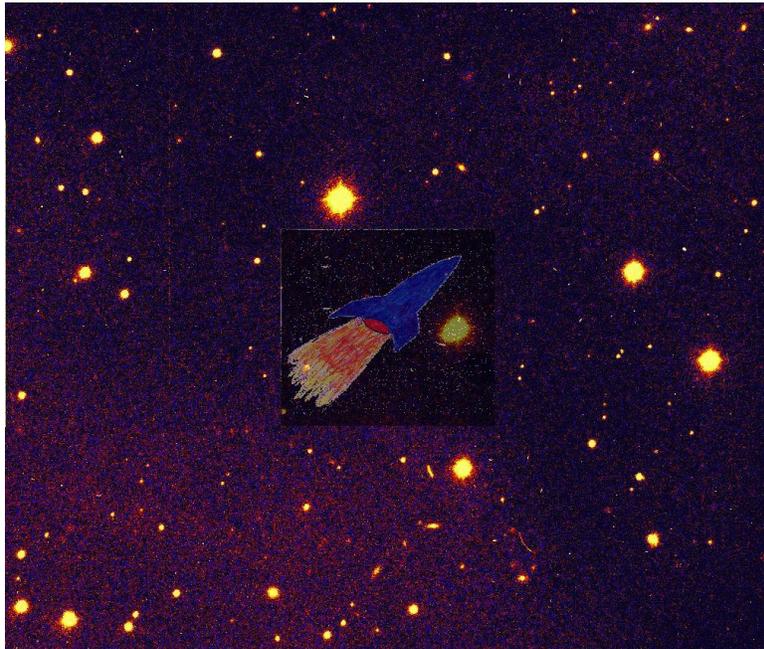


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# The General Catalog of Artificial Space Objects

V1.0.2

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# Chapter I.1

## Preface

The General Catalog of Artificial Space Objects (GCAT) makes public the full satellite database that underlies Jonathan's Space Report (<https://planet4589.org/jsr.html>)

The diagram below indicates the general structure of the database, which reflects the data model of the information it describes.

An artificial space **object** (for short, in future simply 'object') a satellite or spacecraft (active payload, rocket stage, discarded component, piece of debris) outside the Earth's lower atmosphere. At a given time it can be in one of the following **object states**:

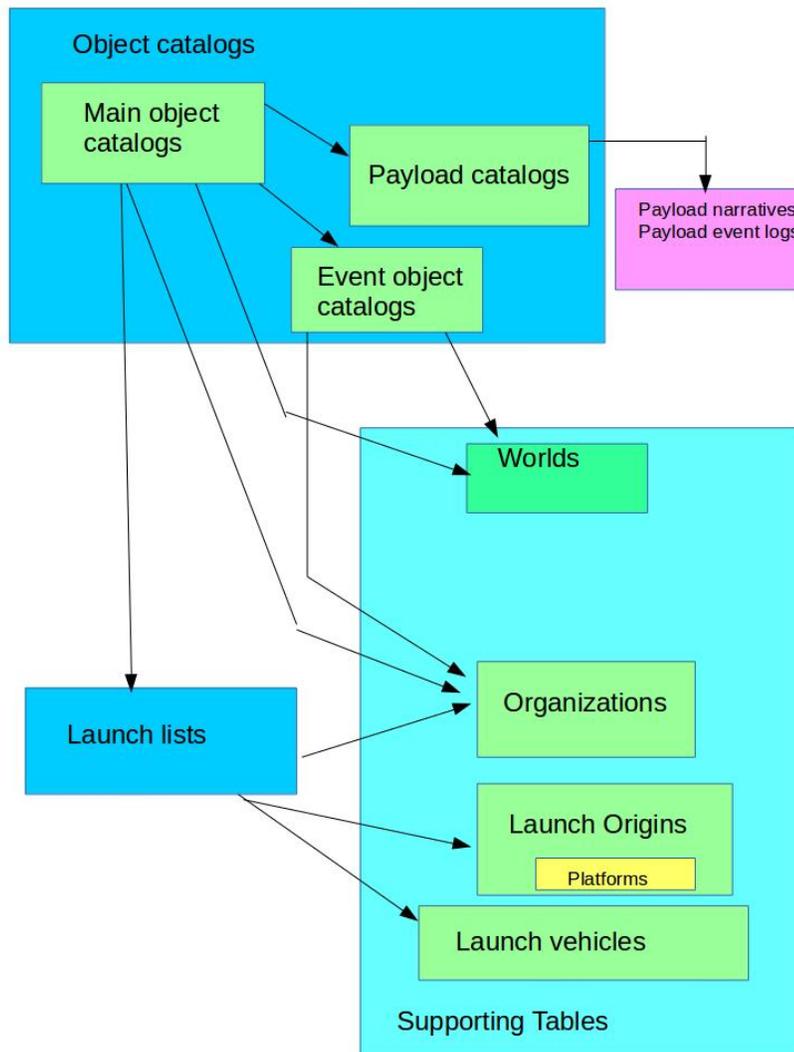
- Attached to another object
- In free flight in the gravitational field of a **world** or astronomical **body**
- On the surface of an astronomical body
- Destroyed (in a collision, explosion or by burnup in atmospheric entry).

Each time the object transitions to another state (undocks, is attached to something, reenters, changes which body it is orbiting, etc.) marks the beginning or end of a **phase**. Most objects in GCAT have only a single phase - they separate from an object (launch vehicle) and then are either still in free flight or have reentered. However, some objects go through many phases.

The main object catalogs define and list the first phase of each object. Objects with more than one phase have their subsequent phases listed as entries in the event object catalogs. A subset of objects are considered **payloads** and have additional data in the payload catalogs.

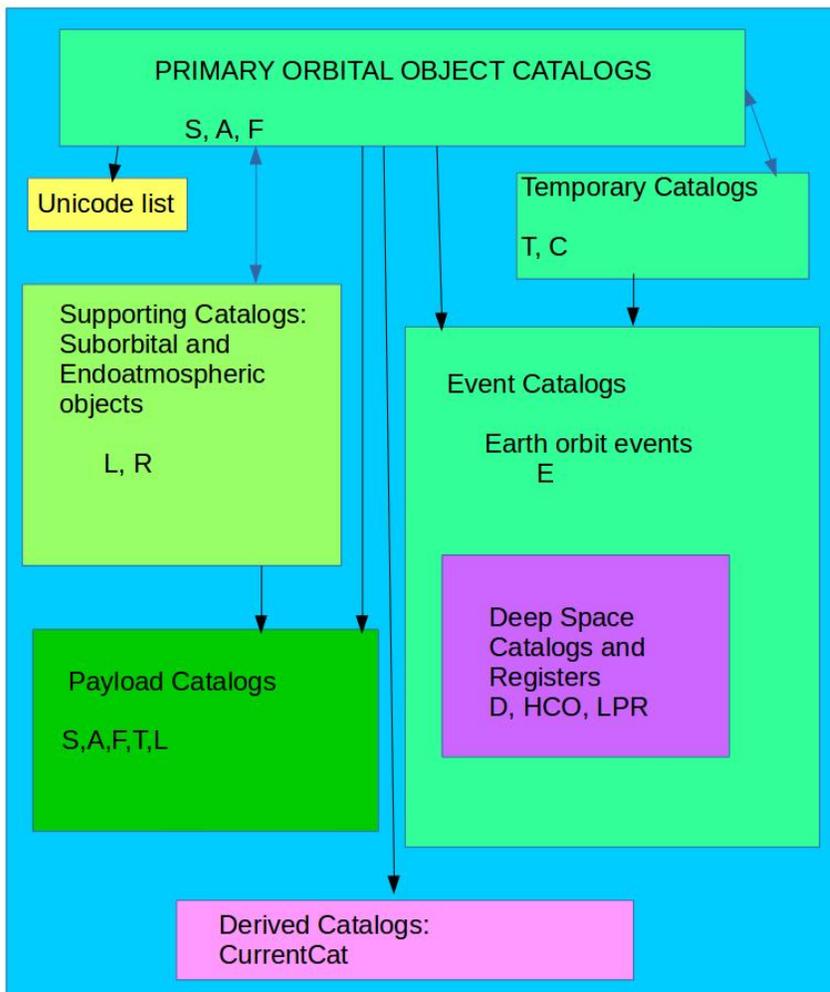
Each object (with rare exceptions) is associated with a single **launch**, described in the launch lists. Each launch may be associated with many objects. The launch lists are the same as those in the already-published LVDB.

Each launch is associated with a **launch vehicle** and a **launch origin** (generalization of launch site), and both launches and objects are associated with **organizations** of several kinds (countries, owners, manufacturers). These associations are expressed by strings which link the launch and object catalogs with the supporting tables.



GCAT – overall structure





Object catalogs – detailed structure

Figure: (1) Overall structure of GCAT. (2) Detailed structure of the object catalogs.

The supporting tables and the launch lists were published as GCAT release 1.0.2 in Aug 2020. Pre-release versions have been public for a decade as part of the Launch Vehicle Database (LVDB). (<https://planet4589.org/space/lvdb/index.html>) Release 1.1.0 is the first complete, formally versioned and documented release to include the object catalogs.

For each payload, there is also a payload narrative and a payload event log. However, these are considerably further from being ready for publication, so don't hold your breath.

Note that in fixed width versions of the table files, column names are truncated to the field width. Sorry about that!

### I.1.0.1 Citing GCAT

GCAT is released under the Creative Commons CC-BY licence. You are free to use the data in GCAT as long as you include a citation to it. A suitable short citation is 'data from GCAT (J. McDowell, planet4589.org/space/gcat)'. A full citation is



## **Part I**

# **Introduction**



## I.0.1 GCAT Release History

Release	Date	Notes
LVDB 2.0	2010 Oct 28	Added 1950s Soviet missiles from Asif Siddiqi
LVDB 2.1	2011 Nov 17	general update
LVDB 2.2	2014 Aug 25	Added many new Soviet ICBM launches provided by a Russian source, general update
LVDB 2.3	2014 Oct 6	Added a number of launches from El Arenosillo, Spain, and assorted launch times for US missiles, re
LVDB 2.4	2014 Nov 11	with more data on Soviet launches.
LVDB 2.5	2015 Jan 12	
LVDB 2.6	2015 Jul 16	
LVDB 2.7	2015 Dec 22	with new USSR launch time data from Andrey Krasil'nikov
LVDB 2.8	2016 Dec 30	
LVDB 2.9	2017 Sep 7	
LVDB 2.10	2017 Dec 28	
LVDB 2.11	2019 Dec 24	there were multiple unversioned minor data updates in 2017-2020
LVDB 2.12	2020 Jun 14	Changed launch site codes
GCAT 1.0.1	2020 Jun 19	Pre-release with supporting files only: Orgs, Sites, Platforms
GCAT 1.0.2	2020 Aug 9	Pre-release with supporting files and launch lists, supersedes LVDB
GCAT 1.1.0	2020 Aug 23	First full release with object catalogs
GCAT 1.1.1	2020 Aug 23	Added omitted documentation (intro/orbits.html)
GCAT 1.1.2	2020 Aug 23	Fixed a few typos and incorrect links
GCAT 1.1.3	2020 Aug 28	Added some Chinese missile bases to Sites file, minor doc updates
GCAT 1.1.4	2020 Sep 1	Added new section DERIVED CATALOGS with new catalog 'currentcat'. Updated OX flags for lost
GCAT 1.1.5	2020 Sep 1	Changed the structure of 'currentcat' to fix some issues.
GCAT 1.1.6	2020 Sep 25	Added new field 'Ac' (active satellite flag) to 'currentcat'
GCAT 1.1.7	2020 Dec 30	Added new derived catalog LAUNCHLOG to replace old launchlog.txt, and new intro section on U la
GCAT 1.1.8	2021 Jan 23	Added TF and ATT columns to payload catalogs and updated possible values for MVR column
GCAT 1.1.9	2021 Mar 13	Added support for 'D' descriptor for cubesat deployers in byte 2 of SatType
GCAT 1.1.10	2021 Apr 4	Added Starlink failure codes to SatType byte 8
GCAT 1.2.0	2021 Jul 21	Introduced 'NomCode' nomenclature code support (with only a few values filled)
GCAT 1.2.1	2021 Aug 17	Added new phase type 'C' for in-orbit collisions (intro/phases.html) and new launch designation 'UN
GCAT 1.2.2	2021 Oct 17	Added new crossindex for deepcat entries, added REFLT status code for relaunched objects, changed
GCAT 1.2.3	2021 Nov 30	Added column-description documentation for derived (currentcat, launchlog) tables.
GCAT 1.2.4	2022 Jan 18	Added new column 'plane' in payload catalogs to record constellation planes
GCAT 1.2.5	2022 Feb 14	Added parent and sep date columns to 'currentcat' to help generate debris history plots
GCAT 1.2.6	2022 Feb 15	Added persistent analyst objects to currentcat, and documentation of analyst objects to intro.
GCAT 1.2.7	2022 Feb 16	Added SatType field to derived catalog 'launchlog' and updated documentation.
GCAT 1.2.8	2022 Mar 24	Changed meaning of SatType byte 4 value 'K'
GCAT 1.2.9	2022 Mar 25	Added C3 and SpE values to special (U) launch table
GCAT 1.2.10	2022 Apr 20	Added orbital period to derived file 'currentcat'
GCAT 1.2.11	2022 Apr 28	Added lower case 'c' option in sat type for objects with newly-declassified orbital data, see type.html
GCAT 1.2.12	2022 Jun 11	Minor documentation corrections
GCAT 1.2.13	2022 Sep 12	Added geosync orbit catalog
GCAT 1.3.0	2022 Sep 25	Added launch service codes and launch profile codes
GCAT 1.3.1	2022 Sep 26	LEO upper boundary changed to 2000 km (was previously 2 hour period)
GCAT 1.3.2	2022 Dec 2	SatType bytes 11 and 12 defined.
GCAT 1.3.3	2022 Dec 26	CurrentCat added Owner and State fields, current owners for defunct sats updated
GCAT 1.3.4	2023 Mar 27	Added missing documention to phases.html about OI, OE cases.
GCAT 1.4.0	2023 Apr 13	Changed suborbital targeted reentry values from 'R' to 'S' to distinguish from uncontrolled reentry
GCAT 1.5.0	2023 Sep 22	Changed status value EVA to EVA RP and for spacesuits, TFR E changed to EVA DP (repress, depres
GCAT 1.5.1	2023 Oct 1	Added status byte 6 value of G for generic cargo accounting, and clarified use of values for all station
GCAT 1.5.2	2023 Oct 6	Added status values TO (LO from small bodies) and LOA (extraterrestrial REFLT, LO attached), RET
GCAT 1.5.4	2023 Oct 24	Added Owner and State fields to (derived) launchlog file.
GCAT 1.5.5	2024 May 5	Added Orbit Payload (OPAY) column to launch lists
GCAT 1.5.6	2024 Oct 13	Added Disposal Orbit columns to payload catalogs
GCAT 1.5.7	2024 Oct 18	Reordered payload catalog columns



# Chapter I.1

## I. Definitions and Conventions

### I.1.1 Time Representations and Vague Date Format

#### I.1.1.1 Time Scales

All dates in GCAT are at least nominally in Coordinated Universal Time (UTC). Comparing launches and orbital events occurring across the world requires a global timescale - local time zones are useless. UTC, like local times, has the bad feature that it is not continuous - there are occasional leap seconds.

An even better choice of timescale would be a continuous one, such as TT, TDB or TCB. JPL Horizons data is expressed in TDB, but most data in the space community is in UTC, and (at least for this release) I have reluctantly decided to go with the crowd.

Nontechnical readers may be more familiar with UTC by the essentially equivalent name GMT (Greenwich Mean Time). The US military tags time zones with the phonetic alphabet, with UTC/GMT as zone 24 known as Z (Zulu) time.

Note, however that UTC is not a time zone per se - it is not restricted to a particular range of longitudes; and of course, it never has daylight savings time.

#### I.1.1.2 Julian Date

We can express dates numerically using the Julian Date (JD). The JD day number is a continuous count of days starting at noon UTC on BC 4713 Jan 1 Old Style/Julian calendar, which is noon UTC on BC 4714 Nov 24 New Style/Gregorian calendar.

Times within a day are expressed as decimal days. Remember that the JD always starts at noon. For example, 0600 UTC on 2020 Aug 1 is JD 2459062.7500; 1800 UTC on 2020 Aug 1 is JD 2459063.2500.

Note that 12:00 UTC on Jan 1, 2000 is JD 2451545.0. This special epoch is the fundamental epoch of modern astronomy, known as J2000.0 for short.

Estimated launch times of rockets are provided as JD values to make it easy to sort the data and carry out computations. However, some launch times are uncertain - even only known to the nearest year or so. This uncertainty is incorporated in a human-readable date field that uses what I call the Vague Date Format, defined in the next section.

---

### I.1.1.3 Vague Date Format

Dates in the General Catalog are usually recorded as strings in what I call the 'Vague Date' format. A Vague Date string defines a time range within which an event is believed to lie.

Many astronomical databases include dates which are actually approximate but are given as if they are precise. For example, a rocket which is only known to have launched sometime in 1984 may be entered with a date of 1984 Jan 1 0000:00 as if it was known to the nearest second. This is particularly common if the date is stored as a single real number (e.g. Julian Day value).

To fix this, every date field should actually be a pair of values - either two dates as a confidence interval or a date and an uncertainty value. This adds storage, maintenance and I/O software overhead to the handling of dates.

As a compromise between this additional overhead and following the common practice of ignoring the problem, the Vague Date string format translates to a time confidence interval with a particular precision. A maximal-precision Vague Date is of the form

2016 Jun 8 2359:57.345

which is interpreted as UTC in a geocenter-fixed frame, lying in the millisecond between 2359:57.3450 and 2359:57.3460 UTC. Note that there must be two spaces between "Jun" and "8" here.

We provide the ability to encode greater uncertainty by allowing rightmost fields to be omitted, and optionally a question mark symbol to be appended.

In the General Catalog we only allow 1 second precision, so e.g.

2016 Jun 8 2359:57

The full specification of the format is as a series of fields increasing in precision from left to right, with a possible question-mark suffix. The only mandatory field is the year, but if a field is present so must all the fields to the left of it, except for the optional leftmost 'domain' field.

The fields are:

- **Domain, consisting of the string AD or BC.** This is usually omitted and the value AD is assumed. Of course, we don't normally need BC for space events! But I use the same format for astronomy, where we do have observations of supernovae and comets before 1 AD.

It's true that nowadays academic historians would advocate using the 'common era' designations CE and BCE to avoid Christian associations, but, having grown up with BC and AD, I find this overly precious despite my atheism - if you are going to worry about that, perhaps you should change the zero point (to the Space Era of 1957, for example).

- **Year field.**

This can be either:

- The (Gregorian) year, as an integer; or
- A century descriptor, format: integer followed by letter. The letter can be C or M for century or millenium. For example, 20C means between 1901 Jan 1 and 2001 Jan 1; M indicates a millenium; 3M means between 2001 Jan 1 and 3001 Jan 1. Usually for astronomical applications we know the date more accurately than a century!

- **Month (generalized month), consisting of the (case sensitive) strings** Jan, Feb, .... Dec, and the special strings Q1, Q2, Q3, Q4 indicating the year-quarters Jan-Mar, Apr-Jun, Jul-Sep, Oct-Dec respectively.
- **Day, an integer in the range 1, 31 always right justified** in a two byte field.
- **Time, in one of two formats:**



- **Centiday:** A day decimal fraction with one or two significant digits. This format was used by the RAE table of Earth Satellites and related satellite tabulations.
- **HMS:** A time in the format hhmm:ss.sss (where trailing items can be omitted) parsed as:
  - The hour, 00 to 24 (leading zeroes required)
  - Minute, 00 to 60 (leading zeroes required), appended to the hour value without any separator.
  - Second, 00 to 60 (leading zeroes required), appended to the minutes with a colon separator.
  - Millisecond, 000 to 999, appended to the seconds with a decimal point
- **Schedule flag, an optional trailing 's' to indicate a scheduled date, where the**
- **Flag, An optional trailing question mark to indicate uncertainty.**

Here are a selection of valid Vague Date strings and their mapping to a date confidence interval.

Precision	Vague Date	Range implied (semi-open interval)	Width
Millisec	2016 Jun 8 2355:57.345	2016 Jun 8 2355:57.345 to 57.346	1ms
Second	2016 Jun 8 2355:57	2016 Jun 8 2355:57.0 to 2355:58.0	1s
Seconds	2016 Jun 8 2355:57?	2016 Jun 8 2355:56.0 to 2355:59.0	3s
Minute	2016 Jun 8 2355	2016 Jun 8 2355:00 to 2356:00	1m
Minutes	2016 Jun 8 2355?	2016 Jun 8 2354:00 to 2357:00	3m
Centiday	2016 Jun 8.98	2016 Jun 8 2331:12 to Jun 8 2345:36	0.01d
Centidays	2016 Jun 8.98?	2016 Jun 8 2316:48 to Jun 9 0000:00	0.03d
Hour	2016 Jun 8 23h	2016 Jun 8 2300:00 to Jun 9 0000:00	1h
Hours	2016 Jun 8.9	2016 Jun 8 2136:00 to Jun 9 0000:00	2.4h
Day	2016 Jun 8	2016 Jun 8 0000 to 2016 Jun 9 0000	1d
Day (scheduled)	2016 Jun 8s	2016 Jun 8 0000 to 2016 Jun 9 0000	1d
Days	2016 Jun 8?	2016 Jun 7 0000 to 2016 Jun 10 0000	3d
Month	2016 Jun	2016 Jun 1 0000 to 2016 Jul 1 0000	1mo
Months	2016 Jun?	2016 May 1 0000 to 2016 Aug 1 0000	3mo
Quarter	2016 Q2	2016 Apr 1 0000 to 2016 Jul 1 0000	3mo
Quarters	2016 Q2?	2016 Jan 1 0000 to 2016 Oct 1 0000	9mo
Year	2016	2016 Jan 1 0000 to 2017 Jan 1 0000	1y
Years	2016?	2015 Jan 1 0000 to 2018 Jan 1 0000	3y
Decade	2010s	2010 Jan 1 0000 to 2020 Jan 1 0000	10y
Decades	2010s?	2000 Jan 1 0000 to 2030 Jan 1 0000	30y
Century	21C	2001 Jan 1 0000 to 2101 Jan 1 0000	100y
Centuries	21C?	1901 Jan 1 0000 to 2201 Jan 1 0000	300y
Millenium	3M	2001 Jan 1 0000 to 3001 Jan 1 0000	1000y
Millenia	3M?	1001 Jan 1 0000 to 4001 Jan 1 0000	3000y

Some additional special values:

Unknown	?	Date entirely unknown
Current	*	Now (for an end date, indicating still active, etc.)

## I.1.2 Space and Orbit

### I.1.2.1 Where Does Space Begin? 80 km!

In GCAT, I have lists of objects in space as well as some list of objects in the atmosphere. Where does space begin, though? How do we define it? I have written extensively about this question, and the answer (at least for GCAT) is that space begins at 80 km above the geoid. See my paper on the subject: (See McDowell (2018), Acta Astronautica 151, 668)

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The paper also discusses the EL1:4 boundary that I use to mark the start of deep space, which lies at 152066 km from the Earth's center.

### I.1.2.2 Orbit

Being in space is not at all the same thing as being in orbit. At least, in the sense of a closed (elliptical or circular) orbit that does not intersect the Earth.

To be strict, though, there are several senses of the word **orbit**. In its broadest sense, an orbit is any trajectory of an object in the local gravitational field. If you stand on the Earth and throw a ball in the air (or make an apple fall from a tree) its path (neglecting aerodynamic effects) is not, as you were taught in school, a parabola. It is in fact a very eccentric ellipse with the perigee extremely close to the center of the Earth. The ball will complete a very small part of this orbit before the surface of the Earth gets in its way. In this sense, 'suborbital' rockets are in fact just orbital rockets with negative perigee height.

Because even many people in the space field don't appreciate this, it's worth doing the worked example. Suppose we throw a ball at a 45 degree angle and a moderate speed of 50 km/hr (13.9 m/s); let us assume we are in Harvard Square (42.4 deg N) and throw the ball due eastwards. The resulting orbit is -6371.8 x -10.0 km x 42.4 deg, an eccentricity of 0.998. (As noted in the section on apogees and perigees, we quote the heights relative to a fictitious 6378 km spherical Earth, and due to oblateness Harvard Square is 10 km below the zero surface.)

At the other extreme, an orbit around the Earth can also be hyperbolic, with eccentricity greater than 1. When a rocket reaches escape velocity, many writers say 'it is now in solar orbit'. From the point of view of calculating its trajectory in an N-body solar system simulator that's not the right way to think about it. The object is travelling away from Earth very fast, but it's still deep in the terrestrial gravity well, far below the geostationary satellites, and the differential effects of the Sun's gravity are negligible. Only several days later does the object reach the edge of the Sun-Earth Hill sphere where it is a better approximation to model it as orbiting the Sun. Until then, I consider it to be in Earth orbit, albeit an unbound one on an escape trajectory.

Different categories of orbit (LEO, GEO etc) are noted in the catalogs and defined in (See the Orbital Categories ) section.

## I.1.3 Orbital Parameters and Coordinate Frames

### I.1.3.1 Perigee and Apogee

The perigee and apogee are respectively the closest and furthest points of the orbit from the Earth's surface. This apparently simple definition has some complications.

In the strictest meaning of the words, the perigee and apogee are **points** in an elliptical orbit at which the orbiting object has the smallest and largest radius vectors respectively. They lie at opposite ends of the semi-major axis of the ellipse.

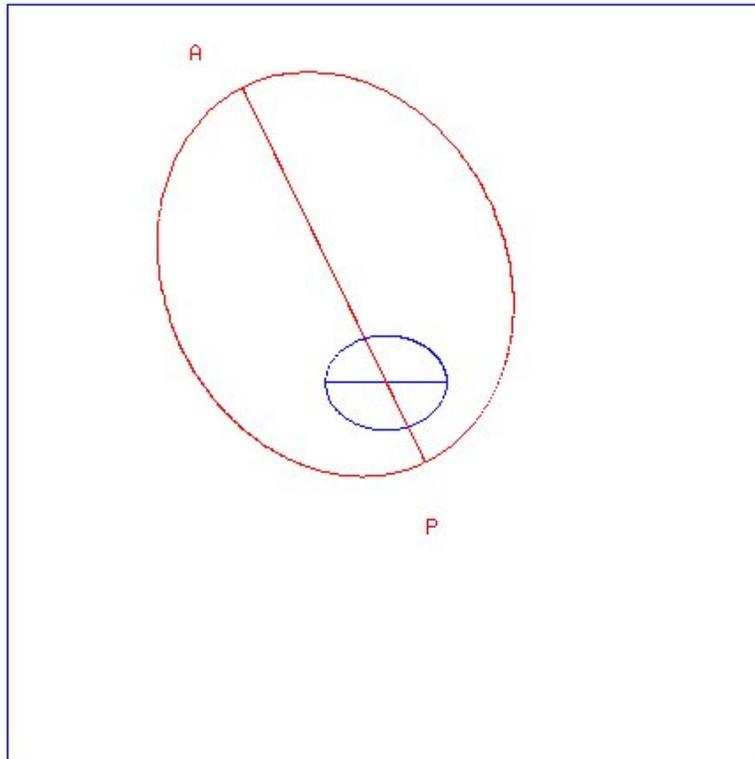
We often refer to the perigee and apogee **heights**; i.e. the height of the perigee and apogee points above the planetary surface. Loosely, we drop the word 'height' and refer to these values simply as the perigee and apogee.

But complications arise when you start thinking about the fact that the Earth is not actually a sphere, but (to a much better approximation) an oblate spheroid - its cross-section is also an ellipse. Depending on the orientation of the orbit, the two ellipses are misaligned. In the figure below, a satellite orbit in red is drawn around an exaggerated Earth in blue. In this case, the smallest height of the orbit around the spheroid Earth is not necessarily the height of the perigee point P. In fact in the example shown, the point of smallest height is about 40 degrees further around the orbit.

Worse yet, the flattening of the Earth means that the orbit is not actually an ellipse. The instantaneous ('osculating') orbital parameters **change with time** as you go round the orbit, so the true perigee and apogee are different from ones obtained from time-averaged 'mean elements'.

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**It is conventional in space situational awareness contexts to quote perigee and apogee heights relative to a fictitious perfectly spherical Earth with radius equal to the equatorial radius.** There are a lot of reasons that this makes good sense, but the reader should remember that the actual height above the Earth may be considerably higher if the perigee is over the polar regions.



### **I.1.3.2 The Friends of Perigee and Apogee**

The 'gee' in apogee and perigee is from the Greek word for the Earth. For orbits around other bodies, special names are in use. Most of these are falling out of favour and are being replaced by the terms periapsis and apoapsis, referring to the 'apsis' (plural, apsides), the generic name for the extreme points in the orbit. There are several terms used for selenocentric orbits. I list terms that I've seen in relatively recent use; there are many others. I'm torn between the poetry of them and the fact that they are totally unnecessary.

Central body	Terms	Plural
<b>Still in use</b>		
Earth	perigee, apogee	-gees
Sun	perihelion, aphelion	-helias
Moon	perilune, apolune	-lunes
Moon	periselene, aposelene	-selenes?
Mars	periares, apoares	-ares
Jupiter	perijove, apojove	-joves
Star	periastron, apoastron	-astrons
Galaxy	perigalacticon, apogalacticon	-icones? (not used)
<b>Probably obsolescent</b>		
Moon	pericynthion, apocynthion	-cynthia
Venus	pericytherion, apocytherion	
Saturn	perikrone, apokrone	
Black hole	peribothron, apobothron	-bothroi

### I.1.3.3 Coordinate Frames and Units

The orbital inclination (and the node and argument of perigee, which are not given in this release of GCAT) depends on the equator and pole of your coordinate frame.

In GCAT, angles are always expressed in degrees and distances are usually in km (but see below for heliocentric orbits).

- Earth orbits are given with respect to the equator of date (strictly, TEME equator). Note that astronomical positions are often given with respect to the (inertially fixed) ICRF frame. The Earth wobbles due to precession, so the equator of date changes with time relative to the ICRF. Distances are always given in km.
- Heliocentric orbits are given with respect to the J2000 ecliptic. Distances (aphelion and perihelion) are given in astronomical units (AU). 1 AU = 149597870.700 km.
- Orbits around other central bodies (Moon, Mars, etc.) are given with respect to the IAU equator of that body. Where no IAU equator is yet defined in JPL Horizons, the ecliptic is used instead. Distances are given in km.

### I.1.4 JCAT Identifiers

The General Catalog (GCAT) uses an alphanumeric identifier (JCAT, originally Jonathan's Catalog ID) to uniquely tag space objects. The identifier consists of a single prefix letter followed by a sequence number with either 5 or 9 digits (examples: A00022; S101234009). The 9 digit case is not yet in use, but is supported in anticipation of the introduction of 9-digit SATCAT numbers by the US DoD.

The leading letter tells you which object catalog the object belongs to, as follows:

JCAT letter	Catalog
A	auxcat (Auxiliary catalog)
C	csocat (Complementary catalog)
D	deepcat (Deep space catalog)
F	ftocat (Failed to orbit catalog)
L	lecat (low altitude catalog)
R	rcat (suborbital catalog)
S	stdcat (Standard catalog)
T	tmpcat (Temporary catalog)

Note that there are no prefix letters associated with the ecacat (event catalog), or the heliocentric and lunar-planetary registers, since they contain only objects already defined in the other catalogs.

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Also, each object with a D (deep space catalog) designation also has an S or A catalog designation which applies when the object is within near-Earth space.

Sequence numbers in the A, D, F, L, R, and S catalogs are assigned sequentially starting with 00001. However, occasional numbers may be missing due to deletions of spurious or reassigned entries.

Sequence numbers in the C and T catalogs are not assigned sequentially.

Sequence numbers in the S catalog are in one-to-one correspondence with the US SATCAT catalog numbers. Thus, S46112 corresponds to SATCAT satellite 46112 (2020-056A).

In exceptional cases, future releases of GCAT may reassign existing catalog numbers. Any such reassignments will be recorded explicitly in an accompanying table. However, users who have found earlier (pre-GCAT) JCAT catalog numbers that crept into my public files have no such guarantee - in particular, auxcat numbers previously seen in public files may now refer to different objects.

### **I.1.4.1 Extended JCAT identifier**

The Parent field of the object catalogs supports what I call an ‘extended JCAT ID’. This consists of a JCAT ID and a **port location** separated by one or more spaces. The port location defines a specific part of the parent object where the object is attached. It’s usually only space station modules or spaceships that have port locations.

Examples of port locations are:

- Docking ports, e.g. A07305 N, Harmony nadir CBM
- JEM Exposed Facility EFU locations, e.g. A07559 EFU5
- ISS truss battery ORU locations, e.g. A07476 1B3

For the time being, there’s no formal definition table of these port locations.

In some cases in the object catalog Parent field an asterisk is appended to the identifier. This is a flag that the launch designation in the Piece field is not what you’d expect from the launch designation of the parent. In the normal situation, for example, S45920 has Piece designation 2020-048A, and its parent S45921 has 2020-048B - both are 2020-048 launch pieces. But S45916 has Piece designation 1998-067RP, and its parent is A09547\* with piece designation 2020-011, an apparent contradiction. In fact 2020-011 is the correct launch for both, with launch date 2020 Feb 15, but USSF assigns 1998-067 piece designations and a 1998 launch date for all objects released from the ISS. I added the asterisks to facilitate automatic checking: it lets you know to be careful about the launch date and launch information for this object.

## **I.1.5 Launch Designations and Piece Designations**

Each rocket launch in the database is labelled with a unique designation. For successful orbital launches, we use the International Designation (also called the COSPAR designation, after the Committee on Space Research which adopted the system.) For other launches, I use a variation on that scheme of my own design. I introduce the generalized concept of ‘launch designation’ to include the International/COSPAR designation and other similar schemes. The term ‘piece designation’ is also introduced to generalize the per-piece (per-cataloged-object) international designation.

Note that for catalog pieces in the SATCAT, the launch encoded in the international designation is not always the actual launch. In particular, all objects deployed from the ISS are give 1998-067 designations (the Zarya launch) even if they were launched on a much later cargo ship. However, the correct launch for an object can be found in the object catalogs by tracing back the Parent fields to the launch vehicle.

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### I.1.5.1 The COSPAR designation

The COSPAR designation scheme applies to both launches and to cataloged orbiting objects. It has been in use since January 1963.

For launches, the scheme is of the form 'year - launch number in year'. For example, 2005-012 indicates the 12th launch to reach orbit in the year 2005.

For individual objects, a 'piece designation' is used, with a sequence of letters appended to the launch designation; 2005-012E is the fifth (E) piece associated with that launch. The piece letters run from A to Z, then AA to AZ, BA ... to ZZ, AAA to AAZ, etc., always omitting the letters I and O. Usually, the first piece letters are reserved for the main payloads, followed by the rocket stages, followed by debris. However, there are frequent exceptions to this rule.

You can think of the piece letter scheme as a base 24 number. The largest number of pieces assigned to a launch as of 2020 is for 1999-025; object 1999-025EYS is the 3449th piece from the launch ( $5 \times 24 \times 24 + 23 \times 24 + 17 = 3449$ ). The mapping of piece number to piece letter for the first 72 objects of a launch is given in the figure below for convenience.

Order	Piece Letter	Order	Piece Letter	Order	Piece Letter
1	A	25	AA	49	BA
2	B	26	AB	50	BB
3	C	27	AC	51	BC
4	D	28	AD	52	BD
5	E	29	AE	53	BE
6	F	30	AF	54	BF
7	G	31	AG	55	BG
8	H	32	AH	56	BH
9	J	33	AJ	57	BJ
10	K	34	AK	58	BK
11	L	35	AL	59	BL
12	M	36	AM	60	BM
13	N	37	AN	61	BN
14	P	38	AP	62	BP
15	Q	39	AQ	63	BQ
16	R	40	AR	64	BR
17	S	41	AS	65	BS
18	T	42	AT	66	BT
19	U	43	AU	67	BU
20	V	44	AV	68	BV
21	W	45	AW	69	BW
22	X	46	AX	70	BX
23	Y	47	AY	71	BY
24	Z	48	AZ	72	BZ

Usually the launch numbers are in chronological order within the year. There are, nevertheless, rare exceptions to this rule.

In principle, international designations are assigned to launches and pieces of launches which either complete a full orbit of the Earth or reach the Moon or beyond. Again, there are exceptions - launches which completed an orbit but did not get a designation, and launches or pieces which did not complete an orbit but got a designation anyway.

It is currently conventional to use three digits for the launch number, including leading zeros; e.g. 2020-005A. However, this is not part of the definition of the designation; e.g. 2020-05A is also a valid use and means the same thing.

As a special case, launch number 000 of the year is used for cataloged objects whose parent launch is unknown. This special case has been used very rarely and most of the relevant cases have since been identified with known launches and given revised designations. I tabulate all such cases here.

US Satcat Number	Original designation	Current designation	Notes
S02428	1966-000A	1965-058D	
S02429	1966-000B	1963-014DG	
S02430	1966-000C	1963-014DH	
S02431	1966-000D	1963-014AC	
S04924	1971-000A	1962 B LAM 2 (1962-059B)	
S04925	1971-000B	1964-086B	
S04926	1971-000C	1964-086C	
S05309	1971-000D	1965-108H	
S05310	1971-000E		maybe should be 1971-039D?
S40328	2014-000A	1982-029P	

### I.1.5.2 The Harvard designation

The first scheme for designating orbital launches was the Harvard scheme, invented by Fred Whipple and colleagues in 1957 and published in the Harvard Announcement Circulars from the Harvard Observatory. This was of the form "year - greek letter - piece number", as in 1957 $\alpha$ 2, indicating the second object of the first (Alpha) launch of 1957.

This system was used for launches until the end of 1962, and the last launch to use the scheme was 1962 $\beta\omega$ , which had two pieces, 1962 $\beta\omega$ 1 and 1962 $\beta\omega$ 2.

However, in later years when new debris objects were discovered from those launches, NORAD (acting on behalf of COSPAR) also designated them using the Harvard scheme. For example, in 1992 a new debris object from the Ablestar 008 breakup was cataloged as NORAD number 21986 and given international designation 1961 $\omicron$ 300 (1961 Omicron 300) using the Harvard scheme.

Designation of new objects had at some point been delegated to NORAD by COSPAR. However, it's not entirely clear that control of the scheme itself was designated. Thus, when in the late 1990s NORAD retrospectively reassigned all Harvard designations using the post-1963 scheme, it's not clear that was really a legitimate thing to do. From the point of view of historical consistency, I prefer to retain original designations rather than reassign them. Thus, although the US DoD now refers to object 21986 as 1961-015MM, I still use its original designation.

In most of my database files I map the Greek letters to an ASCII representation (mostly because I started this project long before Unicode was a thing). The representation used is indicated in the following table as 'Code'. 'Order' is the numerical order of launch (and the launch number in the new COSPAR scheme). I also provide the full English names of the Greek sequences, since the Greek alphabet may be less familiar to 21st-century readers.

Order	Sequence	Code	English name	Order	Sequence	Code	English name	Order	Sequence	Code	English name
1	$\alpha$	ALP	Alpha	25	$\alpha\alpha$	A ALP	Alpha Alpha	49	$\beta\alpha$	B ALP	Beta Alpha
2	$\beta$	BET	Beta	26	$\alpha\beta$	A BET	Alpha Beta	50	$\beta\beta$	B BET	Beta Beta
3	$\gamma$	GAM	Gamma	27	$\alpha\gamma$	A GAM	Alpha Gamma	51	$\beta\gamma$	B GAM	Beta Gamma
4	$\delta$	DEL	Delta	28	$\alpha\delta$	A DEL	Alpha Delta	52	$\beta\delta$	B DEL	Beta Delta
5	$\epsilon$	EPS	Epsilon	29	$\alpha\epsilon$	A EPS	Alpha Epsilon	53	$\beta\epsilon$	B EPS	Beta Epsilon
6	$\zeta$	ZET	Zeta	30	$\alpha\zeta$	A ZET	Alpha Zeta	54	$\beta\zeta$	B ZET	Beta Zeta
7	$\eta$	ETA	Eta	31	$\alpha\eta$	A ETA	Alpha Eta	55	$\beta\eta$	B ETA	Beta Eta
8	$\theta$	THE	Theta	32	$\alpha\theta$	A THE	Alpha Theta	56	$\beta\theta$	B THE	Beta Theta
9	$\iota$	IOT	Iota	33	$\alpha\iota$	A IOT	Alpha Iota	57	$\beta\iota$	B IOT	Beta Iota
10	$\kappa$	KAP	Kappa	34	$\alpha\kappa$	A KAP	Alpha Kappa	58	$\beta\kappa$	B KAP	Beta Kappa
11	$\lambda$	LAM	Lambda	35	$\alpha\lambda$	A LAM	Alpha Lambda	59	$\beta\lambda$	B LAM	Beta Lambda
12	$\mu$	MU	Mu	36	$\alpha\mu$	A MU	Alpha Mu	60	$\beta\mu$	B MU	Beta Mu
13	$\nu$	NU	Nu	37	$\alpha\nu$	A NU	Alpha Nu	61	$\beta\nu$	B NU	Beta Nu
14	$\xi$	XI	Xi	38	$\alpha\xi$	A XI	Alpha Xi	62	$\beta\xi$	B XI	Beta Xi
15	$\omicron$	OMI	Omicron	39	$\alpha\omicron$	A OMI	Alpha Omicron	63	$\beta\omicron$	B OMI	Beta Omicron
16	$\pi$	PI	Pi	40	$\alpha\pi$	A PI	Alpha Pi	64	$\beta\pi$	B PI	Beta Pi
17	$\rho$	RHO	Rho	41	$\alpha\rho$	A RHO	Alpha Rho	65	$\beta\rho$	B RHO	Beta Rho
18	$\sigma$	SIG	Sigma	42	$\alpha\sigma$	A SIG	Alpha Sigma	66	$\beta\sigma$	B SIG	Beta Sigma
19	$\tau$	TAU	Tau	43	$\alpha\tau$	A TAU	Alpha Tau	67	$\beta\tau$	B TAU	Beta Tau
20	$\upsilon$	UPS	Upsilon	44	$\alpha\upsilon$	A UPS	Alpha Upsilon	68	$\beta\upsilon$	B UPS	Beta Upsilon
21	$\phi$	PHI	Phi	45	$\alpha\phi$	A PHI	Alpha Phi	69	$\beta\phi$	B PHI	Beta Phi
22	$\chi$	CHI	Chi	46	$\alpha\chi$	A CHI	Alpha Chi	70	$\beta\chi$	B CHI	Beta Chi
23	$\psi$	PSI	Psi	47	$\alpha\psi$	A PSI	Alpha Psi	71	$\beta\psi$	B PSI	Beta Psi
24	$\omega$	OME	Omega	48	$\alpha\omega$	A OME	Alpha Omega	72	$\beta\omega$	B OME	Beta Omega

### I.1.5.3 JSR scheme

In the data files associated with my newsletter Jonathan's Space Report (JSR), I introduced a new designation scheme for launches not covered by the existing international designations.

You can call this the "JSR" scheme or even the "New Harvard" scheme (technically I work for the Smithsonian Institution's SAO, and I'm doing this on my own time, but to the extent that I'm on the Harvard campus and support space-related outreach inquiries for the Harvard-Smithsonian Center for Astrophysics, and recalling that Fred's satellite support team was an SAO program too, it's good enough.)

The only other comprehensive scheme for suborbital launch designations that I am aware of was from the World Data Center for Rockets and Satellites-A (WDC/RS-A) at NASA-Goddard. They assigned numbers to sounding rockets using a scheme of the form Rymm-ddnn - example, R7402-1311 for the 11th cataloged launch on 1974 Feb 13. They only covered scientific sounding rockets (not, e.g., missile launches or failed orbital launches). I considered retaining these designations but instead have found it more useful to use a scheme similar to international designations for orbital launches.

My scheme is similar to the current international designation except that a 'class letter' is added following the hyphen. The letter used indicates the type of launch, as described below. For example, the class letter F denotes a failed orbital launch attempt and the designation 2005-F03 indicates the third failed attempt in the year 2005.

Since the non-orbital catalog is incomplete, and I often identify previously undocumented historical launches, there are many more cases of launch numbers that are not chronological. Thus, 1961-S227 may have a launch date later than 1961-S511. Ordering within a year is therefore essentially arbitrary (although I start off \*trying\* to make it chronological).

Another wrinkle is that launches can change designation. If I've got documentation on a Nike Apache launch with no information on apogee, I may assume it worked and give it an S designation. If I later find it failed at low altitude, I will retire the S designation and assign a new A designation. I've been rather cavalier about this until now, but hope to be better in future about recording such changes explicitly.

Note that the JSR scheme is only for launches - there is no equivalent of the 'piece letter', at least for now. For space catalog objects from such launches, my practice is to use the launch designation in the 'piece designation' field. Thus, all objects from launch 2005-F03 have JSR designation 2005-F03, rather than being 2005-F03A, 2005-F03B, etc.



The categories used are presented in the following table:

Class Letter	Launches	Criteria
(none)	Orbital launch with COSPAR designation.	
A	Endoatmospheric flight	apogee less than 50 km.
E	Pad explosion	rocket blew up, apogee in controlled flight less than a few cm
F	Failed orbital launch attempt	
M	Mesospheric flight	apogee between 50 and 80 km
S	Suborbital space launch	apogee more than 80 km
U	Uncataloged orbital-energy launch	See below.
W	Mesospheric flight	same as M, obsolete
Y	Suborbital space launch	same as S, obsolete

Orbital launch failures (class F) also satisfy the criteria for either A, M or S classes, but differ in that the intent was to achieve orbit. (F overrides A, M or S; but U overrides F.)

Some small meteorological rocket launches have W and Y class letters. I have discontinued assigning new launch designations in these classes, and the existing ones should be treated as if they were in classes M and S respectively.

I use 'U' to indicate a launch that should have received a regular designation but did not (e.g. 1995-U01). I also use it for a small set of interesting launches which had total energy (kinetic + potential) equal or greater than that needed for low Earth orbit with positive perigee. This includes some low-perigee orbital attempts that reentered within one orbit and some high speed reentry tests.

Launches from worlds other than the Earth are given 'U' designations and marked as 'LO' (liftoff) in the event catalog status. Departures from rocks (objects that are not large enough to be round due to self-gravity, working definition: objects with radius less than 200 km) are also marked as 'LO' but are not given launch designations; they are considered to be a new phase in the existing launch.

#### I.1.5.4 Unknown objects

Sometimes we have to deal with objects of unknown origin - they cannot be associated with a launch. A few have entries in the official US catalog with a year assigned with launch number zero; designations like 1966-00C, for example. For objects not in the US catalog, I use the special designation 'UNK'.

#### I.1.6 SatType scheme

Associated with each object in the General Catalog is a 12 byte SatType string that provides a classification of the object. Each byte in the string has a set of defined meanings. (As of late 2022, byte 12 is unused). The SatType data in principle allows one to select subsets of certain kinds of object.

The SatType string can be found in the table column called simply 'Type'.

For each object, the SatType string in the entry for the first phase for that object applies to the whole history of the object. If the type is different in a later phase, that's probably a data entry error.

The byte layout is as follows:

Byte	Contents
Byte 1	Coarse Type (payload, rocket, debris)
Byte 2	Type modifier
Byte 3	Attach flag
Byte 4	Subtype
Byte 5	Orbit flag
Byte 6	Human spaceflight subset
Byte 7	UN registration flag
Byte 8	Failure flag
Byte 9	Uncertain ID flag
Byte 10	Annotation flag
Byte 11	Group control flag
Byte 12:	Not yet used

In each byte, an empty (null) value is represented by blank or dash (the dash is used to help me visually line up the elds during data entry).

### I.1.6.1 Byte 1 (Coarse type)

The coarse type allows us to divide the catalog into payloads, rocket stages, and debris. We consider two kinds of debris: components, which are subsystems of the parent object, usually but not necessarily designed to separate, and fragmentation debris, pieces resulting from an object breakup (propellant explosion, weapons test, self-destruct, collision, insulation blanket separation).

Value	Meaning
P	Payload (for orbital attempt)
C	Component
R	Launch vehicle stage
D	Fragmentation debris
S	Suborbital payload (e.g. sounding rocket payload or missile reentry vehicle)
X	Catalog entry that has been deleted (used in auxcat etc.)
Z	Spurious catalog entry (was in SATCAT, perhaps in TLEs, but there was no real object)

### I.1.6.2 Byte 2 (Type modifier)

The Byte 2 entries modify the Byte 1 entries (and are not independent of them). Here I tabulate the combined byte 1/2 values and their meanings. (cases where byte 2 is blank are not listed).

Byte 1-2 Value	Meaning
PA	Alias entry.
PH	Spaceship with humans aboard at launch.
SH	Spaceship with humans aboard at launch (suborbital).
SX	Suborbital, special cases not currently further defined
PP or CP or SP	Spaceship with pressurized cabin, but without humans at launch.
PX:	Not in standard list of satellites.
R1 to R5	Stage number for launch vehicle stage.
CC	Cargo placeholder for mass accounting.
CX	Component not to be included in certain standard lists
CD	Deployer for separately integrated payload

PA: The A (alias) modifier is used for special records representing a phase where the satellite is leased temporarily or jointly owned. This phase type is special in that its time period overlaps another phase. An example is object S23779 (Palapa C1, renamed HGS-3 in Nov 2000) From Dec 2000 to Jan 2003 its capacity was leased to

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Turk Telecom which called it Anatolia 1. The HGS-3 entry is tagged with SatFlag equal to P (standard payload) while the Anatolia 1 entry covering an overlapping time period is tagged with SatFlag equal to PA to denote that it's a secondary or alias entry that may be ignored.

PP: The P modifier is used for spaceship test flights without crews, pressurized sections of cargo ships, and space station modules.

PX: The X modifier is used to denote 'non-standard payloads'. What is a payload and what is just a component? I take a broader view of 'payload' than most satellite lists do. Some examples of 'PX' types:

- Small passive calibration satellites. Some (e.g. the NRL Calspheres) are included as payloads in standard lists, but others (the ESO test objects released from Soviet Romb payloads) are not - they are given the X modifier. West Ford dipole clumps, however, are counted as components (C).
- Attached payloads. There is a subtle (and perhaps false) distinction between multiple experiments in a single spacecraft and multiple spacecraft permanently attached to each other. Agena spacecraft have a main payload attached to the front end of the rocket and small secondary payloads attached to the back end, integrated separately. I treat these as separate payloads with separate entries, and label the secondary ones with the X modifier.
- Recovery capsules. CORONA missions ejected film capsules with deorbit motors. For the brief moments when they were orbiting the Earth separately I consider them to be payloads.
- There are a few other cases, such as the E-8-5 Luna ascent vehicles and the LRVs.

CC is used for 'down cargo' for space stations returned to Earth or destroyed in cargo ship reentry. Note that we usually don't know the launch date of 'down cargo'.

The D modifier (CD) is used for separately integrated deployers. The D flag has been added to reflect the emergence of intermediary companies like Nanoracks and Spaceflight which sit between the payload owner and the launch provider and manage the integration of customer payloads. Note that byte 4 has a V value for 'deployer/clamp band' which is more general and does not imply a separate integration - it includes things like the CRRES canisters or the Shuttle PAM-D ASE. (Well, it's an interesting question whether those count as equivalent to a Nanoracks deployer, but I think the hardware and integration were done by NASA - I could be wrong.)

Objects with a D flag in byte 2 are usually not separate satellites but attached to a parent object (e.g. launch vehicle stage). They are therefore usually in the A (auxiliary) catalog.

### I.1.6.3 Byte 3 (Attach flag)

This flag describes why this object is attached to its parent object:

Byte 3 Value	Meaning
A	Permanently attached component or payload
F	Stuck attached by mistake
S	Expected to separate in future
T	Never flew free but transferred
I	Internal

F indicates that the object was intended to separate but failed to do so. S denotes that the object is expected to separate at a later date. T is mostly used for hardware that is transferred from the exterior of one object to another during a spacewalk or using robotic arms.

I is used for entries representing hardware that remains internal to one or more host spacecraft, possibly being transferred between them. Entries of this sort that I keep track of include EVA spacesuits not actually used on an EVA; cubesat dispensers used on ISS; and special entries used to do mass accounting of upward and downward space station cargo. In the future I'm considered adding entries for human space travellers, who would also be internal (either to a spaceship or a spacesuit).

#### I.1.6.4 Byte 4 (subtype flag)

This byte is used to categorize objects more finely than the byte 1-2 specification. It is useful for gathering statistics about different kinds of debris. Each value is usually only used with a subset of possible byte 1 values as listed below (however, these restrictions are not absolute).

Value	Meaning	Allowed B1 values
A	Payload adapter (e.g. SYLDA), support structures, interfaces	C
B	Battery explosion debris	D
C	Passive calibration satellites, test objects or chaff	P, C
D	Dummy satellite	P
E	Spacesuit on tethered spacewalk	P (PX)
F	Fairings and other covers	C
G	General, miscellaneous debris	C, D
H	Human spaceflight related	P, C
I	Impact (accidental collision)	D
J	Anomalous debris (insulation, soft material, ablated material)	C, D
K	Possible solid motor slag	D
L	Separated from vehicle after landing (rovers, etc)	P, C
M	Jettisoned motor or tank	C
N	Nuclear reactor core or coolant blob	C, D
O	Unknown debris released at orbit insertion	
P	Propulsion related, residual-propellant breakup	D
Q	Aerodynamic breakup at low perigee	D
R	Reentry vehicle	P
S	Subsatellite or subpayload	P
T	Ejected section of payload	C
U	Untethered EVA	P (PX)
V	Ejection mechanism (deploy canister, clamp band)	C
W	Weapons test, ASAT debris	D
X	Debris of unknown nature	C, D
Y	Despin (yo-yo) device	C
Z	Breakup debris from on-board destruct device	D

Note that code K used to be used for interstages but that meaning has now been merged with code A.

#### I.1.6.5 Byte 5 (orbit flag)

This flag is used to note special cases related to the object's trajectory. The flag is blank for normal SATCAT entries except for the deep space ones.

Value	meaning
D	Deep Space or escape
E	Destroyed in pad explosion
F	Failed to reach orbit
L	Active on planet surface during this phase
M	Missing from SATCAT by mistake (EXPRESS, IXV)
O	Orbital-Energy but Non-Orbit
P	Partial orbit - reached legit orbit but deorbited after less than 1 rev
R	Reentry orbit: objects that were attached and separated in post-deorbit-burn suborbital trajectory
S	Near-Orbit (marginally suborbital)
T	Transient orbit - separated just (perhaps seconds) before deorbit
V	Escape energy but not deep space
X	Extra catalog entry for extraterrestrially launched object
Z	Launch from extraterrestrial object, recataloged with new D series number.

#### I.1.6.6 Byte 6 (human spaceflight/special group flag)

This flag is present to support easily identifying all objects in the given categories, such as all satellite deployments from ISS. As such it serves a somewhat different purpose from the byte 2 values. At the moment I've only filled in values for space stations and Shuttle. 'Station' refers to any space station, or indeed any composite space object.

Value	meaning
I	Station program, general
C	Station major non-module component
D	Station deployable subsatellite
E	Station EVA related equipment
G	Pseudo-entry used for station generic cargo mass accounting
M	Station module
S	Space Shuttle program or Shuttle payload or component
T	Piece of visiting vehicle
U	Visiting vehicle or rocket stage deployed satellite
V	Station visiting vehicle

#### I.1.6.7 Byte 7 (UN registration flag)

This flag notes issues with UN registration for objects that are not standard payloads. Standard payloads (Byte 1-2 = P) should be registered, and the presence of a UNReg entry in the corresponding payload catalog tells you if they are or not (as of the last time I checked the UN site, at least). Non-standard payloads (Byte 1-2 = PX, see the byte 2 discussion) are more complicated. I have attempted to decide whether standard practice implies they should have been registered based on comparison with similar payloads.

Value	Meaning
U	Is, or should be, UN registered even though not a standard payload.
X	Was UN registered but should not have been.

For example, object A06499, the Canadarm-2 on the ISS, is not a standard payload and has no SATCAT entry. Nevertheless it was registered with the UN. A05668 Fasat-Alfa was a satellite that failed to separate from its parent

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satellite. It doesn't have a separate SATCAT number from its parent S23657 Sich-1, so it is a 'PX' nonstandard payload; but it was registered by Chile, while Sich-1 was registered by Ukraine. Byte 7 is set to U.

Object A05597 EXPRESS completed several orbits of the Earth. It is a 'PX' nonstandard payload because the US tracking system failed to catch it, and it doesn't have a SATCAT number. Nevertheless Germany should have registered it with the UN and did not. Byte 7 is set to U.

On the other hand, A06874 Celestis-04 Error was registered with the UN but should not have been, since it was removed from the rocket before launch and never got to space. Byte 7 is set to X.

Object A07634 ELC-1 is a logistics carrier launched on the Shuttle and later attached to the ISS. Although the US has usually registered ISS pressurized modules, other similar minor ISS components (such as the other ELCs and the major truss segments) have not been registered, so for consistency ELC-1 shouldn't have been registered either. Byte 7 is set to X.

### I.1.6.8 Byte 8 (Failure flag/Constellation status flag)

An asterisk in this field records which rocket stage was to blame in an orbital launch failure. An asterisk in byte 8 says that this object was, broadly speaking, the culprit.

For a debris object, a numeric value in this field (1,2, etc) groups objects in a particular debris cloud for a launch which has multiple associated debris events. (I have only used this a few times.)

Other values indicate different kinds of payload failure (or success) and have been added to support analysis of the Starlink constellation.

Value	Meaning
*	This object was the one that failed during launch.
A	Satellite ascending: orbit raising to op orbit (or lowering from high drift orbit)
D	Satellite in plane drift orbit
F	Satellite failed early in mission, before reaching operational orbit ("screened")
G	Satellite retired to a graveyard orbit of some kind
L	Satellite removed far from operational constellation by lowering or raising orbit
M	Satellite failed in operational orbit and is undergoing uncontrolled decay - non maneuverable
O	Satellite is active in operational orbit
R	Satellite reentered after active orbit lowering
S	Satellite was used for special tests outside of main constellation
T	Satellite removed slightly (and possibly temporarily) from operational constellation by lowering or raising orbit a little
U	Satellite apparently malfunctioning, held in intermediate orbit for debugging?

### I.1.6.9 Byte 9 (ID flag)

This flag notes problems with the identification of the object.

Value	Meaning
?	The association of this satellite with this catalog number is a guess because JSpOC has not yet assigned a name. ID may change in future.
+	Starlink filing with FCC reports this satellite is out of service but could still maneuver, at the time of filing. Starlink filing with FCC reports this satellite is out of service and can not maneuver.
m	Multiple objects. This entry is a placeholder for a known debris event where no debris has yet been cataloged by DoD.
C	US government orbital data for this object are secret.
c	Older US government orbital data for this object were secret, but current data is public.
U	This object is a cargo item on ISS (or other station) and has been assigned to a likely cargo launch but the actual launch for this object is not known.
D	This object is a cargo item on ISS (or other station). The return date is uncertain and I've made a guess at which ship it went down on.
X	We don't know which launch this object is from, so the launch date is unknown (and other parameters may also be unknown).
s	Disagreement between TLE and SupTLE data (true for S45139)

### I.1.6.10 Byte 10 (Annotation flag)

This byte is used to control display options in certain software associated with the database. It should be ignored by other software.

At present, possible values of this byte are r,g,b,c,m,y,k indicating colors chosen for data associated with the specific satellite in automated plots, e.g. of altitude vs time.

### I.1.6.11 Byte 11 (Group control flag)

This byte is used to include or exclude objects from the debris clouds in the debris cloud catalog.

Value	Meaning
+	Object included in debris cloud analysis
-	Debris object not counted as part of debris cloud

## I.1.7 Phases and Status Values

Each entry in the General Catalog represents a time period or phase in the flight history of an object. The !b status value describes the status of the object at the end of the phase. Typical values of the status are 'O' (still in orbit) and 'R' (reentered). But it can get a lot more complicated.

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### I.1.7.1 Phases

Each time an object transitions to another state (undocks, is attached to something, reenters, changes which body it is orbiting, etc.) marks the beginning or end of a **phase**. Most objects in GCAT have only a single phase - they separate from an object (launch vehicle) and then are either still in free flight or have reentered. However, some objects go through many phases.

The phase is defined by a set of fields in the object catalog entry.

Field	Symbol	Format	Description
Parent	P	EJCAT/Body	the parent can be an extended JCAT ID (EJCAT) or a body name.
SDate	t1	VagueDate	the phase start time. This can be the time the object separated from the parent EJCAT or the time the object departed the parent body's gravitational sphere of influence (SOI)
Primary	C	Body	the name of the central body for this phase
DDate	t2	VagueDate	the phase end time
Status	S	Phase Status Code	a code describing the event that ends the phase
Dest	D	Location/Body/JCAT	'destination', a string whose definition depends on the Status value. It can be empty, a Location, a body, or a JCAT.

Also relevant is *te*, the orbit epoch ODate, mentioned in a few cases below.

The symbols in the table above are used in the discussion below for conciseness.

A **location** can be expressed as a string (uncontrolled text, e.g. 'W Atlantic') or as longitude/latitude coordinates (e.g. 74W 22S). The Dest field may be blank if reentry location is unknown.

The different kinds of phases are defined by the Status field. They are given in a somewhat arbitrary order that makes sense to me, and grouped by what kind of Dest field is used. The state of an object includes its 'externality' - is it free, attached to a parent object externally, or is it inside its parent object. This externality is also described in the following table defining the different Status codes. The table assumes (in the interpretation of t1 and t2) that P is a EJCAT rather than a body. If P is a body then t1 represents the time the object went from P's SOI to C's SOI; if D is a body then t2 represents the time the object went from C's SOI to D's SOI.

(Added 2021 Oct.) For cases where a vehicle is reused in a new launch (e.g. Space Shuttle Orbiter), the REFLT status is used to connect the objects. For example, the Space Shuttle OV-102 Columbia flew on mission STS-1 as orbital launch 1981-034, catalog S12399, piece designation 1981-034A. When it flew again on STS-2, NORAD gave it a new launch number 1981-111, catalog number S12953, and piece designation 1981-111A. Understandably the NORAD (now Space Force) tracking system cannot know from tracking data that the objects are the same vehicle - but historians do. I add an extra phase to S12399 (STS-1) after the landing, with zero duration, status REFLT, and dest equal to S12953, to signal that S12399 later got relaunched as S12953. Note that only a few entries of this kind have been added at the time of this writing.

I acknowledge that there is a bit of a 'ship of Theseus' problem here: is the orbiter that flew on STS-93 really the 'same object' as the one that flew STS-1?

The case of re-launches from other worlds is slightly different, in that Space Force does NOT assign a new catalog number, but I do - when the launch is from a world, not a small rock. For Apollo 11, three objects get new catalog numbers: the LM 5 Eagle ascent stage and the two EVA suits. EVA suit A7L-056 was given auxiliary catalog A01625 for its launch from Earth (launch designation 1969-059). On reaching deep space aboard Eagle it is given designation D00265. The last A01625 phase has status DSA with dest D00265 to tie the two together. The suit retains its D00265 designation through the lunar surface EVAs. Then it has a phase with the REFLT tag reassigning it to a new catalog number D01053 associated with a new launch, 1969-U01, corresponding to the launch of Eagle from the lunar surface. This follows the spirit of what NORAD did with STS-1 - when relaunching the same thing it gets new launch designations and catalog numbers - even though NORAD does not actually do this when the launch is not from Earth. Suit A7L-056 retains the new D01053 catalog number and 1969-U01 launch designation through its landing in the Pacific aboard D00273/1969-059A Columbia.



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For the actual extraterrestrial re-launching itself, I retain the 'LO' status tag used previously but add a dest value. 'LO' should now be considered as equivalent to REFLT for such cases. Thus, for Eagle's ascent stage we have: launched from Earth as 1969-059C, catalog S04041. Reached deep space and reassigned as 1969-059C, catalog D00274, via a DSA status tag to connect the catalog numbers. Relunched from the Moon as new launch 1969-U01, catalog D01052. The final D00274 phase has status LO with dest D01052 to connect it to the new catalog number.

For 'launches' (departures) from low gravity objects that I don't count as worlds, I don't give new launch designations. I think of it more like an undocking in such cases! In these cases, the LO status tag does not have a new catalog number in the Dest field.

In earlier versions of the catalog, I did not distinguish between planetary flybys and orbital missions. Both used the 'EO' take for a swich of sphere of influence. For an orbital mission, however, the phase within the planetary sphere of influence includes three sub-phases: hyperbolic approach from sphere of influence to orbit insertion, elliptical bound orbit phase, and (hyperbolic) departure from orbit escape to sphere of influence (or to impact/landing).

In versions prior to 1.4, suborbital objects were given status 'R'. However their reentry, although it doesn't involve a deorbit burn, is at a predictable time and targeted location, which is importantly different from uncontrolled reentries of orbital objects. The new status value 'S' is now used for suborbital targeted reentries and also (a bit more questionably) for launch failures. The 'LF' code for failed landing has not been used generally - some 'D' should really be 'LF'.

Status value	Description	Interpretation	Externality
<b>Cases with t2 and Dest both empty</b>			
O	In orbit	Sep from P at t1, still in free flight	Free
AO	Attached in orbit	Attached to P from t1 to present	External
AO IN	Attached inside	Inside P from t1 to present	Internal
UDK	Undocked	Docked to P from t1 to t2, sep from P at t2	External to fr
REL	Released	Attached to P from t1 to t2, sep from P at t2	External to fr
DEP	Deployed	Same as REL but for objects on planetary surface	External to fr
TO	Takeoff	Launch from C surface (C is a small body, not a world)	Free
TOA (was ALO)	Attached at takeoff	Attached to P from t1 to t2 including at launch from C surface.	External
OX	In orbit (probably) but lost	As O, but no recent tracking data	Free
<b>Dest is always blank but t2 is not</b>			
E	Exploded	Sep from P at t1, free in orbit until breakup at t2. Next phase of this object is a debris fragment.	Free
N	Renamed	In orbit from t1 to t2, name or owner changed at t2. Next phase reflects new name and owner	Free
NA	Renamed attached	Attached to P from t1 to t2, name or owner changed at t2. Next phase reflects new name and owner	External
LEASE	Lease	Temporary lease from main owner from t1 to t2. Sat-Type code is PA.	Free
<b>Dest is a location on C, or C itself, or blank (see also 'Dest is a body name' b</b>			
S	Targeted suborbital entry/impact	Sep from P at t1, crashed or destroyed in atmosphere at t2 at end of launch trajectory	Free
R	Reentered	Sep from P at t1, destroyed in C's atmosphere at t2 after natural decay	Free
D	Deorbited	Sep from P at t1, destroyed in C's atmosphere at t2 via active deorbit maneuver	Free
L	Landed	Sep from P at t1, landed or splashed down on C's surface at t2	Free
LF	Failed landing	Intact landing intended but actually destroyed on impact	Free
AS	Suborbital reentered attached	Attached to P from t1 to t2 when P reentered	External
AR	Reentered attached	Attached to P from t1 to t2 when P reentered	External
AR IN	Reentered inside	Inside P from t1 to t2 when P reentered	Internal
AL	Landed attached	Attached to P from t1 to t2 when P landed	External
AL IN	Landed inside	Inside P from t1 to t2 when P landed	Internal
TX	Transmission ended	Operated on C's surface from t1 to t2	Free
F	Failed	Sep from P at t1, crashed or destroyed at t2 during launch failure	Free
AF	Failed attached	Attached to P at all times until it and P crashed or destroyed at t2 during launch failure	External or in nal.
<b>Dest is a JCAT from D catalog (deep space). JCAT ID used in deep space catalog f</b>			
DSO	Deep space	Sep from P at t1, passed deep space boundary at t2.	Free
DSA	Deep space attached	Attached to P since t1, passed deep space boundary at t2.	External
DSA IN	Deep space inside	Inside P since t1, passed deep space boundary at t2.	Internal
LO	Liftoff	Launch from C surface (C is a world but not Earth), catalog reassigned to dest	Free
LOA	Reflight attached	Launch from C surface (C is a world but not Earth) aboard parent object, catalog reassigned to dest	External or In nal
<b>Dest is a JCAT from the main catalogs (not from D catalog)</b>			
DK	Docked	Sep from P at t1, docked with D at t2	Free to Extern
GRP	Grappled	Sep from P at t1, docked with D at t2	Free to Extern
ATT	Attached	Was attached to P at t1, then attached to D at t2	External.
TFR	Transfer	Inside P at t1, moved inside D at t2	Internal
TFR E	Transfer external	Inside P at t1, moved to exterior of D at t2	Internal to E nal
TFR IN	Transfer in	Outside P at t1, moved to interior of D at t2	External to In

For case C (Collision) the collision can result in the destruction of the object, in which case there is no subsequent phase; or the object can survive, in which case t2 starts a new phase. If object A collides with object B, there is a C status for each of the objects A and B. That is, A has a phase that ends with 'A collides with B', and B has a phase that ends with 'B collides with A'. If A survives, B is the parent object for A's next phase, and vice versa.

For cases R, D, AR, AR IN: if C has no atmosphere, t2 is the time of impact on C's surface. Natural decay includes orbit perturbation due to mascons, and direct impact without first entering bound orbit.

For cases DSO, DSA, DSA IN; the object is considered to have left the main part of GCAT at t2. Its old JCAT ID no longer applies and the Deep Space Catalog JCAT ID is used for further phases of its history.

For case LO, when taking off from a world a new launch designation and catalog number are assigned - it is treated as a new launch. For case TO, when taking off/departing from a small body, I don't consider it a new launch and no reassignment is made.

For case EVA RP, P and D are usually the same airlock. The phase may involve moving outside airlock and returning ('spacewalk'), but sometimes the 'EVA' may be entirely internal, working inside the depressurized airlock for the duration. Sometimes I use the phrase 'depressurization activity' rather than 'EVA', since the initial E is not necessarily applicable.

The cases OI, OE, EN, EO and EAO are only used in the Deep Space Catalog and the heliocentric and lunar-planetary registers.

## I.1.8 Launch Success Fractions

The practice, of which I and others have long been guilty, of evaluating launch vehicle reliability based on a simple pass/fail value for each launch is rather a blunt instrument. To try and do a bit better, I have added a **launch success fraction** in some cases.

In the LaunchCode field of the launch lists, I take a rather old-fashioned view of success and failure. Nowadays, if a commercial satellite launch vehicle fails to deliver all its customer payloads to the correct orbit in working order, the launch is considered a total failure. In the 1950s, however, a US government launch that got only a few metres off the pad might still be considered a 'partial success', for example because it demonstrated the correct functioning of the engine ignition system and the ability of the rocket to fly in vaguely the right direction.

When you're assessing the capability of launch vehicles over decades and comparing those from new space players and established spacefarers, this older approach is actually helpful. In 2012 I introduced the following scheme.

For pass/fail purposes I consider a score of less than 0.75 to be a failure; one could argue for lowering that boundary a little bit.

For launches with a single payload, or multiple equal-priority payloads, I give:

- full success	1.00	
- orbit usable but not nominal	0.75	
- orbit but not a usable one	0.40	
- payload failed to separate or fatally damaged by LV	0.25	(even if good orbit)
- orbit not reached	0.00	(or reentry after circa 1 orbit)

For missions with primary (P) and secondary (S) payloads, a rough scaling to give the P 3 times the weight of S -

- full success	1.00
- S off-nominal orbit	0.95
- S unusable orbit	0.85
- S failed to sep	0.75
- P off-nominal orbit	0.55
- P unusable orbit	0.30
- P failed to separate	0.10

There's still some subjectivity here, and I've allowed myself to assign intermediate values, e.g. when an orbit is only slightly off-nominal. Now obviously scores of 0.40 or less are going to mean an unhappy customer, but I think it's still worth distinguishing from complete failure to orbit a it usually indicates a vehicle which is 'close' to working in contrast to some vehicles which never make it beyond first or second stage burn.

In my initial implementation in 2012, the scores assigned that differ from 0.0 and 1.0 were:

Score	LaunchCode	Launch (Launch desig, vehicle)
0.25	OF25	96-061 Pegasus
0.40	OF40	63-021 Thor Agena, 67-032 Proton. 76-062,76-088, 80-031,
0.45	OF45	04-050 Delta 4H (primary payload medium-bad orbit, second
0.50	OF50	01-029 Ariane 5/V142
0.75	OS75	97-057 PSLV, 97-066 Ariane 502, 07-027 Atlas V/NROL-30
0.80	OS80	00-048 Delta 3, 01-015 GSLV (somewhat off-nominal orbit)
0.85	OS85	12-054 Falcon 9 (primary perfect, secondary unusable)

## I.1.9 Orbital Categories

The following table gives the abbreviations I use to summarize different orbital categories (notably, in the OpOrbit field of the object catalogs.) LEO is (the upper part of) Low Earth Orbit; LLEO is Lower LEO, below 600 km. GEO is Geosynchronous Earth Orbit.

'Height'  $h$  is defined as geocentric semi-major axis minus Earth equatorial radius:  $(a-6378.0 \text{ km})$ ; i.e. average of conventional perigee ( $h_p$ ) and apogee ( $h_a$ ) heights. Heights are in km, inclination in degrees.

One common conventional upper boundary of LEO is a 2 hour period (and it's enshrined in code as part of the SGP4 model.) Orbital period makes the most sense for defining boundaries between there and GEO, while height makes the most sense for the lower boundaries. This makes the definition scheme a bit patchwork - sorry.

Prior to release 1.3 (Sep 2022) I used a 2-hour period (1681 km altitude) as the upper boundary of LEO. I now use 2000 km altitude, which has become the more common usage in recent years.

Code	Name	Period (hr:min)	Height (km)	Inclination (deg)	Eccentricity
ATM	Atmospheric		ha below 80		
SO	Suborbital		hp below 0, ha above 80		
TA	Trans-Atm.		hp from 0 to 80, ha above 80		
LLEO/E	Lower LEO/Equatorial		h 80 to 600	0 to 25	
LLEO/I	Lower LEO/Intermediate		h 80 to 600	25 to 85	
LLEO/P	Lower LEO/Polar		h 80 to 600	85 to 95	
LLEO/S	Lower LEO/Sun-Sync		h 80 to 600	95 to 104	
LLEO/R	Lower LEO/Retrograde		h 80 to 600	104 to 180	
LEO/E	Upper LEO/Equatorial	Up to 2:00	h 600 to 1681	0 to 25	
LEO/I	Upper LEO/Intermediate	Up to 2:00	h 600 to 1681	25 to 85	
LEO/P	Upper LEO/Polar	Up to 2:00	h 600 to 1681	85 to 95	
LEO/S	Upper LEO/Sun-Sync	Up to 2:00	h 600 to 1681	95 to 104	
LEO/R	Upper LEO/Retrograde	Up to 2:00	h 600 to 1681	104 to 180	
MEO	Medium Earth Orbit	2:00 - 23:00			0.00-0.50
HEO	Highly Elliptical orbit	4:03 - 23:00			0.50-0.92
HEO/M	Molniya	11:30 - 12:30		62.0 - 64.0	0.50 - 0.77
GTO	Geotransfer	10:00 - 12:30		0.0 - 85.0	0.50 - 0.77
GEO/S	Stationary	23:55.5-23:56.5		0.0 - 3.0	0.00 - 0.01
GEO/I	Inclined GEO	23:55.5-23:56.5		3.0 - 25.0	0.00 - 0.05
GEO/T	Synchronous	23:55.5-23:56.5		0.0 - 180.0	0.00 - 0.85
GEO/D	Drift GEO	23:00 - 25:00		0.0 - 3.0	0.00 - 0.05
GEO/SI	Inclined GEO	23:55.5-23:56.5		3.0 - 25.0	0.00 - 0.05
GEO/ID	Inclined Drift	23:41 - 24:11		3.0 - 25.0	0.00 - 0.05
GEO/NS	Near-sync	23:00 - 25:00		0.0 - 180.0	0.0 - 0.85
VHEO	Very High Earth Orbit	Above 25:00		0.0 - 180.0	0.0 - 1.00
DSO	Deep Space Orbit		h above 145688 to 318200		0.0 to 1.0
CLO	Cislunar/Translunar		h from 318200 to 1.5 million		0.0 to 1.0
EEO	Earth Escape		h less than 1.5 million		Above 1.0
HCO	Heliocentric		h more than 1.5 million		Heliocentric e
PCO	Planetocentric		Central body not Earth or Sun		
SSE	Solar System Escape				Heliocentric e

## I.1.10 Uncataloged ('U') Launches

### I.1.10.1 The U designation

In the (See launch designations) section we mention the 'U' entries. These are launches for which I assign designations for the form 1969-U01, etc. They are launches which are not in the usual lists of orbital launches, but which are close to making the cut for various reasons, and most of them are pretty interesting.

Orbital launches usually have international designations ('COSPAR designations'). Assignment of these designations was delegated in the early 1960s by the UN COSPAR to the World Data Center A for Rockets and Satellites, who at some point further delegated it to NORAD, today in the form of the US Space Force 18th Space Control Squadron.

The traditional rule was that any launch from the Earth which resulted in an object completing one or more orbits of the Earth would receive a designation. This rule has not always been followed.

I assign U designations for several categories of launch that I consider interesting:

- 'Skipped launches': Launches which should have received international designations but did not, either because the US failed to track them or because the rule was not followed.

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- 'Marginal orbit': Attempted orbital launches which failed to reach a sustained orbit, but fell just short; typically perigee between -500 km and +100 km. Since the exact orbit attained is often uncertain, I have tended to be inclusive when deciding whether to assign such launches a 'U' rather than an 'F' designation. You can think of this category as a way to pull out 'interesting' launch failures that were really close to succeeding, as opposed to ones that blew up just above the pad.
  - 'Suborbital with orbital energy': Suborbital launches that have a high apogee (more than a few thousand kilometres) have a total energy (kinetic plus potential) that is greater than a low orbit satellite, in contrast to the vast majority of suborbital sounding rocket and missile flights which are well short of orbital energy. Thus, these are 'interesting' suborbital launches than are in some sense close to being orbital.
  - 'Reentry with orbital energy': suborbital launches with stages that fire their payload down fast into the atmosphere to test reentry behaviour. In some cases these even have escape velocity, but going in the 'wrong' direction. They may only traverse a small segment of the indicated orbit; for example the orbital parameters of Meteor 4/5 have a large apogee but the vehicle didn't ever get to that apogee, flying on a small segment of the downward arc of the orbit with a maximum actual altitude of 110 km.
  - 'Extraterrestrial launches': launches from worlds other than the Earth. (So far, that's just the Moon). 'Worlds' here means large (self-gravitatingly round) bodies; departures from comets and small asteroids are considered equivalent to undockings rather than launches and are not given separate launch designations.

For convenience, here is an annotated table of all the U launches. 'Actual Apo' indicates the actual maximum height above Earth reached. 'Orbit Peri' and 'Orbit Apo' define the orbit that the spacecraft was on for at least a few moments, even if they did not reach either orbit extreme. Recall that negative apogees represent hyperbolic (above escape velocity) trajectories, albeit in this case heading downwards into the atmosphere.

The C3 value, usually used for Earth escape launches, is a measure of the orbital binding energy per unit mass, in  $\text{km}^2/\text{s}^2$  or (equivalently) MJ/kg; the SpE value is the total kinetic plus potential energy per unit mass, in the same units; the two are not independent, as  $\text{SpE} = 0.5 * \text{C3} + 62.5$ . C3 is negative for objects bound to Earth and positive if they have escape velocity; SpE is always positive and I find it more intuitive for the marginal-orbit cases.

Designation	Launch Date	Launch Vehicle	Site	Payload
1957-U01	1957 Oct 17 0505	Aerobee USAF 88	Holloman ADC	USAF 88 Charge A
1958-U01	1958 Sep 26 1538	Vanguard SLV-3	Canaveral LC18A	Vanguard Cloud Cover Sa
1959-U01	1959 Jun 25 2247	Thor Agena A 179	Vandenberg 75-3-5	CORONA C-1/FTV 1023
1960-U01	1960 Apr 15 1506	Vostok-L L1-9	Baykonur LC1/5	Luna E-3 No. 1
1960-U02	1960 Sep 21 1301	Blue Scout Jr D-1	Canaveral LC18A	D-1 Probe
1960-U03	1960 Oct 4 1523	Scout X-1 ST-2	Wallops LA3	ST-2 Probe
1961-U01	1961 Aug 17 1429	Blue Scout Jr D-1	Canaveral LC18A	O-1 Probe
1961-U02	1961 Apr 21 0556	Trailblazer I	Wallops	Trailblazer 1g
1961-U03	1961 Oct 19 1738	Scout X-1 ST-7	Wallops LA3	ST-7 Probe
1961-U04	1961 Dec 4 0400	Blue Scout Jr O-2	Point Arguello LC-A	O-2 Probe
1962-U01	1962 Mar 29 0727	Scout X-2 ST-9	Wallops LA3	ST-9 Probe
1962-U02	1962 May 6 0541	Trailblazer 2	Wallops	Meteor 1 pellet
1962-U03	1962 Aug 31 1625	Scout X-3A S114	Wallops LA3	Reentry 2
1963-U01	1963 Jul 30 1616	Blue Scout Jr 22-1	Canaveral LC18A	AFCRL-1/21
1964-U01	1964 Mar 12 0417	Nike Cajun	Wallops	Meteor 2/3
1964-U02	1964 Apr 14 2142	Atlas 263D	Kennedy LC12	FIRE 1
1964-U03	1964 Apr 21 1850	Thor Ablestar 379/AB014	Vandenberg 75-1-1	Transit VBN-3
1964-U04	1964 Aug 18 0605	Scout X-4A S129R	Wallops LA3	Reentry 4
1964-U05	1964 Nov 7 0138	Nike Cajun	Wallops	Meteor 4/5
1965-U01	1965 Dec 16 1409	R-36O U22502-01L	Baykonur LC67/21	OGCh No. 01L
1965-U02	1965 Jan 19 1404	Titan II GLV-2	Kennedy LC19	Gemini GT-2
1965-U03	1965 May 4 0550	Nike Cajun	Wallops	Meteor 6/7
1965-U04	1965 May 22 2155	Atlas 264D	Kennedy LC12	FIRE 2
1965-U05	1965 Mar 30 1609	Blue Scout Jr 22-4	Kennedy LC18A	AFRCL-35
1965-U06	1965 Apr 9 1810	Blue Scout Jr 22-9	Kennedy LC18A	AFWL-14
1965-U07	1965 May 12 1602	Blue Scout Jr 22-8	Kennedy LC18A	AFCRL-335
1965-U08	1965 Jun 9 1626	Blue Scout Jr 22-5	Kennedy LC18A	AFWL-304
1966-U01	1966 Feb 5 1219	R-36O U22502-02L	Baykonur LC67/21	OGCh No. 02L
1966-U02	1966 May 19 1930	R-36O U22502-04L	Baykonur LC67/21	OGCh No. 04L
1966-U03	1966 Feb 10 0055	Scout X-4A S141C	Wallops LA3A	Reentry E
1966-U04	1966 Feb 26 1612	Saturn IB SA-201	Kennedy LC34	Apollo AS-201
1966-U05	1966 Mar 18 0115	Trailblazer 2	Wallops	Meteor 8
1966-U06	1966 Aug 25 1715	Uprated Saturn I SA-202	Kennedy LC34	Apollo AS-202
1966-U07	1966 Sep 17 0157	Nike Cajun	Wallops	Meteor 9
1966-U08	1966 Dec 21 2215	Atlas SLV-3 7001	Vandenberg SLC3E	SV-5D FV-1
1967-U01	1967 Feb 14 0552	Trailblazer 2	Wallops	Meteor 10
1967-U02	1967 Mar 5 2305	Atlas SLV-3 7002	Vandenberg SLC3E	SV-5D FV-2
1967-U03	1967 Apr 20 0135	Atlas SLV-3 7003	Vandenberg SLC3E	SV-5D FV-3
1967-U04	1967 Oct 19 1733	Scout B S159C	Wallops LA3A	RAM C-1
1968-U01	1968 May 20 2205	R-36O Ya22500-18L	Baykonur LC162/36	OGCh No. 18LU
1968-U02	1968 May 27 2315	R-36O Ya22501-19L	Baykonur LC161/35	OGCh No. 19LU
1968-U03	1968 Aug 22 1516	Scout B S168C	Wallops LA3A	RAM C-2
1969-U01	1969 Jul 21 1754	LM 5 Ascent Stage	Tranquility Base	LM 5 Eagle
1969-U02	1969 Nov 20 1425	LM 6 Ascent Stage	Surveyor 3 Site	LM 6 Intrepid
1969-U03	1969 Jan 25 1114	Tsiklon-2A No. 12L	Baykonur LC90/19	US-A No. 212
1970-U01	1970 Sep 21 0743	E-8-5 VS	Luna-16 site,Mare Fecunditatis	E-8-5 No. 406 VA
1970-U02	1970 Jun 12 0110	Europa I F-9	Woomera LA6A	ELDO STV 3
1970-U03	1970 Nov 30 2240	Atlas Centaur AC-21	Kennedy LC36B	OA0 B
1971-U01	1971 Feb 6 1848	LM 8 Ascent Stage	Fra Mauro Base	LM 8 Antares
1971-U02	1971 Aug 2 1711	LM 10 Ascent Stage	Hadley Base	LM 10 Falcon
1971-U03	1971 Sep 20 2331	Scout B S166C	Wallops LA3A	Barium Ion Cloud
1972-U01	1972 Feb 22 2258	E-8-5 VS	Luna-20 site, Apollonius C	E-8-5 No. 408 VA
1972-U02	1972 Apr 24 0125	LM 11 Ascent Stage	Descartes Base	LM 11 Orion
1972-U03	1972 Dec 14 2254	LM 12 Ascent Stage	Taurus-Littrow Base	LM 12 Challenger
1973-U01	1973 Apr 25 0910	Tsiklon-2 No. 17L	Baykonur LC90	US-A No. 314
1973-U02	1973 May 21 0847	Diamant B No. 5	Kourou ELD	D-5A/D-5B
1976-U01	1976 Aug 19 0525	E-8-5 VS	Luna-24 site, Mare Crisium	E-8-5 No. 413 VA
1976-U02	1976 Jun 18 1141	Scout D-II-47. S193C	Wallops LA3A	Gravity Probe A
1979 U01	1979 Oct 12 1230	Soyuz U 77025 419	Placatek LC43/3	Aragon (Zenit 6) No. 12L

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## I.1.11 Analyst Objects

In the derived catalog 'currentcat' I have added about 700 objects with 'C' prefixes. These are debris objects tracked by the US Space Force which they have not identified with a specific launch.

### I.1.11.1 Analyst Objects in the Space Force Catalog

The main, public US Space Force catalog has a running catalog number starting with 1 (Sputnik 1 rocket stage) and going to currently somewhat over 51000.

The criteria for a previously undetected debris object being added to the catalog are traditionally:

- Object remained in space for more than one full orbit
- Object's orbit is well determined and followed over a period of time (many orbits). I will refer to this as it being a 'persistent object', as opposed to radar tracks that are not seen again. (For astronomers: This is analogous to the difference between a minor planet with a provisional designation and one with a permanent asteroid number.)
- Object is identified as being from a specific launch, so that it can get an 'international designation'

The Space Force also generates orbital solutions for objects which do not yet meet these criteria, but might later get added to the catalog. These are called 'analyst objects' (the data will be studied by analysts for possible later identification). Historically these are assigned fake catalog numbers between 80000 and 90000 (and possibly between 70000 and 80000, although the orbital data for those has not generally been released). More recently, objects detected by the Space Fence have been given numbers starting at 270000.

A few datasets of the analyst object TLEs became public (possibly inadvertently) over the years, and then in 2020 a subset of analyst TLEs started being regularly released by 18SPCS on Space-Track.org.

To distinguish the analyst objects, I add them to my supplementary CSOCAT catalog (which also contains objects from other sources such as hobbyists). CSOCAT catalog numbers in the ranges 80000-89999 and 270000 upwards are reserved for US Space Force analyst object TLEs.

These objects fall in several categories:

- Assorted TLEs: analyst catalog numbers with several TLE sets referring to several different objects in entirely different orbits. These numbers are apparently reused at will and do not refer to a single persistent object.
- Fake (Search) TLEs: TLEs which appear to be associated with prelaunch estimates of a known object rather than being based on actual tracking data.
- Poorly tracked objects, with only one or two TLE sets, and those from many years ago.
- Old, retired analyst objects: analyst catalog numbers with several TLEs in my archive, but none referring to recent epochs. In particular, a lot of objects in the 1994 and 1998 analyst datasets available to me don't appear in the modern (2020 onwards) TLE data releases. I have assigned them status OX (lost), but in many cases it's possible they have been moved to the main catalog with a new catalog number. I have identified a handful of cases like that, but haven't worked to make systematic cross-identifications.
- Persistent analyst objects: analyst catalog numbers for which the TLEs since 2018 clearly refer to one specific object (the orbit changes slowly) and which continue to get new updated TLEs in the past year or so.
- Space Fence objects: the objects with catalog numbers above 270000. All of these (with a handful of exceptions) appear to be persistent analyst objects.
- Unreleased analyst objects. The Space-Track.org 'Space Scoreboard' says that there are (as of Feb 2022) 17600 analyst objects, many more than data is being released for.



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### I.1.11.2 Objects in the CurrentCat

Only the ‘persistent analyst objects’ are really of interest, as real well-tracked objects which would be in the main catalog if they were associated with a known launch. As of Feb 2022 there are a little under 700 of these. This is just a few percent of the number of tracked debris objects in orbit, and a small number compared to the 17600 such objects reported to exist by 18SPCS.

All the analyst objects for which I have any data are included in the Complementary Catalog ‘csocat’. Use that data with care, since they include objects which are not necessarily real, and ones which have been reassigned with new numbers elsewhere.

The 700 robust ‘persistent analyst objects’ are now included at the end of the derived product ‘currentcat’ so that they can be used in statistical studies.

### I.1.11.3 Tentative Identifications of Analyst Objects

I have attempted to identify these analyst objects.

- In some cases one can infer the parent launch with fairly high confidence - for example objects from the 1965 SNAPSHOT launch which have distinctive orbital parameters.
- In other cases one can only identify them as being from one of a handful of launches - there is a debris cloud at high inclination which is dominated by debris from three different Delta rocket stages that exploded in Dec 1973 (Delta 98), Aug 1975 (Delta 104), and Dec 1977 (Delta 126). You can be pretty sure that certain debris objects belong to one of those three launches, but you can’t tell which. For now I have arbitrarily picked one of the launches to assign to the objects but indicate the ambiguity in the object name.
- In still other cases, notably for LEO sun-synchronous objects and many Molniya orbit and geotransfer orbit objects, there are too many possible parent launches to make a specific identification. In these cases I do not assign an international designation and give the object a generic name like ”Unknown SSO debris”.

In future I hope to take a more rigorous approach by creating new designations for specific debris clouds.

## I.1.12 Nomenclature codes (work in progress)

Satellites use a variety of nomenclature schemes and many satellites have multiple names. The GCAT object catalogs provide a primary post-launch name (‘Name’), a (often pre-launch) payload name (‘PLName’) and optionally a comma-delimited list of further alternate names.

For some purposes it is useful to flag which nomenclature scheme is being used for which name. In order to do this, GCAT introduces a ‘nomenclature code’ used to tag specific names. This code is usually a one or two letter string, but I reserve the right to make the strings longer in future.

The NomCodes can in principle support use cases such as:

- Print only the manufacturer name
- List all satellites with an early NASA ‘S-45A’ style designation
- Omit NRO mission names

However, that would require the NomCodes to be entered for all satellites. The user is warned that as of mid 2021, only a handful of satellites have NomCodes assigned. The intent is that NomCodes will be added as time goes on, but completion of that project is likely to take years.

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### I.1.12.1 NomCodes file

Valid nomenclature codes are listed in the (See NomCodes ) file.

### I.1.12.2 NomCodes in object catalog AltNames field

Nom codes are included as colon-delimited suffixes in the AltNames field. For example, the AltNames field might be

```
Zenit-6 No. 7L:RC,11F645 No. 76038-407:RB
```

This says the object has two alternate names:

```
1: Zenit-6 No. 7L
2: 11F645 No. 76038-407
```

The first one has nomenclature code RC, and the second one has nomenclature code RB. The RC code tells us that that name is a Soviet/Russian manufacturer name.

These NomCode suffixes are not currently supported in the Name and PLName fields. Instead, NomCode values for those fields may be listed at the beginning of the AltNames field, as for example:

```
:C,:RD,Zenit-6 No. 7L,11F645 No. 76038-407:RB
```

Parsing this string, we see that the first comma-delimited item is a NomCode (because it has a colon, which is treated as a special character) without a name prefixed to it. So, it is interpreted as a NomCode for the Name field. The second comma delimited item is also a NomCode with no name prefixed, so it is a NomCode for the PLName field. We then go into the regular list of AltNames. Note that in this example the first AltName doesn't have a NomCode. Some entries in an AltNames list may have a NomCode and others may not.

Correspondingly, if the first entry in the AltNames list has a non-empty name section, then there are no NomCodes defined for Name or PLName.

The catch is that there are two satellites which actually have colons in their names (Eu:CROPIS and RE:X xing). Colons may occur in the Name and PLName field, but are not allowed in names in the AltNames field. That's ugly, I know.

## I.1.13 Launch Service Codes

The Launch Service codes are provided in the Groups column of the launch lists, for orbital launches only.

I apologize for the overloading of the Groups column with totally different meanings in the orbital and suborbital cases. This denormalization was done purely for reasons of compact formatting in my internal representation.

The launch service code encodes the type of launch service (govt., fully commercial etc.) and customer (govt./commercial). To be used for statistical analysis of commercial launch activity. The intent here is to capture some nuance around 'commercial launches' - is the money really coming from commercial activity or is it just more government space investment with a different contracting model?

The launch service code is of the form

LST

or

LST/CT

or

---

LST/CT+CT

where LST is the **launch service type** and CT is the **satellite customer type**, as listed below.

The LST codes (launch service types) are:

LST Code	Launch Service Type	Default CT
G	Government rocket	G
CG	Commercial rocket operated on behalf of govt.	G
CO	Commercially operated government-developed rocket	C
CX	Commercial rocket and payload but end customer is govt	C
C	Fully commercial rocket	C

The CT codes (satellite customer types) are

CT code	Customer type
G	Government (of the rocket operator's country)
OG	Other government (foreign to the rocket operator)
C	Commercial

We distinguish between the government of the rocket operator's country and other governments. For example, Thor Delta is a US rocket so if it carries a US govt payload that's CT = G, but if it carries a Canadian govt payload that's CT = OG. Special cases include ESA/Arianespace rockets, where ESA, the EU, and individual ESA member state governments all count as 'G'; for Rocket Lab both US and NZ count as 'G'.

If the CT is the default CT for that LST, it can be omitted. Up to two different CTs can apply to a different launch.

Example 1: G - Government rocket with govt payload

Example 2: CG/OG+C - Commercial rocket operated on behalf of govt, carrying payload(s) for another govt and commercial payload(s).

## I.1.14 Launch Profile Codes

The launch profile codes are provided in the Category field of the launch lists, for orbital launches only.

This field encodes the target orbit type (LEO, GEO etc.), the upper stage(s) disposal mode, and the number of launch vehicle related debris objects generated during the launch phase (later stage breakups are not included). Note that the data in this field represent the intended result of the launch, not the actual result. It can be used to track the evolution of space debris mitigation practices used by launch agencies.

The format of the launch profile code is:

Sat XXX CC N

where XXX is the orbit code for the target orbit, CC encodes the planned upper stage(s) disposal mode, and N is the number of other debris objects planned to be left in orbit from the launch vehicle (not counting objects released by the payload, although there is some ambiguity in that).

The target orbit codes are:

Orbit code	Meaning
DSO	Deep space orbit (Earth orbit with apogee beyond 150,000 km)
EEO	Earth escape orbit
GEO	Direct geosync insertion
GTO	Geosync transfer orbit
HEO	Highly elliptical orbit (except MTO, MOL, DSO)
ISS	International Space Station
LEO	Low Earth Orbit (other than SSO, LSS, ISS)
LSS	LEO space station other than ISS
MEO	Medium Earth Orbit
MOL	Molniya orbit
MTO	MEO transfer orbit (with payload performing MEO circularization)
SSO	Sun-sync orbit
STO	Supersync transfer orbit (apogee more than 45000 km)
XO	Extraterrestrial launch (e.g. launch from lunar surface)

The next part of the launch profile code indicates what measures are taken to dispose of each upper stage which reaches orbit, or is close to reaching orbit. This section has one, two or three letters, depending on the number of upper stages reaching orbit.

Disposal codes are not included for extraterrestrial launches.

For example, OL means that one upper stage was left in orbit with no orbit change, and a second one was left in orbit with a perigee lowering burn carried out after payload deployment.

Disposal code	Meaning
A	Stage left in Earth orbit, but remains attached to payload by design.
B	Stage made depletion burn which boosted it to higher Earth orbit.
D	Actively deorbited to destructive reentry
E	Stage placed in Earth escape orbit
L	Small perigee lowering burn to reduce orbit lifetime (but not meeting criterion for P)
O	Left in Earth orbit for later uncontrolled reentry
P	Perigee lowered to 180 km or less for rapid decay, or stage left in orbit with that low a perigee to start with.
R	Recovered intact for possible reuse (so far, space shuttles only, considered as upper stages).
S	Stage left in marginally suborbital trajectory for targeted reentry on first orbit. Stages with perigees above -10

The S cases are typically ones involving disposing of a large core stage by leaving it slightly suborbital and making the payload or a small insertion stage complete the orbit insertion (for this purpose, the Shuttle External Tank is counted as a stage). This is a standard way of avoiding leaving a big stage with a non-restartable engine in low orbit, and is included to highlight this responsible strategy (and as a contrast to cases such as the CZ-5B).

Finally the number of other launch vehicle-related intentional debris objects is listed. Accidental debris, such as from upper stage breakups, is not included here. Typically the objects noted are tumble weights, multi-payload adapters such as Ariane Sylda5, or payload release hardware such as Starlink tension rods.

For example, 'Sat GTO SO 1' indicates that the launch was targeted for geotransfer orbit, that one stage was marginally suborbital and another was left in orbit for uncontrolled decay, and one additional debris object was left in orbit.

**Part II**

**Space Organizations**



## Chapter II.1

# The Space Organizations Catalog

### II.1.1 Introduction

In catalogs, review papers and databases describing or tabulating artificial satellites, space launches and other astronomical events, it is often necessary or useful to report the country of origin, owner organization, and/or manufacturer of the object of interest. This can be problematic as there is no standard way to refer to a particular organization. Organizations or parts of organizations are frequently sold, merge, or otherwise change their names, potentially concealing continuity in design of their spacecraft.

For my purposes, an ‘organization’ can be any named and spacetime-localized entity including

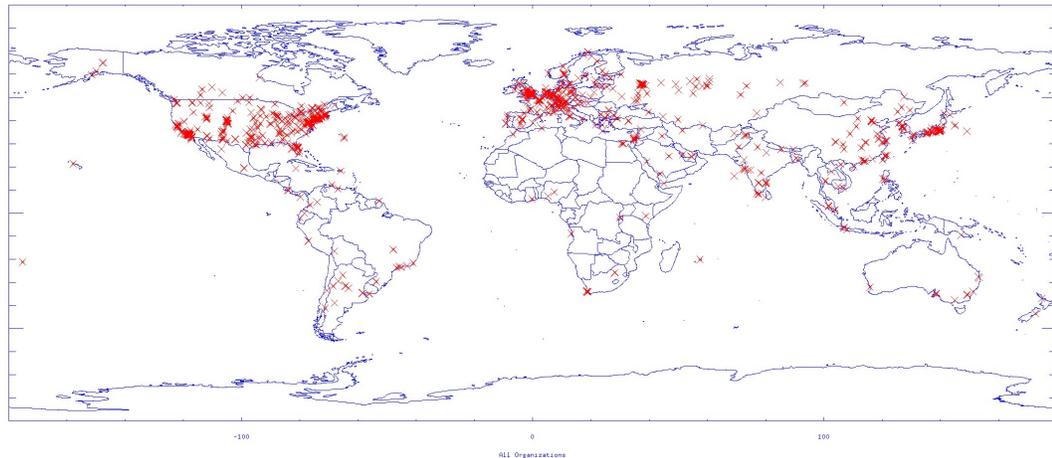
- A world or a region on a world - an ‘astronomical polity’ (AP)
- A country (nation-state) or autonomous political region (CY)
- An intergovernmental or supranational organization, used as if it were a country (IGO)
- An academic (A) or non-profit organization
- A business (B) entity, a corporation, company, or operating location thereof
- A civilian (C) or military/defense (D) government agency, base, or group

In this paper I present a scheme - the ‘Org Code’ - for referring to space organizations and a database of such organizations. The scheme and associated (See database) were developed to address this problem for the General Catalog of Artificial Space Objects (GCASO, McDowell 2020 in prep.), but I hope it will be found generally useful as no other comparable public dataset exists.

The organizations database generally includes only owner/operator and prime contractors for already-launched spacecraft, stages, stage main propulsion engines, etc., not subsystem level contractors, data analysis organizations, nor (with some exceptions) organizations involved only in missions whose launch is not yet imminent.

Although most documents describe satellite ownership and manufacture at the level of a headquarters parent agency or corporation (NASA, Boeing, Roskosmos, JAXA), I find it more illuminating to follow events at the level of a single operating location - an agency center like NASA-Goddard, or a factory/design organization like McDonnell Douglas/Huntingdon Beach (now Boeing). I assign a short alphanumeric code, the Org Code, to each such operating location.

Below: map showing geographic distribution of all organizations in the database (click for larger version)



## II.1.2 The Org Code

### II.1.2.1 Allowed characters

The GCASO Org Code scheme presented here uses a unique string of 1 to 8 characters to refer to an organization. Allowed characters are the digits 0-9, the ASCII upper case letters A to Z, and the dash (minus-sign). Some examples of the Org Code are: I-ESRO, SWRIB, B, 44FA2, IQ223, NASA.

### II.1.2.2 Code and UCode: Organization phases

We want to track the time evolution of an organization as it changes outward identity at the same location. Each change marks the start of a new 'phase' which gets a new **Org Code**, but also has an associated "**UCode**" (unified code) which is the same for all of the phases (and is usually, but not necessarily, the Org Code of the first phase). Note that each UCode is itself an Org Code.

For example, let us consider the Palo Alto, California location of Ford Aerospace. I assign this the UCode FORDA, with a series of phases:

Code	UCode	Name	Dates
PHLP	FORDA	Philco Western Development Labs (WDL)	1957-1966
PHFP	FORDA	Philco-Ford WDL	1966-1975
FORDP	FORDA	Aeronutronic Ford, WDL	1975 - 1976 Dec
FORDA	FORDA	Ford Aerospace/Palo Alto	1976 Dec - 1990 Oct
LOR	FORD	Space Systems Loral	1990 Oct - 2012 Nov
SSL	FORDA	MDA-SSL	2012 Nov - 2017 Oct
SSLMAX	FORDA	Maxar SSL	2017 Oct -2019 Mar
MAXSS	FORDA	Maxar Space Solutions	2019 Mar - present

In the organization database each code is paired with a UCode, so that all the codes with a common UCode can be identified. This allows us to understand that there is a historical connection between satellites built by SSL and those whose manufacturer was PHFP.

So, all the 1300 series communications satellites were built by (Ucode) FORDA, but each one can also be tagged with the specific name of the company as it existed at the time of the satellite's launch.

Note that countries can have phases too - the Czech republic is CSSR (1940-1990), CSFR (1990-1993) and CZ (1993-present), sharing the ucode CZ. Note that for countries extant in the early 21st century, the ucode is usually the Internet TLD, e.g. CN like .cn for Zhongguo (China), although the usual single-letter abbreviations have been



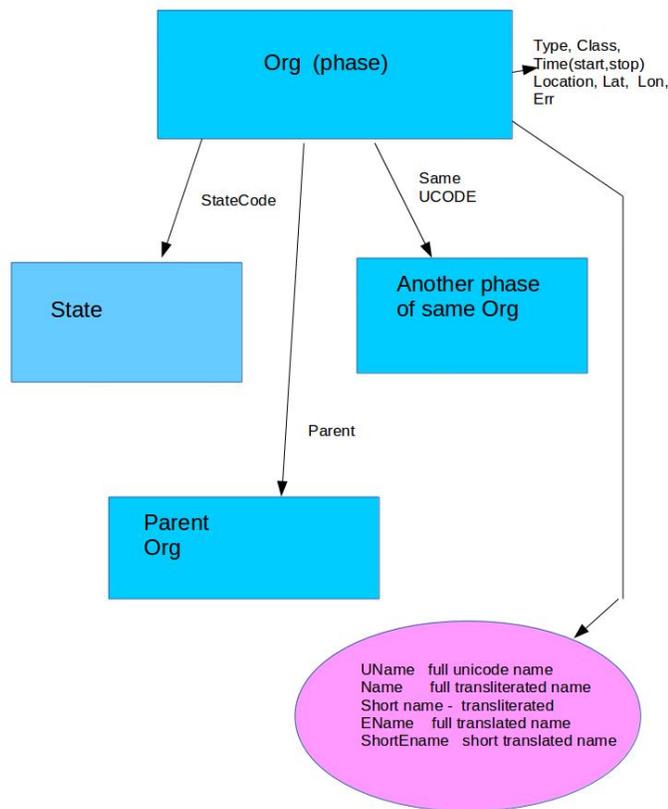
used for European Union countries e.g. D for Deutschland (Germany), F for France etc. Most two-letter ucodes are countries but there are a few exceptions (LM for Lockheed Martin, for example).

### II.1.3 The Database

The database consists of a single (See table) in which each record is an organizational phase with its Org Code. The columns are:

Column Name	Description
Code	Org Code for organization in a particular phase (time period)
UCode	'unified' Org Code for organization across all time periods
StateCode	OrgCode for organization's host state.
Type	Organization roles: a slash-separated set of types.
Class	Organization class: A, B, C, or D (Nonprofit, commercial, civil or defence)
TStart	Calendar date of phase start - e.g. when the org was founded
TStop	Calendar date of phase end - e.g. when the org was closed or renamed
ShortName	Short name of organization (ASCII, host language)
Name	Full name of organization (ASCII, host language)
Location	Approximate location (e.g. city)
Longitude	Longitude of location, deg E
Latitude	Latitude of location, deg N
Error	Error in lon/lat, deg
Parent	OrgCode of organization of which this org is a part
ShortEName	Short name of organization (ASCII, English)
EName	Full name of organization (ASCII, English)
UName	Full name of organization (Unicode, host language)

The way these columns are used is explained in more detail in the following subsection. First I present a diagram illustrating how the database entries relate the different organizations to one another:



### II.1.3.1 Column details

- **Code - the Org Code for this organization/time phase.**
- **UCode - the unified Org Code for all phases for this organization.**
- **StateCode - Org Code for the nation-state, IGO or other polity** with responsibility for the organization. This is normally the country in which the organization is located (referred to as 'host country' in the remainder of this document). Type of the state code must be CY, IGO or AP.
- **Type - the organization type**

This indicates the role of the organization, e.g. a payload operator, a launch agency, etc. The current database is somewhat patchy in data quality for this field, and I do not recommend relying on data in this column with the exception of the special values CY, IGO and AP which indicate entries with a status equivalent to a nation-state.

An entry can have multiple values of Type which are separated by a slash character, e.g. LV/E indicating the organization has both LV and E roles. Alternatively, an entry may have no Type value present at all.

Additional roles are reserved for the related Launch Sites database and are noted in the table below.

The full list of roles is:

Type code	Meaning
<b>States and similar entities</b>	
CY	Country (i.e. nation-state or autonomous region). Not always the same as the ISO3166 code even when the latter exists.
IGO	Intergovernmental organization. Treated as equivalent to a country for the purposes of tabulations of launches by country etc.
AP	Astronomical Polity: e.g. Luna, Mars. Used for the 'country' field for locations that are not on Earth and therefore don't have a country.
<b>Manufacturers</b>	
E	Engine manufacturer
LV	Launch vehicle manufacturer
W	Meteorological rocket launch agency or manufacturer
PL	Payload manufacturer
<b>Operators</b>	
LA	Launch Agency
S	Suborbital payload operator
O	Payload owner
P	Parent organization of another entry
<b>Launch origin or destination</b>	
LS	Launch site
LP	Launch position
LC	Launch cruise
LZ	Launch zone
TGT	Suborbital target area

- **Class - the organization class.**

Each organization is tagged as one of:

- A (Academic, amateur and non-profit)
- B (Business/commercial)
- C (Civil government)
- D (Defense/military/intelligence)

The same classes are used in the satellite payload database to mark individual satellites - usually the class of the satellite is the same as the class of the owner organization, but not always.

- **TStart and TStop** - start and stop time of this organization phase. Given in year, month, day format (actually Vague Date format. )

Null values are indicated by a dash. Null TStart means the start date of the organization is unknown; Null Stop means that the organization is still in operation, or assumed to be so.

- **ShortName** - a short ASCII name of the organization suitable for use in labels or tables, nominally a transliterated representation of the name in the host country's own language (or one of its principal languages, as appropriate).

- **Name** - a full name (up to 80 ASCII characters). Transliterated full name of the organization, in host country's language.

- 
- **Location** - City and locality of the organization. In many cases this is given in the form UrbanArea-Suburb, e.g. "Los Angeles-El Segundo". The precise address is not currently included in the database, although admittedly this would have been desirable.
  - **Longitude, Latitude, Error.** - The values are geographic longitude (east-positive) and latitude in decimal degrees.

For the Organizations database the error field is not filled but is usually 0.1 deg.

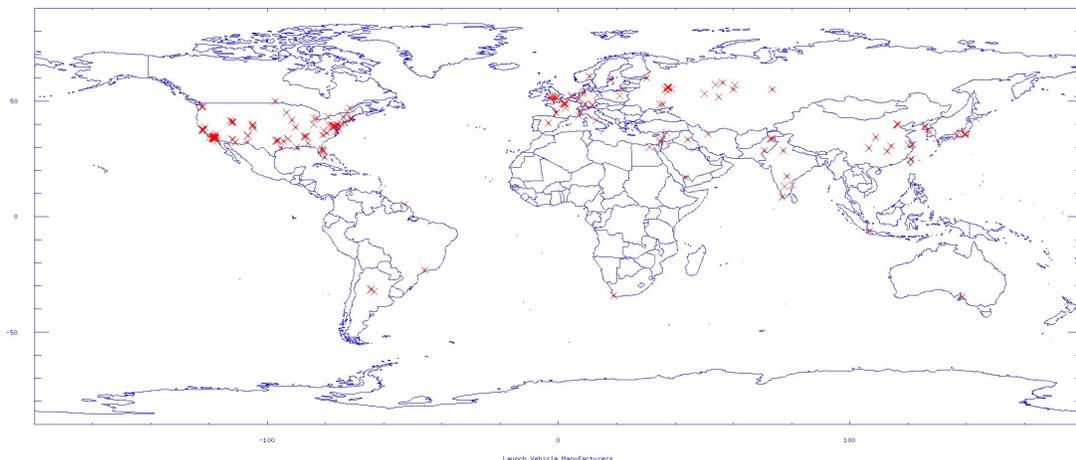
- **Parent**, when nonempty, provides an Org Code of the organization of which the current entry is a subset. Thus, NASA is the parent of Goddard Space Flight Center.

Note that in a few cases, an Org is noted as having more than one parent (two Org Codes separated by a solidus, e.g. MOTI/TMI). In these cases the Org is an equal joint venture of the two parents. However in practice in my software I ignore the second parent.

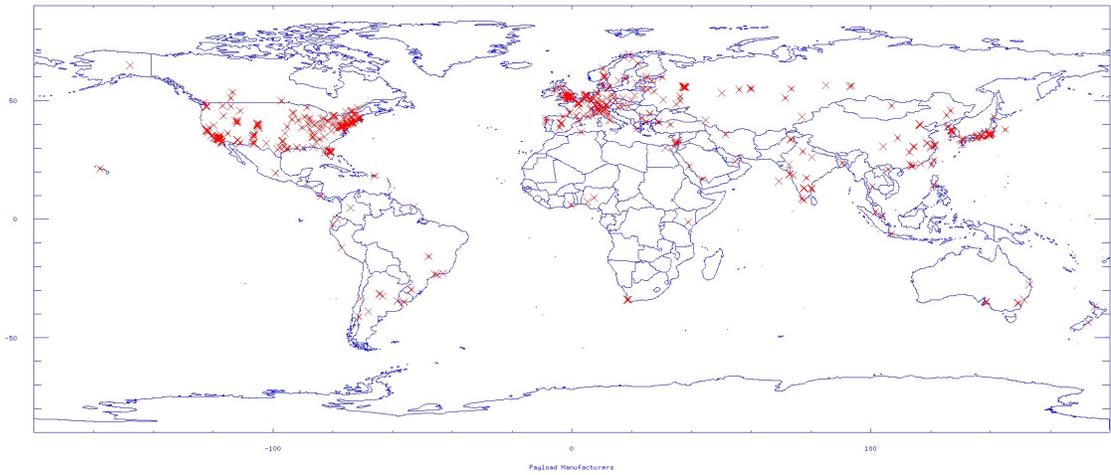
- **ShortEName** - Short name in English. Useful for summary information. Can be omitted when ShortName is itself English.
- **Ename** - Long (full) name in English.
- **UName** - Unicode version of full name in organization's parent language.

We can use the mask field to look at the geographic distribution of various types of organization:

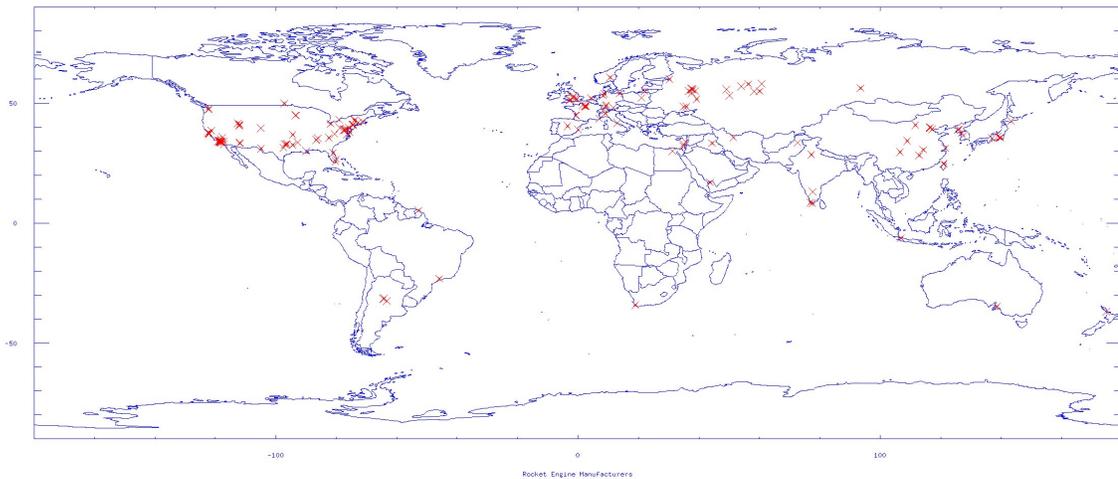
Launch vehicle and stage prime contractors:



Payload manufacturers:



Engine manufacturers:



### II.1.3.2 Sources

For contemporary satellites and rockets, organizations were largely identified from mission press kits and web sites. For historical missions, archival sources, Aviation Week, Flight International, and Jane's All the World's Aircraft (and Jane's Spaceflight Directory) were useful.

(See Note: Vague Date Format)



## **Part III**

# **Launch Sites**





# Chapter III.1

## The Space Launch Origins Catalog

### III.1.1 Introduction

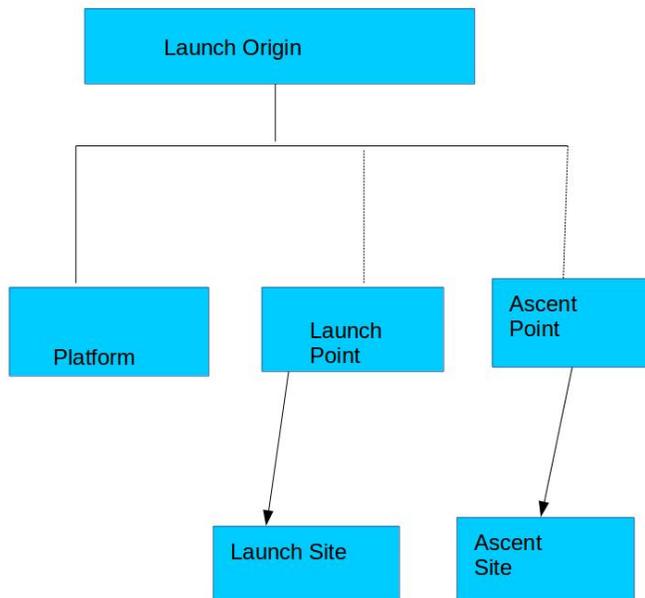
#### III.1.1.1 Launch Origin

Each rocket launch in the General Catalog has an associated **launch origin**. The ‘launch origin’ generalizes the concept of a launch site, because nothing is ever simple. It consists of:

- the **Platform** (optional): either a ship or an airplane from which the rocket is launched. (The platforms are discussed in detail in a separate section.
- the **Launch Pad** or **Launch Point** (LP for short, unifying the two terms) where the rocket ignition occurs; LPs are always associated with
- a **Launch Site** which groups together related LPs.

However, for an air launch, we consider **two** Launch Site/LP pairs: the location of the departure runway where the aircraft takes off, and the location where the rocket drops from the plane and ignites. This latter pair we call:

- the **Ascent Site** and
- the **Ascent Point**. For other launches we consider the Ascent Site and Ascent Point to be identical with the Launch Site and Launch Point. (Ideally, for sea launches one would track the ship port departure point and distinguish it from the launch itself in the same way, but usually that information is not known).



If the Platform is a ship on a research cruise and the launch point is not a regular (reused) point, the Launch Site (and the Ascent Site) is the expedition code. Ascent Points for airplanes and ships near an existing launch site and under its range authority, may be grouped together either under that launch site or a special related ocean-specific launch site. For example, we distinguish between the Cape Canaveral land-based pads at site CC and the air and sea launches off the Cape coast at site ETR (Eastern Test Range); this makes the LPs for site CC geographically compact, which can be helpful for display.

Associated with each Launch (or Ascent) Site is an implicit LP with the same name as the Site, for launches where we know the Site but not the particular pad.

The association of LPs with Sites is usually obvious for the land based pads at major launch sites. However for remaining LPs it is somewhat arbitrary and I have not been terribly consistent.

### III.1.1.2 Launch Sites database

The information needed to describe the existence, time-dependent nomenclature, and location of a launch site and its launch pads is similar to that needed for an organization. The database has two files, one for the Sites and one for the individual LPs. The format is almost the same for each file.

- **Site** contains the org code for the launch site.
- **Code LP file:** contains the org code for the LP; Sites file: is blank, since the Site is the org code.
- **UCode** Unified org code for the entry. The Code and UCode are not globally unique for launch pads, but are unique when combined with their Site values.

---

For example White Sands Army Launch Area 2 has LP entries with org code values ALA2 (1958-1960) and LC36 (1960-). Each LP entry has UCode ALA2 and Site value WS. The Site value corresponds to an LS entry which also has Site value WS, tying the launch pad to its launch site.

As another example, the LP org code value LC2 is not unique; Site code PF and Site code CC each have an LP with org code LC2. Internally in software searches are made by concatenating the Site and LP codes, e.g. "CC LC2".

In other respects the Sites and LP databases are identical in structure with the Orgs one.

The Sites records are:

- **Site** - the Org Code for this launch site (or, for this time phase of this launch site, if it has multiple phases - i.e. changed its name).
- **Code** - a blank entry (for back compatibility).
- **UCode** - the unified Org Code for all phases for this launch site.
- **Type** - the launch site type (LS, LC, LZ).

There are three types of Site:

- the **Launch Zone (LZ)**, a geographically more or less compact zone grouping air and/or sea LPs;
- the **Launch Cruise (LC)**, a temporally compact but geographically extended zone (possibly over multiple oceans) representing a research cruise expedition with multiple sea LPs;
- the **Launch Site (LS)**, for everything else, i.e. land based launch sites.

Additional reserved site types for future use are

- **LNZ** - Landing zone
- **TGT** - Target impact location, e.g. for missiles
- **StateCode - Org Code for the nation-state, IGO or other polity** with responsibility for the launch site. This is normally the country in which the site is located. Type of the state code must be CY, IGO or AP, and the code must occur in the Organizations Database.
- **TStart and TStop** - start and stop time of this launch site phase. Given in year, month, day format (actually Vague Date format. )

Null values are indicated by a dash or an asterisk. Null TStart means the start date of the organization is unknown; Null Stop means that the organization is still in operation, or assumed to be so.

- **ShortName** - a short ASCII name of the site suitable for use in labels or tables, nominally a transliterated representation of the name in the host country's own language
- **Name** - a full name (up to 80 ASCII characters). Transliterated full name of the launch site, in host country's language. Where known, this is the formal name of the launch site.
- **Location** - City and locality of the launch site. In many cases this is given in the form UrbanArea-Suburb, e.g. "Los Angeles-El Segundo".
- **Longitude, Latitude, Error.** - The values are geographic longitude (east-positive) and latitude in decimal degrees.

The error field gives the uncertainty of the launch site location. Note that when a launch site contains multiple launch pads or launch points, the position given for the site is a bit arbitrary, and you should consult the LP (launch points) database for precise positions.

- **Parent**, when nonempty, provides an Org Code of the organization operating the launch site.
- **ShortEName** - Short name in English. Useful for summary information. Can be omitted when ShortName is itself English.

- 
- **Ename** - Long (full) name in English.
  - **Group** - At present, this field is used to group together ocean launch sites, lunar sites, and some unknown V2 launch areas. The field is likely to be repurposed in future releases.
  - **UName** - Unicode version of full name in organization's parent language.

### III.1.1.3 Launch Points database

The Launch Points records are:

- **Site** - the Org UCode for the launch site of which this LP is a part. Every LP is part of a Launch Site.
- **Code** - an Org code for this LP (or for this phase of this LP, for LPs with multiple time phases).
- **UCode** - the unified Org Code for all phases for this LP.
- **Type** - the launch point type is always LP
- **StateCode** - this field is blank for LPs in the current release; the LP is considered to inherit the StateCode of its Launch Site.
- **TStart and TStop** - start and stop time of this phase. Given in year, month, day format (actually Vague Date format. )

Null values are indicated by a dash or an asterisk. Null TStart means the start date of the organization is unknown; Null Stop means that the organization is still in operation, or assumed to be so.

- **ShortName** - a short ASCII name of the site suitable for use in labels or tables. often a concatenation of the Site and LP codes.
- **Name** - a full name (up to 80 ASCII characters). Transliterated full name of the launch point, in host country's language.
- **Location** - City and locality of the launch point. In many cases this is given in the form UrbanArea-Suburb, e.g "Los Angeles-El Segundo".
- **Longitude, Latitude, Error.** - The values are geographic longitude (east-positive) and latitude in decimal degrees.

The error field gives the uncertainty of the launch point location. In contrast to the Organizations database, I have attempted to find as accurate positions as possible for the LP values.

- **Parent**, when nonempty, provides an Org Code of the organization operating the launch site.
- **ShortENAME** - Reserved for short name in English. Not used in the current release but retained for compatibility with the Orgs database format.
- **Ename** - Reserved for long name in English. Not used in the current release but retained for compatibility with the Orgs database format.
- **UName** - Unicode version of full name in organization's parent language. Not currently supplied for the LP database, but I might fill it in in a future release.

## **Part IV**

# **Launch Platforms**



# Chapter IV.1

## Platforms

### IV.1.1 Platform data structure

Some space launches are carried out from mobile structures which don't have a fixed geographical location. I thus distinguish between the 'platform' (the vehicle used as a launch platform) and the 'site' (the geographical location at which the platform was located when the rocket separated from it).

Platforms which have been used to launch rockets include surface ships, submarines and aircraft. (I also include the KSC pad 39 mobile launch platforms, just because I want to record which one was used for which launch and it's a useful database field to stash that particular information.)

I consider ship launches to fall into two main categories: individual launches from launch zones (LZ) and launches on cruises (LC). In a cruise, a specific ship launches a series of rockets at different (sometimes widely different) geographical locations (launch points). Conceptually I think of the cruise path as a launch site and the launch points as different launch pads in that site. However, some launch points were used many times by different ships and cruises. These frequently used launch locations (e.g. OJP, in the Pacific at 160E 0N) are instead defined as a launch zone. Therefore, a cruise can consist of launches associated with the cruise's own site (LC) value and also with one or more standard LZs. For example, the Akademik Korolev (KORO) made a cruise in Feb-Mar 1973 (cruise GMS73A) which had launches from launch points LP1 to LP8 associated with site value GMS73A as well as launches from frequently-visited Indian Ocean sites IO65, IOCOR, RODR, IOSWR and IO6540. I recognize that this is a bit messy but I think making explicit that these sites are used by multiple ships and cruises is helpful.

The fields in the Platforms data file are

- **Code:** an Org Code for the platform (or for this time phase of the platform; alt phases for any platform in the current list, except for the LC39 mobile launch platforms)
- **UCode:** Unified Org Code for the platform. Usually the same as the Code field.
- **StateCode:** Org code for the country owning the platform.
- **Type:** Type of platform. Types are PLAT (generic platform) SHIP, SUB, and AIR (with obvious meanings).
- **Class:** What kind of organization owns the platform (A,B,C, D as per the Orgs database. Most often D here, as most platforms until recently were owned by the military).
- **TStart and TStop** - start and stop time of this launch site phase. Given in year, month, day format (actually Vague Date format. )

Null values are indicated by a dash or an asterisk. Null TStart means the start date of the organization is unknown; Null Stop means that the organization is still in operation, or assumed to be so.

- **ShortName** - a short ASCII name of the site suitable for use in labels or tables, nominally a transliterated representation of the name in the host country's own language

- 
- **Name** - a full name (up to 80 ASCII characters). Transliterated full name of the launch site, in host country's language. Where known, this is the formal name of the launch site.
  - **Location** - City and locality of the launch site. In many cases this is given in the form UrbanArea-Suburb, e.g. "Los Angeles-El Segundo".
  - **Longitude, Latitude, Error.** - The values are geographic longitude (east-positive) and latitude in decimal degrees.

The error field gives the uncertainty of the launch site location. Note that when a launch site contains multiple launch pads or launch points, the position given for the site is a bit arbitrary, and you should consult the LP (launch points) database for precise positions.

- **Parent**, when nonempty, provides an Org Code of the organization operating the launch site.
- **ShortENAME** - Short name in English. Useful for summary information. Can be omitted when ShortName is itself English.
- **ENAME** - Long (full) name in English.
- **VClass** - vehicle class, used mainly to describe ship class.
- **VClassID** - identification serial within vehicle class
- **VID** - another field for identification serial for the platform, e.g. IMO number for ships, where applicable.
- **Group** Used to group together platforms in the later subsections of this document.
- **UNAME** - Unicode version of full name in organization's parent language.

## IV.1.2 Catalog of platforms

### IV.1.3 Soviet Oceanographic Vessels

Updated: 2024 Nov 28 03:19:31



Ship	Transliteration	Image	CODE	Agency	Class	ClassID	AltID	Active
Пассат	Passat		PASSAT	GOIG	Passat	V88-I/1	IM06904167	1968 - 2008
Муссон	Musson		MUSSON	GOIG	Passat	V88-I/2	IM06904155	1968 - -
Волна	Volna		VOLNA	DVNG	Passat	V88-I/3	IM06914203	1968 - -
Прилив	Priliv		PRILIV	DVNG	Passat	V88-I/4	IM06916574	1969 - -
Виктор Бугаев	Viktor Bugaev		BUGAEV	GOIG	Poryv	V88-III/7	IM07048427	1980 - 1990
Георгий Ушаков	Georgiy Ushakov		USHAKOV	GOIG	Poryv	V88-III/8	IM07117371	1971 - -
Эрнст Кренкель	Ernst Krenkel		KREN	GOIG	Poryv	V88-III/9	IM07205685	1971 - -
Ю. М. Шокальский	Yu. M. Shokal'skiy		SHOK	DVNG	224 A.I. Voeikov	-	IM05396600	1959 - 1980
А.И. Воейков	A. I. Voeikov		VOKV	DVNG	224 A.I. Voeikov	-	IM05010244	1959 - 1989
Академик Ширшов	Akademik Shirshov		SHIR	DVNG	416 Ak. Kurchatov	-	IM06712552	1968 - 1991
Профессор Визе	Professor Vize		VIZE	AANII	416 Ak. Kurchatov	-	IM06707674	1968 - 1999
Профессор Зубов	Professor Zubov		ZUB	AANII	416 Ak. Kurchatov	-	IM06718764	1969 - 1991

Soviet Oceanographic Vessels

Ship	Transliteration	Image	CODE	Agency	Class	ClassID	AltID	Active
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Академик Королёв	Академик Korolev		KORO	GOIG	416 Ak. Kurchatov	-	IM06707301	1970 - 1996
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### IV.1.3.1 Passat

Пассат



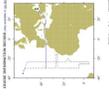
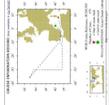
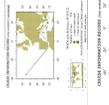
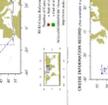
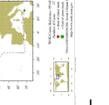
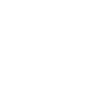
Credit: Photo from wrk.ru forums, file "Passat (V88) 2016-11-23.pdf".

The Passat launches are unusual in that they were almost all from the same location, 53N 35W, where Passat remained during its research.

Note: Cruise data for SU012423 puts Passat at the usual 53N 35W location on 1989 Jan 31. I therefore assume that PASS89A was also at that location for 1989 Feb 1-22. Similarly, SU012425 puts Passat at that location on 1989 Apr 25, 1 week before the start of PASS89B. PASS90B starts a few days after SU111251 but that cruise was more dynamic in location so it's less clear what one can infer.

Rockets used: MMR-06

Updated: 2024 Nov 28 03:19:31

LC_Code	Active	Region	Cruises: PASSAT Cruise	CruiseMap
GMS80A	1980 Feb 1 - 1980 Mar 15	Minia, Atlantic Ocean	Passat Expedition 1, 1980 (SU000722)	
GMS82H	1982 Feb 1 - 1982 Mar 1	Minia, Atlantic Ocean	Passat Expedition 2, 1982 (SU001366)	
GMS82J	1982 May 1 - 1982 May 31	Minia, Atlantic Ocean	Passat Expedition 3, 1982	
GMS86G	1986 Feb 1 - 1986 Mar 15	Minia, Atlantic Ocean	Passat Expedition 4, 1986 (SU153122)	
GMS88H	1988 Mar 15 - 1988 Apr 15	Minia, Atlantic Ocean	Passat Expedition 5, 1988 (SU008536)	
GMS88J	1988 Nov 1 - 1988 Nov 30	Minia, Atlantic Ocean	Passat Expedition 6, 1988 (SU011600)	
GMS89G	1989 Feb 1 - 1989 Feb 28	Minia, Atlantic Ocean	Passat Expedition 7, 1989	
GMS89H	1989 May 1 - 1989 May 31	Minia, Atlantic Ocean	Passat Expedition 8, 1989	
GMS90B	1990 Jan 1 - 1990 Feb 1	Minia, Atlantic Ocean	Passat Expedition 9, 1990 (99141925)	
GMS90E	1990 Nov 1 - 1990 Nov 15	Atlantic Ocean	Passat Expedition 10, 1990	

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Updated: 2024 Nov 28 03:19:31

Launches: PASSAT

Date	Rocket	Flight	Mission	PlatCode	Platform	Site	LP	AscSite	AsclP	Pos	Apogee
1980 Feb 06 07:00:00	MMR-06	-	-	PASSAT	Passat	GMS80A	LP1	-	-	35.0W 53.0N (+/- 1.0)	56.0
1980 Feb 15 08:30:00	MMR-06	-	-	PASSAT	Passat	GMS80A	LP1	-	-	35.0W 53.0N (+/- 1.0)	60.0
1980 Feb 20 08:00:00	MMR-06	-	-	PASSAT	Passat	GMS80A	LP1	-	-	35.0W 53.0N (+/- 1.0)	59.0
1980 Feb 27 08:00:00	MMR-06	-	-	PASSAT	Passat	GMS80A	LP1	-	-	35.0W 53.0N (+/- 1.0)	52.0
1980 Feb 29 07:30:00	MMR-06	-	-	PASSAT	Passat	MINIA	-	-	-	35.0W 53.0N (+/- 2.0)	57.0
1980 Feb 29 09:00:00	MMR-06	-	-	PASSAT	Passat	MINIA	-	-	-	35.0W 53.0N (+/- 2.0)	57.0
1980 Mar 03 04:00:00	MMR-06	-	-	PASSAT	Passat	GMS80A	LP1	-	-	35.0W 53.0N (+/- 1.0)	57.0
1982 Feb 12 07:30:00	MMR-06	-	-	PASSAT	Passat	MINIA	-	-	-	35.0W 53.0N (+/- 2.0)	61.0
1982 Feb 17 07:00:00	MMR-06	-	-	PASSAT	Passat	MINIA	-	-	-	35.0W 53.0N (+/- 2.0)	62.0
1982 Feb 19 09:00:00	MMR-06	-	-	PASSAT	Passat	MINIA	-	-	-	35.0W 53.0N (+/- 2.0)	62.0
1982 Feb 21 07:00:00	MMR-06	-	-	PASSAT	Passat	MINIA	-	-	-	35.0W 53.0N (+/- 2.0)	58.0
1982 Feb 22 07:00:00	MMR-06	-	-	PASSAT	Passat	MINIA	-	-	-	35.0W 53.0N (+/- 2.0)	60.0
1982 Feb 24 07:00:00	MMR-06	-	-	PASSAT	Passat	MINIA	-	-	-	35.0W 53.0N (+/- 2.0)	60.0
1982 Feb 26 07:00:00	MMR-06	-	-	PASSAT	Passat	MINIA	-	-	-	35.0W 53.0N (+/- 2.0)	60.0
1982 Feb 28 08:50:00	MMR-06	-	-	PASSAT	Passat	MINIA	-	-	-	35.0W 53.0N (+/- 2.0)	62.0
1982 May 03 06:00:00	MMR-06	-	-	PASSAT	Passat	MINIA	-	-	-	35.0W 53.0N (+/- 2.0)	56.0
1982 May 05 06:00:00	MMR-06	-	-	PASSAT	Passat	MINIA	-	-	-	35.0W 53.0N (+/- 2.0)	57.0
1982 May 07 07:00:00	MMR-06	-	-	PASSAT	Passat	MINIA	-	-	-	35.0W 53.0N (+/- 2.0)	60.0
1982 May 10 07:00:00	MMR-06	-	-	PASSAT	Passat	MINIA	-	-	-	35.0W 53.0N (+/- 2.0)	55.0
1982 May 12 07:00:00	MMR-06	-	-	PASSAT	Passat	MINIA	-	-	-	35.0W 53.0N (+/- 2.0)	58.0
1982 May 14 07:00:00	MMR-06	-	-	PASSAT	Passat	MINIA	-	-	-	35.0W 53.0N (+/- 2.0)	62.0
1982 May 17 07:00:00	MMR-06	-	-	PASSAT	Passat	MINIA	-	-	-	35.0W 53.0N (+/- 2.0)	61.0
1982 May 21 07:00:00	MMR-06	-	-	PASSAT	Passat	MINIA	-	-	-	35.0W 53.0N (+/- 2.0)	60.0
1982 May 24 07:00:00	MMR-06	-	-	PASSAT	Passat	MINIA	-	-	-	35.0W 53.0N (+/- 2.0)	60.0
1982 May 26 07:00:00	MMR-06	-	-	PASSAT	Passat	MINIA	-	-	-	35.0W 53.0N (+/- 2.0)	59.0
1986 Feb 12 07:23:00	MMR-06	-	-	PASSAT	Passat	MINIA	-	-	-	35.0W 53.0N (+/- 2.0)	62.0
1986 Feb 14 08:42:00	MMR-06	-	-	PASSAT	Passat	MINIA	-	-	-	35.0W 53.0N (+/- 2.0)	64.0
1986 Feb 17 07:03:00	MMR-06	-	-	PASSAT	Passat	MINIA	-	-	-	35.0W 53.0N (+/- 2.0)	61.0
1986 Feb 19 07:01:00	MMR-06	-	-	PASSAT	Passat	MINIA	-	-	-	35.0W 53.0N (+/- 2.0)	62.0
1986 Feb 21 07:00:00	MMR-06	-	-	PASSAT	Passat	MINIA	-	-	-	35.0W 53.0N (+/- 2.0)	64.0
1986 Feb 26 07:00:00	MMR-06	-	-	PASSAT	Passat	MINIA	-	-	-	35.0W 53.0N (+/- 2.0)	61.0
1986 Feb 28 07:10:00	MMR-06	-	-	PASSAT	Passat	MINIA	-	-	-	35.0W 53.0N (+/- 2.0)	61.0
1986 Mar 03 07:01:00	MMR-06	-	-	PASSAT	Passat	MINIA	-	-	-	35.0W 53.0N (+/- 2.0)	59.0
1986 Mar 05 07:02:00	MMR-06	-	-	PASSAT	Passat	MINIA	-	-	-	35.0W 53.0N (+/- 2.0)	62.0
1986 Mar 07 07:18:00	MMR-06	-	-	PASSAT	Passat	MINIA	-	-	-	35.0W 53.0N (+/- 2.0)	55.0
1988 Mar 18 07:42:00	MMR-06	-	-	PASSAT	Passat	MINIA	-	-	-	35.0W 53.0N (+/- 2.0)	63.0
1988 Mar 23 07:00:00	MMR-06	-	-	PASSAT	Passat	MINIA	-	-	-	35.0W 53.0N (+/- 2.0)	62.0
1988 Mar 25 07:16:00	MMR-06	-	-	PASSAT	Passat	MINIA	-	-	-	35.0W 53.0N (+/- 2.0)	61.0
1988 Mar 30 06:09:00	MMR-06	-	-	PASSAT	Passat	MINIA	-	-	-	35.0W 53.0N (+/- 2.0)	59.0
1988 Apr 01 06:48:00	MMR-06	-	-	PASSAT	Passat	MINIA	-	-	-	35.0W 53.0N (+/- 2.0)	60.0
1988 Apr 04 06:03:00	MMR-06	-	-	PASSAT	Passat	MINIA	-	-	-	35.0W 53.0N (+/- 2.0)	60.0
1988 Apr 06 06:05:00	MMR-06	-	-	PASSAT	Passat	MINIA	-	-	-	35.0W 53.0N (+/- 2.0)	60.0
1988 Apr 13 07:02:00	MMR-06	-	-	PASSAT	Passat	MINIA	-	-	-	35.0W 53.0N (+/- 2.0)	61.0
1988 Nov 02 07:07:00	MMR-06	-	-	PASSAT	Passat	MINIA	-	-	-	35.0W 53.0N (+/- 2.0)	62.0
1988 Nov 09 07:07:00	MMR-06	-	-	PASSAT	Passat	MINIA	-	-	-	35.0W 53.0N (+/- 2.0)	63.0
1988 Nov 11 07:03:00	MMR-06	-	-	PASSAT	Passat	MINIA	-	-	-	35.0W 53.0N (+/- 2.0)	62.0
1988 Nov 14 07:00:00	MMR-06	-	-	PASSAT	Passat	MINIA	-	-	-	35.0W 53.0N (+/- 2.0)	62.0
1988 Nov 16 07:01:00	MMR-06	-	-	PASSAT	Passat	MINIA	-	-	-	35.0W 53.0N (+/- 2.0)	60.0
1988 Nov 18 07:02:00	MMR-06	-	-	PASSAT	Passat	MINIA	-	-	-	35.0W 53.0N (+/- 2.0)	62.0
1988 Nov 23 07:16:00	MMR-06	-	-	PASSAT	Passat	MINIA	-	-	-	35.0W 53.0N (+/- 2.0)	62.0
1988 Nov 28 07:05:00	MMR-06	-	-	PASSAT	Passat	MINIA	-	-	-	35.0W 53.0N (+/- 2.0)	63.0
1989 Feb 01 07:22:00	MMR-06	-	-	PASSAT	Passat	MINIA	-	-	-	35.0W 53.0N (+/- 2.0)	53.0
1989 Feb 03 07:09:00	MMR-06	-	-	PASSAT	Passat	MINIA	-	-	-	35.0W 53.0N (+/- 2.0)	57.0
1989 Feb 05 07:06:00	MMR-06	-	-	PASSAT	Passat	MINIA	-	-	-	35.0W 53.0N (+/- 2.0)	60.0
1989 Feb 08 07:04:00	MMR-06	-	-	PASSAT	Passat	MINIA	-	-	-	35.0W 53.0N (+/- 2.0)	61.0

Launches: PASSAT

Date	Rocket	Flight	Mission	Platform	Site	LP	AscSite	AscLP	Pos	Apogee
1989 Feb 12 0704:00	MMR-06	-	-	PASSAT	MINIA	-	-	-	35.0W 53.0N (+/- 2.0)	60.0
1989 Feb 17 0703:00	MMR-06	-	-	PASSAT	MINIA	-	-	-	35.0W 53.0N (+/- 2.0)	67.0
1989 Feb 22 0701:00	MMR-06	-	-	PASSAT	MINIA	-	-	-	35.0W 53.0N (+/- 2.0)	60.0
1989 May 03 0715:00	MMR-06	-	-	PASSAT	MINIA	-	-	-	35.0W 53.0N (+/- 2.0)	63.0
1989 May 10 0711:00	MMR-06	-	-	PASSAT	MINIA	-	-	-	35.0W 53.0N (+/- 2.0)	62.0
1989 May 12 0703:00	MMR-06	-	-	PASSAT	MINIA	-	-	-	35.0W 53.0N (+/- 2.0)	65.0
1989 May 17 0701:00	MMR-06	-	-	PASSAT	MINIA	-	-	-	35.0W 53.0N (+/- 2.0)	63.0
1989 May 19 0701:00	MMR-06	-	-	PASSAT	MINIA	-	-	-	35.0W 53.0N (+/- 2.0)	65.0
1989 May 24 0715:00	MMR-06	-	-	PASSAT	MINIA	-	-	-	35.0W 53.0N (+/- 2.0)	62.0
1989 May 26 0703:00	MMR-06	-	-	PASSAT	MINIA	-	-	-	35.0W 53.0N (+/- 2.0)	63.0
1990 Jan 03 0815:00	MMR-06	-	-	PASSAT	MINIA	-	-	-	35.0W 53.0N (+/- 2.0)	62.0
1990 Jan 05 0710:00	MMR-06	-	-	PASSAT	GMS90B	LP2	-	-	35.0W 53.0N (+/- 1.0)	65.0
1990 Jan 08 0729:00	MMR-06	-	-	PASSAT	GMS90B	LP3	-	-	35.0W 53.0N (+/- 1.0)	60.0
1990 Jan 12 0824:00	MMR-06	-	-	PASSAT	GMS90B	LP4	-	-	35.0W 53.0N (+/- 1.0)	61.0
1990 Jan 29 0739:00	MMR-06	-	-	PASSAT	GMS90B	LP5	-	-	35.0W 53.0N (+/- 1.0)	60.0
1990 Jan 31 0708:00	MMR-06	-	-	PASSAT	GMS90B	LP6	-	-	35.0W 53.0N (+/- 1.0)	60.0
1990 Nov 02 0801:00	MMR-06	-	-	PASSAT	GMS90E	LP1	-	-	47.0W 43.0N (+/- 5.0)	63.0
1990 Nov 05 0814:00	MMR-06	-	-	PASSAT	GMS90E	-	-	-	47.0W 43.0N (+/- 5.0)	64.0
1990 Nov 07 0726:00	MMR-06	-	-	PASSAT	GMS90E	-	-	-	47.0W 43.0N (+/- 5.0)	64.0

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### IV.1.3.2 Musson

Муsson



Credit: Photo from wrk.ru forums, file "Passat (V88) 2016-11-23.pdf".



Credit: -

Note: The cruise maps from NOAA often cover longer periods than the active period of rocket launching - e.g. the Jan 1982 expedition is part of a cruise from Nov 1981 to Apr 1982 which goes back and forward across the ocean, but during the 29 day period of MMR-06 launches the ship was roughly stationary at the MINIA location.

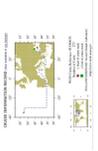
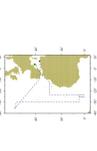
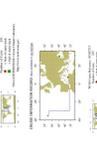
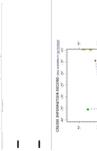
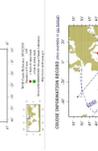
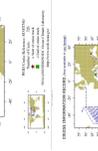
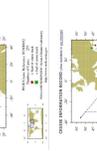
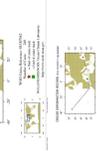
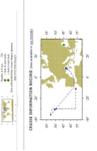
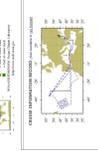
Note: The WDC-A/RS database gives positions for Musson's Expedition 5 at 53N 35E, in the middle of the Russian countryside - unlikely for a ship. I assume this is a mistake for its usual position at 53N 35W.

Location of Musson on both 1989 May 31 (end of cruise SU012426) and 1989 Jul 1 (beginning of SU012114) was at the MINIA location, so for Expedition 13 during the intervening month I assume it remained there.

Rockets used: MMR-06

Updated: 2024 Nov 28 03:19:31



LC_Code	Active	Cruises: MUSSON		Region	Cruise	CruiseMap
		Active	Region			
GMS77P	1977 Dec 1 - 1977 Dec 31	Minia, Atlantic Ocean	Musson Expedition 1, 1977 (SU000630)			
GMS78F	1978 Mar 15 - 1978 Apr 30	Minia, Atlantic Ocean	Musson Expedition 2, 1978 (SU007211)			
GMS78J	1978 Nov 1 - 1978 Nov 30	Minia, Atlantic Ocean	Musson Expedition 3, 1978 (SU007213)			
GMS79E	1979 May 15 - 1979 Jun 30	Minia, Atlantic Ocean	Musson Expedition 5, 1979			
GMS79R	1979 Feb 1 - 1979 Mar 1	Minia, Atlantic Ocean	Musson Expedition 4, 1979			
GMS81H	1981 Sep 1 - 1981 Oct 15	Minia, Atlantic Ocean	Musson Expedition 6, 1981 (SU012109)			
GMS82C	1982 Apr 1 - 1982 May 15	Minia, Atlantic Ocean	Musson Expedition 8, 1982 (SU007540)			
GMS82G	1982 Jan 1 - 1982 Jan 31	Minia, Atlantic Ocean	Musson Expedition 7, 1982 (SU000602)			
GMS83F	1983 May 1 - 1983 May 31	Minia, Atlantic Ocean	Musson Expedition 9, 1983 (SU007042)			
GMS83G	1983 Aug 1 - 1983 Aug 31	Minia, Atlantic Ocean	Musson Expedition 10, 1983 (SU007042)			
GMS85E	1985 Oct 15 - 1985 Nov 30	Minia, Atlantic Ocean	Musson Expedition 11, 1985 (SU007410)			
GMS87M	1987 Jul 1 - 1987 Jul 31	Minia, Atlantic Ocean	Musson Expedition 12, 1987 (SU007554)			
GMS89F	1989 Jun 1 - 1989 Jun 30	Minia, Atlantic Ocean	Musson Expedition 13, 1989			

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Updated: 2024 Nov 28 03:19:31

Launches: MUSSON

Date	Rocket	Flight	Mission	Platform	Site	LP	AscSite	AscLP	Pos	Apogee
1977 Dec 02 0200:00	MMR-06	-	-	MUSSON	MUSSON	MINIA	-	-	35.0W 53.0N (+/- 2.0)	66.0
1977 Dec 07 0200:00	MMR-06	-	-	MUSSON	MUSSON	MINIA	-	-	35.0W 53.0N (+/- 2.0)	65.0
1977 Dec 14 0200:00	MMR-06	-	-	MUSSON	MUSSON	MINIA	-	-	35.0W 53.0N (+/- 2.0)	56.0
1977 Dec 21 0200:00	MMR-06	-	-	MUSSON	MUSSON	MINIA	-	-	35.0W 53.0N (+/- 2.0)	66.0
1977 Dec 28 0300:00	MMR-06	-	-	MUSSON	MUSSON	MINIA	-	-	35.0W 53.0N (+/- 2.0)	59.0
1978 Mar 17 0700:00	MMR-06	-	-	MUSSON	MUSSON	MINIA	-	-	35.0W 53.0N (+/- 2.0)	59.0
1978 Mar 17 0800:00	MMR-06	-	-	MUSSON	MUSSON	MINIA	-	-	35.0W 53.0N (+/- 2.0)	64.0
1978 Mar 29 0700:00	MMR-06	-	-	MUSSON	MUSSON	MINIA	-	-	35.0W 53.0N (+/- 2.0)	61.0
1978 Mar 29 0800:00	MMR-06	-	-	MUSSON	MUSSON	MINIA	-	-	35.0W 53.0N (+/- 2.0)	62.0
1978 Mar 31 0800:00	MMR-06	-	-	MUSSON	MUSSON	MINIA	-	-	35.0W 53.0N (+/- 2.0)	62.0
1978 Apr 09 0700:00	MMR-06	-	-	MUSSON	MUSSON	MINIA	-	-	35.0W 53.0N (+/- 2.0)	61.0
1978 Apr 12 0700:00	MMR-06	-	-	MUSSON	MUSSON	GMS78F	LP1	-	35.0W 53.0N (+/- 1.0)	59.0
1978 Apr 12 0800:00	MMR-06	-	-	MUSSON	MUSSON	GMS78F	LP2	-	35.0W 53.0N (+/- 1.0)	60.0
1978 Apr 15 0800:00	MMR-06	-	-	MUSSON	MUSSON	GMS78F	LP3	-	35.0W 53.0N (+/- 1.0)	58.0
1978 Nov 01 0800:00	MMR-06	-	-	MUSSON	MUSSON	MINIA	-	-	35.0W 53.0N (+/- 2.0)	59.0
1978 Nov 03 0700:00	MMR-06	-	-	MUSSON	MUSSON	MINIA	-	-	35.0W 53.0N (+/- 2.0)	59.0
1978 Nov 08 0700:00	MMR-06	-	-	MUSSON	MUSSON	MINIA	-	-	35.0W 53.0N (+/- 2.0)	58.0
1978 Nov 10 0800:00	MMR-06	-	-	MUSSON	MUSSON	MINIA	-	-	35.0W 53.0N (+/- 2.0)	62.0
1978 Nov 15 0800:00	MMR-06	-	-	MUSSON	MUSSON	MINIA	-	-	35.0W 53.0N (+/- 2.0)	63.0
1978 Nov 17 0700:00	MMR-06	-	-	MUSSON	MUSSON	MINIA	-	-	35.0W 53.0N (+/- 2.0)	60.0
1979 Feb 02 0800:00	MMR-06	-	-	MUSSON	MUSSON	MINIA	-	-	35.0W 53.0N (+/- 2.0)	61.0
1979 Feb 07 0700:00	MMR-06	-	-	MUSSON	MUSSON	MINIA	-	-	35.0W 53.0N (+/- 2.0)	61.0
1979 Feb 09 0700:00	MMR-06	-	-	MUSSON	MUSSON	MINIA	-	-	35.0W 53.0N (+/- 2.0)	61.0
1979 Feb 14 0700:00	MMR-06	-	-	MUSSON	MUSSON	MINIA	-	-	35.0W 53.0N (+/- 2.0)	60.0
1979 Feb 28 0700:00	MMR-06	-	-	MUSSON	MUSSON	MINIA	-	-	35.0W 53.0N (+/- 2.0)	57.0
1979 May 27 0800:00	MMR-06	-	-	MUSSON	MUSSON	GMS79E	LP1	-	35.0W 53.0N (+/- 1.0)	58.0
1979 Jun 01 0800:00	MMR-06	-	-	MUSSON	MUSSON	MINIA	-	-	35.0W 53.0N (+/- 2.0)	59.0
1979 Jun 06 0800:00	MMR-06	-	-	MUSSON	MUSSON	MINIA	-	-	35.0W 53.0N (+/- 2.0)	59.0
1979 Jun 08 0700:00	MMR-06	-	-	MUSSON	MUSSON	MINIA	-	-	35.0W 53.0N (+/- 2.0)	59.0
1979 Jun 13 0800:00	MMR-06	-	-	MUSSON	MUSSON	MINIA	-	-	35.0W 53.0N (+/- 2.0)	58.0
1979 Jun 15 0700:00	MMR-06	-	-	MUSSON	MUSSON	MINIA	-	-	35.0W 53.0N (+/- 2.0)	59.0
1979 Jun 20 0800:00	MMR-06	-	-	MUSSON	MUSSON	MINIA	-	-	35.0W 53.0N (+/- 2.0)	60.0
1979 Jun 22 0700:00	MMR-06	-	-	MUSSON	MUSSON	MINIA	-	-	35.0W 53.0N (+/- 2.0)	59.0
1979 Jun 27 0700:00	MMR-06	-	-	MUSSON	MUSSON	MINIA	-	-	35.0W 53.0N (+/- 2.0)	61.0
1981 Sep 04 0900:00	MMR-06	-	-	MUSSON	MUSSON	MINIA	-	-	35.0W 53.0N (+/- 2.0)	60.0
1981 Sep 09 0900:00	MMR-06	-	-	MUSSON	MUSSON	MINIA	-	-	35.0W 53.0N (+/- 2.0)	60.0
1981 Sep 11 0740:00	MMR-06	-	-	MUSSON	MUSSON	MINIA	-	-	35.0W 53.0N (+/- 2.0)	61.0
1981 Sep 16 0900:00	MMR-06	-	-	MUSSON	MUSSON	MINIA	-	-	35.0W 53.0N (+/- 2.0)	60.0
1981 Sep 25 0800:00	MMR-06	-	-	MUSSON	MUSSON	MINIA	-	-	35.0W 53.0N (+/- 2.0)	61.0
1981 Sep 30 0800:00	MMR-06	-	-	MUSSON	MUSSON	MINIA	-	-	35.0W 53.0N (+/- 2.0)	60.0
1981 Oct 02 0800:00	MMR-06	-	-	MUSSON	MUSSON	MINIA	-	-	35.0W 53.0N (+/- 2.0)	57.0
1981 Oct 07 0800:00	MMR-06	-	-	MUSSON	MUSSON	MINIA	-	-	35.0W 53.0N (+/- 2.0)	60.0
1982 Jan 01 0800:00	MMR-06	-	-	MUSSON	MUSSON	MINIA	-	-	35.0W 53.0N (+/- 2.0)	61.0
1982 Jan 06 0730:00	MMR-06	-	-	MUSSON	MUSSON	MINIA	-	-	35.0W 53.0N (+/- 2.0)	58.0
1982 Jan 08 0800:00	MMR-06	-	-	MUSSON	MUSSON	MINIA	-	-	35.0W 53.0N (+/- 2.0)	59.0
1982 Jan 13 0700:00	MMR-06	-	-	MUSSON	MUSSON	MINIA	-	-	35.0W 53.0N (+/- 2.0)	59.0
1982 Jan 15 0800:00	MMR-06	-	-	MUSSON	MUSSON	MINIA	-	-	35.0W 53.0N (+/- 2.0)	59.0
1982 Jan 22 0730:00	MMR-06	-	-	MUSSON	MUSSON	MINIA	-	-	35.0W 53.0N (+/- 2.0)	60.0
1982 Jan 27 0800:00	MMR-06	-	-	MUSSON	MUSSON	MINIA	-	-	35.0W 53.0N (+/- 2.0)	57.0
1982 Jan 29 0700:00	MMR-06	-	-	MUSSON	MUSSON	MINIA	-	-	35.0W 53.0N (+/- 2.0)	58.0
1982 Apr 07 0700:00	MMR-06	-	-	MUSSON	MUSSON	MINIA	-	-	35.0W 53.0N (+/- 2.0)	60.0
1982 Apr 09 0800:00	MMR-06	-	-	MUSSON	MUSSON	MINIA	-	-	35.0W 53.0N (+/- 2.0)	58.0
1982 Apr 16 0700:00	MMR-06	-	-	MUSSON	MUSSON	MINIA	-	-	35.0W 53.0N (+/- 2.0)	60.0
1982 Apr 21 0700:00	MMR-06	-	-	MUSSON	MUSSON	MINIA	-	-	35.0W 53.0N (+/- 2.0)	59.0
1982 Apr 23 0700:00	MMR-06	-	-	MUSSON	MUSSON	MINIA	-	-	35.0W 53.0N (+/- 2.0)	59.0

Launches: MUSSON

Date	Rocket	Flight	Mission	Platform	Site	LP	AscSite	AsclP	Pos	Apogee
1982 Apr 30 0700:00	MMR-06	-	-	MUSSON	MUSSON	-	-	-	35.0W 53.0N (+/- 2.0)	59.0
1982 May 03 0700:00	MMR-06	-	-	MUSSON	MUSSON	LP1	-	-	35.0W 53.0N (+/- 1.0)	59.0
1983 May 04 0710:00	MMR-06	-	-	MUSSON	MUSSON	-	-	-	35.0W 53.0N (+/- 2.0)	60.0
1983 May 06 0720:00	MMR-06	-	-	MUSSON	MUSSON	-	-	-	35.0W 53.0N (+/- 2.0)	60.0
1983 May 11 0700:00	MMR-06	-	-	MUSSON	MUSSON	-	-	-	35.0W 53.0N (+/- 2.0)	60.0
1983 May 13 0700:00	MMR-06	-	-	MUSSON	MUSSON	-	-	-	35.0W 53.0N (+/- 2.0)	59.0
1983 May 16 0810:00	MMR-06	-	-	MUSSON	MUSSON	-	-	-	35.0W 53.0N (+/- 2.0)	60.0
1983 May 18 0700:00	MMR-06	-	-	MUSSON	MUSSON	-	-	-	35.0W 53.0N (+/- 2.0)	59.0
1983 May 20 0740:00	MMR-06	-	-	MUSSON	MUSSON	-	-	-	35.0W 53.0N (+/- 2.0)	60.0
1983 May 25 0730:00	MMR-06	-	-	MUSSON	MUSSON	-	-	-	35.0W 53.0N (+/- 2.0)	63.0
1983 May 27 0730:00	MMR-06	-	-	MUSSON	MUSSON	-	-	-	35.0W 53.0N (+/- 2.0)	60.0
1983 Aug 03 0750:00	MMR-06	-	-	MUSSON	MUSSON	-	-	-	35.0W 53.0N (+/- 2.0)	57.0
1983 Aug 05 0740:00	MMR-06	-	-	MUSSON	MUSSON	-	-	-	35.0W 53.0N (+/- 2.0)	59.0
1983 Aug 10 0720:00	MMR-06	-	-	MUSSON	MUSSON	-	-	-	35.0W 53.0N (+/- 2.0)	57.0
1983 Aug 12 0740:00	MMR-06	-	-	MUSSON	MUSSON	-	-	-	35.0W 53.0N (+/- 2.0)	56.0
1983 Aug 18 0803:00	MMR-06	-	-	MUSSON	MUSSON	-	-	-	35.0W 53.0N (+/- 2.0)	59.0
1983 Aug 24 0706:00	MMR-06	-	-	MUSSON	MUSSON	-	-	-	35.0W 53.0N (+/- 2.0)	58.0
1983 Aug 26 0723:00	MMR-06	-	-	MUSSON	MUSSON	-	-	-	35.0W 53.0N (+/- 2.0)	58.0
1983 Aug 29 0704:00	MMR-06	-	-	MUSSON	MUSSON	-	-	-	35.0W 53.0N (+/- 2.0)	58.0
1985 Oct 28 0741:00	MMR-06	-	-	MUSSON	MUSSON	-	-	-	35.0W 53.0N (+/- 2.0)	60.0
1985 Oct 30 0721:00	MMR-06	-	-	MUSSON	MUSSON	-	-	-	35.0W 53.0N (+/- 2.0)	59.0
1985 Nov 01 0729:00	MMR-06	-	-	MUSSON	MUSSON	-	-	-	35.0W 53.0N (+/- 2.0)	61.0
1985 Nov 06 0709:00	MMR-06	-	-	MUSSON	MUSSON	-	-	-	35.0W 53.0N (+/- 2.0)	64.0
1985 Nov 13 0730:00	MMR-06	-	-	MUSSON	MUSSON	-	-	-	35.0W 53.0N (+/- 2.0)	60.0
1985 Nov 20 0800:00	MMR-06	-	-	MUSSON	MUSSON	-	-	-	35.0W 53.0N (+/- 2.0)	60.0
1985 Nov 22 0730:00	MMR-06	-	-	MUSSON	MUSSON	-	-	-	35.0W 53.0N (+/- 2.0)	60.0
1987 Jul 08 0847:00	MMR-06	-	-	MUSSON	MUSSON	-	-	-	35.0W 53.0N (+/- 2.0)	60.0
1987 Jul 10 0806:00	MMR-06	-	-	MUSSON	MUSSON	-	-	-	35.0W 53.0N (+/- 2.0)	61.0
1987 Jul 12 0741:00	MMR-06	-	-	MUSSON	MUSSON	-	-	-	35.0W 53.0N (+/- 2.0)	60.0
1987 Jul 17 0715:00	MMR-06	-	-	MUSSON	MUSSON	-	-	-	35.0W 53.0N (+/- 2.0)	58.0
1987 Jul 19 0723:00	MMR-06	-	-	MUSSON	MUSSON	-	-	-	35.0W 53.0N (+/- 2.0)	57.0
1987 Jul 22 0736:00	MMR-06	-	-	MUSSON	MUSSON	-	-	-	35.0W 53.0N (+/- 2.0)	56.0
1987 Jul 24 0747:00	MMR-06	-	-	MUSSON	MUSSON	-	-	-	35.0W 53.0N (+/- 2.0)	56.0
1987 Jul 26 0727:00	MMR-06	-	-	MUSSON	MUSSON	-	-	-	35.0W 53.0N (+/- 2.0)	58.0
1987 Jul 29 0706:00	MMR-06	-	-	MUSSON	MUSSON	-	-	-	35.0W 53.0N (+/- 2.0)	64.0
1989 Jun 02 0703:00	MMR-06	-	-	MUSSON	MUSSON	-	-	-	35.0W 53.0N (+/- 2.0)	57.0
1989 Jun 04 0702:00	MMR-06	-	-	MUSSON	MUSSON	-	-	-	35.0W 53.0N (+/- 2.0)	60.0
1989 Jun 07 0708:00	MMR-06	-	-	MUSSON	MUSSON	-	-	-	35.0W 53.0N (+/- 2.0)	64.0
1989 Jun 09 0705:00	MMR-06	-	-	MUSSON	MUSSON	-	-	-	35.0W 53.0N (+/- 2.0)	61.0
1989 Jun 16 0703:00	MMR-06	-	-	MUSSON	MUSSON	-	-	-	35.0W 53.0N (+/- 2.0)	62.0
1989 Jun 21 0704:00	MMR-06	-	-	MUSSON	MUSSON	-	-	-	35.0W 53.0N (+/- 2.0)	61.0
1989 Jun 23 0717:00	MMR-06	-	-	MUSSON	MUSSON	-	-	-	35.0W 53.0N (+/- 2.0)	61.0
1989 Jun 28 0714:00	MMR-06	-	-	MUSSON	MUSSON	-	-	-	35.0W 53.0N (+/- 2.0)	62.0

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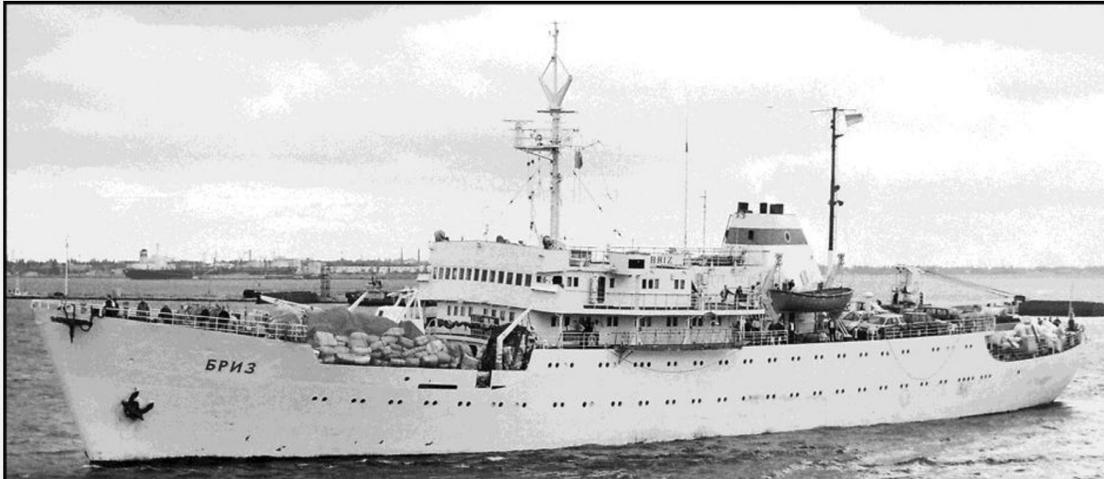
### IV.1.3.3 Volna

Волна

#### «Волна»

с 1995 – «Бриз»

1968–2006



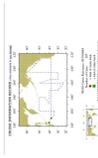
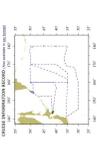
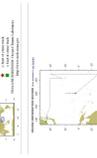
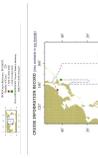
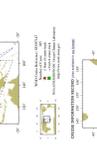
Credit: Photo from wrk.ru forums, file "Passat (V88) 2016-11-23.pdf".

Volna was renamed Briz in 1995.

Rockets used: MMR-06

Updated: 2024 Nov 28 03:19:31

Cruises: VOLNA

LC_Code	Active	Region	Cruise	CruiseMap
GMS76B	1976 Feb 1 - 1976 Mar 31	Pacific Ocean	Volna Expedition 1, 1976 (SU016684)	
GMS77D	1977 Mar 15 - 1977 May 15	Pacific Ocean	Volna Expedition 2, 1977 (SU016686)	
GMS78B	1978 Mar 15 - 1978 Mar 31	Pacific Ocean	Volna Expedition 3, 1978 (SU016932)	
GMS79K	1979 Dec 15 - 1980 Mar 1	Ontong Java Plateau, Pacific Ocean	Volna Expedition 4, 1980 (SU097147)	
GMS81A	1981 Jan 1 - 1981 Mar 31	Southern Ocean	Volna Expedition 5, 1981 (SU009598)	

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Updated: 2024 Nov 28 03:19:31

Launches: VOLNA

Date	Rocket	Flight	Mission	PlatCode	Platform	Site	LP	AscSite	AscLP	Pos	Apogee
1976 Feb 10 0700:00	MWR-06	-	-	VOLNA	Volna	GMS76B	LP1	-	-	180.0E 40.0N (+/- 5.0)	57.0
1976 Feb 12 0700:00	MWR-06	-	-	VOLNA	Volna	GMS76B	LP2	-	-	180.0E 40.0N (+/- 5.0)	58.0
1976 Feb 13 0900:00	MWR-06	-	-	VOLNA	Volna	GMS76B	LP2	-	-	180.0E 40.0N (+/- 5.0)	59.0
1976 Feb 16 0700:00	MWR-06	-	-	VOLNA	Volna	GMS76B	LP3	-	-	180.0E 40.0N (+/- 5.0)	61.0
1976 Feb 17 0900:00	MWR-06	-	-	VOLNA	Volna	GMS76B	LP4	-	-	180.0E 40.0N (+/- 5.0)	57.0
1976 Feb 27 0700:00	MWR-06	-	-	VOLNA	Volna	GMS76B	LP6	-	-	180.0E 40.0N (+/- 5.0)	63.0
1976 Mar 03 0900:00	MWR-06	-	-	VOLNA	Volna	GMS76B	LP6	-	-	180.0E 40.0N (+/- 5.0)	60.0
1976 Mar 05 1000:00	MWR-06	-	-	VOLNA	Volna	GMS76B	LP6	-	-	180.0E 40.0N (+/- 5.0)	61.0
1976 Mar 07 0800:00	MWR-06	-	-	VOLNA	Volna	GMS76B	LP7	-	-	180.0E 40.0N (+/- 5.0)	59.0
1976 Mar 08 0800:00	MWR-06	-	-	VOLNA	Volna	GMS76B	LP8	-	-	180.0E 40.0N (+/- 5.0)	60.0
1976 Mar 11 0900:00	MWR-06	-	-	VOLNA	Volna	GMS76B	LP1	-	-	180.0E 40.0N (+/- 5.0)	59.0
1976 Mar 15 0900:00	MWR-06	-	-	VOLNA	Volna	GMS76B	LP9	-	-	180.0E 40.0N (+/- 5.0)	62.0
1976 Mar 15 1000:00	MWR-06	-	-	VOLNA	Volna	GMS76B	LP9	-	-	180.0E 40.0N (+/- 5.0)	61.0
1977 Mar 17 1000:00	MWR-06	-	-	VOLNA	Volna	GMS77D	LP1	-	-	160.0E 40.0N (+/- 5.0)	60.0
1977 Mar 18 0900:00	MWR-06	-	-	VOLNA	Volna	GMS77D	LP2	-	-	160.0E 40.0N (+/- 5.0)	61.0
1977 Mar 23 1100:00	MWR-06	-	-	VOLNA	Volna	GMS77D	LP3	-	-	160.0E 40.0N (+/- 5.0)	62.0
1977 Mar 25 1000:00	MWR-06	-	-	VOLNA	Volna	GMS77D	LP4	-	-	160.0E 40.0N (+/- 5.0)	57.0
1977 Mar 30 1000:00	MWR-06	-	-	VOLNA	Volna	GMS77D	LP5	-	-	160.0E 40.0N (+/- 5.0)	59.0
1977 Apr 14 1000:00	MWR-06	-	-	VOLNA	Volna	GMS77D	LP6	-	-	160.0E 40.0N (+/- 5.0)	60.0
1977 Apr 19 1000:00	MWR-06	-	-	VOLNA	Volna	GMS77D	LP7	-	-	160.0E 40.0N (+/- 5.0)	59.0
1977 Apr 20 0900:00	MWR-06	-	-	VOLNA	Volna	GMS77D	LP8	-	-	160.0E 40.0N (+/- 5.0)	60.0
1977 Apr 21 0900:00	MWR-06	-	-	VOLNA	Volna	GMS77D	LP8	-	-	160.0E 40.0N (+/- 5.0)	59.0
1977 Apr 23 0900:00	MWR-06	-	-	VOLNA	Volna	GMS77D	LP9	-	-	160.0E 40.0N (+/- 5.0)	62.0
1977 Apr 26 0900:00	MWR-06	-	-	VOLNA	Volna	GMS77D	LP10	-	-	160.0E 40.0N (+/- 5.0)	63.0
1977 Apr 30 1100:00	MWR-06	-	-	VOLNA	Volna	GMS77D	LP1	-	-	160.0E 40.0N (+/- 5.0)	68.0
1977 May 03 1100:00	MWR-06	-	-	VOLNA	Volna	GMS77D	LP11	-	-	160.0E 40.0N (+/- 5.0)	62.0
1978 Mar 19 0900:00	MWR-06	-	-	VOLNA	Volna	GMS78B	LP1	-	-	150.0W 34.0N (+/- 5.0)	59.0
1978 Mar 21 0700:00	MWR-06	-	-	VOLNA	Volna	GMS78B	LP2	-	-	150.0W 34.0N (+/- 5.0)	60.0
1978 Mar 24 0800:00	MWR-06	-	-	VOLNA	Volna	GMS78B	LP3	-	-	150.0W 34.0N (+/- 5.0)	60.0
1978 Mar 26 0700:00	MWR-06	-	-	VOLNA	Volna	GMS78B	LP4	-	-	150.0W 34.0N (+/- 5.0)	60.0
1979 Dec 24 1000:00	MWR-06	-	-	VOLNA	Volna	GMS79K	LP1	-	-	160.0E 0.0N (+/- 1.0)	60.0
1979 Dec 24 1545:00	MWR-06	-	-	VOLNA	Volna	GMS79K	LP1	-	-	160.0E 0.0N (+/- 1.0)	62.0
1980 Feb 08 1600:00	MWR-06	-	-	VOLNA	Volna	GMS79K	LP2	-	-	160.0E 0.0N (+/- 1.0)	56.0
1980 Feb 09 1540:00	MWR-06	-	-	VOLNA	Volna	GMS79K	LP2	-	-	160.0E 0.0N (+/- 1.0)	59.0
1980 Feb 25 1400:00	MWR-06	-	-	VOLNA	Volna	OJP	-	-	-	160.0E 0.0N (+/- 1.0)	59.0
1980 Feb 25 1630:00	MWR-06	-	-	VOLNA	Volna	OJP	-	-	-	160.0E 0.0N (+/- 1.0)	59.0
1980 Feb 25 1830:00	MWR-06	-	-	VOLNA	Volna	OJP	-	-	-	160.0E 0.0N (+/- 1.0)	60.0
1980 Feb 26 1430:00	MWR-06	-	-	VOLNA	Volna	OJP	-	-	-	160.0E 0.0N (+/- 1.0)	60.0
1980 Feb 26 1840:00	MWR-06	-	-	VOLNA	Volna	OJP	-	-	-	160.0E 0.0N (+/- 1.0)	58.0
1980 Feb 27 1320:00	MWR-06	-	-	VOLNA	Volna	OJP	-	-	-	160.0E 0.0N (+/- 1.0)	59.0
1980 Feb 27 1730:00	MWR-06	-	-	VOLNA	Volna	OJP	-	-	-	160.0E 0.0N (+/- 1.0)	59.0
1980 Feb 28 1320:00	MWR-06	-	-	VOLNA	Volna	OJP	-	-	-	160.0E 0.0N (+/- 1.0)	59.0
1980 Feb 28 1420:00	MWR-06	-	-	VOLNA	Volna	OJP	-	-	-	160.0E 0.0N (+/- 1.0)	60.0
1980 Feb 28 1530:00	MWR-06	-	-	VOLNA	Volna	OJP	-	-	-	160.0E 0.0N (+/- 1.0)	59.0
1980 Feb 28 1700:00	MWR-06	-	-	VOLNA	Volna	OJP	-	-	-	160.0E 0.0N (+/- 1.0)	59.0
1980 Feb 28 1800:00	MWR-06	-	-	VOLNA	Volna	OJP	-	-	-	160.0E 0.0N (+/- 1.0)	60.0
1980 Feb 29 1220:00	MWR-06	-	-	VOLNA	Volna	OJP	-	-	-	160.0E 0.0N (+/- 1.0)	59.0
1981 Jan 14 1300:00	MWR-06	-	-	VOLNA	Volna	GMS81A	LP1	-	-	155.0E 62.0S (+/- 5.0)	54.0
1981 Jan 15 1300:00	MWR-06	-	-	VOLNA	Volna	GMS81A	LP2	-	-	155.0E 62.0S (+/- 5.0)	61.0
1981 Jan 20 1300:00	MWR-06	-	-	VOLNA	Volna	GMS81A	LP3	-	-	155.0E 62.0S (+/- 5.0)	55.0
1981 Jan 21 1330:00	MWR-06	-	-	VOLNA	Volna	GMS81A	LP4	-	-	155.0E 62.0S (+/- 5.0)	60.0
1981 Feb 22 1320:00	MWR-06	-	-	VOLNA	Volna	GMS81A	LP5	-	-	155.0E 62.0S (+/- 5.0)	58.0
1981 Feb 23 1500:00	MWR-06	-	-	VOLNA	Volna	GMS81A	LP6	-	-	155.0E 62.0S (+/- 5.0)	62.0
1981 Feb 24 1340:00	MWR-06	-	-	VOLNA	Volna	GMS81A	LP7	-	-	155.0E 62.0S (+/- 5.0)	57.0



Date	Rocket	Flight	Mission	Platform	Platform Site	LP	AscSite	AscLP	Pos	Apogee
1981 Mar 26 1600:00	MWR-06	-	-	VOLNA	Volna GMS81A	LP8	-	-	155.0E 62.0S (+/- 5.0)	58.0

#### IV.1.3.4 Priliv

Прилив



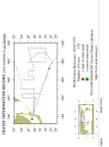
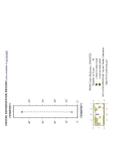
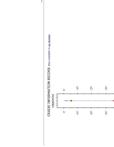
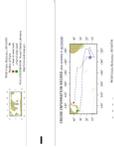
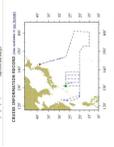
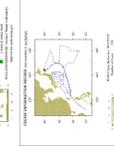
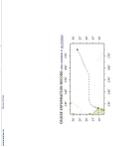
Credit: Photo from wrk.ru forum

Credit: Photo from wrk.ru forum found via <https://forums.airbase.ru/2016/04/t347823-nauchno-issledovatel'skie-suda.html>

Rockets used: MMR-06

Updated: 2024 Nov 28 03:19:31

Cruises: PRILIV  
Cruise

LC_Code	Active	Region	CruiseMap
GMS76H	1976 Oct 15 - 1977 Jan 15	Pacific Ocean	
GMS79D	1979 Apr 15 - 1979 Jul 15	Indian Ocean	
GMS80D	1980 Apr 15 - 1980 Jun 15	Pacific Ocean	
GMS81B	1981 Jan 1 - 1981 Apr 15	Southern and Indian Oceans	
GMS87A	1987 Jan 1 - 1987 Jan 15	Pacific Ocean?	
GMS87G	1987 Nov 15 - 1988 Feb 28	Pacific Ocean	
GMS88B	1988 Apr 1 - 1988 Apr 30	Pacific Ocean	
GMS88D	1988 Dec 15 - 1989 Mar 31	Pacific Ocean	
GMS90A	1990 Jan 1 - 1990 Mar 15	Pacific Ocean	

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Updated: 2024 Nov 28 03:19:31

Launches: PRLIIV

Date	Rocket	Flight	Mission	PlatCode	Platform	Site	LP	AscSite	AscLP	Pos	Apogee
1976 Oct 16 0800:00	MWR-06	-	-	PRLIIV	Priliv	GMS76H	LP1	-	-	160.0W 40.0N (+/- 5.0)	61.0
1976 Oct 19 1000:00	MWR-06	-	-	PRLIIV	Priliv	GMS76H	LP2	-	-	160.0W 40.0N (+/- 5.0)	64.0
1976 Nov 14 1000:00	MWR-06	-	-	PRLIIV	Priliv	GMS76H	LP3	-	-	160.0W 40.0N (+/- 5.0)	60.0
1976 Nov 18 0700:00	MWR-06	-	-	PRLIIV	Priliv	GMS76H	LP4	-	-	160.0W 40.0N (+/- 5.0)	60.0
1976 Dec 21 0900:00	MWR-06	-	-	PRLIIV	Priliv	GMS76H	LP5	-	-	160.0W 40.0N (+/- 5.0)	65.0
1976 Dec 31 0900:00	MWR-06	-	-	PRLIIV	Priliv	GMS76H	LP6	-	-	160.0W 40.0N (+/- 5.0)	60.0
1976 Dec 31 1000:00	MWR-06	-	-	PRLIIV	Priliv	GMS76H	LP7	-	-	160.0W 40.0N (+/- 5.0)	61.0
1977 Jan 03 1100:00	MWR-06	-	-	PRLIIV	Priliv	GMS76H	LP8	-	-	160.0W 40.0N (+/- 5.0)	58.0
1977 Jan 05 1000:00	MWR-06	-	-	PRLIIV	Priliv	GMS76H	LP9	-	-	160.0W 40.0N (+/- 5.0)	59.0
1979 Apr 23 1700:00	MWR-06	-	-	PRLIIV	Priliv	GMS79D	LP1	-	-	57.0E 4.0N (+/- 5.0)	60.0
1979 May 16 2100:00	MWR-06	-	-	PRLIIV	Priliv	GMS79D	LP2	-	-	57.0E 4.0N (+/- 5.0)	55.0
1979 May 18 2000:00	MWR-06	-	-	PRLIIV	Priliv	GMS79D	LP3	-	-	57.0E 4.0N (+/- 5.0)	58.0
1979 May 21 2000:00	MWR-06	-	-	PRLIIV	Priliv	GMS79D	LP4	-	-	57.0E 4.0N (+/- 5.0)	59.0
1979 May 23 2000:00	MWR-06	-	-	PRLIIV	Priliv	GMS79D	LP5	-	-	57.0E 4.0N (+/- 5.0)	58.0
1979 May 24 2000:00	MWR-06	-	-	PRLIIV	Priliv	GMS79D	LP6	-	-	57.0E 4.0N (+/- 5.0)	60.0
1979 May 27 2000:00	MWR-06	-	-	PRLIIV	Priliv	GMS79D	LP7	-	-	57.0E 4.0N (+/- 5.0)	59.0
1979 May 28 2000:00	MWR-06	-	-	PRLIIV	Priliv	GMS79D	LP8	-	-	57.0E 4.0N (+/- 5.0)	58.0
1979 May 29 2000:00	MWR-06	-	-	PRLIIV	Priliv	GMS79D	LP9	-	-	57.0E 4.0N (+/- 5.0)	58.0
1979 Jul 12 1400:00	MWR-06	-	-	PRLIIV	Priliv	GMS79D	LP4	-	-	57.0E 4.0N (+/- 5.0)	57.0
1979 Jul 12 1500:00	MWR-06	-	-	PRLIIV	Priliv	GMS79D	LP4	-	-	57.0E 4.0N (+/- 5.0)	58.0
1979 Jul 12 1600:00	MWR-06	-	-	PRLIIV	Priliv	GMS79D	LP4	-	-	57.0E 4.0N (+/- 5.0)	58.0
1980 Apr 19 0900:00	MWR-06	-	-	PRLIIV	Priliv	GMS80D	LP1	-	-	160.0W 30.0N (+/- 5.0)	56.0
1980 Apr 23 0900:00	MWR-06	-	-	PRLIIV	Priliv	GMS80D	LP2	-	-	160.0W 30.0N (+/- 5.0)	58.0
1980 Apr 25 0900:00	MWR-06	-	-	PRLIIV	Priliv	GMS80D	LP3	-	-	160.0W 30.0N (+/- 5.0)	61.0
1980 May 17 1100:00	MWR-06	-	-	PRLIIV	Priliv	GMS80D	LP4	-	-	160.0W 30.0N (+/- 5.0)	58.0
1980 May 29 1000:00	MWR-06	-	-	PRLIIV	Priliv	GMS80D	LP5	-	-	160.0W 30.0N (+/- 5.0)	56.0
1980 May 31 0900:00	MWR-06	-	-	PRLIIV	Priliv	GMS80D	LP6	-	-	160.0W 30.0N (+/- 5.0)	62.0
1980 Jun 02 1100:00	MWR-06	-	-	PRLIIV	Priliv	GMS80D	LP6	-	-	160.0W 30.0N (+/- 5.0)	57.0
1981 Jan 14 1500:00	MWR-06	-	-	PRLIIV	Priliv	GMS81B	LP5	-	-	150.0E 55.0S (+/- 5.0)	55.0
1981 Jan 17 1400:00	MWR-06	-	-	PRLIIV	Priliv	GMS81B	LP2	-	-	150.0E 55.0S (+/- 5.0)	58.0
1981 Jan 20 1300:00	MWR-06	-	-	PRLIIV	Priliv	GMS81B	LP3	-	-	150.0E 55.0S (+/- 5.0)	58.0
1981 Feb 10 1400:00	MWR-06	-	-	PRLIIV	Priliv	GMS81B	LP4	-	-	150.0E 55.0S (+/- 5.0)	60.0
1981 Feb 20 1500:00	MWR-06	-	-	PRLIIV	Priliv	GMS81B	LP5	-	-	150.0E 55.0S (+/- 5.0)	64.0
1981 Feb 25 1230:00	MWR-06	-	-	PRLIIV	Priliv	GMS81B	LP6	-	-	150.0E 55.0S (+/- 5.0)	56.0
1981 Mar 23 1500:00	MWR-06	-	-	PRLIIV	Priliv	GMS81B	LP7	-	-	150.0E 55.0S (+/- 5.0)	58.0
1981 Mar 26 1500:00	MWR-06	-	-	PRLIIV	Priliv	GMS81B	LP8	-	-	150.0E 55.0S (+/- 5.0)	55.0
1981 Apr 02 1500:00	MWR-06	-	-	PRLIIV	Priliv	GMS81B	LP9	-	-	150.0E 55.0S (+/- 5.0)	55.0
1981 Apr 05 1600:00	MWR-06	-	-	PRLIIV	Priliv	GMS81B	LP9	-	-	150.0E 55.0S (+/- 5.0)	56.0
1987 Jan 02 1220:00	MWR-06	-	-	PRLIIV	Priliv	GMS87A	ULP1	-	-	-	59.0
1987 Jan 02 1444:00	MWR-06	-	-	PRLIIV	Priliv	GMS87A	ULP1	-	-	-	58.0
1987 Jan 05 1624:00	MWR-06	-	-	PRLIIV	Priliv	GMS87A	ULP1	-	-	-	58.0
1987 Jan 05 1741:00	MWR-06	-	-	PRLIIV	Priliv	GMS87A	ULP1	-	-	-	60.0
1987 Jan 06 1406:00	MWR-06	-	-	PRLIIV	Priliv	GMS87A	ULP1	-	-	-	57.0
1987 Jan 06 1525:00	MWR-06	-	-	PRLIIV	Priliv	GMS87A	ULP1	-	-	-	58.0
1987 Jan 07 1139:00	MWR-06	-	-	PRLIIV	Priliv	GMS87A	ULP1	-	-	-	62.0
1987 Jan 08 1105:00	MWR-06	-	-	PRLIIV	Priliv	GMS87A	ULP1	-	-	-	59.0
1987 Jan 09 1001:00	MWR-06	-	-	PRLIIV	Priliv	GMS87A	ULP1	-	-	-	59.0
1987 Jan 11 1237:00	MWR-06	-	-	PRLIIV	Priliv	GMS87A	ULP1	-	-	-	57.0
1987 Jan 11 1347:00	MWR-06	-	-	PRLIIV	Priliv	GMS87A	ULP1	-	-	-	57.0
1987 Nov 29 0951:00	MWR-06	-	-	PRLIIV	Priliv	GMS87G	LP1	-	-	170.0W 36.0N (+/- 5.0)	57.0
1987 Dec 01 0906:00	MWR-06	-	-	PRLIIV	Priliv	GMS87G	LP2	-	-	170.0W 36.0N (+/- 5.0)	58.0
1987 Dec 03 1000:00	MWR-06	-	-	PRLIIV	Priliv	GMS87G	LP3	-	-	170.0W 36.0N (+/- 5.0)	60.0
1987 Dec 07 1405:00	MWR-06	-	-	PRLIIV	Priliv	GMS87G	LP4	-	-	170.0W 36.0N (+/- 5.0)	56.0
1988 Feb 23 1018:00	MWR-06	-	-	PRLIIV	Priliv	GMS87G	LP5	-	-	170.0W 36.0N (+/- 5.0)	59.0

Launches: PRLIIV

Date	Rocket	Flight	Mission	PlatCode	Platform	Site	LP	AscSite	AscLP	Pos	Apogee
1988 Feb 24 1105:00	MWR-06	-	-	PRLIIV	Priliv	GMS87G	LP6	-	-	170.0W 36.0N	(+/- 5.0)
1988 Feb 25 1231:00	MWR-06	-	-	PRLIIV	Priliv	GMS87G	LP7	-	-	170.0W 36.0N	(+/- 5.0)
1988 Feb 26 1108:00	MWR-06	-	-	PRLIIV	Priliv	GMS87G	LP8	-	-	170.0W 36.0N	(+/- 5.0)
1988 Feb 27 1105:00	MWR-06	-	-	PRLIIV	Priliv	GMS87G	LP9	-	-	170.0W 36.0N	(+/- 5.0)
1988 Feb 28 1113:00	MWR-06	-	-	PRLIIV	Priliv	GMS87G	LP10	-	-	170.0W 36.0N	(+/- 5.0)
1988 Apr 07 1210:00	MWR-06	-	-	PRLIIV	Priliv	GMS88B	LP1	-	-	161.0E 18.0N	(+/- 5.0)
1988 Apr 10 1006:00	MWR-06	-	-	PRLIIV	Priliv	GMS88B	LP2	-	-	161.0E 18.0N	(+/- 5.0)
1988 Apr 10 1445:00	MWR-06	-	-	PRLIIV	Priliv	GMS88B	LP3	-	-	161.0E 18.0N	(+/- 5.0)
1988 Apr 16 1000:00	MWR-06	-	-	PRLIIV	Priliv	GMS88B	LP4	-	-	161.0E 18.0N	(+/- 5.0)
1988 Apr 17 1025:00	MWR-06	-	-	PRLIIV	Priliv	GMS88B	LP5	-	-	161.0E 18.0N	(+/- 5.0)
1988 Apr 18 1025:00	MWR-06	-	-	PRLIIV	Priliv	GMS88B	LP6	-	-	161.0E 18.0N	(+/- 5.0)
1988 Apr 18 1312:00	MWR-06	-	-	PRLIIV	Priliv	GMS88B	LP7	-	-	161.0E 18.0N	(+/- 5.0)
1988 Dec 18 0800:00	MWR-06	-	-	PRLIIV	Priliv	GMS88D	LP1	-	-	163.0E 27.0N	(+/- 5.0)
1988 Dec 20 0800:00	MWR-06	-	-	PRLIIV	Priliv	GMS88D	LP2	-	-	163.0E 27.0N	(+/- 5.0)
1988 Dec 21 1000:00	MWR-06	-	-	PRLIIV	Priliv	GMS88D	LP3	-	-	163.0E 27.0N	(+/- 5.0)
1988 Dec 22 1000:00	MWR-06	-	-	PRLIIV	Priliv	GMS88D	LP4	-	-	163.0E 27.0N	(+/- 5.0)
1988 Dec 25 1059:00	MWR-06	-	-	PRLIIV	Priliv	GMS88D	LP5	-	-	163.0E 27.0N	(+/- 5.0)
1988 Dec 28 1109:00	MWR-06	-	-	PRLIIV	Priliv	GMS88D	LP6	-	-	163.0E 27.0N	(+/- 5.0)
1989 Jan 01 1711:00	MWR-06	-	-	PRLIIV	Priliv	GMS88D	LP7	-	-	163.0E 27.0N	(+/- 5.0)
1989 Jan 02 0924:00	MWR-06	-	-	PRLIIV	Priliv	GMS88D	LP8	-	-	163.0E 27.0N	(+/- 5.0)
1989 Jan 03 1114:00	MWR-06	-	-	PRLIIV	Priliv	GMS88D	LP9	-	-	163.0E 27.0N	(+/- 5.0)
1989 Jan 05 1046:00	MWR-06	-	-	PRLIIV	Priliv	GMS88D	LP10	-	-	163.0E 27.0N	(+/- 5.0)
1989 Jan 06 1049:00	MWR-06	-	-	PRLIIV	Priliv	GMS88D	LP11	-	-	163.0E 27.0N	(+/- 5.0)
1989 Jan 07 1013:00	MWR-06	-	-	PRLIIV	Priliv	GMS88D	LP12	-	-	163.0E 27.0N	(+/- 5.0)
1989 Jan 07 1251:00	MWR-06	-	-	PRLIIV	Priliv	GMS88D	LP13	-	-	163.0E 27.0N	(+/- 5.0)
1989 Jan 09 1252:00	MWR-06	-	-	PRLIIV	Priliv	GMS88D	LP14	-	-	163.0E 27.0N	(+/- 5.0)
1989 Jan 11 1444:00	MWR-06	-	-	PRLIIV	Priliv	GMS88D	LP15	-	-	163.0E 27.0N	(+/- 5.0)
1989 Jan 13 1151:00	MWR-06	-	-	PRLIIV	Priliv	GMS88D	LP16	-	-	163.0E 27.0N	(+/- 5.0)
1989 Mar 16 1247:00	MWR-06	-	-	PRLIIV	Priliv	GMS88D	LP17	-	-	163.0E 27.0N	(+/- 5.0)
1989 Mar 17 1155:00	MWR-06	-	-	PRLIIV	Priliv	GMS88D	LP18	-	-	163.0E 27.0N	(+/- 5.0)
1989 Mar 19 1030:00	MWR-06	-	-	PRLIIV	Priliv	GMS88D	LP19	-	-	163.0E 27.0N	(+/- 5.0)
1990 Jan 01 1300:00	MWR-06	-	-	PRLIIV	Priliv	GMS90A	LP1	-	-	160.0E 29.0N	(+/- 5.0)
1990 Jan 03 1000:00	MWR-06	-	-	PRLIIV	Priliv	GMS90A	LP2	-	-	160.0E 29.0N	(+/- 5.0)
1990 Jan 05 1430:00	MWR-06	-	-	PRLIIV	Priliv	GMS90A	LP3	-	-	160.0E 29.0N	(+/- 5.0)
1990 Jan 06 1317:00	MWR-06	-	-	PRLIIV	Priliv	GMS90A	LP4	-	-	160.0E 29.0N	(+/- 5.0)
1990 Jan 11 1115:00	MWR-06	-	-	PRLIIV	Priliv	GMS90A	LP5	-	-	160.0E 29.0N	(+/- 5.0)
1990 Jan 13 1010:00	MWR-06	-	-	PRLIIV	Priliv	GMS90A	LP6	-	-	160.0E 29.0N	(+/- 5.0)
1990 Jan 17 0908:00	MWR-06	-	-	PRLIIV	Priliv	GMS90A	LP5	-	-	160.0E 29.0N	(+/- 5.0)
1990 Jan 21 1050:00	MWR-06	-	-	PRLIIV	Priliv	GMS90A	LP6	-	-	160.0E 29.0N	(+/- 5.0)
1990 Jan 22 1000:00	MWR-06	-	-	PRLIIV	Priliv	GMS90A	LP7	-	-	160.0E 29.0N	(+/- 5.0)
1990 Jan 23 1009:00	MWR-06	-	-	PRLIIV	Priliv	GMS90A	LP8	-	-	160.0E 29.0N	(+/- 5.0)
1990 Jan 24 1023:00	MWR-06	-	-	PRLIIV	Priliv	GMS90A	LP9	-	-	160.0E 29.0N	(+/- 5.0)
1990 Jan 25 1044:00	MWR-06	-	-	PRLIIV	Priliv	GMS90A	LP10	-	-	160.0E 29.0N	(+/- 5.0)
1990 Jan 26 1313:00	MWR-06	-	-	PRLIIV	Priliv	GMS90A	LP11	-	-	160.0E 29.0N	(+/- 5.0)
1990 Mar 11 1058:00	MWR-06	-	-	PRLIIV	Priliv	GMS90A	LP12	-	-	160.0E 29.0N	(+/- 5.0)
1990 Mar 14 1256:00	MWR-06	-	-	PRLIIV	Priliv	GMS90A	LP13	-	-	160.0E 29.0N	(+/- 5.0)

### IV.1.3.5 Viktor Bugaev

Виктор Бугаев



Credit: Unknown

IMO 7048427. Built 1971 as the Poryv. Renamed Viktor Bugayev. Last research expedition in 1998. Sold to Ukraine Marine Ecology.

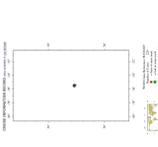
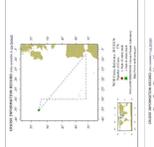
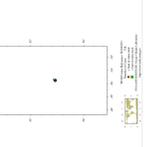
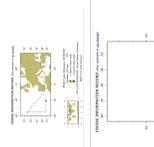
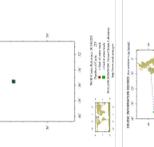
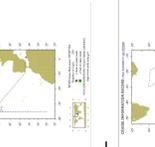
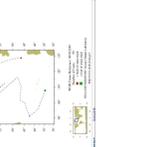
Operated by Odessa branch of Gosudarstvennoi Okeanographicheskii Institut (State Oceanographic Institute, under the GMS).

Rockets used: MMR-06

Updated: 2024 Nov 28 03:19:31



Credit: Credit: User VAV on shi

LC_Code	Active	Region	Cruises: BUGAEV Cruise	CruiseMap
GMS80J	1980 Oct 1 - 1980 Oct 31	Minia, Atlantic Ocean	Bugaev Expedition 1, 1980 (SU010225)	
GMS81J	1981 Jun 1 - 1981 Jun 30	Minia, Atlantic Ocean	Bugaev Expedition 2, 1981 (SU010136)	
GMS81K	1981 Oct 15 - 1981 Nov 30	Minia, Atlantic Ocean	Bugaev Expedition 3, 1981 (SU010233)	
GMS82K	1982 Dec 1 - 1982 Dec 31	Minia, Atlantic Ocean	Bugaev Expedition 4, 1982 (SU010239)	
GMS83H	1983 Mar 1 - 1983 Mar 31	Minia, Atlantic Ocean	Bugaev Expedition 5, 1983 (SU007027)	
GMS87N	1987 Jan 1 - 1987 Jan 31	Minia, Atlantic Ocean	Bugaev Expedition 6, 1987 (SU010263)	
GMS87P	1987 Apr 1 - 1987 Apr 30	Minia, Atlantic Ocean	Bugaev Expedition 7, 1987 (SU007364)	
GMS89J	1989 Jan 1 - 1989 Jan 31	Minia, Atlantic Ocean	Bugaev Expedition 8, 1989	
GMS90F	1990 Dec 15 - 1991 Jan 1	Minia, Atlantic Ocean	Bugaev Expedition 9, 1990 (SU012248)	



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Updated: 2024 Nov 28 03:19:31



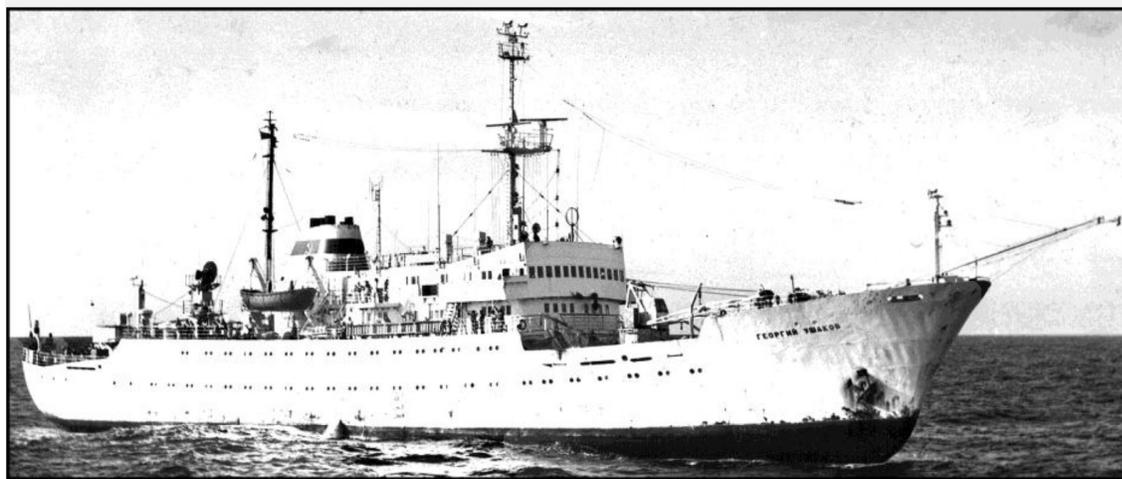
Launches: BUGAEV

Date	Rocket	Flight	Mission	PlatCode	Platform	Site	LP	AscSite	AscLP	Pos	Apogee
1989 Jan 04 0810:00	MMR-06	-	-	BUGAEV	Viktor Bugaev	MINIA	-	-	-	35.0W 53.0N (+/- 2.0)	60.0
1989 Jan 06 0704:00	MMR-06	-	-	BUGAEV	Viktor Bugaev	MINIA	-	-	-	35.0W 53.0N (+/- 2.0)	56.0
1989 Jan 09 0705:00	MMR-06	-	-	BUGAEV	Viktor Bugaev	MINIA	-	-	-	35.0W 53.0N (+/- 2.0)	60.0
1989 Jan 11 0830:00	MMR-06	-	-	BUGAEV	Viktor Bugaev	MINIA	-	-	-	35.0W 53.0N (+/- 2.0)	60.0
1989 Jan 13 0857:00	MMR-06	-	-	BUGAEV	Viktor Bugaev	MINIA	-	-	-	35.0W 53.0N (+/- 2.0)	60.0
1989 Jan 15 0702:00	MMR-06	-	-	BUGAEV	Viktor Bugaev	MINIA	-	-	-	35.0W 53.0N (+/- 2.0)	65.0
1989 Jan 18 0701:00	MMR-06	-	-	BUGAEV	Viktor Bugaev	MINIA	-	-	-	35.0W 53.0N (+/- 2.0)	63.0
1989 Jan 20 0702:00	MMR-06	-	-	BUGAEV	Viktor Bugaev	MINIA	-	-	-	35.0W 53.0N (+/- 2.0)	61.0
1989 Jan 25 0721:00	MMR-06	-	-	BUGAEV	Viktor Bugaev	MINIA	-	-	-	35.0W 53.0N (+/- 2.0)	61.0
1989 Jan 27 0839:00	MMR-06	-	-	BUGAEV	Viktor Bugaev	MINIA	-	-	-	35.0W 53.0N (+/- 2.0)	63.0
1990 Dec 31 0706:00	MMR-06	-	-	BUGAEV	Viktor Bugaev	GMS90F	LP1	-	-	35.0W 53.0N (+/- 5.0)	62.0

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### IV.1.3.6 Georgiy Ushakov

Георгий Ушаков



Credit: Photo from wrk.ru forums, file "Passat (V88) 2016-11-23.pdf".

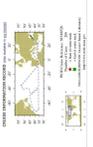
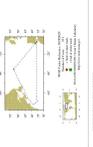
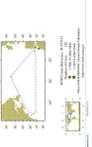
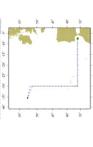
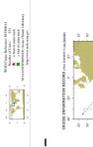
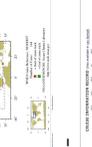
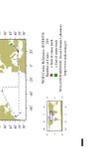
Originally Shkval ('squall'); renamed 1984 Nov. Owned by GOI/GMS Odessa.

Note: There is little evidence for the location of the 1989-1990 launches, but the ship is known to have been in the same general area of the Atlantic as MINIA and so it seems likely that the launches were from there.

Rockets used: MMR-06

Updated: 2024 Nov 28 03:19:31

Cruises: USHAKOV

LC_Code	Active	Region	Cruise	CruiseMap
GMS76D	1976 Apr 15 - 1976 Jun 30	Minia, Atlantic Ocean	Ushakov Expedition 1, 1976 (SU000526/097314)	
GMS76G	1976 Aug 1 - 1976 Oct 15	Minia, Atlantic Ocean	Ushakov Expedition 2, 1976 (SU000628)	
GMS77E	1977 Apr 1 - 1977 Jun 15	Minia, Atlantic Ocean	Ushakov Expedition 3, 1977 (SU015113)	
GMS77K	1977 Jul 15 - 1977 Sep 15	Minia, Atlantic Ocean	Ushakov Expedition 4, 1977 (SU000614)	
GMS78D	1978 Apr 1 - 1978 Apr 2	Minia, Atlantic Ocean Black Sea	Ushakov Expedition 6, 1978	
GMS78H	1978 Feb 1 - 1978 Mar 1	Minia, Atlantic Ocean	Ushakov Expedition 5, 1978 (SU000657)	
GMS79G	1979 Nov 1 - 1979 Dec 31	Minia, Atlantic Ocean	Ushakov Expedition 7, 1979	
GMS80G	1980 Mar 1 - 1980 Mar 31	Minia, Atlantic Ocean	Ushakov Expedition 8, 1980 (SU000734)	
GMS86E	1986 Sep 1 - 1986 Sep 30	Minia, Atlantic Ocean	Ushakov Expedition 9, 1986	
GMS87H	1987 Nov 1 - 1987 Dec 15	Minia, Atlantic Ocean	Ushakov Expedition 10, 1987 (SU010268)	
GMS88E	1988 Feb 1 - 1988 Mar 15	Minia, Atlantic Ocean	Ushakov Expedition 11, 1988	
GMS88F	1988 May 15 - 1988 Jun 30	Minia, Atlantic Ocean	Ushakov Expedition 12, 1988 (SU008535)	
GMS88G	1988 Aug 15 - 1988 Sep 30	Minia, Atlantic Ocean	Ushakov Expedition 13, 1988	
GMS89D	1989 Oct 15 - 1989 Oct 31	Minia, Atlantic Ocean	Ushakov Expedition 14, 1989	
GMS90G	1990 Jan 1 - 1990 Feb 1	Minia, Atlantic Ocean	Ushakov Expedition 15, 1989	

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Updated: 2024 Nov 28 03:19:31

Launches: USHAKOV

Date	Rocket	Flight	Mission	Platform	Site	LP	AscSite	AsclP	Pos	Apogee
1976 Apr 21 0300:00	MMR-06	-	-	USHAKOV	Georgiy Ushakov	GMS76D	LP1	-	35.0M 53.0N (+/- 2.0)	60.0
1976 Apr 28 0200:00	MMR-06	-	-	USHAKOV	Georgiy Ushakov	GMS76D	LP2	-	35.0M 53.0N (+/- 2.0)	63.0
1976 May 03 0200:00	MMR-06	-	-	USHAKOV	Georgiy Ushakov	MINIA	-	-	35.0M 53.0N (+/- 2.0)	61.0
1976 May 12 0300:00	MMR-06	-	-	USHAKOV	Georgiy Ushakov	MINIA	-	-	35.0M 53.0N (+/- 2.0)	60.0
1976 May 19 0200:00	MMR-06	-	-	USHAKOV	Georgiy Ushakov	MINIA	-	-	35.0M 53.0N (+/- 2.0)	59.0
1976 May 25 0300:00	MMR-06	-	-	USHAKOV	Georgiy Ushakov	MINIA	-	-	35.0M 53.0N (+/- 2.0)	58.0
1976 May 27 0300:00	MMR-06	-	-	USHAKOV	Georgiy Ushakov	GMS76D	LP3	-	35.0M 53.0N (+/- 2.0)	60.0
1976 Jun 09 0300:00	MMR-06	-	-	USHAKOV	Georgiy Ushakov	GMS76D	LP4	-	35.0M 53.0N (+/- 2.0)	62.0
1976 Jun 15 0500:00	MMR-06	-	-	USHAKOV	Georgiy Ushakov	GMS76D	LP5	-	35.0M 53.0N (+/- 2.0)	62.0
1976 Jun 17 0600:00	MMR-06	-	-	USHAKOV	Georgiy Ushakov	GMS76D	LP6	-	35.0M 53.0N (+/- 2.0)	61.0
1976 Aug 12 0200:00	MMR-06	-	-	USHAKOV	Georgiy Ushakov	GMS76G	LP1	-	35.0M 53.0N (+/- 2.0)	60.0
1976 Aug 28 0200:00	MMR-06	-	-	USHAKOV	Georgiy Ushakov	GMS76G	LP2	-	35.0M 53.0N (+/- 2.0)	61.0
1976 Sep 04 0300:00	MMR-06	-	-	USHAKOV	Georgiy Ushakov	GMS76G	LP3	-	35.0M 53.0N (+/- 2.0)	62.0
1976 Sep 08 0300:00	MMR-06	-	-	USHAKOV	Georgiy Ushakov	MINIA	-	-	35.0M 53.0N (+/- 2.0)	61.0
1976 Sep 09 0200:00	MMR-06	-	-	USHAKOV	Georgiy Ushakov	MINIA	-	-	35.0M 53.0N (+/- 2.0)	61.0
1976 Sep 15 0200:00	MMR-06	-	-	USHAKOV	Georgiy Ushakov	MINIA	-	-	35.0M 53.0N (+/- 2.0)	61.0
1976 Sep 21 0200:00	MMR-06	-	-	USHAKOV	Georgiy Ushakov	MINIA	-	-	35.0M 53.0N (+/- 2.0)	61.0
1976 Sep 29 0300:00	MMR-06	-	-	USHAKOV	Georgiy Ushakov	MINIA	-	-	35.0M 53.0N (+/- 2.0)	61.0
1976 Oct 5 0200	MMR-06	-	-	USHAKOV	Georgiy Ushakov	MINIA	-	-	35.0M 53.0N (+/- 2.0)	61.0
1976 Oct 13 0200:00	MMR-06	-	-	USHAKOV	Georgiy Ushakov	MINIA	-	-	35.0M 53.0N (+/- 2.0)	60.0
1977 Apr 13 0300:00	MMR-06	-	-	USHAKOV	Georgiy Ushakov	GMS77E	LP1	-	35.0M 53.0N (+/- 2.0)	61.0
1977 Apr 29 0500:00	MMR-06	-	-	USHAKOV	Georgiy Ushakov	GMS77E	LP2	-	35.0M 53.0N (+/- 2.0)	60.0
1977 May 04 0200:00	MMR-06	-	-	USHAKOV	Georgiy Ushakov	MINIA	-	-	35.0M 53.0N (+/- 2.0)	59.0
1977 May 06 0500:00	MMR-06	-	-	USHAKOV	Georgiy Ushakov	MINIA	-	-	35.0M 53.0N (+/- 2.0)	62.0
1977 May 11 0200:00	MMR-06	-	-	USHAKOV	Georgiy Ushakov	MINIA	-	-	35.0M 53.0N (+/- 2.0)	61.0
1977 May 18 0200:00	MMR-06	-	-	USHAKOV	Georgiy Ushakov	MINIA	-	-	35.0M 53.0N (+/- 2.0)	65.0
1977 May 25 0320:00	MMR-06	-	-	USHAKOV	Georgiy Ushakov	MINIA	-	-	35.0M 53.0N (+/- 2.0)	60.0
1977 Jun 01 0200:00	MMR-06	-	-	USHAKOV	Georgiy Ushakov	GMS77E	LP3	-	35.0M 53.0N (+/- 2.0)	63.0
1977 Jun 03 0400:00	MMR-06	-	-	USHAKOV	Georgiy Ushakov	GMS77E	LP4	-	35.0M 53.0N (+/- 2.0)	60.0
1977 Jun 04 0400:00	MMR-06	-	-	USHAKOV	Georgiy Ushakov	GMS77E	LP5	-	35.0M 53.0N (+/- 2.0)	61.0
1977 Jul 27 0400:00	MMR-06	-	-	USHAKOV	Georgiy Ushakov	GMS77K	LP1	-	35.0M 53.0N (+/- 2.0)	60.0
1977 Aug 03 2200:00	MMR-06	-	-	USHAKOV	Georgiy Ushakov	MINIA	-	-	35.0M 53.0N (+/- 2.0)	60.0
1977 Aug 05 2100:00	MMR-06	-	-	USHAKOV	Georgiy Ushakov	MINIA	-	-	35.0M 53.0N (+/- 2.0)	63.0
1977 Aug 10 2100:00	MMR-06	-	-	USHAKOV	Georgiy Ushakov	MINIA	-	-	35.0M 53.0N (+/- 2.0)	62.0
1977 Aug 12 2100:00	MMR-06	-	-	USHAKOV	Georgiy Ushakov	MINIA	-	-	35.0M 53.0N (+/- 2.0)	61.0
1977 Aug 17 2100:00	MMR-06	-	-	USHAKOV	Georgiy Ushakov	MINIA	-	-	35.0M 53.0N (+/- 2.0)	63.0
1977 Aug 19 2100:00	MMR-06	-	-	USHAKOV	Georgiy Ushakov	MINIA	-	-	35.0M 53.0N (+/- 2.0)	61.0
1977 Aug 26 2100:00	MMR-06	-	-	USHAKOV	Georgiy Ushakov	MINIA	-	-	35.0M 53.0N (+/- 2.0)	59.0
1977 Aug 31 2200:00	MMR-06	-	-	USHAKOV	Georgiy Ushakov	MINIA	-	-	35.0M 53.0N (+/- 2.0)	61.0
1977 Sep 07 0200:00	MMR-06	-	-	USHAKOV	Georgiy Ushakov	GMS77K	LP2	-	35.0M 53.0N (+/- 2.0)	61.0
1978 Feb 01 0200:00	MMR-06	-	-	USHAKOV	Georgiy Ushakov	MINIA	-	-	35.0M 53.0N (+/- 2.0)	61.0
1978 Feb 03 0300:00	MMR-06	-	-	USHAKOV	Georgiy Ushakov	MINIA	-	-	35.0M 53.0N (+/- 2.0)	61.0
1978 Feb 08 0300:00	MMR-06	-	-	USHAKOV	Georgiy Ushakov	MINIA	-	-	35.0M 53.0N (+/- 2.0)	64.0
1978 Feb 10 0200:00	MMR-06	-	-	USHAKOV	Georgiy Ushakov	MINIA	-	-	35.0M 53.0N (+/- 2.0)	62.0
1978 Feb 15 0400:00	MMR-06	-	-	USHAKOV	Georgiy Ushakov	MINIA	-	-	35.0M 53.0N (+/- 2.0)	69.0
1978 Feb 17 0300:00	MMR-06	-	-	USHAKOV	Georgiy Ushakov	MINIA	-	-	35.0M 53.0N (+/- 2.0)	65.0
1978 Feb 22 0200:00	MMR-06	-	-	USHAKOV	Georgiy Ushakov	MINIA	-	-	35.0M 53.0N (+/- 2.0)	68.0
1978 Feb 24 0335:00	MMR-06	-	-	USHAKOV	Georgiy Ushakov	MINIA	-	-	35.0M 53.0N (+/- 2.0)	64.0
1978 Apr 01 1600:00	MMR-06	-	-	USHAKOV	Georgiy Ushakov	GMS78D	LP1	-	31.0E 43.0N (+/- 2.0)	59.0
1978 Apr 01 1700:00	MMR-06	-	-	USHAKOV	Georgiy Ushakov	GMS78D	LP1	-	31.0E 43.0N (+/- 2.0)	58.0
1979 Nov 01 2140:00	MMR-06	-	-	USHAKOV	Georgiy Ushakov	GMS79G	LP1	-	35.0M 53.0N (+/- 2.0)	55.0
1979 Nov 07 0900:00	MMR-06	-	-	USHAKOV	Georgiy Ushakov	MINIA	-	-	35.0M 53.0N (+/- 2.0)	59.0
1979 Dec 12 0730:00	MMR-06	-	-	USHAKOV	Georgiy Ushakov	MINIA	-	-	35.0M 53.0N (+/- 2.0)	60.0
1979 Dec 19 0800:00	MMR-06	-	-	USHAKOV	Georgiy Ushakov	MINIA	-	-	35.0M 53.0N (+/- 2.0)	58.0
1979 Dec 24 0730:00	MMR-06	-	-	USHAKOV	Georgiy Ushakov	MINIA	-	-	35.0M 53.0N (+/- 2.0)	58.0

Launches: USHAKOV

Date	Rocket	Flight	Mission	Platform	Site	LP	AscSite	AsclP	Pos	Apogee
1979 Dec 26 07:15:00	MMR-06	-	-	USHAKOV	Georgiy Ushakov	MINIA	-	-	35.0W 53.0N (+/- 2.0)	59.0
1980 Mar 05 09:00:00	MMR-06	-	-	USHAKOV	Georgiy Ushakov	MINIA	-	-	35.0W 53.0N (+/- 2.0)	57.0
1980 Mar 12 08:00:00	MMR-06	-	-	USHAKOV	Georgiy Ushakov	MINIA	-	-	35.0W 53.0N (+/- 2.0)	56.0
1980 Mar 14 08:00:00	MMR-06	-	-	USHAKOV	Georgiy Ushakov	MINIA	-	-	35.0W 53.0N (+/- 2.0)	57.0
1980 Mar 19 07:00:00	MMR-06	-	-	USHAKOV	Georgiy Ushakov	MINIA	-	-	35.0W 53.0N (+/- 2.0)	57.0
1980 Mar 21 07:00:00	MMR-06	-	-	USHAKOV	Georgiy Ushakov	MINIA	-	-	35.0W 53.0N (+/- 2.0)	57.0
1980 Mar 26 08:00:00	MMR-06	-	-	USHAKOV	Georgiy Ushakov	MINIA	-	-	35.0W 53.0N (+/- 2.0)	58.0
1980 Mar 28 08:00:00	MMR-06	-	-	USHAKOV	Georgiy Ushakov	MINIA	-	-	35.0W 53.0N (+/- 2.0)	58.0
1986 Sep 07 07:48:00	MMR-06	-	-	USHAKOV	Georgiy Ushakov	MINIA	-	-	35.0W 53.0N (+/- 2.0)	60.0
1986 Sep 19 08:00:00	MMR-06	-	-	USHAKOV	Georgiy Ushakov	MINIA	-	-	35.0W 53.0N (+/- 2.0)	60.0
1986 Sep 21 08:04:00	MMR-06	-	-	USHAKOV	Georgiy Ushakov	MINIA	-	-	35.0W 53.0N (+/- 2.0)	60.0
1986 Sep 22 08:17:00	MMR-06	-	-	USHAKOV	Georgiy Ushakov	MINIA	-	-	35.0W 53.0N (+/- 2.0)	60.0
1986 Sep 24 07:59:00	MMR-06	-	-	USHAKOV	Georgiy Ushakov	MINIA	-	-	35.0W 53.0N (+/- 2.0)	62.0
1986 Sep 28 07:42:00	MMR-06	-	-	USHAKOV	Georgiy Ushakov	MINIA	-	-	35.0W 53.0N (+/- 2.0)	60.0
1987 Nov 13 07:18:00	MMR-06	-	-	USHAKOV	Georgiy Ushakov	MINIA	-	-	35.0W 53.0N (+/- 2.0)	58.0
1987 Nov 18 08:56:00	MMR-06	-	-	USHAKOV	Georgiy Ushakov	MINIA	-	-	35.0W 53.0N (+/- 2.0)	60.0
1987 Nov 27 07:22:00	MMR-06	-	-	USHAKOV	Georgiy Ushakov	MINIA	-	-	35.0W 53.0N (+/- 2.0)	61.0
1987 Dec 02 07:17:00	MMR-06	-	-	USHAKOV	Georgiy Ushakov	MINIA	-	-	35.0W 53.0N (+/- 2.0)	60.0
1987 Dec 04 07:40:00	MMR-06	-	-	USHAKOV	Georgiy Ushakov	MINIA	-	-	35.0W 53.0N (+/- 2.0)	62.0
1987 Dec 09 07:00:00	MMR-06	-	-	USHAKOV	Georgiy Ushakov	MINIA	-	-	35.0W 53.0N (+/- 2.0)	58.0
1987 Dec 11 07:00:00	MMR-06	-	-	USHAKOV	Georgiy Ushakov	MINIA	-	-	35.0W 53.0N (+/- 2.0)	60.0
1988 Feb 15 07:10:00	MMR-06	-	-	USHAKOV	Georgiy Ushakov	MINIA	-	-	35.0W 53.0N (+/- 2.0)	63.0
1988 Feb 17 07:02:00	MMR-06	-	-	USHAKOV	Georgiy Ushakov	MINIA	-	-	35.0W 53.0N (+/- 2.0)	60.0
1988 Feb 19 07:00:00	MMR-06	-	-	USHAKOV	Georgiy Ushakov	MINIA	-	-	35.0W 53.0N (+/- 2.0)	57.0
1988 Feb 24 07:00:00	MMR-06	-	-	USHAKOV	Georgiy Ushakov	MINIA	-	-	35.0W 53.0N (+/- 2.0)	60.0
1988 Feb 26 07:00:00	MMR-06	-	-	USHAKOV	Georgiy Ushakov	MINIA	-	-	35.0W 53.0N (+/- 2.0)	60.0
1988 Feb 29 07:00:00	MMR-06	-	-	USHAKOV	Georgiy Ushakov	MINIA	-	-	35.0W 53.0N (+/- 2.0)	60.0
1988 Mar 02 07:00:00	MMR-06	-	-	USHAKOV	Georgiy Ushakov	MINIA	-	-	35.0W 53.0N (+/- 2.0)	59.0
1988 Mar 04 07:00:00	MMR-06	-	-	USHAKOV	Georgiy Ushakov	MINIA	-	-	35.0W 53.0N (+/- 2.0)	60.0
1988 Mar 09 07:00:00	MMR-06	-	-	USHAKOV	Georgiy Ushakov	MINIA	-	-	35.0W 53.0N (+/- 2.0)	60.0
1988 Mar 11 07:00:00	MMR-06	-	-	USHAKOV	Georgiy Ushakov	MINIA	-	-	35.0W 53.0N (+/- 2.0)	61.0
1988 May 25 07:00:00	MMR-06	-	-	USHAKOV	Georgiy Ushakov	MINIA	-	-	35.0W 53.0N (+/- 2.0)	60.0
1988 May 27 07:00:00	MMR-06	-	-	USHAKOV	Georgiy Ushakov	MINIA	-	-	35.0W 53.0N (+/- 2.0)	60.0
1988 May 29 07:00:00	MMR-06	-	-	USHAKOV	Georgiy Ushakov	MINIA	-	-	35.0W 53.0N (+/- 2.0)	58.0
1988 Jun 01 07:00:00	MMR-06	-	-	USHAKOV	Georgiy Ushakov	MINIA	-	-	35.0W 53.0N (+/- 2.0)	60.0
1988 Jun 03 07:01:00	MMR-06	-	-	USHAKOV	Georgiy Ushakov	MINIA	-	-	35.0W 53.0N (+/- 2.0)	60.0
1988 Jun 08 07:00:00	MMR-06	-	-	USHAKOV	Georgiy Ushakov	MINIA	-	-	35.0W 53.0N (+/- 2.0)	59.0
1988 Jun 10 07:00:00	MMR-06	-	-	USHAKOV	Georgiy Ushakov	MINIA	-	-	35.0W 53.0N (+/- 2.0)	58.0
1988 Jun 17 07:00:00	MMR-06	-	-	USHAKOV	Georgiy Ushakov	MINIA	-	-	35.0W 53.0N (+/- 2.0)	59.0
1988 Jun 22 07:00:00	MMR-06	-	-	USHAKOV	Georgiy Ushakov	MINIA	-	-	35.0W 53.0N (+/- 2.0)	59.0
1988 Jun 24 07:00:00	MMR-06	-	-	USHAKOV	Georgiy Ushakov	MINIA	-	-	35.0W 53.0N (+/- 2.0)	58.0
1988 Aug 28 06:06:00	MMR-06	-	-	USHAKOV	Georgiy Ushakov	MINIA	-	-	35.0W 53.0N (+/- 2.0)	58.0
1988 Aug 31 07:01:00	MMR-06	-	-	USHAKOV	Georgiy Ushakov	MINIA	-	-	35.0W 53.0N (+/- 2.0)	59.0
1988 Sep 02 07:01:00	MMR-06	-	-	USHAKOV	Georgiy Ushakov	MINIA	-	-	35.0W 53.0N (+/- 2.0)	60.0
1988 Sep 09 07:01:00	MMR-06	-	-	USHAKOV	Georgiy Ushakov	MINIA	-	-	35.0W 53.0N (+/- 2.0)	59.0
1988 Sep 11 07:00:00	MMR-06	-	-	USHAKOV	Georgiy Ushakov	MINIA	-	-	35.0W 53.0N (+/- 2.0)	58.0
1988 Sep 14 07:02:00	MMR-06	-	-	USHAKOV	Georgiy Ushakov	MINIA	-	-	35.0W 53.0N (+/- 2.0)	58.0
1988 Sep 16 07:05:00	MMR-06	-	-	USHAKOV	Georgiy Ushakov	MINIA	-	-	35.0W 53.0N (+/- 2.0)	59.0
1988 Sep 21 07:07:00	MMR-06	-	-	USHAKOV	Georgiy Ushakov	MINIA	-	-	35.0W 53.0N (+/- 2.0)	58.0
1988 Sep 23 07:07:00	MMR-06	-	-	USHAKOV	Georgiy Ushakov	MINIA	-	-	35.0W 53.0N (+/- 2.0)	59.0
1989 Oct 16 07:17:00	MMR-06	-	-	USHAKOV	Georgiy Ushakov	MINIA	-	-	35.0W 53.0N (+/- 2.0)	65.0
1989 Oct 18 08:20:00	MMR-06	-	-	USHAKOV	Georgiy Ushakov	MINIA	-	-	35.0W 53.0N (+/- 2.0)	66.0
1989 Oct 22 07:00:00	MMR-06	-	-	USHAKOV	Georgiy Ushakov	MINIA	-	-	35.0W 53.0N (+/- 2.0)	64.0
1989 Oct 22 08:09:00	MMR-06	-	-	USHAKOV	Georgiy Ushakov	MINIA	-	-	35.0W 53.0N (+/- 2.0)	64.0
1989 Oct 23 07:00:00	MMR-06	-	-	USHAKOV	Georgiy Ushakov	MINIA	-	-	35.0W 53.0N (+/- 2.0)	62.0

[M-100B in R.File]



Launches: USHAKOV

Date	Rocket	Flight	Mission	Platform	Site	LP	AscSite	AscLP	Pos	Apogee
1989 Oct 23 0832:00	MMR-06	-	-	USHAKOV	Georgiy Ushakov	MINIA	-	-	35.0M 53.0N (+/- 2.0)	56.0
1989 Oct 25 0715:00	MMR-06	-	-	USHAKOV	Georgiy Ushakov	MINIA	-	-	35.0M 53.0N (+/- 2.0)	64.0
1990 Jan 05 0725:00	MMR-06	-	-	USHAKOV	Georgiy Ushakov	MINIA	-	-	35.0M 53.0N (+/- 2.0)	60.0
1990 Jan 10 0719:00	MMR-06	-	-	USHAKOV	Georgiy Ushakov	MINIA	-	-	35.0M 53.0N (+/- 2.0)	60.0
1990 Jan 12 0705:00	MMR-06	-	-	USHAKOV	Georgiy Ushakov	MINIA	-	-	35.0M 53.0N (+/- 2.0)	57.0
1990 Jan 17 0704:00	MMR-06	-	-	USHAKOV	Georgiy Ushakov	MINIA	-	-	35.0M 53.0N (+/- 2.0)	55.0
1990 Jan 19 0704:00	MMR-06	-	-	USHAKOV	Georgiy Ushakov	MINIA	-	-	35.0M 53.0N (+/- 2.0)	60.0
1990 Jan 24 0700:00	MMR-06	-	-	USHAKOV	Georgiy Ushakov	MINIA	-	-	35.0M 53.0N (+/- 2.0)	60.0
1990 Jan 26 0700:00	MMR-06	-	-	USHAKOV	Georgiy Ushakov	MINIA	-	-	35.0M 53.0N (+/- 2.0)	60.0
1990 Jan 31 0711:00	MMR-06	-	-	USHAKOV	Georgiy Ushakov	MINIA	-	-	35.0M 53.0N (+/- 2.0)	60.0

### IV.1.3.7 Ernst Krenkel'

Эрнст Кренкель



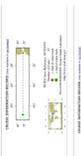
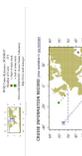
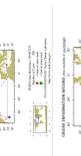
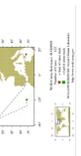
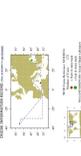
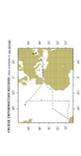
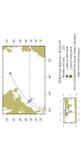
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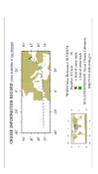
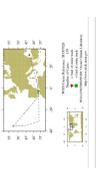
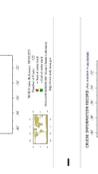
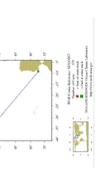
Credit: -

Originally named Vikhr' ('vortex'). Renamed Ernst Krenkel' in 1972.

Rockets used: MMR-06

Updated: 2024 Nov 28 03:19:31

LC_Code	Active	Cruises: KREN		CruiseMap
		Region	Cruise	
GMS77B	1977 Feb 1 - 1977 Apr 15	Minia, Atlantic Ocean	Krenkel Expedition 1, 1977 (SU010079)	
GMS77J	1977 Jun 1 - 1977 Jul 31	Minia, Atlantic Ocean	Krenkel Expedition 2, 1977 (SU000617)	
GMS77N	1977 Oct 1 - 1977 Oct 31	Minia, Atlantic Ocean	Krenkel Expedition 3, 1977 (SU000618)	
GMS78C	1978 Jul 15 - 1978 Sep 30	Minia, Atlantic Ocean	Krenkel Expedition 4, 1978 (SU000618)	
GMS79M	1979 Jan 1 - 1979 Feb 1	Minia, Atlantic Ocean	Krenkel Expedition 5, 1979 (SU000699)	
GMS79N	1979 Apr 15 - 1979 Apr 30	Minia, Atlantic Ocean	Krenkel Expedition 6, 1979 (SU000674)	
GMS79P	1979 Jul 1 - 1979 Jul 31	Minia, Atlantic Ocean	Krenkel Expedition 7, 1979 (SU007218)	
GMS79Q	1979 Nov 1 - 1979 Dec 1	Minia, Atlantic Ocean	Krenkel Expedition 8, 1979 (SU007219)	
GMS80H	1980 Sep 1 - 1980 Oct 15	Minia, Atlantic Ocean	Krenkel Expedition 9, 1980	
GMS81F	1981 Feb 1 - 1981 Feb 28	Minia, Atlantic Ocean	Krenkel Expedition 10, 1981 (SU010128)	
GMS81C	1981 May 1 - 1981 May 31	Minia, Atlantic Ocean	Krenkel Expedition 11, 1981 (SU010230)	

LC_Code	Active	Region	Cruises: KREN	Cruise	CruiseMap
GMS82F	1982 Nov 1 - 1982 Nov 30	Minia, Atlantic Ocean	Krenkel Expedition 12, 1982	(SU010154)	
GMS83E	1983 Feb 1 - 1983 Feb 28	Minia, Atlantic Ocean	Krenkel Expedition 13, 1983	(SU007026)	
GMS85D	1985 Aug 1 - 1985 Sep 30	Minia, Atlantic Ocean	Krenkel Expedition 14, 1985	(SU010253)	
GMS86F	1986 Mar 1 - 1986 Apr 30	Minia, Atlantic Ocean	Krenkel Expedition 15, 1986		
GMS87J	1987 Mar 1 - 1987 Mar 31	Minia, Atlantic Ocean	Krenkel Expedition 16, 1987	(SU010265)	
GMS87K	1987 Jun 1 - 1987 Jul 15	Minia, Atlantic Ocean	Krenkel Expedition 17, 1987		
GMS87L	1987 Sep 1 - 1987 Oct 15	Minia, Atlantic Ocean	Krenkel Expedition 18, 1987	(SU010267)	
GMS89E	1989 Nov 1 - 1989 Nov 30	Minia, Atlantic Ocean	Krenkel Expedition 19, 1989		
GMS90H	1990 Feb 1 - 1990 Mar 15	Minia, Atlantic Ocean	Krenkel Expedition 20, 1990		

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Updated: 2024 Nov 28 03:19:31

Launches: KREN

Date	Rocket	Flight	Mission	PlatCode	Platform	Site	LP	AscSite	AsclP	Pos	Apogee
1977 Feb 06 0200:00	MMR-06	-	-	KREN	Ernst Krenkel'	GMS77B	LP1	-	-	35.0W 53.0N (+/- 2.0)	60.0
1977 Feb 13 0300:00	MMR-06	-	-	KREN	Ernst Krenkel'	GMS77B	LP2	-	-	35.0W 53.0N (+/- 2.0)	61.0
1977 Feb 27 0200:00	MMR-06	-	-	KREN	Ernst Krenkel'	GMS77B	LP3	-	-	35.0W 53.0N (+/- 2.0)	60.0
1977 Mar 02 0200:00	MMR-06	-	-	KREN	Ernst Krenkel'	MINIA	-	-	-	35.0W 53.0N (+/- 2.0)	62.0
1977 Mar 04 0200:00	MMR-06	-	-	KREN	Ernst Krenkel'	MINIA	-	-	-	35.0W 53.0N (+/- 2.0)	62.0
1977 Mar 09 0300:00	MMR-06	-	-	KREN	Ernst Krenkel'	MINIA	-	-	-	35.0W 53.0N (+/- 2.0)	64.0
1977 Mar 11 0200:00	MMR-06	-	-	KREN	Ernst Krenkel'	MINIA	-	-	-	35.0W 53.0N (+/- 2.0)	61.0
1977 Mar 17 0300:00	MMR-06	-	-	KREN	Ernst Krenkel'	MINIA	-	-	-	35.0W 53.0N (+/- 2.0)	60.0
1977 Mar 23 0400:00	MMR-06	-	-	KREN	Ernst Krenkel'	MINIA	-	-	-	35.0W 53.0N (+/- 2.0)	64.0
1977 Mar 25 0200:00	MMR-06	-	-	KREN	Ernst Krenkel'	MINIA	-	-	-	35.0W 53.0N (+/- 2.0)	62.0
1977 Mar 31 0400:00	MMR-06	-	-	KREN	Ernst Krenkel'	MINIA	-	-	-	35.0W 53.0N (+/- 2.0)	59.0
1977 Mar 31 0600:00	MMR-06	-	-	KREN	Ernst Krenkel'	MINIA	-	-	-	35.0W 53.0N (+/- 2.0)	61.0
1977 Apr 03 0300:00	MMR-06	-	-	KREN	Ernst Krenkel'	GMS77B	LP4	-	-	35.0W 53.0N (+/- 2.0)	62.0
1977 Apr 04 0400:00	MMR-06	-	-	KREN	Ernst Krenkel'	GMS77B	LP5	-	-	35.0W 53.0N (+/- 2.0)	60.0
1977 Jun 02 0200:00	MMR-06	-	-	KREN	Ernst Krenkel'	GMS77J	LP1	-	-	35.0W 53.0N (+/- 2.0)	61.0
1977 Jun 08 0200:00	MMR-06	-	-	KREN	Ernst Krenkel'	GMS77J	LP2	-	-	35.0W 53.0N (+/- 2.0)	56.0
1977 Jun 08 0300:00	MMR-06	-	-	KREN	Ernst Krenkel'	GMS77J	LP2	-	-	35.0W 53.0N (+/- 2.0)	62.0
1977 Jun 15 0300:00	MMR-06	-	-	KREN	Ernst Krenkel'	GMS77J	LP3	-	-	35.0W 53.0N (+/- 2.0)	59.0
1977 Jun 15 0400:00	MMR-06	-	-	KREN	Ernst Krenkel'	GMS77J	LP3	-	-	35.0W 53.0N (+/- 2.0)	59.0
1977 Jun 17 0200:00	MMR-06	-	-	KREN	Ernst Krenkel'	GMS77J	LP4	-	-	35.0W 53.0N (+/- 2.0)	58.0
1977 Jun 21 0200:00	MMR-06	-	-	KREN	Ernst Krenkel'	GMS77J	LP5	-	-	35.0W 53.0N (+/- 2.0)	57.0
1977 Jun 22 1400:00	MMR-06	-	-	KREN	Ernst Krenkel'	GMS77J	LP6	-	-	35.0W 53.0N (+/- 2.0)	60.0
1977 Jun 22 1640:00	MMR-06	-	-	KREN	Ernst Krenkel'	GMS77J	LP6	-	-	35.0W 53.0N (+/- 2.0)	59.0
1977 Jun 26 0200:00	MMR-06	-	-	KREN	Ernst Krenkel'	GMS77J	LP7	-	-	35.0W 53.0N (+/- 2.0)	58.0
1977 Jun 29 0300:00	MMR-06	-	-	KREN	Ernst Krenkel'	GMS77J	LP8	-	-	35.0W 53.0N (+/- 2.0)	59.0
1977 Jun 29 0400:00	MMR-06	-	-	KREN	Ernst Krenkel'	GMS77J	LP8	-	-	35.0W 53.0N (+/- 2.0)	59.0
1977 Jul 13 2000:00	MMR-06	-	-	KREN	Ernst Krenkel'	MINIA	-	-	-	35.0W 53.0N (+/- 2.0)	60.0
1977 Jul 20 1800:00	MMR-06	-	-	KREN	Ernst Krenkel'	MINIA	-	-	-	35.0W 53.0N (+/- 2.0)	62.0
1977 Jul 20 2000:00	MMR-06	-	-	KREN	Ernst Krenkel'	MINIA	-	-	-	35.0W 53.0N (+/- 2.0)	62.0
1977 Jul 27 1900:00	MMR-06	-	-	KREN	Ernst Krenkel'	MINIA	-	-	-	35.0W 53.0N (+/- 2.0)	59.0
1977 Jul 27 2100:00	MMR-06	-	-	KREN	Ernst Krenkel'	MINIA	-	-	-	35.0W 53.0N (+/- 2.0)	58.0
1977 Jul 29 1900:00	MMR-06	-	-	KREN	Ernst Krenkel'	MINIA	-	-	-	35.0W 53.0N (+/- 2.0)	61.0
1977 Jul 29 2000:00	MMR-06	-	-	KREN	Ernst Krenkel'	MINIA	-	-	-	35.0W 53.0N (+/- 2.0)	60.0
1977 Oct 08 0200:00	MMR-06	-	-	KREN	Ernst Krenkel'	MINIA	-	-	-	35.0W 53.0N (+/- 2.0)	59.0
1977 Oct 08 0400:00	MMR-06	-	-	KREN	Ernst Krenkel'	MINIA	-	-	-	35.0W 53.0N (+/- 2.0)	59.0
1977 Oct 13 0200:00	MMR-06	-	-	KREN	Ernst Krenkel'	MINIA	-	-	-	35.0W 53.0N (+/- 2.0)	56.0
1977 Oct 15 0200:00	MMR-06	-	-	KREN	Ernst Krenkel'	MINIA	-	-	-	35.0W 53.0N (+/- 2.0)	57.0
1977 Oct 15 0400:00	MMR-06	-	-	KREN	Ernst Krenkel'	MINIA	-	-	-	35.0W 53.0N (+/- 2.0)	64.0
1977 Oct 20 0100:00	MMR-06	-	-	KREN	Ernst Krenkel'	MINIA	-	-	-	35.0W 53.0N (+/- 2.0)	66.0
1977 Oct 20 0300:00	MMR-06	-	-	KREN	Ernst Krenkel'	MINIA	-	-	-	35.0W 53.0N (+/- 2.0)	65.0
1977 Oct 22 0300:00	MMR-06	-	-	KREN	Ernst Krenkel'	MINIA	-	-	-	35.0W 53.0N (+/- 2.0)	61.0
1977 Oct 27 0200:00	MMR-06	-	-	KREN	Ernst Krenkel'	MINIA	-	-	-	35.0W 53.0N (+/- 2.0)	62.0
1978 Jul 28 1500:00	MMR-06	-	-	KREN	Ernst Krenkel'	GMS78G	LP1	-	-	35.0W 53.0N (+/- 2.0)	59.0
1978 Jul 28 1600:00	MMR-06	-	-	KREN	Ernst Krenkel'	GMS78G	LP1	-	-	35.0W 53.0N (+/- 2.0)	58.0
1978 Jul 30 1500:00	MMR-06	-	-	KREN	Ernst Krenkel'	GMS78G	LP1	-	-	35.0W 53.0N (+/- 2.0)	59.0
1978 Jul 30 1600:00	MMR-06	-	-	KREN	Ernst Krenkel'	GMS78G	LP2	-	-	35.0W 53.0N (+/- 2.0)	57.0
1978 Aug 02 1800:00	MMR-06	-	-	KREN	Ernst Krenkel'	GMS78G	LP3	-	-	35.0W 53.0N (+/- 2.0)	58.0
1978 Sep 01 0200:00	MMR-06	-	-	KREN	Ernst Krenkel'	MINIA	-	-	-	35.0W 53.0N (+/- 2.0)	59.0
1978 Sep 06 0200:00	MMR-06	-	-	KREN	Ernst Krenkel'	MINIA	-	-	-	35.0W 53.0N (+/- 2.0)	57.0
1978 Sep 08 0300:00	MMR-06	-	-	KREN	Ernst Krenkel'	MINIA	-	-	-	35.0W 53.0N (+/- 2.0)	61.0
1978 Sep 13 0800:00	MMR-06	-	-	KREN	Ernst Krenkel'	MINIA	-	-	-	35.0W 53.0N (+/- 2.0)	60.0
1978 Sep 15 0800:00	MMR-06	-	-	KREN	Ernst Krenkel'	MINIA	-	-	-	35.0W 53.0N (+/- 2.0)	60.0
1978 Sep 20 0800:00	MMR-06	-	-	KREN	Ernst Krenkel'	MINIA	-	-	-	35.0W 53.0N (+/- 2.0)	59.0
1978 Sep 22 0900:00	MMR-06	-	-	KREN	Ernst Krenkel'	MINIA	-	-	-	35.0W 53.0N (+/- 2.0)	60.0
1978 Sep 27 0900:00	MMR-06	-	-	KREN	Ernst Krenkel'	MINIA	-	-	-	35.0W 53.0N (+/- 2.0)	57.0

Launches: KREN

Date	Flight	Mission	PlatCode	Platform	Site	LP	AscSite	AsclP	Pos	Apogee
1978 Sep 29 0800:00	-	-	KREN	Ernst Krenkel'	MINIA	-	-	-	35.0W 53.0N (+/- 2.0)	60.0
1979 Jan 03 0900:00	-	-	KREN	Ernst Krenkel'	MINIA	-	-	-	35.0W 53.0N (+/- 2.0)	60.0
1979 Jan 26 0800:00	-	-	KREN	Ernst Krenkel'	MINIA	-	-	-	35.0W 53.0N (+/- 2.0)	57.0
1979 Jan 31 0800:00	-	-	KREN	Ernst Krenkel'	MINIA	-	-	-	35.0W 53.0N (+/- 2.0)	58.0
1979 Apr 25 0800:00	-	-	KREN	Ernst Krenkel'	MINIA	-	-	-	35.0W 53.0N (+/- 2.0)	58.0
1979 Apr 27 0800:00	-	-	KREN	Ernst Krenkel'	MINIA	-	-	-	35.0W 53.0N (+/- 2.0)	59.0
1979 Jul 04 0800:00	-	-	KREN	Ernst Krenkel'	MINIA	-	-	-	35.0W 53.0N (+/- 2.0)	58.0
1979 Jul 11 0800:00	-	-	KREN	Ernst Krenkel'	MINIA	-	-	-	35.0W 53.0N (+/- 2.0)	59.0
1979 Jul 18 0800:00	-	-	KREN	Ernst Krenkel'	MINIA	-	-	-	35.0W 53.0N (+/- 2.0)	57.0
1979 Nov 07 0800:00	-	-	KREN	Ernst Krenkel'	MINIA	-	-	-	35.0W 53.0N (+/- 2.0)	57.0
1979 Nov 16 0800:00	-	-	KREN	Ernst Krenkel'	MINIA	-	-	-	35.0W 53.0N (+/- 2.0)	87.0
1979 Nov 21 0740:00	-	-	KREN	Ernst Krenkel'	MINIA	-	-	-	35.0W 53.0N (+/- 2.0)	56.0
1979 Nov 30 0730:00	-	-	KREN	Ernst Krenkel'	MINIA	-	-	-	35.0W 53.0N (+/- 2.0)	57.0
1980 Sep 05 0820:00	-	-	KREN	Ernst Krenkel'	MINIA	-	-	-	35.0W 53.0N (+/- 2.0)	54.0
1980 Sep 10 0735:00	-	-	KREN	Ernst Krenkel'	MINIA	-	-	-	35.0W 53.0N (+/- 2.0)	57.0
1980 Sep 12 0735:00	-	-	KREN	Ernst Krenkel'	MINIA	-	-	-	35.0W 53.0N (+/- 2.0)	56.0
1980 Sep 19 0730:00	-	-	KREN	Ernst Krenkel'	MINIA	-	-	-	35.0W 53.0N (+/- 2.0)	57.0
1980 Sep 24 0700:00	-	-	KREN	Ernst Krenkel'	MINIA	-	-	-	35.0W 53.0N (+/- 2.0)	58.0
1980 Oct 01 0700:00	-	-	KREN	Ernst Krenkel'	MINIA	-	-	-	35.0W 53.0N (+/- 2.0)	57.0
1981 Feb 04 0700:00	-	-	KREN	Ernst Krenkel'	MINIA	-	-	-	35.0W 53.0N (+/- 2.0)	54.0
1981 Feb 06 0700:00	-	-	KREN	Ernst Krenkel'	MINIA	-	-	-	35.0W 53.0N (+/- 2.0)	58.0
1981 Feb 06 0845:00	-	-	KREN	Ernst Krenkel'	MINIA	-	-	-	35.0W 53.0N (+/- 2.0)	59.0
1981 Feb 13 0830:00	-	-	KREN	Ernst Krenkel'	MINIA	-	-	-	35.0W 53.0N (+/- 2.0)	58.0
1981 Feb 18 0720:00	-	-	KREN	Ernst Krenkel'	MINIA	-	-	-	35.0W 53.0N (+/- 2.0)	60.0
1981 Feb 18 0840:00	-	-	KREN	Ernst Krenkel'	MINIA	-	-	-	35.0W 53.0N (+/- 2.0)	57.0
1981 Feb 20 1700:00	-	-	KREN	Ernst Krenkel'	MINIA	-	-	-	35.0W 53.0N (+/- 2.0)	56.0
1981 May 01 0750:00	-	-	KREN	Ernst Krenkel'	MINIA	-	-	-	35.0W 53.0N (+/- 2.0)	58.0
1981 May 06 0830:00	-	-	KREN	Ernst Krenkel'	MINIA	-	-	-	35.0W 53.0N (+/- 2.0)	57.0
1981 May 08 0700:00	-	-	KREN	Ernst Krenkel'	MINIA	-	-	-	35.0W 53.0N (+/- 2.0)	55.0
1981 May 15 0800:00	-	-	KREN	Ernst Krenkel'	MINIA	-	-	-	35.0W 53.0N (+/- 2.0)	57.0
1981 May 27 0730:00	-	-	KREN	Ernst Krenkel'	MINIA	-	-	-	35.0W 53.0N (+/- 2.0)	59.0
1981 May 28 0800:00	-	-	KREN	Ernst Krenkel'	MINIA	-	-	-	35.0W 53.0N (+/- 2.0)	58.0
1981 May 29 0840:00	-	-	KREN	Ernst Krenkel'	MINIA	-	-	-	35.0W 53.0N (+/- 2.0)	57.0
1981 May 29 0730:00	-	-	KREN	Ernst Krenkel'	MINIA	-	-	-	35.0W 53.0N (+/- 2.0)	59.0
1981 May 24 0830:00	-	-	KREN	Ernst Krenkel'	MINIA	-	-	-	35.0W 53.0N (+/- 2.0)	56.0
1981 Nov 03 0710:00	-	-	KREN	Ernst Krenkel'	MINIA	-	-	-	35.0W 53.0N (+/- 2.0)	58.0
1982 Nov 03 0710:00	-	-	KREN	Ernst Krenkel'	MINIA	-	-	-	35.0W 53.0N (+/- 2.0)	58.0
1982 Nov 05 0700:00	-	-	KREN	Ernst Krenkel'	MINIA	-	-	-	35.0W 53.0N (+/- 2.0)	59.0
1982 Nov 10 0700:00	-	-	KREN	Ernst Krenkel'	MINIA	-	-	-	35.0W 53.0N (+/- 2.0)	58.0
1982 Nov 12 0700:00	-	-	KREN	Ernst Krenkel'	MINIA	-	-	-	35.0W 53.0N (+/- 2.0)	59.0
1982 Nov 15 0710:00	-	-	KREN	Ernst Krenkel'	MINIA	-	-	-	35.0W 53.0N (+/- 2.0)	57.0
1982 Nov 19 0700:00	-	-	KREN	Ernst Krenkel'	MINIA	-	-	-	35.0W 53.0N (+/- 2.0)	60.0
1982 Nov 22 0700:00	-	-	KREN	Ernst Krenkel'	MINIA	-	-	-	35.0W 53.0N (+/- 2.0)	60.0
1982 Nov 24 0700:00	-	-	KREN	Ernst Krenkel'	MINIA	-	-	-	35.0W 53.0N (+/- 2.0)	61.0
1982 Nov 26 0700:00	-	-	KREN	Ernst Krenkel'	MINIA	-	-	-	35.0W 53.0N (+/- 2.0)	60.0
1982 Nov 29 0700:00	-	-	KREN	Ernst Krenkel'	MINIA	-	-	-	35.0W 53.0N (+/- 2.0)	60.0
1983 Feb 09 0710:00	-	-	KREN	Ernst Krenkel'	MINIA	-	-	-	35.0W 53.0N (+/- 2.0)	59.0
1983 Feb 13 0700:00	-	-	KREN	Ernst Krenkel'	MINIA	-	-	-	35.0W 53.0N (+/- 2.0)	58.0
1983 Feb 14 0700:00	-	-	KREN	Ernst Krenkel'	MINIA	-	-	-	35.0W 53.0N (+/- 2.0)	60.0
1983 Feb 16 0700:00	-	-	KREN	Ernst Krenkel'	MINIA	-	-	-	35.0W 53.0N (+/- 2.0)	58.0
1983 Feb 18 0700:00	-	-	KREN	Ernst Krenkel'	MINIA	-	-	-	35.0W 53.0N (+/- 2.0)	61.0
1983 Feb 21 0700:00	-	-	KREN	Ernst Krenkel'	MINIA	-	-	-	35.0W 53.0N (+/- 2.0)	59.0
1983 Feb 23 0750:00	-	-	KREN	Ernst Krenkel'	MINIA	-	-	-	35.0W 53.0N (+/- 2.0)	61.0
1983 Feb 27 0700:00	-	-	KREN	Ernst Krenkel'	MINIA	-	-	-	35.0W 53.0N (+/- 2.0)	60.0
1985 Aug 14 0820:00	-	-	KREN	Ernst Krenkel'	MINIA	-	-	-	35.0W 53.0N (+/- 2.0)	58.0

Launches: KREN

Date	Rocket	Flight	Mission	PlatCode	Platform	Site	LP	AscSite	AsclP	Pos	Apogee
1985 Aug 16 0720:00	MMR-06	-	-	KREN	Ernst Krenkel'	MINIA	-	-	-	35.0W 53.0N (+/- 2.0)	58.0
1985 Aug 21 0745:00	MMR-06	-	-	KREN	Ernst Krenkel'	MINIA	-	-	-	35.0W 53.0N (+/- 2.0)	59.0
1985 Aug 23 0713:00	MMR-06	-	-	KREN	Ernst Krenkel'	MINIA	-	-	-	35.0W 53.0N (+/- 2.0)	60.0
1985 Aug 28 0700:00	MMR-06	-	-	KREN	Ernst Krenkel'	MINIA	-	-	-	35.0W 53.0N (+/- 2.0)	60.0
1985 Aug 30 0700:00	MMR-06	-	-	KREN	Ernst Krenkel'	MINIA	-	-	-	35.0W 53.0N (+/- 2.0)	59.0
1985 Sep 04 0700:00	MMR-06	-	-	KREN	Ernst Krenkel'	MINIA	-	-	-	35.0W 53.0N (+/- 2.0)	81.0
1985 Sep 16 0700:00	MMR-06	-	-	KREN	Ernst Krenkel'	MINIA	-	-	-	35.0W 53.0N (+/- 2.0)	58.0
1986 Mar 14 0739:00	MMR-06	-	-	KREN	Ernst Krenkel'	MINIA	-	-	-	35.0W 53.0N (+/- 2.0)	65.0
1986 Mar 17 0733:00	MMR-06	-	-	KREN	Ernst Krenkel'	MINIA	-	-	-	35.0W 53.0N (+/- 2.0)	61.0
1986 Mar 19 0704:00	MMR-06	-	-	KREN	Ernst Krenkel'	MINIA	-	-	-	35.0W 53.0N (+/- 2.0)	65.0
1986 Mar 21 0706:00	MMR-06	-	-	KREN	Ernst Krenkel'	MINIA	-	-	-	35.0W 53.0N (+/- 2.0)	54.0
1986 Mar 26 0704:00	MMR-06	-	-	KREN	Ernst Krenkel'	MINIA	-	-	-	35.0W 53.0N (+/- 2.0)	60.0
1986 Mar 28 0713:00	MMR-06	-	-	KREN	Ernst Krenkel'	MINIA	-	-	-	35.0W 53.0N (+/- 2.0)	59.0
1986 Apr 02 0712:00	MMR-06	-	-	KREN	Ernst Krenkel'	MINIA	-	-	-	35.0W 53.0N (+/- 2.0)	65.0
1986 Apr 09 0701:00	MMR-06	-	-	KREN	Ernst Krenkel'	MINIA	-	-	-	35.0W 53.0N (+/- 2.0)	61.0
1986 Apr 11 0726:00	MMR-06	-	-	KREN	Ernst Krenkel'	MINIA	-	-	-	35.0W 53.0N (+/- 2.0)	59.0
1987 Mar 02 0745:00	MMR-06	-	-	KREN	Ernst Krenkel'	MINIA	-	-	-	35.0W 53.0N (+/- 2.0)	61.0
1987 Mar 04 0819:00	MMR-06	-	-	KREN	Ernst Krenkel'	MINIA	-	-	-	35.0W 53.0N (+/- 2.0)	60.0
1987 Mar 06 0704:00	MMR-06	-	-	KREN	Ernst Krenkel'	MINIA	-	-	-	35.0W 53.0N (+/- 2.0)	60.0
1987 Mar 18 0701:00	MMR-06	-	-	KREN	Ernst Krenkel'	MINIA	-	-	-	35.0W 53.0N (+/- 2.0)	59.0
1987 Mar 20 0723:00	MMR-06	-	-	KREN	Ernst Krenkel'	MINIA	-	-	-	35.0W 53.0N (+/- 2.0)	58.0
1987 Mar 25 0717:00	MMR-06	-	-	KREN	Ernst Krenkel'	MINIA	-	-	-	35.0W 53.0N (+/- 2.0)	61.0
1987 Mar 27 0705:00	MMR-06	-	-	KREN	Ernst Krenkel'	MINIA	-	-	-	35.0W 53.0N (+/- 2.0)	58.0
1987 Jun 05 0705:00	MMR-06	-	-	KREN	Ernst Krenkel'	MINIA	-	-	-	35.0W 53.0N (+/- 2.0)	59.0
1987 Jun 10 0701:00	MMR-06	-	-	KREN	Ernst Krenkel'	MINIA	-	-	-	35.0W 53.0N (+/- 2.0)	57.0
1987 Jun 12 0701:00	MMR-06	-	-	KREN	Ernst Krenkel'	MINIA	-	-	-	35.0W 53.0N (+/- 2.0)	58.0
1987 Jun 15 0705:00	MMR-06	-	-	KREN	Ernst Krenkel'	MINIA	-	-	-	35.0W 53.0N (+/- 2.0)	58.0
1987 Jun 17 0701:00	MMR-06	-	-	KREN	Ernst Krenkel'	MINIA	-	-	-	35.0W 53.0N (+/- 2.0)	60.0
1987 Jun 19 0701:00	MMR-06	-	-	KREN	Ernst Krenkel'	MINIA	-	-	-	35.0W 53.0N (+/- 2.0)	59.0
1987 Jun 24 0703:00	MMR-06	-	-	KREN	Ernst Krenkel'	MINIA	-	-	-	35.0W 53.0N (+/- 2.0)	60.0
1987 Jun 26 0701:00	MMR-06	-	-	KREN	Ernst Krenkel'	MINIA	-	-	-	35.0W 53.0N (+/- 2.0)	59.0
1987 Jul 01 0706:00	MMR-06	-	-	KREN	Ernst Krenkel'	MINIA	-	-	-	35.0W 53.0N (+/- 2.0)	60.0
1987 Sep 04 2000:00	MMR-06	-	-	KREN	Ernst Krenkel'	MINIA	-	-	-	35.0W 53.0N (+/- 2.0)	60.0
1987 Sep 11 1916:00	MMR-06	-	-	KREN	Ernst Krenkel'	MINIA	-	-	-	35.0W 53.0N (+/- 2.0)	60.0
1987 Sep 16 1918:00	MMR-06	-	-	KREN	Ernst Krenkel'	MINIA	-	-	-	35.0W 53.0N (+/- 2.0)	60.0
1987 Sep 18 1917:00	MMR-06	-	-	KREN	Ernst Krenkel'	MINIA	-	-	-	35.0W 53.0N (+/- 2.0)	60.0
1987 Sep 23 1915:00	MMR-06	-	-	KREN	Ernst Krenkel'	MINIA	-	-	-	35.0W 53.0N (+/- 2.0)	60.0
1987 Sep 25 1905:00	MMR-06	-	-	KREN	Ernst Krenkel'	MINIA	-	-	-	35.0W 53.0N (+/- 2.0)	60.0
1987 Sep 30 1916:00	MMR-06	-	-	KREN	Ernst Krenkel'	MINIA	-	-	-	35.0W 53.0N (+/- 2.0)	60.0
1987 Oct 02 1919:00	MMR-06	-	-	KREN	Ernst Krenkel'	MINIA	-	-	-	35.0W 53.0N (+/- 2.0)	56.0
1989 Nov 04 0700:00	MMR-06	-	-	KREN	Ernst Krenkel'	MINIA	-	-	-	35.0W 53.0N (+/- 2.0)	60.0
1989 Nov 08 0700:00	MMR-06	-	-	KREN	Ernst Krenkel'	MINIA	-	-	-	35.0W 53.0N (+/- 2.0)	65.0
1989 Nov 10 0708:00	MMR-06	-	-	KREN	Ernst Krenkel'	MINIA	-	-	-	35.0W 53.0N (+/- 2.0)	65.0
1989 Nov 15 0700:00	MMR-06	-	-	KREN	Ernst Krenkel'	MINIA	-	-	-	35.0W 53.0N (+/- 2.0)	64.0
1989 Nov 17 0716:00	MMR-06	-	-	KREN	Ernst Krenkel'	MINIA	-	-	-	35.0W 53.0N (+/- 2.0)	63.0
1989 Nov 22 0704:00	MMR-06	-	-	KREN	Ernst Krenkel'	MINIA	-	-	-	35.0W 53.0N (+/- 2.0)	64.0
1989 Nov 27 0702:00	MMR-06	-	-	KREN	Ernst Krenkel'	MINIA	-	-	-	35.0W 53.0N (+/- 2.0)	63.0
1990 Feb 09 0709:00	MMR-06	-	-	KREN	Ernst Krenkel'	MINIA	-	-	-	35.0W 53.0N (+/- 2.0)	57.0
1990 Feb 12 0706:00	MMR-06	-	-	KREN	Ernst Krenkel'	MINIA	-	-	-	35.0W 53.0N (+/- 2.0)	62.0
1990 Feb 14 0703:00	MMR-06	-	-	KREN	Ernst Krenkel'	MINIA	-	-	-	35.0W 53.0N (+/- 2.0)	55.0
1990 Feb 16 0703:00	MMR-06	-	-	KREN	Ernst Krenkel'	MINIA	-	-	-	35.0W 53.0N (+/- 2.0)	60.0
1990 Feb 21 0703:00	MMR-06	-	-	KREN	Ernst Krenkel'	MINIA	-	-	-	35.0W 53.0N (+/- 2.0)	60.0
1990 Feb 23 0703:00	MMR-06	-	-	KREN	Ernst Krenkel'	MINIA	-	-	-	35.0W 53.0N (+/- 2.0)	60.0
1990 Feb 28 0705:00	MMR-06	-	-	KREN	Ernst Krenkel'	MINIA	-	-	-	35.0W 53.0N (+/- 2.0)	56.0
1990 Mar 02 0740:00	MMR-06	-	-	KREN	Ernst Krenkel'	MINIA	-	-	-	35.0W 53.0N (+/- 2.0)	60.0



Launches: KREN

Date	Rocket	Flight	Mission	PlatCode	Platform	Site	LP	AscSite	AsCLP	Pos	Apogee
1990 Mar 07 0702:00	MMR-06	-	-	KREN	Ernst Krenkel'	MINIA	-	-	-	35.0W 53.0N (+/- 2.0)	60.0
1990 Mar 09 0754:00	MMR-06	-	-	KREN	Ernst Krenkel'	MINIA	-	-	-	35.0W 53.0N (+/- 2.0)	60.0

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#### IV.1.3.8 Yu. M. Shokal'skiy

Ю. М. Шокальский



Credit: -

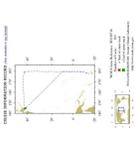
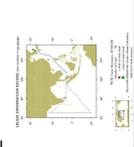
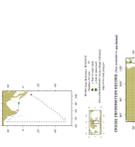
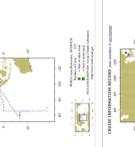
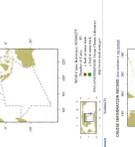
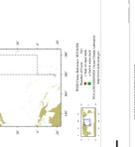
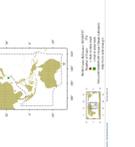
The association of the 1966 Dec expedition with the Shokalskiy is speculative.

The WDC Rocket File gives spurious positions for the summer 1979 expedition. I assume a zero has been dropped from the longitudes so that the ship was in mid-Pacific rather than the middle of Eastern Europe.

Rockets used: M-100

Updated: 2024 Nov 28 03:19:31

Cruises: SHOK  
Cruise

LC_Code	Active	Region	Cruise	CruiseMap
GMS60C	1960 Nov 1 - 1960 Dec 15	Pacific Ocean	Shokalskiy Expedition 1, 1960 (SU016716)	
GMS65A	1965 Apr 15 - 1965 Jun 30	Pacific Ocean	Shokalskiy Expedition 2, 1965	
GMS66A	1966 Dec 15 - 1967 Feb 28	Indian or Pacific Oceans?	Shokalskiy? Expedition 3, 1966-67	
GMS69B	1969 Jan 1 - 1969 Feb 15	Indian Ocean	Shokalskiy Expedition 4, 1968-69 (SU000266)	
GMS69C	1969 May 15 - 1969 Jun 15	Indian Ocean	Shokalskiy Expedition 5, 1969 (SU10335)	
GMS70A	1970 Jun 15 - 1970 Jul 31	Indian Ocean	Shokalskiy Expedition 7, 1970 (SU000275)	
GMS70G	1970 Jan 1 - 1970 Feb 28	Indian Ocean	Shokalskiy Expedition 6, 1970 (SU000324)	
GMS74A	1974 Jan 15 - 1974 May 10	Pacific Ocean	Shokalskiy Expedition 8, 1974 (SU014166)	
GMS74C	1974 Aug 1 - 1974 Sep 30	Indian Ocean	Shokalskiy Expedition 9, 1974	
GMS75C	1975 Apr 15 - 1975 Jun 30	Pacific Ocean	Shokalskiy Expedition 10, 1975 (SU016727)	

Cruises: SHOK  
Cruise

LC_Code	Active	Region	CruiseMap
GMS76C	1976 Feb 15 - 1976 Apr 15	Indian Ocean	<p>Shokalskiy Expedition 11, 1976 (SU008417)</p>
GMS76E	1976 Jun 15 - 1976 Aug 31	Indian Ocean	<p>Shokalskiy Expedition 12, 1976 (SU012456)</p>
GMS76K	1976 Dec 1 - 1977 Jan 15	Indian Ocean	<p>Shokalskiy Expedition 13, 1976 (SU014141)</p>
GMS77G	1977 May 1 - 1977 Jul 31	Indian Ocean	<p>Shokalskiy Expedition 14, 1977 (SU097317)</p>
GMS77M	1977 Nov 15 - 1978 Jan 31	Pacific Ocean	<p>Shokalskiy Expedition 15, 1977-78 (SU017909)</p>
GMS79A	1979 Feb 1 - 1979 Apr 1	Indian Ocean	<p>Shokalskiy Expedition 16, 1979 (SU000529)</p>
GMS79F	1979 Jun 1 - 1979 Aug 31	Pacific Ocean	<p>Shokalskiy Expedition 17, 1979 (SU017938/40)</p>
GMS79H	1979 Nov 1 - 1980 Jan 15	Indian and Pacific Ocean	<p>Shokalskiy Expedition 18, 1979-80 (SU097146)</p>

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Updated: 2024 Nov 28 03:19:31

Launches: SHOK

Date	Rocket	Flight	Mission	Platform	Site	LP	AscSite	AsclP	Pos	Apogee
1960 Nov 8 1404:59	M-100	-	-	SHOK	GMS60C	M9034	-	-	180.0E 30.0N (+/- 5.0)	50.0
1960 Nov 13 1104:59	M-100	-	-	SHOK	GMS60C	M9035	-	-	180.0E 30.0N (+/- 5.0)	44.0
1960 Nov 15 1100:00	M-100	-	-	SHOK	GMS60C	M9035	-	-	180.0E 30.0N (+/- 5.0)	40.0
1960 Nov 17 1104:59	M-100	-	-	SHOK	GMS60C	M9035	-	-	180.0E 30.0N (+/- 5.0)	35.0
1960 Nov 19 1100:00	M-100	-	-	SHOK	GMS60C	M9035	-	-	180.0E 30.0N (+/- 5.0)	45.0
1960 Nov 21 1107:00	M-100	-	-	SHOK	GMS60C	M9036	-	-	180.0E 30.0N (+/- 5.0)	44.0
1960 Nov 26 1100:00	M-100	-	-	SHOK	GMS60C	M9036	-	-	180.0E 30.0N (+/- 5.0)	44.0
1960 Nov 28 1142:00	M-100	-	-	SHOK	GMS60C	M9036	-	-	180.0E 30.0N (+/- 5.0)	42.0
1960 Nov 30 1148:00	M-100	-	-	SHOK	GMS60C	M9036	-	-	180.0E 30.0N (+/- 5.0)	46.0
1960 Dec 1 1104:59	M-100	-	-	SHOK	GMS60C	M9037	-	-	180.0E 30.0N (+/- 5.0)	41.0
1960 Dec 2 1100:00	M-100	-	-	SHOK	GMS60C	M9038	-	-	180.0E 30.0N (+/- 5.0)	39.0
1960 Dec 4 1100:00	M-100	-	-	SHOK	GMS60C	M9039	-	-	180.0E 30.0N (+/- 5.0)	41.0
1960 Dec 5 1100:00	M-100	-	-	SHOK	GMS60C	M9040	-	-	180.0E 30.0N (+/- 5.0)	55.0
1960 Dec 6 1100:00	M-100	-	-	SHOK	GMS60C	M9041	-	-	180.0E 30.0N (+/- 5.0)	39.0
1960 Dec 8 1100:00	M-100	-	-	SHOK	GMS60C	M9042	-	-	180.0E 30.0N (+/- 5.0)	50.0
1960 Dec 9 1054:59	M-100	-	-	SHOK	GMS60C	M9043	-	-	180.0E 30.0N (+/- 5.0)	52.0
1960 Dec 11 1030:00	M-100	-	-	SHOK	GMS60C	M9044	-	-	180.0E 30.0N (+/- 5.0)	48.0
1960 Dec 12 1100:00	M-100	-	-	SHOK	GMS60C	M9045	-	-	180.0E 30.0N (+/- 5.0)	85.0
1965 Apr 17 0944	M-100	-	-	SHOK	GMS65A	LP1	-	-	160.0E 30.0N (+/- 5.0)	85.0
1965 Apr 18 1416	M-100	-	-	SHOK	GMS65A	LP2	-	-	160.0E 30.0N (+/- 5.0)	88.0
1965 Apr 28 1303	M-100	-	-	SHOK	GMS65A	LP3	-	-	160.0E 30.0N (+/- 5.0)	88.0
1965 Apr 30 1200	M-100	-	-	SHOK	GMS65A	LP4	-	-	160.0E 30.0N (+/- 5.0)	85.0
1965 May 1 1159	M-100	-	-	SHOK	GMS65A	LP5	-	-	160.0E 30.0N (+/- 5.0)	85.0
1965 May 2 1209	M-100	-	-	SHOK	GMS65A	LP6	-	-	160.0E 30.0N (+/- 5.0)	88.0
1965 May 3 1211	M-100	-	-	SHOK	GMS65A	LP7	-	-	160.0E 30.0N (+/- 5.0)	85.0
1965 May 4 1507:00	M-100	-	-	SHOK	GMS65A	LP8	-	-	160.0E 30.0N (+/- 5.0)	85.0
1965 May 5 1505	M-100	-	-	SHOK	GMS65A	LP9	-	-	160.0E 30.0N (+/- 5.0)	88.0
1965 May 5 1507	M-100	-	-	SHOK	GMS65A	LP8	-	-	160.0E 30.0N (+/- 5.0)	85.0
1965 May 6 1158	M-100	-	-	SHOK	GMS65A	LP10	-	-	160.0E 30.0N (+/- 5.0)	85.0
1965 May 7 1222	M-100	-	-	SHOK	GMS65A	LP11	-	-	160.0E 30.0N (+/- 5.0)	88.0
1965 May 8 1200	M-100	-	-	SHOK	GMS65A	LP12	-	-	160.0E 30.0N (+/- 5.0)	85.0
1965 May 9 1200	M-100	-	-	SHOK	GMS65A	LP13	-	-	160.0E 30.0N (+/- 5.0)	85.0
1965 May 10 1242	M-100	-	-	SHOK	GMS65A	LP14	-	-	160.0E 30.0N (+/- 5.0)	88.0
1965 May 11 1100	M-100	-	-	SHOK	GMS65A	LP15	-	-	160.0E 30.0N (+/- 5.0)	85.0
1965 May 12 1132	M-100	-	-	SHOK	GMS65A	LP16	-	-	160.0E 30.0N (+/- 5.0)	85.0
1965 May 13 1000	M-100	-	-	SHOK	GMS65A	LP17	-	-	160.0E 30.0N (+/- 5.0)	88.0
1965 May 15 1041	M-100	-	-	SHOK	GMS65A	LP18	-	-	160.0E 30.0N (+/- 5.0)	85.0
1965 May 16 1000	M-100	-	-	SHOK	GMS65A	LP19	-	-	160.0E 30.0N (+/- 5.0)	85.0
1965 May 17 1000	M-100	-	-	SHOK	GMS65A	LP20	-	-	160.0E 30.0N (+/- 5.0)	88.0
1965 May 27 1053	M-100	-	-	SHOK	GMS65A	LP21	-	-	160.0E 30.0N (+/- 5.0)	85.0
1965 May 28 1042	M-100	-	-	SHOK	GMS65A	LP22	-	-	160.0E 30.0N (+/- 5.0)	85.0
1965 May 29 1058	M-100	-	-	SHOK	GMS65A	LP23	-	-	160.0E 30.0N (+/- 5.0)	88.0
1965 Jun 3 1100	M-100	-	-	SHOK	GMS65A	LP24	-	-	160.0E 30.0N (+/- 5.0)	85.0
1965 Jun 5 1102	M-100	-	-	SHOK	GMS65A	LP25	-	-	160.0E 30.0N (+/- 5.0)	85.0
1965 Jun 6 1100	M-100	-	-	SHOK	GMS65A	LP26	-	-	160.0E 30.0N (+/- 5.0)	88.0
1965 Jun 7 1130	M-100	-	-	SHOK	GMS65A	LP27	-	-	160.0E 30.0N (+/- 5.0)	88.0
1965 Jun 9 1102	M-100	-	-	SHOK	GMS65A	LP28	-	-	160.0E 30.0N (+/- 5.0)	85.0
1965 Jun 10 1100	M-100	-	-	SHOK	GMS65A	LP29	-	-	160.0E 30.0N (+/- 5.0)	88.0
1965 Jun 11 1100	M-100	-	-	SHOK	GMS65A	LP30	-	-	160.0E 30.0N (+/- 5.0)	85.0
1965 Jun 12 1224:59	M-100	-	-	SHOK	GMS65A	M9072	-	-	160.0E 30.0N (+/- 5.0)	48.0
1965 Jun 13 1221	M-100	-	-	SHOK	GMS65A	LP31	-	-	160.0E 30.0N (+/- 5.0)	88.0
1965 Jun 14 1100	M-100	-	-	SHOK	GMS65A	LP32	-	-	160.0E 30.0N (+/- 5.0)	85.0
1965 Jun 15 1151	M-100	-	-	SHOK	GMS65A	LP33	-	-	160.0E 30.0N (+/- 5.0)	85.0
1965 Jun 16 1153	M-100	-	-	SHOK	GMS65A	LP34	-	-	160.0E 30.0N (+/- 5.0)	88.0
1966 Dec 19 1200:00	M-100	-	-	SHOK	GMS66A	M9115	-	-	-	45.0

Launches: SHOK

Date	Rocket	Flight	Mission	Platform	Site	LP	AscSite	AsclP	Pos	Apogee
1966 Dec 21 1200:00	M-100	-	-	SHOK	Yu. M. Shokal'skiy	GMS66A	M9114	-	-	40.0
1966 Dec 22 1100:00	M-100	-	-	SHOK	Yu. M. Shokal'skiy	GMS66A	M9113	-	-	50.0
1966 Dec 23 0959:59	M-100	-	-	SHOK	Yu. M. Shokal'skiy	GMS66A	M9112	-	-	79.0
1966 Dec 25 0959:59	M-100	-	-	SHOK	Yu. M. Shokal'skiy	GMS66A	M9111	-	-	78.0
1966 Dec 29 0959:59	M-100	-	-	SHOK	Yu. M. Shokal'skiy	GMS66A	M9110	-	-	60.0
1966 Dec 31 0820:00	M-100	-	-	SHOK	Yu. M. Shokal'skiy	GMS66A	M9169	-	-	80.0
1966 Dec 31 0959:59	M-100	-	-	SHOK	Yu. M. Shokal'skiy	GMS66A	M9109	-	-	80.0
1967 Jan 2 0959:59	M-100	-	-	SHOK	Yu. M. Shokal'skiy	GMS66A	M9108	-	-	83.0
1967 Jan 3 1025:59	M-100	-	-	SHOK	Yu. M. Shokal'skiy	GMS66A	M9107	-	-	60.0
1967 Jan 16 0959:59	M-100	-	-	SHOK	Yu. M. Shokal'skiy	GMS66A	M9154	-	-	80.0
1967 Jan 17 0959:59	M-100	-	-	SHOK	Yu. M. Shokal'skiy	GMS66A	M9155	-	-	83.0
1967 Jan 18 0959:59	M-100	-	-	SHOK	Yu. M. Shokal'skiy	GMS66A	M9156	-	-	83.0
1967 Jan 20 1104:59	M-100	-	-	SHOK	Yu. M. Shokal'skiy	GMS66A	M9157	-	-	83.0
1967 Jan 21 1100:00	M-100	-	-	SHOK	Yu. M. Shokal'skiy	GMS66A	M9158	-	-	79.0
1967 Jan 22 1204:59	M-100	-	-	SHOK	Yu. M. Shokal'skiy	GMS66A	M9159	-	-	42.0
1967 Jan 23 1200:00	M-100	-	-	SHOK	Yu. M. Shokal'skiy	GMS66A	M9160	-	-	43.0
1967 Feb 6 1026:59	M-100	-	-	SHOK	Yu. M. Shokal'skiy	GMS66A	M9106	-	-	80.0
1967 Feb 7 0957:59	M-100	-	-	SHOK	Yu. M. Shokal'skiy	GMS66A	M9105	-	-	46.0
1967 Feb 10 0953:00	M-100	-	-	SHOK	Yu. M. Shokal'skiy	GMS66A	M9104	-	-	48.0
1967 Feb 15 0900:00	M-100	-	-	SHOK	Yu. M. Shokal'skiy	GMS66A	M9119	-	-	78.0
1967 Feb 16 1212:59	M-100	-	-	SHOK	Yu. M. Shokal'skiy	GMS66A	M9118	-	-	80.0
1967 Feb 18 0953:00	M-100	-	-	SHOK	Yu. M. Shokal'skiy	GMS66A	M9117	-	-	31.0
1967 Feb 20 0953:00	M-100	-	-	SHOK	Yu. M. Shokal'skiy	GMS66A	M9116	-	-	80.0
1969 Jan 2 1640	M-100	-	-	SHOK	Yu. M. Shokal'skiy	IOLZ	R0DR	-	65.0E 0.0N (+/- 2.0)	93.0
1969 Jan 2 2205	M-100	-	-	SHOK	Yu. M. Shokal'skiy	IOLZ	R0DR	-	65.0E 0.0N (+/- 2.0)	92.0
1969 Jan 7 0352	M-100	-	-	SHOK	Yu. M. Shokal'skiy	IOLZ	R0DR	-	65.0E 0.0N (+/- 2.0)	90.0
1969 Jan 7 0950	M-100	-	-	SHOK	Yu. M. Shokal'skiy	IOLZ	R0DR	-	65.0E 0.0N (+/- 2.0)	91.0
1969 Jan 7 2147	M-100	-	-	SHOK	Yu. M. Shokal'skiy	IOLZ	R0DR	-	65.0E 0.0N (+/- 2.0)	90.0
1969 Jan 11 0351	M-100	-	-	SHOK	Yu. M. Shokal'skiy	IOLZ	R0DR	-	65.0E 0.0N (+/- 2.0)	91.0
1969 Jan 11 0945	M-100	-	-	SHOK	Yu. M. Shokal'skiy	IOLZ	R0DR	-	65.0E 0.0N (+/- 2.0)	94.0
1969 Jan 11 1556	M-100	-	-	SHOK	Yu. M. Shokal'skiy	IOLZ	R0DR	-	65.0E 0.0N (+/- 2.0)	93.0
1969 Jan 11 2145	M-100	-	-	SHOK	Yu. M. Shokal'skiy	IOLZ	R0DR	-	65.0E 0.0N (+/- 2.0)	93.0
1969 Jan 23 0400	M-100	-	-	SHOK	Yu. M. Shokal'skiy	IOLZ	R0DR	-	65.0E 0.0N (+/- 2.0)	93.0
1969 Jan 23 1000	M-100	-	-	SHOK	Yu. M. Shokal'skiy	IOLZ	R0DR	-	65.0E 0.0N (+/- 2.0)	89.0
1969 Jan 23 1620	M-100	-	-	SHOK	Yu. M. Shokal'skiy	IOLZ	R0DR	-	65.0E 0.0N (+/- 2.0)	92.0
1969 Jan 27 0400	M-100	-	-	SHOK	Yu. M. Shokal'skiy	IOLZ	R0DR	-	65.0E 0.0N (+/- 2.0)	92.0
1969 Jan 27 1640	M-100	-	-	SHOK	Yu. M. Shokal'skiy	IOLZ	R0DR	-	65.0E 0.0N (+/- 2.0)	96.0
1969 Jan 27 2200	M-100	-	-	SHOK	Yu. M. Shokal'skiy	IOLZ	R0DR	-	65.0E 0.0N (+/- 2.0)	96.0
1969 Feb 02 1805:00	M-100	-	MR-12	SHOK	Yu. M. Shokal'skiy	GMS69B	M9126	-	65.0E 20.0S (+/- 5.0)	91.0
1969 Feb 03 1808:00	M-100	-	MR-12	SHOK	Yu. M. Shokal'skiy	GMS69B	M9125	-	65.0E 20.0S (+/- 5.0)	90.0
1969 Feb 04 1800:00	M-100	-	MR-12	SHOK	Yu. M. Shokal'skiy	GMS69B	M9124	-	65.0E 20.0S (+/- 5.0)	96.0
1969 Feb 05 1800:00	M-100	-	-	SHOK	Yu. M. Shokal'skiy	GMS69B	M9123	-	65.0E 20.0S (+/- 5.0)	89.0
1969 Feb 06 1825:00	M-100	-	-	SHOK	Yu. M. Shokal'skiy	GMS69B	M9122	-	65.0E 20.0S (+/- 5.0)	94.0
1969 Feb 07 1720:00	M-100	-	-	SHOK	Yu. M. Shokal'skiy	GMS69B	M9120	-	65.0E 20.0S (+/- 5.0)	86.0
1969 Feb 09 2200:00	M-100	-	-	SHOK	Yu. M. Shokal'skiy	GMS69B	LP02	-	65.0E 20.0S (+/- 5.0)	91.0
1969 Feb 10 2200:00	M-100	-	-	SHOK	Yu. M. Shokal'skiy	GMS69B	M9121	-	65.0E 20.0S (+/- 5.0)	93.0
1969 Feb 11 2200:00	M-100	-	-	SHOK	Yu. M. Shokal'skiy	GMS69B	M9166	-	65.0E 20.0S (+/- 5.0)	93.0
1969 May 19 0400:00	M-100	-	-	SHOK	Yu. M. Shokal'skiy	KER	M9128	-	70.2E 49.4S (+/- 0.0)	76.0
1969 May 19 1600:00	M-100	-	-	SHOK	Yu. M. Shokal'skiy	GMS69C	M9129	-	65.0E 20.0S (+/- 5.0)	80.0
1969 May 19 2200:00	M-100	-	-	SHOK	Yu. M. Shokal'skiy	GMS69C	M9130	-	65.0E 20.0S (+/- 5.0)	86.0
1969 May 20 2200:00	M-100	-	-	SHOK	Yu. M. Shokal'skiy	GMS69C	M9131	-	65.0E 20.0S (+/- 5.0)	91.0
1969 May 21 1600:00	M-100	-	-	SHOK	Yu. M. Shokal'skiy	GMS69C	M9132	-	65.0E 20.0S (+/- 5.0)	83.0
1969 May 21 2200:00	M-100	-	-	SHOK	Yu. M. Shokal'skiy	IOLZ	I06540	-	65.0E 0.0N (+/- 2.0)	82.0
1969 May 22 0400:00	M-100	-	-	SHOK	Yu. M. Shokal'skiy	IOLZ	I06540	-	65.0E 0.0N (+/- 2.0)	88.0
1969 May 22 1000:00	M-100	-	-	SHOK	Yu. M. Shokal'skiy	GMS69C	M9134	-	65.0E 20.0S (+/- 5.0)	88.0

Launches: SHOK

Date	Rocket	Flight	Mission	PlatCode	Platform	Site	LP	AscSite	AsclP	Pos	Apogee
1969 May 23 2200:00	M-100	-	-	SHOK	Yu. M. Shokal'skiy	GMS69C	M9135	-	-	65.0E 20.0S (+/- 5.0)	89.0
1969 May 24 1100:00	M-100	-	-	SHOK	Yu. M. Shokal'skiy	GMS69C	M9136	-	-	65.0E 20.0S (+/- 5.0)	89.0
1969 May 24 1600:00	M-100	-	-	SHOK	Yu. M. Shokal'skiy	IOLZ	IOSWR	-	-	65.0E 0.0N (+/- 2.0)	92.0
1969 May 25 0400:00	M-100	-	-	SHOK	Yu. M. Shokal'skiy	GMS69C	M9138	-	-	65.0E 20.0S (+/- 5.0)	92.0
1969 May 25 2300:00	M-100	-	-	SHOK	Yu. M. Shokal'skiy	GMS69C	M9127	-	-	65.0E 20.0S (+/- 5.0)	92.0
1969 May 26 2200:00	M-100	-	-	SHOK	Yu. M. Shokal'skiy	GMS69C	M9139	-	-	65.0E 20.0S (+/- 5.0)	92.0
1969 May 27 1600:00	M-100	-	-	SHOK	Yu. M. Shokal'skiy	GMS69C	M9140	-	-	65.0E 20.0S (+/- 5.0)	88.0
1969 Jun 02 2200:00	M-100	-	-	SHOK	Yu. M. Shokal'skiy	GMS69C	M9141	-	-	65.0E 20.0S (+/- 5.0)	91.0
1969 Jun 03 2200:00	M-100	-	-	SHOK	Yu. M. Shokal'skiy	GMS69C	M9142	-	-	65.0E 20.0S (+/- 5.0)	91.0
1969 Jun 04 0400:00	M-100	-	-	SHOK	Yu. M. Shokal'skiy	GMS69C	M9143	-	-	65.0E 20.0S (+/- 5.0)	90.0
1969 Jun 4 1559:59	M-100	-	-	SHOK	Yu. M. Shokal'skiy	GMS69C	M9144	-	-	65.0E 20.0S (+/- 5.0)	72.0
1969 Jun 06 2200:00	M-100	-	-	SHOK	Yu. M. Shokal'skiy	IOLZ	I065	-	-	65.0E 0.0N (+/- 2.0)	92.0
1969 Jun 07 0400:00	M-100	-	-	SHOK	Yu. M. Shokal'skiy	IOLZ	I065	-	-	65.0E 0.0N (+/- 2.0)	89.0
1969 Jun 07 1000:00	M-100	-	-	SHOK	Yu. M. Shokal'skiy	GMS69C	M9146	-	-	65.0E 20.0S (+/- 5.0)	93.0
1969 Jun 07 1600:00	M-100	-	-	SHOK	Yu. M. Shokal'skiy	GMS69C	M9147	-	-	65.0E 20.0S (+/- 5.0)	92.0
1969 Jun 08 2200:00	M-100	-	-	SHOK	Yu. M. Shokal'skiy	GMS69C	M9148	-	-	65.0E 20.0S (+/- 5.0)	89.0
1969 Jun 09 2200:00	M-100	-	-	SHOK	Yu. M. Shokal'skiy	GMS69C	M9149	-	-	65.0E 20.0S (+/- 5.0)	87.0
1969 Jun 10 0400:00	M-100	-	-	SHOK	Yu. M. Shokal'skiy	GMS69C	M9150	-	-	65.0E 20.0S (+/- 5.0)	86.0
1969 Jun 11 2200:00	M-100	-	-	SHOK	Yu. M. Shokal'skiy	GMS69C	LP1	-	-	65.0E 20.0S (+/- 5.0)	85.0
1969 Jun 12 2200:00	M-100	-	-	SHOK	Yu. M. Shokal'skiy	GMS69C	M9151	-	-	65.0E 20.0S (+/- 5.0)	90.0
1969 Jun 13 0400:00	M-100	-	-	SHOK	Yu. M. Shokal'skiy	GMS69C	M9152	-	-	65.0E 20.0S (+/- 5.0)	91.0
1969 Jun 13 1600:00	M-100	-	-	SHOK	Yu. M. Shokal'skiy	GMS69C	M9153	-	-	65.0E 20.0S (+/- 5.0)	86.0
1970 Jan 06 2200:00	M-100	-	-	SHOK	Yu. M. Shokal'skiy	IOLZ	I065	-	-	65.0E 0.0N (+/- 2.0)	93.0
1970 Jan 07 0001:00	M-100	-	-	SHOK	Yu. M. Shokal'skiy	IOLZ	I065	-	-	65.0E 0.0N (+/- 2.0)	91.0
1970 Jan 07 2025:00	M-100	-	-	SHOK	Yu. M. Shokal'skiy	IOLZ	I065	-	-	65.0E 0.0N (+/- 2.0)	89.0
1970 Jan 07 2218:00	M-100	-	-	SHOK	Yu. M. Shokal'skiy	IOLZ	I065	-	-	65.0E 0.0N (+/- 2.0)	87.0
1970 Jan 08 2034:00	M-100	-	-	SHOK	Yu. M. Shokal'skiy	IOLZ	I065	-	-	65.0E 0.0N (+/- 2.0)	86.0
1970 Jan 08 2239:00	M-100	-	-	SHOK	Yu. M. Shokal'skiy	IOLZ	I065	-	-	65.0E 0.0N (+/- 2.0)	85.0
1970 Jan 09 2020:00	M-100	-	-	SHOK	Yu. M. Shokal'skiy	IOLZ	I065	-	-	65.0E 0.0N (+/- 2.0)	82.0
1970 Jan 09 2200:00	M-100	-	-	SHOK	Yu. M. Shokal'skiy	IOLZ	I065	-	-	65.0E 0.0N (+/- 2.0)	87.0
1970 Jan 10 2000:00	M-100	-	-	SHOK	Yu. M. Shokal'skiy	IOLZ	I065	-	-	65.0E 0.0N (+/- 2.0)	93.0
1970 Jan 11 2000:00	M-100	-	-	SHOK	Yu. M. Shokal'skiy	IOLZ	I065	-	-	65.0E 0.0N (+/- 2.0)	87.0
1970 Jan 11 2000:00	M-100	-	-	SHOK	Yu. M. Shokal'skiy	IOLZ	I065	-	-	65.0E 0.0N (+/- 2.0)	88.0
1970 Jan 18 2006:00	M-100	-	-	SHOK	Yu. M. Shokal'skiy	IOLZ	RDDR	-	-	65.0E 0.0N (+/- 2.0)	81.0
1970 Jan 18 2200:00	M-100	-	-	SHOK	Yu. M. Shokal'skiy	IOLZ	RDDR	-	-	65.0E 0.0N (+/- 2.0)	86.0
1970 Jan 19 2000:00	M-100	-	-	SHOK	Yu. M. Shokal'skiy	IOLZ	RDDR	-	-	65.0E 0.0N (+/- 2.0)	90.0
1970 Jan 19 2200:00	M-100	-	-	SHOK	Yu. M. Shokal'skiy	IOLZ	RDDR	-	-	65.0E 0.0N (+/- 2.0)	84.0
1970 Jan 20 1920:00	M-100	-	-	SHOK	Yu. M. Shokal'skiy	IOLZ	RDDR	-	-	65.0E 0.0N (+/- 2.0)	87.0
1970 Jan 20 2049:00	M-100	-	-	SHOK	Yu. M. Shokal'skiy	IOLZ	RDDR	-	-	65.0E 0.0N (+/- 2.0)	87.0
1970 Jan 20 2237:00	M-100	-	-	SHOK	Yu. M. Shokal'skiy	IOLZ	RDDR	-	-	65.0E 0.0N (+/- 2.0)	86.0
1970 Jan 21 2115:00	M-100	-	-	SHOK	Yu. M. Shokal'skiy	IOLZ	RDDR	-	-	65.0E 0.0N (+/- 2.0)	88.0
1970 Feb 04 2001:00	M-100	-	-	SHOK	Yu. M. Shokal'skiy	IOLZ	IOSWR	-	-	65.0E 0.0N (+/- 2.0)	87.0
1970 Feb 04 2201:00	M-100	-	-	SHOK	Yu. M. Shokal'skiy	IOLZ	IOSWR	-	-	65.0E 0.0N (+/- 2.0)	87.0
1970 Feb 05 2045:00	M-100	-	-	SHOK	Yu. M. Shokal'skiy	IOLZ	IOSWR	-	-	65.0E 0.0N (+/- 2.0)	83.0
1970 Feb 06 0123:00	M-100	-	-	SHOK	Yu. M. Shokal'skiy	IOLZ	IOSWR	-	-	65.0E 0.0N (+/- 2.0)	86.0
1970 Feb 06 2001:00	M-100	-	-	SHOK	Yu. M. Shokal'skiy	IOLZ	IOSWR	-	-	65.0E 0.0N (+/- 2.0)	87.0
1970 Feb 06 2200:00	M-100	-	-	SHOK	Yu. M. Shokal'skiy	IOLZ	IOSWR	-	-	65.0E 0.0N (+/- 2.0)	86.0
1970 Feb 07 2050:00	M-100	-	-	SHOK	Yu. M. Shokal'skiy	IOLZ	IOSWR	-	-	65.0E 0.0N (+/- 2.0)	89.0
1970 Feb 07 2232:00	M-100	-	-	SHOK	Yu. M. Shokal'skiy	IOLZ	IOSWR	-	-	65.0E 0.0N (+/- 2.0)	91.0
1970 Feb 11 2200:00	M-100	-	-	SHOK	Yu. M. Shokal'skiy	IOLZ	I06540	-	-	65.0E 0.0N (+/- 2.0)	88.0
1970 Feb 12 2000:00	M-100	-	-	SHOK	Yu. M. Shokal'skiy	IOLZ	I06540	-	-	65.0E 0.0N (+/- 2.0)	90.0
1970 Feb 13 2000:00	M-100	-	-	SHOK	Yu. M. Shokal'skiy	IOLZ	I06540	-	-	65.0E 0.0N (+/- 2.0)	90.0
1970 Feb 13 2200:00	M-100	-	-	SHOK	Yu. M. Shokal'skiy	IOLZ	I06540	-	-	65.0E 0.0N (+/- 2.0)	93.0
1970 Feb 14 2000:00	M-100	-	-	SHOK	Yu. M. Shokal'skiy	IOLZ	I06540	-	-	65.0E 0.0N (+/- 2.0)	90.0
1970 Feb 14 2200:00	M-100	-	-	SHOK	Yu. M. Shokal'skiy	IOLZ	I06540	-	-	65.0E 0.0N (+/- 2.0)	90.0



Launches: SHOK

Date	Rocket	Flight	Mission	PlatCode	Platform	Site	LP	AscSite	AsclP	Pos	Apogee
1970 Feb 17 2043:00	M-100	-	-	SHOK	Yu. M. Shokal'skiy	KER	LEC	-	-	70.2E 49.4S (+/- 0.0)	83.0
1970 Feb 17 2100:00	M-100	Atomic 0	[Same as 2043Z]	SHOK	Yu. M. Shokal'skiy	KER	LEC	-	-	70.2E 49.4S (+/- 0.0)	90.0
1970 Feb 17 2245:00	M-100	-	-	SHOK	Yu. M. Shokal'skiy	KER	LEC	-	-	70.2E 49.4S (+/- 0.0)	90.0
1970 Feb 18 2017:00	M-100	-	-	SHOK	Yu. M. Shokal'skiy	KER	LEC	-	-	70.2E 49.4S (+/- 0.0)	87.0
1970 Feb 18 2218:00	M-100	-	-	SHOK	Yu. M. Shokal'skiy	KER	LEC	-	-	70.2E 49.4S (+/- 0.0)	88.0
1970 Jun 18 2000:00	M-100	-	-	SHOK	Yu. M. Shokal'skiy	GMS70A	LP1	-	-	65.0E 30.0S (+/- 5.0)	91.0
1970 Jun 20 2000:00	M-100	-	-	SHOK	Yu. M. Shokal'skiy	GMS70A	LP2	-	-	65.0E 30.0S (+/- 5.0)	91.0
1970 Jun 21 2100:00	M-100	-	-	SHOK	Yu. M. Shokal'skiy	GMS70A	LP3	-	-	65.0E 30.0S (+/- 5.0)	90.0
1970 Jul 01 2010:00	M-100	-	-	SHOK	Yu. M. Shokal'skiy	IOLZ	IOSWR	-	-	65.0E 0.0N (+/- 2.0)	89.0
1970 Jul 01 2200:00	M-100	-	-	SHOK	Yu. M. Shokal'skiy	IOLZ	IOSWR	-	-	65.0E 0.0N (+/- 2.0)	92.0
1970 Jul 05 2005:00	M-100	-	-	SHOK	Yu. M. Shokal'skiy	GMS70A	LP4	-	-	65.0E 30.0S (+/- 5.0)	88.0
1970 Jul 06 2015:00	M-100	-	-	SHOK	Yu. M. Shokal'skiy	GMS70A	LP5	-	-	65.0E 30.0S (+/- 5.0)	94.0
1970 Jul 08 1956:00	M-100	-	-	SHOK	Yu. M. Shokal'skiy	GMS70A	LP6	-	-	65.0E 30.0S (+/- 5.0)	85.0
1970 Jul 10 1830:00	M-100	-	-	SHOK	Yu. M. Shokal'skiy	GMS70A	LP7	-	-	65.0E 30.0S (+/- 5.0)	85.0
1970 Jul 13 2000:00	M-100	-	-	SHOK	Yu. M. Shokal'skiy	GMS70A	LP8	-	-	65.0E 30.0S (+/- 5.0)	86.0
1970 Jul 13 2230:00	M-100	-	-	SHOK	Yu. M. Shokal'skiy	GMS70A	LP8	-	-	65.0E 30.0S (+/- 5.0)	92.0
1970 Jul 15 1800:00	M-100	-	-	SHOK	Yu. M. Shokal'skiy	GMS70A	LP9	-	-	65.0E 30.0S (+/- 5.0)	95.0
1970 Jul 15 2000:00	M-100	-	-	SHOK	Yu. M. Shokal'skiy	GMS70A	LP9	-	-	65.0E 30.0S (+/- 5.0)	93.0
1970 Jul 17 2024:00	M-100	-	-	SHOK	Yu. M. Shokal'skiy	GMS70A	LP10	-	-	65.0E 30.0S (+/- 5.0)	85.0
1970 Jul 17 2222:00	M-100	-	-	SHOK	Yu. M. Shokal'skiy	GMS70A	LP11	-	-	65.0E 30.0S (+/- 5.0)	86.0
1970 Jul 18 2015:00	M-100	-	-	SHOK	Yu. M. Shokal'skiy	GMS70A	LP10	-	-	65.0E 30.0S (+/- 5.0)	90.0
1970 Jul 18 2205:00	M-100	-	-	SHOK	Yu. M. Shokal'skiy	GMS70A	LP10	-	-	65.0E 30.0S (+/- 5.0)	89.0
1970 Jul 20 2000:00	M-100	-	-	SHOK	Yu. M. Shokal'skiy	GMS70A	LP12	-	-	65.0E 30.0S (+/- 5.0)	91.0
1970 Jul 20 2150:00	M-100	-	-	SHOK	Yu. M. Shokal'skiy	GMS70A	LP12	-	-	65.0E 30.0S (+/- 5.0)	91.0
1970 Jul 21 2000:00	M-100	-	-	SHOK	Yu. M. Shokal'skiy	IOLZ	IOSWR	-	-	65.0E 0.0N (+/- 2.0)	92.0
1974 Jan 28 1000:00	M-100	-	-	SHOK	Yu. M. Shokal'skiy	GMS74A	LP1	-	-	180.0E 0.0N (+/- 5.0)	95.0
1974 Feb 01 1100:00	M-100	-	-	SHOK	Yu. M. Shokal'skiy	GMS74A	LP2	-	-	180.0E 0.0N (+/- 5.0)	86.0
1974 Feb 07 0900:00	M-100	-	-	SHOK	Yu. M. Shokal'skiy	GMS74A	LP3	-	-	180.0E 0.0N (+/- 5.0)	89.0
1974 Feb 08 0900:00	M-100	-	-	SHOK	Yu. M. Shokal'skiy	GMS74A	LP4	-	-	180.0E 0.0N (+/- 5.0)	90.0
1974 Feb 09 0900:00	M-100	-	-	SHOK	Yu. M. Shokal'skiy	GMS74A	LP5	-	-	180.0E 0.0N (+/- 5.0)	90.0
1974 Feb 11 0900:00	M-100	-	-	SHOK	Yu. M. Shokal'skiy	GMS74A	LP6	-	-	180.0E 0.0N (+/- 5.0)	91.0
1974 Feb 13 1400:00	M-100	-	-	SHOK	Yu. M. Shokal'skiy	GMS74A	LP7	-	-	180.0E 0.0N (+/- 5.0)	91.0
1974 Feb 18 1500:00	M-100	-	-	SHOK	Yu. M. Shokal'skiy	GMS74A	LP7	-	-	180.0E 0.0N (+/- 5.0)	90.0
1974 Feb 24 0900:00	M-100	-	-	SHOK	Yu. M. Shokal'skiy	ANTIM	-	-	-	180.0E 0.0N (+/- 1.0)	91.0
1974 Mar 02 0900:00	M-100	-	-	SHOK	Yu. M. Shokal'skiy	GMS74A	LP9	-	-	180.0E 0.0N (+/- 5.0)	93.0
1974 Mar 05 0200:00	M-100	-	-	SHOK	Yu. M. Shokal'skiy	GMS74A	LP10	-	-	180.0E 0.0N (+/- 5.0)	90.0
1974 Mar 07 0900:00	M-100	-	-	SHOK	Yu. M. Shokal'skiy	GMS74A	LP11	-	-	180.0E 0.0N (+/- 5.0)	93.0
1974 Mar 20 0800:00	M-100	-	-	SHOK	Yu. M. Shokal'skiy	GMS74A	LP12	-	-	180.0E 0.0N (+/- 5.0)	90.0
1974 Mar 22 0900:00	M-100	-	-	SHOK	Yu. M. Shokal'skiy	GMS74A	LP13	-	-	180.0E 0.0N (+/- 5.0)	91.0
1974 Mar 24 0800:00	M-100	-	-	SHOK	Yu. M. Shokal'skiy	GMS74A	LP14	-	-	180.0E 0.0N (+/- 5.0)	88.0
1974 Mar 27 1100:00	M-100	-	-	SHOK	Yu. M. Shokal'skiy	GMS74A	LP15	-	-	180.0E 0.0N (+/- 5.0)	93.0
1974 Mar 27 1200:00	M-100	-	-	SHOK	Yu. M. Shokal'skiy	GMS74A	LP15	-	-	180.0E 0.0N (+/- 5.0)	82.0
1974 Mar 31 1000:00	M-100	-	-	SHOK	Yu. M. Shokal'skiy	GMS74A	LP16	-	-	180.0E 0.0N (+/- 5.0)	87.0
1974 Mar 31 1000:00	M-100	-	-	SHOK	Yu. M. Shokal'skiy	GMS74A	LP16	-	-	180.0E 0.0N (+/- 5.0)	93.0
1974 May 05 1000:00	M-100	-	-	SHOK	Yu. M. Shokal'skiy	GMS74A	LP17	-	-	180.0E 0.0N (+/- 5.0)	87.0
1974 Aug 14 1900:00	M-100	-	-	SHOK	Yu. M. Shokal'skiy	GMS74C	LP1	-	-	65.0E 0.0N (+/- 5.0)	90.0
1974 Aug 18 1930:00	M-100	-	-	SHOK	Yu. M. Shokal'skiy	GMS74C	LP2	-	-	65.0E 0.0N (+/- 5.0)	91.0
1974 Aug 20 1830:00	M-100	-	-	SHOK	Yu. M. Shokal'skiy	GMS74C	LP3	-	-	65.0E 0.0N (+/- 5.0)	87.0
1974 Aug 23 1900:00	M-100	-	-	SHOK	Yu. M. Shokal'skiy	GMS74C	LP4	-	-	65.0E 0.0N (+/- 5.0)	85.0
1974 Aug 24 1930:00	M-100	-	-	SHOK	Yu. M. Shokal'skiy	IOLZ	I0GOR	-	-	65.0E 0.0N (+/- 2.0)	90.0
1974 Sep 03 1930:00	M-100	-	-	SHOK	Yu. M. Shokal'skiy	GMS74C	LP6	-	-	65.0E 0.0N (+/- 5.0)	88.0
1974 Sep 05 1940:00	M-100	-	-	SHOK	Yu. M. Shokal'skiy	GMS74C	LP7	-	-	65.0E 0.0N (+/- 5.0)	80.0
1974 Sep 10 1940:00	M-100	-	-	SHOK	Yu. M. Shokal'skiy	GMS74C	LP8	-	-	65.0E 0.0N (+/- 5.0)	79.0
1974 Sep 13 2000:00	M-100	-	-	SHOK	Yu. M. Shokal'skiy	KER	LEC	-	-	70.2E 49.4S (+/- 0.0)	91.0
1974 Sep 15 1800:00	M-100	-	-	SHOK	Yu. M. Shokal'skiy	GMS74C	LP10	-	-	65.0E 0.0N (+/- 5.0)	86.0

Launches: SHOK

Date	Rocket	Flight	Mission	Platform	Site	LP	AscSite	AsclP	Pos	Apogee
1974 Sep 16 1900:00	M-100	-	-	SHOK	Yu. M. Shokal'skiy	KER	-	-	70.2E 49.4S (+/- 0.0)	83.0
1974 Sep 20 1900:00	M-100	-	-	SHOK	Yu. M. Shokal'skiy	GMS74C	-	-	160.0E 0.0N (+/- 5.0)	88.0
1975 Apr 25 0800:00	M-100	-	-	SHOK	Yu. M. Shokal'skiy	GMS75C	-	-	160.0E 0.0N (+/- 5.0)	90.0
1975 May 06 1300:00	M-100	-	-	SHOK	Yu. M. Shokal'skiy	GMS75C	-	-	160.0E 0.0N (+/- 5.0)	87.0
1975 May 07 1200:00	M-100	-	-	SHOK	Yu. M. Shokal'skiy	GMS75C	-	-	160.0E 0.0N (+/- 5.0)	88.0
1975 May 08 1200:00	M-100	-	-	SHOK	Yu. M. Shokal'skiy	OJP	-	-	160.0E 0.0N (+/- 1.0)	95.0
1975 May 08 1330:00	M-100	-	-	SHOK	Yu. M. Shokal'skiy	OJP	-	-	160.0E 0.0N (+/- 1.0)	87.0
1975 May 09 1000:00	M-100	-	-	SHOK	Yu. M. Shokal'skiy	GMS75C	-	-	160.0E 0.0N (+/- 5.0)	89.0
1975 May 11 0800:00	M-100	-	-	SHOK	Yu. M. Shokal'skiy	GMS75C	-	-	160.0E 0.0N (+/- 5.0)	85.0
1975 May 13 1600:00	M-100	-	-	SHOK	Yu. M. Shokal'skiy	GMS75C	-	-	160.0E 0.0N (+/- 5.0)	85.0
1975 May 21 1000:00	M-100	-	-	SHOK	Yu. M. Shokal'skiy	GMS75C	-	-	160.0E 0.0N (+/- 5.0)	92.0
1975 May 24 1030:00	M-100	-	-	SHOK	Yu. M. Shokal'skiy	GMS75C	-	-	160.0E 0.0N (+/- 5.0)	89.0
1975 Jun 12 1500:00	M-100	-	-	SHOK	Yu. M. Shokal'skiy	GMS75C	-	-	160.0E 0.0N (+/- 5.0)	78.0
1975 Jun 17 1500:00	M-100	-	-	SHOK	Yu. M. Shokal'skiy	GMS75C	-	-	160.0E 0.0N (+/- 5.0)	88.0
1975 Jun 20 1600:00	M-100	-	-	SHOK	Yu. M. Shokal'skiy	GMS75C	-	-	160.0E 0.0N (+/- 5.0)	81.0
1975 Jun 24 1800:00	M-100	-	-	SHOK	Yu. M. Shokal'skiy	GMS75C	-	-	160.0E 0.0N (+/- 5.0)	82.0
1975 Jun 26 1600:00	M-100	-	-	SHOK	Yu. M. Shokal'skiy	GMS75C	-	-	160.0E 0.0N (+/- 5.0)	87.0
1975 Jun 26 1700:00	M-100	-	-	SHOK	Yu. M. Shokal'skiy	GMS75C	-	-	160.0E 0.0N (+/- 5.0)	83.0
1975 Jun 28 1540:00	M-100	-	-	SHOK	Yu. M. Shokal'skiy	GMS75C	-	-	160.0E 0.0N (+/- 5.0)	83.0
1976 Feb 18 1500:00	M-100	-	-	SHOK	Yu. M. Shokal'skiy	GMS76C	-	-	90.0E 0.0N (+/- 5.0)	85.0
1976 Feb 19 1500:00	M-100	-	-	SHOK	Yu. M. Shokal'skiy	GMS76C	-	-	90.0E 0.0N (+/- 5.0)	82.0
1976 Feb 20 1500:00	M-100	-	-	SHOK	Yu. M. Shokal'skiy	GMS76C	-	-	90.0E 0.0N (+/- 5.0)	83.0
1976 Feb 21 1500:00	M-100	-	-	SHOK	Yu. M. Shokal'skiy	GMS76C	-	-	90.0E 0.0N (+/- 5.0)	89.0
1976 Feb 22 1500:00	M-100	-	-	SHOK	Yu. M. Shokal'skiy	NER	-	-	90.0E 0.0N (+/- 2.0)	88.0
1976 Feb 22 2000:00	M-100	-	-	SHOK	Yu. M. Shokal'skiy	NER	-	-	90.0E 0.0N (+/- 2.0)	89.0
1976 Feb 24 1500:00	M-100	-	-	SHOK	Yu. M. Shokal'skiy	GMS76C	-	-	90.0E 0.0N (+/- 5.0)	80.0
1976 Feb 29 1500:00	M-100	-	-	SHOK	Yu. M. Shokal'skiy	GMS76C	-	-	90.0E 0.0N (+/- 5.0)	83.0
1976 Mar 03 1500:00	M-100	-	-	SHOK	Yu. M. Shokal'skiy	GMS76C	-	-	90.0E 0.0N (+/- 5.0)	86.0
1976 Mar 08 1500:00	M-100	-	-	SHOK	Yu. M. Shokal'skiy	GMS76C	-	-	90.0E 0.0N (+/- 5.0)	83.0
1976 Mar 11 1500:00	M-100	-	-	SHOK	Yu. M. Shokal'skiy	GMS76C	-	-	90.0E 0.0N (+/- 5.0)	76.0
1976 Mar 13 1500:00	M-100	-	-	SHOK	Yu. M. Shokal'skiy	GMS76C	-	-	90.0E 0.0N (+/- 5.0)	82.0
1976 Mar 14 1500:00	M-100	-	-	SHOK	Yu. M. Shokal'skiy	GMS76C	-	-	90.0E 0.0N (+/- 5.0)	80.0
1976 Mar 14 1600:00	M-100	-	-	SHOK	Yu. M. Shokal'skiy	GMS76C	-	-	90.0E 0.0N (+/- 5.0)	84.0
1976 Mar 15 1500:00	M-100	-	-	SHOK	Yu. M. Shokal'skiy	GMS76C	-	-	90.0E 0.0N (+/- 5.0)	88.0
1976 Mar 16 1500:00	M-100	-	-	SHOK	Yu. M. Shokal'skiy	GMS76C	-	-	90.0E 0.0N (+/- 5.0)	85.0
1976 Mar 17 1500:00	M-100	-	-	SHOK	Yu. M. Shokal'skiy	GMS76C	-	-	90.0E 0.0N (+/- 5.0)	83.0
1976 Mar 26 1600:00	M-100	-	-	SHOK	Yu. M. Shokal'skiy	GMS76C	-	-	90.0E 0.0N (+/- 5.0)	86.0
1976 Mar 28 1600:00	M-100	-	-	SHOK	Yu. M. Shokal'skiy	GMS76C	-	-	90.0E 0.0N (+/- 5.0)	84.0
1976 Apr 03 1900:00	M-100	-	-	SHOK	Yu. M. Shokal'skiy	GMS76C	-	-	90.0E 0.0N (+/- 5.0)	86.0
1976 Apr 09 1700:00	M-100	-	-	SHOK	Yu. M. Shokal'skiy	GMS76C	-	-	90.0E 0.0N (+/- 5.0)	86.0
1976 Apr 10 1600:00	M-100	-	-	SHOK	Yu. M. Shokal'skiy	GMS76C	-	-	90.0E 0.0N (+/- 5.0)	88.0
1976 Apr 11 1600:00	M-100	-	-	SHOK	Yu. M. Shokal'skiy	GMS76C	-	-	90.0E 0.0N (+/- 5.0)	83.0
1976 Apr 12 1600:00	M-100	-	-	SHOK	Yu. M. Shokal'skiy	GMS76C	-	-	90.0E 0.0N (+/- 5.0)	87.0
1976 Apr 13 1700:00	M-100	-	-	SHOK	Yu. M. Shokal'skiy	GMS76C	-	-	90.0E 0.0N (+/- 5.0)	90.0
1976 Jun 22 1800:00	M-100	-	-	SHOK	Yu. M. Shokal'skiy	GMS76E	-	-	65.0E 0.0N (+/- 5.0)	90.0
1976 Jun 23 1600:00	M-100	-	-	SHOK	Yu. M. Shokal'skiy	GMS76E	-	-	65.0E 0.0N (+/- 5.0)	86.0
1976 Jun 25 1800:00	M-100	-	-	SHOK	Yu. M. Shokal'skiy	GMS76E	-	-	65.0E 0.0N (+/- 5.0)	86.0
1976 Jun 26 1800:00	M-100	-	-	SHOK	Yu. M. Shokal'skiy	GMS76E	-	-	65.0E 0.0N (+/- 5.0)	89.0
1976 Jun 28 1700:00	M-100	-	-	SHOK	Yu. M. Shokal'skiy	IOLZ	-	-	65.0E 0.0N (+/- 2.0)	89.0
1976 Jun 30 1800:00	M-100	-	-	SHOK	Yu. M. Shokal'skiy	IOLZ	-	-	65.0E 0.0N (+/- 2.0)	89.0
1976 Jul 01 1700:00	M-100	-	-	SHOK	Yu. M. Shokal'skiy	GMS76E	-	-	65.0E 0.0N (+/- 5.0)	89.0
1976 Jul 14 1800:00	M-100	-	-	SHOK	Yu. M. Shokal'skiy	IOLZ	-	-	65.0E 0.0N (+/- 2.0)	82.0
1976 Jul 17 1700:00	M-100	-	-	SHOK	Yu. M. Shokal'skiy	GMS76E	-	-	65.0E 0.0N (+/- 5.0)	89.0
1976 Jul 19 1700:00	M-100	-	-	SHOK	Yu. M. Shokal'skiy	GMS76E	-	-	65.0E 0.0N (+/- 5.0)	92.0

Launches: SHOK

Date	Rocket	Flight	Mission	Platform	Site	LP	AscSite	AsclP	Pos	Apogee
1976 Jul 20 1600:00	M-100	-	-	Yu. M. Shokal'skiy	GMS76E	LP9	-	-	65.0E 0.0N (+/- 5.0)	85.0
1976 Jul 20 1800:00	M-100	-	-	Yu. M. Shokal'skiy	GMS76E	LP9	-	-	65.0E 0.0N (+/- 5.0)	82.0
1976 Jul 21 1700:00	M-100	-	-	Yu. M. Shokal'skiy	GMS76E	LP10	-	-	65.0E 0.0N (+/- 5.0)	85.0
1976 Jul 23 1500:00	M-100	-	-	Yu. M. Shokal'skiy	GMS76E	LP11	-	-	65.0E 0.0N (+/- 5.0)	86.0
1976 Jul 26 1600:00	M-100	-	-	Yu. M. Shokal'skiy	IOLZ	IOSWR	-	-	65.0E 0.0N (+/- 2.0)	86.0
1976 Jul 29 1600:00	M-100	-	-	Yu. M. Shokal'skiy	GMS76E	LP13	-	-	65.0E 0.0N (+/- 5.0)	83.0
1976 Jul 31 1600:00	M-100	-	-	Yu. M. Shokal'skiy	GMS76E	LP8	-	-	65.0E 0.0N (+/- 5.0)	76.0
1976 Aug 01 1600:00	M-100	-	-	Yu. M. Shokal'skiy	KER	LEC	-	-	70.2E 49.4S (+/- 0.0)	85.0
1976 Aug 01 1700:00	M-100	-	-	Yu. M. Shokal'skiy	KER	LEC	-	-	70.2E 49.4S (+/- 0.0)	86.0
1976 Aug 03 1800:00	M-100	-	-	Yu. M. Shokal'skiy	GMS76E	LP13	-	-	65.0E 0.0N (+/- 5.0)	82.0
1976 Aug 05 1600:00	M-100	-	-	Yu. M. Shokal'skiy	GMS76E	LP11	-	-	65.0E 0.0N (+/- 5.0)	87.0
1976 Aug 06 1600:00	M-100	-	-	Yu. M. Shokal'skiy	GMS76E	LP14	-	-	65.0E 0.0N (+/- 5.0)	86.0
1976 Aug 08 1600:00	M-100	-	-	Yu. M. Shokal'skiy	IOLZ	IOSWR	-	-	65.0E 0.0N (+/- 2.0)	86.0
1976 Aug 08 1700:00	M-100	-	-	Yu. M. Shokal'skiy	IOLZ	IOSWR	-	-	65.0E 0.0N (+/- 2.0)	86.0
1976 Aug 19 1650:00	M-100	-	-	Yu. M. Shokal'skiy	GMS76E	LP15	-	-	65.0E 0.0N (+/- 5.0)	85.0
1976 Aug 21 1750:00	M-100	-	-	Yu. M. Shokal'skiy	IOLZ	IOSWR	-	-	65.0E 0.0N (+/- 2.0)	89.0
1976 Aug 22 1700:00	M-100	-	-	Yu. M. Shokal'skiy	GMS76E	LP17	-	-	65.0E 0.0N (+/- 5.0)	84.0
1976 Aug 23 1700:00	M-100	-	-	Yu. M. Shokal'skiy	GMS76E	LP6	-	-	65.0E 0.0N (+/- 5.0)	92.0
1976 Aug 24 1600:00	M-100	-	-	Yu. M. Shokal'skiy	IOLZ	I065	-	-	65.0E 0.0N (+/- 2.0)	87.0
1976 Aug 24 1700:00	M-100	-	-	Yu. M. Shokal'skiy	IOLZ	I065	-	-	65.0E 0.0N (+/- 2.0)	86.0
1976 Aug 25 1700:00	M-100	-	-	Yu. M. Shokal'skiy	GMS76E	LP18	-	-	65.0E 0.0N (+/- 5.0)	84.0
1976 Aug 26 1600:00	M-100	-	-	Yu. M. Shokal'skiy	GMS76E	LP19	-	-	65.0E 0.0N (+/- 5.0)	89.0
1976 Aug 26 1700:00	M-100	-	-	Yu. M. Shokal'skiy	GMS76E	LP19	-	-	65.0E 0.0N (+/- 5.0)	89.0
1976 Aug 27 1700:00	M-100	-	-	Yu. M. Shokal'skiy	GMS76E	LP20	-	-	65.0E 0.0N (+/- 5.0)	86.0
1976 Aug 28 1700:00	M-100	-	-	Yu. M. Shokal'skiy	GMS76E	LP20	-	-	65.0E 0.0N (+/- 5.0)	88.0
1976 Aug 28 1800:00	M-100	-	-	Yu. M. Shokal'skiy	GMS76E	LP21	-	-	65.0E 0.0N (+/- 5.0)	86.0
1976 Aug 30 1600:00	M-100	-	-	Yu. M. Shokal'skiy	GMS76E	LP22	-	-	65.0E 0.0N (+/- 5.0)	89.0
1976 Aug 30 1700:00	M-100	-	-	Yu. M. Shokal'skiy	GMS76E	LP22	-	-	65.0E 0.0N (+/- 5.0)	86.0
1976 Dec 01 1800:00	M-100	-	-	Yu. M. Shokal'skiy	GMS76K	LP1	-	-	65.0E 0.0N (+/- 5.0)	86.0
1976 Dec 01 1900:00	M-100	-	-	Yu. M. Shokal'skiy	GMS76K	LP1	-	-	65.0E 0.0N (+/- 5.0)	86.0
1976 Dec 02 1700:00	M-100	-	-	Yu. M. Shokal'skiy	GMS76K	LP2	-	-	65.0E 0.0N (+/- 5.0)	79.0
1976 Dec 02 1700:00	M-100	-	-	Yu. M. Shokal'skiy	GMS76K	LP2	-	-	65.0E 0.0N (+/- 5.0)	81.0
1976 Dec 03 1700:00	M-100	-	-	Yu. M. Shokal'skiy	GMS76K	LP4	-	-	65.0E 0.0N (+/- 5.0)	82.0
1976 Dec 05 1600:00	M-100	-	-	Yu. M. Shokal'skiy	GMS76K	LP5	-	-	65.0E 0.0N (+/- 5.0)	87.0
1976 Dec 16 1900:00	M-100	-	-	Yu. M. Shokal'skiy	GMS76K	LP6	-	-	65.0E 0.0N (+/- 5.0)	83.0
1976 Dec 17 1600:00	M-100	-	-	Yu. M. Shokal'skiy	IOLZ	IOSWR	-	-	65.0E 0.0N (+/- 2.0)	84.0
1976 Dec 17 1700:00	M-100	-	-	Yu. M. Shokal'skiy	IOLZ	IOSWR	-	-	65.0E 0.0N (+/- 2.0)	84.0
1976 Dec 18 1600:00	M-100	-	-	Yu. M. Shokal'skiy	GMS76K	LP6	-	-	65.0E 0.0N (+/- 5.0)	87.0
1976 Dec 20 1500:00	M-100	-	-	Yu. M. Shokal'skiy	IOLZ	RDDR	-	-	65.0E 0.0N (+/- 2.0)	87.0
1976 Dec 23 1600:00	M-100	-	-	Yu. M. Shokal'skiy	IOLZ	I0COR	-	-	65.0E 0.0N (+/- 2.0)	87.0
1976 Dec 23 1800:00	M-100	-	-	Yu. M. Shokal'skiy	IOLZ	I0COR	-	-	65.0E 0.0N (+/- 2.0)	87.0
1976 Dec 25 1600:00	M-100	-	-	Yu. M. Shokal'skiy	GMS76K	LP8	-	-	65.0E 0.0N (+/- 5.0)	90.0
1976 Dec 25 1700:00	M-100	-	-	Yu. M. Shokal'skiy	GMS76K	LP8	-	-	65.0E 0.0N (+/- 5.0)	86.0
1976 Dec 26 1600:00	M-100	-	-	Yu. M. Shokal'skiy	GMS76K	LP9	-	-	65.0E 0.0N (+/- 5.0)	85.0
1976 Dec 26 1700:00	M-100	-	-	Yu. M. Shokal'skiy	GMS76K	LP9	-	-	65.0E 0.0N (+/- 5.0)	85.0
1976 Dec 27 1600:00	M-100	-	-	Yu. M. Shokal'skiy	GMS76K	LP10	-	-	65.0E 0.0N (+/- 5.0)	81.0
1976 Dec 27 1800:00	M-100	-	-	Yu. M. Shokal'skiy	GMS76K	LP11	-	-	65.0E 0.0N (+/- 5.0)	87.0
1976 Dec 30 1600:00	M-100	-	-	Yu. M. Shokal'skiy	GMS76K	LP12	-	-	65.0E 0.0N (+/- 5.0)	86.0
1976 Dec 30 1800:00	M-100	-	-	Yu. M. Shokal'skiy	GMS76K	LP12	-	-	65.0E 0.0N (+/- 5.0)	86.0
1977 Jan 02 1600:00	M-100	-	-	Yu. M. Shokal'skiy	NER	-	-	-	90.0E 0.0N (+/- 2.0)	83.0
1977 Jan 02 1700:00	M-100	-	-	Yu. M. Shokal'skiy	NER	-	-	-	90.0E 0.0N (+/- 2.0)	83.0
1977 May 08 1400:00	M-100	-	-	Yu. M. Shokal'skiy	GMS77G	LP1	-	-	65.0E 0.0N (+/- 5.0)	87.0
1977 May 11 1500:00	M-100	-	-	Yu. M. Shokal'skiy	GMS77G	LP2	-	-	65.0E 0.0N (+/- 5.0)	85.0
1977 May 17 1800:00	M-100	-	-	Yu. M. Shokal'skiy	GMS77G	LP3	-	-	65.0E 0.0N (+/- 5.0)	82.0
1977 May 19 1400:00	M-100	-	-	Yu. M. Shokal'skiy	GMS77G	LP4	-	-	65.0E 0.0N (+/- 5.0)	85.0

Launches: SHOK

Date	Rocket	Flight	Mission	PlatCode	Platform	Site	LP	AscSite	AsclP	Pos	Apogee
1977 May 21 1900:00	M-100	-	-	SHOK	Yu. M. Shokal'skiy	GMS77G	LP5	-	-	65.0E 0.0N (+/- 5.0)	85.0
1977 May 21 2200:00	M-100	-	-	SHOK	Yu. M. Shokal'skiy	GMS77G	LP6	-	-	65.0E 0.0N (+/- 5.0)	80.0
1977 Jun 04 1900:00	M-100	-	-	SHOK	Yu. M. Shokal'skiy	GMS77G	LP7	-	-	65.0E 0.0N (+/- 5.0)	81.0
1977 Jun 04 2300:00	M-100	-	-	SHOK	Yu. M. Shokal'skiy	GMS77G	LP8	-	-	65.0E 0.0N (+/- 5.0)	81.0
1977 Jul 15 1500:00	M-100	-	-	SHOK	Yu. M. Shokal'skiy	GMS77G	LP1	-	-	160.0E 0.0N (+/- 5.0)	85.0
1977 Nov 17 1100:00	M-100	-	-	SHOK	Yu. M. Shokal'skiy	GMS77M	LP2	-	-	160.0E 0.0N (+/- 5.0)	86.0
1977 Nov 23 1000:00	M-100	-	-	SHOK	Yu. M. Shokal'skiy	GMS77M	LP3	-	-	160.0E 0.0N (+/- 5.0)	86.0
1977 Nov 24 1200:00	M-100	-	-	SHOK	Yu. M. Shokal'skiy	ANTIM	-	-	-	180.0E 0.0N (+/- 1.0)	74.0
1977 Nov 26 1000:00	M-100	-	-	SHOK	Yu. M. Shokal'skiy	GMS77M	LP5	-	-	160.0E 0.0N (+/- 5.0)	85.0
1977 Nov 28 1000:00	M-100	-	-	SHOK	Yu. M. Shokal'skiy	GMS77M	LP6	-	-	160.0E 0.0N (+/- 5.0)	85.0
1977 Nov 29 1000:00	M-100	-	-	SHOK	Yu. M. Shokal'skiy	GMS77M	LP7	-	-	160.0E 0.0N (+/- 5.0)	88.0
1977 Dec 02 1100:00	M-100	-	-	SHOK	Yu. M. Shokal'skiy	GMS77M	LP1	-	-	160.0E 0.0N (+/- 5.0)	83.0
1977 Dec 10 1000:00	M-100	-	-	SHOK	Yu. M. Shokal'skiy	GMS77M	LP1	-	-	160.0E 0.0N (+/- 5.0)	80.0
1977 Dec 14 1200:00	M-100	-	-	SHOK	Yu. M. Shokal'skiy	GMS77M	LP8	-	-	160.0E 0.0N (+/- 5.0)	80.0
1977 Dec 18 1100:00	M-100	-	-	SHOK	Yu. M. Shokal'skiy	GMS77M	LP9	-	-	160.0E 0.0N (+/- 5.0)	84.0
1977 Dec 26 1500:00	M-100	-	-	SHOK	Yu. M. Shokal'skiy	GMS77M	LP10	-	-	160.0E 0.0N (+/- 5.0)	82.0
1978 Jan 05 1500:00	M-100	-	-	SHOK	Yu. M. Shokal'skiy	GMS77M	LP11	-	-	160.0E 0.0N (+/- 5.0)	81.0
1978 Jan 10 1200:00	M-100	-	-	SHOK	Yu. M. Shokal'skiy	OJP	-	-	-	160.0E 0.0N (+/- 1.0)	84.0
1978 Jan 12 1300:00	M-100	-	-	SHOK	Yu. M. Shokal'skiy	OJP	-	-	-	160.0E 0.0N (+/- 1.0)	82.0
1978 Jan 14 1400:00	M-100	-	-	SHOK	Yu. M. Shokal'skiy	OJP	-	-	-	160.0E 0.0N (+/- 1.0)	84.0
1978 Jan 16 1400:00	M-100	-	-	SHOK	Yu. M. Shokal'skiy	OJP	-	-	-	160.0E 0.0N (+/- 1.0)	84.0
1978 Jan 18 1200:00	M-100	-	-	SHOK	Yu. M. Shokal'skiy	GMS77M	LP12	-	-	160.0E 0.0N (+/- 5.0)	82.0
1978 Jan 20 1000:00	M-100	-	-	SHOK	Yu. M. Shokal'skiy	GMS77M	LP13	-	-	160.0E 0.0N (+/- 5.0)	85.0
1978 Jan 20 1145:00	M-100	-	-	SHOK	Yu. M. Shokal'skiy	GMS77M	LP13	-	-	160.0E 0.0N (+/- 5.0)	86.0
1978 Jan 23 1200:00	M-100	-	-	SHOK	Yu. M. Shokal'skiy	GMS77M	LP14	-	-	160.0E 0.0N (+/- 5.0)	84.0
1978 Jan 26 1200:00	M-100	-	-	SHOK	Yu. M. Shokal'skiy	GMS77M	LP14	-	-	160.0E 0.0N (+/- 5.0)	86.0
1978 Jan 26 1500:00	M-100	-	-	SHOK	Yu. M. Shokal'skiy	GMS77M	LP15	-	-	160.0E 0.0N (+/- 5.0)	83.0
1979 Feb 04 1700:00	M-100	-	-	SHOK	Yu. M. Shokal'skiy	GMS79A	LP1	-	-	65.0E 0.0N (+/- 5.0)	86.0
1979 Feb 05 1800:00	M-100	-	-	SHOK	Yu. M. Shokal'skiy	NER	-	-	-	90.0E 0.0N (+/- 2.0)	86.0
1979 Feb 09 1700:00	M-100	-	-	SHOK	Yu. M. Shokal'skiy	GMS79A	LP2	-	-	65.0E 0.0N (+/- 5.0)	80.0
1979 Feb 16 2000:00	M-100	-	-	SHOK	Yu. M. Shokal'skiy	IOLZ	I065	-	-	65.0E 0.0N (+/- 2.0)	80.0
1979 Feb 14 2200:00	M-100	-	-	SHOK	Yu. M. Shokal'skiy	IOLZ	I065	-	-	65.0E 0.0N (+/- 2.0)	84.0
1979 Feb 15 1900:00	M-100	-	-	SHOK	Yu. M. Shokal'skiy	GMS79A	LP3	-	-	65.0E 0.0N (+/- 5.0)	85.0
1979 Feb 17 1900:00	M-100	-	-	SHOK	Yu. M. Shokal'skiy	GMS79A	LP4	-	-	65.0E 0.0N (+/- 5.0)	91.0
1979 Feb 18 1900:00	M-100	-	-	SHOK	Yu. M. Shokal'skiy	IOLZ	I065	-	-	65.0E 0.0N (+/- 2.0)	83.0
1979 Feb 23 1800:00	M-100	-	-	SHOK	Yu. M. Shokal'skiy	GMS79A	LP4	-	-	65.0E 0.0N (+/- 5.0)	84.0
1979 Feb 26 1800:00	M-100	-	-	SHOK	Yu. M. Shokal'skiy	GMS79A	LP5	-	-	65.0E 0.0N (+/- 5.0)	86.0
1979 Mar 01 1700:00	M-100	-	-	SHOK	Yu. M. Shokal'skiy	GMS79A	LP6	-	-	65.0E 0.0N (+/- 5.0)	84.0
1979 Mar 01 1900:00	M-100	-	-	SHOK	Yu. M. Shokal'skiy	GMS79A	LP7	-	-	65.0E 0.0N (+/- 5.0)	83.0
1979 Mar 14 2100:00	M-100	-	-	SHOK	Yu. M. Shokal'skiy	GMS79A	LP8	-	-	65.0E 0.0N (+/- 5.0)	81.0
1979 Mar 18 1700:00	M-100	-	-	SHOK	Yu. M. Shokal'skiy	GMS79A	LP9	-	-	65.0E 0.0N (+/- 5.0)	84.0
1979 Mar 18 1900:00	M-100	-	-	SHOK	Yu. M. Shokal'skiy	GMS79A	LP9	-	-	65.0E 0.0N (+/- 5.0)	87.0
1979 Mar 27 1800:00	M-100	-	-	SHOK	Yu. M. Shokal'skiy	GMS79A	LP9	-	-	65.0E 0.0N (+/- 5.0)	86.0
1979 Mar 27 1900:00	M-100	-	-	SHOK	Yu. M. Shokal'skiy	GMS79A	LP9	-	-	65.0E 0.0N (+/- 5.0)	85.0
1979 Mar 31 1500:00	M-100	-	-	SHOK	Yu. M. Shokal'skiy	GMS79A	LP8	-	-	65.0E 0.0N (+/- 5.0)	86.0
1979 Mar 31 1600:00	M-100	-	-	SHOK	Yu. M. Shokal'skiy	GMS79A	LP10	-	-	65.0E 0.0N (+/- 5.0)	84.0
1979 Jun 10 1340:00	M-100	-	-	SHOK	Yu. M. Shokal'skiy	GMS79F	LP1	-	-	180.0E 0.0N (+/- 5.0)	75.0
1979 Jun 13 1340:00	M-100	-	-	SHOK	Yu. M. Shokal'skiy	GMS79F	LP2	-	-	180.0E 0.0N (+/- 5.0)	75.0
1979 Jun 20 1440:00	M-100	-	-	SHOK	Yu. M. Shokal'skiy	GMS79F	LP3	-	-	180.0E 0.0N (+/- 5.0)	86.0
1979 Jun 23 1400:00	M-100	-	-	SHOK	Yu. M. Shokal'skiy	GMS79F	LP4	-	-	180.0E 0.0N (+/- 5.0)	88.0
1979 Jun 25 1240:00	M-100	-	-	SHOK	Yu. M. Shokal'skiy	GMS79F	LP5	-	-	180.0E 0.0N (+/- 5.0)	88.0
1979 Jul 08 1400:00	M-100	-	-	SHOK	Yu. M. Shokal'skiy	GMS79F	LP6	-	-	180.0E 0.0N (+/- 5.0)	84.0
1979 Jul 10 1500:00	M-100	-	-	SHOK	Yu. M. Shokal'skiy	GMS79F	LP7	-	-	180.0E 0.0N (+/- 5.0)	86.0
1979 Jul 22 1200:00	M-100	-	-	SHOK	Yu. M. Shokal'skiy	GMS79F	LP8	-	-	180.0E 0.0N (+/- 5.0)	81.0

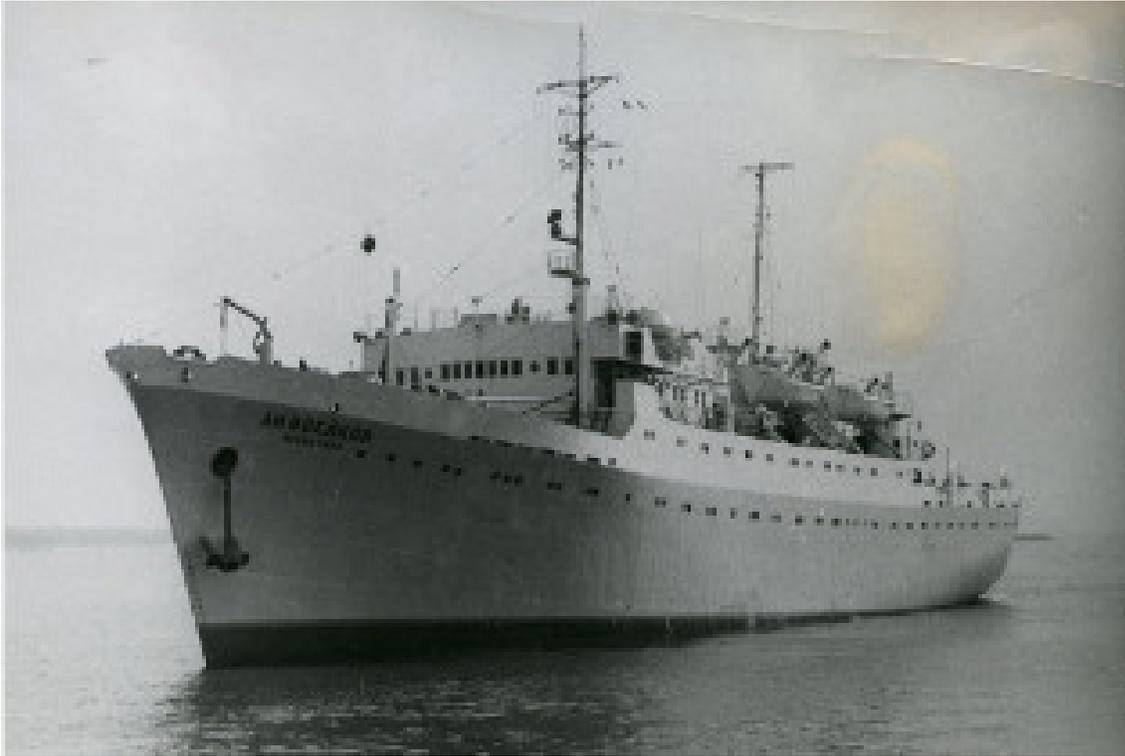
Launches: SHOK

Date	Rocket	Flight	Mission	Platform	Site	LP	AscSite	AsclP	Pos	Apogee
1979 Jul 22 1600:00	M-100	-	-	SHOK	Yu. M. Shokal'skiy	GMS79F	LP8	-	180.0E 0.0N (+/- 5.0)	82.0
1979 Jul 27 1200:00	M-100	-	-	SHOK	Yu. M. Shokal'skiy	GMS79F	LP9	-	180.0E 0.0N (+/- 5.0)	85.0
1979 Jul 27 1400:00	M-100	-	-	SHOK	Yu. M. Shokal'skiy	GMS79F	LP9	-	180.0E 0.0N (+/- 5.0)	87.0
1979 Aug 09 1400:00	M-100	-	-	SHOK	Yu. M. Shokal'skiy	GMS79F	LP10	-	180.0E 0.0N (+/- 5.0)	92.0
1979 Aug 10 1400:00	M-100	-	-	SHOK	Yu. M. Shokal'skiy	GMS79F	LP11	-	180.0E 0.0N (+/- 5.0)	85.0
1979 Aug 13 1400:00	M-100	-	-	SHOK	Yu. M. Shokal'skiy	GMS79F	LP4	-	180.0E 0.0N (+/- 5.0)	78.0
1979 Aug 17 1400:00	M-100	-	-	SHOK	Yu. M. Shokal'skiy	GMS79F	LP3	-	180.0E 0.0N (+/- 5.0)	87.0
1979 Aug 20 1400:00	M-100	-	-	SHOK	Yu. M. Shokal'skiy	GMS79F	LP12	-	180.0E 0.0N (+/- 5.0)	85.0
1979 Aug 23 1300:00	M-100	-	-	SHOK	Yu. M. Shokal'skiy	GMS79F	LP13	-	180.0E 0.0N (+/- 5.0)	85.0
1979 Aug 23 1400:00	M-100	-	-	SHOK	Yu. M. Shokal'skiy	GMS79F	LP13	-	180.0E 0.0N (+/- 5.0)	86.0
1979 Aug 25 1200:00	M-100	-	-	SHOK	Yu. M. Shokal'skiy	GMS79F	LP14	-	180.0E 0.0N (+/- 5.0)	85.0
1979 Aug 28 1200:00	M-100	-	-	SHOK	Yu. M. Shokal'skiy	GMS79F	LP2	-	180.0E 0.0N (+/- 5.0)	85.0
1979 Aug 28 1400:00	M-100	-	-	SHOK	Yu. M. Shokal'skiy	GMS79F	LP2	-	180.0E 0.0N (+/- 5.0)	85.0
1979 Aug 30 1200:00	M-100	-	-	SHOK	Yu. M. Shokal'skiy	GMS79F	LP15	-	180.0E 0.0N (+/- 5.0)	75.0
1979 Nov 02 1600:00	M-100	-	-	SHOK	Yu. M. Shokal'skiy	GMS79H	LP1	-	90.0E 0.0N (+/- 5.0)	86.0
1979 Nov 05 1500:00	M-100	-	-	SHOK	Yu. M. Shokal'skiy	GMS79H	LP2	-	90.0E 0.0N (+/- 5.0)	82.0
1979 Nov 05 1600:00	M-100	-	-	SHOK	Yu. M. Shokal'skiy	GMS79H	LP2	-	90.0E 0.0N (+/- 5.0)	81.0
1979 Nov 08 1700:00	M-100	-	-	SHOK	Yu. M. Shokal'skiy	GMS79H	LP3	-	90.0E 0.0N (+/- 5.0)	81.0
1979 Nov 11 1400:00	M-100	-	-	SHOK	Yu. M. Shokal'skiy	NER	-	-	90.0E 0.0N (+/- 2.0)	86.0
1979 Nov 11 1500:00	M-100	-	-	SHOK	Yu. M. Shokal'skiy	NER	-	-	90.0E 0.0N (+/- 2.0)	84.0
1979 Nov 11 1630:00	M-100	-	-	SHOK	Yu. M. Shokal'skiy	NER	-	-	90.0E 0.0N (+/- 2.0)	86.0
1979 Nov 11 1700:00	M-100	-	-	SHOK	Yu. M. Shokal'skiy	NER	-	-	90.0E 0.0N (+/- 2.0)	80.0
1979 Nov 12 1800:00	M-100	-	-	SHOK	Yu. M. Shokal'skiy	NER	-	-	90.0E 0.0N (+/- 2.0)	86.0
1979 Nov 12 1800:00	M-100	-	-	SHOK	Yu. M. Shokal'skiy	NER	-	-	90.0E 0.0N (+/- 2.0)	77.0
1979 Nov 13 1400:00	M-100	-	-	SHOK	Yu. M. Shokal'skiy	NER	-	-	90.0E 0.0N (+/- 2.0)	82.0
1979 Nov 13 1400:00	M-100	-	-	SHOK	Yu. M. Shokal'skiy	NER	-	-	90.0E 0.0N (+/- 2.0)	88.0
1979 Nov 13 1630:00	M-100	-	-	SHOK	Yu. M. Shokal'skiy	NER	-	-	90.0E 0.0N (+/- 2.0)	85.0
1979 Nov 13 1740:00	M-100	-	-	SHOK	Yu. M. Shokal'skiy	NER	-	-	90.0E 0.0N (+/- 2.0)	82.0
1979 Nov 14 1400:00	M-100	-	-	SHOK	Yu. M. Shokal'skiy	NER	-	-	90.0E 0.0N (+/- 2.0)	79.0
1979 Nov 14 1540:00	M-100	-	-	SHOK	Yu. M. Shokal'skiy	NER	-	-	90.0E 0.0N (+/- 2.0)	81.0
1979 Nov 14 1900:00	M-100	-	-	SHOK	Yu. M. Shokal'skiy	NER	-	-	90.0E 0.0N (+/- 2.0)	74.0
1979 Nov 14 2100:00	M-100	-	-	SHOK	Yu. M. Shokal'skiy	NER	-	-	90.0E 0.0N (+/- 2.0)	79.0
1979 Nov 15 2000:00	M-100	-	-	SHOK	Yu. M. Shokal'skiy	NER	-	-	90.0E 0.0N (+/- 2.0)	80.0
1979 Nov 15 2100:00	M-100	-	-	SHOK	Yu. M. Shokal'skiy	OJP	-	-	160.0E 0.0N (+/- 1.0)	85.0
1979 Dec 12 1700:00	M-100	-	-	SHOK	Yu. M. Shokal'skiy	OJP	-	-	160.0E 0.0N (+/- 1.0)	83.0
1979 Dec 19 1900:00	M-100	-	-	SHOK	Yu. M. Shokal'skiy	OJP	-	-	160.0E 0.0N (+/- 1.0)	69.0
1980 Jan 01 1400:00	M-100	-	-	SHOK	Yu. M. Shokal'skiy	GMS79H	LP4	-	90.0E 0.0N (+/- 5.0)	84.0
1980 Jan 05 1100:00	M-100	-	-	SHOK	Yu. M. Shokal'skiy	GMS79H	LP5	-	90.0E 0.0N (+/- 5.0)	76.0
1980 Jan 05 1200:00	M-100	-	-	SHOK	Yu. M. Shokal'skiy	GMS79H	LP5	-	90.0E 0.0N (+/- 5.0)	85.0

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#### IV.1.3.9 A. I. Voeykov

А.И. Воейков



Credit: -

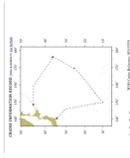
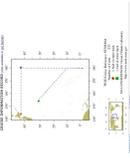
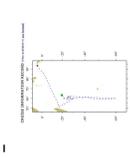
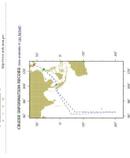
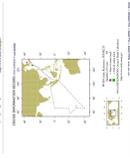
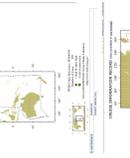
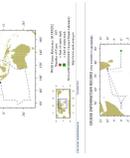
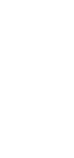
Note: In NSSDC/WDC-A/RS document 78-02, "Launch Summary 1973-77", and other derived NSSDC rocket databases, some M-100 launches in 1973 are associated with a ship called 'NOYEKOV'. It is now clear that this was a typo and these launches were from the Voeykov.

Note: the online version of the NSSDC rocket file available from GSFC in the 1990s alas did not retain ship-launch positions. I also understand the original records were discarded by WDC/A-RS, alas. The 1986 cruise has no corresponding entry in the NOAA OCL WOD lists, so we don't even know which ocean the launches were from.

Note: the association of the 1966 Dec expedition with the Voeykov is speculative.

Rockets used: M-100,M-100B

Updated: 2024 Nov 28 03:19:31

LC_Code	Active	Region	Cruises: VOKV Cruise	CruiseMap
GMS60A	1960 Jan 20 - 1960 Apr 1	Pacific Ocean	Voeykov Expedition 1, 1960 (SU015559)	
GMS60B	1960 Aug 1 - 1960 Aug 16	Pacific Ocean	Voeykov Expedition 2, 1960 (SU000044)	
GMS65B	1965 Apr 28 - 1965 Jun 20	Pacific Ocean	Voeykov Expedition 3, 1965	
GMS66B	1966 Dec 15 - 1967 Feb 5	Indian or Pacific Oceans?	Voeykov? Expedition 4, 1966-67	
GMS67A	1967 May 1 - 1967 Aug 15	Indian Ocean	Voeykov Expedition 5, 1967 (SU008398)	
GMS69A	1968 Dec 15 - 1969 Feb 15	Indian Ocean	Voeykov Expedition 6, 1968-69 (SU000260)	
GMS69F	1969 Sep 15 - 1969 Oct 31	Indian Ocean	Voeykov Expedition 7, 1969 (SU000215)	
GMS70D	1970 Nov 1 - 1971 Jan 20	Indian and Pacific Oceans	Voeykov Expedition 9, 1970 (SU000292)	
GMS70F	1970 Mar 1 - 1970 Apr 20	Indian Ocean	Voeykov Expedition 8, 1970 (SU000345)	
GMS73B	1973 May 15 - 1973 Jul 31	Indian Ocean	Voeykov Expedition 10, 1973 (SU000433)	

LC_Code	Active	Region	Cruises: VOKV Cruise	CruiseMap
GMS73E	1973 Oct 1 - 1973 Dec 15	Pacific Ocean	Voeykov Expedition 11, 1973 (SU000434)	
GMS82E	1982 Nov 15 - 1983 Jan 1	Indian Ocean	Voeykov Expedition 12, 1982	
GMS83C	1983 Aug 15 - 1983 Sep 15	Indian Ocean	Voeykov Expedition 13, 1983	
GMS86C	1986 Aug 1 - 1986 Aug 31	Pacific or Indian Ocean?	Voeykov Expedition 14, 1986	
GMS87D	1987 May 15 - 1987 Jun 30	Pacific Ocean	Voeykov Expedition 15, 1987	



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Updated: 2024 Nov 28 03:19:31

Launches: VOKV

Date	Rocket	Flight	Mission	PlatCode	Platform	Site	LP	AscSite	AscLP	Pos	Apogee
1960 Jan 24 0659:59	M-100	-	-	VOKV	A. I. Voeykov	GMS60A	M9002	-	-	175.7E 36.7N (+/- 5.0)	44.0
1960 Jan 30 1154:00	M-100	-	-	VOKV	A. I. Voeykov	GMS60A	M9003	-	-	175.7E 36.7N (+/- 5.0)	42.0
1960 Feb 1 1030:00	M-100	-	-	VOKV	A. I. Voeykov	GMS60A	M9004	-	-	175.7E 36.7N (+/- 5.0)	45.0
1960 Feb 2 1037:59	M-100	-	-	VOKV	A. I. Voeykov	GMS60A	M9005	-	-	175.7E 36.7N (+/- 5.0)	46.0
1960 Feb 3 1121:00	M-100	-	-	VOKV	A. I. Voeykov	GMS60A	M9006	-	-	175.7E 36.7N (+/- 5.0)	43.0
1960 Feb 4 1100:00	M-100	-	-	VOKV	A. I. Voeykov	GMS60A	M9007	-	-	175.7E 36.7N (+/- 5.0)	44.0
1960 Feb 5 1100:00	M-100	-	-	VOKV	A. I. Voeykov	GMS60A	M9008	-	-	175.7E 36.7N (+/- 5.0)	38.0
1960 Feb 6 1100:00	M-100	-	-	VOKV	A. I. Voeykov	GMS60A	M9009	-	-	175.7E 36.7N (+/- 5.0)	38.0
1960 Feb 7 1103:59	M-100	-	-	VOKV	A. I. Voeykov	GMS60A	M9010	-	-	175.7E 36.7N (+/- 5.0)	44.0
1960 Feb 8 1102:00	M-100	-	-	VOKV	A. I. Voeykov	GMS60A	M9011	-	-	175.7E 36.7N (+/- 5.0)	43.0
1960 Feb 9 1107:00	M-100	-	-	VOKV	A. I. Voeykov	GMS60A	M9012	-	-	175.7E 36.7N (+/- 5.0)	42.0
1960 Feb 10 1200:00	M-100	-	-	VOKV	A. I. Voeykov	GMS60A	M9013	-	-	175.7E 36.7N (+/- 5.0)	42.0
1960 Feb 11 1100:00	M-100	-	-	VOKV	A. I. Voeykov	GMS60A	M9014	-	-	175.7E 36.7N (+/- 5.0)	42.0
1960 Feb 12 1054:59	M-100	-	-	VOKV	A. I. Voeykov	GMS60A	M9015	-	-	175.7E 36.7N (+/- 5.0)	35.0
1960 Feb 13 0855:00	M-100	-	-	VOKV	A. I. Voeykov	GMS60A	M9016	-	-	175.7E 36.7N (+/- 5.0)	42.0
1960 Mar 12 1100:00	M-100	-	-	VOKV	A. I. Voeykov	GMS60A	M9017	-	-	175.7E 36.7N (+/- 5.0)	41.0
1960 Mar 15 1100:00	M-100	-	-	VOKV	A. I. Voeykov	GMS60A	M9018	-	-	175.7E 36.7N (+/- 5.0)	42.0
1960 Mar 18 1100:00	M-100	-	-	VOKV	A. I. Voeykov	GMS60A	M9019	-	-	175.7E 36.7N (+/- 5.0)	45.0
1960 Mar 24 1100:00	M-100	-	-	VOKV	A. I. Voeykov	GMS60A	M9020	-	-	175.7E 36.7N (+/- 5.0)	43.0
1960 Mar 27 1100:00	M-100	-	-	VOKV	A. I. Voeykov	GMS60A	M9021	-	-	175.7E 36.7N (+/- 5.0)	45.0
1960 Mar 30 1100:00	M-100	-	-	VOKV	A. I. Voeykov	GMS60A	M9022	-	-	175.7E 36.7N (+/- 5.0)	45.0
1960 Mar 31 1100:00	M-100	-	-	VOKV	A. I. Voeykov	GMS60A	M9023	-	-	175.7E 36.7N (+/- 5.0)	44.0
1960 Aug 1 1100:00	M-100	-	-	VOKV	A. I. Voeykov	GMS60B	M9024	-	-	175.7E 36.7N (+/- 5.0)	42.0
1960 Aug 2 1100:00	M-100	-	-	VOKV	A. I. Voeykov	GMS60B	M9025	-	-	175.7E 36.7N (+/- 5.0)	44.0
1960 Aug 3 1100:00	M-100	-	-	VOKV	A. I. Voeykov	GMS60B	M9026	-	-	175.7E 36.7N (+/- 5.0)	40.0
1960 Aug 5 1100:00	M-100	-	-	VOKV	A. I. Voeykov	GMS60B	M9027	-	-	175.7E 36.7N (+/- 5.0)	43.0
1960 Aug 6 1100:00	M-100	-	-	VOKV	A. I. Voeykov	GMS60B	M9028	-	-	175.7E 36.7N (+/- 5.0)	44.0
1960 Aug 9 1100:00	M-100	-	-	VOKV	A. I. Voeykov	GMS60B	M9029	-	-	175.7E 36.7N (+/- 5.0)	43.0
1960 Aug 12 1100:00	M-100	-	-	VOKV	A. I. Voeykov	GMS60B	M9030	-	-	175.7E 36.7N (+/- 5.0)	39.0
1960 Aug 13 1100:00	M-100	-	-	VOKV	A. I. Voeykov	GMS60B	M9031	-	-	175.7E 36.7N (+/- 5.0)	33.0
1960 Aug 14 1100:00	M-100	-	-	VOKV	A. I. Voeykov	GMS60B	M9032	-	-	175.7E 36.7N (+/- 5.0)	47.0
1960 Aug 15 2300:00	M-100	-	-	VOKV	A. I. Voeykov	GMS60B	M9033	-	-	175.7E 36.7N (+/- 5.0)	44.0
1965 Apr 30 1030	M-100	-	-	VOKV	A. I. Voeykov	GMS65B	LP2	-	-	150.0W 0.0N (+/- 5.0)	85.0
1965 Apr 30 1417:30	M-100	-	-	VOKV	A. I. Voeykov	GMS65B	LP1	-	-	150.0W 0.0N (+/- 5.0)	85.0
1965 May 1 1124	M-100	-	-	VOKV	A. I. Voeykov	GMS65B	LP3	-	-	150.0W 0.0N (+/- 5.0)	85.0
1965 May 4 0941	M-100	-	-	VOKV	A. I. Voeykov	GMS65B	LP5	-	-	150.0W 0.0N (+/- 5.0)	85.0
1965 May 4 1211	M-100	-	-	VOKV	A. I. Voeykov	GMS65B	LP4	-	-	150.0W 0.0N (+/- 5.0)	85.0
1965 May 6 0858	M-100	-	-	VOKV	A. I. Voeykov	GMS65B	LP6	-	-	150.0W 0.0N (+/- 5.0)	85.0
1965 May 7 0957	M-100	-	-	VOKV	A. I. Voeykov	GMS65B	LP7	-	-	150.0W 0.0N (+/- 5.0)	85.0
1965 May 8 1351:00	M-100	-	-	VOKV	A. I. Voeykov	GMS65B	LP8	-	-	150.0W 0.0N (+/- 5.0)	85.0
1965 May 9 0859	M-100	-	-	VOKV	A. I. Voeykov	GMS65B	LP9	-	-	150.0W 0.0N (+/- 5.0)	85.0
1965 May 9 1351	M-100	-	-	VOKV	A. I. Voeykov	GMS65B	LP8	-	-	150.0W 0.0N (+/- 5.0)	85.0
1965 May 10 0943	M-100	-	-	VOKV	A. I. Voeykov	GMS65B	LP10	-	-	150.0W 0.0N (+/- 5.0)	85.0
1965 May 11 0959	M-100	-	-	VOKV	A. I. Voeykov	GMS65B	LP11	-	-	150.0W 0.0N (+/- 5.0)	85.0
1965 May 12 0905	M-100	-	-	VOKV	A. I. Voeykov	GMS65B	LP12	-	-	150.0W 0.0N (+/- 5.0)	85.0
1965 May 14 0859	M-100	-	-	VOKV	A. I. Voeykov	GMS65B	LP13	-	-	150.0W 0.0N (+/- 5.0)	85.0
1965 May 15 0913	M-100	-	-	VOKV	A. I. Voeykov	GMS65B	LP14	-	-	150.0W 0.0N (+/- 5.0)	85.0
1965 May 26 1058	M-100	-	-	VOKV	A. I. Voeykov	GMS65B	LP15	-	-	150.0W 0.0N (+/- 5.0)	85.0
1965 May 28 2203	M-100	-	-	VOKV	A. I. Voeykov	GMS65B	LP16	-	-	150.0W 0.0N (+/- 5.0)	85.0
1965 May 29 2206	M-100	-	-	VOKV	A. I. Voeykov	GMS65B	LP17	-	-	150.0W 0.0N (+/- 5.0)	85.0
1965 May 30 2201	M-100	-	-	VOKV	A. I. Voeykov	GMS65B	LP18	-	-	150.0W 0.0N (+/- 5.0)	85.0
1965 Jun 2 2309	M-100	-	-	VOKV	A. I. Voeykov	GMS65B	LP19	-	-	150.0W 0.0N (+/- 5.0)	85.0
1965 Jun 2 1445	M-100	-	-	VOKV	A. I. Voeykov	GMS65B	LP20	-	-	150.0W 0.0N (+/- 5.0)	85.0
1965 Jun 3 1232	M-100	-	-	VOKV	A. I. Voeykov	GMS65B	LP21	-	-	150.0W 0.0N (+/- 5.0)	85.0
1965 Jun 4 1206	M-100	-	-	VOKV	A. I. Voeykov	GMS65B	LP22	-	-	150.0W 0.0N (+/- 5.0)	85.0

Launches: VOKV

Date	Rocket	Flight	Mission	PlatCode	Platform	Site	LP	AscSite	AscLP	Pos	Apogee
1965 Jun 5 1155	M-100	-	-	VOKV	A. I. Voeykov	GMS66B	LP23	-	-	150.0W 0.0N (+/- 5.0)	85.0
1965 Jun 6 1200	M-100	-	-	VOKV	A. I. Voeykov	GMS66B	LP24	-	-	150.0W 0.0N (+/- 5.0)	85.0
1965 Jun 7 1158	M-100	-	-	VOKV	A. I. Voeykov	GMS66B	LP25	-	-	150.0W 0.0N (+/- 5.0)	85.0
1965 Jun 8 1235	M-100	-	-	VOKV	A. I. Voeykov	GMS66B	LP26	-	-	150.0W 0.0N (+/- 5.0)	85.0
1965 Jun 9 1216	M-100	-	-	VOKV	A. I. Voeykov	GMS66B	LP27	-	-	150.0W 0.0N (+/- 5.0)	85.0
1965 Jun 10 1201	M-100	-	-	VOKV	A. I. Voeykov	GMS66B	LP28	-	-	150.0W 0.0N (+/- 5.0)	85.0
1965 Jun 11 1200	M-100	-	-	VOKV	A. I. Voeykov	GMS66B	LP29	-	-	150.0W 0.0N (+/- 5.0)	85.0
1965 Jun 13 1205	M-100	-	-	VOKV	A. I. Voeykov	GMS66B	LP31	-	-	150.0W 0.0N (+/- 5.0)	85.0
1965 Jun 13 1525	M-100	-	-	VOKV	A. I. Voeykov	GMS66B	LP30	-	-	150.0W 0.0N (+/- 5.0)	85.0
1965 Jun 14 1217	M-100	-	-	VOKV	A. I. Voeykov	GMS66B	LP32	-	-	150.0W 0.0N (+/- 5.0)	85.0
1965 Jun 15 1127	M-100	-	-	VOKV	A. I. Voeykov	GMS66B	LP33	-	-	150.0W 0.0N (+/- 5.0)	85.0
1965 Jun 19 1251	M-100	-	-	VOKV	A. I. Voeykov	GMS66B	LP34	-	-	150.0W 0.0N (+/- 5.0)	52.0
1966 Dec 19 1501:59	M-100	-	-	VOKV	A. I. Voeykov	GMS66B	M9193	-	-	-	78.0
1966 Dec 21 1121:00	M-100	-	-	VOKV	A. I. Voeykov	GMS66B	M9199	-	-	-	50.0
1966 Dec 25 0847:00	M-100	-	-	VOKV	A. I. Voeykov	GMS66B	M9194	-	-	-	80.0
1966 Dec 26 0912:59	M-100	-	-	VOKV	A. I. Voeykov	GMS66B	M9195	-	-	-	80.0
1966 Dec 27 2046:00	M-100	-	-	VOKV	A. I. Voeykov	GMS66B	M9196	-	-	-	78.0
1966 Dec 29 0830:00	M-100	-	-	VOKV	A. I. Voeykov	GMS66B	M9197	-	-	-	78.0
1966 Dec 30 0830:00	M-100	-	-	VOKV	A. I. Voeykov	GMS66B	M9198	-	-	-	42.0
1967 Jan 1 0732:59	M-100	-	-	VOKV	A. I. Voeykov	GMS66B	M9192	-	-	-	39.0
1967 Jan 3 0800:00	M-100	-	-	VOKV	A. I. Voeykov	GMS66B	M9191	-	-	-	64.0
1967 Jan 4 0912:59	M-100	-	-	VOKV	A. I. Voeykov	GMS66B	M9190	-	-	-	78.0
1967 Jan 4 0959:59	M-100	-	-	VOKV	A. I. Voeykov	GMS66B	M9209	-	-	-	83.0
1967 Jan 5 0834:00	M-100	-	-	VOKV	A. I. Voeykov	GMS66B	M9189	-	-	-	78.0
1967 Jan 6 0803:00	M-100	-	-	VOKV	A. I. Voeykov	GMS66B	M9188	-	-	-	180.0
1967 Jan 6 0959:59	M-100	-	-	VOKV	A. I. Voeykov	GMS66B	M9208	-	-	-	85.0
1967 Jan 6 2153:00	M-100	-	-	VOKV	A. I. Voeykov	GMS66B	M9187	-	-	-	45.0
1967 Jan 7 0853:00	M-100	-	-	VOKV	A. I. Voeykov	GMS66B	M9186	-	-	-	44.0
1967 Jan 8 1002:59	M-100	-	-	VOKV	A. I. Voeykov	GMS66B	M9185	-	-	-	80.0
1967 Jan 10 0904:59	M-100	-	-	VOKV	A. I. Voeykov	GMS66B	M9184	-	-	-	75.0
1967 Jan 10 1009:59	M-100	-	-	VOKV	A. I. Voeykov	GMS66B	M9210	-	-	-	83.0
1967 Jan 11 0920:00	M-100	-	-	VOKV	A. I. Voeykov	GMS66B	M9183	-	-	-	48.0
1967 Jan 14 1911:59	M-100	-	-	VOKV	A. I. Voeykov	GMS66B	M9207	-	-	-	84.0
1967 Jan 17 0944:00	M-100	-	-	VOKV	A. I. Voeykov	GMS66B	M9182	-	-	-	33.0
1967 Jan 18 0922:59	M-100	-	-	VOKV	A. I. Voeykov	GMS66B	M9181	-	-	-	80.0
1967 Jan 19 1134:00	M-100	-	-	VOKV	A. I. Voeykov	GMS66B	M9180	-	-	-	80.0
1967 Jan 21 1104:59	M-100	-	-	VOKV	A. I. Voeykov	GMS66B	M9200	-	-	-	50.0
1967 Jan 23 1030:00	M-100	-	-	VOKV	A. I. Voeykov	GMS66B	M9179	-	-	-	58.0
1967 Jan 24 1048:59	M-100	-	-	VOKV	A. I. Voeykov	GMS66B	M9178	-	-	-	80.0
1967 Jan 26 1100:00	M-100	-	-	VOKV	A. I. Voeykov	GMS66B	M9173	-	-	-	80.0
1967 Jan 27 1108:00	M-100	-	-	VOKV	A. I. Voeykov	GMS66B	M9174	-	-	-	70.0
1967 Jan 28 1113:00	M-100	-	-	VOKV	A. I. Voeykov	GMS66B	M9175	-	-	-	78.0
1967 Jan 30 1113:00	M-100	-	-	VOKV	A. I. Voeykov	GMS66B	M9177	-	-	-	78.0
1967 Feb 1 1133:00	M-100	-	-	VOKV	A. I. Voeykov	GMS66B	M9176	-	-	-	80.0
1967 Feb 4 1055:59	M-100	-	-	VOKV	A. I. Voeykov	GMS66B	M9170	-	-	-	80.0
1967 May 7 1526	M-100	-	-	VOKV	A. I. Voeykov	GMS67A	LP1	-	-	90.0E 0.0N (+/- 5.0)	90.0
1967 May 14 1720	M-100	-	-	VOKV	A. I. Voeykov	GMS67A	LP2	-	-	90.0E 0.0N (+/- 5.0)	90.0
1967 Jun 13 1636	M-100	-	-	VOKV	A. I. Voeykov	GMS67A	LP3	-	-	90.0E 0.0N (+/- 5.0)	90.0
1967 Jun 15 1638:00	M-100	-	-	VOKV	A. I. Voeykov	GMS67A	LP4	-	-	90.0E 0.0N (+/- 5.0)	90.0
1967 Jun 17 1628	M-100	-	-	VOKV	A. I. Voeykov	GMS67A	LP5	-	-	90.0E 0.0N (+/- 5.0)	90.0
1967 Jun 17 2115	M-100	-	-	VOKV	A. I. Voeykov	GMS67A	LP6	-	-	90.0E 0.0N (+/- 5.0)	90.0
1967 Aug 11 2025	M-100	-	-	VOKV	A. I. Voeykov	GMS67A	LP7	-	-	90.0E 0.0N (+/- 5.0)	90.0
1968 Dec 26 1559:59	M-100	-	-	VOKV	A. I. Voeykov	IOLZ	RDDR	-	-	65.0E 0.0N (+/- 2.0)	80.0
1968 Dec 26 2330:00	M-100	-	-	VOKV	A. I. Voeykov	IOLZ	RDDR	-	-	65.0E 0.0N (+/- 2.0)	74.0
1968 Dec 27 0511:00	M-100	-	-	VOKV	A. I. Voeykov	IOLZ	RDDR	-	-	65.0E 0.0N (+/- 2.0)	80.0

Launches: VOKV

Date	Rocket	Flight	Mission	Platform	Site	LP	AscSite	AscLP	Pos	Apogee
1968 Dec 30 0502:00	M-100	-	-	A. I. Voeykov	IOLZ	RDDR	-	-	65.0E 0.0N (+/- 2.0)	78.0
1968 Dec 30 1100:00	M-100	-	-	A. I. Voeykov	IOLZ	RDDR	-	-	65.0E 0.0N (+/- 2.0)	80.0
1968 Dec 30 1549:59	M-100	-	-	A. I. Voeykov	IOLZ	RDDR	-	-	65.0E 0.0N (+/- 2.0)	80.0
1968 Dec 30 1753:00	M-100	-	-	A. I. Voeykov	IOLZ	RDDR	-	-	65.0E 0.0N (+/- 2.0)	74.0
1968 Dec 30 2351:00	M-100	-	-	A. I. Voeykov	IOLZ	RDDR	-	-	65.0E 0.0N (+/- 2.0)	80.0
1969 Jan 2 0350	M-100	-	-	A. I. Voeykov	IOLZ	RDDR	-	-	65.0E 0.0N (+/- 2.0)	89.0
1969 Jan 2 0942	M-100	-	-	A. I. Voeykov	IOLZ	RDDR	-	-	65.0E 0.0N (+/- 2.0)	88.0
1969 Jan 2 1645	M-100	-	-	A. I. Voeykov	GMS69A	M9127	-	-	65.0E 20.0S (+/- 5.0)	91.0
1969 Jan 3 0000	M-100	-	-	A. I. Voeykov	GMS69A	M9127	-	-	65.0E 20.0S (+/- 5.0)	91.0
1969 Jan 7 0300	M-100	-	-	A. I. Voeykov	GMS69A	M9127	-	-	65.0E 20.0S (+/- 5.0)	94.0
1969 Jan 7 1000	M-100	-	-	A. I. Voeykov	GMS69A	M9127	-	-	65.0E 20.0S (+/- 5.0)	90.0
1969 Jan 11 1000	M-100	-	-	A. I. Voeykov	GMS69A	M9127	-	-	65.0E 20.0S (+/- 5.0)	92.0
1969 Jan 11 1630	M-100	-	-	A. I. Voeykov	GMS69A	M9127	-	-	65.0E 20.0S (+/- 5.0)	92.0
1969 Jan 11 2200	M-100	-	-	A. I. Voeykov	GMS69A	M9127	-	-	65.0E 20.0S (+/- 5.0)	89.0
1969 Jan 23 0350	M-100	-	-	A. I. Voeykov	GMS69A	M9127	-	-	65.0E 20.0S (+/- 5.0)	93.0
1969 Jan 23 0948	M-100	-	-	A. I. Voeykov	GMS69A	M9127	-	-	65.0E 20.0S (+/- 5.0)	93.0
1969 Jan 23 2149	M-100	-	-	A. I. Voeykov	GMS69A	M9127	-	-	65.0E 20.0S (+/- 5.0)	94.0
1969 Jan 24 1558	M-100	-	-	A. I. Voeykov	GMS69A	M9127	-	-	65.0E 20.0S (+/- 5.0)	87.0
1969 Jan 27 0353	M-100	-	-	A. I. Voeykov	GMS69A	M9127	-	-	65.0E 20.0S (+/- 5.0)	91.0
1969 Jan 27 0945	M-100	-	-	A. I. Voeykov	GMS69A	M9127	-	-	65.0E 20.0S (+/- 5.0)	92.0
1969 Jan 27 1545	M-100	-	-	A. I. Voeykov	GMS69A	M9127	-	-	65.0E 20.0S (+/- 5.0)	96.0
1969 Jan 27 2145	M-100	-	-	A. I. Voeykov	GMS69A	M9127	-	-	65.0E 20.0S (+/- 5.0)	96.0
1969 Jan 28 1852:00	M-100	-	-	A. I. Voeykov	GMS69A	M9127	-	-	65.0E 20.0S (+/- 5.0)	92.0
1969 Jan 30 1003:00	M-100	-	-	A. I. Voeykov	GMS69A	M9127	-	-	65.0E 20.0S (+/- 5.0)	91.0
1969 Jan 30 2004:00	M-100	-	-	A. I. Voeykov	GMS69A	M9127	-	-	65.0E 20.0S (+/- 5.0)	92.0
1969 Jan 31 1900:00	M-100	-	-	A. I. Voeykov	IOLZ	I06540	-	-	65.0E 0.0N (+/- 2.0)	91.0
1969 Feb 01 1900:00	M-100	-	MR-12	A. I. Voeykov	GMS69A	M9205	-	-	65.0E 20.0S (+/- 5.0)	87.0
1969 Feb 02 1900:00	M-100	-	MR-12	A. I. Voeykov	GMS69A	M9204	-	-	65.0E 20.0S (+/- 5.0)	84.0
1969 Feb 03 2000:00	M-100	-	MR-12	A. I. Voeykov	KER	M9128	-	-	70.2E 49.4S (+/- 0.0)	90.0
1969 Feb 04 2000:00	M-100	-	MR-12	A. I. Voeykov	GMS69A	M9203	-	-	65.0E 20.0S (+/- 5.0)	98.0
1969 Feb 05 2000:00	M-100	-	-	A. I. Voeykov	GMS69A	M9201	-	-	65.0E 20.0S (+/- 5.0)	90.0
1969 Feb 06 1745:00	M-100	-	-	A. I. Voeykov	GMS69A	M9202	-	-	65.0E 20.0S (+/- 5.0)	95.0
1969 Feb 06 2000:00	M-100	-	-	A. I. Voeykov	IOLZ	I065	-	-	65.0E 0.0N (+/- 2.0)	88.0
1969 Sep 16 1950:00	M-100	-	-	A. I. Voeykov	IOLZ	I065	-	-	65.0E 0.0N (+/- 2.0)	90.0
1969 Sep 16 2143:00	M-100	-	-	A. I. Voeykov	IOLZ	I065	-	-	65.0E 0.0N (+/- 2.0)	90.0
1969 Sep 17 1950:00	M-100	-	-	A. I. Voeykov	IOLZ	I065	-	-	65.0E 0.0N (+/- 2.0)	90.0
1969 Sep 17 2140:00	M-100	-	-	A. I. Voeykov	IOLZ	I065	-	-	65.0E 0.0N (+/- 2.0)	87.0
1969 Sep 18 1145:00	M-100	-	-	A. I. Voeykov	IOLZ	I065	-	-	65.0E 0.0N (+/- 2.0)	89.0
1969 Sep 18 2159:00	M-100	-	-	A. I. Voeykov	IOLZ	I065	-	-	65.0E 0.0N (+/- 2.0)	87.0
1969 Sep 18 2308:00	M-100	-	-	A. I. Voeykov	IOLZ	I065	-	-	65.0E 0.0N (+/- 2.0)	89.0
1969 Sep 19 2010:00	M-100	-	-	A. I. Voeykov	IOLZ	I065	-	-	65.0E 0.0N (+/- 2.0)	88.0
1969 Sep 19 2232:00	M-100	-	-	A. I. Voeykov	IOLZ	I065	-	-	65.0E 0.0N (+/- 2.0)	88.0
1969 Sep 20 1007:00	M-100	-	-	A. I. Voeykov	IOLZ	I065	-	-	65.0E 0.0N (+/- 2.0)	77.0
1969 Sep 20 2008:00	M-100	-	-	A. I. Voeykov	IOLZ	I065	-	-	65.0E 0.0N (+/- 2.0)	90.0
1969 Sep 25 2315:00	M-100	-	-	A. I. Voeykov	IOLZ	RDDR	-	-	65.0E 0.0N (+/- 2.0)	90.0
1969 Sep 26 2005:00	M-100	-	-	A. I. Voeykov	IOLZ	RDDR	-	-	65.0E 0.0N (+/- 2.0)	89.0
1969 Sep 26 2200:00	M-100	-	-	A. I. Voeykov	IOLZ	RDDR	-	-	65.0E 0.0N (+/- 2.0)	91.0
1969 Sep 27 1900	M-100	-	-	A. I. Voeykov	IOLZ	RDDR	-	-	65.0E 0.0N (+/- 2.0)	88.0
1969 Sep 28 2003	M-100	-	-	A. I. Voeykov	IOLZ	RDDR	-	-	65.0E 0.0N (+/- 2.0)	89.0
1969 Sep 28 2200	M-100	-	-	A. I. Voeykov	IOLZ	RDDR	-	-	65.0E 0.0N (+/- 2.0)	90.0
1969 Sep 29 2123:00	M-100	-	-	A. I. Voeykov	IOLZ	RDDR	-	-	65.0E 0.0N (+/- 2.0)	88.0
1969 Sep 29 2231:00	M-100	-	-	A. I. Voeykov	IOLZ	RDDR	-	-	65.0E 0.0N (+/- 2.0)	89.0
1969 Oct 11 2000:00	M-100	-	-	A. I. Voeykov	IOLZ	IOSWR	-	-	65.0E 0.0N (+/- 2.0)	87.0
1969 Oct 11 2154:00	M-100	-	-	A. I. Voeykov	IOLZ	IOSWR	-	-	65.0E 0.0N (+/- 2.0)	88.0
1969 Oct 12 1950:00	M-100	-	-	A. I. Voeykov	IOLZ	IOSWR	-	-	65.0E 0.0N (+/- 2.0)	88.0

Launches: VOKV

Date	Flight	Mission	Platform	Site	LP	AscSite	AscLP	Pos	Apogee
1969 Oct 12 21:44:00	-	-	VOKV	IOLZ	IOSWR	-	-	65.0E 0.0N (+/- 2.0)	87.0
1969 Oct 13 19:55:00	-	-	VOKV	IOLZ	IOSWR	-	-	65.0E 0.0N (+/- 2.0)	87.0
1969 Oct 13 21:55:00	-	-	VOKV	IOLZ	IOSWR	-	-	65.0E 0.0N (+/- 2.0)	87.0
1969 Oct 14 21:45:00	-	-	VOKV	IOLZ	IOSWR	-	-	65.0E 0.0N (+/- 2.0)	87.0
1969 Oct 15 19:57:00	-	-	VOKV	IOLZ	IOSWR	-	-	65.0E 0.0N (+/- 2.0)	89.0
1969 Oct 15 21:45:00	-	-	VOKV	IOLZ	IOSWR	-	-	65.0E 0.0N (+/- 2.0)	93.0
1969 Oct 18 21:36:00	-	-	VOKV	IOLZ	I06540	-	-	65.0E 0.0N (+/- 2.0)	88.0
1969 Oct 18 22:36:00	-	-	VOKV	IOLZ	I06540	-	-	65.0E 0.0N (+/- 2.0)	87.0
1969 Oct 19 19:06:00	-	-	VOKV	IOLZ	I06540	-	-	65.0E 0.0N (+/- 2.0)	91.0
1969 Oct 19 22:00:00	-	-	VOKV	IOLZ	I06540	-	-	65.0E 0.0N (+/- 2.0)	83.0
1969 Oct 20 19:20:00	-	-	VOKV	IOLZ	I06540	-	-	65.0E 0.0N (+/- 2.0)	95.0
1969 Oct 20 22:17:00	-	-	VOKV	IOLZ	I06540	-	-	65.0E 0.0N (+/- 2.0)	94.0
1969 Oct 21 09:49:00	-	-	VOKV	IOLZ	I06540	-	-	65.0E 0.0N (+/- 2.0)	89.0
1969 Oct 21 18:54:00	-	-	VOKV	IOLZ	I06540	-	-	65.0E 0.0N (+/- 2.0)	88.0
1969 Oct 21 20:58:00	-	-	VOKV	IOLZ	I06540	-	-	65.0E 0.0N (+/- 2.0)	88.0
1970 Mar 08 20:10:00	-	-	VOKV	IOLZ	I065	-	-	65.0E 0.0N (+/- 2.0)	85.0
1970 Mar 08 22:11:00	-	-	VOKV	IOLZ	I065	-	-	65.0E 0.0N (+/- 2.0)	85.0
1970 Mar 10 20:34:00	-	-	VOKV	IOLZ	I065	-	-	65.0E 0.0N (+/- 2.0)	96.0
1970 Mar 10 22:42:00	-	-	VOKV	IOLZ	I065	-	-	65.0E 0.0N (+/- 2.0)	94.0
1970 Mar 11 19:54:00	-	-	VOKV	IOLZ	I065	-	-	65.0E 0.0N (+/- 2.0)	94.0
1970 Mar 11 21:44:00	-	-	VOKV	IOLZ	I065	-	-	65.0E 0.0N (+/- 2.0)	96.0
1970 Mar 12 20:25:00	-	-	VOKV	IOLZ	I065	-	-	65.0E 0.0N (+/- 2.0)	94.0
1970 Mar 12 21:54:00	-	-	VOKV	IOLZ	I065	-	-	65.0E 0.0N (+/- 2.0)	91.0
1970 Mar 13 20:13:00	-	-	VOKV	IOLZ	I065	-	-	65.0E 0.0N (+/- 2.0)	92.0
1970 Mar 13 21:34:00	-	-	VOKV	IOLZ	I065	-	-	65.0E 0.0N (+/- 2.0)	90.0
1970 Mar 24 19:23:00	-	-	VOKV	IOLZ	RDR	-	-	65.0E 0.0N (+/- 2.0)	94.0
1970 Mar 24 21:32:00	-	-	VOKV	IOLZ	RDR	-	-	65.0E 0.0N (+/- 2.0)	93.0
1970 Mar 25 19:47:00	-	-	VOKV	IOLZ	RDR	-	-	65.0E 0.0N (+/- 2.0)	85.0
1970 Mar 25 20:59:00	-	-	VOKV	IOLZ	RDR	-	-	65.0E 0.0N (+/- 2.0)	94.0
1970 Mar 26 20:32:00	-	-	VOKV	IOLZ	RDR	-	-	65.0E 0.0N (+/- 2.0)	91.0
1970 Mar 26 21:20:00	-	-	VOKV	IOLZ	RDR	-	-	65.0E 0.0N (+/- 2.0)	90.0
1970 Mar 29 19:53:00	-	-	VOKV	IOLZ	RDR	-	-	65.0E 0.0N (+/- 2.0)	89.0
1970 Mar 29 21:37:00	-	-	VOKV	IOLZ	RDR	-	-	65.0E 0.0N (+/- 2.0)	92.0
1970 Mar 30 19:56:00	-	-	VOKV	IOLZ	RDR	-	-	65.0E 0.0N (+/- 2.0)	93.0
1970 Apr 06 19:54:00	-	-	VOKV	IOLZ	IOSWR	-	-	65.0E 0.0N (+/- 2.0)	95.0
1970 Apr 06 21:45:00	-	-	VOKV	IOLZ	IOSWR	-	-	65.0E 0.0N (+/- 2.0)	88.0
1970 Apr 07 19:31:00	-	-	VOKV	IOLZ	IOSWR	-	-	65.0E 0.0N (+/- 2.0)	91.0
1970 Apr 08 19:40:00	-	-	VOKV	IOLZ	IOSWR	-	-	65.0E 0.0N (+/- 2.0)	92.0
1970 Apr 08 21:30:00	-	-	VOKV	IOLZ	IOSWR	-	-	65.0E 0.0N (+/- 2.0)	92.0
1970 Apr 09 19:49:00	-	-	VOKV	IOLZ	IOSWR	-	-	65.0E 0.0N (+/- 2.0)	94.0
1970 Apr 09 21:10:00	-	-	VOKV	IOLZ	IOSWR	-	-	65.0E 0.0N (+/- 2.0)	95.0
1970 Apr 10 19:31:00	-	-	VOKV	IOLZ	IOSWR	-	-	65.0E 0.0N (+/- 2.0)	94.0
1970 Apr 13 20:00:00	-	-	VOKV	IOLZ	I06540	-	-	65.0E 0.0N (+/- 2.0)	93.0
1970 Apr 14 20:00:00	-	-	VOKV	IOLZ	I06540	-	-	65.0E 0.0N (+/- 2.0)	87.0
1970 Apr 15 19:25:00	-	-	VOKV	IOLZ	I06540	-	-	65.0E 0.0N (+/- 2.0)	92.0
1970 Apr 15 21:26:00	-	-	VOKV	IOLZ	I06540	-	-	65.0E 0.0N (+/- 2.0)	95.0
1970 Apr 16 19:50:00	-	-	VOKV	IOLZ	I06540	-	-	65.0E 0.0N (+/- 2.0)	96.0
1970 Apr 16 21:28:00	-	-	VOKV	IOLZ	I06540	-	-	65.0E 0.0N (+/- 2.0)	95.0
1970 Apr 17 19:40:00	-	-	VOKV	IOLZ	I06540	-	-	65.0E 0.0N (+/- 2.0)	92.0
1970 Apr 17 21:27:00	-	-	VOKV	IOLZ	I06540	-	-	65.0E 0.0N (+/- 2.0)	93.0
1970 Apr 18 19:17:00	-	-	VOKV	IOLZ	I06540	-	-	65.0E 0.0N (+/- 2.0)	94.0
1970 Apr 18 21:33:00	-	-	VOKV	IOLZ	I06540	-	-	65.0E 0.0N (+/- 2.0)	94.0
1970 Nov 06 16:00:00	-	-	VOKV	GMS70D	LP1	-	-	180.0E 0.0N (+/- 5.0)	94.0
1970 Nov 14 15:00:00	-	-	VOKV	GMS70D	LP2	-	-	180.0E 0.0N (+/- 5.0)	93.0
1970 Nov 17 15:00:00	-	-	VOKV	GMS70D	LP3	-	-	180.0E 0.0N (+/- 5.0)	90.0

Launches: VOKV

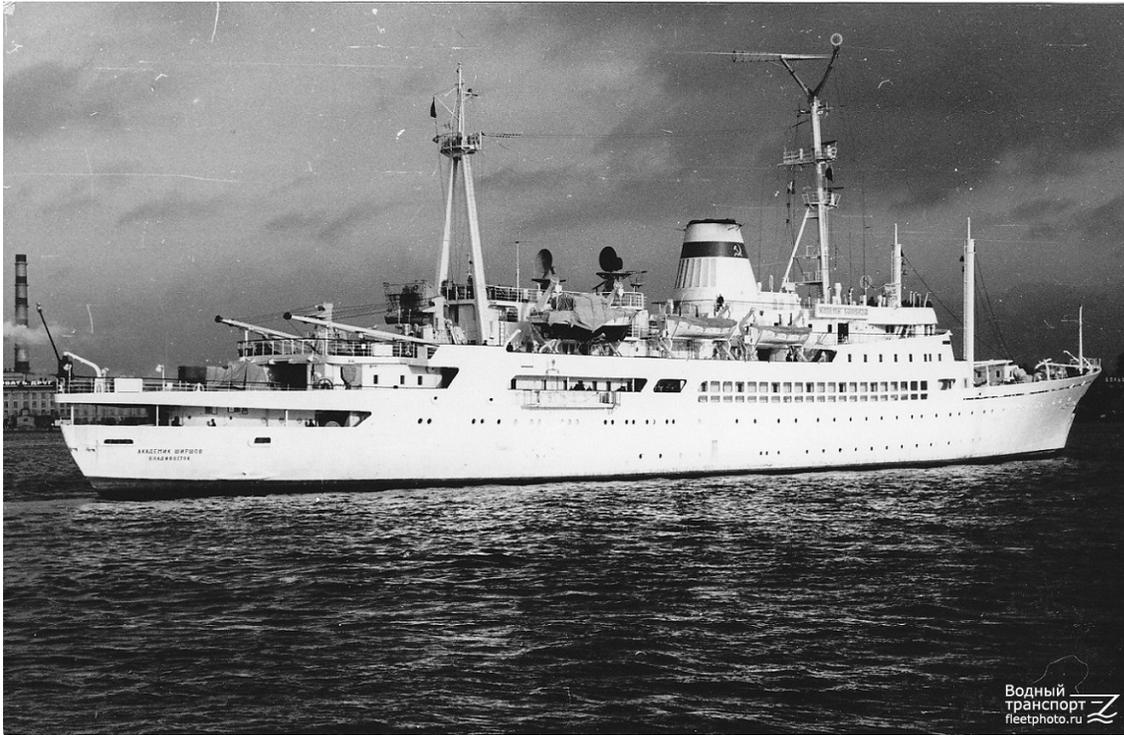
Date	Rocket	Flight	Mission	PlatCode	Platform	Site	LP	AscSite	AscLP	Pos	Apogee
1970 Nov 18 1500:00	M-100	-	-	VOKV	A. I. Voeykov	GMS70D	LP4	-	-	180.0E 0.0N (+/- 5.0)	90.0
1970 Nov 19 1500:00	M-100	-	-	VOKV	A. I. Voeykov	GMS70D	LP5	-	-	180.0E 0.0N (+/- 5.0)	91.0
1970 Nov 20 1600:00	M-100	-	-	VOKV	A. I. Voeykov	GMS70D	LP6	-	-	180.0E 0.0N (+/- 5.0)	87.0
1970 Nov 21 1500:00	M-100	-	-	VOKV	A. I. Voeykov	GMS70D	LP7	-	-	180.0E 0.0N (+/- 5.0)	91.0
1970 Nov 23 1500:00	M-100	-	-	VOKV	A. I. Voeykov	GMS70D	LP8	-	-	180.0E 0.0N (+/- 5.0)	88.0
1970 Nov 24 1500:00	M-100	-	-	VOKV	A. I. Voeykov	GMS70D	LP9	-	-	180.0E 0.0N (+/- 5.0)	90.0
1970 Nov 29 1500:00	M-100	-	-	VOKV	A. I. Voeykov	GMS70D	LP10	-	-	180.0E 0.0N (+/- 5.0)	87.0
1970 Dec 03 1000:00	M-100	-	-	VOKV	A. I. Voeykov	OJP	-	-	-	160.0E 0.0N (+/- 1.0)	87.0
1970 Dec 06 1000:00	M-100	-	-	VOKV	A. I. Voeykov	OJP	-	-	-	160.0E 0.0N (+/- 1.0)	92.0
1970 Dec 08 1500:00	M-100	-	-	VOKV	A. I. Voeykov	GMS70D	LP11	-	-	180.0E 0.0N (+/- 5.0)	90.0
1970 Dec 13 1500:00	M-100	-	-	VOKV	A. I. Voeykov	GMS70D	LP12	-	-	180.0E 0.0N (+/- 5.0)	88.0
1970 Dec 14 1500:00	M-100	-	-	VOKV	A. I. Voeykov	GMS70D	LP13	-	-	180.0E 0.0N (+/- 5.0)	85.0
1970 Dec 16 1500:00	M-100	-	-	VOKV	A. I. Voeykov	GMS70D	LP14	-	-	180.0E 0.0N (+/- 5.0)	94.0
1970 Dec 26 1500:00	M-100	-	-	VOKV	A. I. Voeykov	GMS70D	LP15	-	-	180.0E 0.0N (+/- 5.0)	94.0
1970 Dec 30 1500:00	M-100	-	-	VOKV	A. I. Voeykov	ANTIIM	-	-	-	180.0E 0.0N (+/- 1.0)	94.0
1971 Jan 13 1500:00	M-100	-	-	VOKV	A. I. Voeykov	GMS70D	LP16	-	-	180.0E 0.0N (+/- 5.0)	90.0
1971 Jan 13 1700:00	M-100	-	-	VOKV	A. I. Voeykov	GMS70D	LP17	-	-	180.0E 0.0N (+/- 5.0)	92.0
1971 Jan 14 1500:00	M-100	-	-	VOKV	A. I. Voeykov	GMS70D	LP18	-	-	180.0E 0.0N (+/- 5.0)	85.0
1971 Jan 16 1500:00	M-100	-	-	VOKV	A. I. Voeykov	GMS70D	LP19	-	-	180.0E 0.0N (+/- 5.0)	89.0
1973 May 19 1600:00	M-100	-	-	VOKV	A. I. Voeykov	GMS73B	LP1	-	-	50.0E 0.0N (+/- 5.0)	83.0
1973 May 25 1900:00	M-100	-	-	VOKV	A. I. Voeykov	GMS73B	LP2	-	-	50.0E 0.0N (+/- 5.0)	84.0
1973 May 29 2000:00	M-100	-	-	VOKV	A. I. Voeykov	GMS73B	LP3	-	-	50.0E 0.0N (+/- 5.0)	85.0
1973 Jun 01 2000:00	M-100	-	-	VOKV	A. I. Voeykov	GMS73B	LP3	-	-	50.0E 0.0N (+/- 5.0)	87.0
1973 Jun 04 2000:00	M-100	-	-	VOKV	A. I. Voeykov	GMS73B	LP3	-	-	50.0E 0.0N (+/- 5.0)	86.0
1973 Jun 06 2000:00	M-100	-	-	VOKV	A. I. Voeykov	GMS73B	LP3	-	-	50.0E 0.0N (+/- 5.0)	86.0
1973 Jun 08 2000:00	M-100	-	-	VOKV	A. I. Voeykov	GMS73B	LP4	-	-	50.0E 0.0N (+/- 5.0)	85.0
1973 Jun 24 2000:00	M-100	-	-	VOKV	A. I. Voeykov	GMS73B	LP3	-	-	50.0E 0.0N (+/- 5.0)	84.0
1973 Jun 27 1900:00	M-100	-	-	VOKV	A. I. Voeykov	GMS73B	LP5	-	-	50.0E 0.0N (+/- 5.0)	85.0
1973 Jun 30 2000:00	M-100	-	-	VOKV	A. I. Voeykov	GMS73B	LP5	-	-	50.0E 0.0N (+/- 5.0)	84.0
1973 Jul 02 1900:00	M-100	-	-	VOKV	A. I. Voeykov	GMS73B	LP3	-	-	50.0E 0.0N (+/- 5.0)	86.0
1973 Jul 04 1900:00	M-100	-	-	VOKV	A. I. Voeykov	GMS73B	LP6	-	-	50.0E 0.0N (+/- 5.0)	84.0
1973 Jul 14 1600:00	M-100	-	-	VOKV	A. I. Voeykov	GMS73B	LP7	-	-	50.0E 0.0N (+/- 5.0)	89.0
1973 Jul 15 1600:00	M-100	-	-	VOKV	A. I. Voeykov	GMS73B	LP8	-	-	50.0E 0.0N (+/- 5.0)	85.0
1973 Jul 17 1500:00	M-100	-	-	VOKV	A. I. Voeykov	GMS73B	LP9	-	-	50.0E 0.0N (+/- 5.0)	89.0
1973 Jul 18 1700:00	M-100	-	-	VOKV	A. I. Voeykov	GMS73B	LP10	-	-	50.0E 0.0N (+/- 5.0)	88.0
1973 Oct 06 0900:00	M-100	-	-	VOKV	A. I. Voeykov	GMS73E	LP1	-	-	180.0E 0.0N (+/- 5.0)	85.0
1973 Oct 08 0900:00	M-100	-	-	VOKV	A. I. Voeykov	GMS73E	LP2	-	-	180.0E 0.0N (+/- 5.0)	89.0
1973 Oct 14 0900:00	M-100	-	-	VOKV	A. I. Voeykov	GMS73E	LP3	-	-	180.0E 0.0N (+/- 5.0)	90.0
1973 Oct 16 0900:00	M-100	-	-	VOKV	A. I. Voeykov	ANTIIM	-	-	-	180.0E 0.0N (+/- 1.0)	88.0
1973 Oct 17 0900:00	M-100	-	-	VOKV	A. I. Voeykov	ANTIIM	-	-	-	180.0E 0.0N (+/- 1.0)	88.0
1973 Oct 18 0900:00	M-100	-	-	VOKV	A. I. Voeykov	GMS73E	LP5	-	-	180.0E 0.0N (+/- 5.0)	87.0
1973 Oct 30 1200:00	M-100	-	-	VOKV	A. I. Voeykov	GMS73E	LP6	-	-	180.0E 0.0N (+/- 5.0)	88.0
1973 Nov 02 1000:00	M-100	-	-	VOKV	A. I. Voeykov	GMS73E	LP7	-	-	180.0E 0.0N (+/- 5.0)	84.0
1973 Nov 13 0900:00	M-100	-	-	VOKV	A. I. Voeykov	GMS73E	LP8	-	-	180.0E 0.0N (+/- 5.0)	88.0
1973 Nov 16 0900:00	M-100	-	-	VOKV	A. I. Voeykov	GMS73E	LP9	-	-	180.0E 0.0N (+/- 5.0)	88.0
1973 Nov 18 1000:00	M-100	-	-	VOKV	A. I. Voeykov	GMS73E	LP10	-	-	180.0E 0.0N (+/- 5.0)	85.0
1973 Nov 24 0910:00	M-100	-	-	VOKV	A. I. Voeykov	GMS73E	LP5	-	-	180.0E 0.0N (+/- 5.0)	88.0
1973 Nov 25 1430:00	M-100	-	-	VOKV	A. I. Voeykov	ANTIIM	-	-	-	180.0E 0.0N (+/- 1.0)	90.0
1973 Nov 27 0900:00	M-100	-	-	VOKV	A. I. Voeykov	GMS73E	LP11	-	-	180.0E 0.0N (+/- 5.0)	87.0
1973 Dec 04 0900:00	M-100	-	-	VOKV	A. I. Voeykov	GMS73E	LP12	-	-	180.0E 0.0N (+/- 5.0)	87.0
1973 Dec 06 0900:00	M-100	-	-	VOKV	A. I. Voeykov	GMS73E	LP13	-	-	180.0E 0.0N (+/- 5.0)	86.0
1973 Dec 09 0900:00	M-100	-	-	VOKV	A. I. Voeykov	GMS73E	LP14	-	-	180.0E 0.0N (+/- 5.0)	86.0
1982 Nov 25 1751:00	M-100	-	-	VOKV	A. I. Voeykov	GMS82E	LP1	-	-	80.0E 0.0N (+/- 5.0)	82.0
1982 Nov 29 1900:00	M-100	-	-	VOKV	A. I. Voeykov	GMS82E	LP2	-	-	80.0E 0.0N (+/- 5.0)	83.0
1982 Dec 01 1900:00	M-100	-	-	VOKV	A. I. Voeykov	GMS82E	LP3	-	-	80.0E 0.0N (+/- 5.0)	87.0

Launches: VOKV

Date	Rocket	Flight	Mission	PlatCode	Platform	Site	LP	AscSite	AscLP	Pos	Apogee
1982 Dec 05 1925:00	M-100	-	-	VOKV	A. I. Voeykov	GMS82E	LP4	-	-	80.0E 0.0N (+/- 5.0)	87.0
1982 Dec 07 1900:00	M-100	-	-	VOKV	A. I. Voeykov	GMS82E	LP5	-	-	80.0E 0.0N (+/- 5.0)	87.0
1982 Dec 09 1900:00	M-100	-	-	VOKV	A. I. Voeykov	GMS82E	LP6	-	-	80.0E 0.0N (+/- 5.0)	85.0
1982 Dec 28 2320:00	M-100	-	-	VOKV	A. I. Voeykov	GMS82E	LP7	-	-	80.0E 0.0N (+/- 5.0)	85.0
1982 Dec 31 1800:00	M-100	-	-	VOKV	A. I. Voeykov	GMS82E	LP8	-	-	80.0E 0.0N (+/- 5.0)	90.0
1982 Dec 31 2000:00	M-100	-	-	VOKV	A. I. Voeykov	GMS82E	LP9	-	-	80.0E 0.0N (+/- 5.0)	90.0
1983 Jan 03 1800:00	M-100	-	-	VOKV	A. I. Voeykov	GMS82E	LP10	-	-	80.0E 0.0N (+/- 5.0)	91.0
1983 Jan 04 1900:00	M-100	-	-	VOKV	A. I. Voeykov	GMS82E	LP11	-	-	80.0E 0.0N (+/- 5.0)	88.0
1983 Jan 05 2000:00	M-100	-	-	VOKV	A. I. Voeykov	GMS82E	LP12	-	-	80.0E 0.0N (+/- 5.0)	52.0
1983 Jan 08 2000:00	M-100	-	-	VOKV	A. I. Voeykov	IDLZ	IO70	-	-	65.0E 0.0N (+/- 2.0)	82.0
1983 Jan 09 2100:00	M-100	-	-	VOKV	A. I. Voeykov	GMS82E	LP14	-	-	80.0E 0.0N (+/- 5.0)	85.0
1983 Aug 31 2000:00	M-100	-	-	VOKV	A. I. Voeykov	GMS83C	LP1	-	-	64.0E 3.0N (+/- 5.0)	87.0
1983 Sep 03 1855:00	M-100	-	-	VOKV	A. I. Voeykov	GMS83C	LP2	-	-	64.0E 3.0N (+/- 5.0)	87.0
1983 Sep 03 2050:00	M-100	-	-	VOKV	A. I. Voeykov	GMS83C	LP2	-	-	64.0E 3.0N (+/- 5.0)	61.0
1986 Aug 14 0830:00	M-100B	-	-	VOKV	A. I. Voeykov	GMS86C	ULP1	-	-	-	88.0
1986 Aug 14 1045:00	M-100B	-	-	VOKV	A. I. Voeykov	GMS86C	ULP1	-	-	-	88.0
1986 Aug 14 1315:00	M-100B	-	-	VOKV	A. I. Voeykov	GMS86C	ULP1	-	-	-	88.0
1986 Aug 17 0800:00	M-100B	-	-	VOKV	A. I. Voeykov	GMS86C	ULP1	-	-	-	88.0
1986 Aug 17 1110:00	M-100B	-	-	VOKV	A. I. Voeykov	GMS86C	ULP1	-	-	-	87.0
1986 Aug 19 0800:00	M-100B	-	-	VOKV	A. I. Voeykov	GMS86C	ULP1	-	-	-	86.0
1986 Aug 19 0900:00	M-100B	-	-	VOKV	A. I. Voeykov	GMS86C	ULP1	-	-	-	87.0
1986 Aug 19 0900:00	M-100B	-	-	VOKV	A. I. Voeykov	GMS86C	ULP1	-	-	-	88.0
1987 May 18 1154:00	M-100B	-	-	VOKV	A. I. Voeykov	GMS87D	LP1	-	-	150.0E 30.0N (+/- 5.0)	88.0
1987 May 19 1130:00	M-100B	-	-	VOKV	A. I. Voeykov	GMS87D	LP2	-	-	150.0E 30.0N (+/- 5.0)	87.0
1987 May 20 1140:00	M-100B	-	-	VOKV	A. I. Voeykov	GMS87D	LP3	-	-	150.0E 30.0N (+/- 5.0)	86.0
1987 May 21 1108:00	M-100B	-	-	VOKV	A. I. Voeykov	GMS87D	LP4	-	-	150.0E 30.0N (+/- 5.0)	85.0
1987 May 24 1210:00	M-100B	-	-	VOKV	A. I. Voeykov	GMS87D	LP5	-	-	150.0E 30.0N (+/- 5.0)	88.0
1987 May 25 1142:00	M-100B	-	-	VOKV	A. I. Voeykov	GMS87D	LP6	-	-	150.0E 30.0N (+/- 5.0)	87.0
1987 May 28 1100:00	M-100B	-	-	VOKV	A. I. Voeykov	GMS87D	LP7	-	-	150.0E 30.0N (+/- 5.0)	87.0
1987 Jun 21 1209:00	M-100B	-	-	VOKV	A. I. Voeykov	GMS87D	LP8	-	-	150.0E 30.0N (+/- 5.0)	85.0
1987 Jun 22 1300:00	M-100B	-	-	VOKV	A. I. Voeykov	GMS87D	LP9	-	-	150.0E 30.0N (+/- 5.0)	80.0
1987 Jun 24 1213:00	M-100B	-	-	VOKV	A. I. Voeykov	GMS87D	LP10	-	-	150.0E 30.0N (+/- 5.0)	83.0
1987 Jun 24 1446:00	M-100B	-	-	VOKV	A. I. Voeykov	GMS87D	LP10	-	-	150.0E 30.0N (+/- 5.0)	81.0

### IV.1.3.10 Akademik Shirshov

Академик Ширшов



Credit: -

Also referred to as Akademik Pyotr Shirshov.

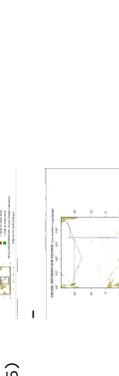
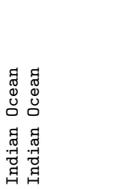
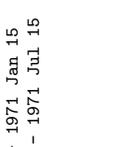
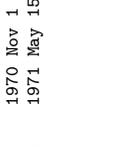
Note: launches in Jul-Sep 1973 attributed in the WDC Rocket File to the Shirshov, and originally labelled Shirshov Exp. 4 by me, appear to actually be from the Korolev - several sources confirm the CIMO 1973 launches at Kourou were from the Korolev.

Rockets used: M-100,M-100B

Updated: 2024 Nov 28 03:19:31



Cruises: SHIR  
Cruise

LC_Code	Active	Region	Cruises: SHIR Cruise	CruiseMap
GMS68B	1968 Jul 1 - 1968 Sep 30	Indian Ocean	Shirshov? Expedition 1, 1968	
GMS70C	1970 Nov 1 - 1971 Jan 15	Indian Ocean	Shirshov Expedition 2, 1970-71 (SU000315)	
GMS71A	1971 May 15 - 1971 Jul 15	Indian Ocean	Shirshov Expedition 3, 1971 (SU000302)	
GMS72A	1972 Jan 1 - 1972 Mar 15	Pacific Ocean	Shirshov Expedition 4, 1972 (SU000396)	
GMS72C	1972 Jul 1 - 1972 Aug 15	Indian Ocean	Shirshov Expedition 5, 1972 (SU000407)	
GMS72D	1972 Dec 15 - 1973 Mar 31	Pacific Ocean	Shirshov Expedition 6, 1972-73 (SU000483)	
GMS73F	1973 Dec 1 - 1974 Mar 15	Pacific Ocean	Shirshov Expedition 7, 1973-74	
GMS74E	1974 Dec 15 - 1975 Jan 31	Indian Ocean	Shirshov Expedition 8, 1974-75 (SU000512)	
GMS75A	1975 Mar 1 - 1975 Mar 31	Indian Ocean	Shirshov Expedition 9, 1975	
GMS75E	1975 May 1 - 1975 Jun 30	Indian Ocean	Shirshov Expedition 10, 1975	
GMS76A	1976 Jan 1 - 1976 Feb 29	Indian Ocean	Shirshov Expedition 11, 1976	
GMS76J	1976 Oct 20 - 1977 Feb 15	Pacific Ocean	Shirshov Expedition 12, 1976-77 (SU097117)	
GMS78C	1978 Mar 15 - 1978 Mar 31	Pacific Ocean	Shirshov Expedition 13, 1978 (SU008422)	

LC\_Code Active Region Cruises: SHIR CruiseMap

LC_Code	Active	Region	Cruises: SHIR	CruiseMap
GMS79B	1979 Apr 15 - 1979 May 31	Indian Ocean	Shirshov Expedition 14, 1979 (SU000732)	
GMS80B	1980 Feb 15 - 1980 Mar 31	Ontong Java Plateau, Pacific Ocean	Shirshov Expedition 15, 1980 (SU097155)	
GMS80F	1980 Apr 15 - 1980 Jun 15	Indian Ocean	Shirshov Expedition 16, 1980 (SU0007155)	
GMS81C	1981 Jan 15 - 1981 Mar 31	Pacific Ocean	Shirshov Expedition 17, 1981 (SU001350)	
GMS82D	1982 May 15 - 1982 Jul 15	Indian Ocean	Shirshov Expedition 18, 1982 (SU007064/65)	
GMS83D	1983 Feb 15 - 1983 Mar 31	Indian Ocean, Ninety East Ridge	Shirshov Expedition 19, 1983	
GMS85C	1985 Oct 15 - 1986 Jan 15	Pacific or Indian Ocean?	Shirshov Expedition 20, 1985-86	
GMS86A	1986 Apr 15 - 1986 May 31	Pacific or Indian Ocean?	Shirshov Expedition 21, 1986	
GMS87B	1987 Jan 1 - 1987 Feb 15	Indian Ocean	Shirshov Expedition 22, 1987	
GMS87F	1987 Oct 15 - 1987 Dec 15	Pacific or Indian Ocean?	Shirshov Expedition 23, 1987 (SU097224)	
GMS88A	1988 Mar 15 - 1988 May 15	Pacific or Indian Ocean?	Shirshiv Expedition 24, 1988	
GMS89C	1989 Aug 15 - 1989 Oct 31	Pacific or Indian Ocean?	Shirshov Expedition 25, 1989	
GMS90C	1990 Jan 15 - 1990 Mar 15	Indian Ocean	Shirshov Expedition 26, 1990 (SU016766)	

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Updated: 2024 Nov 28 03:19:31

Launches: SHIR

Date	Rocket	Flight	Mission	PlatCode	Platform	Site	LP	AscSite	AscLP	Pos	Apogee
1968 Jul 09 1700:00	M-100	-	-	SHIR	Akademik Shirshov	GMS68B	M9161	-	-	65.0E 20.0S (+/- 5.0)	92.0
1968 Aug 9 0959:59	M-100	-	-	SHIR	Akademik Shirshov	GMS68B	M9162	-	-	65.0E 20.0S (+/- 5.0)	80.0
1968 Aug 13 1859:59	M-100	-	-	SHIR	Akademik Shirshov	IOLZ	I0C0R	-	-	65.0E 0.0N (+/- 2.0)	78.0
1968 Aug 14 1600:00	M-100	-	-	SHIR	Akademik Shirshov	IOLZ	I0C0R	-	-	65.0E 0.0N (+/- 2.0)	93.0
1968 Aug 14 1800:00	M-100	-	-	SHIR	Akademik Shirshov	IOLZ	I0C0R	-	-	65.0E 0.0N (+/- 2.0)	80.0
1968 Aug 15 1700:00	M-100	-	-	SHIR	Akademik Shirshov	IOLZ	I0C0R	-	-	65.0E 0.0N (+/- 2.0)	80.0
1968 Aug 16 1859:59	M-100	-	-	SHIR	Akademik Shirshov	IOLZ	I0C0R	-	-	65.0E 0.0N (+/- 2.0)	78.0
1968 Aug 19 1859:59	M-100	-	-	SHIR	Akademik Shirshov	GMS68B	M9164	-	-	65.0E 20.0S (+/- 5.0)	80.0
1968 Aug 20 2300:00	M-100	-	-	SHIR	Akademik Shirshov	IOLZ	R0DR	-	-	65.0E 0.0N (+/- 2.0)	78.0
1968 Aug 21 1700:00	M-100	-	-	SHIR	Akademik Shirshov	IOLZ	R0DR	-	-	65.0E 0.0N (+/- 2.0)	76.0
1968 Aug 22 1600:00	M-100	-	-	SHIR	Akademik Shirshov	IOLZ	R0DR	-	-	65.0E 0.0N (+/- 2.0)	90.0
1968 Aug 22 1859:59	M-100	-	-	SHIR	Akademik Shirshov	IOLZ	R0DR	-	-	65.0E 0.0N (+/- 2.0)	80.0
1968 Aug 23 1700:00	M-100	-	-	SHIR	Akademik Shirshov	IOLZ	R0DR	-	-	65.0E 0.0N (+/- 2.0)	92.0
1968 Aug 23 1859:59	M-100	-	-	SHIR	Akademik Shirshov	IOLZ	R0DR	-	-	65.0E 0.0N (+/- 2.0)	76.0
1968 Aug 24 1559:59	M-100	-	-	SHIR	Akademik Shirshov	IOLZ	R0DR	-	-	65.0E 0.0N (+/- 2.0)	80.0
1968 Aug 24 1700:00	M-100	-	-	SHIR	Akademik Shirshov	IOLZ	R0DR	-	-	65.0E 0.0N (+/- 2.0)	80.0
1968 Sep 01 1600:00	M-100	-	-	SHIR	Akademik Shirshov	GMS68B	M9136	-	-	65.0E 20.0S (+/- 5.0)	91.0
1968 Sep 01 1900:00	M-100	-	-	SHIR	Akademik Shirshov	GMS68B	M9136	-	-	65.0E 20.0S (+/- 5.0)	90.0
1968 Sep 2 1700:00	M-100	-	-	SHIR	Akademik Shirshov	GMS68B	M9135	-	-	65.0E 20.0S (+/- 5.0)	82.0
1968 Sep 2 1800:00	M-100	-	-	SHIR	Akademik Shirshov	GMS68B	M9135	-	-	65.0E 20.0S (+/- 5.0)	78.0
1968 Sep 3 1800:00	M-100	-	-	SHIR	Akademik Shirshov	GMS68B	M9135	-	-	65.0E 20.0S (+/- 5.0)	78.0
1968 Sep 4 1859:59	M-100	-	-	SHIR	Akademik Shirshov	GMS68B	M9135	-	-	65.0E 20.0S (+/- 5.0)	78.0
1968 Sep 5 1700:00	M-100	-	-	SHIR	Akademik Shirshov	GMS68B	M9172	-	-	65.0E 20.0S (+/- 5.0)	80.0
1968 Sep 7 1700:00	M-100	-	-	SHIR	Akademik Shirshov	GMS68B	M9132	-	-	65.0E 20.0S (+/- 5.0)	80.0
1968 Sep 10 2100:00	M-100	-	-	SHIR	Akademik Shirshov	GMS68B	M9171	-	-	65.0E 20.0S (+/- 5.0)	54.0
1968 Sep 10 2300:00	M-100	-	-	SHIR	Akademik Shirshov	GMS68B	M9171	-	-	65.0E 20.0S (+/- 5.0)	74.0
1968 Sep 12 2000:00	M-100	-	-	SHIR	Akademik Shirshov	GMS68B	M9168	-	-	65.0E 20.0S (+/- 5.0)	90.0
1968 Sep 15 1559:59	M-100	-	-	SHIR	Akademik Shirshov	GMS68B	M9167	-	-	65.0E 20.0S (+/- 5.0)	76.0
1968 Sep 18 1700:00	M-100	-	-	SHIR	Akademik Shirshov	GMS68B	M9165	-	-	65.0E 20.0S (+/- 5.0)	93.0
1968 Sep 21 1400:00	M-100	-	-	SHIR	Akademik Shirshov	GMS68B	M9165	-	-	65.0E 20.0S (+/- 5.0)	80.0
1968 Sep 21 1600:00	M-100	-	-	SHIR	Akademik Shirshov	GMS68B	M9165	-	-	65.0E 20.0S (+/- 5.0)	94.0
1968 Sep 21 1700:00	M-100	-	-	SHIR	Akademik Shirshov	GMS68B	M9165	-	-	65.0E 20.0S (+/- 5.0)	76.0
1968 Sep 21 1900:00	M-100	-	-	SHIR	Akademik Shirshov	GMS68B	M9165	-	-	65.0E 20.0S (+/- 5.0)	96.0
1970 Oct 28 1900:00	M-100	-	-	SHIR	Akademik Shirshov	IOLZ	I070	-	-	65.0E 0.0N (+/- 2.0)	92.0
1970 Nov 01 2200:00	M-100	-	-	SHIR	Akademik Shirshov	GMS70C	LP1	-	-	70.0E 30.0S (+/- 5.0)	96.0
1970 Nov 07 0100:00	M-100	-	-	SHIR	Akademik Shirshov	IOLZ	I070	-	-	65.0E 0.0N (+/- 2.0)	96.0
1970 Nov 20 0000:00	M-100	-	-	SHIR	Akademik Shirshov	GMS70C	LP2	-	-	70.0E 30.0S (+/- 5.0)	91.0
1970 Nov 22 0000:00	M-100	-	-	SHIR	Akademik Shirshov	GMS70C	LP3	-	-	70.0E 30.0S (+/- 5.0)	94.0
1970 Nov 23 0100:00	M-100	-	-	SHIR	Akademik Shirshov	GMS70C	LP4	-	-	70.0E 30.0S (+/- 5.0)	96.0
1970 Nov 24 1900:00	M-100	-	-	SHIR	Akademik Shirshov	GMS70C	LP5	-	-	70.0E 30.0S (+/- 5.0)	95.0
1970 Nov 26 1700:00	M-100	-	-	SHIR	Akademik Shirshov	GMS70C	LP6	-	-	70.0E 30.0S (+/- 5.0)	93.0
1970 Nov 30 0300:00	M-100	-	-	SHIR	Akademik Shirshov	GMS70C	LP7	-	-	70.0E 30.0S (+/- 5.0)	92.0
1970 Dec 02 1900:00	M-100	-	-	SHIR	Akademik Shirshov	GMS70C	LP8	-	-	70.0E 30.0S (+/- 5.0)	93.0
1970 Dec 02 2100:00	M-100	-	-	SHIR	Akademik Shirshov	GMS70C	LP9	-	-	70.0E 30.0S (+/- 5.0)	92.0
1970 Dec 05 1900:00	M-100	-	-	SHIR	Akademik Shirshov	GMS70C	LP10	-	-	70.0E 30.0S (+/- 5.0)	93.0
1970 Dec 07 1600:00	M-100	-	-	SHIR	Akademik Shirshov	GMS70C	LP11	-	-	70.0E 30.0S (+/- 5.0)	91.0
1970 Dec 17 1800:00	M-100	-	-	SHIR	Akademik Shirshov	GMS70C	LP12	-	-	70.0E 30.0S (+/- 5.0)	92.0
1970 Dec 27 1400:00	M-100	-	-	SHIR	Akademik Shirshov	GMS70C	LP13	-	-	70.0E 30.0S (+/- 5.0)	88.0
1970 Dec 28 1400:00	M-100	-	-	SHIR	Akademik Shirshov	GMS70C	LP13	-	-	70.0E 30.0S (+/- 5.0)	89.0
1970 Dec 28 2000:00	M-100	-	-	SHIR	Akademik Shirshov	GMS70C	LP13	-	-	70.0E 30.0S (+/- 5.0)	94.0
1971 Jan 01 2003:00	M-100	-	-	SHIR	Akademik Shirshov	GMS70C	LP14	-	-	70.0E 30.0S (+/- 5.0)	90.0
1971 Jan 11 1100:00	M-100	-	-	SHIR	Akademik Shirshov	GMS70C	LP15	-	-	70.0E 30.0S (+/- 5.0)	90.0
1971 Jan 11 2206:00	M-100	-	-	SHIR	Akademik Shirshov	GMS70C	LP16	-	-	70.0E 30.0S (+/- 5.0)	90.0
1971 Jan 12 0555:00	M-100	-	-	SHIR	Akademik Shirshov	GMS70C	LP16	-	-	70.0E 30.0S (+/- 5.0)	90.0
1971 Jan 12 1130:00	M-100	-	-	SHIR	Akademik Shirshov	GMS70C	LP16	-	-	70.0E 30.0S (+/- 5.0)	90.0

Launches: SHIR

Date	Rocket	Flight	Mission	PlatCode	Platform	Site	LP	AscSite	AscLP	Pos	Apogee
1971 Jan 12 1657:00	M-100	-	-	SHIR	Akademik Shirshov	GMS70C	LP16	-	-	70.0E 30.0S (+/- 5.0)	90.0
1971 Jan 12 2030:00	M-100	-	-	SHIR	Akademik Shirshov	GMS70C	LP16	-	-	70.0E 30.0S (+/- 5.0)	90.0
1971 May 17 2048:00	M-100	-	-	SHIR	Akademik Shirshov	GMS71A	LP1	-	-	65.0E 0.0N (+/- 5.0)	78.0
1971 May 20 2022:00	M-100	-	-	SHIR	Akademik Shirshov	GMS71A	LP2	-	-	65.0E 0.0N (+/- 5.0)	93.0
1971 May 20 2200:00	M-100	-	-	SHIR	Akademik Shirshov	GMS71A	LP3	-	-	65.0E 0.0N (+/- 5.0)	88.0
1971 May 22 2030:00	M-100	-	-	SHIR	Akademik Shirshov	GMS71A	LP4	-	-	65.0E 0.0N (+/- 5.0)	88.0
1971 May 24 2100:00	M-100	-	-	SHIR	Akademik Shirshov	IOLZ	I065	-	-	65.0E 0.0N (+/- 2.0)	92.0
1971 May 27 2130:00	M-100	-	-	SHIR	Akademik Shirshov	GMS71A	LP5	-	-	65.0E 0.0N (+/- 5.0)	85.0
1971 May 29 1734:00	M-100	-	-	SHIR	Akademik Shirshov	GMS71A	LP6	-	-	65.0E 0.0N (+/- 5.0)	92.0
1971 Jun 06 1957:00	M-100	-	-	SHIR	Akademik Shirshov	GMS71A	LP7	-	-	65.0E 0.0N (+/- 5.0)	87.0
1971 Jun 09 1905:00	M-100	-	-	SHIR	Akademik Shirshov	GMS71A	LP8	-	-	65.0E 0.0N (+/- 5.0)	87.0
1971 Jun 10 2000:00	M-100	-	-	SHIR	Akademik Shirshov	GMS71A	LP9	-	-	65.0E 0.0N (+/- 5.0)	87.0
1971 Jun 12 1859:00	M-100	-	-	SHIR	Akademik Shirshov	GMS71A	LP10	-	-	65.0E 0.0N (+/- 5.0)	87.0
1971 Jun 13 1859:00	M-100	-	-	SHIR	Akademik Shirshov	GMS71A	LP11	-	-	65.0E 0.0N (+/- 5.0)	82.0
1971 Jun 14 1853:00	M-100	-	-	SHIR	Akademik Shirshov	GMS71A	LP12	-	-	65.0E 0.0N (+/- 5.0)	82.0
1971 Jun 16 1856:00	M-100	-	-	SHIR	Akademik Shirshov	GMS71A	LP13	-	-	65.0E 0.0N (+/- 5.0)	90.0
1971 Jun 24 2000:00	M-100	-	-	SHIR	Akademik Shirshov	GMS71A	LP14	-	-	65.0E 0.0N (+/- 5.0)	88.0
1971 Jun 26 1707:00	M-100	-	-	SHIR	Akademik Shirshov	GMS71A	LP15	-	-	65.0E 0.0N (+/- 5.0)	89.0
1971 Jun 28 2001:00	M-100	-	-	SHIR	Akademik Shirshov	GMS71A	LP16	-	-	65.0E 0.0N (+/- 5.0)	88.0
1971 Jun 29 1043:00	M-100	-	-	SHIR	Akademik Shirshov	IOLZ	I065	-	-	65.0E 0.0N (+/- 2.0)	92.0
1971 Jun 30 2003:00	M-100	-	-	SHIR	Akademik Shirshov	GMS71A	LP17	-	-	65.0E 0.0N (+/- 5.0)	86.0
1971 Jul 01 2000:00	M-100	-	-	SHIR	Akademik Shirshov	GMS71A	LP18	-	-	65.0E 0.0N (+/- 5.0)	90.0
1971 Jul 02 2100:00	M-100	-	-	SHIR	Akademik Shirshov	GMS71A	LP19	-	-	65.0E 0.0N (+/- 5.0)	91.0
1971 Jul 03 2000:00	M-100	-	-	SHIR	Akademik Shirshov	GMS71A	LP20	-	-	65.0E 0.0N (+/- 5.0)	89.0
1971 Jul 08 1700:00	M-100	-	-	SHIR	Akademik Shirshov	GMS71A	LP21	-	-	65.0E 0.0N (+/- 5.0)	91.0
1971 Jul 09 1900:00	M-100	-	-	SHIR	Akademik Shirshov	GMS71A	LP22	-	-	65.0E 0.0N (+/- 5.0)	90.0
1972 Jan 03 1300:00	M-100	-	-	SHIR	Akademik Shirshov	GMS72A	LP1	-	-	150.0W 30.0N (+/- 5.0)	91.0
1972 Jan 04 1100:00	M-100	-	-	SHIR	Akademik Shirshov	GMS72A	LP2	-	-	150.0W 30.0N (+/- 5.0)	90.0
1972 Jan 09 0800:00	M-100	-	-	SHIR	Akademik Shirshov	GMS72A	LP3	-	-	150.0W 30.0N (+/- 5.0)	90.0
1972 Jan 11 0800:00	M-100	-	-	SHIR	Akademik Shirshov	GMS72A	LP4	-	-	150.0W 30.0N (+/- 5.0)	90.0
1972 Jan 12 0900:00	M-100	-	-	SHIR	Akademik Shirshov	GMS72A	LP5	-	-	150.0W 30.0N (+/- 5.0)	90.0
1972 Jan 13 0800:00	M-100	-	-	SHIR	Akademik Shirshov	GMS72A	LP6	-	-	150.0W 30.0N (+/- 5.0)	90.0
1972 Jan 15 0800:00	M-100	-	-	SHIR	Akademik Shirshov	GMS72A	LP7	-	-	150.0W 30.0N (+/- 5.0)	93.0
1972 Jan 16 1500:00	M-100	-	-	SHIR	Akademik Shirshov	GMS72A	LP8	-	-	150.0W 30.0N (+/- 5.0)	93.0
1972 Jan 18 0900:00	M-100	-	-	SHIR	Akademik Shirshov	GMS72A	LP9	-	-	150.0W 30.0N (+/- 5.0)	90.0
1972 Jan 30 0900:00	M-100	-	-	SHIR	Akademik Shirshov	GMS72A	LP10	-	-	150.0W 30.0N (+/- 5.0)	90.0
1972 Feb 06 1200:00	M-100	-	-	SHIR	Akademik Shirshov	GMS72A	LP11	-	-	150.0W 30.0N (+/- 5.0)	88.0
1972 Feb 08 0900:00	M-100	-	-	SHIR	Akademik Shirshov	GMS72A	LP8	-	-	150.0W 30.0N (+/- 5.0)	89.0
1972 Feb 08 1100:00	M-100	-	-	SHIR	Akademik Shirshov	GMS72A	LP7	-	-	150.0W 30.0N (+/- 5.0)	89.0
1972 Feb 14 1000:00	M-100	-	-	SHIR	Akademik Shirshov	GMS72A	LP12	-	-	150.0W 30.0N (+/- 5.0)	87.0
1972 Feb 16 1100:00	M-100	-	-	SHIR	Akademik Shirshov	GMS72A	LP13	-	-	150.0W 30.0N (+/- 5.0)	89.0
1972 Feb 17 1200:00	M-100	-	-	SHIR	Akademik Shirshov	GMS72A	LP14	-	-	150.0W 30.0N (+/- 5.0)	86.0
1972 Feb 19 0900:00	M-100	-	-	SHIR	Akademik Shirshov	GMS72A	LP15	-	-	150.0W 30.0N (+/- 5.0)	91.0
1972 Feb 21 0900:00	M-100	-	-	SHIR	Akademik Shirshov	GMS72A	LP16	-	-	150.0W 30.0N (+/- 5.0)	89.0
1972 Feb 22 0900:00	M-100	-	-	SHIR	Akademik Shirshov	GMS72A	LP17	-	-	150.0W 30.0N (+/- 5.0)	89.0
1972 Mar 15 1200:00	M-100	-	-	SHIR	Akademik Shirshov	GMS72A	LP18	-	-	150.0W 30.0N (+/- 5.0)	90.0
1972 Jul 01 2000:00	M-100	-	-	SHIR	Akademik Shirshov	GMS72C	LP1	-	-	65.0E 0.0N (+/- 5.0)	89.0
1972 Jul 03 2000:00	M-100	-	-	SHIR	Akademik Shirshov	IOLZ	I06540	-	-	65.0E 0.0N (+/- 2.0)	88.0
1972 Jul 06 1700:00	M-100	-	-	SHIR	Akademik Shirshov	GMS72C	LP3	-	-	65.0E 0.0N (+/- 5.0)	83.0
1972 Jul 07 1700:00	M-100	-	-	SHIR	Akademik Shirshov	GMS72C	LP4	-	-	65.0E 0.0N (+/- 5.0)	90.0
1972 Jul 08 1700:00	M-100	-	-	SHIR	Akademik Shirshov	IOLZ	I06540	-	-	65.0E 0.0N (+/- 2.0)	83.0
1972 Jul 09 1700:00	M-100	-	-	SHIR	Akademik Shirshov	GMS72C	LP5	-	-	65.0E 0.0N (+/- 5.0)	84.0
1972 Jul 10 1400:00	M-100	-	-	SHIR	Akademik Shirshov	KER	LEC	-	-	70.2E 49.4S (+/- 0.0)	91.0
1972 Jul 13 1400:00	M-100	-	-	SHIR	Akademik Shirshov	GMS72C	LP7	-	-	65.0E 0.0N (+/- 5.0)	89.0
1972 Jul 15 1500:00	M-100	-	-	SHIR	Akademik Shirshov	IOLZ	I05WR	-	-	65.0E 0.0N (+/- 2.0)	89.0

Launches: SHIR

Date	Rocket	Flight	Mission	PlatCode	Platform	Site	LP	AscSite	AscLP	Pos	Apogee
1972 Jul 16 2000:00	M-100	-	-	SHIR	Akademik Shirshov	GMS72C	LP9	-	-	65.0E 0.0N (+/- 5.0)	90.0
1972 Jul 26 2000:00	M-100	-	-	SHIR	Akademik Shirshov	GMS72C	LP10	-	-	65.0E 0.0N (+/- 5.0)	88.0
1972 Jul 31 2000:00	M-100	-	-	SHIR	Akademik Shirshov	GMS72C	LP11	-	-	65.0E 0.0N (+/- 5.0)	88.0
1972 Aug 01 2000:00	M-100	-	-	SHIR	Akademik Shirshov	GMS72C	LP12	-	-	65.0E 0.0N (+/- 5.0)	89.0
1972 Aug 08 2200:00	M-100	-	-	SHIR	Akademik Shirshov	GMS72C	LP13	-	-	65.0E 0.0N (+/- 5.0)	91.0
1972 Aug 09 2000:00	M-100	-	-	SHIR	Akademik Shirshov	GMS72C	LP14	-	-	65.0E 0.0N (+/- 5.0)	92.0
1972 Aug 12 2000:00	M-100	-	-	SHIR	Akademik Shirshov	GMS72C	LP15	-	-	65.0E 0.0N (+/- 5.0)	88.0
1972 Aug 13 2000:00	M-100	-	-	SHIR	Akademik Shirshov	GMS72C	LP13	-	-	65.0E 0.0N (+/- 5.0)	88.0
1972 Aug 14 2000:00	M-100	-	-	SHIR	Akademik Shirshov	GMS72C	LP16	-	-	65.0E 0.0N (+/- 5.0)	91.0
1972 Dec 25 1300:00	M-100	-	-	SHIR	Akademik Shirshov	GMS72D	LP1	-	-	165.0E 0.0N (+/- 5.0)	92.0
1972 Dec 27 1200:00	M-100	-	-	SHIR	Akademik Shirshov	GMS72D	LP1	-	-	165.0E 0.0N (+/- 5.0)	92.0
1972 Dec 28 1200:00	M-100	-	-	SHIR	Akademik Shirshov	GMS72D	LP2	-	-	165.0E 0.0N (+/- 5.0)	85.0
1972 Dec 29 1200:00	M-100	-	-	SHIR	Akademik Shirshov	GMS72D	LP3	-	-	165.0E 0.0N (+/- 5.0)	83.0
1972 Dec 30 1200:00	M-100	-	-	SHIR	Akademik Shirshov	GMS72D	LP4	-	-	165.0E 0.0N (+/- 5.0)	87.0
1973 Jan 01 1300:00	M-100	-	-	SHIR	Akademik Shirshov	GMS72D	LP6	-	-	165.0E 0.0N (+/- 5.0)	86.0
1973 Jan 02 1300:00	M-100	-	-	SHIR	Akademik Shirshov	GMS72D	LP6	-	-	165.0E 0.0N (+/- 5.0)	91.0
1973 Jan 04 1300:00	M-100	-	-	SHIR	Akademik Shirshov	GMS72D	LP7	-	-	165.0E 0.0N (+/- 5.0)	81.0
1973 Jan 04 1700:00	M-100	-	-	SHIR	Akademik Shirshov	GMS72D	LP8	-	-	165.0E 0.0N (+/- 5.0)	89.0
1973 Jan 05 1500:00	M-100	-	-	SHIR	Akademik Shirshov	GMS72D	LP9	-	-	165.0E 0.0N (+/- 5.0)	86.0
1973 Jan 06 1500:00	M-100	-	-	SHIR	Akademik Shirshov	GMS72D	LP10	-	-	165.0E 0.0N (+/- 5.0)	87.0
1973 Jan 06 1600:00	M-100	-	-	SHIR	Akademik Shirshov	GMS72D	LP10	-	-	165.0E 0.0N (+/- 5.0)	86.0
1973 Jan 24 1200:00	M-100	-	-	SHIR	Akademik Shirshov	GMS72D	LP8	-	-	165.0E 0.0N (+/- 5.0)	89.0
1973 Jan 26 1200:00	M-100	-	-	SHIR	Akademik Shirshov	GMS72D	LP11	-	-	165.0E 0.0N (+/- 5.0)	89.0
1973 Jan 26 1300:00	M-100	-	-	SHIR	Akademik Shirshov	GMS72D	LP11	-	-	165.0E 0.0N (+/- 5.0)	89.0
1973 Jan 28 1200:00	M-100	-	-	SHIR	Akademik Shirshov	GMS72D	LP12	-	-	165.0E 0.0N (+/- 5.0)	90.0
1973 Jan 28 1400:00	M-100	-	-	SHIR	Akademik Shirshov	GMS72D	LP12	-	-	165.0E 0.0N (+/- 5.0)	87.0
1973 Jan 31 1300:00	M-100	-	-	SHIR	Akademik Shirshov	GMS72D	LP13	-	-	165.0E 0.0N (+/- 5.0)	88.0
1973 Jan 31 1400:00	M-100	-	-	SHIR	Akademik Shirshov	GMS72D	LP13	-	-	165.0E 0.0N (+/- 5.0)	88.0
1973 Feb 03 1500:00	M-100	-	-	SHIR	Akademik Shirshov	GMS72D	LP14	-	-	165.0E 0.0N (+/- 5.0)	83.0
1973 Feb 21 1400:00	M-100	-	-	SHIR	Akademik Shirshov	GMS72D	LP9	-	-	165.0E 0.0N (+/- 5.0)	85.0
1973 Feb 21 1500:00	M-100	-	-	SHIR	Akademik Shirshov	GMS72D	LP9	-	-	165.0E 0.0N (+/- 5.0)	88.0
1973 Mar 06 1200:00	M-100	-	-	SHIR	Akademik Shirshov	GMS72D	LP10	-	-	165.0E 0.0N (+/- 5.0)	88.0
1973 Mar 07 1200:00	M-100	-	-	SHIR	Akademik Shirshov	GMS72D	LP9	-	-	165.0E 0.0N (+/- 5.0)	88.0
1973 Mar 08 1500:00	M-100	-	-	SHIR	Akademik Shirshov	GMS72D	LP15	-	-	165.0E 0.0N (+/- 5.0)	88.0
1973 Mar 09 1300:00	M-100	-	-	SHIR	Akademik Shirshov	GMS72D	LP16	-	-	165.0E 0.0N (+/- 5.0)	90.0
1973 Mar 10 1400:00	M-100	-	-	SHIR	Akademik Shirshov	GMS72D	LP17	-	-	165.0E 0.0N (+/- 5.0)	92.0
1973 Mar 12 1600:00	M-100	-	-	SHIR	Akademik Shirshov	GMS72D	LP18	-	-	165.0E 0.0N (+/- 5.0)	86.0
1973 Mar 14 1200:00	M-100	-	-	SHIR	Akademik Shirshov	GMS72D	LP19	-	-	165.0E 0.0N (+/- 5.0)	86.0
1973 Mar 15 1200:00	M-100	-	-	SHIR	Akademik Shirshov	GMS72D	LP20	-	-	165.0E 0.0N (+/- 5.0)	89.0
1973 Mar 19 1200:00	M-100	-	-	SHIR	Akademik Shirshov	GMS72D	LP21	-	-	165.0E 0.0N (+/- 5.0)	88.0
1973 Mar 20 0900:00	M-100	-	-	SHIR	Akademik Shirshov	GMS72D	LP22	-	-	165.0E 0.0N (+/- 5.0)	89.0
1973 Dec 12 1220:00	M-100	-	-	SHIR	Akademik Shirshov	GMS73F	LP1	-	-	180.0E 0.0N (+/- 5.0)	87.0
1973 Dec 17 1300:00	M-100	-	-	SHIR	Akademik Shirshov	GMS73F	LP2	-	-	180.0E 0.0N (+/- 5.0)	82.0
1973 Dec 19 1300:00	M-100	-	-	SHIR	Akademik Shirshov	GMS73F	LP3	-	-	180.0E 0.0N (+/- 5.0)	82.0
1973 Dec 23 1300:00	M-100	-	-	SHIR	Akademik Shirshov	GMS73F	LP4	-	-	180.0E 0.0N (+/- 5.0)	84.0
1973 Dec 24 1300:00	M-100	-	-	SHIR	Akademik Shirshov	GMS73F	LP6	-	-	180.0E 0.0N (+/- 5.0)	91.0
1973 Dec 25 1300:00	M-100	-	-	SHIR	Akademik Shirshov	GMS73F	LP6	-	-	180.0E 0.0N (+/- 5.0)	89.0
1974 Jan 26 1400:00	M-100	-	-	SHIR	Akademik Shirshov	GMS73F	LP7	-	-	180.0E 0.0N (+/- 5.0)	85.0
1974 Jan 29 1700:00	M-100	-	-	SHIR	Akademik Shirshov	GMS73F	LP8	-	-	180.0E 0.0N (+/- 5.0)	81.0
1974 Feb 03 1700:00	M-100	-	-	SHIR	Akademik Shirshov	GMS73F	LP9	-	-	180.0E 0.0N (+/- 5.0)	86.0
1974 Feb 06 1800:00	M-100	-	-	SHIR	Akademik Shirshov	GMS73F	LP10	-	-	180.0E 0.0N (+/- 5.0)	87.0
1974 Feb 09 1900:00	M-100	-	-	SHIR	Akademik Shirshov	GMS73F	LP11	-	-	180.0E 0.0N (+/- 5.0)	86.0
1974 Feb 11 1900:00	M-100	-	-	SHIR	Akademik Shirshov	GMS73F	LP12	-	-	180.0E 0.0N (+/- 5.0)	88.0
1974 Feb 13 1900:00	M-100	-	-	SHIR	Akademik Shirshov	GMS73F	LP13	-	-	180.0E 0.0N (+/- 5.0)	89.0
1974 Feb 14 1900:00	M-100	-	-	SHIR	Akademik Shirshov	GMS73F	LP14	-	-	180.0E 0.0N (+/- 5.0)	87.0

Launches: SHIR

Date	Rocket	Flight	Mission	PlatCode	Platform	Site	LP	AscSite	AscLP	Pos	Apogee
1974 Feb 26 2000:00	M-100	-	-	SHIR	Akademik Shirshov	IOLZ	I070	-	-	65.0E 0.0N (+/- 2.0)	85.0
1974 Feb 28 1700:00	M-100	-	-	SHIR	Akademik Shirshov	GMS73F	LP16	-	-	180.0E 0.0N (+/- 5.0)	92.0
1974 Mar 01 1800:00	M-100	-	-	SHIR	Akademik Shirshov	GMS73F	LP17	-	-	180.0E 0.0N (+/- 5.0)	89.0
1974 Dec 22 2300:00	M-100	-	-	SHIR	Akademik Shirshov	NER	-	-	-	90.0E 0.0N (+/- 2.0)	88.0
1974 Dec 25 0000:00	M-100	-	-	SHIR	Akademik Shirshov	GMS74E	LP2	-	-	65.0E 0.0N (+/- 5.0)	86.0
1974 Dec 28 0000:00	M-100	-	-	SHIR	Akademik Shirshov	GMS74E	LP3	-	-	65.0E 0.0N (+/- 5.0)	91.0
1975 Jan 04 1900:00	M-100	-	-	SHIR	Akademik Shirshov	IOLZ	I065	-	-	65.0E 0.0N (+/- 2.0)	92.0
1975 Jan 10 1930:00	M-100	Indian Ocean?	-	SHIR	Akademik Shirshov	GMS74E	LP5	-	-	65.0E 0.0N (+/- 5.0)	80.0
1975 Jan 11 1930:00	M-100	-	-	SHIR	Akademik Shirshov	GMS74E	LP6	-	-	65.0E 0.0N (+/- 5.0)	81.0
1975 Jan 12 2000:00	M-100	-	-	SHIR	Akademik Shirshov	GMS74E	LP7	-	-	65.0E 0.0N (+/- 5.0)	83.0
1975 Jan 13 2050:00	M-100	-	-	SHIR	Akademik Shirshov	IOLZ	I065	-	-	65.0E 0.0N (+/- 2.0)	87.0
1975 Jan 14 2000:00	M-100	-	-	SHIR	Akademik Shirshov	GMS74E	LP8	-	-	65.0E 0.0N (+/- 5.0)	89.0
1975 Jan 15 1950:00	M-100	-	-	SHIR	Akademik Shirshov	GMS74E	LP9	-	-	65.0E 0.0N (+/- 5.0)	85.0
1975 Jan 16 2000:00	M-100	-	-	SHIR	Akademik Shirshov	IOLZ	I0C0R	-	-	65.0E 0.0N (+/- 2.0)	87.0
1975 Mar 01 1600:00	M-100	-	-	SHIR	Akademik Shirshov	GMS75A	LP1	-	-	70.0E 30.0S (+/- 5.0)	91.0
1975 Mar 03 1600:00	M-100	-	-	SHIR	Akademik Shirshov	GMS75A	LP2	-	-	70.0E 30.0S (+/- 5.0)	89.0
1975 Mar 03 1720:00	M-100	-	-	SHIR	Akademik Shirshov	GMS75A	LP2	-	-	70.0E 30.0S (+/- 5.0)	88.0
1975 Mar 06 1820:00	M-100	-	-	SHIR	Akademik Shirshov	GMS75A	LP3	-	-	70.0E 30.0S (+/- 5.0)	83.0
1975 Mar 07 1800:00	M-100	-	-	SHIR	Akademik Shirshov	GMS75A	LP4	-	-	70.0E 30.0S (+/- 5.0)	86.0
1975 Mar 07 1940:00	M-100	-	-	SHIR	Akademik Shirshov	GMS75A	LP4	-	-	70.0E 30.0S (+/- 5.0)	89.0
1975 Mar 11 1650:00	M-100	-	-	SHIR	Akademik Shirshov	GMS75A	LP5	-	-	70.0E 30.0S (+/- 5.0)	82.0
1975 Mar 13 1600:00	M-100	-	-	SHIR	Akademik Shirshov	GMS75A	LP6	-	-	70.0E 30.0S (+/- 5.0)	89.0
1975 Mar 14 1820:00	M-100	-	-	SHIR	Akademik Shirshov	GMS75A	LP7	-	-	70.0E 30.0S (+/- 5.0)	89.0
1975 Mar 15 1550:00	M-100	-	-	SHIR	Akademik Shirshov	GMS75A	LP8	-	-	70.0E 30.0S (+/- 5.0)	87.0
1975 Mar 16 1400:00	M-100	-	-	SHIR	Akademik Shirshov	GMS75A	LP9	-	-	70.0E 30.0S (+/- 5.0)	87.0
1975 Mar 19 1700:00	M-100	-	-	SHIR	Akademik Shirshov	IOLZ	I070	-	-	65.0E 0.0N (+/- 2.0)	88.0
1975 Mar 20 1700:00	M-100	-	-	SHIR	Akademik Shirshov	GMS75A	LP11	-	-	70.0E 30.0S (+/- 5.0)	87.0
1975 Mar 22 1700:00	M-100	-	-	SHIR	Akademik Shirshov	GMS75A	LP12	-	-	70.0E 30.0S (+/- 5.0)	89.0
1975 May 08 2000:00	M-100	-	-	SHIR	Akademik Shirshov	GMS75E	LP1	-	-	65.0E 0.0N (+/- 5.0)	88.0
1975 May 17 1830:00	M-100	-	-	SHIR	Akademik Shirshov	GMS75E	LP2	-	-	65.0E 0.0N (+/- 5.0)	81.0
1975 May 17 2040:00	M-100	-	-	SHIR	Akademik Shirshov	GMS75E	LP2	-	-	65.0E 0.0N (+/- 5.0)	79.0
1975 May 25 2040:00	M-100	-	-	SHIR	Akademik Shirshov	IOLZ	I065	-	-	65.0E 0.0N (+/- 2.0)	86.0
1975 May 29 1820:00	M-100	-	-	SHIR	Akademik Shirshov	IOLZ	R0DR	-	-	65.0E 0.0N (+/- 2.0)	87.0
1975 Jun 06 1930:00	M-100	-	-	SHIR	Akademik Shirshov	IOLZ	R0DR	-	-	65.0E 0.0N (+/- 2.0)	81.0
1975 Jun 07 2110:00	M-100	-	-	SHIR	Akademik Shirshov	IOLZ	R0DR	-	-	65.0E 0.0N (+/- 5.0)	90.0
1975 Jun 08 1700:00	M-100	-	-	SHIR	Akademik Shirshov	IOLZ	I0C0R	-	-	65.0E 0.0N (+/- 2.0)	86.0
1975 Jun 10 0800:00	M-100	-	-	SHIR	Akademik Shirshov	IOLZ	I065	-	-	65.0E 0.0N (+/- 2.0)	86.0
1975 Jun 11 1830:00	M-100	-	-	SHIR	Akademik Shirshov	GMS75E	LP7	-	-	65.0E 0.0N (+/- 5.0)	89.0
1975 Jun 12 1800:00	M-100	-	-	SHIR	Akademik Shirshov	GMS75E	LP8	-	-	65.0E 0.0N (+/- 5.0)	90.0
1975 Jun 13 1800:00	M-100	-	-	SHIR	Akademik Shirshov	GMS75E	LP9	-	-	65.0E 0.0N (+/- 5.0)	87.0
1975 Jun 14 1800:00	M-100	-	-	SHIR	Akademik Shirshov	GMS75E	LP10	-	-	65.0E 0.0N (+/- 5.0)	83.0
1975 Jun 17 1900:00	M-100	-	-	SHIR	Akademik Shirshov	IOLZ	I070	-	-	65.0E 0.0N (+/- 2.0)	86.0
1975 Jun 18 1500:00	M-100	-	-	SHIR	Akademik Shirshov	IOLZ	I070	-	-	65.0E 0.0N (+/- 2.0)	78.0
1976 Jan 05 1500:00	M-100	-	-	SHIR	Akademik Shirshov	NER	-	-	-	90.0E 0.0N (+/- 2.0)	86.0
1976 Jan 07 1600:00	M-100	-	-	SHIR	Akademik Shirshov	GMS76A	LP2	-	-	65.0E 0.0N (+/- 5.0)	82.0
1976 Jan 09 1600:00	M-100	-	-	SHIR	Akademik Shirshov	IOLZ	I070	-	-	65.0E 0.0N (+/- 2.0)	92.0
1976 Jan 10 1700:00	M-100	-	-	SHIR	Akademik Shirshov	IOLZ	I070	-	-	65.0E 0.0N (+/- 2.0)	87.0
1976 Jan 11 1700:00	M-100	-	-	SHIR	Akademik Shirshov	GMS76A	LP4	-	-	65.0E 0.0N (+/- 5.0)	92.0
1976 Jan 16 1800:00	M-100	-	-	SHIR	Akademik Shirshov	GMS76A	LP5	-	-	65.0E 0.0N (+/- 5.0)	87.0
1976 Jan 18 1800:00	M-100	-	-	SHIR	Akademik Shirshov	GMS76A	LP6	-	-	65.0E 0.0N (+/- 5.0)	86.0
1976 Jan 19 1600:00	M-100	-	-	SHIR	Akademik Shirshov	IOLZ	I065	-	-	65.0E 0.0N (+/- 2.0)	87.0
1976 Jan 24 1600:00	M-100	-	-	SHIR	Akademik Shirshov	GMS76A	LP8	-	-	65.0E 0.0N (+/- 5.0)	89.0
1976 Jan 29 1600:00	M-100	-	-	SHIR	Akademik Shirshov	IOLZ	R0DR	-	-	65.0E 0.0N (+/- 2.0)	90.0
1976 Jan 31 1600:00	M-100	-	-	SHIR	Akademik Shirshov	IOLZ	I0SWR	-	-	65.0E 0.0N (+/- 2.0)	87.0
1976 Jan 31 1800:00	M-100	-	-	SHIR	Akademik Shirshov	IOLZ	I0SWR	-	-	65.0E 0.0N (+/- 2.0)	88.0

Launches: SHIR

Date	Rocket	Flight	Mission	PlatCode	Platform	Site	LP	AscSite	AscLP	Pos	Apogee
1976 Feb 01 1700:00	M-100	-	-	SHIR	Akademik Shirshov	GMS76A	LP11	-	-	65.0E 0.0N (+/- 5.0)	89.0
1976 Feb 02 1600:00	M-100	-	-	SHIR	Akademik Shirshov	IOLZ	I06540	-	-	65.0E 0.0N (+/- 2.0)	85.0
1976 Feb 02 1800:00	M-100	-	-	SHIR	Akademik Shirshov	IOLZ	I06540	-	-	65.0E 0.0N (+/- 2.0)	91.0
1976 Feb 03 1900:00	M-100	-	-	SHIR	Akademik Shirshov	GMS76A	LP13	-	-	65.0E 0.0N (+/- 5.0)	87.0
1976 Feb 05 2100:00	M-100	-	-	SHIR	Akademik Shirshov	GMS76A	LP14	-	-	65.0E 0.0N (+/- 5.0)	84.0
1976 Feb 05 2230:00	M-100	-	-	SHIR	Akademik Shirshov	GMS76A	LP15	-	-	65.0E 0.0N (+/- 5.0)	88.0
1976 Feb 06 1600:00	M-100	-	-	SHIR	Akademik Shirshov	GMS76A	LP16	-	-	65.0E 0.0N (+/- 5.0)	91.0
1976 Feb 07 1500:00	M-100	-	-	SHIR	Akademik Shirshov	GMS76A	LP17	-	-	65.0E 0.0N (+/- 5.0)	87.0
1976 Feb 07 1700:00	M-100	-	-	SHIR	Akademik Shirshov	GMS76A	LP17	-	-	65.0E 0.0N (+/- 5.0)	98.0
1976 Feb 08 1600:00	M-100	-	-	SHIR	Akademik Shirshov	GMS76A	LP18	-	-	65.0E 0.0N (+/- 5.0)	87.0
1976 Feb 09 1500:00	M-100	-	-	SHIR	Akademik Shirshov	GMS76A	LP19	-	-	65.0E 0.0N (+/- 5.0)	88.0
1976 Feb 09 1700:00	M-100	-	-	SHIR	Akademik Shirshov	GMS76A	LP19	-	-	65.0E 0.0N (+/- 5.0)	89.0
1976 Feb 11 1500:00	M-100	-	-	SHIR	Akademik Shirshov	GMS76A	LP20	-	-	65.0E 0.0N (+/- 5.0)	89.0
1976 Feb 13 1600:00	M-100	-	-	SHIR	Akademik Shirshov	GMS76A	LP21	-	-	65.0E 0.0N (+/- 5.0)	90.0
1976 Feb 14 1600:00	M-100	-	-	SHIR	Akademik Shirshov	GMS76A	LP22	-	-	65.0E 0.0N (+/- 5.0)	89.0
1976 Feb 15 1600:00	M-100	-	-	SHIR	Akademik Shirshov	GMS76A	LP23	-	-	65.0E 0.0N (+/- 5.0)	89.0
1976 Feb 16 1500:00	M-100	-	-	SHIR	Akademik Shirshov	IOLZ	I070	-	-	65.0E 0.0N (+/- 2.0)	89.0
1976 Feb 19 1500:00	M-100	-	-	SHIR	Akademik Shirshov	GMS76A	LP24	-	-	65.0E 0.0N (+/- 5.0)	91.0
1976 Feb 21 1400:00	M-100	-	-	SHIR	Akademik Shirshov	NER	-	-	-	90.0E 0.0N (+/- 2.0)	91.0
1976 Oct 20 1100:00	M-100	-	-	SHIR	Akademik Shirshov	GMS76J	LP1	-	-	160.0W 30.0N (+/- 5.0)	78.0
1976 Oct 22 1140:00	M-100	-	-	SHIR	Akademik Shirshov	GMS76J	LP2	-	-	160.0W 30.0N (+/- 5.0)	85.0
1976 Oct 24 1300:00	M-100	-	-	SHIR	Akademik Shirshov	GMS76J	LP3	-	-	160.0W 30.0N (+/- 5.0)	76.0
1976 Oct 26 1320:00	M-100	-	-	SHIR	Akademik Shirshov	GMS76J	LP4	-	-	160.0W 30.0N (+/- 5.0)	85.0
1976 Oct 27 1200:00	M-100	-	-	SHIR	Akademik Shirshov	DJP	-	-	-	160.0E 0.0N (+/- 1.0)	85.0
1976 Oct 28 1200:00	M-100	-	-	SHIR	Akademik Shirshov	GMS76J	LP6	-	-	160.0W 30.0N (+/- 5.0)	76.0
1976 Oct 30 1400:00	M-100	-	-	SHIR	Akademik Shirshov	GMS76J	LP7	-	-	160.0W 30.0N (+/- 5.0)	85.0
1976 Nov 02 1300:00	M-100	-	-	SHIR	Akademik Shirshov	GMS76J	LP8	-	-	160.0W 30.0N (+/- 5.0)	80.0
1976 Nov 06 1100:00	M-100	-	-	SHIR	Akademik Shirshov	GMS76J	LP9	-	-	160.0W 30.0N (+/- 5.0)	83.0
1976 Nov 16 1100:00	M-100	-	-	SHIR	Akademik Shirshov	GMS76J	LP9	-	-	160.0W 30.0N (+/- 5.0)	80.0
1976 Nov 18 1300:00	M-100	-	-	SHIR	Akademik Shirshov	GMS76J	LP10	-	-	160.0W 30.0N (+/- 5.0)	85.0
1976 Nov 22 1300:00	M-100	-	-	SHIR	Akademik Shirshov	GMS76J	LP11	-	-	160.0W 30.0N (+/- 5.0)	85.0
1976 Nov 25 1100:00	M-100	-	-	SHIR	Akademik Shirshov	DJP	-	-	-	160.0E 0.0N (+/- 1.0)	77.0
1976 Nov 27 1400:00	M-100	-	-	SHIR	Akademik Shirshov	DJP	-	-	-	160.0E 0.0N (+/- 1.0)	81.0
1976 Dec 06 1300:00	M-100	-	-	SHIR	Akademik Shirshov	GMS76J	LP12	-	-	160.0W 30.0N (+/- 5.0)	93.0
1976 Dec 09 1200:00	M-100	-	-	SHIR	Akademik Shirshov	GMS76J	LP13	-	-	160.0W 30.0N (+/- 5.0)	85.0
1976 Dec 12 1100:00	M-100	-	-	SHIR	Akademik Shirshov	GMS76J	LP14	-	-	160.0W 30.0N (+/- 5.0)	80.0
1976 Dec 12 1200:00	M-100	-	-	SHIR	Akademik Shirshov	GMS76J	LP14	-	-	160.0W 30.0N (+/- 5.0)	82.0
1976 Dec 13 1100:00	M-100	-	-	SHIR	Akademik Shirshov	GMS76J	LP15	-	-	160.0W 30.0N (+/- 5.0)	82.0
1976 Dec 25 1600:00	M-100	-	-	SHIR	Akademik Shirshov	GMS76J	LP16	-	-	160.0W 30.0N (+/- 5.0)	87.0
1976 Dec 28 1300:00	M-100	-	-	SHIR	Akademik Shirshov	GMS76J	LP17	-	-	160.0W 30.0N (+/- 5.0)	88.0
1976 Dec 28 1400:00	M-100	-	-	SHIR	Akademik Shirshov	GMS76J	LP17	-	-	160.0W 30.0N (+/- 5.0)	84.0
1976 Dec 30 1100:00	M-100	-	-	SHIR	Akademik Shirshov	GMS76J	LP18	-	-	160.0W 30.0N (+/- 5.0)	84.0
1977 Jan 01 0900:00	M-100	-	-	SHIR	Akademik Shirshov	GMS76J	LP19	-	-	160.0W 30.0N (+/- 5.0)	85.0
1977 Jan 03 0900:00	M-100	-	-	SHIR	Akademik Shirshov	GMS76J	LP20	-	-	160.0W 30.0N (+/- 5.0)	87.0
1977 Jan 05 0900:00	M-100	-	-	SHIR	Akademik Shirshov	GMS76J	LP21	-	-	160.0W 30.0N (+/- 5.0)	86.0
1977 Jan 20 0700:00	M-100	-	-	SHIR	Akademik Shirshov	GMS76J	LP22	-	-	160.0W 30.0N (+/- 5.0)	87.0
1977 Jan 23 0700:00	M-100	-	-	SHIR	Akademik Shirshov	GMS76J	LP23	-	-	160.0W 30.0N (+/- 5.0)	84.0
1977 Jan 24 1500:00	M-100	-	-	SHIR	Akademik Shirshov	GMS76J	LP24	-	-	160.0W 30.0N (+/- 5.0)	87.0
1977 Feb 03 0900:00	M-100	-	-	SHIR	Akademik Shirshov	GMS76J	LP25	-	-	160.0W 30.0N (+/- 5.0)	84.0
1977 Feb 03 1000:00	M-100	-	-	SHIR	Akademik Shirshov	GMS76J	LP25	-	-	160.0W 30.0N (+/- 5.0)	82.0
1977 Feb 04 0900:00	M-100	-	-	SHIR	Akademik Shirshov	GMS76J	LP1	-	-	160.0W 30.0N (+/- 5.0)	85.0
1977 Feb 04 1000:00	M-100	-	-	SHIR	Akademik Shirshov	GMS76J	LP1	-	-	160.0W 30.0N (+/- 5.0)	86.0
1977 Feb 06 0900:00	M-100	-	-	SHIR	Akademik Shirshov	GMS76J	LP26	-	-	160.0W 30.0N (+/- 5.0)	84.0
1977 Feb 06 1000:00	M-100	-	-	SHIR	Akademik Shirshov	GMS76J	LP26	-	-	160.0W 30.0N (+/- 5.0)	86.0
1978 Mar 19 1300:00	M-100	-	-	SHIR	Akademik Shirshov	GMS78C	LP1	-	-	160.0E 0.0N (+/- 5.0)	88.0



Launches: SHIR

Date	Rocket	Flight	Mission	PlatCode	Platform	Site	LP	AscSite	AscLP	Pos	Apogee
1978 Mar 26 1100:00	M-100	-	-	SHIR	Akademik Shirshov	GMS78C	LP2	-	-	160.0E 0.0N (+/- 5.0)	92.0
1978 Mar 26 1300:00	M-100	-	-	SHIR	Akademik Shirshov	GMS78C	LP2	-	-	160.0E 0.0N (+/- 5.0)	87.0
1978 Mar 30 1300:00	M-100	-	-	SHIR	Akademik Shirshov	OJP	-	-	-	160.0E 0.0N (+/- 1.0)	88.0
1978 Mar 30 1400:00	M-100	-	-	SHIR	Akademik Shirshov	GMS78C	LP4	-	-	160.0E 0.0N (+/- 5.0)	83.0
1979 Apr 21 1202:00	M-100B	-	-	SHIR	Akademik Shirshov	GMS79B	LP1	-	-	54.0E 0.0N (+/- 5.0)	78.0
1979 Apr 24 1139:00	M-100B	-	-	SHIR	Akademik Shirshov	GMS79B	LP2	-	-	54.0E 0.0N (+/- 5.0)	84.0
1979 Apr 27 1222:00	M-100B	-	-	SHIR	Akademik Shirshov	GMS79B	LP3	-	-	54.0E 0.0N (+/- 5.0)	84.0
1979 May 02 0325:00	M-100B	-	-	SHIR	Akademik Shirshov	GMS79B	LP4	-	-	54.0E 0.0N (+/- 5.0)	90.0
1979 May 16 1324:00	M-100B	-	-	SHIR	Akademik Shirshov	GMS79B	LP5	-	-	54.0E 0.0N (+/- 5.0)	82.0
1979 May 18 1324:00	M-100B	-	-	SHIR	Akademik Shirshov	GMS79B	LP6	-	-	54.0E 0.0N (+/- 5.0)	83.0
1979 May 21 1325:00	M-100B	-	-	SHIR	Akademik Shirshov	GMS79B	LP7	-	-	54.0E 0.0N (+/- 5.0)	84.0
1979 May 23 1432:00	M-100B	-	-	SHIR	Akademik Shirshov	GMS79B	LP7	-	-	54.0E 0.0N (+/- 5.0)	78.0
1979 May 25 1323:00	M-100B	-	-	SHIR	Akademik Shirshov	GMS79B	LP7	-	-	54.0E 0.0N (+/- 5.0)	85.0
1979 May 27 0315:00	M-100B	-	-	SHIR	Akademik Shirshov	GMS79B	LP7	-	-	54.0E 0.0N (+/- 5.0)	79.0
1979 May 28 0211:00	M-100B	-	-	SHIR	Akademik Shirshov	GMS79B	LP7	-	-	54.0E 0.0N (+/- 5.0)	83.0
1979 May 28 0316:00	M-100B	-	-	SHIR	Akademik Shirshov	GMS79B	LP7	-	-	54.0E 0.0N (+/- 5.0)	79.0
1980 Feb 25 1400:00	M-100	-	-	SHIR	Akademik Shirshov	OJP	-	-	-	160.0E 0.0N (+/- 1.0)	81.0
1980 Feb 25 1500:00	M-100	-	-	SHIR	Akademik Shirshov	OJP	-	-	-	160.0E 0.0N (+/- 1.0)	83.0
1980 Feb 25 1630:00	M-100	-	-	SHIR	Akademik Shirshov	OJP	-	-	-	160.0E 0.0N (+/- 1.0)	83.0
1980 Feb 25 1800:00	M-100	-	-	SHIR	Akademik Shirshov	OJP	-	-	-	160.0E 0.0N (+/- 1.0)	84.0
1980 Feb 26 1440:00	M-100	-	-	SHIR	Akademik Shirshov	OJP	-	-	-	160.0E 0.0N (+/- 1.0)	80.0
1980 Feb 26 1600:00	M-100	-	-	SHIR	Akademik Shirshov	OJP	-	-	-	160.0E 0.0N (+/- 1.0)	87.0
1980 Feb 26 1730:00	M-100	-	-	SHIR	Akademik Shirshov	OJP	-	-	-	160.0E 0.0N (+/- 1.0)	85.0
1980 Feb 26 1840:00	M-100	-	-	SHIR	Akademik Shirshov	OJP	-	-	-	160.0E 0.0N (+/- 1.0)	82.0
1980 Feb 27 1440:00	M-100	-	-	SHIR	Akademik Shirshov	OJP	-	-	-	160.0E 0.0N (+/- 1.0)	86.0
1980 Feb 27 1540:00	M-100	-	-	SHIR	Akademik Shirshov	OJP	-	-	-	160.0E 0.0N (+/- 1.0)	83.0
1980 Feb 28 1420:00	M-100	-	-	SHIR	Akademik Shirshov	OJP	-	-	-	160.0E 0.0N (+/- 1.0)	83.0
1980 Feb 28 1540:00	M-100	-	-	SHIR	Akademik Shirshov	OJP	-	-	-	160.0E 0.0N (+/- 1.0)	85.0
1980 Feb 28 1700:00	M-100	-	-	SHIR	Akademik Shirshov	OJP	-	-	-	160.0E 0.0N (+/- 1.0)	83.0
1980 Feb 28 1820:00	M-100	-	-	SHIR	Akademik Shirshov	OJP	-	-	-	160.0E 0.0N (+/- 1.0)	84.0
1980 Feb 29 1100:00	M-100	-	-	SHIR	Akademik Shirshov	OJP	-	-	-	160.0E 0.0N (+/- 1.0)	87.0
1980 Feb 29 1340:00	M-100	-	-	SHIR	Akademik Shirshov	OJP	-	-	-	160.0E 0.0N (+/- 1.0)	84.0
1980 Feb 29 1400:00	M-100	-	-	SHIR	Akademik Shirshov	OJP	-	-	-	160.0E 0.0N (+/- 1.0)	84.0
1980 Feb 29 1500:00	M-100	-	-	SHIR	Akademik Shirshov	OJP	-	-	-	160.0E 0.0N (+/- 1.0)	84.0
1980 Mar 07 1700:00	M-100	-	-	SHIR	Akademik Shirshov	GMS80B	LP1	-	-	160.0E 0.0N (+/- 1.0)	84.0
1980 Mar 23 1500:00	M-100	-	-	SHIR	Akademik Shirshov	OJP	-	-	-	160.0E 0.0N (+/- 1.0)	83.0
1980 Mar 26 1520:00	M-100	-	-	SHIR	Akademik Shirshov	GMS80B	LP2	-	-	160.0E 0.0N (+/- 1.0)	79.0
1980 Mar 29 1600:00	M-100	-	-	SHIR	Akademik Shirshov	GMS80B	LP3	-	-	160.0E 0.0N (+/- 1.0)	84.0
1980 Mar 30 1420:00	M-100	-	-	SHIR	Akademik Shirshov	GMS80B	LP4	-	-	160.0E 0.0N (+/- 1.0)	81.0
1980 Apr 29 1600:00	M-100	-	-	SHIR	Akademik Shirshov	NER	-	-	-	90.0E 0.0N (+/- 2.0)	82.0
1980 Apr 29 1730:00	M-100	-	-	SHIR	Akademik Shirshov	NER	-	-	-	90.0E 0.0N (+/- 2.0)	83.0
1980 May 01 1630:00	M-100	-	-	SHIR	Akademik Shirshov	GMS80F	LP2	-	-	67.0E 0.0N (+/- 5.0)	81.0
1980 May 06 2100:00	M-100	-	-	SHIR	Akademik Shirshov	GMS80F	LP3	-	-	67.0E 0.0N (+/- 5.0)	84.0
1980 May 06 2210:00	M-100	-	-	SHIR	Akademik Shirshov	GMS80F	LP3	-	-	67.0E 0.0N (+/- 5.0)	82.0
1980 May 07 2140:00	M-100	-	-	SHIR	Akademik Shirshov	GMS80F	LP4	-	-	67.0E 0.0N (+/- 5.0)	84.0
1980 May 08 2240:00	M-100	-	-	SHIR	Akademik Shirshov	IOLZ	IOLZ	-	-	65.0E 0.0N (+/- 2.0)	83.0
1980 May 09 2210:00	M-100	-	-	SHIR	Akademik Shirshov	GMS80F	LP6	-	-	67.0E 0.0N (+/- 5.0)	83.0
1980 May 19 2130:00	M-100	-	-	SHIR	Akademik Shirshov	GMS80F	LP7	-	-	67.0E 0.0N (+/- 5.0)	86.0
1980 May 20 2130:00	M-100	-	-	SHIR	Akademik Shirshov	GMS80F	LP8	-	-	67.0E 0.0N (+/- 5.0)	85.0
1980 May 21 2130:00	M-100	-	-	SHIR	Akademik Shirshov	GMS80F	LP9	-	-	67.0E 0.0N (+/- 5.0)	85.0
1980 May 22 2240:00	M-100	-	-	SHIR	Akademik Shirshov	GMS80F	LP10	-	-	67.0E 0.0N (+/- 5.0)	82.0
1980 May 23 2120:00	M-100	-	-	SHIR	Akademik Shirshov	GMS80F	LP11	-	-	67.0E 0.0N (+/- 5.0)	79.0
1980 May 24 2030:00	M-100	-	-	SHIR	Akademik Shirshov	GMS80F	LP12	-	-	67.0E 0.0N (+/- 5.0)	82.0
1980 May 25 2000:00	M-100	-	-	SHIR	Akademik Shirshov	GMS80F	LP13	-	-	67.0E 0.0N (+/- 5.0)	82.0
1980 May 26 1930:00	M-100	-	-	SHIR	Akademik Shirshov	GMS80F	LP14	-	-	67.0E 0.0N (+/- 5.0)	83.0

Launches: SHIR

Date	Rocket	Flight	Mission	PlatCode	Platform	Site	LP	AscSite	AscLP	Pos	Apogee
1980 May 27 1800:00	M-100	-	-	SHIR	Akademik Shirshov	GMS80F	LP15	-	-	67.0E 0.0N (+/- 5.0)	84.0
1980 May 27 1920:00	M-100	-	-	SHIR	Akademik Shirshov	GMS80F	LP15	-	-	67.0E 0.0N (+/- 5.0)	79.0
1980 May 30 1900:00	M-100	-	-	SHIR	Akademik Shirshov	GMS80F	LP16	-	-	67.0E 0.0N (+/- 5.0)	83.0
1980 Jun 01 1730:00	M-100	-	-	SHIR	Akademik Shirshov	GMS80F	LP17	-	-	67.0E 0.0N (+/- 5.0)	84.0
1980 Jun 04 1830:00	M-100	-	-	SHIR	Akademik Shirshov	GMS80F	LP18	-	-	67.0E 0.0N (+/- 5.0)	85.0
1980 Jun 05 2000:00	M-100	-	-	SHIR	Akademik Shirshov	GMS80F	LP19	-	-	67.0E 0.0N (+/- 5.0)	84.0
1980 Jun 06 2120:00	M-100	-	-	SHIR	Akademik Shirshov	GMS80F	LP20	-	-	67.0E 0.0N (+/- 5.0)	85.0
1981 Jan 24 1400:00	M-100	-	-	SHIR	Akademik Shirshov	GMS81C	LP1	-	-	180.0E 0.0N (+/- 5.0)	92.0
1981 Jan 26 1300:00	M-100	-	-	SHIR	Akademik Shirshov	GMS81C	LP2	-	-	180.0E 0.0N (+/- 5.0)	67.0
1981 Feb 02 1240:00	M-100	-	-	SHIR	Akademik Shirshov	GMS81C	LP3	-	-	180.0E 0.0N (+/- 5.0)	90.0
1981 Feb 03 1300:00	M-100	-	-	SHIR	Akademik Shirshov	GMS81C	LP4	-	-	180.0E 0.0N (+/- 5.0)	90.0
1981 Feb 04 1400:00	M-100	-	-	SHIR	Akademik Shirshov	GMS81C	LP5	-	-	180.0E 0.0N (+/- 5.0)	87.0
1981 Feb 15 1330:00	M-100	-	-	SHIR	Akademik Shirshov	GMS81C	LP6	-	-	180.0E 0.0N (+/- 5.0)	84.0
1981 Feb 17 1330:00	M-100	-	-	SHIR	Akademik Shirshov	OJP	-	-	-	160.0E 0.0N (+/- 1.0)	84.0
1981 Feb 17 1440:00	M-100	-	-	SHIR	Akademik Shirshov	OJP	-	-	-	160.0E 0.0N (+/- 1.0)	84.0
1981 Feb 18 1330:00	M-100	-	-	SHIR	Akademik Shirshov	GMS81C	LP7	-	-	180.0E 0.0N (+/- 5.0)	83.0
1981 Feb 18 1440:00	M-100	-	-	SHIR	Akademik Shirshov	GMS81C	LP7	-	-	180.0E 0.0N (+/- 5.0)	83.0
1981 Feb 21 1500:00	M-100	-	-	SHIR	Akademik Shirshov	GMS81C	LP8	-	-	180.0E 0.0N (+/- 5.0)	80.0
1981 Feb 23 1500:00	M-100	-	-	SHIR	Akademik Shirshov	GMS81C	LP9	-	-	180.0E 0.0N (+/- 5.0)	81.0
1981 Feb 24 1350:00	M-100	-	-	SHIR	Akademik Shirshov	GMS81C	LP10	-	-	180.0E 0.0N (+/- 5.0)	87.0
1981 Feb 25 1500:00	M-100	-	-	SHIR	Akademik Shirshov	GMS81C	LP11	-	-	180.0E 0.0N (+/- 5.0)	90.0
1981 Mar 03 1740:00	M-100	-	-	SHIR	Akademik Shirshov	GMS81C	LP12	-	-	180.0E 0.0N (+/- 5.0)	77.0
1981 Mar 04 1640:00	M-100	-	-	SHIR	Akademik Shirshov	GMS81C	LP13	-	-	180.0E 0.0N (+/- 5.0)	89.0
1981 Mar 07 1600:00	M-100	-	-	SHIR	Akademik Shirshov	GMS81C	LP14	-	-	180.0E 0.0N (+/- 5.0)	82.0
1981 Mar 07 1700:00	M-100	-	-	SHIR	Akademik Shirshov	GMS81C	LP14	-	-	180.0E 0.0N (+/- 5.0)	77.0
1981 Mar 28 1600:00	M-100	-	-	SHIR	Akademik Shirshov	GMS81C	LP15	-	-	180.0E 0.0N (+/- 5.0)	83.0
1981 Mar 28 1720:00	M-100	-	-	SHIR	Akademik Shirshov	GMS81C	LP15	-	-	180.0E 0.0N (+/- 5.0)	80.0
1981 Mar 28 1830:00	M-100	-	-	SHIR	Akademik Shirshov	GMS81C	LP15	-	-	180.0E 0.0N (+/- 5.0)	84.0
1981 Mar 29 1630:00	M-100	-	-	SHIR	Akademik Shirshov	GMS81C	LP15	-	-	180.0E 0.0N (+/- 5.0)	81.0
1981 Mar 29 1740:00	M-100	-	-	SHIR	Akademik Shirshov	GMS81C	LP15	-	-	180.0E 0.0N (+/- 5.0)	87.0
1981 Mar 30 1833:00	M-100	-	-	SHIR	Akademik Shirshov	GMS81C	LP15	-	-	180.0E 0.0N (+/- 5.0)	85.0
1981 Mar 30 1620:00	M-100	-	-	SHIR	Akademik Shirshov	GMS81C	LP15	-	-	180.0E 0.0N (+/- 5.0)	87.0
1981 Mar 30 1730:00	M-100	-	-	SHIR	Akademik Shirshov	GMS81C	LP15	-	-	180.0E 0.0N (+/- 5.0)	86.0
1981 Mar 30 1833:00	M-100	-	-	SHIR	Akademik Shirshov	GMS81C	LP15	-	-	180.0E 0.0N (+/- 5.0)	83.0
1982 May 30 1930:00	M-100	-	-	SHIR	Akademik Shirshov	NER	-	-	-	90.0E 0.0N (+/- 2.0)	79.0
1982 May 30 2045:00	M-100	-	-	SHIR	Akademik Shirshov	GMS82D	LP2	-	-	65.0E 0.0N (+/- 5.0)	84.0
1982 May 31 2030:00	M-100	-	-	SHIR	Akademik Shirshov	GMS82D	LP3	-	-	65.0E 0.0N (+/- 5.0)	80.0
1982 Jun 01 1200:00	M-100	-	-	SHIR	Akademik Shirshov	GMS82D	LP4	-	-	65.0E 0.0N (+/- 5.0)	84.0
1982 Jun 02 2125:00	M-100	-	-	SHIR	Akademik Shirshov	GMS82D	LP5	-	-	65.0E 0.0N (+/- 5.0)	83.0
1982 Jun 25 2100:00	M-100	-	-	SHIR	Akademik Shirshov	GMS82D	LP6	-	-	65.0E 0.0N (+/- 5.0)	86.0
1982 Jul 01 2230:00	M-100	-	-	SHIR	Akademik Shirshov	GMS82D	LP7	-	-	65.0E 0.0N (+/- 5.0)	80.0
1982 Jul 02 2207:00	M-100	-	-	SHIR	Akademik Shirshov	GMS82D	LP8	-	-	65.0E 0.0N (+/- 5.0)	90.0
1982 Jul 03 2200:00	M-100	-	-	SHIR	Akademik Shirshov	GMS82D	LP9	-	-	65.0E 0.0N (+/- 5.0)	85.0
1982 Jul 04 2200:00	M-100	-	-	SHIR	Akademik Shirshov	GMS82D	LP10	-	-	65.0E 0.0N (+/- 5.0)	87.0
1982 Jul 05 2210:00	M-100	-	-	SHIR	Akademik Shirshov	GMS82D	LP11	-	-	65.0E 0.0N (+/- 5.0)	89.0
1982 Jul 06 2200:00	M-100	-	-	SHIR	Akademik Shirshov	GMS82D	LP12	-	-	65.0E 0.0N (+/- 5.0)	85.0
1982 Jul 07 2200:00	M-100	-	-	SHIR	Akademik Shirshov	GMS82D	LP13	-	-	65.0E 0.0N (+/- 5.0)	84.0
1982 Jul 08 2200:00	M-100	-	-	SHIR	Akademik Shirshov	GMS82D	LP14	-	-	65.0E 0.0N (+/- 5.0)	80.0
1982 Jul 09 2200:00	M-100	-	-	SHIR	Akademik Shirshov	GMS82D	LP15	-	-	65.0E 0.0N (+/- 5.0)	82.0
1982 Jul 10 2150:00	M-100	-	-	SHIR	Akademik Shirshov	GMS82D	LP16	-	-	65.0E 0.0N (+/- 5.0)	85.0
1982 Jul 11 2000:00	M-100	-	-	SHIR	Akademik Shirshov	GMS82D	LP17	-	-	65.0E 0.0N (+/- 5.0)	83.0
1982 Jul 12 1900:00	M-100	-	-	SHIR	Akademik Shirshov	GMS82D	LP18	-	-	65.0E 0.0N (+/- 5.0)	83.0
1982 Jul 13 1930:00	M-100	-	-	SHIR	Akademik Shirshov	GMS82D	LP19	-	-	65.0E 0.0N (+/- 5.0)	90.0
1982 Jul 14 1930:00	M-100	-	-	SHIR	Akademik Shirshov	GMS82D	LP20	-	-	65.0E 0.0N (+/- 5.0)	85.0
1983 Feb 21 1900:00	M-100	-	-	SHIR	Akademik Shirshov	NER	-	-	-	90.0E 0.0N (+/- 2.0)	91.0

Launches: SHIR

Date	Rocket	Flight	Mission	PlatCode	Platform	Site	LP	AscSite	AscLP	Pos	Apogee
1983 Feb 22 1845:00	M-100	-	-	SHIR	Akademik Shirshov	NER	-	-	-	90.0E 0.0N (+/- 2.0)	71.0
1983 Feb 23 2030:00	M-100	-	-	SHIR	Akademik Shirshov	NER	-	-	-	90.0E 0.0N (+/- 2.0)	81.0
1983 Feb 24 1845:00	M-100	-	-	SHIR	Akademik Shirshov	NER	-	-	-	90.0E 0.0N (+/- 2.0)	83.0
1983 Feb 25 1840:00	M-100	-	-	SHIR	Akademik Shirshov	NER	-	-	-	90.0E 0.0N (+/- 2.0)	87.0
1983 Feb 26 1850:00	M-100	-	-	SHIR	Akademik Shirshov	NER	-	-	-	90.0E 0.0N (+/- 2.0)	83.0
1983 Feb 27 1845:00	M-100	-	-	SHIR	Akademik Shirshov	NER	-	-	-	90.0E 0.0N (+/- 2.0)	85.0
1983 Feb 28 1852:00	M-100	-	-	SHIR	Akademik Shirshov	NER	-	-	-	90.0E 0.0N (+/- 2.0)	81.0
1983 Mar 01 1930:00	M-100	-	-	SHIR	Akademik Shirshov	NER	-	-	-	90.0E 0.0N (+/- 2.0)	85.0
1983 Mar 02 1900:00	M-100	-	-	SHIR	Akademik Shirshov	NER	-	-	-	90.0E 0.0N (+/- 2.0)	86.0
1983 Mar 03 1900:00	M-100	-	-	SHIR	Akademik Shirshov	NER	-	-	-	90.0E 0.0N (+/- 2.0)	85.0
1983 Mar 04 1840:00	M-100	-	-	SHIR	Akademik Shirshov	NER	-	-	-	90.0E 0.0N (+/- 2.0)	83.0
1983 Mar 05 1850:00	M-100	-	-	SHIR	Akademik Shirshov	NER	-	-	-	90.0E 0.0N (+/- 2.0)	84.0
1983 Mar 06 1850:00	M-100	-	-	SHIR	Akademik Shirshov	NER	-	-	-	90.0E 0.0N (+/- 2.0)	83.0
1983 Mar 07 1850:00	M-100	-	-	SHIR	Akademik Shirshov	NER	-	-	-	90.0E 0.0N (+/- 2.0)	85.0
1983 Mar 08 2000:00	M-100	-	-	SHIR	Akademik Shirshov	NER	-	-	-	90.0E 0.0N (+/- 2.0)	90.0
1983 Mar 09 1830:00	M-100	-	-	SHIR	Akademik Shirshov	NER	-	-	-	90.0E 0.0N (+/- 2.0)	80.0
1983 Mar 10 1835:00	M-100	-	-	SHIR	Akademik Shirshov	NER	-	-	-	90.0E 0.0N (+/- 2.0)	85.0
1983 Mar 11 1830:00	M-100	-	-	SHIR	Akademik Shirshov	NER	-	-	-	90.0E 0.0N (+/- 2.0)	85.0
1983 Mar 12 1840:00	M-100	-	-	SHIR	Akademik Shirshov	NER	-	-	-	90.0E 0.0N (+/- 2.0)	63.0
1983 Mar 13 1825:00	M-100	-	-	SHIR	Akademik Shirshov	NER	-	-	-	90.0E 0.0N (+/- 2.0)	85.0
1983 Mar 14 1830:00	M-100	-	-	SHIR	Akademik Shirshov	NER	-	-	-	90.0E 0.0N (+/- 2.0)	87.0
1983 Mar 15 1830:00	M-100	-	-	SHIR	Akademik Shirshov	NER	-	-	-	90.0E 0.0N (+/- 2.0)	84.0
1983 Mar 16 1900:00	M-100	-	-	SHIR	Akademik Shirshov	NER	-	-	-	90.0E 0.0N (+/- 2.0)	83.0
1983 Mar 17 1825:00	M-100	-	-	SHIR	Akademik Shirshov	NER	-	-	-	90.0E 0.0N (+/- 2.0)	90.0
1983 Mar 18 1800:00	M-100	-	-	SHIR	Akademik Shirshov	NER	-	-	-	90.0E 0.0N (+/- 2.0)	86.0
1983 Mar 19 2010:00	M-100	-	-	SHIR	Akademik Shirshov	NER	-	-	-	90.0E 0.0N (+/- 2.0)	85.0
1983 Mar 20 1850:00	M-100	-	-	SHIR	Akademik Shirshov	NER	-	-	-	90.0E 0.0N (+/- 2.0)	88.0
1985 Oct 30 1426:00	M-100B	-	-	SHIR	Akademik Shirshov	NER	ULP1	-	-	90.0E 0.0N (+/- 2.0)	86.0
1985 Nov 04 1438:00	M-100B	-	-	SHIR	Akademik Shirshov	GMS85C	ULP1	-	-	-	84.0
1985 Nov 05 1433:00	M-100B	-	-	SHIR	Akademik Shirshov	GMS85C	ULP1	-	-	-	86.0
1985 Nov 08 1421:00	M-100B	-	-	SHIR	Akademik Shirshov	GMS85C	ULP1	-	-	-	79.0
1985 Nov 25 1400:00	M-100B	-	-	SHIR	Akademik Shirshov	GMS85C	ULP1	-	-	-	87.0
1985 Nov 25 1522:00	M-100B	-	-	SHIR	Akademik Shirshov	GMS85C	ULP1	-	-	-	86.0
1985 Nov 28 1240:00	M-100B	-	-	SHIR	Akademik Shirshov	GMS85C	ULP1	-	-	-	71.0
1985 Nov 29 0730:00	M-100B	-	-	SHIR	Akademik Shirshov	GMS85C	ULP1	-	-	-	79.0
1985 Nov 29 1400:00	M-100B	-	-	SHIR	Akademik Shirshov	GMS85C	ULP1	-	-	-	84.0
1985 Nov 29 1510:00	M-100B	-	-	SHIR	Akademik Shirshov	GMS85C	ULP1	-	-	-	85.0
1985 Dec 01 1129:00	M-100B	-	-	SHIR	Akademik Shirshov	GMS85C	ULP1	-	-	-	77.0
1985 Dec 03 0930:00	M-100B	-	-	SHIR	Akademik Shirshov	GMS85C	ULP1	-	-	-	84.0
1985 Dec 03 1530:00	M-100B	-	-	SHIR	Akademik Shirshov	GMS85C	ULP1	-	-	-	71.0
1985 Dec 03 1650:00	M-100B	-	-	SHIR	Akademik Shirshov	GMS85C	ULP1	-	-	-	90.0
1985 Dec 05 1030:00	M-100B	-	-	SHIR	Akademik Shirshov	GMS85C	ULP1	-	-	-	87.0
1985 Dec 05 1633:00	M-100B	-	-	SHIR	Akademik Shirshov	GMS85C	ULP1	-	-	-	85.0
1985 Dec 05 1740:00	M-100B	-	-	SHIR	Akademik Shirshov	GMS85C	ULP1	-	-	-	83.0
1985 Dec 15 0930:00	M-100B	-	-	SHIR	Akademik Shirshov	GMS85C	ULP1	-	-	-	83.0
1985 Dec 15 1602:00	M-100B	-	-	SHIR	Akademik Shirshov	GMS85C	ULP1	-	-	-	85.0
1985 Dec 15 1716:00	M-100B	-	-	SHIR	Akademik Shirshov	GMS85C	ULP1	-	-	-	89.0
1986 Jan 04 1030:00	M-100B	-	-	SHIR	Akademik Shirshov	GMS85C	ULP1	-	-	-	86.0
1986 Jan 04 1655:00	M-100B	-	-	SHIR	Akademik Shirshov	GMS85C	ULP1	-	-	-	75.0
1986 Jan 04 1831:00	M-100B	-	-	SHIR	Akademik Shirshov	GMS85C	ULP1	-	-	-	80.0
1986 Jan 04 2015:00	M-100B	-	-	SHIR	Akademik Shirshov	GMS85C	ULP1	-	-	-	80.0
1986 Apr 27 0900:00	M-100B	-	-	SHIR	Akademik Shirshov	GMS86A	ULP1	-	-	-	79.0
1986 Apr 27 1020:00	M-100B	-	-	SHIR	Akademik Shirshov	GMS86A	ULP1	-	-	-	82.0
1986 Apr 29 0840:00	M-100B	-	-	SHIR	Akademik Shirshov	GMS86A	ULP1	-	-	-	80.0

Launches: SHIR

Date	Rocket	Flight	Mission	PlatCode	Platform	Site	LP	AscSite	AscLP	Pos	Apogee
1986 Apr 29 0946:00	M-100B	-	-	SHIR	Akademik Shirshov	GMS86A	ULP1	-	-	-	84.0
1986 May 02 0756:00	M-100B	-	-	SHIR	Akademik Shirshov	GMS86A	ULP1	-	-	-	87.0
1986 May 02 0906:00	M-100B	-	-	SHIR	Akademik Shirshov	GMS86A	ULP1	-	-	-	85.0
1986 May 04 0756:00	M-100B	-	-	SHIR	Akademik Shirshov	GMS86A	ULP1	-	-	-	86.0
1986 May 04 0900:00	M-100B	-	-	SHIR	Akademik Shirshov	GMS86A	ULP1	-	-	-	86.0
1986 May 22 0909:00	M-100B	-	-	SHIR	Akademik Shirshov	GMS86A	ULP1	-	-	-	86.0
1986 May 22 1036:00	M-100B	-	-	SHIR	Akademik Shirshov	GMS86A	ULP1	-	-	-	85.0
1986 May 25 0800:00	M-100B	-	-	SHIR	Akademik Shirshov	GMS86A	ULP1	-	-	-	85.0
1986 May 25 0900:00	M-100B	-	-	SHIR	Akademik Shirshov	GMS86A	ULP1	-	-	-	80.0
1986 May 27 0720:00	M-100B	-	-	SHIR	Akademik Shirshov	GMS86A	ULP1	-	-	-	82.0
1986 May 28 0703:00	M-100B	-	-	SHIR	Akademik Shirshov	GMS86A	ULP1	-	-	-	84.0
1986 May 28 0900:00	M-100B	-	-	SHIR	Akademik Shirshov	GMS86A	ULP1	-	-	-	86.0
1986 May 29 0806:00	M-100B	-	-	SHIR	Akademik Shirshov	GMS86A	ULP1	-	-	-	81.0
1986 May 29 0935:00	M-100B	-	-	SHIR	Akademik Shirshov	GMS86A	ULP1	-	-	-	82.0
1986 May 30 0649:00	M-100B	-	-	SHIR	Akademik Shirshov	GMS86A	ULP1	-	-	-	80.0
1987 Jan 03 1500:00	M-100B	-	-	SHIR	Akademik Shirshov	NER	-	-	-	90.0E 0.0N (+/- 2.0)	77.0
1987 Jan 04 0732:00	M-100B	-	-	SHIR	Akademik Shirshov	NER	-	-	-	90.0E 0.0N (+/- 2.0)	86.0
1987 Jan 04 1458:00	M-100B	-	-	SHIR	Akademik Shirshov	NER	-	-	-	90.0E 0.0N (+/- 2.0)	84.0
1987 Jan 06 1500:00	M-100B	-	-	SHIR	Akademik Shirshov	GMS87B	LP1	-	-	90.0E 0.0N (+/- 5.0)	84.0
1987 Jan 07 1457:00	M-100B	-	-	SHIR	Akademik Shirshov	GMS87B	LP2	-	-	90.0E 0.0N (+/- 5.0)	85.0
1987 Jan 12 1800:00	M-100B	-	-	SHIR	Akademik Shirshov	GMS87B	LP3	-	-	90.0E 0.0N (+/- 5.0)	85.0
1987 Jan 13 1800:00	M-100B	-	-	SHIR	Akademik Shirshov	GMS87B	LP4	-	-	90.0E 0.0N (+/- 5.0)	90.0
1987 Jan 13 2100:00	M-100B	-	-	SHIR	Akademik Shirshov	GMS87B	LP5	-	-	90.0E 0.0N (+/- 5.0)	81.0
1987 Jan 14 1755:00	M-100B	-	-	SHIR	Akademik Shirshov	GMS87B	LP6	-	-	90.0E 0.0N (+/- 5.0)	81.0
1987 Jan 15 1755:00	M-100B	-	-	SHIR	Akademik Shirshov	GMS87B	LP7	-	-	90.0E 0.0N (+/- 5.0)	83.0
1987 Jan 16 1759:00	M-100B	-	-	SHIR	Akademik Shirshov	GMS87B	LP8	-	-	90.0E 0.0N (+/- 5.0)	81.0
1987 Jan 17 1700:00	M-100B	-	-	SHIR	Akademik Shirshov	GMS87B	LP9	-	-	90.0E 0.0N (+/- 5.0)	82.0
1987 Jan 22 1757:00	M-100B	-	-	SHIR	Akademik Shirshov	SOMAP	-	-	-	53.0E 1.0N (+/- 1.0)	85.0
1987 Jan 22 2027:00	M-100B	-	-	SHIR	Akademik Shirshov	SOMAP	-	-	-	53.0E 1.0N (+/- 1.0)	83.0
1987 Jan 24 2000:00	M-100B	-	-	SHIR	Akademik Shirshov	SOMAP	-	-	-	53.0E 1.0N (+/- 1.0)	82.0
1987 Jan 25 1802:00	M-100B	-	-	SHIR	Akademik Shirshov	SOMAP	-	-	-	53.0E 1.0N (+/- 1.0)	85.0
1987 Jan 26 1905:00	M-100B	-	-	SHIR	Akademik Shirshov	SOMAP	-	-	-	53.0E 1.0N (+/- 1.0)	82.0
1987 Jan 28 1800:00	M-100B	-	-	SHIR	Akademik Shirshov	SOMAP	-	-	-	53.0E 1.0N (+/- 1.0)	81.0
1987 Jan 29 1800:00	M-100B	-	-	SHIR	Akademik Shirshov	SOMAP	-	-	-	53.0E 1.0N (+/- 1.0)	82.0
1987 Jan 30 1800:00	M-100B	-	-	SHIR	Akademik Shirshov	SOMAP	-	-	-	53.0E 1.0N (+/- 1.0)	81.0
1987 Jan 30 1806:00	M-100B	-	-	SHIR	Akademik Shirshov	SOMAP	-	-	-	53.0E 1.0N (+/- 1.0)	81.0
1987 Feb 01 1800:00	M-100B	-	-	SHIR	Akademik Shirshov	SOMAP	-	-	-	53.0E 1.0N (+/- 1.0)	88.0
1987 Feb 02 1800:00	M-100B	-	-	SHIR	Akademik Shirshov	SOMAP	-	-	-	53.0E 1.0N (+/- 1.0)	83.0
1987 Feb 03 1800:00	M-100B	-	-	SHIR	Akademik Shirshov	SOMAP	-	-	-	53.0E 1.0N (+/- 1.0)	85.0
1987 Feb 04 1800:00	M-100B	-	-	SHIR	Akademik Shirshov	SOMAP	-	-	-	53.0E 1.0N (+/- 1.0)	84.0
1987 Feb 05 1904:00	M-100B	-	-	SHIR	Akademik Shirshov	SOMAP	-	-	-	53.0E 1.0N (+/- 1.0)	82.0
1987 Feb 06 1800:00	M-100B	-	-	SHIR	Akademik Shirshov	SOMAP	-	-	-	53.0E 1.0N (+/- 1.0)	84.0
1987 Feb 22 1200:00	M-100B	-	-	SHIR	Akademik Shirshov	SOMAP	-	-	-	53.0E 1.0N (+/- 1.0)	83.0
1987 Oct 23 1200:00	M-100B	-	-	SHIR	Akademik Shirshov	GMS87F	ULP1	-	-	-	78.0
1987 Oct 24 1100:00	M-100B	-	-	SHIR	Akademik Shirshov	GMS87F	ULP1	-	-	-	78.0
1987 Oct 26 1004:00	M-100B	-	-	SHIR	Akademik Shirshov	GMS87F	ULP1	-	-	-	85.0
1987 Oct 27 1204:00	M-100B	-	-	SHIR	Akademik Shirshov	GMS87F	ULP1	-	-	-	83.0
1987 Oct 28 1144:00	M-100B	-	-	SHIR	Akademik Shirshov	GMS87F	ULP1	-	-	-	80.0
1987 Oct 28 1258:00	M-100B	-	-	SHIR	Akademik Shirshov	GMS87F	ULP1	-	-	-	77.0
1987 Nov 13 1234:00	M-100B	-	-	SHIR	Akademik Shirshov	GMS87F	ULP1	-	-	-	81.0
1987 Nov 15 1218:00	M-100B	-	-	SHIR	Akademik Shirshov	GMS87F	ULP1	-	-	-	78.0
1987 Nov 21 1122:00	M-100B	-	-	SHIR	Akademik Shirshov	GMS87F	ULP1	-	-	-	84.0
1987 Nov 23 1044:00	M-100B	-	-	SHIR	Akademik Shirshov	GMS87F	ULP1	-	-	-	74.0
1987 Nov 29 0907:00	M-100B	-	-	SHIR	Akademik Shirshov	GMS87F	ULP1	-	-	-	85.0
1987 Nov 29 0907:00	M-100B	-	-	SHIR	Akademik Shirshov	GMS87F	ULP1	-	-	-	83.0

Launches: SHIR

Date	Rocket	Flight	Mission	PlatCode	Platform	Site	LP	AscSite	AscLP	Pos	Apogee
1987 Nov 30 0705:00	M-100B	-	-	SHIR	Akademik Shirshov	GMS87F	ULP1	-	-	-	82.0
1987 Dec 01 0902:00	M-100B	-	-	SHIR	Akademik Shirshov	GMS87F	ULP1	-	-	-	83.0
1987 Dec 02 0911:00	M-100B	-	-	SHIR	Akademik Shirshov	GMS87F	ULP1	-	-	-	79.0
1987 Dec 07 1005:00	M-100B	-	-	SHIR	Akademik Shirshov	GMS87F	ULP1	-	-	-	76.0
1987 Dec 09 1017:00	M-100B	-	-	SHIR	Akademik Shirshov	GMS87F	ULP1	-	-	-	79.0
1988 Mar 18 1519:00	M-100B	-	-	SHIR	Akademik Shirshov	GMS88A	ULP1	-	-	-	84.0
1988 Mar 18 1634:00	M-100B	-	-	SHIR	Akademik Shirshov	GMS88A	ULP1	-	-	-	80.0
1988 Mar 20 1624:00	M-100B	-	-	SHIR	Akademik Shirshov	GMS88A	ULP1	-	-	-	74.0
1988 Mar 22 1541:00	M-100B	-	-	SHIR	Akademik Shirshov	GMS88A	ULP1	-	-	-	85.0
1988 Mar 23 1551:00	M-100B	-	-	SHIR	Akademik Shirshov	GMS88A	ULP1	-	-	-	85.0
1988 Mar 31 1651:00	M-100B	-	-	SHIR	Akademik Shirshov	GMS88A	ULP1	-	-	-	82.0
1988 Apr 05 1620:00	M-100B	-	-	SHIR	Akademik Shirshov	GMS88A	ULP1	-	-	-	80.0
1988 Apr 06 1602:00	M-100B	-	-	SHIR	Akademik Shirshov	GMS88A	ULP1	-	-	-	80.0
1988 Apr 07 1604:00	M-100B	-	-	SHIR	Akademik Shirshov	GMS88A	ULP1	-	-	-	77.0
1988 Apr 11 1554:00	M-100B	-	-	SHIR	Akademik Shirshov	GMS88A	ULP1	-	-	-	76.0
1988 Apr 12 1615:00	M-100B	-	-	SHIR	Akademik Shirshov	GMS88A	ULP1	-	-	-	81.0
1988 Apr 27 1609:00	M-100B	-	-	SHIR	Akademik Shirshov	GMS88A	ULP1	-	-	-	79.0
1988 Apr 30 1200:00	M-100B	-	-	SHIR	Akademik Shirshov	GMS88A	ULP1	-	-	-	86.0
1988 May 02 1430:00	M-100B	-	-	SHIR	Akademik Shirshov	GMS88A	ULP1	-	-	-	77.0
1988 May 03 1358:00	M-100B	-	-	SHIR	Akademik Shirshov	GMS88A	ULP1	-	-	-	78.0
1988 May 04 1400:00	M-100B	-	-	SHIR	Akademik Shirshov	GMS88A	ULP1	-	-	-	77.0
1989 Aug 26 1701:00	M-100B	-	-	SHIR	Akademik Shirshov	GMS89C	ULP1	-	-	-	83.0
1989 Aug 27 0650:00	M-100B	-	-	SHIR	Akademik Shirshov	GMS89C	ULP1	-	-	-	83.0
1989 Aug 29 1635:00	M-100B	-	-	SHIR	Akademik Shirshov	GMS89C	ULP1	-	-	-	69.0
1989 Aug 29 1845:00	M-100B	-	-	SHIR	Akademik Shirshov	GMS89C	ULP1	-	-	-	87.0
1989 Aug 31 1600:00	M-100B	-	-	SHIR	Akademik Shirshov	GMS89C	ULP1	-	-	-	81.0
1989 Sep 01 0700:00	M-100B	-	-	SHIR	Akademik Shirshov	GMS89C	ULP1	-	-	-	82.0
1989 Sep 01 1600:00	M-100B	-	-	SHIR	Akademik Shirshov	GMS89C	ULP1	-	-	-	81.0
1989 Sep 01 1727:00	M-100B	-	-	SHIR	Akademik Shirshov	GMS89C	ULP1	-	-	-	82.0
1989 Sep 01 1900:00	M-100B	-	-	SHIR	Akademik Shirshov	GMS89C	ULP1	-	-	-	81.0
1989 Sep 11 1600:00	M-100B	-	-	SHIR	Akademik Shirshov	GMS89C	ULP1	-	-	-	78.0
1989 Sep 08 1851:00	M-100B	-	-	SHIR	Akademik Shirshov	GMS89C	ULP1	-	-	-	91.0
1989 Sep 08 1630:00	M-100B	-	-	SHIR	Akademik Shirshov	GMS89C	ULP1	-	-	-	84.0
1989 Sep 11 0620:00	M-100B	-	-	SHIR	Akademik Shirshov	GMS89C	ULP1	-	-	-	82.0
1989 Sep 11 1745:00	M-100B	-	-	SHIR	Akademik Shirshov	GMS89C	ULP1	-	-	-	83.0
1989 Sep 11 2015:00	M-100B	-	-	SHIR	Akademik Shirshov	GMS89C	ULP1	-	-	-	71.0
1989 Oct 05 1800:00	M-100B	-	-	SHIR	Akademik Shirshov	GMS89C	ULP1	-	-	-	85.0
1989 Oct 05 1802:00	M-100B	-	-	SHIR	Akademik Shirshov	GMS89C	ULP1	-	-	-	85.0
1989 Oct 09 1655:00	M-100B	-	-	SHIR	Akademik Shirshov	GMS89C	ULP1	-	-	-	64.0
1989 Oct 09 1655:00	M-100B	-	-	SHIR	Akademik Shirshov	GMS89C	ULP1	-	-	-	64.0
1989 Oct 09 1814:00	M-100B	-	-	SHIR	Akademik Shirshov	GMS89C	ULP1	-	-	-	82.0
1989 Oct 11 0700:00	M-100B	-	-	SHIR	Akademik Shirshov	GMS89C	ULP1	-	-	-	95.0
1989 Oct 11 0701:00	M-100B	-	-	SHIR	Akademik Shirshov	GMS89C	ULP1	-	-	-	95.0
1989 Oct 11 1700:00	M-100B	-	-	SHIR	Akademik Shirshov	GMS89C	ULP1	-	-	-	84.0
1989 Oct 12 1405:00	M-100B	-	-	SHIR	Akademik Shirshov	GMS89C	ULP1	-	-	-	93.0
1989 Oct 12 1405:00	M-100B	-	-	SHIR	Akademik Shirshov	GMS89C	ULP1	-	-	-	93.0
1989 Oct 12 1405:00	M-100B	-	-	SHIR	Akademik Shirshov	GMS89C	ULP1	-	-	-	82.0
1989 Oct 12 1705:00	M-100B	-	-	SHIR	Akademik Shirshov	GMS89C	ULP1	-	-	-	86.0
1989 Oct 12 1807:00	M-100B	-	-	SHIR	Akademik Shirshov	GMS89C	ULP1	-	-	-	74.0
1989 Oct 15 1655:00	M-100B	-	-	SHIR	Akademik Shirshov	GMS89C	ULP1	-	-	-	84.0
1989 Oct 15 1836:00	M-100B	-	-	SHIR	Akademik Shirshov	GMS89C	ULP1	-	-	-	81.0
1989 Oct 18 1730:00	M-100B	-	-	SHIR	Akademik Shirshov	GMS89C	ULP1	-	-	-	83.0
1989 Oct 20 1802:00	M-100B	-	-	SHIR	Akademik Shirshov	GMS89C	ULP1	-	-	-	88.0
1989 Oct 20 2050:00	M-100B	-	-	SHIR	Akademik Shirshov	GMS89C	ULP1	-	-	-	88.0
1989 Oct 20 2050:00	M-100B	-	-	SHIR	Akademik Shirshov	GMS89C	ULP1	-	-	-	82.0
1989 Oct 21 1928:00	M-100B	-	-	SHIR	Akademik Shirshov	GMS89C	ULP1	-	-	-	82.0

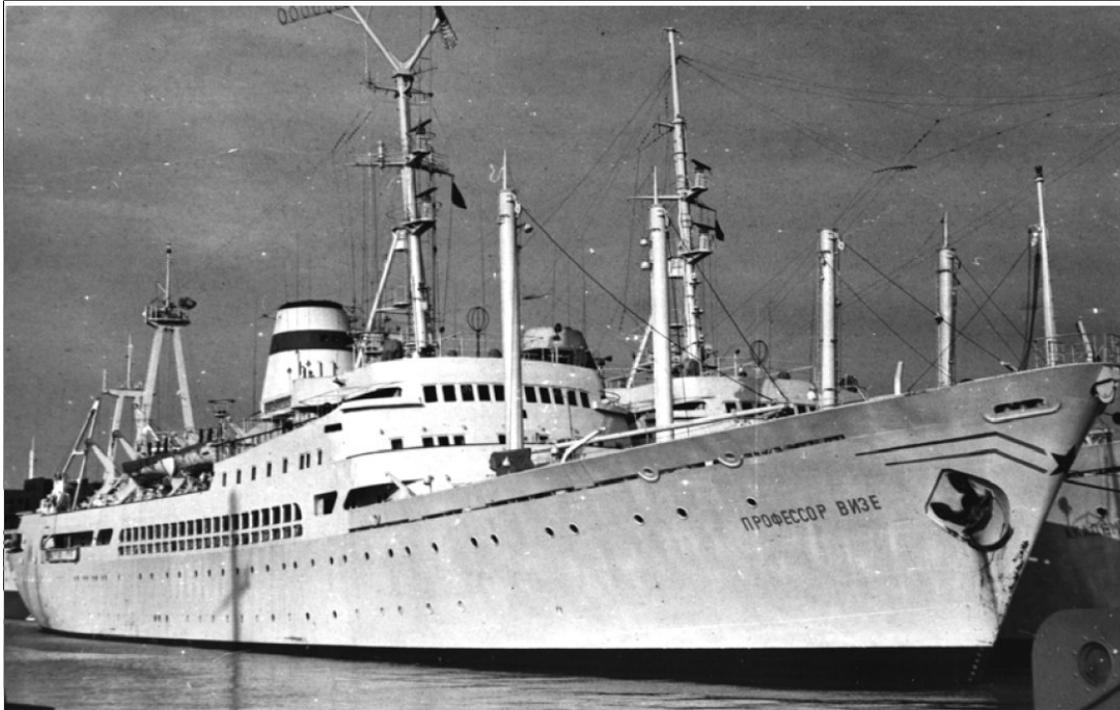
Launches: SHIR

Date	Rocket	Flight	Mission	PlatCode	Platform	Site	LP	AscSite	AscLP	Pos	Apogee
1989 Oct 21 1928:00	M-100B	-	-	SHIR	Akademik Shirshov	GMS89C	ULP1	-	-	-	87.0
1989 Oct 23 0500:00	M-100B	-	-	SHIR	Akademik Shirshov	GMS89C	ULP1	-	-	-	90.0
1989 Oct 23 1652:00	M-100B	-	-	SHIR	Akademik Shirshov	GMS89C	ULP1	-	-	-	84.0
1989 Oct 23 1800:00	M-100B	-	-	SHIR	Akademik Shirshov	GMS89C	ULP1	-	-	-	90.0
1989 Oct 26 1800:00	M-100B	-	-	SHIR	Akademik Shirshov	GMS89C	ULP1	-	-	-	78.0
1990 Jan 31 0445:00	M-100B	-	-	SHIR	Akademik Shirshov	GMS90C	LP1	-	-	65.0E 6.0N (+/- 5.0)	66.0
1990 Jan 31 0707:00	M-100B	-	-	SHIR	Akademik Shirshov	GMS90C	LP1	-	-	65.0E 6.0N (+/- 5.0)	60.0
1990 Jan 31 1125:00	M-100B	-	-	SHIR	Akademik Shirshov	GMS90C	LP1	-	-	65.0E 6.0N (+/- 5.0)	60.0
1990 Jan 31 1453:00	M-100B	-	-	SHIR	Akademik Shirshov	GMS90C	LP1	-	-	65.0E 6.0N (+/- 5.0)	55.0
1990 Jan 31 1853:00	M-100B	-	-	SHIR	Akademik Shirshov	GMS90C	LP1	-	-	65.0E 6.0N (+/- 5.0)	76.0
1990 Jan 31 2320:00	M-100B	-	-	SHIR	Akademik Shirshov	GMS90C	LP1	-	-	65.0E 6.0N (+/- 5.0)	60.0
1990 Feb 21 0254:00	M-100B	-	-	SHIR	Akademik Shirshov	GMS90C	LP2	-	-	65.0E 6.0N (+/- 5.0)	75.0
1990 Feb 21 0652:00	M-100B	-	-	SHIR	Akademik Shirshov	GMS90C	LP2	-	-	65.0E 6.0N (+/- 5.0)	67.0
1990 Feb 21 1053:00	M-100B	-	-	SHIR	Akademik Shirshov	GMS90C	LP2	-	-	65.0E 6.0N (+/- 5.0)	70.0
1990 Feb 21 1457:00	M-100B	-	-	SHIR	Akademik Shirshov	GMS90C	LP2	-	-	65.0E 6.0N (+/- 5.0)	67.0
1990 Feb 21 1855:00	M-100B	-	-	SHIR	Akademik Shirshov	GMS90C	LP2	-	-	65.0E 6.0N (+/- 5.0)	72.0
1990 Feb 22 0032:00	M-100B	-	-	SHIR	Akademik Shirshov	GMS90C	LP2	-	-	65.0E 6.0N (+/- 5.0)	72.0
1990 Mar 11 0303:00	M-100B	-	-	SHIR	Akademik Shirshov	GMS90C	LP3	-	-	65.0E 6.0N (+/- 5.0)	55.0
1990 Mar 11 0409:00	M-100B	-	-	SHIR	Akademik Shirshov	GMS90C	LP3	-	-	65.0E 6.0N (+/- 5.0)	60.0
1990 Mar 11 0703:00	M-100B	-	-	SHIR	Akademik Shirshov	GMS90C	LP3	-	-	65.0E 6.0N (+/- 5.0)	77.0
1990 Mar 11 1055:00	M-100B	-	-	SHIR	Akademik Shirshov	GMS90C	LP3	-	-	65.0E 6.0N (+/- 5.0)	76.0
1990 Mar 11 1455:00	M-100B	-	-	SHIR	Akademik Shirshov	GMS90C	LP3	-	-	65.0E 6.0N (+/- 5.0)	77.0
1990 Mar 11 1857:00	M-100B	-	-	SHIR	Akademik Shirshov	GMS90C	LP3	-	-	65.0E 6.0N (+/- 5.0)	72.0
1990 Mar 11 2255:00	M-100B	-	-	SHIR	Akademik Shirshov	GMS90C	LP3	-	-	65.0E 6.0N (+/- 5.0)	75.0

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### IV.1.3.11 Professor Vize

Профессор Визе



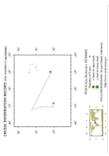
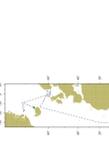
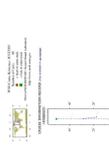
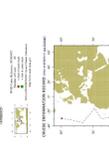
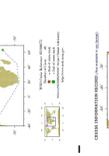
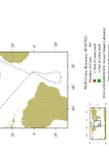
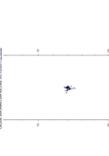
R/V Professor Vize, built in 1968 (AARI)

Credit: Unknown

GMS SSSR research ship operated by Arctic and Antarctic Research Inst., Leningrad. Built 1966. IMO 6707674. Mass: 5714 tons

Rockets used: MR-12,MR-20

Updated: 2024 Nov 28 03:19:31

LC_Code	Active	Cruises: VIZE		Region	Cruise	CruiseMap
		LC_Code	Active			
GMS68A	1968 May 1 - 1968 May 31	Atlantic Ocean	Vize Expedition 1, 1968 (SU008482)			
GMS70B	1970 Jul 1 - 1970 Aug 15	Atlantic Ocean	Vize Expedition 2, 1970 (SU023005)			
GMS73C	1973 Jun 12 - 1973 Sep 1	Atlantic Ocean	Vize Expedition 3, 1973 (SU008487)			
GMS76F	1976 Aug 1 - 1976 Nov 30	Atlantic Ocean	Vize Expedition 4, 1976 (SU008672)			
GMS77F	1977 May 1 - 1977 Jul 31	Atlantic Ocean	Vize Expedition 5, 1977			
GMS78A	1978 Mar 1 - 1978 Jul 31	Atlantic Ocean	Vize Expedition 6, 1978 (SU017921)			
GMS82A	1982 Feb 1 - 1982 May 31	Atlantic Ocean	Vize Expedition 7, 1982 (SU008509)			
GMS83B	1983 Aug 1 - 1983 Oct 31	Atlantic Ocean	Vize Expedition 8, 1983			
GMS86B	1986 Jun 1 - 1986 Aug 31	Atlantic Ocean	Vize Expedition 9, 1986			
GMS88C	1988 Jul 1 - 1988 Dec 31	Japan Sea/Chukotsk Sea	Vize Expedition 10, 1988			



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Updated: 2024 Nov 28 03:19:31

Launches: VIZE

Date	Rocket	Flight	Mission	Platform	Site	LP	AscSite	AscLP	Pos	Apogee
1968 May 9 0730	MR-12	-	-	VIZE	GMS68A	LP1	-	-	20.0W 10.0N (+/- 5.0)	162.0
1968 May 11 0100	MR-12	-	-	Professor Vize	GMS68A	LP2	-	-	20.0W 10.0N (+/- 5.0)	167.0
1968 May 11 1300	MR-12	-	-	Professor Vize	GMS68A	LP3	-	-	20.0W 10.0N (+/- 5.0)	167.0
1968 May 12 1315	MR-12	-	-	Professor Vize	GMS68A	LP4	-	-	20.0W 10.0N (+/- 5.0)	171.0
1968 May 16 1833	MR-12	-	-	Professor Vize	GMS68A	LP5	-	-	20.0W 10.0N (+/- 5.0)	168.0
1968 May 17 1825	MR-12	-	-	Professor Vize	GMS68A	LP6	-	-	20.0W 10.0N (+/- 5.0)	159.0
1968 May 18 1805	MR-12	-	-	Professor Vize	GMS68A	LP7	-	-	20.0W 10.0N (+/- 5.0)	167.0
1968 May 21 1400	MR-12	MX6407P	-	Professor Vize	GMS68A	LP8	-	-	20.0W 10.0N (+/- 5.0)	174.0
1968 May 21 2009	MR-12	-	-	Professor Vize	GMS68A	LP9	-	-	20.0W 10.0N (+/- 5.0)	167.0
1968 May 22 0050	MR-12	MX6407P	-	Professor Vize	GMS68A	LP10	-	-	20.0W 10.0N (+/- 5.0)	169.0
1970 Jul 14 0704:00	MR-12	-	-	Professor Vize	GMS70B	LP1	-	-	30.0W 5.0N (+/- 5.0)	171.0
1970 Jul 23 1225:00	MR-12	-	-	Professor Vize	GMS70B	LP2	-	-	30.0W 5.0N (+/- 5.0)	167.0
1970 Jul 24 1640:00	MR-12	-	-	Professor Vize	GMS70B	LP3	-	-	30.0W 5.0N (+/- 5.0)	180.0
1970 Jul 25 1403:00	MR-12	-	-	Professor Vize	GMS70B	LP4	-	-	30.0W 5.0N (+/- 5.0)	150.0
1970 Jul 26 1301:00	MR-12	-	-	Professor Vize	GMS70B	LP5	-	-	30.0W 5.0N (+/- 5.0)	158.0
1970 Jul 26 1720:00	MR-12	-	-	Professor Vize	GMS70B	LP6	-	-	30.0W 5.0N (+/- 5.0)	158.0
1970 Jul 26 1949:00	MR-12	-	-	Professor Vize	GMS70B	LP7	-	-	30.0W 5.0N (+/- 5.0)	180.0
1970 Jul 30 0821:00	MR-12	-	-	Professor Vize	GMS70B	LP8	-	-	30.0W 5.0N (+/- 5.0)	160.0
1970 Jul 30 1426:00	MR-12	-	-	Professor Vize	GMS70B	LP9	-	-	30.0W 5.0N (+/- 5.0)	159.0
1970 Aug 04 0431:00	MR-12	-	-	Professor Vize	GMS70B	LP10	-	-	30.0W 5.0N (+/- 5.0)	165.0
1970 Aug 04 1718:00	MR-12	-	-	Professor Vize	GMS70B	LP11	-	-	30.0W 5.0N (+/- 5.0)	158.0
1970 Aug 05 0820:00	MR-12	-	-	Professor Vize	GMS70B	LP12	-	-	30.0W 5.0N (+/- 5.0)	149.0
1970 Aug 05 1630:00	MR-12	-	-	Professor Vize	GMS70B	LP13	-	-	30.0W 5.0N (+/- 5.0)	149.0
1970 Aug 10 0612:00	MR-12	-	-	Professor Vize	GMS70B	LP14	-	-	30.0W 5.0N (+/- 5.0)	158.0
1970 Aug 10 1637:00	MR-12	-	-	Professor Vize	GMS70B	LP15	-	-	30.0W 5.0N (+/- 5.0)	150.0
1973 Jun 12 0801	MR-12	-	-	Professor Vize	GMS73C	LP1	-	-	30.0W 50.0N (+/- 5.0)	150.0
1973 Jun 12 1917	MR-12	-	-	Professor Vize	GMS73C	LP2	-	-	30.0W 50.0N (+/- 5.0)	150.0
1973 Jun 13 1407	MR-12	-	-	Professor Vize	GMS73C	LP3	-	-	30.0W 50.0N (+/- 5.0)	150.0
1973 Jun 14 0312	MR-12	-	-	Professor Vize	GMS73C	LP4	-	-	30.0W 50.0N (+/- 5.0)	150.0
1973 Jun 14 0759	MR-12	-	-	Professor Vize	GMS73C	LP5	-	-	30.0W 50.0N (+/- 5.0)	150.0
1973 Jun 29 1019	MR-12	Eclipse control	-	Professor Vize	GMS73C	LP6	-	-	30.0W 50.0N (+/- 5.0)	150.0
1973 Jul?	MR-12	-	-	Professor Vize	GMS73C	LP10	-	-	30.0W 50.0N (+/- 5.0)	150.0
1973 Jul?	MR-12	-	-	Professor Vize	GMS73C	LP10	-	-	30.0W 50.0N (+/- 5.0)	150.0
1973 Jul?	MR-12	-	-	Professor Vize	GMS73C	LP10	-	-	30.0W 50.0N (+/- 5.0)	150.0
1973 Jun 30 1014:38	MR-12	Eclipse	-	Professor Vize	GMS73C	LP6	-	-	30.0W 50.0N (+/- 5.0)	150.0
1973 Jun 30 1305	MR-12	Eclipse control	-	Professor Vize	GMS73C	LP6	-	-	30.0W 50.0N (+/- 5.0)	150.0
1973 Jul 1 1015:00	MR-12	Eclipse control	-	Professor Vize	GMS73C	LP6	-	-	30.0W 50.0N (+/- 5.0)	150.0
1973 Jul 12 1449:00	MR-12	-	-	Professor Vize	GMS73C	LP7	-	-	30.0W 50.0N (+/- 5.0)	175.0
1973 Jul 19 2121:00	MR-12	-	-	Professor Vize	GMS73C	LP8	-	-	30.0W 50.0N (+/- 5.0)	175.0
1973 Jul 20 0648:00	MR-12	-	-	Professor Vize	GMS73C	LP9	-	-	30.0W 50.0N (+/- 5.0)	175.0
1973 Aug?	MR-12	-	-	Professor Vize	GMS73C	LP10	-	-	30.0W 50.0N (+/- 5.0)	150.0
1973 Aug?	MR-12	-	-	Professor Vize	GMS73C	LP10	-	-	30.0W 50.0N (+/- 5.0)	150.0
1973 Aug?	MR-12	-	-	Professor Vize	GMS73C	LP10	-	-	30.0W 50.0N (+/- 5.0)	150.0
1973 Aug?	MR-12	-	-	Professor Vize	GMS73C	LP10	-	-	30.0W 50.0N (+/- 5.0)	150.0
1976 Aug	MR-12	-	-	Professor Vize	GMS76F	LP1	-	-	35.0W 60.0N (+/- 5.0)	150.0
1976 Aug?	MR-12	-	-	Professor Vize	GMS76F	LP1	-	-	35.0W 60.0N (+/- 5.0)	150.0
1976 Aug?	MR-12	-	-	Professor Vize	GMS76F	LP1	-	-	35.0W 60.0N (+/- 5.0)	150.0
1976 Aug?	MR-12	-	-	Professor Vize	GMS76F	LP1	-	-	35.0W 60.0N (+/- 5.0)	150.0
1976 Aug?	MR-12	-	-	Professor Vize	GMS76F	LP1	-	-	35.0W 60.0N (+/- 5.0)	150.0
1976 Aug?	MR-12	-	-	Professor Vize	GMS76F	LP1	-	-	35.0W 60.0N (+/- 5.0)	150.0
1976 Aug?	MR-12	-	-	Professor Vize	GMS76F	LP1	-	-	35.0W 60.0N (+/- 5.0)	150.0
1976 Aug?	MR-12	-	-	Professor Vize	GMS76F	LP1	-	-	35.0W 60.0N (+/- 5.0)	150.0
1976 Aug?	MR-12	-	-	Professor Vize	GMS76F	LP1	-	-	35.0W 60.0N (+/- 5.0)	150.0
1976 Sep?	MR-12	-	-	Professor Vize	GMS76F	LP1	-	-	35.0W 60.0N (+/- 5.0)	150.0
1976 Sep?	MR-12	-	-	Professor Vize	GMS76F	LP1	-	-	35.0W 60.0N (+/- 5.0)	150.0

Launches: VIZE

Date	Rocket	Flight	Mission	Platform	Site	LP	AscSite	AscLP	Pos	Apogee
1976 Sep?	MR-12	-	-	VIZE	Professor Vize	LP1	-	-	35.0W 60.0N (+/- 5.0)	150.0
1976 Sep?	MR-12	-	-	VIZE	Professor Vize	LP1	-	-	35.0W 60.0N (+/- 5.0)	150.0
1976 Sep?	MR-12	-	-	VIZE	Professor Vize	LP1	-	-	35.0W 60.0N (+/- 5.0)	150.0
1976 Sep?	MR-12	-	-	VIZE	Professor Vize	LP1	-	-	35.0W 60.0N (+/- 5.0)	150.0
1976 Sep?	MR-12	-	-	VIZE	Professor Vize	LP1	-	-	35.0W 60.0N (+/- 5.0)	150.0
1976 Oct?	MR-12	-	-	VIZE	Professor Vize	LP1	-	-	35.0W 60.0N (+/- 5.0)	150.0
1976 Oct?	MR-12	-	-	VIZE	Professor Vize	LP1	-	-	35.0W 60.0N (+/- 5.0)	150.0
1976 Oct?	MR-12	-	-	VIZE	Professor Vize	LP1	-	-	35.0W 60.0N (+/- 5.0)	150.0
1976 Nov?	MR-12	-	-	VIZE	Professor Vize	LP2	-	-	35.0W 60.0N (+/- 5.0)	150.0
1977 May	MR-12	-	-	VIZE	Professor Vize	ULP1	-	-	60.0W 20.0N (+/- 5.0)	150.0
1977 May?	MR-12	-	-	VIZE	Professor Vize	ULP1	-	-	60.0W 20.0N (+/- 5.0)	150.0
1977 Jun?	MR-12	-	-	VIZE	Professor Vize	ULP1	-	-	60.0W 20.0N (+/- 5.0)	150.0
1977 Jun?	MR-12	-	-	VIZE	Professor Vize	ULP1	-	-	60.0W 20.0N (+/- 5.0)	150.0
1977 Jun?	MR-12	-	-	VIZE	Professor Vize	ULP1	-	-	60.0W 20.0N (+/- 5.0)	150.0
1977 Jun?	MR-12	-	-	VIZE	Professor Vize	ULP1	-	-	60.0W 20.0N (+/- 5.0)	150.0
1977 Jul?	MR-12	-	-	VIZE	Professor Vize	ULP1	-	-	60.0W 20.0N (+/- 5.0)	150.0
1977 Jul?	MR-12	-	-	VIZE	Professor Vize	ULP1	-	-	60.0W 20.0N (+/- 5.0)	150.0
1978 Mar	MR-12	-	-	VIZE	Professor Vize	LP1	-	-	75.0W 38.0N (+/- 5.0)	178.0
1978 Apr 07 1045:00	MR-12	-	-	VIZE	Professor Vize	LP2	-	-	75.0W 38.0N (+/- 5.0)	178.0
1978 Apr 19 1035:00	MR-12	-	-	VIZE	Professor Vize	LP3	-	-	75.0W 38.0N (+/- 5.0)	161.0
1978 Apr 19 1537:00	MR-12	-	-	VIZE	Professor Vize	LP3	-	-	75.0W 38.0N (+/- 5.0)	170.0
1978 Apr 21 0529:00	MR-12	-	-	VIZE	Professor Vize	LP4	-	-	75.0W 38.0N (+/- 5.0)	170.0
1978 Apr 21 0626:00	MR-12	-	-	VIZE	Professor Vize	LP4	-	-	75.0W 38.0N (+/- 5.0)	170.0
1978 Apr 21 0752:00	MR-12	-	-	VIZE	Professor Vize	LP4	-	-	75.0W 38.0N (+/- 5.0)	150.0
1978 Apr 21 1740:00	MR-12	-	-	VIZE	Professor Vize	LP4	-	-	75.0W 38.0N (+/- 5.0)	170.0
1978 Apr 21 1830:00	MR-12	-	-	VIZE	Professor Vize	LP4	-	-	75.0W 38.0N (+/- 5.0)	170.0
1978 May 04 0614:00	MR-12	-	-	VIZE	Professor Vize	LP5	-	-	75.0W 38.0N (+/- 5.0)	168.0
1978 May 04 0705:00	MR-12	-	-	VIZE	Professor Vize	LP5	-	-	75.0W 38.0N (+/- 5.0)	165.0
1978 May 04 1829:00	MR-12	-	-	VIZE	Professor Vize	LP6	-	-	75.0W 38.0N (+/- 5.0)	168.0
1978 May 05 0630:00	MR-12	-	-	VIZE	Professor Vize	LP7	-	-	75.0W 38.0N (+/- 5.0)	160.0
1978 Jun 11 0627:00	MR-12	JASPIC	Wallops I Coast	VIZE	Professor Vize	LP8	-	-	75.0W 38.0N (+/- 5.0)	170.0
1978 Jun 20 0410:00	MR-12	JASPIC	-	VIZE	Professor Vize	LP8	-	-	75.0W 38.0N (+/- 5.0)	175.0
1978 Jun 24 0213:00	MR-12	JASPIC	-	VIZE	Professor Vize	LP8	-	-	75.0W 38.0N (+/- 5.0)	168.0
1978 Jun 26 0131:00	MR-12	JASPIC	-	VIZE	Professor Vize	LP8	-	-	75.0W 38.0N (+/- 5.0)	165.0
1978 Jun 26 0231:00	MR-12	JASPIC	-	VIZE	Professor Vize	LP8	-	-	75.0W 38.0N (+/- 5.0)	150.0
1978 Jul?	MR-12	-	-	VIZE	Professor Vize	LP9	-	-	75.0W 38.0N (+/- 5.0)	150.0
1978 Jul?	MR-12	-	-	VIZE	Professor Vize	LP9	-	-	75.0W 38.0N (+/- 5.0)	150.0
1978 Jul	MR-12	-	-	VIZE	Professor Vize	LP9	-	-	75.0W 38.0N (+/- 5.0)	150.0
1982 Feb	MR-12	-	-	VIZE	Professor Vize	LP1	-	-	0.0E 68.0N (+/- 9.0)	150.0
1982 Feb?	MR-12	-	-	VIZE	Professor Vize	LP1	-	-	0.0E 68.0N (+/- 9.0)	150.0
1982 Mar?	MR-12	-	-	VIZE	Professor Vize	LP1	-	-	0.0E 68.0N (+/- 9.0)	150.0
1982 Mar?	MR-12	-	-	VIZE	Professor Vize	LP1	-	-	0.0E 68.0N (+/- 9.0)	150.0
1982 Mar?	MR-12	-	-	VIZE	Professor Vize	LP1	-	-	0.0E 68.0N (+/- 9.0)	150.0
1982 Mar?	MR-12	-	-	VIZE	Professor Vize	LP1	-	-	0.0E 68.0N (+/- 9.0)	150.0
1982 Mar?	MR-12	-	-	VIZE	Professor Vize	LP1	-	-	0.0E 68.0N (+/- 9.0)	150.0
1982 Mar?	MR-12	-	-	VIZE	Professor Vize	LP1	-	-	0.0E 68.0N (+/- 9.0)	150.0
1982 Mar?	MR-12	-	-	VIZE	Professor Vize	LP1	-	-	0.0E 68.0N (+/- 9.0)	150.0
1982 Apr?	MR-12	-	-	VIZE	Professor Vize	ULP1	-	-	0.0E 68.0N (+/- 9.0)	150.0
1982 Apr?	MR-12	-	-	VIZE	Professor Vize	ULP1	-	-	0.0E 68.0N (+/- 9.0)	150.0



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### IV.1.3.12 Professor Zubov

Профессор Зубов



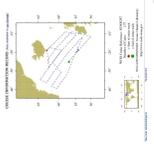
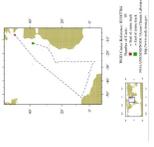
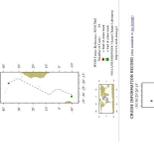
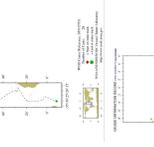
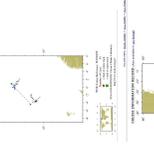
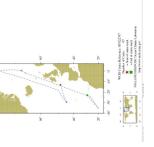
Credit: Unknown

GMS SSSR research ship operated by Arctic and Antarctic Research Inst., Leningrad. In service 1967. Mass: 6900 tons. Code: 6602

Notes: the vessel for the 1969 Jul launches was not given in the WDC Rocket File, but the Shidrovskiy 2003 book (MRKS) reveals that these were the first weather rocket launches from the Zubov.

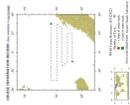
Rockets used: MR-12,MR-20

Updated: 2024 Nov 28 03:19:31

LC_Code	Active	Region	Cruises: ZUB	Cruise	CruiseMap
GMS69D	1969 Jul 15 - 1969 Aug 15	Atlantic Ocean	Zubov Expedition 1, 1969	-	
GMS69E	1969 Oct 1 - 1969 Dec 31	Atlantic Ocean	Zubov Expedition 2, 1969	-	
GMS71B	1971 Nov 15 - 1972 Jan 15	Atlantic Ocean	Zubov Expedition 3, 1971-2 (SU007384)	-	
GMS75D	1975 May 1 - 1975 Jul 31	Atlantic Ocean	Zubov Expedition 4, 1975 (SU017861)	-	
GMS75F	1975 Nov 1 - 1976 Feb 29	Atlantic Ocean	Zubov Expedition 5, 1975-76 (SU015701)	-	
GMS80C	1980 Apr 1 - 1980 Jul 31	Atlantic Ocean	Zubov Expedition 6, 1980 Apr-Jul (SU008499)	-	
GMS81D	1981 May 1 - 1981 Aug 31	Atlantic Ocean	Zubov Expedition 7, 1981 May-Aug (SU022747)	-	-
GMS85A	1985 Feb 1 - 1985 Apr 30	Atlantic Ocean	Zubov Expedition 8, 1985	-	-
GMS85B	1985 Aug 1 - 1985 Nov 30	Atlantic Ocean	Zubov Expedition 9, 1985	-	-
GMS86D	1986 Sep 1 - 1986 Nov 30	Atlantic Ocean	Zubov Expedition 10, 1986	-	-
GMS87E	1987 Jun 1 - 1987 Sep 30	Atlantic Ocean	Zubov Expedition 11, 1987	-	-

**Cruises: ZUB**

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LC_Code	Active	Region	Cruise	CruiseMap
GMS90B	1989 Jul 1 - 1989 Nov 30	Atlantic Ocean	Zubov Expedition 12, 1989 (SU023022)	
GMS90D	1990 Aug 1 - 1990 Dec 31	Atlantic Ocean	Zubov Expedition 13, 1990	-
GMS91A	1991 Jul 1 - 1991 Oct 31	Caribbean and Equatorial Atlantic	Zubov Expedition 14, 1991	-

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Updated: 2024 Nov 28 03:19:31



Launches: ZUB

Date	Rocket	Flight	Mission	PlatCode	Platform	Site	LP	AscSite	AsCLP	Pos	Apogee
1969 Jul 25 01:19:00	MR-12	-	-	ZUB	Professor Zubov	GMS69D	LP1	-	-	46.0W 45.0N (+/- 5.0)	166.0
1969 Jul 27 21:47:00	MR-12	-	-	ZUB	Professor Zubov	GMS69D	LP2	-	-	46.0W 45.0N (+/- 5.0)	168.0
1969 Jul 27 22:37:00	MR-12	-	-	ZUB	Professor Zubov	GMS69D	LP3	-	-	46.0W 45.0N (+/- 5.0)	164.0
1969 Jul 27 23:27:00	MR-12	-	-	ZUB	Professor Zubov	GMS69D	LP4	-	-	46.0W 45.0N (+/- 5.0)	170.0
1969 Jul 28 00:17:00	MR-12	-	-	ZUB	Professor Zubov	GMS69D	LP5	-	-	46.0W 45.0N (+/- 5.0)	167.0
1969 Aug 03 03:25:00	MR-12	-	-	ZUB	Professor Zubov	GMS69D	LP6	-	-	46.0W 45.0N (+/- 5.0)	164.0
1969 Aug 03 04:15:00	MR-12	-	-	ZUB	Professor Zubov	GMS69D	LP7	-	-	46.0W 45.0N (+/- 5.0)	168.0
1969 Aug 03 05:05:00	MR-12	-	-	ZUB	Professor Zubov	GMS69D	LP8	-	-	46.0W 45.0N (+/- 5.0)	165.0
1969 Aug 03 05:51:00	MR-12	-	-	ZUB	Professor Zubov	GMS69D	LP9	-	-	46.0W 45.0N (+/- 5.0)	169.0
1969 Aug 03 07:00:00	MR-12	-	-	ZUB	Professor Zubov	GMS69D	LP10	-	-	46.0W 45.0N (+/- 5.0)	172.0
1969 Oct 9?	MR-12	-	-	ZUB	Professor Zubov	GMS69E	LP1	-	-	46.0W 45.0N (+/- 5.0)	150.0
1969 Oct 11 11:05	MR-12	-	-	ZUB	Professor Zubov	GMS69E	LP2	-	-	46.0W 45.0N (+/- 5.0)	158.0
1969 Oct 18 11:07	MR-12	-	-	ZUB	Professor Zubov	GMS69E	LP3	-	-	46.0W 45.0N (+/- 5.0)	165.0
1969 Oct 18 17:47	MR-12	-	-	ZUB	Professor Zubov	GMS69E	LP4	-	-	46.0W 45.0N (+/- 5.0)	160.0
1969 Nov 5 08:11	MR-12	-	-	ZUB	Professor Zubov	GMS69E	LP5	-	-	46.0W 45.0N (+/- 5.0)	160.0
1969 Nov 5 11:12	MR-12	-	-	ZUB	Professor Zubov	GMS69E	LP6	-	-	46.0W 45.0N (+/- 5.0)	162.0
1969 Nov 9 16:47	MR-12	-	-	ZUB	Professor Zubov	GMS69E	LP7	-	-	46.0W 45.0N (+/- 5.0)	162.0
1969 Dec 10 20:59	MR-12	-	-	ZUB	Professor Zubov	GMS69E	LP7	-	-	46.0W 45.0N (+/- 5.0)	160.0
1969 Dec 10 22:13	MR-12	-	-	ZUB	Professor Zubov	GMS69E	LP7	-	-	46.0W 45.0N (+/- 5.0)	160.0
1971 Nov?	MR-12	-	-	ZUB	Professor Zubov	GMS71B	LP1	-	-	26.0W 0.0N (+/- 5.0)	150.0
1971 Dec 14 15:41:00	MR-12	at CSG?	-	ZUB	Professor Zubov	GMS71B	LP2	-	-	26.0W 0.0N (+/- 5.0)	151.0
1971 Dec 16 05:59:00	MR-12	at CSG?	-	ZUB	Professor Zubov	GMS71B	LP2	-	-	26.0W 0.0N (+/- 5.0)	170.0
1971 Dec 26 04:00:00	MR-12	-	-	ZUB	Professor Zubov	GMS71B	LP3	-	-	26.0W 0.0N (+/- 5.0)	179.0
1971 Dec 26 12:30:00	MR-12	MX-6407P	Mass spec	ZUB	Professor Zubov	GMS71B	LP3	-	-	26.0W 0.0N (+/- 5.0)	150.0
1971 Dec 26 14:30:00	MR-12	-	-	ZUB	Professor Zubov	GMS71B	LP3	-	-	26.0W 0.0N (+/- 5.0)	175.0
1971 Dec 27 02:00:00	MR-12	-	-	ZUB	Professor Zubov	GMS71B	LP3	-	-	26.0W 0.0N (+/- 5.0)	176.0
1972 Jan?	MR-12	-	-	ZUB	Professor Zubov	GMS71B	LP5	-	-	26.0W 0.0N (+/- 5.0)	150.0
1971 Dec 31 19:49:00	MR-12	-	-	ZUB	Professor Zubov	GMS71B	LP4	-	-	26.0W 0.0N (+/- 5.0)	177.0
1971 Dec 31 20:49:00	MR-12	-	-	ZUB	Professor Zubov	GMS71B	LP4	-	-	26.0W 0.0N (+/- 5.0)	158.0
1971 Dec 31 21:57:00	MR-12	-	-	ZUB	Professor Zubov	GMS71B	LP4	-	-	26.0W 0.0N (+/- 5.0)	179.0
1971 Dec 31 23:00:00	MR-12	-	-	ZUB	Professor Zubov	GMS71B	LP5	-	-	26.0W 0.0N (+/- 5.0)	183.0
1972 Jan 01 07:05:00	MR-12	-	-	ZUB	Professor Zubov	GMS75D	ULP1	-	-	26.0W 3.0N (+/- 5.0)	150.0
1975 May?	MR-12	-	-	ZUB	Professor Zubov	GMS75D	ULP1	-	-	26.0W 3.0N (+/- 5.0)	150.0
1975 May?	MR-12	-	-	ZUB	Professor Zubov	GMS75D	ULP1	-	-	26.0W 3.0N (+/- 5.0)	150.0
1975 Jun?	MR-12	-	-	ZUB	Professor Zubov	GMS75D	ULP1	-	-	26.0W 3.0N (+/- 5.0)	150.0
1975 Jun?	MR-12	-	-	ZUB	Professor Zubov	GMS75D	ULP1	-	-	26.0W 3.0N (+/- 5.0)	150.0
1975 Jun?	MR-12	-	-	ZUB	Professor Zubov	GMS75D	ULP1	-	-	26.0W 3.0N (+/- 5.0)	150.0
1975 Jun?	MR-12	-	-	ZUB	Professor Zubov	GMS75D	ULP1	-	-	26.0W 3.0N (+/- 5.0)	150.0
1975 Jun?	MR-12	-	-	ZUB	Professor Zubov	GMS75D	ULP1	-	-	26.0W 3.0N (+/- 5.0)	150.0
1975 Jun?	MR-12	-	-	ZUB	Professor Zubov	GMS75D	ULP1	-	-	26.0W 3.0N (+/- 5.0)	150.0
1975 Jun?	MR-12	-	-	ZUB	Professor Zubov	GMS75D	ULP1	-	-	26.0W 3.0N (+/- 5.0)	150.0
1975 Jun?	MR-12	-	-	ZUB	Professor Zubov	GMS75D	ULP1	-	-	26.0W 3.0N (+/- 5.0)	150.0
1975 Jun?	MR-12	-	-	ZUB	Professor Zubov	GMS75D	ULP1	-	-	26.0W 3.0N (+/- 5.0)	150.0
1975 Jul?	MR-12	-	-	ZUB	Professor Zubov	GMS75D	ULP1	-	-	26.0W 3.0N (+/- 5.0)	150.0
1975 Jul	MR-12	-	-	ZUB	Professor Zubov	GMS75D	LP3	-	-	26.0W 3.0N (+/- 5.0)	150.0
1975 Nov	MR-12	-	-	ZUB	Professor Zubov	GMS75F	ULP1	-	-	30.0W 54.0N (+/- 5.0)	150.0
1975 Nov?	MR-12	-	-	ZUB	Professor Zubov	GMS75F	ULP1	-	-	30.0W 54.0N (+/- 5.0)	150.0
1975 Dec?	MR-12	-	-	ZUB	Professor Zubov	GMS75F	ULP1	-	-	30.0W 54.0N (+/- 5.0)	150.0
1975 Dec?	MR-12	-	-	ZUB	Professor Zubov	GMS75F	ULP1	-	-	30.0W 54.0N (+/- 5.0)	150.0
1975 Dec?	MR-12	-	-	ZUB	Professor Zubov	GMS75F	ULP1	-	-	30.0W 54.0N (+/- 5.0)	150.0







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### IV.1.3.13 Akademik Korolev

Академик Королёв



Credit: Unknown

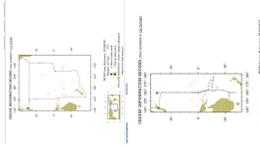
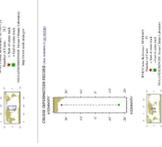
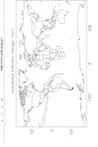
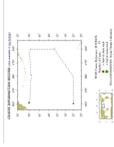
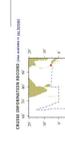
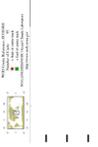
There were two Soviet research ships associated with Korolev: the Akademik Korolev (this one) and the Akademik Sergey Korolev (a larger space tracking ship). Thanks to Brian Harvey for drawing this to my attention.

Some launches are not associated with particular vessels in the WDC Rocket File but do have latitude and longitude. The NOAA NODC (National Oceanographic Data Center) database ([nodc.noaa.gov](http://nodc.noaa.gov)) gives cruise data for particular vessels, with latitude and longitude versus time. was useful in identifying some of these.

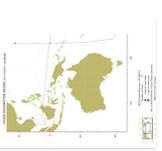
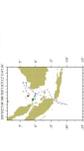
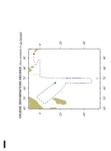
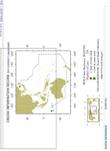
Rockets used: M-100,M-100B,Super Loki

Updated: 2024 Nov 28 03:19:31

Cruises: KORO

LC_Code	Active	Region	Cruise	CruiseMap
GMS70E	1970 Dec 1 - 1971 Feb 28	Pacific Ocean	Korolev Expedition 1, 1970-71 (SU000303)	
GMS72B	1972 Jan 1 - 1972 Mar 31	Pacific Ocean	Korolev Expedition 2, 1972 (SU016724)	
GMS73A	1973 Feb 1 - 1973 Mar 31	Indian Ocean	Korolev Expedition 3, 1973 (SU000419, SU010379, SU014957)	
GMS73D	1973 Jul 1 - 1973 Nov 15	Pacific and Atlantic Oceans	Korolev Expedition 4, 1973	
GMS74B	1974 Feb 15 - 1974 May 31	Pacific Ocean	Korolev Expedition 5, 1974 (SU000456)	
GMS74D	1974 Oct 15 - 1974 Nov 30	Pacific Ocean	Korolev Expedition 6, 1974	
GMS75B	1975 Mar 1 - 1975 Mar 31	Indian Ocean	Korolev Expedition 7, 1975	
GMS77A	1977 Jan 1 - 1977 Jan 31	Pacific Ocean	Korolev Expedition 8, 1977	
GMS77C	1977 Mar 1 - 1977 Mar 31	Indian Ocean	Korolev Expedition 9, 1977 (SU010400)	
GMS77H	1977 Jun 1 - 1977 Aug 31	Pacific and Atlantic Oceans	Korolev Expedition 10, 1977	
GMS77L	1977 Nov 1 - 1978 Mar 15	Indian and Pacific Oceans	Korolev Expedition 11, 1977-78	
GMS78E	1978 Apr 1 - 1978 Apr 30	Pacific Ocean	Korolev Expedition 12, 1978	
GMS79C	1979 Apr 15 - 1979 Aug 20	Indian Ocean	Korolev Expedition 14, 1979 (SU000709)	

Cruises: KORO

LC_Code	Active	Region	Cruise	CruiseMap
GMS79J	1979 Nov 15 - 1980 Mar 1	Pacific Ocean	Korolev Expedition 15, 1979-80 (SU000710)	
GMS79L	1979 Jan 1 - 1979 Feb 15	Ninety East Ridge, Indian Ocean	Korolev Expedition 13, 1979	
GMS80E	1980 May 1 - 1980 Jun 15	Ontong Java Plateau, Pacific Ocean	Korolev Expedition 16, 1980	
GMS81E	1981 May 1 - 1981 Jun 30	Indian Ocean	Korolev Expedition 17, 1981 (SU010433)	
GMS82B	1982 Feb 1 - 1982 Mar 31	Indian and Pacific Oceans	Korolev Expedition 18, 1982	
GMS83A	1983 Jun 15 - 1983 Aug 15	Indian and Pacific Oceans	Korolev Expedition 19, 1983 (SU097181)	
GMS87C	1987 Jan 15 - 1987 Mar 31	Pacific or Indian Ocean?	Korolev Expedition 20, 1987	
GMS89A	1988 Dec 15 - 1989 Mar 31	Pacific or Indian Ocean?	Korolev Expedition 21, 1988-89	

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Updated: 2024 Nov 28 03:19:31



Launches: KORO

Date	Rocket	Flight	Mission	PlatCode	Platform	Site	LP	AscSite	AsclP	Pos	Apogee
1970 Dec 09 1000:00	M-100	-	-	KORO	Akademik Korolev	GMS70E	LP1	-	-	132.0W 40.0N (+/- 5.0)	90.0
1970 Dec 11 1000:00	M-100	-	-	KORO	Akademik Korolev	GMS70E	LP2	-	-	132.0W 40.0N (+/- 5.0)	90.0
1970 Dec 19 1400:00	M-100	-	-	KORO	Akademik Korolev	GMS70E	LP3	-	-	132.0W 40.0N (+/- 5.0)	92.0
1970 Dec 22 0700:00	M-100	-	-	KORO	Akademik Korolev	GMS70E	LP4	-	-	132.0W 40.0N (+/- 5.0)	92.0
1970 Dec 23 1400:00	M-100	-	-	KORO	Akademik Korolev	GMS70E	LP5	-	-	132.0W 40.0N (+/- 5.0)	91.0
1970 Dec 29 1100:00	M-100	-	-	KORO	Akademik Korolev	GMS70E	LP6	-	-	132.0W 40.0N (+/- 5.0)	92.0
1970 Dec 31 0700:00	M-100	-	-	KORO	Akademik Korolev	GMS70E	LP7	-	-	132.0W 40.0N (+/- 5.0)	91.0
1971 Jan 08 0900:00	M-100	-	-	KORO	Akademik Korolev	GMS70E	LP8	-	-	132.0W 40.0N (+/- 5.0)	85.0
1971 Jan 14 1200:00	M-100	-	-	KORO	Akademik Korolev	GMS70E	LP9	-	-	132.0W 40.0N (+/- 5.0)	87.0
1971 Jan 16 1100:00	M-100	-	-	KORO	Akademik Korolev	GMS70E	LP10	-	-	132.0W 40.0N (+/- 5.0)	88.0
1971 Jan 18 1100:00	M-100	-	-	KORO	Akademik Korolev	GMS70E	LP11	-	-	132.0W 40.0N (+/- 5.0)	90.0
1971 Jan 20 1100:00	M-100	-	-	KORO	Akademik Korolev	GMS70E	LP12	-	-	132.0W 40.0N (+/- 5.0)	92.0
1971 Jan 22 1100:00	M-100	-	-	KORO	Akademik Korolev	GMS70E	LP13	-	-	132.0W 40.0N (+/- 5.0)	93.0
1971 Jan 24 1400:00	M-100	-	-	KORO	Akademik Korolev	GMS70E	LP14	-	-	132.0W 40.0N (+/- 5.0)	92.0
1971 Feb 01 0600:00	M-100	-	-	KORO	Akademik Korolev	GMS70E	LP15	-	-	132.0W 40.0N (+/- 5.0)	82.0
1971 Feb 03 0500:00	M-100	-	-	KORO	Akademik Korolev	GMS70E	LP16	-	-	132.0W 40.0N (+/- 5.0)	89.0
1971 Feb 05 0600:00	M-100	-	-	KORO	Akademik Korolev	GMS70E	LP17	-	-	132.0W 40.0N (+/- 5.0)	89.0
1971 Feb 08 0800:00	M-100	-	-	KORO	Akademik Korolev	GMS70E	LP18	-	-	132.0W 40.0N (+/- 5.0)	91.0
1971 Feb 10 1000:00	M-100	-	-	KORO	Akademik Korolev	GMS70E	LP19	-	-	132.0W 40.0N (+/- 5.0)	87.0
1971 Feb 13 0900:00	M-100	-	-	KORO	Akademik Korolev	GMS70E	LP20	-	-	132.0W 40.0N (+/- 5.0)	90.0
1971 Feb 17 0900:00	M-100	-	-	KORO	Akademik Korolev	GMS70E	LP21	-	-	132.0W 40.0N (+/- 5.0)	87.0
1972 Jan 10 1200:00	M-100	-	-	KORO	Akademik Korolev	GMS72B	LP1	-	-	160.0E 0.0N (+/- 5.0)	91.0
1972 Jan 12 0900:00	M-100	-	-	KORO	Akademik Korolev	GMS72B	LP2	-	-	160.0E 0.0N (+/- 5.0)	90.0
1972 Jan 15 0900:00	M-100	-	-	KORO	Akademik Korolev	GMS72B	LP3	-	-	160.0E 0.0N (+/- 5.0)	92.0
1972 Jan 17 1000:00	M-100	-	-	KORO	Akademik Korolev	GMS72B	LP4	-	-	160.0E 0.0N (+/- 5.0)	90.0
1972 Jan 19 1000:00	M-100	-	-	KORO	Akademik Korolev	GMS72B	LP5	-	-	160.0E 0.0N (+/- 5.0)	91.0
1972 Jan 20 1000:00	M-100	-	-	KORO	Akademik Korolev	GMS72B	LP6	-	-	160.0E 0.0N (+/- 5.0)	94.0
1972 Jan 21 1000:00	M-100	-	-	KORO	Akademik Korolev	OJP	-	-	-	160.0E 0.0N (+/- 1.0)	91.0
1972 Jan 22 1000:00	M-100	-	-	KORO	Akademik Korolev	GMS72B	LP7	-	-	160.0E 0.0N (+/- 5.0)	90.0
1972 Mar 15 1100:00	M-100	-	-	KORO	Akademik Korolev	GMS72B	LP8	-	-	160.0E 0.0N (+/- 5.0)	93.0
1972 Mar 17 1700:00	M-100	-	-	KORO	Akademik Korolev	OJP	-	-	-	160.0E 0.0N (+/- 1.0)	91.0
1972 Mar 18 1100:00	M-100	-	-	KORO	Akademik Korolev	OJP	-	-	-	160.0E 0.0N (+/- 1.0)	90.0
1972 Mar 19 1200:00	M-100	-	-	KORO	Akademik Korolev	GMS72B	LP6	-	-	160.0E 0.0N (+/- 5.0)	91.0
1972 Mar 20 1200:00	M-100	-	-	KORO	Akademik Korolev	GMS72B	LP9	-	-	160.0E 0.0N (+/- 5.0)	87.0
1972 Mar 21 1300:00	M-100	-	-	KORO	Akademik Korolev	GMS72B	LP10	-	-	160.0E 0.0N (+/- 5.0)	90.0
1972 Mar 23 1100:00	M-100	-	-	KORO	Akademik Korolev	GMS72B	LP11	-	-	160.0E 0.0N (+/- 5.0)	90.0
1972 Mar 24 1100:00	M-100	-	-	KORO	Akademik Korolev	GMS72B	LP12	-	-	160.0E 0.0N (+/- 5.0)	90.0
1972 Mar 25 1200:00	M-100	-	-	KORO	Akademik Korolev	GMS72B	LP13	-	-	160.0E 0.0N (+/- 5.0)	90.0
1972 Mar 27 1100:00	M-100	-	-	KORO	Akademik Korolev	GMS72B	LP14	-	-	160.0E 0.0N (+/- 5.0)	83.0
1973 Feb 01 2000:00	M-100	-	-	KORO	Akademik Korolev	GMS73A	LP1	-	-	65.0E 0.0N (+/- 5.0)	85.0
1973 Feb 03 2000:00	M-100	-	-	KORO	Akademik Korolev	GMS73A	LP2	-	-	65.0E 0.0N (+/- 5.0)	88.0
1973 Feb 04 1900:00	M-100	-	-	KORO	Akademik Korolev	GMS73A	LP3	-	-	65.0E 0.0N (+/- 5.0)	90.0
1973 Feb 05 1900:00	M-100	-	-	KORO	Akademik Korolev	IOLZ	IOLZ	-	-	65.0E 0.0N (+/- 2.0)	85.0
1973 Feb 07 2000:00	M-100	-	-	KORO	Akademik Korolev	IOLZ	IOLZ	-	-	65.0E 0.0N (+/- 2.0)	89.0
1973 Feb 23 2000:00	M-100	-	-	KORO	Akademik Korolev	IOLZ	IOLZ	-	-	65.0E 0.0N (+/- 2.0)	88.0
1973 Feb 23 2200:00	M-100	-	-	KORO	Akademik Korolev	IOLZ	IOLZ	-	-	65.0E 0.0N (+/- 2.0)	85.0
1973 Feb 23 2300:00	M-100	-	-	KORO	Akademik Korolev	IOLZ	IOLZ	-	-	65.0E 0.0N (+/- 2.0)	85.0
1973 Feb 26 1900:00	M-100	-	-	KORO	Akademik Korolev	IOLZ	IOLZ	-	-	65.0E 0.0N (+/- 2.0)	85.0
1973 Feb 26 2000:00	M-100	-	-	KORO	Akademik Korolev	IOLZ	IOLZ	-	-	65.0E 0.0N (+/- 2.0)	86.0
1973 Feb 26 2100:00	M-100	-	-	KORO	Akademik Korolev	IOLZ	IOLZ	-	-	65.0E 0.0N (+/- 2.0)	87.0
1973 Mar 01 1900:00	M-100	-	-	KORO	Akademik Korolev	IOLZ	IOLZ	-	-	65.0E 0.0N (+/- 2.0)	86.0
1973 Mar 01 2100:00	M-100	-	-	KORO	Akademik Korolev	IOLZ	IOLZ	-	-	65.0E 0.0N (+/- 2.0)	86.0
1973 Mar 01 2200:00	M-100	-	-	KORO	Akademik Korolev	IOLZ	IOLZ	-	-	65.0E 0.0N (+/- 2.0)	86.0
1973 Mar 04 1800:00	M-100	-	-	KORO	Akademik Korolev	IOLZ	IOLZ	-	-	65.0E 0.0N (+/- 2.0)	89.0
1973 Mar 04 2000:00	M-100	-	-	KORO	Akademik Korolev	IOLZ	IOLZ	-	-	65.0E 0.0N (+/- 2.0)	87.0

Launches: KORO

Date	Rocket	Flight	Mission	PlatCode	Platform	Site	LP	AscSite	AsclP	Pos	Apogee
1973 Mar 07 2100:00	M-100	-	-	KORO	Akademik Korolev	GMS73A	LP5	-	-	65.0E 0.0N (+/- 5.0)	87.0
1973 Mar 07 2200:00	M-100	-	-	KORO	Akademik Korolev	GMS73A	LP5	-	-	65.0E 0.0N (+/- 5.0)	87.0
1973 Mar 10 2000:00	M-100	-	-	KORO	Akademik Korolev	GMS73A	LP6	-	-	65.0E 0.0N (+/- 5.0)	89.0
1973 Mar 11 2000:00	M-100	-	-	KORO	Akademik Korolev	IOLZ	I065	-	-	65.0E 0.0N (+/- 2.0)	89.0
1973 Mar 12 2000:00	M-100	-	-	KORO	Akademik Korolev	GMS73A	LP7	-	-	65.0E 0.0N (+/- 5.0)	88.0
1973 Mar 19 1900:00	M-100	-	-	KORO	Akademik Korolev	GMS73A	LP8	-	-	65.0E 0.0N (+/- 5.0)	89.0
1973 Mar 20 1900:00	M-100	-	-	KORO	Akademik Korolev	IOLZ	I065	-	-	65.0E 0.0N (+/- 2.0)	83.0
1973 Mar 20 2000:00	M-100	-	-	KORO	Akademik Korolev	IOLZ	I065	-	-	65.0E 0.0N (+/- 2.0)	90.0
1973 Mar 21 1900:00	M-100	-	-	KORO	Akademik Korolev	GMS73A	LP3	-	-	65.0E 0.0N (+/- 5.0)	90.0
1973 Mar 22 1900:00	M-100	-	-	KORO	Akademik Korolev	GMS73A	LP2	-	-	65.0E 0.0N (+/- 5.0)	86.0
1973 Mar 24 1900:00	M-100	-	-	KORO	Akademik Korolev	GMS73A	LP1	-	-	65.0E 0.0N (+/- 5.0)	86.0
1973 Jul 01 1500:00	M-100	-	-	KORO	Akademik Korolev	GMS73D	LP1	-	-	30.0W 20.0S (+/- 5.0)	82.0
1973 Jul 03 0700:00	M-100	-	-	KORO	Akademik Korolev	GMS73D	LP2	-	-	30.0W 20.0S (+/- 5.0)	82.0
1973 Jul 06 1100:00	M-100	-	-	KORO	Akademik Korolev	GMS73D	LP3	-	-	30.0W 20.0S (+/- 5.0)	92.0
1973 Jul 07 1300:00	M-100	-	-	KORO	Akademik Korolev	GMS73D	LP3	-	-	30.0W 20.0S (+/- 5.0)	90.0
1973 Jul 19 1200:00	M-100	-	-	KORO	Akademik Korolev	GMS73D	LP4	-	-	30.0W 20.0S (+/- 5.0)	87.0
1973 Aug 11 0500:00	M-100	-	-	KORO	Akademik Korolev	GMS73D	LP5	-	-	30.0W 20.0S (+/- 5.0)	86.0
1973 Aug 19 0400:00	M-100	-	-	KORO	Akademik Korolev	GMS73D	LP6	-	-	30.0W 20.0S (+/- 5.0)	84.0
1973 Aug 21 0300:00	M-100	-	-	KORO	Akademik Korolev	GMS73D	LP7	-	-	30.0W 20.0S (+/- 5.0)	85.0
1973 Aug 23 0300:00	M-100	-	-	KORO	Akademik Korolev	GMS73D	LP8	-	-	30.0W 20.0S (+/- 5.0)	89.0
1973 Aug 26 2300:00	M-100	-	-	KORO	Akademik Korolev	GMS73D	LP9	-	-	30.0W 20.0S (+/- 5.0)	85.0
1973 Aug 27 0030:00	M-100	-	-	KORO	Akademik Korolev	GMS73D	LP9	-	-	30.0W 20.0S (+/- 5.0)	84.0
1973 Aug 28 0500:00	M-100	-	-	KORO	Akademik Korolev	GMS73D	LP10	-	-	30.0W 20.0S (+/- 5.0)	84.0
1973 Aug 29 0100:00	M-100	-	-	KORO	Akademik Korolev	GMS73D	LP11	-	-	30.0W 20.0S (+/- 5.0)	87.0
1973 Aug 29 0200:00	M-100	-	-	KORO	Akademik Korolev	GMS73D	LP11	-	-	30.0W 20.0S (+/- 5.0)	81.0
1973 Aug 30 0100:00	M-100	-	-	KORO	Akademik Korolev	GMS73D	LP12	-	-	30.0W 20.0S (+/- 5.0)	86.0
1973 Aug 30 2300:00	M-100	-	-	KORO	Akademik Korolev	GMS73D	LP13	-	-	30.0W 20.0S (+/- 5.0)	86.0
1973 Aug 31 0200:00	M-100	-	-	KORO	Akademik Korolev	GMS73D	LP13	-	-	30.0W 20.0S (+/- 5.0)	89.0
1973 Aug 31 2200:00	M-100	-	-	KORO	Akademik Korolev	GMS73D	LP12	-	-	30.0W 20.0S (+/- 5.0)	87.0
1973 Sep 01 0000:00	M-100	-	-	KORO	Akademik Korolev	GMS73D	LP14	-	-	30.0W 20.0S (+/- 5.0)	84.0
1973 Sep 02 0000:00	M-100	-	-	KORO	Akademik Korolev	GMS73D	LP14	-	-	30.0W 20.0S (+/- 5.0)	89.0
1973 Sep 02 2000:00	M-100	-	-	KORO	Akademik Korolev	GMS73D	LP15	-	-	30.0W 20.0S (+/- 5.0)	87.0
1973 Sep 03 2300:00	M-100	-	-	KORO	Akademik Korolev	GMS73D	LP15	-	-	30.0W 20.0S (+/- 5.0)	84.0
1973 Sep 09 2200:00	M-100	-	-	KORO	Akademik Korolev	GMS73D	LP8	-	-	30.0W 20.0S (+/- 5.0)	87.0
1973 Sep 09 2300:00	M-100	-	-	KORO	Akademik Korolev	GMS73D	LP8	-	-	30.0W 20.0S (+/- 5.0)	83.0
1973 Sep 11 1400:00	M-100	-	-	KORO	Akademik Korolev	GMS73D	LP16	-	-	30.0W 20.0S (+/- 5.0)	82.0
1973 Sep 14 2000:00	M-100	-	-	KORO	Akademik Korolev	CSG	MER	-	-	52.8W 5.2N (+/- 0.0)	87.0
1973 Sep 18 1700:00	M-100	-	-	KORO	Akademik Korolev	CSG	MER	-	-	52.8W 5.2N (+/- 0.0)	84.0
1973 Sep 20 1440	M-100	-	-	KORO	Akademik Korolev	CSG	MER	-	-	52.8W 5.2N (+/- 0.0)	77.0
1973 Sep 21 0420	M-100	-	-	KORO	Akademik Korolev	CSG	MER	-	-	52.8W 5.2N (+/- 0.0)	80.0
1973 Sep 21 1520	M-100	-	-	KORO	Akademik Korolev	CSG	MER	-	-	52.8W 5.2N (+/- 0.0)	80.0
1973 Sep 22 0410	M-100	-	-	KORO	Akademik Korolev	CSG	MER	-	-	52.8W 5.2N (+/- 0.0)	68.0
1973 Sep 24 1720	M-100	-	-	KORO	Akademik Korolev	CSG	MER	-	-	52.8W 5.2N (+/- 0.0)	79.0
1973 Sep 25 0030	M-100	-	-	KORO	Akademik Korolev	CSG	MER	-	-	52.8W 5.2N (+/- 0.0)	78.0
1973 Sep 25 1810	M-100	-	-	KORO	Akademik Korolev	CSG	MER	-	-	52.8W 5.2N (+/- 0.0)	77.0
1973 Sep 26 0020	M-100	-	-	KORO	Akademik Korolev	CSG	MER	-	-	52.8W 5.2N (+/- 0.0)	78.0
1973 Sep 26 1410	M-100	-	-	KORO	Akademik Korolev	CSG	MER	-	-	52.8W 5.2N (+/- 0.0)	80.0
1973 Sep 27 1410	M-100	-	-	KORO	Akademik Korolev	CSG	MER	-	-	52.8W 5.2N (+/- 0.0)	80.0
1973 Sep 28 0240	M-100	-	-	KORO	Akademik Korolev	CSG	MER	-	-	52.8W 5.2N (+/- 0.0)	80.0
1973 Sep 29 0300:00	M-100	-	-	KORO	Akademik Korolev	CSG	MER	-	-	52.8W 5.2N (+/- 0.0)	78.0
1973 Oct 1 0340	M-100	-	-	KORO	Akademik Korolev	CSG	MER	-	-	52.8W 5.2N (+/- 0.0)	80.0
1973 Oct 31 2300:00	M-100	-	-	KORO	Akademik Korolev	GMS73D	LP17	-	-	30.0W 20.0S (+/- 5.0)	89.0
1973 Nov 01 0100:00	M-100	-	-	KORO	Akademik Korolev	GMS73D	LP18	-	-	30.0W 20.0S (+/- 5.0)	89.0
1973 Nov 07 1400:00	M-100	-	-	KORO	Akademik Korolev	GMS73D	LP19	-	-	30.0W 20.0S (+/- 5.0)	92.0
1973 Nov 11 1200:00	M-100	-	-	KORO	Akademik Korolev	GMS73D	LP20	-	-	30.0W 20.0S (+/- 5.0)	82.0

Launches: KORO

Date	Rocket	Flight	Mission	PlatCode	Platform	Site	LP	AscSite	AsclP	Pos	Apogee
1974 Feb 17 1900:00	M-100	-	-	KORO	Akademik Korolev	GMS74B	LP1	-	-	160.0E 0.0N (+/- 5.0)	79.0
1974 Feb 19 2200:00	M-100	-	-	KORO	Akademik Korolev	GMS74B	LP2	-	-	160.0E 0.0N (+/- 5.0)	95.0
1974 Mar 10 2100:00	M-100	-	-	KORO	Akademik Korolev	GMS74B	LP3	-	-	160.0E 0.0N (+/- 5.0)	88.0
1974 Mar 14 2200:00	M-100	-	-	KORO	Akademik Korolev	GMS74B	LP4	-	-	160.0E 0.0N (+/- 5.0)	84.0
1974 Mar 17 2200:00	M-100	-	-	KORO	Akademik Korolev	GMS74B	LP5	-	-	160.0E 0.0N (+/- 5.0)	84.0
1974 Mar 20 2100:00	M-100	-	-	KORO	Akademik Korolev	GMS74B	LP6	-	-	160.0E 0.0N (+/- 5.0)	88.0
1974 Mar 20 2300:00	M-100	-	-	KORO	Akademik Korolev	GMS74B	LP7	-	-	160.0E 0.0N (+/- 5.0)	85.0
1974 Mar 23 2100:00	M-100	-	-	KORO	Akademik Korolev	GMS74B	LP8	-	-	160.0E 0.0N (+/- 5.0)	82.0
1974 Mar 23 2100:00	M-100	-	-	KORO	Akademik Korolev	GMS74B	LP8	-	-	160.0E 0.0N (+/- 5.0)	86.0
1974 May 09 1300:00	M-100	-	-	KORO	Akademik Korolev	OJP	-	-	-	160.0E 0.0N (+/- 1.0)	89.0
1974 May 15 0745:00	M-100	-	-	KORO	Akademik Korolev	GMS74B	LP9	-	-	160.0E 0.0N (+/- 5.0)	87.0
1974 May 18 0640:00	M-100	-	-	KORO	Akademik Korolev	GMS74B	LP10	-	-	160.0E 0.0N (+/- 5.0)	85.0
1974 May 22 0640:00	M-100	-	-	KORO	Akademik Korolev	GMS74B	LP11	-	-	160.0E 0.0N (+/- 5.0)	87.0
1974 May 25 0500:00	M-100	-	-	KORO	Akademik Korolev	GMS74B	LP12	-	-	160.0E 0.0N (+/- 5.0)	87.0
1974 May 27 0400:00	M-100	-	-	KORO	Akademik Korolev	GMS74B	LP13	-	-	160.0E 0.0N (+/- 5.0)	85.0
1974 Oct 22 0300:00	M-100	-	-	KORO	Akademik Korolev	GMS74D	LP1	-	-	140.0W 0.0N (+/- 5.0)	87.0
1974 Oct 27 0400:00	M-100	-	-	KORO	Akademik Korolev	GMS74D	LP1	-	-	140.0W 0.0N (+/- 5.0)	84.0
1974 Oct 30 0400:00	M-100	-	-	KORO	Akademik Korolev	GMS74D	LP2	-	-	140.0W 0.0N (+/- 5.0)	90.0
1974 Nov 02 0700:00	M-100	-	-	KORO	Akademik Korolev	GMS74D	LP3	-	-	140.0W 0.0N (+/- 5.0)	81.0
1974 Nov 05 0800:00	M-100	-	-	KORO	Akademik Korolev	GMS74D	LP4	-	-	140.0W 0.0N (+/- 5.0)	84.0
1974 Nov 26 1030:00	M-100	-	-	KORO	Akademik Korolev	GMS74D	LP5	-	-	140.0W 0.0N (+/- 5.0)	88.0
1974 Nov 26 1440:00	M-100	-	-	KORO	Akademik Korolev	GMS74D	LP5	-	-	140.0W 0.0N (+/- 5.0)	91.0
1975 Mar 09 1630:00	M-100	-	-	KORO	Akademik Korolev	GMS75B	LP1	-	-	78.0E 48.0S (+/- 5.0)	81.0
1975 Mar 18 1700:00	M-100	-	-	KORO	Akademik Korolev	GMS75B	LP2	-	-	78.0E 48.0S (+/- 5.0)	83.0
1975 Mar 18 1840:00	M-100	-	-	KORO	Akademik Korolev	GMS75B	LP2	-	-	78.0E 48.0S (+/- 5.0)	81.0
1977 Jan 04 1240:00	M-100	-	-	KORO	Akademik Korolev	GMS77A	LP1	-	-	160.0W 30.0N (+/- 5.0)	86.0
1977 Jan 05 0950:00	M-100	-	-	KORO	Akademik Korolev	GMS77A	LP2	-	-	160.0W 30.0N (+/- 5.0)	87.0
1977 Jan 07 0840:00	M-100	-	-	KORO	Akademik Korolev	GMS77A	LP3	-	-	160.0W 30.0N (+/- 5.0)	78.0
1977 Jan 12 0840:00	M-100	-	-	KORO	Akademik Korolev	GMS77A	LP4	-	-	160.0W 30.0N (+/- 5.0)	79.0
1977 Jan 17 0730:00	M-100	-	-	KORO	Akademik Korolev	GMS77A	LP5	-	-	160.0W 30.0N (+/- 5.0)	85.0
1977 Jan 21 0900:00	M-100	-	-	KORO	Akademik Korolev	GMS77A	LP6	-	-	160.0W 30.0N (+/- 5.0)	77.0
1977 Jan 23 1036:00	M-100	-	-	KORO	Akademik Korolev	GMS77A	LP7	-	-	160.0W 30.0N (+/- 5.0)	81.0
1977 Jan 27 0810:00	M-100	-	-	KORO	Akademik Korolev	GMS77A	LP8	-	-	160.0W 30.0N (+/- 5.0)	83.0
1977 Jan 28 1450:00	M-100	-	-	KORO	Akademik Korolev	GMS77A	LP9	-	-	160.0W 30.0N (+/- 5.0)	81.0
1977 Mar 12 0500:00	M-100	-	-	KORO	Akademik Korolev	GMS77C	LP1	-	-	65.0E 0.0N (+/- 5.0)	77.0
1977 Mar 14 0500:00	M-100	-	-	KORO	Akademik Korolev	GMS77C	LP2	-	-	65.0E 0.0N (+/- 5.0)	84.0
1977 Mar 18 0600:00	M-100	-	-	KORO	Akademik Korolev	GMS77C	LP3	-	-	65.0E 0.0N (+/- 5.0)	82.0
1977 Mar 19 0600:00	M-100	-	-	KORO	Akademik Korolev	GMS77C	LP4	-	-	65.0E 0.0N (+/- 5.0)	84.0
1977 Mar 20 0600:00	M-100	-	-	KORO	Akademik Korolev	GMS77C	LP5	-	-	65.0E 0.0N (+/- 5.0)	88.0
1977 Mar 21 0600:00	M-100	-	-	KORO	Akademik Korolev	IDLZ	I065	-	-	65.0E 0.0N (+/- 2.0)	83.0
1977 Mar 22 0600:00	M-100	-	-	KORO	Akademik Korolev	GMS77C	LP6	-	-	65.0E 0.0N (+/- 5.0)	83.0
1977 Mar 23 0600:00	M-100	-	-	KORO	Akademik Korolev	IDLZ	I0COR	-	-	65.0E 0.0N (+/- 2.0)	85.0
1977 Mar 26 0600:00	M-100	-	-	KORO	Akademik Korolev	GMS77C	LP7	-	-	65.0E 0.0N (+/- 5.0)	85.0
1977 Mar 28 0700:00	M-100	-	-	KORO	Akademik Korolev	IDLZ	I0SWR	-	-	65.0E 0.0N (+/- 2.0)	82.0
1977 Mar 28 0900:00	M-100	-	-	KORO	Akademik Korolev	IDLZ	I0SWR	-	-	65.0E 0.0N (+/- 2.0)	81.0
1977 Jun	M-100B	-	[Dubious]	KORO	Akademik Korolev	GMS77H	-	-	-	126.0W 14.5N (+/- 5.0)	70.0
1977 Jun	M-100B	-	[Dubious]	KORO	Akademik Korolev	GMS77H	-	-	-	126.0W 14.5N (+/- 5.0)	70.0
1977 Jul 18 0631	M-100B	-	-	KORO	Akademik Korolev	GMS77H	LP01	-	-	126.0W 14.5N (+/- 5.0)	70.0
1977 Jul 18 0751	M-100B	-	-	KORO	Akademik Korolev	GMS77H	LP02	-	-	126.0W 14.5N (+/- 5.0)	70.0
1977 Jul 21 2030	M-100B	-	-	KORO	Akademik Korolev	GMS77H	LP03	-	-	126.0W 14.5N (+/- 5.0)	70.0
1977 Jul 21 2200	M-100B	-	-	KORO	Akademik Korolev	GMS77H	LP04	-	-	126.0W 14.5N (+/- 5.0)	70.0
1977 Jul 21 2330	M-100B	-	-	KORO	Akademik Korolev	GMS77H	LP05	-	-	126.0W 14.5N (+/- 5.0)	70.0
1977 Jul 25 0509	M-100B	-	-	KORO	Akademik Korolev	GMS77H	LP06	-	-	126.0W 14.5N (+/- 5.0)	70.0
1977 Jul 25 0640	M-100B	-	-	KORO	Akademik Korolev	GMS77H	LP07	-	-	126.0W 14.5N (+/- 5.0)	70.0

Launches: KORO

Date	Rocket	Flight	Mission	PlatCode	Platform	Site	LP	AscSite	AsclP	Pos	Apogee
1977 Jul 25 0810	M-100B	-	-	KORO	Akademik Korolev	GMS77H	LP08	-	-	126.0W 14.5N (+/- 5.0)	70.0
1977 Jul 27 0304	M-100B	-	-	KORO	Akademik Korolev	GMS77H	LP09	-	-	126.0W 14.5N (+/- 5.0)	70.0
1977 Jul 27 0435	M-100B	-	-	KORO	Akademik Korolev	GMS77H	LP10	-	-	126.0W 14.5N (+/- 5.0)	70.0
1977 Aug 10 1405	M-100B	No. 1	-	KORO	Akademik Korolev	WI	LP2	-	-	75.5W 37.8N (+/- 0.0)	82.0
1977 Aug 12 0405	M-100B	No. 2	-	KORO	Akademik Korolev	WI	LP2	-	-	75.5W 37.8N (+/- 0.0)	82.0
1977 Aug 12 0606	M-100B	No. 3	-	KORO	Akademik Korolev	WI	LP2	-	-	75.5W 37.8N (+/- 0.0)	82.0
1977 Aug 12 1105	M-100B	No. 4	-	KORO	Akademik Korolev	WI	LP2	-	-	75.5W 37.8N (+/- 0.0)	81.0
1977 Aug 15 1735	M-100B	No. 5	-	KORO	Akademik Korolev	WI	LP2	-	-	75.5W 37.8N (+/- 0.0)	84.0
1977 Aug 15 1935	M-100B	No. 6	-	KORO	Akademik Korolev	WI	LP2	-	-	75.5W 37.8N (+/- 0.0)	80.0
1977 Aug 16 0105	M-100B	No. 7	-	KORO	Akademik Korolev	WI	LP2	-	-	75.5W 37.8N (+/- 0.0)	79.0
1977 Aug 16 1840	M-100B	No. 8	-	KORO	Akademik Korolev	WI	LP2	-	-	75.5W 37.8N (+/- 0.0)	85.0
1977 Aug 16 2029	M-100B	No. 9	-	KORO	Akademik Korolev	WI	LP2	-	-	75.5W 37.8N (+/- 0.0)	84.0
1977 Aug 17 2015	M-100B	No. 10	-	KORO	Akademik Korolev	WI	LP2	-	-	75.5W 37.8N (+/- 0.0)	86.0
1977 Aug 19 0120	M-100B	No. 11	-	KORO	Akademik Korolev	WI	LP2	-	-	75.5W 37.8N (+/- 0.0)	84.0
1977 Aug 19 0308	M-100B	No. 12	-	KORO	Akademik Korolev	WI	LP2	-	-	75.5W 37.8N (+/- 0.0)	84.0
1977 Aug 19 0507	M-100B	No. 13	-	KORO	Akademik Korolev	WI	LP2	-	-	75.5W 37.8N (+/- 0.0)	83.0
1977 Aug 19 2005	M-100B	No. 14	-	KORO	Akademik Korolev	WI	LP2	-	-	75.5W 37.8N (+/- 0.0)	83.0
1977 Aug 19 2205	M-100B	No. 15	-	KORO	Akademik Korolev	WI	LP2	-	-	75.5W 37.8N (+/- 0.0)	82.0
1977 Aug 20 0105	M-100B	No. 16	-	KORO	Akademik Korolev	WI	LP2	-	-	75.5W 37.8N (+/- 0.0)	83.0
1977 Aug 22 2312	M-100B	No. 17	-	KORO	Akademik Korolev	WI	LP2	-	-	75.5W 37.8N (+/- 0.0)	83.0
1977 Aug 23 0105	M-100B	No. 18	-	KORO	Akademik Korolev	WI	LP2	-	-	75.5W 37.8N (+/- 0.0)	84.0
1977 Aug 23 0343	M-100B	No. 19	-	KORO	Akademik Korolev	WI	LP2	-	-	75.5W 37.8N (+/- 0.0)	84.0
1977 Aug 24 0107	M-100B	No. 20	-	KORO	Akademik Korolev	WI	LP2	-	-	75.5W 37.8N (+/- 0.0)	84.0
1977 Aug 24 0308	M-100B	No. 21	-	KORO	Akademik Korolev	WI	LP2	-	-	75.5W 37.8N (+/- 0.0)	84.0
1977 Nov 05 1500:00	M-100	-	-	KORO	Akademik Korolev	GMS77L	LP1	-	-	165.0E 40.0N (+/- 5.0)	82.0
1977 Nov 07 2000:00	M-100	-	-	KORO	Akademik Korolev	GMS77L	LP2	-	-	165.0E 40.0N (+/- 5.0)	82.0
1977 Nov 08 1700:00	M-100	-	-	KORO	Akademik Korolev	GMS77L	LP3	-	-	165.0E 40.0N (+/- 5.0)	75.0
1977 Nov 09 1700:00	M-100	-	-	KORO	Akademik Korolev	GMS77L	LP4	-	-	165.0E 40.0N (+/- 5.0)	82.0
1977 Nov 11 1700:00	M-100	-	-	KORO	Akademik Korolev	GMS77L	LP4	-	-	165.0E 40.0N (+/- 5.0)	86.0
1977 Nov 13 1700:00	M-100	-	-	KORO	Akademik Korolev	GMS77L	LP5	-	-	165.0E 40.0N (+/- 5.0)	81.0
1977 Nov 15 1500:00	M-100	-	-	KORO	Akademik Korolev	GMS77L	LP6	-	-	165.0E 40.0N (+/- 5.0)	79.0
1977 Nov 16 1700:00	M-100	-	-	KORO	Akademik Korolev	GMS77L	LP7	-	-	165.0E 40.0N (+/- 5.0)	76.0
1977 Nov 21 1600:00	M-100	-	-	KORO	Akademik Korolev	GMS77L	LP8	-	-	165.0E 40.0N (+/- 5.0)	82.0
1977 Nov 22 1650:00	M-100	-	-	KORO	Akademik Korolev	GMS77L	LP9	-	-	165.0E 40.0N (+/- 5.0)	84.0
1977 Nov 23 1700:00	M-100	-	-	KORO	Akademik Korolev	GMS77L	LP10	-	-	165.0E 40.0N (+/- 5.0)	84.0
1977 Nov 24 1800:00	M-100	-	-	KORO	Akademik Korolev	IOLZ	IOSWR	-	-	65.0E 0.0N (+/- 2.0)	88.0
1977 Nov 26 1700:00	M-100	-	-	KORO	Akademik Korolev	IOLZ	IOLZ	-	-	65.0E 0.0N (+/- 2.0)	71.0
1977 Nov 28 1700:00	M-100	-	-	KORO	Akademik Korolev	IOLZ	IOLZ	-	-	65.0E 0.0N (+/- 2.0)	77.0
1977 Nov 28 1700:00	M-100	-	-	KORO	Akademik Korolev	IOLZ	IOLZ	-	-	65.0E 0.0N (+/- 2.0)	71.0
1977 Nov 29 1700:00	M-100	-	-	KORO	Akademik Korolev	GMS77L	LP11	-	-	165.0E 40.0N (+/- 5.0)	70.0
1977 Nov 29 1700:00	M-100	-	-	KORO	Akademik Korolev	GMS77L	LP12	-	-	165.0E 40.0N (+/- 5.0)	79.0
1977 Nov 29 1900:00	M-100	-	-	KORO	Akademik Korolev	GMS77L	LP12	-	-	165.0E 40.0N (+/- 5.0)	82.0
1977 Nov 30 1600:00	M-100	-	-	KORO	Akademik Korolev	GMS77L	LP13	-	-	165.0E 40.0N (+/- 5.0)	85.0
1977 Dec 01 1800:00	M-100	-	-	KORO	Akademik Korolev	GMS77L	LP14	-	-	165.0E 40.0N (+/- 5.0)	84.0
1977 Dec 02 2100:00	M-100	-	-	KORO	Akademik Korolev	IOLZ	IOLZ	-	-	65.0E 0.0N (+/- 2.0)	82.0
1977 Dec 03 1900:00	M-100	-	-	KORO	Akademik Korolev	GMS77L	LP15	-	-	165.0E 40.0N (+/- 5.0)	85.0
1977 Dec 09 1800:00	M-100	-	-	KORO	Akademik Korolev	GMS77L	LP15	-	-	165.0E 40.0N (+/- 5.0)	85.0
1977 Dec 11 1700:00	M-100	-	-	KORO	Akademik Korolev	GMS77L	LP15	-	-	165.0E 40.0N (+/- 5.0)	82.0
1977 Dec 15 1600:00	M-100	-	-	KORO	Akademik Korolev	GMS77L	LP15	-	-	165.0E 40.0N (+/- 5.0)	83.0
1977 Dec 16 1700:00	M-100	-	-	KORO	Akademik Korolev	GMS77L	LP15	-	-	165.0E 40.0N (+/- 5.0)	85.0
1977 Dec 19 1700:00	M-100	-	-	KORO	Akademik Korolev	GMS77L	LP15	-	-	165.0E 40.0N (+/- 5.0)	85.0
1977 Dec 20 1700:00	M-100	-	-	KORO	Akademik Korolev	GMS77L	LP15	-	-	165.0E 40.0N (+/- 5.0)	87.0
1977 Dec 21 1700:00	M-100	-	-	KORO	Akademik Korolev	GMS77L	LP15	-	-	165.0E 40.0N (+/- 5.0)	85.0
1977 Dec 22 1600:00	M-100	-	-	KORO	Akademik Korolev	GMS77L	LP15	-	-	165.0E 40.0N (+/- 5.0)	87.0
1978 Jan 11 1200:00	M-100	-	-	KORO	Akademik Korolev	GMS77L	LP16	-	-	165.0E 40.0N (+/- 5.0)	90.0
1978 Jan 12 0820:00	M-100	-	-	KORO	Akademik Korolev	GMS77L	LP17	-	-	165.0E 40.0N (+/- 5.0)	84.0

Launches: KORO

Date	Rocket	Flight	Mission	PlatCode	Platform	Site	LP	AscSite	AsCLP	Pos	Apogee
1978 Jan 18 11:00:00	M-100	-	-	KORO	Akademik Korolev	GMS77L	LP18	-	-	165.0E 40.0N (+/- 5.0)	81.0
1978 Jan 27 12:00:00	M-100	-	-	KORO	Akademik Korolev	GMS77L	LP19	-	-	165.0E 40.0N (+/- 5.0)	90.0
1978 Feb 01 02:00:00	M-100	-	-	KORO	Akademik Korolev	GMS77L	LP20	-	-	165.0E 40.0N (+/- 5.0)	81.0
1978 Feb 03 10:00:00	M-100	-	-	KORO	Akademik Korolev	GMS77L	LP21	-	-	165.0E 40.0N (+/- 5.0)	82.0
1978 Feb 07 09:00:00	M-100	-	-	KORO	Akademik Korolev	GMS77L	LP22	-	-	165.0E 40.0N (+/- 5.0)	82.0
1978 Feb 15 09:00:00	M-100	-	-	KORO	Akademik Korolev	ANTIM	-	-	-	180.0E 0.0N (+/- 1.0)	84.0
1978 Feb 17 09:00:00	M-100	-	-	KORO	Akademik Korolev	GMS77L	LP24	-	-	165.0E 40.0N (+/- 5.0)	84.0
1978 Feb 19 09:20:00	M-100	-	-	KORO	Akademik Korolev	GMS77L	LP25	-	-	165.0E 40.0N (+/- 5.0)	81.0
1978 Feb 23 08:30:00	M-100	-	-	KORO	Akademik Korolev	GMS77L	LP26	-	-	165.0E 40.0N (+/- 5.0)	88.0
1978 Feb 24 09:30:00	M-100	-	-	KORO	Akademik Korolev	GMS77L	LP27	-	-	165.0E 40.0N (+/- 5.0)	85.0
1978 Feb 27 08:00:00	M-100	-	-	KORO	Akademik Korolev	GMS77L	LP28	-	-	165.0E 40.0N (+/- 5.0)	81.0
1978 Mar 01 07:30:00	M-100	-	-	KORO	Akademik Korolev	GMS77L	LP29	-	-	165.0E 40.0N (+/- 5.0)	87.0
1978 Mar 05 09:00:00	M-100	-	-	KORO	Akademik Korolev	GMS77L	LP30	-	-	165.0E 40.0N (+/- 5.0)	91.0
1978 Mar 05 10:15:00	M-100	-	-	KORO	Akademik Korolev	GMS77L	LP30	-	-	165.0E 40.0N (+/- 5.0)	83.0
1978 Mar 08 07:40:00	M-100	-	-	KORO	Akademik Korolev	GMS77L	LP31	-	-	165.0E 40.0N (+/- 5.0)	89.0
1978 Mar 08 09:10:00	M-100	-	-	KORO	Akademik Korolev	GMS77L	LP32	-	-	165.0E 40.0N (+/- 5.0)	83.0
1978 Mar 08 12:00:00	M-100	-	-	KORO	Akademik Korolev	GMS78E	LP1	-	-	160.0E 0.0N (+/- 5.0)	88.0
1978 Apr 03 14:00:00	M-100	-	-	KORO	Akademik Korolev	GMS78E	LP1	-	-	160.0E 0.0N (+/- 5.0)	85.0
1978 Apr 06 11:00:00	M-100	-	-	KORO	Akademik Korolev	GMS78E	LP2	-	-	160.0E 0.0N (+/- 5.0)	83.0
1978 Apr 07 11:00:00	M-100	-	-	KORO	Akademik Korolev	GMS78E	LP3	-	-	160.0E 0.0N (+/- 5.0)	87.0
1978 Apr 07 12:30:00	M-100	-	-	KORO	Akademik Korolev	GMS78E	LP3	-	-	160.0E 0.0N (+/- 5.0)	85.0
1978 Apr 21 10:00:00	M-100	-	-	KORO	Akademik Korolev	GMS78E	LP4	-	-	160.0E 0.0N (+/- 5.0)	84.0
1978 Apr 22 08:35:00	M-100	-	-	KORO	Akademik Korolev	GMS78E	LP5	-	-	160.0E 0.0N (+/- 5.0)	88.0
1978 Apr 22 10:00:00	M-100	-	-	KORO	Akademik Korolev	GMS78E	LP5	-	-	160.0E 0.0N (+/- 5.0)	88.0
1978 Apr 23 09:20:00	M-100	-	-	KORO	Akademik Korolev	GMS78E	LP6	-	-	160.0E 0.0N (+/- 5.0)	83.0
1978 Apr 24 08:50:00	M-100	-	-	KORO	Akademik Korolev	GMS78E	LP7	-	-	160.0E 0.0N (+/- 5.0)	87.0
1978 Apr 25 08:50:00	M-100	-	-	KORO	Akademik Korolev	GMS78E	LP8	-	-	160.0E 0.0N (+/- 5.0)	84.0
1978 Apr 26 19:00:00	M-100	-	-	KORO	Akademik Korolev	GMS78E	LP8	-	-	160.0E 0.0N (+/- 5.0)	81.0
1978 Apr 27 09:00:00	M-100	-	-	KORO	Akademik Korolev	GMS78E	LP9	-	-	160.0E 0.0N (+/- 5.0)	81.0
1979 Jan 10 15:30:00	M-100	-	-	KORO	Akademik Korolev	NER	-	-	-	90.0E 0.0N (+/- 2.0)	88.0
1979 Jan 13 15:30:00	M-100	-	-	KORO	Akademik Korolev	NER	-	-	-	90.0E 0.0N (+/- 2.0)	87.0
1979 Jan 14 15:30:00	M-100	-	-	KORO	Akademik Korolev	NER	-	-	-	90.0E 0.0N (+/- 2.0)	83.0
1979 Jan 16 15:30:00	M-100	-	-	KORO	Akademik Korolev	NER	-	-	-	90.0E 0.0N (+/- 2.0)	87.0
1979 Jan 18 15:50:00	M-100	-	-	KORO	Akademik Korolev	NER	-	-	-	90.0E 0.0N (+/- 2.0)	80.0
1979 Jan 19 15:30:00	M-100	-	-	KORO	Akademik Korolev	NER	-	-	-	90.0E 0.0N (+/- 2.0)	81.0
1979 Jan 20 15:25:00	M-100	-	-	KORO	Akademik Korolev	NER	-	-	-	90.0E 0.0N (+/- 2.0)	80.0
1979 Jan 21 15:30:00	M-100	-	-	KORO	Akademik Korolev	NER	-	-	-	90.0E 0.0N (+/- 2.0)	82.0
1979 Jan 22 15:30:00	M-100	-	-	KORO	Akademik Korolev	NER	-	-	-	90.0E 0.0N (+/- 2.0)	88.0
1979 Jan 23 15:10:00	M-100	-	-	KORO	Akademik Korolev	NER	-	-	-	90.0E 0.0N (+/- 2.0)	85.0
1979 Jan 24 15:35:00	M-100	-	-	KORO	Akademik Korolev	NER	-	-	-	90.0E 0.0N (+/- 2.0)	83.0
1979 Jan 25 14:55:00	M-100	-	-	KORO	Akademik Korolev	NER	-	-	-	90.0E 0.0N (+/- 2.0)	80.0
1979 Jan 26 15:00:00	M-100	-	-	KORO	Akademik Korolev	NER	-	-	-	90.0E 0.0N (+/- 2.0)	84.0
1979 Jan 27 14:55:00	M-100	-	-	KORO	Akademik Korolev	NER	-	-	-	90.0E 0.0N (+/- 2.0)	81.0
1979 Jan 28 15:35:00	M-100	-	-	KORO	Akademik Korolev	NER	-	-	-	90.0E 0.0N (+/- 2.0)	84.0
1979 Jan 29 15:35:00	M-100	-	-	KORO	Akademik Korolev	NER	-	-	-	90.0E 0.0N (+/- 2.0)	82.0
1979 Jan 30 17:55:00	M-100	-	-	KORO	Akademik Korolev	NER	-	-	-	90.0E 0.0N (+/- 2.0)	82.0
1979 Jan 31 15:00:00	M-100	-	-	KORO	Akademik Korolev	NER	-	-	-	90.0E 0.0N (+/- 2.0)	83.0
1979 Feb 02 15:00:00	M-100	-	-	KORO	Akademik Korolev	NER	-	-	-	90.0E 0.0N (+/- 2.0)	82.0
1979 Feb 03 18:00:00	M-100	-	-	KORO	Akademik Korolev	NER	-	-	-	90.0E 0.0N (+/- 2.0)	81.0
1979 Feb 04 20:00:00	M-100	-	-	KORO	Akademik Korolev	NER	-	-	-	90.0E 0.0N (+/- 2.0)	83.0
1979 Feb 05 21:20:00	M-100	-	-	KORO	Akademik Korolev	NER	-	-	-	90.0E 0.0N (+/- 2.0)	81.0
1979 Feb 06 19:00:00	M-100	-	-	KORO	Akademik Korolev	NER	-	-	-	90.0E 0.0N (+/- 2.0)	81.0
1979 Feb 07 18:50:00	M-100	-	-	KORO	Akademik Korolev	NER	-	-	-	90.0E 0.0N (+/- 2.0)	78.0
1979 Feb 09 20:20:00	M-100	-	-	KORO	Akademik Korolev	NER	-	-	-	90.0E 0.0N (+/- 2.0)	83.0

Launches: KORO

Date	Rocket	Flight	Mission	PlatCode	Platform	Site	LP	AscSite	AsclP	Pos	Apogee
1979 Feb 10 1930:00	M-100	-	-	KORO	Akademik Korolev	NER	-	-	-	90.0E 0.0N (+/- 2.0)	82.0
1979 Feb 11 1950:00	M-100	-	-	KORO	Akademik Korolev	NER	-	-	-	90.0E 0.0N (+/- 2.0)	85.0
1979 Feb 12 2050:00	M-100	-	-	KORO	Akademik Korolev	NER	-	-	-	90.0E 0.0N (+/- 2.0)	85.0
1979 Feb 13 2010:00	M-100	-	-	KORO	Akademik Korolev	NER	-	-	-	90.0E 0.0N (+/- 2.0)	83.0
1979 Feb 14 1350:00	M-100	-	-	KORO	Akademik Korolev	NER	-	-	-	90.0E 0.0N (+/- 2.0)	83.0
1979 Apr 21 2100:00	M-100	-	-	KORO	Akademik Korolev	GMS79C	LP1	-	-	54.0E 6.0N (+/- 5.0)	78.0
1979 Apr 22 2000:00	M-100	-	-	KORO	Akademik Korolev	GMS79C	LP2	-	-	54.0E 6.0N (+/- 5.0)	82.0
1979 Apr 24 2010:00	M-100	-	-	KORO	Akademik Korolev	GMS79C	LP3	-	-	54.0E 6.0N (+/- 5.0)	84.0
1979 Apr 26 2300:00	M-100	-	-	KORO	Akademik Korolev	GMS79C	LP4	-	-	54.0E 6.0N (+/- 5.0)	84.0
1979 Apr 29 2000:00	M-100	-	-	KORO	Akademik Korolev	GMS79C	LP5	-	-	54.0E 6.0N (+/- 5.0)	85.0
1979 May 01 2000:00	M-100	-	-	KORO	Akademik Korolev	GMS79C	LP5	-	-	54.0E 6.0N (+/- 5.0)	85.0
1979 May 02 2200:00	M-100	-	-	KORO	Akademik Korolev	GMS79C	LP6	-	-	54.0E 6.0N (+/- 5.0)	82.0
1979 May 13 2200:00	M-100	-	-	KORO	Akademik Korolev	GMS79C	LP6	-	-	54.0E 6.0N (+/- 5.0)	83.0
1979 May 16 2100:00	M-100	-	-	KORO	Akademik Korolev	GMS79C	LP7	-	-	54.0E 6.0N (+/- 5.0)	82.0
1979 May 18 2200:00	M-100	-	-	KORO	Akademik Korolev	IOLZ	IOCHR	-	-	65.0E 0.0N (+/- 2.0)	84.0
1979 May 19 2200:00	M-100	-	-	KORO	Akademik Korolev	GMS79C	LP7	-	-	54.0E 6.0N (+/- 5.0)	88.0
1979 May 21 2200:00	M-100	-	-	KORO	Akademik Korolev	IOLZ	IOCHR	-	-	65.0E 0.0N (+/- 2.0)	84.0
1979 May 21 2200:00	M-100	-	-	KORO	Akademik Korolev	IOLZ	IOCHR	-	-	65.0E 0.0N (+/- 2.0)	84.0
1979 May 21 2200:00	Super Loki	-	-	KORO	Akademik Korolev	WI	LP2	-	-	75.5W 37.8N (+/- 0.0)	84.0
1979 May 23 2300:00	M-100	-	-	KORO	Akademik Korolev	IOLZ	IOCHR	-	-	65.0E 0.0N (+/- 2.0)	89.0
1979 May 24 2200:00	M-100	-	-	KORO	Akademik Korolev	IOLZ	IOCHR	-	-	65.0E 0.0N (+/- 2.0)	85.0
1979 May 26 0040:00	M-100	-	-	KORO	Akademik Korolev	IOLZ	IOCHR	-	-	65.0E 0.0N (+/- 2.0)	84.0
1979 May 26 2200:00	M-100	-	-	KORO	Akademik Korolev	IOLZ	IOCHR	-	-	65.0E 0.0N (+/- 2.0)	89.0
1979 May 27 2130:00	M-100	-	-	KORO	Akademik Korolev	IOLZ	IOCHR	-	-	65.0E 0.0N (+/- 2.0)	79.0
1979 May 29 2130:00	M-100	-	-	KORO	Akademik Korolev	IOLZ	IOCHR	-	-	65.0E 0.0N (+/- 2.0)	81.0
1979 Jun 24 2100:00	M-100	-	-	KORO	Akademik Korolev	GMS79C	LP8	-	-	54.0E 6.0N (+/- 5.0)	82.0
1979 Jun 26 2100:00	M-100	-	-	KORO	Akademik Korolev	GMS79C	LP9	-	-	54.0E 6.0N (+/- 5.0)	92.0
1979 Aug 20 1400:00	M-100	-	-	KORO	Akademik Korolev	GMS79C	LP1	-	-	160.0E 0.0N (+/- 1.0)	82.0
1979 Nov 27 1400:00	M-100	-	-	KORO	Akademik Korolev	GMS79J	LP1	-	-	160.0E 0.0N (+/- 1.0)	81.0
1979 Nov 27 1500:00	M-100	-	-	KORO	Akademik Korolev	GMS79J	LP1	-	-	160.0E 0.0N (+/- 1.0)	82.0
1979 Nov 29 1400:00	M-100	-	-	KORO	Akademik Korolev	GMS79J	LP2	-	-	160.0E 0.0N (+/- 1.0)	84.0
1979 Nov 29 1500:00	M-100	-	-	KORO	Akademik Korolev	GMS79J	LP2	-	-	160.0E 0.0N (+/- 1.0)	85.0
1979 Nov 30 1400:00	M-100	-	-	KORO	Akademik Korolev	GMS79J	LP3	-	-	160.0E 0.0N (+/- 1.0)	82.0
1979 Dec 04 1400:00	M-100	-	-	KORO	Akademik Korolev	GMS79J	LP4	-	-	160.0E 0.0N (+/- 1.0)	82.0
1979 Dec 12 1500:00	M-100	-	-	KORO	Akademik Korolev	GMS79J	LP5	-	-	160.0E 0.0N (+/- 1.0)	85.0
1979 Dec 12 1630:00	M-100	-	-	KORO	Akademik Korolev	GMS79J	LP5	-	-	160.0E 0.0N (+/- 1.0)	76.0
1980 Jan 03 0700:00	M-100	-	-	KORO	Akademik Korolev	GMS79J	LP6	-	-	160.0E 0.0N (+/- 1.0)	84.0
1980 Jan 03 0800:00	M-100	-	-	KORO	Akademik Korolev	GMS79J	LP6	-	-	160.0E 0.0N (+/- 1.0)	83.0
1980 Jan 21 0700:00	M-100	-	-	KORO	Akademik Korolev	GMS79J	LP7	-	-	160.0E 0.0N (+/- 1.0)	84.0
1980 Jan 21 0800:00	M-100	-	-	KORO	Akademik Korolev	GMS79J	LP7	-	-	160.0E 0.0N (+/- 1.0)	84.0
1980 Jan 23 0800:00	M-100	-	-	KORO	Akademik Korolev	GMS79J	LP8	-	-	160.0E 0.0N (+/- 1.0)	85.0
1980 Feb 25 1400:00	M-100	-	-	KORO	Akademik Korolev	OJP	-	-	-	160.0E 0.0N (+/- 1.0)	87.0
1980 Feb 25 1500:00	M-100	-	-	KORO	Akademik Korolev	OJP	-	-	-	160.0E 0.0N (+/- 1.0)	83.0
1980 Feb 25 1630:00	M-100	-	-	KORO	Akademik Korolev	OJP	-	-	-	160.0E 0.0N (+/- 1.0)	86.0
1980 Feb 25 1750:00	M-100	-	-	KORO	Akademik Korolev	OJP	-	-	-	160.0E 0.0N (+/- 1.0)	83.0
1980 Feb 26 1430:00	M-100	-	-	KORO	Akademik Korolev	OJP	-	-	-	160.0E 0.0N (+/- 1.0)	89.0
1980 Feb 26 1600:00	M-100	-	-	KORO	Akademik Korolev	OJP	-	-	-	160.0E 0.0N (+/- 1.0)	82.0
1980 Feb 26 1730:00	M-100	-	-	KORO	Akademik Korolev	OJP	-	-	-	160.0E 0.0N (+/- 1.0)	89.0
1980 Feb 26 1830:00	M-100	-	-	KORO	Akademik Korolev	OJP	-	-	-	160.0E 0.0N (+/- 1.0)	86.0
1980 Feb 27 1210:00	M-100	-	-	KORO	Akademik Korolev	OJP	-	-	-	160.0E 0.0N (+/- 1.0)	84.0
1980 Feb 27 1530:00	M-100	-	-	KORO	Akademik Korolev	OJP	-	-	-	160.0E 0.0N (+/- 1.0)	84.0
1980 Feb 27 1730:00	M-100	-	-	KORO	Akademik Korolev	OJP	-	-	-	160.0E 0.0N (+/- 1.0)	82.0
1980 Feb 28 1300:00	M-100	-	-	KORO	Akademik Korolev	OJP	-	-	-	160.0E 0.0N (+/- 1.0)	86.0
1980 Feb 28 1400:00	M-100	-	-	KORO	Akademik Korolev	OJP	-	-	-	160.0E 0.0N (+/- 1.0)	88.0
1980 Feb 28 1530:00	M-100	-	-	KORO	Akademik Korolev	OJP	-	-	-	160.0E 0.0N (+/- 1.0)	83.0

Launches: KORO

Date	Rocket	Flight	Mission	PlatCode	Platform	Site	LP	AscSite	AsclP	Pos	Apogee
1980 Feb 29 1100:00	M-100	-	-	KORO	Akademik Korolev	OJP	-	-	-	160.0E 0.0N (+/- 1.0)	83.0
1980 Feb 29 1200:00	M-100	-	-	KORO	Akademik Korolev	OJP	-	-	-	160.0E 0.0N (+/- 1.0)	88.0
1980 Feb 29 1330:00	M-100	-	-	KORO	Akademik Korolev	OJP	-	-	-	160.0E 0.0N (+/- 1.0)	84.0
1980 Feb 29 1550:00	M-100	-	-	KORO	Akademik Korolev	OJP	-	-	-	160.0E 0.0N (+/- 1.0)	85.0
1980 May 01 1200:00	M-100	-	-	KORO	Akademik Korolev	GMS80E	LP1	-	-	160.0E 0.0N (+/- 1.0)	90.0
1980 May 06 1200:00	M-100	-	-	KORO	Akademik Korolev	GMS80E	LP2	-	-	160.0E 0.0N (+/- 1.0)	94.0
1980 May 07 1200:00	M-100	-	-	KORO	Akademik Korolev	GMS80E	LP2	-	-	160.0E 0.0N (+/- 1.0)	89.0
1980 May 20 1200:00	M-100	-	-	KORO	Akademik Korolev	GMS80E	LP3	-	-	160.0E 0.0N (+/- 1.0)	91.0
1980 May 20 1500:00	M-100	-	-	KORO	Akademik Korolev	GMS80E	LP3	-	-	160.0E 0.0N (+/- 1.0)	91.0
1980 May 26 1200:00	M-100	-	-	KORO	Akademik Korolev	GMS80E	LP4	-	-	160.0E 0.0N (+/- 1.0)	85.0
1980 May 26 1300:00	M-100	-	-	KORO	Akademik Korolev	GMS80E	LP4	-	-	160.0E 0.0N (+/- 1.0)	84.0
1980 May 28 1200:00	M-100	-	-	KORO	Akademik Korolev	GMS80E	LP5	-	-	160.0E 0.0N (+/- 1.0)	82.0
1980 May 28 1300:00	M-100	-	-	KORO	Akademik Korolev	GMS80E	LP5	-	-	160.0E 0.0N (+/- 1.0)	88.0
1980 Jun 03 1300:00	M-100	-	-	KORO	Akademik Korolev	GMS80E	LP6	-	-	160.0E 0.0N (+/- 1.0)	84.0
1980 Jun 03 1400:00	M-100	-	-	KORO	Akademik Korolev	GMS80E	LP6	-	-	160.0E 0.0N (+/- 1.0)	81.0
1981 May 02 1830:00	M-100	-	-	KORO	Akademik Korolev	GMS81E	LP1	-	-	65.0E 0.0N (+/- 5.0)	85.0
1981 May 04 2000:00	M-100	-	-	KORO	Akademik Korolev	GMS81E	LP2	-	-	65.0E 0.0N (+/- 5.0)	84.0
1981 May 09 1835:00	M-100	-	-	KORO	Akademik Korolev	GMS81E	LP3	-	-	65.0E 0.0N (+/- 5.0)	84.0
1981 May 12 1700:00	M-100	-	-	KORO	Akademik Korolev	GMS81E	LP4	-	-	65.0E 0.0N (+/- 5.0)	82.0
1981 May 12 1810:00	M-100	-	-	KORO	Akademik Korolev	GMS81E	LP4	-	-	65.0E 0.0N (+/- 5.0)	76.0
1981 May 14 1800:00	M-100	-	-	KORO	Akademik Korolev	GMS81E	LP5	-	-	65.0E 0.0N (+/- 5.0)	88.0
1981 May 14 2000:00	M-100	-	-	KORO	Akademik Korolev	GMS81E	LP6	-	-	65.0E 0.0N (+/- 5.0)	90.0
1981 May 15 1900:00	M-100	-	-	KORO	Akademik Korolev	GMS81E	LP7	-	-	65.0E 0.0N (+/- 5.0)	80.0
1981 May 17 1500:00	M-100	-	-	KORO	Akademik Korolev	GMS81E	LP8	-	-	65.0E 0.0N (+/- 5.0)	92.0
1981 May 17 1600:00	M-100	-	-	KORO	Akademik Korolev	GMS81E	LP8	-	-	65.0E 0.0N (+/- 5.0)	89.0
1981 May 18 1700:00	M-100	-	-	KORO	Akademik Korolev	GMS81E	LP9	-	-	65.0E 0.0N (+/- 5.0)	76.0
1981 May 19 1700:00	M-100	-	-	KORO	Akademik Korolev	GMS81E	LP10	-	-	65.0E 0.0N (+/- 5.0)	79.0
1981 May 19 1800:00	M-100	-	-	KORO	Akademik Korolev	GMS81E	LP11	-	-	65.0E 0.0N (+/- 5.0)	86.0
1981 May 20 1700:00	M-100	-	-	KORO	Akademik Korolev	GMS81E	LP12	-	-	65.0E 0.0N (+/- 5.0)	84.0
1981 May 20 1800:00	M-100	-	-	KORO	Akademik Korolev	GMS81E	LP12	-	-	65.0E 0.0N (+/- 5.0)	86.0
1981 May 21 1800:00	M-100	-	-	KORO	Akademik Korolev	GMS81E	LP13	-	-	65.0E 0.0N (+/- 5.0)	84.0
1981 May 21 1900:00	M-100	-	-	KORO	Akademik Korolev	GMS81E	LP14	-	-	65.0E 0.0N (+/- 5.0)	87.0
1981 Jun 11 1900:00	M-100	-	-	KORO	Akademik Korolev	IDLZ	TOCOR	-	-	65.0E 0.0N (+/- 2.0)	82.0
1981 Jun 12 1900:00	M-100	-	-	KORO	Akademik Korolev	GMS81E	LP15	-	-	65.0E 0.0N (+/- 5.0)	83.0
1981 Jun 13 1500:00	M-100	-	-	KORO	Akademik Korolev	IDLZ	IO65	-	-	65.0E 0.0N (+/- 2.0)	86.0
1981 Jun 14 2000:00	M-100	-	-	KORO	Akademik Korolev	IDLZ	IO65	-	-	65.0E 0.0N (+/- 2.0)	85.0
1981 Jun 14 2100:00	M-100	-	-	KORO	Akademik Korolev	IDLZ	IO65	-	-	65.0E 0.0N (+/- 2.0)	85.0
1981 Jun 15 2000:00	M-100	-	-	KORO	Akademik Korolev	GMS81E	LP16	-	-	65.0E 0.0N (+/- 5.0)	85.0
1981 Jun 16 2100:00	M-100	-	-	KORO	Akademik Korolev	GMS81E	LP17	-	-	65.0E 0.0N (+/- 5.0)	82.0
1981 Jun 17 2300:00	M-100	-	-	KORO	Akademik Korolev	GMS81E	LP18	-	-	65.0E 0.0N (+/- 5.0)	84.0
1981 Jun 21 1900:00	M-100	-	-	KORO	Akademik Korolev	IDLZ	IO70	-	-	65.0E 0.0N (+/- 2.0)	87.0
1981 Jun 23 2100:00	M-100	-	-	KORO	Akademik Korolev	GMS81E	LP20	-	-	65.0E 0.0N (+/- 5.0)	79.0
1981 Jun 24 2030:00	M-100	-	-	KORO	Akademik Korolev	GMS81E	LP21	-	-	65.0E 0.0N (+/- 5.0)	84.0
1981 Jun 25 2000:00	M-100	-	-	KORO	Akademik Korolev	NER	-	-	-	90.0E 0.0N (+/- 2.0)	89.0
1981 Jun 25 2100:00	M-100	-	-	KORO	Akademik Korolev	NER	-	-	-	90.0E 0.0N (+/- 2.0)	85.0
1982 Feb 08 1200:00	M-100	-	-	KORO	Akademik Korolev	GMS82B	LP1	-	-	70.0E 25.0S (+/- 5.0)	85.0
1982 Feb 10 1200:00	M-100	-	-	KORO	Akademik Korolev	GMS82B	LP2	-	-	70.0E 25.0S (+/- 5.0)	79.0
1982 Feb 18 1200:00	M-100	-	-	KORO	Akademik Korolev	GMS82B	LP3	-	-	70.0E 25.0S (+/- 5.0)	86.0
1982 Feb 19 1200:00	M-100	-	-	KORO	Akademik Korolev	GMS82B	LP4	-	-	70.0E 25.0S (+/- 5.0)	90.0
1982 Mar 04 1500:00	M-100	-	-	KORO	Akademik Korolev	GMS82B	LP5	-	-	70.0E 25.0S (+/- 5.0)	85.0
1982 Mar 07 1400:00	M-100	-	-	KORO	Akademik Korolev	GMS82B	LP5	-	-	70.0E 25.0S (+/- 5.0)	89.0
1982 Mar 07 1520:00	M-100	-	-	KORO	Akademik Korolev	GMS82B	LP5	-	-	70.0E 25.0S (+/- 5.0)	74.0
1982 Mar 10 1520:00	M-100	-	-	KORO	Akademik Korolev	GMS82B	LP6	-	-	70.0E 25.0S (+/- 5.0)	93.0
1982 Mar 12 1700:00	M-100	-	-	KORO	Akademik Korolev	GMS82B	LP7	-	-	70.0E 25.0S (+/- 5.0)	75.0
1982 Mar 12 1825:00	M-100	-	-	KORO	Akademik Korolev	GMS82B	LP8	-	-	70.0E 25.0S (+/- 5.0)	91.0
1982 Mar 14 0840:00	M-100	-	-	KORO	Akademik Korolev	GMS82B	LP9	-	-	70.0E 25.0S (+/- 5.0)	91.0

Launches: KORO

Date	Rocket	Flight	Mission	PlatCode	Platform	Site	LP	AscSite	AsclP	Pos	Apogee
1982 Mar 15 1700:00	M-100	-	-	KORO	Akademik Korolev	GMS82B	LP10	-	-	70.0E 25.0S (+/- 5.0)	93.0
1982 Mar 16 1700:00	M-100	-	-	KORO	Akademik Korolev	GMS82B	LP11	-	-	70.0E 25.0S (+/- 5.0)	83.0
1982 Mar 17 1700:00	M-100	-	-	KORO	Akademik Korolev	GMS82B	LP12	-	-	70.0E 25.0S (+/- 5.0)	87.0
1982 Mar 18 1700:00	M-100	-	-	KORO	Akademik Korolev	GMS82B	LP13	-	-	70.0E 25.0S (+/- 5.0)	88.0
1982 Mar 19 1800:00	M-100	-	-	KORO	Akademik Korolev	GMS82B	LP14	-	-	70.0E 25.0S (+/- 5.0)	91.0
1982 Mar 20 1900:00	M-100	-	-	KORO	Akademik Korolev	GMS82B	LP15	-	-	70.0E 25.0S (+/- 5.0)	74.0
1982 Mar 21 1720:00	M-100	-	-	KORO	Akademik Korolev	GMS82B	LP16	-	-	70.0E 25.0S (+/- 5.0)	91.0
1982 Mar 22 2000:00	M-100	-	-	KORO	Akademik Korolev	GMS82B	LP17	-	-	70.0E 25.0S (+/- 5.0)	89.0
1982 Mar 25 1725:00	M-100	-	-	KORO	Akademik Korolev	GMS82B	LP18	-	-	70.0E 25.0S (+/- 5.0)	88.0
1982 Mar 27 1600:00	M-100	-	-	KORO	Akademik Korolev	GMS82B	LP19	-	-	70.0E 25.0S (+/- 5.0)	85.0
1982 Mar 27 1700:00	M-100	-	-	KORO	Akademik Korolev	GMS82B	LP19	-	-	70.0E 25.0S (+/- 5.0)	85.0
1982 Mar 28 1630:00	M-100	-	-	KORO	Akademik Korolev	NER	-	-	-	90.0E 0.0N (+/- 2.0)	90.0
1982 Mar 28 1735:00	M-100	-	-	KORO	Akademik Korolev	NER	-	-	-	90.0E 0.0N (+/- 2.0)	90.0
1982 Mar 29 1600:00	M-100	-	-	KORO	Akademik Korolev	GMS82B	LP20	-	-	70.0E 25.0S (+/- 5.0)	89.0
1982 Mar 29 1730:00	M-100	-	-	KORO	Akademik Korolev	GMS82B	LP20	-	-	70.0E 25.0S (+/- 5.0)	90.0
1983 Jun 15 1300:00	M-100	-	-	KORO	Akademik Korolev	GMS83A	LP1	-	-	90.0E 10.0S (+/- 5.0)	85.0
1983 Jun 19 1330:00	M-100	-	-	KORO	Akademik Korolev	GMS83A	LP2	-	-	90.0E 10.0S (+/- 5.0)	90.0
1983 Jun 19 1530:00	M-100	-	-	KORO	Akademik Korolev	GMS83A	LP3	-	-	90.0E 10.0S (+/- 5.0)	85.0
1983 Jun 21 1300:00	M-100	-	-	KORO	Akademik Korolev	GMS83A	LP4	-	-	90.0E 10.0S (+/- 5.0)	83.0
1983 Jun 21 1450:00	M-100	-	-	KORO	Akademik Korolev	GMS83A	LP4	-	-	90.0E 10.0S (+/- 5.0)	82.0
1983 Jun 28 0945:00	M-100	-	-	KORO	Akademik Korolev	GMS83A	LP5	-	-	90.0E 10.0S (+/- 5.0)	85.0
1983 Jun 28 1107:00	M-100	-	-	KORO	Akademik Korolev	GMS83A	LP5	-	-	90.0E 10.0S (+/- 5.0)	88.0
1983 Jun 30 1050:00	M-100	-	-	KORO	Akademik Korolev	GMS83A	LP6	-	-	90.0E 10.0S (+/- 5.0)	88.0
1983 Jul 04 1000:00	M-100	-	-	KORO	Akademik Korolev	GMS83A	LP7	-	-	90.0E 10.0S (+/- 5.0)	87.0
1983 Jul 05 0930:00	M-100	-	-	KORO	Akademik Korolev	GMS83A	LP8	-	-	90.0E 10.0S (+/- 5.0)	88.0
1983 Jul 22 1545:00	M-100	-	-	KORO	Akademik Korolev	GMS83A	LP9	-	-	90.0E 10.0S (+/- 5.0)	88.0
1983 Jul 22 1750:00	M-100	-	-	KORO	Akademik Korolev	GMS83A	LP9	-	-	90.0E 10.0S (+/- 5.0)	82.0
1983 Aug 04 1632:00	M-100	-	-	KORO	Akademik Korolev	GMS83A	LP10	-	-	90.0E 10.0S (+/- 5.0)	83.0
1983 Aug 05 1811:00	M-100	-	-	KORO	Akademik Korolev	GMS83A	LP11	-	-	90.0E 10.0S (+/- 5.0)	86.0
1983 Aug 06 1746:00	M-100	-	-	KORO	Akademik Korolev	GMS83A	LP12	-	-	90.0E 10.0S (+/- 5.0)	87.0
1983 Aug 06 1919:00	M-100	-	-	KORO	Akademik Korolev	GMS83A	LP13	-	-	90.0E 10.0S (+/- 5.0)	86.0
1983 Aug 08 1825:00	M-100	-	-	KORO	Akademik Korolev	GMS83A	LP14	-	-	90.0E 10.0S (+/- 5.0)	76.0
1983 Aug 10 1632:00	M-100	-	-	KORO	Akademik Korolev	NER	-	-	-	90.0E 0.0N (+/- 2.0)	85.0
1983 Aug 10 1756:00	M-100	-	-	KORO	Akademik Korolev	NER	-	-	-	90.0E 0.0N (+/- 2.0)	84.0
1987 Jan 26 1800:00	M-100B	-	-	KORO	Akademik Korolev	GMS87C	ULP1	-	-	-	87.0
1987 Jan 27 1900:00	M-100B	-	-	KORO	Akademik Korolev	GMS87C	ULP1	-	-	-	83.0
1987 Feb 01 1800:00	M-100B	-	-	KORO	Akademik Korolev	GMS87C	ULP1	-	-	-	82.0
1987 Feb 02 1800:00	M-100B	-	-	KORO	Akademik Korolev	GMS87C	ULP1	-	-	-	85.0
1987 Feb 03 1817:00	M-100B	-	-	KORO	Akademik Korolev	GMS87C	ULP1	-	-	-	70.0
1987 Feb 04 1900:00	M-100B	-	-	KORO	Akademik Korolev	GMS87C	ULP1	-	-	-	82.0
1987 Feb 05 1800:00	M-100B	-	-	KORO	Akademik Korolev	GMS87C	ULP1	-	-	-	85.0
1987 Feb 06 1804:00	M-100B	-	-	KORO	Akademik Korolev	GMS87C	ULP1	-	-	-	83.0
1987 Feb 07 1800:00	M-100B	-	-	KORO	Akademik Korolev	GMS87C	ULP1	-	-	-	87.0
1987 Feb 08 1800:00	M-100B	-	-	KORO	Akademik Korolev	GMS87C	ULP1	-	-	-	88.0
1987 Feb 09 1800:00	M-100B	-	-	KORO	Akademik Korolev	GMS87C	ULP1	-	-	-	82.0
1987 Feb 10 2000:00	M-100B	-	-	KORO	Akademik Korolev	GMS87C	ULP1	-	-	-	80.0
1987 Feb 11 1805:00	M-100B	-	-	KORO	Akademik Korolev	GMS87C	ULP1	-	-	-	83.0
1987 Feb 12 1800:00	M-100B	-	-	KORO	Akademik Korolev	GMS87C	ULP1	-	-	-	86.0
1987 Mar 05 1226:00	M-100B	-	-	KORO	Akademik Korolev	GMS87C	ULP1	-	-	-	84.0
1987 Mar 08 1124:00	M-100B	-	-	KORO	Akademik Korolev	GMS87C	ULP1	-	-	-	78.0
1987 Mar 09 1000:00	M-100B	-	-	KORO	Akademik Korolev	GMS87C	ULP1	-	-	-	84.0
1987 Mar 11 1006:00	M-100B	-	-	KORO	Akademik Korolev	GMS87C	ULP1	-	-	-	87.0
1987 Mar 13 1100:00	M-100B	-	-	KORO	Akademik Korolev	GMS87C	ULP1	-	-	-	80.0
1987 Mar 16 1200:00	M-100B	-	-	KORO	Akademik Korolev	GMS87C	ULP1	-	-	-	87.0
1987 Mar 16 1300:00	M-100B	-	-	KORO	Akademik Korolev	GMS87C	ULP1	-	-	-	89.0



Launches: KORO

Date	Rocket	Flight	Mission	PlatCode	Platform	Site	LP	AscSite	AsclP	Pos	Apogee
1987 Mar 18 1415:00	M-100B	-	-	KORO	Akademik Korolev	GMS87C	ULP1	-	-	-	88.0
1987 Mar 19 1205:00	M-100B	-	-	KORO	Akademik Korolev	GMS87C	ULP1	-	-	-	90.0
1987 Mar 19 1311:00	M-100B	-	-	KORO	Akademik Korolev	GMS87C	ULP1	-	-	-	83.0
1987 Mar 20 1203:00	M-100B	-	-	KORO	Akademik Korolev	GMS87C	ULP1	-	-	-	91.0
1988 Dec 27 1134:00	M-100B	-	-	KORO	Akademik Korolev	GMS88A	ULP1	-	-	-	82.0
1989 Jan 17 1400:00	M-100B	-	-	KORO	Akademik Korolev	GMS88A	ULP1	-	-	-	80.0
1989 Jan 21 0400:00	M-100B	-	-	KORO	Akademik Korolev	GMS89A	ULP1	-	-	-	81.0
1989 Jan 24 1000:00	M-100B	-	-	KORO	Akademik Korolev	GMS88A	ULP1	-	-	-	77.0
1989 Jan 26 1100:00	M-100B	-	-	KORO	Akademik Korolev	GMS88A	ULP1	-	-	-	78.0
1989 Feb 01 2000:00	M-100B	-	-	KORO	Akademik Korolev	GMS89A	ULP1	-	-	-	83.0
1989 Feb 03 1500:00	M-100B	-	-	KORO	Akademik Korolev	GMS88A	ULP1	-	-	-	67.0
1989 Mar 10 1514:00	M-100B	-	-	KORO	Akademik Korolev	GMS88A	ULP1	-	-	-	78.0
1989 Mar 13 1605:00	M-100B	-	-	KORO	Akademik Korolev	GMS89A	ULP1	-	-	-	78.0
1989 Mar 15 1545:00	M-100B	-	-	KORO	Akademik Korolev	GMS88A	ULP1	-	-	-	79.0

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## **IV.1.4 US Rocket Launch Research Vessels**

Updated: 2024 Nov 28 03:19:31

US Rocket Launch Research Vessels

Ship	Transliteration	Image	CODE	Agency	Class	ClassID	AltID	Active
USS Atka	USS Atka		AGB-3	USNB	Wind	AGB-3	-	- - -
USS Glacier	USS Glacier		AGB-4	USNB	Glacier	AGB-4	IM06123672	1954 - 1966
USS Staten Island	USS Staten Island		AGB-5	USNB	Wind	AGB-5	-	1952 - 1974
USS Eastwind	USS Eastwind		WYG-279	USN	Wind	WYG-279	-	1944 - 1968
USS Norton Sound	USS Norton Sound		AWM1	NAMTC	Norton Sound	AWM-1	-	1951 - 1986
USS Ashland	USS Ashland		LSD-1	USNVA	Ashland	LSD-1	-	1955 - -
USS Rushmore	USS Rushmore		LSD-14	USN	Casa Grande	LSD-14	-	1956 - -
USS Colonial	USS Colonial		LSD-18	USN	Casa Grande	LSD-18	-	1956 - -
USS Plymouth Rock	USS Plymouth Rock		LSD-29	USN	Thomaston	LSD-29	-	1956 - -
USS Point Defiance	USS Point Defiance		LSD-31	USN	Thomaston	LSD-31	-	1956 - -

US Rocket Launch Research Vessels

Ship	Transliteration	Image	CODE	Agency	Class	ClassID	AltID	Active
USNS Croatan, Wallops Mobile Range Facility	USNS Croatan, Wallops Mobile Range Facility		CVE-25	USN/NASA	Bogue	CVE-25	-	1964 - 1965
USNS Range Recoverer	USNS Range Recoverer		RREC	USN	-	-	-	1960 - 1972
USNS Wheeling	USNS Wheeling		T-AGM-8	USN	-	T-AGM-8	-	- - -
USAS American Mariner	USAS American Mariner		T-AGM-12	USN	-	T-AGM-12	-	- - -

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#### IV.1.4.1 USS Atka



Credit: US Navy

The USCGC Southwind (WAG-280) was built in 1943 and transferred to the USSR in 1945-1949 as the Admiral Makarov, then transferred to USN as AGB-3 USS Atka. In 1966 she went back to USCG as the WAGB-280 USCGC Southwind. It was retired in 1974.

Rockets used: Deacon Rockoon

Updated: 2024 Nov 28 03:19:32

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LC_Code	Active	Region	Cruises: ACP-3	Cruise	CruiseMap
USN54A	1954 Jul 15 - 1954 Jul 31	Atlantic Ocean	USS Eastwind, 1954 Arctic expedition	-	-

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Updated: 2024 Nov 28 03:19:32

Launches: AGB-3

Date	Rocket	Flight	Mission	Platform	Site	LP	AscSite	AscLP	Pos	Apogee
1954 Jul 16 1213	Deacon Rockoon	SUI 24	-	AGB-3	USS Atka	USN54A	-	-	66.7W 42.1N (+/- 0.0)	90.0
1954 Jul 16 2158	Deacon Rockoon	SUI 25	-	AGB-3	USS Atka	USN54A	-	-	66.7W 42.1N (+/- 0.0)	11.0
1954 Jul 19 1600	Deacon Rockoon	NRL Rockoon 7	-	AGB-3	USS Atka	USN54A	-	-	66.7W 42.1N (+/- 0.0)	88.0
1954 Jul 19 2030	Deacon Rockoon	SUI 26	-	AGB-3	USS Atka	USN54A	-	-	66.7W 42.1N (+/- 0.0)	43.0
1954 Jul 20 0255	Deacon Rockoon	NRL Rockoon 8	-	AGB-3	USS Atka	USN54A	-	-	66.7W 42.1N (+/- 0.0)	90.0
1954 Jul 21 0903	Deacon Rockoon	SUI 27	-	AGB-3	USS Atka	USN54A	-	-	66.7W 42.1N (+/- 0.0)	60.0
1954 Jul 21 1245	Deacon Rockoon	SUI 28	-	AGB-3	USS Atka	USN54A	-	-	66.7W 42.1N (+/- 0.0)	90.0
1954 Jul 21 2049	Deacon Rockoon	SUI 29	-	AGB-3	USS Atka	USN54A	-	-	66.7W 42.1N (+/- 0.0)	40.0
1954 Jul 23 1446	Deacon Rockoon	SUI 30	-	AGB-3	USS Atka	USN54A	-	-	66.7W 42.1N (+/- 0.0)	90.0
1954 Jul 23 1709	Deacon Rockoon	NRL Rockoon 9	-	AGB-3	USS Atka	USN54A	-	-	66.7W 42.1N (+/- 0.0)	90.0
1954 Jul 23 1754	Deacon Rockoon	SUI 31	-	AGB-3	USS Atka	USN54A	-	-	66.7W 42.1N (+/- 0.0)	90.0
1954 Jul 23 1937	Deacon Rockoon	SUI 32	-	AGB-3	USS Atka	USN54A	-	-	66.7W 42.1N (+/- 0.0)	23.0
1954 Jul 24 0857	Deacon Rockoon	SUI 33	-	AGB-3	USS Atka	USN54A	-	-	66.7W 42.1N (+/- 0.0)	90.0
1954 Jul 24 1316	Deacon Rockoon	SUI 34	-	AGB-3	USS Atka	USN54A	-	-	66.7W 42.1N (+/- 0.0)	90.0
1954 Jul 25 0651	Deacon Rockoon	SUI 35	-	AGB-3	USS Atka	USN54A	-	-	66.7W 42.1N (+/- 0.0)	90.0
1954 Jul 25 1236	Deacon Rockoon	SUI 36	-	AGB-3	USS Atka	USN54A	-	-	66.7W 42.1N (+/- 0.0)	90.0
1954 Jul 25 1530	Deacon Rockoon	SUI 37	-	AGB-3	USS Atka	USN54A	-	-	66.7W 42.1N (+/- 0.0)	90.0
1954 Jul 25 1845	Deacon Rockoon	NRL Rockoon 10	-	AGB-3	USS Atka	USN54A	-	-	66.7W 42.1N (+/- 0.0)	85.0
1954 Jul 26 0029	Deacon Rockoon	NRL Rockoon 11	-	AGB-3	USS Atka	USN54A	-	-	66.7W 42.1N (+/- 0.0)	10.0
1954 Jul 26 1102	Deacon Rockoon	NRL Rockoon 12	-	AGB-3	USS Atka	USN54A	-	-	66.7W 42.1N (+/- 0.0)	90.0



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#### IV.1.4.2 USS Glacier

Photo # NH 67733 USS Glacier underway, 8 November 1955



Credit: US Navy

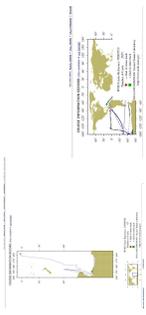
AGB-4 USS Glacier built 1954, transferred to USCG Jun 1966, retired 1987.

Rockets used: Loki Rockoon

Updated: 2024 Nov 28 03:19:32

LC\_Code    Active    Region    Cruises: **ACB-4**    Cruise    CruiseMap

USN57B    1957 Sep 23 - 1957 Nov 10    Atlantic and Pacific Oceans    1957 NRL USS Glacier cruise, Atlantic and Pacific Oceans



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Updated: 2024 Nov 28 03:19:32

Launches: AGB-4

Date	Rocket	Flight	Mission	Platform	Site	LP	AscSite	AsclP	Pos	Apogee
1957 Sep 26 1821	Loki Rockoon	SUI 74	IGY I15.50F	USG Glacier	USN57B	LP1	-	-	1.0M 0.8N (+/- 0.0)	100.0
1957 Sep 27 1427	Loki Rockoon	SUI 75	IGY I15.51F	USG Glacier	USN57B	LP2	-	-	1.0M 0.8N (+/- 0.0)	119.0
1957 Oct 4 2036	Loki Rockoon	SUI 76	IGY I15.52F	USG Glacier	USN57B	LP3	-	-	1.0M 0.8N (+/- 0.0)	113.0
1957 Oct 13 1815	Loki Rockoon	SUI 77	IGY I15.53F	USG Glacier	USN57B	LP4	-	-	1.0M 0.8N (+/- 0.0)	100.0
1957 Oct 14 2231	Loki Rockoon	SUI 78	IGY I15.54F	USG Glacier	USN57B	LP5	-	-	1.0M 0.8N (+/- 0.0)	113.0
1957 Oct 16 2117	Loki Rockoon	SUI 79	IGY I15.55F	USG Glacier	USN57B	LP6	-	-	1.0M 0.8N (+/- 0.0)	100.0
1957 Oct 17 0009	Loki Rockoon	SUI 80	IGY I15.56F	USG Glacier	USN57B	LP7	-	-	1.0M 0.8N (+/- 0.0)	0.0
1957 Oct 17 0218	Loki Rockoon	SUI 81	IGY I15.57F	USG Glacier	USN57B	LP8	-	-	1.0M 0.8N (+/- 0.0)	10.0
1957 Oct 17 2116	Loki Rockoon	SUI 82	IGY I15.58F	USG Glacier	USN57B	LP9	-	-	1.0M 0.8N (+/- 0.0)	44.0
1957 Oct 18 0059	Loki Rockoon	SUI 83	IGY I15.59F	USG Glacier	USN57B	LP10	-	-	1.0M 0.8N (+/- 0.0)	127.0
1957 Oct 18 0935	Loki Rockoon	SUI 84	IGY I15.60F	USG Glacier	USN57B	LP11	-	-	1.0M 0.8N (+/- 0.0)	10.0
1957 Oct 18 2058	Loki Rockoon	SUI 85	IGY I15.61F	USG Glacier	USN57B	LP12	-	-	1.0M 0.8N (+/- 0.0)	121.0
1957 Oct 19 0059	Loki Rockoon	SUI 86	IGY I15.62F	USG Glacier	USN57B	LP13	-	-	1.0M 0.8N (+/- 0.0)	121.0
1957 Oct 19 2007	Loki Rockoon	I15.63F	IGY I15.63F	USG Glacier	USN57B	LP14	-	-	1.0M 0.8N (+/- 0.0)	122.0
1957 Oct 20 0219	Loki Rockoon	I15.64F	IGY I15.64F	USG Glacier	USN57B	LP15	-	-	1.0M 0.8N (+/- 0.0)	104.0
1957 Oct 20 0357?	Loki Rockoon	I15.65F	IGY I15.65F	USG Glacier	USN57B	LP16	-	-	1.0M 0.8N (+/- 0.0)	100.0
1957 Oct 20 2011	Loki Rockoon	I15.66F	IGY I15.66F	USG Glacier	USN57B	LP17	-	-	1.0M 0.8N (+/- 0.0)	100.0
1957 Oct 22 2231	Loki Rockoon	I15.67F	IGY I15.67F	USG Glacier	USN57B	LP18	-	-	1.0M 0.8N (+/- 0.0)	100.0
1957 Oct 26 1947	Loki Rockoon	I15.68F	IGY I15.68F	USG Glacier	USN57B	LP19	-	-	1.0M 0.8N (+/- 0.0)	100.0
1957 Oct 27 0246	Loki Rockoon	I15.69F	IGY I15.69F	USG Glacier	USN57B	LP20	-	-	1.0M 0.8N (+/- 0.0)	10.0
1957 Oct 29 0013	Loki Rockoon	I15.70F	IGY I15.70F	USG Glacier	USN57B	LP21	-	-	1.0M 0.8N (+/- 0.0)	8.0
1957 Oct 30 2250	Loki Rockoon	I15.71F	IGY I15.71F	USG Glacier	USN57B	LP22	-	-	1.0M 0.8N (+/- 0.0)	100.0
1957 Oct 31 0144	Loki Rockoon	I15.72F	IGY I15.72F	USG Glacier	USN57B	LP23	-	-	1.0M 0.8N (+/- 0.0)	100.0
1957 Oct 31 1951	Loki Rockoon	I15.73F	IGY I15.73F	USG Glacier	USN57B	LP24	-	-	1.0M 0.8N (+/- 0.0)	100.0
1957 Nov 1 0100	Loki Rockoon	I15.74F	IGY I15.74F	USG Glacier	USN57B	LP25	-	-	1.0M 0.8N (+/- 0.0)	10.0
1957 Nov 3 2008	Loki Rockoon	I15.75F	IGY I15.75F	USG Glacier	USN57B	LP26	-	-	1.0M 0.8N (+/- 0.0)	10.0
1957 Nov 4 0039	Loki Rockoon	I15.76F	IGY I15.76F	USG Glacier	USN57B	LP27	-	-	1.0M 0.8N (+/- 0.0)	100.0
1957 Nov 4 0250	Loki Rockoon	I15.77F	IGY I15.77F	USG Glacier	USN57B	LP28	-	-	1.0M 0.8N (+/- 0.0)	113.0
1957 Nov 4 0347	Loki Rockoon	I15.78F	IGY I15.78F	USG Glacier	USN57B	LP29	-	-	1.0M 0.8N (+/- 0.0)	10.0
1957 Nov 4 0716	Loki Rockoon	I15.79F	IGY I15.79F	USG Glacier	USN57B	LP30	-	-	1.0M 0.8N (+/- 0.0)	10.0
1957 Nov 4 1852	Loki Rockoon	I15.80F	IGY I15.80F	USG Glacier	USN57B	LP31	-	-	1.0M 0.8N (+/- 0.0)	10.0
1957 Nov 5 0125	Loki Rockoon	I15.81F	IGY I15.81F	USG Glacier	USN57B	LP32	-	-	1.0M 0.8N (+/- 0.0)	100.0
1957 Nov 5 2023	Loki Rockoon	I15.82F	IGY I15.82F	USG Glacier	USN57B	LP33	-	-	1.0M 0.8N (+/- 0.0)	97.0
1957 Nov 5 2317	Loki Rockoon	I15.83F	IGY I15.83F	USG Glacier	USN57B	LP34	-	-	1.0M 0.8N (+/- 0.0)	100.0
1957 Nov 8 2200	Loki Rockoon	I15.84F	IGY I15.84F	USG Glacier	USN57B	LP35	-	-	1.0M 0.8N (+/- 0.0)	110.0
1957 Nov 9 0000	Loki Rockoon	I15.85F	IGY I15.85F	USG Glacier	USN57B	LP36	-	-	1.0M 0.8N (+/- 0.0)	110.0

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#### IV.1.4.3 USS Staten Island



Credit: US Navy

Built 1942 as USCGC Staten Island (WAGB-278), transferred to USSR as Sverny Veter, then returned to USN in 1951 at USS Northwind (AGB-5), renamed USS Staten Island 15 Apr 1952, transferred to USCG in 1965, retired 1974.

The USS Staten Island was based at Boston Naval Shipyard from 1952 to May 1955, and at Seattle from 1955 to 1973.

The 1953 expedition was part of Project Muskrat. The Staten Island left Boston on 1953 Jul 18 (Ludwig 2011).

Rockets used: Deacon Rockoon

Updated: 2024 Nov 28 03:19:32

Launches: AGB-5

Date	Rocket	Flight	Mission	Platform	Site	LP	AscSite	AsclP	Pos	Apogee
1953 Jul 18 2227	Deacon Rockoon	SUI 8	-	AGB-5	USN53A	LP1	-	-	70.4W 42.4N (+/- 0.0)	11.0
1953 Jul 19 1030	Deacon Rockoon	SUI 9	-	AGB-5	USN53A	LP2	-	-	70.4W 42.4N (+/- 0.0)	11.0
1953 Jul 19 1553	Deacon Rockoon	SUI 10	-	AGB-5	USN53A	LP3	-	-	70.4W 42.4N (+/- 0.0)	11.0
1953 Jul 19 2157	Deacon Rockoon	SUI 11	-	AGB-5	USN53A	LP4	-	-	70.4W 42.4N (+/- 0.0)	11.0
1953 Jul 24 1640	Deacon Rockoon	SUI 12	-	AGB-5	USN53A	LP5	-	-	70.4W 42.4N (+/- 0.0)	11.0
1953 Jul 28 0941	Deacon Rockoon	SUI 13	-	AGB-5	USN53A	LP6	-	-	70.4W 42.4N (+/- 0.0)	90.0
1953 Aug 3 1828	Deacon Rockoon	SUI 14	-	AGB-5	USN53A	LP7	-	-	70.4W 42.4N (+/- 0.0)	11.0
1953 Aug 5 2154	Deacon Rockoon	NRL Rockoon 1	-	AGB-5	USN53A	LP21	-	-	70.4W 42.4N (+/- 0.0)	80.0
1953 Aug 6 1507	Deacon Rockoon	SUI 15	-	AGB-5	USN53A	LP8	-	-	70.4W 42.4N (+/- 0.0)	68.0
1953 Aug 6 1840	Deacon Rockoon	SUI 16	-	AGB-5	USN53A	LP9	-	-	70.4W 42.4N (+/- 0.0)	96.0
1953 Aug 8 1509	Deacon Rockoon	NRL Rockoon 2	-	AGB-5	USN53A	LP22	-	-	70.4W 42.4N (+/- 0.0)	80.0
1953 Aug 9 0554	Deacon Rockoon	SUI 17	-	AGB-5	USN53A	LP10	-	-	70.4W 42.4N (+/- 0.0)	100.0
1953 Aug 9 1915	Deacon Rockoon	NRL Rockoon 3	-	AGB-5	USN53A	LP23	-	-	70.4W 42.4N (+/- 0.0)	38.0
1953 Aug 11 1709	Deacon Rockoon	NRL Rockoon 4	-	AGB-5	USN53A	LP24	-	-	70.4W 42.4N (+/- 0.0)	80.0

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#### IV.1.4.4 USS Eastwind



Credit: US Navy

Ludwig (2011) reports that the Eastwind departed Thule, Greenland on 1952 Jul 29, the SUI team having flown to Thule to join it there. After a voyage to Alert Base (62.3E 82.5N) the Eastwind proceeded to Murchison Sound for the launches, and returned to Thule on 1952 Sep 5.

Rockets used: Deacon Rockoon

Updated: 2024 Nov 28 03:19:32

**Cruises: WYG-279**

LC_Code	Active	Region	Cruise	CruiseMap
USN52A	1952 Aug 15 - 1952 Sep 15	Arctic Ocean	Eastwind 1952 Arctic expedition	-
USN53B	1953 Aug 15 - 1953 Sep 15	Atlantic Ocean	USS Eastwind, 1953 Arctic expedition	-



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Updated: 2024 Nov 28 03:19:32

Launches: WYG-279

Date	Rocket	Flight	Mission	Platform	Site	LP	AscSite	AscLP	Pos	Apogee
1952 Aug 21 0625	Deacon Rockoon	SUI 1	-	USS Eastwind	USN52A	LP1	-	-	68.5W 80.1N (+/- 0.1)	11.0
1952 Aug 24 0334	Deacon Rockoon	SUI 2	-	USS Eastwind	USN52A	LP2	-	-	68.5W 80.1N (+/- 0.1)	11.0
1952 Aug 29 0026	Deacon Rockoon	SUI 3	-	USS Eastwind	USN52A	LP3	-	-	68.5W 80.1N (+/- 0.1)	61.0
1952 Aug 29 0736	Deacon Rockoon	SUI 4	-	USS Eastwind	USN52A	LP4	-	-	68.5W 80.1N (+/- 0.1)	60.0
1952 Aug 29 1815	Deacon Rockoon	SUI 5	-	USS Eastwind	USN52A	LP5	-	-	68.5W 80.1N (+/- 0.1)	90.0
1952 Aug 31 2110	Deacon Rockoon	SUI 6	-	USS Eastwind	USN52A	LP6	-	-	68.5W 80.1N (+/- 0.1)	60.0
1952 Sep 4 0917	Deacon Rockoon	SUI 7	-	USS Eastwind	USN52A	LP7	-	-	68.5W 80.1N (+/- 0.1)	60.0
1953 Aug 30 1400	Deacon Rockoon	SUI 18	-	USS Eastwind	USN53B	LP11	-	-	55.1W 53.1N (+/- 0.0)	11.0
1953 Aug 30 1620	Deacon Rockoon	SUI 19	-	USS Eastwind	USN53B	LP12	-	-	55.1W 53.1N (+/- 0.0)	11.0
1953 Aug 30 2046	Deacon Rockoon	SUI 20	-	USS Eastwind	USN53B	LP13	-	-	55.1W 53.1N (+/- 0.0)	100.0
1953 Sep 3 0950	Deacon Rockoon	SUI 21	-	USS Eastwind	USN53B	LP14	-	-	55.1W 53.1N (+/- 0.0)	90.0
1953 Sep 3 1151	Deacon Rockoon	SUI 22	-	USS Eastwind	USN53B	LP15	-	-	55.1W 53.1N (+/- 0.0)	100.0
1953 Sep 3 1405	Deacon Rockoon	SUI 23	-	USS Eastwind	USN53B	LP16	-	-	55.1W 53.1N (+/- 0.0)	100.0
1953 Sep 4 0359	Deacon Rockoon	NRL Rockoon 5	-	USS Eastwind	USN53B	LP25	-	-	55.1W 53.1N (+/- 0.0)	70.0
1953 Sep 4 1551	Deacon Rockoon	NRL Rockoon 6	-	USS Eastwind	USN53B	LP26	-	-	55.1W 53.1N (+/- 0.0)	70.0

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#### IV.1.4.5 USS Norton Sound



Credit: US Navy

Rockets used: Aerobee RTV-N-8,Aerobee RTV-N-10,Viking,X-17,Deacon,Hydra-Iris,Hydra Sandhawk

Updated: 2024 Nov 28 03:19:32

LC_Code	Active	Region	Cruises: AVMI	Cruise	CruiseMap
USM49A	1949 Mar 15 - 1949 Mar 31	Pacific Ocean		APL Aerobee cruise	-
USN60A	1950 Jan 15 - 1950 Jan 31	Bering Sea		USS Norton Sound, 1950 Bering Sea expedition	-
USN68B	1968 Aug 15 - 1968 Sep 15	Tristan de Cunha, Atlantic Ocean		USS Norton Sound, 1968 Argus expedition	-

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Updated: 2024 Nov 28 03:19:32

Launches: AVMI

Date	Rocket	Flight	Mission	Platform	Site	LP	AscSite	AsclP	Pos	Apogee
1949 Mar 17 2320	Aerobee RTV-N-8	-	-	USS Norton Sound	USN49A	LP1	-	-	88.4W 11.1S (+/- 0.0)	105.0
1949 Mar 22 1720	Aerobee RTV-N-8	-	-	USS Norton Sound	USN49A	LP1	-	-	88.4W 11.1S (+/- 0.0)	105.0
1949 Mar 24 1514	Aerobee RTV-N-8	-	-	USS Norton Sound	USN49A	LP2	-	-	88.4W 11.1S (+/- 0.0)	5.0
1950 Jan 15 2345	Aerobee RTV-N-10	-	-	USS Norton Sound	USN50A	LP1	-	-	170.0W 58.0N (+/- 9.0)	72.0
1950 Jan 18 2317	Aerobee RTV-N-10	-	-	USS Norton Sound	USN50A	LP2	-	-	170.0W 58.0N (+/- 9.0)	80.0
1950 May 12 0308	Viking	Viking 4	-	USS Norton Sound	JARV	LP1	-	-	161.4W 0.2N (+/- 0.0)	171.0
1958 Jul 2	X-17	Argus test	-	USS Norton Sound	WTR	SCL LP1	-	-	119.0W 33.0N (+/- 3.0)	560.0
1958 Jul 9?	X-17	Argus test	-	USS Norton Sound	WTR	SCL LP1	-	-	119.0W 33.0N (+/- 3.0)	10.0
1958 Jul 17?	X-17	Argus test	-	USS Norton Sound	WTR	SCL LP1	-	-	119.0W 33.0N (+/- 3.0)	0.0
1958 Jul 24	X-17	Argus test	-	USS Norton Sound	WTR	SCL LP1	-	-	119.0W 33.0N (+/- 3.0)	672.0
1958 Aug 25	Deacon	Pogo Target	-	USS Norton Sound	USN58B	-	-	-	11.5W 38.5S (+/- 0.1)	30.0
1958 Aug 25	Deacon	Pogo Target	-	USS Norton Sound	USN58B	-	-	-	11.5W 38.5S (+/- 0.1)	30.0
1958 Aug 25	Deacon	Pogo Target	-	USS Norton Sound	USN58B	-	-	-	11.5W 38.5S (+/- 0.1)	30.0
1958 Aug 26	Deacon	Pogo Target	-	USS Norton Sound	USN58B	-	-	-	11.5W 38.5S (+/- 0.1)	30.0
1958 Aug 27 0220	X-17	Argus I	-	USS Norton Sound	USN58B	LP1	-	-	11.5W 38.5S (+/- 0.1)	160.0
1958 Aug 30 0310	X-17	Argus II	-	USS Norton Sound	USN58B	LP2	-	-	11.5W 38.5S (+/- 0.1)	293.0
1958 Sep 6 2205	X-17	Argus III	-	USS Norton Sound	USN58B	LP3	-	-	11.5W 38.5S (+/- 0.1)	750.0
1968 Mar 20 1955:05	Hydra-Iris	LRL BAR-1/FL-B	-	USS Norton Sound	HYD	LP3	-	-	120.0W 30.0N (+/- 0.5)	195.0
1971 Nov 18 0704:52	Hydra Sandhawk	LRL BOX-17	-	USS Norton Sound	HYD	LP5	-	-	120.0W 30.0N (+/- 0.5)	267.0

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#### IV.1.4.6 USS Ashland



Credit: US Navy

Built 1942, recommissioned 1950, retired 1969.

The USS Ashland was based in Boston.

Rockets used: Loki Rockoon, Deacon Rockoon, Deacon-Loki Rockoon

Updated: 2024 Nov 28 03:19:32

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LC_Code	Active	Region	Cruises: LSD-I Cruise	CruiseMap
USN55A	1955 Sep 15 - 1955 Oct 15	Atlantic Ocean	USS Staten Island, 1955 Arctic expedition	-



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Updated: 2024 Nov 28 03:19:32

Launches: LSD-1

Date	Rocket	Flight	Mission	Platform	Site	LP	AscSite	AsclP	Pos	Apogee
1955 Sep 23 2034	Loki Rockoon	SUI 38	-	LSD-1	USS Ashland	USN55A	LP1	-	66.2W 42.7N (+/- 0.0)	100.0
1955 Sep 24 1635	Deacon Rockoon	SUI 39	-	LSD-1	USS Ashland	USN55A	LP2	-	66.2W 42.7N (+/- 0.0)	100.0
1955 Sep 24 2109	Loki Rockoon	SUI 40	-	LSD-1	USS Ashland	USN55A	LP3	-	66.2W 42.7N (+/- 0.0)	100.0
1955 Sep 25 2039	Loki Rockoon	SUI 41	-	LSD-1	USS Ashland	USN55A	LP4	-	66.2W 42.7N (+/- 0.0)	11.0
1955 Sep 27 1912	Deacon Rockoon	NRL Rockoon 14	-	LSD-1	USS Ashland	USN55A	LP20	-	66.2W 42.7N (+/- 0.0)	11.0
1955 Sep 27 1943	Deacon Rockoon	NRL Rockoon 13	-	LSD-1	USS Ashland	USN55A	LP19	-	66.2W 42.7N (+/- 0.0)	90.0
1955 Sep 27 2054	Deacon Rockoon	SUI 42	-	LSD-1	USS Ashland	USN55A	LP5	-	66.2W 42.7N (+/- 0.0)	100.0
1955 Sep 28 0113	Loki Rockoon	SUI 43	-	LSD-1	USS Ashland	USN55A	LP6	-	66.2W 42.7N (+/- 0.0)	100.0
1955 Sep 28 1245	Deacon Rockoon	NRL Rockoon 15	-	LSD-1	USS Ashland	USN55A	LP21	-	66.2W 42.7N (+/- 0.0)	90.0
1955 Sep 28 1454	Deacon Rockoon	SUI 44	-	LSD-1	USS Ashland	USN55A	LP7	-	66.2W 42.7N (+/- 0.0)	100.0
1955 Sep 28 1740	Deacon Rockoon	NRL Rockoon 16	-	LSD-1	USS Ashland	USN55A	LP22	-	66.2W 42.7N (+/- 0.0)	11.0
1955 Sep 28 1922	Deacon-Loki Rockoon	SUI 45	-	LSD-1	USS Ashland	USN55A	LP8	-	66.2W 42.7N (+/- 0.0)	102.0
1955 Sep 29 1342	Deacon Rockoon	SUI 46	-	LSD-1	USS Ashland	USN55A	LP9	-	66.2W 42.7N (+/- 0.0)	100.0
1955 Sep 29 1913	Deacon Rockoon	SUI 47	-	LSD-1	USS Ashland	USN55A	LP10	-	66.2W 42.7N (+/- 0.0)	100.0
1955 Sep 29 2152	Deacon-Loki Rockoon	SUI 48	-	LSD-1	USS Ashland	USN55A	LP11	-	66.2W 42.7N (+/- 0.0)	100.0
1955 Sep 30 2010	Loki Rockoon	SUI 49	-	LSD-1	USS Ashland	USN55A	LP12	-	66.2W 42.7N (+/- 0.0)	100.0
1955 Oct 4 2118	Loki Rockoon	SUI 50	-	LSD-1	USS Ashland	USN55A	LP13	-	66.2W 42.7N (+/- 0.0)	100.0
1955 Oct 6 1054	Deacon Rockoon	NRL Rockoon 17	-	LSD-1	USS Ashland	USN55A	LP23	-	66.2W 42.7N (+/- 0.0)	11.0
1955 Oct 6 1910	Deacon Rockoon	SUI 51	-	LSD-1	USS Ashland	USN55A	LP14	-	66.2W 42.7N (+/- 0.0)	100.0
1955 Oct 11 1433	Deacon Rockoon	SUI 52	-	LSD-1	USS Ashland	USN55A	LP15	-	66.2W 42.7N (+/- 0.0)	20.0
1955 Oct 11 1437	Deacon Rockoon	NRL Rockoon 18	-	LSD-1	USS Ashland	USN55A	LP24	-	66.2W 42.7N (+/- 0.0)	90.0
1955 Oct 13 0637	Deacon Rockoon	NRL Rockoon 19	-	LSD-1	USS Ashland	USN55A	LP25	-	66.2W 42.7N (+/- 0.0)	60.0
1955 Oct 13 1244	Deacon Rockoon	SUI 53	-	LSD-1	USS Ashland	USN55A	LP16	-	66.2W 42.7N (+/- 0.0)	100.0
1955 Oct 13 1342	Deacon Rockoon	NRL Rockoon 20	-	LSD-1	USS Ashland	USN55A	LP26	-	66.2W 42.7N (+/- 0.0)	50.0
1955 Oct 13 1524	Deacon Rockoon	SUI 54	-	LSD-1	USS Ashland	USN55A	LP17	-	66.2W 42.7N (+/- 0.0)	20.0
1955 Oct 13 2013	Deacon Rockoon	SUI 55	-	LSD-1	USS Ashland	USN55A	LP18	-	66.2W 42.7N (+/- 0.0)	100.0

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#### IV.1.4.7 USS Rushmore



Credit: US Navy

Built 1944, retired 1993.

Rockets used: Nike Cajun

Updated: 2024 Nov 28 03:19:32

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LC_Code	Active	Region	Cruises: LSD-14	Cruise	CruiseMap
USN56B	1956 Oct 15 - 1956 Nov 15	Atlantic Ocean	USS Rushmore U. Michigan	Cruise 1956	-

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Updated: 2024 Nov 28 03:19:32

Launches: LSD-14

Date	Rocket	Flight	Mission	PlatCode	Platform	Site	LP	AscSite	AscLP	Pos	Apogee
1956 Oct 27 2124	Nike Cajun	UM AM6.08 Sphere	IGY AM6.08	LSD-14	USS Rushmore	USN56B	LP1	-	-	71.0W 40.0N (+/- 0.5)	161.0
1956 Nov 2 1840	Nike Cajun	UM AM6.09 Sphere	IGY AM6.09	LSD-14	USS Rushmore	USN56B	LP2	-	-	71.0W 40.0N (+/- 0.5)	131.0
1956 Nov 4 1854	Nike Cajun	UM AM6.10 Sphere	IGY AM6.09	LSD-14	USS Rushmore	USN56B	LP3	-	-	71.0W 40.0N (+/- 0.5)	162.0
1956 Nov 7 1502	Nike Cajun	UM AM6.11 Sphere	IGY AM6.11	LSD-14	USS Rushmore	USN56B	LP4	-	-	71.0W 40.0N (+/- 0.5)	169.0
1956 Nov 10 1517	Nike Cajun	UM AM6.12 Sphere	IGY AM6.12	LSD-14	USS Rushmore	USN56B	LP5	-	-	71.0W 40.0N (+/- 0.5)	161.0

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#### IV.1.4.8 USS Colonial



Credit: US Navy

Built 1945, retired 1993

Rockets used: Deacon Rockoon

Updated: 2024 Nov 28 03:19:32

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LC_Code	Active	Region	Cruises: LSD-18 Cruise	CruiseMap
USN56A	1956 Jul 15 - 1956 Jul 31	Pacific Ocean	1956 NRL Cruise (Operation San Diego High)	-



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Updated: 2024 Nov 28 03:19:32

Launches: LSD-18

Date	Rocket	Flight	Mission	Platform	Site	LP	AscSite	AsCLP	Pos	Apogee
1956 Jul 17 1940	Deacon Rockoon	NRL NN5.27	IGY NN5.27	LSD-18	USN56A	LP1	-	-	121.6W 29.7N (+/- 0.0)	120.0
1956 Jul 18 2000	Deacon Rockoon	NRL NN5.28	IGY NN5.28	LSD-18	USN56A	LP2	-	-	121.6W 29.7N (+/- 0.0)	120.0
1956 Jul 19 1932	Deacon Rockoon	NRL NN5.29	IGY NN5.29	LSD-18	USN56A	LP3	-	-	121.6W 29.7N (+/- 0.0)	120.0
1956 Jul 20 1915	Deacon Rockoon	NRL NN5.30	IGY NN5.30	LSD-18	USN56A	LP4	-	-	121.6W 29.7N (+/- 0.0)	120.0
1956 Jul 21 2200	Deacon Rockoon	NRL NN5.31	IGY NN5.31	LSD-18	USN56A	LP5	-	-	121.6W 29.7N (+/- 0.0)	11.0
1956 Jul 22 1910	Deacon Rockoon	NRL NN5.32	IGY NN5.32	LSD-18	USN56A	LP6	-	-	121.6W 29.7N (+/- 0.0)	120.0
1956 Jul 24 1910	Deacon Rockoon	NRL NN5.33	IGY NN5.33	LSD-18	USN56A	LP7	-	-	121.6W 29.7N (+/- 0.0)	11.0
1956 Jul 25 2115	Deacon Rockoon	NRL NN5.34	IGY NN5.34	LSD-18	USN56A	LP8	-	-	121.6W 29.7N (+/- 0.0)	120.0
1956 Jul 26 2100	Deacon Rockoon	NRL NN5.35	IGY NN5.35	LSD-18	USN56A	LP9	-	-	121.6W 29.7N (+/- 0.0)	120.0
1956 Jul 27 1705	Deacon Rockoon	NRL NN5.36	IGY NN5.36	LSD-18	USN56A	LP10	-	-	121.6W 29.7N (+/- 0.0)	5.0

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#### IV.1.4.9 USS Plymouth Rock



Credit: US Navy

Rockets used: Loki Rockoon

Updated: 2024 Nov 28 03:19:32

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**Cruises: LSD-29**

LC_Code	Active	Region	Cruise	CruiseMap
USN57A	1957 Aug 1 - 1957 Aug 20	Atlantic Ocean	1957 NRL USS Plymouth Rock Cruise, Atlantic Ocean	-

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Updated: 2024 Nov 28 03:19:32

Launches: LSD-29

Date	Rocket	Flight	Mission	Platform	Site	LP	AscSite	AscLP	Pos	Apogee
1957 Aug 5 1322	Loki Rockoon	SUI 56	IGY I15.01F	USS Plymouth Rock	USN57A	LP1	-	-	54.0W 55.0N (+/- 0.0)	100.0
1957 Aug 5 1659	Loki Rockoon	SUI 57	IGY I15.02F	USS Plymouth Rock	USN57A	LP2	-	-	54.0W 55.0N (+/- 0.0)	100.0
1957 Aug 6 1313	Loki Rockoon	SUI 58	IGY I15.03F	USS Plymouth Rock	USN57A	LP3	-	-	54.0W 55.0N (+/- 0.0)	116.0
1957 Aug 6 1723	Loki Rockoon	SUI 59	IGY I15.04F	USS Plymouth Rock	USN57A	LP4	-	-	54.0W 55.0N (+/- 0.0)	117.0
1957 Aug 7 0328	Loki Rockoon	SUI 60	IGY I15.05F	USS Plymouth Rock	USN57A	LP5	-	-	54.0W 55.0N (+/- 0.0)	10.0
1957 Aug 7 2204	Loki Rockoon	SUI 61	IGY I15.06F	USS Plymouth Rock	USN57A	LP6	-	-	54.0W 55.0N (+/- 0.0)	10.0
1957 Aug 8 0717	Loki Rockoon	SUI 62	IGY I15.07F	USS Plymouth Rock	USN57A	LP7	-	-	54.0W 55.0N (+/- 0.0)	132.0
1957 Aug 10 0629	Loki Rockoon	SUI 63	IGY I15.08F	USS Plymouth Rock	USN57A	LP8	-	-	54.0W 55.0N (+/- 0.0)	117.0
1957 Aug 10 2336	Loki Rockoon	SUI 64	IGY I15.09F	USS Plymouth Rock	USN57A	LP9	-	-	54.0W 55.0N (+/- 0.0)	77.0
1957 Aug 11 0516	Loki Rockoon	SUI 65	IGY I15.10F	USS Plymouth Rock	USN57A	LP10	-	-	54.0W 55.0N (+/- 0.0)	10.0
1957 Aug 11 2030	Loki Rockoon	SUI 66	IGY I15.11F	USS Plymouth Rock	USN57A	LP11	-	-	54.0W 55.0N (+/- 0.0)	100.0
1957 Aug 12 0748	Loki Rockoon	SUI 67	IGY I15.12F	USS Plymouth Rock	USN57A	LP12	-	-	54.0W 55.0N (+/- 0.0)	10.0
1957 Aug 12 1515	Loki Rockoon	SUI 68	IGY I15.13F	USS Plymouth Rock	USN57A	LP13	-	-	54.0W 55.0N (+/- 0.0)	100.0
1957 Aug 13 0158	Loki Rockoon	SUI 69	IGY I15.14F	USS Plymouth Rock	USN57A	LP14	-	-	54.0W 55.0N (+/- 0.0)	100.0
1957 Aug 14 0924	Loki Rockoon	SUI 70	IGY I15.15F	USS Plymouth Rock	USN57A	LP15	-	-	54.0W 55.0N (+/- 0.0)	100.0
1957 Aug 14 1507	Loki Rockoon	SUI 71	IGY I15.16F	USS Plymouth Rock	USN57A	LP16	-	-	54.0W 55.0N (+/- 0.0)	97.0
1957 Aug 14 2119	Loki Rockoon	SUI 72	IGY I15.17F	USS Plymouth Rock	USN57A	LP17	-	-	54.0W 55.0N (+/- 0.0)	130.0
1957 Aug 15 0011	Loki Rockoon	SUI 73	IGY I15.18F	USS Plymouth Rock	USN57A	LP18	-	-	54.0W 55.0N (+/- 0.0)	97.0

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#### IV.1.4.10 USS Point Defiance



Credit: US Navy

Rockets used: Nike Asp,Arcas

Updated: 2024 Nov 28 03:19:32

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LC_Code	Active	Region	Cruises: LSD-31 Cruise	CruiseMap
USNS8C	1958 Sep 15 - 1958 Oct 15	Pacific Ocean	1958 Point Defiance Expedition, Danger Is., Pacific Ocean	-



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Updated: 2024 Nov 28 03:19:32

Launches: LSD-31

Date	Rocket	Flight	Mission	Platform	Site	LP	AscSite	AscLP	Pos	Apogee
1958 Sep 28 1942	Nike Asp	-	IGY NN8.57F	LSD-31	USN58C	LP1	-	-	165.5W 10.3S (+/- 0.0)	225.0
1958 Oct 1 1942	Nike Asp	-	IGY NN8.58F	LSD-31	USN58C	LP1	-	-	165.5W 10.3S (+/- 0.0)	56.0
1958 Oct 12 1942:06	Nike Asp	-	IGY NN8.59F	LSD-31	USN58C	LP1	-	-	165.5W 10.3S (+/- 0.0)	222.0
1958 Oct 12 1942:03	Nike Asp	-	IGY NN8.60F	LSD-31	USN58C	LP1	-	-	165.5W 10.3S (+/- 0.0)	236.0
1958 Oct 12 1943:18	Nike Asp	-	IGY NN8.61F	LSD-31	USN58C	LP1	-	-	165.5W 10.3S (+/- 0.0)	242.0
1958 Oct 12 1952:49	Nike Asp	-	IGY NN8.62F	LSD-31	USN58C	LP1	-	-	165.5W 10.3S (+/- 0.0)	240.0
1958 Oct 12 2010:09	Nike Asp	-	IGY NN8.63F	LSD-31	USN58C	LP1	-	-	165.5W 10.3S (+/- 0.0)	88.0
1958 Oct 13 1939:56	Nike Asp	-	IGY NN8.64F	LSD-31	USN58C	LP1	-	-	165.5W 10.3S (+/- 0.0)	225.0
1961 Jun	Arcas	HYDRA Arcas	-	LSD-31	HYDS	LP1	-	-	120.0W 0.0N (+/- 1.0)	60.0

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#### IV.1.4.11 USNS Croatan, Wallops Mobile Range Facility



Credit: NASA

Built 1942 as USS Croatan; Became non-commissioned USNS Croatan in 1958. Assigned to NASA Oct 1964-May 1965. Scrapped 1971.

Rockets used: Nike Apache,Nike Cajun,Arcas,Loki Dart

Updated: 2024 Nov 28 03:19:32

Cruises: CVE-25

LC_Code	Active	Region	Cruise	CruiseMap
MASA64	1964 Nov 1 - 1964 Nov 30	Atlantic Ocean	1964 Croatan MRF Expedition	-
MASA65	1965 Feb 15 - 1965 Apr 30	Atlantic Ocean	1965 Croatan MRF Expedition	-

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Updated: 2024 Nov 28 03:19:32

Launches: CVE-25

Date	Rocket	Flight	Mission	Platform	Platform Code	LP	AscSite	Pos	Apofee
1964 Nov 10 2225	Nike Apache	GCA Release 39 Na	-	USNS Croatan, Wallops Mobile Range Facility	CVE-25	LP1	-	75.0W 38.0N (+/- 2.0)	198.0
1964 Nov 11 2224	Nike Apache	GCA Release 41 Na	-	USNS Croatan, Wallops Mobile Range Facility	CVE-25	LP2	-	75.0W 38.0N (+/- 2.0)	156.0
1964 Nov 12 1053	Nike Apache	GCA Release 43 Na	-	USNS Croatan, Wallops Mobile Range Facility	CVE-25	LP3	-	75.0W 38.0N (+/- 2.0)	204.0
1964 Nov 17 1749	Nike Apache	Density	-	USNS Croatan, Wallops Mobile Range Facility	CVE-25	LP4	-	75.0W 38.0N (+/- 2.0)	194.0
1964 Nov 17 2110	Nike Cajun	Density	-	USNS Croatan, Wallops Mobile Range Facility	CVE-25	LP5	-	75.0W 38.0N (+/- 2.0)	160.0
1964 Nov 19 1834	Nike Apache	UM Pitot 7?	-	USNS Croatan, Wallops Mobile Range Facility	CVE-25	LP6	-	75.0W 38.0N (+/- 2.0)	14.0
1964 Nov 19 2202	Nike Apache	UIUC IQSY Ionos	-	USNS Croatan, Wallops Mobile Range Facility	CVE-25	LP7	-	75.0W 38.0N (+/- 2.0)	170.0
1965 Feb 27 2133	Nike Cajun	Density	-	USNS Croatan, Wallops Mobile Range Facility	CVE-25	LP1	-	75.0W 38.0N (+/- 5.0)	100.0
1965 Mar 7	Arcas	-	-	USNS Croatan, Wallops Mobile Range Facility	CVE-25	LP43	-	75.0W 38.0N (+/- 5.0)	60.0
1965 Mar 8 1535	Nike Apache	B Field	-	USNS Croatan, Wallops Mobile Range Facility	CVE-25	LP2	-	75.0W 38.0N (+/- 5.0)	151.0
1965 Mar 8 1748:08	Nike Apache	UM Pitot 8	-	USNS Croatan, Wallops Mobile Range Facility	CVE-25	LP2	-	75.0W 38.0N (+/- 5.0)	141.0
1965 Mar 9	Arcas	-	-	USNS Croatan, Wallops Mobile Range Facility	CVE-25	LP44	-	75.0W 38.0N (+/- 5.0)	60.0
1965 Mar 9 0626:26	Nike Apache	UM Pitot 9	-	USNS Croatan, Wallops Mobile Range Facility	CVE-25	LP3	-	75.0W 38.0N (+/- 5.0)	143.0
1965 Mar 9 1625	Nike Apache	UNH 65-2	-	USNS Croatan, Wallops Mobile Range Facility	CVE-25	LP4	-	75.0W 38.0N (+/- 5.0)	200.0
1965 Mar 10 1600	Nike Apache	UNH 65-3	-	USNS Croatan, Wallops Mobile Range Facility	CVE-25	LP5	-	75.0W 38.0N (+/- 5.0)	200.0
1965 Mar 11	Loki Dart	-	-	USNS Croatan, Wallops Mobile Range Facility	CVE-25	LP45	-	75.0W 38.0N (+/- 5.0)	60.0
1965 Mar 11 0935:14	Nike Apache	Composition(Tropics)	-	USNS Croatan, Wallops Mobile Range Facility	CVE-25	LP6	-	75.0W 38.0N (+/- 5.0)	197.0
1965 Mar 11 1038	Nike Cajun	-	-	USNS Croatan, Wallops Mobile Range Facility	CVE-25	LP7	-	75.0W 38.0N (+/- 5.0)	100.0
1965 Mar 11 2007	Nike Apache	UNH 65-4	-	USNS Croatan, Wallops Mobile Range Facility	CVE-25	LP8	-	75.0W 38.0N (+/- 5.0)	200.0
1965 Mar 12 1330	Nike Apache	UNH 65-4	-	USNS Croatan, Wallops Mobile Range Facility	CVE-25	LP9	-	75.0W 38.0N (+/- 5.0)	178.0
1965 Mar 12 1600	Nike Apache	UNH 65-5	-	USNS Croatan, Wallops Mobile Range Facility	CVE-25	LP9	-	75.0W 38.0N (+/- 5.0)	175.0
1965 Mar 16	Arcas	-	-	USNS Croatan, Wallops Mobile Range Facility	CVE-25	LP46	-	75.0W 38.0N (+/- 5.0)	60.0
1965 Mar 16 1615	Nike Apache	B field	-	USNS Croatan, Wallops Mobile Range Facility	CVE-25	LP10	-	75.0W 38.0N (+/- 5.0)	172.0
1965 Mar 16 1651	Nike Apache	-	-	USNS Croatan, Wallops Mobile Range Facility	CVE-25	LP11	-	75.0W 38.0N (+/- 5.0)	200.0
1965 Mar 17	Loki Dart	-	-	USNS Croatan, Wallops Mobile Range Facility	CVE-25	LP47	-	75.0W 38.0N (+/- 5.0)	60.0
1965 Mar 18	Arcas	-	-	USNS Croatan, Wallops Mobile Range Facility	CVE-25	LP48	-	75.0W 38.0N (+/- 5.0)	60.0
1965 Mar 18 0604	Nike Apache	B field	-	USNS Croatan, Wallops Mobile Range Facility	CVE-25	LP12	-	75.0W 38.0N (+/- 5.0)	180.0
1965 Mar 18 0641	Nike Apache	B field	-	USNS Croatan, Wallops Mobile Range Facility	CVE-25	LP13	-	75.0W 38.0N (+/- 5.0)	200.0
1965 Mar 18 1601	Nike Apache	B field	-	USNS Croatan, Wallops Mobile Range Facility	CVE-25	LP14	-	75.0W 38.0N (+/- 5.0)	149.0
1965 Mar 18 1638	Nike Apache	-	-	USNS Croatan, Wallops Mobile Range Facility	CVE-25	LP15	-	75.0W 38.0N (+/- 5.0)	200.0
1965 Mar 19	Loki Dart	-	-	USNS Croatan, Wallops Mobile Range Facility	CVE-25	LP49	-	75.0W 38.0N (+/- 5.0)	60.0
1965 Mar 20 1320:09	Nike Apache	-	-	USNS Croatan, Wallops Mobile Range Facility	CVE-25	LP16	-	75.0W 38.0N (+/- 5.0)	174.0
1965 Mar 20 1628	Nike Apache	B field	-	USNS Croatan, Wallops Mobile Range Facility	CVE-25	LP17	-	75.0W 38.0N (+/- 5.0)	201.0
1965 Mar 20 1704:13	Nike Cajun	Electron density	-	USNS Croatan, Wallops Mobile Range Facility	CVE-25	LP18	-	75.0W 38.0N (+/- 5.0)	122.0
1965 Mar 21	Arcas	-	-	USNS Croatan, Wallops Mobile Range Facility	CVE-25	LP50	-	75.0W 38.0N (+/- 5.0)	60.0
1965 Mar 22	Loki Dart	-	-	USNS Croatan, Wallops Mobile Range Facility	CVE-25	LP51	-	75.0W 38.0N (+/- 5.0)	60.0
1965 Mar 22 0744	Nike Apache	B field	-	USNS Croatan, Wallops Mobile Range Facility	CVE-25	LP19	-	75.0W 38.0N (+/- 5.0)	206.0
1965 Mar 22 0849:10	Nike Cajun	Electron density	-	USNS Croatan, Wallops Mobile Range Facility	CVE-25	LP20	-	75.0W 38.0N (+/- 5.0)	120.0
1965 Mar 23 0931:09	Nike Apache	-	-	USNS Croatan, Wallops Mobile Range Facility	CVE-25	LP18	-	75.0W 38.0N (+/- 5.0)	165.0
1965 Mar 24	Arcas	-	-	USNS Croatan, Wallops Mobile Range Facility	CVE-25	LP52	-	75.0W 38.0N (+/- 5.0)	60.0
1965 Mar 24 1634	Nike Apache	B field	-	USNS Croatan, Wallops Mobile Range Facility	CVE-25	LP22	-	75.0W 38.0N (+/- 5.0)	200.0
1965 Mar 24 1707	Nike Apache	-	-	USNS Croatan, Wallops Mobile Range Facility	CVE-25	LP23	-	75.0W 38.0N (+/- 5.0)	200.0
1965 Mar 25	Loki Dart	-	-	USNS Croatan, Wallops Mobile Range Facility	CVE-25	LP53	-	75.0W 38.0N (+/- 5.0)	60.0
1965 Mar 25 1600	Nike Apache	B field	-	USNS Croatan, Wallops Mobile Range Facility	CVE-25	LP24	-	75.0W 38.0N (+/- 5.0)	100.0
1965 Mar 26 1541	Nike Apache	B field	-	USNS Croatan, Wallops Mobile Range Facility	CVE-25	LP25	-	75.0W 38.0N (+/- 5.0)	155.0
1965 Mar 26 1613	Nike Apache	-	-	USNS Croatan, Wallops Mobile Range Facility	CVE-25	LP26	-	75.0W 38.0N (+/- 5.0)	200.0
1965 Mar 27	Arcas	-	-	USNS Croatan, Wallops Mobile Range Facility	CVE-25	LP54	-	75.0W 38.0N (+/- 5.0)	60.0
1965 Mar 27 0300	Nike Apache	-	-	USNS Croatan, Wallops Mobile Range Facility	CVE-25	LP27	-	75.0W 38.0N (+/- 5.0)	200.0
1965 Mar 27 1808	Nike Apache	B field	-	USNS Croatan, Wallops Mobile Range Facility	CVE-25	LP28	-	75.0W 38.0N (+/- 5.0)	200.0
1965 Mar 28	Loki Dart	-	-	USNS Croatan, Wallops Mobile Range Facility	CVE-25	LP55	-	75.0W 38.0N (+/- 5.0)	60.0
1965 Mar 28 1550	Nike Apache	B field	-	USNS Croatan, Wallops Mobile Range Facility	CVE-25	LP29	-	75.0W 38.0N (+/- 5.0)	129.0
1965 Mar 29 1547	Nike Apache	B field	-	USNS Croatan, Wallops Mobile Range Facility	CVE-25	LP30	-	75.0W 38.0N (+/- 5.0)	172.0
1965 Mar 29 1547	Nike Cajun	-	-	USNS Croatan, Wallops Mobile Range Facility	CVE-25	LP56	-	75.0W 38.0N (+/- 5.0)	60.0
1965 Apr 2	Arcas	-	-	USNS Croatan, Wallops Mobile Range Facility	CVE-25	LP31	-	75.0W 38.0N (+/- 5.0)	200.0
1965 Apr 2 1322	Nike Apache	UNH Particles	-	USNS Croatan, Wallops Mobile Range Facility	CVE-25	LP31	-	75.0W 38.0N (+/- 5.0)	200.0

Launches: CVE-25

Date	Rocket	Flight	Mission	Platform	Platform Code	Platform	Site	LP	AscSite	AsclP	Pos	Apofee
1965 Apr 3	Arcas	-	-	USNS Croatan, Wallops Mobile Range Facility	CVE-25	USNS Croatan, Wallops Mobile Range Facility	NASA65	LP57	-	-	75.0W 38.0N (+/- 5.0)	60.0
1965 Apr 4	Arcas	-	-	USNS Croatan, Wallops Mobile Range Facility	CVE-25	USNS Croatan, Wallops Mobile Range Facility	NASA65	LP58	-	-	75.0W 38.0N (+/- 5.0)	60.0
1965 Apr 4 1606:35	Nike Apache	UM Pitot 10	-	USNS Croatan, Wallops Mobile Range Facility	CVE-25	USNS Croatan, Wallops Mobile Range Facility	NASA65	LP32	-	-	75.0W 38.0N (+/- 5.0)	139.0
1965 Apr 5	Arcas	-	-	USNS Croatan, Wallops Mobile Range Facility	CVE-25	USNS Croatan, Wallops Mobile Range Facility	NASA65	LP59	-	-	75.0W 38.0N (+/- 5.0)	60.0
1965 Apr 5	Arcas	-	-	USNS Croatan, Wallops Mobile Range Facility	CVE-25	USNS Croatan, Wallops Mobile Range Facility	NASA65	LP60	-	-	75.0W 38.0N (+/- 5.0)	60.0
1965 Apr 5 1345:53	Nike Apache	-	-	USNS Croatan, Wallops Mobile Range Facility	CVE-25	USNS Croatan, Wallops Mobile Range Facility	NASA65	LP33	-	-	75.0W 38.0N (+/- 5.0)	177.0
1965 Apr 5 1942	Nike Apache	UNH Particles	-	USNS Croatan, Wallops Mobile Range Facility	CVE-25	USNS Croatan, Wallops Mobile Range Facility	NASA65	LP34	-	-	75.0W 38.0N (+/- 5.0)	200.0
1965 Apr 6	Arcas	-	-	USNS Croatan, Wallops Mobile Range Facility	CVE-25	USNS Croatan, Wallops Mobile Range Facility	NASA65	LP61	-	-	75.0W 38.0N (+/- 5.0)	60.0
1965 Apr 6 1634:05	Nike Apache	UM Pitot 11	-	USNS Croatan, Wallops Mobile Range Facility	CVE-25	USNS Croatan, Wallops Mobile Range Facility	NASA65	LP35	-	-	75.0W 38.0N (+/- 5.0)	142.0
1965 Apr 8	Loki Dart	-	-	USNS Croatan, Wallops Mobile Range Facility	CVE-25	USNS Croatan, Wallops Mobile Range Facility	NASA65	LP62	-	-	75.0W 38.0N (+/- 5.0)	60.0
1965 Apr 9 1918:15	Nike Apache	-	-	USNS Croatan, Wallops Mobile Range Facility	CVE-25	USNS Croatan, Wallops Mobile Range Facility	NASA65	LP36	-	-	75.0W 38.0N (+/- 5.0)	191.0
1965 Apr 9 2026:10	Nike Apache	UM Pitot 12	-	USNS Croatan, Wallops Mobile Range Facility	CVE-25	USNS Croatan, Wallops Mobile Range Facility	NASA65	LP37	-	-	75.0W 38.0N (+/- 5.0)	147.0
1965 Apr 10	Arcas	-	-	USNS Croatan, Wallops Mobile Range Facility	CVE-25	USNS Croatan, Wallops Mobile Range Facility	NASA65	LP63	-	-	75.0W 38.0N (+/- 5.0)	60.0
1965 Apr 11	Arcas	-	-	USNS Croatan, Wallops Mobile Range Facility	CVE-25	USNS Croatan, Wallops Mobile Range Facility	NASA65	LP64	-	-	75.0W 38.0N (+/- 5.0)	60.0
1965 Apr 11	Arcas	-	-	USNS Croatan, Wallops Mobile Range Facility	CVE-25	USNS Croatan, Wallops Mobile Range Facility	NASA65	LP65	-	-	75.0W 38.0N (+/- 5.0)	60.0
1965 Apr 12 1714:02	Nike Apache	UIUC-GCA Iomos 7	-	USNS Croatan, Wallops Mobile Range Facility	CVE-25	USNS Croatan, Wallops Mobile Range Facility	NASA65	LP38	-	-	75.0W 38.0N (+/- 5.0)	187.0
1965 Apr 13	Arcas	-	-	USNS Croatan, Wallops Mobile Range Facility	CVE-25	USNS Croatan, Wallops Mobile Range Facility	NASA65	LP66	-	-	75.0W 38.0N (+/- 5.0)	60.0
1965 Apr 13 0405:06	Nike Apache	UM Pitot 13	-	USNS Croatan, Wallops Mobile Range Facility	CVE-25	USNS Croatan, Wallops Mobile Range Facility	NASA65	LP39	-	-	75.0W 38.0N (+/- 5.0)	150.0
1965 Apr 13 1600:09	Nike Apache	UM Pitot 14	-	USNS Croatan, Wallops Mobile Range Facility	CVE-25	USNS Croatan, Wallops Mobile Range Facility	NASA65	LP39	-	-	75.0W 38.0N (+/- 5.0)	146.0
1965 Apr 13 1710	Nike Apache	UNH Particles	-	USNS Croatan, Wallops Mobile Range Facility	CVE-25	USNS Croatan, Wallops Mobile Range Facility	NASA65	LP39	-	-	75.0W 38.0N (+/- 5.0)	200.0
1965 Apr 13 1906	Nike Apache	Composition	-	USNS Croatan, Wallops Mobile Range Facility	CVE-25	USNS Croatan, Wallops Mobile Range Facility	NASA65	LP40	-	-	75.0W 38.0N (+/- 5.0)	200.0
1965 Apr 14	Arcas	-	-	USNS Croatan, Wallops Mobile Range Facility	CVE-25	USNS Croatan, Wallops Mobile Range Facility	NASA65	LP67	-	-	75.0W 38.0N (+/- 5.0)	60.0
1965 Apr 15	Arcas	-	-	USNS Croatan, Wallops Mobile Range Facility	CVE-25	USNS Croatan, Wallops Mobile Range Facility	NASA65	LP68	-	-	75.0W 38.0N (+/- 5.0)	60.0
1965 Apr 15 1600:04	Nike Apache	UM Pitot 15	-	USNS Croatan, Wallops Mobile Range Facility	CVE-25	USNS Croatan, Wallops Mobile Range Facility	NASA65	LP41	-	-	75.0W 38.0N (+/- 5.0)	140.0
1965 Apr 15 1802	Nike Apache	Composition	-	USNS Croatan, Wallops Mobile Range Facility	CVE-25	USNS Croatan, Wallops Mobile Range Facility	NASA65	LP42	-	-	75.0W 38.0N (+/- 5.0)	200.0

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#### IV.1.4.12 USNS Range Recoverer



Credit: US Navy

Built 1944 as FS-278, converted to MSTST T-AG-161 in 1960, and then to T-AGM-2/USNS Range Recoverer in Nov 1960.

Note: A Feb 1966 mid-Atlantic Arcas launch was reported by the IRIG Meteorological Working Group (Document 109-62, Vol LIV, Feb 1966 Firings) as being from 'Ship Sierra'. This might be the USS Sierra, but there's no other indication it was ever involved in weather rocket firings. It seems more likely that 'Sierra' is just a code letter S in the phonetic alphabet (perhaps as Quebec and Victor were associated with the range ships Coastal Sentry and Rose Knot). I further speculate that the firing was a proof of concept precursor to the Zorba eclipse firings, and that Ship Sierra was in fact the Range Recoverer; obviously this is a rather tenuous guess.

Rockets used: Boosted Arcas

Updated: 2024 Nov 28 03:19:32



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LC_Code	Active	Region	Cruises: RREC	CruiseMap
			Cruise	
USN66A	1966 Feb 1 - 1966 Feb 15	Atlantic Ocean	Ship Sierra point, Feb 1966 [Unknown USN vessel maybe Range Rec.]	-

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Launches: RREC

Date	Rocket	Flight	Mission	PlatCode	Platform	Site	LP	AscSite	AscLP	Pos	Apogee
1966 Feb 10 1059	Boosted Arcas	Arcasonde IIA	-	RREC	USNS Range Recoverer	USN66A	LP1	-	-	63.5W 26.6N (+/- 0.1)	60.0
1966 May 15 1043	Boosted Arcas	Zorba I (Test)	-	RREC	USNS Range Recoverer	KOR	LP1	-	-	21.9E 36.8N (+/- 0.0)	20.0
1966 May 20 0800	Boosted Arcas	Zorba II	-	RREC	USNS Range Recoverer	KOR	LP1	-	-	21.9E 36.8N (+/- 0.0)	90.0
1966 May 20 0845	Boosted Arcas	Zorba III	-	RREC	USNS Range Recoverer	KOR	LP1	-	-	21.9E 36.8N (+/- 0.0)	99.0
1966 May 20 0930	Boosted Arcas	Zorba IV	-	RREC	USNS Range Recoverer	KOR	LP1	-	-	21.9E 36.8N (+/- 0.0)	102.0
1966 May 20 1015	Boosted Arcas	Zorba V	-	RREC	USNS Range Recoverer	KOR	LP1	-	-	21.9E 36.8N (+/- 0.0)	90.0
1966 May 20 1105	Boosted Arcas	Zorba VI	-	RREC	USNS Range Recoverer	KOR	LP1	-	-	21.9E 36.8N (+/- 0.0)	101.0
1966 May 21 0930	Boosted Arcas	Zorba VII	-	RREC	USNS Range Recoverer	KOR	LP1	-	-	21.9E 36.8N (+/- 0.0)	90.0

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#### IV.1.4.13 USNS Wheeling



Credit: US Navy

The commercial ship Seton Hall Victory was built in 1945 and converted to the missile range instrumentation ship AGM-8 Wheeling, for Pacific Missile Range support. It supported the Lawrence Livermore Lab Hydra sounding rocket program.

Rockets used: Hydra-Iris, Hydra Sandhawk

Updated: 2024 Nov 28 03:19:32

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LC_Code	Active	Region	Cruises: T-AGM-8 Cruise	CruiseMap
USN65A	1965 Jan 1 - 1965 Jan 31	Atlantic Ocean	USNS Wheeling, 1965 Hydra-Iris SAA expedition	-

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Updated: 2024 Nov 28 03:19:32

Launches: T-AGM-8

Date	Rocket	Flight	Mission	PlatCode	Platform	Site	LP	AscSite	AsclP	Pos	Apogee
1964 Aug 10	Hydra-Iris	LRL GSP-1	-	T-AGM-8	USNS Wheeling	WTR	HLP1	-	-	119.0W 33.0N (+/- 3.0)	200.0
1965 Jan 7	Hydra-Iris	LRL SAP-1	-	T-AGM-8	USNS Wheeling	USN65A	LP1	-	-	27.4W 56.5S (+/- 0.0)	2.0
1965 Jan 26 0940:26	Hydra-Iris	LRL SAP-2 (SAA)	-	T-AGM-8	USNS Wheeling	USN65A	LP2	-	-	27.4W 56.5S (+/- 0.0)	289.0
1965 Oct 28 1801:50	Hydra-Iris	LRL BOX-2	-	T-AGM-8	USNS Wheeling	HYD	LP1	-	-	120.0W 30.0N (+/- 0.5)	194.0
1966 May 31 1716	Hydra-Iris	LRL BOX-4	-	T-AGM-8	USNS Wheeling	HYDS	LP2	-	-	120.0W 0.0N (+/- 1.0)	188.0
1966 Oct 30 1745	Hydra-Iris	LRL BOX-5/FL-B	-	T-AGM-8	USNS Wheeling	HYD	LP2	-	-	120.0W 30.0N (+/- 0.5)	12.0
1968 Nov 3 1800	Hydra-Iris	LRL BOX-15	-	T-AGM-8	USNS Wheeling	HYD	LP4	-	-	120.0W 30.0N (+/- 0.5)	227.0
1973 Apr 26 0620:00	Hydra Sandhawk	LRL BOX-18	-	T-AGM-8	USNS Wheeling	HYD	LP5	-	-	120.0W 30.0N (+/- 0.5)	262.0

#### IV.1.4.14 USAS American Mariner



Credit: US Navy

Credit: US Navy

The TS American Mariner operated as a USCG training ship from 1941 to 1953. In 1953 it was transferred to the US Army and became the USAS American Mariner; it supported the US Army/ARPA DAMP reentry tracking project in 1959-63, during which it launched at least one Arcas rocket off the coast of Cape Canaveral. In 1963-4 it was transferred briefly to the USAF and then in Jan 1964 to the US Navy as USNS American Mariner. The ship was retired in 1966.

Rockets used: Arcas



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Launches: T-AGM-12

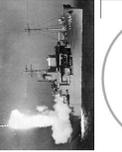
Date	Rocket	Flight	Mission	PlatCode	Platform	Site	LP	AscSite	AscLP	Pos	Apogee
1960 Apr 20	Arcas	-	-	T-AGM-12	USAS American Mariner	ETR	LP2	-	-	79.0W 28.5N (+/- 2.0)	40.0

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## **IV.1.5 US Missile Test Launch Vessels**

Updated: 2024 Nov 28 03:19:32

US Missile Test Launch Vessels

Ship	Transliteration	Image	CODE	Agency	Class	ClassID	AltID	Active
USS Midway	USS Midway		CV-41	USNVA	Midway	CV-41	-	1947 - -
USS Hazelwood	USS Hazelwood		DD-531	USN	Fletcher	DD-531	-	1958 - -
USS Kyes	USS Kyes		DD-787	USN	Gearing	DD-787	-	1956 - -
USS Shelton	USS Shelton		DD-790	USN	Gearing	DD-790	-	1956 - -
USS Warrington	USS Warrington		DD-843	USN	Gearing	DD-843	-	1958 - -
USNS Observation Island	USNS Observation Island		EAG-154	USN	-	EAG-154	-	1958 - 2014
Unknown US Terrier missile ship	Unknown US Terrier missile ship		SHIP-US	USN	-	-	-	1965 - 1965
US Army Mobile Launch Platform	US Army Mobile Launch Platform		MLP	USA	-	-	-	2003 - -

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### IV.1.5.1 USS Midway



Credit: US Navy

Midway was built in 1942 and retired in 1992. A V-2 was launched from its deck in Sep 1947.

Rockets used: V-2

Updated: 2024 Nov 28 03:19:32

**Launches: CV-41**

Date	Rocket	Flight	Mission	Platform	Site	LP	AscSite	AsclP	Pos	Apogee
1947 Sep 6 1553	V-2	Operation Sandy	-	CV-41	USS Midway	SANDY	-	-	61.5W 29.1N (+/- 1.0)	1.0

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## IV.1.5.2 USS Hazelwood



Credit: US Navy

Rockets used: Pogo Hi

Updated: 2024 Nov 28 03:19:32

**Launches: DD-531**

Date	Rocket	Flight	Mission	PlatCode	Platform	Site	LP	AscSite	AscLP	Pos	Apogee
1958?	Pogo Hi	POGO	-	DD-531	USS Hazelwood	CCOD	-	-	-	69.5W 40.5N (+/- 5.0)	10.0
1958?	Pogo Hi	POGO	-	DD-531	USS Hazelwood	CCOD	-	-	-	69.5W 40.5N (+/- 5.0)	10.0



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### IV.1.5.3 USS Kyes



Credit: US Navy

Rockets used: Loki Dart

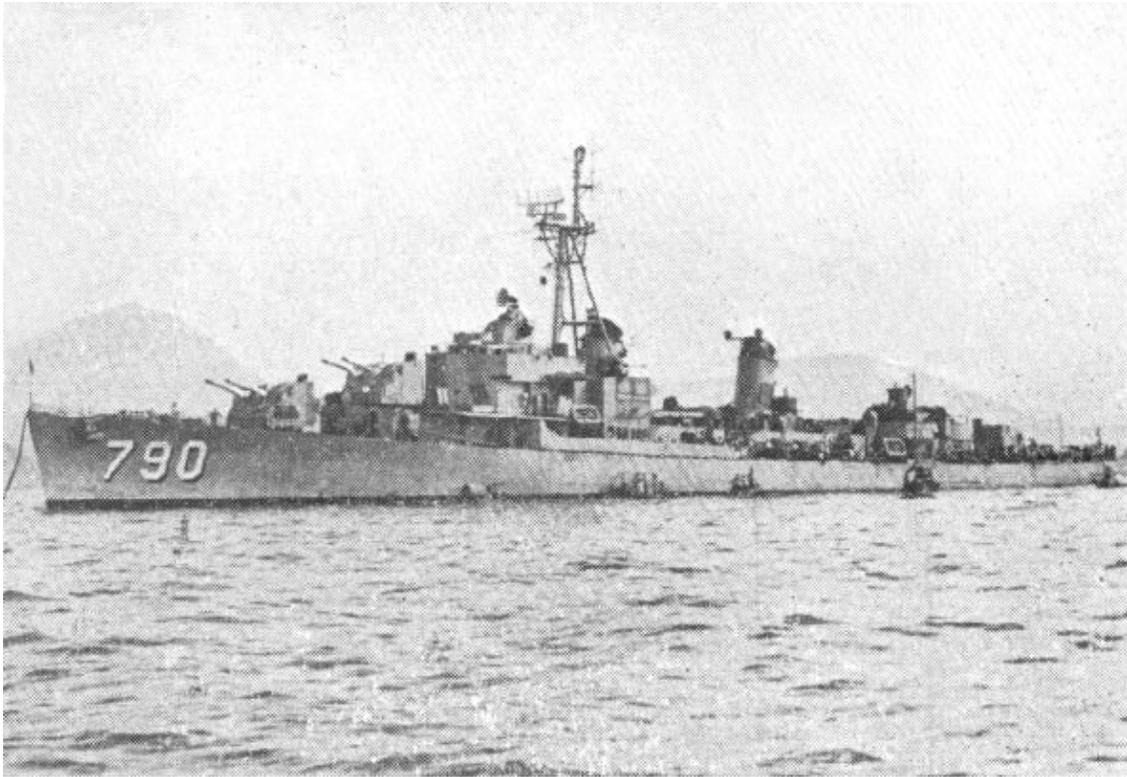
Updated: 2024 Nov 28 03:19:32

Launches: DD-787

Date	Rocket	Flight	Mission	PlatCode	Platform	Site	LP	AscSite	AscLP	Pos	Apogee
1956 Apr	Loki Dart	-	-	DD-787	USS Kyes	BIK	-	-	-	165.3E 11.6N (+/- 0.0)	31.0
1956 May	Loki Dart	-	-	DD-787	USS Kyes	BIK	-	-	-	165.3E 11.6N (+/- 0.0)	31.0
1956 Jun	Loki Dart	-	-	DD-787	USS Kyes	BIK	-	-	-	165.3E 11.6N (+/- 0.0)	30.0
1956 Jul	Loki Dart	-	-	DD-787	USS Kyes	BIK	-	-	-	165.3E 11.6N (+/- 0.0)	30.0

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#### IV.1.5.4 USS Shelton



Credit: US Navy

Rockets used: Loki Dart

Updated: 2024 Nov 28 03:19:32

Launches: DD-790

Date	Rocket	Flight	Mission	Platform	Site	LP	AscSite	AscLP	Pos	Apogee
1956 Apr	Loki Dart	-	-	DD-790	USS Shelton	BIK	-	-	165.3E 11.6N (+/- 0.0)	31.0
1956 May 28 0616	Loki Dart	-	ZUNI	DD-790	USS Shelton	ENW	-	-	162.2E 11.5N (+/- 0.0)	31.0
1956 Jun 11	Loki Dart	-	FLATHEAD	DD-790	USS Shelton	ENW	-	-	162.2E 11.5N (+/- 0.0)	30.0
1956 Jun 12	Loki Dart	-	FLATHEAD	DD-790	USS Shelton	ENW	-	-	162.2E 11.5N (+/- 0.0)	30.0
1956 Jun 19	Loki Dart	-	INCA	DD-790	USS Shelton	ENW	-	-	162.2E 11.5N (+/- 0.0)	30.0
1956 Jun 22	Loki Dart	-	INCA	DD-790	USS Shelton	ENW	-	-	162.2E 11.5N (+/- 0.0)	30.0
1956 Jul 15	Loki Dart	-	TEWA	DD-790	USS Shelton	ENW	-	-	162.2E 11.5N (+/- 0.0)	30.0
1956 Jul 21	Loki Dart	-	TEWA	DD-790	USS Shelton	ENW	-	-	162.2E 11.5N (+/- 0.0)	30.0

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### IV.1.5.5 USS Warrington



Credit: US Navy

Rockets used: Loki Dart

Updated: 2024 Nov 28 03:19:32

**Cruises: DD-843**

LC\_Code    Active    Region    Cruise    CruiseMap

USN58A    1958 Aug 1 - 1958 Sep 15    Atlantic Ocean    USS Warrington, TF88 Argus cruise from Virginia to S Atlantic    -

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Updated: 2024 Nov 28 03:19:32

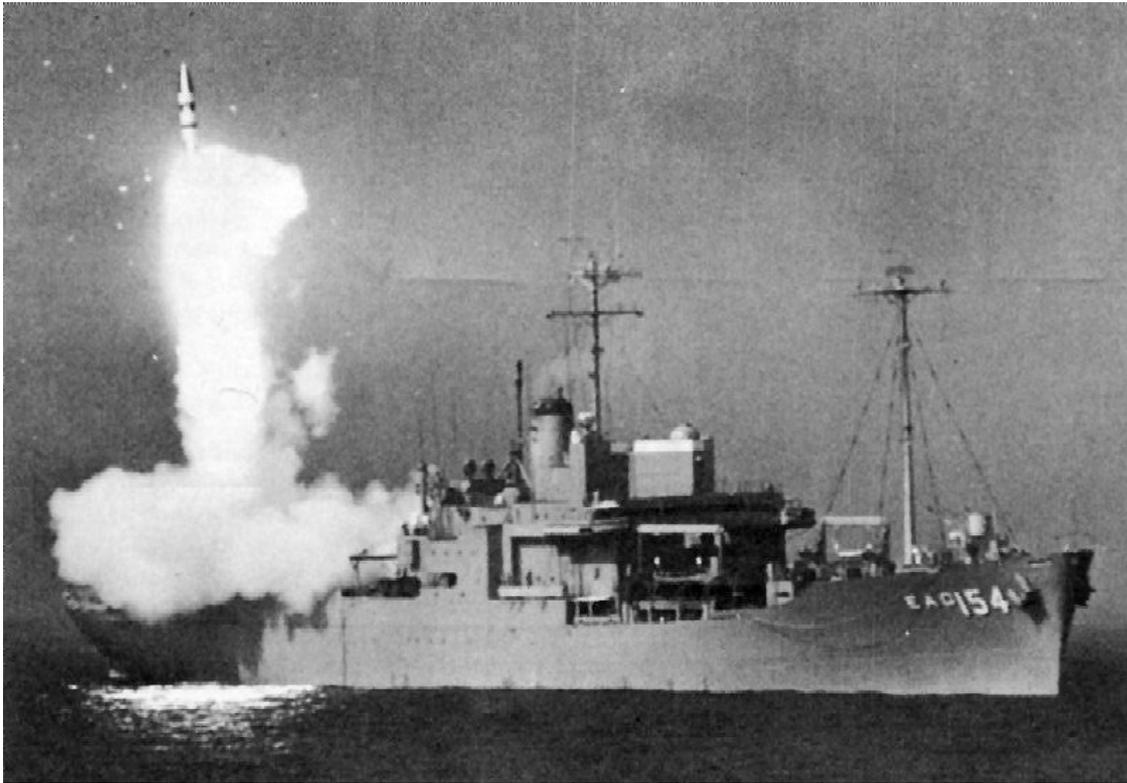
Launches: DD-843

Date	Rocket	Flight	Mission	PlatCode	Platform	Site	LP	AscSite	AsclP	Pos	Apogee
1958 Aug	Loki Dart	Argus training	-	DD-843	USS Warrington	USN68A	ULP1	-	-	-	70.0
1958 Aug	Loki Dart	Argus training	-	DD-843	USS Warrington	USN68A	ULP1	-	-	-	70.0
1958 Aug	Loki Dart	Argus training	-	DD-843	USS Warrington	USN68A	ULP1	-	-	-	70.0
1958 Aug	Loki Dart	Argus training	-	DD-843	USS Warrington	USN68A	ULP1	-	-	-	70.0
1958 Aug	Loki Dart	Argus training	-	DD-843	USS Warrington	USN68A	ULP1	-	-	-	70.0
1958 Aug	Loki Dart	Argus training	-	DD-843	USS Warrington	USN68A	ULP1	-	-	-	70.0
1958 Aug	Loki Dart	Argus training	-	DD-843	USS Warrington	USN68A	ULP1	-	-	-	70.0
1958 Aug	Loki Dart	Argus training	-	DD-843	USS Warrington	USN68A	ULP1	-	-	-	70.0
1958 Aug	Loki Dart	Argus training	-	DD-843	USS Warrington	USN68A	ULP1	-	-	-	70.0
1958 Aug 12	Loki Dart	Argus training	-	DD-843	USS Warrington	USN68A	ULP1	-	-	-	70.0
1958 Aug 22	Loki Dart	Argus training	-	DD-843	USS Warrington	USN68A	ULP1	-	-	-	70.0



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#### IV.1.5.6 USNS Observation Island



Credit: US Navy

The Empire State Mariner was built in 1953 for United States Lines and the US Maritime Commission. It was transferred to the USN in 1956 and redesignated EAG-154 (Experimental Miscellaneous Auxiliary) Observation Island. It was redesignated AG-154 in Apr 1968, placed in reserve 1972-79 and then used by Military Sealift Command as the missile range instrumentation ship USNS Observation Island, designated T-AGM-23. It was retired in 2014.

Rockets used: Polaris AX,Polaris A1,Polaris A2,Polaris A3,Poseidon C3

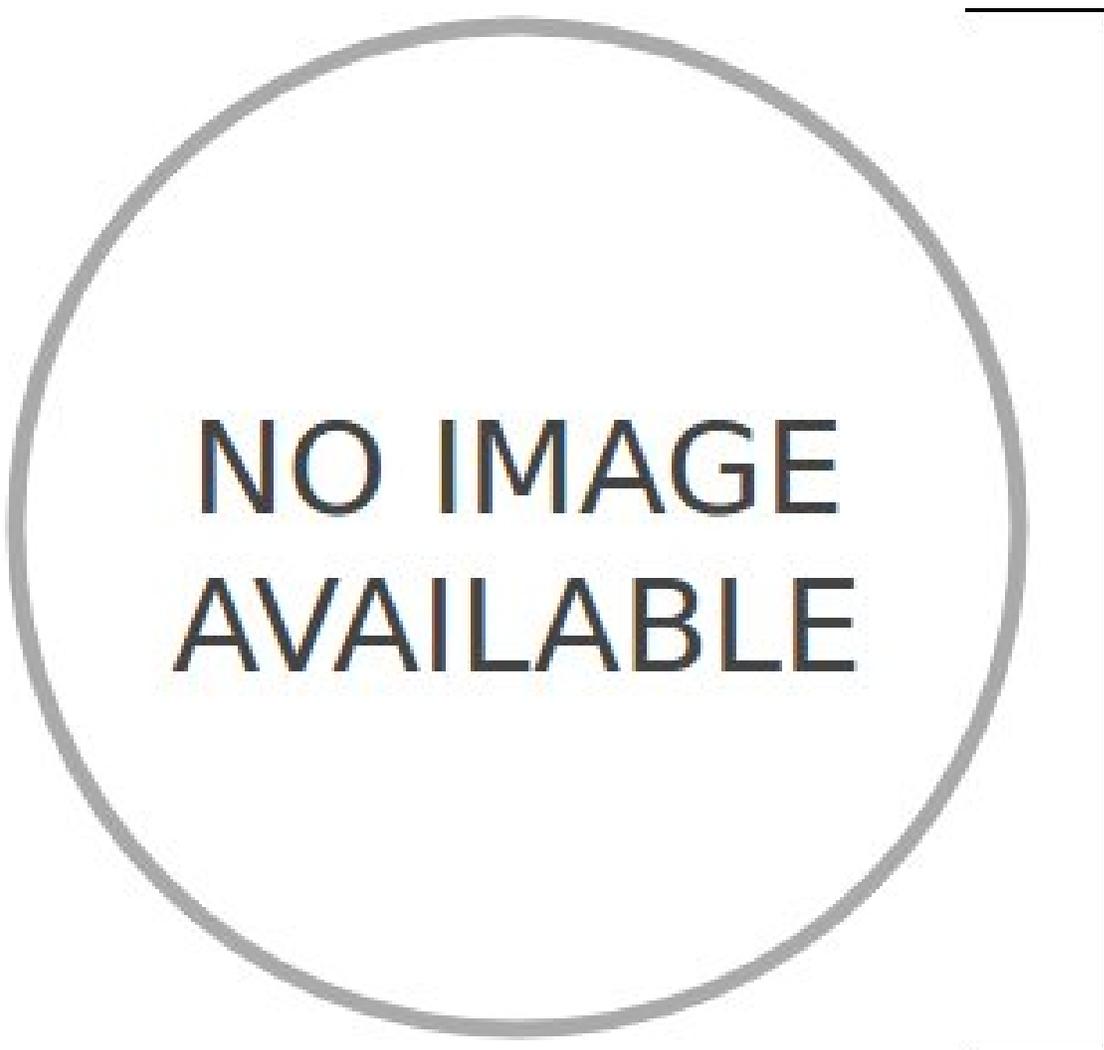
Updated: 2024 Nov 28 03:19:32

Launches: EAG-154

Date	Rocket	Flight	Mission	Platform	Site	LP	AscSite	AsclP	Pos	Apogee
1959 Aug 27 1652	Polaris AX	-	-	EAG-154	USNS Observation Island	ETR	SLBM	-	79.0W 28.5N (+/- 2.0)	500.0
1960 Mar 30 0103	Polaris A1	Integrated test	-	EAG-154	USNS Observation Island	ETR	SLBM	-	79.0W 28.5N (+/- 2.0)	300.0
1960 Apr 18	Polaris A1	-	-	EAG-154	USNS Observation Island	ETR	SLBM	-	79.0W 28.5N (+/- 2.0)	50.0
1960 May 23 2139	Polaris A1	-	-	EAG-154	USNS Observation Island	ETR	SLBM	-	79.0W 28.5N (+/- 2.0)	500.0
1960 Jun 23 0222	Polaris A1	-	-	EAG-154	USNS Observation Island	ETR	SLBM	-	79.0W 28.5N (+/- 2.0)	500.0
1960 Jul 7	Polaris A1	-	-	EAG-154	USNS Observation Island	ETR	SLBM	-	79.0W 28.5N (+/- 2.0)	0.0
1961 Mar 1 1819	Polaris A2	-	-	EAG-154	USNS Observation Island	ETR	SLBM	-	79.0W 28.5N (+/- 2.0)	1000.0
1961 Mar 9	Polaris A2	-	-	EAG-154	USNS Observation Island	ETR	SLBM	-	79.0W 28.5N (+/- 2.0)	1000.0
1961 May 25 1953	Polaris A2	-	-	EAG-154	USNS Observation Island	ETR	SLBM	-	79.0W 28.5N (+/- 2.0)	0.0
1961 Jun 26 1842	Polaris A2	-	-	EAG-154	USNS Observation Island	ETR	SLBM	-	79.0W 28.5N (+/- 2.0)	500.0
1961 Aug 18	Polaris A2	-	-	EAG-154	USNS Observation Island	ETR	SLBM	-	79.0W 28.5N (+/- 2.0)	2.0
1961 Oct 4 1522	Polaris A2	(A2X-157)	-	EAG-154	USNS Observation Island	ETR	SLBM	-	79.0W 28.5N (+/- 2.0)	1000.0
1962 Sep 14 0809:06	Polaris A1	-	-	EAG-154	USNS Observation Island	ETR	SLBM	-	79.0W 28.5N (+/- 2.0)	500.0
1962 Sep 15 2037:10	Polaris A1	-	-	EAG-154	USNS Observation Island	ETR	SLBM	-	79.0W 28.5N (+/- 2.0)	500.0
1962 Oct 14	Polaris A1	-	-	EAG-154	USNS Observation Island	ETR	SLBM	-	79.0W 28.5N (+/- 2.0)	10.0
1963 Apr 10 2033:07	Polaris A3	-	-	EAG-154	USNS Observation Island	ETR	SLBM	-	79.0W 28.5N (+/- 2.0)	1.0
1963 Apr 26 1831:23	Polaris A3	-	-	EAG-154	USNS Observation Island	ETR	SLBM	-	79.0W 28.5N (+/- 2.0)	80.0
1963 Jun 17 1614:02	Polaris A3	-	-	EAG-154	USNS Observation Island	ETR	SLBM	-	79.0W 28.5N (+/- 2.0)	1000.0
1963 Jun 21 1544:03	Polaris A3	-	-	EAG-154	USNS Observation Island	ETR	SLBM	-	79.0W 28.5N (+/- 2.0)	1000.0
1963 Sep 27 0325:00	Polaris A3	Steam eject, PX-2	-	EAG-154	USNS Observation Island	ETR	SLBM	-	79.0W 28.5N (+/- 2.0)	1000.0
1963 Oct 4 0518:07	Polaris A3	PX-2	-	EAG-154	USNS Observation Island	ETR	SLBM	-	79.0W 28.5N (+/- 2.0)	1000.0
1963 Nov 27 0610:59	Polaris A3	PX-2, PY-2	-	EAG-154	USNS Observation Island	ETR	SLBM	-	79.0W 28.5N (+/- 2.0)	40.0
1963 Dec 11 0100:06	Polaris A3	PX-2, PY-2	-	EAG-154	USNS Observation Island	ETR	SLBM	-	79.0W 28.5N (+/- 2.0)	10.0
1964 Jan 20 1702:01	Polaris A3	-	-	EAG-154	USNS Observation Island	ETR	SLBM	-	79.0W 28.5N (+/- 2.0)	1000.0
1964 Apr 1	Polaris A3	PX-2	-	EAG-154	USNS Observation Island	ETR	LP2	-	169.5W 16.7N (+/- 0.0)	1000.0
1964 Apr 8	Polaris A3	PX-2	-	EAG-154	USNS Observation Island	ETR	LP2	-	169.5W 16.7N (+/- 0.0)	10.0
1964 May 12	Polaris A3	PY-2	-	EAG-154	USNS Observation Island	ETR	LP2	-	169.5W 16.7N (+/- 0.0)	1000.0
1964 Nov 20	Polaris A3	PX-2	-	EAG-154	USNS Observation Island	ETR	LP2	-	169.5W 16.7N (+/- 0.0)	1000.0
1964 Nov 25	Polaris A3	PX-2	-	EAG-154	USNS Observation Island	ETR	LP2	-	169.5W 16.7N (+/- 0.0)	1000.0
1965 Sep 22	Polaris A3	ISEP 1	Mk 2 RV	EAG-154	USNS Observation Island	ETR	LP2	-	169.5W 16.7N (+/- 0.0)	500.0
1967	Polaris A1	ISEP 2	Mk 2 RV	EAG-154	USNS Observation Island	ETR	LP2	-	169.5W 16.7N (+/- 0.0)	500.0
1967	Polaris A1	ISEP 3	Mk 2 RV	EAG-154	USNS Observation Island	ETR	LP2	-	169.5W 16.7N (+/- 0.0)	500.0
1967 May 17	Polaris A3	USM Mk 2 Mod 2 RV x 2	-	EAG-154	USNS Observation Island	ETR	LP2	-	169.5W 16.7N (+/- 0.0)	500.0
1967 Jun 21	Polaris A3	Antelope 5	-	EAG-154	USNS Observation Island	ETR	LP2	-	169.5W 16.7N (+/- 0.0)	500.0
1967 Jun 21	Polaris A3	Antelope 6	-	EAG-154	USNS Observation Island	ETR	LP2	-	169.5W 16.7N (+/- 0.0)	500.0
1967 Nov 29	Polaris A3	USM Mk 2 Mod 2 RV x 2	-	EAG-154	USNS Observation Island	ETR	LP2	-	169.5W 16.7N (+/- 0.0)	500.0
1967 Dec 6	Polaris A3	Antelope 10	-	EAG-154	USNS Observation Island	ETR	LP2	-	169.5W 16.7N (+/- 0.0)	500.0
1968	Polaris A1	ISEP 6	Mk 2 RV	EAG-154	USNS Observation Island	ETR	LP2	-	169.5W 16.7N (+/- 0.0)	500.0
1968 Mar 16	Polaris A3	USM Mk 2 Mod 2 RV x 2	Mk 2 Mod 2 RVs+Decoys	EAG-154	USNS Observation Island	ETR	LP2	-	169.5W 16.7N (+/- 0.0)	500.0
1968 Apr 4	Polaris A3	USM Mk 2 Mod 2 RV x 2	-	EAG-154	USNS Observation Island	ETR	LP2	-	169.5W 16.7N (+/- 0.0)	500.0
1968 Apr 11	Polaris A3	USM Mk 2 Mod 2 RV x 2	-	EAG-154	USNS Observation Island	ETR	LP2	-	169.5W 16.7N (+/- 0.0)	500.0
1968 Apr 19	Polaris A3	USM Mk 2 Mod 2 RV x 2	-	EAG-154	USNS Observation Island	ETR	LP2	-	169.5W 16.7N (+/- 0.0)	500.0
1968 May?	Polaris A1	ISEP 4	Mk 2 RV	EAG-154	USNS Observation Island	ETR	LP2	-	169.5W 16.7N (+/- 0.0)	500.0
1968 May?	Polaris A1	ISEP 5	Mk 2 RV	EAG-154	USNS Observation Island	ETR	LP2	-	169.5W 16.7N (+/- 0.0)	100.0
1969 Dec 16 1725	Poseidon C3	-	-	EAG-154	USNS Observation Island	ETR	SLBM	-	79.0W 28.5N (+/- 2.0)	500.0
1970 Feb 4 2038	Poseidon C3	-	-	EAG-154	USNS Observation Island	ETR	SLBM	-	79.0W 28.5N (+/- 2.0)	100.0
1970 Mar 24 1917	Poseidon C3	-	-	EAG-154	USNS Observation Island	ETR	SLBM	-	79.0W 28.5N (+/- 2.0)	500.0
1971 Apr 15	Polaris A2	Safeguard M1-7	-	EAG-154	USNS Observation Island	MID	LP4	-	177.5W 24.8N (+/- 0.2)	1000.0
1971 May 7	Polaris A2	Safeguard M1-8	-	EAG-154	USNS Observation Island	MID	LP4	-	177.5W 24.8N (+/- 0.2)	1000.0
1971 Nov 10	Polaris A2	Safeguard M2-5	-	EAG-154	USNS Observation Island	MID	LP4	-	177.5W 24.8N (+/- 0.2)	1000.0
1971 Nov 12	Polaris A2	Safeguard M2-8	-	EAG-154	USNS Observation Island	MID	LP4	-	177.5W 24.8N (+/- 0.2)	1000.0
1971 Dec 8	Polaris A3	Safeguard M2-3	-	EAG-154	USNS Observation Island	MID	LP4	-	177.5W 24.8N (+/- 0.2)	1000.0

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#### IV.1.5.7 Unknown US Terrier missile ship



**NO IMAGE  
AVAILABLE**

The DAT-371 experiment of Project Defender used a Redstone missile as the target for a Terrier missile launched from an unknown US ship off San Nicolas Island in Dec 1965.

Rockets used: Terrier

Updated: 2024 Nov 28 03:19:32

Launches: SHIP-US

Date	Rocket	Flight	Mission	PlatCode	Platform	Site	LP	AscSite	AscLP	Pos	Apogee
1965 Dec 1 0428:20?	Terrier	DAT-371 Intercept	-	SHIP-US	Unknown US Terrier missile ship	SMI	-	-	-	119.5W 33.2N (+/- 0.0)	8.0

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### IV.1.5.8 US Army Mobile Launch Platform



Credit: US Navy

The Mobile Launch Platform (MLP) was converted from the LPH-10 USS Tripoli in 2002. It was leased from USN by US Army SMDC for the MDA.

Rockets used: Lance, Scud

Updated: 2024 Nov 28 03:19:32

Launches: MLP

Date	Rocket	Flight	Mission	PlatCode	Platform	Site	LP	AscSite	AscLP	Pos	Apogee
2003 Q1	Lance	MLP Test (FY03)	-	MLP	US Army Mobile Launch Platform	PM	-	-	-	119.1W 34.1N (+/- 0.0)	40.0
2003 Q1	Lance	MLP Test (FY03)	-	MLP	US Army Mobile Launch Platform	PM	-	-	-	119.1W 34.1N (+/- 0.0)	40.0
2004 Jul 29 1722?	Scud	Arrow USFT-1 Target	CARAVAN-1 Target	MLP	US Army Mobile Launch Platform	WTR	LP1	-	-	119.0W 33.0N (+/- 3.0)	80.0
2007 Jan 27 0518?	Scud	FMA 7 Target	-	MLP	US Army Mobile Launch Platform	KAU	-	-	-	159.8W 22.1N (+/- 0.0)	100.0
2007 Apr 6 0642	Scud	FMA 8 Target	-	MLP	US Army Mobile Launch Platform	KAU	-	-	-	159.8W 22.1N (+/- 0.0)	100.0
2007 Oct 27 0715	Scud	FMA 9 Target	-	MLP	US Army Mobile Launch Platform	KAU	-	-	-	159.8W 22.1N (+/- 0.0)	100.0
2008 Jun 5 1813	Scud	FMA 10 Target	-	MLP	US Army Mobile Launch Platform	KAU	-	-	-	159.8W 22.1N (+/- 0.0)	150.0
2008 Sep 18 0205	Scud	FMA 11 Target	-	MLP	US Army Mobile Launch Platform	KAU	-	-	-	159.8W 22.1N (+/- 0.0)	80.0
2009 Mar 18 0025?	Scud	FMA 12 Target?	(Sep Target)?	MLP	US Army Mobile Launch Platform	KAU	-	-	-	159.8W 22.1N (+/- 0.0)	100.0
2010 Feb 12 0444	Scud	FMA 13	-	MLP	US Army Mobile Launch Platform	WTR	W1	-	-	119.0W 33.0N (+/- 3.0)	100.0
2010 Jun 29 0732	Scud	FMA 14	-	MLP	US Army Mobile Launch Platform	KAU	-	-	-	159.8W 22.1N (+/- 0.0)	80.0
2011 Feb 23 0630	Scud	FMA 16	CARAVAN-2 Target	MLP	US Army Mobile Launch Platform	PM	-	-	-	119.1W 34.1N (+/- 0.0)	40.0
2011 Oct 5 0556	Scud	FMA 17	-	MLP	US Army Mobile Launch Platform	KAU	-	-	-	159.8W 22.1N (+/- 0.0)	100.0
2012 Oct 25?	Scud	FMA 18	-	MLP	US Army Mobile Launch Platform	KWR	BDA-NE	-	-	167.7E 9.0N (+/- 0.0)	150.0

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## **IV.1.6 US Aegis Missile Ships**

Updated: 2024 Nov 28 03:19:32

US Aegis Missile Ships

Ship	Transliteration	Image	CODE	Agency	Class	ClassID	AltID	Active
USS Richmond K. Turner	USS Richmond K. Turner		CG-20	USN	Leahy	CG-20	-	1975 - 1995
USS Jouett	USS Jouett		CG-29	USN	Belknap	CG-29	-	1962 - 2007
USS Shiloh	USS Shiloh		CG-67	USN	Ticonderoga	CG-67	-	1987 - -
USS Lake Erie USS Arleigh Burke	USS Lake Erie USS Arleigh Burke		CG-70 DDG-51	USN USNROT	Ticonderoga Arleigh Burke	CG-70 DDG-51	-	1991 - - 1991 - -
USS John Paul Jones	USS John Paul Jones		DDG-53	USNPH	Arleigh Burke	DDG-53	-	1991 - -
USS Paul Hamilton	USS Paul Hamilton		DDG-60	USNSD	Arleigh Burke	DDG-60	-	1993 - -
USS Fitzgerald USS Carney	USS Fitzgerald USS Carney		DDG-62 DDG-64	USNSD USNMP	Arleigh Burke Arleigh Burke	DDG-62 DDG-64	-	1994 - - 1994 - -
USS Benfold	USS Benfold		DDG-65	USNYOK	Arleigh Burke	DDG-65	-	1994 - -
USS The Sullivans	USS The Sullivans		DDG-68	USNMP	Arleigh Burke	DDG-68	-	1995 - -
USS Hopper	USS Hopper		DDG-70	USNPH	Arleigh Burke	DDG-70	-	1996 - -



US Aegis Missile Ships

Ship	Transliteration	Image	CODE	Agency	Class	ClassID	AltID	Active
USS Ross	USS Ross		DDG-71	USNVA	Arleigh Burke	DDG-71	-	1996 --
USS Decatur	USS Decatur		DDG-73	USNSD	Arleigh Burke	DDG-73	-	1996 --
USS McFaul	USS McFaul		DDG-74	USNVA	Arleigh Burke	DDG-74	-	1997 --
USS Donald Cook	USS Donald Cook		DDG-75	USNROT	Arleigh Burke	DDG-75	-	1997 --
USS O'Kane	USS O'Kane		DDG-77	USMPH	Arleigh Burke	DDG-77	-	1997 --
USS Roosevelt	USS Roosevelt	-	DDG-80	USNMYP	Arleigh Burke	DDG-80	-	1999 --
USS McCampbell	USS McCampbell	-	DDG-85	USNEV	Arleigh Burke	DDG-85	-	1999 --
USS Preble	USS Preble	-	DDG-88	USNEV	Arleigh Burke	DDG-88	-	1999 --
USS John Finn	USS John Finn		DDG-113	USNSD	Arleigh Burke	DDG-113	-	2015 --
USS Ralph Johnson	USS Ralph Johnson	-	DDG-114	USNSD	Arleigh Burke	DDG-114	-	2015 --
USS Paul Ignatius	USS Paul Ignatius	-	DDG-117	USNSD	Arleigh Burke	DDG-117	-	2017 --
USS Daniel Inouye	USS Daniel Inouye	-	DDG-118	USNSD	Arleigh Burke	DDG-117	-	2023 --
USS Carl Levin	USS Carl Levin	-	DDG-120	USNSD	Arleigh Burke	DDG-117	-	2023 --
JS Kongo	JS Kongo		DDG-173	JMSDSA	Kongo	DDG-173	-	1991 --
JS Kirishima	JS Kirishima		DDG-174	JMSDYO	Kongo	DDG-174	-	1993 --

US Aegis Missile Ships

Ship	Transliteration	Image	CODE	Agency	Class	ClassID	AltID	Active
JS Myoko	JS Myoko		DDG-175	JMSDMA	Kongo	DDG-175	-	1994 --
JS Chokai	JS Chokai		DDG-176	JMSDSA	Kongo	DDG-176	-	1996 --
JS Atago	JS Atago		DDG-177	JMSDMA	Kongo	DDG-177	-	2005 --
JS Ashigara	JS Ashigara	-	DDG-178	JMSDMA	Ashigara	DDG-178	-	2005 --
JS Maya	JS Maya	-	DDG-179	JMSDMA	Ashigara	DDG-179	-	2019 --
JS Haguro	JS Haguro	-	DDG-180	JMSDMA	Ashigara	DDG-180	-	2019 --
Unknown Aegis ship	Unknown Aegis ship	-	DDG-UNK	USN	Arleigh Burke	DDG-UNK	-	-- --

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### IV.1.6.1 USS Richmond K. Turner



Credit: US Navy photo

The Richmond K. Turner was used in 1992-95 to launch the Terrier/LEAP tests, which were precursors to the SM-3 AEGIS.

Rockets used: Terrier LEAP

Updated: 2024 Nov 28 03:19:32

Launches: CG-20

Date	Rocket	Flight	Mission	Platform	Site	LP	AscSite	AscLP	Pos	Apogee
1992 Sep 24	Terrier LEAP	FTV-1 (Dummy LEAP)	-	CG-20	PM	-	-	-	119.1W 34.1N (+/- 0.0)	30.0
1995 Mar 4 1020	Terrier LEAP	FTV-3	-	CG-20	AONC	-	-	-	73.7W 33.8N (+/- 0.0)	30.0
1995 Mar 28	Terrier LEAP	FTV-4	-	CG-20	AONC	-	-	-	73.7W 33.8N (+/- 0.0)	30.0

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### IV.1.6.2 USS Jouett



Credit: US Navy photo

The Jouett was used in 1992 to launch a Terrier/LEAP test. Designation DLG-29 from 1964 to 1975; then CG-29.

Rockets used: Terrier LEAP

Updated: 2024 Nov 28 03:19:32

**Launches: CG-29**

Date	Rocket	Flight	Mission	Platform	Site	LP	AscSite	AscLP	Pos	Apogee
1993 Sep 27	Terrier LEAP	FTV-2 LEAP Mockup	-	CG-29	USS Jouett PM	-	-	-	119.1W 34.1N (+/- 0.0)	30.0

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### IV.1.6.3 USS Shiloh



Credit: US Navy photo

The Shiloh was used to launch Aegis SM-3 missiles.

Rockets used: SM-3

Updated: 2024 Nov 28 03:19:32

Launches: CG-67

Date	Rocket	Flight	Mission	Platform	Site	LP	AscSite	AscLP	Pos	Apogee	
1999 Sep 24	SM-3	Stellar Phoenix	-	CG-67	USC Shiloh	KAU	POA	-	159.8W 22.1N	(+/- 0.0)	107.0
2006 Jun 22 2204?	SM-3	Stellar Predator	-	CG-67	USC Shiloh	KAU	POA	-	159.8W 22.1N	(+/- 0.0)	150.0



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#### IV.1.6.4 USS Lake Erie



Credit: US Navy photo

Rockets used: SM-3,SM-2-IV,SM-2MR,SM-3-IB

Updated: 2024 Nov 28 03:19:32

Launches: CG-70

Date	Rocket	Flight	Mission	PlatCode	Platform	Site	LP	AscSite	AsclP	Pos	Apogee
2000 Jul 14	SM-3	Stellar Archer	-	CG-70	USS Lake Erie	KAU	POA	-	-	159.8W 22.1N (+/- 0.0)	100.0
2001 Jan 26 0403	SM-3	Stellar Gemini	-	CG-70	USS Lake Erie	KAU	POA	-	-	159.8W 22.1N (+/- 0.0)	100.0
2002 Jan 26 0208	SM-3	Stellar Eagle	-	CG-70	USS Lake Erie	KAU	POA	-	-	159.8W 22.1N (+/- 0.0)	160.0
2002 Jun 14 0129	SM-3	Stellar Impact	-	CG-70	USS Lake Erie	KAU	POA	-	-	159.8W 22.1N (+/- 0.0)	100.0
2002 Nov 22 0032	SM-3	Stellar Viper (LEAP)	-	CG-70	USS Lake Erie	KAU	POA	-	-	159.8W 22.1N (+/- 0.0)	152.0
2003 Jun 18 2317	SM-3	Stellar Hammer	-	CG-70	USS Lake Erie	KAU	POA	-	-	159.8W 22.1N (+/- 0.0)	150.0
2003 Dec 11 1812	SM-3	Stellar Defender	-	CG-70	USS Lake Erie	KAU	POA	-	-	159.8W 22.1N (+/- 0.0)	137.0
2005 Feb 24 2104	SM-3	Stellar Dragon	-	CG-70	USS Lake Erie	KAU	POA	-	-	159.8W 22.1N (+/- 0.0)	150.0
2005 Nov 17 1816	SM-3	Stellar Valkyrie	-	CG-70	USS Lake Erie	KAU	POA	-	-	159.8W 22.1N (+/- 0.0)	150.0
2006 Mar 8 2045	SM-3	Stellar Tsuru	-	CG-70	USS Lake Erie	KAU	POA2	-	-	159.8W 22.1N (+/- 0.0)	150.0
2006 May 24 2036	SM-2-IV	Pacific Phoenix	-	CG-70	USS Lake Erie	KAU	POA	-	-	159.8W 22.1N (+/- 0.0)	10.0
2007 Apr 26 2132	SM-3	Stellar Hunters	-	CG-70	USS Lake Erie	KAU	POA	-	-	159.8W 22.1N (+/- 0.0)	160.0
2007 Apr 26 2132	SM-2MR	-	-	CG-70	USS Lake Erie	KAU	POA	-	-	159.8W 22.1N (+/- 0.0)	10.0
2007 Aug 31	SM-3	-	[Details classified]	CG-70	USS Lake Erie	KAU	POA	-	-	159.8W 22.1N (+/- 0.0)	160.0
2007 Nov 7 0414	SM-3	Stellar Gryphon	-	CG-70	USS Lake Erie	KAU	POA	-	-	159.8W 22.1N (+/- 0.0)	160.0
2007 Nov 7 0414	SM-3	-	-	CG-70	USS Lake Erie	KAU	POA	-	-	159.8W 22.1N (+/- 0.0)	160.0
2008 Feb 21 0326	SM-3	USA 193 intercept	-	CG-70	USS Lake Erie	KAU	POA	-	-	159.8W 22.1N (+/- 0.0)	250.0
2008 Jun 5 1817	SM-2-IV	Stellar Scorpion	-	CG-70	USS Lake Erie	KAU	POA	-	-	159.8W 22.1N (+/- 0.0)	19.0
2008 Jun 5 1817	SM-2-IV	Stellar Scorpion	-	CG-70	USS Lake Erie	KAU	POA	-	-	159.8W 22.1N (+/- 0.0)	19.0
2011 Sep 1 1354	SM-3-IB	-	-	CG-70	USS Lake Erie	KAU	POA	-	-	159.8W 22.1N (+/- 0.0)	150.0
2012 May 10 0620?	SM-3-IB	Stellar Vengeance	-	CG-70	USS Lake Erie	KAU	POA	-	-	159.8W 22.1N (+/- 0.0)	100.0
2012 Jun 27 0920?	SM-3-IB	Stellar Minotaur	-	CG-70	USS Lake Erie	KAU	POA	-	-	159.8W 22.1N (+/- 0.0)	150.0
2013 Feb 13 0915?	SM-3	Stellar Eyes	-	CG-70	USS Lake Erie	KAU	POA	-	-	159.8W 22.1N (+/- 0.0)	150.0
2013 May 16 0330?	SM-3-IB	Stellar Hecate	-	CG-70	USS Lake Erie	KAU	POA3	-	-	159.8W 22.1N (+/- 0.0)	150.0
2013 Sep 19 0032?	SM-3-IB	Stellar Ninja	-	CG-70	USS Lake Erie	KAU	POA	-	-	159.8W 22.1N (+/- 0.0)	300.0
2013 Sep 19 0032?	SM-3-IB	Stellar Ninja	-	CG-70	USS Lake Erie	KAU	POA	-	-	159.8W 22.1N (+/- 0.0)	300.0
2013 Oct 4 0537?	SM-3-IB	Stellar Raven	-	CG-70	USS Lake Erie	KAU	POA	-	-	159.8W 22.1N (+/- 0.0)	200.0

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### **IV.1.6.5 USS Arleigh Burke**

Rockets used: SM-3

Updated: 2024 Nov 28 03:19:32

Launches: DDC-51

Date	Rocket	Flight	Mission	Platform	Site	LP	AscSite	AsCLP	Pos	Apogee
2024 Apr 13 2330?	SM-3	-	-	DDG-51	EMED	-	-	-	34.0E 32.0N (+/- 1.0)	100.0
2024 Apr 13 2330?	SM-3	-	-	DDG-51	EMED	-	-	-	34.0E 32.0N (+/- 1.0)	100.0
2024 Apr 13 2330?	SM-3	-	-	DDG-51	EMED	-	-	-	34.0E 32.0N (+/- 1.0)	100.0

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#### IV.1.6.6 USS John Paul Jones



Credit: US Navy photo

Rockets used: SM-6,SM-3-IB,SM-2MR,SM-2-IV,SM-3-IIA

Updated: 2024 Nov 28 03:19:32

Launches: DDG-53

Date	Rocket	Flight	Mission	Platform	Site	LP	AscSite	AscLP	Pos	Apogee
2014 Jun 18	SM-6	-	-	USG-53	SNI	-	-	-	119.5W 33.2N (+/- 0.0)	20.0
2014 Jun 19?	SM-6	-	-	USG-53	SNI	-	-	-	119.5W 33.2N (+/- 0.0)	20.0
2014 Jun 20?	SM-6	-	-	USG-53	SNI	-	-	-	119.5W 33.2N (+/- 0.0)	20.0
2014 Jun 20?	SM-6	-	-	USG-53	SNI	-	-	-	119.5W 33.2N (+/- 0.0)	20.0
2014 Nov 6 2206?	SM-3-IB	Stellar Wyvern	-	USG-53	KAU	POA	-	-	159.8W 22.1N (+/- 0.0)	150.0
2014 Nov 6 2206?	SM-2MR	2-3A	-	USG-53	KAU	POA	-	-	159.8W 22.1N (+/- 0.0)	10.0
2014 Nov 6 2206?	SM-2MR	2-3A	-	USG-53	KAU	POA	-	-	159.8W 22.1N (+/- 0.0)	10.0
2015 Jul 29 0832?	SM-6	-	-	USG-53	KAU	POA	-	-	159.8W 22.1N (+/- 0.0)	20.0
2015 Jul 30 0617?	SM-2-IV	-	-	USG-53	KAU	POA	-	-	159.8W 22.1N (+/- 0.0)	20.0
2015 Aug 1 0032?	SM-2-IV	Cruise missile intercept	-	USG-53	KAU	POA	-	-	159.8W 22.1N (+/- 0.0)	10.0
2015 Aug 2 0147?	SM-6	Cruise missile intercept	-	USG-53	KAU	POA	-	-	159.8W 22.1N (+/- 0.0)	10.0
2015 Nov 1 0312?	SM-3-IB	eMRBM intercept	-	USG-53	WAKE	-	-	-	166.6E 19.3N (+/- 0.0)	10.0
2016 Jan	SM-6	-	-	USG-53	KAU	POA	-	-	159.8W 22.1N (+/- 0.0)	20.0
2016 Jan	SM-6	-	-	USG-53	KAU	POA	-	-	159.8W 22.1N (+/- 0.0)	20.0
2016 Jan	SM-6	-	-	USG-53	KAU	POA	-	-	159.8W 22.1N (+/- 0.0)	20.0
2016 Jan	SM-6	-	-	USG-53	KAU	POA	-	-	159.8W 22.1N (+/- 0.0)	20.0
2016 Jan	SM-6	-	-	USG-53	KAU	POA	-	-	159.8W 22.1N (+/- 0.0)	20.0
2016 Dec 15	SM-6	Stellar Crossbow	-	USG-53	KAU	POA	-	-	159.8W 22.1N (+/- 0.0)	20.0
2016 Dec 15	SM-6	Stellar Crossbow	-	USG-53	KAU	POA	-	-	159.8W 22.1N (+/- 0.0)	20.0
2017 Feb 4 0833?	SM-3-IIA	-	-	USG-53	KAU	POA	-	-	159.8W 22.1N (+/- 0.0)	150.0
2017 Jun 22 0523?	SM-3-IIA	-	-	USG-53	KAU	POA	-	-	159.8W 22.1N (+/- 0.0)	200.0
2017 Aug 29	SM-6	-	-	USG-53	KAU	POA	-	-	159.8W 22.1N (+/- 0.0)	20.0

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### IV.1.6.7 USS Paul Hamilton



Credit: US Navy photo

Rockets used: SM-3

Updated: 2024 Nov 28 03:19:32

Launches: DDG-60

Date	Rocket	Flight	Mission	PlatCode	Platform	Site	LP	AscSite	AscLP	Pos	Apogee
2008 Nov 1	SM-3	PacBlitz08	-	DDG-60	USS Paul Hamilton	KAU	POA	-	-	159.8W 22.1N (+/- 0.0)	150.0



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### IV.1.6.8 USS Fitzgerald



Credit: US Navy photo

Rockets used: SM-3

Updated: 2024 Nov 28 03:19:32

Launches: DDG-62

Date	Rocket	Flight	Mission	Platform	Site	LP	AscSite	AscLP	Pos	Apogee
2012 Oct 25?	SM-3	-	-	DDG-62	KMR	BOA	-	-	167.7E 9.0N (+/- 0.0)	150.0
2022 Aug 9	SM-3	Pacific Dragon 22	-	DDG-62	KAU	POA	-	-	159.8W 22.1N (+/- 0.0)	20.0

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## **IV.1.6.9 USS Carney**

Rockets used: SM-3

Updated: 2024 Nov 28 03:19:32

Launches: DDG-64

Date	Rocket	Flight	Mission	Platform	Site	LP	AscSite	AsclP	Pos	Apogee
2024 Apr 13 2330?	SM-3	-	-	DDG-64	EMED	-	-	-	34.0E 32.ON (+/- 1.0)	100.0
2024 Apr 13 2330?	SM-3	-	-	DDG-64	EMED	-	-	-	34.0E 32.ON (+/- 1.0)	100.0
2024 Apr 13 2330?	SM-3	-	-	DDG-64	EMED	-	-	-	34.0E 32.ON (+/- 1.0)	100.0

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#### IV.1.6.10 USS Benfold



Credit: US Navy photo

Rockets used: SM-2-IV

Updated: 2024 Nov 28 03:19:32

**Launches: DDC-65**

Date	Rocket	Flight	Mission	Platform	Site	LP	AscSite	AsclP	Pos	Apogee
2009 Mar 26 1920?	SM-2-IV	Stellar Daggers	-	DDG-65	USS Benfold	W1	-	-	119.0W 33.0N (+/- 3.0)	10.0

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### IV.1.6.11 USS The Sullivans



Credit: US Navy photo

Rockets used: SM-2-IV

Updated: 2024 Nov 28 03:19:32

Launches: DDG-68

Date	Rocket	Flight	Mission	PlatCode	Platform	Site	LP	AscSite	AsCLP	Pos	Apogee
2015 Oct 20	SM-2-IV	Aegis	-	DDG-68	USS The Sullivans	SUIST	D701	-	-	7.3W 57.3N (+/- 0.0)	10.0



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### IV.1.6.12 USS Hopper



Credit: US Navy photo

Rockets used: SM-3,SM-3-IB

Updated: 2024 Nov 28 03:19:32

Launches: DDG-70

Date	Rocket	Flight	Mission	PlatCode	Platform	Site	LP	AscSite	AsCLP	Pos	Apogee
2008 Nov 1	SM-3	PacBlitz08	-	DDG-70	USS Hopper	KAU	POA	-	-	159.8W 22.1N (+/- 0.0)	150.0
2009 Jul 31 0342	SM-3	Stellar Avenger	-	DDG-70	USS Hopper	KAU	POA	-	-	159.8W 22.1N (+/- 0.0)	160.0
2016 May 25	SM-3-IB	-	-	DDG-70	USS Hopper	KAU	POA	-	-	159.8W 22.1N (+/- 0.0)	100.0
2016 May 26	SM-3-IB	-	-	DDG-70	USS Hopper	KAU	POA	-	-	159.8W 22.1N (+/- 0.0)	100.0

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### IV.1.6.13 USS Ross



Credit: US Navy photo

Rockets used: SM-3

Updated: 2024 Nov 28 03:19:32

Launches: DDG-71

Date	Rocket	Flight	Mission	PlatCode	Platform	Site	LP	AscSite	AsclP	Pos	Apogee
2015 Oct 20	SM-3	-	-	DDG-71	USS Ross	SUIST	D701	-	-	7.3W 57.3N (+/- 0.0)	100.0

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#### IV.1.6.14 USS Decatur



Credit: US Navy photo

Rockets used: SM-3

Updated: 2024 Nov 28 03:19:32

Launches: DDG-73

Date	Rocket	Flight	Mission	Platform	Site	LP	AscSite	AsclP	Pos	Apogee
2007 Jun 23 0244	SM-3	Stellar Athena	-	USS Decatur	KAU	POA	-	-	159.8W 22.1N (+/- 0.0)	160.0
2013 Sep 10	SM-3	-	-	USS Decatur	KWR	BOA	-	-	167.7E 9.0N (+/- 0.0)	150.0

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### IV.1.6.15 USS McFaul



Credit: US Navy photo

Rockets used: SM-6

Updated: 2024 Nov 28 03:19:32

Launches: DDG-74

Date	Rocket	Flight	Mission	PlatCode	Platform	Site	LP	AscSite	AscLP	Pos	Apogee
2017 Oct 15	SM-6	-	-	DDG-74	USS McFaul	SUIST	D701	-	-	7.3W 57.3N (+/- 0.0)	20.0



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#### IV.1.6.16 USS Donald Cook



Credit: US Navy photo

Rockets used: SM-3-IB

Updated: 2024 Nov 28 03:19:32

Date	Rocket	Flight	Mission	PlatCode	Platform	Site	LP	AscSite	AsclP	Pos	Apogee
2017 Oct 15	SM-3-IB	Formidable Shield	-	DDG-75	USS Donald Cook	SUIST	D701	-	-	7.3W 57.3N (+/- 0.0)	100.0

**Launches: DDG-75**

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#### IV.1.6.17 USS O’Kane



Credit: US Navy photo

Rockets used: SM-3

Updated: 2024 Nov 28 03:19:32

**Launches: DDG-77**

Date	Rocket	Flight	Mission	PlatCode	Platform	Site	LP	AscSite	AscLP	Pos	Apogee
2011 Apr 15 0703	SM-3	Stellar Charon	-	DDG-77	USS 0'Kane	KAU	P0A4	-	-	159.8W 22.1N (+/- 0.0)	160.0

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#### IV.1.6.18 USS Roosevelt



Credit: US Navy photo

Rockets used: SM-3-IB

Updated: 2024 Nov 28 03:19:32

**Launches: DDC-80**

Date	Rocket	Flight	Mission	Platform	Site	LP	AscSite	AscLP	Pos	Apogee
2019 May 10	SM-3-IB	Formidable Shield 19E4	-	DDG-80	USS Roosevelt	SUIST D701	-	-	7.3W 57.3N (+/- 0.0)	150.0

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### **IV.1.6.19 USS McCampbell**

Rockets used: SM-3-IIA

Updated: 2024 Nov 28 03:19:32

Date	Rocket	Flight	Mission	PlatCode	Platform	Site	LP	AscSite	AsCLP	Pos	Apogee
2024 Feb 8	SM-3-IIA	Stellar Sisyphus	-	DDG-85	USS McCampbell	KAU	LP7	-	-	159.8W 22.1N (+/- 0.0)	150.0

**Launches: DDG-85**



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## **IV.1.6.20 USS Preble**

Rockets used: SM-6

Updated: 2024 Nov 28 03:19:32

**Launches: DDG-88**

Date	Rocket	Flight	Mission	PlatCode	Platform	Site	LP	AscSite	AsCLP	Pos	Apogee
2024 Mar 28	SM-6	Stellar Laelaps	-	DDG-88	USS Preble	KAU	POA	-	-	159.8W 22.1N (+/- 0.0)	20.0
2024 Mar 28	SM-6	Stellar Laelaps	-	DDG-88	USS Preble	KAU	POA	-	-	159.8W 22.1N (+/- 0.0)	20.0

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### IV.1.6.21 USS John Finn



Credit: US Navy photo

Rockets used: SM-3-IIA

Updated: 2024 Nov 28 03:19:32

**Launches: DDG-113**

Date	Rocket	Flight	Mission	PlatCode	Platform	Site	LP	AscSite	AsclP	Pos	Apogee
2018 Oct 26	SM-3-1IA	Stellar Alaris	-	DDG-113	USS John Finn	KAU	POA	-	-	159.8W 22.1N (+/- 0.0)	150.0
2020 Nov 17 0605?	SM-3-1IA	Stellar Lancer	-	DDG-113	USS John Finn	KAU	POA	-	-	159.8W 22.1N (+/- 0.0)	200.0

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## **IV.1.6.22 USS Ralph Johnson**

Rockets used: SM-6

Updated: 2024 Nov 28 03:19:32

Launches: DDG-114

Date	Rocket	Flight	Mission	PlatCode	Platform	Site	LP	AscSite	AscLP	Pos	Apogee
2021 Jul 24	SM-6	-	-	DDG-114	USS Ralph Johnson	KAU	POA	-	-	159.8W 22.1N (+/- 0.0)	20.0
2021 Jul 24	SM-6	-	-	DDG-114	USS Ralph Johnson	KAU	POA	-	-	159.8W 22.1N (+/- 0.0)	20.0
2021 Jul 24	SM-6	-	-	DDG-114	USS Ralph Johnson	KAU	POA	-	-	159.8W 22.1N (+/- 0.0)	20.0
2021 Jul 24	SM-6	-	-	DDG-114	USS Ralph Johnson	KAU	POA	-	-	159.8W 22.1N (+/- 0.0)	20.0

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### **IV.1.6.23 USS Paul Ignatius**

Rockets used: SM-3

Updated: 2024 Nov 28 03:19:32

**Launches: DDG-117**

Date	Rocket	Flight	Mission	PlatCode	Platform	Site	LP	AscSite	AsCLP	Pos	Apogee
2021 May 26	SM-3	ASD/FS-21	Formidable Shield	DDG-117	USS Paul Ignatius	SUIST	D701D	-	-	7.3W 57.3N (+/- 0.0)	300.0
2021 May 30	SM-3	ASD/FS-21	Formidable Shield	DDG-117	USS Paul Ignatius	SUIST	D701D	-	-	7.3W 57.3N (+/- 0.0)	300.0



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#### **IV.1.6.24 USS Daniel Inouye**

Rockets used: SM-6

Updated: 2024 Nov 28 03:19:32

**Launches: DDG-118**

Date	Rocket	Flight	Mission	PlatCode	Platform	Site	LP	AscSite	AscLP	Pos	Apogee
2023 Mar 30	SM-6	Stellar Hydra	-	DDG-118	USS Daniel Inouye	KAU	POA	-	-	159.8W 22.1N (+/- 0.0)	20.0
2023 Mar 30	SM-6	Stellar Hydra	-	DDG-118	USS Daniel Inouye	KAU	POA	-	-	159.8W 22.1N (+/- 0.0)	20.0

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## **IV.1.6.25 USS Carl Levin**

Rockets used: SM-3

Updated: 2024 Nov 28 03:19:32

Launches: DDG-120

Date	Rocket	Flight	Mission	PlatCode	Platform	Site	LP	AscSite	AscLP	Pos	Apogee
2023 Oct 25	SM-3	Vigilant Wyvern	-	DDG-120	USS Carl Levin	KAU	POA	-	-	159.8W 22.1N (+/- 0.0)	150.0
2023 Oct 25	SM-3	Vigilant Wyvern	-	DDG-120	USS Carl Levin	KAU	POA	-	-	159.8W 22.1N (+/- 0.0)	150.0

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#### IV.1.6.26 JS Kongo



Credit: US Navy photo

The Kongo, first of the Japanese AEGIS ships, was used to launch Aegis SM-3 missiles.

Rockets used: SM-3

Updated: 2024 Nov 28 03:19:32

Launches: DDG-173

Date	Rocket	Flight	Mission	Platform	Site	LP	AscSite	AsCLP	Pos	Apogee
2007 Dec 17 2208	SM-3	Stellar Kiji	-	DDG-173	JS Kongo	KAU	-	-	159.8W 22.1N (+/- 0.0)	160.0

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#### IV.1.6.27 JS Kirishima



Credit: US Navy photo

Rockets used: SM-3

Updated: 2024 Nov 28 03:19:32

Launches: DDG-174

Date	Rocket	Flight	Mission	PlatCode	Platform	Site	LP	AscSite	AscLP	Pos	Apogee
2010 Oct 29 0309	SM-3	Stellar Taka	-	DDG-174	JS Kirishima	KAU	POA	-	-	159.8W 22.1N (+/- 0.0)	150.0



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**IV.1.6.28 JS Myoko**



Credit: US Navy photo

Rockets used: SM-3

Updated: 2024 Nov 28 03:19:32

**Launches: DDG-175**

Date	Rocket	Flight	Mission	PlatCode	Platform	Site	LP	AscSite	AscLP	Pos	Apogee
2009 Oct 28 0404	SM-3	Stellar Raicho	-	DDG-175	JS Myoko	KAU	POA	-	-	159.8W 22.1N (+/- 0.0)	150.0

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#### IV.1.6.29 JS Chokai



Credit: US Navy photo

Rockets used: SM-3

Updated: 2024 Nov 28 03:19:32

**Launches: DDG-176**

Date	Rocket	Flight	Mission	Platform	Site	LP	AscSite	AsCLP	Pos	Apogee
2008 Nov 20 0224	SM-3	Stellar Hayabusa	-	DDG-176	JS Chokai	KAU	POA	-	159.8W 22.1N (+/- 0.0)	150.0

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### IV.1.6.30 JS Atago



Credit: US Navy photo

Rockets used: SM-3-IB

Updated: 2024 Nov 28 03:19:32

Launches: DDG-177

Date	Rocket	Flight	Mission	Platform	Site	LP	AscSite	AscLP	Pos	Apogee
2018 Sep 12 0840?	SM-3-IB	Stellaris Fukuroou	-	DDG-177	JS Atago	POA	-	-	159.8W 22.1N (+/- 0.0)	150.0

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### **IV.1.6.31 JS Ashigara**

### **IV.1.6.32 JS Maya**

Rockets used: SM-3-IIA

Updated: 2024 Nov 28 03:19:32

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**Launches: DDG-179**

Date	Rocket	Flight	Mission	Platform	Site	LP	AscSite	AscLP	Pos	Apogee
2022 Nov 16	SM-3-III	-	-	DDG-179	JS Maya	KAU	POA	-	159.8W 22.1N (+/- 0.0)	200.0



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### **IV.1.6.33 JS Haguro**

Rockets used: SM-3-IB

Updated: 2024 Nov 28 03:19:32

**Launches: DDG-180**

Date	Rocket	Flight	Mission	Platform	Site	LP	AscSite	AscLP	Pos	Apogee
2022 Nov 19	SM-3-IB	-	-	DDG-180	JS Haguro	KAU	POA	-	159.8W 22.1N (+/- 0.0)	150.0

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### **IV.1.6.34 Unknown Aegis ship**

Rockets used: SM-6

Updated: 2024 Nov 28 03:19:32

Launches: DDG-UNK

Date	Rocket	Flight	Mission	PlatCode	Platform	Site	LP	AscSite	AsclP	Pos	Apogee
2021 May 29	SM-6	-	-	DDG-UNK	Unknown Aegis ship	KAU	POA	-	-	159.8W 22.1N (+/- 0.0)	20.0
2021 May 29	SM-6	-	-	DDG-UNK	Unknown Aegis ship	KAU	POA	-	-	159.8W 22.1N (+/- 0.0)	20.0

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## **IV.1.7 Indian Navy Missile Ships**

Updated: 2024 Nov 28 03:19:32

Indian Navy Missile Ships

Ship	Transliteration	Image	CODE	Agency	Class	ClassID	AltID	Active
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INS Subhadra	INS Subhadra		INS-P51	INAV	Sukanya	INS-P51	-	2001 - -
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INS Suvarna	INS Suvarna		INS-P52	INAV	Sukanya	INS-P52	-	- - -
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INS Rajput	INS Rajput		INS-D51	INAV	Rajput	INS-D51	-	2005? - -
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### IV.1.7.1 INS Subhadra



Credit: Indian Navy

The Subhadra is the launch platform for Indian Navy test launches.

Some launches indicated as "INS-P51?" may be from INS-P52 instead.

Rockets used: Dhanush,PDV Target

Updated: 2024 Nov 28 03:19:32

Launches: INS-P51

Date	Rocket	Flight	Mission	Platform	Site	LP	AscSite	AscLP	Pos	Apogee
2001 Sep 21	Dhanush	Test	-	INS Subhadra	CHAN	SEA	-	-	86.6E 21.3M (+/- 0.1)	50.0
2004 Nov 7 0650	Dhanush	Ship test	-	INS Subhadra	CHAN	SEA	-	-	86.6E 21.3M (+/- 0.1)	50.0
2007 Mar 30 0905	Dhanush	Ship test	-	INS Subhadra	CHAN	SEA	-	-	86.6E 21.3M (+/- 0.1)	50.0
2009 Mar 6 1054	Dhanush	PAD Target	-	INS Subhadra	CHAN	SEA	-	-	86.6E 21.3M (+/- 0.1)	120.0
2009 Dec 13 0601?	Dhanush	-	F6	INS Subhadra	CHAN	SEA	-	-	86.6E 21.3M (+/- 0.1)	50.0
2010 Mar 27 0014	Dhanush	Test	-	INS Subhadra	CHAN	SEA	-	-	86.6E 21.3M (+/- 0.1)	100.0
2012 Oct 5 0555	Dhanush	Test	-	INS Subhadra	CHAN	SEA	-	-	86.6E 21.3M (+/- 0.1)	100.0
2014 Apr 27 0337	PDV Target	Target	2S-SL TGT-01	INS Subhadra	CHAN	IC3	-	-	86.6E 21.3M (+/- 0.1)	120.0
2014 Nov 14 1410	Dhanush	Test	-	INS Subhadra	CHAN	SEA	-	-	86.6E 21.3M (+/- 0.1)	50.0
2015 Apr 9 0532	Dhanush	Test	-	INS Subhadra	CHAN	SEA	-	-	86.6E 21.3M (+/- 0.1)	50.0
2017 Feb 12 0213?	PDV Target	Prithvi Target	-	INS Subhadra	CHAN	SEA	-	-	86.6E 21.3M (+/- 0.1)	97.0
2018 Feb 23 0522	Dhanush	Test	-	INS Subhadra	CHAN	SEA	-	-	86.6E 21.3M (+/- 0.1)	50.0
2018 Sep 23 1433?	PDV Target	Prithvi Target	-	INS Subhadra	CHAN	SEA	-	-	86.6E 21.3M (+/- 0.1)	90.0



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### IV.1.7.2 INS Suvarna



Credit: Indian Navy

The Suvarna is a launch platform for Indian Navy test launches.

Rockets used: Dhanush

Updated: 2024 Nov 28 03:19:32

Launches: INS-P52											
Date	Rocket	Flight	Mission	PlatCode	Platform	Site	LP	AscSite	AscLP	Pos	Apogee
2011 Mar 11 0433	Dhanush	-	-	INS-P52	INS Suvarna	CHAN	SEA	-	-	86.6E 21.3N (+/- 0.1)	50.0

---

### IV.1.7.3 INS Rajput



Credit: Indian Navy

The Rajput was used as a Dhanush test platform.

Rockets used: Dhanush

Updated: 2024 Nov 28 03:19:32

**Launches: INS-D51**

Date	Rocket	Flight	Mission	Platform	Site	LP	AscSite	AscLP	Pos	Apogee
2005 Dec 28 0828	Dhanush	INS Rajput	-	INS-D51	INS Rajput CHAN	SEA	-	-	86.6E 21.3N (+/- 0.1)	50.0

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## **IV.1.8 Other Rocket Launching Ships**

Updated: 2024 Nov 28 03:19:32

Other Rocket Launching Ships

Ship	Transliteration	Image	CODE	Agency	Class	ClassID	AltID	Active
CCOC0000 37101 CZ-11 launch barge (TAI RUI?)	Tai Rui CCOC0000 37101 CZ-11 launch barge		CCOC	CALTQ	CCOC	-	MMS412137101	2019 --
Debo-3 DEFU 15002 launch barge	Debo-3 launch barge DEFU 15002 launch barge		DEB03 DEFU2	CALTQ CALTQ	Debo-3 Debo-3	- -	- -	2020 -- 2020 --
Bo Run Jiu Zhou 东方航天港号	Bo Run Jiu Zhou Dongfeng Hangtiangang		BRJZ DFHT	CALTQ CALTQ	- -	- -	MMS413536970 -	2023 -- 2023 --
Unknown Israeli ship	Unknown Israeli ship		SHIP-ISR	IDFN	-	-	-	--
Sirius barge, Anhueng	Sirius barge, Anhueng		SIR	ADDAH	-	-	IM08772295	2012 --
Sea Launch Odyssey Once In A Lifetime	Sea Launch Odyssey Once In A Lifetime		ODYSSEY OIALT	BOSL SPORT	- -	- -	IM08753196 MMS368379350	1999 -- 2020 2024 --

---

#### IV.1.8.1 Tai Rui CCOCOOOO 37101 CZ-11 launch barge

CCOCOOOO 37101 CZ-11 launch barge (TAI RUI?)



Credit: CALT? via weibo.com



Credit: -

The CCOC (CCOCOOOO 37101) is the launch barge for the CZ-11SL orbital launch vehicle.

Rockets used: Chang Zheng 11, Jielong-3

Updated: 2024 Nov 28 03:19:32

Date	Rocket	Flight	Mission	PlatCode	Platform	Launches: CCOC	Site	LP	AscSite	AscLP	Pos	Apogee
2019 Jun 5 0406	Chang Zheng 11	Jilin/JSW	Jilin/JSW	CCOC	Tai Rui CGOC0000	37101 CZ-11 launch barge	HHAI	LP1	-	-	121.2E 34.9N (+/- 0.0)	633.0
2022 Apr 30 0330	Chang Zheng 11	Jilin-1 03D-04-07/04A	Jilin-1 GF03D	CCOC	Tai Rui CGOC0000	37101 CZ-11 launch barge	HHAI	LP3	-	-	121.2E 34.9N (+/- 0.0)	592.0
2022 Dec 9 0636	Jielong-3	Jilin-1	-	CCOC	Tai Rui CGOC0000	37101 CZ-11 launch barge	HHAI	LP5	-	-	121.2E 34.9N (+/- 0.0)	-1.0



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#### IV.1.8.2 Debo-3 launch barge

Debo-3



Credit: www.news.cn

Credit: [credit unknown]

The Debo-3 barge was introduced for the second CZ-11 sea launch. Its home port is the Shandong Eastern

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Spaceport at Haiyang.

Rockets used: Chang Zheng 11

Updated: 2024 Nov 28 03:19:32

**Launches: DEB03**

Date	Rocket	Flight	Mission	PlatCode	Platform	Site	LP	AscSite	AsclP	Pos	Apogee
2020 Sep 15 0123	Chang Zheng 11	Jilin-1 03B/03C	Jilin-1	DEB03	Debo-3 launch barge	HHA1	LP2	-	-	121.2E 34.9N (+/- 0.0)	611.0

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### **IV.1.8.3 DEFU 15002 launch barge**

Rockets used: Chang Zheng 11,Gushenxing 1

Updated: 2024 Nov 28 03:19:32

**Launches: DEFU2**

Date	Rocket	Flight	Mission	PlatCode	Platform	Site	LP	AscSite	AsclP	Pos	Apogee
2022 Oct 7 1310:29	Chang Zheng 11	Centispace S5/S6	-	DEFU2	DEFU 15002 launch barge	HHAI	LP4	-	-	121.2E 34.9N (+/- 0.0)	-1.0
2023 Sep 5 0934:46	Gushenxing 1	The Little Mermaid	Tianqi-21/24	DEFU2	DEFU 15002 launch barge	HHAI	LP4	-	-	121.2E 34.9N (+/- 0.0)	-1.0

#### IV.1.8.4 Bo Run Jiu Zhou



Credit: via cnspacelight on twitter

The Bo Run Jiu Zhou was used for the second JL-3 launch.

Rockets used: Jielong-3, Chang Zheng 11

Updated: 2024 Nov 28 03:19:32

Launches: BRJZ

Date	Rocket	Flight	Mission	Platform	Site	LP	AscSite	AscLP	Pos	Apogee
2023 Dec 5 1924	Jielong-3	CX-20	WHJSM 03	BRJZ	Bo Run Jiu Zhou	YJ	LP1	-	112.0E 21.3N (+/- 0.0)	-1.0
2023 Dec 25 2239	Chang Zheng 11	Shiyan-24C 1-3	-	BRJZ	Bo Run Jiu Zhou	YJ	LP1	-	112.0E 21.3N (+/- 0.0)	-1.0
2024 Feb 3 0306	Jielong-3	MEXSAT-1/DFHG-1	-	BRJZ	Bo Run Jiu Zhou	YJ	LP2	-	112.0E 21.3N (+/- 0.0)	-1.0

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### IV.1.8.5 Dongfeng Hangtiangang

东方航天港号

Rockets used: Yinli-1,Gushenxing 1,Jielong-3

Updated: 2024 Nov 28 03:19:32

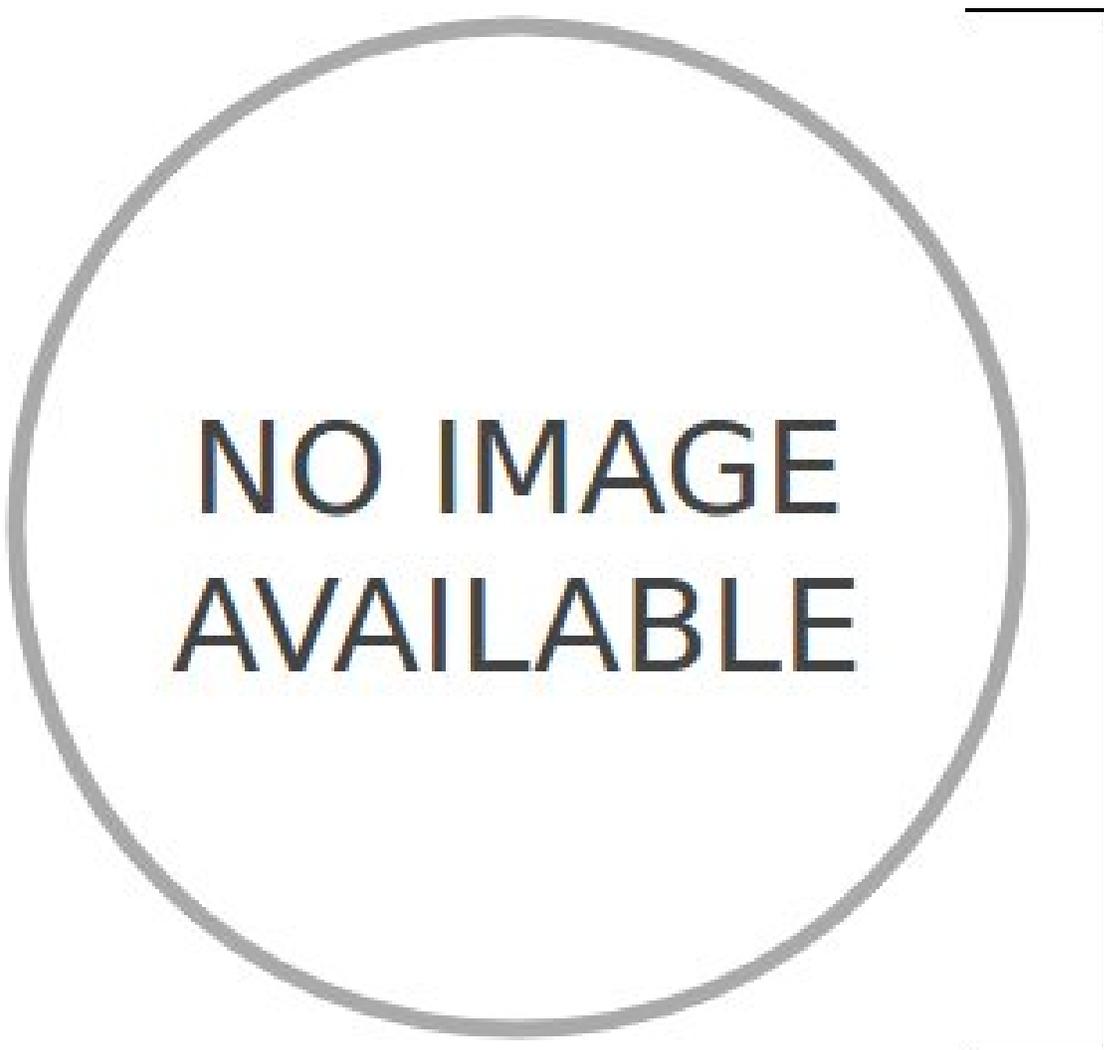


Launches: DFHT

Date	Rocket	Flight	Mission	PlatCode	Platform	Site	LP	AscSite	AsclP	Pos	Apogee
2024 Jan 11 0530	Yinli-1	Yunyao-1 18-20	-	DFHT	Dongfeng Hangtiangang	YJ	LP1	-	-	112.0E 21.3N (+/- 0.0)	-1.0
2024 May 29 0812:27	Gushenxing 1	Beautiful World	Tianqi-25/28	DFHT	Dongfeng Hangtiangang	HHAI	LP6	-	-	121.2E 34.9N (+/- 0.0)	-1.0
2024 Aug 29 0522	Gushenxing 1	How Far I'll Go	Yunyao-1 15-17	DFHT	Dongfeng Hangtiangang	HHAI	LP6	-	-	121.2E 34.9N (+/- 0.0)	-1.0
2024 Sep 24 0231:41	Jielong-3	Jilin Daxue/XSD-15/	-	DFHT	Dongfeng Hangtiangang	HHAI	LP4	-	-	121.2E 34.9N (+/- 0.0)	-1.0

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#### IV.1.8.6 Unknown Israeli ship



**NO IMAGE  
AVAILABLE**

From 1990 to 1999 Arrow 1 interceptors were test-launched from a ship (or ships) in the Mediterranean against targets launched from Palmachim. The Sa'ar 4.5 class boat INS Hetz, or similar, seems to me to be a plausible candidate.

Rockets used: Arrow 1

Updated: 2024 Nov 28 03:19:32

Launches: SHIP-ISR

Date	Rocket	Flight	Mission	PlatCode	Platform	Site	LP	AscSite	AsclP	Pos	Apogee
1990 Aug 9	Arrow 1	-	-	SHIP-ISR	Unknown Israeli ship	PALB	IAFTR	-	-	34.7E 31.9N (+/- 0.0)	0.0
1991 Mar 25	Arrow 1	-	-	SHIP-ISR	Unknown Israeli ship	PALB	IAFTR	-	-	34.7E 31.9N (+/- 0.0)	20.0
1991 Oct 30	Arrow 1	-	-	SHIP-ISR	Unknown Israeli ship	PALB	IAFTR	-	-	34.7E 31.9N (+/- 0.0)	20.0
1992 Sep 23	Arrow 1	-	-	SHIP-ISR	Unknown Israeli ship	PALB	IAFTR	-	-	34.7E 31.9N (+/- 0.0)	20.0
1993 Feb 28	Arrow 1	-	-	SHIP-ISR	Unknown Israeli ship	PALB	IAFTR	-	-	34.7E 31.9N (+/- 0.0)	20.0
1993 Feb 28	Arrow 1	-	-	SHIP-ISR	Unknown Israeli ship	PALB	IAFTR	-	-	34.7E 31.9N (+/- 0.0)	20.0
1993 Jul 14	Arrow 1	-	-	SHIP-ISR	Unknown Israeli ship	PALB	IAFTR	-	-	34.7E 31.9N (+/- 0.0)	20.0
1993 Oct 14	Arrow 1	-	-	SHIP-ISR	Unknown Israeli ship	PALB	IAFTR	-	-	34.7E 31.9N (+/- 0.0)	20.0
1993 Oct 14	Arrow 1	-	-	SHIP-ISR	Unknown Israeli ship	PALB	IAFTR	-	-	34.7E 31.9N (+/- 0.0)	20.0
1994 Mar	Arrow 1	-	[Not launched?]	SHIP-ISR	Unknown Israeli ship	PALB	IAFTR	-	-	34.7E 31.9N (+/- 0.0)	0.0
1994 Jun 12	Arrow 1	ATD-1	-	SHIP-ISR	Unknown Israeli ship	PALB	IAFTR	-	-	34.7E 31.9N (+/- 0.0)	20.0
1996 Aug 20	Arrow 1	-	-	SHIP-ISR	Unknown Israeli ship	PALB	IAFTR	-	-	34.7E 31.9N (+/- 0.0)	80.0
1997 Aug 19 0820?	Arrow 1	-	-	SHIP-ISR	Unknown Israeli ship	PALB	IAFTR	-	-	34.7E 31.9N (+/- 0.0)	80.0
1999 Nov 1 0942	Arrow 1	Target	-	SHIP-ISR	Unknown Israeli ship	PALB	IAFTR	-	-	34.7E 31.9N (+/- 0.0)	80.0

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#### IV.1.8.7 Sirius barge, Anhueng



Credit: (via Dave Schmerler on twitter; original source unknown)

SIRIUS is the launch barge for Hyunmoo missile test flights off Anhueng.

Rockets used: Hyunmoo-2C,ADD TV1,ADD TV2

Updated: 2024 Nov 28 03:19:32

Launches: SIR

Date	Rocket	Flight	Mission	PlatCode	Platform	Site	LP	AscSite	AsclP	Pos	Apogee
2017 Mar	Hyunmoo-2C	-	-	SIR	Sirius barge, Anhueng	ANHU	-	-	-	126.1E 36.4N (+/- 0.0)	150.0
2017 Jun 23 0130?	Hyunmoo-2C	-	-	SIR	Sirius barge, Anhueng	ANHU	-	-	-	126.1E 36.4N (+/- 0.0)	150.0
2022 Mar 30	ADD TV1	Space Test	-	SIR	Sirius barge, Anhueng	ANHU	-	-	-	126.1E 36.4N (+/- 0.0)	200.0
2022 Dec 30 0900?	ADD TV1	Space Test	-	SIR	Sirius barge, Anhueng	ANHU	-	-	-	126.1E 36.4N (+/- 0.0)	200.0
2023 Dec 4 0500	ADD TV2	S-STEP	-	SIR	Sirius barge, Anhueng	JEJU	-	-	-	126.4E 33.2N (+/- 0.1)	-1.0

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#### IV.1.8.8 Sea Launch Odyssey



Credit: Sea Launch

The Odyssey was the launch platform for the orbital Zenit-3SL rocket. In 2020, following its sale to the S7 group, it was moved from Long Beach to Vladivostok.

Rockets used: Zenit-3SL

Updated: 2024 Nov 28 03:19:32

Launches: ODYSSEY

Date	Rocket	Flight	Mission	Platform	Site	LP	AscSite	AsclP	Pos	Apogee
1999 Mar 28 0129:59	Zenit-3SL	SL1 DemoSat	DemoSat	Sea Launch Odyssey	KLA	-	-	-	154.0W 0.0N (+/- 0.1)	36119.0
1999 Oct 10 0328:00	Zenit-3SL	SL2 DirecTV 1-R	DirecTV-1R	Sea Launch Odyssey	KLA	-	-	-	154.0W 0.0N (+/- 0.1)	42115.0
2000 Mar 12 1449:15	Zenit-3SL	SL3 ICO F-1	ICO F1	Sea Launch Odyssey	KLA	-	-	-	154.0W 0.0N (+/- 0.1)	200.0
2000 Jul 28 2242:00	Zenit-3SL	SL4 PAS 9	PAS 9	Sea Launch Odyssey	KLA	-	-	-	154.0W 0.0N (+/- 0.1)	36326.0
2000 Oct 21 0552	Zenit-3SL	SL5 Thuraya	Thuraya 1	Sea Launch Odyssey	KLA	-	-	-	154.0W 0.0N (+/- 0.1)	40166.0
2001 Mar 18 2233:30	Zenit-3SL	SL7 XM Radio-2	XM Radio-2	Sea Launch Odyssey	KLA	-	-	-	154.0W 0.0N (+/- 0.1)	38876.0
2001 May 8 2210:29	Zenit-3SL	SL6 XM Radio-1	XM Radio-1	Sea Launch Odyssey	KLA	-	-	-	154.0W 0.0N (+/- 0.1)	38716.0
2002 Jun 15 2239:30	Zenit-3SL	SL8 Galaxy 3C	Galaxy III-C	Sea Launch Odyssey	KLA	-	-	-	154.0W 0.0N (+/- 0.1)	41494.0
2003 Jun 10 1359:59	Zenit-3SL	SL9 Thuraya 2	Thuraya 2	Sea Launch Odyssey	KLA	-	-	-	154.0W 0.0N (+/- 0.1)	36034.0
2003 Aug 8 0330:55	Zenit-3SL	SL10 Echostar IX	Echostar IX	Sea Launch Odyssey	KLA	-	-	-	154.0W 0.0N (+/- 0.1)	36090.0
2003 Oct 1 0402:59	Zenit-3SL	SL11 Galaxy 13/Hor.1	Galaxy XIII/Horizons 1	Sea Launch Odyssey	KLA	-	-	-	154.0W 0.0N (+/- 0.1)	35893.0
2004 Mar 11 0412:59	Zenit-3SL	SL12 TeIstar 14	TeIstar 14	Sea Launch Odyssey	KLA	-	-	-	154.0W 0.0N (+/- 0.1)	36761.0
2004 May 4 1242:00	Zenit-3SL	SL13 DirecTV 7S	DirecTV 7S	Sea Launch Odyssey	KLA	-	-	-	154.0W 0.0N (+/- 0.1)	36216.0
2004 Jun 29 0358:59	Zenit-3SL	SL20 TeIstar 18	Apstar 5	Sea Launch Odyssey	KLA	-	-	-	154.0W 0.0N (+/- 0.1)	36181.0
2005 Mar 1 0350:59	Zenit-3SL	SL18 XM Radio-3	XM Radio-3	Sea Launch Odyssey	KLA	-	-	-	154.0W 0.0N (+/- 0.1)	35927.0
2005 Apr 26 0731:29	Zenit-3SL	SL15 Spaceway 1	Spaceway 1	Sea Launch Odyssey	KLA	-	-	-	154.0W 0.0N (+/- 0.1)	45519.0
2005 Jun 23 1403:00	Zenit-3SL	SL14 IA-8	Intelsat Americas 8	Sea Launch Odyssey	KLA	-	-	-	154.0W 0.0N (+/- 0.1)	36026.0
2005 Nov 8 1406:59	Zenit-3SL	SL23 Inmarsat 4F2	Inmarsat 4 F2	Sea Launch Odyssey	KLA	-	-	-	154.0W 0.0N (+/- 0.1)	36006.0
2006 Feb 15 2334:55	Zenit-3SL	SL24 Echostar 10	Echostar 10	Sea Launch Odyssey	KLA	-	-	-	154.0W 0.0N (+/- 0.1)	35851.0
2006 Apr 12 2329:59	Zenit-3SL	SL31 JCSAT-9	JCSAT-9	Sea Launch Odyssey	KLA	-	-	-	154.0W 0.0N (+/- 0.1)	35830.0
2006 Jun 18 0750	Zenit-3SL	SL29 Galaxy 16	Galaxy 16	Sea Launch Odyssey	KLA	-	-	-	154.0W 0.0N (+/- 0.1)	35940.0
2006 Aug 22 0327:01	Zenit-3SL	SL25 KoreaSat-5	KoreaSat 5	Sea Launch Odyssey	KLA	-	-	-	154.0W 0.0N (+/- 0.1)	36175.0
2006 Oct 30 2348:59	Zenit-3SL	SL22 XM Radio-4	XM Radio-4	Sea Launch Odyssey	KLA	-	-	-	154.0W 0.0N (+/- 0.1)	36096.0
2007 Jan 30 2322	Zenit-3SL	SL16 NSS 8	NSS 8	Sea Launch Odyssey	KLA	-	-	-	154.0W 0.0N (+/- 0.1)	0.0
2008 Jan 15 1148:59	Zenit-3SL	SL36 Thuraya 3	Thuraya 3	Sea Launch Odyssey	KLA	-	-	-	154.0W 0.0N (+/- 0.1)	35999.0
2008 Mar 19 2247:59	Zenit-3SL	SL32 DirecTV 11	DirecTV-11	Sea Launch Odyssey	KLA	-	-	-	154.0W 0.0N (+/- 0.1)	41363.0
2008 May 21 0943:59	Zenit-3SL	SL30 Galaxy 18	Galaxy 18	Sea Launch Odyssey	KLA	-	-	-	154.0W 0.0N (+/- 0.1)	35853.0
2008 Jul 16 0520:59	Zenit-3SL	SL34 Echostar 11	Echostar 11	Sea Launch Odyssey	KLA	-	-	-	154.0W 0.0N (+/- 0.1)	35821.0
2008 Sep 24 0927:59	Zenit-3SL	SL35 Galaxy 19	Galaxy 19	Sea Launch Odyssey	KLA	-	-	-	154.0W 0.0N (+/- 0.1)	35829.0
2009 Apr 20 0815:59	Zenit-3SL	SL42 SICRAL 1B	SICRAL 1B	Sea Launch Odyssey	KLA	-	-	-	154.0W 0.0N (+/- 0.1)	35891.0
2011 Sep 24 2017:59	Zenit-3SL	SL39 Atlantic Bird 7	Atlantic Bird 7	Sea Launch Odyssey	KLA	-	-	-	154.0W 0.0N (+/- 0.1)	35883.0
2012 Jun 1 0522:59	Zenit-3SL	SL45 Intelsat IS-19	Intelsat IS-19	Sea Launch Odyssey	KLA	-	-	-	154.0W 0.0N (+/- 0.1)	35870.0
2012 Aug 19 0654:59	Zenit-3SL	SL49 Intelsat IS-21	Intelsat IS-21	Sea Launch Odyssey	KLA	-	-	-	154.0W 0.0N (+/- 0.1)	35936.0
2012 Dec 3 2043:59	Zenit-3SL	SL50 Eutelsat 70B	EUTELSAT 70B	Sea Launch Odyssey	KLA	-	-	-	154.0W 0.0N (+/- 0.1)	35814.0
2013 Feb 1 0656:00	Zenit-3SL	SL48 Intelsat IS-27	Intelsat IS-27	Sea Launch Odyssey	KLA	-	-	-	154.0W 0.0N (+/- 0.1)	1.0
2014 May 26 2109:59	Zenit-3SL	Eutelsat 3B	EUTELSAT 3B	Sea Launch Odyssey	KLA	-	-	-	154.0W 0.0N (+/- 0.1)	35812.0

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## **IV.1.8.9 Once In A Lifetime**

Rockets used: Evo Space

Updated: 2024 Nov 28 03:19:32

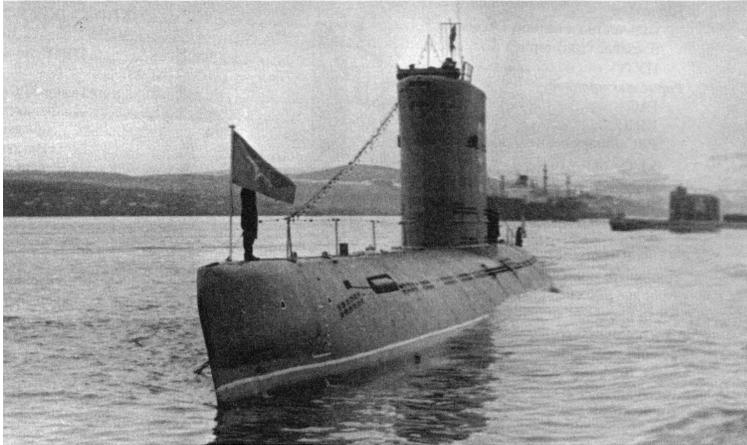


Date	Rocket	Flight	Mission	Platform	Site	LP	AscSite	AscLP	Pos	Apogee
2024 Aug 31	Evo Space	Spaceport Co. Test	-	OIALT	PBLA	-	-	-	89.0W 30.0N (+/- 0.0)	17.0

Launches: OIALT

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## IV.1.9 Soviet Missile Submarines - Project 611



Credit: Apa'lkov et al 2006



Credit: From Polmar and Moore, Cold War Submarines

The Project 611 submarines and the later AV611 version were the USSR's first ballistic missile submarines. They carried the R-11FM missile. NATO codename: Zulu.

Updated: 2024 Nov 28 03:19:32

Soviet Missile Submarines - Project 611

Ship	Transliteration	Image	CODE	Agency	Class	ClassID	AltID	Active
B-62	B-62 submarine	-	B-62	VMF	Proekt B-611A	B-62	-	-
B-67	B-67 submarine	-	B-67	VMF	Proekt B-611AV	B-67	-	-
B-73	B-73 submarine	-	B-73	VMF	Proekt B-611AV	B-73	-	-
B-78	B-78 Murmanskii Komsomolets submarine	-	B-78	VMF	Proekt B-611AV	B-78	-	-
B-79	B-79 submarine	-	B-79	VMF	Proekt B-611AV	B-79	-	-
B-89	B-89 submarine	-	B-89	VMF	Proekt B-611AV	B-89	-	-
AB-611	Unknown Zulu V class submarine	-	ZULUV	VMF	Proekt B-611AV	-	-	-

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### **IV.1.9.1 B-62 submarine**

B-62

B-62 was the first Soviet ballistic missile submarine, under Project 611A. It carried a single R-11FM missile as the D-1 launch system. NATO reporting name was ZULU IV.

Rockets used: R-11FM

Updated: 2024 Nov 28 03:19:32

**Launches: B-62**

Date	Rocket	Flight	Mission	PlatCode	Platform	Site	LP	AscSite	AscLP	Pos	Apogee
1958 Sep 6	R-11FM	-	-	B-62	B-62 submarine	POLA58	-	-	-	150.0E 40.0N (+/- 9.0)	86.0

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## IV.1.9.2 B-67 submarine

B-67

Rockets used: R-11FM

Updated: 2024 Nov 28 03:19:32

Launches: B-67

Date	Rocket	Flight	Mission	PlatCode	Platform	Site	LP	AscSite	AscLP	Pos	Apogee
1955 Sep 12 1432	R-11FM	-	-	B-67	B-67 submarine	BELA	-	-	-	38.0E 65.5N (+/- 1.0)	150.0
1956 Oct 31	R-11FM	-	-	B-67	B-67 submarine	BELA	-	-	-	38.0E 65.5N (+/- 1.0)	150.0
1956 Oct 31	R-11FM	-	-	B-67	B-67 submarine	BELA	-	-	-	38.0E 65.5N (+/- 1.0)	150.0
1956 Dec 26	R-11FM	-	-	B-67	B-67 submarine	BELA	-	-	-	38.0E 65.5N (+/- 1.0)	150.0
1958 Mar 31	R-11FM	-	-	B-67	B-67 submarine	BELA	-	-	-	38.0E 65.5N (+/- 1.0)	86.0
1958 May 25	R-11FM	-	-	B-67	B-67 submarine	BELA	-	-	-	38.0E 65.5N (+/- 1.0)	86.0
1958 May 26	R-11FM	-	-	B-67	B-67 submarine	BELA	-	-	-	38.0E 65.5N (+/- 1.0)	86.0
1959	R-11FM	-	-	B-67	B-67 submarine	BELA	-	-	-	38.0E 65.5N (+/- 1.0)	0.0
1960 Sep 10	R-11FM	-	-	B-67	B-67 submarine	BELA	-	-	-	38.0E 65.5N (+/- 1.0)	86.0

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**IV.1.9.3 B-73 submarine**

Б-73

**IV.1.9.4 B-78 Murmanski Komsomolets submarine**

Б-78

**IV.1.9.5 B-79 submarine**

Б-79

**IV.1.9.6 B-89 submarine**

Б-89

**IV.1.9.7 Unknown Zulu V class submarine**

AB-611

Rockets used: R-13

Updated: 2024 Nov 28 03:19:32

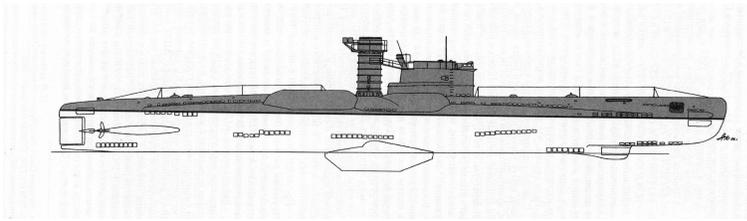


Launches: ZULUV

Date	Rocket	Flight	Mission	PlatCode	Platform	Site	LP	AscSite	AsclP	Pos	Apogee
1959 Nov	R-13	-	-	ZULUV	Unknown Zulu V class submarine	UNKPL	-	-	-	-	150.0
1960 Aug	R-13	-	-	ZULUV	Unknown Zulu V class submarine	UNKPL	-	-	-	-	150.0
1961 Sep 14	R-13	-	0445?	ZULUV	Unknown Zulu V class submarine	BELA	-	-	-	38.0E 65.5N (+/- 1.0)	150.0
1961 Sep 16	R-13	-	0400?	ZULUV	Unknown Zulu V class submarine	BELA	-	-	-	38.0E 65.5N (+/- 1.0)	150.0
1961 Oct 19	R-13	-	-	ZULUV	Unknown Zulu V class submarine	BELA	-	-	-	38.0E 65.5N (+/- 1.0)	150.0
1961 Oct 20	R-13	-	-	ZULUV	Unknown Zulu V class submarine	BELA	-	-	-	38.0E 65.5N (+/- 1.0)	150.0

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## IV.1.10 Soviet Missile Submarines - Project 613D4



Credit: Apa'lkov et al 2006

The single Project 613 submarine was S-229. It tested launch ejection of the R-21 and R-27 missiles at the Black Sea test site.

Updated: 2024 Nov 28 03:19:32

Soviet Missile Submarines - Project 613D4

Ship	Transliteration	Image	CODE	Agency	Class	ClassID	AltID	Active
C-229	S-229 Submarine	-	S-229	VNF	Proekt 613D4	S-229	-	1961 - 1968

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### **IV.1.10.1 S-229 Submarine**

C-229

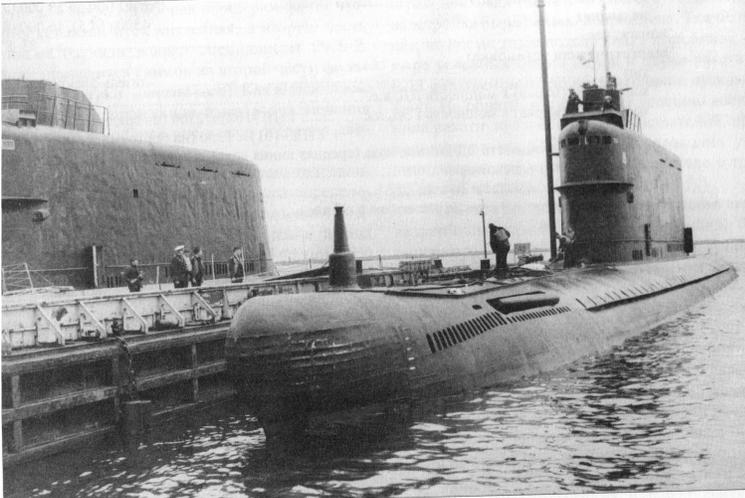
Rockets used: R-21,Zyb

Updated: 2024 Nov 28 03:19:32

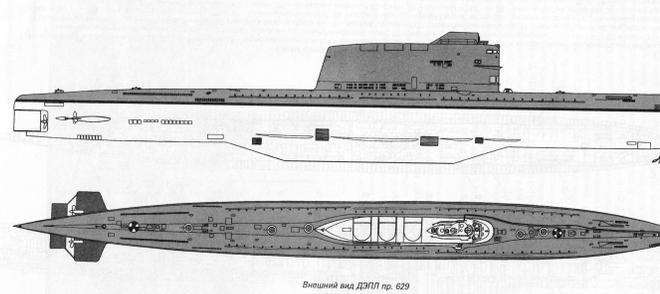
Launches: S-229

Date	Rocket	Flight	Mission	Platform	Site	LP	AscSite	AscLP	Pos	Apogee
1961 Aug 29	R-21	R-21 BR-II-1	-	S-229 Submarine	CHM	-	-	-	34.0E 44.ON (+/- 0.5)	1.0
1961 Sep?	R-21	R-21 BR-II-2	-	S-229 Submarine	CHM	-	-	-	34.0E 44.ON (+/- 0.5)	1.0
1961 Sep 11	R-21	R-21 BR-II-3	-	S-229 Submarine	CHM	-	-	-	34.0E 44.ON (+/- 0.5)	1.0
1967 Jan 18	Zyb	R-27 4K10 BR-II-1	-	S-229 Submarine	CHM	-	-	-	34.0E 44.ON (+/- 0.5)	1.0
1967 Q2?	Zyb	R-27 4K10 BR-II-2	-	S-229 Submarine	CHM	-	-	-	34.0E 44.ON (+/- 0.5)	1.0
1967 Q2?	Zyb	R-27 4K10 BR-II-3	-	S-229 Submarine	CHM	-	-	-	34.0E 44.ON (+/- 0.5)	1.0
1967 Q2?	Zyb	R-27 4K10 BR-II-4	-	S-229 Submarine	CHM	-	-	-	34.0E 44.ON (+/- 0.5)	1.0
1967 Q2?	Zyb	R-27 4K10 BR-II-5	-	S-229 Submarine	CHM	-	-	-	34.0E 44.ON (+/- 0.5)	1.0
1967 Aug 10	Zyb	R-27 4K10 BR-II-6	-	S-229 Submarine	CHM	-	-	-	34.0E 44.ON (+/- 0.5)	1.0

## IV.1.11 Soviet Missile Submarines - Project 629



Credit: Apa'lkov et al 2006



Credit: Apa'lkov et al 2006

Project 629 submarines, NATO codename Golf I, had the D-1 and D-2 launch systems with R-11FM and R-13 missiles respectively. Some were later converted to Project 629A, which see.

Updated: 2024 Nov 28 03:19:32

Soviet Missile Submarines - Project 629

Ship	Transliteration	Image	CODE	Agency	Class	ClassID	AltID	Active
629	Unknown 629 (Golf) submarine	-	GOLF	VMF	Proekt 629	-	-	-
K-61	K-61 Submarine	-	K-61	VMF	Proekt 629	B-29	-	-
K-83	K-83 Submarine	-	K-83	VMF	Proekt 629	B-42	-	-
K-102	K-102 Submarine	-	K-102	VMF	Proekt 629	B-121	-	-
K-107	K-107 Submarine	-	K-107	VMF	Proekt 629	B-125	-	-
K-110	K-110 Submarine	-	K-110	VMF	Proekt 629	K-110	-	-
K-113	K-113 Submarine	-	K-113	VMF	Proekt 629	B-146	-	-
K-118	K-118 Submarine		K-118	VMF	Proekt 629	B-149	-	-
K-136	K-136 Submarine		K-136	VMF	Proekt 629	B-109	-	-
K-153	K-153 Submarine	-	K-153	VMF	Proekt 629	K-153	-	-

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### **IV.1.11.1 Unknown 629 (Golf) submarine**

629

Rockets used: R-13

Updated: 2024 Nov 28 03:19:32



Launches: GOLF

Date	Rocket	Flight	Mission	PlatCode	Platform	Site	LP	AscSite	AscLP	Pos	Apogee
1965 May 19 1300	R-13	-	-	GOLF	Unknown 629 (Golf) submarine	BLA	-	-	-	34.0E 70.0N (+/- 0.5)	150.0
1965 May 24 1000	R-13	-	-	GOLF	Unknown 629 (Golf) submarine	BLA	-	-	-	34.0E 70.0N (+/- 0.5)	150.0
1965 May 25 1300	R-13	-	-	GOLF	Unknown 629 (Golf) submarine	BLA	-	-	-	34.0E 70.0N (+/- 0.5)	150.0
1965 May 26 1336	R-13	-	-	GOLF	Unknown 629 (Golf) submarine	BLA	-	-	-	34.0E 70.0N (+/- 0.5)	150.0
1965 May 31 1330	R-13	-	-	GOLF	Unknown 629 (Golf) submarine	BLA	-	-	-	34.0E 70.0N (+/- 0.5)	150.0

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**IV.1.11.2 K-61 Submarine**

K-61

**IV.1.11.3 K-83 Submarine**

K-83

**IV.1.11.4 K-102 Submarine**

K-102

**IV.1.11.5 K-107 Submarine**

K-107

**IV.1.11.6 K-110 Submarine**

K-110

**IV.1.11.7 K-113 Submarine**

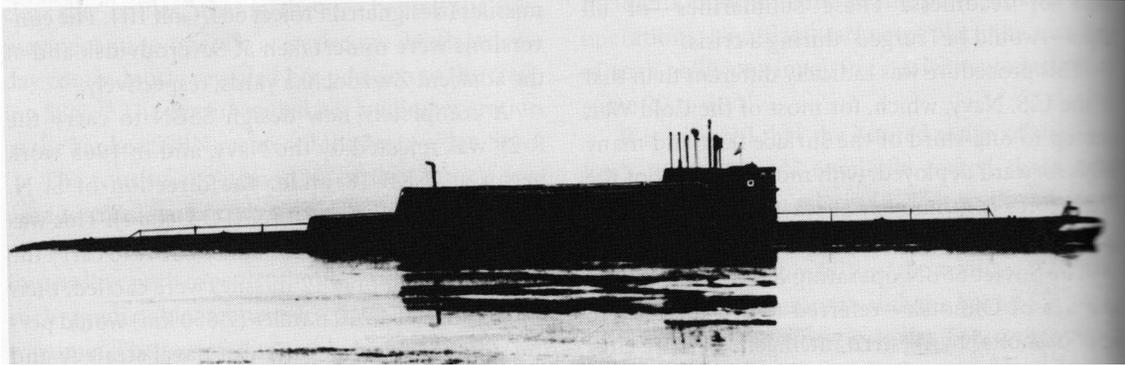
K-113

IV-370

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### IV.1.11.8 K-118 Submarine

K-118



Credit: From Polmar and Moore, Cold War Submarines

Rockets used: Vysota

Updated: 2024 Nov 28 03:19:32

Launches: K-118

Date	Rocket	Flight	Mission	PlatCode	Platform	Site	LP	AscSite	AsclP	Pos	Apogee
1972 Dec?	Vysota	R-29 4K75 LKI-III-13	MGCh 4G75/RA46	K-118	K-118 Submarine	BELA	-	-	-	38.0E 65.5N (+/- 1.0)	1000.0
1972 Dec?	Vysota	R-29 4K75 LKI-III-14	MGCh 4G75/RA46	K-118	K-118 Submarine	BELA	-	-	-	38.0E 65.5N (+/- 1.0)	1000.0
1972 Dec 14	Vysota	R-29 4K75 LKI-III-15	MGCh 4G75/RA46	K-118	K-118 Submarine	BELA	-	-	-	38.0E 65.5N (+/- 1.0)	1000.0
1972 Dec 14	Vysota	R-29 4K75 LKI-III-16	MGCh 4G75/RA46	K-118	K-118 Submarine	BELA	-	-	-	38.0E 65.5N (+/- 1.0)	1000.0
1972 Dec 14	Vysota	R-29 4K75 LKI-III-17	MGCh 4G75/RA46	K-118	K-118 Submarine	BELA	-	-	-	38.0E 65.5N (+/- 1.0)	1000.0
1972 Dec 14	Vysota	R-29 4K75 LKI-III-18	MGCh 4G75/RA46	K-118	K-118 Submarine	BELA	-	-	-	38.0E 65.5N (+/- 1.0)	1000.0
1973	Vysota	R-29 4K75 LKI-III-19	MGCh 4G75/RA46	K-118	K-118 Submarine	UNKPL	-	-	-	-	1000.0
1973	Vysota	R-29 4K75 LKI-III-20	MGCh 4G75/RA46	K-118	K-118 Submarine	UNKPL	-	-	-	-	1000.0
1973	Vysota	R-29 4K75 LKI-III-21	MGCh 4G75/RA46	K-118	K-118 Submarine	UNKPL	-	-	-	-	1000.0
1973	Vysota	R-29 4K75 LKI-III-22	MGCh 4G75/RA46	K-118	K-118 Submarine	UNKPL	-	-	-	-	1000.0
1973	Vysota	R-29 4K75 LKI-III-23	MGCh 4G75/RA46	K-118	K-118 Submarine	UNKPL	-	-	-	-	1000.0
1973	Vysota	R-29 4K75 LKI-III-24	MGCh 4G75/RA46	K-118	K-118 Submarine	UNKPL	-	-	-	-	1000.0
1973	Vysota	R-29 4K75 LKI-III-25	MGCh 4G75/RA46	K-118	K-118 Submarine	BELA	-	-	-	38.0E 65.5N (+/- 1.0)	1000.0

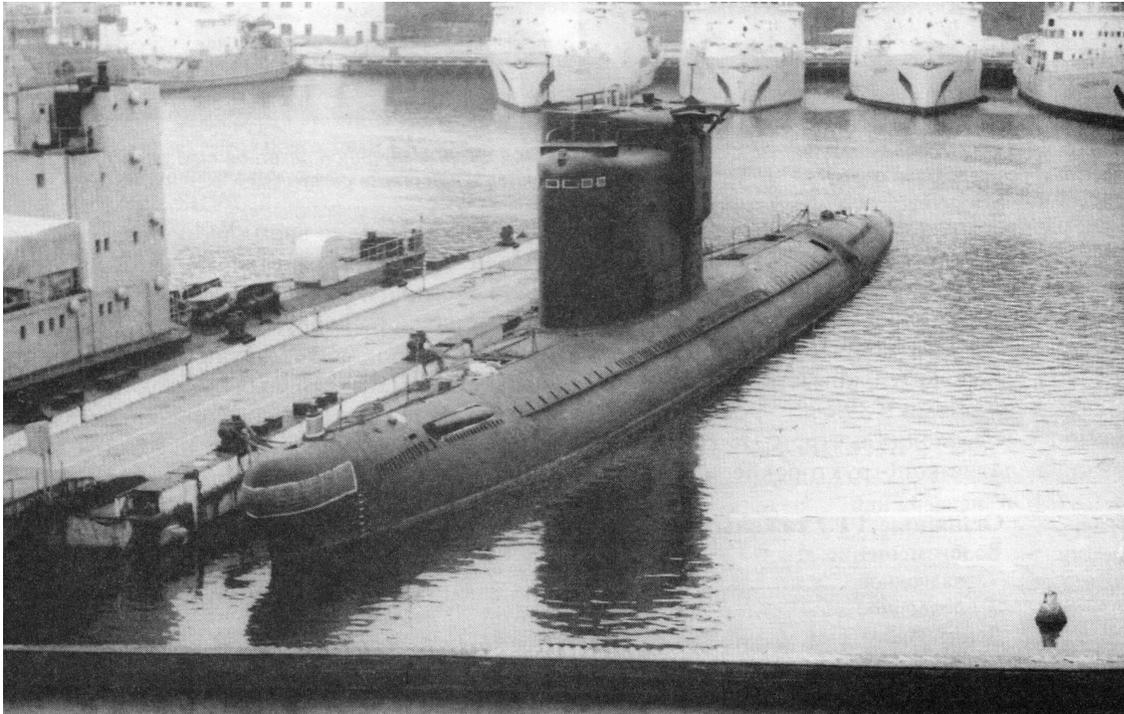
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### IV.1.11.9 K-136 Submarine

K-136

### IV.1.11.10 K-153 Submarine

K-153



Credit: Apa'lkov et al 2006

Rockets used: R-39

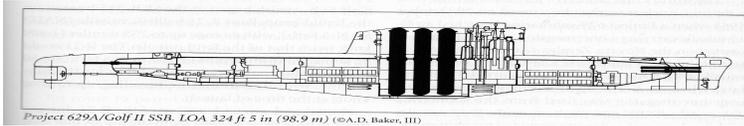
Updated: 2024 Nov 28 03:19:32

Launches: K-153

Date	Rocket	Flight	Mission	PlatCode	Platform	Site	LP	AscSite	AscLP	Pos	Apogee
1978 Dec 29	R-39	BR-II-1 eject test	-	K-153	K-153 Submarine	CHM	-	-	-	34.0E 44.0N (+/- 0.5)	1.0
1979 Jan?	R-39	BR-II-2 eject test	-	K-153	K-153 Submarine	CHM	-	-	-	34.0E 44.0N (+/- 0.5)	1.0
1979 Jan?	R-39	BR-II-3 eject test	-	K-153	K-153 Submarine	CHM	-	-	-	34.0E 44.0N (+/- 0.5)	1.0
1979 Jan?	R-39	BR-II-4 eject test	-	K-153	K-153 Submarine	CHM	-	-	-	34.0E 44.0N (+/- 0.5)	1.0
1979 Jan?	R-39	BR-II-5 eject test	-	K-153	K-153 Submarine	CHM	-	-	-	34.0E 44.0N (+/- 0.5)	1.0
1979 Jan?	R-39	BR-II-6 eject test	-	K-153	K-153 Submarine	CHM	-	-	-	34.0E 44.0N (+/- 0.5)	1.0
1979 Sep?	R-39	BR-II-7 eject test	-	K-153	K-153 Submarine	CHM	-	-	-	34.0E 44.0N (+/- 0.5)	1.0

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## IV.1.12 Soviet Missile Submarines - Project 629A



Credit: (c) A.D. Baker, III; from Polmar and Moore, Cold War Submarines

Project 629A submarines (NATO name Golf II) were used to launch the R-21 missile using the D-4 system.

Updated: 2024 Nov 28 03:19:32

Soviet Missile Submarines - Project 629A

Ship	Transliteration	Image	CODE	Agency	Class	ClassID	AltID	Active
K-36	K-36 submarine	-	K-36	VNF	Proekt 629A	B-26	-	-
K-72	K-72 Submarine	-	K-72	VNF	Proekt 629A	B-40	-	-
K-75	K-75 Submarine	-	K-75	VNF	Proekt 629A	B-46	-	-
K-79	K-79 Submarine	-	K-79	VNF	Proekt 629A	B-41	-	-
K-88	K-88 Submarine	-	K-88	VNF	Proekt 629A	B-45	-	-
K-91	K-91 submarine	-	K-91	VNF	Proekt 629A	B-48	-	-
K-93	K-93 Submarine	-	K-93	VNF	Proekt 629A	K-93	-	-
K-96	K-96 Submarine	-	K-96	VNF	Proekt 629A	B-92	-	-
K-99	K-99 Submarine	-	K-99	VNF	Proekt 629A	B-51	-	-
K-126	K-126 Submarine	-	K-126	VNF	Proekt 629A	B-93	-	-
K-129	K-129 Submarine (Proekt 629)	-	K-129A	VNF	Proekt 629A	B-103	-	-
K-139	K-139 Submarine	-	K-139	VNF	Proekt 629A	B-113	-	-
K-142	K-142 Submarine	-	K-142	VNF	Proekt 629B	K-142	-	-
K-163	K-163 Submarine	-	K-163	VNF	Proekt 629A	K-163	-	-



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**IV.1.12.1 K-36 submarine**

K-36

**IV.1.12.2 K-72 Submarine**

K-72

**IV.1.12.3 K-75 Submarine**

K-75

**IV.1.12.4 K-79 Submarine**

K-79

Rockets used: R-21

Updated: 2024 Nov 28 03:19:32

**Launches: K-79**

Date	Rocket	Flight	Mission	PlatCode	Platform	Site	LP	AscSite	AsclP	Pos	Apogee
1970 May?	R-21	R-21 4K55 UBP	MGCh 4G55/RA3	K-79	K-79 Submarine	UNKPL	-	-	-	-	300.0

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#### **IV.1.12.5 K-88 Submarine**

K-88

Rockets used: R-21

Updated: 2024 Nov 28 03:19:32

Launches: K-88

Date	Rocket	Flight	Mission	PlatCode	Platform	Site	LP	AscSite	AsclP	Pos	Apogee
1974 Jun?	R-21	R-21 4K55 UBP	MGCh 4G55/RA3	K-88	K-88 Submarine	UNKPL	-	-	-	-	300.0
1974 Jun?	R-21	R-21 4K55 UBP	MGCh 4G55/RA3	K-88	K-88 Submarine	UNKPL	-	-	-	-	300.0

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### **IV.1.12.6 K-91 submarine**

K-91

Rockets used: R-21

Updated: 2024 Nov 28 03:19:32

**Launches: K-91**

Date	Rocket	Flight	Mission	PlatCode	Platform	Site	LP	AscSite	AsclP	Pos	Apogee
1968 Jun?	R-21	R-21 4K55 UBP	MGCh 4G55/RA3	K-91	K-91 submarine	UNKPL	-	-	-	-	300.0
1969	R-21	R-21 4K55 UBP	MGCh 4G55/RA3	K-91	K-91 submarine	UNKPL	-	-	-	-	300.0

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**IV.1.12.7 K-93 Submarine**

K-93

**IV.1.12.8 K-96 Submarine**

K-96

**IV.1.12.9 K-99 Submarine**

K-99

**IV.1.12.10 K-126 Submarine**

K-126

**IV.1.12.11 K-129 Submarine (Proekt 629)**

K-129

**IV.1.12.12 K-139 Submarine**

K-139

IV-383

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### **IV.1.12.13 K-142 Submarine**

K-142

Rockets used: R-21

Updated: 2024 Nov 28 03:19:32



Launches: K-142

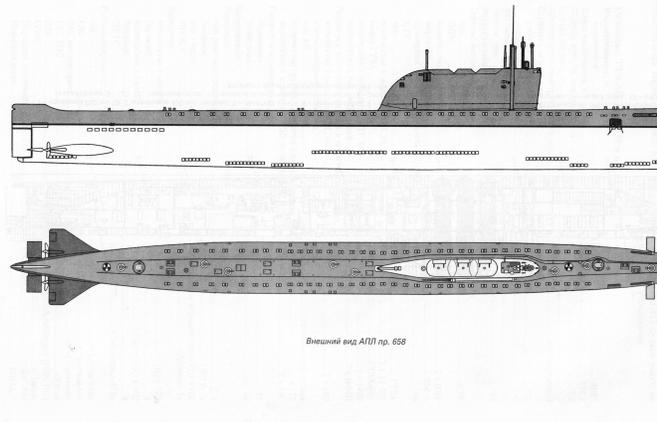
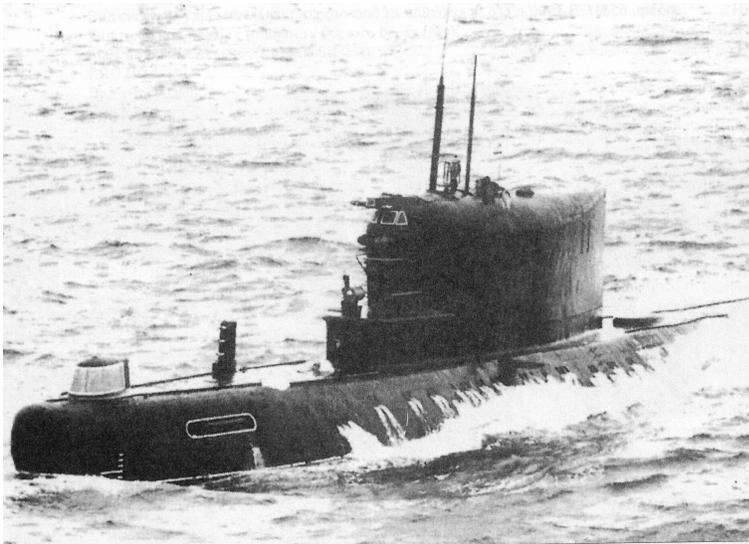
Date	Rocket	Flight	Mission	Platform	Site	LP	AscSite	AsCLP	Pos	Apogee
1962 Feb 26	R-21	R-21 4K55 LKI-III-1	MGCh 4G55/RA3	K-142	BLA	-	-	-	34.0E 70.0N (+/- 0.5)	300.0
1962 Mar?	R-21	R-21 4K55 LKI-III-2	MGCh 4G55/RA3	K-142	BLA	-	-	-	34.0E 70.0N (+/- 0.5)	300.0
1962 Mar?	R-21	R-21 4K55 LKI-III-3	MGCh 4G55/RA3	K-142	BLA	-	-	-	34.0E 70.0N (+/- 0.5)	300.0
1962 Mar?	R-21	R-21 4K55 LKI-III-4	MGCh 4G55/RA3	K-142	BLA	-	-	-	34.0E 70.0N (+/- 0.5)	300.0
1962 Jul	R-21	R-21 4K55 LKI-III-5	MGCh 4G55/RA3	K-142	BLA	-	-	-	34.0E 70.0N (+/- 0.5)	300.0
1962 Jul	R-21	R-21 4K55 LKI-III-6	MGCh 4G55/RA3	K-142	BLA	-	-	-	34.0E 70.0N (+/- 0.5)	300.0
1962 Jul	R-21	R-21 4K55 LKI-III-7	MGCh 4G55/RA3	K-142	BLA	-	-	-	34.0E 70.0N (+/- 0.5)	0.0
1971 Jan 16	R-21	R-21 4K55 UBP	MGCh 4G55/RA3	K-142	UNKPL	-	-	-	-	300.0

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#### IV.1.12.14 K-163 Submarine

K-163

#### IV.1.13 Soviet Missile Submarines - Project 658



Credit: Apa'lkov et al 2006

Credit: Apa'lkov et al 2006

The Project 658 (NATO code, Hotel) submarine supported the D-2 launch system with three R-13 missiles.

Updated: 2024 Nov 28 03:19:32

Soviet Missile Submarines - Project 658

Ship	Transliteration	Image	CODE	Agency	Class	ClassID	AltID	Active
K-16	K-16 submarine	-	K-16	VMF	Proekt 658	K-16	-	- - -
								
K-19	K-19 Submarine	-	K-19	VMF	Proekt 658	K-19	-	- - -
K-33	K-33 submarine	-	K-33	VMF	Proekt 658	K-33	-	- - -
K-40	K-40 submarine	-	K-40	VMF	Proekt 658	K-40	-	- - -
K-55	K-55 submarine	-	K-55	VMF	Proekt 658	K-55	-	- - -
K-145	K-145 Submarine	-	K-145	VMF	Proekt 658/701	K-145	-	- - -
K-149	K-149 Submarine	-	K-149	VMF	Proekt 658	K-149	-	- - -
K-178	K-178 Submarine	-	K-178	VMF	Proekt 658	K-178	-	- - -

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### **IV.1.13.1 K-16 submarine**

K-16

Rockets used: R-21

Updated: 2024 Nov 28 03:19:32

Launches: K-16

Date	Rocket	Flight	Mission	PlatCode	Platform	Site	LP	AscSite	AsCLP	Pos	Apogee
1973	R-21	R-21 4K55 UBP	MGCh 4G55/RA3	K-16	K-16 submarine	UNKPL	-	-	-	-	300.0
1973	R-21	R-21 4K55 UBP	MGCh 4G55/RA3	K-16	K-16 submarine	UNKPL	-	-	-	-	300.0
1975	R-21	R-21 4K55 UBP	MGCh 4G55/RA3	K-16	K-16 submarine	MAOLA	-	-	-	30.0M 57.0N (+/- 9.0)	300.0
1979	R-21	R-21 8K55M UBP	MGCh	K-16	K-16 submarine	UNKPL	-	-	-	-	300.0

---

## IV.1.13.2 K-19 Submarine

K-19



Credit: From Polmar and Moore, Cold War Submarines

Rockets used: R-21

Updated: 2024 Nov 28 03:19:32

Launches: K-19

Date	Rocket	Flight	Mission	PlatCode	Platform	Site	LP	AscSite	AsCLP	Pos	Apogee
1962 Dec?	R-21	R-21 4K55 LKI-III-14	MGCh 4G55/RA3	K-19	K-19 Submarine	UNKPL	-	-	-	-	300.0
1963 Dec 14	R-21	R-21 4K55 UBP	MGCh 4G55/RA3	K-19	K-19 Submarine	BLA	-	-	-	34.0E 70.0N (+/- 0.5)	300.0
1966	R-21	R-21 4K55 UBP	MGCh 4G55/RA3	K-19	K-19 Submarine	BLA	-	-	-	34.0E 70.0N (+/- 0.5)	300.0
1973 Mar 18	R-21	R-21 4K55 UBP	MGCh 4G55/RA3	K-19	K-19 Submarine	UNKPL	-	-	-	-	300.0
1975 Mar 18	R-21	R-21 4K55 UBP	MGCh 4G55/RA3	K-19	K-19 Submarine	UNKPL	-	-	-	-	300.0

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### **IV.1.13.3 K-33 submarine**

K-33

Rockets used: R-21

Updated: 2024 Nov 28 03:19:32



Launches: K-33

Date	Rocket	Flight	Mission	PlatCode	Platform	Site	LP	AscSite	AsclP	Pos	Apogee
1965 Sep 15	R-21	R-21 4K55 UBP	MGCh 4G55/RA3	K-33	K-33 submarine	BELA	-	-	-	38.0E 65.5N (+/- 1.0)	300.0
1965 Sep 15	R-21	R-21 4K55 UBP	MGCh 4G55/RA3	K-33	K-33 submarine	BELA	-	-	-	38.0E 65.5N (+/- 1.0)	300.0
1967 Jun?	R-21	R-21 4K55 UBP	MGCh 4G55/RA3	K-33	K-33 submarine	UNKPL	-	-	-	-	300.0
1967 Jun?	R-21	R-21 4K55 UBP	MGCh 4G55/RA3	K-33	K-33 submarine	UNKPL	-	-	-	-	300.0
1967 Jun?	R-21	R-21 4K55 UBP	MGCh 4G55/RA3	K-33	K-33 submarine	UNKPL	-	-	-	-	300.0
1973 Apr?	R-21	R-21 4K55 UBP	MGCh 4G55/RA3	K-33	K-33 submarine	UNKPL	-	-	-	-	300.0
1973 Apr?	R-21	R-21 4K55 UBP	MGCh 4G55/RA3	K-33	K-33 submarine	UNKPL	-	-	-	-	300.0

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#### **IV.1.13.4 K-40 submarine**

K-40

#### **IV.1.13.5 K-55 submarine**

K-55

#### **IV.1.13.6 K-145 Submarine**

K-145

Rockets used: Vysota

Updated: 2024 Nov 28 03:19:32

Launches: K-145

Date	Rocket	Flight	Mission	Platform	Site	LP	AscSite	AsclP	Pos	Apogee
1971 Dec 25	Vysota	R-29 4K75 LKI-III-1	MGCh 4G75/RA46	K-145	K-145 Submarine	BELA	-	-	38.0E 65.5N (+/- 1.0)	1000.0
1972 Jan?	Vysota	R-29 4K75 LKI-III-2	MGCh 4G75/RA46	K-145	K-145 Submarine	BELA	-	-	38.0E 65.5N (+/- 1.0)	1000.0
1972 Mar?	Vysota	R-29 4K75 LKI-III-3	MGCh 4G75/RA46	K-145	K-145 Submarine	BELA	-	-	38.0E 65.5N (+/- 1.0)	1000.0
1972 Apr?	Vysota	R-29 4K75 LKI-III-4	MGCh 4G75/RA46	K-145	K-145 Submarine	BELA	-	-	38.0E 65.5N (+/- 1.0)	1000.0
1972 Aug 21	Vysota	R-29 4K75 LKI-III-5	MGCh 4G75/RA46	K-145	K-145 Submarine	BLA	-	-	34.0E 70.0N (+/- 0.5)	1000.0
1972 Sep?	Vysota	R-29 4K75 LKI-III-6	MGCh 4G75/RA46	K-145	K-145 Submarine	BLA	-	-	34.0E 70.0N (+/- 0.5)	1000.0
1972 Sep?	Vysota	R-29 4K75 LKI-III-7	MGCh 4G75/RA46	K-145	K-145 Submarine	BLA	-	-	34.0E 70.0N (+/- 0.5)	1000.0
1972 Sep?	Vysota	R-29 4K75 LKI-III-8	MGCh 4G75/RA46	K-145	K-145 Submarine	BLA	-	-	34.0E 70.0N (+/- 0.5)	1000.0
1972 Sep?	Vysota	R-29 4K75 LKI-III-9	MGCh 4G75/RA46	K-145	K-145 Submarine	BLA	-	-	34.0E 70.0N (+/- 0.5)	1000.0
1972 Nov 25	Vysota	R-29 4K75 LKI-III-10	MGCh 4G75/RA46	K-145	K-145 Submarine	BELA	-	-	38.0E 65.5N (+/- 1.0)	1000.0
1972 Nov 28	Vysota	R-29 4K75 LKI-III-11	MGCh 4G75/RA46	K-145	K-145 Submarine	BELA	-	-	38.0E 65.5N (+/- 1.0)	1000.0
1972 Nov 28	Vysota	R-29 4K75 LKI-III-12	MGCh 4G75/RA46	K-145	K-145 Submarine	BELA	-	-	38.0E 65.5N (+/- 1.0)	1000.0

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### **IV.1.13.7 K-149 Submarine**

K-149

### **IV.1.13.8 K-178 Submarine**

K-178

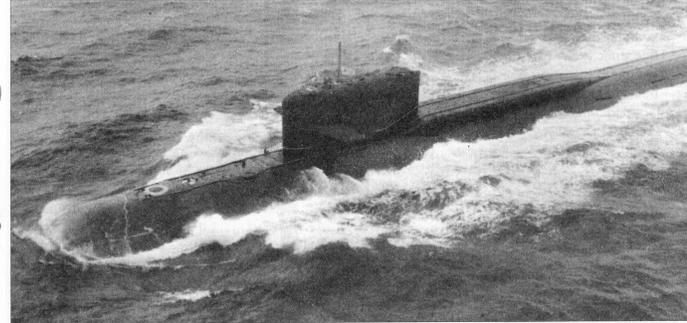
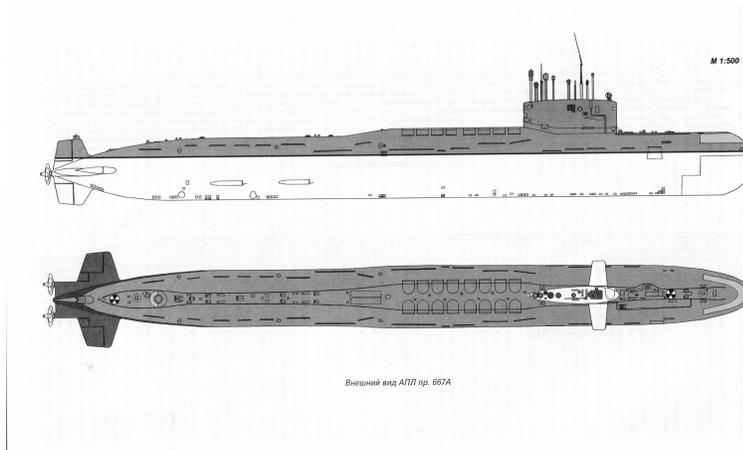
Rockets used: R-21

Updated: 2024 Nov 28 03:19:32

**Launches: K-178**

Date	Rocket	Flight	Mission	PlatCode	Platform	Site	LP	AscSite	AscLP	Pos	Apogee
1971	R-21	R-21 4K55 UBP	MGCh 4G55/RA3	K-178	K-178 Submarine	UNKPL	-	-	-	-	300.0

## IV.1.14 Soviet Missile Submarines - Project 667/667A



Credit: Apa'lkov et al 2006

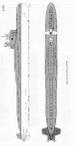
Credit: Apa'lkov et al 2006

The Project 667A Navaga submarines (NATO codename YANKEE) carried 16 R-27 missiles. The K-140 was later converted to Project 667AM Navaga-M, with the R-31 missile.

Some 667 submarines were converted to 667AT and 667M variants without ballistic missiles.

Updated: 2024 Nov 28 03:19:33

Soviet Missile Submarines - Project 667/667A

Ship	Transliteration	Image	CODE	Agency	Class	ClassID	AltID	Active
K-26	K-26 submarine	-	K-26	VMF	Proekt 667A	K-26	-	-
K-32	K-32 submarine	-	K-32	VMF	Proekt 667A	K-32	-	-
K-137	K-137 Submarine	-	K-137	VMF	Proekt 667AU	K-137	-	-
								
K-140	K-140 Submarine	-	K-140	VMF	Proekt 667AM	K-140	-	-
K-207	K-207 Submarine	-	K-207	VMF	Proekt 667A	K-207	-	-
K-210	K-210 Submarine	-	K-210	VMF	Proekt 667A	K-210	-	-
K-214	K-214 Submarine	-	K-214	VMF	Proekt 667AU	K-214	-	-
K-216	K-216 Submarine	-	K-216	VMF	Proekt 667A	K-216	-	-
K-219	K-219 Submarine	-	K-219	VMF	Proekt 667AU	K-219	-	-
K-228	K-228 submarine	-	K-228	VMF	Proekt 667AU	K-228	-	-
K-236	K-236 submarine	-	K-236	VMF	Proekt 667AU	K-236	-	-
K-241	K-241 submarine	-	K-241	VMF	Proekt 667AU	K-241	-	-
K-245	K-245 submarine	-	K-245	VMF	Proekt 667AU	K-245	-	-
K-249	K-249 Submarine	-	K-249	VMF	Proekt 667A	K-249	-	-
K-252	K-252 submarine	-	K-252	VMF	Proekt 667A	K-252	-	-
K-253	K-253 Submarine	-	K-253	VMF	Proekt 667A	K-253	-	-
K-258	K-258 Submarine	-	K-258	VMF	Proekt 667AU	K-258	-	-
K-339	K-339 Submarine	-	K-339	VMF	Proekt 667A	K-339	-	-
K-389	K-389 submarine	-	K-389	VMF	Proekt 667A	K-389	-	-
K-395	K-395 submarine	-	K-395	VMF	Proekt 667A	K-395	-	-
K-403	K-403 submarine	-	K-403	VMF	Proekt 667A	K-403	-	-
K-408	K-408 Submarine	-	K-408	VMF	Proekt 667A	K-408	-	-
K-411	K-411 Submarine	-	K-411	VMF	Proekt 667A	K-411	-	-
K-415	K-415 Submarine	-	K-415	VMF	Proekt 667A	K-415	-	-
K-418	K-418 Submarine	-	K-418	VMF	Proekt 667A	K-418	-	-
K-420	K-420 Submarine	-	K-420	VMF	Proekt 667A	K-420	-	-
K-423	K-423 Submarine	-	K-423	VMF	Proekt 667A	K-423	-	-
K-426	K-426 Submarine	-	K-426	VMF	Proekt 667A	K-426	-	-
K-430	K-430 Submarine	-	K-430	VMF	Proekt 667AU	K-430	-	-
K-434	K-434 Submarine	-	K-434	VMF	Proekt 667AU	K-434	-	-
K-436	K-436 Submarine	-	K-436	VMF	Proekt 667AU	K-436	-	-
K-444	K-444 submarine	-	K-444	VMF	Proekt 667AU	K-444	-	-
K-446	K-446 submarine	-	K-446	VMF	Proekt 667AU	K-446	-	-
K-451	K-451 submarine	-	K-451	VMF	Proekt 667AU	K-451	-	-

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#### **IV.1.14.1 K-26 submarine**

K-26

Rockets used: Zyb

Updated: 2024 Nov 28 03:19:33



**Launches: K-26**

Date	Rocket	Flight	Mission	PlatCode	Platform	Site	LP	AscSite	AscLP	Pos	Apogee
1978 Apr?	Zyb	R-27U 3M20 UBp	3 BB RA83	K-26	K-26 submarine	UNKPL	-	-	-	-	620.0

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#### **IV.1.14.2 K-32 submarine**

K-32

Rockets used: Zyb

Updated: 2024 Nov 28 03:19:33

Launches: K-32

Date	Rocket	Flight	Mission	PlatCode	Platform	Site	LP	AscSite	AscLP	Pos	Apogee
1969 Dec 19	Zyb	R-27 4K10 UBP	MGCh 4G10/RA15	K-32	K-32 submarine	BLA	-	-	-	34.0E 70.0N (+/- 0.5)	620.0
1969 Dec 19	Zyb	R-27 4K10 UBP	MGCh 4G10/RA15	K-32	K-32 submarine	BLA	-	-	-	34.0E 70.0N (+/- 0.5)	620.0
1969 Dec 19	Zyb	R-27 4K10 UBP	MGCh 4G10/RA15	K-32	K-32 submarine	BLA	-	-	-	34.0E 70.0N (+/- 0.5)	620.0
1969 Dec 19	Zyb	R-27 4K10 UBP	MGCh 4G10/RA15	K-32	K-32 submarine	BLA	-	-	-	34.0E 70.0N (+/- 0.5)	620.0
1969 Dec 19	Zyb	R-27 4K10 UBP	MGCh 4G10/RA15	K-32	K-32 submarine	BLA	-	-	-	34.0E 70.0N (+/- 0.5)	620.0
1969 Dec 19	Zyb	R-27 4K10 UBP	MGCh 4G10/RA15	K-32	K-32 submarine	BLA	-	-	-	34.0E 70.0N (+/- 0.5)	620.0
1969 Dec 19 0530	Zyb	R-27 4K10 UBP	MGCh 4G10/RA15	K-32	K-32 submarine	BLA	-	-	-	34.0E 70.0N (+/- 0.5)	620.0

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### **IV.1.14.3 K-137 Submarine**

K-137

Rockets used: Zyb

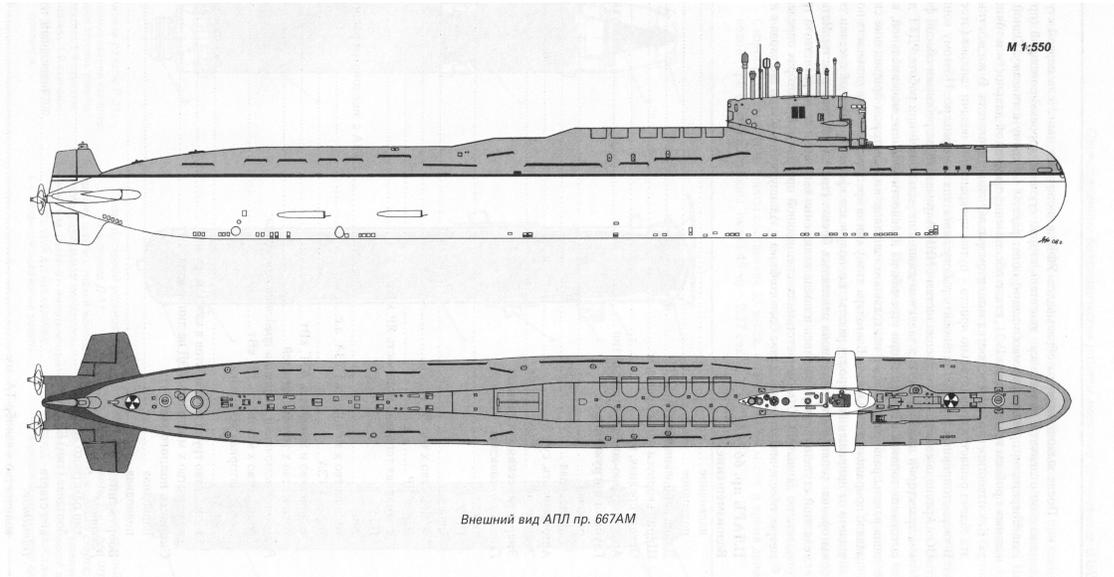
Updated: 2024 Nov 28 03:19:33

Launches: K-137

Date	Rocket	Flight	Mission	Platform	Site	LP	AscSite	AsCLP	Pos	Apogee
1967 Sep 6	Zyb	R-27 4K10 LKI-IV-1	MGCh 4G10/RA15	K-137	BELA	-	-	-	38.0E 65.5N (+/- 1.0)	620.0
1967 Sep 27	Zyb	R-27 4K10 LKI-IV-2	MGCh 4G10/RA15	K-137	BELA	-	-	-	38.0E 65.5N (+/- 1.0)	620.0
1967 Sep 27	Zyb	R-27 4K10 LKI-IV-3	MGCh 4G10/RA15	K-137	BELA	-	-	-	38.0E 65.5N (+/- 1.0)	620.0
1967 Oct 2	Zyb	R-27 4K10 LKI-IV-4	MGCh 4G10/RA15	K-137	BELA	-	-	-	38.0E 65.5N (+/- 1.0)	620.0
1967 Oct 2	Zyb	R-27 4K10 LKI-IV-5	MGCh 4G10/RA15	K-137	BELA	-	-	-	38.0E 65.5N (+/- 1.0)	620.0
1967 Oct 2	Zyb	R-27 4K10 LKI-IV-6	MGCh 4G10/RA15	K-137	BELA	-	-	-	38.0E 65.5N (+/- 1.0)	620.0
1978 Mar 19	Zyb	R-27U 3M20 UBP	3 BB RA83	K-137	GRSEA	-	-	-	5.0W 75.0N (+/- 5.0)	620.0
1978 Mar 19	Zyb	R-27U 3M20 UBP	3 BB RA83	K-137	GRSEA	-	-	-	5.0W 75.0N (+/- 5.0)	620.0
1987 Sep?	Zyb	R-27U 3M20 UBP	-	K-137	UNKPL	-	-	-	-	620.0
1987 Sep?	Zyb	R-27U 3M20 UBP	-	K-137	UNKPL	-	-	-	-	620.0

## IV.1.14.4 K-140 Submarine

### K-140



Credit: Apa'lkov et al 2006

Rockets used: Zyb,R-31

Updated: 2024 Nov 28 03:19:33

Launches: K-140

Date	Rocket	Flight	Mission	Platform	Site	LP	AscSite	AsclP	Pos	Apogee
1972 Jul?	Zyb	R-27 4K10 UBP	MGCh 4G10/RA15	K-140	NWSLA	-	-	-	5.0E 70.0N (+/- 5.0)	620.0
1972 Jul?	Zyb	R-27 4K10 UBP	MGCh 4G10/RA15	K-140	NWSLA	-	-	-	5.0E 70.0N (+/- 5.0)	620.0
1972 Jul?	Zyb	R-27 4K10 UBP	MGCh 4G10/RA15	K-140	NWSLA	-	-	-	5.0E 70.0N (+/- 5.0)	620.0
1976 Dec 22 0430	R-31	3M17 LKI-III-1	-	K-140	BELA	-	-	-	38.0E 65.5N (+/- 1.0)	1000.0
1977	R-31	3M17 LKI-III-2	-	K-140	UNKPL	-	-	-	-	1000.0
1977	R-31	3M17 LKI-III-3	-	K-140	UNKPL	-	-	-	-	1000.0
1977	R-31	3M17 LKI-III-4	-	K-140	UNKPL	-	-	-	-	1000.0
1977	R-31	3M17 LKI-III-5	-	K-140	UNKPL	-	-	-	-	1000.0
1977	R-31	3M17 LKI-III-6	-	K-140	UNKPL	-	-	-	-	1000.0
1977	R-31	3M17 LKI-III-7	-	K-140	UNKPL	-	-	-	-	1000.0
1978	R-31	3M17 LKI-III-8	MGCh	K-140	UNKPL	-	-	-	-	1000.0
1978	R-31	3M17 LKI-III-9	MGCh	K-140	UNKPL	-	-	-	-	1000.0
1978	R-31	3M17 LKI-III-10	MGCh	K-140	UNKPL	-	-	-	-	1000.0
1978	R-31	3M17 LKI-III-11	MGCh	K-140	UNKPL	-	-	-	-	1000.0
1978	R-31	3M17 LKI-III-12	MGCh	K-140	UNKPL	-	-	-	-	1000.0
1978	R-31	3M17 LKI-III-13	MGCh	K-140	UNKPL	-	-	-	-	1000.0
1978	R-31	3M17 LKI-III-14	MGCh	K-140	UNKPL	-	-	-	-	1000.0
1979	R-31	3M17 LKI-III-15	MGCh	K-140	UNKPL	-	-	-	-	1000.0
1979	R-31	3M17 LKI-III-16	MGCh	K-140	UNKPL	-	-	-	-	1000.0
1979	R-31	3M17 LKI-III-17	MGCh	K-140	UNKPL	-	-	-	-	1000.0
1979	R-31	3M17 LKI-III-18	MGCh	K-140	UNKPL	-	-	-	-	1000.0
1979	R-31	3M17 LKI-III-19	MGCh	K-140	UNKPL	-	-	-	-	1000.0
1979 Aug	R-31	3M17 LKI-III-20	MGCh	K-140	UNKPL	-	-	-	-	1000.0
1979 Sep?	R-31	3M17 UBP	MGCh	K-140	KARA	-	-	-	75.0E 75.0N (+/- 9.0)	1000.0
1979 Sep?	R-31	3M17 Utl	MGCh	K-140	UNKPL	-	-	-	75.0E 75.0N (+/- 9.0)	1000.0
1990 Sep 17	R-31	3M17 Utl	MGCh	K-140	UNKPL	-	-	-	-	1000.0
1990 Sep 18	R-31	3M17 Utl	MGCh	K-140	UNKPL	-	-	-	-	1000.0
1990 Sep 29	R-31	3M17 Utl	MGCh	K-140	UNKPL	-	-	-	-	1000.0
1990 Sep 30	R-31	3M17 Utl	MGCh	K-140	UNKPL	-	-	-	-	1000.0
1990 Sep 30	R-31	3M17 Utl	MGCh	K-140	UNKPL	-	-	-	-	1000.0
1990 Oct 1	R-31	3M17 Utl	MGCh	K-140	UNKPL	-	-	-	-	0.0
1990 Oct 11	R-31	3M17 Utl	MGCh	K-140	UNKPL	-	-	-	-	1000.0
1990 Oct 11	R-31	3M17 Utl	MGCh	K-140	UNKPL	-	-	-	-	1000.0
1990 Oct 11	R-31	3M17 Utl	MGCh	K-140	UNKPL	-	-	-	-	1000.0
1990 Oct 11	R-31	3M17 Utl	MGCh	K-140	UNKPL	-	-	-	-	1000.0
1990 Nov 30	R-31	3M17 Utl	MGCh	K-140	UNKPL	-	-	-	-	1000.0
1990 Nov 30	R-31	3M17 Utl	MGCh	K-140	UNKPL	-	-	-	-	1000.0

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#### **IV.1.14.5 K-207 Submarine**

K-207

#### **IV.1.14.6 K-210 Submarine**

K-210

#### **IV.1.14.7 K-214 Submarine**

K-214

Rockets used: Zyb

Updated: 2024 Nov 28 03:19:33



Launches: K-214

Date	Rocket	Flight	Mission	PlatCode	Platform	Site	LP	AscSite	AscLP	Pos	Apogee
1972 May?	Zyb	R-27 4K10 UBP	MGCh 4G10/RA15	K-214	K-214 Submarine	UNKPL	-	-	-	-	620.0
1975 Sep	Zyb	R-27U 3M20 UBP	3 BB RA83	K-214	K-214 Submarine	UNKPL	-	-	-	-	620.0
1976	Zyb	R-27U 3M20 UBP	3 BB RA83	K-214	K-214 Submarine	GRSEA	-	-	-	5.0W 75.0N (+/- 5.0)	620.0
1976	Zyb	R-27U 3M20 UBP	3 BB RA83	K-214	K-214 Submarine	GRSEA	-	-	-	5.0W 75.0N (+/- 5.0)	620.0

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#### **IV.1.14.8 K-216 Submarine**

K-216

#### **IV.1.14.9 K-219 Submarine**

K-219

#### **IV.1.14.10 K-228 submarine**

K-228

Rockets used: Zyb R-27U

Updated: 2024 Nov 28 03:19:33

Launches: K-228

Date	Rocket	Flight	Mission	Platform	Site	LP	AscSite	AsclP	Pos	Apogee
1972 Sep	Zyb R-27U	R-27U 3M20 LKI-1	MGCh RA82	K-228	UNKPL	-	-	-	-	620.0
1972 Sep	Zyb R-27U	R-27U 3M20 LKI-2	MGCh RA82	K-228	UNKPL	-	-	-	-	620.0
1972 Sep	Zyb R-27U	R-27U 3M20 LKI-3	MGCh RA82	K-228	UNKPL	-	-	-	-	620.0
1972 Sep	Zyb R-27U	R-27U 3M20 LKI-4	MGCh RA82	K-228	UNKPL	-	-	-	-	620.0
1972 Sep	Zyb R-27U	R-27U 3M20 LKI-5	MGCh RA82	K-228	UNKPL	-	-	-	-	620.0
1972 Sep	Zyb R-27U	R-27U 3M20 LKI-6	MGCh RA82	K-228	UNKPL	-	-	-	-	620.0
1972 Sep	Zyb R-27U	R-27U 3M20 LKI-7	MGCh RA82	K-228	UNKPL	-	-	-	-	620.0
1972 Sep	Zyb R-27U	R-27U 3M20 LKI-8	MGCh RA82	K-228	UNKPL	-	-	-	-	620.0
1972 Sep	Zyb R-27U	R-27U 3M20 LKI-9	MGCh RA82	K-228	UNKPL	-	-	-	-	620.0
1972 Sep	Zyb R-27U	R-27U 3M20 LKI-10	MGCh RA82	K-228	UNKPL	-	-	-	-	620.0
1972 Sep	Zyb R-27U	R-27U 3M20 LKI-11	3 BB RA83	K-228	UNKPL	-	-	-	-	620.0
1972 Sep	Zyb R-27U	R-27U 3M20 LKI-12	3 BB RA83	K-228	UNKPL	-	-	-	-	620.0
1972 Sep	Zyb R-27U	R-27U 3M20 LKI-13	3 BB RA83	K-228	UNKPL	-	-	-	-	620.0
1972 Sep	Zyb R-27U	R-27U 3M20 LKI-14	3 BB RA83	K-228	UNKPL	-	-	-	-	620.0
1973 Aug	Zyb R-27U	R-27U 3M20 LKI-15	3 BB RA83	K-228	UNKPL	-	-	-	-	620.0
1973 Aug	Zyb R-27U	R-27U 3M20 LKI-15	3 BB RA83	K-228	UNKPL	-	-	-	-	620.0

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#### **IV.1.14.11 K-236 submarine**

K-236

Rockets used: Zyb

Updated: 2024 Nov 28 03:19:33

Date      Rocket      Flight      Mission      PlatCode      Platform      Site      LP      AscSite      AscLP      Pos      Apogee  
 1971 Sep?      Zyb      R-27 4K10 UBP      MGCh 4G10/RA15      K-236      K-236 submarine      UNKPL      -      -      -      -      620.0

**Launches: K-236**

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#### **IV.1.14.12 K-241 submarine**

K-241

#### **IV.1.14.13 K-245 submarine**

K-245

Rockets used: Zyb

Updated: 2024 Nov 28 03:19:33

Launches: K-245

Date	Rocket	Flight	Mission	PlatformCode	Platform	Site	LP	AscSite	AsclP	Pos	Apogee
1972 Oct 21	Zyb	R-27 4K10 UBP	MGCh 4G10/RA15	K-245	K-245 submarine	NPOLE	-	-	-	0.0E 90.0N (+/- 9.0)	620.0
1973 Jun 26	Zyb	R-27 4K10 UBP	MGCh 4G10/RA15	K-245	K-245 submarine	UNKPL	-	-	-	-	620.0
1973 Jun 26	Zyb	R-27 4K10 UBP	MGCh 4G10/RA15	K-245	K-245 submarine	UNKPL	-	-	-	-	620.0
1973 Jun 26	Zyb	R-27 4K10 UBP	MGCh 4G10/RA15	K-245	K-245 submarine	UNKPL	-	-	-	-	620.0
1973 Jun 26	Zyb	R-27 4K10 UBP	MGCh 4G10/RA15	K-245	K-245 submarine	UNKPL	-	-	-	-	620.0
1973 Jun 26	Zyb	R-27 4K10 UBP	MGCh 4G10/RA15	K-245	K-245 submarine	UNKPL	-	-	-	-	620.0

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#### **IV.1.14.14 K-249 Submarine**

K-249

#### **IV.1.14.15 K-252 submarine**

K-252

Rockets used: Zyb

Updated: 2024 Nov 28 03:19:33



Launches: K-252

Date	Rocket	Flight	Mission	PlatCode	Platform	Site	LP	AscSite	AscLP	Pos	Apogee
1975 Apr?	Zyb	R-27U 3M20 UBP	3 BB RA83	K-252	K-252 submarine	POLA	-	-	-	170.0E 30.0N (+/- 9.0)	620.0
1978 Mar?	Zyb	R-27U 3M20 UBP	3 BB RA83	K-252	K-252 submarine	UNKPL	-	-	-	-	620.0
1984	Zyb	R-27U 3M20 UBP	-	K-252	K-252 submarine	UNKPL	-	-	-	-	0.0

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#### **IV.1.14.16 K-253 Submarine**

K-253

Rockets used: Zyb

Updated: 2024 Nov 28 03:19:33

Launches: K-253

Date	Rocket	Flight	Mission	PlatCode	Platform	Site	LP	AscSite	AscLP	Pos	Apogee
1970 Apr 27	Zyb	R-27 4K10 UBP	MGCh 4G10/RA15	K-253	K-253 Submarine	NAOLA	-	-	-	30.0W 57.0N (+/- 9.0)	620.0
1971	Zyb	R-27 4K10 UBP	MGCh 4G10/RA15	K-253	K-253 Submarine	UNKPL	-	-	-	-	620.0

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#### **IV.1.14.17 K-258 Submarine**

K-258

Rockets used: Zyb

Updated: 2024 Nov 28 03:19:33

Launches: K-258

Date	Rocket	Flight	Mission	PlatCode	Platform	Site	LP	AscSite	AsclP	Pos	Apogee
1975 Oct	Zyb	R-27U 3M20 UBP	3 BB RA83	K-258	K-258 Submarine	UNKPL	-	-	-	-	620.0
1975 Oct	Zyb	R-27U 3M20 UBP	3 BB RA83	K-258	K-258 Submarine	UNKPL	-	-	-	-	620.0
1975 Oct	Zyb	R-27U 3M20 UBP	3 BB RA83	K-258	K-258 Submarine	UNKPL	-	-	-	-	620.0
1975 Oct	Zyb	R-27U 3M20 UBP	3 BB RA83	K-258	K-258 Submarine	UNKPL	-	-	-	-	620.0
1975 Oct	Zyb	R-27U 3M20 UBP	3 BB RA83	K-258	K-258 Submarine	UNKPL	-	-	-	-	620.0

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**IV.1.14.18 K-339 Submarine**

K-339

**IV.1.14.19 K-389 submarine**

K-389

**IV.1.14.20 K-395 submarine**

K-395

Rockets used: Zyb

Updated: 2024 Nov 28 03:19:33

Launches: K-395

Date	Rocket	Flight	Mission	PlatCode	Platform	Site	LP	AscSite	AscLP	Pos	Apogee
1969 Nov 30	Zyb	R-27 4K10 UBP	MGCh 4G10/RA15	K-395	K-395 submarine	UNKPL	-	-	-	-	620.0
1969 Nov 30	Zyb	R-27 4K10 UBP	MGCh 4G10/RA15	K-395	K-395 submarine	UNKPL	-	-	-	-	620.0
1972 Sep 9	Zyb	R-27 4K10 UBP	MGCh 4G10/RA15	K-395	K-395 submarine	UNKPL	-	-	-	-	620.0
1974 Feb 3	Zyb	R-27 4K10 UBP	MGCh 4G10/RA15	K-395	K-395 submarine	UNKPL	-	-	-	-	620.0
1975 Jan 20	Zyb	R-27U 3M20 UBP	3 BB RA83	K-395	K-395 submarine	UNKPL	-	-	-	-	620.0

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**IV.1.14.21 K-403 submarine**

K-403

**IV.1.14.22 K-408 Submarine**

K-408

**IV.1.14.23 K-411 Submarine**

K-411

**IV.1.14.24 K-415 Submarine**

K-415

Rockets used: Zyb

Updated: 2024 Nov 28 03:19:33



Date	Rocket	Flight	Mission	PlatCode	Platform	Site	LP	AscSite	AscLP	Pos	Apogee
1970 Dec?	Zyb	R-27 4K10 UBP	MGCh 4G10/RA15	K-415	K-415 Submarine	UNKPL	-	-	-	-	620.0

**Launches: K-415**

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#### **IV.1.14.25 K-418 Submarine**

K-418

Rockets used: Zyb

Updated: 2024 Nov 28 03:19:33

Launches: K-418

Date	Rocket	Flight	Mission	Platform	Site	LP	AscSite	AsclP	Pos	Apogee
1974 Jan 16	Zyb	R-27 4K10 UBP	MGCh 4G10/RA15	K-418	UNKPL	-	-	-	-	620.0
1974 Apr 24	Zyb	R-27 4K10 UBP	MGCh 4G10/RA15	K-418	GRSEA	-	-	-	5.0W 75.0N (+/- 5.0)	620.0

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#### **IV.1.14.26 K-420 Submarine**

K-420

#### **IV.1.14.27 K-423 Submarine**

K-423

Rockets used: Zyb

Updated: 2024 Nov 28 03:19:33

**Launches: K-423**

Date	Rocket	Flight	Mission	Platform	Site	LP	AscSite	AscLP	Pos	Apogee
1976	Zyb	R-27U 3M20 UBP	3 BB RA83	K-423	K-423 Submarine	-	-	-	-	620.0

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**IV.1.14.28 K-426 Submarine**

K-426

**IV.1.14.29 K-430 Submarine**

K-430

Rockets used: Zyb

Updated: 2024 Nov 28 03:19:33

Launches: K-430

Date	Rocket	Flight	Mission	PlatCode	Platform	Site	LP	AscSite	AscLP	Pos	Apogee
1975 Jul 5	Zyb	R-27U 3M20 UBP	3 BB RA83	K-430	K-430 Submarine	UNKPL	-	-	-	-	620.0
1975 Jul 5	Zyb	R-27U 3M20 UBP	3 BB RA83	K-430	K-430 Submarine	UNKPL	-	-	-	-	620.0
1975 Jul 5	Zyb	R-27U 3M20 UBP	3 BB RA83	K-430	K-430 Submarine	UNKPL	-	-	-	-	620.0
1975 Jul 5	Zyb	R-27U 3M20 UBP	3 BB RA83	K-430	K-430 Submarine	UNKPL	-	-	-	-	620.0
1975 Jul 5	Zyb	R-27U 3M20 UBP	3 BB RA83	K-430	K-430 Submarine	UNKPL	-	-	-	-	620.0
1975 Jul 5	Zyb	R-27U 3M20 UBP	3 BB RA83	K-430	K-430 Submarine	UNKPL	-	-	-	-	620.0
1975 Jul 5	Zyb	R-27U 3M20 UBP	3 BB RA83	K-430	K-430 Submarine	UNKPL	-	-	-	-	620.0
1992 Dec 9 0000	Zyb	Efir	-	K-430	K-430 Submarine	POLA	-	-	-	170.0E 30.0N (+/- 9.0)	620.0
1993 Nov 2	Zyb	Efir	R-27U Zyb'	K-430	K-430 Submarine	POLA	-	-	-	170.0E 30.0N (+/- 9.0)	620.0

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### **IV.1.14.30 K-434 Submarine**

K-434

Rockets used: Zyb

Updated: 2024 Nov 28 03:19:33



Launches: K-434

Date	Rocket	Flight	Mission	PlatCode	Platform	Site	LP	AscSite	AscLP	Pos	Apogee
1973?	Zyb	R-27 4K10 UBP	MGCh 4G10/RA15	K-434	K-434 Submarine	UNKPL	-	-	-	-	620.0
1973?	Zyb	R-27 4K10 UBP	MGCh 4G10/RA15	K-434	K-434 Submarine	UNKPL	-	-	-	-	620.0
1973?	Zyb	R-27 4K10 UBP	MGCh 4G10/RA15	K-434	K-434 Submarine	UNKPL	-	-	-	-	620.0
1973?	Zyb	R-27 4K10 UBP	MGCh 4G10/RA15	K-434	K-434 Submarine	UNKPL	-	-	-	-	620.0

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### **IV.1.14.31 K-436 Submarine**

K-436

Rockets used: Zyb

Updated: 2024 Nov 28 03:19:33

Date	Rocket	Flight	Mission	PlatCode	Platform	Site	LP	AscSite	AscLP	Pos	Apogee
1979 Nov	Zyb	R-27U 3M20U UBP	3 BB RA83	K-436	K-436 Submarine	UNKPL	-	-	-	-	620.0

Launches: K-436

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### **IV.1.14.32 K-444 submarine**

K-444

Rockets used: Zyb

Updated: 2024 Nov 28 03:19:33

Launches: K-444

Date	Rocket	Flight	Mission	PlatCode	Platform	Site	LP	AscSite	AscLP	Pos	Apogee
1974 Jun?	Zyb	R-27 4K10 UBP	MGCh 4G10/RA15	K-444	K-444 submarine	UNKPL	-	-	-	-	620.0
1976	Zyb	R-27U 3M20 UBP	3 BB RA83	K-444	K-444 submarine	UNKPL	-	-	-	-	620.0
1976	Zyb	R-27U 3M20 UBP	3 BB RA83	K-444	K-444 submarine	UNKPL	-	-	-	-	620.0
1976 Aug?	Zyb	R-27U 3M20 UBP	3 BB RA83	K-444	K-444 submarine	UNKPL	-	-	-	-	620.0
1976 Aug?	Zyb	R-27U 3M20 UBP	3 BB RA83	K-444	K-444 submarine	UNKPL	-	-	-	-	620.0
1983 Sep 5	Zyb	R-27U 3M20U UBP	Magistral'	K-444	K-444 submarine	OMLA	-	-	-	148.0E 57.0N (+/- 2.0)	620.0

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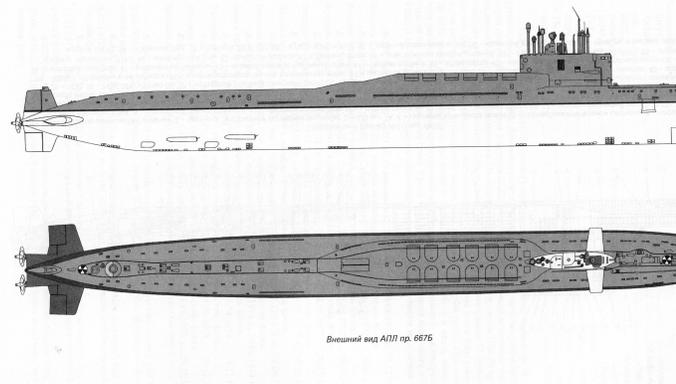
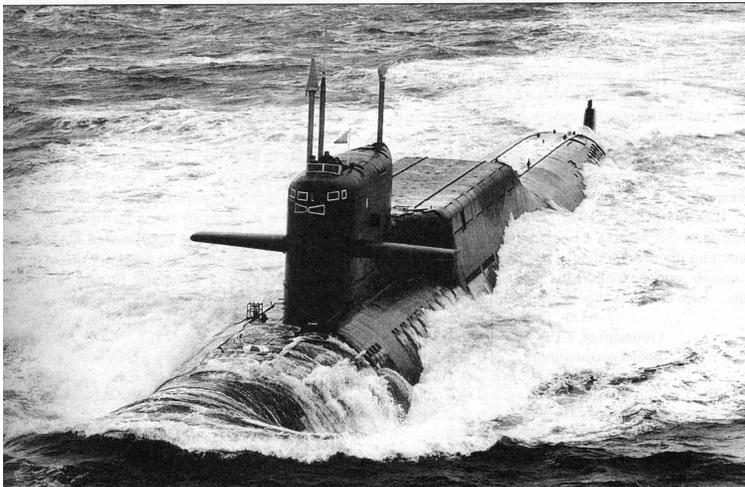
### IV.1.14.33 K-446 submarine

K-446

### IV.1.14.34 K-451 submarine

K-451

## IV.1.15 Soviet Missile Submarines - Project 667B



Credit: Apa'lkov et al 2006

Credit: Apa'lkov et al 2006

Project 667B Murena submarines (NATO codename Delta I) carried 12 R-29 missiles.

Updated: 2024 Nov 28 03:19:33

Soviet Missile Submarines - Project 667B

Ship	Transliteration	Image	CODE	Agency	Class	ClassID	AltID	Active
K-171	K-171 Submarine	-	K-171	VMF	Proekt 667B	K-171	-	-
K-279	K-279 Submarine	-	K-279	VMF	Proekt 667B	K-279	-	-
K-336	K-336 submarine	-	K-336	VMF	Proekt 667B	K-336	-	-
K-385	K-385 submarine	-	K-385	VMF	Proekt 667B	K-385	-	-
K-417	K-417 Submarine	-	K-417	VMF	Proekt 667B	K-417	-	-
K-447 Кисловодск	K-447 Kislvodsk Submarine	-	K-447	VMF	Proekt 667B	K-447	-	-
K-450	K-450 submarine	-	K-450	VMF	Proekt 667B	K-450	-	-
K-457	K-457 Submarine	-	K-457	VMF	Proekt 667B	K-457	-	-
K-460	K-460 Submarine	-	K-460	VMF	Proekt 667B	K-460	-	-
K-465	K-465 Submarine	-	K-465	VMF	Proekt 667B	K-465	-	-
K-472	K-472 Submarine	-	K-472	VMF	Proekt 667B	K-472	-	-
K-475	K-475 Submarine	-	K-475	VMF	Proekt 667B	K-475	-	-
K-477	K-477 Submarine	-	K-477	VMF	Proekt 667B	K-477	-	-
K-497	K-497 Submarine	-	K-497	VMF	Proekt 667B	K-497	-	-
K-500	K-500 Submarine	-	K-500	VMF	Proekt 667B	K-500	-	-
K-512	K-512 submarine	-	K-512	VMF	Proekt 667B	K-512	-	-
K-523	K-523 submarine	-	K-523	VMF	Proekt 667B	K-523	-	-
K-530	K-530 submarine	-	K-530	VMF	Proekt 667B	K-530	-	-

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## IV.1.15.1 K-171 Submarine

K-171

Rockets used: Vysota

Updated: 2024 Nov 28 03:19:33



**Launches: K-171**

Date	Rocket	Flight	Mission	PlatCode	Platform	Site	LP	AscSite	AscLP	Pos	Apogee
1980	Vysota	R-29 4K75D UBP	-	K-171	K-171 Submarine	UNKPL	-	-	-	-	1000.0
1980 Jul	Vysota	R-29 4K75D UBP	-	K-171	K-171 Submarine	POLA	-	-	-	170.0E 30.0N (+/- 9.0)	1000.0

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## IV.1.15.2 K-279 Submarine

K-279

Rockets used: Vysota

Updated: 2024 Nov 28 03:19:33

Launches: K-279

Date	Rocket	Flight	Mission	PlatCode	Platform	Site	LP	AscSite	AsclP	Pos	Apogee
1973	Vysota	R-29 4K75 LKI-III-26	MGCh 4G75/RA46	K-279	K-279 Submarine	BELA	-	-	-	38.0E 65.5N (+/- 1.0)	1000.0
1973	Vysota	R-29 4K75 LKI-III-27	MGCh 4G75/RA46	K-279	K-279 Submarine	BELA	-	-	-	38.0E 65.5N (+/- 1.0)	1000.0
1973	Vysota	R-29 4K75 LKI-III-28	MGCh 4G75/RA46	K-279	K-279 Submarine	BLA	-	-	-	34.0E 70.0N (+/- 0.5)	1000.0
1973	Vysota	R-29 4K75 LKI-III-29	MGCh 4G75/RA46	K-279	K-279 Submarine	BLA	-	-	-	34.0E 70.0N (+/- 0.5)	1000.0
1973	Vysota	R-29 4K75 LKI-III-30	MGCh 4G75/RA46	K-279	K-279 Submarine	BLA	-	-	-	34.0E 70.0N (+/- 0.5)	1000.0
1973	Vysota	R-29 4K75 LKI-III-31	MGCh 4G75/RA46	K-279	K-279 Submarine	BLA	-	-	-	34.0E 70.0N (+/- 0.5)	1000.0

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### **IV.1.15.3 K-336 submarine**

K-336

### **IV.1.15.4 K-385 submarine**

K-385

Rockets used: Vysota

Updated: 2024 Nov 28 03:19:33

Date	Rocket	Flight	Mission	PlatCode	Platform	Site	LP	AscSite	AscLP	Pos	Apogee
1982 Jan 31?	Vysota	R-29 4K75D UB	MGCh	K-385	K-385 submarine	BLA	-	-	-	34.0E 70.0N (+/- 0.5)	1000.0

Launches: K-385

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#### **IV.1.15.5 K-417 Submarine**

K-417

#### **IV.1.15.6 K-447 Kislovodsk Submarine**

K-447 Кисловодск

Rockets used: Vysota, Volna

Updated: 2024 Nov 28 03:19:33

Launches: K-447

Date	Rocket	Flight	Mission	Platform	Platform Code	Platform	Site	LP	AscSite	AsCLP	Pos	Apogee
1974 Apr?	Vysota	R-29 4K75 UBP	MGCh 4G75/RA46	K-447	K-447	K-447 Kislododsk Submarine	UNKPL	-	-	-	-	1000.0
1974 Apr?	Vysota	R-29 4K75 UBP	MGCh 4G75/RA46	K-447	K-447	K-447 Kislododsk Submarine	UNKPL	-	-	-	-	1000.0
1974 Apr?	Vysota	R-29 4K75 UBP	MGCh 4G75/RA46	K-447	K-447	K-447 Kislododsk Submarine	UNKPL	-	-	-	-	1000.0
1974 Apr?	Vysota	R-29 4K75 UBP	MGCh 4G75/RA46	K-447	K-447	K-447 Kislododsk Submarine	UNKPL	-	-	-	-	1000.0
1974 Apr?	Vysota	R-29 4K75 UBP	MGCh 4G75/RA46	K-447	K-447	K-447 Kislododsk Submarine	UNKPL	-	-	-	-	1000.0
1974 Apr?	Vysota	R-29 4K75 UBP	MGCh 4G75/RA46	K-447	K-447	K-447 Kislododsk Submarine	UNKPL	-	-	-	-	1000.0
1974 Apr?	Vysota	R-29 4K75 UBP	MGCh 4G75/RA46	K-447	K-447	K-447 Kislododsk Submarine	UNKPL	-	-	-	-	1000.0
1974 Apr?	Vysota	R-29 4K75 UBP	MGCh 4G75/RA46	K-447	K-447	K-447 Kislododsk Submarine	UNKPL	-	-	-	-	1000.0
1974 Apr?	Vysota	R-29 4K75 UBP	MGCh 4G75/RA46	K-447	K-447	K-447 Kislododsk Submarine	UNKPL	-	-	-	-	1000.0
1974 Apr?	Vysota	R-29 4K75 UBP	MGCh 4G75/RA46	K-447	K-447	K-447 Kislododsk Submarine	UNKPL	-	-	-	-	1000.0
1979	Vysota	R-29 4K75 UBP	-	K-447	K-447	K-447 Kislododsk Submarine	UNKPL	-	-	-	-	1000.0
1981 Jul 3	Vysota	R-29 4K75 UBP	-	K-447	K-447	K-447 Kislododsk Submarine	NPOLE	-	-	-	0.0E 90.0N (+/- 9.0)	1000.0
1981 Jul 3	Vysota	R-29 4K75 UBP	3 BB?	K-447	K-447	K-447 Kislododsk Submarine	NPOLE	-	-	-	0.0E 90.0N (+/- 9.0)	1000.0
1984 Apr?	Vysota	R-29 4K75 UBP	-	K-447	K-447	K-447 Kislododsk Submarine	UNKPL	-	-	-	-	1000.0
1995 Sep	Vysota	R-29 4K75DU UBP	MGCh	K-447	K-447	K-447 Kislododsk Submarine	BLA	-	-	-	34.0E 70.0N (+/- 0.5)	1000.0
1995 Sep	Vysota	R-29 4K75DU UBP	MGCh	K-447	K-447	K-447 Kislododsk Submarine	BLA	-	-	-	34.0E 70.0N (+/- 0.5)	1000.0
1996 Jul 15	Vysota	R-29 4K75DU UBP	MGCh	K-447	K-447	K-447 Kislododsk Submarine	BLA	-	-	-	34.0E 70.0N (+/- 0.5)	1000.0
1996 Jul 15	Vysota	R-29 4K75DU UBP	MGCh	K-447	K-447	K-447 Kislododsk Submarine	BLA	-	-	-	34.0E 70.0N (+/- 0.5)	1000.0
1996 Jul 15	Vysota	R-29 4K75DU UBP	MGCh	K-447	K-447	K-447 Kislododsk Submarine	BLA	-	-	-	34.0E 70.0N (+/- 0.5)	1000.0
1996 Oct?	Volna	R-29 4K75DU UBP	MGCh	K-447	K-447	K-447 Kislododsk Submarine	BLA	-	-	-	34.0E 70.0N (+/- 0.5)	1000.0
1997 Oct 3	Vysota	R-29 4K75DU UBP	Souvenir container	K-447	K-447	K-447 Kislododsk Submarine	BLA	-	-	-	34.0E 70.0N (+/- 0.5)	1000.0
1997 Nov?	Volna	R-29 4K75DU UBP	MGCh	K-447	K-447	K-447 Kislododsk Submarine	BLA	-	-	-	34.0E 70.0N (+/- 0.5)	1000.0
1998 Jul?	Volna	R-29 4K75DU UBP	MGCh	K-447	K-447	K-447 Kislododsk Submarine	BLA	-	-	-	34.0E 70.0N (+/- 0.5)	1000.0

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#### **IV.1.15.7 K-450 submarine**

K-450

#### **IV.1.15.8 K-457 Submarine**

K-457

Rockets used: Vysota, Volna

Updated: 2024 Nov 28 03:19:33



Launches: K-457

Date	Rocket	Flight	Mission	PlatCode	Platform	Site	LP	AscSite	AscLP	Pos	Apogee
1975 Jul	Vysota	R-29 4K75 UBP	MGCh 4G75/RA46	K-457	K-457 Submarine	BLA	-	-	-	34.0E 70.0N (+/- 0.5)	1000.0
1975 Jul	Vysota	R-29 4K75 UBP	MGCh 4G75/RA46	K-457	K-457 Submarine	BLA	-	-	-	34.0E 70.0N (+/- 0.5)	1000.0
1980 May 14?	Vysota	R-29 4K75D UBP	-	K-457	K-457 Submarine	NPOLE	-	-	-	0.0E 90.0N (+/- 9.0)	1000.0
1980 May 14?	Vysota	R-29 4K75D UBP	-	K-457	K-457 Submarine	NPOLE	-	-	-	0.0E 90.0N (+/- 9.0)	1000.0
1997 Sep 2	Volna	R-29 4K75DU UBP	MGCh	K-457	K-457 Submarine	BLA	-	-	-	34.0E 70.0N (+/- 0.5)	1000.0

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## IV.1.15.9 K-460 Submarine

K-460

Rockets used: Vysota

Updated: 2024 Nov 28 03:19:33

Launches: K-460

Date	Rocket	Flight	Mission	PlatCode	Platform	Site	LP	AscSite	AsclP	Pos	Apogee
1974 Aug?	Vysota	R-29 4K75 UBP	MGCh 4G75/RA46	K-460	K-460 Submarine	BLA	-	-	-	34.0E 70.0N (+/- 0.5)	1000.0
1974 Aug?	Vysota	R-29 4K75 UBP	MGCh 4G75/RA46	K-460	K-460 Submarine	BLA	-	-	-	34.0E 70.0N (+/- 0.5)	1000.0
1975	Vysota	R-29 4K75 UBP	MGCh 4G75/RA46	K-460	K-460 Submarine	BLA	-	-	-	34.0E 70.0N (+/- 0.5)	1000.0
1977 Jul 2?	Vysota	R-29 4K75D UBP	MGCh 4G75/RA46	K-460	K-460 Submarine	UNKPL	-	-	-	-	1000.0

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#### **IV.1.15.10 K-465 Submarine**

K-465

#### **IV.1.15.11 K-472 Submarine**

K-472

Rockets used: Vysota

Updated: 2024 Nov 28 03:19:33

Launches: K-472

Date	Rocket	Flight	Mission	PlatCode	Platform	Site	LP	AscSite	AsCLP	Pos	Apogee
1979	Vysota	R-29 4K75D UB	-	K-472	K-472 Submarine	UNKPL	-	-	-	-	1000.0

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## IV.1.15.12 K-475 Submarine

K-475

Rockets used: Vysota

Updated: 2024 Nov 28 03:19:33

**Launches: K-475**

Date	Rocket	Flight	Mission	PlatCode	Platform	Site	LP	AscSite	AscLP	Pos	Apogee
1975	Vysota	R-29 4K75 UBP	MGCh 4G75/RA46	K-475	K-475 Submarine	UNKPL	-	-	-	-	1000.0
1977 Jul 3?	Vysota	R-29 4K75D UBP	MGCh 4G75/RA46	K-475	K-475 Submarine	UNKPL	-	-	-	-	1000.0

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### **IV.1.15.13 K-477 Submarine**

K-477

Rockets used: Vysota

Updated: 2024 Nov 28 03:19:33



**Launches: K-477**

Date	Rocket	Flight	Mission	PlatCode	Platform	Site	LP	AscSite	AscLP	Pos	Apogee
1977 Sep	Vysota	R-29 4K75D UBP	MGCh 4G75/RA46	K-477	K-477 Submarine	UNKPL	-	-	-	-	1000.0

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**IV.1.15.14 K-497 Submarine**

K-497

**IV.1.15.15 K-500 Submarine**

K-500

**IV.1.15.16 K-512 submarine**

K-512

Rockets used: Vysota

Updated: 2024 Nov 28 03:19:33

Date	Rocket	Flight	Mission	PlatCode	Platform	Site	LP	AscSite	AscLP	Pos	Apogee
1982 Oct 9	Vysota	R-29 4K75D UB	MGCh	K-512	K-512 submarine	UNKPL	-	-	-	-	1000.0

Launches: K-512

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## IV.1.15.17 K-523 submarine

K-523

Rockets used: Vysota

Updated: 2024 Nov 28 03:19:33

Launches: K-523

Date	Rocket	Flight	Mission	PlatCode	Platform	Site	LP	AscSite	AsCLP	Pos	Apogee
1981 Nov	Vysota	R-29 4K75D UBP	MGCh	K-523	K-523 submarine	UNKPL	-	-	-	-	1000.0

---

#### **IV.1.15.18 K-530 submarine**

K-530

Rockets used: Vysota

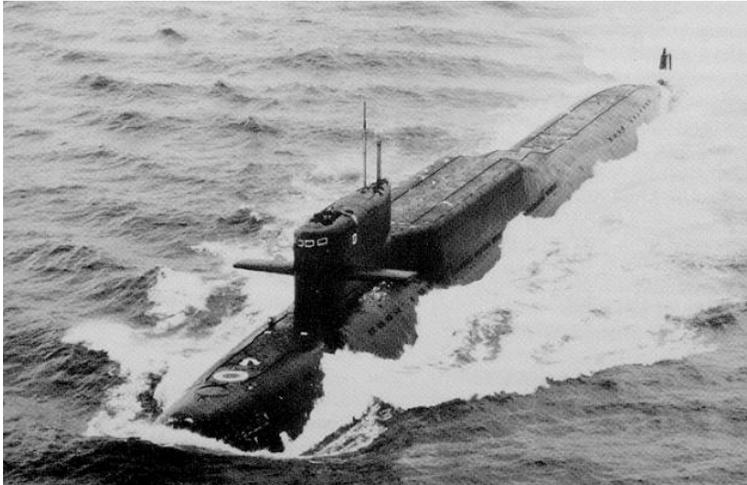
Updated: 2024 Nov 28 03:19:33

Launches: K-530

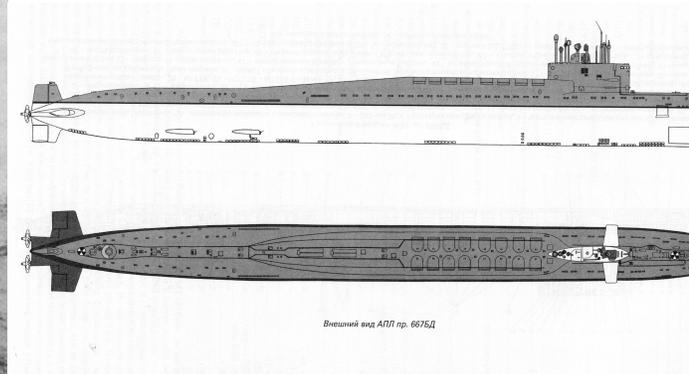
Date	Rocket	Flight	Mission	PlatCode	Platform	Site	LP	AscSite	AscLP	Pos	Apogee
1979	Vysota	R-29 4K75D UBP	-	K-530	K-530 submarine	SIMSH	-	-	-	152.0E 47.ON (+/- 1.0)	1000.0
1996 Jun 28	Vysota	R-29 4K75DU UBP	MGCh	K-530	K-530 submarine	OMLA	-	-	-	148.0E 57.ON (+/- 2.0)	1000.0

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## IV.1.16 Soviet Missile Submarines - Project 667BD



Credit: [credit unknown]



Credit: Apa'lkov et al 2006

Project 667BD Murena-M submarines (NATO designation Delta II) carried 16 R-29 missiles.

Updated: 2024 Nov 28 03:19:33



Soviet Missile Submarines - Project 667BD

Ship	Transliteration	Image	CODE	Agency	Class	ClassID	AltID	Active
667БД	Unknown 667BD (Murena-M, Delta 2) class submarine	-	DELTA2	VMF	Proekt 667BD	-	-	-
K-92	K-92 Submarine	-	K-92	VMF	Proekt 667BD	K-92	-	-
K-182 60 лет Великого Октября	K-182 60 лет Великого Октября Submarine	-	K-182	VMF	Proekt 667BD	K-182	-	-
K-193	K-193 Submarine	-	K-193	VMF	Proekt 667BD	K-193	-	-
K-421	K-421 Submarine	-	K-421	VMF	Proekt 667BD	K-193	-	-

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### **IV.1.16.1 Unknown 667BD (Murena-M, Delta 2) class submarine**

667БД

Rockets used: Vysota

Updated: 2024 Nov 28 03:19:33

Launches: DELTA2

Date	Rocket	Flight	Mission	PlatCode	Platform	Site	LP	AscSite	AsCLP	Pos	Apogee
1986 Sep	Vysota	R-29 4K75D UBP	M6Ch	DELTA2	Unknown 667BD (Murena-M, Delta 2) class submarine	BLA	-	-	-	34.OE 70.ON (+/- 0.5)	1000.0

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## IV.1.16.2 K-92 Submarine

K-92

Rockets used: Vysota

Updated: 2024 Nov 28 03:19:33

Launches: K-92

Date	Rocket	Flight	Mission	Platform	Site	LP	AscSite	AsCLP	Pos	Apogee
1982 Apr 23	Vysota	R-29 4K75D UBP	MGCh	K-92 Submarine	STANNA	-	-	-	69.0E 80.0N (+/- 1.0)	1000.0
1982 Apr 23	Vysota	R-29 4K75D UBP	MGCh	K-92 Submarine	STANNA	-	-	-	69.0E 80.0N (+/- 1.0)	1000.0
1982 Jun 18	Vysota	R-29 4K75D UBP	Shchit-82 ABM Target	K-92 Submarine	NPOLE	-	-	-	0.0E 90.0N (+/- 9.0)	1000.0
1983	Vysota	R-29 4K75D UBP	MGCh	K-92 Submarine	UNKPL	-	-	-	-	1000.0
1984 Jul?	Vysota	R-29 4K75D UBP	MGCh	K-92 Submarine	STANNA	-	-	-	69.0E 80.0N (+/- 1.0)	1000.0
1986 Aug?	Vysota	R-29 4K75D UBP	MGCh	K-92 Submarine	UNKPL	-	-	-	-	0.0
1992 Jun?	Vysota	R-29 4K75DU UBP	MGCh	K-92 Submarine	BLA	-	-	-	34.0E 70.0N (+/- 0.5)	1000.0

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### **IV.1.16.3 K-182 60 Let Velikogo Oktyabria Submarine**

К-182 60 лет Великого Октября

### **IV.1.16.4 K-193 Submarine**

К-193

Rockets used: Vysota

Updated: 2024 Nov 28 03:19:33

Launches: K-193

Date	Rocket	Flight	Mission	PlatCode	Platform	Site	LP	AscSite	AscLP	Pos	Apogee
1978?	Vysota	R-29 4K75D UBP	-	K-193	K-193 Submarine	UNKPL	-	-	-	-	1000.0
1986	Vysota	R-29 4K75D UBP	MGCh	K-193	K-193 Submarine	UNKPL	-	-	-	-	1000.0
1990	Vysota	R-29 4K75DU UBP	MGCh	K-193	K-193 Submarine	BLA	-	-	-	34.0E 70.0N (+/- 0.5)	1000.0
1990	Vysota	R-29 4K75DU UBP	MGCh	K-193	K-193 Submarine	BLA	-	-	-	34.0E 70.0N (+/- 0.5)	1000.0

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## IV.1.16.5 K-421 Submarine

K-421

Rockets used: Vysota

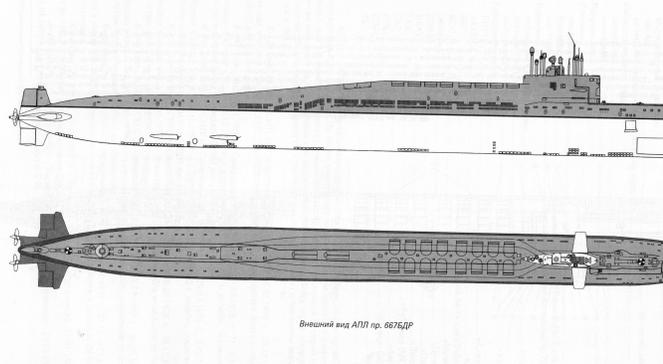
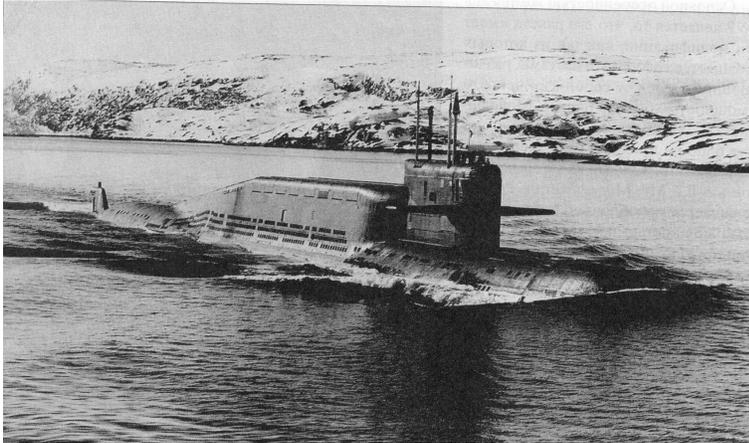
Updated: 2024 Nov 28 03:19:33



Launches: K-421

Date	Rocket	Flight	Mission	Platform	Site	LP	AscSite	AsCLP	Pos	Apogee
1978 Apr?	Vysota	R-29 4K75D UBP	-	K-421	UNKPL	-	-	-	-	1000.0
1982 Jan 29?	Vysota	R-29 4K75D UBP	MGCh	K-421 Submarine	BLA	-	-	-	34.0E 70.0N (+/- 0.5)	1000.0
1982 Jan 30?	Vysota	R-29 4K75D UBP	MGCh	K-421 Submarine	BLA	-	-	-	34.0E 70.0N (+/- 0.5)	1000.0
1994	Vysota	R-29 4K75DU UBP	MGCh	K-421 Submarine	BLA	-	-	-	34.0E 70.0N (+/- 0.5)	1000.0

## IV.1.17 Soviet Missile Submarines - Project 667BDR



Credit: Apa'lkov et al 2006

Credit: Apa'lkov et al 2006

Project 667BDR Kalmar submarines (NATO designation Delta III) carried 16 R-29R missiles.

Updated: 2024 Nov 28 03:19:33

Soviet Missile Submarines - Project 667BDR

Ship	Transliteration	Image	CODE	Agency	Class	ClassID	AltID	Active
K-44 Рязань	K-44 Ryzan Submarine	-	K-44	VMF	Proekt 667BDR	K-44	-	-
K-129	K-129 Submarine (Proekt 667BDR)	-	K-129	VMF	Proekt 667BDR	K-129	-	-
K-180	K-180 Submarine	-	K-180	VMF	Proekt 667BDR	K-180	-	-
K-211 Петропавловск-Камчатский	K-211 Petropavlovsk-Kamchatkskiy submarine	-	K-211	VMF	Proekt 667BDR	K-211	-	-
K-233 Подольск	K-223 Podolsk submarine	-	K-223	VMF	Proekt 667BDR	K-223	-	-
K-424	K-424 Submarine	-	K-424	VMF	Proekt 667BDR	K-424	-	-
K-433 Святой Георгий Победоносец	K-433 Svyaity Georgiy Pobedonosets	-	K-433	VMF	Proekt 667BDR	K-433	-	-
K-441	K-441 submarine	-	K-441	VMF	Proekt 667BDR	K-441	-	-
K-449	K-449 submarine	-	K-449	VMF	Proekt 667BDR	K-449	-	-
K-455	K-455 submarine	-	K-455	VMF	Proekt 667BDR	K-455	-	-
K-487	K-487 Submarine	-	K-487	VMF	Proekt 667BDR	K-487	-	-
K-490	K-490 Submarine	-	K-490	VMF	Proekt 667BDR	K-490	-	-
K-496 Борисоглебск	K-496 Borisoglebsk submarine	-	K-496	VMF	Proekt 667BDR	K-490	-	-
K-506 Зеленоград	K-506 Zelenograd submarine	-	K-506	VMF	Proekt 667BDR	K-506	-	-
667БДР Кальмар	Unknown Kalmar (667 BDR, Delta III) class sub	-	KALMAR	VMF	Proekt 667BDR	-	-	-

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### IV.1.17.1 K-44 Ryazan Submarine

К-44 Рязань

Rockets used: Volna

Updated: 2024 Nov 28 03:19:33

Launches: K-44

Date	Rocket	Flight	Mission	Platform	Site	LP	AscSite	AsclP	Pos	Apogee
1986	Volna	R-29R 3M40K UB	7 BB	K-44	NPOLE	-	-	-	0.0E 90.0N (+/- 9.0)	1000.0
1995 Jun 6 2210	Volna	Volan	Tech Module	K-44	BLA	-	-	-	34.0E 70.0N (+/- 0.5)	1270.0
1999 Oct 1 0645	Volna	R-29R KU-01 UB	3 BB 3G95	K-44	BLA	-	-	-	34.0E 70.0N (+/- 0.5)	10.0
2002 Jul 12 0058:31	Volna	R-29R	IRDT-2	K-44	BLA	-	-	-	34.0E 70.0N (+/- 0.5)	200.0
2008 Aug 1 0900	Volna	R-29R KU-01 UB	3 BB 3G95	K-44	BLA	-	-	-	34.0E 70.0N (+/- 0.5)	1000.0
2009 Oct 7 0630	Volna	R-29R KU-02 UB	3 BB	K-44	OMLA	-	-	-	148.0E 57.0N (+/- 2.0)	1000.0
2017 Oct 26 1507:20	Volna	R-29R KU-02 UB	3 BB	K-44	OMLA	-	-	-	148.0E 57.0N (+/- 2.0)	1000.0
2017 Oct 26 1507:33	Volna	R-29R KU-02 UB	3 BB	K-44	OMLA	-	-	-	148.0E 57.0N (+/- 2.0)	1000.0
2018 Oct 11 1014	Volna	R-29R KU-02 UB	3 BB	K-44	OMLA	-	-	-	148.0E 57.0N (+/- 2.0)	1000.0
2018 Oct 11 1014?	Volna	-	-	K-44	OMLA	-	-	-	148.0E 57.0N (+/- 2.0)	1000.0
2019 Oct 17?	Volna	R-29R KU-02 UB	3 BB	K-44	OMLA	-	-	-	148.0E 57.0N (+/- 2.0)	1000.0

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## **IV.1.17.2 K-129 Submarine (Proekt 667BDR)**

K-129

Rockets used: Volna

Updated: 2024 Nov 28 03:19:33

Launches: K-129

Date	Rocket	Flight	Mission	PlatCode	Platform	Site	LP	AscSite	AscLP	Pos	Apogee
1985	Volna	R-29R 3M40K UBP	7 BB	K-129	K-129 Submarine (Proekt 667BDR)	NPOLE	-	-	-	0.0E 90.0N (+/- 9.0)	1000.0
1985	Volna	R-29R 3M40K UBP	7 BB	K-129	K-129 Submarine (Proekt 667BDR)	MAOLA	-	-	-	30.0W 57.0N (+/- 9.0)	1000.0

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### **IV.1.17.3 K-180 Submarine**

K-180

Rockets used: Vysota

Updated: 2024 Nov 28 03:19:33



**Launches: K-180**

Date	Rocket	Flight	Mission	PlatCode	Platform	Site	LP	AscSite	AscLP	Pos	Apogee
1982?	Vysota	R-29R 3W40L	3 BB	K-180	K-180 Submarine	UNKPL	-	-	-	-	1000.0

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#### **IV.1.17.4 K-211 Petropavlovsk-Kamchatkskiy submarine**

K-211 Петропавловск-Камчатский

Rockets used: Volna

Updated: 2024 Nov 28 03:19:33

Launches: K-211

Date	Rocket	Flight	Mission	PlatCode	Platform	Site	LP	AscSite	AsclP	Pos	Apogee
1996 Jun 28	Volna	R-29RKU-01 UBP	3 BB 3G95	K-211	K-211 Petropavlovsk-Kamchatkskiy submarine	OMLA	-	-	-	148.OE 57.ON (+/- 2.0)	1000.0
1999 Oct 1 0557	Volna	R-29RKU-01 UBP	3 BB 3G95	K-211	K-211 Petropavlovsk-Kamchatkskiy submarine	OMLA	-	-	-	148.OE 57.ON (+/- 2.0)	1000.0
2007 Aug 7	Volna	R-29RKU-01 UBP	3 BB 3G95	K-211	K-211 Petropavlovsk-Kamchatkskiy submarine	OMLA	-	-	-	148.OE 57.ON (+/- 2.0)	1000.0

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#### **IV.1.17.5 K-223 Podolsk submarine**

K-233 Подольск

Rockets used: Vysota, Volna

Updated: 2024 Nov 28 03:19:33

Launches: K-223

Date	Rocket	Flight	Mission	PlatCode	Platform	Site	LP	AscSite	AscLP	Pos	Apogee
1983 Dec 22	Vysota	R-29R 3M40L UBP	3 BB	K-223	K-223 Podolsk submarine	UNKPL	-	-	-	-	1000.0
1987	Volna	R-29R 3M40KU UBP	7 BB	K-223	K-223 Podolsk submarine	OMLA	-	-	-	148.0E 57.0N (+/- 2.0)	1000.0
1987	Volna	R-29R 3M40KU UBP	7 BB	K-223	K-223 Podolsk submarine	OMLA	-	-	-	148.0E 57.0N (+/- 2.0)	1000.0
1996 Jun 28	Volna	R-29RKU-01 UBP	3 BB 3G95	K-223	K-223 Podolsk submarine	OMLA	-	-	-	148.0E 57.0N (+/- 2.0)	1000.0
2001 Sep 18	Volna	R-29RKU-01 UBP	3 BB 3G95	K-223	K-223 Podolsk submarine	OMLA	-	-	-	148.0E 57.0N (+/- 2.0)	1000.0
2014 May 8	Volna	R-29RKU-02 UBP	3 BB	K-223	K-223 Podolsk submarine	OMLA	-	-	-	148.0E 57.0N (+/- 2.0)	1000.0
2015 Oct 30 1028	Volna	R-29RKU-02 UBP	3 BB	K-223	K-223 Podolsk submarine	OMLA	-	-	-	148.0E 57.0N (+/- 2.0)	1000.0

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## IV.1.17.6 K-424 Submarine

K-424

Rockets used: Volna

Updated: 2024 Nov 28 03:19:33

Launches: K-424

Date	Rocket	Flight	Mission	Platform	Site	LP	AscSite	AscLP	Pos	Apogee
1976 Nov 16	Volna	R-29R 3M40 LKI-II-5	3 BB RA95	K-424 Submarine	UNKPL	-	-	-	-	1000.0
1976 Dec 9	Volna	R-29R 3M40 LKI-II-6	3 BB RA95	K-424 Submarine	UNKPL	-	-	-	-	1000.0
1976 Dec 11	Volna	R-29R 3M40 LKI-II-7	3 BB RA95	K-424 Submarine	UNKPL	-	-	-	-	1000.0
1976 Dec 11	Volna	R-29R 3M40 LKI-II-8	3 BB RA95	K-424 Submarine	UNKPL	-	-	-	-	1000.0
1976 Dec 11	Volna	R-29R 3M40 LKI-II-9	3 BB RA95	K-424 Submarine	UNKPL	-	-	-	-	1000.0
1976 Dec 11	Volna	R-29R 3M40 LKI-II-10	3 BB RA95	K-424 Submarine	UNKPL	-	-	-	-	1000.0
1977 Dec	Volna	R-29R 3M40L LKI-5	MGCh	K-424 Submarine	UNKPL	-	-	-	-	1000.0
1977 Dec	Volna	R-29R 3M40L LKI-6	MGCh	K-424 Submarine	UNKPL	-	-	-	-	1000.0
1977 Dec	Volna	R-29R 3M40L LKI-7	MGCh	K-424 Submarine	UNKPL	-	-	-	-	1000.0
1977 Dec	Volna	R-29R 3M40L LKI-8	MGCh	K-424 Submarine	UNKPL	-	-	-	-	1000.0
1978 Feb	Volna	R-29R 3M40L LKI-9	7 BB	K-424 Submarine	UNKPL	-	-	-	-	1000.0
1978 Feb	Volna	R-29R 3M40L LKI-10	7 BB	K-424 Submarine	UNKPL	-	-	-	-	1000.0
1978 Feb	Volna	R-29R 3M40L LKI-11	7 BB	K-424 Submarine	UNKPL	-	-	-	-	1000.0
1978 Feb	Volna	R-29R 3M40L LKI-12	7 BB	K-424 Submarine	UNKPL	-	-	-	-	1000.0
1978 Feb	Volna	R-29R 3M40L LKI-13	7 BB	K-424 Submarine	UNKPL	-	-	-	-	1000.0
1978 Feb	Volna	R-29R 3M40L LKI-14	7 BB	K-424 Submarine	UNKPL	-	-	-	-	1000.0
1978 Feb	Volna	R-29R 3M40L LKI-15	7 BB	K-424 Submarine	UNKPL	-	-	-	-	1000.0
1978 Sep 27	Volna	R-29 3M40L LKI-16	7 BB	K-424 Submarine	UNKPL	-	-	-	-	1000.0
1980 Jun?	Volna	R-29R 3M40L Demo	3 BB	K-424 Submarine	NWSLA	-	-	-	5.0E 70.0N (+/- 5.0)	1000.0
1984 Sep 27	Volna	R-29R 3M40K UBP	7 BB	K-424 Submarine	BLA	-	-	-	34.0E 70.0N (+/- 0.5)	0.0
1986 May 19	Volna	R-29R 3M40K UBP	7 BB	K-424 Submarine	BLA	-	-	-	34.0E 70.0N (+/- 0.5)	0.0
1988	Volna	R-29R 3M40KU-01 LKI-1	3 BB 3G95	K-424 Submarine	NWSLA	-	-	-	5.0E 70.0N (+/- 5.0)	1.0
1988	Volna	R-29R 3M40KU-01 LKI-2	3 BB 3G95	K-424 Submarine	NWSLA	-	-	-	5.0E 70.0N (+/- 5.0)	1000.0
1988	Volna	R-29R 3M40KU-01 LKI-3	3 BB 3G95	K-424 Submarine	NWSLA	-	-	-	5.0E 70.0N (+/- 5.0)	1000.0
1988	Volna	R-29R 3M40KU-01 LKI-4	3 BB 3G95	K-424 Submarine	NWSLA	-	-	-	5.0E 70.0N (+/- 5.0)	1000.0
1989	Volna	R-29R 3M40KU-01 LKI-5	3 BB 3G95	K-424 Submarine	NWSLA	-	-	-	5.0E 70.0N (+/- 5.0)	1000.0
1989	Volna	R-29R 3M40KU-01 LKI-6	3 BB 3G95	K-424 Submarine	BLA	-	-	-	34.0E 70.0N (+/- 0.5)	1000.0
1989	Volna	R-29R 3M40KU-01 LKI-7	3 BB 3G95	K-424 Submarine	BLA	-	-	-	34.0E 70.0N (+/- 0.5)	1000.0

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#### **IV.1.17.7 K-433 Svyaity Georgiy Pobedonosets**

К-433 Святой Георгий Победоносец

Rockets used: Vysota, Volna

Updated: 2024 Nov 28 03:19:33



Launches: K-433

Date	Rocket	Flight	Mission	PlatCode	Platform	Site	LP	AscSite	AscLP	Pos	Apogee
1984 Feb 22	Vysota	R-29R 3M40L UBP	3 BB	K-433	K-433 Svyaity Georgiy Pobedonosets	UNKPL	-	-	-	-	1000.0
1984 Apr 11	Volna	R-29R 3M40L UBP	3 BB	K-433	K-433 Svyaity Georgiy Pobedonosets	UNKPL	-	-	-	-	1000.0
2004 Nov 2 0925	Volna	R-29R KU-01 UBP	3 BB 3695	K-433	K-433 Svyaity Georgiy Pobedonosets	OMLA	-	-	-	148.0E 57.0N (+/- 2.0)	1000.0
2005 Sep 30 0822	Volna	R-29R KU-01 UBP	3 BB 3695	K-433	K-433 Svyaity Georgiy Pobedonosets	OMLA	-	-	-	148.0E 57.0N (+/- 2.0)	1000.0
2006 Sep 10 1450	Volna	R-29R KU-01 UBP	3 BB 3695	K-433	K-433 Svyaity Georgiy Pobedonosets	SIMLA	-	-	-	152.0E 47.0N (+/- 1.0)	1000.0
2009 Oct 6 0637	Volna	R-29R KU-01 UBP	3 BB 3695	K-433	K-433 Svyaity Georgiy Pobedonosets	OMLA	-	-	-	148.0E 57.0N (+/- 2.0)	1000.0
2010 Oct 28 1017	Volna	R-29R KU-02 UBP	3 BB	K-433	K-433 Svyaity Georgiy Pobedonosets	OMLA	-	-	-	148.0E 57.0N (+/- 2.0)	1000.0
2012 Oct 19 0925	Volna	R-29R KU-02 UBP	3 BB	K-433	K-433 Svyaity Georgiy Pobedonosets	OMLA	-	-	-	148.0E 57.0N (+/- 2.0)	1000.0
2013 Oct 30 1039	Volna	R-29R KU-02 UBP	3 BB	K-433	K-433 Svyaity Georgiy Pobedonosets	OMLA	-	-	-	148.0E 57.0N (+/- 2.0)	1000.0
2016 Oct 12 1032	Volna	R-29R KU-02 3M40KU-02 UBP	3 BB	K-433	K-433 Svyaity Georgiy Pobedonosets	OMLA	-	-	-	148.0E 57.0N (+/- 2.0)	1000.0

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### **IV.1.17.8 K-441 submarine**

K-441

Rockets used: Volna

Updated: 2024 Nov 28 03:19:33

Launches: K-441

Date	Rocket	Flight	Mission	PlatCode	Platform	Site	LP	AscSite	AscLP	Pos	Apogee
1976 Nov	Volna	R-29R 3M40 LKI-II-1	MGCh 3G47/RA94	K-441	K-441 submarine	UNKPL	-	-	-	-	1000.0
1976 Nov	Volna	R-29R 3M40 LKI-II-2	MGCh 3G47/RA94	K-441	K-441 submarine	UNKPL	-	-	-	-	1000.0
1976 Nov	Volna	R-29R 3M40 LKI-II-3	MGCh 3G47/RA94	K-441	K-441 submarine	UNKPL	-	-	-	-	1000.0
1976 Nov	Volna	R-29R 3M40 LKI-II-4	MGCh 3G47/RA94	K-441	K-441 submarine	UNKPL	-	-	-	-	1000.0
1977 Nov	Volna	R-29R 3M40L LKI-1	3 BB	K-441	K-441 submarine	UNKPL	-	-	-	-	1000.0
1977 Nov	Volna	R-29R 3M40L LKI-2	3 BB	K-441	K-441 submarine	UNKPL	-	-	-	-	1000.0
1977 Nov	Volna	R-29R 3M40L LKI-3	3 BB	K-441	K-441 submarine	UNKPL	-	-	-	-	1000.0
1977 Dec	Volna	R-29R 3M40L LKI-4	3 BB	K-441	K-441 submarine	UNKPL	-	-	-	-	1000.0
1981	Volna	R-29R 3M40L UBP	3 BB	K-441	K-441 submarine	UNKPL	-	-	-	-	1000.0
1981	Volna	R-29R 3M40L UBP	3 BB	K-441	K-441 submarine	UNKPL	-	-	-	-	1000.0
1981	Volna	R-29R 3M40L UBP	3 BB	K-441	K-441 submarine	UNKPL	-	-	-	-	1000.0
1981	Volna	R-29R 3M40L UBP	3 BB	K-441	K-441 submarine	UNKPL	-	-	-	-	1000.0
1981	Volna	R-29R 3M40L UBP	3 BB	K-441	K-441 submarine	UNKPL	-	-	-	-	1000.0
1981	Volna	R-29R 3M40L UBP	3 BB	K-441	K-441 submarine	UNKPL	-	-	-	-	1000.0
1981	Volna	R-29R 3M40L UBP	3 BB	K-441	K-441 submarine	UNKPL	-	-	-	-	1000.0
1981	Volna	R-29R 3M40L UBP	3 BB	K-441	K-441 submarine	UNKPL	-	-	-	-	1000.0
1981	Volna	R-29R 3M40L UBP	3 BB	K-441	K-441 submarine	UNKPL	-	-	-	-	1000.0
1981	Volna	R-29R 3M40L UBP	3 BB	K-441	K-441 submarine	UNKPL	-	-	-	-	1000.0

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**IV.1.17.9 K-449 submarine**

K-449

**IV.1.17.10 K-455 submarine**

K-455

**IV.1.17.11 K-487 Submarine**

K-487

Rockets used: Volna

Updated: 2024 Nov 28 03:19:33

Launches: K-487

Date	Rocket	Flight	Mission	PlatCode	Platform	Site	LP	AscSite	AscLP	Pos	Apogee
1985 Aug 18?	Volna	R-29R 3M4OK UBP	7 BB	K-487	K-487 Submarine	NPOLE	-	-	-	0.0E 90.0N (+/- 9.0)	1000.0
1985 Aug 18?	Volna	R-29R 3M4OK UBP	7 BB	K-487	K-487 Submarine	NPOLE	-	-	-	0.0E 90.0N (+/- 9.0)	1000.0

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## **IV.1.17.12 K-490 Submarine**

K-490

Rockets used: Volna

Updated: 2024 Nov 28 03:19:33

Launches: K-490

Date	Rocket	Flight	Mission	PlatCode	Platform	Site	LP	AscSite	AsCLP	Pos	Apogee
1978?	Volna	R-29R 3M40 UBP	3 BB RA95	K-490	K-490 Submarine	BELA	-	-	-	38.0E 65.5N (+/- 1.0)	1000.0
1981	Volna	R-29R 3M40L UBP	3 BB	K-490	K-490 Submarine	UNKPL	-	-	-	-	1000.0
1984	Volna	R-29R 3M40K UBP	7 BB	K-490	K-490 Submarine	UNKPL	-	-	-	-	1000.0
1993	Volna	R-29R 3M40KU-01 UBP	-	K-490	K-490 Submarine	UNKPL	-	-	-	-	1000.0

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### **IV.1.17.13 K-496 Borisoglebsk submarine**

K-496 Борисоглебск

Rockets used: Volna

Updated: 2024 Nov 28 03:19:33



Launches: K-496

Date	Rocket	Flight	Mission	PlatCode	Platform	Site	LP	AscSite	AscLP	Pos	Apogee
1999 Apr 1	Volna	R-29RKU-01 UBP	3 BB 3G95	K-496	K-496 Borisoglebsk submarine	BLA	-	-	-	34.0E 70.0N (+/- 0.5)	1000.0
2000 Apr 6 0530	Volna	R-29RKU-01 UBP	3 BB 3G95	K-496	K-496 Borisoglebsk submarine	BLA	-	-	-	34.0E 70.0N (+/- 0.5)	1000.0
2001 Jul 20 0031	Volna	Cosmos 1 Solar Sail	-	K-496	K-496 Borisoglebsk submarine	BLA	-	-	-	34.0E 70.0N (+/- 0.5)	412.0
2004 Sep 8 0738	Volna	R-29RKU-01 UBP	3 BB 3G95	K-496	K-496 Borisoglebsk submarine	BLA	-	-	-	34.0E 70.0N (+/- 0.5)	1000.0
2005 Jun 21 1946:09	Volna	Cosmos-1/Dem-2R	TPS Solar Sail	K-496	K-496 Borisoglebsk submarine	BLA	-	-	-	34.0E 70.0N (+/- 0.5)	850.0
2005 Oct 1?	Volna	R-29RKU-02 LKI	3 BB	K-496	K-496 Borisoglebsk submarine	BLA	-	-	-	34.0E 70.0N (+/- 0.5)	1000.0
2005 Oct 6 2130:04	Volna	IRDT-2R	-	K-496	K-496 Borisoglebsk submarine	BLA	-	-	-	34.0E 70.0N (+/- 0.5)	200.0

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#### **IV.1.17.14 K-506 Zelenograd submarine**

K-506 Зеленоград

Rockets used: Volna

Updated: 2024 Nov 28 03:19:33

Launches: K-506

Date	Rocket	Flight	Mission	Platform	Site	LP	AscSite	AscLP	Pos	Apogee
1983	Volna	R-29R 3M40K UBP	7 BB	K-506	UNKPL	-	-	-	-	1000.0
1983	Volna	R-29R 3M40K UBP	7 BB	K-506	UNKPL	-	-	-	-	1000.0
1987	Volna	R-29R 3M40KU UBP	7 BB	K-506	OMLA	-	-	-	148.0E 57.0N (+/- 2.0)	1000.0
1987	Volna	R-29R 3M40KU UBP	7 BB	K-506	OMLA	-	-	-	148.0E 57.0N (+/- 2.0)	1000.0
2003 Sep 2 0823	Volna	R-29RKU-01 UBP	3 BB 3695	K-506	OMLA	-	-	-	148.0E 57.0N (+/- 2.0)	1000.0
2008 Oct 12 0650	Volna	R-29RKU-01 UBP	3 BB 3695	K-506	OMLA	-	-	-	148.0E 57.0N (+/- 2.0)	1000.0

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#### **IV.1.17.15 Unknown Kalmar (667 BDR, Delta III) class sub**

667БДР Кальмар

Rockets used: Volna

Updated: 2024 Nov 28 03:19:33

Launches: KALMAR

Date	Rocket	Flight	Mission	Platform	Platform	Site	LP	AscSite	AscLP	Pos	Apogee
1991 Dec	Volna	-	-	KALMAR	Unknown Kalmar (667 BDR, Delta III) class sub	UNKPL	-	-	-	-	1000.0
1993 Dec	Volna	-	-	KALMAR	Unknown Kalmar (667 BDR, Delta III) class sub	UNKPL	-	-	-	-	1000.0
1997 Jan 15	Volna	R-29RKU-01 UBP	3 BB 3G95	KALMAR	Unknown Kalmar (667 BDR, Delta III) class sub	BLA	-	-	-	34.0E 70.0N (+/- 0.5)	1000.0

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## **IV.1.18 Soviet Missile Submarines - Project 667BDRM**

Project 667BDRM Delfin submarines (NATO designation Delta IV) carried 16 R-29RMU Sineva missiles.

Updated: 2024 Nov 28 03:19:33

Soviet Missile Submarines - Project 667BDRM

Ship	Transliteration	Image	CODE	Agency	Class	ClassID	AltID	Active
667БДРМ	Unknown 667BDRM (Delphin, Delta 4) class submarine	-	DELTA4	VMF	Proekt 667BDRM	-	-	-
K-18 Керелия	K-18 Karelia submarine	-	K-18	VMF	Proekt 667BDRM	K-18	-	-
K-51 Верхотурье	K-51 Verkhotur'ye Submarine	-	K-51	VMF	Proekt 667BDRM	K-51	-	-
K-64 Подмоскoвьe	K-64 Podmoskov'ye Submarine	-	K-64	VMF	Proekt 667BDRM	K-64	-	-
K-84 Екатеринбург	K-84 Ekaterinburg Submarine	-	K-84	VMF	Proekt 667BDRM	K-84	-	-
K-114 Тула	K-114 Tula Submarine	-	K-114	VMF	Proekt 667BDRM	K-114	-	-
K-117 Брянск	K-117 Bryansk Submarine	-	K-117	VMF	Proekt 667BDRM	K-117	-	-
K-407 Новомосковск	K-407 Novomoskovsk Submarine	-	K-407	VMF	Proekt 667BDRM	K-407	-	-

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#### **IV.1.18.1 Unknown 667BDRM (Delfin, Delta 4) class submarine**

667БДРМ

Rockets used: Shtil'

Updated: 2024 Nov 28 03:19:33



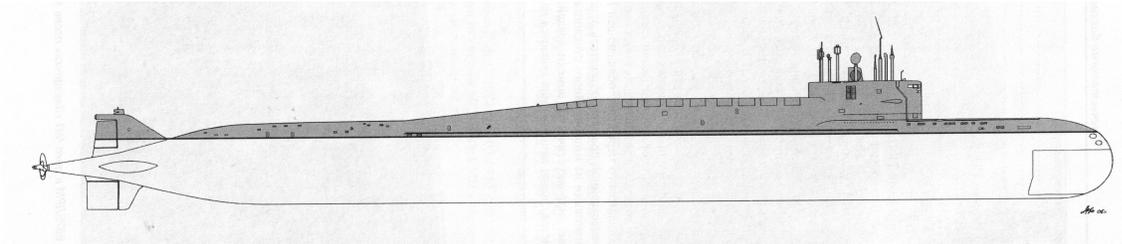
Launches: DELTA4

Date	Rocket	Flight	Mission	Platform	Site	LP	AscSite	AsCLP	Pos	Apogee
1998 Feb 19	Shtil'	R-29RM 3M37U UBP	4 BB 3695	Unknown 667BDRM (Delfin, Delta 4)	BLA	-	-	-	34.0E 70.0N (+/- 0.5)	1000.0
1998 Feb 19	Shtil'	R-29RM 3M37U UBP	4 BB 3695	Unknown 667BDRM (Delfin, Delta 4)	BLA	-	-	-	34.0E 70.0N (+/- 0.5)	1000.0

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## IV.1.18.2 K-18 Karelia submarine

К-18 Карелия



Credit: Apa'lkov et al 2006

Rockets used: Shtil', Sineva

Updated: 2024 Nov 28 03:19:33

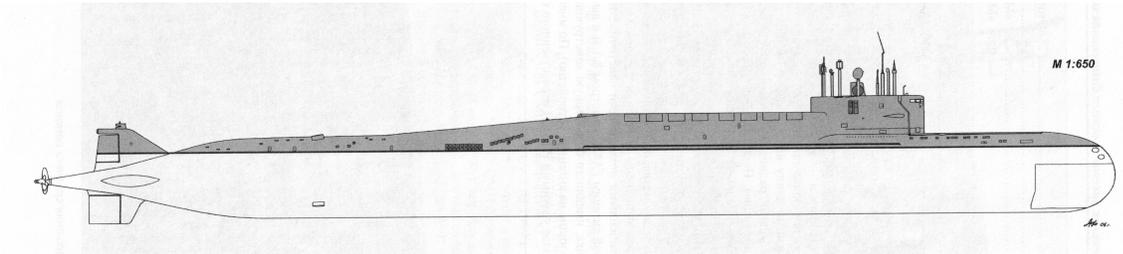
Launches: K-18

Date	Rocket	Flight	Mission	PlatCode	Platform	Site	LP	AscSite	AsclP	Pos	Apogee
1989 Aug 24	Shtil'	R-29RM 3M37U UBP	4 BB 3G95	K-18	K-18 Karelia submarine	BLA	-	-	-	34.0E 70.0N (+/- 0.5)	1000.0
1989 Aug 24 1830	Shtil'	R-29RM 3M37U UBP	4 BB 3G95	K-18	K-18 Karelia submarine	BLA	-	-	-	34.0E 70.0N (+/- 0.5)	1000.0
2000 Mar 27 0600	Shtil'	R-29RM 3M37U	4 BB 3G95	K-18	K-18 Karelia submarine	BLA	-	-	-	34.0E 70.0N (+/- 0.5)	1000.0
2000 Mar 27 0900	Shtil'	R-29RM 3M37U	4 BB 3G95	K-18	K-18 Karelia submarine	BLA	-	-	-	34.0E 70.0N (+/- 0.5)	1000.0
2000 Sep 10	Sineva	R-29RM 3M37U1 LKI-1	4 BB	K-18	K-18 Karelia submarine	BLA	-	-	-	34.0E 70.0N (+/- 0.5)	1000.0
2004 Feb 18 0900	Sineva	R-29RM 3M37U1 UBP	4 BB	K-18	K-18 Karelia submarine	BLA	-	-	-	34.0E 70.0N (+/- 0.5)	10.0
2019 Oct 17?	Sineva	R-29RM 3M37U2 UBP	4 BB?	K-18	K-18 Karelia submarine	BLA	-	-	-	34.0E 70.0N (+/- 0.5)	1000.0
2020 Dec 9	Sineva	R-29RM 3M37U2 UBP	4 BB?	K-18	K-18 Karelia submarine	BLA	-	-	-	34.0E 70.0N (+/- 0.5)	1000.0
2022 Feb 19	Sineva	R-29RM 3M37U2 UBP	4 BB?	K-18	K-18 Karelia submarine	BLA	-	-	-	34.0E 70.0N (+/- 0.5)	1000.0

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### IV.1.18.3 K-51 Verkhoturiye Submarine

#### K-51 Верхогурье



Credit: Apa'lkov et al 2006

Rockets used: Shtil',Sineva

Updated: 2024 Nov 28 03:19:33

Launches: K-51

Date	Rocket	Flight	Mission	PlatCode	Platform	Site	LP	AscSite	AscLP	Pos	Apogee
1984 Oct 29	Shtil'	R-29RM 3M37 LKI-3-1	10 BB	K-51	K-51 Verkhoturiye Submarine	BELA	-	-	-	38.0E 65.5N (+/- 1.0)	1000.0
1984 Oct 30	Shtil'	R-29RM 3M37 LKI-3-2	10 BB	K-51	K-51 Verkhoturiye Submarine	BELA	-	-	-	38.0E 65.5N (+/- 1.0)	1000.0
1984 Nov 16	Shtil'	R-29RM 3M37 LKI-3-3	10 BB	K-51	K-51 Verkhoturiye Submarine	BELA	-	-	-	38.0E 65.5N (+/- 1.0)	1000.0
1984 Nov 17	Shtil'	R-29RM 3M37 LKI-3-4	10 BB	K-51	K-51 Verkhoturiye Submarine	BELA	-	-	-	38.0E 65.5N (+/- 1.0)	1000.0
1984 Nov 20	Shtil'	R-29RM 3M37 LKI-3-5	10 BB	K-51	K-51 Verkhoturiye Submarine	BELA	-	-	-	38.0E 65.5N (+/- 1.0)	1000.0
1984 Nov 27	Shtil'	R-29RM 3M37 LKI-3-6	10 BB	K-51	K-51 Verkhoturiye Submarine	BELA	-	-	-	38.0E 65.5N (+/- 1.0)	1000.0
1984 Dec 19	Shtil'	R-29RM 3M37 LKI-3-7	10 BB	K-51	K-51 Verkhoturiye Submarine	BELA	-	-	-	38.0E 65.5N (+/- 1.0)	1000.0
1984 Dec 19	Shtil'	R-29RM 3M37 LKI-3-8	10 BB	K-51	K-51 Verkhoturiye Submarine	BELA	-	-	-	38.0E 65.5N (+/- 1.0)	1000.0
1984 Dec 26	Shtil'	R-29RM 3M37 LKI-3-9	10 BB	K-51	K-51 Verkhoturiye Submarine	BELA	-	-	-	38.0E 65.5N (+/- 1.0)	1000.0
1984 Dec 26	Shtil'	R-29RM 3M37 LKI-3-10	10 BB	K-51	K-51 Verkhoturiye Submarine	BELA	-	-	-	38.0E 65.5N (+/- 1.0)	1000.0
1984 Dec 26	Shtil'	R-29RM 3M37 LKI-3-11	10 BB	K-51	K-51 Verkhoturiye Submarine	BELA	-	-	-	38.0E 65.5N (+/- 1.0)	1000.0
1984 Dec 26	Shtil'	R-29RM 3M37 LKI-3-12	10 BB	K-51	K-51 Verkhoturiye Submarine	BELA	-	-	-	38.0E 65.5N (+/- 1.0)	1000.0
1985 Jul 27	Shtil'	R-29RM 3M37 DLKI-1	10 BB	K-51	K-51 Verkhoturiye Submarine	UNKPL	-	-	-	-	20.0
1985 Jul 27	Shtil'	R-29RM 3M37 DLKI-2	10 BB	K-51	K-51 Verkhoturiye Submarine	UNKPL	-	-	-	-	100.0
1985 Oct 23	Shtil'	R-29RM 3M37 DLKI-3	10 BB	K-51	K-51 Verkhoturiye Submarine	UNKPL	-	-	-	-	1000.0
1985 Oct 23	Shtil'	R-29RM 3M37 DLKI-4	10 BB	K-51	K-51 Verkhoturiye Submarine	UNKPL	-	-	-	-	1000.0
1986	Shtil'	R-29RM 3M37 RV Test	4 BB 3G95	K-51	K-51 Verkhoturiye Submarine	UNKPL	-	-	-	-	1000.0
1986	Shtil'	R-29RM 3M37 RV Test	4 BB 3G95	K-51	K-51 Verkhoturiye Submarine	UNKPL	-	-	-	-	0.0
1986	Shtil'	R-29RM 3M37 RV Test	4 BB 3G95	K-51	K-51 Verkhoturiye Submarine	UNKPL	-	-	-	-	1000.0
1987 Aug?	Shtil'	R-29RM 3M37 RV Test	4 BB 3G95	K-51	K-51 Verkhoturiye Submarine	UNKPL	-	-	-	-	1000.0
1987 Sep 17 1052	Shtil'	R-29RM 3M37U LKI-13	4 BB 3G95	K-51	K-51 Verkhoturiye Submarine	NPOLE	-	-	-	0.0E 90.0N (+/- 9.0)	0.0
1987 Sep 17 1212	Shtil'	R-29RM 3M37U LKI-14	4 BB 3G95	K-51	K-51 Verkhoturiye Submarine	NPOLE	-	-	-	0.0E 90.0N (+/- 9.0)	0.0
2001 Jun 5 1132	Shtil'	R-29RM 3M37U1 LKI-3	4 BB	K-51	K-51 Verkhoturiye Submarine	BLA	-	-	-	34.0E 70.0N (+/- 0.5)	1000.0
2015 Dec 12 0805	Sineva	R-29RM 3M37U2 K.	4 BB	K-51	K-51 Verkhoturiye Submarine	BLA	-	-	-	34.0E 70.0N (+/- 0.5)	1000.0

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#### **IV.1.18.4 K-64 Podmoskovye Submarine**

К-64 Подмоскóвье

Rockets used: Shtil'

Updated: 2024 Nov 28 03:19:33

Launches: K-64

Date	Rocket	Flight	Mission	PlatCode	Platform	Site	LP	AscSite	AsCLP	Pos	Apogee
1988 Oct?	Shtil'	R-29RM 3M37U UBP	4 BB 3G95	K-64	K-64 Podmoskovye Submarine	BELA	-	-	-	38.0E 65.5N (+/- 1.0)	1000.0

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#### **IV.1.18.5 K-84 Ekaterinburg Submarine**

К-84 Екатеринбург

Rockets used: Shtil', Sineva, Shtil'-1, Layner

Updated: 2024 Nov 28 03:19:33



Launches: K-84

Date	Rocket	Flight	Mission	Platform	Site	LP	AscSite	AsclP	Pos	Apogee
1985 Nov 12	Shtil'	R-29RM 3M37 DLKI-5	10 BB	K-84	K-84 Ekaterinburg Submarine	UNKPL	-	-	-	1000.0
1985 Nov 12	Shtil'	R-29RM 3M37 DLKI-6	10 BB	K-84	K-84 Ekaterinburg Submarine	UNKPL	-	-	-	1000.0
1989 Jun	Shtil'	R-29RM 3M37U UBP	4 BB 3G95	K-84	K-84 Ekaterinburg Submarine	BLA	-	-	34.0E 70.0N (+/- 0.5)	1000.0
1989 Jun	Shtil'	R-29RM 3M37U UBP	4 BB 3G95	K-84	K-84 Ekaterinburg Submarine	BLA	-	-	34.0E 70.0N (+/- 0.5)	1000.0
1989 Jun	Shtil'	R-29RM 3M37U UBP	4 BB 3G95	K-84	K-84 Ekaterinburg Submarine	BLA	-	-	34.0E 70.0N (+/- 0.5)	1000.0
2003 Dec 5 2005	Sineva	R-29RM 3M37U2 LKI-1	4 BB	K-84	K-84 Ekaterinburg Submarine	BLA	-	-	34.0E 70.0N (+/- 0.5)	1000.0
2003 Dec 26 1100	Sineva	R-29RM 3M37U2 LKI-2	4 BB	K-84	K-84 Ekaterinburg Submarine	BLA	-	-	34.0E 70.0N (+/- 0.5)	1000.0
2004 Jun 29 0725	Sineva	R-29RM 3M37U2 LKI-3	4 BB	K-84	K-84 Ekaterinburg Submarine	BLA	-	-	34.0E 70.0N (+/- 0.5)	1000.0
2004 Sep 8 0538	Shtil'	R-29RM 3M37U1 UBP	4 BB	K-84	K-84 Ekaterinburg Submarine	BLA	-	-	34.0E 70.0N (+/- 0.5)	1000.0
2005 Aug 17 0706	Sineva	R-29RM 3M37U1 UBP	4 BB	K-84	K-84 Ekaterinburg Submarine	BLA	-	-	34.0E 70.0N (+/- 0.5)	1000.0
2006 May 26 1850	Shtil'-1	Kompas-2	Vulkan-Kompas-2	K-84	K-84 Ekaterinburg Submarine	BLA	-	-	34.0E 70.0N (+/- 0.5)	524.0
2006 Sep 9 1120	Sineva	R-29RM 3M37U1	4 BB	K-84	K-84 Ekaterinburg Submarine	NPOLE	-	-	0.0E 90.0N (+/- 9.0)	1000.0
2008 Oct 12 0730	Sineva	R-29RM 3M37U2 UBP	4 BB	K-84	K-84 Ekaterinburg Submarine	BLA	-	-	34.0E 70.0N (+/- 0.5)	1000.0
2009 Jul 13 0120	Sineva	R-29RM 3M37U2 UBP	4 BB	K-84	K-84 Ekaterinburg Submarine	BFJL	-	-	58.0E 79.5N (+/- 1.0)	1000.0
2011 Apr 26 1711	Sineva	R-29RM 3M37U2	4 BB	K-84	K-84 Ekaterinburg Submarine	BLA	-	-	34.0E 70.0N (+/- 0.5)	1000.0
2011 May 20 1450	Layner	R-29RM 3M37U2.1 LKI-1	10 BB	K-84	K-84 Ekaterinburg Submarine	BLA	-	-	34.0E 70.0N (+/- 0.5)	1000.0
2011 Jul 27 1306	Sineva	R-29RM 3M37U2 K.	4 BB	K-84	K-84 Ekaterinburg Submarine	BLA	-	-	34.0E 70.0N (+/- 0.5)	1000.0
2013 Mar 28 0030	Sineva	R-29RM 3M37U2 K.	4 BB	K-84	K-84 Ekaterinburg Submarine	BLA	-	-	34.0E 70.0N (+/- 0.5)	1000.0

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## **IV.1.18.6 K-114 Tula Submarine**

K-114 Тула

Rockets used: Sineva,Layner

Updated: 2024 Nov 28 03:19:33

Launches: K-114

Date	Rocket	Flight	Mission	PlatCode	Platform	Site	LP	AscSite	AsclP	Pos	Apogee
2006 Jun 30 0625	Sineva	R-29RM 3M37U1	4 BB	K-114	K-114 Tula Submarine	BLA	-	-	-	34.0E 70.0N (+/- 0.5)	1000.0
2007 Dec 17	Sineva	R-29RM 3M37U1 UBP	4 BB	K-114	K-114 Tula Submarine	BLA	-	-	-	34.0E 70.0N (+/- 0.5)	1000.0
2007 Dec 25 1000	Sineva	R-29RM 3M37U2 UBP	4 BB	K-114	K-114 Tula Submarine	BLA	-	-	-	34.0E 70.0N (+/- 0.5)	1000.0
2008 Oct 11 0800	Sineva	R-29RM 3M37U2 UBP	4 BB	K-114	K-114 Tula Submarine	BLA	-	-	-	34.0E 70.0N (+/- 0.5)	1000.0
2010 Mar 4 0450	Sineva	R-29RM 3M37U2 UBP	4 BB	K-114	K-114 Tula Submarine	BLA	-	-	-	34.0E 70.0N (+/- 0.5)	1000.0
2010 Aug 6 1515	Sineva	R-29RM 3M37U2 UBP	4 BB	K-114	K-114 Tula Submarine	BLA	-	-	-	34.0E 70.0N (+/- 0.5)	1000.0
2010 Aug 6 1516	Sineva	R-29RM 3M37U1 UBP	4 BB	K-114	K-114 Tula Submarine	BLA	-	-	-	34.0E 70.0N (+/- 0.5)	1000.0
2011 Sep 29 1720	Layner	R-29RM 3M37U2.1 LKI-2	10 BB	K-114	K-114 Tula Submarine	BLA	-	-	-	34.0E 70.0N (+/- 0.5)	1000.0
2014 May 8	Sineva	R-29RM 3M37U2 UBP	4 BB	K-114	K-114 Tula Submarine	BLA	-	-	-	34.0E 70.0N (+/- 0.5)	1000.0
2014 Nov 5 0630?	Sineva	R-29RM 3M37U2 K.	4 BB	K-114	K-114 Tula Submarine	BLA	-	-	-	34.0E 70.0N (+/- 0.5)	1000.0
2018 Oct 11 1027	Sineva	R-29RM 3M37U2 UBP	4 BB	K-114	K-114 Tula Submarine	BLA	-	-	-	34.0E 70.0N (+/- 0.5)	1000.0
2018 Oct 11 1027?	Sineva	R-29RM 3M37U2 UBP	-	K-114	K-114 Tula Submarine	BLA	-	-	-	34.0E 70.0N (+/- 0.5)	1000.0
2019 Aug 24	Sineva	R-29RM 3M37U2 UBP	4 BB?	K-114	K-114 Tula Submarine	NPOLE	-	-	-	0.0E 90.0N (+/- 9.0)	1000.0
2022 Oct 26	Sineva	R-29RM 3M37U2 UBP	4 BB?	K-114	K-114 Tula Submarine	BLA	-	-	-	34.0E 70.0N (+/- 0.5)	1000.0
2023 Aug 22	Sineva	R-29RM 3M37U2 UBP	4 BB?	K-114	K-114 Tula Submarine	BLA	-	-	-	34.0E 70.0N (+/- 0.5)	1000.0
2023 Oct 25	Sineva	R-29RM 3M37U2 UBP	4 BB?	K-114	K-114 Tula Submarine	BLA	-	-	-	34.0E 70.0N (+/- 0.5)	1000.0

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#### **IV.1.18.7 K-117 Bryansk Submarine**

К-117 Брянск

Rockets used: Sineva

Updated: 2024 Nov 28 03:19:33

Launches: K-117

Date	Rocket	Flight	Mission	PlatCode	Platform	Site	LP	AscSite	AscLP	Pos	Apogee
2009 Jul 13 2350	Sineva	R-29RM 3M37U2 UBP	4 BB	K-117	K-117 Bryansk Submarine	NPOLE	-	-	-	0.0E 90.0N (+/- 9.0)	1500.0
2009 Nov 1 0730	Sineva	R-29RM 3M37U2 UBP	4 BB	K-117	K-117 Bryansk Submarine	BLA	-	-	-	34.0E 70.0N (+/- 0.5)	1000.0
2010 Oct 28 1030	Sineva	R-29RM 3M37U1	4 BB	K-117	K-117 Bryansk Submarine	BLA	-	-	-	34.0E 70.0N (+/- 0.5)	1000.0
2013 Oct 30 1110	Sineva	R-29RM 3M37U2 UBP	4 BB	K-117	K-117 Bryansk Submarine	BLA	-	-	-	34.0E 70.0N (+/- 0.5)	1000.0
2015 Oct 30 1026	Sineva	R-29RM 3M37U2 UBP	4 BB	K-117	K-117 Bryansk Submarine	BLA	-	-	-	34.0E 70.0N (+/- 0.5)	1000.0
2016 Nov 9 1107	Sineva	R-29RM 3M37U2 K.	4 BB	K-117	K-117 Bryansk Submarine	BLA	-	-	-	34.0E 70.0N (+/- 0.5)	1000.0
2017 Oct 26 1507:21	Sineva	R-29RM 3M37U2 UBP	4 BB	K-117	K-117 Bryansk Submarine	BLA	-	-	-	34.0E 70.0N (+/- 0.5)	1000.0

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## IV.1.18.8 K-407 Novomoskvosk Submarine

K-407 НОВОМОСКОВСК

Rockets used: Shtil', Shtil'-1, Sineva

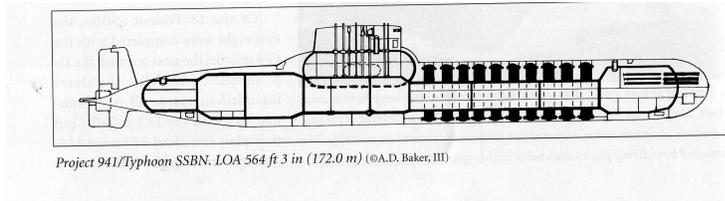
Updated: 2024 Nov 28 03:19:33

Launches: K-407

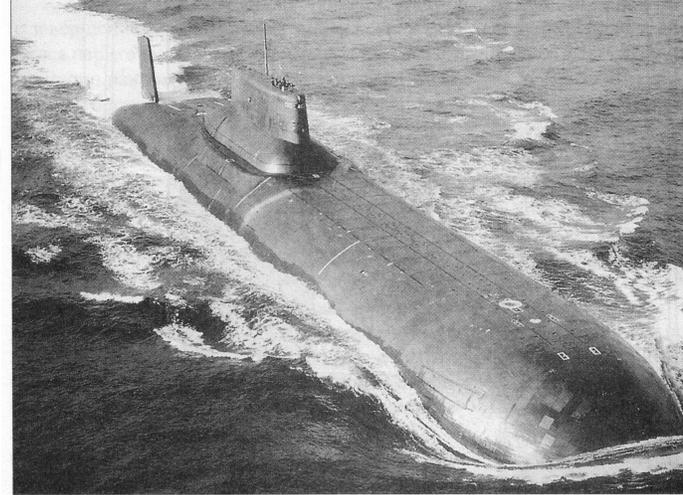
Date	Rocket	Flight	Mission	Platform	Site	LP	AscSite	AscLP	Pos	Apogee
1991 Jul 14	Shtil'	R-29RM 3M37U	4 BB 3G95	K-407	BLA	-	-	-	34.0E 70.0N (+/- 0.5)	1000.0
1991 Aug 8 1810?	Shtil'	R-29RM 3M37U	4 BB 3G95 Begemot-2-1	K-407	BLA	-	-	-	34.0E 70.0N (+/- 0.5)	1000.0
1991 Aug 8 1810?	Shtil'	R-29RM 3M37U	4 BB 3G95 Begemot-2-2	K-407	BLA	-	-	-	34.0E 70.0N (+/- 0.5)	1000.0
1991 Aug 8 1810?	Shtil'	R-29RM 3M37U	Begemot-2-3	K-407	BLA	-	-	-	34.0E 70.0N (+/- 0.5)	10.0
1991 Aug 8 1810?	Shtil'	R-29RM 3M37U	Begemot-2-4	K-407	BLA	-	-	-	34.0E 70.0N (+/- 0.5)	10.0
1991 Aug 8 1810?	Shtil'	R-29RM 3M37U	Begemot-2-5	K-407	BLA	-	-	-	34.0E 70.0N (+/- 0.5)	10.0
1991 Aug 8 1810?	Shtil'	R-29RM 3M37U	Begemot-2-6	K-407	BLA	-	-	-	34.0E 70.0N (+/- 0.5)	10.0
1991 Aug 8 1810?	Shtil'	R-29RM 3M37U	Begemot-2-7	K-407	BLA	-	-	-	34.0E 70.0N (+/- 0.5)	10.0
1991 Aug 8 1810?	Shtil'	R-29RM 3M37U	Begemot-2-8	K-407	BLA	-	-	-	34.0E 70.0N (+/- 0.5)	10.0
1991 Aug 8 1810?	Shtil'	R-29RM 3M37U	Begemot-2-9	K-407	BLA	-	-	-	34.0E 70.0N (+/- 0.5)	10.0
1991 Aug 8 1810?	Shtil'	R-29RM 3M37U	Begemot-2-10	K-407	BLA	-	-	-	34.0E 70.0N (+/- 0.5)	10.0
1991 Aug 8 1810?	Shtil'	R-29RM 3M37U	Begemot-2-11	K-407	BLA	-	-	-	34.0E 70.0N (+/- 0.5)	10.0
1991 Aug 8 1810?	Shtil'	R-29RM 3M37U	Begemot-2-12	K-407	BLA	-	-	-	34.0E 70.0N (+/- 0.5)	10.0
1991 Aug 8 1810?	Shtil'	R-29RM 3M37U	Begemot-2-13	K-407	BLA	-	-	-	34.0E 70.0N (+/- 0.5)	10.0
1991 Aug 8 1810?	Shtil'	R-29RM 3M37U	Begemot-2-14	K-407	BLA	-	-	-	34.0E 70.0N (+/- 0.5)	10.0
1991 Aug 8 1810?	Shtil'	R-29RM 3M37U	Begemot-2-15	K-407	BLA	-	-	-	34.0E 70.0N (+/- 0.5)	10.0
1991 Aug 8 1810?	Shtil'	R-29RM 3M37U	Begemot-2-16	K-407	BLA	-	-	-	34.0E 70.0N (+/- 0.5)	10.0
1996 Jul 15	Shtil'	R-29RM 3M37U UBP	4 BB 3G95	K-407	BLA	-	-	-	34.0E 70.0N (+/- 0.5)	10.0
1998 Jul 7 0315:00	Shtil'-1	TUBSAT-N	TubSAT-N	K-407	BLA	-	-	-	34.0E 70.0N (+/- 0.5)	1000.0
2000 Dec 27 0800	Shtil'	R-29RM 3M37U UBP	4 BB 3G95	K-407	BLA	LP1	-	-	34.0E 70.0N (+/- 0.5)	809.0
2001 Feb 16 1028	Shtil'	R-29RM 3M37U1 LKI-2	4 BB	K-407	BLA	-	-	-	34.0E 70.0N (+/- 0.5)	1000.0
2004 Mar 17 1208	Sineva	R-29RM 3M37U1 UBP	4 BB	K-407	BLA	-	-	-	34.0E 70.0N (+/- 0.5)	1000.0
2004 Mar 17 1400	Sineva	R-29RM 3M37U1 UBP	4 BB	K-407	BLA	-	-	-	34.0E 70.0N (+/- 0.5)	1000.0
2016 Oct 12 1104	Sineva	R-29RM 3M37U2 UBP	4 BB	K-407	BLA	-	-	-	34.0E 70.0N (+/- 0.5)	1000.0

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## IV.1.19 Soviet Missile Submarines - Project 941



Credit: (c) A.D. Baker, III; from Polmar and Moore, Cold War Submarines



Credit: Apa'lkov et al 2006

The Акула (Akula, shark) class Project 941 submarine had the NATO reporting name Typhoon. Each Akula submarine carried 20 R-39 Rif missiles (D-19 launch system). TK-208 was later converted to test launch the Bulava missile.

Updated: 2024 Nov 28 03:19:33



Soviet Missile Submarines - Project 941

Ship	Transliteration	Image	CODE	Agency	Class	ClassID	AltID	Active
TK-12 Симбирск	TK-12 Simbirsk submarine	-	TK-12	VMF	Proekt 941	TK-12	-	1985 - 1999
TK-13	TK-13 submarine	-	TK-13	VMF	Proekt 941	TK-13	-	1989 - 1998
TK-17 Архангельск	TK-17 Arkhangel'sk submarine	-	TK-17	VMF	Proekt 941	TK-17	-	1990 - 2004
TK-20 Северсталь	TK-20 Severstal submarine	-	TK-20	VMF	Proekt 941	TK-20	-	1992 - 2003
TK-202	TK-202 submarine	-	TK-202	VMF	Proekt 941	TK-202	-	1984 - -
TK-208 Дмитрий Донской	TK-208 Dmitriy Donskoy submarine	-	TK-208	VMF	Proekt 941	TK-208	-	1982 - -

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### **IV.1.19.1 TK-12 Simbirsk submarine**

TK-12 Симбирск

Rockets used: R-39,R-39U

Updated: 2024 Nov 28 03:19:33

Launches: TK-12

Date	Rocket	Flight	Mission	PlatCode	Platform	Site	LP	AscSite	AsclP	Pos	Apogee
1985 Nov 16	R-39	-	-	TK-12	TK-12 Simbirsk submarine	BELA	-	-	-	38.0E 65.5N (+/- 1.0)	1000.0
1985 Nov 16	R-39	-	-	TK-12	TK-12 Simbirsk submarine	BELA	-	-	-	38.0E 65.5N (+/- 1.0)	1000.0
1986 Aug 26?	R-39	3M65 UBP	10 BB	TK-12	TK-12 Simbirsk submarine	BELA	-	-	-	38.0E 65.5N (+/- 1.0)	1000.0
1986 Sep 27	R-39	3M65 UBP	10 BB	TK-12	TK-12 Simbirsk submarine	BELA	-	-	-	38.0E 65.5N (+/- 1.0)	1000.0
1986 Sep 18?	R-39	3M65 UBP	10 BB	TK-12	TK-12 Simbirsk submarine	BELA	-	-	-	38.0E 65.5N (+/- 1.0)	1000.0
1986 Sep 25	R-39	3M65 UBP	10 BB	TK-12	TK-12 Simbirsk submarine	BELA	-	-	-	38.0E 65.5N (+/- 1.0)	1000.0
1987 Sep 8	R-39	3M65 UBP	10 BB	TK-12	TK-12 Simbirsk submarine	NPOLE	-	-	-	0.0E 90.0N (+/- 9.0)	0.0
1987 Sep 8	R-39	3M65 UBP	10 BB	TK-12	TK-12 Simbirsk submarine	NPOLE	-	-	-	0.0E 90.0N (+/- 9.0)	1000.0
1989 Feb 21	R-39U	3M65U UBP	10 BB	TK-12	TK-12 Simbirsk submarine	BELA	-	-	-	38.0E 65.5N (+/- 1.0)	1000.0

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## IV.1.19.2 TK-13 submarine

TK-13

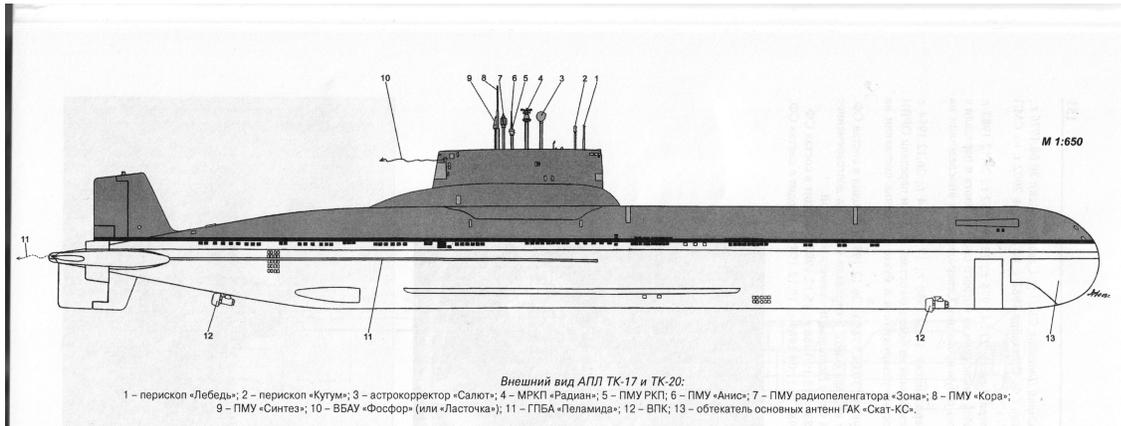
Rockets used: R-39U,R-39

Updated: 2024 Nov 28 03:19:33



### IV.1.19.3 TK-17 Arkhangelsk submarine

#### TK-17 Архангельск



Credit: Apa'lkov et al 2006

Rockets used: R-39U,R-39

Updated: 2024 Nov 28 03:19:33

Launches: TK-17

Date	Rocket	Flight	Mission	PlatCode	Platform	Site	LP	AscSite	AsCLP	Pos	Apogee
1990 Q3?	R-39U	3M65U UBP	10 BB	TK-17	TK-17 Arkhangel'sk submarine	BELA	-	-	-	38.0E 65.5N (+/- 1.0)	1000.0
1991 Aug	R-39U	3M65U UBP	-	TK-17	TK-17 Arkhangel'sk submarine	BELA	-	-	-	38.0E 65.5N (+/- 1.0)	1000.0
1991 Aug	R-39U	3M65U UBP	-	TK-17	TK-17 Arkhangel'sk submarine	BELA	-	-	-	38.0E 65.5N (+/- 1.0)	1000.0
1991 Sep 27 1613	R-39	-	-	TK-17	TK-17 Arkhangel'sk submarine	BELA	-	-	-	38.0E 65.5N (+/- 1.0)	0.0
1993 Oct?	R-39	3M65U UBP	10 BB	TK-17	TK-17 Arkhangel'sk submarine	BELA	-	-	-	34.0E 70.0N (+/- 0.5)	1000.0
1993 Nov 27	R-39	-	-	TK-17	TK-17 Arkhangel'sk submarine	BELA	-	-	-	38.0E 65.5N (+/- 1.0)	1000.0
1996 Oct 23	R-39U	3M65U UBP	10 BB	TK-17	TK-17 Arkhangel'sk submarine	BELA	-	-	-	34.0E 70.0N (+/- 0.5)	3.0
1996 Oct 23	R-39U	3M65U UBP	10 BB	TK-17	TK-17 Arkhangel'sk submarine	BELA	-	-	-	34.0E 70.0N (+/- 0.5)	3.0
1996 Nov	R-39U	3M65U UBP	10 BB	TK-17	TK-17 Arkhangel'sk submarine	BELA	-	-	-	34.0E 70.0N (+/- 0.5)	1000.0
1996 Nov	R-39U	3M65U UBP	10 BB	TK-17	TK-17 Arkhangel'sk submarine	BELA	-	-	-	34.0E 70.0N (+/- 0.5)	1000.0
1996 Nov	R-39U	3M65U UBP	10 BB	TK-17	TK-17 Arkhangel'sk submarine	BELA	-	-	-	34.0E 70.0N (+/- 0.5)	1000.0
2002 Dec	R-39U	3M65U UBP	10 BB	TK-17	TK-17 Arkhangel'sk submarine	BELA	-	-	-	38.0E 65.5N (+/- 1.0)	1000.0
2003 Oct 15 1003	R-39U	3M65U UBP	10 BB	TK-17	TK-17 Arkhangel'sk submarine	BELA	-	-	-	38.0E 65.5N (+/- 1.0)	1000.0

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#### **IV.1.19.4 TK-20 Severstal submarine**

TK-20 Северсталь

Rockets used: R-39,R-39U,Shtil'

Updated: 2024 Nov 28 03:19:33





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#### **IV.1.19.5 TK-202 submarine**

TK-202

Rockets used: R-39

Updated: 2024 Nov 28 03:19:33

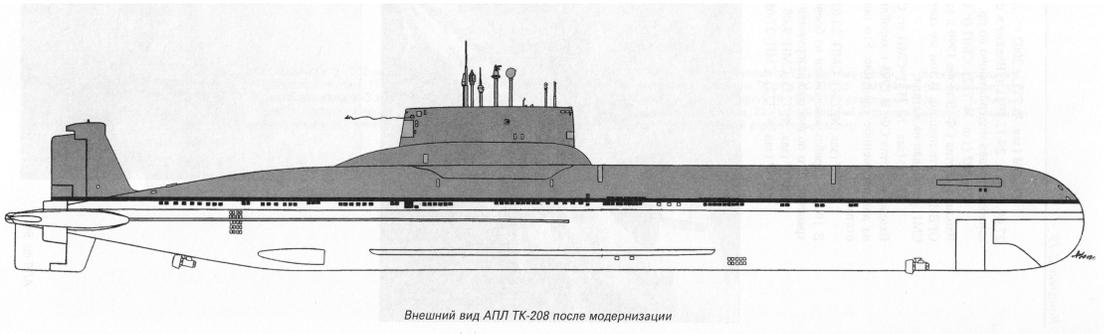
Launches: TK-202

Date	Rocket	Flight	Mission	Platform	Site	LP	AscSite	AsclP	Pos	Apogee
1984 May 13	R-39	-	-	TK-202	TK-202 submarine	BELA	-	-	38.0E 65.5N (+/- 1.0)	1000.0
1986 Aug 14	R-39	-	-	TK-202	TK-202 submarine	BELA	-	-	38.0E 65.5N (+/- 1.0)	1000.0
1987	R-39	3M65 UBP	10 BB	TK-202	TK-202 submarine	BELA	-	-	38.0E 65.5N (+/- 1.0)	0.0
1987	R-39	3M65 UBP	10 BB	TK-202	TK-202 submarine	BELA	-	-	38.0E 65.5N (+/- 1.0)	0.0

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### IV.1.19.6 TK-208 Dmitriy Donskoy submarine

#### TK-208 Дмитрий Донской



Credit: Apa'lkov et al 2006

In 2003 the TK-208 Project 941 submarine was converted to Project 941UM, carrying Bulava missiles. It was named Dmitriy Donskoy in 2002.

Rockets used: R-39,Bulava

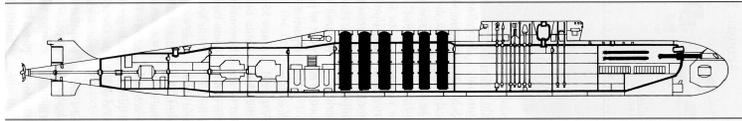
Updated: 2024 Nov 28 03:19:33

Launches: TK-208

Date	Rocket	Flight	Mission	PlatCode	Platform	Site	LP	AscSite	AscLP	Pos	Apogee
1982 Jun 29	R-39	LKI-IV-1	3 BB	TK-208	Dmitriy Donskoy submarine	BELA	-	-	-	38.0E 65.5N (+/- 1.0)	1000.0
1982 Jul 21	R-39	LKI-IV-2	4 BB	TK-208	Dmitriy Donskoy submarine	BELA	-	-	-	38.0E 65.5N (+/- 1.0)	1000.0
1982 Jul 22	R-39	LKI-IV-3	Mil variant	TK-208	Dmitriy Donskoy submarine	BELA	-	-	-	38.0E 65.5N (+/- 1.0)	1000.0
1982 Aug 12	R-39	LKI-IV-4	2 BB	TK-208	Dmitriy Donskoy submarine	BELA	-	-	-	38.0E 65.5N (+/- 1.0)	1000.0
1982 Aug 12	R-39	LKI-IV-5	3 BB	TK-208	Dmitriy Donskoy submarine	BELA	-	-	-	38.0E 65.5N (+/- 1.0)	1000.0
1982 Sep 1	R-39	LKI-IV-6	-	TK-208	Dmitriy Donskoy submarine	BELA	-	-	-	38.0E 65.5N (+/- 1.0)	1000.0
1982 Sep 1	R-39	LKI-IV-7	-	TK-208	Dmitriy Donskoy submarine	BELA	-	-	-	38.0E 65.5N (+/- 1.0)	1000.0
1982 Sep 1	R-39	LKI-IV-8	-	TK-208	Dmitriy Donskoy submarine	BELA	-	-	-	38.0E 65.5N (+/- 1.0)	1000.0
1982 Oct 14	R-39	LKI-IV-9	4 BB	TK-208	Dmitriy Donskoy submarine	BELA	-	-	-	38.0E 65.5N (+/- 1.0)	1000.0
1982 Oct 14	R-39	LKI-IV-10	1 BB	TK-208	Dmitriy Donskoy submarine	BELA	-	-	-	38.0E 65.5N (+/- 1.0)	1000.0
1982 Oct 14	R-39	LKI-IV-11	4 BB	TK-208	Dmitriy Donskoy submarine	BELA	-	-	-	38.0E 65.5N (+/- 1.0)	1000.0
1982 Dec 12	R-39	LKI-IV-12	2 BB	TK-208	Dmitriy Donskoy submarine	BELA	-	-	-	38.0E 65.5N (+/- 1.0)	1000.0
1982 Dec 12	R-39	LKI-IV-13	5 BB	TK-208	Dmitriy Donskoy submarine	BELA	-	-	-	38.0E 65.5N (+/- 1.0)	1000.0
1982 Dec 12	R-39	LKI-IV-14	2 BB	TK-208	Dmitriy Donskoy submarine	BELA	-	-	-	38.0E 65.5N (+/- 1.0)	1000.0
1982 Dec 12	R-39	LKI-IV-15	4 BB	TK-208	Dmitriy Donskoy submarine	BELA	-	-	-	38.0E 65.5N (+/- 1.0)	1000.0
1984 Jun 24	R-39	-	-	TK-208	Dmitriy Donskoy submarine	BELA	-	-	-	38.0E 65.5N (+/- 1.0)	1000.0
1985 Sep 12	R-39	-	-	TK-208	Dmitriy Donskoy submarine	BELA	-	-	-	38.0E 65.5N (+/- 1.0)	1000.0
1986 Aug 14	R-39	-	-	TK-208	Dmitriy Donskoy submarine	BELA	-	-	-	38.0E 65.5N (+/- 1.0)	1000.0
1986 Sep 17	R-39	3M65 UBP	10 BB	TK-208	Dmitriy Donskoy submarine	BELA	-	-	-	38.0E 65.5N (+/- 1.0)	1000.0
2003 Dec 11 0800	Bulava	3M30 Popup test II-1	-	TK-208	Dmitriy Donskoy submarine	BLA	-	-	-	34.0E 70.0N (+/- 0.5)	1.0
2004 Sep 23	Bulava	3M30 Popup test II-2	-	TK-208	Dmitriy Donskoy submarine	BLA	-	-	-	34.0E 70.0N (+/- 0.5)	1.0
2005 Sep 27 1322	Bulava	3M30 LKI-1	3 x 3G32 BB (3G30)	TK-208	Dmitriy Donskoy submarine	BELA	-	-	-	38.0E 65.5N (+/- 1.0)	1000.0
2005 Dec 21 0519	Bulava	3M30 LKI-2	3 x 3G32 BB (3G30)	TK-208	Dmitriy Donskoy submarine	BELA	-	-	-	38.0E 65.5N (+/- 1.0)	1000.0
2006 Sep 7 1550	Bulava	3M30 LKI-3	3 x 3G32 BB (3G30)	TK-208	Dmitriy Donskoy submarine	BELA	-	-	-	38.0E 65.5N (+/- 1.0)	1.0
2006 Oct 25 1305	Bulava	3M30 LKI-4	3 x 3G32 BB (3G30)	TK-208	Dmitriy Donskoy submarine	BELA	-	-	-	38.0E 65.5N (+/- 1.0)	10.0
2006 Dec 24	Bulava	3M30 LKI-5	3 x 3G32 BB (3G30)	TK-208	Dmitriy Donskoy submarine	BELA	-	-	-	38.0E 65.5N (+/- 1.0)	100.0
2007 Jun 28 1525:00	Bulava	3M30 LKI-6	3 x 3G32 BB (3G30)	TK-208	Dmitriy Donskoy submarine	BELA	-	-	-	38.0E 65.5N (+/- 1.0)	1000.0
2007 Nov 10	Bulava	3M30 LKI-7	3 x 3G32 BB (3G30)	TK-208	Dmitriy Donskoy submarine	BELA	-	-	-	38.0E 65.5N (+/- 1.0)	1.0
2008 Sep 18 1445:00	Bulava	3M30 LKI-8	3 x 3G32 BB (3G30)	TK-208	Dmitriy Donskoy submarine	BELA	-	-	-	38.0E 65.5N (+/- 1.0)	1000.0
2008 Nov 28 1405	Bulava	3M30 LKI-9	3 x 3G32 BB (3G30)	TK-208	Dmitriy Donskoy submarine	BELA	-	-	-	38.0E 65.5N (+/- 1.0)	1000.0
2008 Dec 23 0250	Bulava	3M30 LKI-10	3 x 3G32 BB (3G30)	TK-208	Dmitriy Donskoy submarine	BELA	-	-	-	38.0E 65.5N (+/- 1.0)	100.0
2009 Jul 15	Bulava	3M30 LKI-11	3 x 3G32 BB (3G30)	TK-208	Dmitriy Donskoy submarine	BELA	-	-	-	38.0E 65.5N (+/- 1.0)	10.0
2009 Dec 9 0645	Bulava	3M30 LKI-12	3 x 3G32 BB	TK-208	Dmitriy Donskoy submarine	BELA	-	-	-	38.0E 65.5N (+/- 1.0)	500.0
2010 Oct 7 0715	Bulava	3M30 LKI-13	3 x 3G32 BB	TK-208	Dmitriy Donskoy submarine	BELA	-	-	-	38.0E 65.5N (+/- 1.0)	1000.0
2010 Oct 29 0110	Bulava	3M30 LKI-14	3 x 3G32 BB	TK-208	Dmitriy Donskoy submarine	BELA	-	-	-	38.0E 65.5N (+/- 1.0)	1000.0

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## IV.1.20 Soviet Missile Submarines - Project 955



*Project 955/Yuri Dolgoruki SSBN (early design). LOA approx. 557 ft 6 in (170.0 m) (©A.D. Baker, III)*

Credit: From Polmar and Moore, Cold War Submarines

The Project 955 Borey submarines were built to launch the Bulava missile.

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Soviet Missile Submarines - Project 955

Ship	Transliteration	Image	CODE	Agency	Class	ClassID	AltID	Active
K-535 Юрий Долгорукий	K-535 Yuriy Dolgorukiy submarine	-	K-535	WMF	Proekt 955	K-535	-	-
K-549 Князь Владимир	K-549 Knyaz Vladimir submarine	-	K-549	WMF	Proekt 955A	K-549	-	-
K-550 Александр Невский	K-550 Aleksandr Nevskiy submarine	-	K-550	WMF	Proekt 955	K-550	-	-
K-551 Владимир Мономах	K-551 Vladimir Monomakh	-	K-551	WMF	Proekt 955	K-551	-	-
K-552 Князь Олег	K-552 Knyaz Oleg	-	K-552	WMF	Proekt 955A	K-552	-	-
K-553 Генералиссимус Суворов	K-553 Generalissimus Suvorov	-	K-553	WMF	Proekt 955A	K-553	-	-
K-554 Император Александр III	K-554 Imperator Aleksandr Tretii	-	K-554	WMF	Proekt 955A	K-554	-	-

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#### **IV.1.20.1 K-535 Yuriy Dolgorukiy submarine**

К-535 Юрий Долгорукий

Rockets used: Bulava

Updated: 2024 Nov 28 03:19:33



Launches: K-535

Date	Rocket	Flight	Mission	Platform	Site	LP	AscSite	AscLP	Pos	Apogee
2011 Jun 28 1155	Bulava	3M30 LKI-15	6 BB	K-535	BELA	-	-	-	38.0E 65.5N (+/- 1.0)	1000.0
2011 Aug 27 0320	Bulava	3M30 LKI-16	6 BB	K-535	BELA	-	-	-	38.0E 65.5N (+/- 1.0)	1000.0
2011 Oct 28 0340	Bulava	3M30 LKI-17	-	K-535	BELA	-	-	-	38.0E 65.5N (+/- 1.0)	1000.0
2011 Dec 23 1550	Bulava	3M30 LKI-18	6 BB	K-535	BELA	-	-	-	38.0E 65.5N (+/- 1.0)	1000.0
2011 Dec 23 1550	Bulava	3M30 LKI-19	6 BB	K-535	BELA	-	-	-	38.0E 65.5N (+/- 1.0)	1000.0
2014 Oct 29 1727	Bulava	3M30 UB	6 BB	K-535	BELA	-	-	-	34.0E 70.0N (+/- 0.5)	1000.0
2016 Sep 27 1420:00	Bulava	3M30 UB	6BB	K-535	BELA	-	-	-	38.0E 65.5N (+/- 1.0)	1000.0
2016 Sep 27 1420:10	Bulava	3M30 UB	6BB	K-535	BELA	-	-	-	38.0E 65.5N (+/- 1.0)	10.0
2017 Jun 26 1459	Bulava	3M30 UB	6 BB	K-535	BELA	-	-	-	34.0E 70.0N (+/- 0.5)	1000.0
2018 May 22 1513:00?	Bulava	-	6 BB	K-535	BELA	-	-	-	38.0E 65.5N (+/- 1.0)	100.0
2018 May 22 1513:07?	Bulava	-	6 BB	K-535	BELA	-	-	-	38.0E 65.5N (+/- 1.0)	1000.0
2018 May 22 1513:14?	Bulava	-	6 BB	K-535	BELA	-	-	-	38.0E 65.5N (+/- 1.0)	1000.0
2018 May 22 1513:21?	Bulava	3M30 UB	6 BB	K-535	BELA	-	-	-	38.0E 65.5N (+/- 1.0)	1000.0
2019 Aug 24	Bulava	3M30 UB	6 BB	K-535	BELA	-	-	-	34.0E 70.0N (+/- 0.5)	1000.0

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## IV.1.20.2 K-549 Knyaz Vladimir submarine

K-549 Князь Владимир

Rockets used: Bulava

Updated: 2024 Nov 28 03:19:33

Launches: K-549

Date	Rocket	Flight	Mission	PlatCode	Platform	Site	LP	AscSite	AsCLP	Pos	Apogee
2019 Oct 30 1457	Bulava	3M30 UBP	6 BB	K-549	K-549 Knyaz Vladimir submarine	BELA	-	-	-	38.0E 65.5N (+/- 1.0)	1000.0

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### **IV.1.20.3 K-550 Aleksandr Nevskiy submarine**

K-550 Александр Невский

Rockets used: Bulava

Updated: 2024 Nov 28 03:19:33

Launches: K-550

Date	Rocket	Flight	Mission	PlatCode	Platform	Site	LP	AscSite	AscLP	Pos	Apogee
2013 Sep 6 0520	Bulava	3M30 UBP	6 BB	K-550	K-550 Aleksandr Nevskiy submarine	BELA	-	-	-	38.0E 65.5N (+/- 1.0)	100.0
2014 Nov 28 1609	Bulava	3M30 UBP	6 BB	K-550	K-550 Aleksandr Nevskiy submarine	BLA	-	-	-	34.0E 70.0N (+/- 0.5)	1000.0

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#### **IV.1.20.4 K-551 Vladimir Monomakh**

K-551 Владимир Мономах

Rockets used: Bulava

Updated: 2024 Nov 28 03:19:33

Launches: K-551

Date	Rocket	Flight	Mission	PlatCode	Platform	Site	LP	AscSite	AsCLP	Pos	Apogee
2014 Sep 10 0405	Bulava	3M30 UBP	6 BB	K-551	K-551 Vladimir Monomakh	BELA	-	-	-	38.0E 65.5N (+/- 1.0)	1000.0
2015 Nov 14 1716:00	Bulava	3M30 K	6 BB	K-551	K-551 Vladimir Monomakh	BELA	-	-	-	34.0E 70.0N (+/- 0.5)	40.0
2015 Nov 14 1716:10	Bulava	3M30 K	6 BB	K-551	K-551 Vladimir Monomakh	BELA	-	-	-	34.0E 70.0N (+/- 0.5)	1000.0
2020 Dec 12	Bulava	3M30 UBP	4 BB	K-551	K-551 Vladimir Monomakh	OMLA	-	-	-	148.0E 57.0N (+/- 2.0)	1000.0
2020 Dec 12	Bulava	3M30 UBP	4 BB	K-551	K-551 Vladimir Monomakh	OMLA	-	-	-	148.0E 57.0N (+/- 2.0)	1000.0
2020 Dec 12	Bulava	3M30 UBP	4 BB	K-551	K-551 Vladimir Monomakh	OMLA	-	-	-	148.0E 57.0N (+/- 2.0)	1000.0
2020 Dec 12	Bulava	3M30 UBP	4 BB	K-551	K-551 Vladimir Monomakh	OMLA	-	-	-	148.0E 57.0N (+/- 2.0)	1000.0

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#### **IV.1.20.5 K-552 Knyaz Oleg**

K-552 Князь Олег

Rockets used: Bulava

Updated: 2024 Nov 28 03:19:33



**Launches: K-552**

Date	Rocket	Flight	Mission	PlatCode	Platform	Site	LP	AscSite	AscLP	Pos	Apogee
2021 Oct 21	Bulava	3M30 UBP	4 BB	K-552	K-552 Knyaz Oleg	BELA	-	-	-	38.0E 65.5N (+/- 1.0)	1000.0

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#### **IV.1.20.6 K-553 Generalissimus Suvorov**

К-553 Генералиссимус Суворов

Rockets used: Bulava

Updated: 2024 Nov 28 03:19:33

Launches: K-553

Date	Rocket	Flight	Mission	PlatCode	Platform	Site	LP	AscSite	AsclP	Pos	Apogee
2022 Nov 3	Bulava	3M30 UBP	4 BB	K-553	K-553 Generalissimus Suvorov	BELA	-	-	-	38.0E 65.5N (+/- 1.0)	1000.0

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#### **IV.1.20.7 K-554 Emperor Aleksandr Tretii**

K-554 Император Александр III

Rockets used: Bulava

Updated: 2024 Nov 28 03:19:33

Launches: K-554

Date	Rocket	Flight	Mission	PlatCode	Platform	Site	LP	AscSite	AscLP	Pos	Apogee
2023 Nov 4?	Bulava	3M30 UBP	4 BB	K-554	K-554 Imperator Aleksandr Tretii	BELA	-	-	-	38.0E 65.5N (+/- 1.0)	1000.0

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## **IV.1.21 Soviet Missile Submarines - Launches from unknown sub**

Missile launches noted in this section were from unknown Soviet submarines.

Updated: 2024 Nov 28 03:19:33

Soviet Missile Submarines - Launches from unknown sub

Ship	Transliteration	Image	CODE	Agency	Class	ClassID	AltID	Active
Unknown Soviet/Russian sub	Unknown Soviet/Russian sub	-	PLBR	VMF	-	-	-	- - -

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#### **IV.1.21.1 Unknown Soviet/Russian sub**

Rockets used: R-21,Zyb R-27K,Vysota,Zyb,Volna,R-39,Shtil'

Updated: 2024 Nov 28 03:19:33



Launches: PLBR

Date	Rocket	Flight	Mission	Platform	Site	LP	AscSite	AsclP	Pos	Apogee
1962 Q3?	R-21	4K55 LKI-III-8	MGCh 4G55/RA3	Unknown Soviet/Russian sub	UNKPL	-	-	-	-	0.0
1962 Q3?	R-21	4K55 LKI-III-9	MGCh 4G55/RA3	Unknown Soviet/Russian sub	UNKPL	-	-	-	-	0.0
1962 Q3?	R-21	4K55 LKI-III-10	MGCh 4G55/RA3	Unknown Soviet/Russian sub	UNKPL	-	-	-	-	300.0
1962 Q3?	R-21	4K55 LKI-III-11	MGCh 4G55/RA3	Unknown Soviet/Russian sub	UNKPL	-	-	-	-	300.0
1962 Q3?	R-21	4K55 LKI-III-12	MGCh 4G55/RA3	Unknown Soviet/Russian sub	UNKPL	-	-	-	-	300.0
1962 Q3?	R-21	4K55 LKI-III-13	MGCh 4G55/RA3	Unknown Soviet/Russian sub	UNKPL	-	-	-	-	300.0
1963?	R-21	4K55 LKI-IV-1	MGCh 4G55/RA3	Unknown Soviet/Russian sub	BLA	-	34.0E 70.0N (+/- 0.5)	-	-	300.0
1963?	R-21	4K55 LKI-IV-2	MGCh 4G55/RA3	Unknown Soviet/Russian sub	UNKPL	-	-	-	-	300.0
1963?	R-21	4K55 LKI-IV-3	MGCh 4G55/RA3	Unknown Soviet/Russian sub	UNKPL	-	-	-	-	300.0
1963?	R-21	4K55 LKI-IV-4	MGCh 4G55/RA3	Unknown Soviet/Russian sub	UNKPL	-	-	-	-	300.0
1963?	R-21	4K55 LKI-IV-5	MGCh 4G55/RA3	Unknown Soviet/Russian sub	UNKPL	-	-	-	-	300.0
1963?	R-21	4K55 LKI-IV-6	MGCh 4G55/RA3	Unknown Soviet/Russian sub	UNKPL	-	-	-	-	300.0
1963?	R-21	4K55 LKI-IV-7	MGCh 4G55/RA3	Unknown Soviet/Russian sub	UNKPL	-	-	-	-	300.0
1963?	R-21	4K55 LKI-IV-8	MGCh 4G55/RA3	Unknown Soviet/Russian sub	UNKPL	-	-	-	-	300.0
1963?	R-21	4K55 LKI-IV-9	MGCh 4G55/RA3	Unknown Soviet/Russian sub	UNKPL	-	-	-	-	300.0
1963?	R-21	4K55 LKI-IV-10	MGCh 4G55/RA3	Unknown Soviet/Russian sub	UNKPL	-	-	-	-	300.0
1963?	R-21	4K55 LKI-IV-11	MGCh 4G55/RA3	Unknown Soviet/Russian sub	UNKPL	-	-	-	-	300.0
1963?	R-21	4K55 LKI-IV-12	MGCh 4G55/RA3	Unknown Soviet/Russian sub	UNKPL	-	-	-	-	300.0
1963?	R-21	4K55 LKI-III-15	MGCh 4G55/RA3	Unknown Soviet/Russian sub	UNKPL	-	5.0E 70.0N (+/- 5.0)	-	-	620.0
1973 Sep 11	Zyb R-27K	-	-	Unknown Soviet/Russian sub	UNKPL	-	-	-	-	620.0
1973 Dec 4	Zyb R-27K	-	-	Unknown Soviet/Russian sub	UNKPL	-	-	-	-	620.0
1974 Oct 2	Vysota	R-29 4K75 UBP	MGCh 4G75/RA46	Unknown Soviet/Russian sub	BELA	-	38.0E 65.5N (+/- 1.0)	-	-	1000.0
1974 Oct 2	Vysota	R-29 4K75 UBP	MGCh 4G75/RA46	Unknown Soviet/Russian sub	BELA	-	38.0E 65.5N (+/- 1.0)	-	-	1000.0
1975 Apr?	Vysota	R-29 4K75 UBP	MGCh 4G75/RA46	Unknown Soviet/Russian sub	UNKPL	-	-	-	-	1000.0
1976 Nov	Vysota	R-29 4K75 UBP	MGCh	Unknown Soviet/Russian sub	UNKPL	-	-	-	-	1000.0
1976 Nov	Vysota	R-29 4K75 UBP	MGCh	Unknown Soviet/Russian sub	BLA	-	34.0E 70.0N (+/- 0.5)	-	-	0.0
1976 Nov	Vysota	R-29 4K75 UBP	MGCh	Unknown Soviet/Russian sub	BLA	-	34.0E 70.0N (+/- 0.5)	-	-	1000.0
1976 Nov	Vysota	R-29 4K75 UBP	MGCh	Unknown Soviet/Russian sub	BLA	-	34.0E 70.0N (+/- 0.5)	-	-	1000.0
1976 Nov	Vysota	R-29 4K75 UBP	MGCh	Unknown Soviet/Russian sub	BLA	-	34.0E 70.0N (+/- 0.5)	-	-	1000.0
1976 Nov	Vysota	R-29 4K75 UBP	MGCh	Unknown Soviet/Russian sub	UNKPL	-	-	-	-	1000.0
1977 Mar 18	Vysota	R-29 4K75 UBP	MGCh 4G75/RA46	Unknown Soviet/Russian sub	UNKPL	-	-	-	-	1000.0
1977 Mar 20	Vysota	R-29 4K75 UBP	MGCh 4G75/RA46	Unknown Soviet/Russian sub	UNKPL	-	-	-	-	1000.0
1979	R-21	8K55M UBP	MGCh	Unknown Soviet/Russian sub	UNKPL	-	-	-	-	300.0
1980 Mar 15	Zyb	R-27U 3M20U	3 BB RA83?	Unknown Soviet/Russian sub	OMLA	-	148.0E 57.0N (+/- 2.0)	-	-	620.0
1980 Mar 15	Zyb	R-27U 3M20U	3 BB RA83?	Unknown Soviet/Russian sub	OMLA	-	148.0E 57.0N (+/- 2.0)	-	-	620.0
1980 Mar 15	Zyb	R-27U 3M20U	3 BB RA83?	Unknown Soviet/Russian sub	OMLA	-	148.0E 57.0N (+/- 2.0)	-	-	620.0
1980 Mar 15	Zyb	R-27U 3M20U	3 BB RA83?	Unknown Soviet/Russian sub	OMLA	-	148.0E 57.0N (+/- 2.0)	-	-	620.0
1980 Aug?	Volna	R-29R 3M40L Demo	7 BB	Unknown Soviet/Russian sub	UNKPL	-	-	-	-	1000.0
1981	Zyb	R-27U 3M20U LKI	-	Unknown Soviet/Russian sub	UNKPL	-	-	-	-	620.0
1981 Mar?	Volna	R-29R 3M40K LKI-1	7 BB	Unknown Soviet/Russian sub	UNKPL	-	-	-	-	1000.0
1981 Mar?	Volna	R-29R 3M40K LKI-2	7 BB	Unknown Soviet/Russian sub	UNKPL	-	-	-	-	1000.0
1981 Mar?	Volna	R-29R 3M40K LKI-3	7 BB	Unknown Soviet/Russian sub	UNKPL	-	-	-	-	1000.0
1981 Mar?	Volna	R-29R 3M40K LKI-4	7 BB	Unknown Soviet/Russian sub	UNKPL	-	-	-	-	1000.0
1981 Mar?	Volna	R-29R 3M40K LKI-5	7 BB	Unknown Soviet/Russian sub	UNKPL	-	-	-	-	1000.0
1981 Mar?	Volna	R-29R 3M40K LKI-6	7 BB	Unknown Soviet/Russian sub	UNKPL	-	-	-	-	1000.0
1981 Mar?	Volna	R-29R 3M40K LKI-7	7 BB	Unknown Soviet/Russian sub	UNKPL	-	-	-	-	1000.0
1981 Mar?	Volna	R-29R 3M40K LKI-8	7 BB	Unknown Soviet/Russian sub	UNKPL	-	-	-	-	1000.0
1981 Mar?	Volna	R-29R 3M40K LKI-9	7 BB	Unknown Soviet/Russian sub	UNKPL	-	-	-	-	1000.0
1981 Mar?	Volna	R-29R 3M40K LKI-10	7 BB	Unknown Soviet/Russian sub	UNKPL	-	-	-	-	1000.0
1981 Mar?	Volna	R-29R 3M40K LKI-11	7 BB	Unknown Soviet/Russian sub	UNKPL	-	-	-	-	1000.0
1981 Mar?	Volna	R-29R 3M40K LKI-12	7 BB	Unknown Soviet/Russian sub	UNKPL	-	-	-	-	1000.0
1983 May 25	Volna	R-29R 3M40K UBP	7 BB	Unknown Soviet/Russian sub	POLA	-	170.0E 30.0N (+/- 9.0)	-	-	0.0
1984 Sep 7 0710	Volna	R-29R 3M40K UBP	7 BB	Unknown Soviet/Russian sub	BLA	-	34.0E 70.0N (+/- 0.5)	-	-	1000.0
1985 Mar?	R-39	3M65U LKI-1	10 BB	Unknown Soviet/Russian sub	UNKPL	-	-	-	-	1000.0
1985 Mar?	R-39	3M65U LKI-2	10 BB	Unknown Soviet/Russian sub	UNKPL	-	-	-	-	1000.0
1985 Mar?	R-39	3M65U LKI-3	10 BB	Unknown Soviet/Russian sub	UNKPL	-	-	-	-	1000.0

Launches: PLBR

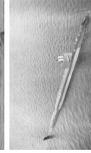
Date	Rocket	Flight	Mission	Platform	Site	LP	AscSite	AsclP	Pos	Apogee
1985 Mar?	R-39	3M65U LKI-4	10 BB	Unknown Soviet/Russian sub	UNKPL	-	-	-	-	1000.0
1985 Mar?	R-39	3M65U LKI-5	10 BB	Unknown Soviet/Russian sub	UNKPL	-	-	-	-	1000.0
1985 Mar?	R-39	3M65U LKI-6	10 BB	Unknown Soviet/Russian sub	UNKPL	-	-	-	-	1000.0
1985 Mar?	R-39	3M65U LKI-7	10 BB	Unknown Soviet/Russian sub	UNKPL	-	-	-	-	1000.0
1985 Mar?	R-39	3M65U LKI-8	10 BB	Unknown Soviet/Russian sub	UNKPL	-	-	-	-	1000.0
1985 Mar?	R-39	3M65U LKI-9	10 BB	Unknown Soviet/Russian sub	UNKPL	-	-	-	-	1000.0
1985 Mar?	R-39	3M65U LKI-10	10 BB	Unknown Soviet/Russian sub	UNKPL	-	-	-	-	1000.0
1985 Apr?	Vysota	R-29 4K75DU LKI-1	MGCh	Unknown Soviet/Russian sub	UNKPL	-	-	-	-	1000.0
1985 Apr?	Vysota	R-29 4K75DU LKI-2	MGCh	Unknown Soviet/Russian sub	UNKPL	-	-	-	-	1000.0
1985 Apr?	Vysota	R-29 4K75DU LKI-3	MGCh	Unknown Soviet/Russian sub	UNKPL	-	-	-	-	1000.0
1985 Apr?	Vysota	R-29 4K75DU LKI-4	MGCh	Unknown Soviet/Russian sub	UNKPL	-	-	-	-	1000.0
1985 Apr?	Vysota	R-29 4K75DU LKI-5	MGCh	Unknown Soviet/Russian sub	UNKPL	-	-	-	-	1000.0
1985 Apr?	Vysota	R-29 4K75DU LKI-6	MGCh	Unknown Soviet/Russian sub	UNKPL	-	-	-	-	1000.0
1985 Apr?	Vysota	R-29 4K75DU LKI-7	MGCh	Unknown Soviet/Russian sub	UNKPL	-	-	-	-	1000.0
1985 Apr?	Vysota	R-29 4K75DU LKI-8	MGCh	Unknown Soviet/Russian sub	UNKPL	-	-	-	-	1000.0
1985 Apr?	Vysota	R-29 4K75DU LKI-9	MGCh	Unknown Soviet/Russian sub	UNKPL	-	-	-	-	1000.0
1985 Apr?	Vysota	R-29 4K75DU LKI-10	MGCh	Unknown Soviet/Russian sub	UNKPL	-	-	-	-	1000.0
1985 Apr?	Vysota	R-29 4K75DU LKI-11	MGCh	Unknown Soviet/Russian sub	UNKPL	-	-	-	-	1000.0
1985 Apr?	Vysota	R-29 4K75DU LKI-12	MGCh	Unknown Soviet/Russian sub	UNKPL	-	-	-	-	1000.0
1985 Jul	Volna	R-29R 3M40K UBP	7 BB	Unknown Soviet/Russian sub	UNKPL	-	-	-	-	100.0
1986	Volna	R-29R 3M40KU LKI-1	7 BB	Unknown Soviet/Russian sub	UNKPL	-	-	-	-	1000.0
1986	Volna	R-29R 3M40KU LKI-2	7 BB	Unknown Soviet/Russian sub	UNKPL	-	-	-	-	1000.0
1986	Volna	R-29R 3M40KU LKI-3	7 BB	Unknown Soviet/Russian sub	UNKPL	-	-	-	-	1000.0
1986	Volna	R-29R 3M40KU LKI-4	7 BB	Unknown Soviet/Russian sub	UNKPL	-	-	-	-	1000.0
1986	Volna	R-29R 3M40KU LKI-5	7 BB	Unknown Soviet/Russian sub	UNKPL	-	-	-	-	1000.0
1986	Volna	R-29R 3M40KU LKI-6	7 BB	Unknown Soviet/Russian sub	UNKPL	-	-	-	-	1000.0
1986	Volna	R-29R 3M40KU LKI-7	7 BB	Unknown Soviet/Russian sub	UNKPL	-	-	-	-	1000.0
1987 Aug?	Shtil'	R-29RM 3M37 RV Test	4 BB 3G95	Unknown Soviet/Russian sub	UNKPL	-	-	-	-	1000.0
1987 Aug?	Shtil'	R-29RM 3M37 RV Test	4 BB 3G95	Unknown Soviet/Russian sub	UNKPL	-	-	-	-	1000.0
1987 Aug?	Shtil'	R-29RM 3M37 RV Test	4 BB 3G95	Unknown Soviet/Russian sub	UNKPL	-	-	-	-	1000.0
1987 Aug?	Shtil'	R-29RM 3M37U LKI-1	4 BB 3G95	Unknown Soviet/Russian sub	UNKPL	-	-	-	-	1000.0
1987 Aug?	Shtil'	R-29RM 3M37U LKI-2	4 BB 3G95	Unknown Soviet/Russian sub	UNKPL	-	-	-	-	1000.0
1987 Aug?	Shtil'	R-29RM 3M37U LKI-3	4 BB 3G95	Unknown Soviet/Russian sub	UNKPL	-	-	-	-	1000.0
1987 Aug?	Shtil'	R-29RM 3M37U LKI-4	4 BB 3G95	Unknown Soviet/Russian sub	UNKPL	-	-	-	-	1000.0
1987 Aug?	Shtil'	R-29RM 3M37U LKI-5	4 BB 3G95	Unknown Soviet/Russian sub	UNKPL	-	-	-	-	1000.0
1987 Aug?	Shtil'	R-29RM 3M37U LKI-6	4 BB 3G95	Unknown Soviet/Russian sub	UNKPL	-	-	-	-	1000.0
1987 Aug?	Shtil'	R-29RM 3M37U LKI-7	4 BB 3G95	Unknown Soviet/Russian sub	UNKPL	-	-	-	-	1000.0
1987 Aug?	Shtil'	R-29RM 3M37U LKI-8	4 BB 3G95	Unknown Soviet/Russian sub	UNKPL	-	-	-	-	1000.0
1987 Aug?	Shtil'	R-29RM 3M37U LKI-9	4 BB 3G95	Unknown Soviet/Russian sub	UNKPL	-	-	-	-	1000.0
1987 Aug?	Shtil'	R-29RM 3M37U LKI-10	4 BB 3G95	Unknown Soviet/Russian sub	UNKPL	-	-	-	-	1000.0
1987 Aug?	Shtil'	R-29RM 3M37U LKI-11	4 BB 3G95	Unknown Soviet/Russian sub	UNKPL	-	-	-	-	1000.0
1987 Aug?	Shtil'	R-29RM 3M37U LKI-12	4 BB 3G95	Unknown Soviet/Russian sub	UNKPL	-	-	-	-	1000.0
1987 Dec?	Shtil'	R-29RM 3M37U LKI-15	4 BB 3G95	Unknown Soviet/Russian sub	UNKPL	-	-	-	-	1000.0
1988	Zyb	Final OT	-	Unknown Soviet/Russian sub	BLA	-	-	-	34.0E 70.0N (+/- 0.5)	620.0
1989 Oct 19	Shtil'	R-29RM 3M37U UBP	4 BB 3G95	Unknown Soviet/Russian sub	BLA	-	-	-	148.0E 57.0N (+/- 2.0)	1000.0
1989 Oct 26	Shtil'	R-29RM 3M37U UBP	4 BB 3G95	Unknown Soviet/Russian sub	BLA	-	-	-	34.0E 70.0N (+/- 0.5)	1000.0
1990 Apr 19	Vysota	R-29 4K75DU UBP	MGCh	Unknown Soviet/Russian sub	BLA	-	-	-	34.0E 70.0N (+/- 0.5)	1000.0
1990 Jun 19	Vysota	R-29 4K75DU UBP	MGCh	Unknown Soviet/Russian sub	BLA	-	-	-	34.0E 70.0N (+/- 0.5)	1000.0
1991 Dec 18	Zyb	Sprint	-	Unknown Soviet/Russian sub	POLA	-	-	-	170.0E 30.0N (+/- 9.0)	620.0
1996 Oct 3	Shtil'	R-29RM 3M37U UBP	4 BB 3G95	Unknown Soviet/Russian sub	BLA	-	-	-	34.0E 70.0N (+/- 0.5)	1000.0
1997 Jul 23	Volna	R-29RKU-01 UBP	3 BB 3G95	Unknown Soviet/Russian sub	OMLA	-	-	-	148.0E 57.0N (+/- 2.0)	1000.0
1998 Aug 21	Volna	R-29RKU-01 UBP	3 BB 3G95	Unknown Soviet/Russian sub	BLA	-	-	-	34.0E 70.0N (+/- 0.5)	1000.0
2002 Oct 12 0912	Volna	R-29RKU-01 UBP	3 BB 3G95	Unknown Soviet/Russian sub	OMLA	-	-	-	148.0E 57.0N (+/- 2.0)	1000.0

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## **IV.1.22 US Navy Polaris Submarines**

Updated: 2024 Nov 28 03:19:33

US Navy Polaris Submarines

Ship	Transliteration	Image	CODE	Agency	Class	ClassID	AltID	Active
USS George Washington	USS George Washington		SSBN-598	USN	George Washington	SSBN-598	-	1959 - 1985
USS Patrick Henry	USS Patrick Henry		SSBN-599	USN	George Washington	SSBN-599	-	1959 - 1984
USS Theodore Roosevelt	USS Theodore Roosevelt		SSBN-600	USN	George Washington	SSBN-600	-	1959 - 1981
USS Robert E Lee	USS Robert E Lee		SSBN-601	USN	George Washington	SSBN-601	-	1959 - 1983
USS Abraham Lincoln	USS Abraham Lincoln		SSBN-602	USN	George Washington	SSBN-602	-	1960 - 1981
USS Ethan Allen	USS Ethan Allen		SSBN-608	USN	Ethan Allen	SSBN-608	-	1960 - 1983
USS Thomas A Edison	USS Thomas A Edison		SSBN-610	USN	Ethan Allen	SSBN-610	-	1961 - 1983
USS Sam Houston	USS Sam Houston		SSBN-609	USN	Ethan Allen	SSBN-609	-	1961 - 1991
USS John Marshall	USS John Marshall		SSBN-611	USN	Ethan Allen	SSBN-611	-	1961 - 1992
USS Thomas Jefferson	USS Thomas Jefferson		SSBN-618	USN	Ethan Allen	SSBN-618	-	1962 - 1985

US Navy Polaris Submarines

Ship	Transliteration	Image	CODE	Agency	Class	ClassID	AltID	Active
USS Lafayette	USS Lafayette		SSBN-616	USN	Lafayette	SSBN-616	-	1962 - 1991
USS Alexander Hamilton	USS Alexander Hamilton		SSBN-617	USN	Lafayette	SSBN-617	-	1962 - 1993
USS Andrew Jackson	USS Andrew Jackson		SSBN-619	USN	Lafayette	SSBN-619	-	1962 - 1989
USS John Adams	USS John Adams		SSBN-620	USN	Lafayette	SSBN-620	-	1963 - 1989
USS James Monroe	USS James Monroe		SSBN-622	USN	Lafayette	SSBN-622	-	1962 - 1990
USS Nathan Hale	USS Nathan Hale		SSBN-623	USN	Lafayette	SSBN-623	-	1963 - 1986
USS Woodrow Wilson	USS Woodrow Wilson		SSBN-624	USN	Lafayette	SSBN-624	-	1963 - 1994
USS Henry Clay	USS Henry Clay		SSBN-625	USN	Lafayette	SSBN-625	-	1962 - 1990
USS Daniel Webster	USS Daniel Webster		SSBN-626	USN	Lafayette	SSBN-626	-	1963 - 1990
USS James Madison	USS James Madison		SSBN-627	USN	James Madison	SSBN-627	-	1963 - 1992

US Navy Polaris Submarines

Ship	Transliteration	Image	CODE	Agency	Class	ClassID	AltID	Active
USS Tecumseh	USS Tecumseh		SSBN-628	USN	James Madison	SSBN-628	-	1963 - 1993
USS Daniel Boone	USS Daniel Boone		SSBN-629	USN	James Madison	SSBN-629	-	1963 - 1994
USS John C Calhoun	USS John C Calhoun		SSBN-630	USN	James Madison	SSBN-630	-	1963 - 1994
USS Ulysses S Grant	USS Ulysses S Grant		SSBN-631	USN	James Madison	SSBN-631	-	1963 - 1992
USS Von Steuben	USS Von Steuben		SSBN-632	USN	James Madison	SSBN-632	-	1963 - 1994
USS Casimir Pulaski	USS Casimir Pulaski		SSBN-633	USN	James Madison	SSBN-633	-	1964 - 1994
USS Stonewall Jackson	USS Stonewall Jackson		SSBN-634	USN	James Madison	SSBN-634	-	1963 - 1995
USS Sam Rayburn	USS Sam Rayburn		SSBN-635	USN	James Madison	SSBN-635	-	1963 - 1989
USS Nathanael Greene	USS Nathanael Greene		SSBN-636	USN	James Madison	SSBN-636	-	1964 - 1986
USS Benjamin Franklin	USS Benjamin Franklin		SSBN-640	USN	Benjamin Franklin	SSBN-640	-	1964 - 1993

Ship	Transliteration	Image	US Navy Polaris Submarines CODE	Agency	Class	ClassID	AltID	Active
USS Simon Bolivar	USS Simon Bolivar		SSBN-641	USN	Benjamin Franklin	SSBN-641	-	1964 - 1995
USS Kamehameha	USS Kamehameha		SSBN-642	USN	Benjamin Franklin	SSBN-642	-	1965 - 2002
USS George Bancroft	USS George Bancroft		SSBN-643	USN	Benjamin Franklin	SSBN-643	-	1964 - 1993
USS Lewis and Clark	USS Lewis and Clark		SSBN-644	USN	Benjamin Franklin	SSBN-644	-	1965 - 1992
USS James K Polk	USS James K Polk		SSBN-645	USN	Benjamin Franklin	SSBN-645	-	1965 - 1999
USS George C Marshall	USS George C Marshall		SSBN-654	USN	Benjamin Franklin	SSBN-654	-	1965 - 1992
USS Henry L Stimson	USS Henry L Stimson		SSBN-655	USN	Benjamin Franklin	SSBN-655	-	1965 - 1993
USS George Washington Carver	USS George Washington Carver		SSBN-656	USN	Benjamin Franklin	SSBN-656	-	1965 - 1993

Ship	Transliteration	Image	US Navy Polaris Submarines CODE	Agency	Class	ClassID	AltID	Active
USS Francis Scott Key	USS Francis Scott Key		SSBN-657	USN	Benjamin Franklin	SSBN-657	-	1966 - 1993
USS Mariano G Vallejo	USS Mariano G Vallejo		SSBN-658	USN	Benjamin Franklin	SSBN-658	-	1965 - 1995
USS Will Rogers	USS Will Rogers		SSBN-659	USN	Benjamin Franklin	SSBN-659	-	1966 - 1993



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### IV.1.22.1 USS George Washington



Credit: USN

Rockets used: Polaris A1, Polaris A3

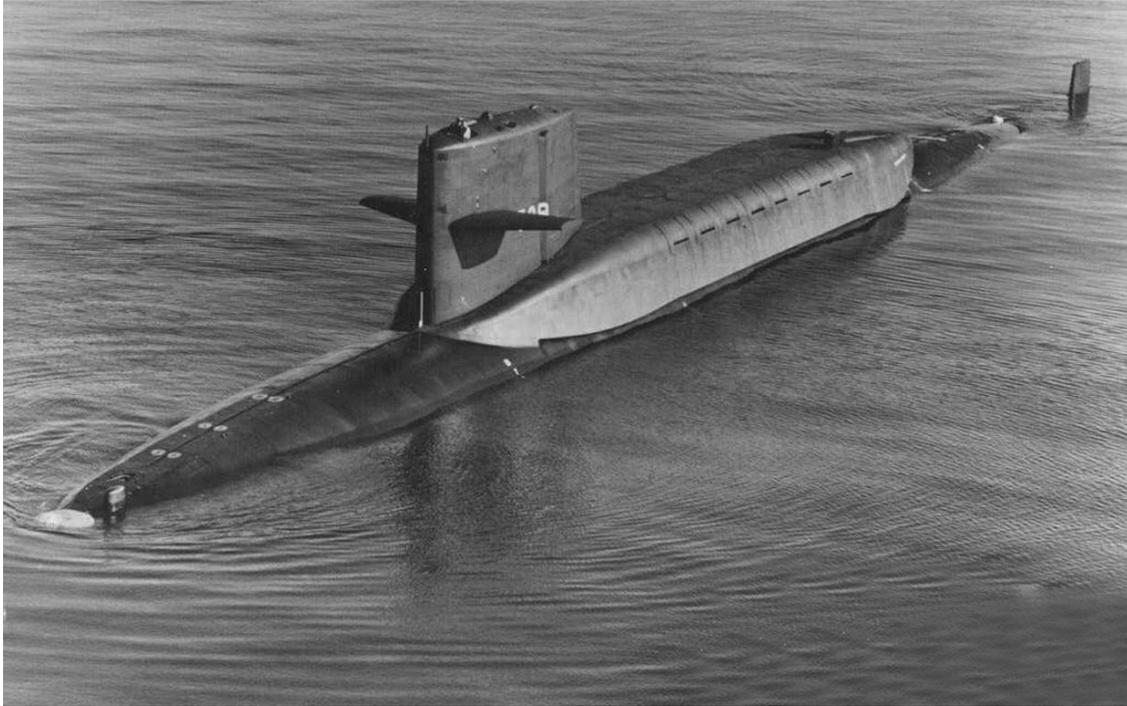
Updated: 2024 Nov 28 03:19:33

Launches: SSBN-598

Date	Rocket	Flight	Mission	PlatCode	Platform	Site	LP	AscSite	AsclP	Pos	Apogee
1960 Jul 20 1739	Polaris A1	-	-	SSBN-598	USS George Washington	ETR	SLBM	-	-	79.0W 28.5N (+/- 2.0)	500.0
1960 Jul 20 2032	Polaris A1	-	-	SSBN-598	USS George Washington	ETR	SLBM	-	-	79.0W 28.5N (+/- 2.0)	500.0
1960 Jul 30 2020	Polaris A1	-	-	SSBN-598	USS George Washington	ETR	SLBM	-	-	79.0W 28.5N (+/- 2.0)	500.0
1960 Aug 1 1710	Polaris A1	-	-	SSBN-598	USS George Washington	ETR	SLBM	-	-	79.0W 28.5N (+/- 2.0)	1.0
1962 Jul 27	Polaris A1	ORRT	-	SSBN-598	USS George Washington	ETR	SLBM	-	-	79.0W 28.5N (+/- 2.0)	500.0
1962 Jul 27	Polaris A1	ORRT	-	SSBN-598	USS George Washington	ETR	SLBM	-	-	79.0W 28.5N (+/- 2.0)	500.0
1962 Jul 27	Polaris A1	ORRT	-	SSBN-598	USS George Washington	ETR	SLBM	-	-	79.0W 28.5N (+/- 2.0)	500.0
1962 Jul 27	Polaris A1	ORRT	-	SSBN-598	USS George Washington	ETR	SLBM	-	-	79.0W 28.5N (+/- 2.0)	500.0
1966 Mar 31 1600	Polaris A3	-	-	SSBN-598	USS George Washington	ETR	SLBM	-	-	79.0W 28.5N (+/- 2.0)	1000.0
1966 Apr 14 1600	Polaris A3	-	-	SSBN-598	USS George Washington	ETR	SLBM	-	-	79.0W 28.5N (+/- 2.0)	1000.0
1972 Feb 4 1615	Polaris A3	DASO	-	SSBN-598	USS George Washington	ETR	SLBM	-	-	79.0W 28.5N (+/- 2.0)	1000.0
1974 Feb 6	Polaris A3	FUT	-	SSBN-598	USS George Washington	WTR	LP5	-	-	119.0W 33.0N (+/- 3.0)	1000.0
1974 Feb 6	Polaris A3	FUT	-	SSBN-598	USS George Washington	WTR	LP5	-	-	119.0W 33.0N (+/- 3.0)	1000.0
1974 Feb 6	Polaris A3	FUT	-	SSBN-598	USS George Washington	WTR	LP5	-	-	119.0W 33.0N (+/- 3.0)	1000.0
1974 Feb 6	Polaris A3	FUT	-	SSBN-598	USS George Washington	WTR	LP5	-	-	119.0W 33.0N (+/- 3.0)	1000.0
1978 Sep 20 1600	Polaris A3	DASO	-	SSBN-598	USS George Washington	ETR	SLBM	-	-	79.0W 28.5N (+/- 2.0)	1000.0

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### IV.1.22.2 USS Patrick Henry



Credit: USN

Rockets used: Polaris A1,Polaris A2,Polaris A3

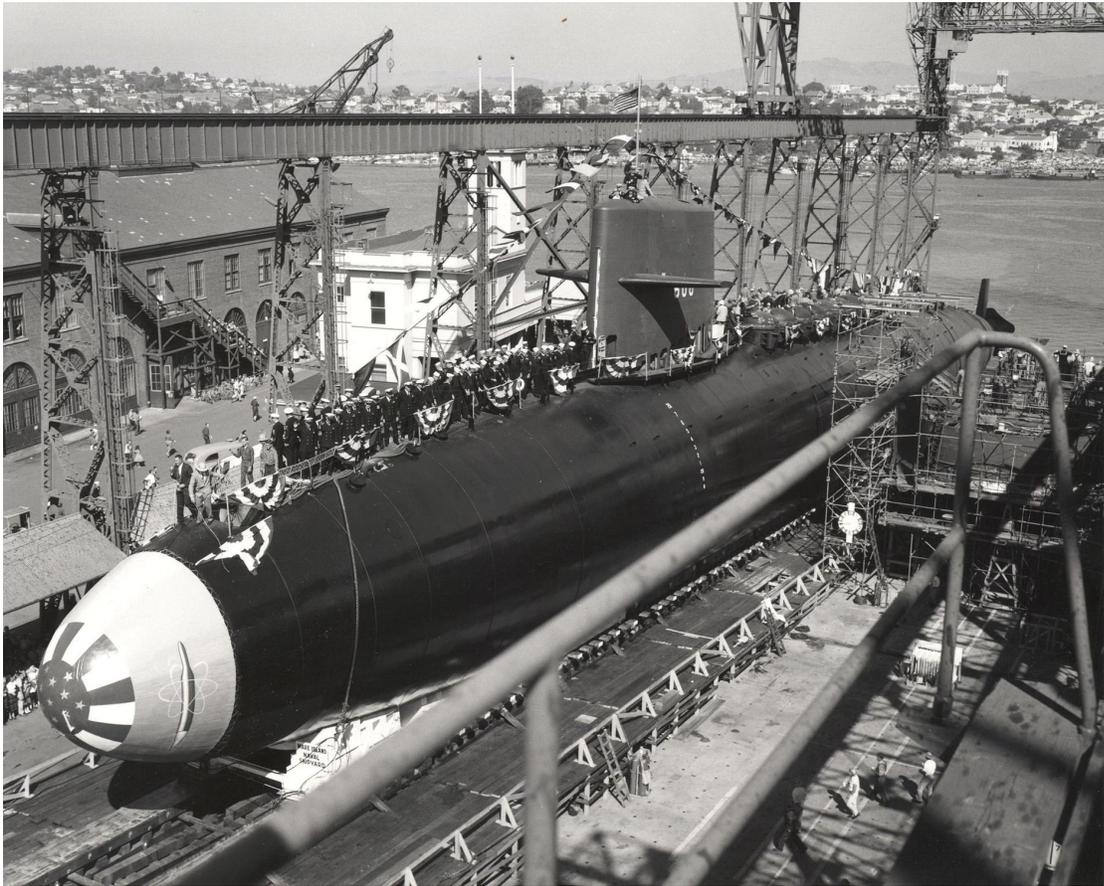
Updated: 2024 Nov 28 03:19:33

Launches: SSBN-599

Date	Rocket	Flight	Mission	PlatCode	Platform	Site	LP	AscSite	AsclP	Pos	Apogee
1960 Sep 13 1755	Polaris A1	-	-	SSBN-599	USS Patrick Henry	ETR	SLBM	-	-	79.0W 28.5N (+/- 2.0)	0.0
1960 Sep 15 2128	Polaris A1	-	-	SSBN-599	USS Patrick Henry	ETR	SLBM	-	-	79.0W 28.5N (+/- 2.0)	500.0
1960 Sep 22 2205	Polaris A1	-	-	SSBN-599	USS Patrick Henry	ETR	SLBM	-	-	79.0W 28.5N (+/- 2.0)	0.0
1960 Sep 23 0105?	Polaris A1	-	-	SSBN-599	USS Patrick Henry	ETR	SLBM	-	-	79.0W 28.5N (+/- 2.0)	0.0
1960 Oct 15	Polaris A1	Op. Test	-	SSBN-599	USS Patrick Henry	ETR	500NM	-	-	79.0W 28.5N (+/- 2.0)	500.0
1960 Oct 15	Polaris A1	-	-	SSBN-599	USS Patrick Henry	ETR	500NM	-	-	79.0W 28.5N (+/- 2.0)	500.0
1960 Oct 16	Polaris A1	-	-	SSBN-599	USS Patrick Henry	ETR	500NM	-	-	79.0W 28.5N (+/- 2.0)	500.0
1960 Oct 18	Polaris A1	-	-	SSBN-599	USS Patrick Henry	ETR	500NM	-	-	79.0W 28.5N (+/- 2.0)	500.0
1963 Feb 4	Polaris A2	ORRT	-	SSBN-599	USS Patrick Henry	ETR	SLBM	-	-	79.0W 28.5N (+/- 2.0)	1000.0
1963 Feb 4	Polaris A2	ORRT	-	SSBN-599	USS Patrick Henry	ETR	SLBM	-	-	79.0W 28.5N (+/- 2.0)	1000.0
1963 Feb 5	Polaris A2	ORRT	-	SSBN-599	USS Patrick Henry	ETR	SLBM	-	-	79.0W 28.5N (+/- 2.0)	1000.0
1963 Feb 5	Polaris A2	ORRT	-	SSBN-599	USS Patrick Henry	ETR	SLBM	-	-	79.0W 28.5N (+/- 2.0)	1000.0
1966 Oct 31 1615	Polaris A3	-	-	SSBN-599	USS Patrick Henry	ETR	SLBM	-	-	79.0W 28.5N (+/- 2.0)	1000.0
1966 Oct 31 1645	Polaris A3	-	-	SSBN-599	USS Patrick Henry	ETR	SLBM	-	-	79.0W 28.5N (+/- 2.0)	1000.0
1972 Apr 24 1600	Polaris A3	DASO	-	SSBN-599	USS Patrick Henry	ETR	SLBM	-	-	79.0W 28.5N (+/- 2.0)	1000.0
1974 Jun 9	Polaris A3	FOT	-	SSBN-599	USS Patrick Henry	WTR	LP5	-	-	119.0W 33.0N (+/- 3.0)	1000.0
1974 Jun 9	Polaris A3	FOT	-	SSBN-599	USS Patrick Henry	WTR	LP5	-	-	119.0W 33.0N (+/- 3.0)	1000.0
1974 Jun 9	Polaris A3	FOT	-	SSBN-599	USS Patrick Henry	WTR	LP5	-	-	119.0W 33.0N (+/- 3.0)	1000.0
1974 Jun 9	Polaris A3	FOT	-	SSBN-599	USS Patrick Henry	WTR	LP5	-	-	119.0W 33.0N (+/- 3.0)	1000.0
1974 Jun 9	Polaris A3	FOT	-	SSBN-599	USS Patrick Henry	WTR	LP5	-	-	119.0W 33.0N (+/- 3.0)	1000.0
1974 Jun 9	Polaris A3	FOT	-	SSBN-599	USS Patrick Henry	WTR	LP5	-	-	119.0W 33.0N (+/- 3.0)	1000.0
1978 Jun 28 2100	Polaris A3	DASO	-	SSBN-599	USS Patrick Henry	ETR	SLBM	-	-	79.0W 28.5N (+/- 2.0)	1000.0
1979 Apr 11	Polaris A3	FOT	-	SSBN-599	USS Patrick Henry	WTR	LP5	-	-	119.0W 33.0N (+/- 3.0)	1000.0
1979 Apr 11	Polaris A3	FOT	-	SSBN-599	USS Patrick Henry	WTR	LP5	-	-	119.0W 33.0N (+/- 3.0)	1000.0
1979 Apr 11	Polaris A3	FOT	-	SSBN-599	USS Patrick Henry	WTR	LP5	-	-	119.0W 33.0N (+/- 3.0)	1000.0

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### IV.1.22.3 USS Theodore Roosevelt



Credit: wikimedia.org

Rockets used: Polaris A1,Polaris A2,Polaris A3

Updated: 2024 Nov 28 03:19:33

Launches: SSBN-600

Date	Rocket	Flight	Mission	FlatCode	Platform	Site	LP	AscSite	AscLP	Pos	Apogee
1961 Mar 23 1625	Polaris A1	-	-	SSBN-600	USS Theodore Roosevelt	ETR	200NM	-	-	79.0W 28.5N (+/- 2.0)	30.0
1961 Mar 23 1925	Polaris A1	-	-	SSBN-600	USS Theodore Roosevelt	ETR	200NM	-	-	79.0W 28.5N (+/- 2.0)	500.0
1961 Mar 23 2241	Polaris A1	-	-	SSBN-600	USS Theodore Roosevelt	ETR	200NM	-	-	79.0W 28.5N (+/- 2.0)	10.0
1961 Apr 6	Polaris A1	-	-	SSBN-600	USS Theodore Roosevelt	ETR	200NM	-	-	79.0W 28.5N (+/- 2.0)	500.0
1963 Mar 14	Polaris A2	ORRT	-	SSBN-600	USS Theodore Roosevelt	ETR	SLEB	-	-	79.0W 28.5N (+/- 2.0)	500.0
1963 Mar 14	Polaris A2	ORRT	-	SSBN-600	USS Theodore Roosevelt	ETR	SLEB	-	-	79.0W 28.5N (+/- 2.0)	1000.0
1963 Mar 14	Polaris A2	ORRT	-	SSBN-600	USS Theodore Roosevelt	ETR	SLEB	-	-	79.0W 28.5N (+/- 2.0)	1000.0
1967 Apr 27 1800:01	Polaris A3	-	-	SSBN-600	USS Theodore Roosevelt	ETR	SLEB	-	-	79.0W 28.5N (+/- 2.0)	1000.0
1974 May 31 1459:59	Polaris A3	DASO	-	SSBN-600	USS Theodore Roosevelt	ETR	SLEB	-	-	79.0W 28.5N (+/- 2.0)	1000.0
1974 Aug 27 1500:00	Polaris A3	DASO	-	SSBN-600	USS Theodore Roosevelt	ETR	SLEB	-	-	79.0W 28.5N (+/- 2.0)	1000.0
1976 Jan 24	Polaris A3	FUT	-	SSBN-600	USS Theodore Roosevelt	WTR	LP5	-	-	119.0W 33.0N (+/- 3.0)	1000.0
1976 Jan 24	Polaris A3	FUT	-	SSBN-600	USS Theodore Roosevelt	WTR	LP5	-	-	119.0W 33.0N (+/- 3.0)	1000.0

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#### IV.1.22.4 USS Robert E Lee



Credit: USN

Rockets used: Polaris A1,Polaris A2,Polaris A3

Updated: 2024 Nov 28 03:19:33

Launches: SSBN-601

Date	Rocket	Flight	Mission	Platform	Site	LP	AscSite	AsclP	Pos	Apogee
1960 Dec 22 1834	Polaris A1	-	-	SSBN-601	ETR	SLBM	-	-	79.0W 28.5N (+/- 2.0)	500.0
1961 Jan 11 1840	Polaris A1	-	-	SSBN-601	ETR	SLBM	-	-	79.0W 28.5N (+/- 2.0)	20.0
1961 Jan 14 1834	Polaris A1	-	-	SSBN-601	ETR	SLBM	-	-	79.0W 28.5N (+/- 2.0)	20.0
1961 Apr 19 2204	Polaris A1	-	-	SSBN-601	ETR	SLBM	-	-	79.0W 28.5N (+/- 2.0)	500.0
1963 Jun 4	Polaris A2	ORRT	-	SSBN-601	ETR	SLBM	-	-	79.0W 28.5N (+/- 2.0)	1000.0
1963 Jun 4	Polaris A2	ORRT	-	SSBN-601	ETR	SLBM	-	-	79.0W 28.5N (+/- 2.0)	1000.0
1963 Jun 4	Polaris A2	ORRT	-	SSBN-601	ETR	SLBM	-	-	79.0W 28.5N (+/- 2.0)	1000.0
1963 Jun 4	Polaris A2	ORRT	-	SSBN-601	ETR	SLBM	-	-	79.0W 28.5N (+/- 2.0)	1000.0
1963 Jun 4	Polaris A2	ORRT	-	SSBN-601	ETR	SLBM	-	-	79.0W 28.5N (+/- 2.0)	1000.0
1963 Jun 4	Polaris A2	ORRT	-	SSBN-601	ETR	SLBM	-	-	79.0W 28.5N (+/- 2.0)	1000.0
1966 Oct 10 1610:03	Polaris A3	-	-	SSBN-601	ETR	SLBM	-	-	79.0W 28.5N (+/- 2.0)	1000.0
1969 Oct 29	Polaris A3	OT	-	SSBN-601	ETR	SLBM	-	-	79.0W 28.5N (+/- 2.0)	1000.0
1969 Oct 29	Polaris A3	OT	-	SSBN-601	ETR	SLBM	-	-	79.0W 28.5N (+/- 2.0)	1000.0
1969 Oct 29	Polaris A3	OT	-	SSBN-601	ETR	SLBM	-	-	79.0W 28.5N (+/- 2.0)	1000.0
1969 Oct 29	Polaris A3	OT	-	SSBN-601	ETR	SLBM	-	-	79.0W 28.5N (+/- 2.0)	1000.0
1969 Oct 29	Polaris A3	OT	-	SSBN-601	ETR	SLBM	-	-	79.0W 28.5N (+/- 2.0)	1000.0
1969 Oct 29	Polaris A3	OT	-	SSBN-601	ETR	SLBM	-	-	79.0W 28.5N (+/- 2.0)	1000.0
1972 Oct 5 1500	Polaris A3	DASO	-	SSBN-601	ETR	SLBM	-	-	79.0W 28.5N (+/- 2.0)	1000.0
1974 Oct 15	Polaris A3	FOT	-	SSBN-601	WTR	LP5	-	-	119.0W 33.0N (+/- 3.0)	1000.0
1974 Oct 15	Polaris A3	FOT	-	SSBN-601	WTR	LP5	-	-	119.0W 33.0N (+/- 3.0)	1000.0
1974 Oct 15	Polaris A3	FOT	-	SSBN-601	WTR	LP5	-	-	119.0W 33.0N (+/- 3.0)	1000.0
1974 Oct 15	Polaris A3	FOT	-	SSBN-601	WTR	LP5	-	-	119.0W 33.0N (+/- 3.0)	1000.0
1978 Nov 20 1723	Polaris A3	DASO	-	SSBN-601	ETR	SLBM	-	-	79.0W 28.5N (+/- 2.0)	1000.0



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#### IV.1.22.5 USS Abraham Lincoln



Credit: USN

Rockets used: Polaris A1, Polaris A3

Updated: 2024 Nov 28 03:19:33

Launches: SSBN-602

Date	Rocket	Flight	Mission	PlatCode	Platform	Site	LP	AscSite	AsclP	Pos	Apogee
1961 May 3 1700	Polaris A1	-	-	SSBN-602	USS Abraham Lincoln	ETR	SLBM	-	-	79.0W 28.5N (+/- 2.0)	500.0
1961 May 17	Polaris A1	-	-	SSBN-602	USS Abraham Lincoln	ETR	SLBM	-	-	79.0W 28.5N (+/- 2.0)	500.0
1961 May 17	Polaris A1	-	-	SSBN-602	USS Abraham Lincoln	ETR	SLBM	-	-	79.0W 28.5N (+/- 2.0)	500.0
1961 May 17	Polaris A1	-	-	SSBN-602	USS Abraham Lincoln	ETR	SLBM	-	-	79.0W 28.5N (+/- 2.0)	200.0
1961 May 17	Polaris A1	-	-	SSBN-602	USS Abraham Lincoln	ETR	SLBM	-	-	79.0W 28.5N (+/- 2.0)	500.0
1961 Aug 12	Polaris A1	-	-	SSBN-602	USS Abraham Lincoln	ETR	SLBM	-	-	79.0W 28.5N (+/- 2.0)	500.0
1961 Aug 12	Polaris A1	-	-	SSBN-602	USS Abraham Lincoln	ETR	SLBM	-	-	79.0W 28.5N (+/- 2.0)	10.0
1961 Aug 12	Polaris A1	-	-	SSBN-602	USS Abraham Lincoln	ETR	SLBM	-	-	79.0W 28.5N (+/- 2.0)	500.0
1961 Aug 12	Polaris A1	-	-	SSBN-602	USS Abraham Lincoln	ETR	SLBM	-	-	79.0W 28.5N (+/- 2.0)	500.0
1961 Aug 12	Polaris A1	-	-	SSBN-602	USS Abraham Lincoln	ETR	SLBM	-	-	79.0W 28.5N (+/- 2.0)	500.0
1961 Aug 12	Polaris A1	-	-	SSBN-602	USS Abraham Lincoln	ETR	SLBM	-	-	79.0W 28.5N (+/- 2.0)	500.0
1963 Sep 4	Polaris A1	ORRT	-	SSBN-602	USS Abraham Lincoln	ETR	SLBM	-	-	79.0W 28.5N (+/- 2.0)	500.0
1963 Sep 4	Polaris A1	ORRT	-	SSBN-602	USS Abraham Lincoln	ETR	SLBM	-	-	79.0W 28.5N (+/- 2.0)	500.0
1963 Sep 4	Polaris A1	ORRT	-	SSBN-602	USS Abraham Lincoln	ETR	SLBM	-	-	79.0W 28.5N (+/- 2.0)	500.0
1963 Sep 4	Polaris A1	ORRT	-	SSBN-602	USS Abraham Lincoln	ETR	SLBM	-	-	79.0W 28.5N (+/- 2.0)	10.0
1963 Sep 4	Polaris A1	ORRT	-	SSBN-602	USS Abraham Lincoln	ETR	SLBM	-	-	79.0W 28.5N (+/- 2.0)	10.0
1967 Sep 8 1545:02	Polaris A3	-	-	SSBN-602	USS Abraham Lincoln	ETR	SLBM	-	-	79.0W 28.5N (+/- 2.0)	500.0
1974 Jul 26 1523:00	Polaris A3	DASO	-	SSBN-602	USS Abraham Lincoln	ETR	SLBM	-	-	79.0W 28.5N (+/- 2.0)	1000.0
1975 Jun 18	Polaris A3	FOT	-	SSBN-602	USS Abraham Lincoln	WTR	LP5	-	-	119.0W 33.0N (+/- 3.0)	1000.0
1975 Jun 18	Polaris A3	FOT	-	SSBN-602	USS Abraham Lincoln	WTR	LP5	-	-	119.0W 33.0N (+/- 3.0)	1000.0
1975 Jun 18	Polaris A3	FOT	-	SSBN-602	USS Abraham Lincoln	WTR	LP5	-	-	119.0W 33.0N (+/- 3.0)	1000.0
1975 Jun 18	Polaris A3	FOT	-	SSBN-602	USS Abraham Lincoln	WTR	LP5	-	-	119.0W 33.0N (+/- 3.0)	1000.0

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#### IV.1.22.6 USS Ethan Allen



Credit: USN

Rockets used: Polaris A1,Polaris A2,Polaris A2E,Polaris A3

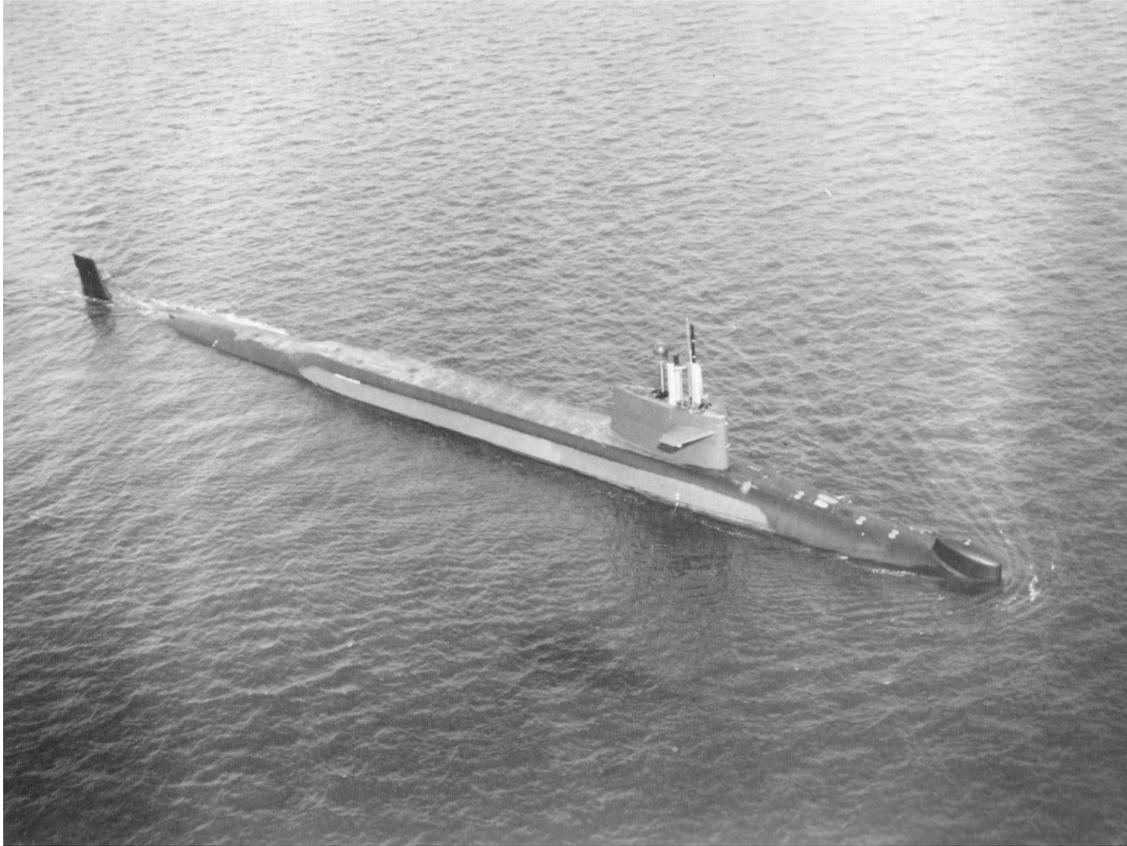
Updated: 2024 Nov 28 03:19:33

Launches: SSBN-608

Date	Rocket	Flight	Mission	PlatformCode	Platform	Site	LP	AscSite	AsclP	Pos	Apogee
1961 Oct 16 1454	Polaris A1	-	-	SSBN-608	USS Ethan Allen	ETR	SLBM	-	-	79.0W 28.5N (+/- 2.0)	500.0
1961 Oct 23 1622	Polaris A2	-	-	SSBN-608	USS Ethan Allen	ETR	SLBM	-	-	79.0W 28.5N (+/- 2.0)	1000.0
1961 Nov 3 1401:32	Polaris A1	-	-	SSBN-608	USS Ethan Allen	ETR	SLBM	-	-	79.0W 28.5N (+/- 2.0)	500.0
1961 Nov 3 1530	Polaris A1	-	-	SSBN-608	USS Ethan Allen	ETR	SLBM	-	-	79.0W 28.5N (+/- 2.0)	500.0
1961 Nov 3 1700	Polaris A1	-	-	SSBN-608	USS Ethan Allen	ETR	SLBM	-	-	79.0W 28.5N (+/- 2.0)	500.0
1961 Nov 8 1610	Polaris A2	-	-	SSBN-608	USS Ethan Allen	ETR	SLBM	-	-	79.0W 28.5N (+/- 2.0)	1000.0
1962 May 6 2317:49	Polaris A1	FRIGATE BIRD	-	SSBN-608	USS Ethan Allen	DOMFB	-	-	-	134.0W 12.5N (+/- 0.0)	500.0
1962 Q4	Polaris A2	-	-	SSBN-608	USS Ethan Allen	JI	LP2	-	-	169.5W 16.7N (+/- 0.0)	1000.0
1962 Q4	Polaris A2	-	-	SSBN-608	USS Ethan Allen	JI	LP2	-	-	169.5W 16.7N (+/- 0.0)	1000.0
1962 Q4	Polaris A2	-	-	SSBN-608	USS Ethan Allen	JI	LP2	-	-	169.5W 16.7N (+/- 0.0)	1000.0
1963 Apr 17	Polaris A2	-	-	SSBN-608	USS Ethan Allen	ETR	SLBM	-	-	79.0W 28.5N (+/- 2.0)	1000.0
1963 Apr 17	Polaris A2	-	-	SSBN-608	USS Ethan Allen	ETR	SLBM	-	-	79.0W 28.5N (+/- 2.0)	1000.0
1963 Apr 17	Polaris A2	-	-	SSBN-608	USS Ethan Allen	ETR	SLBM	-	-	79.0W 28.5N (+/- 2.0)	1000.0
1963 Apr 18	Polaris A2	-	-	SSBN-608	USS Ethan Allen	ETR	SLBM	-	-	79.0W 28.5N (+/- 2.0)	1000.0
1963 Apr 18	Polaris A2	-	-	SSBN-608	USS Ethan Allen	ETR	SLBM	-	-	79.0W 28.5N (+/- 2.0)	1000.0
1963 Apr 18	Polaris A2	-	-	SSBN-608	USS Ethan Allen	ETR	SLBM	-	-	79.0W 28.5N (+/- 2.0)	1000.0
1968 Jan 8 1811	Polaris A2	-	-	SSBN-608	USS Ethan Allen	ETR	SLBM	-	-	79.0W 28.5N (+/- 2.0)	1000.0
1968 Jan 24 1715	Polaris A2	DEFT	-	SSBN-608	USS Ethan Allen	ETR	SLBM	-	-	79.0W 28.5N (+/- 2.0)	1000.0
1968 Oct 21	Polaris A2E	-	-	SSBN-608	USS Ethan Allen	ETR	SLBM	-	-	79.0W 28.5N (+/- 2.0)	1000.0
1968 Oct 21	Polaris A2E	-	-	SSBN-608	USS Ethan Allen	ETR	SLBM	-	-	79.0W 28.5N (+/- 2.0)	1000.0
1968 Oct 21	Polaris A2E	-	-	SSBN-608	USS Ethan Allen	ETR	SLBM	-	-	79.0W 28.5N (+/- 2.0)	1000.0
1968 Oct 21	Polaris A2E	-	-	SSBN-608	USS Ethan Allen	ETR	SLBM	-	-	79.0W 28.5N (+/- 2.0)	1000.0
1970 Apr 21	Polaris A2	OT	-	SSBN-608	USS Ethan Allen	ETR	SLBM	-	-	79.0W 28.5N (+/- 2.0)	1000.0
1970 Apr 21	Polaris A2	OT	-	SSBN-608	USS Ethan Allen	ETR	SLBM	-	-	79.0W 28.5N (+/- 2.0)	1000.0
1970 Apr 21	Polaris A2	OT	-	SSBN-608	USS Ethan Allen	ETR	SLBM	-	-	79.0W 28.5N (+/- 2.0)	1000.0
1970 Apr 21	Polaris A2	OT	-	SSBN-608	USS Ethan Allen	ETR	SLBM	-	-	79.0W 28.5N (+/- 2.0)	1000.0
1970 Apr 21	Polaris A2	OT	-	SSBN-608	USS Ethan Allen	ETR	SLBM	-	-	79.0W 28.5N (+/- 2.0)	1000.0
1970 Apr 21	Polaris A2	OT	-	SSBN-608	USS Ethan Allen	ETR	SLBM	-	-	79.0W 28.5N (+/- 2.0)	1000.0
1974 Aug 9 1512:59	Polaris A3	DASO	-	SSBN-608	USS Ethan Allen	ETR	LP5	-	-	119.0W 33.0N (+/- 3.0)	1000.0
1976 Jan 20	Polaris A3	FOT	-	SSBN-608	USS Ethan Allen	WTR	LP5	-	-	119.0W 33.0N (+/- 3.0)	1000.0
1976 Jan 20	Polaris A3	FOT	-	SSBN-608	USS Ethan Allen	WTR	LP5	-	-	119.0W 33.0N (+/- 3.0)	1000.0
1979 Apr 4	Polaris A3	FOT	-	SSBN-608	USS Ethan Allen	WTR	LP5	-	-	119.0W 33.0N (+/- 3.0)	1000.0

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#### IV.1.22.7 USS Thomas A Edison



Credit: USN

Rockets used: Polaris A2,Polaris A2E,Polaris A3

Updated: 2024 Nov 28 03:19:33

Launches: SSBN-610

Date	Rocket	Flight	Mission	PlatCode	Platform	Site	LP	AscSite	AscLP	Pos	Apogee
1962 May 23 1801:36	Polaris A2	-	-	SSBN-610	USS Thomas A Edison	ETR	SLEB	-	-	79.0W 28.5N (+/- 2.0)	1000.0
1962 May 23 1948:00	Polaris A2	-	-	SSBN-610	USS Thomas A Edison	ETR	SLEB	-	-	79.0W 28.5N (+/- 2.0)	1000.0
1962 Jun 2 1916:01	Polaris A2	-	-	SSBN-610	USS Thomas A Edison	ETR	SLEB	-	-	79.0W 28.5N (+/- 2.0)	1000.0
1962 Jun 2 2234:57	Polaris A2	-	-	SSBN-610	USS Thomas A Edison	ETR	SLEB	-	-	79.0W 28.5N (+/- 2.0)	1000.0
1963 Jun 24	Polaris A2	-	-	SSBN-610	USS Thomas A Edison	ETR	SLEB	-	-	79.0W 28.5N (+/- 2.0)	1000.0
1963 Jun 24	Polaris A2	-	-	SSBN-610	USS Thomas A Edison	ETR	SLEB	-	-	79.0W 28.5N (+/- 2.0)	1000.0
1963 Jun 24	Polaris A2	-	-	SSBN-610	USS Thomas A Edison	ETR	SLEB	-	-	79.0W 28.5N (+/- 2.0)	1000.0
1963 Jun 24	Polaris A2	-	-	SSBN-610	USS Thomas A Edison	ETR	SLEB	-	-	79.0W 28.5N (+/- 2.0)	1000.0
1963 Jun 24	Polaris A2	-	-	SSBN-610	USS Thomas A Edison	ETR	SLEB	-	-	79.0W 28.5N (+/- 2.0)	1000.0
1963 Jun 24	Polaris A2	-	-	SSBN-610	USS Thomas A Edison	ETR	SLEB	-	-	79.0W 28.5N (+/- 2.0)	1000.0
1963 Jun 24	Polaris A2	-	-	SSBN-610	USS Thomas A Edison	ETR	SLEB	-	-	79.0W 28.5N (+/- 2.0)	1000.0
1963 Jun 24	Polaris A2	-	-	SSBN-610	USS Thomas A Edison	ETR	SLEB	-	-	79.0W 28.5N (+/- 2.0)	1000.0
1968 Jun 18 1807	Polaris A2E	DASO	-	SSBN-610	USS Thomas A Edison	ETR	SLEB	-	-	79.0W 28.5N (+/- 2.0)	10.0
1968 Jul 11 1600	Polaris A2E	DASO	-	SSBN-610	USS Thomas A Edison	ETR	SLEB	-	-	79.0W 28.5N (+/- 2.0)	1000.0
1969 Mar 28	Polaris A2E	FOT	-	SSBN-610	USS Thomas A Edison	ETR	SLEB	-	-	79.0W 28.5N (+/- 2.0)	1000.0
1969 Mar 28	Polaris A2E	FOT	-	SSBN-610	USS Thomas A Edison	ETR	SLEB	-	-	79.0W 28.5N (+/- 2.0)	1000.0
1969 Mar 28	Polaris A2E	FOT	-	SSBN-610	USS Thomas A Edison	ETR	SLEB	-	-	79.0W 28.5N (+/- 2.0)	1000.0
1969 Mar 28	Polaris A2E	FOT	-	SSBN-610	USS Thomas A Edison	ETR	SLEB	-	-	79.0W 28.5N (+/- 2.0)	1000.0
1975 Apr 12 1459	Polaris A3	DASO	-	SSBN-610	USS Thomas A Edison	ETR	SLEB	-	-	79.0W 28.5N (+/- 2.0)	1000.0
1976 Sep 2	Polaris A3	FOT	-	SSBN-610	USS Thomas A Edison	WTR	LP5	-	-	119.0W 33.0N (+/- 3.0)	1000.0
1976 Sep 2	Polaris A3	FOT	-	SSBN-610	USS Thomas A Edison	WTR	LP5	-	-	119.0W 33.0N (+/- 3.0)	1000.0
1977 Jun 16	Polaris A3	FOT	-	SSBN-610	USS Thomas A Edison	WTR	LP5	-	-	119.0W 33.0N (+/- 3.0)	1000.0
1977 Jun 16	Polaris A3	FOT	-	SSBN-610	USS Thomas A Edison	WTR	LP5	-	-	119.0W 33.0N (+/- 3.0)	1000.0
1977 Jun 16	Polaris A3	FOT	-	SSBN-610	USS Thomas A Edison	WTR	LP5	-	-	119.0W 33.0N (+/- 3.0)	1000.0
1977 Jun 16	Polaris A3	FOT	-	SSBN-610	USS Thomas A Edison	WTR	LP5	-	-	119.0W 33.0N (+/- 3.0)	1000.0
1977 Jun 16	Polaris A3	FOT	-	SSBN-610	USS Thomas A Edison	WTR	LP5	-	-	119.0W 33.0N (+/- 3.0)	1000.0

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## IV.1.22.8 USS Sam Houston



Credit: USN

Rockets used: Polaris A2,Polaris A3

Updated: 2024 Nov 28 03:19:33

Launches: SSBN-609

Date	Rocket	Flight	Mission	Platform	Site	LP	AscSite	AscLP	Pos	Apogee
1962 Apr 25 1650:26	Polaris A2	-	-	SSBN-609	USS Sam Houston	ETR	SLEB	-	79.0W 28.5N (+/- 2.0)	1000.0
1962 May 9 2245:24	Polaris A2	SDAP (DASO)	-	SSBN-609	USS Sam Houston	ETR	SLEB	-	79.0W 28.5N (+/- 2.0)	10.0
1962 May 11 1826:04	Polaris A2	-	-	SSBN-609	USS Sam Houston	ETR	SLEB	-	79.0W 28.5N (+/- 2.0)	1000.0
1963 Oct 24	Polaris A2	-	-	SSBN-609	USS Sam Houston	ETR	SLEB	-	79.0W 28.5N (+/- 2.0)	1000.0
1963 Oct 24	Polaris A2	-	-	SSBN-609	USS Sam Houston	ETR	SLEB	-	79.0W 28.5N (+/- 2.0)	1000.0
1963 Oct 24	Polaris A2	-	-	SSBN-609	USS Sam Houston	ETR	SLEB	-	79.0W 28.5N (+/- 2.0)	1000.0
1963 Oct 24	Polaris A2	-	-	SSBN-609	USS Sam Houston	ETR	SLEB	-	79.0W 28.5N (+/- 2.0)	1000.0
1963 Oct 24	Polaris A2	-	-	SSBN-609	USS Sam Houston	ETR	SLEB	-	79.0W 28.5N (+/- 2.0)	1000.0
1963 Oct 24	Polaris A2	-	-	SSBN-609	USS Sam Houston	ETR	SLEB	-	79.0W 28.5N (+/- 2.0)	1000.0
1968 Jan 15 1743	Polaris A2	-	-	SSBN-609	USS Sam Houston	ETR	SLEB	-	79.0W 28.5N (+/- 2.0)	10.0
1968 Jan 31 1700	Polaris A2	DEFT	-	SSBN-609	USS Sam Houston	ETR	SLEB	-	79.0W 28.5N (+/- 2.0)	1000.0
1969 Oct 20	Polaris A2	OT	-	SSBN-609	USS Sam Houston	ETR	SLEB	-	79.0W 28.5N (+/- 2.0)	1000.0
1969 Oct 20	Polaris A2	OT	-	SSBN-609	USS Sam Houston	ETR	SLEB	-	79.0W 28.5N (+/- 2.0)	1000.0
1969 Oct 20	Polaris A2	OT	-	SSBN-609	USS Sam Houston	ETR	SLEB	-	79.0W 28.5N (+/- 2.0)	1000.0
1969 Oct 20	Polaris A2	OT	-	SSBN-609	USS Sam Houston	ETR	SLEB	-	79.0W 28.5N (+/- 2.0)	1000.0
1969 Oct 20	Polaris A2	OT	-	SSBN-609	USS Sam Houston	ETR	SLEB	-	79.0W 28.5N (+/- 2.0)	1000.0
1969 Oct 20	Polaris A2	OT	-	SSBN-609	USS Sam Houston	ETR	SLEB	-	79.0W 28.5N (+/- 2.0)	1000.0
1975 Apr 26 1510	Polaris A3	DASO	-	SSBN-609	USS Sam Houston	ETR	SLEB	-	79.0W 28.5N (+/- 2.0)	1000.0
1976 Sep 7	Polaris A3	FOT	-	SSBN-609	USS Sam Houston	WTR	LP5	-	119.0W 33.0N (+/- 3.0)	1000.0
1976 Sep 7	Polaris A3	FOT	-	SSBN-609	USS Sam Houston	WTR	LP5	-	119.0W 33.0N (+/- 3.0)	1000.0



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### IV.1.22.9 USS John Marshall



Credit: USN

Rockets used: Polaris A2,Polaris A2E,Polaris A3

Updated: 2024 Nov 28 03:19:33

Launches: SSBN-611

Date	Rocket	Flight	Mission	Platform	Site	LP	AscSite	AsclP	Pos	Apogee
1962 Jul 12 1831:57	Polaris A2	-	-	SSBN-611	USS John Marshall	ETR	-	-	79.0W 28.5N (+/- 2.0)	1000.0
1962 Jul 12 2005:13	Polaris A2	+80 min	-	SSBN-611	USS John Marshall	ETR	-	-	79.0W 28.5N (+/- 2.0)	1000.0
1962 Jul 21 2049:54	Polaris A2	-	-	SSBN-611	USS John Marshall	ETR	-	-	79.0W 28.5N (+/- 2.0)	1000.0
1962 Jul 21 2219:15	Polaris A2	-	-	SSBN-611	USS John Marshall	ETR	-	-	79.0W 28.5N (+/- 2.0)	1000.0
1962 Jul 21 2349:14	Polaris A2	Short range test	-	SSBN-611	USS John Marshall	ETR	-	-	79.0W 28.5N (+/- 2.0)	1000.0
1963 Aug 17	Polaris A2	-	-	SSBN-611	USS John Marshall	ETR	-	-	79.0W 28.5N (+/- 2.0)	1000.0
1963 Aug 17	Polaris A2	-	-	SSBN-611	USS John Marshall	ETR	-	-	79.0W 28.5N (+/- 2.0)	1000.0
1963 Aug 17	Polaris A2	-	-	SSBN-611	USS John Marshall	ETR	-	-	79.0W 28.5N (+/- 2.0)	1000.0
1963 Aug 17	Polaris A2	-	-	SSBN-611	USS John Marshall	ETR	-	-	79.0W 28.5N (+/- 2.0)	1000.0
1963 Aug 17	Polaris A2	-	-	SSBN-611	USS John Marshall	ETR	-	-	79.0W 28.5N (+/- 2.0)	1000.0
1963 Aug 17	Polaris A2	-	-	SSBN-611	USS John Marshall	ETR	-	-	79.0W 28.5N (+/- 2.0)	1000.0
1966 Mar 1	Polaris A2	-	-	SSBN-611	USS John Marshall	ETR	-	-	79.0W 28.5N (+/- 2.0)	1000.0
1968 Jun 11 1600:01	Polaris A2E	-	-	SSBN-611	USS John Marshall	ETR	-	-	79.0W 28.5N (+/- 2.0)	1000.0
1968 Jun 19 1600	Polaris A2E	DASO	-	SSBN-611	USS John Marshall	ETR	-	-	79.0W 28.5N (+/- 2.0)	1000.0
1971 Mar 30	Polaris A2	FOT	-	SSBN-611	USS John Marshall	ETR	-	-	79.0W 28.5N (+/- 2.0)	1000.0
1971 Mar 30	Polaris A2	FOT	-	SSBN-611	USS John Marshall	ETR	-	-	79.0W 28.5N (+/- 2.0)	1000.0
1971 Mar 30	Polaris A2	FOT	-	SSBN-611	USS John Marshall	ETR	-	-	79.0W 28.5N (+/- 2.0)	1000.0
1971 Mar 30	Polaris A2	FOT	-	SSBN-611	USS John Marshall	ETR	-	-	79.0W 28.5N (+/- 2.0)	1000.0
1971 Mar 30	Polaris A2	FOT	-	SSBN-611	USS John Marshall	ETR	-	-	79.0W 28.5N (+/- 2.0)	1000.0
1971 Mar 30	Polaris A2	FOT	-	SSBN-611	USS John Marshall	ETR	-	-	79.0W 28.5N (+/- 2.0)	1000.0
1976 Sep 18 1725	Polaris A3	DASO	-	SSBN-611	USS John Marshall	ETR	-	-	79.0W 28.5N (+/- 2.0)	1000.0
1978 Jul 12	Polaris A3	FOT	-	SSBN-611	USS John Marshall	WTR	-	-	119.0W 33.0N (+/- 3.0)	1000.0
1978 Jul 12	Polaris A3	FOT	-	SSBN-611	USS John Marshall	WTR	-	-	119.0W 33.0N (+/- 3.0)	1000.0
1978 Jul 12	Polaris A3	FOT	-	SSBN-611	USS John Marshall	WTR	-	-	119.0W 33.0N (+/- 3.0)	1000.0

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#### IV.1.22.10 USS Thomas Jefferson



Credit: USN

Rockets used: Polaris A2,Polaris A2E,Polaris A3

Updated: 2024 Nov 28 03:19:33

Launches: SSBN-618

Date	Rocket	Flight	Mission	Platform	Platform Code	Platform	Site	LP	AscSite	AsclP	Pos	Apogee
1963 Feb 21 1756:07	Polaris A2	-	-	SSBN-618	SSBN-618	USS Thomas Jefferson	ETR	SLBM	-	-	79.0W 28.5N (+/- 2.0)	1000.0
1963 Mar 7 1748:15	Polaris A2	-	-	SSBN-618	SSBN-618	USS Thomas Jefferson	ETR	SLBM	-	-	79.0W 28.5N (+/- 2.0)	1.0
1963 Mar 7 1848:15	Polaris A2	-	-	SSBN-618	SSBN-618	USS Thomas Jefferson	ETR	SLBM	-	-	79.0W 28.5N (+/- 2.0)	1000.0
1965 Feb 12	Polaris A2	-	-	SSBN-618	SSBN-618	USS Thomas Jefferson	ETR	SLBM	-	-	79.0W 28.5N (+/- 2.0)	1000.0
1965 Feb 12	Polaris A2	-	-	SSBN-618	SSBN-618	USS Thomas Jefferson	ETR	SLBM	-	-	79.0W 28.5N (+/- 2.0)	1000.0
1968 Jul 30 1607	Polaris A2E	DASO	-	SSBN-618	SSBN-618	USS Thomas Jefferson	ETR	SLBM	-	-	79.0W 28.5N (+/- 2.0)	1000.0
1968 Aug 14 0000	Polaris A2E	DASO	-	SSBN-618	SSBN-618	USS Thomas Jefferson	ETR	SLBM	-	-	79.0W 28.5N (+/- 2.0)	1000.0
1970 Aug 31	Polaris A2	FOT	-	SSBN-618	SSBN-618	USS Thomas Jefferson	ETR	SLBM	-	-	79.0W 28.5N (+/- 2.0)	1000.0
1970 Aug 31	Polaris A2	FOT	-	SSBN-618	SSBN-618	USS Thomas Jefferson	ETR	SLBM	-	-	79.0W 28.5N (+/- 2.0)	1000.0
1971 Aug 23	Polaris A2	FOT	-	SSBN-618	SSBN-618	USS Thomas Jefferson	ETR	SLBM	-	-	79.0W 28.5N (+/- 2.0)	1000.0
1971 Aug 23	Polaris A2	FOT	-	SSBN-618	SSBN-618	USS Thomas Jefferson	ETR	SLBM	-	-	79.0W 28.5N (+/- 2.0)	1000.0
1971 Aug 23	Polaris A2	FOT	-	SSBN-618	SSBN-618	USS Thomas Jefferson	ETR	SLBM	-	-	79.0W 28.5N (+/- 2.0)	1000.0
1976 Mar 29 1600	Polaris A3	DASO	-	SSBN-618	SSBN-618	USS Thomas Jefferson	ETR	SLBM	-	-	79.0W 28.5N (+/- 2.0)	1000.0
1978 Jul 7	Polaris A3	FOT	-	SSBN-618	SSBN-618	USS Thomas Jefferson	WTR	LP5	-	-	119.0W 33.0N (+/- 3.0)	1000.0
1978 Jul 7	Polaris A3	FOT	-	SSBN-618	SSBN-618	USS Thomas Jefferson	WTR	LP5	-	-	119.0W 33.0N (+/- 3.0)	1000.0

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## IV.1.22.11 USS Lafayette



Credit: USN

Rockets used: Polaris A2,Polaris A2E,Poseidon C3

Updated: 2024 Nov 28 03:19:33

Launches: SSBN-616

Date	Rocket	Flight	Mission	PlatCode	Platform	Site	LP	AscSite	AsclP	Pos	Apogee
1963 Jun 13 1630:02	Polaris A2	-	-	SSBN-616	USS Lafayette	ETR	SLBM	-	-	79.0W 28.5N (+/- 2.0)	40.0
1963 Jun 13 1705:34	Polaris A2	-	-	SSBN-616	USS Lafayette	ETR	SLBM	-	-	79.0W 28.5N (+/- 2.0)	1000.0
1963 Jul 2 1600:04	Polaris A2	-	-	SSBN-616	USS Lafayette	ETR	SLBM	-	-	79.0W 28.5N (+/- 2.0)	1000.0
1963 Jul 2 1630:03	Polaris A2	-	-	SSBN-616	USS Lafayette	ETR	SLBM	-	-	79.0W 28.5N (+/- 2.0)	1000.0
1964 Oct 28	Polaris A2	-	-	SSBN-616	USS Lafayette	ETR	SLBM	-	-	79.0W 28.5N (+/- 2.0)	1000.0
1964 Oct 28	Polaris A2	-	-	SSBN-616	USS Lafayette	ETR	SLBM	-	-	79.0W 28.5N (+/- 2.0)	1000.0
1964 Oct 28	Polaris A2	-	-	SSBN-616	USS Lafayette	ETR	SLBM	-	-	79.0W 28.5N (+/- 2.0)	1000.0
1964 Oct 28	Polaris A2	-	-	SSBN-616	USS Lafayette	ETR	SLBM	-	-	79.0W 28.5N (+/- 2.0)	1000.0
1966 Mar 17	Polaris A2	-	-	SSBN-616	USS Lafayette	ETR	SLBM	-	-	79.0W 28.5N (+/- 2.0)	1000.0
1966 Mar 17	Polaris A2	-	-	SSBN-616	USS Lafayette	ETR	SLBM	-	-	79.0W 28.5N (+/- 2.0)	1000.0
1969 Feb 20 1741:02	Polaris A2E	DASO	-	SSBN-616	USS Lafayette	ETR	SLBM	-	-	79.0W 28.5N (+/- 2.0)	1000.0
1969 Apr 4 1700	Polaris A2E	DASO	-	SSBN-616	USS Lafayette	ETR	SLBM	-	-	79.0W 28.5N (+/- 2.0)	1000.0
1971 Sep 1	Polaris A2	FOT	-	SSBN-616	USS Lafayette	ETR	SLBM	-	-	79.0W 28.5N (+/- 2.0)	1000.0
1971 Sep 1	Polaris A2	FOT	-	SSBN-616	USS Lafayette	ETR	SLBM	-	-	79.0W 28.5N (+/- 2.0)	1000.0
1971 Sep 1	Polaris A2	FOT	-	SSBN-616	USS Lafayette	ETR	SLBM	-	-	79.0W 28.5N (+/- 2.0)	1000.0
1971 Sep 1	Polaris A2	FOT	-	SSBN-616	USS Lafayette	ETR	SLBM	-	-	79.0W 28.5N (+/- 2.0)	1000.0
1971 Sep 1	Polaris A2	FOT	-	SSBN-616	USS Lafayette	ETR	SLBM	-	-	79.0W 28.5N (+/- 2.0)	1000.0
1971 Sep 1	Polaris A2	FOT	-	SSBN-616	USS Lafayette	ETR	SLBM	-	-	79.0W 28.5N (+/- 2.0)	1000.0
1971 Sep 2	Polaris A2	FOT	-	SSBN-616	USS Lafayette	ETR	SLBM	-	-	79.0W 28.5N (+/- 2.0)	1000.0
1971 Sep 2	Polaris A2	FOT	-	SSBN-616	USS Lafayette	ETR	SLBM	-	-	79.0W 28.5N (+/- 2.0)	1000.0
1974 Dec 16 1600:02	Poseidon C3	DASO	-	SSBN-616	USS Lafayette	ETR	SLBM	-	-	79.0W 28.5N (+/- 2.0)	500.0
1977 Jun 1 2146	Poseidon C3	OT-31	-	SSBN-616	USS Lafayette	ETR	SLBM	-	-	79.0W 28.5N (+/- 2.0)	500.0
1977 Jun 1 2147	Poseidon C3	OT-31	-	SSBN-616	USS Lafayette	ETR	SLBM	-	-	79.0W 28.5N (+/- 2.0)	500.0
1983 Sep 2 1600	Poseidon C3	DASO	-	SSBN-616	USS Lafayette	ETR	SLBM	-	-	79.0W 28.5N (+/- 2.0)	500.0

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## IV.1.22.12 USS Alexander Hamilton



Credit: USN

Rockets used: Polaris A2,Polaris A2E,Poseidon C3

Updated: 2024 Nov 28 03:19:33

Launches: SSBN-617

Date	Rocket	Flight	Mission	PlatCode	Platform	Site	LP	AscSite	AsclP	Pos	Apogee
1963 Aug 9 1714:03	Polaris A2	-	-	SSBN-617	USS Alexander Hamilton	ETR	SLBM	-	-	79.0W 28.5N (+/- 2.0)	1000.0
1963 Aug 9 1819:43	Polaris A2	-	-	SSBN-617	USS Alexander Hamilton	ETR	SLBM	-	-	79.0W 28.5N (+/- 2.0)	1000.0
1963 Aug 23 1701:06	Polaris A2	-	-	SSBN-617	USS Alexander Hamilton	ETR	SLBM	-	-	79.0W 28.5N (+/- 2.0)	1000.0
1963 Aug 23 1741:04	Polaris A2	-	-	SSBN-617	USS Alexander Hamilton	ETR	SLBM	-	-	79.0W 28.5N (+/- 2.0)	1000.0
1964 Oct 19	Polaris A2	-	-	SSBN-617	USS Alexander Hamilton	ETR	SLBM	-	-	79.0W 28.5N (+/- 2.0)	1000.0
1964 Oct 19	Polaris A2	-	-	SSBN-617	USS Alexander Hamilton	ETR	SLBM	-	-	79.0W 28.5N (+/- 2.0)	1000.0
1964 Oct 19	Polaris A2	-	-	SSBN-617	USS Alexander Hamilton	ETR	SLBM	-	-	79.0W 28.5N (+/- 2.0)	1000.0
1964 Oct 19	Polaris A2	-	-	SSBN-617	USS Alexander Hamilton	ETR	SLBM	-	-	79.0W 28.5N (+/- 2.0)	1000.0
1966 Mar 14	Polaris A2	-	-	SSBN-617	USS Alexander Hamilton	ETR	SLBM	-	-	79.0W 28.5N (+/- 2.0)	1000.0
1966 Mar 14	Polaris A2	-	-	SSBN-617	USS Alexander Hamilton	ETR	SLBM	-	-	79.0W 28.5N (+/- 2.0)	1000.0
1966 Mar 14	Polaris A2	-	-	SSBN-617	USS Alexander Hamilton	ETR	SLBM	-	-	79.0W 28.5N (+/- 2.0)	1000.0
1966 Mar 14	Polaris A2	-	-	SSBN-617	USS Alexander Hamilton	ETR	SLBM	-	-	79.0W 28.5N (+/- 2.0)	1000.0
1966 Mar 14	Polaris A2	-	-	SSBN-617	USS Alexander Hamilton	ETR	SLBM	-	-	79.0W 28.5N (+/- 2.0)	1000.0
1966 Mar 14	Polaris A2	-	-	SSBN-617	USS Alexander Hamilton	ETR	SLBM	-	-	79.0W 28.5N (+/- 2.0)	1000.0
1968 Sep 10 1600	Polaris A2E	DAS0?	-	SSBN-617	USS Alexander Hamilton	ETR	SLBM	-	-	79.0W 28.5N (+/- 2.0)	1000.0
1968 Sep 26 1800:03	Polaris A2E	DAS0	-	SSBN-617	USS Alexander Hamilton	ETR	SLBM	-	-	79.0W 28.5N (+/- 2.0)	500.0
1975 May 28 2300:02	Poseidon C3	DAS0-34	-	SSBN-617	USS Alexander Hamilton	ETR	SLBM	-	-	79.0W 28.5N (+/- 2.0)	500.0
1975 May 29 0002:02	Poseidon C3	DAS0-35	-	SSBN-617	USS Alexander Hamilton	ETR	SLBM	-	-	79.0W 28.5N (+/- 2.0)	500.0
1976 Nov 19 1707	Poseidon C3	FOT-24?	-	SSBN-617	USS Alexander Hamilton	ETR	SLBM	-	-	79.0W 28.5N (+/- 2.0)	500.0
1976 Nov 19 1707	Poseidon C3	FOT-24?	-	SSBN-617	USS Alexander Hamilton	ETR	SLBM	-	-	79.0W 28.5N (+/- 2.0)	500.0
1976 Nov 19 1908	Poseidon C3	FOT-24?	-	SSBN-617	USS Alexander Hamilton	ETR	SLBM	-	-	79.0W 28.5N (+/- 2.0)	500.0
1976 Nov 19 1909	Poseidon C3	FOT-24?	-	SSBN-617	USS Alexander Hamilton	ETR	SLBM	-	-	79.0W 28.5N (+/- 2.0)	500.0
1989 Sep 29 1804:02	Poseidon C3	DAS0	-	SSBN-617	USS Alexander Hamilton	ETR	SLBM	-	-	79.0W 28.5N (+/- 2.0)	500.0



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### IV.1.22.13 USS Andrew Jackson



Credit: USN

Rockets used: Polaris A2,Polaris A3,Polaris A2E,Poseidon C3

Updated: 2024 Nov 28 03:19:33

Launches: SSBN-619

Date	Rocket	Flight	Mission	PlatCode	Platform	Site	LP	AscSite	AsclP	Pos	Apogee
1963 Oct 1 1939:05	Polaris A2	PY-1? DASO	-	SSBN-619	USS Andrew Jackson	ETR	SLBM	-	-	79.0W 28.5N (+/- 2.0)	1000.0
1963 Oct 16 1630:02	Polaris A2	PY-1? DASO	-	SSBN-619	USS Andrew Jackson	ETR	SLBM	-	-	79.0W 28.5N (+/- 2.0)	1000.0
1963 Oct 26 1614:04	Polaris A3	-	-	SSBN-619	USS Andrew Jackson	ETR	SLBM	-	-	79.0W 28.5N (+/- 2.0)	1000.0
1963 Nov 11 1848:05	Polaris A3	-	-	SSBN-619	USS Andrew Jackson	ETR	SLBM	-	-	79.0W 28.5N (+/- 2.0)	1000.0
1963 Nov 16 1654:42	Polaris A2	-	-	SSBN-619	USS Andrew Jackson	ETR	SLBM	-	-	79.0W 28.5N (+/- 2.0)	1000.0
1966 Sep 28	Polaris A2	FOT	-	SSBN-619	USS Andrew Jackson	ETR	SLBM	-	-	79.0W 28.5N (+/- 2.0)	1000.0
1966 Sep 28	Polaris A2	FOT	-	SSBN-619	USS Andrew Jackson	ETR	SLBM	-	-	79.0W 28.5N (+/- 2.0)	1000.0
1967 Nov 25	Polaris A2	FOT	-	SSBN-619	USS Andrew Jackson	ETR	SLBM	-	-	79.0W 28.5N (+/- 2.0)	1000.0
1967 Nov 25	Polaris A2	FOT	-	SSBN-619	USS Andrew Jackson	ETR	SLBM	-	-	79.0W 28.5N (+/- 2.0)	1000.0
1967 Nov 25	Polaris A2	FOT	-	SSBN-619	USS Andrew Jackson	ETR	SLBM	-	-	79.0W 28.5N (+/- 2.0)	1000.0
1967 Nov 25	Polaris A2	FOT	-	SSBN-619	USS Andrew Jackson	ETR	SLBM	-	-	79.0W 28.5N (+/- 2.0)	1000.0
1969 Sep 18 1600	Polaris A2E	-	-	SSBN-619	USS Andrew Jackson	ETR	SLBM	-	-	79.0W 28.5N (+/- 2.0)	1000.0
1969 Nov 15 1700	Polaris A2E	-	-	SSBN-619	USS Andrew Jackson	ETR	SLBM	-	-	79.0W 28.5N (+/- 2.0)	1000.0
1975 Oct 10 2300:02	Poseidon C3	DASO	-	SSBN-619	USS Andrew Jackson	ETR	SLBM	-	-	79.0W 28.5N (+/- 2.0)	500.0
1978 Apr 11 2159	Poseidon C3	OT-32	-	SSBN-619	USS Andrew Jackson	ETR	SLBM	-	-	79.0W 28.5N (+/- 2.0)	500.0
1978 Apr 11 2159	Poseidon C3	OT-32	-	SSBN-619	USS Andrew Jackson	ETR	SLBM	-	-	79.0W 28.5N (+/- 2.0)	500.0
1978 Apr 11 2200	Poseidon C3	OT-32	-	SSBN-619	USS Andrew Jackson	ETR	SLBM	-	-	79.0W 28.5N (+/- 2.0)	500.0
1978 Apr 11 2200	Poseidon C3	OT-32	-	SSBN-619	USS Andrew Jackson	ETR	SLBM	-	-	79.0W 28.5N (+/- 2.0)	500.0
1982 May 25	Poseidon C3	FOT-46?	-	SSBN-619	USS Andrew Jackson	ETR	SLBM	-	-	79.0W 28.5N (+/- 2.0)	500.0
1982 May 25	Poseidon C3	FOT-46?	-	SSBN-619	USS Andrew Jackson	ETR	SLBM	-	-	79.0W 28.5N (+/- 2.0)	500.0
1982 May 25 2313	Poseidon C3	FOT-46?	-	SSBN-619	USS Andrew Jackson	ETR	SLBM	-	-	79.0W 28.5N (+/- 2.0)	500.0

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#### IV.1.22.14 USS John Adams



Credit: USN

Rockets used: Polaris A2,Polaris A3,Poseidon C3

Updated: 2024 Nov 28 03:19:33

Launches: SSBN-620

Date	Rocket	Flight	Mission	Platform	Site	LP	AscSite	AscLP	Pos	Apogee
1964 Jun 23 1816:03	Polaris A2	-	-	USS John Adams	ETR	SLBM	-	-	79.0W 28.5N (+/- 2.0)	1000.0
1964 Jun 23 1953:03	Polaris A2	-	-	USS John Adams	ETR	SLBM	-	-	79.0W 28.5N (+/- 2.0)	1000.0
1964 Jun 23 2131:02	Polaris A2	-	-	USS John Adams	ETR	SLBM	-	-	79.0W 28.5N (+/- 2.0)	1000.0
1964 Jul 8 1915:03	Polaris A2	-	-	USS John Adams	ETR	SLBM	-	-	79.0W 28.5N (+/- 2.0)	1000.0
1964 Jul 8 2015:03	Polaris A2	-	-	USS John Adams	ETR	SLBM	-	-	79.0W 28.5N (+/- 2.0)	1000.0
1964 Jul 8 2116:02	Polaris A2	-	-	USS John Adams	ETR	SLBM	-	-	79.0W 28.5N (+/- 2.0)	1000.0
1965 Jun 15	Polaris A2	-	-	USS John Adams	ETR	SLBM	-	-	79.0W 28.5N (+/- 2.0)	1000.0
1965 Jun 15	Polaris A2	-	-	USS John Adams	ETR	SLBM	-	-	79.0W 28.5N (+/- 2.0)	1000.0
1967 Jul 8	Polaris A2	FOT	-	USS John Adams	ETR	SLBM	-	-	79.0W 28.5N (+/- 2.0)	1000.0
1967 Jul 8	Polaris A2	FOT	-	USS John Adams	ETR	SLBM	-	-	79.0W 28.5N (+/- 2.0)	1000.0
1969 Dec 2 1630	Polaris A3	-	-	USS John Adams	ETR	SLBM	-	-	79.0W 28.5N (+/- 2.0)	1000.0
1976 May 25 2200	Poseidon C3	DASO	-	USS John Adams	ETR	SLBM	-	-	79.0W 28.5N (+/- 2.0)	500.0
1982 Jun 26	Poseidon C3	FOT	-	USS John Adams	ETR	SLBM	-	-	79.0W 28.5N (+/- 2.0)	500.0
1982 Jun 26 0257	Poseidon C3	FOT	-	USS John Adams	ETR	SLBM	-	-	79.0W 28.5N (+/- 2.0)	500.0
1986 Jun 4	Poseidon C3	FOT	-	USS John Adams	ETR	SLBM	-	-	79.0W 28.5N (+/- 2.0)	500.0
1986 Jun 4	Poseidon C3	FOT	-	USS John Adams	ETR	SLBM	-	-	79.0W 28.5N (+/- 2.0)	500.0
1986 Jun 4	Poseidon C3	FOT	-	USS John Adams	ETR	SLBM	-	-	79.0W 28.5N (+/- 2.0)	500.0
1986 Jun 4 2134	Poseidon C3	FOT	-	USS John Adams	ETR	SLBM	-	-	79.0W 28.5N (+/- 2.0)	500.0

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**IV.1.22.15 USS James Monroe**



Credit: USN

Rockets used: Polaris A2,Polaris A3,Poseidon C3

Updated: 2024 Nov 28 03:19:33

Launches: SSBN-622

Date	Rocket	Flight	Mission	Platform	Site	LP	AscSite	AsclP	Pos	Apogee
1964 Feb 3 1641:07	Polaris A2	PY-1? DASO	-	SSBN-622	USS James Monroe	ETR	SLBM	-	79.0W 28.5N (+/- 2.0)	1000.0
1964 Feb 17 1703:04	Polaris A2	PY-1? DASO	-	SSBN-622	USS James Monroe	ETR	SLBM	-	79.0W 28.5N (+/- 2.0)	1000.0
1969 Oct 30 1630	Polaris A3	-	-	SSBN-622	USS James Monroe	ETR	SLBM	-	79.0W 28.5N (+/- 2.0)	1000.0
1969 Nov 24 1637	Polaris A3	-	-	SSBN-622	USS James Monroe	ETR	SLBM	-	79.0W 28.5N (+/- 2.0)	1000.0
1977 Aug 3 1600:02	Poseidon C3	DASO	-	SSBN-622	USS James Monroe	ETR	SLBM	-	79.0W 28.5N (+/- 2.0)	500.0
1983 Jul 28	Poseidon C3	FOT	-	SSBN-622	USS James Monroe	ETR	SLBM	-	79.0W 28.5N (+/- 2.0)	500.0
1983 Jul 28	Poseidon C3	FOT	-	SSBN-622	USS James Monroe	ETR	SLBM	-	79.0W 28.5N (+/- 2.0)	500.0
1983 Jul 28	Poseidon C3	FOT	-	SSBN-622	USS James Monroe	ETR	SLBM	-	79.0W 28.5N (+/- 2.0)	500.0
1983 Jul 28 0522	Poseidon C3	FOT	-	SSBN-622	USS James Monroe	ETR	SLBM	-	79.0W 28.5N (+/- 2.0)	500.0
1987 Sep 12	Poseidon C3	FOT	-	SSBN-622	USS James Monroe	ETR	SLBM	-	79.0W 28.5N (+/- 2.0)	500.0
1987 Sep 12	Poseidon C3	FOT	-	SSBN-622	USS James Monroe	ETR	SLBM	-	79.0W 28.5N (+/- 2.0)	500.0
1987 Sep 12	Poseidon C3	FOT	-	SSBN-622	USS James Monroe	ETR	SLBM	-	79.0W 28.5N (+/- 2.0)	500.0
1987 Sep 12 0528	Poseidon C3	FOT	-	SSBN-622	USS James Monroe	ETR	SLBM	-	79.0W 28.5N (+/- 2.0)	500.0

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**IV.1.22.16 USS Nathan Hale**



Credit: USN

Rockets used: Polaris A2,Polaris A3,Poseidon C3

Updated: 2024 Nov 28 03:19:33

Launches: SSBN-623

Date	Rocket	Flight	Mission	Platform	Site	LP	AscSite	AsclP	Pos	Apogee
1964 Jan 13 1630:04	Polaris A2	PY-1? DASO	-	SSBN-623	USS Nathan Hale	ETR	SLBM	-	79.0W 28.5N (+/- 2.0)	1000.0
1964 Jan 13 2150:01	Polaris A2	PY-1? DASO	-	SSBN-623	USS Nathan Hale	ETR	SLBM	-	79.0W 28.5N (+/- 2.0)	1000.0
1964 Jan 13 2339:00	Polaris A2	PY-1? DASO	-	SSBN-623	USS Nathan Hale	ETR	SLBM	-	79.0W 28.5N (+/- 2.0)	2.0
1964 Jan 26 1647:03	Polaris A2	-	-	SSBN-623	USS Nathan Hale	ETR	SLBM	-	79.0W 28.5N (+/- 2.0)	5.0
1964 Jan 26 1959:03	Polaris A2	-	-	SSBN-623	USS Nathan Hale	ETR	SLBM	-	79.0W 28.5N (+/- 2.0)	1000.0
1965 May 31	Polaris A2	-	-	SSBN-623	USS Nathan Hale	ETR	SLBM	-	79.0W 28.5N (+/- 2.0)	1000.0
1965 May 31	Polaris A2	-	-	SSBN-623	USS Nathan Hale	ETR	SLBM	-	79.0W 28.5N (+/- 2.0)	1000.0
1967 Jun 23	Polaris A2	FOT	-	SSBN-623	USS Nathan Hale	ETR	SLBM	-	79.0W 28.5N (+/- 2.0)	1000.0
1967 Jun 23	Polaris A2	FOT	-	SSBN-623	USS Nathan Hale	ETR	SLBM	-	79.0W 28.5N (+/- 2.0)	1000.0
1967 Jun 23	Polaris A2	FOT	-	SSBN-623	USS Nathan Hale	ETR	SLBM	-	79.0W 28.5N (+/- 2.0)	1000.0
1967 Jun 23	Polaris A2	FOT	-	SSBN-623	USS Nathan Hale	ETR	SLBM	-	79.0W 28.5N (+/- 2.0)	1000.0
1969 Aug 19 1530	Polaris A3	-	-	SSBN-623	USS Nathan Hale	ETR	SLBM	-	79.0W 28.5N (+/- 2.0)	1000.0
1969 Sep 30 1430	Polaris A3	-	-	SSBN-623	USS Nathan Hale	ETR	SLBM	-	79.0W 28.5N (+/- 2.0)	1000.0
1975 Sep 24 2300:02	Poseidon C3	DASO	-	SSBN-623	USS Nathan Hale	ETR	SLBM	-	79.0W 28.5N (+/- 2.0)	500.0
1977 Jan 28 2236	Poseidon C3	OT-26	-	SSBN-623	USS Nathan Hale	ETR	SLBM	-	79.0W 28.5N (+/- 2.0)	500.0
1977 Jan 28 2237	Poseidon C3	OT-26	-	SSBN-623	USS Nathan Hale	ETR	SLBM	-	79.0W 28.5N (+/- 2.0)	500.0
1977 Jan 28 2237	Poseidon C3	OT-26	-	SSBN-623	USS Nathan Hale	ETR	SLBM	-	79.0W 28.5N (+/- 2.0)	500.0
1977 Jan 28 2237	Poseidon C3	OT-26	-	SSBN-623	USS Nathan Hale	ETR	SLBM	-	79.0W 28.5N (+/- 2.0)	500.0
1978 May 12 2311	Poseidon C3	OT-34	-	SSBN-623	USS Nathan Hale	ETR	SLBM	-	79.0W 28.5N (+/- 2.0)	500.0
1978 May 12 2312	Poseidon C3	OT-34	-	SSBN-623	USS Nathan Hale	ETR	SLBM	-	79.0W 28.5N (+/- 2.0)	500.0
1978 May 12 2312	Poseidon C3	OT-34	-	SSBN-623	USS Nathan Hale	ETR	SLBM	-	79.0W 28.5N (+/- 2.0)	500.0
1978 May 12 2313	Poseidon C3	OT-34	-	SSBN-623	USS Nathan Hale	ETR	SLBM	-	79.0W 28.5N (+/- 2.0)	500.0
1983 Oct 13	Poseidon C3	FOT	-	SSBN-623	USS Nathan Hale	ETR	SLBM	-	79.0W 28.5N (+/- 2.0)	500.0
1983 Oct 13 0641	Poseidon C3	FOT	-	SSBN-623	USS Nathan Hale	ETR	SLBM	-	79.0W 28.5N (+/- 2.0)	500.0
1985 Mar 6	Poseidon C3	FOT	-	SSBN-623	USS Nathan Hale	ETR	SLBM	-	79.0W 28.5N (+/- 2.0)	500.0
1985 Mar 6	Poseidon C3	FOT	-	SSBN-623	USS Nathan Hale	ETR	SLBM	-	79.0W 28.5N (+/- 2.0)	500.0
1985 Mar 6	Poseidon C3	FOT	-	SSBN-623	USS Nathan Hale	ETR	SLBM	-	79.0W 28.5N (+/- 2.0)	500.0
1985 Mar 6 0342	Poseidon C3	FOT	-	SSBN-623	USS Nathan Hale	ETR	SLBM	-	79.0W 28.5N (+/- 2.0)	500.0



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#### IV.1.22.17 USS Woodrow Wilson



Credit: USN

Rockets used: Polaris A2, Polaris A3, Poseidon C3

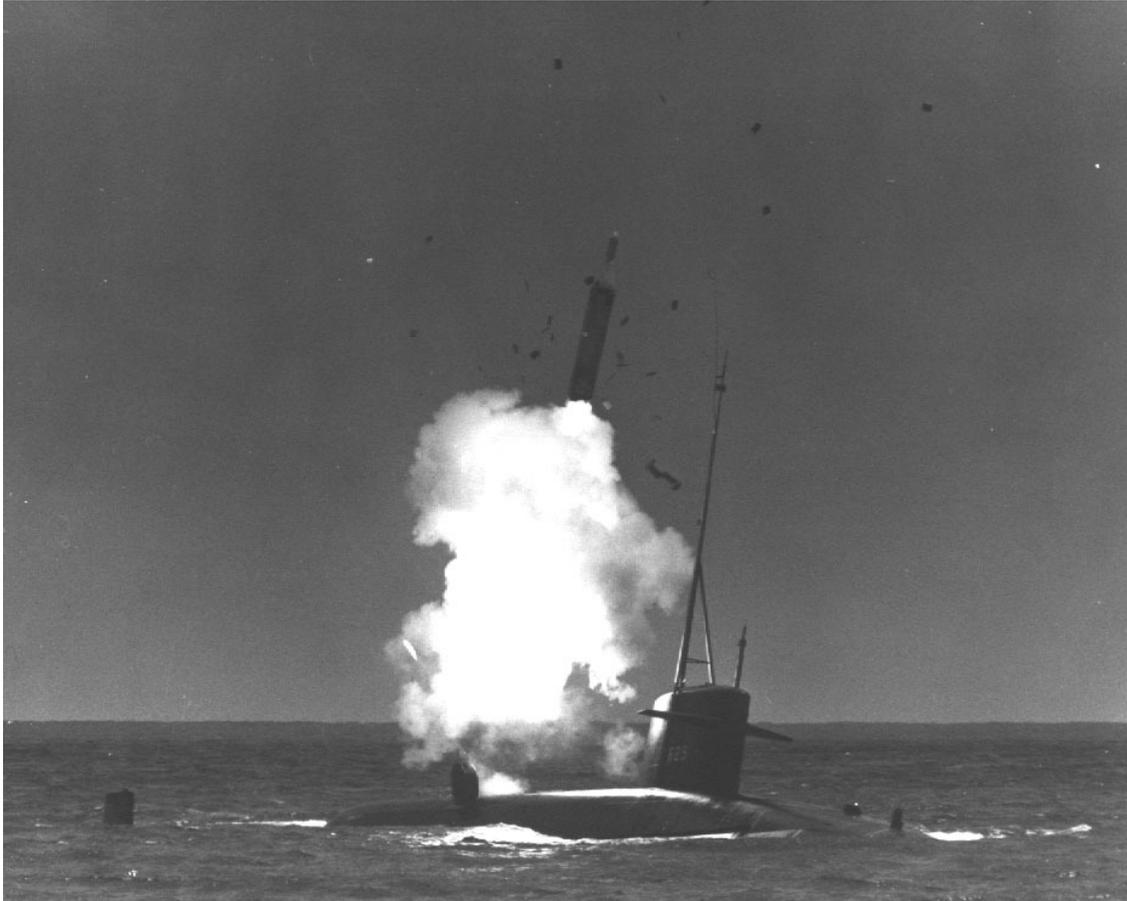
Updated: 2024 Nov 28 03:19:33

Launches: SSBN-624

Date	Rocket	Flight	Mission	Platform	Site	LP	AscSite	AsclP	Pos	Apogee
1964 Mar 2 1630:03	Polaris A2	PY-1? DASO	-	USS Woodrow Wilson	ETR	SLBM	-	-	79.0W 28.5N (+/- 2.0)	1000.0
1964 Mar 16 1630:14	Polaris A2	PY-1? DASO	-	USS Woodrow Wilson	ETR	SLBM	-	-	79.0W 28.5N (+/- 2.0)	1000.0
1965 Feb 6	Polaris A2	-	-	USS Woodrow Wilson	ETR	SLBM	-	-	79.0W 28.5N (+/- 2.0)	1000.0
1965 Feb 6	Polaris A2	-	-	USS Woodrow Wilson	ETR	SLBM	-	-	79.0W 28.5N (+/- 2.0)	1000.0
1965 Feb 6	Polaris A2	-	-	USS Woodrow Wilson	ETR	SLBM	-	-	79.0W 28.5N (+/- 2.0)	1000.0
1965 Feb 6	Polaris A2	-	-	USS Woodrow Wilson	ETR	SLBM	-	-	79.0W 28.5N (+/- 2.0)	1000.0
1966 Sep 20	Polaris A2	FOT	-	USS Woodrow Wilson	ETR	SLBM	-	-	79.0W 28.5N (+/- 2.0)	1000.0
1966 Sep 20	Polaris A2	FOT	-	USS Woodrow Wilson	ETR	SLBM	-	-	79.0W 28.5N (+/- 2.0)	1000.0
1967 Nov 6	Polaris A2	FOT	-	USS Woodrow Wilson	ETR	SLBM	-	-	79.0W 28.5N (+/- 2.0)	1000.0
1967 Nov 6	Polaris A2	FOT	-	USS Woodrow Wilson	ETR	SLBM	-	-	79.0W 28.5N (+/- 2.0)	1000.0
1967 Nov 6	Polaris A2	FOT	-	USS Woodrow Wilson	ETR	SLBM	-	-	79.0W 28.5N (+/- 2.0)	1000.0
1969 Oct 15 1530	Polaris A3	-	-	USS Woodrow Wilson	ETR	SLBM	-	-	79.0W 28.5N (+/- 2.0)	1000.0
1969 Oct 15 1910	Polaris A3	-	-	USS Woodrow Wilson	ETR	SLBM	-	-	79.0W 28.5N (+/- 2.0)	1000.0
1976 Feb 14 2200	Poseidon C3	DASO	-	USS Woodrow Wilson	ETR	SLBM	-	-	79.0W 28.5N (+/- 2.0)	500.0
1977 Mar 24 2047	Poseidon C3	OT-28	-	USS Woodrow Wilson	ETR	SLBM	-	-	79.0W 28.5N (+/- 2.0)	500.0
1977 Mar 24 2047	Poseidon C3	OT-28	-	USS Woodrow Wilson	ETR	SLBM	-	-	79.0W 28.5N (+/- 2.0)	500.0
1983 Jan 10	Poseidon C3	FOT	-	USS Woodrow Wilson	ETR	SLBM	-	-	79.0W 28.5N (+/- 2.0)	500.0
1983 Jan 10 0919	Poseidon C3	FOT	-	USS Woodrow Wilson	ETR	SLBM	-	-	79.0W 28.5N (+/- 2.0)	500.0

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**IV.1.22.18 USS Henry Clay**



Credit: USN

Rockets used: Polaris A2,Polaris A3,Poseidon C3

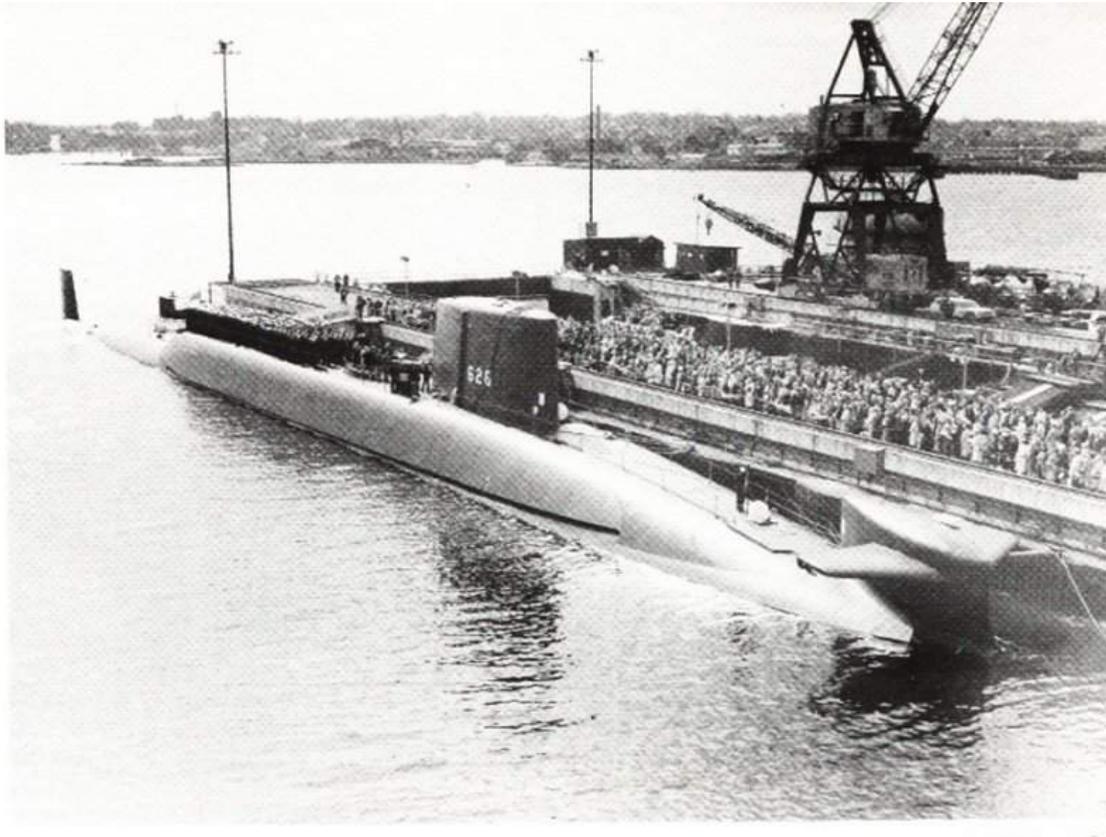
Updated: 2024 Nov 28 03:19:33

Launches: SSBN-625

Date	Rocket	Flight	Mission	Platform	Site	LP	AscSite	AsclP	Pos	Apogee
1964 Mar 16	Polaris A2	PY-1? DASO	-	USS Henry Clay	ETR	SLBM	-	-	79.0W 28.5N (+/- 2.0)	1000.0
1964 Mar 20	Polaris A2	PY-1? DASO	-	SSBN-625	ETR	SLBM	-	-	79.0W 28.5N (+/- 2.0)	1000.0
1964 Apr 6 1630:03	Polaris A2	-	-	USS Henry Clay	ETR	SLBM	-	-	79.0W 28.5N (+/- 2.0)	1000.0
1964 Apr 20 1630:03	Polaris A2	-	-	USS Henry Clay	ETR	SLBM	-	-	79.0W 28.5N (+/- 2.0)	1000.0
1964 Apr 20 1700:09	Polaris A2	Surface Launch Test	-	USS Henry Clay	ETR	SLBM	-	-	79.0W 28.5N (+/- 2.0)	1000.0
1966 Feb 25	Polaris A2	FOT	-	USS Henry Clay	ETR	SLBM	-	-	79.0W 28.5N (+/- 2.0)	1000.0
1966 Feb 25	Polaris A2	FOT	-	SSBN-625	ETR	SLBM	-	-	79.0W 28.5N (+/- 2.0)	1000.0
1970 Apr 10 1630	Polaris A3	-	-	USS Henry Clay	ETR	SLBM	-	-	79.0W 28.5N (+/- 2.0)	10.0
1970 May 22 1800	Polaris A3	DASO	-	USS Henry Clay	ETR	SLBM	-	-	79.0W 28.5N (+/- 2.0)	1000.0
1977 Sep 6 2100:01	Poseidon C3	DASO	-	USS Henry Clay	ETR	SLBM	-	-	79.0W 28.5N (+/- 2.0)	500.0
1980 Aug 20 2119	Poseidon C3	FOT-42?	-	USS Henry Clay	ETR	SLBM	-	-	79.0W 28.5N (+/- 2.0)	500.0
1980 Aug 20 2127	Poseidon C3	FOT-42?	-	USS Henry Clay	ETR	SLBM	-	-	79.0W 28.5N (+/- 2.0)	500.0
1980 Aug 20 2132	Poseidon C3	FOT-42?	-	USS Henry Clay	ETR	SLBM	-	-	79.0W 28.5N (+/- 2.0)	500.0
1984 Jun 29	Poseidon C3	FOT	-	USS Henry Clay	ETR	SLBM	-	-	79.0W 28.5N (+/- 2.0)	500.0
1984 Jun 29 2003	Poseidon C3	FOT	-	SSBN-625	ETR	SLBM	-	-	79.0W 28.5N (+/- 2.0)	500.0

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#### IV.1.22.19 USS Daniel Webster



Credit: wikipedia.org

Rockets used: Polaris A3, Poseidon C3

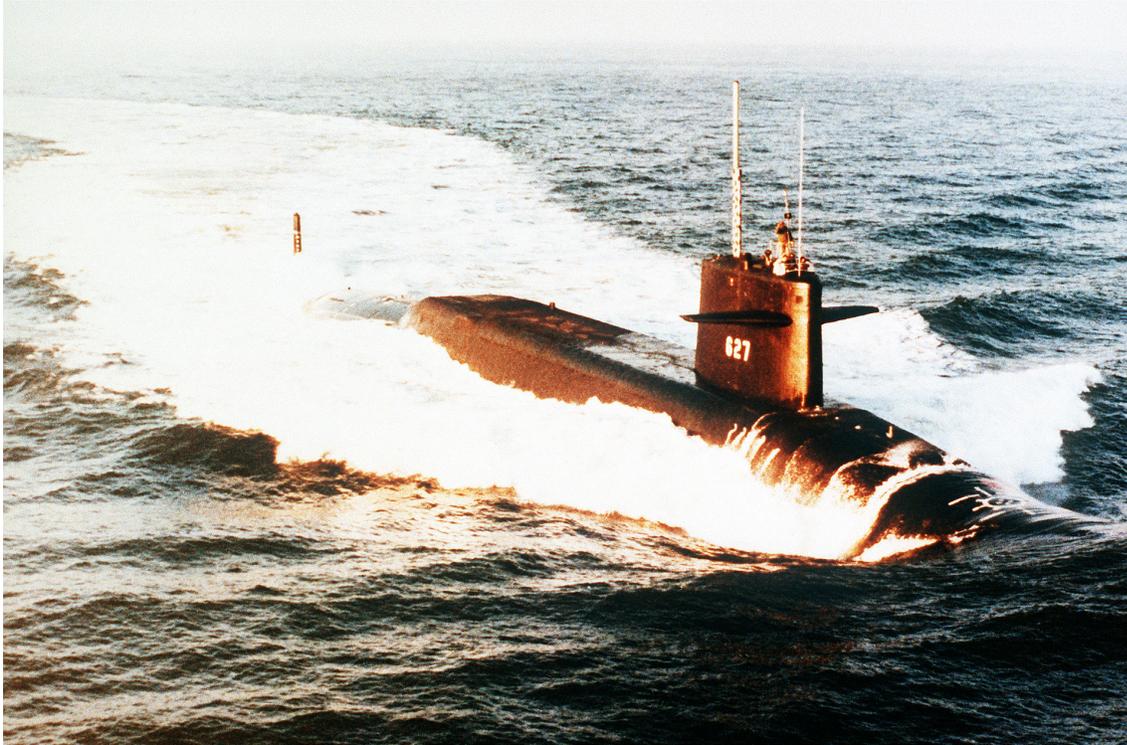
Updated: 2024 Nov 28 03:19:34

Launches: SSBN-626

Date	Rocket	Flight	Mission	PlatCode	Platform	Site	LP	AscSite	AscLP	Pos	Apogee
1964 May 25 1829:05	Polaris A3	-	-	SSBN-626	USS Daniel Webster	ETR	SLBM	-	-	79.0W 28.5N (+/- 2.0)	1000.0
1964 May 25 1915:06	Polaris A3	-	-	SSBN-626	USS Daniel Webster	ETR	SLBM	-	-	79.0W 28.5N (+/- 2.0)	1000.0
1964 Jun 8 1634:07	Polaris A3	-	-	SSBN-626	USS Daniel Webster	ETR	SLBM	-	-	79.0W 28.5N (+/- 2.0)	1000.0
1964 Jun 8 1709:07	Polaris A3	DASO	-	SSBN-626	USS Daniel Webster	ETR	SLBM	-	-	79.0W 28.5N (+/- 2.0)	1000.0
1968 Aug 29 1515	Polaris A3	DASO/Antelope	-	SSBN-626	USS Daniel Webster	ETR	SLBM	-	-	79.0W 28.5N (+/- 2.0)	1000.0
1968 Aug 29 1600	Polaris A3	DASO/Antelope	-	SSBN-626	USS Daniel Webster	ETR	SLBM	-	-	79.0W 28.5N (+/- 2.0)	1000.0
1970 Feb 6 1630	Polaris A3	-	-	SSBN-626	USS Daniel Webster	ETR	SLBM	-	-	79.0W 28.5N (+/- 2.0)	1000.0
1978 Mar 29 2300:01	Poseidon C3	DASO	-	SSBN-626	USS Daniel Webster	ETR	SLBM	-	-	79.0W 28.5N (+/- 2.0)	500.0
1985 Sep 2	Poseidon C3	FUT	-	SSBN-626	USS Daniel Webster	ETR	SLBM	-	-	79.0W 28.5N (+/- 2.0)	500.0
1985 Sep 2 0503	Poseidon C3	FUT	-	SSBN-626	USS Daniel Webster	ETR	SLBM	-	-	79.0W 28.5N (+/- 2.0)	500.0

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**IV.1.22.20 USS James Madison**



Credit: USN

Rockets used: Polaris A3, Poseidon C3, Trident C-4

Updated: 2024 Nov 28 03:19:34

Launches: SSBN-627

Date	Rocket	Flight	Mission	Platform	Site	LP	AscSite	AsclP	Pos	Apogee
1964 Sep 28 1630:03	Polaris A3	-	-	USS James Madison	ETR	SLBM	-	-	79.0W 28.5N (+/- 2.0)	1000.0
1964 Oct 13 1650:04	Polaris A3	-	-	USS James Madison	ETR	SLBM	-	-	79.0W 28.5N (+/- 2.0)	1000.0
1965 Nov 5	Polaris A3	OT	-	USS James Madison	ETR	SLBM	-	-	79.0W 28.5N (+/- 2.0)	1000.0
1965 Nov 5	Polaris A3	OT	-	USS James Madison	ETR	SLBM	-	-	79.0W 28.5N (+/- 2.0)	1000.0
1965 Nov 5	Polaris A3	OT	-	USS James Madison	ETR	SLBM	-	-	79.0W 28.5N (+/- 2.0)	1000.0
1970 Aug 3 1500	Poseidon C3	PEM-1	-	USS James Madison	ETR	SLBM	-	-	79.0W 28.5N (+/- 2.0)	500.0
1970 Aug 17 1616	Poseidon C3	PEM-2	-	USS James Madison	ETR	SLBM	-	-	79.0W 28.5N (+/- 2.0)	500.0
1970 Oct 23 2200	Poseidon C3	USN Mk 3 RV x 10	DASO-1	USS James Madison	ETR	SLBM	-	-	79.0W 28.5N (+/- 2.0)	500.0
1975 Jun 23	Poseidon C3	FOT-11?	-	USS James Madison	ETR	SLBM	-	-	79.0W 28.5N (+/- 2.0)	500.0
1975 Jun 23	Poseidon C3	FOT-11?	-	USS James Madison	ETR	SLBM	-	-	79.0W 28.5N (+/- 2.0)	500.0
1982 Jun 5 2000	Trident C-4	DASO-13	-	USS James Madison	ETR	SLBM	-	-	79.0W 28.5N (+/- 2.0)	1000.0



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#### IV.1.22.21 USS Tecumseh



Credit: USN

Rockets used: Polaris A3, Poseidon C3

Updated: 2024 Nov 28 03:19:34

Launches: SSBN-628

Date	Rocket	Flight	Mission	PlatCode	Platform	Site	LP	AscSite	AsclP	Pos	Apogee
1964 Aug 6 1630	Polaris A3	-	-	SSBN-628	USS Tecumseh	ETR	SLBM	-	-	79.0W 28.5N (+/- 2.0)	1000.0
1964 Aug 20 1630:02	Polaris A3	-	-	SSBN-628	USS Tecumseh	ETR	SLBM	-	-	79.0W 28.5N (+/- 2.0)	1000.0
1971 May 1 0003	Poseidon C3	DASO-7	-	SSBN-628	USS Tecumseh	ETR	SLBM	-	-	79.0W 28.5N (+/- 2.0)	500.0
1971 Jul 17 2330	Poseidon C3	DASO-12	-	SSBN-628	USS Tecumseh	ETR	SLBM	-	-	79.0W 28.5N (+/- 2.0)	500.0
1973 Jan 23	Poseidon C3	FOT-5	-	SSBN-628	USS Tecumseh	ETR	SLBM	-	-	79.0W 28.5N (+/- 2.0)	500.0
1973 Jan 23	Poseidon C3	FOT-5	-	SSBN-628	USS Tecumseh	ETR	SLBM	-	-	79.0W 28.5N (+/- 2.0)	500.0
1973 Jan 23	Poseidon C3	FOT-5	-	SSBN-628	USS Tecumseh	ETR	SLBM	-	-	79.0W 28.5N (+/- 2.0)	500.0
1973 Jan 23	Poseidon C3	FOT-5	-	SSBN-628	USS Tecumseh	ETR	SLBM	-	-	79.0W 28.5N (+/- 2.0)	500.0
1977 Feb 5 0303	Poseidon C3	FOT-27	-	SSBN-628	USS Tecumseh	ETR	SLBM	-	-	79.0W 28.5N (+/- 2.0)	500.0
1979 Oct 23 2151	Poseidon C3	DASO	-	SSBN-628	USS Tecumseh	ETR	SLBM	-	-	79.0W 28.5N (+/- 2.0)	500.0
1982 Feb 28	Poseidon C3	FOT-45?	-	SSBN-628	USS Tecumseh	ETR	SLBM	-	-	79.0W 28.5N (+/- 2.0)	500.0
1982 Feb 28	Poseidon C3	FOT-45?	-	SSBN-628	USS Tecumseh	ETR	SLBM	-	-	79.0W 28.5N (+/- 2.0)	500.0
1987 Jan 31 1930:03	Poseidon C3	DASO	-	SSBN-628	USS Tecumseh	ETR	SLBM	-	-	79.0W 28.5N (+/- 2.0)	500.0
1988 Apr 1	Poseidon C3	FOT	-	SSBN-628	USS Tecumseh	ETR	SLBM	-	-	79.0W 28.5N (+/- 2.0)	500.0
1988 Apr 1	Poseidon C3	FOT	-	SSBN-628	USS Tecumseh	ETR	SLBM	-	-	79.0W 28.5N (+/- 2.0)	500.0
1988 Apr 1	Poseidon C3	FOT	-	SSBN-628	USS Tecumseh	ETR	SLBM	-	-	79.0W 28.5N (+/- 2.0)	500.0
1988 Apr 1 2019	Poseidon C3	FOT	-	SSBN-628	USS Tecumseh	ETR	SLBM	-	-	79.0W 28.5N (+/- 2.0)	500.0

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**IV.1.22.22 USS Daniel Boone**



Credit: USN

Rockets used: Polaris A3, Poseidon C3, Trident C-4

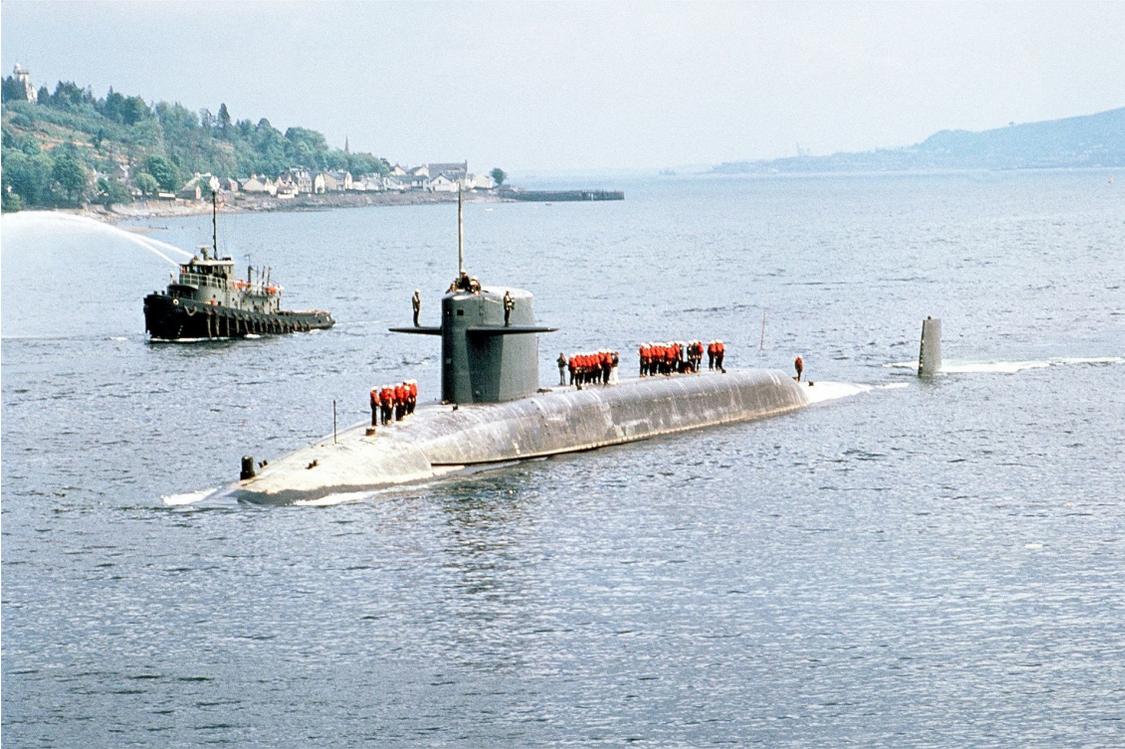
Updated: 2024 Nov 28 03:19:34

Launches: SSBN-629

Date	Rocket	Flight	Mission	Platform	Site	LP	AscSite	AsclP	Pos	Apogee
1964 Jul 16 1654:04	Polaris A3	-	-	SSBN-629	ETR	SLBM	-	-	79.0W 28.5N (+/- 2.0)	1000.0
1964 Jul 16 1724:07	Polaris A3	-	-	SSBN-629	ETR	SLBM	-	-	79.0W 28.5N (+/- 2.0)	500.0
1964 Jul 30 1630:03	Polaris A3	-	-	SSBN-629	ETR	SLBM	-	-	79.0W 28.5N (+/- 2.0)	1000.0
1964 Jul 30 1700:03	Polaris A3	-	-	SSBN-629	ETR	SLBM	-	-	79.0W 28.5N (+/- 2.0)	1000.0
1970 Sep 8 1600	Poseidon C3	PEM-3	-	SSBN-629	ETR	SLBM	-	-	79.0W 28.5N (+/- 2.0)	500.0
1970 Sep 21 1500	Poseidon C3	PEM-4	-	SSBN-629	ETR	SLBM	-	-	79.0W 28.5N (+/- 2.0)	500.0
1970 Oct 6 1515	Poseidon C3	PEM-5	-	SSBN-629	ETR	SLBM	-	-	79.0W 28.5N (+/- 2.0)	500.0
1970 Nov 27 2217	Poseidon C3	DASO-2	-	SSBN-629	ETR	SLBM	-	-	79.0W 28.5N (+/- 2.0)	500.0
1972 Dec 11	Poseidon C3	FOT-4	-	SSBN-629	ETR	SLBM	-	-	79.0W 28.5N (+/- 2.0)	500.0
1972 Dec 11	Poseidon C3	FOT-4	-	SSBN-629	ETR	SLBM	-	-	79.0W 28.5N (+/- 2.0)	500.0
1972 Dec 11	Poseidon C3	FOT-4	-	SSBN-629	ETR	SLBM	-	-	79.0W 28.5N (+/- 2.0)	500.0
1972 Dec 11	Poseidon C3	FOT-4	-	SSBN-629	ETR	SLBM	-	-	79.0W 28.5N (+/- 2.0)	500.0
1978 May 15 2100	Poseidon C3	DASO	-	SSBN-629	ETR	SLBM	-	-	79.0W 28.5N (+/- 2.0)	500.0
1980 Jul 22 0310	Trident C-4	DASO-5?	-	SSBN-629	ETR	SLBM	-	-	79.0W 28.5N (+/- 2.0)	1000.0
1987 Aug 24 0352	Trident C-4	DASO/JANUS	-	SSBN-629	ETR	SLBM	-	-	79.0W 28.5N (+/- 2.0)	1000.0
1990 Mar 24	Trident C-4	CET	-	SSBN-629	ETR	LP5	-	-	79.0W 28.5N (+/- 2.0)	1000.0
1990 Mar 24	Trident C-4	CET	-	SSBN-629	ETR	LP5	-	-	79.0W 28.5N (+/- 2.0)	1000.0
1990 Mar 24	Trident C-4	CET	-	SSBN-629	ETR	LP5	-	-	79.0W 28.5N (+/- 2.0)	1000.0
1990 Mar 24	Trident C-4	CET	-	SSBN-629	ETR	LP5	-	-	79.0W 28.5N (+/- 2.0)	1000.0

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### IV.1.22.23 USS John C Calhoun



Credit: USN

Rockets used: Polaris A3, Poseidon C3, Trident C-4

Updated: 2024 Nov 28 03:19:34

Launches: SSBN-630

Date	Rocket	Flight	Mission	PlatCode	Platform	Site	LP	AscSite	AsclP	Pos	Apogee
1965 Feb 15 1630:03	Polaris A3	-	-	SSBN-630	USS John C Calhoun	ETR	SLBM	-	-	79.0W 28.5N (+/- 2.0)	1000.0
1965 Mar 1 1718:06	Polaris A3	-	-	SSBN-630	USS John C Calhoun	ETR	SLBM	-	-	79.0W 28.5N (+/- 2.0)	1000.0
1968 Apr 10	Polaris A3	FOT	-	SSBN-630	USS John C Calhoun	ETR	SLBM	-	-	79.0W 28.5N (+/- 2.0)	1000.0
1968 Apr 10	Polaris A3	FOT	-	SSBN-630	USS John C Calhoun	ETR	SLBM	-	-	79.0W 28.5N (+/- 2.0)	1000.0
1968 Apr 10	Polaris A3	FOT	-	SSBN-630	USS John C Calhoun	ETR	SLBM	-	-	79.0W 28.5N (+/- 2.0)	1000.0
1968 Apr 10	Polaris A3	FOT	-	SSBN-630	USS John C Calhoun	ETR	SLBM	-	-	79.0W 28.5N (+/- 2.0)	1000.0
1971 Apr 19 2345	Poseidon C3	DASO-6	-	SSBN-630	USS John C Calhoun	ETR	SLBM	-	-	79.0W 28.5N (+/- 2.0)	500.0
1971 Jun 7 1653	Poseidon C3	DASO-10	-	SSBN-630	USS John C Calhoun	ETR	SLBM	-	-	79.0W 28.5N (+/- 2.0)	500.0
1972 Nov 2	Poseidon C3	FOT-3	-	SSBN-630	USS John C Calhoun	ETR	SLBM	-	-	79.0W 28.5N (+/- 2.0)	500.0
1972 Nov 2	Poseidon C3	FOT-3	-	SSBN-630	USS John C Calhoun	ETR	SLBM	-	-	79.0W 28.5N (+/- 2.0)	500.0
1972 Nov 2	Poseidon C3	FOT-3	-	SSBN-630	USS John C Calhoun	ETR	SLBM	-	-	79.0W 28.5N (+/- 2.0)	500.0
1972 Nov 2	Poseidon C3	FOT-3	-	SSBN-630	USS John C Calhoun	ETR	SLBM	-	-	79.0W 28.5N (+/- 2.0)	500.0
1979 Mar 23 2225	Poseidon C3	DASO	-	SSBN-630	USS John C Calhoun	ETR	SLBM	-	-	79.0W 28.5N (+/- 2.0)	500.0
1980 Oct 28 2125	Trident C-4	DASO-6?	-	SSBN-630	USS John C Calhoun	ETR	SLBM	-	-	79.0W 28.5N (+/- 2.0)	1000.0
1981 Aug 13 0226	Trident C-4	OT-6	-	SSBN-630	USS John C Calhoun	ETR	SLBM	-	-	79.0W 28.5N (+/- 2.0)	1000.0
1981 Aug 13 0246	Trident C-4	OT-6	-	SSBN-630	USS John C Calhoun	ETR	SLBM	-	-	79.0W 28.5N (+/- 2.0)	1000.0
1981 Aug 13 0332	Trident C-4	OT-6	-	SSBN-630	USS John C Calhoun	ETR	SLBM	-	-	79.0W 28.5N (+/- 2.0)	1000.0
1981 Aug 13 0332	Trident C-4	OT-6	-	SSBN-630	USS John C Calhoun	ETR	SLBM	-	-	79.0W 28.5N (+/- 2.0)	1000.0
1984 Aug 24	Trident C-4	FOT	-	SSBN-630	USS John C Calhoun	ETR	SLBM	-	-	79.0W 28.5N (+/- 2.0)	1000.0
1984 Aug 24 2143	Trident C-4	FOT	-	SSBN-630	USS John C Calhoun	ETR	SLBM	-	-	79.0W 28.5N (+/- 2.0)	1000.0
1986 Aug 31	Trident C-4	DASO	-	SSBN-630	USS John C Calhoun	ETR	SLBM	-	-	79.0W 28.5N (+/- 2.0)	1000.0
1987 Aug 29	Trident C-4	FOT	-	SSBN-630	USS John C Calhoun	ETR	SLBM	-	-	79.0W 28.5N (+/- 2.0)	1000.0
1987 Aug 29	Trident C-4	FOT	-	SSBN-630	USS John C Calhoun	ETR	SLBM	-	-	79.0W 28.5N (+/- 2.0)	1000.0
1987 Aug 29	Trident C-4	FOT	-	SSBN-630	USS John C Calhoun	ETR	SLBM	-	-	79.0W 28.5N (+/- 2.0)	1000.0
1987 Aug 29 2343	Trident C-4	FOT 140?	-	SSBN-630	USS John C Calhoun	ETR	SLBM	-	-	79.0W 28.5N (+/- 2.0)	1000.0

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#### IV.1.22.24 USS Ulysses S Grant



Credit: USN

Rockets used: Polaris A3, Poseidon C3

Updated: 2024 Nov 28 03:19:34

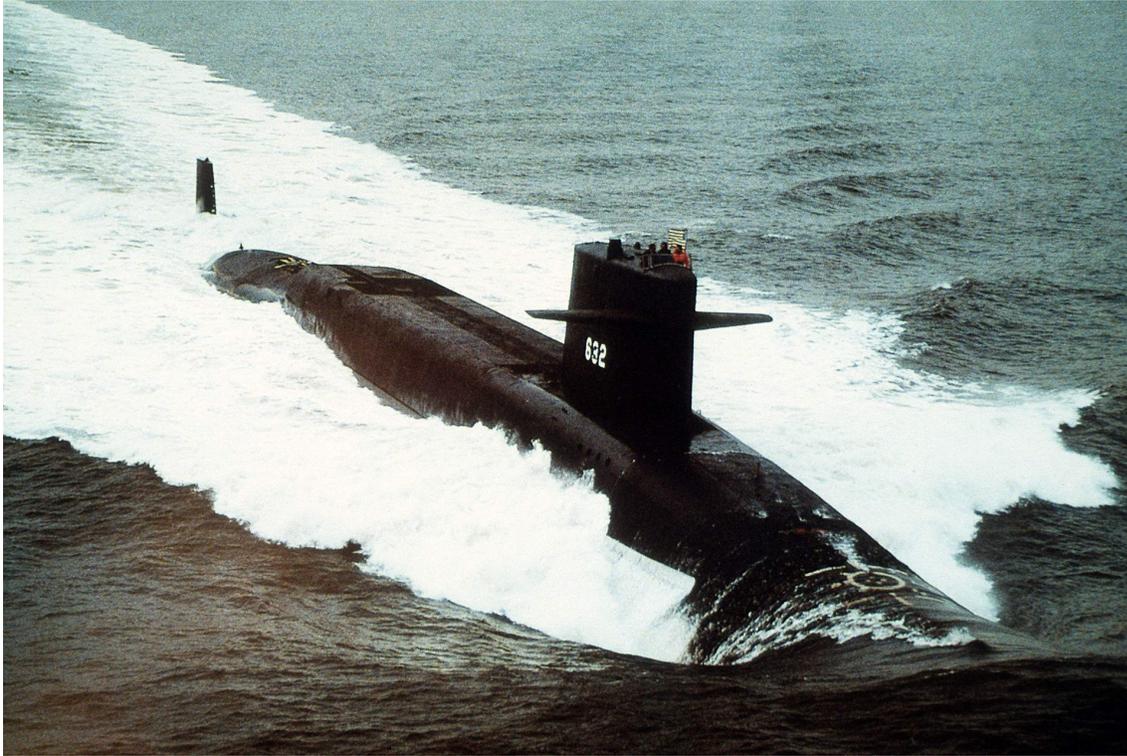
Launches: SSBN-631

Date	Rocket	Flight	Mission	Platform	Site	LP	AscSite	AsclP	Pos	Apogee
1964 Sep 5 1630:03	Polaris A3	-	-	USS Ulysses S Grant	ETR	SLBM	-	-	79.0W 28.5N (+/- 2.0)	1000.0
1964 Sep 21 1630:03	Polaris A3	-	-	USS Ulysses S Grant	ETR	SLBM	-	-	79.0W 28.5N (+/- 2.0)	1000.0
1971 Mar 29 2305	Poseidon C3	DASO-5	-	USS Ulysses S Grant	ETR	SLBM	-	-	79.0W 28.5N (+/- 2.0)	500.0
1971 May 11 2230	Poseidon C3	DASO-8	-	USS Ulysses S Grant	ETR	SLBM	-	-	79.0W 28.5N (+/- 2.0)	500.0
1971 May 11 2347	Poseidon C3	DASO-9	-	USS Ulysses S Grant	ETR	SLBM	-	-	79.0W 28.5N (+/- 2.0)	500.0
1972 Aug 18	Poseidon C3	FOT-1	-	USS Ulysses S Grant	ETR	SLBM	-	-	79.0W 28.5N (+/- 2.0)	500.0
1972 Aug 18	Poseidon C3	FOT-1	-	USS Ulysses S Grant	ETR	SLBM	-	-	79.0W 28.5N (+/- 2.0)	500.0
1972 Aug 18	Poseidon C3	FOT-1	-	USS Ulysses S Grant	ETR	SLBM	-	-	79.0W 28.5N (+/- 2.0)	500.0
1972 Aug 18	Poseidon C3	FOT-1	-	USS Ulysses S Grant	ETR	SLBM	-	-	79.0W 28.5N (+/- 2.0)	500.0
1979 May 26 2245:03	Poseidon C3	DASO	-	USS Ulysses S Grant	ETR	SLBM	-	-	79.0W 28.5N (+/- 2.0)	500.0
1987 Jul 31 1800:03	Poseidon C3	DASO	-	USS Ulysses S Grant	ETR	SLBM	-	-	79.0W 28.5N (+/- 2.0)	500.0



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#### IV.1.22.25 USS Von Steuben



Credit: USN

Rockets used: Polaris A3, Poseidon C3, Trident C-4

Updated: 2024 Nov 28 03:19:34

Launches: SSBN-632

Date	Rocket	Flight	Mission	Platform	Site	LP	AscSite	AsclP	Pos	Apogee
1964 Dec 22 1630:04	Polaris A3	-	-	SSBN-632	USS Von Steuben	ETR	SLBM	-	79.0W 28.5N (+/- 2.0)	1000.0
1965 Jan 11 1713:03	Polaris A3	-	-	SSBN-632	USS Von Steuben	ETR	SLBM	-	79.0W 28.5N (+/- 2.0)	1000.0
1971 Feb 4 2245	Poseidon C3	DASO-3	-	SSBN-632	USS Von Steuben	ETR	SLBM	-	79.0W 28.5N (+/- 2.0)	500.0
1971 Mar 15 2300	Poseidon C3	DASO-4	-	SSBN-632	USS Von Steuben	ETR	SLBM	-	79.0W 28.5N (+/- 2.0)	500.0
1972 Sep 28	Poseidon C3	FOT-2	-	SSBN-632	USS Von Steuben	ETR	SLBM	-	79.0W 28.5N (+/- 2.0)	500.0
1972 Sep 28	Poseidon C3	FOT-2	-	SSBN-632	USS Von Steuben	ETR	SLBM	-	79.0W 28.5N (+/- 2.0)	500.0
1972 Sep 28	Poseidon C3	FOT-2	-	SSBN-632	USS Von Steuben	ETR	SLBM	-	79.0W 28.5N (+/- 2.0)	500.0
1972 Sep 28	Poseidon C3	FOT-2	-	SSBN-632	USS Von Steuben	ETR	SLBM	-	79.0W 28.5N (+/- 2.0)	500.0
1976 Jun 22 2016	Poseidon C3	FOT-20?	-	SSBN-632	USS Von Steuben	ETR	SLBM	-	79.0W 28.5N (+/- 2.0)	500.0
1976 Jun 22 2017	Poseidon C3	FOT-20?	-	SSBN-632	USS Von Steuben	ETR	SLBM	-	79.0W 28.5N (+/- 2.0)	500.0
1982 Nov 14 1700	Trident C-4	DASO	-	SSBN-632	USS Von Steuben	ETR	SLBM	-	79.0W 28.5N (+/- 2.0)	1000.0
1983 Nov 7	Trident C-4	FUT	-	SSBN-632	USS Von Steuben	ETR	SLBM	-	79.0W 28.5N (+/- 2.0)	1000.0
1983 Nov 7 1802	Trident C-4	FOT	-	SSBN-632	USS Von Steuben	ETR	SLBM	-	79.0W 28.5N (+/- 2.0)	1000.0
1986 Sep 17	Trident C-4	FOT	-	SSBN-632	USS Von Steuben	ETR	SLBM	-	79.0W 28.5N (+/- 2.0)	1000.0
1986 Sep 17 1904	Trident C-4	FUT	-	SSBN-632	USS Von Steuben	ETR	SLBM	-	79.0W 28.5N (+/- 2.0)	1000.0

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#### IV.1.22.26 USS Casimir Pulaski



Credit: USN

Rockets used: Polaris A3, Poseidon C3, Trident C-4

Updated: 2024 Nov 28 03:19:34

Launches: SSBN-633

Date	Rocket	Flight	Mission	PlatCode	Platform	Site	LP	AscSite	AsclP	Pos	Apogee
1964 Oct 31 1804:03	Polaris A3	-	-	SSBN-633	USS Casimir Pulaski	ETR	SLBM	-	-	79.0W 28.5N (+/- 2.0)	1000.0
1964 Nov 13 1657:03	Polaris A3	-	-	SSBN-633	USS Casimir Pulaski	ETR	SLBM	-	-	79.0W 28.5N (+/- 2.0)	1000.0
1971 Jul 2 1630	Poseidon C3	DASO-11	-	SSBN-633	USS Casimir Pulaski	ETR	SLBM	-	-	79.0W 28.5N (+/- 2.0)	500.0
1971 Aug 16 1632	Poseidon C3	DASO-13	-	SSBN-633	USS Casimir Pulaski	ETR	SLBM	-	-	79.0W 28.5N (+/- 2.0)	500.0
1973 Mar 1	Poseidon C3	FOT-6	-	SSBN-633	USS Casimir Pulaski	ETR	SLBM	-	-	79.0W 28.5N (+/- 2.0)	500.0
1973 Mar 1	Poseidon C3	FOT-6	-	SSBN-633	USS Casimir Pulaski	ETR	SLBM	-	-	79.0W 28.5N (+/- 2.0)	500.0
1973 Mar 1	Poseidon C3	FOT-6	-	SSBN-633	USS Casimir Pulaski	ETR	SLBM	-	-	79.0W 28.5N (+/- 2.0)	500.0
1973 Mar 1	Poseidon C3	FOT-6	-	SSBN-633	USS Casimir Pulaski	ETR	SLBM	-	-	79.0W 28.5N (+/- 2.0)	500.0
1975 Apr 24	Poseidon C3	FOT-10?	-	SSBN-633	USS Casimir Pulaski	ETR	SLBM	-	-	79.0W 28.5N (+/- 2.0)	500.0
1983 Apr 19 1700	Trident C-4	DASO	-	SSBN-633	USS Casimir Pulaski	ETR	SLBM	-	-	79.0W 28.5N (+/- 2.0)	20.0
1985 Jun 18	Trident C-4	FOT	-	SSBN-633	USS Casimir Pulaski	ETR	SLBM	-	-	79.0W 28.5N (+/- 2.0)	1000.0
1985 Jun 18	Trident C-4	FOT	-	SSBN-633	USS Casimir Pulaski	ETR	SLBM	-	-	79.0W 28.5N (+/- 2.0)	1000.0
1985 Jun 18	Trident C-4	FOT	-	SSBN-633	USS Casimir Pulaski	ETR	SLBM	-	-	79.0W 28.5N (+/- 2.0)	1000.0
1985 Jun 18 0312	Trident C-4	FOT	-	SSBN-633	USS Casimir Pulaski	ETR	SLBM	-	-	79.0W 28.5N (+/- 2.0)	1000.0

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## IV.1.22.27 USS Stonewall Jackson



Credit: USN

Rockets used: Polaris A3, Poseidon C3, Trident C-4

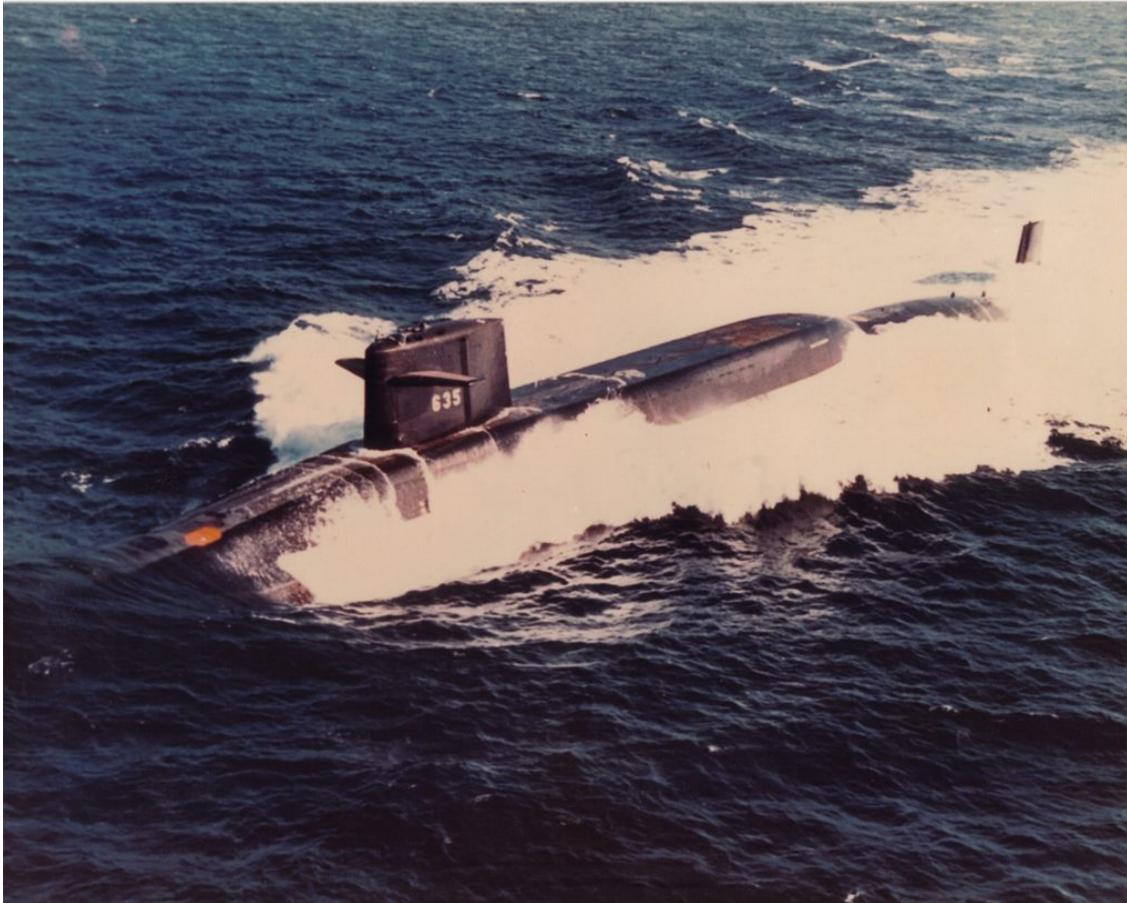
Updated: 2024 Nov 28 03:19:34

Launches: SSBN-634

Date	Rocket	Flight	Mission	PlatCode	Platform	Site	LP	AscSite	AscLP	Pos	Apogee
1964 Dec 2 1630:04	Polaris A3	-	-	SSBN-634	USS Stonewall Jacskon	ETR	SLBM	-	-	79.0W 28.5N (+/- 2.0)	1000.0
1964 Dec 16 1634:03	Polaris A3	-	-	SSBN-634	USS Stonewall Jacskon	ETR	SLBM	-	-	79.0W 28.5N (+/- 2.0)	1000.0
1971 Dec 6 1747	Poseidon C3	DASO-17	-	SSBN-634	USS Stonewall Jacskon	ETR	SLBM	-	-	79.0W 28.5N (+/- 2.0)	500.0
1972 Jan 21 2145	Poseidon C3	DASO-19	-	SSBN-634	USS Stonewall Jacskon	ETR	SLBM	-	-	79.0W 28.5N (+/- 2.0)	500.0
1975 Aug 22 1708:40	Poseidon C3	FOT-13?	-	SSBN-634	USS Stonewall Jacskon	ETR	SLBM	-	-	79.0W 28.5N (+/- 2.0)	500.0
1975 Aug 22 1709:08	Poseidon C3	FOT-13?	-	SSBN-634	USS Stonewall Jacskon	ETR	SLBM	-	-	79.0W 28.5N (+/- 2.0)	500.0
1975 Aug 22 1726:10	Poseidon C3	FOT-13?	-	SSBN-634	USS Stonewall Jacskon	ETR	SLBM	-	-	79.0W 28.5N (+/- 2.0)	500.0
1980 Jul 14 2200	Poseidon C3	DASO-48	-	SSBN-634	USS Stonewall Jacskon	ETR	SLBM	-	-	79.0W 28.5N (+/- 2.0)	500.0
1982 Jan 26 1250	Trident C-4	DASO-10	-	SSBN-634	USS Stonewall Jacskon	ETR	SLBM	-	-	79.0W 28.5N (+/- 2.0)	1000.0
1988 Feb 27 1527	Trident C-4	DASO	-	SSBN-634	USS Stonewall Jacskon	ETR	SLBM	-	-	79.0W 28.5N (+/- 2.0)	1000.0

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**IV.1.22.28 USS Sam Rayburn**



Credit: USN

Rockets used: Polaris A3, Poseidon C3

Updated: 2024 Nov 28 03:19:34

Launches: SSBN-635

Date	Rocket	Flight	Mission	Platform	Site	LP	AscSite	AsclP	Pos	Apogee
1965 Jan 23 1630:08	Polaris A3	-	-	USS Sam Rayburn	ETR	SLBM	-	-	79.0W 28.5N (+/- 2.0)	1000.0
1965 Feb 8 1725:05	Polaris A3	-	-	USS Sam Rayburn	ETR	SLBM	-	-	79.0W 28.5N (+/- 2.0)	1000.0
1971 Oct 14 2113	Poseidon C3	DASO-14	-	USS Sam Rayburn	ETR	SLBM	-	-	79.0W 28.5N (+/- 2.0)	500.0
1971 Nov 24 2115	Poseidon C3	DASO-16	-	USS Sam Rayburn	ETR	SLBM	-	-	79.0W 28.5N (+/- 2.0)	500.0
1975 Nov 8	Poseidon C3	FOT-15?	-	USS Sam Rayburn	ETR	SLBM	-	-	79.0W 28.5N (+/- 2.0)	500.0
1975 Nov 8	Poseidon C3	FOT-15?	-	USS Sam Rayburn	ETR	SLBM	-	-	79.0W 28.5N (+/- 2.0)	500.0
1980 Feb 13 2200:02	Poseidon C3	DASO	-	USS Sam Rayburn	ETR	SLBM	-	-	79.0W 28.5N (+/- 2.0)	500.0
1983 Mar 21	Poseidon C3	FOT	-	USS Sam Rayburn	ETR	SLBM	-	-	79.0W 28.5N (+/- 2.0)	500.0
1983 Mar 21 0254	Poseidon C3	FOT	-	USS Sam Rayburn	ETR	SLBM	-	-	79.0W 28.5N (+/- 2.0)	500.0



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**IV.1.22.29 USS Nathanael Greene**



Credit: USN

Rockets used: Polaris A3, Poseidon C3

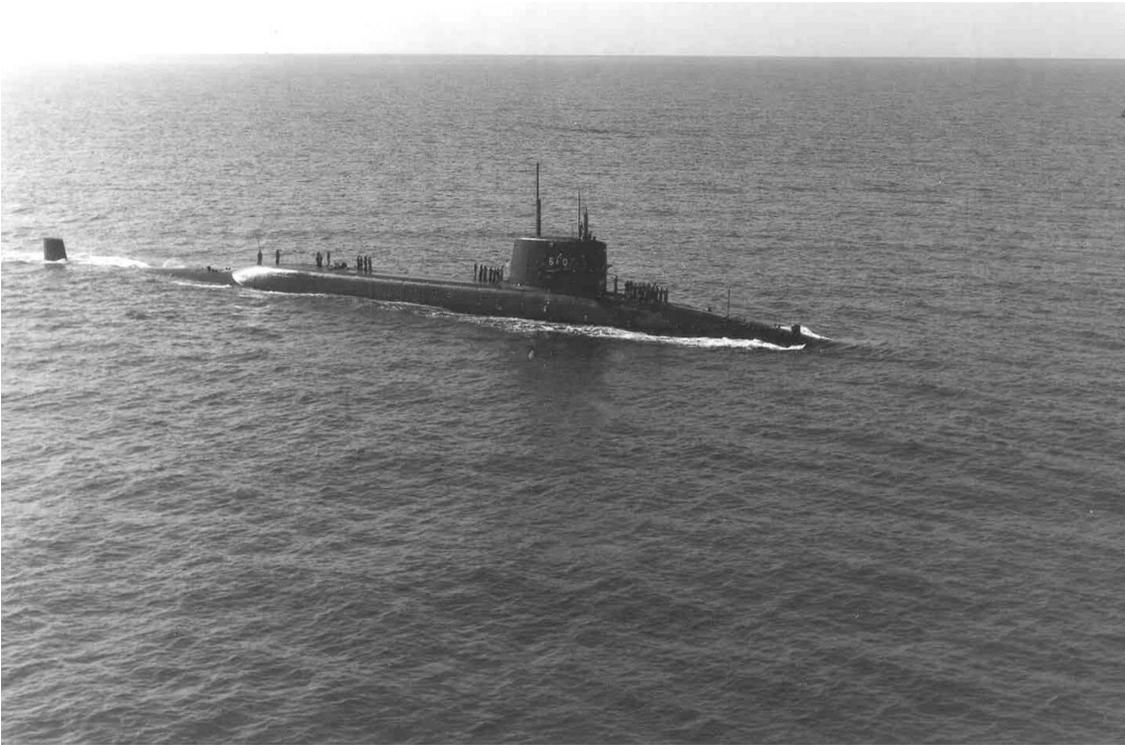
Updated: 2024 Nov 28 03:19:34

Launches: SSBN-636

Date	Rocket	Flight	Mission	PlatCode	Platform	Site	LP	AscSite	AsclP	Pos	Apogee
1965 Mar 15 1822:02	Polaris A3	Surface launch	-	SSBN-636	USS Nathanael Greene	ETR	SLBM	-	-	79.0W 28.5N (+/- 2.0)	1000.0
1965 Mar 15 1909:01	Polaris A3	-	-	SSBN-636	USS Nathanael Greene	ETR	SLBM	-	-	79.0W 28.5N (+/- 2.0)	1000.0
1965 Mar 29 1830:07	Polaris A3	-	-	SSBN-636	USS Nathanael Greene	ETR	SLBM	-	-	79.0W 28.5N (+/- 2.0)	1000.0
1971 Nov 4 1600	Poseidon C3	DASO-15 Surface	-	SSBN-636	USS Nathanael Greene	ETR	SLBM	-	-	79.0W 28.5N (+/- 2.0)	500.0
1971 Dec 17 2145	Poseidon C3	DASO-18	-	SSBN-636	USS Nathanael Greene	ETR	SLBM	-	-	79.0W 28.5N (+/- 2.0)	500.0
1976 Aug 20 2248	Poseidon C3	FOT-22?	-	SSBN-636	USS Nathanael Greene	ETR	SLBM	-	-	79.0W 28.5N (+/- 2.0)	500.0
1976 Aug 20 2250	Poseidon C3	FOT-22?	-	SSBN-636	USS Nathanael Greene	ETR	SLBM	-	-	79.0W 28.5N (+/- 2.0)	500.0
1981 Aug 22 0100	Poseidon C3	DASO	-	SSBN-636	USS Nathanael Greene	ETR	SLBM	-	-	79.0W 28.5N (+/- 2.0)	500.0

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### IV.1.22.30 USS Benjamin Franklin



Credit: USN

Rockets used: Polaris A3, Poseidon C3, Trident C-4

Updated: 2024 Nov 28 03:19:34

Launches: SSBN-640

Date	Rocket	Flight	Mission	PlatCode	Platform	Site	LP	AscSite	AsclP	Pos	Apogee
1965 Dec 6 1925:41	Polaris A3	OT/GT7 target	-	SSBN-640	USS Benjamin Franklin	ETR	SLBM	-	-	79.0W 28.5N (+/- 2.0)	1000.0
1965 Dec 20 1633:03	Polaris A3	-	-	SSBN-640	USS Benjamin Franklin	ETR	SLBM	-	-	79.0W 28.5N (+/- 2.0)	1000.0
1972 Jun 16 2315	Poseidon C3	DASO-20	-	SSBN-640	USS Benjamin Franklin	ETR	SLBM	-	-	79.0W 28.5N (+/- 2.0)	500.0
1976 Jun 26 0858	Poseidon C3	FOT-21?	-	SSBN-640	USS Benjamin Franklin	ETR	SLBM	-	-	79.0W 28.5N (+/- 2.0)	500.0
1976 Jun 26 0906	Poseidon C3	FOT-21?	-	SSBN-640	USS Benjamin Franklin	ETR	SLBM	-	-	79.0W 28.5N (+/- 2.0)	500.0
1981 Nov 15 1750	Trident C-4	Adv Evader 211	-	SSBN-640	USS Benjamin Franklin	ETR	SLBM	-	-	79.0W 28.5N (+/- 2.0)	20.0
1983 Feb 7	Trident C-4	FOT	-	SSBN-640	USS Benjamin Franklin	ETR	SLBM	-	-	79.0W 28.5N (+/- 2.0)	1000.0
1983 Feb 7 1342	Trident C-4	FOT	-	SSBN-640	USS Benjamin Franklin	ETR	SLBM	-	-	79.0W 28.5N (+/- 2.0)	1000.0
1989 Jan 23 1040:05	Trident C-4	DASO-31	-	SSBN-640	USS Benjamin Franklin	ETR	SLBM	-	-	79.0W 28.5N (+/- 2.0)	1000.0

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**IV.1.22.31 USS Simon Bolivar**



Credit: USN

Rockets used: Polaris A3, Poseidon C3, Trident C-4

Updated: 2024 Nov 28 03:19:34

Launches: SSBN-641

Date	Rocket	Flight	Mission	PlatCode	Platform	Site	LP	AscSite	AscLP	Pos	Apogee
1966 Jan 17 1642:04	Polaris A3	-	-	SSBN-641	USS Simon Bolivar	ETR	SLEB	-	-	79.0W 28.5N (+/- 2.0)	1000.0
1966 Jan 31 1630:03	Polaris A3	-	-	SSBN-641	USS Simon Bolivar	ETR	SLEB	-	-	79.0W 28.5N (+/- 2.0)	1000.0
1970 Apr 11	Polaris A3	OT	-	SSBN-641	USS Simon Bolivar	ETR	SLEB	-	-	79.0W 28.5N (+/- 2.0)	1000.0
1970 Apr 11	Polaris A3	OT	-	SSBN-641	USS Simon Bolivar	ETR	SLEB	-	-	79.0W 28.5N (+/- 2.0)	1000.0
1970 Apr 11	Polaris A3	OT	-	SSBN-641	USS Simon Bolivar	ETR	SLEB	-	-	79.0W 28.5N (+/- 2.0)	1000.0
1970 Apr 11	Polaris A3	OT	-	SSBN-641	USS Simon Bolivar	ETR	SLEB	-	-	79.0W 28.5N (+/- 2.0)	1000.0
1970 Apr 11	Polaris A3	OT	-	SSBN-641	USS Simon Bolivar	ETR	SLEB	-	-	79.0W 28.5N (+/- 2.0)	1000.0
1970 Apr 11	Polaris A3	OT	-	SSBN-641	USS Simon Bolivar	ETR	SLEB	-	-	79.0W 28.5N (+/- 2.0)	1000.0
1972 Jul 5 2315	Poseidon C3	DASO-21	-	SSBN-641	USS Simon Bolivar	ETR	SLEB	-	-	79.0W 28.5N (+/- 2.0)	500.0
1976 Aug 28 0942	Poseidon C3	FOT-23?	-	SSBN-641	USS Simon Bolivar	ETR	SLEB	-	-	79.0W 28.5N (+/- 2.0)	500.0
1976 Aug 28 0943	Poseidon C3	FOT-23?	-	SSBN-641	USS Simon Bolivar	ETR	SLEB	-	-	79.0W 28.5N (+/- 2.0)	500.0
1981 Apr 1 0910	Trident C-4	DASO-7?	-	SSBN-641	USS Simon Bolivar	ETR	SLEB	-	-	79.0W 28.5N (+/- 2.0)	500.0
1981 Aug 28 0003	Trident C-4	OT-7	-	SSBN-641	USS Simon Bolivar	ETR	SLEB	-	-	79.0W 28.5N (+/- 2.0)	1000.0
1981 Aug 28 0004	Trident C-4	OT-7	-	SSBN-641	USS Simon Bolivar	ETR	SLEB	-	-	79.0W 28.5N (+/- 2.0)	1000.0
1981 Aug 28 0004	Trident C-4	OT-7	-	SSBN-641	USS Simon Bolivar	ETR	SLEB	-	-	79.0W 28.5N (+/- 2.0)	1000.0
1981 Aug 28 0004	Trident C-4	OT-7	-	SSBN-641	USS Simon Bolivar	ETR	SLEB	-	-	79.0W 28.5N (+/- 2.0)	1000.0
1983 Aug 6	Trident C-4	FOT	-	SSBN-641	USS Simon Bolivar	ETR	SLEB	-	-	79.0W 28.5N (+/- 2.0)	1000.0
1983 Aug 6 0038	Trident C-4	FOT	-	SSBN-641	USS Simon Bolivar	ETR	SLEB	-	-	79.0W 28.5N (+/- 2.0)	1000.0
1988 Feb 6 1955	Trident C-4	DASO	-	SSBN-641	USS Simon Bolivar	ETR	SLEB	-	-	79.0W 28.5N (+/- 2.0)	2.0

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**IV.1.22.32 USS Kamehameha**



Credit: USN

Rockets used: Polaris A3, Poseidon C3

Updated: 2024 Nov 28 03:19:34

Launches: SSBN-642

Date	Rocket	Flight	Mission	PlatCode	Platform	Site	LP	AscSite	AscLP	Pos	Apogee
1966 Feb 24 1704:04	Polaris A3	-	-	SSBN-642	USS Kamehameha	ETR	SLBM	-	-	79.0W 28.5N (+/- 2.0)	1000.0
1966 Mar 10 1600:02	Polaris A3	-	-	SSBN-642	USS Kamehameha	ETR	SLBM	-	-	79.0W 28.5N (+/- 2.0)	1000.0
1972 Dec 15 2125	Poseidon C3	DAS0-23	-	SSBN-642	USS Kamehameha	ETR	SLBM	-	-	79.0W 28.5N (+/- 2.0)	500.0
1975 Nov 13	Poseidon C3	F0T-16?	-	SSBN-642	USS Kamehameha	ETR	SLBM	-	-	79.0W 28.5N (+/- 2.0)	500.0
1979 Mar 5 1847	Poseidon C3	OT-37	-	SSBN-642	USS Kamehameha	ETR	SLBM	-	-	79.0W 28.5N (+/- 2.0)	500.0
1979 Mar 5 1848	Poseidon C3	OT-37	-	SSBN-642	USS Kamehameha	ETR	SLBM	-	-	79.0W 28.5N (+/- 2.0)	500.0
1979 Mar 5 2007	Poseidon C3	OT-37	-	SSBN-642	USS Kamehameha	ETR	SLBM	-	-	79.0W 28.5N (+/- 2.0)	500.0
1979 Mar 5 2225	Poseidon C3	OT-37	-	SSBN-642	USS Kamehameha	ETR	SLBM	-	-	79.0W 28.5N (+/- 2.0)	500.0
1980 Jul 11 1601	Poseidon C3	F0T-41?	-	SSBN-642	USS Kamehameha	ETR	SLBM	-	-	79.0W 28.5N (+/- 2.0)	500.0
1980 Jul 11 1601	Poseidon C3	F0T-41?	-	SSBN-642	USS Kamehameha	ETR	SLBM	-	-	79.0W 28.5N (+/- 2.0)	500.0
1980 Jul 11 1602	Poseidon C3	F0T-41?	-	SSBN-642	USS Kamehameha	ETR	SLBM	-	-	79.0W 28.5N (+/- 2.0)	500.0
1980 Jul 11 1602	Poseidon C3	F0T-41?	-	SSBN-642	USS Kamehameha	ETR	SLBM	-	-	79.0W 28.5N (+/- 2.0)	500.0
1983 Apr 8 1900	Poseidon C3	DAS0	-	SSBN-642	USS Kamehameha	ETR	SLBM	-	-	79.0W 28.5N (+/- 2.0)	500.0
1990 Apr 30 1750	Poseidon C3	DAS0-61	-	SSBN-642	USS Kamehameha	ETR	SLBM	-	-	79.0W 28.5N (+/- 2.0)	500.0



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### IV.1.22.33 USS George Bancroft



Credit: USN

Rockets used: Polaris A3, Poseidon C3, Trident C-4

Updated: 2024 Nov 28 03:19:34

Launches: SSBN-643

Date	Rocket	Flight	Mission	PlatCode	Platform	Site	LP	AscSite	AsclP	Pos	Apogee
1966 Apr 7 1600	Polaris A3	1 of 2 failed	-	SSBN-643	USS George Bancroft	ETR	SLBM	-	-	79.0W 28.5N (+/- 2.0)	20.0
1966 Apr 7 1630	Polaris A3	-	-	SSBN-643	USS George Bancroft	ETR	SLBM	-	-	79.0W 28.5N (+/- 2.0)	1000.0
1966 Apr 21 1600	Polaris A3	-	-	SSBN-643	USS George Bancroft	ETR	SLBM	-	-	79.0W 28.5N (+/- 2.0)	1000.0
1966 Apr 21 1630	Polaris A3	-	-	SSBN-643	USS George Bancroft	ETR	SLBM	-	-	79.0W 28.5N (+/- 2.0)	1000.0
1966 Apr 21 1915:02	Polaris A3	-	-	SSBN-643	USS George Bancroft	ETR	SLBM	-	-	79.0W 28.5N (+/- 2.0)	1000.0
1971 Mar 24	Polaris A3	FOT	-	SSBN-643	USS George Bancroft	ETR	SLBM	-	-	79.0W 28.5N (+/- 2.0)	1000.0
1971 Mar 24	Polaris A3	FOT	-	SSBN-643	USS George Bancroft	ETR	SLBM	-	-	79.0W 28.5N (+/- 2.0)	1000.0
1971 Mar 24	Polaris A3	FOT	-	SSBN-643	USS George Bancroft	ETR	SLBM	-	-	79.0W 28.5N (+/- 2.0)	1000.0
1971 Mar 24	Polaris A3	FOT	-	SSBN-643	USS George Bancroft	ETR	SLBM	-	-	79.0W 28.5N (+/- 2.0)	1000.0
1971 Mar 24	Polaris A3	FOT	-	SSBN-643	USS George Bancroft	ETR	SLBM	-	-	79.0W 28.5N (+/- 2.0)	1000.0
1971 Mar 24	Polaris A3	FOT	-	SSBN-643	USS George Bancroft	ETR	SLBM	-	-	79.0W 28.5N (+/- 2.0)	1000.0
1971 Mar 24	Polaris A3	FOT	-	SSBN-643	USS George Bancroft	ETR	SLBM	-	-	79.0W 28.5N (+/- 2.0)	1000.0
1971 Mar 24	Polaris A3	FOT	-	SSBN-643	USS George Bancroft	ETR	SLBM	-	-	79.0W 28.5N (+/- 2.0)	1000.0
1972 Sep 25 2245	Poseidon C3	DASO-22	-	SSBN-643	USS George Bancroft	ETR	SLBM	-	-	79.0W 28.5N (+/- 2.0)	500.0
1976 Feb 3 2115	Poseidon C3	FOT-17?	-	SSBN-643	USS George Bancroft	ETR	SLBM	-	-	79.0W 28.5N (+/- 2.0)	500.0
1976 Feb 3 2116	Poseidon C3	FOT-17?	-	SSBN-643	USS George Bancroft	ETR	SLBM	-	-	79.0W 28.5N (+/- 2.0)	500.0
1976 Feb 3 2147	Poseidon C3	FOT-17?	-	SSBN-643	USS George Bancroft	ETR	SLBM	-	-	79.0W 28.5N (+/- 2.0)	500.0
1977 May 25 2257	Poseidon C3	OT-30	-	SSBN-643	USS George Bancroft	ETR	SLBM	-	-	79.0W 28.5N (+/- 2.0)	500.0
1977 May 25 2327	Poseidon C3	OT-30	-	SSBN-643	USS George Bancroft	ETR	SLBM	-	-	79.0W 28.5N (+/- 2.0)	500.0
1977 May 25 2327	Poseidon C3	OT-30	-	SSBN-643	USS George Bancroft	ETR	SLBM	-	-	79.0W 28.5N (+/- 2.0)	500.0
1982 Apr 24 1752	Trident C-4	DASO-12	-	SSBN-643	USS George Bancroft	ETR	SLBM	-	-	79.0W 28.5N (+/- 2.0)	1000.0
1989 Feb 4 0303:04	Trident C-4	DASO-32/JANUS	-	SSBN-643	USS George Bancroft	ETR	SLBM	-	-	79.0W 28.5N (+/- 2.0)	1000.0

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**IV.1.22.34 USS Lewis and Clark**



Credit: USN

Rockets used: Polaris A3, Poseidon C3

Updated: 2024 Nov 28 03:19:34

Launches: SSBN-644

Date	Rocket	Flight	Mission	PlatCode	Platform	Site	LP	AscSite	AsclP	Pos	Apogee
1966 Feb 17 1630:03	Polaris A3	-	-	SSBN-644	USS Lewis and Clark	ETR	SLBM	-	-	79.0W 28.5N (+/- 2.0)	1000.0
1966 Mar 3 1650:02	Polaris A3	- (SSBN 642?)	-	SSBN-644	USS Lewis and Clark	ETR	SLBM	-	-	79.0W 28.5N (+/- 2.0)	1000.0
1972 Dec 18 2115	Poseidon C3	DASO-24	-	SSBN-644	USS Lewis and Clark	ETR	SLBM	-	-	79.0W 28.5N (+/- 2.0)	500.0
1976 Apr 23 0946	Poseidon C3	FUT-19?	-	SSBN-644	USS Lewis and Clark	ETR	SLBM	-	-	79.0W 28.5N (+/- 2.0)	500.0
1976 Apr 23 0953	Poseidon C3	FUT-19?	-	SSBN-644	USS Lewis and Clark	ETR	SLBM	-	-	79.0W 28.5N (+/- 2.0)	500.0
1981 Jun 19 0115	Poseidon C3	FUT-43?	-	SSBN-644	USS Lewis and Clark	ETR	SLBM	-	-	79.0W 28.5N (+/- 2.0)	500.0
1981 Jun 19 0115	Poseidon C3	FUT-43?	-	SSBN-644	USS Lewis and Clark	ETR	SLBM	-	-	79.0W 28.5N (+/- 2.0)	500.0
1981 Jun 19 0116	Poseidon C3	FUT-43?	-	SSBN-644	USS Lewis and Clark	ETR	SLBM	-	-	79.0W 28.5N (+/- 2.0)	500.0
1984 Mar 19 1700	Poseidon C3	DASO	-	SSBN-644	USS Lewis and Clark	ETR	SLBM	-	-	79.0W 28.5N (+/- 2.0)	500.0
1985 Jun 13	Poseidon C3	FUT	-	SSBN-644	USS Lewis and Clark	ETR	SLBM	-	-	79.0W 28.5N (+/- 2.0)	500.0
1985 Jun 13	Poseidon C3	FUT	-	SSBN-644	USS Lewis and Clark	ETR	SLBM	-	-	79.0W 28.5N (+/- 2.0)	500.0
1985 Jun 13	Poseidon C3	FUT	-	SSBN-644	USS Lewis and Clark	ETR	SLBM	-	-	79.0W 28.5N (+/- 2.0)	500.0
1985 Jun 13 0608	Poseidon C3	FUT	-	SSBN-644	USS Lewis and Clark	ETR	SLBM	-	-	79.0W 28.5N (+/- 2.0)	500.0
1986 Nov 4	Poseidon C3	FUT	-	SSBN-644	USS Lewis and Clark	ETR	SLBM	-	-	79.0W 28.5N (+/- 2.0)	500.0
1986 Nov 4	Poseidon C3	FUT	-	SSBN-644	USS Lewis and Clark	ETR	SLBM	-	-	79.0W 28.5N (+/- 2.0)	500.0
1986 Nov 4 2059	Poseidon C3	FUT	-	SSBN-644	USS Lewis and Clark	ETR	SLBM	-	-	79.0W 28.5N (+/- 2.0)	500.0
1986 Nov 4 2059	Poseidon C3	FUT	-	SSBN-644	USS Lewis and Clark	ETR	SLBM	-	-	79.0W 28.5N (+/- 2.0)	500.0

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**IV.1.22.35 USS James K Polk**



Credit: USN

Rockets used: Polaris A3,Poseidon C3

Updated: 2024 Nov 28 03:19:34

Launches: SSBN-645

Date	Rocket	Flight	Mission	Platform	Site	LP	AscSite	AscLP	Pos	Apogee
1966 Jun 10 1609	Polaris A3	-	-	SSBN-645	ETR	SLBM	-	-	79.0W 28.5N (+/- 2.0)	1000.0
1966 Jun 23 1600	Polaris A3	-	-	SSBN-645	ETR	SLBM	-	-	79.0W 28.5N (+/- 2.0)	1000.0
1973 Jan 13 2145	Poseidon C3	DASO-25	-	SSBN-645	ETR	SLBM	-	-	79.0W 28.5N (+/- 2.0)	500.0
1975 Apr 19 0028:00	Poseidon C3	FOT-9	-	SSBN-645	ETR	SLBM	-	-	79.0W 28.5N (+/- 2.0)	500.0
1975 Apr 19 0033:34	Poseidon C3	FOT-9	-	SSBN-645	ETR	SLBM	-	-	79.0W 28.5N (+/- 2.0)	500.0
1975 Aug 29 1724:26	Poseidon C3	FOT-14?	-	SSBN-645	ETR	SLBM	-	-	79.0W 28.5N (+/- 2.0)	500.0
1975 Aug 29 1724:44	Poseidon C3	FOT-14?	-	SSBN-645	ETR	SLBM	-	-	79.0W 28.5N (+/- 2.0)	500.0
1978 Apr 24 0935	Poseidon C3	OT-33	-	SSBN-645	ETR	SLBM	-	-	79.0W 28.5N (+/- 2.0)	500.0
1978 Apr 24 0935	Poseidon C3	OT-33	-	SSBN-645	ETR	SLBM	-	-	79.0W 28.5N (+/- 2.0)	500.0
1978 Apr 24 0936	Poseidon C3	OT-33	-	SSBN-645	ETR	SLBM	-	-	79.0W 28.5N (+/- 2.0)	500.0
1978 Apr 24 0936	Poseidon C3	OT-33	-	SSBN-645	ETR	SLBM	-	-	79.0W 28.5N (+/- 2.0)	500.0
1979 Feb 19 0332?	Poseidon C3	FOT-36	-	SSBN-645	ETR	SLBM	-	-	79.0W 28.5N (+/- 2.0)	500.0
1979 Feb 19 0333	Poseidon C3	FOT-36	-	SSBN-645	ETR	SLBM	-	-	79.0W 28.5N (+/- 2.0)	500.0
1979 Feb 19 0335	Poseidon C3	FOT-36	-	SSBN-645	ETR	SLBM	-	-	79.0W 28.5N (+/- 2.0)	500.0
1979 Feb 19 0500	Poseidon C3	FOT-36	-	SSBN-645	ETR	SLBM	-	-	79.0W 28.5N (+/- 2.0)	500.0
1983 Jul 23 1915	Poseidon C3	DASO	-	SSBN-645	ETR	SLBM	-	-	79.0W 28.5N (+/- 2.0)	500.0
1984 Apr 9	Poseidon C3	FOT	-	SSBN-645	ETR	SLBM	-	-	79.0W 28.5N (+/- 2.0)	500.0
1984 Apr 9 0516	Poseidon C3	FOT	-	SSBN-645	ETR	SLBM	-	-	79.0W 28.5N (+/- 2.0)	500.0
1989 Mar 9 2133:02	Poseidon C3	DASO	-	SSBN-645	ETR	SLBM	-	-	79.0W 28.5N (+/- 2.0)	500.0

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**IV.1.22.36 USS George C Marshall**



Credit: USN

Rockets used: Polaris A3, Poseidon C3

Updated: 2024 Nov 28 03:19:34

Launches: SSBN-654

Date	Rocket	Flight	Mission	PlatCode	Platform	Site	LP	AscSite	AscLP	Pos	Apogee
1966 Jul 11 1600	Polaris A3	-	-	SSBN-654	USS George C Marshall	ETR	SLBM	-	-	79.0W 28.5N (+/- 2.0)	1000.0
1966 Jul 25 1600	Polaris A3	-	-	SSBN-654	USS George C Marshall	ETR	SLBM	-	-	79.0W 28.5N (+/- 2.0)	1000.0
1973 Apr 28 2248	Poseidon C3	DASO	-	SSBN-654	USS George C Marshall	ETR	SLBM	-	-	79.0W 28.5N (+/- 2.0)	500.0
1977 Mar 30 1202	Poseidon C3	OT-29	-	SSBN-654	USS George C Marshall	ETR	SLBM	-	-	79.0W 28.5N (+/- 2.0)	500.0
1977 Mar 30 1336	Poseidon C3	OT-29	-	SSBN-654	USS George C Marshall	ETR	SLBM	-	-	79.0W 28.5N (+/- 2.0)	500.0
1980 Feb 3 0112	Poseidon C3	FOT-38?	-	SSBN-654	USS George C Marshall	ETR	SLBM	-	-	79.0W 28.5N (+/- 2.0)	500.0
1980 Feb 3 0113	Poseidon C3	FOT-38?	-	SSBN-654	USS George C Marshall	ETR	SLBM	-	-	79.0W 28.5N (+/- 2.0)	500.0
1980 Feb 3 0113	Poseidon C3	FOT-38?	-	SSBN-654	USS George C Marshall	ETR	SLBM	-	-	79.0W 28.5N (+/- 2.0)	500.0
1980 Feb 4 0242	Poseidon C3	FOT-39?	-	SSBN-654	USS George C Marshall	ETR	SLBM	-	-	79.0W 28.5N (+/- 2.0)	500.0
1981 Jul 11 1448	Poseidon C3	FOT-44?	-	SSBN-654	USS George C Marshall	ETR	SLBM	-	-	79.0W 28.5N (+/- 2.0)	500.0
1981 Jul 11 1448	Poseidon C3	FOT-44?	-	SSBN-654	USS George C Marshall	ETR	SLBM	-	-	79.0W 28.5N (+/- 2.0)	500.0
1981 Jul 11 1449	Poseidon C3	FOT-44?	-	SSBN-654	USS George C Marshall	ETR	SLBM	-	-	79.0W 28.5N (+/- 2.0)	500.0
1981 Jul 11 1449	Poseidon C3	FOT-44?	-	SSBN-654	USS George C Marshall	ETR	SLBM	-	-	79.0W 28.5N (+/- 2.0)	500.0
1984 Jul 24 1700	Poseidon C3	DASO	-	SSBN-654	USS George C Marshall	ETR	SLBM	-	-	79.0W 28.5N (+/- 2.0)	500.0
1987 Oct 16	Poseidon C3	FOT	-	SSBN-654	USS George C Marshall	ETR	SLBM	-	-	79.0W 28.5N (+/- 2.0)	500.0
1987 Oct 16	Poseidon C3	FOT	-	SSBN-654	USS George C Marshall	ETR	SLBM	-	-	79.0W 28.5N (+/- 2.0)	500.0
1987 Oct 16	Poseidon C3	FOT	-	SSBN-654	USS George C Marshall	ETR	SLBM	-	-	79.0W 28.5N (+/- 2.0)	500.0
1987 Oct 16 1617	Poseidon C3	FOT	-	SSBN-654	USS George C Marshall	ETR	SLBM	-	-	79.0W 28.5N (+/- 2.0)	500.0



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**IV.1.22.37 USS Henry L Stimson**



Credit: USN

Rockets used: Polaris A3, Poseidon C3, Trident C-4

Updated: 2024 Nov 28 03:19:34

Launches: SSBN-655

Date	Rocket	Flight	Mission	Platform	Site	LP	AscSite	AscLP	Pos	Apogee
1966 Nov 14	Polaris A3	-	-	SSBN-655	ETR	SLBM	-	-	79.0W 28.5N (+/- 2.0)	1000.0
1966 Nov 14 1650:02	Polaris A3	-	-	SSBN-655	ETR	SLBM	-	-	79.0W 28.5N (+/- 2.0)	1000.0
1966 Nov 28 1615:02	Polaris A3	-	-	SSBN-655	ETR	SLBM	-	-	79.0W 28.5N (+/- 2.0)	1000.0
1966 Nov 28 1645:02	Polaris A3	-	-	SSBN-655	ETR	SLBM	-	-	79.0W 28.5N (+/- 2.0)	1000.0
1970 Sep 9	Polaris A3	FOT	-	SSBN-655	ETR	SLBM	-	-	79.0W 28.5N (+/- 2.0)	1000.0
1970 Sep 9	Polaris A3	FOT	-	SSBN-655	ETR	SLBM	-	-	79.0W 28.5N (+/- 2.0)	1000.0
1970 Sep 9	Polaris A3	FOT	-	SSBN-655	ETR	SLBM	-	-	79.0W 28.5N (+/- 2.0)	1000.0
1970 Sep 9	Polaris A3	FOT	-	SSBN-655	ETR	SLBM	-	-	79.0W 28.5N (+/- 2.0)	1000.0
1970 Sep 9	Polaris A3	FOT	-	SSBN-655	ETR	SLBM	-	-	79.0W 28.5N (+/- 2.0)	1000.0
1970 Sep 9	Polaris A3	FOT	-	SSBN-655	ETR	SLBM	-	-	79.0W 28.5N (+/- 2.0)	1000.0
1970 Sep 9	Polaris A3	FOT	-	SSBN-655	ETR	SLBM	-	-	79.0W 28.5N (+/- 2.0)	1000.0
1970 Sep 9	Polaris A3	FOT	-	SSBN-655	ETR	SLBM	-	-	79.0W 28.5N (+/- 2.0)	1000.0
1973 May 9 2325	Polaris A3	FOT	-	SSBN-655	ETR	SLBM	-	-	79.0W 28.5N (+/- 2.0)	1000.0
1976 Nov 23	Poseidon C3	DASO	-	SSBN-655	ETR	SLBM	-	-	79.0W 28.5N (+/- 2.0)	1000.0
1976 Nov 23	Poseidon C3	FOT-25?	-	SSBN-655	WTR	LP5	-	-	119.0W 33.0W (+/- 3.0)	500.0
1976 Nov 23	Poseidon C3	FOT-25?	-	SSBN-655	WTR	LP5	-	-	119.0W 33.0W (+/- 3.0)	500.0
1980 Mar 26 1219	Trident C-4	DASO-4?	-	SSBN-655	ETR	SLBM	-	-	79.0W 28.5N (+/- 2.0)	1000.0
1980 Aug 27 0219	Trident C-4	OT-5	-	SSBN-655	ETR	SLBM	-	-	79.0W 28.5N (+/- 2.0)	1000.0
1980 Aug 27 0220	Trident C-4	OT-5	-	SSBN-655	ETR	SLBM	-	-	79.0W 28.5N (+/- 2.0)	1000.0
1980 Aug 27 0220	Trident C-4	OT-5	-	SSBN-655	ETR	SLBM	-	-	79.0W 28.5N (+/- 2.0)	1000.0
1984 Dec 15 2044	Trident C-4	DASO	-	SSBN-655	ETR	SLBM	-	-	79.0W 28.5N (+/- 2.0)	1000.0
1986 Jul 28	Trident C-4	FOT	-	SSBN-655	ETR	SLBM	-	-	79.0W 28.5N (+/- 2.0)	1000.0
1986 Jul 28 2155	Trident C-4	FOT	-	SSBN-655	ETR	SLBM	-	-	79.0W 28.5N (+/- 2.0)	1000.0
1992 Apr 8	Trident C-4	FCET-40	-	SSBN-655	ETR	LP5	-	-	79.0W 28.5N (+/- 2.0)	1000.0
1992 Apr 8	Trident C-4	FCET-40	-	SSBN-655	ETR	LP5	-	-	79.0W 28.5N (+/- 2.0)	1000.0

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### IV.1.22.38 USS George Washington Carver



Credit: USN

Rockets used: Polaris A3, Poseidon C3

Updated: 2024 Nov 28 03:19:34

Launches: SSBN-656

Date	Rocket	Flight	Mission	Platform	Site	LP	AscSite	AscLP	Pos	Apogee
1966 Sep 1 1700:00	Polaris A3	-	-	USS George Washington	Carver	SLBM	-	-	79.0W 28.5N (+/- 2.0)	1000.0
1967 Nov 1	Polaris A3	FOT	-	USS George Washington	Carver	SLBM	-	-	79.0W 28.5N (+/- 2.0)	1000.0
1967 Nov 1	Polaris A3	FOT	-	USS George Washington	Carver	SLBM	-	-	79.0W 28.5N (+/- 2.0)	1000.0
1967 Nov 1	Polaris A3	FOT	-	USS George Washington	Carver	SLBM	-	-	79.0W 28.5N (+/- 2.0)	1000.0
1973 May 19 2300	Poseidon C3	DASO	-	USS George Washington	Carver	SLBM	-	-	79.0W 28.5N (+/- 2.0)	500.0
1975 Jun 24	Poseidon C3	FOT-12?	-	USS George Washington	Carver	SLBM	-	-	79.0W 28.5N (+/- 2.0)	500.0
1975 Jun 24	Poseidon C3	FOT-12?	-	USS George Washington	Carver	SLBM	-	-	79.0W 28.5N (+/- 2.0)	500.0
1976 Apr 20 2008	Poseidon C3	FOT-18?	-	USS George Washington	Carver	SLBM	-	-	79.0W 28.5N (+/- 2.0)	500.0
1976 Apr 20 2009	Poseidon C3	FOT-18?	-	USS George Washington	Carver	SLBM	-	-	79.0W 28.5N (+/- 2.0)	500.0
1980 Apr 21 2147	Poseidon C3	FOT-40?	-	USS George Washington	Carver	SLBM	-	-	79.0W 28.5N (+/- 2.0)	500.0
1980 Apr 21 2147	Poseidon C3	FOT-40?	-	USS George Washington	Carver	SLBM	-	-	79.0W 28.5N (+/- 2.0)	500.0
1980 Apr 21 2147	Poseidon C3	FOT-40?	-	USS George Washington	Carver	SLBM	-	-	79.0W 28.5N (+/- 2.0)	500.0
1980 Apr 21 2148	Poseidon C3	FOT-40?	-	USS George Washington	Carver	SLBM	-	-	79.0W 28.5N (+/- 2.0)	500.0
1985 Aug 10 1700	Poseidon C3	DASO	-	USS George Washington	Carver	SLBM	-	-	79.0W 28.5N (+/- 2.0)	500.0

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### IV.1.22.39 USS Francis Scott Key



Credit: USN

Rockets used: Polaris A3, Poseidon C3, Trident C-4

Updated: 2024 Nov 28 03:19:34

Launches: SSBN-657

Date	Rocket	Flight	Mission	PlatCode	Platform	Site	LP	AscSite	AsclP	Pos	Apogee
1967 Apr 3 2325:01	Polaris A3	-	-	SSBN-657	USS Francis Scott Key	ETR	SLBM	-	-	79.0W 28.5N (+/- 2.0)	1000.0
1968 Apr 26	Polaris A3	FOT	-	SSBN-657	USS Francis Scott Key	ETR	SLBM	-	-	79.0W 28.5N (+/- 2.0)	1000.0
1968 Apr 26	Polaris A3	FOT	-	SSBN-657	USS Francis Scott Key	ETR	SLBM	-	-	79.0W 28.5N (+/- 2.0)	1000.0
1968 Apr 26	Polaris A3	FOT	-	SSBN-657	USS Francis Scott Key	ETR	SLBM	-	-	79.0W 28.5N (+/- 2.0)	1000.0
1970 May 11	Polaris A3	OT	-	SSBN-657	USS Francis Scott Key	ETR	SLBM	-	-	79.0W 28.5N (+/- 2.0)	1000.0
1970 May 11	Polaris A3	OT	-	SSBN-657	USS Francis Scott Key	ETR	SLBM	-	-	79.0W 28.5N (+/- 2.0)	1000.0
1970 May 11	Polaris A3	OT	-	SSBN-657	USS Francis Scott Key	ETR	SLBM	-	-	79.0W 28.5N (+/- 2.0)	1000.0
1970 May 11	Polaris A3	OT	-	SSBN-657	USS Francis Scott Key	ETR	SLBM	-	-	79.0W 28.5N (+/- 2.0)	1000.0
1970 May 11	Polaris A3	OT	-	SSBN-657	USS Francis Scott Key	ETR	SLBM	-	-	79.0W 28.5N (+/- 2.0)	1000.0
1970 May 11	Polaris A3	OT	-	SSBN-657	USS Francis Scott Key	ETR	SLBM	-	-	79.0W 28.5N (+/- 2.0)	1000.0
1973 Sep 15 2215	Poseidon C3	DASO	-	SSBN-657	USS Francis Scott Key	ETR	SLBM	-	-	79.0W 28.5N (+/- 2.0)	500.0
1979 Apr 10 1000	Trident C-4	PEM-1	-	SSBN-657	USS Francis Scott Key	ETR	SLBM	-	-	79.0W 28.5N (+/- 2.0)	1000.0
1979 Jun 8 1837	Trident C-4	PEM-3	-	SSBN-657	USS Francis Scott Key	ETR	SLBM	-	-	79.0W 28.5N (+/- 2.0)	1000.0
1979 Jun 14 1800	Trident C-4	PEM-2	-	SSBN-657	USS Francis Scott Key	ETR	SLBM	-	-	79.0W 28.5N (+/- 2.0)	1000.0
1979 Jul 14 1800	Trident C-4	PEM-4	-	SSBN-657	USS Francis Scott Key	ETR	SLBM	-	-	79.0W 28.5N (+/- 2.0)	1000.0
1979 Jul 22 1800	Trident C-4	Imp. Evader 210	-	SSBN-657	USS Francis Scott Key	ETR	SLBM	-	-	79.0W 28.5N (+/- 2.0)	1000.0
1979 Jul 31 0215	Trident C-4	PEM-7	-	SSBN-657	USS Francis Scott Key	ETR	SLBM	-	-	79.0W 28.5N (+/- 2.0)	1000.0
1979 Jul 31 0433	Trident C-4	PEM-6	-	SSBN-657	USS Francis Scott Key	ETR	SLBM	-	-	79.0W 28.5N (+/- 2.0)	1000.0
1979 Aug 29 0030	Trident C-4	DASO-1	-	SSBN-657	USS Francis Scott Key	ETR	SLBM	-	-	79.0W 28.5N (+/- 2.0)	1000.0
1979 Sep 26 2344	Trident C-4	DASO-2?	-	SSBN-657	USS Francis Scott Key	ETR	SLBM	-	-	79.0W 28.5N (+/- 2.0)	1000.0
1980 Feb 28 1313	Trident C-4	OT-1	-	SSBN-657	USS Francis Scott Key	ETR	SLBM	-	-	79.0W 28.5N (+/- 2.0)	1000.0
1980 Feb 28 1313	Trident C-4	OT-1	-	SSBN-657	USS Francis Scott Key	ETR	SLBM	-	-	79.0W 28.5N (+/- 2.0)	1000.0
1980 Feb 28 1415	Trident C-4	OT-1	-	SSBN-657	USS Francis Scott Key	ETR	SLBM	-	-	79.0W 28.5N (+/- 2.0)	1000.0
1980 Feb 28 1415	Trident C-4	OT-1	-	SSBN-657	USS Francis Scott Key	ETR	SLBM	-	-	79.0W 28.5N (+/- 2.0)	1000.0
1980 May 28 0623	Trident C-4	OT-3	-	SSBN-657	USS Francis Scott Key	ETR	SLBM	-	-	79.0W 28.5N (+/- 2.0)	1000.0
1980 May 28 0624	Trident C-4	OT-3	-	SSBN-657	USS Francis Scott Key	ETR	SLBM	-	-	79.0W 28.5N (+/- 2.0)	1000.0
1980 May 28 0652	Trident C-4	OT-3	-	SSBN-657	USS Francis Scott Key	ETR	SLBM	-	-	79.0W 28.5N (+/- 2.0)	1000.0
1980 May 28 0652	Trident C-4	OT-3	-	SSBN-657	USS Francis Scott Key	ETR	SLBM	-	-	79.0W 28.5N (+/- 2.0)	1000.0
1985 Dec 7 1530	Trident C-4	DASO	-	SSBN-657	USS Francis Scott Key	ETR	SLBM	-	-	79.0W 28.5N (+/- 2.0)	1000.0
1991 Jun 19 1800:00	Trident C-4	-	-	SSBN-657	USS Francis Scott Key	ETR	SLBM	-	-	79.0W 28.5N (+/- 2.0)	1000.0

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#### IV.1.22.40 USS Mariano G Vallejo



Credit: USN

Rockets used: Polaris A3, Poseidon C3, Trident C-4

Updated: 2024 Nov 28 03:19:34

Launches: SSBN-658

Date	Rocket	Flight	Mission	PlatCode	Platform	Site	LP	AscSite	AscLP	Pos	Apogee
1967 Mar 6 0245:01	Polaris A3	-	-	SSBN-658	USS Mariano G Vallejo	ETR	SLEB	-	-	79.0W 28.5N (+/- 2.0)	1000.0
1974 Apr 12 2324	Poseidon C3	DASO	-	SSBN-658	USS Mariano G Vallejo	ETR	SLEB	-	-	79.0W 28.5N (+/- 2.0)	500.0
1974 Nov 22	Poseidon C3	FUT-8	-	SSBN-658	USS Mariano G Vallejo	ETR	SLEB	-	-	79.0W 28.5N (+/- 2.0)	500.0
1974 Nov 22	Poseidon C3	FUT-8	-	SSBN-658	USS Mariano G Vallejo	ETR	SLEB	-	-	79.0W 28.5N (+/- 2.0)	500.0
1974 Nov 22	Poseidon C3	FUT-8	-	SSBN-658	USS Mariano G Vallejo	ETR	SLEB	-	-	79.0W 28.5N (+/- 2.0)	500.0
1974 Nov 22	Poseidon C3	FUT-8	-	SSBN-658	USS Mariano G Vallejo	ETR	SLEB	-	-	79.0W 28.5N (+/- 2.0)	500.0
1978 May 21	Poseidon C3	OT-35	-	SSBN-658	USS Mariano G Vallejo	ETR	SLEB	-	-	79.0W 28.5N (+/- 2.0)	500.0
1978 May 21 1222	Poseidon C3	OT-35	-	SSBN-658	USS Mariano G Vallejo	ETR	SLEB	-	-	79.0W 28.5N (+/- 2.0)	500.0
1978 May 21 1223	Poseidon C3	OT-35	-	SSBN-658	USS Mariano G Vallejo	ETR	SLEB	-	-	79.0W 28.5N (+/- 2.0)	500.0
1978 May 21 1255	Poseidon C3	OT-35	-	SSBN-658	USS Mariano G Vallejo	ETR	SLEB	-	-	79.0W 28.5N (+/- 2.0)	500.0
1979 Dec 13 1730	Trident C-4	DASO-3?	-	SSBN-658	USS Mariano G Vallejo	ETR	SLEB	-	-	79.0W 28.5N (+/- 2.0)	1000.0
1980 Apr 1 1236	Trident C-4	OT-2	-	SSBN-658	USS Mariano G Vallejo	ETR	SLEB	-	-	79.0W 28.5N (+/- 2.0)	1000.0
1980 Apr 2 1239	Trident C-4	OT-2	-	SSBN-658	USS Mariano G Vallejo	ETR	SLEB	-	-	79.0W 28.5N (+/- 2.0)	1000.0
1980 Apr 2 1423	Trident C-4	OT-2	-	SSBN-658	USS Mariano G Vallejo	ETR	SLEB	-	-	79.0W 28.5N (+/- 2.0)	1000.0
1980 Apr 2 1423	Trident C-4	OT-2	-	SSBN-658	USS Mariano G Vallejo	ETR	SLEB	-	-	79.0W 28.5N (+/- 2.0)	1000.0
1980 Jun 27 0539	Trident C-4	OT-4	-	SSBN-658	USS Mariano G Vallejo	ETR	SLEB	-	-	79.0W 28.5N (+/- 2.0)	1000.0
1980 Jun 27 0539	Trident C-4	OT-4	-	SSBN-658	USS Mariano G Vallejo	ETR	SLEB	-	-	79.0W 28.5N (+/- 2.0)	1000.0
1980 Jun 27 0553	Trident C-4	OT-4	-	SSBN-658	USS Mariano G Vallejo	ETR	SLEB	-	-	79.0W 28.5N (+/- 2.0)	1000.0
1980 Jun 27 0553	Trident C-4	OT-4	-	SSBN-658	USS Mariano G Vallejo	ETR	SLEB	-	-	79.0W 28.5N (+/- 2.0)	1000.0
1982 Mar 17	Trident C-4	OT-8	-	SSBN-658	USS Mariano G Vallejo	ETR	SLEB	-	-	79.0W 28.5N (+/- 2.0)	1000.0
1982 Mar 17	Trident C-4	OT-8	-	SSBN-658	USS Mariano G Vallejo	ETR	SLEB	-	-	79.0W 28.5N (+/- 2.0)	1000.0
1982 Mar 17	Trident C-4	OT-8	-	SSBN-658	USS Mariano G Vallejo	ETR	SLEB	-	-	79.0W 28.5N (+/- 2.0)	1000.0
1984 Oct 9 2105	Trident C-4	DASO	-	SSBN-658	USS Mariano G Vallejo	ETR	SLEB	-	-	79.0W 28.5N (+/- 2.0)	1000.0
1988 Apr 15	Trident C-4	FUT	-	SSBN-658	USS Mariano G Vallejo	ETR	SLEB	-	-	79.0W 28.5N (+/- 2.0)	1000.0
1988 Apr 15	Trident C-4	FUT	-	SSBN-658	USS Mariano G Vallejo	ETR	SLEB	-	-	79.0W 28.5N (+/- 2.0)	1000.0
1988 Apr 15 0411	Trident C-4	FUT	-	SSBN-658	USS Mariano G Vallejo	ETR	SLEB	-	-	79.0W 28.5N (+/- 2.0)	1000.0
1988 Apr 15 0526	Trident C-4	FUT	-	SSBN-658	USS Mariano G Vallejo	ETR	SLEB	-	-	79.0W 28.5N (+/- 2.0)	1000.0
1991 May 10	Trident C-4	FCET	-	SSBN-658	USS Mariano G Vallejo	ETR	LP5	-	-	79.0W 28.5N (+/- 2.0)	1000.0
1991 May 10	Trident C-4	FCET	-	SSBN-658	USS Mariano G Vallejo	ETR	LP5	-	-	79.0W 28.5N (+/- 2.0)	1000.0
1991 May 10	Trident C-4	FCET	-	SSBN-658	USS Mariano G Vallejo	ETR	LP5	-	-	79.0W 28.5N (+/- 2.0)	1000.0
1991 May 10	Trident C-4	FCET	-	SSBN-658	USS Mariano G Vallejo	ETR	LP5	-	-	79.0W 28.5N (+/- 2.0)	1000.0



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#### IV.1.22.41 USS Will Rogers



Credit: USN

Rockets used: Polaris A3, Poseidon C3

Updated: 2024 Nov 28 03:19:34

Launches: SSBN-659

Date	Rocket	Flight	Mission	PlatCode	Platform	Site	LP	AscSite	AscLP	Pos	Apogee
1967 Jul 31 1518:04	Polaris A3	-	-	SSBN-659	USS Will Rogers	ETR	SLBM	-	-	79.0W 28.5N (+/- 2.0)	1000.0
1971 Mar 19	Polaris A3	F0T	-	SSBN-659	USS Will Rogers	ETR	SLBM	-	-	79.0W 28.5N (+/- 2.0)	1000.0
1971 Mar 19	Polaris A3	F0T	-	SSBN-659	USS Will Rogers	ETR	SLBM	-	-	79.0W 28.5N (+/- 2.0)	1000.0
1971 Mar 19	Polaris A3	F0T	-	SSBN-659	USS Will Rogers	ETR	SLBM	-	-	79.0W 28.5N (+/- 2.0)	1000.0
1971 Mar 19	Polaris A3	F0T	-	SSBN-659	USS Will Rogers	ETR	SLBM	-	-	79.0W 28.5N (+/- 2.0)	1000.0
1971 Mar 19	Polaris A3	F0T	-	SSBN-659	USS Will Rogers	ETR	SLBM	-	-	79.0W 28.5N (+/- 2.0)	1000.0
1974 May 15 2300	Poseidon C3	DAS0	-	SSBN-659	USS Will Rogers	ETR	SLBM	-	-	79.0W 28.5N (+/- 2.0)	500.0
1974 May 15 2345	Poseidon C3	DAS0	-	SSBN-659	USS Will Rogers	ETR	SLBM	-	-	79.0W 28.5N (+/- 2.0)	500.0
1974 Oct 22	Poseidon C3	F0T-7	-	SSBN-659	USS Will Rogers	ETR	SLBM	-	-	79.0W 28.5N (+/- 2.0)	500.0
1974 Oct 22	Poseidon C3	F0T-7	-	SSBN-659	USS Will Rogers	ETR	SLBM	-	-	79.0W 28.5N (+/- 2.0)	500.0
1974 Oct 22	Poseidon C3	F0T-7	-	SSBN-659	USS Will Rogers	ETR	SLBM	-	-	79.0W 28.5N (+/- 2.0)	500.0
1986 May 20 1645	Poseidon C3	DAS0	-	SSBN-659	USS Will Rogers	ETR	SLBM	-	-	79.0W 28.5N (+/- 2.0)	500.0

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## **IV.1.23 US Navy Trident Submarines**

Updated: 2024 Nov 28 03:19:34

US Navy Trident Submarines

Ship	Transliteration	Image	CODE	Agency	Class	ClassID	AltID	Active
USS Ohio	USS Ohio		SSBN-726	USN	Ohio	SSBN-726	-	1979 - 2003
USS Michigan	USS Michigan		SSBN-727	USN	Ohio	SSBN-727	-	1980 - 2007
USS Florida	USS Florida		SSBN-728	USN	Ohio	SSBN-728	-	1981 - 2003
USS Georgia	USS Georgia		SSBN-729	USN	Ohio	SSBN-729	-	1982 - 2003
USS Henry M. Jackson	USS Henry M. Jackson		SSBN-730	USN	Ohio	SSBN-730	-	1983 - -
USS Alabama	USS Alabama		SSBN-731	USN	Ohio	SSBN-731	-	1984 - -
USS Alaska	USS Alaska		SSBN-732	USN	Ohio	SSBN-732	-	1985 - -
USS Nevada	USS Nevada		SSBN-733	USN	Ohio	SSBN-733	-	1985 - -
USS Tennessee	USS Tennessee		SSBN-734	USN	Ohio	SSBN-734	-	1986 - -
USS Pennsylvania	USS Pennsylvania		SSBN-735	USN	Ohio	SSBN-735	-	1988 - -
USS West Virginia	USS West Virginia		SSBN-736	USN	Ohio	SSBN-736	-	1989 - -

US Navy Trident Submarines

Ship	Transliteration	Image	CODE	Agency	Class	ClassID	AltID	Active
USS Kentucky	USS Kentucky		SSBN-737	USN	Ohio	SSBN-737	-	1990 --
USS Maryland	USS Maryland		SSBN-738	USN	Ohio	SSBN-738	-	1991 --
USS Nebraska	USS Nebraska		SSBN-739	USN	Ohio	SSBN-739	-	1992 --
USS Rhode Island	USS Rhode Island		SSBN-740	USN	Ohio	SSBN-740	-	1993 --
USS Maine	USS Maine		SSBN-741	USN	Ohio	SSBN-741	-	1994 --
USS Wyoming	USS Wyoming		SSBN-742	USN	Ohio	SSBN-742	-	1995 --
USS Louisiana	USS Louisiana		SSBN-743	USN	Ohio	SSBN-743	-	1996 --

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### IV.1.23.1 USS Ohio



Credit: H. Gerwein

Rockets used: Trident C-4

Updated: 2024 Nov 28 03:19:34

Launches: SSBN-726

Date	Rocket	Flight	Mission	Platform	Site	LP	AscSite	AsclP	Pos	Apogee
1982 Jan 17 1411	Trident C-4	DASO-9	-	SSBN-726	USS Ohio	SLBM	-	-	79.0W 28.5N (+/- 2.0)	1000.0
1982 Mar 13 1700	Trident C-4	DASO-11	-	SSBN-726	USS Ohio	SLBM	-	-	79.0W 28.5N (+/- 2.0)	1000.0
1983 Sep?	Trident C-4	FOT	-	SSBN-726	USS Ohio	LP5	-	-	119.0W 33.0N (+/- 3.0)	1000.0
1983 Sep?	Trident C-4	FOT	-	SSBN-726	USS Ohio	LP5	-	-	119.0W 33.0N (+/- 3.0)	1000.0
1983 Sep?	Trident C-4	FOT	-	SSBN-726	USS Ohio	LP5	-	-	119.0W 33.0N (+/- 3.0)	1000.0
1983 Sep?	Trident C-4	FOT	-	SSBN-726	USS Ohio	LP5	-	-	119.0W 33.0N (+/- 3.0)	1000.0
1984 Oct 22 2009:03	Trident C-4	-	-	SSBN-726	USS Ohio	D4	-	-	79.0W 28.5N (+/- 2.0)	1000.0
1996 May 16 2148:55	Trident C-4	-	-	SSBN-726	USS Ohio	SLBM	-	-	79.0W 28.5N (+/- 2.0)	1000.0
1996 May 16 2149:12	Trident C-4	-	-	SSBN-726	USS Ohio	SLBM	-	-	79.0W 28.5N (+/- 2.0)	1000.0
1996 May 16 2250:13	Trident C-4	-	-	SSBN-726	USS Ohio	SLBM	-	-	79.0W 28.5N (+/- 2.0)	1000.0
1996 May 16 2250:31	Trident C-4	- 200?	-	SSBN-726	USS Ohio	SLBM	-	-	79.0W 28.5N (+/- 2.0)	1000.0
2001 Dec 9 2011	Trident C-4	OT-III (218)	-	SSBN-726	USS Ohio	LP5	-	-	79.0W 28.5N (+/- 2.0)	1000.0
2001 Dec 9 2011	Trident C-4	OT-III	-	SSBN-726	USS Ohio	LP5	-	-	79.0W 28.5N (+/- 2.0)	1000.0
2001 Dec 9 2136	Trident C-4	OT-III	-	SSBN-726	USS Ohio	LP5	-	-	79.0W 28.5N (+/- 2.0)	1000.0
2001 Dec 9 2136	Trident C-4	OT-III	-	SSBN-726	USS Ohio	LP5	-	-	79.0W 28.5N (+/- 2.0)	1000.0
2001 Dec 18 2011	Trident C-4	OT-III (221)	-	SSBN-726	USS Ohio	LP5	-	-	79.0W 28.5N (+/- 2.0)	1000.0
2001 Dec 18 2011	Trident C-4	OT-III (223)	-	SSBN-726	USS Ohio	LP5	-	-	79.0W 28.5N (+/- 2.0)	1000.0
2001 Dec 18 2011	Trident C-4	OT-III (224)	-	SSBN-726	USS Ohio	LP5	-	-	79.0W 28.5N (+/- 2.0)	1000.0
2001 Dec 18 2204	Trident C-4	OT-III (225)	-	SSBN-726	USS Ohio	LP5	-	-	79.0W 28.5N (+/- 2.0)	1000.0
2001 Dec 18 2204	Trident C-4	OT-III	-	SSBN-726	USS Ohio	LP5	-	-	79.0W 28.5N (+/- 2.0)	1000.0

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### IV.1.23.2 USS Michigan



Credit: US Navy

Rockets used: Trident C-4

Updated: 2024 Nov 28 03:19:34

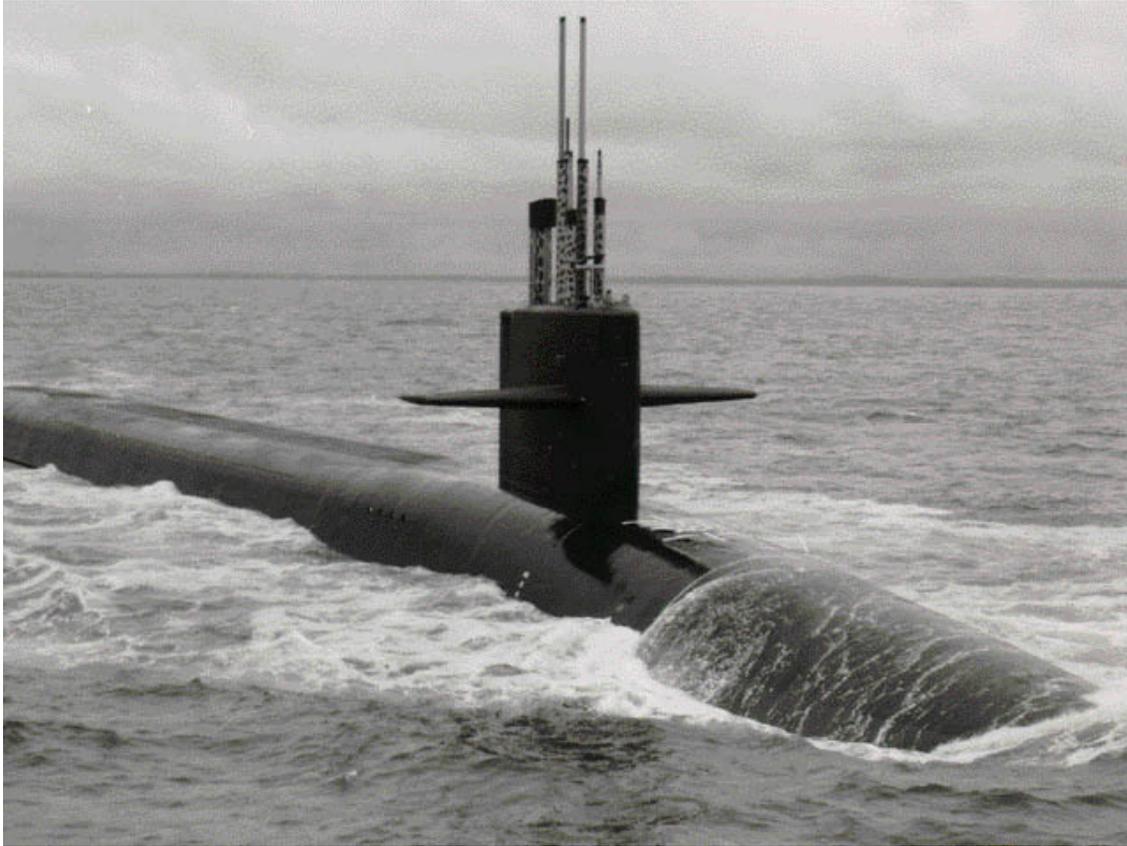


Launches: SBN-727

Date	Rocket	Flight	Mission	PlatCode	Platform	Site	LP	AscSite	AsCLP	Pos	Apogee
1982 Nov 21 1734	Trident C-4	Adv Evader211A	-	SBN-727	USS Michigan	ETR	SLBM	-	-	79.0W 28.5N (+/- 2.0)	1000.0
1995 Oct 29 2100:03	Trident C-4	-	-	SBN-727	USS Michigan	ETR	SLBM	-	-	79.0W 28.5N (+/- 2.0)	1000.0

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### IV.1.23.3 USS Florida



Credit: USN

Rockets used: Trident C-4

Updated: 2024 Nov 28 03:19:34

Launches: SSBN-728

Date	Rocket	Flight	Mission	PlatCode	Platform	Site	LP	AscSite	AscLP	Pos	Apogee
1983 Aug 21 1800	Trident C-4	DASO	-	SSBN-728	USS Florida	ETR	SLBM	-	-	79.0W 28.5N (+/- 2.0)	1000.0
1983 Oct 3 1834	Trident C-4	DASO	-	SSBN-728	USS Florida	ETR	SLBM	-	-	79.0W 28.5N (+/- 2.0)	1000.0
1995 Mar 6 2007:32	Trident C-4	- 190?	-	SSBN-728	USS Florida	ETR	SLBM	-	-	79.0W 28.5N (+/- 2.0)	1000.0
1995 Mar 6 2007:49	Trident C-4	-	-	SSBN-728	USS Florida	ETR	SLBM	-	-	79.0W 28.5N (+/- 2.0)	1000.0
1995 Mar 6 2103:25	Trident C-4	-	-	SSBN-728	USS Florida	ETR	SLBM	-	-	79.0W 28.5N (+/- 2.0)	1000.0
1995 Mar 6 2103:42	Trident C-4	-	-	SSBN-728	USS Florida	ETR	SLBM	-	-	79.0W 28.5N (+/- 2.0)	1000.0
1995 Mar 14 1650:01	Trident C-4	-	-	SSBN-728	USS Florida	ETR	SLBM	-	-	79.0W 28.5N (+/- 2.0)	1000.0
1995 Mar 14 1650:20	Trident C-4	-	-	SSBN-728	USS Florida	ETR	SLBM	-	-	79.0W 28.5N (+/- 2.0)	1000.0
1996 Oct 2 2230:03	Trident C-4	-	-	SSBN-728	USS Florida	ETR	SLBM	-	-	79.0W 28.5N (+/- 2.0)	1000.0

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#### IV.1.23.4 USS Georgia



Credit: USN

Rockets used: Trident C-4

Updated: 2024 Nov 28 03:19:34

Launches: SSBN-729

Date	Rocket	Flight	Mission	PlatCode	Platform	Site	LP	AscSite	AscLP	Pos	Apogee
1984 Apr 7 0720	Trident C-4	DASO	-	SSBN-729	USS Georgia	ETR	SLBM	-	-	79.0W 28.5N (+/- 2.0)	1000.0
1984 Mar 28 1806:55	Trident C-4	- 181?	-	SSBN-729	USS Georgia	ETR	LP5	-	-	79.0W 28.5N (+/- 2.0)	1000.0
1984 Mar 28 1807?	Trident C-4	-	-	SSBN-729	USS Georgia	ETR	LP5	-	-	79.0W 28.5N (+/- 2.0)	1000.0
1984 Mar 28 1807?	Trident C-4	-	-	SSBN-729	USS Georgia	ETR	LP5	-	-	79.0W 28.5N (+/- 2.0)	1000.0
1984 Mar 28 1807?	Trident C-4	-	-	SSBN-729	USS Georgia	ETR	LP5	-	-	79.0W 28.5N (+/- 2.0)	1000.0

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### IV.1.23.5 USS Henry M. Jackson



Credit: US Navy

Rockets used: Trident C-4, Trident D-5

Updated: 2024 Nov 28 03:19:34

Launches: SSBN-730

Date	Rocket	Flight	Mission	Platform	Site	LP	AscSite	AsclP	Pos	Apogee
1984 Dec 4 1954	Trident C-4	DASO	-	SSBN-730	ETR	SLBM	-	-	79.0W 28.5N (+/- 2.0)	1000.0
1984 Dec 7 1611:40	Trident C-4	-	-	SSBN-730	ETR	LP5	-	-	79.0W 28.5N (+/- 2.0)	1000.0
1984 Dec 7 1611:57	Trident C-4	-	-	SSBN-730	ETR	LP5	-	-	79.0W 28.5N (+/- 2.0)	1000.0
1984 Dec 7 1611:57	Trident C-4	-	-	SSBN-730	ETR	LP5	-	-	79.0W 28.5N (+/- 2.0)	1000.0
1984 Dec 7 1611:57	Trident C-4	-	-	SSBN-730	ETR	LP5	-	-	79.0W 28.5N (+/- 2.0)	1000.0
1999 Mar 23 2146:10	Trident C-4	-	-	SSBN-730	ETR	LP5	-	-	79.0W 28.5N (+/- 2.0)	1000.0
1999 Mar 23 2146:28	Trident C-4	-	-	SSBN-730	ETR	LP5	-	-	79.0W 28.5N (+/- 2.0)	1000.0
1999 Mar 25 0017:05	Trident C-4	-	-	SSBN-730	ETR	LP5	-	-	79.0W 28.5N (+/- 2.0)	1000.0
1999 Mar 25 0017:22	Trident C-4	-	-	SSBN-730	ETR	LP5	-	-	79.0W 28.5N (+/- 2.0)	1000.0
2000 Feb 26 2000	Trident C-4	-	-	SSBN-730	ETR	LP5	-	-	79.0W 28.5N (+/- 2.0)	1000.0
2000 Feb 26 2000	Trident C-4	-	-	SSBN-730	ETR	LP5	-	-	79.0W 28.5N (+/- 2.0)	1000.0
2000 Feb 26 2243	Trident C-4	-	-	SSBN-730	ETR	LP5	-	-	79.0W 28.5N (+/- 2.0)	1000.0
2000 Feb 26 2243	Trident C-4	-	-	SSBN-730	ETR	LP5	-	-	79.0W 28.5N (+/- 2.0)	1000.0
2007 Nov 29	Trident D-5	- (120ss)	-	SSBN-730	WTR	LP5	-	-	119.0W 33.0N (+/- 3.0)	1000.0

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### IV.1.23.6 USS Alabama



Credit: US Navy

Rockets used: Trident C-4, Trident D-5

Updated: 2024 Nov 28 03:19:34

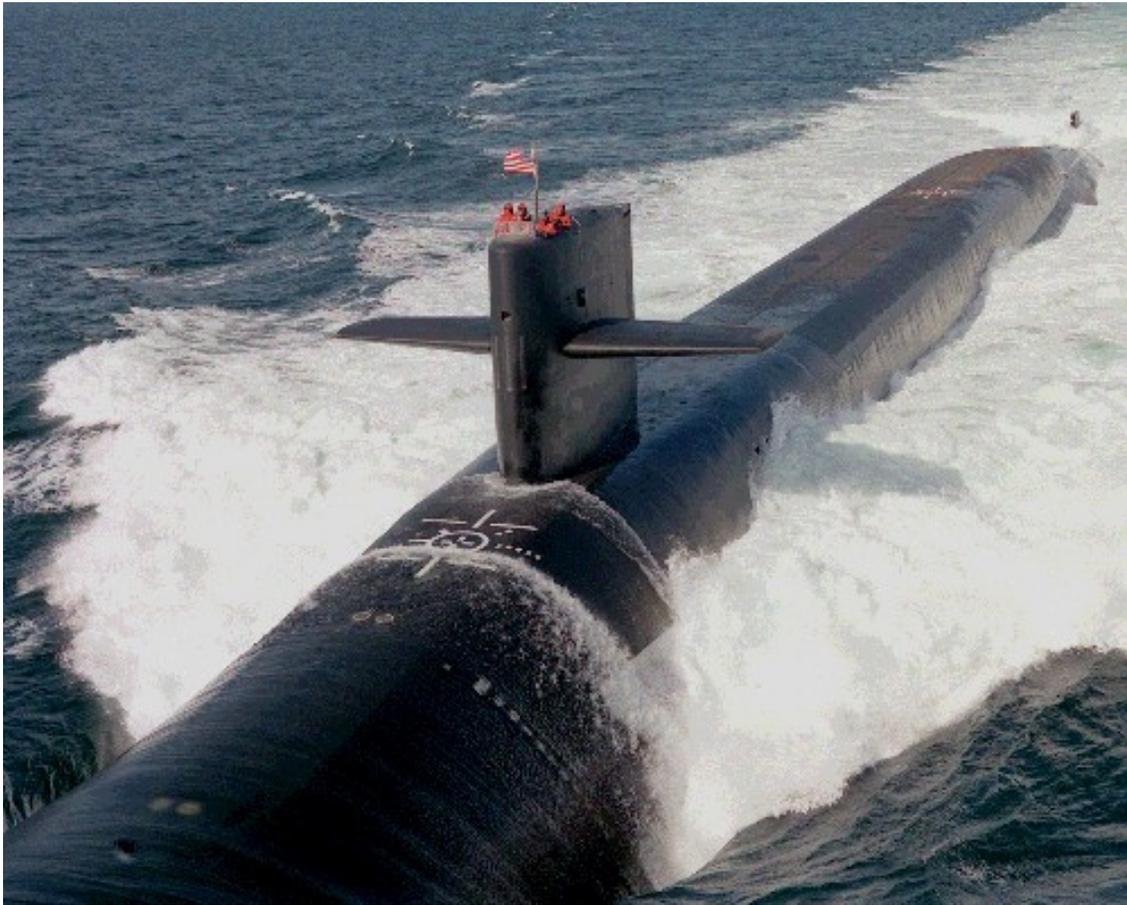


Launches: SSBN-731

Date	Rocket	Flight	Mission	Platform	Site	LP	AscSite	AsCLP	Pos	Apogee
1985 Jul 6 0055	Trident C-4	DASO	-	SSBN-731	USS Alabama	ETR	SLBM	-	79.0W 28.5N (+/- 2.0)	1000.0
1988 May 15 0345	Trident C-4	-	-	SSBN-731	USS Alabama	WTR	LP5	-	119.0W 33.0N (+/- 3.0)	1000.0
2009 Feb 13	Trident D-5	- (126ss)	-	SSBN-731	USS Alabama	WTR	LP5	-	119.0W 33.0N (+/- 3.0)	1000.0

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### IV.1.23.7 USS Alaska



Credit: US Navy

Rockets used: Trident C-4, Trident D-5

Updated: 2024 Nov 28 03:19:34

Launches: SSBN-732

Date	Rocket	Flight	Mission	Platform	Site	LP	AscSite	AscLP	Pos	Apogee
1986 Feb 21 1715	Trident C-4	DASO	-	SSBN-732	USS Alaska	SLBM	-	-	79.0W 28.5N (+/- 2.0)	1000.0
1997 Feb 20 2011:31	Trident C-4	-	-	SSBN-732	USS Alaska	LP5	-	-	79.0W 28.5N (+/- 2.0)	1000.0
1997 Feb 20 2011:49	Trident C-4	-	-	SSBN-732	USS Alaska	LP5	-	-	79.0W 28.5N (+/- 2.0)	1000.0
1997 Feb 20 2124:47	Trident C-4	-	-	SSBN-732	USS Alaska	LP5	-	-	79.0W 28.5N (+/- 2.0)	1000.0
1997 Feb 20 2125:04	Trident C-4	-	-	SSBN-732	USS Alaska	LP5	-	-	79.0W 28.5N (+/- 2.0)	1000.0
2002 Mar 16 2150	Trident D-5	- (95ss)	-	SSBN-732	USS Alaska	D4	-	-	79.0W 28.5N (+/- 2.0)	1000.0
2006 May 9	Trident D-5	W76 LEP?	-	SSBN-732	USS Alaska	LP5	-	-	119.0W 33.0N (+/- 3.0)	1000.0
2006 May 9	Trident D-5	W76 LEP?	-	SSBN-732	USS Alaska	LP5	-	-	119.0W 33.0N (+/- 3.0)	1000.0
2009 Dec 19	Trident D-5	- (130ss)	-	SSBN-732	USS Alaska	SLBM	-	-	79.0W 28.5N (+/- 2.0)	1000.0

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### IV.1.23.8 USS Nevada



Credit: US Navy

Rockets used: Trident C-4, Trident D-5

Updated: 2024 Nov 28 03:19:34

Launches: SSBN-733

Date	Rocket	Flight	Mission	Platform	Site	LP	AscSite	AsclP	Pos	Apogee
1986 Sep 30 1520	Trident C-4	DASO	-	SSBN-733	ETR	SLBM	-	-	79.0W 28.5N (+/- 2.0)	1000.0
1998 Feb 10 2133:09	Trident C-4	-	-	SSBN-733	ETR	LP5	-	-	79.0W 28.5N (+/- 2.0)	1000.0
1998 Feb 10 2133:26	Trident C-4	-	-	SSBN-733	ETR	LP5	-	-	79.0W 28.5N (+/- 2.0)	1000.0
1998 Feb 10 2236:47	Trident C-4	-	-	SSBN-733	ETR	LP5	-	-	79.0W 28.5N (+/- 2.0)	1000.0
1998 Feb 10 2237:04	Trident C-4	-	-	SSBN-733	ETR	LP5	-	-	79.0W 28.5N (+/- 2.0)	1000.0
2002 Dec 11 1950	Trident D-5	-	-	SSBN-733	ETR	D4	-	-	79.0W 28.5N (+/- 2.0)	1000.0
2004 Nov 4	Trident D-5	- (107ss)	-	SSBN-733	WTR	LP5	-	-	119.0W 33.0N (+/- 3.0)	1000.0
2004 Nov 4	Trident D-5	- (108ss)	-	SSBN-733	WTR	LP5	-	-	119.0W 33.0N (+/- 3.0)	1000.0
2011 Mar 1 2100	Trident D-5	- (135ss/136s)	-	SSBN-733	WTR	LP13	-	-	119.0W 33.0N (+/- 3.0)	1000.0

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### IV.1.23.9 USS Tennessee



Credit: USN

Rockets used: Trident D-5

Updated: 2024 Nov 28 03:19:34

Launches: SSBN-734

Date	Rocket	Flight	Mission	Platform	Site	LP	AscSite	AsclP	Pos	Apogee
1989 Mar 21 1620	Trident D-5	PEN-1	-	SSBN-734	USS Tennessee	D4	-	-	79.0W 28.5N (+/- 2.0)	0.0
1989 Aug 2 1500:03	Trident D-5	PEN-2	-	SSBN-734	USS Tennessee	SLBM	-	-	79.0W 28.5N (+/- 2.0)	1000.0
1989 Aug 15 2110:00	Trident D-5	PEN-4	-	SSBN-734	USS Tennessee	SLBM	-	-	79.0W 28.5N (+/- 2.0)	0.0
1989 Dec 4 1540:03	Trident D-5	PEN-5	-	SSBN-734	USS Tennessee	D4	-	-	79.0W 28.5N (+/- 2.0)	1000.0
1989 Dec 13 1415:03	Trident D-5	PEN-11	-	SSBN-734	USS Tennessee	D4	-	-	79.0W 28.5N (+/- 2.0)	1000.0
1989 Dec 15 1415	Trident D-5	PEN-3	-	SSBN-734	USS Tennessee	SLBM	-	-	79.0W 28.5N (+/- 2.0)	1000.0
1990 Jan 15 1645:07	Trident D-5	PEN-7	-	SSBN-734	USS Tennessee	LP5	-	-	79.0W 28.5N (+/- 2.0)	1000.0
1990 Jan 16 1600:03	Trident D-5	PEN-6	-	SSBN-734	USS Tennessee	LP5	-	-	79.0W 28.5N (+/- 2.0)	1000.0
1990 Feb 12 1410	Trident D-5	DASO-1	-	SSBN-734	USS Tennessee	LP5	-	-	79.0W 28.5N (+/- 2.0)	1000.0
1990 Feb 12 1410:20	Trident D-5	PEN-8	-	SSBN-734	USS Tennessee	LP5	-	-	79.0W 28.5N (+/- 2.0)	1000.0
1990 Nov 3 1153	Trident D-5	CET	-	SSBN-734	USS Tennessee	LP5	-	-	79.0W 28.5N (+/- 2.0)	1000.0
1990 Nov 3 1238:11	Trident D-5	CET	-	SSBN-734	USS Tennessee	LP5	-	-	79.0W 28.5N (+/- 2.0)	1000.0
1990 Nov 3 1337	Trident D-5	CET	-	SSBN-734	USS Tennessee	LP5	-	-	79.0W 28.5N (+/- 2.0)	1000.0
1990 Nov 3 1337	Trident D-5	CET	-	SSBN-734	USS Tennessee	LP5	-	-	79.0W 28.5N (+/- 2.0)	1000.0
1992 Aug 4	Trident D-5	CET	-	SSBN-734	USS Tennessee	LP5	-	-	79.0W 28.5N (+/- 2.0)	1000.0
1992 Aug 4	Trident D-5	CET	-	SSBN-734	USS Tennessee	LP5	-	-	79.0W 28.5N (+/- 2.0)	1000.0
1992 Aug 4	Trident D-5	CET	-	SSBN-734	USS Tennessee	LP5	-	-	79.0W 28.5N (+/- 2.0)	1000.0
1992 Nov 10	Trident D-5	-	-	SSBN-734	USS Tennessee	LP5	-	-	79.0W 28.5N (+/- 2.0)	1000.0
1992 Nov 10	Trident D-5	-	-	SSBN-734	USS Tennessee	LP5	-	-	79.0W 28.5N (+/- 2.0)	1000.0
1992 Nov 10	Trident D-5	-	-	SSBN-734	USS Tennessee	LP5	-	-	79.0W 28.5N (+/- 2.0)	1000.0
1992 Nov 10	Trident D-5	-	-	SSBN-734	USS Tennessee	LP5	-	-	79.0W 28.5N (+/- 2.0)	1000.0
1995 Apr 9 2020	Trident D-5	-	-	SSBN-734	USS Tennessee	LP5	-	-	79.0W 28.5N (+/- 2.0)	1000.0
1995 Apr 9 2020	Trident D-5	-	-	SSBN-734	USS Tennessee	LP5	-	-	79.0W 28.5N (+/- 2.0)	1000.0
1996 Oct 28 1930:20	Trident D-5	-	-	SSBN-734	USS Tennessee	LP5	-	-	79.0W 28.5N (+/- 2.0)	1000.0
1996 Oct 28 1930:37	Trident D-5	-	-	SSBN-734	USS Tennessee	LP5	-	-	79.0W 28.5N (+/- 2.0)	1000.0
2005 Mar 2 0400:13	Trident D-5	Short range test	-	SSBN-734	USS Tennessee	LP5	-	-	79.0W 28.5N (+/- 2.0)	1000.0
2007 May 15	Trident D-5	-	-	SSBN-734	USS Tennessee	LP5	-	-	79.0W 28.5N (+/- 2.0)	1000.0
2007 May 15	Trident D-5	-	-	SSBN-734	USS Tennessee	SLBM	-	-	79.0W 28.5N (+/- 2.0)	1000.0
2012 Feb 22	Trident D-5	-	-	SSBN-734	USS Tennessee	SLBM	-	-	79.0W 28.5N (+/- 2.0)	1000.0
2013 Sep 10 21107	Trident D-5	- (137s)	-	SSBN-734	USS Tennessee	SLBM	-	-	79.0W 28.5N (+/- 2.0)	1800.0
2013 Sep 10 21107	Trident D-5	- (145s)	-	SSBN-734	USS Tennessee	SLBM	-	-	79.0W 28.5N (+/- 2.0)	1800.0
2013 Sep 12	Trident D-5	- (146s)	-	SSBN-734	USS Tennessee	SLBM	-	-	79.0W 28.5N (+/- 2.0)	1800.0
2013 Sep 12	Trident D-5	- (147s)	-	SSBN-734	USS Tennessee	SLBM	-	-	79.0W 28.5N (+/- 2.0)	1000.0
2013 Sep 12	Trident D-5	- (148s)	-	SSBN-734	USS Tennessee	SLBM	-	-	79.0W 28.5N (+/- 2.0)	1000.0

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## IV.1.23.10 USS Pennsylvania



Credit: US Navy

Rockets used: Trident D-5

Updated: 2024 Nov 28 03:19:34



Launches: SSBN-735

Date	Rocket	Flight	Mission	Platform Code	Platform	Site	LP	AscSite	AsclP	Pos	Apogee
1990 Mar 12 0345:03	Trident D-5	DASO-3	-	SSBN-735	USS Pennsylvania	ETR	LP5	-	-	79.0W 28.5N (+/- 2.0)	1000.0
1990 Sep 26 1555	Trident D-5	DASO-4	-	SSBN-735	USS Pennsylvania	ETR	LP5	-	-	79.0W 28.5N (+/- 2.0)	1000.0
1991 Jul 29	Trident D-5	CET	-	SSBN-735	USS Pennsylvania	ETR	LP5	-	-	79.0W 28.5N (+/- 2.0)	1000.0
1991 Jul 29	Trident D-5	CET	-	SSBN-735	USS Pennsylvania	ETR	LP5	-	-	79.0W 28.5N (+/- 2.0)	1000.0
1991 Jul 29	Trident D-5	CET	-	SSBN-735	USS Pennsylvania	ETR	LP5	-	-	79.0W 28.5N (+/- 2.0)	1000.0
1991 Jul 29	Trident D-5	CET	-	SSBN-735	USS Pennsylvania	ETR	LP5	-	-	79.0W 28.5N (+/- 2.0)	1000.0
1991 Nov 11	Trident D-5	CET	-	SSBN-735	USS Pennsylvania	ETR	LP5	-	-	79.0W 28.5N (+/- 2.0)	1000.0
1991 Nov 11	Trident D-5	CET	-	SSBN-735	USS Pennsylvania	ETR	LP5	-	-	79.0W 28.5N (+/- 2.0)	1000.0
1991 Nov 11	Trident D-5	CET	-	SSBN-735	USS Pennsylvania	ETR	LP5	-	-	79.0W 28.5N (+/- 2.0)	1000.0
1991 Nov 11	Trident D-5	CET	-	SSBN-735	USS Pennsylvania	ETR	LP5	-	-	79.0W 28.5N (+/- 2.0)	1000.0
1993 Jul 7	Trident D-5	-	-	SSBN-735	USS Pennsylvania	ETR	LP5	-	-	79.0W 28.5N (+/- 2.0)	1000.0
1993 Jul 7	Trident D-5	-	-	SSBN-735	USS Pennsylvania	ETR	LP5	-	-	79.0W 28.5N (+/- 2.0)	1000.0
1996 Jul 19 2001:01	Trident D-5	-	-	SSBN-735	USS Pennsylvania	ETR	SLBM	-	-	79.0W 28.5N (+/- 2.0)	1000.0
1996 Jul 19 2001:17	Trident D-5	-	-	SSBN-735	USS Pennsylvania	ETR	SLBM	-	-	79.0W 28.5N (+/- 2.0)	1000.0
2013 Apr?	Trident D-5	- (144s)	-	SSBN-735	USS Pennsylvania	ETR	SLBM	-	-	79.0W 28.5N (+/- 2.0)	1000.0
2015 Feb 22	Trident D-5	- (154s)	-	SSBN-735	USS Pennsylvania	WTR	LP5	-	-	119.0W 33.0N (+/- 3.0)	1000.0
2015 Feb 22	Trident D-5	- (154s)	-	SSBN-735	USS Pennsylvania	WTR	SCL LP2	-	-	119.0W 33.0N (+/- 3.0)	1000.0
2015 Feb 22	Trident D-5	- (155s)	-	SSBN-735	USS Pennsylvania	WTR	SCL LP2	-	-	119.0W 33.0N (+/- 3.0)	1000.0

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### IV.1.23.11 USS West Virginia



Credit: US Navy

Rockets used: Trident D-5

Updated: 2024 Nov 28 03:19:34

Launches: SSBN-736

Date	Rocket	Flight	Mission	Platform	Site	LP	AscSite	AsclP	Pos	Apogee
1990 Nov 28 2000:03	Trident D-5	DASO-5	-	SSBN-736	USS West Virginia	ETR	-	-	79.0W 28.5N (+/- 2.0)	1000.0
1991 Apr 15 2210:03	Trident D-5	DASO-6	-	SSBN-736	USS West Virginia	ETR	-	-	79.0W 28.5N (+/- 2.0)	1000.0
1992 Feb 22	Trident D-5	CET	-	SSBN-736	USS West Virginia	ETR	-	-	79.0W 28.5N (+/- 2.0)	1000.0
1992 Feb 22	Trident D-5	CET	-	SSBN-736	USS West Virginia	ETR	-	-	79.0W 28.5N (+/- 2.0)	1000.0
1992 Feb 22	Trident D-5	CET	-	SSBN-736	USS West Virginia	ETR	-	-	79.0W 28.5N (+/- 2.0)	1000.0
1992 Feb 22	Trident D-5	CET	-	SSBN-736	USS West Virginia	ETR	-	-	79.0W 28.5N (+/- 2.0)	1000.0
1992 Jun 18	Trident D-5	CET	-	SSBN-736	USS West Virginia	ETR	-	-	79.0W 28.5N (+/- 2.0)	1000.0
1992 Jun 18	Trident D-5	CET	-	SSBN-736	USS West Virginia	ETR	-	-	79.0W 28.5N (+/- 2.0)	1000.0
1992 Jun 18	Trident D-5	CET	-	SSBN-736	USS West Virginia	ETR	-	-	79.0W 28.5N (+/- 2.0)	1000.0
1992 Jun 18	Trident D-5	CET	-	SSBN-736	USS West Virginia	ETR	-	-	79.0W 28.5N (+/- 2.0)	1000.0
1992 Jun 18	Trident D-5	CET	-	SSBN-736	USS West Virginia	ETR	-	-	79.0W 28.5N (+/- 2.0)	1000.0
1997 Mar 17 2226:28	Trident D-5	-	-	SSBN-736	USS West Virginia	ETR	-	-	79.0W 28.5N (+/- 2.0)	1000.0
1997 Mar 18 0016	Trident D-5	-	-	SSBN-736	USS West Virginia	ETR	-	-	79.0W 28.5N (+/- 2.0)	1000.0
1998 Mar 7 2342:31	Trident D-5	- 78?	-	SSBN-736	USS West Virginia	ETR	-	-	79.0W 28.5N (+/- 2.0)	1000.0
1998 Mar 7 2342:47	Trident D-5	- 79?	-	SSBN-736	USS West Virginia	ETR	-	-	79.0W 28.5N (+/- 2.0)	1000.0
1998 Mar 10 2333:10	Trident D-5	- 80?	-	SSBN-736	USS West Virginia	ETR	-	-	79.0W 28.5N (+/- 2.0)	1000.0
1998 Mar 11 0115:58	Trident D-5	- 81?	-	SSBN-736	USS West Virginia	ETR	-	-	79.0W 28.5N (+/- 2.0)	1000.0
2009 Sep 3	Trident D-5	- (128ss)	-	SSBN-736	USS West Virginia	ETR	-	-	79.0W 28.5N (+/- 2.0)	1000.0
2009 Sep 4	Trident D-5	- (129ss)	-	SSBN-736	USS West Virginia	ETR	-	-	79.0W 28.5N (+/- 2.0)	1000.0
2014 Jun 2	Trident D-5	- (149s)	-	SSBN-736	USS West Virginia	ETR	-	-	79.0W 28.5N (+/- 2.0)	1000.0
2014 Jun 2	Trident D-5	- (150s)	-	SSBN-736	USS West Virginia	ETR	-	-	79.0W 28.5N (+/- 2.0)	1000.0
2021 Feb 9 2330	Trident D-5	- (179s)	-	SSBN-736	USS West Virginia	ETR	-	-	79.0W 28.5N (+/- 2.0)	1800.0
2021 Feb 10	Trident D-5	- (180s)	-	SSBN-736	USS West Virginia	ETR	-	-	79.0W 28.5N (+/- 2.0)	1800.0
2021 Feb 11	Trident D-5	- (181s)	-	SSBN-736	USS West Virginia	ETR	-	-	79.0W 28.5N (+/- 2.0)	1800.0
2021 Feb 11	Trident D-5	- (182s)	-	SSBN-736	USS West Virginia	ETR	-	-	79.0W 28.5N (+/- 2.0)	1800.0
2023 Jun 15?	Trident D-5	- (189s)	-	SSBN-736	USS West Virginia	ETR	-	-	79.0W 28.5N (+/- 2.0)	1800.0
2023 Jun 15?	Trident D-5	- (190s)	-	SSBN-736	USS West Virginia	ETR	-	-	79.0W 28.5N (+/- 2.0)	1800.0

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**IV.1.23.12 USS Kentucky**



Credit: USN

Rockets used: Trident D-5

Updated: 2024 Nov 28 03:19:34

Launches: SSBN-737

Date	Rocket	Flight	Mission	Platform	Site	LP	AscSite	AsclP	Pos	Apogee
1991 Aug 30 2332:03	Trident D-5	DAS0-7	-	SSBN-737	USS Kentucky	ETR	LP5	-	79.0W 28.5N (+/- 2.0)	1000.0
1991 Nov 4 2042	Trident D-5	DAS0-8	-	SSBN-737	USS Kentucky	ETR	D4	-	79.0W 28.5N (+/- 2.0)	1000.0
1992 Sep 3	Trident D-5	CET	-	SSBN-737	USS Kentucky	ETR	LP5	-	79.0W 28.5N (+/- 2.0)	1000.0
1992 Sep 3	Trident D-5	CET	-	SSBN-737	USS Kentucky	ETR	LP5	-	79.0W 28.5N (+/- 2.0)	1000.0
1992 Sep 3	Trident D-5	CET	-	SSBN-737	USS Kentucky	ETR	LP5	-	79.0W 28.5N (+/- 2.0)	1000.0
1992 Sep 3	Trident D-5	CET	-	SSBN-737	USS Kentucky	ETR	LP5	-	79.0W 28.5N (+/- 2.0)	1000.0
1999 Nov 10 2023:56	Trident D-5	-	-	SSBN-737	USS Kentucky	ETR	LP5	-	79.0W 28.5N (+/- 2.0)	1000.0
1999 Nov 10 2150	Trident D-5	- (87ss)	-	SSBN-737	USS Kentucky	ETR	LP5	-	79.0W 28.5N (+/- 2.0)	1000.0
2001 May 14	Trident D-5	- (91ss)	-	SSBN-737	USS Kentucky	ETR	SLBM	-	79.0W 28.5N (+/- 2.0)	1000.0
2015 Nov 8 0200	Trident D-5	- (156s)	-	SSBN-737	USS Kentucky	WTR	SCL LP2	-	119.0W 33.0N (+/- 3.0)	1000.0
2015 Nov 9 2000?	Trident D-5	- (157s)	-	SSBN-737	USS Kentucky	WTR	SCL LP2	-	119.0W 33.0N (+/- 3.0)	1000.0
2017 Feb 14 1130	Trident D-5	- (162s)	-	SSBN-737	USS Kentucky	WTR	LP14	-	119.0W 33.0N (+/- 3.0)	1000.0
2017 Feb 14 1420	Trident D-5	- (163s)	-	SSBN-737	USS Kentucky	WTR	LP14	-	119.0W 33.0N (+/- 3.0)	1000.0
2017 Feb 15?	Trident D-5	- (164s)	-	SSBN-737	USS Kentucky	WTR	LP14	-	119.0W 33.0N (+/- 3.0)	1000.0
2017 Feb 16?	Trident D-5	- (165s)	-	SSBN-737	USS Kentucky	WTR	LP14	-	119.0W 33.0N (+/- 3.0)	1000.0
2022 Jun 15	Trident D-5	- (185s)	-	SSBN-737	USS Kentucky	WTR	LP14	-	119.0W 33.0N (+/- 3.0)	1000.0
2022 Jun 15	Trident D-5	- (186s)	-	SSBN-737	USS Kentucky	WTR	LP14	-	119.0W 33.0N (+/- 3.0)	1000.0
2022 Jun 17	Trident D-5	- (187s)	-	SSBN-737	USS Kentucky	WTR	LP14	-	119.0W 33.0N (+/- 3.0)	1000.0
2022 Jun 17	Trident D-5	- (188s)	-	SSBN-737	USS Kentucky	WTR	LP14	-	119.0W 33.0N (+/- 3.0)	1000.0

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### IV.1.23.13 USS Maryland



Credit: USN

Rockets used: Trident D-5

Updated: 2024 Nov 28 03:19:34

Launches: SSBN-738

Date	Rocket	Flight	Mission	Platform	Site	LP	AscSite	AsCLP	Pos	Apogee
1992 Jul 29	Trident D-5	DASO-9	-	SSBN-738	USS Maryland	ETR	-	-	79.0W 28.5N (+/- 2.0)	1000.0
1992 Oct 19	Trident D-5	DASO-10	-	SSBN-738	USS Maryland	ETR	-	-	79.0W 28.5N (+/- 2.0)	1000.0
1994 Jan 20 0103:52	Trident D-5	-	-	SSBN-738	USS Maryland	ETR	-	-	79.0W 28.5N (+/- 2.0)	1000.0
1994 Jan 20 0104:09	Trident D-5	-	-	SSBN-738	USS Maryland	ETR	-	-	79.0W 28.5N (+/- 2.0)	1000.0
1994 Jan 20 0221:06	Trident D-5	-	-	SSBN-738	USS Maryland	ETR	-	-	79.0W 28.5N (+/- 2.0)	1000.0
1994 Jan 20 0222:23	Trident D-5	-	-	SSBN-738	USS Maryland	ETR	-	-	79.0W 28.5N (+/- 2.0)	1000.0
1996 Apr 21 2136:06	Trident D-5	-	-	SSBN-738	USS Maryland	ETR	-	-	79.0W 28.5N (+/- 2.0)	1000.0
1996 Apr 21 2136:23	Trident D-5	-	-	SSBN-738	USS Maryland	ETR	-	-	79.0W 28.5N (+/- 2.0)	1000.0
1999 Apr 26 1947:31	Trident D-5	- to ASC C-17	-	SSBN-738	USS Maryland	ETR	-	-	79.0W 28.5N (+/- 2.0)	1000.0
1999 Apr 26 1947:47	Trident D-5	- to ASC C-17	-	SSBN-738	USS Maryland	ETR	-	-	79.0W 28.5N (+/- 2.0)	1000.0
2003 Nov 5 2110:02	Trident D-5	-	-	SSBN-738	USS Maryland	ETR	-	-	79.0W 28.5N (+/- 2.0)	1000.0
2003 Nov 5 2322:43	Trident D-5	- (104ss)	-	SSBN-738	USS Maryland	ETR	-	-	79.0W 28.5N (+/- 2.0)	1000.0
2006 Nov 21	Trident D-5	W76 (116ss)	-	SSBN-738	USS Maryland	ETR	-	-	79.0W 28.5N (+/- 2.0)	1000.0
2006 Nov 21	Trident D-5	W76 (117ss)	-	SSBN-738	USS Maryland	ETR	-	-	79.0W 28.5N (+/- 2.0)	1000.0
2010 Jun 8	Trident D-5	- (131ss)	-	SSBN-738	USS Maryland	ETR	-	-	79.0W 28.5N (+/- 2.0)	1000.0
2010 Jun 8	Trident D-5	- (132ss)	-	SSBN-738	USS Maryland	ETR	-	-	79.0W 28.5N (+/- 2.0)	1000.0
2010 Jun 9	Trident D-5	- (133ss)	-	SSBN-738	USS Maryland	ETR	-	-	79.0W 28.5N (+/- 2.0)	1000.0
2010 Jun 9	Trident D-5	- (134ss)	-	SSBN-738	USS Maryland	ETR	-	-	79.0W 28.5N (+/- 2.0)	1000.0
2012 Apr 14	Trident D-5	- (139s)	-	SSBN-738	USS Maryland	ETR	-	-	79.0W 28.5N (+/- 2.0)	1000.0
2012 Apr 14	Trident D-5	- (140s)	-	SSBN-738	USS Maryland	ETR	-	-	79.0W 28.5N (+/- 2.0)	1000.0
2012 Apr 16	Trident D-5	- (141s)	-	SSBN-738	USS Maryland	ETR	-	-	79.0W 28.5N (+/- 2.0)	1000.0
2012 Apr 16	Trident D-5	- (142s)	-	SSBN-738	USS Maryland	ETR	-	-	79.0W 28.5N (+/- 2.0)	1000.0
2016 Aug 31	Trident D-5	- (161s)	-	SSBN-738	USS Maryland	ETR	-	-	79.0W 28.5N (+/- 2.0)	1000.0

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#### IV.1.23.14 USS Nebraska



Credit: USN

Rockets used: Trident D-5

Updated: 2024 Nov 28 03:19:34



Launches: SSBN-739

Date	Rocket	Flight	Mission	PlatCode	Platform	Site	LP	AscSite	AsclP	Pos	Apogee
1993 Aug 20 1827	Trident D-5	-	-	SSBN-739	USS Nebraska	ETR	D4	-	-	79.0W 28.5N (+/- 2.0)	1000.0
1993 Nov 18	Trident D-5	PGW Test	-	SSBN-739	USS Nebraska	ETR	D4	-	-	79.0W 28.5N (+/- 2.0)	1000.0
1995 Jan 19 2248:56	Trident D-5	-	-	SSBN-739	USS Nebraska	ETR	LP5	-	-	79.0W 28.5N (+/- 2.0)	1000.0
1995 Jan 19 2249:12	Trident D-5	-	-	SSBN-739	USS Nebraska	ETR	LP5	-	-	79.0W 28.5N (+/- 2.0)	1000.0
2004 Feb 26 0031:20	Trident D-5	-	-	SSBN-739	USS Nebraska	ETR	LP5	-	-	79.0W 28.5N (+/- 2.0)	1000.0
2004 Feb 26 0133:51	Trident D-5	-	-	SSBN-739	USS Nebraska	ETR	LP5	-	-	79.0W 28.5N (+/- 2.0)	1000.0
2008 May 8	Trident D-5	-	-	SSBN-739	USS Nebraska	WTR	LP5	-	-	119.0W 33.0N (+/- 3.0)	1000.0
2008 May 8	Trident D-5	(122ss)	-	SSBN-739	USS Nebraska	WTR	LP5	-	-	119.0W 33.0N (+/- 3.0)	1000.0
2018 Mar 27 0240?	Trident D-5	(166s)	-	SSBN-739	USS Nebraska	WTR	SCL LP2	-	-	119.0W 33.0N (+/- 3.0)	1000.0
2018 Mar 27 0240?	Trident D-5	(167s)	-	SSBN-739	USS Nebraska	WTR	SCL LP2	-	-	119.0W 33.0N (+/- 3.0)	1000.0
2019 Sep 4	Trident D-5	(173s)	-	SSBN-739	USS Nebraska	WTR	LP5	-	-	119.0W 33.0N (+/- 3.0)	1000.0
2019 Sep 4	Trident D-5	(174s)	-	SSBN-739	USS Nebraska	WTR	LP5	-	-	119.0W 33.0N (+/- 3.0)	1000.0
2019 Sep 6	Trident D-5	(175s)	-	SSBN-739	USS Nebraska	WTR	LP5	-	-	119.0W 33.0N (+/- 3.0)	1000.0
2019 Sep 6	Trident D-5	(176s)	-	SSBN-739	USS Nebraska	WTR	LP5	-	-	119.0W 33.0N (+/- 3.0)	1000.0

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#### IV.1.23.15 USS Rhode Island



Credit: USN

Rockets used: Trident D-5

Updated: 2024 Nov 28 03:19:34

Launches: SSBN-740

Date	Rocket	Flight	Mission	Platform	Site	LP	AscSite	AsCLP	Pos	Apogee
1994 Dec 1 0045:03?	Trident D-5	-	-	SSBN-740	USS Rhode Island	ETR	D4	-	79.0W 28.5N (+/- 2.0)	1000.0
1999 Feb 9 2010:00	Trident D-5	- to ASC C-25	-	SSBN-740	USS Rhode Island	ETR	LP5	-	79.0W 28.5N (+/- 2.0)	1000.0
1999 Feb 9 2010:15	Trident D-5	- to ASC C-25	-	SSBN-740	USS Rhode Island	ETR	LP5	-	79.0W 28.5N (+/- 2.0)	1000.0
2005 Dec 9 1902:42	Trident D-5	-	-	SSBN-740	USS Rhode Island	ETR	LP5	-	79.0W 28.5N (+/- 2.0)	1000.0
2019 May 9	Trident D-5	- (172s)	-	SSBN-740	USS Rhode Island	ETR	SLBM	-	79.0W 28.5N (+/- 2.0)	1800.0

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### IV.1.23.16 USS Maine



Credit: USN

Rockets used: Trident D-5

Updated: 2024 Nov 28 03:19:34

Launches: SSBN-741

Date	Rocket	Flight	Mission	Platform	Site	LP	AscSite	AsCLP	Pos	Apogee
1995 Dec 7 2047:00	Trident D-5	ENTB RV?	-	SSBN-741	USS Maine	ETR	-	-	79.0W 28.5N (+/- 2.0)	1000.0
2003 Apr 23 1841	Trident D-5	-	-	SSBN-741	USS Maine	ETR	-	-	79.0W 28.5N (+/- 2.0)	1000.0
2003 Apr 23 2043	Trident D-5	-	-	SSBN-741	USS Maine	ETR	-	-	79.0W 28.5N (+/- 2.0)	1000.0
2020 Feb 12	Trident D-5	- (177s)	-	SSBN-741	USS Maine	WTR	-	-	119.0W 33.0N (+/- 3.0)	1800.0
2020 Feb 16	Trident D-5	- (178s)	-	SSBN-741	USS Maine	WTR	-	-	119.0W 33.0N (+/- 3.0)	1800.0

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### IV.1.23.17 USS Wyoming



Credit: USN

Rockets used: Trident D-5

Updated: 2024 Nov 28 03:19:34

Launches: SSBN-742

Date	Rocket	Flight	Mission	PlatCode	Platform	Site	LP	AscSite	AsclP	Pos	Apogee
1997 May 30 2230:04	Trident D-5	-	-	SSBN-742	USS Wyoming	ETR	D4	-	-	79.0W 28.5N (+/- 2.0)	1000.0
2000 Apr 30	Trident D-5	- (89ss)	-	SSBN-742	USS Wyoming	ETR	SLBM	-	-	79.0W 28.5N (+/- 2.0)	1000.0
2000 Apr 30 1940:32	Trident D-5	- (88ss)	-	SSBN-742	USS Wyoming	ETR	LP5	-	-	79.0W 28.5N (+/- 2.0)	1000.0
2002 Oct 22 2131	Trident D-5	-	-	SSBN-742	USS Wyoming	ETR	LP5	-	-	79.0W 28.5N (+/- 2.0)	1000.0
2021 Sep 17	Trident D-5	- (183s)	-	SSBN-742	USS Wyoming	ETR	SLBM	-	-	79.0W 28.5N (+/- 2.0)	1800.0
2021 Sep 17	Trident D-5	- (184s)	-	SSBN-742	USS Wyoming	ETR	SLBM	-	-	79.0W 28.5N (+/- 2.0)	1800.0

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### IV.1.23.18 USS Louisiana



Credit: USN

Rockets used: Trident D-5

Updated: 2024 Nov 28 03:19:34



Launches: SBBN-743

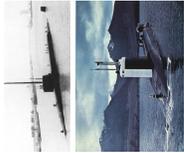
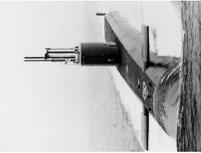
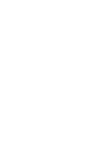
Date	Rocket	Flight	Mission	PlatCode	Platform	Site	LP	AscSite	AscLP	Pos	Apogee
1997 Dec 18	Trident D-5	- (77ss)	-	SBBN-743	USS Louisiana	ETR	SLBM	-	-	79.0W 28.5N (+/- 2.0)	1000.0
2001 Jun 25 2316	Trident D-5	-	-	SBBN-743	USS Louisiana	ETR	LP5	-	-	79.0W 28.5N (+/- 2.0)	1000.0
2001 Jun 25 2316	Trident D-5	-	-	SBBN-743	USS Louisiana	ETR	LP5	-	-	79.0W 28.5N (+/- 2.0)	1000.0
2001 Jun 26 0113	Trident D-5	-	-	SBBN-743	USS Louisiana	ETR	LP5	-	-	79.0W 28.5N (+/- 2.0)	1000.0
2002 Apr 24	Trident D-5	-	-	SBBN-743	USS Louisiana	ETR	LP5	-	-	79.0W 28.5N (+/- 2.0)	1000.0
2002 Apr 24 2023	Trident D-5	-	-	SBBN-743	USS Louisiana	ETR	LP5	-	-	79.0W 28.5N (+/- 2.0)	1000.0
2002 Apr 25	Trident D-5	-	-	SBBN-743	USS Louisiana	ETR	LP5	-	-	79.0W 28.5N (+/- 2.0)	1000.0
2008 Aug 25	Trident D-5	- (123ss)	-	SBBN-743	USS Louisiana	WTR	LP5	-	-	119.0W 33.0N (+/- 3.0)	1000.0
2008 Aug 25	Trident D-5	- (124ss)	-	SBBN-743	USS Louisiana	WTR	LP5	-	-	119.0W 33.0N (+/- 3.0)	1000.0
2014 Sep 12 1300	Trident D-5	- (151s)	-	SBBN-743	USS Louisiana	WTR	SCL LP2	-	-	119.0W 33.0N (+/- 3.0)	1000.0
2014 Sep 12 1300	Trident D-5	- (152s)	-	SBBN-743	USS Louisiana	WTR	SCL LP2	-	-	119.0W 33.0N (+/- 3.0)	1000.0
2014 Sep 12 1300	Trident D-5	- (153s)	-	SBBN-743	USS Louisiana	WTR	SCL LP2	-	-	119.0W 33.0N (+/- 3.0)	1000.0
2023 Sep 27 2110	Trident D-5	- (191s)	-	SBBN-743	USS Louisiana	WTR	LP13	-	-	119.0W 33.0N (+/- 3.0)	1000.0

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## **IV.1.24 UK Royal Navy Missile Submarines**

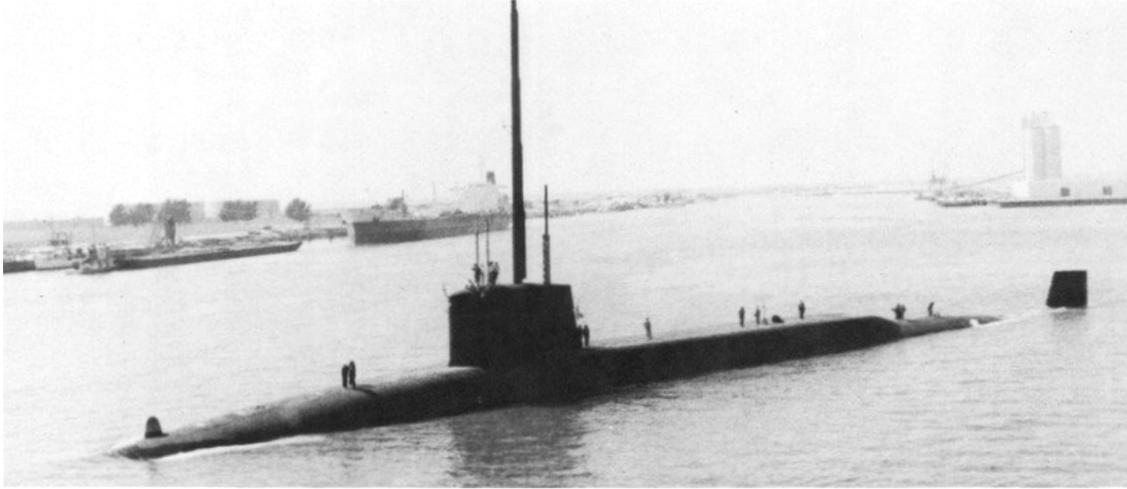
Updated: 2024 Nov 28 03:19:34

UK Royal Navy Missile Submarines

Ship	Transliteration	Image	CODE	Agency	Class	ClassID	AltID	Active
HMS Resolution (UK01)	HMS Resolution (UK01)		UK-S22	RN	Resolution	S22	-	1966 - 1994
HMS Repulse (UK03)	HMS Repulse (UK03)		UK-S23	RN	Resolution	S23	-	1967 - 1996
HMS Renown (UK02)	HMS Renown (UK02)		UK-S26	RN	Resolution	S26	-	1967 - 1996
HMS Revenge (UK04)	HMS Revenge (UK04)		UK-S27	RN	Resolution	S27	-	1968 - 1992
HMS Vanguard (UK05)	HMS Vanguard (UK05)		UK-S28	RN	Vanguard	S28	-	1992 - -
HMS Victorious (UK06)	HMS Victorious (UK06)		UK-S29	RN	Vanguard	S29	-	1993 - -
HMS Vigilant	HMS Vigilant		UK-S30	RN	Vanguard	S30	-	1995 - -
HMS Vengeance	HMS Vengeance		UK-S31	RN	Vanguard	S31	-	1998 - -

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#### IV.1.24.1 HMS Resolution (UK01)



Credit: USN

HMS Resolution carried Polaris A3 missiles. It was launched in 1967 and retired in 1994. In 1984 it was updated to use the Chevaline payload.

Rockets used: Polaris A3

Updated: 2024 Nov 28 03:19:34

Launches: UK-S22

Date	Rocket	Flight	Mission	Platform	Site	LP	AscSite	AscLP	Pos	Apogee
1968 Feb 15 1615	Polaris A3	UK DASO-01	-	HMS Resolution (UK01)	ETR	SLBM	-	-	79.0W 28.5N (+/- 2.0)	1000.0
1968 Mar 4 1615	Polaris A3	UK DASO-02	-	HMS Resolution (UK01)	ETR	SLBM	-	-	79.0W 28.5N (+/- 2.0)	1000.0
1972 Mar 6 1630	Polaris A3	DASO	-	HMS Resolution (UK01)	ETR	SLBM	-	-	79.0W 28.5N (+/- 2.0)	1000.0
1977 Jul 14 1600:00	Polaris A3	DASO	-	HMS Resolution (UK01)	ETR	SLBM	-	-	79.0W 28.5N (+/- 2.0)	1000.0
1985 May 19 0055	Polaris A3	CHEVALINE DASO-3	-	HMS Resolution (UK01)	ETR	SLBM	-	-	79.0W 28.5N (+/- 2.0)	1000.0
1985 May 20 0600	Polaris A3	CHEVALINE DASO-3	-	HMS Resolution (UK01)	ETR	SLBM	-	-	79.0W 28.5N (+/- 2.0)	1.0
1985 Jun 10 0826	Polaris A3	CHEVALINE DASO-3	-	HMS Resolution (UK01)	ETR	SLBM	-	-	79.0W 28.5N (+/- 2.0)	1000.0

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#### IV.1.24.2 HMS Repulse (UK03)



Credit: US Navy

HMS Repulse was launched in 1967 and retired in 1996.

Rockets used: Polaris A3

Updated: 2024 Nov 28 03:19:34

Launches: UK-S23

Date	Rocket	Flight	Mission	Platform	Site	LP	AscSite	AscLP	Pos	Apogee
1969 Mar 27 1600:03	Polaris A3	UK DAS0-03	-	HMS Repulse (UK03)	ETR	SLEM	-	-	79.0W 28.5N (+/- 2.0)	1000.0
1969 Apr 14 1630	Polaris A3	UK DAS0-04	-	HMS Repulse (UK03)	ETR	SLEM	-	-	79.0W 28.5N (+/- 2.0)	1000.0
1973 Feb 13 1629:59	Polaris A3	DAS0	-	HMS Repulse (UK03)	ETR	SLEM	-	-	79.0W 28.5N (+/- 2.0)	1000.0
1979 Feb 20 1700	Polaris A3	DAS0?	-	HMS Repulse (UK03)	ETR	SLEM	-	-	79.0W 28.5N (+/- 2.0)	1000.0
1987 Apr 16 0925	Polaris A3	CHEVALINE CAF	-	HMS Repulse (UK03)	ETR	SLEM	-	-	79.0W 28.5N (+/- 2.0)	1000.0
1987 Apr 18 0300	Polaris A3	CHEVALINE CAF	-	HMS Repulse (UK03)	ETR	SLEM	-	-	79.0W 28.5N (+/- 2.0)	1000.0
1987 May 10 0945	Polaris A3	CHEVALINE CAF	-	HMS Repulse (UK03)	ETR	SLEM	-	-	79.0W 28.5N (+/- 2.0)	5.0
1987 May 10 1107	Polaris A3	CHEVALINE CAF	-	HMS Repulse (UK03)	ETR	SLEM	-	-	79.0W 28.5N (+/- 2.0)	1000.0

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#### IV.1.24.3 HMS Renown (UK02)



Credit: Wikipedia

HMS Renown was launched in 1967 and updated to use Chevaline in 1982. It was retired in 1996.

Rockets used: Polaris A3



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Updated: 2024 Nov 28 03:19:34

Launches: UK-S26

Date	Rocket	Flight	Mission	Platform	Site	LP	AscSite	AsclP	Pos	Apogee
1969 Jul 24 1610	Polaris A3	UK DASO-05	-	HMS Renown (UK02)	ETR	SLBM	-	-	79.0W 28.5N (+/- 2.0)	1000.0
1969 Aug 11 1530	Polaris A3	UK DASO-06	-	HMS Renown (UK02)	ETR	SLBM	-	-	79.0W 28.5N (+/- 2.0)	1000.0
1974 Jul 16 1459:59	Polaris A3	DASO	-	HMS Renown (UK02)	ETR	SLBM	-	-	79.0W 28.5N (+/- 2.0)	1000.0
1980 Nov 14 2000	Polaris A3	CHEVALINE PS1	-	HMS Renown (UK02)	ETR	SLBM	-	-	79.0W 28.5N (+/- 2.0)	1000.0
1980 Nov 18 1630	Polaris A3	CHEVALINE PS2	-	HMS Renown (UK02)	ETR	SLBM	-	-	79.0W 28.5N (+/- 2.0)	1000.0
1982 Jan 30 1630	Polaris A3	CHEVALINE DASO-1	-	HMS Renown (UK02)	ETR	SLBM	-	-	79.0W 28.5N (+/- 2.0)	1000.0
1982 Feb 1 1830	Polaris A3	CHEVALINE DASO-1	-	HMS Renown (UK02)	ETR	SLBM	-	-	79.0W 28.5N (+/- 2.0)	1000.0
1982 Feb 3 1630	Polaris A3	CHEVALINE DASO-1	-	HMS Renown (UK02)	ETR	SLBM	-	-	79.0W 28.5N (+/- 2.0)	1000.0
1982 Feb 8 1830	Polaris A3	CHEVALINE DASO-1	-	HMS Renown (UK02)	ETR	SLBM	-	-	79.0W 28.5N (+/- 2.0)	1000.0

#### IV.1.24.4 HMS Revenge (UK04)



Credit: Admiralty

HMS Revenge was launched in 1968 and retired in 1992.

Rockets used: Polaris A3

Updated: 2024 Nov 28 03:19:34

Launches: UK-S27

Date	Rocket	Flight	Mission	Platform	Site	LP	AscSite	AscLP	Pos	Apogee
1970 Jun 1 1530	Polaris A3	-	-	HMS Revenge (UK04)	ETR	SLEB	-	-	79.0W 28.5N (+/- 2.0)	1000.0
1970 Jun 18 1530	Polaris A3	-	-	HMS Revenge (UK04)	ETR	SLEB	-	-	79.0W 28.5N (+/- 2.0)	1000.0
1975 Nov 22 1600:02	Polaris A3	DASO	-	HMS Revenge (UK04)	ETR	SLEB	-	-	79.0W 28.5N (+/- 2.0)	1000.0
1983 May 15 1546	Polaris A3	CHEVALINE DASO-2	-	HMS Revenge (UK04)	ETR	SLEB	-	-	79.0W 28.5N (+/- 2.0)	1000.0
1983 May 16 1530	Polaris A3	CHEVALINE DASO-2	-	HMS Revenge (UK04)	ETR	SLEB	-	-	79.0W 28.5N (+/- 2.0)	1000.0
1983 Jun 9 1500	Polaris A3	CHEVALINE DASO-2	-	HMS Revenge (UK04)	ETR	SLEB	-	-	79.0W 28.5N (+/- 2.0)	10.0
1983 Jun 9 1605	Polaris A3	CHEVALINE DASO-2	-	HMS Revenge (UK04)	ETR	SLEB	-	-	79.0W 28.5N (+/- 2.0)	1000.0
1983 Jun 11 1500	Polaris A3	CHEVALINE DASO-2	-	HMS Revenge (UK04)	ETR	SLEB	-	-	79.0W 28.5N (+/- 2.0)	1000.0
1983 Jun 11 1643	Polaris A3	CHEVALINE DASO-2	-	HMS Revenge (UK04)	ETR	SLEB	-	-	79.0W 28.5N (+/- 2.0)	1000.0
1986 Jul 25 2230	Polaris A3	CHEVALINE DASO-4 PEM	-	HMS Revenge (UK04)	ETR	SLEB	-	-	79.0W 28.5N (+/- 2.0)	1000.0
1986 Jul 26 0213	Polaris A3	CHEVALINE DASO-4 PEM	-	HMS Revenge (UK04)	ETR	SLEB	-	-	79.0W 28.5N (+/- 2.0)	1000.0
1986 Aug 1 2215	Polaris A3	CHEVALINE DASO-4 PEM	-	HMS Revenge (UK04)	ETR	SLEB	-	-	79.0W 28.5N (+/- 2.0)	1000.0
1986 Aug 2 0435	Polaris A3	CHEVALINE DASO-4 PEM	-	HMS Revenge (UK04)	ETR	SLEB	-	-	79.0W 28.5N (+/- 2.0)	1000.0

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#### IV.1.24.5 HMS Vanguard (UK05)



Credit: MoD

HMS Vanguard was the first UK Trident submarine, carrying 16 Trident II missiles. It was launched in 1992.

Rockets used: Trident D-5

Updated: 2024 Nov 28 03:19:34

Launches: UK-S28

Date	Rocket	Flight	Mission	Platform	Site	LP	AscSite	AsclP	Pos	Apogee
1994 May 26 2215:03	Trident D-5	-	-	UK-S28	ETR	D4	-	-	79.0W 28.5N (+/- 2.0)	1000.0
1994 Jun 20 0300:03	Trident D-5	-	-	UK-S28	ETR	D4	-	-	79.0W 28.5N (+/- 2.0)	1000.0
2005 Oct 10 2110:08	Trident D-5	- (111ss)	-	UK-S28	ETR	D4	-	-	79.0W 28.5N (+/- 2.0)	1000.0
2024 Jan 30	Trident D-5	-	-	UK-S28	ETR	LF7	-	-	79.0W 28.5N (+/- 2.0)	1.0

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#### IV.1.24.6 HMS Victorious (UK06)



Credit: UK MoD

Rockets used: Trident D-5

Updated: 2024 Nov 28 03:19:34

Launches: UK-S29

Date	Rocket	Flight	Mission	FlatCode	Platform	Site	LP	AscSite	AscLP	Pos	Apogee
1995 Jul 24 2230:03	Trident D-5	-	-	UK-S29	HMS Victorious (UK06)	ETR	SLEM	-	-	79.0W 28.5N (+/- 2.0)	1000.0
1995 Aug 22 2225:04	Trident D-5	-	-	UK-S29	HMS Victorious (UK06)	ETR	SLEM	-	-	79.0W 28.5N (+/- 2.0)	1000.0
2009 May 26	Trident D-5	- (127ss)	-	UK-S29	HMS Victorious (UK06)	ETR	SLEM	-	-	79.0W 28.5N (+/- 2.0)	1000.0



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## IV.1.24.7 HMS Vigilant



Credit: MoD

Rockets used: Trident D-5

Updated: 2024 Nov 28 03:19:34

Launches: UK-S30

Date	Rocket	Flight	Mission	Platform	Site	LP	AscSite	AsclP	Pos	Apogee
1997 Oct 10	Trident D-5	-	-	UK-S30	HMS Vigilant	ETR	LP5	-	79.0W 28.5N	(+/- 2.0) 1000.0
1997 Oct 10 2005:03	Trident D-5	-	-	UK-S30	HMS Vigilant	ETR	LP5	-	79.0W 28.5N	(+/- 2.0) 1000.0
2012 Oct 23	Trident D-5	- (143s)	-	UK-S30	HMS Vigilant	ETR	SLBM	-	79.0W 28.5N	(+/- 2.0) 1000.0

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#### IV.1.24.8 HMS Vengeance



Credit: MoD

Rockets used: Trident D-5

Updated: 2024 Nov 28 03:19:34

Launches: UK-S31

Date	Rocket	Flight	Mission	PlatCode	Platform	Site	LP	AscSite	AscLP	Pos	Apogee
2000 Sep 21 2050	Trident D-5	- (90ss)	-	UK-S31	HMS Vengeance	ETR	SLBM	-	-	79.0W 28.5N (+/- 2.0)	1000.0
2016 Jun 20	Trident D-5	-	-	UK-S31	HMS Vengeance	ETR	SLBM	-	-	79.0W 28.5N (+/- 2.0)	10.0

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## **IV.1.25 Indian Missile Submarines**

Updated: 2024 Nov 28 03:19:34

**Indian Missile Submarines**

Ship	Transliteration	Image	CODE	Agency	Class	ClassID	AltID	Active
INS Arihant (S-73)	INS Arihant (S-73)		INS-S73	INAV	Arihant	SSBN 80	-	2015 - -

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#### IV.1.25.1 INS Arihant (S-73)



Credit: Indian Navy via Economic Times

Rockets used: K-15,K-4

Updated: 2024 Nov 28 03:19:34

Launches: INS-S73

Date	Rocket	Flight	Mission	PlatCode	Platform	Site	LP	AscSite	AsCLP	Pos	Apogee
2015 Nov	K-15	Sagarika	-	INS-S73	INS Arihant (S-73)	VISKH	-	-	-	83.2E 17.7N (+/- 0.1)	300.0
2016 Mar 31	K-4	-	-	INS-S73	INS Arihant (S-73)	VISKH	-	-	-	83.2E 17.7N (+/- 0.1)	500.0
2018 Aug 11	K-15	Sagarika	-	INS-S73	INS Arihant (S-73)	VISKH	-	-	-	83.2E 17.7N (+/- 0.1)	300.0
2018 Aug 11	K-15	Sagarika	-	INS-S73	INS Arihant (S-73)	VISKH	-	-	-	83.2E 17.7N (+/- 0.1)	300.0
2018 Aug 12	K-15	Sagarika	-	INS-S73	INS Arihant (S-73)	VISKH	-	-	-	83.2E 17.7N (+/- 0.1)	300.0
2022 Oct 14	K-15	-	-	INS-S73	INS Arihant (S-73)	CHAN	IC4	-	-	86.6E 21.3N (+/- 0.1)	300.0



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## **IV.1.26 Chinese Missile Submarines**

Updated: 2024 Nov 28 03:19:34

Chinese Missile Submarines

Ship	Transliteration	Image	CODE	Agency	Class	ClassID	AltID	Active
长城-200	Changcheng 200 submarine		CH200	PLANS	Type 031	200	-	1982 - -
长城-406	Changcheng 406 submarine		CH406	PLANS	Type 092	406	-	1981 - -
Unknown Jinji Qianting (Type 094) class sub	Unknown Jinji Qianting (Type 094) class sub		T094	PLANS	Type 094	-	-	2006? - -

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## IV.1.26.1 Changcheng 200 submarine

长城-200



Credit: [www.haijun360.com](http://www.haijun360.com)

Rockets used: JL-1

Updated: 2024 Nov 28 03:19:34

Launches: CH200

Date	Rocket	Flight	Mission	PlatCode	Platform	Site	LP	AscSite	AscLP	Pos	Apogee
1982 Oct 12	JL-1	-	-	CH200	Changcheng 200 submarine	YEL	-	-	-	123.0E 35.0N (+/- 3.0)	500.0

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## IV.1.26.2 Changcheng 406 submarine

长城-406

Rockets used: JL-1,JL-2

Updated: 2024 Nov 28 03:19:34

Launches: CH406

Date	Rocket	Flight	Mission	PlatCode	Platform	Site	LP	AscSite	AscLP	Pos	Apogee
1985 Sep 28	JL-1	-	-	CH406	Changcheng 406 submarine	YEL	-	-	-	123.0E 35.0N (+/- 3.0)	0.0
1988 Sep 27	JL-1	-	-	CH406	Changcheng 406 submarine	YEL	-	-	-	123.0E 35.0N (+/- 3.0)	500.0
2004 Jul 26?	JL-2	Julang-2	-	CH406	Changcheng 406 submarine	YEL	-	-	-	123.0E 35.0N (+/- 3.0)	10.0
2005 Jun 12?	JL-2	-	-	CH406	Changcheng 406 submarine	YEL	-	-	-	123.0E 35.0N (+/- 3.0)	1000.0
2008 May 29	JL-2	-	-	CH406	Changcheng 406 submarine	YEL	-	-	-	123.0E 35.0N (+/- 3.0)	1000.0

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### **IV.1.26.3 Unknown Jinji Qianting (Type 094) class sub**

Several Type 094 submarines exist. We don't know which ones were involved in specific launches.

Rockets used: JL-2,JL-3

Updated: 2024 Nov 28 03:19:34

Launches: T094

Date	Rocket	Flight	Mission	PlatCode	Platform	Site	LP	AscSite	AsCLP	Pos	Apogee
2012 Aug 16	JL-2	-	-	T094	Unknown Jinji Qianting (Type 094) class sub	BOHAI	-	-	-	120.9E 38.5N (+/- 0.5)	1000.0
2015 Jan 23	JL-2	-	-	T094	Unknown Jinji Qianting (Type 094) class sub	BOHAI	-	-	-	120.9E 38.5N (+/- 0.5)	1000.0
2018 Nov 22?	JL-3	-	-	T094	Unknown Jinji Qianting (Type 094) class sub	BOHAI	-	-	-	120.9E 38.5N (+/- 0.5)	1000.0
2019 Jun 1 2030?	JL-3	-	-	T094	Unknown Jinji Qianting (Type 094) class sub	BOHAI	-	-	-	120.9E 38.5N (+/- 0.5)	1000.0



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## **IV.1.27 North Korean Missile Submarines**

Updated: 2024 Nov 28 03:19:34

North Korean Missile Submarines

Ship	Transliteration	Image	CODE	Agency	Class	ClassID	AltID	Active
8.24 Yongung Submerged barge,Korean People's Navy	8.24 Yongung (Gorae class sub) Submerged barge,Korean People's Navy	-	824YONG KPN-PLAT	KPA KPA	Gorae -	-	-	2016 -- 2015 --

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### **IV.1.27.1 8.24 Yongung (Gorae class sub)**

#### 8.24 Yongung

Rockets used: Bukgukseong,Bukgukseong-3,Bukgukseong-6

Updated: 2024 Nov 28 03:19:34

Launches: 824YONG

Date	Rocket	Flight	Mission	Platform	Site	LP	AscSite	AscLP	Pos	Apogee
2016 Apr 23 0930	Bukgukseong	Bukgukseong	-	824YONG	8.24 Yongung (Gorae class sub)	SINPO	-	-	128.2E 40.0N (+/- 0.0)	10.0
2016 Jul 9 0230	Bukgukseong	Bukgukseong	-	824YONG	8.24 Yongung (Gorae class sub)	SINPO	-	-	128.2E 40.0N (+/- 0.0)	40.0
2016 Aug 23 2030	Bukgukseong	Bukgukseong	-	824YONG	8.24 Yongung (Gorae class sub)	SINPO	-	-	128.2E 40.0N (+/- 0.0)	500.0
2019 Oct 1 2211	Bukgukseong-3	-	-	824YONG	8.24 Yongung (Gorae class sub)	WONSAN	-	-	127.5E 39.2N (+/- 0.0)	910.0
2022 May 7 0505	Bukgukseong-6	-	-	824YONG	8.24 Yongung (Gorae class sub)	SINPO	-	-	128.2E 40.0N (+/- 0.0)	60.0

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## **IV.1.27.2 Submerged barge,Korean People's Navy**

Rockets used: Bukgukseong,Bukgukseong-6

Updated: 2024 Nov 28 03:19:34

**Launches: KPN-PLAT**

Date	Rocket	Flight	Mission	PlatCode	Platform	Site	LP	AscSite	AscLP	Pos	Apogee
2015 May 8	Bukguekseong	Bukguekseong	-	KPN-PLAT	Submerged barge,Korean People's Navy	SINPO	-	-	-	128.2E 40.0N (+/- 0.0)	1.0
2015 Nov 28	Bukguekseong	Ejection test	-	KPN-PLAT	Submerged barge,Korean People's Navy	SINPO	-	-	-	128.2E 40.0N (+/- 0.0)	0.0
2015 Dec 21	Bukguekseong	Ejection test	-	KPN-PLAT	Submerged barge,Korean People's Navy	SINPO	-	-	-	128.2E 40.0N (+/- 0.0)	0.0
2021 Oct 19 0117	Bukguekseong-6	-	-	KPN-PLAT	Submerged barge,Korean People's Navy	SINPO	-	-	-	128.2E 40.0N (+/- 0.0)	60.0

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## **IV.1.28 French Missile Submarines**

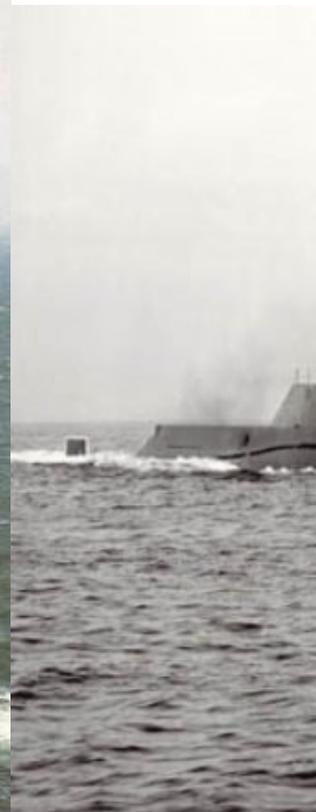
Updated: 2024 Nov 28 03:19:34

Ship	Transliteration	Image	French Missile Submarines CODE	Agency	Class	ClassID	AltID	Active
SNLE S655 Gymnote	SNLE S655 Gymnote		S655	ARMF	Gymnote	S655	-	1980? - 1986
SNLE S610 Le Foudroyant	SNLE S610 Le Foudroyant		S610	ARMF	Redoutable	S610	-	1971 - 1998
SNLE S611 Le Redoutable	SNLE S611 Le Redoutable		S611	ARMF	Redoutable	S611	-	1967 - 1991
SNLE S612 Le Terrible	SNLE S612 Le Terrible		S612	ARMF	Redoutable	S612	-	1969 - 1996
SNLE S613 L'Indomptable	SNLE S613 L'Indomptable		S613	ARMF	Redoutable	S613	-	1974 - 2003
SNLE S614 Le Tonnant	SNLE S614 Le Tonnant		S614	ARMF	Redoutable	S614	-	1977 - 1999
SNLE S615 L'Inflexible	SNLE S615 L'Inflexible		S615	ARMF	Redoutable	S615	-	1985 - 2008
SNLE-NG S616 Le Triomphant	SNLE-NG S616 Le Triomphant		S616	ARMF	Triomphant	S616	-	1994 - -
S617 Le Téméraire	SNLE-NG S617 Le Téméraire		S617	ARMF	Triomphant	S617	-	1998 - -
SNLE-NG S618 Le Vigilant	SNLE-NG S618 Le Vigilant		S618	ARMF	Triomphant	S618	-	2003 - -
SNLE-NG S619 Le Terrible	SNLE-NG S619 Le Terrible		S619	ARMF	Triomphant	S619	-	2008 - -



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#### IV.1.28.1 SNLE S655 Gymnote



Credit: Marine nationale

Credit: [source unknown]

The Gymnote was an experimental submarine for test launches of French SLBMs.

Rockets used: MSBS M112,MSBS M013,MSBS M1,MSBS M2,MSBS M4

Updated: 2024 Nov 28 03:19:34

Launches: S655

Date	Rocket	Flight	Mission	PlatCode	Platform	Site	LP	AscSite	AsCLP	Pos	Apogee
1967	MSBS M112	Gymnote 2	-	S655	SNLE S655 Gymnote	CERES	-	-	-	6.5E 43.0N (+/- 0.0)	50.0
1967	MSBS M112	Gymnote 3	-	S655	SNLE S655 Gymnote	CERES	-	-	-	6.5E 43.0N (+/- 0.0)	50.0
1967	MSBS M112	Gymnote 4	RSD Test	S655	SNLE S655 Gymnote	CERES	-	-	-	6.5E 43.0N (+/- 0.0)	10.0
1967	Apr 19	Gymnote 1	-	S655	SNLE S655 Gymnote	CERES	-	-	-	6.5E 43.0N (+/- 0.0)	50.0
1968?	MSBS M013	V2	-	S655	SNLE S655 Gymnote	CEL	-	-	-	1.2M 44.5N (+/- 0.0)	500.0
1968?	MSBS M013	V3	-	S655	SNLE S655 Gymnote	CEL	-	-	-	1.2M 44.5N (+/- 0.0)	500.0
1968	Nov 16	V1 Vecteur	-	S655	SNLE S655 Gymnote	CEL	-	-	-	1.2M 44.5N (+/- 0.0)	500.0
1969?	MSBS M013	V4	-	S655	SNLE S655 Gymnote	CEL	-	-	-	1.2M 44.5N (+/- 0.0)	500.0
1969?	MSBS M013	V5	-	S655	SNLE S655 Gymnote	CEL	-	-	-	1.2M 44.5N (+/- 0.0)	500.0
1969?	MSBS M013	V6	-	S655	SNLE S655 Gymnote	CEL	-	-	-	1.2M 44.5N (+/- 0.0)	500.0
1970?	MSBS M013	V7	-	S655	SNLE S655 Gymnote	CEL	-	-	-	1.2M 44.5N (+/- 0.0)	500.0
1970?	MSBS M013	C2	-	S655	SNLE S655 Gymnote	CEL	-	-	-	1.2M 44.5N (+/- 0.0)	500.0
1970?	MSBS M013	C3	-	S655	SNLE S655 Gymnote	CEL	-	-	-	1.2M 44.5N (+/- 0.0)	500.0
1970?	MSBS M013	C4	-	S655	SNLE S655 Gymnote	CEL	-	-	-	1.2M 44.5N (+/- 0.0)	500.0
1970	Jun 11	C1 Charge (RV)	-	S655	SNLE S655 Gymnote	CEL	-	-	-	1.2M 44.5N (+/- 0.0)	500.0
1971?	MSBS M013	C5	-	S655	SNLE S655 Gymnote	CEL	-	-	-	1.2M 44.5N (+/- 0.0)	500.0
1971?	MSBS M013	C6	-	S655	SNLE S655 Gymnote	CEL	-	-	-	1.2M 44.5N (+/- 0.0)	500.0
1971?	MSBS M013	C7	-	S655	SNLE S655 Gymnote	CEL	-	-	-	1.2M 44.5N (+/- 0.0)	500.0
1971	MSBS M013	C8	-	S655	SNLE S655 Gymnote	CEL	-	-	-	1.2M 44.5N (+/- 0.0)	500.0
1971?	MSBS M1	-	-	S655	SNLE S655 Gymnote	CEL	-	-	-	1.2M 44.5N (+/- 0.0)	500.0
1973	MSBS M2	-	-	S655	SNLE S655 Gymnote	CEL	-	-	-	1.2M 44.5N (+/- 0.0)	600.0
1982?	MSBS M4	-	-	S655	SNLE S655 Gymnote	CEL	-	-	-	1.2M 44.5N (+/- 0.0)	800.0
1982?	MSBS M4	-	-	S655	SNLE S655 Gymnote	CEL	-	-	-	1.2M 44.5N (+/- 0.0)	800.0
1982	Mar 10	-	-	S655	SNLE S655 Gymnote	CEL	-	-	-	1.2M 44.5N (+/- 0.0)	800.0
1983	MSBS M4	-	-	S655	SNLE S655 Gymnote	CEL	-	-	-	1.2M 44.5N (+/- 0.0)	800.0
1983	Jul 12	-	-	S655	SNLE S655 Gymnote	BRET	-	-	-	4.5M 47.5N (+/- 0.7)	800.0
1983	Nov 23	-	-	S655	SNLE S655 Gymnote	CEL	-	-	-	1.2M 44.5N (+/- 0.0)	800.0
1984	Feb 29	-	-	S655	SNLE S655 Gymnote	CEL	-	-	-	1.2M 44.5N (+/- 0.0)	800.0

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### IV.1.28.2 SNLE S610 Le Foudroyant



Credit: Patrick Coulon (sousmarintimonier.monsite-orange.fr)

Le Foudroyant (S610) entered service in 1974. It carried the M1, M2 and M20 missiles. In 1990-93 it was modified to carry the M4. It was retired in 1998.x

Rockets used: MSBS M2

Updated: 2024 Nov 28 03:19:34

Launches: S610

Date	Rocket	Flight	Mission	PlatCode	Platform	Site	LP	AscSite	AsCLP	Pos	Apogee
1973?	MSBS M2	-	-	S610	SNLE S610 Le Foudroyant	CEL	-	-	-	1.2W 44.5N (+/- 0.0)	600.0

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### IV.1.28.3 SNLE S611 Le Redoutable



Credit: Guilluame Rueda

S611 Le Redoutable was launched in Mar 1967 and in service Dec 1971. It had 16 M1 missiles, upgraded to M2 in 1974 and M20 in 1977. It was retired in 1991.

Rockets used: MSBS M1

Updated: 2024 Nov 28 03:19:34

Launches: S611

Date	Rocket	Flight	Mission	PlatCode	Platform	Site	LP	AscSite	AsclP	Pos	Apogee
1971 May 29 1000?	MSBS M1	-	-	S611	SNLE S611 Le Redoutable	CEL	-	-	-	1.2W 44.5N (+/- 0.0)	500.0
1971 Jun 26	MSBS M1	-	-	S611	SNLE S611 Le Redoutable	CEL	-	-	-	1.2W 44.5N (+/- 0.0)	500.0

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#### IV.1.28.4 SNLE S612 Le Terrible



Credit: Marine nationale

Le Terrible was launched Dec 1969 and entered service Jan 1973. It was refit to carry the M4 in 1988-1990 and retired in 1996.

Rockets used: MSBS M1

Updated: 2024 Nov 28 03:19:34

**Launches: S612**

Date	Rocket	Flight	Mission	PlatCode	Platform	Site	LP	AscSite	AscLP	Pos	Apogee
1972?	MSBS M1	-	-	S612	SNLE S612 Le Terrible	CEL	-	-	-	1.2W 44.5N (+/- 0.0)	500.0



#### IV.1.28.5 SNLE S613 L'Indomptable



Credit: (c) Bernard Prézélin

L'Indomptable was launched 1974 and entered service Dec 1976 with 16 M20 missiles. Upgrade to the M4 was carried out from Dec 1987 to Jun 1989. It was disarmed in 2005.

Rockets used: MSBS M20

Updated: 2024 Nov 28 03:19:34

Launches: S613

Date	Rocket	Flight	Mission	PlatCode	Platform	Site	LP	AscSite	AscLP	Pos	Apogee
1976 Apr 7	MSBS M20	-	-	S613	SNLE S613 L'Indomptable	CEL	-	-	-	1.2W 44.5N (+/- 0.0)	600.0
1979 Jul	MSBS M20	-	-	S613	SNLE S613 L'Indomptable	CEL	-	-	-	1.2W 44.5N (+/- 0.0)	600.0

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#### IV.1.28.6 SNLE S614 Le Tonnant



Credit: Marine nationale

Launched Sep 1977, in service April 1980 with 16 M20 missiles. Le Tonnant was refurbished Feb 1985- Apr 1987 to carry the M4.

Rockets used: MSBS M20,MSBS M4

Updated: 2024 Nov 28 03:19:34

Launches: S614

Date	Rocket	Flight	Mission	PlatCode	Platform	Site	LP	AscSite	AscLP	Pos	Apogee
1980?	MSBS M20	-	-	S614	SNLE S614 Le Tonnant	CEL	-	-	-	1.2W 44.5N (+/- 0.0)	600.0
1987 Sep 15	MSBS M4	Operational test	-	S614	SNLE S614 Le Tonnant	BRET	-	-	-	4.5W 47.5N (+/- 0.7)	800.0

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### IV.1.28.7 SNLE S615 L'Inflexible



Credit: wikipedia.org

Rockets used: MSBS M4,MSBS M45

Updated: 2024 Nov 28 03:19:34

Launches: S615

Date	Rocket	Flight	Mission	PlatCode	Platform	Site	LP	AscSite	AscLP	Pos	Apogee
1984 Jul 12	MSBS M4	-	-	S615	SNLE S615 L'Inflexible	CEL	-	-	-	1.2W 44.5N (+/- 0.0)	800.0
1986 Mar	MSBS M4	Long range test	M45 development?	S615	SNLE S615 L'Inflexible	CEL	-	-	-	1.2W 44.5N (+/- 0.0)	800.0
1999 May 4	MSBS M4	Veuglaire	-	S615	SNLE S615 L'Inflexible	BRET	-	-	-	4.5W 47.5N (+/- 0.7)	800.0
2001 Apr 17 2200	MSBS M45	M51 R&D (to CSG)	-	S615	SNLE S615 L'Inflexible	BRET	-	-	-	4.5W 47.5N (+/- 0.7)	800.0

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#### IV.1.28.8 SNLE-NG S616 Le Triomphant



Credit: Marine nationale, V. Guyoton

Le Triomphant was launched in 1994 and entered service in 1997.

Rockets used: MSBS M45,MSBS M51

Updated: 2024 Nov 28 03:19:34

Launches: S616

Date	Rocket	Flight	Mission	PlatCode	Platform	Site	LP	AscSite	AsCLP	Pos	Apogee
1995 Feb 14	MSBS M45	-	-	S616	SNLE-NG S616 Le Triomphant	BRET	-	-	-	4.5W 47.5N (+/- 0.7)	800.0
1996 Sep 19	MSBS M45	-	-	S616	SNLE-NG S616 Le Triomphant	BRET	-	-	-	4.5W 47.5N (+/- 0.7)	10.0
2005 Feb 1	MSBS M45	-	-	S616	SNLE-NG S616 Le Triomphant	BRET	-	-	-	4.5W 47.5N (+/- 0.7)	800.0
2016 Jul 1 0718	MSBS M51	-	-	S616	SNLE-NG S616 Le Triomphant	BRETA	LP1	-	-	4.0W 47.6N (+/- 0.1)	1000.0



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#### IV.1.28.9 SNLE-NG S617 Le Temeraire

S617 Le Téméraire



Credit: Marine nationale?

Rockets used: MSBS M45,MSBS M51

Updated: 2024 Nov 28 03:19:34

Launches: S617

Date	Rocket	Flight	Mission	Platform	Site	LP	AscSite	AscLP	Pos	Apogee
1999 May 4	MSBS M45	-	-	S617 SNLE-NG S617 Le Temeraire	BRET	-	-	-	4.5W 47.5N (+/- 0.7)	800.0
2020 Jun 12	MSBS M51	-	-	S617 SNLE-NG S617 Le Temeraire	BRETA	LP2	-	-	4.0W 47.6N (+/- 0.1)	1200.0

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#### IV.1.28.10 SNLE-NG S618 Le Vigilant



Credit: Marine nationale

Rockets used: MSBS M45,MSBS M51

Updated: 2024 Nov 28 03:19:34

Launches: S618

Date	Rocket	Flight	Mission	Platform	Site	LP	AscSite	AsclP	Pos	Apogee
2004 Jun 1 2201	MSBS M45	ME-34 Teutates	-	S618	SNLE-NG S618 Le Vigilant	-	-	-	4.5W 47.5N (+/- 0.7)	800.0
2013 May 5 0730	MSBS M51	M51.2	-	S618	SNLE-NG S618 Le Vigilant	LP1	-	-	4.0W 47.6N (+/- 0.1)	1.0

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#### IV.1.28.11 SNLE-NG S619 Le Terrible



Credit: Wolfgang Meinhart

The new Triumphant-class Le Terrible (not to be confused with the Redoutable class submarine of the same name) was launched in 2008 and entered service in 2010. It carries 16 M51 missiles.

Rockets used: MSBS M51

Updated: 2024 Nov 28 03:19:34

Launches: S619

Date	Rocket	Flight	Mission	Platform	Site	LP	AscSite	AsCLP	Pos	Apogee
2010 Jan 27 0825	MSBS M51	N Atlantic	-	S619	SMLE-NG S619 Le Terrible	BRETA	LP1	-	4.0W 47.6N (+/- 0.1)	1000.0
2010 Jul 10 0732	MSBS M51	N Atlantic	-	S619	SMLE-NG S619 Le Terrible	BRETA	LP1	-	4.0W 47.6N (+/- 0.1)	1000.0
2023 Apr 19	MSBS M51	-	-	S619	SMLE-NG S619 Le Terrible	BRETA	LP1	-	4.0W 47.6N (+/- 0.1)	1000.0

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## **IV.1.29 US Rocket Launching Aircraft: Bombers**

Updated: 2024 Nov 28 03:19:34

US Rocket Launching Aircraft: Bombers

Ship	Transliteration	Image	CODE	Agency	Class	ClassID	AltID	Active
B-1B Lancer, unknown S/N B-29 or B-50 Superfortress, unknown S/N	B-1B Lancer, unknown S/N B-29 or B-50 Superfortress, unknown S/N		B-1B B-29	USAF USAF	B-1B B-29	- -	- -	- - - - - -
B-29B-60-BO Superfortress S/N 44-84073	B-29B-60-BO Superfortress S/N 44-84073		B-29-073	USAF	B-29	44-80473	-	1951 - 1960
B-29-55-BO Superfortress S/N 44-86402	B-29-55-BO Superfortress S/N 44-86402		B-29-402	USAF	B-29	44-86402	-	1951 - 1960
DB-47E-60-BW Stratojet S/N 51-5220 JTB-50D-80-BO Superfortress S/N 48-0068	DB-47E-60-BW Stratojet S/N 51-5220 JTB-50D-80-BO Superfortress S/N 48-0068		B-47E-220 B-50D-068	USAF USAF	B-47 B-50	51-5220 48-0068	- -	1958 - 1959 1951 - 1960
B-52G/H Stratofortress FB-111	B-52G/H Stratofortress FB-111		B-52GH FB-111	USAF USAF	B-52 FB-111	- -	- -	1969 - 1984 - - -
B-52G Stratofortress S/N 57-6473 B-52H Stratofortress, unknown S/N	B-52G Stratofortress S/N 57-6473 B-52H Stratofortress, unknown S/N		B-52G-473 B-52H	USAF USAF	B-52 B-52	57-6473 60-0024	- -	1962 - 1963 - - -
B-52H Stratofortress S/N 60-0021 or 60-0036	B-52H Stratofortress S/N 60-0021 or 60-0036		B-52H-T	USAF	B-52	60-0021/36	-	1967 - 1970
B-52H Stratofortress S/N 60-0021	B-52H Stratofortress S/N 60-0021		B-52H-021	USAF	B-52	60-0021	-	1967 - 1970
B-52H Stratofortress S/N 60-0024?	B-52H Stratofortress S/N 60-0024?		B-52H-024	USAF	B-52	60-0024	-	2009 - 2016



US Rocket Launching Aircraft: Bombers

Ship	Transliteration	Image	CODE	Agency	Class	ClassID	AltID	Active
B-52H Stratofortress S/N 60-0031?	B-52H Stratofortress S/N 60-0031?		B-52H-031	USAF	B-52	60-0031	-	2009 - 2016
B-52H Stratofortress S/N 60-0036	B-52H Stratofortress S/N 60-0036		B-52H-036	USAF	B-52	60-0036	-	1967 - 1970
B-52H Stratofortress S/N 60-0050	B-52H Stratofortress S/N 60-0050		B-52H-050	USAF	B-52	60-0050	-	2009 - 2016
NB-52 Stratofortress (S/N 003 or 008)	NB-52 Stratofortress (S/N 003 or 008)		NB-52	FRC	B-52	52-003/008	-	- - -
NB-52A Stratofortress S/N 003	NB-52A Stratofortress S/N 003		NB-52-003	FRC	B-52	52-003	-	- - -
NB-52B Stratofortress S/N 008	NB-52B Stratofortress S/N 008		NB-52-008	FRC	B-52	52-008	-	- - -
B-57A Canberra, AFSWC	B-57A Canberra, AFSWC		B-57A-SWC	AFSWC	B-57	-	-	- - -
B-57A Canberra NASA 218	B-57A Canberra NASA 218		B-57A-218	PARD	B-57	52-1418	NASA 218	- - -
WB-57B Canberra S/N 52-1502/3/4/6	WB-57B Canberra S/N 52-1502/3/4/6		B-57B-502	USAF	B-57	52-1502	-	- - -
WB-57C Canberra S/N 53-3832 and 53-3944	WB-57C Canberra S/N 53-3832 and 53-3944		B-57C	USAF	B-57	53-3832/3944	-	- - -
WB-57C Canberra S/N 53-3832 and 53-3944	WB-57C Canberra S/N 53-3832 and 53-3944		B-57C-832	USAF	B-57	53-3832	-	- - -
WB-57C Canberra S/N 53-3832 and 53-3944	WB-57C Canberra S/N 53-3832 and 53-3944		B-57C-944	USAF	B-57	53-3944	-	- - -
B-58 Hustler S/N 55-660?	B-58 Hustler S/N 55-660?		B-58-660	USAF/CONV	B-58	55-660	-	- - -

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### **IV.1.29.1 B-1B Lancer, unknown S/N**

Rockets used: SRAM

Updated: 2024 Nov 28 03:19:34

Launches: B-1B

Date	Rocket	Flight	Mission	Platform	Site	LP	AscSite	AsclP	Pos	Apogee
1987 Jan 16	SRAM	-	-	B-1B Lancer, unknown S/N	TTR	RW13/42	TTR	LP1	116.8W 37.8N (+/- 0.0)	10.0
1987 Jun 3	SRAM	-	-	B-1B Lancer, unknown S/N	DYESS	RW16/34	TTR	LP1	116.8W 37.8N (+/- 0.0)	10.0

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### **IV.1.29.2 B-29 or B-50 Superfortress, unknown S/N**

The X-7A-1 missile was launched from two airplanes: the B-29B-60-BO S/N 44-84073 (my code B-29-073) and the B-29-55-BO S/N 44-86402 (my code B-29-402). We don't know which missile was dropped by which plane, so the generic B-29 code is used for each of the launches.

Rockets used: X-7A-1

Updated: 2024 Nov 28 03:19:34

Launches: B-29

Date	Rocket	Flight	Mission	PlatCode	Platform	Site	LP	AscSite	AsclP	Pos	Apogee
1951 Nov	X-7A-1	-	-	B-29	B-29 or B-50 Superfortress, unknown S/N	HADC	RW07/25	WS	LP1	106.5W 32.4N (+/- 0.1)	10.0
1952 Dec 17	X-7A-1	-	-	B-29	B-29 or B-50 Superfortress, unknown S/N	HADC	RW07/25	WS	LP1	106.5W 32.4N (+/- 0.1)	10.0
1953 Feb 2	X-7A-1	-	-	B-29	B-29 or B-50 Superfortress, unknown S/N	HADC	RW07/25	WS	LP1	106.5W 32.4N (+/- 0.1)	10.0
1953 Apr 8	X-7A-1	-	-	B-29	B-29 or B-50 Superfortress, unknown S/N	HADC	RW07/25	WS	LP1	106.5W 32.4N (+/- 0.1)	10.0
1953 Sep 12	X-7A-1	-	-	B-29	B-29 or B-50 Superfortress, unknown S/N	HADC	RW07/25	WS	LP1	106.5W 32.4N (+/- 0.1)	10.0
1953 Dec 8	X-7A-1	-	-	B-29	B-29 or B-50 Superfortress, unknown S/N	HADC	RW07/25	WS	LP1	106.5W 32.4N (+/- 0.1)	10.0
1954 Jan 26	X-7A-1	-	-	B-29	B-29 or B-50 Superfortress, unknown S/N	HADC	RW07/25	WS	LP1	106.5W 32.4N (+/- 0.1)	10.0
1954 Feb 24	X-7A-1	-	-	B-29	B-29 or B-50 Superfortress, unknown S/N	HADC	RW07/25	WS	LP1	106.5W 32.4N (+/- 0.1)	10.0
1954 Jun 8	X-7A-1	-	-	B-29	B-29 or B-50 Superfortress, unknown S/N	HADC	RW07/25	WS	LP1	106.5W 32.4N (+/- 0.1)	10.0
1954 Sep 23	X-7A-1	-	-	B-29	B-29 or B-50 Superfortress, unknown S/N	HADC	RW07/25	WS	LP1	106.5W 32.4N (+/- 0.1)	10.0
1954 Oct 21	X-7A-1	-	-	B-29	B-29 or B-50 Superfortress, unknown S/N	HADC	RW07/25	WS	LP1	106.5W 32.4N (+/- 0.1)	10.0
1954 Nov 24	X-7A-1	-	-	B-29	B-29 or B-50 Superfortress, unknown S/N	HADC	RW07/25	WS	LP1	106.5W 32.4N (+/- 0.1)	10.0
1954 Dec 14	X-7A-1	-	-	B-29	B-29 or B-50 Superfortress, unknown S/N	HADC	RW07/25	WS	LP1	106.5W 32.4N (+/- 0.1)	10.0
1954 Dec 21	X-7A-1	-	-	B-29	B-29 or B-50 Superfortress, unknown S/N	HADC	RW07/25	WS	LP1	106.5W 32.4N (+/- 0.1)	10.0
1955 Jan 18	X-7A-1	-	-	B-29	B-29 or B-50 Superfortress, unknown S/N	HADC	RW07/25	WS	LP1	106.5W 32.4N (+/- 0.1)	10.0
1955 Feb 1	X-7A-1	-	-	B-29	B-29 or B-50 Superfortress, unknown S/N	HADC	RW07/25	WS	LP1	106.5W 32.4N (+/- 0.1)	10.0
1955 Feb 24	X-7A-1	ST-30 TV14	-	B-29	B-29 or B-50 Superfortress, unknown S/N	HADC	RW07/25	WS	LP1	106.5W 32.4N (+/- 0.1)	10.0
1955 Apr 7	X-7A-1	ST-31	-	B-29	B-29 or B-50 Superfortress, unknown S/N	HADC	RW07/25	WS	LP1	106.5W 32.4N (+/- 0.1)	10.0
1955 Apr 29	X-7A-1	32	-	B-29	B-29 or B-50 Superfortress, unknown S/N	HADC	RW07/25	WS	LP1	106.5W 32.4N (+/- 0.1)	10.0

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**IV.1.29.3 B-29B-60-BO Superfortress S/N 44-84073**



Credit: Unk

Rockets used: X-7A-1

Updated: 2024 Nov 28 03:19:34

**Launches: B-29-073**

Date	Rocket	Flight	Mission	PlatCode	Platform	Site	LP	AscSite	AscLP	Pos	Apogee
1951 Apr 26	X-7A-1	-	-	B-29-073	B-29B-60-B0 Superfortress S/N 44-84073	HADC	RM07/25	WS	LP1	106.5W 32.4N (+/- 0.1)	10.0

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**IV.1.29.4 B-29-55-BO Superfortress S/N 44-86402**



Credit: Unk



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#### IV.1.29.5 DB-47E-60-BW Stratojet S/N 51-5220



Credit: Unk

The Bold Orion launches were dropped over the Atlantic Missile Range from a B-47E Stratojet based at Eglin. Its serial number is 51-5220 according to [www.joebaugher.com](http://www.joebaugher.com)

Rockets used: Bold Orion

Updated: 2024 Nov 28 03:19:34

Launches: B-47E-220

Date	Rocket	Flight	Mission	PlatCode	Platform	Site	LP	AscSite	AscLP	Pos	Apogee
1958 May 26	Bold Orion	-	-	B-47E-220	DB-47E-60-BW Stratojet S/N 51-5220	EGL	RW12/30	AMR	LP1	80.0W 28.5N (+/- 1.0)	8.0
1958 Jun 27	Bold Orion	-	-	B-47E-220	DB-47E-60-BW Stratojet S/N 51-5220	EGL	RW12/30	AMR	LP1	80.0W 28.5N (+/- 1.0)	12.0
1958 Jul 18	Bold Orion	-	-	B-47E-220	DB-47E-60-BW Stratojet S/N 51-5220	EGL	RW12/30	AMR	LP1	80.0W 28.5N (+/- 1.0)	100.0
1958 Sep 25	Bold Orion	-	-	B-47E-220	DB-47E-60-BW Stratojet S/N 51-5220	EGL	RW12/30	AMR	LP1	80.0W 28.5N (+/- 1.0)	100.0
1958 Oct 10	Bold Orion	-	-	B-47E-220	DB-47E-60-BW Stratojet S/N 51-5220	EGL	RW12/30	AMR	LP1	80.0W 28.5N (+/- 1.0)	100.0
1958 Nov 17	Bold Orion	-	-	B-47E-220	DB-47E-60-BW Stratojet S/N 51-5220	EGL	RW12/30	AMR	LP1	80.0W 28.5N (+/- 1.0)	100.0
1958 Dec 8	Bold Orion	-	-	B-47E-220	DB-47E-60-BW Stratojet S/N 51-5220	EGL	RW12/30	AMR	LP1	80.0W 28.5N (+/- 1.0)	11.0
1958 Dec 16	Bold Orion	-	-	B-47E-220	DB-47E-60-BW Stratojet S/N 51-5220	EGL	RW12/30	AMR	LP1	80.0W 28.5N (+/- 1.0)	200.0
1959 Apr 4	Bold Orion	-	-	B-47E-220	DB-47E-60-BW Stratojet S/N 51-5220	EGL	RW12/30	AMR	LP1	80.0W 28.5N (+/- 1.0)	200.0
1959 Jun 8	Bold Orion	-	-	B-47E-220	DB-47E-60-BW Stratojet S/N 51-5220	EGL	RW12/30	AMR	LP1	80.0W 28.5N (+/- 1.0)	100.0
1959 Jun 19 1530	Bold Orion	-	-	B-47E-220	DB-47E-60-BW Stratojet S/N 51-5220	EGL	RW12/30	AMR	LP1	80.0W 28.5N (+/- 1.0)	100.0
1959 Oct 13 0900	Bold Orion	-	-	B-47E-220	DB-47E-60-BW Stratojet S/N 51-5220	EGL	RW12/30	AMR	LP1	80.0W 28.5N (+/- 1.0)	200.0

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#### IV.1.29.6 JTB-50D-80-BO Superfortress S/N 48-0068



Credit: Unk



Credit: Unk

The B-50 Superfortress was an improved derivative of the B-29. B-50D no. 58-0068 was used at White Sands for X-7A3 launches. The picture shows a different B-50D; let me know if you have one of 58-0068. A different B-50 was used at Edwards for X-1 launches. (6004?)

Rockets used: X-7A-3,X-7B

Updated: 2024 Nov 28 03:19:34



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## IV.1.29.7 B-52G/H Stratofortress



Credit: Unk

This code covers various B-52G and B-52H aircraft used for SRAM test launches. The aircraft took off from a variety of bases and launched their missiles over the Atlantic off Cape Canaveral.

The SRAM missiles were low altitude rockets and are included here mainly to complete the Cape Canaveral launch list.

SRAM missiles were also launched by the FB-111 and later by the B-1B.

B-52G 57-6518 was used for the 1971 Jul 22 flight at White Sands.

Rockets used: SRAM

Updated: 2024 Nov 28 03:19:34

Launches: B-52GH

Date	Rocket	Flight	Mission	PlatCode	Platform	Site	LP	AscSite	AscLP	Pos	Apogee
1969 Jul 29	SRAM	-	-	B-52GH	B-52G/H Stratofortress	HADC	RW07/25	WS	LP1	106.5W 32.4N (+/- 0.1)	10.0
1971 Jul 22	SRAM	-	-	B-52GH	B-52G/H Stratofortress	HADC	RW07/25	WS	LP1	106.5W 32.4N (+/- 0.1)	10.0
1972 Jun 15	SRAM	-	-	B-52GH	B-52G/H Stratofortress	HADC	RW07/25	WS	LP1	106.5W 32.4N (+/- 0.1)	10.0
1974 Aug 20 1109	SRAM	BULLET BLAST	-	B-52GH	B-52G/H Stratofortress	GF	RW17/35	ETR	GTIDZ	79.0W 28.5N (+/- 2.0)	10.0
1975 Mar 25 1101	SRAM	BULLET BLITZ II-1	-	B-52GH	B-52G/H Stratofortress	GF	RW17/35	ETR	GTIDZ	79.0W 28.5N (+/- 2.0)	10.0
1975 May 12 1124	SRAM	BULLET BLITZ II-3	-	B-52GH	B-52G/H Stratofortress	GF	RW17/35	ETR	GTIDZ	79.0W 28.5N (+/- 2.0)	10.0
1975 May 12 1154	SRAM	BULLET BLITZ II-4	-	B-52GH	B-52G/H Stratofortress	GF	RW17/35	ETR	GTIDZ	79.0W 28.5N (+/- 2.0)	10.0
1975 Nov 13 1316	SRAM	-	-	B-52GH	B-52G/H Stratofortress	GF	RW17/35	ETR	GTIDZ	79.0W 28.5N (+/- 2.0)	10.0
1975 Nov 14 1230	SRAM	-	-	B-52GH	B-52G/H Stratofortress	GF	RW17/35	ETR	GTIDZ	79.0W 28.5N (+/- 2.0)	10.0
1975 Nov 24 1315	SRAM	-	-	B-52GH	B-52G/H Stratofortress	GF	RW17/35	ETR	GTIDZ	79.0W 28.5N (+/- 2.0)	10.0
1977 Apr 14 1159	SRAM	-	-	B-52GH	B-52G/H Stratofortress	ELLS	RW13/31	ETR	GTIDZ	79.0W 28.5N (+/- 2.0)	10.0
1977 Dec 14 1254	SRAM	-	-	B-52GH	B-52G/H Stratofortress	BARK	RW15/33	ETR	GTIDZ	79.0W 28.5N (+/- 2.0)	10.0
1978 Mar 1 1200	SRAM	-	-	B-52GH	B-52G/H Stratofortress	ROBI	RW15/33	ETR	GTIDZ	79.0W 28.5N (+/- 2.0)	10.0
1978 Jul 20 1149	SRAM	-	-	B-52GH	B-52G/H Stratofortress	GF	RW17/35	ETR	GTIDZ	79.0W 28.5N (+/- 2.0)	10.0
1978 Dec 13 1158	SRAM	-	-	B-52GH	B-52G/H Stratofortress	WURT	RW07/25	ETR	GTIDZ	79.0W 28.5N (+/- 2.0)	10.0
1979 Feb 7 1157:09	SRAM	-	-	B-52GH	B-52G/H Stratofortress	GFX	-	ETR	GTIDZ	79.0W 28.5N (+/- 2.0)	10.0
1979 Nov 28 1201:28	SRAM	-	-	B-52GH	B-52G/H Stratofortress	GFX	-	ETR	GTIDZ	79.0W 28.5N (+/- 2.0)	10.0
1980 Feb 6 1201:42	SRAM	-	-	B-52GH	B-52G/H Stratofortress	GFX	-	ETR	GTIDZ	79.0W 28.5N (+/- 2.0)	10.0
1980 Jun 22	SRAM	-	-	B-52GH	B-52G/H Stratofortress	KMR	-	KMR	-	167.7E 9.0N (+/- 0.0)	10.0
1983 Jun 22 1058:41	SRAM	-	-	B-52GH	B-52G/H Stratofortress	GFX	-	ETR	GTIDZ	79.0W 28.5N (+/- 2.0)	10.0
1983 Jul 26 1129:54	SRAM	-	-	B-52GH	B-52G/H Stratofortress	GFX	-	ETR	GTIDZ	79.0W 28.5N (+/- 2.0)	10.0

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## **IV.1.29.8 FB-111**

Rockets used: SRAM

Updated: 2024 Nov 28 03:19:34

Launches: FB-111

Date	Rocket	Flight	Mission	PlatCode	Platform	Site	LP	AscSite	AscLP	Pos	Apogee
1970 May 20	SRAM	-	-	FB-111	FB-111	HADC	RM07/25	WS	LP1	106.5W 32.4N (+/- 0.1)	10.0
1974 Dec 6	SRAM	BULLET BLAST	-	FB-111	FB-111	TTR	RW13/42	TTR	LP1	116.8W 37.8N (+/- 0.0)	10.0
1975 Apr 21 1235	SRAM	BULLET BLITZ II-2	-	FB-111	FB-111	PLATT	RW17/35	ETR	GTIDZ	79.0W 28.5N (+/- 2.0)	10.0
1975 May 23 1135	SRAM	BULLET BLITZ II-5	-	FB-111	FB-111	PLATT	RW17/35	ETR	GTIDZ	79.0W 28.5N (+/- 2.0)	10.0
1975 May 23 1158	SRAM	BULLET BLITZ II-6	-	FB-111	FB-111	PLATT	RW17/35	ETR	GTIDZ	79.0W 28.5N (+/- 2.0)	10.0
1976 Apr 14 1201	SRAM	-	-	FB-111	FB-111	PLATT	-	ETR	GTIDZ	79.0W 28.5N (+/- 2.0)	10.0
1976 Apr 14 1221	SRAM	-	-	FB-111	FB-111	PLATT	-	ETR	GTIDZ	79.0W 28.5N (+/- 2.0)	10.0
1976 Dec 14 1200	SRAM	-	-	FB-111	FB-111	PLATT	RW17/35	ETR	GTIDZ	79.0W 28.5N (+/- 2.0)	10.0
1976 Dec 14 1220	SRAM	-	-	FB-111	FB-111	PLATT	RW17/35	ETR	GTIDZ	79.0W 28.5N (+/- 2.0)	10.0
1979 Jan 17 1252:41	SRAM	-	-	FB-111	FB-111	PLATT	-	ETR	GTIDZ	79.0W 28.5N (+/- 2.0)	10.0
1979 Jan 19 1159:20	SRAM	-	-	FB-111	FB-111	PLATX	-	ETR	GTIDZ	79.0W 28.5N (+/- 2.0)	10.0
1979 Jan 19 1229:38	SRAM	-	-	FB-111	FB-111	PLATX	-	ETR	GTIDZ	79.0W 28.5N (+/- 2.0)	10.0
1979 Dec 12 1159:36	SRAM	-	-	FB-111	FB-111	PLATX	-	ETR	GTIDZ	79.0W 28.5N (+/- 2.0)	10.0
1979 Dec 12 1225:12	SRAM	-	-	FB-111	FB-111	PLATX	-	ETR	GTIDZ	79.0W 28.5N (+/- 2.0)	10.0
1980 Nov 5 1207:49	SRAM	-	-	FB-111	FB-111	PLATX	-	ETR	GTIDZ	79.0W 28.5N (+/- 2.0)	10.0
1981 Dec 9 1200:52	SRAM	-	-	FB-111	FB-111	PLATX	-	ETR	GTIDZ	79.0W 28.5N (+/- 2.0)	10.0



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#### IV.1.29.9 B-52G Stratofortress S/N 57-6473



Credit: Unk

Credit: Unk

Steve Pace, in his book X-Planes over Edwards, reports that B-52G 57-6473 was used for Skybolt captive trials at Edwards because the B-52H was not mature enough. Other reports suggest there was a single B-52G used for trials, although B-52H planes were photographed carrying dummy Skybolts. Records confirm at least 3 of the 5 launches were by a B-52G, but do not give a serial number. I will assume that 473 was used for all the actual Skybolt launches in Florida, staged from Eglin. One photo of the first launch shows a blurry tail number that appears consistent with '6473'.

Two RAF Vulcans were also used for captive trials but never made a live launch

Rockets used: Skybolt ALBM

Updated: 2024 Nov 28 03:19:34

Launches: B-52G-473

Date	Rocket	Flight	Mission	Platform	Site	LP	AscSite	AscLP	Pos	Apogee	
1962 Apr 19 2103	Skybolt ALBM	PL.1	-	B-52G-473	B-52G Stratofortress S/N 57-6473	EGL	RW12/30	AMR	LP1	80.0W 28.5N (+/- 1.0)	78.0
1962 Jun 29	Skybolt ALBM	PL.2	-	B-52G-473	B-52G Stratofortress S/N 57-6473	EGL	RW12/30	AMR	LP1	80.0W 28.5N (+/- 1.0)	12.0
1962 Sep 13	Skybolt ALBM	PL.3	-	B-52G-473	B-52G Stratofortress S/N 57-6473	EGL	RW12/30	AMR	LP1	80.0W 28.5N (+/- 1.0)	10.0
1962 Sep 25 1409	Skybolt ALBM	PL.4	-	B-52G-473	B-52G Stratofortress S/N 57-6473	EGL	RW12/30	AMR	LP1	80.0W 28.5N (+/- 1.0)	100.0
1962 Nov 28 1845	Skybolt ALBM	GL.1	-	B-52G-473	B-52G Stratofortress S/N 57-6473	EGL	RW12/30	AMR	LP1	80.0W 28.5N (+/- 1.0)	10.0
1962 Dec 22 1415	Skybolt ALBM	GL.2	-	B-52G-473	B-52G Stratofortress S/N 57-6473	EGL	RW12/30	AMR	LP1	80.0W 28.5N (+/- 1.0)	580.0

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#### **IV.1.29.10 B-52H Stratofortress, unknown S/N**

Rockets used: ARRW

Updated: 2024 Nov 28 03:19:34

Launches: B-52H

Date	Rocket	Flight	Mission	PlatCode	Platform	Site	LP	AscSite	AsCLP	Pos	Apogee
2022 Jul 12	ARW	Booster Test	AGM-183A	B-52H	B-52H Stratofortress, unknown S/N	EAFB	-	PM	-	119.1W 34.1N (+/- 0.0)	10.0
2022 Dec 9	ARW	Test	AGM-183A	B-52H	B-52H Stratofortress, unknown S/N	EAFB	-	PM	-	119.1W 34.1N (+/- 0.0)	10.0
2023 Mar 13	ARW	Test	AGM-183A	B-52H	B-52H Stratofortress, unknown S/N	EAFB	-	PM	-	119.1W 34.1N (+/- 0.0)	10.0
2023 Aug 19	ARW	Test	AGM-183A	B-52H	B-52H Stratofortress, unknown S/N	EAFB	-	PM	-	119.1W 34.1N (+/- 0.0)	20.0
2023 Oct 12	ARW	Test	AGM-183A	B-52H	B-52H Stratofortress, unknown S/N	EAFB	-	PM	-	119.1W 34.1N (+/- 0.0)	20.0
2024 Mar	ARW	Test	AGM-183A	B-52H	B-52H Stratofortress, unknown S/N	GUAWA	-	KMR	-	167.7E 9.0N (+/- 0.0)	20.0

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**IV.1.29.11 B-52H Stratofortress S/N 60-0021 or 60-0036**



Credit: [credit unknown]

Rockets used: D-21B

Updated: 2024 Nov 28 03:19:34

Launches: B-52H-T

Date	Rocket	Flight	Mission	Platform	Site	LP	AscSite	AsclP	Pos	Apogee
1967 Sep 28	D-21B	Accidental launch	-	B-52H-T	A51	RW14/32	A51	X1	115.8W 37.2N (+/- 0.1)	10.0
1967 Nov 6	D-21B	Initial Test Series 1	-	B-52H-T	A51	RW14/32	WTR	LP6	119.0W 33.0N (+/- 3.0)	26.0
1967 Dec 2	D-21B	Initial Test Series 2	-	B-52H-T	A51	RW14/32	WTR	LP6	119.0W 33.0N (+/- 3.0)	26.0
1968 Jan 19	D-21B	Initial Test Series 3	-	B-52H-T	A51	RW14/32	WTR	LP6	119.0W 33.0N (+/- 3.0)	26.0
1968 Apr 30	D-21B	Initial Test Series 4	-	B-52H-T	A51	RW14/32	WTR	LP6	119.0W 33.0N (+/- 3.0)	26.0
1968 Jun 16 1934	D-21B	Initial Test Series 5	-	B-52H-T	A51	RW14/32	WTR	LP6	119.0W 33.0N (+/- 3.0)	27.0
1968 Jul 1 1700	D-21B	Capt Hook I	-	B-52H-T	A51	RW14/32	KAU	LP4	159.8W 22.1N (+/- 0.0)	26.0
1968 Aug 28	D-21B	Capt Hook II	-	B-52H-T	A51	RW14/32	KAU	LP4	159.8W 22.1N (+/- 0.0)	26.0
1968 Dec 15	D-21B	Capt Hook III	-	B-52H-T	A51	RW14/32	KAU	LP4	159.8W 22.1N (+/- 0.0)	26.0
1969 Feb 11	D-21B	Capt Hook IV	-	B-52H-T	A51	RW14/32	KAU	LP4	159.8W 22.1N (+/- 0.0)	26.0
1969 May 10 2202	D-21B	Capt Hook V	-	B-52H-T	BEALE	RW15/33	KAU	LP4	159.8W 22.1N (+/- 0.0)	29.0
1969 Jul 10 2156	D-21B	Capt Hook VI	-	B-52H-T	BEALE	RW15/33	KAU	LP4	159.8W 22.1N (+/- 0.0)	28.0
1969 Nov 10	D-21B	SENIOR BOWL 02	-	B-52H-T	GUAMA	RW06L/24R	PHLDZ	-	118.0E 12.0N (+/- 2.0)	26.0
1970 Feb 20	D-21B	LONG DRIVE	-	B-52H-T	BEALE	RW15/33	KAU	LP4	159.8W 22.1N (+/- 0.0)	29.0
1970 Dec 17 0004	D-21B	SENIOR BOWL 04	-	B-52H-T	GUAMA	RW06L/24R	PHLDZ	-	118.0E 12.0N (+/- 2.0)	26.0
1971 Mar 4	D-21B	SENIOR BOWL	-	B-52H-T	GUAMA	RW06L/24R	PHLDZ	-	118.0E 12.0N (+/- 2.0)	26.0
1971 Mar 20	D-21B	SENIOR BOWL	Lop Nor, shot down	B-52H-T	GUAMA	RW06L/24R	PHLDZ	-	118.0E 12.0N (+/- 2.0)	26.0

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**IV.1.29.12 B-52H Stratofortress S/N 60-0021**



Credit: Lockheed Martin

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**IV.1.29.13 B-52H Stratofortress S/N 60-0024?**



Credit: [credit unknown]

Rockets used: X-51A

Updated: 2024 Nov 28 03:19:34



Launches: B-52H-024

Date	Rocket	Flight	Mission	PlatCode	Platform	Site	LP	AscSite	AscLP	Pos	Apogee
2013 May 1 1755	X-51A	-	-	B-52H-024	B-52H Stratofortress S/N 60-0024?	EAFB	RM04/22	WTR	LP10	119.0W 33.0N (+/- 3.0)	16.0



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**IV.1.29.14 B-52H Stratofortress S/N 60-0031?**



Credit: [credit unknown]



Credit: [credit unknown]

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Rockets used: X-51A

Updated: 2024 Nov 28 03:19:34

Launches: B-52H-031

Date	Rocket	Flight	Mission	PlatCode	Platform	Site	LP	AscSite	AscLP	Pos	Apogee
2011 Jun 13	X-51A	-	-	B-52H-031	B-52H Stratofortress S/N 60-0031?	EAFB	RW04/22	WTR	LP10	119.0W 33.0N (+/- 3.0)	16.0

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**IV.1.29.15 B-52H Stratofortress S/N 60-0036**



Credit: [credit unknown]

Rockets used: ARRW

Updated: 2024 Nov 28 03:19:34

Launches: B-52H-036

Date	Rocket	Flight	Mission	PlatCode	Platform	Site	LP	AscSite	AscLP	Pos	Apogee
2021 Jul 28	ARRW	BTV-1b	AGM-183A	B-52H-036	B-52H Stratofortress S/N 60-0036	EAFB	-	PM	-	119.1W 34.1N (+/- 0.0)	10.0

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**IV.1.29.16 B-52H Stratofortress S/N 60-0050**



Rockets used: X-51A,ARRW

Updated: 2024 Nov 28 03:19:34



Launches: B-52H-050

Date	Rocket	Flight	Mission	PlatCode	Platform	Site	LP	AscSite	AscLP	Pos	Apogee
2010 May 26 1710	X-51A	-	-	B-52H-050	B-52H Stratofortress S/N 60-0050	EAFB	RW04/22	WTR	LP10	119.0W 33.0N (+/- 3.0)	19.0
2012 Aug 14 1835	X-51A	-	-	B-52H-050	B-52H Stratofortress S/N 60-0050	EAFB	RW04/22	WTR	LP10	119.0W 33.0N (+/- 3.0)	16.0
2022 May 14	ARRW	Booster test	AGM-183A	B-52H-050	B-52H Stratofortress S/N 60-0050	EAFB	-	PM	-	119.1W 34.1N (+/- 0.0)	10.0

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#### **IV.1.29.17 NB-52 Stratofortress (S/N 003 or 008)**

Rockets used: X-15

Updated: 2024 Nov 28 03:19:34

Launches: NB-52

Date	Rocket	Flight	Mission	PlatCode	Platform	Site	LP	AscSite	AsclP	Pos	Apogee
1960 Nov 4	X-15	-	-	NB-52	NB-52 Stratofortress (S/N 003 or 008)	EAFB	RW04/22	EAFB	ROS C	117.8W 34.9N (+/- 0.1)	14.0
1961 Feb 21	X-15	-	-	NB-52	NB-52 Stratofortress (S/N 003 or 008)	EAFB	RW04/22	SIL	A	115.8W 35.5N (+/- 0.1)	14.0
1961 Feb 24	X-15	-	-	NB-52	NB-52 Stratofortress (S/N 003 or 008)	EAFB	RW04/22	SIL	A	115.8W 35.5N (+/- 0.1)	14.0
1961 Oct 27	X-15	-	-	NB-52	NB-52 Stratofortress (S/N 003 or 008)	EAFB	RW04/22	MUD	A	117.3W 38.1N (+/- 0.1)	14.0
1961 Nov 2	X-15	-	-	NB-52	NB-52 Stratofortress (S/N 003 or 008)	EAFB	RW04/22	MUD	A	117.3W 38.1N (+/- 0.1)	14.0
1961 Nov 3	X-15	-	-	NB-52	NB-52 Stratofortress (S/N 003 or 008)	EAFB	RW04/22	MUD	A	117.3W 38.1N (+/- 0.1)	14.0
1962 Apr 18	X-15	-	-	NB-52	NB-52 Stratofortress (S/N 003 or 008)	EAFB	RW04/22	MUD	A	117.3W 38.1N (+/- 0.1)	14.0
1962 Apr 25	X-15	-	-	NB-52	NB-52 Stratofortress (S/N 003 or 008)	EAFB	RW04/22	HH	B2	116.0W 36.0N (+/- 0.0)	14.0
1962 Apr 26	X-15	-	-	NB-52	NB-52 Stratofortress (S/N 003 or 008)	EAFB	RW04/22	HH	B2	116.0W 36.0N (+/- 0.0)	14.0
1962 Apr 27	X-15	-	-	NB-52	NB-52 Stratofortress (S/N 003 or 008)	EAFB	RW04/22	MUD	A	117.3W 38.1N (+/- 0.1)	14.0
1962 May 25	X-15	-	-	NB-52	NB-52 Stratofortress (S/N 003 or 008)	EAFB	RW04/22	DDL	LP2A	114.9W 37.4N (+/- 0.0)	14.0
1962 May 29	X-15	-	-	NB-52	NB-52 Stratofortress (S/N 003 or 008)	EAFB	RW04/22	DDL	LP2A	114.9W 37.4N (+/- 0.0)	14.0
1962 Aug 1	X-15	-	-	NB-52	NB-52 Stratofortress (S/N 003 or 008)	EAFB	RW04/22	MUD	A	117.3W 38.1N (+/- 0.1)	14.0
1962 Jul 3	X-15	-	-	NB-52	NB-52 Stratofortress (S/N 003 or 008)	EAFB	RW04/22	DDL	LP1	114.9W 37.4N (+/- 0.0)	14.0
1963 Jul 17	X-15	-	-	NB-52	NB-52 Stratofortress (S/N 003 or 008)	EAFB	RW04/22	MUD	A	117.3W 38.1N (+/- 0.1)	14.0
1963 Oct 4	X-15	-	-	NB-52	NB-52 Stratofortress (S/N 003 or 008)	EAFB	RW04/22	HH	A2	116.0W 36.0N (+/- 0.0)	14.0
1963 Oct 14	X-15	-	-	NB-52	NB-52 Stratofortress (S/N 003 or 008)	EAFB	RW04/22	HH	A2	116.0W 36.0N (+/- 0.0)	14.0
1963 Oct 25	X-15	-	-	NB-52	NB-52 Stratofortress (S/N 003 or 008)	EAFB	RW04/22	HH	A2	116.0W 36.0N (+/- 0.0)	14.0
1963 Nov 19	X-15	-	-	NB-52	NB-52 Stratofortress (S/N 003 or 008)	EAFB	RW04/22	HH	A2	116.0W 36.0N (+/- 0.0)	14.0
1963 Dec 3	X-15	-	-	NB-52	NB-52 Stratofortress (S/N 003 or 008)	EAFB	RW04/22	DDL	LP1	114.9W 37.4N (+/- 0.0)	14.0
1963 Dec 18	X-15	-	-	NB-52	NB-52 Stratofortress (S/N 003 or 008)	EAFB	RW04/22	MUD	A	117.3W 38.1N (+/- 0.1)	14.0
1964 Mar 17	X-15	-	-	NB-52	NB-52 Stratofortress (S/N 003 or 008)	EAFB	RW04/22	DDL	LP1	114.9W 37.4N (+/- 0.0)	14.0
1964 May 11	X-15	-	-	NB-52	NB-52 Stratofortress (S/N 003 or 008)	EAFB	RW04/22	HH	A2	116.0W 36.0N (+/- 0.0)	14.0
1964 Jun 11	X-15	-	-	NB-52	NB-52 Stratofortress (S/N 003 or 008)	EAFB	RW04/22	DDL	LP1	114.9W 37.4N (+/- 0.0)	14.0
1964 Jun 15	X-15	-	-	NB-52	NB-52 Stratofortress (S/N 003 or 008)	EAFB	RW04/22	DDL	LP1	114.9W 37.4N (+/- 0.0)	14.0
1964 Jun 23	X-15	-	-	NB-52	NB-52 Stratofortress (S/N 003 or 008)	EAFB	RW04/22	EAFB	ROS A	117.8W 34.9N (+/- 0.1)	14.0
1964 Jul 2	X-15	-	-	NB-52	NB-52 Stratofortress (S/N 003 or 008)	EAFB	RW04/22	HH	B2	116.0W 36.0N (+/- 0.0)	14.0
1964 Jul 28	X-15	-	-	NB-52	NB-52 Stratofortress (S/N 003 or 008)	EAFB	RW04/22	HH	LP1	114.9W 37.4N (+/- 0.0)	14.0
1964 Sep 23	X-15	-	-	NB-52	NB-52 Stratofortress (S/N 003 or 008)	EAFB	RW04/22	DDL	LP1	114.9W 37.4N (+/- 0.0)	14.0
1964 Oct 2	X-15	-	-	NB-52	NB-52 Stratofortress (S/N 003 or 008)	EAFB	RW04/22	HH	A2	116.0W 36.0N (+/- 0.0)	14.0
1964 Oct 29	X-15	-	-	NB-52	NB-52 Stratofortress (S/N 003 or 008)	EAFB	RW04/22	DDL	LP1	114.9W 37.4N (+/- 0.0)	14.0
1964 Nov 6	X-15	-	-	NB-52	NB-52 Stratofortress (S/N 003 or 008)	EAFB	RW04/22	DDL	LP1	114.9W 37.4N (+/- 0.0)	14.0
1964 Nov 16	X-15	-	-	NB-52	NB-52 Stratofortress (S/N 003 or 008)	EAFB	RW04/22	HH	B3	116.0W 36.0N (+/- 0.0)	14.0
1964 Dec 4	X-15	-	-	NB-52	NB-52 Stratofortress (S/N 003 or 008)	EAFB	RW04/22	EAFB	ROS A	117.8W 34.9N (+/- 0.1)	14.0
1964 Dec 4	X-15	-	-	NB-52	NB-52 Stratofortress (S/N 003 or 008)	EAFB	RW04/22	EAFB	ROS A	117.8W 34.9N (+/- 0.1)	14.0
1965 Jan 26	X-15	-	-	NB-52	NB-52 Stratofortress (S/N 003 or 008)	EAFB	RW04/22	DDL	LP1	114.9W 37.4N (+/- 0.0)	14.0
1965 Feb 15	X-15	-	-	NB-52	NB-52 Stratofortress (S/N 003 or 008)	EAFB	RW04/22	EAFB	ROS A	117.8W 34.9N (+/- 0.1)	14.0
1965 Feb 15	X-15	-	-	NB-52	NB-52 Stratofortress (S/N 003 or 008)	EAFB	RW04/22	EAFB	ROS A	117.8W 34.9N (+/- 0.1)	14.0
1965 Feb 19	X-15	-	-	NB-52	NB-52 Stratofortress (S/N 003 or 008)	EAFB	RW04/22	DDL	LP1	114.9W 37.4N (+/- 0.0)	14.0
1965 Feb 25	X-15	-	-	NB-52	NB-52 Stratofortress (S/N 003 or 008)	EAFB	RW04/22	EAFB	ROS A	117.8W 34.9N (+/- 0.1)	14.0
1965 May 11	X-15	-	-	NB-52	NB-52 Stratofortress (S/N 003 or 008)	EAFB	RW04/22	DDL	LP1	114.9W 37.4N (+/- 0.0)	14.0
1965 May 13	X-15	-	-	NB-52	NB-52 Stratofortress (S/N 003 or 008)	EAFB	RW04/22	MUD	A	117.3W 38.1N (+/- 0.1)	14.0
1965 Jun 4	X-15	-	-	NB-52	NB-52 Stratofortress (S/N 003 or 008)	EAFB	RW04/22	MUD	A	117.3W 38.1N (+/- 0.1)	14.0
1965 Jun 8	X-15	-	-	NB-52	NB-52 Stratofortress (S/N 003 or 008)	EAFB	RW04/22	MUD	A	117.3W 38.1N (+/- 0.1)	14.0
1965 Jun 11	X-15	-	-	NB-52	NB-52 Stratofortress (S/N 003 or 008)	EAFB	RW04/22	MUD	A	117.3W 38.1N (+/- 0.1)	14.0
1965 Jul 2	X-15	-	-	NB-52	NB-52 Stratofortress (S/N 003 or 008)	EAFB	RW04/22	DDL	LP1	114.9W 37.4N (+/- 0.0)	14.0
1965 Jul 13	X-15	-	-	NB-52	NB-52 Stratofortress (S/N 003 or 008)	EAFB	RW04/22	DDL	LP1	114.9W 37.4N (+/- 0.0)	14.0
1965 Jul 23	X-15	-	-	NB-52	NB-52 Stratofortress (S/N 003 or 008)	EAFB	RW04/22	DDL	LP1	114.9W 37.4N (+/- 0.0)	14.0
1965 Jul 27	X-15	-	-	NB-52	NB-52 Stratofortress (S/N 003 or 008)	EAFB	RW04/22	DDL	LP1	114.9W 37.4N (+/- 0.0)	14.0
1965 Jul 28	X-15	-	-	NB-52	NB-52 Stratofortress (S/N 003 or 008)	EAFB	RW04/22	DDL	LP1	114.9W 37.4N (+/- 0.0)	14.0
1965 Jul 28	X-15	-	-	NB-52	NB-52 Stratofortress (S/N 003 or 008)	EAFB	RW04/22	DDL	LP1	114.9W 37.4N (+/- 0.0)	14.0
1965 Aug 20	X-15	-	-	NB-52	NB-52 Stratofortress (S/N 003 or 008)	EAFB	RW04/22	DDL	LP1	114.9W 37.4N (+/- 0.0)	14.0
1965 Aug 24	X-15	-	-	NB-52	NB-52 Stratofortress (S/N 003 or 008)	EAFB	RW04/22	DDL	LP1	114.9W 37.4N (+/- 0.0)	14.0
1965 Oct 8	X-15	-	-	NB-52	NB-52 Stratofortress (S/N 003 or 008)	EAFB	RW04/22	DDL	LP1	114.9W 37.4N (+/- 0.0)	14.0
1965 Nov 2	X-15	-	-	NB-52	NB-52 Stratofortress (S/N 003 or 008)	EAFB	RW04/22	HH	A2	116.0W 36.0N (+/- 0.0)	14.0
1966 Apr 13	X-15	-	-	NB-52	NB-52 Stratofortress (S/N 003 or 008)	EAFB	RW04/22	MUD	B	117.3W 38.1N (+/- 0.1)	14.0

Launches: NB-52

Date	Rocket	Flight	Mission	PlatCode	Platform	Site	LP	AscSite	AsclP	Pos	Apogee
1966 Apr 20	X-15	-	-	NB-52	NB-52 Stratofortress (S/N 003 or 008)	EAFB	RW04/22	MUD	B	117.3W 38.1N (+/- 0.1)	14.0
1966 May 5	X-15	-	-	NB-52	NB-52 Stratofortress (S/N 003 or 008)	EAFB	RW04/22	MUD	B	117.3W 38.1N (+/- 0.1)	14.0
1966 Jun 2	X-15	-	-	NB-52	NB-52 Stratofortress (S/N 003 or 008)	EAFB	RW04/22	MUD	A	117.3W 38.1N (+/- 0.1)	14.0
1966 Jun 10	X-15	-	-	NB-52	NB-52 Stratofortress (S/N 003 or 008)	EAFB	RW04/22	MUD	A	117.3W 38.1N (+/- 0.1)	14.0
1966 Jun 20	X-15	-	-	NB-52	NB-52 Stratofortress (S/N 003 or 008)	EAFB	RW04/22	HH	A2	116.0W 36.0N (+/- 0.0)	14.0
1966 Jun 27	X-15	External Tank Test	-	NB-52	NB-52 Stratofortress (S/N 003 or 008)	EAFB	RW04/22	CUD	-	117.3W 35.2N (+/- 0.1)	14.0
1966 Jul 13	X-15	-	-	NB-52	NB-52 Stratofortress (S/N 003 or 008)	EAFB	RW04/22	HH	A2	116.0W 36.0N (+/- 0.0)	14.0
1966 Jul 20	X-15	-	-	NB-52	NB-52 Stratofortress (S/N 003 or 008)	EAFB	RW04/22	DDL	LP1	114.9W 37.4N (+/- 0.0)	14.0
1966 Aug 9	X-15	-	-	NB-52	NB-52 Stratofortress (S/N 003 or 008)	EAFB	RW04/22	DDL	LP1	114.9W 37.4N (+/- 0.0)	14.0
1966 Aug 10	X-15	-	-	NB-52	NB-52 Stratofortress (S/N 003 or 008)	EAFB	RW04/22	DDL	LP1	114.9W 37.4N (+/- 0.0)	14.0
1966 Sep 13	X-15	-	-	NB-52	NB-52 Stratofortress (S/N 003 or 008)	EAFB	RW04/22	DDL	LP1	114.9W 37.4N (+/- 0.0)	14.0
1966 Sep 28	X-15	-	-	NB-52	NB-52 Stratofortress (S/N 003 or 008)	EAFB	RW04/22	HH	A2	116.0W 36.0N (+/- 0.0)	14.0
1966 Oct 4	X-15	-	-	NB-52	NB-52 Stratofortress (S/N 003 or 008)	EAFB	RW04/22	HH	A2	116.0W 36.0N (+/- 0.0)	14.0
1966 Oct 7	X-15	-	-	NB-52	NB-52 Stratofortress (S/N 003 or 008)	EAFB	RW04/22	MUD	B	117.3W 38.1N (+/- 0.1)	14.0
1966 Oct 19	X-15	-	-	NB-52	NB-52 Stratofortress (S/N 003 or 008)	EAFB	RW04/22	MUD	B	117.3W 38.1N (+/- 0.1)	14.0
1966 Nov 18	X-15	-	-	NB-52	NB-52 Stratofortress (S/N 003 or 008)	EAFB	RW04/22	HH	A2	116.0W 36.0N (+/- 0.0)	14.0
1966 Nov 23	X-15	-	-	NB-52	NB-52 Stratofortress (S/N 003 or 008)	EAFB	RW04/22	HH	A2	116.0W 36.0N (+/- 0.0)	14.0
1966 Dec 22	X-15	-	-	NB-52	NB-52 Stratofortress (S/N 003 or 008)	EAFB	RW04/22	CUD	-	117.3W 35.2N (+/- 0.1)	14.0
1967 Mar 15	X-15	-	-	NB-52	NB-52 Stratofortress (S/N 003 or 008)	EAFB	RW04/22	MUD	A	117.3W 38.1N (+/- 0.1)	14.0
1967 Mar 21	X-15	-	-	NB-52	NB-52 Stratofortress (S/N 003 or 008)	EAFB	RW04/22	MUD	A	117.3W 38.1N (+/- 0.1)	14.0
1967 Apr 20	X-15	-	-	NB-52	NB-52 Stratofortress (S/N 003 or 008)	EAFB	RW04/22	DDL	LP1	114.9W 37.4N (+/- 0.0)	14.0
1967 May 5	X-15	-	-	NB-52	NB-52 Stratofortress (S/N 003 or 008)	EAFB	RW04/22	HH	B1	116.0W 36.0N (+/- 0.0)	14.0
1967 May 12	X-15	-	-	NB-52	NB-52 Stratofortress (S/N 003 or 008)	EAFB	RW04/22	SIL	B	115.8W 35.5N (+/- 0.1)	14.0
1967 May 25	X-15	-	-	NB-52	NB-52 Stratofortress (S/N 003 or 008)	EAFB	RW04/22	DDL	LP2	114.9W 37.4N (+/- 0.0)	14.0
1967 Jun 1	X-15	-	-	NB-52	NB-52 Stratofortress (S/N 003 or 008)	EAFB	RW04/22	DDL	LP2	114.9W 37.4N (+/- 0.0)	14.0
1967 Jun 14	X-15	-	-	NB-52	NB-52 Stratofortress (S/N 003 or 008)	EAFB	RW04/22	DDL	LP2	114.9W 37.4N (+/- 0.0)	14.0
1967 Aug 7	X-15	Ramjet flow	-	NB-52	NB-52 Stratofortress (S/N 003 or 008)	EAFB	RW04/22	MUD	B	117.3W 38.1N (+/- 0.1)	14.0
1967 Aug 11	X-15	Ramjet flow	-	NB-52	NB-52 Stratofortress (S/N 003 or 008)	EAFB	RW04/22	HH	B1	116.0W 36.0N (+/- 0.0)	14.0
1967 Aug 16	X-15	-	-	NB-52	NB-52 Stratofortress (S/N 003 or 008)	EAFB	RW04/22	HH	B1	116.0W 36.0N (+/- 0.0)	14.0
1967 Sep 22	X-15	-	-	NB-52	NB-52 Stratofortress (S/N 003 or 008)	EAFB	RW04/22	SRL	LP1	117.2W 39.5N (+/- 0.0)	14.0

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**IV.1.29.18 NB-52A Stratofortress S/N 003**



Credit: [credit unknown]

Rockets used: X-15

Updated: 2024 Nov 28 03:19:34

Launches: NB-52-003

Date	Rocket	Flight	Mission	PlatCode	Platform	Site	LP	AscSite	AsclP	Pos	Apogee
1959 Mar 10	X-15	-	-	NB-52-003	NB-52A Stratofortress S/N 003	EAFB	RW04/22	EAFB	ROS D	117.8W 34.9N (+/- 0.1)	11.0
1959 Apr 1	X-15	-	-	NB-52-003	NB-52A Stratofortress S/N 003	EAFB	RW04/22	EAFB	ROS D	117.8W 34.9N (+/- 0.1)	11.0
1959 Apr 10	X-15	-	-	NB-52-003	NB-52A Stratofortress S/N 003	EAFB	RW04/22	EAFB	ROS D	117.8W 34.9N (+/- 0.1)	11.0
1959 May 21	X-15	-	-	NB-52-003	NB-52A Stratofortress S/N 003	EAFB	RW04/22	EAFB	ROS D	117.8W 34.9N (+/- 0.1)	11.0
1959 Jun 8	X-15	-	-	NB-52-003	NB-52A Stratofortress S/N 003	EAFB	RW04/22	EAFB	ROS D	117.8W 34.9N (+/- 0.1)	11.0
1959 Jul 24	X-15	-	-	NB-52-003	NB-52A Stratofortress S/N 003	EAFB	RW04/22	EAFB	ROS C	117.8W 34.9N (+/- 0.1)	14.0
1959 Sep 4	X-15	-	-	NB-52-003	NB-52A Stratofortress S/N 003	EAFB	RW04/22	EAFB	ROS C	117.8W 34.9N (+/- 0.1)	14.0
1959 Sep 17	X-15	1508:48	-	NB-52-003	NB-52A Stratofortress S/N 003	EAFB	RW04/22	EAFB	ROS C	117.8W 34.9N (+/- 0.1)	15.0
1959 Oct 10	X-15	-	-	NB-52-003	NB-52A Stratofortress S/N 003	EAFB	RW04/22	EAFB	ROS WAL	117.8W 34.9N (+/- 0.1)	14.0
1959 Oct 14	X-15	-	-	NB-52-003	NB-52A Stratofortress S/N 003	EAFB	RW04/22	EAFB	ROS WAL	117.8W 34.9N (+/- 0.1)	14.0
1959 Oct 17	X-15	-	-	NB-52-003	NB-52A Stratofortress S/N 003	EAFB	RW04/22	EAFB	ROS WAL	117.8W 34.9N (+/- 0.1)	14.0
1959 Oct 22	X-15	-	-	NB-52-003	NB-52A Stratofortress S/N 003	EAFB	RW04/22	EAFB	ROS WAL	117.8W 34.9N (+/- 0.1)	18.0
1959 Oct 31	X-15	-	-	NB-52-003	NB-52A Stratofortress S/N 003	EAFB	RW04/22	EAFB	ROS WAL	117.8W 34.9N (+/- 0.1)	14.0
1959 Nov 5	X-15	1739:28	-	NB-52-003	NB-52A Stratofortress S/N 003	EAFB	RW04/22	EAFB	ROS WAL	117.8W 34.9N (+/- 0.1)	14.0
1960 Apr 13	X-15	1715:11	-	NB-52-003	NB-52A Stratofortress S/N 003	EAFB	RW04/22	EAFB	ROS WAL	117.8W 34.9N (+/- 0.1)	13.0
1960 Apr 19	X-15	1651:44	-	NB-52-003	NB-52A Stratofortress S/N 003	EAFB	RW04/22	EAFB	ROS WAL	117.8W 34.9N (+/- 0.1)	14.0
1960 May 6	X-15	1653:19	-	NB-52-003	NB-52A Stratofortress S/N 003	EAFB	RW04/22	EAFB	ROS WAL	117.8W 34.9N (+/- 0.1)	18.0
1960 May 12	X-15	1547:37	-	NB-52-003	NB-52A Stratofortress S/N 003	EAFB	RW04/22	EAFB	ROS WAL	117.8W 34.9N (+/- 0.1)	18.0
1960 May 19	X-15	1546:47	-	NB-52-003	NB-52A Stratofortress S/N 003	EAFB	RW04/22	EAFB	ROS WAL	117.8W 34.9N (+/- 0.1)	18.0
1960 Jun 3	X-15	-	Alt Buildup	NB-52-003	NB-52A Stratofortress S/N 003	EAFB	RW04/22	SIL	A	115.8W 35.5N (+/- 0.1)	23.0
1960 Jun 8	X-15	-	-	NB-52-003	NB-52A Stratofortress S/N 003	EAFB	RW04/22	SIL	A	115.8W 35.5N (+/- 0.1)	33.0
1960 Jun 10	X-15	-	-	NB-52-003	NB-52A Stratofortress S/N 003	EAFB	RW04/22	SIL	A	115.8W 35.5N (+/- 0.1)	14.0
1960 Jun 15	X-15	-	-	NB-52-003	NB-52A Stratofortress S/N 003	EAFB	RW04/22	SIL	A	115.8W 35.5N (+/- 0.1)	14.0
1960 Jun 27	X-15	-	-	NB-52-003	NB-52A Stratofortress S/N 003	EAFB	RW04/22	SIL	A	115.8W 35.5N (+/- 0.1)	14.0
1960 Aug 4	X-15	1559:13	Aero Heating	NB-52-003	NB-52A Stratofortress S/N 003	EAFB	RW04/22	SIL	A	115.8W 35.5N (+/- 0.1)	23.0
1960 Aug 11	X-15	-	-	NB-52-003	NB-52A Stratofortress S/N 003	EAFB	RW04/22	SIL	A	115.8W 35.5N (+/- 0.1)	14.0
1960 Aug 12	X-15	1548:43	High Alt	NB-52-003	NB-52A Stratofortress S/N 003	EAFB	RW04/22	SIL	A	115.8W 35.5N (+/- 0.1)	41.0
1960 Aug 18	X-15	-	-	NB-52-003	NB-52A Stratofortress S/N 003	EAFB	RW04/22	SIL	A	115.8W 35.5N (+/- 0.1)	14.0
1960 Aug 19	X-15	1534:22	Aero Heating	NB-52-003	NB-52A Stratofortress S/N 003	EAFB	RW04/22	SIL	A	115.8W 35.5N (+/- 0.1)	24.0
1960 Nov 15	X-15	1759:00	XLR-99 Checkout	NB-52-003	NB-52A Stratofortress S/N 003	EAFB	RW04/22	EAFB	ROS C	117.8W 34.9N (+/- 0.1)	16.0
1960 Nov 17	X-15	2043:07	Aero Heating	NB-52-003	NB-52A Stratofortress S/N 003	EAFB	RW04/22	EAFB	PLM	117.8W 34.9N (+/- 0.1)	18.0
1960 Nov 22	X-15	2125:55	XLR-99, BCS	NB-52-003	NB-52A Stratofortress S/N 003	EAFB	RW04/22	EAFB	ROS C	117.8W 34.9N (+/- 0.1)	16.0
1960 Dec 6	X-15	2329:30	XLR-99, BCS	NB-52-003	NB-52A Stratofortress S/N 003	EAFB	RW04/22	EAFB	ROS B	117.8W 34.9N (+/- 0.1)	16.0
1961 Apr 21	X-15	1805:17	Mach 4, Aero	NB-52-003	NB-52A Stratofortress S/N 003	EAFB	RW04/22	HH	A1	116.0W 36.0N (+/- 0.0)	32.0
1961 May 19	X-15	-	-	NB-52-003	NB-52A Stratofortress S/N 003	EAFB	RW04/22	MUD	A	117.3W 38.1N (+/- 0.1)	14.0
1961 May 25	X-15	1916:35	Mach 5, SAS, Aero	NB-52-003	NB-52A Stratofortress S/N 003	EAFB	RW04/22	MUD	A	117.3W 38.1N (+/- 0.1)	32.0
1961 Jun 23	X-15	2100:05	Mach 5, Aero, Stab.	NB-52-003	NB-52A Stratofortress S/N 003	EAFB	RW04/22	MUD	A	117.3W 38.1N (+/- 0.1)	32.0
1961 Jun 29	X-15	1727:05	XLR-99, beta-dot	NB-52-003	NB-52A Stratofortress S/N 003	EAFB	RW04/22	SIL	A	115.8W 35.5N (+/- 0.1)	23.0
1961 Sep 29	X-15	-	-	NB-52-003	NB-52A Stratofortress S/N 003	EAFB	RW04/22	SIL	A	115.8W 35.5N (+/- 0.1)	14.0
1961 Oct 3	X-15	1840:50	V0 Stability	NB-52-003	NB-52A Stratofortress S/N 003	EAFB	RW04/22	SIL	A	115.8W 35.5N (+/- 0.1)	23.0
1961 Oct 11	X-15	2020:00	Alt, Aero, Low q	NB-52-003	NB-52A Stratofortress S/N 003	EAFB	RW04/22	MUD	A	117.3W 38.1N (+/- 0.1)	66.0
1961 Oct 17	X-15	1857:33	Mach 5, Aero, Stab	NB-52-003	NB-52A Stratofortress S/N 003	EAFB	RW04/22	MUD	A	117.3W 38.1N (+/- 0.1)	33.0
1961 Dec 19	X-15	-	-	NB-52-003	NB-52A Stratofortress S/N 003	EAFB	RW04/22	SIL	A	115.8W 35.5N (+/- 0.1)	14.0
1961 Dec 20	X-15	2245:50	MH-96	NB-52-003	NB-52A Stratofortress S/N 003	EAFB	RW04/22	SIL	A	115.8W 35.5N (+/- 0.1)	24.0
1962 Jan 10	X-15	2028:16	High alpha, Aero	NB-52-003	NB-52A Stratofortress S/N 003	EAFB	RW04/22	MUD	A	117.3W 38.1N (+/- 0.1)	13.0
1962 Jan 17	X-15	2000:34	MH-96, Mach 5	NB-52-003	NB-52A Stratofortress S/N 003	EAFB	RW04/22	MUD	A	117.3W 38.1N (+/- 0.1)	40.0
1962 Mar 29	X-15	-	-	NB-52-003	NB-52A Stratofortress S/N 003	EAFB	RW04/22	HH	A2	116.0W 36.0N (+/- 0.0)	14.0
1962 Mar 30	X-15	-	-	NB-52-003	NB-52A Stratofortress S/N 003	EAFB	RW04/22	HH	A2	116.0W 36.0N (+/- 0.0)	14.0
1962 Mar 31	X-15	-	-	NB-52-003	NB-52A Stratofortress S/N 003	EAFB	RW04/22	HH	A2	116.0W 36.0N (+/- 0.0)	14.0
1962 Apr 5	X-15	1804:25	MH-96	NB-52-003	NB-52A Stratofortress S/N 003	EAFB	RW04/22	HH	A2	116.0W 36.0N (+/- 0.0)	54.0
1962 Apr 19	X-15	1802:20	ASAS, alpha 20, M=5	NB-52-003	NB-52A Stratofortress S/N 003	EAFB	RW04/22	MUD	A	117.3W 38.1N (+/- 0.1)	46.0
1962 May 2	X-15	-	Eglin Demo	NB-52-003	NB-52A Stratofortress S/N 003	EAFB	RW04/22	-	-	117.8W 34.9N (+/- 0.1)	14.0
1962 May 5	X-15	-	Eglin Demo	NB-52-003	NB-52A Stratofortress S/N 003	EGL	RW12/30	-	-	86.7W 30.4N (+/- 0.0)	14.0
1962 May 22	X-15	-	Eglin Demo	NB-52-003	NB-52A Stratofortress S/N 003	ALT	RW17R/35L	-	-	99.3W 34.7N (+/- 0.1)	14.0
1962 May 5	X-15	1704:46	Local flow	NB-52-003	NB-52A Stratofortress S/N 003	EAFB	RW04/22	HH	B3	116.0W 36.0N (+/- 0.0)	30.0
1962 Jun 7	X-15	1729:20	Local flow, M=5	NB-52-003	NB-52A Stratofortress S/N 003	EAFB	RW04/22	HH	A4	116.0W 36.0N (+/- 0.0)	31.0
1962 Jun 27	X-15	2008:10	High alpha, Mach 6	NB-52-003	NB-52A Stratofortress S/N 003	EAFB	RW04/22	MUD	A	117.3W 38.1N (+/- 0.1)	37.0

Launches: NB-52-003

Date	Rocket	Flight	Mission	PlatCode	Platform	Site	LP	AscSite	AsclP	Pos	Apogee
1962 Jul 10	X-15	-	-	NB-52-003	NB-52A Stratofortress S/N 003	EAFB	RW04/22	SRL	-	117.2W 39.5N (+/- 0.0)	14.0
1962 Jul 11	X-15	-	-	NB-52-003	NB-52A Stratofortress S/N 003	EAFB	RW04/22	SRL	-	117.2W 39.5N (+/- 0.0)	14.0
1962 Jul 16	X-15	-	-	NB-52-003	NB-52A Stratofortress S/N 003	EAFB	RW04/22	DDL	LP2A	114.9W 37.4N (+/- 0.0)	14.0
1962 Jul 17	X-15	MH-96 Demo	-	NB-52-003	NB-52A Stratofortress S/N 003	EAFB	RW04/22	DDL	LP2	114.9W 37.4N (+/- 0.0)	95.0
1962 Jul 26	X-15	Aero stab. and drag	-	NB-52-003	NB-52A Stratofortress S/N 003	EAFB	RW04/22	MUD	A	117.3W 38.1N (+/- 0.1)	30.0
1962 Aug 2	X-15	MH-96 fixed gain	-	NB-52-003	NB-52A Stratofortress S/N 003	EAFB	RW04/22	MUD	A	117.3W 38.1N (+/- 0.1)	44.0
1962 Aug 10	X-15	-	-	NB-52-003	NB-52A Stratofortress S/N 003	EAFB	RW04/22	DDL	LP2A	114.9W 37.4N (+/- 0.0)	14.0
1962 Aug 14	X-15	Const Theta Entry	-	NB-52-003	NB-52A Stratofortress S/N 003	EAFB	RW04/22	DDL	LP2A	114.9W 37.4N (+/- 0.0)	59.0
1962 Oct 9	X-15	VO Stability	-	NB-52-003	NB-52A Stratofortress S/N 003	EAFB	RW04/22	DDL	LP2A	114.9W 37.4N (+/- 0.0)	39.0
1963 May 15	X-15	Opt Deg/Trav Probe	-	NB-52-003	NB-52A Stratofortress S/N 003	EAFB	RW04/22	DDL	LP1	114.9W 37.4N (+/- 0.0)	37.0
1963 Jun 25	X-15	Opt Deg/Trav Probe	-	NB-52-003	NB-52A Stratofortress S/N 003	EAFB	RW04/22	DDL	LP1	114.9W 37.4N (+/- 0.0)	34.0
1963 Jun 18	X-15	VO Stability	-	NB-52-003	NB-52A Stratofortress S/N 003	EAFB	RW04/22	MUD	A	117.3W 38.1N (+/- 0.1)	31.0
1963 Aug 22	X-15	VO, Spectrom, Photom	-	NB-52-003	NB-52A Stratofortress S/N 003	EAFB	RW04/22	SRL	LP1	117.2W 39.5N (+/- 0.0)	108.0
1964 Feb 19	X-15	SUV, Boundary Layer	-	NB-52-003	NB-52A Stratofortress S/N 003	EAFB	RW04/22	HH	B3	116.0W 36.0N (+/- 0.0)	23.0
1964 Mar 13	X-15	SUV, Boundary Layer	-	NB-52-003	NB-52A Stratofortress S/N 003	EAFB	RW04/22	HH	A2	116.0W 36.0N (+/- 0.0)	23.0
1964 Mar 27	X-15	Optical Degradation	-	NB-52-003	NB-52A Stratofortress S/N 003	EAFB	RW04/22	DDL	LP1	114.9W 37.4N (+/- 0.0)	30.0
1964 Apr 8	X-15	Opt Deg/Alt Build	-	NB-52-003	NB-52A Stratofortress S/N 003	EAFB	RW04/22	DDL	LP1	114.9W 37.4N (+/- 0.0)	53.0
1964 Apr 29	X-15	Opt Deg/Alt Build	-	NB-52-003	NB-52A Stratofortress S/N 003	EAFB	RW04/22	DDL	LP1	114.9W 37.4N (+/- 0.0)	31.0
1964 May 12	X-15	SUV/BLN	-	NB-52-003	NB-52A Stratofortress S/N 003	EAFB	RW04/22	HH	A2	116.0W 36.0N (+/- 0.0)	22.0
1964 May 19	X-15	Opt Deg/Alt Build	-	NB-52-003	NB-52A Stratofortress S/N 003	EAFB	RW04/22	DDL	LP1	114.9W 37.4N (+/- 0.0)	59.0
1964 May 21	X-15	SUV/BLN	-	NB-52-003	NB-52A Stratofortress S/N 003	EAFB	RW04/22	SIL	C	115.8W 36.5N (+/- 0.1)	19.0
1964 Jun 25	X-15	Stability	-	NB-52-003	NB-52A Stratofortress S/N 003	EAFB	RW04/22	HH	B2	116.0W 36.0N (+/- 0.0)	25.0
1964 Jun 30	X-15	Opt Deg/Alt Build	-	NB-52-003	NB-52A Stratofortress S/N 003	EAFB	RW04/22	DDL	LP1	114.9W 37.4N (+/- 0.0)	30.0
1964 Jul 8	X-15	Hor Scan/MH-96	-	NB-52-003	NB-52A Stratofortress S/N 003	EAFB	RW04/22	DDL	LP1	114.9W 37.4N (+/- 0.0)	51.0
1964 Jul 29	X-15	Heat tran/Local Flow	-	NB-52-003	NB-52A Stratofortress S/N 003	EAFB	RW04/22	HH	B3	116.0W 36.0N (+/- 0.0)	23.0
1964 Aug 12	X-15	Heat tran/LF/BLN	-	NB-52-003	NB-52A Stratofortress S/N 003	EAFB	RW04/22	HH	B3	116.0W 36.0N (+/- 0.0)	24.0
1964 Aug 14	X-15	Stability	-	NB-52-003	NB-52A Stratofortress S/N 003	EAFB	RW04/22	DDL	LP1	114.9W 37.4N (+/- 0.0)	31.0
1964 Aug 26	X-15	HT/LF/BLN	-	NB-52-003	NB-52A Stratofortress S/N 003	EAFB	RW04/22	HH	B3	116.0W 36.0N (+/- 0.0)	27.0
1964 Sep 3	X-15	MA-48R TPS, BLN	-	NB-52-003	NB-52A Stratofortress S/N 003	EAFB	RW04/22	DDL	LP1	114.9W 37.4N (+/- 0.0)	29.0
1964 Sep 28	X-15	IPDS/MIT/Air Den	-	NB-52-003	NB-52A Stratofortress S/N 003	EAFB	RW04/22	DDL	LP1	114.9W 37.4N (+/- 0.0)	34.0
1964 Dec 22	X-15	Fricion, GE TPS., 3D	-	NB-52-003	NB-52A Stratofortress S/N 003	EAFB	RW04/22	HH	B1	116.0W 36.0N (+/- 0.0)	24.0
1965 Jan 13	X-15	3D, HT, Fric, BLN	-	NB-52-003	NB-52A Stratofortress S/N 003	EAFB	RW04/22	HH	B3	116.0W 36.0N (+/- 0.0)	30.0
1965 Jun 16	X-15	Radiometer/BLN	-	NB-52-003	NB-52A Stratofortress S/N 003	EAFB	RW04/22	DDL	LP1	114.9W 37.4N (+/- 0.0)	74.0
1965 Jun 16	X-15	ST, Landing, Alt	-	NB-52-003	NB-52A Stratofortress S/N 003	EAFB	RW04/22	DDL	LP1	114.9W 37.4N (+/- 0.0)	64.0
1965 Aug 10	X-15	Northrop Scan, BLN	-	NB-52-003	NB-52A Stratofortress S/N 003	EAFB	RW04/22	DDL	LP1A	114.9W 37.4N (+/- 0.0)	82.0
1965 Aug 25	X-15	MIT Scan, Stability	-	NB-52-003	NB-52A Stratofortress S/N 003	EAFB	RW04/22	DDL	LP1	114.9W 37.4N (+/- 0.0)	65.0
1965 Sep 22	X-15	IR Scan	-	NB-52-003	NB-52A Stratofortress S/N 003	EAFB	RW04/22	DDL	LP1	114.9W 37.4N (+/- 0.0)	30.0
1965 Sep 28	X-15	N. Scan/BLN/Tail	-	NB-52-003	NB-52A Stratofortress S/N 003	EAFB	RW04/22	DDL	LP1A	114.9W 37.4N (+/- 0.0)	90.0
1965 Sep 30	X-15	IR Scan	-	NB-52-003	NB-52A Stratofortress S/N 003	EAFB	RW04/22	HH	A2	116.0W 36.0N (+/- 0.0)	23.0
1965 Oct 14	X-15	MIT, Pace transducer	-	NB-52-003	NB-52A Stratofortress S/N 003	EAFB	RW04/22	DDL	LP1	114.9W 37.4N (+/- 0.0)	81.0
1965 Oct 27	X-15	N. Scan/BLN	-	NB-52-003	NB-52A Stratofortress S/N 003	EAFB	RW04/22	DDL	LP1A	114.9W 37.4N (+/- 0.0)	72.0
1965 Nov 3	X-15	External Tank Test	-	NB-52-003	NB-52A Stratofortress S/N 003	EAFB	RW04/22	CUD	-	117.3W 35.2N (+/- 0.1)	21.0
1966 May 6	X-15	AD/MuMet/Scan/SB	-	NB-52-003	NB-52A Stratofortress S/N 003	EAFB	RW04/22	DDL	LP1	114.9W 37.4N (+/- 0.0)	20.0
1966 May 18	X-15	V-On Stab	-	NB-52-003	NB-52A Stratofortress S/N 003	EAFB	RW04/22	MUD	B	117.3W 38.1N (+/- 0.1)	30.0
1966 Jul 12	X-15	Checkout, Systems	-	NB-52-003	NB-52A Stratofortress S/N 003	EAFB	RW04/22	MUD	A	117.3W 38.1N (+/- 0.1)	39.0
1966 Jul 18	X-15	Checkout, Systems	-	NB-52-003	NB-52A Stratofortress S/N 003	EAFB	RW04/22	HH	A2	116.0W 36.0N (+/- 0.0)	29.0
1966 Jul 21	X-15	Alt, ST, Abl TPS	-	NB-52-003	NB-52A Stratofortress S/N 003	EAFB	RW04/22	DDL	LP1	114.9W 37.4N (+/- 0.0)	58.0
1966 Aug 11	X-15	HS, MuMet, SB, Gas	-	NB-52-003	NB-52A Stratofortress S/N 003	EAFB	RW04/22	DDL	LP1	114.9W 37.4N (+/- 0.0)	76.0
1966 Aug 12	X-15	ST, Pitot, Base drag	-	NB-52-003	NB-52A Stratofortress S/N 003	EAFB	RW04/22	DDL	LP1	114.9W 37.4N (+/- 0.0)	70.0
1966 Aug 19	X-15	BLN, OBE, H	-	NB-52-003	NB-52A Stratofortress S/N 003	EAFB	RW04/22	DDL	LP1	114.9W 37.4N (+/- 0.0)	54.0
1966 Aug 25	X-15	HS/MuMet/Gas	-	NB-52-003	NB-52A Stratofortress S/N 003	EAFB	RW04/22	DDL	LP1	114.9W 37.4N (+/- 0.0)	78.0
1966 Sep 14	X-15	MuMet/Solar spec	-	NB-52-003	NB-52A Stratofortress S/N 003	EAFB	RW04/22	DDL	LP1	114.9W 37.4N (+/- 0.0)	77.0
1966 Oct 6	X-15	Checkout	-	NB-52-003	NB-52A Stratofortress S/N 003	EAFB	RW04/22	HH	A2	116.0W 36.0N (+/- 0.0)	23.0
1966 Nov 1	X-15	MuMet/DCR/SB	-	NB-52-003	NB-52A Stratofortress S/N 003	EAFB	RW04/22	SRL	LP1	117.2W 39.5N (+/- 0.0)	93.0

Launches: NB-52-003

Date	Rocket	Flight	Mission	PlatCode	Platform	Site	LP	AscSite	AsclP	Pos	Apogee
1966 Nov 29 1938:32	X-15	Checkout	-	NB-52-003	NB-52A Stratofortress S/N 003	EAFB	RW04/22	HH	A2	116.0W 36.0N (+/- 0.0)	28.0
1967 Mar 22 1752:04	X-15	Stab./Loads/ASAS	-	NB-52-003	NB-52A Stratofortress S/N 003	EAFB	RW04/22	MUD	A	117.3W 38.1N (+/- 0.1)	40.0
1967 Apr 28 1723:32	X-15	WTR/HS/E Loads	-	NB-52-003	NB-52A Stratofortress S/N 003	EAFB	RW04/22	DDL	LP1	114.9W 37.4N (+/- 0.0)	50.0
1967 May 17 1745:48	X-15	Telem/HT/Guidance	-	NB-52-003	NB-52A Stratofortress S/N 003	EAFB	RW04/22	SIL	B	115.8W 35.5N (+/- 0.1)	21.0
1967 Jun 15 1809:28	X-15	HS/Stab/WTR	-	NB-52-003	NB-52A Stratofortress S/N 003	EAFB	RW04/22	DDL	LP2	114.9W 37.4N (+/- 0.0)	69.0
1967 Aug 25 2027:28	X-15	Guid/HT/BLM	-	NB-52-003	NB-52A Stratofortress S/N 003	EAFB	RW04/22	HH	B1	116.0W 36.0N (+/- 0.0)	25.0
1967 Oct 4 1716:54	X-15	UV Plume/Solar/MM	-	NB-52-003	NB-52A Stratofortress S/N 003	EAFB	RW04/22	SRL	LP1	117.2W 39.5N (+/- 0.0)	76.0
1968 Jul 15	X-15	Fluidic Probe/etc	-	NB-52-003	NB-52A Stratofortress S/N 003	EAFB	RW04/22	RRV	LP1	116.2W 38.2N (+/- 0.1)	14.0
1968 Jul 16 2223:06	X-15	WTR/HS/SB/FAB/FP	-	NB-52-003	NB-52A Stratofortress S/N 003	EAFB	RW04/22	RRV	LP1	116.2W 38.2N (+/- 0.1)	67.0
1968 Aug 21 1604:48	X-15	WTR/HS/SB/FAB/FP	-	NB-52-003	NB-52A Stratofortress S/N 003	EAFB	RW04/22	RRV	LP1	116.2W 38.2N (+/- 0.1)	81.0
1968 Sep 13 1819:23	X-15	WTR/HS/SB/FAB/FP	-	NB-52-003	NB-52A Stratofortress S/N 003	EAFB	RW04/22	SRL	LP1	117.2W 39.5N (+/- 0.0)	77.0
1968 Oct 24 1702:47	X-15	WTR/HS/FAB/FP	-	NB-52-003	NB-52A Stratofortress S/N 003	EAFB	RW04/22	SRL	LP1	117.2W 39.5N (+/- 0.0)	77.0
1968 Dec 12	X-15	-	-	NB-52-003	NB-52A Stratofortress S/N 003	EAFB	RW04/22	RRV	LP1	116.2W 38.2N (+/- 0.1)	14.0



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**IV.1.29.19 NB-52B Stratofortress S/N 008**



Rockets used: X-15,Pegasus,Pegasus/HAPS,Hyper X

Updated: 2024 Nov 28 03:19:34

Launches: NB-52-008

Date	Rocket	Flight	Mission	PlatCode	Platform	Site	LP	AscSite	AsclP	Pos	Apogee
1959 Dec 16	X-15	-	-	NB-52-008	NB-52B Stratofortress S/N 008	EAFB	RM04/22	EAFB	ROS WAL	117.8W 34.9N (+/- 0.1)	14.0
1960 Jan 24 0017:05	X-15	SAS Eval	-	NB-52-008	NB-52B Stratofortress S/N 008	EAFB	RM04/22	EAFB	ROS WAL	117.8W 34.9N (+/- 0.1)	20.0
1960 Feb 4	X-15	-	-	NB-52-008	NB-52B Stratofortress S/N 008	EAFB	RM04/22	EAFB	ROS WAL	117.8W 34.9N (+/- 0.1)	14.0
1960 Feb 11 1815:04	X-15	-	-	NB-52-008	NB-52B Stratofortress S/N 008	EAFB	RM04/22	EAFB	ROS WAL	117.8W 34.9N (+/- 0.1)	26.0
1960 Feb 17 1741:32	X-15	SAS Eval	-	NB-52-008	NB-52B Stratofortress S/N 008	EAFB	RM04/22	EAFB	ROS WAL	117.8W 34.9N (+/- 0.1)	16.0
1960 Mar 17 1631:25	X-15	SAS Eval/Stability	-	NB-52-008	NB-52B Stratofortress S/N 008	EAFB	RM04/22	EAFB	ROS WAL	117.8W 34.9N (+/- 0.1)	16.0
1960 Mar 18	X-15	-	-	NB-52-008	NB-52B Stratofortress S/N 008	EAFB	RM04/22	EAFB	ROS WAL	117.8W 34.9N (+/- 0.1)	14.0
1960 Mar 25 2343:23	X-15	-	-	NB-52-008	NB-52B Stratofortress S/N 008	EAFB	RM04/22	EAFB	ROS WAL	117.8W 34.9N (+/- 0.1)	14.0
1960 Mar 29 1759:28	X-15	-	-	NB-52-008	NB-52B Stratofortress S/N 008	EAFB	RM04/22	EAFB	ROS WAL	117.8W 34.9N (+/- 0.1)	15.0
1960 Mar 31 1642:05	X-15	SAS Gains	-	NB-52-008	NB-52B Stratofortress S/N 008	EAFB	RM04/22	EAFB	ROS WAL	117.8W 34.9N (+/- 0.1)	14.0
1960 May 5	X-15	-	-	NB-52-008	NB-52B Stratofortress S/N 008	EAFB	RM04/22	EAFB	ROS WAL	117.8W 34.9N (+/- 0.1)	14.0
1960 May 26 1608:36	X-15	SAS, High alpha, BCS	-	NB-52-008	NB-52B Stratofortress S/N 008	EAFB	RM04/22	EAFB	ROS C	117.8W 34.9N (+/- 0.1)	15.0
1960 Sep 2	X-15	-	-	NB-52-008	NB-52B Stratofortress S/N 008	EAFB	RM04/22	SIL	A	115.8W 35.5N (+/- 0.1)	14.0
1960 Sep 10 1845:10	X-15	Stability/Control	-	NB-52-008	NB-52B Stratofortress S/N 008	EAFB	RM04/22	SIL	A	115.8W 35.5N (+/- 0.1)	24.0
1960 Sep 20	X-15	-	-	NB-52-008	NB-52B Stratofortress S/N 008	EAFB	RM04/22	EAFB	PLM	117.8W 34.9N (+/- 0.1)	14.0
1960 Sep 23 1652:06	X-15	-	-	NB-52-008	NB-52B Stratofortress S/N 008	EAFB	RM04/22	EAFB	PLM	117.8W 34.9N (+/- 0.1)	16.0
1960 Oct 11	X-15	-	-	NB-52-008	NB-52B Stratofortress S/N 008	EAFB	RM04/22	EAFB	PLM	117.8W 34.9N (+/- 0.1)	14.0
1960 Oct 13	X-15	-	-	NB-52-008	NB-52B Stratofortress S/N 008	EAFB	RM04/22	EAFB	ROS C	117.8W 34.9N (+/- 0.1)	14.0
1960 Oct 20 1730:27	X-15	Stability/Control	-	NB-52-008	NB-52B Stratofortress S/N 008	EAFB	RM04/22	EAFB	PLM	117.8W 34.9N (+/- 0.1)	16.0
1960 Oct 28 1743:56	X-15	Stability/Control	-	NB-52-008	NB-52B Stratofortress S/N 008	EAFB	RM04/22	EAFB	PLM	117.8W 34.9N (+/- 0.1)	15.0
1960 Nov 4 2043:33	X-15	Stability/Control	-	NB-52-008	NB-52B Stratofortress S/N 008	EAFB	RM04/22	EAFB	PLM	117.8W 34.9N (+/- 0.1)	14.0
1960 Nov 30 1842:43	X-15	-	-	NB-52-008	NB-52B Stratofortress S/N 008	EAFB	RM04/22	EAFB	PLM	117.8W 34.9N (+/- 0.1)	14.0
1960 Dec 9 1952:40	X-15	Ball nose, Stabil.	-	NB-52-008	NB-52B Stratofortress S/N 008	EAFB	RM04/22	EAFB	PLM	117.8W 34.9N (+/- 0.1)	15.0
1960 Dec 15	X-15	-	-	NB-52-008	NB-52B Stratofortress S/N 008	EAFB	RM04/22	EAFB	PLM	117.8W 34.9N (+/- 0.1)	14.0
1961 Jan 11	X-15	-	-	NB-52-008	NB-52B Stratofortress S/N 008	EAFB	RM04/22	EAFB	PLM	117.8W 34.9N (+/- 0.1)	14.0
1961 Feb 1 1847:32	X-15	Ball/side controller	-	NB-52-008	NB-52B Stratofortress S/N 008	EAFB	RM04/22	EAFB	PLM	117.8W 34.9N (+/- 0.1)	15.0
1961 Feb 7 2056:10	X-15	Stab./Control	-	NB-52-008	NB-52B Stratofortress S/N 008	EAFB	RM04/22	EAFB	PLM	117.8W 34.9N (+/- 0.1)	23.0
1961 Mar 7 1828:33	X-15	Mach 4 flight	-	NB-52-008	NB-52B Stratofortress S/N 008	EAFB	RM04/22	SIL	A	115.8W 35.5N (+/- 0.1)	23.0
1961 Mar 21	X-15	-	-	NB-52-008	NB-52B Stratofortress S/N 008	EAFB	RM04/22	HH	A1	116.0W 36.0N (+/- 0.0)	14.0
1961 Mar 30 1805:00	X-15	Alt., BCS, Aero	-	NB-52-008	NB-52B Stratofortress S/N 008	EAFB	RM04/22	HH	A1	116.0W 36.0N (+/- 0.0)	51.0
1961 Jun 20	X-15	-	-	NB-52-008	NB-52B Stratofortress S/N 008	EAFB	RM04/22	MUD	A	117.3W 38.1N (+/- 0.1)	14.0
1961 Sep 12 2140:17	X-15	Mach 5, Aero, Stab.	-	NB-52-008	NB-52B Stratofortress S/N 008	EAFB	RM04/22	MUD	A	117.3W 38.1N (+/- 0.1)	34.0
1961 Sep 28 1750:25	X-15	Mach 5, Heat Trans.	-	NB-52-008	NB-52B Stratofortress S/N 008	EAFB	RM04/22	HH	A3	116.0W 36.0N (+/- 0.0)	31.0
1961 Nov 9 1757:17	X-15	Mach 6, Aero, Stab	-	NB-52-008	NB-52B Stratofortress S/N 008	EAFB	RM04/22	MUD	A	117.3W 38.1N (+/- 0.1)	63.0
1962 Apr 20 1926:58	X-15	MH-96, M=5	-	NB-52-008	NB-52B Stratofortress S/N 008	EAFB	RM04/22	MUD	A	117.3W 38.1N (+/- 0.1)	63.0
1962 Apr 30 1723:20	X-15	Alt, Low q, Aero	-	NB-52-008	NB-52B Stratofortress S/N 008	EAFB	RM04/22	MUD	A	117.3W 38.1N (+/- 0.1)	75.0
1962 May 8 1701:28	X-15	Heat T/ASAS/High al.	-	NB-52-008	NB-52B Stratofortress S/N 008	EAFB	RM04/22	HH	B2	116.0W 36.0N (+/- 0.0)	21.0
1962 Jun 1 1751:15	X-15	ASAS, 23 alpha, M=5	-	NB-52-008	NB-52B Stratofortress S/N 008	EAFB	RM04/22	HH	B2	116.0W 36.0N (+/- 0.0)	40.0
1962 Jun 12 1904:00	X-15	RCS check, M=5	-	NB-52-008	NB-52B Stratofortress S/N 008	EAFB	RM04/22	DDL	LP2A	114.9W 37.4N (+/- 0.0)	56.0
1962 Jun 21 1647:05	X-15	MH-96 Demo, M=5	-	NB-52-008	NB-52B Stratofortress S/N 008	EAFB	RM04/22	DDL	LP2A	114.9W 37.4N (+/- 0.0)	75.0
1962 Jun 29 1741:47	X-15	Heating rates, notch	-	NB-52-008	NB-52B Stratofortress S/N 008	EAFB	RM04/22	HH	B3	116.0W 36.0N (+/- 0.0)	25.0
1962 Jul 16 2109:25	X-15	Notch/ASAS/Aero drag	-	NB-52-008	NB-52B Stratofortress S/N 008	EAFB	RM04/22	MUD	A	117.3W 38.1N (+/- 0.1)	32.0
1962 Jul 19 1653:45	X-15	Heating rates, drag	-	NB-52-008	NB-52B Stratofortress S/N 008	EAFB	RM04/22	HH	B3	116.0W 36.0N (+/- 0.0)	26.0
1962 Aug 8 1708:35	X-15	Heating, aero drag	-	NB-52-008	NB-52B Stratofortress S/N 008	EAFB	RM04/22	HH	A5	116.0W 36.0N (+/- 0.0)	27.0
1962 Aug 20 1708:40	X-15	Heating, drag, ASAS	-	NB-52-008	NB-52B Stratofortress S/N 008	EAFB	RM04/22	HH	A3	116.0W 36.0N (+/- 0.0)	27.0
1962 Aug 29 1736:03	X-15	Heating	-	NB-52-008	NB-52B Stratofortress S/N 008	EAFB	RM04/22	HH	A1	116.0W 36.0N (+/- 0.0)	29.0
1962 Sep 27	X-15	-	-	NB-52-008	NB-52B Stratofortress S/N 008	EAFB	RM04/22	HH	B3	116.0W 36.0N (+/- 0.0)	14.0
1962 Sep 28 1704:55	X-15	Heating, V0 Stab	-	NB-52-008	NB-52B Stratofortress S/N 008	EAFB	RM04/22	HH	B3	116.0W 36.0N (+/- 0.0)	20.0
1962 Oct 4 1710:11	X-15	V0 Stability	-	NB-52-008	NB-52B Stratofortress S/N 008	EAFB	RM04/22	DDL	LP2A	114.9W 37.4N (+/- 0.0)	34.0
1962 Oct 23 1830:40	X-15	V0 Stability	-	NB-52-008	NB-52B Stratofortress S/N 008	EAFB	RM04/22	MUD	A	117.3W 38.1N (+/- 0.1)	41.0
1962 Nov 9 1823:07	X-15	V0 Stab, Bound.Layer	-	NB-52-008	NB-52B Stratofortress S/N 008	EAFB	RM04/22	MUD	A	117.3W 38.1N (+/- 0.1)	16.0
1962 Dec 13	X-15	V0 Stab, UVP	-	NB-52-008	NB-52B Stratofortress S/N 008	EAFB	RM04/22	MUD	A	117.3W 38.1N (+/- 0.1)	43.0
1962 Dec 14 1844:07	X-15	V0 Stab, UVP	-	NB-52-008	NB-52B Stratofortress S/N 008	EAFB	RM04/22	MUD	A	117.3W 38.1N (+/- 0.1)	14.0
1962 Dec 20 1925:04	X-15	V0 Stab, MH-96	-	NB-52-008	NB-52B Stratofortress S/N 008	EAFB	RM04/22	MUD	A	117.3W 38.1N (+/- 0.1)	48.0
1963 Jan 17 1859:37	X-15	V0 Alt, IR expt	-	NB-52-008	NB-52B Stratofortress S/N 008	EAFB	RM04/22	DDL	LP2	114.9W 37.4N (+/- 0.0)	82.0

Launches: NB-52-008

Date	Rocket	Flight	Mission	PlatCode	Platform	Site	LP	AscSite	AsclP	Pos	Apogee
1963 Apr 11 1803:20	X-15	KC-1/APU	-	NB-52-008	NB-52B Stratofortress S/N 008	EAFB	RM04/22	HH	A2	116.0W 36.0N (+/- 0.0)	22.0
1963 Apr 18 2016:17	X-15	HT, Local flow, IR	-	NB-52-008	NB-52B Stratofortress S/N 008	EAFB	RM04/22	HH	B3	116.0W 36.0N (+/- 0.0)	28.0
1963 Apr 25 2204:19	X-15	KC-1	-	NB-52-008	NB-52B Stratofortress S/N 008	EAFB	RM04/22	DDL	LP1	114.9W 37.4N (+/- 0.0)	32.0
1963 May 2 1659:54	X-15	APU, UVP, IR, flow	-	NB-52-008	NB-52B Stratofortress S/N 008	EAFB	RM04/22	MUD	B	117.3W 38.1N (+/- 0.1)	63.0
1963 May 10	X-15	-	-	NB-52-008	NB-52B Stratofortress S/N 008	EAFB	RM04/22	HH	A4	116.0W 36.0N (+/- 0.0)	14.0
1963 May 14 1911:56	X-15	Heating, UVP, IR	-	NB-52-008	NB-52B Stratofortress S/N 008	EAFB	RM04/22	HH	A4	116.0W 36.0N (+/- 0.0)	29.0
1963 May 29 1743:22	X-15	Aero heating/V0 Stab	-	NB-52-008	NB-52B Stratofortress S/N 008	EAFB	RM04/22	DDL	LP2	114.9W 37.4N (+/- 0.0)	28.0
1963 Jun 18 1734:21	X-15	Alt, UVP, Tail P	-	NB-52-008	NB-52B Stratofortress S/N 008	EAFB	RM04/22	DDL	LP1	114.9W 37.4N (+/- 0.0)	86.0
1963 Jun 27 1656:03	X-15	Alt/UVP/IR/HorScan	-	NB-52-008	NB-52B Stratofortress S/N 008	EAFB	RM04/22	DDL	LP1	114.9W 37.4N (+/- 0.0)	69.0
1963 Jul 9 1912:12	X-15	Opt Deg/TravP/RAS	-	NB-52-008	NB-52B Stratofortress S/N 008	EAFB	RM04/22	DDL	LP1	114.9W 37.4N (+/- 0.0)	106.0
1963 Jul 19 1720:05	X-15	V0, UVP, IR, HS, Balloon	-	NB-52-008	NB-52B Stratofortress S/N 008	EAFB	RM04/22	SRL	LP1	117.2W 39.5N (+/- 0.0)	14.0
1963 Aug 6	X-15	-	-	NB-52-008	NB-52B Stratofortress S/N 008	EAFB	RM04/22	SRL	LP1	117.2W 39.5N (+/- 0.0)	14.0
1963 Aug 13	X-15	-	-	NB-52-008	NB-52B Stratofortress S/N 008	EAFB	RM04/22	SRL	LP1	117.2W 39.5N (+/- 0.0)	14.0
1963 Aug 15	X-15	-	-	NB-52-008	NB-52B Stratofortress S/N 008	EAFB	RM04/22	SRL	LP1	117.2W 39.5N (+/- 0.0)	14.0
1963 Oct 7 1922:56	X-15	Checkout/Opt Deg.	-	NB-52-008	NB-52B Stratofortress S/N 008	EAFB	RM04/22	HH	A2	116.0W 36.0N (+/- 0.0)	23.0
1963 Oct 29 1942:34	X-15	Checkout/Opt Deg.	-	NB-52-008	NB-52B Stratofortress S/N 008	EAFB	RM04/22	HH	A2	116.0W 36.0N (+/- 0.0)	22.0
1963 Nov 7 1811:14	X-15	Sharp Upper Vert.	-	NB-52-008	NB-52B Stratofortress S/N 008	EAFB	RM04/22	HH	A2	116.0W 36.0N (+/- 0.0)	25.0
1963 Nov 14 1919:21	X-15	CU/Opt Deg/Systems	-	NB-52-008	NB-52B Stratofortress S/N 008	EAFB	RM04/22	HH	A2	116.0W 36.0N (+/- 0.0)	27.0
1963 Nov 27 2017:40	X-15	Checkout	-	NB-52-008	NB-52B Stratofortress S/N 008	EAFB	RM04/22	HH	A2	116.0W 36.0N (+/- 0.0)	27.0
1963 Dec 5 1904:36	X-15	Opt Deg/Sys/Mach 6	-	NB-52-008	NB-52B Stratofortress S/N 008	EAFB	RM04/22	DDL	LP1	114.9W 37.4N (+/- 0.0)	30.0
1964 Jan 8 2010:31	X-15	SAS Off Stability	-	NB-52-008	NB-52B Stratofortress S/N 008	EAFB	RM04/22	HH	A2	116.0W 36.0N (+/- 0.0)	21.0
1964 Jan 16 1803:30	X-15	Sharp Upper Vert	-	NB-52-008	NB-52B Stratofortress S/N 008	EAFB	RM04/22	HH	A2	116.0W 36.0N (+/- 0.0)	27.0
1964 Jan 28 2011:36	X-15	Stability	-	NB-52-008	NB-52B Stratofortress S/N 008	EAFB	RM04/22	DDL	LP1	114.9W 37.4N (+/- 0.0)	32.0
1964 Sep 29 2000:13	X-15	Stab., Star tracker	-	NB-52-008	NB-52B Stratofortress S/N 008	EAFB	RM04/22	MUD	A	117.3W 38.1N (+/- 0.1)	29.0
1964 Oct 15 2015:40	X-15	IFDS/Tip Pod/AD-SB	-	NB-52-008	NB-52B Stratofortress S/N 008	EAFB	RM04/22	HH	B3	116.0W 36.0N (+/- 0.0)	25.0
1964 Oct 30 1751:52	X-15	Gear mod, BLN	-	NB-52-008	NB-52B Stratofortress S/N 008	EAFB	RM04/22	HH	B3	116.0W 36.0N (+/- 0.0)	25.0
1964 Nov 30 2009:32	X-15	Gear mod, Stab, ST	-	NB-52-008	NB-52B Stratofortress S/N 008	EAFB	RM04/22	HH	B2	116.0W 36.0N (+/- 0.0)	26.0
1964 Dec 9 1836:17	X-15	3D Flow Field, MA-45R	-	NB-52-008	NB-52B Stratofortress S/N 008	EAFB	RM04/22	HH	B3	116.0W 36.0N (+/- 0.0)	28.0
1965 Feb 2 2050:14	X-15	MA-25S TPS, MH-96, BLN	-	NB-52-008	NB-52B Stratofortress S/N 008	EAFB	RM04/22	DDL	LP1	114.9W 37.4N (+/- 0.0)	46.0
1965 Feb 17 1844:59	X-15	Stability	-	NB-52-008	NB-52B Stratofortress S/N 008	EAFB	RM04/22	MUD	A	117.3W 38.1N (+/- 0.1)	29.0
1965 Feb 26 1945:55	X-15	MIT/AIRD/Sky Bright	-	NB-52-008	NB-52B Stratofortress S/N 008	EAFB	RM04/22	DDL	LP1	114.9W 37.4N (+/- 0.0)	28.0
1965 Mar 26 1901:59	X-15	IR Scanner/IFDS	-	NB-52-008	NB-52B Stratofortress S/N 008	EAFB	RM04/22	DDL	LP1	114.9W 37.4N (+/- 0.0)	31.0
1965 Apr 23 1744:16	X-15	HT/Abt TPS/BLN	-	NB-52-008	NB-52B Stratofortress S/N 008	EAFB	RM04/22	HH	B1	116.0W 36.0N (+/- 0.0)	24.0
1965 May 18 1656:38	X-15	Landing loads, Stab	-	NB-52-008	NB-52B Stratofortress S/N 008	EAFB	RM04/22	HH	B1	116.0W 36.0N (+/- 0.0)	28.0
1965 May 25 1712:07	X-15	Stab, landing, ST	-	NB-52-008	NB-52B Stratofortress S/N 008	EAFB	RM04/22	MUD	A	117.3W 38.1N (+/- 0.1)	31.0
1965 May 28 1643:51	X-15	IFDS/MIT/RAS Mod	-	NB-52-008	NB-52B Stratofortress S/N 008	EAFB	RM04/22	MUD	A	117.3W 38.1N (+/- 0.1)	54.0
1965 May 28 1643:51	X-15	Radiometer/Scan/BLN	-	NB-52-008	NB-52B Stratofortress S/N 008	EAFB	RM04/22	MUD	A	117.3W 38.1N (+/- 0.1)	54.0
1965 Jun 17 1640:31	X-15	IR Scanner, INS	-	NB-52-008	NB-52B Stratofortress S/N 008	EAFB	RM04/22	DDL	LP1	114.9W 37.4N (+/- 0.0)	63.0
1965 Jun 22 1644:43	X-15	Stability, ST, gear	-	NB-52-008	NB-52B Stratofortress S/N 008	EAFB	RM04/22	DDL	LP1	114.9W 37.4N (+/- 0.0)	47.0
1965 Jun 29 1721:17	X-15	LaRC Scan, Radiom, BLN	-	NB-52-008	NB-52B Stratofortress S/N 008	EAFB	RM04/22	DDL	LP1	114.9W 37.4N (+/- 0.0)	85.0
1965 Jul 20 1659:28	X-15	Bound, Layer Noise	-	NB-52-008	NB-52B Stratofortress S/N 008	EAFB	RM04/22	DDL	LP1	114.9W 37.4N (+/- 0.0)	32.0
1965 Aug 3 1940:05	X-15	RAS, ST, Landing	-	NB-52-008	NB-52B Stratofortress S/N 008	EAFB	RM04/22	DDL	LP1	114.9W 37.4N (+/- 0.0)	63.0
1965 Aug 6 1641:46	X-15	IR Scan, Stability	-	NB-52-008	NB-52B Stratofortress S/N 008	EAFB	RM04/22	DDL	LP1	114.9W 37.4N (+/- 0.0)	31.0
1965 Aug 26 1652:12	X-15	Northrop Radiom, BLN	-	NB-52-008	NB-52B Stratofortress S/N 008	EAFB	RM04/22	DDL	LP1	114.9W 37.4N (+/- 0.0)	73.0
1965 Sep 2 1640:05	X-15	RAS, ST, Landing	-	NB-52-008	NB-52B Stratofortress S/N 008	EAFB	RM04/22	DDL	LP1	114.9W 37.4N (+/- 0.0)	73.0
1965 Sep 9 1655:50	X-15	IR scan, Abt TPS	-	NB-52-008	NB-52B Stratofortress S/N 008	EAFB	RM04/22	DDL	LP1	114.9W 37.4N (+/- 0.0)	29.0
1965 Sep 14 1701:06	X-15	N. Radiom, BLN	-	NB-52-008	NB-52B Stratofortress S/N 008	EAFB	RM04/22	DDL	LP1	114.9W 37.4N (+/- 0.0)	72.0
1965 Oct 12 1643:13	X-15	Checkout	-	NB-52-008	NB-52B Stratofortress S/N 008	EAFB	RM04/22	HH	A2	116.0W 36.0N (+/- 0.0)	28.0
1965 Nov 4 1711:31	X-15	Checkout	-	NB-52-008	NB-52B Stratofortress S/N 008	EAFB	RM04/22	HH	A2	116.0W 36.0N (+/- 0.0)	24.0
1966 Jul 1 1802:36	X-15	External Tank Test	-	NB-52-008	NB-52B Stratofortress S/N 008	EAFB	RM04/22	MUD	B	117.3W 38.1N (+/- 0.1)	13.0
1966 Jul 28 1701:12	X-15	MuMet/HS/SB/RAS	-	NB-52-008	NB-52B Stratofortress S/N 008	EAFB	RM04/22	DDL	LP1	114.9W 37.4N (+/- 0.0)	73.0
1966 Aug 3 1545:26	X-15	ST, Base drag	-	NB-52-008	NB-52B Stratofortress S/N 008	EAFB	RM04/22	MUD	LP1	114.9W 37.4N (+/- 0.0)	75.0
1966 Aug 4 1654:43	X-15	Heat Tran, BLN, OBE	-	NB-52-008	NB-52B Stratofortress S/N 008	EAFB	RM04/22	DDL	LP1	114.9W 37.4N (+/- 0.0)	40.0
1966 Aug 30 1651:37	X-15	V-On, Maurer, TPS	-	NB-52-008	NB-52B Stratofortress S/N 008	EAFB	RM04/22	MUD	A	117.3W 38.1N (+/- 0.1)	31.0
1966 Sep 8 1739:16	X-15	HS/Elec loads	-	NB-52-008	NB-52B Stratofortress S/N 008	EAFB	RM04/22	SRL	LP1	117.2W 39.5N (+/- 0.0)	22.0

Launches: NB-52-008

Date	Rocket	Flight	Mission	Platform	Site	LP	AscSite	AsclP	Pos	Apogee
1966 Nov 18 2124:07	X-15	ET/TPS/Maurer/Mach 6	-	NB-52-008	NB-52B Stratofortress S/N 008	EW04/22	MUD	B	117.3W 38.1N (+/- 0.1)	30.0
1967 Apr 26 1920:17	X-15	Telem/HT/Guidance	-	NB-52-008	NB-52B Stratofortress S/N 008	EW04/22	SIL	B	115.8W 35.5N (+/- 0.1)	16.0
1967 May 8 1927:38	X-15	Ramjet flow	-	NB-52-008	NB-52B Stratofortress S/N 008	EW04/22	HH	B1	116.0W 36.0N (+/- 0.0)	29.0
1967 Jun 22 2157:17	X-15	HT/Telem	-	NB-52-008	NB-52B Stratofortress S/N 008	EW04/22	HH	B1	116.0W 36.0N (+/- 0.0)	25.0
1967 Jun 29 1927:51	X-15	WTR/HS/ASAS	-	NB-52-008	NB-52B Stratofortress S/N 008	EW04/22	SRL	LP1	117.2W 39.5N (+/- 0.0)	52.0
1967 Jul 20 1711:00	X-15	HT/Guid/Telem	-	NB-52-008	NB-52B Stratofortress S/N 008	EW04/22	HH	B1	116.0W 36.0N (+/- 0.0)	25.0
1967 Aug 21 1759:16	X-15	Ramjet/Hycon/TPS	-	NB-52-008	NB-52B Stratofortress S/N 008	EW04/22	HH	B1	116.0W 36.0N (+/- 0.0)	27.0
1967 Oct 3 2131:50	X-15	TPS/Ramjet/Mach 6.7	-	NB-52-008	NB-52B Stratofortress S/N 008	EW04/22	MUD	B	117.3W 38.1N (+/- 0.1)	31.0
1967 Oct 17 1640:23	X-15	UVPL/Solar/MM	-	NB-52-008	NB-52B Stratofortress S/N 008	EW04/22	SRL	LP1	117.2W 39.5N (+/- 0.0)	85.0
1967 Oct 31	X-15	-	-	NB-52-008	NB-52B Stratofortress S/N 008	EW04/22	DDL	LP1	114.9W 37.4N (+/- 0.0)	14.0
1967 Nov 15 1830:07	X-15	UVPL/Solar/MM/SA TPS	-	NB-52-008	NB-52B Stratofortress S/N 008	EW04/22	DDL	LP1	114.9W 37.4N (+/- 0.0)	81.0
1968 Feb 6	X-15	-	-	NB-52-008	NB-52B Stratofortress S/N 008	EW04/22	EAPB	ROS B	117.8W 34.9N (+/- 0.1)	14.0
1968 Feb 7	X-15	-	-	NB-52-008	NB-52B Stratofortress S/N 008	EW04/22	HH	B1	116.0W 36.0N (+/- 0.0)	14.0
1968 Feb 27	X-15	-	-	NB-52-008	NB-52B Stratofortress S/N 008	EW04/22	HH	B1	116.0W 36.0N (+/- 0.0)	14.0
1968 Mar 1 1928:11	X-15	Checkout	-	NB-52-008	NB-52B Stratofortress S/N 008	EW04/22	HH	B1	116.0W 36.0N (+/- 0.0)	14.0
1968 Mar 28	X-15	-	-	NB-52-008	NB-52B Stratofortress S/N 008	EW04/22	DDL	LP2	114.9W 37.4N (+/- 0.0)	14.0
1968 Apr 4	X-15	-	-	NB-52-008	NB-52B Stratofortress S/N 008	EW04/22	DDL	LP2	114.9W 37.4N (+/- 0.0)	14.0
1968 Apr 18 1802:17	X-15	CO/WTR/SA TPS	-	NB-52-008	NB-52B Stratofortress S/N 008	EW04/22	DDL	LP2	114.9W 37.4N (+/- 0.0)	57.0
1968 Apr 26 1951:49	X-15	SA TPS/HS	-	NB-52-008	NB-52B Stratofortress S/N 008	EW04/22	DDL	LP2	114.9W 37.4N (+/- 0.0)	63.0
1968 May 23	X-15	Fixed Alpha Ball/WTR	-	NB-52-008	NB-52B Stratofortress S/N 008	EW04/22	SRL	LP1	117.2W 39.5N (+/- 0.0)	14.0
1968 Jun 12 1531:01	X-15	WTR/SA TPS/HS/FAB	-	NB-52-008	NB-52B Stratofortress S/N 008	EW04/22	SRL	LP1	117.2W 39.5N (+/- 0.0)	67.0
1990 Apr 5 1910:17	Pegasus	Pegsat/USA 55 GLOMR	Pegsat	NB-52-008	NB-52B Stratofortress S/N 008	EW04/22	WTR	PAWA	119.0W 33.0N (+/- 3.0)	680.0
1991 Jul 17 1733:53	Pegasus/HAPS	Microsat	Microsat 1	NB-52-008	NB-52B Stratofortress S/N 008	EW04/22	WTR	PAWA	119.0W 33.0N (+/- 3.0)	479.0
1993 Feb 9 1430:34	Pegasus	SCD-1	Orbcomm OXP	NB-52-008	NB-52B Stratofortress S/N 008	EW04/22	WTR	MFWA	79.0W 28.5N (+/- 2.0)	792.0
1993 Apr 25 1356	Pegasus	Alexis	Alexis	NB-52-008	NB-52B Stratofortress S/N 008	EW04/22	WTR	PAWA	119.0W 33.0N (+/- 3.0)	861.0
1994 May 19 1703	Pegasus/HAPS	STEP 2	STEP 2	NB-52-008	NB-52B Stratofortress S/N 008	EW04/22	WTR	PAWA	119.0W 33.0N (+/- 3.0)	824.0
1994 Aug 3 1438	Pegasus	APEX	APEX	NB-52-008	NB-52B Stratofortress S/N 008	EW04/22	WTR	PAWA	119.0W 33.0N (+/- 3.0)	2551.0
2001 Jun 2 2043:31	Hyper X	X-43A	-	NB-52-008	NB-52B Stratofortress S/N 008	EW04/22	WTR	PAWA	119.0W 33.0N (+/- 3.0)	7.0
2004 Mar 27 2159:57	Hyper X	X-43A	-	NB-52-008	NB-52B Stratofortress S/N 008	EW04/22	WTR	PAWA	119.0W 33.0N (+/- 3.0)	29.0
2004 Nov 16 2235	Hyper X	X-43A	-	NB-52-008	NB-52B Stratofortress S/N 008	EW04/22	WTR	PAWA	119.0W 33.0N (+/- 3.0)	33.0

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## **IV.1.29.20 B-57A Canberra, AFSWC**

Rockets used: Jaguar

Updated: 2024 Nov 28 03:19:34

Launches: B-57A-SWC

Date	Rocket	Flight	Mission	Platform	Site	LP	AscSite	AscLP	Pos	Apogee
1960 Q1?	Jaguar	-	-	B-57A-SWC	HADC	RW07/25	WS	LP1	106.5W 32.4N	800.0
1960 Q1?	Jaguar	-	-	B-57A-SWC	HADC	RW07/25	WS	LP1	106.5W 32.4N	800.0

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IV.1.29.21 B-57A Canberra NASA 218



Credit: [credit unknown]



FIGURE 314. Lewis technician D  
Credit: [credit unknown]

B-57A Canberra USAF S/N 52-1418 was transferred to NASA to become NASA 218. It was based at Wallops Island and used for test rocket launches.

Rockets used: Recruit T55

Updated: 2024 Nov 28 03:19:34

Launches: B-57A-218

Date	Rocket	Flight	Mission	PlatCode	Platform	Site	LP	AscSite	AscLP	Pos	Apogee
1958 Jul 15	Recruit T55	-	-	B-57A-218	B-57A Canberra NASA 218	MAOTS	RW04/22	WI	LP1	75.5W 37.8N (+/- 0.0)	14.0
1958 Jul 24	Recruit T55	-	-	B-57A-218	B-57A Canberra NASA 218	MAOTS	RW04/22	WI	LP1	75.5W 37.8N (+/- 0.0)	14.0
1958 Sep 12	Recruit T55	-	-	B-57A-218	B-57A Canberra NASA 218	MAOTS	RW04/22	WI	LP1	75.5W 37.8N (+/- 0.0)	12.0



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**IV.1.29.22 WB-57B Canberra S/N 52-1502/3/4/6**



Credit: 52-1502, (c) Geoff Goodall 1964



Credit: 52-1504, (c) Kurt Finger

Several B-57B aircraft attached to Kirtland AFB are thought to have carried out Cleansweep IIIB operations: Nos. 52-1502, 52-1503, 52-1504 and 52-1506. In the absence of information about specific flights this code is used to cover all of them.

Rockets used: Cleansweep IIIB

Updated: 2024 Nov 28 03:19:34

Launches: B-57B-502

Date	Rocket	Flight	Mission	Platform	Site	LP	AscSite	AsclP	Pos	Apogee
1965 Oct 20	Cleansweep IIIB	Shrike motor	-	WB-57B Canberra S/N 52-1502/3/4/6	JI	RW05/23	JI	LP1	169.5W 16.7N (+/- 0.0)	52.0
1965 Dec 20?	Cleansweep IIIB	-	-	WB-57B Canberra S/N 52-1502/3/4/6	JI	RW05/23	JI	LP1	169.5W 16.7N (+/- 0.0)	50.0
1966	Cleansweep IIIB	-	-	WB-57B Canberra S/N 52-1502/3/4/6	PM	RW03/21	WTR	LP3	119.0W 33.0N (+/- 3.0)	52.0

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**IV.1.29.23 WB-57C Canberra S/N 53-3832 and 53-3944**



Two WB-57C Canberra planes were used for sampling missions; S/N 53-3832 and 53-3944. This code covers both of them.

Rockets used: Cleansweep III,Cleansweep IIIB

Updated: 2024 Nov 28 03:19:34

Launches: B-57C

Date	Rocket	Flight	Mission	PlatCode	Platform	Site	LP	AscSite	AscLP	Pos	Apogee
1963	Cleansweep III	LRL Sampling	-	B-57C	WB-57C Canberra S/N 53-3832 and 53-3944	PM	RW03/21	PM	-	119.1W 34.1N (+/- 0.0)	40.0
1964 Oct 18	Cleansweep III	LRL Sampling	Crosscheck LF1	B-57C	WB-57C Canberra S/N 53-3832 and 53-3944	JI	RW05/23	JI	LP1	169.5W 16.7N (+/- 0.0)	40.0
1964 Oct 23	Cleansweep III	LRL Sampling	Crosscheck LF2	B-57C	WB-57C Canberra S/N 53-3832 and 53-3944	JI	RW05/23	JI	LP1	169.5W 16.7N (+/- 0.0)	40.0
1967 May 16	Cleansweep IIIB	JTF-8 exercise	-	B-57C	WB-57C Canberra S/N 53-3832 and 53-3944	PM	RW03/21	WTR	LP3	119.0W 33.0N (+/- 3.0)	50.0
1967 May 16	Cleansweep IIIB	-	-	B-57C	WB-57C Canberra S/N 53-3832 and 53-3944	PM	RW03/21	WTR	LP3	119.0W 33.0N (+/- 3.0)	50.0
1967 May 16	Cleansweep IIIB	-	-	B-57C	WB-57C Canberra S/N 53-3832 and 53-3944	PM	RW03/21	WTR	LP3	119.0W 33.0N (+/- 3.0)	50.0
1967 May 16	Cleansweep IIIB	-	-	B-57C	WB-57C Canberra S/N 53-3832 and 53-3944	PM	RW03/21	WTR	LP3	119.0W 33.0N (+/- 3.0)	50.0
1967 May 16	Cleansweep IIIB	-	-	B-57C	WB-57C Canberra S/N 53-3832 and 53-3944	PM	RW03/21	WTR	LP3	119.0W 33.0N (+/- 3.0)	50.0
1967 May 16	Cleansweep IIIB	-	-	B-57C	WB-57C Canberra S/N 53-3832 and 53-3944	PM	RW03/21	WTR	LP3	119.0W 33.0N (+/- 3.0)	50.0
1967 May 16	Cleansweep IIIB	-	-	B-57C	WB-57C Canberra S/N 53-3832 and 53-3944	PM	RW03/21	WTR	LP3	119.0W 33.0N (+/- 3.0)	50.0

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**IV.1.29.24 WB-57C Canberra S/N 53-3832 and 53-3944**

**IV.1.29.25 WB-57C Canberra S/N 53-3832 and 53-3944**

**IV.1.29.26 B-58 Hustler S/N 55-660?**



Credit: [credit unknown]

Credit: [credit unknown]

B-58 S/N 660 was the first B-58 aircraft. It was used for the High Virgo tests.

The B-58 ALBM Summary Report video, <https://www.youtube.com/watch?v=OVtosAjWUvY> is the best source for the WS-199C.

Rockets used: High Virgo WS199C

Updated: 2024 Nov 28 03:19:34

Launches: B-58-660

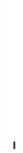
Date	Rocket	Flight	Mission	PlatCode	Platform	Site	LP	AscSite	AsCLP	Pos	Apogee
1958 Sep 5	High Virgo WS199C	High Virgo	-	B-58-660	B-58 Hustler S/N 55-660?	EGL	RW12/30	AMR	LP1	80.0W 28.5N (+/- 1.0)	13.0
1958 Dec 19	High Virgo WS199C	High Virgo	-	B-58-660	B-58 Hustler S/N 55-660?	EGL	RW12/30	AMR	LP1	80.0W 28.5N (+/- 1.0)	76.0
1959 Jun 4	High Virgo WS199C	High Virgo	-	B-58-660	B-58 Hustler S/N 55-660?	EGL	RW12/30	AMR	LP1	80.0W 28.5N (+/- 1.0)	51.0
1959 Sep 22 1010?	High Virgo WS199C	King Lofus IV	Discoverer 5 intercept	B-58-660	B-58 Hustler S/N 55-660?	EGL	RW12/30	EGL	HV4	86.7W 30.4N (+/- 0.0)	350.0

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## **IV.1.30 US Rocket Launching Aircraft: Military Transports**

Updated: 2024 Nov 28 03:19:34

**US Rocket Launching Aircraft: Military Transports**

Ship	Transliteration	Image	CODE	Agency	Class	ClassID	AltID	Active
C-5A Galaxy S/N 69-0014	C-5A Galaxy S/N 69-0014		C-5A-014	USAF	C-5	69-0014	-	- - -
C-17 Globemaster III (AMC)	C-17 Globemaster III (AMC)		C-17	USAF	C-17	-	-	- - -
C-17 Globemaster III (EAFB)	C-17 Globemaster III (EAFB)		C-17-E	USAF	C-17	-	-	- - -
C-130 Hercules	C-130 Hercules		C-130	NAWC	C-130	-	-	- - -



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### IV.1.30.1 C-5A Galaxy S/N 69-0014



For the Minuteman Air Mobile Feasibility Test, the C-5A took off from Edwards and made the drop 15 mi (24 km ) W of VAFB.

Rockets used: Minuteman 1

Updated: 2024 Nov 28 03:19:34

**Launches: C-5A-014**

Date	Rocket	Flight	Mission	PlatCode	Platform	Site	LP	AscSite	AscLP	Pos	Apogee
1974 Oct 24	Minuteman 1	Mk 5 RV?	-	C-5A-014	C-5A Galaxy S/N 69-0014	EAFB	RM04/22	WTR	LP12	119.0W 33.0N (+/- 3.0)	6.0

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### IV.1.30.2 C-17 Globemaster III (AMC)



Image shown is a C-17 from the 535th Airlift Sqn, not necessarily one of the ones used for air-launch. The C-17 used for airdrops west of Kauai were probably based at Hickam as part of USAF 535th Airlift Sqn.. but environmental assessment reports indicate the air launch flights take off from PMRF (Kauai).

Rockets used: LRALT,SRALT,MRT,E-LRALT,eMRBM,IRBM-T1,MRBM-T2

Updated: 2024 Nov 28 03:19:34

Launches: C-17

Date	Rocket	Flight	Mission	PlatCode	Platform	Site	LP	AscSite	AscLP	Pos	Apogee
2004 May 3 0406	LRALT	LRALT Demo	-	C-17	C-17 Globemaster III (AMC)	KAU	RW16/34	MID	LP1	177.5W 24.8N (+/- 0.2)	300.0
2004 Aug 26	SRALT	USFT-2 Target	CARAVAN-1 Target	C-17	C-17 Globemaster III (AMC)	PM	RW03/21	WTR	LP2	119.0W 33.0N (+/- 3.0)	150.0
2005 Apr 8 1730	MRT	MRT-1 RRF	-	C-17	C-17 Globemaster III (AMC)	HICK	RW08R/26L	MID	LP3	177.5W 24.8N (+/- 0.2)	500.0
2005 Sep 26	LRALT	COBRA DAME Test	-	C-17	C-17 Globemaster III (AMC)	HICK	RW08R/26L	MID	LP2	177.5W 24.8N (+/- 0.2)	300.0
2007 Mar 6 0030	SRALT	SRALT?	-	C-17	C-17 Globemaster III (AMC)	HICK	RW08R/26L	KAU	LP3	159.8W 22.1N (+/- 0.0)	100.0
2008 Jun 26 0216	MRT	MRT-6 (Sep)	-	C-17	C-17 Globemaster III (AMC)	HICK	RW08R/26L	MID	LP3	177.5W 24.8N (+/- 0.2)	500.0
2009 Jul 22 1945	LRALT	CARAVAN	CARAVAN-2 Target	C-17	C-17 Globemaster III (AMC)	PM	RW03/21	WTR	W1	119.0W 33.0N (+/- 3.0)	500.0
2009 Dec 11	SRALT	MBRV	-	C-17	C-17 Globemaster III (AMC)	HICK	RW08R/26L	KAU	LP3	159.8W 22.1N (+/- 0.0)	10.0
2011 Jul 9 0204	SRALT	FTX-17	-	C-17	C-17 Globemaster III (AMC)	PM	RW03/21	WTR	LP8	119.0W 33.0N (+/- 3.0)	200.0
2011 Oct 5 0556	SRALT	-	-	C-17	C-17 Globemaster III (AMC)	HICK	RW08R/26L	MID	LP3	177.5W 24.8N (+/- 0.2)	100.0
2012 Oct 25?	E-LRALT	FTI-01 THAAD Target	-	C-17	C-17 Globemaster III (AMC)	HICK	RW08R/26L	WAKE	LP1	166.6E 19.3N (+/- 0.0)	300.0
2013 Sep 10	eMRBM	FTO-01 THAAD Target	-	C-17	C-17 Globemaster III (AMC)	HICK	RW08R/26L	WAKE	LP1	166.6E 19.3N (+/- 0.0)	300.0
2015 Jun 26	IRBM-T1	Aegis Ashore Target	MBRV-7?	C-17	C-17 Globemaster III (AMC)	HICK	RW08R/26L	WAKE	LP3	169.5W 16.7N (+/- 0.0)	0.0
2015 Oct 4	eMRBM	FTO-02E2 Target	MBRV-7?	C-17	C-17 Globemaster III (AMC)	HICK	RW08R/26L	WAKE	LP2	166.6E 19.3N (+/- 0.0)	10.0
2015 Nov 1 0305	SRALT	FTO-02E2a Target	-	C-17	C-17 Globemaster III (AMC)	HICK	RW08R/26L	WAKE	LP2	166.6E 19.3N (+/- 0.0)	300.0
2015 Dec 10	IRBM-T1	FTO-02E1a Target	MBRV-7?	C-17	C-17 Globemaster III (AMC)	HICK	RW08R/26L	WAKE	LP3	169.5W 16.7N (+/- 0.0)	300.0
2016 Jan 28 2155?	IRBM-T1	GMD CTV-02+ Target	-	C-17	C-17 Globemaster III (AMC)	HICK	RW08R/26L	WAKE	LP3	169.5W 16.7N (+/- 0.0)	300.0
2017 Jul 11	IRBM-T1	THAAD FTI-18 Target	MBRV-8?	C-17	C-17 Globemaster III (AMC)	HICK	RW08R/26L	WAKE	LP3	169.5W 16.7N (+/- 0.0)	300.0
2017 Jul 30	eMRBM	FET-1 Target	-	C-17	C-17 Globemaster III (AMC)	HICK	RW08R/26L	WAKE	LP1	155.0W 35.0N (+/- 5.0)	300.0
2018 Jan 31	eMRBM	FTW-29 Target	IRBM Target	C-17	C-17 Globemaster III (AMC)	HICK	RW08R/26L	WAKE	LP2	166.6E 19.3N (+/- 0.0)	300.0
2018 Dec 10	eMRBM	GMD FTI-03 Target	MBRV?	C-17	C-17 Globemaster III (AMC)	HICK	RW08R/26L	WAKE	LP3	169.5W 16.7N (+/- 0.0)	300.0
2019 Jul 15?	eMRBM	-	CARAVAN-3 Target	C-17	C-17 Globemaster III (AMC)	HICK	RW08R/26L	WAKE	LP3	169.5W 16.7N (+/- 0.0)	300.0
2019 Jul 22?	eMRBM	-	CARAVAN-3 Target	C-17	C-17 Globemaster III (AMC)	HICK	RW08R/26L	WAKE	LP1	155.0W 35.0N (+/- 5.0)	300.0
2019 Jul 27?	eMRBM	-	CARAVAN-3 Target	C-17	C-17 Globemaster III (AMC)	HICK	RW08R/26L	WAKE	LP1	155.0W 35.0N (+/- 5.0)	300.0
2019 Aug 30	eMRBM	-	MBRV?	C-17	C-17 Globemaster III (AMC)	HICK	RW08R/26L	WAKE	LP3	169.5W 16.7N (+/- 0.0)	300.0
2023 Dec 11 1438?	IRBM-T1	GMD FTG-12 Target	MBRV?	C-17	C-17 Globemaster III (AMC)	HICK	RW08R/26L	WAKE	LP5	159.8W 22.1N (+/- 0.0)	300.0
2024 Feb 8	MRBM-T2	MRBM Target	-	C-17	C-17 Globemaster III (AMC)	HICK	RW08R/26L	WAKE	LP6	159.8W 22.1N (+/- 0.0)	300.0

### IV.1.30.3 C-17 Globemaster III (EAFB)



This C-17 was operated by the 418th Flight Test Sqn at Edwards AFB. It was used in 2015 together with an AMC C-17 for dual target launches within a few minutes of each other. Serial number is unknown.

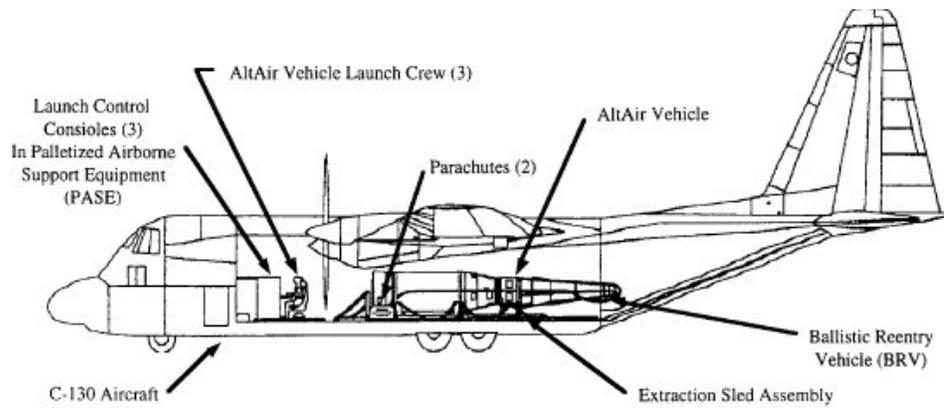
Rockets used: eMRBM

Updated: 2024 Nov 28 03:19:34

Launches: C-17-E

Date	Rocket	Flight	Mission	PlatCode	Platform	Site	LP	AscSite	AscLP	Pos	Apogee
2015 Nov 1 0309:25	eMRBM	FTO-02E2a Target	MBRV-7?	C-17-E	C-17 Globemaster III (EAFB)	HICK	RW08R/26L	PORC1	LP1	177.4E 12.9N (+/- 0.0)	300.0

#### IV.1.30.4 C-130 Hercules



A C-130 transport was used to deploy an SR-19 missile in the AltAir (HAVE GOLD) demo of 1997. It is not clear whether or not another C-130 launch of an SR-19 based target in 1999 used the same aircraft. The 1999 launch used a C-130H. The 1997 launch used 'a Navy-supplied C-130'.

Rockets used: AltAir,SRALT

Updated: 2024 Nov 28 03:19:34

**Launches: C-130**

Date	Rocket	Flight	Mission	Platform	Site	LP	AscSite	AsCLP	Pos	Apogee
1997 Jan 30 2155	AltAir	AltAir (Have Gold)	-	C-130	PM	RW03/21	WTR	LP3	119.0W 33.0N (+/- 3.0)	15.0
1999 Mar 31 0015	SRALT	SRALT/MERV-3	-	C-130	KAU	RW16/34	KAU	LP1	159.8W 22.1N (+/- 0.0)	99.0



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## **IV.1.31 US Rocket Launching Aircraft: Fighters**

Updated: 2024 Nov 28 03:19:34

US Rocket Launching Aircraft: Fighters

Ship	Transliteration	Image	CODE	Agency	Class	ClassID	AltID	Active
F2H-2 Banshee	F2H-2 Banshee		F2H2-N	NATC	F2H	-	-	-
F2H-2 Banshee S/N 124942	F2H-2 Banshee S/N 124942		F2H2-942	NACA	F2H	124942	-	-
F-3B Demon	F-3B Demon		F-3B	NMC	F3B	-	-	-
F-3B Demon S/N 143484?	F-3B Demon S/N 143484?		F-3B-484	NMC	F3B	143484	-	-
F-4B Phantom S/N 149451	F-4B Phantom S/N 149451		F-4B-451	NMC	F4B	149451	-	-
F-4C Phantom S/N 63-7654	F-4C Phantom S/N 63-7654		F-4C-654	AFSWC	F4C	63-7654	-	-
F-4D-1 Skyray S/N 130745	F-4D-1 Skyray S/N 130745		F-4D-745	NMC	F4D	130745	-	-
F-4D-1 Skyray S/N 130747	F-4D-1 Skyray S/N 130747		F-4D-747	NMC	F4D	130747	-	-
F-4D-1 Skyray S/N 134856	F-4D-1 Skyray S/N 134856		F-4D-856	NMC	F4D	134856	-	-
F-4D Phantom	F-4D Phantom		F-4D-A	AFSWC	F4D	Unknown	-	-
F-4J Phantom S/N 153077	F-4J Phantom S/N 153077		F-4J-077	NATC	F4J	153077	-	-
F-15D Eagle, Sparrow target program. (Tail 706, 714 and others)	F-15D Eagle, Sparrow target program. (Tail 706, 714 and others)		F-15D-I	IDF	F-15D	706/714/	-	-
F-15D Eagle IAF S/N 701	F-15D Eagle IAF S/N 701		F-15D-701	IDF	F-15D	701	-	-
F-15D Eagle IAF S/N 706	F-15D Eagle IAF S/N 706		F-15D-706	IDF	F-15D	706	-	-
F-15D Eagle IAF S/N 714	F-15D Eagle IAF S/N 714		F-15D-714	IDF	F-15D	714	-	-
F-15D Eagle IAF S/N 715	F-15D Eagle IAF S/N 715		F-15D-715	IDF	F-15D	715	-	-
F-86D Sabre, Rockaire program	F-86D Sabre, Rockaire program		F-86D	USAF	F-86D	-	-	-

US Rocket Launching Aircraft: Fighters

Ship	Transliteration	Image	CODE	Agency	Class	ClassID	AltID	Active
F-89J Scorpion No. 53-2547	F-89J Scorpion No. 53-2547		F-89J-547	USAF	F-89J	53-2547	-	- - -
F-104A-10-LO Starfighter S/N 56-749	F-104A-10-LO Starfighter S/N 56-749		F-104-749	USAF	F-104	56-749	-	1956 -
F-15 Eagle, ASAT program (084 or 086)	F-15 Eagle, ASAT program (084 or 086)		F-15A-08x	USAF	F-15A	76-0084/0086	-	- - -
F-15A Eagle S/N 76-0084, ASAT program.	F-15A Eagle S/N 76-0084, ASAT program.		F-15A-084	USAF	F-15A	76-0084	-	- - -
F-15A Eagle S/N 76-0086, ASAT program.	F-15A Eagle S/N 76-0086, ASAT program.		F-15A-086	USAF	F-15A	76-0086	-	- - -
F-4H-1F Phantom II (F-4A-2-MC) S/N 145310	F-4H-1F Phantom II (F-4A-2-MC) S/N 145310		F4H-310	NOTS	F-4H	145310	-	- -
TF4H-1F Phantom II (F-4A-2-MC) S/N 145317	TF4H-1F Phantom II (F-4A-2-MC) S/N 145317		F4H-317	NOTS	F-4H	145317	-	- -
YF4H-1 Phantom II (F-4A-1-MC) S/N 143389	YF4H-1 Phantom II (F-4A-1-MC) S/N 143389		F4H-389	NOTS	F-4H	145317	-	- -
F-4H Phantom II, 145317/145310/143389	F-4H Phantom II, 145317/145310/143389		F4H-N	NOTS	F-4H	145310/17	-	- -

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### **IV.1.31.1 F2H-2 Banshee**

The serial number for the F2H-2 used for the Navy Rockair launches is unknown. However I suspect it may well be the same aircraft, 942, that was used for the later Recruit-T55 heat transfer launches.

Rockets used: Rockair

Updated: 2024 Nov 28 03:19:34

Launches: F2H2-N

Date	Rocket	Flight	Mission	PlatCode	Platform	Site	LP	AscSite	AscLP	Pos	Apogee
1955 Aug 16	Rockair	-	-	F2H2-N	F2H-2 Banshee	NAOTS	RW04/22	WI	LP1	75.5W 37.8N (+/- 0.0)	9.0
1955 Aug 16	Rockair	-	-	F2H2-N	F2H-2 Banshee	NAOTS	RW04/22	WI	LP1	75.5W 37.8N (+/- 0.0)	55.0
1955 Aug 16?	Rockair	-	-	F2H2-N	F2H-2 Banshee	NAOTS	RW04/22	WI	LP1	75.5W 37.8N (+/- 0.0)	50.0
1955 Nov	Rockair	-	-	F2H2-N	F2H-2 Banshee	NAOTS	RW04/22	WI	LP1	75.5W 37.8N (+/- 0.0)	50.0
1955 Nov	Rockair	-	-	F2H2-N	F2H-2 Banshee	NAOTS	RW04/22	WI	LP1	75.5W 37.8N (+/- 0.0)	50.0

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## IV.1.31.2 F2H-2 Banshee S/N 124942



The Banshee used for Recruit Heat Transfer missions, aircraft 942, launched its payloads off the coast near Wallops. I've assumed it took off from USN Chincoteague (later NASA Wallops Main Base) but it may have been staged from Patuxent River. 942 was a NACA plane rather than a Navy one though, although according to Joe Baugher's site it was assigned to LeRC.

A Banshee was also used for the Navy Rockair launches in 1955. I suspect it was the same aircraft but don't have any evidence to support that guess.

Rockets used: Recruit, Recruit T55

Updated: 2024 Nov 28 03:19:34

Launches: F2H2-942

Date	Rocket	Flight	Mission	PlatCode	Platform	Site	LP	AscSite	AscLP	Pos	Apogee
1956 Nov 6	Recruit	Heat Transfer	-	F2H2-942	F2H-2 Banshee S/N 124942	NAQTS	RW04/22	WI	LP1	75.5W 37.8N (+/- 0.0)	4.0
1957	Recruit T55	Heat Transfer	-	F2H2-942	F2H-2 Banshee S/N 124942	NAQTS	RW04/22	WI	LP1	75.5W 37.8N (+/- 0.0)	4.0
1957 Aug 7	Recruit T55	Heat Transfer	-	F2H2-942	F2H-2 Banshee S/N 124942	NAQTS	RW04/22	WI	LP1	75.5W 37.8N (+/- 0.0)	4.0
1958 Jan 31	Recruit T55	Heat Transfer	-	F2H2-942	F2H-2 Banshee S/N 124942	NAQTS	RW04/22	WI	LP1	75.5W 37.8N (+/- 0.0)	4.0
1958 Mar 28	Recruit T55	-	-	F2H2-942	F2H-2 Banshee S/N 124942	NAQTS	RW04/22	WI	LP1	75.5W 37.8N (+/- 0.0)	4.0

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### **IV.1.31.3 F-3B Demon**

The Naval Missile Center used F-3B Demon, F-4D Skyray and F-4B Phantom aircraft to launch the Sparoair I, II and III sounding rockets for various projects. The Sparoair launch list is highly incomplete and it is not always clear which aircraft was used for which launch.

Rockets used: Sparoair I,Sparoair II

Updated: 2024 Nov 28 03:19:34



Launches: F-3B

Date	Rocket	Flight	Mission	Platform	Site	LP	AscSite	AsclP	Pos	Apogee
1960	Sparoair I	-	-	F-3B Demon	PM	RW03/21	WTR	LP3	119.0W 33.0N (+/- 3.0)	100.0
1961	Sparoair II	Flight 8	-	F-3B	PM	RW03/21	WTR	LP3	119.0W 33.0N (+/- 3.0)	100.0
1963	Sparoair II	REDGLARE	Comms Test	F-3B	PM	RW03/21	WTR	LP3	119.0W 33.0N (+/- 3.0)	103.0
1963 Aug 2 0800?	Sparoair I	NITE OWL 1	-	F-3B	PM	RW03/21	WTR	LP3	119.0W 33.0N (+/- 3.0)	107.0
1964 Jan 18	Sparoair I	NITE OWL 3	-	F-3B	PM	RW03/21	WTR	LP3	119.0W 33.0N (+/- 3.0)	91.0

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**IV.1.31.4 F-3B Demon S/N 143484?**



Rockets used: Sparoair I

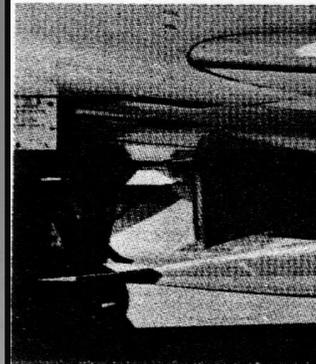
Updated: 2024 Nov 28 03:19:34

Launches: F-3B-484

Date	Rocket	Flight	Mission	PlatCode	Platform	Site	LP	AscSite	AsclP	Pos	Apogee
1963 Q3?	Sparoair I	NITE OWL 2	-	F-3B-484	F-3B Demon S/N 143484?	PM	RW03/21	WTR	LP3	119.0W 33.0N (+/- 3.0)	103.0

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#### IV.1.31.5 F-4B Phantom S/N 149451



Credit: US Navy

The F-4B Phantom was used by the Naval Missile Center for Sparoair III launches. It is thought that only two flights were carried out.

Rockets used: Sparoair III

Updated: 2024 Nov 28 03:19:34

Launches: F-4B-451

Date	Rocket	Flight	Mission	Platform	Platform	Site	LP	AscSite	AscLP	Pos	Apogee
1965 Jul 8	Sparoair III	-	-	F-4B-451	F-4B Phantom S/N 149451	PM	RW03/21	WTR	LP3	119.0W 33.0N (+/- 3.0)	27.0
1966 May 26	Sparoair III	-	-	F-4B-451	F-4B Phantom S/N 149451	PM	RW03/21	WTR	LP3	119.0W 33.0N (+/- 3.0)	30.0

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#### IV.1.31.6 F-4C Phantom S/N 63-7654



Phantom II F-4C 63-7654 was used by the USAF AFSWC (Air Force Special Weapons Center) to launch the ALARR sampler rocket from White Sands in 1966. For ALARR flights in Mar 1967 onwards an F-4D replaced it. Up to that time all flights were from White Sands, but according to Aviation Week (27 Feb 1967 p 40) flights were planned from Howard AFB (Panama Canal Zone), and from Alaska. It is unclear if any such flights were in fact made.

Rockets used: ALARR

Updated: 2024 Nov 28 03:19:34

Launches: F-4C-654

Date	Rocket	Flight	Mission	Platform	Site	LP	AscSite	AsclP	Pos	Apogee
1966 Mar 28	ALARR	-	-	F-4C Phantom S/N 63-7654	HADC	RW07/25	WS	LP1	106.5W 32.4N (+/- 0.1)	46.0
1966 Jul	ALARR	-	-	F-4C-654	HADC	RW07/25	WS	LP1	106.5W 32.4N (+/- 0.1)	62.0
1966 Nov 17 2015	ALARR	Leonids	-	F-4C-654	HADC	RW07/25	WS	LP1	106.5W 32.4N (+/- 0.1)	100.0
1967 Feb	ALARR	-	-	F-4C Phantom S/N 63-7654	HADC	RW07/25	WS	LP1	106.5W 32.4N (+/- 0.1)	100.0

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**IV.1.31.7 F4D-1 Skyray S/N 130745**



F-4D-1 Skyray No. 130745 was to be used for CALEB test flights in 1960; it was wrecked in a fatal accident on Oct 21 but seems to have been used for the Oct 24 flight nevertheless.



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IV.1.31.8 F4D-1 Skyray S/N 130747



F-4D-1 Skyray No. 130745 was to be used for CALEB test flights in 1960; it was wrecked in a fatal accident on Oct 21 but seems to have been used for the Jul 28 flight.

Rockets used: NOTS EV1,NOTS EV2,Sparoair II

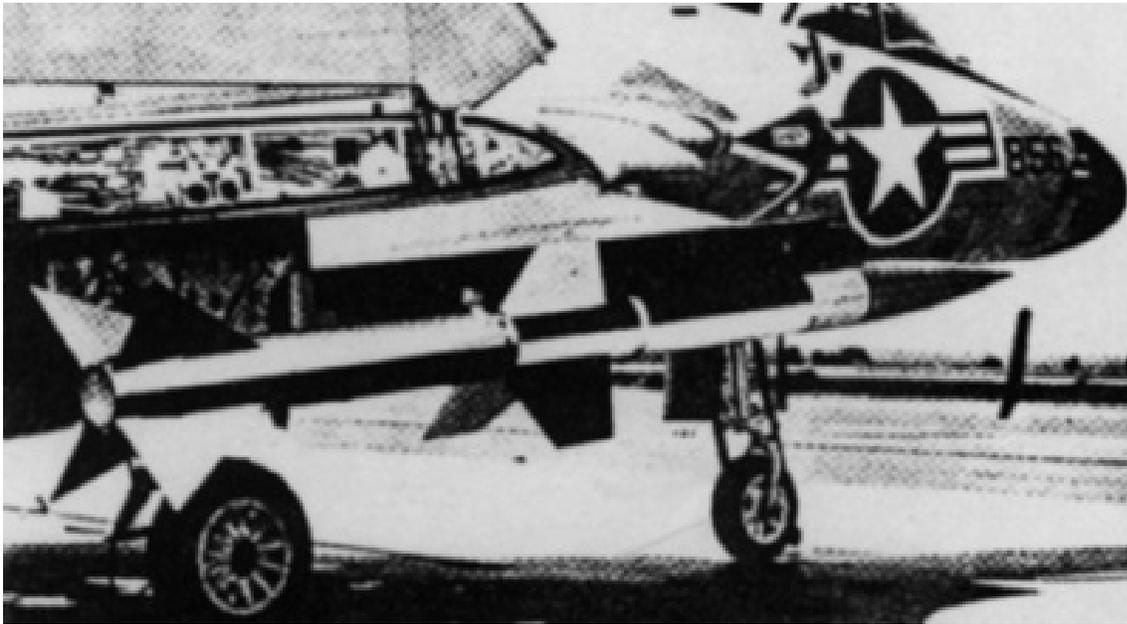
Updated: 2024 Nov 28 03:19:35

Launches: F-4D-747

Date	Rocket	Flight	Mission	PlatCode	Platform	Site	LP	AscSite	AscLP	Pos	Apogee
1958 Jul 25	NOTS EV1	Diagnostic 1	Diagnostic Payload 1	F-4D-747	F4D-1 Skyray S/N 130747	NOTS	RW03/21	WTR	LP4	119.0W 33.0N (+/- 3.0)	12.0
1958 Aug 12	NOTS EV1	Diagnostic 2	Diagnostic Payload 2	F-4D-747	F4D-1 Skyray S/N 130747	NOTS	RW03/21	WTR	LP4	119.0W 33.0N (+/- 3.0)	12.0
1958 Aug 22	NOTS EV1	Diagnostic 3	Diagnostic Payload 3	F-4D-747	F4D-1 Skyray S/N 130747	NOTS	RW03/21	WTR	LP4	119.0W 33.0N (+/- 3.0)	80.0
1958 Aug 25	NOTS EV1	Argus Radiation 1	Radiation Payload 1	F-4D-747	F4D-1 Skyray S/N 130747	NOTS	RW03/21	WTR	LP4	119.0W 33.0N (+/- 3.0)	12.0
1958 Aug 26	NOTS EV1	Argus Radiation 2	Radiation Payload 2	F-4D-747	F4D-1 Skyray S/N 130747	NOTS	RW03/21	WTR	LP4	119.0W 33.0N (+/- 3.0)	12.0
1958 Aug 28	NOTS EV1	Argus Radiation 3	Radiation Payload 3	F-4D-747	F4D-1 Skyray S/N 130747	NOTS	RW03/21	WTR	LP4	119.0W 33.0N (+/- 3.0)	12.0
1960 Jul 28	NOTS EV2	Caleb TV-1	TV-1	F-4D-747	F4D-1 Skyray S/N 130747	NOTS	RW03/21	WTR	LP7	119.0W 33.0N (+/- 3.0)	20.0
1960 Oct 24	NOTS EV2	Caleb TV-2	TV-2	F-4D-747	F4D-1 Skyray S/N 130747	NOTS	RW03/21	WTR	LP7	119.0W 33.0N (+/- 3.0)	20.0
1961?	Sparosair II	-	-	F-4D-747	F4D-1 Skyray S/N 130747	PM	RW03/21	WTR	LP3	119.0W 33.0N (+/- 3.0)	100.0

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**IV.1.31.9 F4D-1 Skyray S/N 134856**



Rockets used: Sparoair II

Updated: 2024 Nov 28 03:19:35

Launches: F-4D-856

Date	Rocket	Flight	Mission	PlatCode	Platform	Site	LP	AscSite	AscLP	Pos	Apogee
1961 Jul 18	Sparoair II	-	-	F-4D-856	F4D-1 Skyray S/N 134856	PM	RM03/21	WTR	LP3	119.0W 33.0N (+/- 3.0)	103.0

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### **IV.1.31.10 F-4D Phantom**

Rockets used: ALARR

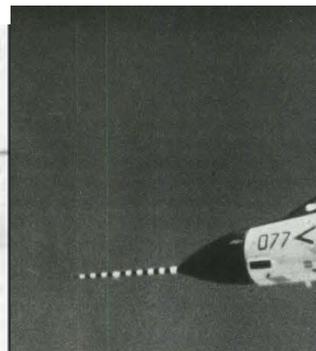
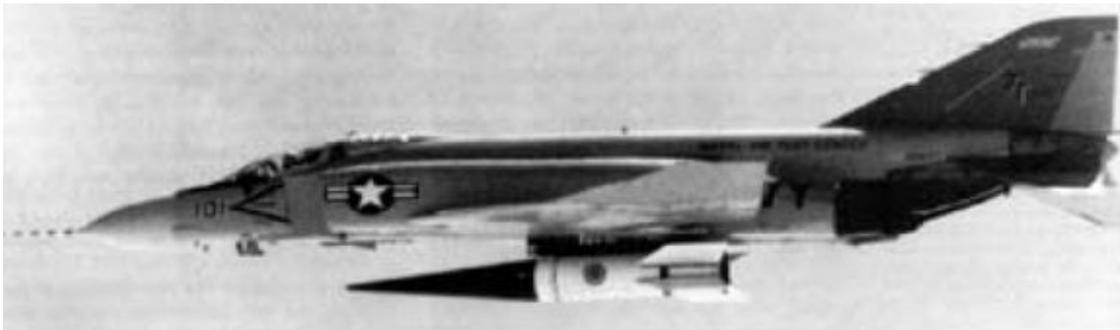
Updated: 2024 Nov 28 03:19:35

Launches: F-4D-A

Date	Rocket	Flight	Mission	PlatCode	Platform	Site	LP	AscSite	AscLP	Pos	Apogee
1968 Apr	ALARR	-	-	F-4D-A	F-4D Phantom	HADC	RW07/25	WS	LP1	106.5W 32.4N (+/- 0.1)	100.0
1968 Apr	ALARR	-	-	F-4D-A	F-4D Phantom	HADC	RW07/25	WS	LP1	106.5W 32.4N (+/- 0.1)	100.0
1968 May	ALARR	-	-	F-4D-A	F-4D Phantom	HADC	RW07/25	WS	LP1	106.5W 32.4N (+/- 0.1)	100.0
1968 May	ALARR	-	-	F-4D-A	F-4D Phantom	HADC	RW07/25	WS	LP1	106.5W 32.4N (+/- 0.1)	100.0
1968 Nov	ALARR	-	-	F-4D-A	F-4D Phantom	HADC	RW07/25	WS	LP1	106.5W 32.4N (+/- 0.1)	100.0
1968 Nov	ALARR	-	-	F-4D-A	F-4D Phantom	HADC	RW07/25	WS	LP1	106.5W 32.4N (+/- 0.1)	100.0
1969 Mar	ALARR	-	-	F-4D-A	F-4D Phantom	HADC	RW07/25	WS	LP1	106.5W 32.4N (+/- 0.1)	100.0
1969 May	ALARR	-	-	F-4D-A	F-4D Phantom	HADC	RW07/25	WS	LP1	106.5W 32.4N (+/- 0.1)	100.0
1969 May	ALARR	-	-	F-4D-A	F-4D Phantom	HADC	RW07/25	WS	LP1	106.5W 32.4N (+/- 0.1)	100.0
1969 May	ALARR	-	-	F-4D-A	F-4D Phantom	HADC	RW07/25	WS	LP1	106.5W 32.4N (+/- 0.1)	100.0
1969 May	ALARR	-	-	F-4D-A	F-4D Phantom	HADC	RW07/25	WS	LP1	106.5W 32.4N (+/- 0.1)	100.0
1969 May	ALARR	-	-	F-4D-A	F-4D Phantom	HADC	RW07/25	WS	LP1	106.5W 32.4N (+/- 0.1)	100.0
1969 Sep	ALARR	-	-	F-4D-A	F-4D Phantom	HADC	RW07/25	WS	LP1	106.5W 32.4N (+/- 0.1)	100.0
1969 Sep	ALARR	-	-	F-4D-A	F-4D Phantom	HADC	RW07/25	WS	LP1	106.5W 32.4N (+/- 0.1)	100.0
1969 Sep	ALARR	-	-	F-4D-A	F-4D Phantom	HADC	RW07/25	WS	LP1	106.5W 32.4N (+/- 0.1)	100.0
1969 Oct	ALARR	-	-	F-4D-A	F-4D Phantom	HADC	RW07/25	WS	LP1	106.5W 32.4N (+/- 0.1)	100.0
1970 Apr	ALARR	-	-	F-4D-A	F-4D Phantom	HADC	RW07/25	WS	LP1	106.5W 32.4N (+/- 0.1)	100.0

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**IV.1.31.11 F-4J Phantom S/N 153077**



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The F-4J S/N 153077 from NATC/Patuxent River was dedicated to the FLAME project and performed launches from Wallops and Tonopah.

The Wallops drops were staged from Patuxent River and the Tonopah ones from China Lake.

Rockets used: Pedro Recruit

Updated: 2024 Nov 28 03:19:35



Launches: F-4J-077

Date	Rocket	Flight	Mission	Platform	Site	LP	AscSite	AscLP	Pos	Apogee
1975 Feb 4 1835	Pedro Recruit	FLAME	-	F-4J-077	NATC	RW06/24	WI	LP1	75.5W 37.8N (+/- 0.0)	17.0
1975 Feb 27	Pedro Recruit	FLAME	-	F-4J Phantom S/N 153077	NOTS	RW03/21	TTR	LP1	116.8W 37.8N (+/- 0.0)	17.0
1975 Mar 28 2104	Pedro Recruit	FLAME	-	F-4J Phantom S/N 153077	NOTS	RW06/24	WI	LP1	75.5W 37.8N (+/- 0.0)	18.0
1975 Apr 18	Pedro Recruit	FLAME	-	F-4J Phantom S/N 153077	NATC	RW03/21	TTR	LP1	116.8W 37.8N (+/- 0.0)	17.0
1975 Jun 3	Pedro Recruit	FLAME	Tungsten nosetip test	F-4J Phantom S/N 153077	NOTS	RW03/21	TTR	LP1	116.8W 37.8N (+/- 0.0)	18.0
1975 Jun 4	Pedro Recruit	FLAME	-	F-4J Phantom S/N 153077	NOTS	RW03/21	TTR	LP1	116.8W 37.8N (+/- 0.0)	17.0
1976 Jan 22	Pedro Recruit	FLAME	-	F-4J Phantom S/N 153077	NOTS	RW03/21	TTR	LP1	116.8W 37.8N (+/- 0.0)	17.0
1976 Jan 26	Pedro Recruit	FLAME	-	F-4J Phantom S/N 153077	NOTS	RW03/21	TTR	LP1	116.8W 37.8N (+/- 0.0)	17.0

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**IV.1.31.12 F-15D Eagle, Sparrow target program. (Tail 706, 714 and others)**



Credit: Rafael

Rockets used: Black Sparrow,Blue Sparrow,Silver Sparrow

Updated: 2024 Nov 28 03:19:35

Launches: F-15D-I

Date	Rocket	Flight	Mission	PlatCode	Platform	Site	LP	AscSite	AsclP	Pos
2000 Sep 14 0900	Black Sparrow	-	-	F-15D-I	F-15D Eagle, Sparrow target program.	PALB	RW03/21	PALB	LP1	34.7E 31.9N (+/- 0.0)
2001 Aug 27	Black Sparrow	-	-	F-15D-I	F-15D Eagle, Sparrow target program.	PALB	RW03/21	PALB	LP1	34.7E 31.9N (+/- 0.0)
2003 Dec 16	Black Sparrow	-	-	F-15D-I	F-15D Eagle, Sparrow target program.	PALB	RW03/21	PALB	LP1	34.7E 31.9N (+/- 0.0)
2005 Dec 2 0827?	Black Sparrow	-	-	F-15D-I	F-15D Eagle, Sparrow target program.	PALB	RW03/21	PALB	LP1	34.7E 31.9N (+/- 0.0)
2007 Feb 11	Black Sparrow	-	-	F-15D-I	F-15D Eagle, Sparrow target program.	PALB	RW03/21	PALB	LP1	34.7E 31.9N (+/- 0.0)
2008 Apr 15	Blue Sparrow	-	-	F-15D-I	F-15D Eagle, Sparrow target program.	PALB	RW03/21	PALB	MEDR	34.7E 31.9N (+/- 0.0)
2011 Nov 15	Black Sparrow	Aster 30 Target	-	F-15D-I	F-15D Eagle, Sparrow target program.	CAZ	RW06/24	DGAEML	LP1	1.2W 44.5N (+/- 0.0)
2012 Feb 10 0900	Blue Sparrow	Radar target	-	F-15D-I	F-15D Eagle, Sparrow target program.	PALB	RW03/21	PALB	MEDR	34.7E 31.9N (+/- 0.0)
2013 Sep 3 0616	Silver Sparrow	Radar target	-	F-15D-I	F-15D Eagle, Sparrow target program.	PALB	RW03/21	PALB	MEDR	34.7E 31.9N (+/- 0.0)
2014 Sep 9	Blue Sparrow	Target	Ankor	F-15D-I	F-15D Eagle, Sparrow target program.	PALB	RW03/21	PALB	MEDR	34.7E 31.9N (+/- 0.0)
2014 Dec 16	Silver Sparrow	Target	-	F-15D-I	F-15D Eagle, Sparrow target program.	PALB	RW03/21	PALB	MEDR	34.7E 31.9N (+/- 0.0)
2015 Dec 10 0612	Silver Sparrow	Target	-	F-15D-I	F-15D Eagle, Sparrow target program.	PALB	RW03/21	PALB	MEDR	34.7E 31.9N (+/- 0.0)
2019 Jan 22	Silver Sparrow	Target	-	F-15D-I	F-15D Eagle, Sparrow target program.	PALB	RW03/21	PALB	MEDR	34.7E 31.9N (+/- 0.0)
2020 Aug 12	Silver Sparrow	Target	-	F-15D-I	F-15D Eagle, Sparrow target program.	PALB	RW03/21	PALB	MEDR	34.7E 31.9N (+/- 0.0)
2022 Jan 18	Silver Sparrow	Target	-	F-15D-I	F-15D Eagle, Sparrow target program.	PALB	RW03/21	PALB	MEDR	34.7E 31.9N (+/- 0.0)

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**IV.1.31.13 F-15D Eagle IAF S/N 701**



**IV.1.31.14 F-15D Eagle IAF S/N 706**



Credit: Rafael

Rockets used: Black Sparrow

Updated: 2024 Nov 28 03:19:35

Launches: F-15D-706

Date	Rocket	Flight	Mission	PlatCode	Platform	Site	LP	AscSite	AsclP	Pos	Apogee
2017 Jan 25	Black Sparrow	DST-5 Target	David's Sling Target	F-15D-706	F-15D Eagle IAF S/N 706	PALB	RW03/21	PALB	LP1	34.7E 31.9N (+/- 0.0)	20.0

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**IV.1.31.15 F-15D Eagle IAF S/N 714**



**IV.1.31.16 F-15D Eagle IAF S/N 715**



Credit: J.P. Dewam

Rockets used: Black Sparrow

Updated: 2024 Nov 28 03:19:35

Launches: F-15D-715

Date	Rocket	Flight	Mission	PlatCode	Platform	Site	LP	AscSite	AscLP	Pos	Apogee
2013 Mar 6	Black Sparrow	Aster 30 Target	-	F-15D-715	F-15D Eagle IAF S/N 715	CAZ	RM06/24	DGAEML	LP1	1.2W 44.5N (+/- 0.0)	100.0

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#### IV.1.31.17 F-86D Sabre, Rockaire program



Credit: USAF. Generic F-86D, specific aircraft unknown

Rockets used: Rockaire

Updated: 2024 Nov 28 03:19:35



Launches: F-86D

Date	Rocket	Flight	Mission	Platform	Site	LP	AscSite	AsclP	Pos	Apogee
1956 Dec 13	Rockaire	Rockair 2710	-	F-86D	HADC	RW07/25	WS	LP1	106.5W 32.4N (+/- 0.1)	44.0
1956 Dec 14	Rockaire	-	-	F-86D	HADC	RW07/25	WS	LP1	106.5W 32.4N (+/- 0.1)	42.0
1956 Dec 17	Rockaire	-	-	F-86D	HADC	RW07/25	WS	LP1	106.5W 32.4N (+/- 0.1)	43.0
1956 Dec 19	Rockaire	-	-	F-86D	HADC	RW07/25	WS	LP1	106.5W 32.4N (+/- 0.1)	45.0

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#### IV.1.31.18 F-89J Scorpion No. 53-2547



F-89J No. 53-2547 took off from Indian Springs AFB on 1957 Jul 19 at 1305 UTC and flew to the Nevada Test Site. It fired a Genie MB-1 missile with a live 1.5 kT W-25 nuclear warhead which at 1400 UTC (0700 PDT) detonated 4.2 km downrange, 6 km above the test site. The plane landed at Indian Springs at 1407. This was Operation PLUMBOB shot JOHN.

Indian Springs (now Creech AFB) has two runways, 13/31 and the large 08/26. My guess is that the larger runway is relatively new and the 1957 flight would have used 13/31.

Rockets used: F89J/Genie

Updated: 2024 Nov 28 03:19:35

Launches: F-89J-547

Date	Rocket	Flight	Mission	PlatCode	Platform	Site	LP	AscSite	AsCLP	Pos	Apogee
1957 Jul 19 1400	F89J/Genie	-	-	F-89J-547	F-89J Scorpion No. 53-2547	INSP	RW13/31	NTS	Area 10	116.1W 36.8N (+/- 0.0)	6.0

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**IV.1.31.19 F-104A-10-LO Starfighter S/N 56-749**



Credit: NASA

Rockets used: ALSOR

Updated: 2024 Nov 28 03:19:35

Launches: F-104-749

Date	Rocket	Flight	Mission	PlatCode	Platform	Site	LP	AscSite	AscLP	Pos	Apogee
1959?	ALSOR	Model A (F1)	-	F-104-749	F-104A-10-L0 Starfighter S/N 56-749	EAFB	RW04/22	EAFB	LP1	117.8W 34.9N (+/- 0.1)	74.0
1959?	ALSOR	Model A (F2)	-	F-104-749	F-104A-10-L0 Starfighter S/N 56-749	EAFB	RW04/22	EAFB	LP1	117.8W 34.9N (+/- 0.1)	117.0
1960 Apr 20	ALSOR	Model A (F4)	-	F-104-749	F-104A-10-L0 Starfighter S/N 56-749	EAFB	RW04/22	WTR	LP9	119.0W 33.0N (+/- 3.0)	70.0
1960 Apr 30	ALSOR	Model A (F5)	-	F-104-749	F-104A-10-L0 Starfighter S/N 56-749	EAFB	RW04/22	WTR	LP9	119.0W 33.0N (+/- 3.0)	62.0
1961 Jan?	ALSOR	NOTS Viperscan	-	F-104-749	F-104A-10-L0 Starfighter S/N 56-749	EAFB	RW04/22	EAFB	LP1	117.8W 34.9N (+/- 0.1)	71.0

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### **IV.1.31.20 F-15 Eagle, ASAT program (084 or 086)**

Rockets used: ASAT

Updated: 2024 Nov 28 03:19:35

Launches: F-15A-08x

Date	Rocket	Flight	Mission	PlatCode	Platform	Site	LP	AscSite	AscLP	Pos	Apogee
1984 Nov 13 2017	ASAT	-	-	F-15A-08x	F-15 Eagle, ASAT program (084 or 086)	EAFB	RW04/22	WTR	LP11	119.0W 33.0N (+/- 3.0)	1000.0
1986 Aug 22	ASAT	-	-	F-15A-08x	F-15 Eagle, ASAT program (084 or 086)	EAFB	RW04/22	WTR	LP11	119.0W 33.0N (+/- 3.0)	1000.0
1986 Sep 30 1045?	ASAT	-	-	F-15A-08x	F-15 Eagle, ASAT program (084 or 086)	EAFB	RW04/22	WTR	LP11	119.0W 33.0N (+/- 3.0)	1000.0

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**IV.1.31.21 F-15A Eagle S/N 76-0084, ASAT program.**



Rockets used: ASAT

Updated: 2024 Nov 28 03:19:35



Launches: F-15A-084

Date	Rocket	Flight	Mission	Platform	Site	LP	AscSite	AscLP	Pos	Apogee
1985 Sep 13 2040?	ASAT	Celestial Eagle	-	F-15A-084 F-15A Eagle S/N 76-0084, ASAT program.	EAFB	RM04/22	WTR	LP11	119.0W 33.0N (+/- 3.0)	500.0

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**IV.1.31.22 F-15A Eagle S/N 76-0086, ASAT program.**



Rockets used: ASAT

Updated: 2024 Nov 28 03:19:35

Launches: F-15A-086

Date	Rocket	Flight	Mission	PlatCode	Platform	Site	LP	AscSite	AscLP	Pos	Apogee
1984 Jan 21 1852:30	ASAT	-	-	F-15A-086	F-15A Eagle S/N 76-0086, ASAT program.	EAFB	RW04/22	WTR	LP11	119.0W 33.0N (+/- 3.0)	1000.0

**IV.1.31.23 F4H-1F Phantom II (F-4A-2-MC) S/N 145310**



**IV.1.31.24 TF4H-1F Phantom II (F-4A-2-MC) S/N 145317**



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**IV.1.31.25 YF4H-1 Phantom II (F-4A-1-MC) S/N 143389**



Credit: China Lake Alumni

Rockets used: NOTS EV2



Credit: China Lake Alumni

Updated: 2024 Nov 28 03:19:35

Launches: F4H-389

Date	Rocket	Flight	Mission	PlatCode	Platform	Site	LP	AscSite	AscLP	Pos	Apogee
1961 Oct 5 1910	NOTS EV2	Caleb	HI-HOE 1	F4H-389	YF4H-1 Phantom II	NOTS	RW03/21	WTR	LP7	119.0W 33.ON (+/- 3.0)	10.0
1962 Mar 26 1903	NOTS EV2	Caleb	HI-HOE 2	F4H-389	YF4H-1 Phantom II	NOTS	RW03/21	WTR	LP7	119.0W 33.ON (+/- 3.0)	21.0
1962 Jul 25 1541	NOTS EV2	Caleb	HI-HOE 3	F4H-389	YF4H-1 Phantom II	NOTS	RW03/21	WTR	LP7	119.0W 33.ON (+/- 3.0)	1166.0

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**IV.1.31.26 F4H Phantom II, 145317/145310/143389**

**IV.1.32 US Rocket Launching Aircraft: Commercial**

Updated: 2024 Nov 28 03:19:35

US Rocket Launching Aircraft: Commercial

Ship	Transliteration	Image	CODE	Agency	Class	ClassID	AltID	Active
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L-1011-385-1 (MFR No. 1067) Stargazer N140SC	L-1011-385-1 (MFR No. 1067) Stargazer N140SC		L-1011	OSC	L-1011	N140SC	-	1994 - -
Boeing 747-123 Shuttle Carrier Aircraft N905NA	Boeing 747-123 Shuttle Carrier Aircraft N905NA		SCA905	DFRC	B747	N905NA	-	1977 - 2012
Boeing 747-SR46 Shuttle Carrier Aircraft N911NA	Boeing 747-SR46 Shuttle Carrier Aircraft N911NA		SCA911	DFRC	B747	N911NA	-	1977 - 2012
Boeing 747-400 (-41R) S/N 32745 Cosmic Girl N744VG	Boeing 747-400 (-41R) S/N 32745 Cosmic Girl N744VG		B747-744	VORB	B747	N744VG	-	2020 - -
White Knight 1 N318SL	White Knight 1 N318SL		WK1	SCAL	WK1	N318SL	-	2002 - 2014
White Knight 2 N348MS 'VMS Eve'	White Knight 2 N348MS 'VMS Eve'		WK2	TSCD	WK2	N348MS	-	2008 - -



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**IV.1.32.1 L-1011-385-1 (MFR No. 1067) Stargazer N140SC**



Rockets used: Pegasus XL,Pegasus H,Pegasus XL/HAPS

Updated: 2024 Nov 28 03:19:35

Launches: L-1011

Date	Rocket	Flight	Mission	Platform	Site	LP	AscSite	AsclP	Pos	Ap
1994 Jun 27 2115	Pegasus XL	STEP 1	STEP 1	L-1011	V	RW30/12	WTR	PAWA	119.0W 33.0N (+/- 3.0)	388
1995 Apr 3 1348	Pegasus H	Orbcomm 1/2	Orbcomm FM1	L-1011	V	RW30/12	WTR	PAWA	119.0W 33.0N (+/- 3.0)	75
1995 Jun 22 1958	Pegasus XL	STEP 3	STEP 3	L-1011	V	RW30/12	WTR	PAWA	119.0W 33.0N (+/- 3.0)	141
1996 Mar 9 0133	Pegasus XL	REX II	REX II	L-1011	V	RW30/12	WTR	PAWA	119.0W 33.0N (+/- 3.0)	833
1996 May 17 0244	Pegasus H	MSI 3	MSI 3	L-1011	V	RW30/12	WTR	PAWA	119.0W 33.0N (+/- 3.0)	477
1996 Jul 2 0748	Pegasus XL	TOMS-EP	TOMS-EP	L-1011	V	RW30/12	WTR	PAWA	119.0W 33.0N (+/- 3.0)	94
1996 Aug 21 0947:26	Pegasus XL	FAST	FAST	L-1011	V	RW30/12	WTR	PAWA	119.0W 33.0N (+/- 3.0)	41
1996 Nov 4 1708:56	Pegasus XL	SAC-B/HETE	HETE	L-1011	WIMB	RW04/22	WI	LP3	75.5W 37.8N (+/- 0.0)	555
1997 Apr 21 1159:06	Pegasus XL	Minisat-01	Minisat-01	L-1011	GANC	RW03/21	GANC	LP1	15.3W 27.9N (+/- 0.0)	58
1997 Aug 1 2020	Pegasus XL	OrbView-2	Seastar	L-1011	V	RW30/12	WTR	PAWA	119.0W 33.0N (+/- 3.0)	78
1997 Aug 29 1502:22	Pegasus XL	FORTE	FORTE	L-1011	V	RW30/12	WTR	PAWA	119.0W 33.0N (+/- 3.0)	833
1997 Oct 22 1313	Pegasus XL	STEP 4	STEP M4	L-1011	V	RW04/22	WI	LP3	75.5W 37.8N (+/- 0.0)	833
1997 Dec 23 1911:42	Pegasus XL/HAPS	Orbcomm A1-A8	Orbcomm FM5	L-1011	WIMB	RW04/22	WI	LP3	75.5W 37.8N (+/- 0.0)	855
1998 Feb 26 0707	Pegasus XL	SNODE/T1	SNODE	L-1011	WIMB	RW30	WTR	PAWA	119.0W 33.0N (+/- 3.0)	58
1998 Apr 2 0242:39	Pegasus XL	TRACE	TRACE	L-1011	V	RW30/12	WTR	PAWA	119.0W 33.0N (+/- 3.0)	64
1998 Aug 2 1624	Pegasus XL/HAPS	Orbcomm B1-B8	Orbcomm FM17	L-1011	WIMB	RW04/22	WI	LP3	75.5W 37.8N (+/- 0.0)	833
1998 Sep 23 0506	Pegasus XL/HAPS	Orbcomm C1-C8	Orbcomm FM21	L-1011	WIMB	RW04/22	WI	LP3	75.5W 37.8N (+/- 0.0)	833
1998 Oct 23 0002	Pegasus H	SCD-2	SCD-2	L-1011	CC	RW30/12	ETR	MFWA	79.0W 28.5N (+/- 2.0)	777
1999 Mar 5 0256	Pegasus XL	WIRE	WIRE	L-1011	V	RW30/12	WTR	PAWA	119.0W 33.0N (+/- 3.0)	59
1999 May 18 0509:36	Pegasus XL/HAPS	TERRIERS/MUBLCOM	TERRIERS	L-1011	V	RW30/12	WTR	PAWA	119.0W 33.0N (+/- 3.0)	777
1999 Dec 4 1853	Pegasus XL/HAPS	Orbcomm D1-D7	Orbcomm FM30	L-1011	WIMB	RW22	WI	LP3	75.5W 37.8N (+/- 0.0)	13
2000 Jun 7 1319:30	Pegasus H	TSX-5	TSX-5	L-1011	V	RW30/12	WTR	PAWA	119.0W 33.0N (+/- 3.0)	17
2000 Oct 9 0538:18	Pegasus H	HETE 2	HETE 2	L-1011	KMR	RW06/24	KMR	Lp1	167.7E 9.0N (+/- 0.0)	666
2002 Feb 5 2058:12	Pegasus XL	HESSI	HESSI	L-1011	CC	RW30/12	ETR	MFWA	79.0W 28.5N (+/- 2.0)	60
2003 Jan 25 2013:35	Pegasus XL	SORCE	SORCE	L-1011	CC	RW30/12	ETR	MFWA	79.0W 28.5N (+/- 2.0)	65
2003 Apr 28 1159:57	Pegasus XL	GALEX	GALEX	L-1011	CC	RW30/12	ETR	MFWA	79.0W 28.5N (+/- 2.0)	70
2003 Jun 26 1853	Pegasus XL	Orbview-3	Orbview-3	L-1011	V	RW30/12	WTR	PAWA	119.0W 33.0N (+/- 3.0)	46
2003 Aug 13 0209:33	Pegasus XL	Scisat-1	SCISAT-1	L-1011	V	RW30/12	WTR	PAWA	119.0W 33.0N (+/- 3.0)	65
2005 Apr 15 1726:50	Pegasus XL/HAPS	DART	DART/HAPS	L-1011	V	RW30/12	WTR	PAWA	119.0W 33.0N (+/- 3.0)	75
2006 Mar 22 1403:53	Pegasus XL	ST5	Space Technology 5	L-1011	V	RW30/12	WTR	PAWA	119.0W 33.0N (+/- 3.0)	45
2007 Apr 25 2026:03	Pegasus XL	AIM	AIM	L-1011	V	RW30/12	WTR	PAWA	119.0W 33.0N (+/- 3.0)	60
2008 Apr 16 1702:48	Pegasus XL	C/NOFS	C/NOFS	L-1011	KMR	RW06/24	KMR	LP2	167.7E 9.0N (+/- 0.0)	855
2008 Oct 19 1747:23	Pegasus XL	IBEX/Star 27	IBEX	L-1011	KMR	RW06/24	KMR	LP2	167.7E 9.0N (+/- 0.0)	15
2012 Jun 13 1600:42	Pegasus XL	NuSTAR	NuSTAR	L-1011	KMR	RW06/24	KMR	LP3	167.7E 9.0N (+/- 0.0)	63
2013 Jun 28 0227:46	Pegasus XL	IRIS	IRIS	L-1011	V	RW30/12	WTR	PAWA	119.0W 33.0N (+/- 3.0)	666
2016 Dec 15 1337	Pegasus XL	CYGNSS	CYGNSS	L-1011	CC	RW13	ETR	MFWA	79.0W 28.5N (+/- 2.0)	57
2019 Oct 11 0200	Pegasus XL	ICON	ICON	L-1011	CC	RW13	ETR	MFWA	79.0W 28.5N (+/- 2.0)	61
2021 Jun 13 0811	Pegasus XL	Odyssey	TacBL-2	L-1011	VSFb	RW30/12	WTR	PAWA	119.0W 33.0N (+/- 3.0)	45

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**IV.1.32.2 Boeing 747-123 Shuttle Carrier Aircraft N905NA**



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**IV.1.32.3 Boeing 747-SR46 Shuttle Carrier Aircraft N911NA**



**IV.1.32.4 Boeing 747-400 (-41R) S/N 32745 Cosmic Girl N744VG**



Rockets used: LauncherOne

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Updated: 2024 Nov 28 03:19:35

Date	Rocket	Flight	Mission	PlatCode	Platform	Site	LP	AscSite	AsclP	Pos	Apogee
2020 May 25 1950	LauncherOne	Starshine 4?	-	B747-744	Boeing 747-400 (-41R) S/N 32745 Cosmic Girl N744VG	MHV	RW12/30	WTR	LP15	119.0W 33.0N (+/- 3.0)	10.0
2021 Jan 17 1938:51	LauncherOne	Elana XX	-	B747-744	Boeing 747-400 (-41R) S/N 32745 Cosmic Girl N744VG	MHV	RW12/30	WTR	LP15	119.0W 33.0N (+/- 3.0)	535.0
2021 Jun 30 1447	LauncherOne	STP-27VPA	Tubular Bells I	B747-744	Boeing 747-400 (-41R) S/N 32745 Cosmic Girl N744VG	MHV	RW12/30	WTR	LP16	119.0W 33.0N (+/- 3.0)	543.0
2022 Jan 13 2252	LauncherOne	STP-27VPB	Above The Clouds	B747-744	Boeing 747-400 (-41R) S/N 32745 Cosmic Girl N744VG	MHV	RW12/30	WTR	LP17 A	119.0W 33.0N (+/- 3.0)	505.0
2022 Jul 2 0653:00	LauncherOne	STP-S28A	Straight Up	B747-744	Boeing 747-400 (-41R) S/N 32745 Cosmic Girl N744VG	MHV	RW12/30	WTR	LP17 B	119.0W 33.0N (+/- 3.0)	499.0
2023 Jan 9 2308:59?	LauncherOne	UK launch	Start Me Up	B747-744	Boeing 747-400 (-41R) S/N 32745 Cosmic Girl N744VG	NEWQ	RW12/30	CELS	LP1	11.0W 51.0N (+/- 0.5)	-1.0

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### IV.1.32.5 White Knight 1 N318SL



Rockets used: Spaceship One

Updated: 2024 Nov 28 03:19:35

Launches: WK1

Date	Rocket	Flight	Mission	PlatCode	Platform	Site	LP	AscSite	AscLP	Pos	Apogee
2003 May 20	Spaceship One	-	-	WK1	White Knight 1 N318SL	MHV	RW12/30	-	-	118.1W 35.ON (+/- 0.0)	14.0
2003 Jul 29	Spaceship One	-	-	WK1	White Knight 1 N318SL	MHV	RW12/30	-	-	118.1W 35.ON (+/- 0.0)	14.0
2003 Aug 7 1437	Spaceship One	-	-	WK1	White Knight 1 N318SL	MHV	RW12/30	MHV	LP1	118.1W 35.ON (+/- 0.0)	14.0
2003 Aug 27	Spaceship One	-	-	WK1	White Knight 1 N318SL	MHV	RW12/30	MHV	LP1	118.1W 35.ON (+/- 0.0)	14.0
2003 Aug 27	Spaceship One	-	-	WK1	White Knight 1 N318SL	MHV	RW12/30	MHV	LP1	118.1W 35.ON (+/- 0.0)	14.0
2003 Sep 23	Spaceship One	-	-	WK1	White Knight 1 N318SL	MHV	RW12/30	MHV	LP1	118.1W 35.ON (+/- 0.0)	14.0
2003 Oct 17	Spaceship One	-	-	WK1	White Knight 1 N318SL	MHV	RW12/30	MHV	LP1	118.1W 35.ON (+/- 0.0)	14.0
2003 Nov 14	Spaceship One	-	-	WK1	White Knight 1 N318SL	MHV	RW12/30	MHV	LP1	118.1W 35.ON (+/- 0.0)	14.0
2003 Nov 19	Spaceship One	-	-	WK1	White Knight 1 N318SL	MHV	RW12/30	MHV	LP1	118.1W 35.ON (+/- 0.0)	14.0
2003 Dec 4	Spaceship One	-	-	WK1	White Knight 1 N318SL	MHV	RW12/30	MHV	LP1	118.1W 35.ON (+/- 0.0)	14.0
2003 Dec 17 1615	Spaceship One	-	-	WK1	White Knight 1 N318SL	MHV	RW12/30	MHV	LP1	118.1W 35.ON (+/- 0.0)	20.0
2004 Mar 11	Spaceship One	-	-	WK1	White Knight 1 N318SL	MHV	RW12/30	MHV	LP1	118.1W 35.ON (+/- 0.0)	14.0
2004 Apr 8 1511	Spaceship One	-	-	WK1	White Knight 1 N318SL	MHV	RW12/30	MHV	LP1	118.1W 35.ON (+/- 0.0)	32.0
2004 May 13 1531	Spaceship One	-	-	WK1	White Knight 1 N318SL	MHV	RW12/30	MHV	BAR	118.1W 35.ON (+/- 0.0)	64.0
2004 Jun 21 1450	Spaceship One	-	-	WK1	White Knight 1 N318SL	MHV	RW30	MHV	BAR	118.1W 35.ON (+/- 0.0)	100.0
2004 Sep 29 1509:53	Spaceship One	-	-	WK1	White Knight 1 N318SL	MHV	RW30	MHV	BAR	118.1W 35.ON (+/- 0.0)	103.0
2004 Oct 4 1449:11	Spaceship One	-	-	WK1	White Knight 1 N318SL	MHV	RW30	MHV	BAR	118.1W 35.ON (+/- 0.0)	112.0



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#### IV.1.32.6 White Knight 2 N348MS 'VMS Eve'



Rockets used: Spaceship Two

Updated: 2024 Nov 28 03:19:35

Launches: WK2

Date	Rocket	Flight	Mission	Platform	Site	LP	AscSite	AscLP	Pos	Apogee
2010 Mar 22	SpaceShip Two	WK2-25/OC01	-	White Knight 2 N348MS 'VMS Eve'	MHV	-	-	-	118.1W 35.ON (+/- 0.0)	10.0
2010 May 16	SpaceShip Two	WK2-27/OC02	-	White Knight 2 N348MS 'VMS Eve'	MHV	-	-	-	118.1W 35.ON (+/- 0.0)	15.0
2010 Jul 15	SpaceShip Two	WK2-33/OC03	-	White Knight 2 N348MS 'VMS Eve'	MHV	-	-	-	118.1W 35.ON (+/- 0.0)	10.0
2010 Sep 30	SpaceShip Two	WK2-39/OC04	-	White Knight 2 N348MS 'VMS Eve'	MHV	-	-	-	118.1W 35.ON (+/- 0.0)	10.0
2010 Oct 10	SpaceShip Two	WK2-41/GF01	-	White Knight 2 N348MS 'VMS Eve'	MHV	RW12/30	MHV	LP3	118.1W 35.ON (+/- 0.0)	14.0
2010 Oct 22	SpaceShip Two	WK2-42/OC05	-	White Knight 2 N348MS 'VMS Eve'	MHV	-	-	-	118.1W 35.ON (+/- 0.0)	10.0
2010 Oct 22	SpaceShip Two	WK2-43/OC06	-	White Knight 2 N348MS 'VMS Eve'	MHV	-	-	-	107.0W 33.ON (+/- 0.0)	10.0
2010 Oct 28	SpaceShip Two	WK2-44/GF02	-	White Knight 2 N348MS 'VMS Eve'	SPAM	-	-	-	118.1W 35.ON (+/- 0.0)	14.0
2010 Nov 17	SpaceShip Two	WK2-45/GF03	-	White Knight 2 N348MS 'VMS Eve'	MHV	RW12/30	MHV	LP3	118.1W 35.ON (+/- 0.0)	14.0
2011 Jan 13	SpaceShip Two	WK2-47/GF04	-	White Knight 2 N348MS 'VMS Eve'	MHV	RW12/30	MHV	LP3	118.1W 35.ON (+/- 0.0)	14.0
2011 Feb 14	SpaceShip Two	WK2-48/05GC-CC07	-	White Knight 2 N348MS 'VMS Eve'	MHV	RW12/30	MHV	LP3	118.1W 35.ON (+/- 0.0)	10.0
2011 Feb 15	SpaceShip Two	WK2-49/05GC-CC08	-	White Knight 2 N348MS 'VMS Eve'	MHV	RW12/30	MHV	-	118.1W 35.ON (+/- 0.0)	10.0
2011 Apr 6	SpaceShip Two	WK2-52/OC09	-	White Knight 2 N348MS 'VMS Eve'	MHV	-	-	-	118.1W 35.ON (+/- 0.0)	10.0
2011 Apr 7	SpaceShip Two	WK2-53/OC10	-	White Knight 2 N348MS 'VMS Eve'	SFO	-	-	-	122.4W 37.6N (+/- 0.0)	10.0
2011 Apr 14	SpaceShip Two	WK2-55/OC11	-	White Knight 2 N348MS 'VMS Eve'	MHV	RW12/30	-	-	118.1W 35.ON (+/- 0.0)	14.0
2011 Apr 22	SpaceShip Two	WK2-56/GF05	-	White Knight 2 N348MS 'VMS Eve'	MHV	RW12/30	MHV	LP3	118.1W 35.ON (+/- 0.0)	14.0
2011 Apr 27	SpaceShip Two	WK2-57/GF06	-	White Knight 2 N348MS 'VMS Eve'	MHV	RW12/30	MHV	LP3	118.1W 35.ON (+/- 0.0)	14.0
2011 May 4 1428	SpaceShip Two	WK2-58/GF07	-	White Knight 2 N348MS 'VMS Eve'	MHV	RW12/30	MHV	LP3	118.1W 35.ON (+/- 0.0)	15.0
2011 May 10	SpaceShip Two	WK2-59/GF08	-	White Knight 2 N348MS 'VMS Eve'	MHV	RW12/30	MHV	LP3	118.1W 35.ON (+/- 0.0)	15.0
2011 May 19	SpaceShip Two	WK2-60/GF09	-	White Knight 2 N348MS 'VMS Eve'	MHV	RW12/30	MHV	LP3	118.1W 35.ON (+/- 0.0)	15.0
2011 May 25	SpaceShip Two	WK2-61/GF10	-	White Knight 2 N348MS 'VMS Eve'	MHV	RW12/30	MHV	LP3	118.1W 35.ON (+/- 0.0)	15.0
2011 Jun 9	SpaceShip Two	WK2-62/OC12	-	White Knight 2 N348MS 'VMS Eve'	MHV	RW12/30	-	-	118.1W 35.ON (+/- 0.0)	15.0
2011 Jun 14	SpaceShip Two	WK2-64/GF11	-	White Knight 2 N348MS 'VMS Eve'	MHV	RW12/30	MHV	LP3	118.1W 35.ON (+/- 0.0)	15.0
2011 Jun 15	SpaceShip Two	WK2-65/GF12	-	White Knight 2 N348MS 'VMS Eve'	MHV	RW12/30	MHV	LP3	118.1W 35.ON (+/- 0.0)	15.0
2011 Jun 21	SpaceShip Two	WK2-66/GF13	-	White Knight 2 N348MS 'VMS Eve'	MHV	RW12/30	MHV	LP3	118.1W 35.ON (+/- 0.0)	15.0
2011 Jun 23	SpaceShip Two	WK2-67/GF14	-	White Knight 2 N348MS 'VMS Eve'	MHV	RW12/30	MHV	LP3	118.1W 35.ON (+/- 0.0)	15.0
2011 Jun 27	SpaceShip Two	WK2-68/GF15	-	White Knight 2 N348MS 'VMS Eve'	MHV	RW12/30	MHV	LP3	118.1W 35.ON (+/- 0.0)	15.0
2011 Sep 29	SpaceShip Two	WK2-73/GF16	-	White Knight 2 N348MS 'VMS Eve'	MHV	RW12/30	MHV	LP3	118.1W 35.ON (+/- 0.0)	15.0
2012 Jun 26	SpaceShip Two	WK2-87/GF17	-	White Knight 2 N348MS 'VMS Eve'	MHV	RW12/30	MHV	LP3	118.1W 35.ON (+/- 0.0)	15.0
2012 Jun 29	SpaceShip Two	WK2-88/GF18	-	White Knight 2 N348MS 'VMS Eve'	MHV	RW12/30	MHV	LP3	118.1W 35.ON (+/- 0.0)	15.0
2012 Jul 18	SpaceShip Two	WK2-90/GF19	-	White Knight 2 N348MS 'VMS Eve'	MHV	RW12/30	MHV	LP3	118.1W 35.ON (+/- 0.0)	15.0
2012 Aug 2	SpaceShip Two	WK2-91/GF20	-	White Knight 2 N348MS 'VMS Eve'	MHV	RW12/30	MHV	LP3	118.1W 35.ON (+/- 0.0)	15.0
2012 Aug 7	SpaceShip Two	WK2-92/GF21	-	White Knight 2 N348MS 'VMS Eve'	MHV	RW12/30	MHV	LP3	118.1W 35.ON (+/- 0.0)	15.0
2012 Aug 11	SpaceShip Two	WK2-93/GF22	-	White Knight 2 N348MS 'VMS Eve'	MHV	RW12/30	MHV	LP3	118.1W 35.ON (+/- 0.0)	15.0
2012 Aug 19	SpaceShip Two	WK2-109/GF23	-	White Knight 2 N348MS 'VMS Eve'	MHV	RW12/30	MHV	LP3	118.1W 35.ON (+/- 0.0)	15.0
2013 Apr 3 1531	SpaceShip Two	WK2-113/GF24	-	White Knight 2 N348MS 'VMS Eve'	MHV	RW12/30	MHV	LP3	118.1W 35.ON (+/- 0.0)	15.0
2013 Apr 12	SpaceShip Two	WK2-114/GF01	Cold Flow	White Knight 2 N348MS 'VMS Eve'	MHV	RW12/30	MHV	LP3	118.1W 35.ON (+/- 0.0)	15.0
2013 Apr 29 1447	SpaceShip Two	WK2-115/PF01	-	White Knight 2 N348MS 'VMS Eve'	MHV	RW12/30	MHV	LP3	118.1W 35.ON (+/- 0.0)	17.0
2013 Jul 25	SpaceShip Two	WK2-130/GF25	-	White Knight 2 N348MS 'VMS Eve'	MHV	RW12/30	MHV	LP3	118.1W 35.ON (+/- 0.0)	15.0
2013 Aug 8 1450?	SpaceShip Two	WK2-131/GF26	-	White Knight 2 N348MS 'VMS Eve'	MHV	RW12/30	MHV	LP3	118.1W 35.ON (+/- 0.0)	15.0
2013 Sep 5 1611	SpaceShip Two	WK2-132/PF02	-	White Knight 2 N348MS 'VMS Eve'	MHV	RW12/30	MHV	LP3	118.1W 35.ON (+/- 0.0)	15.0
2013 Dec 11 1745?	SpaceShip Two	WK2-145/GF27	-	White Knight 2 N348MS 'VMS Eve'	MHV	RW12/30	MHV	LP3	118.1W 35.ON (+/- 0.0)	15.0
2014 Jan 10 1600?	SpaceShip Two	WK2-147/PF03	-	White Knight 2 N348MS 'VMS Eve'	MHV	RW12/30	MHV	LP3	118.1W 35.ON (+/- 0.0)	15.0
2014 Jan 17 1700?	SpaceShip Two	WK2-149/GF28 51	-	White Knight 2 N348MS 'VMS Eve'	MHV	RW12/30	MHV	LP3	118.1W 35.ON (+/- 0.0)	21.0
2014 Jul 29 2049?	SpaceShip Two	WK2-156/GF29	-	White Knight 2 N348MS 'VMS Eve'	MHV	RW12/30	MHV	LP3	118.1W 35.ON (+/- 0.0)	15.0
2014 Aug 28 1453?	SpaceShip Two	WK2-164/GF02	Cold Flow	White Knight 2 N348MS 'VMS Eve'	MHV	RW12/30	MHV	LP3	118.1W 35.ON (+/- 0.0)	15.0
2014 Oct 7 1600?	SpaceShip Two	WK2-170/GF30	-	White Knight 2 N348MS 'VMS Eve'	MHV	RW12/30	MHV	LP3	118.1W 35.ON (+/- 0.0)	15.0
2014 Oct 31 1709	SpaceShip Two	WK2-173/PF04	-	White Knight 2 N348MS 'VMS Eve'	MHV	RW12/30	MHV	LP3	118.1W 35.ON (+/- 0.0)	15.0
2016 Sep 8 1904	SpaceShip Two	WK2-2xx/VG-001 CC2-01	-	White Knight 2 N348MS 'VMS Eve'	MHV	RW12/30	-	-	118.1W 35.ON (+/- 0.0)	10.0
2016 Nov 1 1330?	SpaceShip Two	WK2-215/VG-002 CC2-02	-	White Knight 2 N348MS 'VMS Eve'	MHV	RW12/30	-	-	118.1W 35.ON (+/- 0.0)	15.0
2016 Nov 3 1330?	SpaceShip Two	WK2-216/VG-003 CC2-03	-	White Knight 2 N348MS 'VMS Eve'	MHV	RW12/30	-	-	118.1W 35.ON (+/- 0.0)	15.0
2016 Nov 30 2207	SpaceShip Two	WK2-217/VG-004 CC2-04	-	White Knight 2 N348MS 'VMS Eve'	MHV	RW12/30	-	-	118.1W 35.ON (+/- 0.0)	15.0
2016 Dec 3 1540	SpaceShip Two	WK2-218/VG-005 GF	Glide 1	White Knight 2 N348MS 'VMS Eve'	MHV	RW12/30	MHV	LP3	118.1W 35.ON (+/- 0.0)	15.0
2016 Dec 22 2200?	SpaceShip Two	WK2-221/VG-006 GF	Glide 2	White Knight 2 N348MS 'VMS Eve'	MHV	RW12/30	MHV	LP3	118.1W 35.ON (+/- 0.0)	15.0
2017 Feb 24 1810?	SpaceShip Two	WK2-226/VG-007 GF	Glide 3	White Knight 2 N348MS 'VMS Eve'	MHV	RW12/30	MHV	LP3	118.1W 35.ON (+/- 0.0)	15.0

Launches: WK2

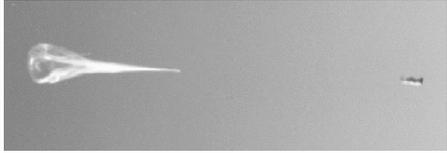
Date	Rocket	Flight	Mission	Platform	PlatCode	Site	LP	AscSite	AsclP	Pos	Apogee
2017 May 1 1738?	Spaceship Two	WK2-227/VG-008 GF	Feather test	White Knight 2 N348MS 'VMS Eve'	WK2	MHV	RW12/30	MHV	LP3	118.1W 35.0N (+/- 0.0)	15.0
2017 Jun 1 1755?	Spaceship Two	WK2-230/VG-009 GF	Water ballast test	White Knight 2 N348MS 'VMS Eve'	WK2	MHV	RW12/30	MHV	LP3	118.1W 35.0N (+/- 0.0)	15.0
2017 Aug 4	Spaceship Two	WK2-234/VG-010 GF	Glide 6	White Knight 2 N348MS 'VMS Eve'	WK2	MHV	RW12/30	MHV	LP3	118.1W 35.0N (+/- 0.0)	15.0
2018 Jan 11	Spaceship Two	WK2-242/VG-011 GF	Glide 7	White Knight 2 N348MS 'VMS Eve'	WK2	MHV	RW12/30	MHV	LP3	118.1W 35.0N (+/- 0.0)	15.0
2018 Apr 5	Spaceship Two	WK2-246/VG-012 VP-01	-	White Knight 2 N348MS 'VMS Eve'	WK2	MHV	RW12/30	MHV	LP3	118.1W 35.0N (+/- 0.0)	26.0
2018 May 29	Spaceship Two	WK2-249/VG-013 VP-01-2	-	White Knight 2 N348MS 'VMS Eve'	WK2	MHV	RW12/30	MHV	LP3	118.1W 35.0N (+/- 0.0)	35.0
2018 Jul 26 1644	Spaceship Two	WK2-252/VG-014 VP-02	-	White Knight 2 N348MS 'VMS Eve'	WK2	MHV	RW12/30	MHV	KVAL	118.1W 35.0N (+/- 0.0)	52.0
2018 Dec 13 1559:39	Spaceship Two	WK2-261/VG-015 VP-03	-	White Knight 2 N348MS 'VMS Eve'	WK2	MHV	RW12/30	MHV	KVAL	118.1W 35.0N (+/- 0.0)	82.0
2019 Feb 22 1653:40	Spaceship Two	WK2-264/VG-016 VF-01	-	White Knight 2 N348MS 'VMS Eve'	WK2	MHV	RW12/30	MHV	KVAL	118.1W 35.0N (+/- 0.0)	90.0
2020 Feb 13 1859	Spaceship Two	WK2-2xx/VG-017 CC2	-	White Knight 2 N348MS 'VMS Eve'	WK2	MHV	RW12/30	MHV	-	118.1W 35.0N (+/- 0.0)	15.0
2020 May 1 1540	Spaceship Two	WK2-279/VG-018 VG-09	Glide 8	White Knight 2 N348MS 'VMS Eve'	WK2	SPAM	RW16/34	SPAM	EER P1	107.0W 33.0N (+/- 0.0)	15.0
2020 Jun 25 1533:44	Spaceship Two	WK2-284/VG-019 VG-10	Glide 9	White Knight 2 N348MS 'VMS Eve'	WK2	SPAM	RW16/34	SPAM	EER P2	107.0W 33.0N (+/- 0.0)	15.0
2020 Dec 12 1616:50?	Spaceship Two	WK2-288/VG-020 VF-02	Unity 20	White Knight 2 N348MS 'VMS Eve'	WK2	SPAM	RW16/34	SPAM	EER P2	107.0W 33.0N (+/- 0.0)	15.0
2021 May 22 1526	Spaceship Two	WK2-294/VG-021 VF-02-2	Unity 21	White Knight 2 N348MS 'VMS Eve'	WK2	SPAM	RW16/34	SPAM	EER P3	107.0W 33.0N (+/- 0.0)	89.0
2021 Jul 11 1524:17	Spaceship Two	WK2-295/VG-022 VH-01	Unity 22	White Knight 2 N348MS 'VMS Eve'	WK2	SPAM	RW16/34	SPAM	EER P4	107.0W 33.0N (+/- 0.0)	85.0
2023 Apr 17 1336	Spaceship Two	WK2-xxx/VG-023 CC	Unity 23?	White Knight 2 N348MS 'VMS Eve'	WK2	SPAM	RW16/34	SPAM	-	107.0W 33.0N (+/- 0.0)	14.0
2023 Apr 26 1347	Spaceship Two	WK2-xxx/VG-024	Unity 24	White Knight 2 N348MS 'VMS Eve'	WK2	SPAM	RW16/34	SPAM	EER P3	107.0W 33.0N (+/- 0.0)	14.0
2023 May 25 1623:04	Spaceship Two	WK2-312/VG-025	Unity 25	White Knight 2 N348MS 'VMS Eve'	WK2	SPAM	RW16/34	SPAM	EER P3	107.0W 33.0N (+/- 0.0)	87.0
2023 Jun 29 1528:37	Spaceship Two	WK2-317/VG-026	Galactic 01	White Knight 2 N348MS 'VMS Eve'	WK2	SPAM	RW16/34	SPAM	EER P3	107.0W 33.0N (+/- 0.0)	87.0
2023 Aug 10 1517:10	Spaceship Two	WK2-324/VG-027	Galactic 02	White Knight 2 N348MS 'VMS Eve'	WK2	SPAM	RW16/34	SPAM	EER P3	107.0W 33.0N (+/- 0.0)	88.0
2023 Sep 8 1522:13	Spaceship Two	WK2-327/VG-028	Galactic 03	White Knight 2 N348MS 'VMS Eve'	WK2	SPAM	RW16/34	SPAM	EER P3	107.0W 33.0N (+/- 0.0)	88.0
2023 Oct 6 1610:33	Spaceship Two	WK2-332/VG-029	Galactic 04	White Knight 2 N348MS 'VMS Eve'	WK2	SPAM	RW16/34	SPAM	EER P3	107.0W 33.0N (+/- 0.0)	87.0
2023 Nov 2 1544:40	Spaceship Two	WK2-337/VG-030	Galactic 05	White Knight 2 N348MS 'VMS Eve'	WK2	SPAM	RW16/34	SPAM	EER P3	107.0W 33.0N (+/- 0.0)	87.0
2024 Jan 26 1742:05	Spaceship Two	WK2-xxx/VG-031	Galactic 06	White Knight 2 N348MS 'VMS Eve'	WK2	SPAM	RW16/34	SPAM	EER P3	107.0W 33.0N (+/- 0.0)	87.0
2024 Jun 8 1526:30	Spaceship Two	WK2-xxx/VG-032	Galactic 07	White Knight 2 N348MS 'VMS Eve'	WK2	SPAM	RW16/34	SPAM	EER P3	107.0W 33.0N (+/- 0.0)	87.0

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## **IV.1.33 US Ground-Launched Rockoons**

Updated: 2024 Nov 28 03:19:35

US Ground-Launched Rockoons

Ship	Transliteration	Image	CODE	Agency	Class	ClassID	AltID	Active
USAF Farside Balloon	USAF Farside Balloon		BLN-FS	USAF	-	-	-	1957 - 1958
NASA LDSD Balloon	NASA LDSD Balloon		BLN-LDSD	NASA	-	-	-	- - -
HAL5 Balloon	HAL5 Balloon		BLN-HAL5	NASA	-	-	-	1997 - 1997

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### IV.1.33.1 USAF Farside Balloon



Rockets used: Farside

Updated: 2024 Nov 28 03:19:35

Launches: BLN-FS

Date	Rocket	Flight	Mission	PlatCode	Platform	Site	LP	AscSite	AscLP	Pos	Apogee
1957 Sep 25	Farside	Shot 1	-	BLN-FS	USAF Farside Balloon	ENW	FS	-	-	162.2E 11.5N (+/- 0.0)	20.0
1957 Oct 3	Farside	Shot 2	-	BLN-FS	USAF Farside Balloon	ENW	FS	-	-	162.2E 11.5N (+/- 0.0)	800.0
1957 Oct 7	Farside	Shot 3	-	BLN-FS	USAF Farside Balloon	ENW	FS	-	-	162.2E 11.5N (+/- 0.0)	700.0
1957 Oct 11	Farside	Shot 4	-	BLN-FS	USAF Farside Balloon	ENW	FS	-	-	162.2E 11.5N (+/- 0.0)	30.0
1957 Oct 20	Farside	Shot 5	-	BLN-FS	USAF Farside Balloon	ENW	FS	-	-	162.2E 11.5N (+/- 0.0)	5000.0
1957 Oct 22	Farside	Shot 6	-	BLN-FS	USAF Farside Balloon	ENW	FS	-	-	162.2E 11.5N (+/- 0.0)	5000.0





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**IV.1.33.2 NASA LDSB Balloon**



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Rockets used: LDSD

Updated: 2024 Nov 28 03:19:35

Launches: BLN-LDSD

Date	Rocket	Flight	Mission	PlatCode	Platform	Site	LP	AscSite	AscLP	Pos	Apogee
2014 Jun 28 2105:00	LDSD	SIAD-R/SSDS	-	BLN-LDSD	MASA LDSD Balloon	KAU	BLP	KAU	LP2	159.8W 22.1N (+/- 0.0)	54.0
2015 Jun 8 2135:00	LDSD	SIAD-R/SSRS	-	BLN-LDSD	MASA LDSD Balloon	KAU	BLP	KAU	LP2	159.8W 22.1N (+/- 0.0)	54.0



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**IV.1.33.3 HAL5 Balloon**



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Rockets used: HALO

Updated: 2024 Nov 28 03:19:35

**Launches: BLN-HAL5**

Date	Rocket	Flight	Mission	PlatCode	Platform	Site	LP	AscSite	AsCLP	Pos	Apogee
1997 May 11 1225	HALO	Rockoon	-	BLN-HAL5	HAL5 Balloon	HAMNC	-	-	-	77.6W 34.4N (+/- 0.1)	67.0

---

## **IV.1.34 Soviet/Russian Rocket Launching Aircraft**

Updated: 2024 Nov 28 03:19:35



**Soviet/Russian Rocket Launching Aircraft**

Ship	Transliteration	Image	CODE	Agency	Class	ClassID	AltID	Active
------	-----------------	-------	------	--------	-------	---------	-------	--------



MiG-31D 07-2	MiG-31D 07-2		MiG31D-72	PVO	MiG-31	07-2	-	- - -
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#### IV.1.34.1 MiG-31D 07-2



Rockets used: Kontakt

Updated: 2024 Nov 28 03:19:35

**Launches: MiG31D-72**

Date	Rocket	Flight	Mission	PlatCode	Platform	Site	LP	AscSite	AsCLP	Pos	Apogee
1991 Jul 26	Kontakt	79M6 test flight	-	MiG31D-72	MiG-31D 07-2	BALKH	-	-	-	72.9E 46.4N (+/- 0.0)	200.0

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## **Part V**

# **Launch Vehicles**

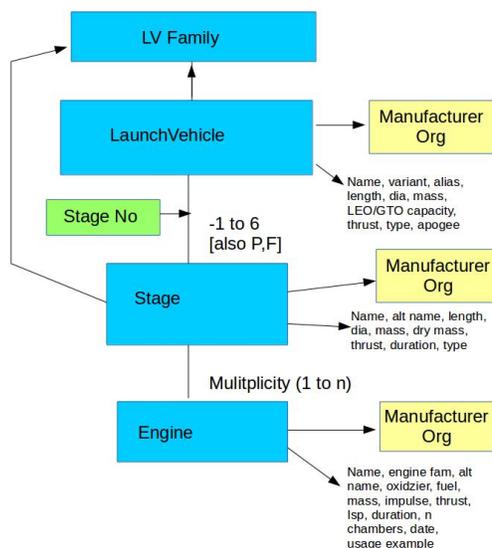


## Chapter V.1

# Launch Vehicle Descriptions

### V.1.1 Introduction

Each launch in the launch database is associated with a particular launch vehicle variant. In this section we describe these vehicles, giving approximate dimensions, masses and performance parameters. The reader should note that these approximate values are intended to give a general idea of the differences between variants - but the data is not necessarily the most accurate available and parameters given in other sources may be more reliable.



Schema for launch vehicle database, centered on the LaunchVehicle class. Each LaunchVehicle and Stage belongs to an LV Family. Each Launch Vehicle has a numbered set of stages. Each stage has a main engine type and has some (unordered) number of that type of engine. Auxiliary engines are not considered. Manufacturers of LVs, Stages and Engines are identified using an Org code linking them to the Orgs database.

Each launch vehicle variant is defined as consisting of a series of stages, and each stage is associated with a main engine type. Furthermore, each variant is a member of a larger grouping called a launch vehicle family. This structure is related in the five files that make up the launch vehicle description database:

- 
- Families - the Family file lists the different launch vehicle families.
  - LV - the LV file lists each launch vehicle variant and its overall properties, including specifying which family it is a member of.
  - LV Stages the LVtages file ties the LV and Stages file together by listing the stages in each vehicle variant.
  - Stages - the Stages file lists each different type of stage and their parameters, including the type and numbers of main engines.
  - Engines - Main engines used in each stage. The Engines file lists engines used either as Stage main engines or as satellite apogee engines.

## V.1.2 Launch Vehicle Families

In this work I have grouped stages into 'families' of related designs, and launch vehicles into families based on their first stage type. For instance, I consider the Thor Agena, Thor Able, and Delta II to be members of the same family, while Atlas Agena, Atlas Able, and Atlas Centaur are a second family. Ariane 1 to 4 and Ariane 5 are separate families - Ariane 1 to 4 share a common first stage design, but Ariane 5 is an entirely different rocket.

It's easier to maintain listings on a per-family basis, and the total number of first stage families is about 330 - much smaller than the 1500 or so different launch vehicle variants. There are some grey areas in assigning vehicles to families, but it's much less problematic than splitting hairs about slight differences between variants.

The rule I've adopted for defining a new family is a change in the tankage diameter. In some ways this is a superficial thing - to a rocket engineer, changes in the engine and the avionics will be much more significant than a change in the external dimensions - but in practise the diameter criterion works well and reveals important design commonalities between different launch vehicles. There are some marginal cases - the Trident II and Trident I missiles are closely related but have different diameters. The real complication comes in deciding which stage is the first stage. For orbital vehicles it's pretty clear, on a Delta II the Thor-derived first stage is a true first stage, it wouldn't make sense to count the GEM strap-ons as the core of the vehicle. But for many sounding rockets the vehicle consists of a booster and sustainer, with the booster falling off after only a couple of seconds. Is a Nike-Aerobee (Aerobee 170) a Nike variant or an Aerobee variant? After much agonizing I have decided to consider it a Nike variant. Similarly, Skylarks boosted by Cuckoo or Goldfinch motors are under the Cuckoo family, while single-stage unboosted Skylarks are in the Raven family.

## V.1.3 Launch Vehicle List

The LV (launch vehicle) list has the following fields:

- **Name of launch vehicle**
- **Launch vehicle family** - base stage.
- **Manufacturer.** See the Orgs file.
- **Launch vehicle variant.** Sometimes two different launch vehicles have the same name. For instance, the Vanguard rocket had variants with different third stages; the Little Joe 1 had various combinations of rocket motors; some variants of the H-1 had different strap-ons or different numbers of stages. These variants are indicated by an extra string in this field.
- **Alias.** An entry in this field indicates that the vehicle mentioned as an alias is an alternate name for this vehicle. For instance, the Taurus 1110 has the alias 'ARPA Taurus', indicating that the separate entry for ARPA Taurus actually refers to the same vehicle as the Taurus 1110; the vehicle was simply renamed. I have chosen in my launch listings to use the vehicle name in use by the launch agency at the time of launch. The Saturn IB, for example, was known for a while as the Uprated Saturn I, and has identical entries under each name.



- **Stage numbers.** Two numbers giving the minimum and maximum stage number. The minimum is usually 1, but sometimes 0 to allow for strapon stages, and occasionally -1 to allow for two kinds of strapon stage (e.g. Atlas IIAS).
- **Length** (metres.) The length is approximate, and may vary when different payloads and fairings are used.
- **Diameter** (metres)
- **Launch mass**, (tonnes)
- **LEO payload capacity** in kg, approximate; only provided for some of the orbital vehicles. Values in these fields are especially tentative.
- **GTO payload capacity** in kg, approximate; only provided for some of the orbital vehicles. Values in these fields are especially tentative.
- **Launch thrust**, kN.
- **Vehicle type**, see below.
- **Estimated max apogee** (kilometers). In many cases this is a rough order of magnitude (ROM) estimate. In some cases for IRBM/ICBMs I include an extra figure representing the range.

The following vehicle types are defined: (number of examples is from the 2003 release and has not been updated)

Code	Type
D	Deep Space launch
M	Missile
O	Orbital vehicle
R	Research rocket
V	Reentry test vehicle
X	Exoatmospheric test
Y	Exoatmospheric weather rocket
A	Endoatmospheric missile
C	Cruise missile
Q	Endoatmospheric reentry test
T	Endoatmospheric test/research
W	Endoatmospheric weather rocket

These types for individual launch vehicle types are slightly more finely divided than those used for the Family/Stage datafile: apart from the use of O rather than L, the R category is broken up to include V, X and Y subtypes and the T/A category is joined by the Q type. Note that the A,C,Q,T,W types of rocket never enter space (by my 80 km definition).

## V.1.4 LV Stages

The LV Stages list is quite simple. Each line represents a single stage within a vehicle. Stages are usually numbered starting from 1; 0 is used for strapon boosters, and in the rare cases where two different kinds of strapon booster are present, -1 is used as well. In some cases the nose fairing is included, and given a stage 'number' of F.

- **The vehicle name.**
- **The vehicle variant** (usually blank). Sometimes a launch vehicle manufacturer will use exactly the same designation for two versions of a vehicle with different stages or engines. I use an arbitrary string code to distinguish the versions.
- **the stage number** (which can be -1 or 0 for strapons, and F for fairing),
- **the stage name** (which maps to the Stages file)

- 
- **uncertainty flag**, a flag to indicate that it is not confirmed that this stage is the correct one.
  - **dummy flag**, a flag to indicate a dummy stage (e.g. the Cora vehicle always carries a dummy Astris stage), and finally
  - **the stage multiplicity**: e.g. stage 0 of the ASLV consists of two AS-0 strapon stages, and so has multiplicity 2.

## V.1.5 Stages

The Stages file gives basic information for all of the stages making up the launch vehicles in the LV file. The reader is again cautioned about the approximate nature of the numerical values in this file.

The file contains for each stage:

- **Stage name**
- **Stage family**
- **Manufacturer**
- **Alternate name**
- **Length (m)**
- **Diameter (m)**
- **Full mass (tonne)**
- **Dry mass (kg)**
- **Typical thrust (kN)**
- **Typical burn duration (s)**
- **Main engine name**
- **Main engine multiplicity** (i.e. the stage has this many main engines, all of the type defined in the previous column.)
- **Stage type** This doesn't really mean anything and can be ignored.

The main engine name has been made up (e.g. RD R-29 (1) for the first stage of the R-29) for cases where no name for the engine is available.

## V.1.6 Engines

The Engines file gives basic information for solid motors and liquid engines used as the main engines of stages in the Stages file. The reader is again cautioned about the approximate nature of the numerical values in this file.

The file contains for each engine:

- **Engine name**
- **Manufacturer**
- **Engine Family** (loosely defined grouping)
- **Alternative name**

- 
- **Oxidizer type**
  - **Fuel type**
  - **Mass, kg, loaded** (solids only)
  - **Total impulse**, kNs (mostly for solids)
  - **Typical thrust** (kN)
  - **Typical Isp** (s), (vacuum Isp where available)
  - **Typical burn duration** (s)
  - **Number of engine chambers** per engine
  - **Date of first flight**
  - **Example of usage**  
(stage number in brackets)

The main engine name has been made up (e.g. RD R-29 (1) for the first Stage of the R-29) for cases where no real name for the engine is available.



**Part VI**

**Launch Lists**



# Chapter VI.1

## Launch Lists

### VI.1.1 Introduction

The JSR Launch Vehicle Database is an attempt to provide a complete listing of all types of space launch vehicle, both suborbital and orbital, and indicate relationships between them. An attempt has been made to estimate numerical parameters even when they are not available in the literature, on the grounds that some reasonable estimate is better than none and gives a general idea of the vehicle's size and power.

The database gives launch times in UTC to the nearest second where available. It is the only online source for most of these launch times. An accurate launch time is important if you want to compare trajectories of different launches (did that missile launch pass close to this satellite?).

In the database:

- - all successful orbital launches are included
- - all confirmed failed orbital launch attempts are included; it is believed there are no more than a handful of unknown ones.
- - I have attempted to include all publicly documented suborbital exoatmospheric (apogee above 80 km) launches. The completeness with respect to such launches is moderately high (I would guess 70 to 80 percent) for large rockets (large sounding rockets, IRBMs and ICBMs). It is much lower (perhaps 30 to 50 percent) for small meteorological rockets where public records are comparatively lacking.
- - I have made a less comprehensive effort to document mesospheric launches, but completeness is fairly high for larger rockets and missiles with apogee in the mesosphere.
- - Endoatmospheric launches (launches with apogees below 50 km) are included on a patchy and somewhat arbitrary basis. I have attempted to include rockets that are in some way related to orbital missions, rockets that are launched from orbital launch sites (so that the launch list for that site is complete), and some rockets that I happen to find interesting. However, there is no attempt at completeness for endoatmospheric launches.

The primary access to the database is through launch lists for each 'family' of rocket. A family groups together launch vehicles with the same basic first stage design.

For each launch a citation (LTCite) is given for the existence of the launch and the source of the launch time. Occasional secondary citations are given for interest; I have not provided a detailed citation trail for the values in other columns of the tables. You have been warned. The cryptic citations are somewhat expanded in the Launch Time References file.

I acknowledge the help of Joe King and Pat Ross at NSSDC, who provided access to the old World Data Center/Rockets and Satellites launch database, and Joel Powell, Jean-Jacques Serra, Vladimir Agapov, Phillip Clark, Asif Siddiqi, Peter Hunter, Jacques Tiziou and the late Geoff Perry for sharing data over the many years it took to assemble this information. Mark Cleary at Patrick AFB, Roger Launius at NASA HQ, Elaine Liston at the KSC

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archives, and Jeff Geiger at Vandenberg were among those who provided useful data. Mark Wade has also caught a number of inconsistencies in the designation system, which I've fixed, and Doug Burke found numerous formatting errors. Above all, kudos to Carl Rigg who once again spent several months painstakingly comparing my data with his own extensive and independently constructed lists, and caught a large number of typos and errors. Thanks to Carl, I believe that this database is now as reliable a source for launch times, launch sites and vehicle types as any currently in existence. I also thank Ulrich Brocks who has scoured on-line newspapers and other resources to track down additional launch times and details.

## VI.1.2 Launch List Column Explanations

The lists have the following fields:

- **Launch\_Tag:** an identifier for the launch. For orbital launches, this is the international (COSPAR) designation of the launch. For other launches, the designation is assigned by me using a pseudo-COSPAR format of the form yyyy-Xnnn, where yyyy is the year of launch, X is a letter, and nnn is an integer. The designations are explained in the introduction. See the detailed description in the (See Launch Designations) section of the introduction.
- **Launch\_JD:** the Julian Date (UTC) of launch, useful for sorting.
- **Launch\_Date,** the UTC Gregorian calendar date of launch (defined as first motion, so may differ by a few seconds from some sources which use rocket ignition). The date is given in (See VagueDate) format.
- **LV\_Type,** name of the type of rocket used, as given in the (See LV table.)
- **LV\_Variant** - see discussion in the description of the (See LV table.)
- **Flight\_ID:** an identifier for the particular launch, for example the serial number of the launch vehicle or the mission number or name assigned by the launch agency.
- **Flight, Mission, and FlightCode:** - additional identifiers for the launch. For orbital flights, at least one of these is usually the name of the payload. Some launches have a lot of different designations. I haven't been fully consistent about which name goes in which of the Flight, Mission, FlightCode fields, although usually names in a specific series are in the same column.
- **Platform, Launch\_Site and Launch\_Pad:** where the rocket was launched from. Usually Platform is blank and the launch site (see the Sites file) tells you where the rocket went up from, and the Pad gives you the specific location within the launch site. Platform is used for mobile sites such as submarines or planes. See (See Launch Sites ) and (See Platforms.)
- **Ascent\_Site and Ascent\_Pad**  
Site and location of the actual rocket launch from a Platform, when different from the Launchite. For air launches, Launchite/Pad give the airport/runway of carrier plane takeoff, and Ascentite/Pad give the drop site location.
- **Apogee** - the highest altitude actually reached, in km. This field may be omitted for orbital launches. In many cases for non-orbital launches the value is a guess based on known capabilities of the launch vehicle, so only values with no appended question-mark should be taken as accurate.
- **Range** - the range in km measured along the curved surface of the Earth between launch site and impact site, for a suborbital launch. I have only recently added this field and very few entries are filled in.
- **Destination (Dest)** - the location of landing/impact of a suborbital flight. At present the values in this field are mnemonics that may or may not be obvious to the reader - sorry, I don't have a table of them at this stage. This is another recently added field and regarded as incompletely supported. Values in parentheses represent intended targets that were not reached due to a failure.



- 
- **Orbital Payload (OPay):** - payload in tonnes delivered to orbit (perigee above 80 km). Current values are autogenerated from the payload tables and there are likely some special cases not treated properly yet. Use with caution for now (2024).
  - **Launch\_Agency:** Organization responsible for launch services (often different from the organization owning the payload). See the (See Organizations database.)
  - **Launch\_Code** field. The first letter is the **launch category** - O for orbital, M for military missile, T for test rocket, A for atmospheric rocket, S for suborbital rocket other than missile, D for deep space mission. Also used occasionally are H (high altitude sounding rocket), R (reentry test), X (launch from world other than Earth), and Y (suborbital spaceplane with human crew). This field should be reliable for categories O and D, but the remaining letters are not always assigned fully consistently. It is mainly intended to separate out orbital and non-orbital launches.

The second letter, possibly followed by digits, is the **launch success fraction** (see the (See definitions section) )

Usually the launch success fraction code is S, F or U for Success, Fail or Unknown. Success implies propulsive success only, even if no data was returned from the payload. Also used is E, for pad explosion (no launch occurred, but included in the lists for completeness).

For orbital launches partial success/failure values are sometimes given, e.g. OS80 or OF40. The values between 00 and 99 indicate a percentage success to be used in statistical assessments of launch vehicle reliability as originally described in JSR 669 (<http://www.planet4589.org/space/jsr/back/news.669.txt>) and here in (See the launch success fraction) part of the definitions section.

- **Group:** For suborbital science missions, indicates the leading organizations responsible for the science payload. Up to 3 are given separated by slashes. Following the last slash is a comma-separated list of names of the principal investigators.

For orbital missions: This field encodes the type of launch service; the values are explained in (See the launch service code) part of the definitions section.

- **Category:** For non-orbital launches: Type of flight. Not necessarily a rigorous set of designations.

For orbital launches: Launch profile code. This records what the target orbit type was, how many upper stages were left in orbit, and what kind of debris mitigation maneuver was carried out for them, if any.

The codes are explained in (See the launch profile code) part of the definitions section.

- **Citation 1 (LTCite):** this citation is the primary reference for the existence of the launch and for the given launch time. See the (See Refs file.)

”Wire” means that the time was taken from wire service stories, internet news sites or live launch broadcasts. I’ve been more careful with recording a specific source where the launch time was hard to find.

- **Citation 2: (Cite)** Additional citation of interest, for example reference for which launch pad was used, etc.

- **Notes:** A field for additional notes. Right now I have rarely used this.



## **Part VII**

# **Worlds of the Solar System**



## Chapter VII.1

# Solar System Model

### VII.1.1 Solar System Description Files

At any given time, an artificial space object is considered to be orbiting a particular astronomical body. In the General Catalog the body is identified by a string identifier (e.g. "Earth"). The bodies and their properties are described in two files, the Worlds file and the Spin file.

### VII.1.2 Preamble: The Hill Sphere

In general, a space object travels under the gravitational influence of all the massive worlds in the system. However, in most cases the effects of all but one body can be neglected or treated as small perturbations. We say that the object is 'in orbit about' that one body. (The orbit is not necessarily bound; it may be a hyperbola rather than an ellipse). I introduce the concept of the Hill sphere of body A with respect to body B.

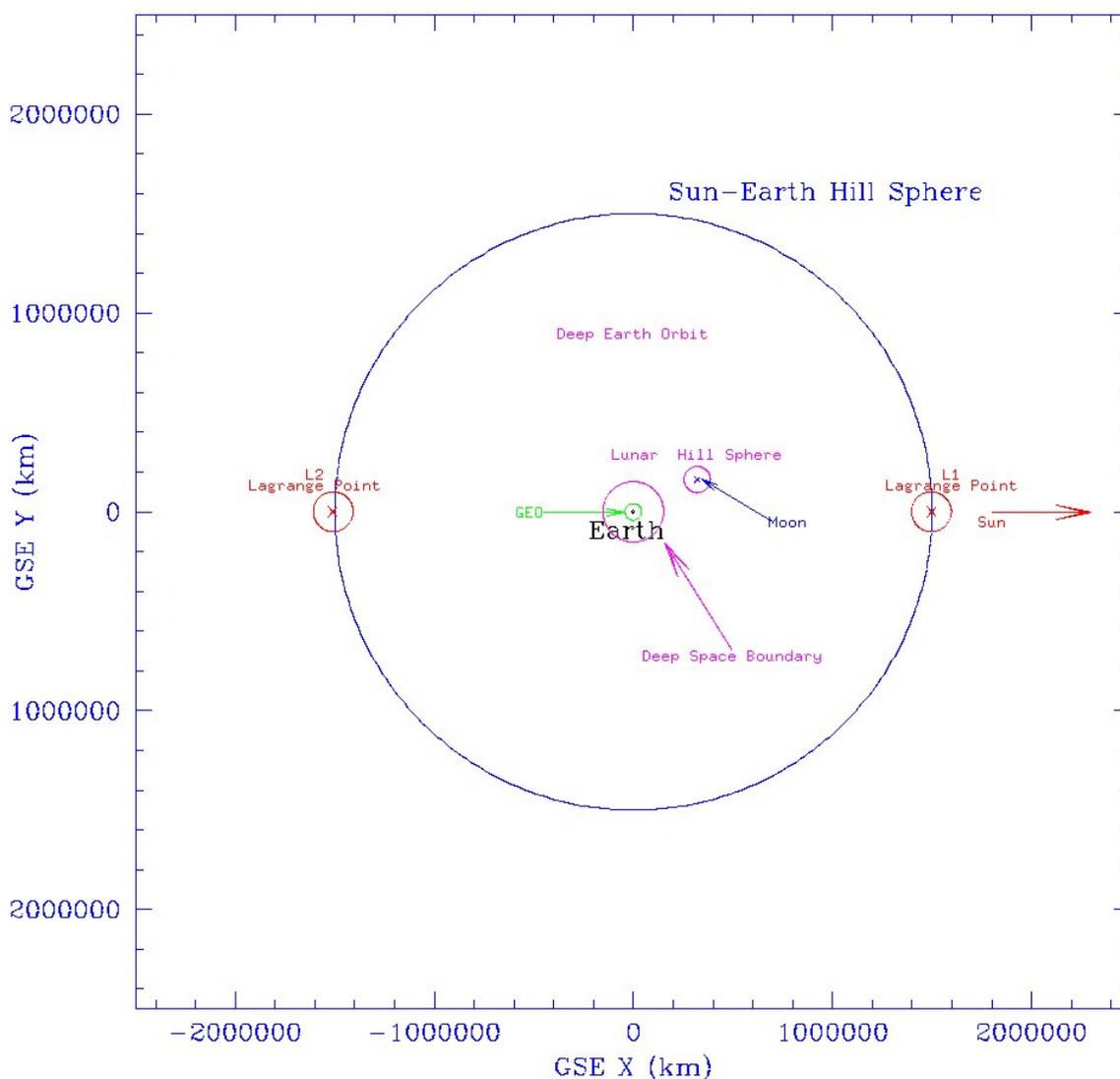
Let the mass of body A be  $M$ , the (smaller) mass of body B be  $m$ , and the distance between A and B be  $R$ . Then B's gravity dominates (in this approximation) when the distance from the object to B is less than

$$r(\text{Hill}) = R \left( \frac{m}{3M} \right)^{1/3}$$

For example, the radius of the Sun-Earth Hill sphere is about 1.5 million km centered on the Earth. The radius of the Earth-Moon Hill sphere is about 66,000 km centered on the Moon, and therefore is entirely within the Sun-Earth sphere.

Here is a map of the Earth-Moon system (with the Moon's position shown on the arbitrary date of 1968 Dec 21), showing the sizes of the two Hill spheres. The map is in geocentric solar ecliptic coordinates in which the Earth-Sun line is fixed and is the X-axis.

## Geography of the Earth-Moon System



The locations for the SEL1 (Sun-Earth Lagrange 1) and SEL2 (Sun-Earth Lagrange 2) points (see below) are also shown. The magenta circle around the Earth indicates the EL1:4 ‘deep space boundary’ beyond which I record space objects in the Deep Space Catalog instead of the main Earth satellite catalog.

### VII.1.3 Worlds in the Solar System

The General Catalog includes data on spacecraft in the vicinity of bodies throughout the Solar System (and, like the Voyagers, on their way to the great beyond).

We consider four kinds of body:

- Stars, of which the only one currently relevant to space travel is the Sun.
- Worlds. A world is a body which is sufficiently massive that it is spheroidal due to its own gravity but not massive enough to be a star. This includes gas and ice giants like Jupiter and Neptune, and terrestrial rocky and icy worlds like Earth and Titan. The majority of worlds are icy bodies beyond Neptune whose sizes are in fact poorly known at the moment.

- 
- Small bodies, solid objects smaller than worlds - asteroids, comets, small moons, and small Trans-Neptunian objects. While the true geophysical boundary between worlds and small bodies depends on composition, for definiteness I treat all substellar bodies with mean radius more than 200 km as worlds. In the list of small bodies used in the catalog, I include a number of the larger ones and all bodies that have been visited by spacecraft.
  - Dynamical reference points, of which we consider two types: subsystem barycenters and Lagrange points.

Objects maintaining position near Lagrange points are recorded in the General Catalog as ‘orbiting’ those points; in all other cases, objects are considered to orbit the body whose Hill sphere they are within. (In the case of nested Hill spheres, we take the innermost sphere the object is within).

### VII.1.3.1 Dynamical Reference Points

First, let’s discuss barycenters.

- The SSB: of greatest importance is the Solar System Barycenter (SSB), the center of gravity of the Solar System. We often choose coordinates in which the planets orbit the Sun (HC, heliocentric coordinates), and that’s what I do for the most part in the General Catalog. But you can instead use a barycentric coordinate (BC) system in which the Sun and the planets jointly orbit the SSB, and this is actually ‘better’ or ‘more correct’ in several senses - for example, BC is closer to an inertial frame, and orbital elements of loosely bound objects like high-eccentricity comets are less time-variable in BC. I went back and forth a few times on this but ultimately decided to stick with object-centered systems (HC and geocentric), partly because it’s conventional to refer Earth satellites to the Earth’s center and not the Earth-Moon barycenter.
- The EMB: the Earth-Moon Barycenter. It is useful to think of the EMB as orbiting the Sun and the Earth and Moon as each orbiting the EMB. (The EMB’s orbit around the Sun is more closely an ellipse, while the Earth’s has wobbles in it due to the Moon).
- Other subsystem barycenters, notably the Jovian and Saturnian systems (whose barycenters, however, are deep within their central planets). These are not explicitly in the attached world list, but are automatically added to the list in software as needed.

Now let’s talk about Lagrange points, which are closely related to the Hill sphere discussed in the previous section. When body B orbits body A, an object orbiting both will be subject to the effects of the gravity of A and B and to the acceleration due to the angular momentum it has with respect to both. Lagrange showed that the net effective forces balance at five points which are the solution of a quintic equation, the Lagrange quintic. We refer to these points as the L1 to L5 points of the A-B system. The Lagrange points for the specific and special A-B cases of Sun-Earth and Earth-Moon are referred to as SEL1 to SEL5 and EML1 to EML5.

- The L1 point lies at the interior intersection between the A-B line and the A-B Hill Sphere. SEL1 is 1.496 million km from the Earth in the direction towards the Sun (i.e. towards noon). SEL1 is useful for probes studying solar wind particles before they reach the Earth.
- The L2 point lies at the exterior intersection between the A-B line and the A-B Hill Sphere. SEL2 is 1.496 million km from the Earth in the direction away from the Sun (i.e. towards midnight). SEL2 is very useful for astronomical observatories. EML2 is being used by the Queqiao communications spacecraft as a farside communications relay point.

The L1 and L2 points are peaks in the effective potential; gravitational forces on objects there are low but nonzero and slowly cause the object to drift away. However, these forces can be counteracted by occasional small thruster firings. In practice spacecraft are placed in large ‘orbits’ around L1 or L2, with radii often in the hundreds of thousands of km for SEL1/2 and maintenance thruster burns every few months. I put the quotes around the word ‘orbit’ since there is of course no central gravitating mass at the Lagrange point, and the paths are not remotely Keplerian. Lagrange trajectories can be either ‘halo orbits’ or ‘Lissajous orbits’, and I hope to finally get around to learning the relevant orbital dynamics some day soon.

- The L3 point lies on the extension of the A-B line through A, roughly at the same distance from A as B is. SEL3 is therefore about 149.6 million km from the Sun and 180 degrees around the Earth's orbit from Earth - it is, roughly, the Anti-Earth. At least so far, the L3 point has not had any particular importance in astronomy or astronautics.
- The L4 and L5 points make an equilateral triangle with A and B, in the plane of the A-B mutual orbit. Unlike L1 to L3, they are gravitationally stable. The first practical example of Lagrange points was the discovery of asteroids at Sun-Jupiter L4 and L5. These asteroids were given names of characters from the Trojan War and became known as Trojan asteroids; the L4 and L5 points are thus also known as 'Trojan points' of any A-B system. Some probes have explored the interplanetary environment near the Earth-Moon L4 and L5 points.

## VII.1.4 Worlds Table Column Descriptions

Each line in the Worlds table represents a world, a small body, or a dynamical point.

The fields in the Worlds table are described below. The important fields are the name, mass, and radius. The orbital data given (columns from SemiMajorAxis through Epoch, and EphPeriod), as well as the RotPeriod, are sample values and it should be noted that the elements are functions of time - especially for moons. In practice, detailed ephemerides such as the JPL data are used to compute the locations of the worlds, and the values in this table are just to give the reader a general idea.

- **ID:** This one or two character string defines what kind of IDName designation the body has. (This also hints what kind of world it is, but that is formally defined in the WType field). The values are described in the next (IDName) paragraph.
- **IDName:** Combined with the ID field, the IDName provides a unique identifier for the body. These are based on the standard astronomical designations for the bodies except for the planets and moons which use the JPL ephemeris codes for the objects. (The identifiers are explained below, but it's fine to treat them as opaque strings rather than parse them).

ID	IDName Format	IDName Examples	Category	Description
P	0nn	006	Planet or Moon	Three digit code. 001-010 are 'planets' including Pluto (9) and the Sun (10).
P	pnn	603		Values 301-999 represent moons. The first digit is the primary and the second is the moon number for that primary, so 603 is the third officially numbered moon of Saturn (Tethys).
DL	ABL <sub>n</sub>	SEL2	Lagrange point	L Point n for the Alpha-Beta system is ABL <sub>n</sub> . The letter abbreviations for the bodies are, however, arbitrary.
A	(nnnn)	(532037)	Numbered minor planet	Value in parentheses is the minor planet number, starting with (1) Ceres.
AP	yyyy ABnnn	2002 TC302	Provisionally designated minor planet	IAU MPC provisional designation code, starting with discovery year.
AS	(nnn) m	(90482) 1	Satellite of minor planet	moon number m of asteroid nnn is (nnn) m.
C	nnP/	21P/	Comet	Comet designations ending in P/ are numbered periodic comets.
C	C/yyyy An	C/2017 S8	Comet	Comet designations starting C/ or D/ are 'unnumbered' non-periodic comets.

- **Name:** Name of the body. This name is used to identify the central body around which an object is orbiting in the General Catalog object catalogs and in the XTLE (extended TLE) orbit data files.
- **AltName:** Alternate name of the body. Either the formal designation with respect to the object's primary (e.g. Earth is Sol III) or an asteroid provisional designation.



- **Radius:** The equatorial radius of the body in km. A trailing question mark indicates an uncertain estimate.
- **Polar radius:** Polar radius of the body in km, where known.
- **Mass:** Mass of the body in teratonnes (1E15 kg, or 1E18g). A trailing question mark indicates an uncertain estimate. A trailing letter M (for million) indicates the numerical value should be multiplied by 1,000,000.
- **SemiMajorAxis:** Semi-major axis (orbital radius) of the body's orbit around its primary, in km. A trailing question mark indicates an uncertain estimate. A trailing letter M (for million) indicates the numerical value should be multiplied by 1,000,000.
- **Periapsis:** Periapsis (minimum orbital radius) of the body's orbit around its primary, in km. Note that for comets, the periapsis is often much more accurately known than the semi-major axis. A trailing question mark indicates an uncertain estimate. A trailing letter M (for million) indicates the numerical value should be multiplied by 1,000,000.
- **Ecc:** Orbital eccentricity at the given epoch.
- **Inc:** Orbital inclination at the given epoch. Moon orbits given with respect to planetary equator. Heliocentric orbits given with respect to the J2000 ecliptic.
- **Node:** Longitude of ascending node at the given epoch. Moon orbits given with respect to planetary equator. Heliocentric orbits given with respect to the J2000 ecliptic.
- **Peri:** Argument of periapsis at the given epoch.
- **M:** Mean anomaly at the given epoch.
- **Epoch:** Epoch of the sample orbital elements (SMA, periapsis, ecc, inc, node, peri, M).
- **RotPeriod:** Rotation period of the body in days. (More detailed information given in the Spin file).
- **OrbPeriod:** Orbital period of the body in days.
- **Ephemeris:** A string which encodes which ephemeris should be used to supersede the given orbital elements. Currently, JPL ephemeris files are used (DE405 for the planets and SPICE files for the moons.)
- **WType:** Body (world) type. Types used are:

WType	Meaning
*	Star
A	Minor planet (asteroid)
AS	Asteroid satellite (moon of asteroid)
DB	Barycenter dynamical point
DL	Lagrange dynamical point
M	Small moon
P	Major planet
W	World (but not major planet)
CP	Periodic comet
C	Comet

- **Primary:** Central body which this body is orbiting. When not given, it is assumed the central body is the Sun. The string EMB is an alternate name accepted for 'Earth-Moon System', the body entry from the Earth-Moon barycenter.

## VII.1.5 Spin File Column Descriptions

Each line in the Spin table represents a body defined in the Worlds file, and gives additional information on the rotational properties of the body. The Spin and Worlds files are linked by the ID and IDName columns (and also by the Name column, but that is not guaranteed to be unique).

- **ID:** This one or two character string defines what kind of IDName designation the body has.
- **IDName:** Combined with the ID field, the IDName provides a unique identifier for the body. See the ‘worlds file’ column descriptions for details.
- **Name** Body name.
- **Rho** Body mean density in units of 1000 kg/cubic metre (i.e. in grams per cc).
- **IFac** Inertial factor. This dimensionless factor  $f_I$  relates the total angular momentum of the body to the product of its mass times radius squared,

$$I = f_I M r^2$$

Where no information is available, a default value of 0.33 is used.

- **PoleRA, PoleDec** Celestial ICRS position in degrees of the direction of the body’s north pole at J2000.0.
- **Meridian** Longitude of planetary meridian at J2000.0, degrees.
- **SpinRate** Rate of change of longitude at J2000.0, degrees per day.
- **J2, J4, J6** J2, J4 and J6 spherical harmonics multiplied by one million.
- **PoleRARate, PoleDecRate** (degrees/d). Rate of change of ICRS polar RA and Dec at epoch J2000.
- **PoleFunc** A code indicating to software which subroutine to use for detailed polar motion function. This and the succeeding functions are based on the Report of the IAU Working Group on Cartographic Coordinates and Rotational Elements 2015 (and later revisions).
- **SpinFunc** A code indicating to software which subroutine to use for detailed spin rate function.
- **InitFunc** A code indicating to software which subroutine to use for detailed perturbation functions for the body’s moons.
- **JFile** Filename containing higher order spherical harmonics for the body. Currently only the Earth has such a file. Its contents are:

Coefficient	Value * 1 million
J2	1082.635854
J3	-2.532435346
J4	-1.619331205
J5	-0.2277161016
J6	0.5396348906

## VII.1.6 Worlds Table Column Descriptions

Each line in the Worlds table represents a world, a small body, or a dynamical point.

The fields in the Worlds table are described below. The important fields are the name, mass, and radius. The orbital data given (columns from SemiMajorAxis through Epoch, and EphPeriod), as well as the RotPeriod, are sample values and it should be noted that the elements are functions of time - especially for moons. In practice, detailed ephemerides such as the JPL data are used to compute the locations of the worlds, and the values in this table are just to give the reader a general idea.

- **ID:** This one or two character string defines what kind of IDName designation the body has. (This also hints what kind of world it is, but that is formally defined in the WType field). The values are described in the next (IDName) paragraph.

- **IDName:** Combined with the ID field, the IDName provides a unique identifier for the body. These are based on the standard astronomical designations for the bodies except for the planets and moons which use the JPL ephemeris codes for the objects. (The identifiers are explained below, but it's fine to treat them as opaque strings rather than parse them).

ID	IDName Format	IDName Examples	Category	Description
P	0nn	006	Planet or Moon	Three digit code. 001-010 are 'planets' including Pluto (9) and the Sun (10).
P	pnn	603		Values 301-999 represent moons. The first digit is the primary and the second is the moon number for that primary, so 603 is the third officially numbered moon of Saturn (Tethys).
DL	ABLn	SEL2	Lagrange point	L Point n for the Alpha-Beta system is ABLn. The letter abbreviations for the bodies are, however, arbitrary.
A	(nnnn)	(532037)	Numbered minor planet	Value in parentheses is the minor planet number, starting with (1) Ceres.
AP	yyyy ABnnn	2002 TC302	Provisionally designated minor planet	IAU MPC provisional designation code, starting with discovery year.
AS	(nnn) m	(90482) 1	Satellite of minor planet	moon number m of asteroid nnn is (nnn) m.
C	nnP/	21P/	Comet	Comet designations ending in P/ are numbered periodic comets.
C	C/yyyy An	C/2017 S8	Comet	Comet designations starting C/ or D/ are 'unnumbered' non-periodic comets.

- **Name:** Name of the body. This name is used to identify the central body around which an object is orbiting in the General Catalog object catalogs and in the XTLE (extended TLE) orbit data files.
- **AltName:** Alternate name of the body. Either the formal designation with respect to the object's primary (e.g. Earth is Sol III) or an asteroid provisional designation.
- **Radius:** The equatorial radius of the body in km. A trailing question mark indicates an uncertain estimate.
- **Polar radius:** Polar radius of the body in km, where known.
- **Mass:** Mass of the body in teratonnes (1E15 kg, or 1E18g). A trailing question mark indicates an uncertain estimate. A trailing letter M (for million) indicates the numerical value should be multiplied by 1,000,000.
- **SemiMajorAxis:** Semi-major axis (orbital radius) of the body's orbit around its primary, in km. A trailing question mark indicates an uncertain estimate. A trailing letter M (for million) indicates the numerical value should be multiplied by 1,000,000.
- **Periapsis:** Periapsis (minimum orbital radius) of the body's orbit around its primary, in km. Note that for comets, the periapsis is often much more accurately known than the semi-major axis. A trailing question mark indicates an uncertain estimate. A trailing letter M (for million) indicates the numerical value should be multiplied by 1,000,000.
- **Ecc:** Orbital eccentricity at the given epoch.
- **Inc:** Orbital inclination at the given epoch. Moon orbits given with respect to planetary equator. Heliocentric orbits given with respect to the J2000 ecliptic.
- **Node:** Longitude of ascending node at the given epoch. Moon orbits given with respect to planetary equator. Heliocentric orbits given with respect to the J2000 ecliptic.
- **Peri:** Argument of periapsis at the given epoch.
- **M:** Mean anomaly at the given epoch.
- **Epoch:** Epoch of the sample orbital elements (SMA, periapsis, ecc, inc, node, peri, M).

- **RotPeriod:** Rotation period of the body in days. (More detailed information given in the Spin file).
- **OrbPeriod:** Orbital period of the body in days.
- **Ephemeris:** A string which encodes which ephemeris should be used to supersede the given orbital elements. Currently, JPL ephemeris files are used (DE405 for the planets and SPICE files for the moons.)
- **WType:** Body (world) type. Types used are:

WType	Meaning
*	Star
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DB	Barycenter dynamical point
DL	Lagrange dynamical point
M	Small moon
P	Major planet
W	World (but not major planet)
CP	Periodic comet
C	Comet

- **Primary:** Central body which this body is orbiting. When not given, it is assumed the central body is the Sun. The string EMB is an alternate name accepted for 'Earth-Moon System', the body entry from the Earth-Moon barycenter.

## VII.1.7 Spin File Column Descriptions

Each line in the Spin table represents a body defined in the Worlds file, and gives additional information on the rotational properties of the body. The Spin and Worlds files are linked by the ID and IDName columns (and also by the Name column, but that is not guaranteed to be unique).

- **ID:** This one or two character string defines what kind of IDName designation the body has.
- **IDName:** Combined with the ID field, the IDName provides a unique identifier for the body. See the 'worlds file' column descriptions for details.
- **Name** Body name.
- **Rho** Body mean density in units of 1000 kg/cubic metre (i.e. in grams per cc).
- **IFac** Inertial factor. This dimensionless factor  $f_I$  relates the total angular momentum of the body to the product of its mass times radius squared,

$$I = f_I M r^2$$

Where no information is available, a default value of 0.33 is used.

- **PoleRA, PoleDec** Celestial ICRS position in degrees of the direction of the body's north pole at J2000.0.
- **Meridian** Longitude of planetary meridian at J2000.0, degrees.
- **SpinRate** Rate of change of longitude at J2000.0, degrees per day.
- **J2, J4, J6** J2, J4 and J6 spherical harmonics multiplied by one million.
- **PoleRARate, PoleDecRate** (degrees/d). Rate of change of ICRS polar RA and Dec at epoch J2000.
- **PoleFunc** A code indicating to software which subroutine to use for detailed polar motion function. This and the succeeding functions are based on the Report of the IAU Working Group on Cartographic Coordinates and Rotational Elements 2015 (and later revisions).
- **SpinFunc** A code indicating to software which subroutine to use for detailed spin rate function.

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- **InitFunc** A code indicating to software which subroutine to use for detailed perturbation functions for the body's moons.
  - **JFile** Filename containing higher order spherical harmonics for the body. Currently only the Earth has such a file. Its contents are:

Coefficient	Value * 1 million
J2	1082.635854
J3	-2.532435346
J4	-1.619331205
J5	-0.2277161016
J6	0.5396348906



**Part VIII**

**Object Catalogs**





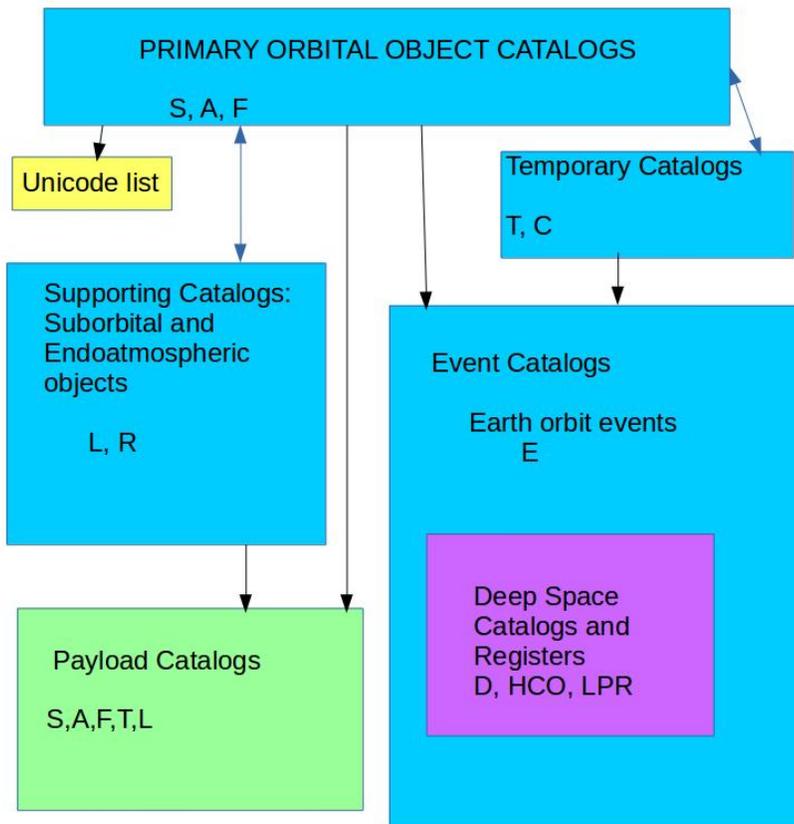
## **Chapter VIII.1**

# **Main Object Catalogs**

### **VIII.1.1 Object Catalogs Organization**

The General Catalog of Artificial Space Objects has eleven object catalogs and five payload catalogs, each with a different role. The object catalogs, while containing different groups of objects, all have the same format - from a relational database point of view, they could be concatenated into a single table without loss of information. The same is true of the payload catalogs. Nevertheless, I find it clearer to keep the catalogs separated.

The diagram below shows the interrelations between the different catalogs. Each payload catalog is paired with an object catalog, but not all the object catalogs have payload catalogs. The various catalogs are summarized in the table below. I then discuss each catalog in general terms, and finally explain the catalog columns.



Object Catalog	Full name	Object prefix	Description
<b>Primary Orbital Object Catalogs</b>			
satcat	Standard Satellite Catalog	S	Objects from the US Satellite Catalog
auxcat	Auxiliary Satellite Catalog	A	Objects omitted from the US catalog
ftocat	Failed Satellite Catalog	F	Objects which failed to reach orbit
<b>Supporting Catalogs</b>			
lcat	Low Altitude (Endoatmospheric) Catalog	L	Objects whose apogee was less than 80 km
rcat	Suborbital Rocket (Exoatmospheric) Catalog	R	Objects whose apogee was 80 km or more
<b>Temporary Catalogs</b>			
tmpcat	Temporary Catalog	T	Objects expected to receive an S catalog number
csocat	Complementary Space Object Catalog	C	Observed objects whose mapping to S is uncertain
<b>Event Catalogs</b>			
ecat	Event Catalog		Later phases in history for objects in primary catalogs
deepcat	Deep Space Catalog	D	Objects which reached more than 150,000 km
hcocat	Heliocentric Register	D	Objects in heliocentric orbit
lprcat	Lunar and Planetary Register	D	Objects in sphere of influence of other worlds
<b>Payload Catalogs</b>			
psatcat	Payload catalog	S	Payload data for payloads in satcat
pauxcat	Payload catalog	A	Payload data for payloads in auxcat
pftocat	Payload catalog	F	Payload data for payloads in ftocat
plcat	Payload catalog	L	Payload data for payloads in lcat
prcat	Payload catalog	R	Payload data for payloads in rcat
pdeepcat	Payload catalog	D	Payload data for payloads in deepcat which are not in primary catalogs
<b>Derived Catalogs</b>			
currentcat	Summary catalog	S/A	Most recent phase for each S and A object, v

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## Chapter VIII.2

# Main Object Catalogs

### VIII.2.1 Primary Orbital Object Catalogs

#### VIII.2.1.1 The Standard (S) Satellite Catalog

Since the late 1950s the US government has maintained a catalog of satellites (often referred to as the SATCAT). Each satellite is given a sequential number (1 was the rocket stage from the first Sputnik). These numbers are sometimes referred to as SSN numbers.

In GCAT, each entry in the S catalog (Standard Satellite Catalog or satcat) corresponds directly to the corresponding entry in the US catalog; entry S00001 corresponds to SSN 1, entry S40000 corresponds to SSN 40000. The S catalog contains additional metadata not present in the US catalog, described later in this chapter. Note that I will use SATCAT in upper case to refer to the US catalog, while the lower case version will always refer to GCAT's S catalog.

By convention I render entries 1-99999 in each catalog with 5 digits, in this case S00001 to S99999. I then jump to 9 digits for objects 000100000 onwards (S000100000 in this case). I am optimistic that we won't reach S999999999 before I retire, so that'll be Somebody Else's Problem.

There are, as always, complications. Not infrequently, the SSN numbers associated with two space objects are swapped, or an SSN number is reassigned to a different object and the previously assigned object is now not in the catalog. However, archival TLE (Two Line Element) sets for the previous object remain associated with the same catalog number, potentially causing confusion. Although I would rather not reassign numbers, in the interests of practical compatibility the S catalog entry corresponds to the object MOST RECENTLY ASSOCIATED with that catalog number (and the GCAT is updated as required to reflect this).

The SSN number is really associated with an object tracked by the US space tracking team (currently the 18th Space Control Squadron and associated organizations). The set of TLEs associated with that catalog number, for the most part, define the SSN. The association of that catalog number with a physical object (satellite, rocket, debris) is an inference. Sometimes I disagree with the association made, and the S catalog reflects that. The harder problem is when you have, say, 3 SSN tracked objects and three known payloads, but you have no idea which is which. This can occur, for example, when three externally similar cubesats deployed from the same vehicle immediately fail, so even the satellite owners don't know which is which. In this case the SATCAT will just have them as 'OBJECT C', etc., and not attempt to make an identification. I prefer to make an arbitrary assignment of the three objects to catalog numbers but flag the assignments as uncertain. This lets me enter all the metadata such as country, owner, name etc. and so statistical counts such as number of payloads associated with a given country will come out right.

Some satellites are made up of several attached sections. When I deem that these separate sections are of sufficient interest to deserve their own catalog entry (for example because their metadata are interestingly different) I create additional entries in the auxcat (see below), and choose one of the sections to be associated with the S entry. As an example, for CORONA satellites both the CORONA payload and the attached Agena rocket stage, as well as

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any Agena aft rack attached payloads, get catalog entries. In such cases the S entry is given to the payload; metadata includes the information that the CORONA and the Agena remained attached until reentry.

The SATCAT associates debris objects with a particular launch but does not identify them in detail; again, I make my best guess as to the nature and origin of particular debris objects.

The US catalog is coy about certain military and intelligence satellites belonging to the US and its allies. Usually a cover name (e.g. USA 304) and a launch date are provided, but no orbital data or reentry date. Since I do not have access to secret information, I am free to speculate. Usually it's not very hard and identifications of secret satellites with particular programs and orbits mostly have a high degree of confidence.

### **VIII.2.1.2 The Auxiliary (A) Satellite Catalog.**

The auxcat contains entries for objects not in the standard catalog. The catalog numbers have the prefix 'A', so the first entry is A00001.

Objects end up in the A catalog for a variety of reasons:

- Object should have been in S catalog but was omitted (not tracked, or administrative oversight)
- Object is attached to another object (see discussion in S catalog section) Some special cases include Shuttle payload bay cargo items, external ISS components, and internal ISS cargo entries used for mass accounting.
- Object was in orbit, with perigee well above the atmosphere, but was deorbited after less than a full orbit.
- Object had positive perigee but reentered on first object.
- Object had mildly negative perigee. This includes some rocket stages (e.g. Ariane core stages) and some objects released during reentry of spacecraft (discarded service modules, parts of film recovery capsules). I like to perturb the boundaries of definitions and see what falls in. These objects don't strictly count as satellites by my rules, but they are 'close enough' to be interesting.
- Objects with greater total energy per unit mass than a low orbit satellite. This includes some high apogee (above 10,000 km) suborbital flights and some high velocity reentry tests.

Sometimes objects already in the A catalog get a US SATCAT number - for example, external ISS experiments which are unexpectedly discarded into orbit at the end of their lives. In this case the object is moved to the S catalog, and its A catalog number is retired. In previous internal use of the catalog I've reused such freed A catalog entries, but with the formal release of GCAT it is my intent that any such reassignments will be recorded formally and the empty catalog entries will not be reused.

When it is clear that an object is likely to receive a SATCAT number in the near future, it is placed in the T catalog (see below) instead of the A catalog.

### **VIII.2.1.3 The Failure To Orbit (F) Satellite Catalog**

The ftocat (F, Failure to orbit catalog) contains objects from failed launches which were expected to have had satellite catalog entries if the launch had been successful. The objects are upper stages and payloads from launches with 'F' launch designations (e.g. 1959-F01).

Note that objects from 'U' marginal-orbit launches (1959-U01 etc) are in the auxcat rather than the ftocat. Objects from pad explosions ('E' launches where no actual launch occurred) are in the lcat.

I have gone to some trouble to estimate the best-guess suborbital perigee, apogee and inclination for the objects in the F catalog. If you have better data for a particular launch, please let me know.

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## VIII.2.2 Supporting Catalogs

The two supporting catalogs are relatively less complete and are of variable data quality, as described below. *Caveat emptor - maxime quando sine sumptu est!*

### VIII.2.2.1 The Rocket (R) and Suborbital Object Catalog

The rcat contains objects whose apogee was probably above 80 km but which did not reach orbit (i.e. are not included in the orbital catalogs). The main purpose of the rcat is to record suborbital stages of orbit launch vehicles, allowing me to specify the detailed configuration of that particular flight vehicle - it gives me a place to put the type and serial number of the stages. Other metadata - mass, size, (sub)orbital parameters - are sometimes included but typically with approximate or guessed values. Orbital inclination values of zero should be ignored.

Object associated with suborbital launches are also included. The catalog is not complete in this respect and the caveats on the quality of the metadata for such objects apply even more strongly. But it gives me a place to store parameters of sounding rocket and missile payloads when I know them.

### VIII.2.2.2 The Low-altitude (L) Endoatmospheric Object Catalog

The lcat contains objects whose apogee was probably below 80 km. Like the rcat, the main purpose of the lcat is to record the stage configuration of orbital launches, serving as a place to store the details of lower stages (first stage, strap-on boosters, etc) that did not leave the atmosphere. As for the rcat, but even more so, metadata on mass, size and trajectory are approximate or guessed and should usually be treated with skepticism. (For a few cases, such as Apollo-Saturn lower stages, the data are accurate.)

Mostly the lcat is used to store low altitude objects associated with a launch which also had exoatmospheric parts. However, some objects associated with purely endoatmospheric and mesospheric launches are included. Nevertheless, the presence of a low altitude launch in the launch lists does not guarantee its associated objects will exist in the lcat.

As noted above under ftoicat, objects from launches which exploded on the pad are also included in the lcat.

## VIII.2.3 Temporary Catalogs

Unlike the main catalogs, the catalog numbers in the T and C catalogs are not assigned sequentially. Currently the first object in the C catalog is C00100.

The tmpcat contains objects which are (1) in orbit, and (2) do not have US satellite catalog numbers but are expected to get them in the fairly near future. This usually means objects which are aboard the ISS or a cargo ship and slated for later deployment, such as cubesats to be ejected from the Kibo module; or subsatellites to be ejected from another satellite; or objects such as the Crew Dragon Trunk which is left in orbit at the end of a Crew Dragon mission. Starlink and other megaconstellation satellites may also receive T numbers based on the 70000-series numbers used by Celestrak Supplemental TLEs before identifications are made with the SATCAT numbers.

When the T catalog object does get a US SATCAT number, its GCAT identifier is changed. The object is added to the S catalog, and its T catalog number is removed (and later reassigned). Users should therefore beware of referring to T catalog numbers - they are ephemeral and their reassignment is not formally recorded. They are a compromise, allowing the instantaneous catalog to reflect the state of things as well as possible, while avoiding reassigning any 'permanent' catalog entries.

Objects which may never get catalog numbers - such as known objects which nevertheless have not been tracked - are instead put in the auxcat as described above.

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### VIII.2.3.1 The Complementary Space Object (C) Catalog

The csocat (C catalog) is a rather different construct. The objects here are those detected and observed by someone other than the US space tracking network, and not immediately identified with an existing SATCAT entry. These include objects found by hobbyist observers, astronomers, and non-US satellite tracking groups. ‘Analyst objects’ from the US space tracking network are also included.

(I will admit that the ‘C’ originally stood for Canadian Space Society, the initial source of hobbyist TLEs in the 1990s thanks to Ted Molczan).

Since the objects in the C catalog may or may not be also present in the S catalog, I do not include C catalog objects in my statistical summaries (of numbers of satellites launched, etc.).

C catalog entries are initially assigned the value NNA (No Number Assigned) in the Satcat number field (see column descriptions). Then, when and if a C catalog object is later identified with an S catalog entry, the actual SATCAT number is placed in the field to flag that the object is no longer ‘unaffiliated’. The user may therefore ignore all C catalog entries whose Satcat number is not ‘NNA’.

Types of objects in the C catalog include (with catalog number ranges used as of mid-2020, but not guaranteed to be rigidly adhered to):

- (C00100-C00399) Objects found by Near-Earth asteroid astronomers and cataloged by Bill Gray (project-pluto.org) PThese include distant space junk but also some natural asteroids.
- (C10000-C29999) Objects found by the ISON and Vimpel networks in Russia
- (C70000-C79999, C90000-C99999) Objects found by hobbyist observers (satobs.org) and cataloged by Ted Molczan, Mike McCants and colleagues.
- (C80000-C89999) ‘Analyst objects’ from Space-Track.org given temporary satellite catalog numbers. The entry in the C catalog has the same catalog number as assigned by Space-Track, but with the C prefix. These numbers generally are between 80000 and 90000 (although some have occurred in the 70000s.)

Since the objects in the C catalog are often of unknown origin, the launch dates and international designations in the catalog are meaningless and should be ignored. The orbital metadata, however, are based on actual data.

### VIII.2.4 Event Catalogs

The event catalogs consist of the main Event Catalog, for Earth orbiting objects, and the deep space catalogs which are only briefly discussed here.

#### VIII.2.4.1 The Event Catalog

The SATCAT data model is basically that launches put a set of objects in orbit at a given date (launch date), some of which eventually (decay date) reenter. The structure of the main GCAT object catalogs adds the idea that objects associated with a launch don’t all appear on the launch date, but may instead separate from one of the other objects at a later (sep date) time. This model covers the vast majority of objects in the catalog, but some have more complex histories. The Event Catalog (ecat) is an attempt to accommodate those more complex histories.

We introduce the idea that each object in GCAT has a history composed of multiple ‘phases’. A new phase typically begins with either separation from a parent or attachment to a new parent. Parents may be GCAT objects or GCAT bodies (worlds). Another kind of phase is less physical: the object changes critical metadata - either its name or its owner. For a typical object, there is only one phase, which begins with separation from the parent object and ends with reentry - or is still in progress. But for some objects there are many phases involving renaming, on-orbit resale, docking and undocking, some other form of attachment to another object (e.g. EVA assembly), bringing inside or outside a space station, entering deep space, entering or leaving the gravitational sphere of influence of a



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new central body, landing or taking off from such a body, or returning to the Earth-Moon system. Each such phase can be characterized by:

- - A parent (GCAT object or body)
- - Phase start time
- - Phase end time
- - Event that ends the phase
- - New parent or destination at phase end

All of this information is conveniently represented in a record identical to the normal satellite catalog entries. Thus, objects with multiple phases are represented by multiple entries with the same catalog identifier; each entry represents a phase. So that this complexity can be ignored when not useful, the main object catalogs contain only a single entry for each object, the first phase. Second and subsequent phases are stored in the *ecat*. The *ecat* records are in chronological order, although this is mainly for my convenience. Thus for example GCAT object A07959 has five phases, leading to one entry in *auxcat* and four entries in *ecat*.

The details of phases are captured in the phase-ending event type, which is stored in the 'status' field of each phase record. The various options are defined in detail in the status column description.

#### **VIII.2.4.2 The Deep Space Catalog**

Objects which pass the EL1:4 deep space boundary at about 150,000 km from Earth are given a 'D' catalog designation in addition to their entries in the S or A catalogs. The S or A catalog uses the decay date, status and destination fields to record the object's transition to deep space and its new catalog number. The corresponding DeepCat entry records the object's arrival in deep space and its departure to its next phase - reentry, entry to the lunar sphere of influence, or departure from the Earth-Moon system. The Heliocentric Register and the Lunar and Planetary Register then record subsequent phases of the object as it visits different bodies in the solar system, using its D catalog designation.

I recognize that the reassignment of a new catalog number to an object once it leaves Earth orbit may be inconvenient. A crossindex between D designations and S/A designations is provided at ([See https://planet4589.org/space/gcat/data/cat/deepindex.html](https://planet4589.org/space/gcat/data/cat/deepindex.html))

The research behind the separate release of the Deep Space Catalog is discussed more fully at <https://planet4589.org/space/deepcat> (<https://planet4589.org/space/deepcat>). While I consider it a part of the General Catalog of Artificial Space Objects, it is a relatively self contained subset and is documented and published on an independent release schedule. The *deepcat* files within GCAT are kept more up to date.

#### **VIII.2.5 Payload Catalogs**

A lot of the metadata I track for satellite payloads (end of operation date, payload category, UN registration information, etc.) is not relevant for debris objects. To save space in the main catalogs, I pull out this extra information into separate 'payload catalogs'. Each object from the main catalogs has zero or one record in the corresponding payload catalog.

For example, GCAT object A00489 appears in the main catalog 'auxcat'. It also has a record in the corresponding payload catalog 'pauxcat' with the additional payload metadata. The payload catalogs have the same name as the corresponding main catalog, except with a leading 'p', so it's pretty easy.

The payload catalogs are *psatcat*, *pauxcat*, *pftocat* and *ptmpcat*. In addition there is a *plcat* corresponding to the *lcat*, containing limited payload info for a few payloads for launches which exploded on the pad and so didn't make it into *focat*, and similarly *prcat* and *pdeepcat* for some special cases in *rcat* and *deepcat*.

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Of greatest interest is probably the end-of-life date information in psatcat, since a comprehensive satellite operational lifetime dataset has never before been published. The psatcat also is useful for statistical analyses since it characterizes satellites as nonprofit, commercial, civil or defense, and as communications, imaging, navigation, science, etc.

## VIII.2.6 Unicode list

The usatcat file contains a list of satellite names in unicode with the corresponding GCAT catalog numbers. Only objects whose name is not in the Latin alphabet are included. This data should really just be an additional column in the payload or object catalogs but some of my older data entry software isn't completely smooth in the way it handles unicode, so it was easier for me to keep the unicode data separately in a dedicated file.

The file is a simple text file with two columns, the GCAT catalog identifier and the unicode satellite name. It is in alphabetical order of GCAT identifier, so auxcat entries precede satcat ones.

## VIII.2.7 Derived Catalogs

### VIII.2.7.1 Current Catalog

The currentcat file is provided as a useful subset of GCAT. It is largely derived from the information in satcat, auxcat and ecat. There is one record for each entry in satcat and auxcat; it is the **most recent** phase for each object. In the main GCAT, if you want to know the current state of an object in satcat, you also have to check through all its records in ecat to find the final one. I decided this is such a common use case that I'd do the work for you and make a 'most recent phase' catalog.

The catalog contains a subset of the fields in satcat, and a couple of new fields: the **Active flag** which is 'A' if the object is a currently active payload, and the first character of SatType (i.e. P for payload, R for rocket, C for component or D for debris) otherwise. and the **extended status** field which decodes the Status field information into a more readable text field.

Space probes have two catalog IDs, the regular JCAT for their near-earth launch phase and a Deep Space Catalog ID beginning with 'D'. The currentcat has a DeepCat column which gives the 'D' identifier for the object if one exists, corresponding to the object's JCAT field in the deepcat file.

There is one set of data not in the other catalogs: for objects currently in Earth orbit, the most recent available orbital data are provided in currentcat rather than the 'canonical' early orbit data provided in, e.g., satcat.

### VIII.2.7.2 Launchlog File

The LaunchLog file is a list of all orbital launch attempts in chronological order. The data are extracted from the launch lists and the payload catalogs. It joins the launch and payload information to have one line per orbital payload with the payload name and the launch information. It replaces and supersedes the earlier launchlog.txt file on my site.

## VIII.2.8 Object Catalog Column Descriptions

- The first few fields (JCAT, Satcat, Piece, Type, Name, PLName, LaunchDate) identify the object and name it.

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– **JCAT**

The General Catalog (GCAT) uses an alphanumeric identifier (JCAT, originally Jonathan’s Catalog ID) to uniquely tag space objects. The identifier consists of a single prefix letter followed by a sequence number with either 5 or 9 digits (examples: A00022; S101234009). The 9 digit case is not yet in use, but is supported in anticipation of the introduction of 9-digit SATCAT numbers by the US DoD.

The leading letter tells you which object catalog the object belongs to, as follows:

JCAT letter	Catalog
A	auxcat (Auxiliary catalog)
C	csocat (Complementary catalog)
D	deepcat (Deep space catalog)
F	focat (Failed to orbit catalog)
L	lcat (low altitude catalog)
R	rcat (suborbital catalog)
S	stdcat (Standard catalog)
T	tmpcat (Temporary catalog)

Note that there are no prefix letters associated with the ecat (event catalog), or the heliocentric and lunar-planetary registers, since they contain only objects already defined in the other catalogs.

Sequence numbers in the A, D, F, L, R, and S catalogs are assigned sequentially starting with 00001. However, occasional numbers may be missing due to deletions of spurious or reassigned entries.

Sequence numbers in the C and T catalogs are not assigned sequentially.

Sequence numbers in the S catalog are in one-to-one correspondence with the US SATCAT catalog numbers. Thus, S46112 corresponds to SATCAT satellite 46112 (2020-056A).

In exceptional cases, future releases of GCAT may reassign existing catalog numbers. Any such reassignments will be recorded explicitly in an accompanying table. However, users who have found earlier (pre-GCAT) JCAT catalog numbers that crept into my public files have no such guarantee - in particular, auxcat numbers previously seen in public files may now refer to different objects.

– **Satcat**

For objects in the US Satcat, this field contains an integer value which is the US SATCAT number. In the S catalog, this will be the same as the JCAT sequence number.

However, one US SATCAT number can correspond to multiple GCAT objects which are attached to one another. For example, SATCAT number 00032 corresponds to GCAT objects S00032 (Discoverer 11 payload), A00046 (Agena 1055 rocket stage), and A00047 (TOD experiment attached to Agena stage). All these objects have 00032 in the Satcat field.

Objects which do NOT have US SATCAT entries instead have a string in this field explaining why they don’t.

Value	Meaning
NNA	No (satcat) Number Assigned. Object should be in SATCAT but is not.
NNA A	No SATCAT number because remained attached to parent object
NNA C	No SATCAT number, component of complex object such as space station
NNA E	No SATCAT number because is an EVA spacesuit. These do not get recorded in SATCAT.
NNA I	No SATCAT number because object remained inside parent object
NNA P	No SATCAT number because completed less than one full orbit
NNA R	No SATCAT number because separated into marginally suborbital trajectory during parent reentry.
NNA S	No SATCAT number because launched into marginally suborbital trajectory
NNA T	Not in SATCAT because object was a separate object in orbit transiently, for only a few seconds (e.g. CORONA film capsule)
NNA X	Not in SATCAT because launch is a marginal orbit case
NSO	No SATCAT number because suborbital

- **Piece** The piece designation for the object. For objects in the US SATCAT this is the COSPAR (International) designation (e.g. 2020-032A). See the section on launch and piece designations in ‘definitions and conventions’ for details.

- **Type**

This field contains a SatType string as defined in the (See SatType section.)

This field tells you something about what kind of object this is. At the coarsest level, we characterize the object as payload (P), rocket stage (R), component (C) or debris (D). A component is a functional part of the spacecraft or rocket that is deliberately or accidentally ejected - a fairing, for example. A debris object in this sense is a fragment from a satellite breakup, usually accidental - although fragments from deliberate explosions or collisions are included in this category.

At a finer level the type string provides a lot more information for special cases. See the (See SatType definition) for more details.

- **Name** My recommended name for the object. The name is based on that used by the owner/operator of the object. In cases where the original name is in a non-Latin character set, see the associated (See GCAT unicode name list ) for a representation of the name in Unicode.

‘X part’ indicates that the object is an unidentified component that separated from X. ‘deb X’ indicates the object is a debris object from the breakup of X.

- **PLName**

The PLName (Payload Name) is an alternative name for the object. When available, it is the name used prior to launch by the manufacturer.

Some debris objects have a string with RCS followed by a number in the PLName field. This refers to the radar cross section in square metres. The RCS values obtained from early 2000s era SATCAT releases are unreliable, but may indicate which objects are particularly small or large.

Some objects have a PLName beginning with the string ‘[UNID]’. These objects are marked with an asterisk in the US SATCAT. They are unidentified debris objects; their piece designations (international designations) are believed to associate them with the wrong launch. For example, there are a lot of small component debris objects associated with Soviet Strela-2M communications satellites in rather similar

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orbits. When such an object is discovered years after its launch, the effects of drag and perturbations are such that while it is obvious from the orbit that the object comes from a Strela-2M, there's no way to tell exactly which Strela-2M it is from.

– **LDate** (Launch Date).

The launch date is given in UTC, with 1 day precision. More accurate launch times are given in the launch lists. Usually you can map the object to a launch using the international designation, but see the discussion in the Parent field below for exceptions.

- The next set of fields (Parent, SDate, Primary, DDate, Status, Dest) describe the current 'phase' of the object.

– **Parent** The Parent field can be either

- \* the 'parent object' which the object is attached to at the start of the phase, or
- \* the central body whose gravitational sphere the object is leaving at the start of the phase.

The parent object is an (See Extended JCAT Identifier) - it's usually just a JCAT ID but sometimes there's a port location appended to make it more specific.

Also, in some cases an asterisk is appended to the identifier. This is a flag that the launch designation in the Piece field is not what you'd expect from the launch designation of the parent. In the normal situation, for example, S45920 has Piece designation 2020-048A, and its parent S45921 has 2020-048B - both are 2020-048 launch pieces. But S45916 has Piece designation 1998-067RP, and its parent is A09547\* with piece designation 2020-011, an apparent contradiction. In fact 2020-011 is the correct launch for both, with launch date 2020 Feb 15, but USSF assigns 1998-067 piece designations and a 1998 launch date for all objects released from the ISS. I added the asterisks to facilitate automatic checking: it lets you know to be careful about the launch date and launch information for this object.

The central body names are given in the Worlds file.

– **SDate**

Separation Date (or Phase Start Date).

This UTC date (in (See Vague Date ) format) is the start time for the current phase. In the simplest cases, it is the time when the object separated from its parent.

– **Primary**

(or Central Body).

The value of this field is a string representing the central body for the current phase. These strings are defined in the Worlds file. (Usually, the central body is Earth.)

– **DDate**

Descent Date (or Phase End Date).

This UTC date (in (See Vague Date ) format) is the end time for the current phase. In the simplest cases, it is the time when the object reentered the atmosphere. If blank, the phase is still in progress.

– **Status** This field gives the event that ends the current phase.

See the discussion on (See phases) in the definitions section.

– **Dest** (Destination) This field gives the destination of the current phase. This may be the reentry or landing location, the JCAT identifier for the new parent object that the object is now attached to, or the world name of the body whose gravitational sphere the object is now entering.

See the discussion on (See phases) in the definitions section.

- The next set of fields (Owner, State, Manufacturer, Bus, Motor) describe ownership and construction.

– **Owner** The (See OrgCode ) for the owner/operator of this object.

– **State** The (See OrgCode ) for the country/state associated with the owner/operator.

- 
- **Manufacturer** The (See OrgCode ) for the entity that built the object.
  - **Bus** This string gives the spacecraft bus (chassis) type. It isn't standardized, and many objects are one-off. It's most useful for things like commercial communications satellite where satellites of the same type are used by many different owners.
  - **Motor** The name of the main thruster or rocket engine in the object's propulsion system. Particular attention has been paid to determining the model of apogee motor or apogee thruster used on satellites, as this has not previously been well documented. The entries in this field have not been standardized but some information may be found in (See the Engines file.)
- The next set of fields (Mass, DryMass, TotMass, Length, Diameter, Span, Shape) describe the object's mass and dimensions.
    - **Mass, MassFlag** Mass of this GCAT object in kg, at launch (meaning, at initial orbital insertion), not including mass of attached objects.
 

If the MassFlag is '?' then the value is an estimate, hopefully good to about 20 percent.
    - **DryMass, DryFlag** Dry mass of this GCAT object (which is a reasonable proxy for the mass of the object after its active lifetime). Value is in kg. Does not include the mass of attached objects.
 

If the DryFlag is '?' then the value is an estimate, hopefully good to about 20 percent.
    - **TotMass, TotFlag** Total mass of this object at launch (orbital insertion), in kg, if nonzero. For a set of GCAT objects attached to each other the total mass will be given for one of them (usually the S catalog entry), and the others will have TotMass = 0. If you add up the Mass values for each of the objects, the result should be equal to the TotMass.
 

If the TotFlag is '?' then the value is an estimate, hopefully good to about 20 percent.
    - **Length, LFlag** Longest dimension of the main body of the object in metres.
 

If LFlag is '?' the value is a guess, hopefully good to about 20 percent.
    - **Diameter, DFlag**

The Diameter is the second longest dimension of the main body of the object in metres. Many objects are cylinders or square-sectioned cuboids, so I haven't bothered to give a separated depth and width. The length times the diameter is a reasonable approximation to the cross-section of the object not counting appendages.

If DFlag is '?' the value is a guess, hopefully good to about 20 percent.
    - **Span, SpanFlag**

The Span is the largest dimension in metres of the entire object across all appendages (booms, solar arrays, antennae). To avoid hitting the object you should stay outside a sphere of diameter equal to the Span.

If SpanFlag is '?' the value is a guess, hopefully good to about 20 percent.
    - **Shape** A string giving the approximate shape of the object. This is included really because it was in the old RAE table of Earth satellites. It isn't a substitute for a 3D CAD model though!
  - The following set of fields (ODate, Perigee, Apogee, Inc, OpOrbit, OQUAL) describe a 'canonical orbit'. The orbit of an object changes with time due to atmospheric drag and other perturbations, and in some cases it changes drastically due to active maneuvering. I pick one orbit (the 'canonical orbit') that is representative of the spacecraft's early operations, after initial positioning, to include in the catalog. But detailed analysis should consult detailed orbital data versus time for each object, from the Space-Track TLEs or other sources.
    - **ODate** Orbit Epoch Date. Epoch of canonical orbital data, Vague Date format.
    - **Perigee, PF** Conventional perigee height in km of canonical orbit. Equal to perigee radius minus equatorial radius of central body.
 

If PF is equal to '?' the value is a guess.

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- **Apogee, AF**

Conventional apogee height in km of canonical orbit. Equal to apogee radius minus equatorial radius of central body.

If AF is equal to '?' the value is a guess.

- **Inc, IF**

Inclination of canonical orbit in degrees with respect to coordinate system equator. Heliocentric orbits are given with respect to the J2000 ecliptic. Earth orbits are given with respect to the equator of date (strictly, TEME equator). Orbits around other central bodies are given with respect to the IAU equator of that body.

If IF is equal to '?' the value is a guess.

- **OpOrbit**

Orbit type of the canonical orbit.

- **OQUAL**

Orbit Quality Note.

Source of the canonical orbit. Usually blank; it's a place for me to make a note to remind me where I got the orbit data from in special cases. 'J' means I estimated the orbit myself.

- The final field really belongs with the first set, with additional names for the object.

- **AltNames**

A comma-delimited list of further alternative names for the object.

## VIII.2.9 Payload Catalog Column Descriptions

- **JCAT** The JCAT identifier (letter followed by digits) identifies the object and ties this catalog to the object catalogs.
- **Piece** The Piece field contains the piece designation, usually the COSPAR 'international Designation'. It is the same as that given in the object catalog and is repeated here for human-readability and convenience.
- **Name** The name in the payload catalog is the name given in the UN satellite registry, where available. I usually fill in another name (usually Name or PLName from the object catalog) where not, for readability.

If the satellite is UN registered (a registration document is noted in the appropriate field) but no name was given in that registration, I enclose the name used in square parentheses to indicate that it's not official. For example, for object S01328, the UNReg field contains "A/AC.105/INF.107", indicating that the satellite is registered. The name is given as "[Explorer 27]", the square brackets indicating that no name was actually given in the registration document.

As with other UN registration metadata reproduced here, the UN name data are provided so you can compare UN registration information with the primary information in the catalog. In this instance, the name in the object catalog (or even better, in the unicode name list) is generally to be preferred over the name given here.

- **LDate** (Launch Date). Same as in object catalog, provided for convenience and cross checking.
- **TLast**

Last Known Active Time.

The date on which the satellite was most recently known (by me) to be active. Often, it's hard to find out whether a satellite is still operating, especially if it does not actively control its orbit. It is therefore helpful to know if it's been known to be active fairly recently, or whether there has been no news of it for decades. Caveat: I only update this infrequently and patchily. The fact that \*I\* haven't heard news of the satellite operating since 2006 doesn't mean that obvious evidence of its continued activity doesn't exist.

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Vague Date Format is used to record the value.

An asterisk in this field indicates that no information is available.

- **TOP** End Operation Date.

The date on which the satellite is believed to have completed regular operations. This is a loosely defined concept. The idea is that after this date the satellite may have been used for on-orbit tests and training, or may still have had an active radio beacon, but was not in use for its primary purpose. (That's not the same as 'end of primary mission', which can be much earlier).

Vague Date Format is used to record the value.

An asterisk in this field indicates that the payload is believed to be still operating.

- **TDate** End of Transmission Date.

I also refer to this as the "Dead, Dead, Dead" date - it is the date after which the satellite became completely silent and unresponsive, or when no further contact was made by its owners. I prefer to use this as an end-of-life date. (There is some ambiguity here. Some old satellites are abandoned by their owners but still emit a radio beacon.)

Vague Date Format is used to record the value.

An asterisk in this field indicates that the payload is believed to be still transmitting.

- **TF**

End of life special flags. Flags here have the following meaning:

Value	Meaning
E	Deep space mission, may be operating outside Earth orbit.
U	This satellite is thought to be still working but the UCS active satellite list suggests it is not.
X	Satellite end of life date is a guess and satellite could still be partly operating.
Z	Zombie satellite: no longer controlled, but continues emitting a beacon signal.

These flags were added to the data to make automatic comparisons with the UCS active satellite list easier. (Easier for me, mostly.)

- **Program**

This field identifies groups of related satellites. I use it to drive the organization of mission logs which I am preparing for a future release.

- **Plane**

This (new) string-valued field can be used to label orbital planes or shells in a constellation. At the moment I am using numeric shell numbers to group OneWeb satellites.

- **Att**

Attitude control flag

The field describes the type of attitude control. However, values of this field have not yet been systematically filled in.

Value	Meaning
-	Unknown
G	Gravity gradient stabilized
P	Pointed, 3-axis stabilized
PS	Sun pointed
PN or N	Nadir (Earth) pointed
S	Spin stabilized
U	Unstabilized



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- **Mvr**

Maneuverability Flag.

This field indicates whether the satellite has or had a propulsion system capable of changing its orbit. Valid nonempty values are 'M', indicating that the satellite is maneuverable, and 'D', indicating that the satellite's propulsion system is capable of a single burn to deorbit the satellite.

- **Class** The class is a one- or, rarely, two-letter character string used to classify satellites as military, commercial, etc. This is usually based on the status of the owner/operator organization, but with some exceptions (for example the Vostok spaceships are considered civil even though operated partly by the Soviet military). The four supported single-letter values are:

Value	Meaning
A	Amateur/academic/non-profit
B	Business (commercial)
C	Civil (government but not military)
D	Defense (govt. military, intelligence)

Two-letter combinations of these have the obvious meaning: e.g. BD means a satellite which has both commercial and military use. In general, I find the concept of 'dual-use' to be mostly unhelpful. Almost everything is potentially usable for military purposes, but almost everything is nevertheless fairly clearly assignable to one of the above four principal uses. I only use the dual-use two-letter characterization for 16 (as of 2020) satellites in the catalog where the management and operation is clearly shared between two organizations connected with different class values.

- **Category**

The category is a different classification, orthogonal to the class. It describes the general purpose of the satellite. A satellite may have one or two categories.

In the case where two values are present, the values in this field are concatenated with a slash between them - for example 'IMG/TECH'.

Uncertain categories have an appended question-mark.

An asterisk appended to the category indicates that the orbital data for the satellite are (or formerly were) kept secret by the US government.

The defined categories are:

Value	meaning
AST	Astronomy
BIO	Biology and life sciences
CAL	Calibration (for atmospheric density, space surveillance radars, etc). Usually passive.
COM	Communications
EDU	Educational purposes.
EOSCI	Earth observing science, except imaging
EW	Missile early warning, including ballistic missile defence tracking
GEOD	Geodesy
IMG	Imaging (optical), except meteorology
IMG-R	Imaging (radar)
INF	Infrastructure (support structures, deployers etc)
MET	Meteorology (imaging)
MET-RO	Meteorology (radio occultation)
MGRAV	Microgravity experiments
MISC	Miscellaneous (e.g. burial services)
NAV	Navigation, positioning and timing
PLAN	Deep space related mission
RB	Rocket body (rocket upper stage)
RV	Reentry vehicle
SCI	Scientific studies, except astronomy and Earth observing
SIG	Signals intelligence
SS	Spaceship, i.e human spaceflight related (including cargo ships)
TARG	Target for missile defense or antisatellite tests
TECH	Technology and training
WEAPON	Weapon, including antisatellite experiment and FOBS

- **Result**

The Result flag is a single letter used to identify satellites which failed early in their mission. Values of this flag are:

- S - success
- F - failed
- U - Unknown
- N - No test (e.g. rocket failed before satellite had a chance to operate).

- **Control**

Location of the spacecraft operations control center. I have not filled this field in systematically yet, it's really a 'future project' (maybe never). However those values which are filled in should be reliable.

- **Discipline**

For scientific satellites, this field may note one or more specific scientific areas in which the satellite is carrying out research. Values used to date are:

Value	Meaning
AIS	Automatic ID system (ship tracking)
ALT	Radar altimeter
ATM	Atmospheric science
AUR	Auroral research
BIO	Biology and life sciences
ENV	Space environmental exposure
ESCI	Earth sciences
F	Electromagnetic fields
GEOD	Geodesy
GRA	Gamma ray astronomy
IMG	Imaging
ION	Ionospheric research
IRA	Infrared astronomy
M	Humans in microgravity and related research
MG	Microgravity experiments
MM	Micrometeorite studies
OA	Optical astronomy
P	Particles
PHY	Basic physics
PL	Planetary science
RFA	Radio-frequency astronomy
SMA	Submillimeter astronomy
SOL	Solar physics
SX	Solar X-ray astronomy
TECH	Technology experiments
UVA	Ultraviolet astronomy
XNAV	X-ray navigation
XRA	X-ray astronomy

- **UNState**

If the satellite is registered with the UN, this field contains the OrgCode string corresponding to the country which registered it. If this country is not the owner country I have assigned the object to in the object catalog, an asterisk is appended to the OrgCode to alert you.

If the satellite has not been registered with the UN, the field contains, in square parentheses, the OrgCode string corresponding to the country which I think \*ought\* to have registered it. (If this isn't the same as the owner country in the object catalog, an asterisk is appended to the closing square parenthesis - e.g. '[US]\*').

If the satellite has not been registered, but it's not a 'real payload' (minor subsatellite, etc.) and I don't think it requires registration, the field is left blank.

- **UNReg**

The UNReg field gives the ID of the UN registration document in which the satellite was registered, if it was. These documents are usually in the ST/SG/SER.E series or the A/AC.105/INF series.

An appended asterisk indicates that the online UN site reports that the satellite was registered in a particular document, but the document isn't yet available on that site, so I can't see what it actually says! Unfortunately some US registrations have been 'in process' for several years now (as of mid 2020).

A blank entry indicates that the satellite has not been registered with the UN.

- **UNPeriod** is the nodal period in minutes reported in the UN registration document, if any. Although the UN registration orbital information, reported by the state of registry, is valuable for a variety of research purposes, it is not always reliable and I recommend that users prefer the orbital data in the main object catalog which is based on US and hobbyist tracking data.
- **UNPerigee** is the orbital perigee height in km reported in the UN registration document, if any.

- 
- **UNApogee** is the orbital apogee height in km reported in the UN registration document, if any.
  - **UNInc** is the orbital inclination in degrees reported in the UN registration document, if any.

- **DispEpoch**

Disposal Epoch. Only for maneuverable payloads in Earth orbit; the epoch of the disposal orbit given in the following fields. The disposal orbit information is used to assess compliance with disposal recommendations. For objects other than maneuverable payloads, the disposal orbit is deemed to be the initial orbit. For satellites still able to maneuver, a recent orbit may be given as a placeholder.

Inclusion of the disposal orbit data is currently an experiment and the data should not be relied upon at present (2024 Oct).

- **DispPeri**

Disposal perigee; perigee of the orbit at the end of life for a maneuverable satellite.

- **DispApo**

Disposal apogee; apogee of the orbit at the end of life for a maneuverable satellite.

- **DispInc**

Disposal inclination; inclination of the orbit at the end of life for a maneuverable satellite.

- **Comment** - A descriptive comment, which I may or may not have felt moved to fill in.

## Chapter VIII.3

# Main Object Catalogs

### VIII.3.1 Primary Orbital Object Catalogs

#### VIII.3.1.1 The Standard (S) Satellite Catalog

Since the late 1950s the US government has maintained a catalog of satellites (often referred to as the SATCAT). Each satellite is given a sequential number (1 was the rocket stage from the first Sputnik). These numbers are sometimes referred to as SSN numbers.

In GCAT, each entry in the S catalog (Standard Satellite Catalog or satcat) corresponds directly to the corresponding entry in the US catalog; entry S00001 corresponds to SSN 1, entry S40000 corresponds to SSN 40000. The S catalog contains additional metadata not present in the US catalog, described later in this chapter. Note that I will use SATCAT in upper case to refer to the US catalog, while the lower case version will always refer to GCAT's S catalog.

By convention I render entries 1-99999 in each catalog with 5 digits, in this case S00001 to S99999. I then jump to 9 digits for objects 000100000 onwards (S000100000 in this case). I am optimistic that we won't reach S999999999 before I retire, so that'll be Somebody Else's Problem.

There are, as always, complications. Not infrequently, the SSN numbers associated with two space objects are swapped, or an SSN number is reassigned to a different object and the previously assigned object is now not in the catalog. However, archival TLE (Two Line Element) sets for the previous object remain associated with the same catalog number, potentially causing confusion. Although I would rather not reassign numbers, in the interests of practical compatibility the S catalog entry corresponds to the object MOST RECENTLY ASSOCIATED with that catalog number (and the GCAT is updated as required to reflect this).

The SSN number is really associated with an object tracked by the US space tracking team (currently the 18th Space Control Squadron and associated organizations). The set of TLEs associated with that catalog number, for the most part, define the SSN. The association of that catalog number with a physical object (satellite, rocket, debris) is an inference. Sometimes I disagree with the association made, and the S catalog reflects that. The harder problem is when you have, say, 3 SSN tracked objects and three known payloads, but you have no idea which is which. This can occur, for example, when three externally similar cubesats deployed from the same vehicle immediately fail, so even the satellite owners don't know which is which. In this case the SATCAT will just have them as 'OBJECT C', etc., and not attempt to make an identification. I prefer to make an arbitrary assignment of the three objects to catalog numbers but flag the assignments as uncertain. This lets me enter all the metadata such as country, owner, name etc. and so statistical counts such as number of payloads associated with a given country will come out right.

Some satellites are made up of several attached sections. When I deem that these separate sections are of sufficient interest to deserve their own catalog entry (for example because their metadata are interestingly different) I create additional entries in the auxcat (see below), and choose one of the sections to be associated with the S entry. As an example, for CORONA satellites both the CORONA payload and the attached Agena rocket stage, as well as

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any Agena aft rack attached payloads, get catalog entries. In such cases the S entry is given to the payload; metadata includes the information that the CORONA and the Agena remained attached until reentry.

The SATCAT associates debris objects with a particular launch but does not identify them in detail; again, I make my best guess as to the nature and origin of particular debris objects.

The US catalog is coy about certain military and intelligence satellites belonging to the US and its allies. Usually a cover name (e.g. USA 304) and a launch date are provided, but no orbital data or reentry date. Since I do not have access to secret information, I am free to speculate. Usually it's not very hard and identifications of secret satellites with particular programs and orbits mostly have a high degree of confidence.

### **VIII.3.1.2 The Auxiliary (A) Satellite Catalog.**

The auxcat contains entries for objects not in the standard catalog. The catalog numbers have the prefix 'A', so the first entry is A00001.

Objects end up in the A catalog for a variety of reasons:

- Object should have been in S catalog but was omitted (not tracked, or administrative oversight)
- Object is attached to another object (see discussion in S catalog section) Some special cases include Shuttle payload bay cargo items, external ISS components, and internal ISS cargo entries used for mass accounting.
- Object was in orbit, with perigee well above the atmosphere, but was deorbited after less than a full orbit.
- Object had positive perigee but reentered on first object.
- Object had mildly negative perigee. This includes some rocket stages (e.g. Ariane core stages) and some objects released during reentry of spacecraft (discarded service modules, parts of film recovery capsules). I like to perturb the boundaries of definitions and see what falls in. These objects don't strictly count as satellites by my rules, but they are 'close enough' to be interesting.
- Objects with greater total energy per unit mass than a low orbit satellite. This includes some high apogee (above 10,000 km) suborbital flights and some high velocity reentry tests.

Sometimes objects already in the A catalog get a US SATCAT number - for example, external ISS experiments which are unexpectedly discarded into orbit at the end of their lives. In this case the object is moved to the S catalog, and its A catalog number is retired. In previous internal use of the catalog I've reused such freed A catalog entries, but with the formal release of GCAT it is my intent that any such reassignments will be recorded formally and the empty catalog entries will not be reused.

When it is clear that an object is likely to receive a SATCAT number in the near future, it is placed in the T catalog (see below) instead of the A catalog.

### **VIII.3.1.3 The Failure To Orbit (F) Satellite Catalog**

The ftocat (F, Failure to orbit catalog) contains objects from failed launches which were expected to have had satellite catalog entries if the launch had been successful. The objects are upper stages and payloads from launches with 'F' launch designations (e.g. 1959-F01).

Note that objects from 'U' marginal-orbit launches (1959-U01 etc) are in the auxcat rather than the ftocat. Objects from pad explosions ('E' launches where no actual launch occurred) are in the lcat.

I have gone to some trouble to estimate the best-guess suborbital perigee, apogee and inclination for the objects in the F catalog. If you have better data for a particular launch, please let me know.

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## VIII.3.2 Supporting Catalogs

The two supporting catalogs are relatively less complete and are of variable data quality, as described below. *Caveat emptor - maxime quando sine sumptu est!*

### VIII.3.2.1 The Rocket (R) and Suborbital Object Catalog

The rcat contains objects whose apogee was probably above 80 km but which did not reach orbit (i.e. are not included in the orbital catalogs). The main purpose of the rcat is to record suborbital stages of orbit launch vehicles, allowing me to specify the detailed configuration of that particular flight vehicle - it gives me a place to put the type and serial number of the stages. Other metadata - mass, size, (sub)orbital parameters - are sometimes included but typically with approximate or guessed values. Orbital inclination values of zero should be ignored.

Object associated with suborbital launches are also included. The catalog is not complete in this respect and the caveats on the quality of the metadata for such objects apply even more strongly. But it gives me a place to store parameters of sounding rocket and missile payloads when I know them.

### VIII.3.2.2 The Low-altitude (L) Endoatmospheric Object Catalog

The lcat contains objects whose apogee was probably below 80 km. Like the rcat, the main purpose of the lcat is to record the stage configuration of orbital launches, serving as a place to store the details of lower stages (first stage, strap-on boosters, etc) that did not leave the atmosphere. As for the rcat, but even more so, metadata on mass, size and trajectory are approximate or guessed and should usually be treated with skepticism. (For a few cases, such as Apollo-Saturn lower stages, the data are accurate.)

Mostly the lcat is used to store low altitude objects associated with a launch which also had exoatmospheric parts. However, some objects associated with purely endoatmospheric and mesospheric launches are included. Nevertheless, the presence of a low altitude launch in the launch lists does not guarantee its associated objects will exist in the lcat.

As noted above under ftoicat, objects from launches which exploded on the pad are also included in the lcat.

## VIII.3.3 Temporary Catalogs

Unlike the main catalogs, the catalog numbers in the T and C catalogs are not assigned sequentially. Currently the first object in the C catalog is C00100.

The tmpcat contains objects which are (1) in orbit, and (2) do not have US satellite catalog numbers but are expected to get them in the fairly near future. This usually means objects which are aboard the ISS or a cargo ship and slated for later deployment, such as cubesats to be ejected from the Kibo module; or subsatellites to be ejected from another satellite; or objects such as the Crew Dragon Trunk which is left in orbit at the end of a Crew Dragon mission. Starlink and other megaconstellation satellites may also receive T numbers based on the 70000-series numbers used by Celestrak Supplemental TLEs before identifications are made with the SATCAT numbers.

When the T catalog object does get a US SATCAT number, its GCAT identifier is changed. The object is added to the S catalog, and its T catalog number is removed (and later reassigned). Users should therefore beware of referring to T catalog numbers - they are ephemeral and their reassignment is not formally recorded. They are a compromise, allowing the instantaneous catalog to reflect the state of things as well as possible, while avoiding reassigning any 'permanent' catalog entries.

Objects which may never get catalog numbers - such as known objects which nevertheless have not been tracked - are instead put in the auxcat as described above.

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### VIII.3.3.1 The Complementary Space Object (C) Catalog

The csocat (C catalog) is a rather different construct. The objects here are those detected and observed by someone other than the US space tracking network, and not immediately identified with an existing SATCAT entry. These include objects found by hobbyist observers, astronomers, and non-US satellite tracking groups. ‘Analyst objects’ from the US space tracking network are also included.

(I will admit that the ‘C’ originally stood for Canadian Space Society, the initial source of hobbyist TLEs in the 1990s thanks to Ted Molczan).

Since the objects in the C catalog may or may not be also present in the S catalog, I do not include C catalog objects in my statistical summaries (of numbers of satellites launched, etc.).

C catalog entries are initially assigned the value NNA (No Number Assigned) in the Satcat number field (see column descriptions). Then, when and if a C catalog object is later identified with an S catalog entry, the actual SATCAT number is placed in the field to flag that the object is no longer ‘unaffiliated’. The user may therefore ignore all C catalog entries whose Satcat number is not ‘NNA’.

Types of objects in the C catalog include (with catalog number ranges used as of mid-2020, but not guaranteed to be rigidly adhered to):

- (C00100-C00399) Objects found by Near-Earth asteroid astronomers and cataloged by Bill Gray (project-pluto.org) PThese include distant space junk but also some natural asteroids.
- (C10000-C29999) Objects found by the ISON and Vimpel networks in Russia
- (C70000-C79999, C90000-C99999) Objects found by hobbyist observers (satobs.org) and cataloged by Ted Molczan, Mike McCants and colleagues.
- (C80000-C89999) ‘Analyst objects’ from Space-Track.org given temporary satellite catalog numbers. The entry in the C catalog has the same catalog number as assigned by Space-Track, but with the C prefix. These numbers generally are between 80000 and 90000 (although some have occurred in the 70000s.)

Since the objects in the C catalog are often of unknown origin, the launch dates and international designations in the catalog are meaningless and should be ignored. The orbital metadata, however, are based on actual data.

### VIII.3.4 Event Catalogs

The event catalogs consist of the main Event Catalog, for Earth orbiting objects, and the deep space catalogs which are only briefly discussed here.

#### VIII.3.4.1 The Event Catalog

The SATCAT data model is basically that launches put a set of objects in orbit at a given date (launch date), some of which eventually (decay date) reenter. The structure of the main GCAT object catalogs adds the idea that objects associated with a launch don’t all appear on the launch date, but may instead separate from one of the other objects at a later (sep date) time. This model covers the vast majority of objects in the catalog, but some have more complex histories. The Event Catalog (ecat) is an attempt to accommodate those more complex histories.

We introduce the idea that each object in GCAT has a history composed of multiple ‘phases’. A new phase typically begins with either separation from a parent or attachment to a new parent. Parents may be GCAT objects or GCAT bodies (worlds). Another kind of phase is less physical: the object changes critical metadata - either its name or its owner. For a typical object, there is only one phase, which begins with separation from the parent object and ends with reentry - or is still in progress. But for some objects there are many phases involving renaming, on-orbit resale, docking and undocking, some other form of attachment to another object (e.g. EVA assembly), bringing inside or outside a space station, entering deep space, entering or leaving the gravitational sphere of influence of a



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new central body, landing or taking off from such a body, or returning to the Earth-Moon system. Each such phase can be characterized by:

- - A parent (GCAT object or body)
- - Phase start time
- - Phase end time
- - Event that ends the phase
- - New parent or destination at phase end

All of this information is conveniently represented in a record identical to the normal satellite catalog entries. Thus, objects with multiple phases are represented by multiple entries with the same catalog identifier; each entry represents a phase. So that this complexity can be ignored when not useful, the main object catalogs contain only a single entry for each object, the first phase. Second and subsequent phases are stored in the *ecat*. The *ecat* records are in chronological order, although this is mainly for my convenience. Thus for example GCAT object A07959 has five phases, leading to one entry in *auxcat* and four entries in *ecat*.

The details of phases are captured in the phase-ending event type, which is stored in the 'status' field of each phase record. The various options are defined in detail in the status column description.

### VIII.3.4.2 The Deep Space Catalog

Objects which pass the EL1:4 deep space boundary at about 150,000 km from Earth are given a 'D' catalog designation in addition to their entries in the S or A catalogs. The S or A catalog uses the decay date, status and destination fields to record the object's transition to deep space and its new catalog number. The corresponding DeepCat entry records the object's arrival in deep space and its departure to its next phase - reentry, entry to the lunar sphere of influence, or departure from the Earth-Moon system. The Heliocentric Register and the Lunar and Planetary Register then record subsequent phases of the object as it visits different bodies in the solar system, using its D catalog designation.

I recognize that the reassignment of a new catalog number to an object once it leaves Earth orbit may be inconvenient. A crossindex between D designations and S/A designations is provided at ([See https://planet4589.org/space/gcat/data/cat/deepindex.html](https://planet4589.org/space/gcat/data/cat/deepindex.html))

The research behind the separate release of the Deep Space Catalog is discussed more fully at <https://planet4589.org/space/deepcat> (<https://planet4589.org/space/deepcat>). While I consider it a part of the General Catalog of Artificial Space Objects, it is a relatively self contained subset and is documented and published on an independent release schedule. The *deepcat* files within GCAT are kept more up to date.

### VIII.3.5 Payload Catalogs

A lot of the metadata I track for satellite payloads (end of operation date, payload category, UN registration information, etc.) is not relevant for debris objects. To save space in the main catalogs, I pull out this extra information into separate 'payload catalogs'. Each object from the main catalogs has zero or one record in the corresponding payload catalog.

For example, GCAT object A00489 appears in the main catalog 'auxcat'. It also has a record in the corresponding payload catalog 'pauxcat' with the additional payload metadata. The payload catalogs have the same name as the corresponding main catalog, except with a leading 'p', so it's pretty easy.

The payload catalogs are *psatcat*, *pauxcat*, *pftocat* and *ptmpcat*. In addition there is a *plcat* corresponding to the *lcat*, containing limited payload info for a few payloads for launches which exploded on the pad and so didn't make it into *ftocat*, and similarly *precat* and *pdeepcat* for some special cases in *rcat* and *deepcat*.

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Of greatest interest is probably the end-of-life date information in psatcat, since a comprehensive satellite operational lifetime dataset has never before been published. The psatcat also is useful for statistical analyses since it characterizes satellites as nonprofit, commercial, civil or defense, and as communications, imaging, navigation, science, etc.

### VIII.3.6 Unicode list

The usatcat file contains a list of satellite names in unicode with the corresponding GCAT catalog numbers. Only objects whose name is not in the Latin alphabet are included. This data should really just be an additional column in the payload or object catalogs but some of my older data entry software isn't completely smooth in the way it handles unicode, so it was easier for me to keep the unicode data separately in a dedicated file.

The file is a simple text file with two columns, the GCAT catalog identifier and the unicode satellite name. It is in alphabetical order of GCAT identifier, so auxcat entries precede satcat ones.

### VIII.3.7 Derived Catalogs

#### VIII.3.7.1 Current Catalog

The currentcat file is provided as a useful subset of GCAT. It is largely derived from the information in satcat, auxcat and ecat. There is one record for each entry in satcat and auxcat; it is the **most recent** phase for each object. In the main GCAT, if you want to know the current state of an object in satcat, you also have to check through all its records in ecat to find the final one. I decided this is such a common use case that I'd do the work for you and make a 'most recent phase' catalog.

The catalog contains a subset of the fields in satcat, and a couple of new fields: the **Active flag** which is 'A' if the object is a currently active payload, and the first character of SatType (i.e. P for payload, R for rocket, C for component or D for debris) otherwise. and the **extended status** field which decodes the Status field information into a more readable text field.

Space probes have two catalog IDs, the regular JCAT for their near-earth launch phase and a Deep Space Catalog ID beginning with 'D'. The currentcat has a DeepCat column which gives the 'D' identifier for the object if one exists, corresponding to the object's JCAT field in the deepcat file.

There is one set of data not in the other catalogs: for objects currently in Earth orbit, the most recent available orbital data are provided in currentcat rather than the 'canonical' early orbit data provided in, e.g., satcat.

#### VIII.3.7.2 Launchlog File

The LaunchLog file is a list of all orbital launch attempts in chronological order. The data are extracted from the launch lists and the payload catalogs. It joins the launch and payload information to have one line per orbital payload with the payload name and the launch information. It replaces and supersedes the earlier launchlog.txt file on my site.

### VIII.3.8 Object Catalog Column Descriptions

- The first few fields (JCAT, Satcat, Piece, Type, Name, PLName, LaunchDate) identify the object and name it.

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– **JCAT**

The General Catalog (GCAT) uses an alphanumeric identifier (JCAT, originally Jonathan’s Catalog ID) to uniquely tag space objects. The identifier consists of a single prefix letter followed by a sequence number with either 5 or 9 digits (examples: A00022; S101234009). The 9 digit case is not yet in use, but is supported in anticipation of the introduction of 9-digit SATCAT numbers by the US DoD.

The leading letter tells you which object catalog the object belongs to, as follows:

JCAT letter	Catalog
A	auxcat (Auxiliary catalog)
C	csocat (Complementary catalog)
D	deepcat (Deep space catalog)
F	focat (Failed to orbit catalog)
L	lcat (low altitude catalog)
R	rcat (suborbital catalog)
S	stdcat (Standard catalog)
T	tmpcat (Temporary catalog)

Note that there are no prefix letters associated with the ecat (event catalog), or the heliocentric and lunar-planetary registers, since they contain only objects already defined in the other catalogs.

Sequence numbers in the A, D, F, L, R, and S catalogs are assigned sequentially starting with 00001. However, occasional numbers may be missing due to deletions of spurious or reassigned entries.

Sequence numbers in the C and T catalogs are not assigned sequentially.

Sequence numbers in the S catalog are in one-to-one correspondence with the US SATCAT catalog numbers. Thus, S46112 corresponds to SATCAT satellite 46112 (2020-056A).

In exceptional cases, future releases of GCAT may reassign existing catalog numbers. Any such reassignments will be recorded explicitly in an accompanying table. However, users who have found earlier (pre-GCAT) JCAT catalog numbers that crept into my public files have no such guarantee - in particular, auxcat numbers previously seen in public files may now refer to different objects.

– **Satcat**

For objects in the US Satcat, this field contains an integer value which is the US SATCAT number. In the S catalog, this will be the same as the JCAT sequence number.

However, one US SATCAT number can correspond to multiple GCAT objects which are attached to one another. For example, SATCAT number 00032 corresponds to GCAT objects S00032 (Discoverer 11 payload), A00046 (Agena 1055 rocket stage), and A00047 (TOD experiment attached to Agena stage). All these objects have 00032 in the Satcat field.

Objects which do NOT have US SATCAT entries instead have a string in this field explaining why they don’t.

Value	Meaning
NNA	No (satcat) Number Assigned. Object should be in SATCAT but is not.
NNA A	No SATCAT number because remained attached to parent object
NNA C	No SATCAT number, component of complex object such as space station
NNA E	No SATCAT number because is an EVA spacesuit. These do not get recorded in SATCAT.
NNA I	No SATCAT number because object remained inside parent object
NNA P	No SATCAT number because completed less than one full orbit
NNA R	No SATCAT number because separated into marginally suborbital trajectory during parent reentry.
NNA S	No SATCAT number because launched into marginally suborbital trajectory
NNA T	Not in SATCAT because object was a separate object in orbit transiently, for only a few seconds (e.g. CORONA film capsule)
NNA X	Not in SATCAT because launch is a marginal orbit case
NSO	No SATCAT number because suborbital

- **Piece** The piece designation for the object. For objects in the US SATCAT this is the COSPAR (International) designation (e.g. 2020-032A). See the section on launch and piece designations in ‘definitions and conventions’ for details.

- **Type**

This field contains a SatType string as defined in the (See SatType section.)

This field tells you something about what kind of object this is. At the coarsest level, we characterize the object as payload (P), rocket stage (R), component (C) or debris (D). A component is a functional part of the spacecraft or rocket that is deliberately or accidentally ejected - a fairing, for example. A debris object in this sense is a fragment from a satellite breakup, usually accidental - although fragments from deliberate explosions or collisions are included in this category.

At a finer level the type string provides a lot more information for special cases. See the (See SatType definition) for more details.

- **Name** My recommended name for the object. The name is based on that used by the owner/operator of the object. In cases where the original name is in a non-Latin character set, see the associated (See GCAT unicode name list ) for a representation of the name in Unicode.

‘X part’ indicates that the object is an unidentified component that separated from X. ‘deb X’ indicates the object is a debris object from the breakup of X.

- **PLName**

The PLName (Payload Name) is an alternative name for the object. When available, it is the name used prior to launch by the manufacturer.

Some debris objects have a string with RCS followed by a number in the PLName field. This refers to the radar cross section in square metres. The RCS values obtained from early 2000s era SATCAT releases are unreliable, but may indicate which objects are particularly small or large.

Some objects have a PLName beginning with the string ‘[UNID]’. These objects are marked with an asterisk in the US SATCAT. They are unidentified debris objects; their piece designations (international designations) are believed to associate them with the wrong launch. For example, there are a lot of small component debris objects associated with Soviet Strela-2M communications satellites in rather similar

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orbits. When such an object is discovered years after its launch, the effects of drag and perturbations are such that while it is obvious from the orbit that the object comes from a Strela-2M, there's no way to tell exactly which Strela-2M it is from.

– **LDate** (Launch Date).

The launch date is given in UTC, with 1 day precision. More accurate launch times are given in the launch lists. Usually you can map the object to a launch using the international designation, but see the discussion in the Parent field below for exceptions.

- The next set of fields (Parent, SDate, Primary, DDate, Status, Dest) describe the current 'phase' of the object.

– **Parent** The Parent field can be either

- \* the 'parent object' which the object is attached to at the start of the phase, or
- \* the central body whose gravitational sphere the object is leaving at the start of the phase.

The parent object is an (See Extended JCAT Identifier) - it's usually just a JCAT ID but sometimes there's a port location appended to make it more specific.

Also, in some cases an asterisk is appended to the identifier. This is a flag that the launch designation in the Piece field is not what you'd expect from the launch designation of the parent. In the normal situation, for example, S45920 has Piece designation 2020-048A, and its parent S45921 has 2020-048B - both are 2020-048 launch pieces. But S45916 has Piece designation 1998-067RP, and its parent is A09547\* with piece designation 2020-011, an apparent contradiction. In fact 2020-011 is the correct launch for both, with launch date 2020 Feb 15, but USSF assigns 1998-067 piece designations and a 1998 launch date for all objects released from the ISS. I added the asterisks to facilitate automatic checking: it lets you know to be careful about the launch date and launch information for this object.

The central body names are given in the Worlds file.

– **SDate**

Separation Date (or Phase Start Date).

This UTC date (in (See Vague Date ) format) is the start time for the current phase. In the simplest cases, it is the time when the object separated from its parent.

– **Primary**

(or Central Body).

The value of this field is a string representing the central body for the current phase. These strings are defined in the Worlds file. (Usually, the central body is Earth.)

– **DDate**

Descent Date (or Phase End Date).

This UTC date (in (See Vague Date ) format) is the end time for the current phase. In the simplest cases, it is the time when the object reentered the atmosphere. If blank, the phase is still in progress.

– **Status** This field gives the event that ends the current phase.

See the discussion on (See phases) in the definitions section.

– **Dest** (Destination) This field gives the destination of the current phase. This may be the reentry or landing location, the JCAT identifier for the new parent object that the object is now attached to, or the world name of the body whose gravitational sphere the object is now entering.

See the discussion on (See phases) in the definitions section.

- The next set of fields (Owner, State, Manufacturer, Bus, Motor) describe ownership and construction.

– **Owner** The (See OrgCode ) for the owner/operator of this object.

– **State** The (See OrgCode ) for the country/state associated with the owner/operator.

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- **Manufacturer** The (See OrgCode ) for the entity that built the object.
  - **Bus** This string gives the spacecraft bus (chassis) type. It isn't standardized, and many objects are one-off. It's most useful for things like commercial communications satellite where satellites of the same type are used by many different owners.
  - **Motor** The name of the main thruster or rocket engine in the object's propulsion system. Particular attention has been paid to determining the model of apogee motor or apogee thruster used on satellites, as this has not previously been well documented. The entries in this field have not been standardized but some information may be found in (See the Engines file.)
- The next set of fields (Mass, DryMass, TotMass, Length, Diameter, Span, Shape) describe the object's mass and dimensions.
    - **Mass, MassFlag** Mass of this GCAT object in kg, at launch (meaning, at initial orbital insertion), not including mass of attached objects.
 

If the MassFlag is '?' then the value is an estimate, hopefully good to about 20 percent.
    - **DryMass, DryFlag** Dry mass of this GCAT object (which is a reasonable proxy for the mass of the object after its active lifetime). Value is in kg. Does not include the mass of attached objects.
 

If the DryFlag is '?' then the value is an estimate, hopefully good to about 20 percent.
    - **TotMass, TotFlag** Total mass of this object at launch (orbital insertion), in kg, if nonzero. For a set of GCAT objects attached to each other the total mass will be given for one of them (usually the S catalog entry), and the others will have TotMass = 0. If you add up the Mass values for each of the objects, the result should be equal to the TotMass.
 

If the TotFlag is '?' then the value is an estimate, hopefully good to about 20 percent.
    - **Length, LFlag** Longest dimension of the main body of the object in metres.
 

If LFlag is '?' the value is a guess, hopefully good to about 20 percent.
    - **Diameter, DFlag**

The Diameter is the second longest dimension of the main body of the object in metres. Many objects are cylinders or square-sectioned cuboids, so I haven't bothered to give a separated depth and width. The length times the diameter is a reasonable approximation to the cross-section of the object not counting appendages.

If DFlag is '?' the value is a guess, hopefully good to about 20 percent.
    - **Span, SpanFlag**

The Span is the largest dimension in metres of the entire object across all appendages (booms, solar arrays, antennae). To avoid hitting the object you should stay outside a sphere of diameter equal to the Span.

If SpanFlag is '?' the value is a guess, hopefully good to about 20 percent.
    - **Shape** A string giving the approximate shape of the object. This is included really because it was in the old RAE table of Earth satellites. It isn't a substitute for a 3D CAD model though!
  - The following set of fields (ODate, Perigee, Apogee, Inc, OpOrbit, OQUAL) describe a 'canonical orbit'. The orbit of an object changes with time due to atmospheric drag and other perturbations, and in some cases it changes drastically due to active maneuvering. I pick one orbit (the 'canonical orbit') that is representative of the spacecraft's early operations, after initial positioning, to include in the catalog. But detailed analysis should consult detailed orbital data versus time for each object, from the Space-Track TLEs or other sources.
    - **ODate** Orbit Epoch Date. Epoch of canonical orbital data, Vague Date format.
    - **Perigee, PF** Conventional perigee height in km of canonical orbit. Equal to perigee radius minus equatorial radius of central body.
 

If PF is equal to '?' the value is a guess.

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- **Apogee, AF**

Conventional apogee height in km of canonical orbit. Equal to apogee radius minus equatorial radius of central body.

If AF is equal to '?' the value is a guess.

- **Inc, IF**

Inclination of canonical orbit in degrees with respect to coordinate system equator. Heliocentric orbits are given with respect to the J2000 ecliptic. Earth orbits are given with respect to the equator of date (strictly, TEME equator). Orbits around other central bodies are given with respect to the IAU equator of that body.

If IF is equal to '?' the value is a guess.

- **OpOrbit**

Orbit type of the canonical orbit.

- **OQUAL**

Orbit Quality Note.

Source of the canonical orbit. Usually blank; it's a place for me to make a note to remind me where I got the orbit data from in special cases. 'J' means I estimated the orbit myself.

- The final field really belongs with the first set, with additional names for the object.

- **AltNames**

A comma-delimited list of further alternative names for the object.

### VIII.3.9 Payload Catalog Column Descriptions

- **JCAT** The JCAT identifier (letter followed by digits) identifies the object and ties this catalog to the object catalogs.
- **Piece** The Piece field contains the piece designation, usually the COSPAR 'international Designation'. It is the same as that given in the object catalog and is repeated here for human-readability and convenience.
- **Name** The name in the payload catalog is the name given in the UN satellite registry, where available. I usually fill in another name (usually Name or PLName from the object catalog) where not, for readability.

If the satellite is UN registered (a registration document is noted in the appropriate field) but no name was given in that registration, I enclose the name used in square parentheses to indicate that it's not official. For example, for object S01328, the UNReg field contains "A/AC.105/INF.107", indicating that the satellite is registered. The name is given as "[Explorer 27]", the square brackets indicating that no name was actually given in the registration document.

As with other UN registration metadata reproduced here, the UN name data are provided so you can compare UN registration information with the primary information in the catalog. In this instance, the name in the object catalog (or even better, in the unicode name list) is generally to be preferred over the name given here.

- **LDate** (Launch Date). Same as in object catalog, provided for convenience and cross checking.
- **TLast**

Last Known Active Time.

The date on which the satellite was most recently known (by me) to be active. Often, it's hard to find out whether a satellite is still operating, especially if it does not actively control its orbit. It is therefore helpful to know if it's been known to be active fairly recently, or whether there has been no news of it for decades. Caveat: I only update this infrequently and patchily. The fact that \*I\* haven't heard news of the satellite operating since 2006 doesn't mean that obvious evidence of its continued activity doesn't exist.

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Vague Date Format is used to record the value.

An asterisk in this field indicates that no information is available.

- **TOP** End Operation Date.

The date on which the satellite is believed to have completed regular operations. This is a loosely defined concept. The idea is that after this date the satellite may have been used for on-orbit tests and training, or may still have had an active radio beacon, but was not in use for its primary purpose. (That's not the same as 'end of primary mission', which can be much earlier).

Vague Date Format is used to record the value.

An asterisk in this field indicates that the payload is believed to be still operating.

- **TDate** End of Transmission Date.

I also refer to this as the "Dead, Dead, Dead" date - it is the date after which the satellite became completely silent and unresponsive, or when no further contact was made by its owners. I prefer to use this as an end-of-life date. (There is some ambiguity here. Some old satellites are abandoned by their owners but still emit a radio beacon.)

Vague Date Format is used to record the value.

An asterisk in this field indicates that the payload is believed to be still transmitting.

- **TF**

End of life special flags. Flags here have the following meaning:

Value	Meaning
E	Deep space mission, may be operating outside Earth orbit.
U	This satellite is thought to be still working but the UCS active satellite list suggests it is not.
X	Satellite end of life date is a guess and satellite could still be partly operating.
Z	Zombie satellite: no longer controlled, but continues emitting a beacon signal.

These flags were added to the data to make automatic comparisons with the UCS active satellite list easier. (Easier for me, mostly.)

- **Program**

This field identifies groups of related satellites. I use it to drive the organization of mission logs which I am preparing for a future release.

- **Plane**

This (new) string-valued field can be used to label orbital planes or shells in a constellation. At the moment I am using numeric shell numbers to group OneWeb satellites.

- **Att**

Attitude control flag

The field describes the type of attitude control. However, values of this field have not yet been systematically filled in.

Value	Meaning
-	Unknown
G	Gravity gradient stabilized
P	Pointed, 3-axis stabilized
PS	Sun pointed
PN or N	Nadir (Earth) pointed
S	Spin stabilized
U	Unstabilized



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- **Mvr**

Maneuverability Flag.

This field indicates whether the satellite has or had a propulsion system capable of changing its orbit. Valid nonempty values are 'M', indicating that the satellite is maneuverable, and 'D', indicating that the satellite's propulsion system is capable of a single burn to deorbit the satellite.

- **Class** The class is a one- or, rarely, two-letter character string used to classify satellites as military, commercial, etc. This is usually based on the status of the owner/operator organization, but with some exceptions (for example the Vostok spaceships are considered civil even though operated partly by the Soviet military). The four supported single-letter values are:

Value	Meaning
A	Amateur/academic/non-profit
B	Business (commercial)
C	Civil (government but not military)
D	Defense (govt. military, intelligence)

Two-letter combinations of these have the obvious meaning: e.g. BD means a satellite which has both commercial and military use. In general, I find the concept of 'dual-use' to be mostly unhelpful. Almost everything is potentially usable for military purposes, but almost everything is nevertheless fairly clearly assignable to one of the above four principal uses. I only use the dual-use two-letter characterization for 16 (as of 2020) satellites in the catalog where the management and operation is clearly shared between two organizations connected with different class values.

- **Category**

The category is a different classification, orthogonal to the class. It describes the general purpose of the satellite. A satellite may have one or two categories.

In the case where two values are present, the values in this field are concatenated with a slash between them - for example 'IMG/TECH'.

Uncertain categories have an appended question-mark.

An asterisk appended to the category indicates that the orbital data for the satellite are (or formerly were) kept secret by the US government.

The defined categories are:

Value	meaning
AST	Astronomy
BIO	Biology and life sciences
CAL	Calibration (for atmospheric density, space surveillance radars, etc). Usually passive.
COM	Communications
EDU	Educational purposes.
EOSCI	Earth observing science, except imaging
EW	Missile early warning, including ballistic missile defence tracking
GEOD	Geodesy
IMG	Imaging (optical), except meteorology
IMG-R	Imaging (radar)
INF	Infrastructure (support structures, deployers etc)
MET	Meteorology (imaging)
MET-RO	Meteorology (radio occultation)
MGRAV	Microgravity experiments
MISC	Miscellaneous (e.g. burial services)
NAV	Navigation, positioning and timing
PLAN	Deep space related mission
RB	Rocket body (rocket upper stage)
RV	Reentry vehicle
SCI	Scientific studies, except astronomy and Earth observing
SIG	Signals intelligence
SS	Spaceship, i.e human spaceflight related (including cargo ships)
TARG	Target for missile defense or antisatellite tests
TECH	Technology and training
WEAPON	Weapon, including antisatellite experiment and FOBS

- **Result**

The Result flag is a single letter used to identify satellites which failed early in their mission. Values of this flag are:

- S - success
- F - failed
- U - Unknown
- N - No test (e.g. rocket failed before satellite had a chance to operate).

- **Control**

Location of the spacecraft operations control center. I have not filled this field in systematically yet, it's really a 'future project' (maybe never). However those values which are filled in should be reliable.

- **Discipline**

For scientific satellites, this field may note one or more specific scientific areas in which the satellite is carrying out research. Values used to date are:

Value	Meaning
AIS	Automatic ID system (ship tracking)
ALT	Radar altimeter
ATM	Atmospheric science
AUR	Auroral research
BIO	Biology and life sciences
ENV	Space environmental exposure
ESCI	Earth sciences
F	Electromagnetic fields
GEOD	Geodesy
GRA	Gamma ray astronomy
IMG	Imaging
ION	Ionospheric research
IRA	Infrared astronomy
M	Humans in microgravity and related research
MG	Microgravity experiments
MM	Micrometeorite studies
OA	Optical astronomy
P	Particles
PHY	Basic physics
PL	Planetary science
RFA	Radio-frequency astronomy
SMA	Submillimeter astronomy
SOL	Solar physics
SX	Solar X-ray astronomy
TECH	Technology experiments
UVA	Ultraviolet astronomy
XNAV	X-ray navigation
XRA	X-ray astronomy

- **UNState**

If the satellite is registered with the UN, this field contains the OrgCode string corresponding to the country which registered it. If this country is not the owner country I have assigned the object to in the object catalog, an asterisk is appended to the OrgCode to alert you.

If the satellite has not been registered with the UN, the field contains, in square parentheses, the OrgCode string corresponding to the country which I think \*ought\* to have registered it. (If this isn't the same as the owner country in the object catalog, an asterisk is appended to the closing square parenthesis - e.g. '[US]\*').

If the satellite has not been registered, but it's not a 'real payload' (minor subsatellite, etc.) and I don't think it requires registration, the field is left blank.

- **UNReg**

The UNReg field gives the ID of the UN registration document in which the satellite was registered, if it was. These documents are usually in the ST/SG/SER.E series or the A/AC.105/INF series.

An appended asterisk indicates that the online UN site reports that the satellite was registered in a particular document, but the document isn't yet available on that site, so I can't see what it actually says! Unfortunately some US registrations have been 'in process' for several years now (as of mid 2020).

A blank entry indicates that the satellite has not been registered with the UN.

- **UNPeriod** is the nodal period in minutes reported in the UN registration document, if any. Although the UN registration orbital information, reported by the state of registry, is valuable for a variety of research purposes, it is not always reliable and I recommend that users prefer the orbital data in the main object catalog which is based on US and hobbyist tracking data.
- **UNPerigee** is the orbital perigee height in km reported in the UN registration document, if any.

- 
- **UNApogee** is the orbital apogee height in km reported in the UN registration document, if any.
  - **UNInc** is the orbital inclination in degrees reported in the UN registration document, if any.

- **DispEpoch**

Disposal Epoch. Only for maneuverable payloads in Earth orbit; the epoch of the disposal orbit given in the following fields. The disposal orbit information is used to assess compliance with disposal recommendations. For objects other than maneuverable payloads, the disposal orbit is deemed to be the initial orbit. For satellites still able to maneuver, a recent orbit may be given as a placeholder.

Inclusion of the disposal orbit data is currently an experiment and the data should not be relied upon at present (2024 Oct).

- **DispPeri**

Disposal perigee; perigee of the orbit at the end of life for a maneuverable satellite.

- **DispApo**

Disposal apogee; apogee of the orbit at the end of life for a maneuverable satellite.

- **DispInc**

Disposal inclination; inclination of the orbit at the end of life for a maneuverable satellite.

- **Comment** - A descriptive comment, which I may or may not have felt moved to fill in.



Family	Family	Family	Family	Family
10KS2500	10SM	11AE2B	11AE2V	
20SM	25SM	40SM	48N6	
51T6B	5InSM	8K75B	A-350	
AAD	ADD-SLV	AJ60	AMROC	
ARRW	ASLV	ASLV.St2	ASLV.St3	
ASLV.St4	ATACMS	AUS-61	AVUM	
Abid	Abid.St3	Able	Ablestar	
AeroHIV	AeroHIV2	Aerobee	AerobeeB	
Agate	Agena	Agni3	AgnIII.St2	
Air	Ajax	Alkahir	Alcor	
Alfa	Alpha	Altair	Amateur	
Angara	Angara.AM	Antares	Apache	
Apollo.LES	Arcas	ArcaSB	Arcon	
Ariane	Ariane.St2	Ariane.St3	Ariane5	
Aries	Arrow	Arrow2	Arrow3	
Asp	Astra	Astra2	Astrid	
Astris	Astrobeed	Astrobeef	Atea	
Atlas	Atlas.Booster	Atlas5	AtlasVSRM	
Aurora	Avanti	B-611	BB3	
BB5	BB5	BB6	BB7	
BE3	BLDT	BOZ	BR	
BabySergeant	Belenos	Belier	Bellisama	
Berenice	BlackArrow	BlackArrow.St2	BlackKnight	
BlackSparrow	Blok-A	Blok-D	Blok-E	
Blok-I	Blok-L	BlokG	BlueStreak	
Bomarc	Briz	Bukuekseong	BullGoose	
Bullpup	Bursztyn	BursztynBooster	Burya	
CB-250	CESSQ	CHGB	CSXT	
CZ.LB	CZ.St2	CZ1.St2	CZ11-3	
CZ11-4	CZ12	CZ3.St3	CZ5	
Castor4	Cedre	Cedre.St2	Cedre.St3	
Centaur	CentaurV	Cetus	Chick	
Cirrus	Cluster	Coralie	Corporal	
Cuckoo	Cygnus	D-21B	D3SS	
D4SS	DACROC	DC-X	DF-11	
DF-15	DF-16	DF-21	DF-31	
DF3	DF5	DIM	DS	
Daniel	Deacon	Delta2	Delta4	
Demon	Dezful	Dolphin	Dragon	
Dummy	E8	EPBS	EPS	
Edge	Electron	Emeraude	Emma	
Energiya	Eris	Eris.St2	Eris.St3	
EvoSpace	Excalibur	FFAR	FFK	
FTB	FTI	F44	Falcon	
Falcon1	Falcon9	Falcon9.St2	Falah	
Fregat	GCR	GEW	Fatem	
GEM63	GF-02	GLCM	GEM60	
GS-3A	GSLV	GSLV3	GS3	
GSOM	GYUB4	GammaCen	GSLV3.St2	
Generic	Genie	Gosling	GammaCens	
Gradicom	Gum05	Gum07	Grad	
Gushenxing-3	H2	H2.SRB	Gum16	
H2.St2	H2B	HALO	H2.SSB	
HAPS	HIBEX	HJ	HAMBIT	
HP1	HP1-4	HTR	HOTROC	
HVSR	Hades	HTR	HVAR	
HermesA3	Hopi	Hercules	Hermes	
Hwasong-15	Hwasong-18	HoundDog	Hwasong-12	
IAl.Arrow.St2	IIAE-Orion	Hwasong-18.S2	Hwasong-12	
IRIS.Fiat	ISRO-CES	INTRA-100	Hyunmo	
Icarus	Icarus2	ISRO-L40	IRCS	
IraqGun350	Iris	Ikar	ISRO-TV	
JCR	JLI	Iroquois	Interstage	
Javelin	Jericho	JLI-3	Ivanov	
K-4	K10S	Jupiter	JLI-4	
K420	KM-D	K150	K-15	
KM-V	KM-V2	KM-H	K250	
KSLV.St2	KSLV2	KN-24	KN-L	
KSR-3	KTI-3	KSLV2-2	KN-25	
Kairos	Kappa	KTI-4	KSR	
Kestrell1	Kestrell1.St2	Kappa4	KZ2-3	
Kontakt	Kosmos-2.St2	Kingfisher	Kavoshgar	
Kuryer.St3	L14	Kosmos-3.St2	Kiva	
LAPS	LAFSTAR	L480S	Kuryer	
		LE-3	L500	
		LE-5	L500	

Family	Family	Family	Family
LEO-46	LEO-7	LJ1	LJ2
LWAS	LOSt2	LPR-006	LS-C
Lacrosse	Lambda	Lambda.St2	Lance
Lance/Motor	Lark	LauncherOne	Lex
Lobster	Loki	LongTom	Luna
Lupus	Luzon	M-100	M-20
M-24	M-30	M-34	M-35
M-40	M51	MLRS	MRR-06
MR-12	MR-UR-100	MR-UR-100.St2	MSBS
MSBS.St2	MSBS.St3	MT-135	MV
MX	MX-774	MX.St2	MX.St3
MX.St4	Malemute	Matador	Mera
Meteo	Meteor	Meteor2	Mimosa
Minteman	Minteman.St3	Miura	Mk72
Momo	Monica	Mu	Musca
N-1	NAL	NOTS.3inSM	NOTS.8in
NOTS400	NOTS500	NOTS505	NOTS551
NSPO	NSPOB	Navaho	Neptune
Neutron	Neutron2	NexShepard	Nike
Nike-46	Nodong	Nucleus	OAM
OS-M1-3	OS-M1-4	OTRAG	OV
Oka	Orbus1	Orbus21	Orbus6
Oriole	Orion	Orion.LAS	P-10
P-16	P068	PAL	PAM-D2
PAP	PBS	PDV-II	PRS-1
PSLV	PSLV.St4	Pedro	Pegasus
Pegasus.St2	Pegasus.St3	Peregrine	Perekhodnik
Pershing	Pershing.St2	Petrel	Plastic
Polaris	Polaris.St2	PolarisA3.St2	Poseidon
Poseidon.St2	Prithvi	PrivateA	PrivateBooster
Proson	Proson2	Proton	Proton.St3
Qaem	Qaem-S2	Qaem-S3	Qased-S3
R-11	R-12	R-13	R-14
R-16	R-16.St2	R-21	R-27
R-29	R-29.St2	R-29.St3	R-31
R-31.St2	R-36	R-36.St2	R-39
R-39.St2	R-39.St3	R-5	R-7
R-9	RH-125	RH-200	RH-300
RH-560	RH-75	RS1	RT-1.St3
RT-15	RT-15.St2	RT-15.St3	RT-2
RT-2.St3	RT-20P	RT-20P.St2	RT-21.St2
RT-23.St2	RT-23.St3	RTV	RX-250
RX-320	RX-420	Raven	Recruit
RedKite	Redstone	Regulus	Rhumi
Rigel	Rita	Rocketsonde	Rocketsonde2
Rubis	S-160	S-210	S-300
S-310	S-40	S-44	S-520
SSM	SB-310	SB-735	SD
SEPR167	SICBM	SICBM2	SICBM3
SICBM4	SM-3-II	SM3.TSRM	SORS
SGZ	SRO.1	SR19	SR73
SR75	SRAM	SRE	SRMU
SS-520-4	SSI	SS2	SSLV
SSLV-SS3	SSLV-VTM	STA	STIG
STIG-B	STS	STS	STS.OV
Sandhawk	Salmat	Saman-1	Samoud
SaturnIV	SaturnIVB	Saturn	SaturnII
ScoutD	Sejjil	SaturnV	Scout
Shavit	Sidewinder	Selliger	Sergeant
Skua	Skybolt	Simorgh.St2	Sirocco
Sonda	Sonda3	Skybolt.St2	Shark
Spartan	Sprint	SpaceLoft	Sharrow
Star20	Star26	Squirt	Standard
Star48	Star48	Star27	Star37
Stonechat	Stratos2	Starship	Star
T-40	T-55	Stromboli	Star
T48	TD3	T-7	SuperLoki
TL2	TL2-3	THAAD	T-7B
TR-1.St2	TT-210	TL3	TKSVA
TX-239	Talos	TTB	TR-1
Terrani	Terrier	Temp	TX-238
Titan	Titan.SRM	Thor	Temp-2S
Tomahawk	Topol	Titan.St2	Tianying
		Topol.St2	Tochka
			Topol.St3

Family		Family		Family	
Transtage	Traveler	Trident	Trident.St2	Trident	Trident.St2
Trident.St3	Trident2	UM129A	UR-100N.St2	UMK	UR-100N.St2
UR-100	UR-100.St2	UR-100N	URM-2	Unha	Unha
UR-100MU.St3	UR-200	URM-2	Unknown	V-1000	V-1000
Unha.St2	Unha.St3	V-750	V-750	V-825	V-825
V-1000.Booster	V-2	Vela	Vela	Venus	Venus
Vega	VegaC	Viking	Viking	Vikram-S	Vikram-S
Veronique	Vesta	Viper5	Viper5	Vulcan	Vulcan
Viper	Viper3	X-10	X-10	X-15	X-15
WAC	Waxwing	X-51	X-51	X-7	X-7
X-241	X-271	YGCS	YGCS	YZ-1	YZ-1
XN-17	Xaero	ZN	ZN	Z0-1	Z0-1
ZK-1	ZK-1A-4	Zefiro	Zefiro	Zelzal	Zelzal
ZQ-2	Zefiro	Zenith	Zenith	Zeus-A	Zeus-A
Zenit	Zenit.St2	SkyLarkL	SkyLarkL	SkyLarkMicro	SkyLarkMicro
ZolJanah	Zulfiqar	SkyLarkL	SkyLarkL	SkyLarkMicro	SkyLarkMicro
SkyLarkMS2	-				







LV

LV_Name	LV_Family	LV_Manufacturer	LV_Variant	LV_Alias	LV_Min_Stage	LV_Max_Stage	Length m	Diameter m	Launch_Mass t	LEO_Capacity kg	GTU_Capacity kg	TU_Thrust kN	Class	Apogee km	Range km
DC-X	DC-X	MDAC	-	Saturn IB	1	1	12.6	4.95	18.8	0	0	242	T	10	
H-II	H2	MHITO	-	Saturn IB	0	2	49.0	4.00	260.0	10060	3930	3960	0	40000	
H-IIA 202	H2	MHITO	(2S)	Saturn IB	-1	2	49.0	4.00	281.0 ?	10060	3930	4600	0	40000	
H-IIA 202	H2	MASDA	-	Saturn IB	0	2	53.0	4.00	285.0	10000	4100	5600	0	40000	
H-IIA 204	H2	MASDA	1	Saturn IB	0	2	53.0	4.00	285.0	10000	4100	5600	0	40000	
H-IIA 204	H2	MASDA	2	Saturn IB	0	2	53.0	4.00	285.0	10000	4100	5600	0	40000	
H-IIA 2022	H2	MASDA	-	Saturn IB	-1	2	57.0	4.00	348.0	-	5000	8580	0	40000	
H-IIA 2024	H2	MASDA	-	Saturn IB	-1	2	57.0	4.00	348.0	-	5000	8580	0	40000	
H-IIA 2024	H2	MASDA	1	Saturn IB	0	2	57.0	4.00	629.0	-	4000	-	0	40000	
GSLV Mk III	GSLV3	ISRO	a	Saturn IB	0	2	42.4	4.00	629.0	-	4000	-	0	40000	
GSLV Mk III	GSLV3	ISRO	-	Saturn IB	0	2	42.4	4.00	629.0	-	4000	-	0	40000	
LVM3	GSLV3	ISRO	-	GSLV Mk III	0	2	42.4	4.00	629.0	-	4000	-	0	40000	
Little Joe II	LJ2	GDA	6-1-0	GSLV Mk III	0	1	26.2	3.96	26.2	0	0	1482	T	10	
Little Joe II	LJ2	GDA	4-2-0	GSLV Mk III	0	1	26.2	3.96	42.7	0	0	1716	T	10	
Little Joe II	LJ2	GDA	0-3-3	GSLV Mk III	1	1	26.2	3.96	80.3	0	0	3276	T	35	
Little Joe II	LJ2	GDA	5-2-2	GSLV Mk III	0	1	26.2	3.96	63.3	0	0	2964	T	25	
Antares 110	Zenit	OSCW	-	GSLV Mk III	1	2	40.5	3.90	282.0	4600	1800	3631	0	300	
Antares 120	Zenit	OSCW	-	GSLV Mk III	1	2	40.5	3.90	282.0	4600	1800	3631	0	300	
Antares 130	Zenit	OSCW	-	GSLV Mk III	1	2	40.5	3.90	282.0	5100	1800	3631	0	300	
Antares 230	Zenit	OSCW	-	GSLV Mk III	1	2	42.5	3.90	290.0	6250	1800	3844	0	300	
Antares 230+	Zenit	OSCW	-	GSLV Mk III	1	2	42.5	3.90	290.0	6250	1800	3844	0	300	
Zenit-2	Zenit	YUZH	-	GSLV Mk III	1	2	57.0	3.90	459.0	13500	0	7259	0	1000	
Zenit-2M	Zenit	YUZH	-	GSLV Mk III	1	2	57.0	3.90	459.0	13500	0	7259	0	1000	
Zenit-2.1K77.05	Zenit	YUZH	-	GSLV Mk III	1	2	57.0	3.90	459.0	13500	0	7259	0	1000	
Zenit-3SL	Zenit	YUZH	-	GSLV Mk III	1	3	59.6	3.90	471.0	0	5000	7259	0	40000	
Zenit-3SB	Zenit	YUZH	-	GSLV Mk III	1	3	59.6	3.90	471.0 ?	0	5000	7259	0	40000	
Zenit-3F	Zenit	YUZH	-	GSLV Mk III	1	3	59.6	3.90	471.0	0	5000	7259	0	40000	
Zenit-3SLB	Zenit	YUZH	-	GSLV Mk III	1	3	59.6	3.90	471.0	0	5000	7259	0	40000	
Zenit-3SLBF	Zenit	YUZH	-	Zenit-3F	1	3	59.6	3.90	471.0	0	5000	7259	0	40000	
Atlas V 401	Atlas5	LMA	-	Zenit-3F	1	2	58.3	3.80	334.5	-	4750	3800	0	40000	
Atlas V 401	Atlas5	LMA	C	Zenit-3F	1	2	58.3	3.80	334.5	-	4750	3800	0	40000	
Atlas V 411	Atlas5	LMA	-	Zenit-3F	0	2	58.3	3.80	386.8	-	5950	-	0	40000	
Atlas V 411	Atlas5	LMA	C	Zenit-3F	0	2	58.3	3.80	386.8	-	5950	-	0	40000	
Atlas V 421	Atlas5	LMA	-	Zenit-3F	0	2	58.3	3.80	433.8	-	6890	-	0	40000	
Atlas V 421	Atlas5	LMA	C	Zenit-3F	0	2	58.3	3.80	433.8	-	6890	-	0	40000	
Atlas V 421	Atlas5	LMA	C1	Zenit-3F	0	2	58.3	3.80	433.8	-	6890	-	0	40000	
Atlas V 421	Atlas5	LMA	G1	Zenit-3F	0	2	58.3	3.80	433.8	-	6890	-	0	40000	
Atlas V 431	Atlas5	LMA	-	Zenit-3F	0	2	59.1	3.80	479.7	-	7700	-	0	40000	
Atlas V 431	Atlas5	LMA	C	Zenit-3F	0	2	59.1	3.80	479.7	-	7700	-	0	40000	
Atlas V 501	Atlas5	LMA	-	Zenit-3F	1	2	58.3	3.80	334.5	-	3775	-	0	40000	
Atlas V 501	Atlas5	LMA	C	Zenit-3F	1	2	58.3	3.80	334.5	-	3775	-	0	40000	
Atlas V 521	Atlas5	LMA	-	Zenit-3F	0	2	59.7	3.80	433.5	14000	6475	6520	0	40000	
Atlas V 521	Atlas5	LMA	G	Zenit-3F	0	2	59.7	3.80	433.5	14000	6475	6520	0	40000	
Atlas V 511	Atlas5	LMA	-	Zenit-3F	0	2	60.0	3.80	479.7	-	7700	-	0	40000	
Atlas V 511	Atlas5	LMA	C	Zenit-3F	0	2	60.0	3.80	479.7	-	7700	-	0	40000	
Atlas V 531	Atlas5	LMA	-	Zenit-3F	0	2	60.0	3.80	479.7	-	7700	-	0	40000	
Atlas V 531	Atlas5	LMA	G1	Zenit-3F	0	2	60.0	3.80	479.7	-	7700	-	0	40000	
Atlas V 541	Atlas5	LMA	-	Zenit-3F	0	2	60.0	3.80	479.7	-	7700	-	0	40000	
Atlas V 541	Atlas5	LMA	C	Zenit-3F	0	2	60.0	3.80	479.7	-	7700	-	0	40000	
Atlas V 541	Atlas5	LMA	G	Zenit-3F	0	2	60.0	3.80	479.7	-	7700	-	0	40000	
Atlas V 551	Atlas5	LMA	-	Zenit-3F	0	2	59.7	3.80	573.2	-	8900	-	0	40000	
Atlas V 551	Atlas5	LMA	C	Zenit-3F	0	2	59.7	3.80	573.2	-	8900	-	0	40000	
Atlas V 551	Atlas5	LMA	G	Zenit-3F	0	2	59.7	3.80	573.2	-	8900	-	0	40000	
Atlas V N22	Atlas5	LMA	-	Zenit-3F	0	2	52.4	3.80	444.2	-	6890	-	0	40000	
Ariane 1	Ariane	AELM	-	Zenit-3F	1	3	47.4	3.80	210.0	-	1400	2462	0	40000	
Ariane 2	Ariane	AELM	-	Zenit-3F	1	3	49.0	3.80	217.0	-	2175	2689	0	40000	
Ariane 3	Ariane	AELM	-	Zenit-3F	0	3	49.0	3.80	237.0	-	2700	4021	0	40000	
Ariane 40	Ariane	AELM	40	Zenit-3F	1	3	58.4	3.80	243.0	2700	1900	2708	0	1000	
Ariane 40	Ariane	AELM	40+	Zenit-3F	1	3	58.4	3.80	245.0	2740	1900	2718	0	1000	
Ariane 40	Ariane	AELM	40-3	Zenit-3F	1	3	58.4	3.80	245.0	2740	1900	2718	0	1000	
Ariane 42L	Ariane	AELM	42L	Zenit-3F	0	3	58.4	3.80	363.0	-	2800	4208	0	40000	
Ariane 42L	Ariane	AELM	42L+	Zenit-3F	0	3	58.4	3.80	363.0	-	3350	4228	0	40000	
Ariane 42L	Ariane	AELM	42L-3	Zenit-3F	0	3	58.4	3.80	363.0	-	3480	4228	0	40000	
Ariane 42P	Ariane	AELM	42P	Zenit-3F	0	3	58.4	3.80	320.0	-	2600	4008	0	40000	
Ariane 42P	Ariane	AELM	42P+	Zenit-3F	0	3	58.4	3.80	324.0	-	2740	4028	0	40000	
Ariane 44L	Ariane	AELM	44L	Zenit-3F	0	3	58.4	3.80	324.0	-	2930	4028	0	40000	
Ariane 44L	Ariane	AELM	44L+	Zenit-3F	0	3	58.4	3.80	470.0	-	4200	5708	0	40000	
Ariane 44L	Ariane	AELM	44L-3	Zenit-3F	0	3	58.4	3.80	464.0	-	4460	5728	0	40000	
Ariane 44LP	Ariane	AELM	44LP	Zenit-3F	0	3	58.4	3.80	464.0	-	3700	5728	0	40000	
Ariane 44LP	Ariane	AELM	44LP+	Zenit-3F	-1	3	58.4	3.80	418.5	-	4030	5508	0	40000	
Ariane 44LP	Ariane	AELM	44LP-3	Zenit-3F	-1	3	58.4	3.80	421.0	-	4528	5528	0	40000	
Ariane 44P	Ariane	AELM	44P	Zenit-3F	0	3	58.4	3.80	355.0	-	3000	5308	0	40000	

LV

LV_Name	LV_Family	LV_Manufacturer	LV_Variant	LV_Alias	LV_Min_Stage	LV_Max_Stage	Length m	Diameter m	Launch_Mass t	LEO_Capacity kg	GTD_Capacity kg	TU_Thrust kN	Class	Apogee km	Range km
Ariane 44P	Ariane	AELM	44P-3	Zenit-3F	0	3	58.4	3.80	356.0	-	3465	5328	0	40000	
Tianlong-3	TL3	TIAB	-	Zenit-3F	1	2	71.0	3.80	590.0	-	17000	7600	0	-	
Tianlong-3 S1	TL3	TIAB	-	Zenit-3F	1	2	71.0	3.80	590.0	-	17000	7600	0	-	
Chang Zheng 12	CZ12	SAST	-	Zenit-3F	1	2	59.0	3.80	433.0	-	10000	5000	0	-	
Ares 1-X	SRB	MSFC	-	Zenit-3F	1	1	100.0	3.77	834.0	-	0	0	T	45	
LM AS	GRUM	GRUM	-	Zenit-3F	1	1	2.5	3.76	4.9	2000	0	-	D	100	
Dragon V2	SPX	SPX	-	Zenit-3F	1	1	6.1	3.70	4.2	0	0	584	X	1	
Falcon Heavy	Falcon9	SPX	-	Zenit-3F	0	2	69.2	3.65	1400.0	54400	22200	17000	0	200	
Falcon 9	Falcon9	SPX	-	Zenit-3F	1	2	333.4	3.65	3400	9300	3400	4940	0	200	
Falcon 9	Falcon9	SPX	FT5	Zenit-3F	1	2	54.9	3.65	3400	13150	4850	5886	0	200	
Falcon 9	Falcon9	SPX	FT4/5	Zenit-3F	1	2	68.4	3.65	480.0	13150	4850	5886	0	200	
Falcon 9	Falcon9	SPX	FT4	Zenit-3F	1	2	68.4	3.65	480.0	13150	4850	5886	0	200	
Falcon 9	Falcon9	SPX	FT3	Zenit-3F	1	2	71.0	3.65	480.0	22800	8300	5886	0	200	
Falcon 9	Falcon9	SPX	1.1	Zenit-3F	1	2	71.0	3.65	480.0	13150	4850	5886	0	200	
Falcon 9	Falcon9	SPX	FT3/4	Zenit-3F	1	2	34.0	3.65	480.0	13150	4850	5886	0	200	
Grasshopper	Falcon9	SPX	-	Zenit-3F	1	1	34.0	3.65	200.0	0	0	540	X	1	
Falcon 9R	Falcon9	SPX	1	Zenit-3F	1	1	49.0	3.65	480.0	13150	4850	5886	0	10	
Nuri	KARI	KSLV2	-	Zenit-3F	1	3	47.2	3.50	200.0	0	0	2942	0	500	
Vega C	AVIO	AVIO	-	Zenit-3F	1	4	35.0	3.40	210.0	0	3300	-	0	500	
X-15	X-15	MAA	-	Zenit-3F	0	1	15.3	3.55	14.2	0	0	257	X	100	
X-15	X-15	MAA	1	Zenit-3F	0	1	15.3	3.55	14.2	0	0	72	X	50	
Zhuque-2	ZQ-2	LAMDSP	-	Zenit-3F	1	1	49.5	3.35	216.0	0	0	2630	0	500	
Zhuque-2E	ZQ-2	LAMDSP	-	Zenit-3F	1	2	49.5	3.35	229.0	0	0	2880	0	500	
Zhuque-2E	ZQ-2	LAMDSP	1	Zenit-3F	1	2	47.3	3.35	219.0	4000	0	2770	0	500	
Dong Feng 5	DF5	CALT	-	Zenit-3F	1	2	32.6	3.35	183.0	0	0	2500	M	1000	13000
Dong Feng 5A	DF5	CALT	-	Zenit-3F	1	2	32.6	3.35	183.0	0	0	2500	M	1000	13000
Dong Feng 5C	DF5	CALT	-	Zenit-3F	1	2	32.6	3.35	183.0	0	0	2500	M	1000	13000
Feng Bao 1	DF5	SBA	-	Zenit-3F	1	2	32.6	3.35	192.0	2200	0	2500	M	1000	13000
Chang Zheng 2	DF5	CALT	-	Zenit-3F	1	2	31.2	3.35	190.0	0	0	2786	0	500	
Chang Zheng 2C	DF5	CALT	-	Zenit-3F	1	2	35.2	3.35	192.0	2800	0	2962	0	500	
Chang Zheng 2C	DF5	CALT	a	Zenit-3F	1	2	37.2	3.35	213.0	2800	0	2962	0	500	
Chang Zheng 2C	DF5	CALT	b	Zenit-3F	1	2	41.9	3.35	245.0	2800	0	2962	0	500	
Chang Zheng 2C	DF5	CALT	SM	Zenit-3F	1	2	37.2	3.35	213.0	2800	0	2962	0	500	
Chang Zheng 2C	DF5	CALT	SMA	Zenit-3F	1	2	37.2	3.35	245.0	2800	0	2962	0	500	
Chang Zheng 2C/YZ-1S	DF5	CALT	-	Zenit-3F	1	3	41.0	3.35	213.0	2800	0	2962	0	500	
Chang Zheng 2C-III/SD	DF5	CALT	-	Zenit-3F	1	2	39.9	3.35	213.0	2800	0	2962	0	1000	13000
Chang Zheng 2D	DF5	SAST	a	Zenit-3F	1	3	38.3	3.35	232.0	3400	0	2962	0	500	
Chang Zheng 2D	DF5	SAST	-	Zenit-3F	1	2	38.3	3.35	232.0	3400	0	2962	0	500	
Chang Zheng 2D/YZ-3	DF5	SAST	-	Zenit-3F	1	3	38.3	3.35	232.0	3400	0	2962	0	500	
Chang Zheng 2E	DF5	CALT	-	Zenit-3F	0	2	51.2	3.35	464.0	9200	3500	5923	0	500	
Chang Zheng 2F	DF5	CALT	-	Zenit-3F	0	2	51.2	3.35	464.0	9200	3500	5923	0	500	
Chang Zheng 2F	DF5	CALT	G	Zenit-3F	0	2	51.2	3.35	464.0	9200	3500	5923	0	500	
Chang Zheng 2F	DF5	CALT	T	Zenit-3F	0	2	51.2	3.35	480.0	9200	3500	5923	0	500	
Chang Zheng 3	DF5	CALT	-	Zenit-3F	1	3	43.9	3.35	202.0	0	1400	2962	0	40000	13000
Chang Zheng 3A	DF5	CALT	-	Zenit-3F	1	3	52.5	3.35	240.0	0	2300	2962	0	40000	13000
Chang Zheng 3B	DF5	CALT	-	Zenit-3F	0	3	54.8	3.35	425.8	0	4800	4441	0	40000	13000
Chang Zheng 3B	DF5	CALT	G1	Zenit-3F	0	3	56.5	3.35	457.0	0	5400	5923	0	40000	13000
Chang Zheng 3B	DF5	CALT	G2	Zenit-3F	0	3	56.5	3.35	457.0	0	5400	5923	0	40000	13000
Chang Zheng 3B	DF5	CALT	G3	Zenit-3F	0	3	56.5	3.35	457.0	0	5400	5923	0	40000	13000
Chang Zheng 3B	DF5	CALT	G5	Zenit-3F	0	3	58.0	3.35	456.0	0	5400	5923	0	40000	13000
Chang Zheng 3C	DF5	CALT	-	Zenit-3F	0	3	54.8	3.35	345.0	0	4800	4441	0	40000	13000
Chang Zheng 3C	DF5	CALT	G2	Zenit-3F	0	3	54.8	3.35	345.0	0	4800	4441	0	40000	13000
Chang Zheng 3C/YZ-1	DF5	CALT	-	Zenit-3F	0	4	54.8	3.35	345.0	0	4800	4441	0	40000	13000
Chang Zheng 3B/YZ-1	DF5	CALT	G3Z	Zenit-3F	0	4	54.8	3.35	345.0	0	4800	4441	0	40000	13000
Chang Zheng 6	DF5	SAST	-	Zenit-3F	1	2	29.0	3.35	103.0	1000	0	-	0	0	
Chang Zheng 6A	DF5	SAST	-	Zenit-3F	0	2	50.0	3.35	530.0	0	0	-	0	0	
Chang Zheng 6C	DF5	SAST	-	Zenit-3F	1	2	29.0	3.35	103.0	1000	0	-	0	0	
Chang Zheng 7	DF5	CALT	-	Zenit-3F	0	2	53.1	3.35	594.0	13500	7000	-	0	0	
Chang Zheng 7A	DF5	CALT	-	Zenit-3F	0	2	55.0	3.35	615.0	13500	7000	-	0	0	
Chang Zheng 7A	DF5	CALT	G	Zenit-3F	0	3	53.1	3.35	594.0	13500	7000	-	0	0	
Chang Zheng 8	DF5	CALT	-	Zenit-3F	0	2	53.1	3.35	594.0	8400	2800	4800	0	13000	
Chang Zheng 8	DF5	CALT	0	Zenit-3F	1	2	53.1	3.35	594.0	8400	2800	4800	0	13000	
Chang Zheng 4	DF5	SAST	-	Zenit-3F	1	3	42.0	3.35	249.0	16500	0	2962	0	1000	
Chang Zheng 4B	DF5	SAST	-	Zenit-3F	1	3	43.1	3.35	254.4	2800	1500	2962	0	1000	
Chang Zheng 4C	DF5	SAST	-	Zenit-3F	1	3	43.1	3.35	254.4	2800	1500	2962	0	1000	
Tianlong-2	TL2	TIANB	-	Zenit-3F	1	3	32.8	3.35	150.0	2000	0	1860	0	13000	
Titan I	Titan	MARTD	-	Zenit-3F	1	2	31.0	3.05	105.1	0	0	1450	M	1000	13000
Titan II	Titan	MARTD	-	Zenit-3F	1	2	31.1	3.05	150.0	0	0	2000	M	1380	13000
Titan II GLV	Titan	MARTD	-	Zenit-3F	1	2	32.8	3.05	150.0	3600	0	2090	M	300	13000
Titan II SLV	Titan	MARTD	-	Zenit-3F	1	2	34.6	3.05	155.0	1900	0	2900	0	1000	13000
Titan IIIA	Titan	MARTD	-	Zenit-3F	1	3	42.0	3.05	161.7	4100	-	2300	0	4000	13000
Titan IIIB	Titan	MWD	-	Zenit-3F	1	3	45.0	3.05	156.5	3700	0	2300	0	1000	13000
Titan IIIC	Titan	MWD	-	Zenit-3F	0	3	38.3	3.05	626.2	13300	3000	10600	0	40000	13000

LV

LV_Name	LV_Family	LV_Manufacturer	LV_Variant	LV_Alias	LV_Min_Stage	LV_Max_Stage	Length m	Diameter m	Launch_Mass t	LEO_Capacity kg	GTO_Capacity kg	TU_Thrust kN	Class	Apogee km	Range km
Titan IIID	Titan	MMD	-	Zenit-3F	0	2	36.0	3.05	613.0	11200	0	10600	0	1000	13000
Titan IIIE	Titan	MMD	-	Zenit-3F	0	3	48.8	3.05	633.0	14000	0	10600	0	400000	13000
Titan 23B	Titan	MMD	-	Zenit-3F	1	3	45.0 ?	3.05	165.0 ?	3600	-	2300	0	1000	13000
Titan 24B	Titan	MMD	-	Zenit-3F	1	3	45.0	3.05	170.0 ?	3600	-	2410	0	1000	13000
Titan 33B	Titan	MMD	-	Zenit-3F	1	3	45.0 ?	3.05	185.0 ?	3600	-	2300	0	40000	13000
Titan 34B	Titan	MMD	-	Zenit-3F	1	3	45.5	3.05	188.5	3600	0	2410	0	40000	13000
Titan 34D	Titan	MMD	-	Zenit-3F	0	2	50.0	3.05	723.5	15350	0	11280	0	40000	13000
Titan 34D/Transtage	Titan	MMD	-	Zenit-3F	0	3	50.0	3.05	720.0 ?	0	5000	11280	0	40000	13000
Titan 34D/IUS	Titan	MMD	-	Zenit-3F	0	4	52.4	3.05	725.0 ?	0	5000	11280	0	40000	13000
Commercial Titan 3	Titan	MMD	-	Zenit-3F	0	2	47.3	3.05	680.0	14515	1850	12450	0	40000	13000
Titan 401A/Centaur	Titan	LVA	-	Zenit-3F	0	3	63.1	3.05	868.0	0	-	14200	0	40000	13000
Titan 402A/IUS	Titan	LVA	-	Zenit-3F	0	4	54.0	3.05	910.0	0	-	14200	0	40000	13000
Titan 403A	Titan	LVA	-	Zenit-3F	0	2	54.0	3.05	906.0	17700	0	14200	0	1000	13000
Titan 404A	Titan	LVA	-	Zenit-3F	0	2	54.0	3.05	906.0	17700	0	14200	0	1000	13000
Titan 405A	Titan	LVA	-	Zenit-3F	0	2	54.0	3.05	906.0	17700	0	14200	0	1000	13000
Titan 401B/Centaur	Titan	LVA	-	Zenit-3F	0	3	62.2	3.05	939.0	0	9000	15000	0	400000	13000
Titan 402B/IUS	Titan	LVA	-	Zenit-3F	0	4	54.0	3.05	925.0	0	-	15000	0	1000	13000
Titan 403B	Titan	LVA	-	Zenit-3F	0	2	54.0	3.05	910.0	21680	0	15000	0	1000	13000
Titan 404B	Titan	LVA	-	Zenit-3F	0	2	54.0	3.05	910.0	21680	0	15000	0	1000	13000
Titan 405B	Titan	LVA	-	Zenit-3F	0	2	54.0	3.05	910.0	21680	0	15000	0	1000	13000
Blue Streak	ELDO	ELDO	-	Zenit-3F	1	1	31.7	3.05	100.0 ?	0	0	1512	X	250	13000
Blue Streak	ELDO	ELDO	-	Zenit-3F	1	3	31.7	3.05	104.6	1000	200	1512	0	2000	13000
ELDO A	BlueStreak	ELDO	-	Zenit-3F	1	3	31.7	3.05	104.6	1000	200	1512	0	2000	13000
Europa I	BlueStreak	ELDO	-	Zenit-3F	1	3	31.7	3.05	104.6	1000	200	1512	0	2000	13000
Europa II	BlueStreak	ELDO	-	Zenit-3F	1	4	31.7	3.05	111.7	1160	360	1512	0	40000	13000
Atlas A	Atlas	GDA	-	Zenit-3F	0	1	22.9	3.05	82.0	0	0	1210	X	120	900
Atlas B	Atlas	GDA	-	Zenit-3F	0	1	22.0	3.05	112.5	68	0	1615	0	900	6000
Atlas C	Atlas	GDA	-	Zenit-3F	0	1	24.0	3.05	112.5 ?	0	0	1615	0	900	8000
Atlas D	Atlas	GDA	-	Zenit-3F	0	1	24.0	3.05	119.0	1400	0	1629	M	1855	13000
Atlas E	Atlas	GDA	-	Zenit-3F	0	1	20.0	3.05	121.0	1700	0	1731	0	2000	13000
Atlas F	Atlas	GDA	-	Zenit-3F	0	1	20.0	3.05	121.0	1700	0	1731	0	1413	13000
Atlas F/Trident	Atlas	GDA	-	Zenit-3F	0	2	25.0 ?	3.05	130.0 ?	0	0	1731	M	1500	13000
Atlas E/Trident	Atlas	GDA	-	Zenit-3F	0	2	25.0 ?	3.05	130.0 ?	0	0	1731	M	1500	13000
Atlas C Able	Atlas	GDA	-	Zenit-3F	0	3	28.0 ?	3.05	120.0 ?	170	0	1615	0	400000	13000
Atlas F/Agenda D	Atlas	GDA	-	Zenit-3F	0	2	34.6	3.05	130.0 ?	-	0	1731	0	1000	13000
Atlas F/MSD	Atlas	GDA	-	Zenit-3F	0	2	27.3	3.05	122.0 ?	1200	0	1731	0	1100	13000
Atlas E/MSD	Atlas	GDA	-	Zenit-3F	0	2	27.3	3.05	122.0 ?	1200	0	1731	0	1100	13000
Atlas E Altaire	Atlas	GDA	-	Zenit-3F	0	2	27.3 ?	3.05	125.0 ?	0	0	1731	0	1000	13000
Atlas F/OIS	Atlas	GDA	-	Zenit-3F	0	2	32.1 ?	3.05	120.0 ?	-	0	1731	0	550	13000
Atlas E/OIS	Atlas	GDA	-	Zenit-3F	0	2	28.7	3.05	120.0 ?	-	0	1731	0	2000	13000
Atlas F/PTS	Atlas	GDA	-	Zenit-3F	0	2	29.2	3.05	125.0 ?	295	295	1731	0	8000	13000
Atlas F/SVS	Atlas	GDA	-	Zenit-3F	0	3	29.2	3.05	125.0 ?	700	0	1731	0	20000	13000
Atlas F/SVS	Atlas	GDA	-	Zenit-3F	0	3	29.2	3.05	125.0 ?	700	0	1731	0	20000	13000
Atlas E/SVS-2	Atlas	GDA	-	Zenit-3F	0	3	32.1 ?	3.05	125.0 ?	861	0	1731	0	20000	13000
Atlas SILV-3	Atlas	GDA	-	Zenit-3F	0	1	21.0 ?	3.05	120.0 ?	0	0	1650	0	1500	13000
Atlas G Centaur	Atlas	GDA	-	Zenit-3F	0	2	41.8	3.05	166.1	3630	2400	1987	0	40000	13000
Atlas H	Atlas	GDA	-	Zenit-3F	0	1	27.4	3.05	150.5	2000	0	1954	0	1100	13000
Atlas Able	Atlas	GDA	-	Zenit-3F	0	3	35.0	3.05	120.0	-	0	1629	0	400000	13000
Atlas Agena A	Atlas	GDA	-	Zenit-3F	0	2	30.0 ?	3.05	124.0	-	0	1629	0	600	13000
Atlas Agena B	Atlas	GDA	-	Zenit-3F	0	2	32.1 ?	3.05	130.0 ?	-	0	1629	0	400000	13000
Atlas Agena D	Atlas	GDA	-	Zenit-3F	0	2	32.1	3.05	130.0 ?	-	800	1590	0	400000	13000
Atlas SILV-3 Agena B	Atlas	GDA	-	Zenit-3F	0	2	32.1 ?	3.05	140.0 ?	-	0	1629	0	400000	13000
Atlas SILV-3 Agena D	Atlas	GDA	-	Zenit-3F	0	2	32.1 ?	3.05	140.0 ?	-	850	1629	0	400000	13000
Atlas SILV-3A Agena D	Atlas	GDA	-	Zenit-3F	0	2	36.0	3.05	155.0 ?	-	1000	1700	0	150000	13000
Atlas Burner 2	Atlas	GDA	-	Zenit-3F	0	2	28.9	3.05	130.0 ?	-	0	1700	0	800	13000
Atlas Burner 2A	Atlas	GDA	-	Zenit-3F	0	3	30.0 ?	3.05	130.0 ?	-	0	1700	0	800	13000
Atlas Centaur	Atlas	GDA	-	Zenit-3F	0	2	33.0	3.05	136.1	-	1700	1629	0	400000	13000
Atlas Centaur D	Atlas	GDA	-	Zenit-3F	0	2	33.0	3.05	136.1	-	1700	1629	0	400000	13000
Atlas SILV-3C Centaur	Atlas	GDA	-	Zenit-3F	0	2	40.2	3.05	148.4	-	1800	1741	0	400000	13000
Atlas SILV-3D Centaur	Atlas	GDA	-	Zenit-3F	0	2	40.3	3.05	149.0	-	1900	1741	0	400000	13000
Atlas I	Atlas	LVA	-	Zenit-3F	0	2	41.8	3.05	166.1	6580	2250	1987	0	400000	13000
Atlas II	Atlas	LVA	-	Zenit-3F	0	2	45.0 ?	3.05	187.0 ?	0	2770	2140	0	40000	13000
Atlas IIA	Atlas	LVA	-	Zenit-3F	0	2	47.4	3.05	187.5	7316	3066	2140	0	100000	13000
Atlas IIMS	Atlas	LVA	-	Zenit-3F	-1	2	47.4	3.05	237.2	8618	3719	3000	0	400000	13000
Atlas 3A	Atlas	LVA	-	Zenit-3F	2	2	52.8	3.05	225.0	8620	4060	3827	0	40000	13000
Atlas 3B	Atlas	LVA	SEC	Zenit-3F	1	2	53.6	3.05	225.0	8620	4060	3827	0	40000	13000
Atlas 3B	Atlas	LVA	DEC	Zenit-3F	1	2	53.6	3.05	225.0	8620	4060	3827	0	40000	13000
New Shepard	NewShepard	BLOR	-	Zenit-3F	1	1	15.0	3.00	75.0	0	0	1020	0	100	13000
Vega	Vega	ELV	-	Zenit-3F	1	4	30.1	3.00	136.7	1500	-	2974	0	1000	13000
Vega	Vega	ELV	1	Zenit-3F	1	4	30.1	3.00	136.7	1500	-	2974	0	1000	13000
YGCS	YGCS	CALT	-	Zenit-3F	1	1	20.0 ?	3.00 ?	100.0 ?	0	0	-	M	200	13000
Sarmat	Sarmat	MAK	-	Zenit-3F	1	2	35.5 ?	3.00	208.1 ?	0	0	-	M	1000	13000
R-36	R-36	OKB586	-	Zenit-3F	1	2	34.1	3.00	183.9	0	0	2360	M	1000	1100
R-36 8K67	R-36	OKB586	-	Zenit-3F	1	2	34.1	3.00	183.9	0	0	2360	M	1000	1100

LV

LV_Name	LV_Family	LV_Manufacturer	LV_Variant	LV_Alias	LV_Min_Stage	LV_Max_Stage	Length m	Diameter m	Launch_Mass t	LEO_Capacity kg	GTO_Capacity kg	TU_Thrust kN	Class	Apogee km	Range km
R-36 8K67P	R-36	OKB586	-	Zenit-3F	1	2	33.9	3.00	183.9	0	0	2360	M	1000	1100
R-36 8K67PM	R-36	OKB586	-	Zenit-3F	1	2	33.9	3.00	183.9	0	0	2360	M	1000	1100
R-36 8K67M	R-36	OKB586	-	Zenit-3F	1	2	34.6	3.00	185.0	0	0	2360	M	1000	1100
R-36 8K67MA	R-36	OKB586	-	Zenit-3F	1	2	34.6	3.00	185.0	0	0	2360	M	1000	1100
R-360 8K69	R-36	OKB586	-	Zenit-3F	1	2	35.0	3.00	180.0	0	0	2360	0	200	1100
R-360 8K69M	R-36	OKB586	-	Zenit-3F	1	2	35.0	3.00	180.0	0	0	2360	0	200	1100
Tsikhon-2A	R-36	OKB586	-	Zenit-3F	1	2	39.7	3.00	180.0	3000	0	2852	0	1000	1100
Tsikhon-2	R-36	OKB586	-	Zenit-3F	1	2	35.5	3.00	180.0	3350	0	2652	0	1000	1100
Tsikhon-3	R-36	YUZH	-	Zenit-3F	1	3	30.0	3.00	190.0	4100	0	2745	0	2000	1100
R-36M 15A14	R-36	YUZH	-	Zenit-3F	1	3	33.6	3.00	209.6	0	0	4500	M	1000	150
R-36MU 15A18	R-36	YUZH	-	Zenit-3F	1	3	34.3	3.00	211.0	0	0	4525	M	1000	110
R-36M2 15A18M	R-36	YUZH	-	Zenit-3F	1	3	37.0	3.00	211.1	0	0	4500	M	1000	110
Dnepr	R-36	YUZH	-	Zenit-3F	1	3	34.3	3.00	211.0	4500	0	4525	0	1500	110
R-16	R-16	OKB586	-	Zenit-3F	1	3	34.3	3.00	140.6	0	0	2610	M	1000	110
R-16U	R-16	OKB586	-	Zenit-3F	1	2	34.3	3.00	140.6	0	0	2610	M	1000	130
UR-200	UR-200	KHRU	-	Zenit-3F	1	2	26.4	3.00	138.0	0	0	2001	M	1000	120
R-7	R-7	OKB1	-	Zenit-3F	1	2	34.2	2.95	274.3	0	0	3904	M	1000	120
R-7	R-7	OKB1	71/III	Zenit-3F	1	2	33.5	2.95	279.1	0	0	3904	M	1000	120
R-7A	R-7	OKB1	-	Zenit-3F	1	2	33.5	2.95	283.5	0	0	3998	M	1000	120
Sputnik 8K71FS	R-7	OKB1	-	Zenit-3F	1	3	38.4	2.95	287.0	4700	0	3998	0	70000	120
Sputnik 8A91	R-7	OKB1	-	Zenit-3F	1	3	38.4	2.95	285.9	4750	0	4020	0	500	120
Vostok 11A57	R-7	OKB1	-	Zenit-3F	1	3	29.2	2.95	268.6	500	0	3806	0	1500	120
Vostok-L 8K72	R-7	OKB1	-	Zenit-3F	1	3	44.0	2.95	305.1	5600	0	4054	0	500	120
Vostok 8K72	R-7	OKB1	-	Zenit-3F	1	3	33.5	2.95	279.1	4000	0	3998	0	4000000	120
Vostok 8K72	R-7	OKB1	K	Zenit-3F	1	3	38.4	2.95	283.5	4500	0	3998	0	500	120
Vostok 8K92	R-7	OKB1	-	Zenit-3F	1	3	38.4	2.95	287.0	4700	0	3998	0	70000	120
Vostok 8A92M	R-7	PROG	-	Zenit-3F	1	3	38.4	2.95	285.9	4750	0	4020	0	500	120
Polyot 11A59	R-7	PROG	-	Zenit-3F	1	3	38.5	2.95	283.1	1280	0	4020	0	1000	120
Vostok-2A 11A510	R-7	OKB1	-	Zenit-3F	1	2	34.8	2.95	275.3	2250	0	4020	0	1500	120
Soyuz 11A511	R-7	PROG/OKB1	-	Zenit-3F	1	2	37.9	2.95	280.7	3600	0	4054	0	250	120
Soyuz 11A511L	R-7	PROG/OKB1	-	Zenit-3F	1	3	50.0 ?	2.95	300.0 ?	6500	0	4054	0	400	120
Soyuz 11A511H	R-7	PROG/OKB1	-	Zenit-3F	1	3	50.0 ?	2.95	300.0 ?	6500	0	4054	0	400	120
Soyuz-U	R-7	PROG	-	Zenit-3F	1	3	50.0 ?	2.95	300.0 ?	6500	0	4054	0	400	120
Soyuz-U-PVB	R-7	PROG	-	Zenit-3F	1	3	50.7	2.95	310.0	7200	0	4032	0	500	120
Soyuz-U2	R-7	PROG	-	Zenit-3F	1	3	50.7	2.95	310.0	7200	0	4032	0	500	120
Soyuz-2-1A	R-7	PROG	Ikar	Zenit-3F	1	4	43.4	2.95	305.0	4100	0	4032	0	500	120
Soyuz-2-1B	R-7	PROG	Fregat	Zenit-3F	1	4	42.5	2.95	308.0	5000	0	4146	0	500	120
Soyuz-2-1A	R-7	PROG	-	Zenit-3F	1	3	50.7	2.95	313.0	7600	0	4146	0	500	120
Soyuz-2-1B	R-7	PROG	-	Zenit-3F	1	4	50.7	2.95	313.0	7600	0	4146	0	500	120
Soyuz-2-1A	R-7	PROG	Fregat	Zenit-3F	1	4	50.7	2.95	313.0	7600	0	4146	0	500	120
Soyuz-2-1B	R-7	PROG	Fregat	Zenit-3F	1	4	50.7	2.95	313.0	7600	0	4146	0	500	120
Soyuz-2-1V	Block-A	PROG	-	Zenit-3F	1	2	41.1	2.95	160.0	2800	0	-	0	0	120
Soyuz-2-1V	Block-A	PROG	Volga	Zenit-3F	1	3	41.1	2.95	160.0	2800	0	-	0	0	120
Soyuz-ST-A	R-7	PROG	-	Zenit-3F	1	5	50.7	2.95	313.0	7600	0	4146	0	500	120
Soyuz-ST-A	R-7	PROG	Fregat	Zenit-3F	1	4	50.7	2.95	313.0	7600	0	4146	0	500	120
Soyuz-ST-B	R-7	PROG	-	Zenit-3F	1	4	50.7	2.95	313.0	7600	0	4146	0	500	120
Soyuz-ST-B	R-7	PROG	Fregat	Zenit-3F	1	4	50.7	2.95	313.0	7600	0	4146	0	500	120
Soyuz-FG	R-7	PROG	-	Zenit-3F	1	4	46.0 ?	2.95	308.0	7200	0	4146	0	500	120
Soyuz-FG	R-7	PROG	Fregat	Zenit-3F	1	4	46.0 ?	2.95	308.0	7200	0	4146	0	500	120
Molniya 8K78	R-7	OKB1	-	Zenit-3F	1	5	44.0	2.95	306.5	-	0	4020	0	400000	120
Molniya 8K78	R-7	OKB1	E6	Zenit-3F	1	5	44.4	2.95	306.2	-	0	4054	0	400000	120
Molniya 8K78M	R-7	PROG	M	Zenit-3F	1	5	44.4	2.95	306.2	-	0	4054	0	400000	120
Molniya 8K78M	R-7	PROG	-	Zenit-3F	1	5	42.8	2.95	305.5	-	0	4054	0	400000	120
Molniya 8K78M	R-7	PROG	MIM	Zenit-3F	1	5	42.8	2.95	305.5	-	0	4054	0	400000	120
Molniya 8K78M	R-7	PROG	ML	Zenit-3F	1	5	43.4	2.95	305.0	0	2000	4054	0	40000	120
Molniya 8K78M-PVB	R-7	PROG	ML	Zenit-3F	1	5	43.4	2.95	305.0	0	2000	4054	0	40000	120
Molniya 8K78M	R-7	PROG	SOL	Zenit-3F	1	5	43.4	2.95	305.0	0	2000	4054	0	400000	120
Molniya 8K78M	R-7	PROG	VL	Zenit-3F	1	5	43.4	2.95	305.0	0	2000	4054	0	400000	120
Molniya 8K78M	R-7	PROG	2BL	Zenit-3F	1	5	43.4	2.95	305.0	0	2000	4054	0	40000	120
Molniya 8K78M	R-7	PROG	2BL	Zenit-3F	1	5	43.4	2.95	305.0	0	2000	4054	0	40000	120
Molniya 8K78M-PVB	R-7	PROG	2BL	Zenit-3F	1	5	43.4	2.95	305.0	0	2000	4054	0	40000	120
Angara A5	Angara	KHRU	-	Zenit-3F	0	3	42.8 ?	2.90	773.0	24500	5400	2095	0	200	120
Angara A5/Persei	Angara	KHRU	-	Zenit-3F	0	3	42.8 ?	2.90	773.0	24500	5400	2095	0	200	120
Angara A5/Orion	Angara	KHRU	-	Zenit-3F	1	2	42.8 ?	2.90	773.0	24500	5400	2095	0	200	120
Angara-1.2PP	Angara	KHRU	-	Zenit-3F	1	2	42.8	2.90	171.0	0	0	2095	0	200	120
Angara-1.2	Angara	KHRU	-	Zenit-3F	1	2	42.8	2.90	171.0	0	0	2095	0	200	120
Naro-1	Angara	KARI	-	Zenit-3F	1	3	33.5	2.90	140.0	100	0	2095	0	200	120
PSLV	PSLV	VSSC/SHAR	-	Zenit-3F	0	4	44.4	2.80	294.0	1600	800	5290	0	1000	120
PSLV	PSLV	VSSC/SHAR	C	Zenit-3F	0	4	44.4	2.80	294.0	1600	800	5290	0	1000	120
PSLV	PSLV	VSSC/SHAR	CA	Zenit-3F	1	4	44.4	2.80	230.0	1300	1000	4430	0	1000	120
PSLV-DL	PSLV	VSSC/SHAR	-	Zenit-3F	0	4	44.4	2.80	230.0	1300	1000	4430	0	1000	120
PSLV-QL	PSLV	VSSC/SHAR	-	Zenit-3F	0	4	44.4	2.80	230.0	1300	1000	4430	0	1000	120

LV

LV_Name	LV_Family	LV_Manufacturer	LV_Variant	LV_Alias	LV_Min_Stage	LV_Max_Stage	Length m	Diameter m	Launch_Mass t	LEO_Capacity kg	GTO_Capacity kg	TU_Thrust kN	Class	Apogee km	Range km
PSLV-XL	PSLV	VSSC/SHAR	-	Zenit-3F	0	4	44.4	2.80	230.0	1800	1000	9230	0	1000	120
GSLV Mk I	PSLV	VSSC/SHAR	a	Zenit-3F	0	3	49.0	2.80	401.0	0	2500	7420	0	40000	120
GSLV Mk I	PSLV	VSSC/SHAR	b	Zenit-3F	0	3	49.0	2.80	401.0	0	2500	7420	0	40000	120
GSLV Mk I	PSLV	VSSC/SHAR	c	Zenit-3F	0	3	49.0	2.80	401.0	0	2500	7420	0	40000	120
GSLV Mk II	PSLV	VSSC/SHAR	-	Zenit-3F	0	3	49.1	2.80	401.0	0	2500	7420	0	40000	120
GSLV Mk II	PSLV	VSSC/SHAR	b	Zenit-3F	0	3	49.1	2.80	415.6	0	2500	7420	0	40000	120
GSLV Mk II	PSLV	VSSC/SHAR	c	Zenit-3F	0	3	50.1	2.80	415.6	0	2500	7420	0	40000	120
R-9A	R-9	OKB1	-	Zenit-3F	1	1	24.0 ?	2.68	100.0	0	0	1385	M	1000	16000
Jupiter IREM	Jupiter	CHRY/ABMA	-	Zenit-3F	1	2	18.4	2.67	54.4	0	0	667	M	500	3000
Junco II	Jupiter	CHRY/ABMA	-	Zenit-3F	1	4	23.4	2.67	55.3	50	0	667	0	1000000	3000
Junco II	Jupiter	CHRY/ABMA	(3)	Zenit-3F	1	3	23.4	2.67	55.3	50	0	667	0	1000	3000
Lijiang-1	ZK-1	CASIOM	-	Zenit-3F	1	4	50.0	2.65	135.0	-	-	-	0	-	3000
Jieiong-3	ZK-1	CZJH	-	Zenit-3F	1	4	31.0	2.65	140.0	0	0	-	0	200	200
Yinli-1	ZK-1	DFK	-	Zenit-3F	0	3	29.0	2.65	100.0 ?	6500	0	-	0	200	200
Al Abid	Abid	IQ	-	Zenit-3F	1	3	25.0	2.64 ?	48.0	0	0	650	X	100	2000
KSLV-II TLV	KSLV2-2	KARI	-	Zenit-3F	1	3	25.8	2.60	52.1	0	0	747	M	200	2000
A-350	A-350	SKB30	-	Zenit-3F	1	4	24.4	2.50	91.0	0	450	2250	0	500	350
A-350Zh	A-350	SKB30	-	Zenit-3F	1	3	26.0	2.50	95.4	0	500	2250	0	500	350
A-925	A-350	FAKEL	-	Zenit-3F	1	2	17.9	2.57	32.0 ?	0	0	-	M	350	350
Nudol'	A-350	ALMAN	-	Zenit-3F	1	2	19.8	2.57	33.0	0	0	-	M	350	350
Hwasong-17	Hwasong-15	KPA	-	Zenit-3F	1	2	19.0 ?	2.60 ?	33.0 ?	0	0	-	M	1000	12000
Epsilon	H2_SRB	JAXA	-	Zenit-3F	1	2	25.0 ?	2.60 ?	100.0 ?	0	0	3200	M	1000	10000
Epsilon	H2_SRB	JAXA	2	Zenit-3F	1	4	24.4	2.50	105.6	0	0	1870	M	1000	10000
Epsilon	H2_SRB	JAXA	2	Zenit-3F	1	3	24.3	2.50	105.6	0	0	1870	M	1000	10000
Strela	UR-100N	NPOMA	-	Zenit-3F	1	3	29.2	2.50	105.0	1400	0	-	0	500	10000
Rokot	UR-100N	KHRU	K	Zenit-3F	1	3	29.0	2.50	107.0	1850	0	1870	0	1500	10000
Rokot	UR-100N	KHRU	-	Zenit-3F	1	3	29.0	2.50	107.0	1850	0	1870	0	1500	10000
M-V	UR-100N	NISST	-	Zenit-3F	1	3	30.7	2.50	139.0	1800	0	3786	0	1000	10000
Thor DM-18	Thor	DACM	1	Zenit-3F	1	3	30.7	2.50	139.0	1800	0	3786	0	1000	10000
Thor DM-18A	Thor	DACM	-	Zenit-3F	1	1	19.8	2.44	48.5 ?	0	0	710	M	520	10000
Thor DM-18C	Thor	DACM	-	Zenit-3F	1	1	19.4	2.44	48.9	0	0	668	M	520	10000
Thor Able	Thor	DACM	-	Zenit-3F	1	2	22.0	2.44	48.5	0	0	734	M	500	10000
Thor Able I	Thor	DACM	-	Zenit-3F	1	2	24.8	2.44	48.3	0	0	668	M	1600	10000
Thor Able II	Thor	DACM	-	Zenit-3F	1	3	26.9	2.44	52.0 ?	50	0	710	0	10000	10000
Thor Able III	Thor	DACM	M1	Zenit-3F	1	3	27.3	2.44	52.0 ?	0	0	668	M	1600	10000
Thor Able IV	Thor	DACM	-	Zenit-3F	1	3	27.8	2.44	52.0 ?	0	0	668	0	10000	10000
Thor Ablestar	Thor	DACM	-	Zenit-3F	1	3	27.4	2.44	52.0 ?	100	0	668	0	400000	10000
Thor Ablestar	Thor	DACM	2	Zenit-3F	1	2	27.2	2.44	52.0 ?	100	0	668	0	1500	10000
Thor Agena A	Thor	DACM	-	Zenit-3F	1	2	23.5	2.44	53.0	150	0	756	0	1500	10000
Thor Agena B	Thor	DACM	-	Zenit-3F	1	2	23.8	2.44	53.0	150	0	756	0	1500	10000
Thor Agena D	Thor	DACM	-	Zenit-3F	1	2	24.0	2.44	53.1	250	0	670	0	1000	10000
Thor SLV-2 Agena B	Thor	DACM	-	Zenit-3F	1	2	23.4 ?	2.44	56.5	0	0	670	0	1000	10000
Thor SLV-2 Agena D	Thor	DACM	-	Zenit-3F	1	2	23.4	2.44	56.5	0	0	743	0	5500	10000
Thor SLV-2 Agena D	Thor	DACM	-	Zenit-3F	1	2	27.2	2.44	56.5 ?	0	0	756	0	1000	10000
Thor SLV-2H Agena B	Thor	DACM	-	Zenit-3F	1	2	27.2	2.44	56.5 ?	0	0	756	0	1000	10000
Thor SLV-2H Agena D	Thor	DACM	-	Zenit-3F	1	2	27.2	2.44	56.5 ?	0	0	756	0	1000	10000
Thorad SLV-2G Agena D	Thor	DACM	-	Zenit-3F	0	2	27.2	2.44	67.8	0	0	1475	0	2000	10000
Thorad SLV-2H Agena D	Thor	DACM	-	Zenit-3F	0	2	27.2	2.44	67.8	0	0	1475	0	2000	10000
Thor Delta A	Thor	DACM	-	Zenit-3F	1	3	32.9	2.44	91.4 ?	1500	0	1444	0	1000	10000
Thor Delta B	Thor	DACM	-	Zenit-3F	1	3	32.9	2.44	91.4 ?	1500	0	1444	0	1000	10000
Thor Delta C1	Thor	DACM	-	Zenit-3F	1	3	32.9	2.44	91.4 ?	1500	0	1444	0	1000	10000
Thor Delta D	Thor	DACM	-	Zenit-3F	1	3	32.9	2.44	91.4 ?	1500	0	1444	0	1000	10000
Thor Delta E	Thor	DACM	-	Zenit-3F	1	3	27.5	2.44	50.7	226	0	734	0	400000	10000
Thor Delta E1	Thor	DACM	-	Zenit-3F	1	3	27.5	2.44	51.0	250	0	756	0	100000	10000
Thor Delta E1	Thor	DACM	-	Zenit-3F	1	3	27.5	2.44	51.8	270	0	756	0	100000	10000
Thor Delta J	Thor	DACM	-	Zenit-3F	1	3	27.5	2.44	51.8	350	0	756	0	400000	10000
Thor Delta L	Thor	DACM	-	Zenit-3F	1	3	27.5	2.44	52.0 ?	400	81	756	0	10000	10000
Thor Delta M	Thor	DACM	-	Zenit-3F	1	3	27.5	2.44	52.0 ?	400	81	756	0	1000	10000
Thor Delta M6	Thor	DACM	-	Zenit-3F	0	3	28.0	2.44	68.0	450	150	104	0	40000	10000
Thor Delta N	Thor	DACM	-	Zenit-3F	0	3	28.0	2.44	68.0	450	150	104	0	400000	10000
Thor Delta N6	Thor	DACM	-	Zenit-3F	0	2	28.0 ?	2.44	65.0 ?	0	0	1450	0	400000	10000
Thor DSV-2D	Thor	DACM	-	Zenit-3F	0	2	28.0	2.44	65.0 ?	0	0	1590	0	400	10000
Thor DSV-2E	Thor	DACM	-	Zenit-3F	0	3	28.0 ?	2.44	65.0 ?	0	0	1590	0	6000	10000
Thor DSV-2F	Thor	DACM	-	Zenit-3F	0	3	34.0	2.44	89.9	0	300	1590	0	400000	10000
Thor DSV-2G	Thor	DACM	-	Zenit-3F	0	3	32.4	2.44	91.0 ?	0	355	1590	0	40000	10000
Thor DSV-2J	Thor	DACM	-	Zenit-3F	0	3	32.4	2.44	103.7	0	450	2411	0	400000	10000
Thor DSV-2K	Thor	DACM	-	Zenit-3F	0	2	33.0	2.44	90.0 ?	0	0	1590	0	1500	10000
Thor DSV-2L	Thor	DACM	-	Zenit-3F	0	2	33.0 ?	2.44	102.9	0	0	2411	0	1500	10000
Thor DSV-2M	Thor	DACM	-	Zenit-3F	1	1	21.7	2.44	50.0 ?	0	0	743	X	50	10000
Thor DSV-2N	Thor	DACM	-	Zenit-3F	1	1	19.4	2.44	49.3	0	0	668	M	50	10000
Thor DSV-2O	Thor	DACM	-	Zenit-3F	1	1	20.8	2.44	50.0 ?	0	0	668	V	50	10000
Thor DSV-2P	Thor	DACM	-	Zenit-3F	1	2	26.9	2.44	55.0 ?	0	0	668	V	75	10000
Thor DSV-2Q	Thor	DACM	-	Zenit-3F	1	1	19.4	2.44	55.0 ?	0	0	668	M	1500	10000

LV

LV_Name	LV_Family	LV_Manufacturer	LV_Variant	LV_Alias	LV_Min_Stage	LV_Max_Stage	Length m	Diameter m	Launch_Mass t	LEO_Capacity kg	GTO_Capacity kg	TU_Thrust kN	Class	Apogee km	Range km
Thor DSV-2U	Thor	DACM	-	Zenit-3F	1	2	23.0 ?	2.44	49.5 ?	500	0	750	0	1000	10000
Thor MG-18	Thor	DACM	-	Zenit-3F	1	2	23.0	2.44	50.0 ?	200	0	668	0	1000	10000
Thor Burner 1	Thor	DACM	-	Zenit-3F	1	2	23.0	2.44	50.0 ?	200	0	668	0	1000	10000
Thor Burner 2	Thor	DACM	-	Zenit-3F	1	2	22.4	2.44	50.0 ?	500	0	750	0	1000	10000
Thor Burner 2A	Thor	DACM	-	Zenit-3F	1	2	23.0 ?	2.44	50.0 ?	500	0	750	0	1000	10000
Delta 0300	Thor	MDAC	-	Zenit-3F	0	3	34.0	2.44	90.1 ?	1000	0	1590	0	1500	10000
Delta 0900	Thor	MDAC	-	Zenit-3F	0	2	34.0	2.44	116.5	1300	0	2500	0	1500	10000
Delta 1410	Thor	MDAC	-	Zenit-3F	0	2	35.0	2.44	110.0 ?	1000	0	1863	0	900	10000
Delta 1604	Thor	MDAC	-	Zenit-3F	0	3	35.0	2.44	118.0 ?	-	600	2410	0	200000	10000
Delta 1900	Thor	MDAC	-	Zenit-3F	0	2	35.0	2.44	130.0 ?	-	0	2410	0	4000	10000
Delta 1910	Thor	MDAC	-	Zenit-3F	0	2	35.0	2.44	130.0 ?	-	0	2410	0	550	10000
Delta 1913	Thor	MDAC	-	Zenit-3F	0	3	35.0	2.44	130.0 ?	-	-	2410	0	400000	10000
Delta 1914	Thor	MDAC	-	Zenit-3F	0	3	35.0	2.44	130.3	-	-	2410	0	40000	10000
Delta 2310	Thor	MDAC	-	Zenit-3F	0	2	35.0	2.44	131.0 ?	-	0	1737	0	1500	10000
Delta 2910	Thor	MDAC	-	Zenit-3F	0	2	35.0	2.44	131.0 ?	-	0	2560	0	3000	10000
Delta 2313	Thor	MDAC	-	Zenit-3F	0	3	35.0	2.44	131.0 ?	1540	500	1737	0	40000	10000
Delta 2913	Thor	MDAC	-	Zenit-3F	0	3	35.0	2.44	131.8	2000	700	2560	0	20000	10000
Delta 2914	Thor	MDAC	-	Zenit-3F	0	3	35.0	2.44	130.4	2000	724	2560	0	400000	10000
Delta 2914	Thor	MDAC	C	Zenit-3F	0	3	35.0	2.44	130.4	2000	724	2560	0	40000	10000
Delta 3910	Thor	MDAC	-	Zenit-3F	0	2	36.0	2.44	191.0 ?	-	0	3188	0	700	10000
Delta 3910/PAM	Thor	MDAC	-	Zenit-3F	0	3	36.0	2.44	191.6	0	1280	3188	0	40000	10000
Delta 3913	Thor	MDAC	-	Zenit-3F	0	3	36.0	2.44	191.6	0	1087	3188	0	40000	10000
Delta 3914	Thor	MDAC	-	Zenit-3F	0	3	35.0	2.44	190.0 ?	2700	951	3188	0	25000	10000
Delta 3920-8	Thor	MDAC	-	Zenit-3F	0	2	36.0	2.44	190.0 ?	-	0	3188	0	500	10000
Delta 3920	Thor	MDAC	-	Zenit-3F	0	2	36.0	2.44	191.0 ?	-	0	3188	0	700	10000
Delta 3920/PAM	Thor	MDAC	-	Zenit-3F	0	3	36.0	2.44	191.6	0	1280	3188	0	40000	10000
Delta 3924	Thor	MDAC	-	Zenit-3F	0	3	36.0	2.44	191.0 ?	-	0	3188	0	1000	10000
Delta 4925-8	Thor	MDAC	-	Zenit-3F	0	3	36.0	2.44	200.7	-	1200	3188	0	120000	10000
Delta 5920-8	Thor	MDAC	-	Zenit-3F	0	2	34.0	2.44	201.6	3850	0	3470	0	1000	10000
Delta 6920-8	Thor	MDAC	-	Zenit-3F	0	2	39.0 ?	2.44	219.0	-	0	3790	0	1000	10000
Delta 6920-10	Thor	MDAC	-	Zenit-3F	0	2	39.0 ?	2.44	219.0	-	0	3790	0	1000	10000
Delta 6925-8	Thor	MDAC	-	Zenit-3F	0	3	39.0 ?	2.44	219.0	0	1500	3790	0	40000	10000
Delta 6925-10	Thor	MDAC	-	Zenit-3F	0	3	39.0 ?	2.44	219.0	0	1445	3790	0	400000	10000
Delta 7320-10	Thor	MDAC	-	Zenit-3F	0	3	38.9	2.44	151.7	-	0	2500	0	1000	10000
Delta 7320-10C	Thor	MDAC	-	Zenit-3F	0	2	38.9	2.44	151.7	-	0	2500	0	1000	10000
Delta 7326-9.5	Thor	MDAC	-	Zenit-3F	0	2	38.4	2.44	155.0 ?	-	0	2500	0	400000	10000
Delta 7420-10C	Thor	MDAC	-	Zenit-3F	0	2	39.0 ?	2.44	165.0 ?	-	0	3020	0	1500	10000
Delta 7425-9.5	Thor	MDAC	-	Zenit-3F	0	3	39.0 ?	2.44	170.0 ?	-	-	3020	0	400000	10000
Delta 7425-10	Thor	MDAC	-	Zenit-3F	0	3	39.0 ?	2.44	170.0 ?	-	-	3020	0	400000	10000
Delta 7426-9.5	Thor	MDAC	-	Zenit-3F	0	3	39.0 ?	2.44	170.0 ?	-	-	3020	0	400000	10000
Delta 7920-8	Thor	MDAC	-	Zenit-3F	0	2	39.0 ?	2.44	220.0 ?	5118	0	4000	0	1000	10000
Delta 7920-10	Thor	MDAC	-	Zenit-3F	0	2	39.0 ?	2.44	220.0 ?	5118	0	4000	0	1000	10000
Delta 7920-10C	Thor	MDAC	-	Zenit-3F	0	2	39.0 ?	2.44	232.0 ?	-	0	4000	0	1000	10000
Delta 7920-10L	Thor	MDAC	-	Zenit-3F	0	2	40.0 ?	2.44	232.0 ?	-	0	4000	0	1000	10000
Delta 7925	Thor	MDAC	-	Zenit-3F	0	3	39.7	2.44	219.9	-	1816	4000	0	400000	10000
Delta 7925H	Thor	MDAC	-	Zenit-3F	0	3	39.7	2.44	283.0 ?	-	1816	5030	0	0	10000
Delta 7920H	Thor	MDAC	-	Zenit-3F	0	2	39.7	2.44	283.0	-	1816	5030	0	0	10000
Delta 7925-8	Thor	MDAC	-	Zenit-3F	0	3	38.2	2.44	220.0 ?	-	-	4000	0	400000	10000
Delta 7925-9.5	Thor	MDAC	-	Zenit-3F	0	3	39.0 ?	2.44	231.0 ?	-	-	4000	0	400000	10000
Delta 7925-10	Thor	MDAC	-	Zenit-3F	0	3	38.9	2.44	231.9	-	-	4000	0	400000	10000
Delta 7925-10C	Thor	MDAC	-	Zenit-3F	0	3	38.9	2.44	231.9	-	-	4000	0	400000	10000
Delta 7925-10L	Thor	MDAC	-	Zenit-3F	0	3	38.9	2.44	231.9	-	-	4000	0	400000	10000
Delta 8930	Thor	MDAC	-	Zenit-3F	0	2	33.0	2.44	301.5	8280	3800	4891	0	40000	10000
N-1	Thor	MHITO	-	Zenit-3F	0	3	36.0	2.44	90.0	1200	360	2290	0	40000	10000
N-2	Thor	MHITO	(2)	Zenit-3F	0	2	35.0	2.44	135.0	2000	730	2290	0	40000	10000
N-2	Thor	MHITO	(2)	Zenit-3F	0	2	35.0	2.44	133.0 ?	-	-	2290	0	1000	10000
H-1	Thor	MHITO	-	Zenit-3F	0	3	42.0	2.44	142.0	3200	1100	2130	0	40000	10000
H-1	Thor	MHITO	(2)	Zenit-3F	0	2	42.0	2.44	142.0	-	-	2130	0	1500	10000
H-1	Thor	MHITO	6R	Zenit-3F	0	3	42.0	2.44	145.0 ?	-	-	1350	0	40000	10000
R-39	R-39	MAK	-	Zenit-3F	1	3	16.0	2.40	84.0	0	0	2060	M	1000	830
R-39	R-39	MAK	-	Zenit-3F	1	3	16.0	2.40	84.0	0	0	2060	M	1000	830
R-39	R-39	MAK	-	Zenit-3F	1	3	16.0	2.40	84.0	0	0	2060	M	1000	830
R-39	R-39	MAK	-	Zenit-3F	1	3	16.0	2.40	84.0	0	0	2060	M	1000	830
Grom	R-39	MAK	-	Zenit-3F	1	3	22.4	2.40	104.5	0	0	2060	M	1000	1000
RT-23 15Zh44	R-39	YUZH	-	Zenit-3F	1	3	22.4	2.40	104.5	0	0	2060	M	1000	1000
RT-23 15Zh52	R-39	YUZH	-	Zenit-3F	1	3	22.6	2.40	104.5	0	0	2060	M	1000	1000
RT-23U 15Zh61	R-39	YUZH	-	Zenit-3F	1	3	22.6	2.40	104.5	0	0	2060	M	1000	1000
RT-23U 15Zh60	R-39	YUZH	-	Zenit-3F	1	3	22.6	2.40	104.5	0	0	2060	M	1000	1000
Hwasong-18	Hwasong-18	KFA	-	Zenit-3F	1	3	27.0	2.40	40.0 ?	0	0	-	M	3000	1000
Hwasong-19	Hwasong-18	KFA	-	Zenit-3F	1	3	27.0	2.40	40.0 ?	0	0	-	M	3000	1000
Hwasong-16	Hwasong-18	KFA	-	Zenit-3F	1	2	15.0 ?	2.40	18.0 ?	0	0	-	M	500	1000
Hwasong-16Ha	Hwasong-18	KFA	-	Zenit-3F	1	2	13.0 ?	2.40	18.0 ?	0	0	-	M	500	1000
Cheonlima-1	Hwasong-15	NADA	-	Zenit-3F	1	3	25.0	2.40 ?	100.0 ?	50	0	1000	0	2000	1000
NK Kerolox LV	Hwasong-15	NADA	-	Zenit-3F	1	3	25.0	2.40 ?	100.0 ?	50	0	1000	0	2000	1000



LV

LV_Name	LV_Family	LV_Manufacturer	LV_Variant	LV_Alias	LV_Min_Stage	LV_Max_Stage	Length m	Diameter m	Launch_Mass t	LEO_Capacity kg	GTD_Capacity kg	TU_Thrust kN	Class	Apogees km	Range km
Hwasong-15	Hwasong-15	KPA	-	Zenit-3F	1	2	22.0 ?	2.40 ?	85.0 ?	0	0	-	M	3000	1000
Unha-1	Unha	KPA	-	Zenit-3F	1	2	29.0	2.40	85.0 ?	0	0	1000	M	1000	4000
Unha-2	Unha	KPA	-	Zenit-3F	1	3	30.0	2.40	85.0 ?	50	0	1000	M	2000	4000
Unha-3	Unha	KPA	-	Zenit-3F	1	3	30.0	2.40	85.0 ?	50	0	1000	M	2000	4000
Kwangmyongsong	Unha	KPA	-	Unha-3	1	3	30.0	2.40	85.0 ?	50	0	1000	M	2000	4000
Simorgh	Unha	IR	-	Unha-3	1	2	27.0	2.40 ?	85.0 ?	50	0	1000	M	2000	4000
Simorgh	Unha	IR	3	Unha-3	1	3	27.0	2.40 ?	85.0 ?	50	0	1000	M	2000	4000
R-14	R-14	OKB586	-	Unha-3	1	1	24.4	2.40	86.3	0	0	1480	M	676	400
R-14U	R-14U	OKB586	-	Unha-3	1	1	24.4	2.40	86.4	0	0	1480	M	676	400
Kosmos 65S3	R-14	OKB586	-	Unha-3	1	2	32.4	2.40	109.0 ?	1500	0	1500	M	1500	400
Kosmos 11K65	R-14	OKB586	-	Unha-3	1	2	32.4	2.40	109.0 ?	1500	0	1485	M	1500	400
Kosmos 11K65M	R-14	OKB586	-	Unha-3	1	2	32.4	2.40	109.0 ?	1500	0	1485	M	1500	400
Vertikal' K6SUP	R-14	POL	-	Unha-3	1	2	27.6	2.40	90.0 ?	0	0	1485	X	1500	400
K65M-R	R-14	POL	-	Unha-3	1	2	32.4	2.40	109.0 ?	0	0	1485	M	500	400
K65M-RB	R-14	POL	-	Unha-3	1	2	32.4	2.40	109.0 ?	1500	0	1485	M	250	400
Burya	Burya	OKB23	-	Unha-3	1	2	22.0 ?	2.40	120.0 ?	0	0	1530	C	50	400
ARPA Taurus	MX	OSCC	-	Unha-3	1	4	27.9	2.35	73.0	1320	0	1711	M	1000	400
Taurus 2110	MX	OSCC	-	Unha-3	1	4	27.9	2.35	73.0	1320	0	1711	M	1000	400
Taurus 2210	MX	OSCC	-	Unha-3	1	4	29.7	2.35	73.0	1380	0	1711	M	1000	400
Taurus 3210	MX	OSCC	-	Unha-3	1	4	31.6	2.35	73.0	1380	0	1711	M	1000	400
Taurus 3110	MX	OSCC	-	Unha-3	1	4	31.6	2.35	73.0	1380	0	1711	M	1000	400
Taurus 1110	MX	OSCC	-	ARPA Taurus	1	4	27.9	2.35	73.0	1320	0	1711	M	1000	400
Minotaur C	MX	OSCC	-	ARPA Taurus	1	4	31.6	2.35	73.0	1380	0	1711	M	1000	400
Peacekeeper	MX	MWD	-	ARPA Taurus	1	4	21.6	2.30	88.5	0	0	1711	M	1000	400
LLV-1	LLV-1	LMSC	-	Athena-1	1	3	18.9	2.30	66.3	820	0	1450	M	1000	400
LLM-V-1	MX	LMSC	-	Athena-1	1	3	18.9	2.30	66.3	820	0	1450	M	1000	400
Athena-1	MX	LMSC	-	Athena-1	1	3	18.9	2.30	66.3	820	0	1450	M	1000	400
Athena-2	MX	LMSC	-	Athena-1	1	3	18.9	2.30	66.3	820	0	1450	M	1000	400
Minotaur V	MX	OSCC	-	Athena-1	1	4	28.2	2.30	120.7	2065	0	1450	M	1000	400
Minotaur IV	MX	OSCC	-	Athena-1	1	5	23.9	2.35	36.2	1735	0	1600	M	500	500
Minotaur IV	MX	OSCC	-	Athena-1	1	4	23.9	2.35	36.2	1735	0	1600	M	500	500
Minotaur IV	MX	OSCC	H	Athena-1	1	5	23.9	2.35	36.2	1735	0	1600	M	500	500
Minotaur IV	MX	OSCC	2	Athena-1	1	5	23.9	2.35	36.2	1735	0	1600	M	500	500
Minotaur IV+	MX	OSCC	-	Athena-1	1	4	23.9	2.35	36.2	1735	0	1600	M	500	500
Minotaur IV Lite	MX	OSCC	-	Athena-1	1	3	23.0 ?	2.35	36.2	1735	0	1600	M	500	500
MSBS M51	MX	OSCC	-	Athena-1	1	3	12.0	2.30	56.0	0	0	1600	M	1000	10000
Terran-1	MR-UR-100	RELSP	-	Athena-1	1	3	35.2	2.30	77.1 ?	0	0	920	M	1000	10000
MR-UR-100	MR-UR-100	YUZH	-	Athena-1	1	2	20.9 ?	2.25	71.0 ?	0	0	1236	M	1000	10000
MR-UR-100U 15A16	MR-UR-100	YUZH	-	Athena-1	1	3	21.6 ?	2.25	71.1	0	0	1236	M	1000	10000
Perimeter 15A11	MR-UR-100	YUZH	-	Athena-1	1	2	21.6 ?	2.25	71.0 ?	0	0	1236	M	1000	10000
DF-3	DF-3	CALT	-	Athena-1	1	2	24.0	2.25	64.0	0	0	1224	M	500	2650
DF-3A	DF-3A	CALT	-	Athena-1	1	2	24.0	2.25	64.0	0	0	1224	M	500	2650
DF-4	DF-4	CALT	-	Athena-1	1	2	28.0	2.25	82.0	0	0	1224	M	500	4750
Chang Zheng 1	DF3	CALT	-	Athena-1	1	3	29.5	2.25	81.5	250	0	2500	M	2500	4750
Chang Zheng ID	DF3	CALT	-	Athena-1	1	3	29.5	2.25	81.5	250	0	2500	M	2500	4750
Kuazhou-11	DF-31	ARMT	-	Athena-1	1	3	11.0 ?	2.20	78.0	0	0	1177	M	1000	8000
DF-41	DF-31	ARMT	-	Athena-1	1	3	11.0 ?	2.20	40.0 ?	0	0	-	M	1000	8000
DF-31	DF-31	ARMT	-	Athena-1	1	3	11.0 ?	2.20	20.0 ?	0	0	-	M	1000	8000
JL-2	DF-31	ARMT	-	Athena-1	1	3	11.0 ?	2.20	20.0 ?	0	0	-	M	1000	8000
JL-3	DF-31	ARMT	-	Athena-1	1	3	11.0 ?	2.20	20.0 ?	0	0	-	M	1000	8000
Chang Zheng 11	DF-31	CALT/SIREC	-	Athena-1	1	4	20.0	2.20	58.0	500	0	1177	M	200	200
Chang Zheng 11	DF-31	CALT/SIREC	H	Athena-1	1	4	20.0	2.20	58.0	500	0	1177	M	200	200
KT-2	DF-31	CASIO4A	-	Athena-1	1	4	20.0 ?	2.20	58.0	250	0	-	M	1000	8000
ADD TV1	ADD-SLV	ADD	d	Athena-1	1	3	16.2 ?	2.20 ?	20.0 ?	0	0	-	M	200	8000
ADD TV1	ADD-SLV	ADD	d	Athena-1	1	3	16.2 ?	2.20 ?	20.0 ?	0	0	-	M	200	8000
ADD TV2	ADD-SLV	ADD	-	Athena-1	1	3	20.6 ?	2.20 ?	20.0 ?	0	0	-	M	200	8000
Hyumoo-5	ADD-SLV	ADD	-	Athena-1	1	2	16.2 ?	2.20 ?	15.0 ?	0	0	-	M	500	500
Trident D-5	Trident	LMSC	-	Athena-1	1	3	13.6	2.11	58.5	0	0	-	M	500	500
ISRO TV	ISRO-L40	VSSC	-	Athena-1	1	1	19.7	2.10	46.0	0	0	-	M	11000	11000
Little Joe 1	LJ1	MAA	4P	Athena-1	0	1	15.2	2.03	12.7	0	0	680	T	20	60
Little Joe 1	LJ1	MAA	2P	Athena-1	0	1	15.2	2.03	12.7	0	0	650	T	60	11000
Little Joe 1	LJ1	MAA	2C	Athena-1	0	1	15.2	2.03	12.7	0	0	650	T	60	11000
Little Joe 1	LJ1	MAA	4C	Athena-1	0	1	15.2	2.03	12.7	0	0	1044	X	90	11000
Cora	PRS-1	LRBA/MORD	-	Athena-1	1	2	11.0	2.01	16.0	0	0	268	T	55	11000
PRS-1 5Ya26	PRS-1	NOVTR	-	Athena-1	1	1	10.0	2.00 ?	12.0	0	0	-	M	40	80
PRS-1	PRS-1	NOVTR	-	Athena-1	1	1	10.0	2.00 ?	12.0	0	0	-	M	40	80
PRS-1M	PRS-1	NOVTR	-	Athena-1	1	1	10.0	2.00 ?	12.0	0	0	-	M	40	80
Black Arrow	BlackArrow	RAE	BA0	Athena-1	1	3	12.9	2.00	18.1	75	0	222	M	1600	80
Black Arrow	BlackArrow	RAE	-	Athena-1	1	3	12.9	2.00	18.1	0	0	222	M	1600	80
Eris Block 1	Eris	GILM	-	Athena-1	1	3	25.0	2.00	36.0	300	0	440	X	550	500
Agni 5	DRDO	DRDO	-	Athena-1	1	3	17.2	2.00	50.0	0	0	-	M	100	5000
Agni 3	DRDO	DRDO	-	Athena-1	1	2	16.0	2.00	48.0	0	0	-	M	100	2000
SSLV	SSLV	ISRO	-	Athena-1	1	4	34.0	2.00	120.0	500	0	2600	M	500	2000
UR-100	UR-100	KHRU	-	Athena-1	1	2	16.9	2.00	42.3	0	0	2070	M	1000	10600

LV

LV_Name	LV_Family	LV_Manufacturer	LV_Variant	LV_Alias	LV_Min_Stage	LV_Max_Stage	Length m	Diameter m	Launch_Mass t	LEO_Capacity kg	GTO_Capacity kg	TU_Thrust kN	Class	Apogee km	Range km
UR-100M	UR-100	KHRU	-	Athena-1	1	2	16.7	2.00	42.3 ?	0	0	2070	M	1000	10600
UR-100K	UR-100	KHRU	-	Athena-1	1	2	18.9	2.00	50.0	0	0	2070	M	1000	12000
UR-100U	UR-100	KHRU	-	Athena-1	1	3	18.9	2.00	50.0	0	0	2070	M	1000	12000
MSBS M45	MSBS	AELM	-	Athena-1	1	3	11.0 ?	1.93	35.0 ?	0	0	900	M	800	12000
MSBS M4	MSBS	AELM	-	Athena-1	1	3	11.0	1.93	35.0	0	0	900	M	800	12000
Vysova	R-29	MAK	-	Athena-1	1	2	13.0	1.90	33.3	0	0	682	M	1000	9100
Volna	R-29	MAK	-	Athena-1	1	2	14.1	1.90	35.3	0	0	682	M	1000	6500
Shtil'-1	R-29	MAK	-	Athena-1	1	3	14.8	1.90	40.3	0	0	682	M	1000	8300
Shtil'-1	R-29	MAK	-	Athena-1	1	3	14.8	1.90	40.3	430	0	810	M	1000	8300
Sineva	R-29	MAK	-	Athena-1	1	3	14.8 ?	1.90 ?	40.3 ?	0	0	682	M	1000	8300
Layner	R-29	MAK	-	Athena-1	1	3	14.8 ?	1.90 ?	40.3 ?	0	0	682	M	1000	8300
Possidon C3	Possidon	LMSC	-	Athena-1	1	2	10.4	1.88	29.4	0	0	-	M	500	4600
Trident C-4	Trident	LMSC	-	Athena-1	1	3	10.4	1.88	33.1	0	0	-	M	1000	7300
ICBM-T1	Trident	OATK	-	Athena-1	1	3	17.6	1.68	33.1	0	0	935	M	1300	1000
ICBM-T2	Trident	OATK	-	Athena-1	1	3	17.6	1.68	33.1	0	0	935	M	1300	7300
LV-2	Trident	LMSC	-	Athena-1	1	2	10.4 ?	1.88 ?	30.0 ?	-	-	-	M	0	7300
LV-3	Trident	LMSC	-	Athena-1	1	2	15.0 ?	1.88 ?	40.0 ?	-	-	-	M	0	7300
MRBM-T3c2	Trident	LMSC	-	Athena-1	1	2	15.0 ?	1.88 ?	40.0 ?	-	-	-	M	0	7300
RT-1	RT-2	OKB1	-	Athena-1	1	3	18.0	1.84	34.0	0	0	890	M	500	2000
RT-2	RT-2	OKB1	-	Athena-1	1	3	21.3	1.84	46.0	0	0	890	M	1000	9500
RT-2P	RT-2	ARSL	-	Athena-1	1	3	21.3	1.84	51.0	0	0	890	M	1000	1000
RT-2M	RT-2	MITT	-	Athena-1	1	3	21.3	1.84	51.0	0	0	980	M	1000	1000
LauncherOne	LauncherOne	VORB	-	Athena-1	0	2	20.0	1.83	24.4	500	0	308	O	200	20
RS1	RS1	ABLSS	-	Athena-1	1	1	27.0	1.83	50.0 ?	1300	0	503	O	200	200
Firefly Alpha	Alpha	FFLY	-	Athena-1	1	2	29.8	1.82	54.1	1000	0	736	O	500	200
Topol'	Topol'	MITT/VOYK	-	Athena-1	1	3	21.5	1.80	45.0	0	0	890	M	1000	1050
Topol'-E	Topol'	MITT/VOYK	-	Athena-1	1	3	21.5	1.80	45.0	0	0	890	M	1000	1050
Topol'-M	Topol'	MITT/VOYK	-	Athena-1	1	3	20.5	1.80	47.1	0	0	890	M	1000	1050
Topol'-M 152b55	Topol'	MITT/VOYK	-	Athena-1	1	3	20.5	1.80	47.1	0	0	890	M	1000	1050
Perimeter-RTs	Topol'	MITT/VOYK	-	Athena-1	1	3	20.5	1.80	47.1	0	0	890	M	1000	1050
Skorost'	Topol'	MITT/VOYK	-	Athena-1	1	2	18.0 ?	1.80	45.0 ?	0	0	890	M	1000	1050
Rubezh	Topol'	MITT/VOYK	-	Athena-1	1	2	20.5	1.80	47.1	0	0	890	M	1000	1050
Oreshnik	Topol'	MITT/VOYK	-	Athena-1	1	2	20.5	1.80	47.1	0	0	890	M	1000	1050
Yars	Topol'	MITT/VOYK	-	Athena-1	1	3	20.5	1.80	47.1	0	0	890	M	1000	1050
Yars-E	Topol'	MITT/VOYK	-	Athena-1	1	3	20.5	1.80	47.1	0	0	890	M	1000	1050
Yars-M	Topol'	MITT/VOYK	152b80	Athena-1	1	3	20.5	1.80	47.1	0	0	890	M	1000	1050
Yars-M	Topol'	MITT/VOYK	152b81	Athena-1	1	3	20.5	1.80	47.1	0	0	890	M	1000	1050
Yars 152b5M	Topol'	MITT/VOYK	-	Athena-1	1	3	20.5	1.80	47.1	0	0	890	M	1000	1050
Bulava	Topol'	MITT/VOYK	-	Athena-1	1	3	20.5	1.80	47.1	0	0	890	M	1000	1050
Start	Topol'	MITT	-	Athena-1	1	6	28.9	1.80	60.0	650	0	890	O	1000	1050
Start-1	Topol'	MITT	-	Athena-1	1	5	22.7	1.80	47.0	500	0	890	O	1000	1050
Start-1.2	Topol'	MITT	-	Athena-1	1	5	22.7	1.80	47.0	500	0	890	O	1000	1050
RT-20P	RT-20P	YUZH	-	Athena-1	1	2	17.5	1.80	30.0	0	0	600	M	1000	8000
J-1	H2, SRB	NISSST	-	Athena-1	1	2	33.1	1.80	88.5	0	0	1550	X	110	8000
Pioneer	Temp-2S	MITT/VOYK	-	Athena-1	1	2	16.5	1.79	37.0	0	0	-	M	500	5000
Pioneer UTTkh	Temp-2S	MITT/VOYK	-	Athena-1	1	2	16.5	1.79	37.0	0	0	-	M	500	5000
Pioneer-3	Temp-2S	MITT/VOYK	-	Athena-1	1	2	16.5	1.79	37.0	0	0	-	M	500	5000
Temp-2S	Temp-2S	MITT/VOYK	-	Athena-1	1	3	18.5	1.79	41.5	0	0	-	M	1000	1050
Jupiter A	Redstone	CHRY/ABMA	-	Athena-1	1	1	20.0	1.78	28.4	0	0	357	M	95	1050
Redstone	Redstone	CHRY/ABMA	-	Athena-1	1	1	20.0	1.78	28.4	0	0	357	M	95	1050
Redstone MRLV	Redstone	CHRY/ABMA	-	Athena-1	1	1	20.0	1.78	28.4	0	0	357	M	200	1050
SPARTA	Redstone	CHRY/TRW	-	Athena-1	1	3	21.8	1.78	30.0 ?	45	0	357	O	1100	1050
Jupiter C	Redstone	ABMA	-	Athena-1	1	3	21.2	1.78	28.5	11	0	357	V	1000	1050
Jupiter C	Redstone	ABMA	-	Athena-1	1	4	21.2	1.78	28.5	11	0	357	V	1000	1050
Hwasong-14	Hwasong-12	KPA	-	Athena-1	1	2	17.9	1.75 ?	20.0 ?	0	0	-	M	3000	1050
Hwasong-12	Hwasong-12	KPA	-	Athena-1	1	1	14.0 ?	1.75 ?	16.0 ?	0	0	-	M	2000	1050
Hwasong-12	Hwasong-12	KPA	A	Athena-1	1	1	14.0 ?	1.75 ?	16.0 ?	0	0	-	M	2000	1050
Hwasong-12A	Hwasong-12	KPA	-	Athena-1	1	2	14.0 ?	1.75 ?	16.0 ?	0	0	-	M	2000	1050
Falcon 1	Falcon 1	SPX	-	Athena-1	1	2	21.3	1.70	27.2	600	0	378	O	500	1050
Minuteman 1A	Minuteman	BOUT	-	Athena-1	1	3	16.4	1.68	30.0 ?	0	0	935	T	10	1050
Minuteman 1A	Minuteman	BOUT	-	Athena-1	1	3	16.4	1.68	31.3	0	0	935	T	10	1050
Minuteman 1B	Minuteman	BOUT	-	Athena-1	1	3	16.8	1.68	31.7	0	0	935	M	1300	1050
Minuteman 2	Minuteman	BOUT	-	Athena-1	1	3	17.6	1.68	33.1	0	0	935	M	1300	1050
Minotaur II	Minuteman	BOUT	-	Athena-1	1	3	17.6	1.68	33.1	0	0	935	M	1300	1050
Minotaur II+	Minuteman	BOUT	-	Athena-1	1	3	17.6	1.68	33.1	0	0	935	M	1300	1050
Minuteman 3	Minuteman	BOUT	-	Athena-1	1	4	18.3	1.68	35.3	0	0	935	M	1600	1050
Minuteman 3	Minuteman	BOUT	PRP	Athena-1	1	4	18.3	1.68	35.3	0	0	935	M	1600	1050
Minuteman 1	Minuteman	BOUT	-	Athena-1	1	3	16.0 ?	1.68	30.0 ?	0	0	935	T	50	1050
HOE	Minuteman	LWMS	-	Athena-1	1	2	19.0 ?	1.68	35.0 ?	0	0	935	M	200	1050
Minotaur I	Minuteman	OSCC	-	Athena-1	1	4	19.2	1.68	36.3	340	0	892	O	1000	1050
Minotaur I Lite	Minuteman	OSCC	-	Athena-1	1	4	19.2	1.68	36.3	340	0	892	O	1000	1050
R-5	R-5	OKB1	-	Athena-1	1	1	20.7	1.65	24.4	0	0	430	M	300	1200
R-5A	R-5	OKB1	-	Athena-1	1	1	20.7	1.65	24.4	0	0	430	M	300	1200

LV

LV_Name	LV_Family	LV_Manufacturer	LV_Variant	LV_Alias	LV_Min_Stage	LV_Max_Stage	Length m	Diameter m	Launch_Mass t	LEO_Capacity kg	GTU_Capacity kg	TU_Thrust kN	Class	Apogee km	Range km
R-5B	R-5	OKB1	-	Athena-1	1	1	20.7	1.65	24.4 ?	0	0	430	M	300	1200
R-5M	R-5	OKB1	-	Athena-1	1	1	20.3	1.65	24.4 ?	0	0	430	M	500	1200
R-5V	R-5	OKB1	-	Athena-1	1	1	21.2	1.65	24.4 ?	0	0	430	M	500	1200
R-5 VAO	R-5	OKB1	-	Athena-1	1	1	21.2	1.65	24.4 ?	0	0	430	M	500	1200
R-12	R-12	OKB586	-	Athena-1	1	1	22.5	1.65	42.0	0	0	730	M	402	1200
R-12U	R-12	OKB586	-	Athena-1	1	1	22.5	1.65	42.0	0	0	730	M	402	1200
K63	R-12	OKB586	-	Athena-1	1	1	22.5	1.65	42.0	0	0	730	M	402	1200
K63D	R-12	OKB586	-	Athena-1	1	1	22.5	1.65	42.0	0	0	730	M	402	1200
Kosmos 63S1	R-12	OKB586	-	Athena-1	1	2	31.5	1.65	48.1	500	0	730	O	2000	1200
Kosmos 11K63	R-12	OKB586	-	Athena-1	1	2	31.5	1.65	48.1	500	0	730	O	2000	1200
R-UNK	UNK	-	-	Athena-1	1	1	22.5 ?	1.65 ?	42.0 ?	0	0	-	O	402	1200
DF-1	V-2	CALT	-	Athena-1	1	1	17.6	1.65 ?	20.4	0	0	260	B	100	590
DF-2	V-2	CALT	-	Athena-1	1	1	20.6	1.65 ?	32.0	0	0	300	B	200	1050
DF-2A	V-2	CALT	-	Athena-1	1	1	20.6	1.65 ?	32.0	0	0	300	B	200	1050
A-4	V-2	WEHR	-	Athena-1	1	1	13.6	1.65	12.8	0	0	270	B	85	1250
A-4b	V-2	WEHR	-	Athena-1	1	1	13.6	1.65	12.8	0	0	312	B	85	1250
V-2	V-2	WEHR	-	Athena-1	1	1	13.6	1.65	12.8	0	0	312	R	200	1250
V-2	V-2	GEMTS	US	Athena-1	1	1	13.6	1.65	12.8	0	0	312	R	200	1250
Hermes II	V-2	GEMTS	-	Athena-1	1	1	14.0 ?	1.65	13.0 ?	0	0	312	R	200	1250
Bumper-VAC	V-2	GEMTS	-	Athena-1	1	2	17.2	1.65	12.9	0	0	267	X	250	1250
R-1	V-2	NI188	-	Athena-1	1	1	14.1	1.65	13.4	0	0	267	B	100	1250
R-1 8A11	V-2	NI188	-	R-1	1	1	14.1	1.65	13.4	0	0	267	B	100	1250
A-1	V-2	NI188	-	R-1	1	1	14.1	1.65	13.4	0	0	267	B	100	1250
R-1A	V-2	OKB1	-	R-1	1	1	14.1	1.65	13.4	0	0	267	R	100	1250
R-1B	V-2	OKB1	-	R-1	1	1	14.1	1.65	13.4	0	0	267	B	100	1250
R-1V	V-2	OKB1	-	R-1	1	1	17.5	1.65	13.4	0	0	267	B	100	1250
R-1D	V-2	OKB1	-	R-1	1	1	14.1	1.65	13.4	0	0	267	B	100	1250
R-1E (A-1)	V-2	OKB1	-	R-1	1	1	14.1	1.65	13.4	0	0	267	B	100	1250
R-1E	V-2	OKB1	-	R-1	1	1	14.1	1.65	13.4	0	0	267	B	100	1250
R-1UK	V-2	OKB1	-	R-1	1	1	14.1	1.65	13.4	0	0	267	B	100	1250
R-2	V-2	OKB1	-	R-1	1	1	17.0	1.65	20.3	0	0	363	R	150	550
R-2A	V-2	OKB1	-	R-1	1	1	17.0	1.65	20.3	0	0	363	R	212	550
R-2e	V-2	OKB1	-	R-1	1	1	17.0	1.65	20.3	0	0	363	R	200	550
R-2R	V-2	OKB1	-	R-1	1	1	17.0	1.65	20.3	0	0	363	R	200	550
R-31	R-31	ARSL	-	R-1	1	3	11.4	1.54	26.9	0	0	580	M	500	4200
CF-5 SSQ	CFSSQ	CAST	-	R-1	1	1	1.5	1.50	0.5	0	0	-	O	200	4200
Zyb R-27U	R-27	MAK	-	R-1	1	1	9.7	1.50	14.2	0	0	-	M	500	3000
Zyb R-27K	R-27	MAK	-	R-1	1	1	9.7	1.50	14.2	0	0	-	M	500	3000
Hwasong-10	R-27	KPA	-	R-1	1	1	9.7	1.50	14.2	0	0	-	M	500	3000
Khorranshahr	R-27	IR	-	R-1	1	1	9.7	1.50	14.2	0	0	-	M	500	3000
Zoljanah	R-27	IR	-	R-1	1	3	25.5	1.50	40.0 ?	220	0	-	M	500	3000
Bukgukseong	KPA	KPA	-	R-1	1	2	9.5 ?	1.50	18.0 ?	0	0	-	M	500	3000
Bukgukseong-2	KPA	KPA	-	R-1	1	2	9.5 ?	1.50	18.0 ?	0	0	-	M	500	3000
Bukgukseong-3	KPA	KPA	-	R-1	1	2	9.5 ?	1.50	18.0 ?	0	0	-	M	500	3000
MSBS M011	P-10	SEREB	-	R-1	1	1	10.0 ?	1.50	15.0 ?	0	0	440	T	50	3000
MSBS M012	P-10	SEREB	-	R-1	1	2	10.0 ?	1.50	15.0 ?	0	0	440	M	500	3000
MSBS M013	P-10	SEREB	-	R-1	1	2	10.0 ?	1.50	15.0 ?	0	0	440	M	500	3000
MSBS M112	P-10	SEREB	-	R-1	1	2	10.4 ?	1.50	18.0 ?	0	0	440	T	50	3000
MSBS M1	P-10	SEREB	-	R-1	1	2	10.4	1.50	18.0	0	0	440	M	500	3000
MSBS M2	P-10	SEREB	-	R-1	1	2	10.7	1.50	20.0	0	0	440	M	600	3000
MSBS M20	P-10	AELM	-	R-1	1	2	10.7	1.50	20.0	0	0	440	M	600	3000
MSBS S112	P-10	SEREB	-	R-1	1	2	12.6	1.50	25.1	0	0	440	T	50	3000
MSBS S01	P-10	SEREB	-	R-1	1	2	15.1	1.50	25.0 ?	0	0	440	M	500	3000
MSBS S02	P-16	SEREB	-	R-1	1	2	14.8	1.50	31.9	0	0	540	M	600	3000
MSBS S2	P-16	SEREB	-	R-1	1	2	14.8	1.50	31.9	0	0	540	M	600	3000
MSBS S3	P-16	AELM	-	R-1	1	2	13.8	1.50	26.8	0	0	540	M	600	3500
Spaceship One	SS1	SCAL	-	R-1	0	1	5.0 ?	1.50 ?	4.0 ?	0	0	-	R	130	3500
Spaceship Two	SS2	SCAL	-	R-1	0	1	18.3	2.30	9.7	0	0	-	R	130	3500
RT-15M	RT-15	ARSL	-	R-1	1	2	11.9	1.49	16.0	0	0	412	M	500	2500
RT-15M	RT-15	ARSL	-	R-1	1	2	11.9	1.49	16.0	0	0	412	M	500	2500
Kestrel I	Kestrel1	ATSP	-	Hapith I	1	2	10.2	1.46	3.0	0	0	77	R	200	2500
Hapith I	Kestrel1	ATSP	-	Hapith I	1	2	10.2	1.46	3.0	0	0	77	R	200	2500
ETV	Mu	NISST	-	Hapith I	0	2	21.3	1.41	39.4	0	0	1932	X	150	2500
Mu-1	Mu	NISST	-	Hapith I	0	2	21.9	1.41	40.0 ?	0	0	1932	T	50	2500
Mu-3D	Mu	NISST	-	Hapith I	0	4	23.6	1.41	40.0 ?	0	0	1932	X	160	2500
Mu-4S	Mu	NISST	-	Hapith I	0	4	23.6	1.41	43.6	180	0	1932	O	6500	2500
Mu-9C	Mu	NISST	-	Hapith I	0	3	20.2	1.41	41.6	195	0	1932	O	3500	2500
Mu-9H	Mu	NISST	-	Hapith I	0	4	23.8	1.41	44.7	300	0	2150	O	1000	2500
Mu-SS	Mu	NISST	-	Hapith I	0	3	23.8	1.41	49.3	300	0	2150	O	1000	2500
Mu-SS-II	Mu	NISST	-	Hapith I	0	3	27.8	1.41	61.7	800	0	1930	O	1400	2500
Emeraude VE121	Emeraude	SEREB	-	Hapith I	1	1	17.9	1.40	18.2	0	0	275	V	200	2500
Saphir VE231	Emeraude	SEREB	-	Hapith I	1	2	17.8	1.40	18.0	0	0	275	V	1000	2500

LV

LV_Name	LV_Family	LV_Manufacturer	LV_Variant	LV_Alias	LV_Min_Stage	LV_Max_Stage	Length m	Diameter m	Launch_Mass t	LEO_Capacity kg	GTG_Capacity kg	TU_Thrust kN	Class	Apogee km	Range km
Diamant A	Emeralde	SEREB	-	Hapith I	1	3	18.9	1.40	18.5	40	0	275	0	2000	2500
Diamant B	Emeralde	SEREB	-	Hapith I	1	3	23.5	1.40	24.6	115	0	348	0	2000	2500
Diamant BP.4	Emeralde	SEREB	-	Hapith I	1	3	21.6	1.40	26.3	150	0	316	0	2000	2500
Polaris AX	Polaris	LMSC	-	Hapith I	1	2	7.6	1.37 ?	10.0 ?	0	0	-	M	500	2500
Polaris A1	Polaris	LMSC	-	Hapith I	1	2	8.7	1.37	13.0 ?	0	0	-	M	500	1850
Polaris A2E	Polaris	LMSC	-	Hapith I	1	2	9.4	1.37	14.7	0	0	-	M	1000	4600
Polaris A2	Polaris	LMSC	-	Hapith I	1	2	9.4	1.37	14.7	0	0	-	M	1000	4600
Polaris A3	Polaris	LMSC	-	Hapith I	1	2	9.4	1.37	16.2	0	0	-	M	1000	4600
Polaris A3	Polaris	LMSC	A3T	Hapith I	1	2	9.4	1.37	16.2	0	0	-	M	1000	4600
STARS	Polaris	LMSC/SAMD	-	Hapith I	1	3	11.5	1.37	16.7	0	0	-	M	5500	5500
Alfa	Alfa	AERIT	-	Hapith I	1	1	6.5	1.37 ?	8.0	0	0	245	M	3000	1000
Squirt	Squirt	MDAC	-	Hapith I	1	2	8.2 ?	1.37 ?	3.4	0	0	3000	A	1	1000
Sprint ABM	Sprint	MDAC	-	Hapith I	1	2	8.2 ?	1.37	3.4	0	0	3000	A	50	1000
HEDI	Sprint	MDAC	-	Hapith I	1	2	8.2 ?	1.37	3.5 ?	0	0	3000	A	15	1000
Kuryer	Kuryer	MITT/VOYK	-	Hapith I	1	3	11.2	1.36	15.0	0	0	-	M	1000	1000
Shuang Quxian 1	DF-21	XJRY	-	Hapith I	1	4	24.0	1.40	31.0	280	0	555	M	300	1000
Shuang Quxian 1	DF-21	XJRY	2	Hapith I	1	4	24.0	1.40	42.0	300	0	555	M	300	1000
Shuang Quxian 1	DF-21	XJRY	3	Hapith I	1	4	24.0	1.40	42.0	300	0	555	M	300	1000
Shuang Quxian 1	DF-21	XJRY	S	Hapith I	1	1	8.4	1.40	4.6	0	0	90	B	150	300
Gushenxing 1	DF-21	XID0	-	Hapith I	1	4	19.0	1.40	30.0	350	0	590	0	500	300
Gushenxing 1	DF-21	XID0	1	Hapith I	1	4	20.0	1.40	33.0	350	0	590	0	500	300
Gushenxing 1	DF-21	XID0	S	Hapith I	1	4	20.0	1.40	33.0	350	0	590	0	500	300
Kairos	Kairos	SPONE	-	Hapith I	1	4	18.0	1.35	23.0	250	0	-	M	500	500
KT-1	KT-1	CASIC4A	-	Hapith I	1	4	11.0 ?	1.35	20.0 ?	50	0	-	M	1000	8000
Kuazhou	DF-21	CASIC4A	-	Hapith I	1	4	20.0	1.35	30.0	250	0	-	M	1000	8000
Kuazhou-1A	DF-21	CASIC4A	-	Hapith I	1	4	20.0	1.35	30.0	250	0	-	M	1000	8000
JL-1	JL-1	CASIC4A	-	Hapith I	1	2	10.7	1.35	14.7	0	0	-	M	500	1800
DF-21	DF-21	CASIC4A	-	Hapith I	1	2	10.7	1.35	14.7	0	0	-	M	500	1800
DF-26	DF-26	CASIC4A	-	Hapith I	1	2	14.0	1.35	20.0	0	0	-	M	500	1800
DF-27	DF-27	CASIC4A	-	Hapith I	1	2	14.0	1.35	20.0	0	0	-	M	500	1800
Zhuque-1	DF-21	CASIC4A	-	Hapith I	1	3	19.0	1.35	27.0	400	0	200	M	200	200
Shaheen 2	DF-21	PKWDC	-	Hapith I	1	2	18.0	1.35 ?	26.0	0	0	-	M	300	2000
Shaheen 3	DF-21	PKWDC	-	Hapith I	1	2	18.0	1.35 ?	26.0	0	0	-	M	300	2000
Ababeel	DF-21	PKWDC	-	Hapith I	1	3	22.0 ?	1.35 ?	25.0	0	0	-	M	300	2000
Jericho II	Jericho	IAI	-	Hapith I	1	3	15.0 ?	1.35 ?	20.0 ?	0	0	610	M	300	2000
Jericho III	Jericho	IAI	-	Hapith I	1	3	15.0 ?	1.35 ?	20.0 ?	0	0	610	M	300	2000
Shavit	Jericho	IAI	-	Hapith I	1	2	17.0	1.35	26.0	200	0	610	M	1400	2000
Shavit 1	Jericho	IAI	-	Hapith I	1	3	18.0	1.35	30.0	230	0	610	M	1400	2000
Shavit 2	Jericho	IAI	-	Hapith I	1	3	18.0	1.35	30.0	230	0	610	M	1400	2000
Arrow 1	Arrow	IAI	-	Hapith I	1	1	7.5	1.35 ?	-	0	0	-	A	40	2000
RSA-3	Jericho	HOUV	-	Hapith I	1	3	17.6	1.35 ?	23.6	330	0	451	M	300	2000
RSA-3	Jericho	HOUV	d	Hapith I	1	3	17.6	1.35 ?	23.6	330	0	451	M	300	2000
Astra Rocket 3.1	Astra	ASTRV	-	Hapith I	1	2	11.6	1.32	11.0	10	0	140	M	300	300
Astra Rocket 3.2	Astra	ASTRV	-	Hapith I	1	2	11.6	1.32	11.0	10	0	140	M	300	300
Astra Rocket 3.3	Astra	ASTRV	-	Hapith I	1	2	11.8	1.32	11.0	10	0	140	M	300	300
Storm-2	SR19	OSCC	-	Hapith I	1	1	9.9	1.32	10.0	0	0	267	M	200	600
SR19	SR19	COLE	-	Hapith I	1	1	6.0 ?	1.32	8.0 ?	0	0	267	R	100	600
AltAir	SR19	SVC	-	Hapith I	1	1	6.0 ?	1.32	8.0 ?	0	0	267	R	100	600
eMRBM	SR19	LWCO	-	Hapith I	0	2	15.5	1.32	15.0 ?	0	0	267	M	300	600
MRBM Target	SR19	LWCO	-	Hapith I	1	2	15.5	1.32	15.0 ?	0	0	267	M	300	600
eMRBM-T1	SR19	OSCC	-	Hapith I	0	2	15.5	1.32	15.0 ?	0	0	267	M	300	600
Janus	SR19	OSCC	-	Hapith I	0	2	15.5	1.32	15.0 ?	0	0	267	M	300	600
MRBM-T1	SR19	LWCO	-	Hapith I	0	2	11.2	1.32	10.8	0	0	267	M	300	600
MRBM-T2	SR19	LWCO	-	Hapith I	0	2	15.5	1.32	15.0 ?	0	0	267	M	300	600
MRBM-T3	SR19	LWCO	-	Hapith I	0	2	15.5	1.32	15.0 ?	0	0	267	M	300	600
SR19/SR19	SR19	OSCC	-	Hapith I	0	2	15.0 ?	1.32	15.0 ?	0	0	267	M	300	600
SR19/SR19	SR19	OSCC	-	Hapith I	0	2	15.5	1.32	15.0 ?	0	0	267	M	300	600
LRALT	SR19	COLE	-	Hapith I	0	2	15.5	1.32	15.0 ?	0	0	267	M	300	600
E-LRALT	SR19	COLE	-	Hapith I	0	3	15.5	1.32	15.0 ?	0	0	267	M	300	600
SRALT	SR19	COLE	-	Hapith I	0	1	12.0	1.32	12.0 ?	0	0	267	M	300	600
Hera	SR19	COLE	-	Hapith I	1	2	11.2	1.32	10.8	0	0	267	M	300	600
Jun0	SR19	OSCC	-	Hapith I	1	1	11.2	1.32	10.8	0	0	267	M	300	600
Minuteman 2 PLV	SR19	LWMS	-	Hapith I	1	2	10.3	1.32	15.0 ?	0	0	267	M	225	600
R-21	R-21	SKB385	-	Hapith I	1	1	13.0	1.30	16.6	0	0	-	M	300	1400
R-13	R-13	SKB385	-	Hapith I	1	1	11.8	1.30	13.7	0	0	-	M	150	600
K-4	K-4	DRD0	-	Hapith I	1	2	12.0	1.30	17.0	0	0	-	M	500	3500
PDV Mk II	K-4	DRD0	-	Hapith I	1	3	12.0	1.30	17.0	0	0	-	M	500	3500
V-825	V-825	FAKEL	-	Hapith I	0	1	18.5	1.30	16.6	0	0	-	B	180	3500
Qaem-100	Qaem	IRCC	-	Hapith I	1	3	15.0	1.25	40.0	0	0	-	M	500	3500
Sejjil	IR	IR	-	Hapith I	2	2	17.6	1.25	23.6	0	0	255	B	150	2000
Sejjil	IR	IR	-	Hapith I	2	2	17.9	1.25	23.6	0	0	560	B	150	2000
Ashura	Sejjil	IR	-	Sejjil	1	1	10.0 ?	1.25	20.0 ?	0	0	560	B	150	2000
Hwasong-7	Hwasong-7	KPA	-	Sejjil	1	1	16.0 ?	1.25	16.0 ?	0	0	255	B	150	2000
Shahab 3	Hwasong-7	IR	-	Sejjil	1	1	15.6	1.25	16.0 ?	0	0	255	B	150	2000

LV

LV_Name	LV_Family	LV_Manufacturer	LV_Variant	LV_Alias	LV_Min_Stage	LV_Max_Stage	Length m	Diameter m	Launch_Mass t	LEO_Capacity kg	GTG_Capacity kg	TU_Thrust kN	Class	Apogee km	Range km
Salman	Nodong	IR	-	Sejjil	1	1	15.6	1.25	16.0 ?	0	0	255	B	150	2000
Emad	Nodong	IR	-	Sejjil	1	1	15.5	1.25	17.5	0	0	255	B	150	2000
Ghadr 1	Nodong	IR	-	Sejjil	1	1	15.6	1.25	16.0 ?	0	0	255	B	150	2000
Ghadr-110	Nodong	IR	-	Sejjil	1	1	15.6	1.25	16.0 ?	0	0	255	B	150	2000
Ghadr F	Nodong	IR	-	Sejjil	1	1	15.9	1.25	17.5	0	0	255	B	150	2000
Toufan	Nodong	IR	-	Sejjil	1	1	15.9	1.25	17.5	0	0	255	B	150	2000
Safir	Nodong	IR	-	Sejjil	1	2	22.0	1.25	26.0	0	0	255	B	250	2000
Paeksed	Nodong	IR	-	Sejjil	1	3	18.0	1.25	19.4	0	0	255	B	450	2000
Paektusan 1	Nodong	KPA	-	Sejjil	1	3	25.8 ?	1.25	33.4	50	0	570	B	2000	2000
Ghauri	Nodong	KRLP	-	Sejjil	1	1	16.0 ?	1.25	16.0 ?	0	0	255	B	150	2000
Scud D	Nodong	KPA	-	Sejjil	1	1	16.0 ?	1.25	16.0 ?	0	0	255	B	150	2000
AMROC IRR	AMROC	AMROC	-	Sejjil	1	1	17.7	1.29	12.2	0	0	315	R	100	2000
GBI	Pegasus	OSCC	-	Sejjil	1	3	15.5 ?	1.28	18.0 ?	0	0	580	R	2000	2000
GBI	Pegasus	OSCC	2	Sejjil	1	2	15.5 ?	1.28	18.0 ?	0	0	580	R	2000	2000
ALV	Pegasus	ATKE	-	Sejjil	1	2	16.8	1.28	15.0	-	-	580	R	200	2000
Pegasus	Pegasus	OSCC	-	Sejjil	0	3	15.5	1.28	18.5	350	0	580	O	4000	2000
Pegasus/HAPS	Pegasus	OSCC	-	Sejjil	0	4	15.5	1.28	18.5	250	0	580	O	4000	2000
Pegasus H	Pegasus	OSCC	-	Sejjil	0	3	15.5	1.28	18.5	350	0	580	O	4000	2000
Pegasus XL	Pegasus	OSCC	-	Sejjil	0	3	17.4	1.28	23.0	440	0	726	O	4000	2000
Pegasus XL/HAPS	Pegasus	OSCC	-	Sejjil	0	4	17.4	1.28	23.0	350	0	726	O	4000	2000
IRBM-T1	Pegasus	OSCC	-	Sejjil	1	2	15.0 ?	1.28	23.0	350	0	726	M	4000	2000
IRBM-T2	Pegasus	OSCC	-	Sejjil	1	2	15.0 ?	1.28	23.0	350	0	726	M	4000	2000
Hyper X	Pegasus	OSCC	-	Sejjil	0	1	14.9	1.28	18.8	0	0	726	T	40	2000
Al Kahir	AlKahir	EGAO	-	Sejjil	1	1	12.5	1.22	10.0 ?	0	0	-	A	60	2000
LDS	Star48	JPL	-	Sejjil	0	1	2.0	1.22	3.0 ?	0	0	-	A	60	2000
Hyunoo-1	Hyunoo	ADD	-	Sejjil	1	2	11.9	1.20	4.9	0	0	775	A	45	2000
Hyunoo-2A	Hyunoo	ADD	-	Sejjil	1	1	7.0 ?	1.20 ?	5.0 ?	0	0	-	A	80	2000
Hyunoo-2B	Hyunoo	ADD	-	Sejjil	1	1	7.0 ?	1.20 ?	5.0 ?	0	0	-	A	80	2000
Hyunoo-2C	Hyunoo	ADD	-	Sejjil	1	1	7.0 ?	1.20 ?	5.0 ?	0	0	-	A	80	2000
Hyunoo-4	Hyunoo	ADD	-	Sejjil	1	1	7.0 ?	1.20 ?	5.0 ?	0	0	-	A	80	2000
Electron	Electron	RLABN	-	Sejjil	1	3	17.0	1.20	12.6	150	0	162	O	200	200
Electron	Electron	RLABN	L	Sejjil	1	3	17.0	1.20	12.6	150	0	162	O	200	200
HASTE	Electron	RLABN	-	Sejjil	1	3	17.0	1.20	12.6	150	0	162	O	200	200
Jielong-1	JL1	CZJH	-	Sejjil	1	4	19.5	1.20	19.5	150	0	200	O	200	200
DF-16	DF-16	CASIC	-	Sejjil	1	1	12.0	1.20	18.0 ?	0	0	-	M	200	1000
DF-17	DF-17	CASIC	-	Sejjil	1	1	12.0	1.20	18.0 ?	0	0	-	M	200	1000
Hermes A-3B	HermesA3	GEMTS	-	Sejjil	1	1	10.1	1.19	5.4	0	0	100	A	37	100
SICEM	SICEM	MMD?	-	Sejjil	1	4	16.2	1.17	17.0	0	0	979	M	1000	11000
Super Strypi	LED-46	SAMD	-	Sejjil	1	3	20.6	1.17	24.0 ?	300	0	-	O	250	250
Aries	Aries	SVC	-	Sejjil	1	1	9.2	1.16	6.3	0	0	200	R	500	250
M56A1	Aries	OSCC	-	Sejjil	1	1	9.2	1.16	6.3	0	0	200	R	500	250
ERIS	Aries	LNSC	-	Sejjil	1	2	4.1	1.16	14.0 ?	0	0	200	M	300	250
Viking Type 9	Viking	NRL	-	Sejjil	1	1	12.8	1.14	6.8	0	0	93	R	250	250
Vanguard	Viking	NRL	-	Sejjil	1	3	22.1	1.14	10.0	20	0	120	O	3000	250
Vanguard	Viking	NRL	X-248	Sejjil	1	3	22.1	1.14	10.0	20	0	120	O	3000	250
Scout II TV	Scout II TV	BPD	-	Sejjil	1	1	9.0 ?	1.14 ?	17.0	0	0	590	T	50	2000
Scout D-1	Scout D-1	LTV	-	Sejjil	1	4	25.0	1.14	21.3	183	0	464	O	10000	250
Scout E-1	Scout E-1	LTV	F	Sejjil	1	4	25.0	1.14	21.3	183	0	464	O	1000	250
Scout F-1	Scout F-1	LTV	-	Sejjil	1	5	25.0 ?	1.14	20.6	200	0	464	O	130000	250
Scout G-1	Scout G-1	LTV	-	Sejjil	1	4	25.0	1.14	20.6	192	0	464	O	500	250
TR-1	ScoutD	LTV	-	Sejjil	1	4	25.0 ?	1.14	23.8	205	0	464	O	1000	250
TR-1A	TR-1	NISST	-	Sejjil	1	1	14.3	1.13	11.8	0	0	608	R	80	2000
Prithvi	Prithvi	HAL	-	Sejjil	1	1	13.4	1.13	10.3	0	0	608	R	270	100
Prithvi 2	Prithvi	HAL	-	Sejjil	1	1	9.0	1.10	4.5	0	0	-	B	100	350
PDV Target	Prithvi	HAL	-	Sejjil	1	1	9.0	1.10	4.5	0	0	-	B	100	350
PDV	Prithvi	HAL	-	Sejjil	1	2	9.0	1.10	4.5	0	0	-	B	100	350
PDV	Prithvi	HAL	-	Sejjil	1	1	9.0	1.10	4.5	0	0	-	B	100	350
Dhanush	Prithvi	HAL	-	Sejjil	1	1	8.5	1.10	4.5	0	0	-	A	50	150
Spartan ABM	Spartan	MDAC/WELEC	-	Sejjil	1	1	16.8	1.09	13.2	0	0	2000	M	560	740
Nike Zeus	Spartan	DACC/WELEC	-	Sejjil	1	3	14.7	1.09	10.3	0	0	2002	M	200	400
Nike Zeus	Spartan	DACC/WELEC	3	Sejjil	1	2	14.6	1.09	10.3	0	0	2002	M	280	400
Nike Zeus DM-1ES	Spartan	DACC/WELEC	-	Sejjil	1	3	14.6	1.09	10.3	0	0	2002	M	280	400
Dolphin	Dolphin	STST	-	Sejjil	1	1	15.5	1.07	7.5	0	0	155	T	2	400
Nike Hercules 1810	Hercules	DACC/WELEC	-	Sejjil	1	2	11.9	1.06	4.9	0	0	775	A	45	400
Nike Hercules R&D	Hercules	DACC/WELEC	-	Sejjil	1	1	11.9	1.06	4.9	0	0	775	A	45	400
Nike Hercules	Hercules	DACC/WELEC	-	Sejjil	1	2	11.9	1.06	4.9	0	0	775	A	45	400
Nike J	Hercules	MHTO?	-	Sejjil	1	1	11.9	1.06	4.9	0	0	775	A	45	400
Paekkom	Hercules	ADD	-	Sejjil	1	2	11.9	1.06	4.9	0	0	775	A	45	400
Hermes A-3A	HermesA3	GEMTS	-	Sejjil	1	1	8.7	1.02	3.8	0	0	80	A	30	400
Blue Scout I	Scout	LTV	-	Sejjil	1	1	21.7	1.02	16.7	0	0	556	R	5000	400
Blue Scout II	Scout	LTV	-	Sejjil	1	3	21.7	1.02	16.9	50	0	556	O	2500	400
Scout X	Scout X	LTV	-	Sejjil	1	4	21.6	1.02	16.7 ?	0	0	556	X	100	400
Scout X-1	Scout X-1	LTV	-	Sejjil	1	4	21.6	1.02	16.7	59	0	556	O	7000	400

LV

LV_Name	LV_Family	LV_Manufacturer	LV_Variant	LV_Alias	LV_Min_Stage	LV_Max_Stage	Length m	Diameter m	Launch_Mass t	LEO_Capacity kg	GTO_Capacity kg	TU_Thrust kN	Class	Apogee km	Range km
Scout X-1A	Scout	LTV	-	Sejfil	1	5	22.0 ?	1.02	17.0 ?	0	0	440	R	220	400
Scout X-2	Scout	LTV	IC	Sejfil	1	4	22.0 ?	1.02	17.0 ?	76	0	440	0	7000	400
Scout X-2B	Scout	LTV	-	Sejfil	1	4	22.0 ?	1.02	17.0 ?	76	0	440	0	900	400
Scout X-2M	Scout	LTV	-	Sejfil	1	4	22.0 ?	1.02	17.0 ?	90	0	440	0	900	400
Scout X-3	Scout	LTV	-	Sejfil	1	4	22.0 ?	1.02	17.0 ?	90	0	440	0	900	400
Scout X-3M	Scout	LTV	-	Sejfil	1	4	22.0 ?	1.02	17.0 ?	87	0	380	0	900	400
Scout X-3A	Scout	LTV	-	Sejfil	1	5	22.0 ?	1.02	17.0 ?	90	0	380	0	900	400
Scout X-3C	Scout	LTV	-	Sejfil	1	3	22.0 ?	1.02	17.0 ?	0	0	380	R	220	400
Scout X-4	Scout	LTV	-	Sejfil	1	4	22.0 ?	1.02	17.0 ?	0	0	380	R	1300	400
Scout X-4A	Scout	LTV	-	Sejfil	1	4	22.0 ?	1.02	17.5 ?	103	0	380	0	4000	400
Scout X-5C	Scout	LTV	-	Sejfil	1	3	22.0 ?	1.02	17.5 ?	0	0	380	R	180	400
Scout A	Scout	LTV	-	Sejfil	1	4	22.0 ?	1.02	17.5 ?	0	0	380	R	180	400
Scout A-1	Scout	LTV	-	Sejfil	1	4	22.0 ?	1.02	17.9	121	0	400	0	1000	400
Scout B	Scout	LTV	-	Sejfil	1	4	22.4	1.02	17.9	121	0	440	0	1000	400
Scout B	Scout	LTV	2A	Sejfil	1	4	22.4	1.02	17.9	143	0	400	0	1000	400
Scout B-1	Scout	LTV	F	Sejfil	1	4	22.0 ?	1.02	17.9	143	0	400	0	1000	400
Scout B-1	Scout	LTV	-	Sejfil	1	4	22.0 ?	1.02	17.5 ?	143	0	440	0	1000	400
Athena H	Castor4	ATILC/CELES	-	Sejfil	0	3	18.6	1.02	14.0	0	0	422	V	200	400
Prospector	Castor4	SDCO	-	Sejfil	1	1	14.1	1.02	12.2	0	0	430	R	500	400
Strypi XIIIR	Sergeant	SAMD	-	Sejfil	0	2	16.0 ?	1.02	13.5 ?	0	0	430	R	500	400
Castor 4A	Castor4	OSCC	-	Sejfil	1	1	16.0 ?	1.02	13.5 ?	0	0	430	R	500	400
Maxus	Castor4	EADSB	-	Sejfil	1	1	15.5	1.02	12.3	0	0	500	R	850	400
Castor 4B	Castor4	OSCC	-	Sejfil	1	1	14.0 ?	1.02	13.0 ?	0	0	500	R	500	400
MRT	Castor4	OSCC	-	Sejfil	1	1	14.0 ?	1.02	13.0 ?	0	0	500	R	500	400
Castor-M57A1	Castor4	OSCC	-	Sejfil	1	2	16.0 ?	1.02	14.0 ?	0	0	500	R	1100	400
Conestoga 1620	Castor4	EERSSI	-	Sejfil	1	4	15.2	1.02	87.4	900	0	1580	0	450	400
GBI BV	GEM	BDHSV	-	Sejfil	1	3	15.5	1.02	14.0	0	0	500	R	200	400
GBI BV+	GEM	LMSC	-	Sejfil	1	3	15.5	1.02	14.0	0	0	500	R	200	400
Pershing 1	Pershing	MARTO	-	Sejfil	1	2	10.7	1.02	4.7	0	0	116	M	250	600
Pershing 1A	Pershing	MARTO	-	Sejfil	1	2	10.7	1.02	4.7	0	0	116	M	250	600
Pershing 2	Pershing	MARTO	-	Sejfil	1	2	10.7	1.02	4.7	0	0	116	M	250	600
Sonda 4	Pershing	MARTO	1	Sejfil	1	2	9.0 ?	1.02	7.5	0	0	-	M	250	1800
VS-40	S-40	INPE	-	Sejfil	1	2	11.0	1.01	6.8	0	0	203	R	800	200
VS-40M	S-40	INPE	-	Sejfil	1	2	9.5	1.01	6.8	0	0	190	R	1000	200
VLS-1	S-40M	INPE	-	Sejfil	0	3	9.5	1.01	6.8	0	0	190	R	1000	200
Temp	Temp	MITI/VOTK	-	Sejfil	1	1	12.4	1.01	9.7	0	0	1172	0	750	200
Temp	Temp	MITI/VOTK	-	Sejfil	1	1	12.4	1.01	9.3	0	0	-	M	150	900
Astra Rocket 1.0	Astra	ASTRV	-	Sejfil	1	1	10.0	1.00	6.0 ?	0	0	-	R	100	900
Astra Rocket 2.0	Astra	ASTRV	-	Sejfil	1	2	10.0	1.00	6.0 ?	0	0	-	R	100	900
Orion LAS	Orion.LAS	OSCC	-	Sejfil	1	1	11.6	1.00	6.1 ?	0	0	-	M	1	900
Agni TD	ASLV	DRDO	-	Sejfil	1	2	21.0	1.00	19.0	0	0	503	M	300	1200
Agni P	ASLV	DRDO	-	Sejfil	1	2	17.2	1.00	24.0	0	0	-	M	100	5000
Agni 1	ASLV	DRDO	-	Sejfil	1	1	15.0	1.00	12.0	0	0	503	M	200	700
Agni 2	ASLV	DRDO	-	Sejfil	1	2	20.0	1.00	16.0	0	0	503	M	405	2000
Agni 2P	ASLV	DRDO	-	Sejfil	1	2	20.0	1.00	16.0	0	0	503	M	405	2000
Agni 4	ASLV	DRDO	-	Agni 4	1	2	20.0	1.00	16.0	0	0	503	M	405	2000
ASLV	ASLV	ISRO	-	Agni 4	0	4	23.6	1.00	39.0	150	0	1383	0	900	2000
SLV-3	ASLV	ISRO	-	Agni 4	1	4	23.6	1.00	17.0	42	0	503	0	900	2000
SLV-3	ASLV	ISRO	D4	Agni 4	1	4	23.6	1.00	17.0	42	0	503	0	900	2000
HSR	ASLV	ISRO	-	Agni 4	1	1	19.0	1.00	9.0	0	0	503	R	100	2000
KSR-III	KSR-3	KARI	-	Agni 4	1	1	13.5	1.00	5.6	0	0	126	R	100	2000
HANBIT-TLV	HANBIT	INNOSE	-	Agni 4	1	1	16.3	1.00	8.4	0	0	-	R	100	2000
Vesta	Vesta	LRBA	-	Agni 4	1	1	10.2	1.00	6.0	0	0	140	R	250	2000
DF-15	DF-15	ARMT	-	Agni 4	1	1	9.1	1.00 ?	6.2	0	0	-	B	100	600
Shaheen 1A	DF-15	PKMDC	-	Agni 4	1	1	9.1	1.00 ?	6.2 ?	0	0	-	B	100	750
Shaheen 1	DF-15	PKMDC	-	Agni 4	1	1	9.1	1.00 ?	6.2 ?	0	0	-	B	100	750
Dezful	Dezful	ANSAL	-	Agni 4	1	1	10.3	1.00	5.0 ?	0	0	90	B	150	750
Kheibar Shekan	Dezful	IR	-	Agni 4	1	1	14.0	1.00	20.0 ?	0	0	-	M	500	750
Fattah-1	Dezful	IR	-	Agni 4	1	1	14.0	1.00	20.0 ?	0	0	-	M	500	750
V-1000	V-1000	SKB30	-	Agni 4	0	1	14.5	1.00	8.8	0	0	-	A	30	750
V-1000	V-1000	SKB30	-	Agni 4	0	1	14.5	1.00	8.8	0	0	-	A	30	750
Oka	Oka	KBM	-	Agni 4	1	1	7.5	0.92	4.7	0	0	-	B	80	400
Iskander	Oka	KBM	-	Agni 4	1	1	7.3	0.92	3.8	0	0	-	B	50	400
Kinzhal	Oka	KBM	-	Agni 4	1	1	7.3	0.92	3.8	0	0	-	B	50	400
Bukgukesong-6	Oka	KPA	-	Agni 4	1	1	8.0 ?	0.88 ?	14.0 ?	0	0	-	M	500	3000
Hwasong-110a	Oka	KPA	-	Agni 4	1	1	7.3	0.92	4.0	0	0	-	M	20	3000
Hwasong-11Da	Oka	KPA	-	Agni 4	1	1	7.3	0.92	4.0	0	0	-	M	20	3000
Hwasong-11Da-4.5	Oka	KPA	-	Agni 4	1	1	7.3	0.92	4.0	0	0	-	M	20	3000
Hwasong-11Ra	Oka	KPA	-	Agni 4	1	1	7.3	0.92	4.0	0	0	-	M	20	3000
Iskander-M	Oka	KBM	-	Agni 4	1	1	7.3	0.92	3.8	0	0	-	B	50	400
Iskander-E	Oka	KBM	-	Agni 4	1	1	7.3	0.92	3.8	0	0	-	B	50	200

LV

LV_Name	LV_Family	LV_Manufacturer	LV_Variant	LV_Alias	LV_Min_Stage	LV_Max_Stage	Length m	Diameter m	Launch_Mass t	LEO_Capacity kg	GTO_Capacity kg	TU_Thrust kN	Class	Apogee km	Range km
Falstaff	Stonechat	RAE/RORD	-	Agni 4	1	1	5.3	0.92	5.1	0	0	240	T	90	200
Falstaff	Stonechat	RAE/RORD	1	Agni 4	1	1	5.3	0.92	5.1	0	0	240	T	90	200
Black Knight	BlackKnight	SROE	201	Agni 4	1	1	10.2	0.91	5.4	0	0	75	V	500	200
Black Knight	BlackKnight	SROE	201/C	Agni 4	1	2	11.6	0.91	6.4	0	0	95	V	500	200
Black Knight	BlackKnight	SROE	201/C2	Agni 4	1	2	11.6	0.91	6.4	0	0	95	V	500	200
Black Knight	BlackKnight	SROE	301/C	Agni 4	1	2	11.6	0.91	6.4	0	0	95	V	500	200
Black Knight	BlackKnight	SROE	301/C2	Agni 4	1	2	11.6	0.91	6.4	0	0	95	V	500	200
Nike Zeus A	Spartan	DACC/WELEC	-	Agni 4	1	2	13.3	0.91	5.0	0	0	2002	A	50	320
Skybolt ALBM	Skybolt	DAC	-	Agni 4	1	2	12.0	0.91	5.1	0	0	111	A	390	1200
IRCFPS	IRCFPS	LMPLM	-	Agni 4	1	2	7.3	0.88	5.0	0	0	-	M	100	1200
Ghaznavi	DF-11	PKPMO	-	Agni 4	1	1	9.1	0.88	6.2	0	0	-	B	100	750
OS-X0	DF-11	LYK	-	Agni 4	1	1	8.4	0.88	4.6	0	0	90	B	150	300
OS-X1	DF-11	LYK	-	Agni 4	1	1	8.4	0.88	4.6	0	0	90	B	150	300
OS-X1	DF-11	LYK	-	Agni 4	1	4	19.0	0.88	20.0	200	200	90	0	150	300
OS-X6B	DF-11	LYK	-	Agni 4	1	1	9.4	0.88	5.0	0	0	-	R	300	300
DF-11	DF-11	SANJ	-	Agni 4	1	1	11.3	0.88	6.3	0	0	90	B	150	300
DF-11M	DF-11	SANJ	-	Agni 4	1	1	13.3	0.88	8.0	0	0	90	B	150	600
Elbrus	R-11	MAK	-	Agni 4	1	1	11.3	0.88	6.3	0	0	90	B	150	300
Shahab 1	R-11	MAK	-	Agni 4	1	1	11.3	0.88	6.3	0	0	90	B	76	300
Shahab 2	R-11	MAK	-	Agni 4	1	1	11.3	0.88	6.1	0	0	90	B	76	300
Shahab 2	R-11	MAK	-	Agni 4	1	1	11.3	0.88	6.1	0	0	90	B	76	300
Qiam-1	R-11	MAK	-	Agni 4	1	1	10.6	0.88	6.1	0	0	90	B	76	300
Scud B	R-11	MAK	-	Agni 4	1	1	11.3	0.88	6.3	0	0	90	B	76	300
R-17	R-11	VOTK/MAK	-	Agni 4	1	1	9.0	0.88	5.4	0	0	93	B	150	300
R-17VTO	R-11	VOTK/MAK	-	Agni 4	1	1	9.0	0.88	5.4	0	0	93	B	150	300
Al Abbas	R-11	IQ	-	Agni 4	1	1	13.2	0.88	7.8	0	0	90	B	150	900
Al Hussein	R-11	IQ	-	Agni 4	1	1	12.2	0.88	6.3	0	0	90	B	150	600
Al Hussein	R-11	IQ	-	Agni 4	1	1	11.9	0.88	6.3	0	0	90	B	150	600
Short Al Hussein	R-11	IQ	-	Agni 4	1	1	11.6	0.88	6.3	0	0	90	B	150	600
Scud	R-11	VOTK	-	Agni 4	1	1	11.2	0.88	5.5	0	0	90	B	72	600
Hwasong 5	R-11	KPA	-	Agni 4	1	1	10.0	0.88	5.0	0	0	90	B	150	600
Hwasong 6	R-11	KPA	-	Agni 4	1	1	10.0	0.88	5.0	0	0	90	B	200	600
Hwasong 9	R-11	KPA	-	Agni 4	1	1	16.0	0.88	5.0	0	0	255	B	150	600
Hwasong 9	R-11	KPA	-	Agni 4	1	1	16.0	0.88	5.0	0	0	255	B	150	600
Burkan-1H	R-11	ANSAL	-	Agni 4	1	1	10.0	0.88	5.0	0	0	90	B	150	600
Burkan-2H	R-11	ANSAL	-	Agni 4	1	1	10.0	0.88	5.0	0	0	90	B	150	600
Burkan-3	R-11	ANSAL	-	Agni 4	1	1	10.0	0.88	5.0	0	0	90	B	150	600
Zulficar	R-11	ANSAL	YE	Agni 4	1	1	10.0	0.88	5.0	0	0	90	B	150	600
R-11	R-11	OKB1/MAK	-	Agni 4	1	1	7.4	0.88	4.6	0	0	80	B	160	150
R-11M	R-11	OKB1	-	Agni 4	1	1	7.4	0.88	4.6	0	0	80	B	160	150
R-11FM	R-11	OKB1	-	Agni 4	1	1	8.4	0.88	4.6	0	0	93	B	160	150
R-11A	R-11	OKB1	-	Agni 4	1	1	10.2	0.88	4.6	0	0	80	B	200	150
R-11A-WV	R-11	OKB1	-	Agni 4	1	1	10.0	0.88	5.0	0	0	80	B	200	150
Wasserfall	Hermes	WEHR	-	Agni 4	1	1	7.8	0.88	3.5	0	0	80	A	18	29
CHGB Booster	CHGB	USN/LM	-	Agni 4	1	2	10.0	0.88	4.0	0	0	-	M	100	29
Hermes A-1	Hermes	GEMTS	-	Agni 4	1	1	7.8	0.86	3.0	0	0	71	M	24	60
Viking	Viking	NRL	-	Agni 4	1	1	14.9	0.81	4.5	0	0	93	R	200	60
Topaze VEH111	Agate	SEREB	-	Agni 4	1	1	7.1	0.80	2.8	0	0	120	V	80	60
Topaze VEH111L	Agate	SEREB	-	Agni 4	1	1	7.9	0.80	3.4	0	0	147	V	110	60
Agate	Agate	SEREB	-	Agni 4	1	1	8.5	0.80	3.2	0	0	186	Q	20	60
Agate	Agate	SEREB	-	Agni 4	1	2	9.6	0.80	4.0	0	0	186	Q	20	60
Rubis	Agate	SEREB	-	Agni 4	1	1	13.4	0.80	6.5	0	0	-	R	2000	500
MD-620	Agate	DASST/IAI	-	Agni 4	1	1	13.4	0.80	6.5	0	0	-	B	100	500
MD-620	Agate	DASST/IAI	2	Agni 4	1	2	13.4	0.80	6.5	0	0	-	B	100	500
Jericho	Agate	DASST/IAI	-	Agni 4	1	2	13.4	0.80	6.5	0	0	-	B	100	500
Jericho-1	Arrow2	DASST/IAI	-	Agni 4	1	1	9.0	0.80	6.0	0	0	-	B	100	500
Arrow 2	Arrow 2	IAI	-	Agni 4	1	2	6.3	0.80	2.5	0	0	-	A	40	50
HIBEX	HIBEX	ROKT?	-	Agni 4	1	1	5.2	0.79	6.0	0	0	-	T	20	50
HIBEX	HIBEX	MOAC	-	Agni 4	1	2	5.2	0.79	6.0	0	0	-	T	20	50
Upstage	Sergeant	RAYTH?	-	Agni 4	0	2	8.0	0.79	4.0	0	0	-	T	30	50
ARPAI	Sergeant	GEMTS/JPL	-	Agni 4	1	1	6.2	0.79	3.5	0	0	140	T	58	110
RV-A-10	Sergeant	JPL	-	Agni 4	1	1	5.1	0.79	2.3	0	0	220	R	80	110
Sergeant	Sergeant	DNA	2R	Agni 4	0	1	5.1	0.79	2.3	0	0	220	R	80	110
Sergeant	Sergeant	CONV	-	Agni 4	0	1	9.4	0.79	5.5	0	0	220	M	250	110
High Virgo WS199C	Polaris TV	LWN	-	Agni 4	1	1	8.0	0.79	5.0	0	0	220	T	80	110
Polaris TV	Polaris	LWSC	-	Agni 4	1	2	10.1	0.79	5.0	0	0	-	R	40	110
Polaris FTV-5	Sergeant	AEROL	-	Agni 4	0	4	18.9	0.79	6.3	0	0	-	R	3000	110
Journeyman	Sergeant	MARTB	1	Agni 4	0	1	11.3	0.79	-	0	0	-	R	100	110
Bold Orion	Sergeant	MARTB	2	Agni 4	0	2	11.3	0.79	-	0	0	-	R	200	110
Storm	Sergeant	OSCC	-	Agni 4	1	2	-	0.79	6.0	0	0	-	M	200	110
Sergeant Hydac	Sergeant	SOCO	-	Agni 4	1	2	13.8	0.79	4.8	0	0	-	R	500	110
Draco	Sergeant	MEDA	-	Agni 4	1	2	14.0	0.79	-	0	0	-	Q	30	110
X-17	Sergeant	LWN	-	Agni 4	1	3	12.3	0.79	3.4	0	0	220	V	500	110
Polaris FTV-3	Sergeant	LWN	3	Agni 4	1	1	12.3	0.79	3.4	0	0	220	V	500	110
Polaris FTV-1	Sergeant	LWSC	-	Agni 4	1	1	10.1	0.79	5.0	0	0	-	R	40	110
Shotput	Sergeant	PARD	-	Agni 4	0	2	9.9	0.79	5.1	0	0	220	X	400	110

LV

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Sergeant 5-stage															
Castor	Sergeant	PARD	-	-	1	5	14.0 ?	0.79	-	0	0	230	Q	85	110
Blue Scout Jr	Sergeant	THX	-	-	1	1	8.0 ?	0.79	-	0	0	235	R	300	110
Blue Scout Jr SLV-1B(m)	Sergeant	LTV	-	-	1	4	12.4	0.79	5.8	0	0	222	R	200000	110
Blue Scout Jr SLV-1C	Sergeant	LTV	-	-	1	3	12.4 ?	0.79	5.8	0	0	222	R	1000	110
RAM A	Sergeant	PARD	-	-	0	4	12.4	0.79	5.8	0	0	222	R	1000	110
RAM B	Sergeant	PARD	-	-	0	4	12.4	0.79	5.8	0	0	222	R	100	110
Strypi	Sergeant	PARD	-	-	1	3	12.6	0.79	6.0	0	0	235	R	100	110
Strypi A	Sergeant	SAND	-	-	0	0	-	0.79	-	0	0	-	R	200	110
Strypi B	Sergeant	SAND	-	-	0	0	-	0.79	-	0	0	-	R	200	110
Strypi C	Sergeant	SAND	-	-	0	0	-	0.79	-	0	0	-	R	200	110
Strypi D	Sergeant	SAND	-	-	0	0	-	0.79	-	0	0	-	R	200	110
Strypi E	Sergeant	SAND	-	-	0	0	-	0.79	-	0	0	-	R	200	110
Strypi F	Sergeant	SAND	-	-	0	0	-	0.79	-	0	0	-	R	200	110
Strypi G	Sergeant	SAND	-	-	0	0	-	0.79	-	0	0	-	R	200	110
Strypi H	Sergeant	SAND	-	-	0	0	-	0.79	-	0	0	-	R	200	110
Strypi I	Sergeant	SAND	-	-	0	0	-	0.79	-	0	0	-	R	200	110
Strypi J	Sergeant	SAND	-	-	0	0	-	0.79	-	0	0	-	R	200	110
Strypi K	Sergeant	SAND	-	-	0	0	-	0.79	-	0	0	-	R	200	110
Strypi L	Sergeant	SAND	-	-	0	0	-	0.79	-	0	0	-	R	200	110
Strypi M	Sergeant	SAND	-	-	0	0	-	0.79	-	0	0	-	R	200	110
Strypi N	Sergeant	SAND	-	-	0	0	-	0.79	-	0	0	-	R	200	110
Strypi O	Sergeant	SAND	-	-	0	0	-	0.79	-	0	0	-	R	200	110
Strypi P	Sergeant	SAND	-	-	0	0	-	0.79	-	0	0	-	R	200	110
Strypi Q	Sergeant	SAND	-	-	0	0	-	0.79	-	0	0	-	R	200	110
Strypi R	Sergeant	SAND	-	-	0	0	-	0.79	-	0	0	-	R	200	110
Strypi S	Sergeant	SAND	-	-	0	0	-	0.79	-	0	0	-	R	200	110
Strypi T	Sergeant	SAND	-	-	0	0	-	0.79	-	0	0	-	R	200	110
Strypi U	Sergeant	SAND	-	-	0	0	-	0.79	-	0	0	-	R	200	110
Strypi V	Sergeant	SAND	-	-	0	0	-	0.79	-	0	0	-	R	200	110
Strypi W	Sergeant	SAND	-	-	0	0	-	0.79	-	0	0	-	R	200	110
Strypi X	Sergeant	SAND	-	-	0	0	-	0.79	-	0	0	-	R	200	110
Strypi Y	Sergeant	SAND	-	-	0	0	-	0.79	-	0	0	-	R	200	110
Strypi Z	Sergeant	SAND	-	-	0	0	-	0.79	-	0	0	-	R	200	110
Castor	Sergeant	THX	2R	-	0	0	10.0 ?	0.79	5.2 ?	0	0	586	R	240	110
DOT	Sergeant	SAND	-	-	0	2	11.6	0.79	5.5	0	0	586	R	300	110
Athena	Sergeant	ATLR	-	-	0	4	15.2	0.79	7.2	0	0	586	M	200	110
WASP	Sergeant	LARC?	-	-	0	2	14.7	0.79	6.8	0	0	580	R	240	110
Castor Lance	Sergeant	SAND	-	-	0	2	15.1	0.79	5.8	0	0	-	R	600	110
Castor-Recruit	Sergeant	SAND	-	-	0	0	-	0.79	-	0	0	-	R	150	110
Trailblazer 1	Sergeant	SAND	-	-	0	2	-	0.79	-	0	0	-	R	300	110
Trailblazer 2	Sergeant	AFCL	-	-	0	4	15.7	0.79	6.1	0	0	547	R	300	110
Trailblazer 3	Sergeant	AFCL	-	-	0	5	15.7	0.79	6.1	0	0	547	R	300	110
Astrobee 1500	Sergeant	AFCL	M	-	0	2	10.4	0.79	5.2	0	0	566	R	2000	110
Scammer	Sergeant	AJSP	-	-	0	3	15.4	0.79	6.8	0	0	550	R	600	110
Xaero	Sergeant	LARC	-	-	0	3	-	0.79	-	0	0	-	R	300	110
D-21B	Xaero	MASTEN	-	-	1	1	4.6 ?	0.77 ?	1.0 ?	0	0	-	R	30	110
RTV-A-2	RTV-A-2	LAC	-	-	1	2	13.1	0.77	-	0	0	-	R	30	110
Corporal	Corporal	CDNV	-	-	1	1	9.6	0.76	1.3	0	0	35	T	50	110
Corporal Type 1	Corporal	SUEL/JPL	-	-	1	1	14.0	0.76	5.4	0	0	89	A	50	110
Corporal E	Corporal	SUEL/JPL	-	-	1	1	14.0	0.76	5.4	0	0	89	A	50	110
Talos	Corporal	JPL	-	-	1	1	14.0	0.76	4.5	0	0	89	T	50	110
HPB	Talos	APL	-	-	1	1	9.8	0.76	3.5	0	0	-	A	20	110
Talos Castor	Talos	SDCO	-	-	1	2	14.4	0.76	9.0	0	0	-	R	400	110
Talos Terrier	Talos	SDCO	-	-	1	2	16.9	0.76	8.2	0	0	-	R	300	110
Talos Terrier Oriole	Talos	DNA	-	-	1	3	10.0 ?	0.76	-	0	0	-	R	12	110
SREM T4-G	Talos	MASA	-	-	1	3	19.8	0.76	-	0	0	-	R	12	110
LCLV	Talos	MDA	-	-	1	2	14.0 ?	0.76	-	0	0	-	R	200	110
Talos Sergeant Hydac	Talos	SDCO	-	-	1	3	16.5	0.76	6.9	0	0	-	R	400	110
TATER	Talos	SDCO	-	-	1	3	17.3	0.76	6.1	0	0	-	R	500	110
Starbird	Talos	SAMS0?	-	-	1	3	12.3	0.76	-	0	0	-	Q	5	110
Super Chief I	Talos	SDCO	-	-	1	4	17.5	0.76	7.4	0	0	-	R	500	110
Super Chief II	Talos	AJSP	-	-	1	2	14.7	0.76	4.7	0	0	516	R	300	110
Talos Terrier Peregrine	Talos	AJSP	-	-	1	2	14.7	0.76	4.7	0	0	516	R	300	110
Oriole III	Talos	MSFC	-	-	1	3	14.0 ?	0.46	1.0 ?	0	0	-	R	500	110
Oriole IV	Talos	DTI	-	-	1	3	14.0 ?	0.46	1.0 ?	0	0	268	R	110	110
Black Brant XI	Talos	MASA	-	-	1	4	19.8	0.76	-	0	0	-	R	12	110
Black Brant XII	Talos	BAL	-	-	1	3	17.0 ?	0.76	5.3	0	0	489	R	1400	110
Black Brant XIII	Talos	BAL	-	-	1	4	17.0 ?	0.76	5.3	0	0	489	R	1500	110
Black Brant XIV	Talos	BAL	-	-	1	3	17.0 ?	0.76	5.3	0	0	489	R	1400	110
Black Brant XV	Talos	BAL	-	-	1	4	17.0 ?	0.76	5.3	0	0	489	R	1500	110
Black Brant XVI	Talos	BAL	-	-	1	3	17.0 ?	0.76	5.3	0	0	489	R	1400	110
Black Brant XVII	Talos	BAL	-	-	1	4	17.0 ?	0.76	5.3	0	0	489	R	1500	110
NOTS EV1	Talos	NOTS	-	-	0	5	4.4	0.76	0.9	1	0	125	R	5000	110
NOTS EV2	Talos	NOTS	-	-	0	5	4.4	0.76	0.9	1	0	125	R	5000	110
NOTS EV3	Talos	NOTS	-	-	0	5	4.4	0.76	0.9	1	0	125	R	5000	110
NOTS EV4	Talos	NOTS	-	-	0	5	4.4	0.76	0.9	1	0	125	R	5000	110
NOTS EV5	Talos	NOTS	-	-	0	5	4.4	0.76	0.9	1	0	125	R	5000	110
Al Samoud 2	Al Samoud 2	IONIC	-	-	1	1	7.2	0.76	2.0	0	0	-	T	50	110
OTRAG	OTRAG	OTR	-	-	1	1	10.3	0.76	-	0	0	-	T	20	110
TKS VA SMS	TKS VA SMS	ORBS2	-	-	1	1	10.5	0.74	-	0	0	-	T	1	110
Lambda 2	Lambda 2	ISAS	-	-	0	2	15.5	0.74	6.3	0	0	970	R	500	110
Lambda 3	Lambda 3	ISAS	-	-	0	3	17.4	0.74	8.2	0	0	970	R	1000	110
Lambda 4S	Lambda 4S	ISAS	-	-	0	3	16.5	0.74	7.0	0	0	970	R	2000	110
Lambda 4SC	Lambda 4SC	ISAS	-	-	0	4	16.5	0.74	9.4	0	0	970	R	2000	110
Lambda 4T	Lambda 4T	ISAS	-	-	0	4	16.5 ?	0.74	9.4 ?	0	0	970	R	2000	110
ST-735	ST-735	ISAS	-	-	0	4	16.5 ?	0.74	9.4 ?	0	0	970	R	2000	110
SB-735	SB-735	ISAS	-	-	0	2	14.0 ?	0.74	7.4	0	0	-	R	120	110
NAL-735	NAL-735	ISAS	1	-	0	1	14.6	0.74	7.4	0	0	-	R	120	110
Shaurya	SB-735	ISAS/MAL	-	-	1	1	10.0	0.74	4.7	0	0	250	T	18	110
	K-15	DRDO	-	-	1	2	10.0	0.74	6.2	0	0	-	R	200	600



LV

LV_Name	LV_Family	LV_Manufacturer	LV_Variant	LV_Alias	LV_Min_Stage	LV_Max_Stage	Length m	Diameter m	Launch_Mass t	LEO_Capacity kg	GTJ_Capacity kg	TU_Thrust kN	Class	Apogee km	Range km
Kontakt	Kontakt	FAKEL	-	-	1	3	10.0	0.74	4.5	0	0	-	R	500	600
VLS-R1	Sonda	IAE	-	-	1	2	6.0 ?	0.72	1.0 ?	0	0	120	T	10	600
Pedro Recruit	Pedro	USAF	-	-	1	2	7.8	0.71	-	0	0	244	T	20	600
Arrow 3	Arrow3	IAI	-	-	1	2	11.0 ?	0.70 ?	1.5 ?	0	0	-	A	100	50
Miura 1	Miura	PLDS	-	-	1	1	12.7	0.70	2.6	0	0	30	R	100	50
Skylark I	SkylarkL	SKVR	-	-	1	1	11.7	0.70	0.0	0	0	-	R	30	50
HIMES Rockoon	KN-D	NISST	-	-	0	1	3.5 ?	0.70	0.5	0	0	-	T	70	50
Zulfiqar	Zulfiqar	IR	-	-	1	1	10.3	0.68	5.0 ?	0	0	90	B	150	50
Zulfiqar	Zulfiqar	IRGC	-	-	1	1	10.3	0.68	5.0 ?	0	0	90	B	150	50
Apollo LES	Apollo.LES	MAA	-	-	1	1	10.2	0.66	2.5 ?	0	0	690	T	2	50
ARRW	ARRW	LNPLM	-	-	1	1	5.9	0.66 ?	2.3	0	0	-	M	50	50
KN-02	KN-02	KPA	-	-	1	1	6.4	0.65	2.0	0	0	-	M	20	50
Tochka	Tochka	KEM	-	-	1	1	6.4	0.65	2.0	0	0	-	M	20	50
Tochka-U	Tochka	KEM	-	-	1	1	6.4	0.65	2.0	0	0	-	M	26	50
ZUR-215	V-750	NPOL	-	-	1	1	10.7 ?	0.65 ?	2.3 ?	0	0	490	R	27	50
V-750	V-750	FAKEL	-	-	0	1	10.7	0.65	2.3	0	0	490	R	27	50
Qahir-1	V-750	FAKEL	-	-	0	1	11.0	0.65	2.3	0	0	490	R	27	250
Qahir-M2	V-750	FAKEL	-	-	0	1	11.0	0.65	2.3	0	0	490	R	27	250
SR75	SR75	HYIMP	-	-	1	1	14.0	0.64	1.0 ?	0	0	75	R	50	250
Sabre Zombie	ATACMS	SMDC	-	-	1	1	4.0	0.61	1.0	0	0	57	R	40	250
Pathfinder Zombie	ATACMS	SMDC	-	-	1	1	6.0	0.61	1.0	0	0	57	R	40	250
ATACMS	ATACMS	SMDC	-	-	1	1	5.0 ?	0.61	1.0	0	0	57	R	40	250
ATACMS	ATACMS	SMDC	-	-	1	1	7.7	0.61	1.8	0	0	180	T	20	250
X-51A	BNAP	BNAP	-	-	0	2	7.7	0.61	1.8	0	0	180	T	20	250
Tayfun	B-611	ROKSN	-	-	1	1	7.0 ?	0.60	2.0 ?	0	0	-	M	50	280
Bora-1	B-611	ROKSN	-	-	1	1	7.0 ?	0.60	2.0 ?	0	0	-	M	50	280
B-611	B-611	SANJ	-	-	1	1	7.0 ?	0.60	2.0 ?	0	0	90	R	100	600
TP 0.1	B-611	ROKSN	-	-	1	1	6.0 ?	0.60	1.0	0	0	-	R	20	600
TP 0.2	B-611	ROKSN	-	-	1	1	8.0 ?	0.60	1.0	0	0	-	R	20	600
SR 0.1	B-611	ROKSN	-	-	1	1	8.0 ?	0.60	1.0	0	0	-	R	20	600
K-BATS	ATACMS	HAMMHA	-	-	1	1	4.0	0.60	1.5 ?	0	0	-	M	50	600
Hwasong-11Ma	KN-24	KP	-	-	1	1	5.5	0.60 ?	1.5 ?	0	0	-	M	50	600
Badr-1	Grad	FAKEL	-	-	1	1	5.0	0.60 ?	2.0 ?	0	0	-	M	20	600
Grad	Grad	FAKEL	-	-	1	1	5.0	0.60 ?	2.0 ?	0	0	-	M	20	600
NOTS500	NOTS500	NOTS	-	-	0	2	4.9	0.61	1.3	0	0	-	X	1200	600
NOTS500	NOTS500	NOTS	-	-	0	2	4.9	0.61	1.3	0	0	-	X	1200	600
GFV	GFV	NOTS	-	-	0	2	4.9	0.61	1.3	0	0	-	X	1200	600
GFV	GFV	NOTS	-	-	0	2	4.9	0.61	1.3	0	0	-	X	1200	600
HYSR	HYSR	LMSC	-	-	1	1	18.0	0.61	-	0	0	270	R	70	600
SORS	SORS	DVST	-	-	1	1	10.0 ?	0.60	-	0	0	-	R	100	600
LS-C	LS-C	MHITU?	-	-	1	1	10.3	0.60	2.3	0	0	-	R	100	600
LS-C	LS-C	MHITU?	-	-	1	1	10.3	0.60	2.3	0	0	-	R	100	600
Seliger 1	Seliger	DRG	-	-	1	1	3.4	0.60	0.5 ?	0	0	49	R	52	600
Seliger 2	Seliger	DRG	-	-	1	1	6.0	0.60	1.5 ?	0	0	49	R	80	600
Seliger 3	Seliger	DRG	-	-	1	1	12.8	0.60	3.0 ?	0	0	49	R	120	600
Javelin	HJ	AEROL	-	-	1	4	14.8	0.58	3.4	0	0	365	R	1100	600
Trailblazer 1	HJ	PARD	-	-	1	6	17.1	0.58	3.4	0	0	365	R	280	600
Taurus Orion	HJ	WFF	-	-	1	2	10.1	0.58	2.0	0	0	457	R	200	600
Taurus Tomahawk	HJ	WFF	-	-	1	2	9.4	0.58	1.6	0	0	457	R	550	600
Taurus Nike Tomahawk	HJ	WFF	-	-	1	3	12.0	0.58	2.2	0	0	457	R	700	600
Taurus	HJ	WFF	S	-	1	1	5.0 ?	0.58	1.5	0	0	457	T	10	600
Taurion	HJ	WFF	-	-	1	1	5.0 ?	0.58	1.5	0	0	7	T	2	600
Exos	HJ	UMI	-	-	1	3	12.9	0.58	2.6	0	0	365	R	600	600
Strongarm	HJ	UMI	-	-	1	5	17.1	0.58	3.3	0	0	365	R	1000	600
Honest John	HJ	UMI	1	-	1	4	17.1	0.58	3.3	0	0	365	R	1000	600
Father John	HJ	ORDRSA	-	-	1	1	5.0	0.58	1.5	0	0	365	T	10	600
Father John	HJ	ORDRSA	1	-	0	1	5.0	0.58	1.5	0	0	365	T	10	600
Improved Honest John	HJ	ORDRSA	2	-	0	1	5.0	0.58	1.5	0	0	365	T	10	600
HJ	HJ	DAC	-	-	1	1	4.1	0.58	1.5	0	0	-	M	10	600
HJ Hydac	HJ	ORDRSA	-	-	1	1	5.0	0.58	1.5	0	0	365	T	10	600
HJ Orion	HJ	SDCO	-	-	1	2	11.3	0.58	2.6	0	0	365	R	150	600
HJ Javelin	HJ	MASA	-	-	1	2	12.6	0.58	2.0 ?	0	0	365	R	120	600
HJ Nike	HJ	SDCO	-	-	1	2	9.1	0.58	1.7	0	0	365	R	100	600
HJ Nike Hydac	HJ	SDCO	-	-	1	2	14.3	0.58	2.7	0	0	365	R	100	600
HJ Nike Javelin	HJ	SDCO	-	-	1	3	14.3	0.58	2.9	0	0	365	R	500	600
HJ Nike Gosling	HJ	SDCO	-	-	1	3	13.4	0.58	2.8	0	0	365	R	300	600
HJ Nike Mike	HJ	PARD	-	-	1	3	10.0 ?	0.58	-	0	0	365	Q	20	600
HJ Nike Mike 20"SM	HJ	PARD	-	-	1	3	10.0 ?	0.58	-	0	0	365	Q	170	600
HJ Nike T40	HJ	PARD	-	-	1	4	12.0 ?	0.58	3.2	0	0	365	R	1380	600
HJ Nike T40 T55	HJ	PARD	-	-	1	3	12.0 ?	0.58	-	0	0	365	Q	30	600
HJ Nike Tri-Deacon T40	HJ	PARD	-	-	1	4	12.0 ?	0.58	-	0	0	365	Q	30	600
HJ Nike Nike Recruit	HJ	PARD	-	-	1	4	10.0	0.58	1.3	0	0	365	Q	30	600
HJ Nike Nike Recruit T55	HJ	PARD	-	-	1	4	10.9	0.58	1.3	0	0	365	Q	30	600
HJ PRV	HJ	PARD	-	-	1	4	12.0 ?	0.58	-	0	0	365	R	100	600

LV

LV_Name	LV_Family	LV_Manufacturer	LV_Variant	LV_Alias	LV_Min_Stage	LV_Max_Stage	Length m	Diameter m	Launch_Mass t	LEO_Capacity kg	GTO_Capacity kg	TU_Thrust kN	Class	Apogee km	Range km
Jason	HJ	AEROL	-	-	1	5	17.5	0.56	3.4	0	0	365	R	800	600
X-7A-1	HJ	LWN	-	-	1	2	2.1	0.61	3.6	0	0	-	C	30	600
Fateh-110	Zelzal	IR	-	-	1	1	9.0 ?	0.61	1.0 ?	0	0	-	M	60	200
Fateh-360	Zelzal	IR	-	-	1	1	9.0 ?	0.61	1.0 ?	0	0	-	M	100	500
M-600	Zelzal	SYMC	-	-	1	1	9.0 ?	0.61	1.0 ?	0	0	-	M	60	241
Zelzal	Zelzal	IR	-	-	1	1	10.0 ?	0.61	0.9	0	0	-	R	50	209
Zelzal-1	Zelzal	IR	-	-	1	1	10.0 ?	0.61	0.9	0	0	-	R	50	209
Zelzal-2	Zelzal	IR	-	-	1	1	10.0 ?	0.61	0.9	0	0	-	R	50	209
Zelzal-3	Zelzal	IR	-	-	1	1	10.0 ?	0.61	0.9	0	0	-	R	50	209
Zelzal-3	Zelzal	IR	-	-	1	1	10.0 ?	0.61	0.9	0	0	-	R	50	209
Kavoshgar K110	Zelzal	IR	-	-	1	1	6.2	0.56	-	0	0	-	R	50	209
Lance	Lance	LTVM	-	-	1	1	8.0	0.56	1.5	0	0	-	M	46	209
Sonda 3	Sonda3	IAE	-	-	1	2	8.0	0.56	1.4	0	0	102	R	600	209
Sonda 3	Sonda3	IAE	M1	-	1	2	8.0	0.56	1.4	0	0	102	R	600	209
Sonda 3	Sonda3	IAE	M2	-	1	2	8.0	0.56	1.4	0	0	102	R	600	209
VS-30	Sonda3	INPE	-	-	1	1	5.0 ?	0.56	1.4 ?	0	0	102	R	140	209
VS-30	Sonda3	INPE	-	-	1	1	12.0	0.56	2.6	0	0	102	R	265	209
S31/S30/10	Sonda3	INPE	-	-	2	3	12.0	0.56	2.6	0	0	102	R	265	209
VS-30/Orion	Sonda3	INPE	-	-	1	1	7.0 ?	0.56	1.8 ?	0	0	102	R	320	209
VS-31/Orion	Sonda3	IAE	-	-	1	2	8.0 ?	0.56	1.8 ?	0	0	102	R	400	209
VS-31/IM	Sonda3	IAE	-	-	1	2	8.0 ?	0.56	1.7	0	0	102	R	400	209
Red Kite	RedKite	DLR/BAYCH	-	-	1	1	3.3	0.56	1.1	0	0	226	R	70	209
Red Kite/IM	RedKite	DLR/BAYCH	-	-	1	1	8.0 ?	0.56	1.1	0	0	226	R	70	209
ATV	Stromboli	VSSC	-	-	1	2	10.3	0.56	3.0	0	0	120	R	400	209
RH-560/300 Mk II	Stromboli	VSSC	-	-	1	2	9.1	0.56	1.3	0	0	76	R	400	209
RH-560 Mk III	Stromboli	VSSC	-	-	1	2	9.1	0.56	1.3	0	0	76	R	400	209
RH-560S	Stromboli	VSSC	-	-	1	1	5.9	0.56	1.5	0	0	119	R	250	209
RH-560	Stromboli	VSSC	-	-	1	2	8.4	0.56	1.3	0	0	76	R	400	209
RH-560/LPR-3T	Stromboli	VSSC	-	-	1	2	10.0	0.56	2.5	0	0	119	R	420	209
Berenice	Stromboli	ONERA	-	-	1	4	12.3	0.56	3.4	0	0	170	V	250	209
Titus	Stromboli	ONERA	-	-	1	2	11.6	0.56	3.4	0	0	170	V	250	209
Tibere	Stromboli	ONERA	-	-	1	3	14.2	0.56	4.6	0	0	170	V	1000	209
Tacite	Stromboli	ONERA	-	-	1	1	7.8	0.56	2.0	0	0	170	V	150	209
Opd-56-39-22D	Stromboli	ONERA	-	-	1	4	12.2	0.56	1.8	0	0	200	R	280	209
Antares	Stromboli	ONERA	-	-	1	4	12.2	0.56	1.8	0	0	200	R	280	209
Dragon	Stromboli	SUD	-	-	1	2	7.0 ?	0.56	1.2 ?	0	0	75	R	440	209
Dragon 2B	Stromboli	SUD	-	-	1	2	7.0	0.56	1.2	0	0	97	R	440	209
Dragon 3	Stromboli	SUD	-	-	1	2	7.3	0.56	1.3	0	0	97	R	440	209
Haf 1	Stromboli	SUPA	-	-	1	1	5.3	0.56	1.1	0	0	97	R	116	209
Dauphin	Stromboli	SUD	-	-	1	1	5.3	0.56	1.1	0	0	97	R	116	209
Eridan	Stromboli	CNES	-	-	1	2	8.3	0.56	2.1	0	0	97	R	480	209
Haf II	Stromboli	SUPA	-	-	1	2	8.3	0.56	2.1	0	0	97	R	250	209
SE400	Stromboli	SUD	-	-	1	1	8.1	0.56	1.2	0	0	97	R	440	209
VE10A Aigle	Stromboli	LRBA	-	-	1	1	8.0	0.55	2.3	0	0	-	A	60	209
VE10 Aigle	Stromboli	LRBA	-	-	1	1	8.0	0.55	2.3	0	0	-	Q	20	209
Statalex	Stromboli	NORD	-	-	1	1	8.0	0.55	2.3	0	0	-	Q	20	209
Vega Statoreacteur	Stromboli	NORD	-	-	1	1	9.9	0.56	1.7	0	0	-	C	30	209
Veronique R	Veronique	LRBA	-	-	1	1	9.9	0.56	1.7	0	0	-	C	30	209
Veronique	Veronique	LRBA	-	-	1	1	7.3	0.55	1.3	0	0	40	T	2	209
Veronique AGI	Veronique	LRBA	-	-	1	1	7.3	0.55	1.3	0	0	40	R	100	209
Veronique 61	Veronique	LRBA	-	-	1	1	7.1	0.55	1.3	0	0	40	R	100	209
Veronique 61M	Veronique	LRBA	-	-	1	1	9.5	0.55	1.9	0	0	60	R	300	209
Veronique P2	Veronique	LRBA	-	-	1	1	9.5	0.55	1.9	0	0	60	R	300	209
Veronique P6	Veronique	LRBA	-	-	1	1	6.0 ?	0.55 ?	0.5	0	0	20	T	2	209
Sounding Rocket	NSPOB	NSPO	-	-	1	2	8.0 ?	0.55 ?	2.0 ?	0	0	-	R	200	209
Luna-M	Luna	MLTT	-	-	1	1	9.4	0.54	2.5	0	0	-	M	70	209
SM-3	Mk72	USN	-	-	1	3	7.9	0.53	1.3	0	0	-	R	100	209
SM-3-1B	Mk72	USN	-	-	1	3	7.9	0.53	1.3	0	0	-	R	100	209
SM-3-1IA	Mk72	USN	-	-	1	3	7.9	0.53	1.3	0	0	-	R	100	209
SM-2-IV	Mk72	USN	-	-	1	3	7.9	0.53	1.3	0	0	-	R	100	209
SM-6	Mk72	USN	-	-	1	2	7.9	0.53	1.3	0	0	-	R	100	209
Hades	Hades	AELM	-	-	1	1	7.5	0.53	1.9	0	0	-	A	30	209
Black Sparrow	BlackSparrow	IAI	-	-	0	1	4.8	0.53	1.2	0	0	-	B	150	300
Blue Sparrow	BlackSparrow	IAI	-	-	0	1	6.5	0.53	1.9	0	0	-	B	40	300
Silver Sparrow	BlackSparrow	IAI	-	-	0	1	8.4	0.53	3.1	0	0	-	B	100	300
Al Samoud	V-750	IQMIC	-	-	1	1	7.7	0.50	1.6	0	0	-	R	50	300
Al Fatah	Fatah	LRBA	-	-	1	1	6.5	0.50	1.6	0	0	-	R	50	300
Cedre 3	Cedre	LRBA	-	-	1	3	6.8	0.52	1.2	0	0	-	R	200	300
Cedre 4	Cedre	LRBA	-	-	1	3	7.0 ?	0.52	1.2	0	0	-	R	200	300
S-520	S-520	MISST	-	-	1	1	9.2	0.52	2.2	0	0	143	R	430	300
SS-520	S-520	MISST	-	-	1	2	9.7	0.52	2.6	0	0	-	R	1000	300
SS-520	S-520	MISST	4	-	1	3	9.7	0.52	2.6	0	0	-	R	1000	300
TT-500	JCR	MASDA	-	-	1	2	10.5	0.50	2.2	0	0	-	R	200	300
TT-500A	JCR	MASDA	-	-	1	2	10.5	0.50	2.2	0	0	-	R	290	300

LV

LV_Name	LV_Family	LV_Manufacturer	LV_Variant	LV_Alias	LV_Min_Stage	LV_Max_Stage	Length m	Diameter m	Launch_Mass t	LEO_Capacity kg	GTO_Capacity kg	TU_Thrust kN	Class	Apogee km	Range km
48N6	48N6	FAKEL	-	OP4-56-39-22D	1	1	7.5	0.50	1.8	0	0	-	R	40	300
JCR	JCR	MASDA	-	OP4-56-39-22D	1	2	10.3	0.51	2.3	0	0	133	X	200	300
Momo	Momo	IST	6	OP4-56-39-22D	1	1	9.9	0.50	1.1	0	0	12	R	100	300
Hydra_Sandhawk	NOTS400	NOTS/LLNL	-	OP4-56-39-22D	1	1	10.1	0.50	1.2	0	0	14	R	100	300
STIG-B	STIG-B	ARMAD	-	OP4-56-39-22D	1	2	10.0 ?	0.50 ?	1.2 ?	0	0	-	R	280	300
SARGE	STIG-B	EXOSA	-	OP4-56-39-22D	1	1	10.4	0.51	0.7	0	0	22	R	80	300
K-15	DRDO	NPOL	-	OP4-56-39-22D	1	1	11.0	0.51	1.1	0	0	24	R	100	300
E-8-5 VA	LongTom	WRE	1	OP4-56-39-22D	1	2	2.3	0.50 ?	4.0 ?	0	0	-	R	300	300
Long Tom	LongTom	WRE	1	OP4-56-39-22D	1	2	8.3	0.47	0.9	0	0	190	R	120	300
HAT	LongTom	WRE	1	OP4-56-39-22D	1	2	8.3	0.47	0.9	0	0	190	R	120	300
Nike T48 Ajax	T48	DAC	-	OP4-56-39-22D	1	2	5.0 ?	0.47 ?	0.5 ?	0	0	-	W	60	300
SN-2	Terrier	USN	-	OP4-56-39-22D	1	2	8.0	0.46	1.3	0	0	190	A	20	300
SN-HER	Terrier	USN	-	OP4-56-39-22D	1	2	7.9	0.53	1.3	0	0	-	A	30	300
Hugo	Terrier	USN	-	OP4-56-39-22D	1	2	8.0	0.46	1.3	0	0	258	A	20	300
Terrier Sandhawk	Terrier	NMSU	-	OP4-56-39-22D	1	2	10.0 ?	0.46	1.3 ?	0	0	-	A	160	300
ARAV-ER	Terrier	SAND	-	OP4-56-39-22D	1	1	11.4	0.46	-	0	0	268	R	430	300
Oriole II	Terrier	KRAT	-	OP4-56-39-22D	1	3	14.0 ?	0.46	1.0 ?	0	0	268	R	370	300
Terrier Oriole	Terrier	DTI	-	Terrier Oriole	1	2	11.0 ?	0.46	1.0 ?	0	0	268	R	370	300
Terrier Oriole Oriole	Terrier	DTI	-	Terrier Oriole	1	2	11.0 ?	0.46	1.0 ?	0	0	268	R	370	300
Oriole IIIA	Terrier	DGA	-	Terrier Oriole	1	3	14.0 ?	0.46	1.0 ?	0	0	268	R	370	300
Terrier Terrier Oriole	Terrier	DTI	-	Terrier Oriole	1	3	14.0 ?	0.46	1.0 ?	0	0	268	R	370	300
MRBM T4-E	Terrier	DTI	-	Terrier Oriole	1	3	14.0 ?	0.46	1.0 ?	0	0	268	R	370	300
Terrier Mk 70 Oriole	Terrier	DTI	-	Terrier Oriole	1	2	14.0 ?	0.46	1.0 ?	0	0	268	R	370	300
SRBM T4-B	Terrier	DTI	-	Terrier Oriole	1	2	11.0 ?	0.46	1.0 ?	0	0	268	R	370	300
Terrier	Terrier	ORDRSA	-	Terrier Oriole	1	2	6.0 ?	0.46	1.3 ?	0	0	268	R	370	300
Terrier Mk 70 Peregrine	Terrier	MSFC	-	Terrier Oriole	1	1	17.0	0.46	2.2	0	0	-	R	300	300
Terrier Malemute	Terrier	SAND	-	Terrier Oriole	1	2	12.7	0.46	1.6	0	0	268	R	500	300
Terrier Imp Malemute	Terrier	GSFC	-	Terrier Oriole	1	2	12.7	0.46	1.6	0	0	268	R	500	300
Terrier Imp Malemute	Terrier	GSFC	2	Terrier Oriole	1	2	12.7	0.46	1.6	0	0	268	R	500	300
Terrier Imp Malemute	Terrier	GSFC	1	Terrier Oriole	1	2	12.7	0.46	1.6	0	0	268	R	500	300
Terrier Terrier Imp Mal.	Terrier	GSFC	-	Terrier Oriole	1	3	12.7	0.46	1.6	0	0	268	R	500	300
Terrier/551	Terrier	NOTS?	-	Terrier Oriole	1	2	8.4	0.46	1.3	0	0	268	R	450	300
Terrier LEAP	Terrier	BWDO	-	Terrier Oriole	1	3	10.0 ?	0.46 ?	1.3 ?	0	0	268	A	30	300
Terrier ASAS	Terrier	BWDO	-	Terrier Oriole	1	2	12.0	0.46	1.3 ?	0	0	268	A	275	300
Terrier Hydac	Terrier	DACC	-	Terrier Oriole	1	2	10.0 ?	0.46	-	0	0	268	R	500	300
Terrier Nike	Terrier	SAND	-	Terrier Oriole	1	2	9.8	0.46	1.1 ?	0	0	268	A	2	300
Terrier Asp IV	Terrier	NOTS	-	Terrier Oriole	1	2	10.0 ?	0.46	1.1 ?	0	0	268	R	100	300
Terrier Asp	Terrier	NOTS	-	Terrier Oriole	1	2	10.0 ?	0.46	1.1 ?	0	0	268	R	100	300
Terrier Orion	Terrier	MASA	-	Terrier Oriole	1	2	12.8 ?	0.46	1.3	0	0	268	R	300	300
Terrier Mk 70 Orion	Terrier	MASA	-	Terrier Oriole	1	2	12.8 ?	0.46	1.3	0	0	268	R	300	300
Terrier Improved Orion	Terrier	MASA	-	Terrier Oriole	1	2	12.8 ?	0.46	1.3	0	0	268	R	300	300
Terrier Mk 12 Imp Orion	Terrier	MASA	-	Terrier Oriole	1	2	12.8 ?	0.46	1.3	0	0	268	R	300	300
Terrier Tomahawk	Terrier	SAND	-	Terrier Oriole	1	2	9.0 ?	0.46	1.1 ?	0	0	268	R	300	300
Black Dagger	Terrier	SMDC	-	Boosted Zombie	1	2	6.0	0.46	1.0	0	0	257	R	40	300
Boosted Zombie	Terrier	SMDC	-	Boosted Zombie	1	2	6.0	0.46	1.0	0	0	257	R	40	300
Terrier Lynx	Terrier	NAWC?	-	Boosted Zombie	1	2	9.0 ?	0.46	1.3 ?	0	0	268	R	200	300
Terrier ASHOC Cajun	Terrier	NOTS	-	Boosted Zombie	1	3	11.0 ?	0.46	1.4 ?	0	0	268	R	100	300
Terrier Recruit	Terrier	WFC	-	Boosted Zombie	1	2	5.0 ?	0.46	1.0 ?	0	0	268	R	10	300
Coyote	Terrier	OSSC	-	Boosted Zombie	1	1	9.5	0.46	1.0 ?	0	0	268	R	1	300
STAR	Terrier	OSSC	-	Boosted Zombie	1	1	4.0 ?	0.11 ?	0.0	0	0	-	Y	90	300
Black Brant IX	Terrier	BAL	2	Boosted Zombie	1	2	12.2	0.46	2.2	0	0	257	R	300	300
Black Brant IXB	Terrier	BAL	2	Boosted Zombie	1	2	12.2	0.46	2.2	0	0	257	R	300	300
Black Brant IXB	Terrier	BAL	3	Boosted Zombie	1	2	12.2	0.46	2.2	0	0	257	R	300	300
Black Brant IX	Terrier	BAL	4	Boosted Zombie	1	2	12.2	0.46	2.2	0	0	257	R	300	300
Black Brant IX	Terrier	BAL	4	Boosted Zombie	1	2	12.2	0.46	2.2	0	0	257	R	300	300
Black Brant 98M1	Terrier	BAL	-	Boosted Zombie	1	2	12.2	0.46	2.2	0	0	257	R	300	300
Black Brant 9CM1	Terrier	BAL	-	Boosted Zombie	1	2	12.2	0.46	2.2	0	0	257	R	300	300
Black Brant X	Terrier	BAL	-	Boosted Zombie	1	3	14.5	0.46	2.6	0	0	257	R	900	300
Black Brant YB	Terrier	BAL	-	Boosted Zombie	1	3	14.5	0.46	2.6	0	0	257	R	900	300
Black Brant 10CM1	Terrier	BAL	-	Boosted Zombie	1	3	14.5	0.46	2.6	0	0	257	R	900	300
SRAM	SRAM	BOUT	-	Boosted Zombie	1	1	4.3	0.46	1.0	0	0	-	C	10	180
ASAT	SRAM	LTV	-	Boosted Zombie	1	1	5.4	0.46	1.2	0	0	-	M	1000	180
Farside	Recruit	AEMUT	-	Boosted Zombie	1	4	7.3	0.46 ?	0.9	0	0	667	R	4500	180
NATIV	RTV	MAAD	-	Boosted Zombie	1	1	4.1	0.46	0.6	0	0	12	T	19	50
MR-12	MR-12	TAIFUN	-	Boosted Zombie	1	1	8.8	0.45	1.4	0	0	100	R	150	50
MR-20	MR-20	TAIFUN	-	Boosted Zombie	1	1	9.0	0.45	1.6	0	0	100	R	240	50
MR-25	MR-12	TAIFUN	-	Boosted Zombie	1	1	9.0	0.45	1.6	0	0	100	R	240	50
MR-30	MR-12	TAIFUN	-	Boosted Zombie	1	1	8.0	0.45	1.6	0	0	100	R	300	50
MR-300	MR-12	TAIFUN	-	MR-30	1	1	8.0	0.45	1.6	0	0	100	R	300	50
Tianying-3C	Tianying	CSSAR	-	MR-30	1	1	6.4	0.45	1.1	0	0	-	R	200	50

LV

LV_Name	LV_Family	LV_Manufacturer	LV_Variant	LV_Alias	LV_Min_Stage	LV_Max_Stage	Length m	Diameter m	Launch_Mass t	LEO_Capacity kg	GTG_Capacity kg	TU_Thrust kN	Class	Apogee km	Range km
Tianyong-3E	Tianyong	CSSAR	-	MR-30	1	1	6.4	0.45	1.1	0	0	-	R	200	50
Tianyong-3F	Tianyong	CSSAR	-	MR-30	1	2	9.1	0.45	1.6	0	0	-	R	320	50
Huayi-1	Tianyong	HUAYI	-	MR-30	1	2	9.1	0.45	1.6	0	0	-	R	320	50
T-7	T-7	SIMED	-	MR-30	0	1	9.6	0.45	1.1	0	0	-	W	60	50
T-7A	T-7	SIMED	-	MR-30	0	1	10.3	0.45	1.1	0	0	-	R	115	50
T-7A-S2	T-7	SIMED	-	MR-30	0	1	10.0	0.45	1.3	0	0	-	R	100	50
T-7A-S	T-7	SIMED	-	MR-30	0	1	10.3	0.45	1.2	0	0	-	R	100	50
T-7M	T-7	SIMED	-	MR-30	0	1	5.3	0.45	0.2	0	0	2	T	10	50
T-7/GF-01A	T-7	SIMED	-	MR-30	0	2	10.0 ?	0.45	1.5 ?	0	0	-	R	311	50
Black Brant I	BB5	CARDE	-	MR-30	1	1	8.4 ?	0.44	1.0 ?	0	0	111	R	160	50
Black Brant II	BB5	CARDE	-	MR-30	1	1	8.4	0.44	1.0 ?	0	0	111	R	200	50
Black Brant IIB	BB5	CARDE	-	MR-30	1	1	8.4	0.44	1.0 ?	0	0	89	R	200	50
Black Brant IVA	BB5	BAL	-	MR-30	1	2	12.0	0.44	1.4	0	0	111	R	850	50
Black Brant IVB	BB5	BAL	-	MR-30	1	2	12.0	0.44	1.4	0	0	111	R	950	50
Black Brant VA	BB5	BAL	-	MR-30	1	1	8.3	0.44	1.1	0	0	111	R	170	50
Black Brant VB	BB5	BAL	-	MR-30	1	1	8.3	0.44	1.1	0	0	68	R	400	50
Black Brant VC	BB5	BAL	-	MR-30	1	1	8.3	0.44	1.3	0	0	68	R	350	50
Black Brant 8B	Nike	BAL	-	MR-30	1	2	11.9	0.44	2.0	0	0	196	R	340	50
Black Brant 8C	Nike	BAL	-	MR-30	1	2	11.9	0.44	2.0	0	0	196	R	340	50
Skyllark	Raven	RAE	1	MR-30	1	1	7.5	0.44	1.1	0	0	44	R	150	50
Skyllark	Raven	RAE	2	MR-30	1	1	7.5	0.44	1.1	0	0	44	R	150	50
Skyllark	Raven	RAE	5	MR-30	1	1	7.5	0.44	1.1	0	0	44	R	110	50
Skyllark	Raven	RAE	7	MR-30	1	1	7.5	0.44	1.1	0	0	44	R	140	50
Skyllark 1	Raven	BAC	-	MR-30	1	1	10.8	0.44	1.2	0	0	50	R	125	50
Skyllark	Raven	RAE	2C	MR-30	1	2	9.1	0.44	1.4	0	0	80	R	200	50
Skyllark	Raven	RAE	5C	MR-30	1	2	9.1	0.44	1.4	0	0	80	R	200	50
Skyllark	Raven	RAE	7C	MR-30	1	2	9.1	0.44	1.4	0	0	80	R	200	50
Skyllark	Raven	BAC	-	MR-30	1	2	12.7	0.44	1.5	0	0	80	R	190	50
Skyllark 2 AC	Raven	BAC	-	MR-30	1	2	12.7	0.44	1.5	0	0	80	R	190	50
Skyllark 3 AC	Raven	BAC	-	MR-30	1	2	12.7	0.44	1.7	0	0	80	R	210	50
Skyllark 4 AC	Raven	BAC	-	MR-30	1	2	12.7	0.44	1.7	0	0	80	R	210	50
Skyllark 4 AC	Raven	BAC	-	MR-30	1	2	13.2	0.44	1.9	0	0	191	R	240	50
Skyllark 6 AC	Raven	BAC	-	MR-30	1	2	13.2	0.44	1.9	0	0	191	R	270	50
Skyllark 6 AC	Raven	BAC	-	MR-30	1	2	13.2	0.44	1.9	0	0	191	R	270	50
Skyllark 7 AC	Raven	BAC	-	MR-30	1	2	12.2	0.44	2.1	0	0	191	R	270	50
Skyllark 7 AC	Raven	BAC	-	MR-30	1	2	12.2	0.44	2.0 ?	0	0	191	R	270	50
Skyllark 12 AC	Raven	BAC	-	MR-30	1	3	13.0 ?	0.44	2.1 ?	0	0	191	R	750	50
Skyllark 12 AC	Raven	BAC	-	MR-30	1	3	13.0 ?	0.44	2.1 ?	0	0	191	R	830	50
Skyllark 10A	Raven	RAE	-	MR-30	1	2	6.0 ?	0.44	0.8	0	0	130	R	270	50
Jaguar 1	Raven	RAE/WRE	-	MR-30	1	3	11.9	0.44	1.7	0	0	-	Q	24	50
Jaguar 2	Raven	RAE/WRE	-	MR-30	1	3	11.9	0.44	1.7	0	0	-	Q	24	50
Jabiru 2	Raven	RAE/WRE	-	MR-30	1	3	12.9	0.44	2.2	0	0	-	Q	30	50
Jabiru 3	Raven	RAE/WRE	-	MR-30	1	3	12.9	0.44	2.2	0	0	-	Q	30	50
Rock IIIA	Raven	RAE	-	MR-30	1	2	12.7 ?	0.44	2.0 ?	0	0	-	Q	30	50
Leopard	Raven	RAE	-	MR-30	1	1	5.0 ?	0.44	1.2 ?	0	0	-	Q	20	50
Blue Water	Raven	ELEEC	-	MR-30	1	2	6.0 ?	0.44	1.5 ?	0	0	-	Q	20	50
RX-420	RX-420	LAPAN	-	MR-30	1	1	7.6	0.44	1.4	0	0	196	M	20	50
Kappa 7	Kappa 7	ISAS	-	MR-30	1	1	6.2	0.42	1.0 ?	0	0	-	R	50	50
Kappa 8	Kappa 8	ISAS	-	MR-30	1	1	6.7	0.42	1.2	0	0	-	T	50	50
Kappa 9M	Kappa 9M	ISAS	-	MR-30	1	2	10.9	0.42	1.5	0	0	-	R	200	50
Kappa 9L	Kappa 9L	ISAS	-	MR-30	1	2	11.1	0.42	1.5	0	0	-	R	350	50
Kappa 10	Kappa 10	ISAS	-	MR-30	1	3	12.5	0.42	1.6	0	0	-	R	350	50
Kappa 10C	Kappa 10C	ISAS	-	MR-30	1	2	9.8	0.42	1.8	0	0	-	R	250	50
Kappa 10S	Kappa 10S	ISAS	-	MR-30	1	2	10.0 ?	0.42	-	0	0	-	R	250	50
Nike	Nike	ABL	-	MR-30	1	3	10.0 ?	0.42	-	0	0	-	R	750	50
Nike-480	Nike	DACC/AJ	-	MR-30	1	1	6.0	0.42	0.7	0	0	217	A	23	50
Nike-482	Nike	DACC/AJ	-	MR-30	1	2	6.0 ?	0.42	0.7	0	0	217	A	20	50
Nike-484	Nike	DACC/AJ	-	MR-30	1	2	6.0 ?	0.42	0.7	0	0	217	A	20	50
Nike-490	Nike	DACC/AJ	-	MR-30	1	2	6.0 ?	0.42	0.7	0	0	217	A	20	50
Nike Ajax	Nike	WELEC	-	MR-30	1	2	10.8	0.42	1.1	0	0	217	A	6	50
Nike X201 Ajax	Nike	WELEC	-	MR-30	1	2	10.8	0.42	1.1	0	0	217	A	6	50
Nike Cree	Nike	AFCRL?	-	MR-30	1	2	11.9	0.42	1.4	0	0	217	T	50	50
Nike Recruit	Nike	PARD	-	MR-30	1	1	8.0 ?	0.42	1.1	0	0	217	Q	5	50
Nike Tomahawk	Nike	SAND	-	MR-30	1	2	10.8	0.42	1.0	0	0	217	R	270	50
Nike Tomahawk	Nike	SAND	9	MR-30	1	2	10.8	0.42	1.0	0	0	217	R	270	50
Nike Tomahawk	Nike	SAND	12	MR-30	1	2	10.8	0.42	1.0	0	0	217	R	270	50
Nike Tomahawk	Nike	SAND	9a	MR-30	1	2	10.8	0.42	1.0	0	0	217	R	270	50
Nike Deacon	Nike	PARD	-	MR-30	1	2	7.8	0.42	-	0	0	217	R	100	50
Nike Deacon	Nike	PARD	1	MR-30	1	2	7.8	0.42	-	0	0	265	R	50	50

LV

LV_Name	LV_Family	LV_Manufacturer	LV_Variant	LV_Alias	LV_Min_Stage	LV_Max_Stage	Length m	Diameter m	Launch_Mass t	LEO_Capacity kg	GTG_Capacity kg	TU_Thrust kN	Class	Apogee km	Range km
Nike Nike HPAG	Nike	PARD	-	MR-30	1	3	9.0 ?	0.42	-	0	0	217	Q	10	50
Nike Nike T40	Nike	PARD	-	MR-30	1	3	9.0 ?	0.42	-	0	0	217	Q	10	50
Nike Nike T40 T55	Nike	PARD	-	MR-30	1	3	9.0 ?	0.42	-	0	0	217	Q	10	50
Nike Nike T40 T55	Nike	PARD	-	MR-30	1	4	9.0 ?	0.42	-	0	0	217	R	100	50
Nike Nike Tri-Deacon T40	Nike	PARD	-	MR-30	1	4	9.0 ?	0.42	-	0	0	217	Q	10	50
Nike Nike Deacon	Nike	PARD	-	MR-30	1	3	9.0 ?	0.42	-	0	0	217	Q	10	50
Nike Nike Deacon	Nike	PARD	-	MR-30	1	3	9.0 ?	0.42	-	0	0	217	Q	10	50
Mach 5 TV	Nike	SAND	-	MR-30	1	2	7.0 ?	0.42	-	0	0	217	Q	16	50
Nike Yardbird	Nike	UMI	-	MR-30	1	2	8.1	0.42	-	0	0	217	R	120	50
Nike Nike Cajun	Nike	UMI	-	MR-30	1	2	8.1	0.42	0.7	0	0	217	R	120	50
Nike Nike Cajun	Nike	UMI	-	MR-30	1	2	8.1	0.42	0.7	0	0	217	R	120	50
Nike Nike Apache	Nike	SAND	-	MR-30	1	3	8.6	0.42	0.8	0	0	217	R	200	50
Nike Nike Apache	Nike	SAND	-	MR-30	1	2	8.6	0.42	0.8	0	0	217	R	200	50
Nike Nike Orion	Nike	MASA	-	MR-30	1	2	9.0	0.42	1.1	0	0	217	R	140	50
Nike Nike Orion	Nike	MASA	-	MR-30	1	2	9.0	0.42	1.1	0	0	217	R	140	50
Nike Nike Improved Orion	Nike	MASA	-	MR-30	1	2	9.0 ?	0.42	1.1 ?	0	0	217	R	160	50
Nike Nike Hawk	Nike	MASA	-	MR-30	1	2	8.6	0.42	1.0 ?	0	0	217	R	500	50
Nike Nike Malemute	Nike	MASA	-	MR-30	1	2	8.6	0.42	1.0 ?	0	0	217	R	500	50
Nike Nike Malemute	Nike	MASA	-	MR-30	1	2	8.6	0.42	1.0 ?	0	0	217	R	500	50
Nike Nike Asp	Nike	COOP	-	MR-30	1	1	7.9	0.42	0.7	0	0	217	R	220	50
Nike Nike Hydac	Nike	SOCO	-	MR-30	1	2	9.1	0.42	0.9	0	0	217	R	150	50
Nike Nike Ironouis	Nike	AJSP	-	MR-30	1	2	8.0 ?	0.42	0.7	0	0	217	R	290	50
Nike Nike Javelin	Nike	AFBRL	-	MR-30	1	2	8.2	0.42	0.9	0	0	217	R	130	50
Nike Nike Viper I	Nike	SAND?	-	MR-30	1	2	8.0 ?	0.42	0.6 ?	0	0	217	R	80	50
Nike Nike Viper I	Nike	SAND?	-	MR-30	1	2	8.0 ?	0.42	0.6 ?	0	0	217	R	80	50
Terrier Viper I	Terrier	NOTS	-	MR-30	1	2	8.0 ?	0.42	0.6 ?	0	0	217	R	80	50
Nike Nike Recruit	Nike	LARC	-	MR-30	1	3	9.0 ?	0.42	-	0	0	217	R	120	50
Nike Nike Recruit	Nike	LARC	-	MR-30	1	3	9.0 ?	0.42	-	0	0	217	R	120	50
Aerobee 170A	Nike	AJGC	-	MR-30	1	2	12.4	0.42	1.5	0	0	217	R	200	50
Aerobee 170B	Nike	AJGC	-	MR-30	1	2	12.4	0.42	1.5	0	0	225	R	200	50
Aerobee 170	Nike	AJGC	-	MR-30	1	2	12.6	0.42	1.4	0	0	225	R	200	50
Aerobee 200A	Nike	AJGC	-	MR-30	1	2	12.6	0.42	1.6 ?	0	0	225	R	250	50
Aerobee 200	Nike	AJGC	-	MR-30	1	2	12.6	0.42	1.6 ?	0	0	225	R	250	50
Aerobee 350	Nike	AJGC	-	MR-30	1	2	15.9	0.42	3.6	0	0	217	R	450	50
Aerobee 200	Nike	AJSP	-	MR-30	1	2	6.3	0.42	0.8 ?	0	0	161	R	350	50
AAD	AAD	HAL	-	MR-30	1	1	7.5	0.42	1.3	0	0	-	B	40	350
AAD AD-1	AAD	HAL	-	MR-30	1	2	10.0 ?	0.42	1.3	0	0	-	B	150	350
Prahaar	AAD	HAL	-	MR-30	1	1	7.5	0.42	1.3	0	0	-	B	40	350
KSR-I	KSR	KARI	-	MR-30	1	1	6.7	0.42	1.2	0	0	86	T	50	350
KSR-II	KSR	KARI	-	MR-30	1	1	6.7	0.42	2.0	0	0	298	R	130	350
LongTom	LongTom	WRE	-	MR-30	1	2	6.6	0.41	0.5	0	0	80	T	50	350
Aeolus	Aeolus	WRE	-	MR-30	1	2	6.6	0.41	0.5	0	0	80	T	50	350
Malemute	Malemute	SAND	-	MR-30	1	1	2.4	0.41	0.8 ?	0	0	57	R	165	350
Malemute	Malemute	GSFC	-	MR-30	1	1	2.4	0.41	0.8 ?	0	0	57	R	165	350
Improved Malemute	Malemute	SMDC	-	MR-30	1	1	2.4	0.41	0.8 ?	0	0	57	R	165	350
PAAT	Malemute	SMDC	-	MR-30	1	1	2.4	0.41	0.8 ?	0	0	57	R	165	350
IM/IO	Malemute	DLR	-	MR-30	1	2	5.0 ?	0.41	-	0	0	-	R	165	350
IM/IM	Malemute	DLR	-	MR-30	1	2	5.0 ?	0.41	-	0	0	-	R	165	350
IM/VS-30	Malemute	DLR	-	MR-30	1	2	5.0 ?	0.41	-	0	0	-	R	165	350
Martlet 1	Malemute	DLR	-	MR-30	1	2	5.0 ?	0.41	-	0	0	-	R	165	350
Martlet 2	Guni6	SRCI	-	MR-30	1	1	1.7	0.41	0.2	0	0	-	R	150	350
Martlet 2C	Guni6	SRCI	-	MR-30	1	1	1.7	0.41	0.2	0	0	-	R	150	350
Martlet 3A	Guni6	SRCI	-	MR-30	1	1	1.7	0.41	0.2	0	0	-	R	150	350
Martlet 3B	Guni6	SRCI	-	MR-30	1	1	1.7	0.41	0.2	0	0	-	R	150	350
Gun Projectile 16-inch	Guni6	SRCI	-	MR-30	1	1	1.7	0.41	0.2	0	0	-	R	100	350
Zenith	Zenith	CONTR	-	MR-30	1	1	4.6	0.42	0.7	0	0	45	R	140	350
Zenith	Zenith	CONTR	C	MR-30	0	1	5.9	0.42	0.9	0	0	45	R	190	350
Daniel	Daniel	ONERA	-	MR-30	1	3	8.4	0.40	1.0 ?	0	0	-	R	130	350
Doorknob	Lacrosse	SAND	-	MR-30	1	1	3.6	0.40	0.5	0	0	168	T	24	350
Doorknob	Lacrosse	SAND	1	MR-30	1	1	3.6	0.40	0.5	0	0	168	T	24	350
Nike-46	Nike-46	DAC/AJ	2	MR-30	1	2	5.7	0.40	0.9	0	0	168	R	84	350
Nike-47	Nike-46	DAC/AJ	-	MR-30	1	2	6.0 ?	0.40 ?	0.7	0	0	400	A	10	350
Nike-481	Nike-46	DAC/AJ	-	MR-30	1	2	6.0 ?	0.40 ?	0.7	0	0	400	A	10	350
Tien Kung 3	NSPO	NGSIST	-	MR-30	1	2	6.0 ?	0.42	0.7	0	0	217	A	20	350
KN-25	KN-25	KP	-	MR-30	1	1	5.5	0.40	0.9	0	0	-	A	80	350
STIG-A	STIG	ARMAD	-	MR-30	1	1	5.0 ?	0.40 ?	2.0 ?	0	0	-	R	100	350
ISRO-CES	ISRO-CES	ISRO	-	MR-30	1	1	9.8	0.39	0.7	0	0	22	R	2	350
Astrobee F	Astrobee F	AJSP	-	MR-30	1	1	6.0 ?	0.40 ?	2.0 ?	0	0	-	R	375	350
Astrobee 500	Genie	AJSP	-	MR-30	1	3	11.5	0.38	1.5	0	0	178	R	1000	350
Paute Tomahawk	Genie	THKE	-	MR-30	1	2	7.8	0.38	0.9	0	0	161	R	350	350
Ute Tomahawk	Genie	THKE	-	MR-30	1	2	5.8	0.38	0.6	0	0	140	R	350	350
Paute Apache	Genie	THKE	-	MR-30	1	2	5.2	0.38	0.5	0	0	60	R	230	350
Ute Apache	Genie	THKE	-	MR-30	1	2	4.8 ?	0.38	0.6	0	0	140	R	200	350
ALARR	Genie	AFIT?	-	MR-30	0	1	4.2 ?	0.38 ?	0.5 ?	0	0	60	R	200	350
Genie	Genie	SAND	-	MR-30	1	1	3.1	0.38 ?	0.5 ?	0	0	-	R	100	350
Genie	Genie	SAND	-	MR-30	1	2	3.1	0.38 ?	0.5 ?	0	0	-	R	100	350
Genie	Genie	SAND	-	MR-30	1	2	3.1	0.38 ?	0.5 ?	0	0	-	R	100	350
F89J/Genie	Genie	SAND	-	MR-30	0	1	3.1	0.38 ?	0.5 ?	0	0	-	R	100	350
Jaguar	Recruit	WFF	-	MR-30	0	3	8.8	0.38	0.8	0	0	440	R	800	350
Aerobee RTV-A-1a	Aerobee	AJ	-	MR-30	1	2	7.9	0.38	0.7	0	0	18	R	130	350
Aerobee RTV-A-1	Aerobee	AJ	-	MR-30	1	2	7.9	0.38	0.7	0	0	18	R	130	350
Aerobee RTV-A-1b	Aerobee	AJ	-	MR-30	1	2	7.9	0.38	0.7	0	0	18	R	130	350

LV

LV_Name	LV_Family	LV_Manufacturer	LV_Variant	LV_Alias	LV_Min_Stage	LV_Max_Stage	Length m	Diameter m	Launch_Mass t	LEO_Capacity kg	GTQ_Capacity kg	TU_Thrust kN	Class	Apogee km	Range km
Aerobee RTV-A-1c	Aerobee	AJ	-	MR-30	1	1	7.5	0.38	0.7	0	0	18	R	130	350
Aerobee RTV-N-10a	Aerobee	AJ	-	MR-30	1	2	7.9	0.38	0.7	0	0	18	R	130	350
Aerobee RTV-N-10	Aerobee	AJ	-	MR-30	1	2	7.9	0.38	0.7	0	0	18	R	130	350
Aerobee RTV-N-10b	Aerobee	AJ	-	MR-30	1	2	7.9	0.38	0.7	0	0	18	R	130	350
Aerobee RTV-N-10c	Aerobee	AJ	-	MR-30	1	2	7.9	0.38	0.7	0	0	18	R	130	350
Aerobee RTV-N-8	Aerobee	AJ	-	MR-30	1	2	7.9	0.38	0.7	0	0	18	R	130	350
Aerobee XASR-SC-1	Aerobee	AJ	-	MR-30	1	2	7.9	0.38	0.7	0	0	18	R	130	350
Aerobee XASR-SC-2	Aerobee	AJ	-	MR-30	1	2	7.9	0.38	0.7	0	0	18	R	130	350
Aerobee AJ10-25	Aerobee	AJ	-	MR-30	1	2	7.9	0.38	0.7	0	0	18	R	130	350
Aerobee AJ10-27	Aerobee	AJ	-	MR-30	1	2	7.9	0.38	0.7	0	0	18	R	130	350
Aerobee AJ10-34	Aerobee	AJ	-	MR-30	1	2	7.9	0.38	0.7	0	0	18	R	130	350
Aerobee 100	Aerobee	AJ	-	MR-30	1	2	7.8	0.38	0.7	0	0	18	R	100	350
Seabee	Aerobee	AJ	-	MR-30	1	1	7.0	0.38	0.7	0	0	18	R	1	350
Aerobee	Aerobee	AJ	-	MR-30	1	2	7.9	0.38	0.7	0	0	18	R	130	350
Aerobee Hi	Aerobee	AJ	-	MR-30	1	2	9.5	0.38	0.9	0	0	18	R	130	350
Aerobee 150	Aerobee	AJGC	-	MR-30	1	2	9.3	0.38	0.9	0	0	18	R	270	350
Aerobee 150A	Aerobee	AJGC	-	MR-30	1	2	9.3	0.38	0.9	0	0	18	R	270	350
Aerobee 150 MI	Aerobee	AJGC	-	MR-30	1	2	9.3	0.38	0.9	0	0	18	R	270	350
Aerobee 150 MII	Aerobee	AJGC	-	MR-30	1	2	9.3	0.38	0.9	0	0	18	R	270	350
Aerobee 150 MIII	Aerobee	AJGC	-	MR-30	1	3	9.9	0.38	0.9	0	0	18	R	270	350
Aerobee 300	Aerobee	AJGC	-	MR-30	1	3	9.9	0.38	0.9	0	0	18	R	300	350
Aerobee 300A	Aerobee	AJGC	-	MR-30	1	3	9.9	0.38	0.9	0	0	18	R	300	350
Vikram-S	Vikram-S	SKYRT	-	MR-30	1	1	6.0	0.38	0.5	0	0	70	R	100	350
Kavoshgar M5	Kavoshgar	IR	-	MR-30	1	1	6.0	0.36	0.9	0	0	-	R	150	350
Nazeat 6H	Kavoshgar	IR	-	MR-30	1	1	6.3	0.36	0.9	0	0	-	R	150	350
Nucleus	Nucleus	MAMMO	-	MR-30	1	1	9.0	0.36	0.1	0	0	30	R	100	350
LS-A	LS-C	MHITU?	-	MR-30	1	2	7.5	0.35	0.8	0	0	60	R	150	350
Meteor-2H	Meteor-2	PAI	-	MR-30	1	1	4.5	0.35	0.4	0	0	24	W	68	350
Meteor-2K	Meteor-2	PAI	-	MR-30	0	1	4.3	0.35	0.4	0	0	52	R	90	350
Aerobee 75	Orion	AJ	-	MR-30	1	1	6.0	0.35	0.4	0	0	7	R	80	350
Improved Orion	Orion	MFF	-	MR-30	1	1	5.6	0.35	0.4	0	0	7	R	85	350
Orion	Orion	WFF	-	MR-30	1	1	5.6	0.35	0.4	0	0	7	R	85	350
Polaris FTV-4	10KS2500	LMSC	-	MR-30	1	1	2.9	0.35	0.1	0	0	11	R	10	350
Iraqi Gun Projectile	IraqGun350	SRCI	-	MR-30	1	1	1.5	0.35	0.1	0	0	-	R	100	350
THAAD	THAAD	LMPCO	-	MR-30	1	1	6.2	0.34	0.9	0	0	-	B	100	350
THAAD	THAAD	LMPCO	1	MR-30	1	1	6.2	0.34	0.9	0	0	-	B	100	350
SM-1MR	Standard	GDP0	-	MR-30	1	1	4.5	0.34	0.6	0	0	-	A	20	350
SM-2MR	Standard	USN	-	MR-30	1	1	5.0	0.35	1.3	0	0	-	A	30	350
Lynx	Standard	USN	-	MR-30	1	2	5.0	0.35	1.3	0	0	-	A	30	350
Kappa 4	Kappa4	ISAS	-	MR-30	1	2	5.9	0.33	0.2	0	0	105	R	80	350
Kappa 5	Kappa4	ISAS	-	MR-30	1	2	5.9	0.33	0.2	0	0	105	R	80	350
Sandhawk	Sandhawk	SAND	-	MR-30	1	1	5.1	0.33	0.8	0	0	80	R	200	350
Sandhawk Tomahawk	Sandhawk	SAND	-	MR-30	1	2	9.0	0.33	1.0	0	0	80	R	550	350
Gradiom 1	Gradiom	CITED	-	MR-30	1	1	4.5	0.32	0.5	0	0	40	T	40	350
Gradiom 2	Gradiom	CITED	-	MR-30	1	2	7.7	0.32	0.9	0	0	-	T	100	350
RX-320	RX-320	LAPAM	-	MR-30	1	1	6.0	0.32	0.5	0	0	-	T	70	350
BT-310	S-310	ISAS	-	MR-30	1	1	4.7	0.31	0.7	0	0	-	R	5	350
S-310	S-310	ISAS	-	MR-30	1	1	6.8	0.31	0.7	0	0	-	R	190	350
Belier	Belier	AESFC	-	MR-30	1	1	3.8	0.31	0.4	0	0	-	R	109	350
Belier III	Belier	AESFC	-	MR-30	1	1	3.8	0.31	0.4	0	0	-	R	109	350
RH-300	Belier	VSSC	-	MR-30	1	1	4.1	0.31	0.3	0	0	33	R	150	350
RH-300 Mk II	Belier	VSSC	-	MR-30	1	1	5.9	0.31	0.5	0	0	39	R	150	350
SO-300-200	Belier	VSSC	-	MR-30	0	1	6.0	0.31	0.5	0	0	38	R	300	350
Iris	Iris	ATIR/NRL	-	MR-30	0	1	5.0	0.31	0.6	0	0	17	R	250	350
Hydra-Iris	Iris	MVC/LLNL	-	MR-30	0	1	6.0	0.31	0.8	0	0	17	R	300	350
S-300	S-300	ISAS	-	MR-30	1	1	6.0	0.30	0.6	0	0	-	R	160	350
Bullpup Apache	Bullpup	THKE	-	MR-30	1	2	7.0	0.30	0.4	0	0	111	T	50	350
Bullpup Cajun	Bullpup	THKE	-	MR-30	1	2	7.0	0.30	0.4	0	0	111	T	41	350
FTI	FTI	AVIB	-	MR-30	1	1	5.0	0.30	0.2	0	0	-	R	60	350
WAC A	WAC	JPL/DAC	-	MR-30	0	1	7.3	0.30	0.3	0	0	-	T	75	350
WAC B	WAC	JPL/DAC	-	MR-30	0	1	7.3	0.30	0.3	0	0	-	T	75	350
WAC	WAC	JPL/DAC	-	MR-30	0	1	7.3	0.30	0.3	0	0	-	T	10	350
Tiny Tim	WAC	JPL/DAC	-	MR-30	1	1	2.4	0.30	0.1	0	0	-	T	10	350
Sonda 2	Sonda	IAE	-	MR-30	1	1	5.6	0.30	0.4	0	0	36	R	180	350
VLS-R2	Sonda	IAE	-	MR-30	0	1	4.3	0.30	1.0	0	0	120	T	50	350
Centaur 1	Venus	SUD	-	Centaur 1	1	2	5.9	0.28	0.6	0	0	44	R	130	350
Centaur 1	Venus	SUD	-	Centaur 1	1	2	5.9	0.28	0.6	0	0	44	R	130	350
Centaur 2A	Venus	SUD	-	Centaur 1	1	2	5.9	0.28	0.6	0	0	44	R	146	350
Centaur 2B	Venus	SUD	-	Centaur 1	1	2	6.3	0.28	0.5	0	0	44	R	146	350
Centaur 2C	Venus	SUD	-	Centaur 1	1	2	5.9	0.28	0.6	0	0	44	R	146	350
RH-300B	Venus	VSSC	-	Centaur 1	1	2	6.5	0.28	0.6	0	0	38	R	0	350

LV

LV_Name	LV_Family	LV_Manufacturer	LV_Variant	LV_Alias	LV_Min_Stage	LV_Max_Stage	Length m	Diameter m	Launch_Mass t	LEO_Capacity kg	GTO_Capacity kg	TU_Thrust kN	Class	Apogee km	Range km
Tauro	Rigel	IIAE	-	Centaur 1	1	2	7.7	0.28	1.2	0	0	-	R	150	350
Rigel	Rigel	IIAE	-	Centaur 1	1	2	6.3	0.28	1.0 ?	0	0	-	R	310	350
Canopus 2	Rigel	IIAE	-	Centaur 1	1	1	4.0 ?	0.28	0.3	0	0	-	R	150	350
Canopus 1	Rigel	IIAE	-	Centaur 1	1	1	4.0 ?	0.28	0.3	0	0	-	R	150	350
Centenario	Rigel	IIAE	-	Centaur 1	1	1	4.6	0.28	0.3	0	0	-	R	50	350
Castor (A)	Rigel	IIAE	-	Centaur 1	1	2	7.0 ?	0.28 ?	0.3	0	0	-	R	400	350
Spaceloft XL	Spaceloft	UFAE	-	Centaur 1	1	1	6.1	0.27	0.4	0	0	-	R	100	350
Black Brant III	BB3	BAL	-	Centaur 1	1	1	5.5	0.26	0.3	0	0	49	R	170	350
Black Brant IIIB	BB3	BAL	-	Centaur 1	1	1	5.5	0.26	0.3	0	0	44	R	220	350
N20RTH	Amateur	HVEND	-	Centaur 1	1	1	7.8	0.26	0.2	0	0	10	R	60	350
Gosling-Lobster	Gosling	WRE	-	Centaur 1	1	2	5.0 ?	0.26	0.3 ?	0	0	-	R	40	350
INTA-255	Gosling	INTA	-	Centaur 1	0	1	6.1	0.26	0.3	0	0	22	R	150	350
HAD	Gosling	WRE	-	Centaur 1	1	2	6.1	0.26	0.3	0	0	130	R	130	350
INTA-300	Gosling	INTA	-	Centaur 1	1	2	7.3	0.26	0.5	0	0	137	R	250	350
INTA-300B	Gosling	INTA	-	Centaur 1	1	2	7.3 ?	0.26	0.5 ?	0	0	137	R	250	350
Fulmar	Gosling	BAJUK	-	Centaur 1	1	2	7.5	0.26	0.5 ?	0	0	137	R	250	350
Aero High	Gosling	WRE	-	Centaur 1	1	2	6.8	0.26	0.4	0	0	99	R	200	350
Cockatoo	Gosling	WRE	-	Centaur 1	1	2	6.2	0.26	0.3	0	0	111	R	140	350
Cockatoo Mk 2	Gosling	WRE	-	Centaur 1	1	2	6.3	0.26	0.3	0	0	111	R	140	350
Cockatoo Mk 3	Gosling	WRE	-	Centaur 1	1	2	6.3	0.26	0.3	0	0	99	R	140	350
Cockatoo Mk 4	Gosling	WRE	-	Centaur 1	1	2	6.3	0.26	0.3	0	0	99	R	140	350
Corella	Gosling	WRE	-	Centaur 1	1	2	8.0	0.26	0.4	0	0	99	R	220	350
Hybrid Test Rocket	HTR	MAMMO	-	Centaur 1	1	1	10.6	0.25	0.4	0	0	30	T	200	350
Evo Space	Private A	EvoSpace	-	Centaur 1	1	1	6.7	0.25	0.4	0	0	-	T	120	350
Private A	Private A	JPL	-	Centaur 1	0	1	3.4	0.25	0.3	0	0	98	R	1	350
Private F	Private A	JPL	-	Centaur 1	0	1	3.4	0.25	0.3	0	0	98	R	1	350
Rhumi	Rhumi	SZI	-	Centaur 1	1	1	6.0	0.25	0.3	0	0	2	C	2	350
Forschungsflugkorper	FFK	ERMO	-	Centaur 1	1	1	4.0 ?	0.25 ?	0.3 ?	0	0	-	R	120	350
CSXT	CSXT	CSXT	-	Centaur 1	1	1	6.5	0.25	0.3 ?	0	0	-	R	100	350
K245	K250	ISAS	-	Centaur 1	1	1	5.6	0.25	0.3	0	0	-	T	10	350
Kappa 6	K250	ISAS	-	Centaur 1	1	2	5.6	0.25	0.3	0	0	-	T	60	350
Kappa 6H	K250	ISAS	-	Centaur 1	1	2	6.9	0.25	0.3	0	0	-	R	85	350
Kappa 8L	K250	ISAS	-	Centaur 1	1	2	7.3	0.25	0.3	0	0	-	R	200	350
S-250	ISAS	ISAS	-	Centaur 1	1	1	3.5 ?	0.25	0.2 ?	0	0	8	W	30	350
CB-250/RH-125	CB-250	VSSC	-	Centaur 1	0	1	3.5 ?	0.25	0.1	0	0	8	W	30	350
CB-250/LPR-006	CB-250	VSSC	-	Centaur 1	0	1	3.5 ?	0.25	0.1	0	0	8	W	30	350
NAL-25	STA	STA	-	Centaur 1	1	1	-	0.25	0.1	0	0	-	W	20	350
M-100	M-100	TAIFUN?	-	Centaur 1	1	1	8.3	0.25	0.5	0	0	-	Y	90	350
M-100 (A-1)	M-100	TAIFUN?	-	Centaur 1	1	2	8.3	0.25	0.5	0	0	-	Y	90	350
M-100A	M-100	TAIFUN?	-	Centaur 1	1	2	8.3	0.25	0.5	0	0	-	Y	90	350
M-100B	M-100	TAIFUN?	-	Centaur 1	1	2	8.3	0.25	0.5	0	0	-	Y	90	350
RX-250-LPN	RX-250	LAPAM	-	Centaur 1	1	1	5.3	0.25	0.3	0	0	52	T	70	350
D-Region Tomahawk	Tomahawk	SAND	-	Centaur 1	1	1	5.0 ?	0.23	0.3 ?	0	0	44	R	120	350
ILR-33 Bureztyn 2K	Bureztyn	PAL	-	Centaur 1	0	1	5.0	0.23	0.3 ?	0	0	-	R	100	350
Tomahawk	Tomahawk	SAND	-	Centaur 1	1	1	5.0	0.23	0.3	0	0	44	R	100	350
Mesquito	MIRS	WFF	-	Centaur 1	1	1	5.0	0.23	0.2	0	0	-	R	60	350
Javelin 3	Javelin	SDCO	-	Centaur 1	1	1	4.5	0.23	0.2 ?	0	0	-	R	60	350
Recruit	Recruit	PARD	-	Centaur 1	1	1	3.0 ?	0.23	0.3 ?	0	0	156	R	10	350
Recruit T55	Recruit	PARD	-	Centaur 1	0	2	5.0 ?	0.23	0.4 ?	0	0	156	R	10	350
MX-2227	AeroHTV	AEROPH	-	Centaur 1	1	2	3.9	0.23	0.1	0	0	-	R	10	350
HTV	AeroHTV	AEROPH	-	Centaur 1	1	2	3.9	0.23	0.1	0	0	-	R	10	350
Kappa 2	K250	ISAS	-	Centaur 1	1	2	5.0	0.22	0.2	0	0	-	T	20	350
Kappa 3	K250	ISAS	-	Centaur 1	1	2	5.0	0.22	0.2	0	0	-	T	40	350
S-210	S-210	NISST	-	Centaur 1	1	2	5.0	0.22	0.2	0	0	-	T	40	350
Orion-2	IIAE Orion	IAE	-	Centaur 1	1	1	5.2	0.21	0.3	0	0	-	T	110	350
Orion-1	IIAE Orion	IAE	-	Centaur 1	1	1	4.0	0.21	0.1	0	0	-	R	95	350
Belenos	Belenos	CFTHB	-	Centaur 1	1	2	4.9	0.21	0.1	0	0	-	R	95	350
Belisama	Belenos	CFTHB	-	Centaur 1	1	2	4.6	0.21	0.1	0	0	-	R	116	350
Gramnos	Belenos	CFTHB	-	Centaur 1	1	2	4.9	0.21	0.1	0	0	-	R	92	350
TT-210	TT-210	MASDA	-	Centaur 1	1	2	6.0 ?	0.21	0.2 ?	0	0	-	R	143	350
TT-200	TT-210	MASDA	-	Centaur 1	1	1	6.0 ?	0.21	0.2 ?	0	0	-	R	100	350
RH-200	RH-200	VSSC	-	Centaur 1	1	2	3.6	0.20	0.1	0	0	17	R	100	350
RH-200SV	RH-200	VSSC	-	Centaur 1	1	2	3.6 ?	0.20	0.1	0	0	17	R	80	350
MWR-06	MWR-06	TAIFUN?	-	Centaur 1	1	1	3.5	0.20	0.1	0	0	8	W	60	350
X-17 HTV	Nike	LWN	1	Centaur 1	1	3	5.0 ?	0.20	0.1 ?	0	0	209	Q	10	350
X-17 HTV	Nike	LWN	1	Centaur 1	1	3	5.0 ?	0.20	0.1 ?	0	0	209	Q	10	350
X-17 QTV	X-17 QTV	LWN	-	Centaur 1	1	3	2.5 ?	0.20	0.1 ?	0	0	13	Q	10	350
Kingfisher	Kingfisher	TMINUS	-	Centaur 1	1	1	4.0 ?	0.20	0.0	0	0	0	Y	120	350
Traveler	Traveler	USCLA	-	Centaur 1	1	1	4.0	0.20	0.1	0	0	-	R	0	350
Aftershock	Traveler	USCLA	-	Centaur 1	1	1	3.8	0.20	0.1	0	0	19	R	0	350
Cirrus I	Cirrus I	DRG	-	Centaur 1	1	2	4.1	0.20	0.1 ?	0	0	5	R	35	350
Cirrus II	Cirrus	DRG	-	Centaur 1	1	2	4.1	0.20	0.1 ?	0	0	5	R	35	350
Stratos II+	Stratos2	DARE	-	Centaur 1	1	1	7.0	0.20	0.2	0	0	8	R	50	350

## LV

LV_Name	LV_Family	LV_Manufacturer	LV_Variant	LV_Alias	LV_Min_Stage	LV_Max_Stage	Length m	Diameter m	Launch_Mass t	LEO_Capacity kg	GTG_Capacity kg	TU_Thrust kN	Class	Apogee km	Range km
Stratos III	Stratos2	DARE	-	Centaure 1	1	1	7.0	0.20	0.2	0	0	8	R	50	350
Proson MI	Proson	CITEF	-	Centaure 1	1	2	3.1	0.20	0.1	0	0	-	R	50	350
Sparoar I	Sparrow	NMC	-	Centaure 1	0	2	3.7	0.20	0.1	0	0	35	R	100	350
Sparoar II	Sparrow	NMC	-	Centaure 1	0	2	3.9	0.20	0.1	0	0	35	R	100	350
Sparoar III	Sparrow	NMC	-	Centaure 1	0	2	3.9	0.20	0.1	0	0	35	R	100	350
Sparow Arcas	Sparrow	ATLR	-	Centaure 1	0	2	3.8	0.20	0.1	0	0	35	R	175	350
Clewsweep IIIIB	Sparrow	ZIMN	-	Centaure 1	0	1	3.0 ?	0.20	0.1	0	0	16	R	51	350
Petrel	Petrel	BAJUK	-	Centaure 1	0	1	3.3	0.19	0.2	0	0	-	R	140	350
Petrel 2	Petrel	BAJUK	-	Centaure 1	0	1	3.7	0.19	0.2	0	0	-	R	175	350
Gun Projectile 7-inch	Gun07	BRL	-	Centaure 1	1	1	1.0 ?	0.18	0.2	0	0	-	R	100	350
HAEC	Demon	WRE	-	Centaure 1	1	2	3.5	0.18	0.1	0	0	9	T	75	350
Lorikeet	Demon	WRE	-	Centaure 1	1	2	5.0 ?	0.18	0.1 ?	0	0	-	R	100	350
Lorikeet Mk 2	Demon	WRE	-	Centaure 1	1	2	5.0 ?	0.18	0.1 ?	0	0	-	R	100	350
Astrid	Astrid	LLL	-	Centaure 1	1	1	1.9	0.17	0.0	0	0	-	T	10	350
Clewsweep III	Asp	ZIMN	-	Centaure 1	1	1	3.6	0.17	0.1	0	0	16	W	110	350
ASCAMP	Asp	COOP	-	Centaure 1	1	2	5.0	0.17	0.1	0	0	42	R	110	350
Asp	Asp	COOP	-	Centaure 1	1	1	2.7	0.17	0.0	0	0	42	W	70	350
Asp II	Asp	COOP	-	Centaure 1	1	1	2.7	0.17	0.0	0	0	42	W	50	350
Asp III	Asp	COOP	-	Centaure 1	0	1	2.7	0.17	0.0	0	0	42	W	50	350
Asp IIII	Asp	COOP	-	Centaure 1	0	1	2.7	0.17	0.0	0	0	42	W	50	350
Asp IV	Asp	COOP	4L	Centaure 1	0	1	2.7	0.17	0.0	0	0	42	W	50	350
Viper-Arrow	Viper	SAMD	-	Centaure 1	1	1	2.7	0.17	0.0	0	0	12	Y	109	350
Kiva/Hopi	Kiva	RPI	-	Centaure 1	1	2	5.0	0.17	0.1	0	0	24	R	100	350
Cajun Dart	Deacon	SDCO	-	Centaure 1	1	1	5.5	0.17	0.1	0	0	27	R	365	350
Double Cajun T40	Deacon	PARD	-	Centaure 1	1	1	4.1	0.17	0.1	0	0	36	W	74	350
Pogo HI	Deacon	NMSU	-	Centaure 1	1	2	5.0 ?	0.17	0.1	0	0	36	Q	20	350
Pogo HI II	Deacon	NMSU	-	Centaure 1	1	1	4.0 ?	0.17	0.1	0	0	36	Q	25	350
Pogo HI III	Asp	NMSU	-	Centaure 1	1	1	4.0 ?	0.17	0.1	0	0	36	Q	25	350
Apache	Deacon	NMSU	-	Centaure 1	1	1	4.0 ?	0.17	0.1	0	0	-	R	50	350
Cajun	Deacon	PARD	-	Centaure 1	1	1	4.0 ?	0.17	0.1	0	0	36	Q	20	350
S-C	STA	MHTO?	-	Centaure 1	1	1	2.9	0.17	0.1	0	0	-	R	85	350
S-B	STA	MHTO?	-	Centaure 1	1	1	2.8	0.16	0.1	0	0	-	T	75	350
S-A	STA	MHTO?	-	Centaure 1	1	1	2.8 ?	0.16 ?	0.0	0	0	-	T	50	350
S-160	S-160	NISST	-	Centaure 1	1	1	4.0	0.16	0.1	0	0	10	R	80	350
NAL-16	STA	STA	-	Centaure 1	1	1	4.0	0.16	0.1	0	0	10	T	20	350
Lex	Lex	ONERA/SNECMA	-	Centaure 1	1	1	3.4	0.16	0.0	0	0	10	R	130	350
Monica I	Monica	ATEF	-	Centaure 1	1	3	3.1	0.16	0.1	0	0	-	R	50	350
Monica IV	Monica	ATEF	-	Centaure 1	1	3	5.1	0.16	0.1	0	0	-	R	100	350
Viper V/Dart	Viper5	OSCC	-	Centaure 1	1	1	3.4	0.18	0.0	0	0	27	Y	150	350
Viper Falcon	Viper	SDCO	-	Centaure 1	1	2	3.5 ?	0.17	0.0	0	0	-	Y	100	350
Viper	Viper	SDCO	-	Centaure 1	1	1	2.4	0.16	0.0	0	0	-	Y	100	350
Viper-Dart	Viper	SDCO	-	Centaure 1	1	1	3.4	0.16	0.0	0	0	-	Y	120	350
Rockaire	Deacon	NBL?	-	Centaure 1	0	1	2.7	0.16 ?	0.1	0	0	30	T	40	350
Deacon Rockoon	Deacon	SUI	-	Centaure 1	0	1	3.7	0.16	0.1	0	0	15	R	100	350
Terrapin	Deacon	REP	-	Centaure 1	1	2	4.5	0.16	0.1	0	0	15	R	140	350
Deacon-Loki Rockoon	Deacon	SUI	-	Centaure 1	0	2	5.2 ?	0.16	0.1	0	0	15	R	100	350
ALSOR	Deacon	FRC/ZIMN	-	Centaure 1	0	1	3.6	0.16	0.1	0	0	-	R	100	350
Deacon Judi	Deacon	RPI	-	Centaure 1	1	2	4.2	0.16	0.1	0	0	21	R	146	350
Kisha Judi	Deacon	RPI	-	Centaure 1	1	2	4.2	0.16	0.1	0	0	21	R	146	350
Deacon Arrow II	Deacon	SAMD	-	Centaure 1	1	2	5.1	0.15	0.1	0	0	27	R	85	350
Deacon Deacon	Deacon	PARD	-	Centaure 1	1	2	5.0 ?	0.15	0.1	0	0	27	Q	20	350
Double Deacon	Deacon	PARD	-	Centaure 1	1	1	5.0 ?	0.15	0.1	0	0	54	Q	20	350
Tandem Double Deacon	Deacon	PARD	-	Centaure 1	1	2	10.0 ?	0.15	0.1	0	0	54	Q	20	350
Triple Deacon	Deacon	PARD	-	Centaure 1	1	1	7.0 ?	0.15	0.1	0	0	75	Q	20	350
Triple Deacon HPAG	Deacon	PARD	-	Centaure 1	1	2	7.0 ?	0.15	0.1	0	0	75	Q	20	350
Tri-Deacon Deacon HPAG	Deacon	PARD	-	Centaure 1	1	3	7.0 ?	0.15	0.2	0	0	75	Q	20	350
Quad Deacon	Deacon	PARD	-	Centaure 1	1	1	7.0 ?	0.15	0.1	0	0	100	Q	20	350
Deacon	Deacon	PARD	-	Centaure 1	1	1	4.0 ?	0.15	0.1	0	0	27	Q	20	350
Deacon HVAR	Deacon	PARD	-	Centaure 1	1	2	4.0 ?	0.15	0.1	0	0	27	Q	20	350
Deacon Sidewinder	Deacon	PARD	-	Centaure 1	1	2	4.0 ?	0.15	0.1	0	0	27	Q	20	350
Vrbac-Banovic	Amateur	VRECC	-	Centaure 1	1	2	3.5 ?	0.15	0.1	0	0	-	T	80	350
Atea-1	Atea	RLABN	-	Centaure 1	1	1	5.0	0.15	0.1	0	0	-	R	100	350
Icarus	Icarus	ERAU	-	Centaure 1	1	2	4.9	0.15	0.1	0	0	16	R	60	350
Hyperion	AMROC	EAC	-	Centaure 1	1	1	5.8	0.15	0.1	0	0	6	T	36	350
K150	ISAS	ISAS	-	Centaure 1	1	1	4.0 ?	0.15	0.1	0	0	-	T	7	350
Zhinui	ZN	MUDTC	-	Centaure 1	1	1	4.8	0.15	0.1	0	0	10	R	120	350
Arcon	Arcon	ATLR/MRL	-	Centaure 1	0	1	4.0	0.15	0.1	0	0	14	R	100	350
Astrobee D	AstrobeeD	AJSP	-	Centaure 1	1	1	3.9	0.15	0.1	0	0	23	R	140	350
MERA	Mera	KBPT	-	Centaure 1	1	2	3.2	0.15	0.1	0	0	-	Y	85	350
MD-01	MD-01	SUD	-	Centaure 1	1	1	3.4	0.15	0.1	0	0	-	W	20	350
Meteo	Meteo	SUD	-	Centaure 1	1	1	3.4 ?	0.15	0.0	0	0	-	W	50	350
Sirocco	Sirocco	SDCO	-	Centaure 1	1	1	3.9	0.14	0.1	0	0	-	W	60	350
MT-135	MT-135	NISST	-	Centaure 1	1	1	3.3	0.14	0.0	0	0	12	W	50	350



LV

LV_Name	LV_Family	LV_Manufacturer	LV_Variant	LV_Alias	LV_Min_Stage	LV_Max_Stage	Length m	Diameter m	Launch_Mass t	LEO_Capacity kg	GTO_Capacity kg	TU_Thrust kN	Class	Apogee km	Range km
MT-136P	MT-135	NISST	-	Centaur 1	1	1	3.3	0.14	0.0	0	0	12	W	50	350
MT-135JA	MT-135	NISST	-	Centaur 1	1	1	3.3	0.14	0.0	0	0	12	W	50	350
Ivanov	Ivanov	FIAN	-	Centaur 1	0	3	4.3	0.14	0.1	0	0	-	W	40	350
Emma	Gamma	MATRA	-	Centaur 1	0	0	3.9	0.13	0.1	0	0	-	W	69	350
Gamma Centauro	Gamma	IIAE	-	Centaur 1	1	2	2.4	0.13	0.0	0	0	-	W	30	350
Aurore	Aurore	SNECMA	-	Centaur 1	1	1	3.3	0.13	0.0	0	0	8	W	60	350
Kappa 1	Kappa	ISAS	-	Centaur 1	1	1	2.7	0.13	0.0	0	0	10	T	40	350
Gun Projectile 5-inch	Gun05	BRL	-	Centaur 1	1	1	1.0 ?	0.13	0.2	0	0	-	R	100	350
Skua	Skua	BAJUK	-	Centaur 1	0	1	2.2	0.13	0.0	0	0	-	W	70	350
Skua 2	Skua	BAJUK	-	Centaur 1	0	1	2.0	0.13	0.0	0	0	-	R	100	350
Skua 3	Skua	BAJUK	-	Centaur 1	0	1	2.8	0.13	0.1	0	0	-	R	120	350
Skua 4	Skua	BAJUK	-	Centaur 1	0	1	2.8	0.13	0.1	0	0	-	R	120	350
FTB	FTB	AVTB	-	Centaur 1	1	1	3.0	0.13	0.1	0	0	-	R	80	350
Sidewinder-Arcas	Sidewinder	ATLR	-	Centaur 1	1	2	4.3	0.13	0.1	0	0	-	R	90	350
Sidewinder-Raven	Sidewinder	RPI	-	Centaur 1	1	2	5.2	0.13	0.1	0	0	-	Y	112	350
HPAG	HPAG	PARD	-	Centaur 1	1	1	1.8	0.13	0.0	0	0	12	Q	10	350
HPAG Deacon	HPAG	Sidewinder	-	Centaur 1	1	2	3.0 ?	0.13	0.0	0	0	12	Q	10	350
Double HPAG Deacon	HPAG	PARD	-	Centaur 1	1	2	3.0 ?	0.13	0.0	0	0	12	Q	10	350
ADTV	Lupus	WRE	-	Centaur 1	1	1	2.2	0.13	0.0	0	0	9	T	20	350
Kookaburra	Lupus	WRE	-	Centaur 1	1	2	3.5	0.13	0.1	0	0	9	T	75	350
Kookaburra 2	Lupus	WRE	-	Centaur 1	1	2	3.5	0.13	0.1	0	0	9	T	75	350
Kookaburra 3	Lupus	WRE	-	Centaur 1	1	2	3.5	0.13	0.1	0	0	9	T	75	350
DAC Roc	DAC Roc	DAC	-	Centaur 1	1	1	-	0.13 ?	-	0	0	-	T	50	350
Seagull	Unknown	UNKUS	-	Centaur 1	1	1	-	0.13 ?	-	0	0	-	T	50	350
HALO	HALO	HALS	-	Centaur 1	1	1	2.2	0.13	0.0	0	0	-	T	60	350
HVAR	HVAR	PARD	-	Centaur 1	1	1	2.0	0.13	0.0	0	0	25	Q	10	350
HVAR FFAR	HVAR	PARD	-	Centaur 1	1	1	3.0	0.13	0.0	0	0	25	Q	10	350
DIM	DIM	IIAE	-	Centaur 1	1	1	2.9	0.12	0.0	0	0	-	W	70	350
Meteor-1	Meteor	PAI	-	Centaur 1	1	1	2.5	0.12	0.0	0	0	14	W	40	350
Meteor-3	Meteor	PAI	-	Centaur 1	1	2	4.3	0.12	0.0	0	0	14	W	65	350
Meteor-3B	Meteor	PAI	-	Centaur 1	1	2	4.3	0.12	0.0	0	0	14	W	65	350
RH-125	RH-125	VSSC	-	Centaur 1	1	1	2.5 ?	0.12	0.1	0	0	8	W	30	350
MCR-3/RH-125	RH-125	VSSC	-	Centaur 1	0	1	3.5 ?	0.12	0.1	0	0	8	W	30	350
INTA-100	INTA-100	INTA	-	Centaur 1	1	2	4.1	0.12	0.1	0	0	17	W	100	350
Menaka II	RH-125	VSSC	-	Centaur 1	1	2	3.8	0.12	0.1	0	0	8	W	60	350
Black Brant VI	BB6	BAL	-	Centaur 1	1	1	2.8	0.12	0.1	0	0	7	W	72	350
Sonda 1	Sonda	IAE	-	Centaur 1	1	2	4.5	0.11	0.1	0	0	27	W	65	350
Rocketsonde	Rocketsonde	SDCO?	-	Centaur 1	1	1	3.0 ?	0.11 ?	0.0	0	0	1	W	100	350
Rocketsonde2	Rocketsonde2	SDCO?	-	Centaur 1	1	1	3.0 ?	0.11 ?	0.0	0	0	1	W	100	350
MESOS	MESOS	Amateur	-	Centaur 1	1	2	3.5	0.11	0.0	0	0	-	T	80	350
Viper 3A	Viper3	SDCO	-	Centaur 1	1	1	2.4	0.11	0.0	0	0	-	Y	120	350
DART	Viper3	DART	-	Centaur 1	1	1	3.4	0.11	0.0	0	0	-	Y	120	350
Arcas	Arcas	ATLR	-	Centaur 1	1	1	2.3	0.11	0.0	0	0	1	Y	90	350
Fragible Arcas	Arcas	ATLR	-	Centaur 1	1	1	2.3	0.11	0.0	0	0	1	Y	90	350
Boosted Arcas	ArcasB	ATLR	-	Centaur 1	1	2	3.4	0.11	0.0	0	0	1	Y	90	350
Boosted Arcas 2	ArcasB	ATLR	-	Centaur 1	1	2	3.4	0.11	0.0	0	0	1	Y	90	350
Super Arcas	Arcas	ATLR	-	Centaur 1	1	1	2.7	0.11	0.0	0	0	-	Y	100	350
Excalibur	Excalibur	BAL	-	Centaur 1	1	1	3.0 ?	0.11	0.0	0	0	-	Y	100	350
Hopi Dart	Hopi	RPI	-	Centaur 1	1	1	3.3	0.11	0.0	0	0	-	Y	116	350
Raven	Hopi	RPI	-	Centaur 1	1	1	3.3	0.11	0.0	0	0	8	W	60	350
Super Loki	SuperLoki	SDCO	-	Centaur 1	1	1	3.3	0.10	0.0	0	0	18	Y	90	350
Shadow 1	SuperLoki	LARC	-	Centaur 1	1	1	3.3	0.10	0.0	0	0	18	Y	90	350
Stable Super Loki	SuperLoki	SDCO	-	Centaur 1	1	1	3.3	0.10	0.0	0	0	18	Y	90	350
Falconlaunch	SuperLoki	USAF	-	Centaur 1	1	1	3.3	0.10 ?	0.0	0	0	22	Y	108	350
Microstar	SuperLoki	SPFL	-	Centaur 1	1	1	3.3 ?	0.10 ?	0.0	0	0	-	W	75	350
SPEAR-HRT	Amateur	USMA	-	Centaur 1	1	2	3.0	0.10	0.0	0	0	-	T	90	350
SkyLark Micro	SkyLarkMicro	SKYR	-	Centaur 1	1	2	3.3	0.10	0.0	0	0	-	W	30	350
Epona	Belisama	CFTHB	-	Centaur 1	1	2	4.4	0.10	0.1	0	0	-	W	60	350
SA-II	SA	STA	-	Centaur 1	1	1	-	0.10 ?	0.0	0	0	-	T	20	350
ST	STA	STA	-	Centaur 1	1	1	-	0.10 ?	0.0	0	0	-	T	20	350
Black Brant VII	BB7	BAL	-	Centaur 1	1	1	2.1	0.09	0.0	0	9	-	W	40	350
Loki Dart	Loki	SDCO	-	Centaur 1	1	1	2.6	0.08	0.0	0	0	-	W	75	350
Loki Dart PWM-8B	Loki	SDCO	-	Centaur 1	1	1	2.6	0.08	0.0	0	0	-	W	75	350
Loki	Loki	SDCO	-	Centaur 1	1	1	2.6	0.08	0.0	0	0	-	W	75	350
Loki Rockoon	Loki	SUI	-	Centaur 1	0	1	2.4	0.08	0.0	0	0	10	R	100	350
Judi-Dart	Loki	RPI	-	Centaur 1	1	1	2.7	0.08	0.0	0	0	9	W	65	350
Metroc	Loki	ATLR	-	Centaur 1	1	1	1.4	0.08	0.0	0	0	1	W	30	350
ISRO-TV	ISRO-TV	VSSC	-	Centaur 1	1	1	-	-	0.0	0	0	-	T	10	350
SEGPRO	ISRO-TV	VSSC	-	Centaur 1	1	1	-	-	0.0	0	0	-	T	10	350
RH-75	RH-75	VSSC	-	Centaur 1	1	1	1.5	0.08	0.0	0	0	-	W	10	350
NAL-7	STA	VSSC	-	Centaur 1	1	1	-	0.07	0.0	0	0	-	T	20	350
Rockair	FFAR	UMD	-	Centaur 1	0	1	1.2	0.07	0.0	0	0	3	T	50	350
FFAR	FFAR	PARD	-	Centaur 1	1	1	1.2	0.08	0.0	0	0	-	Q	10	350

LV

LV_Name	LV_Family	LV_Manufacturer	LV_Variant	LV_Alias	LV_Min_Stage	LV_Max_Stage	Length m	Diameter m	Launch_Mass t	LEO_Capacity kg	GTU_Capacity kg	TU_Thrust kN	Class	Apogee km	Range km
Double FFAR	FFAR	PARD	-	Centaur 1	1	2	2.4	0.08	0.0	0	0	-	q	10	350
Navaho II SM-64	Navaho	MAAD	-	Centaur 1	1	2	26.6	-	54.6	0	0	-	C	25	350
MX-775	Snark	NORTH	-	Centaur 1	1	1	15.8	1.40	12.7	0	0	-	C	10	350
Snark	Snark	NORTH	-	Centaur 1	1	1	21.3	1.40	22.5	0	0	-	C	10	350
Matador	Matador	MARTB	-	Centaur 1	1	1	12.1	1.40	5.2	0	0	-	C	12	350
Mace	Matador	MARTB	-	Centaur 1	1	1	14.3	1.40	8.5	0	0	-	C	12	350
Regulus	Regulus	VOUA	-	Centaur 1	1	1	10.1	1.40	6.6	0	0	293	C	15	350
Regulus II	Regulus	VOUA	-	Centaur 1	1	1	20.5	1.30	10.2	0	0	-	C	20	350
Bomarc A	Bomarc	BOC	-	Centaur 1	1	1	14.2	0.89	6.8	0	0	-	C	20	350
Bomarc B	Bomarc	BOC	-	Centaur 1	1	1	14.2	0.89	6.8	0	0	-	C	20	350
Goose	BullGoose	FAIRA	-	Centaur 1	1	1	10.2?	0.85?	3.5?	0	0	-	C	20	350
Bull Goose	BullGoose	FAIRA	-	Centaur 1	1	1	10.2	0.85?	3.5	0	0	-	C	20	350
X-7B	X-7	LWN	-	Centaur 1	0	1	2.1	0.61	3.6	0	0	-	C	50	350
X-7A-3	X-7	LWN	-	Centaur 1	0	1	2.1	0.61	3.6	0	0	-	C	30	350
GLCM	GLCM	GDA	-	Centaur 1	1	1	6.4	0.53	1.8	0	0	-	C	20	2500
BLDT	BLDT	JPL	-	Centaur 1	1	1	0.0	0.00	0.0	0	0	-	C	10	2500
Lark	Lark	FAIRA	-	Centaur 1	1	1	5.6	0.46	0.9	0	0	-	C	8	2500



LVStages

LV_Name	LV_Variant	Stage_No	Stage_Name	Qualifier	Dummy	Multiplicity	Stage_Impulse kNs	Stage_Apogee km	Stage_Perigee km	Perigee_Qual
?	-	1	?	?	-	1	0	-6378	?	?
Unknown	-	1	?	?	-	1	0	-6378	?	?
N-1 11A52	-	1	N-1 Blok-A	?	-	1	0	-6378	?	?
N-1 11A52	-	2	N-1 Blok-B	-	-	1	498000.0	-6300	-6300	?
N-1 11A52	-	3	N-1 Blok-V	-	-	1	182000.0	100	182000.0	?
N-1 11A52	-	1	G0	-	-	2	642000.0	200	642000.0	?
Saturn V	-	1	Saturn S-IC	-	-	1	642000.0	100	6300	?
Saturn V	-	2	S-II Interstage	-	-	1	642000.0	114	-5998	?
Saturn V	-	3	Saturn S-II	-	-	1	642000.0	120	-5800	?
Saturn V	-	4	Saturn S-II	-	-	1	642000.0	189	-2112	?
Saturn V	-	5	Saturn S-IVB	-	-	1	642000.0	188	188	?
Saturn V	-	6	Saturn S-IC	-	-	1	642000.0	206	-6055	?
Saturn V	-	7	S-II Interstage	-	-	1	642000.0	427	427	?
Saturn V	-	8	Saturn S-II	-	-	1	642000.0	427	427	?
Starship V1.0 Ship	-	1	Starship V1.0	-	-	1	642000.0	20	-6370	?
Starship V1.0	-	2	Super Heavy	-	-	1	642000.0	100	-6370	?
Starship V1.0	-	3	Starship V1.0	-	-	1	642000.0	200	200	?
Starship V2	-	1	Super Heavy V3	-	-	1	642000.0	100	-6370	?
Starship V2	-	2	Starship V3	-	-	1	642000.0	200	200	?
Starship V3	-	1	Super Heavy V3	-	-	1	642000.0	100	-6370	?
Starship V3	-	2	Starship V3	-	-	1	642000.0	200	200	?
Space Shuttle	-	1	SRM	-	-	2	642000.0	65	-6250	?
Space Shuttle	-	2	ET	-	-	1	642000.0	280	80	?
Space Shuttle	-	3	OV	-	-	1	642000.0	280	80	?
SLS Block 1	-	1	RSRMV	-	-	2	642000.0	80	-6300	?
SLS Block 1	-	2	SLS CS	-	-	1	642000.0	80	-6300	?
SLS Block 1	-	3	ICPS	-	-	1	642000.0	80	-6300	?
Energia	-	0	Energia Blok A	-	-	4	642000.0	75	-6300	?
Energia	-	1	Energia	-	-	1	642000.0	155	-15	?
Energia	-	2	Fairing	-	-	4	642000.0	120	-6300	?
Energia/Buran	-	F	11S771	-	-	4	642000.0	75	-6300	?
Energia/Buran	-	1	Energia	-	-	1	642000.0	154	11	?
Energia/Buran	-	2	8S810	-	-	1	642000.0	60	-6200	?
UR-500	-	1	8S810	-	-	1	642000.0	130	-5000	?
UR-500	-	2	8S811	-	-	1	642000.0	130	-5000	?
UR-500K	-	1	8S810	-	-	1	642000.0	60	-6200	?
UR-500K	-	2	8S811	-	-	1	642000.0	140	-4900	?
UR-500K	-	3	8S812	-	-	1	642000.0	180	180	?
UR-500K	-	F	G0	-	-	2	642000.0	120	-5200	?
UR-500K/Blok D	-	1	8S810	-	-	1	642000.0	140	-5000	?
UR-500K/Blok D	-	2	8S811	-	-	1	642000.0	140	-4900	?
UR-500K/Blok D	-	3	8S812	-	-	1	642000.0	180	180	?
UR-500K/Blok D	-	4	Perekhodnik	-	-	1	642000.0	160	-1000	?
UR-500K/Blok D	-	5	11S824	-	-	1	642000.0	180	180	?
UR-500K/Blok D	-	6	SOZ	-	-	2	642000.0	180	180	?
UR-500K/Blok D	-	F	G0	-	-	2	642000.0	130	-5000	?
Proton-K	-	1	8S810	-	-	1	642000.0	60	-6200	?
Proton-K	-	2	8S811	-	-	1	642000.0	140	-4900	?
Proton-K	-	3	8S812	-	-	1	642000.0	180	180	?
Proton-K	-	F	G0	-	-	2	642000.0	120	-5200	?
Proton-K/D	-	1	8S810	-	-	1	642000.0	60	-6200	?
Proton-K/D	-	2	8S811	-	-	1	642000.0	130	-5000	?
Proton-K/D	-	3	8S812	-	-	1	642000.0	160	-1000	?
Proton-K/D	-	4	Perekhodnik	-	-	1	642000.0	160	-1000	?
Proton-K/D	-	5	11S824	-	-	1	642000.0	180	180	?
Proton-K/D	-	6	SOZ	-	-	2	642000.0	180	180	?
Proton-K/D	-	F	G0	-	-	2	642000.0	140	-5000	?
Proton-K/D-1	-	1	8S810	-	-	1	642000.0	60	-6200	?
Proton-K/D-1	-	2	8S811	-	-	1	642000.0	130	-5000	?
Proton-K/D-1	-	3	8S812	-	-	1	642000.0	160	-1000	?
Proton-K/D-1	-	4	Perekhodnik	-	-	1	642000.0	160	-1000	?
Proton-K/D-1	-	5	11S824M	-	-	1	642000.0	180	180	?
Proton-K/D-1	-	6	SOZ	-	-	2	642000.0	180	180	?
Proton-K/D-1	-	F	G0	-	-	2	642000.0	140	-5000	?
Proton-K/D-2	-	1	8S810	-	-	1	642000.0	60	-6200	?
Proton-K/D-2	-	2	8S811	-	-	1	642000.0	130	-5000	?
Proton-K/D-2	-	3	8S812	-	-	1	642000.0	160	-1000	?
Proton-K/D-2	-	4	Perekhodnik	-	-	1	642000.0	160	-900	?
Proton-K/D-2	-	5	11S824F	-	-	1	642000.0	180	180	?
Proton-K/D-2	-	6	SOZ	-	-	2	642000.0	180	180	?
Proton-K/D-2	-	F	G0	-	-	2	642000.0	140	-5000	?
Proton-K/DM	-	1	8S810	-	-	1	642000.0	60	-6200	?
Proton-K/DM	-	2	8S811	-	-	1	642000.0	130	-5000	?
Proton-K/DM	-	3	8S812	-	-	1	642000.0	180	180	?
Proton-K/DM	-	4	Perekhodnik	-	-	1	642000.0	180	180	?



LVStages

LV_Name	LV_Variant	Stage_No	Stage_Name	Qualifier	Dummy	Multiplicity	Stage_Impulse kNis	Stage_Apogee km	Stage_Perigee km	Perigee_Qual
Proton-K/Briz-M	-	4	Briz-M	-	-	1	642000.0	200	200	?
Proton-K/Briz-M	-	F	GU	-	-	2	642000.0	130	-5000	?
Proton-M/Briz-M	-	1	8S810M	-	-	1	642000.0	60	642000.0	?
Proton-M/Briz-M	-	2	8S811M	-	-	1	642000.0	130	-5000	?
Proton-M/Briz-M	-	3	8S812M	-	-	1	642000.0	180	180	?
Proton-M/Briz-M	-	4	Briz-M	-	-	1	642000.0	180	180	?
Proton-M/Briz-M	-	F	GU	-	-	2	642000.0	140	-5000	?
Neutron	-	1	Neutron St1	-	-	1	642000.0	150	-6000	?
Neutron	-	2	Neutron St2	-	-	1	642000.0	500	500	?
Saturn C-1	-	1	Saturn S-I	-	-	1	642000.0	130	-6300	?
Saturn C-1	-	2	Saturn S-IVD	d	-	1	642000.0	130	-6300	?
Saturn C-1	-	3	Saturn S-V	-	-	1	642000.0	130	-6250	?
Saturn C-1	-	F	Fairing	-	-	1	642000.0	130	-6300	?
Saturn I	-	1	Saturn S-I	-	-	1	642000.0	130	-6250	?
Saturn I	-	2	Saturn S-IVD	-	-	1	642000.0	130	-6250	?
Saturn I	-	3	Saturn S-V	d	-	1	642000.0	130	-6250	?
Saturn I	-	F	Fairing	-	-	1	642000.0	130	-6250	?
Saturn I	Blk2	1	Saturn S-I	-	-	1	642000.0	160	-5940	?
Saturn I	Blk2	2	Saturn S-IV	-	-	1	642000.0	180	180	?
Saturn IB	-	1	Saturn S-IB	-	-	1	642000.0	120	-6145	?
Saturn IB	-	2	Saturn S-IVB	-	-	1	642000.0	220	220	?
Uprated Saturn I	-	1	Saturn S-IB	-	-	1	642000.0	120	-6145	?
Uprated Saturn I	-	2	Saturn S-IVB	-	-	1	642000.0	220	220	?
ATB	-	1	ATB	-	-	1	642000.0	10	-6300	?
Vulcan Centaur VC0S	-	1	Vulcan	-	-	1	642000.0	150	-6000	?
Vulcan Centaur VC0S	-	2	Centaur V	-	-	1	642000.0	200	40000	?
Vulcan Centaur VC0S	-	F	Vulcan Std Fairing	-	-	2	642000.0	200	200	?
Vulcan Centaur VC2S	-	0	GEM-63XL	-	-	2	642000.0	50	-6300	?
Vulcan Centaur VC2S	-	1	Vulcan	-	-	1	642000.0	150	-6000	?
Vulcan Centaur VC2S	-	2	Centaur V	-	-	1	642000.0	200	40000	?
Vulcan Centaur VC2S	-	F	Vulcan Std Fairing	-	-	2	642000.0	200	200	?
Vulcan Centaur VC4S	-	0	GEM-63XL	-	-	4	642000.0	50	-6300	?
Vulcan Centaur VC4S	-	1	Vulcan	-	-	1	642000.0	150	-6000	?
Vulcan Centaur VC4S	-	2	Centaur V	-	-	1	642000.0	200	40000	?
Vulcan Centaur VC4S	-	F	Vulcan Std Fairing	-	-	2	642000.0	200	200	?
Vulcan Centaur VC6S	-	0	GEM-63XL	-	-	6	642000.0	50	-6300	?
Vulcan Centaur VC6S	-	1	Vulcan	-	-	1	642000.0	150	-6000	?
Vulcan Centaur VC6S	-	2	Centaur V	-	-	1	642000.0	200	40000	?
Vulcan Centaur VC6S	-	F	Vulcan Std Fairing	-	-	2	642000.0	200	200	?
Ariane 5G	-	0	Ariane EAP P238	-	-	2	1262652.0	75	-6000	?
Ariane 5G	-	1	Ariane 5 EPC H158	-	-	1	656146.0	1500	50	?
Ariane 5G	-	2	Ariane 5 EPS	-	-	1	31900.0	200	35780	?
Ariane 5G	-	F	Ariane 5 Fairing	-	-	2	31900.0	125	-5800	?
Ariane 5G+	-	0	Ariane EAP P238	-	-	2	1262652.0	75	-6000	?
Ariane 5G+	-	1	Ariane 5 EPC H158	-	-	1	656146.0	1500	50	?
Ariane 5G+	-	2	Ariane 5 EPS	-	-	1	31900.0	200	35780	?
Ariane 5G+	-	F	Ariane 5 Fairing	-	-	2	31900.0	130	-5800	?
Ariane 5GS	-	0	Ariane EAP P240	-	-	2	1262652.0	75	-6100	?
Ariane 5GS	-	1	Ariane 5 EPC H158	-	-	1	656146.0	1500	50	?
Ariane 5GS	-	2	Ariane 5 EPS	-	-	1	31900.0	200	35780	?
Ariane 5GS	-	F	Ariane 5 Fairing	-	-	2	31900.0	130	-5800	?
Ariane 5ES/ATV	-	0	Ariane EAP P240	-	-	2	1262652.0	75	-6100	?
Ariane 5ES/ATV	-	1	Ariane 5 EPC H175	-	-	1	656146.0	1500	50	?
Ariane 5ES/ATV	-	2	Ariane 5 EPS	-	-	1	31900.0	200	35780	?
Ariane 5ES/ATV	-	F	Ariane 5 Fairing	-	-	2	31900.0	130	-5800	?
Ariane 5ES	-	0	Ariane EAP P240	-	-	2	1262652.0	75	-6100	?
Ariane 5ES	-	1	Ariane 5 EPC H175	-	-	1	656146.0	1500	50	?
Ariane 5ES	-	2	Ariane 5 EPS	-	-	1	31900.0	200	35780	?
Ariane 5ES	-	F	Ariane 5 Fairing	-	-	2	31900.0	130	-5800	?
Ariane 5ECA	-	0	Ariane EAP P240	-	-	2	1262652.0	75	-6100	?
Ariane 5ECA	-	1	Ariane 5 EPC H175	-	-	1	656146.0	1500	50	?
Ariane 5ECA	-	2	ESC-A	-	-	1	656146.0	200	35780	?
Ariane 5ECA	-	F	Ariane 5 Fairing	-	-	2	656146.0	125	-6000	?
Ariane 5ECA+	-	0	Ariane EAP P240	-	-	2	1262652.0	75	-6100	?
Ariane 5ECA+	-	1	Ariane 5 EPC H175	-	-	1	656146.0	1500	50	?
Ariane 5ECA+	-	2	ESC-D	-	-	1	656146.0	200	35780	?
Ariane 5ECA+	-	F	Ariane 5 Fairing	-	-	2	656146.0	125	-6000	?
Ariane 62	-	0	Ariane 6 ESR	-	-	2	656146.0	100	-6000	?
Ariane 62	-	1	Ariane 6 LLPM	-	-	1	656146.0	250	-5000	?
Ariane 62	-	2	Ariane 6 ULPM	-	-	1	656146.0	200	35000	?
Ariane 62	-	F	Ariane 6 Fairing	-	-	2	656146.0	250	-5000	?
Ariane 64	-	0	Ariane 6 ESR	-	-	4	656146.0	100	-6000	?
Ariane 64	-	1	Ariane 6 LLPM	-	-	1	656146.0	250	-5000	?

LVStages

LV_Name	LV_Variant	Stage_No	Stage_Name	Qualifier	Dummy	Multiplicity	Stage_Impulse kNs	Stage_Apogee km	Stage_Perigee km	Perigee_Qual
Ariane 64	-	2	Ariane 6 UPLM	-	-	1	656146.0	200	35000	?
Ariane 64	-	F	Ariane 6 Fairing	-	-	2	656146.0	250	-5000	?
H3-30S	-	1	H3 Stage 1 3E	-	-	1	656146.0	300	-6000	?
H3-22S	-	0	H3 SRB-3	-	-	2	656146.0	50	-6000	?
H3-22S	-	1	H3 Stage 1 2E	-	-	1	656146.0	100	-6000	?
H3-22S	-	2	H3 Stage 2	-	-	1	656146.0	300	-6000	?
H3-22L	-	0	H3 SRB-3	-	-	1	656146.0	50	-6000	?
H3-22L	-	1	H3 Stage 1 2E	-	-	1	656146.0	100	-6000	?
H3-22L	-	2	H3 Stage 2	-	-	1	656146.0	300	-6000	?
H3-24L	-	0	H3 SRB-3	-	-	4	656146.0	50	-6000	?
H3-24L	-	1	H3 Stage 1 2E	-	-	1	656146.0	100	-6000	?
H3-24L	-	2	H3 Stage 2	-	-	1	656146.0	300	-6000	?
H-IIB	-	0	H-II SRB-A3	-	-	4	656146.0	50	-6378	?
H-IIB	-	1	H-II Stage 1	-	-	1	656146.0	100	-6000	?
H-IIB	-	2	H-IIA Stage 2	-	-	1	656146.0	300	-6370	?
Chang Zheng 5	-	0	CZ-5 Booster	-	-	4	656146.0	50	-6370	?
Chang Zheng 5	-	1	CZ-5 Stage 1	-	-	1	656146.0	50	-6370	?
Chang Zheng 5	-	2	CZ-5 Stage 2	-	-	1	656146.0	200	-4400	?
Chang Zheng 5B	-	0	CZ-5 Booster	-	-	4	656146.0	50	-6370	?
Chang Zheng 5B	-	1	CZ-5 Stage 1	-	-	1	656146.0	50	-6370	?
Chang Zheng 5/YZ-2	-	0	CZ-5 Booster	-	-	4	656146.0	50	-6370	?
Chang Zheng 5/YZ-2	-	1	CZ-5 Stage 1	-	-	1	656146.0	50	-6370	?
Chang Zheng 5/YZ-2	-	2	CZ-5 Stage 2	-	-	1	656146.0	200	-4400	?
Chang Zheng 5/YZ-2	-	3	YZ-2	-	-	1	656146.0	200	35780	?
Delta 4H	-	0	Delta CBC	-	-	2	656146.0	100	-5800	?
Delta 4H	-	1	Delta CBC	-	-	1	656146.0	200	-4400	?
Delta 4H	-	2	Delta D4SS-5	-	-	1	656146.0	200	-4400	?
Delta 4H	-	F	Fairing	-	-	2	656146.0	200	-4400	?
Delta 4H	A	1	Delta CBC RS-68A	-	-	2	656146.0	100	-5800	?
Delta 4H	A	2	Delta CBC RS-68A	-	-	1	656146.0	200	-4400	?
Delta 4H	A	1	Delta D4SS-5	-	-	2	656146.0	200	-4400	?
Delta 4H	A	F	Fairing	-	-	2	656146.0	200	-4400	?
Delta 4H	B	0	Delta CBC RS-68A	-	-	2	656146.0	100	-5800	?
Delta 4H	B	1	Delta CBC RS-68A	-	-	1	656146.0	200	-4400	?
Delta 4H	B	2	DCSSS-1	-	-	1	656146.0	200	-4400	?
Delta 4H	B	F	Fairing	-	-	2	656146.0	200	-4400	?
Delta 4H/Star 48BV	-	0	Delta CBC RS-68A	-	-	2	656146.0	100	-5800	?
Delta 4H/Star 48BV	-	1	Delta CBC RS-68A	-	-	1	656146.0	200	-4400	?
Delta 4H/Star 48BV	-	2	Delta D4SS-5	-	-	2	656146.0	200	-4400	?
Delta 4H/Star 48BV	-	F	Fairing	-	-	2	656146.0	200	-4400	?
Delta 4H	-	1	Delta CBC	-	-	1	656146.0	180	-4900	?
Delta 4H	-	2	Delta D4SS-4	-	-	1	656146.0	200	-4900	?
Delta 4H	-	F	Fairing	-	-	2	656146.0	200	-4900	?
Delta 4H+(4,2)	-	0	GEM-60	-	-	2	656146.0	40	-6370	?
Delta 4H+(4,2)	-	1	Delta CBC	-	-	1	656146.0	180	-4900	?
Delta 4H+(4,2)	-	2	Delta D4SS-4	-	-	1	656146.0	200	-4900	?
Delta 4H+(4,2)	-	F	Fairing	-	-	2	656146.0	200	-4900	?
Delta 4H+(5,4)	-	0	GEM-60	-	-	4	656146.0	40	-6370	?
Delta 4H+(5,4)	-	1	Delta CBC	-	-	1	656146.0	180	-4900	?
Delta 4H+(5,4)	-	2	Delta D4SS-5	-	-	1	656146.0	200	-4900	?
Delta 4H+(5,4)	-	F	Fairing	-	-	2	656146.0	200	-4900	?
Delta 4H+(4,2)	A	0	GEM-60	-	-	2	656146.0	40	-6370	?
Delta 4H+(4,2)	A	1	Delta CBC RS-68A	-	-	1	656146.0	180	-4900	?
Delta 4H+(4,2)	A	2	Delta D4SS-4	-	-	1	656146.0	200	-4900	?
Delta 4H+(4,2)	A	F	Fairing	-	-	2	656146.0	200	-4900	?
Delta 4H+(5,4)	A	0	GEM-60	-	-	4	656146.0	40	-6370	?
Delta 4H+(5,4)	A	1	Delta CBC RS-68A	-	-	1	656146.0	180	-4900	?
Delta 4H+(5,4)	A	2	Delta D4SS-5	-	-	1	656146.0	200	-4900	?
Delta 4H+(5,4)	A	F	Fairing	-	-	2	656146.0	200	-4900	?
Delta 4H+(5,4)	A	0	GEM-60	-	-	2	656146.0	40	-6370	?
Delta 4H+(5,4)	A	1	Delta CBC RS-68A	-	-	1	656146.0	180	-4900	?
Delta 4H+(5,4)	A	2	Delta D4SS-4	-	-	1	656146.0	200	-4900	?
Delta 4H+(5,4)	A	F	Fairing	-	-	2	656146.0	200	-4900	?
Delta 4H+(5,2)	A	0	GEM-60	-	-	2	656146.0	40	-6370	?
Delta 4H+(5,2)	A	1	Delta CBC RS-68A	-	-	1	656146.0	180	-4900	?
Delta 4H+(5,2)	A	2	Delta D4SS-5	-	-	1	656146.0	200	-4900	?
Delta 4H+(5,2)	A	F	Fairing	-	-	2	656146.0	200	-4900	?
Delta 4H+(5,2)	A	0	GEM-60	-	-	2	656146.0	40	-6370	?
Delta 4H+(5,2)	A	1	Delta CBC RS-68A	-	-	1	656146.0	180	-4900	?
Delta 4H+(5,2)	A	2	Delta D4SS-4	-	-	1	656146.0	200	-4900	?
Delta 4H+(5,2)	A	F	Fairing	-	-	2	656146.0	200	-4900	?
DC-XA	-	1	DC-XA	-	-	1	656146.0	2	-6378	?
H-II	-	0	H-II SRB	-	-	2	291400.0	60	-6260	?
H-II	-	1	H-II Stage 1	-	-	1	373680.0	300	-4600	?

LVStages

LV_Name	LV_Variant	Stage_No	Stage_Name	Qualifier	Dummy	Multiplicity	Stage_Impulse kNs	Stage_Apogee km	Stage_Perigee km	Perigee_Qual
H-II	-	2	H-II Stage 2	-	-	1	73200.0	400	400	?
H-II	-	F	Fairing	-	-	2	73200.0	140	-5940	?
H-II	(2S)	-1	H-II SSB	-	-	2	73200.0	50	-6250	?
H-II	(2S)	0	H-II SRB	-	-	2	291400.0	60	-6250	?
H-II	(2S)	1	H-II Stage 1	-	-	1	373680.0	250	-4400	?
H-II	(2S)	2	H-II Stage 2	-	-	1	73200.0	400	400	?
H-II	(2S)	F	Fairing	-	-	2	73200.0	140	-5950	?
H-IIA 202	-	0	H-II SRB-A	-	-	2	73200.0	70	-6260	?
H-IIA 202	-	1	H-IIA Stage 1	-	-	1	73200.0	250	-4400	?
H-IIA 202	-	2	H-IIA Stage 2	-	-	1	73200.0	400	400	?
H-IIA 202	F	F	Fairing	-	-	2	73200.0	145	-6000	?
H-IIA 202	1	0	H-II SSB-A3	-	-	2	73200.0	70	-6260	?
H-IIA 202	1	1	H-IIA Stage 1	-	-	1	73200.0	250	-4400	?
H-IIA 202	1	2	H-IIA Stage 2	-	-	1	73200.0	400	400	?
H-IIA 202	2	F	Fairing	-	-	2	73200.0	145	-6000	?
H-IIA 202	2	0	H-II SRB-A	-	-	4	73200.0	70	-6260	?
H-IIA 202	2	1	H-IIA Stage 1	-	-	1	73200.0	250	-4400	?
H-IIA 202	2	2	H-IIA Stage 2	-	-	1	73200.0	400	400	?
H-IIA 202	2	-1	Castor 4AXL	-	-	2	73200.0	75	-6250	?
H-IIA 202	-	0	H-II SRB-A	-	-	2	73200.0	75	-6250	?
H-IIA 202	-	1	H-IIA Stage 1	-	-	1	73200.0	250	-4500	?
H-IIA 202	-	2	H-IIA Stage 2	-	-	1	73200.0	500	500	?
H-IIA 202	-	F	Fairing	-	-	2	73200.0	145	-6000	?
H-IIA 202	-	0	Castor 4AXL	-	-	2	73200.0	90	-6190	?
H-IIA 202	-	1	H-II SRB-A3	-	-	2	73200.0	100	-6190	?
H-IIA 202	-	2	H-IIA Stage 1	-	-	1	73200.0	330	-4340	?
H-IIA 202	-	1	H-IIA Stage 2	-	-	1	73200.0	500	500	?
H-IIA 202	-	F	Fairing	-	-	2	73200.0	145	-6000	?
H-IIA 202	-	0	Castor 4AXL	-	-	2	73200.0	90	-6190	?
H-IIA 202	-	1	H-II SRB-A3	-	-	2	73200.0	100	-6190	?
H-IIA 202	-	2	H-IIA Stage 1	-	-	1	73200.0	330	-4340	?
H-IIA 202	-	1	H-IIA Stage 2	-	-	1	73200.0	500	500	?
H-IIA 202	-	F	Fairing	-	-	2	73200.0	145	-6000	?
H-IIA 202	-	0	GSDM-S200	-	-	2	73200.0	50	-6300	?
H-IIA 202	-	1	GS1-L110 a	-	-	1	73200.0	50	-6300	?
H-IIA 202	-	2	GS2-C25 a	-	-	1	73200.0	500	35700	?
H-IIA 202	-	0	GSDM-S200	-	-	2	73200.0	50	-6300	?
H-IIA 202	-	1	GS1-L110	-	-	1	73200.0	50	-6300	?
H-IIA 202	-	2	GS2-C25	-	-	1	73200.0	500	35700	?
H-IIA 202	-	0	GSDM-S200	-	-	2	73200.0	50	-6300	?
H-IIA 202	-	1	GS1-L110	-	-	1	73200.0	50	-6300	?
H-IIA 202	-	2	GS2-C25	-	-	1	73200.0	500	35700	?
H-IIA 202	-	0	Recruit	-	-	6	73200.0	25	-6368	?
H-IIA 202	-	1	Algol ID	-	-	4	73200.0	25	-6368	?
H-IIA 202	-	0	Recruit	-	-	4	73200.0	25	-6368	?
H-IIA 202	-	1	Algol ID	-	-	2	73200.0	25	-6368	?
H-IIA 202	-	0	Recruit	-	-	6	73200.0	25	-6368	?
H-IIA 202	-	1	Algol ID	-	-	5	73200.0	25	-6368	?
H-IIA 202	-	2	Algol ID	-	-	4	73200.0	25	-6368	?
H-IIA 202	-	1	Antares Stage 1	-	-	1	73200.0	200	-5200	?
H-IIA 202	-	2	Castor 30	-	-	2	73200.0	200	200	?
H-IIA 202	-	1	Antares Stage 1	-	-	1	73200.0	200	-5200	?
H-IIA 202	-	2	Castor 30B	-	-	2	73200.0	200	200	?
H-IIA 202	-	1	Antares Stage 1	-	-	1	73200.0	200	-5200	?
H-IIA 202	-	2	Castor 30XL	-	-	2	73200.0	200	200	?
H-IIA 202	-	1	Antares 2 Stage 1	-	-	1	73200.0	200	-5200	?
H-IIA 202	-	2	Castor 30XL	-	-	2	73200.0	200	200	?
H-IIA 202	-	1	Antares 2+ Stage 1	-	-	1	73200.0	200	-5200	?
H-IIA 202	-	2	Castor 30XL	-	-	2	73200.0	200	200	?
H-IIA 202	-	1	11S771	-	-	1	73200.0	150	-6100	?
H-IIA 202	-	2	11S772	-	-	1	73200.0	700	700	?
H-IIA 202	-	F	G0	-	-	1	73200.0	200	-5000	?
H-IIA 202	-	1	11S771	-	-	1	73200.0	150	-6100	?
H-IIA 202	-	2	11S772	-	-	1	73200.0	700	700	?
H-IIA 202	-	F	G0	-	-	2	73200.0	200	-5000	?
H-IIA 202	-	1	11S771	-	-	1	73200.0	100	-6200	?
H-IIA 202	-	2	11S772	-	-	1	73200.0	900	900	?
H-IIA 202	-	F	G0	-	-	2	73200.0	200	-5000	?
H-IIA 202	-	1	11S771	-	-	1	73200.0	100	-6200	?
H-IIA 202	-	2	11S772	-	-	1	73200.0	200	-2220	?



LVStages

LV_Name	LV_Variant	Stage_No	Stage_Name	Qualifier	Dummy	Multiplicity	Stage_Impulse kNs	Stage_Apogee km	Stage_Perigee km	Perigee_Qual
Zenit-3SL	-	3	Blok DM-SL	-	-	1	73200.0	2000	200	?
Zenit-3SL	-	F	GO	-	-	2	73200.0	140	-5000	?
Zenit-2SB	-	1	11S771	-	-	1	73200.0	150	-6100	?
Zenit-2SB	-	2	11S772	-	-	2	73200.0	700	700	?
Zenit-2SB	-	F	GO	-	-	2	73200.0	200	-5000	?
Zenit-3F	-	1	11S771	-	-	1	73200.0	100	-6200	?
Zenit-3F	-	2	11S772	-	-	2	73200.0	200	-2220	?
Zenit-3F	-	3	Fregat-SB	-	-	1	73200.0	2000	200	?
Zenit-3F	-	F	GO	-	-	1	73200.0	140	-5000	?
Zenit-3SLB	-	1	11S771	-	-	1	73200.0	100	-6200	?
Zenit-3SLB	-	2	11S772	-	-	2	73200.0	200	-2220	?
Zenit-3SLB	-	3	Blok DM-SLB	-	-	2	73200.0	2000	200	?
Zenit-3SLB	-	F	GO	-	-	2	73200.0	140	-5000	?
Zenit-3SLBF	-	1	11S771	-	-	1	73200.0	100	-6200	?
Zenit-3SLBF	-	2	11S772	-	-	2	73200.0	200	-2220	?
Zenit-3SLBF	-	3	Fregat-SB	-	-	1	73200.0	2000	200	?
Zenit-3SLBF	-	F	GO	-	-	2	73200.0	140	-5000	?
Atlas V 401	-	1	Atlas CCB	-	-	1	73200.0	200	-5000	?
Atlas V 401	-	2	Centaur IIIB/SEC	-	-	1	73200.0	1500	200	?
Atlas V 401	-	F	Fairing	-	-	2	73200.0	200	-4900	?
Atlas V 401	C	1	Atlas CCB	-	-	1	73200.0	200	-5000	?
Atlas V 401	C	2	Centaur IIIB/C-1	-	-	1	73200.0	1500	200	?
Atlas V 401	C	F	Fairing	-	-	2	73200.0	200	-4900	?
Atlas V 411	-	0	Atlas V SRM	-	-	1	73200.0	75	-6100	?
Atlas V 411	-	1	Atlas CCB	-	-	1	73200.0	350	-3850	?
Atlas V 411	-	2	Centaur IIIB/SEC	-	-	1	73200.0	4000	200	?
Atlas V 411	-	F	Fairing	-	-	2	73200.0	150	-5500	?
Atlas V 411	C	0	Atlas V SRM	-	-	1	73200.0	75	-6100	?
Atlas V 411	C	1	Atlas CCB	-	-	1	73200.0	350	-3850	?
Atlas V 411	C	2	Centaur IIIB/C-1	-	-	1	73200.0	4000	200	?
Atlas V 411	C	F	Fairing	-	-	2	73200.0	150	-5500	?
Atlas V 421	-	0	Atlas V SRM	-	-	1	73200.0	75	-6100	?
Atlas V 421	-	1	Atlas CCB	-	-	1	73200.0	350	-3850	?
Atlas V 421	-	2	Centaur IIIB/SEC	-	-	1	73200.0	4000	200	?
Atlas V 421	-	F	Fairing	-	-	2	73200.0	150	-5500	?
Atlas V 421	C	0	Atlas V SRM	-	-	1	73200.0	75	-6100	?
Atlas V 421	C	1	Atlas CCB	-	-	1	73200.0	350	-3850	?
Atlas V 421	C	2	Centaur IIIB/C-1	-	-	1	73200.0	4000	200	?
Atlas V 421	C	F	Fairing	-	-	2	73200.0	150	-5500	?
Atlas V 431	-	0	Atlas V SRM	-	-	1	73200.0	75	-6100	?
Atlas V 431	-	1	Atlas CCB	-	-	1	73200.0	350	-3850	?
Atlas V 431	-	2	Centaur IIIB/SEC	-	-	1	73200.0	4000	200	?
Atlas V 431	-	F	Fairing	-	-	2	73200.0	150	-5500	?
Atlas V 431	C	0	Atlas V SRM	-	-	1	73200.0	75	-6100	?
Atlas V 431	C	1	Atlas CCB	-	-	1	73200.0	350	-3850	?
Atlas V 431	C	2	Centaur IIIB/C-1	-	-	1	73200.0	4000	200	?
Atlas V 431	C	F	Fairing	-	-	2	73200.0	150	-5500	?
Atlas V 501	-	1	Atlas CCB	-	-	1	73200.0	350	-3850	?
Atlas V 501	-	2	Centaur IIIB/SEC	-	-	1	73200.0	1500	200	?
Atlas V 501	-	F	Fairing	-	-	2	73200.0	200	-4900	?
Atlas V 501	C	1	Atlas CCB	-	-	1	73200.0	200	-5000	?
Atlas V 501	C	2	Centaur IIIB/C-1	-	-	1	73200.0	2000	200	?
Atlas V 501	C	F	Fairing	-	-	2	73200.0	150	-5500	?
Atlas V 521	-	0	Atlas V SRM	-	-	2	73200.0	75	-6100	?
Atlas V 521	-	1	Atlas CCB	-	-	1	73200.0	350	-3850	?
Atlas V 521	-	2	Centaur IIIB/SEC	-	-	1	73200.0	4000	200	?
Atlas V 521	-	F	Fairing	-	-	2	73200.0	150	-5500	?
Atlas V 531	G	0	Atlas V SRM	-	-	3	73200.0	75	-6100	?
Atlas V 531	G	1	Atlas CCB	-	-	1	73200.0	350	-3850	?
Atlas V 531	G	2	Centaur IIIB/C-1	-	-	1	73200.0	4000	200	?
Atlas V 531	G	F	Fairing	-	-	2	73200.0	150	-5500	?

LVStages

LV_Name	LV_Variant	Stage_No	Stage_Name	Qualifier	Dummy	Multiplicity	Stage_Impulse kNs	Stage_Apogee km	Stage_Perigee km	Perigee_Qual
Atlas V 531	G	0	GEM-63	-	-	3	73200.0	75	-6100	?
Atlas V 531	G	1	Atlas OCB	-	-	1	73200.0	350	-3850	?
Atlas V 531	G	2	Centaur IIIB/SEC	-	-	1	73200.0	4000	200	?
Atlas V 531	G	F	Fairing	-	-	1	73200.0	150	-5500	?
Atlas V 531	G1	0	GEM-63	-	-	3	73200.0	75	-6100	?
Atlas V 531	G1	1	Atlas OCB	-	-	1	73200.0	350	-3850	?
Atlas V 531	G1	2	Centaur IIIB/O-1-1	-	-	1	73200.0	4000	200	?
Atlas V 531	G1	F	Fairing	-	-	2	73200.0	150	-5500	?
Atlas V 541	-	0	Atlas V SRM	-	-	4	73200.0	75	-6100	?
Atlas V 541	-	1	Atlas OCB	-	-	1	73200.0	350	-3850	?
Atlas V 541	-	2	Centaur IIIB/SEC	-	-	1	73200.0	4000	200	?
Atlas V 541	-	F	Fairing	-	-	2	73200.0	150	-5500	?
Atlas V 541	C	0	Atlas V SRM	-	-	4	73200.0	75	-6100	?
Atlas V 541	C	1	Atlas OCB	-	-	1	73200.0	350	-3850	?
Atlas V 541	C	2	Centaur IIIB/O-1	-	-	1	73200.0	4000	200	?
Atlas V 541	C	F	Fairing	-	-	1	73200.0	150	-5500	?
Atlas V 541	C	F	Fairing	-	-	1	73200.0	150	-5500	?
Atlas V 541	G	0	GEM-63	-	-	4	73200.0	75	-6100	?
Atlas V 541	G	1	Atlas OCB	-	-	1	73200.0	350	-3850	?
Atlas V 541	G	2	Centaur IIIB/O-1	-	-	1	73200.0	4000	200	?
Atlas V 541	G	F	Fairing	-	-	2	73200.0	150	-5500	?
Atlas V 551	-	0	Atlas V SRM	-	-	5	73200.0	75	-6100	?
Atlas V 551	-	1	Atlas OCB	-	-	1	73200.0	350	-3850	?
Atlas V 551	-	2	Centaur IIIB/SEC	-	-	1	73200.0	4000	200	?
Atlas V 551	-	F	Fairing	-	-	2	73200.0	150	-5500	?
Atlas V 551	C	0	Atlas V SRM	-	-	5	73200.0	75	-6100	?
Atlas V 551	C	1	Atlas OCB	-	-	1	73200.0	350	-3850	?
Atlas V 551	C	2	Centaur IIIB/O-1	-	-	1	73200.0	4000	200	?
Atlas V 551	C	F	Fairing	-	-	2	73200.0	150	-5500	?
Atlas V 551	C	F	Fairing	-	-	2	73200.0	150	-5500	?
Atlas V 551	G	0	GEM-63	-	-	5	73200.0	75	-6100	?
Atlas V 551	G	1	Atlas OCB	-	-	1	73200.0	350	-3850	?
Atlas V 551	G	2	Centaur IIIB/O-1	-	-	1	73200.0	4000	200	?
Atlas V 551	G	F	Fairing	-	-	2	73200.0	150	-5500	?
Atlas V N22	-	0	Atlas V SRM	-	-	2	73200.0	75	-6100	?
Atlas V N22	-	1	Atlas OCB	-	-	1	73200.0	350	-3850	?
Atlas V N22	-	2	Centaur IIIB/DEC2	-	-	1	73200.0	4000	200	?
Ariane 1	-	1	Ariane L144	-	-	1	73200.0	80	-6130	?
Ariane 1	-	2	Ariane L83	-	-	1	73200.0	160	-4530	?
Ariane 1	-	3	Ariane H8	-	-	1	73200.0	37800	200	?
Ariane 1	-	F	Ariane Fairing	-	-	2	73200.0	130	-5600	?
Ariane 2	-	1	Ariane L144	-	-	1	73200.0	75	-6120	?
Ariane 2	-	2	Ariane L33	-	-	1	73200.0	160	-4760	?
Ariane 2	-	3	Ariane H10	-	-	1	73200.0	37800	200	?
Ariane 2	-	F	Ariane Fairing	-	-	2	73200.0	130	-5600	?
Ariane 3	-	0	PAP	-	-	2	73200.0	4	-6370	?
Ariane 3	-	1	Ariane L144	-	-	1	73200.0	87	-6060	?
Ariane 3	-	2	Ariane L33	-	-	1	73200.0	160	-4500	?
Ariane 3	-	3	Ariane H10	-	-	1	73200.0	37800	200	?
Ariane 3	-	F	Ariane Fairing	-	-	2	73200.0	130	-5600	?
Ariane 40	40	1	Ariane L220	-	-	1	621970.0	80	-5800	?
Ariane 40	40	2	Ariane L33	-	-	1	98910.0	180	-3700	?
Ariane 40	40	3	Ariane H10	-	-	1	98910.0	800	800	?
Ariane 40	40	F	Ariane Fairing	-	-	2	45144.0	130	-5600	?
Ariane 40	40+	1	Ariane L220	-	-	1	621970.0	80	-5800	?
Ariane 40	40+	2	Ariane L33	-	-	1	98910.0	180	-3700	?
Ariane 40	40+	3	Ariane H10+	-	-	1	47025.0	800	800	?
Ariane 40	40+	F	Ariane Fairing	-	-	2	47025.0	130	-5600	?
Ariane 40	40-3	1	Ariane L220	-	-	1	621970.0	80	-5800	?
Ariane 40	40-3	2	Ariane L33	-	-	1	98910.0	180	-3700	?
Ariane 40	40-3	3	Ariane H10-3	-	-	1	48906.0	800	800	?
Ariane 40	40-3	F	Ariane Fairing	-	-	2	48906.0	130	-5600	?
Ariane 42L	42L	0	PAL	-	-	2	212380.0	5	-6300	?
Ariane 42L	42L	1	Ariane L220	-	-	1	621970.0	90	-5720	?
Ariane 42L	42L	2	Ariane L33	-	-	1	98910.0	180	-3700	?
Ariane 42L	42L	3	Ariane H10	-	-	1	98910.0	800	800	?
Ariane 42L	42L	F	Ariane Fairing	-	-	2	45144.0	130	-5600	?
Ariane 42L	42L+	0	PAL	-	-	2	212380.0	5	-6300	?
Ariane 42L	42L+	1	Ariane L220	-	-	1	621970.0	100	-5700	?
Ariane 42L	42L+	2	Ariane L33	-	-	1	98910.0	200	-3700	?
Ariane 42L	42L+	3	Ariane H10+	-	-	1	47025.0	36787	200	?
Ariane 42L	42L+	F	Ariane Fairing	-	-	2	47025.0	130	-5600	?
Ariane 42L	42L-3	0	PAL	-	-	2	212380.0	5	-6300	?
Ariane 42L	42L-3	1	Ariane L220	-	-	1	621970.0	100	-5700	?
Ariane 42L	42L-3	2	Ariane L33	-	-	1	98910.0	200	-3700	?

LVStages

LV_Name	LV_Variant	Stage_No	Stage_Name	Qualifier	Dummy	Multiplicity	Stage_Impulse kNs	Stage_Apogee km	Stage_Perigee km	Perigee_Qual
Ariane 42L	42L-3	3	Ariane H10-3	-	-	1	48906.0	35787	200	?
Ariane 42L	42L-3	F	Ariane 4	-	-	2	48906.0	140	-5400	?
Ariane 42P	42P	0	PAP	-	-	2	54600.0	5	-6300	?
Ariane 42P	42P	1	Ariane L220	-	-	1	621970.0	80	-5800	?
Ariane 42P	42P	2	Ariane L33	-	-	1	98910.0	180	-3700	?
Ariane 42P	42P	3	Ariane L33	-	-	1	98910.0	180	-3700	?
Ariane 42P	42P	F	Ariane H10	-	-	2	48906.0	35787	200	?
Ariane 42P	42P	0	Ariane 4	-	-	2	48906.0	140	-5400	?
Ariane 42P	42P+	0	PAP	-	-	2	54600.0	5	-6300	?
Ariane 42P	42P+	1	Ariane L220	-	-	1	621970.0	80	-5800	?
Ariane 42P	42P+	2	Ariane L33	-	-	1	98910.0	180	-3700	?
Ariane 42P	42P+	3	Ariane L33	-	-	1	98910.0	180	-3700	?
Ariane 42P	42P+	F	Ariane H10-3	-	-	2	48906.0	35787	200	?
Ariane 42P	42P+	0	Ariane 4	-	-	2	47025.0	140	-5400	?
Ariane 42P	42P+	1	PAP	-	-	2	54600.0	5	-6300	?
Ariane 42P	42P-3	0	Ariane L220	-	-	1	621970.0	80	-5800	?
Ariane 42P	42P-3	1	Ariane L33	-	-	1	98910.0	180	-3700	?
Ariane 42P	42P-3	2	Ariane L33	-	-	1	98910.0	180	-3700	?
Ariane 42P	42P-3	F	Ariane H10-3	-	-	2	48906.0	35787	200	?
Ariane 42P	42P-3	0	Ariane 4	-	-	2	47025.0	140	-5400	?
Ariane 44L	44L	1	Ariane L220	-	-	1	621970.0	90	-5720	?
Ariane 44L	44L	2	Ariane L33	-	-	1	98910.0	180	-3700	?
Ariane 44L	44L	3	Ariane L33	-	-	1	98910.0	180	-3700	?
Ariane 44L	44L	F	Ariane H10	-	-	2	45144.0	140	-5400	?
Ariane 44L	44L	0	Ariane 4	-	-	2	45144.0	140	-5400	?
Ariane 44L	44L+	0	PAL	-	-	4	424760.0	50	-6170	?
Ariane 44L	44L+	1	Ariane L220	-	-	1	621970.0	100	-5720	?
Ariane 44L	44L+	2	Ariane L33	-	-	1	98910.0	200	-3700	?
Ariane 44L	44L+	3	Ariane L33	-	-	1	98910.0	200	-3700	?
Ariane 44L	44L+	F	Ariane H10-3	-	-	2	48906.0	35787	200	?
Ariane 44L	44L+	0	Ariane 4	-	-	2	47025.0	140	-5400	?
Ariane 44L	44L+	1	Ariane L220	-	-	1	621970.0	200	-3700	?
Ariane 44L	44L+	2	Ariane L33	-	-	1	98910.0	200	-3700	?
Ariane 44L	44L+	3	Ariane L33	-	-	1	98910.0	200	-3700	?
Ariane 44L	44L+	F	Ariane H10+	-	-	2	48906.0	35787	200	?
Ariane 44L	44L+	0	Ariane 4	-	-	2	47025.0	140	-5400	?
Ariane 44L	44L+	1	PAL	-	-	2	212380.0	50	-6200	?
Ariane 44L	44L+	2	PAP	-	-	2	54600.0	5	-6370	?
Ariane 44L	44L+	3	Ariane L220	-	-	1	621970.0	90	-5800	?
Ariane 44L	44L+	F	Ariane L33	-	-	1	98910.0	180	-3800	?
Ariane 44L	44L+	0	Ariane H10	-	-	2	45144.0	140	-5400	?
Ariane 44L	44L+	1	Ariane 4	-	-	2	45144.0	140	-5400	?
Ariane 44L	44L+	2	PAL	-	-	2	212380.0	50	-6200	?
Ariane 44L	44L+	3	PAP	-	-	2	54600.0	5	-6370	?
Ariane 44L	44L+	F	Ariane L220	-	-	1	621970.0	100	-5700	?
Ariane 44L	44L+	0	Ariane L33	-	-	1	98910.0	200	-3700	?
Ariane 44L	44L+	1	Ariane L33	-	-	1	98910.0	200	-3700	?
Ariane 44L	44L+	2	Ariane L33	-	-	1	98910.0	200	-3700	?
Ariane 44L	44L+	3	Ariane L33	-	-	1	98910.0	200	-3700	?
Ariane 44L	44L+	F	Ariane H10+	-	-	2	47025.0	35787	200	?
Ariane 44L	44L+	0	Ariane 4	-	-	2	47025.0	140	-5400	?
Ariane 44L	44L+	1	PAL	-	-	2	212380.0	50	-6200	?
Ariane 44L	44L+	2	PAP	-	-	2	54600.0	5	-6370	?
Ariane 44L	44L+	3	Ariane L220	-	-	1	621970.0	100	-5700	?
Ariane 44L	44L+	F	Ariane L33	-	-	1	98910.0	200	-3700	?
Ariane 44L	44L+	0	Ariane H10	-	-	2	45144.0	140	-5400	?
Ariane 44L	44L+	1	Ariane 4	-	-	2	45144.0	140	-5400	?
Ariane 44L	44L+	2	PAL	-	-	2	212380.0	50	-6200	?
Ariane 44L	44L+	3	PAP	-	-	2	54600.0	5	-6370	?
Ariane 44P	44P	0	Ariane L220	-	-	1	621970.0	100	-5700	?
Ariane 44P	44P	1	Ariane L33	-	-	1	98910.0	200	-3700	?
Ariane 44P	44P	2	Ariane L33	-	-	1	98910.0	200	-3700	?
Ariane 44P	44P	3	Ariane L33	-	-	1	98910.0	200	-3700	?
Ariane 44P	44P	F	Ariane H10	-	-	2	45144.0	140	-5400	?
Ariane 44P	44P	0	Ariane 4	-	-	2	45144.0	140	-5400	?
Ariane 44P	44P-3	0	PAP	-	-	2	102900.0	5	-6370	?
Ariane 44P	44P-3	1	Ariane L220	-	-	1	621970.0	100	-5700	?
Ariane 44P	44P-3	2	Ariane L33	-	-	1	98910.0	200	-3700	?
Ariane 44P	44P-3	3	Ariane L33	-	-	1	98910.0	200	-3700	?
Ariane 44P	44P-3	F	Ariane H10-3	-	-	2	48906.0	35787	200	?
Ariane 44P	44P-3	0	Ariane 4	-	-	2	48906.0	140	-5400	?
Ariane 44P	44P-3	1	TianLong-3 Stage 1	-	-	1	48906.0	0	0	?
Ariane 44P	44P-3	2	TianLong-3 Stage 2	-	-	1	48906.0	0	0	?
Ariane 44P	44P-3	3	TianLong-3 Stage 1	-	-	1	48906.0	0	0	?
Ariane 44P	44P-3	F	TianLong-3 Stage 2	-	-	1	48906.0	0	0	?
Ariane 44P	44P-3	0	Ares I-X	-	-	1	48906.0	45	-6200	?
Ariane 44P	44P-3	1	LM AS	-	-	1	48906.0	0	0	?
Ariane 44P	44P-3	2	Dragon V2	-	-	1	48906.0	1	-6300	?
Ariane 44P	44P-3	3	Falcon 9 St 1	-	-	2	48906.0	100	-6100	?
Ariane 44P	44P-3	F	Falcon 9 St 1	-	-	1	48906.0	100	-6100	?
Ariane 44P	44P-3	0	Falcon 9 St 2	-	-	2	48906.0	200	-6100	?
Ariane 44P	44P-3	1	Falcon 9 St 2	-	-	1	48906.0	200	-6100	?
Ariane 44P	44P-3	2	Falcon 9 St 1	-	-	1	48906.0	100	-6100	?
Ariane 44P	44P-3	3	Falcon 9 St 2	-	-	2	48906.0	200	-6100	?
Ariane 44P	44P-3	F	Falcon 9 St 2	-	-	1	48906.0	100	-6100	?
Ariane 44P	44P-3	0	Falcon 9 St 1	-	-	2	48906.0	200	-6100	?
Ariane 44P	44P-3	1	Falcon 9 St 2	-	-	1	48906.0	100	-6100	?
Ariane 44P	44P-3	2	Falcon 9 St 1	-	-	2	48906.0	200	-6100	?
Ariane 44P	44P-3	3	Falcon 9 St 2	-	-	1	48906.0	100	-6100	?
Ariane 44P	44P-3	F	Falcon 9 St 2	-	-	2	48906.0	200	-6100	?

LVStages

LV_Name	LV_Variant	Stage_No	Stage_Name	Qualifier	Dummy	Multiplicity	Stage_Impulse kNs	Stage_Apogee km	Stage_Perigee km	Perigee_Qual
Falcon 9	FT5	1	Falcon 9 St 1/1D-5	-	-	1	48906.0	100	-6100	?
Falcon 9	FT5	2	Falcon 9 St 2/1D-5	-	-	1	48906.0	200	-6100	?
Falcon 9	FT4/5	1	Falcon 9 St 1/1D-4	-	-	1	48906.0	100	-6100	?
Falcon 9	FT4/5	2	Falcon 9 St 2/1D-4	-	-	1	48906.0	200	-6100	?
Falcon 9	FT4	1	Falcon 9 St 1/1D-4	-	-	1	48906.0	100	-6100	?
Falcon 9	FT4	2	Falcon 9 St 2/1D-4	-	-	1	48906.0	200	-6100	?
Falcon 9	FT3	1	Falcon 9 St 1/1D-FT	-	-	1	48906.0	100	-6100	?
Falcon 9	FT3	2	Falcon 9 St 2/1D	-	-	1	48906.0	200	-6100	?
Falcon 9	1.1	1	Falcon 9 St 1/1D	-	-	1	48906.0	100	-6100	?
Falcon 9	1.1	2	Falcon 9 St 2/1D	-	-	1	48906.0	200	-6100	?
Falcon 9	FT3/4	1	Falcon 9 St 1/1D-FT	-	-	1	48906.0	100	-6100	?
Falcon 9	FT3/4	2	Falcon 9 St 2/1D-4	-	-	1	48906.0	200	-6100	?
Grasshopper	-	1	Falcon 9-1D	-	-	1	48906.0	0	-6378	?
Falcon 9R	1	1	Falcon 9 St 1/1D	-	-	1	48906.0	10	-6370	?
Nuri	-	1	KSLV-II Stage 1	-	-	1	48906.0	50	-6370	?
Nuri	-	2	KSLV-II Stage 2	-	-	1	48906.0	200	-5000	?
Nuri	-	3	KSLV-II Stage 3	-	-	1	48906.0	200	200	?
Vega C	-	1	Vega P120C	-	-	1	48906.0	50	-6000	?
Vega C	-	2	Zefiro 40	-	-	1	48906.0	200	-5000	?
Vega C	-	3	Zefiro 9	-	-	1	48906.0	200	50	?
Vega C	-	4	AVUM+	-	-	1	48906.0	500	500	?
X-15	-	0	NB-52	-	-	1	48906.0	14	-6378	?
X-15	-	1	X-15	-	-	1	48906.0	100	-6200	?
X-15	-	0	NB-52	-	-	1	48906.0	14	-6378	?
X-15	-	1	X-15 XLR-11	-	-	1	48906.0	100	-6200	?
Zhuque-2	-	1	ZQ-2 Stage 1	-	-	1	48906.0	100	-6300	?
Zhuque-2	-	2	ZQ-2 Stage 2	-	-	1	48906.0	500	500	?
Zhuque-2E	-	1	ZQ-2E Stage 1	-	-	1	48906.0	100	-6300	?
Zhuque-2E	-	2	ZQ-2E Stage 2	-	-	1	48906.0	500	500	?
Zhuque-2E	-	1	ZQ-2E-1 Stage 1	-	-	1	48906.0	100	-6300	?
Zhuque-2E	-	2	ZQ-2E Stage 2	-	-	1	48906.0	500	500	?
Dong Feng 5	-	1	DF-5 Stage 1	-	-	1	48906.0	100	-5500	?
Dong Feng 5	-	2	DF-5 Stage 2	-	-	1	48906.0	1000	-4000	?
Dong Feng 5A	-	1	DF-5 Stage 1	-	-	1	48906.0	100	-5500	?
Dong Feng 5A	-	2	DF-5 Stage 2	-	-	1	48906.0	1000	-4000	?
Dong Feng 5C	-	1	DF-5 Stage 1	-	-	1	48906.0	100	-5500	?
Dong Feng 5C	-	2	DF-5 Stage 2	-	-	1	48906.0	1000	-4000	?
Feng Bao 1	-	1	FB-1 Stage 1	-	-	1	48906.0	100	-6000	?
Feng Bao 1	-	2	FB-1 Stage 2	-	-	1	48906.0	200	200	?
Feng Bao 1	-	F	Fairing	-	-	2	48906.0	100	-6000	?
Chang Zheng 2	-	1	CZ-2 Stage 1	-	-	1	48906.0	100	-5500	?
Chang Zheng 2	-	2	CZ-2 Stage 2	-	-	1	48906.0	300	200	?
Chang Zheng 2C	-	1	CZ-2C Stage 1	-	-	1	48906.0	100	-5500	?
Chang Zheng 2C	-	2	CZ-2C Stage 2	-	-	1	48906.0	500	200	?
Chang Zheng 2C	a	1	CZ-2C Stage 1	-	-	1	48906.0	100	-5500	?
Chang Zheng 2C	a	2	CZ-2Ca Stage 2	-	-	1	48906.0	300	200	?
Chang Zheng 2C	b	1	CZ-2Ca Stage 1	-	-	1	48906.0	100	-5500	?
Chang Zheng 2C	b	2	CZ-2Ca Stage 2	-	-	1	48906.0	300	200	?
Chang Zheng 2C	SM	1	CZ-2C Stage 1	-	-	1	48906.0	100	-5500	?
Chang Zheng 2C	SM	2	CZ-2Ca Stage 2	-	-	1	48906.0	500	200	?
Chang Zheng 2C	SMA	1	CZ-2Ca Stage 1	-	-	1	48906.0	100	-5500	?
Chang Zheng 2C	SMA	2	CZ-2Ca Stage 2	-	-	1	48906.0	300	200	?
Chang Zheng 2C/YZ-1S	-	1	CZ-2Ca Stage 1	-	-	1	48906.0	100	-5500	?
Chang Zheng 2C/YZ-1S	-	2	CZ-2Ca Stage 2	-	-	1	48906.0	300	200	?
Chang Zheng 2C/YZ-1S	-	3	YZ-1S	-	-	1	48906.0	700	700	?
Chang Zheng 2C-III/SD	-	1	CZ-2C Stage 1	-	-	1	48906.0	85	-6180	?
Chang Zheng 2C-III/SD	-	2	CZ-2Ca Stage 2	-	-	1	48906.0	600	180	?
Chang Zheng 2C-III/SD	-	3	Smart Dispenser	-	-	1	48906.0	600	600	?
Chang Zheng 2C-III/SD	-	F	Fairing	-	-	2	48906.0	120	-5560	?
Chang Zheng 2D	a	1	CZ-4 Stage 1	-	-	1	48906.0	120	-5500	?
Chang Zheng 2D	a	2	CZ-4 Stage 2	-	-	1	48906.0	300	170	?
Chang Zheng 2D	-	1	CZ-4 Stage 1	-	-	1	48906.0	120	-5500	?
Chang Zheng 2D	-	2	CZ-4 Stage 2j	-	-	1	48906.0	300	170	?
Chang Zheng 2D/YZ-3	-	1	CZ-4 Stage 1	-	-	1	48906.0	120	-5500	?
Chang Zheng 2D/YZ-3	-	2	CZ-4 Stage 2j	-	-	1	48906.0	300	170	?
Chang Zheng 2D/YZ-3	-	3	YZ-3	-	-	1	48906.0	1000	1000	?
Chang Zheng 2E	-	0	CZ Booster	-	-	4	48906.0	60	-6300	?
Chang Zheng 2E	-	1	CZ-2E Stage 1	-	-	1	48906.0	120	-5500	?
Chang Zheng 2E	-	2	CZ-2E Stage 2	-	-	1	48906.0	1000	200	?
Chang Zheng 2E	-	F	Fairing	-	-	2	48906.0	150	-5500	?
Chang Zheng 2F	-	0	CZ Booster	-	-	4	48906.0	60	-6300	?
Chang Zheng 2F	-	1	CZ-2E Stage 1	-	-	1	48906.0	120	-5500	?
Chang Zheng 2F	-	2	CZ-2E Stage 2	-	-	1	48906.0	200	200	?

LVStages

LV_Name	LV_Variant	Stage_No	Stage_Name	Qualifier	Dummy	Multiplicity	Stage_Impulse kNs	Stage_Apogee km	Stage_Perigee km	Perigee_Qual
Chang Zheng 2F	-	F	Fairing	-	-	2	48906.0	150	-5500	?
Chang Zheng 2F	-	F	LES	-	-	1	48906.0	40	-6300	?
Chang Zheng 2F	G	0	CZ Booster	-	-	4	48906.0	60	-6300	?
Chang Zheng 2F	G	1	CZ-2E Stage 1	-	-	1	48906.0	120	-5500	?
Chang Zheng 2F	G	2	CZ-2E Stage 2	-	-	1	48906.0	200	200	?
Chang Zheng 2F	G	F	Fairing	-	-	1	48906.0	150	-5500	?
Chang Zheng 2F	G	F	LES	-	-	1	48906.0	40	-6300	?
Chang Zheng 2F	T	0	CZ Booster	-	-	4	48906.0	60	-6300	?
Chang Zheng 2F	T	1	CZ-2E Stage 1	-	-	1	48906.0	120	-5500	?
Chang Zheng 2F	T	2	CZ-2E Stage 2	-	-	1	48906.0	200	200	?
Chang Zheng 2F	T	F	Fairing	-	-	2	48906.0	150	-5500	?
Chang Zheng 3	-	1	CZ-3 Stage 1	-	-	1	48906.0	90	-6000	?
Chang Zheng 3	-	2	CZ-3 Stage 2	-	-	1	48906.0	170	-5130	?
Chang Zheng 3	-	3	CZ-3 Stage 3	-	-	1	48906.0	200	200	?
Chang Zheng 3	F	Fairing	-	-	-	2	48906.0	150	-5440	?
Chang Zheng 3B	-	0	CZ Booster	-	-	4	48906.0	105	-6040	?
Chang Zheng 3B	-	1	CZ-3A Stage 1	-	-	1	48906.0	135	-5900	?
Chang Zheng 3B	-	2	CZ-3B Stage 2	-	-	1	48906.0	200	-4120	?
Chang Zheng 3B	-	3	CZ-3A Stage 3	-	-	1	48906.0	200	200	?
Chang Zheng 3B	-	F	Fairing	-	-	2	48906.0	170	-5600	?
Chang Zheng 3B	G1	0	CZ-3BE Booster	-	-	4	48906.0	105	-6040	?
Chang Zheng 3B	G1	1	CZ-3BE Stage 1	-	-	1	48906.0	135	-5900	?
Chang Zheng 3B	G1	2	CZ-3B Stage 2	-	-	1	48906.0	200	-4120	?
Chang Zheng 3B	G1	3	CZ-3A Stage 3	-	-	1	48906.0	200	200	?
Chang Zheng 3B	G2	0	CZ-3BE Booster	-	-	4	48906.0	105	-6040	?
Chang Zheng 3B	G2	1	CZ-3BE Stage 1	-	-	1	48906.0	135	-5900	?
Chang Zheng 3B	G2	2	CZ-3B Stage 2	-	-	1	48906.0	200	-4120	?
Chang Zheng 3B	G2	3	CZ-3A Stage 3	-	-	1	48906.0	200	200	?
Chang Zheng 3B	G3	0	CZ-3BE Booster	-	-	4	48906.0	105	-6040	?
Chang Zheng 3B	G3	1	CZ-3BE Stage 1	-	-	1	48906.0	135	-5900	?
Chang Zheng 3B	G3	2	CZ-3B Stage 2	-	-	1	48906.0	200	-4120	?
Chang Zheng 3B	G3	3	CZ-3A Stage 3	-	-	1	48906.0	200	200	?
Chang Zheng 3B	G5	0	CZ-3BE Booster	-	-	4	48906.0	105	-6040	?
Chang Zheng 3B	G5	1	CZ-3BE Stage 1	-	-	1	48906.0	135	-5900	?
Chang Zheng 3B	G5	2	CZ-3B Stage 2	-	-	1	48906.0	200	-4120	?
Chang Zheng 3B	G5	3	CZ-3A Stage 3	-	-	1	48906.0	200	200	?
Chang Zheng 3C	-	0	CZ Booster	-	-	2	48906.0	170	-5600	?
Chang Zheng 3C	-	1	CZ-3A Stage 1	-	-	1	48906.0	105	-6040	?
Chang Zheng 3C	-	2	CZ-3B Stage 2	-	-	1	48906.0	200	-4120	?
Chang Zheng 3C	-	3	CZ-3A Stage 3	-	-	1	48906.0	200	200	?
Chang Zheng 3C	-	F	Fairing	-	-	2	48906.0	170	-5600	?
Chang Zheng 3C	G2	0	CZ-3BE Booster	-	-	2	48906.0	105	-6040	?
Chang Zheng 3C	G2	1	CZ-3BE Stage 1	-	-	1	48906.0	135	-5900	?
Chang Zheng 3C	G2	2	CZ-3B Stage 2	-	-	1	48906.0	200	-4120	?
Chang Zheng 3C	G2	3	CZ-3A Stage 3	-	-	1	48906.0	200	200	?
Chang Zheng 3C	G2	F	Fairing	-	-	2	48906.0	170	-5600	?
Chang Zheng 3C/YZ-1	-	0	CZ-3BE Booster	-	-	2	48906.0	105	-6040	?
Chang Zheng 3C/YZ-1	-	1	CZ-3BE Stage 1	-	-	1	48906.0	135	-5900	?
Chang Zheng 3C/YZ-1	-	2	CZ-3B Stage 2	-	-	1	48906.0	200	-4120	?
Chang Zheng 3C/YZ-1	-	3	CZ-3A Stage 3	-	-	1	48906.0	200	200	?
Chang Zheng 3C/YZ-1	-	4	YZ-1	-	-	1	48906.0	200	35780	?
Chang Zheng 3C/YZ-1	G3Z	0	CZ-3BE Booster	-	-	4	48906.0	105	-6040	?
Chang Zheng 3C/YZ-1	G3Z	1	CZ-3BE Stage 1	-	-	1	48906.0	135	-5900	?
Chang Zheng 3C/YZ-1	G3Z	2	CZ-3B Stage 2	-	-	1	48906.0	200	-4120	?
Chang Zheng 3C/YZ-1	G3Z	3	CZ-3A Stage 3	-	-	1	48906.0	200	200	?
Chang Zheng 3C/YZ-1	G3Z	4	YZ-1	-	-	1	48906.0	200	35780	?
Chang Zheng 3C/YZ-1	G3Z	F	Fairing	-	-	2	48906.0	170	-5600	?
Chang Zheng 6	-	1	CZ6-C	-	-	1	48906.0	50	-6370	?
Chang Zheng 6	-	2	CZ-K2-2	-	-	1	48906.0	200	200	?
Chang Zheng 6	-	3	CZ-K2-3	-	-	1	48906.0	200	200	?
Chang Zheng 6A	-	0	CZ-6A Booster	-	-	4	48906.0	50	-6370	?
Chang Zheng 6A	-	1	CZ6A-C	-	-	1	48906.0	50	-6370	?
Chang Zheng 6A	-	2	CZ-6A Stage 2	-	-	1	48906.0	200	200	?
Chang Zheng 6C	-	1	CZ6-C	-	-	1	48906.0	50	-6370	?

LVStages

LV_Name	LV_Variant	Stage_No	Stage_Name	Qualifier	Dummy	Multiplicity	Stage_Impulse kNs	Stage_Apogee km	Stage_Perigee km	Perigee_Qual
Chang Zheng 6C	-	2	CZ-K2-2	-	-	1	48906.0	200	200	?
Chang Zheng 7	-	0	CZ-K2-1	-	-	4	48906.0	50	-6370	?
Chang Zheng 7	-	1	CZ-7 Stage 1	-	-	1	48906.0	50	-6370	?
Chang Zheng 7	-	2	CZ-7 Stage 2	-	-	1	48906.0	200	200	?
Chang Zheng 7A	-	0	CZ-K2-1	-	-	4	48906.0	50	-6370	?
Chang Zheng 7A	-	1	CZ-7 Stage 1	-	-	1	48906.0	50	-6370	?
Chang Zheng 7A	-	2	CZ-7 Stage 2	-	-	1	48906.0	200	200	?
Chang Zheng 7A	-	3	CZ-7A Stage 3	-	-	1	48906.0	200	200	?
Chang Zheng 7/YZ-1A	-	0	CZ-K2-1	-	-	4	48906.0	50	-6370	?
Chang Zheng 7/YZ-1A	-	1	CZ-7 Stage 1	-	-	1	48906.0	50	-6370	?
Chang Zheng 7/YZ-1A	-	2	CZ-7 Stage 2	-	-	1	48906.0	200	200	?
Chang Zheng 7/YZ-1A	-	3	YZ-1A	-	-	1	48906.0	200	200	?
Chang Zheng 8	-	0	CZ-K2-1	-	-	2	48906.0	50	-6370	?
Chang Zheng 8	-	1	CZ-8 Stage 1	-	-	1	48906.0	50	-6370	?
Chang Zheng 8	-	2	CZ-8 Stage 2	-	-	1	48906.0	200	200	?
Chang Zheng 8	0	1	CZ-8 Stage 1	-	-	1	48906.0	50	-6370	?
Chang Zheng 8	0	2	CZ-8 Stage 2	-	-	1	48906.0	200	200	?
Chang Zheng 4	-	1	CZ-4 Stage 1	-	-	1	48906.0	100	-6100	?
Chang Zheng 4	-	2	CZ-4 Stage 2	-	-	1	48906.0	300	-5000	?
Chang Zheng 4	-	3	CZ-4 Stage 3	-	-	1	48906.0	900	900	?
Chang Zheng 4	-	F	Fairing	-	-	2	48906.0	100	-6100	?
Chang Zheng 4B	-	1	CZ-4 Stage 1	-	-	1	48906.0	100	-6100	?
Chang Zheng 4C	-	2	CZ-4B Stage 2	-	-	1	48906.0	300	-5000	?
Chang Zheng 4C	-	3	CZ-4C Stage 3	-	-	1	48906.0	900	900	?
Chang Zheng 4C	-	F	Fairing	-	-	2	48906.0	100	-6100	?
Chang Zheng 4C	-	1	CZ-4 Stage 1	-	-	1	48906.0	100	-6100	?
Chang Zheng 4C	-	2	CZ-4B Stage 2	-	-	1	48906.0	300	-5000	?
Chang Zheng 4C	-	3	CZ-4C Stage 3	-	-	1	48906.0	900	900	?
Chang Zheng 4C	-	F	Fairing	-	-	2	48906.0	100	-6100	?
Chang Zheng 4C	-	1	CZ-4 Stage 1	-	-	1	48906.0	100	-6100	?
Chang Zheng 4C	-	2	CZ-4B Stage 2	-	-	1	48906.0	300	-5000	?
Chang Zheng 4C	-	3	CZ-4C Stage 3	-	-	1	48906.0	900	900	?
Chang Zheng 4C	-	F	Fairing	-	-	2	48906.0	100	-6100	?
Tianlong-2	-	1	TL2 Stage 1	-	-	1	48906.0	100	-6100	?
Tianlong-2	-	2	TL2 Stage 2	-	-	1	48906.0	100	-6100	?
Tianlong-2	-	3	TL2 Stage 3	-	-	1	48906.0	100	-6100	?
Titan I	-	1	LR87	-	-	1	48906.0	100	-5950	?
Titan I	-	2	LR91	-	-	1	48906.0	1000	-3200	?
Titan I	-	1	LR87AJ5	-	-	1	48906.0	110	-5950	?
Titan II	-	2	LR91AJ5	-	-	1	48906.0	1300	-3000	?
Titan II GLV	-	1	LR87AJ5	-	-	1	48906.0	120	-5950	?
Titan II GLV	-	2	LR91AJ5	-	-	1	48906.0	180	180	?
Titan II SLV	-	1	LR87AJ5	-	-	1	48906.0	120	-5950	?
Titan II SLV	-	2	LR91AJ5	-	-	1	48906.0	200	200	?
Titan II SLV	-	1	LR91AJ5	-	-	2	48906.0	140	-5000	?
Titan IIIA	-	F	LR87AJ9	-	-	1	48906.0	90	-6300	?
Titan IIIA	-	1	LR87AJ9	-	-	1	48906.0	160	-5500	?
Titan IIIA	-	2	LR91AJ9	-	-	1	48906.0	200	200	?
Titan IIIA	-	3	Transtage	-	-	1	48906.0	130	-6200	?
Titan IIIA	-	F	Fairing	-	-	2	48906.0	100	-6300	?
Titan IIIB	-	1	LR87AJ9	-	-	1	48906.0	90	-6300	?
Titan IIIB	-	2	LR91AJ9	-	-	1	48906.0	130	-5000	?
Titan IIIB	-	3	Agena D	-	-	1	48906.0	200	200	?
Titan IIIC	-	0	UA1205	-	-	2	48906.0	55	-6300	?
Titan IIIC	-	1	LR87AJ11	-	-	1	48906.0	120	-5060	?
Titan IIIC	-	2	LR91AJ11	-	-	1	48906.0	160	-500	?
Titan IIIC	-	3	Transtage	-	-	1	48906.0	200	200	?
Titan IIIC	-	F	Fairing	-	-	2	48906.0	135	-4800	?
Titan IIIC	-	0	UA1205	-	-	3	48906.0	55	-6300	?
Titan IIIC	-	1	LR87AJ11	-	-	1	48906.0	120	-5060	?
Titan IIIC	-	2	LR91AJ11	-	-	1	48906.0	200	200	?
Titan IIIC	-	F	Fairing	-	-	2	48906.0	140	-4800	?
Titan IIIE	-	0	UA1205	-	-	2	48906.0	50	-6300	?
Titan IIIE	-	1	LR87AJ11	-	-	1	48906.0	120	-5000	?
Titan IIIE	-	2	LR91AJ11	-	-	1	48906.0	180	-3000	?
Titan IIIE	-	3	Centaur D-1T	-	-	1	48906.0	200	200	?
Titan IIIE	-	F	Fairing	-	-	2	48906.0	140	-4800	?
Titan 23B	-	1	LR87AJ11	-	-	1	48906.0	90	-6300	?
Titan 23B	-	2	LR91AJ11	-	-	1	48906.0	130	-5000	?
Titan 23B	-	3	Agena D	-	-	1	48906.0	200	200	?
Titan 24B	-	1	LR87AJ11	-	-	1	48906.0	90	-6300	?
Titan 24B	-	2	LR91AJ11	-	-	1	48906.0	130	-5000	?
Titan 24B	-	3	Agena D	-	-	1	48906.0	200	200	?
Titan 33B	-	1	LR87AJ11	-	-	1	48906.0	90	-6300	?
Titan 33B	-	2	LR91AJ11	-	-	1	48906.0	130	-5000	?
Titan 33B	-	3	Agena D	-	-	1	48906.0	200	200	?
Titan 33B	-	F	Fairing	-	-	2	48906.0	130	-5000	?
Titan 34B	-	1	LR87AJ11	-	-	1	48906.0	90	-6300	?

LVStages

LV_Name	LV_Variant	Stage_No	Stage_Name	Qualifier	Dummy	Multiplicity	Stage_Impulse kNs	Stage_Apogee km	Stage_Perigee km	Perigee_Qual
Titan 34B	-	2	LR91AJ11	-	-	1	48906.0	130	-5000	?
Titan 34B	-	3	Agenda D	-	-	1	48906.0	200	200	?
Titan 34B	-	F	Fairing	-	-	2	48906.0	130	-5000	?
Titan 34D	-	0	UAI206	-	-	2	48906.0	45	-6200	?
Titan 34D	-	1	LR87AJ11	-	-	1	48906.0	140	-5000	?
Titan 34D	-	2	LR91AJ11	-	-	1	48906.0	200	200	?
Titan 34D	-	F	PLF	-	-	2	48906.0	150	-4800	?
Titan 34D/Transtage	-	0	UAI206	-	-	2	48906.0	45	-6200	?
Titan 34D/Transtage	-	1	LR87AJ11	-	-	1	48906.0	140	-5000	?
Titan 34D/Transtage	-	2	LR91AJ11	-	-	1	48906.0	200	200	?
Titan 34D/Transtage	-	3	Transtage	-	-	1	48906.0	200	200	?
Titan 34D/Transtage	-	F	PLF	-	-	2	48906.0	150	-4800	?
Titan 34D/IUS	-	0	UAI206	-	-	2	48906.0	45	-6200	?
Titan 34D/IUS	-	1	LR87AJ11	-	-	1	48906.0	140	-5000	?
Titan 34D/IUS	-	2	LR91AJ11	-	-	1	48906.0	200	200	?
Titan 34D/IUS	-	3	IUS SRM-1	-	-	1	48906.0	200	200	?
Titan 34D/IUS	-	4	IUS SRM-2	-	-	1	48906.0	200	200	?
Titan 34D/IUS	-	F	PLF	-	-	2	48906.0	150	-4800	?
Commercial Titan 3	-	0	UAI206	-	-	2	48906.0	45	-6200	?
Commercial Titan 3	-	1	LR87AJ11	-	-	1	48906.0	140	-5000	?
Commercial Titan 3	-	2	LR91AJ11	-	-	1	48906.0	200	200	?
Commercial Titan 3	-	F	PLF	-	-	2	48906.0	150	-4800	?
Titan 401A/Centaur	-	0	UAI207	-	-	2	48906.0	60	-6200	?
Titan 401A/Centaur	-	1	LR87AJ11A	-	-	1	48906.0	160	-5000	?
Titan 401A/Centaur	-	2	LR91AJ11A	-	-	1	48906.0	200	200	?
Titan 401A/Centaur	-	3	Centaur T	-	-	1	48906.0	220	220	?
Titan 401A/Centaur	-	F	PLF	-	-	2	48906.0	120	-5500	?
Titan 402A/IUS	-	0	UAI207	-	-	2	48906.0	60	-6200	?
Titan 402A/IUS	-	1	LR87AJ11A	-	-	1	48906.0	160	-5000	?
Titan 402A/IUS	-	2	LR91AJ11A	-	-	1	48906.0	200	200	?
Titan 402A/IUS	-	3	IUS SRM-1	-	-	1	48906.0	200	200	?
Titan 402A/IUS	-	4	IUS SRM-2	-	-	1	48906.0	200	200	?
Titan 402A/IUS	-	F	PLF	-	-	2	48906.0	120	-5500	?
Titan 403A	-	0	UAI207	-	-	2	48906.0	60	-6200	?
Titan 403A	-	1	LR87AJ11A	-	-	1	48906.0	160	-5000	?
Titan 403A	-	2	LR91AJ11A	-	-	1	48906.0	200	200	?
Titan 403A	-	F	Fairing	-	-	2	48906.0	120	-5500	?
Titan 404A	-	0	UAI207	-	-	2	48906.0	60	-6200	?
Titan 404A	-	1	LR87AJ11A	-	-	1	48906.0	160	-5000	?
Titan 404A	-	2	LR91AJ11A	-	-	1	48906.0	200	200	?
Titan 404A	-	F	Fairing	-	-	2	48906.0	120	-5500	?
Titan 405A	-	0	UAI207	-	-	2	48906.0	60	-6200	?
Titan 405A	-	1	LR87AJ11A	-	-	1	48906.0	160	-5000	?
Titan 405A	-	2	LR91AJ11A	-	-	1	48906.0	200	200	?
Titan 405A	-	F	Fairing	-	-	2	48906.0	120	-5500	?
Titan 405B	-	0	SRMU	-	-	2	48906.0	75	-6200	?
Titan 405B	-	1	LR87AJ11A	-	-	1	48906.0	180	-5000	?
Titan 405B	-	2	LR91AJ11A	-	-	1	48906.0	200	200	?
Titan 405B	-	3	IUS SRM-1	-	-	1	48906.0	200	200	?
Titan 405B	-	4	IUS SRM-2	-	-	1	48906.0	200	200	?
Titan 405B	-	F	Fairing	-	-	2	48906.0	130	-5500	?
Titan 405B	-	0	SRMU	-	-	2	48906.0	75	-6200	?
Titan 405B	-	1	LR87AJ11A	-	-	1	48906.0	160	-5000	?
Titan 405B	-	2	LR91AJ11A	-	-	1	48906.0	200	200	?
Titan 405B	-	F	Fairing	-	-	2	48906.0	120	-5500	?
Titan 405B	-	0	SRMU	-	-	2	48906.0	75	-6200	?
Titan 405B	-	1	LR87AJ11A	-	-	1	48906.0	160	-5000	?
Titan 405B	-	2	LR91AJ11A	-	-	1	48906.0	200	200	?
Titan 405B	-	F	Fairing	-	-	2	48906.0	120	-5500	?
Titan 405B	-	0	SRMU	-	-	2	48906.0	75	-6200	?
Titan 405B	-	1	LR87AJ11A	-	-	1	48906.0	160	-5000	?
Titan 405B	-	2	LR91AJ11A	-	-	1	48906.0	200	200	?
Titan 405B	-	F	Fairing	-	-	2	48906.0	120	-5500	?
Blue Streak	-	0	Blue Streak	-	-	1	48906.0	240	-5800	?
ELDO A	-	1	Blue Streak	-	-	1	48906.0	200	-5800	?
ELDO A	-	2	Coralie	-	-	1	48906.0	250	-5200	?
ELDO A	-	3	Astris	-	-	1	48906.0	250	250	?
ELDO A	-	F	Fairing	-	-	2	48906.0	200	-5800	?





LVStages

LV_Name	LV_Variant	Stage_No	Stage_Name	Qualifier	Dummy	Multiplicity	Stage_Impulse kNs	Stage_Apogee km	Stage_Perigee km	Perigee_Qual
Atlas E/SGS-2	-	1	Atlas E	-	-	1	48906.0	550	-4850	?
Atlas E/SGS-2	-	2	Star 48	-	-	1	48906.0	550	-2800	?
Atlas E/SGS-2	-	3	Star 48	-	-	1	48906.0	20900	550	?
Atlas E/SGS-2	-	F	Fairing	-	-	2	48906.0	200	-6000	?
Atlas SLV-3	-	0	Atlas Booster	-	-	1	48906.0	200	-6150	?
Atlas SLV-3	-	1	Atlas SLV-3	-	-	1	48906.0	200	200	?
Atlas SLV-3	-	F	Fairing	-	-	2	48906.0	200	-200	?
Atlas G Centaur	-	0	Atlas Booster	-	-	1	48906.0	120	-5940	?
Atlas G Centaur	-	1	Atlas G	-	-	1	48906.0	200	-5300	?
Atlas G Centaur	-	2	Centaur D-1A	-	-	2	48906.0	200	200	?
Atlas G Centaur	-	F	Fairing	-	-	2	48906.0	170	-5650	?
Atlas H	-	0	Atlas Booster	-	-	1	48906.0	120	-6100	?
Atlas H	-	1	Atlas H	-	-	1	48906.0	1000	-800	?
Atlas H	-	F	Fairing	-	-	2	48906.0	120	-6100	?
Atlas Able	-	0	Atlas D Booster	-	-	1	48906.0	1290	-1000	?
Atlas Able	-	1	Atlas D	-	-	1	48906.0	1290	-1000	?
Atlas Able	-	2	AJ10-101A	-	-	1	48906.0	1290	-1000	?
Atlas Able	-	3	Altair	-	-	1	48906.0	1000	200	?
Atlas Able	-	F	Fairing	-	-	2	48906.0	180	-6000	?
Atlas Agena A	-	0	Atlas D Booster	-	-	1	48906.0	120	-6000	?
Atlas Agena A	-	1	Atlas D	-	-	1	48906.0	173	-2226	?
Atlas Agena A	-	2	Agena A	-	-	1	48906.0	3360	140	?
Atlas Agena B	-	0	Atlas D Booster	-	-	1	48906.0	120	-6100	?
Atlas Agena B	-	1	Atlas D	-	-	1	48906.0	180	-5000	?
Atlas Agena B	-	2	Agena B	-	-	1	48906.0	500	200	?
Atlas Agena B	-	F	Fairing	-	-	2	48906.0	300	-4400	?
Atlas Agena D	-	0	Atlas D Booster	-	-	1	48906.0	130	-5950	?
Atlas Agena D	-	1	Atlas D	-	-	1	48906.0	300	-4400	?
Atlas Agena D	-	2	Agena D	-	-	1	48906.0	300	300	?
Atlas Agena D	-	F	Fairing	-	-	2	48906.0	300	-4400	?
Atlas SLV-3 Agena B	-	0	Atlas Booster	-	-	1	48906.0	120	-6100	?
Atlas SLV-3 Agena B	-	1	Atlas SLV-3	-	-	1	48906.0	180	-5000	?
Atlas SLV-3 Agena B	-	2	Agena B	-	-	1	48906.0	500	200	?
Atlas SLV-3 Agena B	-	F	Fairing	-	-	2	48906.0	180	-6100	?
Atlas SLV-3 Agena D	-	0	Atlas Booster	-	-	1	48906.0	120	-6100	?
Atlas SLV-3 Agena D	-	1	Atlas SLV-3	-	-	1	48906.0	180	-5000	?
Atlas SLV-3 Agena D	-	2	Agena D	-	-	1	48906.0	500	200	?
Atlas SLV-3 Agena D	-	F	Fairing	-	-	2	48906.0	180	-5000	?
Atlas SLV-3A Agena D	-	0	Atlas Booster	-	-	1	48906.0	120	-6100	?
Atlas SLV-3A Agena D	-	1	Atlas SLV-3A	-	-	1	48906.0	180	-5000	?
Atlas SLV-3A Agena D	-	2	Agena D	-	-	1	48906.0	500	200	?
Atlas SLV-3A Agena D	-	F	Fairing	-	-	2	48906.0	180	-5000	?
Atlas Burner 2	-	0	Atlas Booster	-	-	1	48906.0	120	-6100	?
Atlas Burner 2	-	1	Atlas SLV-3	-	-	1	48906.0	600	-4000	?
Atlas Burner 2	-	2	Star 37B	-	-	1	48906.0	600	-2000	?
Atlas Burner 2	-	F	Fairing	-	-	2	48906.0	200	-6000	?
Atlas Burner 2A	-	0	Atlas Booster	-	-	1	48906.0	120	-6100	?
Atlas Burner 2A	-	1	Atlas F	-	-	1	48906.0	300	-3300	?
Atlas Burner 2A	-	2	Star 37B	-	-	1	48906.0	740	-1240	?
Atlas Burner 2A	-	3	Star 26B	-	-	1	48906.0	740	740	?
Atlas Burner 2A	-	F	Fairing	-	-	2	48906.0	200	-6000	?
Atlas Centaur	-	0	Atlas D Booster	-	-	1	48906.0	100	-6000	?
Atlas Centaur	-	1	Atlas D	-	-	1	48906.0	250	-5800	?
Atlas Centaur	-	2	Centaur	-	-	1	48906.0	250	250	?
Atlas Centaur	-	F	Fairing	-	-	2	48906.0	210	-5800	?
Atlas SLV-3C Centaur	-	0	Atlas Booster	-	-	1	48906.0	100	-6000	?
Atlas SLV-3C Centaur	-	1	Atlas SLV-3C	-	-	1	48906.0	250	-5800	?
Atlas SLV-3C Centaur	-	2	Centaur D	-	-	1	48906.0	200	200	?
Atlas SLV-3C Centaur	-	F	Fairing	-	-	2	48906.0	200	-5800	?
Atlas SLV-3D Centaur	-	0	Atlas Booster	-	-	1	48906.0	100	-6000	?
Atlas SLV-3D Centaur	-	1	Atlas SLV-3D	-	-	1	48906.0	250	-5800	?
Atlas SLV-3D Centaur	-	2	Centaur D-1A	-	-	1	48906.0	200	200	?
Atlas SLV-3D Centaur	-	F	Fairing	-	-	2	48906.0	200	-5800	?
Atlas I	-	0	Atlas Booster	-	-	1	48906.0	100	-6000	?
Atlas I	-	1	Atlas I	-	-	1	48906.0	150	-5900	?
Atlas I	-	2	Centaur I	-	-	1	48906.0	200	200	?
Atlas I	-	F	Fairing	-	-	2	48906.0	150	-5900	?
Atlas II	-	0	Atlas Booster	-	-	1	340725.0	100	-6000	?
Atlas II	-	1	Atlas II	-	-	1	104284.0	150	-5900	?



LVStages

LV_Name	LV_Variant	Stage_No	Stage_Name	Qualifier	Dummy	Multiplicity	Stage_Impulse kNs	Stage_Apogee km	Stage_Perigee km	Perigee_Qual
UR-200	-	1	8S811	-	-	1	11160.0	500	-6100	?
UR-200	-	2	8S812	-	d	1	11160.0	500	-6100	?
R-7	-	1	8K71	-	-	4	11160.0	75	-5900	?
R-7	-	2	8K71A	-	-	1	11160.0	1350	-4000	?
R-7	71/III	1	8K71	-	-	4	11160.0	75	-5900	?
R-7	71/III	2	8K71A	-	-	1	11160.0	1350	-4000	?
R-7A	-	1	8K74	-	-	4	11160.0	75	-5900	?
R-7A	-	2	8K74A	-	-	1	11160.0	1350	-4000	?
Sputnik 8K71FS	-	1	8K71	-	-	4	11160.0	75	-5900	?
Sputnik 8K71FS	-	2	8K71A	-	-	1	11160.0	1000	300	?
Sputnik 8A91	-	1	8K74	-	-	4	11160.0	75	-5900	?
Sputnik 8A91	-	2	8K74A	-	-	1	11160.0	1000	300	?
Voskhod 11A57	-	1	8K74	-	-	4	11160.0	60	-5900	?
Voskhod 11A57	-	2	8K74A	-	-	1	11160.0	120	-5000	?
Voskhod 11A57	-	3	11A57I	-	-	1	11160.0	200	200	?
Voskhod 11A57	-	F	GO	-	-	2	11160.0	120	-5000	?
Vestok-L 8K72	-	1	8K71	-	-	4	11160.0	60	-5900	?
Vestok-L 8K72	-	2	8K71A	-	-	1	11160.0	120	-5000	?
Vestok-L 8K72	-	3	8K72E	-	-	1	11160.0	200	200	?
Vestok-L 8K72	-	F	GO	-	-	2	11160.0	120	-5000	?
Vestok 8K72	-	1	8K71	-	-	4	11160.0	60	-5900	?
Vestok 8K72	-	2	8K71A	-	-	1	11160.0	120	-5000	?
Vestok 8K72	-	3	8K72E	-	-	1	11160.0	200	200	?
Vestok 8K72	-	F	GO	-	-	2	11160.0	120	-5000	?
Vestok 8A92	-	1	8K74	-	-	4	11160.0	60	-5900	?
Vestok 8A92	-	2	8K74A	-	-	1	11160.0	120	-5000	?
Vestok 8A92	-	3	8A92E	-	-	1	11160.0	200	200	?
Vestok 8A92	-	F	GO	-	-	2	11160.0	120	-5000	?
Vestok 8A92M	-	1	8K74	-	-	4	11160.0	60	-5900	?
Vestok 8A92M	-	2	8K74A	-	-	1	11160.0	120	-5000	?
Vestok 8A92M	-	3	8A92ME	-	-	1	11160.0	200	200	?
Vestok 8A92M	-	F	GO	-	-	2	11160.0	120	-5000	?
Polyot 11A59	-	1	8K74	-	-	4	11160.0	75	-5900	?
Polyot 11A59	-	2	8K74A	-	-	1	11160.0	300	-500	?
Polyot 11A59	-	F	GO	-	-	1	11160.0	80	-5900	?
Vestok-2A 11A510	-	1	11S59	-	-	4	11160.0	75	-5900	?
Vestok-2A 11A510	-	2	11S59A	-	-	1	11160.0	200	-1000	?
Vestok-2A 11A510	-	F	GO	-	-	2	11160.0	75	-5900	?
Soyuz 11A511	-	1	11S59	-	-	4	11160.0	75	-5900	?
Soyuz 11A511	-	2	11S59A	-	-	1	11160.0	170	-4400	?
Soyuz 11A511	-	3	11S510	-	-	1	11160.0	200	200	?
Soyuz 11A511	-	F	GO	-	-	2	11160.0	150	-5000	?
Soyuz 11A511M	-	1	11S59	-	-	4	11160.0	75	-5900	?
Soyuz 11A511M	-	2	11S59A	-	-	1	11160.0	175	-4400	?
Soyuz 11A511M	-	3	11S510	-	-	1	11160.0	200	200	?
Soyuz 11A511M	-	F	GO	-	-	2	11160.0	150	-5000	?
Soyuz-U	-	1	11S59	-	-	4	11160.0	75	-5900	?
Soyuz-U	-	2	11S59A	-	-	1	11160.0	175	-4400	?
Soyuz-U	-	3	11S510	-	-	1	11160.0	200	200	?
Soyuz-U	-	F	GO	-	-	2	11160.0	150	-5000	?
Soyuz-U-PVB	-	1	11S59	-	-	4	11160.0	75	-5900	?
Soyuz-U-PVB	-	2	11S59A	-	-	1	11160.0	175	-4400	?
Soyuz-U-PVB	-	3	11S510	-	-	1	11160.0	200	200	?
Soyuz-U-PVB	-	F	GO	-	-	2	11160.0	150	-5000	?
Soyuz-U2	-	1	11S59	-	-	4	11160.0	75	-5900	?
Soyuz-U2	-	2	11S59A-S	-	-	1	11160.0	175	-4400	?
Soyuz-U2	-	3	11S510	-	-	1	11160.0	200	200	?
Soyuz-U2	-	F	GO	-	-	2	11160.0	150	-5000	?
Soyuz-U-PVB	Ikar	1	11S59	-	-	4	11160.0	75	-5900	?
Soyuz-U-PVB	Ikar	2	11S59A	-	-	1	11160.0	230	-5500	?
Soyuz-U-PVB	Ikar	3	11S510	-	-	1	11160.0	200	900	?
Soyuz-U-PVB	Ikar	4	Ikar	-	-	1	11160.0	900	900	?
Soyuz-U-PVB	Fregat	1	11S59	-	-	4	11160.0	75	-5900	?
Soyuz-U-PVB	Fregat	2	11S59A	-	-	1	11160.0	100	-5700	?
Soyuz-U-PVB	Fregat	3	11S510 (F)	-	-	1	11160.0	180	-1200	?

LVStages

LV_Name	LV_Variant	Stage_No	Stage_Name	Qualifier	Dummy	Multiplicity	Stage_Impulse kNs	Stage_Apogee km	Stage_Perigee km	Perigee_Qual
Soyuz-U-PVB										
Soyuz-2-1A	Fregat	4	Fregat	-	-	1	11160.0	200	200	?
Soyuz-2-1A	-	1	14S53	-	-	4	11160.0	75	-5900	?
Soyuz-2-1A	-	2	14S53A	-	-	1	11160.0	120	-5700	?
Soyuz-2-1A	-	3	14S54/RD-0110	-	-	1	11160.0	200	200	?
Soyuz-2-1A	-	F	GO	-	-	2	11160.0	120	-5700	?
Soyuz-2-1B	-	1	14S53	-	-	4	11160.0	75	-5900	?
Soyuz-2-1B	-	2	14S53A	-	-	1	11160.0	120	-5700	?
Soyuz-2-1B	-	3	14S54	-	-	1	11160.0	200	200	?
Soyuz-2-1B	-	F	GO	-	-	2	11160.0	120	-5700	?
Soyuz-2-1A	Fregat	2	14S53	-	-	4	11160.0	75	-5900	?
Soyuz-2-1A	Fregat	2	14S53A	-	-	1	11160.0	120	-5700	?
Soyuz-2-1A	Fregat	3	14S54/RD-0110	-	-	1	11160.0	200	200	?
Soyuz-2-1A	Fregat	4	GO	-	-	1	11160.0	200	200	?
Soyuz-2-1A	Fregat	F	GO	-	-	2	11160.0	120	-5700	?
Soyuz-2-1A	Volga	1	14S53	-	-	4	11160.0	75	-5900	?
Soyuz-2-1A	Volga	1	14S53A	-	-	1	11160.0	120	-5700	?
Soyuz-2-1A	Volga	3	14S54/RD-0110	-	-	1	11160.0	200	200	?
Soyuz-2-1A	Volga	4	GO	-	-	1	11160.0	200	200	?
Soyuz-2-1A	Volga	F	GO	-	-	2	11160.0	120	-5700	?
Soyuz-2-1B	Fregat	1	14S53	-	-	4	11160.0	75	-5900	?
Soyuz-2-1B	Fregat	2	14S53A	-	-	1	11160.0	120	-5700	?
Soyuz-2-1B	Fregat	3	14S54	-	-	1	11160.0	200	200	?
Soyuz-2-1B	Fregat	4	Fregat	-	-	1	11160.0	200	200	?
Soyuz-2-1B	Fregat	F	GO	-	-	2	11160.0	120	-5700	?
Soyuz-2-1V	-	1	Soyuz-2-1V 132KS	-	-	1	11160.0	300	-5500	?
Soyuz-2-1V	-	2	14S54	-	-	1	11160.0	300	300	?
Soyuz-2-1V	-	F	GO	-	-	2	11160.0	120	-5700	?
Soyuz-2-1V	Volga	1	Soyuz-2-1V 132KS	-	-	1	11160.0	300	-5500	?
Soyuz-2-1V	Volga	2	14S54	-	-	1	11160.0	300	300	?
Soyuz-2-1V	Volga	3	Volga	-	-	1	11160.0	300	300	?
Soyuz-2-1V	Volga	F	GO	-	-	2	11160.0	120	-5700	?
Soyuz-ST-A	-	1	374BLO1A	-	-	4	11160.0	75	-5900	?
Soyuz-ST-A	-	2	374BLO1A-A	-	-	1	11160.0	120	-5700	?
Soyuz-ST-A	-	3	374BLO2A	-	-	2	11160.0	200	200	?
Soyuz-ST-A	-	F	GO	-	-	2	11160.0	120	-5700	?
Soyuz-ST-A	Fregat	1	374BLO1A	-	-	4	11160.0	75	-5900	?
Soyuz-ST-A	Fregat	2	374BLO1A-A	-	-	1	11160.0	120	-5700	?
Soyuz-ST-A	Fregat	3	374BLO2A	-	-	2	11160.0	200	200	?
Soyuz-ST-A	Fregat	4	Fregat	-	-	1	11160.0	200	200	?
Soyuz-ST-B	-	1	374BLO1B	-	-	4	11160.0	75	-5900	?
Soyuz-ST-B	-	2	374BLO1B-A	-	-	1	11160.0	120	-5700	?
Soyuz-ST-B	-	3	374BLO2B	-	-	2	11160.0	200	200	?
Soyuz-ST-B	-	F	GO 81KS	-	-	2	11160.0	120	-5700	?
Soyuz-ST-B	Fregat	1	374BLO1B	-	-	4	11160.0	75	-5900	?
Soyuz-ST-B	Fregat	2	374BLO1B-A	-	-	1	11160.0	120	-5700	?
Soyuz-ST-B	Fregat	3	374BLO2B	-	-	2	11160.0	200	200	?
Soyuz-ST-B	Fregat	4	Fregat	-	-	1	11160.0	200	200	?
Soyuz-ST-B	Fregat	F	GO 81KS	-	-	2	11160.0	120	-5700	?
Soyuz-FG	-	1	11S59	-	-	4	11160.0	75	-5900	?
Soyuz-FG	-	2	11S59A	-	-	1	11160.0	100	-5700	?
Soyuz-FG	-	3	11S510	-	-	1	11160.0	200	200	?
Soyuz-FG	-	F	GO	-	-	2	11160.0	150	-5000	?
Soyuz-FG	Fregat	1	11S59	-	-	4	11160.0	75	-5900	?
Soyuz-FG	Fregat	2	11S59A	-	-	1	11160.0	100	-5700	?
Soyuz-FG	Fregat	3	11S510	-	-	1	11160.0	200	200	?
Soyuz-FG	Fregat	4	Fregat	-	-	1	11160.0	200	200	?
Molniya 8K78	-	F	GO	-	-	2	11160.0	150	-5000	?
Molniya 8K78	-	1	8K74	-	-	4	11160.0	75	-5900	?
Molniya 8K78	-	2	8K74A	-	-	1	11160.0	200	-4500	?
Molniya 8K78	-	3	8K78I	-	-	1	11160.0	200	200	?
Molniya 8K78	-	4	BOZ	-	-	1	11160.0	200	200	?
Molniya 8K78	-	5	Blok-L	-	-	1	11160.0	200	200	?
Molniya 8K78	-	F	GO	-	-	2	11160.0	250	-5000	?
Molniya 8K78	E6	1	8K74	-	-	4	11160.0	75	-5900	?
Molniya 8K78	E6	2	8K74A	-	-	1	11160.0	200	-4500	?
Molniya 8K78	E6	3	8K78I	-	-	1	11160.0	200	200	?
Molniya 8K78	E6	4	BOZ	-	-	1	11160.0	200	200	?
Molniya 8K78	E6	5	Blok-L	-	-	1	11160.0	200	200	?
Molniya 8K78	M	F	GO	-	-	2	11160.0	250	-5000	?
Molniya 8K78	M	1	8K74	-	-	4	11160.0	75	-5900	?
Molniya 8K78	M	2	8K74A	-	-	1	11160.0	200	-4500	?
Molniya 8K78	M	3	8K78I	-	-	1	11160.0	200	200	?

LVStages

LV_Name	LV_Variant	Stage_No	Stage_Name	Qualifier	Dummy	Multiplicity	Stage_Impulse kNs	Stage_Apogee km	Stage_Perigee km	Perigee_Qual
Molniya 8K78	M	4	BOZ	-	-	1	11160.0	200	200	?
Molniya 8K78	M	5	Block-L	-	-	1	11160.0	200	200	?
Molniya 8K78	M	F	GO	-	-	2	11160.0	250	-5000	?
Molniya 8K78M	-	1	11S59	-	-	4	11160.0	75	-5900	?
Molniya 8K78M	-	2	11S59A	-	-	1	11160.0	200	-4500	?
Molniya 8K78M	-	3	11S510	-	-	1	11160.0	200	200	?
Molniya 8K78M	-	4	BOZ	-	-	1	11160.0	200	200	?
Molniya 8K78M	-	5	Block-L	-	-	1	11160.0	200	200	?
Molniya 8K78M	-	F	GO	-	-	2	11160.0	250	-5000	?
Molniya 8K78M	MIM	1	11S59	-	-	4	11160.0	75	-5900	?
Molniya 8K78M	MIM	2	11S59A	-	-	1	11160.0	200	-4500	?
Molniya 8K78M	MIM	3	11S510	-	-	1	11160.0	200	200	?
Molniya 8K78M	MIM	4	BOZ	-	-	1	11160.0	200	200	?
Molniya 8K78M	MIM	5	Block-L	-	-	1	11160.0	200	200	?
Molniya 8K78M	MIM	F	GO	-	-	2	11160.0	250	-5000	?
Molniya 8K78M	ML	1	11S59	-	-	4	11160.0	75	-5900	?
Molniya 8K78M	ML	2	11S59A	-	-	1	11160.0	200	-4500	?
Molniya 8K78M	ML	3	11S510	-	-	1	11160.0	200	200	?
Molniya 8K78M	ML	4	BOZ	-	-	1	11160.0	200	200	?
Molniya 8K78M	ML	5	Block-ML	-	-	1	11160.0	200	200	?
Molniya 8K78M	ML	F	GO	-	-	2	11160.0	250	-5000	?
Molniya 8K78M	ML	1	11S59	-	-	4	11160.0	75	-5900	?
Molniya 8K78M-PVB	ML	2	11S59A	-	-	1	11160.0	200	-4500	?
Molniya 8K78M-PVB	ML	3	11S510	-	-	1	11160.0	200	200	?
Molniya 8K78M-PVB	ML	4	BOZ	-	-	1	11160.0	200	200	?
Molniya 8K78M-PVB	ML	5	Block-ML	-	-	1	11160.0	200	200	?
Molniya 8K78M-PVB	ML	F	GO	-	-	2	11160.0	250	-5000	?
Molniya 8K78M	SOL	1	11S59	-	-	4	11160.0	75	-5900	?
Molniya 8K78M	SOL	2	11S59A	-	-	1	11160.0	200	-4500	?
Molniya 8K78M	SOL	3	11S510	-	-	1	11160.0	200	200	?
Molniya 8K78M	SOL	4	BOZ	-	-	1	11160.0	200	200	?
Molniya 8K78M	SOL	5	Block-SO-L	-	-	1	11160.0	200	200	?
Molniya 8K78M	SOL	F	GO	-	-	2	11160.0	250	-5000	?
Molniya 8K78M	VL	1	11S59	-	-	4	11160.0	75	-5900	?
Molniya 8K78M	VL	2	11S59A	-	-	1	11160.0	200	-4500	?
Molniya 8K78M	VL	3	11S510	-	-	1	11160.0	200	200	?
Molniya 8K78M	VL	4	BOZ	-	-	1	11160.0	200	200	?
Molniya 8K78M	VL	5	Block-VL	-	-	1	11160.0	200	200	?
Molniya 8K78M	VL	F	GO	-	-	2	11160.0	250	-5000	?
Molniya 8K78M	MVL	1	11S59	-	-	4	11160.0	75	-5900	?
Molniya 8K78M	MVL	2	11S59A	-	-	1	11160.0	200	-4500	?
Molniya 8K78M	MVL	3	11S510	-	-	1	11160.0	200	200	?
Molniya 8K78M	MVL	4	BOZ	-	-	1	11160.0	200	200	?
Molniya 8K78M	MVL	5	Block-MVL	-	-	1	11160.0	200	200	?
Molniya 8K78M	MVL	F	GO	-	-	2	11160.0	250	-5000	?
Molniya 8K78M	2BL	1	11S59	-	-	4	11160.0	75	-5900	?
Molniya 8K78M	2BL	2	11S59A	-	-	1	11160.0	200	-4500	?
Molniya 8K78M	2BL	3	11S510	-	-	1	11160.0	200	200	?
Molniya 8K78M	2BL	4	BOZ	-	-	1	11160.0	200	200	?
Molniya 8K78M	2BL	5	Block-2BL	-	-	1	11160.0	200	200	?
Molniya 8K78M	2BL	F	GO	-	-	2	11160.0	250	-5000	?
Molniya 8K78M-PVB	2BL	1	11S59	-	-	4	11160.0	75	-5900	?
Molniya 8K78M-PVB	2BL	2	11S59A	-	-	1	11160.0	200	-4500	?
Molniya 8K78M-PVB	2BL	3	11S510	-	-	1	11160.0	200	200	?
Molniya 8K78M-PVB	2BL	4	BOZ	-	-	1	11160.0	200	200	?
Molniya 8K78M-PVB	2BL	5	Block-2BL	-	-	1	11160.0	200	200	?
Molniya 8K78M-PVB	2BL	F	GO	-	-	2	11160.0	250	-5000	?
Angara A5	-	0	Angara URM-1	-	-	1	11160.0	200	-6000	?
Angara A5	-	1	Angara URM-1	-	-	1	11160.0	200	-6000	?
Angara A5	-	2	Angara URM-2	-	-	1	11160.0	200	-6000	?
Angara A5	-	3	Briz-M	-	-	1	11160.0	200	35780	?
Angara A5/Persel	-	0	Angara URM-1	-	-	4	11160.0	200	-6000	?
Angara A5/Persel	-	1	Angara URM-1	-	-	1	11160.0	200	-6000	?
Angara A5/Persel	-	2	Angara URM-2	-	-	1	11160.0	200	-6000	?
Angara A5/Persel	-	3	14S48	-	-	1	11160.0	200	35780	?
Angara A5/Orion	-	0	Angara URM-1	-	-	4	11160.0	200	-6000	?
Angara A5/Orion	-	1	Angara URM-1	-	-	1	11160.0	200	-6000	?
Angara A5/Orion	-	2	Angara URM-2	-	-	1	11160.0	200	-6000	?
Angara A5/Orion	-	3	14S48 Orion	-	-	1	11160.0	200	35780	?
Angara-1.2PP	-	1	Angara URM-1	-	-	1	11160.0	200	-6000	?
Angara-1.2PP	-	2	Angara URM-2	-	-	1	11160.0	200	-100	?
Angara-1.2PP	-	F	Fairing	-	-	1	11160.0	200	-100	?
Angara-1.2	-	1	Angara URM-1	-	-	1	11160.0	200	-6000	?

LVStages

LV_Name	LV_Variant	Stage_No	Stage_Name	Qualifier	Dummy	Multiplicity	Stage_Impulse kNs	Stage_Apogee km	Stage_Perigee km	Perigee_Qual
Angara-1.2	-	2	Angara-1.2 Stage 2	-	-	1	11160.0	200	-100	?
Angara-1.2	-	3	Angara AM	-	-	1	11160.0	200	200	?
Angara-1.2	-	F	Fairing	-	-	1	11160.0	200	-100	?
Naro-1	-	1	Naro Stage 1	-	-	1	11160.0	200	-6000	?
Naro-1	-	2	KSLV-1 Stage 2	-	-	1	11160.0	200	200	?
PSLV	-	0	PSOM	-	-	6	11160.0	50	-6300	?
PSLV	-	1	S125	-	-	1	11160.0	90	-6100	?
PSLV	-	2	PS2	-	-	1	11160.0	350	-5500	?
PSLV	-	3	PS3	-	-	1	11160.0	800	-4000	?
PSLV	-	4	PS4	-	-	1	11160.0	800	800	?
PSLV	-	F	Fairing	-	-	2	11160.0	140	-5500	?
PSLV	-	0	PSOM	-	-	6	11160.0	50	-6300	?
PSLV	-	1	S139	-	-	1	11160.0	90	-6100	?
PSLV	-	2	PS2	-	-	1	11160.0	350	-5500	?
PSLV	-	3	PS3	-	-	1	11160.0	800	-4000	?
PSLV	-	4	PS4	-	-	1	11160.0	800	800	?
PSLV	-	F	Fairing	-	-	2	11160.0	140	-5500	?
PSLV	-	0	PSOM-XL	-	-	2	11160.0	50	-6300	?
PSLV	-	1	S139	-	-	1	11160.0	90	-6100	?
PSLV	-	2	PS2	-	-	1	11160.0	350	-5500	?
PSLV	-	3	PS3	-	-	1	11160.0	800	-4000	?
PSLV	-	4	PS4	-	-	1	11160.0	800	800	?
PSLV	-	F	Fairing	-	-	2	11160.0	140	-5500	?
PSLV	-	0	PSOM-XL	-	-	6	11160.0	50	-6300	?
PSLV	-	1	S139	-	-	1	11160.0	90	-6100	?
PSLV	-	2	PS2	-	-	1	11160.0	350	-5500	?
PSLV	-	3	PS3	-	-	1	11160.0	800	-4000	?
PSLV	-	4	PS4	-	-	1	11160.0	800	800	?
PSLV	-	F	Fairing	-	-	2	11160.0	140	-5500	?
GSLV Mk I	a	0	GSOM	-	-	4	11160.0	85	-6200	?
GSLV Mk I	a	1	GS1-S125	-	-	4	11160.0	85	-6200	?
GSLV Mk I	a	2	GS2	-	-	1	11160.0	150	-4500	?
GSLV Mk I	a	3	12KRB	-	-	1	11160.0	150	-4500	?
GSLV Mk I	a	F	Fairing	-	-	2	11160.0	140	-5500	?
GSLV Mk I	b	0	GSOM	-	-	4	11160.0	85	-6200	?
GSLV Mk I	b	1	GS1-S139	-	-	1	11160.0	85	-6200	?
GSLV Mk I	b	2	GS2	-	-	1	11160.0	150	-4500	?
GSLV Mk I	b	3	12KRB	-	-	1	11160.0	150	-4500	?
GSLV Mk I	b	F	Fairing	-	-	2	11160.0	140	-5500	?
GSLV Mk I	c	0	GSOM	-	-	4	11160.0	85	-6200	?
GSLV Mk I	c	1	GS1-S139	-	-	1	11160.0	85	-6200	?
GSLV Mk I	c	2	GS2	-	-	1	11160.0	150	-4500	?
GSLV Mk I	c	3	15KRB	-	-	1	11160.0	150	-4500	?
GSLV Mk I	c	F	Fairing	-	-	2	11160.0	140	-5500	?
GSLV Mk II	-	0	GSOM	-	-	4	11160.0	85	-6200	?
GSLV Mk II	-	1	GS1-S139	-	-	1	11160.0	85	-6200	?
GSLV Mk II	-	2	GS2	-	-	1	11160.0	150	-4500	?
GSLV Mk II	-	3	CUS12	-	-	1	11160.0	150	-4500	?
GSLV Mk II	-	F	Fairing	-	-	2	11160.0	140	-5500	?
GSLV Mk II	b	0	GSOM	-	-	4	11160.0	85	-6200	?
GSLV Mk II	b	1	GS1-S139	-	-	1	11160.0	85	-6200	?
GSLV Mk II	b	2	GS2-HTVE	-	-	1	11160.0	150	-4500	?
GSLV Mk II	b	3	CUS12	-	-	1	11160.0	150	-4500	?
GSLV Mk II	b	F	Fairing	-	-	2	11160.0	140	-5500	?
GSLV Mk II	c	0	GSOM	-	-	4	11160.0	85	-6200	?
GSLV Mk II	c	1	GS1-S139	-	-	1	11160.0	85	-6200	?
GSLV Mk II	c	2	GS2-HTVE	-	-	1	11160.0	150	-4500	?
GSLV Mk II	c	3	CUS15	-	-	1	11160.0	150	-4500	?
GSLV Mk II	c	F	Fairing	-	-	2	11160.0	140	-5500	?
R-9A	-	1	8K75A	-	-	1	11160.0	100	-6100	?
R-9A	-	2	8K75B	-	-	1	11160.0	1000	-4000	?
Jupiter IRBM	-	1	Jupiter	-	-	1	11160.0	500	-5700	?



LVStages

LV_Name	LV_Variant	Stage_No	Stage_Name	Qualifier	Dummy	Multiplicity	Stage_Impulse kNs	Stage_Apogee km	Stage_Perigee km	Perigee_Qual
M-V	-	3	M-34	-	-	1	29580.0	200	200	?
M-V	-	F	Fairing	-	-	2	29580.0	220	-5200	?
M-V	1	1	M-14	-	-	1	185220.0	70	-6200	?
M-V	1	2	M-25	-	-	1	88040.0	230	-5000	?
M-V	1	3	M-34	-	-	2	29580.0	200	200	?
M-V	1	F	Fairing	-	-	2	29580.0	220	-5200	?
Thor DM-18	-	1	Thor DM-18	-	-	1	29580.0	500	-5700	?
Thor DM-18A	-	1	Thor DM-18A	-	-	1	29580.0	500	-5700	?
Thor DM-18C	-	1	Thor DM-18C	-	-	1	29580.0	500	-5300	?
Thor Able	-	1	Thor DM-18A	-	-	1	29580.0	500	-6000	?
Thor Able I	-	2	AJ10-40	-	-	1	29580.0	1000	-5800	?
Thor Able I	-	1	Thor DM-18A	-	-	1	29580.0	1000	-5500	?
Thor Able I	-	2	AJ10-41	-	-	1	29580.0	2500	-3500	?
Thor Able I	-	3	Altair	-	-	1	29580.0	-1300	-1300	?
Thor Able II	-	1	Thor DM-18A	-	-	1	29580.0	500	-6000	?
Thor Able II	-	2	AJ10-42	-	-	1	29580.0	500	-6000	?
Thor Able II	M1	1	Thor DM-18A	-	-	1	29580.0	200	-6100	?
Thor Able II	M1	2	AJ10-42	-	-	1	29580.0	700	-4300	?
Thor Able II	M1	3	Altair	-	-	1	29580.0	700	700	?
Thor Able III	-	F	Fairing	-	-	2	29580.0	200	-6100	?
Thor Able III	-	1	Thor DM-18A	-	-	1	29580.0	500	-5500	?
Thor Able III	-	2	AJ10	-	-	1	29580.0	250	-1000	?
Thor Able III	-	3	Altair	-	-	1	29580.0	250	42000	?
Thor Able III	-	F	Fairing	-	-	2	29580.0	500	-5500	?
Thor Able IV	-	1	Thor DM-18A	-	-	1	29580.0	500	-5500	?
Thor Able IV	-	2	AJ10	-	-	1	29580.0	500	-1000	?
Thor Able IV	-	3	Altair	-	-	1	29580.0	200	200	?
Thor Ablestar	-	1	Thor DM-21	-	-	1	29580.0	500	-5500	?
Thor Ablestar	-	2	AJ10-104	-	-	1	29580.0	200	-5500	?
Thor Ablestar	-	F	Fairing	-	-	2	29580.0	900	900	?
Thor Ablestar	2	1	Thor DSV-2A	-	-	1	29580.0	200	-5500	?
Thor Ablestar	2	2	AJ10-104D	-	-	1	29580.0	900	900	?
Thor Agena A	-	F	Fairing	-	-	1	29580.0	200	-5500	?
Thor Agena A	-	2	Thor DM-18A	-	-	1	29580.0	200	-5450	?
Thor Agena B	-	1	Thor DM-21	-	-	1	29580.0	400	200	?
Thor Agena B	-	2	Thor DM-21	-	-	1	29580.0	150	-5500	?
Thor Agena B	-	F	Fairing	-	-	2	29580.0	150	-5500	?
Thor Agena D	-	1	Thor DM-21	-	-	1	29580.0	150	-5500	?
Thor Agena D	-	2	Thor DSV-2A	-	-	1	29580.0	150	-5800	?
Thor SLV-2 Agena B	-	1	Thor DSV-2A	-	-	1	29580.0	200	200	?
Thor SLV-2 Agena B	-	2	Thor DSV-2A	-	-	1	29580.0	150	-5800	?
Thor SLV-2 Agena D	-	1	Thor DSV-2A	-	-	1	29580.0	150	-5800	?
Thor SLV-2 Agena D	-	2	Thor DSV-2A	-	-	1	29580.0	150	-5800	?
Thor SLV-2 Agena D	-	F	Fairing	-	-	2	29580.0	150	-5800	?
Thor SLV-2 Agena D	-	0	Castor 1	-	-	3	29580.0	45	-6000	?
Thor SLV-2A Agena B	-	1	Thor DSV-2C	-	-	1	29580.0	150	-5700	?
Thor SLV-2A Agena B	-	2	Thor DSV-2C	-	-	1	29580.0	150	-5700	?
Thor SLV-2A Agena B	-	F	Fairing	-	-	2	29580.0	150	-5700	?
Thor SLV-2A Agena D	-	1	Thor DSV-2A	-	-	1	29580.0	150	-5700	?
Thor SLV-2A Agena D	-	2	Thor DSV-2A	-	-	1	29580.0	150	-5700	?
Thorrad SLV-2G Agena D	-	0	Castor 2	-	-	3	29580.0	45	-6000	?
Thorrad SLV-2G Agena D	-	1	LT Thor DSV-2L-1A	-	-	1	29580.0	150	-5520	?
Thorrad SLV-2G Agena D	-	2	Thor DSV-2L-1A	-	-	1	29580.0	150	-5520	?
Thorrad SLV-2G Agena D	-	F	Fairing	-	-	2	29580.0	150	-5520	?
Thorrad SLV-2H Agena D	-	1	Thor DSV-2H	-	-	1	29580.0	200	200	?
Thorrad SLV-2H Agena D	-	2	Thor DSV-2H	-	-	1	29580.0	150	-5520	?
Thorrad SLV-2H Agena D	-	F	Fairing	-	-	2	29580.0	45	-6000	?
Thor Delta	-	1	Thor DM-18A	-	-	1	29580.0	200	-5000	?
Thor Delta	-	2	AJ10-118	-	-	1	29580.0	300	-2000	?
Thor Delta	-	3	Altair	-	-	1	29580.0	10000	300	?
Thor Delta	-	F	Fairing	-	-	2	29580.0	200	-5000	?
Thor Delta A	-	1	Thor DM-21	-	-	1	29580.0	200	-5030	?
Thor Delta A	-	2	AJ10-118	-	-	1	29580.0	300	-2400	?
Thor Delta A	-	3	Altair	-	-	1	29580.0	300	300	?
Thor Delta A	-	F	Fairing	-	-	2	29580.0	200	-5000	?
Thor Delta B	-	1	Thor DM-21	-	-	1	29580.0	150	-5500	?



LVStages

LV_Name	LV_Variant	Stage_No	Stage_Name	Qualifier	Dummy	Multiplicity	Stage_Impulse kNs	Stage_Apogee km	Stage_Perigee km	Perigee_Qual
Thor Delta B	-	2	AJ10-118A	-	-	1	29580.0	1200	-5000	?
Thor Delta B	-	3	Altair	-	-	1	29580.0	1200	1200	?
Thor Delta B	-	F	Fairing	-	-	2	29580.0	150	-5500	?
Thor Delta C	-	1	Thor DSV-2A	-	-	1	29580.0	150	-5500	?
Thor Delta C	-	2	AJ10-118D	-	-	1	29580.0	200	-1000	?
Thor Delta C	-	3	Altair 2	-	-	1	29580.0	200	200	?
Thor Delta C	-	F	Fairing	-	-	2	29580.0	150	-5500	?
Thor Delta C1	-	1	Thor DSV-2A	-	-	1	29580.0	150	-5500	?
Thor Delta C1	-	2	AJ10-118D	-	-	1	29580.0	200	-1000	?
Thor Delta C1	-	3	Fairing	-	-	2	29580.0	200	200	?
Thor Delta C1	-	F	Fairing	-	-	2	29580.0	150	-5500	?
Thor Delta D	-	0	Castor	-	-	3	29580.0	30	-6340	?
Thor Delta D	-	1	Thor DSV-2C	-	-	1	29580.0	150	-5500	?
Thor Delta D	-	2	AJ10-118D	-	-	1	29580.0	1400	-1000	?
Thor Delta D	-	3	Altair 2	-	-	1	29580.0	1400	1400	?
Thor Delta D	-	F	Fairing	-	-	2	29580.0	150	-5500	?
Thor Delta D	-	F	Fairing	-	-	3	29580.0	30	-6340	?
Thor Delta E	-	0	Castor	-	-	3	29580.0	200	-5350	?
Thor Delta E	-	1	Thor DSV-2C	-	-	1	29580.0	200	200	?
Thor Delta E	-	2	DSV-3E-3	-	-	1	29580.0	200	200	?
Thor Delta E	-	3	Altair 2	-	-	1	29580.0	200	200	?
Thor Delta E	-	F	Fairing	-	-	2	29580.0	35780	200	?
Thor Delta E	-	F	Fairing	-	-	2	29580.0	220	-5200	?
Thor Delta E1	-	0	Castor	-	-	3	29580.0	30	-6340	?
Thor Delta E1	-	1	Thor DSV-2C	-	-	1	29580.0	200	-5350	?
Thor Delta E1	-	2	DSV-3E-3	-	-	1	29580.0	200	200	?
Thor Delta E1	-	3	Fairing	-	-	2	29580.0	200	200	?
Thor Delta E1	-	F	Fairing	-	-	3	29580.0	30	-6340	?
Thor Delta J	-	0	Castor	-	-	3	29580.0	200	-5350	?
Thor Delta J	-	1	Thor DSV-2C	-	-	1	29580.0	200	200	?
Thor Delta J	-	2	DSV-3E-3	-	-	1	29580.0	200	-5350	?
Thor Delta J	-	3	Star 37D	-	-	1	29580.0	640	-6300	?
Thor Delta J	-	F	Fairing	-	-	2	29580.0	200	-5350	?
Thor Delta L	-	0	Castor	-	-	3	29580.0	30	-6340	?
Thor Delta L	-	1	LT Thor DSV-2L-1B	-	-	1	29580.0	150	-4800	?
Thor Delta L	-	2	DSV-3E-3	-	-	1	29580.0	200	200	?
Thor Delta L	-	3	Fairing	-	-	2	29580.0	200	200	?
Thor Delta M	-	0	Castor	-	-	3	29580.0	150	-4800	?
Thor Delta M	-	1	Thor DSV-2L-1B	-	-	1	29580.0	30	-6340	?
Thor Delta M	-	2	DSV-3E-3	-	-	1	29580.0	150	-4800	?
Thor Delta M	-	3	Star 37D	-	-	1	29580.0	200	-4800	?
Thor Delta M	-	F	Fairing	-	-	2	29580.0	37800	200	?
Thor Delta M6	-	0	Castor	-	-	6	29580.0	150	-4800	?
Thor Delta M6	-	1	LT Thor DSV-2L-1C	-	-	1	29580.0	30	-6340	?
Thor Delta M6	-	2	DSV-3E-3	-	-	1	29580.0	150	-4800	?
Thor Delta M6	-	3	Star 37D	-	-	1	29580.0	200	-1000	?
Thor Delta M6	-	F	Fairing	-	-	2	29580.0	37800	200	?
Thor Delta N	-	0	Castor	-	-	3	29580.0	150	-4800	?
Thor Delta N	-	1	LT Thor DSV-2L-1B	-	-	1	29580.0	30	-6340	?
Thor Delta N	-	2	DSV-3E-3	-	-	1	29580.0	150	-4800	?
Thor Delta N	-	F	Fairing	-	-	2	29580.0	200	200	?
Thor Delta N6	-	0	Castor	-	-	6	29580.0	150	-4800	?
Thor Delta N6	-	1	LT Thor DSV-2L-1C	-	-	1	29580.0	30	-6340	?
Thor Delta N6	-	2	DSV-3E-3	-	-	1	29580.0	150	-4800	?
Thor Delta N6	-	3	Star 37D	-	-	1	29580.0	200	-4800	?
Thor Delta N6	-	F	Fairing	-	-	2	29580.0	37800	150	?
Thor DSV-2D	-	0	Castor	-	-	2	29580.0	150	-4800	?
Thor DSV-2D	-	1	Thor DM-21	-	-	2	29580.0	150	-4800	?
Thor DSV-2D	-	F	Fairing	-	-	2	29580.0	1400	-6300	?
Thor DSV-2E	-	0	Castor	-	-	2	29580.0	1400	-6300	?
Thor DSV-2E	-	1	Thor DM-18A	-	-	1	29580.0	500	-6200	?
Thor DSV-2E	-	2	Thor DM-18A	-	-	1	29580.0	50	-5200	?
Thor DSV-2E	-	3	Thor DM-18A	-	-	1	29580.0	50	-5200	?
Thor DSV-2E	-	F	Fairing	-	-	2	29580.0	60	-4000	?
Thor DSV-2G	-	0	Castor	-	-	2	29580.0	60	-4000	?
Thor DSV-2G	-	1	AJ10-118	-	-	1	29580.0	500	-6200	?
Thor DSV-2G	-	2	Thor DM-18A	-	-	1	29580.0	760	-5480	?
Thor DSV-2J	-	0	Castor	-	-	2	29580.0	820	-4130	?
Thor DSV-2J	-	1	Thor DM-18A	-	-	1	29580.0	760	-5480	?
Thor DSV-2U	-	0	Castor	-	-	2	29580.0	760	-5480	?
Thor DSV-2U	-	1	Star 37XE	-	-	2	29580.0	820	-4130	?
Thor DSV-2U	-	2	Fairing	-	-	1	29580.0	700	-5200	?
Thor MG-18	-	0	Castor	-	-	2	29580.0	700	700	?
Thor MG-18	-	1	Thor DM-18A	-	-	1	29580.0	700	700	?
Thor MG-18	-	2	MG-18	-	-	2	29580.0	700	700	?
Thor Burner 1	-	0	Castor	-	-	2	29580.0	800	-5200	?
Thor Burner 1	-	1	Thor DM-18A	-	-	1	29580.0	800	-5400	?
Thor Burner 1	-	2	Fairing	-	-	1	29580.0	800	800	?

LVStages

LV_Name	LV_Variant	Stage_No	Stage_Name	Qualifier	Dummy	Multiplicity	Stage_Impulse kNs	Stage_Apogee km	Stage_Perigee km	Perigee_Qual
Thor Burner 1	-	F	Fairing	-	-	2	29580.0	800	-5400	?
Thor Burner 2	-	1	Thor DM-18A	-	-	1	29580.0	850	-5650	?
Thor Burner 2	-	2	Star 37B	-	-	1	29580.0	850	850	?
Thor Burner 2	-	F	Fairing	-	-	1	29580.0	800	-5600	?
Thor Burner 2A	-	1	Thor DM-18A	-	-	1	29580.0	500	-5050	?
Thor Burner 2A	-	2	Star 37B	-	-	1	29580.0	800	-3000	?
Thor Burner 2A	-	3	Star 26B	-	-	1	29580.0	800	800	?
Thor Burner 2A	-	F	Fairing	-	-	2	29580.0	500	-5050	?
Delta 0300	-	0	Castor 2	-	-	3	29580.0	30	-6340	?
Delta 0300	-	1	LT Thor DSV-2L-1C	-	-	1	29580.0	150	-4800	?
Delta 0300	-	2	DSV-3M-4	-	-	1	29580.0	200	200	?
Delta 0300	-	F	Fairing	-	-	4	29580.0	30	-6340	?
Delta 0800	-	0	Castor 2	-	-	9	29580.0	170	-4250	?
Delta 0900	-	1	LT Thor DSV-2L-1C	-	-	1	29580.0	150	-4800	?
Delta 0900	-	2	DSV-3M-4	-	-	1	29580.0	200	200	?
Delta 0900	-	F	Fairing	-	-	4	29580.0	170	-4250	?
Delta 1410	-	0	Castor 2	-	-	4	29580.0	30	-6340	?
Delta 1410	-	1	ELT Thor DSV-2L-1E	-	-	1	29580.0	150	-4800	?
Delta 1410	-	2	DSV-3P-4B	-	-	1	29580.0	200	200	?
Delta 1410	-	F	Fairing	-	-	2	29580.0	170	-4250	?
Delta 1604	-	0	Castor 2	-	-	6	29580.0	30	-6340	?
Delta 1604	-	1	ELT Thor DSV-2L-1D	-	-	1	29580.0	150	-4800	?
Delta 1604	-	2	DSV-3M-4	-	-	1	29580.0	150	150	?
Delta 1604	-	3	Star 37C	-	-	1	29580.0	200	37800	?
Delta 1604	-	F	Fairing	-	-	2	29580.0	170	-4250	?
Delta 1900	-	0	Castor 2	-	-	9	29580.0	30	-6340	?
Delta 1900	-	1	ELT Thor DSV-2L-1D	-	-	1	29580.0	150	-4800	?
Delta 1900	-	2	DSV-3M-4	-	-	1	29580.0	200	200	?
Delta 1900	-	F	Fairing	-	-	9	29580.0	170	-4250	?
Delta 1910	-	0	Castor 2	-	-	9	29580.0	30	-6340	?
Delta 1910	-	1	ELT Thor DSV-2L-1E	-	-	1	29580.0	150	-4800	?
Delta 1910	-	2	DSV-3P-4	-	-	1	29580.0	500	500	?
Delta 1910	-	F	Fairing	-	-	2	29580.0	170	-4250	?
Delta 1913	-	0	Castor 2	-	-	9	29580.0	30	-6340	?
Delta 1913	-	1	ELT Thor DSV-2L-1E	-	-	1	29580.0	150	-4800	?
Delta 1913	-	2	DSV-3P-4	-	-	1	29580.0	200	200	?
Delta 1913	-	3	Star 37C	-	-	1	29580.0	37800	37800	?
Delta 1913	-	F	Fairing	-	-	2	29580.0	170	-4250	?
Delta 2310	-	0	Castor 2	-	-	3	29580.0	30	-6340	?
Delta 2310	-	1	ELT Thor DSV-2M-1	-	-	1	29580.0	150	-4800	?
Delta 2310	-	2	DSV-3P-4B	-	-	1	29580.0	1000	1000	?
Delta 2310	-	F	Fairing	-	-	2	29580.0	170	-4250	?
Delta 2910	-	0	Castor 2	-	-	9	29580.0	32	-6340	?
Delta 2910	-	1	ELT Thor DSV-2W-1	-	-	1	29580.0	150	-4800	?
Delta 2910	-	2	DSV-3P-4B	-	-	1	29580.0	200	-4800	?
Delta 2910	-	F	Fairing	-	-	2	29580.0	170	-4250	?
Delta 2913	-	0	Castor 2	-	-	3	29580.0	30	-6340	?
Delta 2913	-	1	ELT Thor DSV-2M-1	-	-	1	29580.0	150	-4800	?
Delta 2913	-	2	DSV-3P-4B	-	-	1	29580.0	200	-500	?
Delta 2913	-	3	Star 37D	-	-	1	29580.0	37800	37800	?
Delta 2913	-	F	Fairing	-	-	2	29580.0	170	-4250	?
Delta 2914	-	0	Castor 2	-	-	9	29580.0	32	-6340	?
Delta 2914	-	1	ELT Thor DSV-2W-1	-	-	1	29580.0	160	-4830	?
Delta 2914	-	2	DSV-3P-4B	-	-	1	29580.0	200	200	?
Delta 2914	-	3	Star 37E	-	-	1	29580.0	35780	35780	?
Delta 2914	-	F	Fairing	-	-	2	29580.0	170	-4250	?
Delta 2914	-	C	Castor 2	-	-	9	29580.0	32	-6340	?
Delta 2914	-	0	ELT Thor DSV-2W-1	-	-	1	29580.0	200	-1000	?
Delta 2914	-	1	DSV-3P-4B	-	-	1	29580.0	170	-4250	?
Delta 2914	-	2	Star 37C	-	-	1	29580.0	35780	35780	?
Delta 2914	-	C	Fairing	-	-	2	29580.0	170	-4250	?
Delta 2914	-	0	Castor 4	-	-	9	29580.0	70	-6100	?
Delta 3910	-	1	ELT Thor DSV-2W	-	-	1	29580.0	150	-4100	?

LVStages

LV_Name	LV_Variant	Stage_No	Stage_Name	Qualifier	Dummy	Multiplicity	Stage_Impulse kNs	Stage_Apogee km	Stage_Perigee km	Perigee_Qual
Delta 3910	-	2	DSV-3P-4B	-	-	1	29580.0	200	200	?
Delta 3910	-	F	Fairing	-	-	2	29580.0	150	-4100	?
Delta 3910/PAM	-	0	Castor 4	-	-	9	29580.0	75	-6100	?
Delta 3910/PAM	-	1	ELI Thor DSV-2W	-	-	1	29580.0	150	-4200	?
Delta 3910/PAM	-	2	DSV-3P-4B	-	-	1	29580.0	300	-750	?
Delta 3910/PAM	-	3	Star 48B	-	-	2	29580.0	35900	300	?
Delta 3910/PAM	-	F	Fairing	-	-	2	29580.0	150	-4100	?
Delta 3913	-	0	Castor 4	-	-	9	29580.0	70	-6100	?
Delta 3913	-	1	ELI Thor DSV-2W	-	-	1	29580.0	150	-4100	?
Delta 3913	-	2	DSV-3P-4B	-	-	1	29580.0	200	?	?
Delta 3913	-	3	Star 37N	-	-	1	29580.0	200	?	?
Delta 3913	-	F	Fairing	-	-	2	29580.0	150	-4100	?
Delta 3914	-	0	Castor 4	-	-	9	29580.0	70	-6100	?
Delta 3914	-	1	ELI Thor DSV-2W	-	-	1	29580.0	150	-4100	?
Delta 3914	-	2	DSV-3P-4B	-	-	1	29580.0	200	?	?
Delta 3914	-	3	Star 37E	-	-	1	29580.0	200	?	?
Delta 3914	-	F	Fairing	-	-	2	29580.0	150	-4100	?
Delta 3920-8	-	0	Castor 4	-	-	9	29580.0	70	-6100	?
Delta 3920-8	-	1	ELI Thor DSV-2W	-	-	1	29580.0	150	-4100	?
Delta 3920-8	-	2	Delta/0020	-	-	1	29580.0	200	?	?
Delta 3920-8	-	F	Fairing	-	-	2	29580.0	150	-4100	?
Delta 3920	-	0	Castor 4	-	-	9	29580.0	70	-6100	?
Delta 3920	-	1	ELI Thor DSV-2W	-	-	1	29580.0	150	-4100	?
Delta 3920/PAM	-	1	ELI Thor DSV-2W	-	-	1	29580.0	150	-4100	?
Delta 3920/PAM	-	2	Delta/0020	-	-	1	29580.0	200	?	?
Delta 3920/PAM	-	3	Star 48B	-	-	2	29580.0	35780	200	?
Delta 3920/PAM	-	F	Fairing	-	-	2	29580.0	150	-4100	?
Delta 3924	-	0	Castor 4	-	-	9	29580.0	75	-6100	?
Delta 3924	-	1	ELI Thor DSV-2W	-	-	1	29580.0	145	-4200	?
Delta 3924	-	2	Delta/0020	-	-	1	29580.0	500	170	?
Delta 3924	-	3	Star 37E	-	-	1	29580.0	170	35786	?
Delta 3924	-	F	Fairing	-	-	2	29580.0	145	-4200	?
Delta 4925-8	-	0	Castor 4A	-	-	9	29580.0	70	-6100	?
Delta 4925-8	-	1	ELI Thor DSV-2L	-	-	1	29580.0	150	-4100	?
Delta 4925-8	-	2	Delta/0020	-	-	1	29580.0	200	?	?
Delta 4925-8	-	3	Star 48B	-	-	1	29580.0	35780	200	?
Delta 4925-8	-	F	Fairing	-	-	2	29580.0	150	-4100	?
Delta 5920-8	-	0	Castor 4A	-	-	9	29580.0	70	-6100	?
Delta 5920-8	-	1	ELI Thor DSV-2W	-	-	1	29580.0	150	-4100	?
Delta 5920-8	-	2	Delta/0020	-	-	1	29580.0	200	?	?
Delta 5920-8	-	F	Fairing	-	-	2	29580.0	150	-4100	?
Delta 6920-8	-	0	Castor 4A	-	-	9	29580.0	70	-6100	?
Delta 6920-8	-	1	ELI Thor	-	-	1	29580.0	150	-4100	?
Delta 6920-8	-	2	Delta/0020	-	-	1	29580.0	200	?	?
Delta 6920-8	-	F	Fairing	-	-	2	29580.0	150	-4100	?
Delta 6920-10	-	0	Castor 4A	-	-	9	29580.0	70	-6100	?
Delta 6920-10	-	1	ELI Thor	-	-	1	29580.0	150	-4100	?
Delta 6920-10	-	2	Delta/0020	-	-	1	29580.0	200	?	?
Delta 6920-10	-	F	Fairing	-	-	2	29580.0	150	-4100	?
Delta 6925-8	-	0	Castor 4A	-	-	9	29580.0	70	-6100	?
Delta 6925-8	-	1	ELI Thor	-	-	1	29580.0	150	-4100	?
Delta 6925-8	-	2	Delta/0020	-	-	1	29580.0	200	?	?
Delta 6925-8	-	3	Star 48B	-	-	2	29580.0	35780	200	?
Delta 6925-8	-	F	Fairing	-	-	2	29580.0	150	-4100	?
Delta 6925	-	0	Castor 4A	-	-	9	29580.0	70	-6100	?
Delta 6925	-	1	ELI Thor	-	-	1	29580.0	150	-4100	?
Delta 6925	-	2	Delta/0020	-	-	1	29580.0	200	?	?
Delta 6925	-	3	Star 48B	-	-	2	29580.0	35780	200	?
Delta 6925	-	F	Fairing	-	-	2	29580.0	150	-4100	?
Delta 7320-10	-	0	GEN-40	-	-	3	94800.0	35	-6350	?
Delta 7320-10	-	1	ELI Thor	-	-	1	283500.0	150	-4900	?
Delta 7320-10	-	2	Delta/0020	-	-	1	283500.0	590	?	?
Delta 7320-10	-	F	Fairing	-	-	2	283500.0	165	-4830	?
Delta 7320-10C	-	0	GEN-40	-	-	3	94800.0	35	-6350	?
Delta 7320-10C	-	1	ELI Thor	-	-	1	283500.0	150	-4900	?
Delta 7320-10C	-	2	Delta/0020	-	-	1	283500.0	590	?	?
Delta 7320-10C	-	F	Fairing	-	-	2	283500.0	165	-4830	?
Delta 7326-9.5	-	0	GEN-40	-	-	3	94800.0	21	-6340	?
Delta 7326-9.5	-	1	ELI Thor	-	-	1	283500.0	170	-4100	?
Delta 7326-9.5	-	2	Delta/0020	-	-	1	283500.0	1000	185	?

LVStages

LV_Name	LV_Variant	Stage_No	Stage_Name	Qualifier	Dummy	Multiplicity	Stage_Impulse kNs	Stage_Apogee km	Stage_Perigee km	Perigee_Qual
Delta 7326-9.5	-	3	Star 37FM	-	-	1	283500.0	45000	1000	?
Delta 7326-9.5	-	F	Fairing	-	-	2	283500.0	165	-4830	?
Delta 7420-10C	-	0	GEN-40	-	-	4	126400.0	30	-6330	?
Delta 7420-10C	-	1	EELT Thor	-	-	1	283500.0	150	-4500	?
Delta 7420-10C	-	2	Delta/0020	-	-	1	283500.0	1200	-4500	?
Delta 7420-10C	-	F	Fairing	-	-	2	283500.0	150	-4500	?
Delta 7425-9.5	-	0	GEN-40	-	-	4	126400.0	20	-6300	?
Delta 7425-9.5	-	1	EELT Thor	-	-	1	283500.0	150	-4500	?
Delta 7425-9.5	-	2	Delta/0020	-	-	1	283500.0	200	200	?
Delta 7425-9.5	-	3	Star 48B	-	-	1	283500.0	37800	200	?
Delta 7425-9.5	-	F	Fairing	-	-	2	283500.0	150	-4500	?
Delta 7425-10	-	0	GEN-40	-	-	4	126400.0	28	-6320	?
Delta 7425-10	-	1	EELT Thor	-	-	1	283500.0	160	-4470	?
Delta 7425-10	-	2	Delta/0020	-	-	1	283500.0	180	180	?
Delta 7425-10	-	3	Star 48B	-	-	1	283500.0	180	180	?
Delta 7425-10	-	F	Fairing	-	-	2	283500.0	150	-4500	?
Delta 7426-9.5	-	0	GEN-40	-	-	4	126400.0	30	-6330	?
Delta 7426-9.5	-	1	EELT Thor	-	-	1	283500.0	170	-4200	?
Delta 7426-9.5	-	2	Delta/0020	-	-	1	283500.0	180	180	?
Delta 7426-9.5	-	F	Star 37FM	-	-	2	283500.0	180	180	?
Delta 7426-9.5	-	3	Fairing	-	-	2	283500.0	170	-4200	?
Delta 7920-8	-	0	GEN-40	-	-	9	284400.0	70	-6200	?
Delta 7920-8	-	1	EELT Thor	-	-	1	283500.0	185	-2700	?
Delta 7920-8	-	2	Delta/0020	-	-	1	283500.0	185	185	?
Delta 7920-8	-	F	Fairing	-	-	2	283500.0	185	-2700	?
Delta 7920-10	-	0	GEN-40	-	-	9	283500.0	75	-6200	?
Delta 7920-10	-	1	EELT Thor	-	-	1	283500.0	170	-4140	?
Delta 7920-10	-	2	Delta/0020	-	-	1	283500.0	170	170	?
Delta 7920-10L	-	0	GEN-40	-	-	9	284400.0	75	-6200	?
Delta 7920-10L	-	F	Fairing	-	-	2	283500.0	170	-4120	?
Delta 7920-10C	-	0	GEN-40	-	-	9	284400.0	75	-6200	?
Delta 7920-10C	-	1	EELT Thor	-	-	1	283500.0	170	-4200	?
Delta 7920-10C	-	2	Delta/0020	-	-	1	283500.0	170	170	?
Delta 7920-10C	-	F	Fairing	-	-	2	283500.0	170	-4200	?
Delta 7925	-	0	GEN-40	-	-	9	284400.0	85	-6100	?
Delta 7925	-	1	EELT Thor	-	-	1	283500.0	170	-3700	?
Delta 7925	-	2	Delta/0020	-	-	1	283500.0	180	180	?
Delta 7925	-	3	Star 48B	-	-	1	283500.0	180	180	?
Delta 7925	-	F	Fairing	-	-	2	283500.0	175	-3700	?
Delta 7925H	-	0	GEN-46	-	-	9	284400.0	85	-5800	?
Delta 7925H	-	1	EELT Thor	-	-	1	283500.0	120	-3400	?
Delta 7925H	-	2	Delta/0020	-	-	1	283500.0	160	160	?
Delta 7925H	-	3	Star 48B	-	-	1	283500.0	160	160	?
Delta 7925H	-	F	Fairing	-	-	2	283500.0	120	-3400	?
Delta 7920H	-	0	GEN-46	-	-	9	284400.0	75	-6100	?
Delta 7920H	-	1	EELT Thor	-	-	1	283500.0	160	-3400	?
Delta 7920H	-	2	Delta/0020	-	-	1	283500.0	160	160	?
Delta 7920H	-	F	Fairing	-	-	2	283500.0	160	-3400	?
Delta 7925-8	-	0	GEN-40	-	-	9	284400.0	85	-6100	?
Delta 7925-8	-	1	EELT Thor	-	-	1	283500.0	170	-3700	?
Delta 7925-8	-	2	Delta/0020	-	-	1	283500.0	180	180	?
Delta 7925-8	-	3	Star 48B	-	-	1	283500.0	180	180	?
Delta 7925-8	-	F	Fairing	-	-	2	283500.0	170	-3700	?
Delta 7925-9.5	-	0	GEN-40	-	-	9	284400.0	85	-6100	?
Delta 7925-9.5	-	1	EELT Thor	-	-	1	283500.0	170	-3700	?
Delta 7925-9.5	-	2	Delta/0020	-	-	1	283500.0	180	180	?
Delta 7925-9.5	-	3	Star 48B	-	-	1	283500.0	180	180	?
Delta 7925-9.5	-	F	Fairing	-	-	2	283500.0	170	-3700	?
Delta 7925-10	-	0	GEN-40	-	-	9	284400.0	65	-6180	?
Delta 7925-10	-	1	EELT Thor	-	-	1	283500.0	170	-4250	?
Delta 7925-10	-	2	Delta/0020	-	-	1	283500.0	170	170	?
Delta 7925-10	-	3	Star 48B	-	-	1	283500.0	185	185	?
Delta 7925-10	-	F	Fairing	-	-	2	283500.0	180	-4200	?
Delta 7925-10C	-	0	GEN-40	-	-	9	284400.0	65	-6180	?
Delta 7925-10C	-	1	EELT Thor	-	-	1	283500.0	170	-4250	?
Delta 7925-10C	-	2	Delta/0020	-	-	1	283500.0	170	170	?
Delta 7925-10C	-	3	Star 48B	-	-	1	283500.0	185	185	?
Delta 7925-10C	-	F	Fairing	-	-	2	283500.0	180	-4200	?
Delta 7925-10L	-	0	GEN-40	-	-	9	284400.0	65	-6180	?
Delta 7925-10L	-	1	EELT Thor	-	-	1	283500.0	170	-4250	?

LVStages

LV_Name	LV_Variant	Stage_No	Stage_Name	Qualifier	Dummy	Multiplicity	Stage_Impulse kNs	Stage_Apogee km	Stage_Perigee km	Perigee_Qual
Delta 7925-10L	-	2	Delta/0020	-	-	1	283500.0	170	170	?
Delta 7925-10L	-	3	Star 48B	-	-	1	283500.0	50550	185	?
Delta 7925-10L	-	F	Fairing	-	-	2	283500.0	180	-4200	?
Delta 8930	-	0	GEN-46	-	-	9	411562.0	90	-5950	?
Delta 8930	-	1	Delta III Stage 1	-	-	1	283500.0	175	-4830	?
Delta 8930	-	2	Delta III Stage 2	-	-	1	77000.0	170	170	?
Delta 8930	-	F	Fairing	-	-	2	77000.0	150	-5000	?
N-1	-	0	Castor 2	-	-	3	77000.0	50	-6100	?
N-1	-	1	LT Thor N	-	-	1	77000.0	150	-5500	?
N-1	-	2	LE-3	-	-	1	77000.0	1000	-3200	?
N-1	-	3	Star 37N	-	-	1	77000.0	1000	1000	?
N-1	-	F	Fairing	-	-	2	77000.0	150	-5500	?
N-2	-	0	Castor 2	-	-	9	77000.0	50	-6100	?
N-2	-	1	ELT Thor N	-	-	1	77000.0	150	-5500	?
N-2	-	2	AJ10-118FJ	-	-	1	77000.0	500	170	?
N-2	-	3	Star 37E	-	-	1	77000.0	35800	180	?
N-2	-	F	Fairing	-	-	2	77000.0	150	-5500	?
N-2	(2)	0	Castor 2	-	-	9	77000.0	50	-6100	?
N-2	(2)	1	ELT Thor N	-	-	1	77000.0	150	-5500	?
N-2	(2)	2	AJ10-118FJ	-	-	1	77000.0	1000	1000	?
N-2	(2)	F	Fairing	-	-	2	77000.0	150	-5500	?
H-1	-	0	Castor 2	-	-	9	77000.0	50	-6100	?
H-1	-	1	ELT Thor N	-	-	1	77000.0	150	-5500	?
H-1	-	2	LE-5	-	-	1	77000.0	100	100	?
H-1	-	3	UMI29A	-	-	1	77000.0	35800	200	?
H-1	-	F	Fairing	-	-	2	77000.0	150	-5500	?
H-1	(2)	0	Castor 2	-	-	9	77000.0	50	-6100	?
H-1	(2)	1	ELT Thor N	-	-	1	77000.0	150	-5500	?
H-1	(2)	2	LE-5	-	-	1	77000.0	200	200	?
H-1	(2)	F	Fairing	-	-	2	77000.0	150	-5500	?
H-1	(2)	6R	Castor 2	-	-	6	77000.0	50	-6100	?
H-1	6R	0	ELT Thor N	-	-	1	77000.0	150	-5500	?
H-1	6R	1	LE-5	-	-	1	77000.0	220	-1000	?
H-1	6R	3	UMI29A	-	-	1	77000.0	35800	200	?
H-1	6R	F	Fairing	-	-	2	77000.0	150	-5500	?
R-39	-	1	R-39 St 1	-	-	1	77000.0	40	-6370	?
R-39	-	2	R-39 St 2	-	-	1	77000.0	200	-6000	?
R-39	-	3	R-39 St 3	-	-	1	77000.0	1000	-4000	?
R-39U	-	1	R-39 St 1	-	-	1	77000.0	40	-6370	?
R-39U	-	2	R-39 St 2	-	-	1	77000.0	200	-6000	?
R-39U	-	3	R-39 St 3	-	-	1	77000.0	1000	-4000	?
R-39U	-	3	3M91 St 1	-	-	1	77000.0	40	-6370	?
R-39U	-	3	3M91 St 2	-	-	1	77000.0	200	-6000	?
R-39U	-	3	3M91 St 3	-	-	1	77000.0	1000	-4000	?
Grom	-	1	R-39 St 1	-	-	1	77000.0	0	-6378	?
Grom	-	2	R-39 St 2	-	-	1	77000.0	0	-6378	?
Grom	-	3	R-39 St 3	-	-	1	77000.0	0	-6378	?
RT-23 152h44	-	1	152h44 St 1	-	-	1	77000.0	50	-6370	?
RT-23 152h44	-	2	152h44 St 2	-	-	1	77000.0	200	-6000	?
RT-23 152h44	-	3	RT-23 St 3	-	-	1	77000.0	1000	-4000	?
RT-23 152h44	-	F	G0	-	-	1	77000.0	200	-6000	?
RT-23 152h52	-	1	152h52 St 1	-	-	1	77000.0	50	-6370	?
RT-23 152h52	-	2	152h52 St 2	-	-	1	77000.0	200	-6000	?
RT-23 152h52	-	3	RT-23 St 3	-	-	1	77000.0	1000	-4000	?
RT-23 152h52	-	F	G0	-	-	1	77000.0	200	-6000	?
RT-23U 152h61	-	1	152h61 St 1	-	-	1	77000.0	50	-6370	?
RT-23U 152h61	-	2	152h61 St 2	-	-	1	77000.0	200	-6000	?
RT-23U 152h61	-	3	RT-23 St 3	-	-	1	77000.0	1000	-4000	?
RT-23U 152h61	-	F	G0	-	-	1	77000.0	200	-6000	?
RT-23U 152h60	-	1	152h60 St 1	-	-	1	77000.0	50	-6370	?
RT-23U 152h60	-	2	152h60 St 2	-	-	1	77000.0	200	-6000	?
RT-23U 152h60	-	3	RT-23 St 3	-	-	1	77000.0	1000	-4000	?
RT-23U 152h60	-	F	G0	-	-	1	77000.0	200	-6000	?
Hwasong-18	-	1	HS-18 St1	-	-	1	77000.0	50	-6000	?
Hwasong-18	-	2	HS-18 St2	-	-	1	77000.0	50	-6000	?
Hwasong-18	-	3	HS-18 St3	-	-	1	77000.0	50	-6000	?
Hwasong-19	-	1	HS-19 St1	-	-	1	77000.0	50	-6000	?
Hwasong-19	-	2	HS-18 St2	-	-	1	77000.0	50	-6000	?
Hwasong-19	-	3	HS-18 St3	-	-	1	77000.0	50	-6000	?
Hwasong-16	-	1	HS-18 St1	-	-	1	77000.0	50	-6000	?
Hwasong-16	-	2	HS-18 St2	-	-	1	77000.0	50	-6000	?
Hwasong-16Na	-	1	HS-18 St1	-	-	1	77000.0	50	-6000	?
Hwasong-16Na	-	2	HS-18 St2	-	-	1	77000.0	50	-6000	?

LVStages

LV_Name	LV_Variant	Stage_No	Stage_Name	Qualifier	Dummy	Multiplicity	Stage_Impulse kNs	Stage_Apogee km	Stage_Perigee km	Perigee_Qual
Cheonlima-1	-	1	Cheonlima-1 Stage 1	-	-	1	77000.0	70	-6100	?
Cheonlima-1	-	2	Cheonlima-1 Stage 2	-	-	1	77000.0	220	-5000	?
Cheonlima-1	-	3	Cheonlima-1 Stage 3	-	-	1	77000.0	220	-5000	?
NK Kerolox LV	-	1	NK Kerolox Stage 1	-	-	1	77000.0	70	-6100	?
NK Kerolox LV	-	2	Cheonlima-1 Stage 2	-	-	1	77000.0	220	-5000	?
NK Kerolox LV	-	3	Cheonlima-1 Stage 3	-	-	1	77000.0	220	-5000	?
Hwasong-15	-	1	Hwasong-15 Stage 1	-	-	1	77000.0	50	-6370	?
Hwasong-15	-	2	Hwasong-15 Stage 2	-	-	1	77000.0	3000	-6370	?
Unha-1	-	1	Taepo Dong 2	-	-	1	77000.0	70	-6100	?
Unha-1	-	2	Unha-1 Stage 2	-	-	1	77000.0	1000	-5000	?
Unha-2	-	1	Taepo Dong 2	-	-	1	77000.0	70	-6100	?
Unha-2	-	2	Unha-2 Stage 2	-	-	1	77000.0	220	-5000	?
Unha-2	-	3	Unha-2 Stage 3	-	-	1	77000.0	220	-5000	?
Unha-3	-	1	Taepo Dong 2	-	-	1	77000.0	70	-6100	?
Unha-3	-	2	Unha-2 Stage 2	-	-	1	77000.0	220	-5000	?
Unha-3	-	3	Unha-3 Stage 3	-	-	1	77000.0	220	-5000	?
Kwangmyongsong	-	1	Taepo Dong 2	-	-	1	77000.0	70	-6100	?
Kwangmyongsong	-	2	Unha-2 Stage 2	-	-	1	77000.0	220	-5000	?
Kwangmyongsong	-	3	Unha-3 Stage 3	-	-	1	77000.0	220	-5000	?
Simorgh	-	1	Simorgh Stage 1	-	-	1	77000.0	70	-5000	?
Simorgh	2	2	Simorgh Stage 2	-	-	1	77000.0	500	-5000	?
Simorgh	3	1	Simorgh Stage 1	-	-	1	77000.0	500	-5000	?
Simorgh	3	2	Simorgh Stage 2	-	-	1	77000.0	500	-5000	?
Simorgh	3	3	Samun-1	-	-	1	77000.0	500	-5000	?
R-14	-	1	R-14	-	-	1	77000.0	670	-5300	?
R-14U	-	1	R-14	-	-	1	77000.0	670	-5300	?
Kosmos 65S3	-	1	R-14	-	-	1	77000.0	100	-6100	?
Kosmos 65S3	-	2	S3	-	-	1	77000.0	200	-200	?
Kosmos 65S3	F	F	Fairing	-	-	2	77000.0	100	-6100	?
Kosmos 11K65	-	1	R-14	-	-	1	77000.0	140	-6100	?
Kosmos 11K65	-	2	S3	-	-	1	77000.0	200	-200	?
Kosmos 11K65	F	F	Fairing	-	-	1	77000.0	140	-6100	?
Kosmos 11K65M	-	1	R-14 11K65MA	-	-	1	226900.0	140	-6100	?
Kosmos 11K65M	-	2	S3M	-	-	1	52600.0	200	-200	?
Kosmos 11K65M	F	F	Fairing	-	-	2	52600.0	140	-6100	?
Kosmos 11K65M	-	1	R-14	-	-	1	52600.0	1500	-5800	?
Vertikal' K6SUP	-	1	Fairing	-	-	2	52600.0	1500	-5800	?
Vertikal' K6SUP	-	2	Fairing	-	-	2	52600.0	500	-5800	?
K65M-R	-	1	R-14	-	-	1	52600.0	500	-5800	?
K65M-R	-	2	S3M	-	-	1	52600.0	500	-5800	?
K65M-R	-	P	K65M-R RV	-	-	1	52600.0	500	-5800	?
K65M-RB	-	1	R-14	-	-	1	52600.0	500	-5800	?
K65M-RB	-	2	S3M	-	-	1	52600.0	500	-5800	?
K65M-RB	F	F	K65M Fairing	-	-	2	52600.0	500	-5800	?
Burya	-	1	Burya booster	-	-	2	52600.0	2	-6378	?
Burya	-	2	Burya	-	-	1	52600.0	15	-6378	?
ARPA Taurus	-	1	SRI18	-	-	1	52600.0	50	-6200	?
ARPA Taurus	-	2	Orion 50	-	-	1	52600.0	180	-5000	?
ARPA Taurus	-	3	Orion 50	-	-	1	52600.0	180	-5000	?
ARPA Taurus	-	4	Orion 38	-	-	1	52600.0	740	-3000	?
ARPA Taurus	-	F	Fairing	-	-	2	52600.0	180	-5000	?
Taurus 2110	-	1	Castor 120	-	-	1	52600.0	50	-6200	?
Taurus 2110	-	2	Orion 50	-	-	1	52600.0	180	-5000	?
Taurus 2110	-	3	Orion 50	-	-	1	52600.0	180	-5000	?
Taurus 2110	-	4	Orion 38	-	-	1	52600.0	740	-3000	?
Taurus 2110	-	F	Fairing	-	-	2	52600.0	180	-5000	?
Taurus 2210	-	1	Castor 120	-	-	1	52600.0	50	-6200	?
Taurus 2210	-	2	Orion 50	-	-	1	52600.0	180	-5000	?
Taurus 2210	-	3	Orion 50	-	-	1	52600.0	180	-5000	?
Taurus 2210	-	4	Orion 38	-	-	1	52600.0	740	-3000	?
Taurus 2210	-	F	Fairing	-	-	2	52600.0	180	-5000	?
Taurus 3210	-	1	Castor 120	-	-	1	52600.0	50	-6200	?
Taurus 3210	-	2	Orion 50XSLG	-	-	1	52600.0	180	-5000	?
Taurus 3210	-	3	Orion 50XL	-	-	1	52600.0	714	-2836	?
Taurus 3210	-	4	Orion 38	-	-	1	52600.0	740	-3000	?
Taurus 3210	-	F	Fairing	-	-	2	52600.0	180	-5000	?
Taurus 3110	-	1	Castor 120	-	-	1	52600.0	50	-6200	?
Taurus 3110	-	2	Orion 50XSLG	-	-	1	52600.0	180	-5000	?
Taurus 3110	-	3	Orion 50XL	-	-	1	52600.0	714	-2836	?
Taurus 3110	-	4	Orion 38	-	-	1	52600.0	740	-3000	?
Taurus 3110	-	F	Fairing	-	-	2	52600.0	180	-5000	?
Taurus 1110	-	1	SRI18	-	-	1	52600.0	50	-6200	?
Taurus 1110	-	2	Orion 50	-	-	1	52600.0	180	-5000	?
Taurus 1110	-	3	Orion 50	-	-	1	52600.0	180	-5000	?

LVStages

LV_Name	LV_Variant	Stage_No	Stage_Name	Qualifier	Dummy	Multiplicity	Stage_Impulse kNs	Stage_Apogee km	Stage_Perigee km	Perigee_Qual
Taurus 1110	-	4	Orion 38	-	-	1	52600.0	740	740	?
Taurus 1110	-	F	Fairing	-	-	2	52600.0	180	-5000	?
Minotaur C	-	1	Castor 120	-	-	1	52600.0	50	-6200	?
Minotaur C	-	2	Orion 50XLG	-	-	1	52600.0	180	-5000	?
Minotaur C	-	3	Orion 50XL	-	-	1	52600.0	714	-2836	?
Minotaur C	-	4	Orion 38	-	-	1	52600.0	740	-5000	?
Minotaur C	-	F	Fairing	-	-	2	52600.0	180	-5000	?
Peacekeeper	-	1	SRI18	-	-	1	52600.0	34	-6320	?
Peacekeeper	-	2	SRI19	-	-	1	52600.0	120	-6050	?
Peacekeeper	-	3	SRI20	-	-	1	52600.0	920	-3800	?
Peacekeeper	-	4	Peacekeeper PBPS	-	-	1	52600.0	1000	-3700	?
Peacekeeper	-	F	Fairing	-	-	1	52600.0	120	-6050	?
Peacekeeper	-	LLV-1	Castor 120	-	-	1	133774.0	140	-5900	?
LLV-1	-	2	Orbus 21D	-	-	1	28050.0	200	-340	?
LLV-1	-	3	OAM	-	-	1	500.0	800	240	?
LLV-1	-	F	Fairing	-	-	2	500.0	140	-5900	?
LLV-1	-	1	Castor 120	-	-	1	133774.0	140	-5900	?
LLV-1	-	2	Orbus 21D	-	-	1	28050.0	200	-340	?
LLV-1	-	3	OAM	-	-	1	500.0	800	240	?
LLV-1	-	F	Fairing	-	-	2	500.0	140	-5900	?
Athena-1	-	1	Castor 120	-	-	1	133774.0	20	-6300	?
Athena-1	-	2	Castor 120	-	-	1	133774.0	180	-5600	?
Athena-1	-	3	Orbus 21D	-	-	1	28050.0	400	200	?
Athena-1	-	4	OAM	-	-	1	500.0	600	200	?
Athena-1	-	F	Fairing	-	-	2	500.0	180	-5600	?
Athena-1	-	1	Castor 120	-	-	1	133774.0	140	-5900	?
Athena-2	-	1	Castor 120	-	-	1	133774.0	20	-6300	?
Athena-2	-	2	Castor 120	-	-	1	133774.0	180	-5600	?
Athena-2	-	3	Orbus 21D	-	-	1	28050.0	400	200	?
Athena-2	-	4	OAM	-	-	1	500.0	600	200	?
Athena-2	-	F	Fairing	-	-	2	500.0	180	-5600	?
Minotaur V	-	1	SRI18	-	-	1	500.0	34	-6320	?
Minotaur V	-	2	SRI19	-	-	1	500.0	120	-6050	?
Minotaur V	-	3	SRI20	-	-	1	500.0	920	-3800	?
Minotaur V	-	4	Star 48V	-	-	1	500.0	500	500	?
Minotaur V	-	5	Star 37FM	-	-	1	500.0	200	2000000	?
Minotaur IV	-	1	SRI18	-	-	1	500.0	34	-6320	?
Minotaur IV	-	2	SRI19	-	-	1	500.0	120	-6050	?
Minotaur IV	-	3	SRI20	-	-	1	500.0	920	-3800	?
Minotaur IV	-	4	GCA/Orion 38	-	-	1	500.0	500	500	?
Minotaur IV	-	5	GCA/Orion 38	-	-	1	500.0	500	500	?
Minotaur IV	-	2	Fairing	-	-	1	500.0	120	-6050	?
Minotaur IV	-	1	SRI18	-	-	1	500.0	34	-6320	?
Minotaur IV	-	2	SRI19	-	-	1	500.0	120	-6050	?
Minotaur IV	-	3	SRI20	-	-	1	500.0	920	-3800	?
Minotaur IV	-	4	Star 48V	-	-	1	500.0	500	500	?
Minotaur IV	-	F	Fairing	-	-	1	500.0	120	-6050	?
Minotaur IV Lite	-	1	SRI18	-	-	1	500.0	34	-6320	?
Minotaur IV Lite	-	2	SRI19	-	-	1	500.0	120	-6050	?
Minotaur IV Lite	-	3	SRI20	-	-	1	500.0	920	-3800	?
Minotaur IV Lite	-	F	Fairing	-	-	1	500.0	120	-6050	?
MSBS M51	-	1	MSBS 501	-	-	1	500.0	50	-6370	?
MSBS M51	-	2	MSBS 502	-	-	1	500.0	100	-6300	?
MSBS M51	-	3	MSBS 503	-	-	1	500.0	1000	-5500	?
MSBS M51	-	F	Nose Cone	-	-	1	500.0	100	-6300	?
Terran 1	-	1	Terran 1 St 1	-	-	1	500.0	100	-6300	?
Terran 1	-	2	Terran 1 St 2	-	-	1	500.0	500	500	?
Terran 1	-	F	Fairing	-	-	1	500.0	100	-6300	?
MR-UR-100	-	1	MR-UR-100 St 1	-	-	1	500.0	70	-6300	?
MR-UR-100	-	2	MR-UR-100 St 2	-	-	1	500.0	200	-5500	?
MR-UR-100	-	3	MR-UR-100 BR	-	-	1	500.0	1000	-4500	?
MR-UR-1000 15A16	-	1	MR-UR-100 St 1	-	-	1	500.0	70	-6300	?
MR-UR-1000 15A16	-	2	MR-UR-100 St 2	-	-	1	500.0	200	-5500	?
MR-UR-1000 15A16	-	3	MR-UR-100 BR	-	-	1	500.0	1000	-4500	?
Perimetr 15A11	-	1	Perimetr Stage 1	-	-	1	500.0	100	-6100	?

LVStages

LV_Name	LV_Variant	Stage_No	Stage_Name	Qualifier	Dummy	Multiplicity	Stage_Impulse kNs	Stage_Apogee km	Stage_Perigee km	Perigee_Qual
Perimetr 15A11										
DF-3	-	2	Perimetr Stage 2	-	-	1	500.0	1000	-5000	?
DF-3A	-	1	DF3-YF2A	-	-	1	500.0	500	-6300	?
DF-4	-	1	DF3-YF2A	-	-	1	500.0	500	-6300	?
DF-4	-	1	DF3-YF2A	-	-	1	500.0	500	-6370	?
DF-4	-	2	DF4-YF3	-	-	1	500.0	500	-6300	?
Chang Zheng 1	-	1	DF3-YF2A	-	-	1	500.0	90	-6200	?
Chang Zheng 1	-	2	DF4-YF3	-	-	1	500.0	400	-5300	?
Chang Zheng 1	-	3	GF-02	-	-	2	500.0	2400	440	?
Chang Zheng 1	-	F	Fairing	-	-	2	500.0	100	-6200	?
Chang Zheng 1D	-	1	DF3-YF2A	-	-	1	500.0	90	-6200	?
Chang Zheng 1D	-	2	DF4-YF3	-	-	1	500.0	500	-5300	?
Chang Zheng 1D	-	3	GF-02	?	-	2	500.0	100	-6200	?
Chang Zheng 1D	-	F	Fairing	-	-	2	500.0	100	-6200	?
Kuaizhou-11	-	1	KZ-11 St1	-	-	1	500.0	50	-6300	?
Kuaizhou-11	-	2	KZ-11 St2	-	-	1	500.0	200	-5500	?
Kuaizhou-11	-	3	KZ-11 St3	-	-	1	500.0	500	500	?
DF-41	-	1	DF-41 St1	-	-	1	500.0	50	-6300	?
DF-41	-	2	DF-41 St2	-	-	1	500.0	200	-5500	?
DF-41	-	3	DF-41 St3	-	-	1	500.0	1000	-4000	?
DF-31	-	1	DF-31 St1	-	-	1	500.0	50	-6300	?
DF-31	-	2	DF-31 St2	-	-	1	500.0	200	-5500	?
DF-31	-	3	DF-31 St3	-	-	1	500.0	1000	-4000	?
JL-2	-	1	DF-31 St1	-	-	1	500.0	50	-6300	?
JL-2	-	2	DF-31 St2	-	-	1	500.0	200	-5500	?
JL-2	-	3	DF-31 St3	-	-	1	500.0	1000	-4000	?
JL-3	-	1	DF-31 St1	-	-	1	500.0	50	-6300	?
JL-3	-	2	DF-31 St2	-	-	1	500.0	200	-5500	?
JL-3	-	3	DF-31 St3	-	-	1	500.0	1000	-4000	?
Chang Zheng 11	-	1	CZ-11-1	-	-	1	500.0	200	-6370	?
Chang Zheng 11	-	2	CZ-11-2	-	-	1	500.0	200	-6370	?
Chang Zheng 11	-	3	CZ-11-3	-	-	1	500.0	200	-6370	?
Chang Zheng 11	-	4	CZ-11-4	-	-	1	500.0	700	700	?
Chang Zheng 11	H	1	CZ-11-1	-	-	1	500.0	200	-6370	?
Chang Zheng 11	H	2	CZ-11-2	-	-	1	500.0	200	-6370	?
Chang Zheng 11	H	3	CZ-11-3	-	-	1	500.0	200	-6370	?
Chang Zheng 11	H	4	CZ-11-4	-	-	1	500.0	700	700	?
KT-2	-	1	DF-31 St1	-	-	1	500.0	50	-6300	?
KT-2	-	2	DF-31 St2	-	-	1	500.0	200	-5500	?
KT-2	-	3	DF-31 St3	-	-	1	500.0	1000	-4000	?
ADD TV1	d	1	ADD SLV St2	-	-	1	500.0	100	-6378	?
ADD TV1	d	2	ADD SLV St3	-	-	1	500.0	200	-6000	?
ADD TV1	d	3	ADD SLV St4	-	-	1	500.0	200	-6000	?
ADD TV1	-	1	ADD SLV St2	-	-	1	500.0	100	-6378	?
ADD TV1	-	2	ADD SLV St3	-	-	1	500.0	200	-6000	?
ADD TV1	-	3	ADD SLV St4	-	-	1	500.0	200	-6000	?
ADD TV2	-	1	ADD SLV St1	-	-	1	500.0	500	500	?
ADD TV2	-	2	ADD SLV St2	-	-	1	500.0	100	-6378	?
ADD TV2	-	3	ADD SLV St3	-	-	1	500.0	200	-6000	?
ADD TV2	-	4	ADD SLV St4	-	-	1	500.0	200	-6000	?
Hyumoo-5	-	1	ADD SLV St1	-	?	1	500.0	100	-6378	?
Hyumoo-5	-	2	ADD SLV St2	-	?	1	500.0	100	-6378	?
Trident D-5	-	1	Trident D-5 Stage 1	-	-	1	500.0	40	-6370	?
Trident D-5	-	2	Trident D-5 Stage 2	-	-	1	500.0	150	-6000	?
Trident D-5	-	3	Trident D-5 Stage 3	-	-	1	500.0	1000	-4500	?
Trident D-5	-	F	Fairing	-	-	1	500.0	150	-6000	?
ISR0 TV	-	1	ISR0 TV	-	-	1	500.0	20	-6300	?
Little Joe 1	4P	0	Recruit	-	-	4	500.0	25	-6368	?
Little Joe 1	4P	1	Pollux	-	-	4	500.0	25	-6368	?
Little Joe 1	2P	0	Recruit	-	-	2	500.0	25	-6368	?
Little Joe 1	2P	1	Pollux	-	-	2	500.0	25	-6368	?
Little Joe 1	2C	0	Recruit	-	-	2	500.0	25	-6368	?
Little Joe 1	2C	1	Castor	-	-	2	500.0	25	-6368	?
Little Joe 1	4C	0	Recruit	-	-	4	500.0	25	-6368	?
Little Joe 1	4C	1	Castor	-	-	4	500.0	25	-6368	?
Cora	-	1	Coralie	-	-	1	500.0	55	-6300	?
Cora	-	2	Astris	-	-	1	500.0	55	-6300	?
PRS-1 5Ya26	-	1	5Ya26	-	d	1	500.0	100	-6300	?
PRS-1	-	1	53T6 KV	-	-	1	500.0	100	-6300	?
PRS-1	-	P	53T6 KV	-	-	1	500.0	100	-6300	?
PRS-1M	-	1	53T6	-	-	1	500.0	100	-6300	?
PRS-1M	-	P	53T6 KV	-	-	1	500.0	100	-6300	?
Black Arrow	-	1	Black Arrow	-	-	1	500.0	92	-6291	?
Black Arrow	-	2	Black Arrow St2	-	-	1	500.0	550	-5040	?
Black Arrow	-	3	Waxwing	-	-	1	500.0	1580	550	?





LVStages

LV_Name	LV_Variant	Stage_No	Stage_Name	Qualifier	Dummy	Multiplicity	Stage_Impulse kNs	Stage_Apogee km	Stage_Perigee km	Perigee_Qual
MREM-T3c2		2	M57A1	-	-	1	500.0	200	-6350	?
RT-1		1	8K95A	-	-	1	500.0	40	-6370	?
RT-1		2	8K95B	-	-	1	500.0	100	-6300	?
RT-1		3	8K95V	-	-	1	500.0	500	-6000	?
RT-2		1	8K98A	-	-	1	500.0	40	-6370	?
RT-2		2	8K98B	-	-	1	500.0	200	-6000	?
RT-2		3	8K98V	-	-	1	500.0	1000	-4000	?
RT-2P		1	8K98PA	-	-	1	500.0	50	-6370	?
RT-2P		2	8K96A	-	-	1	500.0	200	-6000	?
RT-2M		1	8K98B	-	-	1	500.0	1000	-4000	?
RT-2M		2	8K98PA	-	-	1	500.0	50	-6370	?
RT-2M		3	8K96A	-	-	1	500.0	200	-6000	?
RT-2M		3	8K96B	-	-	1	500.0	1000	-4000	?
LauncherOne		0	B747-CG	-	-	1	500.0	12	-6378	?
LauncherOne		1	LauncherOne Stage 1	-	-	1	500.0	100	-6378	?
LauncherOne		2	LauncherOne Stage 2	-	-	1	500.0	200	200	?
RS1		1	RS1 S1	-	-	1	500.0	100	-6378	?
RS1		2	RS1 S2	-	-	1	500.0	300	300	?
Firefly Alpha		1	Firefly Alpha St1	-	-	1	500.0	100	-6378	?
Firefly Alpha		2	Firefly Alpha St2	-	-	1	500.0	500	500	?
Topol'		1	15Zh58A	-	-	1	500.0	70	-6300	?
Topol'		2	15Zh58B	-	-	1	500.0	200	-6000	?
Topol'		3	15Zh58V	-	-	1	500.0	1000	-4000	?
Topol'		F	GO	-	-	1	500.0	100	-6200	?
Topol'		P	Topol' RV	-	-	1	500.0	1000	-4000	?
Topol'-E		1	15Zh58A	-	-	1	500.0	70	-6300	?
Topol'-E		2	15Zh58B	-	-	1	500.0	200	-6000	?
Topol'-E		3	15Zh58V	-	-	1	500.0	1000	-4000	?
Topol'-E		F	GO	-	-	1	500.0	100	-6200	?
Topol'-E		P	Topol'-E RV	-	-	1	500.0	1000	-4000	?
Topol'-M		1	15Zh58MA	-	-	1	500.0	70	-6300	?
Topol'-M		2	15Zh58MB	-	-	1	500.0	200	-6000	?
Topol'-M		3	15Zh58MV	-	-	1	500.0	1000	-4000	?
Topol'-M		F	GO	-	-	1	500.0	100	-6200	?
Topol'-M		P	Topol'-M RV	-	-	1	500.0	1000	-4000	?
Topol'-M	15Zh55	1	15Zh58MA	-	-	1	500.0	70	-6300	?
Topol'-M	15Zh55	2	15Zh58MB	-	-	1	500.0	200	-6000	?
Topol'-M	15Zh55	3	15Zh58MV	-	-	1	500.0	1000	-4000	?
Topol'-M	15Zh55	F	GO	-	-	1	500.0	100	-6200	?
Topol'-M	15Zh55	P	Topol'-M RV	-	-	1	500.0	1000	-4000	?
Perimetr-RTs		1	15Zh58A	-	-	1	500.0	70	-6300	?
Perimetr-RTs		2	15Zh58B	-	-	1	500.0	200	-6000	?
Perimetr-RTs		F	GO	-	-	1	500.0	100	-6200	?
Perimetr-RTs		3	15Zh58V	-	-	1	500.0	1000	-4000	?
Perimetr-RTs		F	GO	-	-	1	500.0	100	-6200	?
Perimetr-RTs		P	Perimetr-RTs	-	-	1	500.0	1000	-4000	?
Skorost'		1	15Zh58A	-	-	1	500.0	70	-6300	?
Skorost'		2	15Zh58B	-	-	1	500.0	200	-6000	?
Skorost'		F	GO	-	-	1	500.0	100	-6200	?
Skorost'		1	15Zh58MA	-	-	1	500.0	70	-6300	?
Rubezh		2	15Zh58MB	-	-	1	500.0	200	-6000	?
Rubezh		F	GO	-	-	1	500.0	100	-6200	?
Oreshnik		1	15Zh58MA	-	-	1	500.0	70	-6300	?
Oreshnik		2	15Zh58MB	-	-	1	500.0	200	-6000	?
Oreshnik		F	GO	-	-	1	500.0	100	-6200	?
Yars		1	15Zh58MA	-	-	1	500.0	70	-6300	?
Yars		2	15Zh58MB	-	-	1	500.0	200	-6000	?
Yars		3	15Zh58MV	-	-	1	500.0	1000	-4000	?
Yars		F	GO	-	-	1	500.0	100	-6200	?
Yars-E		1	15Zh58MA	-	-	1	500.0	70	-6300	?
Yars-E		2	15Zh58MB	-	-	1	500.0	200	-6000	?
Yars-E		3	15Zh58MV	-	-	1	500.0	1000	-4000	?
Yars-E		F	GO	-	-	1	500.0	100	-6200	?
Yars-M	15Zh80	1	15Zh58MA	-	-	1	500.0	70	-6300	?
Yars-M	15Zh80	2	15Zh58MB	-	-	1	500.0	200	-6000	?
Yars-M	15Zh80	3	15Zh58MV	-	-	1	500.0	1000	-4000	?
Yars-M	15Zh80	F	GO	-	-	1	500.0	100	-6200	?
Yars-M	15Zh81	1	15Zh58MA	-	-	1	500.0	70	-6300	?
Yars-M	15Zh81	2	15Zh58MB	-	-	1	500.0	200	-6000	?
Yars-M	15Zh81	3	15Zh58MV	-	-	1	500.0	1000	-4000	?
Yars-M	15Zh81	F	GO	-	-	1	500.0	100	-6200	?
Yars 15Zh65M		1	15Zh58MA	-	-	1	500.0	70	-6300	?
Yars 15Zh65M		2	15Zh58MB	-	-	1	500.0	200	-6000	?
Yars 15Zh65M		3	15Zh58MV	-	-	1	500.0	1000	-4000	?

LVStages

LV_Name	LV_Variant	Stage_No	Stage_Name	Qualifier	Dummy	Multiplicity	Stage_Impulse kNs	Stage_Apogee km	Stage_Perigee km	Perigee_Qual	
Yars 15Zh65M	-	F	GO	-	-	1	500.0	100	-6200	?	
Bulava	-	1	15Zh65MA	-	-	1	500.0	70	-6300	?	
Bulava	-	2	15Zh65MB	-	-	1	500.0	200	-6000	?	
Bulava	-	3	15Zh65MV	-	-	1	500.0	1000	-4000	?	
Start	-	1	15Zh65A	-	-	1	500.0	50	-6300	?	
Start	-	2	15Zh65B	-	-	1	500.0	100	-5200	?	
Start	-	3	15Zh65B	-	-	1	500.0	150	-4500	?	
Start	-	4	15Zh65V	-	-	1	500.0	600	-2500	?	
Start	-	5	Start	-	-	1	500.0	600	600	?	
Start	-	6	DS	-	-	1	500.0	600	600	?	
Start-1	-	1	15Zh65A	-	-	1	500.0	55	-6320	?	
Start-1	-	2	15Zh65B	-	-	1	500.0	150	-5800	?	
Start-1	-	3	15Zh65V	-	-	1	500.0	600	-4500	?	
Start-1	-	4	Start	-	-	1	500.0	600	600	?	
Start-1	-	5	DS	-	-	1	500.0	600	600	?	
Start-1	-	F	Fairing	-	-	2	500.0	600	-4500	?	
Start-1.2	-	1	15Zh65A	-	-	1	500.0	55	-6300	?	
Start-1.2	-	2	15Zh65B	-	-	1	500.0	150	-5800	?	
Start-1.2	-	3	15Zh65V	-	-	1	500.0	500	-4500	?	
Start-1.2	-	4	Start	-	-	1	500.0	500	500	?	
Start-1.2	-	5	DS	-	-	1	500.0	500	500	?	
Start-1.2	-	F	Fairing	-	-	2	500.0	600	-4500	?	
RT-20P	-	1	8K99A	-	-	1	500.0	100	-6100	?	
RT-20P	-	2	8K94	-	-	1	500.0	1000	-4000	?	
J-1	-	1	H-11 SRB	-	-	1	500.0	95	-6360	?	
J-1	-	2	H-23	-	-	1	500.0	110	-5450	?	
Pioneer	-	1	RT-21 St1	-	-	1	500.0	70	-6370	?	
Pioneer	-	2	RT-21 St2	-	-	1	500.0	500	-6300	?	
Pioneer UTKh	-	1	RT-21 St1	-	-	1	500.0	70	-6370	?	
Pioneer UTKh	-	2	RT-21 St2	-	-	1	500.0	500	-6300	?	
Pioneer-3	-	1	RT-21 St1	-	-	1	500.0	70	-6370	?	
Pioneer-3	-	2	RT-21 St2	-	-	1	500.0	500	-6300	?	
Temp-2S	-	1	RT-21 St1	-	-	1	500.0	70	-6100	?	
Temp-2S	-	2	RT-21 St2	-	-	1	500.0	300	-5500	?	
Temp-2S	-	3	RT-21 St3	-	-	1	500.0	1000	-4000	?	
Jupiter A	-	1	Redstone	-	-	1	500.0	90	-6230	?	
Redstone	-	1	Redstone	-	-	1	500.0	90	-6230	?	
Redstone MRLV	-	1	Redstone MRLV	-	-	1	500.0	200	-6200	?	
SPARTA	-	1	Redstone	-	-	1	500.0	90	-6100	?	
SPARTA	-	2	Antares 2	-	-	1	500.0	190	-5500	?	
SPARTA	-	3	BE-3A5	-	-	1	500.0	190	-5500	?	
Jupiter C	-	1	Redstone	-	-	1	500.0	360	-6200	?	
Jupiter C	-	2	Cluster Stage 2	-	-	1	500.0	363	-5500	?	
Jupiter C	-	3	Cluster Stage 3	-	-	1	500.0	1000	-4094	?	
Jupiter C	-	1	Redstone	-	-	1	500.0	360	-6200	?	
Jupiter C	JunoI	2	Cluster Stage 2	-	-	1	500.0	360	-5500	?	
Jupiter C	JunoI	3	Cluster Stage 3	-	-	1	500.0	360	-3600	?	
Jupiter C	JunoI	4	RTV Motor	-	-	1	500.0	2500	360	-5500	?
Hwasong-14	-	1	Hwasong-12 Stage 1	-	-	1	500.0	50	-6370	?	
Hwasong-14	-	2	Hwasong-14 Stage 2	-	-	1	500.0	3000	-6370	?	
Hwasong-12	-	1	Hwasong-12 Stage 1	-	-	1	500.0	2000	-6370	?	
Hwasong-12	A	1	Hwasong-12A Stage 1	-	-	1	500.0	2000	-6370	?	
Hwasong-12A	-	1	Hwasong-8 Stage 1	-	-	1	500.0	2000	-6370	?	
Falcon 1	-	1	Falcon 1	-	-	1	500.0	100	-5500	?	
Falcon 1	-	2	Falcon 1 St 2	-	-	1	500.0	600	600	?	
Falcon 1	-	F	Falcon 1 Fairing	-	-	1	500.0	150	-5000	?	
Minuteman 1A	T	1	M56A1	-	-	1	500.0	1	-6378	?	
Minuteman 1A	-	1	M56A1	-	-	1	500.0	72	-6249	?	
Minuteman 1A	-	2	M56A1	-	-	1	500.0	328	-5630	?	
Minuteman 1A	-	3	M57A1	-	-	1	500.0	1100	-3470	?	
Minuteman 1B	-	1	M55E1	-	-	1	500.0	72	-6249	?	
Minuteman 1B	-	2	M56A1	-	-	1	500.0	328	-5630	?	
Minuteman 1B	-	3	M57A1	-	-	1	500.0	1100	-3470	?	
Minuteman 2	-	1	M55E1	-	-	1	500.0	75	-6250	?	
Minuteman 2	-	2	SR19AJ1	-	-	1	500.0	350	-5600	?	
Minuteman 2	-	3	M57A1	-	-	1	500.0	1300	-3500	?	
Minotaur II	-	1	M55E1	-	-	1	500.0	75	-6250	?	
Minotaur II	-	2	SR19AJ1	-	-	1	500.0	350	-5600	?	
Minotaur II	-	3	M57A1	-	-	1	500.0	1300	-3500	?	
Minotaur II+	-	1	M55E1	-	-	1	500.0	75	-6250	?	
Minotaur II+	-	2	SR19AJ1	-	-	1	500.0	350	-5600	?	
Minotaur II+	-	3	SR73AJ1-ATK	-	-	1	500.0	1300	-3500	?	
Minuteman 3	-	1	M55E1	-	-	1	500.0	75	-6250	?	

LVStages

LV_Name	LV_Variant	Stage_No	Stage_Name	Qualifier	Dummy	Multiplicity	Stage_Impulse kNs	Stage_Apogee km	Stage_Perigee km	Perigee_Qual
Minuteman 3	-	2	SR19AJ1	-	-	1	500.0	350	-5600	?
Minuteman 3	-	3	SR73AJ1	-	-	1	500.0	1200	-3500	?
Minuteman 3	-	4	PBS	-	-	1	500.0	1300	-3500	?
Minuteman 3	-	F	Fairing	-	-	1	500.0	350	-5600	?
Minuteman 3	PRP	1	M55E1-ATK	-	-	1	500.0	75	-6250	?
Minuteman 3	PRP	2	SR19AJ1-ATK	-	-	1	500.0	350	-5600	?
Minuteman 3	PRP	3	SR73AJ1-ATK	-	-	1	500.0	1200	-3500	?
Minuteman 3	PRP	4	PBS	-	-	1	500.0	1300	-3500	?
Minuteman 3	PRP	F	Fairing	-	-	1	500.0	350	-5600	?
Minuteman 1	-	1	M55E1	-	-	1	500.0	50	-6370	?
Minuteman 1	-	2	SR19AJ1	-	d	1	500.0	50	-6370	?
Minuteman 1	-	3	M57A1	-	d	1	500.0	50	-6370	?
HDE	-	1	M55E1	-	-	1	500.0	70	-6370	?
HDE	-	2	M56A1	-	-	1	500.0	200	-6370	?
Minotaur I	-	1	M55E1	-	-	1	500.0	70	-6300	?
Minotaur I	-	2	SR19AJ1	-	-	1	500.0	300	-6120	?
Minotaur I	-	3	Orion 50XL	-	-	1	500.0	700	-4300	?
Minotaur I	-	4	Orion 38	-	-	1	500.0	700	700	?
Minotaur I	-	F	Fairing	-	-	2	500.0	200	-6100	?
Minotaur I Lite	-	1	M55E1	-	-	1	500.0	70	-6300	?
Minotaur I Lite	-	2	SR19AJ1	-	-	1	500.0	300	-6120	?
Minotaur I Lite	-	3	Orion 50XL	-	-	1	500.0	700	-4300	?
Minotaur I Lite	-	F	Fairing	-	-	2	500.0	200	-6100	?
R-5	-	1	R-5	-	-	1	500.0	500	-6200	?
R-5A	-	1	R-5	-	-	1	500.0	500	-6200	?
R-5B	-	1	R-5	-	-	1	500.0	500	-6200	?
R-5M	-	1	R-5	-	-	1	500.0	500	-6200	?
R-5V	-	1	R-5	-	-	1	500.0	500	-6200	?
R-6 VAO	-	1	R-6	-	-	1	500.0	500	-6200	?
R-12	-	1	R-12	-	-	1	500.0	500	-6200	?
R-12U	-	1	R-12	-	-	1	500.0	500	-6200	?
K63	-	1	R-12	-	-	1	500.0	500	-6200	?
K63D	-	1	R-12	-	-	1	500.0	500	-6200	?
Kosmos 63S1	-	1	R-12	-	-	1	500.0	500	-6200	?
Kosmos 63S1	-	2	S1	-	-	1	500.0	100	-6000	?
Kosmos 63S1	-	F	Fairing	-	-	2	500.0	200	200	?
Kosmos 11K63	-	1	R-12	-	-	1	500.0	100	-6000	?
Kosmos 11K63	-	2	S1M	-	-	1	500.0	200	-6000	?
Kosmos 11K63	-	F	Fairing	-	-	2	500.0	100	-6000	?
R-UNK	-	1	R-UNK	-	-	1	500.0	400	-6378	?
DF-1	-	1	DF-1	-	-	1	500.0	100	-6370	?
DF-2	-	1	DF-2	-	-	1	500.0	200	-6370	?
DF-2A	-	1	DF-2A	-	-	1	500.0	200	-6370	?
A-4	-	1	V-2	-	-	1	500.0	100	-6300	?
A-4b	-	1	V-2	-	-	1	500.0	80	-6300	?
V-2	-	1	V-2	-	-	1	500.0	100	-6260	?
V-2	-	1	V-2	-	-	1	500.0	100	-6260	?
V-2	US	1	V-2	-	-	1	500.0	100	-6260	?
Hermes II	-	1	V-2-Ram	-	-	1	500.0	150	-6370	?
Bumper-#AC	-	1	V-2	-	-	1	500.0	100	-6370	?
Bumper-#AC	-	2	MAC Corporal	-	-	1	500.0	500	-6370	?
R-1	-	1	R-1	-	-	1	500.0	100	-6280	?
R-1 8A11	-	1	R-1	-	-	1	500.0	100	-6280	?
A-1	-	1	A-1	-	-	1	500.0	100	-6300	?
R-1A	-	1	R-1	-	-	1	500.0	100	-6280	?
R-1B	-	1	R-1	-	-	1	500.0	100	-6280	?
R-1V	-	1	R-1	-	-	1	500.0	100	-6280	?
R-1D	-	1	R-1	-	-	1	500.0	100	-6280	?
R-1E	-	1	R-1	-	-	1	500.0	100	-6280	?
R-1E (A-1)	-	1	R-1	-	-	1	500.0	100	-6280	?
R-1UK	-	1	R-1	-	-	1	500.0	100	-6280	?
R-2	-	1	R-2	-	-	1	500.0	200	-6250	?
R-2A	-	1	R-2	-	-	1	500.0	200	-6250	?
R-2e	-	1	R-2	-	-	1	500.0	200	-6250	?
R-2R	-	1	R-2	-	-	1	500.0	200	-6250	?
R-31	-	1	R-31	-	-	1	500.0	40	-6300	?
R-31	-	2	R-31 St 1	-	-	1	500.0	100	-6100	?
R-31	-	3	R-31 St 2	-	-	1	500.0	100	-6100	?
R-31	-	1	R-31 BS	-	-	1	500.0	1000	-4000	?
CE-5 SSQ	-	1	CE-5 SSQ	-	-	1	500.0	200	200	?
Zyb	-	1	R-27	-	-	1	500.0	500	-6000	?
Zyb R-27U	-	1	R-27	-	-	1	500.0	500	-6000	?
Zyb R-27K	-	1	R-27	-	-	1	500.0	500	-6000	?
Hwasong-10	-	1	Hwasong 10	-	-	1	500.0	1000	-6100	?
Khorramshahr	-	1	Khorramshahr	-	-	1	500.0	1000	-6100	?

LVStages

LV_Name	LV_Variant	Stage_No	Stage_Name	Qualifier	Dummy	Multiplicity	Stage_Impulse kNs	Stage_Apogee km	Stage_Perigee km	Perigee_Qual
Zoljanah	-	1	Zoljanah	-	-	1	500.0	15	-6100	?
Zoljanah	-	2	Zoljanah	-	-	1	500.0	500	-6100	?
Zoljanah	-	3	Safir Stage 2	-	-	1	500.0	500	500	?
Bukgnekseong	-	1	KN-11	-	-	1	500.0	1000	-6100	?
Bukgnekseong	-	2	KN-11-2	-	-	1	500.0	1000	-6100	?
Bukgnekseong-2	-	1	KN-11	-	-	1	500.0	1000	-6100	?
Bukgnekseong-2	-	2	KN-11-2	-	-	1	500.0	1000	-6100	?
Bukgnekseong-3	-	1	KN-11	-	-	1	500.0	1000	-6100	?
Bukgnekseong-3	-	2	KN-11-2	-	-	1	500.0	1000	-6100	?
MSES M011	-	1	SEP 904	-	-	1	500.0	50	-6370	?
MSES M011	-	2	Rita I	-	d	1	500.0	50	-6370	?
MSES M012	-	1	SEP 904	-	-	1	500.0	50	-6370	?
MSES M012	-	2	Rita I	-	-	1	500.0	50	-6000	?
MSES M013	-	1	SEP 904	-	-	1	500.0	50	-6370	?
MSES M013	-	2	Rita I	-	-	1	500.0	500	-6000	?
MSES M112	-	1	SEP 901	-	-	1	500.0	50	-6370	?
MSES M112	-	2	Rita I	-	d	1	500.0	50	-6370	?
MSES M1	-	1	SEP 904	-	-	1	500.0	50	-6370	?
MSES M1	-	2	Rita I	-	-	1	500.0	500	-5500	?
MSES M2	-	1	SEP 904	-	-	1	500.0	50	-6370	?
MSES M2	-	2	Rita II	-	-	1	500.0	600	-5500	?
MSES M20	-	1	SEP 904	-	-	1	500.0	50	-6370	?
MSES M20	-	2	Rita II	-	-	1	500.0	600	-5300	?
SSES S112	-	1	SEP 901	-	-	1	500.0	50	-6300	?
SSES S112	-	2	SEP 903	-	d	1	500.0	50	-6300	?
SSES S01	-	1	SEP 901	-	-	1	500.0	50	-6300	?
SSES S01	-	2	SEP 903	-	-	1	500.0	500	-6000	?
SSES S02	-	1	SEP 902	-	-	1	500.0	100	-6300	?
SSES S02	-	2	SEP 903	-	-	1	500.0	1000	-6000	?
SSES S2	-	1	SEP 902	-	-	1	500.0	100	-6300	?
SSES S2	-	2	SEP 903	-	-	1	500.0	1000	-6000	?
SSES S3	-	1	SEP 902	-	-	1	500.0	100	-6300	?
SSES S3	-	2	Rita II	-	-	1	500.0	1000	-6000	?
Spaceship One	-	0	White Knight	-	-	1	500.0	12	-6378	?
Spaceship One	-	1	Spaceship One	-	-	1	500.0	110	-6377	?
Spaceship Two	-	0	White Knight 2	-	-	1	500.0	12	-6378	?
Spaceship Two	-	1	Spaceship Two	-	-	1	500.0	110	-6377	?
RT-15	-	1	8K96A	-	-	1	500.0	100	-6300	?
RT-15	-	2	8K96B	-	-	1	500.0	1000	-5000	?
RT-15M	-	1	8K96A	-	-	1	500.0	100	-6300	?
RT-15M	-	2	8K96B	-	-	1	500.0	1000	-5000	?
Kestrel I	-	1	Kestrel I Stage 1	-	-	1	500.0	20	-6370	?
Kestrel I	-	2	Kestrel I Stage 2	-	-	1	500.0	350	-6370	?
Hapith I	-	1	Kestrel I Stage 1	-	-	1	500.0	20	-6370	?
Hapith I	-	2	Kestrel I Stage 2	-	-	1	500.0	350	-6370	?
ETV	-	0	SB-310	-	-	8	500.0	10	-6370	?
ETV	-	1	M-10	-	-	1	500.0	50	-6300	?
ETV	-	2	LE-3	-	-	1	500.0	150	-6300	?
Mu-1	-	0	SB-310	-	-	8	500.0	10	-6378	?
Mu-1	-	1	M-10	-	-	1	500.0	54	-6370	?
Mu-1	-	2	M-20	-	d	1	500.0	34	-6370	?
Mu-1	-	3	M-30	-	d	1	500.0	34	-6370	?
Mu-1	-	4	M-40	-	d	1	500.0	34	-6370	?
Mu-1	-	F	Fairing	-	-	2	500.0	34	-6370	?
Mu-3D	-	0	SB-310	-	-	8	500.0	10	-6378	?
Mu-3D	-	1	M-10	-	-	1	500.0	75	-6300	?
Mu-3D	-	2	M-20	-	-	1	500.0	160	-5500	?
Mu-3D	-	3	M-30	-	d	1	500.0	160	-5500	?
Mu-3D	-	4	M-40	-	-	1	500.0	160	-5500	?
Mu-4S	-	F	Fairing	-	-	2	500.0	160	-5500	?
Mu-4S	-	1	SB-310	-	-	8	5624.0	10	-6370	?
Mu-4S	-	2	M-10	-	-	1	44950.0	75	-6300	?
Mu-4S	-	3	M-20	-	-	1	18810.0	280	-5000	?
Mu-4S	-	4	M-30	-	-	1	5376.0	1000	-1670	?
Mu-4S	-	F	Fairing	-	-	2	1060.0	1000	1000	?
Mu-3C	-	0	SB-310	-	-	8	1060.0	10	-6378	?
Mu-3C	-	1	M-10	-	-	1	1060.0	120	-6150	?
Mu-3C	-	2	M-22IVC	-	-	1	1060.0	290	-5300	?
Mu-3C	-	3	M-3A	-	-	1	1060.0	3000	280	?
Mu-3C	-	F	Fairing	-	-	2	1060.0	3000	-5300	?
Mu-3H	-	0	SB-310	-	-	8	1060.0	10	-6378	?
Mu-3H	-	1	M-13	-	-	1	1060.0	120	-6000	?

LVStages

LV_Name	LV_Variant	Stage_No	Stage_Name	Qualifier	Dummy	Multiplicity	Stage_Impulse kNs	Stage_Apogee km	Stage_Perigee km	Perigee_Qual
Mu-3H	-	2	M-22TVC	-	-	1	1060.0	328	-4450	?
Mu-3H	-	3	M-3A	-	-	1	1060.0	800	300	?
Mu-3H	-	4	KM-H	-	-	1	1060.0	3800	800	?
Mu-3H	-	F	Fairing	-	-	2	1060.0	300	-4450	?
Mu-3S	-	0	SB-310	-	-	8	1060.0	10	-6378	?
Mu-3S	-	1	M-13TVC	-	-	1	1060.0	120	-6000	?
Mu-3S	-	2	M-22TVC	-	-	1	1060.0	520	-4900	?
Mu-3S	-	3	M-3A	-	-	1	1060.0	500	500	?
Mu-3S	-	F	Fairing	-	-	2	1060.0	500	-4900	?
Mu-3S-II	-	0	SB-735	-	-	2	1060.0	10	-6378	?
Mu-3S-II	-	1	M-13	-	-	1	1060.0	120	-6000	?
Mu-3S-II	-	2	M-23	-	-	1	1060.0	240	-4900	?
Mu-3S-II	-	3	M-3B	-	-	1	1060.0	400	200	?
Mu-3S-II	-	F	Fairing	-	-	2	1060.0	240	-4900	?
Emeraude VE121	-	1	Emeraude	-	-	1	1060.0	200	-6370	?
Saphir VE231	-	1	Emeraude	-	-	1	1060.0	50	-6300	?
Saphir VE231	-	2	Topaze	-	-	1	1060.0	1000	-5000	?
Diamant A	-	1	Emeraude	-	-	1	1060.0	120	-6260	?
Diamant A	-	2	Topaze	-	-	1	1060.0	530	-5830	?
Diamant A	-	3	P064	-	-	1	1060.0	1800	530	?
Diamant A	-	F	Fairing	-	-	2	1060.0	530	-5830	?
Diamant B	-	1	Amethyste	-	-	1	1060.0	120	-6260	?
Diamant B	-	2	Topaze	-	-	1	1060.0	270	-5800	?
Diamant B	-	F	P068	-	-	1	1060.0	10	-6378	?
Diamant B	-	F	Fairing	-	-	2	1060.0	200	-6370	?
Diamant BP.4	-	1	Amethyste	-	-	1	1060.0	120	-6260	?
Diamant BP.4	-	3	Rita I	-	-	1	1060.0	270	-5600	?
Diamant BP.4	-	F	P068	-	-	1	1060.0	1200	270	?
Diamant BP.4	-	F	Fairing	-	-	2	1060.0	500	-5600	?
Polaris AX	-	1	A1P	-	-	1	1060.0	10	-6378	?
Polaris AX	-	2	A1P Stage 2	-	-	1	1060.0	200	-6370	?
Polaris A1	-	1	A1P	-	-	1	1060.0	10	-6378	?
Polaris A1	-	2	A1P Stage 2	-	-	1	1060.0	50	-6370	?
Polaris A2E	-	1	A2E	-	-	1	1060.0	70	-6300	?
Polaris A2E	-	2	A2E Stage 2	-	-	1	1060.0	1000	-6000	?
Polaris A2	-	1	A2P	-	-	1	1060.0	500	-6300	?
Polaris A2	-	2	A2P Stage 2	-	-	1	1060.0	20	-6378	?
Polaris A3	-	1	A3P	-	-	1	1060.0	50	-6370	?
Polaris A3	-	2	X-260	-	-	1	1060.0	1000	-6000	?
Polaris A3	-	F	Fairing	-	-	1	1060.0	50	-6370	?
Polaris A3	A3T	1	A3P	-	-	1	1060.0	50	-6370	?
Polaris A3	A3T	2	X-260	-	-	1	1060.0	1000	-6000	?
Polaris A3	A3T	F	Fairing	-	-	1	1060.0	50	-6370	?
STARS	-	1	A3P	-	-	1	1060.0	20	-6378	?
STARS	-	2	X-260	-	-	1	1060.0	500	-6000	?
STARS	-	3	Orbus 1	-	-	1	1060.0	1000	-5500	?
Alfa	-	1	Alfa	-	-	1	1060.0	50	-6300	?
Squirt	-	1	Squirt St 1	-	-	1	1060.0	1	-6378	?
Squirt	-	2	Squirt St 2	-	-	1	1060.0	1	-6378	?
Sprint ABM	-	1	X-265	-	-	1	1060.0	1	-6378	?
Sprint ABM	-	2	X-271	-	-	1	1060.0	10	-6370	?
HEDI	-	1	X-265	-	-	1	1060.0	1	-6370	?
HEDI	-	2	X-271	-	-	1	1060.0	10	-6370	?
Kuryer	-	1	15Zn59A	-	-	1	1060.0	10	-6378	?
Kuryer	-	2	15Zn59B	-	-	1	1060.0	100	-6378	?
Kuryer	-	3	15Zn59V	-	-	1	1060.0	1000	-6378	?
Shuang Quxian 1	-	1	Hyperbola-1 Stage 1	-	-	1	1060.0	50	-6300	?
Shuang Quxian 1	-	2	Hyperbola-1 Stage 2	-	-	1	1060.0	50	-6300	?
Shuang Quxian 1	-	3	Hyperbola-1 Stage 3	-	-	1	1060.0	500	-2000	?
Shuang Quxian 1	-	4	Hyperbola-1 Stage 4	-	-	1	1060.0	500	500	?
Shuang Quxian 1	2	1	Hyperbola-1 Stage 1	-	-	1	1060.0	50	-6300	?
Shuang Quxian 1	2	2	Hyperbola-1 Stage 2	-	-	1	1060.0	50	-6300	?
Shuang Quxian 1	2	3	Hyperbola-1B Stage 3	-	-	1	1060.0	500	-2000	?
Shuang Quxian 1	2	4	Hyperbola-1B Stage 4	-	-	1	1060.0	500	500	?
Shuang Quxian 1	3	1	Hyperbola-1B Stage 1	-	-	1	1060.0	50	-6300	?
Shuang Quxian 1	3	2	Hyperbola-1B Stage 2	-	-	1	1060.0	50	-6300	?
Shuang Quxian 1	3	3	Hyperbola-1B Stage 3	-	-	1	1060.0	500	-2000	?
Shuang Quxian 1	3	4	Hyperbola-1B Stage 4	-	-	1	1060.0	500	500	?
Shuang Quxian 1	S	1	Sq-IS	-	-	1	1060.0	100	-6378	?
Gushenxing 1	-	1	GS-1	-	-	1	1060.0	100	-6378	?
Gushenxing 1	-	2	GS-2	-	-	1	1060.0	200	-5000	?
Gushenxing 1	-	3	GS-3	-	-	1	1060.0	500	-2000	?
Gushenxing 1	-	4	Edge	-	-	1	1060.0	500	500	?

LVStages

LV_Name	LV_Variant	Stage_No	Stage_Name	Qualifier	Dummy	Multiplicity	Stage_Impulse kNs	Stage_Apogee km	Stage_Perigee km	Perigee_Qual
Gushenxing 1	1	1	GS-1A	-	-	1	1060.0	100	-6378	?
Gushenxing 1	1	2	GS-2	-	-	1	1060.0	200	-5000	?
Gushenxing 1	1	3	GS-3A	-	-	1	1060.0	500	-2000	?
Gushenxing 1	1	4	Edge	-	-	1	1060.0	500	500	?
Gushenxing 1	S	1	GS-1A	-	-	1	1060.0	100	-6378	?
Gushenxing 1	S	2	GS-2	-	-	1	1060.0	200	-5000	?
Gushenxing 1	S	3	GS-3A	-	-	1	1060.0	500	-2000	?
Gushenxing 1	S	4	Edge	-	-	1	1060.0	500	500	?
Kairos	-	1	Kairos Stage 1	-	-	1	1060.0	50	-6300	?
Kairos	-	2	Kairos Stage 2	-	-	1	1060.0	200	-6300	?
Kairos	-	3	Kairos Stage 3	-	-	1	1060.0	200	-5000	?
Kairos	-	4	Kairos PBS	-	-	1	1060.0	500	500	?
KT-1	-	1	DF-21	-	-	1	1060.0	50	-6300	?
KT-1	-	2	DF-21 St2	-	-	1	1060.0	200	-5000	?
KT-1	-	3	KT-1 St3	-	-	1	1060.0	200	200	?
KT-1	-	4	KT-1 St4	-	-	1	1060.0	200	200	?
Kuaizhou	-	1	KZ-1A St1	-	-	1	1060.0	50	-6300	?
Kuaizhou	-	2	DF-21 St2	-	-	1	1060.0	200	-5000	?
Kuaizhou	-	3	KZ-1 St3	-	-	1	1060.0	200	200	?
Kuaizhou	-	4	KZ-1 St4	-	-	1	1060.0	200	200	?
JL-1	-	1	DF-21	-	-	1	1060.0	100	-6300	?
JL-1	-	2	DF-21 St2	-	-	1	1060.0	500	-6300	?
DF-21	-	1	DF-21	-	-	1	1060.0	100	-6300	?
DF-21	-	2	DF-21 St2	-	-	1	1060.0	1000	-5000	?
DF-26	-	1	DF-26	-	-	1	1060.0	200	-6378	?
DF-26	-	2	DF-26	-	-	1	1060.0	200	-6378	?
DF-27	-	1	DF-27	-	-	1	1060.0	200	-6378	?
DF-27	-	2	DF-27	-	-	1	1060.0	200	-6378	?
Zhuque-1	-	1	DF-26	-	-	1	1060.0	200	-6378	?
Zhuque-1	-	2	DF-26	-	-	1	1060.0	200	-6378	?
Zhuque-1	-	3	ZQ-1 Stage 3	-	-	1	1060.0	200	-6378	?
Shaheen 2	-	1	Shaheen 2 St 1	-	-	1	1060.0	80	-6370	?
Shaheen 2	-	2	Shaheen 2 St 2	-	-	1	1060.0	300	-6300	?
Shaheen 3	-	1	Shaheen 3 St 1	-	-	1	1060.0	80	-6370	?
Shaheen 3	-	2	Shaheen 3 St 2	-	-	1	1060.0	300	-6300	?
Ababeel	-	1	DF-21	-	-	1	1060.0	80	-6370	?
Ababeel	-	2	Shaheen 3 St 2	-	-	1	1060.0	300	-6300	?
Ababeel	-	3	Ababeel St 3	-	-	1	1060.0	300	-6300	?
Jericho II	-	1	Jericho II	-	-	1	1060.0	300	-6370	?
Jericho III	-	1	Jericho IIIA1	-	-	1	1060.0	100	-6370	?
Jericho III	-	2	Jericho IIIA2	-	-	1	1060.0	300	-6370	?
Shavit	-	1	ATSM-9	-	-	1	1060.0	100	-6370	?
Shavit	-	2	ATSM-9	-	-	1	1060.0	250	-5740	?
Shavit	-	3	AUS-51	-	-	1	1060.0	700	250	?
Shavit	-	F	Fairing	-	-	2	1060.0	250	-5740	?
Shavit 1	-	1	Shavit 1	-	-	1	1060.0	100	-6370	?
Shavit 1	-	2	ATSM-9	-	-	1	1060.0	250	-5740	?
Shavit 1	-	3	AUS-51	-	-	1	1060.0	700	250	?
Shavit 1	-	F	Fairing	-	-	2	1060.0	250	-5740	?
Shavit 2	-	1	Shavit 1	-	-	1	1060.0	100	-6370	?
Shavit 2	-	2	ATSM-9	-	-	1	1060.0	250	-5740	?
Shavit 2	-	3	AUS-51	-	-	1	1060.0	700	250	?
Shavit 2	-	F	Fairing	-	-	2	1060.0	250	-5740	?
Arrow 1	-	1	IAI Arrow-1	-	-	1	1060.0	20	-6378	?
RSA-3	-	1	RSA-3-1	-	-	1	1060.0	40	-6370	?
RSA-3	-	2	RSA-3-2	-	-	1	1060.0	100	-6300	?
RSA-3	-	3	RSA-3-3	-	-	1	1060.0	300	-6300	?
RSA-3	d	1	RSA-3-1	-	d	1	1060.0	100	-6300	?
RSA-3	d	2	RSA-3-2	-	d	1	1060.0	100	-6300	?
RSA-3	d	3	RSA-3-3	-	d	1	1060.0	100	-6300	?
Astra Rocket 3.1	-	1	Astra Stage 1	-	-	1	1060.0	100	-6370	?
Astra Rocket 3.1	-	2	Astra Stage 2	-	-	1	1060.0	300	300	?
Astra Rocket 3.2	-	1	Astra Stage 1	-	-	1	1060.0	100	-6370	?
Astra Rocket 3.2	-	2	Astra Stage 2	-	-	1	1060.0	300	300	?
Astra Rocket 3.3	-	1	Astra 3.3 Stage 1	-	-	1	1060.0	100	-6370	?
Astra Rocket 3.3	-	2	Astra 3.3 Stage 2	-	-	1	1060.0	300	300	?
Storm-2	-	1	SR19AJ1	-	-	1	1060.0	100	-6350	?
SR19	-	1	SR19AJ1	-	-	1	1060.0	100	-6300	?
AltAir	-	1	SR19AJ1	-	-	1	1060.0	100	-6300	?

LVStages

LV_Name	LV_Variant	Stage_No	Stage_Name	Qualifier	Dummy	Multiplicity	Stage_Impulse kNs	Stage_Apogee km	Stage_Perigee km	Perigee_Qual
eMRBM	-	0	C-17	-	-	1	1060.0	10	-6378	?
eMRBM	-	1	SR19	-	-	1	1060.0	70	-6100	?
eMRBM	-	2	SR19	-	-	1	1060.0	300	-5500	?
MRBM Target	-	1	SR19	-	-	1	1060.0	70	-6100	?
MRBM Target	-	2	SR19	-	-	1	1060.0	300	-5500	?
eMRBM-T1	-	0	MLRS	-	-	2	1060.0	5	-6100	?
eMRBM-T1	-	1	SR19	-	-	1	1060.0	70	-6100	?
eMRBM-T1	-	2	SR19	-	-	1	1060.0	300	-5500	?
Janus	-	0	MLRS	-	-	2	1060.0	5	-6100	?
Janus	-	1	SR19	-	-	1	1060.0	70	-6370	?
Janus	-	2	SR19	-	-	1	1060.0	300	-6370	?
MRBM-T1	-	0	C-17	-	-	1	1060.0	10	-6378	?
MRBM-T1	-	1	SR19	-	-	1	1060.0	5	-6100	?
MRBM-T1	-	2	SR19	-	-	1	1060.0	300	-6370	?
MRBM-T2	-	0	C-17	-	-	1	1060.0	10	-6378	?
MRBM-T2	-	1	SR19	-	-	1	1060.0	5	-6100	?
MRBM-T2	-	2	SR19	-	-	1	1060.0	300	-6370	?
MRBM-T3	-	1	SR19	-	-	1	1060.0	5	-6100	?
MRBM-T3	-	2	SR73AJI-ATK	-	-	1	1060.0	70	-6100	?
SR19/SR19	-	0	MLRS	-	-	2	1060.0	5	-6100	?
SR19/SR19	-	1	SR19	-	-	1	1060.0	70	-6100	?
SR19/SR19	-	2	SR19	-	-	1	1060.0	300	-5500	?
LRLT	-	0	C-17	-	-	1	1060.0	10	-6378	?
LRLT	-	1	SR19	-	-	1	1060.0	50	-6300	?
LRLT	-	2	SR19	-	-	1	1060.0	300	-6300	?
E-LRLT	-	3	Orbus 1A	-	-	1	1060.0	300	-6300	?
E-LRLT	-	0	C-17	-	-	1	1060.0	10	-6378	?
SRALT	-	1	SR19	-	-	1	1060.0	50	-6300	?
SRALT	-	2	SR19	-	-	1	1060.0	300	-6300	?
Hera	-	1	SR19AJ1	-	-	1	1060.0	70	-6370	?
Hera	-	2	M57A1	-	-	1	1060.0	300	-6370	?
Juno	-	1	SR19AJ1	-	-	1	1060.0	70	-6370	?
Juno	-	2	M57A1	-	-	1	1060.0	300	-6370	?
Minuteman 2 PLV	-	1	SR19AJ1	-	-	1	1060.0	70	-6200	?
Minuteman 2 PLV	-	2	M57A1	-	-	1	1060.0	230	-5500	?
R-21	-	1	R-21	-	-	1	1060.0	300	-6200	?
R-13	-	1	R-13	-	-	1	1060.0	150	-6300	?
K-4	-	1	K-4 Booster	-	-	1	1060.0	5	-6378	?
K-4	-	2	K-4 Stage 2	-	-	1	1060.0	200	-6300	?
PDV Mk II	-	1	PDV-II Stage 1	-	-	1	1060.0	30	-6300	?
PDV Mk II	-	2	PDV-II Stage 2	-	-	1	1060.0	300	-6300	?
PDV Mk II	-	3	PDV-II KV	-	-	1	1060.0	300	-6300	?
V-825	-	0	V-825 Booster	-	-	1	1060.0	20	-6370	?
V-825	-	1	V-825	-	-	1	1060.0	180	-6300	?
Qaem-100	-	1	Qaem-100 St 1	-	-	1	1060.0	50	-6378	?
Qaem-100	-	2	Qaem-100 St 2	-	-	1	1060.0	50	-6378	?
Qaem-100	-	3	Qaem-100 St 3	-	-	1	1060.0	50	-6378	?
Sejjil	-	1	Sejjil	-	-	1	1060.0	50	-6300	?
Sejjil	-	2	Sejjil Stage 2	-	-	1	1060.0	200	-6300	?
Sejjil-2	-	1	Sejjil	-	-	1	1060.0	50	-6300	?
Sejjil-2	-	2	Sejjil Stage 2	-	-	1	1060.0	200	-6300	?
Ashura	-	1	Sejjil	-	-	1	1060.0	50	-6300	?
Ashura	-	2	Sejjil Stage 2	-	-	1	1060.0	200	-6300	?
Hwasong-7	-	1	Hwasong-7	-	-	1	1060.0	150	-6300	?
Shahab 3	-	1	Shahab 3	-	-	1	1060.0	150	-6300	?
Salman	-	1	Shahab 3	-	-	1	1060.0	150	-6300	?
Emad	-	1	Emad	-	-	1	1060.0	150	-6300	?
Ghadr 1	-	1	Shahab 3	-	-	1	1060.0	150	-6300	?
Ghadr-110	-	1	Shahab 3	-	-	1	1060.0	150	-6300	?
Ghadr F	-	1	Shahab 3	-	-	1	1060.0	150	-6300	?
Toufan	-	1	Shahab 3	-	-	1	1060.0	150	-6300	?
Safir	-	1	Shahab 3	-	-	1	1060.0	150	-6300	?
Safir	-	2	Safir Stage 2	-	-	1	1060.0	250	-6300	?
Qased	-	1	Shahab 3	-	-	1	1060.0	150	-6300	?
Qased	-	2	Salman	-	-	1	1060.0	150	-2000	?
Qased	-	3	Qased-S3	-	-	1	1060.0	450	450	?
Paektusan 1	-	1	Taepo Dong 1	-	-	1	1060.0	70	-6100	?
Paektusan 1	-	2	Taepo Dong 1 Stage 2	-	-	1	1060.0	220	-5000	?
Paektusan 1	-	3	Taepo Dong 1 Stage 3	-	-	1	1060.0	220	-5000	?
Ghauri	-	1	Ghauri	-	-	1	1060.0	150	-6370	?
Scud D	-	1	Scud D	-	-	1	1060.0	100	-6200	?



LVStages

LV_Name	LV_Variant	Stage_No	Stage_Name	Qualifier	Dummy	Multiplicity	Stage_Impulse kNs	Stage_Apogee km	Stage_Perigee km	Perigee_Qual
AMROC IRR	-	1	AMROC IRR	-	-	1	1060.0	1	-6378	?
GBI	-	1	Orion 50SG	-	-	1	1060.0	70	-6000	?
GBI	-	2	Orion 50	-	-	1	1060.0	300	-5000	?
GBI	-	3	Orion 38	-	-	1	1060.0	1800	-4500	?
GBI	2	1	Orion 50SG	-	-	1	1060.0	70	-6000	?
GBI	2	2	Orion 50	-	-	1	1060.0	300	-5000	?
ALV	-	1	Orion 50S	-	-	1	1060.0	33	-6378	?
ALV	-	2	Star 37FW	-	-	1	1060.0	200	-6378	?
Pegasus	-	0	NB-52	-	-	1	1060.0	14	-6378	?
Pegasus	-	1	Orion 50S	-	-	1	1060.0	90	-6100	?
Pegasus	-	2	Orion 50	-	-	1	1060.0	120	-4400	?
Pegasus	-	3	Orion 38	-	-	1	1060.0	700	120	?
Pegasus/HAPS	-	4	HAPS	-	-	1	1060.0	700	700	?
Pegasus/HAPS	-	F	Fairing	-	-	2	1060.0	140	-4400	?
Pegasus H	-	0	L-1011	-	-	1	1060.0	14	-6378	?
Pegasus H	-	1	Orion 50S	-	-	1	1060.0	90	-6100	?
Pegasus H	-	2	Orion 50	-	-	1	1060.0	740	-4500	?
Pegasus H	-	3	Orion 38	-	-	1	1060.0	740	740	?
Pegasus H	-	F	Fairing	-	-	2	1060.0	130	-6000	?
Pegasus XL	-	0	L-1011	-	-	1	1060.0	14	-6378	?
Pegasus XL	-	1	Pegasus XL Stage 1	-	-	1	1060.0	90	-6100	?
Pegasus XL	-	2	Orion 50XL	-	-	1	1060.0	700	-4500	?
Pegasus XL	-	3	Orion 38	-	-	1	1060.0	700	700	?
Pegasus XL	-	F	Fairing	-	-	2	1060.0	140	-5950	?
Pegasus XL/HAPS	-	0	L-1011	-	-	1	1060.0	14	-6378	?
Pegasus XL/HAPS	-	1	Pegasus XL Stage 1	-	-	1	1060.0	70	-6100	?
Pegasus XL/HAPS	-	2	Orion 50XL	-	-	1	1060.0	120	-4400	?
Pegasus XL/HAPS	-	3	Orion 38	-	-	1	1060.0	700	700	?
Pegasus XL/HAPS	-	4	HAPS	-	-	1	1060.0	140	-4400	?
Pegasus XL/HAPS	-	F	Fairing	-	-	2	1060.0	140	-5950	?
IREM-T1	-	1	Orion 50SXLT	-	-	1	1060.0	70	-6000	?
IREM-T1	-	2	Orion 50XL	-	-	1	1060.0	70	-6100	?
IREM-T2	-	1	Orion 50SXLT	-	-	1	1060.0	70	-6000	?
IREM-T2	-	2	Orion 50XL	-	-	1	1060.0	300	-5000	?
Hyper X	-	0	NB-52	-	-	1	1060.0	10	-6378	?
Hyper X	-	1	Orion 50S	-	-	1	1060.0	33	-6378	?
Al Kahir	-	1	AlKahir	-	-	1	1060.0	50	-6378	?
LSD	-	0	Balloon	-	-	1	1060.0	18	-6378	?
LSD	-	1	Star 48B	-	-	1	1060.0	55	-6378	?
Hyumoo-1	-	1	Hyumoo Booster	-	-	1	1060.0	2	-6378	?
Hyumoo-1	-	2	TX-30	-	-	1	1060.0	20	-6378	?
Hyumoo-2A	-	1	Hyumoo-2A	-	-	1	1060.0	100	-6378	?
Hyumoo-2B	-	1	Hyumoo-2B	-	-	1	1060.0	100	-6378	?
Hyumoo-2C	-	1	Hyumoo-2C	-	-	1	1060.0	100	-6378	?
Hyumoo-4	-	1	Hyumoo-4	-	-	1	1060.0	100	-6378	?
Electron	-	1	Electron Stage 1	-	-	1	1060.0	50	-6370	?
Electron	-	2	Electron Stage 2	-	-	1	1060.0	200	200	?
Electron	-	3	Electron Stage 3	-	-	1	1060.0	200	200	?
Electron	L	1	Electron Stage 1	-	-	1	1060.0	50	-6370	?
Electron	L	2	Electron Stage 2	-	-	1	1060.0	200	200	?
Electron	L	3	Photon Lunar	-	-	1	1060.0	200	200	?
HASTE	-	1	Electron Stage 1	-	-	1	1060.0	50	-6370	?
HASTE	-	2	Electron Stage 2	-	-	1	1060.0	200	200	?
HASTE	-	3	Electron Stage 3	-	-	1	1060.0	200	200	?
Jielong-1	-	1	JL-1 Stage 1	-	-	1	1060.0	40	-6378	?
Jielong-1	-	2	JL-1 Stage 2	-	-	1	1060.0	200	-6000	?
Jielong-1	-	3	JL-1 Stage 3	-	-	1	1060.0	200	-1000	?
Jielong-1	-	4	JL-1 Stage 4	-	-	1	1060.0	200	200	?
DF-16	-	1	DF-16	-	-	1	1060.0	300	-6378	?
DF-17	-	1	DF-16	-	-	1	1060.0	300	-6378	?
Hermes A-3B	-	1	Hermes A-3B	-	-	1	1060.0	35	-6370	?
SICBM	-	1	SICBM	-	-	1	1060.0	70	-6000	?
SICBM	-	2	SICBM St 2	-	-	1	1060.0	300	-5500	?
SICBM	-	3	SICBM St 3	-	-	1	1060.0	1000	-4000	?
SICBM	-	4	SICBM PBS	-	-	1	1060.0	1000	-4000	?
Super Strypi	-	1	LEO-46	-	-	1	1060.0	10	-6300	?
Super Strypi	-	2	LEO-7	-	-	1	1060.0	300	-6300	?
Super Strypi	-	3	LEO-1	-	-	1	1060.0	300	300	?

LVStages

LV_Name	LV_Variant	Stage_No	Stage_Name	Qualifier	Dummy	Multiplicity	Stage_Impulse kNs	Stage_Apogee km	Stage_Perigee km	Perigee_Qual
Aries	-	1	M56A1	-	-	1	1060.0	300	-6350	?
Aries	-	F	Fairing	-	-	1	1060.0	300	-6350	?
M56A1	-	1	M56A1	-	-	1	1060.0	300	-6350	?
M56A1	-	F	Fairing	-	-	1	1060.0	300	-6100	?
ERIS	-	1	M56A1	-	-	1	1060.0	300	-6100	?
ERIS	-	2	M57A1	-	-	1	1060.0	300	-6100	?
Viking Type 9	-	1	Viking Type 9	-	-	1	1060.0	200	-6300	?
Vanguard	-	1	Vanguard	-	-	1	1060.0	165	-6000	?
Vanguard	-	2	AJ10	-	-	1	1060.0	165	-5600	?
Vanguard	-	3	CCR 33KS2800	-	-	1	1060.0	4000	650	?
Vanguard	-	F	Fairing	-	-	1	1060.0	170	-6000	?
Vanguard	X-248	1	Vanguard	-	-	1	1060.0	165	-6000	?
Vanguard	X-248	2	AJ10	-	-	1	1060.0	650	-5600	?
Vanguard	X-248	3	X-248	-	-	1	1060.0	4000	650	?
Vanguard	X-248	F	Fairing	-	-	1	1060.0	170	-6000	?
Scout II TV	-	1	Zefiro	-	-	1	1060.0	1	-6378	?
Scout D-1	-	1	Algol 3A	-	-	1	1060.0	83	-6317	?
Scout D-1	-	2	Castor 2A	-	-	1	1060.0	280	-5925	?
Scout D-1	-	3	Antares 2	-	-	1	1060.0	275	-4435	?
Scout D-1	-	4	Star 20	-	-	1	1060.0	1000	275	?
Scout D-1	-	F	Fairing	-	-	2	1060.0	280	-5925	?
Scout D-1	-	F	Fairing	-	-	2	1060.0	280	-5925	?
Scout E-1	-	1	Algol 3A	-	-	1	1060.0	70	-6300	?
Scout E-1	-	2	Castor 2A	-	-	1	1060.0	280	-6100	?
Scout E-1	-	3	Antares 2	-	-	1	1060.0	340	-5000	?
Scout E-1	-	4	FWAS	-	-	1	1060.0	800	340	?
Scout E-1	-	5	BE-3	-	-	1	1060.0	800	340	?
Scout E-1	-	F	Fairing	-	-	2	1060.0	280	-6100	?
Scout F-1	-	1	Algol 3A	-	-	1	1060.0	70	-6300	?
Scout F-1	-	2	Castor 2A	-	-	1	1060.0	280	-6100	?
Scout F-1	-	3	Antares 2B	-	-	1	1060.0	350	-4330	?
Scout F-1	-	4	Star 20	-	-	1	1060.0	350	350	?
Scout F-1	-	F	Fairing	-	-	2	1060.0	280	-6100	?
Scout G-1	-	1	Algol 3A	-	-	1	1060.0	70	-6300	?
Scout G-1	-	2	Castor 2A	-	-	1	1060.0	250	-6200	?
Scout G-1	-	3	Antares 3	-	-	1	1060.0	370	-5000	?
Scout G-1	-	4	Star 20	-	-	1	1060.0	1000	1000	?
Scout G-1	-	F	Fairing	-	-	2	1060.0	250	-6200	?
TR-1	-	1	TR-1	-	-	1	1060.0	80	-6370	?
TR-1A	-	1	TR-1A	-	-	1	31616.0	280	-6370	?
Prithvi	-	1	Prithvi	-	-	1	31616.0	100	-6370	?
Prithvi 2	-	1	Prithvi	-	-	1	31616.0	100	-6370	?
PDV Target	-	1	Prithvi	-	-	1	31616.0	100	-6370	?
PDV Target	-	2	PDV Target St2	-	-	1	31616.0	100	-6370	?
PDV	-	1	Prithvi	-	-	1	31616.0	100	-6370	?
Dhanush	-	1	Prithvi	-	-	1	31616.0	50	-6370	?
Spartan ABM	-	1	TX-500	-	-	1	31616.0	10	-6378	?
Spartan ABM	-	2	TX-454	-	-	1	31616.0	30	-6370	?
Spartan ABM	-	3	TX-239	-	-	1	31616.0	100	-6370	?
Nike Zeus	-	1	TX-135	-	-	1	31616.0	15	-6370	?
Nike Zeus	-	2	TX-238	-	-	1	31616.0	150	-6350	?
Nike Zeus	3	1	TX-135	-	-	1	31616.0	15	-6370	?
Nike Zeus	3	2	TX-238	-	-	1	31616.0	150	-6350	?
Nike Zeus	3	3	TX-239	-	-	1	31616.0	200	-6350	?
Nike Zeus DM-15S	-	1	TX-135	-	-	1	31616.0	15	-6370	?
Nike Zeus DM-15S	-	2	TX-238	-	-	1	31616.0	150	-6350	?
Nike Zeus DM-15S	-	3	TX-239	-	-	1	31616.0	200	-6350	?
Dolphin	-	1	Dolphin	-	-	1	31616.0	0	-6378	?
Nike Hercules 1810	-	1	Hercules Booster	-	-	1	31616.0	2	-6378	?
Nike Hercules 1810	-	2	Ajax Cluster 1810	-	-	1	31616.0	20	-6378	?
Nike Hercules R&D	-	1	Hercules Booster	-	-	1	31616.0	2	-6378	?
Nike Hercules R&D	-	2	Ajax Cluster	-	-	1	31616.0	20	-6378	?
Nike Hercules	-	1	Hercules Booster	-	-	1	31616.0	2	-6378	?
Nike Hercules	-	2	TX-30	-	-	1	31616.0	20	-6378	?
Nike J	-	1	Hercules Booster	-	-	1	31616.0	2	-6378	?
Nike J	-	2	TX-30	-	-	1	31616.0	20	-6378	?
Paekkom	-	1	Hercules Booster	-	-	1	31616.0	2	-6378	?
Paekkom	-	2	TX-30	-	-	1	31616.0	20	-6378	?
Hermes A-3A	-	1	Hermes A-3A	-	-	1	31616.0	30	-6370	?

LVStages

LV_Name	LV_Variant	Stage_No	Stage_Name	Qualifier	Dummy	Multiplicity	Stage_Impulse kNs	Stage_Apogee km	Stage_Perigee km	Perigee_Qual
Blue Scout I	-	1	Algol 1	-	-	1	31616.0	70	-6350	?
Blue Scout I	-	2	Castor	-	-	1	31616.0	270	-6350	?
Blue Scout I	-	3	Antares	-	-	1	31616.0	1300	-6168	?
Blue Scout I	-	F	Fairing	-	-	2	31616.0	270	-6350	?
Blue Scout II	-	1	Algol 1	-	-	1	31616.0	70	-6350	?
Blue Scout II	-	2	Castor	-	-	1	31616.0	170	-6340	?
Blue Scout II	-	3	Antares	-	-	1	31616.0	900	-6200	?
Blue Scout II	-	4	Altair	-	-	1	31616.0	2500	-5000	?
Blue Scout II	-	F	Fairing	-	-	2	31616.0	170	-6340	?
Scout X	-	1	Algol 1A	-	-	1	31616.0	48	-6370	?
Scout X	-	2	Castor	-	d	1	31616.0	48	-6370	?
Scout X	-	3	Antares	-	-	1	31616.0	48	-6370	?
Scout X	-	4	Altair	-	d	1	31616.0	48	-6370	?
Scout X-1	-	1	Algol 1B	-	-	1	31616.0	77	-6353	?
Scout X-1	-	2	Castor	-	-	1	31616.0	433	-6216	?
Scout X-1	-	3	Antares	-	-	1	31616.0	640	-5050	?
Scout X-1	-	4	Altair	-	-	1	31616.0	200	200	?
Scout X-1	-	F	Fairing	-	-	2	31616.0	433	-6216	?
Scout X-1A	-	1	Algol 1B	-	-	1	31616.0	77	-6300	?
Scout X-1A	-	2	Castor	-	-	1	31616.0	213	-6200	?
Scout X-1A	-	3	Antares	-	-	1	31616.0	214	-5000	?
Scout X-1A	-	4	Altair	-	-	1	31616.0	349	-4198	?
Scout X-1A	-	5	Cetus	-	-	1	31616.0	1084	-3052	?
Scout X-1A	-	F	Fairing	-	-	2	31616.0	214	-5000	?
Scout X-2	1C	1	Algol 1C	-	-	1	31616.0	75	-6300	?
Scout X-2	1C	2	Castor	-	-	1	31616.0	280	-6200	?
Scout X-2	1C	3	Antares 2	-	-	1	31616.0	1400	-5800	?
Scout X-2	1C	4	Altair	-	-	1	31616.0	7233	-4400	?
Scout X-2	1C	F	Fairing	-	-	2	31616.0	280	-6200	?
Scout X-2	-	1	Algol 1D	-	-	1	31616.0	75	-6350	?
Scout X-2	-	2	Castor	-	-	1	31616.0	400	-6200	?
Scout X-2	-	3	Antares 2	-	-	1	31616.0	900	-5900	?
Scout X-2	-	4	Altair	-	-	1	31616.0	900	900	?
Scout X-2	-	F	Fairing	-	-	2	31616.0	400	-6200	?
Scout X-2B	-	1	Algol 1D	-	-	1	31616.0	75	-6300	?
Scout X-2B	-	2	Castor	-	-	1	31616.0	280	-6200	?
Scout X-2B	-	3	Antares 2	-	-	1	31616.0	730	-5000	?
Scout X-2B	-	4	Altair 2	-	-	1	31616.0	730	-5000	?
Scout X-2B	-	F	Fairing	-	-	2	31616.0	280	-6200	?
Scout X-2M	-	1	Algol 1D	-	-	1	31616.0	75	-6300	?
Scout X-2M	-	2	Castor	-	-	1	31616.0	280	-6200	?
Scout X-2M	-	3	Antares 2	-	-	1	31616.0	700	-5000	?
Scout X-2M	-	4	MG-18	-	-	2	31616.0	700	700	?
Scout X-2M	-	F	Fairing	-	-	2	31616.0	280	-6200	?
Scout X-3	-	1	Algol 2A	-	-	1	31616.0	60	-6330	?
Scout X-3	-	2	Castor	-	-	1	31616.0	220	-6030	?
Scout X-3	-	3	Antares 2	-	-	1	31616.0	740	-4500	?
Scout X-3	-	4	Altair	-	-	1	31616.0	1100	740	?
Scout X-3	-	F	Fairing	-	-	2	31616.0	220	-6030	?
Scout X-3M	-	1	Algol 2A	-	-	1	31616.0	75	-6300	?
Scout X-3M	-	2	Castor	-	-	1	31616.0	280	-6200	?
Scout X-3M	-	3	Antares 2	-	-	1	31616.0	700	-5000	?
Scout X-3M	-	4	MG-18	-	-	2	31616.0	700	700	?
Scout X-3M	-	F	Fairing	-	-	2	31616.0	280	-6200	?
Scout X-3A	-	1	Algol 2A	-	-	1	31616.0	60	-6330	?
Scout X-3A	-	2	Castor	-	-	1	31616.0	220	-6030	?
Scout X-3A	-	3	Antares 2	-	-	1	31616.0	220	-6030	?
Scout X-3A	-	4	Altair	-	-	1	31616.0	220	-6030	?
Scout X-3A	-	5	Cetus	-	-	1	31616.0	7000	-6000	?
Scout X-3A	-	F	Fairing	-	-	2	31616.0	220	-6030	?
Scout X-3C	-	1	Algol 2A	-	-	1	31616.0	60	-6330	?
Scout X-3C	-	2	Castor	-	-	1	31616.0	136	-6000	?
Scout X-3C	-	3	Antares 2	-	-	1	31616.0	183	-3620	?
Scout X-3C	-	F	Fairing	-	-	2	31616.0	140	-6000	?
Scout X-4	-	1	Algol 2A	-	-	1	31616.0	77	-6319	?
Scout X-4	-	2	Castor	-	-	1	31616.0	280	-6006	?
Scout X-4	-	3	Antares 2	-	-	1	31616.0	1000	-4870	?
Scout X-4	-	4	Altair 2	-	-	1	31616.0	1000	1000	?
Scout X-4	-	F	Fairing	-	-	2	31616.0	280	-6006	?
Scout X-4A	-	1	Algol 2A	-	-	1	31616.0	70	-6300	?
Scout X-4A	-	2	Castor	-	-	1	31616.0	175	-6000	?
Scout X-4A	-	3	Antares 2	-	-	1	31616.0	175	-6000	?
Scout X-4A	-	4	Altair 2	-	-	1	31616.0	175	-6000	?

LVStages

LV_Name	LV_Variant	Stage_No	Stage_Name	Qualifier	Dummy	Multiplicity	Stage_Impulse kNs	Stage_Apogee km	Stage_Perigee km	Perigee_Qual
Scout X-4A	-	5	Cetus	-	-	1	31616.0	1709	-414	?
Scout X-4A	F	5	Fairing	-	-	2	31616.0	175	-6000	?
Scout X-5C	-	1	Algol 2B	-	-	1	31616.0	70	-6300	?
Scout X-5C	-	2	Castor 2	-	-	1	31616.0	170	-6000	?
Scout X-5C	-	3	Antares 2	-	-	1	31616.0	664	-3866	?
Scout A	-	1	Algol 2A	-	-	1	31616.0	70	-6300	?
Scout A	-	2	Castor 2A	-	-	1	31616.0	280	-6000	?
Scout A	-	3	Antares 2	-	-	1	31616.0	1000	-5000	?
Scout A	-	4	Altair 2	-	-	1	31616.0	1000	1000	?
Scout A-1	-	F	Fairing	-	-	2	31616.0	280	-6000	?
Scout A-1	-	1	Algol 2B	-	-	1	31616.0	70	-6300	?
Scout B	-	2	Castor 2A	-	-	1	31616.0	280	-6000	?
Scout B	-	3	Antares 2	-	-	1	31616.0	1000	-5000	?
Scout B	-	4	FWAS	-	-	1	31616.0	1000	1000	?
Scout B	-	F	Fairing	-	-	2	31616.0	280	-6000	?
Scout B	2A	1	Algol 2A	-	-	1	31616.0	70	-6300	?
Scout B	2A	2	Castor 2A	-	-	1	31616.0	280	-6100	?
Scout B	2A	3	Antares 2	-	-	1	31616.0	500	-5000	?
Scout B	2A	4	FWAS	-	-	1	31616.0	500	500	?
Scout B	2A	F	Fairing	-	-	2	31616.0	280	-6100	?
Scout B-1	F	1	Algol 2C	-	-	1	31616.0	70	-6300	?
Scout B-1	F	2	Castor 2A	-	-	1	31616.0	280	-6100	?
Scout B-1	F	3	Antares 2	-	-	1	31616.0	500	-5000	?
Scout B-1	F	4	FWAS	-	-	1	31616.0	500	500	?
Scout B-1	F	F	Fairing	-	-	2	31616.0	280	-6100	?
Scout B-1	-	1	Algol 2C	-	-	1	31616.0	70	-6300	?
Scout B-1	-	2	Castor 2A	-	-	1	31616.0	280	-6100	?
Scout B-1	-	3	Antares 2	-	-	1	31616.0	500	-5000	?
Scout B-1	-	4	Star 20	-	-	1	31616.0	500	500	?
Scout B-1	-	F	Fairing	-	-	2	31616.0	280	-6100	?
Athena H	-	0	Recruit	-	-	4	31616.0	1	-6378	?
Athena H	-	1	Castor 4	-	-	1	31616.0	60	-6300	?
Athena H	-	2	Antares 2	-	-	1	31616.0	200	-6250	?
Athena H	-	3	Alcor 1A	-	-	1	31616.0	2000	-4000	?
Prospector	-	1	Castor 4A	-	-	1	31616.0	1	-6378	?
Strypi XIIIR	-	0	Recruit	-	-	2	31616.0	50	-6370	?
Strypi XIIIR	-	1	Castor	-	-	1	31616.0	100	-6370	?
Strypi XIIIR	-	2	Orbus 1	-	-	1	31616.0	100	-6370	?
Castor 4A	-	1	Castor 4A	-	-	1	31616.0	500	-6300	?
Maxus	-	1	Castor 4B	-	-	1	31616.0	700	-6370	?
Castor 4B	-	1	Castor 4B	-	-	1	31616.0	300	-6370	?
MRT	-	1	Castor 4B	-	-	1	31616.0	300	-6370	?
Castor-M57A1	-	1	Castor 4B	-	-	1	31616.0	100	-6370	?
Castor-M57A1	-	2	M57A1	-	-	1	31616.0	1060	-6300	?
Conestoga 1620	-	1	Castor 4B	-	-	4	31616.0	10	-6370	?
Conestoga 1620	-	2	Castor 4B	-	-	2	31616.0	10	-6370	?
Conestoga 1620	-	3	Castor 4B	-	-	1	31616.0	10	-6370	?
Conestoga 1620	-	4	Star 48V	-	-	1	31616.0	10	-6370	?
Conestoga 1620	-	F	Fairing	-	-	2	31616.0	10	-6370	?
GBI BV	-	1	GEM-40	-	-	1	31616.0	70	-6370	?
GBI BV	-	2	Orbus 1	-	-	1	31616.0	100	-6300	?
GBI BV	-	3	Orbus 1	-	-	1	31616.0	200	-6000	?
GBI BV+	-	1	GEM-40	-	-	1	31616.0	70	-6370	?
GBI BV+	-	2	Orbus 1	-	-	1	31616.0	100	-6300	?
GBI BV+	-	3	Orbus 1	-	-	1	31616.0	200	-6000	?
Pershing 1	-	1	TX-174	-	-	1	31616.0	40	-6300	?
Pershing 1	-	2	TX-175	-	-	1	31616.0	250	-6000	?
Pershing 1	-	F	Pershing 1 RV	-	-	1	31616.0	250	-6000	?
Pershing 1A	-	1	TX-174	-	-	1	31616.0	40	-6300	?
Pershing 1A	-	2	TX-175	-	-	1	31616.0	250	-6000	?
Pershing 1A	-	F	Pershing 1 RV	-	-	1	31616.0	250	-6000	?
Pershing 2	-	1	Pershing 2 St1	-	-	1	31616.0	40	-6300	?
Pershing 2	-	2	Pershing 2 St2	-	-	1	31616.0	250	-6000	?
Pershing 2	-	F	Pershing 2 RV	-	-	1	31616.0	250	-6000	?
Pershing 2	1	1	Pershing 2 St1	-	-	1	31616.0	40	-6300	?
Pershing 2	1	2	Pershing 2 St1	-	d	1	31616.0	40	-6300	?
Pershing 2	1	F	Pershing 2 RV	-	-	1	31616.0	250	-6000	?
Sonda 4	-	1	S-43	-	-	1	31616.0	130	-6370	?

LVStages

LV_Name	LV_Variant	Stage_No	Stage_Name	Qualifier	Dummy	Multiplicity	Stage_Impulse kNs	Stage_Apogee km	Stage_Perigee km	Perigee_Qual
Sonda 4	-	2	Sonda 3-1	-	-	1	31616.0	800	-6300	?
VS-40	-	1	S-40TM	-	-	1	31616.0	100	-6300	?
VS-40	-	1	S-44	-	-	1	31616.0	100	-6300	?
VS-40M	-	1	S-40TM	-	-	1	31616.0	100	-6300	?
VS-40M	-	2	S-44M	-	-	1	31616.0	950	-6000	?
VLS-1	-	0	S-43	-	-	4	31616.0	40	-6310	?
VLS-1	-	1	S-43TM	-	-	1	31616.0	120	-6100	?
VLS-1	-	2	S-40TM	-	-	1	31616.0	800	-5000	?
VLS-1	-	3	S-44	-	-	1	31616.0	800	800	?
Temp	-	1	Temp-S	-	-	1	31616.0	150	-6378	?
Astra Rocket 1.0	-	1	Astra 1 Stage 1	-	-	1	31616.0	150	-6378	?
Astra Rocket 1.0	-	2	Astra 1 Stage 2	-	-	1	31616.0	200	-6378	?
Astra Rocket 2.0	-	1	Astra 1 Stage 1	-	d	1	31616.0	200	-6378	?
Astra Rocket 2.0	-	2	Astra 1 Stage 2	-	d	1	31616.0	200	-6378	?
Orion LAS	-	1	Orion LAS	-	-	1	31616.0	2	200	?
Agni TD	-	1	Agni	-	-	1	31616.0	40	-6300	?
Agni TD	-	2	Prithvi	-	-	1	31616.0	40	-6300	?
Agni P	-	1	Agni P	-	-	1	31616.0	300	-5000	?
Agni P	-	2	Agni P Stage 2	-	-	1	31616.0	40	-6300	?
Agni 1	-	1	Agni	-	-	1	31616.0	400	-5000	?
Agni 2	-	1	Agni	-	-	1	31616.0	40	-6300	?
Agni 2	-	1	Agni	-	-	1	31616.0	40	-6300	?
Agni 2P	-	2	Agni II Stage 2	-	-	1	31616.0	400	-5000	?
Agni 2P	-	1	Agni	-	-	1	31616.0	40	-6300	?
Agni 4	-	1	Agni II Stage 2	-	-	1	31616.0	400	-5000	?
Agni 4	-	1	Agni	-	-	1	31616.0	40	-6300	?
ASLV	-	2	Agni 4 Stage 2	-	-	1	31616.0	400	-5000	?
ASLV	-	0	AS-0	-	-	2	31616.0	30	-6300	?
ASLV	-	1	AS-1	-	-	1	31616.0	50	-6300	?
ASLV	-	2	AS-2	-	-	1	31616.0	110	-5000	?
ASLV	-	3	AS-3	-	-	1	31616.0	430	-3580	?
ASLV	-	4	AS-4	-	-	1	31616.0	430	400	?
ASLV	-	F	Fairing	-	-	2	31616.0	110	-5000	?
SLV-3	-	1	SLV-3-1	-	-	1	31616.0	40	-6300	?
SLV-3	-	2	SLV-3-2	-	-	1	31616.0	100	-6000	?
SLV-3	-	3	SLV-3-3	-	-	1	31616.0	330	-4700	?
SLV-3	-	4	SLV-3-4	-	-	1	31616.0	300	200	?
SLV-3	-	F	Fairing	-	-	2	31616.0	100	-6000	?
SLV-3	D4	1	SLV-3-1/D4	-	-	1	31616.0	40	-6300	?
SLV-3	D4	2	SLV-3-2/D4	-	-	1	31616.0	100	-6000	?
SLV-3	D4	3	SLV-3-3/D4	-	-	1	31616.0	500	-4150	?
SLV-3	D4	4	AS-4	-	-	1	31616.0	850	390	?
SLV-3	D4	F	Fairing	-	-	2	31616.0	100	-6000	?
HS9	-	1	S9	-	-	1	31616.0	70	-6300	?
KSR-III	-	1	KSR-III	-	-	1	31616.0	100	-6300	?
HANBIT-TLV	-	1	HANBIT-TLV	-	-	1	31616.0	100	-6300	?
Vesta	-	1	Vesta	-	-	1	31616.0	200	-6300	?
DF-15	-	1	DF-15	-	-	1	31616.0	100	-6370	?
Shabehn 1A	-	1	Shabehn	-	-	1	31616.0	100	-6370	?
Shabehn 1	-	1	Shabehn	-	-	1	31616.0	100	-6370	?
Dezful	-	1	Dezful	-	-	1	31616.0	200	-6350	?
Kheibar Shekan	-	1	Dezful	-	-	1	31616.0	1000	-6100	?
Fattah-1	-	1	Dezful	-	-	1	31616.0	200	-6378	?
V-1000	-	0	V-1000 Booster	-	-	1	31616.0	2	-6378	?
V-1000	-	1	V-1000	-	-	1	31616.0	25	-6300	?
1Ya2TA	-	0	V-1000 Booster	-	-	1	31616.0	2	-6378	?
1Ya2TA	-	1	V-1000	-	-	1	31616.0	25	-6300	?
Oka	-	1	Oka	-	-	1	31616.0	80	-6370	?
Iskander	-	1	Iskander	-	-	1	31616.0	150	-6378	?
Kinzhal	-	0	MiG-31	-	-	1	31616.0	150	-6378	?
Kinzhal	-	1	Iskander	-	-	1	31616.0	150	-6378	?
Pukguksong-6	-	1	BCS-6	-	-	1	31616.0	100	-6100	?
Hwasong-11Ga	-	1	KN-23	-	-	1	31616.0	20	-6378	?
Hwasong-11Da	-	1	KN-23	-	-	1	31616.0	20	-6378	?
Hwasong-11Da-4.5	-	1	KN-23	-	-	1	31616.0	20	-6378	?
Hwasong-11Ra	-	1	KN-23X	-	-	1	31616.0	20	-6378	?
Iskander-M	-	1	Iskander-M	-	-	1	31616.0	150	-6378	?
Iskander-E	-	1	Iskander-E	-	-	1	31616.0	150	-6378	?
Falstaff	-	1	Stonechat II	-	-	1	31616.0	150	-6370	?
Falstaff	1	1	Stonechat I	-	-	1	31616.0	30	-6378	?
Black Knight	201	1	Black Knight	-	-	1	31616.0	600	-6350	?
Black Knight	201/C	1	Black Knight	-	-	1	31616.0	600	-6350	?
Black Knight	201/C	2	Cuckoo IB	-	-	1	31616.0	600	-6350	?

LVStages

LV_Name	LV_Variant	Stage_No	Stage_Name	Qualifier	Dummy	Multiplicity	Stage_Impulse kNs	Stage_Apogee km	Stage_Perigee km	Perigee_Qual
Black Knight	201/C2	1	Black Knight	-	-	1	31616.0	600	-6350	?
Black Knight	201/C2	2	Cuckoo II	-	-	1	31616.0	600	-6350	?
Black Knight	301/C	1	Black Knight 301	-	-	1	31616.0	600	-6350	?
Black Knight	301/C	2	Cuckoo IB	-	-	1	31616.0	600	-6350	?
Black Knight	301/C2	1	Black Knight 301	-	-	1	31616.0	600	-6350	?
Black Knight	301/C2	2	Cuckoo II	-	-	1	31616.0	600	-6350	?
Nike Zeus A	-	1	TX-135	-	-	1	31616.0	10	-6378	?
Nike Zeus A	-	2	Zeus A	-	-	1	31616.0	50	-6370	?
Skybolt ALBM	-	1	Skybolt St1	-	-	1	31616.0	20	-6378	?
Skybolt ALBM	-	2	Skybolt St2	-	-	1	31616.0	20	-6370	?
IRCPs	-	1	IRCPs FSM	-	-	1	31616.0	20	-6370	?
IRCPs	-	2	IRCPs SSM	-	-	1	31616.0	100	-6370	?
Ghaznavi	-	1	Ghaznavi	-	-	1	31616.0	100	-6370	?
OS-X0	-	1	OS-X0	-	-	1	31616.0	40	-6378	?
OS-X1	-	1	OS-X0	-	-	1	31616.0	40	-6378	?
OS-M1	-	1	OS-X0	-	-	1	31616.0	40	-6378	?
OS-M1	-	2	OS-M1 Stage 2	-	-	1	31616.0	40	-6378	?
OS-M1	-	3	OS-M1 Stage 3	-	-	1	31616.0	200	-6000	?
OS-M1	-	4	OS-M1 Stage 4	-	-	1	31616.0	300	300	?
OS-X6B	-	1	OS-X6B	-	-	1	31616.0	300	-6370	?
DF-11	-	1	DF-11	-	-	1	31616.0	100	-6370	?
DF-11M	-	1	DF-11M	-	-	1	31616.0	100	-6370	?
Elbrus	-	1	Scud B	-	-	1	31616.0	90	-6370	?
Shahab 1	-	1	Hwasong 5	-	-	1	31616.0	200	-6250	?
Shahab 2	-	1	Hwasong 6	-	-	1	31616.0	200	-6250	?
Qiam-1	-	1	Hwasong 6	-	-	1	31616.0	200	-6250	?
R-17	-	1	Scud B	-	-	1	31616.0	100	-6200	?
R-17VTO	-	1	R-17	-	-	1	31616.0	200	-6250	?
Al Abbas	-	1	R-17	-	-	1	31616.0	200	-6250	?
Al Hussein	-	1	Al Abbas	-	-	1	31616.0	100	-6200	?
Al Hijara	-	1	Al Hussein	-	-	1	31616.0	100	-6200	?
Short Al Hussein	-	1	Al Hussein	-	-	1	31616.0	100	-6200	?
Scud	-	1	Short Al Hussein	-	-	1	31616.0	100	-6200	?
Hwasong 5	-	1	Scud	-	-	1	31616.0	100	-6200	?
Hwasong 6	-	1	Hwasong 5	-	-	1	31616.0	200	-6350	?
Hwasong 9	-	1	Hwasong 6	-	-	1	31616.0	200	-6350	?
Burkan-1H	-	1	Hwasong ER	-	-	1	31616.0	150	-6300	?
Burkan-2H	-	1	Hwasong 6	-	-	1	31616.0	200	-6350	?
Burkan-3	-	1	Hwasong 6	-	-	1	31616.0	200	-6350	?
Zulfiqar	YE	1	Hwasong 6	-	-	1	31616.0	200	-6350	?
R-11	-	1	Hwasong 6	-	-	1	31616.0	200	-6350	?
R-11M	-	1	R-11	-	-	1	31616.0	200	-6250	?
R-11FM	-	1	R-11	-	-	1	31616.0	200	-6250	?
R-11A	-	1	R-11FM	-	-	1	31616.0	200	-6250	?
R-11A-MV	-	1	R-11	-	-	1	31616.0	200	-6250	?
Wasserfall	-	1	R-11	-	-	1	31616.0	200	-6250	?
CHGB Booster	-	1	Wasserfall	-	-	1	31616.0	10	-6378	?
CHGB Booster	-	2	CHGB LV St 1	-	-	1	31616.0	20	-6378	?
Hermes A-1	-	1	CHGB LV St 2	-	-	1	31616.0	150	-6378	?
Viking	-	1	Hermes A-1	-	-	1	31616.0	50	-6370	?
Topaze VE111	-	1	Viking	-	-	1	31616.0	200	-6300	?
Topaze VE111L	-	1	Topaze VE111C	-	-	1	31616.0	100	-6370	?
Agate	-	1	Topaze VE111L	-	-	1	31616.0	100	-6370	?
Rubis	-	1	Agate	-	-	1	31616.0	20	-6300	?
Rubis	-	2	Agate	-	-	1	31616.0	30	-6200	?
MD-620	-	1	P064	-	-	1	31616.0	2000	-5900	?
MD-620	2	1	MD-620	-	-	1	31616.0	100	-6370	?
MD-620	2	1	MD-620	-	-	1	31616.0	100	-6370	?
Jericho	-	2	NA-805	-	-	1	31616.0	100	-6370	?
Jericho	-	2	MD-620	-	-	1	31616.0	100	-6370	?
Jericho-1	-	1	NA-805	-	-	1	31616.0	100	-6370	?
Arrow 2	-	1	Jericho-1	-	-	1	31616.0	100	-6370	?
Arrow 2	-	2	IAI Arrow	-	-	1	31616.0	10	-6378	?
HIBEX	-	1	IAI Arrow St2	-	-	1	31616.0	80	-6378	?
Upstage	-	1	HIBEX	-	-	1	31616.0	20	-6300	?
Upstage	-	2	HIBEX-U	-	-	1	31616.0	20	-6300	?
ARPAT	-	0	Upstage	-	-	2	31616.0	20	-6300	?
ARPAT	-	1	Recruit	-	-	1	31616.0	2	-6378	?
RV-A-10	-	2	Castor	-	-	1	31616.0	30	-6300	?
Sergeant	-	1	TX-261	-	-	1	31616.0	30	-6300	?
Sergeant	2R	0	RV-A-10	-	-	1	31616.0	50	-6370	?
Sergeant	-	1	Sergeant	-	-	1	31616.0	100	-6200	?
Sergeant	-	2	Recruit	-	-	2	31616.0	1	-6200	?

LVStages

LV_Name	LV_Variant	Stage_No	Stage_Name	Qualifier	Dummy	Multiplicity	Stage_Impulse kN	Stage_Apogee km	Stage_Perigee km	Perigee_Qual
Sergeant	2R	1	Sergeant	-	-	1	31616.0	100	-6200	?
High Virgo WS199C	-	0	B-58 Hustler	-	-	1	31616.0	10	-6378	?
High Virgo WS199C	-	1	TX-20 Sergeant	-	-	1	31616.0	76	-6370	?
Polaris TV	-	1	Polaris TV	-	-	1	31616.0	500	-6370	?
Polaris FTV-5	-	1	TX-20 Sergeant	-	-	1	31616.0	10	-6378	?
Polaris FTV-5	-	2	10KS2500	-	-	1	31616.0	40	-6378	?
Journeyman	-	0	Recruit	-	-	2	31616.0	1	-6378	?
Journeyman	-	1	Sergeant	-	-	1	31616.0	30	-6378	?
Journeyman	-	2	Lance	-	-	1	31616.0	70	-6378	?
Journeyman	-	3	Lance	-	-	1	31616.0	300	-6300	?
Journeyman	-	4	Altair	-	-	1	31616.0	1100	-6250	?
Bold Orion	1	0	B-47 Stratojet	-	-	1	31616.0	10	-6378	?
Bold Orion	1	1	Sergeant	-	-	1	31616.0	100	-6350	?
Bold Orion	2	0	B-47 Stratojet	-	-	1	31616.0	10	-6378	?
Bold Orion	2	1	Sergeant	-	-	1	31616.0	200	-6350	?
Bold Orion	2	2	Altair	-	-	1	31616.0	90	-6350	?
Storm	-	1	Sergeant	-	-	1	31616.0	50	-6370	?
Storm	-	2	M57A1	-	-	1	31616.0	200	-6350	?
Sergeant Hydac	-	1	Sergeant	-	-	1	31616.0	50	-6370	?
Sergeant Hydac	-	2	Hydac	-	-	1	31616.0	400	-6300	?
Draco	-	1	TX-20 Sergeant	-	-	1	31616.0	10	-6378	?
Draco	-	2	TX-30	-	-	1	31616.0	30	-6378	?
X-17	-	1	TX-20 Sergeant	-	-	1	31616.0	140	-6300	?
X-17	-	2	Recruit	-	-	3	31616.0	140	-6000	?
X-17	-	3	Recruit	-	-	1	31616.0	140	-5800	?
Polaris FTV-3	-	1	Sergeant	-	-	1	31616.0	140	-6300	?
Polaris FTV-3	-	2	Recruit	-	-	3	31616.0	140	-6000	?
Polaris FTV-3	-	3	Recruit	-	-	1	31616.0	140	-5800	?
Polaris FTV-1	-	1	Sergeant	-	-	1	31616.0	140	-6300	?
Shotput	-	0	Recruit	-	-	2	31616.0	1	-6378	?
Shotput	-	1	Pollux	-	-	1	31616.0	70	-6350	?
Shotput	-	2	Altair	-	-	1	31616.0	400	-6160	?
Shotput	-	F	Fairing	-	-	2	31616.0	70	-6350	?
Sergeant 5-stage	-	1	Sergeant	-	-	1	31616.0	10	-6378	?
Sergeant 5-stage	-	2	Lance	-	-	1	31616.0	10	-6378	?
Sergeant 5-stage	-	3	Lance	-	-	1	31616.0	10	-6378	?
Sergeant 5-stage	-	4	Recruit	-	-	1	31616.0	30	-6300	?
Sergeant 5-stage	-	5	T-85	-	-	1	31616.0	34	-6200	?
Castor	-	1	Castor	-	-	1	31616.0	100	-6378	?
Blue Scout Jr	-	1	Castor	-	-	1	31616.0	50	-6350	?
Blue Scout Jr	-	2	Antares	-	-	1	31616.0	200	-6300	?
Blue Scout Jr	-	3	Alcor	-	-	1	31616.0	1000	-4300	?
Blue Scout Jr	-	4	Cetus	-	-	1	31616.0	20000	-2000	?
Blue Scout Jr	-	F	Fairing	-	-	2	31616.0	200	-6300	?
Blue Scout Jr SLV-1B(m)	-	1	Castor	-	-	1	31616.0	50	-6350	?
Blue Scout Jr SLV-1B(m)	-	2	Antares	-	-	1	31616.0	200	-6300	?
Blue Scout Jr SLV-1B(m)	-	3	Alcor	-	-	1	31616.0	2200	-6120	?
Blue Scout Jr SLV-1B(m)	-	F	Fairing	-	-	2	31616.0	200	-6300	?
Blue Scout Jr SLV-1C	-	1	Castor	-	-	1	31616.0	50	-6350	?
Blue Scout Jr SLV-1C	-	2	Antares	-	-	1	31616.0	200	-6300	?
Blue Scout Jr SLV-1C	-	3	Altair	-	-	1	31616.0	1000	-4600	?
RAM A	-	0	Fairing	-	-	2	31616.0	200	-6300	?
RAM A	-	1	Recruit	-	-	1	31616.0	1	-6378	?
RAM A	-	2	Castor	-	-	1	31616.0	50	-6300	?
RAM A	-	3	Skat	-	-	1	31616.0	120	-6300	?
RAM A	-	4	Recruit	-	-	1	31616.0	200	-6200	?
RAM B	-	1	Castor	-	-	1	31616.0	1280	-5340	?
RAM B	-	2	Antares	-	-	1	31616.0	25	-6300	?
RAM B	-	3	Alcor	-	-	1	31616.0	50	-5900	?
RAM B	-	0	Alcor	-	-	1	31616.0	88	-4200	?
Strypi	-	1	Recruit	-	-	2	31616.0	1	-6378	?
Strypi	-	2	Castor	-	-	1	31616.0	220	-6100	?
Swik A	-	0	Recruit	-	-	2	31616.0	1	-6378	?
Swik A	-	1	Castor	-	-	1	31616.0	100	-6100	?
Swik A	-	2	Antares	-	-	1	31616.0	1200	-6100	?
Strypi II	-	0	Recruit	-	-	2	31616.0	2	-6378	?
Strypi II	-	1	Castor	-	-	2	31616.0	250	-6300	?
Strypi IIR	-	0	Recruit	-	-	2	31616.0	2	-6378	?
Strypi IIR	-	1	Castor	-	-	1	31616.0	250	-6300	?
Strypi IIR	-	2	Castor 2	-	-	1	31616.0	250	-6300	?
Strypi IIR	-	0	Recruit	-	-	2	31616.0	2	-6378	?
Strypi IIR	-	1	Castor	-	-	1	31616.0	200	-6300	?

LVStages

LV_Name	LV_Variant	Stage_No	Stage_Name	Qualifier	Dummy	Multiplicity	Stage_Impulse kNs	Stage_Apogee km	Stage_Perigee km	Perigee_Qual
Strypi IV	-	2	Star 26	-	-	1	31616.0	200	-6000	?
Strypi IVA	-	0	Recruit	-	-	2	31616.0	2	-6378	?
Strypi IVA	-	1	Castor	-	-	1	31616.0	200	-6300	?
Strypi IVA	-	2	Star 26	?	-	1	31616.0	200	-6000	?
Strypi IVR	-	0	Recruit	-	-	2	31616.0	200	-6378	?
Strypi IVR	-	1	Castor	-	-	1	31616.0	200	-6300	?
Strypi IVR	-	2	Star 26	-	-	1	31616.0	200	-6000	?
Strypi VI	-	0	Recruit	-	-	2	31616.0	2	-6378	?
Strypi VI	-	1	Castor	-	-	1	31616.0	200	-6300	?
Strypi VI	-	2	Alcor	?	-	1	31616.0	200	-6100	?
Strypi VI	-	3	Alcyone	?	-	1	31616.0	250	-6000	?
Strypi VIIAR	-	0	Recruit	-	-	2	31616.0	2	-6378	?
Strypi VIIAR	-	1	Castor 2	-	-	1	31616.0	40	-6378	?
Strypi VIIAR	-	2	Alcor	-	-	1	31616.0	170	-6300	?
Strypi VIIAR	-	3	Alcyone	-	-	1	31616.0	500	-5000	?
Strypi VIIIR	-	0	Recruit	-	-	2	582.0	1	-6378	?
Strypi VIIIR	-	1	Castor	-	-	1	7311.0	40	-6378	?
Strypi VIIIR	-	2	Alcor JB	-	-	1	1148.0	170	-6300	?
Strypi VIIIR	-	3	Alcyone	-	-	1	269.0	1000	-4300	?
Strypi VIIIAR	-	0	Recruit	-	-	2	582.0	1	-6378	?
Strypi VIIIAR	-	1	Castor	-	-	1	7311.0	40	-6378	?
Strypi VIIIAR	-	2	Antares 2	?	-	1	1148.0	170	-6300	?
Strypi VIIIAR	-	3	Antares 2	-	-	1	1148.0	200	-6300	?
Strypi IX	-	0	Recruit	-	-	2	1148.0	200	-5000	?
Strypi IX	-	1	Antares 2	-	-	1	1148.0	200	-6378	?
Strypi IX	-	2	Recruit	-	-	2	1148.0	2	-6378	?
Strypi IX	-	3	Antares 2	-	-	1	1148.0	50	-6378	?
Strypi XI	-	0	Recruit	-	-	2	1148.0	200	-6300	?
Strypi XI	-	1	Castor	-	-	1	1148.0	200	-6000	?
Strypi XI	-	2	Star 27	-	-	1	1148.0	200	-6000	?
Strypi XI	-	3	Recruit	-	-	2	1148.0	1	-6378	?
Castor	2R	0	Castor	-	-	1	1148.0	200	-6300	?
Castor	2R	1	Recruit	-	-	2	1148.0	5	-6378	?
DOT	-	0	Recruit	-	-	2	1148.0	100	-6370	?
DOT	-	1	Castor	-	-	1	1148.0	300	-6300	?
DOT	-	2	Star 26C	-	-	1	1148.0	1	-6378	?
Athena	-	0	Recruit	-	-	2	1148.0	45	-6300	?
Athena	-	1	Castor	-	-	1	1148.0	200	-6250	?
Athena	-	2	TX-261-2	-	-	1	1148.0	600	-5100	?
Athena	-	3	Alcor	-	-	1	1148.0	2000	-4000	?
Athena	-	4	BE-344	-	-	1	1148.0	2	-6378	?
WASP	-	0	Recruit	-	-	2	1148.0	50	-6370	?
WASP	-	1	Pollux	-	-	1	1148.0	50	-6370	?
WASP	-	2	Antares	-	-	1	1148.0	238	-6370	?
Castor Lance	-	0	Recruit	-	-	2	1148.0	1	-6378	?
Castor Lance	-	1	Castor	-	-	1	1148.0	50	-6350	?
Castor Lance	-	2	Lance	-	-	1	1148.0	500	-6350	?
Castor-Lance	-	1	Castor	-	-	1	1148.0	50	-6370	?
Castor-Recruit	-	2	Recruit	-	-	1	1148.0	150	-6300	?
Trailblazer 2	-	0	Recruit	-	-	2	530.0	1	-6378	?
Trailblazer 2	-	1	Castor	-	-	1	8930.0	58	-6350	?
Trailblazer 2	-	2	Lance	-	-	1	8930.0	300	-6310	?
Trailblazer 2	-	3	Alcor	-	-	1	507.0	700	-6368	?
Trailblazer 2	-	4	Cygnus 15	-	-	1	507.0	2670	-6360	?
Trailblazer 2	M	0	Recruit	-	-	2	530.0	1	-6378	?
Trailblazer 2	M	1	Castor	-	-	1	8930.0	58	-6350	?
Trailblazer 2	M	2	Skat	-	-	1	8930.0	305	-6310	?
Trailblazer 2	M	3	Altair	-	-	1	507.0	700	-6370	?
Trailblazer 2	M	4	Cygnus 15	-	-	1	106.0	2300	-6320	?
Trailblazer 2	M	5	Cygnus 5	-	-	1	3.8	2000	-6328	?
Astrobee 1500	-	0	Recruit	-	-	2	3.8	2	-6378	?
Astrobee 1500	-	1	Aerojet Jr	-	-	1	3.8	278	-6300	?
Astrobee 1500	-	2	Alcor	-	-	1	3.8	2000	-6065	?
Scanner	-	0	Recruit	-	-	2	3.8	5	-6378	?
Scanner	-	1	Aerojet Jr	-	-	1	3.8	30	-6370	?
Scanner	-	2	Lance	-	-	1	3.8	100	-6200	?
Scanner	-	3	Altair	-	-	1	3.8	700	-6000	?
Xaero	-	1	Xaero	-	-	1	3.8	30	-6378	?
D-21B	-	1	Avanti	-	-	1	3.8	20	-6300	?
D-21B	-	2	D-21B	-	-	1	3.8	30	-6300	?
RTV-A-2	-	1	MX-774	-	-	1	3.8	50	-6370	?
Corporal	-	1	Corporal Type 1	-	-	1	3.8	30	-6370	?
Corporal Type 1	-	1	Corporal Type 1	-	-	1	3.8	30	-6370	?
Corporal E	-	1	Corporal E	-	-	1	3.8	40	-6370	?
Talos	-	1	Talos	-	-	1	3.8	10	-6378	?
HPB	-	1	Talos	-	-	1	3.8	5	-6378	?





LVStages

LV_Name	LV_Variant	Stage_No	Stage_Name	Qualifier	Dummy	Multiplicity	Stage_Impulse kNs	Stage_Apogee km	Stage_Perigee km	Perigee_Qual
NOTS EV1	1	5	NOTS 3in Sph.	-		1	3.8	40	-6370	?
NOTS EV1	1	F	Fairing	-	d	1	3.8	40	-6370	?
A1 Samoud 2	-	1	A1 Samoud 2	-		1	3.8	100	-6378	?
OTRAG	-	1	OTRAG	-		1	3.8	50	-6370	?
TKS VA SAS	-	1	TKS VA SAS	-		1	3.8	1	-6378	?
Lambda 2	-	0	SB-310	-		2	1406.0	3	-6370	?
Lambda 2	-	1	L735	-		1	11800.0	25	-6370	?
Lambda 2	-	2	Lambda2-2	-		1	11800.0	410	-6360	?
Lambda 3	-	0	SB-310	-		2	1406.0	3	-6370	?
Lambda 3	-	1	L735	-		1	11800.0	30	-6370	?
Lambda 3	-	2	Lambda3-2	-		1	11800.0	300	-6370	?
Lambda 3	-	3	Lambda3-3	-		1	11800.0	1000	-6344	?
Lambda 3	-	F	Fairing	-		2	11800.0	300	-6370	?
Lambda 3H	-	0	SB-310	-		2	1406.0	3	-6370	?
Lambda 3H	-	1	L735	-		1	11800.0	25	-6370	?
Lambda 3H	-	2	L735(1/3)	-		1	4531.0	300	-6370	?
Lambda 3H	-	3	L500	-		1	1863.0	2000	-6340	?
Lambda 3H	-	F	Fairing	-		1	1863.0	300	-6370	?
Lambda 4S	-	0	SB-310	-		2	1406.0	3	-6370	?
Lambda 4S	-	1	L735	-		1	11800.0	50	-6360	?
Lambda 4S	-	2	L735(1/3)	-		1	4531.0	300	-6300	?
Lambda 4S	-	3	L500	-		1	1863.0	525	-4800	?
Lambda 4S	-	4	L480S	-		1	245.0	4000	500	?
Lambda 4S	-	F	Fairing	-		2	245.0	300	-6300	?
Lambda 4SC	-	0	SB-310	-		2	1406.0	3	-6370	?
Lambda 4SC	-	1	L735	-		1	11800.0	50	-6360	?
Lambda 4SC	-	2	L735(1/3)	-		1	4531.0	300	-6300	?
Lambda 4SC	-	3	L500	-		1	1863.0	300	-6000	?
Lambda 4SC	-	4	L480S	-		1	245.0	300	-6000	?
Lambda 4T	-	1	SB-310	-		2	1406.0	3	-6370	?
Lambda 4T	-	2	L735	-		1	11800.0	50	-6360	?
Lambda 4T	-	3	L735(1/3)	-		1	4531.0	300	-6500	?
Lambda 4T	-	4	L500	-		1	1863.0	400	-2500	?
Lambda 4T	-	4	L480S	-		1	245.0	400	-6378	?
ST-735	-	2	ST-735 Stage 2	-		1	245.0	100	-6378	?
ST-735	1	0	ST-735-SB	-		2	245.0	5	-6378	?
ST-735	1	1	ST-735	-		1	245.0	50	-6378	?
NAL-735	-	1	NAL-735	-		1	245.0	10	-6378	?
Shaurya	-	1	Shaurya Booster	-		1	245.0	10	-6370	?
Shaurya	-	2	Shaurya	-		1	245.0	200	-6370	?
Shaurya	-	0	MiG31D 072	-		1	245.0	17	-6300	?
Kontakt	-	1	27D6	-		1	245.0	20	-6300	?
Kontakt	-	2	28D6	-		1	245.0	100	-6300	?
Kontakt	-	3	29D6	-		1	245.0	500	-6300	?
VLS-R1	-	1	VLS-R1 Strapon	-		1	245.0	10	-6370	?
VLS-R1	-	2	VLS-R1	-	d	4	245.0	10	-6370	?
Pedro Recruit	-	1	Pedro	-		1	245.0	17	-6378	?
Pedro Recruit	-	2	Recruit	-		1	245.0	17	-6378	?
Arrow 3	-	1	Arrow 3	-		1	245.0	10	-6378	?
Arrow 3	-	2	Arrow 3 Stage 2	-		1	245.0	80	-6378	?
Miura 1	-	1	Miura 1	-		1	245.0	150	-6378	?
Skylark L	-	1	Skylark L	-		1	245.0	30	-6378	?
HIMES Rockoon	-	0	Balloon	-		1	245.0	18	-6378	?
HIMES Rockoon	-	1	KM Rockoon	-		1	245.0	70	-6378	?
Zulficar	-	1	Zulficar	-		1	245.0	60	-6378	?
Zolfiqar	-	1	Zolfiqar	-		1	245.0	200	-6350	?
Apollo LES	-	1	Apollo LES	-	?	1	245.0	2	-6300	?
ARW	-	1	ARW	-		1	245.0	30	-6370	?
KN-02	-	1	KN-02	-		1	245.0	20	-6378	?
Tochka	-	1	Tochka	-		1	245.0	20	-6378	?
Tochka-U	-	1	Tochka-U	-		1	245.0	20	-6378	?
ZUR-215	-	1	ZUR-215	-		1	245.0	27	-6378	?
V-750	-	0	V-750 Booster	-		1	245.0	10	-6378	?
V-750	-	1	V-750	-		1	245.0	27	-6378	?
Qahir-1	-	0	V-750 Booster	-		1	245.0	10	-6378	?
Qahir-1	-	1	V-750	-		1	245.0	27	-6378	?
Qahir-M2	-	0	V-750 Booster	-		1	245.0	10	-6378	?
Qahir-M2	-	1	V-750	-		1	245.0	27	-6378	?
SR75	-	1	SR75	-		1	245.0	50	-6378	?
Sabre Zombie	-	1	Sabre Zombie	-		1	245.0	120	-6300	?
Pathfinder Zombie	-	1	Pathfinder Zombie	-		1	245.0	120	-6300	?
ATACMS	-	1	ATACMS	-		1	245.0	120	-6300	?

LVStages

LV_Name	LV_Variant	Stage_No	Stage_Name	Qualifier	Dummy	Multiplicity	Stage_Impulse kNs	Stage_Apogee km	Stage_Perigee km	Perigee_Qual
X-51A	-	0	B-52H	-	-	1	245.0	15	-6378	?
X-51A	-	1	ATACMS	-	-	1	245.0	15	-6378	?
X-51A	-	2	X-51A	-	-	1	245.0	20	-6378	?
Tayfun	-	1	B-611	-	-	1	245.0	100	-6370	?
Bora-1	-	1	B-611	-	-	1	245.0	100	-6370	?
B-611	-	1	B-611	-	-	1	245.0	100	-6370	?
TP 0.1	-	1	B-611	-	-	1	245.0	20	-6378	?
TP 0.2	-	1	B-611	-	-	1	245.0	20	-6378	?
TP 0.2	-	2	B-611	-	-	1	245.0	20	-6378	?
SR 0.1	-	1	B-611	-	-	1	245.0	20	-6378	?
SR 0.1	-	2	B-611	-	-	1	245.0	20	-6378	?
K-BATS	-	1	SR 0.1	-	-	1	245.0	20	-6378	?
K-BATS	-	1	K-BATS	-	-	1	245.0	50	-6370	?
Hwasong-11Ma	-	1	KN-24	-	-	1	245.0	40	-6378	?
Badr-1	-	1	Badr-1	-	-	1	245.0	20	-6378	?
Grad	-	1	Grad	-	-	1	245.0	20	-6378	?
NOTS EV2	-	1	F4H Phantom	-	-	1	245.0	10	-6378	?
NOTS EV2	-	0	NOTS 500	-	-	1	245.0	10	-6378	?
NOTS EV2	-	1	NOTS 500	-	-	1	245.0	45	-6378	?
NOTS EV2	-	2	X-248	-	-	1	245.0	1100	-6300	?
GFV	1	0	HVAR	-	-	5	245.0	10	-6378	?
GFV	1	1	NOTS 500	-	-	1	245.0	45	-6378	?
GFV	1	2	NOTS 505	-	-	1	245.0	1100	-6300	?
GFV	2	0	HVAR	-	-	5	245.0	10	-6378	?
GFV	2	1	NOTS 500	-	-	1	245.0	45	-6378	?
GFV	2	2	X-248	-	-	1	245.0	1100	-6300	?
HYSR	-	1	HYSR	-	-	1	245.0	70	-6370	?
SURS	-	1	SURS	-	-	1	245.0	70	-6370	?
LS-C	-	1	LS-C Booster	-	-	1	245.0	5	-6378	?
LS-C	-	2	LS-C	-	-	1	245.0	100	-6370	?
LS-C	-	2	LS-C	-	-	1	245.0	100	-6370	?
LS-C	-	7	LS-C-7	-	-	1	245.0	5	-6378	?
LS-C	-	7	LS-C-7	-	-	1	245.0	100	-6370	?
Seliger 1	-	1	Seliger 1	-	-	1	245.0	50	-6378	?
Seliger 2	-	1	Seliger 1	-	-	1	245.0	20	-6378	?
Seliger 2	-	2	Seliger 1	-	-	1	245.0	50	-6378	?
Seliger 3	-	1	Seliger 1	-	-	1	245.0	20	-6378	?
Seliger 3	-	2	Seliger 1	-	-	1	245.0	20	-6378	?
Seliger 3	-	1	Seliger 1	-	-	1	245.0	50	-6378	?
Seliger 3	-	2	Seliger 1	-	-	1	245.0	50	-6378	?
Seliger 3	-	3	Seliger 3	-	-	1	245.0	120	-6350	?
Javelin	-	1	M-6	-	-	1	245.0	5	-6370	?
Javelin	-	2	Nike	-	-	1	245.0	14	-6370	?
Javelin	-	3	Nike	-	-	1	245.0	95	-6300	?
Javelin	-	4	Altair	-	-	1	245.0	1300	-6150	?
Trailblazer 1	-	1	M-6	-	-	1	245.0	12	-6378	?
Trailblazer 1	-	2	Nike	-	-	1	245.0	40	-6378	?
Trailblazer 1	-	3	Lance	-	-	1	245.0	300	-6338	?
Trailblazer 1	-	4	T-40	-	-	1	245.0	425	-6361	?
Trailblazer 1	-	5	T-55	-	-	1	245.0	943	-6369	?
Trailblazer 1	-	6	Cygnus 5	-	-	1	245.0	3331	-6289	?
Taurus Orion	-	1	Taurus	-	-	1	245.0	20	-6378	?
Taurus Orion	-	2	Orion	-	-	1	245.0	200	-6360	?
Taurus Tomahawk	-	1	Taurus	-	-	1	245.0	20	-6378	?
Taurus Tomahawk	-	2	Tomahawk	-	-	1	245.0	500	-6100	?
Taurus Nike Tomahawk	-	1	Taurus	-	-	1	245.0	10	-6378	?
Taurus Nike Tomahawk	-	2	Nike	-	-	1	245.0	40	-6378	?
Taurus Nike Tomahawk	-	3	Tomahawk	-	-	1	245.0	500	-6360	?
Taurus Nike Tomahawk	S	1	Taurus	-	-	1	245.0	10	-6378	?
Taurus	-	1	Taurion	-	-	1	245.0	2	-6100	?
Exos	-	1	M-6	-	-	1	245.0	14	-6378	?
Exos	-	2	Nike	-	-	1	245.0	37	-6370	?
Exos	-	3	Yardbird	-	-	1	245.0	600	-6370	?
Strongarm	-	1	M-6	-	-	1	245.0	10	-6378	?
Strongarm	-	2	Nike	-	-	1	245.0	40	-6370	?
Strongarm	-	3	Nike	-	-	1	245.0	40	-6370	?
Strongarm	-	4	Nike	-	-	1	245.0	75	-6300	?
Strongarm	-	4	Yardbird	-	-	1	245.0	500	-6200	?
Strongarm	-	5	Baby Sergeant	-	-	1	245.0	1000	-6000	?
Strongarm	-	1	M-6	-	-	1	245.0	10	-6378	?
Strongarm	1	2	Nike	-	-	1	245.0	40	-6370	?
Strongarm	1	3	Nike	-	-	1	245.0	75	-6300	?
Strongarm	1	4	Recruit	-	-	1	245.0	75	-6300	?
Honest John	-	1	M-6	-	-	1	245.0	10	-6370	?
Father John	1	1	Deacon	-	-	6	245.0	1	-6370	?
Father John	1	1	M-6	-	-	1	245.0	2	-6370	?
Father John	2	0	Deacon	-	-	8	245.0	1	-6370	?
Father John	2	1	M-6	-	-	1	245.0	2	-6370	?
Improved Honest John	-	1	Taurus	-	-	1	245.0	2	-6370	?

LVStages

LV_Name	LV_Variant	Stage_No	Stage_Name	Qualifier	Dummy	Multiplicity	Stage_Impulse kN	Stage_Apogee km	Stage_Perigee km	Perigee_Qual
HJ		1	M-6	-	-	1	245.0	10	-6370	?
HJ Hydac		1	M-6	-	-	1	245.0	10	-6370	?
HJ Hydac		2	Hydac	-	-	1	245.0	170	-6370	?
HJ Orion		1	M-6	-	-	1	245.0	20	-6370	?
HJ Orion		2	Orion	-	-	1	245.0	120	-6370	?
HJ Javelin		1	M-6	-	-	1	245.0	15	-6370	?
HJ Javelin		2	Javelin 3	-	-	1	245.0	300	-6370	?
HJ Mike		1	M-6	-	-	1	245.0	10	-6370	?
HJ Mike		2	Nike	-	-	1	245.0	100	-6370	?
HJ Mike Hydac		1	M-6	-	-	1	245.0	10	-6370	?
HJ Mike Hydac		2	Nike	-	-	1	245.0	50	-6370	?
HJ Mike Hydac		3	Hydac	-	-	1	245.0	500	-6370	?
HJ Mike Javelin		1	M-6	-	-	1	245.0	10	-6370	?
HJ Mike Javelin		2	Nike	-	-	1	245.0	40	-6370	?
HJ Mike Javelin		3	Javelin 3	-	-	1	245.0	300	-6370	?
HJ Mike Gosling		1	M-6	-	-	1	245.0	24	-6365	?
HJ Mike Gosling		2	Nike	-	-	1	245.0	37	-6290	?
HJ Mike Gosling		3	Gosling	-	-	1	245.0	43	-6276	?
HJ Mike Nike		1	M-6	-	-	1	245.0	10	-6370	?
HJ Mike Nike		2	Nike	-	-	1	245.0	40	-6300	?
HJ Mike Nike		3	Nike	-	-	1	245.0	120	-6300	?
HJ Mike Nike 20"SM		1	M-6	-	-	1	245.0	15	-6360	?
HJ Mike Nike 20"SM		2	Nike	-	-	1	245.0	40	-6300	?
HJ Mike Nike 20"SM		3	Nike	-	-	1	245.0	90	-6300	?
HJ Mike Nike 20"SM		4	Cygnus 20	-	-	1	245.0	1380	-6100	?
HJ Nike T40		1	M-6	-	-	1	245.0	10	-6378	?
HJ Nike T40		2	Nike	-	-	1	245.0	20	-6378	?
HJ Nike T40		3	T-40	-	-	1	245.0	30	-6378	?
HJ Nike T40 T55		1	M-6	-	-	1	245.0	10	-6378	?
HJ Nike T40 T55		2	Nike	-	-	1	245.0	20	-6378	?
HJ Nike T40 T55		3	T-40	-	-	1	245.0	30	-6378	?
HJ Nike T40 T55		4	T-55	-	-	1	245.0	30	-6378	?
HJ Nike Tri-Deacon T40		1	M-6	-	-	1	245.0	10	-6378	?
HJ Nike Tri-Deacon T40		2	Nike	-	-	1	245.0	20	-6378	?
HJ Nike Tri-Deacon T40		3	Deacon	-	-	3	245.0	30	-6378	?
HJ Nike Tri-Deacon T40		4	T-40	-	-	1	245.0	30	-6378	?
HJ Nike Nike Recruit		1	M-6	-	-	1	245.0	20	-6364	?
HJ Nike Nike Recruit		2	Nike	-	-	1	245.0	30	-6336	?
HJ Nike Nike Recruit		3	Nike	-	-	1	245.0	35	-6300	?
HJ Nike Nike Recruit		4	Recruit	-	-	1	245.0	35	-6300	?
HJ Nike Nike Recruit T55		1	M-6	-	-	1	245.0	30	-6300	?
HJ Nike Nike Recruit T55		2	Nike	-	-	1	245.0	30	-6300	?
HJ Nike Nike Recruit T55		3	Nike	-	-	1	245.0	30	-6300	?
HJ Nike Nike Recruit T55		4	Recruit	-	-	1	245.0	30	-6300	?
HJ Nike Nike Recruit T55		5	T-55	-	-	1	245.0	30	-6300	?
HJ PRV		1	M-6	-	-	1	245.0	10	-6370	?
HJ PRV		2	Nike	-	-	1	245.0	23	-6362	?
HJ PRV		3	Skat	-	-	1	245.0	34	-6157	?
HJ PRV		4	Recruit	-	-	1	245.0	64	-5738	?
Jason		1	M-6	-	-	1	245.0	5	-6370	?
Jason		2	Nike	-	-	1	245.0	14	-6370	?
Jason		3	Nike	-	-	1	245.0	50	-6300	?
Jason		4	Recruit	-	-	1	245.0	200	-6250	?
Jason		5	T-55	-	-	1	245.0	800	-6200	?
X-7A-1		1	X-7A-1 Booster	-	-	1	245.0	0	-6378	?
X-7A-1		2	X-7	-	-	1	245.0	30	-6378	?
Fateh-110		1	Fateh-110	-	-	1	245.0	60	-6378	?
Fateh-360		1	Fateh-360	-	-	1	245.0	60	-6378	?
M-600		1	Fateh-110	-	-	1	245.0	60	-6378	?
Zelzal		1	Zelzal	-	-	1	245.0	60	-6378	?
Zelzal-1		1	Zelzal	-	-	1	245.0	60	-6378	?
Zelzal-2		1	Zelzal	-	-	1	245.0	60	-6378	?
Zelzal-3		1	Zelzal	-	-	1	245.0	60	-6378	?
Kavoshgar K110		1	Zelzal	-	-	1	245.0	60	-6378	?
Lance		1	Lance	-	-	1	245.0	45	-6370	?
Sonda 3		1	Sonda 3-1	-	-	1	245.0	50	-6370	?
Sonda 3		2	Sonda 2A	-	-	1	245.0	500	-6300	?
Sonda 3	M1	1	Sonda 3-1	-	-	1	245.0	500	-6370	?
Sonda 3	M1	2	Sonda 2M	-	-	1	245.0	500	-6300	?
Sonda 3	M2	1	Sonda 3-1	-	-	1	245.0	500	-6300	?
Sonda 3	M2	2	Sonda 2M	-	-	1	245.0	500	-6300	?
VS-30		1	Sonda 3-1	-	-	1	245.0	120	-6370	?
VSP-30		1	S31	-	-	1	245.0	20	-6378	?

LVStages

LV_Name	LV_Variant	Stage_No	Stage_Name	Qualifier	Dummy	Multiplicity	Stage_Impulse kNs	Stage_Apogee km	Stage_Perigee km	Perigee_Qual
VSB-30	-	2	Sonda 3-1	-	-	1	245.0	100	-6370	?
S31/S30/IO	-	1	S31	-	-	1	245.0	20	-6378	?
S31/S30/IO	-	1	Sonda 3-1	-	-	1	245.0	100	-6370	?
S31/S30/IO	-	3	Improved Orion	-	-	1	245.0	400	-6300	?
VS-30/Orion	-	1	Sonda 3-1	-	-	1	245.0	120	-6370	?
VS-30/Orion	-	2	Improved Orion	-	-	1	245.0	400	-6300	?
VS-31/Orion	-	1	S31	-	-	1	245.0	20	-6378	?
VS-31/Orion	-	2	Improved Orion	-	-	1	245.0	400	-6300	?
VS-31/IM	-	1	S31	-	-	1	245.0	20	-6378	?
VS-31/IM	-	2	Imp Malemute	-	-	1	245.0	400	-6300	?
Red Kite	-	1	Red Kite	-	-	1	245.0	70	-6378	?
Red Kite/IM	-	1	Red Kite	-	-	1	245.0	70	-6378	?
Red Kite/IM	-	2	Imp Malemute	-	-	1	245.0	400	-6300	?
ATV	-	1	RH-ATV	-	-	1	245.0	60	-6370	?
ATV	-	2	RH-ATV	-	-	1	245.0	400	-6370	?
RH-560/300 Mk II	-	1	RH-560	-	-	1	245.0	60	-6370	?
RH-560/300 Mk II	-	2	RH-300 Mk II	-	-	1	245.0	420	-6370	?
RH-560 Mk III	-	1	RH-560 Mk III	-	-	1	245.0	60	-6370	?
RH-560 Mk III	-	2	RH-300 Mk II	-	-	1	245.0	420	-6300	?
RH-560S	-	1	RH-560S	-	-	1	245.0	100	-6370	?
RH-560	-	1	RH-560	-	-	1	245.0	60	-6370	?
RH-560	-	2	Belier	-	-	1	245.0	320	-6300	?
RH-560/LPR-3T	-	1	RH-560	-	-	1	245.0	20	-6378	?
RH-560/LPR-3T	-	2	LPR-3T	-	-	1	245.0	20	-6378	?
Berenice	-	1	BER	-	-	1	245.0	8	-6370	?
Berenice	-	2	Berenice St2	-	-	1	245.0	250	-6300	?
Berenice	-	3	Tramontane	-	-	1	245.0	250	-6300	?
Berenice	-	4	Melanie	-	-	1	245.0	250	-6300	?
Titus	-	1	BER	-	-	1	245.0	20	-6370	?
Titus	-	2	Berenice St2	-	-	1	245.0	250	-6300	?
Tibere	-	1	BER	-	-	1	245.0	20	-6370	?
Tibere	-	2	Tacite	-	-	1	245.0	150	-6300	?
Tibere	-	3	P064	-	-	1	245.0	150	-5000	?
Tacite	-	1	Tacite	-	-	1	245.0	140	-6370	?
OPd-56-39-22D	-	1	Vesuve	-	-	1	245.0	20	-6370	?
OPd-56-39-22D	-	2	Neptune	-	-	1	245.0	50	-6350	?
OPd-56-39-22D	-	3	Mimosa	-	-	1	245.0	150	-6300	?
OPd-56-39-22D	-	4	Melanie	-	-	1	245.0	150	-6100	?
Antares	-	1	Vesuve	-	-	1	245.0	20	-6370	?
Antares	-	2	Neptune	-	-	1	245.0	50	-6350	?
Antares	-	3	Mimosa	-	-	1	245.0	150	-6300	?
Antares	-	4	Melanie	-	-	1	245.0	150	-6100	?
Dragon	-	1	Stromboli	-	-	1	245.0	30	-6370	?
Dragon	-	2	Belier	-	-	1	245.0	400	-6300	?
Dragon 2B	-	1	Stromboli	-	-	1	245.0	30	-6370	?
Dragon 2B	-	2	Belier II	-	-	1	245.0	400	-6300	?
Dragon 3	-	1	Stromboli	-	-	1	245.0	30	-6370	?
Dragon 3	-	2	Belier III	-	-	1	245.0	400	-6300	?
Hatf I	-	1	Hatf I	-	-	1	245.0	50	-6370	?
Dauphin	-	1	Stromboli	-	-	1	245.0	110	-6370	?
Eridan	-	1	Stromboli	-	-	1	245.0	50	-6370	?
Eridan	-	2	Stromboli	-	-	1	245.0	400	-6370	?
Hatf II	-	1	Hatf I	-	-	1	245.0	50	-6370	?
Hatf II	-	2	Hatf I	-	-	1	245.0	250	-6370	?
SEA400	-	1	SEPR-732	-	-	1	245.0	60	-6378	?
VE10A Aigle	-	1	Aigle	-	-	1	245.0	20	-6378	?
VE10 Aigle	-	1	Aigle	-	-	1	245.0	20	-6378	?
Stataltex	-	1	Stromboli	-	-	1	245.0	20	-6378	?
Vega Statoreacteur	-	1	Vesuve	-	-	1	245.0	20	-6378	?
Veronique R	-	1	Veronique R	-	-	1	245.0	2	-6378	?
Veronique	-	1	Veronique	-	-	1	245.0	150	-6300	?
Veronique AGI	-	1	Veronique AGI	-	-	1	245.0	150	-6300	?
Veronique 61	-	1	Veronique 61	-	-	1	245.0	200	-6300	?
Veronique 61M	-	1	Veronique 61M	-	-	1	245.0	200	-6300	?
Veronique P2	-	1	Veronique P2	-	-	1	245.0	2	-6378	?
Veronique P6	-	1	Veronique P6	-	-	1	245.0	2	-6378	?
Sounding Rocket	-	1	NSFO Booster	-	-	1	245.0	10	-6370	?
Sounding Rocket	-	2	NSFO Stage 2	-	-	1	245.0	200	-6370	?
Luna-M	-	1	Luna-M	-	-	1	245.0	70	-6378	?
SM-3	-	1	Mk 72	-	-	1	245.0	10	-6370	?
SM-3	-	2	Mk 104	-	-	1	245.0	50	-6350	?
SM-3	-	3	ASAS	-	-	1	245.0	150	-6300	?
SM-3-IB	-	1	Mk 72	-	-	1	245.0	10	-6370	?

LVStages

LV_Name	LV_Variant	Stage_No	Stage_Name	Qualifier	Dummy	Multiplicity	Stage_Impulse kN	Stage_Apogee km	Stage_Perigee km	Perigee_Qual
SM-3-IB	-	2	Mk 104	-	-	1	245.0	50	-6350	?
SM-3-IB	-	3	ASAS XL	-	-	1	245.0	150	-6300	?
SM-3-IIA	-	1	Mk 72	-	-	1	245.0	10	-6370	?
SM-3-IIA	-	2	SM-3-II-2	-	-	1	245.0	50	-6350	?
SM-3-IIA	-	3	SM-3-II-3	-	-	1	245.0	150	-6300	?
SM-2-IV	-	1	Mk 72	-	-	1	245.0	10	-6370	?
SM-2-IV	-	2	Mk 104	-	-	1	245.0	50	-6350	?
SM-6	-	1	Mk 72	-	-	1	245.0	10	-6370	?
SM-6	-	2	Mk 104	-	-	1	245.0	50	-6350	?
Hades	-	1	Hades	-	-	1	245.0	150	-6370	?
Black Sparrow	-	0	F-15D	-	-	1	245.0	10	-6378	?
Black Sparrow	-	0	Black Sparrow	-	-	1	245.0	40	-6378	?
Blue Sparrow	-	0	F-15D	-	-	1	245.0	10	-6378	?
Blue Sparrow	-	1	Blue Sparrow	-	-	1	245.0	100	-6378	?
Silver Sparrow	-	0	F-15D	-	-	1	245.0	10	-6378	?
Silver Sparrow	-	1	Silver Sparrow	-	-	1	245.0	100	-6378	?
Al Samoud	-	1	Al Samoud	-	-	1	245.0	50	-6378	?
Al Fatah	-	1	Al Fatah	-	-	1	245.0	100	-6378	?
Cedre 3	-	1	Cedre St1	-	-	1	245.0	10	-6378	?
Cedre 3	-	2	Cedre St2	-	-	1	245.0	10	-6378	?
Cedre 3	-	3	Cedre St3	-	-	1	245.0	200	-6378	?
Cedre 4	-	1	Cedre-4 St1	-	-	1	245.0	10	-6378	?
Cedre 4	-	2	Cedre St2	-	-	1	245.0	10	-6378	?
Cedre 4	-	3	Cedre St3	-	-	1	245.0	200	-6378	?
S-520	-	1	S-520	-	-	1	245.0	300	-6200	?
SS-520	-	1	S-520	-	-	1	245.0	50	-6378	?
SS-520	-	2	SS-520 St 2	-	-	1	245.0	1000	-6373	?
SS-520	4	1	S-520	-	-	1	245.0	50	-6378	?
SS-520	4	2	SS-520 St 2	-	-	1	245.0	1000	-6373	?
SS-520	4	3	SS-520 St 3	-	-	1	245.0	1000	180	?
TT-500	-	1	TT-500	-	-	1	245.0	70	-6370	?
TT-500	-	2	TT-500-S2	-	-	1	245.0	300	-6300	?
TT-500A	-	1	TT-500	-	-	1	245.0	70	-6370	?
TT-500A	-	2	TT-500-S2	-	-	1	245.0	300	-6300	?
48N6	-	1	48N6	-	-	1	245.0	40	-6378	?
JCR	-	1	JCR Booster	-	-	1	245.0	10	-6370	?
JCR	-	2	JCR	-	-	1	245.0	200	-6370	?
Momo	-	-	Momo	-	-	1	245.0	100	-6378	?
Momo	6	1	Momo 6	-	-	1	245.0	100	-6378	?
Hydra Sandhawk	-	1	MOTS 401A	-	-	1	245.0	20	-6378	?
Hydra Sandhawk	-	2	Sandhawk	-	-	1	245.0	250	-6300	?
STIG-B	-	1	STIG-B	-	-	1	245.0	80	-6378	?
SARGE	-	1	SARGE	-	-	1	245.0	100	-6378	?
K-15	-	1	K-15 Booster	-	-	1	245.0	5	-6378	?
K-15	-	2	K-15 Stage 2	-	-	1	245.0	200	-6300	?
E-8-5 VA	-	1	E-8-5 VA	-	-	1	245.0	0	0	?
Long Tom	-	1	Long Tom	-	-	1	245.0	30	-6378	?
Long Tom	-	2	Long Tom	-	-	1	245.0	100	-6378	?
Long Tom	1	1	Mayfly	-	-	1	245.0	30	-6378	?
Long Tom	1	2	Goatling	-	-	1	245.0	100	-6378	?
HAT	-	1	Mayfly	-	-	1	245.0	10	-6370	?
HAT	-	1	HAT	-	-	1	245.0	10	-6370	?
Nike T48 Ajax	-	2	LAPSTAR	-	-	1	245.0	80	-6370	?
Nike T48 Ajax	-	2	T48	-	-	1	245.0	5	-6370	?
SM-2	-	1	Nike-490 Sustainer	-	-	1	245.0	40	-6370	?
SM-2	-	2	Terrier Mk 70	-	-	1	245.0	10	-6378	?
SM-1ER	-	1	Mk 30	-	-	1	245.0	20	-6370	?
SM-1ER	-	2	Terrier Mk 12	-	-	1	245.0	10	-6378	?
SM-1ER	-	2	Mk 30	-	-	1	245.0	10	-6378	?
Hugo	-	1	Terrier	-	-	1	245.0	20	-6378	?
Hugo	-	2	Terrier	-	-	1	245.0	5	-6378	?
Terrier Sandhawk	-	1	Cajun	-	-	1	245.0	100	-6378	?
Terrier Sandhawk	-	2	Terrier	-	-	1	245.0	10	-6378	?
ARAV-ER	-	1	Sandhawk	-	-	1	245.0	400	-6370	?
ARAV-ER	-	2	Terrier Mk 70	-	-	1	245.0	10	-6378	?
ARAV-ER	-	1	Terrier	-	-	1	245.0	10	-6378	?
ARAV-ER	-	2	Oriole	-	-	1	245.0	368	-6378	?
ARAV-ER	-	3	Star 20	-	-	1	245.0	368	-6378	?
Oriole II	-	1	Terrier	-	-	1	245.0	10	-6378	?
Oriole II	-	2	Oriole	-	-	1	245.0	368	-6378	?
Terrier Oriole	-	1	Terrier	-	-	1	245.0	10	-6378	?
Terrier Oriole	-	2	Oriole	-	-	1	245.0	368	-6378	?
Terrier Oriole Oriole	-	1	Terrier	-	-	1	245.0	10	-6378	?
Terrier Oriole Oriole	-	2	Oriole	-	-	1	245.0	368	-6378	?
Terrier Oriole Oriole	-	3	Oriole	-	-	1	245.0	368	-6378	?
Oriole IIIA	-	1	Terrier	-	-	1	245.0	12	-6378	?

LVStages

LV_Name	LV_Variant	Stage_No	Stage_Name	Qualifier	Dummy	Multiplicity	Stage_Impulse kNs	Stage_Apogee km	Stage_Perigee km	Perigee_Qual
Oriole IIIA	-	2	Oriole	-	-	1	245.0	300	-6378	?
Oriole IIIB	-	3	Milka	-	-	1	245.0	800	-6378	?
Terrier Terrier Oriole	-	1	Terrier	-	-	1	245.0	10	-6378	?
Terrier Terrier Oriole	-	2	Terrier	-	-	1	245.0	10	-6378	?
Terrier Terrier Oriole	-	3	Oriole	-	-	1	245.0	368	-6378	?
MREM T4-E	-	1	Terrier Mk 70	-	-	1	245.0	10	-6378	?
MREM T4-E	-	2	Terrier Mk 70	-	-	1	245.0	10	-6378	?
MREM T4-E	-	3	Oriole	-	-	1	245.0	368	-6378	?
Terrier Mk 70 Oriole	-	1	Terrier Mk 70	-	-	1	245.0	10	-6378	?
Terrier Mk 70 Oriole	-	2	Oriole	-	-	1	245.0	10	-6378	?
SREM T4-B	-	1	Terrier Mk 70	-	-	1	245.0	10	-6370	?
SREM T4-B	-	2	Oriole	-	-	1	245.0	200	-6370	?
Terrier	-	1	Terrier	-	-	1	245.0	10	-6378	?
Terrier Mk 70 Peregrine	-	1	Terrier Mk 70	-	-	1	245.0	12	-6378	?
Terrier Mk 70 Peregrine	-	2	Peregrine	-	-	1	245.0	300	-6378	?
Terrier Malemute	-	1	Terrier	-	-	1	1133.0	10	-6378	?
Terrier Malemute	-	2	Malemute	-	-	1	1210.0	500	-6370	?
Terrier Imp Malemute	-	1	Terrier	-	-	1	1133.0	10	-6378	?
Terrier Imp Malemute	-	2	Imp Malemute	-	-	1	1210.0	500	-6370	?
Terrier Imp Malemute	2	1	Terrier Mk 70	-	-	1	1133.0	10	-6378	?
Terrier Imp Malemute	2	2	Imp Malemute	-	-	1	1210.0	500	-6370	?
Terrier Imp Malemute	1	1	Terrier	-	-	1	1133.0	10	-6378	?
Terrier Imp Malemute	1	2	Imp Malemute	-	-	1	1210.0	500	-6370	?
Terrier Terrier Imp Mal.	-	1	Terrier	-	-	1	1133.0	1	-6378	?
Terrier Terrier Imp Mal.	-	2	Terrier	-	-	1	1133.0	10	-6378	?
Terrier Terrier Imp Mal.	-	3	Imp Malemute	-	-	1	1210.0	500	-6370	?
Terrier/551	-	1	Terrier	-	-	1	1210.0	5	-6378	?
Terrier/551	-	2	NOTS 551	-	-	1	1210.0	400	-6378	?
Terrier LEAP	-	1	Terrier Mk 70	-	-	1	1210.0	10	-6378	?
Terrier LEAP	-	2	Mk 30	-	-	1	1210.0	30	-6378	?
Terrier LEAP	-	3	ASAS	-	-	1	1210.0	30	-6378	?
Terrier ASAS	-	1	Terrier Mk 70	-	-	1	1210.0	10	-6378	?
Terrier ASAS	-	2	ASAS XL	-	-	1	1210.0	30	-6378	?
Terrier Hydac	-	1	Terrier	-	-	1	1210.0	10	-6370	?
Terrier Hydac	-	2	Hydac	-	-	1	1210.0	400	-6300	?
Terrier Nike	-	1	Terrier	-	-	1	1210.0	1	-6378	?
Terrier Nike	-	2	Nike	-	-	1	1210.0	2	-6378	?
Terrier Asp IV	-	1	Terrier	-	-	1	1210.0	20	-6378	?
Terrier Asp IV	-	2	Asp IV	-	-	1	1210.0	150	-6370	?
Terrier Asp	-	1	Terrier	-	-	1	1210.0	20	-6378	?
Terrier Asp	-	2	Asp	-	-	1	1210.0	100	-6370	?
Terrier Orion	-	1	Terrier	-	-	1	1210.0	10	-6378	?
Terrier Orion	-	2	Orion	-	-	1	1210.0	150	-6370	?
Terrier Mk 70 Orion	-	1	Terrier Mk 70	-	-	1	1210.0	10	-6378	?
Terrier Mk 70 Orion	-	2	Improved Orion	-	-	1	1210.0	200	-6370	?
Terrier Improved Orion	-	1	Terrier	-	-	1	1210.0	10	-6378	?
Terrier Improved Orion	-	2	Improved Orion	-	-	1	1210.0	200	-6370	?
Terrier Mk 12 Imp Orion	-	1	Terrier	-	-	1	1210.0	10	-6378	?
Terrier Mk 12 Imp Orion	-	2	Improved Orion	-	-	1	1210.0	200	-6370	?
Terrier Mk 70 Imp Orion	-	1	Terrier Mk 70	-	-	1	1210.0	10	-6378	?
Terrier Mk 70 Imp Orion	-	2	Improved Orion	-	-	1	1210.0	200	-6370	?
Terrier Tomahawk	-	1	Terrier	-	-	1	1210.0	10	-6378	?
Terrier Tomahawk	-	2	Tomahawk	-	-	1	1210.0	400	-6370	?
Black Dagger	-	1	Terrier Mk 70	-	-	1	1210.0	12	-6378	?
Black Dagger	-	2	Sabre Zombie	-	-	1	1210.0	120	-6300	?
Boosted Zombie	-	1	Terrier Mk 70	-	-	1	1210.0	12	-6378	?
Boosted Zombie	-	2	Sabre Zombie	-	-	1	1210.0	120	-6300	?
Terrier Lynx	-	1	Terrier	-	-	1	1210.0	20	-6378	?
Terrier Lynx	-	2	Lynx	-	-	1	1210.0	300	-6370	?
Terrier ASROC Cajun	-	1	Terrier	-	-	1	1210.0	10	-6378	?
Terrier ASROC Cajun	-	2	ASROC	-	-	1	1210.0	30	-6378	?
Terrier ASROC Cajun	-	3	Cajun	-	-	1	1210.0	100	-6370	?
Terrier Recruit	-	1	Terrier	-	-	1	1210.0	10	-6378	?
Terrier Recruit	-	2	Recruit	-	-	1	1210.0	10	-6378	?
Coyote	-	1	Terrier Mk 70	-	-	1	1210.0	1	-6378	?
STAR	-	1	Terrier Mk 70	-	-	1	1210.0	10	-6378	?
Black Brant IX	-	1	Terrier	-	-	1	1210.0	5	-6378	?
Black Brant IX	-	2	Black Brant VC	-	-	1	1210.0	350	-6350	?
Black Brant IX	2	1	Terrier Mk 70	-	-	1	1210.0	5	-6378	?
Black Brant IX	2	2	Black Brant Mk1	-	-	1	1210.0	350	-6350	?
Black Brant IXB	-	1	Terrier	-	-	1	1210.0	5	-6378	?
Black Brant IXB	-	2	Black Brant VB	-	-	1	1210.0	350	-6350	?
Black Brant IX	3	1	Terrier Mk 70	-	-	1	1210.0	5	-6378	?

LVStages

LV_Name	LV_Variant	Stage_No	Stage_Name	Qualifier	Dummy	Multiplicity	Stage_Impulse kNs	Stage_Apogee km	Stage_Perigee km	Perigee_Qual
Black Brant IX	3	2	Black Brant Mk3	-	-	1	1210.0	350	-6350	?
Black Brant IX	4	1	Ferrier Mk 70	-	-	1	1210.0	5	-6378	?
Black Brant IX	4	2	Black Brant Mk4	-	-	1	1210.0	350	-6350	?
Black Brant 98M1	-	1	Ferrier Mk 70	-	-	1	1210.0	5	-6378	?
Black Brant 98M1	-	2	Black Brant VB	-	-	1	1210.0	350	-6350	?
Black Brant 98M1	-	1	Ferrier Mk 70	-	-	1	1210.0	5	-6378	?
Black Brant 98M1	-	2	Black Brant VC	-	-	1	1210.0	350	-6350	?
Black Brant X	-	1	Ferrier	-	-	1	1210.0	5	-6378	?
Black Brant X	-	2	Black Brant VB	-	-	1	1210.0	250	-6360	?
Black Brant X	-	3	Nihka	-	-	1	1210.0	1000	-6300	?
Black Brant XB	-	1	Ferrier	-	-	1	1210.0	5	-6378	?
Black Brant XB	-	2	Black Brant VB	-	-	1	1210.0	250	-6360	?
Black Brant XB	-	3	Nihka	-	-	1	1210.0	1000	-6300	?
Black Brant 10CM1	-	1	Ferrier Mk 70	-	-	1	1210.0	5	-6378	?
Black Brant 10CM1	-	2	Black Brant VC	-	-	1	1210.0	250	-6360	?
Black Brant 10CM1	-	3	Nihka	-	-	1	1210.0	1000	-6300	?
SRAM	-	1	SRAM	-	-	1	1210.0	10	-6378	?
ASAT	-	1	ASAT	-	-	1	1210.0	70	-6370	?
ASAT	-	2	Star 20	-	-	1	1210.0	1000	-6800	?
Farside	-	1	Recruit	-	-	4	1210.0	20	-6370	?
Farside	-	2	Recruit	-	-	1	1210.0	50	-6370	?
Farside	-	3	Arrow II	-	-	4	1210.0	100	-6300	?
Farside	-	4	Arrow II	-	-	4	1210.0	5000	-6300	?
NATIV	-	1	RTV-A-3	-	-	1	1210.0	15	-6378	?
MR-12	-	1	MR-12	-	-	1	1210.0	170	-6370	?
MR-20	-	1	MR-20	-	-	1	1210.0	150	-6370	?
MR-25	-	1	M-250	-	-	1	1210.0	150	-6370	?
MR-30	-	1	MR-30	-	-	1	1210.0	300	-6370	?
MN-300	-	1	MR-30	-	-	1	1210.0	300	-6370	?
Tianying-3C	-	1	Tianying-3C	-	-	1	1210.0	200	-6378	?
Tianying-3E	-	1	Tianying-3C	-	-	1	1210.0	200	-6378	?
Tianying-3F	-	1	Tianying-3F Booster	-	-	1	1210.0	10	-6378	?
Tianying-3F	-	2	Tianying-3C	-	-	1	1210.0	320	-6378	?
Huayi-1	-	1	Tianying-3F Booster	-	-	1	1210.0	10	-6378	?
Huayi-1	-	2	Tianying-3C	-	-	1	1210.0	320	-6378	?
T-7	-	0	T-7 booster	-	-	1	1210.0	100	-6378	?
T-7	-	1	T-7	-	-	1	1210.0	100	-6370	?
T-7A	-	0	T-7 booster	-	-	1	1210.0	100	-6370	?
T-7A	-	1	T-7	-	-	1	1210.0	100	-6378	?
T-7A-S2	-	0	T-7 booster	-	-	1	1210.0	100	-6370	?
T-7A-S2	-	1	T-7	-	-	1	1210.0	100	-6378	?
T-7A-S	-	0	T-7 booster	-	-	1	1210.0	100	-6378	?
T-7A-S	-	1	T-7	-	-	1	1210.0	100	-6370	?
T-7M	-	0	T-7 booster	-	-	1	1210.0	100	-6378	?
T-7M	-	1	T-7	-	-	1	1210.0	100	-6370	?
T-7/GF-O1A	-	0	T-7 booster	-	-	1	1210.0	100	-6378	?
T-7/GF-O1A	-	1	T-7	-	-	1	1210.0	100	-6300	?
T-7/GF-O1A	-	2	GF-O1A	-	-	1	1210.0	300	-6200	?
Black Brant I	-	1	Black Brant I	-	-	1	1210.0	130	-6370	?
Black Brant II	-	1	Black Brant VA	-	-	1	1210.0	130	-6370	?
Black Brant IIB	-	1	Black Brant IIB	-	-	1	1210.0	130	-6370	?
Black Brant IVA	-	1	Black Brant VA	-	-	1	1210.0	100	-6370	?
Black Brant IVA	-	2	Black Brant IIIA	-	-	1	1210.0	800	-6350	?
Black Brant IVB	-	1	Black Brant VA	-	-	1	1210.0	100	-6370	?
Black Brant IVB	-	2	Black Brant IIB	-	-	1	1210.0	800	-6350	?
Black Brant VA	-	1	Black Brant VA	-	-	1	1210.0	180	-6370	?
Black Brant VB	-	1	Black Brant VB	-	-	1	1210.0	180	-6370	?
Black Brant VC	-	1	Black Brant VC	-	-	1	1210.0	180	-6370	?
Black Brant 88	-	1	Nike	-	-	1	1210.0	5	-6378	?
Black Brant 88	-	2	Black Brant VB	-	-	1	1210.0	340	-6350	?
Black Brant 8C	-	1	Nike	-	-	1	1210.0	5	-6378	?
Black Brant 8C	-	2	Black Brant VC	-	-	1	1210.0	340	-6350	?
SkyIark	1	1	Raven 1/1A/2A	-	-	1	1210.0	180	-6300	?
SkyIark	2	1	Raven 2	-	-	1	1210.0	180	-6300	?
SkyIark	5	1	Raven 5	-	-	1	1210.0	180	-6300	?
SkyIark	7	1	Raven 7	-	-	1	1210.0	180	-6300	?
SkyIark 1	-	1	Raven 8	-	-	1	1210.0	100	-6300	?
SkyIark	2C	1	Cuckoo IA	-	-	1	1210.0	3	-6378	?
SkyIark	2C	2	Raven 2	-	-	1	1210.0	180	-6300	?
SkyIark	5C	1	Cuckoo IA	-	-	1	1210.0	3	-6378	?
SkyIark	5C	2	Raven 5	-	-	1	1210.0	180	-6300	?
SkyIark	7C	1	Cuckoo IA	-	-	1	1210.0	3	-6378	?
SkyIark	7C	2	Raven 7	-	-	1	1210.0	180	-6300	?



LVStages

LV_Name	LV_Variant	Stage_No	Stage_Name	Qualifier	Dummy	Multiplicity	Stage_Impulse kNs	Stage_Apogee km	Stage_Perigee km	Perigee_Qual
Skyllark 2	-	1	Cuckoo IA	-	-	1	1210.0	3	-6378	?
Skyllark 2	-	2	Raven 8	-	-	1	1210.0	200	-6300	?
Skyllark 2 AC	-	1	Cuckoo IA	-	-	1	1210.0	3	-6378	?
Skyllark 2 AC	-	2	Raven 8	-	-	1	1210.0	200	-6300	?
Skyllark 3	-	1	Cuckoo IA	-	-	1	1210.0	3	-6378	?
Skyllark 3	-	2	Raven 6	-	-	1	1210.0	200	-6300	?
Skyllark 3 AC	-	1	Cuckoo IA	-	-	1	1210.0	3	-6378	?
Skyllark 3 AC	-	2	Raven 6	-	-	1	1210.0	260	-6300	?
Skyllark 4	-	1	Goldfinch	-	-	1	1210.0	3	-6378	?
Skyllark 4	-	2	Raven 8	-	-	1	1210.0	240	-6300	?
Skyllark 4 AC	-	1	Goldfinch	-	-	1	1210.0	3	-6378	?
Skyllark 4 AC	-	2	Raven 8	-	-	1	1210.0	240	-6300	?
Skyllark 6	-	1	Goldfinch II	-	-	1	1210.0	3	-6378	?
Skyllark 6	-	2	Raven 6	-	-	1	1210.0	240	-6300	?
Skyllark 6 AC	-	1	Goldfinch II	-	-	1	1210.0	3	-6378	?
Skyllark 6 AC	-	2	Raven 6	-	-	1	1210.0	240	-6300	?
Skyllark 7	-	1	Goldfinch II	-	-	1	1210.0	3	-6378	?
Skyllark 7	-	2	Raven 11	-	-	1	1210.0	240	-6300	?
Skyllark 7 AC	-	1	Goldfinch II	-	-	1	1210.0	3	-6378	?
Skyllark 7 AC	-	2	Raven 11	-	-	1	1210.0	240	-6300	?
Skyllark 12	-	1	Goldfinch	-	-	1	1210.0	5	-6378	?
Skyllark 12	-	2	Raven 11	-	-	1	1210.0	150	-6300	?
Skyllark 12 AC	-	1	Goldfinch II	-	-	1	1210.0	5	-6378	?
Skyllark 12 AC	-	2	Raven 11	-	-	1	1210.0	150	-6300	?
Skyllark 12 AC	-	3	Cuckoo 4	-	-	1	1210.0	800	-6000	?
Skyllark 10A	-	1	Goldfinch	-	-	1	1210.0	5	-6378	?
Skyllark 10A	-	2	Gosling 4T	-	-	1	1210.0	240	-6300	?
Jaguar 1	-	1	Rook II	-	-	1	1210.0	30	-6370	?
Jaguar 1	-	2	Gosling IIN	-	-	1	1210.0	30	-6370	?
Jaguar 1	-	3	Lobster I	-	-	1	1210.0	30	-6370	?
Jabiru	-	1	Rook IIIA	-	-	1	1210.0	30	-6370	?
Jabiru	-	2	Goldfinch II	-	-	1	1210.0	30	-6370	?
Jabiru	-	3	Gosling IV	-	-	1	1210.0	30	-6370	?
Jaguar 2	-	1	Rook IIIA	-	-	1	1210.0	30	-6370	?
Jaguar 2	-	2	Goldfinch II	-	-	1	1210.0	30	-6370	?
Jaguar 2	-	3	Gosling IV	-	-	1	1210.0	30	-6370	?
Jaguar 2	-	4	Rook IIIA	-	-	1	1210.0	30	-6370	?
Jabiru 2	-	1	Rook IIIA	-	-	1	1210.0	30	-6370	?
Jabiru 2	-	2	Goldfinch II	-	-	1	1210.0	30	-6370	?
Jabiru 2	-	3	Gosling IV	-	-	1	1210.0	30	-6370	?
Jabiru 3	-	1	Rook IIIA	-	-	1	1210.0	30	-6370	?
Jabiru 3	-	2	Rook IIIA	-	-	1	1210.0	30	-6370	?
Rook	-	1	Rook II	-	-	1	1210.0	20	-6378	?
Rook IIIA	-	1	Rook IIIA	-	-	1	1210.0	20	-6378	?
Leopard	-	1	Rook	-	-	1	1210.0	5	-6378	?
Leopard	-	2	Gosling	-	-	1	1210.0	20	-6378	?
Blue Water	-	1	Saluki B	-	-	1	1210.0	10	-6370	?
Blue Water	-	2	Saluki S	-	-	1	1210.0	10	-6370	?
RX-420	-	1	RX-420	-	-	1	1210.0	70	-6370	?
Kappa 7	-	1	K420	-	-	1	1210.0	53	-6370	?
Kappa 8	-	1	K420	-	-	1	1210.0	50	-6370	?
Kappa 8	-	2	Kappa 8	-	-	1	1210.0	200	-6370	?
Kappa 9M	-	1	K420H	-	-	1	1210.0	60	-6370	?
Kappa 9M	-	2	K250	-	-	1	1210.0	250	-6370	?
Kappa 9L	-	1	K420	-	-	1	1210.0	50	-6378	?
Kappa 9L	-	2	Kappa 6	-	-	1	1210.0	100	-6378	?
Kappa 9L	-	3	K150	-	-	1	1210.0	350	-6378	?
Kappa 10	-	1	K420H	-	-	1	1210.0	30	-6378	?
Kappa 10	-	2	K420(1/3)	-	-	1	1210.0	250	-6300	?
Kappa 10C	-	1	K420H	-	-	1	1210.0	30	-6378	?
Kappa 10C	-	2	K420(1/3)	-	-	1	1210.0	300	-6300	?
Kappa 10S	-	1	K420H	-	-	1	1210.0	30	-6378	?
Kappa 10S	-	2	K420(1/3)	-	-	1	1210.0	250	-6300	?
Kappa 10S	-	3	K10S	-	-	1	1210.0	740	-6370	?
Nike	-	1	Nike	-	-	1	1210.0	5	-6378	?
Nike-480	-	1	X-201	-	-	1	1210.0	5	-6370	?
Nike-480	-	2	Nike-47 Sustainer	-	-	1	1210.0	40	-6370	?
Nike-482	-	1	X-201	-	-	1	1210.0	5	-6370	?
Nike-482	-	2	Nike-47 Sustainer	-	d	1	1210.0	40	-6370	?
Nike-484	-	1	X-201	-	-	1	1210.0	5	-6370	?
Nike-484	-	2	Nike-484 Sustainer	-	-	1	1210.0	40	-6370	?
Nike-490	-	1	X-201	-	-	1	1210.0	5	-6370	?
Nike-490	-	2	Nike-490 Sustainer	-	-	1	1210.0	40	-6370	?

LVStages

LV_Name	LV_Variant	Stage_No	Stage_Name	Qualifier	Dummy	Multiplicity	Stage_Impulse kNs	Stage_Apogee km	Stage_Perigee km	Perigee_Qual
Nike Ajax	-	1	Nike	-	-	1	1210.0	2	-6378	?
Nike Ajax	-	2	Ajax	-	-	1	1210.0	30	-6378	?
Nike X201 Ajax	-	1	X-201	-	-	1	1210.0	5	-6370	?
Nike X201 Ajax	-	2	Nike-490 Sustainer	-	-	1	1210.0	40	-6370	?
Nike Nike	-	1	Nike	-	-	1	1210.0	20	-6378	?
Nike Nike	-	2	Nike	-	-	1	1210.0	50	-6370	?
Nike Cree	-	1	Nike	-	-	1	1210.0	20	-6378	?
Nike Cree	-	2	Nike	-	-	1	1210.0	50	-6370	?
Nike Cree	-	3	Nike	-	-	1	1210.0	5	-6378	?
Nike Recruit	-	1	Nike	-	-	1	1210.0	5	-6378	?
Nike Recruit	-	2	Recruit	-	-	1	1210.0	10	-6378	?
Nike Tomahawk	-	1	Nike	-	-	1	665.0	28	-6364	?
Nike Tomahawk	-	2	Tomahawk	-	-	1	503.0	290	-6321	?
Nike Tomahawk	9	1	Nike	-	-	1	665.0	1	-6364	?
Nike Tomahawk	9	2	Tomahawk	-	-	1	503.0	290	-6321	?
Nike Tomahawk	12	1	Nike	-	-	1	665.0	28	-6364	?
Nike Tomahawk	12	2	Tomahawk	-	-	1	503.0	290	-6321	?
Nike Tomahawk	9a	1	Nike	-	-	1	665.0	28	-6364	?
Nike Tomahawk	9a	2	Tomahawk 1	-	-	1	503.0	290	-6321	?
Nike Deacon	-	1	Nike	-	-	1	503.0	20	-6378	?
Nike Deacon	-	2	Deacon	-	-	1	503.0	120	-6370	?
Nike Deacon	1	1	2.5-DS-59000	-	-	1	503.0	20	-6378	?
Nike Deacon	1	2	Deacon	-	-	1	503.0	120	-6370	?
Nike Nike HPAG	-	1	Nike	-	-	1	503.0	5	-6378	?
Nike Nike HPAG	-	2	Nike	-	-	1	503.0	10	-6378	?
Nike Nike HPAG	-	3	HPAG	-	-	1	503.0	10	-6378	?
Nike Nike T40	-	1	Nike	-	-	1	503.0	10	-6378	?
Nike Nike T40	-	2	Nike	-	-	1	503.0	25	-6378	?
Nike Nike T40	-	3	T-40	-	-	1	503.0	50	-6378	?
Nike Nike T40 T55	-	1	Nike	-	-	1	503.0	5	-6378	?
Nike Nike T40 T55	-	2	Nike	-	-	1	503.0	10	-6378	?
Nike Nike T40 T55	-	3	T-55	-	-	1	503.0	15	-6378	?
Nike Nike T40 T55	-	4	Nike	-	-	1	503.0	100	-6370	?
Nike Nike Tri-Deacon T40	-	1	Nike	-	-	1	503.0	352	-6370	?
Nike Nike Tri-Deacon T40	-	2	Nike	-	-	1	503.0	10	-6378	?
Nike Nike Tri-Deacon T40	-	3	Deacon	-	-	3	503.0	18	-6378	?
Nike Nike Tri-Deacon T40	-	4	T-40	-	-	1	503.0	18	-6378	?
Nike Nike Tri-Deacon T40	-	1	Nike	-	-	1	503.0	10	-6378	?
Nike Nike Deacon	-	2	Nike	-	-	1	503.0	13	-6378	?
Nike Nike Deacon	-	3	Deacon	-	-	1	503.0	13	-6378	?
Mach 5 TV	-	1	Nike	-	-	1	503.0	1	-6378	?
Mach 5 TV	-	2	XM-17	-	-	1	503.0	16	-6300	?
Nike Yardbird	-	1	Nike	-	-	1	503.0	24	-6378	?
Nike Yardbird	-	2	Yardbird	-	-	1	503.0	120	-6370	?
Nike Cajun	-	1	Nike	-	-	1	503.0	24	-6378	?
Nike Cajun	-	2	Cajun	-	-	1	503.0	120	-6370	?
Nike Nike Cajun	-	1	Nike	-	-	1	503.0	24	-6378	?
Nike Nike Cajun	-	2	Nike	-	-	1	503.0	24	-6378	?
Nike Nike Cajun	-	3	Cajun	-	-	1	503.0	120	-6370	?
Nike Apache	-	1	Nike	-	-	1	503.0	7	-6378	?
Nike Apache	-	2	Apache	-	-	1	503.0	110	-6300	?
Nike Orion	-	1	Nike	-	-	1	665.0	25	-6378	?
Nike Orion	-	2	Orion	-	-	1	416.0	140	-6370	?
Nike Improved Orion	-	1	Nike	-	-	1	665.0	25	-6378	?
Nike Improved Orion	-	2	Improved Orion	-	-	1	416.0	140	-6370	?
Nike Hawk	-	1	Nike	-	-	1	416.0	20	-6378	?
Nike Hawk	-	2	Hawk	-	-	1	416.0	162	-6370	?
Nike Malemute	-	1	Nike	-	-	1	665.0	20	-6378	?
Nike Malemute	-	2	Malemute	-	-	1	1210.0	500	-6370	?
Nike Asp	-	1	Nike	-	-	1	1210.0	24	-6378	?
Nike Asp	-	2	Asp IV	-	-	1	1210.0	200	-6370	?
Nike Hydac	-	1	Nike	-	-	1	1210.0	15	-6378	?
Nike Hydac	-	2	Hydac	-	-	1	1210.0	150	-6370	?
Nike Iroquois	-	1	Nike	-	-	1	1210.0	20	-6378	?
Nike Iroquois	-	2	Iroquois	-	-	1	188.0	200	-6370	?
Nike Javelin	-	1	Nike	-	-	1	188.0	20	-6378	?
Nike Javelin	-	2	Javelin 3	-	-	1	188.0	130	-6370	?
Nike Viper I	-	1	Nike	-	-	1	188.0	20	-6370	?
Nike Viper I	-	2	Viper I	-	-	1	188.0	80	-6360	?
Terrier Viper I	-	1	Terrier	-	-	1	188.0	20	-6370	?

LVStages

LV_Name	LV_Variant	Stage_No	Stage_Name	Qualifier	Dummy	Multiplicity	Stage_Impulse kNs	Stage_Apogee km	Stage_Perigee km	Perigee_Qual
Terrier Viper I	-	2	Viper IC	-	-	1	188.0	150	-6370	?
Nike Mike Recruit	-	1	Nike	-	-	1	188.0	5	-6378	?
Nike Mike Recruit	-	1	Nike	-	-	1	188.0	20	-6378	?
Nike Mike Recruit	-	3	Recruit	-	-	1	188.0	120	-6350	?
Aerobee 170A	-	1	Nike	-	-	1	188.0	10	-6370	?
Aerobee 170A	-	2	Aerobee 150	-	-	1	188.0	200	-6370	?
Aerobee 170B	-	1	Nike	-	-	1	188.0	10	-6370	?
Aerobee 170B	-	2	Aerobee 150	-	-	1	188.0	200	-6370	?
Aerobee 170	-	1	Nike	-	-	1	640.0	10	-6370	?
Aerobee 170	-	2	Aerobee 150	-	-	1	928.0	200	-6370	?
Aerobee 200A	-	1	Nike	-	-	1	928.0	10	-6370	?
Aerobee 200A	-	2	AJ60-92	-	-	1	928.0	250	-6370	?
Aerobee 200	-	1	Nike	-	-	1	928.0	10	-6370	?
Aerobee 200	-	2	AJ60-92	-	-	1	928.0	250	-6370	?
Aerobee 350	-	1	Nike	-	-	1	928.0	10	-6370	?
Aerobee 350	-	2	AJ60-91	-	-	1	928.0	300	-6370	?
Aerobee 200	-	1	Nike	-	-	1	928.0	20	-6370	?
Aerobee 200	-	2	Alcor	-	-	1	928.0	300	-6200	?
AAD	-	1	AAD	-	-	1	928.0	40	-6370	?
AAD AD-1	-	1	AAD	-	-	1	928.0	40	-6370	?
AAD AD-1	-	2	AAD St 2	-	-	1	928.0	150	-6370	?
Prahaar	-	1	AAD	-	-	1	928.0	40	-6370	?
KSR-I	-	1	KSR	-	-	1	928.0	40	-6370	?
KSR-II	-	1	KSR Booster	-	-	1	928.0	35	-6370	?
KSR-II	-	2	KSR	-	-	1	928.0	150	-6370	?
Aeolus	-	1	Aeolus Booster	-	-	1	928.0	5	-6370	?
Aeolus	-	2	Mayfly	-	-	1	928.0	80	-6370	?
Malemute	-	1	Malemute	-	-	1	928.0	150	-6370	?
Improved Malemute	-	1	Imp Malemute	-	-	1	928.0	120	-6300	?
Improved Malemute	-	1	Malemute	-	-	1	928.0	50	-6300	?
IM/IO	-	1	Imp Malemute	-	-	1	928.0	10	-6300	?
IM/IO	-	2	Improved Orion	-	-	1	928.0	10	-6300	?
IM/IM	-	1	Imp Malemute	-	-	1	928.0	10	-6300	?
IM/IM	-	2	Imp Malemute	-	-	1	928.0	10	-6300	?
IM/VS-30	-	1	Imp Malemute	-	-	1	928.0	10	-6300	?
IM/VS-30	-	2	Sonda 3-1	-	-	2	928.0	250	-6300	?
Martlet 1	-	1	Martlet 1	-	-	1	928.0	100	-6370	?
Martlet 2	-	1	Martlet 2	-	-	1	928.0	100	-6370	?
Martlet 2C	-	1	Martlet 2	-	-	1	928.0	100	-6370	?
Martlet 3A	-	1	Martlet 3A	-	-	1	928.0	100	-6370	?
Martlet 3B	-	1	Martlet 3B	-	-	1	928.0	100	-6370	?
Gun Projectile 16-inch	-	1	Gun Projectile 16	-	-	1	928.0	100	-6370	?
Zenit	-	1	Zenit	-	-	1	928.0	145	-6370	?
Zenit	C	0	Cuckoo IA	-	-	1	928.0	10	-6378	?
Zenit	C	1	Zenit	-	-	1	928.0	140	-6370	?
Daniel	-	1	SPRAN-50	-	-	1	928.0	10	-6378	?
Daniel	-	2	MD-620	-	-	1	928.0	50	-6378	?
Daniel	-	3	Melanie	-	-	1	928.0	130	-6370	?
DoorKnob	1	1	Lacrosse	-	-	1	928.0	24	-6378	?
DoorKnob	2	1	Lacrosse	-	-	1	928.0	20	-6378	?
DoorKnob	2	2	Lacrosse	-	-	1	928.0	83	-6378	?
Nike-46	-	1	Nike-46	-	-	1	928.0	5	-6370	?
Nike-46	-	2	Nike-46 Sustainer	-	-	1	928.0	40	-6370	?
Nike-47	-	1	Nike-47	-	-	1	928.0	5	-6370	?
Nike-47	-	2	Nike-47 Sustainer	-	-	1	928.0	40	-6370	?
Nike-481	-	1	Nike-48	-	-	1	928.0	5	-6370	?
Nike-481	-	2	Nike-47 Sustainer	-	-	1	928.0	40	-6370	?
Tien Kung 3	-	1	Tien Kung 3	-	-	1	928.0	40	-6370	?
KN-25	-	1	KN-25	-	-	1	928.0	100	-6300	?
STIG-A	-	1	STIG-A	-	-	1	928.0	80	-6378	?
ISRO-CES	-	1	ISRO-CES	-	-	1	928.0	10	-6378	?
Aerobee F	-	1	Aerobee F	-	-	1	928.0	250	-6370	?
Aerobee 500	-	1	Genie	-	-	1	928.0	0	-6378	?
Aerobee 500	-	2	Alcor	-	-	1	928.0	0	-6378	?
Aerobee 500	-	3	Asp	-	-	1	928.0	0	-6378	?
Palute Tomahawk	-	1	Palute	-	-	1	928.0	20	-6378	?
Palute Tomahawk	-	2	Palute Tomahawk	-	-	1	928.0	200	-6370	?
Ute Tomahawk	-	1	Ute	-	-	1	928.0	10	-6378	?
Ute Tomahawk	-	2	Tomahawk	-	-	1	928.0	200	-6300	?
Palute Apache	-	1	Palute	-	-	1	928.0	20	-6378	?
Palute Apache	-	2	Palute Apache	-	-	1	928.0	200	-6370	?
Ute Apache	-	1	Ute	-	-	1	928.0	10	-6378	?
Ute Apache	-	2	Apache	-	-	1	928.0	200	-6300	?

LVStages

LV_Name	LV_Variant	Stage_No	Stage_Name	Qualifier	Dummy	Multiplicity	Stage_Impulse kNs	Stage_Apogee km	Stage_Perigee km	Perigee_Qual
ALARR	-	0	F4D Phantom	-	-	1	928.0	0	-6378	?
ALARR	-	1	Genie-Altarr	-	-	1	928.0	100	-6300	?
Genie	-	1	Genie	-	-	1	928.0	10	-6300	?
Genie	-	1	Genie	-	-	1	928.0	10	-6300	?
Genie	-	1	Genie	-	-	1	928.0	10	-6300	?
Genie	-	2	Genie	-	-	1	928.0	10	-6300	?
F89J/Genie	-	0	F89J Scorpion	-	-	1	928.0	10	-6378	?
F89J/Genie	-	1	Genie	-	-	1	928.0	10	-6378	?
Jaguar	-	0	B-57A Canberra	-	-	1	928.0	10	-6378	?
Jaguar	-	1	Recruit	-	-	3	928.0	20	-6300	?
Jaguar	-	2	Recruit	-	-	1	928.0	100	-6300	?
Jaguar	-	3	Baby Sergeant	-	-	1	928.0	800	-6300	?
Aerobee RTV-A-1a	-	1	Aerobee Booster	-	-	1	928.0	150	-6370	?
Aerobee RTV-A-1a	-	2	Aerobee Booster	-	-	1	928.0	10	-6370	?
Aerobee RTV-A-1a	-	3	Aerobee AJ10-25	-	-	1	928.0	150	-6370	?
Aerobee RTV-A-1	-	1	Aerobee Booster	-	-	1	928.0	150	-6370	?
Aerobee RTV-A-1	-	2	Aerobee XASR-1	-	-	1	928.0	150	-6370	?
Aerobee RTV-A-1b	-	1	Aerobee Booster	-	-	1	928.0	10	-6370	?
Aerobee RTV-A-1b	-	2	Aerobee XASR-1	-	-	1	928.0	150	-6370	?
Aerobee RTV-A-1c	-	1	Aerobee AJ10-25	-	-	1	928.0	150	-6370	?
Aerobee RTV-N-10a	-	1	Aerobee Booster	-	-	1	928.0	10	-6370	?
Aerobee RTV-N-10a	-	2	Aerobee Booster	-	-	1	928.0	150	-6370	?
Aerobee RTV-N-10a	-	3	Aerobee AJ10-25	-	-	1	928.0	150	-6370	?
Aerobee RTV-N-10	-	1	Aerobee Booster	-	-	1	928.0	10	-6370	?
Aerobee RTV-N-10	-	2	Aerobee XASR-1	-	-	1	928.0	150	-6370	?
Aerobee RTV-N-10b	-	1	Aerobee Booster	-	-	1	928.0	10	-6370	?
Aerobee RTV-N-10b	-	2	Aerobee XASR-1	-	-	1	928.0	150	-6370	?
Aerobee RTV-N-10c	-	1	Aerobee Booster	-	-	1	928.0	10	-6370	?
Aerobee RTV-N-10c	-	2	Aerobee Booster	-	-	1	928.0	150	-6370	?
Aerobee RTV-N-10c	-	3	Aerobee AJ10-34	-	-	1	928.0	150	-6370	?
Aerobee RTV-N-8	-	1	Aerobee Booster	-	-	1	928.0	10	-6370	?
Aerobee RTV-N-8	-	2	Aerobee XASR-1	-	-	1	928.0	150	-6370	?
Aerobee XASR-SC-1	-	1	Aerobee XASR-1	-	-	1	928.0	10	-6370	?
Aerobee XASR-SC-1	-	2	Aerobee XASR-1	-	-	1	928.0	150	-6370	?
Aerobee XASR-SC-2	-	1	Aerobee XASR-1	-	-	1	928.0	10	-6370	?
Aerobee XASR-SC-2	-	2	Aerobee XASR-1	-	-	1	928.0	150	-6370	?
Aerobee AJ10-25	-	1	Aerobee XASR-1	-	-	1	928.0	10	-6370	?
Aerobee AJ10-25	-	2	Aerobee XASR-1	-	-	1	928.0	150	-6370	?
Aerobee AJ10-27	-	1	Aerobee XASR-1	-	-	1	928.0	10	-6370	?
Aerobee AJ10-27	-	2	Aerobee XASR-1	-	-	1	928.0	150	-6370	?
Aerobee AJ10-27	-	3	Aerobee XASR-1	-	-	1	928.0	150	-6370	?
Aerobee AJ10-34	-	1	Aerobee XASR-1	-	-	1	928.0	10	-6370	?
Aerobee AJ10-34	-	2	Aerobee XASR-1	-	-	1	928.0	150	-6370	?
Aerobee 100	-	1	Aerobee 100	-	-	1	928.0	10	-6370	?
Aerobee 100	-	2	Aerobee 100	-	-	1	928.0	90	-6370	?
Seabee	-	1	Aerobee 100	-	-	1	928.0	1	-6370	?
Aerobee	-	1	Aerobee Booster	-	-	1	928.0	10	-6370	?
Aerobee	-	2	Aerobee 150	-	-	1	928.0	100	-6370	?
Aerobee HI	-	1	Aerobee Booster	-	-	1	928.0	10	-6370	?
Aerobee HI	-	2	Aerobee Booster	-	-	1	928.0	150	-6370	?
Aerobee 150	-	1	Aerobee 150	-	-	1	928.0	10	-6370	?
Aerobee 150	-	2	Aerobee 150	-	-	1	928.0	200	-6370	?
Aerobee 150	-	3	Aerobee 150	-	-	1	928.0	200	-6370	?
Aerobee 150A	-	1	Aerobee Booster	-	-	1	928.0	10	-6370	?
Aerobee 150A	-	2	Aerobee Booster	-	-	1	928.0	200	-6370	?
Aerobee 150A	-	3	VAM Booster	-	-	1	928.0	10	-6370	?
Aerobee 150 MI	-	1	VAM Booster	-	-	1	928.0	10	-6370	?
Aerobee 150 MI	-	2	Aerobee 150	-	-	1	928.0	200	-6370	?
Aerobee 150 MI	-	3	Aerobee 150	-	-	1	928.0	200	-6370	?
Aerobee 150 MI	-	4	VAM-20	-	-	1	928.0	10	-6370	?
Aerobee 150 MI	-	5	VAM-17	-	-	1	928.0	10	-6370	?
Aerobee 150 MI	-	6	VAM-17	-	-	1	928.0	10	-6370	?
Aerobee 150A MII	-	1	Aerobee 150	-	-	1	928.0	200	-6370	?
Aerobee 150A MII	-	2	Aerobee 150	-	-	1	928.0	200	-6370	?
Aerobee 150A MII	-	3	VAM-20	-	-	1	928.0	10	-6370	?
Aerobee 150 MII	-	4	Aerobee 150	-	-	1	928.0	200	-6370	?
Aerobee 300	-	1	Aerobee Booster	-	-	1	928.0	10	-6370	?
Aerobee 300	-	2	Aerobee 150	-	-	1	928.0	150	-6370	?
Aerobee 300	-	3	Sparrow	-	-	1	928.0	300	-6370	?
Aerobee 300A	-	1	Aerobee Booster	-	-	1	928.0	10	-6370	?
Aerobee 300A	-	2	Aerobee 150	-	-	1	928.0	150	-6370	?
Aerobee 300A	-	3	Sparrow	-	-	1	928.0	340	-6370	?
Vikram-S	-	1	Vikram-S	-	-	1	928.0	100	-6378	?
Kavoshgar M5	-	1	Kavoshgar	-	-	1	928.0	15	-6370	?
Nazeat 6H	-	1	Nazeat	-	-	1	928.0	60	-6378	?
Nucleus	-	1	Nucleus	-	-	1	928.0	110	-6378	?
LS-A	-	1	LS-A	-	-	1	928.0	5	-6378	?
LS-A	-	2	LS-A	-	-	1	928.0	150	-6370	?
Meteor-2H	-	1	Meteor-2	-	-	1	928.0	68	-6378	?
Meteor-2K	-	0	Meteor SRB	-	-	2	928.0	5	-6378	?

LVStages

LV_Name	LV_Variant	Stage_No	Stage_Name	Qualifier	Dummy	Multiplicity	Stage_Impulse kN	Stage_Apogee km	Stage_Perigee km	Perigee_Qual
Meteor-2K	-	1	Meteor-2	-	-	1	928.0	90	-6370	?
Aerobee 75	-	1	Aerobee 75	-	-	1	928.0	60	-6370	?
Improved Orion	-	1	Improved Orion	-	-	1	928.0	88	-6370	?
Orion	-	1	Orion	-	-	1	928.0	88	-6370	?
Polaris FTV-4	-	1	10KS2500	-	-	1	928.0	10	-6378	?
Iraqi Gun Projectile	-	1	Iraqi Gun Projectile	-	-	1	928.0	100	-6370	?
THAAD	-	1	THAAD Proto	-	-	1	928.0	100	-6050	?
THAAD	1	1	THAAD	-	-	1	928.0	100	-6050	?
SM-1MR	-	1	Mk 56	-	-	1	928.0	20	-6378	?
SM-2MR	-	1	Mk 104	-	-	1	928.0	20	-6370	?
Lynx	-	1	Lynx	-	-	1	928.0	10	-6378	?
Kappa 4	-	1	Kappa 4 Booster	-	-	1	928.0	5	-6378	?
Kappa 4	2	1	Kappa 4	-	-	1	928.0	40	-6378	?
Kappa 5	-	1	Kappa 6	-	-	1	928.0	5	-6378	?
Kappa 5	2	1	K150	-	-	1	928.0	5	-6378	?
Sandhawk	-	1	Sandhawk	-	-	1	928.0	15	-6378	?
Sandhawk Tomahawk	-	1	Sandhawk	-	-	1	928.0	100	-6378	?
Sandhawk Tomahawk	-	1	Sandhawk	-	-	1	928.0	50	-6378	?
Gradicom 1	-	2	Tomahawk	-	-	1	928.0	500	-6378	?
Gradicom 2	-	1	Gradicom 1	-	-	1	928.0	40	-6378	?
Gradicom 2	-	1	Gradicom 2	-	-	1	928.0	10	-6378	?
Gradicom 2	2	1	Gradicom 1	-	-	1	928.0	100	-6378	?
RX-320	-	1	RX-320	-	-	1	928.0	70	-6370	?
BT-310	-	1	BT-310	-	-	1	928.0	1	-6378	?
S-310	-	1	S-310	-	-	1	928.0	200	-6370	?
Belier	-	1	Belier	-	-	1	928.0	60	-6300	?
Belier III	-	1	Belier III	-	-	1	928.0	120	-6300	?
RH-300	-	1	RH-300	-	-	1	928.0	100	-6370	?
RH-300 Mk II	-	1	RH-300 Mk II	-	-	1	928.0	135	-6370	?
SO-300-200	-	0	RH-200	-	-	2	928.0	10	-6370	?
SO-300-200	-	1	RH-300	-	-	1	928.0	50	-6370	?
Iris	-	0	MARC 14B1	-	-	1	928.0	1	-6378	?
Iris	-	1	Iris	-	-	1	928.0	200	-6300	?
Hydra-Iris	-	0	MR-1	-	-	1	928.0	3	-6378	?
Hydra-Iris	-	1	Iris	-	-	1	928.0	200	-6378	?
S-300	-	1	S-300	-	-	1	928.0	160	-6370	?
Bullpup Apache	-	1	Bullpup	-	-	1	928.0	2	-6378	?
Bullpup Apache	2	1	Apache	-	-	1	928.0	41	-6378	?
Bullpup Cajun	-	1	Bullpup	-	-	1	928.0	2	-6378	?
Bullpup Cajun	2	1	Cajun	-	-	1	928.0	50	-6378	?
FTI	-	1	FTI	-	-	1	928.0	60	-6378	?
WAC A	-	0	Tiny Tim	-	-	1	928.0	2	-6378	?
WAC A	-	1	WAC Corporal	-	-	1	928.0	40	-6378	?
WAC B	-	0	Tiny Tim	-	-	1	928.0	2	-6378	?
WAC B	-	1	WAC Corporal	-	-	1	928.0	40	-6378	?
WAC	-	0	Tiny Tim	-	-	1	928.0	2	-6378	?
WAC	-	1	WAC Corporal	-	-	1	928.0	2	-6378	?
Tiny Tim	-	1	WAC Corporal	-	-	1	928.0	2	-6378	?
Sonda 2	-	1	Sonda 2A	-	-	1	928.0	100	-6370	?
VLS-R2	-	0	VLS-R2 Strap-on	-	-	4	928.0	10	-6370	?
VLS-R2	-	1	VLS-R2	-	-	1	928.0	50	-6370	?
Centaur	-	1	Venus	-	-	1	928.0	10	-6300	?
Centaur	-	2	Belier	-	-	1	928.0	150	-6300	?
Centaur 1	-	1	Venus	-	-	1	928.0	10	-6300	?
Centaur 1	2	1	Belier	-	-	1	928.0	150	-6300	?
Centaur 2A	-	1	Venus	-	-	1	928.0	10	-6300	?
Centaur 2A	2	1	Belier II	-	-	1	928.0	150	-6300	?
Centaur 2B	-	1	Venus	-	-	1	928.0	10	-6300	?
Centaur 2B	2	1	Belier II	-	-	1	928.0	150	-6300	?
Centaur 2C	-	1	Venus	-	-	1	928.0	10	-6300	?
Centaur 2C	2	1	Belier II	-	-	1	928.0	150	-6300	?
RH-300B	-	1	RH-300 Booster	-	-	1	928.0	10	-6300	?
RH-300B	2	1	RH-300	-	-	1	928.0	150	-6300	?
Tauro	-	1	SS-50	-	-	1	928.0	10	-6350	?
Tauro	2	1	Canopus	-	-	1	928.0	150	-6350	?
Rigel	-	1	Canopus	-	-	1	928.0	70	-6300	?
Rigel	2	1	Orion-2	-	-	1	928.0	250	-6200	?
Canopus 2	-	1	Canopus	-	-	1	928.0	150	-6350	?
Canopus 1	-	1	Canopus	-	-	1	928.0	150	-6350	?
Centenario	-	1	Centenario	-	-	1	928.0	50	-6378	?
Castor (A)	-	1	Canopus	-	-	4	928.0	70	-6300	?
Castor (A)	2	1	Canopus	-	-	1	928.0	400	-6200	?
SpaceLoft XL	-	1	SpaceLoft XL	-	-	1	928.0	100	-6370	?
Black Brant III	-	1	Black Brant IIIA	-	-	1	928.0	180	-6370	?

LVStages

LV_Name	LV_Variant	Stage_No	Stage_Name	Qualifier	Dummy	Multiplicity	Stage_Impulse kNs	Stage_Apogee km	Stage_Perigee km	Perigee_Qual
Black Brant IIIB	-	1	Black Brant IIIB	-	-	1	928.0	180	-6370	?
M2URTH	-	1	M2URTH	-	-	1	928.0	100	-6370	?
Gosling-Lobster	-	1	Gosling	-	-	1	928.0	10	-6378	?
Gosling-Lobster	-	2	Lobster I	-	-	1	928.0	20	-6378	?
INTA-255	-	0	Chick	-	-	4	928.0	1	-6378	?
INTA-255	-	1	Goose	-	-	1	928.0	130	-6378	?
HAD	-	1	Gosling	-	-	1	928.0	10	-6370	?
HAD	-	2	LAFSTAR	-	-	1	928.0	100	-6370	?
INTA-300	-	1	Heron	-	-	1	928.0	2	-6378	?
INTA-300	-	2	Snipe	-	-	1	928.0	200	-6370	?
INTA-300B	-	1	Heron	-	-	1	928.0	2	-6378	?
INTA-300B	-	2	Snipe	-	-	1	928.0	150	-6370	?
Fulmar	-	1	Heron	-	-	1	928.0	15	-6378	?
Fulmar	-	2	Snipe	-	-	1	928.0	150	-6370	?
Aero High	-	1	Gosling IV	-	-	1	928.0	10	-6370	?
Aero High	-	2	Vela	-	-	1	928.0	150	-6370	?
Cockatoo	-	1	Gosling	-	-	1	928.0	20	-6300	?
Cockatoo	-	2	Lupus	-	-	1	928.0	150	-6300	?
Cockatoo Mk 2	-	1	Gosling	-	-	1	928.0	20	-6300	?
Cockatoo Mk 2	-	2	Lupus 2	-	-	1	928.0	150	-6300	?
Cockatoo Mk 3	-	1	Gosling IV	-	-	1	928.0	20	-6300	?
Cockatoo Mk 3	-	2	Lupus 2	-	-	1	928.0	150	-6300	?
Cockatoo Mk 4	-	1	Gosling IV	-	-	1	928.0	20	-6300	?
Cockatoo Mk 4	-	2	Lupus	-	-	1	928.0	150	-6300	?
Corella	-	1	Gosling IV	-	-	1	928.0	20	-6370	?
Corella	-	2	Dorado	-	-	1	928.0	200	-6300	?
Hybrid Test Rocket	-	1	HTR	-	-	1	928.0	30	-6378	?
Evo Space	-	1	EvoL GCC	-	-	1	928.0	120	-6378	?
Private A	-	0	Private A Booster	-	-	1	928.0	1	-6378	?
Private A	-	1	Private A	-	-	1	928.0	1	-6378	?
Private F	-	0	Private A Booster	-	-	1	928.0	1	-6378	?
Private F	-	1	Private F	-	-	1	928.0	1	-6378	?
Rhumi	-	1	Rhumi	-	-	1	928.0	30	-6378	?
Forschungsflugkorper	-	1	FFK	-	-	1	928.0	120	-6300	?
CSXT	-	1	CSXT	-	-	1	928.0	100	-6370	?
K245	-	1	K245	-	-	1	928.0	1	-6378	?
Kappa 6	-	1	Kappa 6	-	-	1	928.0	50	-6379	?
Kappa 6	-	2	K150	-	-	1	928.0	85	-6350	?
Kappa 6H	-	1	Kappa 6H	-	-	1	928.0	40	-6350	?
Kappa 6H	-	2	K150	-	-	1	928.0	70	-6350	?
Kappa 8L	-	1	Kappa 8L	-	-	1	928.0	50	-6378	?
Kappa 8L	-	2	Kappa 8L	-	-	1	928.0	150	-6340	?
S-250	-	1	S-250	-	-	1	928.0	100	-6370	?
CB-250/RH-125	-	0	CB-250	-	-	1	928.0	10	-6378	?
CB-250/RH-125	-	1	RH-125	-	-	1	928.0	?	-6378	?
CB-250/LPR-006	-	0	CB-250	-	-	1	928.0	10	-6378	?
CB-250/LPR-006	-	1	LPR-006	-	-	1	928.0	?	-6378	?
NAL-25	-	1	NAL-25	-	-	1	928.0	50	-6370	?
M-100	-	1	M-100	-	-	1	928.0	10	-6378	?
M-100	-	2	M-100 St2	-	-	1	928.0	85	-6370	?
M-100	-	P	M-100 payload	-	-	1	928.0	85	-6370	?
M-100 (A-1)	-	1	M-100	-	-	1	928.0	10	-6378	?
M-100 (A-1)	-	2	M-100 St2	-	-	1	928.0	85	-6370	?
M-100 (A-1)	-	P	M-100 payload	-	-	1	928.0	85	-6370	?
M-100A	-	1	M-100	-	-	1	928.0	10	-6378	?
M-100A	-	2	M-100 St2	-	-	1	928.0	85	-6370	?
M-100A	-	P	M-100 payload	-	-	1	928.0	85	-6370	?
M-100B	-	1	M-100	-	-	1	928.0	10	-6378	?
M-100B	-	2	M-100 St2	-	-	1	928.0	85	-6370	?
M-100B	-	P	M-100 payload	-	-	1	928.0	85	-6370	?
RX-250-LPN	-	1	RX-250-LPN	-	-	1	928.0	70	-6370	?
D-Region Tomahawk	-	1	Tomahawk	-	-	1	928.0	120	-6300	?
ILR-33 Bursztyn 2K	-	0	ILR-33 Booster	-	-	2	928.0	10	-6370	?
ILR-33 Bursztyn 2K	-	1	ILR-33	-	-	1	928.0	100	-6370	?
Tomahawk	-	1	Tomahawk	-	-	1	928.0	100	-6370	?
Mesquito	-	1	Mesquito	-	-	1	928.0	50	-6378	?
Javelin 3	-	1	Javelin 3	-	-	1	928.0	80	-6370	?
Recruit	-	1	Recruit	-	-	1	928.0	4	-6378	?
Recruit T55	-	0	Recruit	-	-	1	928.0	14	-6378	?
Recruit T55	-	1	B-57A Camberra	-	-	1	928.0	14	-6378	?
Recruit T55	-	2	Recruit	-	-	1	928.0	14	-6378	?
MX-2227	-	1	T-55	-	-	1	928.0	1	-6378	?
MX-2227	-	2	AeroHTV Stage 2	-	-	1	928.0	10	-6378	?

LVStages

LV_Name	LV_Variant	Stage_No	Stage_Name	Qualifier	Dummy	Multiplicity	Stage_Impulse kNs	Stage_Apogee km	Stage_Perigee km	Perigee_Qual
HTV	-	1	AeroHTV	-	-	1	928.0	1	-6378	?
HTV	-	2	AeroHTV Stage 2	-	-	1	928.0	10	-6378	?
Kappa 2	-	1	Kappa 3 Booster	-	-	1	928.0	5	-6378	?
Kappa 2	-	2	Kappa 1	-	-	1	928.0	5	-6378	?
Kappa 3	-	1	Kappa 3 Booster	-	d	1	928.0	5	-6378	?
Kappa 3	-	2	Kappa 1	-	-	1	928.0	30	-6378	?
S-Z10	-	1	S-Z10	-	-	1	928.0	100	-6370	?
Orion-2	-	1	Orion-2	-	-	1	928.0	90	-6370	?
Orion-1	-	1	Orion-1	-	-	1	928.0	90	-6370	?
Belenos	-	1	Elan	-	-	1	928.0	15	-6370	?
Belenos	-	2	Aurore	-	-	1	928.0	120	-6300	?
Belisama	-	1	Elan	-	-	1	928.0	10	-6370	?
Belisama	-	2	Belisama	-	-	1	928.0	90	-6370	?
Grannos	-	1	Emilie	-	-	1	928.0	15	-6378	?
Grannos	-	2	Melusine	-	-	1	928.0	130	-6370	?
TT-210	-	1	TT-210	-	-	1	928.0	100	-6370	?
TT-200	-	1	TT-200	-	-	1	928.0	100	-6370	?
RH-200	-	1	RH-200	-	-	1	928.0	40	-6370	?
RH-200	-	2	RH-125	-	-	1	928.0	70	-6370	?
RH-200SV	-	1	RH-200SV	-	-	1	928.0	40	-6370	?
MMR-06	-	1	MMR-06	-	-	1	928.0	60	-6378	?
X-17 HTV	1	1	X-201	-	-	1	928.0	20	-6378	?
X-17 HTV	1	2	Dummy stage	-	-	1	928.0	20	-6378	?
X-17 HTV	1	3	Dummy stage	-	-	1	928.0	20	-6378	?
X-17 HTV	-	1	X-201	-	-	1	928.0	20	-6378	?
X-17 HTV	-	2	MOTS 124-C	-	-	3	928.0	20	-6378	?
X-17 HTV	-	3	MOTS 124-C	-	-	1	928.0	20	-6378	?
X-17 QTV	-	1	T-40	-	-	1	928.0	11	-6378	?
X-17 QTV	-	2	Dummy stage	-	-	1	928.0	11	-6378	?
X-17 QTV	-	3	Dummy stage	-	-	1	928.0	11	-6378	?
Kingfisher	-	1	Kingfisher	-	-	1	928.0	100	-6378	?
Traveler	-	1	Traveler	-	-	1	928.0	100	-6300	?
Aftershock	-	1	Aftershock	-	-	1	928.0	100	-6300	?
Cirrus I	-	1	Cirrus I	-	-	1	928.0	5	-6378	?
Cirrus I	-	2	Cirrus I	-	-	1	928.0	35	-6378	?
Cirrus II	-	1	Cirrus II	-	-	1	928.0	10	-6378	?
Cirrus II	-	2	Cirrus I	-	-	1	928.0	50	-6378	?
Stratos II+	-	1	Stratos II+	-	-	1	928.0	50	-6300	?
Stratos III	-	1	Stratos II+	-	-	1	928.0	50	-6300	?
Proson M1	-	1	Proson St1	-	-	1	928.0	1	-6300	?
Proson M1	-	2	Proson St2	-	-	1	928.0	1	-6300	?
Sparcoair I	-	0	F3H Cougar	-	-	1	928.0	10	-6378	?
Sparcoair I	-	1	Sparrow	-	-	1	928.0	20	-6370	?
Sparcoair I	-	2	Sparrow	-	-	1	928.0	100	-6100	?
Sparcoair II	-	0	F3H Cougar	-	-	1	928.0	10	-6378	?
Sparcoair II	-	1	Sparrow	-	-	1	928.0	20	-6370	?
Sparcoair II	-	2	Sparrow	-	-	1	928.0	100	-6100	?
Sparcoair III	-	0	F4B Phantom	-	-	1	928.0	10	-6378	?
Sparcoair III	-	1	Sparrow	-	-	1	928.0	20	-6370	?
Sparcoair III	-	2	22.6KS1245	-	-	1	928.0	30	-6370	?
Sparrow Arcas	-	1	Sparrow	-	-	1	928.0	20	-6378	?
Sparrow Arcas	-	2	HV Arcas	-	-	1	928.0	100	-6370	?
Cleansweep IIIB	-	0	RB-57B	-	-	1	928.0	10	-6300	?
Cleansweep IIIB	-	1	Shrike	-	-	1	928.0	51	-6300	?
Petrel	-	0	Chick x3	-	-	1	928.0	20	-6370	?
Petrel	-	1	Petrel	-	-	1	928.0	150	-6370	?
Petrel 2	-	0	Chick x4	-	-	1	928.0	20	-6370	?
Petrel 2	-	1	Petrel 2	-	-	1	928.0	150	-6370	?
Gun Projectile 7-inch	-	1	Gun Projectile 7	-	-	1	928.0	100	-6370	?
HAEC	-	1	Demon	-	-	1	928.0	10	-6370	?
HAEC	-	2	HAEC FFAR	-	-	1	928.0	10	-6370	?
Lorikeet	-	1	Dorado	-	-	1	928.0	30	-6378	?
Lorikeet	-	2	Lupus	-	-	1	928.0	75	-6378	?
Lorikeet Mk 2	-	1	Dorado	-	-	1	928.0	30	-6378	?
Lorikeet Mk 2	-	2	Lupus 3	-	-	1	928.0	140	-6378	?
Astrid	-	1	Astrid	-	-	1	928.0	2	-6378	?
Cleansweep III	-	1	Sword	-	-	1	928.0	40	-6300	?
ASCAMP	-	1	Asp	-	-	1	928.0	30	-6370	?
ASCAMP	-	2	Baby Sergeant	-	-	1	928.0	100	-6370	?
Asp	-	1	Asp	-	-	1	928.0	30	-6370	?
Asp II	-	1	Asp II	-	-	1	928.0	30	-6370	?
Asp III	-	0	Loki	-	-	2	928.0	1	-6378	?
Asp III	-	1	Asp II	-	-	1	928.0	50	-6370	?

LVStages

LV_Name	LV_Variant	Stage_No	Stage_Name	Qualifier	Dummy	Multiplicity	Stage_Impulse kNs	Stage_Apogee km	Stage_Perigee km	Perigee_Qual
Asp III	4L	0	Loki	-	-	4	928.0	1	-6378	?
Asp III	4L	1	Asp II	-	-	1	928.0	50	-6370	?
Asp IV	-	1	Asp IV	-	-	1	928.0	80	-6370	?
Viper-Arrow	-	1	Viper II	-	-	1	928.0	10	-6370	?
Viper-Arrow	-	2	Arrow II	-	-	1	928.0	100	-6370	?
Kiva/Hopi	-	1	Kiva	-	-	1	928.0	30	-6378	?
Kiva/Hopi	-	2	Hopi	-	-	1	928.0	300	-6378	?
Cajun Dart	-	1	Cajun	-	-	1	12.0	12	-6374	?
Cajun Dart	-	1	Dart	-	-	1	12.0	93	-6374	?
Double Cajun T40	-	F	Cajun	-	-	2	12.0	10	-6378	?
Double Cajun T40	-	2	T-40	-	-	1	12.0	10	-6378	?
Pogo Hi	-	1	Deacon	-	-	1	12.0	25	-6370	?
Pogo Hi II	-	1	Cajun	-	-	1	12.0	25	-6370	?
Pogo Hi III	-	1	Asp	-	-	1	12.0	25	-6370	?
Apache	-	1	Apache	-	-	1	12.0	60	-6378	?
Cajun	-	1	Cajun	-	-	1	12.0	12	-6374	?
S-C	-	1	S-C	-	-	1	12.0	85	-6370	?
S-B	-	1	S-B	-	-	1	12.0	75	-6370	?
S-A	-	1	S-A	-	-	1	12.0	50	-6378	?
S-160	-	1	S-160	-	-	1	12.0	90	-6370	?
NAL-16	-	1	NAL-16	-	-	1	12.0	100	-6370	?
Lex	-	1	Lex	-	-	1	12.0	100	-6370	?
Monica I	-	1	Melanie 1	-	-	1	12.0	5	-6378	?
Monica I	-	2	Theodore	-	-	1	12.0	20	-6370	?
Monica I	-	3	Oreste	-	-	1	12.0	50	-6370	?
Monica IV	-	1	Melanie 1	-	-	1	12.0	5	-6378	?
Monica IV	-	1	Prosper	-	-	1	12.0	30	-6370	?
Monica IV	-	3	Prosper	-	-	1	12.0	90	-6370	?
Viper V/Dart	-	1	Viper V	-	-	1	12.0	100	-6370	?
Viper Falcon	-	1	Viper I	-	-	1	12.0	50	-6370	?
Viper Falcon	-	2	Falcon	-	-	1	12.0	150	-6300	?
Viper	-	1	Viper II	-	-	1	12.0	75	-6370	?
Viper-Dart	-	1	Viper II	-	-	1	12.0	123	-6370	?
Rockaire	-	0	F86D Sabrejet	-	-	1	12.0	9	-6378	?
Deacon Rockoon	-	0	Deacon	-	-	1	12.0	40	-6370	?
Deacon Rockoon	-	1	Balloon	-	-	1	12.0	10	-6378	?
Deacon Rockoon	-	1	Deacon	-	-	1	12.0	120	-6370	?
Terrapin	-	1	Deacon	-	-	1	12.0	10	-6378	?
Terrapin	-	1	Deacon	-	-	1	12.0	100	-6370	?
Deacon-Loki Rockoon	-	2	T-55	-	-	1	12.0	100	-6370	?
Deacon-Loki Rockoon	-	0	Balloon	-	-	1	12.0	10	-6378	?
Deacon-Loki Rockoon	-	2	Deacon	-	-	1	12.0	30	-6378	?
Deacon-Loki Rockoon	-	2	Loki	-	-	1	12.0	100	-6378	?
ALSOR	-	0	F-104A Starfighter	-	-	1	12.0	0	-6378	?
ALSOR	-	1	Viper I	-	-	1	12.0	70	-6378	?
Deacon Judi	-	1	Deacon	-	-	1	12.0	10	-6378	?
Deacon Judi	-	2	Judi III	-	-	1	12.0	90	-6378	?
Kisha Judi	-	1	Kisha	-	-	1	12.0	20	-6378	?
Kisha Judi	-	2	Judi III	-	-	1	12.0	100	-6370	?
Deacon Arrow II	-	1	Deacon	-	-	1	12.0	10	-6378	?
Deacon Arrow II	-	2	Arrow II	-	-	1	12.0	85	-6378	?
Deacon Deacon	-	1	Deacon	-	-	1	12.0	5	-6378	?
Deacon Deacon	-	2	Deacon	-	-	1	12.0	10	-6378	?
Double Deacon	-	1	Deacon	-	-	1	12.0	10	-6378	?
Tandem Double Deacon	-	1	Deacon	-	-	2	12.0	10	-6378	?
Tandem Double Deacon	-	2	Deacon	-	-	2	12.0	10	-6378	?
Triple Deacon	-	1	Deacon	-	-	3	12.0	10	-6378	?
Triple Deacon HPAG	-	1	Deacon	-	-	3	12.0	10	-6378	?
Triple Deacon HPAG	-	2	HPAG	-	-	1	12.0	20	-6378	?
Tri-Deacon Deacon HPAG	-	1	Deacon	-	-	3	12.0	5	-6378	?
Tri-Deacon Deacon HPAG	-	2	Deacon	-	-	5	12.0	5	-6378	?
Tri-Deacon Deacon HPAG	-	3	HPAG	-	-	1	12.0	10	-6378	?
Quad Deacon	-	1	Deacon	-	-	4	12.0	10	-6378	?
Deacon	-	1	Deacon	-	-	1	12.0	10	-6378	?
Deacon HVAR	-	1	Deacon	-	-	1	12.0	10	-6378	?
Deacon HVAR	-	2	HVAR	-	-	1	12.0	10	-6378	?
Deacon Sidevinder	-	1	Deacon	-	-	1	12.0	10	-6378	?
Deacon Sidevinder	-	2	HPAG	-	-	1	12.0	10	-6378	?
Vrbec-Banovic	-	1	P-Vrbec	-	-	1	12.0	10	-6378	?
Vrbec-Banovic	-	2	0-Vrbec	-	-	1	12.0	100	-6378	?
Atea-1	-	1	Atea-1	-	-	1	12.0	100	-6378	?
Icarus	-	1	Icarus	-	-	1	12.0	1	-6378	?
Icarus	-	2	Icarus Stage 2	-	-	1	12.0	60	-6378	?
Hyperion	-	1	Hyperion	-	-	1	12.0	36	-6378	?



LVStages

LV_Name	LV_Variant	Stage_No	Stage_Name	Qualifier	Dummy	Multiplicity	Stage_Impulse kNs	Stage_Apogee km	Stage_Perigee km	Perigee_Qual
K150	-	1	K150	-	-	1	12.0	5	-6378	?
Zhinui	-	1	ZN-1	-	-	1	12.0	70	-6370	?
Arcon	-	0	Arcon booster	-	-	1	12.0	1	-6300	?
Arcon	-	1	Arcon	-	-	1	12.0	60	-6300	?
Astrobsee D	-	1	Astrobsee D	-	-	1	12.0	120	-6370	?
MEBA	-	1	MEBA	-	-	1	12.0	10	-6378	?
MEBA	-	2	MEBA	-	-	1	12.0	80	-6370	?
MD-01	-	1	Meteo	-	-	1	12.0	50	-6378	?
Meteo	-	1	Meteo	-	-	1	12.0	50	-6378	?
Sirocco	-	1	Sirocco	-	-	1	12.0	60	-6370	?
MT-135	-	1	MT-135P	-	-	1	12.0	55	-6378	?
MT-135P	-	1	MT-135P	-	-	1	12.0	65	-6378	?
MT-135JA	-	1	MT-135P	-	-	1	12.0	71	-6378	?
Ivanov	-	0	Ivanov Booster	-	-	1	12.0	1	-6378	?
Ivanov	-	1	Ivanov	-	-	1	12.0	5	-6378	?
Ivanov	-	2	Ivanov	-	-	1	12.0	10	-6378	?
Ivanov	-	3	Ivanov	-	-	1	12.0	35	-6378	?
Emma	-	0	Emma Booster	-	-	1	12.0	5	-6378	?
Emma	-	1	Emma	-	-	1	12.0	60	-6378	?
Gamma Centauro	-	1	GammaCent Booster	-	-	1	12.0	1	-6378	?
Gamma Centauro	-	2	GammaCent Sustainer	-	-	1	12.0	35	-6378	?
Aurore	-	1	Aurore	-	-	1	12.0	40	-6370	?
Kappa 1	-	1	Kappa 1	-	-	1	12.0	5	-6378	?
Gun Projectile 5-inch	-	0	Gun Projectile 5	-	-	1	12.0	100	-6370	?
Skua	-	1	Chick x3	-	-	1	12.0	2	-6378	?
Skua	-	1	Skua	-	-	1	12.0	100	-6370	?
Skua 2	-	0	Chick x4	-	-	1	12.0	2	-6378	?
Skua 2	-	1	Skua 2	-	-	1	12.0	100	-6370	?
Skua 3	-	0	Chick x4	-	-	1	12.0	2	-6378	?
Skua 3	-	1	Skua 3	-	-	1	12.0	100	-6370	?
Skua 4	-	0	Chick x4	-	-	1	12.0	2	-6378	?
Skua 4	-	1	Skua 3	-	-	1	12.0	100	-6370	?
FTB	-	1	FTB	-	-	1	12.0	40	-6378	?
Sidewinder-Arcas	-	1	Sidewinder 1A	-	-	1	12.0	3	-6378	?
Sidewinder-Arcas	-	2	HV Arcas	-	-	1	12.0	90	-6347	?
Sidewinder-Arcas	-	F	Nosecone	-	-	1	12.0	90	-6347	?
Sidewinder-Raven	-	1	Sidewinder 1A-15	-	-	1	12.0	3	-6378	?
Sidewinder-Raven	-	2	Hopi IV	-	-	1	12.0	110	-6550	?
HPAG	-	1	HPAG	-	-	1	12.0	10	-6378	?
HPAG Deacon	-	1	HPAG	-	-	1	12.0	10	-6378	?
HPAG Deacon	-	2	Deacon	-	-	1	12.0	10	-6378	?
Double HPAG Deacon	-	1	HPAG	-	-	2	12.0	2	-6378	?
Double HPAG Deacon	-	2	Deacon	-	-	1	12.0	10	-6378	?
ADTV	-	1	Lupus	-	-	1	12.0	20	-6378	?
Kookaburra	-	1	Lupus	-	-	1	12.0	20	-6378	?
Kookaburra	-	2	Musca	-	-	1	12.0	50	-6378	?
Kookaburra 2	-	1	Lupus 2	-	-	1	12.0	20	-6378	?
Kookaburra 2	-	2	Musca	-	-	1	12.0	50	-6378	?
Kookaburra 3	-	1	Lupus 3	-	-	1	12.0	20	-6378	?
Kookaburra 3	-	2	Musca	-	-	1	12.0	50	-6378	?
Kookaburra 3	-	1	DAC Roc	-	-	1	12.0	50	-6378	?
DAC Roc	-	1	DAC Roc	-	-	1	12.0	50	-6378	?
Seagull	-	1	Seagull	-	-	1	12.0	60	-6378	?
HALO	-	1	HALO	-	-	1	12.0	5	-6378	?
HVAR	-	1	HVAR	-	-	1	12.0	5	-6378	?
HVAR FFAR	-	1	HVAR	-	-	1	12.0	5	-6378	?
HVAR FFAR	-	2	Mk7	-	-	1	12.0	5	-6378	?
DIM	-	1	DIM	-	-	1	12.0	70	-6378	?
Meteor-1	-	1	Meteor 1	-	-	1	12.0	40	-6378	?
Meteor-3	-	1	Meteor 3 Booster	-	-	1	12.0	30	-6378	?
Meteor-3	-	2	Meteor 1	-	-	1	12.0	60	-6378	?
Meteor-3B	-	1	Meteor 3B Booster	-	-	1	12.0	30	-6378	?
Meteor-3B	-	2	Meteor 1	-	-	1	12.0	60	-6378	?
RH-125	-	1	RH-125	-	-	1	12.0	20	-6378	?
MCR-3/RH-125	-	0	MCR-3	-	-	1	12.0	10	-6378	?
MCR-3/RH-125	-	1	RH-125	-	-	1	12.0	50	-6378	?
INTA-100	-	1	INTA S-12	-	-	1	12.0	1	-6378	?
INTA-100	-	2	INTA-100	-	-	1	12.0	100	-6378	?
Menaka II	-	1	RH-125	-	-	1	12.0	20	-6378	?
Menaka II	-	2	RH-125S	-	-	1	12.0	60	-6370	?
Black Brant VI	-	1	Black Brant VI	-	-	1	12.0	80	-6378	?
Sonda 1	-	1	Sonda 1-1	-	-	1	12.0	5	-6378	?
Sonda 1	-	2	Sonda 1-2	-	-	1	12.0	65	-6370	?
Rocketsonde	-	1	Rocketsonde	-	-	1	12.0	60	-6370	?

LVStages

LV_Name	LV_Variant	Stage_No	Stage_Name	Qualifier	Dummy	Multiplicity	Stage_Impulse kNs	Stage_Apogee km	Stage_Perigee km	Perigee_Qual
Rocketsonde2	-	1	Rocketsonde2	-	-	1	12.0	60	-6370	?
MESOS	-	1	04500	-	-	1	12.0	1	-6378	?
MESOS	-	2	M830	-	-	1	12.0	80	-6378	?
Viper 3A	-	1	Viper IIIA	-	-	1	12.0	100	-6370	?
DART	-	1	TME DART	-	-	1	12.0	100	-6370	?
Arcas	-	1	Arcas	-	-	1	12.0	90	-6300	?
Arcas	-	P	Arcas payload	-	-	1	12.0	90	-6300	?
Frangible Arcas	-	1	Frangible Arcas	-	-	1	12.0	90	-6300	?
Boosted Arcas	-	1	MARC 14A1	-	-	1	12.0	2	-6378	?
Boosted Arcas	-	2	Arcas	-	-	1	12.0	100	-6370	?
Boosted Arcas 2	-	1	MARC 42A1	-	-	1	12.0	2	-6378	?
Boosted Arcas 2	-	2	Arcas	-	-	1	12.0	100	-6370	?
Super Arcas	-	1	Super Arcas	-	-	1	12.0	80	-6378	?
Excalibur	-	1	Excalibur	-	-	1	12.0	100	-6378	?
Hopi Dart	-	1	Hopi III	-	-	1	12.0	90	-6370	?
Raven	-	1	Hopi IV	-	-	1	12.0	60	-6370	?
Super Loki	-	1	Super Loki	-	-	1	12.0	120	-6370	?
Shadow 1	-	1	Super Loki	-	-	1	12.0	120	-6370	?
Stable Super Loki	-	1	Stable Super Loki	-	-	1	12.0	120	-6370	?
FalconLaunch	-	1	FalconLaunch	-	-	1	12.0	120	-6370	?
Microstar	-	1	Super Loki	-	-	1	12.0	82	-6370	?
SPEAR-HRT	-	1	SPEAR-HRT St 1	-	-	1	12.0	10	-6370	?
SPEAR-HRT	-	2	SPEAR-HRT St 2	-	-	1	12.0	90	-6370	?
SkyLark Micro	-	1	SkyLarkMicro Booster	-	-	1	12.0	1	-6378	?
SkyLark Micro	-	2	SkyLarkMicro	-	-	1	12.0	30	-6378	?
Epona	-	1	Belisama	-	-	1	12.0	16	-6378	?
Epona	-	2	Belisama	-	-	1	12.0	60	-6378	?
SA-II	-	1	SA-II	-	-	1	12.0	20	-6378	?
ST	-	1	ST	-	-	1	12.0	20	-6378	?
Black Brant VII	-	1	Black Brant VII	-	-	1	12.0	40	-6378	?
Loki Dart	-	1	Loki-Dart	-	-	1	12.0	75	-6378	?
Loki Dart PWM-8B	-	1	Loki SK7I-AD-1	-	-	1	12.0	75	-6378	?
Loki	-	1	Loki	-	-	1	12.0	75	-6378	?
Loki Rockoon	-	0	Balloon	-	-	1	12.0	100	-6378	?
Loki Rockoon	-	1	Loki	-	-	1	12.0	100	-6378	?
Judi-Dart	-	1	Judi I	-	-	1	12.0	75	-6370	?
Metroc	-	1	Metroc	-	-	1	12.0	50	-6378	?
FTV	-	1	FTV	-	-	1	12.0	20	-6378	?
SEGPRO	-	1	SEGPRO	-	-	1	12.0	20	-6378	?
RH-75	-	1	RH-75	-	-	1	12.0	10	-6378	?
NAL-7	-	1	NAL-7	-	-	1	12.0	20	-6370	?
Rockair	-	0	F2H2 Banshee	-	-	1	12.0	9	-6378	?
Rockair	-	1	FFAR	-	-	1	12.0	55	-6370	?
FFAR	-	1	Mk7	-	-	1	12.0	5	-6378	?
Double FFAR	-	1	Mk7	-	-	1	12.0	2	-6378	?
Double FFAR	-	2	Mk7	-	-	1	12.0	5	-6378	?
Navaho II SM-64	-	1	Navaho Booster	-	-	1	12.0	25	-6378	?
Navaho II SM-64	-	2	Navaho Missile	-	-	1	12.0	25	-6378	?
MX-775	-	1	MX-775	-	-	1	12.0	10	-6378	?
Shark	-	1	Shark Booster	-	-	1	12.0	20	-6378	?
Matador	-	1	Matador	-	-	1	12.0	12	-6378	?
Mace	-	1	Mace	-	-	1	12.0	12	-6378	?
Regulus	-	1	Regulus	-	-	1	12.0	20	-6378	?
Regulus II	-	1	Regulus II	-	-	1	12.0	20	-6378	?
Bomarc A	-	1	Bomarc A	-	-	1	12.0	20	-6378	?
Bomarc B	-	1	Bomarc B	-	-	1	12.0	20	-6378	?
Goose	-	1	Bull Goose	-	-	1	12.0	20	-6378	?
Bull Goose	-	1	Bull Goose	-	-	1	12.0	20	-6378	?
X-7B	-	0	Lance	-	-	2	12.0	0	-6378	?
X-7B	-	1	X-7	-	-	1	12.0	30	-6378	?
X-7A-3	-	0	Lance	-	-	2	12.0	0	-6378	?
X-7A-3	-	1	X-7	-	-	1	12.0	30	-6378	?
GLCM	-	1	GLCM	-	-	1	12.0	20	-6378	?
BLDT	-	1	BLDT	-	-	1	12.0	10	-6378	?
Lark	-	1	Lark	-	-	1	12.0	8	-6378	?



Stages

Stage_Name	Stage_Family	Stage_Manufacturer	Stage_Alt_Name	Length m	Diameter m	Launch_Mass t	Dry_Mass kg	Thrust kN	Duration s	Engine	MEng
-	Unknown	-	Dummy	-	-	-	0	0.0	0.0	-	0
?	Unknown	-	-	-	-	-	-	-	-	-	-
N-1 Blok-A	Unknown	OKB1	N-1 Blok A	30.0	14.00	1870.0	130000	45300.0	110.0	-	30
N-1 Blok-B	11A52B	OKB1	Blok B	20.5	10.30	540.0	56000	14000.0	130.0	MK-15	8
Saturn S-IC	SaturnV	BOMI	-	42.1	10.06	2286.0	135200	33500.0	170.0	F-1	5
Saturn S-II	SaturnII	MAASB	S-II	24.8	10.06	490.8	39000	4500.0	270.0	J-2	5
Starship V1.0	Starship	SPX	-	50.0	9.00	1500.0	120000	12000.0	330.0	Raptor 2 Vac	6
Starship V2	Starship	SPX	-	52.1	9.00	1700.0	120000	15600.0	330.0	Raptor 3 Vac	6
Starship V3	Starship	SPX	-	69.8	9.00	2700.0	150000	28700.0	330.0	Raptor 3 Vac	9
Super Heavy V1	Starship	SPX	-	71.0	9.00	3520.0	200000	72500.0	330.0	Raptor 3 SL	33
Super Heavy V2	Starship	SPX	-	72.3	9.00	4100.0	220000	82800.0	330.0	Raptor 3 SL	33
Super Heavy V3	Starship	SPX	-	80.2	9.00	4100.0	250000	103000.0	330.0	Raptor 3 SL	35
ET	STS	MMM	-	47.0	8.40	748.0	27000	6300.0	516.0	SSME	3
SLS CS	STS	BOMIS	-	64.6	8.40	1102.0	85300	9116.0	483.0	RS-25	4
Energia	Proton	RKXE	-	58.1	7.75	780.0	80000	7850.0	480.0	RD-0120	4
8S810	Proton	OKB52	Proton 8S810	21.2	7.40	450.0	31000	9500.0	120.0	RD-253	6
8S810M	Proton	OKB52	Proton 8S810	21.2	7.40	450.0	30600	10500.0	120.0	RD-253 14D14	6
Neutron St1	Neutron	RLABU	-	42.8	7.00	420.0	-	6570.0	-	Archimedes Vac	9
Saturn S-IVB	SaturnIVB	DAGHB	S-IVB	18.7	6.60	120.0	13300	890.0	500.0	J-2	1
Saturn S-IB	Saturn	CHRM1	-	24.4	6.53	448.7	41594	5248.0	155.0	H-1	8
Saturn S-I	Saturn	MSFC	-	22.5	6.53	432.7	45250	5760.0	115.0	H-1	8
N-1 Blok-V	11A52V	OKB1	Blok V	12.5	6.40	185.0	13700	1610.0	400.0	MK-21	4
Saturn S-IV	SaturnIV	MSFC	S-IV	9.8	5.59	50.6	5217	400.2	482.0	RL10	6
Saturn S-IVD	SaturnIV	MSFC	Dummy S-IV	9.8	5.59	50.6	5217	400.2	482.0	RL10	6
ATB	MX	RSLP	-	8.4	5.50	119.7	-	-	78.8	SR118	0
OV	STS-OV	RWI	-	37.2	5.49	110.0	80000	54.0	90.0	AJ10-190	2
Ariane 6 ULPM	Ariane5	ARI6	-	12.1	5.46	31.0	3000	180.0	900.0	Vinci	1
Ariane 6 LLPM	Ariane5	ARI6	-	32.0	5.46	189.0	14700	1370.0	465.0	Vulcain 2.1	1
Ariane 5 EPC H158	Ariane5	NORLM	-	30.5	5.46	170.0	12700	1114.0	589.0	Vulcain	1
Ariane 5 EPC H175	Ariane5	NORLM	-	30.5	5.46	189.0	14200	1320.0	540.0	Vulcain 2	1
Ariane 5 EPS	EPS	DORN	-	4.9	5.46	12.5	2700	29.0	1100.0	Aestus	1
Ariane 5 EPS P2000	EPS	DORN	EPS L10	5.2	5.46	13.0	2850	29.0	1100.0	Aestus	1
ESC-A	ESC-D	ASTD	-	7.0	5.43	18.4	2000	64.0	945.0	HM-7B	1
ESC-D	ESC-D	ASTD	-	7.0	5.43	19.0	2000	64.0	945.0	HM-7B	1
Vulcan	Vulcan	ULA	Vulcan	33.3	5.40	540.0	50000	4800.0	299.0	BE-4	2
Centaur V	CentaurV	ULA	Centaur	11.7	5.40	60.0	5500	212.0	740.0	RL10C-1-1A	2
H-II Stage 1	H2	WHITO	H-II	38.0	5.20	202.0	24000	2196.0	352.0	LE-7A	2
H3 Stage 1 2E	H2B	WHITO	H-3	37.0	5.20	114.0	13000	2441.0	300.0	LE-9	2
H3 Stage 1 3E	H2B	WHITO	H-3	37.0	5.20	240.0	15000	3663.0	300.0	LE-9	3
H3 Stage 2	H2B	WHITO	-	12.0	5.20	27.0	2500	137.0	686.0	LE-5B-3	1
CZ-5 Stage 1	CZ5	CALT	CZ-H5-1	31.7	5.00	186.9	21600	1400.0	480.0	YF-77	2
CZ-5 Stage 2	CZ5	CALT	CZ-H5-2	10.6	5.00	36.0	6700	176.5	700.0	YF-75D	2
Delta CBC	Delta4	BOHB	-	40.8	5.00	226.4	26760	2891.0	249.0	RS-68	1
Delta CBC RS-68A	Delta4	BOHB	-	40.8	5.00	226.4	26760	3124.0	249.0	RS-68A	1
Delta D4SS-5	D4SS	BOHB	Delta-5m	12.0	5.00	30.7	3490	110.0	1125.0	RL10B-2	1
DCSS5-1	D4SS	BOHB	Delta-5m	12.0	5.00	30.7	3490	110.0	1125.0	RL10C-2-1	1
ICPS	D4SS	BOHB	Delta-5m	13.7	5.10	31.0	3500	110.0	1125.0	RL10B-2	1
Neutron St2	Neutron2	RLABU	-	11.5	5.00	30.0	-	890.0	-	Archimedes Vac	1
DC-X	DC-X	MDAC	-	12.6	4.95	18.8	10000	242.0	263.0	RL10	4
DC-XA	DC-X	MDAC	Clipper Graham	12.6	4.95	18.8	10000	242.0	263.0	RL10	4
L-3 Blok G	BlockG	OKB1	-	9.1	4.40	61.8	6000	445.0	443.0	MK-19	1
Centaur T	Centaur	GDA	Centaur	9.0	4.30	23.8	2775	146.0	600.0	RL10A-3-3A	2
8S811	UR-200	OKB52	Proton St2	17.1	4.10	167.8	11700	2330.0	210.0	RD-0211	4
8S812	Proton.St3	OKB52	Proton St3	6.9	4.10	50.6	4185	583.0	230.0	RD-0210	1
8S812M	Proton.St3	OKB52	Proton St3	4.1	4.10	50.3	3700	583.0	230.0	RD-0210	1
Briz-M	Briz	KHRU	-	2.8	4.10	22.1	2370	19.6	3000.0	SS-98M	1
H-II Stage 1	H2	WHITO	H-II	34.4	4.00	98.0	11700	1080.0	346.0	LE-7	1
H-IIA Stage 1	H2	WHITO	H-II	37.2	4.00	114.0	13000	1100.0	390.0	LE-7A	1
Delta III Stage 2	D3SS	BOHB	Delta/0030	8.8	4.00	19.3	2475	110.0	700.0	RL10B-2	1
Delta D4SS-4	D3SS	BOHB	Delta/0030	12.0	4.00	24.2	2850	110.0	850.0	RL10B-2	1
H-II Stage 2	H2.St2	WHITO	H-II St2	11.0	4.00	16.7	2700	122.0	600.0	LE-5A	1
H-IIA Stage 2	H2.St2	WHITO	H-II St2	9.2	4.00	20.0	4000	137.0	600.0	LE-5B	1
H-IIA Stage 2 U	H2.St2	WHITO	H-II St2	9.2	4.00	20.0	4000	137.0	600.0	LE-5B	1
GSI-L110 a	GSLV3	LPSCM	-	21.3	4.00	125.8	9800	1598.0	200.0	ViKas 4B	2
GSI-L110	GSLV3	LPSCM	-	21.3	4.00	125.8	9800	1692.0	205.0	HTVE	2
GSI-L110 a	GSLV3.St2	LPSCM	-	13.5	4.00	32.4	4400	200.0	667.0	CE-20	1
GSI-L110	GSLV3.St2	LPSCM	-	13.5	4.00	33.0	4400	200.0	635.0	CE-20	1
GSI-L110 a	GSLV3.St2	LPSCM	-	27.6	3.90	260.7	18715	3260.0	235.0	AJ26-62	2
Antares Stage 1	Zenit	OSCM/YUZH	-	27.6	3.90	260.7	18715	3844.0	235.0	RD-181	2
Antares 2 Stage 1	Zenit	OSCM/YUZH	-	27.6	3.90	260.7	18715	3844.0	235.0	RD-181	2
Antares 2+ Stage 1	Zenit	OSCM/YUZH	-	27.6	3.90	260.7	18715	3844.0	235.0	RD-181	2
Energia Blok A	Zenit	YUZH	-	38.3	3.90	360.0	60000	7908.0	145.0	RD-170	1
11S771	Zenit	YUZH	-	32.9	3.90	352.0	33900	7908.0	140.0	RD-170	1
11S772	Zenit.St2	YUZH	-	11.1	3.90	90.0	9300	912.0	300.0	RD-120	1

Stages

Stage_Name	Stage_Family	Stage_Manufacturer	Stage_Alt_Name	Length m	Diameter m	Launch_Mass t	Dry_Mass kg	Thrust kN	Duration s	Engine	MEng
Atlas CCB	Atlas5	LMA	-	32.5	3.80	304.0	20890	3600.0	240.0	RD-180	1
Ariane L144	Ariane	AELM	-	18.4	3.80	160.0	13750	2462.0	146.0	Viking V	4
Ariane L220	Ariane	EADSL	-	25.4	3.80	246.0	17900	3034.0	205.0	Viking VC	4
Tianlong-3 Stage 1	TL3	TIANB	-	43.0	3.80	-	-	7600.0	-	TH-12	9
Tianlong-3 Stage 2	TL3	TIANB	-	14.3	3.80	-	-	1350.0	-	TH-12V	1
CZ-12 Stage 1	CZ12	SAST	-	40.0	3.80	-	-	5000.0	-	YF-100K	4
CZ-12 Stage 2	CZ12	SAST	-	10.0	3.80	-	-	360.0	-	YF-115	2
LM AS	LMS	GRUM	-	2.5	3.76	4.9	2000	15.6	480.0	RS-18	1
11S824	Blok-D	NPOE	Blok D	5.5	3.70	13.4	1800	85.0	600.0	11DS8	1
11S824M	Blok-D	NPOE	Blok D-1	5.5	3.70	17.3	2400	85.0	600.0	11DS8	1
11S824F	Blok-D	NPOE	Blok D-2	5.5	3.70	17.3	2400	85.0	600.0	11DS8	1
11S86	Blok-D	NPOE	Blok DM	6.3	3.70	17.5	2440	83.4	680.0	11DS8M	1
11S861	Blok-D	NPOE	Blok DM-2	6.3	3.70	17.5	2440	83.4	680.0	11DS8M	1
11S861-01	Blok-D	NPOE	Blok DM-2M	6.3	3.70	17.5	2440	83.4	680.0	11DS8M	1
11S861-03	Blok-D	NPOE	Blok DM-3	6.3	3.70	17.5	2440	83.4	680.0	11DS8M	1
17S40	Blok-D	NPOE	-	6.3	3.70	17.5	2440	83.4	680.0	11DS8M	1
14S48	Blok-D	NPOE	Parsi	6.3	3.70	17.5	2440	83.4	680.0	11DS8M	1
14S48 Orion	Blok-D	NPOE	Orion	6.3	3.70	17.5	2440	83.4	680.0	11DS8M	1
Blok DM1	Blok-D	NPOE	-	6.3	3.70	17.5	2440	83.4	680.0	11DS8M	1
Blok DM3	Blok-D	NPOE	-	6.3	3.70	17.5	2440	83.4	680.0	11DS8M	1
Blok DM4	Blok-D	NPOE	-	6.3	3.70	17.5	2440	83.4	680.0	11DS8M	1
Blok DM-SL	Blok-D	NPOE	-	5.6	3.70	17.3	2720	85.0	650.0	11DS8M	1
Blok DM-SLB	Blok-D	NPOE	-	5.6	3.70	17.3	2720	85.0	650.0	11DS8M	1
Dragon V2	Dragon	SPX	-	6.1	3.70	4.2	4200	584.0	5.0	Super Draco	8
SRM	SRB	THKU	LF140-YF21B	45.5	3.77	590.0	88000	11790.0	123.0	SRM	1
RSRM	SRB	THKU	-	45.5	3.77	590.0	88000	11790.0	123.0	SRM	1
RSRMV	SRB	NGISP	-	47.4	3.77	733.0	72000	9999.0	132.8	RSRMV	1
Ares I-X	SRB	THKU	-	50.9	3.77	590.0	11790.0	11790.0	123.0	SRM	1
Falcon 9 St 1	Falcon 9 St 1	SPX	-	29.0	3.65	302.0	17726	3680.0	174.0	Merlin 1C	9
Falcon 9 St 1/1D	Falcon 9 St 1/1D	SPX	-	42.0	3.65	390.0	18000	5886.0	180.0	Merlin 1D	9
Falcon 9 St 1/1D-FT	Falcon 9 St 1/1D-FT	SPX	-	43.5	3.65	390.0	18000	6770.0	180.0	Merlin 1D-FT	9
Falcon 9 St 1/1D-5	Falcon 9 St 1/1D-5	SPX	-	43.5	3.65	390.0	18000	6770.0	180.0	Merlin 1D-5	9
Falcon 9 St 1/1D-4	Falcon 9 St 1/1D-4	SPX	-	43.5	3.65	390.0	18000	6770.0	180.0	Merlin 1D-4	9
Falcon 9 St 2	Falcon 9 St 2	SPX	-	33.0	3.65	302.0	18000	547.0	174.0	Merlin 1D	9
Falcon 9 St 2/1D	Falcon 9 St 2/1D	SPX	-	10.0	3.65	52.0	2957	427.0	345.0	Merlin 1C-Vac	1
Falcon 9 St 2/1D-4	Falcon 9 St 2/1D-4	SPX	-	12.6	3.65	75.7	4900	801.0	372.0	Merlin 1D-Vac	1
Falcon 9 St 2/1D-5	Falcon 9 St 2/1D-5	SPX	-	12.6	3.65	75.7	4900	801.0	372.0	Merlin 1D-Vac	1
Angara URM-2	URM-2	KHRU	-	5.5	3.60	39.8	4000	294.3	359.0	RD-0124A	1
KSLV-II Stage 1	KSLV-II Stage 1	KARI	-	21.6	3.50	-	-	2942.0	127.0	KRE-075 SL	4
X-15	X-15	MAA	-	15.3	3.55	14.2	5150	257.0	100.0	XLR-99	1
X-15 XLR-11	X-15	MAA	-	15.3	3.55	14.2	5150	257.0	100.0	XLR-99	1
Vega P120C	VegaC	AVIO	-	11.7	3.40	154.6	11000	4500.0	132.8	P120C	1
Ariane 6 ESR	VegaC	AVIO	-	11.7	3.40	154.6	11000	4500.0	132.8	P120C	1
ZQ-2 Stage 1	ZQ-2	LSPHZ	-	34.0	3.35	50.0	15000	2630.0	-	TQ-12	4
ZQ-2 Stage 2	ZQ-2	LSPHZ	-	12.0	3.35	50.0	5000	800.0	-	TQ-12	4
ZQ-2E Stage 1	ZQ-2	LSPHZ	-	34.0	3.35	150.0	15000	2880.0	-	TQ-12A	4
ZQ-2E-1 Stage 1	ZQ-2	LSPHZ	-	34.0	3.35	150.0	15000	2880.0	-	TQ-12	4
ZQ-2E Stage 2	ZQ-2	LSPHZ	-	12.0	3.35	50.0	5000	800.0	-	TQ-15A	1
L180-YF21B	DF5	CALT?	L180-YF21B	23.1	3.35	180.0	10000	2961.0	130.0	YF-20B	4
L140-YF21	DF5	CALT	-	20.2	3.35	151.0	9000	2785.0	132.0	YF-21	4
FB-1 Stage 1	DF5	SAST	LF140-YF21	20.2	3.35	151.0	9000	2785.0	132.0	YF-21	4
DF-5 Stage 1	DF5	CALT?	LF140-YF21	20.2	3.35	151.0	9000	2785.0	132.0	YF-21	4
CZ-2 Stage 1	DF5	CALT	L140-YF21	20.5	3.35	153.0	10000	2961.0	122.0	YF-21	4
CZ-2C Stage 1	DF5	CALT	L140-YF21	25.7	3.35	153.0	10000	2961.0	122.0	YF-21	4
CZ-2Ca Stage 1	DF5	CALT	L140-YF21	27.3	3.35	182.0	10000	2961.0	122.0	YF-21	4
CZ-3 Stage 1	DF5	SAST	L140-YF21	20.2	3.35	151.0	9000	2785.0	132.0	YF-21	4
CZ-2E Stage 1	DF5	CALT	L180-YF21B	23.7	3.35	196.5	9500	2961.0	166.0	YF-21	4
CZ-3A Stage 1	DF5	SAST	L180-YF21B	23.3	3.35	180.0	9500	2961.0	145.0	YF-21	4
CZ-3BE Stage 1	DF5	SAST	L180-YF21B	24.8	3.35	186.2	9500	2961.0	145.0	YF-21	4
CZ-4 Stage 1	DF5	SAST	L180-YF21B	24.7	3.35	192.7	9500	2961.0	170.0	YF-21	4
CZ6-C	DF5	SALT	-	15.0	3.35	84.0	4100	1224.0	-	YF-100	1
CZ6A-C	DF5	SALT	-	20.0	3.35	120.0	6000	2448.0	-	YF-100	2
CZ-7 Stage 1	DF5	CALT	K3-1	26.0	3.35	186.0	12000	2400.0	215.0	YF-100	2
CZ-8 Stage 1	DF5	CALT	K3-1	26.0	3.35	186.0	12000	2400.0	215.0	YF-100	2
CZ-5 Booster	DF5	CALT	K3-1	27.6	3.35	156.6	13800	2400.0	180.0	YF-100	2
DF-5 Stage 2	CZ-St2	CALT?	LF35-YF24	7.5	3.35	39.0	4000	742.0	110.0	YF-22 (FB)	1
FB-1 Stage 2	CZ-St2	SAST	LF35-YF24	7.5	3.35	39.0	4000	742.0	110.0	YF-22	1
L35-YF24	CZ-St2	CALT?	LF35-YF24	9.7	3.35	39.0	4000	765.8	110.0	YF-22	1
CZ-2 Stage 2	CZ-St2	CALT	LF35-YF24	7.5	3.35	39.0	4000	742.0	109.0	YF-22	1
CZ-2C Stage 2	CZ-St2	CALT	LF35-YF24	7.5	3.35	39.0	4000	742.0	109.0	YF-22	1
CZ-2Ca Stage 2	CZ-St2	CALT	LF55-YF24	11.3	3.35	59.0	4000	742.0	109.0	YF-22	1
CZ-3 Stage 2	CZ-St2	SAST	LF35-YF24	9.7	3.35	39.0	4000	720.0	180.0	YF-22	1

Stages

Stage_Name	Stage_Family	Stage_Manufacturer	Stage_Alt_Name	Length m	Diameter m	Launch_Mass t	Dry_Mass kg	Thrust kN	Duration s	Engine	MEng
L35-YF24B	CZ-St2	CALIT?	L35-YF24B	11.5	3.35	34.0	4000	788.4	110.0	YF-22B	1
CZ-3A Stage 2	CZ-St2	SAST	L35-YF24B	9.9	3.35	33.6	4000	742.0	180.0	YF-22	1
CZ-3B Stage 2	CZ-St2	SAST	L35-YF24B	9.9	3.35	33.6	4000	742.0	180.0	YF-22	1
CZ-4 Stage 2	CZ-St2	SAST	L35-YF24B	10.4	3.35	39.6	4000	742.0	127.0	YF-22B	1
CZ-4 Stage 2j	CZ-St2	SAST	L35-YF24B	10.4	3.35	39.6	4000	742.0	127.0	YF-22B	1
CZ-4B Stage 2	CZ-St2	SAST	L35-YF24B	10.4	3.35	39.6	4000	742.0	127.0	YF-22B	1
CZ-2E Stage 2	CZ-St2	CALIT	L35-YF24B	15.5	3.35	91.5	5500	742.0	295.0	YF-22	1
CZ-6A Stage 2	CZ-St2	SAST	-	11.5	3.35	71.0	6000	176.0	-	YF-115	1
CZ-7 Stage 2	CZ-St2	CALIT	-	11.5	3.35	71.0	6000	720.0	-	YF-115	4
TL2 Stage 1	TL2	TIANB	-	25.0	3.35	100.0	-	1860.0	-	YF-102	3
TL2 Stage 2	TL2	TIANB	-	5.0	3.35	35.0	-	300.0	-	TH-11	3
KSLV-II-1	KSLV2	KARI	-	20.0	3.30	300.0	10000	2900.0	-	KRE-075	4
Smart Dispenser	SD	CALIT	-	1.0	3.35	0.2	20	10.8	36.0	FG-47	1
Fregat	Fregat	NPUL	-	1.5	3.35	6.5	1100	19.6	877.0	SS-92	1
Fregat-SB	Fregat	NPUL	-	2.4	3.35	8.5	1050	19.6	1200.0	SS-92	1
SRMU	SRMU	ATXP	-	34.3	3.20	350.0	37000	7500.0	137.8	SRMU	1
GSM-5200	GSM	SDSC	-	26.2	3.20	236.0	31000	4800.0	130.0	S200	1
UA1205	Titan.SRM	UTC	SRM	25.9	3.11	226.2	33800	6227.2	115.0	UA1205	1
UA1206	Titan.SRM	UTC	SRM	27.6	3.11	251.2	40800	6227.2	114.0	UA1206	1
UA1207	Titan.SRM	UTC	SRM1207	34.1	3.11	319.3	51200	7120.0	120.0	UA1207	1
LR87	Titan	MARTD	-	16.0	3.05	76.2	4000	1470.0	138.0	LR87	2
LR87AJ5	Titan	MARTB	-	21.5	3.05	122.0	4000	2090.0	147.0	LR87AJ5	2
LR87AJ9	Titan	MARTB	-	23.8	3.05	116.6	5500	2353.0	147.0	LR87AJ9	2
LR87AJ11	Titan	MARTD	-	23.8	3.05	116.6	5500	2353.0	147.0	LR87AJ11	2
LR87AJ11A	Titan	MARTD	-	26.4	3.05	163.0	8000	2452.0	164.0	LR87AJ11A	2
LR91	Titan.St2	MARTD	-	8.0	3.05	28.9	1725	356.1	225.0	LR91	1
LR91AJ5	Titan.St2	MARTB	-	7.3	3.05	28.9	2400	440.0	182.0	LR91AJ5	1
LR91AJ9	Titan.St2	MARTD	-	9.6	3.05	29.2	2650	449.2	205.0	LR91AJ9	1
LR91AJ11	Titan.St2	MARTD	-	9.6	3.05	29.2	2650	449.2	205.0	LR91AJ11	1
LR91AJ11A	Titan.St2	MARTD	-	10.0	3.05	39.5	4500	472.2	223.0	LR91AJ11A	1
Transtage	Transtage	MARTD	-	4.6	3.05	12.5	2000	71.1	440.0	AJ10-138	2
Atlas A	Atlas	GDA	-	21.8	3.05	82.0	7000	0.0	125.0	-	1
Atlas B	Atlas	GDA	-	21.9	3.05	108.0	3850	267.0	253.6	MA-1/S	1
Atlas C	Atlas	GDA	-	21.9	3.05	108.0	3850	267.0	253.6	MA-1/S	1
Atlas D	Atlas	GDA	-	22.0	3.05	115.0	3400	253.0	281.0	MA-2/S	1
Atlas E	Atlas	GDA	-	20.0	3.05	116.0	3500	253.0	288.0	MA-2/S	1
Atlas F	Atlas	GDA	-	20.0	3.05	116.0	3500	253.0	312.0	MA-2/S	1
Atlas SLV-3	Atlas	GDA	SLV-3	21.0	3.05	118.0	3000	260.0	312.0	MA-5/S	1
Atlas SLV-3A	Atlas	GDA	-	24.0	3.05	142.0	3700	386.0	175.0	MA-5/S	1
Atlas SLV-3C	Atlas	GDA	-	21.9	3.05	128.5	4000	267.0	260.0	MA-5/S	1
Atlas SLV-3D	Atlas	GDA	-	21.2	3.05	128.5	4000	386.5	260.0	MA-5/S	1
Atlas G	Atlas	GDA	-	22.2	3.05	142.5	4240	386.5	266.0	MA-5/S	1
Atlas H	Atlas	GDA	-	21.2	3.05	142.5	4240	380.6	266.0	MA-5/S	1
Atlas I	Atlas	GDA	-	22.2	3.05	142.5	4240	380.6	266.0	MA-5/S	1
Atlas II	Atlas	GDA	-	24.9	3.05	163.5	10350	380.6	274.0	MA-5/S	1
Atlas III	Atlas	GDA	-	29.0	3.05	195.0	13725	4152.0	190.0	RD-180	1
Atlas A Booster	Atlas.Booster	GDA	-	4.5	3.05	3.5	3500	1335.0	128.0	MA-1/B-A	1
Atlas B Booster	Atlas.Booster	GDA	-	4.5	3.05	3.5	3500	1335.0	128.0	MA-1/B	1
Atlas C Booster	Atlas.Booster	GDA	-	4.5	3.05	3.5	3500	1335.0	128.0	MA-1/B	1
Atlas D Booster	Atlas.Booster	GDA	-	4.5	3.05	3.4	3400	1375.0	135.0	MA-2/B	1
Atlas E/F Booster	Atlas.Booster	GDA	-	4.5	3.05	3.2	3200	1468.0	131.0	MA-3/B	1
SLV-3 Booster	Atlas.Booster	GDA	-	4.5	3.05	3.2	3200	1495.0	140.0	MA-5/B	1
SLV-3D Booster	Atlas.Booster	GDA	-	4.5	3.05	3.2	3200	1557.0	140.0	MA-5/B	1
SLV-3C Booster	Atlas.Booster	GDA	-	4.5	3.05	3.2	3200	1646.0	140.0	MA-5/B	1
Atlas G Booster	Atlas.Booster	LMA	-	4.5	3.05	3.2	3200	1682.0	140.0	MA-5/B	1
Atlas MA-5 Booster	Atlas.Booster	GDA	-	4.5	3.05	3.2	3200	1870.0	140.0	MA-5/B	1
Atlas II Booster	Atlas.Booster	LMA	-	4.5	3.05	3.2	3200	1909.0	140.0	MA-5/B	1
Atlas Booster	Atlas.Booster	LMA	-	4.5	3.05	3.2	3200	2065.0	161.0	MA-SA/B	1
Blue Streak	BlueStreak	DEHAVS	-	17.7	3.05	95.0	6800	1512.0	165.0	MA-SA/B	2
Saturn S-V	Saturn S-V	GDA	S-V	6.0	3.05	15.6	2000	0.0	0.0	RZ.2	2
Centaur	Centaur	GDA	Centaur	9.1	3.05	15.6	2000	134.0	430.0	RL10	2
Centaur D	Centaur	GDA	Centaur	9.1	3.05	15.6	2000	134.0	430.0	RL10A-1	2
Centaur D-1A	Centaur	GDA	Centaur	9.6	3.05	16.3	2630	134.0	430.0	RL10A-1	2
Centaur D-1I	Centaur	GDA	Centaur DIAR	9.6	3.05	16.3	2630	134.0	430.0	RL10A-3	2
Centaur I	Centaur	GDA	-	10.1	3.05	15.0	1700	147.0	402.0	RL10A-3A	2
Centaur II	Centaur	GDA	Centaur	10.1	3.05	18.8	2053	147.0	488.0	RL10A-3A	2
Centaur IIIA	Centaur	GDA	Centaur	10.1	3.05	19.0	2200	198.4	370.0	RL10A-4-1	2
Centaur IIIB	Centaur	LMA	Centaur	10.1	3.05	18.6	1720	99.2	740.0	RL10A-4-2	1
Centaur IIIB/SEC	Centaur	LMA	Centaur	11.7	3.05	22.9	2130	99.2	740.0	RL10A-4-2	1
Centaur IIIB/C-1	Centaur	LMA	Centaur	11.7	3.05	22.9	2130	101.8	740.0	RL10C-1	1
Centaur IIIB/C-1-1	Centaur	LMA	Centaur	11.7	3.05	22.9	2130	101.8	740.0	RL10C-1-1	1
Centaur IIIB/DEC	Centaur	LMA	Centaur	11.7	3.05	22.9	2130	198.4	740.0	RL10A-4-1B	2
Centaur IIIB/DEC2	Centaur	LMA	Centaur	11.7	3.05	22.9	2130	198.4	740.0	RL10A-4-2	2

Stages

Stage_Name	Stage_Family	Stage_Manufacturer	Stage_Alt_Name	Length m	Diameter m	Launch_Mass t	Dry_Mass kg	Thrust kN	Duration s	Engine	MEng
Ariane EAP P238	Vega	EADS	-	31.6	3.01	277.6	39600	6719.0	129.0	EAP MFS P238	1
Ariane EAP P240	Vega	EADS	-	31.6	3.01	280.0	40000	6719.0	130.0	EAP MFS P240	1
Vega P80FW	Vega	AVIO	-	11.2	3.01	97.1	8790	2100.0	106.8	P80FW	1
YGCS	YGCS	CALT	-	10.0	3.00	50.0	-	-	-	YF-115	1
New Shepard PM	New Shepard	BLOR	-	12.0	3.00	75.0	10000	1020.0	145.0	BE-3 (BLOR)	4
Sarmat St1	Sarmat	MAK	-	22.0	3.00	180.0	-	-	-	RD-273	3
Sarmat St2	Sarmat	MAK	-	6.0	3.00	28.0	-	-	-	Sarmat St2 Eng	1
8S671	R-36	YUZH	R-36 St1	18.8	3.00	122.0	6400	2648.0	120.0	RD-250	3
8S691	R-36	YUZH	R-360 St1	18.8	3.00	122.0	6400	2648.0	120.0	RD-250	3
11S691	R-36	YUZH	-	18.8	3.00	127.0	8300	3032.0	120.0	RD-263	3
15A14A	R-36	YUZH	R-36M St 1	22.3	3.00	210.0	15000	4522.0	130.0	RD-263	4
15A18A	R-36	YUZH	R-36M St 1	22.3	3.00	210.8	15000	4525.0	98.0	RD-273	3
8S672	R-36.St2	OKB586	R-36 St2	9.4	3.00	49.0	3700	902.0	160.0	RD-252	1
8S692	R-36.St2	OKB586	R-360 St2	9.4	3.00	49.0	3700	902.0	160.0	RD-252	1
11S692	R-36.St2	OKB586	-	10.1	3.00	53.3	4000	1010.0	160.0	RD-252	1
15A14B	R-36.St2	YUZH	R-36M St 2	6.0	3.00	49.0	3000	760.0	153.0	RD-0228	1
15A18B	R-36.St2	YUZH	R-36M St 2	5.7	3.00	49.3	3000	760.0	153.0	RD-0255	1
15A18-BR	BR	YUZH	R-36M St 3	1.0	3.00	8.2	900	18.6	600.0	RD 15A18-BR	1
8S641	R-16	OKB586	R-16A	16.0	3.00	110.0	10000	2610.0	90.0	RD-217	3
CZ3.St3	CZ3.St3	CALT	-	12.4	3.00	21.0	2800	160.0	615.0	YF-75	2
CZ-3A Stage 3	CZ3.St3	CALT	H18-YF75	12.4	3.00	21.0	2800	157.0	470.0	YF-75	2
CZ-8 Stage 2	CZ3.St3	CALT	H18-YF75	12.4	3.00	21.0	2800	157.0	470.0	YF-75	2
YZ-1	YZ-1	CALT	YZ-1	5.0	3.00	0.0	0	0.0	0.0	YF-50D	2
YZ-1A	YZ-1	CALT	YZ-1	5.0	3.00	0.0	0	0.0	0.0	YF-50D	2
YZ-1S	YZ-1	CALT	YZ-1	5.0	3.00	0.0	0	0.0	0.0	YF-50D	2
YZ-2	YZ-1	CALT	YZ-2	5.0	3.00	0.0	0	0.0	0.0	YF-50D	2
YZ-3	YZ-1	SAST	YZ-3	5.0	3.00	0.0	0	0.0	0.0	YF-50D	2
8K71A	Blok-A	OKB1	-	28.0	2.95	93.5	7495	941.0	330.0	8D75PS	1
8K74A	Blok-A	OKB1	-	28.0	2.95	100.0	7000	950.0	330.0	8D75	1
11S59A	Blok-A	OKB1	Blok A	28.0	2.95	105.4	6875	997.1	286.0	RD-108	1
14S53A	Blok-A	OKB1	Blok A	28.0	2.95	105.4	6875	1009.4	286.0	RD-108A	1
11S59A-S	Blok-A	OKB1	Blok A	28.0	2.95	105.4	6875	1009.4	286.0	RD-108A	1
374BLO1A-A	Blok-A	OKB1	Blok A	28.0	2.95	105.4	6875	1009.4	286.0	RD-108A	1
374BLO1B-A	Blok-A	OKB1	Blok A	28.0	2.95	105.4	6875	1009.4	286.0	RD-108A	1
Soyuz-2-1V 132KS	Blok-A	PROG	Blok A	26.9	2.95	129.0	9300	1754.0	292.1	NK-33A	1
IUS SRM-2	Orbus6	UTC	Orbus 6E	2.1	2.90	3.9	1005	76.5	104.0	Orbus 6E	1
CZ-4 Stage 3	L14	SAST	L14-YF40	1.9	2.90	15.2	1000	98.1	303.0	YF-40	1
CZ-4B Stage 3	L14	SAST	L14-YF40	1.9	2.90	15.2	1000	98.1	303.0	YF-40	1
CZ-4C Stage 3	L14	SAST	L14-YF40	1.9	2.90	15.2	1000	98.1	303.0	YF-40A	1
Angara URM	Angara	KHRU	-	25.7	2.90	142.4	9800	2086.0	337.5	RD-191	1
Angara URM-1	Angara	KHRU	-	27.7	2.90	142.4	9800	2086.0	337.5	RD-191	1
Angara-1.2 Stage 2	Angara	KHRU	-	1.0	2.90	30.0	4000	294.3	359.0	RD-0124A	1
Angara AM	Angara.AM	KHRU	-	1.0	2.90	-	0	1.6	-	11D458	4
Maro Stage 1	Angara	KHRU	-	25.7	2.90	142.4	9800	1670.0	337.5	RD-151	1
GS1-S125	PSLV	VSSC	-	20.3	2.80	156.0	27000	4700.0	100.0	S125	1
GS1-S139	PSLV	VSSC	PS-1	20.0	2.80	177.0	30000	4910.0	105.0	S139	1
S139	PSLV	VSSC	PS-1	20.0	2.80	177.0	30000	4910.0	105.0	S139	1
S125	PSLV	VSSC	PS-1	20.0	2.80	168.0	30000	4430.0	105.0	S125	1
GS2-HTVE	ISRO-L40	VSSC	-	11.6	2.80	44.3	4800	846.8	136.0	HTVE	1
GS2	ISRO-L40	VSSC	-	11.6	2.80	42.8	4800	799.0	136.0	Vikas	1
PS2	ISRO-L40	VSSC	PS-2	12.5	2.80	45.8	5300	724.0	158.0	Vikas	1
GS0M	ISRO-L40	VSSC	L40	19.7	2.10	46.0	6000	680.0	160.0	Vikas	1
ISRO TV	ISRO-L40	VSSC	L40	19.7	2.10	46.0	6000	680.0	160.0	Vikas	1
CUS12	GS3	VSSC	-	8.7	2.80	15.0	2200	73.6	720.0	ICE	1
CUS15	GS3	VSSC	-	8.7	2.80	14.6	2200	73.6	720.0	ICE	1
15KR8	GS3	VSSC	C12	8.7	2.80	14.6	2200	73.6	720.0	KVD-1M	1
12KR8	GS3	KHRU	-	8.7	2.80	15.0	2500	73.5	720.0	KVD-1M	1
Ikar	Ikar	PROG	-	2.6	2.72	3.1	2344	29.4	17D61	1	
VoLga	Ikar	PROG	-	1.0	2.70	1.8	900	2.9	882.0	VoLga	1
8K75A	R-9	OKB1	-	14.6	2.70	61.6	4000	1600.0	108.0	RD-111	1
8K75B	8K75B	OKB1	-	7.0	2.70	15.9	2500	300.0	140.0	RD-0106	1
8K71	R-7	OKB1	-	19.0	2.70	10.8	850	250.0	120.0	8D74PS	1
8K74	R-7	OKB1	-	19.0	2.70	10.8	850	250.0	120.0	8D74	1
11S59	R-7	OKB1	Blok BVGD	19.8	2.68	44.5	3915	992.0	120.0	RD-107	1
14S53	R-7	OKB1	Blok BVGD	19.8	2.68	44.5	3915	992.0	120.0	RD-107A	1
374BLO1A	R-7	OKB1	Blok BVGD	19.8	2.68	44.5	3915	992.0	120.0	RD-107A	1
374BLO1B	R-7	OKB1	Blok BVGD	19.8	2.68	44.5	3915	992.0	120.0	RD-107A	1
Jupiter	Jupiter	CHRY/ABMA	-	14.6	2.67	54.4	5400	660.0	180.0	S-3D	1
8K781	Blok-I	OKB1	-	9.4	2.66	25.5	2350	298.0	240.0	RD-0107	1
11A57I	Blok-I	OKB1	Blok I	6.7	2.66	23.7	2350	298.0	240.0	RD-0110	1
14S54/RD-0110	Blok-I	OKB1	-	6.7	2.66	25.2	2400	298.0	240.0	RD-0110	1
14S54	Blok-I	OKB1	-	6.7	2.66	26.0	2800	294.0	359.0	RD-0124	1
14S54 (N)	Blok-I	OKB1	-	6.7	2.66	26.0	2800	294.0	359.0	RD-0124N	1

Stages

Stage_Name	Stage_Family	Stage_Manufacturer	Stage_Alt_Name	Length m	Diameter m	Launch_Mass t	Dry_Mass kg	Thrust kN	Duration s	Engine	MEng
374BL02A	Blok-I	OKB1	-	6.7	2.66	25.2	2800	298.0	240.0	RD-0110	1
374BL02B	Blok-I	OKB1	-	6.7	2.66	26.0	2800	294.0	359.0	RD-0124	1
11SS10	Blok-I	OKB1	-	6.7	2.66	25.2	2410	298.0	240.0	RD-0110	1
11SS10 (F)	Blok-I	OKB1	-	7.6	2.66	25.2	2410	298.0	240.0	RD-0110	1
ZK-1A Stage 1	ZK-1	ARMT	-	16.0	2.65	35.0	-	2067.0	-	ZK-1A-1	1
ZK-1A Stage 2	ZK-1	ARMT	-	12.0	2.65	35.0	-	1081.0	-	ZK-1A-2	1
YL-1 Stage 0	ZK-1	ARMT	-	12.0	2.65	35.0	-	1500.0	-	YL-1-0	1
YL-1 Stage 1	ZK-1	ARMT	-	12.0	2.65	35.0	-	2550.0	-	YL-1-1	1
YL-1 Stage 2	ZK-1	ARMT	-	10.0	2.65	20.0	-	1000.0	-	YL-1-2	1
Abid St1	Abid	IQ	-	8.0	2.64	25.0	3000	1500.0	90.0	Abid	5
Hwasong-17 Stage 1	Hwasong-15	KPA	-	18.0	2.60	80.0	-	0.0	3200.0	HS-17	4
Hwasong-17 Stage 2	Hwasong-15	KPA	-	5.0	2.60	3.0	-	-	800.0	HS-17	1
Ariane L33	Ariane.St2	DASA/ERNO	L33	11.6	2.60	38.9	3500	785.0	126.0	Viking IVB	1
Ariane H8	Ariane.St3	AELM	H8	10.2	2.60	9.7	1450	61.6	563.0	HM-7	1
Ariane H10	Ariane.St3	AELM	H10	11.8	2.60	12.5	1740	62.7	720.0	HM-7B	1
Ariane H10+	Ariane.St3	AELM	H10+	11.8	2.60	12.8	1740	62.7	750.0	HM-7B	1
Ariane H10-3	Ariane.St3	AELM	H10-3	12.1	2.60	13.5	1780	62.7	780.0	HM-7B	1
KSLV-II Stage 2	KSLV2-2	KARI	-	15.0	2.60	50.0	1000	788.0	148.0	KRE-075 V	1
KSLV-II Stage 3	KSLV2-2	KARI	-	3.5	2.60	-	100	68.7	498.0	KRE-007 V	1
M-35	MISST	MISST	-	4.0	2.60	17.2	2200	445.0	129.0	M-35	1
8K72EL	Blok-E	OKB1	-	2.5	2.58	8.1	1110	49.4	450.0	RO-5	1
8K72E	Blok-E	OKB1	-	3.6	2.58	8.0	1440	54.5	450.0	RO-5	1
8K72KE	Blok-E	OKB1	-	3.6	2.58	8.0	1440	54.5	430.0	RO-7	1
8A92E	Blok-E	OKB1	-	3.6	2.58	8.0	1440	54.5	430.0	RO-7	1
8A92ME	Blok-E	OKB1	-	3.6	2.58	8.0	1440	54.5	430.0	RO-7	1
A-350	A-350	SKE30	-	8.0	2.57	15.0	1000	-	5.0	A-350 Booster	1
A-350	A-350	SKE30	-	10.0	2.57	15.0	1000	-	40.0	A-350 Sustainer	1
A-350ZH	A-350	SKE30	-	7.9	2.57	15.0	1000	-	5.0	5S47	1
A-350Zn	A-350	SKE30	-	15.0	2.57	15.0	1000	-	40.0	5D22	1
A-925	FAKEL	FAKEL	-	7.0	2.57	15.0	1000	-	40.0	51T6B ZhRD	1
A-925 Booster	FAKEL	FAKEL	-	8.0	2.57	15.0	1000	-	5.0	51T6 Motor	1
Nudel' Booster	ALMAN	ALMAN	-	7.0	2.60	15.0	-	-	-	Nudel' St 2	1
M-14	MV	ALMAN	-	8.0	2.60	15.0	-	-	-	Nudel' St 1	1
M-24	M-24	MISST	-	14.1	2.51	87.0	12070	3780.0	49.0	M-14	1
M-25	M-24	MISST	-	6.6	2.51	38.0	3410	1240.0	71.0	M-24	1
Briz-KM	Briz	MISST	-	6.6	2.51	38.0	3410	1240.0	71.0	M-25	1
UR-100NA	UR-100N	KHRU	-	2.5	2.50	6.7	1700	19.6	1000.0	SS-98M	1
UR-100NB	UR-100N.St2	KHRU	-	17.2	2.50	88.0	5000	2070.0	121.0	RD-0233	4
ASR SRB-A	H2.SRB	KHRU	-	3.9	2.50	15.0	2000	240.0	183.0	RD-0235	1
H-II SRB-A	H2.SRB	MISST	-	11.7	2.50	76.5	8700	2271.0	116.0	H-II SRB-A3	1
H-II SRB-A3	H2.SRB	MISST	-	15.2	2.50	75.0	10000	2350.0	100.0	H-II SRB-A	1
H3 SRB-3	H2.SRB	MISST	-	15.1	2.50	76.5	10500	2305.0	120.0	H-II SRB-A3	1
TL2 Stage 3	TL2-3	MISST	-	14.6	2.50	76.2	9000	2158.0	110.0	H3 SRB-3	1
Thor DM-18	Thor	TIANB	-	2.0	2.50	0.9	-	3.0	-	TH-31	3
Thor DM-18A	Thor	DAC	-	18.2	2.44	48.8	3125	667.0	160.0	MB-3	1
Thor DM-18C	Thor	DAC	-	18.6	2.44	48.8	3125	667.0	160.0	MB-3	1
Thor DM-21	Thor	DAC	-	17.1	2.44	47.8	3125	734.0	170.0	MB-3-2	1
Thor DSV-2A	Thor	DACHB	-	17.1	2.44	47.8	3125	779.0	170.0	MB-3-2	1
Thor DSV-2C	Thor	DACHB	TA Thor DSV-2C	17.1	2.44	48.0	3175	760.0	170.0	MB-3-2	1
LT Thor DSV-2L-1A	Thor	DACHB	LT Thor DSV-2L	21.0	2.44	70.3	3715	860.0	215.0	MB-3-3	1
LT Thor DSV-2L-1B	Thor	DACHB	LT Thor DSV-2L	20.3	2.44	70.3	3715	860.0	215.0	MB-3-3	1
LT Thor DSV-2L-1C	Thor	DACHB	LT Thor DSV-2L	20.3	2.44	70.3	3715	860.0	215.0	MB-3-3	1
LT Thor N	Thor	DACHB	LT Thor DSV-2L	20.3	2.44	70.3	3715	860.0	215.0	MB-3-3	1
ELT Thor N	Thor	DACHB	ELT Thor 3900	22.4	2.44	85.8	4400	860.0	270.0	MB-3-3	1
ELT Thor DSV-2L-1D	Thor	DACHB	-	22.4	2.44	84.1	4059	860.0	222.0	MB-3-3	1
ELT Thor DSV-2L-1E	Thor	DACHB	-	22.4	2.44	84.1	4059	860.0	222.0	MB-3-3	1
ELT Thor DSV-2W-1	Thor	DACHB	-	22.8	2.44	84.4	4360	912.0	223.0	MB-3-3	1
ELT Thor DSV-2W	Thor	DACHB	-	22.4	2.44	84.4	4360	1030.0	223.0	RS-27	1
Delta III Stage 1	Thor	BOHB	-	26.1	2.44	101.8	5680	1085.8	261.0	RS-27A	1
LE-5	LE-5	MHITO	-	20.0	2.44	102.4	6820	1085.8	261.0	RS-27A	1
UR-100NU APB	UR-100NU.St3	KHRU	-	9.3	2.44	10.6	1800	103.0	370.0	LE-5	1
Strela APB	UR-100NU.St3	KHRU	-	0.5	2.40	-	-	4.9	150.0	RD-0237	1
R-39 St 1	R-39	YUZH/PAVKH	-	1.3	2.40	53.7	-	4.9	150.0	RD-0237	1
R-39 St 2	R-39.St2	MAK	-	9.7	2.40	25.0	-	2060.0	-	3D65	1
R-39 St 3	R-39.St3	MAK	-	5.0	2.40	30.0	-	-	-	R-39 St 2	1
3N91 St 1	R-39	YUZH/PAVKH	-	4.0	2.40	10.0	-	-	-	R-39 St 3	1
3N91 St 2	R-39.St2	MAK	-	9.7	2.40	30.0	-	2060.0	-	3D65	1
3N91 St 3	R-39.St3	MAK	-	5.0	2.40	15.0	-	-	-	R-39 St 2	1
15Zh44 St 1	R-39	PAVKH	-	4.0	2.40	5.0	-	-	-	R-39 St 3	1
15Zh44 St 2	RT-23.St2	PAVKH	-	9.7	2.40	53.7	-	2060.0	-	15D206	1
RT-23.St 2	RT-23.St2	PAVKH	-	4.8	2.40	25.0	-	1050.0	-	15D207	1



Stages

Stage_Name	Stage_Family	Stage_Manufacturer	Stage_Alt_Name	Length m	Diameter m	Launch_Mass t	Dry_Mass kg	Thrust kN	Duration s	Engine	MEng
15Zn52 St 1	R-39	PAVKH	-	9.7	2.40	53.7	-	2060.0	-	15D206	1
15Zn52 St 2	RT-23.St2	PAVKH	-	4.8	2.40	25.0	-	1050.0	-	15D207	1
15Zn60 St 1	R-39	PAVKH	-	9.7	2.40	53.7	-	2060.0	-	15D305	1
15Zn60 St 2	RT-23.St2	PAVKH	-	4.8	2.40	25.0	-	1050.0	-	15D339	1
15Zn61 St 1	R-39	PAVKH	-	9.7	2.40	53.7	-	2060.0	-	15D206	1
15Zn61 St 2	RT-23.St2	PAVKH	-	4.8	2.40	25.0	-	1050.0	-	15D290	1
RT-23 St 3	RT-23.St3	ISKRP	-	3.6	2.40	15.0	-	206.0	-	RT-23-3	1
Hwasong-15 Stage 1	Hwasong-15	KPA	-	15.0	2.40	50.0	-	-	800.0	HS-15	1
Hwasong-15 Stage 2	Hwasong-15	KPA	-	2.1	2.40	3.0	-	-	224.0	HS-15-2	1
Cheonlinam-1 Stage 1	Hwasong-15	NADA	-	7.0	2.40	50.0	-	-	-	CL1-1	1
NK Kerolox Stage 1	Hwasong-15	NADA	-	7.0	2.40	50.0	-	-	-	NK Kero	1
HS-18 St1	Hwasong-18	KPA	-	11.3	2.40	25.0	-	-	-	HS-18-S1	1
HS-19 St1	Hwasong-18	KPA	-	11.3	2.40	25.0	-	-	-	HS-18-S1	1
Taeppo Dong 2	Unha	KPA	-	14.0	2.40	60.0	5000	1200.0	120.0	TD-2	4
SImorgh Stage 1	IR	IR	-	17.8	2.40	60.0	-	1400.0	-	-	1
S3	Kosmos-3.St2	YUZH	-	6.0	2.40	20.1	1500	157.0	335.0	11D49	1
S3M	Kosmos-3.St2	POL	-	6.0	2.40	20.1	1435	157.0	335.0	11D49	1
R-14	R-14	YUZH	-	22.4	2.40	87.2	5300	1745.0	130.0	RD-216	1
R-14 65S3A	R-14	YUZH	-	22.4	2.40	87.2	5300	1745.0	130.0	RD-216	1
R-14 11K65A	R-14	POL	-	22.4	2.40	87.2	5300	1745.0	130.0	RD-216	1
R-14 11K65WA	R-16.St2	OKB586	R-16B	13.0	2.40	27.0	3000	882.0	125.0	RD-216	1
Blok-L	Blok-L	OKB1	-	3.2	2.40	7.3	1160	66.7	250.0	S1.5400	1
Blok-ML	Blok-L	NPOL	-	3.2	2.40	6.2	999	66.7	250.0	S1.5400	1
Blok SO-L	Blok-L	NPOL	-	3.2	2.40	6.2	999	66.7	250.0	S1.5400	1
Blok-ZBL	Blok-L	NPOL	-	3.2	2.40	5.8	902	66.7	250.0	S1.5400	1
Blok-VL	Blok-L	NPOL	-	3.2	2.40	5.8	902	66.7	250.0	S1.5400	1
Blok-WL	Blok-L	NPOL	-	3.2	2.40	5.8	902	66.7	250.0	S1.5400	1
SR119	MX.St2	AJSP	SR119	5.3	2.35	27.7	3175	1223.0	54.0	SR119	1
SR120	MX.St3	HERC	SR120	2.3	2.35	7.8	635	289.0	60.7	SR120	1
GCA/Orion 38	Pegasus.St3	ATKH	-	2.1	2.35	1.2	500	36.0	69.6	Orion 38	1
Castor 30	MX	ATK	-	3.5	2.35	14.0	1220	260.0	136.0	Castor 30	1
Castor 30B	MX	ATK	-	4.2	2.35	14.0	1083	293.4	128.0	Castor 30B	1
Castor 30XL	MX	ATK	-	6.0	2.35	14.0	1220	260.0	166.0	Castor 30XL	1
Peacekeeper PBPS	MX.St4	RDYNE	-	1.1	2.35	1.3	550	11.8	168.0	RS-34	1
Peacekeeper	MX	THKU	-	8.4	2.35	49.0	4300	2204.0	56.0	TU-903	1
TU-903	MX	THKU	TU904	8.4	2.35	53.4	4400	2225.0	78.8	SR118	1
SR118	MX	RELSP	-	24.3	2.30	55.0	6000	920.0	180.0	Aeon 1	9
Terran 1 St 1	Terran1	RELSP	-	8.1	2.30	20.0	2000	126.0	239.0	AeonVac	1
Terran 1 St 2	Terran1	RELSP	-	10.7	2.30	53.1	4450	1604.0	83.4	Castor 120	1
Castor 120	MX	THKU	-	3.5	2.30	10.9	1115	186.0	153.0	Orbus 21D	1
IUS SRM-1	Orbus21	UTC	Orbus 21	3.0	2.30	10.8	1030	187.0	150.0	Orbus 21D	1
Orbus 21D	Orbus21	UTC	-	1.0	2.30	0.7	360	0.9	550.0	MR-107	4
OAM	OAM	PRIMX	-	6.5	2.30	30.0	2500	900.0	60.0	MSBS 501	1
MSBS 501	M51	AELM	-	2.3	2.30	10.0	800	300.0	70.0	MSBS 502	1
MSBS 502	M51	AELM	-	1.3	2.30	5.0	100	100.0	40.0	MSBS 503	1
MSBS 503	M51	AELM	-	14.3	2.25	59.0	5000	1236.0	-	RD-268	1
MR-UR-100 St 1	MR-UR-100	YUZH	-	14.9	2.25	59.0	5000	1236.0	-	RD-268	1
Perimetr Stage 1	MR-UR-100	YUZH	-	7.5	2.25	10.5	2000	44.1	800.0	YF-73	1
CZ-3 Stage 3	CZ3 St3	CALIT	H8-YF73	15.3	2.25	37.7	3200	740.4	128.0	YF-25	1
CZ Booster	CZ.LB	CALIT?	LB40-YF25	16.1	2.25	41.0	3200	740.4	128.0	YF-25	1
CZ-3BE Booster	CZ.LB	CALIT?	LB41-YF25	16.1	2.25	41.0	3200	740.4	128.0	YF-25	1
CZ-K2-1	DF3	CALIT	-	26.5	2.25	81.5	6000	1200.0	185.0	YF-100	1
DF3-YF2A	DF3	CALIT	-	18.0	2.25	64.1	4100	1224.0	130.0	YF-2A	4
DF4-YF3	CZ1.St2	CALIT	-	5.4	2.25	15.0	2700	306.0	110.0	YF-3	1
CZ-K2-2	CZ1.St2	CALIT	-	8.0	2.25	15.0	3000	-	-	YF-115	1
CZ-K2-3	CZ1.St2	CALIT	-	4.0	2.25	-	1000	-	-	YF-85	4
Burya	Burya	NPOL	La-350	18.0	2.20	40.8	13000	-	0.0	-	1
SSM	YUZH	YUZH	-	2.8	2.20	4.6	1600	79.0	125.0	RD-861	1
M-34	M-34	NISSIT	-	3.4	2.20	11.6	1000	290.0	102.0	M-34	1
M-34c	M-34	NISSIT	-	3.4	2.20	12.3	1500	327.0	105.0	M-34c	1
PAL	PAL	DASA	-	18.6	2.17	44.0	4500	758.5	140.0	Viking VI	1
MR-UR-100 St 2	MR-UR-100.St2	YUZH	-	3.2	2.15	10.0	1000	142.0	195.0	15D169	1
Perimetr Stage 2	MR-UR-100.St2	YUZH	-	3.2	2.15	10.0	1000	142.0	195.0	15D169	1
MR-UR-100 BR	BR	YUZH	-	1.0	2.15	1.0	500	-	-	15D171	1
Trident	Trident.St3	UTC?	-	2.0	2.13	1.1	700	35.0	-	Trident Motor	1
Trident D-5 Stage 1	LMSC	LMSC	-	7.2	2.11	39.1	2242	-	64.0	D-5-1	1
Trident D-5 Stage 2	Trident.St2	LMSC	-	2.9	2.11	11.8	790	-	65.0	D-5-2	2
Coralie	Coralie	SEREB	-	6.5	2.01	12.0	2400	268.0	105.0	Coralie	4
Astris	Astris	ERND	-	3.8	2.03	3.6	800	22.5	361.0	Astris	1
PS3	SSLV	VSSC	PS-3	3.6	2.00	8.4	1100	324.0	83.0	PS3	1
HPS3	SSLV	VSSC	PS-3	3.6	2.00	8.4	1100	324.0	83.0	PS3	1
PS4	PSLV.St4	VSSC	PS-4	2.6	2.00	2.9	920	14.8	425.0	LWS	2
HPS4	PSLV.St4	VSSC	PS-4	2.6	2.00	2.9	920	14.8	425.0	LWS	2



Stages

Stage_Name	Stage_Family	Stage_Manufacturer	Stage_Alt_Name	Length m	Diameter m	Launch_Mass t	Dry_Mass kg	Thrust kN	Duration s	Engine	MEng
SSLV S53	SSLV-S53	ISRO	-	2.8	1.70	5.0	400	160.0	-	S4	1
SSLV VTM	SSLV-VTM	ISRO	-	1.0	1.70	1.0	200	-	-	VTM	12
M55E1	Minuteman	THKU	-	7.5	1.68	22.9	2320	892.0	60.0	TU-122	1
M55E1-ATK	Minuteman	THKU	-	7.5	1.68	22.9	2522	892.0	60.0	TU-122-ATK	1
M55A1	Minuteman	THKU	-	7.5	1.68	22.9	2500	792.0	59.3	M55A1	1
R-5	R-5	OKB1	-	20.7	1.65	28.6	4000	500.0	115.0	RD-103	1
V-2	V-2	WEHR	-	12.0	1.65	12.8	4000	312.0	70.0	A-4	1
V-2-Ram	V-2	ABMA	-	12.0	1.65	12.8	4000	312.0	70.0	A-4	1
R-1	R-1	NI188	-	14.1	1.65	13.4	4000	267.0	65.0	RD-100	1
R-2	R-2	OKB1	-	17.0	1.65	20.3	4380	363.0	65.0	RD-101	1
DF-1	V-2	CALT	-	14.1	1.65	14.0	4000	270.0	85.0	DF-1	1
DF-2	V-2	CALT	-	20.0	1.65	30.0	4000	300.0	-	YF-1	1
DF-2A	V-2	CALT	-	20.0	1.65	30.0	4000	300.0	-	YF-1	1
A-1	V-2	OKB1	GR	17.0	1.65	20.0	4000	363.0	85.0	RD-101	1
R-12	R-12	OKB586	-	18.0	1.65	34.6	4810	625.6	125.0	RD-214	1
R-12 63S1A	R-12	OKB586	-	18.0	1.65	39.5	4810	625.6	125.0	RD-214	1
R-12 63S1MA	R-12	OKB586	-	18.0	1.65	39.5	4810	625.6	125.0	RD-214	1
R-12 11K63A	R-12	OKB586	-	18.0	1.65	39.5	4810	625.6	125.0	RD-214	1
S1	Kosmos-2.St2	YUZH	-	7.8	1.65	8.6	840	105.0	250.0	RD-119	1
S1M	Kosmos-2.St2	YUZH	-	7.8	1.65	8.6	840	105.0	250.0	RD-119	1
LE-3	LE-3	MHI	-	5.4	1.62	5.8	500	54.0	250.0	LE-3	1
PAM-D2	PAM-D2	THKU	-	2.7	1.60	3.5	230	85.0	118.0	Star 63D	1
GEM-63	GEM63	OATKH	-	20.1	1.60	49.3	5100	1361.0	91.0	GEM-63	1
GEM-63XL	GEM63	OATKH	-	22.0	1.60	53.4	5400	2044.0	80.0	GEM-63XL	1
Atlas V SRM	AtlasVSRM	AJSP	-	19.5	1.55	46.2	3600	1361.0	91.0	AJ-60A	1
15Zh58B	Topol.St2	MITT	Topol'-2	6.0	1.55	13.0	1500	490.0	64.0	15Zh58B	1
15Zh58MB	Topol.St2	MITT	Topol'-M2	6.0	1.55	13.0	1500	490.0	64.0	15Zh58B	1
R-31 St 1	R-31	ARSL	-	6.3	1.54	17.5	2000	579.0	84.0	3D17	1
R-31 St 2	R-31.St2	ARSL	-	3.1	1.54	6.9	800	233.0	74.0	R-31 St 2	1
R-31 BS	BR	ARSL	-	2.5	1.54	1.3	200	4.0	101.0	R-31BS	4
GEM-60	GEM60	ATKH	-	16.2	1.52	33.2	3850	851.5	90.0	GEM-60	1
Agena A	Agena	LMSC	-	3.0	1.52	3.8	400	69.0	120.0	Bell 8048	1
Agena B	Agena	LMSC	-	6.2	1.52	7.0	750	71.0	480.0	Bell 8096	1
Agena D	Agena	LMSC	-	6.2	1.52	7.0	750	71.0	480.0	Bell 8096	1
SEP 901	P-10	SUD/SEP	P-10	4.5	1.51	10.0	440.0	440.0	-	SEP 901	1
SEP 904	P-10	SUD/SEP	P-10	4.5	1.51	10.0	440.0	440.0	50.0	SEP 904	1
SEP 903	P-10	SEP	P-10	4.7	1.51	10.0	440.0	440.0	-	SEP 903	1
SEP 902	P-16	SUD/SEP	P-16	6.9	1.51	16.0	540.0	540.0	-	SEP 902	1
Rita I	Rita	SUD/SEP	Rita 1	2.3	1.51	4.8	350	180.0	62.0	P4	1
Rita II	Rita	SUD/SEP	Rita 2	3.0	1.51	6.0	480.0	320.0	52.0	Rita II	1
Eris Stage 2	GILM	GILM	-	7.0	1.50	8.0	-	-	100.0	Phoenix	1
Eris Stage 3	Eris.St3	GILM	-	1.5	1.50	1.0	-	-	-	Phoenix	1
AVUM+	AVUM	AVIO	-	1.7	1.50	1.3	606	2.4	940.0	RD-843	1
AVUM	AVUM	AVIO	-	1.7	1.50	1.0	494	2.5	667.0	RD-843	1
AVUM-RD868P	AVUM	AVIO	-	1.7	1.50	1.0	494	2.5	667.0	RD-868P	1
ZK-1A Stage 4	ZK-1A-4	ARMT	-	3.0	1.50	10.0	-	78.0	-	ZK-1A-4	1
ZK-3 Stage 4	ZK-1A-4	ARMT	-	3.0	1.50	10.0	-	78.0	-	ZK-1A-4	1
JL-3 Stage 4	ZK-1A-4	ARMT	-	3.0	1.50	10.0	-	78.0	-	ZK-1A-4	1
CF-5 SSQ	CESSQ	CASST	-	1.5	1.50	0.5	215	-	-	JL3-4	1
Unha-1 Stage 2	Unha.St2	KPA	-	8.0	1.50	25.6	3700	570.0	95.0	SSQ Engine	1
Unha-2 Stage 2	Unha.St2	KPA	-	8.0	1.50	25.6	1500	140.0	176.0	Modong	1
Unha-2 Stage 2	Unha.St2	IR	-	8.2	1.50	8.0	-	71.0	-	Modong	1
Simorgh Stage 2	Unha.St2	IR	-	8.2	1.50	8.0	-	71.0	-	LHE-4	1
KN-11	Bukgukseong	KPA	-	4.0	1.50	10.0	-	255.0	128.0	KPN-Solid1	1
KN-11-2	Bukgukseong	KPA	-	2.8	1.50	7.0	-	255.0	128.0	KPN-Solid2	1
Zoljanah	Zoljanah	IR	-	8.0	1.50	10.0	-	255.0	128.0	Zoljanah-1	1
Khorranshahr	R-27	IR	-	8.0	1.50	10.0	-	255.0	128.0	KPN-4D10	1
Khorranshahr 4	R-27	IR	-	10.0	1.50	15.0	-	255.0	128.0	KPN-4D10	1
Hwasong 10	R-27	MAK	-	8.0	1.50	10.0	-	255.0	128.0	KPN-4D10	1
M-3B	R-27	MAK	-	8.0	1.50	10.0	-	255.0	128.0	KPN-4D10	1
LaucherOne Stage 2	M-40	NISSIT	-	2.7	1.50	3.6	310	132.0	87.0	M-3B	1
Spaceship One	LaucherOne Stage 2	VORB	-	3.4	1.50	2.6	200	22.0	346.0	NewtonFour	1
Spaceship Two	SS1	SCAL	-	5.0	1.50	4.0	3000	-	-	-	1
Burya booster	SS2	SCAL	-	18.3	2.30	9.7	4000	765.0	-	-	1
Epsilon PBS	Burya	NPOL	-	18.9	1.50	27.0	4000	765.0	-	S2.1150	1
CZ-11-4	JAXA	EPBS	-	1.2	1.50	0.3	200	0.4	1100.0	EPBS	1
8K95B	CZ11-4	ARMT	-	1.5	1.50	2.0	1500	500.0	30.0	CZ-11-4	1
8K98B	RT-15	OKB1	-	4.0	1.49	10.0	1500	500.0	30.0	RD RT-15-2	1
8K96A (RT-2P)	RT-15	OKB1/PERM	-	4.7	1.49	9.6	1500	432.0	59.0	15D24	1
RT-21 St2	RT-15	ARSL	-	4.7	1.49	11.3	1500	432.0	60.6	15D27	1
Kestrel I Stage 1	RT-15	ARSL	-	5.1	1.49	11.3	1500	432.0	60.6	15D24P2	1
M-10	RT-21.St2	MITT	-	4.4	1.47	8.7	-	-	-	RD RT-21 St2	1
M-10	Mu	NISSIT	-	5.0	1.46	1.5	5907	737.0	61.0	Lellen 1B	4
M-13	Mu	NISSIT	-	13.0	1.41	26.6	6290	954.0	66.0	M-10	1
M-13	Mu	NISSIT	-	14.8	1.41	33.4	6290	954.0	66.0	M-13	1

Stages

Stage_Name	Stage_Family	Stage_Manufacturer	Stage_Alt_Name	Length m	Diameter m	Launch_Mass t	Dry_Mass kg	Thrust kN	Duration s	Engine	MEng
M-13TVC	Mu	MISST	-	14.8	1.41	34.2	6987	1020.0	66.0	M-13	1
M-20	M-20	MISST	-	4.7	1.41	9.9	2779	285.0	66.0	M-20	1
M-22TVC	M-20	MISST	-	5.0	1.41	9.8	2742	285.0	66.0	M-22	1
M-23	M-20	MISST	-	6.2	1.41	13.0	2742	523.0	73.0	M-23	1
CPKM	SD	ARMT	-	2.9	1.40	4.6	496	222.8	65.2	CPKM	1
KM-V2b	KM-V2	MISST	-	2.3	1.40	2.9	800	99.8	90.0	KM-V2b	1
KM-V2c	KM-V2	MISST	-	2.2	1.40	2.9	400	99.6	88.0	KM-V2c	1
Emeraude	Emeraude	LRBA	-	9.0	1.40	14.7	1500	274.0	93.0	Vexin	1
Amethyste	Emeraude	LRBA	-	14.0	1.40	20.3	2500	415.0	119.0	Valois	1
8K95V	RT-1.St3	OKB1	-	2.8	1.40	3.0	-	240.0	42.0	RD RT-1-3	1
AJ10-104	Ablestar	AJGC	Ablestar	4.5	1.39	4.5	599	36.0	-	AJ10-104	1
AJ10-104D	Ablestar	AJGC	Ablestar	4.5	1.39	4.5	599	36.0	-	AJ10-104	1
DSV-3E-3	Ablestar	AJGC	Delta AJ10-118E	5.2	1.39	6.0	785	33.7	400.0	AJ10-118E	1
DSV-3N-4	Ablestar	AJGC	Delta AJ10-118F	6.3	1.39	5.6	784	41.4	335.0	AJ10-118F	1
DSV-3P-4	Ablestar	MDAC	Delta AJ10-118F	6.0	1.39	5.6	784	41.4	335.0	AJ10-118F	1
DSV-3P-4B	Ablestar	MDAC	Delta TR-201	6.0	1.39	5.4	845	42.0	322.0	TR-201	1
AIP	Polaris	LMSC/AJSP	Polaris AIP St1	3.8	1.37	8.3	1450	-	-	AIP-1	1
A2P	Polaris	LMSC/AJSP	Polaris A2P St1	4.3	1.37	10.1	1450	-	-	A2P-1	1
AZE	Polaris	LMSC/AJSP	Polaris AZE St1	4.3	1.37	10.1	1450	-	-	A2P-1	1
A3P	Polaris	LMSC/AJSP	Polaris A3P St1	4.4	1.37	11.1	1270	-	-	A3P-1	1
AIP Stage 2	Polaris.St2	LMSC/AJSP	Polaris AIP St2	2.0	1.37	4.3	951	-	-	AIP-2	1
A2P Stage 2	Polaris.St2	LMSC/ABL	Polaris A2P St2	2.1	1.37	4.2	860	-	-	X-250	1
A2E Stage 2	Polaris.St2	LMSC/HERC	Polaris A2E St2	2.1	1.37	4.2	860	-	-	X-250	1
X-260	PolarisA3.St2	LMSC/ABL	-	2.3	1.37	4.9	815	-	-	X-260	1
Alfa	Alfa	AERIT	-	3.8	1.37	6.5	1000	250.0	57.0	Alfa	1
Black Arrow St2	BlackArrow.St2	SROE	St 2	3.2	1.37	3.5	535	69.0	113.0	Gamma 2	1
X-265	Sprint	MARTO	Sprint X265	3.0	1.37	4.0	-	-	1.2	X-265	1
Squirt St 1	Squirt	MARTO	-	2.0	1.37	1.0	-	-	1.2	Recruit	7
Squirt St 2	Squirt	MARTO	-	1.0	1.37	1.0	-	-	1.5	Cherokee	7
15Zh59A	Kuryer	MITT	-	3.1	1.36	6.0	-	-	-	15Zh59A	1
15Zh59B	Kuryer	MITT	-	3.1	1.36	5.0	-	-	-	15Zh59B	1
Hyperbola-1 Stage 1	DF-21	XJRY	-	8.7	1.40	18.0	-	770.0	-	Hyperbola-1 M1	1
Hyperbola-1B Stage 1	DF-21	XJRY	-	8.7	1.40	18.0	-	770.0	-	Hyperbola-1 M1	1
Hyperbola-1 Stage 2	HP1	XJRY	-	6.7	1.40	13.0	-	597.0	-	Hyperbola-1 M2	1
Hyperbola-1 Stage 3	HP1	XJRY	-	2.6	1.40	3.9	-	195.0	-	Hyperbola-1 M3	1
Hyperbola-1 Stage 4	HP1-4	XJRY	-	1.9	1.40	1.0	-	60.0	-	Hyperbola-1 M4	1
Hyperbola-1B Stage 3	HP1	XJRY	-	2.6	1.40	3.9	-	195.0	-	Hyperbola-1B M3	1
Hyperbola-1B Stage 4	HP1-4	XJRY	-	1.9	1.40	1.0	-	60.0	-	Hyperbola-1B M4	1
GS-1	DF-21	XID0	-	7.8	1.40	17.0	-	590.0	-	Ceres-1 M1	1
GS-1A	DF-21	XID0	-	7.8	1.40	18.0	-	590.0	-	Ceres-1 M1	1
GS-2	DF-21	XID0	-	4.4	1.40	8.0	-	274.0	-	Ceres-1 M2	1
GS-3A	DF-21	XID0	-	3.4	1.40	5.0	-	86.0	-	Ceres-1 M3	1
SQ-1S	DF-21	SANJ	-	7.4	1.40	5.4	1645	93.2	-	DF-11	1
KZ-1A St1	DF-21	ARMT	-	6.0	1.35	16.6	-	-	-	DF-21-1	1
DF-21	DF-21	ARMT	CSSMX3	6.0	1.35	16.6	-	-	65.0	DF-21-1	1
DF-26	DF-21	ARMT	-	6.0	1.35	10.0	-	-	65.0	DF-26-1	1
DF-27	DF-21	ARMT	-	6.0	1.35	10.0	-	-	65.0	DF-27-1	1
Z0-1 Stage 3	Z0-1	ARMT	-	2.0	1.35	2.0	-	-	65.0	Z0-1-3	1
Shahen 2 St 1	DF-21	ARMT	CSSMX3	9.5	1.35	20.0	-	-	65.0	DF-21-1	1
DF-21 St2	DF-21	ARMT	CSSMX3	4.0	1.35	8.7	-	-	82.0	DF-21-2	1
KZ-2 St3	KZ2-3	HEXI	-	2.0	1.35	3.2	-	-	55.0	KZ2-3	1
Shahen St 2	DF-21	PKMDC	-	4.4	1.35	4.0	-	-	-	Shaheen-2	1
Shahen 3 St 2	DF-21	PKMDC	-	4.4	1.35	4.0	-	-	-	Shaheen-2	1
Ababeel St 3	DF-21	PKMDC	-	3.3	1.35	4.0	-	-	-	Ababeel	1
Shavit 1	Jericho	IAI	-	7.5	1.35	13.0	1200	775.0	55.0	ATSM-13	1
ATSM-9	Jericho	IAI	-	5.3	1.35	9.1	1000	610.0	55.0	ATSM-9	1
Jericho IIIA1	Jericho	IAI	-	7.5	1.35	10.0	-	-	-	-	1
Jericho IIIA2	Jericho	IAI	-	7.5	1.35	10.0	-	-	-	-	1
Jericho IIIA3	Jericho	IAI	-	6.4	1.35	11.0	1771	477.0	52.0	IAI-Arrow-1	1
ISA-3-1	Jericho	IAI	-	6.4	1.35	11.0	-	-	-	IAI-Arrow-1	1
ISA-3-2	Jericho	IAI	Arrow	5.0	1.35	1.5	-	-	-	AUS-51	1
ISA-3-3	Jericho	IAI	-	2.6	1.35	2.0	170	58.0	92.0	AUS-51	1
AUS-51	AUS-51	HOUM	-	2.1	1.35	2.0	170	59.0	94.0	ISA-3-3	1
ISA-3-3	AUS-51	HOUM	-	2.1	1.35	2.0	170	59.0	94.0	ISA-3-3	1
Kairo Stage 1	Kairo	SPONE	-	8.1	1.35	14.7	1769	-	-	Kairo Stage 1	1
Kairo Stage 2	Kairo	SPONE	-	3.6	1.35	5.2	522	-	-	Kairo Stage 2	1
Kairo Stage 3	Kairo	SPONE	-	2.0	1.35	2.7	245	-	-	Kairo Stage 3	1
15Zh58V	Topol.St3	MITT	Topol'-3	3.1	1.34	6.0	1000	245.0	56.0	15Zh58V	1
15Zh58W	Topol.St3	MITT	Topol'-M3	3.1	1.34	6.0	1000	245.0	56.0	15Zh58V	1
RT-21 St3	Topol.St3	MITT	-	3.9	1.34	8.0	1000	245.0	-	RD RT-21-3	1
Astra Stage 1	Astra	ASTRV	-	9.0	1.32	8.0	-	140.0	-	Delphin	5
Astra 3.3 Stage 1	Astra	ASTRV	-	9.2	1.32	8.0	-	144.0	-	Delphin	5
SR19	SR19	AJSP	-	4.1	1.32	7.3	1070	267.0	65.5	SR19	1
SR19A1-ATK	SR19	ATKH	-	4.1	1.32	7.3	1070	267.0	65.5	SR19-ATK	1

Stages

Stage_Name	Stage_Family	Stage_Manufacturer	Stage_Alt_Name	Length m	Diameter m	Launch_Mass t	Dry_Mass kg	Thrust kN	Duration s	Engine	MEng
SR19AJ1	SR19	AJSP	SR19	4.1	1.32	7.3	800	267.0	65.5	SR19	1
SR73AJ1	SR73	AJSP	SR73	2.3	1.32	3.7	410	152.0	61.0	SR73	1
SR73AJ1-ATK	SR73	ATKH	SR73	2.3	1.32	3.7	410	152.0	61.0	SR73-ATK	1
PBS	PBS	BELT/RODME	-	1.0	1.32	1.0	-	1.4	-	RS-14	1
UM129A	UM129A	NISS	-	2.3	1.32	2.2	360	77.5	68.0	UM-129A	1
IRIS Stage	IRIS.Fiat	FIATA	IRIS	1.7	1.31	1.7	146	58.0	79.0	IRIS	1
R-21	R-21	SKE385	-	12.0	1.30	16.6	-	-	-	S5-36	1
R-13	R-13	SKE385	-	10.0	1.30	13.7	-	-	-	S2.713	1
V-825	V-825	FAKEL	5Ya27	9.0	1.30	3.9	-	-	-	V-825	1
V-825 Booster	V-825	FAKEL	5Ya27	10.0	1.30	14.0	-	-	-	5S24	1
Kairos PBS	EPBS	SPONE	-	1.0	1.30	0.1	-	-	-	Kairos PBS	1
PDV-II Stage 1	K-4	DRD0	-	5.0	1.30	8.0	-	-	-	K-4 Booster	1
PDV-II Stage 2	K-4	DRD0	-	5.0	1.30	8.0	-	-	-	K-4 Booster	1
K-4 Booster	K-4	DRD0	-	5.0	1.30	8.0	-	-	-	K-4 Booster	1
K-4 Stage 2	K-4	DRD0	-	5.0	1.30	8.0	-	-	-	K-4 Stage 2	1
AMROC IRR	AMROC	AMROC	-	5.0	1.30	8.0	-	-	-	H600	1
Orion 50S	Pegasus	OSCC	IRR	17.7	1.29	12.2	-	315.0	70.0	Orion 50S	1
Pegasus XL Stage 1	Pegasus	OSCC	Pegasus 1	8.9	1.27	13.4	1900	485.0	72.4	Orion 50S	1
Orion 50XL	Pegasus.St2	OSCC	Pegasus XL1	10.3	1.27	17.0	2000	594.0	73.4	Orion 50XL	1
Orion 50XLT	Pegasus.St2	OSCC	Pegasus 2	2.7	1.27	3.4	345	118.0	73.3	Orion 50	1
Orion 50SLIG	Pegasus.St2	OSCC	Pegasus XL Stage 2	3.7	1.27	4.0	420	196.0	72.5	Orion 50XL	1
Orion 50SLIT	Pegasus	OSCC	Taurus-Lite	10.0	1.27	15.0	-	704.0	72.5	Orion 50SLIT	1
Orion 50SG	Pegasus	OSCC	Taurus-Lite	10.0	1.27	15.0	-	704.0	-	Orion 50SLIT	1
Qaem-100 St 1	Qaem	IRGC	-	10.0	1.27	15.0	-	-	-	Orion 50SLIG	1
Sejjil	Sejjil	IR	-	7.0	1.25	25.0	-	-	-	Orion 50SLIG	1
Sejjil Stage 2	Sejjil	IR	-	8.0	1.25	13.5	2000	560.0	90.0	Rafe	1
Hwasong-14 Stage 2	Nodong	KPA	-	2.1	1.25	5.5	2000	560.0	90.0	Sejjil St 2	1
Taepo Dong 1	Nodong	KPA	-	12.0	1.25	3.0	-	-	224.0	KPN-4D10	1
Scud D	Nodong	KPA?	-	16.0	1.25	25.6	3700	570.0	95.0	Nodong	1
Hwasong-7	Nodong	KPA	-	16.0	1.25	15.1	2000	255.0	110.0	Nodong	1
Ghauri	Nodong	KRLP	Ghauri	16.0	1.25	16.0	2000	255.0	110.0	Nodong	1
Enad	Nodong	IR	-	16.0	1.25	15.1	2000	255.0	90.0	Nodong	1
Shahab 3	Nodong	IR	-	16.0	1.25	15.1	2000	255.0	90.0	Nodong	1
Unha-2 Stage 3	Unha.St3	KPA	-	3.0	1.25	3.0	300	18.0	27.0	Unha St3	1
Unha-3 Stage 3	Unha.St3	KPA	-	3.8	1.25	4.0	500	18.0	27.0	Unha St3	1
Safir Stage 2	Nodong	IR	-	3.0	1.25	9.0	-	-	60.0	LRE-4	1
Star 48	Star48	THKE	Star 48	2.0	1.22	2.2	208	66.4	84.1	Star 48	1
Star 48B	Star48	THKE	Star 48	2.0	1.22	2.2	208	66.4	84.1	Star 48B	1
Star 48B ARM	Star48	THKE	Star 48	2.0	1.22	2.2	116	66.4	84.1	Star 48B	1
Star 48V	Star48	THKE	Star 48	2.0	1.22	2.2	140	68.7	84.1	Star 48V	1
Star 48BV	Star48	THKE	Star 48	2.0	1.22	2.2	140	68.7	84.1	Star 48V	1
Delta 4H Stage 3	Star48	THKE	Star 48	2.1	1.40	2.2	140	68.7	84.1	Star 48V	1
AlKahir	AlKahir	EGAD	-	10.0	1.22	10.0	-	-	-	Star 48V	1
KM-V	KM-V	NISS	-	1.5	1.20	1.4	118	52.0	73.0	AlKahir	1
KT-1 St3	HEXI	HEXI	-	2.0	1.20	2.0	-	-	-	KM-V1	1
KT-1 St3	HEXI	HEXI	-	2.0	1.20	3.2	-	-	-	KT1-3	1
GS-3	Cushenxing-3	XID0	-	3.4	1.20	4.0	-	-	55.0	KT1-3	1
Edge	Edge	XID0	-	2.0	1.20	1.0	-	86.0	-	Ceres-1 M3	1
Hyunmo0 Booster	Hyunmo0	DAC/HERCR	-	4.2	1.20	2.4	-	800.0	-	Edge	1
Hyunmo0-2A	Hyunmo0	ADD	-	7.0	1.20	4.0	-	-	-	Hyunmo0 1	1
Hyunmo0-2B	Hyunmo0	ADD	-	7.0	1.20	4.0	-	-	-	Hyunmo0-2B	1
Hyunmo0-2C	Hyunmo0	ADD	-	7.0	1.20	4.0	-	-	-	Hyunmo0-2B	1
Hyunmo0-4	Hyunmo0	ADD	-	7.0	1.20	4.0	-	-	-	Hyunmo0-2B	1
ADD SLV St1	ADD-SLV	ADD	-	11.8	2.20	4.0	-	-	-	Hyunmo0-2B	1
ADD SLV St2	ADD-SLV	ADD	-	4.8	2.20	4.0	-	-	-	ADD-SLV-1	1
ADD SLV St3	ADD-SLV	ADD	-	2.8	2.20	1.5	-	-	-	ADD-SLV-2	1
JL-1 Stage 1	JL1	CALT	-	7.0	1.20	7.0	-	-	-	ADD-SLV-3	1
JL-1 Stage 2	JL1	CALT	-	7.0	1.20	7.0	-	-	-	JL1-1	1
JL-1 Stage 3	JL1-3	CALT	-	2.0	1.20	3.0	-	-	-	JL1-2	1
JL-1 Stage 4	JL1-4	CALT	-	2.0	1.20	3.0	-	-	-	JL1-3	1
DF-16	DF-16	CASIC	-	7.5	1.20	12.0	-	-	-	JL1-4	1
Electron Stage 1	Electron	RLABN	-	12.1	1.20	10.2	950	162.0	-	DF-16	1
Electron Stage 2	Electron	RLABN	-	2.4	1.20	2.3	250	22.0	-	Rutherford	9
Hermes A-3B	GEM	GEMTS	-	10.1	1.19	5.3	2000	100.0	-	Rutherford Vac	1
GEM-46	GEM	ATKH	-	14.7	1.17	19.3	2035	608.1	75.2	Hermes A-3B	1
LEO-46	LEO-7	AJSP	-	11.2	1.17	22.1	1700	1265.0	76.0	GEM-46	1
LEO-7	LEO-7	AJSP	-	2.7	1.17	3.6	350	195.1	62.0	LEO-46	1
SICBM	SICBM	THKO	-	7.5	1.17	11.6	-	979.0	40.0	LEO-7	1
SICBM St 2	SICBM2	AJSP	-	3.2	1.17	3.3	-	267.0	44.0	SICBM	1
SICBM St 3	SICBM3	AJSP	-	2.0	1.17	1.5	-	88.0	-	SICBM2	1
SICBM PBS	SICBM4	MWD?	-	0.8	1.17	0.5	-	-	-	SICBM3	1
M-40	M-40	NISS	-	2.3	1.14	1.1	130	61.0	54.0	SICBM4	1

Stages

Stage_Name	Stage_Family	Stage_Manufacturer	Stage_Alt_Name	Length m	Diameter m	Launch_Mass t	Dry_Mass kg	Thrust kN	Duration s	Engine	MEng
Vanguard	Viking	MARTB	-	11.4	1.14	7.7	811	120.0	144.0	X-405	1
Viking Type 9	Viking	MARTB	Viking	12.8	1.14	6.8	1000	93.0	105.0	MRL Viking	1
Algol 3A	ScoutD	LTV	-	9.4	1.14	14.3	1600	471.0	56.0	Algol 3A	1
Zefiro	Scout	FIATA	-	4.9	1.14	17.3	1500	590.0	71.0	Zefiro	1
15Zh59V	Kuryer.St3	MITT	-	2.1	1.13	3.0	-	-	-	15Zh59V	1
M56A1	Aries	SVC	Aries	3.8	1.12	5.2	750	200.0	60.0	M56A1	1
KZ-1 St4	KZ1-3	HEXI	-	1.5	1.10	2.0	-	-	-	KZ1-4	1
H-II SSB	H2.SSB	MISST	-	9.0	1.10	10.5	2100	338.0	66.0	H-II SSB	1
H-II SSB (A)	H2.SSB	MISST	-	9.0	1.10	10.5	2100	338.0	66.0	H-II SSB (A)	1
TR-1	TR-1	MASDA	TR-1A	7.1	1.13	10.8	3900	608.0	51.3	TR-1A	1
TR-1A	TR-1	MASDA	TR-1A	7.5	1.13	8.8	1784	608.0	52.0	TR-1A	1
Priithvi	HAL	HAL	-	8.5	1.10	4.5	-	-	-	Priithvi	1
PDV Target St2	PDV-II	HAL	-	2.0	1.10	2.0	-	-	-	2S-SL	1
PDV-II KV	DRDO	DRDO	-	4.0	1.10	2.0	-	-	-	PDV-ASAT	1
TX-500	THXKM	THXKM	Spartan TX-500	4.9	1.09	5.5	1030	2000.0	-	TX-500	1
TX-454	Spartan	THXKM	-	5.0	1.09	6.5	753	-	-	TX-454	1
TX-135	Spartan	THXKM	-	5.2	1.09	5.3	932	2000.0	4.5	TX-135	1
PAP	PAP	BPD	-	11.5	1.07	12.6	3100	650.0	42.0	PAP	1
Dolphin	Dolphin	STST	-	15.5	1.07	7.5	-	155.0	-	Dolphin	1
Hercules Booster	Hercules	DAC/HERCR	-	4.3	1.06	2.4	-	772.0	3.4	XN-42	4
Paekkom Booster	Hercules	ADD	-	4.3	1.06	2.4	-	-	-	Paekkom	4
Algol 1	Scout	LTV	-	9.4	1.02	10.7	1380	413.0	44.0	Algol I	1
Algol 1A	Scout	LTV	-	9.4	1.02	10.7	1200	420.0	44.0	Algol IA	1
Algol 1B	Scout	LTV	-	9.4	1.02	10.7	1200	420.0	44.0	Algol IB	1
Algol 1C	Scout	LTV	-	9.4	1.02	10.7	1200	440.0	44.0	Algol IC	1
Algol 1D	Scout	LTV	-	9.4	1.02	10.7	1200	440.0	44.0	Algol ID	1
Algol 2A	Scout	LTV	-	9.1	1.02	10.7	1200	380.0	60.0	Algol IIA	1
Algol 2B	Scout	LTV	-	9.1	1.02	10.7	1170	400.0	80.0	Algol IIB	1
Algol 2C	Scout	LTV	-	9.1	1.02	10.8	1200	436.0	76.0	Algol IIC	1
Castor 4	Castor 4	THXX	-	9.7	1.02	10.5	1200	428.0	53.9	TX-526	1
Castor 4A	Castor 4	THXX	-	13.6	1.02	11.6	1400	433.7	56.2	TX-780	1
Castor 4B	Castor 4	THXX	-	8.8	1.02	11.5	1420	429.0	60.9	TX-859	1
Castor 4AXL	Castor 4	THXX	-	15.0	1.02	15.4	2500	745.0	60.0	TX-780XL	1
GEM-40	GEM	ATKH	-	13.0	1.02	13.1	1315	499.2	63.3	GEM-40	1
TX-174	Pershing	MARTO	-	2.8	1.02	2.3	251	117.0	39.0	TX-174	1
TX-175	Pershing	MARTO	-	2.7	1.02	1.5	210	85.0	39.0	TX-175	1
Pershing 2 St1	Pershing	MARTO	-	4.0	1.02	4.1	530	172.0	58.0	Pershing 2 St1	1
Pershing 2 St2	Pershing	MARTO	-	2.8	1.02	5.8	350	134.0	46.0	Pershing 2 St2	1
Hermes A-3A	HermesA3	GEMTS	-	8.7	1.02	3.8	-	80.0	-	Hermes A-3A	1
S-43	S-40	IAE	S-43	8.1	1.01	8.4	1250	327.0	40.0	S-43	1
S-43TM	S-40	IAE	S-43	8.1	1.01	8.4	1250	327.0	40.0	S-43	1
S-43 VLR-R2	S-40	IAE	S-43	8.1	1.01	8.4	1250	327.0	40.0	S-43	1
S-40	S-40	IAE	S-40	5.3	1.01	5.6	1300	252.0	40.0	S-40	1
S-40TM	S-40	IAE	S-40	5.1	1.01	5.4	1190	202.0	56.0	S-40	1
S-44	S-44	IAE	-	1.7	1.01	1.0	127	33.0	66.0	S-44	1
S-44M	S-44	IAE	-	1.1	1.01	1.0	74	83.0	26.0	S-44	1
Cygnus 40	40SM	LAARC/THKE	-	1.1	1.01	1.0	127	33.0	66.0	Cygnus 40	1
Temp-S	Temp	MIT	-	12.4	1.01	11.9	120	-	-	9M76B	1
Temp-S	Temp	MIT	-	12.4	1.01	11.9	120	-	-	9M76B	1
Electron Stage 3	Electron	RLABN	-	0.5	1.40	1.0	-	-	-	Curie	1
Photon Lunar	Electron	RLABN	-	1.0	1.40	2.0	-	-	-	HyperCurie	1
Start	Start	MITT	-	2.6	1.00	1.0	300	100.0	53.0	Start	1
DS	DS	MITT	-	0.5	1.00	0.5	50	-	250.0	DS	1
Orion LAS	Orion.LAS	OSCC	-	10.0	1.00	6.0	-	-	-	Orion LAS-AM	1
HAPS Stage	HAPS	PRIMX	-	0.8	1.00	0.1	50	0.7	180.0	MR-107	3
HAPS	HAPS	PRIMX	-	0.8	1.00	0.1	50	0.7	180.0	MR-107	3
Dezful	Dezful	IR	-	10.6	1.00	15.0	-	255.0	128.0	Dezful	1
DF-15	DF-15	ARMT	M-9	9.1	1.00	6.2	-	-	-	DF-15	1
Shahen	DF-15	ARMT	M-9	9.1	1.00	6.2	-	-	-	DF-15	1
HANBIT-TLV	HANBIT	INNOGP	M-9	15.0	1.00	8.0	-	-	-	HYPER-15	1
KSLV-1 Stage 2	KSLV.St2	KARI?	-	1.6	1.00	1.4	200	80.0	44.0	KSLV SRM	1
SLV-3-1	ASLV	VSSC	-	9.8	1.00	10.8	2140	420.0	53.0	SLV-3-1	1
SLV-3-1/D4	ASLV	VSSC	-	9.8	1.00	10.8	2140	590.0	55.0	SLV-3-1/D4	1
AS-0	ASLV	VSSC	-	10.7	1.00	11.6	2963	502.0	49.0	ASLV SRM	1
AS-1	ASLV	VSSC	ASLV	10.2	1.00	11.8	2900	702.0	45.0	ASLV AS-1	1
Agni P	ASLV	DRDO	-	7.7	1.00	15.0	-	-	-	Agni P S1	1
Agni P Stage 2	ASLV	DRDO	-	3.1	1.00	5.0	-	-	-	Agni P S2	1
PSDM	ASLV	VSSC	-	11.3	1.00	11.0	2000	677.0	44.2	PSDM	1
PSDM-XL	ASLV	VSSC	-	13.5	1.00	13.5	2000	720.0	49.0	PSDM	1
SS9	ASLV	VSSC	-	10.7	1.00	11.0	2900	500.0	49.0	SS9	1
ADD SLV St4	GYUB4	HANWHA	-	1.8	1.00	1.0	-	-	-	GYUB4	1
Astra 1 Stage 1	Astra	ASTRV	-	8.0	1.00	4.0	-	-	-	Astra E1	4
Astra 1 Stage 2	Astra	ASTRV	-	2.0	1.00	2.0	-	-	-	Astra E1	1

Stages

Stage_Name	Stage_Family	Stage_Manufacturer	Stage_Alt_Name	Length m	Diameter m	Launch_Mass t	Dry_Mass kg	Thrust kN	Duration s	Engine	MEng
Agri	ASLV	DRDO	-	11.0	1.00	11.5	2900	700.0	50.0	Agri	1
Agri II Stage 2	DRDO	DRDO	-	6.0	1.00	4.2	-	-	60.0	Agri St2	1
Agri 4 Stage 2	DRDO	DRDO	-	6.0	1.00	4.2	-	-	60.0	Agri St2	1
KSR-III	KARI	KARI	-	10.0	1.00	5.6	-	126.0	59.0	KSR-III	1
V-1000 Booster	SKB30	SKB30	-	3.1	1.00	3.0	-	1962.0	4.5	PRD-33	1
53T6	NOVTR	NOVTR	-	10.0	1.00	12.0	-	103.0	4.0	53T6	1
5Ta26	NOVTR	NOVTR	-	10.0	1.00	12.0	-	103.0	4.0	5Ta26	1
Vesta	LREA	LREA	-	7.2	1.00	5.0	780	140.0	56.4	Vesta	1
8K96B (RT-2P)	ARSL/PERM	ARSL/PERM	RT-2P St3	5.5	1.00	4.6	1000	176.0	45.0	15D94	1
8K96B (RT-15)	ARSL/PERM	ARSL/PERM	RT-15 St2	4.6	1.00	4.6	1000	216.0	45.0	15D92	1
8K98V	ARSL/PERM	ARSL/PERM	-	3.8	0.98	3.5	1000	215.0	45.0	15D25	1
8K96B	ARSL/PERM	ARSL/PERM	-	4.6	0.98	4.6	1000	176.0	49.0	15D94	1
Orion 38	ATKH	ATKH	Pegasus 3	1.3	0.97	0.9	126	36.0	69.6	Orion 38	1
MS7A1	HERC	HERC	-	2.1	0.97	1.9	300	76.0	59.0	MS7A1	1
Salman	IRGC	IRGC	-	2.0	0.95	1.7	150	-	65.0	Salman	1
Star 37FM	THKE	THKE	-	1.7	0.94	1.1	74	45.8	66.4	Star 37FM	1
Star 37FMV	THKE	THKE	-	1.7	0.94	1.1	74	45.8	66.4	Star 37FM	1
Star 37B	THKE	THKE	Star 37	1.5	0.94	0.7	65	45.0	-	Star 37B	1
Star 37C	THKE	THKE	-	1.5	0.94	1.0	83	45.0	-	Star 37C	1
Star 37D	THKE	THKE	-	1.5	0.94	0.7	65	45.0	-	Star 37D	1
Star 37E	THKE	THKE	-	1.7	0.94	1.1	83	68.0	42.0	Star 37E	1
Star 37F	THKE	THKE	-	1.7	0.94	0.9	67	55.5	42.0	Star 37F	1
Star 37XF	THKE	THKE	-	1.7	0.94	0.9	67	45.0	-	Star 37XF	1
Star 37XE	THKE	THKE	-	1.7	0.94	0.9	67	45.0	-	Star 37XE	1
Star 37XFP	THKE	THKE	-	1.7	0.94	1.0	72	38.0	66.0	Star 37XFP	1
Star 37S	THKE	THKE	-	1.7	0.94	0.7	53	45.0	66.0	Star 37S	1
Star 37N	THKE	THKE	Star 37E	1.7	0.94	0.6	64	45.0	-	Star 37N	1
KM-H	NISST	NISST	-	1.4	0.93	0.1	13	-	-	KM-H	1
Oka	KBM	KBM	-	7.5	0.92	4.6	-	-	-	Oka	1
BGS-6	KPA	KPA	-	4.0	0.92	6.0	-	-	-	KPN-Solid6	1
KM-23	KBM	KBM	-	7.5	0.92	4.0	-	-	-	KM-23 Motor	1
KM-23X	KBM	KBM	-	7.5	0.92	4.0	-	-	-	KM-23X Motor	1
Iskander	KBM	KBM	-	7.3	0.92	3.8	-	-	-	9M723	1
Iskander-M	KBM	KBM	-	7.3	0.92	3.8	-	-	-	9M723	1
Iskander-E	KBM	KBM	-	7.3	0.92	3.8	-	-	-	9M723	1
Oka	KBM	KBM	-	4.5	0.92	4.8	750	232.0	32.3	Stonechat I	1
Stonechat I	RORD	RORD	-	4.5	0.92	5.1	750	242.0	32.8	Stonechat II	1
Stonechat II	RORD	RORD	-	9.0	0.91	5.4	540	75.0	140.0	Gamma 201	1
Black Knight	SROE	SROE	-	9.0	0.91	5.4	540	75.0	140.0	Gamma 301	1
Black Knight 301	SROE	SROE	-	9.0	0.91	5.4	540	75.0	140.0	Gamma 301	1
TX-238	THXIM	THXIM	-	4.7	0.91	3.5	417	-	-	TX-238	1
Skybolt St1	DAC	DAC	Skybolt	3.8	0.91	2.5	-	164.0	40.7	Skybolt	1
Skybolt St2	DAC	DAC	Skybolt	3.8	0.91	2.5	-	81.8	41.3	Skybolt St2	1
Astra Stage 2	ASTRV	ASTRV	-	2.2	0.91	1.0	-	3.3	-	Aether	1
Astra 3.3 Stage 2	ASTRV	ASTRV	-	2.2	0.91	1.0	-	3.3	-	Aether	1
Cluster Stage 2	JPL	JPL	1xBaby Sergeant	1.2	0.89	0.5	223	80.0	6.0	RTV	11
IRCPFS FSN	LM	LM	-	3.9	0.88	3.0	-	-	-	IRCPFS FSN	1
IRCPFS SSM	LM	LM	-	1.5	0.88	1.5	-	-	-	IRCPFS SSM	1
DF-11	LYK/SANJ	LYK/SANJ	-	7.4	0.88	5.4	1645	93.2	-	DF-11	1
OS-X0	LYK/SANJ	LYK/SANJ	-	7.4	0.88	5.4	1645	93.2	-	DF-11	1
OS-M1 Stage 2	LYK	LYK	-	8.0	0.75	-	-	-	-	DF-11	1
OS-X6B	LYK	LYK	-	8.0	0.75	-	-	-	-	DF-11	1
DF-11	SANJ	SANJ	-	7.4	0.88	5.4	1645	93.2	-	DF-11	1
DF-11M	SANJ	SANJ	-	9.4	0.88	5.4	1645	93.2	-	DF-11	1
Ghaznavi	PKPMO	PKPMO	-	9.4	0.88	5.4	1645	93.2	-	DF-11	1
R-17	MAK	MAK	Scud B	7.4	0.88	5.4	1645	93.2	-	S5.2	1
Scud	MAK	MAK	-	8.0	0.88	6.3	1600	-	-	S5.2	1
Scud B	MAK	MAK	-	8.6	0.88	5.6	1600	-	-	S5.2	1
Al Hussein	MAK	MAK	-	9.5	0.88	5.9	1600	-	-	S5.2	1
Short Al Hussein	MAK	MAK	-	9.0	0.88	5.9	1600	-	-	S5.2	1
Al Abbas	MAK	MAK	-	10.9	0.88	7.6	1600	-	-	S5.2	1
Abid St2	IQ	IQ	-	8.0	0.88	6.0	1600	-	-	S5.2	1
Taepo Dong 1 Stage 2	KPA	KPA	-	12.0	0.88	7.5	1500	140.0	176.0	Modong	1
R-11	OKB1	OKB1	-	7.4	0.88	4.6	955	93.0	-	S2.253	1
R-11FM	OKB1	OKB1	-	7.4	0.88	4.5	1080	93.0	63.0	S2.253A	1
Hwasong 5	KPA	KPA	-	10.0	0.88	5.0	-	93.0	-	S2.253	1
Hwasong 6	KPA	KPA	-	10.0	0.88	5.0	-	93.0	-	S2.253	1
Hwasong 7	KPA	KPA	-	10.0	0.88	5.0	-	93.0	-	S2.253	1
Hwasong 8	KPA	KPA	-	10.0	0.88	5.0	-	93.0	-	S2.253	1
Hwasong ER	KPA	KPA	-	12.0	0.88	5.0	-	93.0	-	S2.253	1
Wasserfall	WEHR	WEHR	-	7.8	0.88	3.5	1700	80.0	40.0	Wasserfall	1
CHGB LV St 1	NGISP	NGISP	-	5.0	0.88	3.0	-	-	-	CHGB FSRM	1
CHGB LV St 2	NGISP	NGISP	-	5.0	0.88	3.0	-	-	-	CHGB SSM	1
Hermes A-1	GEMTS	GEMTS	-	7.8	0.86	3.0	-	71.0	-	Hermes A-1	1
M-30	NISST	NISST	-	4.0	0.86	2.8	773	128.0	42.0	M-30	1
Trident C-4 Stage 3	UTC	UTC	-	3.3	0.86	1.9	150	-	40.0	Trident St 3	1

Stages

Stage_Name	Stage_Family	Stage_Manufacturer	Stage_Alt_Name	Length m	Diameter m	Launch_Mass t	Dry_Mass kg	Thrust kN	Duration s	Engine	MEng
Trident D-5 Stage 3	Trident_St3	UTC	-	3.3	0.86	2.2	159	-	40.0	Trident St 3	1
X-271	X-271	ABL?	- Sprint X271	5.0	0.82	-	-	-	-	X-271	1
Viking	Viking	MARTB	-	14.9	0.81	-	-	-	-	MRL Viking	1
AJ10	Able	AJGC	Able	5.0	0.81	4.5	800	93.0	70.0	AJ10	1
AJ10-11B	Able	AJGC	Able	5.7	0.81	1.9	429	33.0	122.0	AJ10	1
AJ10-40	Able	AJGC	Able	5.8	0.81	1.9	429	34.7	122.0	AJ10-11B	1
AJ10-41	Able	AJGC	Able	5.8	0.81	1.9	429	34.5	110.0	AJ10-40	1
AJ10-42	Able	AJGC	Able	5.8	0.81	1.9	429	34.5	110.0	AJ10-41	1
AJ10-101A	Able	AJGC	Able II	5.8	0.81	1.9	429	34.5	110.0	AJ10-42	1
AJ10-118	Able	AJGC	Able I	5.8	0.81	1.9	385	34.7	110.0	AJ10-101A	1
AJ10-118A	Able	AJGC	Delta	6.0	0.81	2.2	694	33.7	115.0	AJ10-118	1
AJ10-118D	Able	AJGC	Delta	5.8	0.81	2.7	600	33.7	170.0	AJ10-118A	1
P068	P068	SEP	PO.68	1.7	0.80	0.8	545	33.7	170.0	AJ10-118D	1
Agate	Agate	SEREB	VE110 Agate	4.5	0.80	2.0	62	52.5	46.5	P068	1
MD-620	Agate	DASST	-	4.1	0.80	2.0	100	190.0	18.0	MA 801	1
Topaze VE111C	Agate	SEREB	-	2.9	0.80	2.0	-	-	-	MA 804	1
Topaze VE111L	Agate	SEREB	-	3.0	0.80	1.5	-	120.0	39.0	MA 802 Soleil C	1
MA-805	Agate	SEREB	-	4.6	0.80	2.2	-	156.0	44.0	MA 803 Soleil	1
Jericho-1	Arrow2	DASST	-	5.0	0.80	4.1	-	156.0	-	MA 803 Soleil	1
IAI Arrow	Arrow2	IAI	-	4.5	0.80	2.0	-	-	-	MA 805	1
Arrow 3	Arrow3	IAI	Arrow	5.0	0.80	2.0	-	-	-	MA 804	1
Arrow 3 Stage 2	Arrow3	IAI	-	6.5	0.70	1.0	-	-	-	IAI-Arrow-2	1
SLV-3-2/D4	ASLV_St2	IAI	-	3.5	0.70	0.5	-	-	-	IAI-Arrow-3	1
SLV-3-3	ASLV_St2	VSSC	-	6.4	0.80	4.9	1750	200.0	42.0	IAI-Arrow-3	1
SLV-3-3/D4	ASLV_St3	VSSC	-	2.4	0.80	1.5	-	-	-	SLV-3-2/D4	1
AS-2	ASLV_St3	VSSC	-	2.4	0.80	1.5	440	60.0	46.0	SLV-3-3	1
AS-3	ASLV_St2	VSSC	St 2	6.4	0.80	4.4	800	60.0	36.0	SLV-3-3/D4	1
KM-M	ASLV_St3	VSSC	St 3	2.4	0.80	1.7	650	90.7	45.0	ASLV AS-2	1
M-40	M-40	NISST	-	1.3	0.80	0.6	45	32.0	63.0	ASLV AS-3	1
M-40	M-40	NISST	-	1.8	0.79	0.4	73	26.5	40.0	KM-M	1
HIBEX	HIBEX	NISST	-	1.2	0.79	0.5	42	31.3	44.0	M-40	1
HIBEX-U	HIBEX	BOKT?	-	3.1	0.79	6.0	-	-	-	KM-P	1
Polaris TV	HIBEX	BOKT?	-	3.1	0.79	6.0	-	-	-	HIBEX	1
TX-30	Polaris	LMSC	[0.78m?]	6.0	0.79	8.3	1450	285.0	23.0	HIBEX-U	1
Sergeant	Sergeant	THX	-	5.4	0.79	2.0	-	-	-	TX-33	1
Sergeant	Sergeant	THX	-	4.4	0.79	3.2	-	-	-	TX-30	1
Aerojet Jr	Sergeant	AJ	-	5.7	0.79	4.0	-	-	-	TX-30	1
TX-20 Sergeant	THX	THX	-	6.1	0.79	4.0	-	-	-	Aerojet Jr	1
RV-A-10	Sergeant	GEMTS	-	4.0	0.79	3.5	800	140.0	24.0	TX-20	1
Pollux	Sergeant	THX	-	6.0	0.79	4.2	-	-	-	RV-A-10	1
Castor	Sergeant	THX	-	5.7	0.79	4.2	783	235.0	38.0	Pollux	1
Castor 1	Sergeant	THX	-	6.0	0.79	4.2	783	235.0	38.0	TX-33	1
Castor 2A	Sergeant	THX	-	6.0	0.79	4.0	565	235.0	38.0	TX-33	1
Xaero	Sergeant	THX	-	6.0	0.79	4.0	565	289.0	37.0	TX-364-4	1
Avanti	Xaero	MASTEN	-	4.6	0.77	1.0	-	-	-	TX-364-3	1
GF-01A	Avanti	LPC	-	13.5	0.77	6.0	-	-	-	Xaero	1
GF-02	ARMT	ARMT	-	2.0	0.77	2.0	200	121.0	89.0	LPC-A92	1
KX-774	CONV	CONV	-	3.9	0.77	2.0	250	118.0	140.0	GF-02	1
UTRAG	UTRAG	UTRAG	-	5.7	0.76	1.1	500	35.0	75.0	GF-01A	1
Corporal E	Corporal	DAC/JPL	Corporal	7.0	0.76	-	-	-	-	KX-774	4
Corporal Type 1	Corporal	FIRES	Corporal	13.7	0.76	4.5	-	-	-	UTRAG	4
Ajax Cluster 1810	Ajax	AJ	-	6.0	0.76	5.2	-	-	-	Corporal E	1
Ajax Cluster	Ajax	AJ	-	6.0	0.76	1.2	-	-	-	Corporal	1
Talos	Talos	ABL	-	3.4	0.76	1.2	-	-	-	Ajax 1810	4
Antares	Antares	ABL	-	3.3	0.76	1.5	240	516.0	5.2	Ajax	4
Antares 2	Antares	ABL	-	2.9	0.76	1.3	107	60.0	38.0	Talos Mk 11 Mod 2	1
Antares 2B	Antares	ABL	Antares II X-259	2.9	0.76	1.3	107	93.0	36.0	X-254	1
Antares 3	Antares	THKE	-	2.9	0.76	1.4	95	82.3	36.0	X-259	1
Samoud	Samoud	IQMIC	-	5.0	0.76	2.0	505	13.8	45.0	X-259	1
K-15	K-15	DRDO	-	5.6	0.75	5.0	-	-	-	S2 711	1
Shourya Booster	Shourya Booster	DRDO	-	2.2	0.75	3.0	-	-	-	Shourya	1
Qaem-100 St 2	Qaem-S2	IRGC	-	3.0	0.75	3.0	-	-	-	Shourya Booster	1
TX-239	THXIM	THXIM	-	1.1	0.74	0.4	-	-	-	Qaem-100 S2	1
27D6	Kontakt	FAKEL	-	6.0	0.74	3.0	-	-	-	TX-239	1
28D6	Kontakt	FAKEL	-	2.0	0.74	1.0	-	-	-	27D6	1
29D6	Kontakt	FAKEL	-	1.0	0.74	0.5	-	-	-	28D6	1
TKS VA SMS	TKSVA	OKB52	-	5.3	0.74	3.0	-	-	-	29D6	1
SB-735	SB-735	ISAS	M-3S SRB	9.1	0.74	5.1	1100	328.0	38.0	TKS VA SMS	1
ST-735	SB-735	ISAS	-	4.6	0.74	7.4	-	-	-	SB-735	1
ST-735 Stage 2	SB-735	ISAS	-	2.0	0.74	4.0	-	-	-	ST-735-1	1
MAI-735	SB-735	MASDA	-	9.0	0.74	4.7	-	-	-	ST-735-2	1
MAI-735	MAI-735	MASDA	-	9.0	0.74	4.7	-	-	-	MAI-735	1



Stages

Stage_Name	Stage_Family	Stage_Manufacturer	Stage_Alt_Name	Length m	Diameter m	Launch_Mass t	Dry_Mass kg	Thrust kN	Duration s	Engine	MEng
L735	Lambda	ISAS	-	8.4	0.74	5.0	2945	410.0	28.8	L735	1
L735 (1/3)	Lambda.St2	ISAS	L735(1-3)	3.9	0.74	2.5	-	118.0	38.4	L735 (1/3)	1
Waxwing	Waxwing	ROSD	-	1.5	0.71	0.3	39	28.8	37.2	Waxwing	1
Pedro	THXK	THXK	-	3.1	0.71	1.5	250	244.0	11.3	TX-261-3	1
TX-261	Pedro	THXK	-	3.1	0.71	1.5	250	244.0	11.3	TX-261-3	1
TX-261-2	Pedro	THXK	-	3.1	0.71	1.5	250	244.0	11.3	TX-261-2	1
LEO-1	Orbus1	AJSP	-	1.2	0.70	0.7	45	50.0	51.5	LEO-1	1
Orbus 1	Orbus1	UTC	-	1.2	0.70	0.5	50	88.0	-	Orbus 1	1
Orbus 1A	Orbus1	ATKE	-	1.2	0.70	0.5	50	88.0	-	Orbus 1A	1
Miura 1	Miura	PLDS	-	12.7	0.70	2.5	50	30.2	122.0	TEPREL-B	1
Skylark L	SkylarkL	SKVR	-	10.0	0.70	2.5	50	35.0	-	Skylark L	1
KW Rockoon	KW-D	NISST	-	1.3	0.70	0.3	50	-	-	KW-D	1
Kestrel I Stage 2	Kestrel1.St2	TISPACE	-	2.0	0.70	0.5	-	-	-	Lellen 1A	1
MX-775	Snark	ABL	-	5.1	0.69	1.2	0	580.0	4.0	N-25 Snark JATO	2
Star 27	Star27	ATKE	-	1.2	0.69	0.4	24	26.7	34.3	Star 27	1
Zolfaghar	Zolfiqar	IRGC	-	9.0	0.68	4.1	-	-	-	Zolfaghar	1
OIS	Star27	FAIR	-	1.2	0.69	0.4	24	26.7	34.3	Star 27	1
Star 26	Star26	ATKE	-	0.8	0.66	0.3	38	33.0	17.8	Star 26	1
Star 26B	Star26	ATKE	-	0.8	0.66	0.3	23	35.0	17.8	Star 26B	1
Star 26C	Star26	ATKE	-	0.8	0.66	0.3	29	35.0	16.8	Star 26C	1
ARRW	ARRW	LMPLM	-	4.0	0.66	2.0	-	-	-	ARRW Booster	1
AS-4	ASLV.St4	VSSC	St 4	1.4	0.66	0.5	195	35.0	33.0	AS-4	1
SLV-3-4	ASLV.St4	VSSC	-	1.5	0.66	0.4	98	27.0	33.0	SLV-3-4	1
Apollo LES	Apollo.LES	MAAD	LES	10.2	0.66	2.5	-	690.0	3.0	LPC A-1	1
PO64	Rubis	SUD	Rubis	1.5	0.65	0.7	89	52.0	45.0	PO64	1
KTI-1 St4	KTI-4	HEXI	-	1.2	0.65	2.0	-	-	-	Spab-65	1
KN-02	Tochka	KBM	-	6.4	0.65	2.0	-	-	-	KN-02 Motor	1
Tochka	Tochka	KBM	-	6.4	0.65	2.0	-	-	-	9N79	1
Tochka-U	Tochka	KBM	-	6.4	0.65	2.0	-	-	-	9N79-1	1
V-750 Booster	Tochka	KBM	-	6.4	0.65	2.0	-	-	-	9N79-1	1
KN-D	V-750	ISKRM	-	2.4	0.65	0.3	-	-	4.5	PRD-18	1
Cygnus 25	KN-D	NISST	-	1.0	0.63	0.3	24	17.4	38.0	KN-D	1
NOTS 500	25SN	PAID	-	1.1	0.64	0.2	19	33.3	16.5	Cygnus 25	1
NOTS 500	NOTS500	NOTS	-	10.0	0.64	1.0	-	75.0	72.0	HyPLOX75	1
Zeizal	Zeizal	IR	Iran	2.5	0.61	0.9	0	0.0	45.0	NOTS 500	1
Zeizal	Zeizal	IR	Iran	6.0	0.61	0.5	0	0.0	-	NP-110	1
Zeizal	Zeizal	IR	Iran	9.0	0.61	1.0	0	0.0	-	NP-110	1
Fateh-360	Zeizal	IR	Iran	9.0	0.61	1.0	-	-	-	NP-110	1
ATACMS	ATACMS	AJCA	-	4.0	0.61	1.2	-	-	-	Fateh-360	1
Pathfinder Zombie	ATACMS	AJCA	-	4.0	0.61	1.2	-	180.0	-	M124	1
Sabre Zombie	ATACMS	AJCA	-	4.0	0.61	1.2	-	180.0	-	M124	1
K-BATS	ATACMS	AJCA	-	4.0	0.61	1.2	-	180.0	-	M124	1
HYSR	HAWAHA	HAWAHA	-	4.0	0.61	1.2	-	-	-	K-BATS	1
SORS	LMMI	LMMI	-	15.0	0.61	-	-	270.0	-	HYSR	1
B-611	DVST	DVST	-	8.0	0.60	-	-	-	-	SORS	1
B-611-TR	SANJ	SANJ	-	5.0	0.60	1.5	-	-	-	B-611	1
SR 0.1	ROKSN	ROKSN	-	5.0	0.60	1.5	-	-	-	B-611-TR	1
OS-M1 Stage 3	SR0.1	ROKSN	-	5.0	0.60	0.0	-	-	-	ROKETSAN-SR-0.1	1
LS-C	LYK	LYK	-	5.0	0.60	2.0	-	-	-	OS-M St. 3	1
LS-C-7	MHIT0?	MHIT0?	-	4.0	0.60	1.0	-	-	-	LE-2	1
LS-C	MHIT0?	MHIT0?	-	4.0	0.60	1.0	-	-	-	LE-3 (T)	1
LS-C Booster	MHIT0?	MHIT0?	-	2.5	0.60	0.3	-	-	-	LS-C Booster	1
KN-24	KN-24	KN-24	-	4.0	0.60	1.2	-	-	-	LS-C Boosters	1
Seliger 1	DRG	DRG	-	3.0	0.60	0.5	-	49.0	-	KN-ATACMS	1
Seliger 3	DRG	DRG	-	6.0	0.60	1.0	-	50.0	-	Seliger 1	1
Alcyone	BE3	BE3	-	0.6	0.60	0.1	39	34.0	8.0	Seliger 3	1
Badr-1	Grad	ANSAL	-	5.0	0.60	1.0	-	-	-	BE-3B1	1
Grad	ANSAL	ANSAL	-	5.0	0.60	1.0	-	-	-	Badr-1	1
BE-3	BE3	BE3	-	5.0	0.60	1.0	-	-	-	Badr-1	1
BE-3A4	BE3	BE3	-	0.6	0.60	0.1	28	34.0	9.0	BE-3	1
BE-3A5	BE3	BE3	-	0.6	0.60	0.1	28	34.0	9.0	BE-3A4	1
BE-3A9	BE3	BE3	-	0.6	0.60	0.1	28	34.0	9.0	BE-3A5	1
M-6	HJ	ABL	M6 Honest John	4.9	0.58	1.9	954	365.0	5.0	BE-3A9	1
Taurus	HJ	ABL/WFF	-	4.3	0.58	1.4	-	457.0	3.5	M-6	1
X-7A-1 Booster	HJ	LVN/ABL	-	6.0	0.58	1.9	1474	467.0	4.0	Taurus	1
Taurion	HJ	WFF	-	4.3	0.58	1.4	-	-	-	X-202C3	1
Red Kite	RedKite	BAYCH	-	3.3	0.56	1.4	265	226.0	13.0	M112	1
Oriole	Oriole	DTI	-	3.9	0.56	1.0	198	92.1	-	M112	1
AJ60-91	AJ60	AJCC	Aerobee 350 St2	9.1	0.56	3.0	1050	72.0	52.7	Red Kite	1
Sonda 3-1	Sonda3	IAE	-	3.3	0.56	1.2	341	102.0	20.0	GEM 22	4
Sonda 3	Sonda3	IAE	-	3.2	0.56	0.9	284	136.0	11.0	AJ11-6	1
Lance Missile	Lance	LTWM	-	6.2	0.56	-	-	20.0	-	S-30	1
SEPR-732	Stromboli	SUD	-	2.5	0.56	1.5	-	200.0	-	S-31	1
RH-560S	Stromboli	VSSC	-	4.1	0.56	1.3	262	119.0	19.0	P8E-9	1
										SEPR-732	1
										RH-560S	1

Stages

Stage_Name	Stage_Family	Stage_Manufacturer	Stage_Alt_Name	Length m	Diameter m	Launch_Mass t	Dry_Mass kg	Thrust kN	Duration s	Engine	MEng
RH-560	Stromboli	VSSC	-	3.9	0.56	0.9	277	76.0	19.0	RH-560	1
RH-560 Mk III	Stromboli	VSSC	-	3.7	0.56	0.9	277	76.0	19.0	RH-560	1
RH-ATV	Stromboli	VSSC	-	3.7	0.56	0.9	277	76.0	19.0	RH-560	1
Stromboli	Stromboli	VSSC	-	3.0	0.56	0.9	246	75.0	16.0	Stromboli	1
Hatf I	Stromboli	SUPA	-	3.0	0.56	0.9	246	75.0	16.0	Stromboli	1
Aigle	Stromboli	OMERA	-	3.0	0.56	0.9	246	75.0	16.0	Stromboli	1
Vesuve	Stromboli	OMERA	-	3.5	0.56	0.8	250	200.0	6.0	SEPR 734-1	1
Tacite	Stromboli	OMERA	-	4.7	0.56	1.7	455	170.0	20.0	SEPR 739-2	1
Ber	Stromboli	OMERA	-	4.7	0.56	1.9	700	170.0	20.0	SEPR 739	1
Berence St2	Stromboli	OMERA	-	3.8	0.56	1.1	372	170.0	20.0	SEPR 740	1
Veronique AGI	Veronique	NSPO	-	2.4	0.55	1.0	-	-	6.0	NSPO Booster	1
Veronique 61	Veronique	LRBA	-	7.3	0.55	1.3	278	40.0	45.0	Veronique	1
Veronique 61M	Veronique	LRBA	-	7.3	0.55	1.3	278	40.0	45.0	Veronique AGI	1
Veronique R	Veronique	LRBA	-	9.5	0.55	1.9	-	60.0	54.0	Veronique 61	1
Veronique P2	Veronique	LRBA	-	11.7	0.55	2.0	-	60.0	56.0	Veronique 61	1
Veronique P6	Veronique	LRBA	-	5.8	0.55	0.5	385	40.0	6.5	Veronique	1
V-1000	Veronique	LRBA	-	6.0	0.55	0.5	-	10.0	-	Vero P2	1
Luna-M	V-1000	SKB30	-	6.0	0.55	0.5	-	20.0	-	Vero P6	1
ASAS XL	Luna-M	MIT	-	8.0	0.55	-	-	103.0	-	S2.726	1
Mk 72	SM3-TSRM	THKE	-	9.4	0.54	2.3	-	7.0	-	9M21	1
SM-3-II-2	Mk72	UTC	-	0.9	0.53	0.1	-	-	15.0	Mk 136	1
SM-3-II-3	SM-3-II	UTC	-	1.7	0.53	0.7	243	-	-	Mk 72	1
Black Sparrow	SM-3-II-2	MHI	-	2.5	0.53	-	-	-	-	SM-3-II-2	1
Blue Sparrow	SM-3-II-3	MHI	-	1.0	0.53	-	-	-	-	SM-3-II-3	1
Silver Sparrow	BlackSparrow	IAI	-	4.8	0.53	1.2	-	-	-	Black Sparrow	1
Hades	BlackSparrow	IAI	-	4.8	0.53	1.2	-	-	-	Black Sparrow	1
GLCM	Hades	IAI	-	7.0	0.53	2.5	-	-	-	Black Sparrow	1
S-520	GLCM	IAI	-	5.0	0.53	1.8	-	-	-	Acheron	1
SS-520 St. 2	S-520	UNK	-	6.4	0.53	2.3	400	143.1	28.7	S-520	0
Cedre St1	S-520	ISAS	SE20	5.9	0.52	0.4	111	-	-	SS-520	1
Alcor	Alcor	LRS	-	1.7	0.52	1.0	-	138.0	-	Cedre St1	1
Alcor IA	Alcor	AJSP	-	2.3	0.52	1.0	200	36.0	30.0	30KSB000	1
Alcor IB	Alcor	AJSP	-	1.9	0.52	0.5	200	49.0	23.0	23KSI1000	1
Cygnus 20	Alcor	AJSP	-	1.9	0.52	0.5	200	49.0	23.0	Alcor IB	1
SARGE	20SM	THKE/PARD	-	0.7	0.51	0.1	88	42.0	26.0	Alcor IB	1
STIG-B	EXOSA	ARMAD	-	11.0	0.51	1.0	10	30.0	8.5	Cygnus 20	1
OS-M1 Stage 4	STIG-B	ARMAD	-	10.0	0.51	0.7	363	24.1	60.0	SARGE	1
Star 20	OS-M1-4	LYK	-	1.0	0.50	1.0	-	22.5	50.0	STIG-B	1
MSD	Star20	THKE	-	1.5	0.50	0.3	26	26.5	27.5	OS-M St 4	1
FW4	FW4	NRL	-	1.5	0.50	0.3	26	26.5	27.5	Star 20	1
FW4S	FW4	UTC	-	1.5	0.50	0.3	25	25.0	30.5	Star 20	1
Saman-1	FW4	UTC	-	1.5	0.50	0.3	32	25.0	30.5	FW4	1
V-750	Saman-1	IR	-	1.0	0.50	0.5	300	21.0	28.0	FW4	1
ZUR-215	V-750	FAKEL	-	8.1	0.50	2.0	-	13.8	25.0	Saman-1	1
Al Samoud	V-750	NPOL	-	8.1	0.50	2.0	-	13.8	25.0	S2.711	1
48M6	V-750	IQMIC	-	6.0	0.50	2.0	360	13.8	52.0	S2.711	1
Al Fatah	48M6	FAKEL	-	7.5	0.50	1.8	-	-	-	48M6	1
L500	Fatah	FAKEL	-	4.6	0.50	1.0	454	130.0	15.0	Al Fatah	1
TT-500	L500	ISAS	-	2.5	0.50	0.8	-	69.0	27.0	L500	1
JCR	JCR	MASDA	-	7.0	0.50	1.3	300	116.0	-	TT-500	1
JCR Booster	JCR	MASDA	-	3.0	0.50	0.7	200	61.0	-	TT-500	1
Upstage	JCR	NISSIT	-	5.0	0.51	0.7	-	133.0	-	TT-500-S2	1
Momo	JCR	NISSIT	-	5.0	0.51	0.7	-	54.0	-	JCR	1
Momo 6	HIBEX	BOC	-	1.0	0.50	0.2	-	-	-	JCR-S2	1
IAI Arrow St2	Momo	IST	-	6.2	0.50	1.0	-	12.0	-	Upstage	1
Abid St3	IAI Arrow.St2	IAI	Arrow St2	7.2	0.50	1.1	-	14.0	-	Momo	1
NOTS 401A	Abid.St3	IQ	-	2.5	0.50	0.5	-	-	-	Momo 6	1
Zeus A	NOTS400	NOTS	-	0.8	0.50	2.0	-	-	-	IAI-Arrow-2-2	1
E-8-5 VA	Zeus-A	GCR	-	7.0	0.50	0.4	-	-	7.2	NOTS 401A	1
K-15 Booster	E8	NPOL	-	2.3	0.50	0.4	-	-	-	Zeus A	1
K-15 Stage 2	K-15	DRDD	-	2.0	0.50	1.0	-	-	-	E-8-5 VA	1
NOTS 505	K-15	DRDD	-	5.0	0.50	2.0	-	-	-	K-15 Booster	1
Long Tom	NOTS505	NOTS	-	0.5	0.50	0.5	15	18.0	33.5	K-15 Stage 2	1
Private A Booster	L480S	ISAS	-	0.5	0.48	0.1	-	-	-	NOTS 500	1
Lark	LongTom	WRE	-	3.1	0.47	0.6	-	190.0	3.6	L480S	1
X-241	PrivateBooster	JPL	-	1.0	0.47	0.1	-	98.0	0.2	Mayfly	4
RTV-A-3	Lark	FAIRA	-	4.2	0.46	0.5	25	12.1	260.0	T-22	4
Terrier 12-0	ABL	ABL X241	-	1.5	0.46	0.2	280	12.0	36.0	LR2-RM-6	1
Terrier	Terrier	CONVPO	-	3.9	0.46	0.8	322	257.5	4.4	X-241	1
Terrier Mk12 Mod 0	Terrier	HERCR?	ABL X256	3.9	0.46	0.9	322	257.5	4.4	Terrier Mk12 Mod 0	1

Stages

Stage_Name	Stage_Family	Stage_Manufacturer	Stage_Alt_Name	Length m	Diameter m	Launch_Mass t	Dry_Mass kg	Thrust kN	Duration s	Engine	MEng
Terrier Mk 12	Terrier	HERC?	-	3.9	0.46	0.9	322	257.5	4.4	Terrier Mk12 Mod 1	1
Terrier Mk 70	Terrier	THX	-	3.9	0.46	1.0	290	-	6.2	TX-664-4	1
T48	T48	MARTB	-	4.0	0.46	1.0	193.0	-	3.4	T48	1
X-248	Altair	ABL	-	1.8	0.46	0.3	24	13.0	38.6	X-248	1
Altair 2	Altair	ABL	-	1.8	0.46	0.3	24	13.0	39.0	X-248A10	1
Altair	Altair	ABL	-	1.5	0.46	0.3	33	27.2	28.0	X-258	1
MG-18	Altair	LPC	M-2	1.5	0.46	0.3	-	-	-	MG-18	1
GCR 33KS2800	GCR	GCR	-	1.4	0.46	0.2	30	12.5	33.0	33KS2800	1
SRAM	SRAM	BOVT	-	4.3	0.46	1.0	-	-	-	LPC-415	1
ASAT	SRAM	BOVT	-	4.3	0.46	1.0	-	-	-	LPC-415	1
MR-12	MR-12	TAIFUN	-	8.8	0.45	1.0	-	-	-	MR-12	1
MR-20	MR-12	TAIFUN	-	8.8	0.45	1.0	-	-	-	MR-20	1
MR-250	MR-12	TAIFUN	-	8.8	0.45	1.0	-	-	-	MR-25	1
MR-30	MR-12	TAIFUN	-	8.8	0.45	1.0	-	-	-	MR-30	1
SS-520 St. 3	SS-520-4	ISAS	-	0.6	0.45	0.1	8	2.0	-	SS-520 S3	1
T-7	T-7	SIMED	-	6.0	0.45	1.0	-	-	-	T-7 LRE	1
T-7 booster	T-7B	SIMED	-	1.0	0.45	0.5	-	-	-	T-7 booster	1
Tianying-3C	Tianying	CSSAR	-	5.0	0.45	1.1	0	0.0	-	Tianying 3C	1
Tianying-3F Booster	Tianying	CSSAR	-	2.7	0.45	0.5	0	0.0	-	Tianying 3F	1
Peregrine	Peregrine	MSFC	-	6.2	0.44	1.2	-	-	-	Peregrine	1
Black Brant VA	BB5	BAL	Black Brant 2A	5.2	0.44	1.0	150	111.0	15.0	15KS25000	1
Black Brant IIB	BB5	BAL	Black Brant 2B	5.2	0.44	1.0	150	89.0	32.0	23KS20000	1
Black Brant VB	BB5	BAL	Black Brant 5B	5.3	0.44	1.2	151	89.0	32.4	26KS20000	1
Black Brant VC	BB5	BAL	Black Brant 5C	5.3	0.44	1.2	240	68.2	33.0	26KS20000	1
Black Brant I	BB5	BAL	Black Brant 1	5.3	0.44	1.1	-	110.0	15.0	15KS25000	1
Black Brant Mk1	BB5	BAL	Black Brant 5C	5.3	0.44	1.2	240	68.2	33.0	BB Mk1	1
Black Brant Mk3	BB5	BAL	Black Brant 5C	5.3	0.44	1.2	240	68.2	33.0	BB Mk3	1
Black Brant Mk4	BB5	BAL	Black Brant 5C	5.3	0.44	1.2	240	68.2	33.0	BB Mk3	1
Nihka	BB5	BAL	-	2.0	0.44	0.4	79	49.9	17.8	17KS12000	1
Raven 1/1A/2A	Raven	RORD	-	5.1	0.44	1.0	240	44.5	30.0	Raven 1	1
Raven 2	Raven	RORD	-	5.1	0.44	1.0	240	44.5	30.0	Raven 2	1
Raven 5	Raven	RORD	-	5.1	0.44	1.0	240	44.5	30.0	Raven 5	1
Raven 7	Raven	RORD	-	5.1	0.44	1.0	240	44.5	30.0	Raven 7	1
Raven 8	Raven	RORD	-	5.4	0.44	1.2	242	44.5	30.0	Raven 7	1
Raven 6	Raven	RORD	Raven	5.4	0.44	1.2	242	52.5	36.0	Raven 6	1
Raven 8	Raven	RORD	Raven	5.4	0.44	1.1	230	50.1	30.0	Raven 8	1
Raven 11	Raven	RORD	-	5.5	0.44	1.3	290	105.0	39.0	Raven 11	1
Rook I	Raven	RORD	Rook	5.4	0.44	1.1	186	300.0	5.5	Rook	1
Rook II	Raven	RORD	Rook	5.4	0.44	1.2	304	300.0	7.0	Rook	1
Rook IIIA	Raven	RORD	-	5.4	0.44	1.1	186	300.0	5.5	Rook	1
Rook IIIB	Raven	RORD	-	5.4	0.44	1.1	186	300.0	5.5	Rook	1
Rook IIIB	Raven	RORD	-	5.4	0.44	1.1	186	300.0	5.5	Rook	1
Goldfinch	Raven	BAJ	-	2.5	0.44	0.4	94	175.0	3.5	Goldfinch IIA	1
Goldfinch II	Raven	BAJ	Goldfinch	3.0	0.44	0.4	89	-	3.5	Goldfinch II	1
Cuckoo IA	Raven	RORD	-	1.0	0.44	0.2	-	80.0	4.0	Cuckoo IA	1
Cuckoo IB	Raven	RORD	-	1.2	0.44	0.2	57	80.9	4.1	Cuckoo IB	1
Cuckoo II	Raven	RORD	-	1.2	0.44	0.2	37	36.5	10.0	Cuckoo IB	1
Cuckoo 4	Raven	RORD	-	1.2	0.44	0.2	-	-	4.3	Cuckoo II	1
Cuckoo 4	Raven	RORD	-	1.2	0.44	0.2	-	-	4.3	Cuckoo 4	1
Saluki B	Raven	IMIS	-	1.0	0.44	0.6	-	195.5	6.0	Saluki B	1
Saluki S	Raven	IMIS	-	1.0	0.44	0.4	-	35.6	27.0	Saluki S	1
NSPO Stage 2	NSPO	KARL	-	3.9	0.42	1.0	-	-	30.0	NSPO Sustainer	1
KSR	KSR	KARL	-	4.0	0.42	1.2	-	86.0	20.0	KSR	1
KSR Booster	KSR	KARL	-	3.6	0.42	0.8	-	211.0	5.9	KSR Booster	1
Nike	Nike	ABL	-	3.6	0.42	0.7	256	195.6	3.4	MSE1	1
2.5-DS-69000	Nike	ABL	-	3.0	0.42	0.7	-	265.0	2.5	2.5-DS-69000	1
X-201	Nike	ABL	-	3.0	0.42	0.7	-	209.0	3.0	3-DS-47000	1
XW-17	Nike	ABL	-	3.0	0.42	0.7	-	-	-	XW-17	1
RX-420	RX-420	THX	-	6.0	0.42	0.5	-	100.0	-	RX-420	1
K420	K420	LAPAN	-	5.8	0.42	1.2	200	110.0	17.0	K420	1
K420H	K420	ISAS	-	5.8	0.42	1.2	200	110.0	17.0	K420H	1
K420 (1/3)	K420	ISAS	-	2.0	0.42	-	-	45.0	-	K420 (1/3)	1
Lambda2-2	K420	ISAS	-	8.7	0.42	1.4	300	110.0	17.0	K420	1
Lambda3-2	K420	ISAS	-	11.0	0.42	1.8	300	110.0	17.0	K420	1
Lambda3-3	K420	ISAS	-	4.8	0.42	0.5	100	110.0	-	K420	1
AAD	AAD	HAL	-	6.0	0.42	1.0	-	-	-	-	1
Zenith	Zenith	CONTR	-	5.6	0.42	0.6	150	45.0	21.0	Zenith	1
Malemute	Malemute	THX	-	3.3	0.41	0.6	100	55.1	22.0	TU-758	1
Imp Malemute	Malemute	THX	-	3.3	0.41	0.6	100	55.1	22.0	Imp Malemute	1
Patriot	Malemute	THX	-	3.3	0.41	0.6	100	55.1	22.0	TX-486-1	1
Aeolus Booster	Malemute	WRE	-	1.8	0.41	0.3	-	80.0	2.7	LAPSTAR	7
HAI	LongTom	WRE	-	1.8	0.41	0.3	-	90.4	2.3	Demon	2
Gun Projectile 16	Gun16	BRL	-	1.0	0.41	0.1	-	-	-	-	0
MR-1	Sparrow	BRL	-	1.6	0.41	0.2	124	102.0	1.9	1.8KS7800	3
SPRAN-50	Daniel	NMC	-	2.5	0.40	0.4	-	-	5.6	SPRAN-50	1
KW-25	KW-25	ONERA	-	3.0	0.40	2.0	-	-	-	DPKR-MLRS	1
KW-25	KW-25	KP	-	3.0	0.40	2.0	-	-	-	DPKR-MLRS	1

Stages

Stage_Name	Stage_Family	Stage_Manufacturer	Stage_Alt_Name	Length m	Diameter m	Launch_Mass t	Dry_Mass kg	Thrust kN	Duration s	Engine	MEng
Mike-46	Mike-46	AJ	-	1.0	0.40	1.0	-	392.0	2.0	2-AS-22000	4
Mike-47	Mike-46	AJ	-	1.0	0.40	1.1	-	392.0	2.0	2.5-AS-18000	4
Lacrosse	Lacrosse	MARTO	-	2.1	0.40	0.3	-	168.0	2.6	TX-52	1
Qaem-100 St 3	Qaem-S3	IRGC	-	0.5	0.40	10.0	-	-	-	Qaem-100 S3	1
Tien Kung 3	NSPO	NCSIST	-	5.0	0.40	0.5	-	-	-	Sky Box III	1
ISRO-CES	ISRO-CES	ISRO	-	6.0	0.40	-	-	-	-	ISRO-CES	1
STIG-A	STIG	ARMAD	-	9.7	0.39	0.7	-	22.5	50.0	STIG-A	1
Neptune	Neptune	ONERA	-	3.2	0.39	0.5	150	20.0	32.0	Neptune	1
Aerobee AJ10-24	Aerobee	AJ	-	5.8	0.38	0.5	184	17.8	32.1	AJ10-24	1
Aerobee AJ10-25	Aerobee	AJ	-	5.8	0.38	0.5	184	17.8	32.1	AJ10-25	1
Aerobee AJ10-27	Aerobee	AJ	-	5.8	0.38	0.5	184	17.8	32.1	AJ10-27	1
Aerobee AJ10-34	Aerobee	AJ	-	5.8	0.38	0.5	184	17.8	32.1	AJ10-34	1
Aerobee XASR-1	Aerobee	AJ	-	5.8	0.38	0.7	184	11.6	32.1	XASR-1	1
Aerobee 150	Aerobee	AJGC	Aerobee	5.1	0.38	0.7	133	17.8	51.4	AJ11-6	1
Aerobee 150A	Aerobee	AJGC	Aerobee	5.1	0.38	0.6	133	17.8	51.4	AJ11-6	1
AJ60-92	Aerobee	AJGC	Aerobee 200 St2	5.5	0.38	0.7	131	22.6	61.1	AJ60-92	1
Aerobee 100	Aerobee	AJ	Aerobee Jr	3.6	0.38	0.5	119	11.5	40.0	Aerobee Jr	1
Lance	LanceMotor	GCR	-	4.6	0.38	0.8	217	174.0	6.7	Lance	1
Skat	LanceMotor	THX?	-	4.5	0.38	0.9	377	200.0	6.0	XM-45	1
Lance XM-45	LanceMotor	THXK	-	4.9	0.38	0.8	-	222.0	5.0	TX-77	1
Genie-Alarr	Genie	THXU	-	3.1	0.38	0.3	-	-	-	MB-1	1
Genie	Genie	THXU	MB-1	1.8	0.38	0.3	-	-	-	MB-1	1
Ute	Genie	THXU	-	1.3	0.38	0.2	62	85.0	1.5	TU-715	1
Painta	Genie	THXU	-	1.9	0.38	0.3	81	186.0	3.7	TU-716	1
Aerobee F	AerobeeF	AJSP	-	7.3	0.38	1.3	250	36.4	51.1	Aerobee F	1
Cygnus 15	Cygnus	LARC/THKE	-	0.4	0.38	0.1	5	22.0	4.8	Cygnus 15	1
ST-735-SB	SB-310	NISST?	-	0.5	0.38	0.1	10	40.0	20.0	NOTS 100A	1
Vikram-S	Vikram-S	SKYRT	-	4.7	0.38	0.3	356	0.0	0.0	-	1
Nucleus	Nucleus	MAMMO	-	6.0	0.38	0.5	50	70.0	23.0	Kaman-80	1
Nazeat	Kavoshgar	IR	Iran	4.0	0.36	0.3	0	0.0	-	FMUM	1
Kavoshgar	Kavoshgar	IRSA	Iran	4.0	0.36	0.3	0	0.0	-	Kavoshgar	1
Aerobee 75	Orion	AJSP	-	4.0	0.35	0.5	142	13.0	32.0	M22E8	1
Hawk	Orion	AJSP	-	5.0	0.35	0.6	13.0	13.0	32.0	M22E8	1
Orion	Orion	AJSP	-	2.7	0.35	0.4	111	13.0	32.0	M22E8	1
Improved Orion	Orion	AJSP	Orion	1.8	0.35	0.4	-	13.0	32.0	M112	1
Meteor-2	Meteor-2	PAI	-	4.2	0.35	0.4	126	24.0	18.0	Meteor-2	1
10KS2500	10KS2500	THKE	-	2.9	0.35	0.1	-	11.0	10.0	10KS2500	1
LS-A Booster	LS-A Booster	MHITD?	-	3.0	0.35	0.3	-	60.0	10.0	LS-A Booster	1
Qased-S3	Qased-S3	IRGC	-	0.5	0.35	0.3	-	-	-	Qased-S3	1
Mk 104	Standard	THKE?	-	2.9	0.35	0.5	128	-	-	Mk 104	1
Mk 104 (ARC)	Standard	THKE?	-	2.9	0.35	0.5	128	-	-	Mk 104	1
Lynx	Standard	NAVC	-	3.0	0.35	0.5	-	-	-	Mk 104	1
Mk 56	Standard	ATLR?	-	4.5	0.35	0.6	-	-	-	Mk 56	1
Mk 30	Standard	HUMS	-	3.5	0.35	0.4	-	-	-	Mk 30	1
Iraqi Gun Projectile	Iraqi Gun Projectile	SRCI	-	1.5	0.35	0.1	67	-	-	-	0
NOTS 551	NOTS 551	NOTS	-	3.0	0.34	0.4	85	-	28.0	NOTS Mod 551-B	1
THAAD Proto	THAAD	LMCO	-	3.8	0.34	0.6	-	-	-	THAAD	1
THAAD	THAAD	LMPCO	-	3.8	0.34	0.6	-	-	-	THAAD	1
ASROC	HOTROC	DNK	-	4.5	0.34	0.6	40	49.0	-	Mk 12 ASROC	1
Kappa 4 Booster	Kappa4	ISAS	-	3.3	0.33	0.1	0	105.0	3.0	Kappa 4 Booster	1
Sandhawk	Sandhawk	SAND	-	5.1	0.33	0.7	200	90.0	14.0	TE-473	1
AerobeeB	AerobeeB	AJ	-	1.8	0.33	0.3	140	80.0	2.5	AJ60-80	1
VAM Booster	VAM Booster	AJ	-	1.8	0.33	0.3	140	80.0	2.5	2.5KSI18000	1
VAM-17	AerobeeB	AJ	-	1.8	0.33	0.3	140	80.0	2.5	2.5KSI18000	1
VAM-20	AerobeeB	AJ	-	1.8	0.33	0.3	140	80.0	2.5	2.5KSI18000	1
Tramontane	Berenice	ONERA	-	2.4	0.33	0.3	124	50.0	6.7	SEPR-200	1
ASAS	SM3-TSRM	THKE	SM-3 TSRM	0.9	0.33	0.1	-	7.0	15.0	Mk 136	1
Gradicom 1	Gradicom	CITED	-	2.5	0.32	0.4	-	-	-	Gradicom 1	1
Gradicom 2	Gradicom	CITED	-	2.5	0.32	0.2	-	-	-	Gradicom 2	1
RX-320	RX-320	LAPAN	-	4.7	0.32	0.5	-	-	-	RX-320	1
Jericho II	Bellier	SUD	-	2.7	0.31	0.3	-	52.0	-	RX-320	1
Bellier	Bellier	SUD	-	2.9	0.31	0.3	100	20.0	23.8	Jericho II	1
Bellier II	Bellier	SUD	-	2.9	0.31	0.3	80	20.0	23.4	Jericho IV	1
Bellier III	Bellier	SUD	-	2.9	0.31	0.3	100	20.0	23.4	Bellier II	1
RH-300	Bellier	VSSC	-	2.8	0.31	0.3	79	33.3	16.0	Vega	1
RH-300 Mk II	Bellier	VSSC	-	3.4	0.31	0.5	39.1	39.1	20.2	RH-300	1
SP-310	SP-310	ISAS	-	5.8	0.31	0.5	190	95.0	7.4	RH-300-II	1
S-310	S-310	ISAS	S310	5.0	0.31	0.6	230	80.0	31.6	SP-310	1
BT-310	S-310	ISAS	S310	6.0	0.31	0.6	230	80.0	31.6	S-310	1
S-300	S-300	ISAS	S300	6.0	0.30	0.5	-	-	-	S-300	1
LS-A	LS-C	MHITD?	-	4.5	0.30	0.3	-	10.0	35.0	LE-1	1
K10S	K10S	ISAS	-	0.5	0.30	0.1	-	-	-	K10S	1

Stages

Stage_Name	Stage_Family	Stage_Manufacturer	Stage_Alt_Name	Length m	Diameter m	Launch_Mass t	Dry_Mass kg	Thrust kN	Duration s	Engine	MEng
Mike-46 Sustainer	Ajax	AJ	-	6.0	0.30	0.4	-	11.4	21.0	X21AL-2600	1
Mike-47 Sustainer	Ajax	AJ	-	6.0	0.30	0.4	-	11.4	21.0	21AL-2600	1
Mike-484 Sustainer	Ajax	AJ	-	6.0	0.30	0.4	-	11.4	21.0	21AL-2600	1
Mike-490 Sustainer	Ajax	AJ	-	6.0	0.30	0.4	-	13.8	71.0	Ajax-490	1
Ajax	BELL	BELL	-	4.5	0.30	0.5	372	22.6	30.0	Ajax	1
Cluster Stage 3	BabySergeant	3xBaby Sergeant	-	1.2	0.30	0.1	63	11.6	6.0	RTV	3
Bullpup	Bullpup	THKE	-	3.0	0.30	0.3	-	111.0	-	Aerojet Mk 8	1
AAD St 2	AAD	HAL	-	4.0	0.30	1.0	-	-	-	-	1
Taepo Dong 1 Stage 3	TD3	KPA	-	1.8	0.30	0.2	50	18.0	27.0	TD1	1
Tiny Tim	TTB	USN	-	2.4	0.30	0.3	278	222.0	0.6	Tiny Tim	1
MARC 14B1	TTB	USN	-	0.8	0.30	0.1	59	84.0	0.8	MARC 14B1	7
Sonda 2A	Sonda	AVIB	-	4.2	0.30	0.3	77	36.0	20.0	S-20	1
Sonda 2M	Sonda	AVIB	-	2.2	0.30	0.2	69	18.0	20.0	S-23	1
VLS-R1	Sonda	AVIB	-	2.5	0.30	0.5	0	18.0	20.0	S-20	1
VLS-R2	Sonda	AVIB	-	3.0	0.30	0.5	0	18.0	20.0	S-20	1
VLS-R2 Strapon	Sonda	AVIB	-	2.0	0.30	0.5	0	18.0	20.0	S-20	1
VLS-R1 Strapon	Sonda	AVIB	-	2.0	0.30	0.5	0	18.0	20.0	S-20	1
VAC Corporal	VAC	JPL/DAC	-	4.9	0.30	0.3	125	6.7	45.0	VAC	1
HOTROC	HOTROC	NOTS	-	1.8	0.30	0.1	27	63.2	4.9	HOTROC	1
Iris	Iris	ATLR	-	4.0	0.30	0.5	112	17.0	52.0	MARC 13A1	1
FTI	FTI	AVIB	-	5.0	0.30	0.1	1	-	-	FTI	1
RH-300 Booster	Venus	ISRO	-	2.0	0.28	0.2	65	37.5	6.0	RH-300 Booster	1
Venus	Venus	SUD	-	2.0	0.28	0.2	66	44.0	4.3	Venus	1
Centenario	Rigel	ILAE	-	2.4	0.28	0.2	-	39.0	11.2	Centenario	1
SS-50	Rigel	ILAE	-	2.0	0.28	0.2	-	-	18.0	SS-50 Antares	1
Canopus	Rigel	ILAE	-	2.0	0.28	0.2	-	-	18.0	Canopus	1
SpaceLoft XL	SpaceLoft	UPAE	-	4.0	0.27	0.2	-	45.0	13.5	SpaceLoft	1
Gosling	Gosling	RORD	-	3.3	0.26	0.2	-	152.0	2.5	Gosling	1
Gosling IIN	Gosling	RORD	-	3.5	0.26	0.2	-	140.0	3.0	Gosling	1
Gosling IV	Gosling	RORD	-	3.5	0.26	0.3	-	140.0	3.0	Gosling 4	1
Gosling 4T	Gosling	RORD	-	3.6	0.26	0.3	89	137.0	3.1	Gosling 4	1
Heron	Gosling	RORD	-	3.6	0.26	0.3	72	137.0	3.1	Gosling 4	1
Goose	Gosling	RORD	-	3.4	0.26	0.3	95	22.0	17.0	Goose II	1
Black Brant IIIA	Shiipe	RORD	-	2.1	0.26	0.2	58	16.0	16.0	Shiipe	1
Black Brant IIIB	BB3	BAL	BB3	3.7	0.26	0.3	50	49.0	9.0	9K311000	1
Black Brant IIIB	BB3	BAL	BB3B	3.9	0.26	0.2	50	45.0	12.0	12K310000	1
N20RTH	Amateur	HVEND	-	7.0	0.26	0.2	-	10.0	-	HYLIGHT	1
DAC Roc	DAC Roc	DAC	-	3.0	0.25	0.3	-	50.0	10.0	DACRoc	1
M-100	M-100	TAIFUN?	-	3.5	0.25	0.3	110	-	5.0	M-100	1
M-100 St2	M-100	TAIFUN?	-	1.6	0.25	0.1	55	-	4.5	M-100 St.2	1
FFK	ERNO	4.0	-	4.0	0.25	0.5	-	-	-	FFK	1
HTR	HTR	NAMMO	-	10.0	0.25	0.5	-	30.0	20.0	HTR	1
CSXT	CSXT	CSXT	-	6.4	0.25	0.3	96	71.0	13.4	S-50000	1
RX-250 LPN	RX-250	LAPAN	-	5.3	0.25	0.3	-	52.0	6.0	RX-250-LPN	1
K245	ISAS	ISAS	-	1.0	0.25	0.1	40	34.0	9.3	K250	1
Kappa 6	ISAS	ISAS	-	2.3	0.25	0.2	40	34.0	9.3	K250	1
Kappa 6H	ISAS	ISAS	-	3.6	0.25	0.3	50	-	7.2	K250H	1
Kappa 8	ISAS	ISAS	-	3.1	0.25	0.3	50	34.0	9.7	K250-8	1
K250	ISAS	ISAS	-	4.6	0.25	0.3	50	43.0	7.6	K250	1
S-250	ISAS	ISAS	-	2.0	0.25	0.2	-	-	-	S0-250	1
MAL-25	STA	MHITD?	-	4.0	0.25	0.0	-	-	-	MAL-25	1
LPR-3T	ISRO-TV	VSSC	-	2.0	0.25	0.3	-	-	-	LPR-3T	1
FTV	ISRO-TV	VSSC	-	2.0	0.25	0.3	-	-	-	LPR-3T	1
SEGPRO	ISRO-TV	VSSC	-	2.0	0.25	0.3	-	-	-	-	1
CB-250	CB-250	VSSC	-	1.0	0.25	0.3	-	-	-	-	1
Evol 6CC	Eospace	EVOL	-	6.0	0.25	0.4	-	-	-	RH-75	7
Private A	PrivateA	JPL	-	2.3	0.25	0.3	130	4.4	30.0	Evol 1	1
Private F	PrivateA	JPL	-	2.3	0.25	0.3	130	4.4	30.0	30AS1000	1
Rhumi	Rhumi	SZI	-	3.5	0.25	0.2	-	2.5	20.0	Rhumi	1
Cygnus 10	10SM	PARD	-	0.4	0.25	0.0	1	10.0	3.2	Cygnus 10	1
Javelin 3	Javelin	SDCO	-	2.6	0.23	0.2	-	93.0	-	Javelin 3	1
Hydac	Javelin	SDCO	-	3.7	0.23	0.3	-	58.7	-	Hydac	1
ILR-33	Bursstyn	PAI	-	4.5	0.23	0.2	-	4.0	40.0	ILR-33	1
MLRS	MLRS	LMCAM	-	2.0	0.23	0.3	-	53.0	3.2	MLRS	1
Mesquito	MLRS	LMCAM	-	2.0	0.23	0.3	-	53.0	3.2	MLRS	1
Mayfly	LongTom	WRE	-	3.1	0.23	0.2	-	62.0	3.6	Mayfly	1
AeroHTV	AeroHTV	AEROPH	-	1.7	0.23	0.1	-	-	-	Loki	7
Recruit	Recruit	THKE	XM-19	2.6	0.23	0.2	-	156.0	1.5	1.5K35000	1
Recruit 1A	Recruit	THKE	TE29-1A	3.1	0.23	0.2	67	132.0	2.2	TE-29-1A	1
Yardbird	Recruit	THKE	-	2.5	0.23	0.2	29	75.0	3.4	Yardbird	1
Tomahawk 1	Tomahawk	THKE	-	3.5	0.22	0.2	60	53.0	9.0	TE-406	1
Tomahawk	Tomahawk	THKE	-	3.5	0.22	0.2	60	53.0	9.5	TE-416	1
Kappa 3 Booster	K250	ISAS	-	2.5	0.22	0.2	-	-	-	K220	1

Stages

Stage_Name	Stage_Family	Stage_Manufacturer	Stage_Alt_Name	Length m	Diameter m	Launch_Mass t	Dry_Mass kg	Thrust kN	Duration s	Engine	MEng
Melanie	Berenice	ONERA	-	3.0	0.22	0.1	40	38.0	4.4	Melanie	1
Orion-2	IIAE.Orion	IIAE	-	3.0	0.21	0.1	55	-	12.0	Orion-2	1
Orion-1	IIAE.Orion	IIAE	-	3.0	0.21	0.1	55	-	12.0	Orion-1	1
Cedre-4 St1	Cedre.St2	LRs	-	3.0	0.21	1.0	-	138.0	-	Cedre-4 St1	1
Cedre St2	Cedre.St2	LRs	-	2.1	0.21	0.4	-	78.0	-	Cedre St2	1
Elan	Belenos	CFTHB	-	1.6	0.21	0.1	32	-	2.5	Agnos	1
Emilie	Belenos	CFTHB	-	1.6	0.21	0.1	32	-	2.5	Emilie	1
Vela	Vela	WRE	-	3.1	0.21	0.1	59	26.7	5.0	Vela	1
S-210	S-210	ISAS	S210	5.1	0.21	0.3	-	-	17.0	S-210	1
TT-210	TT-210	MASDA	-	5.3	0.20	0.2	-	-	-	TT-210	1
Proson St1	Proson	CLTEF	-	1.5	0.20	0.1	-	-	-	Proson 1	1
Traveler	Traveler	USCLA	-	4.0	0.20	0.1	-	-	-	Traveler	1
Aftershock	Traveler	USCLA	-	4.0	0.20	0.1	-	-	-	Shockwave	1
Stratos2	Stratos2	DARE	-	7.0	0.20	0.2	100	8.0	23.0	DHX-200 Aurora	1
Mimosa	Mimosa	ONERA	-	2.6	0.20	0.2	40	33.0	5.0	SEPR 685-4	1
RH-200	RH-200	VSSC	-	1.4	0.20	0.1	48	16.9	5.7	RH-200	1
RH-200SV	RH-200SV	VSSC	-	1.4	0.21	0.1	48	16.9	10.0	RH-200SV	1
MWR-06	MWR-06	GMS	-	2.5	0.20	0.1	20	-	9.0	MWR-06	1
TT-200	TT-200	MASDA	-	5.0	0.20	0.2	-	-	-	TT-200	1
T-40	T-40	THKE	T40	1.4	0.20	0.1	15	13.3	6.0	T-40	1
Cirrus I	Cirrus	DRG	-	2.0	0.20	0.1	-	5.0	-	Cirrus I	1
Cirrus II	Cirrus	DRG	-	2.0	0.20	0.1	-	18.0	-	Cirrus II	1
Kingfisher	Kingfisher	TMINUS	-	3.0	0.20	0.1	-	25.0	-	Kingfisher	1
Iroquois	Iroquois	THKE	TE-W-388	2.7	0.20	0.1	43	24.4	7.7	TE-388	1
Meteor SB Booster	Meteor	PIHM	-	1.0	0.20	0.1	-	-	2.3	Meteor-1	3
Shrike	Sparrow	NWC	-	2.0	0.20	-	-	-	-	Mk 39	1
Sparrow	Sparrow	HUNS	Mk 6 Mod 3	1.3	0.20	0.1	-	35.0	1.8	1.8KS7800	1
22.6KS1245	Sparrow	HUNS	-	1.3	0.20	0.1	5	5.5	22.6	22.6KS1245	1
NOTS 8in	NOTS.8in	NOTS	-	0.5	0.20	0.0	3	5.1	5.7	NOTS 8	1
Petrel	Petrel	BAJUK	-	1.8	0.19	0.1	26	4.5	30.0	Lapwing	1
Petrel 2	Petrel	BAJUK	Petrel	1.8	0.19	0.1	26	4.5	30.0	Lapwing	1
Viper V	ViperS	OSCC	Viper	2.2	0.18	0.1	-	27.0	5.2	Viper V	1
Lobster I	Lobster	RORD	-	1.9	0.18	0.0	0	29.0	2.0	Lobster	1
Demon	Demon	RORD?	-	2.8	0.18	0.0	-	-	2.3	Demon	1
Dorado	Dorado	WRE	-	3.1	0.18	0.1	66	42.0	4.1	Dorado	1
Gun Projectile 7	Gun07	BRL	-	1.0	0.18	0.1	-	-	-	-	0
Astrid	Astrid	LLNL	-	1.9	0.17	0.0	8	0.4	30.0	MR-125	4
Asp	Asp	COOP	-	2.7	0.17	0.1	18	26.0	5.3	RM-1100	1
Asp II	Asp	COOP	-	2.7	0.17	0.1	18	26.0	3.6	Asp II	1
Asp III	Asp	COOP	-	2.7	0.17	0.1	18	26.0	3.3	Asp III	1
Asp IV	Asp	COOP	Asp	2.8	0.17	0.1	4	12.7	12.0	RM-1400	1
Sword	Asp	LPC	-	1.2	0.17	0.1	12	16.0	3.8	Sword 3KS5000	1
Kiva	Kiva	RPI	-	2.6	0.17	0.1	24	27.0	5.5	Kiva 5.5KS6100	1
Kisha	Kisha	RPI	-	2.0	0.17	0.1	22	21.0	4.4	Kisha I 4.4KS4600	1
Deacon	Deacon	THKE	-	2.6	0.17	0.1	-	36.0	3.0	CaJun	1
Viper I	Viper	LPC	Viper	2.7	0.17	0.1	25	24.0	5.6	5.6KS5400	1
Viper IC	Viper	LPC	Viper	2.7	0.17	0.1	25	24.0	5.6	5.6KS5400	1
Viper II	Viper	LPC	Viper	2.7	0.17	0.1	25	35.8	3.8	3.8KS8040	1
SDC Viper	Viper	SDCO	Viper IIB	2.7	0.17	0.1	20	35.8	3.2	3.52KS8500	1
Apache	Deacon	THKE	-	2.6	0.17	0.1	39	21.0	6.0	TE-307	1
Deacon	Deacon	ABL	-	2.8	0.15	0.1	24	26.0	3.0	X-220	1
Melusine	Monica	CFTHB	-	1.9	0.16	0.0	29	-	8.0	Melusine	1
Melanie 1	Monica	ATEF	-	1.1	0.16	0.0	-	-	-	Melanie	1
Prosper	Monica	ATEF	-	1.2	0.16	0.0	-	-	-	Melanie	1
Lex	Lex	SNECMA	-	2.6	0.16	0.1	20	10.0	20.0	MT 27	1
MAL-16	STA	MHITO?	-	3.9	0.17	0.1	40	10.0	14.0	MAL-16	1
Kappa 8L	Kappa	ISAS	-	2.4	0.16	0.1	20	-	5.3	KI60	1
S-160	S-160	ISAS	S160	3.9	0.16	0.1	7	2.5	-	S-160	1
S-A	STA	MHITO?	-	2.8	0.16	0.0	-	-	-	S-A	1
S-B	STA	MHITO?	-	2.8	0.16	0.1	-	-	-	S-B	1
S-C	STA	MHITO?	-	2.8	0.16	0.1	-	-	-	S-C	1
Falcon	Falcon	THXX	-	1.0	0.16	0.0	0	0.0	0.0	Falcon	1
Hyperion	AMRDC	EAC	-	5.8	0.15	0.1	46	6.0	15.0	Hyperion	1
Atea-1	RLABN	RLABN	-	3.0	0.15	0.1	-	6.9	14.5	Atea-1	1
Icarus	ERAU	ERAU	-	2.3	0.15	0.0	4	15.8	6.4	Icarus	1
Arcon	Arcon	ATLR	-	2.5	0.15	0.1	30	4.5	33.0	Arcon	1
T-55	T-55	THKE?	T55	1.5	0.15	0.0	12	21.0	1.3	T-55	1
ZN-1	ZN	NUDTC	-	2.7	0.15	0.1	-	-	-	ZN-1	1
KI50	ISAS	ISAS	-	3.5	0.15	0.1	10	19.0	15.8	KI50	1
MERA	Mera	KBPT	-	1.0	0.15	0.0	0	-	-	MERA	1
AeroHTV Stage 2	AeroHTV2	KBPT	-	1.7	0.15	0.1	5	8.6	7.6	Loki	4
RTV Motor	BabySergeant	JPL	Baby Sergeant	1.2	0.15	0.0	5	8.6	7.6	RTV	1
Baby Sergeant	BabySergeant	JPL/GCR	-	1.2	0.15	0.0	5	8.6	7.6	RM-3141	1

Stages

Stage_Name	Stage_Family	Stage_Manufacturer	Stage_Alt_Name	Length m	Diameter m	Launch_Mass t	Dry_Mass kg	Thrust kN	Duration s	Engine	MEng
Astrobee D	AstrobeeD	AJSP	-	2.8	0.15	0.1	20	8.9	17.0	Astrobee D	1
Luzou	Luzou	SEP	-	0.3	0.15	0.0	3	3.0	1.7	Luzou	1
P-Vrbec	Amateur	VRBEC	-	1.5	0.15	0.0	5	-	-	P-Vrbec	1
Sirocco	Meteo	SIROCCO	-	2.8	0.15	0.1	20	-	-	Sirocco	1
Meteo	Meteo	SUD	-	3.4	0.15	0.0	0	-	-	-	1
MT-135P	MT-135P	NISST	-	3.3	0.14	0.0	-	12.0	10.5	MT-135	1
Ivanov	Ivanov	FIAN	-	1.0	0.14	0.1	-	-	-	-	1
Ivanov Booster	FIAN	FIAN	-	0.4	0.14	0.1	-	-	-	-	1
GammaCen Booster	GammaCen	IIAE	-	0.8	0.13	0.0	-	-	-	-	1
Emma Booster	Emma	MATRA	-	0.8	0.13	0.0	13	14.8	1.0	SEPR P191	1
Theodore	Monica	AITEF	-	0.8	0.13	0.0	-	1.8	10.0	Theodore	1
Oreste	Monica	AITEF	-	0.5	0.13	0.0	-	0.9	8.0	Oreste	1
Emma	Emma	MATRA	-	1.7	0.13	0.1	11	1.4	37.0	SEPR P163	1
HALO	HALO	HAL5	-	1.6	0.13	0.0	10	0.2	-	HALO	1
Martlet 1	Gum16	SRCI	-	1.5	0.13	0.2	170	0.0	0.0	-	0
Martlet 2	Gum16	SRCI	-	1.5	0.13	0.2	170	0.0	0.0	-	0
Martlet 3A	Gum16	SRCI	-	1.5	0.13	0.2	170	0.0	0.0	-	0
Martlet 3B	Gum16	SRCI	-	1.5	0.13	0.2	170	0.0	0.0	-	0
Gun Projectile 5	Gum05	ERL	-	1.0	0.13	0.1	-	-	-	-	0
Kappa 1	Kappa	ISAS	-	2.7	0.13	0.0	20	10.0	3.0	Kappa 1	1
Kappa 4	Kappa	ISAS	-	2.7	0.13	0.0	20	10.0	3.0	Kappa 4	1
Cygnus 5	5inSM	LAIRC	5"SM	0.2	0.13	0.0	1	2.3	1.6	Cygnus 5	1
FTB	FTB	AVIB	-	3.0	0.13	0.1	1	-	-	SS-30	1
Skua 2	Skua	BAJUK	Skua	2.2	0.13	0.0	10	1.8	30.0	Bantam	1
Skua 3	Skua	BAJUK	Skua	2.4	0.13	0.0	10	1.8	30.0	Bantam 2	1
Aurore	Skua	BAJUK	Skua	2.4	0.13	0.1	12	1.7	34.0	Bantam 3	1
HVAR	Aurore	SNECMA	-	2.1	0.13	0.1	20	10.5	5.3	HVAR	1
HPAG	HVAR	CIT/NOTS	-	1.7	0.13	0.0	17	25.0	0.9	HPAG	1
NOTS 124-C	Sidewinder	NOTS	-	1.8	0.13	0.0	12	12.5	2.7	NOTS 124-C	1
Sidewinder	Sidewinder	THXX	-	1.8	0.13	0.0	0	-	-	-	1
Sidewinder 1C	Sidewinder	THXX	-	1.8	0.13	0.0	0	-	-	Mk 36	1
Sidewinder 1D	Sidewinder	THXX	-	1.8	0.13	0.0	0	-	-	Mk 36 Mod 5	1
Sidewinder 1A	Sidewinder	THXX/NOTS	-	1.9	0.13	0.0	4	12.2	4.7	Mk 50 Mod 0	1
Sidewinder 1A-15	Sidewinder	THXX/NOTS	-	1.9	0.13	0.0	18	17.7	2.1	Mk 17	1
LAPSTAR	Lupus	WRE	-	1.5	0.13	0.1	15	13.7	2.7	LAPSTAR	1
Lupus 2	Lupus	WRE	-	1.7	0.13	0.0	16	9.5	5.2	Lupus 1A	1
Lupus 3	Lupus	WRE	-	1.7	0.13	0.0	16	9.5	4.0	Lupus 2	1
Sonda 1-1	Lupus	WRE	-	2.0	0.13	0.0	16	9.5	4.0	Lupus 3	1
MCR-3	Sonda 1-1	IAE	-	1.5	0.13	0.0	15	27.0	-	Sonda 1 Booster	1
RH-125	RH-125	VSSC	-	1.4	0.12	0.0	0	-	-	MCR-3	1
RH-125S	RH-125	VSSC	-	1.4	0.12	0.0	11	8.4	2.9	RH-125	1
LPR-006	LPR-006	VSSC	-	1.6	0.12	0.0	14	1.3	32.0	RH-125S	1
Black Brant VI	Black Brant VI	BAL	Black Brant 6	3.0	0.13	0.2	-	6.0	-	LPR-006	1
INTA-100	INTA-100	BAL	-	2.0	0.12	0.1	20	7.4	9.0	9KSI660	1
DIM	DIM	IIAE	-	2.5	0.12	0.0	-	1.5	32.0	Urbion	1
Meteor 1	Meteor	PIHM	-	1.8	0.11	0.0	0	-	-	DIM	1
Meteor 3 Booster	Meteor	PIHM	-	1.8	0.11	0.0	10	14.0	2.3	Meteor-1	1
Meteor SRB	Meteor	PIHM	-	1.7	0.11	0.0	10	14.0	2.3	Meteor-1	1
Sonda 1-2	Sonda 1-2	IAE	-	2.1	0.11	0.0	14	4.2	32.0	Sonda 1	1
O4500	Amateur	MESOS	-	1.5	0.11	0.0	15	-	-	O4500	1
Rocketsonde	Rocketsonde	UNK	-	2.0	0.11	0.0	15	-	-	-	1
Rocketsonde2	Rocketsonde2	UNK	-	2.0	0.11	0.0	15	-	-	-	1
Arcas	Arcas	ATLR	-	1.8	0.11	0.0	15	1.5	29.0	MARC 2B1	1
Fragible Arcas	Arcas	ATLR	-	1.8	0.11	0.0	15	1.5	29.0	MARC 2B1	1
HV Arcas	Arcas	ATLR	-	1.6	0.11	0.0	15	1.5	29.0	MARC 2C2	1
Super Arcas	Arcas	ATLR	-	2.0	0.11	0.0	15	1.5	40.0	MARC 60A	1
MARC 14A1	ArcasB	ATLR	-	0.7	0.11	0.0	6	12.0	0.8	MARC 14A1	1
MARC 42A1	ArcasB	ATLR	-	1.6	0.11	0.0	15	12.2	3.0	MARC 42A1	1
MARC 42A2	ArcasB	ATLR	-	0.9	0.11	0.0	-	-	-	MARC 42A2	1
Hopi	Hopi	RPI	-	2.1	0.11	0.0	7	18.0	3.0	Hopi 3 OKS4000	1
Hopi III	Hopi	RPI	-	2.0	0.11	0.0	8	28.0	2.1	Hopi 2.4KXS600	1
Hopi IV	Hopi	RPI	-	2.4	0.11	0.0	9	7.7	9.0	Hopi 9 OKS1800	1
Viper IIIA	Viper3	SDCO	-	2.3	0.11	0.0	9	24.7	2.2	Viper IIIA	1
TWE DART	Viper3	TMINUS	-	2.3	0.11	0.0	7	8.0	6.5	TWE DART	1
Super Loki	SuperLoki	SDCO	-	2.0	0.10	0.0	6	18.0	2.1	Super Loki	1
Stable Super Loki	SuperLoki	SDCO	-	2.3	0.10	0.0	7	21.0	2.1	Stable Super Loki	1
FalconLaunch	SuperLoki	USAF	-	2.0	0.10	0.0	6	18.0	2.1	Super Loki	1
Icarus Stage 2	Icarus2	ERAU	-	1.4	0.11	0.0	4	4.1	7.0	Icarus 8t2	1
Excalibur	Excalibur	BAL	-	2.4	0.11	0.0	13	25.0	2.5	Excalibur	1
Proson 8t2	Proson2	CITEF	-	1.6	0.11	0.0	0	-	-	Proson 2	1
INTA S-12	INTA-100	INTA	-	1.6	0.10	0.0	-	16.7	1.2	INTA S-12	1

Stages

Stage_Name	Stage_Family	Stage_Manufacturer	Stage_Alt_Name	Length m	Diameter m	Launch_Mass t	Dry_Mass kg	Thrust kN	Duration s	Engine	MEng
U-Vrbec	Amateur	VRBEC	-	1.5	0.10	0.0	3	-	-	U-Vrbec	1
Arcon booster	ArcasB	ATLR	-	0.7	0.10	0.0	8	14.0	0.4	Arcon booster	1
IIR-33 Booster	BurstynBooster	PAI	-	1.4	0.10	0.1	-	6.0	2.5	IIR-33 Booster	1
SkyLarkMicro Booster	SkyLarkMicro	SKYR	-	1.5	0.10	0.0	-	1.6	-	SkyMicro1	1
Chick	Chick	RORD	-	0.6	0.10	0.1	6	20.0	0.2	Chick	1
Chick x3	Chick	RORD	-	0.6	0.10	0.0	6	60.0	0.2	Chick	1
Chick x4	Chick	RORD	-	0.6	0.10	0.0	6	80.0	0.2	Chick	1
SPEAR-HRT St 1	Amateur	USMA	-	1.4	0.10	0.0	5	6.5	4.3	US280X-PS DMS	1
Belisama	USMA	CFTHB	-	1.6	0.10	0.0	14	24.0	0.9	Belisama	1
SEPR P167	SEPR167	SEP	-	1.0	0.10	0.0	-	-	-	SEPR P167	1
KM-L	KM-L	NISST?	-	0.1	0.10	0.0	4	-	-	KM-L	1
ST	STA	MHITO?	-	1.0	0.10	0.0	-	-	-	S-B	1
SA-II	SA	MHITO?	-	1.0	0.10	0.0	-	-	-	SA-II	1
GammaCen Sustainer	GammaCens	IAE	-	1.6	0.09	-	-	-	-	-	1
LARC Plastic	LARC Plastic	LARC	LARC Plastic rocket	0.5	0.09	0.0	1	0.3	3.0	LARC Plastic	1
Musca	Musca	WRE	-	1.7	0.09	0.0	-	5.1	3.7	Musca	1
Arrow II	Arrow	GCR	-	1.5	0.08	0.0	2	10.0	2.0	Arrow II	1
Loki-Dart	Loki	GCR?	Loki II Dart	1.7	0.08	0.0	3	15.0	0.8	Loki	1
Loki SR71-AD-1	Loki	SDCC	-	1.7	0.08	0.0	1	9.0	2.0	SR71-AD-1	1
Loki II	Loki	GCR	Loki	1.7	0.08	0.0	1	9.0	2.0	Loki II	1
Loki	Loki	GCR?	Loki	1.7	0.08	0.0	3	15.0	0.8	Loki	1
Judi I	Loki	RPI	-	1.7	0.08	0.0	2	9.0	1.9	Judi-I 1.9K82150	1
Judi III	Loki	RPI	-	2.3	0.08	0.0	2	9.0	1.9	Judi-III 1.9K82100	1
Seagull	Unknown	USN?	-	1.5	0.08	0.0	0	10.0	2.0	Seagull	1
Metroc	Loki	ATLR	-	1.4	0.08	0.0	0	0.6	17.5	MARC 21A1	1
Cedre St3	Cedre.St3	LRS	-	2.1	0.08	0.2	-	20.0	-	Cedre St3	1
RH-75	RH-75	VSSC	-	1.2	0.08	0.0	-	-	-	RH-75	1
NOTS 3in Sph.	NOTS.3inSM	NOTS	-	1.1	0.08	0.0	1	0.7	1.0	NOTS 3SM	1
Black Brant VII	Black Brant VII	BB7	-	1.7	0.09	0.0	10	1.0	4.0	BB7	1
M830	MESOS	BAL	-	1.5	0.08	0.0	15	-	-	M830	0
HAEC FFAR	Amateur	UNK	-	1.4	0.08	0.0	-	-	2.8	HAEC FFAR	1
SkyLarkMicro	FFAR	SKYR	-	1.8	0.08	0.0	-	0.8	-	SkyMicro2	1
SPEAR-HRT St 2	Amateur	USMA	-	1.0	0.07	0.0	2	2.3	4.3	Pro76-66XL	1
FFAR	FFAR	PAR	-	1.2	0.07	0.0	5	3.6	1.5	FFAR	1
Mk7	FFAR	PAR	-	1.2	0.07	0.0	9	9.8	0.9	Mk7	1
MAL-7	STA	MHITO?	-	2.0	0.07	0.0	0	5.0	1.0	MAL-7	1
Balloon	Air	-	-	0.0	0.00	0.0	0	0.0	0.0	-	0
F-104A Starfighter	Air	-	-	0.0	0.00	0.0	0	0.0	0.0	-	0
F2H2 Banshee	Air	-	-	0.0	0.00	0.0	0	0.0	0.0	-	0
F3H Cougar	Air	-	-	0.0	0.00	0.0	0	0.0	0.0	-	0
F4B Phantom	Air	-	-	0.0	0.00	0.0	0	0.0	0.0	-	0
F4D Phantom	Air	-	-	0.0	0.00	0.0	0	0.0	0.0	-	0
F4D-1 Skyray	Air	-	-	0.0	0.00	0.0	0	0.0	0.0	-	0
F4H Phantom	Air	-	-	0.0	0.00	0.0	0	0.0	0.0	-	0
F-15D	Air	-	-	0.0	0.00	0.0	0	0.0	0.0	-	0
F86D Sabrejet	Air	-	-	0.0	0.00	0.0	0	0.0	0.0	-	0
F89J Scorpion	Air	-	-	0.0	0.00	0.0	0	0.0	0.0	-	0
B-47 Stratojet	Air	-	-	0.0	0.00	0.0	0	0.0	0.0	-	0
RB-57B	Air	-	-	0.0	0.00	0.0	0	0.0	0.0	-	0
B-57A Canberra	Air	-	-	0.0	0.00	0.0	0	0.0	0.0	-	0
B-58 Hustler	Air	-	-	0.0	0.00	0.0	0	0.0	0.0	-	0
MB-52	Air	-	-	0.0	0.00	0.0	0	0.0	0.0	-	0
B-52H	Air	-	-	0.0	0.00	0.0	0	0.0	0.0	-	0
C-17	Air	-	-	0.0	0.00	0.0	0	0.0	0.0	-	0
C-130	Air	-	-	0.0	0.00	0.0	0	0.0	0.0	-	0
White Knight	Air	-	-	0.0	0.00	0.0	0	0.0	0.0	-	0
White Knight 2	Air	-	-	0.0	0.00	0.0	0	0.0	0.0	-	0
MIG31D 072	Air	-	-	0.0	0.00	0.0	0	0.0	0.0	-	0
MIG-31	Air	-	-	0.0	0.00	0.0	0	0.0	0.0	-	0
L-1011	Air	-	-	0.0	0.00	0.0	0	0.0	0.0	-	0
B747-GC	Air	-	-	0.0	0.00	0.0	0	0.0	0.0	-	0
Navaho Booster	Navaho	NAAD	-	23.2	-	-	-	0.0	0.0	G-38	2
Navaho Missile	X-10	NAAD	-	21.3	-	-	-	0.0	0.0	-	0
X-10	X-10	NAAD	-	21.3	-	-	-	0.0	0.0	-	0
Regulus	Regulus	VOUA	-	10.1	1.40	6.6	-	0.0	0.0	-	0
Regulus II	Regulus	VOUA	-	20.5	1.30	10.2	-	0.0	0.0	-	0
Matador	Matador	MARTB	-	0.0	0.00	0.0	0	0.0	0.0	TX-16-1	0
Matador	Matador	MARTB	-	0.0	0.00	0.0	0	0.0	0.0	TU-223	0
Shark Booster	Shark	MORRH	-	0.0	0.00	0.0	0	0.0	0.0	N-69C Shark JATO	2
BLDT	BLDT	-	-	0.0	0.00	0.0	0	0.0	0.0	RS-B-535	4
Bomarc A	Bomarc	BOC	-	0.0	0.00	0.0	0	0.0	0.0	LR59-AJ-13	0
Bomarc B	Bomarc	BOC	-	0.0	0.00	0.0	0	0.0	0.0	XM-51	0
Bull Goose	BullGoose	FAIRA	-	0.0	0.00	0.0	0	0.0	0.0	-	0



Stage_Name	Stage_Family	Stage_Manufacturer	Stage_Alt_Name	Length m	Diameter m	Launch_Mass t	Dry_Mass kg	Thrust kN	Duration s	Engine	MEng
Hound Dog	HoundDog	MAA	-	0.0	0.00	0.0	0	0.0	0.0	-	0
X-7	X-7	LVN	-	0.0	0.00	0.0	0	0.0	0.0	-	0
X-51A	X-51	EMAP	-	4.5	0.61	0.0	0	0.0	0.0	-	0
D-21B	D-21B	LAC	-	13.1	2.10	5.1	0	0.0	0.0	-	0
BOZ	BOZ	PROG	-	0.0	0.00	0.0	0	0.0	0.0	-	0
SOZ	SOZ	PROG	-	0.0	0.00	0.0	0	0.0	0.0	-	0
Perekhodnik	Perekhodnik	-	-	0.0	0.00	0.0	0	0.0	0.0	-	0
Sep Motor Cover	Perekhodnik	-	-	0.0	0.00	0.0	0	0.0	0.0	-	0
S-II Interstage	Interstage	-	-	0.0	0.00	0.0	0	0.0	0.0	-	0
Dummy stage	Generic	-	-	0.0	0.00	0.0	0	0.0	0.0	-	0
R-UNK	UNK	UNK	-	0.0	0.00	-	-	-	-	-	1



Name	Manufacturer	Family	Alt_Name	Oxidizer	Fuel	Engines		Thrust kN	Isp s	Duration s	Chambers	Date	Usage	Group
						Mass kg	Impulse kN/s							
Solid propellant engines														
RSRW	NGISP	RSRM	-	-	PBAN	726000.0	1320000	9996.00	-	132.8	1	2022	SLS SRB	Solid
SRMU	THKU	SRM	-	-	PBAN	590000.0	-	11790.00	267.3	123.0	1	1981	STS SRB	Solid
SRMU	ATXP	SRMU	-	-	HTPB	350000.0	-	7600.00	285.6	137.8	1	1984	Titan 4B	Solid
UA1207	UTC	T3SRM	-	-	Solid	319300.0	-	7116.90	272.0	120.0	1	1989	Titan 4 SRM	Solid
EAP MPS P238	EURODPK	Ariane	P230	-	HTPB	268000.0	-	5000.00	275.4	129.0	1	1996	Ariane 5 EAP	Solid
EAP MPS P240	EURODPK	Ariane	P230	-	HTPB	277500.0	-	5000.00	275.4	129.0	1	1996	Ariane 5 EAP	Solid
UA1206	UTC	T3SRM	-	-	Solid	251400.0	-	6227.00	265.0	114.0	1	1989	Titan 34D SRM	Solid
UA1205	UTC	T3SRM	-	-	Solid	226200.0	-	5293.30	263.0	115.0	1	1965	Titan 3 SRM	Solid
S200	VSSC	GSDM-200	-	-	HTPB	207000.0	-	6000.00	274.0	105.0	1	2009	GSLV3 GSDM	Solid
SI39	VSSC	PSI	-	-	HTPB	168000.0	-	4430.00	289.0	106.0	1	1993	PSLV PSI	Solid
S125	VSSC	PSI	-	-	HTPB	157300.0	-	4801.00	266.0	93.0	1	1993	GSLV S125	Solid
P120C	AVIO	-	-	-	HTPB-2013	453000.0	368900	4500.00	278.5	132.8	1	2017	Vega-C	Solid
P80FW	AVIO	-	-	-	HTPB	97131.0	242721	2100.00	280.0	106.8	1	2012	Vega [1]	Solid
S85	ISRO	ISRO	-	-	HTPB	87000.0	-	2600.00	-	117.0	1	2021	SSLV [1]	Solid
M-14	NISST	Mu	-	-	HTPB BP-204J	84000.0	-	3786.00	276.0	49.0	1	1995	Mu V [1]	Solid
H-II SRB-A3	NISST	MASDA	-	-	HTPB	76500.0	-	2305.00	283.6	120.0	1	-	H2A SRB-A	Solid
H3 SRB-3	NISST	MASDA	-	-	HTPB	76200.0	-	2158.00	283.6	110.0	1	2023	H3 SRB-3	Solid
H-II SRB-A	NISST	MASDA	-	-	HTPB	75000.0	-	2250.00	280.0	100.0	1	-	H2A SRB-A	Solid
H-II SRB	NISST	MASDA	-	-	HTPB	70400.0	-	1550.00	273.0	94.0	1	1994	H2 SRB	Solid
15D305	YUZH	-	-	-	Solid	53700.0	-	2060.00	-	-	1	-	RT-23 [1]	Solid
3065	YUZH	-	-	-	Solid	53700.0	-	2060.00	-	-	1	-	R-39 [1]	Solid
15D206	YUZH	-	-	-	Solid	53700.0	-	2060.00	-	-	1	-	RT-23 [1]	Solid
GEN-63XL	NGISH	-	-	-	HTPB	53400.0	-	2026.00	275.0 ?	84.0	1	2020	GEN-63XL	Solid
GEN-63	OATKH	-	-	-	HTPB	49300.0	-	1663.00	275.0 ?	94.0	1	2015	GEN-63	Solid
Castor 120	THKU	MX	-	-	HTPB	53100.0	-	1604.00	280.0	83.4	1	1995	Athena [1]	Solid
SR118	THKU	MX	TU-904	-	HTPB	48625.0	-	1711.00	281.4	78.8	1	1983 Jun 17	Peacekeeper [1]	Solid
GEN-60	OATKH	-	-	-	Solid	46200.0	-	1361.00	275.0	90.0	1	2015	Atlas V SRM	Solid
GEN-60 (D)	ATKH	GEN	-	-	HTPB	33200.0	-	788.00	275.0	90.0	1	2002 Nov 20	Delta IV SRB	Solid
AJ-60A	AJSP	-	-	-	Solid	46200.0	-	1361.00	275.0	90.0	1	2003	Atlas V SRM	Solid
CZ-11-1	SLREC	-	-	-	Solid	40000.0	-	-	248.0	-	1	2016	CZ-11 [4]	Solid
D-5-1	THKU/HERC	-	-	-	Solid	39100.0	-	-	288.0 ?	64.0	1	1995	Trident II [1]	Solid
M-25	NISST	Mu	-	-	HTPB BP-204J	38000.0	-	1240.00	288.0 ?	71.0	1	1995	Mu V [2]	Solid
Zefiro-40C	AVIO	-	-	-	HTPB-2013	39270.0	103600	1120.00	293.5	92.9	1	2017	Vega-C [2]	Solid
ZF-6A Booster	AMT?	-	-	-	Solid	35000.0 ?	-	1200.00 ?	-	-	1	2020	Vega-C [2]	Solid
DF-31-1	ARMT	-	-	-	Solid	35000.0 ?	-	-	-	-	1	-	DF-31 [1]	Solid
DF-41-1	ARMT	-	-	-	Solid	35000.0 ?	-	-	-	-	1	-	DF-31 [1]	Solid
15D23P	ARSL	RT-2	-	-	Solid	34550.0	-	981.00	-	75.4	1	-	RT-2P [1]	Solid
15D23	ARSL	RT-2	-	-	Solid	34550.0	-	893.00	-	75.4	1	-	RT-2 [1]	Solid
M-24	NISST	Mu	-	-	HTPB BP-204J	34000.0	-	1246.00	288.0	71.0	1	1995	Mu V [2]	Solid
M-13	NISST	Mu	-	-	CTPB	33407.0	-	954.00	239.0	70.0	1	1977	Mu SR [1]	Solid
Agn1 III	DRDO	Agn13	-	-	HTPB/AP/Al	33000.0	-	1040.00	237.0 s	75.0	1	2006	Agn1 3 [1]	Solid
MSBS 501	G2P/SNEPCS	-	-	-	Solid	30000.0 ?	-	900.00	-	60.0	1	-	MSBS M51 [1]	Solid
SR119	AJSP	MX Stage 2	-	-	HTPB	27669.0	-	1365.00	304.0	54.0	1	1983 Jun 17	Peacekeeper [2]	Solid
Castor 30XL	THKU	-	-	-	Solid	27400.0 ?	-	350.00	-	166.0	1	-	Taurus 2 [2]	Solid
M-10	NISST	Mu	-	-	Solid	26555.0	-	737.00	219.0	61.0	1	1970	Mu AS [1]	Solid
RD RT-21 (1)	MITT	-	-	-	Solid	26000.0	-	-	-	63.0	1	-	Temp-2S [1]	Solid
15Zb58A	MITT	Topol	-	-	Solid	26000.0	-	980.00	283.0	60.0	1	-	Start-1 [1]	Solid
Zefiro 23	AVIO	-	-	-	HTPB	26563.0	67776	935.00	289.0	71.7	1	2012	Vega [2]	Solid
15D339	YUZH	-	-	-	Solid	25000.0 ?	-	1050.00	-	-	1	-	RT-23 [2]	Solid
15D207	YUZH	-	-	-	Solid	25000.0 ?	-	1050.00	-	-	1	-	RT-23 [2]	Solid
15D290	YUZH	-	-	-	Solid	25000.0 ?	-	1050.00	-	-	1	-	RT-23 [2]	Solid
R-39 St. 2	YUZH	-	-	-	Solid	25000.0 ?	-	1050.00	-	-	1	-	RT-23 [2]	Solid
HS-18-51	KPA	-	-	-	Solid	25000.0 ?	-	-	-	-	1	-	HS-18 [1]	Solid
M55A1	THKU	Minuteman	M55A1	-	PBAN	22930.0	54730	792.00	266.1	59.3	4	1961 Feb 1	Minuteman 1A XM-55	Solid
TU-122	THKU	Minuteman	M55E1	-	PBAN	23240.0	-	891.00	-	60.0	4	1962 Dec 7	Minuteman 1B	Solid
TU-122-ATK	ATXP	Minuteman	M55E1	-	PBAN	23240.0	-	891.00	-	60.0	4	1962 Dec 7	Minuteman 3 PRP	Solid
SEP 401	SEP	401	-	-	Butalane	22500.0	-	900.00	-	60.0	1	1980 Nov 18	MSBS M4 [1]	Solid
LEO-46	AJSP	-	-	-	HTPB	22102.0	56360	1265.40	-	76.0	1	2015	Super Strypi [1]	Solid
Rare	IRGC	-	-	-	Solid	20000.0 ?	-	-	-	-	1	-	Qaem-100 [1]	Solid
GEN-46	ATKH	GEN	-	-	HTPB	19040.0	45730 ?	608.10	274.0	75.2	1	-	Delta III SRB	Solid
DF-26-1	ARMT	-	-	-	Solid	19000.0 ?	-	890.00	239.7	65.0	1	-	DF-26 [4]	Solid
DF-27-1	ARMT	-	-	-	Solid	19000.0 ?	-	900.00	239.7	65.0	1	-	DF-26 [1]	Solid
RT-1-1	OKB1	-	-	-	Solid	19000.0 ?	-	900.00	-	30.0	1	-	RT-1 [1]	Solid
Hyperbola-1 M1	ARMT	-	-	-	Solid	18000.0	-	770.00	245.0	65.0	1	-	Hyperbola-1 [1]	Solid
Zefiro	FIATA	Zefiro	-	-	HTPB 1814	17260.0	41830	545.00	271.0	71.0	1	1999	Hyperbola-1 [1]	Solid
M-35	NISST	Mu	-	-	HTPB	17200.0	-	490.00	295.0	129.0	1	2016	Epsilon	Solid
Ceres-1 M1	XIDO	-	-	-	HTPB	17000.0 ?	-	590.00	-	74.0	1	2020	RT-20P [1]	Solid
15D15	NII125/YUZH	-	-	-	Solid	16700.0	-	600.00	280.0	65.0	4	1967	RT-20P [1]	Solid
DF-21-1	ARMT	-	-	-	Solid	16621.0	-	239.7	239.7	65.0	1	-	DF-21 [1]	Solid
Orion 50SXL	ATKH	Orion	-	-	HTPB	16400.0	43586	594.00	295.0	73.4	1	1994	Pegasus XL [1]	Solid

Name	Manufacturer	Family	Alt_Name	Oxidizer	Fuel	Engines Mass kg	Impulse kN/s	Thrust kN	Isp s	Duration s	Chambers	Date	Usage	Group
Orion 505XLG	ATKH	Orion	-	-	HTPB	16400.0	43586	594.00	295.0	73.4	1	2003	Taurus Lite [1]	Solid
Orion 505XLT	ATKH	Orion	-	-	HTPB	16400.0	43586	594.00	295.0	73.4	1	2003	IBHM-TI [1]	Solid
SICBM	THKU?	P-16	-	-	HTPB/NG/BTTN	16100.0	-	979.00	-	40.0 ?	4	1989 May 11	SICBM [4]	Solid
SEP 902	SEP	P-10	-	-	Isolane	16000.0	-	540.00	-	-	4	1968 Dec 21	SSBS S2 [1]	Solid
3D17	PERM	-	-	-	HTPB	16000.0 ?	-	579.00	-	84.0	1	1973	R-31 [1]	Solid
H-II SSB (A)	NISST	MASDA	-	-	HTPB	15500.0 ?	-	745.00	282.0	60.0	1	-	H2A SSB	Solid
RT-23-3	YUZH	-	-	-	Solid	15000.0 ?	-	206.00	-	-	1	-	RT-23 [3]	Solid
CZ-11-2	CALT	-	-	-	Solid	15000.0 ?	-	-	-	-	1	-	CZ-11 [2]	Solid
5847	KAZSOY	-	-	-	Solid	15000.0 ?	-	-	-	5.0	1	1968	A-350Zh booster	Solid
Agni P S1	DRDO	-	-	-	Solid	15000.0 ?	-	-	-	5.0	1	2021	Agni P [1]	Solid
A-350 Booster	KAZSOY	-	-	-	Solid	15000.0 ?	-	-	-	5.0	1	1968	A-350 booster	Solid
5176 Motor	KAZSOY	-	-	-	Solid	15000.0 ?	-	-	-	5.0	1	1968	A-350 booster	Solid
Modol' St 1	ALMAN	-	-	-	Solid	15000.0 ?	-	-	-	5.0	1	2015	A-235	Solid
TX-780XL	THXX	Castor	Castor IVAXL	-	HTPB	14851.0	-	599.80	289.0	60.0	1	1980s	Atlas	Solid
Kairos Stage 1	SPONE	-	-	-	Solid	14700.0	-	-	-	-	1	2024	Kairos [1]	Solid
Algol 3A	UTC	Algol III	-	-	Solid	14136.0	32040	477.00	288.2	78.0	1	-	Scout [1]	Solid
Castor 30	THKU	Castor	-	-	Solid	14035.0	35200	259.00	301.0	136.0	1	-	Taurus 2 [2]	Solid
Agni III S2	DRDO	Agni3	-	-	HTPB/AP/Al	14000.0	-	315.00	294.0	110.0	1	2006	Agni 3 [2]	Solid
5S24	KAZSOY	-	-	-	Solid	14000.0 ?	-	-	-	-	1	-	V-825 [1]	Solid
Castor 30B	THKU	Castor	-	-	Solid	13970.0	37300	293.40	304.0	127.0	1	-	Taurus 2 [2]	Solid
Orion 50S	ATKH	Orion	-	-	HTPB	13420.0	35108	485.00	294.4	72.4	1	1990	Pegasus [1]	Solid
M-23	NISST	Mu	-	-	HTPB	13100.0	-	524.00	282.0	73.0	1	1980	Mu 3S [2]	Solid
GEM-40	ATKH	GEM	-	-	HTPB	13080.0	31600 ?	499.20	274.0	63.3	1	-	Delta II SRB	Solid
15Zh58B	MITT	Topol	-	-	Solid	13000.0	-	490.00	280.0	64.0	1	-	Start-1 [2]	Solid
ATSM-13	IAI	Shaviyt	-	-	HTPB	13000.0	-	775.00	250.0 s	55.0	1	1994	Shaviyt-1 [1]	Solid
Hyperbola-1 M2	HEXI	-	-	-	Solid	13000.0	-	597.00	282.0	-	1	-	Hyperbola-1 [2]	Solid
Sejjil	IR	-	-	-	Solid	12600.0 ?	-	650.00	230.0	45.0	1	-	Sejjil	Solid
PAP	FIATA	Ariane	P9.5	-	CTPB	12600.0	-	650.00 s	241.0 s	42.0	1	1988	Ariane 4 PAP	Solid
PSOM-XL	VSSC	PSOM	-	-	HTPB	12400.0	20700	677.00	282.0	58.0	1	2006	PSLV PSOM	Solid
C4-1	THKU/HERC	-	-	-	Solid	12100.0	-	-	-	-	1	-	Trident C-4 [1]	Solid
HS-18-S2	KFA	-	-	-	Solid	12000.0 ?	-	-	-	-	1	-	HS-18 [2]	Solid
9M76	VOTK	-	-	-	Solid	11900.0	-	-	-	-	1	-	Temp-S	Solid
9M76B	VOTK	-	-	-	Solid	11900.0	-	-	-	-	1	-	Temp-S	Solid
D-5-2	HERC	-	-	-	Solid	11800.0	-	-	-	65.0	1	-	Trident II [2]	Solid
ASLV AS-1	VSSC	-	-	-	Solid	11800.0	-	702.00	259.0	45.0	1	-	ASLV [1]	Solid
S9	VSSC	-	-	-	Solid	11800.0	-	702.00	259.0	45.0	1	1968	S9	Solid
ASLV SRM	VSSC	-	-	-	Solid	11600.0	-	422.00	253.0	49.0	1	-	ASLV [0]	Solid
M-34c	NISST	Mu	-	-	HTPB BP-205J	11600.0	-	294.00	301.0	102.0	1	1995	Epsilon	Solid
M-34	NISST	Mu	-	-	HTPB BP-205J	11600.0	30000	294.00	301.0	102.0	1	1995	Mu V [3]	Solid
TX-780	THXX	Castor	Castor IVA	-	HTPB	11600.0	26460	433.70	237.8 s	56.2	1	1980s	Atlas IIAS [-4]	Solid
TX-859	THXX	Castor	Castor IVB	-	HTPB	11476.0	26150	429.00	700.0 ?	45.0 ?	1	1991	Agni [1]	Solid
15D24P2	ARSL	RT-2	-	-	Solid	11280.0	-	440.00	60.6	60.6	4	-	RT-2P [2]	Solid
A3P-1	AJSP	-	-	-	Polyurethane/AP	11100.0	-	-	-	-	1	1960	Polaris A3 [1]	Solid
15D27	TSKBT	RT-2	-	-	Solid T9-BK-6	11000.0 ?	-	412.00	-	60.0	4	1965	RT-15 [1]	Solid
PSM	VSSC	PSOM	-	-	HTPB	11000.0	20700	677.00	262.0	44.2	1	1993	PSLV PSOM	Solid
RSA-3-2	HOUW	RSA	-	-	Solid	10971.0	-	477.00	277.0	52.0	1	1988	RSA-3	Solid
SIV-3-1	VSSC	-	-	-	Solid	10800.0	-	422.00	253.0	49.0	1	1979	SIV-3 [1]	Solid
SIV-3-1/D4	VSSC	-	-	-	Solid	10800.0	-	590.00	253.0	55.0	1	1979	SIV-3 [1] prop 8490	Solid
Algol IIC	AJSP	Algol	-	-	Solid	10795.0	24390	436.70	288.9	76.1	1	1965	Scout [1]	Solid
Algol IIB	AJSP	Algol	-	-	Solid	10759.0	24352	449.20	288.9	80.0	1	1965	Scout B [1]	Solid
Algol I	AJSP	Algol	-	-	Solid	10710.0	18240	458.60	214.0	40.0	1	1960	Scout [1]	Solid
Algol IA	AJSP	Algol	AJ Senior	-	Solid	10710.0	18240	458.60	214.0	40.0	1	1960	Scout [1]	Solid
Algol IB	AJSP	Algol	AJ Senior	-	Solid	10710.0	18240	458.60	214.0	40.0	1	1960	Scout [1] ?	Solid
Algol IC	AJSP	Algol	AJ Senior	-	Solid	10710.0	18240	458.60	214.0	40.0	1	1960	Scout [1] ?	Solid
Algol IIA	AJSP	Algol	-	-	Solid	10709.0	24337	465.10	288.3	68.2	1	1965	Scout [1]	Solid
Algol ID	AJSP	Algol	-	-	Solid	10700.0	18100	413.00	44.0	44.0	1	1960	Scout [1]	Solid
Orbus 21D	UTC	Orbus	-	-	HTPB	10619.0	28140	187.00	293.0	150.0	1	1982 Oct 30	IUS [1]	Solid
TX-526	THXX	Castor 4	-	-	PBA	10634.0	23760	428.00	63.9	53.9	1	1971	Athena H [1]	Solid
H-II SSB	NISST	MASDA	-	-	HTPB	10500.0	-	338.00	267.0	66.0	1	1995	H2 SSB	Solid
RSA-3-1	HOUW	RSA	-	-	Solid	10215.0	-	451.00	265.0	52.0	1	1988	RSA-3	Solid
A2P-1	AJSP	-	-	-	Polyurethane/AP	10100.0	-	-	-	-	1	1960	Polaris A2 [1]	Solid
SEP 903	SEP	P-10	P-10	-	Isolane	10000.0	-	440.00	-	50.0	4	1965 Oct 23	SSBS S2 [2]	Solid
SEP 904	SEP	P-10	P-10	-	Isolane	10000.0	-	450.00	-	50.0	4	1966 May	MSBS M1 [1]	Solid
SEP 901	SEP	P-10	P-10	-	Isolane	10000.0	-	440.00	-	50.0	4	1966 May	SSBS S01 [1]	Solid
Zoljannah-1	IRGC	-	-	-	Solid	10000.0 ?	-	-	-	-	1	-	Zoljannah [1]	Solid
KPN-Solid1	KP	-	-	-	Solid	10000.0 ?	-	-	-	-	1	-	KN-11-1	Solid
Agni V S3	DRDO	Agni3	-	-	HTPB/AP/Al	10000.0 ?	-	315.00	294.0	110.0	1	2006	Agni 3 [2]	Solid
MSBS 502	G2P/SNECFS	-	-	-	Solid	10000.0 ?	-	300.00	-	70.0	1	-	MSBS M51 [2]	Solid
C3-1	THKU/HERC	-	-	-	Solid	10000.0 ?	-	-	-	-	1	1968	Poseidon C-3 [1]	Solid
DF-31-2	ARMT	-	-	-	Solid	10000.0 ?	-	-	-	-	1	-	DF-31 [2]	Solid
DF-41-2	ARMT	-	-	-	Solid	10000.0 ?	-	-	-	-	1	-	DF-41 [2]	Solid
R-39 St. 3	MAK	-	-	-	Solid	10000.0 ?	-	-	-	-	1	-	R-39	Solid

Name	Manufacturer	Family	Alt_Name	Oxidizer	Fuel	Engines Mass kg	Impulse kN/s	Thrust kN	Isp s	Duration s	Chambers	Date	Usage	Group
53T6	PERM/KAZSOY	-	-	-	Solid	10000.0 ?	-	-	-	-	1	-	53T6	Solid
5Ya26	PERM/KAZSOY	-	-	-	Solid	10000.0 ?	-	-	-	-	1	-	5Ya26	Solid
RD RT-15-2	OKB1	-	-	-	Solid	10000.0 ?	-	500.00	-	30.0	1	-	RT-15	Solid
M-20	NISST	Mu	-	-	Solid	9850.0	-	285.00	261.0	66.0	1	1970	Mu 4S [2]	Solid
M-22	NISST	Mu	-	-	Solid	9833.0	-	285.00	273.0	70.0 ?	1	1972	Mu 3C [2]	Solid
Zefiro 9A	AVIO	-	-	-	HTPB	9730.0	-	221.00	294.0	110.0	1	2012	Vega [3]	Solid
15D24	ARSL	RT-2	-	-	Solid	9600.0	-	432.00	-	59.0	1	-	RT-2 [2]	Solid
ATSM-9	IAI	Shaviyt	-	-	HTPB	9100.0	-	-	-	-	1	1988	Shaviyt [2]	Solid
TX-500	THKXM	-	-	-	CTPB	9000.0 ?	-	2000.00	-	-	1	1968	Spartan[1]	Solid
S-43	IAE	Sonda	-	-	Solid	8820.0	19500	308.00	279.1	70.0	1	1980 Nov 18	MSBS M4 [2]	Solid
SEP 402	SEP	402	-	-	Butalane	8800.0	-	300.00	-	62.0	1	-	VLS	Solid
RD RT-21 St2	MIIT	-	-	-	Solid	8700.0	-	-	-	245.0 ?	1	-	Pioneer [2]	Solid
RD RT-21-3	MIIT	-	-	-	Solid	8700.0	-	-	-	-	1	-	RT-21 [3]	Solid
DF-21-2	ARMT	-	-	-	Solid	8686.0	-	-	286.4	62.0	1	-	DF-21 [2]	Solid
TR-1	MASDA	-	-	-	HTPB BP-201J	8558.0	32000 ?	698.00	271.6	52.0	1	1989	TR-1	Solid
TR-1A	MASDA	-	-	-	HTPB BP-201J	8558.0	32000 ?	716.00	271.6	49.0	1	1989	TR-1A	Solid
PS3	VSSC	PS3	-	-	HTPB	8400.0	28000	324.00	294.0	83.0	1	1993	PSLV PS3	Solid
A1P-1	AJSP	-	-	-	Polyurethane/AP	8330.0	-	-	-	-	1	1960	Polaris A1 [1]	Solid
C4-2	HERC	-	-	-	Solid	8000.0	-	-	-	-	1	-	Trident C-4 [1]	Solid
Ceres-1 M2	XIDO	-	-	-	HTPB	8000.0 ?	-	274.00	285.8	70.0	1	2020	GS-1 [2]	Solid
SR120	HERC	MX Stage 3	-	-	NEPE Polyethane	7983.0	-	329.00	306.0	62.0	1	1983 Jun 17	Peacekeeper [3]	Solid
S7	ISRO	-	-	-	HTPB	7700.0	-	250.00	-	121.0	1	2021	SSLV [2]	Solid
ST-735-1	ISAS	-	-	-	Solid	7400.0	-	250.00	-	49.0	1	-	ST-735 [1]	Solid
SR19	AJSP	Minuteman-SR	-	-	CTPB	7280.0	-	270.00	287.5	65.5	1	1964 Sep 24	Minuteman 2/3 [2]	Solid
SR19-ATK	ATKP	Minuteman-SR	-	-	CTPB	7033.0	-	268.00	287.5	65.5	1	2004	Minuteman 2/3 [2]	Solid
JL1-1	CALT	-	-	-	Solid	7000.0 ?	-	-	-	-	1	2019	JL-1 (1)	Solid
JL1-2	CALT	-	-	-	Solid	7000.0 ?	-	-	-	-	1	2019	JL-1 (2)	Solid
C3-2	HERC	-	-	-	Solid	7000.0 ?	-	-	-	-	1	1968	Poseidon C-3 [2]	Solid
Alfa	BDP	Alfa	-	-	Solid	6500.0 ?	-	250.00 ?	-	57.0	1	1973	Alfa [1]	Solid
R-31 St 2	PERM	-	-	-	Solid	6500.0 ?	-	233.00	-	73.6	1	1973	R-31 [2]	Solid
TX-454	THKX/THKXM	-	-	-	CTPB	6454.0	-	-	-	-	1	1967	Spartan [2]	Solid
DF-15	ARMT	-	-	-	Solid	6200.0	-	-	-	-	1	-	DF-15	Solid
LPC	LPC	-	-	-	Solid	6000.0	-	121.00	-	89.0	1	-	D-21 booster	Solid
Rita II	SEP	P-6	P6	-	Isolane	6000.0	-	320.00	280.0	52.0	1	1973	MSBS M2 [2]	Solid
15Za58V	MIIT	Topol	-	-	Solid	6000.0	-	245.00	-	56.0	1	-	Start-1 [3]	Solid
FG-46	HEXI	-	-	-	Solid	5985.0	-	292.00	177.0	87.0	1	1990	EPKM	Solid
L735	NISST	L735	-	-	Polyurethane	5982.0	-	383.00	215.0	28.8	1	1966	Lambda [1]	Solid
M56A1 PRP	AJSP	Aries	M56A1	-	Polyurethane	5480.0	12400	202.00	287.3	61.0	4	1961 Feb 1	Minuteman 1A	Solid
DF-11	SANJ	-	-	-	Solid	5400.0	-	93.20	-	-	1	-	DF-11	Solid
SQ/DF-11	SANJ	-	-	-	Solid	5400.0	-	93.20	-	-	1	-	DF-11	Solid
S-40	IAE	Sonda	-	-	PHL/AP/Al	5340.0	11600	191.00	270.8	58.2	1	1991	V5-40 [1]	Solid
TX-135	THX	-	-	-	CTPB	5295.0	-	2000.00	-	4.5	1	1968	Spartan [1]	Solid
M56A1	AJSP	Aries	M56A1	-	Polyurethane	5240.0	12400	207.00	287.3	61.0	4	1961 Feb 1	Minuteman 1A	Solid
Karos Stage 2	SPOME	-	-	-	Solid	5200.0	-	-	-	-	1	2024	Karos [2]	Solid
SB-735	NISST	L735	-	-	CTPB	5124.0	-	328.00	286.0	38.0	1	1985	Mu S3II [0]	Solid
Stonechat II	RPEW	-	-	-	Solid	5090.0	9610	242.00	293.0 ?	32.8	1	1971	Stonechat	Solid
MSBS 503	G2P/SMECPs	-	-	-	Solid	5000.0 ?	-	100.00	-	40.0	1	-	MSBS M51 [3]	Solid
KN-Solid6	KP	-	-	-	Solid	5000.0 ?	-	-	-	-	1	-	KN-11-1	Solid
Shourya	DRDO	-	-	-	Solid	5000.0 ?	-	-	-	-	1	-	Shourya [2]	Solid
Agri P S2	DRDO	-	-	-	Solid	5000.0 ?	-	-	-	-	1	2021	Agri P[2]	Solid
Sejil St 2	IR	-	-	-	Solid	5000.0 ?	-	560.00	230.0	20.0 ?	1	-	Sejil	Solid
15Za59A	VUTK	-	-	-	Solid	5000.0 ?	-	-	-	-	1	-	Kuryer [1]	Solid
15Za59B	VUTK	-	-	-	Solid	5000.0 ?	-	-	-	-	1	-	Kuryer [2]	Solid
KN-Solid2	KP	-	-	-	Solid	5000.0 ?	-	-	-	-	1	-	KN-11-2	Solid
K-4 Booster	DRDO	-	-	-	Solid	5000.0 ?	-	-	-	-	1	2016	K-4	Solid
K-4 Stage 2	DRDO	-	-	-	Solid	5000.0 ?	-	-	-	-	1	2016	K-4	Solid
Qaem-100 S2	IRGC	-	-	-	Solid	5000.0 ?	-	-	-	-	1	-	Qaem-100 [2]	Solid
X-260	ABL	-	-	-	Solid DB/AP	4900.0	-	-	-	-	1	1960	Polaris A3 [2]	Solid
CHGB FSRM	NGISP	-	-	-	Solid	5000.0 ?	-	-	-	-	1	2022	CHGB [1]	Solid
CHGB SSRM	NGISP	-	-	-	Solid	5000.0 ?	-	-	-	-	1	2022	CHGB [2]	Solid
SLV-3-2	VSSC	-	-	-	Solid	4900.0 ?	-	267.00	266.9	45.0	1	1979	SLV-3 [2]	Solid
SLV-3-2/D4	VSSC	-	-	-	Solid	4900.0	-	267.00	266.9	40.0	1	1979	SLV-3 [2]	Solid
Stonechat I	RPEW	-	-	-	Solid	4780.0 ?	8340	232.00	288.2 ?	32.3	1	1969	Stonechat	Solid
15D94	ARSL	RT-2	-	-	Solid	4640.0	-	176.00	271.0	49.0	1	-	RT-2P [3]	Solid
CPKM	ARMT	-	-	-	Solid	4635.0	11360	222.80	280.0	65.2	1	1995	C2-2E/Asiasat	Solid
Star 63F	THKE	-	TE-N-936-2	-	HTPB	4591.0	12535	104.70	297.1	120.0	1	1993	Star 63F	Solid
S4	ISRO	-	-	-	HTPB	4500.0 ?	-	160.00	-	112.0	1	2021	SSLV [3]	Solid
15D92	TSKB7	RT-2	-	-	Solid	4500.0 ?	-	-	-	-	1	-	RT-2	Solid
DF-16	PLA	-	-	-	Solid	4500.0 ?	-	-	-	-	1	2015	DF-16	Solid
ASLV AS-2	VSSC	-	-	-	Solid	4400.0	-	304.00	275.9	36.0	1	-	ASLV [2]	Solid
TX-354-3	THX	Castor	Castor 2A	-	CTPB	4427.0	10301	275.10	281.9	39.0	1	-	Scout [2]	Solid
XN-33-20-4	THX	Castor	Castor	-	PBA	4360.0	7268	276.00	224.0	27.0	1	-	Scout X-1 [2]	Solid
Orion 50XL	ATKH	Pegasus	-	-	HTPB	4331.0	11218	196.00	289.0	72.5	1	1994	Pegasus XL [2]	Solid

Name	Manufacturer	Family	Alt_Name	Oxidizer	Fuel	Engines Mass kg	Impulse kN/s	Thrust kN	Isp s	Duration s	Chambers	Date	Usage	Group
Orion 50XLT	ATKH	Pegasus	-	-	HTPB	4331.0	11218	196.00	289.0	72.5	1	1994	IRBM-TI[2]	Solid
TX-354-4	THXX	Castor	Castor 2	-	CTPB	4320.0	9732	259.00	-	37.0	1	1965	Castor II	Solid
AIP-2	AJSP	-	-	-	Polyurethane/AP	4300.0	-	-	-	-	1	1960	Polaris A1 [2]	Solid
X-250	ABL	-	DDT-70	-	Solid DB/AP	4200.0	-	-	-	-	1	1960	Polaris A2 [2]	Solid
Agni St2	DRDO	-	-	-	Solid	4200.0 ?	-	-	-	60.0 ?	1	-	Agni II [2]	Solid
Pershing 2 St1	HERC	-	-	-	HTPB	4110.0	-	172.00	276.0	58.0	1	1982	Pershing 2 [1]	Solid
Zolfaghar	Zulfiqar	IRGC	-	-	Solid	4000.0	-	-	-	-	1	2021	Zolfaghar	Solid
P4	SEP	Rita I	P-4	-	Isolane	4000.0	12000	176.00	287.0	65.0	1	1966 May 2020	MBSB M1 [2] GS-1 [3]	Solid
Ceres-1 M3	XIDO	-	-	-	Solid	4000.0 ?	-	-	-	-	1	-	-	Solid
Hyumoo 1	ADD	-	-	-	Solid	4000.0 ?	-	-	-	-	1	-	-	Solid
Hyumoo-2B	ADD	-	-	-	Solid	4000.0 ?	-	-	-	-	1	-	-	Solid
ADD-SLV-1	ADD	-	-	-	Solid	4000.0 ?	-	-	-	-	1	-	-	Solid
Okra	KEM	-	9M714	-	Solid	4000.0 ?	-	-	-	-	1	-	-	Solid
Shahen-2	PKDNC	-	-	-	Solid	4000.0 ?	-	-	-	-	1	-	Shahen 2 [2]	Solid
ZQ-1-3	ARMT	-	-	-	Solid	4000.0 ?	-	-	-	-	1	-	ZQ-1[3]	Solid
SI-735-2	ISAS	-	-	-	Solid	4000.0 ?	-	250.00 ?	-	-	1	-	SI-735 [2]	Solid
TX-33	THXX	-	Castor	-	PBAA	4000.0	7311	240.00	254.3	27.4	1	-	Castor I	Solid
XM-33E2	THXX	Castor	TX-33-28	-	PBAA	4000.0	7311	240.00	254.3	27.4	1	-	Castor I	Solid
XM-33E5	THXX	Castor	TX-33-20	-	PBAA	4000.0	7311	240.00	254.3	27.4	1	-	Castor	Solid
XM-33E5	THXX	Castor	TX-33-33	-	PBAA	4000.0	7311	240.00	254.3	27.4	1	-	Castor	Solid
XM-33E6	THXX	Castor	Shotput	-	PBAA	3970.0	8272	236.70	254.3	35.3	1	-	Castor I (mod)	Solid
XM-33E8	THXX	Castor	Castor	-	HTPB	3865.0	-	76.50	303.8	104.0	1	1982 Oct 30	IUS [2]	Solid
Orbus 6E	UTC	Orbus	-	-	Solid	3850.0	-	195.00	290.0	-	1	-	Hyperbola-1 [3]	Solid
Hyperbola-1 M3	HEXI	-	-	-	Solid	3850.0	-	195.00	290.0	-	1	-	Hyperbola-1 [3]	Solid
Hyperbola-1B M3	HEXI	-	-	-	Solid	3850.0	-	195.00	290.0	-	1	-	Hyperbola-1 [3]	Solid
PolLux	THXX	Castor	XM-33E4	-	Polyulfide	3742.0	-	122.00	-	27.0	1	1959	PolLux	Solid
SR73	AJSP	Castor	-	-	CTPB	3742.0	-	152.00	285.0	61.0	1	1968 Aug 16	Minuteman 3 [3]	Solid
SR73-ATK	ATKP	Minuteman-SR	-	-	CTPB	3655.0	-	152.00	285.0	61.0	1	1968 Aug 16	Minuteman 3 PRP [3]	Solid
M-3B	MISST	Minuteman-SR	-	-	HTPB	3603.0	-	132.00	293.1	87.0	1	1985	Mu 3S2 [3]	Solid
MAL-735	MISST	Mu	-	-	Solid	3500.0	-	250.00	-	49.0	1	2002	MAL-735	Solid
Star 63D	THKU	-	TU-936	-	HTPB	3500.0	9046	84.80	283.0	118.0	1	1985	PAM-D2	Solid
15D25	ARSL	RT-2	-	-	Solid	3500.0	-	215.00	-	46.0	1	-	RT-2 [3]	Solid
LEO-7	AJSP	-	Orbus 7	-	Solid	3587.0	9266	105.10	-	57.4	1	-	Super Strypi [2]	Solid
TX-238	THXXM	-	-	-	PBAA	3464.0	-	-	-	-	1	-	TX-238	Solid
Orion LAS-AM	ATKP	-	-	-	Solid	3464.0	-	1780.00	-	2.5	1	-	Orion LAS	Solid
Orion 50	ATKH	Pegasus	-	-	HTPB	3370.0	8666	138.00	292.3	73.3	1	1990 Apr 5	Pegasus [2]	Solid
KM-V2b	MISST	KM	-	-	HTPB	3300.0	-	99.80	301.0	90.0	1	2013	Epsilon	Solid
9M723	VOTK	-	-	-	Solid	3300.0	-	-	-	-	1	-	Iskander	Solid
SICBM2	AJSP	SICBM Stage 2	-	-	PEG/MG/BTBN	3260.0	12000 ?	267.00	-	44.0	1	1989 May 11	SICBM [2]	Solid
TX-20	THXX	-	XM-20?	-	Solid PS	3200.0	-	220.00	-	23.8	1	-	Sergeant	Solid
XM-20	THXX	-	XM-20	-	Solid PS	3200.0	6350 ?	198.00	-	32.0	1	-	Draco, X-17	Solid
TX-12	THXX	-	XM-100	-	Polyulfide	3134.0	-	-	-	-	1	1950s	Sergeant	Solid
TKSA VA SAS	KAZOVB	OKB52	-	-	Solid	3000.0 ?	-	-	-	-	1	-	TKS VA SAS	Solid
27D6	VOTK	-	-	-	Solid	3000.0 ?	-	-	-	-	1	-	Kontakt [1]	Solid
15Zab59V	VOTK	-	-	-	Solid	3000.0 ?	-	-	-	-	1	-	Kuryer [3]	Solid
IRCPFS FSM	IRCPFS	-	-	-	Solid	3000.0 ?	-	-	-	-	1	-	IRCPFS 1	Solid
JLI-3	CALT	-	-	-	Solid	3000.0 ?	-	-	-	-	1	2019	JLI-1 (3)	Solid
Aerojet Jr	AJSP	Aerojet Jr	-	-	Solid	3000.0 ?	7100	264.00	-	28.0	1	1961	Aerojet Jr	Solid
X-265	HERC?	-	-	-	Solid	3000.0 ?	-	-	-	-	1	-	X-265	Solid
RD RT-1-3	OK51	-	-	-	Solid	3000.0 ?	-	240.00	-	42.0	1	-	RT-1 [3]	Solid
HS-18-53	KPA	-	-	-	Solid	3000.0 ?	-	-	-	-	1	-	HS-18 [3]	Solid
Shourya Booster	DRDO	-	-	-	Solid	3000.0 ?	-	-	-	-	1	-	Shourya [1]	Solid
XM-51	THXX/THKU	Bomarc Booster	TX-131	-	Solid	2990.0	-	222.00	-	30.0	1	1958	Bomarc B [0]	Solid
KM-V2c	MISST	KM	-	-	HTPB	2900.0	-	99.60	299.0	88.0	1	2016	Epsilon	Solid
KZ1-3	ARMT	-	-	-	Solid	2850.0	-	290.4	290.4	55.0	1	-	KZ-1 [3]	Solid
KZ2-3	ARMT	-	-	-	Solid	2850.0	-	290.4	290.4	55.0	1	-	KZ-1 [3]	Solid
DF-31-3	ARMT	-	-	-	Solid	2800.0 ?	-	-	-	-	1	-	DF-31 [3]	Solid
DF-41-3	ARMT	-	-	-	Solid	2781.0	-	-	-	-	1	-	DF-31 [3]	Solid
M-30	MISST	Mu	-	-	Solid	2781.0	-	128.00	265.0	42.0	1	1970	Mu 4S [3]	Solid
RV-A-10	THXX	Sergeant	Hermes A-2	-	Solid T14E1	2700.0	3600	157.50	265.0	24.0	1	1953	RV-A-10	Solid
PRD-33	ISKRM	-	-	-	Solid	2700.0	-	1962.00	-	4.5	1	1959	V-1000 booster	Solid
Kairos Stage 3	SPDME	-	-	-	Solid	2700.0	-	-	-	-	1	2024	Kairos [3]	Solid
Pershing 2 St2	HERC	-	-	-	HTPB	2600.0	-	134.00	279.0	46.0	1	1983	Pershing 2 [2]	Solid
N-69C Shark JATO	ABL	Shark	-	-	Solid	2500.0 ?	2300 ?	580.00	-	4.0	1	1965	Shark	Solid
N-69A Shark JATO	ABL	Shark	-	-	Solid	2500.0 ?	1900 ?	470.00	-	4.0	1	1955	Shark	Solid
Skybolt	AJSP	-	-	-	Solid	2500.0	-	164.00	-	40.7	1	-	Skybolt	Solid
ADD-SLV-2	ADD	-	-	-	Solid	2500.0 ?	-	-	-	-	1	-	-	Solid
L735(1/3)	MISST	L735	-	-	Polyurethane	2474.0	-	115.00	242.9	38.4	1	1966	Lambda [2]	Solid
XM-42	HERC	Nike M-42	-	-	Solid	2400.0	-	-	-	-	1	1956	4-Nike cluster	Solid
9M21	VOTK	-	-	-	Solid	2300.0	-	-	-	-	1	-	Luna-M	Solid
TX-174	THXXM	-	Pershing	-	PBAA	2269.0	-	117.00	-	39.0	1	1960	Pershing [1]	Solid
NA 803 Soleil	SNPE	Soleil	-	-	Isolane	2250.0	6460	147.00	-	44.0	4	1963 Dec 21	Topaze	Solid
NA 804	SNPE	Soleil	-	-	Isolane	2250.0	6460	147.00	-	44.0 ?	4	1963 Dec 21	Topaze	Solid



Name	Manufacturer	Family	Alt_Name	Oxidizer	Fuel	Engines Mass kg	Impulse kN/s	Thrust kN	Isp s	Duration s	Chambers	Date	Usage	Group
KH-ATACMS	KP	-	-	-	Solid	1200.0 ?	-	180.00	-	-	1	-	KH-ATACMS	Solid
M124	AJCA	ATACMS	-	-	Solid	1200.0 ?	-	180.00	-	-	1	-	ATACMS	Solid
K-BATS	HANWHA	-	-	-	Solid?	1200.0 ?	-	-	-	-	-	2014?	K-BATS	Solid
X-269	ABL	Antares	Antares 2	-	Solid	1275.0	-	96.50	-	-	1	-	Antares 2	Solid
X-269-B3	ABL	Antares	Antares 2	-	Solid	1275.0	3225	93.10	281.4	35.9	1	-	Scout B [3]	Solid
X-264	ABL	Antares	Antares 1A	-	Solid	1230.0	2330	60.50	285.0	39.0	1	1960	Scout X-1[3]	Solid
TX-30	THKX	-	-	-	Polysulfide	1206.0	-	44.50	-	29.0	1	1960	Nike Hercules [2]	Solid
XM-30	THKX	-	-	-	Solid	1200.0 ?	-	54.30	-	37.0	1	1959	X-17, Draco	Solid
KSR	KARI	-	-	-	Solid	1200.0	1700 ?	86.30	235.0	20.0	1	1993	KSR-I	Solid
KSR Booster	KARI	-	-	-	Solid	1200.0 ?	1250 ?	211.00	-	5.9	1	1993	KSR-II	Solid
Paekkom	ADD	-	-	-	Solid	1000.0 ?	-	-	-	-	1	-	Paekkom bst (1/4)	Solid
Acheron	UNIK	-	-	-	Solid	1200.0 ?	-	-	-	-	1	-	Hades	Solid
Black Sparrow	IAL	-	-	-	Solid	1200.0 ?	-	-	-	-	1	-	Black Sparrow	Solid
Peregrine	MSFC	-	-	-	Solid	1200.0 ?	-	-	-	-	1	2013	Peregrine	Solid
Al Fatah	FATAH	-	-	-	Solid	1200.0 ?	1950	130.00	238.0	15.0	1	-	Black Sparrow	Solid
Red Kite	BAYCH	-	-	-	Solid	1180.0	0	226.00	-	13.0	1	2023	Red Kite	Solid
Rock II	RPEW	-	-	-	Solid	1170.0	1735	-	-	7.0	1	1960	Rock	Solid
26KS20000	BAL	BBS	BBS	-	AP/Al/Polyurethane	1167.0	2251	89.00	230.2	26.0	1	-	BBS	Solid
BB Mk1	BAL	BBS	BBS	-	HTPB	1167.0	2251	89.00	230.2	26.0	1	2007	BB Mk1	Solid
BB Mk3	BAL	BBS	BBS	-	HTPB	1167.0	2251	89.00	230.2	26.0	1	2007	BB Mk3	Solid
Raven 1	RPEW	Raven	-	-	Solid	1160.0	-	80.00	214.5	35.0	1	-	Skylark [7]	Solid
Raven 2	RPEW	Raven	-	-	Solid	1160.0	-	80.00	214.5	35.0	1	-	Skylark [7]	Solid
Raven 5	RPEW	Raven	-	-	Solid	1160.0	-	80.00	214.5	35.0	1	-	Skylark [7]	Solid
Raven 6	RPEW	Raven	-	-	Solid	1160.0	-	80.00	214.5	35.0	1	-	Skylark [7]	Solid
Raven 7	RPEW	Raven	-	-	Solid	1160.0	-	80.00	214.5	35.0	1	-	Skylark [7]	Solid
Star 37FM	THKE	TE-364	TE-M-783	-	HTPB	1147.0	3052	45.80	291.8	66.4	1	-	Skylark [7]	Solid
Star 37E	THKE	TE-364	TE-M-364-4	-	Solid	1123.0	2911	283.6	-	-	1	-	Star 37C	Solid
23KS20000	BAL	BB	-	-	Polyurethane	1113.0	2050 ?	89.00	217.0 ?	23.0	1	1957	Black Brant IIB	Solid
SEPR 740	SEPR	-	-	-	Plastolane	1110.0	-	238.0	20.0	20.0	1	1962	Berenice St 2	Solid
SEPR 740-3	SEPR	-	-	-	Plastolane	1110.0	-	238.0	20.0	20.0	1	1962	-	Solid
K420	ISAS	-	-	-	SP Polysulphide	1100.0	-	-	-	17.0	1	1958	Kappa 8	Solid
K420H	ISAS	-	-	-	UP Polyurethane	1100.0	-	-	-	17.0	1	1962	Kappa 9	Solid
Star 37GV	THKE	TE-364	-	-	HTPB	1084.0	2825	87.00	290.0	49.0	1	-	Delta 7326 st 3	Solid
Rook	RPEW	Raven	-	-	Solid	1057.0	1720	62.00	255.0	5.5	1	1960	Rook	Solid
X-264 [1]	ABL	Antares	Antares 1A	-	Solid	1050.0	4200	60.00	290.0	39.0	1	1960	Antares	Solid
Hyperbola-1 M4	HEXI	-	-	-	BHT	1050.0	-	60.00	290.0	-	1	2019	Hyperbola-1 [4]	Solid
Hyperbola-1B M4	HEXI	-	-	-	BHT	1050.0	-	60.00	290.0	-	1	2019	Hyperbola-1 [4]	Solid
Star 37C	THKE	TE-364	TE-M-364-18	-	Solid	1047.0	2708	50.00	285.5	-	1	-	Star 37C	Solid
Raven 8	RPEW	Raven	-	-	AP	1018.0	-	50.00	209.5	35.0	1	-	Skylark	Solid
LPC-415	LPC	-	SRAM	-	Solid	1000.0 ?	-	-	-	-	1	1969	SRAM	Solid
Start	MITT	Topol	-	-	Solid	1000.0	-	100.00	295.0	207.0	1	-	Start-1 [4]	Solid
ADD	ADD	-	-	-	Solid	1000.0 ?	-	-	-	0.0	1	2022	Hyumoo SLV [4]	Solid
K-15 Booster	DRDO	-	-	-	Solid	1000.0 ?	-	-	-	-	1	2007	K-15 booster	Solid
28-SL	DRDO	-	-	-	Solid	1000.0 ?	-	-	-	-	1	2017	PDV Target [2]	Solid
DRDO	DRDO	-	-	-	Solid	1000.0 ?	-	80.00	-	44.0	1	2009	KSLV	Solid
KARI	KARI	-	-	-	Solid	1000.0 ?	-	-	-	6.0	1	-	NSPO	Solid
NSPO	NSPO	-	-	-	Solid	1000.0 ?	-	-	-	30.0	1	-	NSPO	Solid
NSPO Booster	NSPO	-	-	-	Solid	1000.0 ?	-	-	-	-	1	-	NSPO	Solid
NSFO Sustainer	NSFO	-	-	-	Solid	1000.0 ?	-	-	-	-	1	-	NSFO	Solid
Badr-1	ANSAL	-	-	-	Solid	1000.0 ?	-	-	-	-	1	-	Badr-1	Solid
28D6	KAZOKB	-	-	-	Solid	1000.0 ?	-	-	-	-	1	-	Kontakt [2]	Solid
Seliger 1	DRG	-	-	-	Solid	1000.0 ?	-	50.00	-	-	1	1962	Seliger	Solid
Safir	IR	-	-	-	Solid	1000.0 ?	-	-	-	-	1	2008	Safir [3]	Solid
PKNDC	PKNDC	-	-	-	Solid	1000.0 ?	-	-	-	-	1	2016	Ababeel [3]	Solid
Ababeel	HERC	-	-	-	Solid	1000.0 ?	-	-	-	-	1	-	X-271	Solid
X-271	HERC	-	-	-	Solid	1000.0 ?	-	-	-	-	1	-	X-271	Solid
M5E1 (XM42)	THKX	Nike	M30? X216	-	Solid	984.0	-	92.10	-	-	1	1956	NHer booster(1/4)	Solid
GEM 22	ATKABL	GEM 22 Oriole	-	-	HTPB	980.0	-	83.00	-	26.0	1	2000	Oriole	Solid
Gygnus 40	LARC/THKE	TE-M-186	40" SM	-	Solid	972.0	-	111.00	-	15.0	1	1957	40" SM	Solid
15KS25000	BAL	BB	-	-	Polyurethane	970.0	1670	83.00	217.0	26.0	1	-	Black Brant I	Solid
TX-664-4	THKX?	THKX?	-	-	HTPB	969.0	-	-	-	6.2	1	-	SM-2 [1]	Solid
S-31	IAE	Terrier	Mk 70	-	Solid	961.0	-	-	-	12.0	1	2004	Sonda VSB-30	Solid
Star 37KFP	THKE	TE-364	TE-M-714-16	-	Solid	953.0	1730	136.00	261.0	66.0	1	1985	Star 37KFP	Solid
Star 37XP	THKE	TE-364	TE-M-714-8	-	HTPB	953.0	2538	38.00	290.0	66.0 ?	1	-	Star 37XP	Solid
Stromboli	SDP	-	-	-	HTPB	942.0	2340	56.00 ?	290.0	66.0 ?	1	-	Star 37XF	Solid
Star 37F	THKE	TE-364	TE-M-364-19	-	Plastolite	942.0	1550	97.00	230.0	16.0	1	1968	Eridan [1]	Solid
Lance	GCR	6.65-KS-38800	-	-	Solid	934.0	2445	-	286.0	-	1	-	Star 37F	Solid
XM-45	THKX	TX-77	Skat	-	Solid	922.0	1148	173.00	215.0	6.7	1	1958	X-7A3 Booster	Solid
5K560000	THKX	TX-77?	-	-	Solid	900.0 ?	-	202.00 ?	-	6.0	1	1964	TP2 [2]	Solid
TX-77	THKX	-	-	-	Solid	824.0	-	227.00	-	5.0	1	1958	X-7A3 Booster	Solid
S-44	IAE	Sonda	-	-	Solid	917.0	2250	30.80	281.9	8.7	1	-	X-7A3 Booster	Solid
RX-420	LAPAM	-	-	-	Solid	900.0 ?	-	-	-	73.0	1	1991	VLS [4]	Solid
NOTS 500	NOTS	-	-	-	Polyurethane-AP	900.0 ?	-	-	-	-	1	2009	RX-420	Solid
RH-560	VSSC	-	-	-	Solid	900.0	-	76.00	-	45.0	1	1960	CaLeb [1]	Solid
SEPR 737	ONERA	-	-	-	Solid	900.0	-	75.00	-	16.0	1	-	RH-560	Solid
Orion 38	ATKH	Pegasus	-	-	HTPB	886.0	2185	36.00	289.6	69.6	1	1990 Apr 5	Aigle	Solid
													Pegasus [3]	Solid



Name	Manufacturer	Family	Alt_Name	Oxidizer	Fuel	Engines		Thrust kN	Isp s	Duration s	Chambers	Date	Usage	Group
						Mass kg	Impulse kNs							
Terrier Mk12 Mod 0	UNIK	Terrier	-	-	Solid	845.0	1157	257.50	195.4	4.4	1	-	Terrier	Solid
L500	MISST	L735	-	-	PB	832.0	-	65.00	249.3	27.0	1	1966	Lambda [3]	Solid
X-256	ABL	Terrier	-	-	Solid	820.0	1134	257.50	195.4	4.4	1	-	Terrier [X-256]	Solid
Terrier Mk12 Mod 1	ABL	Terrier	Adv Terr BT3	-	Solid	817.0	1134	257.50	195.4	4.4	1	-	Terrier [X-256A1]	Solid
T48	SEPR	HERC	MARTE/HERCR?	-	Solid	900.0	658	193.00 ?	-	3.4	1	1954	Nike T48 Ajax	Solid
SEPR 734-1	SEPR	-	Vesuve	-	Solid	800.0 ?	1025	200.00 ?	-	5.0	1	1959	Antares [1]	Solid
B-611	SANJ	-	-	-	Solid?	800.0 ?	-	-	-	-	1	2000?	B-611	Solid
B-611-TR	ROKSM	-	-	-	Solid?	800.0 ?	-	-	-	-	1	2000?	B-611-TR	Solid
N-25 Shark JATO	ABL	Shark	X-226	-	Solid	800.0 ?	800 ?	209.00	-	4.0 ?	1	1955	Shark	Solid
HIBEX-U	HERC	-	-	-	Solid	800.0 ?	-	2180.00	-	1.1	1	1965	HIBEX	Solid
HIBEX	HERC	-	-	-	Solid	800.0 ?	-	2180.00	-	1.1	1	1965	HIBEX	Solid
4K5115000	AJ	-	Regulus JATO	-	Solid	800.0 ?	2000 ?	512.00	-	4.0	1	1950s	Regulus 2	Solid
4BS105000 C1	ABL	JATO	X-202C1	-	Solid	800.0 ?	1900 ?	470.00	-	4.0	1	1950?	JATO/Talos	Solid
4DS105000 C6	ABL	JATO	X-202C6	-	Solid	800.0 ?	1870	470.00	-	4.4	1	1950?	HJ prototype	Solid
X-202C3	ABL	-	4DW105000	-	Solid	800.0 ?	1900 ?	470.00	-	4.0	1	1950?	X-7A1 Booster	Solid
P068	SEP	Rubis	TE-M-364-3	-	Solid	775.0	2300	52.50	280.0	46.5	1	1970	Diamond B [3]	Solid
Star 37D	THKE	Star 37D	TE-M-364-3	-	Solid	719.0	1860	45.00	266.0	-	1	1966	Star 37C	Solid
Star 37B	THKE	Star 37B	TE-M-364-2	-	Solid	718.0	1860	45.00	266.0	-	1	1966	Star 37B	Solid
P064	SEP	Rubis	TE-M-364-15	-	Solid	712.0	2300	52.00	291.0	45.0	1	1965	Diamond A [3]	Solid
Star 37S	THKE	Star 37S	TE-M-364-15	-	Solid	711.0	1870	-	287.3	-	1	-	Star 37C	Solid
LED-1	AJSP	-	-	-	Solid	710.0	1845	50.00	-	51.5	1	2015	Star 37C	Solid
Mk 72 UTC	UTC	Terrier	-	-	HTPB	710.0	-	-	-	-	1	-	Super Strypi	Solid
Mk 72	AJCA	Terrier	-	-	HTPB	710.0	-	-	-	-	1	-	SM-3 [1]	Solid
TU-223	THKU	-	M16E3	-	Solid	700.0 ?	-	449.00	-	2.4 ?	1	1955	SM-3 [1]	Solid
SM-3-II-2	MHI	-	-	-	Solid	700.0 ?	-	-	-	-	1	-	Mace Booster [0]	Solid
2.5-DS-59000	ABL	-	-	-	Solid	700.0 ?	-	265.00	-	2.5	1	-	SM-3-II-2	Solid
3-DS-47000	ABL	Nike	X-201A3 T-39	-	Solid	700.0 ?	-	209.00	-	3.0	1	1950	Nike Deacon mod	Solid
MASDA	MASDA	-	-	-	Solid	700.0 ?	-	61.00	-	-	1	-	Nike X201 Ajax	Solid
MASDA	MASDA	-	-	-	Solid	700.0 ?	-	54.00	-	-	1	-	TT-500-S2	Solid
S-310	ISAS	-	-	-	PB	671.0	-	80.00	-	31.6	1	1975	JCR	Solid
Trident Motor	NORTHC	-	-	-	Solid	670.0	-	35.00	268.0	-	2	1967	S-310	Solid
Star 30E	THKE	-	TE-M-700-19	-	HTPB/AP/Al	666.0	1788	35.30	290.5	49.0	1	1980s	RMP-B	Solid
M5E1	ABL	Nike	X-216	-	Solid	630.0	640	195.60	-	3.3	1	-	Star 30E	Solid
X-216A2	ABL	Nike	2.5-DS-59000	-	Solid	630.0	640	195.60	-	3.3	1	-	Nike (Operational)	Solid
XW5	ABL	Nike	2.5-DS-59000	-	Solid	630.0 ?	-	282.00	-	2.5	1	1950s	Mike 1249	Solid
M112 (1)	AJSP	-	Hawk	-	Solid	630.0 ?	-	282.00	-	2.5	1	1958	Mike (3-fin)	Solid
Star 30C	THKE	TE-364	TE-M-700-18	-	HTPB/AP/Al	629.0	1500	32.70	286.8	51.0	1	1980s	Hawk	Solid
Star 37N	THKE	TE-364	TE-M-364-14	-	Solid	622.0	1591	-	290.0	-	1	-	Star 30C	Solid
Star 37	THKE	TE-364	TE-M-364-1	-	Solid	621.0	1585	-	280.0	-	1	-	Star 37N	Solid
Imp Malemute	THKU	THKU	TE-M-364-1	-	Solid	619.0	1395	55.10	281.2	22.0	1	1974	Star 37	Solid
TX-486-1	THXX?	SAM-D	Malemute	-	Solid	619.0	1395	55.10	281.2	22.0	1	1974	Malemute (TX-486-1?)	Solid
TU-758	THKU	SAM-D	Malemute	-	Solid	619.0	1395	55.10	281.2	22.0	1	1974	Patriot TX-486-1	Solid
TX-16-1	THXY?	SAM-D	Malemute	-	Solid	618.0	-	264.00	-	2.4	1	1955	Malemute (TX-516?)	Solid
TE-473	THKE	Sandhawk	Sandhawk	-	Solid	600.0 ?	1400	80.00	238.0	15.0	1	-	Matador [0]	Solid
Mk 56 ALTR	ATLR	-	-	-	Solid	600.0 ?	-	-	-	-	1	-	Sandhawk	Solid
Mk 56	AJSP	-	-	-	Solid	600.0 ?	-	-	-	-	1	-	SH-1	Solid
Zenith	CONTR	-	-	-	Solid	600.0 ?	-	45.00	-	21.0	1	1967	SH-1	Solid
KN-M	MISST	KN	-	-	HTPB	550.0	1375	32.00	293.0	63.0	1	1985	Zenith	Solid
Star 30BP	THKE	-	TE-M-700-20	-	HTPB/AP/Al	542.0	1460	27.00	292.0	54.0	1	1980	Mu 3S2 [4]	Solid
Star 30B	THKE	-	TE-M-700-5	-	HTPB/AP/Al	537.0	1460	27.00 ?	293.0	54.0 ?	1	1980	Star 30BP	Solid
Kaman-80	SKVRT	-	-	-	Solid	500.0 ?	-	70.00	294.0	23.0	1	2022	Star 30	Solid
Mage 2	SEPB	-	CTPB 16.12	-	Solid	520.0	-	46.20	294.0	43.0	1	1980	Vikram-S	Solid
AS-4	VSSC	-	HEF-20	-	Solid	512.0	-	35.00	281.0	33.4	1	1987	Mage 2	Solid
MARC 13A1	ATLR	-	52KS3850	-	Solid	506.0	-	17.00	281.0	52.0	1	1960	ASLV [4]	Solid
SB-310	MISST	-	-	-	Polyurethane?	502.0	-	95.00	220.0	7.4	1	1966	Iris	Solid
RH-300-II	VSSC	-	-	-	Solid	500.0 ?	-	39.10	-	20.2	1	-	Lambda [0]	Solid
29D6	KAZOKB	-	-	-	Solid	500.0 ?	-	-	-	-	1	-	RH-300-II	Solid
T-7 booster	SIMED	-	-	-	Solid	500.0 ?	-	2.00	-	-	1	-	Kontakt [3]	Solid
Neptune	SEPR?	-	-	-	Solid	500.0 ?	-	20.00	-	32.0	1	1959	T-7	Solid
SEPR-732	SEPR	-	-	-	Solid	500.0 ?	630	20.00 ?	-	4.7	1	-	Antares [2]	Solid
IAT-Arrow-2-2	IAI	-	-	-	Solid	500.0 ?	940	-	-	-	1	-	SE4400 booster	Solid
Samam-1	IR	-	-	-	Solid	500.0 ?	-	-	-	-	1	-	Arrow 2	Solid
Alcor IB	AJ	Alcor	Alcor IB	-	PB	500.0 ?	1148	42.80	-	26.5	1	-	Simorgh [3]	Solid
RX-320	LAPAN	-	-	-	Solid	500.0 ?	510	10.00 ?	-	-	1	2008	Alcor IB	Solid
Vero P2	LRBA	-	-	-	Solid	500.0 ?	-	10.00	-	-	1	1952	RX-320	Solid
Vero P6	LRBA	-	-	-	Solid	500.0 ?	-	20.00	-	-	1	1952	Veronique P2	Solid
23KS1000	AJ	Alcor	Alcor IA	-	PB	500.0 ?	-	49.00	-	23.0	1	-	Veronique P6	Solid
THAD Proto	UTC	-	-	-	Solid	500.0 ?	-	-	-	-	1	1995	Alcor IA	Solid
THAD	AJSP	-	-	-	Solid	500.0 ?	-	-	-	-	1	2004	THAD	Solid
NOTS 401A	NOTS	NOTS 400	-	-	Solid	500.0 ?	-	-	-	-	1	1970	NOTS 401A	Solid
Sky Bow III	NSFO	NSFO	-	-	Solid	500.0 ?	-	-	-	7.2	1	-	Sky Bow	Solid
Abid St3	IQ	-	-	-	Solid	500.0 ?	-	-	-	-	1	-	Abid St. 3	Solid
MR-12	TAIFUN	-	-	-	Solid	500.0 ?	-	-	-	-	1	-	MR-12	Solid

Name	Manufacturer	Family	Alt_Name	Oxidizer	Fuel	Engines Mass kg	Impulse kN/s	Thrust kN	Isp s	Duration s	Chambers	Date	Usage	Group
MR-20	TAIFUN	-	-	-	Solid	500.0 ?	-	-	-	-	1	-	MR-20	Solid
MR-25	TAIFUN	-	-	-	Solid	500.0 ?	-	-	-	-	1	-	MR-25	Solid
MR-30	TAIFUN	-	-	-	Solid	500.0 ?	-	-	-	-	1	-	MR-30	Solid
MR-30	TAIFUN	-	-	-	Solid	500.0 ?	-	-	-	-	1	-	MR-UR-100 BR	Solid
15D171	YUZH	-	-	-	Solid	500.0 ?	-	-	-	-	1	-	Seliger 3	Solid
Mk 104	DRG	-	-	-	Solid	486.0 ?	-	50.00	-	-	1	1962	SM-2 [2], Lynx	Solid
Star 30A	THKE	-	TU-876?	-	Solid TP-H 1205C	492.0	-	27.00 ?	294.7	54.0 ?	1	1980	Star 30	Solid
E-8-5 VA	NPOL	-	TE-M-700-4	-	Solid	481.0	-	-	-	-	1	-	E-8-5 VA	Solid
Mk 12 ASROC	UMK	-	-	-	Solid	480.0 ?	-	49.00	-	-	1	-	ASROC	Solid
30KS000	AJ	Alcor	Alcor I	-	Polyurethane	478.0	1070	36.00	-	30.0	1	1988	Alcor I	Solid
Orbus 1A	UTC	-	-	-	Solid	476.0	-	31.00	-	-	1	2005	Orbus 1	Solid
LS-A Booster	MASDA	-	-	-	Solid	475.0	-	31.00	-	-	1	1964	Orbus 1	Solid
MISST	KM	-	-	-	Solid	600	-	60.00	-	10.0	1	1985	LS-A [1]	Solid
Mage IS	MISST	-	-	-	HTPB	461.0	-	31.30	286.0	44.0	1	1980	Mu 3S2 [4]	Solid
M-40	Mu	-	-	-	CTPB 16.12	445.0	-	26.50	291.0	48.5	1	1970	Mage IS	Solid
Saluki S	IMIS	-	-	-	Solid	442.0	-	35.60	270.0	40.0	1	1960	Mu 4S [4]	Solid
Goldfinch II	RPEW	-	-	-	Solid	410.0	700	175.00	225.0	27.0	1	1964	Blue Water [2]	Solid
Goldfinch IIA	RPEW	-	-	-	Solid	410.0	700	175.00	225.0	3.5	1	-	Jabiru	Solid
PIDU	SOYUZ?	-	11D82M	-	Solid	406.0	736	29.00	277.4	23.3	1	1960s	Skyhawk	Solid
17KSI2000	BAL	BB5	Nibka	-	Solid	402.0	915	53.00	284.9	17.8	1	1981 Aug 14	Zenit/Resurs	Solid
Tianyng 3F	SZRTC?	BB5	-	-	Solid	400.0 ?	-	-	-	-	1	1981	BB10 [3]	Solid
Evolution 1	EVOL	-	-	-	Solid	400.0 ?	-	-	-	-	1	2016	Tianyng 3F	Solid
Gradiocom 1	CITED	-	-	-	Solid	400.0 ?	-	-	-	-	1	2023	Gold Chain Cowboy	Solid
SS-520	ISAS	-	-	-	Solid	400.0 ?	-	-	-	-	1	-	Gradiocom 1	Solid
S-300	ISAS	-	-	-	Solid	400.0 ?	-	-	-	-	1	-	SS-520 St 2	Solid
Mk 30	ATLR	-	-	-	Solid	400.0 ?	-	-	-	-	1	-	S-300	Solid
3KS33000	AJ	-	Regulus JATO	-	Solid	400.0 ?	440 ?	147.00	-	3.0	1	1950s	SM-1	Solid
SPRAN-60	ONERA	-	-	-	Solid	400.0 ?	-	-	-	5.6	1	1959 Jan	Daniel	Solid
Kavoshgar	IR	-	-	-	Solid?	400.0 ?	-	-	-	12.0	1	2007	Kavoshgar	Solid
M112	AJSP	Mk 56 type	-	-	Solid	395.0	-	-	-	-	1	-	Hawk/Fa Orion [2]	Solid
M22E8	AJ	Orion	-	-	Solid	389.0	-	-	-	-	1	1977 Jul 19	Taurus Orion [2]	Solid
NOTS Mod 551-B	NOTS	-	-	-	Solid	371.0	-	-	270.0	28.0	1	1965	Terrier/551	Solid
TX-239	THX	-	-	-	ELIOM polyurethane	368.0	831	24.00	-	18.0	1	1968	Mike Zeus [3]	Solid
Meteor-2	PIHM	-	-	-	Solid PBAA	368.0	423	28.20	284.7	34.0	1	1969	Meteor-2	Solid
Mage 1	SEPB	-	-	-	Solid	368.0	-	-	-	-	1	1977	Mage 1	Solid
Spab-65	ARMT	-	-	-	CTPB 16.12	367.0	-	-	-	-	1	-	Mage 1 [4]	Solid
SLV-3-4	VSSC	-	-	-	Solid	360.0	-	26.80	282.9	33.0	1	1979	SLV-3 [4]	Solid
Saluki B	IMIS	-	-	-	Solid	360.0	-	195.50	-	6.0	1	1960	Blue Water [1]	Solid
Star 27	THKE	-	TE-M-616	-	CTPB/AP/Al	351.0	951	28.80	276.0	34.3	1	1976	Star 27 ]	Solid
Waxwing	RPEW	Waxwing	-	-	Solid RD2435	351.0	845	28.80	276.0	40.0	1	1969	Waxwing	Solid
K420(1/3)	ISAS	-	-	-	UP Polyurethane	350.0 ?	-	-	-	-	1	1966	Kappa 10	Solid
ABL JATO	ABL	JATO	3-DS-50000	-	Solid	350.0 ?	-	222.00	-	3.0	1	1947 Aug	JATO	Solid
Tiny Tim	USN	-	-	-	Solid	345.0	130	220.00	-	0.6	1	1945	WAC	Solid
X-248 [1]	ABL	Altair	Altair I	-	Solid	330.0	518	13.40	-	38.6	1	1957	Altair (Scout X-1)	Solid
Belier II	SDP	Belier	-	-	Polyvinyl	320.0 ?	-	20.00	-	23.8	1	-	Belier II	Solid
Vega	SDP	Belier	-	-	Polyurethane	320.0 ?	-	20.00	-	23.8	1	-	Belier III	Solid
Jericho II	ONERA	-	-	-	Solid DB	320.0 ?	-	20.00	-	23.8	1	1959 Jan	Daniel [2]	Solid
Jericho IV	SDP	Belier	-	-	Solid DB	317.0	460	20.00	235.0	23.4	1	1961	Centaur [2]	Solid
S-20	IAE	-	-	-	Solid	316.0	612	36.00	257.0	20.0	1	1966	Sonda 2	Solid
TU-716	THKU	Genie	Paute	-	CTPB	308.0	520	186.00	-	3.7	1	1972	Paute	Solid
Goose II	RPEW	-	-	-	Solid	306.0	370	22.00	-	17.0	1	1969	INTA 265	Solid
KM-D	NISST	KM	-	-	HTPB	304.0	629	17.40	294.0	38.0	1	1985	Mu 3S2 [4]	Solid
FW4S	UTC	-	-	-	Solid	301.0	766	26.00	284.1	31.5	1	1965	FW-4S	Solid
K250H	ISAS	-	-	-	UP Polyurethane	300.0	-	-	-	7.2	1	1958	Kappa 9M [2]	Solid
Star 20	THKE	Altair	TE-M-640-1	-	CTPB/AP/ALTP-H-3062	300.0	772	27.10	286.5	27.5	1	1970?	Scout G [4]	Solid
RX-250-LPN	LAPAM	-	-	-	HTPB	300.0	310	52.00	-	6.0	1	1987	RX-250-LPN	Solid
SM-3-II-3	MHI	-	-	-	Solid	300.0 ?	-	-	-	-	1	-	SM-3-II-2	Solid
TU-289	THKU	Genie	Genie	-	CTPB	300.0 ?	-	162.00	-	-	1	1967	Genie	Solid
Tianyng 3C	SZRTC?	-	-	-	Solid	300.0 ?	-	52.00	-	6.0	1	2011	Tianyng 3C	Solid
LAPAN	LAPAN	-	-	-	HTPB	300.0	310	52.00	-	-	1	1987	LAPAN (?)	Solid
LS-C Booster	STA	-	-	-	Solid	300.0 ?	-	-	-	-	1	1969	LS-C	Solid
PRD-18	ISRRM	-	-	-	Solid	300.0 ?	-	490.00	-	4.5	1	1957	V-750 booster	Solid
RH-300	VSSC	-	-	-	Solid	300.0 ?	-	33.30	-	16.0	1	-	RH-300	Solid
FFK	ERNO	-	-	-	Solid	300.0 ?	-	-	-	-	1	-	FFK	Solid
Aerojet Mk 8	AJ	-	-	-	Solid	300.0 ?	-	111.00	-	-	1	-	Bullpup	Solid
R-31BS	ARSL	-	-	-	Solid	300.0 ?	-	1.00	-	101.0	1	1976	R-31 BS	Solid
X-258	ABL	Altair	Altair II	-	Solid	300.0	623	24.20	279.1	31.0	1	-	Altair II	Solid
FW4	UTC	-	-	-	Solid	299.0	-	26.70	-	32.4	1	-	FW-4D	Solid
X-248	ABL	Altair	Altair I	-	Solid	296.0	561	14.00	-	40.0	1	1959	Altair	Solid
X-248A10	ABL	Altair	Altair I	-	Solid	296.0	516	13.00	-	39.0	1	1957	Altair (TB2 st3)	Solid
Gosling IIN	RORD	Gosling	-	-	Solid	292.0	400	130.00	-	3.5	1	1960	Jaguar 1 [1]	Solid
12KSI1000	BAL	BB3	BB3B	-	Solid ANP2872JM-IV	292.0	552	43.70	236.2	12.0	1	1967	BB3B	Solid

Name	Manufacturer	Family	Alt_Name	Oxidizer	Fuel	Engines Mass kg	Impulse kNs	Thrust kN	Isp s	Duration s	Chambers	Date	Usage	Group
SEPR-200	SEP	Tramontane	Tramontane	-	Solid	280.0	333	50.00 ?	-	6.7	1	1962	Berenice	Solid
MB-1	AJ	Genie	2KS-36250	-	Solid	273.0	100	161.00	-	2.0	1	1956	Genie	Solid
S-50000	CSXT	-	-	-	Solid	272.0	430	71.00	-	13.4	1	2004	CSXT	Solid
Star 26	THKE	Star 26	TE-M-442	-	CTPB/AP/Al	269.0	616	33.30	271.0	17.8	1	-	Strypi IV	Solid
9KS11000	BAL	B3	-	-	Polyurethane DREV	265.0	440	49.00	220.0	9.0	1	-	B3	Solid
RORD	RORD	-	-	-	Solid	263.0	426	137.00	-	4.5	1	1974	INTA 300 [1]	Solid
Star 26C	THKE	Star 26	TE-M-442-2	-	CTPB/AP/Al	262.0	622	35.00	272.1	16.8	1	1980?	DOT	Solid
Star 26B	THKE	Star 26	TE-M-442-1	-	CTPB/AP/Al	261.0	635	34.60	271.7	17.8	1	1974	Burner 2A [2]	Solid
X-259-B1	ABL	Altair	Altair II	-	Solid	260.0	620	27.50	278.1	24.0	1	-	Scout B [4]	Solid
2-5KS18000	AJ	Aerobee Booster	Aerobee JATO	-	Solid	260.0	200	80.00	278.1	2.5	1	1947 Sep 25	Aerobee [0]	Solid
AJ60-80	AJ	Aerobee Booster	Aerobee JATO	-	Solid	260.0	200	80.00	278.1	2.5	1	1947 Sep 25	Aerobee [0]	Solid
Hydac H-28	LPC	-	LPC H-26	-	PBAA	256.0	412	41.60	253.0 ?	-	1	-	Hydac	Solid
TD1	KPA	-	H-28	-	PBAA	253.0	-	58.70	253.0	-	1	-	Hydac	Solid
DAC	DAC	-	-	-	Solid	252.0	-	18.30	250.0 ?	27.0	1	1997	TD1 [3]	Solid
33KS2800	GRC	-	-	-	Solid	250.0 ?	-	50.00 ?	220.0 ?	8.0 ?	1	1963	DACRoc	Solid
Qased-S3	IRGC	-	-	-	Solid	250.0 ?	347	12.50	-	33.0	1	1957	Vanguard [3]	Solid
M-100	UNK	-	-	-	Solid	250.0 ?	-	-	-	-	1	-	Qased [3]	Solid
MG-18	LPC	-	-	-	Solid	250.0 ?	-	-	-	3.0	1	-	M-100	Solid
Cuckoo 4	RPEW	-	-	-	Solid	248.0	591	-	-	-	1	1962	Scout X-2M [4]	Solid
Cuckoo IA	RPEW	-	-	-	Solid	243.0	452	44.00	204.0 ?	15.0	1	-	Skyark 12 [3]	Solid
TE-M-360	THKE	LES Jettison	-	-	Solid	243.0	320	90.00	204.0	4.3	1	-	Skyark	Solid
K250	ISAS	-	-	-	Solid	242.0	165	147.00	-	9.3	1	1965	Apollo LES Jettison	Solid
K250-8	ISAS	-	-	-	EP polyester	240.0	-	34.00	-	9.7	1	1958	Kappa 6	Solid
X-248A5	ABL	Altair	Altair I	-	EP polyester	240.0	-	34.00	-	9.7	1	1958	Kappa 8	Solid
Cygnus 25	THKE	-	25 <sup>th</sup> SM	-	Solid	239.0	516	12.50	285.0	38.0	1	1957	Altair/Scout X-1 [4]	Solid
Star 24C	THKE	-	TE-M-604-4	-	CTPB/AP/Al	239.0	614	33.30	-	16.5	1	-	25 <sup>th</sup> SM	Solid
Cuckoo IB	RPEW	-	-	-	Solid	237.0	640	21.50	282.3	28.0	1	1978	Star 24 IUE	Solid
X-248A3	ABL	Altair	Altair I	-	Solid	232.0	518	80.90	204.0	4.1	1	-	BK	Solid
Mayfly	WRE	-	-	-	Solid	232.0 ?	224	14.00	250.5	39.0 ?	1	1958	Thor Able [3]	Solid
Gosling	RORD	Gosling	-	-	Solid	230.0 ?	278	62.00	-	3.6	1	1957	Long Tom	Solid
Cuckoo II	RPEW	-	-	-	Solid	230.0 ?	278	130.00	-	2.5	1	1960	Jaguar 1 [1]	Solid
Centenario	THKE	-	-	-	Solid	226.0	396	36.50	204.0	10.0	1	-	BK	Solid
XM-10	THRX	-	-	-	Solid	224.0	-	39.00	-	11.2	1	2013	Centenario	Solid
TX-52	THRX	-	-	-	Polysulfide	221.0	-	-	-	-	1	1958	Lacrosse	Solid
TE-416	THKE	Tomahawk	Tomahawk	-	Polysulfide	221.0	-	-	-	-	1	1958	Doorknob	Solid
TE-406	THKE	Tomahawk	Tomahawk	-	PBAA	220.0	417	53.00	-	9.0	1	1965	Tomahawk	Solid
Star 24	THKE	Tomahawk	TE-M-604	-	PBAA	220.0	417	53.00	-	9.0	1	1965	Tomahawk	Solid
S-210	ISAS	-	-	-	CTPB/AP/Al	218.0	561	18.50	282.9	29.6	1	1969	Star 24	Solid
SpaceLoft	UPAE	XM-17	-	-	PB	210.0 ?	-	-	-	17.0	1	1969	S-210	Solid
Canopus	IAAE	Canopus	-	-	Solid	200.0 ?	-	-	-	12.0	1	1959	MSTV [2]	Solid
SS-50 Antares	IAAE	SS-50 Antares	-	-	Solid	200.0 ?	-	36.60	-	18.0	1	2006	SpaceLoft XL	Solid
RH-300 Booster	VSSC	-	-	-	Solid	200.0 ?	-	-	-	18.0	1	1972	Rigel	Solid
K220	ISAS	-	-	-	Solid	200.0 ?	-	37.50	-	6.0	1	1972	Tauro	Solid
S250	ISAS	-	-	-	Solid	200.0 ?	-	-	-	-	1	1956	RH-300 booster	Solid
X-241	ABL	-	-	-	Solid	200.0 ?	-	-	-	-	1	1969	Kappa 2	Solid
Snipe	RORD?	-	-	-	Solid	196.0	44	12.10	260.1	36.0	1	1969	SO-250	Solid
TU-715	THKU	Genie	Ute	-	Solid	190.0	261	16.30	-	16.0	1	1974	Pilot [3]	Solid
S-23	IAE	-	-	-	CTPB	190.0	277	85.00	-	4.6	1	1971	INTA 300 [2]	Solid
30MS1000	AJ	-	-	-	Solid	182.0	-	18.00	-	-	1	1966	Ute	Solid
TE-29-1A	THKE	Recruit	Recruit 1A	-	Solid	174.0	133	4.40	184.0	30.0	1	1944	Sonda 2M	Solid
Javelin 3	LPC	Recruit	LPC J-33	-	Solid	170.0	269	173.00	225.0	2.2	1	-	Private A	Solid
Javelin 3 (old)	LPC	Recruit	LPC J-3	-	PBAA/AP	165.0	269	93.00	239.0	2.2	1	-	Recruit	Solid
HOTROC	NUTS	-	-	-	Solid	165.0	273	47.60	239.0	-	1	1965	Javelin 3 [AWST]	Solid
Venus	SUD	Venus	-	-	Solid	163.0	306	63.20	230.0	4.9	1	1958	HOTROC	Solid
FG-47	HEXI	-	-	-	Solid	160.0	190	44.00	205.0	4.3	1	1961	Centraure [1]	Solid
SVN-2	AJSP	-	-	-	Solid	159.0	400	14.00	285.0 ?	36.0	1	1997	Smart Dispenser	Solid
Javelin 2	LPC	Javelin 2	LPC J-22	-	PBAA/AP	155.0	257	178.00	-	28.0 ?	1	1968	Intelsat 3	Solid
1.5KS35000	THKE	Recruit	Recruit XM19	-	PBAA/AP	153.0	262	156.00	-	-	1	1965	Javelin 2 [AWST]	Solid
Yardbird	THKE	Recruit	TE-289	-	Solid	151.0	167	75.00	-	1.7	1	1956	Recruit	Solid
SEPR 685-4	SEPR	Recruit	Mimosas	-	Solid	150.0 ?	167	33.00 ?	-	3.4	1	1959	Yardbird	Solid
SO-250	VOVA	-	-	-	Solid	150.0 ?	170 ?	53.00	-	5.0	1	1959	Antares [3]	Solid
Kappa 4 Booster	ISAS	-	-	-	Solid	150.0 ?	-	105.00	-	3.2	1	-	MLRS	Solid
TT-200	MASDA	-	-	-	Solid	150.0 ?	-	-	-	3.0	1	-	SO-250	Solid
TT-210	MASDA	-	-	-	Solid	150.0 ?	-	-	-	-	1	-	Kappa 4 Booster	Solid
Upstage	MDAC	-	-	-	Solid	140.0 ?	-	-	-	-	1	-	TT-210	Solid
Orion-2	IAAE	-	-	-	Solid	140.0 ?	-	-	-	1.0 ?	1	-	Upstage	Solid
Orion-1	IAAE	-	-	-	Solid	140.0	-	-	-	12.0	1	1966	Orion-2	Solid
RH-200SV	VSSC	-	-	-	Solid	140.0	-	16.90 ?	-	10.0	1	1970s	RH-200SV	Solid

Name	Manufacturer	Family	Alt_Name	Oxidizer	Fuel	Engines Mass kg	Impulse kN/s	Thrust kN	Isp s	Duration s	Chambers	Date	Usage	Group
Dorado	WRE	-	-	-	Solid	139.3	173	42.00	-	4.3	1	1973	Lorikeet	Solid
BE-3B1	HERC	BE-3	Alcyone	-	Solid	138.0	269	34.20	-	7.8	1	-	Alcyone	Solid
TE-307	THKE	Apache	-	-	Solid	135.0	167	21.10	-	6.0	1	1961	Apache	Solid
Star 17A	THKE	-	TE-M-521-5	-	CTPB/AP/Al	125.5	320	16.00	286.7	19.4	1	-	Star 17A	Solid
Vela	WRE	-	-	-	Solid	118.0	133	26.70	-	5.0	1	1964	Aero High [2]	Solid
Cygnus 20	THKE	-	20" SM	-	Solid	118.0	-	30.00	-	8.5	1	1959	20" SM	Solid
Kiva 6.5KS6100	RPL	-	-	-	Solid	107.0	149	27.00	-	6.5	1	-	Kiva	Solid
L480S	NISST	-	-	-	PB	102.0	-	7.80	254.0	31.5	1	1966	Lambda [4]	Solid
Arcon	ATLR	Arcon	-	-	Solid	100.0	140	4.50	-	33.0	1	1958	Arcon	Solid
TE-388	THKE	Iroquois	PBAA TPH-3117	-	Solid	100.0 ?	-	-	-	-	1	-	Iroquois	Solid
Traveler	USCLA	-	-	-	Solid?	100.0 ?	-	-	-	-	1	-	Traveler	Solid
Gradiocom 2	CITED	-	-	-	Solid	100.0 ?	-	-	-	-	1	-	Gradiocom 2	Solid
M-100 St2	UNK	-	-	-	Solid	100.0 ?	-	-	-	4.5	1	-	M-100 [2]	Solid
Kingfisher	TMLNUS	-	-	-	Solid	100.0 ?	-	0.00	-	-	1	-	Kingfisher	Solid
2-AS-22000	AJ	Nike-46	-	-	Solid	100.0 ?	200	98.00	-	2.0	1	1946	Mike-46	Solid
2.5-AS-18000	AJ	Nike-47	-	-	Solid	100.0 ?	200	80.00	-	2.5	1	1946	Mike-47	Solid
K10S	ISAS	-	-	-	Solid	100.0 ?	-	-	-	-	1	-	K10S	Solid
Mk 136	THKE	-	-	-	Solid	100.0 ?	-	7.00	-	15.0	1	-	ASAS XL	Solid
MAL-25	STA	-	-	-	Solid	100.0 ?	-	-	-	-	1	1965	S-A	Solid
Demon	WRE	-	-	-	Solid	100.0 ?	104	45.20	-	2.3	1	1962?	HAT	Solid
BE-3	HERC	BE-3	Alcyone	-	Solid	100.0 ?	-	34.00	-	8.0	1	-	Alcyone	Solid
BE-3A4	HERC	BE-3	-	-	Solid	100.0 ?	-	34.00	-	8.0	1	-	Athena motor	Solid
BE-3A5	HERC	BE-3	-	-	Solid	100.0 ?	-	34.00	-	8.0	1	-	SPARTA motor	Solid
BE-3A9	HERC	BE-3	Alcyone	-	Solid	98.0	235	27.70	275.2	8.5	1	1969	Scout E [5]	Solid
Lapwing	BAJUK	-	-	-	Solid	97.5	-	-	237.0	30.0	1	1967	Petrel	Solid
Ki60	ISAS	-	-	-	EP polyester	94.0	-	-	-	5.3	1	1958	Kappa 8L [2]	Solid
5.6KS400	GCR	-	Viper IC	-	Solid	91.0	134	24.00	-	5.6	1	1950s	Viper I	Solid
3.8KS8040	GCR	-	Viper II	-	Solid	90.0	135	35.80	207.0	3.8	1	1959	Viper II	Solid
S-160	ISAS	-	-	-	UP Polyurethane	90.0 ?	-	-	-	-	1	1964	S-160	Solid
Shockwave	USCLA	-	GEM8-R4000	-	Solid APCP	90.0	229	19.00	258.0	16.3	1	-	Aftershock	Solid
RW-1400	COOP	Asp	-	-	Solid AP/Al E-107M	90.0	158	12.70	235.0	12.0	1	1960	Asp IV	Solid
Ki50	ISAS	-	-	-	EP polyester	86.0	-	-	-	15.8	1	1968	Kappa 6	Solid
3.52KS8500 SDCO	SDCO	Viper	Viper IIB	-	Solid	89.0	144	35.80	-	3.2	1	1968	Viper	Solid
3.52KS8500	GCR	Viper	-	-	Solid	87.0	142	37.80	-	3.5	1	1960s	Viper	Solid
COOP	COOP	Asp	-	-	Solid JPL-131	87.0	141	38.60	212.0 s	3.6	1	1959	Asp II	Solid
RW-1100	COOP/GCR	Asp	-	-	Solid JPL-132A	85.0	141	26.60	215.0 s	5.3	1	1959	Asp	Solid
Astrobbee D	AJSP	Astrobbee	-	-	HTPB	85.0	156	8.90	-	17.0	1	1970	Astrobbee D	Solid
Agnus	CFTHB	-	Elan	-	Polyvinyl	82.0	100	40.00 ?	242.0	2.5	1	1967	Belenos [1]	Solid
Emilie	CFTHB	-	Elan	-	Polyvinyl	82.0	100	40.00 ?	242.0	2.5	1	1967	Grammos [1]	Solid
Asp III	COOP	Asp	-	-	Solid JPL-131	81.0	139	42.70	226.0 s	3.3	1	1959	Asp III	Solid
Melanie	ONERA	-	Opd 220	-	Solid	80.0 ?	49	38.00 ?	-	4.4	1	1959 Jan	Daniel [3]	Solid
GNS?	GNS?	-	-	-	Solid	80.0 ?	-	-	-	9.0	1	-	MWR-06	Solid
10KS2500	THKE	Nike-06	-	-	Solid	80.0 ?	111	11.00	-	10.0	1	1957	Polaris FTV	Solid
Star 17	THKE	-	TE-M-479	-	CTPB/AP/Al	79.0	198	11.00	286.0	17.6	1	-	Star 17	Solid
SS-520 S3	ISAS	-	-	-	Solid	78.0	-	-	-	-	1	-	SS-520 St 3	Solid
CaJun	THKE	Deacon	-	-	Solid	75.0	108	43.00	-	3.0	1	1957	CaJun	Solid
X-209	ABL	JATO	-	-	Solid	71.8	-	4.40	-	14.0	1	-	M8 JATO (1980s)	Solid
Mk 39	RDYNE	-	-	-	Solid	70.0 ?	-	35.00 ?	-	2.0 ?	1	1965	Shrike	Solid
1.8KS7600	AJ	Sparrow	-	-	Solid	70.0 ?	63 ?	35.00	-	1.8	1	-	Sparrow	Solid
MAL-16	MAL	-	-	-	Solid	70.0	-	10.70	-	14.0	1	1965	MAL-16	Solid
S-B	STA	-	-	-	Solid	70.0	-	-	-	-	1	1965	S-B	Solid
S-C	STA	-	-	-	Solid	70.0 ?	-	-	-	-	1	1965	S-C	Solid
SA-II	STA	-	-	-	Solid	70.0 ?	-	-	-	-	1	1965	SA-II	Solid
SS-30	AVIB	-	-	-	Solid	60.0 ?	-	-	-	-	1	-	FTB	Solid
FTI	AVIB	-	-	-	Solid	60.0 ?	-	-	-	-	1	-	FTB	Solid
Proson 1	CITEF	-	-	-	Solid	60.0 ?	-	-	-	-	1	-	Proson	Solid
Kisha I. 4.4KS4800	RPL	-	-	-	Solid	66.0	95	21.00	-	4.4	1	-	Kisha	Solid
Cygnus 15	LARC	-	TX-456-2?	-	Solid	60.0	-	22.30	-	4.8	1	-	RB2 [4]	Solid
RH-200	VSSC	-	-	-	Solid	60.0 ?	96	16.90	-	5.7	1	1970s	RH-200	Solid
MT-135	ISAS	-	-	-	Solid	68.0	-	8.10	230.0	10.5	1	-	MT-135	Solid
X-220	ABL	Deacon	-	-	Solid	68.0	79	26.00	-	3.0	1	1953	Deacon	Solid
Sirocco	GCR	LPC S-10	-	-	PBAA	65.0	111	14.80	-	-	1	1960s	Sirocco	Solid
Mk 128 JATO	UNK	JATO	-	-	Solid	64.4	-	4.40 ?	-	15.0 ?	1	-	JATO C-130	Solid
15-KS-1000	AJP	JATO	-	-	Solid	64.0	-	4.40	-	15.0	1	1945?	JATO Mk 6	Solid
HVAR	NOTS/CIT	JATO	-	-	Solid	63.0	-	25.00	-	0.9	1	1944	HVAR	Solid
T-40	THKE	-	-	-	Polyulfide	62.0	89	13.30	-	6.0	1	1949	TB1 [4]	Solid
DW-16	ABL	Deacon	-	-	Solid	60.0 ?	33	30.00	210.0 s	2.1	1	1956	Rockaire	Solid
22.6KS1245	MGC	Sparrow	-	-	EL07M	60.0	124 ?	5.50	-	22.6	1	1965	Sparrow III [2]	Solid
Viper V	OSCC	Viper	-	-	Solid	60.0 ?	142	27.00 ?	-	5.3	1	1972	Viper	Solid
KM-H	NISST	KN	-	-	Solid	59.0	-	-	281.0	-	1	1977	Mu 3H [4]	Solid
Aurora	SMECWA	-	-	-	Solid	54.0	58	-	250.0	5.3	1	-	Belenos [2]	Solid
Mk 22 Mod 2	UNK	-	Solid DB N-4	-	Solid	52.0	30	-	-	2.1	1	-	M58A1 munition	Solid
LAPSTAR	WRE	-	-	-	Solid	52.0	37	13.70	-	2.7	1	1957	Aeolus [0]	Solid

Name	Manufacturer	Family	Alt_Name	Oxidizer	Fuel	Engines Mass kg	Impulse kN/s	Thrust kN	Isp s	Duration s	Chambers	Date	Usage	Group
ZM-1														
ILR-33 Booster	NUDTC				Solid	50.0 ?	-	-	-	-	1	1970?	ZN-1	Solid
SEPR P163	PAI				Solid	50.0 ?	6.00	-	-	2.5	1	2015	ILR-33	Solid
12-AS-1000	SEPR				Solid	50.0	-	-	-	35.0	1	1963	Emma [1]	Solid
14-NS-1000	AJP	F-80 JATO			Solid	50.0 ?	4.40	-	-	12.0	1	1945?	JATO	Solid
14-AS-1000	AJP	JATO			Solid	50.0 ?	4.40	-	-	14.0	1	1945?	JATO	Solid
NOTS 100A	NOTS	JATO			Solid	50.0 ?	4.40	-	-	14.0	1	1945?	JATO Mk 2?	Solid
Cirrus I	DRG				Solid	50.0 ?	40.00	-	-	20.0	1	1960	BSJr [4]	Solid
Cirrus II	DRG				Solid	50.0 ?	50 ?	-	-	10.0 ?	1	-	Cirrus	Solid
Star 13B	THKE				Solid	50.0 ?	18.00	-	285.7	14.8	1	-	Star 13B	Solid
Kappa 4	ISAS		TE-M-763		CTPB/AP/Al	47.0	116	10.00	-	3.0	1	1956	Kappa 4	Solid
Kappa 1	ISAS				Solid	45.0 ?	-	10.00	-	3.0	1	1956	Kappa 1	Solid
Mk 36	HERC/THK/ATLR	AIM-9D Sidewinder			HTPB	45.0	-	-	-	-	1	-	Sidewinder	Solid
Mk 17	THKE?	AIM-9B Sidewinder			Solid	45.0	-	17.70	-	2.1	1	-	Sidewinder	Solid
Mk 15	THKE/NOTS	Sidewinder			Solid	45.0	-	17.70	-	2.1	1	-	Sidewinder	Solid
Mk 50 Mod 0	THKE?	Sidewinder 1D			Solid	43.8	63	12.20	230.0	4.7	1	1965	Sidew. (Chaparral)	Solid
SR.116	ABL/AJSP	AIM-9P Sidewinder			Solid	45.0	-	17.70	-	2.1	1	-	Sidewinder	Solid
9KSI660	BAL	BB			PB	43.0	66	7.40	240.0	9.0	1	1969	BB6	Solid
Lupus 3	WRE				Solid	41.0	61	11.50	-	6.3	1	1974	Kookaburra [1]	Solid
Sword 3KS5000	LPC				Solid	42.0	60	16.00	-	3.8	1	-	Cleansweep III	Solid
Star 13F	THKE		TE-M-444		Solid	40.1	94	6.30 ?	240.0	15.0 ?	1	-	Star 13F	Solid
Hopi 9.0KS1800	RPI				Solid	40.0	72	7.70	-	9.0	1	-	Hopi IV	Solid
Excalibur	BAL				Solid	39.2	61	20.00	-	2.5	1	2000	Excalibur	Solid
MARC 60A	ATLR	Arcas			Solid	38.0	60	1.60	-	32.6	1	1960	Super Arcas	Solid
RIV	JPL	RTV Motor			JPL 136	37.0	51	8.50	230.0	6.4	1	1956 Sep 20	Juno I [4]	Solid
Star 13A	THKE		TE-M-516		CTPB/AP/Al	38.0	94	5.90	286.5	15.3	1	-	Star 13A	Solid
Star 13C	THKE		TE-M-345		Solid	38.0	81	5.00 ?	218.0	15.0 ?	1	-	Star 13C	Solid
Bantam	BAJUK				Solid	37.0	-	1.80	-	30.0	1	1962	Skua	Solid
Bantam 2	BAJUK				Solid	37.0	-	1.80	-	30.0	1	-	Skua 2	Solid
Bantam 3	BAJUK				Solid	33.0	-	1.70	-	30.0	1	-	Skua 3	Solid
Star 13	THKE		TE-M-458		Solid	36.0	84	4.10	273.0	21.0	1	-	Star 13	Solid
S-A	STA				Solid	36.0	29	1.50	164.0	12.0	1	1965	S-A	Solid
Lupus 2D	WRE				Solid	35.7 ?	48	11.50	-	4.0	1	1972	Kookaburra	Solid
Lupus 2	WRE				Solid	35.7	46	11.50	-	4.0	1	1972	Kookaburra [1]	Solid
Star 13D	THKE		TE-M-375		Solid	35.3	76	5.00 ?	223.0	15.0 ?	1	-	Star 13D	Solid
P-Vrbec	VRBEC				Solid	35.0 ?	0	-	-	-	1	2022	VB booster	Solid
Icarus	ERAU				AP/Al	35.0	-	15.80	239.9	6.4	1	2007	Icarus [1]	Solid
MARC 2B1	ATLR	Arcas			Solid	34.4	43	1.50	-	29.0	1	1960	Arcas	Solid
Hopi 3.0KS4000	RPI				Solid	33.0	53	18.00	-	3.0	1	-	Hopi	Solid
Hopi 2.4KSS600	RPI				Solid	34.0	58	24.90	227.0	2.4	1	-	Hopi III	Solid
Lupus 1A	WRE				Solid	33.6	38	9.50	-	5.2	1	1969	Kookaburra [1]	Solid
Star 12A	THKE		TE-M-236-3		Polyurethane/AP/Al	33.5	61	7.30	270.0	7.5	1	1971	Super SARV Retro	Solid
Urbion	INTA				Solid	33.0	-	1.50	-	34.0	1	1984	INTA-100 [2]	Solid
Meteor-1	PHM				Solid	32.5	31	14.00	-	2.3	1	1963	Meteor-1 [2]	Solid
MARC 42A1	ATLR		Arcas Boost		Solid	30.8	-	12.20	-	3.0	1	1960s	Boosted Arcas 2 [0]	Solid
Star 13E	THKE		TE-M-385		Solid	30.5	63	4.20 ?	211.0	15.0 ?	1	-	Star 13E	Solid
Cherokee	THKE		TE-146		Solid	30.0 ?	-	-	-	1.5	1	1963	Squirt [2]	Solid
RH-125	VSSC				Solid	30.0 ?	30	10.50	-	2.9	1	1970s	RH-125	Solid
RH-125S	VSSC				Solid	30.0 ?	30	10.50	-	2.9	1	1970s	RH-125S	Solid
NOTS 124-C	NOTS				Solid	30.0 ?	-	-	-	-	1	1955	X-17 HTV [3]	Solid
HPAG	NOTS				Solid	30.0	-	12.60	-	2.7	1	1950	-	Solid
Pruson 2	CITEF				Solid	30.0 ?	-	-	-	-	1	-	Pruson	Solid
TWE DART	TMINUS				Solid	30.0	-	24.70	-	2.2	1	2020	DART	Solid
Viper IIIA	SDCO	Viper			Solid	30.0	59	24.70	-	2.2	1	1972	Viper	Solid
DIM	IIAE				Solid	30.0 ?	-	-	-	-	1	-	DIM	Solid
T-55	THKE				Solid	28.0	-	21.40	-	1.3	1	1956	Terrapin	Solid
INTA S-12	INTA				Solid	28.0	-	16.70	-	1.2	1	1984	INTA-100 [1]	Solid
Star 12	THKE		TE-M-236		Polyurethane/AP/Al	27.8	46	5.60	252.0	7.5	1	1960	SEV Mk IV Retro	Solid
Sonda 1 Booster	IAE				Solid	27.5	-	27.00	-	-	1	1965	Sonda 1	Solid
Sonda 1	IAE				Solid	27.3	-	4.20	-	-	1	1965	Sonda 1	Solid
Stable Super Loki	SDC				PS/AP	27.0	44	21.20	228.7	2.1	1	1973	Stable Super Loki	Solid
Belisama	CFTHB				Solid	26.0	24	24.00 ?	-	0.9	1	1968	Belisama [2]	Solid
MARC 2C2	ATLR	Arcas			Solid	26.0	-	1.40	-	29.0	1	-	HV Arcas	Solid
Lobster	RORD				Solid	26.0	58	29.00	-	2.0	1	-	Jaguar 1 [2]	Solid
RM-3141	COOP/JPL	Scale Sergeant			Solid	25.0	48	7.60	222.0	6.3	1	1959	Ascamp [2]	Solid
Super Loki	SDC				PS/AP	23.0	38	17.80	232.0	2.1	1	1968	Super Loki	Solid
SEPR P167	SEP				Solid	23.0 ?	-	34.00	-	-	1	-	Beronic strapon	Solid
MCR-3	VSSC				Solid	20.0 ?	-	-	-	-	1	1970s	MCR-3/RH-125	Solid
Mk 117 JATO	UMK	JATO			Solid	22.7	-	11.20	-	1.5	1	?	JATO BQM74 5"	Solid
MAL-7	STA				Solid	20.0 ?	-	-	-	-	1	1965	MAL-7	Solid
Falcon	THX		M-58		PS/AP	20.0	-	20.00	-	1.4	1	1950	Falcon	Solid
Melusine	ATEF				Plastollite	20.0 ?	-	-	-	-	1	-	Grannos	Solid
MARC 42A2	ATLR		Arcas Boost		Solid	20.0 ?	-	-	-	-	1	1960s	Boosted Arcas [0]	Solid

Name	Manufacturer	Family	Alt_Name	Oxidizer	Fuel	Engines		Thrust kN	Isp s	Duration s	Chambers	Date	Usage	Group
						Mass kg	Impulse kN/s							
SEPR P191	SEPR	-	-	-	Solid	20.0	15	14.80	-	1.0	1	-	Emma [0]	Solid
SkyMicro1	SKYR	-	-	-	Solid	20.0 ?	-	1.60	172.0	-	1	2020	SkyLark Micro	Solid
MERA	KBPT	-	-	-	Solid	20.0	40 ?	20.00 ?	-	2.0 ?	1	1992	MERA	Solid
Star 10	TRKE	-	TE-M-195	-	PB/AP/Al TP-G-3012	17.0	30	33.50	251.0	9.0	1	1959	SRV Retro Mk I	Solid
BB7	BAL	-	-	-	Solid	16.0	-	-	-	-	1	1969	BB 7	Solid
MARC 14A1	ATLR	-	-	-	Solid	16.0	-	12.00	-	0.8	1	-	Arcas booster	Solid
0E280X-PS DMS	AEROTC	-	-	-	Solid	15.0	23	6.50	-	4.3	1	2018	SPEAR-HRT	Solid
MESOS	MESOS	-	-	-	Solid	15.0 ?	0	4.50	-	-	1	2022	MESOS booster	Solid
M830	MESOS	-	-	-	Solid	15.0 ?	0	0.83	-	-	1	2022	MESOS sustainer	Solid
O-Vrbec	VRBEC	-	-	-	Solid	15.0 ?	0	-	-	-	1	2022	VB sustainer	Solid
Cygnus 10	PARD	-	10" SM	-	Solid	15.0	0	10.00	-	3.2	1	-	10" SM	Solid
TY8-6	THX	-	-	-	Solid	15.0	25	3.60	233.0	7.0 ?	1	1958	Able I motor	Solid
NOTS 8	NOTS	-	-	-	Solid	14.9	29	5.10	245.0	5.7	1	1958	Pilot [4]	Solid
DMU 3000	THKE	-	CORONA DMU	-	Solid	13.4	-	12.00	-	0.8	1	1960	CORONA	Solid
MARC 14B1	ATLR	-	3.25"	-	Solid	13.4	10	9.80	-	0.9	1	1948	Iris booster x 7	Solid
Mk7	UNK	-	-	-	Solid	13.1	9	4.10	-	7.0	1	2007	Icarus [2]	Solid
Icarus St2	ERAU	-	-	-	AP/Al	13.0	5	14.00	241.5	0.4	1	1958	Arccon	Solid
Arccon booster	ARC?	-	-	-	Solid	12.4	5	-	-	-	1	1980?	M3A2 5" JATO (HVAR?)	Solid
M3A2 JATO	UNK	-	-	-	Solid DB T6	12.3	-	-	-	-	1	-	Falcon	Solid
T-41	THX	-	M-46	-	Polysulfide	12.0	-	9.00	-	1.9	1	1949	Arrow	Solid
Arrow II	GCR	-	-	-	Solid	12.0	17	9.00	-	1.9	1	1950s	Arrow	Solid
Judi-III 1.9KS2100	RPI	-	1.9-KS-2100	-	Solid	12.0	18	9.30	231.0	2.0	1	1961	Judi III	Solid
SR71-AD-1	SDCO	-	-	-	Solid	11.0	18	9.00	-	2.0	1	1968	Loki Dart PMN-8B	Solid
Loki II	GCR	-	-	-	Solid	11.0	17	9.00	223.0	2.0	1	1965?	Loki II Dart	Solid
Judi-I 1.9KS2150	RPI	-	1.9-KS-2150	-	Solid	10.0	18	9.60	224.0	1.9	1	1961	Judi III	Solid
Musca	WRE	-	-	-	Solid	10.0 ?	19	5.10 ?	-	3.7	1	1965	Musca	Solid
HAEC FFAR	UNK	-	-	-	Solid	10.0 ?	11	4.00 ?	-	2.8	1	1961	HAEC [2]	Solid
SkyMicro2	SKYR	-	-	-	Solid	10.0 ?	-	0.80	-	-	1	2020	SkyLark Micro	Solid
RH-75	VSSC	-	-	-	Solid	10.0 ?	-	-	-	-	1	1967	-	Solid
Theodore	ATEF	-	-	-	Epicetete	10.0	18	1.80	-	10.0	1	-	Monica	Solid
Mk 125 JATO	UNK	-	-	-	Solid	9.2	-	-	-	-	1	-	JATO Pioneer UAV	Solid
DMU 2000	THKE	-	CORONA DMU	-	Solid	8.9	-	-	-	-	1	-	CORONA	Solid
FFAR	USN/GIT	-	-	-	Solid	9.0	5 ?	3.60	-	1.5	1	1955	Rockair	Solid
Pro75-6GXL	CESARO	-	-	-	Solid	8.0 ?	10	2.30	-	4.3	1	-	SPEAR-HRT	Solid
Loki	JPL/GCR	-	-	-	Solid	8.0	10	15.00	213.0 s	0.8	1	1956	Loki Dart	Solid
Seagull	UNK	-	-	-	Solid?	8.0 ?	-	10.00 ?	-	2.0 ?	1	1963	Seagull	Solid
Chick	RPEW	-	-	-	Solid	8.0	4	20.00	-	0.2	1	-	Chick	Solid
Luzou	SEP	-	-	-	Solid	7.0	-	3.00	-	1.7	1	1975	Eridan-ARAKS	Solid
Mk 66 FFAR	UNK	-	-	-	Solid	6.5	7	5.80	-	1.0	1	-	2.75-inch Wraparound	Solid
MARC 21A1	ATLR	-	17.5-KS-130	-	Solid Arcite	6.3	8	0.60	-	17.5	1	-	Metroc	Solid
T-22	JPL	-	-	-	Solid	5.0 ?	8	24.00	206.0	0.2	1	1944	Private A Booster	Solid
Oreste	ATEF	-	-	-	Epicetete	5.0 ?	7	0.90	-	8.0	1	-	Monica	Solid
Mk 40 LSPFAR	UNK	-	-	-	Solid	5.0	5	3.20	-	1.6	1	1980?	2.75-inch FFAR	Solid
KM-L	MISST	-	-	-	HTPB	4.0	-	-	-	-	1	1990	Hagoromo	Solid
LaRC Plastic	LARC	-	-	-	Solid T13E1	2.5	2	0.40	100.0	3.0	1	1958	Hi Ball	Solid
Cygnus 5	LARC	-	-	-	Solid	2.5	-	2.30	236.0	1.6	1	-	TB2 [6]	Solid
P8SC	AERO	-	-	-	Solid	2.0 ?	40	-	-	-	4	2011	P8SC	Solid
1KS420	ATLR	-	-	-	Solid	2.0 ?	2	22.00	-	1.0	1	1959	Explorer 6	Solid
JPL 2 lb Kick Motor	JPL	-	-	-	JPL 136	1.5	-	246.0	-	3.2	1	1958 Oct 23	Deal III	Solid
D-SAT-EES	DOBBIT	-	-	-	Solid	0.9	1	0.45	266.4	-	1	-	D-SAT	Solid
NOTS 3SM	NOTS	-	-	-	Solid	0.6	1	0.70	245.0	1.0	1	1958	Pilot [5]	Solid
CRAPEL	ONERA	-	-	-	Solid	-	52	-	-	10.5	1	1969	CRAPEL/Belier	Solid
RS-B-535	RDYNE	-	-	-	Solid	-	-	-	-	-	1	1972	BLDT	Solid
Buran TDE0	UNK	-	-	-	Solid	-	35	28.00	-	-	1	1988 Nov 15	Buran (x4)	Solid
M15A1 JATO	PHLR	-	16-MS-1000	-	Solid	-	-	4.40	-	16.0	1	1953	M16A1 JATO	Solid
M34 ZEL JATO	RDYNM	-	4-AX-130000	-	Solid	-	-	578.00	-	4.0	1	1955?	Aircraft JATO	Solid
8-AS-1000	AJP	-	8-AS-1000	-	Solid	-	-	4.40	-	8.0	1	1945?	KAN-1 Litte Joe	Solid
Cedre St1	LRS	-	-	-	Solid	-	-	138.00	-	-	1	1962	Cedre 3	Solid
Cedre St2	LRS	-	-	-	Solid	-	-	78.00	-	-	1	1962	Cedre 3	Solid
Cedre St3	LRS	-	-	-	Solid	-	-	20.00	-	-	1	1962	Cedre 3	Solid
Cedre-4 St1	LRS	-	-	-	Solid	-	-	138.00	-	-	1	1962	Cedre 4	Solid
SORS	DVST	-	-	LOX?	Solid	-	-	-	-	-	1	2021	SORS	Hybrid
HALO	HAL5	-	-	N20	HTPB	20.0	-	1.90	240.0	-	1	1997	HALO	Hybrid
Rhumi	SZI	-	-	N20	Solid	-	180	2.50	-	0.0	1	2024	Rhumi	Hybrid
ILR-53	PAL	-	-	H202	Solid	-	-	4.00	-	40.0	1	2015	Bursztyn	Hybrid
Hyperion	EAC	-	-	N20	HTPB	47.0	93	6.00	-	15.0	1	1996	eAc	Hybrid
DLAEN	RLAEN	-	-	N20	Solid	-	100	6.90	-	14.5	1	2009	Atea-1	Hybrid
DHX-200 Aurora	DARE	-	-	N20	Sorbitol/Paraf/Al	85.0	190	8.00	-	23.0	1	2015	Stratos II+	Hybrid
LeLien 1A	TISPACE	-	-	N20	SBR	-	1339	9.80	-	-	1	2019	Hapith V [3]	Hybrid
MT 27	SNECIA	-	-	NA/N204	Solid	75.0	200 ?	10.00	200.0	20.0	1	1964	Lex	Hybrid

Hybrid propellant engines

Name	Manufacturer	Family	Alt_Name	Oxidizer	Fuel	Engines Mass kg	Impulse kN/s	Thrust kN	Isp s	Duration s	Chambers	Date	Usage	Group
HyLIGHT	HYEND	-	-	N2O	HTPB	120.0 ?	267	10.00	224.0	-	1	2023	N2ORTH	Hybrid
Lellen 1B	TISPACE	-	-	N2O	SBR	-	1028	19.60	-	-	1	2019	Hapth V [2]	Hybrid
HTR	NAMMO	-	-	LOX	Solid	-	520 ?	26.00	202.0	20.0	1	2007	HTR	Hybrid
FWUM	NAMMO	-	-	H2O2	HTPB	-	-	30.00	-	35.0	1	2018	Nucleus	Hybrid
HyPLOTX5	HYTMP	-	-	LOX	Paraffin	-	-	75.00	321.0	72.0	1	2003	SR75	Hybrid
RM-1	SCAL/SPDEV	-	-	N2O	HTPB	-	7200 ?	90.00 ?	-	80.0	1	2003	SS1	Hybrid
Sirius	GILM	-	-	H2O2	Polyethylene	-	-	110.00	-	100.0	1	2024	Eris[1]	Hybrid
Lellen 1C	TISPACE	-	-	N2O?	HTPB	-	-	127.00	-	-	1	2019	Hapth V	Hybrid
Hyper-15	INNDSP	-	-	LOX	Paraffin	-	0	0.00	-	-	1	2022	Hanbit-TLV	Hybrid
Dolphin	STST	-	-	LOX	PB	7500.0	-	155.00	-	-	1	1984	Dolphin	Hybrid
HYSR	LWMI	-	-	LOX	HTPB	-	8000 ?	270.00	290.0	33.4	1	2003	HYSR	Hybrid
RM-2 (1)	SNC	-	-	N2O	HTPB	-	16000 ?	270.00	-	60.0 ?	1	2007	SS2	Hybrid
RM-2	SCAL/SPDEV	-	-	N2O	Polyamide	-	16000 ?	310.00	250.0	60.0 ?	1	2007	SS2	Hybrid
H500	AMROC	-	-	LOX	PB	0.0	23000 ?	333.00	295.2	70.0	1	1989 Oct 5	AMROC	Hybrid

N2 cold gas

DS	MITT	Start DS	-	-	N2	-	-	0.00	-	210.0	1	-	Start DS	N2
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Liquid propellant engines: Nitric acid/Aniline or alcohol

P4-1 Sustainer	MAA	-	-	IRENA	Hydlyne	-	-	0.50	262.0	-	1	-	-	NA/AA
T-7 IRE	SIMED	-	-	NA	Aniline	1000.0	-	2.00	-	-	1	1960	T-7	NA/AA
P4-1 Booster	MAA	-	-	IRENA	Hydlyne	-	-	2.40	232.0	-	1	-	-	NA/AA
LR2-RM-6	RMI	-	-	RFNA	Aniline	-	-	2.80	195.0	260.0	1	1945	Lark	NA/AA
LPR-006	ISRO	-	-	RFNA	Aniline	-	-	6.00	-	-	1	-	LPR-006	NA/AA
WAC	AJCC	WAC	-	RFNA	Aniline/Alcohol	313.0	300	6.70	-	47.0	1	1945	WAC	NA/AA
X21AL-2600	AJCC	Mike	-	RFNA	Aniline/Alcohol	-	-	11.40	-	21.0	1	1947	Mike 46 Ajax [2]	NA/AA
21AL-2600	AJCC	Mike	-	RFNA	Aniline/Alcohol	-	-	11.40	-	21.0	1	1947	Mike 47 Ajax [2]	NA/AA
Ajax-490	AJCC	Mike	-	RFNA	Aniline/Alcohol	-	-	11.40 ?	-	21.0	1	1949	Mike Ajax	NA/AA
MATV	MAA	-	-	NA	Aniline	-	-	11.60	-	-	1	1947	MATV	NA/AA
XASR-1	AJCC	Aerobee	-	RFNA	Aniline/Alcohol	467.0	520	11.60	188.5	32.1	1	1948 Dec 9	Aerobee	NA/AA
AJ11-6	AJCC	Aerobee	AGVL-0113F	RFNA	Aniline/Alcohol	670.0	928	17.80	199.0	52.0	1	1959 Sep 11	Aerobee	NA/AA
AJ11-21	AJCC	Aerobee	-	RFNA	Aniline/Alcohol	670.0	928	17.80	199.0	52.0	1	1959 Sep 11	Aerobee	NA/AA
AJ10-24	AJCC	Aerobee	-	RFNA	Aniline/Alcohol	467.0	586	17.80	193.0	32.1	1	1950?	Aerobee	NA/AA
AJ10-25	AJCC	Aerobee	-	RFNA	Aniline/Alcohol	467.0	586	17.80	193.0	32.1	1	1950?	Aerobee	NA/AA
AJ10-27	AJCC	Aerobee	-	RFNA	Aniline/Alcohol	467.0	586	17.80	193.0	32.1	1	1950?	Aerobee	NA/AA
AJ10-34	AJCC	Aerobee	-	RFNA	Aniline/Alcohol	467.0	586	17.80	193.0	32.1	1	1950?	Aerobee	NA/AA
AJ60-92	AJCC	Aerobee 200	-	IRFMA	Aniline (ANFA)	576.0	1346	22.60	-	58.5	1	-	Aerobee 200	NA/AA
LPR-3T	ISRO	-	-	RFNA	Aniline	-	-	29.00	-	-	1	-	LPR-3T	NA/AA
TD-187	RMD	Bullpup A	-	IRENA	MAF-1	92.0	-	53.00	-	-	1	1950?	Bullpup	NA/AA
TD-232	RMD	Bullpup B	-	IRENA	MAF-1	255.0	-	53.00 ?	-	-	1	1950?	Bullpup	NA/AA
Wasserfall	HVP	-	-	NA	Vinyl Isobutyl ethe	-	-	78.00	-	40.0	1	1944	Wasserfall	NA/AA
Corporal E	JPL	-	-	RFNA	Aniline	-	-	89.00	-	-	1	1947	Corporal E	NA/AA
Corporal	AJCC	-	-	IRFNA	Aniline	-	-	89.00	-	63.0	1	-	Corporal	NA/AA

Liquid propellant engines: Nitric acid/Amine

S2.721V	ISAEV	S2.721	-	NA	Amine	-	-	11.80	-	-	1	1956?	-	NA/Amine
P-15	ISAEV	S2.721	-	NA	Amine	-	-	11.90	-	-	1	-	-	NA/Amine
S5.4	ISAEV	S5.4	-	NA	Amine	-	-	15.80	266.0	-	1	-	-	NA/Amine
V-750V	ISAEV	V-750	-	NA	Amine	-	-	30.40	-	-	1	-	-	NA/Amine
S2.720	ISAEV	S2.720	-	NA	Amine	-	-	34.30	233.0 s	-	1	-	-	NA/Amine
S5.5	ISAEV	KTDU-5	-	NA AK-27I	Amine TG-02	-	-	44.00	287.0	-	1	-	Luna E-6	NA/Amine
KTDU-5A	ISAEV	KTDU-5	-	NA	Amine	-	-	45.50	287.0	-	1	-	Luna E-6	NA/Amine
S2.253	ISAEV	S2.253	-	NA	Amine	-	-	80.00	251.0	-	1	1953 Apr 18	R-11	NA/Amine
S09.29	ISAEV	S09.29	-	NA	Amine	-	-	88.00	-	78.0	1	-	-	NA/Amine
Prithvi	DRDO	-	-	RFNA	Xylylidene/Trieth.	-	-	100.00 ?	-	-	1	1988	Prithvi	NA/Amine
S2.726	ISAEV	S2.726	-	NA AK-20I	Amine TG-02	-	-	103.00	-	55.0	1	1958	V-1000	NA/Amine
S5.1	ISAEV	S5.1	-	NA	Amine	-	-	167.00	-	-	1	-	-	NA/Amine
S5.44	ISAEV	S5.44	-	NA	Amine	-	-	177.00	251.0 s	-	1	-	-	NA/Amine
S2.713	ISAEV	S2.713	-	NA AK-27I	Amine TG-02	-	-	252.00	-	-	1	-	R-13	NA/Amine
S5.3	ISAEV	S5.3	-	NA	Amine	-	-	392.00	-	-	1	-	R-21	NA/Amine
S5.38	ISAEV	S5.3	-	NA	Amine	-	-	392.00	-	-	1	-	R-21	NA/Amine
S5.3M	ISAEV	S5.3	-	NA	Amine	-	-	396.70	241.0 s	-	1	-	-	NA/Amine
S2.1150	ISAEV	S2.1150	-	NA AK-27I	Amine TG-02	-	-	671.20	250.0	-	1	1959	Burya	NA/Amine

Liquid propellant engines: Nitric acid/Kerosene

AlKahir	EGAO	-	-	NA?	Kerosene?	-	-	0.00	-	-	1	1962	Al Kahir	NA/Kero
LE-1	STA	LS-A	-	RFNA	Kerosene	-	350	10.00	195.0	35.0	1	1963	LS-A	NA/Kero
Aerobee Jr	AJCC	-	-	RFNA	Kerosene JP-4	-	-	11.60	200.0	40.0	1	1958	Aerobee 100	NA/Kero
Ajax 1810	AJ	-	-	IRFNA	JPX (JP-4/UDMH)	-	-	11.60	-	30.0	1	-	Mike Hercules 1810	NA/Kero

Name	Manufacturer	Family	Alt_Name	Oxidizer	Fuel	Engines Mass kg	Impulse kN/s	Thrust kN	Isp s	Duration s	Chambers	Date	Usage	Group	
Ajax	AJ	-	-	IRFNA	Kerosene JP-4	-	-	11.60	-	30.0	1	-	Nike Ajax [2]	NA/Kero	
S2.711	ISAEV	-	-	RFNA	Kerosene	-	-	13.80	-	22.0	1	1957	V-750	NA/Kero	
S2.711V	ISAEV	-	-	RFNA AK-20	Kerosene TG-02	-	-	40.40	-	25.0	1	1957	V-750	NA/Kero	
Veronique N	LRBA	-	-	NA	Kerosene	-	-	30.00	-	-	1	1952 May 20	Veronique N	NA/Kero	
OTRAG	OTR	-	-	NA	Kerosene	-	-	58.70	250.0	126.0	1	1977	OTRAG	NA/Kero	
S2.253A	ISAEV	-	-	NA	Kerosene	-	-	93.00	251.0	78.0	1	1953 Apr 18	R-11FM	NA/Kero	
S5.2	ISAEV	-	-	NA	Kerosene	-	-	131.20	258.0	-	1	-	R-17	NA/Kero	
Abid	IQ	-	-	NA?	Kerosene	-	0	130.00 ?	-	-	1	-	Abid St 1	NA/Kero	
LR59-AJ-13	AJGC	-	LR59-AJ-13	IRFNA	Gasoline/UDMH	-	-	133.00	-	4.0	1	1957	Bomarc A	NA/Kero	
TD-2	KPA	-	-	RFNA	Kerosene	-	-	250.00 ?	-	120.0	4	2006	TD-2	NA/Kero	
RD-214 Early	EMASH	-	-	NA	Kerosene	-	-	625.00	210.0	-	4	1957 Jun 22	R-12	NA/Kero	
S2.1100	ISAEV	-	-	NA AK-27I	Kerosene T-1	-	-	673.00 ?	-	-	4	1957 Aug 1	Buriya	NA/Kero	
RD-214	EMASH/PERM	-	8D59	NA	Kerosene	-	-	730.00	264.0	-	4	1957 Jun 22	R-12	NA/Kero	
Liquid propellant engines: Nitric acid/Turpentine															
Veronique	LRBA	LRBA	-	WFNA	Diesel oil	-	-	40.00	-	-	1	1952 May	Veronique	NA/Turps	
Veronique AGI	LRBA	LRBA	-	WFNA	Turpentine	-	1900	40.00	-	49.0	1	1959 Mar 7	Veronique AGI	NA/Turps	
Veronique 61	LRBA	LRBA	-	NA	Turpentine	-	-	60.00	-	-	1	1964 Jun 8	Veronique 61	NA/Turps	
Vesta	LRBA	LRBA	-	NA	Turpentine	-	7900	140.00	-	56.4	1	1965 Oct 15	Vesta	NA/Turps	
Vexin	LRBA	LRBA	-	NA	Turpentine	-	25500	274.00	-	93.0	1	1964 Jun 15	Emeraude	NA/Turps	
Liquid propellant engines: Nitric acid/UDMH															
Unha St3	KPA	Notong	-	NA	UDMH	-	-	-	-	-	1	-	-	NA/UDMH	
KDU-414	ISAEV	1D414	-	NA AK-20	UDMH	-	80	2.00	290.0	-	1	1964	Molliya-1	NA/UDMH	
11D429	ISAEV	11D429	-	NA AK-20	UDMH	-	80	2.00	290.0	-	1	1974	Molliya-1 mod	NA/UDMH	
KTDU-53	ISAEV	KTDU-35	-	NA	UDMH	-	-	4.10	280.0	-	1	-	-	NA/UDMH	
KTDU-35	ISAEV	KTDU-35	-	NA	UDMH	-	-	4.10	280.0	-	1	-	-	NA/UDMH	
KTDU-66	ISAEV	KTDU-35	-	NA	UDMH	-	-	4.10	280.0	-	1	-	-	NA/UDMH	
LE-2	STA	-	-	WFNA	UDMH	-	-	9.80	195.0	25.0	1	-	LS-C	NA/UDMH	
LRÉ-4	IR	-	-	NA?	UDMH?	-	-	17.70	-	-	1	2015	Simorgh [2]	NA/UDMH	
KTDU-417 (NA)	ISAEV	KTDU-417	-	NA	UDMH	-	-	18.90	314.0	-	1	-	-	NA/UDMH	
P8E-9	RDYNE	Lance Sustainer	Dual Thrust	IRFNA	UDMH	-	20.00	227.0	-	114.0	1	1964	Lance Sustainer	NA/UDMH	
RD-851	YUZH	RD-851	-	NA	UDMH	-	32.50	279.0	-	-	1	-	-	NA/UDMH	
AJ10	AJGC	AJ10	-	WFNA	UDMH	-	33.00	33.00	-	122.0	1	-	Vanguard [2]	NA/UDMH	
AJ10-11B	AJGC	AJ10	-	WFNA	UDMH	-	33.00	33.00	-	122.0	1	-	-	NA/UDMH	
AJ10-118	AJGC	AJ10	-	NA	UDMH	-	-	33.70	271.0	-	1	-	-	NA/UDMH	
AJ10-118A	AJGC	AJ10	-	NA	UDMH	-	57.30	33.70	278.0	170.0	1	-	Delta B Stage 2	NA/UDMH	
AJ10-118D	AJGC	AJ10	-	NA	UDMH	-	-	33.70	278.0	-	1	-	-	NA/UDMH	
AJ10-101	AJGC	AJ10	-	NA	UDMH	-	-	34.30	270.0	-	1	-	-	NA/UDMH	
AJ10-40	AJGC	AJ10	-	NA	UDMH	-	-	34.50	270.0	110.0	1	1964	-	NA/UDMH	
AJ10-41	AJGC	AJ10	-	NA	UDMH	-	-	34.50	-	110.0	1	-	-	NA/UDMH	
AJ10-42	AJGC	AJ10	-	NA	UDMH	-	-	34.50	-	110.0	1	-	-	NA/UDMH	
AJ10-101A	AJGC	Able	-	WIFNA	UDMH	-	-	34.70	-	110.0	1	-	-	NA/UDMH	
AJ10-118E	AJGC	AJ10	-	NA	UDMH	-	-	35.10	278.0	400.0	1	1958 Apr 23	-	NA/UDMH	
AJ10-104	AJGC	AJ10	-	NA	UDMH	-	-	35.10	278.0	-	1	-	-	NA/UDMH	
RD-852	YUZH	RD-851	-	NA	UDMH	-	48.30	48.30	255.0	-	1	-	-	NA/UDMH	
Bell 8048	BELL	Agena	-	IRFNA	UDMH	-	69.00	276.0	-	120.0	1	1959	Agena A	NA/UDMH	
Bell 8096	BELL	Agena	-	IRFNA	UDMH	-	71.20	289.8	-	-	1	1960	Agena B	NA/UDMH	
Bell 8096-37	BELL	Agena	-	IRFNA	UDMH	-	71.20	289.8	-	-	1	1960	Agena D	NA/UDMH	
Bell 8096-39	BELL	Agena	-	HDA	UDMH USO	-	71.20	299.7	-	-	1	1960	Agena D	NA/UDMH	
Bell 8081	BELL	Agena	-	NA	UDMH	-	-	71.20	285.0	-	1	-	-	NA/UDMH	
Bell 8247	BELL	Agena	-	NA	UDMH	-	-	71.70	293.0	-	1	1965	GATV	NA/UDMH	
Notong	KPA	Notong	-	NA	UDMH	-	144.00	144.00	285.0	170.0	1	-	TDI [1] x 4	NA/UDMH	
KBKHA	KBKHA	S5.23	-	NA AK-27	UDMH	-	157.50	157.50	303.0	335.0	1	-	S3M [See R204]	NA/UDMH	
P8E-9 Boost	RDYNE	Lance Boost	Dual Thrust	IRFNA	UDMH	-	190.00	227.0	6.1	6.1	1	1964	Lance Booster	NA/UDMH	
YF-1	CALT	-	-	NA27S	UDMH	-	255.00	240.0	240.0	130.0	1	-	CZ-1 [1]	NA/UDMH	
YF-3	CALT	-	-	NA27S	UDMH	-	294.00	287.0	287.0	120.0	1	-	CZ-1 [2]	NA/UDMH	
YF-2A	CALT	YF-2	-	NA	UDMH	-	306.10	268.0	-	-	1	-	-	NA/UDMH	
RD-215	EMASH	RD-215 8D513	-	NA	UDMH	-	864.00	864.00	281.0	-	1	1960 Jun 6	R-14	NA/UDMH	
RD-219	EMASH	RD-215 8D713	-	NA	UDMH	-	865.00	865.00	289.0	106.0	1	1960 Oct 24	R-16	NA/UDMH	
RD-225	EMASH	RD-215 8D713	-	NA	UDMH	-	882.00	882.00	293.0	80.0	1	1960 Oct 24	R-16	NA/UDMH	
RD-216	EMASH/KRAS	RD-215	-	NA	UDMH	-	889.00	889.00	294.0	-	1	-	-	NA/UDMH	
RD-224	EMASH	RD-215	11D614	NA AK-27	UDMH	-	1728.00	1728.00	291.0	130.0	4	-	Kosmos-3M St 1	NA/UDMH	
S5.45	ISAEV	S5.45	-	NA	UDMH	-	1778.00	1778.00	294.0	-	1	-	-	NA/UDMH	
S5.45	ISAEV	S5.45	-	NA	UDMH	-	1961.00	1961.00	287.0	-	1	-	-	-	NA/UDMH
Monopropellant hydrazine engines															
MR-111	RRC	MR-111	-	-	Hydrazine	-	-	0.00	229.0	-	1	1980 Dec	AOCS 4N	Monohyd	
MR-103	RRC	MR-103	-	-	Hydrazine	-	-	0.00	227.0	-	1	1974 May 30	AOCS 1N	Monohyd	
MR-50	RRC	MR-50	-	-	Hydrazine	-	-	0.02	228.0	-	1	1974 May 22	AOCS 22N	Monohyd	



Name	Manufacturer	Family	Alt_Name	Oxidizer	Fuel	Engines Mass kg	Impulse kN/s	Thrust kN	Isp s	Duration s	Chambers	Date	Usage	Group
MR-106	RRC	MR-106	-	-	Hydrazine	-	-	0.03	232.0	-	1	1974	AOC3 30N	MonoHyd
MR-125	RRC	MR-125	-	-	Hydrazine?	-	-	0.11	-	30.0	1	1994	Astrid	MonoHyd
MR-107	RRC	MR-107	-	-	Hydrazine	-	-	0.26	236.0	550.0	1	1890	Pegasus AOC3,HAPS	MonoHyd
MR-104	RRC	MR-104	-	-	Hydrazine	-	-	0.44	239.0	-	1	1977 Aug 30	AOC3 445N	MonoHyd
MR-104H	RRC	MR-104	-	-	Hydrazine	-	-	0.89	-	-	1	2012	AOC3 890N?	MonoHyd
REA 20-4	HASTD	REA20-4	-	-	Hydrazine	-	-	0.56	-	-	1	-	-	MonoHyd
EPBS	JAXA	-	-	-	Hydrazine	-	-	0.40	215.0	-	1	-	-	MonoHyd
Kairos PBS	JAXA	-	-	-	Hydrazine	-	-	0.40 ?	215.0 /	-	1	-	-	MonoHyd

Liquid propellant engines: Nitrogen tetroxide/hydrazine

GYUB4	ADD	-	-	N2O4?	MMH?	-	-	-	-	-	1	-	GYUB [4]	NTU/Hyd
KZ1-4	ARMT	-	-	N2O4	MMH	-	-	0.02	-	-	1	-	KZ-1 [4]	NTU/Hyd
R-6C	MARQ	-	-	N2O4	MMH	-	-	0.05	-	-	1	2021	ATS-1 AOC3?	NTU/Hyd
VTM	VSSC	-	-	MON-3	MMH	-	-	0.04	-	-	1	2001	SSLV [4]	NTU/Hyd
TR-500	SCAT	-	-	N2O4	N2H4	-	-	0.21	-	-	2	1962	Geolite	NTU/Hyd
SE5-2	RDYNE?	-	-	N2O4	N2H4/MMH	-	-	0.40	272.0	600.0	1	2009	Agema APS	NTU/Hyd
SPXTX	-	-	-	N2O4	MMH	-	-	0.40	-	-	1	2006 Jun	DragonLab x 18	NTU/Hyd
NRL	-	-	-	N2O4	MMH	-	-	0.40	-	-	1	-	MITEX Stage	NTU/Hyd
NRL-US	-	-	-	N2O4/MON	MMH/H2O	-	-	0.44	318.0	-	1	-	European LAE	NTU/Hyd
S-400-12	ASTL	-	-	N2O4/MON	MMH/	-	-	0.44	321.0	-	1	-	European LAE	NTU/Hyd
S-400-15	ASTL	-	-	N2O4/MON	MMH/	-	-	0.44	321.0	-	1	-	European LAE	NTU/Hyd
ISRO-LAM	VSSC	-	-	N2O4	MMH	-	-	0.44	-	-	1	1992 Jul 9	Insat 2	NTU/Hyd
ISPS	TRW	-	-	HDA	USO	-	-	0.45	272.0	-	1	1970s?	NRO Agema(28 flowm)	NTU/Hyd
TR-306	TRW	-	-	MON	N2H4	-	-	0.45	315.0	-	1	1991 Apr	LM5000	NTU/Hyd
ID-339	RMD	-	-	MON?	MMH-H2O	3.0	-	0.46	287.0	-	1	1966	Surveyor Vernier	NTU/Hyd
TR-308	TRW	-	-	N2O4	MMH	-	-	0.47	322.0	0.0	1	1999	CKX	NTU/Hyd
R-4D-11	PRIMX	-	-	MON-3	MMH	-	20000	0.49	315.5	-	1	-	HS-601 LAE	NTU/Hyd
FY-25	SLREC	-	-	N2O4	MMH	-	-	0.49	308.9	-	1	1994 Nov 29	DFH-3 LAE	NTU/Hyd
TQS492-2	STSP	-	-	MON-I	MMH	-	15000	0.49	315.1	-	1	2011	DFH-4 LAE	NTU/Hyd
EAM	ASTL	-	-	N2O4/MON	MMH/	-	-	0.50	325.0	-	1	-	Alphabus	NTU/Hyd
HBT-5	IHL	-	-	MON-3	MMH	-	-	0.50	322.0	-	1	2012	HIV-3	NTU/Hyd
BT-4	IHL/OSCD	-	-	N2O4	N2H4	-	-	0.50	329.6	-	1	2002	NStar c LAE(STAR-2)	NTU/Hyd
RPEW	RPEW	-	-	MON	N2H4	-	-	0.50	314.0	-	1	1991 Mar	Leros 1	NTU/Hyd
500N AKE	IHI	-	-	N2O4	MON-3	-	-	0.55	319.5	-	1	2002	DRTS	NTU/Hyd
Leros 1b	RPEW	-	-	MON	N2H4	-	-	0.67	318.0	-	1	1996	Messenger, MGS	NTU/Hyd
BUS-1 OAT	TRW?	-	-	N2O4	MMH	-	-	1.10	-	-	1	1973?	KH-11	NTU/Hyd
RS-2101A	RDYNE	-	-	N2O4	MMH	-	-	1.33	283.0	-	1	1971	Mariner 9	NTU/Hyd
RS-2101C	RDYNE	-	-	N2O4	MMH	-	-	1.33	294.0	-	1	1975	Viking	NTU/Hyd
RS-14	RDYNE	-	-	N2O4	MMH	-	-	1.40	287.8	-	1	1968	Min 3 PBS	NTU/Hyd
UFS	IHL/MASDA	-	-	N2O4	MMH	-	-	1.70	321.4	-	1	1998	COMETS LAE	NTU/Hyd
Edge	XIDO	-	-	N2O4?	Hydrazine?	-	-	2.00	-	655.0	1	2020	GS-1 [4]	NTU/Hyd
RDYNE?	RDYNE?	-	-	N2O4	MMH	-	-	2.00 ?	-	-	1	1989	SICBM PBS	NTU/Hyd
SSQ Engine	ARMT	-	-	N2O4	UDMH	-	-	3.00	308.0	360.0	1	-	CE-5 SSQ	NTU/Hyd
LVS	VSSC	LVS	-	MON-3	MMH	-	3200	7.40	308.0	-	1	1993	PSLV FS4 x 2	NTU/Hyd
Lr101-NA-7	RDYNE	-	-	N2O4	MMH	-	-	5.20	251.0	-	1	1980?	Upper stage vernier	NTU/Hyd
RS-34	RDYNE	-	-	N2O4	MMH	-	-	11.80	308.0	168.0	1	1983	Peacekeeper [4]	NTU/Hyd
AJ10-190	AJCC	-	-	N2O4	MMH	-	-	27.00	316.0	150.0	1	1981	STS OMS	NTU/Hyd
Aestus	ASTO	Orbiter OME	-	N2O4	MMH	-	-	29.00	324.0	-	1	1996	Ariane 5 EPS	NTU/Hyd
MHBPS	TRW	-	-	N2O4	MMH	-	-	40.00	-	-	1	1967	Rhyolite LAE??	NTU/Hyd
RS-36	RDYNE	-	-	N2O4	MMH	-	-	55.60	281.0	-	1	1982	HOE Axial Engine	NTU/Hyd
Super Draco	SPXTX	-	-	N2O4	MMH	-	-	71.00	235.0	25.0	1	2014	Dragon2	NTU/Hyd

Liquid propellant engines: Nitrogen tetroxide/UDMH

ESM OMS	AJCC	-	-	N2O4	UDMH	-	-	26.60	-	-	1	-	Orion ESM	NTU/UDMH
CL1-2	NADA	-	-	N2O4?	UDMH?	-	-	-	-	-	1	2023	CL-1	NTU/UDMH
CL1-3	NADA	-	-	N2O4?	UDMH?	-	-	-	-	-	1	2023	CL-1	NTU/UDMH
JL3-4	ARMT	-	-	N2O4?	UDMH?	-	-	-	-	-	1	-	-	NTU/UDMH
DST-100	KHMM?	-	-	N2O4	UDMH	-	-	0.10	276.0	-	1	-	-	NTU/UDMH
DST-100A	KHMM?	-	-	N2O4	UDMH	-	-	0.10	304.0	-	1	-	-	NTU/UDMH
RDMT-100	NIIM	-	-	N2O4	UDMH	-	-	0.10	260.0	-	1	-	-	NTU/UDMH
1D428	KHMM?	-	-	N2O4	UDMH	-	-	0.11	-	-	1	-	-	NTU/UDMH
1D428A	KHMM?	-	-	N2O4	UDMH	-	-	0.13	291.0	-	1	-	Yantar URD-II	NTU/UDMH
RDMT-135	NIIM	-	-	N2O4	UDMH	-	-	0.14	260.0	-	1	-	Prog/Soy/Zvezda	NTU/UDMH
DST-200	KHMM	-	-	N2O4	UDMH	-	-	0.20	280.0	-	1	-	-	NTU/UDMH
DST-200A	KHMM	-	-	N2O4	UDMH	-	-	0.20	300.0	-	1	-	-	NTU/UDMH
RDMT-200	NIIM	-	-	N2O4	UDMH	-	-	0.20	285.0	-	1	-	-	NTU/UDMH
LK/LOK-40	UNK	-	-	N2O4	UDMH	-	-	0.39	-	-	1	-	LK/LOK	NTU/UDMH
1D458	KHMM	-	-	N2O4	UDMH	-	-	0.39	252.0	-	1	1977 Jul 17	FGP DFS	NTU/UDMH
RDMT-400	NIIM	-	-	N2O4	UDMH	-	-	0.40	255.0	-	1	-	-	NTU/UDMH
DMT-600	KHMM?	-	-	N2O4	UDMH	-	-	0.60	301.0	-	1	-	-	NTU/UDMH
PDV-ASAT	DRDO	-	-	N2O4	UDMH	-	-	-	-	-	1	2019	PDV Mk II St 3	NTU/UDMH
S5-120	ISIEV	-	-	N2O4	UDMH	-	-	-	304.0	-	1	-	Argon (Zenit-6U)	NTU/UDMH

Name	Manufacturer	Family	Alt_Name	Oxidizer	Fuel	Engines Mass kg	Impulse kN/s	Thrust kN	ISP s	Duration s	Chambers	Date	Usage	Group
OS-M St 4														
RD-869	LYX			N2O4	UDMH	-	-	-	-	-	1	2019	OS-M1	NTG/UDMH
RD-843	YUZH			N2O4	UDMH	-	2.45	315.5	-	-	1	2012	Pre Vega	NTG/UDMH
RD-868P	YUZH			N2O4	UDMH	-	2.45	315.5	-	-	1	2012	Vega [4] mdot=0.792	NTG/UDMH
Volga	PROG			N2O4	UDMH	-	2.45	315.5	-	-	1	2015	Vega [4] mdot=0.792	NTG/UDMH
TH-31	TIAMB			N2O4	MMH	-	3.00	307.0	-	-	1	2103	Tianlong	NTG/UDMH
KRD-79	ISAEV	S5.79		N2O4	UDMH	-	3.09	306.0	-	-	1	2023	Saiyut-6 engine	NTG/UDMH
KDU-426	ISAEV	11D426		N2O4	UDMH	-	3.09	292.0	-	-	1	-	E-8 KT	NTG/UDMH
KTDU-417 verniers	ISAEV			N2O4	UDMH	-	3.40	253.8	-	30.0	2	1969 Feb 19	E-8 KT	NTG/UDMH
RD-0225	KBKHA	RD-0225		N2O4	UDMH	-	3.90	287.0	-	-	1	-	IS	NTG/UDMH
Pollyot	ISAEV			N2O4	UDMH	-	3.90	3.90	-	-	1	1977 Jul 17	FCB DKS	NTG/UDMH
KRD-442	ISAEV	11D442		N2O4	UDMH	-	4.10	4.10	-	-	1	1972	UR-100N BR	NTG/UDMH
RD-0237	KBKHA/YKYZ			N2O4	UDMH	-	4.90	200.0	-	-	1	-	RT-23 P8S	NTG/UDMH
RD-866	YUZH?			N2O4	UDMH	-	5.20	306.0	-	-	1	-	-	NTG/UDMH
MI1-612	UNK			N2O4	UDMH	-	6.00	286.0	-	-	1	-	-	NTG/UDMH
KTDU-80	ISAEV	S5.80		N2O4	UDMH	-	6.20	302.0	-	-	1	-	SoyTM Progress M	NTG/UDMH
YF-50D	CALT	YZ-1		N2O4	UDMH	-	6.50	315.3	-	-	1	-	CZ-3C/YZ-1	NTG/UDMH
LE-3 (T)	STA			WFNA	UDMH	-	10.00 ?	-	-	-	1	-	LS-C 7	NTG/UDMH
YF-23	SLREC			N2O4	UDMH	-	11.80	286.0	-	347.0	1	1970	CZ-2 St2 vernier x4	NTG/UDMH
RS-18	RDYNE	RS-18		N2O4	AZ-50	-	15.60	309.9	-	-	1	1968	LWAS	NTG/UDMH
RD-0236	KBKHA/KOKT	RD-0236		N2O4	UDMH	-	15.80	293.0	-	-	4	1972	UR-100N [2] vernier	NTG/UDMH
11D416	ISAEV			N2O4	UDMH	-	16.40	-	-	-	1	-	-	NTG/UDMH
RD 15A18-BR	UNK			N2O4	UDMH	-	18.60	-	-	600.0	1	-	R-36M2 BR	NTG/UDMH
KRD-61	ISAEV			N2O4	UDMH	-	18.80	313.0	-	-	1	1969 Jun 14	E-8 VA	NTG/UDMH
KTDU-417	ISAEV	KTDU-425		N2O4	UDMH	-	18.90	314.0	-	650.0	1	1969 Feb 19	E-8 KT	NTG/UDMH
KTDU-425	ISAEV	KTDU-417		N2O4	UDMH	-	18.90	312.0	-	-	1	-	-	NTG/UDMH
KTDU-425A	ISAEV	KTDU-417		N2O4	UDMH	-	18.90	315.0	-	-	1	-	Briz	NTG/UDMH
S5.98M	ISAEV			N2O4	UDMH	-	19.60	326.0	-	0.0	1	-	Fobos, Briz, Fregat	NTG/UDMH
S5.92 (A)	KHM	S5		N2O4	UDMH	-	20000	19.60	330.0	0.0	1	1988	Fregat [Umanskiy]	NTG/UDMH
S5.92 (A)	KHM	S5		N2O4	UDMH	-	20000	19.91	333.4	350.0	1	1988	Briz-M	NTG/UDMH
S5.98	KHM	14D30		N2O4	UDMH	-	19.62	331.9	-	200.0	1	1998	-	NTG/UDMH
RD-868	YUZH			N2O4	UDMH	-	20.10	315.0	-	-	1	-	-	NTG/UDMH
RD-864	YUZH			N2O4	UDMH	-	20.20	309.0	-	-	1	-	-	NTG/UDMH
RD-869	YUZH			N2O4	UDMH	-	20.10	312.0	-	-	1	-	-	NTG/UDMH
Astris	MBB			N2O4	AZ-50	-	22.50	297.0	-	361.0	1	1968	Astris	NTG/UDMH
ESM OME	AJGC			N2O4	UDMH	-	26.60	-	-	-	1	-	Orion ESM	NTG/UDMH
RD-0231	KBKHA			N2O4	UDMH	-	29.00	275.0	-	-	1	-	-	NTG/UDMH
17D61	KHM	KRD 17D61		N2O4	UDMH	-	29.40	307.9	-	600.0	1	1979	Ikar; Yantar IKFT	NTG/UDMH
11D430	KHM	KRD 17D62		N2O4	UDMH	-	29.40	307.0	-	-	1	-	Yantar 2K	NTG/UDMH
RD-0207	KBKHA	RD-0207		N2O4	UDMH	-	30.90	297.0	-	-	1	1963 Nov 5	UR-200 [2] vernier	NTG/UDMH
RD-0214	KBKHA	RD-0207		N2O4	UDMH	-	31.00	293.0	-	-	1	1967 Mar 10	UR-500 [3] vernier	NTG/UDMH
S5.51	ISAEV			N2O4	UDMH	-	33.20	314.0	-	-	1	-	LOK PAO	NTG/UDMH
AJ10-138	AJGC	AJ10		N2O4	AZ-50	-	35.60	311.0	-	440.0	1	1964	Transtage x2	NTG/UDMH
AJ10-138A	AJGC	AJ10	ITIP	N2O4	AZ-50	-	35.60	309.3	-	-	1	1964	Transtage x2 (late)	NTG/UDMH
AJ10-138 (early)	AJGC	AJ10		N2O4	AZ-50	-	35.60	302.0	-	430.0	1	1964	Transtage x2	NTG/UDMH
AJ10-118F	AJGC	AJ10		N2O4	AZ-50	-	41.40	280.0	-	-	1	-	Delta 2910	NTG/UDMH
TR-201	TRW	AJ10		N2O4	AZ-50	-	41.90	301.3	-	-	1	-	Delta 2 Stage 2	NTG/UDMH
AJ10-118K	AJGC	AJ10		N2O4	AZ-50	-	43.70	319.2	-	431.0	1	-	-	NTG/UDMH
11D79	SOYUZ			N2O4	UDMH	-	44.00	295.0	-	-	1	-	-	NTG/UDMH
AJ10-118FJ	AJGC	AJ10		N2O4	AZ-50	-	44.10	319.2	-	430.0	1	-	N-2 Stage 2	NTG/UDMH
YF-40A	CALT?			N2O4	UDMH	-	49.00	295.0	-	-	1	-	CZ-4C (3)	NTG/UDMH
LE-3	MHTME	LE-3		N2O4	AZ-50	-	54.00	285.0	-	250.0	1	1975	N-1 Stage 2	NTG/UDMH
RD-866	YUZH			N2O4	UDMH	-	54.20	281.0	-	-	1	-	-	NTG/UDMH
Coralie	LRBA			N2O4	UDMH	-	67.00	281.0	-	105.0	1	1966	Coralie	NTG/UDMH
Vexin A	LRBA			N2O4	UDMH	-	68.60	277.0	-	-	1	-	-	NTG/UDMH
Super Draco (1)	SPXTX			N2O4	MMH	-	73.00	235.0	-	25.0	1	2009	Dragon	NTG/UDMH
RD-864	YUZH			N2O4	UDMH	-	75.00	312.0	-	-	1	1965 Dec 16	OGCh	NTG/UDMH
Vexin B	LRBA			N2O4	UDMH	-	75.40	251.0	-	-	1	-	-	NTG/UDMH
RD-0221	KBKHA			N2O4	UDMH	-	78.00	330.0	-	-	1	-	N-1/L-3 RB	NTG/UDMH
RD-861	YUZH/YUZH	SEM	D-25	N2O4	UDMH	-	78.70	314.4	-	130.0	1	1977	SSM	NTG/UDMH
RD-861K	YUZH/YUZH			N2O4	UDMH	-	77.60	330.0	-	470.0	1	2008	Tsikhon-4 [3]	NTG/UDMH
AJ10-137	AJGC	Apollo SFS		N2O4	AZ-50	-	97.00	314.0	-	585.0	1	1966	Apollo SFS	NTG/UDMH
YF-40	SLREC	YF		N2O4	UDMH	-	98.10	303.0	-	303.0	1	1990	CZ-4 Stage 3	NTG/UDMH
LRBA	LRBA			N2O4	UDMH	-	99.10	251.0	-	-	1	-	-	NTG/UDMH
RD R-29RM St 2	UNK			N2O4	UDMH	-	100.00 ?	-	-	94.0	1	-	R-29RM St 2	NTG/UDMH
RD R-29 St 2	UNK			N2O4	UDMH	-	100.00 ?	-	-	94.0 ?	1	-	R-29R St 2	NTG/UDMH
RD R-29RM St 3	UNK			N2O4	UDMH	-	100.00 ?	-	-	87.0	1	-	R-29RM St 3	NTG/UDMH
8D725	EMASH			N2O4	UDMH	-	117.00	-	-	-	1	-	-	NTG/UDMH
RD-0242	KBKHA			N2O4	UDMH	-	123.60	303.0	-	-	1	-	-	NTG/UDMH
V-825	KLIMOV			N2O4	UDMH	-	131.00 ?	-	-	40.0 ?	1	-	V-825 St 2	NTG/UDMH
15D13	KLIMOV	8D423, 5D13 type		N2O4	UDMH	-	131.00 ?	-	-	-	1	-	UR-100 St 2	NTG/UDMH
5D22	KLIMOV	5D13 type		N2O4	UDMH	-	131.00	-	-	40.0	1	-	A-3502h St2	NTG/UDMH
51T66 ZhRD	KLIMOV	5D22?		N2O4	UDMH	-	131.00 ?	-	-	40.0 ?	1	-	51T6 [2]	NTG/UDMH

Name	Manufacturer	Family	Alt_Name	Oxidizer	Fuel	Engines Mass kg	Impulse kN/s	Thrust kN	Isp s	Duration s	Chambers	Date	Usage	Group
A-350 Sustainer	KLIMOV	5D22?	-	N2O4	UDMH	-	-	131.00 ?	-	40.0	1	-	A-350 St2	NTG/UDMH
RD-862	YUZH	-	-	N2O4	UDMH	-	-	142.60	331.0	-	1	-	-	NTG/UDMH
RD-867	YUZH	-	-	N2O4	UDMH	-	-	147.00	330.0	215.0	1	1967	RT-20P [2]	NTG/UDMH
15D169	YUZH	15D12 type	-	N2O4	UDMH	-	-	147.00 ?	330.0 ?	-	1	-	MR-UR-100 [2]	NTG/UDMH
Topaze	SEP	-	-	N2O4	UDMH	-	-	150.00	260.0	40.0	1	-	Topaze	NTG/UDMH
11D49	KHM	S5.23	-	N2O4	UDMH	-	-	157.50	303.0	335.0	1	-	S3M	NTG/UDMH
RD-0245	KBKHA	-	-	N2O4	UDMH	-	-	211.00	300.0	-	1	-	R29RM St 1 vernier	NTG/UDMH
RD-0216	KBKHA/PERM	RD-0216	15D1	N2O4	UDMH	-	-	219.00	313.0	-	1	-	UR-100 St 1	NTG/UDMH
RD-0217	KBKHA/PERM	RD-0216	15D2	N2O4	UDMH	-	-	219.00	313.0	-	1	-	UR-100 St 1 center	NTG/UDMH
RD-0235	KBKHA/KOKT	RD-0235	-	N2O4	UDMH	-	-	240.00	320.0	-	1	1972	UR-100N [2]	NTG/UDMH
4D10	ISAEV	-	-	N2O4	UDMH	-	-	265.00	-	128.0 ?	1	-	R-27	NTG/UDMH
KN-4D10	ISAEV	-	-	N2O4	UDMH	-	-	265.00	-	128.0 ?	1	-	Musudan	NTG/UDMH
Dezful	IRAN	-	-	N2O4	UDMH	-	-	265.00	-	128.0 ?	1	-	Dezful	NTG/UDMH
RD-963	YUZH	-	-	N2O4	UDMH	-	-	276.80	301.0	-	1	-	-	NTG/UDMH
RD-865	YUZH	-	-	N2O4	UDMH	-	-	285.40	292.0	-	1	-	-	NTG/UDMH
HS-15-2	KPA	-	-	N2O4	UDMH	-	-	285.40	292.0	-	1	-	-	NTG/UDMH
Valois	LRBA	LRBA	-	N2O4	UDMH	39000	-	350.00 ?	-	-	1	-	Hwasong-15	NTG/UDMH
LR91	AJCC	LR91	-	N2O4	AZ-50	-	-	415.00	265.0	119.0	1	1970	Diamant B [1]	NTG/UDMH
LR91AJ5	AJCC	LR91	-	N2O4	AZ-50	-	-	440.00	316.0	182.0	1	1962	Titan 2 Stage 2	NTG/UDMH
LR91AJ9	AJCC	LR91	-	N2O4	AZ-50	-	-	440.00	316.0	182.0	1	1962	Titan 2 Stage 2	NTG/UDMH
Hwasong-12	KPA	RD-0203	-	N2O4	UDMH	-	-	470.00	316.0	182.0 ?	1	-	Titan 2 Stage 2 ?	NTG/UDMH
LR91AJ11	AJCC	LR91	-	N2O4	AZ-50	-	-	472.20	316.0	223.0	1	1990s	Titan ??	NTG/UDMH
LR91AJ11A	AJCC	LR91	-	N2O4	AZ-50	-	-	472.20	316.0	223.0	1	1990s	Titan 4 Stage 2	NTG/UDMH
RD-0233	KBKHA	RD-0233	-	N2O4	UDMH	-	-	520.00	310.0	-	1	1972	UR-100N [1]	NTG/UDMH
15D14	KLIMOV	80419, 5D13 type	-	N2O4	UDMH	-	-	560.00	-	-	1	-	UR-100 vernier	NTG/UDMH
RD-0203	KBKHA	RD-0203	-	N2O4	UDMH	-	-	560.00	-	-	1	1963 Nov 5	UR-200 [1] x 1 ?	NTG/UDMH
RD-0204	KBKHA	RD-0203	-	N2O4	UDMH	-	-	560.00	-	-	1	1963 Nov 5	UR-200 [1] x 3 ?	NTG/UDMH
RD-0206	KBKHA	RD-0203	-	N2O4	UDMH	-	-	580.00	-	-	1	1963 Nov 5	UR-200 [2]	NTG/UDMH
RD-0210	KBKHA	RD-0203	80411K	N2O4	UDMH	-	-	582.50	326.5	210.0	1	1965 Jul 16	UR-500 [2] x 1 ?	NTG/UDMH
RD-0211	KBKHA	RD-0203	80412K	N2O4	UDMH	-	-	582.50	326.5	210.0	1	1965 Jul 16	UR-500 [2] x 3 ?	NTG/UDMH
RD-0213	KBKHA	RD-0203	8048	N2O4	UDMH	-	-	583.00	326.5	230.0	1	1967 Mar 10	UR-500 [3]	NTG/UDMH
Viking V	SEP	Viking	-	N2O4	UDMH	-	-	693.00	280.6	142.0	1	1979	Ariane 1 St1	NTG/UDMH
YF-20	SLREC	YF	-	N2O4	UDMH	-	-	696.00	289.0	128.0	4	1973	CZ-2C	NTG/UDMH
YF-25	SLREC	YF	-	N2O4	UDMH	-	-	696.00	289.0	128.0	4	1973	CZ-3B	NTG/UDMH
Viking IV	SEP	Viking	-	N2O4	UDMH	-	-	713.00	295.6	136.0	1	1979	Ariane 1 St2	NTG/UDMH
YF-22 (FB)	SLREC	YF	-	N2O4	UDMH	-	-	716.00	286.9	117.4	1	1990	FB-1 stage 2	NTG/UDMH
Vikas	VSSC	Viking	-	N2O4	UDMH	109000	-	724.00	293.0	158.0	1	1993	PSLV P52	NTG/UDMH
YF-20B	SLREC	YF	-	N2O4	UDMH	-	-	740.00	289.0	166.0	4	1973	CZ-3A St 1	NTG/UDMH
YF-21	SLREC	YF	-	N2O4	UDMH	-	-	740.40	280.7 s	122.0	1	1970	CZ-2 Stage 1 x4	NTG/UDMH
YF-22	SLREC	YF	-	N2O4	UDMH	-	-	742.00	298.0	109.0	1	1970	CZ-2 Stage 2	NTG/UDMH
YF-22B'	SLREC	YF	-	N2O4	UDMH	-	-	742.00	287.6	126.8	1	1990	CZ-4 Stage 2	NTG/UDMH
RD-0228	KBKHA?	-	-	N2O4	UDMH	-	-	742.00	298.0	126.8	1	1990	CZ-4B Stage 2	NTG/UDMH
Viking VC	SEP	Viking	-	N2O4	UDMH	UH25	-	755.00	-	153.0 ?	1	-	R-36M [2]	NTG/UDMH
Viking VI	SEP	Viking	-	N2O4	UDMH	UH25	-	758.50	278.4	205.0	1	-	Ariane St1	NTG/UDMH
Sarmat St2 Eng	KBKHA	RD-0203	-	N2O4	UDMH	UH25	-	758.50	278.0	140.0	1	-	Ariane PAL	NTG/UDMH
RD-0255	KBKHA	RD-0203	-	N2O4	UDMH	-	-	760.00	-	153.0	1	-	Sarmat [2]	NTG/UDMH
RD-0256	KBKHA	RD-0203	-	N2O4	UDMH	-	-	760.00	-	153.0	1	-	R-36M2 [2]	NTG/UDMH
Viking IVB	SEP	Viking	-	N2O4	UDMH	UH25	-	785.00	293.5	126.0	1	-	R-36M2 [2] ?	NTG/UDMH
Vikas 4B	VSSC	Viking	-	N2O4	UDMH	-	-	799.00	281.0	200.0	1	1993	Ariane St2	NTG/UDMH
CL1-1	NADA	-	-	N2O4	UDMH	-	-	800.00 ?	-	-	1	2023	GSLV [1]	NTG/UDMH
HS-15	KPA	RD-250	-	N2O4	UDMH	-	-	800.00 ?	-	-	1	-	CL-1	NTG/UDMH
HS-17	KPA	RD-250	-	N2O4	UDMH	-	-	800.00 ?	-	-	1	-	Hwasong-15	NTG/UDMH
RD-0244	KBKHA/KRAS	RD-0244	-	N2O4	UDMH	-	-	825.80	300.0	79.0	1	-	Hwasong-17	NTG/UDMH
HTVE	VSSC	Viking	-	N2O4	UDMH	-	-	846.80	281.0	200.0	1	2018	Shtil' St	NTG/UDMH
RD-250	EMASH	RD-250	-	N2O4	UDMH	-	-	882.00	289.6 s	120.0	2	1963	GSLV [2]	NTG/UDMH
RD-252	EMASH	RD-250	-	N2O4	UDMH	-	-	902.00	317.6	160.0	2	1963	R-36 [1]	NTG/UDMH
RD-262	EMASH	RD-250	-	N2O4	UDMH	-	-	941.00	318.0	160.0	2	1963	R-36 [2]	NTG/UDMH
LR87AJ5	AJCC	LR87	-	N2O4	UDMH	AZ-50	-	1045.00	296.0	147.0	1	-	Titan 2 Stage 1 x2	NTG/UDMH
RD-263	EMASH/YUZH	RD-250	-	N2O4	UDMH	AZ-50	-	1131.00	-	98.0	1	-	R-36M(x 4 = RD-264)	NTG/UDMH
LR87	AJCC	LR87	-	N2O4	UDMH	AZ-50	-	1226.00	304.0	164.0	1	-	Titan Stage 1 ?	NTG/UDMH
LR87AJ9	AJCC	LR87	-	N2O4	UDMH	AZ-50	-	1226.00	304.0	164.0	1	-	Titan Stage 1 ?	NTG/UDMH
LR87AJ11	AJCC	LR87	-	N2O4	UDMH	AZ-50	-	1226.00	302.0	164.0	1	-	Titan 4B Stage 1 x2	NTG/UDMH
RD-268	EMASH	RD-250	-	N2O4	UDMH	AZ-50	-	1226.00	302.0	164.0	1	-	Titan Stage 1	NTG/UDMH
RD-273	EMASH	RD-250	-	N2O4	UDMH	AZ-50	-	1239.00	319.0	-	1	1970	Titan 4B Stage 1 x2	NTG/UDMH
RD-253	EMASH/PERM	RD-253	11D48	N2O4	UDMH	-	-	1239.00	-	98.0	1	-	MR-UR-100 [1]	NTG/UDMH
RD-253 14D14	EMASH/PERM	RD-253	14D14	N2O4	UDMH	-	-	1635.00	316.0	120.0	1	1965 Jul 16	R-36MU [1] x 3	NTG/UDMH
RD-275	EMASH/PERM	RD-253	-	N2O4	UDMH	-	-	1750.00	316.0	120.0	1	1986	UR-500 [1] x 6	NTG/UDMH
RD-261	EMASH/YUZH	RD-261	-	N2O4	UDMH	-	-	1745.00	317.0	130.0	1	1986	Proton-M [1] x 6	NTG/UDMH
RD-261	EMASH/YUZH	RD-261	-	N2O4	UDMH	-	-	2643.00	301.0	120.0	1	1965	R-36 = RD-260 x 3	NTG/UDMH
RD-261	EMASH/YUZH	RD-261	-	N2O4	UDMH	-	-	3032.00	270.0 s	120.0	2	1965	R-36 [1] = ? x 3	NTG/UDMH

Liquid propellant engines: Hydrogen peroxide/kerosene

Name	Manufacturer	Family	Alt_Name	Oxidizer	Fuel	Engines		Thrust kN	Isp s	Duration s	Chambers	Date	Usage	Group
						Mass kg	Impulse kN/s							
Sprite	DEHAVE	-	-	H202	Kerosene	-	22.20	-	-	-	1	-	RATO	H202/Kero
AR2-3	RDYNE	-	-	H202	Kerosene JP-4	-	31.00	245.0	-	-	1	-	F-104, X-37B	H202/Kero
SkyLark L	SKYR	-	-	H202	Kerosene	-	35.00	272.0	-	-	1	-	SkyLark L	H202/Kero
BS-605	BSELC?	-	-	H202	Kerosene	-	35.60	-	-	-	1	-	Buccaneer RATO	H202/Kero
Spectre	DEHAVE	-	-	H202	Kerosene	-	35.60	-	-	-	1	-	Blue Steel	H202/Kero
Gamma 2	BSELC?	Gamma	-	H202	Kerosene	-	68.20	251.0	113.0	-	2	1969 Jun 27	Black Arrow [2]	H202/Kero
Gamma 201	BSELC?	Gamma	-	H202	Kerosene	-	71.20	226.9	-	-	4	1958	Black Knight	H202/Kero
Gamma 301	BSELC?	Gamma	-	H202	Kerosene	-	96.10	249.7	-	-	4	1962	Black Knight	H202/Kero
Stentor 101	ASID	-	-	H202	Kerosene	-	112.00	-	-	-	1	1950s	Blue Steel	H202/Kero
Mockingbird	OSCC	-	-	H202	Kerosene	-	165.00	-	72.0	-	1	2001?	Mockingbird	H202/Kero
Gamma 8	BSELC?	Gamma	-	H202	Kerosene	-	234.80	265.0	142.0	-	8	1969 Jun 27	Black Arrow	H202/Kero
YF-85	TIANJ	-	-	H202	Kerosene	-	4000.00	-	-	-	1	2015	CZ-6	H202/Kero
Liquid propellant engines: LOX/Alcohol														
MX-774	RMI	MX-774	-	LOX	Alcohol	-	9.00	-	75.0	-	1	1948	Hiroc	LOX/Alcohol
Momo 6	IST	-	-	LOX	Ethanol	-	14.00	-	100.0	-	1	2021	Momo	LOX/Alcohol
Momo	IST	-	-	LOX	Ethanol	-	12.00	-	100.0	-	1	2017	Momo	LOX/Alcohol
Xaero	MASTEN	-	-	LOX	Alcohol	-	13.20	-	-	-	1	-	Xaero	LOX/Alcohol
STIG-B	ARMAD	-	-	LOX	Ethanol	-	22.50 ?	200.0 ?	50.0 ?	-	1	2011	STIG-B	LOX/Alcohol
STIG-A	ARMAD	-	-	LOX	Ethanol	-	22.50 ?	200.0 ?	50.0 ?	-	1	2011	STIG-A	LOX/Alcohol
SARGE	EXOSA	LE23000FC	-	LOX	Ethanol	-	24.10	200.0 ?	60.0	-	1	2018	SARGE	LOX/Alcohol
Hermes A-1	GENTS	Hermes	-	LOX	Alcohol	-	71.00	-	-	-	1	1950	Hermes A-1	LOX/Alcohol
Hermes A-3A	GENTS	Hermes	-	LOX	Alcohol	-	80.00	242.0	-	-	1	1953	Hermes A-3A	LOX/Alcohol
NRL Viking	RMI	NRL Viking	-	LOX	Alcohol	-	93.50	195.0 s	70.0	-	1	1949 May	Viking	LOX/Alcohol
Hermes A-3B	GENTS	Hermes	-	LOX	Alcohol	-	100.00	242.0	-	-	1	1954	Hermes A-3B	LOX/Alcohol
RD-100	EMASH	A-4	8051	LOX	Alcohol	-	307.00	206.0	63.0	-	1	1948 Sep 17	R-1	LOX/Alcohol
A-4	HVP	A-4	-	LOX	Alcohol	-	312.00	203.0	68.0	-	1	1942 Jun 13	A-4	LOX/Alcohol
XLR-43-MA-1	NAADR	XLR-43	-	LOX	Alcohol	-	333.00	-	-	-	1	-	DF-1	LOX/Alcohol
DF-1	CALIT?	R-2	-	LOX	Alcohol	-	363.00 s	210.0	-	-	1	-	DF-1	LOX/Alcohol
RD-101	EMASH/YUZH	A-4	8052	LOX	Alcohol	-	363.00 s	210.0	-	-	1	1949 Sep 25	R-2	LOX/Alcohol
RD-103	EMASH/YUZH	A-4	8054	LOX	Alcohol	-	500.00	220.0	-	-	1	1953 Mar 15	R-5	LOX/Alcohol
RD-103M	EMASH/YUZH	A-4	8071	LOX	Alcohol	-	500.00	220.0	-	-	1	1953 Mar 15	R-5M	LOX/Alcohol
XLR-83-MA-1	NAADR	XLR-83	-	LOX	Alcohol	-	602.00	273.0	-	-	1	-	-	LOX/Alcohol
Liquid propellant engines: LOX/UDMH														
RD-119	EMASH/KRAS	RD-109	80710	LOX	UDMH	-	105.00	352.0	-	-	1	1961	68S1	LOX/UDMH
Redstone A-7	ABMA	Redstone	-	LOX	Hydraz	-	416.20	265.0	155.0	-	1	1953 Aug 20	Junco I [1]	LOX/UDMH
RD-112	EMASH	RD-112	-	LOX	UDMH	-	58000	-	-	-	1	1960?	-	LOX/UDMH
RD-113	EMASH	RD-112	-	LOX	UDMH	-	1138.00	360.0	-	-	1	1960?	-	LOX/UDMH
RD-114	EMASH	RD-112	-	LOX	UDMH	-	1653.00	341.0	-	-	1	1961?	-	LOX/UDMH
RD-115	EMASH	RD-112	-	LOX	UDMH	-	1726.00	357.0	-	-	1	1961?	-	LOX/UDMH
Liquid propellant engines: LOX/Ammonia														
XLR-11	RMI	XLR-11	-	LOX	Ammonia	-	36.00	-	100.0	-	4	1959	X-15	LOX/NH3
XLR-99	RMD	XLR-99	-	LOX	Ammonia	-	257.00	276.0	100.0	-	1	1960	X-15	LOX/NH3
Liquid propellant engines: LOX/Kerosene														
Phoenix	GILM	-	-	LOX	Kero	-	-	-	-	-	1	2024	Eris St 3	LOX/Kero
NK Kero	KP	-	-	LOX	Kero	-	-	-	-	-	1	2024	NK KeroLox	LOX/Kero
Aether	ASTRV	-	-	LOX	Kero	-	3.30	-	315.0	-	1	2020	Astra St 1	LOX/Kero
Buran UD	OKB1	-	17D15	GOX	Kero Sintin	-	4.00	280.0	-	-	1	1988 Nov 15	Buran (x38)	LOX/Kero
VENT	VENT	-	-	LOX	Kero	-	4.40	-	-	-	1	2014	SALVO	LOX/Kero
XR-5K18	XCOR	-	-	LOX	Kero	-	12.90	-	-	-	1	2011	XCOR Lpmx	LOX/Kero
Astra E1	ASTRV	-	-	LOX	Kero	-	18.00 ?	-	-	-	1	2017	Astra St 1	LOX/Kero
Rutherford	RLABU	-	-	LOX	Kero	-	20.30	311.0	-	-	1	2017	Electron St 1	LOX/Kero
Rutherford Vac	RLABU	-	-	LOX	Kero	-	22.00	343.0	-	-	1	2017	Electron St 2	LOX/Kero
NewtonFour	VORB	-	-	LOX	Kerosene RP-1	-	22.00	0.0	-	-	1	2019	LauncherOne [2]	LOX/Kero
Delphin	ASTRV	-	-	LOX	Kero	-	28.00	-	170.0	-	1	2020	Astra St 1	LOX/Kero
TEPREU-B	PLDS	-	-	LOX	Kero	-	30.20	-	240.0	-	1	2023	Miura 1	LOX/Kero
Kestrel	SPXTX	-	-	LOX	Kero	-	33.00	317.0	378.0	-	1	-	Falcon 1 [2]	LOX/Kero
RO-5	KBKHA	-	80714	LOX	Kero	-	49.90	316.0	450.0	-	1	1958	Block E	LOX/Kero
RO-7	KBKHA	-	80719	LOX	Kero	-	54.50	323.0	430.0	-	1	1959	Block E	LOX/Kero
ABL E2	ABELSS	-	-	LOX	Kero RP-1	-	58.00	-	420.0	-	1	2022	RS1	LOX/Kero
S1-5400	OKB1	S1-5400	11D33	LOX	Kero	-	66.70	340.0	250.0	-	1	1965	Block L	LOX/Kero
KRE-007 V	KARI	-	-	LOX	Kero Jet A	-	68.70	325.1	498.0	-	1	2021	KSLV2 [3]	LOX/Kero
Lightning 1	FFLY	-	-	LOX	Kero RP-1	-	70.10	322.0	-	-	1	2021	Firefly [2]	LOX/Kero
RD-8	YUZH	-	-	LOX	Kero	-	78.40	342.0	-	-	1	1985	Zenit [2]	LOX/Kero
11D58	EMASH	RD-58	-	LOX	Kero	-	85.00	349.0	600.0	-	1	1967	Block D	LOX/Kero

Name	Manufacturer	Family	Alt_Name	Oxidizer	Fuel	Engines Mass kg	Impulse kN/s	Thrust kN	Isp s	Duration s	Chambers	Date	Usage	Group
11D56M	VORO	RD-56	-	LOX	Kero	-	-	85.00	352.0	680.0	1	1976	Blok DM	LOX/Kero
11D56M (s)	VORO	RD-56M	-	LOX	Kero Sintin	-	-	83.50	362.0	680.0	1	1976	Blok D-1	LOX/Kero
17D42	VORO	RD-58 (Buran ODU)	-	LOX	Kero Sintin	-	-	86.30	362.0	680.0	1	1988	Buran	LOX/Kero
X-405	GENTS	X-405	-	LOX	Kero	-	-	120.00	-	144.0	1	1957	Vanguard St1	LOX/Kero
KSR-III	KARI	-	-	LOX	Kero	-	-	126.00	-	59.0	1	2002	KSR-3	LOX/Kero
YF-115	TIAMJ	-	-	LOX	Kero	-	-	176.50	342.0	-	1	-	CZ-6 St. 2	LOX/Kero
Reaver 1	FFLY	-	-	LOX	Kero RP-1	-	-	184.00	295.6	-	1	2021	Firefly [1]	LOX/Kero
MA-2/S	RDYNE	MA-1	-	LOX	Kerosene RP-1	-	-	254.00 s	213.0	281.0	1	1959	Atlas D	LOX/Kero
MA-3/S	RDYNE	MA-1	-	LOX	Kerosene RP-1	-	-	254.00	214.0	-	1	-	Atlas E	LOX/Kero
Fastrac	MSFC	Fastrac	-	LOX	Kerosene RP-1	-	-	265.00	-	-	1	-	X-34	LOX/Kero
MA-1/S	RDYNE	MA-1	-	LOX	Kerosene RP-1	-	-	267.00	210.0	253.6	1	1957	Atlas B	LOX/Kero
MA-5/S	RDYNE	MA-1	-	LOX	Kerosene RP-1	-	-	269.20 s	220.0	-	1	-	Atlas SLV	LOX/Kero
RD-0124	KEKHA	RD-0106	14D23	LOX	Kero	-	-	284.30	359.0	-	1	2006	Soyuz-2-1B St3	LOX/Kero
RD-0124A	KEKHA	-	-	LOX	Kero	-	-	294.30	359.0	-	1	2014	Angara URM-2	LOX/Kero
RD-0124N	KEKHA	-	-	LOX	Kero	-	-	294.30	359.0	424.0	1	2014	Soyuz-2-1B St3	LOX/Kero
11D55	KEKHA	RD-0106	RD-0110?	LOX	Kero Naphthyl	-	-	294.30	359.0	-	1	2017	Soyuz-2-1B St3	LOX/Kero
TH-11	TIANB	-	-	LOX	Kero RG-1	-	-	298.00	326.0	250.0	4	1965	Blok I	LOX/Kero
RD-0110	KEKHA	RD-0106	-	LOX	Kero	-	-	300.00	346.0	240.0	1	2023	Tianlong-2	LOX/Kero
RD-0107	KEKHA	RD-0106	80715K	LOX	Kero	-	-	297.90	325.0	240.0	4	1960	Blok I	LOX/Kero
RD-0106	KEKHA	RD-0106	80715	LOX	Kero	-	-	297.90	326.0	250.0	4	1962	Blok I	LOX/Kero
NewtonThree	VORB	-	-	LOX	Kerosene RP-1	-	-	300.00	325.0	140.0	4	1961 Apr 9	R-9 St2	LOX/Kero
Merlin 1A	SPXTX	-	-	LOX	Kerosene RP-1	-	-	330.00	0.0	-	1	2019	LauncherOne [1]	LOX/Kero
MA-5A/S	RDYNE	MA-1/H-1	-	LOX	Kero	-	-	378.00	304.0	169.0	1	-	Falcon 1 [1]	LOX/Kero
Merlin 1C	SPXTX	-	-	LOX	Kerosene RP-1	-	-	380.60	311.0	274.0	1	-	Atlas 2	LOX/Kero
NK-21	NKE	-	-	LOX	Kero	-	-	400.00	304.0	169.0	1	-	Falcon 1 [1]	LOX/Kero
NK-31	NKE	-	-	LOX	Kero	-	-	402.00	353.0	370.0	1	1969 Feb	N-1 St3	LOX/Kero
Merlin 1C-Vac	SPXTX	-	-	LOX	Kero	-	-	427.00	-	400.0	1	-	N-1 St3 rev	LOX/Kero
NK-19	NKE	-	-	LOX	Kero	-	-	445.00	342.0	169.0	1	-	Falcon 9 [1]	LOX/Kero
G-38	RDYNE	-	-	LOX	Kero	-	-	445.00	353.0	443.0	1	1969 Feb	Blok G	LOX/Kero
Merlin 1C+	SPXTX	-	LR83-MA1	LOX	Kero	-	-	534.00	282.0	-	1	1956	Navaho	LOX/Kero
Merlin 1D	SPXTX	-	-	LOX	Kero	-	-	572.00	304.0	169.0	1	-	Falcon 1e [1]	LOX/Kero
YF-102	TIANJ	-	-	LOX	Kero	-	-	616.00	304.8	169.0	1	-	Falcon 9 [1]	LOX/Kero
S-3D	RDYNE	S-3D	-	LOX	Kero	-	-	620.00	275.0	130.0	1	2023	Tianlong-2	LOX/Kero
MB-3	RDYNE	MB-3	LR79-MA9	LOX	Kero RP-1	-	120100	667.00	247.0	180.0	1	1957	Jupiter [1]	LOX/Kero
Merlin 1D-FT	SPXTX	-	-	LOX	Kero RJ-1	-	116000	710.00	304.8	169.0	1	1957	Thor DM-18 [1]	LOX/Kero
H-1	RDYNE	H-1	-	LOX	Kero	-	-	720.00	263.0	169.0	1	-	Falcon 9 [1]	LOX/Kero
KRE-076 SL	KARI	-	-	LOX	Kero Jet A	-	-	721.00	315.4	498.0	1	1961	Saturn I	LOX/Kero
KRE-075 V	KARI	-	-	LOX	Kero Jet A	-	-	788.00	315.4	498.0	1	2021	KSLV2 [2]	LOX/Kero
RZ.2	RDYNE	-	-	LOX	Kero	-	-	785.50	286.6	127.0	1	2021	KSLV2 [1]	LOX/Kero
MB-3-2	RDYNE	MB-3	LR79-MA9	LOX	Kero	-	-	766.00	248.0 s	146.0	1	1964	Blue Streak (x2)	LOX/Kero
MB-3-3	RDYNE	MB-3	LR79-MA9	LOX	Kero RJ-1	-	-	760.00	170.0	170.0	1	-	Thor DM-21 [1]	LOX/Kero
MB-3 DM-21	RDYNE	MB-3	LR79-MA9	LOX	Kero RJ-1	-	-	779.00	170.0	170.0	1	-	Thor LITAT [1]	LOX/Kero
Merlin 1D-4	SPXTX	-	-	LOX	Kero	-	-	779.00	-	-	1	-	Thor DM-21 [1]	LOX/Kero
Merlin 1D-Vac	SPXTX	-	-	LOX	Kero	-	-	780.00	304.8	169.0	1	-	Falcon 9 [1]	LOX/Kero
RD-120	EMASH/YUZH	11D123	-	LOX	Kero	-	-	801.00	345.0	372.0	1	-	Falcon 9-1.1 [2]	LOX/Kero
Merlin 1D-5	SPXTX	-	-	LOX	Kero	-	-	834.00	350.0	-	1	1985 Apr 13	Zenit St 2	LOX/Kero
8D76PS	EMASH	RD-108	RD-108	LOX	Kero	-	-	845.00	304.8	169.0	1	-	Falcon 9 [1]	LOX/Kero
8D75	EMASH	RD-108	RD-108	LOX	Kero T-1	-	-	941.00	308.0	340.0	4	-	Sputnik	LOX/Kero
8D727	EMASH	RD-108	RD-108WM	LOX	Kero T-1	-	-	941.00	308.0	340.0	4	-	Sputnik	LOX/Kero
8D74PS	EMASH	RD-108	RD-107	LOX	Kero T-1	-	-	833.00	308.0	340.0	4	-	Sputnik	LOX/Kero
8D74	EMASH	RD-108	RD-107	LOX	Kero T-1	-	-	1000.00	306.0	146.0	4	-	Sputnik	LOX/Kero
8D728	EMASH	RD-108	RD-107WM	LOX	Kero T-1	-	-	1000.00	286.0	140.0	4	-	Sputnik	LOX/Kero
11D511	EMASH/NOTOS	RD-108	-	LOX	Kero T-1	-	-	921.00	287.0	140.0	4	-	Molniya	LOX/Kero
RD-107	EMASH	RD-108	-	LOX	Kero T-1	-	-	978.00	316.0	290.0	4	-	Soyuz A	LOX/Kero
RD-108	EMASH/NOTOS	RD-108	-	LOX	Kero T-1	-	-	991.70	310.0	120.0	4	-	Soyuz BVGD	LOX/Kero
11D512	EMASH	RD-108	-	LOX	Kero T-1	-	-	997.10	311.0	286.0	4	-	Soyuz A	LOX/Kero
RD-108FF	EMASH	RD-108	11D512FF	LOX	Kero T-1	-	-	1000.00	314.5	120.0	4	-	Soyuz BVGD	LOX/Kero
RD-107A	EMASH	RD-108	14D22	LOX	Kero Sintin	-	-	1009.40	311.0	286.0	4	-	Soyuz U2 A	LOX/Kero
RD-108A	EMASH	RD-108	14D21	LOX	Kero T-1	-	-	1000.00 ?	310.0	120.0	4	-	Soyuz FG A	LOX/Kero
RS-27	RDYNE	RS-27	-	LOX	Kerosene RP-1	-	-	1023.00	295.0	274.0	1	1974 Jan 19	Thor	LOX/Kero
RS-27A	RDYNE	RS-27	-	LOX	Kerosene RP-1	-	-	1086.00	302.0	261.0	1	1990	Thor	LOX/Kero
TH-12	TIANB	Tianhuo-12	-	LOX	Kerosene RP-1	-	-	1090.00	285.0	100.0	1	2024	TL-3	LOX/Kero
YF-100	TIANJ	-	-	LOX	Kero	-	-	1200.00 ?	305.0	155.0	1	-	YGCS	LOX/Kero
YF-100K	TIANJ	-	-	LOX	Kero	-	-	1200.00 ?	305.0	155.0	1	-	CZ-5	LOX/Kero
MA-1/B-A	RDYNE	MA-1	-	LOX	Kerosene RP-1	-	-	1250.00	335.0	125.0	2	1957	CZ-12	LOX/Kero
MA-1/B	RDYNE	MA-1	-	LOX	Kerosene RP-1	-	-	1210.00	245.0	125.0	1	-	Atlas A	LOX/Kero
TH-12V	TIANB	-	-	LOX	Kerosene RP-1	-	-	1335.00 s	245.0	128.0	2	1957	Atlas B	LOX/Kero
RD-111 (1)	EMASH	RD-111	80717	LOX	Kerosene RP-1	-	-	1350.00	335.0	-	1	2024	TL-3	LOX/Kero
MA-2/B	RDYNE	MA-1	-	LOX	Kero	-	-	1373.00	327.0	-	4	1961?	R-9 St 1	LOX/Kero
RD-111	EMASH	RD-111	80716	LOX	Kerosene RP-1	-	-	1375.00 s	248.0	135.0	2	1959	Atlas D	LOX/Kero
MA-3/B	RDYNE	MA-1	-	LOX	Kero	-	-	1381.00	312.0	108.0	4	1961 Apr 9	R-9 St 1	LOX/Kero
NK-33	NKE	-	-	LOX	Kerosene RP-1	-	-	1468.00 s	250.0	-	2	1959	Atlas E	LOX/Kero
								1510.00	-	110.0	1	-	N-1 St1 rev	LOX/Kero

Name	Manufacturer	Family	Alt_Name	Oxidizer	Fuel	Engines Mass kg	Impulse kN/s	Thrust kN	Isp s	Duration s	Chambers	Date	Usage	Group
AJ26-62	AJ/NKE	-	-	LOX	Kero	-	1510.00	1510.00	-	-	2	-	Taurus 2 [1]	LOX/Kero
RD-151	EMASH	RD-170	-	LOX	Kero	-	1670.00	1670.00	337.0	229.0	1	2009	Naro-1	LOX/Kero
MA-5/B	RDYNE	MA-1	-	LOX	Kerosene RP-1	-	1677.00	1677.00	289.0	-	2	1962	Atlas SLV	LOX/Kero
NK-15	NKE	NK	-	LOX	Kero	-	1750.00	1750.00	284.0	125.0	1	1969 Feb	N-1 St1	LOX/Kero
NK-43	NKE	NK	-	LOX	Kero	-	1750.00	1750.00	346.0	130.0	1	-	N-1 St2 rev	LOX/Kero
NK-15V	NKE	NK	-	LOX	Kero	-	1755.00	1755.00	346.0	120.0	1	1969 Feb	N-1 St2	LOX/Kero
RD-181	EMASH	RD-170	-	LOX	Kerosene RP-1	-	1922.00	1922.00	311.9 s	-	1	2015	Antares [1]	LOX/Kero
NKE	NKE	14D15	-	LOX	Kero	-	1962.00	1962.00	331.2	-	1	-	Soyuz-2-IV	LOX/Kero
NK-33A	RDYNE	MA-5	-	LOX	Kerosene RP-1	-	2065.00	2065.00	293.4	165.0	2	1991	Atlas 2	LOX/Kero
MA-5A/B	RDYNE	MA-5	-	LOX	Kerosene RP-1	-	2079.00	2079.00	337.0	150.0	1	2009	Angara URM	LOX/Kero
RD-191	EMASH	RD-170	-	LOX	Kero	-	4152.00	4152.00	337.8	190.0	2	2000 May 24	Atlas 3 [1]	LOX/Kero
RD-180	EMASH	RD-170	-	LOX	Kerosene RP-1	-	6680.00	6680.00	260.0	-	1	1967	Saturn V [1]	LOX/Kero
F-1	RDYNE	F-1	-	LOX	Kerosene RP-1	-	7908.00	7908.00	337.0	-	4	1985 Apr 13	Energia	LOX/Kero
RD-170	EMASH	RD-170	11D621	LOX	Kero	-	7908.00	7908.00	337.0	-	4	1985 Apr 13	Zenit St 1	LOX/Kero
RD-171	EMASH	RD-170	11D620	LOX	Kero	-	7908.00	7908.00	337.0	-	4	1985 Apr 13	SR 0.1 [2]	LOX/Kero
ROKETSAN-SR-0.1	ROKSN	-	-	LOX?	Kero?	-	-	-	-	-	-	-	-	LOX/Kero

Liquid propellant engines: LOX/Methane

BW1-2	PERI	-	-	LOX	Methane LMG	-	-	-	348.0 ?	-	1	2020	Blue Whale 1 [2]	LOX/Methane
BW1-1	PERI	-	-	LOX	Methane LMG	-	-	-	348.0	150.0	1	2020	Blue Whale 1 [1]	LOX/Methane
PWR35M	PWRD	-	-	LOX	Methane	-	-	-	-	-	1	2009	Taurus 2 Alt-2	LOX/Methane
Aeon 1	RELS	-	-	LOX	Methane	-	126.00	126.00	-	-	1	2023	Terran-1 [1]	LOX/Methane
AeonVac	RELS	-	-	LOX	Methane	-	126.00	126.00	-	-	1	2023	Terran-1 [2]	LOX/Methane
JD-1	XJRY	-	-	LOX	Methane LMG	-	150.00	150.00	355.0	-	1	2020	SQ2	LOX/Methane
TQ-11	LANDSP	-	-	LOX	Methane	-	658.00	658.00	331.0	-	4	2019	ZQ-2	LOX/Methane
Archimedes	RLABU	-	-	LOX	Methane LMG	-	730.00	730.00	329.0	-	1	2025	Neutron	LOX/Methane
TQ-12	LANDSP	-	-	LOX	Methane	-	800.00	800.00	350.0	-	1	2019	ZQ-2	LOX/Methane
TQ-12A	LANDSP	-	-	LOX	Methane	-	810.00	810.00	354.0	-	1	2024	ZQ-2	LOX/Methane
TQ-15A	LANDSP	-	-	LOX	Methane	-	836.00	836.00	350.0	-	1	2024	ZQ-2	LOX/Methane
Archimedes Vac	RLABU	-	-	LOX	Methane LMG	-	890.00	890.00	367.0	-	1	2025	Neutron	LOX/Methane
JD-2	XJRY	-	-	LOX	Methane LMG	-	1000.00	1000.00	300.0	-	1	2020	SQ2	LOX/Methane
Raptor SL	SPX	-	-	LOX	Methane	-	1950.00	1950.00	-	-	1	2019	Starship	LOX/Methane
Raptor 2 Vac	SPX	-	-	LOX	Methane	-	2500.00	2500.00	-	-	1	2020	Starship	LOX/Methane
Raptor 3 SL	SPX	-	-	LOX	Methane	-	2800.00	2800.00	-	-	1	2019	Starship	LOX/Methane
Raptor 3 Vac	SPX	-	-	LOX	Methane	-	2800.00	2800.00	-	-	1	2020	Starship	LOX/Methane
BE-4	BLORTX	-	-	LOX	Methane LMG	-	2447.00	2447.00	-	-	1	2023	Vulcan	LOX/Methane

Liquid propellant engines: LOX/Hydrogen

YF-73	SLREC	YF-73	-	LOX	LH2	-	44.10	44.10	425.0	800.0	4	1984	CZ-3 Stage 3	LOX/LH2
HM-7	SEP	-	-	LOX	LH2	-	61.70	61.70	442.6	510.1	1	1979	Ariane H8	LOX/LH2
HM-7B	SEP	-	-	LOX	LH2	-	64.80	64.80	445.1	745.0	1	-	Ariane H10-3	LOX/LH2
RL10	PMFL	RL10	-	LOX	LH2	-	66.70	66.70	433.0	470.0	1	-	Ariane 1	LOX/LH2
RL10A-1	PMFL	RL10	-	LOX	LH2	-	66.70	66.70	433.0	470.0	1	-	Centaur	LOX/LH2
RL10A-3	PMFL	RL10	-	LOX	LH2	-	65.60	65.60	444.0	470.0	1	-	Centaur	LOX/LH2
ICE	ISRO	ICE	-	LOX	LH2	-	67.40	67.40	452.0	720.0	1	-	GSLV 3	LOX/LH2
RL10A-3A	PMFL	RL10	-	LOX	LH2	-	73.40	73.40	444.0	550.0	1	-	Centaur	LOX/LH2
RL10A-3-3A	PMFL	RL10	-	LOX	LH2	-	73.40	73.40	444.0	550.0	1	-	Centaur T	LOX/LH2
KVD-1M	KHMW	-	RD-56M	LOX	LH2	-	75.00	75.00	460.0	675.0	1	-	GSLV G53	LOX/LH2
YF-75	SLREC	YF-75	-	LOX	LH2	-	78.50	78.50	440.0	470.0	1	-	CZ-3A Stage 3	LOX/LH2
YF-75D	SLREC	YF-75	-	LOX	LH2	-	88.30	88.30	442.0	700.0	1	-	CZ-5 Stage 2	LOX/LH2
RL10A-4	PMFL	RL10	-	LOX	LH2	-	92.60	92.60	449.0	370.0	1	-	Centaur IIA	LOX/LH2
RL10A-4-1	PMFL	RL10	-	LOX	LH2	-	99.20	99.20	450.5	370.0	1	-	Centaur IIA/IIIA	LOX/LH2
RL10A-4-1B	PMFL	RL10	-	LOX	LH2	-	99.20	99.20	450.5	370.0	1	-	Centaur IIIA	LOX/LH2
RL10A-4-2	PMFL	RL10	-	LOX	LH2	-	99.20	99.20	450.5	370.0	1	-	Centaur IIIA	LOX/LH2
LE-5	MHME	LE-5	-	LOX	LH2	-	107.00	107.00	448.0	370.0	1	-	Centaur	LOX/LH2
RL10B-2	PMFL	RL10	-	LOX	LH2	-	110.10	110.10	465.5	700.0	1	1998	H1 St2	LOX/LH2
RL10C-1	PMFL	RL10	-	LOX	LH2	-	101.80	101.80	449.7	700.0	1	2014	Delta III	LOX/LH2
RL10C-1-1	PMFL	RL10	-	LOX	LH2	-	101.80	101.80	449.7	700.0	1	2021	Delta IV	LOX/LH2
RL10C-1-1A	PMFL	RL10	-	LOX	LH2	-	106.00	106.00	449.7	700.0	1	2023	Atlas V	LOX/LH2
RL10C-2	PMFL	RL10	-	LOX	LH2	-	110.00	110.00	462.5	700.0	1	2014	VC	LOX/LH2
RL10C-2-1	PMFL	RL10	-	LOX	LH2	-	110.10	110.10	462.5	700.0	1	2014	SLS?	LOX/LH2
RL10CX	PMFL	RL10	-	LOX	LH2	-	120.00 ?	120.00 ?	462.5 ?	700.0 ?	1	2019	Delta IV	LOX/LH2
LE-5A	MHME	LE-5	-	LOX	LH2	-	122.00	122.00	452.0	600.0	1	1994	Vulcan Centaur	LOX/LH2
LE-5B	MHME	LE-5	-	LOX	LH2	-	137.00	137.00	447.0	530.0	1	-	H2 St2	LOX/LH2
LE-5B-3	MHME	LE-5	-	LOX	LH2	-	137.00	137.00	448.0	686.0	1	2023	H3 St2	LOX/LH2
Vinci	SNECMA	-	-	LOX	LH2	-	180.00	180.00	457.0	300.0	1	2024	Ariane 6	LOX/LH2
BE-20	VSSC	-	-	LOX	LH2	-	186.00	186.00	443.0	550.0	1	2009	C-25	LOX/LH2
BE-3 (BLOR)	BLOR	-	-	LOX	LH2	-	490.00	490.00	-	145.0	1	-	New Shepard	LOX/LH2
YF-77	CALT	-	-	LOX	LH2	-	673.00 ?	673.00 ?	438.0	500.0 ?	1	-	CZ-5	LOX/LH2
J-2	RDYNE	J-2	-	LOX	LH2	-	1023.00	1023.00	427.0	-	1	1966	Saturn 1VB	LOX/LH2
LE-7	MHME	LE-5	-	LOX	LH2	-	1080.00	1080.00	445.6	346.0	1	1994	H2 St1	LOX/LH2
LE-7A	MHME	LE-5	-	LOX	LH2	-	1100.00	1100.00	440.0	390.0	1	-	H2A St1	LOX/LH2

Name	Manufacturer	Family	Alt_Name	Oxidizer	Fuel	Engines Mass kg	Impulse kN/s	Thrust kN	Isp s	Duration s	Chambers	Date	Usage	Group
Vulcain 2	SEP	-	-	LOX	LH2	-	-	1114.00	430.0	589.0	1	1996	Ariane EPC H158	LOX/LH2
J-2X	SEP	-	-	LOX	LH2	-	-	1300.00	434.0	589.0	1	2002	Ariane EPC H175	LOX/LH2
Vulcain 2.1	PWRD	J-2	-	LOX	LH2	-	-	1308.00	448.0	465.0	1	2010	Ares I	LOX/LH2
LE-9	SEP	-	-	LOX	LH2	-	-	1324.00	434.0	589.0	1	2024	Ariane 6 LLP	LOX/LH2
RD-0120	MHME	LE-5	-	LOX	LH2	-	-	1471.00	426.9	298.0	1	2023	H3 St1	LOX/LH2
SSME	KBHA	11D122	-	LOX	LH2	-	-	1961.00	455.0	480.0	1	1987	Energiya St2	LOX/LH2
RS-25	RDYNE	RS-25	-	LOX	LH2	-	-	2100.00	452.5	516.0	1	1981	STS ET	LOX/LH2
RS-68	RDYNE	RS-25	-	LOX	LH2	-	-	2100.00	452.5	516.0	1	2022	SLS	LOX/LH2
RS-68A	RDYNE	RS-68	-	LOX	LH2	-	-	2950.00	409.0	516.0	1	-	Delta 4	LOX/LH2
RS-68A	RDYNE	RS-68	-	LOX	LH2	-	-	3124.00	414.0	-	1	2012	Delta 4	LOX/LH2

Liquid propellant engines: Green

Curie	RLABU	-	-	LOX?	RL Green Prop	-	-	0.12	303.0	-	1	2017	Electron St 3	Green
HyperCurie	RLABU	-	-	LOX?	RL Green Prop	-	-	0.50	320.0	-	1	2017	Electron St 3	Green
GR-1	RDYNE	-	-	-	NH3OHNO3 AF-M315E	0.0	-	-	-	-	-	2017	GPM	Green

Electric propulsion engines: Xenon, Krypton

PFS-1350	SEFVR	-	-	Elec SFT	Xe	-	-	0.00	1800.0	-	1	-	SMART-1/Stentor	EP
PFS-5000	SMECS	-	-	Elec SFT	Xe	-	-	0.00	2000.0	-	1	-	Spacebus-NEO XPS	EP
XIPS-25	L3HED	-	-	IPS	Xe	-	0	0.00	3550.0	-	1	-	XIPS-25	EP
NSTAR-30	L3HED	-	-	IPS	Xe	-	0	0.00	3550.0	-	1	-	XIPS-30	EP
Starlink Kr EPS	SPAS	-	-	IPS	Kr	-	0	-	-	-	1	2019	Starlink	EP





ID#	Name	AltName	Radius km	PolarRadius km	Mass Eg	SemiMajorkxis km	Periapsis km	Ecc	Worlds	Inc deg	Node deg	Peri deg	M deg	Epoch	RotPeriod d	OrbPeriod d	Ephemeris	WType	Primary
P 010	Sun	-	695990	-	1.989e+09H	-	-	-	-	-	-	-	-	-	25.3800	?	JPL 0	*	-
P 001	Mercury	Sol I	2439.76	2439.8	330.0987M	57.908M	46.0012H	0.205630	-	7.0050	0.0000	0.0000	0.0000	2017 Sep 4 00:00:00	?	87.9520	JPL 1	P	-
P 002	Venus	Sol II	6052.3	6052.3	4867.3058H	108.209M	107.4515H	0.007000	0.0000	3.4000	0.0000	0.0000	0.0000	2017 Sep 4 00:00:00	?	224.7020	JPL 2	P	-
P 003	Earth-Moon System	Sol III	6378.135	6378.135	6045.6263H	149.5979M	147.0996H	0.016700	0.0000	0.0000	0.0000	0.0000	0.0000	2017 Sep 4 00:00:00	?	283.0185	JPL 3	DB	-
P 399	Earth	Sol III	6378.135	6378.135	5972.1686H	149.5979M	147.0996H	0.016700	0.0000	0.0000	0.0000	0.0000	0.0000	2017 Sep 4 00:00:00	?	365.2500	JPL 3	P	EMB
P 004	Mars	Sol IV	3397.52	3376.2	641.6909M	0	206.6413M	0.000000	0.0000	0.0000	0.0000	0.0000	0.0000	2017 Sep 4 00:00:00	?	686.9620	JPL 499	P	-
P 005	Jupiter	Sol V	71492	66854	1.899e+09H	0	740.5663M	0.000000	0.0000	0.0000	0.0000	0.0000	0.0000	2017 Sep 4 00:00:00	?	11.8576yr	JPL 699	P	-
P 006	Saturn	Sol VI	60268	54364	568457.8937H	0	1353.1296H	0.000000	0.0000	0.0000	0.0000	0.0000	0.0000	2017 Sep 4 00:00:00	?	29.4201yr	JPL 699	P	-
P 007	Uranus	Sol VII	26559	24973	86818.8215M	0	2742.75H	0.000000	0.0000	0.0000	0.0000	0.0000	0.0000	2017 Sep 4 00:00:00	?	83.7481yr	JPL 799	P	-
P 008	Neptune	Sol VIII	24764	24341	102430.6249H	0	4454.8516H	0.000000	0.0000	0.0000	0.0000	0.0000	0.0000	2017 Sep 4 00:00:00	?	163.7280yr	JPL 899	P	-
P 009	SSB	-	695990	-	1.989e+09H	0	-	-	-	-	-	-	-	?	25.3800	JPL 899	DB	-	
DL SEL1	Sun-Earth L1	Earth L1	0	-	0	149.598M	-	0.018700	0.0000	0.0000	0.0000	0.0000	0.0000	2017 Sep 4 00:00:00	?	365.2500	LP 1	DL	Earth
DL SEL2	Sun-Earth L2	Earth L2	0	-	0	149.598M	-	0.018700	0.0000	0.0000	0.0000	0.0000	0.0000	2017 Sep 4 00:00:00	?	365.2500	LP 2	DL	Earth
P 503	Jupiter III	Jupiter III	2634	-	149.024M	107000M	1067860	0.002000	0.0000	0.2100	0.0000	0.0000	0.0000	2017 Sep 4 00:00:00	?	9.9973	JPL 603	W	Jupiter
P 606	Ganymede	Saturn VI	2634	-	134.52M	1221870	1182023	0.029190	0.3300	0.3300	0.0000	0.0000	0.0000	2017 Sep 4 00:00:00	?	7.1546	JPL 603	W	Jupiter
P 504	Callisto	Jupiter I	2403	-	107.516M	1818203	1.8718H	0.007000	0.5100	0.5100	0.0000	0.0000	0.0000	2017 Sep 4 00:00:00	?	15.9454	JPL 606	W	Saturn
P 501	Io	Jupiter I	1830	1615	89.213M	422000	420312	0.004000	0.0400	0.0400	0.0000	0.0000	0.0000	2017 Sep 4 00:00:00	?	16.6890	JPL 604	W	Jupiter
P 301	Luna	Earth I	1737.5	-	73.4579M	0	363296	0.000000	0.0000	0.0000	0.0000	0.0000	0.0000	2017 Sep 4 00:00:00	?	27.3217	JPL 501	W	Jupiter
P 502	Europa	Jupiter II	1565	-	49.719M	671000	664961	0.009000	0.4700	0.4700	0.0000	0.0000	0.0000	2017 Sep 4 00:00:00	?	3.5512	JPL 502	W	Earth
P 801	Triton	Neptune I	1383	-	21.4H	345760	345764	0.000016	137.3450	137.3450	0.0000	0.0000	0.0000	2017 Sep 4 00:00:00	?	5.8769	JPL 801	W	Jupiter
P 609	Pluto	Sol (134340)	1183	1151	1.3107M	0	4442.7658H	0.000000	0.0000	0.0000	0.0000	0.0000	0.0000	2017 Sep 4 00:00:00	?	248.0301yr	JPL 999	W	Neptune
A (136199)	Eris	Sol (136199)	1163	-	16.9H	0	5650.7356H	0.000000	0.0000	0.0000	0.0000	0.0000	0.0000	?	556.4748yr	JPL 999	W	-	
A (138108)	Haumea	Sol (138108)	980	500	4.01H	6485.672H	0.189382	0.000000	0.0000	28.2037	121.9704	238.8692	214.0666	2017 Sep 4 00:00:00	?	285.4648yr	JPL 999	W	-
P 703	Tiانيا	Uranus III	789	-	3.47H	435910	439460	0.002200	0.1400	0.1400	0.0000	0.0000	0.0000	2017 Sep 4 00:00:00	?	8.7059	JPL 703	W	Uranus
P 905	Rhea	Saturn V	764	-	2.3065H	527108	526580	0.001000	0.3600	0.3600	0.0000	0.0000	0.0000	2017 Sep 4 00:00:00	?	4.5175	JPL 605	W	Uranus
P 704	Ubenon	Uranus IV	761	-	2.92H	563053	563053	0.000000	0.1000	0.1000	0.0000	0.0000	0.0000	2017 Sep 4 00:00:00	?	13.4652	JPL 704	W	Uranus
P 605	Makemake	Saturn VIII	716	-	1.88M	6856.2346H	5780.1629H	0.154733	28.9567	79.5861	236.9466	161.0541	214.0666	2017 Sep 4 00:00:00	?	309.0593yr	JPL 605	W	Uranus
P 606	Lapetus	Saturn VIII	625	-	1500000?	3.5613M	0.022280	0.000000	0.0000	0.0000	0.0000	0.0000	0.0000	2017 Sep 4 00:00:00	?	79.3302	JPL 606	W	Saturn
P 702	Charon	2007 OR10	604	-	1.53M	19571	19422	0.007600	96.1600	96.1600	0.0000	0.0000	0.0000	2017 Sep 4 00:00:00	?	6.3872	JPL 901	W	Pluto
P 701	Arkel	Uranus II	585	578	1270000	266500	264968	0.005000	0.3600	0.3600	0.0000	0.0000	0.0000	2017 Sep 4 00:00:00	?	4.1442	JPL 702	W	Uranus
P 604	Dione	Saturn IV	581	-	1059462	377396	376594	0.002230	0.2000	0.2000	0.0000	0.0000	0.0000	2017 Sep 4 00:00:00	?	2.7369	JPL 604	W	Uranus
P 603	Quasar	2002 LH60	585	526	1227200?	6517.065M	294619.6268H	0.036536	0.9867	188.7602	148.0125	285.9123	358.0259	2017 Sep 4 00:00:00	?	287.5413yr	JPL 603	W	Saturn
P (90377)	Sedna	Saturn III	532	-	17.449M	294619.6268H	11378.2959H	0.843724	11.9290	188.7602	148.0125	285.9123	358.0259	2017 Sep 4 00:00:00	?	10737.3748yr	JPL 603	W	Saturn
A (1)	2004 LW	2004 LW	460	-	2889.0478H	5895.9478H	4896.8797H	0.075607	0.0000	0.0000	0.0000	0.0000	0.0000	2017 Sep 4 00:00:00	?	246.7800yr	JPL 603	W	-
A (317261)	Ceres	Sol (1)	482	446	941063	413.9958M	582.6972H	0.076607	0.0000	0.0000	0.0000	0.0000	0.0000	2017 Sep 4 00:00:00	?	1.7697	JPL 901	W	-
A (5264)	2002 MS4	2002 MS4	460	-	1410663	6284.4227H	581.8979H	0.140679	17.6679	215.9036	309.0646	213.3359	309.0646	2017 Sep 4 00:00:00	?	270.8923yr	JPL 901	W	-
A (158665)	Salacia	2004 SB60	460	-	249600?	6284.4227H	581.8979H	0.140679	17.6679	215.9036	309.0646	213.3359	309.0646	2017 Sep 4 00:00:00	?	270.8923yr	JPL 901	W	-
A (158665)	2002 MI197	2002 MI197	460	-	103000?	7285.6838H	6151.0277H	0.109969	23.9270	279.9973	369.0646	224.5828	244.5828	2017 Sep 4 00:00:00	?	326.9600yr	JPL 901	W	-
A (158665)	2003 MR106	2003 MR106	384	-	56300?	6922.0618H	6151.0277H	0.123270	29.7099	297.5099	394.5634	244.5828	244.5828	2017 Sep 4 00:00:00	?	486.9600yr	JPL 901	W	-
A (158665)	2003 FZ27	2003 FZ27	376	-	276200?	6425.1638H	6151.0277H	0.123270	29.7099	297.5099	394.5634	244.5828	244.5828	2017 Sep 4 00:00:00	?	486.9600yr	JPL 901	W	-
A (158665)	2003 A264	2003 A264	360?	-	173800?	8607.0643H	8945.3693H	0.380951	33.1957	197.1888	139.5951	111.7465	111.7465	2017 Sep 4 00:00:00	?	486.9600yr	JPL 901	W	-
A (158665)	2003 MH2	2003 MH2	360?	-	234500?	5910.3917H	4945.1699H	0.180175	252.1062	14.2264	231.302	231.302	231.302	2017 Sep 4 00:00:00	?	247.9600yr	JPL 901	W	-
A (158665)	2003 W9	2003 W9	352?	-	147000?	5910.3917H	4945.1699H	0.180175	252.1062	14.2264	231.302	231.302	231.302	2017 Sep 4 00:00:00	?	247.9600yr	JPL 901	W	-
A (158665)	2005 RM43	2005 RM43	340?	-	157500?	6321.8832M	5918.7468H	0.000000	0.0000	0.0000	0.0000	0.0000	0.0000	2017 Sep 4 00:00:00	?	274.9600yr	JPL 901	W	-
A (158665)	2005 UH143	2005 UH143	340?	-	254800?	6321.8832M	5918.7468H	0.000000	0.0000	0.0000	0.0000	0.0000	0.0000	2017 Sep 4 00:00:00	?	274.9600yr	JPL 901	W	-
A (158665)	2002 UZ25	2002 UZ25	336	-	400000?	6454.9517M	6454.9517M	0.000000	0.0000	0.0000	0.0000	0.0000	0.0000	2017 Sep 4 00:00:00	?	267.6700yr	JPL 901	W	-
A (158665)	2004 UH163	2004 UH163	330?	-	154000?	6454.9517M	6454.9517M	0.000000	0.0000	0.0000	0.0000	0.0000	0.0000	2017 Sep 4 00:00:00	?	267.6700yr	JPL 901	W	-
A (158665)	2018 VL18	2018 VL18	328	-	39856.6598H	5124.7419H	5124.7419H	0.387460	9.4836	204.6755	270.0035	295.1075	295.1075	2017 Sep 4 00:00:00	?	307.5700yr	JPL 901	W	-
A (158665)	2014 E251	2014 E251	328	-	400000?	12179.4775M	5653.2644H	0.535937	24.4471	245.9535	17.1774	156.8462	156.8462	2017 Sep 4 00:00:00	?	734.6000yr	JPL 901	W	-
A (158665)	2014 E252	2014 E252	325	-	400000?	7645.6737H	7645.6737H	0.000000	0.0000	0.0000	0.0000	0.0000	0.0000	2017 Sep 4 00:00:00	?	629.9450yr	JPL 901	W	-
A (158665)	2014 UZ224	2014 UZ224	317	-	16238.2178M	12236.4918M	12236.4918M	0.650793	0.0000	0.0000	0.0000	0.0000	0.0000	2017 Sep 4 00:00:00	?	1136.4300yr	JPL 901	W	-
A (158665)	2015 RR245	2015 RR245	313	-	263000?	12236.4918M	12236.4918M	0.650793											

ID#	IDName	Name	AltName	Radius km	PolarRadius km	Mass Eg	SemiMajorkxis km	Periaapsis km	Ecc	Worlds	Inc deg	Node deg	Peri deg	M deg	Epoch	RotPeriod d	OrbPeriod d	Ephemeris	WType	Primary
A	(64922)	2003 V52	2003 V52	2627	-	1497007	5876.5426M	5451.1998H	0.072427	14.7970	302.7094	112.8663	19.3664	2017 Sep 4 00:00:00	?	246.143009Y	-	-	-	-
AP	2002 KM14	-	883007	2607	-	883007	7039.5737M	5586.5737M	0.206116	9.7406	59.8163	124.3484	45.8808	2020 Sep 4 00:00:00	?	323.14009Y	-	-	-	-
AP	2013 AT183	2013 AT183	9211.9877M	259	-	610007	9211.9877M	5310.6622H	0.425510	28.1574	304.5939	68.1185	69.6999	2020 May 31 00:00:00	?	468.22869Y	-	-	-	-
AP	2014 F069	2014 F069	10860.3083M	259	-	780007	10860.3083M	6295.0708H	0.444883	29.9630	250.3413	189.6610	89.7191	2020 May 31 00:00:00	?	618.5621Y	-	-	-	-
AP	(498514)	2010 O0127	6344.7322M	259	-	800007	6344.7322M	5045.9688H	0.125896	25.9007	219.7824	246.2970	246.1126	2020 May 31 00:00:00	?	276.21049Y	-	-	-	-
AP	2014 Y460	2014 Y460	6946.5721M	259	-	800007	6946.5721M	4743.4597H	0.171920	23.8653	46.4120	196.4624	311.4665	2020 May 31 00:00:00	?	315.69799Y	-	-	-	-
AP	2017 0F69	2017 0F69	5940.2382M	259	-	800007	5940.2382M	4706.5964H	0.207339	13.6650	218.6073	214.6887	283.3599	2020 May 31 00:00:00	?	250.22229Y	-	-	-	-
P	602	237948	237948	245	245	108022	108022	5772.3011H	0.004520	0.0000	218.6073	214.6887	283.3599	2020 May 31 00:00:00	1.3702	1.3702	JPL 602	-	-	-
AP	(470599)	Saturn II	10117.5519M	253	-	790007	10117.5519M	5772.3011H	0.429476	13.1280	178.0395	33.2676	357.7278	2020 May 31 00:00:00	?	556.20299Y	-	-	-	-
AP	2014 FC72	2014 FC72	11331.8794M	253	-	790007	11331.8794M	5478.3418H	0.318000	29.8979	178.0395	33.2676	357.7278	2020 May 31 00:00:00	?	569.2847Y	-	-	-	-
AP	2014 HA200	2014 HA200	8400.8888M	253	-	790007	8400.8888M	5492.5664H	0.346132	171.1669	138.1240	131.6257	319.0673	2020 May 31 00:00:00	?	420.83099Y	-	-	-	-
A	(119979)	2002 WC19	790007	253	-	790007	790007	5276.1976H	0.258127	9.2049	109.8719	46.3870	319.4714	2020 May 31 00:00:00	?	327.70969Y	-	-	-	-
A	(131650)	2006 AP129	6215.0429M	253	-	790007	6215.0429M	5371.4068H	0.135741	27.4192	14.8749	56.2829	53.9650	2020 May 31 00:00:00	?	367.78809Y	-	-	-	-
A	(472271)	2014 B634	6425.9352M	253	-	790007	6425.9352M	5446.6211H	0.152089	17.4069	286.5716	268.6942	274.1449	2020 May 31 00:00:00	?	281.62989Y	-	-	-	-
A	(523681)	2014 B963	6824.4584M	253	-	790007	6824.4584M	5617.6931H	0.147523	15.4623	279.3764	268.3275	284.2653	2020 May 31 00:00:00	?	308.12189Y	-	-	-	-
AP	2010 F486	2010 F486	7064.3363M	253	-	790007	7064.3363M	5096.8968H	0.064507	25.1667	311.1347	350.2413	284.0431	2020 May 31 00:00:00	?	322.44449Y	-	-	-	-
AP	2015 E2518	2015 E2518	7060.9123M	253	-	790007	7060.9123M	5742.8618H	0.186739	11.3754	43.9916	272.8037	44.8099	2020 May 31 00:00:00	?	324.27349Y	-	-	-	-
A	(486389)	1995 TL8	7813.0809M	247	-	293007	7813.0809M	5479.3406H	0.234701	0.2478	260.2771	33.5682	44.8099	2017 Sep 4 00:00:00	?	377.88009Y	-	-	-	-
A	(307982)	2004 P115	13784.0187M	247	-	610007	13784.0187M	5446.8599H	0.694915	16.2835	230.3653	75.8868	6.9081	2020 May 31 00:00:00	?	884.47159Y	-	-	-	-
A	(484673)	2010 V298	51.446473M	237	-	610007	51.446473M	5140.1730H	0.775383	4.5137	117.3101	313.6257	388.5752	2020 May 31 00:00:00	?	1867.35209Y	-	-	-	-
A	(496603)	2015 AB281	8219.6048M	247	-	690007	8219.6048M	6187.4059H	0.247238	26.7367	22.0222	136.2624	336.0529	2020 May 31 00:00:00	?	407.28529Y	-	-	-	-
A	(523635)	2010 D993	8236.1331M	247	-	690007	8236.1331M	6731.1082H	0.182734	40.5976	90.3027	31.3696	43.2770	2020 May 31 00:00:00	?	408.51239Y	-	-	-	-
A	(444030)	2004 J733	6650.1968M	247	-	790007	6650.1968M	5238.7474H	0.155930	30.2292	240.9004	39.6661	42.9168	2020 May 31 00:00:00	?	286.69019Y	-	-	-	-
A	(523742)	2014 J285	6504.2117M	242	-	790007	6504.2117M	4820.8613H	0.258810	14.9553	336.9067	333.4033	156.6654	2020 May 31 00:00:00	?	914.08989Y	-	-	-	-
A	(26161)	2014 G285	14090.0501M	242	-	790007	14090.0501M	5740.4099H	0.692891	13.3517	194.1964	387.0763	11.9440	2020 May 31 00:00:00	?	2776.7267Y	-	-	-	-
A	2013 F528	2013 F528	29553.4652M	241	-	1400007	29553.4652M	5111.8309H	0.827031	13.0568	204.6489	102.0106	348.2102	2020 May 31 00:00:00	?	461.96269Y	-	-	-	-
AP	2017 F0161	2017 F0161	6939.6028M	241	-	1400007	6939.6028M	5096.8968H	0.429363	54.3505	104.9647	151.0426	240.9005	2020 May 31 00:00:00	?	245.21069Y	-	-	-	-
AP	2017 F0115	2017 F0115	5860.7506M	241	-	1400007	5860.7506M	5495.7651H	0.022278	13.3464	84.4662	87.1340	168.9243	2020 May 31 00:00:00	1.4135	1.4135	JPL 705	-	-	-
P	705	Uranus V	129390	233	233	750000	129390	128696	0.067000	4.2000	44.4662	87.1340	168.9243	2020 May 31 00:00:00	?	461.96269Y	-	-	-	-
A	(471143)	Dzalewanua	51.446473M	237	-	2930007	51.446473M	4881.2461H	0.537357	29.4773	346.2748	284.5338	348.7676	2020 May 31 00:00:00	?	569.77049Y	-	-	-	-
A	(28375)	1999 D69	8262.0109M	236	-	690007	8262.0109M	6187.4059H	0.413625	7.6354	323.1200	158.4438	30.0761	2020 May 31 00:00:00	?	410.47049Y	-	-	-	-
AS	(94642)	1	9650	237	-	970007	9650	8986	0.007000	0.0000	323.1200	158.4438	30.0761	2020 May 31 00:00:00	?	233.6257Y	-	-	-	-
AP	2003 04414	2003 04414	5444.5794M	236	-	540007	5444.5794M	5444.9422H	0.040468	0.0000	192.0925	261.6288	286.1751	2020 May 31 00:00:00	?	763.22359Y	-	-	-	-
AP	2011 WJ157	2011 WJ157	12373.2719M	236	-	540007	12373.2719M	5698.9693H	0.858727	22.3790	101.0173	51.4626	21.0446	2020 May 31 00:00:00	?	963.62019Y	-	-	-	-
A	(308379)	2005 B543	7486.6331M	236	-	540007	7486.6331M	5958.3542H	0.616502	27.1460	76.5180	58.6786	354.1112	2020 May 31 00:00:00	?	288.07199Y	-	-	-	-
A	(523645)	2014 W771	6446.4509M	236	-	540007	6446.4509M	5701.2618H	0.115957	28.6386	196.3046	393.6216	55.7913	2020 May 31 00:00:00	?	331.52819Y	-	-	-	-
A	(523655)	2014 W772	6525.1331M	236	-	540007	6525.1331M	5718.3443H	0.143930	27.9687	346.5046	350.1523	239.0672	2020 May 31 00:00:00	?	282.87989Y	-	-	-	-
A	(327160)	2014 U224	6977.0177M	236	-	540007	6977.0177M	6190.4274H	0.073417	11.0391	11.7856	177.9420	284.2413	2020 May 31 00:00:00	?	286.17979Y	-	-	-	-
A	(397616)	2003 Q969	6656.8912M	236	-	540007	6656.8912M	6076.0662H	0.112740	27.9687	346.5046	350.1523	239.0672	2020 May 31 00:00:00	?	318.51139Y	-	-	-	-
AP	(469369)	1999 D126	6379.6944M	235	-	540007	6379.6944M	5958.3542H	0.137590	25.8542	119.0860	146.3938	254.3359	2020 May 31 00:00:00	?	286.17979Y	-	-	-	-
AP	(544557)	2014 J225	6462.0777M	235	-	540007	6462.0777M	5718.3443H	0.137590	27.9687	346.5046	350.1523	239.0672	2020 May 31 00:00:00	?	286.17979Y	-	-	-	-
AP	(544558)	2014 J226	6462.0777M	235	-	540007	6462.0777M	5718.3443H	0.137590	27.9687	346.5046	350.1523	239.0672	2020 May 31 00:00:00	?	286.17979Y	-	-	-	-
AP	2015 AB281	2015 AB281	11452.9146M	235	-	540007	11452.9146M	5914.0171H	0.338356	26.8953	576.1266	87.2076	95.2916	2020 May 31 00:00:00	?	284.43879Y	-	-	-	-
A	(149461)	2005 K114	5336.9833M	234	-	540007	5336.9833M	5589.4159H	0.482928	26.4636	180.1489	170.9855	27.9785	2020 May 31 00:00:00	?	967.91039Y	-	-	-	-
A	(38923)	2003 F128	5002.141460M	234	-	890007	5002.141460M	5589.4159H	0.246223	11.4049	301.9756	179.2818	2.0789	2020 May 31 00:00:00	?	347.85189Y	-	-	-	-
A	(471137)	2014 E765	5985.1558M	233	-	785007	5985.1558M	4368.9438H	0.202290	7.9049	331.8736	67.8919	3.16923	2017 Sep 4 00:00:00	?	450.80099Y	-	-	-	-
A	2014 O1394	2014 O1394	7037.7658M	230	-	470007	7037.7658M	5929.5698H	0.387776	15.5560	189.5860	354.6312	4.6937	2020 May 31 00:00:00	?	400.87979Y	-	-	-	-
AP	(471383)	2011 Q927	6161.8194M	230	-	540007	6161.8194M	6383.9373H	0.024159	13.0241	299.9857	272.4746	56.5947	2020 May 31 00:00:00	?	386.51629Y	-	-	-	-
AP	(523653)	2014 W937	6577.9333M	230	-	540007	6577.9333M	6383.9373H	0.147469	25.7393	201.4599	90.3026	2020 May 31 00:00:00	?	288.95299Y	-	-	-	-	
AP	(523752)	2014 W937	6072.9852M	230	-	540007	6072.9852M	5788.2398H	0.046872	28.6685	248.1650	342.1327	208.8493	2020 May 31 00:00:00	?	255.85019Y	-	-	-	-
AP	2014 J980	2014 J980	5940.8424M	230	-	540007	5940.8424M	5536.7101H	0.068026	19.3469	146.2894	318.9364	208.0187	2020 May 31 00:00:00	?	250.26949Y	-	-	-	-
AP	2014 J980	2014 J980	5940.8424M	230	-	540007	5940.8424M	5536.7101H	0.068026	19.3469	146.2894	318.9364	208.0187	2020 May 31 00:00:00	?	249.87119Y	-	-	-	-
AP	2014 Y440	2014 Y440	7076.1433M	230	-	470007	7076.1433M	6004.5403H	0.098943	29.0175	119.1588	394.8119	254.2646	2020 May 31 00:00:00	?	325.94429Y	-	-	-	-
AP	2003 OX113	2010 H279	7465.635M																	

ID#	Name	AltName	Radius km	PolarRadius km	Mass Eg	SemiMajorkis km	Periaapsis km	Ecc	Inc deg	Node deg	Peri deg	M deg	Epoch	RotPeriod d	OrbPeriod d	Ephemeris	WType	Primary
P 601	Mimas	Saturn I	198	191	37493	185559	181791	0.020200	1.5300	204.7219	247.4644	339.9250	2017 Sep 4 00:00:00	0.9424	0.9424	JPL 601	M	Saturn
AP 2003 QM91	-	2003 QM91	345007	-	345007	6344.3337M	5664.8153K	0.107107	4.3372	18.7921	303.3275	25.7956	2017 Sep 4 00:00:00	?	?	-	A	-
AP 2003 QM91	-	2003 QM91	345007	-	345007	6256.3358M	6183.8202K	0.066711	2.4144	104.6662	332.6275	272.7538	2017 Sep 4 00:00:00	?	?	-	A	-
AP 2002 PJ149	-	2002 PJ149	345007	-	345007	6786.9078M	6868.8598K	0.076202	9.6612	316.4021	193.4556	180.6496	2002 Jul 25 00:00:00	?	?	-	A	-
AP 2002 GW31	-	2002 GW31	345007	-	345007	6626.9039M	6984.3498K	0.096962	2.1806	59.2187	130.7603	349.1393	2017 Sep 4 00:00:00	?	?	-	A	-
AP 2001 KA77	-	2001 KA77	345007	-	345007	7130.5441M	6479.4468K	0.091349	11.8836	239.0708	121.0382	276.0735	2017 Sep 4 00:00:00	?	?	-	A	-
P 607	Hyperion	Saturn VII	180	113	5619.9	1481000	1328994	0.104300	4.4300	239.0708	121.0382	276.0735	2017 Sep 4 00:00:00	?	?	JPL 607	M	Saturn
A 13874	1996 TL66	1996 TL66	283007	-	283007	12375.5922M	5240.1579K	0.576571	24.0266	217.8482	184.4873	7.7875	2017 Sep 4 00:00:00	?	?	-	A	-
A 128164	2001 YH140	2001 YH140	283007	-	283007	6342.0128M	5450.1868	0.140623	11.0857	108.8752	356.3665	21.9227	2017 Sep 4 00:00:00	?	?	-	A	-
A 148780	Altjira	2001 QJ18	283007	-	283007	6176.7204K	5176.7204K	0.063159	5.2035	108.7722	126.7464	84.1347	2017 Sep 4 00:00:00	?	?	-	A	-
AP 2001 QJ297	-	2001 QJ297	283007	-	283007	6592.0628M	5996.4638K	0.085766	1.5481	348.2143	354.9300	24.3732	2017 Sep 4 00:00:00	?	?	-	A	-
AP 2001 QJ522	-	2001 QJ522	283007	-	283007	6659.0038M	6254.3502K	0.038627	0.2462	309.8012	13.8817	0.0000	2001 Aug 19 00:00:00	?	?	-	A	-
AP 2001 QJ529	-	2001 QJ529	283007	-	283007	6651.9705M	6851.9705K	0.000000	0.2255	309.8012	13.8817	0.0000	2001 Aug 19 00:00:00	?	?	-	A	-
AP 2000 GD106	-	2000 GD106	283007	-	283007	7045.8328M	6030.4468K	0.144112	21.2765	307.2678	95.3784	121.3026	2002 May 31 00:00:00	?	?	-	A	-
A 79360	Sila-munam	Sol (79360)	400007	-	400007	6527.9436M	6472.4648K	0.008500	2.2672	304.4689	257.2045	302.6051	2020 May 31 00:00:00	?	?	-	M	Sol
P 802	Merid II	2001 QJ297	310007	-	247007	1371733	6374.316H	0.483300	27.6000	304.4689	257.2045	302.6051	2020 May 31 00:00:00	?	?	-	M	Neptune
A 688611	Teharonhshawko	2006 HJ123	1707	-	247007	6573.3251M	6374.316H	0.030275	2.5767	304.4689	241.0414	155.7600	2017 Sep 4 00:00:00	?	?	-	A	-
AP 2006 HJ123	-	2006 HJ123	1707	-	247007	5941.1774K	5941.1774K	0.303574	12.4192	222.5121	101.0669	312.0817	2017 Sep 4 00:00:00	?	?	-	A	-
AP 2002 XH91	-	2002 XH91	1707	-	247007	5974.0739K	5874.0739K	0.090749	4.9892	80.5535	184.0760	216.4700	2017 Sep 4 00:00:00	?	?	-	A	-
AP 2002 G132	-	2002 G132	1707	-	247007	6666.0638M	5934.6257K	0.109726	244.8537	244.8537	257.5693	61.3390	2017 Sep 4 00:00:00	?	?	-	A	-
AP 2001 XD256	-	2001 XD256	1707	-	247007	5992.6313M	5236.9357K	0.112780	18.1149	106.7040	109.8576	284.4015	2017 Sep 4 00:00:00	?	?	-	A	-
A 6111	Davidia	Sol (6111)	169	0	240007	473.2038M	384.1769K	0.189139	15.9400	107.6071	337.5927	228.7668	2017 Sep 4 00:00:00	?	?	-	A	-
A 7044	Interamnia	Sol (7044)	167	0	230007	457.563K	386.9869K	0.154487	17.3063	280.2920	95.1204	349.9235	2017 Sep 4 00:00:00	0.2140	0.2140	-	A	-
A 143707	2003 UV117	Sol (143707)	166	0	210007	8247.8003M	4854.7436K	0.411389	0.5463	285.1423	112.2118	11.4952	2017 Sep 4 00:00:00	?	?	-	AS	Varda
AP 2006 HJ122	-	2006 HJ122	1607	-	206007	10463.8938M	5485.2607K	0.479614	7.8654	318.4429	286.8232	40.6495	2017 Sep 4 00:00:00	?	?	-	A	-
AP 2005 XJ100	-	2005 XJ100	1607	-	206007	6510.4932M	5847.3233K	0.101862	7.1629	71.1528	103.3550	76.1495	2017 Sep 4 00:00:00	?	?	-	A	-
AP 2005 JH179	-	2005 JH179	1607	-	206007	7067.5438M	6247.3962K	0.116019	14.2149	225.0669	136.4530	169.7529	2017 Sep 4 00:00:00	?	?	-	A	-
AP 2005 JH175	-	2005 JH175	1607	-	206007	6390.2833M	5749.5438K	0.100294	18.1321	320.9527	17.3374	357.2121	2017 Sep 4 00:00:00	?	?	-	A	-
AP 2004 PJ107	-	2004 PJ107	1607	-	206007	6060.3997M	5716.5502K	0.095737	26.2856	320.9527	17.3374	357.2121	2017 Sep 4 00:00:00	?	?	-	A	-
AP 2003 UJ292	-	2003 UJ292	1607	-	206007	7012.3007M	6692.2241K	0.059916	19.3343	26.2856	84.2714	197.1862	2017 Sep 4 00:00:00	?	?	-	A	-
AP 2003 QH55	-	2003 QH55	1607	-	206007	6667.6338M	6667.1618K	0.069564	1.1026	116.4064	98.5845	23.0189	2017 Sep 4 00:00:00	?	?	-	A	-
AP 2002 VJ130	-	2002 VJ130	1607	-	206007	8442.5797M	4605.8211K	0.211670	1.3745	287.8798	231.4314	273.8623	2017 Sep 4 00:00:00	?	?	-	A	-
AP 2002 QJ146	-	2002 QJ146	1607	-	206007	6326.4638M	6118.6436K	0.032860	1.1629	334.5519	337.2656	123.2097	2017 Sep 4 00:00:00	?	?	-	A	-
AP 2002 QJ146	-	2002 QJ146	1607	-	206007	6650.2534M	6343.9917K	0.046766	3.0832	165.7435	316.9562	206.3514	2017 Sep 4 00:00:00	?	?	-	A	-
AP 2002 QJ146	-	2002 QJ146	1607	-	206007	5911.522M	4901.1743K	0.170912	2.7769	44.2923	24.9963	126.7560	2017 Sep 4 00:00:00	?	?	-	A	-
AP 2002 QJ146	-	2002 QJ146	1607	-	206007	6696.1738M	6246.9440K	0.130094	8.2310	294.9889	73.1597	229.7313	2017 Sep 4 00:00:00	?	?	-	A	-
AP 2001 XH254	-	2001 XH254	1607	-	206007	6426.1497M	5624.0144K	0.038985	28.5762	75.7804	64.6008	32.9312	2017 Sep 4 00:00:00	?	?	-	A	-
AP 2001 QJ522	-	2001 QJ522	1607	-	206007	7651.1838M	5686.5024K	0.065385	17.0472	141.0136	106.0136	67.5160	2017 Sep 4 00:00:00	?	?	-	A	-
AP 2001 QJ297	-	2001 QJ297	1607	-	206007	7721.4797M	5688.2722K	0.237287	0.0245	141.0136	106.0136	67.5160	2017 Sep 4 00:00:00	?	?	-	A	-
AP 2001 QJ296	-	2001 QJ296	1607	-	206007	6396.4638M	5686.9668K	0.058527	0.0245	141.0136	106.0136	67.5160	2017 Sep 4 00:00:00	?	?	-	A	-
AP 2001 QJ296	-	2001 QJ296	1607	-	206007	6791.8033M	415.0738K	0.123360	0.7215	126.2269	44.8482	98.5845	2017 Sep 4 00:00:00	?	?	-	A	-
AP 632	Europa	Sol (632)	156	-	400007	424.9398M	415.0738K	0.040867	7.4125	126.2269	44.8482	98.5845	2017 Sep 4 00:00:00	?	?	-	A	-
AP 2015 TG387	Bernardinelli-Bernstein	2015 TG387	1507	-	170007	165800M	11.6670	0.046600	11.6670	300.8124	118.3116	358.2016	2017 Sep 4 00:00:00	0.2340	0.2340	-	A	-
AP 2009 WZ71	-	2009 WZ71	80	-	100007	61386e+06H	6337.9482M	0.993939	95.7606	190.0094	326.2454	0.0773	2013 Apr 27 00:00:00	?	?	-	AS	Gikun'homdian I
AS 2007G62	-	2007G62	71	-	100007	2495	61386e+06H	0.326800	43.7600	190.0094	326.2454	0.0773	2013 Jan 21 13:01:24	?	?	-	AS	Gikun'homdian I
AS 2006O88	-	2006O88	1	-	50007	2495	61386e+06H	0.326800	43.7600	190.0094	326.2454	0.0773	2013 Jan 21 13:01:24	?	?	-	AS	Gikun'homdian I
P 807	Phaethon	Sol (16)	192	-	1150007	437.6794M	735.486K	0.134868	0.0976	150.9530	227.5463	171.4976	2017 Sep 4 00:00:00	0.1760	0.1760	JPL 807	M	Neptune
P 609	Phobos	Saturn IX	106.6	84	4200	735.486K	735.486K	0.013393	0.2515	150.9530	227.5463	171.4976	2017 Sep 4 00:00:00	0.4546	0.4546	JPL 609	M	Saturn
P 610	Janus	Saturn X	102	76	1897.5	15.852M	10.8376K	0.143260	177.0000	150.9530	227.5463	171.4976	2017 Sep 4 00:00:00	0.6947	0.6947	JPL 610	M	Saturn
P 906	Galatea	Neptune VI	102	72	2150	15.1463	15.1463	0.006600	0.1630	150.9530	227.5463	171.4976	2017 Sep 4 00:00:00	0.4006	0.4006	JPL 906	M	Neptune
P 905	Psophia	Neptune V	81	64	2200	52956	52956	0.009200	0.2200	150.9530	227.5463	171.4976	2017 Sep 4 00:00:00	0.4287	0.4287	JPL 905	M	Neptune
P 715	Phaethon	Uranus IV	81	60	2900	86004	86004	0.009120	0.3199	150.9530	227.5463	171.4976	2017 Sep 4 00:00:00	0.7618	0.7618	JPL 715	M	Uranus
P 712	Julietia	Uranus XII	63	63	1700	66097	66097	0.009160	0.0591	150.9530	227.5463	171.4976	2017 Sep 4 00:00:00	0.4391	0.4391	JPL 712	M	Uranus
P 616	Prometheus	Uranus XI	75	37	6369	64369	64369	0.009680	0.0855	150.9530	227.5463	171.4976	2017 Sep 4 00:00:00	0.6130	0.6130	JPL 616	M	Uranus
P 611	Lycettia	Saturn XI	66.8	29.7	159.5	13980	13980	0.009200	0.0988	150.9530	227.5463	171.4976	2017 Sep 4 00:00:00	0.3400	0.3400	JPL 611	M	Saturn
A 617	Patricius-Menoetius	Saturn XII	65	53	2576.6	364.193M	304.2877M	0.164479	3.0637	80.8783	249.9885	188.6620	2017 Sep 4 00:00:00	?	?	-	M	-
A 617	Patricius-Menoetius	Saturn XII	65	61	1360	151410	151262K	0.009800	0.3510	80.8783	249.9885	188.6620	2017 Sep 4 00:00:00	?	?	-	M	-
A 617	Patricius-Menoetius	Saturn XII	65	61	802	780.4437M	672.5736K	0.138216	22.0475	44.3540	308.2662	153.7013	2017 Sep 4 00:00:00	?	?	-	M	-
A 617	Patricius-Menoetius	Saturn XII	65	61	802	75255	75255	0.000000	0.0000	0.0000	0.0000	0.0000	2017 Sep 4 00:00:00	?	?	-	M	-
A 617	Patricius-Menoetius	Saturn XII	65	32	360	75255	75255	0.000000	0.0000	0.0000	0.0000	0.0000	2017 Sep 4 00:00:00	?	?	-	M	-
A 617	Patricius-Menoet																	

Worlds

IDT	IDName	Name	AltName	Radius km	PolarRadius km	Mass Eg	SemiMajorkxis km	Periaapsis km	Ecc	Inc deg	Noe deg	Peri deg	M deg	Epoch	RotPeriod d	OrbPeriod d	Ephemeris	WType	Primary
A	(951)	Gaeptra	Sol (951)	9.1	4.4	57	330.59556M	273.2699M	0.173402	4.1063	253.0566	129.9423	232.8256	2017 Sep 4 00:00:00	?	1199.0000	-	A	-
C	1P/	Halley	Sol 1P/	8	4	0.22	2667.9500M	87.6611M	0.967143	58.4201	162.2627	111.3525	0.0000	1986 Feb 5 21:29:15	2.2600	75.2903yr	-	CP	-
P	402	Deimos	Mars II	7.5	5.2	1.8	23600	23488	0.009500	1.8000	162.2627	111.3525	0.0000	1986 Feb 5 21:29:15	1.2630	1.2630	JPL 402	M	Mars
C	9P/	Tempel 1	Sol 9P/	7.2	2.2	0.07	470.6041M	230.7626M	0.509646	68.7501	10.4738	179.2020	0.0000	2016 Aug 2 13:49:36	?	2106.0000	-	CP	-
C	81P/	Wild 2	Sol 81P/	57	-	0.17	516.3941M	239.0633M	0.537072	136.0977	3.2372	41.7567	0.0000	2010 Feb 22 13:31:54	?	2431.0000	-	CP	-
C	21P/	Borrelly	Sol 21P/	37	-	0.17	525.9187M	154.19M	0.706818	196.3970	31.9081	172.5844	0.0000	2012 Feb 11 15:01:21	?	3020.0000	-	CP	-
C	49P/	Swains	Sol 1987/	4	2.2	0.02	539.9985M	203.4231M	0.625289	75.4360	30.3131	353.3507	0.0000	2001 Sep 14 06:05:13	?	1327.3050	-	CP	-
A	(2867)	Amesfrank	Sol (2867)	3.4	2.3	2.37	353.5957M	302.0505M	0.145774	9.3953	55.3654	251.1076	127.9525	2017 Sep 4 00:00:00	?	1469.3000	-	A	-
A	(5335)	Toutatis	Sol (5335)	3.3	1.7	0.37	330.9716M	309.9671M	0.063403	4.2473	120.6494	278.7111	23.0210	2017 Sep 4 00:00:00	?	1202.0000	-	A	-
A	(4179)	Churyumov-Gerasimenko	Sol (4179)	2.4	1	0.06	379.4107M	140.6153M	0.629385	0.4474	124.4051	213.0231	66.3771	2017 Sep 4 00:00:00	?	1344.3154	-	A	-
A	(52246)	Donatjohansen	Sol (52246)	2	-	0.01	518.3173M	186.2924M	0.640582	50.1801	7.0437	12.6945	0.0000	2009 Feb 28 12:39:38	?	1469.3000	-	A	-
C	26P/	Gr-eg-Skjellerup	Sol 26P/	1.5	-	0.017	366.6103M	290.4115M	0.640277	4.4194	262.8504	213.0231	10.6054	2017 Sep 4 00:00:00	?	2355.8625	-	CP	-
A	(152830)	Braile	Sol (152830)	0.8	-	0.0078	451.3218M	162.3508M	0.640277	211.5376	22.4289	2.1467	0.0000	2013 Jul 6 01:26:07	?	1863.0000	-	CP	-
A	(68003)	Dinknesh	Sol (68003)	0.36	-	0.0047	290.8414M	198.4165M	0.433442	28.9987	241.9547	366.1138	16.8604	2017 Sep 4 00:00:00	?	1308.0000	-	A	-
A	(3846)	Queta	Sol (3846)	0.397	-	0.0047	350.2123M	290.8414M	0.000000	0.0000	0.0000	0.0000	0.0000	2017 Sep 4 00:00:00	?	1185.0617	-	A	-
AS	(162173)	Ryugu	Sol (162173)	0.5	-	0.00655	0	151.5818M	0.000000	0.0000	0.0000	0.0000	0.0000	2017 Sep 4 00:00:00	?	770.3626	-	-	Eurybaetes
C	48P/	Honda-Okano-Pajdušakova	Sol (48P/)	0.5	0.44	0.000737	2310	2310	0.000000	0.0000	0.0000	0.0000	0.0000	2017 Sep 4 00:00:00	?	82.6000	-	-	-
A	(98943)	2001 CC21	Sol (98943)	0.35	-	0.00027	177.9657M	144.0936M	0.190284	5.8639	251.5940	211.4468	154.0218	2016 Dec 31 06:22:40	?	473.6908	-	A	-
A	(101965)	Bennu	Sol (101965)	0.35	-	0.00047	452.5599M	79.6628M	0.623973	88.9817	4.2462	326.2820	0.0000	2016 Dec 31 06:22:40	?	1920.0000	-	CP	-
AS	(152830) I	Se'lam	Sol (152830) I	0.285	-	0.000078	154.4675M	120.5844M	0.219364	4.8085	76.5793	179.3292	201.5887	2017 Sep 4 00:00:00	?	383.2386	-	-	-
C	C/-146 P1	Itoikawa	Sol (25143)	0.22	0.12	0.000033	3.1	3.1	0.000000	0.0000	2.0296	66.2902	312.6367	2017 Sep 4 00:00:00	?	436.6040	-	A	-
C	C/-146 P1	Dimorphos	Sol (152830) I	0.2	-	0.0000358	198.0846M	142.6675M	0.280168	1.6215	69.0800	162.8112	260.7917	2017 Sep 4 00:00:00	?	2.1960	-	A	-
AS	1998 KT26	Earth-Moon L1	Sol (65803) I	0.17	-	0.000005	0	64.3271M	1.000000	330.0000	71.0000	261.0000	0.0000	0 Jun 28 00:00:00	?	?	-	C	-
DL	BML1	Earth-Moon L1	Sol (65803) I	0.08	-	0	184.4363M	147.2219M	0.201773	1.4610	84.3664	209.3722	359.5532	2017 Sep 4 00:00:00	?	500.0114	-	-	Luna
DL	BML2	Earth-Moon L2	Moon L1	0.015	-	0	66000	-	0.000000	0.0000	84.3664	209.3722	359.5532	2017 Sep 4 00:00:00	?	27.3217	-	DL	Luna
DL			Moon L2	0	-	0	66000	-	0.000000	0.0000	84.3664	209.3722	359.5532	2017 Sep 4 00:00:00	?	27.3217	-	DL	Luna



World\_Spin

IDT	IDName	Name	Rho kg/m**3	IFac	PoleIncl deg	PoleDec deg	Meridian deg	SpinRate deg/d	J2	J4	J6	PoleInclRate deg/d	PoleSubDec deg/d	PoleFunc	SpinFunc	InitFunc	JFile
P 010	Sun	Sun	1.00	0.07	286.1300	63.8700	84.1760	14.1844000	0.00	0.00	0.00	0.0000	0.0000	FSTD	SSTD	-	-
P 001	Mercury	Venus	5.43	0.33	281.0103	61.4155	329.5988	6.1385108	60.00	0.00	0.00	-0.0028	-0.0049	FSTD	SMER	-	-
P 002	Venus	Earth	5.24	0.33	272.7600	67.1600	160.2000	-1.4813688	4.50	0.00	0.00	0.0000	0.0000	FSTD	SSTD	-	Sys/Earth..J
P 399	Earth	Mars	5.52	0.331	90.0000	90.0000	170.1470	360.9856235	1082.64	-1.6193	0.00	-0.6410	-0.5570	FSTD	SMARS	-	MARS
P 004	Mars	Jupiter	3.94	0.365	317.2692	54.4325	176.0489	980.8919824	1960.50	0.00	0.00	-0.10927	-0.0527	PMARS	SMARS	-	MARS
P 005	Jupiter	Saturn	1.33	0.264	288.0566	64.4953	284.9500	870.5366420	14696.40	0.00	0.00	-0.0065	-0.00241	FJUP	SSAT	-	JUP
P 006	Saturn	Uranus	0.70	0.21	40.5890	83.5370	38.9000	810.7939024	16290.70	0.00	0.00	-0.0360	-0.0040	FJUP	SSAT	-	SAT
P 007	Uranus	Neptune	1.30	0.23	297.3110	203.8100	203.8100	-501.1600928	3343.50	0.00	0.00	0.0000	0.0000	FNEP	SMEP	-	NEP
P 008	Neptune	Ganymede	1.76	0.320	289.3600	43.4600	249.9780	941.1397757	3410.00	0.00	0.00	-0.0090	0.0000	FNEP	SSAT	-	NEP
P 503	Ganymede	Titan	1.94	0.341	388.2000	64.5700	44.0640	50.3176081	0.00	0.00	0.00	0.0000	0.0000	PMF	SSAT	-	TIT
P 504	Callisto	Io	1.88	0.341	289.4279	83.4279	186.5855	22.5769768	0.00	0.00	0.00	0.0000	0.0000	PMF	SSAT	-	IO
P 501	Io	Luna	3.53	0.378	288.0500	64.6300	259.5100	21.5710715	0.00	0.00	0.00	-0.0090	0.0030	PMF	SSAT	-	IO
P 301	Luna	Europa	3.01	0.393	268.0800	66.5392	38.3213	13.1763692	203.38	0.00	0.00	-0.0030	0.0000	PMF	SSAT	-	IO
P 502	Europa	Triton	2.06	0.346	268.0800	64.5100	36.0220	101.3747235	0.00	0.00	0.00	-0.0090	0.0000	PMF	SSAT	-	IO
P 801	Triton	Pluto	1.98	0.33	299.3600	41.1700	296.5300	-61.2572637	0.00	0.00	0.00	0.0000	0.0000	PMF	SSAT	-	IO
P 009	Pluto	Titan	1.71	0.31	132.9930	-6.1630	302.6950	-41.3514316	0.00	0.00	0.00	0.0000	0.0000	FSTD	SSTD	-	-
P 703	Titan	Rhea	1.24	0.40	40.3800	83.6500	235.1600	79.6900475	0.00	0.00	0.00	-0.0360	-0.0040	PMF	SSAT	-	-
P 605	Rhea	Iapetus	1.63	0.33	287.4300	75.0300	355.2000	4.5379572	0.00	0.00	0.00	0.0000	0.0000	PMF	SSAT	-	-
P 704	Iapetus	Charon	1.09	0.33	318.1600	75.0300	355.2000	-26.7394952	0.00	0.00	0.00	0.0000	-1.1430	PMF	SSAT	-	-
P 608	Charon	Umbriel	1.71	0.31	132.9930	-6.1630	122.6950	46.8689223	0.00	0.00	0.00	0.0000	0.0000	FSTD	SSTD	-	-
P 702	Umbriel	Ariel	1.39	0.33	287.4300	-15.1000	108.0500	-86.8689223	0.00	0.00	0.00	0.0000	0.0000	PMF	SSAT	-	-
P 701	Ariel	Dione	1.48	0.33	287.4300	-15.1000	108.0500	-142.6366681	0.00	0.00	0.00	-0.0360	-0.0040	PMF	SSAT	-	-
P 604	Dione	Tethys	0.99	0.33	40.6600	83.5200	357.6000	131.5494916	0.00	0.00	0.00	-0.0360	-0.0040	PMF	SSAT	-	-
P 603	Tethys	Ceres	2.08	0.33	291.0000	59.0000	170.9000	490.6979085	0.00	0.00	0.00	0.0000	0.0000	FSTD	SSTD	-	-
A (1)	Ceres	Vesta	3.42	0.33	305.8000	41.4000	292.0000	1617.3527760	0.00	0.00	0.00	0.0000	0.0000	FSTD	SSTD	-	-
A (4)	Vesta	Pallas	3.00	0.33	33.0000	3.0000	36.0000	1105.6036000	0.00	0.00	0.00	0.0000	0.0000	FSTD	SSTD	-	-
P 602	Pallas	Ercelauda	1.61	0.33	40.6600	83.5200	357.6000	262.7316996	0.00	0.00	0.00	-0.0360	-0.0040	PMF	SSAT	-	-
P 605	Ercelauda	Miranda	1.20	0.33	287.4300	15.0600	30.7000	320.7684225	0.00	0.00	0.00	0.0000	0.0000	PMF	SSAT	-	-
P 806	Miranda	Proteus	1.30	0.38	299.2700	42.9100	93.3800	284.6966592	0.00	0.00	0.00	0.0000	0.0000	PMF	SSAT	-	-
P 601	Proteus	Mimas	1.15	0.38	40.6600	83.5200	353.4600	381.9946550	0.00	0.00	0.00	-0.0360	-0.0040	PMF	SSAT	-	-
P 607	Mimas	Hyperion	0.85	0.33	313.0000	15.8100	0.0000	16.9305000	0.00	0.00	0.00	0.0000	0.0000	PMF	SSAT	-	-
P 802	Hyperion	Davida	2.97	0.33	297.0000	5.0000	298.1000	746.2130460	0.00	0.00	0.00	0.0000	0.0000	PMF	SSAT	-	-
A (511)	Davida	Europa	1.50	0.33	297.0000	12.0000	95.0000	1694.4135449	0.00	0.00	0.00	0.0000	0.0000	FSTD	SSTD	-	-
A (52)	Europa	Io	1.20	0.33	289.3600	43.1400	179.4100	1534.6472187	0.00	0.00	0.00	0.0000	0.0000	FSTD	SSTD	-	-
P 807	Io	Europa	1.64	0.33	356.9600	77.6800	178.5800	949.0634470	0.00	0.00	0.00	0.0000	0.0000	PMF	SSAT	-	-
P 609	Europa	Io	1.64	0.33	356.9600	77.6800	178.5800	931.6399050	0.00	0.00	0.00	0.0000	0.0000	PMF	SSAT	-	-
P 610	Io	Europa	1.64	0.33	356.9600	77.6800	178.5800	931.6399050	0.00	0.00	0.00	-0.0360	-0.0040	PMF	SSAT	-	-
P 808	Europa	Io	1.64	0.33	356.9600	77.6800	178.5800	931.6399050	0.00	0.00	0.00	0.0000	0.0000	PMF	SSAT	-	-
P 806	Io	Europa	1.64	0.33	356.9600	77.6800	178.5800	931.6399050	0.00	0.00	0.00	0.0000	0.0000	PMF	SSAT	-	-
P 805	Europa	Io	1.64	0.33	356.9600	77.6800	178.5800	931.6399050	0.00	0.00	0.00	0.0000	0.0000	PMF	SSAT	-	-
P 715	Europa	Io	1.64	0.33	356.9600	77.6800	178.5800	931.6399050	0.00	0.00	0.00	0.0000	0.0000	PMF	SSAT	-	-
P 712	Io	Europa	1.64	0.33	356.9600	77.6800	178.5800	931.6399050	0.00	0.00	0.00	0.0000	0.0000	PMF	SSAT	-	-
P 711	Europa	Io	1.64	0.33	356.9600	77.6800	178.5800	931.6399050	0.00	0.00	0.00	0.0000	0.0000	PMF	SSAT	-	-
P 611	Io	Europa	1.64	0.33	356.9600	77.6800	178.5800	931.6399050	0.00	0.00	0.00	0.0000	0.0000	PMF	SSAT	-	-
A (21)	Europa	Io	1.64	0.33	356.9600	77.6800	178.5800	931.6399050	0.00	0.00	0.00	0.0000	0.0000	PMF	SSAT	-	-
P 614	Io	Europa	1.64	0.33	356.9600	77.6800	178.5800	931.6399050	0.00	0.00	0.00	0.0000	0.0000	PMF	SSAT	-	-
P 714	Europa	Io	1.64	0.33	356.9600	77.6800	178.5800	931.6399050	0.00	0.00	0.00	0.0000	0.0000	PMF	SSAT	-	-
P 804	Io	Europa	1.64	0.33	356.9600	77.6800	178.5800	931.6399050	0.00	0.00	0.00	0.0000	0.0000	PMF	SSAT	-	-
P 617	Europa	Io	1.64	0.33	356.9600	77.6800	178.5800	931.6399050	0.00	0.00	0.00	0.0000	0.0000	PMF	SSAT	-	-
P 803	Io	Europa	1.64	0.33	356.9600	77.6800	178.5800	931.6399050	0.00	0.00	0.00	0.0000	0.0000	PMF	SSAT	-	-
P 709	Europa	Io	1.64	0.33	356.9600	77.6800	178.5800	931.6399050	0.00	0.00	0.00	0.0000	0.0000	PMF	SSAT	-	-
P 710	Io	Europa	1.64	0.33	356.9600	77.6800	178.5800	931.6399050	0.00	0.00	0.00	0.0000	0.0000	PMF	SSAT	-	-
P 708	Europa	Io	1.64	0.33	356.9600	77.6800	178.5800	931.6399050	0.00	0.00	0.00	0.0000	0.0000	PMF	SSAT	-	-
P 707	Io	Europa	1.64	0.33	356.9600	77.6800	178.5800	931.6399050	0.00	0.00	0.00	0.0000	0.0000	PMF	SSAT	-	-
A (243)	Europa	Io	1.64	0.33	356.9600	77.6800	178.5800	931.6399050	0.00	0.00	0.00	0.0000	0.0000	PMF	SSAT	-	-
P 612	Io	Europa	1.64	0.33	356.9600	77.6800	178.5800	931.6399050	0.00	0.00	0.00	0.0000	0.0000	PMF	SSAT	-	-
P 618	Europa	Io	1.64	0.33	356.9600	77.6800	178.5800	931.6399050	0.00	0.00	0.00	0.0000	0.0000	PMF	SSAT	-	-
P 619	Io	Europa	1.64	0.33	356.9600	77.6800	178.5800	931.6399050	0.00	0.00	0.00	0.0000	0.0000	PMF	SSAT	-	-
A (433)	Europa	Io	1.64	0.33	356.9600	77.6800	178.5800	931.6399050	0.00	0.00	0.00	0.0000	0.0000	PMF	SSAT	-	-
P 614	Io	Europa	1.64	0.33	356.9600	77.6800	178.5800	931.6399050	0.00	0.00	0.00	0.0000	0.0000	PMF	SSAT	-	-
P 613	Europa	Io	1.64	0.33	356.9600	77.6800	178.5800	931.6399050	0.00	0.00	0.00	0.0000	0.0000	PMF	SSAT	-	-
P 614	Io	Europa	1.64	0.33	356.9600	77.6800	178.5800	931.6399050	0.00	0.00	0.00	0.0000	0.0000	PMF	SSAT	-	-
P 401	Europa	Gaia	1.88	0.33	317.6707	52.8863	34.9945	1128.8447592	105000.00	0.00	0.00	-0.0360	-0.0040	PMF	SSAT	-	-
P 402	Gaia	Dalra	2.70	0.33	9.47700	53.5099	79.3993	285.1618850	0.00	0.00	0.00	0.0000	0.0000	PMF	SSAT	-	-
A (951)	Dalra	Tempel 1	1.47	0.33	255.0000	64.5000	69.2000	212.8070000	0.00	0.00	0.00	0.0000	0.0000	PMF	SSAT	-	-
P 99/	Tempel 1	Bartoli	0.30	0.33	218.5000	-12.5000	0.0000	390.0000000	0.00	0.00	0.00	0.0000	0.0000	PMF	SSAT	-	-
C 199/	Bartoli	Steins	3.00	0.33	91.0000	-62.0000	321.7600	1428.0991700	0.00	0.00	0.00	0.0000	0.0000	PMF	SSAT	-	-
A (2867)	Steins	Churyumov-Gerasimenko	3.00	0.25	67.5000	64.1100	114.6900	696.5439847	0.00	0.00	0.00	0.0000	0.0000	PMF	SSAT	-	-
C 677/	Churyumov-Gerasimenko	Itokawa	1.95	0.33	90.5300	-66.3000	0.0000	712.1430000	0.00	0.00	0.00	0.0000	0.0000	FSTD	SSTD	-	-



Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Mission	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee km	Range km	Dest
1957-A166	2435645.50	1957 Jan 11	Polaris FTV-4	-	Thrust reversal test	-	-	PH	-	-	-	107	-	-
1957-A167	2435667.50	1957 Jan 29	Polaris FTV-4	-	Thrust reversal test	-	-	PH	-	-	-	107	-	-
1957-A168	2435676.50	1957 Feb 7	Polaris FTV-4	-	Thrust reversal test	-	-	PH	-	-	-	107	-	-
1957-A169	2435683.50	1957 Feb 14	Polaris FTV-4	-	Thrust reversal test	-	-	PH	-	-	-	107	-	-
1957-A170	2435900.50	1957 Mar 3	Polaris FTV-4	-	Thrust reversal test	-	-	PH	-	-	-	107	-	-
1957-S46	2436016.50	1957 Jun 27	Polaris FTV-4	-	4-204-1	-	-	CC	LC3	-	-	107	-	-
1957-S59	2436035.50	1957 Jul 16	Polaris FTV-4	-	4-204-2	-	-	CC	LC3	-	-	107	-	-





Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Unit	Agency	Launch_Code	Group	Category	LTCite	Cite	Notes
1957-A166	2435849.50	1957 Jan 11	Polaris FTV-4	-	Thrust reversal test	0.000	USNSFO	MS	-	Test	Powell	-	-
1957-A167	2435867.50	1957 Jan 29	Polaris FTV-4	-	Thrust reversal test	0.000	USNSFO	MS	-	Test	Powell	-	-
1957-A168	2435876.50	1957 Feb 7	Polaris FTV-4	-	Thrust reversal test	0.000	USNSFO	MS	-	Test	Powell	-	-
1957-A169	2435883.50	1957 Feb 14	Polaris FTV-4	-	Thrust reversal test	0.000	USNSFO	MS	-	Test	Powell	-	-
1957-A170	2435900.50	1957 Mar 3	Polaris FTV-4	-	Thrust reversal test	0.000	USNSFO	MS	-	Test	Powell	-	-
1957-S86	2436016.50	1957 Jun 27	Polaris FTV-4	-	4-204-1	0.000	USNSFO	MS	-	Reentry Test	Cleary95	Cleary	-
1957-S89	2436035.50	1957 Jul 16	Polaris FTV-4	-	4-204-2	0.000	USNSFO	MS	-	Reentry Test	Cleary95	Cleary	-



Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Mission	Launch_FlightCode	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee km	Range km	Dest
1999-A06	2451221-50	1999 Feb 12	48H6	-	S-300	48H6E test	-	-	-	GTSP-4	-	-	-	407	-	-
2004-A17	2453126-50	2004 Apr 30	48H6	-	S-300	48H6DM	-	-	-	GTSP-4	-	-	-	407	-	-
2013-A24	2456595-50	2013 Oct 30	48H6	-	S-300	-	-	-	-	GTSP-4	-	-	-	407	-	-
2013-A25	2456595-50	2013 Oct 30	48H6	-	S-400	-	-	-	-	GTSP-4	-	-	-	407	-	-



Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Launch			Group	Category	LTCite	Cite	Notes
						OrbPay	Agency	Launch_Code					
1999-406	2451221.50	1999 Feb 12	4886	-	S-300	0.000	PVO	MS	-	Test	globalsecurity.org	-	-
2004-417	2453125.50	2004 Apr 30	4886	-	S-300	0.000	PVO	MS	-	Test	globalsecurity.org	-	-
2013-424	2456696.50	2013 Oct 30	4886	-	S-300	0.000	PVO	MS	-	OT	russianforces.org	-	-
2013-425	2456696.50	2013 Oct 30	4886	-	S-400	0.000	PVO	MS	-	OT	russianforces.org	-	-



Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Mission	Launch_FlightCode	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee_Km	Range_Km	Dest
1962-442	2457764.50	1962 Apr	A-350Zh	-	57Ya	F1	-	-	-	BALKH	LC6	-	-	107	-	-
1962-401	2457664.50	1962	A-350Zh	-	57Ya	F2	-	-	-	BALKH	LC6	-	-	107	-	-
1962-402	2457664.50	1962?	A-350Zh	-	57Ya	F3	-	-	-	BALKH	LC6	-	-	107	-	-
1963-403	2458029.50	1963?	A-350Zh	-	57Ya	F4	-	-	-	BALKH	LC6	-	-	107	-	-
1963-401	2438029.50	1963?	A-350Zh	-	57Ya	F5	-	-	-	BALKH	LC6	-	-	107	-	-
1963-467	2438149.50	1963 May	A-350Zh	-	67Ya	F6	-	-	-	BALKH	LC6	-	-	100?	-	-
1963-5416	2438272.50	1963 Sep	A-350Zh	-	67Ya	F1	-	-	-	BALKH	LC6	-	-	100?	-	-
1964-301	2438029.50	1963?	A-350Zh	-	67Ya	F2	-	-	-	BALKH	LC6	-	-	100?	-	-
1964-301	2438394.50	1964?	A-350Zh	-	67Ya	F3	-	-	-	BALKH	LC6	-	-	100?	-	-
1964-302	2438394.50	1964?	A-350Zh	-	67Ya	F4	-	-	-	BALKH	LC6	-	-	100?	-	-
1964-5494	2438668.50	1964 Oct	A-350Zh	-	67Ya	F5	-	-	-	BALKH	LC6	-	-	100?	-	-
1966-5665	2439094.50	1966 Dec	A-350Zh	-	67Ya?	-	-	-	-	BALKH	LC6	-	-	100?	-	-
1966-301	2439126.50	1966?	A-350Zh	-	67Ya?	-	-	-	-	BALKH	LC6	-	-	100?	-	-
1966-502	2439126.50	1966?	A-350Zh	-	67Ya?	-	-	-	-	BALKH	LC6	-	-	100?	-	-
1966-503	2439126.50	1966?	A-350Zh	-	67Ya?	-	-	-	-	BALKH	LC6	-	-	100?	-	-
1966-504	2439126.50	1966?	A-350Zh	-	67Ya?	-	-	-	-	BALKH	LC6	-	-	100?	-	-
1966-505	2439126.50	1966?	A-350Zh	-	67Ya?	-	-	-	-	BALKH	LC6	-	-	100?	-	-
1967-5239	2439610.50	1967 May	A-350Zh	-	67Ya?	-	-	-	-	BALKH	LC6	-	-	300?	-	-
1967-5408	2439735.50	1967 Sep	A-350Zh	-	LXI-1	-	-	-	-	BALKH	LC6	-	-	300	-	-
1971-301	2440951.50	1971	A-350	-	LXI	LXI	-	-	-	BALKH	-	-	-	300	-	-
1971-302	2440951.50	1971	A-350	-	LXI	LXI	-	-	-	BALKH	-	-	-	300	-	-
1971-303	2440951.50	1971	A-350	-	LXI	LXI	-	-	-	BALKH	-	-	-	300	-	-
1976-301	2442777.50	1976	A-350	-	LXI	LXI	-	-	-	BALKH	-	-	-	300	-	-
1979-301	2443145.50	1979 Mar	A-350	-	LXI	LXI	-	-	-	BALKH	-	-	-	300	-	-
1979-5245	2444207.50	1979 Dec	A-350	-	LXI	LXI	-	-	-	BALKH	-	-	-	300	-	-
1979-5245	2444207.50	1979 Dec	A-350	-	LXI	LXI	-	-	-	BALKH	-	-	-	300	-	-
1982-5123	2445136.50	1982 Jun, 18	A-325	-	51T6 LXI	51T6 LXI	GCh M84	Eject test	-	BALKH	LC6	-	-	100?	-	-
1982-5268	2445273.50	1982 Nov?	A-325	-	51T6 LXI	51T6 LXI	GCh M84	-	-	BALKH	LC6	-	-	100?	-	-
1982-5269	2445273.50	1982 Nov?	A-325	-	51T6 LXI	51T6 LXI	GCh M84	-	-	BALKH	LC6	-	-	100?	-	-
1982-5270	2445273.50	1982 Nov?	A-325	-	51T6 LXI	51T6 LXI	GCh M84	-	-	BALKH	LC6	-	-	100?	-	-
1982-5281	2445273.50	1982 Nov?	A-325	-	51T6 LXI	51T6 LXI	GCh M84	-	-	BALKH	LC6	-	-	100?	-	-
1982-5282	2445273.50	1982 Nov?	A-325	-	51T6 LXI	51T6 LXI	GCh M84	-	-	BALKH	LC6	-	-	100?	-	-
1982-5283	2445273.50	1982 Nov?	A-325	-	51T6 LXI	51T6 LXI	GCh M84	-	-	BALKH	LC6	-	-	100?	-	-
1982-5284	2445273.50	1982 Nov?	A-325	-	51T6 LXI	51T6 LXI	GCh M84	-	-	BALKH	LC6	-	-	100?	-	-
1984-3516	2446594.50	1984 Mar	A-325	-	51T6 LXI	51T6 LXI	GCh M84	-	-	BALKH	LC6	-	-	100?	-	-
1987-5203	2447668.50	1987 Mar	A-325	-	51T6 LXI	51T6 LXI	GCh M84	-	-	BALKH	LC6	-	-	100?	-	-
1987-5241	2447668.50	1987 Oct?	A-325	-	51T6 LXI	51T6 LXI	GCh M84	-	-	BALKH	LC6	-	-	100?	-	-
1988-5202	2447160.50	1988	A-325	-	51T6 LXI	51T6 LXI	GCh M84	-	-	BALKH	LC6	-	-	100?	-	-
1988-5193	2447342.50	1988 Jul?	A-325	-	51T6 LXI	51T6 LXI	GCh M84	-	-	BALKH	LC6	-	-	100?	-	-
1989-5194	2447526.50	1989	A-325	-	51T6 LXI	51T6 LXI	GCh M84	-	-	BALKH	LC6	-	-	100?	-	-
1989-5195	2447526.50	1989	A-325	-	51T6 LXI	51T6 LXI	GCh M84	-	-	BALKH	LC6	-	-	100?	-	-
1989-5196	2448387.50	1989	A-325	-	51T6 LXI	51T6 LXI	GCh M84	-	-	BALKH	LC6	-	-	300	-	-
1989-5197	2448387.50	1989 Nov	A-325	-	51T6 LXI	51T6 LXI	GCh M84	-	-	BALKH	LC6	-	-	300	-	-
2002-560	2462560.12	2002 Oct 2, 1458	A-325	-	51T6 UBP	51T6 UBP	GCh M84	-	-	BALKH	LC52?	-	-	100?	-	(Kara Sea)
2014-149	2465881.12	2014 Aug 12	Rusol1	-	14A092 LKI-1	14A092 LKI-1	-	-	-	GIF-1	LC52?	-	-	0?	-	(Kara Sea)
2015-138	2467344.50	2015 Apr 22	Rusol1	-	14A092 LKI-2	14A092 LKI-2	-	-	-	GIF-1	LC52?	-	-	100?	-	(Kara Sea)
2015-373	2467344.50	2015 Nov 18	Rusol1	-	14A092 LKI-3	14A092 LKI-3	A-235	-	-	GIF-1	LC52?	-	-	100?	-	(Kara Sea)
2015-387	2467344.50	2015 May 26	Rusol1	-	14A092 LKI-4	14A092 LKI-4	A-235	-	-	GIF-1	LC52?	-	-	100?	-	(Kara Sea)
2015-517	2467738.94	2016 Dec 16, 1040	Rusol1	-	14A092 LKI-5	14A092 LKI-5	-	-	-	GIF-1	LC52?	-	-	100?	-	(Kara Sea)
2018-383	2468293.66	2018 Mar 26, 0429	Rusol1	-	14A092-01 LKI-II-1	14A092-01 LKI-II-1	GUM	-	-	GIF-1	LC52?	-	-	500?	-	Laptev Sea
2018-383	2468293.66	2018 Dec 23, 0317	Rusol1	-	14A092 LKI-II-2	14A092 LKI-II-2	GUM	-	-	GIF-1	LC52?	-	-	500?	-	Laptev Sea
2018-383	2468645.64	2019 Jun 30?	Rusol1	-	14A092 test	14A092 test	GUM?	-	-	GIF-1	LC52?	-	-	500?	-	Laptev Sea
2018-383	2468645.64	2019 Jun 30?	Rusol1	-	14A092 test	14A092 test	GUM?	-	-	GIF-1	LC52?	-	-	500?	-	Laptev Sea
2018-383	2468645.64	2019 Jun 30?	Rusol1	-	14A092 test	14A092 test	GUM?	-	-	GIF-1	LC52?	-	-	500?	-	Laptev Sea
2018-383	2468645.64	2019 Jun 30?	Rusol1	-	14A092 test	14A092 test	GUM?	-	-	GIF-1	LC52?	-	-	500?	-	Laptev Sea
2018-504	2468902.50	2020 Apr 15, 1500?	Rusol1	-	14A092 test	14A092 test	GUM?	-	-	GIF-1	LC52?	-	-	500?	-	Laptev Sea
2020-547	2468902.50	2020 Apr 15, 1500?	Rusol1	-	14A092 test	14A092 test	GUM?	-	-	GIF-1	LC52?	-	-	500?	-	Laptev Sea
2020-547	2468902.50	2020 Dec 16	Rusol1	-	14A092 test	14A092 test	GUM?	-	-	GIF-1	LC52?	-	-	500?	-	Laptev Sea
2021-566	2469533.61	2021 Nov 15, 0246?	Rusol1	-	14A092 test	14A092 test	GUM?	Intercept K-1408	-	GIF-1	LC52?	-	-	500?	-	Laptev Sea









Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Launch			Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee km	Range km	Dest
							Mission	FlightCode	Platform								
2007-A13	2454435.72	2007 Dec 2 0514	AAD	-	01	AD Interceptor	-	-	-	CHAN	IC4	-	-	15	-	-	
2007-A12	2454440.73	2007 Dec 6 0535?	AAD	-	02	AD Interceptor	-	-	-	CHAN	IC4	-	-	15	-	-	
2010-A04	2455403.69	2010 Jul 26 0440?	AAD	-	03?	AD Interceptor	-	-	-	CHAN	IC4	-	-	15?	-	-	
2011-A03	2455225.67	2011 Mar 6 0407	AAD	-	04?	AD Interceptor	-	-	-	CHAN	IC4	-	-	16	-	-	
2011-A04	2455763.62	2011 Jul 21 0250	Prahaar	-	-	Prahaar	-	-	-	CHAN	IC3	-	-	35	-	-	
2012-A01	2455967.70	2012 Feb 10 0444?	AAD	-	05	AD Interceptor	-	-	-	CHAN	IC4	-	-	15	-	-	
2012-A24	2456254.81	2012 Nov 23 0725?	AAD	-	-	AD Interceptor	-	-	-	CHAN	IC4	-	-	15	-	-	
2017-A128	2457513.70	2017 Mar 1 0445	AAD	-	-	AD Interceptor	-	-	-	CHAN	IC4	-	-	15	-	-	
2017-A129	2458115.50	2017 Dec 28	AAD	-	-	AD Interceptor	-	-	-	CHAN	IC4	-	-	30?	-	-	
2022-S114	2459885.50	2022 Nov 2	AAD AD-1	-	1	AD-1 Interceptor	-	-	-	CHAN	IC4	-	-	150?	-	-	



Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	DrpPay	Agency	Launch_Code	Group	Category	LTCite	Cite	Notes
2007-A13	2454436.72	2007 Dec 2 0514	AAD	-	01	0.000	IDBDL	MS	-	Test	Wire	-	-
2007-A12	2454440.73	2007 Dec 6 0535?	AAD	-	02	0.000	IDBDL	MS	-	Test	Wire	-	-
2010-A04	2455403.69	2010 Jul 26 0440?	AAD	-	03?	0.000	IDBDL	MS	-	Interceptor	Wire	-	-
2011-A03	2455626.67	2011 Mar 6 0407	AAD	-	04?	0.000	IDBDL	MS	-	Interceptor	Wire	-	-
2011-A04	2455763.62	2011 Jul 21 0250	Prahaar	-	-	0.000	IDBDL	MS	-	Test	Wire	-	-
2012-A01	2455967.70	2012 Feb 10 0444?	AAD	-	05	0.000	IDBDL	MS	-	Interceptor	Wire	-	-
2012-A24	2456254.81	2012 Nov 23 0725?	AAD	-	-	0.000	IDBDL	MS	-	Interceptor	Wire	-	-
2017-A128	2457813.70	2017 Mar 1 0445	AAD	-	-	0.000	IDBDL	MS	-	Interceptor	Wire	-	-
2017-A129	2458115.50	2017 Dec 28	AAD	-	-	0.000	IDBDL	MS	-	Interceptor	Wire	-	-
2022-S114	2459885.50	2022 Nov 2	AAD AD-1	-	1	0.000	IDBDL	MS	-	Interceptor	Wire	-	-



Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Launch				Ascent_Pad	Apogee km	Range km	Dest	
							Mission	FlightCode	Platform	Launch_Site					Launch_Pad
2022-S21	2459665.50	2022 Mar 30	ADD TV1	d	TF1	Space Test	-	SIR	AHHU	-	-	-	200?	-	-
2022-S141	2459575.50	2022	Hyunseo-5	?	-	Test	-	-	AHHU	-	-	-	200?	-	-
2022-S137	2459943.88	2022 Dec 30 0900?	ADD TV1	-	TF2	Space Test	-	SIR?	AHHU	-	-	-	200?	-	-
2023-S68	2459944.50	2023	Hyunseo-5	?	-	Test	-	-	AHHU	-	-	-	200?	-	-
2023-188	2460282.71	2023 Dec 4 0500	ADD TV2	-	-	S-STEP	-	SIR?	JEJU	-	-	-	-	-	-





Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	DrpPay	Agency	Launch_Code	Group	Category	LTCite	Cite	Notes
2022-521	2459668.50	2022 Mar 30	ADD TV1	d	TF1	0.000	ADD	TS	-	Test	Wire	-	-
2022-S141	2459579.50	2022	Hyumoo-5	?	-	0.000	ADD	RU	-	Test	Wire	-	-
2022-S137	2459943.88	2022 Dec 30 0900?	ADD TV1	-	TF2	0.000	ADD	TS	-	Test	Wire	-	-
2023-868	2459944.50	2023	Hyumoo-5	?	-	0.000	ADD	RU	-	Test	Wire	-	-
2023-188	2460282.71	2023 Dec 4 0500	ADD TV2	-	-	0.080	ADD	US	G	Sat LEO 0	Wire	-	-



Launch

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Mission	FlightCode	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee km	Range km	Dest
1989-A08	2447805.23	1989 Oct 6 1728	AMROC IRR	-	SET-1	-	-	-	-	V	BMRSA3	-	-	0	-	-
1996-A08	2450402.50	1996 Nov 15	Hyperion	-	FPDP 1	LA-1	-	-	-	WI	-	-	-	8	-	-
1996-A09	2450402.50	1996 Nov 15	Hyperion	-	FPDP 2	LA-2	-	-	-	WI	-	-	-	8	-	-
1997-A02	2450466.50	1997 Jan 8	Hyperion	-	FPDP 3	HA-1	-	-	-	WI	-	-	-	36	-	-
1997-A29	2450563.50	1997 Apr 26	Hyperion	-	FPDP 4	HA-2	-	-	-	WI	-	-	-	33	-	-



Launch													
Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Orbpay	Agency	Launch_Code	Group	Category	LTCite	Cite	Notes
1989-408	2447805.23	1989 Oct 5 1728	AMROC IRR	-	SET-1	0.000	AMROC	SF	AMROC/	Test	SMS91009-1	VAFB	-
1996-408	2460402.50	1996 Nov 15	Hyperion	-	FPDP 1	0.000	MSFC	SS	EAC/	Test	www.cesaroni.net	ISIR980914-13	-
1996-409	2460402.50	1996 Nov 15	Hyperion	-	FPDP 2	0.000	MSFC	SS	EAC/	Test	www.cesaroni.net	ISIR980914-13	-
1997-402	2460466.50	1997 Jan 8	Hyperion	-	FPDP 3	0.000	MSFC	SS	EAC/	Test	www.hybrids.com	SM97020-17	-
1997-429	2460666.50	1997 Apr 25	Hyperion	-	FPDP 4	0.000	MSFC	SS	EAC/	Test	www.hybrids.com	ISIR980914-13	-



Launch

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Mission	FlightCode	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee km	Range km	Dest
2021-A16	2459423.50	2021 Jul 28	ARRW	-	-	BTV-1b	AGR-183A	-	B-52H-036	EAFB	-	PH	-	107	-	-
2022-A19	2459713.50	2022 May 14	ARRW	-	-	Booster test	AGR-183A	-	B-52H-050	EAFB	-	PH	-	107	-	-
2022-A39	2459772.50	2022 Jul 12	ARRW	-	-	Booster Test	AGR-183A	-	B-52H	EAFB	-	PH	-	107	-	-
2022-A37	2459922.50	2022 Dec 9	ARRW	-	-	Test	AGR-183A	-	B-52H	EAFB	-	PH	-	107	-	-
2023-A08	2460016.50	2023 Mar 13	ARRW	-	-	Test	AGR-183A	-	B-52H	EAFB	-	PH	-	107	-	-
2023-A19	2460176.50	2023 Aug 19	ARRW	-	-	Test	AGR-183A	-	B-52H	EAFB	-	PH?	-	207	-	-
2023-A21	2460229.50	2023 Oct 12	ARRW	-	-	Test	AGR-183A	-	B-52H	EAFB	-	PH?	-	207	-	-
2024-A02	2460369.50	2024 Mar	ARRW	-	-	Test	AGR-183A	-	B-52H	GUAMA	-	RHR	-	207	-	-





Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	OrbPay	Agency	Launch_Code	Group	Category	LTcite	Cite	Notes
2021-A16	2459423.50	2021 Jul 28	ARRW	-	-	0.000	AFAD	MF	-	Test	eglin.af.mil	-	-
2022-A19	2459713.50	2022 May 14	ARRW	-	-	0.000	AFAD	MF	-	Test	liss.org	-	-
2022-A39	2459772.50	2022 Jul 12	ARRW	-	-	0.000	AFAD	RS	-	Test	Wire	-	-
2022-A37	2459922.50	2022 Dec 9	ARRW	-	-	0.000	AFAD	RS	-	Test	Wire	-	-
2023-A08	2460016.50	2023 Mar 13	ARRW	-	-	0.000	AFAD	MF	-	Test	Wire	-	-
2023-A19	2460176.50	2023 Aug 19	ARRW	-	-	0.000	AFAD	MF	-	Test	Wire	-	-
2023-A21	2460229.50	2023 Oct 12	ARRW	-	-	0.000	AFAD	MU	-	Test	Wire	-	-
2024-A02	2460369.50	2024 Mar	ARRW	-	-	0.000	AFAD	MU	-	Test	Wire	-	-



Launch

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Mission	FlightCode	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee Km	Range Km	Dest
1979-703	2444095-60	1979 Aug 10 0228	SLV-3	-	SLV-3-E1	RS-1	Rohini RS-1	-	-	SHAR	SLV	-	-	300?	-	-
1980-062	2444438-61	1980 Jul 18 0233:45	SLV-3	-	SLV-3-E2	RS-1	Rohini RS-1	-	-	SHAR	SLV	-	-	919	-	-
1981-051	2444765-65	1981 May 31 0333:46	SLV-3	-	SLV-3-D1	RS-D-1	Rohini RS-D-1	-	-	SHAR	SLV	-	-	418	-	-
1983-033	2445441-73	1983 Apr 17 0636:45	SLV-3	D4	SLV-3-D2	RS-D-2	Rohini RS-D-2	-	-	SHAR	SLV	-	-	856	-	-
1987-701	2446878-78	1987 Mar 24 0639	ASLV	-	ASLV-D1	SRSS A	SRSS-A	-	-	SHAR	SLV	-	-	10?	-	-
1988-F03	2447355-89	1988 Jul 13 0918	ASLV	-	ASLV-D2	SRSS B	SRSS-B	-	-	SHAR	SLV	-	-	26	-	-
1989-558	2447668-57	1989 May 22 0140	ASLV TD	-	01	-	-	-	-	CHAN	-	-	-	300?	-	-
1992-028	2448762-52	1992 May 20 0030	ASLV	-	ASLV-D3	SRSS C	SRSS-C	-	-	SHAR	SLV	-	-	444	-	-
1992-110	2448770-50	1992 May 28	ASLV TD	-	02	-	-	-	-	CHAN	-	-	-	10	-	-
1994-518	2449403-01	1994 Feb 19 1213	ASLV TD	-	04	-	-	-	-	CHAN	-	-	-	300?	-	-
1994-027	2449476-50	1994 May 14 0000	ASLV	-	ASLV-D4	SRSS C2	SRSS-C2	-	-	SHAR	SLV	-	-	922	-	-
1999-523	2451279-68	1999 Apr 11 0417	ASLV	-	-	-	-	-	-	IC4	IC4	-	-	1000?	-	-
2001-503	2451926-69	2001 Jan 17 0431	ASLV	-	-	-	-	-	-	IC4/TEL	IC4/TEL	-	-	1000?	-	-
2002-503	2452299-64	2002 Jan 25 0315	ASLV	-	-	-	-	-	-	CHAN	-	-	-	300?	-	-
2005-501	2452848-64	2005 Jan 9 0317	ASLV	-	-	-	-	-	-	CHAN	-	-	-	300?	-	-
2004-528	2453190-69	2004 Jul 4 0440	ASLV	-	-	-	-	-	-	CHAN	-	-	-	300?	-	-
2004-538	2453246-81	2004 Aug 29 0726	ASLV	-	-	-	-	-	-	CHAN	-	-	-	1000?	-	-
2007-850	2454378-71	2007 Oct 5 0507	ASLV	-	-	-	-	-	-	CHAN	-	-	-	300?	-	-
2007-851	2454397-50	2007 Oct 24	ASLV	-	-	-	-	-	-	CHAN	-	-	-	300?	-	-
2008-512	2454946-70	2008 Mar 23 0445	ASLV	-	-	-	-	-	-	CHAN	-	-	-	1000?	-	-
2009-527	2454970-69	2009 May 19 0436	ASLV	-	-	-	-	-	-	CHAN	-	-	-	300?	-	-
2009-408	2455159-10	2009 Nov 23 1419	ASLV	-	-	-	-	-	-	CHAN	-	-	-	300?	-	-
2010-528	2455283-82	2010 Mar 28 0737	ASLV	-	-	-	-	-	-	CHAN	-	-	-	20?	-	-
2010-534	2455353-66	2010 May 17 0348	ASLV	-	-	-	-	-	-	CHAN	-	-	-	300	-	-
2010-570	2455525-69	2010 Nov 25 0440	ASLV	-	-	-	-	-	-	CHAN	-	-	-	300	-	-
2010-405	2455940-69	2010 Dec 10 0435	ASLV 2P	-	-	-	-	-	-	CHAN	-	-	-	20?	-	-
2011-844	2455934-67	2011 Sep 30 0400	ASLV	-	-	-	-	-	-	CHAN	-	-	-	220	-	-
2011-855	2455980-65	2011 Nov 15 0350	ASLV	-	-	-	-	-	-	CHAN	-	-	-	900	-	-
2011-873	2455986-67	2011 Dec 1 0400	ASLV	-	-	-	-	-	-	CHAN	-	-	-	300?	-	-
2012-542	2456121-69	2012 Jul 13 0436	ASLV	-	-	-	-	-	-	CHAN	-	-	-	300?	-	-
2012-543	2456146-64	2012 Aug 9 0316	ASLV	-	-	-	-	-	-	CHAN	-	-	-	220?	-	-
2012-546	2456188-76	2012 Sep 19 0618	ASLV	-	-	-	-	-	-	CHAN	-	-	-	900?	-	-
2013-525	2456389-70	2013 Apr 7 0465	ASLV	-	-	-	-	-	-	CHAN	-	-	-	220?	-	-
2014-805	2456977-72	2014 Jan 20 0522	ASLV	-	-	-	-	-	-	CHAN	-	-	-	900?	-	-
2014-851	2456979-23	2014 Sep 11 0541	ASLV	-	-	-	-	-	-	CHAN	-	-	-	300?	700	-
2014-852	2456911-74	2014 Apr 11 1733	ASLV	-	-	-	-	-	-	CHAN	-	-	-	300?	700	-
2014-376	2456970-97	2014 Nov 9 0410	ASLV	-	-	-	-	-	-	CHAN	-	-	-	300?	3000	-
2014-376	2457335-66	2014 Dec 2 0449	ASLV	-	-	-	-	-	-	CHAN	-	-	-	600	3000	-
2015-501	2457353-66	2015 Nov 27 0415	ASLV	-	-	-	-	-	-	CHAN	-	-	-	300?	700	-
2016-398	2457353-69	2016 Mar 27 0346	ASLV	-	-	-	-	-	-	CHAN	-	-	-	300?	410	-
2016-376	2457461-66	2016 May 23 0346	ASLV	-	-	-	-	-	-	CHAN	-	-	-	66	410	-
2016-377	2457471-56	2016 May 23 0130	ASLV	-	-	-	-	-	-	CHAN	-	-	-	300?	700	-
2016-377	2457471-56	2016 May 23 0130	ASLV	-	-	-	-	-	-	CHAN	-	-	-	700	3500	-
2017-1109	2457751-77	2017 Nov 22 0520	ASLV	-	-	-	-	-	-	CHAN	-	-	-	100	3500	-
2017-1130	2457797-77	2017 Jan 2 0525	ASLV	-	-	-	-	-	-	CHAN	-	-	-	300?	700	-
2018-403	2458155-62	2018 May 6 0365	ASLV	-	-	-	-	-	-	CHAN	-	-	-	500?	3150	92.5E 7.5E?
2018-413	2458169-62	2018 Feb 20 0308	ASLV	-	-	-	-	-	-	CHAN	-	-	-	300?	3150	92.5E 7.5E?
2018-413	2458246-75	2018 Feb 20 0308	ASLV	-	-	-	-	-	-	CHAN	-	-	-	300?	3150	92.5E 7.5E?
2019-1126	2458904-75	2019 Jun 12 0557	ASLV	-	-	-	-	-	-	CHAN	-	-	-	300?	3150	92.5E 7.5E?
2019-471	2458904-06	2019 Jun 15 1407	ASLV	-	-	-	-	-	-	CHAN	-	-	-	200?	2000?	-
2019-109	2458909-73	2019 Sep 7 0532	ASLV	-	-	-	-	-	-	CHAN	-	-	-	30	2000?	-
2021-437	2459083-73	2021 Jun 28 0536	ASLV P	-	-	-	-	-	-	CHAN	-	-	-	900?	-	-
2021-437	2459083-73	2021 Jun 28 0536	ASLV P	-	-	-	-	-	-	CHAN	-	-	-	900	-	-
2021-543	2459266-73	2021 Dec 19 0536	ASLV P	-	-	-	-	-	-	CHAN	-	-	-	800	-	-
2022-543	2459273-03	2022 Oct 6 1400	ASLV P	-	-	-	-	-	-	CHAN	-	-	-	600	3500	-
2022-5109	2459273-68	2022 Oct 21 0415	ASLV P	-	-	-	-	-	-	CHAN	-	-	-	800	-	-
2024-552	2460569-50	2024 Sep 6	ASLV P	-	-	-	-	-	-	CHAN	-	-	-	600	3500	-



Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	DrPay	Agency	Launch_Code	Group	Category	LTCite	Cite	Notes
1979-F03	2444095.60	1979 Aug 10 0228	SIV-3	-	SIV-3-EI	0.035	ISRO	0F	G	Sat LE0 0	ISRO-poster	SP-4024	-
1980-062	2444385.61	1980 Jul 18 0233:45	SIV-3	-	SIV-3-E2	0.035	ISRO	0S	G	Sat LE0 0	Sandilas	SP-4024	-
1981-051	2444755.65	1981 May 31 0333:46	SIV-3	-	SIV-3-D1	0.040	ISRO	0S75	G	Sat LE0 0	Sandilas	RME	-
1983-033	2445441.73	1983 Apr 17 0538:45	SIV-3	D4	SIV-3-D2	0.041	ISRO	0F	G	Sat LE0 0	ISRO	-	-
1987-F01	2446878.78	1987 Mar 24 0639:45	ASLV	-	ASLV-D1	0.150	ISRO	0F	G	Sat LE0 0	ISRO	-	-
1988-F03	2447355.89	1988 Jul 13 0918	ASLV	-	ASLV-D2	0.150	ISRO	0F	G	Sat LE0 0	ISRO	-	-
1989-858	2447665.57	1989 May 22 0140	ASLV TD	-	01	0.000	ISRO	0S	G	Test	Chengappa	AMST890529-42	-
1992-028	2448762.52	1992 May 20 0030	ASLV	-	ASLV-D3	0.106	ISRO	0S	G	Sat LE0 0	ISRO	-	-
1992-A10	2448770.50	1992 May 28	ASLV TD	-	02	0.000	ISRO	0F	-	Test	Chengappa	-	-
1994-F10	2449403.01	1994 Feb 19 1213	ASLV	-	ASLV-D4	0.113	ISRO	0S	G	Sat LE0 0	ISRO	-	-
1999-823	2451279.68	1999 Apr 11 0417	ASLV	-	04	0.000	ISRO	0S	G	Test	Chengappa	-	-
2001-303	2451926.69	2001 Jan 17 0431	Agri 2	-	-	0.000	ISRO	0S	-	Test	ISRO	-	-
2002-303	2452289.64	2002 Jan 25 0315	Agri 1	-	-	0.000	ISRO	0S	-	Test	ISRO	-	-
2003-301	2452648.64	2003 Jan 9 0317	Agri 1	-	-	0.000	ISRO	0S	-	Test	ISRO	-	-
2004-301	2453190.69	2004 Jul 4 0440	Agri 1	-	-	0.000	ISRO	0S	-	Test	Thehindu040705	-	-
2004-858	2453246.81	2004 Aug 29 0726	Agri 2	-	-	0.000	ISRO	0S	-	Test	ISRO	-	-
2007-850	2454378.71	2007 Oct 5 0507	Agri 1	-	-	0.000	ISRO	0S	-	Test	ISRO	-	-
2007-851	2454397.50	2007 Oct 24	Agri 1	-	-	0.000	ISRO	0S	-	Test	ISRO	-	-
2008-812	2454648.70	2008 Mar 23 0445	Agri 1	-	-	0.000	ISRO	0S	-	Test	ISRO	-	-
2009-827	2454970.69	2009 May 19 0436	Agri 2	-	-	0.000	ISRO	0S	-	Test	ISRO	-	-
2009-808	2455159.10	2009 Nov 25 1419	Agri 1	-	-	0.000	ISRO	0S	-	Test	ISRO	-	-
2010-828	2455283.82	2010 Mar 26 0737	Agri 1	-	-	0.000	ISRO	0S	-	Test	ISRO	-	-
2010-834	2455353.66	2010 May 17 0348	Agri 2	-	-	0.000	ISRO	0S	-	Test	ISRO	-	-
2010-870	2455225.69	2010 Nov 25 0440	Agri 1	-	-	0.000	ISRO	0S	-	Test	ISRO	-	-
2010-805	2455940.69	2010 Dec 10 0435	Agri 2P	-	-	0.000	ISRO	0S	-	Test	ISRO	-	-
2011-844	2456354.67	2011 Sep 30 0400	Agri 4	-	-	0.000	ISRO	0S	-	Test	ISRO	-	-
2011-855	2456800.65	2011 Nov 15 0330	Agri 4	-	-	0.000	ISRO	0S	-	Test	ISRO	-	-
2011-873	2456936.67	2011 Dec 1 0400	Agri 1	-	-	0.000	ISRO	0S	-	Test	ISRO	-	-
2012-842	2456121.69	2012 Jul 13 0436	Agri 1	-	-	0.000	ISRO	0S	-	Test	ISRO	-	-
2012-843	2456146.64	2012 Aug 9 0316	Agri 2	-	-	0.000	ISRO	0S	-	Test	ISRO	-	-
2012-846	2456189.76	2012 Sep 19 0618	Agri 4	-	-	0.000	ISRO	0S	-	Test	ISRO	-	-
2013-825	2456395.70	2013 Apr 7 0455	Agri 2	-	-	0.000	ISRO	0S	-	Test	ISRO	-	-
2014-805	2456677.72	2014 Jan 20 0522	Agri 4	-	-	0.000	ISRO	0S	-	Test	ISRO	-	-
2014-851	2456769.23	2014 Apr 11 1733	Agri 1	-	-	0.000	ISRO	0S	-	Test	ISRO	-	-
2014-852	2456911.74	2014 Sep 11 0941	Agri 1	-	-	0.000	ISRO	0S	-	Test	ISRO	-	-
2014-875	2456970.57	2014 Nov 9 0410	Agri 2	-	-	0.000	ISRO	0S	-	Test	ISRO	-	-
2014-876	2456993.70	2014 Dec 2 0449	Agri 4	-	-	0.000	ISRO	0S	-	Test	ISRO	-	-
2015-871	2457355.68	2015 Nov 27 0432	Agri 4	-	-	0.000	ISRO	0S	-	Test	ISRO	-	-
2015-896	2457353.69	2015 Nov 27 0432	Agri 1	-	-	0.000	ISRO	0S	-	Test	ISRO	-	-
2016-876	2457461.56	2016 Mar 24 0345	RS9	-	-	0.000	ISRO	0S	-	Test	ISRO	-	-
2016-877	2457531.56	2016 May 23 0430	RS9	-	-	0.000	ISRO	0S	-	Test	ISRO	-	-
2016-878	2457745.89	2016 Nov 27 0440	Agri 1	-	-	0.000	ISRO	0S	-	Test	ISRO	-	-
2017-8109	2457757.77	2017 Jan 4 0625	Agri 1	-	-	0.000	ISRO	0S	-	Test	ISRO	-	-
2017-830	2457977.77	2017 May 6 0325	Agri 2	-	-	0.000	ISRO	0S	-	Test	ISRO	-	-
2018-830	2458155.52	2018 Feb 6 0308	Agri 1	-	-	0.000	ISRO	0S	-	Test	ISRO	-	-
2018-833	2458185.62	2018 Feb 20 0308	Agri 1	-	-	0.000	ISRO	0S	-	Test	ISRO	-	-
2019-8125	2458446.75	2019 Jun 12 0527	Agri 2	-	-	0.000	ISRO	0S	-	Test	ISRO	-	-
2019-871	2458904.08	2019 Nov 12 1402	Agri 1	-	-	0.000	ISRO	0S	-	Test	ISRO	-	-
2020-801	2458909.73	2020 Sep 7 0532	Agri 2	-	-	0.000	ISRO	0S	-	Test	ISRO	-	-
2021-837	2459293.73	2021 Jun 28 0526	Agri P	-	-	0.000	ISRO	0S	-	Test	ISRO	-	-
2021-839	2459265.73	2021 Jun 18 0526	Agri P	-	-	0.000	ISRO	0S	-	Test	ISRO	-	-
2022-849	2459373.68	2022 Dec 6 1400	Agri 4	-	-	0.000	ISRO	0S	-	Test	ISRO	-	-
2022-8109	2459373.68	2022 Oct 21 0415	Agri P	-	-	0.000	ISRO	0S	-	Test	ISRO	-	-
2024-852	2460559.50	2024 Sep 6	Agri 4	-	-	0.000	ISRO	0S	-	Test	ISRO	-	-



Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Mission	FlightCode	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee_Km	Range_Km	Dest
2010-402	2455543.22	2010 May 26 1710	X-51A	-	1	-	-	-	B-52H-050	EAFB	RM04/22	WTR	LP10	19	-	-
2011-422	2455725.50	2011 Jun 13	X-51A	-	2	-	-	-	B-52H-031	EAFB	RM04/22	WTR	LP10	16?	-	-
2012-407	2456154.27	2012 Aug 14 1835	X-51A	-	3	-	-	-	B-52H-050	EAFB	RM04/22	WTR	LP10	16?	-	-
2013-408	2456414.25	2013 May 1 1755	X-51A	-	4	-	-	-	B-52H-024	EAFB	RM04/22	WTR	LP10	16?	-	-
2015-443	2457022.50	2015?	K-BATS	-	-	Target	-	-	-	AMHU	-	-	-	40?	-	-
2016-A104	2457736.18	2016 Dec 15 1615	Pathfinder Zombie	-	-	Pathfinder Zombie	-	-	-	WS	-	-	-	40?	-	-
2017-A112	2457919.16	2017 Jun 14 1545:24	Sabre Zombie	-	-	Sabre Zombie	-	-	-	WS	-	-	-	40?	-	-
2017-554	2457939.42	2017 Jul 4 2200?	ATACMS	-	-	-	-	-	-	GUSEONG	-	-	-	80?	-	-
2017-563	2457963.42	2017 Jul 28 2200?	ATACMS	-	-	-	-	-	-	GUSEONG	-	-	-	80?	-	-
2017-A113	2458074.12	2017 Nov 16 1500:00	Pathfinder Zombie	-	-	Pathfinder Zombie	-	-	-	WS	MCG	-	-	30?	-	-
2020-530	2459025.50	2020 Jun 25	Sabre Zombie	-	-	Sabre Zombie	-	-	-	WS	-	-	-	40?	-	-
2021-A10	2459553.50	2021 May 19	Pathfinder Zombie	-	-	Pathfinder Zombie	-	-	-	SUIST	-	-	-	40?	-	-
2022-541	2459736.49	2022 Jun 5 2345	ATACMS	-	-	-	-	-	-	GUSEONG?	-	-	-	80?	-	-
2022-542	2459736.49	2022 Jun 5 2350?	ATACMS	-	-	-	-	-	-	GUSEONG?	-	-	-	80?	-	-
2022-543	2459736.49	2022 Jun 5 2350?	ATACMS	-	-	-	-	-	-	GUSEONG?	-	-	-	80?	-	-
2022-544	2459736.49	2022 Jun 5 2350?	ATACMS	-	-	-	-	-	-	GUSEONG?	-	-	-	80?	-	-
2022-545	2459736.49	2022 Jun 5 2350?	ATACMS	-	-	-	-	-	-	GUSEONG?	-	-	-	80?	-	-
2022-546	2459736.49	2022 Jun 5 2350?	ATACMS	-	-	-	-	-	-	GUSEONG?	-	-	-	80?	-	-
2022-547	2459736.49	2022 Jun 5 2350?	ATACMS	-	-	-	-	-	-	GUSEONG?	-	-	-	80?	-	-
2022-548	2459736.50	2022 Jun 5 2355	ATACMS	-	-	-	-	-	-	GUSEONG?	-	-	-	80?	-	-
2022-590	2459857.12	2022 Oct 4 1500?	ATACMS	-	-	-	-	-	-	GAMON	-	-	-	80?	-	-
2022-591	2459857.12	2022 Oct 4 1500?	ATACMS	-	-	-	-	-	-	GAMON	-	-	-	80?	-	-
2022-592	2459857.12	2022 Oct 4 1500?	ATACMS	-	-	-	-	-	-	GAMON	-	-	-	80?	-	-
2022-594	2459857.12	2022 Oct 4 1500?	ATACMS	-	-	-	-	-	-	GAMON	-	-	-	80?	-	-
2024-A13	2460633.52	2024 Oct 4 1500?	ATACMS	-	-	-	-	-	-	URKI	-	-	-	50?	-	-
2024-A14	2460633.52	2024 Nov 19 0025?	ATACMS	-	-	-	-	-	-	URKI	-	-	-	50?	-	-
2024-A15	2460633.52	2024 Nov 19 0025?	ATACMS	-	-	-	-	-	-	URKI	-	-	-	50?	-	-
2024-A16	2460633.52	2024 Nov 19 0025?	ATACMS	-	-	-	-	-	-	URKI	-	-	-	50?	-	-
2024-A17	2460633.52	2024 Nov 19 0025?	ATACMS	-	-	-	-	-	-	URKI	-	-	-	50?	-	-
2024-A18	2460633.52	2024 Nov 19 0025?	ATACMS	-	-	-	-	-	-	URKI	-	-	-	50?	-	-
2024-A19	2460633.52	2024 Nov 19 0025?	ATACMS	-	-	-	-	-	-	URKI	-	-	-	50?	-	-





Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Launch_Urbay	Agency	Launch_Code	Group	Category	LTCite	Cite	Notes
2010-A02	2455343.22	2010 May 26 17:10	X-51A	-	1	0.000	AFRLRZ	AS	AFRLRZ/DARPA/	Hypersonic Scramjet	Wire	-	-
2011-A22	2455725.50	2011 Jun 13	X-51A	-	2	0.000	AFRLRZ	AS	AFRLRZ/DARPA/	Hypersonic Scramjet	Wire	-	-
2012-A07	2456154.27	2012 Aug 14 18:36	X-51A	-	3	0.000	AFRLRZ	AF	AFRLRZ/DARPA/	Hypersonic Scramjet	Wire	-	-
2013-A08	2456414.26	2013 May 1 17:55	X-51A	-	4	0.000	AFRLRZ	AS	AFRLRZ/DARPA/	Hypersonic Scramjet	Wire	-	-
2015-A43	2457022.50	2015?	K-BATS	-	-	0.000	ADD	AS	ADD/	Test	AMST10620-34	-	-
2016-A104	2457738.18	2016 Dec 15 16:15	Pathfinder Zombie	-	-	0.000	SMDC	SS	SMDC/Christley	Test	army.mil	-	-
2017-A112	2457919.16	2017 Jun 14 15:45:24	Sabre Zombie	-	-	0.000	SMDC	SS	SMDC/Christley	Test	army.mil	-	-
2017-S64	2457939.42	2017 Jul 4 22:00?	ATACHS	-	-	0.000	US8A	SS	US8A/	Test	usfk.mil	-	-
2017-S63	2457963.42	2017 Jul 28 22:00?	ATACHS	-	-	0.000	US8A	SS	US8A/	Test	usfk.mil	-	-
2017-A113	2458074.12	2017 Nov 16 15:00:00	Sabre Zombie	-	-	0.000	SMDC	SS	SMDC/Christley	Test	army.mil	-	-
2020-S30	2458025.50	2020 Jun 25	Pathfinder Zombie	-	-	0.000	SMDC	MS	-	Target	army.mil	-	-
2021-A10	2458353.50	2021 May 19	ATACHS	-	-	0.000	SMDC	MS	-	Target	army.mil	-	-
2022-S61	2458736.49	2022 Jun 5 23:45	ATACHS	-	-	0.000	US8A	SS	US8A/	Test	Wire	-	-
2022-S62	2458736.49	2022 Jun 5 23:50?	ATACHS	-	-	0.000	US8A	SS	US8A/	Test	Wire	-	-
2022-S63	2458736.49	2022 Jun 5 23:50?	ATACHS	-	-	0.000	US8A	SS	US8A/	Test	Wire	-	-
2022-S64	2458736.49	2022 Jun 5 23:50?	ATACHS	-	-	0.000	US8A	SS	US8A/	Test	Wire	-	-
2022-S65	2458736.49	2022 Jun 5 23:50?	ATACHS	-	-	0.000	US8A	SS	US8A/	Test	Wire	-	-
2022-S66	2458736.49	2022 Jun 5 23:50?	ATACHS	-	-	0.000	US8A	SS	US8A/	Test	Wire	-	-
2022-S67	2458736.49	2022 Jun 5 23:50?	ATACHS	-	-	0.000	US8A	SS	US8A/	Test	Wire	-	-
2022-S68	2458736.50	2022 Jun 5 23:55	ATACHS	-	-	0.000	US8A	SS	US8A/	Test	Wire	-	-
2022-S80	2458667.12	2022 Oct 4 15:00?	ATACHS	-	-	0.000	US8A	SS	US8A/	Test	Wire	-	-
2022-S81	2458667.12	2022 Oct 4 15:00?	ATACHS	-	-	0.000	US8A	SS	US8A/	Test	Wire	-	-
2022-S83	2458667.12	2022 Oct 4 15:00?	ATACHS	-	-	0.000	ADD	SS	ADD/	Test	Wire	-	-
2022-S84	2458667.12	2022 Oct 4 15:00?	ATACHS	-	-	0.000	ADD	SS	ADD/	Test	Wire	-	-
2024-A13	2460633.52	2024 Nov 19 00:25?	ATACHS	-	-	0.000	AFU	MS	AFU/	Weapon	Wire	-	-
2024-A14	2460633.52	2024 Nov 19 00:25?	ATACHS	-	-	0.000	AFU	MS	AFU/	Weapon	Wire	-	-
2024-A15	2460633.52	2024 Nov 19 00:25?	ATACHS	-	-	0.000	AFU	MS	AFU/	Weapon	Wire	-	-
2024-A16	2460633.52	2024 Nov 19 00:25?	ATACHS	-	-	0.000	AFU	MS	AFU/	Weapon	Wire	-	-
2024-A17	2460633.52	2024 Nov 19 00:25?	ATACHS	-	-	0.000	AFU	MS	AFU/	Weapon	Wire	-	-
2024-A18	2460633.52	2024 Nov 19 00:25?	ATACHS	-	-	0.000	AFU	MS	AFU/	Weapon	Wire	-	-
2024-A19	2460633.52	2024 Nov 19 00:25?	ATACHS	-	-	0.000	AFU	MS	AFU/	Weapon	Wire	-	-



Launch																
Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Mission	FlightCode	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee km	Range km	Dest
1989-X05	2447865.50	1989 Dec 5	AI Abid	-	-	Stage 1 test	-	-	-	AMBAR	-	-	-	2?	-	-



Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	OrbPay	Agency	Launch_Code	Group	Category	LTCite	Cite	Notes
1989-405	2447865.50	1989 Dec 5	AI Abid	-	-	0.000	IQ	MF	-	Test	www.fas.org	SM891211-22	-



Launch

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Mission	FlightCode	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee_Km	Range_Km	Dest
1954-A725	2435064.50	1954 Nov 18	MX-2227	-	1	HIV	-	-	-	WS	-	-	-	107	-	-
1954-A726	2435069.50	1954 Nov 23	MX-2227	-	2	HIV	-	-	-	WS	-	-	-	107	-	-
1954-A727	2435090.50	1954 Dec 14	MX-2227	-	3	HIV	-	-	-	WS	-	-	-	107	-	-
1954-A728	2435093.50	1954 Dec 17	MX-2227	-	4	HIV	-	-	-	WS	-	-	-	107	-	-
1955-A573	2435205.50	1955 Apr 8	MX-2227	-	5	HIV	-	-	-	WS	-	-	-	107	-	-
1955-A574	2435212.50	1955 Apr 15	MX-2227	-	6	HIV	-	-	-	WS	-	-	-	107	-	-
1955-A575	2435275.50	1955 Jun 17	HIV	-	7	HIV	-	-	-	WS	-	-	-	107	-	-
1955-A576	2435286.50	1955 Jun 28	HIV	-	8	HIV	-	-	-	WS	-	-	-	107	-	-
1955-A577	2435288.50	1955 Jun 30	HIV	-	9	HIV	-	-	-	WS	-	-	-	107	-	-
1955-A664	2435366.50	1955 Sep 16	HIV	?	AM-1	HIV Atlas AM-1	-	-	-	WS	-	-	-	107	-	-
1955-A665	2435369.50	1955 Sep 19	HIV	?	HS-2	HIV Atlas HS-1	-	-	-	WS	-	-	-	107	-	-
1955-A666	2435371.50	1955 Sep 21	HIV	?	AM-2	HIV Atlas AM-2	-	-	-	WS	-	-	-	107	-	-
1955-A578	2435399.50	1955 Oct 19	HIV	-	10	HIV 1366	-	-	-	WS	-	-	-	107	-	-
1955-A579	2435406.50	1955 Oct 26	HIV	-	11	HIV 1366	-	-	-	WS	-	-	-	107	-	-
1955-A580	2435433.50	1955 Nov 22	HIV	-	14	HIV 1366	-	-	-	WS	-	-	-	107	-	-
1955-A581	2435449.50	1955 Nov 22	HIV	-	15	HIV 1366	-	-	-	WS	-	-	-	107	-	-
1956-A236	2435491.50	1956 Jan 19	HIV	-	13	HIV 1366	-	-	-	WS	-	-	-	107	-	-
1956-A237	2435524.50	1956 Feb 21	HIV	-	2A24	HIV 1366	-	-	-	WS	-	-	-	107	-	-
1956-A238	2435534.50	1956 Mar 2	HIV	-	2A25	HIV RS	-	-	-	WS	-	-	-	107	-	-
1956-A239	2435546.50	1956 Mar 13	HIV	-	2F36	HIV RS	-	-	-	WS	-	-	-	107	-	-
1956-A240	2435561.50	1956 Mar 29	HIV	-	2A26	HIV RS	-	-	-	WS	-	-	-	107	-	-
1956-A241	2435566.50	1956 Apr 5	HIV	-	AF27	HIV RS	-	-	-	WS	-	-	-	107	-	-
1956-A242	2435569.50	1956 Apr 5	HIV	-	2F38	HIV RS	-	-	-	WS	-	-	-	107	-	-
1956-A243	2435574.50	1956 Apr 11	HIV	-	2AM39	HIV RS	-	-	-	WS	-	-	-	107	-	-
1956-A244	2435589.50	1956 Apr 26	HIV	-	2A27	HIV	-	-	-	WS	-	-	-	107	-	-
1956-A356	2435612.50	1956 May 19	HIV	?	-	HIV Atlas 107A	-	-	-	WS	-	-	-	107	-	-
1956-A357	2435612.50	1956 May 19	HIV	?	-	HIV Atlas 107A	-	-	-	WS	-	-	-	107	-	-
1956-A245	2435615.50	1956 May 22	HIV	-	2H40	HIV	-	-	-	WS	-	-	-	107	-	-
1956-A246	2435631.50	1956 Jun 7	HIV	-	SL6	HIV	-	-	-	WS	-	-	-	107	-	-
1956-A358	2435633.50	1956 Jun 9	HIV	?	DI-2	HIV Atlas DI-2	-	-	-	WS	-	-	-	107	-	-
1956-A247	2435643.50	1956 Jun 19	HIV	-	SL7	HIV	-	-	-	WS	-	-	-	107	-	-
1956-A248	2435664.50	1956 Jul 10	HIV	-	HAT-1	HIV HAT	-	-	-	WS	-	-	-	107	-	-
1956-A249	2435680.50	1956 Jul 26	HIV	-	W-2	HIV 107A	-	-	-	WS	-	-	-	107	-	-
1956-A250	2435707.50	1956 Aug 22	HIV	-	HAT-2	HIV HAT	-	-	-	WS	-	-	-	107	-	-
1956-A251	2435716.50	1956 Aug 31	HIV	-	HAT-3	HIV 107A	-	-	-	WS	-	-	-	107	-	-
1956-A252	2435722.50	1956 Sep 6	HIV	-	W-4	HIV 1366	-	-	-	WS	-	-	-	107	-	-
1956-A253	2435743.50	1956 Sep 11	HIV	-	W-4	HIV 107A	-	-	-	WS	-	-	-	107	-	-
1956-A254	2435743.50	1956 Sep 27	HIV	-	W-4	HIV 107A	-	-	-	WS	-	-	-	107	-	-
1956-A255	2435762.50	1956 Oct 16	HIV	-	TH-41	HIV Douglas	-	-	-	WS	-	-	-	107	-	-
1956-A256	2435796.50	1956 Nov 19	HIV	-	-	HIV 107A	-	-	-	WS	-	-	-	107	-	-
1956-A257	2435803.50	1956 Nov 28	HIV	-	-	HIV 107A	-	-	-	WS	-	-	-	107	-	-





Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	OrbPay	Agency	Launch_Code	Group	Category	LTCite	Cite	Notes
1964-A725	2435064-50	1964 Nov 18	MX-2227	-	1	0.000	ORD	AS	-	Heat transfer	wsm-history.org	-	-
1964-A726	2435069-50	1964 Nov 23	MX-2227	-	2	0.000	ORD	AS	-	Heat transfer	wsm-history.org	-	-
1964-A727	2435090-50	1964 Dec 14	MX-2227	-	3	0.000	ORD	AS	-	Heat transfer	wsm-history.org	-	-
1964-A728	2435093-50	1964 Dec 17	MX-2227	-	4	0.000	ORD	AS	-	Heat transfer	wsm-history.org	-	-
1965-A573	2435203-50	1965 Apr 8	MX-2227	-	5	0.000	ORD	AS	-	Heat transfer	wsm-history.org	-	-
1965-A574	2435212-50	1965 Apr 15	MX-2227	-	6	0.000	ORD	AS	-	Heat transfer	wsm-history.org	-	-
1965-A575	2435275-50	1965 Jun 17	HTV	-	7	0.000	ORD	AS	-	Heat transfer	wsm-history.org	-	-
1965-A576	2435286-50	1965 Jun 28	HTV	-	8	0.000	ORD	AS	-	Heat transfer	wsm-history.org	-	-
1965-A577	2435288-50	1965 Jun 30	HTV	-	9	0.000	ORD	AS	-	Heat transfer	wsm-history.org	-	-
1965-A664	2435368-50	1965 Sep 16	HTV	-	AM-1	0.000	ORD	AS	-	Heat transfer	wsm-history.org	-	-
1965-A665	2435369-50	1965 Sep 19	HTV	?	RS-2	0.000	ORD	AS	-	Heat transfer	wsm-history.org	-	-
1965-A666	2435371-50	1965 Sep 21	HTV	?	AM-2	0.000	ORD	AS	-	Heat transfer	wsm-history.org	-	-
1965-A578	2435389-50	1965 Oct 19	HTV	-	10	0.000	ORD	AS	-	Heat transfer	wsm-history.org	-	-
1965-A579	2435406-50	1965 Oct 26	HTV	-	11	0.000	ORD	AS	-	Heat transfer	wsm-history.org	-	-
1965-A580	2435433-50	1965 Nov 22	HTV	-	14	0.000	ORD	AS	-	Heat transfer	wsm-history.org	-	-
1965-A581	2435449-50	1965 Dec 8	HTV	-	15	0.000	ORD	AS	-	Heat transfer	wsm-history.org	-	-
1966-A236	2435491-50	1966 Jan 19	HTV	-	13	0.000	ORD	AS	-	Heat transfer	wsm-history.org	-	-
1966-A237	2435524-50	1966 Feb 21	HTV	-	2A24	0.000	ORD	AS	-	Heat transfer	wsm-history.org	-	-
1966-A238	2435534-50	1966 Mar 2	HTV	-	2A25	0.000	ORD	AS	-	Heat transfer	wsm-history.org	-	-
1966-A239	2435545-50	1966 Mar 13	HTV	-	2F36	0.000	ORD	AS	-	Heat transfer	wsm-history.org	-	-
1966-A240	2435561-50	1966 Mar 29	HTV	-	2A26	0.000	ORD	AS	-	Heat transfer	wsm-history.org	-	-
1966-A241	2435566-50	1966 Apr 3	HTV	-	AF27	0.000	ORD	AS	-	Heat transfer	wsm-history.org	-	-
1966-A242	2435568-50	1966 Apr 5	HTV	-	2F38	0.000	ORD	AS	-	Heat transfer	wsm-history.org	-	-
1966-A243	2435574-50	1966 Apr 11	HTV	-	2AM39	0.000	ORD	AS	-	Heat transfer	wsm-history.org	-	-
1966-A244	2435579-50	1966 Apr 26	HTV	-	2A27	0.000	ORD	AS	-	Heat transfer	wsm-history.org	-	-
1966-A356	2435612-50	1966 May 19	HTV	?	-	0.000	ORD	AS	-	Heat transfer	wsm-history.org	-	-
1966-A357	2435615-50	1966 May 19	HTV	?	-	0.000	ORD	AS	-	Heat transfer	wsm-history.org	-	-
1966-A245	2435631-50	1966 May 22	HTV	-	2M40	0.000	ORD	AS	-	Heat transfer	wsm-history.org	-	-
1966-A246	2435633-50	1966 Jun 7	HTV	-	S16	0.000	ORD	AS	-	Heat transfer	wsm-history.org	-	-
1966-A358	2435643-50	1966 Jun 9	HTV	?	DT-2	0.000	ORD	AS	-	Heat transfer	wsm-history.org	-	-
1966-A247	2435643-50	1966 Jun 19	HTV	-	S17	0.000	ORD	AS	-	Heat transfer	wsm-history.org	-	-
1966-A248	2435664-50	1966 Jul 10	HTV	-	HAT-1	0.000	ORD	AS	-	Heat transfer	wsm-history.org	-	-
1966-A249	2435660-50	1966 Jul 26	HTV	-	W-2	0.000	ORD	AS	-	Heat transfer	wsm-history.org	-	-
1966-A250	2435707-50	1966 Aug 22	HTV	-	HAT-2	0.000	ORD	AS	-	Heat transfer	wsm-history.org	-	-
1966-A251	2435716-50	1966 Aug 31	HTV	-	W-1	0.000	ORD	AS	-	Heat transfer	wsm-history.org	-	-
1966-A252	2435722-50	1966 Aug 31	HTV	-	HAT-3	0.000	ORD	AS	-	Heat transfer	wsm-history.org	-	-
1966-A253	2435727-50	1966 Sep 6	HTV	-	W-4	0.000	ORD	AS	-	Heat transfer	wsm-history.org	-	-
1966-A254	2435743-50	1966 Sep 11	HTV	-	W-5	0.000	ORD	AS	-	Heat transfer	wsm-history.org	-	-
1966-A255	2435743-50	1966 Sep 27	HTV	-	TH-41	0.000	ORD	AS	-	Heat transfer	wsm-history.org	-	-
1966-A256	2435762-50	1966 Oct 16	HTV	-	-	0.000	ORD	AS	-	Heat transfer	wsm-history.org	-	-
1966-A256	2435786-50	1966 Nov 19	HTV	-	-	0.000	ORD	AS	-	Heat transfer	wsm-history.org	-	-
1966-A257	2435805-50	1966 Nov 28	HTV	-	-	0.000	ORD	AS	-	Heat transfer	wsm-history.org	-	-



Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Mission	FlightCode	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee km	Range km	Dest
1962-A32	2434062.12	1962 Feb 19 1449	Aerobee RTV-A-1c	-	USAF 22	Airglow	-	-	-	HADC	A	-	-	0	-	-
1961-A223	2437696.60	1961 Oct 24	Seabee	-	SEABEE	Hydra	-	-	-	PH	-	-	-	1?	-	-
1961-A267	2437606.60	1961 Nov 2	Seabee	-	SEABEE	Hydra	-	-	-	PH	-	-	-	1?	-	-



Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Orbit	Agency	Launch_Code	Group	Category	LTCite	Cite	Notes
1952-A52	2434062.12	1952 Feb 19 1449	Aerobee RTV-A-1c	-	USAF 22	0.000	AFRL	SF	AFRL/	Aeronomy SB	Nowell	-	-
1961-A223	2437696.50	1961 Oct 24	Seabee	-	SEABEE	0.000	MCC	AS	-	Test	rocketservices.co.uk	AMS2E-371	-
1961-A267	2437605.50	1961 Nov 2	Seabee	-	SEABEE	0.000	MCC	AS	-	Test	AeAe1961	-	-



Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Mission	FlightCode	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee_Km	Range_Km	Dest
1947-A18	2432453-50	1947 Sep 25	Aerobee HTV-10-8	-	A1	Dummy	-	-	-	WS	LC35	-	-	17	-	-
1947-A20	2432460-50	1947 Oct 2	Aerobee HTV-10-8	-	A2	Dummy	-	-	-	WS	LC35	-	-	17	-	-
1947-A27	2432469-50	1947 Oct 31	Aerobee HTV-10-8	-	A3	Dummy	-	-	-	WS	LC35	-	-	17	-	-
1947-M06	2432514-22	1947 Nov 24 17:20	Aerobee HTV-10-8	-	A4	Particles	-	-	-	WS	LC35	-	-	56	-	-
1948-S03	2432516-45	1948 Mar 5 22:51	Aerobee HTV-10-8	-	A5	Particles	-	-	-	WS	LC35	-	-	118	-	-
1948-S05	2432655-40	1948 Apr 13 21:41	Aerobee HTV-10-8	-	A6	B field	-	-	-	WS	LC35	-	-	114	-	-
1948-S08	2432759-20	1948 Jul 26 16:47	Aerobee HTV-10-8	-	A7	-	-	-	-	WS	LC35	-	-	113	-	-
1948-S11	2432769-57	1948 Aug 6 01:37	Aerobee HTV-10-8	-	MR1_1	Aerobee Venus 1	-	-	-	WS	LC35	-	-	98	-	-
1948-S19	2432857-51	1948 Nov 2 00:15	Aerobee HTV-10-8	-	A8	CX/Solar	-	-	-	WS	LC35	-	-	91	-	-
1949-S01	2432895-44	1949 Dec 9 22:38	Aerobee ZASR-SC-1	-	SC 1	Air sampling	-	-	-	WS	LC35	-	-	91	-	-
1949-S02	2432945-76	1949 Jan 29 06:17	Aerobee HTV-10-8	-	MR1_2	Venus 2	-	-	-	WS	LC35	-	-	96	-	-
1949-A04	2432976-50	1949 Mar 1	Aerobee HTV-10-8	-	MR1_3	Venus 3	-	-	-	WS	LC35	-	-	0	-	-
1949-S04	2432983-47	1949 Mar 22 17:20	Aerobee HTV-10-8	-	A9	Ship launch test	-	-	-	WS	LC35	-	-	1	-	-
1949-S06	2432988-22	1949 Mar 24 15:14	Aerobee HTV-10-8	-	A10	-	-	-	-	WS	LC35	-	-	0	-	-
1949-A07	2433000-13	1949 Mar 24 15:14	Aerobee HTV-10-8	-	A11	-	-	-	-	WS	LC35	-	-	105	-	-
1949-M03	2433070-05	1949 Jun 2 13:10	Aerobee ZASR-SC-1	-	SC 2	Air Sampling	-	-	-	WS	LC35	-	-	78	-	-
1949-S16	2433082-59	1949 Jun 15 02:03	Aerobee HTV-10-8	-	MR1_5	Ozone spectrograph	-	-	-	WS	LC35	-	-	109	-	-
1949-S17	2433084-98	1949 Jun 17 11:50	Aerobee HTV-10-8	-	A13	Aerodynamics test	-	-	-	WS	LC35	-	-	88	-	-
1949-M04	2433091-47	1949 Jun 23 23:21	Aerobee HTV-10-8	-	A14	CX/Solar	-	-	-	WS	LC35	-	-	88	-	-
1949-M06	2433119-17	1949 Jul 21 16:01	Aerobee ZASR-SC-1	-	SC 4	Air Sampling	-	-	-	WS	LC35	-	-	76	-	-
1949-S04	2433180-21	1949 Sep 20 17:03	Aerobee ZASR-SC-1	-	SC 5	Air Sampling	-	-	-	WS	LC35	-	-	58	-	-
1949-S05	2433253-43	1949 Dec 2 22:20	Aerobee ZASR-SC-1	-	USAF 1	MX-1011	-	-	-	WS	A	-	-	96	-	-
1949-M08	2433257-27	1949 Dec 6 15:52	Aerobee ZASR-SC-1	-	SC 3	Air Sampling	-	-	-	WS	LC35	-	-	65	-	-
1949-M09	2433257-51	1949 Dec 6 15:52	Aerobee ZASR-SC-1	-	SC 7	Air Sampling	-	-	-	WS	LC35	-	-	60	-	-
1949-A28	2433266-22	1949 Dec 7 00:16	Aerobee ZASR-SC-1	-	USAF 2	MX-1011	-	-	-	WS	A	-	-	0	-	-
1960-M01	2433287-49	1960 Jan 15 17:10	Aerobee HTV-A-1	-	A15	-	-	-	-	HADC	LP1	-	-	72	-	-
1960-M02	2433300-47	1960 Jan 15 23:45	Aerobee HTV-10-10	-	A16	-	-	-	-	USN50A	LP2	-	-	80	-	-
1960-S01	2433327-47	1960 Feb 14 23:17	Aerobee HTV-10-8	-	MR1_4	Cosmic gamma	-	-	-	WS	LC35	-	-	87	-	-
1960-M04	2433394-54	1960 Feb 22 00:54	Aerobee ZASR-SC-1	-	SC 9	Air Sampling	-	-	-	WS	LC35	-	-	49	-	-
1960-M04	2433394-52	1960 Mar 4 00:36	Aerobee ZASR-SC-1	-	SC 6	Grenades	-	-	-	WS	LC35	-	-	72	-	-
1960-S03	2433395-36	1960 Mar 14 20:43	Aerobee HTV-A-1	-	USAF 3	Solar X/Airglow	-	-	-	HADC	A	-	-	3	-	-
1960-S05	2433397-55	1960 Apr 26 01:11	Aerobee ZASR-SC-2	-	SC 11	Air Sampling	-	-	-	WS	LC35	-	-	100	-	-
1960-S06	2433414-02	1960 May 12 12:30	Aerobee HTV-10-10	-	USAF 4	Insolation	-	-	-	WS	LC35	-	-	86	-	-
1960-M05	2433428-32	1960 May 26 19:43	Aerobee HTV-10-10	-	USAF 5	Airglow	-	-	-	HADC	A	-	-	24	-	-
1960-A25	2433435-21	1960 Jun 2 17:00	Aerobee HTV-A-1	-	USAF 6	UR 7/7p	-	-	-	HADC	A	-	-	93	-	-
1960-S06	2433453-15	1960 Jun 20 15:38	Aerobee HTV-A-1	-	USAF 5	Grenades	-	-	-	HADC	A	-	-	69	-	-
1960-A07	2433476-86	1960 Jul 1 06:59	Aerobee ZASR-SC-1	-	SC 8	Grenades	-	-	-	WS	LC35	-	-	6	-	-
1960-S07	2433497-49	1960 Aug 3 23:52	Aerobee HTV-10-10	-	MR1_6	Sunfollower/SX	-	-	-	WS	LC35	-	-	6	-	-
1960-S07	2433511-16	1960 Aug 17 15:48	Aerobee HTV-10-10	-	USAF 7	Mass spectrometer	-	-	-	WS	LC35	-	-	101	-	-
1960-S11	2433557-32	1960 Oct 12 15:56	Aerobee HTV-10-10	-	USAF 7	Photo/Temp	-	-	-	HADC	A	-	-	87	-	-
1960-S10	2433571-67	1960 Oct 15 04:00	Aerobee ZASR-SC-2	-	SC 10	Grenades	-	-	-	WS	LC35	-	-	80	-	-
1960-S12	2433571-67	1960 Oct 15 04:00	Aerobee ZASR-SC-2	-	SC 12	Grenades	-	-	-	WS	LC35	-	-	85	-	-
1960-S11	2433582-08	1960 Oct 15 13:30	Aerobee ZASR-SC-2	-	SC 13	Grenades	-	-	-	WS	LC35	-	-	80	-	-
1960-S19	2433582-06	1960 Oct 27 13:30	Aerobee ZASR-SC-2	-	USAF 8	Airglow	-	-	-	HADC	LC35	-	-	92	-	-
1960-S21	2433589-19	1960 Nov 2 16:20	Aerobee HTV-A-1	-	SC 15	Probe	-	-	-	WS	LC35	-	-	84	-	-
1960-S22	2433627-41	1960 Dec 11 07:04	Aerobee ZASR-SC-2	-	SC 15	Grenades	-	-	-	WS	LC35	-	-	71	-	-
1960-S23	2433627-41	1960 Dec 11 07:04	Aerobee ZASR-SC-2	-	SC 15	Grenades	-	-	-	WS	LC35	-	-	84	-	-
1960-M24	2433627-88	1960 Dec 15 09:10	Aerobee ZASR-SC-2	-	SC 14	Grenades	-	-	-	WS	LC35	-	-	71	-	-
1960-S26	2433628-97	1960 Dec 15 18:52	Aerobee HTV-A-1	-	USAF 9	UR 7/7p	-	-	-	HADC	LC35	-	-	106	-	-
1960-S27	2433635-29	1960 Dec 15 18:52	Aerobee ZASR-SC-2	-	USAF 9	Mass spectrometer	-	-	-	WS	LC35	-	-	82	-	-
1960-S28	2433659-45	1961 Jan 25 22:55	Aerobee HTV-10-10	-	A20	Ozone	-	-	-	WS	LC35	-	-	98	-	-
1961-S01	2433670-12	1961 Jan 25 15:00	Aerobee HTV-10-10	-	A20	Zone photography	-	-	-	WS	LC35	-	-	98	-	-
1961-S08	2433674-22	1961 Feb 2 17:20	Aerobee HTV-10-10	-	A21	GED-2 HCl release	-	-	-	WS	LC35	-	-	99	-	-
1961-M03	2433724-47	1961 Feb 26 23:14	Aerobee HTV-A-1	-	USAF 10	Colorade UVS	-	-	-	HADC	A	-	-	66	-	-
1961-A12	2433749-23	1961 Apr 12 17:26	Aerobee HTV-A-1	-	USAF 11	Aerobee 1	-	-	-	HADC	A	-	-	29	-	-
1961-M04	2433755-28	1961 Apr 18 18:29	Aerobee HTV-A-1	-	USAF 12	Ionos Propagation	-	-	-	HADC	A	-	-	61	-	-
1961-A04	2433755-28	1961 Apr 18 18:29	Aerobee HTV-A-1	-	USAF 13	Ionos Propagation	-	-	-	HADC	A	-	-	4	-	-
1961-S09	2433796-32	1961 Apr 29 19:46	Aerobee HTV-A-1	-	USAF 13	Solar X/HaCl release	-	-	-	HADC	A	-	-	88	-	-
1961-S09	2433805-51	1961 May 29 19:46	Aerobee HTV-A-1	-	USAF 14	Prop.	-	-	-	HADC	A	-	-	6	-	-
1961-M05	2433806-76	1961 Jun 9 01:18	Aerobee ZASR-SC-1	-	SC 19	Grenades	-	-	-	WS	LC35	-	-	67	-	-
1961-M07	2433853-18	1961 Jun 25 16:26	Aerobee ZASR-SC-1	-	SC 18	Grenades	-	-	-	WS	LC35	-	-	71	-	-
1961-S36	2433866-19	1961 Jul 25 16:26	Aerobee HTV-A-1	-	USAF 15	Airglow/WLC Imager	-	-	-	HADC	A	-	-	83	-	-
1961-M08	2433889-44	1961 Aug 30 22:40	Aerobee HTV-A-1b	-	USAF 16	Ion Propagation	-	-	-	HADC	A	-	-	75	-	-
1961-M09	2433902-88	1961 Sep 13 11:37	Aerobee HTV-A-1b	-	USAF 17	Rocket test	-	-	-	HADC	A	-	-	76	-	-
1961-M10	2433910-19	1961 Sep 20 16:31	Aerobee HTV-A-1	-	USAF 18	UR T/7a	-	-	-	HADC	A	-	-	71	-	-
1961-M11	2433916-50	1961 Sep 27 00:06	Aerobee ZASR-SC-1	-	USAF 19	Aerobee 2	-	-	-	HADC	A	-	-	69	-	-
1961-S43	2433937-26	1961 Oct 17 18:17	Aerobee HTV-A-1a	-	SC 21	Sampling	-	-	-	WS	LC35	-	-	114	-	-
1961-M12	2433951-91	1961 Nov 1 09:45	Aerobee HTV-A-1a	-	USAF 20	Ionos Propagation	-	-	-	HADC	A	-	-	66	-	-
1961-S45	2433953-82	1961 Nov 3 00:35	Aerobee ZASR-SC-1	-	SC 20	Grenades	-	-	-	WS	LC35	-	-	82	-	-
1962-A20	2434042-36	1962 Jan 30 20:45	Aerobee ZASR-SC-1	-	SC 22	Grenades	-	-	-	WS	LC35	-	-	0	-	-
1962-S01	2434062-21	1962 Feb 19 17:00	Aerobee HTV-10-10	-	MR1_7	AF/Utah Ionos 1	-	-	-	HADC	A	-	-	81	-	-
1962-S02	2434072-11	1962 Feb 29 14:40	Aerobee HTV-A-1	-	USAF 21	Sunfollower/SX	-	-	-	HADC	A	-	-	88	-	-
1962-S03	2434125-23	1962 Apr 22 17:28	Aerobee HTV-A-1	-	USAF 23	Airglow	-	-	-	HADC	A	-	-	116	-	-
1962-S04	2434133-06	1962 Apr 22 17:28	Aerobee HTV-10-10	-	USAF 24	Ionos Propagation	-	-	-	HADC	A	-	-	128	-	-
1962-S06	2434134-15	1962 Apr 30 13:30	Aerobee HTV-10-10	-	MR1_8	UV detectors	-	-	-	WS	LC35	-	-	91	-	-
1962-S05	2434134-12	1962 May 1 15:42	Aerobee HTV-10-10	-	USAF 25	Solar flux	-	-	-	HADC	A	-	-	126	-	-
1962-S07	2434138-07	1962 May 5 14:59	Aerobee HTV-10-10	-	MR1_9	UV detectors	-	-	-	WS	LC35	-	-	127	-	-
1962-M01	2434147-55	1962 May 15 01:15	Aerobee ZASR-SC-1	-	MR1_10	UV detectors	-	-	-	WS	LC35	-	-	76	-	-
1962-S08	2434147-59	1962 May 15 01:15	Aerobee ZASR-SC-1	-	SC 23	Sphere	-	-	-	WS	LC35	-	-	90	-	-
1962-M02	2434154-14	1962 May 21 15:15	Aerobee HTV-A-1	-	SC 24	Grenades	-	-	-	WS	LC35	-	-	61	-	-
1962-S10	2434192-24	1962 May 21 15:15	Aerobee HTV-A-1	-	USAF 26	Aerobee 3	-	-	-	HADC	A	-	-	100	-	-
1962-S11	2434194-11	1962 Jun 18 17:50	Aerobee HTV-A-1	-	USAF 27	UV/Opt spectrographs	-	-	-	HADC	A	-	-	101	-	-
1962-A143	2434251-29	1962 Jun 30 14:32	Aerobee HTV-A-1	-	USAF 28	AF Airglow 1	-	-	-	HADC	A	-	-	32	-	-
1962-S29	2434259-12	1962 Sep 3 14:49	Aerobee HTV-A-1a	-	USAF 29	Sunfollower/SX	-	-	-	HADC	A	-	-	106	-	-
1962-S31	2434280-66	1962 Sep 25 03:50	Aerobee ZASR-SC-1	-	MR1_11	Sunfollower/SX	-	-	-	WS	LC35	-	-	117	-	-
1962-S32	2434296-10	1962 Oct 10 14:24	Aerobee HTV-A-1	-	SC 25	Grenades	-	-	-	WS	LC35	-	-	101	-	-
1																



Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Launch_Mission	FlightCode	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee_km	Range_km	Dest
1952-S54	2434308.11	1952 Oct 22 1435	Aerobee RTV-A-1	-	USAF 31	-	-	-	HADC	A	-	-	100	-	-
1952-S53	2434308.66	1952 Oct 23 0345	Aerobee XASR-SC-2	-	USAF 26	T-day	-	-	WS	LC35	-	-	112	-	-
1952-M09	2434323.16	1952 Nov 6 1556	Aerobee RTV-A-1	-	USAF 32	AF Airglow 2	-	-	HADC	A	-	-	76	-	-
1952-S39	2434388.49	1952 Dec 11 2347	Aerobee XASR-SC-1	-	USAF 33	Colorado/WVS?	-	-	WS	LC35	-	-	105	-	-
1952-S40	2434389.32	1952 Dec 12 1938	Aerobee RTV-A-1	-	USAF 33	Colorado/WVS?	-	-	HADC	A	-	-	88	-	-
1953-S01	2434419.38	1953 Feb 10 2109	Aerobee RTV-N-10	-	NRL 12	Mass spectrometer	-	-	WS	LC35	-	-	137	-	-
1953-S02	2434420.80	1953 Feb 12 0709	Aerobee RTV-N-10	-	NRL 13	Mass spectrometer	-	-	WS	LC35	-	-	137	-	-
1953-S03	2434426.78	1953 Feb 18 0650	Aerobee XASR-SC-2	-	SC 27	Grenades	-	-	WS	LC35	-	-	109	-	-
1953-S04	2434427.24	1953 Feb 18 1742	Aerobee RTV-A-1a	-	USAF 34	Heating/beacon test	-	-	HADC	A	-	-	117	-	-
1953-S10	2434462.16	1953 Apr 14 1547	Aerobee RTV-A-1a	-	USAF 35	Heating test	-	-	HADC	A	-	-	122	-	-
1953-S13	2434491.31	1953 Apr 23 1933	Aerobee XASR-SC-2	-	SC 30	Sphere	-	-	WS	LC35	-	-	124	-	-
1953-S12	2434491.93	1953 Apr 24 1019	Aerobee XASR-SC-2	-	SC 28	Grenade	-	-	WS	LC35	-	-	108	-	-
1953-S18	2434518.09	1953 May 20 1404	Aerobee RTV-A-1a	-	USAF 36	AF Airglow 3	-	-	HADC	A	-	-	114	-	-
1953-S19	2434519.16	1953 May 21 1547	Aerobee RTV-A-1a	-	USAF 37	AF Airglow 4	-	-	HADC	A	-	-	114	-	-
1953-S22	2434585.30	1953 Jun 26 1910	Aerobee RTV-A-1a	-	USAF 38	AF/Utah Ions 3	-	-	HADC	A	-	-	136	-	-
1953-S23	2434580.24	1953 Jun 26 1910	Aerobee RTV-A-1a	-	USAF 39	AF/Utah Ions 4	-	-	HADC	A	-	-	138	-	-
1953-S25	2434573.15	1953 Jul 1 1752	Aerobee RTV-A-1a	-	USAF 40	Solar flux	-	-	HADC	A	-	-	103	-	-
1953-S26	2434581.91	1953 Jul 14 1530	Aerobee RTV-A-1a	-	USAF 41	Airglow spectrograph	-	-	HADC	A	-	-	96	-	-
1953-S31	2434621.71	1953 Sep 1 0505	Aerobee XASR-SC-2	-	SC 32	Grenades	-	-	WS	LC35	-	-	108	-	-
1953-S35	2434625.73	1953 Sep 5 0536	Aerobee XASR-SC-1	-	SC 33	Grenades	-	-	WS	LC35	-	-	114	-	-
1953-A358	2434636.13	1953 Sep 15 1502	Aerobee RTV-A-1a	-	USAF 42	AF Airglow 5	-	-	HADC	A	-	-	32	-	-
1953-M10	2434660.37	1953 Sep 29 2050	Aerobee RTV-A-1a	-	USAF 42	AF Airglow 5	-	-	WS	LC35	-	-	76	-	-
1953-S640	2434668.21	1953 Oct 7 1700	Aerobee RTV-A-1a	-	SC 31	Solar spectrum	-	-	HADC	A	-	-	100	-	-
1953-S689	2434684.27	1953 Nov 2 1832	Aerobee RTV-A-1a	-	USAF 43	Solar spectrum	-	-	HADC	A	-	-	120	-	-
1953-S680	2434685.26	1953 Nov 3 1815	Aerobee RTV-A-1a	-	USAF 44	AF/Utah Ions 5	-	-	HADC	A	-	-	121	-	-
1953-S684	2434701.44	1953 Nov 19 2240	Aerobee RTV-N-10	-	USAF 45	AF/Utah Ions 6	-	-	HADC	A	-	-	96	-	-
1953-S686	2434707.16	1953 Nov 25 1546	Aerobee RTV-N-10	-	NRL 14	Oxygen content	-	-	WS	LC35	-	-	112	-	-
1953-S688	2434713.15	1953 Nov 25 1546	Aerobee RTV-N-10	-	NRL 15	Oxygen content	-	-	WS	LC35	-	-	96	-	-
1954-S02	2434776.27	1954 Feb 2 1535	Aerobee RTV-N-10	-	NRL 16	Oxygen content	-	-	WS	LC35	-	-	101	-	-
1954-S08	2434862.38	1954 Apr 9 2112	Aerobee RTV-N-10	-	NRL 20	Sumfolger UVS	-	-	WS	LC35	-	-	145	-	-
1954-A163	2434862.68	1954 Apr 9 2112	Aerobee RTV-N-10	-	NRL 18	Mass spectrometer	-	-	WS	LC35	-	-	6	-	-
1954-S29	2434896.17	1954 May 11 1500	Aerobee RTV-A-1a	-	USAF 46	Beacon test	-	-	HADC	A	-	-	98	-	-
1954-S35	2434896.17	1954 May 11 1500	Aerobee RTV-A-1a	-	USAF 47	Solar UV spectrum	-	-	HADC	A	-	-	93	-	-
1954-S543	2434938.08	1954 Jun 2 1610	Aerobee RTV-A-1a	-	USAF 48	UV wind vane	-	-	HADC	A	-	-	92	-	-
1954-S562	2434966.23	1954 Aug 11 1725	Aerobee RTV-A-1a	-	USAF 49	AF/Utah D-layer	-	-	HADC	A	-	-	94	-	-
1954-S570	2435003.10	1954 Sep 17 1431	Aerobee RTV-A-1a	-	USAF 49	AF/Utah D-layer	-	-	HADC	A	-	-	94	-	-
1954-S576	2435021.26	1954 Oct 5 1815	Aerobee RTV-N-10b	-	USAF 50	Solar flux	-	-	WS	LC35	-	-	88	-	-
1955-S06	2435129.94	1955 Jan 22 0054	Aerobee RTV-A-1a	-	USAF 51	Na Release 1	-	-	HADC	A	-	-	70	-	-
1955-S08	2435146.29	1955 Jan 22 0054	Aerobee RTV-A-1a	-	USAF 51	Na Release 1	-	-	HADC	A	-	-	70	-	-
1955-S16	2435149.44	1955 Feb 10 2258	Aerobee RTV-A-1a	-	USAF 52	AF/Utah D-layer	-	-	HADC	A	-	-	94	-	-
1955-S19	2435160.27	1955 Feb 10 2258	Aerobee RTV-A-1a	-	USAF 52	AF/Utah D-layer	-	-	HADC	A	-	-	94	-	-
1955-S22	2435185.76	1955 Mar 29 0637	Aerobee RTV-N-10c	-	USAF 53	Sumfolger/UVS	-	-	HADC	A	-	-	115	-	-
1955-S22	2435185.76	1955 Mar 29 0637	Aerobee RTV-N-10c	-	USAF 53	Sumfolger/UVS	-	-	HADC	A	-	-	115	-	-
1955-S22	2435185.76	1955 Mar 29 0637	Aerobee RTV-N-10c	-	USAF 54	Solar FUV/Lya	-	-	HADC	A	-	-	112	-	-
1955-S22	2435185.76	1955 Mar 29 0637	Aerobee RTV-N-10c	-	USAF 54	Solar FUV/Lya	-	-	HADC	A	-	-	112	-	-
1955-S24	2435219.17	1955 Apr 21 1558	Aerobee RTV-A-1a	-	USAF 55	AJ11-6 test	-	-	HADC	A	-	-	209	-	-
1955-S24	2435219.17	1955 Apr 21 1558	Aerobee RTV-A-1a	-	USAF 55	AJ11-6 test	-	-	HADC	A	-	-	209	-	-
1955-M4	2435252.45	1955 Jun 15 1111	Aerobee AL10-27	-	USAF 57	Mass spectrometers	-	-	WS	LC35	-	-	113	-	-
1955-S52	2435262.68	1955 Jun 25 1200	Aerobee RTV-N-10	-	NRL 23	Mass spectrometers	-	-	WS	LC35	-	-	69	-	-
1955-S55	2435296.98	1955 Jul 6 0839	Aerobee RTV-N-10	-	NRL 23	Mass spectrometers	-	-	WS	LC35	-	-	69	-	-
1955-M93	2435326.79	1955 Jul 6 0839	Aerobee RTV-N-10a	-	NRL 27	UV wind vane	-	-	WS	LC35	-	-	95	-	-
1955-S79	2435345.04	1955 Jul 25 1300	Aerobee AL10-27	-	NRL 27	UV wind vane	-	-	WS	LC35	-	-	95	-	-
1955-S79	2435345.04	1955 Jul 25 1300	Aerobee AL10-27	-	NRL 27	UV wind vane	-	-	WS	LC35	-	-	95	-	-
1955-M06	2435381.16	1955 Sep 5 1550	Aerobee RTV-A-1a	-	USAF 58	Colorado UVS	-	-	HADC	A	-	-	70	-	-
1955-S93	2435393.54	1955 Sep 23 0100	Aerobee RTV-A-1a	-	USAF 59	Colorado UVS	-	-	HADC	A	-	-	101	-	-
1955-S96	2435399.45	1955 Oct 18 2249	Aerobee RTV-N-10c	-	USAF 60	Na Release 2	-	-	HADC	A	-	-	101	-	-
1955-S97	2435402.51	1955 Oct 22 0020	Aerobee RTV-N-10c	-	NRL 34	Solar Lya/Airglow	-	-	WS	LC35	-	-	136	-	-
1955-S101	2435416.15	1955 Nov 4 1630	Aerobee RTV-N-10c	-	NRL 35	Solar Lya/Airglow	-	-	WS	LC35	-	-	136	-	-
1955-S102	2435428.89	1955 Nov 4 1630	Aerobee RTV-N-10c	-	NRL 36	Solar Lya/Airglow	-	-	WS	LC35	-	-	136	-	-
1955-S104	2435441.22	1955 Nov 29 1716	Aerobee RTV-N-10	-	NRL 25	Mass spectrometers	-	-	WS	LC35	-	-	132	-	-
1955-A095	2435451.71	1955 Dec 9 1450	Aerobee H1	-	NRL 24	Mass spectrometers	-	-	WS	LC35	-	-	07	-	-
1955-S108	2435455.25	1955 Dec 13 0500	Aerobee RTV-N-10a	-	NRL 28	Airglow/Mass spec	-	-	WS	LC35	-	-	142	-	-
1955-S108	2435455.25	1955 Dec 13 0500	Aerobee RTV-N-10a	-	NRL 28	Airglow/Mass spec	-	-	WS	LC35	-	-	142	-	-
1956-S18	2435545.36	1956 Mar 12 2115	Aerobee RTV-A-1a	-	USAF 61	Colorado UVS	-	-	HADC	A	-	-	95	-	-
1956-S22	2435575.69	1956 Mar 14 0945	Aerobee RTV-A-1a	-	USAF 62	Release B (ND)	-	-	HADC	A	-	-	106	-	-
1956-S22	2435575.69	1956 Mar 14 0945	Aerobee RTV-A-1a	-	USAF 63	Release B (ND)	-	-	HADC	A	-	-	106	-	-
1956-A50	2435595.42	1956 Apr 12 0205	Aerobee RTV-A-1a	-	USAF 64	Na Release 3	-	-	HADC	A	-	-	106	-	-
1956-S27	2435602.12	1956 May 8 1454	Aerobee AL10-34	-	NRL 39	RV-N-13a	-	-	WS	LC35	-	-	4	-	-
1956-S28	2435602.12	1956 May 8 1454	Aerobee AL10-34	-	USAF 65	FUV spec/La imager	-	-	HADC	A	-	-	143	-	-
1956-S32	2435610.15	1956 May 16 1540	Aerobee H1	-	NRL 42	RV-N-13c	-	-	WS	LC35	-	-	188	-	-
1956-M04	2435629.09	1956 Jun 4 1413	Aerobee H1	-	USAF 66	AJ11-6 test	-	-	HADC	A	-	-	169	-	-
1956-S42	2435638.37	1956 Jun 13 2051	Aerobee AL10-34	-	NRL 46	AJ11-6 test	-	-	WS	LC35	-	-	58	-	-
1956-S42	2435643.36	1956 Jun 18 2042	Aerobee AL10-34	-	USAF 67	RV-N-13a	-	-	HADC	A	-	-	138	-	-
1956-S43	2435646.28	1956 Jun 21 1848	Aerobee AL10-34	-	USAF 68	E-layer	-	-	HADC	A	-	-	136	-	-
1956-A64	2435647.32	1956 Jun 22 1942	Aerobee RTV-N-10	-	USAF 69	E-layer	-	-	HADC	A	-	-	146	-	-
1956-S46	2435651.27	1956 Jun 26 1826	Aerobee RTV-N-10	-	NRL 22	D-region	-	-	WS	LC35	-	-	5	-	-
1956-S46	2435651.27	1956 Jun 26 1826	Aerobee RTV-N-10	-	USAF 70	E-layer	-	-	HADC	A	-	-	111	-	-
1956-S50	2435654.30	1956 Jun 29 1909	Aerobee H1	-	NRL 50 (RV-N-13b)	D-region	-	-	WS	LC35	-	-	264	-	-
1956-S50	2435654.30	1956 Jun 29 1909													

Launch

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Mission	FlightCode	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee_km	Range_km	Dest
1956-S103	2435798.72	1956 Nov 21 05:21:11	Aerobee HI	-	MRL 48 (RV-N-13c)	MRL MNS-17	ICV MNS-17	-	-	FC	-	-	-	250	-	-
1956-S109	2435821.41	1956 Dec 13 21:44	Aerobee HI	-	USAF 76	USAF 76	USAF 76	-	-	HADC	A	-	-	193	-	-
1957-S112	2435871.84	1957 Feb 2 08:05	Aerobee AJ10-34	-	MRL 31	Firefly (Eche)lne)	-	-	-	WS	LC35	-	-	143	-	-
1957-S201	2435926.70	1957 Mar 29 04:51	Aerobee RTV-N-10c	-	MRL 31	MRL MNS-26	ICV MNS-26	-	-	WS	LC35	-	-	135	-	-
1957-M07	2435938.14	1957 Apr 9 15:19	Aerobee AJ10-25	-	USAF 77	-	-	-	-	HADC	A	-	-	61	-	-
1957-S204	2435959.13	1957 Apr 11 16:31	Aerobee HI	-	MRL 40 (RV-N-13c)	Vanguard test	-	-	-	WS	LC35	-	-	204	-	-
1957-S204	2435959.13	1957 Apr 30 15:10	Aerobee HI	-	MRL 40 (RV-N-13c)	RV-N-13c test	-	-	-	WS	LC35	-	-	289	-	-
1957-S352	2435962.09	1957 May 3 14:04	Aerobee HI	-	MRL 44 (RV-N-13c)	Sumfollower/OVS	-	-	-	WS	LC35	-	-	204	-	-
1957-S340	2436008.08	1957 Jun 18 14:00	Aerobee HI	-	USAF 79	A04.27	ICV A04.27	-	-	HADC	A	-	-	171	-	-
1957-S344	2436015.09	1957 Jun 25 14:07	Aerobee HI	-	MNS 08F	MNS 08F	ICV MNS 08F	-	-	HADC	A	-	-	202	-	-
1957-S385	2436024.76	1957 Jul 4 18:15:40	Aerobee HI	-	MNS 09F	MNS 09F	ICV MNS 09F	-	-	FC	-	-	-	237	-	-
1957-S461	2436036.06	1957 Jul 16 09:17:56	Aerobee HI	-	USAF 80	-	-	-	-	HADC	A	-	-	16	-	-
1957-S388	2436038.10	1957 Jul 18 14:30	Aerobee	-	USAF 81	-	-	-	-	HADC	A	-	-	122	-	-
1957-S380	2436038.10	1957 Jul 22 04:16:28	Aerobee	-	USAF 81	-	-	-	-	HADC	A	-	-	107	-	-
1957-S380	2436041.68	1957 Jul 22 04:16:28	Aerobee	-	SHI 02	Grenades	ICV SHI 02	-	-	FC	-	-	-	92	-	-
1957-S386	2436043.73	1957 Jul 24 05:29:50	Aerobee HI	-	MNS 13F	Grenades	ICV SHI 03	-	-	FC	-	-	-	88	-	-
1957-S388	2436049.42	1957 Jul 29 21:59	Aerobee HI	-	USAF 82	MRL MNS 13F	ICV MNS 13F	-	-	FC	-	-	-	210	-	-
1957-S374	2436057.15	1957 Aug 6 15:30	Aerobee AJ10-34	-	SHI 04	Solar UV	ICV A02.24	-	-	HADC	A	-	-	146	-	-
1957-M10	2436063.17	1957 Aug 12 15:59:31	Aerobee	-	USAF 83	Grenades	ICV SHI 04	-	-	FC	-	-	-	74	-	-
1957-S328	2436069.50	1957 Aug 19	Aerobee	-	USAF 84	Na	ICV MNS 08F	-	-	HADC	A	-	-	178	-	-
1957-S328	2436071.50	1957 Aug 21	Aerobee	-	USAF 84	Na probe	ICV MNS 08F	-	-	HADC	A	-	-	1007	-	-
1957-S483	2436070.60	1957 Aug 20 02:29:51	Aerobee	-	SHI 05 (SC 40)	Grenades	ICV SHI 05	-	-	FC	-	-	-	86	-	-
1957-M11	2436075.60	1957 Aug 25 02:29	Aerobee	-	SHI 05	Grenades	ICV SHI 05	-	-	FC	-	-	-	51	-	-
1957-S396	2436075.60	1957 Aug 25 14:06:05	Aerobee	-	SHI 06	Grenades,Temp, wind	ICV SHI 06	-	-	FC	-	-	-	130	-	-
1957-S104	2436083.44	1957 Sep 1 22:28	Aerobee HI	-	MNS 001	Ion probe	ICV SHI 06	-	-	FC	-	-	-	160	-	-
1957-M12	2436089.09	1957 Sep 17 14:04	Aerobee RTV-N-10	-	MRL 21	MRL UV Echelle	ICV MNS 01	-	-	WS	LC35	-	-	51	-	-
1957-S110	2436101.19	1957 Sep 19 16:30	Aerobee	-	USAF 87	Artificial Meteor	ICV MNS 25	-	-	HADC	A	-	-	1007	-	-
1957-S122	2436128.13	1957 Oct 14 15:06	Aerobee	-	USAF 88	-	-	-	-	HADC	A	-	-	146	-	-
1957-001	2436128.13	1957 Oct 17 09:05	Aerobee	-	USAF 88	-	-	-	-	HADC	A	-	-	114	-	-
1957-S139	2436134.50	1957 Oct 23	Aerobee	-	USAF 89	-	-	-	-	HADC	A	-	-	1007	-	-
1957-S145	2436136.50	1957 Oct 25	Aerobee	-	USAF 90	-	-	-	-	HADC	A	-	-	1007	-	-
1957-S164	2436150.17	1957 Nov 7 16:05	Aerobee	-	USAF 90	-	-	-	-	HADC	A	-	-	1007	-	-
1957-S168	2436151.12	1957 Nov 6 14:57	Aerobee	-	USAF 90	-	-	-	-	HADC	A	-	-	1007	-	-
1957-S171	2436152.50	1957 Nov 10 16:29:56	Aerobee	-	Smoke Puff	-	-	-	-	HADC	A	-	-	1007	-	-
1957-S172	2436169.04	1957 Nov 25 12:55	Aerobee	-	SHI 07	Na	ICV SHI 07	-	-	HADC	A	-	-	80	-	-
1957-S178	2436184.07	1957 Dec 12 04:00	Aerobee	-	MNS 03F	Grenades	ICV SHI 07	-	-	FC	-	-	-	90	-	-
1957-S179	2436187.38	1957 Dec 14 21:00	Aerobee HI	-	MNS 03F	Grenades	ICV SHI 08	-	-	FC	-	-	-	80	-	-
1958-S12	2436229.68	1958 Jan 27 09:04	Aerobee	-	SHI 09	MRL MNS 03F	ICV SHI 08	-	-	FC	-	-	-	180	-	-
1958-S13	2436230.78	1958 Jan 26 04:16:56	Aerobee	-	SHI 09	Grenades	ICV SHI 09	-	-	FC	-	-	-	96	-	-
1958-S15	2436251.28	1958 Feb 3 18:02:20	Aerobee HI	-	MNS 10F	Grenades/Sphere	ICV SHI 09	-	-	FC	-	-	-	148	-	-
1958-S19	2436258.28	1958 Jan 27 09:04	Aerobee HI	-	MNS 11F	MRL MNS 10F	ICV SHI 10	-	-	FC	-	-	-	138	-	-
1958-S25	2436258.70	1958 Feb 5 09:16:58	Aerobee HI	-	MNS 11F	MRL MNS 11F	ICV MNS 10F	-	-	FC	-	-	-	204	-	-
1958-S25	2436258.70	1958 Feb 15 00:21:26	Aerobee 100	-	MNS 11F	MRL MNS 11F	ICV MNS 11F	-	-	FC	-	-	-	204	-	-
1958-S31	2436263.22	1958 Feb 25 06:26:42	Aerobee HI	-	MNS 12F	Aerobee	ICV MNS 12F	-	-	WS	-	-	-	90	-	-
1958-S31	2436266.99	1958 Feb 24 06:26:42	Aerobee HI	-	MNS 12F	MRL MNS 12F	ICV MNS 12F	-	-	FC	-	-	-	225	-	-
1958-S33	2436278.79	1958 Mar 16 04:54:15	Aerobee HI	-	MNS 04F	MRL MNS 14F	ICV MNS 14F	-	-	FC	-	-	-	207	-	-
1958-S38	2436278.79	1958 Mar 16 04:54:15	Aerobee HI	-	MNS 04F	MRL MNS 14F	ICV MNS 14F	-	-	FC	-	-	-	144	-	-
1958-S43	2436293.50	1958 Mar 31 01:12	Aerobee	-	USAF 93	NO/02 composition	ICV MNS 04	-	-	HADC	A	-	-	89	-	-
1958-S44	2436293.50	1958 Mar 31 01:12	Aerobee	-	USAF 93	NO/02 composition	ICV MNS 04	-	-	HADC	A	-	-	1007	-	-
1958-S46	2436294.78	1958 Mar 25 06:41:17	Aerobee HI	-	MNS 05	-	ICV MNS 05F	-	-	FC	-	-	-	168	-	-
1958-S46	2436296.25	1958 Mar 25 19:07:08	Aerobee HI	-	MNS 05	Neutral gas	ICV MNS 05F	-	-	FC	-	-	-	168	-	-
1958-S49	2436299.60	1958 Mar 5 14:15	Aerobee HI	-	MNS 22F	-	ICV MNS 19F	-	-	WS	LC35	-	-	214	-	-
1958-S50	2436359.14	1958 May 5 15:15	Aerobee HI	-	MNS 22F	-	ICV MNS 22F	-	-	WS	LC35	-	-	200	-	-
1958-S92	2436388.20	1958 Jun 9 16:52	Aerobee	-	A03 07F	Solar EUV Spectrum	ICV A03 07F	-	-	HADC	A	-	-	262	-	-
1958-S98	2436391.00	1958 Jul 6 03:02:18	Aerobee	-	A03 10F	Charge density	ICV A03 10F	-	-	FC	-	-	-	250	-	-
1958-S98	2436396.27	1958 Jul 11 18:00:07	Aerobee	-	A03 11F	Charge density	ICV A03 11F	-	-	FC	-	-	-	243	-	-
1958-S158	2436438.50	1958 Aug 15 15:45	Aerobee	-	-	-	-	-	-	HADC	A	-	-	1007	-	-
1958-S163	2436431.16	1958 Aug 15 15:45	Aerobee	-	-	-	-	-	-	HADC	A	-	-	200	-	-
1958-S226	2436431.16	1958 Aug 15 15:45	Aerobee	-	-	-	-	-	-	HADC	A	-	-	176	-	-
1958-S226	2436431.16	1958 Aug 15 15:45	Aerobee	-	-	-	-	-	-	HADC	A	-	-	176	-	-
1958-S228	2436499.20	1958 Oct 15 10:04:36	Aerobee HI	-	AM4 012	Vehicle test	ICV AM4 12	-	-	FC	-	-	-	157	-	-
1958-S228	2436499.20	1958 Oct 22 16:47:18	Aerobee 300	-	AM4 012	Vehicle test	ICV AM4 12	-	-	FC	-	-	-	157	-	-
1958-S242	2436502.31	1958 Oct 31 19:59:14	Aerobee HI	-	AM4 012	Vehicle test	ICV AM4 12	-	-	FC	-	-	-	176	-	-
1958-S247	2436511.18	1958 Nov 3 16:29:05	Aerobee HI	-	MNS 15F	Composition	ICV MNS 15F	-	-	FC	-	-	-	418	-	-
1958-S268	2436523.79	1958 Nov 16 06:56:53	Aerobee HI	-	MNS 15F	Aerobee particles	ICV MNS 15F	-	-	FC	-	-	-	188	-	-
1958-S268	2436531.77	1958 Nov 24 09:21:30	Aerobee HI	-	MNS 15F	Electron density	ICV MNS 15F	-	-	FC	-	-	-	211	-	-
1958-S271	2436537.19	1958 Nov 29 18:30:34	Aerobee HI	-	MNS 16F	Auroral/UV Phot	ICV MNS 16F	-	-	FC	-	-	-	163	-	-
1958-S274	2436538.28	1958 Nov 30 18:36:36	Aerobee 300	-	MNS 16F	Auroral/UV Phot	ICV MNS 16F	-	-	FC	-	-	-	207	-	-
1958-S274	2436538.28	1958 Nov 30 18:36:36	Aerobee 300	-	MNS 16F	Auroral/UV Phot	ICV MNS 16F	-	-	FC	-	-	-	202	-	-
1958-S278	2436539.32	1958 Dec 1 03:44	Aerobee 300	-	BM10 200	To probe	ICV BM10 200	-	-	FC	-	-	-	304	-	-
1958-S278	2436541.28	1958 Dec 3 18:35:44	Aerobee 300	-	BM10 200	To probe	ICV BM10 200	-	-	FC	-	-	-	97	-	-
1958-S278	2436541.28	1958 Dec 3 18:35:44	Aerobee 300	-	BM10 200	To probe	ICV BM10 200	-	-	FC	-	-	-	225	-	-
1958-S278	2436541.28	1958 Dec 3 18:35:44	Aerobee 300	-	BM10 200	To probe	ICV BM10 200	-	-	FC	-	-	-	225	-	-
1958-S278	2436541.28	1958 Dec 3 18:35:44	Aerobee 300	-	BM10 200	To probe	ICV BM10 200	-	-	FC	-	-	-	225	-	-
1958-S278	2436541.28															

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Mission	FlightCode	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee_km	Range_km	Dest
1969-S166	2436809.28	1969 Aug 28 1845	Aerobee 150	-	AA3.122C	EUV/RFA	-	-	-	WS	LC35	-	-	235	-	-
1969-S168	2436823.30	1969 Sep 11 1912	Aerobee 150	-	MASA 04.086I	-	-	-	-	FC	-	-	-	227	-	-
1969-S170	2436826.23	1969 Sep 14 1727	Aerobee 150	-	MASA 04.076I	-	-	-	-	FC	-	-	-	218	-	-
1969-S171	2436826.50	1969 Sep 15	Aerobee 150	-	-	-	-	-	-	WS	LC35	-	-	200?	-	-
1969-S176	2436829.28	1969 Sep 17 1837	Aerobee 150	-	MASA 04.021I	DRTE-01	-	-	-	FC	-	-	-	256	-	-
1969-S181	2436832.23	1969 Sep 20 1735	Aerobee 150	-	MASA 04.031I	DRTE-02	-	-	-	FC	-	-	-	100?	-	-
1969-S206	2436833.50	1969 Sep 22	Aerobee 100	-	AA1.260C	-	-	-	-	WS	LC35	-	-	110	-	-
1969-S216	2436832.00	1969 Oct 10 1200	Aerobee AJ10-34	-	AA2.102C	-	-	-	-	WS	LC35	-	-	111	-	-
1969-S216	2436862.10	1969 Oct 10 1425	Aerobee AJ10-34	-	AA2.240C	-	-	-	-	WS	-	-	-	113	-	-
1969-S223	2436867.24	1969 Oct 25 1744	Aerobee 300	-	AA10.184C	Utah no probe	-	-	-	FC	-	-	-	386	-	-
1969-S237	2436878.81	1969 Nov 6 0725	Aerobee 300	-	AA10.185C	Utah no probe	-	-	-	FC	-	-	-	135	-	-
1969-S236	2436879.19	1969 Nov 6 1636	Aerobee 150	-	AA2.78C	Airglow	-	-	-	WS	LC35	-	-	142	-	-
1969-S236	2436879.19	1969 Nov 6 1636	Aerobee 300	-	AA10.187C	Utah no probe	-	-	-	FC	-	-	-	393	-	-
1969-S240	2436887.44	1969 Nov 14 2238	Aerobee 300	-	AA10.165C	Utah no probe	-	-	-	FC	-	-	-	138	-	-
1969-S245	2436891.62	1969 Nov 19 0744	Aerobee 150	-	AA3.282C	GM sphere	-	-	-	FC	-	-	-	106	-	-
1969-A192	2436895.27	1969 Nov 22 1835	Aerobee 300	-	AA10.186C	B field profile	-	-	-	FC	-	-	-	35	-	-
1969-S256	2436902.92	1969 Nov 30 0958?	Aerobee 300	-	NRL 30	UV Ionos probe	-	-	-	WS	-	-	-	140	-	-
1969-S10	2436947.50	1960 Jan 14	Aerobee 300	-	TATLETIALE FCC 1	-	-	-	-	EdL	-	-	-	100?	-	-
1969-S15	2436953.26	1960 Jan 19 1818	Aerobee 150	-	AA3.124C	EUV monochromator	-	-	-	WS	LC35	-	-	210	-	-
1969-S26	2436953.29	1960 Jan 29 1851	Aerobee 150	-	AA3.125C	EUV monochromator	-	-	-	WS	LC35	-	-	226	-	-
1969-S35	2436977.53	1960 Feb 13 0043	Aerobee AJ10-34	-	AA2.143C	UV airglow spectra	-	-	-	WS	LC35	-	-	143	-	-
1969-S36	2436980.50	1960 Feb 16 2048	Aerobee 300	-	TATLETIALE FCC 2	-	-	-	-	EdL	-	-	-	100?	-	-
1969-A48	2436981.37	1960 Feb 16 2048	Aerobee 150	-	MASA 04.010T	-	-	-	-	EdL	-	-	-	3	-	-
1969-S40	2436991.79	1960 Feb 27 0653	Aerobee HL	-	AA4.360C	JHU Aurora 1	-	-	-	FC	-	-	-	117	-	-
1969-S40	2437009.50	1960 Mar 16 2125	Aerobee 300	-	TATLETIALE FCC 3	-	-	-	-	EdL	-	-	-	100?	-	-
1969-S53	2437010.39	1960 Mar 16 2125	Aerobee 300	-	MASA 06.010I	UV Ionos probe	-	-	-	FC	-	-	-	357	-	-
1969-S53	2437019.28	1960 Mar 25 1640	Aerobee 150A	-	MASA 04.126T	-	-	-	-	EdL	-	-	-	212	-	-
1969-S54	2437021.68	1960 Apr 29 1947	Aerobee 150A	-	AA3.221	-	-	-	-	EdL	-	-	-	236	-	-
1969-S57	2437079.19	1960 Apr 7 0206	Aerobee 150	-	NRL 50	IR studies	-	-	-	WS	-	-	-	222	-	-
1969-S76	2437044.09	1960 Apr 19 1415	Aerobee HL	-	MNS 60	MNS-60 Fimble cam	-	-	-	EdL	-	-	-	246	-	-
1969-S80	2437046.12	1960 Apr 21 1500	Aerobee 150	-	AA3.253C	Magnetometer	-	-	-	EdL	-	-	-	246	-	-
1969-S82	2437046.41	1960 Apr 21 1500	Aerobee 150A	-	MASA 04.100T	UV star photometer	-	-	-	EdL	-	-	-	200?	-	-
1969-S84	2437051.68	1960 Apr 27 0418	Aerobee 150	-	MASA 04.046G	-	-	-	-	EdL	-	-	-	246	-	-
1969-S90	2437094.16	1960 Apr 29 1947	Aerobee 150A	-	MASA 04.096A	Composition	-	-	-	EdL	-	-	-	282	-	-
1969-S103	2437079.19	1960 May 24 1640	Aerobee 150	-	AA3.183C	-	-	-	-	EdL	-	-	-	289	-	-
1969-S108	2437081.67	1960 May 27 0408	Aerobee 150	-	NRL 59	(NRL 49?)	-	-	-	WS	LC35	-	-	195	-	-
1969-S109	2437081.73	1960 May 27 0530	Aerobee 150A	-	MASA 04.056G	UV star photometer	-	-	-	EdL	-	-	-	215	-	-
1969-S129	2437091.13	1960 Jun 15 1548	Aerobee 150	-	NCS.107	NRL-97	-	-	-	EdL	-	-	-	321	-	-
1969-S130	2437101.46	1960 Jun 15 2256	Aerobee 300	-	MASA 06.020I	UV Ionos probe	-	-	-	FC	-	-	-	24	-	-
1969-S145	2437109.77	1960 Jun 24 0628	Aerobee 150A	-	MASA 04.066G	UV star photometer	-	-	-	EdL	-	-	-	211	-	-
1969-S149	2437113.05	1960 Jun 27 1318	Aerobee 150	-	NCS.108	-	-	-	-	EdL	-	-	-	222	-	-
1969-S160	2437117.11	1960 Jul 1 1435	Aerobee 150	-	AA3.107	-	-	-	-	EdL	-	-	-	162	-	-
1969-S171	2437143.54	1960 Jul 2 1303	Aerobee 150	-	TATLETIALE FCC 4	AF-49	-	-	-	EdL	-	-	-	148	-	-
1969-S171	2437143.54	1960 Jul 2 1303	Aerobee 150A	-	MNS 36.030I	UV Ionospheric	-	-	-	EdL	-	-	-	418	-	-
1969-S218	2437150.18	1960 Aug 5 1626	Aerobee 300A	-	MASA 36.030I	-	-	-	-	EdL	-	-	-	385	-	-
1969-S227	2437156.91	1960 Aug 10 1701	Aerobee 150A	-	MASA 04.106E	-	-	-	-	EdL	-	-	-	399	-	-
1969-S240	2437160.18	1960 Aug 23 1710	Aerobee 150A	-	AA3.09	-	-	-	-	EdL	-	-	-	107	-	-
1969-S249	2437177.22	1960 Aug 23 1710	Aerobee 150	-	TATLETIALE FCC 5	-	-	-	-	EdL	-	-	-	102	-	-
1969-S250	2437177.22	1960 Aug 23 1710	Aerobee 150A	-	MASA 04.106E	-	-	-	-	EdL	-	-	-	107	-	-
1969-S250	2437177.22	1960 Aug 23 1710	Aerobee 150	-	TATLETIALE FCC 6	-	-	-	-	EdL	-	-	-	102	-	-
1969-S271	2437193.08	1960 Sep 15 1401	Aerobee 300	-	AA1.126	Solar Constant	-	-	-	WS	LC35	-	-	76	-	-
1969-S271	2437193.08	1960 Sep 15 1809	Aerobee 100	-	MASA 01.039P	APP	-	-	-	FC	-	-	-	76	-	-
1969-S277	2437209.26	1960 Sep 26 1813	Aerobee 100	-	APP	APP	-	-	-	FC	-	-	-	76	-	-
1969-S277	2437198.04	1960 Sep 26 1245	Aerobee 150	-	AA3.142	Thermal CR	-	-	-	WS	LC35	-	-	195	-	-
1969-S289	2437205.42	1960 Sep 27 2210	Aerobee 150	-	AA3.102	CR/Airglow	-	-	-	WS	LC35	-	-	100?	-	-
1969-S289	2437213.33	1960 Oct 5 0652	Aerobee 150	-	MASA 04.436P	APP	-	-	-	FC	-	-	-	235	-	-
1969-S365	2437248.61	1960 Nov 10 0235	Aerobee 150	-	NCS.101	-	-	-	-	WS	LC35	-	-	211	-	-
1969-S372	2437254.20	1960 Nov 15 1641	Aerobee 150A	-	MASA 04.146A	Composition	-	-	-	EdL	-	-	-	204	-	-
1969-S372	2437256.07	1960 Nov 17 1340	Aerobee 150	-	AA3.144	UV Spectrometer	-	-	-	EdL	-	-	-	217	-	-
1969-S372	2437260.86	1960 Nov 22 0842	Aerobee 150A	-	MASA 04.110G	UV Spectrograph	-	-	-	EdL	-	-	-	183	-	-
1969-S372	2437261.93	1960 Nov 23 1019	Aerobee 100	-	MASA 01.010I	On-SU quiet flight	-	-	-	FC	-	-	-	91	-	-
1969-S382	2437266.24	1960 Nov 27 1748	Aerobee 100	-	MASA 01.028I	On-SU quiet flight	-	-	-	FC	-	-	-	85	-	-
1969-S382	2437267.97	1960 Nov 29 1116	Aerobee 150	-	NRL NBS.103	NRL NBS.103	-	-	-	WS	LC35	-	-	197	-	-
1969-S381	2437268.71	1960 Nov 30 0501	Aerobee 150	-	AA3.284	MHD mass	-	-	-	FC	-	-	-	241	-	-
1969-S396	2437330.47	1961 Jan 30 2320	Aerobee 150A	-	AA3.370	Mass spectrometer	-	-	-	EdL	-	-	-	204	-	-
1969-S396	2437336.08	1961 Feb 5 0448	Aerobee 150A	-	MASA 04.381P	Mass LHP test	-	-	-	EdL	-	-	-	152	-	-
1969-S42	2437348.29	1961 Feb 17 1904	Aerobee 150	-	AA3.129	EUV Monochromator	-	-	-	EdL	-	-	-	400?	-	-
1969-S74	2437367.20	1961 Mar 6 1653	Aerobee 300	-	AA10.192	UV/RFA	-	-	-	EdL	-	-	-	386?	-	-
1969-S92	2437385.20	1961 Mar 26 1654	Aerobee 300A	-	MASA 06.040I	UV Ionospheric	-	-	-	EdL	-	-	-	72	-	-
1969-S92	2437389.62	1961 Mar 31 0250	Aerobee 150A	-	MASA 04.346G	UV star photometer	-	-	-	EdL	-	-	-	206	-	-
1969-S110	2437404.22	1961 Apr 14 1715	Aerobee 150A	-	MASA 04.198T	Attitude control	-	-	-	EdL	-	-	-	242	-	-
1969-S111	2437407.69	1961 Apr 18 0440	Aerobee 150	-	NCS.104	NRL NBS.104	-	-	-	EdL	-	-	-	154	-	-
1969-S124	2437411.00	1961 Apr 21 1200	Aerobee 150A	-	MASA 04.391P	LeRC LHP test	-	-	-	EdL	-	-	-	294	-	-
1969-S144	2437436.16	1961 May 16 1545	Aerobee 150	-	AA3.145	-	-	-	-	EdL	-	-	-	312	-	-
1969-S145	2437436.16	1961 May 16 1700	Aerobee 150	-	AA3.127	-	-	-	-	EdL	-	-	-	76	-	-
1969-S145	2437437.31	1961 May 17 1922	Aerobee 100	-	MASA 01.046P	APP FUS	-	-	-	EdL	-	-	-	23	-	-
1969-S158	2437439.25	1961 May 19 1803	Aerobee 100	-	MASA 01.068P	APP FUS	-	-	-	EdL	-	-	-	200?	-	-
1969-S167	2437444.50	1961 May 25	Aerobee 150	-	-	-	-	-	-	EdL	-	-	-	165	-	-
1969-S167	2437457.02	1961 Jun 6 1231	Aerobee 150	-	AA3.108	Venus Flytrap	-	-	-	EdL	-	-	-	197	-	-
1969-S181	2437467.81	1961 Jun 17 0729	Aerobee 150	-	NRL NBS.112	NRL NBS.112	-	-	-	EdL	-	-	-	271	-	-
1969-S184	2437472.11	1961 Jun 21 1445	Aerobee 150A	-	NRL NBS.102	NRL NBS.102	-	-	-	EdL	-	-	-	187	-	-
1969-S189	2437477.14	1961 Jun 26 1515	Aerobee 150A	-	MASA 04.200T	Attitude control	-	-	-	EdL	-	-	-	153	-	-
1969-S242	2437523.96	1961 Aug 12 1057	Aerobee 150A	-	LeRC LHP test	LeRC LHP test	-	-	-	EdL	-	-	-	271	-	-
1969-S244	2437527.22	1961 Aug 15 1721	Aerobee 150	-	AA3.130	EUV Monochromator	-	-	-	EdL	-	-	-	205	-	-
1969-S253	2437535.21	1961 Aug 23 1702	Aerobee 150	-	-	EUV Monochromator	-	-	-	EdL	-	-	-	260	-	-
1969-S258	2437551.11	1961 Aug 29 1435	Aerobee 150	-	NCS.110	NRL UV Echelle	-	-	-							

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Mission	FlightCode	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee_km	Range_km	Dest
1961-5516	2437573-10	1961 Sep 30 1430	Aerobee 150	-	MASA 04-2505	OSD spectrometer	-	-	-	WI	-	-	-	223	-	-
1961-5528	2437573-36	1961 Sep 30 2042	Aerobee 150	-	MASA 01-096A	Air sampler	-	-	-	FC	-	-	-	73	-	-
1961-5531	2437586-06	1961 Oct 12 1321	Aerobee 150	-	ACS-146	UV absorption	-	-	-	WS	LC35	-	-	192	-	-
1961-5532	2437586-50	1961 Oct 14	Aerobee 150	-	[Spurious?]	Lunar X-ray	-	-	-	WS	LC35	-	-	200?	-	-
1961-5530	2437588-11	1961 Oct 15 1433	Aerobee 150	-	MASA 01-106A	Air sampler	-	-	-	FC	-	-	-	76	-	-
1961-5531	2437590-34	1961 Oct 17 2011	Aerobee 150	-	MASA 01-076A	Air sampler	-	-	-	FC	-	-	-	65	-	-
1961-5536	2437591-06	1961 Oct 18 1325	Aerobee 150A	-	MASA 04-40NP	LaRC LH2 test	-	-	-	WI	LC35	-	-	152	-	-
1961-5550	2437597-79	1961 Oct 25 0659	Aerobee 150	-	ACS-351	ASRE-2	-	-	-	WS	LC35	-	-	232	-	-
1961-5564	2437604-62	1961 Nov 2 1724	Aerobee 150	-	MS3-122	-	-	-	-	WS	LC35	-	-	212	-	-
1961-5552	2437606-23	1961 Nov 5 2011	Aerobee 150	-	MASA 01-116A	Air sampler	-	-	-	FC	-	-	-	68	-	-
1961-5553	2437609-34	1961 Nov 5 2011	Aerobee 150	-	MASA 01-126A	Air sampler	-	-	-	FC	-	-	-	71	-	-
1961-5599	2437634-22	1961 Nov 30 1710	Aerobee 150	-	MS3-123	-	-	-	-	WS	LC35	-	-	238	-	-
1961-5513	2437641-47	1961 Dec 7 2315	Aerobee 150	-	MS3-344	Sphere	-	-	-	EdL	-	-	-	234	-	-
1961-5522	2437647-00	1961 Dec 13 1200	Aerobee 150	-	MS3-110	Micrometeorites	-	-	-	EdL	-	-	-	246	-	-
1961-5528	2437649-21	1961 Dec 15 1700	Aerobee 150	-	MS3-140	Hr Solar Spectra	-	-	-	WS	LC35	-	-	169	-	-
1961-5534	2437655-68	1961 Dec 22 0424	Aerobee 300A	-	MASA 06-050I	UV Atmospheric	-	-	-	WS	LC35	-	-	365	-	-
1962-513	2437678-18	1962 Jan 13 1615	Aerobee 150A	-	MASA 04-68GT	Attitude control	-	-	-	WI	-	-	-	209	-	-
1962-515	2437680-50	1962 Jan 16	Aerobee 150	-	MASA 04-356G	EUV Mon/AR counter	-	-	-	WI	LC35	-	-	200?	-	-
1962-518	2437702-69	1962 Feb 7 0438	Aerobee 150A	-	MASA 04-41NP	UV Spectrograph	-	-	-	WI	-	-	-	4	-	-
1962-542	2437713-32	1962 Feb 17 1943	Aerobee 150	-	MS3-150	LaRC LH2 test	-	-	-	WI	-	-	-	157	-	-
1962-563	2437730-06	1962 Mar 6 1330	Aerobee 150	-	MASA 04-186A	UV Absorption	-	-	-	WS	LC35	-	-	323	-	-
1962-562	2437743-15	1962 Mar 19 1530	Aerobee 150A	-	MS3-114F7	Structure	-	-	-	WI	-	-	-	79	-	-
1962-5102	2437772-22	1962 Apr 17 1720	Aerobee 150	-	MMA-193	Cryo interaction	-	-	-	WS	-	-	-	286	-	-
1962-5119	2437786-30	1962 May 1 1918	Aerobee 150	-	ACS-361	Day airglow	-	-	-	EdL	LC35	-	-	94	-	-
1962-5120	2437787-45	1962 May 2 2253	Aerobee 150	-	MASA 04-46NP	JPL Rocket Radar 1	-	-	-	EdL	LC35	-	-	276	-	-
1962-5127	2437793-13	1962 May 8 1505	Aerobee 150	-	MASA 04-46NP	Sea recovery test	-	-	-	WS	LC35	-	-	196	-	-
1962-5142	2437810-03	1962 May 26 1243	Aerobee 150A	-	MASA 04-46GT	EUV Monochromator	-	-	-	WI	-	-	-	200	-	-
1962-5167	2437821-03	1962 Jun 5 1245	Aerobee 150	-	MS3-133	EUV Monochromator	-	-	-	WS	LC35	-	-	216	-	-
1962-5183	2437828-40	1962 Jun 12 2130	Aerobee 150	-	MS3-352	ASRE-3 (Sco X-1)	-	-	-	WS	LC35	-	-	224	-	-
1962-5194	2437834-79	1962 Jun 19 0659	Aerobee 150	-	MASA 04-28NP	LaRC LH2 test	-	-	-	WS	LC35	-	-	208	-	-
1962-5216	2437836-06	1962 Jun 20 1329	Aerobee 150A	-	MASA 04-710M/UP	JHU Airglow 1	-	-	-	WI	-	-	-	210	-	-
1962-5210	2437846-38	1962 Jun 29 2100	Aerobee 150A	-	MASA 04-720P	JHU Airglow 2	-	-	-	WI	-	-	-	210	-	-
1962-5257	2437856-12	1962 Jul 10 1500	Aerobee 150	-	MASA 04-47NP	JPL Rocket Radar 2	-	-	-	WS	LC35	-	-	200	-	-
1962-5256	2437870-01	1962 Jul 24 1209:00	Aerobee 150A	-	MASA 04-2305	Ly alpha test	-	-	-	EdL	-	-	-	100?	-	-
1962-5258	2437870-40	1962 Jul 24 2141	Aerobee 150	-	MASA 04-60GT	Attitude control	-	-	-	WI	-	-	-	208	-	-
1962-5284	2437885-20	1962 Aug 6 1655	Aerobee 150	-	MS3-128	UV Airglow	-	-	-	WS	LC35	-	-	249	-	-
1962-5206	2437899-15	1962 Aug 22 1530	Aerobee 150	-	MASA 01-13MA	UV Airglow	-	-	-	WS	LC35	-	-	234	-	-
1962-5521	2437914-10	1962 Sep 11 2324	Aerobee 150	-	ACS-322	UV Photometer	-	-	-	WS	LC35	-	-	306	-	-
1962-5531	2437919-46	1962 Sep 11 2324	Aerobee 150A	-	MASA 04-366G	Electric structure	-	-	-	WI	LC35	-	-	387	-	-
1962-5532	2437929-60	1962 Sep 27 1800	Aerobee 150	-	MS3-246	ASRE-4	-	-	-	WS	LC35	-	-	300	-	-
1962-5535	2437935-25	1962 Sep 27 1800	Aerobee 150A	-	ACS-353	ASRE-4	-	-	-	WI	LC35	-	-	317	-	-
1962-5588	2437937-78	1962 Oct 15 0952	Aerobee 150	-	ACS-358	ASRE-4	-	-	-	WS	LC35	-	-	111	-	-
1962-5524	2437960-78	1962 Oct 25 2328	Aerobee 150	-	ACS-338	EUV Mon/AR/RPA	-	-	-	WS	LC35	-	-	213	-	-
1962-5524	2437963-48	1962 Oct 25 2328	Aerobee 150	-	ACS-338	EUV Mon/AR/RPA	-	-	-	WS	LC35	-	-	188	-	-
1962-5568	2437975-35	1962 Oct 30 0410	Aerobee 150A	-	ACS-343	HR solar spectrum	-	-	-	WS	LC35	-	-	308	-	-
1962-5574	2437982-44	1962 Nov 6 1943:00	Aerobee 150	-	ACS-345	Firefly III FANW	-	-	-	EdL	LC35	-	-	208	-	-
1962-5576	2437982-54	1962 Nov 13 2230:00	Aerobee 150	-	ACS-452	Firefly III GLIDA	-	-	-	EdL	AT	-	-	253	-	-
1962-5579	2437984-55	1962 Nov 15 0126:00	Aerobee 150	-	ACS-453	Firefly III KHEN	-	-	-	EdL	AT	-	-	234	-	-
1962-5105	2437984-68	1962 Nov 15 0422	Aerobee 150A	-	ACS-449 (SFE)	CSIRO VLF 1	-	-	-	WI	-	-	-	206	-	-
1962-5081	2437986-71	1962 Nov 18 0457	Aerobee 150A	-	MASA 04-730A	UV Airglow test	-	-	-	WS	LC35	-	-	206	-	-
1962-5092	2437989-40	1962 Nov 30 1655	Aerobee 150	-	MASA 01-14MA	UV Airglow	-	-	-	WS	LC35	-	-	305	-	-
1962-5094	2437989-40	1962 Nov 30 2141:30	Aerobee 150A	-	MASA 06-06CA	Thermosphere Probe 1	-	-	-	WS	LC35	-	-	203	-	-
1962-5095	2437986-25	1962 Nov 30 1800	Aerobee 150	-	MASA 04-21US	Thermosphere Probe 1	-	-	-	WS	LC35	-	-	220	-	-
1962-5046	2438006-55	1962 Dec 6 0108:00	Aerobee 150	-	ACS-450	Firefly III LAURA	-	-	-	EdL	AT	-	-	52	-	-
1962-5040	2438009-57	1962 Dec 6 0108:00	Aerobee 150A	-	MASA 04-80II	CSIRO VLF 2	-	-	-	EdL	AT	-	-	222	-	-
1962-5023	2438012-22	1962 Dec 13 1723	Aerobee 150A	-	MASA 04-740M	JHU Airglow 3	-	-	-	EdL	AT	-	-	224	-	-
1962-5067	2438014-23	1962 Dec 15 1730:00	Aerobee 150	-	ACS-451 (SFE)	Firefly III MARTHA	-	-	-	EdL	AT	-	-	224	-	-
1962-5070	2438017-32	1962 Dec 18 1945	Aerobee 150	-	ACS-139	EUV Mon/RPA	-	-	-	WS	LC35	-	-	207	-	-
1963-5116	2438059-19	1963 Jan 29 1627	Aerobee 150A	-	MASA 04-730A	JHU Airglow 4	-	-	-	EdL	LC35	-	-	234	-	-
1963-511	2438074-12	1963 Feb 14 0030	Aerobee 150	-	MS3-345	Sphere	-	-	-	EdL	LC35	-	-	239	-	-
1963-513	2438076-19	1963 Feb 15 1634	Aerobee 150	-	MS3-134	Bennett Mass Spec	-	-	-	WS	LC35	-	-	306	-	-
1963-515	2438079-24	1963 Feb 18 1743	Aerobee 150	-	MS3-140	Mass spectrometer	-	-	-	WS	LC35	-	-	200?	-	-
1963-516	2438086-50	1963 Feb 26 1943	Aerobee 150	-	ACS-372	Mass spectrometer	-	-	-	WS	LC35	-	-	228	-	-
1963-511	2438095-44	1963 Mar 6 0230	Aerobee 150	-	ACS-149	UV absorption	-	-	-	WS	LC35	-	-	201	-	-
1963-5101	2438104-60	1963 Mar 16 0219	Aerobee 150A	-	ACS-149	UV absorption	-	-	-	WS	LC35	-	-	99	-	-
1963-5106	2438108-25	1963 Mar 19 1800	Aerobee 150	-	MASA 04-30CG	EUV resorbant	-	-	-	WS	LC35	-	-	300	-	-
1963-5116	2438116-51	1963 Mar 28 0015	Aerobee 150	-	MASA 04-580I	EDGO VLF test	-	-	-	WS	LC35	-	-	237	-	-
1963-5120	2438123-20	1963 Apr 3 1646	Aerobee 150A	-	MS3-118	Solar X-B Spectrum 1	-	-	-	WS	LC35	-	-	205	-	-
1963-5134	2438124-12	1963 Apr 4 1600	Aerobee 150	-	MASA 04-96II	Visible Dayglow	-	-	-	WS	LC35	-	-	198	-	-
1963-5147	2438131-73	1963 Apr 12 0530	Aerobee 150A	-	KPS-1	Thermo Probe 2(AE-A)	-	-	-	WS	LC35	-	-	302	-	-
1963-5148	2438132-08	1963 Apr 12 1400	Aerobee 150	-	MASA 06-07CA	Electron density	-	-	-	WS	LC35	-	-	240	-	-
1963-5163	2438136-38	1963 Apr 18 2100:14	Aerobee 300A	-	MASA 04-44GI	UV Phot/HR/L X-ray	-	-	-	WS	LC35	-	-	199	-	-
1963-5170	2438143-37	1963 Apr 23 2048	Aerobee 150A	-	ACS-510	JHU Airglow 5	-	-	-	WS	LC35	-	-	232	-	-
1963-5165	2438149-67	1963 Apr 30 0400	Aerobee 150	-	MS3-130	JHU Airglow 5	-	-	-	WS	LC35	-	-	203	-	-
1963-5188	2438152-21	1963 May 7 2111	Aerobee 150A	-	ACS-510	JHU Airglow 5	-	-	-	WS	LC35	-	-	203	-	-
1963-5190	2438157-38	1963 May 7 2111	Aerobee 150A	-	MASA 04-98IIA	Paraglider	-	-	-	WS	LC35	-	-	214	-	-
1963-5194	2438159-25	1963 May 9 1602	Aerobee 150A	-	MS3-140R	FUV Telescope	-	-	-	WS	LC35	-	-	185	-	-
1963-5197	2438160-11	1963 May 10 1445	Aerobee 150	-	MASA 04-97II	ASE/Lunar X-ray	-	-	-	WS	LC35	-	-	208	-	-
1963-5201	2438164-16	1963 May 14 1545	Aerobee 150	-	MASA 04-68NP	Attitude control	-	-	-	WS	LC35	-	-	302	-	-
1963-5224	2438170-73	1963 May 21 0530	Aerobee 150	-	MS3-119	LaRC LH2 test	-	-	-	WS	LC35	-	-	182	-	-
1963-5264	2438187-10	1963 Jun 11 0515	Aerobee 150	-	ACS-35A	LaRC LH2 test	-	-	-	WS	LC35	-	-	189	-	-
1963-5268	2438191-72	1963 Jun 11 0515	Aerobee 150	-	MASA 04-87GT	LaRC LH2 test	-	-	-	WS	LC35	-	-	189	-	-
1963-5278	2438198-25	1963 Jun 17 1800	Aerobee 150	-	MASA 04-28NP	LaRC LH2 test	-	-	-	WS	LC35	-	-	189	-	-
1963-5285	2438200-23	1963 Jun 19														

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Mission	FlightCode	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee_km	Range_km	Dest
1965-5289	2438201.10	1963 Jun 20 1425	Aerobee 150	-	MASA 04.61AS	-	-	-	WS	LC35	-	-	195	-	-
1965-5290	2438206.06	1963 Jun 25 1320	Aerobee 150	-	MASA 04.62AS	MLC Coronagraph	-	-	WS	LC35	-	-	213	-	-
1965-5300	2438209.10	1963 Jun 28 1430	Aerobee 150	-	MASA 04.62AS	Visible Dayglow	-	-	WS	LC35	-	-	204	-	-
1965-5311	2438210.20	1963 Jun 29 1646	Aerobee 150	-	ACS 607	Gyro-resonance	-	-	EdL	-	-	-	156	-	-
1965-5327	2438213.88	1963 Jul 3 0900	Aerobee 150	-	RES 247	Structure	-	-	EdL	-	-	-	199	-	-
1965-5334	2438220.62	1963 Jul 10 0246	Aerobee 150A	-	MASA 04.5901	EDG WLF test	-	-	WI	-	-	-	204	-	-
1965-5335	2438221.21	1963 Jul 10 1702	Aerobee 150	-	ACS 511	EUV Mon/RPA	-	-	WS	LC35	-	-	225	-	-
1965-5343	2438229.73	1963 Jul 19 0530	Aerobee 150A	-	MASA 04.376G	UV spectrograph	-	-	WI	-	-	-	185	-	-
1965-5345	2438231.14	1963 Jul 20 1518	Aerobee 150	-	MASA 04.376G	OSD B spectrometer	-	-	WS	LC35	-	-	78	-	-
1965-5357	2438231.38	1963 Jul 20 2106	Aerobee 150	-	MASA 04.750A	JHU Eclipse Airglow	-	-	FC	-	-	-	38	-	-
1965-5350	2438231.41	1963 Jul 20 2154:45	Aerobee 150A	-	MASA 06.06GA	Thermosphere Probe 3	-	-	WI	-	-	-	177	-	-
1965-5352	2438233.75	1963 Jul 23 0600	Aerobee 150A	-	MASA 04.296G	UV spectrograph	-	-	WI	-	-	-	200	-	-
1965-5367	2438236.09	1963 Jul 25 1415	Aerobee 150	-	ACS 374	Solar XE Spectrum 2	-	-	WS	LC35	-	-	232	-	-
1965-5373	2438272.84	1963 Aug 1 0806	Aerobee 150	-	ACS 374	Bennett Mass Spec 2	-	-	WS	LC35	-	-	288	-	-
1965-5321	2438276.44	1963 Sep 3 2236	Aerobee 150	-	MASA 04.91GE	CR nuclei	-	-	FC	-	-	-	228	-	-
1965-5329	2438277.06	1963 Sep 6 1311	Aerobee 150	-	MASA 04.220S	OSD B experiment	-	-	FC	LC35	-	-	222	-	-
1965-5333	2438279.40	1963 Sep 6 2130	Aerobee 150	-	MASA 04.52HP	LaRC LH2 test	-	-	WI	-	-	-	165	-	-
1965-5339	2438284.10	1963 Sep 11 1424	Aerobee 150A	-	MASA 04.66G1	SK solar spectrum	-	-	WI	LC35	-	-	208	-	-
1965-5347	2438293.16	1963 Sep 20 1545	Aerobee 150	-	MESA 151	Japan-US Ionos 4	-	-	WI	-	-	-	96	-	-
1965-5367	2438297.80	1963 Sep 25 0709	Aerobee 150A	-	MASA 04.66G1	UV absorption	-	-	WI	LC35	-	-	224	-	-
1965-5364	2438299.27	1963 Sep 26 1630	Aerobee 150	-	MASA 04.66G1	Japan-US Ionos 5	-	-	WI	-	-	-	226	-	-
1965-5367	2438301.11	1963 Sep 28 1443	Aerobee 150A	-	MASA 04.66G1	OSD B spectrometer	-	-	WI	-	-	-	219	-	-
1965-5374	2438304.21	1963 Oct 1 1700	Aerobee 150	-	MASA 04.768S	UV geocorona?	-	-	WS	LC35	-	-	197	-	-
1965-5374	2438312.94	1963 Oct 10 1033	Aerobee 150	-	MASA 04.316G	ASL XRT	-	-	WS	LC35	-	-	207	-	-
1965-5393	2438316.17	1963 Oct 15 1605	Aerobee 150	-	MASA 04.316G	FR-1 test	-	-	WS	LC35	-	-	187	-	-
1965-5395	2438320.20	1963 Oct 17 1650	Aerobee 150A	-	MASA 04.9311	HITAB 136F	-	-	WC	-	-	-	2007	-	-
1965-5399	2438330.64	1963 Oct 26 0315	Aerobee 150	-	HITAB-TSRA Test	FR-1 test	-	-	WI	LA1	-	-	187	-	-
1965-5327	2438334.20	1963 Oct 31 1650	Aerobee 150A	-	MASA 04.9411	Dayglow	-	-	WI	-	-	-	200	-	-
1965-5339	2438338.13	1963 Nov 4 1510	Aerobee 150	-	MASA 04.760A	JHU Airglow 6	-	-	WS	LC35	-	-	200	-	-
1965-5346	2438346.29	1963 Nov 12 1858	Aerobee 150A	-	ADS 324	Dayglow	-	-	WI	-	-	-	223	-	-
1965-5351	2438347.46	1963 Nov 13 2300	Aerobee 150	-	MASA 04.85NA	Dayglow	-	-	WI	LC35	-	-	282	-	-
1965-5355	2438351.26	1963 Nov 17 1815	Aerobee 150A	-	MASA 04.85NA	Airglow	-	-	WI	-	-	-	216	-	-
1965-5372	2438351.24	1963 Nov 27 1750	Aerobee 150	-	MESA 153	HR solar spectrum	-	-	WS	LC35	-	-	2007	-	-
1965-5385	2438368.50	1963 Dec 5	Aerobee 150	-	ADS 513	EUV Mon/AVRPA	-	-	WS	LC35	-	-	328	-	-
1965-5397	2438376.20	1963 Dec 12 1650	Aerobee 150	-	MASA 04.88GT	Attitude control	-	-	WS	LC35	-	-	126	-	-
1964-5357	2438423.29	1964 Jan 29 1900	Aerobee 150	-	MASA 06.096A	Thermosphere probe	-	-	WS	LC35	-	-	309	-	-
1964-5359	2438423.63	1964 Jan 29 0309	Aerobee 150A	-	ACS 603	Urb Ionos probe	-	-	FC	-	-	-	228	-	-
1964-5352	2438434.07	1964 Feb 9 0412	Aerobee 150	-	ACS 143	JHU Aurora 2	-	-	FC	-	-	-	288	-	-
1964-5102	2438442.32	1964 Feb 17 1010	Aerobee 150	-	MASA 04.1240A	EDG WLF test	-	-	FC	-	-	-	161	-	-
1964-5120	2438452.39	1964 Feb 26 2118	Aerobee 150	-	HITAB-TSRA-1	EDG WLF test	-	-	FC	-	-	-	2007	-	-
1964-5135	2438471.31	1964 Mar 10 0239	Aerobee 150	-	HITAB-TSRA-1	EDG WLF test	-	-	FC	-	-	-	2007	-	-
1964-5155	2438471.31	1964 Mar 10 0239	Aerobee 150	-	HITAB-TSRA-2	EDG WLF test	-	-	FC	-	-	-	2007	-	-
1964-5177	2438485.29	1964 Mar 30 1930	Aerobee 150	-	MASA 04.156G	Dayglow	-	-	WS	LC35	-	-	190	-	-
1964-5182	2438486.36	1964 Apr 1 0323?	Aerobee 150	-	MASA 04.156G	Dayglow	-	-	WS	LC35	-	-	223	-	-
1964-5189	2438486.66	1964 Apr 5 0343	Aerobee 150	-	MASA 04.81CG	Dayglow	-	-	WS	LC35	-	-	74	-	-
1964-5192	2438486.66	1964 Apr 7 1413	Aerobee 150	-	MASA 04.86NA	Airglow	-	-	WS	LC35	-	-	31	-	-
1964-1629	2438486.69	1964 Apr 10 1931	Aerobee 150	-	MASA 04.86NA	Airglow	-	-	WS	LC35	-	-	31	-	-
1964-1629	2438486.69	1964 Apr 14 1931	Aerobee 150	-	MASA 04.86NA	Airglow	-	-	WS	LC35	-	-	31	-	-
1964-5177	2438505.97	1964 Apr 21 1618	Aerobee 150	-	MASA 04.1130A-G1	Astrochemistry	-	-	WS	LC35	-	-	238	-	-
1964-5202	2438520.17	1964 May 07 0630	Aerobee 150	-	MESA 154	Lunar X-ray	-	-	WS	LC35	-	-	205	-	-
1964-5237	2438522.69	1964 May 27 1708?	Aerobee 150	-	ADS 355	HITAB S4-6	-	-	WS	LC35	-	-	2007	-	-
1964-5268	2438544.21	1964 May 26 1708?	Aerobee 150	-	HITAB-TSRA-1	HITAB S4-6	-	-	WS	LC35	-	-	2007	-	-
1964-5268	2438557.03	1964 May 26 1708?	Aerobee 150	-	MASA 04.67HP	Paraglider	-	-	WS	LC35	-	-	155	-	-
1964-5298	2438562.88	1964 Jun 16 0900	Aerobee 150	-	MESA 147	Dayglow	-	-	WS	LC35	-	-	137	-	-
1964-5303	2438566.07	1964 Jun 19 1346	Aerobee 150	-	MESA 147	Dayglow	-	-	WS	LC35	-	-	134	-	-
1964-5329	2438584.45	1964 Jul 7 2243	Aerobee 150	-	MESA 164	Crags lunar occ.	-	-	WS	LC35	-	-	295	-	-
1964-5362	2438593.85	1964 Jul 17 0923?	Aerobee 150	-	HITAB-TSRA-2	HITAB 216D	-	-	WS	LC35	-	-	96	-	-
1964-5370	2438600.28	1964 Jul 23 1843	Aerobee 150	-	MASA 04.107GE	CR nuclei	-	-	FC	-	-	-	233	-	-
1964-5360	2438602.23	1964 Jul 25 1735	Aerobee 150	-	MASA 04.109GE	CR nuclei	-	-	FC	-	-	-	215	-	-
1964-5366	2438605.38	1964 Jul 28 2114	Aerobee 150	-	MASA 06.102A	Thermosphere probe	-	-	FC	-	-	-	322	-	-
1964-5341	2438618.94	1964 Aug 11 1030	Aerobee 150	-	MASA 04.126GG	Thermosphere probe	-	-	WS	LC35	-	-	172	-	-
1964-5441	2438629.93	1964 Aug 22 1015	Aerobee 150	-	MASA 04.126GG	UV Spec (Venus)	-	-	WS	LC35	-	-	133	-	-
1964-5447	2438636.73	1964 Aug 29 0530	Aerobee 150	-	MASA 04.550G	AS/E/MTT-1	-	-	WI	LC35	-	-	179	-	-
1964-5468	2438640.63	1964 Sep 2 0308	Aerobee 150A	-	MASA 04.550G	Zodiacal light	-	-	WI	-	-	-	156	-	-
1964-5468	2438653.90	1964 Sep 15 0935	Aerobee 150	-	MASA 04.115NA	Dayglow	-	-	WI	LC35	-	-	200	-	-
1964-5473	2438657.22	1964 Sep 18 1717	Aerobee 150A	-	MASA 04.139R-GT	Attitude control test	-	-	WI	-	-	-	188	-	-
1964-5478	2438665.00	1964 Sep 26 1204	Aerobee 150A	-	MASA 04.120CG	Leckebach XR Survey	-	-	WI	LC35	-	-	130	-	-
1964-5500	2438692.60	1964 Oct 14	Aerobee 150	-	HITAB-TSRA-2	Leckebach XR Survey	-	-	WI	LC35	-	-	144	-	-
1964-5539	2438695.54	1964 Oct 27 0058	Aerobee 150A	-	MASA 04.129CG	AS/E/MTT-2	-	-	WI	-	-	-	2007	-	-
1964-5552	2438699.31	1964 Oct 30 1930	Aerobee 150	-	MASA 04.116GS	EUV spectrum/W flux	-	-	WS	LC35	-	-	189	-	-
1964-5567	2438702.83	1964 Nov 3 0757	Aerobee 150	-	MASA 04.520S	Princeton UVS	-	-	WS	LC35	-	-	137	-	-
1964-5601	2438706.94	1964 Nov 7 1031	Aerobee 150	-	MASA 04.109GG	NRL UV Echelle	-	-	WS	LC35	-	-	213	-	-
1964-5624	2438712.31	1964 Nov 12 1930	Aerobee 150	-	MASA 155	Thermosphere probe	-	-	WS	LC35	-	-	189	-	-
1964-5624	2438713.93	1964 Nov 14 1023	Aerobee 150	-	MASA 04.110GG	Thermosphere probe	-	-	WI	-	-	-	207	-	-
1964-5626	2438716.26	1964 Nov 16 1818	Aerobee 150A	-	MASA 04.456A	Luster 1964	-	-	WI	LC35	-	-	157	-	-
1964-5627	2438716.27	1964 Nov 16 1831	Aerobee 150	-	MASA 04.118NA	Luster 1964	-	-	WS	LC35	-	-	219	-	-
1964-5639	2438719.22	1964 Nov 19 1715	Aerobee 150	-	MESA 154R	-	-	-	WS	LC35	-	-	200	-	-
1964-5648	2438724.98	1964 Nov 25 1134	Aerobee 150	-	MESA 161	UV Airglow	-	-	WS	LC35	-	-	182	-	-
1964-5664	2438730.76	1964 Dec 1 0615	Aerobee 150	-	ADS 515	HITAB AC-4	-	-	WS	LC35	-	-	2007	-	-
1964-5674	2438738.45	1964 Dec 8 2255	Aerobee 150	-	MASA 04.83GA	HITAB-TSRA-3	-	-	WS	LC35	-	-	182	-	-
1964-5678	2438741.10	1964 Dec 15 1430	Aerobee 150	-	ADS 515	Meteoroids	-	-	WC	LC35	-	-	2007	-	-
1964-5685	2438746.10	1964 Dec 16 1637	Aerobee 150	-	MASA 04.1320A-G1	JHU Airglow 8	-	-	WS	LC35	-	-	235	-	-
1964-5689	2438746.79	1964 Dec 17 0655	Aerobee 150	-	MASA 04.1250A	Dayglow	-	-	WS	LC35	-	-	228	-	-
1965-534	2438774.16	1965 Jan 13 1549	Aerobee 150	-	MASA 04.111NA	Airglow	-	-	WI	-	-	-	178	-	-
1965-536	2438774.49	1965 Jan 13 2348	Aerobee 150	-	MASA 163	Airglow	-	-	WS	LC35	-	-	235	-	-
1965-542	2438792.35	1965 Jan 21 2030	Aerobee 150	-	MASA 163	Airglow	-	-	WS	LC35	-	-	235	-	-

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Mission	FlightCode	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee_km	Range_km	Dest
1965-558	2438790.82	1965 Jan 30 0745	Aerobee 150	-	NF3.162	-	-	-	-	WS	LC35	-	-	211	-	-
1965-559	2438803.26	1965 Feb 11 1765	Aerobee 150	-	ASA.1E3	Solar spectrum	-	-	-	WS	LC35	-	-	200	-	-
1965-580	2438810.70	1965 Feb 19 0451:02	Aerobee 150	-	MASA 04.129CA	Caribou I	JHU Aurora 3	-	-	FC	-	-	-	159	-	-
1965-5129	2438822.51	1965 Mar 3 0009	Aerobee 150	-	ASA.516	EUV Mon	-	-	-	WS	LC35	-	-	241	-	-
1965-5128	2438823.09	1965 Mar 03 1415:00	Aerobee 150	-	ASA.517	EUV Mon	-	-	-	WS	-	-	-	252	-	-
1965-5136	2438824.51	1965 Mar 6 0011	Aerobee 150	-	ASA.518	EUV Mon	-	-	-	WS	LC35	-	-	189	-	-
1965-5140	2438825.65	1965 Mar 6 0732	Aerobee 150	-	MASA 04.1330G	Princeton UVS	-	-	-	WS	LC35	-	-	246	-	-
1965-5141	2438825.81	1965 Mar 13 0338	Aerobee 150	-	ASA.613	D-region comp/Aurora	-	-	-	FC	-	-	-	193	-	-
1965-5156	2438832.65	1965 Mar 13 0355	Aerobee 150	-	MASA 04.566G	UV spectra	[Uncertain]	-	-	WS	LC35	-	-	155	-	-
1965-5157	2438832.66	1965 Mar 13 0358	Aerobee 150	-	ASA.516	Auroral Input/Output	-	-	-	WS	LC35	-	-	184	-	-
1965-5158	2438832.82	1965 Mar 17 1510	Aerobee 150	-	ASA.612	Thermosphere probe	-	-	-	FC	-	-	-	105	-	-
1965-5166	2438838.62	1965 Mar 17 1510	Aerobee 150	-	MASA 04.636S	UV spectra	-	-	-	WS	LC35	-	-	156	-	-
1965-5174	2438838.74	1965 Mar 20 0542	Aerobee 150	-	MASA 04.576G	MASA 04.576G	-	-	-	WS	LC35	-	-	155	-	-
1965-5177	2438839.74	1965 Mar 20 0542	Aerobee 300	-	MASA 06.116A	Thermosphere probe	-	-	-	WI	-	-	-	326	-	-
1965-5208	2438869.74	1965 Mar 30 0550	Aerobee 150	-	NF3.159	-	-	-	-	WS	LC35	-	-	217	-	-
1965-5226	2438863.12	1965 Apr 12 1447	Aerobee 150	-	MASA 04.496S (128-3)	Mg II heliogram 1	-	-	-	WS	LC35	-	-	201	-	-
1965-5242	2438871.15	1965 Apr 24 0515	Aerobee 150	-	MASA 04.1270A	AF-142 Thermo. comp.	-	-	-	WS	LC35	-	-	196	-	-
1965-5250	2438874.72	1965 Apr 24 0515	Aerobee 150	-	ASA.156	-	-	-	-	WS	LC35	-	-	201	-	-
1965-5256	2438877.77	1965 Apr 27 0630	Aerobee 150	-	MASA 04.1146G	-	-	-	-	WS	LC35	-	-	193	-	-
1965-5264	2438884.81	1965 May 4 0730	Aerobee 150	-	NF3.162R	-	-	-	-	WS	LC35	-	-	17	-	-
1965-5274	2438885.64	1965 May 5 0323	Aerobee 150	-	ASA.162R	STRAP	-	-	-	WS	LC35	-	-	146	-	-
1965-5336	2438913.77	1965 Jun 2 0622	Aerobee 150	-	MASA 04.896G	Princeton UVS	-	-	-	WS	LC35	-	-	181	-	-
1965-5362	2438929.38	1965 Jun 17 2107	Aerobee 150	-	MASA 04.170G	CR Fluxes	-	-	-	FC	-	-	-	233	-	-
1965-5382	2438935.11	1965 Jun 23 1432	Aerobee 150	-	MASA 04.1406E	Soft X solar photo	-	-	-	FC	LC35	-	-	186	-	-
1965-5383	2438935.16	1965 Jun 23 1547	Aerobee 150	-	KFS.10	CR Fluxes	-	-	-	FC	LC35	-	-	215	-	-
1965-5393	2438941.29	1965 Jun 29 1900	Aerobee 150	-	MASA 04.1410E	Airglow	-	-	-	WS	LC35	-	-	195	-	-
1965-5414	2438942.10	1965 Jun 30 1430	Aerobee 150	-	MASA 04.1058P	JPL Rocket Radar 3	-	-	-	WS	LC35	-	-	158	-	-
1965-5420	2438946.81	1965 Jul 7 0725	Aerobee 150	-	ASA.117/VF105-S-1	Noctilucent clouds	-	-	-	FC	-	-	-	07	-	-
1965-5424	2438955.63	1965 Jul 14 0757	Aerobee 150	-	NF3.265/VF105-S-2	Noctilucent clouds	-	-	-	WS	LC35	-	-	196	-	-
1965-5428	2438957.37	1965 Jul 15 2050	Aerobee 150	-	ASA.1280A	Thermosphere comp.	-	-	-	WS	LC35	-	-	193	-	-
1965-5430	2438963.38	1965 Jul 21 2000	Aerobee 150	-	CR. M3.375	Mass spec/Imp. probe	-	-	-	FC	LC35	-	-	179	-	-
1965-5432	2438963.86	1965 Jul 24 0536	Aerobee 150	-	CR. M3.269/VF105-S-3	Noctilucent clouds	-	-	-	FC	LC35	-	-	241	-	-
1965-5466	2438985.22	1965 Aug 12 1715	Aerobee 150	-	CR. M3.519	EUV Mon	-	-	-	WS	LC35	-	-	109	-	-
1965-5481	2438999.29	1965 Aug 26 1903	Aerobee 150	-	CR. M3.614	Gyro Resonance	-	-	-	EdL	-	-	-	182	-	-
1965-5481	2439021.41	1965 Sep 17 2151	Aerobee 150A	-	MASA 04.1381I	FR-1 test	-	-	-	VI	LC35	-	-	189	-	-
1965-5489	2439026.94	1965 Sep 22 2007	Aerobee 150	-	MASA 04.1470G	FR-2 test	-	-	-	WS	LC35	-	-	189	-	-
1965-5507	2439028.67	1965 Sep 26 0400	Aerobee 150	-	CR. M3.722	IR Horizon 1	-	-	-	WS	LC35	-	-	189	-	-
1965-5513	2439029.41	1965 Sep 26 2154	Aerobee 150A	-	MASA 04.1591I	FR-1 test	-	-	-	VI	LC35	-	-	182	-	-
1965-5514	2439029.41	1965 Sep 26 2154	Aerobee 150A	-	MASA 04.1591I	Neutrons/Ionos	-	-	-	WS	LC35	-	-	185	-	-
1965-5517	2439031.86	1965 Sep 26 0939:58	Aerobee 150	-	MASA 04.1590A-G1-G8	-	-	-	-	WS	LC35	-	-	200	-	-
1965-5520	2439032.90	1965 Sep 29 0130	Aerobee 150	-	MASA 04.1210G	LPABL ID XRT	-	-	-	WS	LC35	-	-	146	-	-
1965-5521	2439034.96	1965 Oct 1 0330	Aerobee 150	-	NRL M3.164	-	-	-	-	WS	LC35	-	-	171	-	-
1965-5535	2439038.62	1965 Oct 5 0330	Aerobee 150	-	MASA 04.1591G	-	-	-	-	WS	LC35	-	-	163	-	-
1965-5550	2439046.93	1965 Oct 13 0313	Aerobee 150	-	MASA 04.1591G	Colorado/Keyes-Seki	-	-	-	VI	LC35	-	-	179	-	-
1965-5561	2439053.38	1965 Oct 20 2035	Aerobee 150A	-	MASA 04.1608A	Comet study/Solar	-	-	-	VI	LC35	-	-	184	-	-
1965-5566	2439054.97	1965 Oct 21 1400	Aerobee 150	-	MASA 04.1608S	JHU Keyes-Seki	-	-	-	WS	LC35	-	-	204	-	-
1965-5571	2439056.14	1965 Oct 25 0530	Aerobee 150	-	NRL M3.167	-	-	-	-	VI	LC35	-	-	182	-	-
1965-5574	2439056.74	1965 Oct 25 1525	Aerobee 150	-	MASA 04.562S	-	-	-	-	WS	LC35	-	-	195	-	-
1965-5584	2439059.88	1965 Oct 29 1130	Aerobee 150	-	NRL M3.162R	IR Telescope	-	-	-	WS	LC35	-	-	205	-	-
1965-5584	2439059.88	1965 Oct 29 1130	Aerobee 150	-	CR. M3.523	Solar XUV	-	-	-	WS	LC35	-	-	210	-	-
1965-5584	2439059.88	1965 Oct 29 1130	Aerobee 150	-	CR. M3.523	EUV Mon	-	-	-	WS	LC35	-	-	208	-	-
1965-5604	2439074.29	1965 Nov 5 1600	Aerobee 150	-	CR. M3.366	Lunar	-	-	-	WS	LC35	-	-	180	-	-
1965-5609	2439074.60	1965 Nov 16 1600	Aerobee 150	-	MASA 04.1198A	Luster 1965-B	-	-	-	WS	LC35	-	-	144	-	-
1965-5617	2439081.17	1965 Nov 30 0748	Aerobee 150	-	CR. M3.366	Stellar Spectra	-	-	-	WS	LC35	-	-	150	-	-
1965-5635	2439094.85	1965 Nov 30 0748	Aerobee 150	-	MASA 04.1550G	-	-	-	-	WS	LC35	-	-	179	-	-
1965-5659	2439094.85	1965 Nov 30 0748	Aerobee 150	-	MASA 04.1550G	Mg II heliogram 2	-	-	-	WS	LC35	-	-	185	-	-
1965-5661	2439097.23	1965 Dec 3 730	Aerobee 150	-	K23.11	STRAP	-	-	-	VI	LC35	-	-	134	-	-
1965-5668	2439103.64	1966 Jan 19 0319	Aerobee 150A	-	K23.11	Stellar Spectra	-	-	-	VI	LC35	-	-	50	-	-
1965-5681	2439143.64	1966 Jan 27 0129	Aerobee 150	-	NRL M3.186	-	-	-	-	WS	LC35	-	-	243	-	-
1965-5683	2439152.56	1966 Jan 27 0129	Aerobee 150	-	NRL M3.186	Spectroheliograph	-	-	-	WS	LC35	-	-	209	-	-
1965-5688	2439158.25	1966 Feb 2 1004	Aerobee 150	-	MASA 04.1590G	Spica UV spectra	-	-	-	WS	LC35	-	-	175	-	-
1965-5692	2439158.92	1966 Feb 2 1004	Aerobee 150	-	MASA 04.1590G	JHU Aurora 4	-	-	-	WS	LC35	-	-	166	-	-
1965-5721	2439176.73	1966 Feb 20 0530	Aerobee 150	-	MASA 04.1620A	To Solar UV	-	-	-	FC	LC35	-	-	228	-	-
1965-5145	2439187.25	1966 Mar 2 755	Aerobee 150A	-	MASA 04.993S	AFORL Solar	-	-	-	WS	LC35	-	-	219	-	-
1965-5148	2439188.41	1966 Mar 3 2154	Aerobee 150A	-	MASA 04.1008S	AS/E/MIT-3	-	-	-	VI	LC35	-	-	165	-	-
1965-5163	2439192.82	1966 Mar 8 0712	Aerobee 150	-	MASA 04.1480G	Stellar spectra	-	-	-	WS	LC35	-	-	185	-	-
1965-5154	2439193.60	1966 Mar 9 0222	Aerobee 150	-	K23.15	EUV Mon/RPA	-	-	-	WS	LC35	-	-	229	-	-
1965-5197	2439215.27	1966 Mar 30 1835	Aerobee 150	-	CR. M3.524	Dayglow	-	-	-	WS	LC35	-	-	183	-	-
1965-5210	2439230.12	1966 Apr 14 1508	Aerobee 150	-	MASA 04.1438A	-	-	-	-	WS	LC35	-	-	192	-	-
1965-5220	2439230.13	1966 Apr 14 1508	Aerobee 150	-	MASA 04.2438A	-	-	-	-	WS	LC35	-	-	183	-	-
1965-5231	2439236.98	1966 Apr 28 1235	Aerobee 150	-	MASA 04.1650A	JHU UVT F1 (Venau)	-	-	-	WS	LC35	-	-	154	-	-
1965-5237	2439244.02	1966 Apr 28 1235	Aerobee 150	-	MASA 04.1800S	NRL M3.172R	-	-	-	WS	LC35	-	-	175	-	-
1965-5239	2439244.66	1966 Apr 29 0349	Aerobee 150	-	CR. M3.723	IR Horizon 2	-	-	-	WS	LC35	-	-	160	-	-
1965-5268	2439255.14	1966 May 9 1520	Aerobee 150	-	MASA 04.1068P	JPL Rocket Radar 4	-	-	-	WS	LC35	-	-	174	-	-
1965-5268	2439263.67	1966 May 18 0402	Aerobee 150A	-	MASA 04.1710G	-	-	-	-	VI	LC35	-	-	210	-	-
1965-5271	2439266.13	1966 May 20 1510	Aerobee 150	-	MASA 04.963S	XRT (?)	-	-	-	WS	LC35	-	-	172	-	-
1965-5273	2439266.48	1966 May 20 2330	Aerobee 150	-	MASA 04.1710G	-	-	-	-	WS	LC35	-	-	195	-	-
1965-5279	2439269.71	1966 May 24 0507	Aerobee 150	-	MASA 04.510G	-	-	-	-	WS	LC35	-	-	132	-	-
1965-5373	2439322.73	1966 Jul 16 0532	Aerobee 150	-	MASA 04.1590G	STRAP7	-	-	-	WS	LC35	-	-	145	-	-
1965-5380	2439325.65	1966 Jul 19 0336	Aerobee 150	-	MASA 04.1440G	NRL M3.165	-	-	-	WS	LC35	-	-	247	-	-
1965-5386	2439329.38	1966 Jul 22 2102	Aerobee 150	-	NRL M3.525	EUV Mon/RPA	-	-	-	WS	LC35	-	-	134	-	-
1965-5394	2439334.12	1966 Jul 27 1900	Aerobee 150	-	NRL M3.190	Heliograph XIV-H1	-	-	-	WS	LC35	-	-	211	-	-
1965-5431	2439346.27	1966 Aug 8 1822	Aerobee 150	-	CR. M3.734	Solar min particles										

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Mission	FlightCode	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee_km	Range_km	Dest
1966-5481	2439371.45	1966 Sep 2 2250	Aerobee 150	-	MRL M3.152	MRL M3.152	-	-	-	WS	LC35	-	-	206	-	-
1966-5488	2439388.74	1966 Sep 20 0545	Aerobee 150	-	MASA 04.1760G	-	-	-	-	WS	LC35	-	-	165	-	-
1966-5498	2439389.21	1966 Sep 20 1705	Aerobee 150	-	MASA 12.06GT	Booster test	-	-	-	WS	LC35	-	-	3	-	-
1966-5528	2439403.35	1966 Oct 4 2029	Aerobee 150	-	MRL M3.160	RP3.18	-	-	-	WS	LC35	-	-	154	-	-
1966-5538	2439410.47	1966 Oct 11 2322	Aerobee 150	-	RP3.16	IR dayglow	-	-	-	WS	LC35	-	-	150	-	-
1966-5539	2439410.58	1966 Oct 12 0152	Aerobee 150	-	MASA 04.149CG	ASKE	-	-	-	WS	LC35	-	-	148	-	-
1966-5557	2439421.14	1966 Oct 22 1520	Aerobee 150	-	MASA 04.161UA	Luster 1966	-	-	-	WS	LC35	-	-	149	-	-
1966-5561	2439424.23	1966 Oct 25 1725	Aerobee 150	-	MASA 04.195GA-G1	Meteoroids	-	-	-	WS	LC35	-	-	186	-	-
1966-5576	2439430.50	1966 Nov 1	Aerobee 150	-	-	(?)	-	-	-	WS	LC35	-	-	241	-	-
1966-5615	2439442.18	1966 Nov 12 1615	Aerobee 150	-	MASA 04.153GS	-	-	-	-	WS	LC35	-	-	151	-	-
1966-5601	2439442.19	1966 Nov 12 1640	Aerobee 150	-	MRL M03.188 XUV-H2?	MRL M03.188 XUV-H2?	-	-	-	WS	LC35	-	-	174	-	-
1966-5624	2439446.05	1966 Nov 16 1315	Aerobee 150	-	CRF RF3.267	Leonids	-	-	-	WS	LC35	-	-	173	-	-
1966-5648	2439450.92	1966 Nov 21 1000	Aerobee 150	-	MASA 04.154GG	-	-	-	-	WS	LC35	-	-	165	-	-
1966-5655	2439455.59	1966 Nov 27 0216	Aerobee 150	-	CRF M3.357	Al 274-L	Lunar IR	-	-	FC	-	-	-	169	-	-
1966-5655	2439459.99	1966 Nov 30 1145	Aerobee 150	-	MASA 04.161UA	Composition	-	-	-	WS	LC35	-	-	227	-	-
1966-5667	2439462.38	1966 Dec 2 2109	Aerobee 150	-	MASA 04.160UA	Composition	-	-	-	WS	LC35	-	-	227	-	-
1966-5669	2439465.65	1966 Dec 6 0335	Aerobee 150	-	CRF M3.724	-	-	-	-	WS	LC35	-	-	188	-	-
1966-5682	2439472.77	1966 Dec 13 0630	Aerobee 150	-	MASA 04.162UG	-	-	-	-	FC	-	-	-	169	-	-
1966-5685	2439473.84	1966 Dec 14 0616	Aerobee 150	-	CRF RF3.615	Al 199-6L	-	-	-	FC	-	-	-	180	-	-
1966-5687	2439473.96	1966 Dec 14 1130	Aerobee 150	-	CRF RF3.615	-	-	-	-	WS	LC35	-	-	177	-	-
1966-A153	2439476.76	1966 Dec 17 0615	Aerobee 150	-	RP3.19	RP3.19	-	-	-	WS	LC35	-	-	1	-	-
1967-501	2439508.29	1967 Jan 17 1900	Aerobee 150	-	CRF M3.526	EUV Mon	-	-	-	WS	LC35	-	-	243	-	-
1967-5122	2439538.68	1967 Feb 17 0418	Aerobee 150	-	MASA 04.163UA	JHU Aurora 5	-	-	-	FC	-	-	-	168	-	-
1967-5136	2439552.65	1967 Mar 3 0330	Aerobee 150	-	MASA 04.160GG	UV stellar photom	-	-	-	FC	-	-	-	157	-	-
1967-5136	2439552.68	1967 Mar 3 0420	Aerobee 150	-	MASA 04.160GG	IR payload	-	-	-	WS	LC35	-	-	186	-	-
1967-5156	2439564.22	1967 Mar 14 1714	Aerobee 150A	-	MASA 04.102DS	OSU-3 calibration	-	-	-	WS	LC35	-	-	205	-	-
1967-5164	2439566.66	1967 Mar 17 0346	Aerobee 150	-	MASA 04.194GG	MRL M3.191/FULLS	-	-	-	WI	-	-	-	193	-	-
1967-5168	2439572.21	1967 Mar 22 1656	Aerobee 150A	-	MASA 04.103DS	OSU-3 calibration	-	-	-	WI	-	-	-	229	-	-
1967-5188	2439581.65	1967 Apr 1 0340	Aerobee 150	-	MASA 04.168CS	UV stellar photom	-	-	-	WS	LC35	-	-	139	-	-
1967-5193	2439585.51	1967 Apr 5 0015	Aerobee 150	-	MASA 04.168CS	LISC Solar/Mod 1	-	-	-	WS	LC35	-	-	160	-	-
1967-5197	2439587.85	1967 Apr 7 0925	Aerobee 150	-	MASA 04.169UG	-	-	-	-	WS	LC35	-	-	176	-	-
1967-5246	2439605.14	1967 Apr 24 1520	Aerobee 150	-	MASA 04.170CS	OSU-3 calibration	-	-	-	WS	LC35	-	-	181	-	-
1967-5246	2439615.81	1967 May 5 0730	Aerobee 150	-	MASA 04.170CS	Venus UV	-	-	-	WS	LC35	-	-	159	-	-
1967-5246	2439615.81	1967 May 5 0730	Aerobee 150	-	MASA 04.170CS	UV stellar spectra	-	-	-	WS	LC35	-	-	176	-	-
1967-5254	2439620.38	1967 May 9 2100	Aerobee 150	-	MASA 04.203UG	MRL M03.199 XUV-H3?	-	-	-	WS	LC35	-	-	182	-	-
1967-5260	2439626.86	1967 May 16 0632	Aerobee 150	-	MRL M3.177	UV stellar spectra	-	-	-	WS	LC35	-	-	148	-	-
1967-5260	2439643.69	1967 Jun 2 0430	Aerobee 150	-	MASA 04.210GG	Luster 1967-I	-	-	-	WS	LC35	-	-	179	-	-
1967-5268	2439646.10	1967 Jun 6 1420	Aerobee 150	-	MASA 04.222MA	Planetary UV	-	-	-	WS	LC35	-	-	156	-	-
1967-5296	2439660.68	1967 Jun 9 0415	Aerobee 150	-	RP3.21	Planetary UV	-	-	-	WS	LC35	-	-	180	-	-
1967-5311	2439663.38	1967 Jun 21 1849	Aerobee 150	-	MASA 04.179UA	Dim. mass spectrom.	-	-	-	FC	-	-	-	210	-	-
1967-5317	2439677.28	1967 Jul 5 0341	Aerobee 150	-	CRF M3.562	Auroral profile	-	-	-	FC	-	-	-	400?	-	-
1967-5341	2439679.67	1967 Jul 5 0410	Aerobee 150	-	MASA 04.190UG	MII-4 GC Survey I	-	-	-	WS	LC35	-	-	142	-	-
1967-5352	2439691.98	1967 Jul 20 0920	Aerobee 150	-	MASA 04.212UA	Composition	-	-	-	WS	LC35	-	-	210	-	-
1967-5352	2439692.31	1967 Jul 20 1924	Aerobee 150	-	MASA 04.212UA	Composition	-	-	-	WS	LC35	-	-	139	-	-
1967-5368	2439706.70	1967 Aug 4 0455	Aerobee 150	-	MASA 04.217UG	Stellar UV	-	-	-	WS	LC35	-	-	209	-	-
1967-5376	2439711.41	1967 Aug 6 1415	Aerobee 150	-	MASA 04.207UA	PIGO detector test	-	-	-	WS	LC35	-	-	141	-	-
1967-5384	2439711.41	1967 Aug 6 1415	Aerobee 150	-	MRL M3.233MA	EUV Mon	-	-	-	WS	LC35	-	-	232	-	-
1967-5384	2439713.88	1967 Aug 8 1090	Aerobee 150	-	CRF M3.167	UV Mon	-	-	-	WS	LC35	-	-	243	-	-
1967-5384	2439713.88	1967 Aug 8 1090	Aerobee 150	-	CRF M3.167	UV Mon	-	-	-	WS	LC35	-	-	135	-	-
1967-5384	2439717.78	1967 Aug 15 1845	Aerobee 150	-	MASA 04.167CG	UV Mon	-	-	-	WS	LC35	-	-	200?	-	-
1967-5387	2439718.69	1967 Aug 15 1845	Aerobee 150	-	MRL M3.196	LISC X-ray	-	-	-	WS	LC35	-	-	216	-	-
1967-5396	2439728.69	1967 Aug 26 0436	Aerobee 150	-	MASA 12.07CT	Stellar X-ray	-	-	-	WS	LC35	-	-	184	-	-
1967-5400	2439741.64	1967 Sep 30 1614	Aerobee 150	-	MASA 04.104DS	Resil launch test	-	-	-	WS	LC35	-	-	173	-	-
1967-5417	2439746.43	1967 Sep 30 1614	Aerobee 150	-	MASA 04.104DS	OSU 3 calibration	-	-	-	WS	LC35	-	-	182	-	-
1967-5469	2439759.10	1967 Oct 5 4818	Aerobee 150	-	MASA 04.152GS	Solar heating	-	-	-	WS	LC35	-	-	176	-	-
1967-5472	2439759.10	1967 Oct 5 4818	Aerobee 150	-	MASA 04.152GS	Solar heating	-	-	-	WS	LC35	-	-	184	-	-
1967-5497	2439793.00	1967 Oct 19 1205	Aerobee 150	-	MASA 04.238US	MRL M03.192 GC Gr.	-	-	-	WS	LC35	-	-	173	-	-
1967-5506	2439790.95	1967 Oct 27 1045	Aerobee 150	-	MASA 04.158GG	Solar/geo Ly-alpha	-	-	-	WS	LC35	-	-	182	-	-
1967-5519	2439795.98	1967 Oct 27 1130	Aerobee 150	-	MASA 04.226UG	UV stellar spectra	-	-	-	WS	LC35	-	-	176	-	-
1967-5528	2439802.24	1967 Nov 7 1745	Aerobee 150	-	CRF M3.530	EUV Mon/RA	-	-	-	WS	LC35	-	-	243	-	-
1967-5534	2439808.92	1967 Nov 14 1005	Aerobee 150	-	MASA 04.229UG	UV stellar spectra	-	-	-	WS	LC35	-	-	172	-	-
1967-5536	2439810.40	1967 Nov 15 2130	Aerobee 150	-	CRF M3.365	Dayglow	-	-	-	CLBI	-	-	-	224	-	-
1967-5542	2439814.95	1967 Nov 20 1042	Aerobee 150	-	MASA 04.228CG	ASKE X-ray	-	-	-	WS	LC35	-	-	144	-	-
1967-5560	2439828.99	1967 Dec 4 1145	Aerobee 150	-	RP3.20	UV Feal (Venus)	-	-	-	WS	LC35	-	-	167	-	-
1967-5566	2439829.98	1967 Dec 5 1911	Aerobee 150	-	MASA 04.197UA	JHU UVT F2 (Venus)	-	-	-	WS	LC35	-	-	160?	-	-
1967-5566	2439830.30	1967 Dec 6 1045	Aerobee 150A	-	MASA 04.213NB	Rat centrifuge 1	-	-	-	WS	LC35	-	-	137	-	-
1967-5566	2439830.95	1967 Dec 6 1045	Aerobee 150	-	MASA 04.201NT	UV stellar spectra	-	-	-	WS	LC35	-	-	210	-	-
1967-5576	2439835.42	1967 Dec 10 2200	Aerobee 150	-	CRF M3.268	SPARCS Test	-	-	-	WS	LC35	-	-	160	-	-
1967-5576	2439835.42	1967 Dec 13 1259	Aerobee 150	-	MRL M3.201	Dust collector	-	-	-	WS	LC35	-	-	184	-	-
1968-594	2439878.21	1968 Jan 22 1705	Aerobee 150	-	CRF M3.171	RP3-25 PCS/PC	-	-	-	WS	LC35	-	-	175	-	-
1968-5101	2439881.67	1968 Jan 26 0400	Aerobee 150	-	MASA 04.205GG	Stellar Astron.	-	-	-	WS	LC35	-	-	160	-	-
1968-5115	2439888.73	1968 Feb 2 0630	Aerobee 150	-	MASA 04.220GG	Stellar Astron.	-	-	-	WS	LC35	-	-	139	-	-
1968-5116	2439888.76	1968 Feb 2 0610	Aerobee 150	-	MASA 04.217UA	Stellar Astron.	-	-	-	WS	LC35	-	-	149	-	-
1968-5128	2439895.70	1968 Feb 9 0441	Aerobee 150	-	RP3.22	JHU Aurora 6	-	-	-	FC	-	-	-	155	-	-
1968-5135	2439903.60	1968 Feb 17 0224	Aerobee 150	-	CRF M3.531	Stellar UV	-	-	-	WS	LC35	-	-	183	-	-
1968-5137	2439906.29	1968 Feb 19 1855	Aerobee 150	-	MASA 04.169CS	EUV Mon	-	-	-	WS	LC35	-	-	243	-	-
1968-5138	2439906.47	1968 Feb 19 2315	Aerobee 150	-	MASA 04.169CS	Stellar IR	-	-	-	WS	LC35	-	-	161	-	-
1968-5162	2439916.65	1968 Mar 1 0330	Aerobee 150	-	MASA 04.177UG	ASKE Solar	-	-	-	WS	LC35	-	-	171	-	-
1968-5178	2439931.29	1968 Mar 15 1904	Aerobee 150	-	MASA 04.209CS	ASKE Solar	-	-	-	WS	LC35	-	-	155	-	-
1968-5180	2439931.64	1968 Mar 16 0315	Aerobee 150	-	MASA 04.198CG	Crab X-ray	-	-	-	WS	LC35	-	-	153	-	-
1968-5191	2439935.18	1968 Mar 19 1615	Aerobee 150	-	MASA 04.202NT	SPARCS Test	-	-	-	WS	LC35	-	-	159	-	-
1968-5203	2439937.81	1968 Mar 22 0724	Aerobee 150	-	MASA 04.255GG	IR Telescope	-	-	-	WS	LC35	-	-	208	-	-
1968-5227	2439944.78	1968 Mar 29 0645	Aerobee 150	-	CRF M3.154	Spectrograph	-	-	-	WS	LC35	-				





Launch

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Mission	FlightCode	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee_km	Range_km	Dest
1970-S224	2440653.29	1970 Mar 7 1900	Aerobee 150	-	MASA 04.157DS	MEL ME3.216	-	-	-	WS	LC35	-	-	187	-	-
1970-S227	2440653.31	1970 Mar 7 1930	Aerobee 150A	-	MASA 04.275DS	MEL ME3.235	-	-	-	WS	LC35	-	-	163	-	-
1970-S245	2440658.76	1970 Mar 13 0618	Aerobee 150	-	CRJ A03.006-1	Electron beam	-	-	-	FC	-	-	-	205	-	-
1970-S246	2440659.65	1970 Mar 14 0334	Aerobee 150	-	MASA 04.328DG	UV	-	-	-	WS	LC35	-	-	164	-	-
1970-S266	2440671.70	1970 Mar 26 0444	Aerobee 150 MI	17	MASA 04.309UA	JHU Aurora 8	-	-	-	FC	-	-	-	163	-	-
1970-S297	2440690.02	1970 Apr 13 1234	Aerobee 150	-	MASA 04.321UA	-	-	-	-	WS	LC35	-	-	200?	-	-
1970-S331	2440700.87	1970 Apr 24 0853	Aerobee 150	-	RF3.30	CAL XR 5 [Aer170?]	-	-	-	WS	LC35	-	-	274	-	-
1970-S336	2440704.88	1970 Apr 28 0900	Aerobee 150	-	MASA 04.326NA	Luster	-	-	-	FC	-	-	-	127	-	-
1970-S340	2440708.16	1970 May 1 1553	Aerobee 150	-	MASA 04.327UA	Luster	-	-	-	FC	-	-	-	128	-	-
1970-S355	2440718.32	1970 May 11 1942	Aerobee 150	-	MEL ME3.211	-	-	-	-	FC	-	-	-	188	-	-
1970-S368	2440733.03	1970 May 25 0800	Aerobee 150	-	MASA 04.316NG	-	-	-	-	W00	LC35	-	-	200?	-	-
1970-S369	2440736.07	1970 May 26 1207	Aerobee 150	-	MASA 04.301UG	-	-	-	-	W00	LAR	-	-	200?	-	-
1970-S375	2440740.26	1970 Jun 2 1800	Aerobee 150	-	MASA 04.302UG	-	-	-	-	W00	LAR	-	-	200?	-	-
1970-S384	2440739.70	1970 Jun 2 0447	Aerobee 150	-	MASA 04.271UG	-	-	-	-	W00	LC35	-	-	165	-	-
1970-S386	2440739.79	1970 Jun 2 0700	Aerobee 150	-	MASA 04.311UA	JHU UVT F5 (Jupiter)	-	-	-	WS	LC35	-	-	200?	-	-
1970-S394	2440753.16	1970 Jun 15 1555	Aerobee 150	-	RF3.31	-	-	-	-	WS	LC35	-	-	150	-	-
1970-S400	2440760.11	1970 Jun 22 1445	Aerobee 150	-	MASA 04.323US	-	-	-	-	WS	LC35	-	-	200?	-	-
1970-S414	2440769.75	1970 Jul 2 0601	Aerobee 150 MII	20	MASA 04.289UG	-	Orb Cal	-	-	WS	LC35	-	-	168	-	-
1970-S460	2440794.69	1970 Jul 27 0437	Aerobee 150	-	CRJ A03.903-2	EUV	-	-	-	WS	LC35	-	-	200?	-	-
1970-S481	2440811.27	1970 Aug 13 1902	Aerobee 150	-	MASA 04.200US	-	-	-	-	WS	LC35	-	-	222	-	-
1970-S484	2440812.29	1970 Aug 13 1902	Aerobee 150	-	MASA 04.131UA	MEL ME3.247 (S082)	-	-	-	WS	LC35	-	-	186	-	-
1970-S564	2440888.18	1970 Oct 28 1623	Aerobee 150	-	MASA 04.285CS	Structure	-	-	-	WS	LC35	-	-	200?	-	-
1970-S624	2440915.36	1970 Nov 24 2045	Aerobee 150	-	MASA 04.267UG	-	-	-	-	WS	LC35	-	-	200?	-	-
1970-S624	2440922.81	1970 Dec 2 0730	Aerobee 150	-	MASA 04.260GG	-	-	-	-	WS	LC35	-	-	200?	-	-
1971-S580	2440974.60	1971 Jan 25 0230	Aerobee 150	-	MASA 04.318UA	JHU UVT F6 (Venus)	-	-	-	WS	LC35	-	-	160?	-	-
1971-S586	2440976.96	1971 Jan 25 1130	Aerobee 150	-	MASA 04.249NA	Luster (Encake)	-	-	-	WS	LC35	-	-	200?	-	-
1971-S513	2441007.11	1971 Feb 24 1440	Aerobee 150	-	RF3.32	Venus Lyalpha	-	-	-	WS	LC35	-	-	160	-	-
1971-S519	2441011.99	1971 Mar 1 1140	Aerobee 150	-	MEL ME3.245	-	-	-	-	WS	LC35	-	-	200?	-	-
1971-S528	2441037.61	1971 Mar 27 0244	Aerobee 150	-	MASA 04.352GG	-	-	-	-	WS	LC35	-	-	200?	-	-
1971-S528	2441072.86	1971 May 1 0900	Aerobee 150	-	MASA 04.303NG	-	-	-	-	WS	LC35	-	-	200?	-	-
1971-S529	2441090.81	1971 May 19 0730	Aerobee 150	-	RF3.37	-	-	-	-	WS	LC35	-	-	179	-	-
1971-S531	2441099.90	1971 May 28 0940	Aerobee 150 MI	-	MASA 04.324US	-	-	-	-	WS	LC35	-	-	200?	-	-
1971-S530	2441117.22	1971 Jun 14 1717	Aerobee 150	-	MASA 04.237NA	-	-	-	-	WS	LC35	-	-	200?	-	-
1971-S535	2441126.31	1971 Jun 22 1920	Aerobee 150	-	MASA 04.257NA	-	-	-	-	WS	LC35	-	-	200?	-	-
1971-S552	2441133.22	1971 Jun 30 1110	Aerobee 150	-	MASA 04.259GS	-	-	-	-	WS	LC35	-	-	200?	-	-
1971-S526	2441240.60	1971 Oct 16 0231	Aerobee 150	-	CRJ A03.910-1	IR Airglow	-	-	-	WS	LC35	-	-	218	-	-
1971-S555	2441265.29	1971 Nov 9 1900	Aerobee 150	-	CRJ A03.062-4	XUV	-	-	-	WS	LC35	-	-	218	-	-
1971-S555	2441265.29	1971 Nov 9 1900	Aerobee 150	-	CRJ A03.062-3	XUV	-	-	-	WS	LC35	-	-	219	-	-
1971-S559	2441272.16	1971 Nov 16 1945	Aerobee 150	-	RF3.36	-	-	-	-	WS	LC35	-	-	200?	-	-
1972-S595	2441379.27	1972 Mar 2 1027.35	Aerobee 150	-	MEL ME3.218	-	-	-	-	WS	LC35	-	-	182	-	-
1972-S514	2441389.82	1972 Mar 31 0310	Aerobee 150	-	MASA 04.320UA	JHU Aurora 9	-	-	-	FC	-	-	-	161	-	-
1972-S514	2441406.68	1972 Mar 31 0310	Aerobee 150	-	MEL ME3.220UA	UH Aeronomy	-	-	-	WS	LC35	-	-	200?	-	-
1972-S517	2441408.19	1972 Apr 1 0327	Aerobee 150	-	MASA 04.268UA	-	-	-	-	WS	LC35	-	-	200?	-	-
1972-S517	2441430.33	1972 Apr 21 1513	Aerobee 150	-	MASA 04.268UA	-	-	-	-	WS	LC35	-	-	200?	-	-
1972-S546	2441490.73	1972 Jun 24 0201	Aerobee 150	-	MASA 04.320UA	-	-	-	-	WS	LC35	-	-	200?	-	-
1972-S546	2441740.73	1972 Feb 27 0535	Aerobee 150	-	CRJ A03.911-1	-	-	-	-	FC	-	-	-	180	-	-
1972-S159	2441799.70	1973 Apr 29 0433	Aerobee 150	-	MASA 04.258UA	UV Absorption	-	-	-	WS	LC35	-	-	111	-	-
1972-S159	2441804.19	1973 Apr 29 1532	Aerobee 150A	-	MASA 04.258UA	-	-	-	-	WS	LC35	-	-	111	-	-
1972-S173	2441904.95	1973 May 20 1032	Aerobee 150	-	MEL ME3.211-1	Reemstrahlung	-	-	-	WS	LC35	-	-	168	-	-
1974-S529	2442029.85	1974 Aug 30 0331	Aerobee 150	-	MASA 04.324UA	JHU Aurora 10	-	-	-	FC	LC36	-	-	229	-	-
1976-S106	2442029.99	1974 Jun 30 2119	Aerobee 150A MII	-	MEL ME3.245	JHU Aurora 10	-	-	-	WS	LC35	-	-	172	-	-
1976-S106	2442037.93	1974 Jun 30 2119	Aerobee 150	-	CRJ A03.103-1	Dustier for Backs.	-	-	-	WS	LC35	-	-	180	-	-
1976-S106	2442037.93	1974 Jun 30 2119	Aerobee 150	-	CRJ A03.103-1	Solar XUV/UV	-	-	-	WS	LC35	-	-	180	-	-
1976-S106	2442037.93	1974 Jun 30 2119	Aerobee 150	-	CRJ A03.103-1	Solar XUV/UV	-	-	-	WS	LC35	-	-	180	-	-
1976-S106	2442037.93	1974 Jun 30 2119	Aerobee 150	-	CRJ A03.103-1	Solar XUV/UV	-	-	-	WS	LC35	-	-	180	-	-
1976-S106	2442037.93	1974 Jun 30 2119	Aerobee 150	-	CRJ A03.103-1	Solar XUV/UV	-	-	-	WS	LC35	-	-	180	-	-
1976-S106	2442037.93	1974 Jun 30 2119	Aerobee 150	-	CRJ A03.103-1	Solar XUV/UV	-	-	-	WS	LC35	-	-	180	-	-
1976-S106	2442037.93	1974 Jun 30 2119	Aerobee 150	-	CRJ A03.103-1	Solar XUV/UV	-	-	-	WS	LC35	-	-	180	-	-
1976-S106	2442037.93	1974 Jun 30 2119	Aerobee 150	-	CRJ A03.103-1	Solar XUV/UV	-	-	-	WS	LC35	-	-	180	-	-
1976-S106	2442037.93	1974 Jun 30 2119	Aerobee 150	-	CRJ A03.103-1	Solar XUV/UV	-	-	-	WS	LC35	-	-	180	-	-
1976-S106	2442037.93	1974 Jun 30 2119	Aerobee 150	-	CRJ A03.103-1	Solar XUV/UV	-	-	-	WS	LC35	-	-	180	-	-
1976-S106	2442037.93	1974 Jun 30 2119	Aerobee 150	-	CRJ A03.103-1	Solar XUV/UV	-	-	-	WS	LC35	-	-	180	-	-
1976-S106	2442037.93	1974 Jun 30 2119	Aerobee 150	-	CRJ A03.103-1	Solar XUV/UV	-	-	-	WS	LC35	-	-	180	-	-
1976-S106	2442037.93	1974 Jun 30 2119	Aerobee 150	-	CRJ A03.103-1	Solar XUV/UV	-	-	-	WS	LC35	-	-	180	-	-
1976-S106	2442037.93	1974 Jun 30 2119	Aerobee 150	-	CRJ A03.103-1	Solar XUV/UV	-	-	-	WS	LC35	-	-	180	-	-
1976-S106	2442037.93	1974 Jun 30 2119	Aerobee 150	-	CRJ A03.103-1	Solar XUV/UV	-	-	-	WS	LC35	-	-	180	-	-
1976-S106	2442037.93	1974 Jun 30 2119	Aerobee 150	-	CRJ A03.103-1	Solar XUV/UV	-	-	-	WS	LC35	-	-	180	-	-
1976-S106	2442037.93	1974 Jun 30 2119	Aerobee 150	-	CRJ A03.103-1	Solar XUV/UV	-	-	-	WS	LC35	-	-	180	-	-
1976-S106	2442037.93	1974 Jun 30 2119	Aerobee 150	-	CRJ A03.103-1	Solar XUV/UV	-	-	-	WS	LC35	-	-	180	-	-
1976-S106	2442037.93	1974 Jun 30 2119	Aerobee 150	-	CRJ A03.103-1	Solar XUV/UV	-	-	-	WS	LC35	-	-	180	-	-
1976-S106	2442037.93	1974 Jun 30 2119	Aerobee 150	-	CRJ A03.103-1	Solar XUV/UV	-	-	-	WS	LC35	-	-	180	-	-
1976-S106	2442037.93	1974 Jun 30 2119	Aerobee 150	-	CRJ A03.103-1	Solar XUV/UV	-	-	-	WS	LC35	-	-	180	-	-
1976-S106	2442037.93	1974 Jun 30 2119	Aerobee 150	-	CRJ A03.103-1	Solar XUV/UV	-	-	-	WS	LC35	-	-	180	-	-
1976-S106	2442037.93	1974 Jun 30 2119	Aerobee 150	-	CRJ A03.103-1	Solar XUV/UV	-	-	-	WS	LC35	-	-	180	-	-
1976-S106	2442037.93	1974 Jun 30 2119	Aerobee 150	-	CRJ A03.103-1	Solar XUV/UV	-	-	-	WS	LC35	-	-	180	-	-
1976-S106	2442037.93	1974 Jun 30 2119	Aerobee 150	-	CRJ A03.103-1	Solar XUV/UV	-	-	-	WS	LC35	-	-	180	-	-
1976-S106	2442037.93	1974 Jun 30 2119	Aerobee 150	-	CRJ A03.103-1	Solar XUV/UV	-	-	-	WS	LC35	-	-	180	-	-
1976-S106	2442037.93	1974 Jun 30 2119	Aerobee 150	-	CRJ A03.103-1	Solar XUV/UV	-	-	-	WS	LC35	-	-	180	-	-
1976-S106	2442037.93	1974 Jun 30 2119	Aerobee 150	-	CRJ A03.103-1	Solar XUV/UV	-	-	-	WS	LC35	-	-	180	-	-
1976-S106	2442037.93	1974 Jun 30 2119	Aerobee 150	-	CRJ A03.103-1	Solar XUV/UV	-	-	-	WS	LC35	-	-	180	-	-
1976-S106	2442037.93	1974 Jun 30 2119	Aerobee 150	-	CRJ A03.103-1	Solar XUV/UV	-	-	-	WS	LC35	-	-	180	-	-
1976-S106	2442037.93	1974 Jun 30 2119	Aerobee 150	-	CRJ A03.103-1	Solar XUV/UV	-	-	-	WS	LC35	-	-	180	-	-
1976-S106	2442037.93	1974 Jun 30 2119	Aerobee 150													



Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	OrbPay	Agency	Launch_Code	Group	Category	LTCite	Cite	Notes
1947-A18	2432453.50	1947 Sep 25	Aerobee HTV-n-8	-	A1	0.000	APL	SS	APL/	Test	Howell	-	-
1947-A20	2432460.50	1947 Oct 2	Aerobee HTV-n-8	-	A2	0.000	APL	SS	APL/	Test	Howell	-	-
1947-A27	2432469.50	1947 Oct 31	Aerobee HTV-n-8	-	A3	0.000	APL	SS	APL/	Test	Howell	-	-
1947-A06	2432514.22	1947 Mar 24 1720	Aerobee HTV-n-8	-	A4	0.000	APL	SS	APL/VanAllen	CR	Howell	-	PhysRev75, 57
1948-S03	2432516.45	1948 Mar 5 2251	Aerobee HTV-n-8	-	A5	0.000	APL	SS	APL/VanAllen	CR	Howell	-	-
1948-S05	2432565.40	1948 Apr 13 2141	Aerobee HTV-n-8	-	A6	0.000	APL	SS	APL/Singer	Magneto-spheric	Howell	-	-
1948-S08	2432759.20	1948 Jul 26 1647	Aerobee HTV-n-8	-	A7	0.000	APL	SS	APL/Holidays	Earth Imaging	Howell	-	-
1948-S11	2432769.57	1948 Aug 6 0137	Aerobee HTV-n-8	-	A8	0.000	NRL	SS	NRL/Havens LaGov	Aeron/Solar UV	Howell	-	-
1948-S19	2432857.51	1948 Nov 2 0015	Aerobee HTV-n-8	-	A8	0.000	APL	SS	APL/NRL/VanAllen	Particls/Solar X	Howell	-	-
1948-S25	2432895.44	1948 Dec 9 2238	Aerobee XASR-SC-1	-	SC 1	0.000	SC2L	SS	UHI/Michols	Aeronomy	Howell	-	-
1949-S01	2432985.76	1949 Jan 29 0617	Aerobee HTV-n-8	-	NRL 2	0.000	NRL	SS	NRL/Solar UV, X	Ionos/Solar X	Howell	-	-
1949-A04	2432989.28	1949 Feb 1 1838	Aerobee HTV-n-8	-	NRL 3	0.000	NRL	SS	NRL/Solar UV, X	Solar UV, X	Howell	-	-
1949-A06	2432976.50	1949 Mar 1	Aerobee HTV-n-8	-	A9	0.000	APL	SS	APL/VanAllen	Test	Howell	-	PhysRev75, 50
1949-S04	2432983.47	1949 Mar 17 2520	Aerobee HTV-n-8	-	A10	0.000	APL	SS	APL/VanAllen	Ionospheric	Howell	-	-
1949-S06	2432988.22	1949 Mar 22 1720	Aerobee HTV-n-8	-	A11	0.000	APL	SS	APL/VanAllen	Ionospheric	Howell	-	-
1949-A07	2433000.13	1949 Mar 24 1514	Aerobee HTV-n-8	-	A12	0.000	APL	SS	APL/VanAllen	Ionospheric	Howell	-	-
1949-H03	2433070.05	1949 Jun 2 1310	Aerobee XASR-SC-1	-	SC 2	0.000	SC2L	SS	UHI/Michols	Aeronomy	Howell	-	-
1949-S16	2433062.59	1949 Jun 15 0203	Aerobee HTV-n-8	-	NRL 5	0.000	NRL	SS	NRL/Johnson, Purcell	Solar UV	Howell	-	-
1949-S17	2433094.99	1949 Jun 17 1150	Aerobee HTV-n-8	-	A13	0.000	APL	SS	APL/	Particls/Solar X/Aeron	Howell	-	-
1949-H04	2433091.47	1949 Jun 23 2321	Aerobee XASR-SC-1	-	A13	0.000	APL	SS	APL/NRL/VanAllen, Singer	Particls/Solar X/Aeron	Howell	-	-
1949-H06	2433119.17	1949 Jul 21 1001	Aerobee XASR-SC-1	-	A14	0.000	SC2L	SS	UHI/Michols	Aeronomy	Howell	-	-
1949-H08	2433180.21	1949 Sep 20 1703	Aerobee XASR-SC-1	-	SC 4	0.000	SC2L	SS	UHI/Michols	Aeronomy	Howell	-	-
1949-S45	2433253.43	1949 Dec 2 2220	Aerobee XASR-SC-1	-	USAF 1	0.000	AFCHL	SS	AFCHL/BU/WADC/	Solar X/Aeron/Imaging	Howell	-	-
1949-H08	2433257.27	1949 Dec 6 1832	Aerobee XASR-SC-1	-	SC 3	0.000	SC2L	SS	UHI/Michols	Aeronomy	Howell	-	-
1949-H09	2433257.51	1949 Dec 7 0016	Aerobee XASR-SC-1	-	SC 7	0.000	SC2L	SS	UHI/Michols	Aeronomy	Howell	-	-
1949-A28	2433266.22	1949 Dec 15 1710	Aerobee XASR-SC-1	-	USAF 2	0.000	AFCHL	SS	AFCHL/ON	Solar X/Aeron	Howell	-	-
1960-H02	2433300.47	1960 Jan 15 2346	Aerobee HTV-n-10	-	A15	0.000	APL	SS	APL/VanAllen	Particls	Howell	-	PhysRev64, 572
1960-S01	2433327.47	1960 Jan 16 2317	Aerobee HTV-n-10	-	NRL 4	0.000	NRL	SS	NRL/Perlow	Particls	Howell	-	-
1960-H04	2433394.54	1960 Feb 14 2314	Aerobee XASR-SC-1	-	SC 9	0.000	SC2L	SS	UHI/Jones, L	Aeronomy	Howell	-	-
1960-A11	2433395.36	1960 Mar 4 0036	Aerobee XASR-SC-1	-	SC 6	0.000	SC2L	SS	UHI/Jones, L	Aeronomy	Howell	-	-
1960-S03	2433397.55	1960 Apr 26 0111	Aerobee XASR-SC-1	-	USAF 3	0.000	AFCHL	SS	AFCHL/NIU/	Solar X/UV?	Howell	-	-
1960-H08	2433414.02	1960 May 12 1230	Aerobee HTV-n-10	-	AL1	0.000	APL	SS	UHI/VanAllen?	Aeronomy	Howell	-	-
1960-A28	2433435.21	1960 Jun 2 1707	Aerobee HTV-n-1	-	USAF 4	0.000	AFCHL	SS	AFCHL/	Opt. Astronomy	Howell	-	JAppPhys25, 161
1960-S06	2433453.18	1960 Jun 20 1838	Aerobee HTV-n-1	-	USAF 5	0.000	AFCHL	SS	AFCHL/	Aeronomy	Howell	-	JOR61, 45
1960-H07	2433477.66	1960 Jul 14 0839	Aerobee XASR-SC-1	-	SC 8	0.000	SC2L	SS	UHI/VanAllen?	Aeronomy	Howell	-	-
1960-A31	2433497.49	1960 Aug 3 2352	Aerobee HTV-n-10	-	NRL 6	0.000	NRL	SS	NRL/	Solar UV, X	Howell	-	-
1960-S07	2433511.16	1960 Aug 17 1948	Aerobee HTV-n-10	-	AL3	0.000	APL	SS	NRL/Ganges	Aeronomy	Howell	-	-
1960-S11	2433567.32	1960 Oct 12 1966	Aerobee XASR-SC-2	-	USAF 7	0.000	AFCHL	SS	AFCHL/BU/	Imaging	Howell	-	-
1960-S10	2433571.67	1960 Oct 19 0430	Aerobee XASR-SC-2	-	SC 10	0.000	SC2L	SS	UHI/Jones, L	Aeronomy	Howell	-	-
1960-S12	2433582.69	1960 Oct 27 1330	Aerobee XASR-SC-2	-	SC 12	0.000	SC2L	SS	UHI/Jones, L	Aeronomy	Howell	-	-
1960-S11	2433585.06	1960 Oct 27 1330	Aerobee XASR-SC-2	-	SC 13	0.000	SC2L	SS	UHI/Jones, L	Aeronomy	Howell	-	-
1960-S19	2433589.19	1960 Nov 2 1629	Aerobee XASR-SC-2	-	USAF 8	0.000	AFCHL	SS	UHI/BNV/	Aeronomy	Howell	-	-
1960-A21	2433597.47	1960 Dec 11 0404	Aerobee XASR-SC-2	-	SC 15	0.000	SC2L	SS	UHI/Jones, L	Aeronomy	Howell	-	JOR61, 45
1960-M25	2433627.61	1960 Dec 15 0910	Aerobee XASR-SC-2	-	SC 16	0.000	SC2L	SS	UHI/Jones, L	Aeronomy	Howell	-	JOR61, 45
1960-M28	2433627.88	1960 Dec 15 1926	Aerobee XASR-SC-2	-	SC 18	0.000	SC2L	SS	UHI/Jones, L	Aeronomy	Howell	-	-
1960-S26	2433658.97	1960 Dec 15 1852	Aerobee HTV-n-1	-	USAF 9	0.000	AFCHL	SS	UHI/Sicinski?	Aeronomy	Howell	-	-
1960-S27	2433659.29	1960 Dec 15 1852	Aerobee XASR-SC-2	-	SC 17	0.000	AFCHL	SS	UHI/Jones, L	Aeronomy	Howell	-	-
1961-S01	2433669.45	1961 Jan 25 2245	Aerobee HTV-n-10	-	A19	0.000	APL	SS	APL/	Aeronomy	Howell	-	-
1961-S02	2433672.71	1961 Jan 25 1500	Aerobee HTV-n-10	-	A20	0.000	APL	SS	APL/	Aeronomy	Howell	-	-
1961-S08	2433684.22	1961 Feb 6 1720	Aerobee HTV-n-10	-	A21	0.000	APL	SS	APL/	Imaging	Howell	-	-
1961-S08	2433724.47	1961 Feb 28 2314	Aerobee HTV-n-1	-	USAF 10	0.000	AFCHL	SS	AFCHL/	Imaging	Howell	-	-
1961-A10	2433749.23	1961 Apr 12 1726	Aerobee HTV-n-1	-	USAF 11	0.000	AFCHL	SS	UCB/	Solar UV	Howell	-	-
1961-M04	2433755.28	1961 Apr 18 1829	Aerobee HTV-n-1	-	USAF 12	0.000	AFCHL	SS	UHI/	Biolog	Howell	-	-
1961-A24	2433796.32	1961 Apr 29 1946	Aerobee HTV-n-1	-	USAF 13	0.000	AFCHL	SS	UHI/	Biolog	Howell	-	-
1961-S09	2433805.51	1961 May 2 0011	Aerobee XASR-SC-1	-	USAF 14	0.000	AFCHL	SS	AFCHL/	Biolog	Howell	-	-
1961-A28	2433805.55	1961 Jun 8 0118	Aerobee XASR-SC-1	-	SC 19	0.000	SC2L	SS	UHI/Jones, L	Solar X/Aeron	Howell	-	-
1961-M05	2433806.76	1961 Jun 9 0611	Aerobee XASR-SC-1	-	SC 18	0.000	SC2L	SS	UHI/Jones, L	Aeronomy	Howell	-	JOR61, 45
1961-M07	2433863.18	1961 Jun 25 1626	Aerobee HTV-n-1	-	USAF 15	0.000	AFCHL	SS	AFCHL/	Aeronomy	Howell	-	-
1961-S26	2433866.19	1961 Jul 7 6336	Aerobee HTV-n-1	-	USAF 16	0.000	AFCHL	SS	AFCHL/	Aeronomy	Howell	-	-
1961-M09	2433889.44	1961 Aug 30 2240	Aerobee HTV-n-1b	-	USAF 17	0.000	AFCHL	SS	BU/	Test	Howell	-	-
1961-M08	2433902.98	1961 Sep 13 1137	Aerobee HTV-n-1	-	USAF 18	0.000	AFCHL	SS	AFCHL/HADC/	Test	Howell	-	-
1961-H10	2433910.10	1961 Sep 27 0031	Aerobee HTV-n-1	-	USAF 19	0.000	AFCHL	SS	UHI/Schulte	Aeronomy	Howell	-	-
1961-M11	2433916.50	1961 Sep 27 0606	Aerobee XASR-SC-1	-	USAF 19	0.000	AFCHL	SS	UHI/	Biolog	Howell	-	-
1961-M13	2433937.26	1961 Oct 17 1817	Aerobee XASR-SC-1	-	SC 21	0.000	SC2L	SS	UHI/	Ionos	Howell	-	-
1961-M12	2433951.91	1961 Nov 1 0945	Aerobee HTV-n-1a	-	USAF 20	0.000	AFCHL	SS	BU/	Ionos	Howell	-	-
1961-S45	2433953.82	1961 Nov 3 0035	Aerobee XASR-SC-1	-	SC 20	0.000	SC2L	SS	SC2L/	Aeronomy	Howell	-	JOR61, 45
1962-A20	2434042.36	1962 Jan 30 2045	Aerobee XASR-SC-1	-	SC 22	0.000	SC2L	SS	SC2L/	Aeronomy	Howell	-	-
1962-S02	2434062.21	1962 Feb 19 1700	Aerobee HTV-n-1a	-	USAF 21	0.000	AFCHL	SS	AFCHL/UIT/	Ionos	Howell	-	-
1962-S02	2434072.11	1962 Feb 29 1440	Aerobee HTV-n-10	-	NRL 7	0.000	NRL	SS	NRL/	Solar/CR	Howell	-	-
1962-S03	2434125.23	1962 Feb 29 1728	Aerobee HTV-n-1	-	USAF 23	0.000	AFCHL	SS	AFCHL/UIT/	Ionos	Howell	-	-
1962-S04	2434133.06	1962 Apr 22 1728	Aerobee HTV-n-10	-	USAF 24	0.000	AFCHL	SS	BU/	Ionos	Howell	-	-
1962-S05	2434134.15	1962 Apr 30 1330	Aerobee HTV-n-1	-	NRL 8	0.000	NRL	SS	NRL/Byram	Solar UV/CR	Howell	-	PhysRev91, 1278
1962-S06	2434134.12	1962 May 1 1542	Aerobee HTV-n-10	-	NRL 9	0.000	NRL	SS	AFCHL/BU/	Solar UV	Howell	-	PhysRev91, 1278
1962-S07	2434138.07	1962 May 5 1344	Aerobee XASR-SC-1	-	SC 25	0.000	SC2L	SS	NRL/Byram	Solar X UV	Howell	-	PhysRev91, 1278
1962-M01	2434147.55	1962 May 15 0115	Aerobee XASR-SC-1	-	NRL 10	0.000	NRL	SS	NRL/Byram	Solar X UV/CR	Howell	-	UM-HR-2
1962-S08	2434152.59	1962 May 20 0207	Aerobee XASR-SC-1	-	SC 23	0.000	SC2L	SS	UHI/Jones, L	Aeronomy	Howell	-	-
1962-M02	2434154.14	1962 May 21 1515	Aerobee HTV-n-1	-	SC 24	0.000	SC2L	SS	UHI/Jones, L	Aeronomy	Howell	-	-
1962-S10	2434182.24	1962 May 21 1515	Aerobee HTV-n-1	-	USAF 26	0.000	AFCHL	SS	UHI/	Biolog	Howell	-	-
1962-S11	2434194.11	1962 Jun 18 1750	Aerobee HTV-n-1	-	USAF 27	0.000	AFCHL	SS	UHI/	Solar UV	Howell	-	-
1962-A143	2434251.29	1962 Jun 30 1432	Aerobee HTV-n-1	-	USAF 28	0.000	AFCHL	SS	AFCHL/UIT/	Solar UV	Howell	-	-
1962-S29	2434259.12	1962 Sep 3 1449	Aerobee HTV-n-1a	-	NRL 11	0.000	NRL	SS	NRL/	Ionos	Howell	-	-
1962-S31	2434280.66	1962 Sep 25 0350	Aerobee XASR-SC-1	-	SC 25	0.000	SC2L	SS	NRL/	Solar UV/X	Howell	-	-
1962-S32	2434296.10	1962 Oct 10 1424	Aerobee HTV-n-1	-	USAF 30	0.000	AFCHL	SS	AFCHL/DENV/	Aeronomy	Howell	-	-

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	OrbPay	Agency	Launch_Code	Group	Category	LTCite	Cite	Notes
1952-S34	2434308.11	1952 Oct 22 1435	Aerobee RTV-A-1	-	USAF 31	0.000	AFCRRL	SS	URL/	Aeronomy	Newell	-	-
1952-S33	2434308.66	1952 Oct 23 0945	Aerobee XASR-SC-2	-	SC 26	0.000	SCEL	SS	SCEL/	Aeronomy	J0661,45	-	-
1952-M09	2434323.21	1952 Nov 6 1556	Aerobee RTV-A-1	-	USAF 32	0.000	AFCRRL	SS	AFCRRL/	Aeronomy SB	Newell	-	-
1952-S39	2434388.49	1952 Dec 11 2347	Aerobee XASR-SC-1	-	USAF 33	0.000	SCEL	SS	URL/Jones, I	Aeronomy	Newell/UM-FS	UM-HA-7	-
1952-S39	2434389.32	1952 Dec 12 1938	Aerobee RTV-A-1	-	USAF 33	0.000	AFCRRL	SS	UCO/Rease	Solar UV	PhysRev90,156	-	-
1953-S01	2434419.38	1953 Feb 12 0709	Aerobee RTV-A-10	-	NRL 12	0.000	NRL	SS	NRL/Townsend	Aeronomy/CR	Newell	-	-
1953-S01	2434420.80	1953 Feb 12 0709	Aerobee RTV-A-10	-	NRL 13	0.000	NRL	SS	NRL/Townsend	Aeronomy/CR	Newell	-	-
1953-S04	2434426.78	1953 Feb 18 1742	Aerobee XASR-SC-2	-	SC 27	0.000	SCEL	SS	AFCRRL/	Aeronomy	AnnaleeGeo17,100	-	-
1953-S04	2434427.24	1953 Feb 18 1742	Aerobee RTV-A-1a	-	USAF 34	0.000	AFCRRL	SS	AFCRRL/	Test	Newell	J0661,45	-
1953-S10	2434462.31	1953 Apr 14 1947	Aerobee RTV-A-1a	-	SC 30	0.000	AFCRRL	SS	URL/Jones, I	Aeronomy	UM-HA-6/UM-FS	-	-
1953-S10	2434462.31	1953 Apr 14 1947	Aerobee XASR-SC-2	-	SC 30	0.000	AFCRRL	SS	AFCRRL/	Aeronomy	Newell/UM-HA-6	-	-
1953-S12	2434461.93	1953 Apr 24 1019	Aerobee XASR-SC-2	-	USAF 36	0.000	SCEL	SS	AFCRRL/	Aeronomy SB	Newell	-	-
1953-S18	2434518.09	1953 May 20 1404	Aerobee RTV-A-1a	-	USAF 37	0.000	AFCRRL	SS	AFCRRL/	Aeronomy SB	Newell	-	-
1953-S19	2434519.16	1953 May 21 1547	Aerobee RTV-A-1a	-	USAF 38	0.000	AFCRRL	SS	AFCRRL/	Aeronomy SB	Newell	-	-
1953-S22	2434565.30	1953 Jun 26 1910	Aerobee RTV-A-1a	-	USAF 39	0.000	AFCRRL	SS	AFCRRL/	Aeronomy SB	Newell	-	-
1953-S23	2434560.24	1953 Jul 1 1752	Aerobee RTV-A-1a	-	USAF 40	0.000	AFCRRL	SS	AFCRRL/	Aeronomy SB	Newell	-	-
1953-S25	2434573.15	1953 Jul 14 1530	Aerobee RTV-A-1a	-	USAF 41	0.000	AFCRRL	SS	AFCRRL/	Aeronomy SB	Newell	-	-
1953-S25	2434573.15	1953 Jul 14 1530	Aerobee XASR-SC-2	-	USAF 41	0.000	AFCRRL	SS	AFCRRL/	Aeronomy SB	Newell	-	-
1953-S31	2434621.71	1953 Sep 1 0905	Aerobee XASR-SC-1	-	SC 32	0.000	SCEL	SS	URL/Jones, I	Solar	J0661,45	-	-
1953-S35	2434626.73	1953 Sep 5 0536	Aerobee XASR-SC-1	-	SC 35	0.000	SCEL	SS	AFCRRL/UCO/	Aeronomy	J0661,45	-	-
1953-S38	2434660.37	1953 Sep 29 2050	Aerobee RTV-A-1a	-	USAF 42	0.000	AFCRRL	SS	AFCRRL/UCO/	Aeronomy	J0661,45	-	-
1953-S40	2434668.27	1953 Oct 7 1700	Aerobee RTV-A-1a	-	USAF 43	0.000	AFCRRL	SS	AFCRRL/UCO/	Aeronomy	J0661,45	-	-
1953-S40	2434668.27	1953 Oct 7 1700	Aerobee XASR-SC-1	-	USAF 43	0.000	AFCRRL	SS	AFCRRL/UCO/	Aeronomy	J0661,45	-	-
1953-S89	2434685.26	1953 Nov 3 1815	Aerobee RTV-A-1a	-	USAF 45	0.000	AFCRRL	SS	AFCRRL/UCO/	Aeronomy	J0661,45	-	-
1953-S89	2434685.26	1953 Nov 3 1815	Aerobee XASR-SC-1	-	USAF 45	0.000	AFCRRL	SS	AFCRRL/UCO/	Aeronomy	J0661,45	-	-
1953-S84	2434701.44	1953 Nov 19 2240	Aerobee RTV-A-10	-	NRL 14	0.000	NRL	SS	AFCRRL/UCO/	Aeronomy	J0661,45	-	-
1953-S86	2434707.16	1953 Nov 25 1546	Aerobee RTV-A-10	-	NRL 15	0.000	NRL	SS	NRL/Byram, Chubb	Aeronomy	J0661,45	-	-
1953-S88	2434713.15	1953 Dec 1 1530	Aerobee RTV-A-10	-	NRL 16	0.000	NRL	SS	NRL/Byram	Aeronomy	J0661,45	-	-
1953-S88	2434713.15	1953 Dec 1 1530	Aerobee XASR-SC-2	-	NRL 16	0.000	NRL	SS	NRL/Byram	Aeronomy	J0661,45	-	-
1954-S02	2434776.27	1954 Feb 2 1835	Aerobee RTV-A-10	-	NRL 20	0.000	NRL	SS	NRL/Townsend?	Aeronomy	Newell/UM-FS	-	-
1954-S08	2434862.38	1954 Apr 9 2112	Aerobee RTV-A-10	-	NRL 18	0.000	NRL	SS	NRL/Townsend?	Aeronomy	Newell	-	-
1954-S10	2434862.38	1954 Apr 9 2112	Aerobee XASR-SC-2	-	NRL 18	0.000	NRL	SS	NRL/Townsend?	Aeronomy	Newell	-	-
1954-S13	2434874.12	1954 Apr 10 0900	Aerobee RTV-A-1a	-	USAF 46	0.000	AFCRRL	SS	AFCRRL/UCO/	Aeronomy	Newell	-	-
1954-S35	2434896.71	1954 Jun 11 1500	Aerobee RTV-A-1a	-	USAF 47	0.000	AFCRRL	SS	AFCRRL/UCO/	Aeronomy	Newell	-	-
1954-S35	2434896.71	1954 Jun 11 1500	Aerobee XASR-SC-1	-	USAF 47	0.000	AFCRRL	SS	AFCRRL/UCO/	Aeronomy	Newell	-	-
1954-S43	2434938.08	1954 Aug 11 1725	Aerobee RTV-A-1a	-	USAF 48	0.000	AFCRRL	SS	AFCRRL/UCO/	Aeronomy	Newell	-	-
1954-S52	2434966.23	1954 Aug 11 1725	Aerobee RTV-A-1a	-	USAF 49	0.000	AFCRRL	SS	AFCRRL/UCO/	Aeronomy	Newell	-	-
1954-S52	2434966.23	1954 Aug 11 1725	Aerobee XASR-SC-1	-	USAF 49	0.000	AFCRRL	SS	AFCRRL/UCO/	Aeronomy	Newell	-	-
1954-S76	2435003.10	1954 Sep 17 1431	Aerobee RTV-A-1a	-	USAF 50	0.000	AFCRRL	SS	AFCRRL/UCO/	Aeronomy	Newell	-	-
1954-S76	2435003.10	1954 Sep 17 1431	Aerobee XASR-SC-2	-	USAF 50	0.000	AFCRRL	SS	AFCRRL/UCO/	Aeronomy	Newell	-	-
1955-S06	2435123.26	1955 Oct 5 1815	Aerobee RTV-A-10b	-	USAF 51	0.000	NRL	SS	NRL/Berg	Solar UV	MonthlyRev1955,119	-	-
1955-S06	2435123.26	1955 Oct 5 1815	Aerobee RTV-A-1a	-	USAF 51	0.000	AFCRRL	SS	NRL/Berg	Remote Sensing	MonthlyRev1955,119	-	-
1955-S18	2435146.29	1955 Jan 22 0954	Aerobee RTV-A-1a	-	USAF 52	0.000	AFCRRL	SS	AFCRRL/Edwards	Aeronomy	UpperAirSummary	-	-
1955-S18	2435146.29	1955 Jan 22 0954	Aerobee XASR-SC-2	-	USAF 52	0.000	AFCRRL	SS	AFCRRL/Edwards	Aeronomy	UpperAirSummary	-	-
1955-S01	2435149.44	1955 Feb 10 2238	Aerobee RTV-A-1a	-	NRL 29	0.000	NRL	SS	AFCRRL/UCO/	Aeronomy	Newell	-	-
1955-S01	2435149.44	1955 Feb 10 2238	Aerobee XASR-SC-2	-	NRL 29	0.000	NRL	SS	AFCRRL/UCO/	Aeronomy	Newell	-	-
1955-S22	2435165.76	1955 Mar 19 0527	Aerobee RTV-A-10c	-	USAF 54	0.000	AFCRRL	SS	NRL/Tousey	Solar	Newell	-	-
1955-S22	2435165.76	1955 Mar 19 0527	Aerobee RTV-A-1a	-	USAF 54	0.000	AFCRRL	SS	NRL/Tousey	Solar	Newell	-	-
1955-S25	2435219.17	1955 Mar 29 1547	Aerobee RTV-A-1a	-	USAF 56	0.000	HADC	SS	AFCRRL/UCO/Jursa	Aeronomy	Newell	-	-
1955-S25	2435219.17	1955 Mar 29 1547	Aerobee XASR-SC-2	-	USAF 56	0.000	HADC	SS	AFCRRL/UCO/Jursa	Aeronomy	Newell	-	-
1955-S24	2435274.55	1955 Apr 21 0156	Aerobee HI	-	USAF 57	0.000	AFCRRL	SS	AFCRRL/	Test	Newell	-	-
1955-S24	2435274.55	1955 Apr 21 0156	Aerobee RTV-A-10-27	-	USAF 57	0.000	AFCRRL	SS	AFCRRL/	Test	Newell	-	-
1955-S26	2435292.68	1955 Jun 23 1210	Aerobee RTV-A-10	-	NRL 23	0.000	NRL	SS	NRL/Hegppar, Holmes	Ionos	Newell	-	-
1955-S26	2435292.68	1955 Jun 23 1210	Aerobee XASR-SC-2	-	NRL 23	0.000	NRL	SS	NRL/Hegppar, Holmes	Ionos	Newell	-	-
1955-S63	2435296.79	1955 Jul 6 0839	Aerobee RTV-A-10a	-	NRL 27	0.000	NRL	SS	NRL/Preesly, Townsend	Aeronomy	Newell	-	-
1955-S67	2435305.04	1955 Jul 25 1330	Aerobee HI	-	USAF 58	0.000	AFCRRL	SS	NRL/Preesly, Townsend	Test/Astron	Newell	-	-
1955-S72	2435305.04	1955 Jul 25 1330	Aerobee RTV-A-10	-	USAF 58	0.000	AFCRRL	SS	NRL/Preesly, Townsend	Test/Astron	Newell	-	-
1955-S06	2435309.16	1955 Sep 30 1500	Aerobee RTV-A-10-27	-	USAF 59	0.000	AFCRRL	SS	AFCRRL/UMT/UCO/	Solar UV	Newell	-	-
1955-S06	2435309.16	1955 Sep 30 1500	Aerobee RTV-A-1a	-	USAF 59	0.000	AFCRRL	SS	AFCRRL/UMT/UCO/	Solar UV	Newell	-	-
1955-S93	2435389.45	1955 Oct 10 0100	Aerobee RTV-A-1a	-	USAF 60	0.000	AFCRRL	SS	AFCRRL/UMT/UCO/	Solar UV	Newell	-	-
1955-S93	2435389.45	1955 Oct 10 0100	Aerobee XASR-SC-2	-	USAF 60	0.000	AFCRRL	SS	AFCRRL/UMT/UCO/	Solar UV	Newell	-	-
1955-S96	2435403.51	1955 Oct 22 0020	Aerobee RTV-A-10c	-	NRL 35	0.000	NRL	SS	NRL/Kupperman, Fridsman	Solar UV/Solar X	Newell	-	-
1955-S96	2435403.51	1955 Oct 22 0020	Aerobee RTV-A-1a	-	NRL 35	0.000	NRL	SS	NRL/Kupperman, Fridsman	Solar UV	Newell	-	-
1955-S101	2435416.15	1955 Nov 4 1830	Aerobee RTV-A-10c	-	NRL 36	0.000	NRL	SS	NRL/Kupperman, Fridsman	Solar UV	Newell	-	-
1955-S101	2435416.15	1955 Nov 4 1830	Aerobee RTV-A-1a	-	NRL 36	0.000	NRL	SS	NRL/Kupperman, Fridsman	Solar UV	Newell	-	-
1955-S102	2435424.89	1955 Nov 17 0915	Aerobee RTV-A-10	-	NRL 25	0.000	NRL	SS	NRL/Kupperman, Fridsman	Meteorites/UV Astron	AJ62,9/J0661,751	-	-
1955-S102	2435424.89	1955 Nov 17 0915	Aerobee XASR-SC-2	-	NRL 25	0.000	NRL	SS	NRL/Kupperman, Fridsman	Meteorites/UV Astron	AJ62,9/J0661,751	-	-
1955-S104	2435441.22	1955 Nov 29 1716	Aerobee HI	-	NRL 24	0.000	NRL	SS	NRL/Kupperman, Fridsman	Ionos	J0661,576	-	-
1955-S104	2435441.22	1955 Nov 29 1716	Aerobee RTV-A-10	-	NRL 24	0.000	NRL	SS	NRL/Kupperman, Fridsman	Ionos	J0661,576	-	-
1955-S107	2435454.71	1955 Dec 13 0500	Aerobee RTV-A-10a	-	NRL 29	0.000	NRL	SS	NRL/Preesly, Townsend	Test	Newell	-	-
1955-S107	2435454.71	1955 Dec 13 0500	Aerobee RTV-A-1a	-	NRL 29	0.000	NRL	SS	NRL/Preesly, Townsend	Test	Newell	-	-
1955-S108	2435455.25	1955 Dec 13 1759	Aerobee RTV-A-10	-	USAF 61	0.000	AFCRRL	SS	NRL/Preesly, Townsend	Test	Newell	-	-
1955-S108	2435455.25	1955 Dec 13 1759	Aerobee XASR-SC-2	-	USAF 61	0.000	AFCRRL	SS	NRL/Preesly, Townsend	Test	Newell	-	-
1956-S18	2435546.86	1956 Mar 12 2115	Aerobee RTV-A-1a	-	USAF 63	0.000	AFCRRL	SS	AFCRRL/brsa, Manno	Ionos/Aeronomy	Newell	J0661,576	-
1956-S18	2435546.86	1956 Mar 12 2115	Aerobee XASR-SC-2	-	USAF 63	0.000	AFCRRL	SS	AFCRRL/brsa, Manno	Ionos/Aeronomy	Newell	J0661,576	-
1956-S22	2435575.69	1956 Mar 12 0205	Aerobee RTV-A-1a	-	USAF 64	0.000	AFCRRL	SS	AFCRRL/brsa, Manno	Ionos/Aeronomy	Newell	J0661,576	-
1956-S22	2435575.69	1956 Mar 12 0205	Aerobee XASR-SC-2	-	USAF 64	0.000	AFCRRL	SS	AFCRRL/brsa, Manno	Ionos/Aeronomy	Newell	J0661,576	-
1956-S40	2435595.42	1956 May 1 2205	Aerobee HI	-	NRL 39	0.000	NRL	SS	NRL/Preesly, Townsend	Test	Newell	-	-
1956-S40	2435595.42	1956 May 1 2205	Aerobee RTV-A-1a	-	NRL 39	0.000	NRL	SS	NRL/Preesly, Townsend				

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	OrbPay	Agency	Launch_Code	Group	Category	LTCite	Cite	Notes
1966-S103	2435798-72	1966 Nov 21 0521:11	Aerobee HI	-	NRL 48 (RV-N-13c)	0.000	NRL	NRL/Meadows,Holmes	Ionos/Auroral	Ionos/Auroral	Mesall	AmaleeGeo17,100	-
1966-S109	2435921-41	1966 Dec 13 2144	Aerobee HI	-	USAF 76	0.000	AFCRN	AFCRN/	Test	Test	Mesall	-	-
1967-S12	2435971-84	1967 Feb 2 0805	Aerobee AJ10-34	-	USAF 76	0.000	AFCRN	AFCRN/Zelkoff,Harmo	Aeronomy release	Aeronomy release	Mesall	J0663,31	-
1967-S107	2435928-70	1967 Mar 29 0451	Aerobee RTV-N-10c	-	NRL 31	0.000	NRL	NRL/Aupperian,Bogges	UV Astronomy	UV Astronomy	Mesall	SM1,599/7N-D-673	-
1967-S24	2435938-14	1967 Apr 9 1519	Aerobee AJ10-25	-	USAF 77	0.000	AFCRN	AFCRN/	Meteorites	Meteorites	Mesall	-	-
1967-S30	2435949-13	1967 Apr 30 1531	Aerobee HI	-	NRL 40 (RV-N-13c)	0.000	NRL	NRL/Pressly,Townsend	Payload test	Payload test	Mesall	-	-
1967-S32	2435962-09	1967 Apr 3 1404	Aerobee HI	-	NRL 41 (RV-N-13c)	0.000	NRL	NRL/Pressly,Townsend	Test/Meteorites	Test/Meteorites	Mesall	-	-
1967-S34	2436008-08	1967 Jun 18 1400	Aerobee HI	-	NRL 44 (RV-N-13c)	0.000	AFCRN	NRL/	Solar UV	Solar UV	Mesall	-	-
1967-S35	2436015-09	1967 Jun 25 1407	Aerobee HI	-	USAF 78	0.000	AFCRN	AFCRN/OUT/	Ionos	Ionos	Mesall	-	-
1967-S41	2436024-26	1967 Jul 4 0917:56	Aerobee HI	-	NRL 09	0.000	AFCRN	AFCRN/Seidon	Ionos	Ionos	Mesall	-	-
1967-S58	2436036-06	1967 Jul 16 1330	Aerobee HI	-	NRL 08	0.000	NRL	NRL/Seidon	Astronautics708	Astronautics708	WDCRF	-	-
1967-S60	2436038-10	1967 Jul 18 1430	Aerobee	-	USAF 80	0.000	AFCRN	AFCRN/	Astronautics708	Astronautics708	WDCRF	-	-
1967-S63	2436041-68	1967 Jul 22 0416:28	Aerobee	-	USAF 81	0.000	AFCRN	AFCRN/	Meteorites	Meteorites	WDCRF	-	-
1967-S66	2436043-73	1967 Jul 24 0529:50	Aerobee	-	SKH 02	0.000	SEEL	SEEL/ONI/Stroud,Bartman	Aeron	Aeron	WDCRF	-	-
1967-S68	2436049-42	1967 Jul 29 2159	Aerobee HI	-	SKH 03	0.000	SEEL	SEEL/ONI/Stroud,Bartman	Aeron La	Aeron La	WDCRF	J0663,757	-
1967-S74	2436057-15	1967 Aug 6 1530	Aerobee AJ10-34	-	USAF 82	0.000	AFCRN	UCD/Rense	Solar UV	Solar UV	WDCRF	ApJ150,361/McAlliste	-
1967-S75	2436063-17	1967 Aug 12 1559:31	Aerobee	-	SKH 04	0.000	SEEL	SEEL/ONI/Stroud,Bartman	Aeron	Aeron	WDCRF	-	-
1967-S78	2436069-50	1967 Aug 19	Aerobee	-	USAF 83	0.000	AFCRN	AFCRN/	Aeron	Aeron	WDCRF	-	-
1967-S79	2436071-50	1967 Aug 21	Aerobee	-	USAF 84	0.000	AFCRN	AFCRN/	Aeron	Aeron	WDCRF	-	-
1967-S82	2436070-60	1967 Aug 20 0229:51	Aerobee	-	USAF 85	0.000	AFCRN	AFCRN/	Aeron	Aeron	WDCRF	-	-
1967-S83	2436075-60	1967 Aug 25 0229	Aerobee	-	SKH 05 (SC 40)	0.000	SEEL	SEEL/ONI/Stroud,Bartman	Aeron	Aeron	WDCRF	-	-
1967-S96	2436076-09	1967 Aug 25 1406:05	Aerobee	-	SKH 06	0.000	SEEL	SEEL/ONI/Bandeen	Aeron	Aeron	WDCRF	-	-
1967-S104	2436083-44	1967 Sep 1 2228	Aerobee HI	-	SKH 07	0.000	SEEL	SEEL/ONI/Stroud,Bartman	Aeron	Aeron	WDCRF	-	-
1967-S112	2436099-09	1967 Sep 17 1404	Aerobee RTV-N-10	-	AMK 001	0.000	AFCRN	AFCRN/	Solar UV	Solar UV	WDCRF	IGY1,198	-
1967-S110	2436101-19	1967 Sep 19 1630	Aerobee	-	NRL 21	0.000	NRL	NRL/Harmo	Meteorites	Meteorites	EngSci.58	WDCRF	-
1967-S122	2436126-13	1967 Oct 14 1908	Aerobee	-	USAF 87	0.133	AFCRN	AFCRN/CIT/Zeicky	Meteorites	Meteorites	EngSci.58	WDCRF	-
1967-S139	2436134-50	1967 Oct 23	Aerobee	-	USAF 88	0.000	AFCRN	AFCRN/	Aeron	Aeron	WDCRF	-	-
1967-S145	2436136-50	1967 Oct 25	Aerobee	-	USAF 89	0.000	AFCRN	AFCRN/	Ionos	Ionos	WDCRF	-	-
1967-S162	2436160-17	1967 Nov 6 1457	Aerobee	-	USAF 90	0.000	AFCRN	AFCRN/	Test/Ionos	Test/Ionos	WDCRF	-	-
1967-S168	2436161-12	1967 Nov 8 1457	Aerobee	-	USAF 90	0.000	AFCRN	AFCRN/	Test/Ionos	Test/Ionos	WDCRF	-	-
1967-S172	2436162-50	1967 Nov 19 1629:56	Aerobee	-	Smoke Puff	0.000	AFCRN	AFCRN/Malmo	Aeron	Aeron	WDCRF	-	-
1967-S174	2436169-04	1967 Nov 26 1255	Aerobee	-	SKH 07	0.000	AFCRN	AFCRN/Beidinger	Aeron	Aeron	WDCRF	-	-
1967-S176	2436194-67	1967 Dec 12 0400	Aerobee	-	SKH 08	0.000	SEEL	SEEL/ONI/Stroud,Bartman	Aeron	Aeron	WDCRF	-	-
1967-S179	2436197-38	1967 Dec 14 2116	Aerobee HI	-	NRL 03F	0.000	NRL	NRL/Heredith	Aurora	Aurora	WDCRF	SM1,721	-
1968-S12	2436229-68	1968 Jan 26 0418:56	Aerobee	-	SKH 09	0.000	SEEL	SEEL/ONI/Stroud,Bartman	Aeron	Aeron	WDCRF	-	-
1968-S13	2436230-78	1968 Jan 27 0904	Aerobee	-	SKH 10	0.000	SEEL	SEEL/ONI/Stroud,Bar,June	Test/Ionos	Test/Ionos	WDCRF	-	-
1968-S15	2436231-28	1968 Jan 27 0949	Aerobee	-	NRL 10F	0.000	NRL	NRL/Seidon	Ionos	Ionos	WDCRF	-	-
1968-S19	2436238-28	1968 Feb 4 0916:58	Aerobee HI	-	NRL 11F	0.000	NRL	NRL/Seidon	Ionos	Ionos	WDCRF	-	-
1968-S22	2436258-70	1968 Feb 15 0202:26	Aerobee 100	-	NRL 5F	0.000	NRL	NRL/Meadows	Test/Imaging	Test/Imaging	WDCRF	AmaleeGeo17,100	-
1968-S25	2436263-22	1968 Feb 24 0656:53	Aerobee HI	-	NRL 16F	0.000	NRL	NRL/Meadows	Ionos/AuroraX	Ionos/AuroraX	WDCRF	-	-
1968-S33	2436266-99	1968 Feb 24 0656:53	Aerobee HI	-	NRL 16F	0.000	NRL	NRL/Meadows	Ionos/AuroraX	Ionos/AuroraX	WDCRF	-	-
1968-S35	2436268-79	1968 Mar 10 0454:15	Aerobee HI	-	NRL 04F	0.000	NRL	NRL/Heredith	Aurora/Fields	Aurora/Fields	WDCRF	-	-
1968-S38	2436274-15	1968 Mar 31 0112	Aerobee	-	USAF 93	0.000	AFCRN	AFCRN/Bursa	Aeron	Aeron	WDCRF	SM1,721	-
1968-S43	2436293-55	1968 Mar 31 0112	Aerobee	-	USAF 93	0.000	AFCRN	AFCRN/	Ionos	Ionos	WDCRF	-	-
1968-S44	2436294-76	1968 Mar 25 0641:17	Aerobee HI	-	NRL 05	0.000	NRL	NRL/Heredith	Ionos	Ionos	WDCRF	-	-
1968-S45	2436296-26	1968 Mar 25 1907:08	Aerobee HI	-	NRL 16F	0.000	NRL	NRL/Heredith	Aurora/Fields	Aurora/Fields	WDCRF	-	-
1968-S46	2436299-26	1968 Mar 25 1907:08	Aerobee HI	-	NRL 16F	0.000	NRL	NRL/Heredith	Aurora/Fields	Aurora/Fields	WDCRF	-	-
1968-S51	2436309-69	1968 May 6 1415	Aerobee HI	-	NRL 22F	0.000	AFCRN	UCD/Rense,Violet	Solar EUV	Solar EUV	WDCRF	-	-
1968-S50	2436359-14	1968 Jun 9 1652	Aerobee HI	-	AUS 07E	0.000	AFCRN	UTV/	Ionos	Ionos	WDCRF	-	-
1968-S92	2436388-20	1968 Jul 3 1652	Aerobee	-	AUS 10F	0.000	AFCRN	UTV/	Ionos	Ionos	WDCRF	-	-
1968-S93	2436390-01	1968 Jul 6 1202:18	Aerobee	-	AUS 11F	0.000	AFCRN	UTV/	Ionos	Ionos	WDCRF	-	-
1968-S98	2436396-27	1968 Jul 13 1530:07	Aerobee	-	-	0.000	AFCRN	AFCRN/Hinteregger	Ionos	Ionos	WDCRF	-	-
1968-S155	2436438-50	1968 Aug 13 1545	Aerobee	-	AM4 012	0.000	AFCRN	AFCRN/Hinteregger	Test/Ionos	Test/Ionos	WDCRF	-	-
1968-S163	2436431-54	1968 Aug 15 1044:36	Aerobee HI	-	AM4 012	0.000	AFCRN	AFCRN/Hinteregger	Test/Ionos	Test/Ionos	WDCRF	-	-
1968-S238	2436499-20	1968 Oct 22 1647:18	Aerobee 300	-	AM10 01	0.000	AFCRN	AFCRN/USU/McCracken	Test/Aeron	Test/Aeron	WDCRF	-	-
1968-S243	2436502-31	1968 Oct 25 1908:14	Aerobee 300	-	AM10 02	0.000	AFCRN	AFCRN/USU/McCracken	Meteorites	Meteorites	WDCRF	-	-
1968-S248	2436508-33	1968 Oct 31 1959:14	Aerobee HI	-	NRL 15F	0.000	NRL	NRL/IsOa,Horsyatz	Meteorites	Meteorites	WDCRF	-	-
1968-S247	2436511-18	1968 Nov 3 1620:06	Aerobee HI	-	NRL 20F	0.000	NRL	NRL/Meade,Johnson	Aeron/Tonos	Aeron/Tonos	WDCRF	-	-
1968-S267	2436523-79	1968 Nov 16 0656:53	Aerobee HI	-	NRL 06F	0.000	NRL	NRL/Meade,Johnson	Aurora/Fields	Aurora/Fields	WDCRF	-	-
1968-S268	2436531-77	1968 Nov 24 0923:30	Aerobee HI	-	NRL 21F	0.000	NRL	NRL/Meade,Johnson	Aurora/Tonos	Aurora/Tonos	WDCRF	-	-
1968-S271	2436537-19	1968 Nov 29 1630:30	Aerobee HI	-	NRL 16F	0.000	NRL	NRL/Meade,Johnson	Aurora/Tonos	Aurora/Tonos	WDCRF	-	-
1968-S274	2436538-28	1968 Nov 30 1636:36	Aerobee 300	-	AM10 200	0.000	AFCRN	BRL/ONI/Bogges	Test/Ionos	Test/Ionos	WDCRF	-	-
1968-S276	2436539-32	1968 Dec 1 1934:40	Aerobee 300	-	NRL 001	0.000	NRL	NRL/Seidon	Ionos	Ionos	WDCRF	-	-
1968-S278	2436541-28	1968 Dec 3 1838:44	Aerobee 150	-	NRL 002	0.000	NRL	NRL/Seidon	Ionos	Ionos	WDCRF	-	-
1968-S114	2436605-11	1969 Feb 5 1445	Aerobee 150	-	AM3 100C	0.000	AFCRN	AFCRN/	Ionos	Ionos	WDCRF	-	-
1969-S18	2436627-16	1969 Feb 27 1544	Aerobee HI	-	AM3 120C	0.000	AFCRN	AFCRN/	Ionos	Ionos	WDCRF	-	-
1969-S26	2436640-16	1969 Mar 13 1545:00	Aerobee HI	-	AM3 120C	0.000	AFCRN	AFCRN/	Meteorites	Meteorites	WDCRF	-	-
1969-S30	2436641-13	1969 Mar 13 1545:00	Aerobee HI	-	AM3 140C	0.000	AFCRN	AFCRN/	Meteorites	Meteorites	WDCRF	-	-
1969-S39	2436658-13	1969 Mar 30 1501	Aerobee 150	-	NRL 52	0.000	AFCRN	AFCRN/Hinteregger	Solar EUV	Solar EUV	WDCRF	SM1,615	-
1969-S40	2436658-20	1969 Mar 30 1645	Aerobee 150	-	NRL 52	0.000	AFCRN	AFCRN/Hinteregger	Solar EUV	Solar EUV	WDCRF	SM1,594	-
1969-S44	2436666-12	1969 Apr 7 1446	Aerobee 150	-	NRL 52	0.000	AFCRN	AFCRN/Hinteregger	Solar EUV	Solar EUV	WDCRF	-	-
1969-S48	2436674-12	1969 Apr 15 1446	Aerobee 150	-	NRL 52	0.000	AFCRN	AFCRN/Hinteregger	Solar EUV	Solar EUV	WDCRF	-	-
1969-S53	2436679-55	1969 Apr 21 0105	Aerobee 150	-	NRL 181C	0.000	AFCRN	AFCRN/	Ionos	Ionos	WDCRF	-	-
1969-S61	2436693-57	1969 Apr 21 0105	Aerobee 150	-	AL2 141C	0.000	AFCRN	AFCRN/	Ionos	Ionos	WDCRF	-	-
1969-S69	2436700-99	1969 May 5 0145	Aerobee 150	-	AM3 200C	0.000	AFCRN	AFCRN/	Aeron	Aeron	WDCRF	-	-
1969-S75	2436710-97	1969 May 22 1115	Aerobee 150	-	AM3 201C	0.000	AFCRN	AFCRN/	Aeron	Aeron	WDCRF	-	-
1969-S84	2436730-19	1969 Jun 10 1640	Aerobee 150	-	AM3 280C	0.000	AFCRN	AFCRN/	Ionos	Ionos	WDCRF	-	-
1969-S94	2436742-11	1969 Jun 22 1432	Aerobee 150	-	AM1 260C	0.000	AFCRN	AFCRN/	Ionos	Ionos	WDCRF	-	-
1969-S95	2436744-01	1969 Jun 24 1210	Aerobee 150	-	AM3 220C	0.000	AFCRN	AFCRN/	Ionos	Ionos	WDCRF	-	-
1969-S118	2436771-08	1969 Jul 21 1400	A										

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	OrbPay	Agency	Launch_Code	Group	Category	LTCIte	Cite	Notes
1969-S156	2438609.28	1969 Aug 28 1945	Aerobee 150	-	AA3. 122C	0.000	AFCR/L	SS	AFCR/L/Utwick, Hinteeregger	Ionos/Solar EVI	AFCR/L2	SRI, 304	-
1969-S166	2438623.30	1969 Sep 11 1912	Aerobee 150	-	MASA 04.076G1	0.000	GSFC	SS	GSFC/Jackson, Bordeaux	Ionos	WDCRF	TM-D-570	-
1969-S170	2438626.23	1969 Sep 14 1727	Aerobee 150	-	MASA 04.076G1	0.000	GSFC	SS	GSFC/Jackson, Bordeaux	Ionos	WDCRF	TM-D-570	-
1969-S171	2438626.28	1969 Sep 15 1837	Aerobee 150	-	-	0.000	AFCR/L	SS	AFCR/L/Heikilla	Test	WDCRF	SRI, 366	-
1969-S176	2438628.28	1969 Sep 17 1837	Aerobee 150	-	MASA 04.021I	0.000	GSFC	SS	DRETE/Heikilla	Ionos	WDCRF	-	-
1969-S181	2438632.23	1969 Sep 20 1735	Aerobee 150	-	MASA 04.031I	0.000	GSFC	SS	DRETE/Heikilla	Ionos?	WDCRF	-	-
1969-S183	2438633.90	1969 Sep 22 1735	Aerobee 100	-	AA1. 260C	0.000	AFCR/L	SS	AFCR/L/	Meteorites	JCN	-	-
1969-S206	2438652.00	1969 Oct 10 1200	Aerobee AJ10-34	-	AA1. 260C	0.000	AFCR/L	SS	AFCR/L/	Meteorites	WDCRF	-	-
1969-S216	2438662.10	1969 Oct 20 1426	Aerobee AJ10-34	-	AA2. 240C	0.000	AFCR/L	SS	AFCR/L/	Meteorites	WDCRF	-	-
1969-S223	2438662.10	1969 Oct 20 1426	Aerobee 300	-	AA2. 240C	0.000	AFCR/L	SS	AFCR/L/	Meteorites	WDCRF	-	-
1969-S225	2438667.24	1969 Oct 26 1744	Aerobee 300	-	AA10. 184C	0.000	AFCR/L	SS	UUT/Haycock	Ionos	AFCR/L2	-	-
1969-S237	2438678.81	1969 Nov 6 0725	Aerobee 150	-	IM2. 78C	0.000	NRL	SS	UUT/Haycock	Ionos	AFCR/L2	SR2, 1021	-
1969-S236	2438679.19	1969 Nov 6 1638	Aerobee 300	-	AA10. 187C	0.000	AFCR/L	SS	NRL/Packer, Tousey	Aeron	WDCRF/SRI, 1021	-	-
1969-S240	2438687.44	1969 Nov 14 2238	Aerobee 300	-	AA10. 165C	0.000	AFCR/L	SS	AFCR/L/Hutchinson	Ionos	WDCRF	-	-
1969-S245	2438689.62	1969 Nov 19 0744	Aerobee 150	-	AA3. 282C	0.000	AFCR/L	SS	AFCR/L/Hutchinson	Ionos	WDCRF	-	-
1969-S246	2438689.62	1969 Nov 19 0744	Aerobee 150	-	AA10. 166C	0.000	AFCR/L	SS	AFCR/L/Hutchinson	Ionos	WDCRF	-	-
1969-S192	2438695.22	1969 Nov 22 1535	Aerobee 300	-	AA10. 166C	0.000	AFCR/L	SS	AFCR/L/Hutchinson	Ionos	WDCRF	-	-
1969-S266	2438692.92	1969 Nov 30 0958?	Aerobee	-	NRL 30	0.000	NRL	SS	NRL/Byram	Ionos	WDCRF	SRI, 599	-
1969-S110	2438694.50	1969 Jan 14 1818	Aerobee 300	-	TATLETIALE FCC 1	0.000	AFCR/L	SS	NSA/	UV Astron	WDCRF/SRI, 599	-	-
1969-S111	2438695.26	1969 Jan 19 1818	Aerobee 150	-	AA3. 124C	0.000	AFCR/L	SS	AFCR/L/Hinteeregger	Slight Test?	JCN	-	-
1969-S26	2438695.29	1969 Jan 29 1851	Aerobee 150	-	AA3. 125C	0.000	AFCR/L	SS	AFCR/L/Hinteeregger	Solar EVI	WDCRF	ApJ132, 801	-
1969-S35	2438697.53	1969 Feb 13 0043	Aerobee AJ10-34	-	AA2. 143C	0.000	AFCR/L	SS	AFCR/L/Hinteeregger	Solar EVI	WDCRF	ApJ132, 801	-
1969-S36	2438697.53	1969 Feb 13 0043	Aerobee 300	-	TATLETIALE FCC 2	0.000	AFCR/L	SS	AFCR/L/Hinteeregger	Solar EVI	WDCRF	-	-
1969-S48	2438698.37	1969 Feb 16 2048	Aerobee 150	-	MASA 04.010T	0.000	GSFC	SS	NSA/	Slight Test?	JCN	-	-
1969-S44	2438698.90	1969 Feb 16 2048	Aerobee 150	-	MASA 04.010T	0.000	GSFC	SS	NSA/	Slight Test?	JCN	-	-
1969-S40	2438699.59	1969 Feb 27 0653	Aerobee HI	-	AA4. 260C	0.000	AFCR/L	SS	NSA/	Slight Test?	JCN	-	-
1969-S52	2437009.50	1969 Mar 16 2125	Aerobee 300	-	TATLETIALE FCC 3	0.000	AFCR/L	SS	NSA/	Slight Test?	JCN	-	-
1969-S53	2437010.39	1969 Mar 16 2125	Aerobee 300	-	TATLETIALE FCC 3	0.000	AFCR/L	SS	NSA/	Slight Test?	JCN	-	-
1969-S54	2437019.28	1969 Mar 25 1540	Aerobee 150A	-	MASA 06.010I	0.000	GSFC	SS	GSFC/Hedrow	Test/Meteorites	WDCRF	JGR67, 157	-
1969-S59	2437019.28	1969 Mar 25 1540	Aerobee 150A	-	MASA 04.096A	0.000	GSFC	SS	GSFC/Hedrow	Test/Meteorites	WDCRF	JGR67, 157	-
1969-S71	2437031.59	1969 Apr 7 0206	Aerobee 150	-	AA3. 121	0.000	AFCR/L	SS	NRL/Purcell, Tousey	Solar UV/Solar EVI	WDCRF	AmaleeGeo17, 263	-
1969-S76	2437044.09	1969 Apr 19 1415	Aerobee HI	-	IM3. 50	0.000	NRL	SS	NRL/Walker	Solar UV/Solar EVI	WDCRF	-	-
1969-S80	2437046.12	1969 Apr 21 1500	Aerobee 150	-	AA3. 283C	0.000	AFCR/L	SS	AFCR/L/Hutchinson	Fields	WDCRF	-	-
1969-S82	2437046.41	1969 Apr 23 2146	Aerobee 150A	-	MASA 04.100T	0.000	GSFC	SS	AFCR/L/Hutchinson	Fields	WDCRF	-	-
1969-S84	2437051.68	1969 Apr 27 0418	Aerobee 150	-	MASA 04.046G	0.000	GSFC	SS	AFCR/L/Hutchinson	Fields	WDCRF	-	-
1969-S90	2437059.16	1969 Apr 29 1947	Aerobee 150A	-	MASA 04.066G	0.000	GSFC	SS	AFCR/L/Hutchinson	Fields	WDCRF	-	-
1969-S103	2437079.19	1969 May 24 1640	Aerobee 150	-	AA3. 183C	0.000	AFCR/L	SS	AFCR/L/Hutchinson	Fields	WDCRF	-	-
1969-S108	2437081.67	1969 May 27 0405	Aerobee 150	-	NRL 59	0.000	NRL	SS	AFCR/L/Hutchinson	Fields	WDCRF	-	-
1969-S109	2437081.73	1969 May 27 0405	Aerobee 150A	-	NRL 59	0.000	NRL	SS	AFCR/L/Hutchinson	Fields	WDCRF	-	-
1969-S129	2437101.16	1969 Jun 15 1546	Aerobee 150	-	MASA 04.056G	0.000	GSFC	SS	AFCR/L/Hutchinson	Fields	WDCRF	-	-
1969-S130	2437101.46	1969 Jun 15 2256	Aerobee 300	-	MASA 06.020I	0.000	NRL	SS	AFCR/L/Hutchinson	Fields	WDCRF	-	-
1969-S145	2437109.77	1969 Jun 24 1928	Aerobee 150A	-	MASA 04.066G	0.000	GSFC	SS	AFCR/L/Hutchinson	Fields	WDCRF	-	-
1969-S149	2437113.05	1969 Jun 27 1315	Aerobee 150	-	NCS 108	0.000	NRL	SS	AFCR/L/Hutchinson	Fields	WDCRF	-	-
1969-S160	2437117.11	1969 Jul 11 1428	Aerobee 150	-	AA3. 107	0.000	AFCR/L	SS	NRL/Hofman, Holmes	UV Astron	WDCRF	-	-
1969-S171	2437143.94	1969 Jul 27 0203	Aerobee 300	-	TATLETIALE FCC 4	0.000	AFCR/L	SS	NRL/Hofman, Holmes	UV Astron	WDCRF	-	-
1969-S217	2437143.94	1969 Jul 27 0203	Aerobee 300A	-	TATLETIALE FCC 4	0.000	AFCR/L	SS	NRL/Hofman, Holmes	UV Astron	WDCRF	-	-
1969-S225	2437156.91	1969 Aug 5 1626	Aerobee 150	-	IM3. 36C	0.000	GSFC	SS	NRL/Garrett, Detweiler	Ionos?	WDC	JGR67, 157	-
1969-S229	2437170.91	1969 Aug 10 1701	Aerobee 150A	-	IM3. 36C	0.000	GSFC	SS	NRL/Garrett, Detweiler	Ionos?	WDC	JGR67, 157	-
1969-S250	2437171.22	1969 Aug 10 1701	Aerobee 150A	-	IM3. 36C	0.000	GSFC	SS	NRL/Garrett, Detweiler	Ionos?	WDC	JGR67, 157	-
1969-S259	2437171.22	1969 Aug 10 1701	Aerobee 150A	-	IM3. 36C	0.000	GSFC	SS	NRL/Garrett, Detweiler	Ionos?	WDC	JGR67, 157	-
1969-S260	2437171.22	1969 Aug 10 1701	Aerobee 150A	-	IM3. 36C	0.000	GSFC	SS	NRL/Garrett, Detweiler	Ionos?	WDC	JGR67, 157	-
1969-S269	2437171.22	1969 Aug 10 1701	Aerobee 150A	-	IM3. 36C	0.000	GSFC	SS	NRL/Garrett, Detweiler	Ionos?	WDC	JGR67, 157	-
1969-S271	2437171.22	1969 Aug 10 1701	Aerobee 150A	-	IM3. 36C	0.000	GSFC	SS	NRL/Garrett, Detweiler	Ionos?	WDC	JGR67, 157	-
1969-S272	2437171.22	1969 Aug 10 1701	Aerobee 150A	-	IM3. 36C	0.000	GSFC	SS	NRL/Garrett, Detweiler	Ionos?	WDC	JGR67, 157	-
1969-S273	2437171.22	1969 Aug 10 1701	Aerobee 150A	-	IM3. 36C	0.000	GSFC	SS	NRL/Garrett, Detweiler	Ionos?	WDC	JGR67, 157	-
1969-S274	2437171.22	1969 Aug 10 1701	Aerobee 150A	-	IM3. 36C	0.000	GSFC	SS	NRL/Garrett, Detweiler	Ionos?	WDC	JGR67, 157	-
1969-S275	2437171.22	1969 Aug 10 1701	Aerobee 150A	-	IM3. 36C	0.000	GSFC	SS	NRL/Garrett, Detweiler	Ionos?	WDC	JGR67, 157	-
1969-S276	2437171.22	1969 Aug 10 1701	Aerobee 150A	-	IM3. 36C	0.000	GSFC	SS	NRL/Garrett, Detweiler	Ionos?	WDC	JGR67, 157	-
1969-S277	2437171.22	1969 Aug 10 1701	Aerobee 150A	-	IM3. 36C	0.000	GSFC	SS	NRL/Garrett, Detweiler	Ionos?	WDC	JGR67, 157	-
1969-S278	2437171.22	1969 Aug 10 1701	Aerobee 150A	-	IM3. 36C	0.000	GSFC	SS	NRL/Garrett, Detweiler	Ionos?	WDC	JGR67, 157	-
1969-S279	2437171.22	1969 Aug 10 1701	Aerobee 150A	-	IM3. 36C	0.000	GSFC	SS	NRL/Garrett, Detweiler	Ionos?	WDC	JGR67, 157	-
1969-S280	2437171.22	1969 Aug 10 1701	Aerobee 150A	-	IM3. 36C	0.000	GSFC	SS	NRL/Garrett, Detweiler	Ionos?	WDC	JGR67, 157	-
1969-S281	2437171.22	1969 Aug 10 1701	Aerobee 150A	-	IM3. 36C	0.000	GSFC	SS	NRL/Garrett, Detweiler	Ionos?	WDC	JGR67, 157	-
1969-S282	2437171.22	1969 Aug 10 1701	Aerobee 150A	-	IM3. 36C	0.000	GSFC	SS	NRL/Garrett, Detweiler	Ionos?	WDC	JGR67, 157	-
1969-S283	2437171.22	1969 Aug 10 1701	Aerobee 150A	-	IM3. 36C	0.000	GSFC	SS	NRL/Garrett, Detweiler	Ionos?	WDC	JGR67, 157	-
1969-S284	2437171.22	1969 Aug 10 1701	Aerobee 150A	-	IM3. 36C	0.000	GSFC	SS	NRL/Garrett, Detweiler	Ionos?	WDC	JGR67, 157	-
1969-S285	2437171.22	1969 Aug 10 1701	Aerobee 150A	-	IM3. 36C	0.000	GSFC	SS	NRL/Garrett, Detweiler	Ionos?	WDC	JGR67, 157	-
1969-S286	2437171.22	1969 Aug 10 1701	Aerobee 150A	-	IM3. 36C	0.000	GSFC	SS	NRL/Garrett, Detweiler	Ionos?	WDC	JGR67, 157	-
1969-S287	2437171.22	1969 Aug 10 1701	Aerobee 150A	-	IM3. 36C	0.000	GSFC	SS	NRL/Garrett, Detweiler	Ionos?	WDC	JGR67, 157	-
1969-S288	2437171.22	1969 Aug 10 1701	Aerobee 150A	-	IM3. 36C	0.000	GSFC	SS	NRL/Garrett, Detweiler	Ionos?	WDC	JGR67, 157	-
1969-S289	2437171.22	1969 Aug 10 1701	Aerobee 150A	-	IM3. 36C	0.000	GSFC	SS	NRL/Garrett, Detweiler	Ionos?	WDC	JGR67, 157	-
1969-S290	2437171.22	1969 Aug 10 1701	Aerobee 150A	-	IM3. 36C	0.000	GSFC	SS	NRL/Garrett, Detweiler	Ionos?	WDC	JGR67, 157	-
1969-S291	2437171.22	1969 Aug 10 1701	Aerobee 150A	-	IM3. 36C	0.000	GSFC	SS	NRL/Garrett, Detweiler	Ionos?	WDC	JGR67, 157	-
1969-S292	2437171.22	1969 Aug 10 1701	Aerobee 150A	-	IM3. 36C	0.000	GSFC	SS	NRL/Garrett, Detweiler	Ionos?	WDC	JGR67, 157	-
1969-S293	2437171.22	1969 Aug 10 1701	Aerobee 150A	-	IM3. 36C	0.000	GSFC	SS	NRL/Garrett, Detweiler	Ionos?	WDC	JGR67, 157	-
1969-S294	2437171.22	1969 Aug 10 1701	Aerobee 150A	-	IM3. 36C	0.000	GSFC	SS	NRL/Garrett, Detweiler	Ionos?	WDC	JGR67, 157	-
1969-S295	2437171.22	1969 Aug 10 1701	Aerobee 150A	-	IM3. 36C	0.000	GSFC						

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Orb_Pay_t	Agency	Launch_Code	Group	Category	LTCite	Cite	Notes
1961-S316	2437573-10	1961 Sep 30 1430	Aerobee 150	-	MASA 04-250S	0.000	GSFC	SS	GSFC/Behring	Solar X	TN-D-1466	TN-D-2503	-
1961-M28	2437573-06	1961 Sep 30 2042	Aerobee 150	-	MASA 01-096A	0.000	AFRL	SS	GSFC/Austin,Jepsen	Aeronomy	WDCRF	-	-
1961-S331	2437586-06	1961 Oct 12 1321	Aerobee 150	-	MAS.146	0.000	AFRL	SS	AFRL/Aura	Aeron	WDCRF	-	-
1961-S332	2437586-10	1961 Oct 14	Aerobee 150	-	[Spiruous7]	0.000	AFRL	SS	ASE/Giacconi,Salisbury	XR Astron	WDCRF	AFRL	-
1961-M30	2437588-11	1961 Oct 15 1433	Aerobee 150	-	MASA 01-10GA	0.000	GSFC	SS	GSFC/Martin,Dordeyn	Aeronomy	WDCRF	-	-
1961-M31	2437590-34	1961 Oct 17 2011	Aerobee 150	-	MASA 01-07GA	0.000	GSFC	SS	GSFC/Martin,Dordeyn	Aeronomy	WDCRF	-	-
1961-S336	2437591-06	1961 Oct 18 1328	Aerobee 150	-	MASA 04-40MP	0.000	GSFC	SS	LERC/Kegetz	Tech	WDCRF	-	-
1961-S350	2437597-79	1961 Oct 25 0659	Aerobee 150	-	MS.351	0.000	AFRL	SS	ASE/Giacconi,Salisbury	XR Astron	Hrsh	-	-
1961-S364	2437600-62	1961 Nov 1 0300	Aerobee 150	-	MS.122	0.000	AFRL	SS	NRL/Packer	Aeron	WDCRF	-	-
1961-M33	2437606-23	1961 Nov 2 1724	Aerobee 150	-	MASA 01-11GA	0.000	AFRL	SS	GSFC/Martin	Aeronomy	WDCRF	-	-
1961-S399	2437609-34	1961 Nov 5 2011	Aerobee 150	-	MASA 01-12GA	0.000	GSFC	SS	GSFC/Martin	Aeronomy	WDCRF	-	-
1961-S343	2437641-47	1961 Dec 7 2315	Aerobee 150	-	MS.344	0.000	AFRL	SS	NRL/Purcell,Austin	Solar EV	WDCRF	-	-
1961-S422	2437647-00	1961 Dec 13 1200	Aerobee 150	-	MS.110	0.000	AFRL	SS	AFRL/Faucher	Aeron/Ions	WDCRF	-	-
1961-S428	2437649-21	1961 Dec 15 1700	Aerobee 150	-	MS.140	0.000	AFRL	SS	AFRL/Soberman	Test/Meteorites	WDCRF	-	-
1961-S434	2437655-68	1961 Dec 22 0424	Aerobee 300A	-	MASA 06-05UI	0.000	GSFC	SS	AFRL/Aura	Solar UV	WDCRF	-	-
1962-S13	2437678-18	1962 Jan 13 1615	Aerobee 150	-	MASA 04-66GT	0.000	GSFC	SS	UML/Brace	Ionos	WDCRF	TN-D-2514	-
1962-S15	2437680-50	1962 Jan 16	Aerobee 150	-	MASA 04-36GG	0.000	AFRL	SS	AFRL/Hinteregger	Solar EV	WDCRF	-	-
1962-A18	2437702-69	1962 Feb 7 0438	Aerobee 150A	-	MASA 04-41HP	0.000	GSFC	SF	GSFC/Seacher	UV Astron	WDCRF	-	-
1962-S42	2437713-32	1962 Mar 6 1330	Aerobee 150	-	MS.150	0.000	AFRL	SS	LERC/Dillon	Tech	WDCRF	-	-
1962-S63	2437730-06	1962 Mar 6 1330	Aerobee 150	-	MASA 04-18GA	0.000	AFRL	SS	AFRL/Aura	Aeron	WDCRF	-	-
1962-H02	2437743-15	1962 Mar 19 1520	Aerobee 150A	-	MASA 04-18GA	0.000	AFRL	SF	UML/Spencer,Brace	Aeronomy	WDCRF	-	-
1962-S102	2437772-22	1962 Apr 17 1720	Aerobee 150	-	MAS.114F7	0.000	NRL	SS	NRL/Holmes,Hoffman	Aeron	WDCRF	-	-
1962-S119	2437786-30	1962 May 1 1918	Aerobee 150	-	MAS.361	0.000	AFRL	SS	AFRL/Silverman	Ionos?	WDCRF	-	-
1962-S120	2437787-46	1962 May 2 2263	Aerobee 150	-	MASA 04-46HP	0.000	AFRL	SS	AFRL/ULM ck	Aeron	WDCRF	-	-
1962-S121	2437793-13	1962 May 8 1505	Aerobee 150	-	MASA 04-46HP	0.000	AFRL	SS	AFRL/Silverman	Aeron	WDCRF	-	-
1962-S127	2437810-03	1962 May 25 1243	Aerobee 150A	-	MASA 04-46GT	0.000	GSFC	SS	GSFC/Presley,Smith	Test/Ionos	WDCRF	CGA-63-23N	-
1962-S142	2437821-03	1962 Jun 2 2130	Aerobee 150	-	MS.133	0.000	AFRL	SS	AFRL/Hinteregger	Aeron/Solar EV	WDCRF	-	-
1962-S183	2437824-40	1962 Jun 5 1245	Aerobee 150	-	MS.134	0.000	AFRL	SS	ASE/Giacconi	XR Astron	Hrsh	-	-
1962-S194	2437828-79	1962 Jun 12 1530	Aerobee 150	-	MASA 04-26HP	0.000	AFRL	SS	AFRL/Hinteregger	Solar EV	WDCRF	-	-
1962-S196	2437836-06	1962 Jun 19 0659	Aerobee 150	-	MASA 04-71UM/OP	0.000	GSFC	SS	AFRL/Hinteregger	Solar EV	WDCRF	-	-
1962-S216	2437846-38	1962 Jun 29 0455	Aerobee 150A	-	MASA 04-72UP	0.000	GSFC	SS	AFRL/Hinteregger	Solar EV	WDCRF	-	-
1962-S210	2437846-38	1962 Jun 29 2100	Aerobee 150A	-	MASA 04-47HP	0.000	GSFC	SS	JHU/Faerie	Aeronomy	WDCRF	WDCRF	SM4 has Jun 30
1962-S237	2437856-12	1962 Jul 10 1500	Aerobee 150	-	MASA 04-47HP	0.000	GSFC	SS	JHU/Faerie	Aeronomy	WDCRF	WDCRF	SM4 has Jun 30
1962-S256	2437870-01	1962 Jul 24 1209:00	Aerobee 150A	-	MASA 04-23US	0.000	AFRL	SU	AFRL/7	Tech	WDCRF	-	-
1962-S258	2437870-40	1962 Jul 24 2141	Aerobee 150	-	MASA 04-60GT	0.000	GSFC	SS	UCSD/Lindsay,Sheldon	Aeron	WDCRF	-	-
1962-S284	2437885-20	1962 Aug 6 1695	Aerobee 150	-	MS.128	0.000	GSFC	SS	GSFC/Russell	Solar UV	WDCRF	-	-
1962-S306	2437899-15	1962 Aug 22 1350	Aerobee 150	-	MS.128	0.000	NRL	SS	NRL/Austin,Purcell	Test	WDCRF	-	-
1962-H02	2437914-10	1962 Sep 6 1430	Aerobee 150	-	MASA 01-13MA	0.000	GSFC	SS	JPL/Bart	Solar EV/XR	WDCRF	SM4,703	-
1962-S531	2437919-46	1962 Sep 11 2324	Aerobee 150	-	ACS.322	0.000	AFRL	SS	AFRL/Silverman	Aeronomy	WDCRF	-	-
1962-S532	2437929-60	1962 Sep 27 0920	Aerobee 150A	-	MASA 04-36GG	0.000	AFRL	SS	AFRL/Silverman	Aeron	WDCRF	-	-
1962-S535	2437935-25	1962 Sep 27 0920	Aerobee 150	-	MS.146	0.000	AFRL	SS	AFRL/Silverman	Aeron	WDCRF	-	-
1962-S577	2437937-78	1962 Sep 30 0650	Aerobee 150A	-	MASA 04-36GG	0.000	AFRL	SS	AFRL/Silverman	Aeron	WDCRF	-	-
1962-S585	2437963-78	1962 Oct 25 2328	Aerobee 150	-	ACS.358	0.000	AFRL	SS	AFRL/Hinteregger	Ionos	WDCRF	Nature204,982	-
1962-S444	2437963-78	1962 Oct 25 2328	Aerobee 150	-	ACS.358	0.000	AFRL	SS	AFRL/Hinteregger	Ionos	WDCRF	-	-
1962-S468	2437975-32	1962 Oct 30 1945	Aerobee 150A	-	ACS.148	0.000	AFRL	SS	AFRL/Code	Solar UV	WDCRF	-	-
1962-S474	2437975-32	1962 Nov 6 1934:00	Aerobee 150A	-	ACS.148	0.000	AFRL	SS	AFRL/Code	Solar UV	WDCRF	-	-
1962-S476	2437984-54	1962 Nov 13 2230:00	Aerobee 150	-	ACS.463	0.000	AFRL	SS	AFRL/Rosenberg	Solar EV	WDCRF	-	-
1962-S479	2437984-54	1962 Nov 13 2230:00	Aerobee 150	-	ACS.463	0.000	AFRL	SS	AFRL/Rosenberg	Solar EV	WDCRF	-	-
1962-S481	2437984-68	1962 Nov 15 0422	Aerobee 150A	-	MASA 04-70TI	0.000	AFRL	SS	AFRL/Rosenberg	Aeron	WDCRF	-	-
1962-S483	2437986-71	1962 Nov 18 0427	Aerobee 150A	-	MASA 04-27HP	0.000	GSFC	SS	GSFC/Cartwright	Ionos	WDCRF	-	-
1962-A202	2437989-40	1962 Nov 20 1655	Aerobee 300A	-	MASA 01-14MA	0.000	GSFC	SS	JPL/Carpas	Tech	WDCRF	-	-
1962-S484	2437989-40	1962 Nov 20 2141:30	Aerobee 300A	-	MASA 06-06GA	0.000	GSFC	SS	UML/ASFC/Brace	Aeronomy	WDCRF	-	-
1962-S485	2437989-40	1962 Nov 20 2141:30	Aerobee 300A	-	MASA 06-06GA	0.000	GSFC	SS	UML/ASFC/Brace	Aeronomy	WDCRF	-	-
1962-S486	2438006-25	1962 Nov 27 1900	Aerobee 150	-	ACS.460	0.000	AFRL	SS	UCSD/Lindsay,Collberg	Solar EV	WDCRF	-	-
1962-S486	2438006-25	1962 Nov 27 1900	Aerobee 150	-	ACS.460	0.000	AFRL	SS	UCSD/Lindsay,Collberg	Solar EV	WDCRF	-	-
1962-M40	2438009-57	1962 Dec 1 0138:00	Aerobee 150A	-	MASA 04-80TI	0.000	GSFC	SF	GSFC/Cartwright	Ionos	WDCRF	NR621217-13	-
1962-A223	2438012-22	1962 Dec 11 1723	Aerobee 150A	-	MASA 04-70UM	0.000	GSFC	SF	JHU/Faerie	Aeronomy	WDCRF	TR-R-226	-
1962-S467	2438014-23	1962 Dec 15 1730:00	Aerobee 150	-	ACS.451 (SFE)	0.000	AFRL	SS	AFRL/Hinterberg	Ionos	WDCRF	SM4,389	-
1962-S470	2438017-32	1962 Dec 18 1945	Aerobee 150	-	ACS.451 (SFE)	0.000	AFRL	SS	AFRL/Hinterberg	Ionos	WDCRF	-	-
1963-A16	2438059-19	1963 Jan 29 1627	Aerobee 150A	-	MASA 04-73UA	0.000	GSFC	SF	JHU/Faerie	Solar EV	WDCRF	-	-
1963-S51	2438074-52	1963 Feb 14 0030	Aerobee 150	-	MS.345	0.000	AFRL	SS	AFRL/Faucher	Aeron	WDCRF	-	-
1963-S53	2438076-19	1963 Feb 15 1834	Aerobee 150	-	MS.134	0.000	NRL	SS	NRL/Johnson,Young	Aeron	WDCRF	-	-
1963-S55	2438079-24	1963 Feb 18 1743	Aerobee 150	-	MS.140	0.000	NRL	SS	NRL/Johnson,Young	Aeron	WDCRF	-	-
1963-S55	2438079-24	1963 Feb 18 1743	Aerobee 150	-	MS.140	0.000	NRL	SS	NRL/Johnson,Young	Aeron	WDCRF	-	-
1963-S81	2438096-54	1963 Mar 6 2230	Aerobee 150	-	ACS.372	0.000	AFRL	SF	AFRL/Brace	Solar EV	WDCRF	-	-
1963-S101	2438104-00	1963 Mar 16 0219	Aerobee 150A	-	MASA 04-70CC	0.000	GSFC	SS	AFRL/Brace	Aeron	WDCRF	-	-
1963-S106	2438108-25	1963 Mar 19 1800	Aerobee 150	-	ACS.149	0.000	GSFC	SS	AFRL/Brace	Aeron	WDCRF	-	-
1963-S112	2438116-51	1963 Mar 28 0015	Aerobee 150	-	MASA 04-30CC	0.000	GSFC	SS	AFRL/Brace	Aeron	WDCRF	-	-
1963-S116	2438123-20	1963 Apr 3 1646	Aerobee 150A	-	MASA 04-58UI	0.000	GSFC	SS	GSFC/Briggs	XR Astron	WDCRF	-	-
1963-S134	2438194-12	1963 Apr 4 1500	Aerobee 150	-	MS.118	0.000	NRL	SS	STAN/Rodden	UV Astron	WDCRF	-	-
1963-S147	2438191-73	1963 Apr 12 0530	Aerobee 150A	-	MASA 04-96TI	0.000	GSFC	SS	NRL/Blake	Ionos	WDCRF	ApJ142,1	-
1963-S148	2438192-08	1963 Apr 12 1400	Aerobee 150	-	KP3.1	0.000	GSFC	SF	GSFC/Cartwright	Ionos	WDCRF	-	-
1963-S163	2438198-38	1963 Apr 18 2100:14	Aerobee 150	-	MASA 06-07GA	0.000	GSFC	SF	KPND/Hallace	Ionos	WDCRF	-	-
1963-S170	2438143-37	1963 Apr 23 2040	Aerobee 150A	-	MASA 04-44GI	0.000	GSFC	SS	GSFC/Bauer	Aeron	WDCRF	-	-
1963-S185	2438149-67	1963 Apr 23 0400	Aerobee 150	-	ACS.510	0.000	AFRL	SS	NRL/Boyer,Byran	Ionos	WDCRF	-	-
1963-S188	2438152-21	1963 May 2 2111	Aerobee 150A	-	MASA 04-98UA	0.000	AFRL	SS	AFRL/Hinteregger	Solar UV	WDCRF	ApJ139,1135	-
1963-S190	2438157-38	1963 May 9 1802	Aerobee 150A	-	MASA 04-97TI	0.000	GSFC	SS	AFRL/Hinteregger	Solar UV	WDCRF	ApJ140,319	-
1963-S194	2438159-25	1963 May 9 1802	Aerobee 150A	-	MS.140R	0.000	NRL	SS	NRL/Hinteregger	Aeronomy	WDCRF	SR4,304	-
1963-S197	2438160-11	1963 May 10 1445	Aerobee 150	-	MASA 04-66HP	0.000	GSFC	SS	NRL/Kinard	Ionos			

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	OrbPay	Agency	Launch_Code	Group	Category	LTCite	Cite	Notes
1965-S289	2438201.10	1963 Jun 20 1425	Aerobee 150	-	MASA 04-61AS	0.000	GSFC	SS	HRL/Packer	Test	WDCRF	-	-
1965-S300	2438206.06	1963 Jun 25 1320	Aerobee 150	-	RFS 2	0.000	KPND	SS	KPND/Wallace	Aeron/Auroral	WDCRF	JOR69,471	-
1965-S308	2438209.10	1963 Jun 28 1430	Aerobee 150	-	MASA 04-62AS	0.000	GSFC	SS	HRL/Packer	Solar/Solar EDV	WDCRF	-	-
1965-S311	2438210.20	1963 Jun 29 1046	Aerobee 150	-	ACS 207	0.000	AFCHL	SS	AFCHL/Utlack	Test/Ionos	WDCRF	-	-
1965-S327	2438213.88	1963 Jul 3 0900	Aerobee 150	-	ARS 247	0.000	AFCHL	SS	AFCHL/SagaLyn	Test/Ionos	WDCRF	-	-
1965-S334	2438220.62	1963 Jul 10 0748	Aerobee 150A	-	MASA 04-59UI	0.000	GSFC	SS	STAN/Korden	Ionos	WDCRF	-	-
1965-S335	2438221.21	1963 Jul 10 0742	Aerobee 150	-	ACS 511	0.000	AFCHL	SS	AFCHL/Hinteregger	Solar UV	WDCRF	-	-
1965-S343	2438229.73	1963 Jul 19 0530	Aerobee 150A	-	MASA 04-37GG	0.000	GSFC	SS	GSFC/Stecher	Solar UV/Eclipse	WDCRF	-	-
1965-S344	2438229.74	1963 Jul 20 2108	Aerobee 150	-	MASA 04-760A	0.000	GSFC	SS	GSFC/Woelff, Linday	Solar UV/Eclipse	WDCRF	-	-
1965-S345	2438231.38	1963 Jul 20 2106	Aerobee 150	-	MASA 04-760A	0.000	GSFC	SS	JHU/Faatie	Aeronomy/Eclipse	WDCRF	-	-
1965-S350	2438231.41	1963 Jul 20 2154-46	Aerobee 300A	-	MASA 06-08GA	0.000	GSFC	SS	UMI/Brace	Aeronomy/Eclipse	WDCRF	TM-X-56430	-
1965-S352	2438233.76	1963 Jul 23 0600	Aerobee 150A	-	MASA 04-29GG	0.000	GSFC	SS	GSFC/Stecher	Solar X	WDCRF	ApJ142,1	-
1965-S357	2438236.09	1963 Jul 25 1415	Aerobee 150	-	MS 124	0.000	HRL	SS	HRL/Blake	Solar X	WDCRF	SMS,756	-
1965-S373	2438276.44	1963 Aug 1 0806	Aerobee 150	-	ACS 374	0.000	AFCHL	SS	HRL/Holmes,Johnson	Aeron	WDCRF	-	-
1965-S428	2438279.06	1963 Sep 6 2130	Aerobee 150	-	MASA 04-91GE	0.000	AFCHL	SS	AFCHL/Marcisi,Cohen	Aeron	WDCRF	-	-
1965-S433	2438279.40	1963 Sep 6 2130	Aerobee 150	-	MASA 04-220S	0.000	GSFC	SS	GSFC/Fichtel	Cosmic rays	WDCRF	-	-
1965-S439	2438279.40	1963 Sep 6 2130	Aerobee 150	-	MASA 04-32RP	0.000	GSFC	SS	HGO/Lindsay,Goldberg	Cosmic rays	WDCRF	-	-
1965-S447	2438293.16	1963 Sep 11 1424	Aerobee 150	-	MS 151	0.000	HRL	SS	HRL/Purcell,Austin	Tech	WDCRF	-	-
1965-S457	2438297.80	1963 Sep 25 0709	Aerobee 150	-	MASA 04-65GI	0.000	GSFC	SS	GSFC/RHL/Hirao	Solar EDV	WDCRF	-	-
1965-S464	2438299.27	1963 Sep 26 1443	Aerobee 150	-	ACS 151	0.000	AFCHL	SS	AFCHL/Jura	Ionos	WDCRF	-	-
1965-S474	2438304.11	1963 Oct 1 1700	Aerobee 150	-	MASA 04-64GI	0.000	GSFC	SS	GSFC/RHL/Hirao	Ionos	WDCRF	-	-
1965-S474	2438304.21	1963 Oct 1 1700	Aerobee 150	-	MASA 04-31GG	0.000	GSFC	SS	GSFC/RHL/Hirao	Ionos	WDCRF	-	-
1965-S493	2438316.17	1963 Oct 15 1605	Aerobee 150	-	MASA 04-35GG	0.000	GSFC	SS	GSFC/Hallam	Solar	WDCRF	-	-
1965-S499	2438320.20	1963 Oct 17 1650	Aerobee 150	-	MASA 04-35GG	0.000	GSFC	SS	GSFC/Bogges	Solar	WDCRF	-	-
1965-S503	2438330.64	1963 Oct 28 0315	Aerobee 150	-	MASA 04-391I	0.000	GSFC	SS	GSFC/ASE/Haney,Giacconi	Solar X	WDCRF	-	-
1965-S527	2438334.20	1963 Oct 31 1650	Aerobee 150	-	HTRB-TSRA Test	0.000	NITS/	SS	CHET/Storey	Ionos	WDCRF	AFR16069	-
1965-S539	2438338.13	1963 Nov 4 1510	Aerobee 150	-	RFS 3	0.000	GSFC	SS	CHET/Storey	IR Background	WDCRF	TM-X-56494	-
1965-S546	2438346.29	1963 Nov 12 1558	Aerobee 150A	-	MASA 04-760A	0.000	GSFC	SS	KPND/Wallace	Aeron	WDC	PlanSpaSci12,1021	-
1965-S551	2438349.46	1963 Nov 15 2300	Aerobee 150	-	MS 324	0.000	AFCHL	SS	JHU/Faatie	Aeronomy	WDCRF	-	-
1965-S555	2438351.26	1963 Nov 17 1515	Aerobee 150A	-	MASA 04-85NA	0.000	GSFC	SS	AFCHL/Silverman	Aeronomy	WDCRF	-	-
1965-S572	2438361.24	1963 Nov 27 1750	Aerobee 150	-	MS 153	0.000	HRL	SS	JPL/Barth	Aeronomy	WDCRF	ApJ142,1	-
1965-S585	2438368.90	1963 Dec 5	Aerobee 150	-	MS 153	0.000	AFCHL	SS	HRL/Purcell,Austin	Solar EDV	WDCRF	AppJ142,6,373	-
1965-S597	2438376.20	1963 Dec 12 1650	Aerobee 150	-	MS 513	0.000	AFCHL	SS	AFCHL/Jura	Solar EDV	WDCRF	-	-
1964-S57	2438423.29	1964 Jan 28 1300	Aerobee 150	-	MASA 04-88GT	0.000	GSFC	SS	AFCHL/Hinteregger	Test	WDCRF	-	-
1964-S59	2438423.69	1964 Jan 29 0309	Aerobee 300A	-	MASA 06-09GA	0.000	GSFC	SS	GSFC/RHL/Hirao	Ionos/Auroral	WDCRF	-	-
1964-S62	2438434.07	1964 Feb 9 0412	Aerobee 150	-	MS 603	0.000	AFCHL	SS	UMI/Brace,Utlack	Ionos/Auroral	WDCRF	-	-
1964-S62	2438434.07	1964 Feb 9 0412	Aerobee 150	-	MS 143	0.000	HRL	SS	HRL/Guledge,Koonen	Aeron	WDCRF	JOR70,2613	-
1964-S102	2438462.32	1964 Feb 17 1010	Aerobee 150	-	MASA 04-124UA	0.000	GSFC	SS	JHU/Faatie,Dise	Aeronomy	FC	-	-
1964-S155	2438471.31	1964 Mar 16 2229	Aerobee 150	-	HTRB-TSRA-1	0.000	NITS	SS	NITS/Ruchey	TV/UV Background	WDCRF	ApJ142,13	-
1964-S177	2438485.28	1964 Mar 30 1509	Aerobee 150	-	HTRB-TSRA-2	0.000	AFCHL	SS	AFCHL/Hinteregger	Solar EDV	WDCRF	-	-
1964-S185	2438486.36	1964 Apr 1 0233?	Aerobee 150	-	MS 514	0.000	NITS	SS	AFCHL/Hinteregger	IR Background	WDCRF	-	-
1964-S192	2438488.06	1964 Apr 2 0938	Aerobee 150	-	KFS 04-15GG	0.000	GSFC	SS	GSFC/Bogges	Aeron	WDCRF	PlanSpaceSci14,677	-
1964-S199	2438488.09	1964 Apr 7 1413	Aerobee 150	-	MASA 04-81CG	0.000	GSFC	SS	GSFC/Bogges	UV Astron	WDCRF	-	-
1964-S201	2438488.09	1964 Apr 10 1931	Aerobee 150	-	MASA 04-88NA	0.000	GSFC	SS	GSFC/Bogges	Aeronomy	WDCRF	-	-
1964-S207	2438507.97	1964 Apr 19 1518	Aerobee 150	-	MASA 04-1130A-G1	0.000	GSFC	SS	GSFC/LUX/Allen,Berg	Meteorology/Ionos/Solar X	WDCRF	JOR72,69	-
1964-S232	2438520.19	1964 Apr 21 1618	Aerobee 150	-	MS 164	0.000	HRL	SS	HRL/Coole,Bliese	Solar EDV	WDCRF	TM-X-1279	-
1964-S262	2438524.67	1964 May 27 0923?	Aerobee 150	-	MS 355	0.000	AFCHL	SS	AFCHL/Salisbury	Aeronomy	WDCRF	TM-X-1279	-
1964-S268	2438534.21	1964 May 28 1708?	Aerobee 150	-	HTRB-TSRA-1	0.000	AFCHL	SS	AFCHL/Kinard	IR Background	WDCRF	-	-
1964-S288	2438553.03	1964 Jun 12 1244-59	Aerobee 150	-	MASA 04-67RP	0.000	GSFC	SS	HRL/Bowyer,Byram	UV Astron/RX Astron	WDCRF	Sci147,394	-
1964-S296	2438562.88	1964 Jun 16 0900	Aerobee 150	-	KFS 147	0.000	GSFC	SS	HRL/Bowyer,Byram	UV Astron/RX Astron	WDCRF	JOR72,69	-
1964-S298	2438566.07	1964 Jun 19 1346	Aerobee 150	-	MS 164	0.000	KPND	SS	HRL/Hummen	Astron	WDCRF	-	-
1964-S299	2438569.45	1964 Jun 19 1346	Aerobee 150	-	MS 164	0.000	HRL	SS	HRL/Bowyer,Byram	XR Astron	WDCRF	-	-
1964-S363	2438593.85	1964 Jul 17 0923?	Aerobee 150	-	HTRB-TSRA-2	0.000	NITS	SS	NITS/IR Background	Test/IR Background	WDCRF	-	-
1964-S370	2438600.28	1964 Jul 23 1843	Aerobee 150	-	MASA 04-107GE	0.000	GSFC	SS	GSFC/Fichtel,Guns	Cosmic Rays	WDCRF	-	-
1964-S380	2438602.23	1964 Jul 25 1735	Aerobee 150	-	MASA 04-109GE	0.000	GSFC	SS	GSFC/Fichtel,Guns	Cosmic Rays	WDCRF	-	-
1964-S386	2438605.98	1964 Jul 28 2114	Aerobee 300	-	MASA 06-10GE	0.000	GSFC	SS	GSFC/UMI/Brace	Cosmic Rays	WDCRF	-	-
1964-S419	2438618.94	1964 Aug 11 1030	Aerobee 150	-	MASA 04-822G	0.000	GSFC	SS	GSFC/UMI/Brace	Aeronomy	WDCRF	-	-
1964-S441	2438629.73	1964 Aug 22 1015	Aerobee 150	-	MASA 04-126GG	0.000	GSFC	SS	GSFC/Bogges	UV Astron	WDCRF	-	-
1964-S447	2438636.73	1964 Aug 29 0530	Aerobee 150	-	MASA 04-126GG	0.000	GSFC	SS	GSFC/Bogges	UV Astron	WDCRF	AF70,321	-
1964-S457	2438640.63	1964 Sep 2 0938	Aerobee 150A	-	KFS 5	0.000	GSFC	SS	HRL/Coole,Bliese	XR Astron	WDCRF	ASP-2017	-
1964-S468	2438653.00	1964 Sep 15 0938	Aerobee 150	-	MASA 04-58UG	0.000	GSFC	SS	KPND/Solartecraft	IR Astron	WDCRF	-	-
1964-S473	2438657.22	1964 Sep 18 1717	Aerobee 150	-	MS 164	0.000	GSFC	SS	JPL/Barth	IR Astron	WDCRF	-	-
1964-S478	2438665.00	1964 Sep 26 1204	Aerobee 150A	-	MASA 04-115WA	0.000	GSFC	SS	JPL/Barth	Test	WDCRF	-	-
1964-S500	2438670.61	1964 Oct 2 0235	Aerobee 150A	-	MASA 04-120CG	0.000	GSFC	SS	LPARL/Fisher	Test	WDCRF	ApJ143,203	-
1964-S520	2438682.60	1964 Oct 14	Aerobee 150A	-	HTRB-TSRA-2	0.000	NITS	SS	LPARL/Fisher	IR Background	WDCRF	-	-
1964-S539	2438695.54	1964 Oct 27 0068	Aerobee 150	-	MASA 04-116GG	0.000	GSFC	SS	ASE/MTT/Giacconi,Oda	XR Astron	WDCRF	ASP-2017	-
1964-S552	2438699.31	1964 Oct 30 1930	Aerobee 150	-	MASA 04-52UG	0.000	GSFC	SS	PRIM/Kerton	Solar X	WDCRF	-	-
1964-S567	2438702.83	1964 Nov 3 0757	Aerobee 150	-	MASA 04-52UG	0.000	GSFC	SS	GSFC/Stecher	UV Astron	WDCRF	-	-
1964-S601	2438706.94	1964 Nov 7 1031	Aerobee 150	-	MS 155	0.000	GSFC	SS	HRL/Purcell,Garrett	Solar UV	WDCRF	-	-
1964-S621	2438712.31	1964 Nov 12 1930	Aerobee 150	-	MASA 04-110GG	0.000	GSFC	SS	HRL/Purcell,Garrett	Solar UV	WDCRF	-	-
1964-S624	2438713.93	1964 Nov 14 1023	Aerobee 150	-	MASA 04-45GA	0.000	GSFC	SS	ARC/Pechari	Meteorites	WDCRF	-	-
1964-S626	2438716.26	1964 Nov 16 1818	Aerobee 150A	-	MASA 04-118NA	0.000	GSFC	SS	ARC/Pechari	Meteorites	WDCRF	-	-
1964-S627	2438716.27	1964 Nov 16 1831	Aerobee 150	-	MS 154R	0.000	NRL	SS	HRL/Austin,Garrett	Solar UV	WDCRF	-	-
1964-S639	2438719.22	1964 Nov 19 1715	Aerobee 150	-	MS 161	0.000	NRL	SS	HRL/Bowyer,Byram	XR Astron	WDCRF	Sci147,394	-
1964-S648	2438724.98	1964 Nov 25 1134	Aerobee 150	-	MASA 04-83GA	0.000	AFCHL	SS	HRL/Austin,Garrett	XR Astron	WDCRF	TM-X-56664	-
1964-S664	2438730.76	1964 Dec 1 0615	Aerobee 150	-	MS 161	0.000	GSFC	SS	AFCHL/Hinteregger	Aeronomy	WDCRF	HR650927-15	-
1964-S674	2438738.45	1964 Dec 8 2226?	Aerobee 150	-	MS 161	0.000	AFCHL	SS	AFCHL/Hinteregger	Aeronomy	WDCRF	-	-
1964-S678	2438741.10	1964 Dec 11 1426?	Aerobee 150	-	MS 161	0.000</							



Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Agency	Launch_Code	Group	Category	LTCite	Cite	Notes
1965-558	243879.82	1965 Jan 30 0745	Aerobee 150	-	NF3.162	NRL	SS	NRL/Harwit	IR Astron	WDCRF	-	-
1965-559	243880.26	1965 Feb 11 1765	Aerobee 150	-	RES.153	AFCLR	SS	JHU/Alursa	Solar UV/Solar EUV	WDCRF	-	-
1965-560	243881.70	1965 Feb 11 1765	Aerobee 150	-	MASA 04.129CA	GSFC	SS	JHU/Faestle,Diabeo,Isler	Aeronomy	JGR73.3383	-	-
1965-5127	243882.51	1965 Mar 3 0009	Aerobee 150	-	RES.516	AFCLR	SS	AFCLR/Hinteregger	Solar UV	WDCRF	-	WDCRF
1965-5128	243882.09	1965 Mar 03 1415:00	Aerobee 150	-	RES.517	AFCLR	SS	AFCLR/Hinteregger	Solar UV	WDCRF	-	-
1965-5135	243882.61	1965 Mar 5 0031	Aerobee 150	-	RES.518	AFCLR	SS	AFCLR/Hinteregger	Solar UV	WDCRF	-	-
1965-5140	243882.65	1965 Mar 6 0732	Aerobee 150	-	MASA 04.1330G	GSFC	SS	PRIM/Morton	UV Astron	WDCRF	-	-
1965-5141	243882.81	1965 Mar 6 0732	Aerobee 150	-	AD3.613	AFCLR	SS	UUT/AFCLR/Baker,Ulwick	Aeron/Ionos	AmaleeGeo24.225	-	AmaleeGeo24.285
1965-5156	243882.66	1965 Mar 13 0338	Aerobee 150	-	MASA 04.566G	GSFC	SS	GSFC/Boggs	UV Astron	WDCRF	-	-
1965-5157	243882.66	1965 Mar 13 0338	Aerobee 150	-	RES.516	AFCLR	SS	AFCLR/Harwit	UV Astron?	WDCRF	-	-
1965-5158	243882.82	1965 Mar 13 0742	Aerobee 150	-	RES.517	AFCLR	SS	UUT/AFCLR/Baker,Ulwick	Meteorites/Auroral	WDCRF	-	AmaleeGeo24.285
1965-5166	243883.13	1965 Mar 17 1510	Aerobee 150	-	MASA 04.63GS	GSFC	SS	ASE/Ready,Giacconi	Solar X	WDCRF	-	-
1965-5174	243883.62	1965 Mar 19 0300	Aerobee 150	-	MASA 04.570G	GSFC	SS	GSFC/Boggs,Sciulich	UV Astron	WDCRF	-	-
1965-5177	243883.99	1965 Mar 20 0542	Aerobee 300	-	MASA 06.11GA	GSFC	SS	UHL/Carignan	Aeronomy	WDCRF	-	-
1965-5208	243883.74	1965 Mar 30 0550	Aerobee 150	-	MS3.159	NRL	SS	NRL/Fackler,Gallledge	Aeron/UV Astron	WDCRF	-	-
1965-5226	243883.12	1965 Apr 12 1447	Aerobee 150	-	MASA 04.496S (128-3)	GSFC	SS	GSFC/Fredga	Solar UV	RES-24357	-	TMX-55536
1965-5242	243887.16	1965 Apr 20 1540	Aerobee 150	-	RES.156	AFCLR	SS	NRL/Austin,Garrett	Aeronomy	RES-24358	-	-
1965-5246	243887.77	1965 Apr 27 0530	Aerobee 150	-	RES.162R	NRL	SS	NRL/Byram	Solar UV, X	WDCRF	-	-
1965-5274	243888.81	1965 May 4 0730	Aerobee 150	-	NF3.162R	NRL	SS	NRL/Harwit	UV Astron	WDCRF	-	-
1965-5335	243891.77	1965 May 5 0323	Aerobee 150	-	MASA 04.89GG	GSFC	SS	GSFC/Boggs,Wright	UV Astron	WDCRF	-	Sci152.66
1965-5362	243892.38	1965 Jun 17 2107	Aerobee 150	-	MASA 04.170G	GSFC	SS	GSFC/Fichtel	UV Astron	WDCRF	-	-
1965-5365	243893.11	1965 Jun 23 1432	Aerobee 150	-	MASA 04.140EE	GSFC	SS	PRIM/Morton	UV Astron	WDCRF	-	-
1965-5383	243893.16	1965 Jun 23 1547	Aerobee 150	-	RES.10	AFPD	SS	RFMO/Broadfoot	Magnetospheric	WDCRF	-	-
1965-5393	243894.29	1965 Jun 29 1940	Aerobee 150	-	MASA 04.112HA	GSFC	SS	JPL/Barth	Magnetospheric	WDCRF	-	TM-X-55640
1965-5414	243894.10	1965 Jun 30 1430	Aerobee 150	-	MASA 04.105HP	GSFC	SS	JPL/Gaugler,Barath	Aeronomy	WDCRF	-	TM-X-55640
1965-5420	243894.81	1965 Jul 7 0725	Aerobee 150	-	RES.117/PTES-S1	AFCLR	SS	AFCLR/Soberman	Aeron. AF3.285?	RES-617	-	HR650503-33
1965-5424	243895.37	1965 Jul 14 0757	Aerobee 150	-	MASA 04.1280A	GSFC	SS	UHL/Flur	Aeronomy	WDCRF	-	WDCRF
1965-5432	243895.38	1965 Jul 21 2000	Aerobee 150	-	RES.269/PTES-S2	AFCLR	SS	AFCLR/Soberman	UV Astron	WDCRF	-	-
1965-5436	243895.86	1965 Jul 21 0956	Aerobee 150	-	RES.269/PTES-S3	AFCLR	SS	AFCLR/Soberman	UV Astron	WDCRF	-	-
1965-5466	243896.33	1965 Aug 12 1715	Aerobee 150	-	RES.519	AFCLR	SS	AFCLR/Harwit	UV Astron	WDCRF	-	-
1965-5481	243899.29	1965 Aug 22 1903	Aerobee 150	-	RES.514	AFCLR	SS	AFCLR/Soberman	UV Astron	WDCRF	-	-
1965-5489	243902.41	1965 Sep 17 2131	Aerobee 150	-	MASA 04.138LI	GSFC	SS	CHES/storrey	UV Astron	WDCRF	-	-
1965-5507	243902.67	1965 Sep 22 2007	Aerobee 150	-	MASA 04.147OG	GSFC	SS	ASE/Giacconi,Gursky	UV Astron	ASE-192	-	WDCRF
1965-5513	243902.91	1965 Sep 25 0400	Aerobee 150	-	RES.722	AFCLR	SS	AFCLR/Hinteregger	Test	WDCRF	-	AFCLR-66-631
1965-5517	243903.66	1965 Sep 25 2154	Aerobee 150A	-	MASA 04.139LI	GSFC	SS	AFCLR/Commiff	UV Astron	WDCRF	-	-
1965-5520	243903.88	1965 Sep 28 0939:58	Aerobee 150	-	MASA 04.1500A-G1-G8	GSFC	SS	GSFC/Boggs	Meteorites/Biology	WDCRF	-	-
1965-5521	243902.59	1965 Sep 29 0130	Aerobee 150	-	MASA 04.121OG	GSFC	SS	NRL/COM/Piper,Harwit	Aeronomy	WDCRF	-	TEES-NS13-580
1965-5535	243903.96	1965 Oct 1 0330	Aerobee 150	-	RES.164	GSFC	SS	NRL/Fisher	UV Astron	WDCRF	-	-
1965-5541	243903.62	1965 Oct 5 0930	Aerobee 150	-	MASA 04.131OG	GSFC	SS	NRL/Byram,Chubb,Friedman	UV Astron	WDCRF	-	-
1965-5550	243906.53	1965 Oct 13 2013	Aerobee 150	-	MASA 04.142HA	GSFC	SS	UHL/Barth	UV Astron	WDCRF	-	-
1965-5551	243906.38	1965 Oct 19 2035	Aerobee 150A	-	MASA 04.140US	GSFC	SS	NRL/Barth	UV Astron	WDCRF	-	-
1965-5566	243905.49	1965 Oct 20 0258	Aerobee 150	-	MASA 04.160A	GSFC	SS	NRL/Roemen	UV Astron	WDCRF	-	-
1965-5571	243905.71	1965 Oct 21 0530	Aerobee 150	-	RES.163	NRL	SS	NRL/Faestle	UV Astron/Solar UV	WDCRF	-	SR-VII-1252
1965-5577	243906.14	1965 Oct 25 1525	Aerobee 150	-	MASA 04.562S	GSFC	SS	GSFC/Faestle,Gallledge	Aeronomy	WDCRF	-	AJ71.163
1965-5584	243906.98	1965 Oct 29 1130	Aerobee 150	-	RES.163R	NRL	SS	NRL/COM/Piper,Harwit	Aeronomy	WDCRF	-	TMX-55536
1965-5594	243908.29	1965 Nov 8 1900	Aerobee 150	-	RES.163R	NRL	SS	NRL/COM/Piper,Harwit	Aeronomy	WDCRF	-	AJ71.1026
1965-5604	243907.29	1965 Nov 9 1900	Aerobee 150	-	RES.163R	NRL	SS	NRL/COM/Piper,Harwit	Aeronomy	WDCRF	-	-
1965-5609	243907.41	1965 Nov 16 0230	Aerobee 150	-	RES.163R	NRL	SS	NRL/COM/Piper,Harwit	Aeronomy	WDCRF	-	-
1965-5617	243907.60	1965 Nov 16 0230	Aerobee 150	-	RES.163R	NRL	SS	NRL/COM/Piper,Harwit	Aeronomy	WDCRF	-	-
1965-5635	243909.85	1965 Nov 30 0928	Aerobee 150	-	MASA 04.119HA	GSFC	SS	K23.8	UV Astron	WDCRF	-	HR651129-16
1965-5655	243909.84	1965 Nov 30 0928	Aerobee 150	-	MASA 04.155GG	GSFC	SS	MASA 04.155GG	UV Astron	WDCRF	-	-
1965-5656	243909.84	1965 Nov 30 0928	Aerobee 150	-	MASA 04.145GG	GSFC	SS	MASA 04.145GG	UV Astron	WDCRF	-	-
1965-5661	243910.63	1965 Dec 9 0319	Aerobee 150A	-	MASA 04.90GG	GSFC	SS	MASA 04.90GG	UV Astron	WDCRF	-	-
1965-5681	243914.69	1966 Jan 19 0439	Aerobee 150	-	K23.11	AFCLR	SS	K23.11	UV Astron	WDCRF	-	-
1965-5683	243915.56	1966 Jan 27 0129	Aerobee 150	-	RES.163	NRL	SS	NRL/Young,Holmes	Aeron/Ionos	WDCRF	-	TMX-55536,Ap1144,864
1965-5688	243915.92	1966 Jan 27 0129	Aerobee 150	-	RES.163	NRL	SS	NRL/Young,Holmes	Aeron/Ionos	WDCRF	-	-
1965-5692	243915.92	1966 Feb 2 1004	Aerobee 150	-	RES.163	NRL	SS	NRL/Young,Holmes	Aeron/Ionos	WDCRF	-	-
1965-5721	243917.73	1966 Feb 2 1755	Aerobee 150	-	MASA 04.50UC	GSFC	SS	MASA 04.50UC	Solar X	WDCRF	-	CR-77752
1965-5745	243917.25	1966 Feb 2 1755	Aerobee 150	-	MASA 04.90DS	GSFC	SS	MASA 04.90DS	Solar X	WDCRF	-	CR-4007
1965-5748	243918.41	1966 Mar 3 0154	Aerobee 150A	-	MASA 04.100BS	GSFC	SS	AFCLR/Hinteregger	Aeronomy	CR-76317	-	CR-4007
1965-5753	243919.82	1966 Mar 8 0742	Aerobee 150	-	MASA 04.148GG	GSFC	SS	ASE/MTT/Giacconi,Oba	UV Astron	ASE-1372	-	ASE-1637
1965-5754	243919.82	1966 Mar 8 0742	Aerobee 150	-	K23.15	AFCLR	SS	PRIM/Morton	UV Astron	WDCRF	-	-
1965-5797	243923.27	1966 Mar 30 1835	Aerobee 150	-	RES.163	AFCLR	SS	UCD/Bass	Aeronomy	WDCRF	-	AFCLR-68-0009
1965-5819	243920.12	1966 Apr 14 1508	Aerobee 150	-	MASA 04.143MA	GSFC	SS	MASA 04.143MA	Solar	WDCRF	-	-
1965-5820	243920.13	1966 Apr 14 1508	Aerobee 150	-	MASA 04.24US	GSFC	SS	MASA 04.24US	Solar	WDCRF	-	-
1965-5821	243920.98	1966 Apr 21 1125	Aerobee 150	-	MASA 04.165HA	GSFC	SS	MASA 04.165HA	Solar	WDCRF	-	SP-4007
1965-5837	243924.02	1966 Apr 28 1235	Aerobee 150	-	MASA 04.180BS	GSFC	SS	MASA 04.180BS	Solar	WDCRF	-	CR-77752
1965-5839	243924.66	1966 Apr 29 0349	Aerobee 150	-	RES.163	AFCLR	SS	AFCLR/Walker,Commiff	Tech IR	CR-76571	-	-
1965-5865	243925.14	1966 May 8 1520	Aerobee 150	-	MASA 04.106HP	GSFC	SS	MASA 04.106HP	Tech	WDCRF	-	-
1965-5868	243925.67	1966 May 18 0410	Aerobee 150A	-	MASA 04.171UG	GSFC	SS	MASA 04.171UG	UV Astron	WDCRF	-	CR-77647
1965-5871	243926.13	1966 May 20 2330	Aerobee 150	-	MASA 04.96GS	GSFC	SS	MASA 04.96GS	Solar X	WDCRF	-	CR-76049
1965-5879	243926.48	1966 May 24 0507	Aerobee 150	-	MASA 04.51UG	GSFC	SS	GSFC/Hebert	Solar	WDCRF	-	CR-77331
1965-5886	243926.71	1966 May 24 0507	Aerobee 150	-	MASA 04.51UG	GSFC	SS	GSFC/Hebert	Solar	WDCRF	-	CR-77331
1965-5893	243927.73	1966 Jul 16 0532	Aerobee 150	-	MASA 04.159GG	GSFC	SS	PRIM/Morton	UV Astron	WDCRF	-	CR-77332
1965-5900	243932.65	1966 Jul 19 0336	Aerobee 150	-	MASA 04.144DG	GSFC	SS	NRL/Byram,Carrubbers	UV Astron	WDCRF	-	AFCLR-68-0009
1965-5906	243932.38	1966 Jul 22 2100	Aerobee 150	-	RES.163	AFCLR	SS	NRL/Byram,Carrubbers	Solar UV	WDCRF	-	SR8.450
1965-5908	243932.94	1966 Jul 27 1500	Aerobee 150	-	RES.163	AFCLR	SS	NRL/Byram,Carrubbers	Solar UV	WDCRF	-	AFCLR
1965-5931	243934.12	1966 Aug 11 1553	Aerobee 150	-	RES.163	AFCLR	SS	NRL/Byram,Carrubbers	UV Astron	WDCRF	-	AFCLR
1965-5936	243934.46	1966 Aug 11 1553	Aerobee 150	-	RES.163	AFCLR	SS	NRL/Byram,Carrubbers	UV Astron	WDCRF	-	AFCLR
1965-5946	243934.26	1966 Aug 26 1813	Aerobee 150A	-	MASA 04.101DS	GSFC	SS	AFCLR/Silverman	Auroral	WDCRF	-	-
1965-5947	243934.26	1966 Aug 26 1813	Aerobee 150	-	MASA 04.101DS	GSFC	SS	AFCLR/Silverman	Auroral	WDCRF	-	-
1965-5948	243934.26	1966 Aug 26 1813	Aerobee 150	-	MASA 04.101DS	GSFC	SS	AFCLR/Silverman	Auroral	WDCRF	-	-
1965-5949	243934.26											

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	OrbPay	Agency	Launch_Code	Group	Category	LTCite	Cite	Notes
1966-5481	2439371.46	1966 Sep 2 2220	Aerobee 150	-	NRL M3.152	0.000	NRL	SS	NRL/Sloan, Guss	Solar EUV	WDKRF	-	-
1966-5488	2439388.74	1966 Sep 20 0545	Aerobee 150	-	MASA 04.1760G	0.000	GSFC	SS	PRIM/Aorton	UV Astron	WDKRF	-	-
1966-A107	2439389.21	1966 Sep 20 1705	Aerobee 150	-	MASA 04.1760G	0.000	GSFC	SS	PRIM/Aorton	Test	WDKRF	-	-
1966-5428	2439403.36	1966 Oct 1 2029	Aerobee 150	-	NRL M3.160	0.000	KPNO/KPNO	SS	NRL/Amick	Solar X/Test	WDKRF	-	ApJ148.L133
1966-5438	2439410.47	1966 Oct 11 2322	Aerobee 150	-	KP3.16	0.000	KPNO	SS	KPNO/Wallace, Broadfoot	Aeron	WDKRF	-	PlanSpSci17, 975
1966-5439	2439410.58	1966 Oct 12 0152	Aerobee 150	-	MASA 04.1490G	0.000	GSFC	SS	ASE/Gursky	XR Astron	WDKRF	-	CR-762, ApJ148.L119
1966-5457	2439421.14	1966 Oct 22 1520	Aerobee 150	-	MASA 04.1610A	0.000	GSFC	SS	ARC/Farlow	Meteorites	WDKRF	-	-
1966-5461	2439424.23	1966 Oct 25 1725	Aerobee 150	-	MASA 04.1950G-G1	0.000	GSFC	SS	GSFC/Berg	Meteorites	WDKRF	-	-
1966-5476	2439430.50	1966 Nov 1 1115	Aerobee 150	-	-	0.000	AFRL	SS	AFRL/	Solar EUV	WDKRF	-	-
1966-5615	2439442.18	1966 Nov 12 1615	Aerobee 150	-	MASA 04.1536S	0.000	GSFC	SS	GSFC/Underwood	Solar EUV/eclipse	WDKRF	-	-
1966-5601	2439442.19	1966 Nov 12 1640	Aerobee 150	-	MASA 04.191DS	0.000	MASA/NRL	SS	NRL/Koomen, Purcell	Solar EUV/eclipse	WDKRF	-	SNS 469
1966-5624	2439446.06	1966 Nov 16 1315	Aerobee 150	-	CRJ M3.287	0.000	AFRL	SS	AFRL/Skrivanek	Meteorites	AFRL	-	-
1966-5648	2439450.92	1966 Nov 21 1000	Aerobee 150	-	CRJ M3.357	0.000	AFRL	SS	GSFC/Stecher	UV Astron	WDKRF	-	-
1966-5655	2439456.59	1966 Nov 27 0216	Aerobee 150	-	CRJ M3.357	0.000	AFRL	SS	AFRL/Sallisbury, Adler	IR Astron	WDKRF	-	-
1966-5653	2439459.99	1966 Nov 30 1145	Aerobee 150	-	MASA 04.1810A	0.000	GSFC	SS	UMI/Hier	Aeronomy	WDKRF	-	-
1966-5667	2439462.38	1966 Dec 2 2109	Aerobee 150	-	CRJ M3.724	0.000	AFRL	SS	AFRL/Chun, Liff	Tech IR	AFRL	-	-
1966-5669	2439465.65	1966 Dec 6 0335	Aerobee 150	-	CRJ M3.1020G	0.000	GSFC	SS	UCB/Booyar	XR Astron	WDKRF	-	Harz217, 32
1966-5682	2439472.77	1966 Dec 13 0630	Aerobee 150	-	CRJ M3.615	0.000	AFRL	SS	AFRL/ODU/Standock	Ionos	WDKRF	-	AmaleGeo24, 285
1966-5688	2439473.84	1966 Dec 14 0516	Aerobee 150	-	CRJ M3.194	0.000	NRL	SS	NRL/Byram	XR Astron?	WDKRF	-	-
1966-5687	2439476.76	1966 Dec 17 0615	Aerobee 150	-	KP3.19	0.000	KPNO	SS	KPNO/Stuart	UV Astron	WDKRF	-	-
1966-A153	2439508.29	1967 Jan 17 1900	Aerobee 150	-	CRJ M3.526	0.000	AFRL	SS	AFRL/Hinteregger	Solar EUV	WDKRF	-	AFRL-68-0009
1967-5122	2439538.68	1967 Feb 17 0418	Aerobee 150	-	MASA 04.1630A	0.000	AFRL	SS	JHU/Faastle	Aurora	WDKRF	-	SP-4008
1967-5136	2439552.68	1967 Mar 3 0530	Aerobee 150	-	MASA 04.1606G	0.000	GSFC	SS	GSFC/Stecher	UV Astron	WDKRF	-	-
1967-5136	2439552.68	1967 Mar 3 0530	Aerobee 150	-	MASA 04.840G	0.000	GSFC	SS	CON/Hawat	IR Astron	WDKRF	-	-
1967-5156	2439564.22	1967 Mar 14 1714	Aerobee 150A	-	MASA 04.102DS	0.000	GSFC	SS	AFRL/Hinteregger	Solar EUV	WDKRF	-	-
1967-5164	2439566.66	1967 Mar 17 0346	Aerobee 150	-	MASA 04.194DS	0.000	MASA/NRL	SS	NRL/Carruthers	UV Astron	WDKRF	-	SP-4008
1967-5168	2439572.21	1967 Mar 22 1656	Aerobee 150A	-	MASA 04.103DS	0.000	GSFC	SS	AFRL/Hinteregger	Solar EUV	WDKRF	-	AmaleGeo26, 547
1967-5188	2439581.65	1967 Apr 1 0340	Aerobee 150	-	MASA 04.2046G	0.000	GSFC	SS	GSFC/Stecher	UV Astron	WDKRF	-	-
1967-5193	2439585.51	1967 Apr 5 0015	Aerobee 150	-	MASA 04.166GS	0.000	GSFC	SS	LPRL/Weldon, Acton	Solar X/AR Astron	WDKRF	-	-
1967-5197	2439587.85	1967 Apr 7 0925	Aerobee 150	-	MASA 04.1696G	0.000	GSFC	SS	GSFC/Evans	UV Astron	WDKRF	-	SP-4008
1967-5246	2439605.14	1967 Apr 24 1520	Aerobee 150	-	MASA 04.1576G	0.000	GSFC	SS	GSFC/Wegart	Solar X/EUV	WDKRF	-	-
1967-5246	2439605.14	1967 Apr 24 1520	Aerobee 150	-	MASA 04.176GS	0.000	GSFC	SS	PRIM/Aorton	UV Astron	WDKRF	-	-
1967-5249	2439606.38	1967 May 5 0730	Aerobee 150	-	MASA 04.2030G	0.000	GSFC	SS	PRIM/Aorton	UV Astron	WDKRF	-	-
1967-5259	2439643.69	1967 Jun 2 0430	Aerobee 150	-	MASA 04.192DS	0.000	NRL	SS	NRL/Koomen, Purcell	Solar Opt/EUV	WDKRF	-	-
1967-5258	2439643.69	1967 Jun 2 0430	Aerobee 150	-	MASA 04.2106G	0.000	GSFC	SS	NRL/Byram	UV Astron	WDKRF	-	-
1967-5253	2439660.68	1967 Jun 6 1420	Aerobee 150	-	MASA 04.2220A	0.000	GSFC	SS	ARC/Farlow	Meteorites	WDKRF	-	-
1967-5256	2439660.68	1967 Jun 9 0415	Aerobee 150	-	KP3.21	0.000	KPNO	SS	PRIM/Aorton	UV Astron	WDKRF	-	-
1967-5331	2439663.58	1967 Jun 9 1949	Aerobee 150	-	MASA 04.1790A	0.000	AFRL	SS	UMI/Hier	Aeronomy	WDKRF	-	SP-4008
1967-5337	2439677.28	1967 Jul 8 1841	Aerobee 150	-	CRJ M3.582	0.000	AFRL	SS	AFRL/Silverman	Aeronomy	WDKRF	-	AFRL
1967-5351	2439679.66	1967 Jul 8 0410	Aerobee 150	-	MASA 04.1910G	0.000	AFRL	SS	UMI/Brad	XR Astron	WDKRF	-	AFRL
1967-5352	2439679.66	1967 Jul 8 0410	Aerobee 150	-	MASA 04.2120A	0.000	GSFC	SS	UMI/Brad	XR Astron	WDKRF	-	SP-4008
1967-5353	2439681.99	1967 Jul 20 1924	Aerobee 150	-	MASA 04.1710A	0.000	GSFC	SS	UMI/Hier	Aeronomy	WDKRF	-	-
1967-5363	2439692.31	1967 Jul 20 1924	Aerobee 150	-	MASA 04.1710A	0.000	GSFC	SS	UMI/Hier	Aeronomy	WDKRF	-	-
1967-5368	2439706.70	1967 Aug 4 0452	Aerobee 150	-	MASA 04.2070A	0.000	GSFC	SS	UMI/Hier	UV/AR Astron	WDKRF	-	SP-4008
1967-5376	2439711.41	1967 Aug 8 1425	Aerobee 150	-	MASA M3.233A	0.000	AFRL	SS	AFRL/Hinteregger	Ionos	WDKRF	-	SR10, 266
1967-5384	2439718.11	1967 Aug 8 1425	Aerobee 150	-	NRL M3.187	0.000	NRL	SS	NRL/Factor	Solar EUV	WDKRF	-	-
1967-5387	2439718.78	1967 Aug 15 0930	Aerobee 150	-	CRJ M3.187	0.000	AFRL	SS	NRL/Factor	Meteorites	WDKRF	-	-
1967-5387	2439718.78	1967 Aug 15 0930	Aerobee 150	-	MASA 04.1870G	0.000	AFRL	SS	NRL/Factor	Meteorites	WDKRF	-	-
1967-5396	2439728.69	1967 Aug 26 0436	Aerobee 150	-	MASA 04.1970G	0.000	AFRL	SS	AFRL/Hinteregger	Aeronomy	WDKRF	-	SP-4008
1967-5396	2439728.69	1967 Aug 26 0436	Aerobee 150	-	NRL M3.190	0.000	NRL	SS	AFRL/Hinteregger	Aeronomy	WDKRF	-	SP-4008
1967-5410	2439741.64	1967 Sep 5 2205	Aerobee 150	-	MASA 10.072G	0.000	GSFC	SS	NRL/Beckwith, Henry	UV Astron	WDKRF	-	-
1967-5417	2439746.43	1967 Sep 30 1614	Aerobee 150	-	MASA 04.104DS	0.000	GSFC	SS	AFRL/Hinteregger	UV Astron	WDKRF	-	-
1967-5469	2439761.19	1967 Oct 5 1420	Aerobee 150	-	MASA 04.152DS	0.000	GSFC	SS	GSFC/Hinteregger	Solar X/UV	WDKRF	-	-
1967-5472	2439767.26	1967 Oct 5 1420	Aerobee 150	-	MASA 04.230DS	0.000	GSFC	SS	NRL/Holtz, Purcell, Koomen	Solar EUV	WDKRF	-	10B75, 8466
1967-5472	2439767.26	1967 Oct 5 1420	Aerobee 150	-	MASA 04.230DS	0.000	GSFC	SS	UCB/Booyar, Jones	Solar EUV	WDKRF	-	-
1967-5496	2439793.00	1967 Oct 19 1205	Aerobee 150	-	MASA 04.2260G	0.000	GSFC	SS	PRIM/Hier	UV Astron	WDKRF	-	SP-4008
1967-5496	2439793.00	1967 Oct 19 1205	Aerobee 150	-	CRJ M3.530	0.000	AFRL	SS	AFRL/Hinteregger	Aeronomy	WDKRF	-	SP-4008
1967-5519	2439795.88	1967 Nov 1 1130	Aerobee 150	-	MASA 04.2290G	0.000	MASA/NRL	SS	NRL/Carruthers	Aeronomy	WDKRF	-	SP-4008
1967-5528	2439802.24	1967 Nov 7 1715	Aerobee 150	-	MASA 04.2290G	0.000	AFRL	SS	NRL/Carruthers	Aeronomy	WDKRF	-	SP-4008
1967-5534	2439808.92	1967 Nov 14 1005	Aerobee 150	-	CRJ M3.365	0.000	AFRL	SS	AFRL/Silverman	Aeronomy	WDKRF	-	SP-4008
1967-5534	2439810.40	1967 Nov 15 2130	Aerobee 150	-	CRJ M3.365	0.000	AFRL	SS	AFRL/Silverman	Aeronomy	WDKRF	-	SP-4008
1967-5542	2439814.95	1967 Nov 20 1042	Aerobee 150	-	MASA 04.2280G	0.000	KPNO	SS	UPL/KPNO/Anderson	UV Astron	WDKRF	-	JA-Sci26, 874
1967-5560	2439828.99	1967 Dec 4 1145	Aerobee 150	-	KP3.20	0.000	GSFC	SS	JHU/Faastle	UV Astron	WDKRF	-	AppDrs8, 1821
1967-5565	2439829.88	1967 Dec 5 1130	Aerobee 150A	-	MASA 04.2190A	0.000	GSFC	SS	JHU/Faastle	Biology	WDKRF	-	TSSTO
1967-5565	2439829.88	1967 Dec 5 1130	Aerobee 150A	-	MASA 04.2190A	0.000	GSFC	SS	JHU/Faastle	Biology	WDKRF	-	TSSTO
1967-5566	2439830.95	1967 Dec 5 1130	Aerobee 150	-	MASA 04.2190A	0.000	GSFC	SS	JHU/Faastle	Biology	WDKRF	-	TSSTO
1967-5566	2439830.95	1967 Dec 5 1130	Aerobee 150	-	CRJ M3.268	0.000	GSFC	SS	GSFC/Saith, A	UV Astron	WDKRF	-	SP-4008
1967-5576	2439835.42	1967 Dec 6 10200	Aerobee 150	-	MASA 04.2011T	0.000	AFRL	SS	AFRL/Holtz, Hanson	Test/Dof Astron	AFRL	-	Sci164, 3886
1967-5576	2439835.42	1967 Dec 6 10200	Aerobee 150	-	CRJ M3.268	0.000	AFRL	SS	AFRL/Holtz, Hanson	Test/Dof Astron	AFRL	-	Sci164, 3886
1968-504	2439878.21	1968 Jan 13 1259	Aerobee 150	-	NRL M3.201	0.000	NRL/KPNO	SS	NRL/Hickler	Solar X	WDKRF	-	-
1968-5101	2439881.67	1968 Jan 26 0400	Aerobee 150	-	MASA 04.2616G	0.000	GSFC	SS	ASE/Giaccconi, Gursky, Gor.	UV Astron	WDKRF	-	-
1968-5116	2439888.76	1968 Feb 2 0530	Aerobee 150	-	MASA 04.2616G	0.000	GSFC	SS	ASE/Giaccconi, Gursky, Gor.	UV Astron	WDKRF	-	-
1968-5128	2439898.70	1968 Feb 9 0441	Aerobee 150	-	MASA 04.2200G	0.000	GSFC	SS	JHU/Faastle	Aurora	WDKRF	-	AmaleGeo28, 489
1968-5135	2439903.60	1968 Feb 9 0441	Aerobee 150	-	MASA 04.2170A	0.000	GSFC	SS	JHU/Faastle	Aurora	WDKRF	-	-
1968-5136	2439906.29	1968 Feb 19 2315	Aerobee 150	-	KP3.22	0.000	KPNO	SS	KPNO/Stuart	UV Astron	WDKRF	-	-
1968-5136	2439906.29	1968 Feb 19 2315	Aerobee 150	-	CRJ M3.531	0.000	AFRL	SS	AFRL/Hinteregger	Solar EUV	WDKRF	-	-
1968-5138													

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Agency	Launch_Code	Group	Category	LTCite	Cite	Notes
1966-S290	2439974.13	1968 Apr 27 1505	Aerobee 150	-	MASA 04-244DS	GSFC	SS	NRL/Tousey,Komen	Solar UV	WDCRF	-	-
1966-S293	2439976.12	1968 Apr 29 1500	Aerobee 150	-	MASA 04-245DS	GSFC	SS	NRL/Komen	Solar UV	WDCRF	-	-
1966-S305	2439979.80	1968 May 3 0715	Aerobee 150	-	MASA 04-227UG	GSFC	SS	PRIM/Morton	UV Astron	WDCRF	-	-
1966-A77	2439979.82	1968 May 3 0745	Aerobee 150	-	MASA 04-196UG	GSFC	SF	CHL/Morick	UV Astron	WDCRF	-	-
1966-S322	2439983.66	1968 May 17 0345	Aerobee 150	-	RFS 24	KFND	SS	KFND/Broadfoot	UV Astron	WDCRF	WDC	JATSci26,874
1966-S323	2439983.68	1968 May 17 0425	Aerobee 150	-	MASA 04-221GG	GSFC	SS	GSFC/Kondo	UV Astron	WDCRF	-	Ulrich/Wire
1966-S332	2439987.12	1968 May 20 1500	Aerobee 150	-	MASA 04-173UG	GSFC	SS	GSFC/Fredga	Solar	WDCRF	-	SolarPhys9,368
1966-S350	2440001.76	1968 May 25 0640	Aerobee 150	-	MASA 04-230GS	GSFC	SS	UMI/Bless	UV Astron	WDCRF	-	-
1966-S364	2440016.24	1968 Jun 8 1741	Aerobee 150	-	MASA 04-263GS	GSFC	SS	ASE/Ready,Valana	Solar EDV/X	WDCRF	-	-
1966-S365	2440016.28	1968 Jun 8 1838	Aerobee 150	-	MASA 04-194DS	GSFC	SS	NRL/Tousey,Purcell	Solar EDV	WDCRF	-	-
1966-S383	2440032.45	1968 Jun 24 2251	Aerobee 150	-	MASA 04-214HB	GSFC	SS	WFF/BeLerville,Develler	Biology	WDCRF	-	ISST9
1966-S325	2440064.66	1968 Jul 27 0355	Aerobee 150	-	MASA 04-236UG	GSFC	SS	CHL/Morick	UV Astron	WDCRF	-	-
1966-S326	2440064.69	1968 Jul 27 0430	Aerobee 150	-	MASA 04-225UG	GSFC	SS	MIT/Bredt	UV Astron	WDCRF	-	-
1966-S439	2440069.88	1968 Aug 1 0910	Aerobee 150	-	MASA 04-224HA	AFCHL	SS	AFCHL/Hinteregger	Ions/Solar EDV	AFCHL	-	SR10,337
1966-S443	2440075.26	1968 Aug 6 1843	Aerobee 150	-	CRJ A03-532	AFCHL	SS	NRL/Prinz,Barcoe	Solar EDV	WDCRF	-	-
1966-S444	2440075.28	1968 Aug 14 1637	Aerobee 150	-	NRL MES-183	AFCHL	SF	AFCHL/Walker	Aeron IR	AFCHL	-	-
1966-S458	2440083.63	1968 Aug 15 0759	Aerobee 150	-	CRJ MES-725	AFCHL	SS	NRL/Caruthers	Aeron IR	AFCHL	-	-
1966-S489	2440104.12	1968 Sep 4 1450	Aerobee 150	-	MASA 04-130UA	GSFC	SS	ICAR/Marvell	Aeronomy	WDCRF	-	-
1966-A94	2440113.10	1968 Sep 13 1431	Aerobee 150	MI	MASA 12-14GT	GSFC	SS	UMI/Code	Test	WDCRF	-	SP-4010
1966-S504	2440120.66	1968 Sep 21 0345	Aerobee 150	-	MASA 04-174UG	GSFC	SS	UMI/Komen	UV Astron	WDCRF	-	-
1966-S506	2440122.15	1968 Sep 22 1530	Aerobee 150	-	MASA 04-246US	GSFC	SS	NRL/Komen,Tousey	Solar UV	WDCRF	-	-
1966-S508	2440124.19	1968 Sep 24 1630	Aerobee 150	-	MASA 04-185US	GSFC	SS	HGO/Goldberg,Reeves	Solar UV	WDCRF	-	-
1966-S516	2440130.31	1968 Sep 30 1930	Aerobee 150	MI	MASA 04-231GS	GSFC	SS	GSFC/Bohring	Solar EDV	WDCRF	-	ApplOptics12,528
1966-S517	2440131.29	1968 Oct 1 1852	Aerobee 150	-	MASA 04-241UA	GSFC	SS	UCD/Barth	Aeronomy	WDCRF	-	-
1966-S584	2440139.94	1968 Oct 10 1030	Aerobee 150	-	MASA 04-265UG	GSFC	SS	NRL/Caruthers	UV Astron	WDCRF	-	-
1966-S584	2440146.47	1968 Oct 16 2315	Aerobee 150	-	MASA 04-248GS	GSFC	SS	LPARL/Acton	Solar	WDCRF	-	-
1966-S584	2440175.62	1968 Nov 15 0745	Aerobee 150	-	MASA 04-268UG	GSFC	SS	PRIN/Acton	UV Astron	WDCRF	-	-
1966-S601	2440182.27	1968 Nov 21 1630	Aerobee 150	-	CRJ A13-533	AFCHL	SS	AFCHL/Hinteregger	Solar EDV	AFCHL	-	-
1966-S602	2440182.30	1968 Nov 21 1915	Aerobee 150	MI	MASA 04-240US	GSFC	SS	UCD/Brumer,Reese	Solar EDV	WDCRF	-	-
1966-S603	2440182.36	1968 Nov 21 2045	Aerobee 150	-	MASA 04-215HB	GSFC	SS	UKY/WF7/Develler	Biology	WDCRF	-	-
1966-S654	2440197.76	1968 Dec 7 0611	Aerobee 150	-	MASA 04-264CC	GSFC	SS	ASE/Gorenstein	UV Astron	WDCRF	-	-
1966-S656	2440211.64	1968 Dec 21 0230	Aerobee 150	-	MASA 04-178UG	GSFC	SS	JHU/Faastle	UV Astron	WDCRF	-	ApJ187,145
1966-S656	2440211.61	1968 Dec 21 0245	Aerobee 150	-	MASA 04-269UA	GSFC	SS	CHM/Harwit	UV Astron	WDCRF	-	ApJ187,145
1966-S656	2440211.61	1968 Dec 21 0245	Aerobee 150	-	MASA 04-269UA	GSFC	SS	NRL/Caruthers	Aeronomy	WDCRF	-	ApJ187,145
1966-S656	2440211.61	1968 Dec 21 0245	Aerobee 150	-	MASA 04-269UA	GSFC	SS	UMI/Riser	Aeronomy	WDCRF	-	ApJ187,145
1966-S656	2440211.61	1968 Dec 21 0245	Aerobee 150	-	MASA 04-269UA	GSFC	SS	UMI/Riser	Aeronomy	WDCRF	-	ApJ187,145
1966-S656	2440211.61	1968 Dec 21 0245	Aerobee 150	-	MASA 04-269UA	GSFC	SS	JHU/Faastle	Aeronomy	WDCRF	-	ApJ187,145
1966-S656	2440211.61	1968 Dec 21 0245	Aerobee 150	-	MASA 04-269UA	GSFC	SS	NRL/Caruthers	Aeronomy	WDCRF	-	ApJ187,145
1966-S656	2440211.61	1968 Dec 21 0245	Aerobee 150	-	MASA 04-269UA	GSFC	SS	UMI/Riser	Aeronomy	WDCRF	-	ApJ187,145
1966-S656	2440211.61	1968 Dec 21 0245	Aerobee 150	-	MASA 04-269UA	GSFC	SS	JHU/Faastle	Aeronomy	WDCRF	-	ApJ187,145
1966-S656	2440211.61	1968 Dec 21 0245	Aerobee 150	-	MASA 04-269UA	GSFC	SS	NRL/Caruthers	Aeronomy	WDCRF	-	ApJ187,145
1966-S656	2440211.61	1968 Dec 21 0245	Aerobee 150	-	MASA 04-269UA	GSFC	SS	UMI/Riser	Aeronomy	WDCRF	-	ApJ187,145
1966-S656	2440211.61	1968 Dec 21 0245	Aerobee 150	-	MASA 04-269UA	GSFC	SS	JHU/Faastle	Aeronomy	WDCRF	-	ApJ187,145
1966-S656	2440211.61	1968 Dec 21 0245	Aerobee 150	-	MASA 04-269UA	GSFC	SS	NRL/Caruthers	Aeronomy	WDCRF	-	ApJ187,145
1966-S656	2440211.61	1968 Dec 21 0245	Aerobee 150	-	MASA 04-269UA	GSFC	SS	UMI/Riser	Aeronomy	WDCRF	-	ApJ187,145
1966-S656	2440211.61	1968 Dec 21 0245	Aerobee 150	-	MASA 04-269UA	GSFC	SS	JHU/Faastle	Aeronomy	WDCRF	-	ApJ187,145
1966-S656	2440211.61	1968 Dec 21 0245	Aerobee 150	-	MASA 04-269UA	GSFC	SS	NRL/Caruthers	Aeronomy	WDCRF	-	ApJ187,145
1966-S656	2440211.61	1968 Dec 21 0245	Aerobee 150	-	MASA 04-269UA	GSFC	SS	UMI/Riser	Aeronomy	WDCRF	-	ApJ187,145
1966-S656	2440211.61	1968 Dec 21 0245	Aerobee 150	-	MASA 04-269UA	GSFC	SS	JHU/Faastle	Aeronomy	WDCRF	-	ApJ187,145
1966-S656	2440211.61	1968 Dec 21 0245	Aerobee 150	-	MASA 04-269UA	GSFC	SS	NRL/Caruthers	Aeronomy	WDCRF	-	ApJ187,145
1966-S656	2440211.61	1968 Dec 21 0245	Aerobee 150	-	MASA 04-269UA	GSFC	SS	UMI/Riser	Aeronomy	WDCRF	-	ApJ187,145
1966-S656	2440211.61	1968 Dec 21 0245	Aerobee 150	-	MASA 04-269UA	GSFC	SS	JHU/Faastle	Aeronomy	WDCRF	-	ApJ187,145
1966-S656	2440211.61	1968 Dec 21 0245	Aerobee 150	-	MASA 04-269UA	GSFC	SS	NRL/Caruthers	Aeronomy	WDCRF	-	ApJ187,145
1966-S656	2440211.61	1968 Dec 21 0245	Aerobee 150	-	MASA 04-269UA	GSFC	SS	UMI/Riser	Aeronomy	WDCRF	-	ApJ187,145
1966-S656	2440211.61	1968 Dec 21 0245	Aerobee 150	-	MASA 04-269UA	GSFC	SS	JHU/Faastle	Aeronomy	WDCRF	-	ApJ187,145
1966-S656	2440211.61	1968 Dec 21 0245	Aerobee 150	-	MASA 04-269UA	GSFC	SS	NRL/Caruthers	Aeronomy	WDCRF	-	ApJ187,145
1966-S656	2440211.61	1968 Dec 21 0245	Aerobee 150	-	MASA 04-269UA	GSFC	SS	UMI/Riser	Aeronomy	WDCRF	-	ApJ187,145
1966-S656	2440211.61	1968 Dec 21 0245	Aerobee 150	-	MASA 04-269UA	GSFC	SS	JHU/Faastle	Aeronomy	WDCRF	-	ApJ187,145
1966-S656	2440211.61	1968 Dec 21 0245	Aerobee 150	-	MASA 04-269UA	GSFC	SS	NRL/Caruthers	Aeronomy	WDCRF	-	ApJ187,145
1966-S656	2440211.61	1968 Dec 21 0245	Aerobee 150	-	MASA 04-269UA	GSFC	SS	UMI/Riser	Aeronomy	WDCRF	-	ApJ187,145
1966-S656	2440211.61	1968 Dec 21 0245	Aerobee 150	-	MASA 04-269UA	GSFC	SS	JHU/Faastle	Aeronomy	WDCRF	-	ApJ187,145
1966-S656	2440211.61	1968 Dec 21 0245	Aerobee 150	-	MASA 04-269UA	GSFC	SS	NRL/Caruthers	Aeronomy	WDCRF	-	ApJ187,145
1966-S656	2440211.61	1968 Dec 21 0245	Aerobee 150	-	MASA 04-269UA	GSFC	SS	UMI/Riser	Aeronomy	WDCRF	-	ApJ187,145
1966-S656	2440211.61	1968 Dec 21 0245	Aerobee 150	-	MASA 04-269UA	GSFC	SS	JHU/Faastle	Aeronomy	WDCRF	-	ApJ187,145
1966-S656	2440211.61	1968 Dec 21 0245	Aerobee 150	-	MASA 04-269UA	GSFC	SS	NRL/Caruthers	Aeronomy	WDCRF	-	ApJ187,145
1966-S656	2440211.61	1968 Dec 21 0245	Aerobee 150	-	MASA 04-269UA	GSFC	SS	UMI/Riser	Aeronomy	WDCRF	-	ApJ187,145
1966-S656	2440211.61	1968 Dec 21 0245	Aerobee 150	-	MASA 04-269UA	GSFC	SS	JHU/Faastle	Aeronomy	WDCRF	-	ApJ187,145
1966-S656	2440211.61	1968 Dec 21 0245	Aerobee 150	-	MASA 04-269UA	GSFC	SS	NRL/Caruthers	Aeronomy	WDCRF	-	ApJ187,145
1966-S656	2440211.61	1968 Dec 21 0245	Aerobee 150	-	MASA 04-269UA	GSFC	SS	UMI/Riser	Aeronomy	WDCRF	-	ApJ187,145
1966-S656	2440211.61	1968 Dec 21 0245	Aerobee 150	-	MASA 04-269UA	GSFC	SS	JHU/Faastle	Aeronomy	WDCRF	-	ApJ187,145
1966-S656	2440211.61	1968 Dec 21 0245	Aerobee 150	-	MASA 04-269UA	GSFC	SS	NRL/Caruthers	Aeronomy	WDCRF	-	ApJ187,145
1966-S656	2440211.61	1968 Dec 21 0245	Aerobee 150	-	MASA 04-269UA	GSFC	SS	UMI/Riser	Aeronomy	WDCRF	-	ApJ187,145
1966-S656	2440211.61	1968 Dec 21 0245	Aerobee 150	-	MASA 04-269UA	GSFC	SS	JHU/Faastle	Aeronomy	WDCRF	-	ApJ187,145
1966-S656	2440211.61	1968 Dec 21 0245	Aerobee 150	-	MASA 04-269UA	GSFC	SS	NRL/Caruthers	Aeronomy	WDCRF	-	ApJ187,145
1966-S656	2440211.61	1968 Dec 21 0245	Aerobee 150	-	MASA 04-269UA	GSFC	SS	UMI/Riser	Aeronomy	WDCRF	-	ApJ187,145
1966-S656	2440211.61	1968 Dec 21 0245	Aerobee 150	-	MASA 04-269UA	GSFC	SS	JHU/Faastle	Aeronomy	WDCRF	-	ApJ187,145
1966-S656	2440211.61	1968 Dec 21 0245	Aerobee 150	-	MASA 04-269UA	GSFC	SS	NRL/Caruthers	Aeronomy	WDCRF	-	ApJ187,145
1966-S656	2440211.61	1968 Dec 21 0245	Aerobee 150	-	MASA 04-269UA	GSFC	SS	UMI/Riser	Aeronomy	WDCRF	-	ApJ187,145
1966-S656	2440211.61	1968 Dec 21 0245	Aerobee 150	-	MASA 04-269UA	GSFC	SS	JHU/Faastle	Aeronomy	WDCRF	-	ApJ187,145
1966-S656	2440211.61	1968 Dec 21 0245	Aerobee 150	-	MASA 04-269UA	GSFC	SS	NRL/Caruthers	Aeronomy	WDCRF	-	ApJ187,145
1966-S656	2440211.61	1968 Dec 21 0245	Aerobee 150	-	MASA 04-269UA	GSFC	SS	UMI/Riser	Aeronomy	WDCRF	-	ApJ187,1





Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Launch_Mission	FlightCode	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee_Km	Range_Km	Dest
1961-A147	2437453-50	1961 Jun 3	Agate	-	-	-	-	-	-	HMG	Bacchus	-	-	20?	-	-
1961-A149	2437457-50	1961 Jun 7	Agate	-	-	-	-	-	-	HMG	Bacchus	-	-	20?	-	-
1961-A235	2437616-50	1961 Nov 13	Agate	-	-	-	-	-	-	HMG	Bacchus	-	-	20?	-	-
1961-A237	2437620-50	1961 Nov 17	Agate	-	-	-	-	-	-	HMG	Bacchus	-	-	20?	-	-
1962-A33	2437742-50	1962 Mar 19	Agate	-	-	-	-	-	-	HMG	Bacchus	-	-	20?	-	-
1962-A36	2437746-50	1962 Mar 23	Agate	-	-	-	-	-	-	HMG	Bacchus	-	-	20?	-	-
1962-M41	2438017-50	1962 Dec 19	Topaze VE111	-	-	-	-	-	-	HMG	Agate	-	-	20	-	-
1963-M22	2438110-50	1963 Mar 22	Topaze VE111	-	-	-	-	-	-	HMG	Agate	-	-	80?	-	-
1963-M23	2438116-50	1963 Mar 28	Topaze VE111	-	-	-	-	-	-	HMG	Agate	-	-	80?	-	-
1963-A177	2438157-50	1963 May 18	Agate	-	-	-	-	-	-	HMG	Agate	-	-	20?	-	-
1963-M81	2438170-50	1963 May 21	Agate	-	-	-	-	-	-	HMG	Agate	-	-	80?	-	-
1963-M94	2438201-50	1963 Jun 21	Topaze VE111	-	-	-	-	-	-	HMG	Agate	-	-	80?	-	-
1963-M95	2438207-50	1963 Jun 27	Topaze VE111	-	-	-	-	-	-	HMG	Agate	-	-	80?	-	-
1963-M48	2438326-50	1963 Oct 24	Topaze VE111	-	-	-	-	-	-	HMG	Agate	-	-	80?	-	-
1963-A171	2438352-50	1963 Nov 19	Agate	-	-	-	-	-	-	CERES	-	-	-	0?	-	-
1963-A177	2438361-50	1963 Nov 26	Agate	-	-	-	-	-	-	CERES	-	-	-	0?	-	-
1963-S613	2438394-50	1963 Dec 21	Topaze VE111L	-	-	-	-	-	-	CERES	-	-	-	74	-	-
1964-A31	2438463-50	1964 Feb 28	Agate	-	-	-	-	-	-	CERES	-	-	-	20?	-	-
1964-S138	2438465-50	1964 Mar 11	Topaze VE111L	-	-	-	-	-	-	CERES	-	-	-	110	-	-
1964-A66	2438505-50	1964 Apr 20	Topaze VE111L	-	-	-	-	-	-	CERES	-	-	-	20?	-	-
1964-M14	2438550-50	1964 Jun 4	Topaze VE111	-	-	-	-	-	-	HMG	Agate	-	-	1?	-	-
1964-S286	2438556-73	1964 Jun 10 0530	Rubis	-	-	-	-	-	-	HMG	Bacchus	-	-	1800	-	-
1964-S293	2438556-71	1964 Jun 12 0503	Rubis	-	-	-	-	-	-	HMG	Bacchus	-	-	1800	-	-
1964-M32	2438680-50	1964 Oct 12	Rubis	-	-	-	-	-	-	HMG	Bacchus	-	-	60?	-	-
1964-M24	2438689-50	1964 Oct 21	Topaze VE111	-	-	-	-	-	-	HMG	Bacchus	-	-	49	-	-
1964-M30	2438740-50	1964 Dec 11	Topaze VE111	-	-	-	-	-	-	HMG	Agate	-	-	80?	-	-
1964-M31	2438744-50	1964 Dec 15	Topaze VE111	-	-	-	-	-	-	HMG	Agate	-	-	80?	-	-
1964-M33	2438747-50	1964 Dec 16	Topaze VE111	-	-	-	-	-	-	HMG	Agate	-	-	60?	-	-
1965-S86	2438752-50	1965 Feb 1	Rubis	-	-	-	-	-	-	CERES	-	-	-	100?	-	-
1965-S294	2438896-50	1965 May 16	Topaze VE111L	-	-	-	-	-	-	HMG	Agate	-	-	100?	-	-
1965-S301	2438901-50	1965 May 21	Topaze VE111L	-	-	-	-	-	-	HMG	Agate	-	-	100?	-	-
1965-S324	2438911-50	1965 May 31	Rubis	-	-	-	-	-	-	HMG	Bacchus	-	-	2000	-	-
1965-S339	2438914-50	1965 Jun 3	Rubis	-	-	-	-	-	-	HMG	Bacchus	-	-	2000	-	-
1965-S342	2438916-74	1965 Jun 5 0540	Rubis	-	-	-	-	-	-	HMG	Bacchus	-	-	2020	-	-
1965-S351	2439033-68	1965 Sep 30 0420	Rubis	-	-	-	-	-	-	HMG	Bacchus	-	-	1760	-	-
1965-S695	2439117-50	1965 Dec 23	Rubis	-	-	-	-	-	-	CERES	-	-	-	100?	-	-
1965-S168	2439250-30	1966 Mar 16	HD-620	2	-	-	-	-	-	CERES	-	-	-	100?	-	-
1965-S233	2439256-33	1966 Apr 22 2000	HD-620	2	-	-	-	-	-	CERES	-	-	-	2035	-	-
1966-S06	2439125-50	1966	Rubis	-	-	-	-	-	-	HMG	Bacchus	-	-	100?	-	-
1966-S07	2439125-50	1966	HD-620	-	-	-	-	-	-	CERES	-	-	-	100?	-	-
1966-S08	2439125-50	1966	HD-620	-	-	-	-	-	-	CERES	-	-	-	100?	-	-
1967-S366	2439477-59	1967 Jul 5 1407	Rubis	-	-	-	-	-	-	CERES	-	-	-	1500	-	-
1967-S01	2439480-50	1967	HD-620	-	-	-	-	-	-	CERES	-	-	-	100?	-	-
1967-S02	2439480-50	1967	HD-620	-	-	-	-	-	-	CERES	-	-	-	100?	-	-
1967-S03	2439480-50	1967	HD-620	-	-	-	-	-	-	CERES	-	-	-	100?	-	-
1967-S04	2439480-50	1967	HD-620	-	-	-	-	-	-	CERES	-	-	-	100?	-	-
1967-S05	2439480-50	1967	HD-620	-	-	-	-	-	-	CERES	-	-	-	100?	-	-
1968-S01	2439851-50	1968?	HD-620	-	-	-	-	-	-	CERES	-	-	-	100?	-	-
1968-S02	2439851-50	1968?	HD-620	-	-	-	-	-	-	CERES	-	-	-	100?	-	-
1968-S03	2439851-50	1968?	HD-620	-	-	-	-	-	-	CERES	-	-	-	100?	-	-
1968-S04	2439851-50	1968?	HD-620	-	-	-	-	-	-	CERES	-	-	-	100?	-	-
1968-S515	2440123-50	1968 Sep 30	HD-620	-	-	-	-	-	-	CERES	-	-	-	100?	-	-



Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	OrbPay	Agency	Launch_Code	Group	Category	LTCite	Cite	Notes
1961-A147	2437453.50	1961 Jun 3	Agate	-	-	0.000	ONERA	TS	-	Test	Tiziou	-	-
1961-A149	2437457.50	1961 Jun 7	Agate	-	-	0.000	ONERA	TS	-	Test	Tiziou	-	-
1961-A235	2437616.50	1961 Nov 13	Agate	-	-	0.000	ONERA	TS	-	Test	Tiziou	-	-
1961-A237	2437620.50	1961 Nov 17	Agate	-	-	0.000	ONERA	TS	-	Test	Tiziou	-	-
1962-A33	2437742.50	1962 Mar 19	Agate	-	-	0.000	ONERA	TS	-	Test	Tiziou	-	-
1962-A36	2437746.50	1962 Mar 23	Agate	-	-	0.000	ONERA	TS	-	Test	Tiziou	-	-
1962-M41	2438017.50	1962 Mar 19	Topaze VE111	-	C3	0.000	ONERA	TS	-	Test	ARSHEZ-295	Tiziou	-
1962-M22	2438110.50	1963 Mar 22	Topaze VE111	-	C4	0.000	ONERA	TS	-	Test	Tiziou	-	-
1963-M23	2438116.50	1963 Mar 28	Topaze VE111	-	C7	0.000	ONERA	TS	-	Test	Tiziou	-	-
1963-M17	2438167.50	1963 May 18	Agate	-	-	0.000	ONERA	TS	-	Test	Tiziou	-	-
1963-M81	2438170.50	1963 May 21	Agate	-	-	0.000	ONERA	TS	-	Test	Tiziou	-	-
1963-M34	2438201.50	1963 Jun 21	Topaze VE111	-	C9	0.000	ONERA	TS	-	Test	Tiziou	-	-
1963-M35	2438207.50	1963 Jun 27	Topaze VE111	-	C8	0.000	ONERA	TS	-	Test	Tiziou	-	-
1963-M46	2438326.50	1963 Oct 24	Topaze VE111	-	C10	0.000	ONERA	TS	-	Test	Tiziou	-	-
1963-A171	2438352.50	1963 Nov 19	Agate	-	R	0.000	ONERA	TF	-	Test	Tiziou	-	-
1963-A177	2438361.50	1963 Nov 28	Agate	-	R	0.000	ONERA	TS	-	Test	ARSHEZ-295	Tiziou	-
1963-S613	2438384.50	1963 Dec 21	Topaze VE111L	-	L1	0.000	ONERA	TS	-	Test	ARSHEZ-295	Tiziou	-
1964-A31	2438463.50	1964 Feb 28	Agate	-	R	0.000	ONERA	TS	-	Test	ARSHEZ-295	Tiziou	-
1964-S138	2438465.50	1964 Mar 11	Topaze VE111L	-	L2	0.000	ONERA	TS	-	Test	ARSHEZ-295	Tiziou	-
1964-M66	2438605.50	1964 Apr 20	Agate	-	R	0.000	ONERA	TS	-	Test	ARSHEZ-295	Tiziou	-
1964-M14	2438650.50	1964 Jun 4	Topaze VE111	-	C11 (11)	0.000	ONERA	TF	-	Test	ARSHEZ-295	Tiziou	-
1964-S286	2438656.73	1964 Jun 10 0630	Rubis	-	R1	0.000	ONERA	HS	-	Test	LAC-06_E4.3.02	Tiziou	-
1964-S293	2438668.71	1964 Jun 12 0603	Rubis	-	R2	0.000	ONERA	HS	-	Test	LAC-06_E4.3.02	Tiziou	-
1964-M32	2438680.50	1964 Oct 12	Rubis	-	R3	0.000	ONERA	HS	-	Test	LAC-06_E4.3.02	Tiziou	-
1964-M24	2438689.50	1964 Oct 21	Topaze VE111	-	C12 (12)	0.000	ONERA	TF	-	Test	ARSHEZ-295	Tiziou	-
1964-M30	2438740.50	1964 Dec 11	Topaze VE111	-	C13 (13)	0.000	ONERA	TS	-	Test	Tiziou	-	-
1964-M31	2438744.50	1964 Dec 15	Topaze VE111	-	C14 (14)	0.000	ONERA	TS	-	Test	Tiziou	-	-
1964-M33	2438747.50	1964 Dec 18	Rubis	-	R4	0.000	ONERA	TF	-	Test	Tiziou	-	-
1965-S86	2438792.50	1965 Feb 1	MP-620	-	LG1 (G)	0.000	DASST	MS	-	Test	Serra	-	-
1965-S284	2438896.50	1965 May 16	Topaze VE111L	-	LG2 (G)	0.000	ONERA	TS	-	Test	Tiziou	-	-
1965-S301	2438901.50	1965 May 21	Topaze VE111L	-	R5	0.000	ONERA	TS	-	Test	Tiziou	-	-
1965-S324	2438911.50	1965 May 31	Rubis	-	R6	0.000	ONERA	HS	-	Test/Tonos?	Tiziou	-	-
1965-S339	2438914.50	1965 Jun 3	Rubis	-	R7	0.000	ONERA	HS	-	Test/Tonos?	Tiziou	-	-
1965-S342	2438916.74	1965 Jun 5 0540	Rubis	-	R8	0.000	ONERA	HS	ONES/Guinard	RF Astron/Particles	Tiziou	-	-
1965-S351	2439033.66	1965 Sep 30 0420	Rubis	-	R9	0.000	ONERA	HS	DPH/GMS/Chifo,Stein.	DPH/GMS/Chifo,Stein.	Tiziou	-	-
1965-S895	2439117.50	1965 Dec 23	MP-620	-	-	0.000	DASST	MF	-	Test	Serra	-	-
1965-S168	2439200.50	1966 Mar 16	MP-620	-	-	0.000	DASST	MF	-	Test	Serra	-	-
1965-S233	2439236.33	1966 Apr 22 2000	Rubis	-	-	0.000	DASST	MF	HPE/Lutz	Plaema/Tonos/Ba	Tiziou	-	-
1966-S05	2439126.50	1966	MP-620	-	-	0.000	DASST	MF	-	Test	Serra	-	-
1966-S09	2439126.50	1966	MP-620	-	-	0.000	DASST	MF	-	Test	Serra	-	-
1966-S11	2439126.50	1966	MP-620	-	-	0.000	DASST	MF	-	Test	Serra	-	-
1967-S336	2439126.50	1967 Jul 5 1407	Rubis	-	R10	0.000	DASST	MS	DPH/Steinberg	RF Astron	Tiziou	-	-
1967-S01	2439400.50	1967	MP-620	-	-	0.000	DASST	MS	-	Test	LAC-06_E4.3.02	Tiziou	-
1967-S02	2439400.50	1967	MP-620	-	-	0.000	DASST	MS	-	Test	Serra	-	-
1967-S03	2439400.50	1967	MP-620	-	-	0.000	DASST	MS	-	Test	Serra	-	-
1967-S04	2439400.50	1967	MP-620	-	-	0.000	DASST	MF	-	Test	Serra	-	-
1967-S05	2439400.50	1967	MP-620	-	-	0.000	DASST	MF	-	Test	Serra	-	-
1968-S01	2439855.50	1968	MP-620	-	-	0.000	DASST	MS	-	Test	Serra	-	-
1968-S02	2439855.50	1968	MP-620	-	-	0.000	DASST	MS	-	Test	Serra	-	-
1968-S03	2439855.50	1968	MP-620	-	-	0.000	DASST	MF	-	Test	Serra	-	-
1968-S04	2439855.50	1968	MP-620	-	-	0.000	DASST	MF	-	Test	Serra	-	-
1968-S515	2440129.50	1968 Sep 30	MP-620	-	-	0.000	DASST	MS	-	Test	Serra	-	-





Launch

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Mission	FlightCode	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee km	Range km	Dest
2006-S40	245925.73	2006 Jul 9 0533	Agri 3	-	-	-	-	-	-	CHH	ICA	-	-	100?	-	-
2007-S22	2454202.72	2007 Apr 12 0522	Agri 3	-	01	-	-	-	-	CHH	ICA	-	-	400	-	-
2008-S19	2454593.68	2008 May 7 0426	Agri 3	-	-	-	-	-	-	CHH	ICA	-	-	350	-	-
2010-S15	245234.72	2010 Feb 7 0520	Agri 3	-	-	-	-	-	-	CHH	ICA	-	-	350	-	-
2012-S18	2456036.61	2012 Apr 19 0237	Agri 5	-	-	-	-	-	-	CHH	ICA	-	-	800	-	-
2012-S87	2456131.33	2012 Sep 20 1960	Agri 3	-	-	-	-	-	-	CHH	ICA	-	-	500	-	-
2013-S63	2456550.63	2013 Sep 15 0313	Agri 5	-	-	-	-	-	-	CHH	ICA	-	-	800	-	-
2013-S106	2456669.98	2013 Dec 23 1128	Agri 3	-	-	-	-	-	-	CHH	ICA	-	-	350	-	-
2015-S06	2457053.61	2015 Jan 31 0236	Agri 5	-	-	-	-	-	-	CHH	ICA	-	-	800	-	-
2015-S68	2457128.68	2015 Apr 16 0422	Agri 3	-	-	-	-	-	-	CHH	ICA	-	-	350	-	Bay Beng.
2016-S88	2457788.73	2016 Dec 26 0535	Agri 3	-	-	-	-	-	-	CHH	ICA	-	-	800	-	-
2017-S88	2457870.65	2017 Apr 27 0342	Agri 3	-	-	-	-	-	-	CHH	ICA	-	-	500	-	-
2018-S01	2458136.68	2018 Jan 18 0423	Agri 5	-	-	-	-	-	-	CHH	ICA	-	-	800	-	-
2018-S35	2458272.68	2018 Jun 3 0418	Agri 5	-	-	-	-	-	-	CHH	ICA	-	-	800	-	-
2018-S78	2458462.83	2018 Dec 10 0800	Agri 5	-	-	-	-	-	-	CHH	ICA	-	-	800	-	-
2019-S78	2458818.08	2019 Nov 30 1360	Agri 3	-	-	-	-	-	-	CHH	ICA	-	-	100	-	-
2021-S74	2458915.10	2021 Oct 27 1420	Agri 5	-	-	-	-	-	-	CHH	ICA	-	-	800	-	-
2022-S129	2458906.65	2022 Nov 23 0342	Agri 3	-	-	-	-	-	-	CHH	ICA	-	-	350	-	-
2022-S132	2458929.01	2022 Dec 15 1215?	Agri 5	-	-	-	-	-	-	CHH	ICA	-	-	800	-	-
2024-S07	2460360.50	2024 Mar 11	Agri 5	-	-	-	Mission Divyatra	-	-	CHH	ICA	-	-	800	-	-
							MIRV test	-	-			-	-			



Launch

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	OrbPay	Agency	Launch_Code	Group	Category	LTCite	Cite	Notes
2006-S40	245925.73	2006 Jul 9 0533	Agrn 3	-	01	0.000	IDRDL	NF	-	Test	Wire	-	-
2007-S22	245202.72	2007 Apr 12 0522	Agrn 3	-	-	0.000	IDRDL	NS	-	Test	Wire	-	-
2008-S19	245493.68	2008 May 7 0426	Agrn 3	-	-	0.000	IDRDL	NS	-	Test	Wire	-	-
2010-S15	245234.72	2010 Feb 7 0520	Agrn 3	-	-	0.000	IDRDL	NS	-	Test	Wire	-	-
2012-S18	2456036.61	2012 Apr 19 0237	Agrn 5	-	-	0.000	IDRDL	NS	-	Test	Wire	-	-
2012-S57	2456131.33	2012 Sep 20 1960	Agrn 3	-	-	0.000	ISFC	NS	-	Test	Wire	-	-
2013-S63	2456550.63	2013 Sep 15 0313	Agrn 5	-	-	0.000	IDRDL	NS	-	Test	ndtv.com	-	-
2013-S106	2456669.98	2013 Dec 23 1128	Agrn 3	-	-	0.000	ISFC	NS	-	Test	Wire	-	-
2015-S06	2457053.61	2015 Jan 31 0236	Agrn 5	-	-	0.000	IDRDL	NS	-	Test	zoeneus.com	-	-
2015-S26	2457128.68	2015 Apr 16 0422	Agrn 3	-	-	0.000	ISFC	NS	-	Test	Wire	-	-
2016-S68	245778.73	2016 Dec 26 0535	Agrn 5	-	-	0.000	IDRDL	NS	-	Test	Wire	-	-
2017-S38	2457970.65	2017 Apr 27 0342	Agrn 3	-	-	0.000	ISFC	NS	-	Test	Wire	-	-
2018-S01	2458136.68	2018 Jan 18 0423	Agrn 5	-	-	0.000	IDRDL	NS	-	Test	Wire	-	-
2018-S35	2458272.68	2018 Jun 3 0418	Agrn 5	-	-	0.000	IDRDL	NS	-	Test	Wire	-	-
2018-S78	2458462.63	2018 Dec 10 0800	Agrn 5	-	-	0.000	IDRDL	NS	-	Test	Wire	-	-
2019-S78	2458818.08	2019 Nov 30 1360	Agrn 3	-	-	0.000	IDRDL	NF	-	Test	Wire	-	-
2021-S74	2458915.10	2021 Oct 27 1420	Agrn 5	-	-	0.000	IDRDL	NS	-	Test	Wire	-	-
2022-S129	2458906.65	2022 Nov 23 0342	Agrn 3	-	-	0.000	IDRDL	NS	-	Test	Wire	-	-
2022-S132	2458929.01	2022 Dec 15 1215?	Agrn 5	-	-	0.000	IDRDL	NS	-	Test	Wire	-	-
2024-S07	2460380.50	2024 Mar 11	Agrn 5	-	-	0.000	IDRDL	NS	-	Test	Wire	-	-



Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Mission	LaunchCode	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee km	Range km	Dest
1962-M15	2437866-50	1962 Jul 21	Al Kahir	-	-	-	-	JHM	-	JHM	-	-	-	50?	-	-
1962-M16	2437866-50	1962 Jul 21	Al Kahir	-	-	-	-	JHM	-	JHM	-	-	-	50?	-	-
1963-M25	2438149-50	1963 May?	Al Kahir	-	-	Meteo	-	JHM	-	JHM	-	-	-	50?	-	-
1971-A118	2441217-50	1971 Sep 23	Al Kahir	-	-	-	-	JHM	-	JHM	-	-	-	3?	-	-
1973-A84	2441961-50	1973 Oct 6?	Al Kahir	-	-	Al Tin	-	JHM	-	JHM	-	-	-	3?	-	-
1973-A85	2441961-50	1973 Oct 6?	Al Kahir	-	-	Al Tin	-	JHM	-	JHM	-	-	-	3?	-	-



Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	OrbPay	Agency	Launch_Code	Group	Category	LTCite	Cite	Notes
1962-H15	2437866.50	1962 Jul 21	Al Kahir	-	-	0.000	EGAD	SS	EGAD/	Test	AMS25-201	-	-
1962-H16	2437866.50	1962 Jul 21	Al Kahir	-	-	0.000	EGAD	SS	EGAD/	Test	AMS25-201	-	-
1962-H25	2438149.50	1963 May?	Al Kahir	-	-	0.000	EGAD	SS	EGAD/	Test	AMS25-201	-	-
1971-H118	2441217.50	1971 Sep 23	Al Kahir	-	-	0.000	EGAD	SF	EGAD/	Test	JanesIR	-	-
1973-H84	2441961.50	1973 Oct 6?	Al Kahir	-	-	0.000	EGAD	SF	EGAD/	Test	nti.org	-	-
1973-H85	2441961.50	1973 Oct 6?	Al Kahir	-	-	0.000	EGAD	SF	EGAD/	Test	nti.org	-	-





Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Launch			Apogee Km	Range Km	Dest
							Mission	FlightCode	Platform			
1973-M02	2441713.50	1973 Feb	Alfa	-	001	[Spurious?]	-	-	-	-	-	-
1974-M04	2442320.50	1974 Q4	Alfa	-	002	[Spurious?]	-	-	-	-	-	-
1975-M01	2442506.50	1975 Apr 4	Alfa	-	003	[Spurious?]	-	-	-	-	-	-
1975-S365	2442863.50	1975 Sep 8	Alfa	-	1?	-	-	-	-	-	-	-
1975-S366	2442708.50	1975 Oct 23	Alfa	-	2?	-	-	-	-	-	-	-
1976-S364	2442876.12	1976 Apr 6 1446	Alfa	-	3?	-	-	-	-	-	-	-



Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Orbity	Agency	Launch_Code	Group	Category	LTCite	Cite	Notes
1973-802	2441713.50	1973 Feb	Alfa	-	001	0.000	I	MS	-	Test	Serra	-	-
1974-804	2442520.50	1974 Q4	Alfa	-	002	0.000	I	MS	-	Test	Serra	-	-
1976-801	2442506.50	1975 Apr 4	Alfa	-	003	0.000	I	MS	-	Test	Serra	-	-
1976-8355	2442663.50	1975 Sep 8	Alfa	-	1?	0.000	I	MS	-	Test	Ulivi	-	-
1976-8356	2442708.50	1975 Oct 23	Alfa	-	2?	0.000	I	MS	-	Test	Ulivi	-	-
1976-8354	2442875.12	1976 Apr 6 1446	Alfa	-	3?	0.000	I	MS	-	Test	Ulivi	-	-



Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Mission	FlightCode	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee km	Range km	Dest
2021-F08	2459460.58	2021 Sep 3 0159:00	Firefly Alpha	-	FLTA001	Dream	-	-	-	VAFB	SLC2W	-	-	167	-	-
2022-122	2459653.79	2022 Oct 1 0701:00	Firefly Alpha	-	FLTA002	To The Black	-	-	-	VAFB	SLC2W	-	-	-	-	-
2023-142	2460202.60	2023 Sep 15 0228	Firefly Alpha	-	FLTA003	VICTUS MDX	-	-	-	VAFB	SLC2W	-	-	-	-	-
2023-202	2460301.23	2023 Dec 22 1732:30	Firefly Alpha	-	FLTA004	Fly the Lightning	Tantrum	ESA Tech Demo	-	VAFB	SLC2W	-	-	-	-	-
2024-125	2460496.67	2024 Jul 4 0404	Firefly Alpha	-	FLTA005	Noise of Summer	VGLS Demo-2FB	ELANA 43	-	VAFB	SLC2W	-	-	-	-	-



Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	OrbPay	Agency	Launch_Code	Group	Category	LTCite	Cite	Notes
2021-F08	2459460.58	2021 Sep 3 0158:00	Firefly Alpha	-	FLTA001	0.066	FFLY	DF	C	Sat LE0 0	Wire	-	-
2022-122	2459853.79	2022 Oct 1 0701:00	Firefly Alpha	-	FLTA002	0.019	FFLY	DS7S	C	Sat LE0 0	spaceflightnow	-	Stage 2 underburn?
2023-142	2460202.60	2023 Sep 15 0228	Firefly Alpha	-	FLTA003	0.100	FFLY	DS	C	Sat SSD D	maspaceflight	-	-
2023-202	2460301.23	2023 Dec 22 1732:30	Firefly Alpha	-	FLTA004	0.250	FFLY	DF40	C	Sat LE0 0	maspaceflight	-	ST2 failed to restart
2024-126	2460496.67	2024 Jul 4 0404	Firefly Alpha	-	FLTA005	0.063	FFLY	DS	C	Sat LE0 0	maspaceflight	-	ST2 failed to restart





Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Mission	FlightCode	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee_Km	Range_Km	Deat
2019-4126	2456634.50	2019 May 31	SPAR-HRT	-	-	Unknown config	-	-	-	SPAR	-	-	-	30	-	-
2019-886	2456635.50	2019 Jun 1	SPAR-HRT	-	-	Unknown config	-	-	-	SPAR	-	-	-	80	-	-
2021-427	2459335.50	2021 May 1	SPAR-HRT	-	-	Flight 1	-	-	-	SPAR	-	-	-	1	-	-
2021-892	2459335.50	2021 May 1	SPAR-HRT	-	-	Flight 2	-	-	-	SPAR	-	-	-	84	-	-
2022-3121	2459687.50	2022 Apr 18	SPAR-HRT	-	-	Flight 3	-	-	-	SPAR	-	-	-	90	-	-
2022-3102	2459646.50	2022 Sep 24	Vrsec-Banovic	-	-	Two stage P to 0	-	-	-	BRUCK	-	-	-	100?	-	-
2022-889	2459654.23	2022 Oct 1 1730:58	MESUS	-	-	MESUS	-	-	-	BRUCK	LP1	-	-	89	-	-
2023-405	2460052.88	2023 Apr 18 0905	M2URTH	-	-	M2URTH Flight 1	-	-	-	ESR	MAN	-	-	64	-	-
2023-411	2460053.01	2023 Apr 24 1210:00	M2URTH	-	-	M2URTH Flight 2	-	-	-	ESR	MAN	-	-	1?	-	-



Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Launch_DrPay	Agency	Launch_Code	Group	Category	LTCite	Cite	Notes
2019-A126	2458654.50	2019 May 31	SPEAR-HRT	-	-	0.000	USNA	SF	USNA/	Test	Wire	-	-
2019-S86	2458655.50	2019 Jun 1	SPEAR-HRT	-	-	0.000	USNA	SS	USNA/	Test	Wire	-	-
2021-A27	2458935.50	2021 May 1	SPEAR-HRT	-	-	0.000	USNA	SF	USNA/	Test	Wire	-	-
2021-S92	2458935.50	2021 May 1	SPEAR-HRT	-	-	0.000	USNA	SS	USNA/	Test	Wire	-	-
2022-S121	2458967.50	2022 Apr 18	SPEAR-HRT	-	-	0.000	USNA	SS	USNA/	Test	Wire	-	-
2022-S102	2458946.50	2022 Sep 24	Vrbec-Banovic	-	-	0.000	VRBEC	SS	VRBEC/	Test	rocketryforum.com	-	-
2022-S89	2458954.23	2022 Oct 1 1730:58	MESUS	-	-	0.000	MESUS	SS	MESUS/	Test	rocketryforum.com	-	-
2023-M05	2460052.88	2023 Apr 18 0905	MZURTH	-	-	0.000	DLR/HEND	SS	HEND/	Test	hyend.de	-	-
2023-A11	2460059.01	2023 Apr 24 1210:00	MZURTH	-	-	0.000	DLR/HEND	SF	HEND/	Test	hyend.de	-	-



Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Mission	FlightCode	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee km	Range km	Dest
2009-F03	2455068.83	2009 Aug 25 0800:33	Maro-1	-	74501	STSAT-2A	STSAT-2	-	-	MAR0	LC1	-	-	387	-	-
2010-F02	2455357.83	2010 Jun 10 0801	Maro-1	-	74502	STSAT-2B	STSAT-2B	-	-	MAR0	LC1	-	-	707	-	-
2013-003	2456322.79	2013 Jan 30 0700:00	Maro-1	-	74503	STSAT-2C	STSAT-2C	-	-	MAR0	LC1	-	-	1520	-	-
2014-S37	2456948.00	2014 Jul 9 1200:00	Angara-1.2PP	-	71501 /82501	Maketa	A2PF 2A2B:PN	-	-	G1K-1	LC38/1	-	-	189	-	Kura
2014-085	2457014.75	2014 Dec 23 0657:00	Angara AS	-	71751 (1L0)/88801	IPN	5A4PP	-	-	G1K-1	LC38/1	-	-	39170	-	-
2020-097	2459197.74	2020 Dec 14 0650:00	Angara AS	-	71752 (2L0)/88802	IPN	5A4PP	-	-	G1K-1	LC38/1	-	-	37630	-	-
2021-133	2459576.29	2021 Dec 27 1900:00	Angara AS/Perseid	-	71753 (3L)/1L	IPN	-	-	-	G1K-1	LC38/1	-	-	201	-	-
2022-044	2459699.33	2022 Apr 29 1955:22	Angara-1.2	-	716027/1L	Kosmos-2555	ED NKA-2	-	-	G1K-1	LC38/1	-	-	293	-	-
2022-136	2459668.33	2022 Oct 15 1955:15	Angara-1.2	-	716037/2L	Kosmos-2560	ED NKA-3	-	-	G1K-1	LC38/1	-	-	-	-	-
2024-069	2460411.88	2024 Apr 11 0900	Angara AS/Orion	-	72901/1TLI	GMM KA	GMM KA	-	-	VOST	PLIA	-	-	-	-	-
2024-166	2460570.79	2024 Sep 17 0701:00	Angara-1.2	-	71604/3L?	Kosmos-2577/2578	00 NKA-1/2	-	-	G1K-1	LC38/1	-	-	-	-	-



Launch

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	OrbPay	Agency	Launch_Code	Group	Category	LTCite	Cite	Notes
2009-F03	2455068.83	2009 Aug 25 0900:33	Maro-1	-	74501	0.100	KARI	DF	G	Sat LED 0	Wire	-	-
2010-F02	2455357.83	2010 Jun 10 0901	Maro-1	-	74502	0.100	KARI	DF	G	Sat LED 0	Wire	-	-
2013-003	2456322.79	2013 Jan 30 0700:00	Maro-1	-	74503	0.100	KARI	US	G	Sat LED 0	Wire	-	-
2014-S37	2456988.00	2014 Jul 9 1200:00	Angara-1.2PP	-	71601/82501	4.000	KHRU	SS	KHRU/	Test	zenite.nu/orbita	-	-
2014-085	2457014.75	2014 Dec 23 0557:00	Angara A5	-	71751 (1LM)/88801	4.000	KHRU	US	G	Sat GED 0 1	Wire	-	-
2020-097	2459197.74	2020 Dec 14 0550:00	Angara A5	-	71752 (2LM)/88802	5.000	KHRU	US	G	Sat GED 0 1	Wire	-	-
2021-133	2459576.29	2021 Dec 27 1900:00	Angara A5/Perseid	-	71753 (3L)/1L	20.000	KHRU	DF40	G	Sat GED 0	Wire	-	-
2022-044	2459699.33	2022 Apr 29 1955:22	Angara-1.2	-	716027/1L	0.520	KHRU	US	G	Sat GED 0	Wire	-	-
2022-135	2459688.33	2022 Oct 15 1955:15	Angara-1.2	-	716037/2L	0.520	KHRU	US	G	Sat SSO SD	Wire	-	-
2024-069	2460411.88	2024 Apr 11 0900	Angara A5/Orion	-	72901/11L1	20.008	KHRU	US	G	Sat GED 0	Wire	-	-
2024-166	2460570.79	2024 Sep 17 0701:00	Angara-1.2	-	71604/3L?	0.520	KHRU	US	G	Sat SSO SD	Wire	-	-





Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Mission	FlightCode	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee km	Range km	Dest
1963-A165	2438341.17	1963 Nov 7 1600:01	Apollo LES	-	PA-1	-	-	-	-	WS	LC36	-	-	2	-	-
1965-490	2438941.04	1965 Jun 29 1300:01	Apollo LES	-	PA-2	-	-	-	-	WS	LC36	-	-	2	-	-



Launch_Tag	Launch_JD	Launch_Date	LV_Type	Variant	Flight_ID	OrbPay	Agency	Launch_Code	Group	Category	LTCite	Cite	Notes
1963-A165	2438341.17	1963 Nov 7 1600:01	Apollo LES	-	PA-1	0.000	NSC	TS	-	Test	SF-4205	-	-
1965-490	2438941.04	1965 Jun 29 1300:01	Apollo LES	-	PA-2	0.000	NSC	TS	-	Test	SF-4205	CR-97018	-



Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Launch_Mission	FlightCode	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee_Km	Range_Km	Dest
1955-A173	2435612-21	1958 Nov 4 1700	Arcaa	-	1	Test	-	-	-	WS	-	-	-	20?	-	-
1955-A174	2435636-24	1958 Nov 28 1745	Arcaa	-	2	Test	-	-	-	WS	-	-	-	22	-	-
1955-A175	2435646-12	1958 Dec 8 1500	Arcaa	-	3	Test	-	-	-	WS	-	-	-	28	-	-
1955-W02	2435892-14	1959 Jan 23 1515	Arcaa	-	4	Test	-	-	-	WS	-	-	-	54	-	-
1955-W20	2435899-20	1959 Jan 30 1655	Arcaa	-	5	Test	-	-	-	WS	-	-	-	52	-	-
1955-W18	2435724-50	1959 Jun 5	Arcaa	-	6	Test	-	-	-	WS	-	-	-	66	-	-
1955-W41	2435742-50	1959 Jun 23	Arcaa	-	7	Test	-	-	-	WS	-	-	-	76	-	-
1955-A121	2435780-50	1959 Jul 31	Arcaa	-	-	-	-	-	-	WT	-	-	-	10?	-	-
1955-A122	2435780-50	1959 Jul 31	Arcaa	-	-	-	-	-	-	WT	-	-	-	10?	-	-
1955-W04	2435787-50	1959 Aug 7	Arcaa	-	-	-	-	-	-	WT	-	-	-	55	-	-
1955-W19	2435787-50	1959 Aug 7	Arcaa	-	-	-	-	-	-	WT	-	-	-	80	-	-
1955-W01	2435868-50	1959	Arcaa	-	-	-	-	-	-	EdL	-	-	-	61	-	-
1955-W13	2435869-50	1959 Oct 28	Arcaa	-	-	-	-	-	-	CC	LC43	-	-	51	-	-
1955-W14	2435876-50	1959 Nov 4	Arcaa	-	-	-	-	-	-	PH	-	-	-	59	-	-
1955-W15	2435882-50	1959 Nov 10	Arcaa	-	-	-	-	-	-	PH	-	-	-	61	-	-
1955-W16	2435888-50	1959 Nov 16	Arcaa	-	-	-	-	-	-	PH	-	-	-	58	-	-
1955-W16	2435888-50	1959 Nov 16	Arcaa	-	-	-	-	-	-	PH	-	-	-	59	-	-
1955-W69	2435951-50	1960 Jan 18	Arcaa	-	-	-	-	-	-	PH	-	-	-	57	-	-
1955-W67	2435955-50	1960 Jan 22	Arcaa	-	-	-	-	-	-	PH	-	-	-	46	-	-
1955-A316	2435965-50	1960 Feb 1	Arcaa	-	-	-	-	-	-	PH	-	-	-	51	-	-
1955-W70	2435967-50	1960 Feb 3	Arcaa	-	-	-	-	-	-	PH	-	-	-	56	-	-
1955-W71	2435968-50	1960 Feb 4	Arcaa	-	-	-	-	-	-	PH	-	-	-	45	-	-
1955-A317	2435969-50	1960 Feb 5	Arcaa	-	-	-	-	-	-	PH	-	-	-	55	-	-
1955-W72	2435972-50	1960 Feb 8	Arcaa	-	-	-	-	-	-	PH	-	-	-	61	-	-
1955-W01	2435979-50	1960 Feb 15	Arcaa	-	-	-	-	-	-	PH	-	-	-	50	-	-
1955-W73	2435980-50	1960 Feb 16	Arcaa	-	-	-	-	-	-	PH	-	-	-	61	-	-
1955-W02	2435981-50	1960 Feb 17	Arcaa	-	-	-	-	-	-	PH	-	-	-	61	-	-
1955-W03	2435985-50	1960 Mar 2	Arcaa	-	-	-	-	-	-	PH	-	-	-	65	-	-
1955-A321	2437044-50	1960 Apr 20	Arcaa	-	253 723-4XZ	-	-	-	T-AGM-12	ETA	LP2	-	-	40?	-	-
1955-W04	2437115-50	1960 Jul	Arcaa	-	-	-	-	-	-	FC	-	-	-	60?	-	-
1955-W05	2437115-50	1960 Jul	Arcaa	-	-	-	-	-	-	FC	-	-	-	60?	-	-
1955-W06	2437115-50	1960 Jul	Arcaa	-	-	-	-	-	-	FC	-	-	-	60?	-	-
1955-W07	2437115-50	1960 Jul	Arcaa	-	-	-	-	-	-	FC	-	-	-	60?	-	-
1955-W08	2437115-50	1960 Jul	Arcaa	-	-	-	-	-	-	FC	-	-	-	60?	-	-
1955-W09	2437115-50	1960 Jul	Arcaa	-	-	-	-	-	-	FC	-	-	-	60?	-	-
1955-A322	2437154-50	1960 Jul 19	Arcaa	-	357 4210-40A	-	-	-	-	WT	-	-	-	20?	-	-
1955-W10	2437146-50	1960 Aug	Arcaa	-	-	-	-	-	-	FC	-	-	-	60?	-	-
1955-W11	2437146-50	1960 Aug	Arcaa	-	-	-	-	-	-	FC	-	-	-	60?	-	-
1955-W12	2437146-50	1960 Aug	Arcaa	-	-	-	-	-	-	FC	-	-	-	60?	-	-
1955-W13	2437146-50	1960 Aug	Arcaa	-	-	-	-	-	-	FC	-	-	-	60?	-	-
1955-W14	2437146-50	1960 Aug	Arcaa	-	-	-	-	-	-	FC	-	-	-	60?	-	-
1955-W15	2437146-50	1960 Aug	Arcaa	-	-	-	-	-	-	FC	-	-	-	60?	-	-
1955-W16	2437146-50	1960 Aug	Arcaa	-	-	-	-	-	-	FC	-	-	-	60?	-	-
1955-W17	2437146-50	1960 Aug	Arcaa	-	-	-	-	-	-	FC	-	-	-	60?	-	-
1955-W18	2437146-50	1960 Aug	Arcaa	-	-	-	-	-	-	FC	-	-	-	60?	-	-
1955-W19	2437146-50	1960 Aug	Arcaa	-	-	-	-	-	-	FC	-	-	-	60?	-	-
1955-W16	2437146-50	1960 Aug	Arcaa	-	-	-	-	-	-	FC	-	-	-	60?	-	-
1955-A323	2437165-50	1960 Aug 10	Arcaa	-	359 1662-4MU	-	-	-	-	DW	-	-	-	20?	-	-
1955-W20	2437159-50	1960 Aug 10	Arcaa	-	-	-	-	-	-	FC	-	-	-	60?	-	-
1955-W21	2437177-50	1960 Sep	Arcaa	-	-	-	-	-	-	FC	-	-	-	60?	-	-
1955-W22	2437177-50	1960 Sep	Arcaa	-	-	-	-	-	-	FC	-	-	-	60?	-	-
1955-W23	2437177-50	1960 Sep	Arcaa	-	-	-	-	-	-	FC	-	-	-	60?	-	-
1955-A324	2437163-50	1960 Sep 16	Arcaa	-	403 4250AA	-	-	-	-	US	-	-	-	20?	-	-
1955-W24	2437205-50	1960 Sep 18	Arcaa	-	459 4275-4A	-	-	-	-	US	-	-	-	7?	-	-
1955-A325	2437226-50	1960 Oct 19	Arcaa	-	460 4276-4AA	-	-	-	-	US	-	-	-	38	-	-
1955-W25	2437227-50	1960 Dec 20	Arcaa	-	461 4277-4AA	-	-	-	-	US	-	-	-	63	-	-
1955-W29	2437238-50	1960 Nov	Arcaa	-	-	-	-	-	-	FC	-	-	-	60?	-	-
1955-W30	2437238-50	1960 Nov	Arcaa	-	-	-	-	-	-	FC	-	-	-	60?	-	-
1955-W31	2437238-50	1960 Nov	Arcaa	-	-	-	-	-	-	FC	-	-	-	60?	-	-
1955-W32	2437238-50	1960 Nov	Arcaa	-	-	-	-	-	-	FC	-	-	-	60?	-	-
1955-W33	2437238-50	1960 Nov	Arcaa	-	-	-	-	-	-	FC	-	-	-	60?	-	-
1955-W34	2437238-50	1960 Nov	Arcaa	-	-	-	-	-	-	FC	-	-	-	60?	-	-
1955-W35	2437238-50	1960 Nov	Arcaa	-	-	-	-	-	-	FC	-	-	-	60?	-	-
1955-W36	2437238-50	1960 Nov	Arcaa	-	-	-	-	-	-	FC	-	-	-	60?	-	-
1955-W37	2437238-50	1960 Nov	Arcaa	-	-	-	-	-	-	FC	-	-	-	60?	-	-
1955-W38	2437238-50	1960 Nov	Arcaa	-	-	-	-	-	-	FC	-	-	-	60?	-	-
1955-W39	2437238-50	1960 Nov	Arcaa	-	-	-	-	-	-	FC	-	-	-	60?	-	-
1955-W40	2437238-50	1960 Nov	Arcaa	-	-	-	-	-	-	FC	-	-	-	60?	-	-
1955-W41	2437241-50	1960 Nov 3	Arcaa	-	-	-	-	-	-	HMC	-	-	-	0?	-	-
1955-W42	2437266-50	1960 Nov 28	Arcaa	-	-	-	-	-	-	KUU	-	-	-	50?	-	-
1955-W43	2437238-50	1960 Nov 28	Arcaa	-	-	-	-	-	-	EdL	-	-	-	65?	-	-
1955-W44	2437238-50	1960 Nov	Arcaa	-	-	-	-	-	-	KUU	-	-	-	65?	-	-
1955-W45	2437238-50	1960 Nov	Arcaa	-	-	-	-	-	-	KUU	-	-	-	65?	-	-
1955-W46	2437238-50	1960 Nov	Arcaa	-	-	-	-	-	-	FC	-	-	-	60?	-	-
1955-W47	2437238-50	1960 Nov	Arcaa	-	-	-	-	-	-	FC	-	-	-	60?	-	-
1955-W48	2437238-50	1960 Nov	Arcaa	-	-	-	-	-	-	FC	-	-	-	60?	-	-
1955-W49	2437238-50	1960 Nov	Arcaa	-	-	-	-	-	-	FC	-	-	-	60?	-	-
1955-W50	2437238-50	1960 Nov	Arcaa	-	-	-	-	-	-	FC	-	-	-	60?	-	-
1955-W51	2437241-50	1960 Nov 3	Arcaa	-	-	-	-	-	-	HMC	-	-	-	0?	-	-
1955-W52	2437266-50	1960 Nov 28	Arcaa	-	-	-	-	-	-	KUU	-	-	-	65?	-	-
1955-W53	2437238-50	1960 Nov	Arcaa	-	-	-	-	-	-	EdL	-	-	-	65?	-	-
1955-W54	2437238-50	1960 Nov	Arcaa	-	-	-	-	-	-	KUU	-	-	-	65?	-	-
1955-W55	2437238-50	1960 Nov	Arcaa	-	-	-	-	-	-	FC	-	-	-	60?	-	-
1955-W56	2437238-50	1960 Nov	Arcaa	-	-	-	-	-	-	FC	-	-	-	60?	-	-
1955-W57	2437238-50	1960 Nov	Arcaa	-	-	-	-	-	-	FC	-	-	-	60?	-	-
1955-W58	2437238-50	1960 Nov	Arcaa	-	-	-	-	-	-	FC	-	-	-	60?	-	-
1955-W59	2437238-50	1960 Nov	Arcaa	-	-	-	-	-	-	FC	-	-	-	60?	-	-
1955-W60	2437238-50	1960 Nov	Arcaa	-	-	-	-	-	-	FC	-	-	-	60?	-	-
1955-W61	2437238-50	1960 Nov	Arcaa	-	-	-	-	-	-	FC	-	-	-	60?	-	-
1955-W62	2437238-50	1960 Nov	Arcaa	-	-	-	-	-	-	FC	-	-	-	60?	-	-
1955-W63	2437238-50	1960 Nov	Arcaa	-	-	-	-	-	-	FC	-	-	-	60?	-	-
1955-W64	2437238-50	1960 Nov	Arcaa	-	-	-	-	-	-	FC	-	-	-	60?	-	-
1955-W65	2437238-50	1960 Nov	Arcaa	-	-	-	-	-	-	FC	-	-	-	60?	-	-
1955-W66	2437238-50	1960 Nov	Arcaa	-	-	-	-	-	-	FC	-	-	-	60?	-	-
1955-W67	2437238-50	1960 Nov	Arcaa	-	-	-	-	-	-	FC	-	-	-	60?	-	-
1955-W68	2437238-50	1960 Nov	Arcaa	-	-	-	-	-	-	FC	-	-	-	60?	-	-
1955-W69	2437238-50	1960 Nov	Arcaa	-	-	-	-	-	-	FC	-	-	-	60?	-	-
1955-W70	2437238-50	1960 Nov	Arcaa	-	-	-	-	-	-	FC	-	-	-	60?	-	-
1955-W71	2437238-50	1960 Nov	Arcaa	-	-	-	-	-	-	FC	-	-	-	60?	-	-
1955-W72	2437238-50	1960 Nov	Arcaa	-	-	-	-	-	-	FC	-	-	-	60?	-	-
1955-W73	2437238-50	1960 Nov	Arcaa	-	-	-	-	-	-	FC	-	-	-	60?	-	-
1955-W74	2437238-50	1960 Nov	Arcaa	-	-	-	-	-	-	FC	-	-	-	60?	-	-
1955-W75</																

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Launch_Mission	FlightCode	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee_Km	Range_Km	Dest
1961-W16	2437429-56	1961 May 10 0130?	Arcas	-	-	Robin E2	-	-	-	EGL	-	-	-	64?	-	-
1961-W17	2437429-60	1961 May 10 0230?	Arcas	-	-	Robin E3	-	-	-	EGL	-	-	-	64?	-	-
1961-W18	2437429-65	1961 May 10 0300?	Arcas	-	-	Robin E4	-	-	-	EGL	-	-	-	64?	-	-
1961-W19	2437429-69	1961 May 10 0430?	Arcas	-	-	Robin E5	-	-	-	EGL	-	-	-	64?	-	-
1961-W20	2437429-73	1961 May 10 0530?	Arcas	-	-	Robin E7	-	-	-	EGL	-	-	-	64?	-	-
1961-W21	2437429-77	1961 May 10 0630?	Arcas	-	-	Robin E8	-	-	-	EGL	-	-	-	64?	-	-
1961-W22	2437429-81	1961 May 10 0730?	Arcas	-	-	Robin E9	-	-	-	EGL	-	-	-	64?	-	-
1961-W23	2437429-85	1961 May 10 0830?	Arcas	-	-	Robin E10	-	-	-	EGL	-	-	-	64?	-	-
1961-W24	2437429-90	1961 May 10 0930?	Arcas	-	-	Robin E11	-	-	-	EGL	-	-	-	64?	-	-
1961-W25	2437429-93	1961 May 10 1015	Arcas	-	-	Falling sphere	-	-	-	EGL	-	-	-	64	-	-
1961-W26	2437429-97	1961 May 10 1115	Arcas	-	-	Falling sphere	-	-	-	EGL	-	-	-	64	-	-
1961-W27	2437430-01	1961 May 10 1215?	Arcas	-	-	Robin E12	-	-	-	EGL	-	-	-	64?	-	-
1961-W28	2437430-05	1961 May 10 1315?	Arcas	-	-	Robin E13	-	-	-	EGL	-	-	-	64?	-	-
1961-W29	2437430-09	1961 May 10 1415?	Arcas	-	-	Robin E14	-	-	-	EGL	-	-	-	64?	-	-
1961-W30	2437430-14	1961 May 10 1515?	Arcas	-	-	Robin E15	-	-	-	EGL	-	-	-	64?	-	-
1961-W31	2437430-18	1961 May 10 1615?	Arcas	-	-	Robin E16	-	-	-	EGL	-	-	-	64?	-	-
1961-W32	2437430-22	1961 May 10 1715?	Arcas	-	-	Robin E17	-	-	-	EGL	-	-	-	64?	-	-
1961-W33	2437430-26	1961 May 10 1815?	Arcas	-	-	Robin E18	-	-	-	EGL	-	-	-	64?	-	-
1961-W34	2437430-30	1961 May 10 1915?	Arcas	-	-	Robin E19	-	-	-	EGL	-	-	-	64?	-	-
1961-W35	2437430-33	1961 May 10 2000	Arcas	-	-	Falling sphere	-	-	-	EGL	-	-	-	64	-	-
1961-W36	2437430-39	1961 May 10 2115?	Arcas	-	-	Robin E20	-	-	-	EGL	-	-	-	64?	-	-
1961-W37	2437430-43	1961 May 10 2215?	Arcas	-	-	Robin E21	-	-	-	EGL	-	-	-	64?	-	-
1961-W38	2437436-32	1961 May 16 1946	Arcas	-	-	Falling sphere	-	-	-	EGL	-	-	-	64	-	-
1961-W39	2437460-50	1961 Jun 15	Arcas	-	-	HYDR Arcas	-	-	LSD-31	HYDR	-	-	-	60?	-	-
1961-W40	2437465-50	1961 Jun 15	Arcas	-	-	-	-	-	-	ARCOS	-	-	-	91	-	-
1961-W41	2437526-38	1961 Aug 14 2105	Arcas	-	RTG K61-1	Arcas Robin	-	-	-	ARCOS	-	-	-	60?	-	-
1961-W42	2437541-50	1961 Aug 30	Arcas	-	-	Arcas Robin	-	-	-	ARCOS	-	-	-	60?	-	-
1961-W43	2437541-50	1961 Aug 30	Arcas	-	-	Arcas Robin	-	-	-	ARCOS	-	-	-	60?	-	-
1961-W44	2437542-50	1961 Sep	Arcas	-	-	Robin	-	-	-	ARCOS	-	-	-	96	-	-
1962-W02	2437685-50	1962 Jan 21	Arcas	-	-	Robin	-	-	-	ARCOS	-	-	-	60?	-	-
1962-W03	2437685-50	1962 Jan 21	Arcas	-	-	Robin	-	-	-	ARCOS	-	-	-	60?	-	-
1962-W04	2437724-50	1962 Mar 1	Arcas	-	-	Robin	-	-	-	ARCOS	-	-	-	60?	-	-
1962-W05	2437724-50	1962 Mar 1	Arcas	-	-	Robin	-	-	-	ARCOS	-	-	-	60?	-	-
1962-W06	2437747-39	1962 Mar 23 2125:00	Arcas	-	-	Robin	-	-	-	ARCOS	-	-	-	60?	-	-
1962-W07	2437747-45	1962 Mar 23 2255:00	Arcas	-	-	Robin	-	-	-	ARCOS	-	-	-	60?	-	-
1962-W08	2437822-61	1962 Jun 07 0241:00	Arcas	-	-	Arcas Robin	-	-	-	ARCOS	-	-	-	60?	-	-
1962-W09	2437822-66	1962 Jun 07 0239:00	Arcas	-	-	Arcas Robin	-	-	-	ARCOS	-	-	-	60?	-	-
1962-W10	2437835-19	1962 Jun 19 1655:00	Arcas	-	-	Richard 1	-	-	-	ARCOS	-	-	-	32	-	-
1962-W11	2437845-50	1962 Jun 30	Arcas	-	-	-	-	-	-	ARCOS	-	-	-	70	-	-
1962-W12	2437847-50	1962 Jul 2	Arcas	-	-	-	-	-	-	ARCOS	-	-	-	70	-	-
1962-W13	2437850-50	1962 Jul 6	Arcas	-	-	-	-	-	-	ARCOS	-	-	-	70	-	-
1962-W14	2437851-50	1962 Jul 6	Arcas	-	-	-	-	-	-	ARCOS	-	-	-	70	-	-
1962-W15	2437861-50	1962 Jul 9	Arcas	-	-	Richard 2	-	-	-	ARCOS	-	-	-	51	-	-
1962-W16	2437871-63	1962 Jul 26 0355:00	Arcas	?	-	-	-	-	-	ARCOS	-	-	-	86	-	-
1962-W17	2437871-71	1962 Jul 26 0359:00	Arcas	?	-	-	-	-	-	ARCOS	-	-	-	86	-	-
1962-W18	2437871-76	1962 Jul 26 0609:00	Arcas	?	-	-	-	-	-	ARCOS	-	-	-	89	-	-
1962-W19	2437872-88	1962 Jul 27 0931:00	Arcas	?	-	-	-	-	-	ARCOS	-	-	-	88	-	-
1962-W20	2437872-94	1962 Jul 27 1037:00	Arcas	?	-	-	-	-	-	ARCOS	-	-	-	88	-	-
1962-W21	2437872-99	1962 Jul 27 1145:00	Arcas	?	-	-	-	-	-	ARCOS	-	-	-	88	-	-
1962-W22	2437875-99	1962 Jul 30 1149:00	Arcas	?	-	-	-	-	-	ARCOS	-	-	-	87	-	-
1962-W23	2437876-07	1962 Jul 30 1341:00	Arcas	?	-	-	-	-	-	ARCOS	-	-	-	60	-	-
1962-W24	2437883-24	1962 Aug 06 1744:00	Arcas	?	-	-	-	-	-	ARCOS	-	-	-	60	-	-
1962-W25	2437883-26	1962 Aug 06 1921:00	Arcas	?	-	-	-	-	-	ARCOS	-	-	-	60	-	-
1962-W26	2437883-35	1962 Aug 06 2020:00	Arcas	?	-	-	-	-	-	ARCOS	-	-	-	60?	-	-
1962-W27	2437884-42	1962 Aug 7 0202	Arcas	?	RTG K62-2	Air sample	-	-	-	ARCOS	-	-	-	70	-	-
1962-W28	2437884-42	1962 Aug 16 1559	Arcas	-	-	Richard 3	-	-	-	ARCOS	-	-	-	41	-	-
1962-W29	2437891-23	1962 Aug 11 1729:00	Arcas	-	-	Richard 4	-	-	-	ARCOS	-	-	-	63	-	-
1962-W30	2437892-63	1962 Sep 21 0314:00	Arcas	-	-	Richard 5	-	-	-	ARCOS	-	-	-	61	-	-
1962-W31	2437892-63	1962 Sep 21 0314:00	Arcas	-	-	-	-	-	-	ARCOS	-	-	-	69	-	-
1962-W32	2437892-22	1962 Sep 24 1751	Arcas	?	-	-	-	-	-	ARCOS	-	-	-	69	-	-
1962-W33	2437892-24	1962 Sep 24 1751	Arcas	?	-	-	-	-	-	ARCOS	-	-	-	69	-	-
1962-W34	2437893-68	1962 Sep 27 0419	Arcas	-	-	Richard 6	-	-	-	ARCOS	-	-	-	68	-	-
1962-W35	2437894-68	1962 Sep 27 0419	Arcas	-	-	Richard 7	-	-	-	ARCOS	-	-	-	68	-	-
1962-W36	2437894-68	1962 Sep 27 0419	Arcas	-	-	Richard 8	-	-	-	ARCOS	-	-	-	68	-	-
1962-W37	2437900-65	1962 Oct 03 0334:00	Arcas	-	-	Robin	-	-	-	ARCOS	-	-	-	31	-	-
1962-W38	2437905-19	1962 Oct 18 1634:00	Arcas	-	-	-	-	-	-	ARCOS	-	-	-	64?	-	-
1962-W39	2437965-50	1962 Oct 30	Arcas	-	Range test	-	-	-	-	ARCOS	-	-	-	60?	-	-
1962-W40	2437967-50	1962 Oct 30	Arcas	-	-	-	-	-	-	ARCOS	-	-	-	60?	-	-
1962-W41	2437969-50	1962 Nov 17	Arcas	-	-	Arcas Robin	-	-	-	ARCOS	-	-	-	60?	-	-
1962-W42	2437969-50	1962 Nov 17	Arcas	-	-	Arcas Robin	-	-	-	ARCOS	-	-	-	60?	-	-
1962-W43	2437969-50	1962 Nov 17	Arcas	-	-	Arcas Robin	-	-	-	ARCOS	-	-	-	60?	-	-
1962-W44	2437971-68	1962 Nov 3 0420	Arcas	-	-	Richard 9	-	-	-	ARCOS	-	-	-	60?	-	-
1962-W45	2437976-19	1962 Nov 07 1635:00	Arcas	-	-	Richard 10 (MCM 30)	-	-	-	ARCOS	-	-	-	60?	-	-
1962-W46	2437983-74	1962 Nov 15 0547	Arcas	-	-	Richard 11	-	-	-	ARCOS	-	-	-	60?	-	-
1962-W47	2437986-63	1962 Nov 28 0314:00	Arcas	-	-	Richard 12	-	-	-	ARCOS	-	-	-	60?	-	-
1962-W48	2438003-73	1962 Dec 05 0530:00	Arcas	-	-	Richard 13	-	-	-	ARCOS	-	-	-	60?	-	-
1962-W49	2438003-73	1962 Dec 05 0530:00	Arcas	-	-	Richard 14	-	-	-	ARCOS	-	-	-	60?	-	-
1962-W50	2438004-78	1962 Dec 12 0417:00	Arcas	-	-	Richard 15	-	-	-	ARCOS	-	-	-	0?	-	-
1962-W51	2438019-66	1962 Dec 21 0349:00	Arcas	-	-	Arcas Robin	-	-	-	ARCOS	-	-	-	65	-	-
1962-W52	2438019-66	1962 Dec 21 0349:00	Arcas	-	-	Parachute test	-	-	-	ARCOS	-	-	-	65	-	-
1962-W53	2438029-50	1963?	Arcas	-	-	Parachute test	-	-	-	ARCOS	-	-	-	65	-	-
1962-W54	2438029-50	1963?	Arcas	-	-	Parachute test	-	-	-	ARCOS	-	-	-	65	-	-
1962-W55	2438029-50	1963?	Arcas	-	-	Parachute test	-	-	-	ARCOS	-	-	-	65	-	-
1962-W56	2438029-50	1963?	Arcas	-	-	Parachute test	-	-	-	ARCOS	-	-	-	65	-	-
1962-W57	2438038-64	1963 Jan 09 0320:00	Arcas	-	-	Richard 16	-	-	-	ARCOS	-	-	-	60?	-	-
1962-W58	2438045-70	1963 Jan 16 0445:00	Arcas	-	-	Robin	-	-	-	ARCOS	-	-	-	60?	-	-
1962-W59	2438048-22	1963 Jan 18 1718	Arcas	-	-	Richard 17	-	-	-	ARCOS	-	-	-	60?	-	-
1962-W60	2438066-73	1963 Feb 6 0535	Arcas	-	-	Richard 18	-	-	-	ARCOS	-	-	-	60?	-	-
1962-W61	2438067-69	1963 Feb 27 0430	Arcas	-	-	Richard 19	-	-	-	ARCOS	-	-	-	60?	-	-
1962-W62	2438087-69	1963 Mar 2 0015:00	Arcas	-	-	-	-	-	-	ARCOS	-	-	-	60?	-	-
1962-W63	2438090-51	1963 Mar 2 0015:00	Arcas	?	-	-	-	-	-	ARCOS	-	-	-	60?	-	-

Launch Mission

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	FlightCode	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee_Km	Range_Km	Dest
1965-W43	2438143-54	1963 Apr 24 0100	Arcas	-	-	McHurdco 20	-	-	NCM	-	-	-	607	-	-
1965-W18	2438165-65	1963 May 16 0340:00	Arcas	-	-	McHurdco 21	-	-	NCM	-	-	-	607	-	-
1965-W19	2438172-50	1963 May 23	Arcas	-	-	-	-	-	BFL	-	-	-	607	-	-
1965-W22	2438180-50	1963 Jun	Arcas	-	-	-	-	-	FC	-	-	-	607	-	-
1965-W24	2438212-62	1963 Jun 02 0257:00	Arcas	?	-	-	-	-	ASC	-	-	-	607	-	-
1965-W25	2438239-66	1963 Jul 29 0348:00	Arcas	-	-	McHurdco 22	-	-	NCM	-	-	-	607	-	-
1965-W44	2438255-60	1963 Aug 14 0230	Arcas	-	-	McHurdco 23	-	-	NCM	-	-	-	607	-	-
1965-W26	2438264-63	1963 Aug 23 0303:00	Arcas	-	-	McHurdco 24	-	-	NCM	-	-	-	607	-	-
1965-W27	2438270-28	1963 Aug 28 1948	Arcas	-	-	Robin	-	-	FC	-	-	-	607	-	-
1965-W28	2438272-50	1963 Sep	Arcas	-	-	Arcasonde	-	-	FC	-	-	-	607	-	-
1965-W29	2438272-50	1963 Sep	Arcas	-	-	Arcasonde	-	-	FC	-	-	-	607	-	-
1965-W30	2438289-65	1963 Sep 17 0330:00	Arcas	-	-	McHurdco 25	-	-	NCM	-	-	-	607	-	-
1965-W31	2438290-60	1963 Sep 18 0230:00	Arcas	-	-	McHurdco 26	-	-	NCM	-	-	-	607	-	-
1965-W32	2438291-25	1963 Sep 18 1800:00	Arcas	?	-	-	-	-	ASC	-	-	-	607	-	-
1965-W33	2438299-50	1963 Sep 27	Arcas	-	-	-	-	-	WT	-	-	51	51	-	-
1965-W34	2438299-62	1963 Sep 27 0300:00	Arcas	?	-	Arcate-Margo (Meteor)	-	-	NCM	-	-	-	607	-	-
1965-W35	2438305-25	1963 Oct 02 1804:00	Arcas	-	-	-	-	-	ASC	-	-	-	607	-	-
1965-W45	2438305-65	1963 Oct 3 0830	Arcas	-	-	McHurdco 28	-	-	NCM	-	-	-	607	-	-
1965-W46	2438310-25	1963 Oct 7 1800	Arcas	-	-	Arcasonde	-	-	FC	-	-	-	607	-	-
1965-W39	2438347-36	1963 Nov 13 2045:00	Arcas	-	-	-	-	-	ASC	-	-	-	607	-	-
1965-W40	2438376-53	1963 Dec 13 0045:00	Arcas	?	-	-	-	-	ASC	-	-	-	607	-	-
1964-W01	2438394-50	1964 Jan	Arcas	-	-	Arcasonde	-	-	FC	-	-	-	607	-	-
1964-W02	2438394-50	1964 Jan	Arcas	-	-	Arcasonde	-	-	FC	-	-	-	607	-	-
1964-W03	2438411-65	1964 Jan 17 0337:00	Arcas	?	-	-	-	-	ASC	-	-	-	607	-	-
1964-W04	2438423-59	1964 Jan 29 0205:00	Arcas	?	-	-	-	-	ASC	-	-	-	607	-	-
1964-W16	2438424-50	1964 Jan 29 2357	Arcas	?	-	-	-	-	FC	-	-	-	607	-	-
1964-W05	2438430-57	1964 Feb 5 0145	Arcas	-	-	Deltasonde for 10.69	-	-	FC	-	-	-	607	-	-
1964-W204	2438437-50	1964 Feb 12	Arcas	?	-	Deltasonde for 10.67	-	-	PH	-	-	-	607	-	-
1964-W06	2438438-69	1964 Feb 13 0440	Arcas	-	-	Paezoid ozonsonde	-	-	FC	-	-	-	607	-	-
1964-W209	2438439-54	1964 Feb 14 0052	Arcas	-	-	Deltasonde for 10.68	-	-	FC	-	-	-	503	-	-
1964-W129	2438439-56	1964 Feb 14 0152	Arcas	?	-	Arcate-Margo	-	-	WT	-	-	-	407	-	-
1964-W09	2438464-50	1964 Mar	Arcas	-	-	Highly House	-	-	FC	-	-	-	607	-	-
1964-W10	2438464-50	1964 Mar	Arcas	-	-	Arcasonde	-	-	FC	-	-	-	607	-	-
1964-W11	2438464-50	1964 Mar	Arcas	-	-	Arcasonde	-	-	FC	-	-	-	607	-	-
1964-W12	2438464-50	1964 Mar	Arcas	-	-	Arcasonde	-	-	FC	-	-	-	607	-	-
1964-W13	2438464-50	1964 Mar	Arcas	-	-	Arcasonde	-	-	FC	-	-	-	607	-	-
1964-W14	2438465-35	1964 Mar 13 2000:00	Arcas	?	-	-	-	-	ASC	-	-	-	607	-	-
1964-W17	2438470-50	1964 Mar 16	Arcas	-	-	-	-	-	ASC	-	-	-	607	-	-
1964-W15	2438480-25	1964 Mar 25 1800:00	Arcas	?	-	Paezoid ozonsonde	-	-	ASC	-	-	-	503	-	-
1964-W18	2438485-80	1964 Mar 31 0715:00	Arcas	?	-	-	-	-	ASC	-	-	-	607	-	-
1964-W19	2438485-50	1964 Apr 02 0100:00	Arcas	?	-	Arcasonde	-	-	ASC	-	-	-	607	-	-
1964-W20	2438485-94	1964 Apr 06 0409:00	Arcas	?	-	-	-	-	ASC	-	-	-	607	-	-
1964-W21	2438491-27	1964 Apr 08 1925:00	Arcas	?	-	-	-	-	ASC	-	-	-	64	-	-
1964-W22	2438501-20	1964 Apr 15 1645:00	Arcas	?	-	-	-	-	ASC	-	-	-	64	-	-
1964-W24	2438506-14	1964 Apr 20 1515	Arcas	-	-	ROBIN	-	-	SDU	-	-	-	757	-	-
1964-W26	2438506-17	1964 Apr 21 0922	Arcas	-	-	ROBIN	-	-	SDU	-	-	-	757	-	-
1964-W28	2438508-90	1964 Apr 21 1626	Arcas	-	-	ROBIN	-	-	SDU	-	-	-	757	-	-
1964-W29	2438507-10	1964 Apr 21 1626	Arcas	-	-	ROBIN	-	-	SDU	-	-	-	757	-	-
1964-W33	2438508-25	1964 Apr 22 1907:00	Arcas	?	-	-	-	-	ASC	-	-	-	607	-	-
1964-W34	2438507-96	1964 Apr 22 1959	Arcas	-	-	ROBIN	-	-	ASC	-	-	-	757	-	-
1964-W35	2438508-09	1964 Apr 22 1633	Arcas	-	-	ROBIN	-	-	SDU	-	-	-	757	-	-
1964-W36	2438508-19	1964 Apr 23 1038	Arcas	-	-	ROBIN	-	-	SDU	-	-	-	757	-	-
1964-W37	2438509-00	1964 Apr 23 1038	Arcas	-	-	ROBIN	-	-	SDU	-	-	-	757	-	-
1964-W38	2438509-10	1964 Apr 23 1424	Arcas	-	-	ROBIN	-	-	SDU	-	-	-	757	-	-
1964-W39	2438509-14	1964 Apr 23 1623	Arcas	-	-	ROBIN	-	-	SDU	-	-	-	757	-	-
1964-W41	2438509-92	1964 Apr 24 1404	Arcas	-	-	ROBIN	-	-	SDU	-	-	-	757	-	-
1964-W42	2438510-09	1964 Apr 24 1404	Arcas	-	-	ROBIN	-	-	SDU	-	-	-	757	-	-
1964-W48	2438512-97	1964 Apr 27 1120	Arcas	-	-	ROBIN	-	-	SDU	-	-	-	757	-	-
1964-W49	2438513-08	1964 Apr 27 1402	Arcas	-	-	ROBIN	-	-	SDU	-	-	-	757	-	-
1964-W100	2438513-20	1964 Apr 27 1648	Arcas	-	-	ROBIN	-	-	SDU	-	-	-	757	-	-
1964-W101	2438513-94	1964 Apr 28 1028	Arcas	-	-	ROBIN	-	-	SDU	-	-	-	757	-	-
1964-W102	2438513-96	1964 Apr 28 1100	Arcas	-	-	ROBIN	-	-	SDU	-	-	-	757	-	-
1964-W103	2438514-09	1964 Apr 28 1403	Arcas	-	-	ROBIN	-	-	SDU	-	-	-	757	-	-
1964-W104	2438514-17	1964 Apr 28 1559	Arcas	-	-	ROBIN	-	-	SDU	-	-	-	757	-	-
1964-W105	2438514-20	1964 Apr 28 1646	Arcas	-	-	ROBIN	-	-	SDU	-	-	-	757	-	-
1964-W106	2438514-95	1964 Apr 29 1042	Arcas	-	-	ROBIN	-	-	SDU	-	-	-	757	-	-
1964-W107	2438515-09	1964 Apr 29 1408	Arcas	-	-	ROBIN	-	-	SDU	-	-	-	757	-	-
1964-W108	2438515-19	1964 Apr 29 1634	Arcas	-	-	ROBIN	-	-	SDU	-	-	-	757	-	-
1964-W109	2438515-98	1964 Apr 30 1129	Arcas	-	-	ROBIN	-	-	SDU	-	-	-	757	-	-
1964-W110	2438516-10	1964 Apr 30 1427	Arcas	-	-	ROBIN	-	-	SDU	-	-	-	757	-	-
1964-W111	2438516-18	1964 Apr 30 1619	Arcas	-	-	ROBIN	-	-	SDU	-	-	-	757	-	-
1964-W24	2438515-50	1964 May	Arcas	-	-	Arcasonde IIA	-	-	FC	-	-	-	607	-	-
1964-W25	2438515-50	1964 May	Arcas	-	-	Arcasonde IIA	-	-	FC	-	-	-	607	-	-
1964-W26	2438515-50	1964 May	Arcas	-	-	Arcasonde IIA	-	-	FC	-	-	-	607	-	-
1964-W27	2438515-95	1964 May 4 1045	Arcas	-	-	ROBIN	-	-	SDU	-	-	-	757	-	-
1964-W112	2438519-95	1964 May 4 1045	Arcas	-	-	ROBIN	-	-	SDU	-	-	-	757	-	-
1964-W113	2438519-96	1964 May 4 1109	Arcas	-	-	ROBIN	-	-	SDU	-	-	-	757	-	-
1964-W114	2438520-10	1964 May 4 1417	Arcas	-	-	ROBIN	-	-	SDU	-	-	-	757	-	-
1964-W115	2438520-20	1964 May 4 1643	Arcas	-	-	ROBIN	-	-	SDU	-	-	-	757	-	-
1964-W116	2438520-40	1964 May 4 2143	Arcas	-	-	ROBIN	-	-	SDU	-	-	-	757	-	-
1964-W117	2438520-96	1964 May 5 1109	Arcas	-	-	ROBIN	-	-	SDU	-	-	-	757	-	-
1964-W118	2438520-98	1964 May 5 1129	Arcas	-	-	ROBIN	-	-	SDU	-	-	-	757	-	-
1964-W119	2438521-19	1964 May 5 1635	Arcas	-	-	ROBIN	-	-	SDU	-	-	-	757	-	-
1964-W120	2438521-21	1964 May 5 1700	Arcas	-	-	ROBIN	-	-	SDU	-	-	-	757	-	-

















Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Launch_Mission	FlightCode	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee_Km	Range_Km	Dest
1967-W10	2439490.50	1967 Jan	Arcas	-	-	Arcasonde IA	-	-	-	FC	-	-	-	60?	-	-
1967-W11	2439490.50	1967 Jan	Arcas	-	-	Arcasonde IA	-	-	-	FC	-	-	-	60?	-	-
1967-W12	2439490.50	1967 Jan	Arcas	-	-	Arcasonde IA	-	-	-	FC	-	-	-	60?	-	-
1967-W13	2439490.50	1967 Jan	Arcas	-	-	Arcasonde IA	-	-	-	FC	-	-	-	60?	-	-
1967-W14	2439490.50	1967 Jan	Arcas	-	-	Arcasonde IA	-	-	-	FC	-	-	-	60?	-	-
1967-W15	2439490.50	1967 Jan	Arcas	-	-	Arcasonde IA	-	-	-	FC	-	-	-	60?	-	-
1967-W16	2439490.50	1967 Jan	Arcas	-	-	Arcasonde IA	-	-	-	FC	-	-	-	60?	-	-
1967-W17	2439490.50	1967 Jan	Arcas	-	-	Arcasonde IA	-	-	-	FC	-	-	-	60?	-	-
1967-W240	2439509.17	1967 Jan 18 1604	Arcas	-	EXAMETHET W23	Arcasonde IA	-	-	-	WI	-	-	-	53	-	-
1967-W157	2439510.48	1967 Jan 19 2329	Arcas	-	-	-	-	-	-	EdL	-	-	-	60?	-	-
1967-W158	2439510.48	1967 Jan 19 2334	Arcas	-	-	-	-	-	-	EdL	-	-	-	59	-	-
1967-W294	2439513.75	1967 Jan 23 0600	Arcas	-	-	Arcasonde IA	-	-	-	WS	-	-	-	60	-	-
1967-W295	2439513.88	1967 Jan 23 0900	Arcas	-	-	Arcasonde IA	-	-	-	WS	-	-	-	63	-	-
1967-W296	2439514.00	1967 Jan 23 1200	Arcas	-	-	Arcasonde IA	-	-	-	WS	-	-	-	59	-	-
1967-W297	2439514.26	1967 Jan 23 1615	Arcas	-	-	Arcasonde IA	-	-	-	WS	-	-	-	56	-	-
1967-W298	2439514.28	1967 Jan 23 1841	Arcas	-	-	Arcasonde IA	-	-	-	WI	-	-	-	50	-	-
1967-W241	2439516.19	1967 Jan 26 1659	Arcas	-	EXAMETHET W24	Arcasonde IA	-	-	-	CC	-	-	-	60?	-	-
1967-W222	2439521.10	1967 Jan 30 1430	Arcas	-	-	Ballute/Arcasonde IA	-	-	-	CC	-	-	-	60?	-	-
1967-W223	2439522.12	1967 Jan 31 1500	Arcas	-	-	Ballute/Arcasonde IA	-	-	-	CC	-	-	-	60?	-	-
1967-W242	2439522.32	1967 Jan 31 1935	Arcas	-	-	Arcasonde IA	-	-	-	WI	-	-	-	60?	-	-
1967-W18	2439522.42	1967 Jan 31 2200	Arcas	-	-	Arcasonde IA	-	-	-	FC	-	-	-	60?	-	-
1967-W38	2439521.50	1967 Feb	Arcas	-	-	Arcasonde IA?	-	-	-	FC	-	-	-	60?	-	-
1967-W39	2439521.50	1967 Feb	Arcas	-	-	Arcasonde IA?	-	-	-	FC	-	-	-	60?	-	-
1967-W40	2439521.50	1967 Feb	Arcas	-	-	Arcasonde IA?	-	-	-	FC	-	-	-	60?	-	-
1967-W41	2439521.50	1967 Feb	Arcas	-	-	Arcasonde IA?	-	-	-	FC	-	-	-	60?	-	-
1967-W42	2439521.50	1967 Feb	Arcas	-	-	Arcasonde IA?	-	-	-	FC	-	-	-	60?	-	-
1967-W43	2439521.50	1967 Feb	Arcas	-	-	Arcasonde IA?	-	-	-	FC	-	-	-	60?	-	-
1967-W44	2439521.50	1967 Feb	Arcas	-	-	Arcasonde IA?	-	-	-	FC	-	-	-	60?	-	-
1967-W45	2439523.10	1967 Feb 1 1430	Arcas	-	-	Arcasonde IA?	-	-	-	FC	-	-	-	60?	-	-
1967-W243	2439523.28	1967 Feb 1 1838	Arcas	-	EXAMETHET W25	Arcasonde IA	-	-	-	WI	-	-	-	60	-	-
1967-W244	2439525.27	1967 Feb 3 1826	Arcas	-	-	Arcasonde IA	-	-	-	WI	-	-	-	60?	-	-
1967-W245	2439537.20	1967 Feb 15 1651	Arcas	-	EXAMETHET W27	Arcasonde IA	-	-	-	WI	-	-	-	61	-	-
1967-W49	2439549.50	1967 Mar	Arcas	-	-	Arcasonde IA?	-	-	-	FC	-	-	-	60?	-	-
1967-W50	2439549.50	1967 Mar	Arcas	-	-	Arcasonde IA?	-	-	-	FC	-	-	-	60?	-	-
1967-W51	2439549.50	1967 Mar	Arcas	-	-	Arcasonde IA?	-	-	-	FC	-	-	-	60?	-	-
1967-W52	2439549.50	1967 Mar	Arcas	-	-	Arcasonde IA?	-	-	-	FC	-	-	-	60?	-	-
1967-W53	2439549.50	1967 Mar	Arcas	-	-	Arcasonde IA?	-	-	-	FC	-	-	-	60?	-	-
1967-W54	2439549.50	1967 Mar	Arcas	-	-	Arcasonde IA?	-	-	-	FC	-	-	-	60?	-	-
1967-W55	2439549.50	1967 Mar	Arcas	-	-	Arcasonde IA?	-	-	-	FC	-	-	-	60?	-	-
1967-W56	2439549.50	1967 Mar	Arcas	-	-	Arcasonde IA?	-	-	-	FC	-	-	-	60?	-	-
1967-W57	2439549.50	1967 Mar	Arcas	-	-	Arcasonde IA?	-	-	-	FC	-	-	-	60?	-	-
1967-W58	2439549.50	1967 Mar	Arcas	-	-	Arcasonde IA?	-	-	-	FC	-	-	-	60?	-	-
1967-W59	2439549.50	1967 Mar	Arcas	-	-	Arcasonde IA?	-	-	-	FC	-	-	-	60?	-	-
1967-W60	2439549.50	1967 Mar	Arcas	-	-	Arcasonde IA?	-	-	-	FC	-	-	-	60?	-	-
1967-W61	2439549.50	1967 Mar	Arcas	-	-	Arcasonde IA?	-	-	-	FC	-	-	-	60?	-	-
1967-W62	2439551.12	1967 Mar 1 1500	Arcas	-	-	Ballute/Arcasonde IA	-	-	-	CC	-	-	-	60?	-	-
1967-W63	2439551.17	1967 Mar 2 1600	Arcas	-	-	Ballute/Arcasonde IA	-	-	-	CC	-	-	-	60?	-	-
1967-W65	2439562.17	1967 Mar 9 1521	Arcas	-	EXAMETHET W29	Arcasonde IA	-	-	-	WI	-	-	-	59	-	-
1967-W66	2439561.34	1967 Mar 9 1521	Arcas	-	-	Arcasonde IA	-	-	-	WI	-	-	-	59	-	-
1967-W67	2439561.30	1967 Mar 31 1913	Arcas	-	-	Arcasonde IA	-	-	-	WI	-	-	-	60?	-	-
1967-W68	2439561.26	1967 Mar 31 1944	Arcas	-	-	Arcasonde IA	-	-	-	WI	-	-	-	60?	-	-
1967-W69	2439580.50	1967 Apr	Arcas	-	-	Arcasonde IA?	-	-	-	FC	-	-	-	60?	-	-
1967-W70	2439580.50	1967 Apr	Arcas	-	-	Arcasonde IA?	-	-	-	FC	-	-	-	60?	-	-
1967-W71	2439580.50	1967 Apr	Arcas	-	-	Arcasonde IA?	-	-	-	FC	-	-	-	60?	-	-
1967-W72	2439580.50	1967 Apr	Arcas	-	-	Arcasonde IA?	-	-	-	FC	-	-	-	60?	-	-
1967-W73	2439580.50	1967 Apr	Arcas	-	-	Arcasonde IA?	-	-	-	FC	-	-	-	60?	-	-
1967-W74	2439580.50	1967 Apr	Arcas	-	-	Arcasonde IA?	-	-	-	FC	-	-	-	60?	-	-
1967-W75	2439580.50	1967 Apr	Arcas	-	-	Arcasonde IA?	-	-	-	FC	-	-	-	60?	-	-
1967-W76	2439580.50	1967 Apr	Arcas	-	-	Arcasonde IA?	-	-	-	FC	-	-	-	60?	-	-
1967-W77	2439584.89	1967 Apr 4 0927	Arcas	-	-	Arcasonde IA	-	-	-	WI	-	-	-	63	-	-
1967-W79	2439584.92	1967 Apr 4 1002	Arcas	-	-	Arcasonde IA	-	-	-	WI	-	-	-	63	-	-
1967-W81	2439584.97	1967 Apr 4 1119	Arcas	-	-	Arcasonde IA	-	-	-	WI	-	-	-	63	-	-
1967-W84	2439585.20	1967 Apr 4 1643	Arcas	-	-	Arcasonde IA	-	-	-	WI	-	-	-	58	-	-
1967-W85	2439585.29	1967 Apr 4 1902	Arcas	-	-	Arcasonde IA	-	-	-	WI	-	-	-	60	-	-
1967-W87	2439585.46	1967 Apr 4 2259	Arcas	-	-	Arcasonde IA	-	-	-	WI	-	-	-	59	-	-
1967-W89	2439585.52	1967 Apr 5 0032	Arcas	-	-	Arcasonde IA	-	-	-	WI	-	-	-	53	-	-
1967-W89	2439585.56	1967 Apr 5 0129	Arcas	-	-	Arcasonde IA	-	-	-	WI	-	-	-	61	-	-
1967-W91	2439585.67	1967 Apr 5 0368	Arcas	-	-	Arcasonde IA	-	-	-	WI	-	-	-	60	-	-
1967-W92	2439587.40	1967 Apr 6 2143	Arcas	-	-	Arcasonde IA	-	-	-	WI	-	-	-	61	-	-
1967-W950	2439587.27	1967 Apr 11 1825	Arcas	-	EXAMETHET W33	Arcasonde IA	-	-	-	WI	-	-	-	60?	-	-
1967-W921	2439592.27	1967 Apr 12 1509	Arcas	-	-	Ballute/Arcasonde IA	-	-	-	CC	-	-	-	60?	-	-
1967-W926	2439593.13	1967 Apr 12 1509	Arcas	-	EXAMETHET W34	Arcasonde IA	-	-	-	WI	-	-	-	58	-	-
1967-W922	2439595.13	1967 Apr 14 1501	Arcas	-	-	Arcasonde IA	-	-	-	WI	-	-	-	60?	-	-
1967-W927	2439600.12	1967 Apr 19 1500	Arcas	-	-	Ballute/Arcasonde IA	-	-	-	CC	-	-	-	60?	-	-
1967-W923	2439601.25	1967 Apr 20 1806	Arcas	-	EXAMETHET W35	Arcasonde IA	-	-	-	WI	-	-	-	63	-	-
1967-W924	2439601.36	1967 Apr 20 2035	Arcas	-	MASA 15 55GT	Tone ranging test	-	-	-	WI	-	-	-	47	-	-
1967-W925	2439607.12	1967 Apr 26 1451	Arcas	-	EXAMETHET W36	Arcasonde II	-	-	-	WI	-	-	-	58	-	-
1967-W924	2439610.50	1967 May	Arcas	-	-	Arcasonde II?	-	-	-	FC	-	-	-	60?	-	-
1967-W106	2439610.50	1967 May	Arcas	-	-	Arcasonde II?	-	-	-	FC	-	-	-	60?	-	-
1967-W107	2439610.50	1967 May	Arcas	-	-	Arcasonde II?	-	-	-	FC	-	-	-	60?	-	-
1967-W108	2439610.50	1967 May	Arcas	-	-	Arcasonde II?	-	-	-	FC	-	-	-	60?	-	-
1967-W109	2439610.50	1967 May	Arcas	-	-	Arcasonde II?	-	-	-	FC	-	-	-	60?	-	-
1967-W110	2439610.50	1967 May	Arcas	-	-	Arcasonde II?	-	-	-	FC	-	-	-	60?	-	-
1967-W111	2439610.50	1967 May	Arcas	-	-	Arcasonde II?	-	-	-	FC	-	-	-	60?	-	-
1967-W112	2439610.50	1967 May	Arcas	-	-	Arcasonde II?	-	-	-	FC	-	-	-	60?	-	-
1967-W268	2439614.09	1967 May 3 1407	Arcas	-	EXAMETHET W37	Arcasonde IA	-	-	-	WI	-	-	-	60	-	-





Launch Mission

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee_Km	Range_Km	Dest
1967-1255	2439769-09	1967 Oct 5 1413	Arcas	-	-	Arcasonde IA	-	WI	-	-	-	607	-	-
1967-1256	2439770-27	1967 Oct 6 1834	Arcas	-	-	Arcasonde IA	-	WI	-	-	-	607	-	-
1967-1257	2439776-15	1967 Oct 12 1530	Arcas	-	EXAMETHET M68	Arcasonde IA	-	WI	-	-	-	50	-	-
1967-1194	2439777-40	1967 Oct 13 2134	Arcas	-	MASN 15-38DA	OGD 4	-	RAU	-	-	-	59	-	-
1967-1192	2439777-48	1967 Oct 13 2336	Arcas	-	-	Arcasonde IA?	-	FC	-	-	-	607	-	-
1967-1197	2439783-38	1967 Oct 19 2104	Arcas	-	MASN 15-39DA	OGD 4	-	RAU	-	-	-	58	-	-
1967-1258	2439784-08	1967 Oct 20 1350	Arcas	-	EXAMETHET M69	Arcasonde IA	-	WI	-	-	-	53	-	-
1967-1200	2439786-37	1967 Oct 22 2046	Arcas	-	MASN 15-40DA	OGD 4	-	RAU	-	-	-	59	-	-
1967-1259	2439789-10	1967 Oct 25 1417	Arcas	-	EXAMETHET M60	Arcasonde IA	-	WI	-	-	-	55	-	-
1967-1204	2439789-35	1967 Oct 25 2030	Arcas	-	MASN 15-41DA	OGD 4	-	RAU	-	-	-	59	-	-
1967-1832	2439790-50	1967 Oct 27 1455	Arcas	-	-	Ballute/Arcasonde IA	-	CC	-	-	-	607	-	-
1967-1260	2439791-12	1967 Oct 27 1455	Arcas	-	-	Arcasonde IA	-	WI	-	-	-	607	-	-
1967-1206	2439794-50	1967 Nov	Arcas	-	-	Arcasonde IA?	-	FC	-	-	-	607	-	-
1967-1207	2439794-50	1967 Nov	Arcas	-	-	Arcasonde IA?	-	FC	-	-	-	607	-	-
1967-1208	2439794-50	1967 Nov	Arcas	-	-	Arcasonde IA?	-	FC	-	-	-	607	-	-
1967-1209	2439794-50	1967 Nov	Arcas	-	-	Arcasonde IA?	-	FC	-	-	-	607	-	-
1967-1210	2439794-50	1967 Nov	Arcas	-	-	Arcasonde IA?	-	FC	-	-	-	607	-	-
1967-1211	2439796-23	1967 Nov 3 1726	Arcas	-	EXAMETHET M61	Arcasonde IA	-	WI	-	-	-	60	-	-
1967-1212	2439802-50	1967 Nov 8	Arcas	-	#119 R-112	-	-	WS	-	-	-	72	-	-
1967-1217	2439809-50	1967 Nov 15	Arcas	-	#118 R-113	-	-	WS	-	-	-	70	-	-
1967-1218	2439809-50	1967 Nov 15	Arcas	-	EXAMETHET C26	-	-	WS	-	-	-	68	-	-
1967-1219	2439810-16	1967 Nov 15 1557	Arcas	-	-	Arcasonde 2B	-	CELPA	-	-	-	70	-	-
1967-1262	2439812-15	1967 Nov 17 1942	Arcas	-	EXAMETHET M63	Arcasonde IA	-	WI	-	-	-	607	-	-
1967-1263	2439816-14	1967 Nov 21 1515	Arcas	-	-	Arcasonde IA	-	WI	-	-	-	51	-	-
1967-1264	2439824-33	1967 Nov 21 1953	Arcas	-	EXAMETHET M64	Arcasonde IA?	-	FC	-	-	-	57	-	-
1967-1228	2439824-50	1967 Dec	Arcas	-	-	Arcasonde IA?	-	FC	-	-	-	607	-	-
1967-1229	2439824-50	1967 Dec	Arcas	-	-	Arcasonde IA?	-	FC	-	-	-	607	-	-
1967-1230	2439824-50	1967 Dec	Arcas	-	-	Arcasonde IA?	-	FC	-	-	-	607	-	-
1967-1231	2439824-50	1967 Dec	Arcas	-	-	Arcasonde IA?	-	FC	-	-	-	607	-	-
1967-1232	2439824-50	1967 Dec	Arcas	-	-	Arcasonde IA?	-	FC	-	-	-	607	-	-
1967-1233	2439824-50	1967 Dec	Arcas	-	-	Arcasonde IA?	-	FC	-	-	-	607	-	-
1967-1234	2439824-50	1967 Dec	Arcas	-	-	Arcasonde IA?	-	FC	-	-	-	607	-	-
1967-1141	2439831-46	1967 Dec 6 2303	Arcas	-	-	Particles	-	FC	-	-	-	42	-	-
1967-1265	2439833-25	1967 Dec 8 1789	Arcas	-	EXAMETHET M66	Arcasonde IA	-	WI	-	-	-	607	-	-
1967-1266	2439835-26	1967 Dec 13 1816	Arcas	-	-	Arcasonde IA	-	WI	-	-	-	53	-	-
1967-1267	2439842-50	1967 Dec 18	Arcas	-	-	Ballute/Arcasonde IA	-	CC	-	-	-	607	-	-
1967-1268	2439844-36	1967 Dec 19 2041	Arcas	-	-	Arcasonde IA	-	WI	-	-	-	607	-	-
1968-101	2439855-50	1968 Jan	Arcas	-	-	Arcasonde IA?	-	FC	-	-	-	607	-	-
1968-102	2439855-50	1968 Jan	Arcas	-	-	Arcasonde IA?	-	FC	-	-	-	607	-	-
1968-103	2439855-50	1968 Jan	Arcas	-	-	Arcasonde IA?	-	FC	-	-	-	607	-	-
1968-104	2439855-50	1968 Jan	Arcas	-	-	Arcasonde IA?	-	FC	-	-	-	607	-	-
1968-105	2439855-50	1968 Jan	Arcas	-	-	Arcasonde IA?	-	FC	-	-	-	607	-	-
1968-106	2439855-50	1968 Jan	Arcas	-	-	Arcasonde IA?	-	FC	-	-	-	607	-	-
1968-107	2439855-50	1968 Jan	Arcas	-	-	Arcasonde IA?	-	FC	-	-	-	607	-	-
1968-108	2439855-50	1968 Jan	Arcas	-	-	Arcasonde IA?	-	FC	-	-	-	607	-	-
1968-109	2439855-50	1968 Jan	Arcas	-	-	Arcasonde IA?	-	FC	-	-	-	607	-	-
1968-110	2439855-50	1968 Jan	Arcas	-	-	Arcasonde IA?	-	FC	-	-	-	607	-	-
1968-111	2439855-50	1968 Jan	Arcas	-	-	Arcasonde IA?	-	FC	-	-	-	607	-	-
1968-112	2439855-50	1968 Jan	Arcas	-	-	Arcasonde IA?	-	FC	-	-	-	607	-	-
1968-113	2439855-50	1968 Jan	Arcas	-	-	Arcasonde IA?	-	FC	-	-	-	607	-	-
1968-114	2439855-50	1968 Jan	Arcas	-	-	Arcasonde IA?	-	FC	-	-	-	607	-	-
1968-115	2439855-50	1968 Jan	Arcas	-	-	Arcasonde IA?	-	FC	-	-	-	607	-	-
1968-116	2439855-50	1968 Jan	Arcas	-	-	Arcasonde IA?	-	FC	-	-	-	607	-	-
1968-117	2439860-33	1968 Jan 4 2000	Arcas	-	-	Arcasonde IA?	-	FC	-	-	-	607	-	-
1968-1312	2439861-20	1968 Jan 5 1650	Arcas	-	EXAMETHET W 67	Arcasonde IA	-	WI	-	-	-	53	-	-
1968-1378	2439864-53	1968 Jan 9 0050	Arcas	-	-	Oronesside	-	WS	-	-	-	607	-	-
1968-1379	2439864-53	1968 Jan 9 0050	Arcas	-	-	Oronesside	-	WS	-	-	-	607	-	-
1968-1380	2439864-53	1968 Jan 9 0050	Arcas	-	-	Oronesside	-	WS	-	-	-	607	-	-
1968-1381	2439865-07	1968 Jan 9 1335	Arcas	-	-	Oronesside	-	WS	-	-	-	607	-	-
1968-1382	2439865-22	1968 Jan 9 1715	Arcas	-	-	Oronesside	-	WS	-	-	-	607	-	-
1968-1313	2439865-43	1968 Jan 9 2215	Arcas	-	-	Oronesside	-	WS	-	-	-	507	-	-
1968-1314	2439865-28	1968 Jan 10 1840	Arcas	-	-	Oronesside	-	WS	-	-	-	607	-	-
1968-1315	2439873-23	1968 Jan 17 1812	Arcas	-	EXAMETHET W 68	Arcasonde IA	-	WI	-	-	-	58	-	-
1968-1316	2439873-23	1968 Jan 17 1812	Arcas	-	EXAMETHET W 69	Arcasonde 2B	-	WI	-	-	-	58	-	-
1968-1317	2439873-23	1968 Jan 17 1725	Arcas	-	EXAMETHET C28	Dark 1 (ORONCD)	-	CELPA	-	-	-	71	-	-
1968-1318	2439877-50	1968 Jan 22	Arcas	-	-	Arcasonde IA?	-	WI	-	-	-	55	-	-
1968-1319	2439882-17	1968 Jan 26 1559	Arcas	-	-	Arcasonde IA?	-	WI	-	-	-	55	-	-
1968-1320	2439886-50	1968 Feb	Arcas	-	-	Arcasonde IA?	-	FC	-	-	-	607	-	-
1968-1321	2439886-50	1968 Feb	Arcas	-	-	Arcasonde IA?	-	FC	-	-	-	607	-	-
1968-1322	2439886-50	1968 Feb	Arcas	-	-	Arcasonde IA?	-	FC	-	-	-	607	-	-
1968-1323	2439886-50	1968 Feb	Arcas	-	-	Arcasonde IA?	-	FC	-	-	-	607	-	-
1968-1324	2439886-50	1968 Feb	Arcas	-	-	Arcasonde IA?	-	FC	-	-	-	607	-	-
1968-1325	2439886-50	1968 Feb	Arcas	-	-	Arcasonde IA?	-	FC	-	-	-	607	-	-
1968-1326	2439886-50	1968 Feb	Arcas	-	-	Arcasonde IA?	-	FC	-	-	-	607	-	-
1968-1327	2439886-50	1968 Feb	Arcas	-	-	Arcasonde IA?	-	FC	-	-	-	607	-	-
1968-1328	2439886-50	1968 Feb	Arcas	-	-	Arcasonde IA?	-	FC	-	-	-	607	-	-
1968-1329	2439886-50	1968 Feb	Arcas	-	-	Arcasonde IA?	-	FC	-	-	-	607	-	-
1968-1330	2439886-50	1968 Feb	Arcas	-	-	Arcasonde IA?	-	FC	-	-	-	607	-	-
1968-1331	2439886-50	1968 Feb	Arcas	-	-	Arcasonde IA?	-	FC	-	-	-	607	-	-
1968-1332	2439886-50	1968 Feb	Arcas	-	-	Arcasonde IA?	-	FC	-	-	-	607	-	-
1968-1333	2439886-50	1968 Feb	Arcas	-	-	Arcasonde IA?	-	FC	-	-	-	607	-	-
1968-1334	2439886-50	1968 Feb	Arcas	-	-	Arcasonde IA?	-	FC	-	-	-	607	-	-
1968-1335	2439886-50	1968 Feb	Arcas	-	-	Arcasonde IA?	-	FC	-	-	-	607	-	-
1968-1336	2439886-50	1968 Feb	Arcas	-	-	Arcasonde IA?	-	FC	-	-	-	607	-	-
1968-1337	2439886-50	1968 Feb	Arcas	-	-	Arcasonde IA?	-	FC	-	-	-	607	-	-
1968-1338	2439886-50	1968 Feb	Arcas	-	-	Arcasonde IA?	-	FC	-	-	-	607	-	-
1968-1339	2439886-50	1968 Feb	Arcas	-	-	Arcasonde IA?	-	FC	-	-	-	607	-	-
1968-1340	2439886-50	1968 Feb	Arcas	-	-	Arcasonde IA?	-	FC	-	-	-	607	-	-
1968-1341	2439886-50	1968 Feb	Arcas	-	-	Arcasonde IA?	-	FC	-	-	-	607	-	-
1968-1342	2439886-50	1968 Feb	Arcas	-	-	Arcasonde IA?	-	FC	-	-	-	607	-	-
1968-1343	2439886-50	1968 Feb 5 2314	Arcas	-	-	Arcasonde IA?	-	FC	-	-	-	607	-	-
1968-1317	2439901-13	1968 Feb 14 1513	Arcas	-	EXAMETHET W 72	Arcasonde IA	-	WI	-	-	-	657	-	-
1968-1318	2439907-41	1968 Feb 20 2144	Arcas	-	EXAMETHET W 73	Arcasonde 1A	-	WI	-	-	-	62	-	-
1968-1319	2439915-14	1968 Feb 28 1528	Arcas	-	EXAMETHET W 74	Arcasonde 1A	-	WI	-	-	-	53	-	-
1968-1344	2439915-50	1968 Mar	Arcas	-	-	Ballute/Arcasonde IA	-	CC	-	-	-	607	-	-
1968-1345	2439915-50	1968 Mar	Arcas	-	-	-	-	FC	-	-	-	607	-	-
1968-1346	2439915-50	1968 Mar	Arcas	-	-	-	-	FC	-	-	-	607	-	-
1968-1347	2439915-50	1968 Mar	Arcas	-	-	-	-	FC	-	-	-	607	-	-
1968-1348	2439915-50	1968 Mar	Arcas	-	-	-	-	FC	-	-	-	607	-	-
1968-1349	2439915-50	1968 Mar	Arcas	-	-	-	-	FC	-	-	-	607	-	-
1968-1350	2439915-50	1968 Mar	Arcas	-	-	-	-	FC	-	-	-	607	-	-
1968-1351	2439915-50	1968 Mar	Arcas	-	-	-	-	FC	-	-	-	607	-	-
1968-1352	2439915-50	1968 Mar	Arcas	-	-	-	-	FC	-	-	-	607	-	-
1968-1353	243991													





Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Launch_Mission	FlightCode	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee_Km	Range_Km	Dest
1965-Y104	2440204-92	1968 Dec 14 1000	Arcas	?	-	-	-	-	-	BARB	-	-	-	80	-	-
1965-W271	2440204-96	1968 Dec 14 1127	Arcas	?	-	-	-	-	-	BARB	-	-	-	79	-	-
1965-W288	2440208-55	1968 Dec 18 0105	Arcas	-	PSU-WD-4	Control flight	-	-	-	WS	-	-	-	70?	-	-
1965-W258	2440209-12	1968 Dec 18 1500	Arcas	-	EXAMINMET N64	Arcasonde 1A	-	-	-	CELEI	-	-	-	58	-	-
1965-W257	2440209-25	1968 Dec 18 1802	Arcas	-	EXAMINMET C50	Arcasonde 1A	-	-	-	CELEI	-	-	-	72	-	-
1965-W01	2440221-50	1969 Jan	Arcas	-	-	-	-	-	-	FC	-	-	-	60?	-	-
1965-W02	2440221-50	1969 Jan	Arcas	-	-	-	-	-	-	FC	-	-	-	60?	-	-
1965-W03	2440221-50	1969 Jan	Arcas	-	-	-	-	-	-	FC	-	-	-	60?	-	-
1965-W09	2440229-25	1969 Jan 7 1755:00	Arcas	?	-	-	-	-	-	FC	-	-	-	65	-	-
1965-W37	2440230-25	1969 Jan 8 1807:00	Arcas	?	-	-	-	-	-	FC	-	-	-	54	-	-
1965-W40	2440231-24	1969 Jan 9 1747:00	Arcas	?	-	-	-	-	-	FC	-	-	-	65	-	-
1965-W105	2440242-28	1969 Jan 20 1841:00	Arcas	?	-	-	-	-	-	FC	-	-	-	51	-	-
1965-W34	2440242-28	1969 Jan 20 1900	Arcas	?	-	-	-	-	-	FC	-	-	-	81	-	-
1965-W107	2440242-32	1969 Jan 20 1958:59	Arcas	?	-	-	-	-	-	FC	-	-	-	50	-	-
1965-W109	2440242-35	1969 Jan 20 2028:00	Arcas	?	-	-	-	-	-	FC	-	-	-	57	-	-
1965-W112	2440243-71	1969 Jan 21 1700	Arcas	?	-	-	-	-	-	FC	-	-	-	77	-	-
1965-W35	2440243-72	1969 Jan 22 0515	Arcas	?	-	-	-	-	-	FC	-	-	-	77	-	-
1965-W118	2440243-96	1969 Jan 22 0615	Arcas	?	-	-	-	-	-	FC	-	-	-	84	-	-
1965-W119	2440243-97	1969 Jan 22 1100	Arcas	?	-	-	-	-	-	FC	-	-	-	76	-	-
1965-W118	2440243-97	1969 Jan 22 1100:00	Arcas	?	-	-	-	-	-	FC	-	-	-	76	-	-
1965-W137	2440244-23	1969 Jan 22 1730	Arcas	?	-	-	-	-	-	FC	-	-	-	74	-	-
1965-W129	2440244-23	1969 Jan 22 2300:00	Arcas	?	-	-	-	-	-	FC	-	-	-	94	-	-
1965-W140	2440244-71	1969 Jan 23 0503:00	Arcas	?	-	-	-	-	-	FC	-	-	-	77	-	-
1965-W45	2440245-21	1969 Jan 23 0603:00	Arcas	?	-	-	-	-	-	FC	-	-	-	81	-	-
1965-W49	2440246-21	1969 Jan 23 1701:00	Arcas	?	-	-	-	-	-	FC	-	-	-	83	-	-
1965-W68	2440249-17	1969 Jan 24 1701:00	Arcas	?	-	-	-	-	-	FC	-	-	-	80	-	-
1965-W174	2440252-37	1969 Jan 27 1600:00	Arcas	?	-	-	-	-	-	FC	-	-	-	83	-	-
1965-W163	2440253-26	1969 Jan 30 2051:00	Arcas	?	-	-	-	-	-	FC	-	-	-	55	-	-
1965-W217	2440259-25	1969 Jan 31 1821	Arcas	?	MASA 15. G1DM	Met Para, Arcasonde	-	-	-	FC	-	-	-	54	-	-
1965-W289	2440272-51	1969 Feb 6 1800	Arcas	-	MASA 15. G2DM	Met Para, Arcasonde	-	-	-	FC	-	-	-	56	-	-
1965-W429	2440274-24	1969 Feb 20 0014:59	Arcas	-	-	-	-	-	-	FC	-	-	-	64	-	-
1965-W436	2440284-69	1969 Feb 21 1749:59	Arcas	-	-	-	-	-	-	FC	-	-	-	57	-	-
1965-W534	2440292-31	1969 Mar 4 0437:59	Arcas	-	-	-	-	-	-	FC	-	-	-	60	-	-
1965-W369	2440292-31	1969 Mar 11 1930:00	Arcas	-	-	-	-	-	-	FC	-	-	-	61	-	-
1965-W394	2440293-69	1969 Mar 13 0430:00	Arcas	-	-	-	-	-	-	FC	-	-	-	63	-	-
1965-W472	2440311-50	1969 Apr	Arcas	-	-	-	-	-	-	FC	-	-	-	60?	-	-
1965-W473	2440311-50	1969 Apr	Arcas	-	-	-	-	-	-	FC	-	-	-	60?	-	-
1965-W475	2440311-50	1969 Apr	Arcas	-	-	-	-	-	-	FC	-	-	-	60?	-	-
1965-W476	2440311-50	1969 Apr	Arcas	-	-	-	-	-	-	FC	-	-	-	60?	-	-
1965-W477	2440311-50	1969 Apr	Arcas	-	-	-	-	-	-	FC	-	-	-	60?	-	-
1965-W478	2440311-50	1969 Apr	Arcas	-	-	-	-	-	-	FC	-	-	-	60?	-	-
1965-W479	2440311-50	1969 Apr	Arcas	-	-	-	-	-	-	FC	-	-	-	60?	-	-
1965-W480	2440311-50	1969 Apr	Arcas	-	-	-	-	-	-	FC	-	-	-	60?	-	-
1965-W481	2440311-50	1969 Apr	Arcas	-	-	-	-	-	-	FC	-	-	-	60?	-	-
1965-W482	2440311-50	1969 Apr	Arcas	-	-	-	-	-	-	FC	-	-	-	60?	-	-
1965-W483	2440311-50	1969 Apr	Arcas	-	-	-	-	-	-	FC	-	-	-	60?	-	-
1965-W484	2440311-50	1969 Apr	Arcas	-	-	-	-	-	-	FC	-	-	-	60?	-	-
1965-W485	2440311-50	1969 Apr	Arcas	-	-	-	-	-	-	FC	-	-	-	60?	-	-
1965-W486	2440311-50	1969 Apr	Arcas	-	-	-	-	-	-	FC	-	-	-	60?	-	-
1965-W487	2440311-50	1969 Apr	Arcas	-	-	-	-	-	-	FC	-	-	-	60?	-	-
1965-W488	2440311-50	1969 Apr	Arcas	-	-	-	-	-	-	FC	-	-	-	60?	-	-
1965-W489	2440311-50	1969 Apr	Arcas	-	-	-	-	-	-	FC	-	-	-	60?	-	-
1965-W490	2440311-50	1969 Apr	Arcas	-	-	-	-	-	-	FC	-	-	-	60?	-	-
1965-W491	2440311-50	1969 Apr	Arcas	-	-	-	-	-	-	FC	-	-	-	60?	-	-
1965-W492	2440311-50	1969 Apr	Arcas	-	-	-	-	-	-	FC	-	-	-	60?	-	-
1965-W493	2440311-50	1969 Apr	Arcas	-	-	-	-	-	-	FC	-	-	-	60?	-	-
1965-W494	2440311-50	1969 Apr	Arcas	-	-	-	-	-	-	FC	-	-	-	60?	-	-
1965-W495	2440311-50	1969 Apr	Arcas	-	-	-	-	-	-	FC	-	-	-	60?	-	-
1965-W496	2440311-50	1969 Apr	Arcas	-	-	-	-	-	-	FC	-	-	-	60?	-	-
1965-W497	2440311-50	1969 Apr	Arcas	-	-	-	-	-	-	FC	-	-	-	60?	-	-
1965-W498	2440311-50	1969 Apr	Arcas	-	-	-	-	-	-	FC	-	-	-	60?	-	-
1965-W499	2440311-50	1969 Apr	Arcas	-	-	-	-	-	-	FC	-	-	-	60?	-	-
1965-W500	2440311-50	1969 Apr	Arcas	-	-	-	-	-	-	FC	-	-	-	60?	-	-
1965-W501	2440311-50	1969 Apr	Arcas	-	-	-	-	-	-	FC	-	-	-	60?	-	-
1965-W502	2440311-50	1969 Apr	Arcas	-	-	-	-	-	-	FC	-	-	-	60?	-	-
1965-W503	2440311-50	1969 Apr	Arcas	-	-	-	-	-	-	FC	-	-	-	60?	-	-
1965-W504	2440311-50	1969 Apr	Arcas	-	-	-	-	-	-	FC	-	-	-	60?	-	-
1965-W505	2440311-50	1969 Apr	Arcas	-	-	-	-	-	-	FC	-	-	-	60?	-	-
1965-W506	2440311-50	1969 Apr	Arcas	-	-	-	-	-	-	FC	-	-	-	60?	-	-
1965-W507	2440311-50	1969 Apr	Arcas	-	-	-	-	-	-	FC	-	-	-	60?	-	-
1965-W508	2440311-50	1969 Apr	Arcas	-	-	-	-	-	-	FC	-	-	-	60?	-	-
1965-W509	2440311-50	1969 Apr	Arcas	-	-	-	-	-	-	FC	-	-	-	60?	-	-
1965-W510	2440311-50	1969 Apr	Arcas	-	-	-	-	-	-	FC	-	-	-	60?	-	-
1965-W511	2440311-50	1969 Apr	Arcas	-	-	-	-	-	-	FC	-	-	-	60?	-	-
1965-W512	2440311-50	1969 Apr	Arcas	-	-	-	-	-	-	FC	-	-	-	60?	-	-
1965-W513	2440311-50	1969 Apr	Arcas	-	-	-	-	-	-	FC	-	-	-	60?	-	-
1965-W514	2440311-50	1969 Apr	Arcas	-	-	-	-	-	-	FC	-	-	-	60?	-	-
1965-W515	2440311-50	1969 Apr	Arcas	-	-	-	-	-	-	FC	-	-	-	60?	-	-
1965-W516	2440311-50	1969 Apr	Arcas	-	-	-	-	-	-	FC	-	-	-	60?	-	-
1965-W517	2440311-50	1969 Apr	Arcas	-	-	-	-	-	-	FC	-	-	-	60?	-	-
1965-W518	2440311-50	1969 Apr	Arcas	-	-	-	-	-	-	FC	-	-	-	60?	-	-
1965-W519	2440311-50	1969 Apr	Arcas	-	-	-	-	-	-	FC	-	-	-	60?	-	-
1965-W520	2440311-50	1969 Apr	Arcas	-	-	-	-	-	-	FC	-	-	-	60?	-	-
1965-W521	2440311-50	1969 Apr	Arcas	-	-	-	-	-	-	FC	-	-	-	60?	-	-
1965-W522	2440311-50	1969 Apr	Arcas	-	-	-	-	-	-	FC	-	-	-	60?	-	-
1965-W523	2440311-50	1969 Apr	Arcas	-	-	-	-	-	-	FC	-	-	-	60?	-	-
1965-W524	2440311-50	1969 Apr	Arcas	-	-	-	-	-	-	FC	-	-	-	60?	-	-
1965-W525	2440311-50	1969 Apr	Arcas	-	-	-	-	-	-	FC	-	-	-	60?	-	-
1965-W526	2440311-50	1969 Apr	Arcas	-	-	-	-	-	-	FC	-	-	-	60?	-	-
1965-W527	2440311-50	1969 Apr	Arcas	-	-	-	-	-	-	FC	-	-	-	60?	-	-
1965-W528	2440311-50	1969 Apr	Arcas	-	-	-	-	-	-	FC	-	-	-	60?	-	-
1965-W529	2440311-50	1969 Apr	Arcas	-	-	-	-	-	-	FC	-	-	-	60?	-	-
1965-W530	2440311-50	1969 Apr	Arcas	-	-	-	-	-	-	FC	-	-	-	60?	-	-
1965-W531	2440311-50	1969 Apr	Arcas	-	-	-	-	-	-	FC	-	-	-	60?	-	-
1965-W532	2440311-50	1969 Apr	Arcas	-	-	-	-	-	-	FC	-	-	-	60?	-	-
1965-W533	2440311-50	1969 Apr	Arcas	-	-	-	-	-	-	FC	-	-	-	60?	-	-
1965-W534	2440311-50	1969 Apr	Arcas	-	-	-	-	-	-	FC	-	-	-	60?	-	-
1965-W535	2440311-50	1969 Apr	Arcas	-	-	-	-	-	-	FC	-	-	-	60?	-	-
1965-W536	2440311-50	1969 Apr	Arcas	-	-	-	-	-	-	FC	-	-	-	60?	-	-
1965-W537	2440311-50	1969 Apr	Arcas	-	-	-	-	-	-	FC	-	-	-	60?	-	-
1965-W538	2440311-5															



Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Launch_Mission	FlightCode	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee_Km	Range_Km	Dest
1972-1283	2441657-26	1972 Dec 5 1814	Super Arcas	-	MSA 15.195UI	-	-	-	-	WI	-	-	-	84	-	-
1973-031	2441699-25	1973 Jan 16 1804	Super Arcas	-	MSA 15.1030I	-	-	-	-	WI	-	-	-	95	-	-
1973-031	2441702-21	1973 Jan 19 1658:00	Arcas	-	-	-	-	-	-	WS	-	-	-	64	-	-
1973-031	2441715-50	1973 Feb 2 0615	Arcas	-	USA Ozone	-	-	-	-	WS	-	-	-	64?	-	-
1973-031	2441715-76	1973 Feb 2 0615	Super Arcas	-	MSA 15.1010I	-	-	-	-	FC	-	-	-	64	-	-
1973-031	2441715-77	1973 Feb 2 0623	Super Arcas	-	MSA 15.1020I	-	-	-	-	FC	-	-	-	81	-	-
1973-031	2441727-15	1973 Feb 2 0623	Super Arcas	-	MSA 15.1070R	-	-	-	-	AMT	-	-	-	58	-	-
1973-031	2441734-14	1973 Feb 20 1525	Super Arcas	-	MSA 15.1080R	-	-	-	-	AMT	-	-	-	53	-	-
1973-031	2441762-50	1973 Mar 21	Super Arcas	-	-	-	-	-	-	CSG	-	-	-	75?	-	-
1973-031	2441769-50	1973 Mar 28	Super Arcas	-	-	-	-	-	-	CSG	-	-	-	75?	-	-
1973-031	2441772-28	1973 Mar 30 1845	Super Arcas	-	-	-	-	-	-	WI	-	-	-	60?	-	-
1973-031	2441776-50	1973 Apr 4	Super Arcas	-	TI-6446	-	-	-	-	CSG	-	-	-	75?	-	-
1973-031	2441782-59	1973 Apr 10 0215	Super Arcas	-	TI-6428	-	-	-	-	WI	-	-	-	60?	-	-
1973-031	2441790-50	1973 Apr 18	Super Arcas	-	-	-	-	-	-	CSG	-	-	-	75?	-	-
1973-031	2441811-50	1973 May 9	Super Arcas	-	-	-	-	-	-	CSG	-	-	-	75?	-	-
1973-031	2441832-50	1973 May 30	Super Arcas	-	-	-	-	-	-	CSG	-	-	-	75?	-	-
1973-031	2441839-13	1973 Jun 5 1501	Super Arcas	-	MSA 15.1090R	-	-	-	-	AMT	-	-	-	56	-	-
1973-031	2441840-50	1973 Jun 7	Super Arcas	-	-	-	-	-	-	CSG	-	-	-	75?	-	-
1973-031	2441875-50	1973 Jul 12	Super Arcas	-	-	-	-	-	-	WS	-	-	-	68	-	-
1973-031	2441880-50	1973 Jul 17	Super Arcas	-	-	-	-	-	-	WS	-	-	-	57	-	-
1973-031	2441883-26	1973 Jul 19 1819	Super Arcas	-	LI-6574	-	-	-	-	WI	-	-	-	60?	-	-
1973-031	2441911-20	1973 Jul 19 1859	Super Arcas	-	MSA 15.1110R	-	-	-	-	AMT	-	-	-	53	-	-
1973-031	2441919-12	1973 Aug 16 1810	Arcas	-	MSA 15.1120R	-	-	-	-	AMT	-	-	-	51	-	-
1973-031	2441919-16	1973 Aug 24 1462	Super Arcas	-	TI-6723	-	-	-	-	WI	-	-	-	54	-	-
1973-031	2441926-21	1973 Aug 24 1555	Super Arcas	-	TI-6777	-	-	-	-	WI	-	-	-	60?	-	-
1973-031	2441930-26	1973 Aug 31 1707	Super Arcas	-	TI-6731	-	-	-	-	WI	-	-	-	57	-	-
1973-031	2441935-50	1973 Sep 4 1809:00	Super Arcas	-	TI-6720	-	-	-	-	CSG	-	-	-	75?	-	-
1973-031	2441937-50	1973 Sep 10	Super Arcas	-	-	-	-	-	-	CSG	-	-	-	75?	-	-
1973-031	2441945-14	1973 Sep 12	Super Arcas	-	MSA 15.1130R	-	-	-	-	AMT	-	-	-	49	-	-
1973-031	2441945-28	1973 Sep 19 1519	Super Arcas	-	TI-6776	-	-	-	-	WI	-	-	-	60?	-	-
1973-031	2441946-08	1973 Sep 19 1559	Super Arcas	-	CHD	-	-	-	-	CSG	-	-	-	73	-	-
1973-031	2441946-65	1973 Sep 20 1354	Super Arcas	-	CHD	-	-	-	-	CSG	-	-	-	74	-	-
1973-031	2441947-69	1973 Sep 22 0457	Super Arcas	-	CHD	-	-	-	-	CSG	-	-	-	74	-	-
1973-031	2441960-22	1973 Sep 24 1715	Super Arcas	-	CHD	-	-	-	-	CSG	-	-	-	73	-	-
1973-031	2441960-54	1973 Sep 25 0656	Super Arcas	-	CHD	-	-	-	-	CSG	-	-	-	77	-	-
1973-031	2441981-28	1973 Sep 25 1840	Super Arcas	-	CHD	-	-	-	-	CSG	-	-	-	70	-	-
1973-031	2441981-55	1973 Sep 26 1442	Super Arcas	-	CHD	-	-	-	-	CSG	-	-	-	72	-	-
1973-031	2441985-10	1973 Sep 26 1006	Super Arcas	-	CHD	-	-	-	-	CSG	-	-	-	73	-	-
1973-031	2441985-65	1973 Sep 26 1326	Super Arcas	-	CHD	-	-	-	-	CSG	-	-	-	72	-	-
1973-031	2441984-65	1973 Sep 28 0311	Super Arcas	-	CHD	-	-	-	-	CSG	-	-	-	73	-	-
1973-031	2441986-67	1973 Sep 29 0329	Super Arcas	-	CHD	-	-	-	-	CSG	-	-	-	73	-	-
1973-031	2441989-56	1973 Oct 1 0420	Super Arcas	-	APCRL Arcas 72-2	-	-	-	-	WS	-	-	-	10?	-	-
1973-031	2441989-76	1973 Oct 4 1010	Super Arcas	-	APCRL Arcas 72-1	-	-	-	-	WS	-	-	-	10?	-	-
1973-031	2441989-90	1973 Oct 10 0610	Super Arcas	-	-	-	-	-	-	CSG	-	-	-	75?	-	-
1973-031	2441989-94	1973 Oct 10 1515	Super Arcas	-	LI-6576	-	-	-	-	WI	-	-	-	70?	-	-
1973-031	2441986-25	1973 Oct 10 1804	Arcas	-	LI-6577	-	-	-	-	WI	-	-	-	70?	-	-
1973-031	2441986-25	1973 Oct 19 1715	Arcas	-	MSA 15.1160R	-	-	-	-	AMT	-	-	-	43	-	-
1973-031	2441986-25	1973 Oct 31	Super Arcas	-	-	-	-	-	-	AMT	-	-	-	75?	-	-
1973-031	2442009-50	1973 Nov 23	Super Arcas	-	Polar Airglow	-	-	-	-	THU	-	-	-	100?	-	-
1973-031	2442010-14	1973 Nov 23 1520	Super Arcas	-	MSA 15.1160R	-	-	-	-	AMT	-	-	-	60?	-	-
1973-031	2442015-50	1973 Nov 29	Super Arcas	-	-	-	-	-	-	CSG	-	-	-	75?	-	-
1973-031	2442021-15	1973 Dec 4 1533:00	Super Arcas	-	MSA LI-6963	-	-	-	-	WI	-	-	-	67	-	-
1973-031	2442021-27	1973 Dec 4 1835	Super Arcas	-	MSA LI-6964	-	-	-	-	WI	-	-	-	60?	-	-
1973-031	2442028-50	1973 Dec 12	Super Arcas	-	-	-	-	-	-	CSG	-	-	-	75?	-	-
1973-031	2442047-50	1974 Jan 9	Super Arcas	-	PCA	-	-	-	-	THU	-	-	-	100?	-	-
1973-031	2442056-50	1974 Jan 9	Super Arcas	-	-	-	-	-	-	WS	-	-	-	70	-	-
1973-031	2442058-50	1974 Jan 11	Super Arcas	-	PSU Gordon	-	-	-	-	CSG	-	-	-	75?	-	-
1973-031	2442068-26	1974 Jan 16 1813	Super Arcas	-	MSA 15.1050I	-	-	-	-	WI	-	-	-	103	-	-
1973-031	2442079-12	1974 Jan 31 1500	Super Arcas	-	MSA 15.510E	-	-	-	-	AMT	-	-	-	60?	-	-
1973-031	2442082-50	1974 Feb 4	Super Arcas	-	-	-	-	-	-	AMT	-	-	-	75?	-	-
1973-031	2442082-50	1974 Feb 14	Super Arcas	-	-	-	-	-	-	CSG	-	-	-	75?	-	-
1973-031	2442082-50	1974 Feb 25	Super Arcas	-	-	-	-	-	-	CSG	-	-	-	75?	-	-
1973-031	2442103-50	1974 Feb 25	Super Arcas	-	-	-	-	-	-	CSG	-	-	-	75?	-	-
1973-031	2442105-50	1974 Feb 27	Super Arcas	-	-	-	-	-	-	CSG	-	-	-	75?	-	-
1973-031	2442119-50	1974 Mar 13	Super Arcas	-	-	-	-	-	-	CSG	-	-	-	76	-	-
1973-031	2442122-30	1974 Mar 15 1917	Super Arcas	-	MSA G1-7207	-	-	-	-	WI	-	-	-	60?	-	-
1973-031	2442128-00	1974 Mar 21 1200	Super Arcas	-	MSA 15.1230M	-	-	-	-	ALFS	-	-	-	1	-	-
1973-031	2442129-11	1974 Mar 22 1445	Super Arcas	-	MSA 15.1240R	-	-	-	-	ALFS	-	-	-	89	-	-
1973-031	2442133-50	1974 Apr 17	Super Arcas	-	-	-	-	-	-	CSG	-	-	-	75?	-	-
1973-031	2442169-50	1974 May 2	Super Arcas	-	-	-	-	-	-	CSG	-	-	-	75?	-	-
1973-031	2442182-50	1974 May 15	Super Arcas	-	-	-	-	-	-	CSG	-	-	-	75?	-	-
1973-031	2442196-50	1974 May 29	Super Arcas	-	-	-	-	-	-	CSG	-	-	-	75?	-	-
1973-031	2442228-35	1974 Jun 29 2025:00	Super Arcas	-	F 1-7393	-	-	-	-	WI	-	-	-	60?	-	-
1973-031	2442228-38	1974 Jun 29 2110	Super Arcas	-	MSA 15.1040I	-	-	-	-	WI	-	-	-	89	-	-
1973-031	2442228-64	1974 Jun 30 0315	Super Arcas	-	MSA 15.1260E	-	-	-	-	WI	-	-	-	72	-	-
1973-031	2442228-94	1974 Jun 30 1035:00	Super Arcas	-	F 1-7394	-	-	-	-	WI	-	-	-	90?	-	-
1973-031	2442229-50	1974 Jul 1 0005	Super Arcas	-	MSA 15.1250I	-	-	-	-	WI	-	-	-	83	-	-
1973-031	2442254-25	1974 Jul 25 1800	Super Arcas	-	MSA 15.1060I	-	-	-	-	WS	-	-	-	74	-	-
1973-031	2442294-50	1974 Sep 4	Super Arcas	-	-	-	-	-	-	CSG	-	-	-	75?	-	-
1973-031	2442301-50	1974 Sep 11	Super Arcas	-	-	-	-	-	-	CSG	-	-	-	75?	-	-
1973-031	2442308-50	1974 Sep 18	Super Arcas	-	-	-	-	-	-	CSG	-	-	-	75?	-	-
1973-031	2442322-50	1974 Oct 2	Super Arcas	-	-	-	-	-	-	CSG	-					





Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Launch_Mission	FlightCode	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee_Km	Range_Km	Dest
1975-1697	2443750-32	1978 Aug 29 1937:59	Super Arcas	-	-	Midair Recovery Test	-	-	-	WI	-	-	-	66	-	-
1975-1443	2443857-50	1978 Dec 15	Super Arcas	-	MASA 15-1970H	-	-	-	-	WI	-	-	-	80?	-	-
1975-11272	2443857-74	1978 Dec 15 0641	Super Arcas	-	MASA 15-1490H	-	-	-	-	WS	-	-	-	70	-	-
1975-162	2443900-50	1979 Jan 27	Super Arcas	-	MASA 15-1980H	-	-	-	-	WI	-	-	-	80?	-	-
1975-16153	2443901-34	1979 Jan 27 2005	Super Arcas	-	MASA 15-1500H	-	-	-	-	PF	-	-	-	60	-	-
1975-157	2443901-50	1979 Jan 28	Super Arcas	-	MASA 15-1990H	-	-	-	-	WI	-	-	-	80?	-	-
1975-16154	2443901-86	1979 Jan 28 0833	Super Arcas	-	MASA 15-1510H	-	-	-	-	PF	-	-	-	69	-	-
1975-1606	2443929-20	1979 Feb 24 1654:50	Super Arcas	-	CNS-1	-	-	-	-	RLAKE	COCH	-	-	80?	-	-
1975-1122	2443929-22	1979 Feb 24 1722	Super Arcas	-	CNS-1-10	-	-	-	-	RLAKE	COCH	-	-	80?	-	-
1975-1610	2443930-21	1979 Feb 25 1700	Super Arcas	-	CNS-05	-	-	-	-	RLAKE	COCH	-	-	80?	-	-
1975-1123	2443930-23	1979 Feb 25 1730	Super Arcas	-	CNS-06	-	-	-	-	RLAKE	COCH	-	-	80?	-	-
1975-1124	2443931-20	1979 Feb 26 1653	Super Arcas	-	CNS-07	-	-	-	-	RLAKE	COCH	-	-	80?	-	-
1975-1125	2443931-23	1979 Feb 26 1738	Super Arcas	-	CNS-06	-	-	-	-	RLAKE	COCH	-	-	80?	-	-
1975-1612	2443931-28	1979 Feb 26 1840	Super Arcas	-	CNS-07	-	-	-	-	RLAKE	COCH	-	-	80?	-	-
1975-1127	2443931-65	1979 Feb 27 0330	Super Arcas	-	CNS-08	-	-	-	-	RLAKE	COCH	-	-	80?	-	-
1975-1128	2443932-05	1979 Feb 27 1306	Super Arcas	-	CNS-09	-	-	-	-	RLAKE	COCH	-	-	80?	-	-
1975-1616	2443932-09	1979 Feb 27 1410	Super Arcas	-	-	-	-	-	-	RLAKE	COCH	-	-	80	-	-
1975-1225	2443969-47	1979 Apr 05 2314:00	Super Arcas	-	MASA 15-1760H / T 1-	-	-	-	-	WI	-	-	-	81	-	-
1975-1394	2444071-01	1979 Jul 16 1213	Super Arcas	-	MASA 15-1940H	-	-	-	-	PF	-	-	-	88	-	-
1975-1689	2444071-06	1979 Jul 16 1320	Super Arcas	-	MASA 15-1960H	-	-	-	-	PF	-	-	-	72	-	-
1975-1395	2444072-02	1979 Jul 17 1223	Super Arcas	-	MASA 15-1950H	-	-	-	-	PF	-	-	-	81	-	-
1975-1614	2444079-14	1979 Jul 24 1525	Super Arcas	-	MASA 15-1950H	-	-	-	-	WI	-	-	-	75?	-	-
1975-1615	2444079-16	1979 Jul 24 1555	Super Arcas	-	-	-	-	-	-	WI	-	-	-	75?	-	-
1975-1476	2444129-50	1979 Sep 13	Super Arcas	-	MASA 15-1930E	-	-	-	-	WI	-	-	-	80?	-	-
1975-11256	2444129-50	1979 Sep 13	Super Arcas	-	MASA 15-1800E	-	-	-	-	WI	-	-	-	80?	-	-
1975-1601	2444168-15	1979 Oct 21 1557	Super Arcas	-	MASA 15-2000H	-	-	-	-	WI	-	-	-	74	-	-
1975-1601	2444168-19	1979 Oct 21 1630	Super Arcas	-	MASA 15-2006H	-	-	-	-	WI	-	-	-	74	-	-
1975-11259	2444168-22	1979 Oct 21 1715	Super Arcas	-	MASA 15-2006H	-	-	-	-	WI	-	-	-	92	-	-
1975-11259	2444168-22	1979 Oct 21 1715	Super Arcas	-	MASA 15-2006H	-	-	-	-	WI	-	-	-	75	-	-
1975-1618	2444181-89	1979 Nov 4 0925	Super Arcas	-	MASA 15-2006H	-	-	-	-	WI	-	-	-	82	-	-
1975-1519	2444181-92	1979 Nov 4 1000	Super Arcas	-	MASA 15-2006H	-	-	-	-	WI	-	-	-	81	-	-
1975-1617	2444231-50	1979 Dec 24	Super Arcas	-	-	-	-	-	-	WI	-	-	-	81	-	-
1980-163	2444284-85	1980 Feb 15 0825	Super Arcas	-	MASA 15-2000E	-	-	-	-	SHLC	ALFS	-	-	80?	-	-
1980-166	2444285-85	1980 Feb 15 0825	Super Arcas	-	MASA 15-2000E	-	-	-	-	SHLC	ALFS	-	-	88	-	-
1980-167	2444285-86	1980 Feb 15 0825	Super Arcas	-	MASA 15-2000E	-	-	-	-	SHLC	ALFS	-	-	88	-	-
1980-1157	2444285-88	1980 Feb 16 0910	Super Arcas	-	MASA 15-2002E	-	-	-	-	SHLC	ALFS	-	-	94	-	-
1980-1376	2444465-63	1980 Aug 14 0311	Super Arcas	-	MASA 15-2002E	-	-	-	-	SHLC	ALFS	-	-	94	-	-
1980-1446	2444535-36	1980 Oct 22 2045	Super Arcas	-	MASA 15-2100E	-	-	-	-	WI	LA2	-	-	90	-	-
1980-1166	2444542-15	1980 Oct 29 1510	Super Arcas	-	A14-021-1	-	-	-	-	WI	-	-	-	75?	-	-
1980-1167	2444542-15	1980 Oct 29 1510	Super Arcas	-	-	-	-	-	-	WI	-	-	-	75?	-	-
1980-1491	2444585-97	1980 Dec 12 1117	Super Arcas	-	MASA 15-1800E	-	-	-	-	STP	A	-	-	80	-	-
1980-1600	2444594-25	1980 Dec 20 1730	Super Arcas	-	MASA 15-1900E	-	-	-	-	STP	A	-	-	80?	-	-
1981-110	2444615-26	1981 Jan 11 1516	Super Arcas	-	MASA 15-1910E	-	-	-	-	STP	A	-	-	80?	-	-
1981-110	2444615-26	1981 Jan 11 1516	Super Arcas	-	MASA 15-1910E	-	-	-	-	STP	A	-	-	80?	-	-
1981-15156	2444715-56	1981 Jan 10 1127	Super Arcas	-	MASA 15-1920E	-	-	-	-	CSG	ALFS	-	-	80?	-	-
1981-15282	2444715-56	1981 Jan 9 0206	Super Arcas	-	MASA 15-2110E	-	-	-	-	WI	-	-	-	75	-	-
1981-1640	2444827-59	1981 Aug 9 0206	Super Arcas	-	MASA 15-2120E	-	-	-	-	WI	-	-	-	75	-	-
1981-1640	2444827-59	1981 Aug 9 0206	Super Arcas	-	MASA 15-2120E	-	-	-	-	WI	-	-	-	75	-	-
1981-1640	2444827-59	1981 Aug 9 0206	Super Arcas	-	MASA 15-2120E	-	-	-	-	WI	-	-	-	75	-	-
1982-1313	2444989-76	1982 Dec 20 0645	Super Arcas	-	MASA 15-2100E	-	-	-	-	CSG	ALFS	-	-	80?	-	-
1982-1313	2444989-76	1982 Dec 20 0645	Super Arcas	-	MASA 15-2100E	-	-	-	-	CSG	ALFS	-	-	80?	-	-
1982-1313	2444989-76	1982 Dec 20 0645	Super Arcas	-	MASA 15-2100E	-	-	-	-	CSG	ALFS	-	-	80?	-	-
1982-1313	2444989-76	1982 Dec 20 0645	Super Arcas	-	MASA 15-2100E	-	-	-	-	CSG	ALFS	-	-	80?	-	-
1982-1313	2444989-76	1982 Dec 20 0645	Super Arcas	-	MASA 15-2100E	-	-	-	-	CSG	ALFS	-	-	80?	-	-
1982-1313	2444989-76	1982 Dec 20 0645	Super Arcas	-	MASA 15-2100E	-	-	-	-	CSG	ALFS	-	-	80?	-	-
1982-1313	2444989-76	1982 Dec 20 0645	Super Arcas	-	MASA 15-2100E	-	-	-	-	CSG	ALFS	-	-	80?	-	-
1982-1313	2444989-76	1982 Dec 20 0645	Super Arcas	-	MASA 15-2100E	-	-	-	-	CSG	ALFS	-	-	80?	-	-
1982-1313	2444989-76	1982 Dec 20 0645	Super Arcas	-	MASA 15-2100E	-	-	-	-	CSG	ALFS	-	-	80?	-	-
1982-1313	2444989-76	1982 Dec 20 0645	Super Arcas	-	MASA 15-2100E	-	-	-	-	CSG	ALFS	-	-	80?	-	-
1982-1313	2444989-76	1982 Dec 20 0645	Super Arcas	-	MASA 15-2100E	-	-	-	-	CSG	ALFS	-	-	80?	-	-
1982-1313	2444989-76	1982 Dec 20 0645	Super Arcas	-	MASA 15-2100E	-	-	-	-	CSG	ALFS	-	-	80?	-	-
1982-1313	2444989-76	1982 Dec 20 0645	Super Arcas	-	MASA 15-2100E	-	-	-	-	CSG	ALFS	-	-	80?	-	-
1982-1313	2444989-76	1982 Dec 20 0645	Super Arcas	-	MASA 15-2100E	-	-	-	-	CSG	ALFS	-	-	80?	-	-
1982-1313	2444989-76	1982 Dec 20 0645	Super Arcas	-	MASA 15-2100E	-	-	-	-	CSG	ALFS	-	-	80?	-	-
1982-1313	2444989-76	1982 Dec 20 0645	Super Arcas	-	MASA 15-2100E	-	-	-	-	CSG	ALFS	-	-	80?	-	-
1982-1313	2444989-76	1982 Dec 20 0645	Super Arcas	-	MASA 15-2100E	-	-	-	-	CSG	ALFS	-	-	80?	-	-
1982-1313	2444989-76	1982 Dec 20 0645	Super Arcas	-	MASA 15-2100E	-	-	-	-	CSG	ALFS	-	-	80?	-	-
1982-1313	2444989-76	1982 Dec 20 0645	Super Arcas	-	MASA 15-2100E	-	-	-	-	CSG	ALFS	-	-	80?	-	-
1982-1313	2444989-76	1982 Dec 20 0645	Super Arcas	-	MASA 15-2100E	-	-	-	-	CSG	ALFS	-	-	80?	-	-
1982-1313	2444989-76	1982 Dec 20 0645	Super Arcas	-	MASA 15-2100E	-	-	-	-	CSG	ALFS	-	-	80?	-	-
1982-1313	2444989-76	1982 Dec 20 0645	Super Arcas	-	MASA 15-2100E	-	-	-	-	CSG	ALFS	-	-	80?	-	-
1982-1313	2444989-76	1982 Dec 20 0645	Super Arcas	-	MASA 15-2100E	-	-	-	-	CSG	ALFS	-	-	80?	-	-
1982-1313	2444989-76	1982 Dec 20 0645	Super Arcas	-	MASA 15-2100E	-	-	-	-	CSG	ALFS	-	-	80?	-	-
1982-1313	2444989-76	1982 Dec 20 0645	Super Arcas	-	MASA 15-2100E	-	-	-	-	CSG	ALFS	-	-	80?	-	-
1982-1313	2444989-76	1982 Dec 20 0645	Super Arcas	-	MASA 15-2100E	-	-	-	-	CSG	ALFS	-	-	80?	-	-
1982-1313	2444989-76	1982 Dec 20 0645	Super Arcas	-	MASA 15-2100E	-	-	-	-	CSG	ALFS	-	-	80?	-	-
1982-1313	2444989-76	1982 Dec 20 0645	Super Arcas	-	MASA 15-2100E	-	-	-	-	CSG	ALFS	-	-	80?	-	-
1982-1313	2444989-76	1982 Dec 20 0645	Super Arcas	-	MASA 15-2100E											

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Mission	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee_Km	Range_Km	Deot
1987-Y220	2446990-90	1987 Jul 14 0929	Super Arcas	-	MASH 15.24500	MAC-SIDE S-SK2/H	-	AND	-	-	-	96	-	-
1987-Y226	2446991-04	1987 Jul 14 1255	Super Arcas	-	MASH 15.24700	MAC-SIDE S-SK3/H	-	AND	-	-	-	93	-	-
1987-Y229	2446992-02	1987 Jul 15 1232	Super Arcas	-	MASH 15.24600	MAC-SIDE S-SK4/L	-	AND	-	-	-	98	-	-
1987-S272	2447120-50	1987 Nov 21	Super Arcas	-	-	Ariane Met	-	CSG	ALFS	-	-	80?	-	-
1988-S203	2447327-50	1988 Jun 15	Super Arcas	-	-	Ariane Met	-	CSG	ALFS	-	-	80?	-	-
1988-S204	2447506-50	1988 Jun 15	Super Arcas	-	-	Ariane Met	-	CSG	ALFS	-	-	80?	-	-
1988-S166	2447826-50	1988 Dec 11	Super Arcas	-	-	Ariane Met	-	CSG	ALFS	-	-	80?	-	-
1989-S166	2447826-50	1989 Oct 27	Super Arcas	-	-	Ariane Met	-	CSG	ALFS	-	-	80?	-	-
1990-S216	2447912-50	1990 Jan 21	Super Arcas	-	-	Ariane Met	-	CSG	ALFS	-	-	80?	-	-
1990-S217	2448215-50	1990 Nov 20	Super Arcas	-	-	Ariane Met	-	CSG	ALFS	-	-	80?	-	-
1990-S225	2448464-50	1991 Jul 17	Super Arcas	-	-	Ariane Met	-	ESR	-	-	-	89	-	-
1991-Y22	2448469-56	1991 Aug 1 0128:00	Super Arcas	-	MASH 15.24900 NLC-91	N-B-802 MISTI B	-	ESR	-	-	-	88	-	-
1991-Y27	2448474-47	1991 Aug 5 2321	Super Arcas	-	MASH 15.2500E NLC-91	N-C-803 MISTI C	-	ESR	-	-	-	88	-	-
1991-Y29	2448478-48	1991 Aug 9 2330	Super Arcas	-	MASH 15.2510E NLC-91	N-A-815 MISTI A	-	ESR	-	-	-	80?	-	-
1992-S112	2448727-50	1992 Apr 15	Super Arcas	-	-	Ariane Met	-	CSG	ALFS	-	-	80?	-	-



Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	OrbPay	Agency	Launch_Code	Group	Category	LTCite	Cite	Notes
1956-A173	2436512-21	1958 Nov 4 1700	Arcas	-	1	0.000	SMSA	SS	SMSA/Webb	Test	Quest16, 2, 41	-	-
1956-A174	2436536-24	1958 Nov 28 1745	Arcas	-	2	0.000	SMSA	SS	SMSA/Webb	Test	Quest16, 2, 41	-	-
1956-A175	2436546-12	1958 Dec 8 1500	Arcas	-	3	0.000	SMSA	SS	SMSA/Webb	Test	Quest16, 2, 41	-	-
1959-W02	2436592-14	1959 Jan 23 1515	Arcas	-	4	0.000	SMSA	SS	SMSA/Webb	Test	Quest16, 2, 41	MR690511-20/Destind	-
1959-W20	2436599-20	1959 Jan 30 1655	Arcas	-	5	0.000	SMSA	SS	SMSA/Webb	Test	Quest16, 2, 41	-	-
1959-W18	2436724-50	1959 Jun 23	Arcas	-	6	0.000	SMSA	SS	SMSA/Webb	Test	ArcasFinal	-	-
1959-W41	2436742-50	1959 Jun 23	Arcas	-	7	0.000	BRL	SF	BRL/	Aeron	RP-1028	-	-
1959-A121	2436780-50	1959 Jul 31	Arcas	-	-	0.000	BRL	SF	BRL/	Aeron	RP-1028	-	-
1959-A122	2436780-50	1959 Jul 31	Arcas	-	-	0.000	BRL	SF	BRL/	Aeron	RP-1028	-	-
1959-W04	2436787-50	1959 Aug 7	Arcas	-	-	0.000	BRL	SF	BRL/	Aeron	RP-1028	-	-
1959-W19	2436868-50	1959 Aug 7	Arcas	-	-	0.000	AFCDL	SS	AFCDL/	Test	Desind	-	-
1959-W01	2436868-50	1959 Aug 7	Arcas	-	(1 of 26)	0.000	AFPTC	SS	AFPTC/	Aeron	SP-219	-	-
1959-W13	2436869-50	1959 Oct 28	Arcas	-	-	0.000	DIR	SS	DIR/	Aeron	Honkrev88, 187	-	-
1959-W14	2436876-50	1959 Nov 4	Arcas	-	-	0.000	DIR	SS	DIR/	Aeron	Honkrev88, 187	-	-
1959-W15	2436882-50	1959 Nov 10	Arcas	-	-	0.000	DIR	SS	DIR/	Aeron	Honkrev88, 187	-	-
1959-W16	2436888-50	1959 Nov 16	Arcas	-	-	0.000	DIR	SS	DIR/	Aeron	Honkrev88, 187	-	-
1959-W69	2436951-50	1960 Jan 18	Arcas	-	-	0.000	DIR	SS	DIR/	Aeron	Honkrev88, 187	-	-
1959-W67	2436955-50	1960 Jan 22	Arcas	-	-	0.000	DIR	SS	DIR/	Aeron	Honkrev88, 187	-	-
1960-A316	2436965-50	1960 Feb 1	Arcas	-	-	0.000	DIR	SS	DIR/	Aeron	Honkrev88, 191	-	-
1960-W70	2436965-50	1960 Feb 3	Arcas	-	-	0.000	DIR	SS	DIR/	Aeron	Honkrev88, 187	-	-
1960-W71	2436968-50	1960 Feb 4	Arcas	-	-	0.000	DIR	SS	DIR/	Aeron	Honkrev88, 187	-	-
1960-A317	2436969-50	1960 Feb 5	Arcas	-	-	0.000	DIR	SS	DIR/	Aeron	Honkrev88, 187	-	-
1960-W01	2436979-50	1960 Feb 16	Arcas	-	-	0.000	DIR	SS	DIR/	Aeron	Honkrev88, 187	-	-
1960-W73	2436980-50	1960 Feb 16	Arcas	-	-	0.000	DIR	SS	DIR/	Aeron	Honkrev88, 187	-	-
1960-W02	2436981-50	1960 Feb 17	Arcas	-	-	0.000	DIR	SS	DIR/	Aeron	Honkrev88, 191	-	-
1960-A321	2437044-50	1960 Mar 2	Arcas	-	-	0.000	DIR	SS	DIR/	Aeron	CR-1529	-	-
1960-W04	2437115-50	1960 Apr 20	Arcas	-	253 72-4XZ	0.000	PHOS/PHR	SF	PHOS/PHR/	Aeron	IS152	-	-
1960-W05	2437115-50	1960 Jul	Arcas	-	-	0.000	SMSA/NSMR	SS	SMSA/NSMR/	Aeron	AD-437681	-	-
1960-W06	2437115-50	1960 Jul	Arcas	-	-	0.000	SMSA/NSMR	SS	SMSA/NSMR/	Aeron	FC	-	-
1960-W07	2437115-50	1960 Jul	Arcas	-	-	0.000	SMSA/NSMR	SS	SMSA/NSMR/	Aeron	FC	-	-
1960-W08	2437115-50	1960 Jul	Arcas	-	-	0.000	SMSA/NSMR	SS	SMSA/NSMR/	Aeron	FC	-	-
1960-W09	2437115-50	1960 Jul	Arcas	-	-	0.000	SMSA/NSMR	SS	SMSA/NSMR/	Aeron	FC	-	-
1960-A322	2437154-50	1960 Jul 19	Arcas	-	337 4210-4CA	0.000	W/LA	SF	W/LA/	Aeron	AD-437681	-	-
1960-W10	2437146-50	1960 Aug	Arcas	-	-	0.000	SMSA/NSMR	SS	SMSA/NSMR/	Aeron	FC	-	-
1960-W11	2437146-50	1960 Aug	Arcas	-	-	0.000	SMSA/NSMR	SS	SMSA/NSMR/	Aeron	FC	-	-
1960-W12	2437146-50	1960 Aug	Arcas	-	-	0.000	SMSA/NSMR	SS	SMSA/NSMR/	Aeron	FC	-	-
1960-W13	2437146-50	1960 Aug	Arcas	-	-	0.000	SMSA/NSMR	SS	SMSA/NSMR/	Aeron	FC	-	-
1960-W14	2437146-50	1960 Aug	Arcas	-	-	0.000	SMSA/NSMR	SS	SMSA/NSMR/	Aeron	FC	-	-
1960-W15	2437146-50	1960 Aug	Arcas	-	-	0.000	SMSA/NSMR	SS	SMSA/NSMR/	Aeron	FC	-	-
1960-W16	2437146-50	1960 Aug	Arcas	-	-	0.000	SMSA/NSMR	SS	SMSA/NSMR/	Aeron	FC	-	-
1960-W17	2437146-50	1960 Aug	Arcas	-	-	0.000	SMSA/NSMR	SS	SMSA/NSMR/	Aeron	FC	-	-
1960-W18	2437146-50	1960 Aug	Arcas	-	-	0.000	SMSA/NSMR	SS	SMSA/NSMR/	Aeron	FC	-	-
1960-W19	2437146-50	1960 Aug	Arcas	-	-	0.000	SMSA/NSMR	SS	SMSA/NSMR/	Aeron	FC	-	-
1960-A323	2437146-50	1960 Aug	Arcas	-	-	0.000	SMSA/NSMR	SS	SMSA/NSMR/	Aeron	FC	-	-
1960-W20	2437146-50	1960 Aug	Arcas	-	-	0.000	SMSA/NSMR	SS	SMSA/NSMR/	Aeron	FC	-	-
1960-W21	2437146-50	1960 Aug	Arcas	-	-	0.000	SMSA/NSMR	SS	SMSA/NSMR/	Aeron	FC	-	-
1960-W22	2437177-50	1960 Sep	Arcas	-	-	0.000	SMSA/NSMR	SS	SMSA/NSMR/	Aeron	FC	-	-
1960-W23	2437177-50	1960 Sep	Arcas	-	-	0.000	SMSA/NSMR	SS	SMSA/NSMR/	Aeron	FC	-	-
1960-A324	2437103-50	1960 Sep 16	Arcas	-	402 4250AA	0.000	NSMR	SF	NSMR/	Aeron	AD-437681	-	-
1960-A324	2437295-50	1960 Oct 18	Arcas	-	459 4275-4A	0.000	NSMR	SF	NSMR/	Test	AD-437681	-	-
1960-A325	2437226-50	1960 Oct 19	Arcas	-	460 4276-4A	0.000	NSMR	SF	NSMR/	Test	AD-437681	-	-
1960-A326	2437227-50	1960 Oct 20	Arcas	-	461 4277-4A	0.000	NSMR	SF	NSMR/	Test	AD-437681	-	-
1960-W29	2437228-50	1960 Nov	Arcas	-	-	0.000	SMSA/NSMR	SS	SMSA/NSMR/	Aeron	FC	-	-
1960-W30	2437228-50	1960 Nov	Arcas	-	-	0.000	SMSA/NSMR	SS	SMSA/NSMR/	Aeron	FC	-	-
1960-W31	2437228-50	1960 Nov	Arcas	-	-	0.000	SMSA/NSMR	SS	SMSA/NSMR/	Aeron	FC	-	-
1960-W32	2437228-50	1960 Nov	Arcas	-	-	0.000	SMSA/NSMR	SS	SMSA/NSMR/	Aeron	FC	-	-
1960-W33	2437228-50	1960 Nov	Arcas	-	-	0.000	SMSA/NSMR	SS	SMSA/NSMR/	Aeron	FC	-	-
1960-W34	2437228-50	1960 Nov	Arcas	-	-	0.000	SMSA/NSMR	SS	SMSA/NSMR/	Aeron	FC	-	-
1960-W35	2437228-50	1960 Nov	Arcas	-	-	0.000	SMSA/NSMR	SS	SMSA/NSMR/	Aeron	FC	-	-
1960-W36	2437228-50	1960 Nov	Arcas	-	-	0.000	SMSA/NSMR	SS	SMSA/NSMR/	Aeron	FC	-	-
1960-W37	2437228-50	1960 Nov	Arcas	-	-	0.000	SMSA/NSMR	SS	SMSA/NSMR/	Aeron	FC	-	-
1960-W38	2437228-50	1960 Nov	Arcas	-	-	0.000	SMSA/NSMR	SS	SMSA/NSMR/	Aeron	FC	-	-
1960-A324	2437228-50	1960 Nov	Arcas	-	-	0.000	HADC	SF	HADC/	Aeron	Desind	-	-
1960-W39	2437228-50	1960 Nov	Arcas	-	-	0.000	DIR	SS	DIR/	Aeron	Lossal/Suwei01104	-	-
1960-W40	2437241-50	1960 Nov 3	Arcas	-	-	0.000	AFCDL	SS	AFCDL/	Aeron	Hire/Ubrich	-	-
1960-W41	2437266-50	1960 Nov 28	Arcas	-	-	0.000	DIR	SS	DIR/	Aeron	Grabb, Jc	-	-
1960-W37	2437238-50	1960 Nov	Arcas	-	-	0.000	SMSA/NSMR	SS	SMSA/NSMR/	Aeron	FC	-	-
1961-W01	2437299-50	1961 Jan	Arcas	-	-	0.000	SMSA/NSMR	SS	SMSA/NSMR/	Aeron	FC	-	-
1961-W02	2437299-50	1961 Jan	Arcas	-	-	0.000	SMSA/NSMR	SS	SMSA/NSMR/	Aeron	FC	-	-
1961-A01	2437299-50	1961 Jan	Arcas	-	-	0.000	NSMR	SF	NSMR/	Test	AD-437681	-	-
1961-S449	2437317-50	1961 Jan 18	Arcas	-	668 4363 44A	0.000	NSMR	SF	NSMR/	Test	AD-437681	-	-
1961-M84	2437318-50	1961 Jan 19	Arcas	-	666 4361 44A	0.000	NSMR	SF	NSMR/	Test	AD-437681	-	-
1961-S450	2437319-50	1961 Jan 20	Arcas	-	667 4362 44A	0.000	NSMR	SF	NSMR/	Test	AD-437681	-	-
1961-W04	2437330-50	1961 Feb	Arcas	-	-	0.000	SMSA/NSMR	SS	SMSA/NSMR/	Aeron	FC	-	-
1961-A30	2437330-50	1961 Feb	Arcas	-	-	0.000	SMSA/NSMR	SF	SMSA/NSMR/	Aeron	FC	-	-
1961-A31	2437330-50	1961 Feb	Arcas	-	-	0.000	SMSA/NSMR	SF	SMSA/NSMR/	Aeron	FC	-	-
1961-A32	2437330-50	1961 Feb	Arcas	-	-	0.000	SMSA/NSMR	SF	SMSA/NSMR/	Aeron	FC	-	-
1961-A33	2437330-50	1961 Feb	Arcas	-	-	0.000	SMSA/NSMR	SF	SMSA/NSMR/	Aeron	FC	-	-
1961-A34	2437330-50	1961 Feb	Arcas	-	-	0.000	SMSA/NSMR	SF	SMSA/NSMR/	Aeron	FC	-	-
1961-A35	2437330-50	1961 Feb	Arcas	-	-	0.000	SMSA/NSMR	SF	SMSA/NSMR/	Aeron	FC	-	-
1961-S451	2437332-50	1961 Feb 2	Arcas	-	690 4375 44A	0.000	NSMR	SF	NSMR/	Test	AD-437681	-	-
1961-M85	2437340-50	1961 Feb 10	Arcas	-	689 4374 44A	0.000	NSMR	SF	NSMR/	Test	AD-437681	-	-
1961-W14	2437429-48	1961 May 9 2330	Arcas	-	-	0.000	APCC	SS	APCC/	Aeron	MR610522-16	-	-
1961-W15	2437429-54	1961 May 10 0100	Arcas	-	-	0.000	APCC	SS	APCC/	Aeron	SP-219	-	-



Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	OrbPay	Agency	Launch_Code	Group	Category	LTCite	Cite	Notes
1965-W43	2438143-54	1965 Apr 24 0100	Arcas	-	-	0.000	TWIC	SS	TWIC/Br-166s	Aeron	JapHet4, 238	-	-
1965-W18	2438165-65	1965 May 16 0940:00	Arcas	-	-	0.000	TWIC	SS	TWIC/Br-166s	Aeron	WDRNF	-	-
1965-W19	2438172-50	1965 May 23	Arcas	-	-	0.000	GSPC/UCAM	SS	UCAM	Ionos	SP-4004	-	-
1965-W22	2438180-50	1965 Jun	Arcas	-	-	0.000	4HG	SS	NASH/4MG/	Aeron	FC	-	-
1965-W24	2438212-62	1965 Jul 02 0257:00	Arcas	?	-	0.000	ANS	SU	ASC45/	Aeron	WDRNF	-	-
1965-W25	2438239-66	1965 Jul 29 0945:00	Arcas	-	-	0.000	TWIC	SS	TWIC/Br-166s	Aeron	WDRNF	-	-
1965-W44	2438255-60	1965 Aug 14 0230	Arcas	-	-	0.000	TWIC	SS	TWIC/Br-166s	Aeron	JapHet4, 238	-	-
1965-W26	2438264-63	1965 Aug 23 0303:00	Arcas	-	-	0.000	TWIC	SS	TWIC/Br-166s	Aeron	WDRNF	-	-
1965-W27	2438270-28	1965 Aug 28 1948	Arcas	-	-	0.000	ANS	SS	DAL/	Aeron	FC	-	-
1965-W28	2438272-50	1965 Sep	Arcas	-	-	0.000	ANS	SS	DAL/	Aeron	FC	-	-
1965-W29	2438272-50	1965 Sep	Arcas	-	-	0.000	ANS	SS	DAL/	Aeron	FC	-	-
1965-W30	2438289-65	1965 Sep 17 0330:00	Arcas	-	-	0.000	TWIC	SS	TWIC/Br-166s	Aeron	WDRNF	-	-
1965-W31	2438290-60	1965 Sep 18 0230:00	Arcas	-	-	0.000	TWIC	SS	TWIC/Br-166s	Aeron	WDRNF	-	-
1965-W32	2438291-25	1965 Sep 18 1800:00	Arcas	?	-	0.000	ANS	SU	ASC45/	Aeron	WDRNF	-	-
1965-W33	2438299-50	1965 Sep 27	Arcas	-	-	0.000	LARCN	SS	LARC/	Reentry Test	TI-D-3930	-	-
1965-W34	2438299-62	1965 Sep 27 0300:00	Arcas	?	-	0.000	TWIC	SU	TWIC/Br-166s	Aeron	WDRNF	-	-
1965-W35	2438305-25	1965 Oct 02 1804:00	Arcas	-	-	0.000	ANS	SU	ASC45/	Aeron	WDRNF	-	-
1965-W45	2438310-25	1965 Oct 3 0830	Arcas	-	-	0.000	ANS	SS	DAL/	Aeron	FC	-	-
1965-W46	2438310-25	1965 Oct 7 1800	Arcas	-	-	0.000	ANS	SS	ASC45/	Aeron	WDRNF	-	-
1965-W39	2438347-36	1965 Nov 13 2045:00	Arcas	?	-	0.000	ANS	SU	ASC45/	Aeron	WDRNF	-	-
1965-W40	2438376-53	1965 Dec 13 0045:00	Arcas	?	-	0.000	ANS	SU	DAL/	Aeron	FC	-	-
1964-W01	2438394-50	1964 Jan	Arcas	-	-	0.000	ANS	SS	DAL/	Aeron	FC	-	-
1964-W02	2438394-50	1964 Jan	Arcas	-	-	0.000	ANS	SS	DAL/	Aeron	FC	-	-
1964-W03	2438411-65	1964 Jan 17 0337:00	Arcas	-	-	0.000	ANS	SS	ASC45/	Aeron	WDRNF	-	-
1964-W04	2438423-59	1964 Jan 29 0205:00	Arcas	?	-	0.000	ANS	SU	ASC45/	Aeron	WDRNF	-	-
1964-W16	2438424-50	1964 Jan 29 2357	Arcas	?	-	0.000	ANS	SF	GSPC/Smith	Aeron	FC	-	-
1964-W05	2438430-57	1964 Feb 5 0145	Arcas	-	-	0.000	ANS	SS	GSPC/Smith	Aeron	FC	-	-
1964-W204	2438437-50	1964 Feb 12	Arcas	?	-	0.000	NOTS	SF	NOTS/	Aeron	PHRHist64	-	-
1964-W06	2438438-69	1964 Feb 13 0440	Arcas	?	-	0.000	ANS	SS	GSPC/Smith	Aeron	FC	-	-
1964-W129	2438439-54	1964 Feb 14 0952	Arcas	-	-	0.000	LARCN	SS	LARC/	Reentry Test	SHUlab	-	-
1964-W201	2438439-56	1964 Feb 14 0132	Arcas	?	-	0.000	LARCN	SS	LARC/	Reentry Test	SHUlab	-	-
1964-W09	2438454-50	1964 Mar	Arcas	-	-	0.000	ANS	SS	DAL/446	Aeron	FC	-	-
1964-W10	2438454-50	1964 Mar	Arcas	-	-	0.000	ANS	SS	DAL/446	Aeron	FC	-	-
1964-W11	2438454-50	1964 Mar	Arcas	-	-	0.000	ANS	SS	DAL/446	Aeron	FC	-	-
1964-W12	2438454-50	1964 Mar	Arcas	-	-	0.000	ANS	SS	DAL/446	Aeron	FC	-	-
1964-W13	2438454-50	1964 Mar	Arcas	-	-	0.000	ANS	SS	DAL/446	Aeron	FC	-	-
1964-W14	2438465-35	1964 Mar 13 2000:00	Arcas	?	-	0.000	ANS	SS	DAL/446	Aeron	FC	-	-
1964-W147	2438470-50	1964 Mar 16	Arcas	-	-	0.000	ANS	SU	ASC45/7	Aeron	WDRNF	-	-
1964-W15	2438480-25	1964 Mar 25 1900:00	Arcas	?	-	0.000	NOTS	SF	NOTS/	Aeron	PHRHist64	-	-
1964-W16	2438485-80	1964 Mar 31 0715:00	Arcas	?	-	0.000	ANS	SU	ASC45/7	Aeron	WDRNF	-	-
1964-W17	2438485-50	1964 Apr 02 0100:00	Arcas	?	-	0.000	ANS	SS	ASC45/7	Aeron	FC	-	-
1964-W19	2438487-54	1964 Apr 06 0409:00	Arcas	?	-	0.000	ANS	SU	DAL/446	Aeron	FC	-	-
1964-W21	2438494-27	1964 Apr 08 0409:00	Arcas	?	-	0.000	ANS	SU	ASC45/7	Aeron	WDRNF	-	-
1964-W22	2438501-20	1964 Apr 15 1225:00	Arcas	?	-	0.000	ANS	SU	ASC45/7	Aeron	WDRNF	-	-
1964-W24	2438506-14	1964 Apr 15 1945:00	Arcas	-	-	0.000	DLR	SS	TEAHR/Schuror	Aeron	AFCRU-TC248	-	-
1964-W25	2438506-17	1964 Apr 20 1515	Arcas	-	-	0.000	DLR	SS	TEAHR/Schuror	Aeron	AFCRU-TC248	-	-
1964-W26	2438507-11	1964 Apr 21 0922	Arcas	?	-	0.000	DLR	SS	TEAHR/Schuror	Aeron	AFCRU-TC248	-	-
1964-W88	2438507-10	1964 Apr 21 1626	Arcas	-	-	0.000	DLR	SS	TEAHR/Schuror	Aeron	AFCRU-TC248	-	-
1964-W89	2438507-17	1964 Apr 22 1907:00	Arcas	?	-	0.000	ANS	SU	ASC45/7	Aeron	WDRNF	-	-
1964-W93	2438508-25	1964 Apr 22 1859	Arcas	-	-	0.000	DLR	SS	TEAHR/Schuror	Aeron	AFCRU-TC248	-	-
1964-W90	2438508-09	1964 Apr 22 1403	Arcas	-	-	0.000	DLR	SS	TEAHR/Schuror	Aeron	AFCRU-TC248	-	-
1964-W91	2438508-19	1964 Apr 22 1633	Arcas	-	-	0.000	DLR	SS	TEAHR/Schuror	Aeron	AFCRU-TC248	-	-
1964-W92	2438508-94	1964 Apr 23 1038	Arcas	-	-	0.000	DLR	SS	TEAHR/Schuror	Aeron	AFCRU-TC248	-	-
1964-W93	2438509-10	1964 Apr 23 1403	Arcas	-	-	0.000	DLR	SS	TEAHR/Schuror	Aeron	AFCRU-TC248	-	-
1964-W94	2438509-18	1964 Apr 23 1623	Arcas	-	-	0.000	DLR	SS	TEAHR/Schuror	Aeron	AFCRU-TC248	-	-
1964-W95	2438509-92	1964 Apr 24 1002	Arcas	-	-	0.000	DLR	SS	TEAHR/Schuror	Aeron	AFCRU-TC248	-	-
1964-W96	2438510-09	1964 Apr 24 1404	Arcas	-	-	0.000	DLR	SS	TEAHR/Schuror	Aeron	AFCRU-TC248	-	-
1964-W98	2438512-97	1964 Apr 27 1120	Arcas	-	-	0.000	DLR	SS	TEAHR/Schuror	Aeron	AFCRU-TC248	-	-
1964-W99	2438513-08	1964 Apr 27 1402	Arcas	-	-	0.000	DLR	SS	TEAHR/Schuror	Aeron	AFCRU-TC248	-	-
1964-W100	2438513-20	1964 Apr 27 1648	Arcas	-	-	0.000	DLR	SS	TEAHR/Schuror	Aeron	AFCRU-TC248	-	-
1964-W101	2438513-94	1964 Apr 28 1028	Arcas	-	-	0.000	DLR	SS	TEAHR/Schuror	Aeron	AFCRU-TC248	-	-
1964-W102	2438513-96	1964 Apr 28 1100	Arcas	-	-	0.000	DLR	SS	TEAHR/Schuror	Aeron	AFCRU-TC248	-	-
1964-W103	2438514-09	1964 Apr 28 1403	Arcas	-	-	0.000	DLR	SS	TEAHR/Schuror	Aeron	AFCRU-TC248	-	-
1964-W104	2438514-17	1964 Apr 28 1559	Arcas	-	-	0.000	DLR	SS	TEAHR/Schuror	Aeron	AFCRU-TC248	-	-
1964-W105	2438514-20	1964 Apr 28 1646	Arcas	-	-	0.000	DLR	SS	TEAHR/Schuror	Aeron	AFCRU-TC248	-	-
1964-W106	2438514-95	1964 Apr 29 1042	Arcas	-	-	0.000	DLR	SS	TEAHR/Schuror	Aeron	AFCRU-TC248	-	-
1964-W107	2438515-19	1964 Apr 29 1408	Arcas	-	-	0.000	DLR	SS	TEAHR/Schuror	Aeron	AFCRU-TC248	-	-
1964-W108	2438515-98	1964 Apr 29 1634	Arcas	-	-	0.000	DLR	SS	TEAHR/Schuror	Aeron	AFCRU-TC248	-	-
1964-W109	2438515-18	1964 Apr 30 1129	Arcas	-	-	0.000	DLR	SS	TEAHR/Schuror	Aeron	AFCRU-TC248	-	-
1964-W110	2438516-18	1964 Apr 30 1427	Arcas	-	-	0.000	DLR	SS	TEAHR/Schuror	Aeron	AFCRU-TC248	-	-
1964-W111	2438516-18	1964 Apr 30 1619	Arcas	-	-	0.000	DLR	SS	TEAHR/Schuror	Aeron	AFCRU-TC248	-	-
1964-W24	2438515-50	1964 May	Arcas	-	-	0.000	ANS	SS	DAB/4MG	Aeron	FC	-	-
1964-W25	2438515-50	1964 May	Arcas	-	-	0.000	ANS	SS	DAB/4MG	Aeron	FC	-	-
1964-W26	2438515-50	1964 May	Arcas	-	-	0.000	ANS	SS	DAB/4MG	Aeron	FC	-	-
1964-W112	2438515-95	1964 May 4 1045	Arcas	-	-	0.000	DLR	SS	TEAHR/Schuror	Aeron	AFCRU-TC248	-	-
1964-W113	2438519-96	1964 May 4 1109	Arcas	-	-	0.000	DLR	SS	TEAHR/Schuror	Aeron	AFCRU-TC248	-	-
1964-W114	2438520-10	1964 May 4 1417	Arcas	-	-	0.000	DLR	SS	TEAHR/Schuror	Aeron	AFCRU-TC248	-	-
1964-W115	2438520-20	1964 May 4 1643	Arcas	-	-	0.000	DLR	SS	TEAHR/Schuror	Aeron	AFCRU-TC248	-	-
1964-W116	2438520-40	1964 May 4 2143	Arcas	-	-	0.000	DLR	SS	TEAHR/Schuror	Aeron	AFCRU-TC248	-	-
1964-W117	2438520-96	1964 May 5 1109	Arcas	-	-	0.000	DLR	SS	TEAHR/Schuror	Aeron	AFCRU-TC248	-	-
1964-W118	2438520-98	1964 May 5 1129	Arcas	-	-	0.000	DLR	SS	TEAHR/Schuror	Aeron	AFCRU-TC248	-	-
1964-W119	2438521-19	1964 May 5 1635	Arcas	-	-	0.000	DLR	SS	TEAHR/Schuror	Aeron	AFCRU-TC248	-	-
1964-W120	2438521-21	1964 May 5 1700	Arcas	-	-	0.000	DLR	SS	TEAHR/Schuror	Aeron	AFCRU-TC248	-	-

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	OrbPay	Agency	Launch_Code	Group	Category	LTCite	Cite	Notes
1964-M121	2438521.97	1964 May 6 1120	Arcas	-	-	0.000	DLR	SS	IFARM/Schurer	Aeron	AFORL-70248	-	-
1964-M122	2438522.08	1964 May 6 1400	Arcas	-	-	0.000	DLR	SS	IFARM/Schurer	Aeron	AFORL-70248	-	-
1964-M123	2438522.18	1964 May 6 1622	Arcas	-	-	0.000	DLR	SS	IFARM/Schurer	Aeron	AFORL-70248	-	-
1964-M124	2438523.25	1964 May 8 1039	Arcas	?	-	0.000	AMS	SU	ASC45/7	Aeron	WDCRF	-	-
1964-M125	2438523.94	1964 May 8 1103	Arcas	-	-	0.000	DLR	SS	IFARM/Schurer	Aeron	AFORL-70248	-	-
1964-M126	2438524.10	1964 May 8 1422	Arcas	-	-	0.000	DLR	SS	IFARM/Schurer	Aeron	AFORL-70248	-	-
1964-M127	2438524.12	1964 May 8 1448	Arcas	-	-	0.000	DLR	SS	IFARM/Schurer	Aeron	AFORL-70248	-	-
1964-M128	2438524.20	1964 May 8 1647	Arcas	-	-	0.000	DLR	SS	IFARM/Schurer	Aeron	AFORL-70248	-	-
1964-M129	2438536.17	1964 May 20 1600:00	Arcas	?	-	0.000	AMS	SU	ASC45/7	Aeron	WDCRF	-	-
1964-M130	2438546.50	1964 Jun	Arcas	-	-	0.000	AMS	SS	DAN/4WG	Aeron	FC	-	-
1964-M131	2438546.50	1964 Jun	Arcas	-	-	0.000	AMS	SS	DAN/4WG	Aeron	FC	-	-
1964-M132	2438546.50	1964 Jun	Arcas	-	-	0.000	AMS	SS	DAN/4WG	Aeron	FC	-	-
1964-M133	2438557.17	1964 Jun 10 1600:00	Arcas	?	-	0.000	AMS	SU	ASC45/7	Aeron	WDCRF	-	-
1964-M134	2438563.50	1964 Jun 17 1600:00	Arcas	?	-	0.000	AFPTC	SU	AFPTC/7	Aeron	Ulrich	-	-
1964-M135	2438571.50	1964 Jun 17 1600:00	Arcas	?	TL-1673	0.000	WFF	SU	WFF/Early	Blo	SP-109	-	-
1964-M136	2438576.50	1964 Jul	Arcas	-	-	0.000	AMS	SS	DAN/4WG	Aeron	FC	-	-
1964-M137	2438576.50	1964 Jul	Arcas	-	-	0.000	AMS	SS	DAN/4WG	Aeron	FC	-	-
1964-M138	2438576.50	1964 Jul	Arcas	-	-	0.000	AMS	SS	DAN/4WG	Aeron	FC	-	-
1964-M139	2438576.50	1964 Jul	Arcas	-	-	0.000	AMS	SS	DAN/4WG	Aeron	FC	-	-
1964-M140	2438586.50	1964 Jul 10	Arcas	-	TL-1674	0.000	WFF	SU	WFF/Early	Blo	SP-109	-	-
1964-M141	2438592.17	1964 Jul 15 1600:00	Arcas	?	-	0.000	AMS	SU	ASC45/7	Aeron	WDCRF	-	-
1964-M142	2438599.50	1964 Jul 23	Arcas	-	TL-1675	0.000	WFF	SU	WFF/Early	Blo	SP-109	-	-
1964-M143	2438605.50	1964 Jul 29	Arcas	-	TL-1676	0.000	WFF	SU	WFF/Early	Blo	SP-109	-	-
1964-M144	2438607.50	1964 Aug	Arcas	-	-	0.000	AMS	SS	DAN/4WG	Aeron	FC	-	-
1964-M145	2438607.50	1964 Aug	Arcas	-	-	0.000	AMS	SS	DAN/4WG	Aeron	FC	-	-
1964-M146	2438607.50	1964 Aug	Arcas	-	-	0.000	AMS	SS	DAN/4WG	Aeron	FC	-	-
1964-M147	2438607.50	1964 Aug	Arcas	-	-	0.000	AMS	SS	DAN/4WG	Aeron	FC	-	-
1964-M148	2438607.50	1964 Aug	Arcas	-	-	0.000	AMS	SS	DAN/4WG	Aeron	FC	-	-
1964-M149	2438607.50	1964 Aug	Arcas	-	-	0.000	AMS	SS	DAN/4WG	Aeron	FC	-	-
1964-M150	2438607.50	1964 Aug	Arcas	-	-	0.000	AMS	SS	DAN/4WG	Aeron	FC	-	-
1964-M151	2438613.17	1964 Aug 05 1600:00	Arcas	?	Meteo	0.000	AMS	SU	ASC45/7	Aeron	FC	-	-
1964-M152	2438614.00	1964 Aug 6 1207	Arcas	-	-	0.000	UHL	SS	UHL/Wescott?	Aeron	Questi-2	JBIS49-59	-
1964-M153	2438617.50	1964 Aug 107	Arcas	-	-	0.000	UHL	SS	UHL/Wescott?	Aeron	Questi-2	-	-
1964-M154	2438623.50	1964 Aug 16	Arcas	-	-	0.000	NDTS	SU	NDTS	Aeron	PHAL1664	-	-
1964-M155	2438633.50	1964 Aug 26	Arcas	-	-	0.000	NDTS	SU	NDTS	Aeron	PHAL1664	-	-
1964-M156	2438635.50	1964 Aug 26	Arcas	-	-	0.000	NDTS	SU	NDTS	Aeron	PHAL1664	-	-
1964-M157	2438635.50	1964 Aug 26	Arcas	-	-	0.000	NDTS	SU	NDTS	Aeron	PHAL1664	-	-
1964-M158	2438635.50	1964 Aug 18	Arcas	-	-	0.000	NDTS	SU	NDTS	Aeron	PHAL1664	-	-
1964-M159	2438635.50	1964 Aug 18	Arcas	-	-	0.000	NDTS	SU	NDTS	Aeron	PHAL1664	-	-
1964-M160	2438635.50	1964 Sep	Arcas	-	-	0.000	NDTS	SU	NDTS	Aeron	PHAL1664	-	-
1964-M161	2438635.50	1964 Sep	Arcas	-	-	0.000	NDTS	SU	NDTS	Aeron	PHAL1664	-	-
1964-M162	2438635.50	1964 Sep	Arcas	-	-	0.000	NDTS	SU	NDTS	Aeron	PHAL1664	-	-
1964-M163	2438635.50	1964 Sep	Arcas	-	-	0.000	NDTS	SU	NDTS	Aeron	PHAL1664	-	-
1964-M164	2438635.50	1964 Sep	Arcas	-	-	0.000	NDTS	SU	NDTS	Aeron	PHAL1664	-	-
1964-M165	2438635.50	1964 Sep	Arcas	-	-	0.000	NDTS	SU	NDTS	Aeron	PHAL1664	-	-
1964-M166	2438635.50	1964 Sep	Arcas	-	-	0.000	NDTS	SU	NDTS	Aeron	PHAL1664	-	-
1964-M167	2438635.50	1964 Sep	Arcas	-	-	0.000	NDTS	SU	NDTS	Aeron	PHAL1664	-	-
1964-M168	2438635.50	1964 Sep	Arcas	-	-	0.000	NDTS	SU	NDTS	Aeron	PHAL1664	-	-
1964-M169	2438635.50	1964 Sep	Arcas	-	-	0.000	NDTS	SU	NDTS	Aeron	PHAL1664	-	-
1964-M170	2438635.50	1964 Sep	Arcas	-	-	0.000	NDTS	SU	NDTS	Aeron	PHAL1664	-	-
1964-M171	2438635.50	1964 Sep	Arcas	-	-	0.000	NDTS	SU	NDTS	Aeron	PHAL1664	-	-
1964-M172	2438642.12	1964 Sep 04 1454	Arcas	?	TL-1676	0.000	NDTS	SU	NDTS	Aeron	PHAL1664	-	-
1964-M173	2438642.12	1964 Sep 04 1600:00	Arcas	-	-	0.000	NDTS	SU	NDTS	Aeron	PHAL1664	-	-
1964-M174	2438642.12	1964 Sep 14	Arcas	-	-	0.000	NDTS	SU	NDTS	Aeron	PHAL1664	-	-
1964-M175	2438652.50	1964 Sep 26 1635	Arcas	-	-	0.000	WFF	SU	WFF/Early	Blo	SP-109	HR640914-15	-
1964-M176	2438652.50	1964 Sep 26 1635	Arcas	-	-	0.000	WFF	SU	WFF/Early	Blo	SP-109	-	-
1964-M177	2438652.50	1964 Sep 30 1600:00	Arcas	?	TL-1746	0.000	AMS	SU	ASC45/7	Aeron	WDCRF	SP-4005	-
1964-M178	2438668.50	1964 Oct	Arcas	-	-	0.000	AMS	SS	DAN/4WG	Aeron	FC	-	-
1964-M179	2438668.50	1964 Oct	Arcas	-	-	0.000	AMS	SS	DAN/4WG	Aeron	FC	-	-
1964-M180	2438668.50	1964 Oct	Arcas	-	-	0.000	AMS	SS	DAN/4WG	Aeron	FC	-	-
1964-M181	2438668.50	1964 Oct	Arcas	-	-	0.000	AMS	SS	DAN/4WG	Aeron	FC	-	-
1964-M182	2438668.50	1964 Oct	Arcas	-	-	0.000	AMS	SS	DAN/4WG	Aeron	FC	-	-
1964-M183	2438668.50	1964 Oct	Arcas	-	-	0.000	AMS	SS	DAN/4WG	Aeron	FC	-	-
1964-M184	2438668.50	1964 Oct	Arcas	-	-	0.000	AMS	SS	DAN/4WG	Aeron	FC	-	-
1964-M185	2438668.50	1964 Oct	Arcas	-	-	0.000	AMS	SS	DAN/4WG	Aeron	FC	-	-
1964-M186	2438671.17	1964 Oct 02 1600:00	Arcas	?	-	0.000	AMS	SU	ASC45/7	Aeron	WDCRF	-	-
1964-M187	2438671.17	1964 Oct 05 1600:00	Arcas	?	-	0.000	AMS	SU	ASC45/7	Aeron	WDCRF	-	-
1964-M188	2438671.17	1964 Oct 07 1600:00	Arcas	?	-	0.000	AMS	SU	ASC45/7	Aeron	WDCRF	-	-
1964-M189	2438671.17	1964 Oct 08	Arcas	?	-	0.000	AMS	SU	ASC45/7	Aeron	WDCRF	-	-
1964-M190	2438676.50	1964 Oct 12 1607:00	Arcas	?	-	0.000	AMS	SU	ASC45/7	Aeron	WDCRF	-	-
1964-M191	2438683.17	1964 Oct 14 1607:00	Arcas	?	-	0.000	AMS	SU	ASC45/7	Aeron	WDCRF	-	-
1964-M192	2438685.17	1964 Oct 16 1600:00	Arcas	?	-	0.000	AMS	SU	ASC45/7	Aeron	WDCRF	-	-
1964-M193	2438690.17	1964 Oct 21 1600:00	Arcas	?	-	0.000	AMS	SU	ASC45/7	Aeron	WDCRF	-	-
1964-M194	2438692.17	1964 Oct 23 1600:00	Arcas	?	-	0.000	AMS	SU	ASC45/7	Aeron	WDCRF	-	-
1964-M195	2438698.29	1964 Oct 29 1903:00	Arcas	?	-	0.000	AMS	SU	ASC45/7	Aeron	WDCRF	-	-
1964-M196	2438699.50	1964 Nov	Arcas	-	-	0.000	AMS	SS	DAN/4WG	Aeron	FC	-	-
1964-M197	2438699.50	1964 Nov	Arcas	-	-	0.000	AMS	SS	DAN/4WG	Aeron	FC	-	-
1964-M198	2438699.50	1964 Nov	Arcas	-	-	0.000	AMS	SS	DAN/4WG	Aeron	FC	-	-
1964-M199	2438699.50	1964 Nov	Arcas	-	-	0.000	AMS	SS	DAN/4WG	Aeron	FC	-	-
1964-M200	2438699.50	1964 Nov	Arcas	-	-	0.000	AMS	SS	DAN/4WG	Aeron	FC	-	-
1964-M201	2438699.50	1964 Nov	Arcas	-	-	0.000	AMS	SS	DAN/4WG	Aeron	FC	-	-
1964-M202	2438699.50	1964 Nov	Arcas	-	-	0.000	AMS	SS	DAN/4WG	Aeron	FC	-	-
1964-M203	2438699.50	1964 Nov	Arcas	-	-	0.000	AMS	SS	DAN/4WG	Aeron	FC	-	-
1964-M204	2438699.50	1964 Nov	Arcas	-	-	0.000	AMS	SS	DAN/4WG	Aeron	FC	-	-
1964-M205	2438729.50	1964 Dec	Arcas	-	-	0.000	AMS	SS	DAN/4WG	Aeron	FC	-	-
1964-M206	2438729.50	1964 Dec	Arcas	-	-	0.000	AMS	SS	DAN/4WG	Aeron	FC	-	-
1964-M207	2438729.50	1964 Dec	Arcas	-	-	0.000	AMS	SS	DAN/4WG	Aeron	FC	-	-
1964-M208	2438729.50	1964 Dec	Arcas	-	-	0.000	AMS	SS	DAN/4WG	Aeron	FC	-	-
1964-M209	2438729.50	1964 Dec	Arcas	-	-	0.000	AMS	SS	DAN/4WG	Aeron	FC	-	-
1964-M210	2438729.50	1964 Dec	Arcas	-	-	0.000	AMS	SS	DAN/4WG	Aeron	FC	-	-
1964-M211	2438729.50	1964 Dec	Arcas	-	-	0.000	AMS	SS	DAN/4WG	Aeron	FC	-	-
1964-M212	2438729.50	1964 Dec	Arcas	-	-	0.000	AMS	SS	DAN/4WG	Aeron	FC	-	-
1964-M213	2438729.50	1964 Dec	Arcas	-	-	0.000	AMS	SS	DAN/4WG	Aeron	FC	-	-
1964-M214	2438729.50	1964 Dec	Arcas	-	-	0.000	AMS	SS	DAN/4WG	Aeron	FC	-	-
1964-M215	2438729.50	1964 Dec	Arcas	-	-	0.000	AMS	SS	DAN/4WG	Aeron	FC	-	-
1964-M216	2438729.50	1964 Dec	Arcas	-	-	0.000	AMS	SS	DAN/4WG	Aeron	FC	-	-
1964-M217	2438736.97	1964 Dec 7 1115	Arcas	-	-	0.000	KSC/UCAN	SS	UCAN/	Tonos	SP-4401	-	-
1964-M218	2438736.97	1964 Dec 7 1705	Arcas	-	-	0.000	KSC/	SS	KSC/	Aeron	SP-219	-	-
1964-M219	2438737.21	1964 Dec 7 1705	Arcas	-	-	0.000	KSC/	SS	KSC/	Aeron	SP-219	-	-
1964-M220	2438741.25	1964 Dec 11 1805	Arcas	-	-	0.000	ERDA	SS	PSU/Hal	Tonos	EDPE	-	-

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	OrbPay	Agency	Launch_Code	Group	Category	LTCite	Cite	Notes
1964-W125	2438745-50	1964 Dec 16	Frangible Arcas	-	FMD-1	0.000	AFORL	SF	AFORL/ATL/Usa	Test	AFORL66-157	MR650104-11	-
1965-W01	2438760-50	1965 Jan	Arcas	-	-	0.000	ANS	SS	USAF/4MG	Aeron	FC	-	-
1965-W02	2438760-50	1965 Jan	Arcas	-	-	0.000	ANS	SS	USAF/4MG	Aeron	FC	-	-
1965-W03	2438760-50	1965 Jan	Arcas	-	-	0.000	ANS	SS	USAF/4MG	Aeron	FC	-	-
1965-W04	2438760-50	1965 Jan	Arcas	-	-	0.000	ANS	SS	USAF/4MG	Aeron	FC	-	-
1965-W05	2438760-50	1965 Jan	Arcas	-	-	0.000	ANS	SS	USAF/4MG	Aeron	FC	-	-
1965-W06	2438760-50	1965 Jan	Arcas	-	-	0.000	ANS	SS	USAF/4MG	Aeron	FC	-	-
1965-A189	2438780-50	1965 Jan 20	Frangible Arcas	-	FMD-2	0.000	AFORL	SF	AFORL/	Test	AFORL66-157	-	-
1965-W10	2438791-50	1965 Feb	Arcas	-	-	0.000	ANS	SS	USAF/4MG	Aeron	FC	-	-
1965-W11	2438791-50	1965 Feb	Arcas	-	-	0.000	ANS	SS	USAF/4MG	Aeron	FC	-	-
1965-W12	2438791-50	1965 Feb	Arcas	-	-	0.000	ANS	SS	USAF/4MG	Aeron	FC	-	-
1965-W13	2438791-50	1965 Feb	Arcas	-	-	0.000	ANS	SS	USAF/4MG	Aeron	FC	-	-
1965-W14	2438791-50	1965 Feb	Arcas	-	-	0.000	ANS	SS	USAF/4MG	Aeron	FC	-	-
1965-W15	2438791-50	1965 Feb	Arcas	-	-	0.000	ANS	SS	USAF/4MG	Aeron	FC	-	-
1965-W16	2438791-50	1965 Feb	Arcas	-	-	0.000	ANS	SS	USAF/4MG	Aeron	FC	-	-
1965-W210	2438805-15	1965 Feb 16 1537	Arcas	-	-	0.000	KSC	SS	KSC/	Aeron	FC	-	-
1965-W211	2438805-21	1965 Feb 17 1700	Arcas	-	-	0.000	KSC	SS	KSC/	Aeron	FC	-	-
1965-W21	2438819-50	1965 Mar	Arcas	-	-	0.000	ANS	SS	USAF/4MG	Aeron	FC	-	-
1965-W22	2438819-50	1965 Mar	Arcas	-	-	0.000	ANS	SS	USAF/4MG	Aeron	FC	-	-
1965-W23	2438819-50	1965 Mar	Arcas	-	-	0.000	ANS	SS	USAF/4MG	Aeron	FC	-	-
1965-W24	2438819-50	1965 Mar	Arcas	-	-	0.000	ANS	SS	USAF/4MG	Aeron	FC	-	-
1965-W25	2438819-50	1965 Mar	Arcas	-	-	0.000	ANS	SS	USAF/4MG	Aeron	FC	-	-
1965-W26	2438819-50	1965 Mar	Arcas	-	-	0.000	ANS	SS	USAF/4MG	Aeron	FC	-	-
1965-W27	2438819-50	1965 Mar	Arcas	-	-	0.000	ANS	SS	USAF/4MG	Aeron	FC	-	-
1965-W28	2438819-50	1965 Mar	Arcas	-	-	0.000	ANS	SS	USAF/4MG	Aeron	FC	-	-
1965-W29	2438819-50	1965 Mar	Arcas	-	-	0.000	ANS	SS	USAF/4MG	Aeron	FC	-	-
1965-W30	2438819-50	1965 Mar	Arcas	-	-	0.000	ANS	SS	USAF/4MG	Aeron	FC	-	-
1965-W31	2438819-50	1965 Mar	Arcas	-	-	0.000	ANS	SS	USAF/4MG	Aeron	FC	-	-
1965-W33	2438826-42	1965 Mar 6 2200	Arcas	?	-	0.000	WSRR	SS	WSRR/?	Aeron	FC	-	-
1965-W34	2438826-50	1965 Mar 7	Arcas	-	-	0.000	GSFC	SS	ESSA/Flinger	Aeron	FC	-	-
1965-W36	2438826-50	1965 Mar 9	Arcas	-	-	0.000	GSFC	SS	ESSA/Flinger	Aeron	FC	-	-
1965-W41	2438835-50	1965 Mar 16	Arcas	-	-	0.000	GSFC	SS	ESSA/Flinger	Aeron	FC	-	-
1965-W250	2438837-50	1965 Mar 16	Arcas	-	-	0.000	GSFC	SS	ESSA/Flinger	Aeron	FC	-	-
1965-W251	2438840-50	1965 Mar 21	Arcas	-	-	0.000	GSFC	SS	ESSA/Flinger	Aeron	FC	-	-
1965-W45	2438841-92	1965 Mar 22 1000:00	Arcas	-	-	0.000	ERDA	SS	PSU/Halo	Ionos	SR8-325	-	-
1965-W252	2438843-50	1965 Mar 24	Arcas	-	-	0.000	GSFC	SS	ESSA/Flinger	Aeron	FC	-	-
1965-W253	2438846-50	1965 Mar 27	Arcas	-	-	0.000	GSFC	SS	ESSA/Flinger	Aeron	FC	-	-
1965-W46	2438850-50	1965 Apr	Arcas	-	-	0.000	ANS	SS	USAF/6WH	Aeron	FC	-	-
1965-W49	2438850-50	1965 Apr	Arcas	-	-	0.000	ANS	SS	USAF/6WH	Aeron	FC	-	-
1965-W50	2438850-50	1965 Apr	Arcas	-	-	0.000	ANS	SS	USAF/6WH	Aeron	FC	-	-
1965-W51	2438850-50	1965 Apr	Arcas	-	-	0.000	ANS	SS	USAF/6WH	Aeron	FC	-	-
1965-W54	2438852-50	1965 Apr 2	Arcas	-	-	0.000	GSFC	SS	ESSA/Flinger	Aeron	FC	-	-
1965-W255	2438852-50	1965 Apr 3	Arcas	-	-	0.000	GSFC	SS	ESSA/Flinger	Aeron	FC	-	-
1965-W256	2438854-50	1965 Apr 4	Arcas	-	-	0.000	GSFC	SS	ESSA/Flinger	Aeron	FC	-	-
1965-W257	2438855-50	1965 Apr 5	Arcas	-	-	0.000	GSFC	SS	ESSA/Flinger	Aeron	FC	-	-
1965-W258	2438855-50	1965 Apr 6	Arcas	-	-	0.000	GSFC	SS	ESSA/Flinger	Aeron	FC	-	-
1965-W259	2438856-50	1965 Apr 8	Arcas	-	-	0.000	GSFC	SS	ESSA/Flinger	Aeron	FC	-	-
1965-W260	2438860-50	1965 Apr 10	Arcas	-	-	0.000	GSFC	SS	ESSA/Flinger	Aeron	FC	-	-
1965-W261	2438861-50	1965 Apr 11	Arcas	-	-	0.000	GSFC	SS	ESSA/Flinger	Aeron	FC	-	-
1965-W262	2438861-50	1965 Apr 11	Arcas	-	-	0.000	GSFC	SS	ESSA/Flinger	Aeron	FC	-	-
1965-W263	2438863-50	1965 Apr 13	Arcas	-	-	0.000	GSFC	SS	ESSA/Flinger	Aeron	FC	-	-
1965-W264	2438864-50	1965 Apr 14	Arcas	-	-	0.000	GSFC	SS	ESSA/Flinger	Aeron	FC	-	-
1965-W265	2438865-50	1965 Apr 14	Arcas	-	-	0.000	GSFC	SS	ESSA/Flinger	Aeron	FC	-	-
1965-W266	2438865-50	1965 Apr 15	Arcas	-	-	0.000	GSFC	SS	ESSA/Flinger	Aeron	FC	-	-
1965-W61	2438880-50	1965 May	Arcas	-	-	0.000	ANS	SS	USAF/6WH	Aeron	FC	-	-
1965-W62	2438880-50	1965 May	Arcas	-	-	0.000	ANS	SS	USAF/6WH	Aeron	FC	-	-
1965-W63	2438880-50	1965 May	Arcas	-	-	0.000	ANS	SS	USAF/6WH	Aeron	FC	-	-
1965-W64	2438880-50	1965 May	Arcas	-	-	0.000	ANS	SS	USAF/6WH	Aeron	FC	-	-
1965-W65	2438880-50	1965 May	Arcas	-	-	0.000	ANS	SS	USAF/6WH	Aeron	FC	-	-
1965-W66	2438880-50	1965 May	Arcas	-	-	0.000	ANS	SS	USAF/6WH	Aeron	FC	-	-
1965-A197	2438900-50	1965 May 20	Frangible Arcas	-	FAS-1	0.000	AFORL	SF	AFORL/	Test	AFORL66-157	-	-
1965-W70	2438900-58	1965 May 23 0202:00	Arcas	?	-	0.000	ANS	SU	USAF/?	Aeron	FC	-	-
1965-W71	2438904-04	1965 May 23 1400:00	Arcas	-	-	0.000	KSC	SU	USAF/?	Aeron	FC	-	-
1965-W212	2438906-24	1965 May 25 1740	Arcas	-	-	0.000	KSC	SU	KSC/?	Aeron	FC	-	-
1965-W73	2438911-50	1965 Jun	Arcas	-	-	0.000	ANS	SS	USAF/6WH	Aeron	FC	-	-
1965-W74	2438911-50	1965 Jun	Arcas	-	-	0.000	ANS	SS	USAF/6WH	Aeron	FC	-	-
1965-W75	2438911-50	1965 Jun	Arcas	-	-	0.000	ANS	SS	USAF/6WH	Aeron	FC	-	-
1965-W76	2438911-50	1965 Jun	Arcas	-	-	0.000	ANS	SS	USAF/6WH	Aeron	FC	-	-
1965-W77	2438911-50	1965 Jun	Arcas	-	-	0.000	ANS	SS	USAF/6WH	Aeron	FC	-	-
1965-W78	2438911-50	1965 Jun	Arcas	-	-	0.000	ANS	SS	USAF/6WH	Aeron	FC	-	-
1965-W84	2438941-50	1965 Jul	Arcas	-	-	0.000	ANS	SS	USAF/6WH	Aeron	FC	-	-
1965-W86	2438941-50	1965 Jul	Arcas	-	-	0.000	ANS	SS	USAF/6WH	Aeron	FC	-	-
1965-W87	2438941-50	1965 Jul	Arcas	-	-	0.000	ANS	SS	USAF/6WH	Aeron	FC	-	-
1965-W88	2438941-50	1965 Jul	Arcas	-	-	0.000	ANS	SS	USAF/6WH	Aeron	FC	-	-
1965-W89	2438941-50	1965 Jul	Arcas	-	-	0.000	ANS	SS	USAF/6WH	Aeron	FC	-	-
1965-W90	2438941-50	1965 Jul	Arcas	-	-	0.000	ANS	SS	USAF/6WH	Aeron	FC	-	-
1965-W91	2438941-50	1965 Jul	Arcas	-	-	0.000	ANS	SS	USAF/6WH	Aeron	FC	-	-
1965-W97	2438954-83	1965 Jul 13 0750:00	Arcas	-	-	0.000	ERDA	SS	PSU/Halo	Ionos	SRVTL-140	-	-
1965-W99	2438956-71	1965 Jul 15 0500:00	Arcas	-	-	0.000	ERDA	SS	PSU/Halo	Ionos	SRVTL-140	-	-
1965-W206	2438964-50	1965 Jul 23	Arcas	-	-	0.000	ERDA	SS	PSU/Halo	Ionos	SRVTL-140	-	-
1965-W213	2438972-07	1965 Jul 30 1341	Arcas	-	-	0.000	KSC	SS	KSC/?	Aeron	FC	-	-
1965-W104	2438972-50	1965 Aug	Arcas	-	-	0.000	ANS	SS	DAF/6WH	Aeron	FC	-	-
1965-W105	2438972-50	1965 Aug	Arcas	-	-	0.000	ANS	SS	DAF/6WH	Aeron	FC	-	-
1965-W106	2438972-50	1965 Aug	Arcas	-	-	0.000	ANS	SS	DAF/6WH	Aeron	FC	-	-
1965-W107	2438972-50	1965 Aug	Arcas	-	-	0.000	ANS	SS	DAF/6WH	Aeron	FC	-	-



Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	OrbPay	Agency	Launch_Code	Group	Category	LTCite	Cite	Notes
1965-W108	2438972-50	1965 Aug	Arcas	-	-	0.000	ANS	SS	USAF/6NW	Aeron	FC	-	-
1965-W109	2438972-50	1965 Aug	Arcas	-	-	0.000	ANS	SS	USAF/6NW	Aeron	FC	-	-
1965-W110	2438972-50	1965 Aug	Arcas	-	-	0.000	ANS	SS	USAF/6NW	Aeron	FC	-	-
1965-W111	2438972-50	1965 Aug	Arcas	-	-	0.000	ANS	SS	USAF/6NW	Aeron	FC	-	-
1965-W112	2438972-50	1965 Aug	Arcas	-	-	0.000	ANS	SS	USAF/6NW	Aeron	FC	-	-
1965-W113	2438980-04	1965 Aug 7 1300	Arcas	-	-	0.000	ANS	SS	GSEC/Smith	Aeron	FC	-	-
1965-W114	2438980-36	1965 Aug 7 2045	Arcas	-	-	0.000	ANS	SS	GSEC/Smith	Aeron	FC	-	-
1965-W115	2438980-71	1965 Aug 8 0500	Arcas	-	-	0.000	ANS	SS	GSEC/Smith	Aeron	FC	-	-
1965-W116	2438980-97	1965 Aug 8 1111	Arcas	-	-	0.000	ANS	SS	GSEC/Smith	Aeron	FC	-	-
1965-W117	2438989-20	1965 Aug 20 1642	Arcas	-	-	0.000	WFF	SS	WFF/Early	Blo	PostalCover	-	-
1965-W123	2438998-16	1965 Aug 26 1547	Arcas	-	-	0.000	WFF	SS	WFF/Early	Blo	PostalCover	-	-
1965-W121	2439003-50	1965 Sep	Arcas	-	-	0.000	ANS	SS	USAF/6NW	Aeron	FC	-	-
1965-W122	2439003-50	1965 Sep	Arcas	-	-	0.000	ANS	SS	USAF/6NW	Aeron	FC	-	-
1965-W123	2439003-50	1965 Sep	Arcas	-	-	0.000	ANS	SS	USAF/6NW	Aeron	FC	-	-
1965-W124	2439003-50	1965 Sep	Arcas	-	-	0.000	ANS	SS	USAF/6NW	Aeron	FC	-	-
1965-W125	2439003-50	1965 Sep	Arcas	-	-	0.000	ANS	SS	USAF/6NW	Aeron	FC	-	-
1965-W126	2439003-50	1965 Sep	Arcas	-	-	0.000	ANS	SS	USAF/6NW	Aeron	FC	-	-
1965-W127	2439003-50	1965 Sep	Arcas	-	-	0.000	ANS	SS	WFF/	Meteo	MoKRea97_607	-	-
1965-W223	2439007-14	1965 Sep 3 1525	Arcas	-	-	0.000	WFF	SS	WFF/	Meteo	MoKRea97_607	-	-
1965-W129	2439012-44	1965 Sep 8 2235	Arcas	-	-	0.000	WFF	SS	WFF/	Meteo	TR-X-1298	-	-
1965-W130	2439012-56	1965 Sep 9 0126	Arcas	-	-	0.000	WFF	SS	WFF/	Meteo	TR-X-1298	-	-
1965-W138	2439033-50	1965 Oct	Arcas	-	-	0.000	ANS	SS	LARC/	Aeron	FC	-	-
1965-W139	2439033-50	1965 Oct	Arcas	-	-	0.000	ANS	SS	USAF/6NW	Aeron	FC	-	-
1965-W140	2439033-50	1965 Oct	Arcas	-	-	0.000	ANS	SS	USAF/6NW	Aeron	FC	-	-
1965-W141	2439033-50	1965 Oct	Arcas	-	-	0.000	ANS	SS	USAF/6NW	Aeron	FC	-	-
1965-W142	2439033-50	1965 Oct	Arcas	-	-	0.000	ANS	SS	USAF/6NW	Aeron	FC	-	-
1965-W143	2439033-50	1965 Oct	Arcas	-	-	0.000	ANS	SS	USAF/6NW	Aeron	FC	-	-
1965-W144	2439033-50	1965 Oct	Arcas	-	-	0.000	ANS	SS	USAF/6NW	Aeron	FC	-	-
1965-W145	2439033-50	1965 Oct	Arcas	-	-	0.000	ANS	SS	USAF/6NW	Aeron	FC	-	-
1965-W146	2439033-50	1965 Oct	Arcas	-	-	0.000	ANS	SS	USAF/6NW	Aeron	FC	-	-
1965-W151	2439058-67	1965 Oct 25 0400:00	Arcas	-	-	0.000	WNR	SU	WNR/	Aeron	MDCRF	-	-
1965-W214	2439059-31	1965 Oct 26 1936	Arcas	-	-	0.000	WFF	SS	WFF/	Meteo	MoKRea97_607	-	-
1965-W267	2439069-52	1965 Oct 26 0015	Arcas	-	-	0.000	WFF	SS	WFF/	Meteo	SP-176	-	-
1965-W215	2439060-27	1965 Oct 26 1634	Arcas	-	-	0.000	WFF	SS	WFF/	Meteo	MoKRea97_607	-	-
1965-W216	2439061-32	1965 Oct 27 1942	Arcas	-	-	0.000	WFF	SS	WFF/	Meteo	MoKRea97_607	-	-
1965-W154	2439064-50	1965 Nov	Arcas	-	-	0.000	ANS	SS	WFF/	Aeron	FC	-	-
1965-W155	2439064-50	1965 Nov	Arcas	-	-	0.000	ANS	SS	USAF/6NW	Aeron	FC	-	-
1965-W156	2439064-50	1965 Nov	Arcas	-	-	0.000	ANS	SS	USAF/6NW	Aeron	FC	-	-
1965-W157	2439064-50	1965 Nov	Arcas	-	-	0.000	ANS	SS	USAF/6NW	Aeron	FC	-	-
1965-W158	2439064-50	1965 Nov	Arcas	-	-	0.000	ANS	SS	USAF/6NW	Aeron	FC	-	-
1965-W159	2439064-50	1965 Nov	Arcas	-	-	0.000	ANS	SS	USAF/6NW	Aeron	FC	-	-
1965-W160	2439064-50	1965 Nov	Arcas	-	-	0.000	ANS	SS	USAF/6NW	Aeron	FC	-	-
1965-W161	2439069-30	1965 Nov 4 1911	Arcas	-	-	0.000	WFF	SS	WFF/	Meteo	SP-175	-	-
1965-W279	2439073-30	1965 Nov 8 1905	Arcas	-	-	0.000	WFF	SS	WFF/	Meteo	SP-175	-	-
1965-W171	2439073-34	1965 Nov 10 0910	Arcas	-	-	0.000	WFF	SS	WFF/	Meteo	MoKRea97_607	-	-
1965-W216	2439073-26	1965 Nov 10 0910	Arcas	-	-	0.000	WFF	SS	WFF/	Meteo	MoKRea97_607	-	-
1965-W224	2439078-63	1965 Nov 24 0306:00	Arcas	-	-	0.000	ASL	SU	WNR/?	Meteo	UDCR	-	-
1965-W172	2439089-22	1965 Nov 24 1716	Arcas	-	-	0.000	WFF	SS	WFF/	Meteo	MoKRea97_607	-	-
1965-W219	2439089-22	1965 Nov 24 1716	Arcas	-	-	0.000	WFF	SS	WFF/	Meteo	MoKRea97_607	-	-
1965-W225	2439089-66	1965 Nov 29 0429	Arcas	-	-	0.000	WFF	SS	WFF/	Meteo	MoKRea97_607	-	-
1965-W175	2439094-50	1965 Dec	Arcas	-	-	0.000	ANS	SS	USAF/6NH	Aeron	FC	-	-
1965-W176	2439094-50	1965 Dec	Arcas	-	-	0.000	ANS	SS	USAF/6NH	Aeron	FC	-	-
1965-W177	2439094-50	1965 Dec	Arcas	-	-	0.000	ANS	SS	USAF/6NH	Aeron	FC	-	-
1965-W178	2439094-50	1965 Dec	Arcas	-	-	0.000	ANS	SS	USAF/6NH	Aeron	FC	-	-
1965-W179	2439094-50	1965 Dec	Arcas	-	-	0.000	ANS	SS	USAF/6NH	Aeron	FC	-	-
1965-W180	2439094-50	1965 Dec	Arcas	-	-	0.000	ANS	SS	USAF/6NH	Aeron	FC	-	-
1965-W181	2439094-50	1965 Dec	Arcas	-	-	0.000	ANS	SS	USAF/6NH	Aeron	FC	-	-
1965-W182	2439094-50	1965 Dec	Arcas	-	-	0.000	ANS	SS	USAF/6NH	Aeron	FC	-	-
1965-W183	2439094-50	1965 Dec	Arcas	-	-	0.000	ANS	SS	USAF/6NH	Aeron	FC	-	-
1965-W184	2439094-50	1965 Dec	Arcas	-	-	0.000	ANS	SS	USAF/6NH	Aeron	FC	-	-
1965-W185	2439094-50	1965 Dec	Arcas	-	-	0.000	ANS	SS	USAF/6NH	Aeron	FC	-	-
1965-W186	2439094-50	1965 Dec	Arcas	-	-	0.000	ANS	SS	USAF/6NH	Aeron	FC	-	-
1965-W187	2439094-50	1965 Dec	Arcas	-	-	0.000	ANS	SS	USAF/6NH	Aeron	FC	-	-
1965-W188	2439094-50	1965 Dec	Arcas	-	-	0.000	ANS	SS	USAF/6NH	Aeron	FC	-	-
1965-W189	2439094-50	1965 Dec	Arcas	-	-	0.000	ANS	SS	USAF/6NH	Aeron	FC	-	-
1965-W190	2439094-50	1965 Dec	Arcas	-	-	0.000	ANS	SS	USAF/6NH	Aeron	FC	-	-
1965-W191	2439094-50	1965 Dec	Arcas	-	-	0.000	ANS	SS	USAF/6NH	Aeron	FC	-	-
1965-W192	2439094-50	1965 Dec	Arcas	-	-	0.000	ANS	SS	USAF/6NH	Aeron	FC	-	-
1965-W193	2439094-50	1965 Dec	Arcas	-	-	0.000	ANS	SS	USAF/6NH	Aeron	FC	-	-
1965-W194	2439094-50	1965 Dec	Arcas	-	-	0.000	ANS	SS	USAF/6NH	Aeron	FC	-	-
1965-W195	2439094-50	1965 Dec	Arcas	-	-	0.000	ANS	SS	USAF/6NH	Aeron	FC	-	-
1965-W196	2439094-50	1965 Dec	Arcas	-	-	0.000	ANS	SS	USAF/6NH	Aeron	FC	-	-
1965-W220	2439096-23	1965 Dec 1 1734	Arcas	-	-	0.000	WFF	SS	WFF/	Meteo	MoKRea97_607	-	-
1965-W226	2439096-77	1965 Dec 2 0623	Arcas	-	-	0.000	WFF	SS	WFF/	Meteo	MoKRea97_607	-	-
1965-W244	2439102-50	1965 Dec 8 2031	Arcas	-	-	0.000	UMI/	SS	UMI/	Meteo	www_ft.org	-	-
1965-W221	2439103-35	1965 Dec 8 2031	Arcas	-	-	0.000	WFF	SS	WFF/	Meteo	MoKRea97_607	-	-
1965-W227	2439103-70	1965 Dec 9 0454	Arcas	-	-	0.000	WFF	SS	WFF/	Meteo	MoKRea97_607	-	-
1965-W197	2439104-43	1965 Dec 9 2215	Arcas	-	-	0.000	ANS	SS	WFF/	Meteo	SR-VII-1060	-	-
1965-W199	2439105-50	1965 Dec 11 1921	Arcas	-	-	0.000	ANS	SS	APCC	Aeron	NR651220-10	-	FC
1965-W222	2439110-31	1965 Dec 15 1921	Arcas	-	-	0.000	WFF	SS	WFF/	Meteo	MoKRea97_607	-	-
1965-W228	2439115-75	1965 Dec 16 0601	Arcas	-	-	0.000	WFF	SS	WFF/	Meteo	MoKRea97_607	-	-
1965-W188	2439115-50	1965 Dec 21	Arcas	-	-	0.000	AFCLR/	SS	AFCLR/	Test	AFCLR66-157	-	-
1966-W02	2439125-50	1966 Jan	Arcas	-	-	0.000	ANS	SS	USAF/6NH	Aeron	FC	-	-
1966-W03	2439125-50	1966 Jan	Arcas	-	-	0.000	ANS	SS	USAF/6NH	Aeron	FC	-	-
1966-W04	2439125-50	1966 Jan	Arcas	-	-	0.000	ANS	SS	USAF/6NH	Aeron	FC	-	-
1966-W05	2439125-50	1966 Jan	Arcas	-	-	0.000	ANS	SS	USAF/6NH	Aeron	FC	-	-

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	OrbPay	Agency	Launch	Launch_Code	Group	Category	LTCite	Cite	Notes
1966-W06	2439125-50	1966 Jan	Arcas	-	-	0.000	AWS	SS	USAF/6W	Aeron	Aeron	FC	-	-
1966-W07	2439125-50	1966 Jan	Arcas	-	-	0.000	AWS	SS	USAF/6W	Aeron	Aeron	FC	-	-
1966-W10	2439131-62	1966 Jan 6 0300	Arcas	-	-	0.000	ERDA	SS	PSU/Hale	Ionos	Ionos	SR-VII-140	WDCRF	-
1966-W11	2439131-71	1966 Jan 6 0500	Arcas	-	-	0.000	ERDA	SS	PSU/Hale	Ionos	Ionos	SR-VII-140	WDCRF	-
1966-W24	2439149-78	1966 Jan 24 0640	Arcas	-	-	0.000	AWS	SS	USAF/6W	Aeron	Aeron	FC	-	-
1966-W34	2439146-16	1966 Jan 20 1543	Arcas	-	-	0.000	WFF	SS	WFF/	Metco	Metco	HonkRevs7_607	-	-
1966-W31	2439157-83	1966 Feb 1 0800	Arcas	-	-	0.000	MRN	SS	USAF/6W	Metco	Metco	HRB54	-	-
1966-W34	2439158-42	1966 Feb 1 2211	Arcas	-	-	0.000	MRN	SS	NASA	Metco	Metco	HRB54	-	-
1966-W35	2439158-62	1966 Feb 2 0300	Arcas	-	-	0.000	MRN	SS	CSFC/Smith	Metco	Metco	HRB54	-	-
1966-W36	2439158-71	1966 Feb 2 0500	Arcas	-	-	0.000	MRN	SS	WSRR/	Metco	Metco	HRB54	-	-
1966-W38	2439159-12	1966 Feb 2 1500	Arcas	-	-	0.000	MRN	SS	WSRR/	Metco	Metco	HRB54	-	-
1966-W39	2439159-14	1966 Feb 2 1525	Arcas	-	-	0.000	MRN	SS	USAF/	Metco	Metco	HRB54	-	-
1966-W40	2439159-16	1966 Feb 2 1545	Arcas	-	-	0.000	MRN	SS	WSRR/	Metco	Metco	HRB54	-	-
1966-W42	2439159-23	1966 Feb 2 1730	Arcas	-	-	0.000	MRN	SS	DIR/	Metco	Metco	HRB54	-	-
1966-W43	2439159-35	1966 Feb 2 2017	Arcas	-	-	0.000	MRN	SS	USAF/	Metco	Metco	HRB54	-	-
1966-W44	2439159-38	1966 Feb 2 2100	Arcas	-	-	0.000	MRN	SS	USAF/6W	Metco	Metco	HRB54	-	-
1966-W45	2439159-39	1966 Feb 2 2115	Arcas	-	-	0.000	MRN	SS	USAF/	Metco	Metco	HRB54	-	-
1966-W50	2439160-33	1966 Feb 03 2000: 00	Arcas	-	-	0.000	WSRR	SS	WSRR/Randhava	Aeron	Aeron	WDCRF	HRB54	-
1966-W51	2439160-33	1966 Feb 3 2000	Arcas	-	-	0.000	MRN	SS	USAF/	Metco	Metco	HRB54	-	-
1966-W54	2439160-80	1966 Feb 4 0705	Arcas	-	-	0.000	MRN	SS	WSRR/	Metco	Metco	HRB54	-	-
1966-W57	2439161-09	1966 Feb 4 1415	Arcas	-	-	0.000	MRN	SS	USAF/	Metco	Metco	HRB54	-	-
1966-W58	2439161-13	1966 Feb 4 1507	Arcas	-	-	0.000	MRN	SS	USAF/	Metco	Metco	HRB54	-	-
1966-W60	2439161-17	1966 Feb 4 1600	Arcas	-	-	0.000	MRN	SS	USAF/	Metco	Metco	HRB54	-	-
1966-W63	2439161-33	1966 Feb 4 2000	Arcas	-	-	0.000	MRN	SS	USAF/	Metco	Metco	HRB54	-	-
1966-W64	2439161-54	1966 Feb 5 0101	Arcas	-	-	0.000	MRN	SS	USAF/6W	Metco	Metco	HRB54	-	-
1966-W65	2439162-33	1966 Feb 5 2000	Arcas	-	-	0.000	MRN	SS	USAF/	Metco	Metco	HRB54	-	-
1966-W66	2439163-33	1966 Feb 6 2000	Arcas	-	-	0.000	MRN	SS	USAF/	Metco	Metco	HRB54	-	-
1966-W67	2439164-12	1966 Feb 7 1500	Arcas	-	-	0.000	MRN	SS	USAF/	Metco	Metco	HRB54	-	-
1966-W68	2439164-13	1966 Feb 7 1501	Arcas	-	-	0.000	MRN	SS	USAF/	Metco	Metco	HRB54	-	-
1966-W69	2439164-21	1966 Feb 7 1705	Arcas	-	-	0.000	MRN	SS	USAF/	Metco	Metco	HRB54	-	-
1966-W73	2439164-52	1966 Feb 8 0030	Arcas	-	-	0.000	MRN	SS	USAF/	Metco	Metco	HRB54	-	-
1966-W75	2439164-80	1966 Feb 8 0715	Arcas	-	-	0.000	MRN	SS	USAF/	Metco	Metco	HRB54	-	-
1966-W76	2439165-33	1966 Feb 8 2307	Arcas	-	-	0.000	MRN	SS	USAF/	Metco	Metco	HRB54	-	-
1966-W77	2439165-46	1966 Feb 8 2307	Arcas	-	-	0.000	MRN	SS	USAF/	Metco	Metco	HRB54	-	-
1966-W78	2439165-50	1966 Feb 9 0000	Arcas	-	-	0.000	MRN	SS	USAF/	Metco	Metco	HRB54	-	-
1966-W80	2439166-12	1966 Feb 9 1500	Arcas	-	-	0.000	MRN	SS	USAF/	Metco	Metco	HRB54	-	-
1966-W81	2439166-12	1966 Feb 9 1500	Arcas	-	-	0.000	MRN	SS	USAF/	Metco	Metco	HRB54	-	-
1966-W82	2439166-13	1966 Feb 9 1500	Arcas	-	-	0.000	MRN	SS	USAF/	Metco	Metco	HRB54	-	-
1966-W84	2439166-25	1966 Feb 9 1701	Arcas	-	-	0.000	MRN	SS	USAF/	Metco	Metco	HRB54	-	-
1966-W85	2439166-26	1966 Feb 9 1712	Arcas	-	-	0.000	MRN	SS	USAF/6W	Metco	Metco	HRB54	-	-
1966-W83	2439166-51	1966 Feb 10 0014	Arcas	-	-	0.000	MRN	SS	USAF/	Metco	Metco	HRB54	-	-
1966-W84	2439166-56	1966 Feb 10 0220	Arcas	-	-	0.000	MRN	SS	USAF/	Metco	Metco	HRB54	-	-
1966-W84	2439166-59	1966 Feb 10 0207	Arcas	-	-	0.000	MRN	SS	USAF/	Metco	Metco	HRB54	-	-
1966-W87	2439166-70	1966 Feb 10 0406	Arcas	-	-	0.000	MRN	SS	USAF/	Metco	Metco	HRB54	-	-
1966-W88	2439166-75	1966 Feb 10 0724	Arcas	-	-	0.000	MRN	SS	USAF/	Metco	Metco	HRB54	-	-
1966-W90	2439166-82	1966 Feb 10 0909	Arcas	-	-	0.000	MRN	SS	CSFC/Smith	Metco	Metco	HRB54	-	-
1966-W91	2439166-84	1966 Feb 10 0943	Arcas	-	-	0.000	MRN	SS	USAF/	Metco	Metco	HRB54	-	-
1966-W92	2439166-85	1966 Feb 10 0843	Arcas	-	-	0.000	MRN	SS	USAF/	Metco	Metco	HRB54	-	-
1966-W93	2439166-85	1966 Feb 10 1517	Arcas	-	-	0.000	MRN	SS	USAF/	Metco	Metco	HRB54	-	-
1966-W95	2439167-20	1966 Feb 10 1900	Arcas	-	-	0.000	MRN	SS	CSFC/Smith	Metco	Metco	HRB54	-	-
1966-W96	2439167-20	1966 Feb 10 1900	Arcas	-	-	0.000	MRN	SS	USAF/	Metco	Metco	HRB54	-	-
1966-W98	2439167-33	1966 Feb 10 2000	Arcas	-	-	0.000	MRN	SS	USAF/	Metco	Metco	HRB54	-	-
1966-W101	2439167-40	1966 Feb 10 2340	Arcas	-	-	0.000	MRN	SS	USAF/	Metco	Metco	HRB54	-	-
1966-W102	2439167-43	1966 Feb 11 0008	Arcas	-	-	0.000	MRN	SS	USAF/	Metco	Metco	HRB54	-	-
1966-W102	2439167-51	1966 Feb 11 0114	Arcas	-	-	0.000	MRN	SS	USAF/	Metco	Metco	HRB54	-	-
1966-W104	2439167-55	1966 Feb 11 0214	Arcas	-	-	0.000	MRN	SS	USAF/	Metco	Metco	HRB54	-	-
1966-W105	2439167-59	1966 Feb 11 0214	Arcas	-	-	0.000	MRN	SS	USAF/	Metco	Metco	HRB54	-	-
1966-W106	2439167-63	1966 Feb 11 0300	Arcas	-	-	0.000	MRN	SS	USAF/	Metco	Metco	HRB54	-	-
1966-W107	2439167-63	1966 Feb 11 0311	Arcas	-	-	0.000	MRN	SS	USAF/	Metco	Metco	HRB54	-	-
1966-W110	2439168-12	1966 Feb 11 1500	Arcas	-	-	0.000	MRN	SS	USAF/	Metco	Metco	HRB54	-	-
1966-W110	2439168-34	1966 Feb 11 2012	Arcas	-	-	0.000	MRN	SS	USAF/	Metco	Metco	HRB54	-	-
1966-W111	2439168-43	1966 Feb 11 2211	Arcas	-	-	0.000	MRN	SS	USAF/	Metco	Metco	HRB54	-	-
1966-W112	2439168-47	1966 Feb 11 2319	Arcas	-	-	0.000	MRN	SS	USAF/	Metco	Metco	HRB54	-	-
1966-W114	2439171-12	1966 Feb 14 1500	Arcas	-	-	0.000	MRN	SS	USAF/	Metco	Metco	HRB54	-	-
1966-W115	2439171-12	1966 Feb 14 1500	Arcas	-	-	0.000	MRN	SS	USAF/	Metco	Metco	HRB54	-	-
1966-W116	2439171-14	1966 Feb 14 1515	Arcas	-	-	0.000	MRN	SS	USAF/	Metco	Metco	HRB54	-	-
1966-W117	2439171-17	1966 Feb 14 1600	Arcas	-	-	0.000	MRN	SS	USAF/	Metco	Metco	HRB54	-	-
1966-W118	2439171-23	1966 Feb 14 1730	Arcas	-	-	0.000	MRN	SS	USAF/	Metco	Metco	HRB54	-	-
1966-W120	2439171-33	1966 Feb 15 2000	Arcas	-	-	0.000	MRN	SS	USAF/	Metco	Metco	HRB54	-	-
1966-W123	2439172-33	1966 Feb 15 2000	Arcas	-	-	0.000	MRN	SS	USAF/	Metco	Metco	HRB54	-	-
1966-W128	2439173-13	1966 Feb 16 1510	Arcas	-	-	0.000	MRN	SS	USAF/	Metco	Metco	HRB54	-	-
1966-W129	2439173-16	1966 Feb 16 1545	Arcas	-	-	0.000	MRN	SS	USAF/	Metco	Metco	HRB54	-	-
1966-W130	2439173-19	1966 Feb 16 1629	Arcas	-	-	0.000	MRN	SS	USAF/	Metco	Metco	HRB54	-	-
1966-W133	2439173-25	1966 Feb 16 1800	Arcas	-	-	0.000	MRN	SS	USAF/	Metco	Metco	HRB54	-	-
1966-W134	2439173-30	1966 Feb 16 2000	Arcas	-	-	0.000	MRN	SS	USAF/	Metco	Metco	HRB54	-	-
1966-W136	2439173-33	1966 Feb 17 0002	Arcas	-	-	0.000	MRN	SS	USAF/	Metco	Metco	HRB54	-	-
1966-W138	2439174-33	1966 Feb 17 2000	Arcas	-	-	0.000	MRN	SS	USAF/	Metco	Metco	HRB54	-	-
1966-W142	2439175-10	1966 Feb 18 1430	Arcas	-	-	0.000	MRN	SS	USAF/	Metco	Metco	HRB54	-	-
1966-W145	2439175-27	1966 Feb 18 1800	Arcas	-	-	0.000	MRN	SS	USAF/	Metco	Metco	HRB54	-	-
1966-W147	2439175-25	1966 Feb 18 1835	Arcas	-	-	0.000	MRN	SS	USAF/	Metco	Metco	HRB54	-	-
1966-W151	2439175-36	1966 Feb 18 2034	Arcas	-	-	0.000	MRN	SS	USAF/	Metco	Metco	HRB54	-	-
1966-W153	2439175-96	1966 Feb 19 1055	Arcas	-	-	0.000	MRN	SS	USAF/	Metco	Metco	HRB54	-	-
1966-W154	2439176-05	1966 Feb 19 1312	Arcas	-	-	0.000	MRN	SS	USAF/	Metco	Metco	HRB54	-	-
1966-W155	2439176-33	1966 Feb 19 2000	Arcas	-	-	0.000	MRN	SS	USAF/	Metco	Metco	HRB54	-	-

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	OrbPay	Agency	Launch_Code	Group	Category	LTCite	Cite	Notes
1966-W156	2439177-04	1966 Feb 20 1300	Arcas	-	-	0.000	HRM	SS	USAF/	Metco	HRM54	-	-
1966-W157	2439177-33	1966 Feb 20 2000	Arcas	-	-	0.000	HRM	SS	USAF/	Metco	HRM54	-	-
1966-W158	2439178-04	1966 Feb 21 1300	Arcas	-	-	0.000	HRM	SS	USAF/	Metco	HRM54	-	-
1966-W159	2439178-04	1966 Feb 21 1300	Arcas	-	-	0.000	HRM	SS	USAF/	Metco	HRM54	-	-
1966-W160	2439178-10	1966 Feb 21 1430	Arcas	-	-	0.000	HRM	SS	USAF/	Metco	HRM54	-	-
1966-W161	2439178-11	1966 Feb 21 1445	Arcas	-	-	0.000	HRM	SS	USAF/	Metco	HRM54	-	-
1966-W162	2439178-12	1966 Feb 21 1500	Arcas	-	-	0.000	HRM	SS	USAF/	Metco	HRM54	-	-
1966-W166	2439179-04	1966 Feb 22 1300	Arcas	-	-	0.000	HRM	SS	USAF/	Metco	HRM54	-	-
1966-W167	2439179-04	1966 Feb 22 2000	Arcas	-	-	0.000	HRM	SS	USAF/	Metco	HRM54	-	-
1966-W169	2439179-33	1966 Feb 22 2245	Arcas	-	-	0.000	HRM	SS	USAF/	Metco	HRM54	-	-
1966-W170	2439179-45	1966 Feb 22 2245	Arcas	-	-	0.000	HRM	SS	USAF/	Metco	HRM54	-	-
1966-W171	2439180-04	1966 Feb 23 1300	Arcas	-	-	0.000	HRM	SS	USAF/	Metco	HRM54	-	-
1966-W172	2439180-04	1966 Feb 23 1300	Arcas	-	-	0.000	HRM	SS	USAF/	Metco	HRM54	-	-
1966-W174	2439180-12	1966 Feb 23 1446	Arcas	-	-	0.000	HRM	SS	USAF/	Metco	HRM54	-	-
1966-W177	2439180-25	1966 Feb 23 1800	Arcas	-	-	0.000	HRM	SS	USAF/	Metco	HRM54	-	-
1966-W179	2439180-33	1966 Feb 23 2000	Arcas	-	-	0.000	HRM	SS	USAF/	Metco	HRM54	-	-
1966-W180	2439180-35	1966 Feb 23 2022	Arcas	-	-	0.000	HRM	SS	USAF/	Metco	HRM54	-	-
1966-W181	2439180-47	1966 Feb 23 2320	Arcas	-	-	0.000	HRM	SS	USAF/	Metco	HRM54	-	-
1966-W182	2439181-03	1966 Feb 24 1245	Arcas	-	-	0.000	HRM	SS	USAF/	Metco	HRM54	-	-
1966-W183	2439181-03	1966 Feb 24 1245	Arcas	-	-	0.000	HRM	SS	USAF/	Metco	HRM54	-	-
1966-W184	2439182-03	1966 Feb 25 1245	Arcas	-	-	0.000	HRM	SS	USAF/	Metco	HRM54	-	-
1966-W185	2439182-03	1966 Feb 25 1245	Arcas	-	-	0.000	HRM	SS	USAF/	Metco	HRM54	-	-
1966-W186	2439182-06	1966 Feb 25 1321	Arcas	-	-	0.000	HRM	SS	USAF/	Metco	HRM54	-	-
1966-W187	2439182-17	1966 Feb 25 1430	Arcas	-	-	0.000	HRM	SS	USAF/	Metco	HRM54	-	-
1966-W188	2439182-45	1966 Feb 25 1600	Arcas	-	-	0.000	HRM	SS	USAF/	Metco	HRM54	-	-
1966-W190	2439182-45	1966 Feb 25 2245	Arcas	-	-	0.000	HRM	SS	USAF/	Metco	HRM54	-	-
1966-W191	2439182-45	1966 Feb 25 2245	Arcas	-	-	0.000	HRM	SS	USAF/	Metco	HRM54	-	-
1966-W192	2439182-53	1966 Feb 26 0045	Arcas	-	-	0.000	HRM	SS	USAF/	Metco	HRM54	-	-
1966-W193	2439182-61	1966 Feb 26 0245	Arcas	-	-	0.000	HRM	SS	USAF/	Metco	HRM54	-	-
1966-W194	2439183-22	1966 Feb 26 1712	Arcas	-	-	0.000	HRM	SS	KSC/	Metco	HRM54	-	-
1966-W196	2439183-25	1966 Feb 26 1850	Arcas	-	-	0.000	ANS	SS	USAF/	Metco	HRM54	RSC-A-R-06-4	-
1966-W197	2439183-33	1966 Feb 26 2000	Arcas	-	-	0.000	HRM	SS	USAF/	Metco	HRM54	HRM-54	-
1966-W199	2439184-25	1966 Feb 27 1945	Arcas	-	-	0.000	HRM	SS	USAF/	Metco	HRM54	-	-
1966-W200	2439184-33	1966 Feb 27 2000	Arcas	-	-	0.000	HRM	SS	USAF/	Metco	HRM54	-	-
1966-W210	2439184-77	1966 Feb 28 0630	Arcas	-	-	0.000	HRM	SS	USAF/	Metco	HRM54	-	-
1966-W211	2439185-11	1966 Feb 28 1445	Arcas	-	-	0.000	HRM	SS	USAF/	Metco	HRM54	-	-
1966-W212	2439185-12	1966 Feb 28 1500	Arcas	-	-	0.000	HRM	SS	USAF/	Metco	HRM54	-	-
1966-W216	2439185-44	1966 Feb 28 2230	Arcas	-	-	0.000	HRM	SS	USAF/	Metco	HRM54	-	-
1966-W201	2439184-50	1966 Mar	Arcas	-	-	0.000	ANS	SS	USAF/6NH	Aeron	FC	-	-
1966-W202	2439184-50	1966 Mar	Arcas	-	-	0.000	ANS	SS	USAF/6NH	Aeron	FC	-	-
1966-W203	2439184-50	1966 Mar	Arcas	-	-	0.000	ANS	SS	USAF/6NH	Aeron	FC	-	-
1966-W204	2439184-50	1966 Mar	Arcas	-	-	0.000	ANS	SS	USAF/6NH	Aeron	FC	-	-
1966-W205	2439184-50	1966 Mar	Arcas	-	-	0.000	ANS	SS	USAF/6NH	Aeron	FC	-	-
1966-W206	2439184-50	1966 Mar	Arcas	-	-	0.000	ANS	SS	USAF/6NH	Aeron	FC	-	-
1966-W207	2439184-50	1966 Mar	Arcas	-	-	0.000	ANS	SS	USAF/6NH	Aeron	FC	-	-
1966-W208	2439184-50	1966 Mar	Arcas	-	-	0.000	ANS	SS	USAF/6NH	Aeron	FC	-	-
1966-W209	2439184-50	1966 Mar	Arcas	-	-	0.000	ANS	SS	USAF/6NH	Aeron	FC	-	-
1966-W212	2439202-10	1966 Mar 18 0231	Arcas	-	-	0.000	VEF	SS	USAF/6NH	Metco	MetcoRev97_607	-	-
1966-W216	2439202-10	1966 Mar 18 1517	Arcas	-	-	0.000	VEF	SS	USAF/6NH	Metco	MetcoRev97_607	-	-
1966-W220	2439215-50	1966 Apr 1	Arcas	-	-	0.000	AFCRL	SS	USAF/USU/	Metco	AFCRL67-0943	FC	-
1966-W225	2439215-50	1966 Apr	Arcas	-	-	0.000	ANS	SS	USAF/6NH	Aeron	FC	-	-
1966-W230	2439216-50	1966 Apr	Arcas	-	-	0.000	ANS	SS	USAF/6NH	Aeron	FC	-	-
1966-W405	2439226-50	1966 Apr 11	Arcas	-	-	0.000	ANS	SS	AFCRL/	Aeron	SR8-823	-	-
1966-W406	2439226-50	1966 Apr 11	Arcas	-	-	0.000	ANS	SS	AFCRL/	Aeron	SR8-823	-	-
1966-W409	2439226-50	1966 Apr 11	Arcas	-	-	0.000	ANS	SS	AFCRL/	Aeron	SR8-823	-	-
1966-W411	2439226-50	1966 Apr 11	Arcas	-	-	0.000	ANS	SS	AFCRL/	Aeron	SR8-823	-	-
1966-W412	2439226-50	1966 Apr 11	Arcas	-	-	0.000	ANS	SS	AFCRL/	Aeron	SR8-823	-	-
1966-W413	2439227-50	1966 Apr 12?	Arcas	-	-	0.000	ANS	SS	AFCRL/	Aeron	SR8-823	-	-
1966-W414	2439227-50	1966 Apr 12	Arcas	-	-	0.000	ANS	SS	AFCRL/	Aeron	SR8-823	-	-
1966-W415	2439227-50	1966 Apr 12	Arcas	-	-	0.000	ANS	SS	AFCRL/	Aeron	SR8-823	-	-
1966-W416	2439227-50	1966 Apr 12	Arcas	-	-	0.000	ANS	SS	AFCRL/	Aeron	SR8-823	-	-
1966-W417	2439227-50	1966 Apr 12	Arcas	-	-	0.000	ANS	SS	AFCRL/	Aeron	SR8-823	-	-
1966-W418	2439227-50	1966 Apr 12	Arcas	-	-	0.000	ANS	SS	AFCRL/	Aeron	SR8-823	-	-
1966-W419	2439227-50	1966 Apr 12	Arcas	-	-	0.000	ANS	SS	AFCRL/	Aeron	SR8-823	-	-
1966-W420	2439227-50	1966 Apr 12	Arcas	-	-	0.000	ANS	SS	AFCRL/	Aeron	SR8-823	-	-
1966-W421	2439227-50	1966 Apr 12	Arcas	-	-	0.000	ANS	SS	AFCRL/	Aeron	SR8-823	-	-
1966-W422	2439227-50	1966 Apr 12	Arcas	-	-	0.000	ANS	SS	AFCRL/	Aeron	SR8-823	-	-
1966-W423	2439227-50	1966 Apr 12	Arcas	-	-	0.000	ANS	SS	AFCRL/	Aeron	SR8-823	-	-
1966-W424	2439227-50	1966 Apr 12	Arcas	-	-	0.000	ANS	SS	AFCRL/	Aeron	SR8-823	-	-
1966-W425	2439228-50	1966 Apr 12?	Arcas	-	-	0.000	ANS	SS	AFCRL/	Aeron	SR8-823	-	-
1966-W426	2439228-50	1966 Apr 13?	Arcas	-	-	0.000	ANS	SS	AFCRL/	Aeron	SR8-823	-	-
1966-W427	2439228-50	1966 Apr 13	Arcas	-	-	0.000	ANS	SS	AFCRL/	Aeron	SR8-823	-	-
1966-W428	2439228-50	1966 Apr 13	Arcas	-	-	0.000	ANS	SS	AFCRL/	Aeron	SR8-823	-	-
1966-W429	2439228-50	1966 Apr 13	Arcas	-	-	0.000	ANS	SS	AFCRL/	Aeron	SR8-823	-	-
1966-W430	2439228-50	1966 Apr 13	Arcas	-	-	0.000	ANS	SS	AFCRL/	Aeron	SR8-823	-	-
1966-W431	2439231-29	1966 Apr 15 1903	Arcas	-	-	0.000	ANS	SS	AFCRL/	Aeron	SR8-823	-	-
1966-W432	2439235-50	1966 Apr 20	Arcas	-	-	0.000	ANS	SS	USAF/6NH	Aeron	JAN-Sci-33_695	-	-
1966-W433	2439235-50	1966 Apr 20	Arcas	-	-	0.000	AFCRL	SS	USAF/6NH	Aeron	AFCRL-68-0622	-	-
1966-W434	2439237-50	1966 Apr 22	Arcas	-	-	0.000	AFCRL	SS	AFCRL/	Test	AFCRL-68-0622	-	-
1966-W435	2439245-50	1966 May	Arcas	-	-	0.000	ANS	SS	USAF/6NH	Aeron	FC	-	-
1966-W436	2439245-50	1966 May	Arcas	-	-	0.000	ANS	SS	USAF/6NH	Aeron	FC	-	-
1966-W437	2439245-50	1966 May	Arcas	-	-	0.000	ANS	SS	USAF/6NH	Aeron	FC	-	-
1966-W438	2439245-50	1966 May	Arcas	-	-	0.000	ANS	SS	USAF/6NH	Aeron	FC	-	-
1966-W439	2439245-50	1966 May	Arcas	-	-	0.000	ANS	SS	USAF/6NH	Aeron	FC	-	-
1966-W440	2439245-50	1966 May	Arcas	-	-	0.000	ANS	SS	USAF/6NH	Aeron	FC	-	-
1966-W441	2439245-50	1966 May	Arcas	-	-	0.000	ANS	SS	USAF/6NH	Aeron	FC	-	-
1966-W442	2439245-50	1966 May	Arcas	-	-	0.000	ANS	SS	USAF/6NH	Aeron	FC	-	-
1966-W443	2439245-50	1966 May	Arcas	-	-	0.000	ANS	SS	USAF/6NH	Aeron	FC	-	-
1966-W444	2439247-65	1966 May 2 0330	Arcas	-	-	0.000	ANS	SS	GSEC/Smith	Aeron	FC	-	-



Launch_Tag	Launch_ID	Variant	Flight_ID	OrbPay	Agency	Launch_Code	Group	Category	LTCite	Cite	Notes
1966-W317	2439376-71	-	-	0.000	ANS	SS	USAF/6MW	Aeron	JMS133-659/FC	-	-
1966-W318	2439376-86	-	-	0.000	ANS	SS	USAF/6MW	Aeron	JMS133-659/FC	-	-
1966-W319	2439377-04	-	-	0.000	ANS	SS	USAF/6MW	Aeron	JMS133-659/FC	-	-
1966-W320	2439377-21	-	-	0.000	ANS	SS	USAF/6MW	Aeron	JMS133-659/FC	-	-
1966-W321	2439377-38	-	-	0.000	ANS	SS	USAF/6MW	Aeron	JMS133-659/FC	-	-
1966-W322	2439377-54	-	-	0.000	ANS	SS	USAF/6MW	Aeron	JMS133-659/FC	-	-
1966-W323	2439377-71	-	-	0.000	ANS	SS	USAF/6MW	Aeron	JMS133-659/FC	-	-
1966-W324	2439377-88	-	-	0.000	ANS	SS	USAF/6MW	Aeron	JMS133-659/FC	-	-
1966-W325	2439378-04	-	-	0.000	WFF	SS	WFF/	Meteo	Homkrev97_607	-	-
1966-W449	2439378-16	-	-	0.000	ANS	SS	USAF/6MW	Aeron	JMS133-659/FC	-	-
1966-W450	2439378-21	-	-	0.000	ANS	SS	USAF/6MW	Aeron	JMS133-659/FC	-	-
1966-W327	2439378-38	-	-	0.000	ANS	SS	USAF/6MW	Aeron	JMS133-659/FC	-	-
1966-W328	2439378-54	-	-	0.000	ANS	SS	USAF/6MW	Aeron	JMS133-659/FC	-	-
1966-W329	2439378-71	-	-	0.000	ANS	SS	USAF/6MW	Aeron	JMS133-659/FC	-	-
1966-W491	2439383-15	-	EXAMETHET M14	0.000	TIPE	SS	TIPE/Defendonca	Aeron	SP-175	SP-175	-
1966-W492	2439383-27	-	Ballute	0.000	AFCLR	SS	AFCLR/	Test	AFCLR-68-0622	-	-
1966-W493	2439384-17	-	EXAMETHET W16	0.000	WFF	SS	WFF/	Meteo	Homkrev97_607	-	-
1966-W450	2439385-32	-	-	0.000	WFF	SS	WFF/	Meteo	Homkrev97_607	-	-
1966-W451	2439385-67	-	-	0.000	AFCLR	SS	AFCLR/	Test	AFCLR-68-0622	-	-
1966-W113	2439388-12	-	-	0.000	AFCLR	SS	AFCLR/	Test	AFCLR-68-0622	-	-
1966-W114	2439389-12	-	-	0.000	WFF	SS	WFF/	Meteo	Homkrev97_607	-	-
1966-W462	2439392-28	-	EXAMETHET W17	0.000	COMAE	SS	COMAE/Lichtenstein	Aeron	SP-175	SP-175	-
1966-W463	2439397-25	-	EXAMETHET C12A?	0.000	AFCLR	SS	AFCLR/OSU/	Aeron	AFCLR67-0343	FC	-
1966-W340	2439396-50	-	-	0.000	ANS	SS	USAF/6MW	Aeron	FC	-	-
1966-W339	2439396-50	-	-	0.000	ANS	SS	USAF/6MW	Aeron	FC	-	-
1966-W341	2439396-50	-	-	0.000	ANS	SS	USAF/6MW	Aeron	FC	-	-
1966-W342	2439396-50	-	-	0.000	ANS	SS	USAF/6MW	Aeron	FC	-	-
1966-W343	2439396-50	-	-	0.000	ANS	SS	USAF/6MW	Aeron	FC	-	-
1966-W344	2439396-50	-	-	0.000	ANS	SS	USAF/6MW	Aeron	FC	-	-
1966-W345	2439396-50	-	-	0.000	ANS	SS	USAF/6MW	Aeron	FC	-	-
1966-W346	2439396-50	-	-	0.000	ANS	SS	USAF/6MW	Aeron	FC	-	-
1966-W347	2439396-50	-	-	0.000	ANS	SS	USAF/6MW	Aeron	FC	-	-
1966-W348	2439396-50	-	-	0.000	ANS	SS	USAF/6MW	Aeron	FC	-	-
1966-W459	2439399-52	-	EXAMETHET W18	0.000	WFF	SS	WFF/	Meteo	Homkrev97_607	SP-175	-
1966-W460	2439403-50	-	-	0.000	WFF	SS	WFF/	Meteo	Homkrev97_607	-	-
1966-W354	2439423-50	-	-	0.000	ANS	SS	USAF/6MW	Aeron	FC	-	-
1966-W355	2439423-50	-	-	0.000	ANS	SS	USAF/6MW	Aeron	FC	-	-
1966-W356	2439423-50	-	-	0.000	ANS	SS	USAF/6MW	Aeron	FC	-	-
1966-W357	2439423-50	-	-	0.000	ANS	SS	USAF/6MW	Aeron	FC	-	-
1966-W358	2439423-50	-	-	0.000	ANS	SS	USAF/6MW	Aeron	FC	-	-
1966-W359	2439423-50	-	-	0.000	ANS	SS	USAF/6MW	Aeron	FC	-	-
1966-W360	2439423-50	-	-	0.000	ANS	SS	USAF/6MW	Aeron	FC	-	-
1966-W361	2439423-50	-	-	0.000	ANS	SS	USAF/6MW	Aeron	FC	-	-
1966-W362	2439423-50	-	-	0.000	ANS	SS	USAF/6MW	Aeron	FC	-	-
1966-W363	2439423-50	-	-	0.000	ANS	SS	USAF/6MW	Aeron	FC	-	-
1966-W456	2439439-35	-	1966 Nov 9 2031	0.000	WFF	SS	WFF/	Meteo	SP-4007	-	-
1966-W457	2439439-35	-	-	0.000	COMAE/SEFC	SS	COMAE/SEFC	Aeron/Eclipse	Homkrev97_607	-	-
1966-W458	2439440-08	-	1966 Nov 11 0901	0.000	COMAE/SEFC	SS	COMAE/SEFC	Aeron/Eclipse	SP-4401	-	-
1966-W459	2439440-08	-	1966 Nov 11 0906	0.000	COMAE/SEFC	SS	COMAE/SEFC	Aeron/Eclipse	SP-4401	-	-
1966-W460	2439441-25	-	1966 Nov 11 1800	0.000	COMAE/SEFC	SS	COMAE/SEFC	Aeron/Eclipse	SP-4401	-	-
1966-W461	2439441-02	-	1966 Nov 12 1323	0.000	COMAE/SEFC	SS	COMAE/SEFC	Aeron/Eclipse	SP-4401	-	-
1966-W462	2439442-04	-	1966 Nov 12 1303	0.000	COMAE/SEFC	SS	COMAE/SEFC	Aeron/Eclipse	SP-4401	-	-
1966-W463	2439442-04	-	1966 Nov 12 1303	0.000	COMAE/SEFC	SS	COMAE/SEFC	Aeron/Eclipse	SP-4401	-	-
1966-W464	2439442-08	-	1966 Nov 12 1400	0.000	COMAE/SEFC	SS	COMAE/SEFC	Aeron/Eclipse	SP-4401	-	-
1966-W465	2439442-10	-	1966 Nov 12 1431	0.000	COMAE/SEFC	SS	COMAE/SEFC	Aeron/Eclipse	SP-4401	-	-
1966-W466	2439442-21	-	1966 Nov 12 1702	0.000	COMAE/SEFC	SS	COMAE/SEFC	Aeron/Eclipse	SP-4401	-	-
1966-W467	2439441-50	-	1966 Nov 12	0.000	COMAE/SEFC	SS	COMAE/SEFC	Aeron/Eclipse	SP-4401	-	-
1966-W468	2439441-50	-	1966 Nov 12	0.000	COMAE/SEFC	SS	COMAE/SEFC	Aeron/Eclipse	SP-4401	-	-
1966-W469	2439441-50	-	1966 Nov 12	0.000	COMAE/SEFC	SS	COMAE/SEFC	Aeron/Eclipse	SP-4401	-	-
1966-W470	2439441-50	-	1966 Nov 12	0.000	COMAE/SEFC	SS	COMAE/SEFC	Aeron/Eclipse	SP-4401	-	-
1966-W471	2439441-50	-	1966 Nov 12	0.000	COMAE/SEFC	SS	COMAE/SEFC	Aeron/Eclipse	SP-4401	-	-
1966-W472	2439441-50	-	1966 Nov 12	0.000	COMAE/SEFC	SS	COMAE/SEFC	Aeron/Eclipse	SP-4401	-	-
1966-W473	2439446-13	-	1966 Nov 16 1505	0.000	TIPE	SS	TIPE/Defendonca	Aeron	SP-175	SP-175	-
1966-W474	2439446-17	-	1966 Nov 16 1606	0.000	WFF	SS	WFF/	Meteo	Homkrev97_607	-	-
1966-W376	2439459-50	-	1966 Dec	0.000	ANS	SS	USAF/6MW	Aeron	FC	-	-
1966-W377	2439459-50	-	1966 Dec	0.000	ANS	SS	USAF/6MW	Aeron	FC	-	-
1966-W378	2439459-50	-	1966 Dec	0.000	ANS	SS	USAF/6MW	Aeron	FC	-	-
1966-W379	2439459-50	-	1966 Dec	0.000	ANS	SS	USAF/6MW	Aeron	FC	-	-
1966-W380	2439459-50	-	1966 Dec	0.000	ANS	SS	USAF/6MW	Aeron	FC	-	-
1966-W381	2439459-50	-	1966 Dec	0.000	ANS	SS	USAF/6MW	Aeron	FC	-	-
1966-W382	2439459-50	-	1966 Dec	0.000	ANS	SS	USAF/6MW	Aeron	FC	-	-
1966-W383	2439459-50	-	1966 Dec	0.000	ANS	SS	USAF/6MW	Aeron	FC	-	-
1966-W384	2439459-65	-	1966 Dec 10 0337	0.000	LARCV/MBU	SS	LARCV/MBU	Meteo	TM-D-4905	-	-
1966-W385	2439459-65	-	1966 Dec 10 0352	0.000	LARCV/MBU	SS	LARCV/MBU	Meteo	TM-D-4905	-	-
1966-W386	2439459-66	-	1966 Dec 10 0400	0.000	LARCV/MBU	SS	LARCV/MBU	Meteo	TM-D-4905	-	-
1966-W387	2439459-67	-	1966 Dec 10 0628	0.000	LARCV/MBU	SS	LARCV/MBU	Meteo	TM-D-4905	-	-
1966-W388	2439459-77	-	1966 Dec 10 0630	0.000	LARCV/MBU	SS	LARCV/MBU	Meteo	TM-D-4905	-	-
1966-W389	2439459-88	-	1966 Dec 10 0900	0.000	WNR	SS	USAF/6MW	Meteo	TM-X-1451	-	-
1966-W390	2439459-88	-	1966 Dec 10 0900	0.000	WNR	SS	USAF/6MW	Meteo	USCSPARE7-81	-	-
1966-W391	2439470-26	-	1966 Dec 10 1812?	0.000	ERDA	SS	PSU/Halo	Tonos	SR8-325	-	-
1966-W114	2439471-50	-	1966 Dec 12	0.000	ANS	SS	USAF/6MW	Aeron	FC	-	-
1966-W407	2439473-29	-	1967 Jan	0.000	ANS	SS	USAF/6MW	Aeron	FC	-	-
1967-W01	2439490-50	-	1967 Jan	0.000	ANS	SS	USAF/6MW	Aeron	FC	-	-
1967-W02	2439490-50	-	1967 Jan	0.000	ANS	SS	USAF/6MW	Aeron	FC	-	-
1967-W03	2439490-50	-	1967 Jan	0.000	ANS	SS	USAF/6MW	Aeron	FC	-	-
1967-W04	2439490-50	-	1967 Jan	0.000	ANS	SS	USAF/6MW	Aeron	FC	-	-
1967-W05	2439490-50	-	1967 Jan	0.000	ANS	SS	USAF/6MW	Aeron	FC	-	-
1967-W06	2439490-50	-	1967 Jan	0.000	ANS	SS	USAF/6MW	Aeron	FC	-	-
1967-W07	2439490-50	-	1967 Jan	0.000	ANS	SS	USAF/6MW	Aeron	FC	-	-
1967-W08	2439490-50	-	1967 Jan	0.000	ANS	SS	USAF/6MW	Aeron	FC	-	-
1967-W09	2439490-50	-	1967 Jan	0.000	ANS	SS	USAF/6MW	Aeron	FC	-	-



Launch_Tag	Launch_ID	Variant	Flight_ID	OrbPay	Agency	Launch	Launch_Code	Group	Category	LTCite	Cite	Notes
1967-W340	2439614-67	-	-	0.000	AFORL	SS	AFORL/	AFORL/	Meteo	StratoCircr, 453	-	-
1967-W341	2439614-67	-	-	0.000	AFORL	SS	AFORL/	AFORL/	Meteo	StratoCircr, 453	-	-
1967-W337	2439615-19	-	-	0.000	AFORL	SS	AFORL/	AFORL/	Meteo	StratoCircr, 453	-	-
1967-W338	2439615-19	-	-	0.000	AFORL	SS	AFORL/	AFORL/	Meteo	StratoCircr, 453	-	-
1967-W339	2439615-19	-	-	0.000	AFORL	SS	AFORL/	AFORL/	Meteo	StratoCircr, 453	-	-
1967-W269	2439615-36	-	-	0.000	WFF	SS	WFF/	WFF/	Meteo	HokkRevsr7, 607	-	-
1967-W291	2439615-81	-	-	0.000	WFF	SS	WFF/	WFF/	Meteo	HokkRevsr7, 607	-	-
1967-W289	2439621-12	-	-	0.000	AFORL	SS	AFORL/	AFORL/	Test	AFORL-68-0622	-	-
1967-W29	2439621-17	-	-	0.000	AFORL	SS	AFORL/	AFORL/	Test	AFORL-68-0622	-	-
1967-W270	2439628-125	-	-	0.000	AFORL	SS	AFORL/	AFORL/	Meteo	HokkRevsr7, 607	SP-176	-
1967-W118	2439628-18	-	-	0.000	WFF	SS	WFF/	WFF/	Meteo	HokkRevsr7, 607	SP-176	-
1967-W272	2439636-28	-	-	0.000	COMAE	SS	COMAE/Lichtenstein	COMAE/Lichtenstein	Meteo	WDCRF	SP-176	-
1967-W119	2439641-50	-	-	0.000	WFF	SS	WFF/	WFF/	Meteo	SP-176	-	-
1967-W120	2439641-50	-	-	0.000	ANS	SS	USAF/6W	USAF/6W	Aeron	FC	-	-
1967-W121	2439641-50	-	-	0.000	ANS	SS	USAF/6W	USAF/6W	Aeron	FC	-	-
1967-W122	2439641-50	-	-	0.000	ANS	SS	USAF/6W	USAF/6W	Aeron	FC	-	-
1967-W123	2439641-50	-	-	0.000	ANS	SS	USAF/6W	USAF/6W	Aeron	FC	-	-
1967-W124	2439641-50	-	-	0.000	ANS	SS	USAF/6W	USAF/6W	Aeron	FC	-	-
1967-W125	2439641-50	-	-	0.000	ANS	SS	USAF/6W	USAF/6W	Aeron	FC	-	-
1967-W126	2439641-50	-	-	0.000	ANS	SS	USAF/6W	USAF/6W	Aeron	FC	-	-
1967-W127	2439641-50	-	-	0.000	ANS	SS	USAF/6W	USAF/6W	Aeron	FC	-	-
1967-W128	2439641-50	-	-	0.000	ANS	SS	USAF/6W	USAF/6W	Aeron	FC	-	-
1967-W273	2439644-28	-	-	0.000	AFORL	SS	AFORL/Sandoz	AFORL/Sandoz	Meteo	HokkRevsr7, 607	SP-176	-
1967-W129	2439646-58	-	-	0.000	WFF	SS	WFF/	WFF/	Ionos	FC	WDCRF	-
1967-W274	2439649-11	-	-	0.000	WFF	SS	WFF/	WFF/	Meteo	HokkRevsr7, 607	SP-176	-
1967-W130	2439655-19	-	-	0.000	COMAE	SS	COMAE/Lichtenstein	COMAE/Lichtenstein	Meteo	WDCRF	SP-176	-
1967-W275	2439657-24	-	-	0.000	WFF	SS	WFF/	WFF/	Meteo	HokkRevsr7, 607	SP-176	-
1967-W276	2439661-10	-	-	0.000	LARON	SS	WNR/	WNR/	Meteo	TH-X-1642	SP-176	-
1967-W277	2439663-09	-	-	0.000	WFF	SS	WFF/	WFF/	Meteo	HokkRevsr7, 607	SP-176	-
1967-W132	2439663-34	-	-	0.000	WFF	SP	WFF/	WFF/	Meteo	WDCRF	SP-176	-
1967-W277	2439670-15	-	-	0.000	WFF	SS	WFF/	WFF/	Meteo	HokkRevsr7, 607	SP-176	-
1967-W135	2439671-50	-	-	0.000	ANS	SS	USAF/6W	USAF/6W	Aeron	FC	-	-
1967-W139	2439671-50	-	-	0.000	ANS	SS	USAF/6W	USAF/6W	Aeron	FC	-	-
1967-W140	2439671-50	-	-	0.000	ANS	SS	USAF/6W	USAF/6W	Aeron	FC	-	-
1967-W141	2439671-50	-	-	0.000	ANS	SS	USAF/6W	USAF/6W	Aeron	FC	-	-
1967-W142	2439671-50	-	-	0.000	ANS	SS	USAF/6W	USAF/6W	Aeron	FC	-	-
1967-W143	2439671-50	-	-	0.000	ANS	SS	USAF/6W	USAF/6W	Aeron	FC	-	-
1967-W144	2439671-50	-	-	0.000	ANS	SS	USAF/6W	USAF/6W	Aeron	FC	-	-
1967-W145	2439671-50	-	-	0.000	ANS	SS	USAF/6W	USAF/6W	Aeron	FC	-	-
1967-W146	2439671-50	-	-	0.000	ANS	SS	USAF/6W	USAF/6W	Aeron	FC	-	-
1967-W278	2439677-11	-	-	0.000	AFORL	SS	AFORL/	AFORL/	Meteo	HokkRevsr7, 607	SP-176	-
1967-W150	2439677-11	-	-	0.000	WFF	SS	WFF/	WFF/	Test	SP-176	-	-
1967-W279	2439682-34	-	-	0.000	WFF	SS	WFF/	WFF/	Meteo	AFORL-68-0622	-	-
1967-W151	2439686-09	-	-	0.000	LARON	SS	WRC/?	WRC/?	Meteo	HokkRevsr7, 607	SP-176	-
1967-W152	2439689-08	-	-	0.000	WFF	SS	WFF/	WFF/	Meteo	TH-X-1499	SP-176	-
1967-W153	2439700-50	-	-	0.000	WFF	SS	WFF/	WFF/	Meteo	HokkRevsr7, 607	-	-
1967-W154	2439702-50	-	-	0.000	ANS	SS	USAF/6W	USAF/6W	Aeron	FC	-	-
1967-W155	2439702-50	-	-	0.000	ANS	SS	USAF/6W	USAF/6W	Aeron	FC	-	-
1967-W156	2439702-50	-	-	0.000	ANS	SS	USAF/6W	USAF/6W	Aeron	FC	-	-
1967-W157	2439702-50	-	-	0.000	ANS	SS	USAF/6W	USAF/6W	Aeron	FC	-	-
1967-W158	2439702-50	-	-	0.000	ANS	SS	USAF/6W	USAF/6W	Aeron	FC	-	-
1967-W159	2439702-50	-	-	0.000	ANS	SS	USAF/6W	USAF/6W	Aeron	FC	-	-
1967-W160	2439702-50	-	-	0.000	ANS	SS	USAF/6W	USAF/6W	Aeron	FC	-	-
1967-W161	2439702-50	-	-	0.000	ANS	SS	USAF/6W	USAF/6W	Aeron	FC	-	-
1967-W162	2439702-50	-	-	0.000	ANS	SS	USAF/6W	USAF/6W	Aeron	FC	-	-
1967-W163	2439702-50	-	-	0.000	ANS	SS	USAF/6W	USAF/6W	Aeron	FC	-	-
1967-W164	2439702-50	-	-	0.000	ANS	SS	USAF/6W	USAF/6W	Aeron	FC	-	-
1967-W165	2439705-48	-	-	0.000	WFF	SS	WFF/	WFF/	Meteo	HokkRevsr7, 607	SP-176	-
1967-W166	2439711-52	-	-	0.000	WFF	SS	WFF/	WFF/	Meteo	HokkRevsr7, 607	SP-176	-
1967-W280	2439711-52	-	-	0.000	WFF	SS	WFF/	WFF/	Meteo	SP-4008	-	-
1967-W104	2439711-98	-	-	0.000	AFORL	SS	AFORL/	AFORL/	Blg	CR-1509	-	-
1967-W31	2439718-16	-	-	0.000	WFF	SS	WFF/	WFF/	Test	HokkRevsr7, 607	SP-176	-
1967-W281	2439719-23	-	-	0.000	WFF	SS	WFF/	WFF/	Meteo	AFORL-68-0622	-	-
1967-W282	2439721-03	-	-	0.000	WFF	SS	WFF/	WFF/	Meteo	HokkRevsr7, 607	SP-176	-
1967-W170	2439724-31	-	-	0.000	WNR	SS	WNR/	WNR/	Aeronomy	CR-1509	-	-
1967-W283	2439728-10	-	-	0.000	WFF	SS	WFF/	WFF/	Meteo	HokkRevsr7, 607	SP-176	-
1967-W284	2439733-26	-	-	0.000	ANS	SS	USAF/6W	USAF/6W	Meteo	HokkRevsr7, 607	SP-176	-
1967-W174	2439733-50	-	-	0.000	ANS	SS	USAF/6W	USAF/6W	Aeron	FC	-	-
1967-W175	2439733-50	-	-	0.000	ANS	SS	USAF/6W	USAF/6W	Aeron	FC	-	-
1967-W176	2439733-50	-	-	0.000	WFF	SS	WFF/	WFF/	Meteo	HokkRevsr7, 607	SP-176	-
1967-W285	2439740-11	-	-	0.000	WFF	SS	WFF/	WFF/	Meteo	HokkRevsr7, 607	SP-176	-
1967-W286	2439742-10	-	-	0.000	WFF	SS	WFF/	WFF/	Meteo	HokkRevsr7, 607	SP-176	-
1967-W179	2439747-52	-	-	0.000	WFF	SS	WFF/	WFF/	Meteo	HokkRevsr7, 607	SP-176	-
1967-W287	2439749-07	-	-	0.000	WFF	SS	WFF/	WFF/	Meteo	HokkRevsr7, 607	SP-176	-
1967-W181	2439750-51	-	-	0.000	WNR	SS	WNR/	WNR/	Aeronomy	CR-1509	-	-
1967-W184	2439752-50	-	-	0.000	WNR	SS	WNR/	WNR/	Aeronomy	CR-1509	-	-
1967-W185	2439752-50	-	-	0.000	WNR	SS	WNR/	WNR/	Aeronomy	CR-1509	-	-
1967-W186	2439752-50	-	-	0.000	WNR	SS	WNR/	WNR/	Aeronomy	CR-1509	-	-
1967-W187	2439753-50	-	-	0.000	WFF	SS	WFF/	WFF/	Meteo	HokkRevsr7, 607	SP-176	-
1967-W288	2439754-15	-	-	0.000	WFF	SS	WFF/	WFF/	Meteo	HokkRevsr7, 607	SP-176	-
1967-W289	2439756-15	-	-	0.000	WFF	SS	WFF/	WFF/	Meteo	HokkRevsr7, 607	SP-176	-
1967-W290	2439761-11	-	-	0.000	WFF	SS	WFF/	WFF/	Meteo	HokkRevsr7, 607	SP-176	-
1967-W189	2439763-50	-	-	0.000	ANS	SS	USAF/6W	USAF/6W	Aeron	FC	-	-
1967-W190	2439763-50	-	-	0.000	ANS	SS	USAF/6W	USAF/6W	Aeron	FC	-	-
1967-W191	2439763-50	-	-	0.000	ANS	SS	USAF/6W	USAF/6W	Aeron	FC	-	-
1967-W322	2439768-50	-	-	0.000	WFF	SS	WFF/	WFF/	Meteo	SP-176	-	-





Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	OrbPay	Agency	Launch_Code	Group	Category	LTCite	Cite	Notes
1966-W57	2433915-50	1966 Mar	Arcas	-	-	0.000	ANS	SS	USAF/6W	Aeron	FC	-	-
1966-W58	2433915-50	1966 Mar	Arcas	-	-	0.000	ANS	SS	USAF/6W	Aeron	FC	-	-
1966-W59	2433915-50	1966 Mar	Arcas	-	-	0.000	ANS	SS	USAF/6W	Aeron	FC	-	-
1966-W60	2433915-50	1966 Mar	Arcas	-	-	0.000	ANS	SS	USAF/6W	Aeron	FC	-	-
1966-W61	2433915-50	1966 Mar	Arcas	-	-	0.000	ANS	SS	USAF/6W	Aeron	FC	-	-
1966-W62	2433915-50	1966 Mar	Arcas	-	-	0.000	ANS	SS	USAF/6W	Aeron	FC	-	-
1966-W63	2433915-50	1966 Mar	Arcas	-	-	0.000	ANS	SS	USAF/6W	Aeron	FC	-	-
1966-W64	2433915-50	1966 Mar	Arcas	-	-	0.000	ANS	SS	USAF/6W	Aeron	FC	-	-
1966-W65	2433915-50	1966 Mar	Arcas	-	-	0.000	ANS	SS	USAF/6W	Aeron	FC	-	-
1966-W66	2433915-50	1966 Mar	Arcas	-	-	0.000	ANS	SS	USAF/6W	Aeron	FC	-	-
1966-W16	2433921-50	1966 Mar 6	Arcas	-	-	0.000	GSFC/PSU	SS	PSU/	Aeron/CR	FC	-	-
1966-W320	2433922-13	1966 Mar 6	Arcas	-	EXAMETHET W 75	0.000	WFF	SS	WFF/	Meteo	SP-231	-	-
1966-W69	2433922-13	1966 Mar 13	Arcas	-	EXAMETHET C30	0.000	CDMAE	SS	CDMAE/Lichtenstein	Aeron	WDRRF	-	-
1966-W321	2433930-12	1966 Mar 14	Arcas	-	EXAMETHET W 76	0.000	WFF	SS	WFF/	Meteo	SP-231	-	-
1966-W322	2433937-18	1966 Mar 21	Arcas	-	EXAMETHET W 77	0.000	WFF	SS	WFF/	Meteo	SP-231	-	-
1966-W71	2433943-17	1966 Mar 27	Arcas	-	EXAMETHET C32	0.000	CDMAE	SS	CDMAE/Lichtenstein	Aeron	WDRRF	-	-
1966-W323	2433943-28	1966 Mar 27	Arcas	-	EXAMETHET W 78	0.000	WFF	SS	WFF/	Meteo	SP-231	-	-
1966-W73	2433946-50	1966 Apr	Arcas	-	-	0.000	ANS	SS	USAF/6W	Aeron	FC	-	-
1966-W74	2433946-50	1966 Apr	Arcas	-	-	0.000	ANS	SS	USAF/6W	Aeron	FC	-	-
1966-W75	2433946-50	1966 Apr	Arcas	-	-	0.000	ANS	SS	USAF/6W	Aeron	FC	-	-
1966-W76	2433946-50	1966 Apr	Arcas	-	-	0.000	ANS	SS	USAF/6W	Aeron	FC	-	-
1966-W77	2433946-50	1966 Apr	Arcas	-	-	0.000	ANS	SS	USAF/6W	Aeron	FC	-	-
1966-W78	2433946-50	1966 Apr	Arcas	-	-	0.000	ANS	SS	USAF/6W	Aeron	FC	-	-
1966-W79	2433946-50	1966 Apr	Arcas	-	-	0.000	ANS	SS	USAF/6W	Aeron	FC	-	-
1966-W80	2433946-50	1966 Apr	Arcas	-	-	0.000	ANS	SS	USAF/6W	Aeron	FC	-	-
1966-W81	2433946-50	1966 Apr	Arcas	-	-	0.000	ANS	SS	USAF/6W	Aeron	FC	-	-
1966-W324	2433950-17	1966 Apr 3	Arcas	-	EXAMETHET W 79	0.000	ANS	SS	WFF/	Meteo	SP-231	-	-
1966-W285	2433952-25	1966 Apr 5	Arcas	-	1966 Apr 5 1559	0.000	ANS	SS	WFF/	Meteo	SP-231	-	-
1966-W325	2433952-25	1966 Apr 5	Arcas	-	1966 Apr 5 1807	0.000	ANS	SS	WFF/	Meteo	SP-231	-	-
1966-W85	2433954-50	1966 Apr 8	Arcas	-	MASA 12.110H	0.000	WFF	SF	GSFC/Shitth	Aeronomy/Test	JASci33,695	-	-
1966-W86	2433956-59	1966 Apr 8	Arcas	-	EXAMETHET C34	0.000	CDMAE	SS	CDMAE/Lichtenstein	Aeron	WDRRF	-	-
1966-W326	2433957-13	1966 Apr 10	Arcas	-	EXAMETHET W 80	0.000	WFF	SS	WFF/	Meteo	SP-231	-	-
1966-W91	2433976-50	1966 May	Arcas	-	-	0.000	ANS	SS	USAF/6W	Aeron	FC	-	-
1966-W82	2433976-50	1966 May	Arcas	-	-	0.000	ANS	SS	USAF/6W	Aeron	FC	-	-
1966-W83	2433976-50	1966 May	Arcas	-	-	0.000	ANS	SS	USAF/6W	Aeron	FC	-	-
1966-W84	2433976-50	1966 May	Arcas	-	-	0.000	ANS	SS	USAF/6W	Aeron	FC	-	-
1966-W85	2433976-50	1966 May	Arcas	-	-	0.000	ANS	SS	USAF/6W	Aeron	FC	-	-
1966-W86	2433976-50	1966 May	Arcas	-	-	0.000	ANS	SS	USAF/6W	Aeron	FC	-	-
1966-W87	2433976-50	1966 May	Arcas	-	-	0.000	ANS	SS	USAF/6W	Aeron	FC	-	-
1966-W88	2433976-50	1966 May	Arcas	-	-	0.000	ANS	SS	USAF/6W	Aeron	FC	-	-
1966-W89	2433976-50	1966 May	Arcas	-	-	0.000	ANS	SS	USAF/6W	Aeron	FC	-	-
1966-W90	2433976-50	1966 May	Arcas	-	-	0.000	ANS	SS	USAF/6W	Aeron	FC	-	-
1966-W92	2433976-50	1966 May	Arcas	-	-	0.000	ANS	SS	USAF/6W	Aeron	FC	-	-
1966-W93	2433976-50	1966 May	Arcas	-	-	0.000	ANS	SS	USAF/6W	Aeron	FC	-	-
1966-W94	2433976-50	1966 May	Arcas	-	-	0.000	ANS	SS	USAF/6W	Aeron	FC	-	-
1966-W95	2433976-50	1966 May	Arcas	-	-	0.000	ANS	SS	USAF/6W	Aeron	FC	-	-
1966-W96	2433976-50	1966 May	Arcas	-	-	0.000	ANS	SS	USAF/6W	Aeron	FC	-	-
1966-W97	2433976-50	1966 May	Arcas	-	-	0.000	ANS	SS	USAF/6W	Aeron	FC	-	-
1966-W329	2433985-12	1966 May 8	Arcas	-	EXAMETHET W 84	0.000	WFF	SS	WFF/	Meteo	SP-231	-	-
1966-W330	2433982-22	1966 May 15	Arcas	-	EXAMETHET W 85	0.000	WFF	SS	WFF/	Meteo	SP-231	-	-
1966-W105	2433985-77	1966 May 17	Arcas	-	Sandia	0.000	SAID	SS	SAID/	Aeron	SP-219	-	-
1966-W106	2433984-0	1966 May 17	Arcas	-	Sandia	0.000	SAID	SS	SAID/	Aeron	SP-219	-	-
1966-W107	2433984-48	1966 May 17	Arcas	-	Sandia	0.000	SAID	SS	SAID/	Aeron	SP-219	-	-
1966-W108	2433984-48	1966 May 17	Arcas	-	Sandia	0.000	SAID	SS	SAID/	Aeron	SP-219	-	-
1966-W331	2433986-50	1966 May 22	Arcas	-	EXAMETHET W 86	0.000	WFF	SS	WFF/	Meteo	SP-231	-	-
1966-W332	2433989-10	1966 May 22	Arcas	-	EXAMETHET W 86	0.000	WFF	SS	WFF/	Meteo	SP-231	-	-
1966-W110	2440000-31	1966 May 23	Arcas	-	Sandia	0.000	WDRRF	SS	WDRRF/	Aeron/CR	PSU-SR335	-	-
1966-W112	2440000-31	1966 Jun	Arcas	-	Sandia	0.000	WDRRF	SS	WDRRF/	Aeron/CR	PSU-SR335	-	-
1966-W113	2440007-50	1966 Jun	Arcas	-	-	0.000	ANS	SS	USAF/6W	Aeron	FC	-	-
1966-W114	2440007-50	1966 Jun	Arcas	-	-	0.000	ANS	SS	USAF/6W	Aeron	FC	-	-
1966-W115	2440007-50	1966 Jun	Arcas	-	-	0.000	ANS	SS	USAF/6W	Aeron	FC	-	-
1966-W116	2440007-50	1966 Jun	Arcas	-	-	0.000	ANS	SS	USAF/6W	Aeron	FC	-	-
1966-W117	2440007-50	1966 Jun	Arcas	-	-	0.000	ANS	SS	USAF/6W	Aeron	FC	-	-
1966-W118	2440007-50	1966 Jun	Arcas	-	-	0.000	ANS	SS	USAF/6W	Aeron	FC	-	-
1966-W119	2440007-50	1966 Jun	Arcas	-	-	0.000	ANS	SS	USAF/6W	Aeron	FC	-	-
1966-W120	2440007-50	1966 Jun	Arcas	-	-	0.000	ANS	SS	USAF/6W	Aeron	FC	-	-
1966-W121	2440007-50	1966 Jun	Arcas	-	-	0.000	ANS	SS	USAF/6W	Aeron	FC	-	-
1966-W122	2440013-30	1966 Jun 5	Arcas	-	EXAMETHET V 87	0.000	WFF	SS	WFF/	Meteo	SP-231	-	-
1966-W333	2440013-30	1966 Jun 13	Arcas	-	EXAMETHET V 88	0.000	WFF	SS	WFF/	Meteo	SP-231	-	-
1966-W334	2440021-09	1966 Jun 13	Arcas	-	EXAMETHET C38	0.000	CDMAE/CSFC	SU	CDMAE/Lichtenstein	Aeron	WDRRF	-	-
1966-W125	2440021-26	1966 Jun 13	Arcas	-	EXAMETHET W 89	0.000	WFF	SS	WFF/	Meteo	SP-231	-	-
1966-W335	2440027-11	1966 Jun 19	Arcas	-	EXAMETHET W 89	0.000	WFF	SS	WFF/	Meteo	SP-231	-	-
1966-W126	2440037-50	1966 Jun	Arcas	-	-	0.000	ANS	SS	USAF/6W	Aeron	FC	-	-
1966-W127	2440037-50	1966 Jun	Arcas	-	-	0.000	ANS	SS	USAF/6W	Aeron	FC	-	-
1966-W128	2440037-50	1966 Jun	Arcas	-	-	0.000	ANS	SS	USAF/6W	Aeron	FC	-	-
1966-W129	2440037-50	1966 Jun	Arcas	-	-	0.000	ANS	SS	USAF/6W	Aeron	FC	-	-
1966-W130	2440037-50	1966 Jun	Arcas	-	-	0.000	ANS	SS	USAF/6W	Aeron	FC	-	-
1966-W131	2440037-50	1966 Jun	Arcas	-	-	0.000	ANS	SS	USAF/6W	Aeron	FC	-	-
1966-W132	2440037-50	1966 Jun	Arcas	-	-	0.000	ANS	SS	USAF/6W	Aeron	FC	-	-
1966-W133	2440037-50	1966 Jun	Arcas	-	-	0.000	ANS	SS	USAF/6W	Aeron	FC	-	-
1966-W134	2440037-50	1966 Jun	Arcas	-	-	0.000	ANS	SS	USAF/6W	Aeron	FC	-	-
1966-W135	2440037-50	1966 Jun	Arcas	-	-	0.000	ANS	SS	USAF/6W	Aeron	FC	-	-
1966-W136	2440037-50	1966 Jun	Arcas	-	-	0.000	ANS	SS	USAF/6W	Aeron	FC	-	-
1966-W137	2440037-50	1966 Jun	Arcas	-	-	0.000	ANS	SS	USAF/6W	Aeron	FC	-	-
1966-W138	2440037-50	1966 Jun	Arcas	-	-	0.000	ANS	SS	USAF/6W	Aeron	FC	-	-
1966-W139	2440037-50	1966 Jun	Arcas	-	-	0.000	ANS	SS	USAF/6W	Aeron	FC	-	-
1966-W140	2440037-50	1966 Jun	Arcas	-	-	0.000	ANS	SS	USAF/6W	Aeron	FC	-	-
1966-W141	2440037-50	1966 Jun	Arcas	-	-	0.000	ANS	SS	USAF/6W	Aeron	FC	-	-
1966-W142	2440037-50	1966 Jun	Arcas	-	-	0.000	ANS	SS	USAF/6W	Aeron	FC	-	-
1966-W143	2440037-50	1966 Jun	Arcas	-	-	0.000	ANS	SS	USAF/6W	Aeron	FC	-	-
1966-W144	2440037-50	1966 Jun	Arcas	-	-	0.000	ANS	SS	USAF/6W	Aeron	FC	-	-
1966-W145	2440037-50	1966 Jun	Arcas	-	-	0.000	ANS	SS	USAF/6W	Aeron	FC	-	-
1966-W336	2440040-16	1966 Jun 2	Arcas	-	EXAMETHET W 90	0.000	WFF	SS	WFF/	Meteo	SP-231	-	-
1966-W337	2440048-12	1966 Jun 10	Arcas	-	EXAMETHET W 91	0.000	WFF	SS	WFF/	Meteo	SP-231	-	-
1966-W152	2440053-57	1966 Jun 16	Arcas	-	EXAMETHET C40	0.000	CDMAE/CSFC	SU	CDMAE/Lichtenstein	Aeron	WDRRF	-	-
1966-W337	2440055-09	1966 Jun 17	Arcas	-	EXAMETHET W 92	0.000	WFF	SS	WFF/	Meteo	SP-231	-	-
1966-W154	2440056-26	1966 Jun 18	Arcas	-	FC-DR-348	0.000	ANS	SS	WDC/Krusgor	Aeron	FC	-	-
1966-W286	2440057-23	1966 Jun 19	Arcas	-	FC-DR-348	0.000	ANS	SS	WDC/Krusgor	Aeron	FC	-	-
1966-W155	2440057-27	1966 Jun 19	Arcas	-	EXAMETHET W 93	0.000	ANS	SS	WDC/Krusgor	Aeron	FC	-	-
1966-W338	2440062-13	1966 Jun 24	Arcas	-	EXAMETHET W 93	0.000	WFF	SS	WFF/	Meteo	SP-231	-	-
1966-W339	2440062-17	1966 Jun 24	Arcas	-	EXAMETHET W 93	0.000	WFF	SS	WFF/	Meteo	SP-231	-	-
1966-W340	2440062-17	1966 Jun 24	Arcas	-	EXAMETHET W 93	0.000	WFF	SS	WFF/	Meteo	SP-231	-	-

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	OrbPay	Agency	Launch_Code	Group	Category	LTCite	Cite	Notes
1966-W339	2440089-18	1966 Jul 31 1618	Arcas	-	EXAMETHET W 94	0.000	WFF	SS	WFF/	Meteo	SP-231	-	-
1966-W156	2440088-50	1966 Aug	Arcas	-	-	0.000	ANS	SS	USAF/6W	Aeron	FC	-	-
1966-W157	2440088-50	1966 Aug	Arcas	-	-	0.000	ANS	SS	USAF/6W	Aeron	FC	-	-
1966-W158	2440088-50	1966 Aug	Arcas	-	-	0.000	ANS	SS	USAF/6W	Aeron	FC	-	-
1966-W159	2440088-50	1966 Aug	Arcas	-	-	0.000	ANS	SS	USAF/6W	Aeron	FC	-	-
1966-W160	2440088-50	1966 Aug	Arcas	-	-	0.000	ANS	SS	USAF/6W	Aeron	FC	-	-
1966-W341	2440083-23	1966 Aug 14 1730	Arcas	-	EXAMETHET W 96	0.000	WFF	SS	WFF/	Meteo	SP-231	-	-
1966-W342	2440083-48	1966 Aug 14 2328:00	Arcas	-	EXAMETHET C42	0.000	WFF	SU	COMAE/Lichtenstein	Aeron	WDRCF	-	-
1966-W343	2440090-06	1966 Aug 21 1321	Arcas	-	EXAMETHET W 97	0.000	WFF	SS	WFF/	Meteo	SP-231	-	-
1966-W344	2440097-10	1966 Aug 28 1421	Arcas	-	EXAMETHET W 98	0.000	WFF	SS	WFF/	Meteo	SP-231	-	-
1966-W171	2440099-50	1966 Sep	Arcas	-	-	0.000	ANS	SS	USAF/6W	Aeron	FC	-	-
1966-W172	2440099-50	1966 Sep	Arcas	-	-	0.000	ANS	SS	USAF/6W	Aeron	FC	-	-
1966-W173	2440099-50	1966 Sep	Arcas	-	-	0.000	ANS	SS	USAF/6W	Aeron	FC	-	-
1966-W174	2440099-50	1966 Sep	Arcas	-	-	0.000	ANS	SS	USAF/6W	Aeron	FC	-	-
1966-W175	2440099-50	1966 Sep	Arcas	-	-	0.000	ANS	SS	USAF/6W	Aeron	FC	-	-
1966-W176	2440099-50	1966 Sep	Arcas	-	-	0.000	ANS	SS	USAF/6W	Aeron	FC	-	-
1966-W344	2440104-16	1966 Sep 4 1544	Arcas	-	EXAMETHET W 99	0.000	WFF	SS	WFF/	Meteo	SP-231	-	-
1966-W345	2440111-26	1966 Sep 11 1810	Arcas	-	EXAMETHET W 100	0.000	WFF	SS	WFF/	Meteo	SP-231	-	-
1966-W284	2440111-26	1966 Sep 11 1821	Arcas	?	Arcasonde	0.000	WFF/NOTS	SS	NOTS/?	Meteo	BT-1040.04	-	-
1966-W167	2440116-26	1966 Sep 16 1807	Arcas	-	RMSN 15. GOUE	0.000	WFF/NOTS	SS	NOTS/Arueger	Plasma	WDRCF	-	-
1966-W346	2440118-11	1966 Sep 18 1812	Arcas	-	-	0.000	WFF	SS	WFF/	Meteo	TR-79712	-	-
1966-W308	2440118-14	1966 Sep 18 1519	Arcas	-	EXAMETHET W 101	0.000	WFF	SS	WFF/	Meteo	SP-231	-	-
1966-W283	2440119-65	1966 Sep 20 0340	Arcas	-	EXAMETHET M41	0.000	CHME	SU	TUBE/DeMendoza	Aeron	SP-231	-	-
1966-W169	2440124-57	1966 Sep 25 0140	Arcas	-	EXAMETHET C44	0.000	ERDA	SS	COMAE/Lichtenstein	Aeron	SRL0.208	-	-
1966-W347	2440125-10	1966 Sep 25 1424	Arcas	-	PSU-HALO-1	0.000	WFF	SS	WFF/	Meteo	SP-231	-	-
1966-W190	2440129-50	1966 Oct	Arcas	-	EXAMETHET W 102	0.000	ANS	SS	USAF/6W	Aeron	FC	-	-
1966-W191	2440129-50	1966 Oct	Arcas	-	-	0.000	ANS	SS	USAF/6W	Aeron	FC	-	-
1966-W192	2440129-50	1966 Oct	Arcas	-	-	0.000	ANS	SS	USAF/6W	Aeron	FC	-	-
1966-W193	2440129-50	1966 Oct	Arcas	-	-	0.000	ANS	SS	USAF/6W	Aeron	FC	-	-
1966-W194	2440129-50	1966 Oct	Arcas	-	-	0.000	ANS	SS	USAF/6W	Aeron	FC	-	-
1966-W195	2440129-50	1966 Oct	Arcas	-	-	0.000	ANS	SS	USAF/6W	Aeron	FC	-	-
1966-W196	2440129-50	1966 Oct	Arcas	-	-	0.000	ANS	SS	USAF/6W	Aeron	FC	-	-
1966-W197	2440129-50	1966 Oct	Arcas	-	-	0.000	ANS	SS	USAF/6W	Aeron	FC	-	-
1966-W198	2440129-50	1966 Oct	Arcas	-	-	0.000	ANS	SS	USAF/6W	Aeron	FC	-	-
1966-W199	2440129-50	1966 Oct	Arcas	-	-	0.000	ANS	SS	USAF/6W	Aeron	FC	-	-
1966-W200	2440129-50	1966 Oct	Arcas	-	-	0.000	ANS	SS	USAF/6W	Aeron	FC	-	-
1966-W201	2440129-50	1966 Oct	Arcas	-	-	0.000	ANS	SS	USAF/6W	Aeron	FC	-	-
1966-W202	2440129-50	1966 Oct	Arcas	-	-	0.000	ANS	SS	USAF/6W	Aeron	FC	-	-
1966-W203	2440129-50	1966 Oct	Arcas	-	-	0.000	ANS	SS	USAF/6W	Aeron	FC	-	-
1966-W204	2440129-50	1966 Oct	Arcas	-	-	0.000	ANS	SS	USAF/6W	Aeron	FC	-	-
1966-W205	2440129-50	1966 Oct	Arcas	-	-	0.000	ANS	SS	USAF/6W	Aeron	FC	-	-
1966-W206	2440129-50	1966 Oct	Arcas	-	-	0.000	ANS	SS	USAF/6W	Aeron	FC	-	-
1966-W207	2440129-50	1966 Oct	Arcas	-	-	0.000	ANS	SS	USAF/6W	Aeron	FC	-	-
1966-W208	2440129-50	1966 Oct	Arcas	-	-	0.000	ANS	SS	USAF/6W	Aeron	FC	-	-
1966-W209	2440129-50	1966 Oct	Arcas	-	-	0.000	ANS	SS	USAF/6W	Aeron	FC	-	-
1966-W210	2440129-50	1966 Oct	Arcas	-	-	0.000	ANS	SS	USAF/6W	Aeron	FC	-	-
1966-W211	2440129-50	1966 Oct	Arcas	-	-	0.000	ANS	SS	USAF/6W	Aeron	FC	-	-
1966-W212	2440129-50	1966 Oct	Arcas	-	-	0.000	ANS	SS	USAF/6W	Aeron	FC	-	-
1966-W213	2440129-50	1966 Oct	Arcas	-	-	0.000	ANS	SS	USAF/6W	Aeron	FC	-	-
1966-W214	2440129-50	1966 Oct	Arcas	-	-	0.000	ANS	SS	USAF/6W	Aeron	FC	-	-
1966-W215	2440129-50	1966 Oct	Arcas	-	-	0.000	ANS	SS	USAF/6W	Aeron	FC	-	-
1966-W216	2440129-50	1966 Oct	Arcas	-	-	0.000	ANS	SS	USAF/6W	Aeron	FC	-	-
1966-W217	2440129-50	1966 Oct	Arcas	-	-	0.000	ANS	SS	USAF/6W	Aeron	FC	-	-
1966-W218	2440129-50	1966 Oct	Arcas	-	-	0.000	ANS	SS	USAF/6W	Aeron	FC	-	-
1966-W219	2440129-50	1966 Oct	Arcas	-	-	0.000	ANS	SS	USAF/6W	Aeron	FC	-	-
1966-W220	2440129-50	1966 Oct	Arcas	-	-	0.000	ANS	SS	USAF/6W	Aeron	FC	-	-
1966-W221	2440129-50	1966 Oct	Arcas	-	-	0.000	ANS	SS	USAF/6W	Aeron	FC	-	-
1966-W222	2440129-50	1966 Oct	Arcas	-	-	0.000	ANS	SS	USAF/6W	Aeron	FC	-	-
1966-W223	2440129-50	1966 Oct	Arcas	-	-	0.000	ANS	SS	USAF/6W	Aeron	FC	-	-
1966-W224	2440129-50	1966 Oct	Arcas	-	-	0.000	ANS	SS	USAF/6W	Aeron	FC	-	-
1966-W225	2440129-50	1966 Oct	Arcas	-	-	0.000	ANS	SS	USAF/6W	Aeron	FC	-	-
1966-W226	2440129-50	1966 Oct	Arcas	-	-	0.000	ANS	SS	USAF/6W	Aeron	FC	-	-
1966-W227	2440129-50	1966 Oct	Arcas	-	-	0.000	ANS	SS	USAF/6W	Aeron	FC	-	-
1966-W228	2440129-50	1966 Oct	Arcas	-	-	0.000	ANS	SS	USAF/6W	Aeron	FC	-	-
1966-W229	2440129-50	1966 Oct	Arcas	-	-	0.000	ANS	SS	USAF/6W	Aeron	FC	-	-
1966-W230	2440129-50	1966 Oct	Arcas	-	-	0.000	ANS	SS	USAF/6W	Aeron	FC	-	-
1966-W231	2440129-50	1966 Oct	Arcas	-	-	0.000	ANS	SS	USAF/6W	Aeron	FC	-	-
1966-W232	2440129-50	1966 Oct	Arcas	-	-	0.000	ANS	SS	USAF/6W	Aeron	FC	-	-
1966-W233	2440129-50	1966 Oct	Arcas	-	-	0.000	ANS	SS	USAF/6W	Aeron	FC	-	-
1966-W234	2440129-50	1966 Oct	Arcas	-	-	0.000	ANS	SS	USAF/6W	Aeron	FC	-	-
1966-W235	2440129-50	1966 Oct	Arcas	-	-	0.000	ANS	SS	USAF/6W	Aeron	FC	-	-
1966-W236	2440129-50	1966 Oct	Arcas	-	-	0.000	ANS	SS	USAF/6W	Aeron	FC	-	-
1966-W237	2440129-50	1966 Oct	Arcas	-	-	0.000	ANS	SS	USAF/6W	Aeron	FC	-	-
1966-W310	2440174-15	1966 Nov 13 1530	Arcas	-	EXAMETHET NE3	0.000	CHME	SS	TUBE/DeMendoza	Aeron	SP-231	-	-
1966-W311	2440174-30	1966 Nov 13 1910	Arcas	-	EXAMETHET C48	0.000	COMAE/SSFC	SU	COMAE/Lichtenstein	Aeron	SP-231	-	-
1966-W297	2440174-30	1966 Dec	Arcas	-	-	0.000	ANS	SS	USAF/6W	Aeron	FC	-	-
1966-W250	2440190-50	1966 Dec	Arcas	-	-	0.000	ANS	SS	USAF/6W	Aeron	FC	-	-
1966-W251	2440190-50	1966 Dec	Arcas	-	-	0.000	ANS	SS	USAF/6W	Aeron	FC	-	-
1966-W252	2440190-50	1966 Dec	Arcas	-	-	0.000	ANS	SS	USAF/6W	Aeron	FC	-	-
1966-W253	2440190-50	1966 Dec	Arcas	-	-	0.000	ANS	SS	USAF/6W	Aeron	FC	-	-
1966-W254	2440190-50	1966 Dec	Arcas	-	-	0.000	ANS	SS	USAF/6W	Aeron	FC	-	-
1966-W255	2440190-50	1966 Dec	Arcas	-	-	0.000	ANS	SS	USAF/6W	Aeron	FC	-	-
1966-W256	2440190-50	1966 Dec	Arcas	-	-	0.000	ANS	SS	USAF/6W	Aeron	FC	-	-
1966-W257	2440197-55	1966 Dec 7 0105	Arcas	-	PSU-HALO-2	0.000	ERDA	SS	USAF/6W	Aeron	FC	-	-
1966-W265	2440202-37	1966 Dec 11 2059	Arcas	-	EXAMETHET W 113	0.000	WFF/	SS	WFF/	Meteo	SRL0.208	-	-
1966-W353	2440202-37	1966 Dec 13 0105	Arcas	-	-	0.000	WFF/	SS	WFF/	Meteo	SP-231	-	-
1966-W266	2440203-55	1966 Dec 13 0105	Arcas	-	-	0.000	ERDA	SS	USAF/6W	Aeron	SRL0.208	-	-
1966-W267	2440204-14	1966 Dec 13 1515	Arcas	?	-	0.000	ERDA	SS	USAF/6W	Aeron	WDRCF	-	-
1966-W268	2440204-22	1966 Dec 13 1720	Arcas	?	-	0.000	ANS?	SS	USAF/6W	Aeron	WDRCF	-	-
1966-W269	2440204-73	1966 Dec 14 0527	Arcas	?	-	0.000	ANS?	SS	USAF/6W	Aeron	WDRCF	-	-
1966-W270	2440204-80	1966 Dec 14 0715	Arcas	?	-	0.000	ANS?	SS	USAF/6W	Aeron	WDRCF	-	-
1966-W103	2440204-89	1966 Dec 14 0919	Arcas	?	-	0.000	ANS?	SS	USAF/6W	Aeron	WDRCF	-	-

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	OrbPay	Agency	Launch_Code	Group	Category	LTCite	Cite	Notes
1966-Y104	2440204-92	1966 Dec 14 1000	Arcas	?	-	0.000	ANS?	SS	USAF/	Aeron	WDCRF	-	-
1966-W271	2440204-96	1966 Dec 14 1127	Arcas	?	-	0.000	ANS?	SS	USAF/	Aeron	WDCRF	-	-
1966-W288	2440208-55	1966 Dec 18 0105	Arcas	-	PSU-ND-4	0.000	ERDA	SS	PSU/Hale	Aeron	SR10,208	-	-
1966-W258	2440209-12	1966 Dec 18 1500	Arcas	-	EXAMETHET IN-4	0.000	CIARE	SS	LOPE/Defendconca	Aeron	SP-231	-	-
1966-W257	2440209-25	1966 Dec 18 1502	Arcas	-	EXAMETHET CS0	0.000	COMAE/SSFC	SU	COMAE/Lichtenstein	Aeron	SP-231	-	-
1969-W01	2440221-50	1969 Jan	Arcas	-	-	0.000	ANS	SS	USAF/6W	Aeron	FC	-	-
1969-W02	2440221-50	1969 Jan	Arcas	-	-	0.000	ANS	SS	USAF/6W	Aeron	FC	-	-
1969-W03	2440221-50	1969 Jan	Arcas	-	-	0.000	ANS	SS	USAF/6W	Aeron	FC	-	-
1969-W09	2440229-25	1969 Jan 7 1755:00	Arcas	?	-	0.000	NRN	SS	USAF/6W	Mecco	DSI-5660	-	-
1969-W29	2440230-25	1969 Jan 8 1807:00	Arcas	?	-	0.000	NRN	SS	USAF/6W	Mecco	DSI-5660	-	-
1969-W37	2440231-24	1969 Jan 9 1747:00	Arcas	?	-	0.000	NRN	SS	USAF/6W	Mecco	DSI-5660	-	-
1969-W40	2440242-28	1969 Jan 20 1941:00	Arcas	?	-	0.000	NRN	SS	USAF/6W	Mecco	DSI-5660	-	-
1969-Y34	2440242-28	1969 Jan 20 1900	Arcas	?	-	0.000	NRN	SS	USAF/6W	Aeron	WDCRF	-	-
1969-W107	2440242-32	1969 Jan 20 1936:59	Arcas	?	-	0.000	NRN	SS	USAF/6W	Mecco	DSI-5660	-	-
1969-W109	2440242-35	1969 Jan 20 2026:00	Arcas	?	-	0.000	NRN	SS	USAF/6W	Mecco	DSI-5660	-	-
1969-W112	2440243-21	1969 Jan 21 1700	Arcas	?	-	0.000	ANS	SS	USAF/	Aeron	WDCRF	-	-
1969-Y35	2440243-72	1969 Jan 22 0515	Arcas	?	-	0.000	ANS	SS	USAF/	Aeron	WDCRF	-	-
1969-W118	2440243-96	1969 Jan 22 1100	Arcas	?	-	0.000	ANS	SS	USAF/	Aeron	WDCRF	-	-
1969-W119	2440243-97	1969 Jan 22 1100:00	Arcas	?	-	0.000	ANS	SU	USAF/	Aeron	WDCRF	-	-
1969-W137	2440244-23	1969 Jan 22 1730	Arcas	?	-	0.000	ANS	SU	USAF/	Aeron	WDCRF	-	-
1969-W129	2440244-46	1969 Jan 22 2300:00	Arcas	?	-	0.000	ANS	SU	USAF/	Aeron	WDCRF	-	-
1969-W140	2440244-71	1969 Jan 23 0503:00	Arcas	?	-	0.000	ANS	SU	USAF/	Aeron	WDCRF	-	-
1969-W45	2440245-21	1969 Jan 23 1700:00	Arcas	?	-	0.000	ANS	SU	USAF/	Aeron	WDCRF	-	-
1969-W49	2440246-21	1969 Jan 24 1701:00	Arcas	?	-	0.000	ANS	SU	USAF/	Aeron	WDCRF	-	-
1969-W158	2440249-17	1969 Jan 27 1600:00	Arcas	?	-	0.000	ANS	SU	USAF/	Aeron	WDCRF	-	-
1969-W174	2440252-37	1969 Jan 30 2051:00	Arcas	?	-	0.000	NRN	SU	USAF/6W	Aeron	WDCRF	-	-
1969-W163	2440253-26	1969 Feb 6 1800	Arcas	-	MASA 15-61DM	0.000	FFF/NOTS	SS	USAF/6W	Mecco	DSI-5660	-	-
1969-W217	2440252-51	1969 Feb 20 0014:59	Arcas	-	MASA 15-62DM	0.000	FFF/NOTS	SS	USAF/6W	Mecco	DSI-5660	-	-
1969-W289	2440272-51	1969 Feb 20 0014:59	Arcas	-	-	0.000	NRN	SS	USAF/6W	Mecco	DSI-5660	-	-
1969-W326	2440274-24	1969 Feb 21 1749:59	Arcas	-	-	0.000	NRN	SS	USAF/6W	Mecco	DSI-5660	-	-
1969-W334	2440284-69	1969 Mar 4 10437:59	Arcas	-	-	0.000	NRN	SS	USAF/6W	Mecco	DSI-5660	-	-
1969-W369	2440292-31	1969 Mar 11 1350:00	Arcas	-	-	0.000	NRN	SS	USAF/6W	Mecco	DSI-5660	-	-
1969-W384	2440293-69	1969 Mar 13 0430:00	Arcas	-	-	0.000	NRN	SS	USAF/6W	Mecco	DSI-5660	-	-
1969-W472	2440311-50	1969 Apr	Arcas	-	-	0.000	ANS	SS	USAF/6W	Aeron	FC	-	-
1969-W473	2440311-50	1969 Apr	Arcas	-	-	0.000	ANS	SS	USAF/6W	Aeron	FC	-	-
1969-W475	2440323-64	1969 Apr 12 0315:59	Arcas	-	-	0.000	ANS	SS	USAF/6W	Aeron	FC	-	-
1969-W553	2440333-64	1969 Apr 22 0236:59	Arcas	-	-	0.000	NRN	SS	USAF/6W	Mecco	DSI-5660	-	-
1969-W582	2440344-15	1969 May 2 1618:59	Arcas	?	-	0.000	NRN	SS	USAF/6W	Mecco	DSI-5660	-	-
1969-W640	2440385-27	1969 Jun 12 1652	Arcas	-	MASA 12.12DM	0.000	FFF	SS	USAF/6W	Mecco	DSI-5660	-	-
1969-W626	2440391-29	1969 Jun 16 1900	Arcas	-	-	0.000	LANON	SS	USAF/6W	Mecco	DSI-5660	-	-
1969-W1747	2440439-57	1969 Aug 6 0359	Arcas	-	-	0.000	AFCLR	SS	USAF/6W	Mecco	DSI-5660	-	-
1969-W1046	2440461-52	1969 Sep 16 1715	Arcas	-	-	0.000	AFCLR?	SS	USAF/6W	Mecco	DSI-5660	-	-
1969-W1249	2440461-50	1969 Sep 22 0635	Arcas	-	-	0.000	AFCLR	SS	USAF/6W	Mecco	DSI-5660	-	-
1969-W1278	2440468-73	1969 Nov 3 0700	Arcas	-	-	0.000	AFCLR	SS	USAF/6W	Mecco	DSI-5660	-	-
1969-W1479	2440468-73	1969 Nov 3 0700	Arcas	-	-	0.000	AFCLR	SS	USAF/6W	Mecco	DSI-5660	-	-
1969-W1480	2440468-73	1969 Nov 3 0700	Arcas	-	-	0.000	AFCLR	SS	USAF/6W	Mecco	DSI-5660	-	-
1969-W1481	2440468-73	1969 Nov 3 0700	Arcas	-	-	0.000	AFCLR	SS	USAF/6W	Mecco	DSI-5660	-	-
1969-W1482	2440468-73	1969 Nov 3 0700	Arcas	-	-	0.000	AFCLR	SS	USAF/6W	Mecco	DSI-5660	-	-
1969-W1483	2440468-73	1969 Nov 3 0700	Arcas	-	-	0.000	AFCLR	SS	USAF/6W	Mecco	DSI-5660	-	-
1969-W1484	2440468-73	1969 Nov 3 0700	Arcas	-	-	0.000	AFCLR	SS	USAF/6W	Mecco	DSI-5660	-	-
1969-W1485	2440468-73	1969 Nov 3 0700	Arcas	-	-	0.000	AFCLR	SS	USAF/6W	Mecco	DSI-5660	-	-
1969-W1486	2440468-73	1969 Nov 3 0700	Arcas	-	-	0.000	AFCLR	SS	USAF/6W	Mecco	DSI-5660	-	-
1969-W1487	2440468-73	1969 Nov 3 0700	Arcas	-	-	0.000	AFCLR	SS	USAF/6W	Mecco	DSI-5660	-	-
1969-W1488	2440468-73	1969 Nov 3 0700	Arcas	-	-	0.000	AFCLR	SS	USAF/6W	Mecco	DSI-5660	-	-
1969-W1489	2440468-73	1969 Nov 3 0700	Arcas	-	-	0.000	AFCLR	SS	USAF/6W	Mecco	DSI-5660	-	-
1969-W1490	2440468-73	1969 Nov 3 0700	Arcas	-	-	0.000	AFCLR	SS	USAF/6W	Mecco	DSI-5660	-	-
1969-W1491	2440468-73	1969 Nov 3 0700	Arcas	-	-	0.000	AFCLR	SS	USAF/6W	Mecco	DSI-5660	-	-
1969-W1492	2440468-73	1969 Nov 3 0700	Arcas	-	-	0.000	AFCLR	SS	USAF/6W	Mecco	DSI-5660	-	-
1969-W1493	2440468-73	1969 Nov 3 0700	Arcas	-	-	0.000	AFCLR	SS	USAF/6W	Mecco	DSI-5660	-	-
1969-W1494	2440468-73	1969 Nov 3 0700	Arcas	-	-	0.000	AFCLR	SS	USAF/6W	Mecco	DSI-5660	-	-
1969-W1495	2440468-73	1969 Nov 3 0700	Arcas	-	-	0.000	AFCLR	SS	USAF/6W	Mecco	DSI-5660	-	-
1969-W1496	2440468-73	1969 Nov 3 0700	Arcas	-	-	0.000	AFCLR	SS	USAF/6W	Mecco	DSI-5660	-	-
1969-W1497	2440468-73	1969 Nov 3 0700	Arcas	-	-	0.000	AFCLR	SS	USAF/6W	Mecco	DSI-5660	-	-
1969-W1498	2440468-73	1969 Nov 3 0700	Arcas	-	-	0.000	AFCLR	SS	USAF/6W	Mecco	DSI-5660	-	-
1969-W1499	2440468-73	1969 Nov 3 0700	Arcas	-	-	0.000	AFCLR	SS	USAF/6W	Mecco	DSI-5660	-	-
1969-W1500	2440468-73	1969 Nov 3 0700	Arcas	-	-	0.000	AFCLR	SS	USAF/6W	Mecco	DSI-5660	-	-
1969-W1501	2440468-73	1969 Nov 3 0700	Arcas	-	-	0.000	AFCLR	SS	USAF/6W	Mecco	DSI-5660	-	-
1969-W1502	2440468-73	1969 Nov 3 0700	Arcas	-	-	0.000	AFCLR	SS	USAF/6W	Mecco	DSI-5660	-	-
1969-W1503	2440468-73	1969 Nov 3 0700	Arcas	-	-	0.000	AFCLR	SS	USAF/6W	Mecco	DSI-5660	-	-
1969-W1504	2440468-73	1969 Nov 3 0700	Arcas	-	-	0.000	AFCLR	SS	USAF/6W	Mecco	DSI-5660	-	-
1969-W1505	2440468-73	1969 Nov 3 0700	Arcas	-	-	0.000	AFCLR	SS	USAF/6W	Mecco	DSI-5660	-	-
1969-W1506	2440468-73	1969 Nov 3 0700	Arcas	-	-	0.000	AFCLR	SS	USAF/6W	Mecco	DSI-5660	-	-
1969-W1507	2440468-73	1969 Nov 3 0700	Arcas	-	-	0.000	AFCLR	SS	USAF/6W	Mecco	DSI-5660	-	-
1969-W1508	2440468-73	1969 Nov 3 0700	Arcas	-	-	0.000	AFCLR	SS	USAF/6W	Mecco	DSI-5660	-	-
1969-W1509	2440468-73	1969 Nov 3 0700	Arcas	-	-	0.000	AFCLR	SS	USAF/6W	Mecco	DSI-5660	-	-
1969-W1510	2440468-73	1969 Nov 3 0700	Arcas	-	-	0.000	AFCLR	SS	USAF/6W	Mecco	DSI-5660	-	-
1969-W1511	2440468-73	1969 Nov 3 0700	Arcas	-	-	0.000	AFCLR	SS	USAF/6W	Mecco	DSI-5660	-	-
1969-W1512	2440468-73	1969 Nov 3 0700	Arcas	-	-	0.000	AFCLR	SS	USAF/6W	Mecco	DSI-5660	-	-
1969-W1513	2440468-73	1969 Nov 3 0700	Arcas	-	-	0.000	AFCLR	SS	USAF/6W	Mecco	DSI-5660	-	-
1969-W1514	2440468-73	1969 Nov 3 0700	Arcas	-	-	0.000	AFCLR	SS	USAF/6W	Mecco	DSI-5660	-	-
1969-W1515	2440468-73	1969 Nov 3 0700	Arcas	-	-	0.000	AFCLR	SS	USAF/6W	Mecco	DSI-5660	-	-
1969-W1516	2440468-73	1969 Nov 3 0700	Arcas	-	-	0.000	AFCLR	SS	USAF/6W	Mecco	DSI-5660	-	-
1969-W1517	2440468-73	1969 Nov 3 0700	Arcas	-	-	0.000	AFCLR	SS	USAF/6W	Mecco	DSI-5660	-	-
1969-W1518	2440468-73	1969 Nov 3 0700	Arcas	-	-	0.000	AFCLR	SS	USAF/6W	Mecco	DSI-5660	-	-
1969-W1519	2440468-73	1969 Nov 3 0700	Arcas	-	-	0.000	AFCLR	SS	USAF/6W	Mecco	DSI-5660	-	-
1969-W1520	2440468-73	1969 Nov 3 0700	Arcas	-	-	0.000	AFCLR	SS	USAF/6W	Mecco	DSI-5660	-	-
1969-W1521	2440468-73	1969 Nov 3 0700	Arcas	-	-	0.000	AFCLR	SS	USAF/6W	Mecco	DSI-5660	-	-
1969-W1522	2440468-73	1969 Nov 3 0700	Arcas	-	-	0.000	AFCLR	SS	USAF/6W	Mecco	DSI-5660	-	-
1969-W1523	2440468-73	1969 Nov 3 0700	Arcas	-	-	0.000	AFCLR	SS	USAF/6W	Mecco	DSI-5660	-	-
1969-W1524	2440468-73	1969 Nov 3 0700	Arcas	-	-	0.000	AFCLR	SS	USAF/6W	Mecco	DSI-5660	-	-
1969-W1525	2440468-73	1969 Nov 3 0700	Arcas	-	-	0.000	AFCLR	SS	USAF/6W	Mecco	DSI-5660	-	-
1969-W1526	2440468-73	1969 Nov 3 0700	Arcas	-	-	0.000	AFCLR	SS	USAF/6W	Mecco	DSI-5660	-	-
1969-W1527	2440468-73	1969 Nov 3 0700	Arcas	-	-	0.000	AFCLR	SS	USAF/6W	Mecco	DSI-5660	-	-
1969-W1528	2440468-73	1969 Nov 3 0700	Arcas	-	-	0.000	AFCLR	SS	USAF/6W	Mecco	DSI-5660	-	-
1969-W1529	2440468-73	1969 Nov 3 0700	Arcas	-	-	0.000	AFCLR	SS	USAF/6W	Mecco			



Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	OrbPay	Agency	Launch_Code	Group	Category	LTCite	Cite	Notes
1972-Y283	2441657-26	1972 Dec 5 1814	Super Arcas	-	MASA 15. 580UI	0.000	GSFC	SS	PSU/Hale	Ionos	WDCRF	-	-
1973-Y31	2441699-25	1973 Jan 16 1804	Super Arcas	-	MASA 15. 1030UI	0.000	GSFC	SS	PSU/Hale	Ionos	WDCRF	-	-
1973-W111	2441702-21	1973 Jan 19 1658:00	Super Arcas	-	-	0.000	WSNR	SU	WSNR/	Aeron	WDCRF	-	-
1973-W1653	2441715-50	1973 Feb 2 0615	Arcas	-	USA Ozone	0.000	WSNR	SS	WSNR/Olson	Aeron/Test	AD-A-005589	-	-
1973-W172	2441715-76	1973 Feb 2 0623	Super Arcas	-	MASA 15. 1010UI	0.000	GSFC	SS	HOU/Sheidon	Ionos	WDCRF	SR14, 363	-
1973-W60	2441715-77	1973 Feb 2 0623	Super Arcas	-	MASA 15. 1020UI	0.000	GSFC	SS	HOU/Sheidon	Ionos	WDCRF	-	-
1973-W229	2441727-15	1973 Feb 13 1530	Arcas	-	MASA 15. 1070H	0.000	GSFC	SS	GSFC/Krueger	Aeronomy	WDCRF	-	-
1973-W260	2441734-14	1973 Feb 20 1525	Arcas	-	MASA 15. 1080H	0.000	GSFC	SS	GSFC/Krueger	Aeronomy	WDCRF	-	-
1973-W37	2441762-50	1973 Mar 21	Super Arcas	-	-	0.000	CHES	SS	CHES/?	Meteo	FDC/Dirich	-	-
1973-W35	2441769-50	1973 Mar 28	Super Arcas	-	-	0.000	CHES	SS	CHES/?	Meteo	FDC/Dirich	-	-
1973-W43	2441772-28	1973 Mar 30 1845	Arcas	-	TL-6446	0.000	GSFC	SS	GSFC/?	Aeron	FDC/Dirich	-	-
1973-W36	2441776-50	1973 Apr 4	Super Arcas	-	-	0.000	CHES	SS	CHES/?	Meteo	FDC/Dirich	-	-
1973-W44	2441782-59	1973 Apr 10 0215	Arcas	-	TL-6428	0.000	GSFC	SS	GSFC/?	Aeron	FDC/Dirich	-	-
1973-W45	2441790-50	1973 Apr 18	Super Arcas	-	-	0.000	CHES	SS	CHES/?	Meteo	FDC/Dirich	-	-
1973-W25	2441811-50	1973 May 9	Super Arcas	-	-	0.000	CHES	SS	CHES/?	Meteo	FDC/Dirich	-	-
1973-W15	2441832-50	1973 May 30	Super Arcas	-	-	0.000	CHES	SS	CHES/?	Meteo	Envelope	-	-
1973-W736	2441839-13	1973 Jun 5 1501	Arcas	-	MASA 15. 1090H	0.000	GSFC	SS	GSFC/Krueger	Aeronomy	WDCRF	-	-
1973-W27	2441840-50	1973 Jun 7	Super Arcas	-	-	0.000	CHES	SS	CHES/?	Meteo	FDC/Dirich	-	-
1973-W879	2441876-50	1973 Jul 12	Arcas	-	-	0.000	WSNR	SS	WSNR/Olson	Test/Aeron	WDCRF	AD-A-05589	-
1973-W695	2441880-50	1973 Jul 17	Arcas	-	-	0.000	WSNR	SS	WSNR/Olson	Test/Aeron	WDCRF	AD-A-05589	-
1973-W46	2441883-26	1973 Jul 19 1819	Super Arcas	-	LI-6874	0.000	WSNR	SS	GSFC/?	Aeron	FDC/Dirich	-	-
1973-W1036	2441911-20	1973 Aug 16 1650	Arcas	-	MASA 15. 1110H	0.000	GSFC	SS	GSFC/Krueger	Aeronomy	WDCRF	-	-
1973-W1073	2441919-12	1973 Aug 16 1910	Arcas	-	MASA 15. 1120H	0.000	GSFC	SS	GSFC/Krueger	Aeronomy	WDCRF	-	-
1973-W49	2441919-16	1973 Aug 24 1552	Super Arcas	-	TL-6727	0.000	CHES	SS	CHES/?	Meteo	FDC/Dirich	-	-
1973-W47	2441926-21	1973 Aug 31 1707	Arcas	-	TL-6731	0.000	CHES	SS	CHES/?	Meteo	FDC/Dirich	-	-
1973-W1120	2441930-26	1973 Sep 4 1809:00	Super Arcas	-	TL-6720	0.000	CHES	SS	CHES/?	Meteo	FDC/Dirich	-	-
1973-W28	2441935-50	1973 Sep 10	Super Arcas	-	-	0.000	CHES	SS	CHES/?	Meteo	FDC/Dirich	-	-
1973-W29	2441937-50	1973 Sep 12	Super Arcas	-	-	0.000	CHES	SS	CHES/?	Meteo	FDC/Dirich	-	-
1973-W44	2441946-14	1973 Sep 19 1519	Arcas	-	MASA 15. 1130H	0.000	GSFC	SS	GSFC/Krueger	Aeronomy	WDCRF	-	-
1973-W64	2441946-28	1973 Sep 19 1659	Super Arcas	-	CHRO	0.000	CHES	SS	CHES/?	Meteo	SR15, 143	-	-
1973-W1601	2441946-08	1973 Sep 20 1354	Super Arcas	-	CHRO	0.000	CHES	SS	CHES/?	Meteo	SR15, 143	-	-
1973-W1602	2441946-65	1973 Sep 21 0332	Super Arcas	-	CHRO	0.000	CHES	SS	CHES/?	Meteo	SR15, 143	-	-
1973-W1603	2441947-69	1973 Sep 22 0437	Super Arcas	-	CHRO	0.000	CHES	SS	CHES/?	Meteo	SR15, 143	-	-
1973-W1604	2441950-22	1973 Sep 24 1715	Super Arcas	-	CHRO	0.000	CHES	SS	CHES/?	Meteo	SR15, 143	-	-
1973-W1605	2441950-54	1973 Sep 25 0956	Super Arcas	-	CHRO	0.000	CHES	SS	CHES/?	Meteo	SR15, 143	-	-
1973-W1606	2441951-28	1973 Sep 26 1940	Super Arcas	-	CHRO	0.000	CHES	SS	CHES/?	Meteo	SR15, 143	-	-
1973-W1607	2441951-55	1973 Sep 26 1442	Super Arcas	-	CHRO	0.000	CHES	SS	CHES/?	Meteo	SR15, 143	-	-
1973-W1608	2441952-11	1973 Sep 26 1426	Super Arcas	-	CHRO	0.000	CHES	SS	CHES/?	Meteo	SR15, 143	-	-
1973-W1609	2441955-65	1973 Sep 26 0311	Super Arcas	-	CHRO	0.000	CHES	SS	CHES/?	Meteo	SR15, 143	-	-
1973-W1610	2441955-68	1973 Sep 26 0329	Super Arcas	-	CHRO	0.000	CHES	SS	CHES/?	Meteo	SR15, 143	-	-
1973-W1611	2441954-65	1973 Sep 26 0329	Super Arcas	-	CHRO	0.000	CHES	SS	CHES/?	Meteo	SR15, 143	-	-
1973-W1612	2441956-57	1973 Oct 1 0408	Super Arcas	-	CHRO	0.000	CHES	SS	CHES/?	Meteo	SR15, 143	-	-
1973-W68	2441959-56	1973 Oct 4 1020	Super Arcas	-	AFRL Arcas 72-2	0.000	AFRL	SS	AFRL	Aeron	AFRL	-	-
1973-W43	2441969-56	1973 Oct 4 1020	Super Arcas	-	AFRL Arcas 72-1	0.000	AFRL	SS	AFRL	Aeron	AFRL	-	-
1973-W31	2441969-50	1973 Oct 10 1515	Arcas	-	LI-6876	0.000	CHES	SS	CHES/?	Meteo	FDC/Dirich	-	-
1973-W30	2441969-54	1973 Oct 10 1504	Arcas	-	LI-6877	0.000	CHES	SS	CHES/?	Meteo	FDC/Dirich	-	-
1973-W61	2441976-25	1973 Oct 10 1804	Arcas	-	MASA 15. 1140H	0.000	GSFC	SS	GSFC/?	Meteo	FDC/Dirich	-	-
1973-W92	2441976-22	1973 Oct 31	Super Arcas	-	-	0.000	GSFC	SS	GSFC/Krueger	Aeronomy	WDCRF	-	-
1973-W90	2442008-50	1973 Nov 23	Super Arcas	-	Polar Anglow	0.000	AFRL	SS	AFRL	Ionos	AFRL	-	-
1973-W1480	2442010-14	1973 Nov 23 1520	Arcas	-	MASA 15. 1160H	0.000	CHES	SS	CHES/?	Meteo	FDC/Dirich	-	-
1973-W33	2442015-50	1973 Nov 29	Super Arcas	-	-	0.000	CHES	SS	CHES/?	Meteo	FDC/Dirich	-	-
1973-W1500	2442021-15	1973 Dec 4 1533:00	Arcas	-	MASA LI-6963	0.000	MBN	SS	GSFC/Krueger	Aeronomy	WDCRF	-	-
1973-W48	2442021-27	1973 Dec 4 1835	Arcas	-	MASA LI-6964	0.000	CHES	SS	CHES/?	Meteo	FDC/Dirich	-	-
1973-W34	2442028-50	1973 Dec 12	Super Arcas	-	-	0.000	CHES	SS	CHES/?	Meteo	FDC/Dirich	-	-
1974-W30	2442047-50	1974	Super Arcas	-	PCA	0.000	AFRL	SS	AFRL	Ionos	AFRL	-	-
1974-W07	2442056-50	1974 Jan 9	Super Arcas	-	-	0.000	CHES	SS	CHES/?	Meteo	FDC/Dirich	-	-
1974-W44	2442068-50	1974 Jan 11	Super Arcas	-	PSU Generation	0.000	CHES	SS	CHES/?	Ionos	AFRL	-	-
1974-Y20	2442068-26	1974 Jan 16 1813	Arcas	-	MASA 15. 1050UI	0.000	WSNR	SS	PSU/Hale	Ionos	WDCRF	AD-A-05589	-
1974-W149	2442070-12	1974 Jan 31 1500	Super Arcas	-	MASA 15. 51UE	0.000	GSFC	SS	GSFC/Krueger	Ionos	WDCRF	-	-
1974-W08	2442082-50	1974 Feb 4	Arcas	-	-	0.000	CHES	SS	CHES/?	Meteo	FDC/Dirich	-	-
1974-W09	2442082-50	1974 Feb 12	Super Arcas	-	-	0.000	CHES	SS	CHES/?	Meteo	FDC/Dirich	-	-
1974-W10	2442103-50	1974 Feb 25	Super Arcas	-	-	0.000	CHES	SS	CHES/?	Meteo	FDC/Dirich	-	-
1974-W11	2442103-50	1974 Feb 27	Super Arcas	-	-	0.000	CHES	SS	CHES/?	Meteo	FDC/Dirich	-	-
1974-W12	2442105-50	1974 Feb 27	Super Arcas	-	-	0.000	CHES	SS	CHES/?	Meteo	FDC/Dirich	-	-
1974-W13	2442119-50	1974 Mar 13	Super Arcas	-	-	0.000	CHES	SS	CHES/?	Meteo	FDC/Dirich	-	-
1974-W40	2442122-30	1974 Mar 15 1917	Super Arcas	-	MASA G1-7207	0.000	GSFC	SS	GSFC/?	Meteo	FDC/Dirich	-	-
1974-W114	2442128-10	1974 Mar 21 1200	Super Arcas	-	MASA 15. 1230H	0.000	GSFC	SS	GSFC/Krueger	Aeronomy	WDCRF	-	-
1974-Y121	2442129-11	1974 Mar 21 1445	Super Arcas	-	MASA 15. 1246H	0.000	GSFC	SS	GSFC/Krueger	Aeronomy	WDCRF	-	-
1974-W14	2442133-50	1974 Apr 17	Super Arcas	-	-	0.000	CHES	SS	CHES/?	Meteo	FDC/Dirich	-	-
1974-W20	2442154-50	1974 Apr 27	Super Arcas	-	-	0.000	CHES	SS	CHES/?	Meteo	FDC/Dirich	-	-
1974-W21	2442169-50	1974 May 2	Super Arcas	-	-	0.000	CHES	SS	CHES/?	Meteo	FDC/Dirich	-	-
1974-W22	2442182-50	1974 May 15	Super Arcas	-	-	0.000	CHES	SS	CHES/?	Meteo	FDC/Dirich	-	-
1974-W23	2442196-50	1974 May 29	Super Arcas	-	-	0.000	CHES	SS	CHES/?	Meteo	FDC/Dirich	-	-
1974-W846	2442228-35	1974 Jun 29 2025:00	Super Arcas	-	E 1-7323	0.000	WFF	SU	WSNR/Bandhava	Aeron	WDCRF	-	-
1974-Y226	2442228-38	1974 Jun 29 2110	Super Arcas	-	MASA 15. 1040UI	0.000	GSFC	SS	PSU/Hale	Ionos	FDC	-	-
1974-W862	2442228-64	1974 Jun 30 0315	Super Arcas	-	MASA 15. 1260UI	0.000	WFF	SU	WSNR/Bandhava	Aeron	WDCRF	-	-
1974-Y228	2442228-94	1974 Jun 30 1035:00	Super Arcas	-	E 1-7324	0.000	WFF	SU	PSU/Hale	Ionos	SR17, 191	-	-
1974-Y227	2442229-50	1974 Jul 1 0005	Super Arcas	-	MASA 15. 1250UI	0.000	GSFC	SS	WSNR/Bandhava	Ionos	WDCRF	-	-
1974-W861	2442254-25	1974 Jul 25 1800	Super Arcas	-	MASA 15. 1060UI	0.000	CHES	SS	HOU/Sheidon	Ionos	FDC/Dirich	-	-
1974-W15	2442294-50	1974 Sep 4	Super Arcas	-	-	0.000	CHES	SS	CHES/?	Meteo	FDC/Dirich	-	-
1974-W16	2442301-50	1974 Sep 11	Super Arcas	-	-	0.000	CHES	SS	CHES/?	Meteo	FDC/Dirich	-	-
1974-W95	2442308-50	1974 Sep 18	Super Arcas	-	-	0.000	CHES	SS	CHES/?	Meteo	FDC/Dirich	-	-
1974-W16	2442322-50	1974 Oct 2	Super Arcas	-	-	0.000	CHES	SS	CHES/?	Meteo	FDC/Dirich	-	-
1974-W17	2442336-50	1974 Oct 16	Super Arcas	-	-	0.000	CHES	SS	CHES/?	Meteo	FDC/Dirich	-	-

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	OrbPay	Agency	Launch_Code	Group	Category	LTCite	Cite	Notes
1974-M18	2442350-50	1974 Oct 30	Super Arcas	-	-	0.000	CHES	SS	CHES/?	Meteo	FDC/Ulrich	-	-
1974-M19	2442354-50	1974 Nov 13	Super Arcas	-	-	0.000	CHES	SS	CHES/?	Meteo	FDC/Ulrich	-	-
1974-M20	2442378-50	1974 Nov 27	Super Arcas	-	-	0.000	CHES	SS	CHES/?	Meteo	FDC/Ulrich	-	-
1974-M21	2442380-50	1974 Nov 29	Super Arcas	-	-	0.000	CHES	SS	CHES/?	Meteo	FDC/Ulrich	-	-
1974-M22	2442385-50	1974 Dec 4	Super Arcas	-	-	0.000	CHES	SS	CHES/?	Meteo	FDC/Ulrich	-	-
1974-M23	2442396-67	1974 Dec 15 0402	Super Arcas	-	-	0.000	ACORL	SS	ACORL/	Aeronomy	Pittfield	-	-
1974-M24	2442399-50	1974 Dec 18	Super Arcas	-	-	0.000	CHES	SS	CHES/?	Meteo	FDC/Ulrich	-	-
1975-M03	2442421-50	1975 Jan 9	Super Arcas	-	-	0.000	CHES	SS	CHES/?	Meteo	FDC/Ulrich	-	-
1975-M30	2442438-61	1975 Jan 26 0236	Super Arcas	-	-	0.000	GFSC	SS	HOU/SHelton	Plasma	WDRF	-	-
1975-M31	2442438-61	1975 Jan 26 0236	Super Arcas	-	-	0.000	GFSC	SS	HOU/SHelton	Plasma	WDRF	-	-
1975-M32	2442442-50	1975 Jan 30	Super Arcas	-	-	0.000	CHES	SS	CHES/?	Meteo	FDC/Ulrich	-	-
1975-M33	2442446-68	1975 Feb 3 0415	Super Arcas	-	-	0.000	GFSC	SS	HOU/SHelton	Plasma	WDRF	-	-
1975-M34	2442456-50	1975 Feb 13	Super Arcas	-	-	0.000	CHES	SS	CHES/?	Meteo	FDC/Ulrich	-	-
1975-M35	2442456-56	1975 Feb 15 0125	Super Arcas	-	-	0.000	GFSC	SS	HOU/SHelton	Plasma	WDRF	-	-
1975-M36	2442456-57	1975 Feb 15 0136	Super Arcas	-	-	0.000	GFSC	SS	HOU/SHelton	Plasma	WDRF	-	-
1975-M37	2442469-50	1975 Feb 26	Super Arcas	-	-	0.000	CHES	SS	CHES/?	Meteo	FDC/Ulrich	-	-
1975-M38	2442469-50	1975 Mar 12	Super Arcas	-	-	0.000	CHES	SS	CHES/?	Meteo	FDC/Ulrich	-	-
1975-M39	2442485-18	1975 Mar 13 1615	Super Arcas	-	-	0.000	GFSC	SS	GFSC/HilSenrath	Aeronomy	WDRF	-	-
1975-M40	2442485-18	1975 Mar 26	Super Arcas	-	-	0.000	CHES	SS	CHES/?	Meteo	FDC/Ulrich	-	-
1975-M41	2442516-50	1975 Apr 16	Super Arcas	-	-	0.000	CHES	SS	CHES/?	Meteo	FDC/Ulrich	-	-
1975-M42	2442516-50	1975 Apr 29	Super Arcas	-	-	0.000	CHES	SS	CHES/?	Meteo	FDC/Ulrich	-	-
1975-M43	2442561-50	1975 Apr 29	Super Arcas	-	-	0.000	CHES	SS	CHES/?	Meteo	FDC/Ulrich	-	-
1975-M44	2442566-50	1975 May 14	Super Arcas	-	-	0.000	CHES	SS	CHES/?	Meteo	FDC/Ulrich	-	-
1975-M45	2442566-55	1975 May 24 0105	Super Arcas	-	-	0.000	GFSC	SS	PSU/Hale	Plasma	WDRF	SR17,191	-
1975-M46	2442566-58	1975 May 24 0152	Super Arcas	-	-	0.000	GFSC	SS	GFSC/HilSenrath	Aeronomy	WDRF	-	-
1975-M47	2442566-58	1975 May 24 0705	Super Arcas	-	-	0.000	GFSC	SS	PSU/Hale	Plasma	WDRF	SR17,191	-
1975-M48	2442566-80	1975 May 24 0744	Super Arcas	-	-	0.000	GFSC	SS	GFSC/HilSenrath	Aeronomy	WDRF	-	-
1975-M49	2442566-82	1975 May 24 0942	Super Arcas	-	-	0.000	GFSC	SS	GFSC/HilSenrath	Aeronomy	WDRF	-	-
1975-M50	2442566-86	1975 May 24 0942	Super Arcas	-	-	0.000	GFSC	SS	GFSC/HilSenrath	Aeronomy	WDRF	-	-
1975-M51	2442566-86	1975 May 26	Super Arcas	-	-	0.000	CHES	SS	CHES/?	Meteo	FDC/Ulrich	-	-
1975-M52	2442569-31	1975 May 26 1930	Super Arcas	-	-	0.000	GFSC	SS	PSU/Hale	Plasma	WDRF	SR17,191	-
1975-M53	2442569-31	1975 May 26 2116	Super Arcas	-	-	0.000	GFSC	SS	PSU/Hale	Plasma	WDRF	SR17,191	-
1975-M54	2442574-50	1975 Jun 11	Super Arcas	-	-	0.000	CHES	SS	CHES/?	Meteo	FDC/Ulrich	-	-
1975-M55	2442581-50	1975 Jun 16	Super Arcas	-	-	0.000	CHES	SS	CHES/?	Meteo	FDC/Ulrich	-	-
1975-M56	2442609-05	1975 Jun 16 1318	Arcas	-	-	0.000	GFSC	SS	WFF/Silbert	Fields	WDRF	SR17,199	-
1975-M57	2442617-74	1975 Jul 24 0944	Super Arcas	-	-	0.000	GFSC	SS	GFSC/Randawa	Aeronomy	WDRF	-	-
1975-M58	2442623-19	1975 Jul 28 0547	Super Arcas	-	-	0.000	GFSC	SS	GFSC/Randawa	Aeronomy	WDRF	-	-
1975-M59	2442623-31	1975 Jul 28 1920	Super Arcas	-	-	0.000	GFSC	SS	GFSC/HilSenrath	Aeronomy	WDRF	-	-
1975-M60	2442664-50	1975 Sep 9	Super Arcas	-	-	0.000	CHES	SS	CHES/?	Meteo	FDC/Ulrich	-	-
1975-M61	2442672-50	1975 Sep 17	Super Arcas	-	-	0.000	CHES	SS	CHES/?	Meteo	FDC/Ulrich	-	-
1975-M62	2442682-04	1975 Sep 26 1259:59	Arcas	-	Gerdien	0.000	MIN	SS	VTEP/SWR/Mitchell	Meteo	DSI-5860	-	-
1975-M63	2442694-50	1975 Sep 28	Super Arcas	-	-	0.000	CHES	SS	CHES/?	Meteo	FDC/Ulrich	-	-
1975-M64	2442714-50	1975 Oct 28	Super Arcas	-	-	0.000	CHES	SS	CHES/?	Meteo	FDC/Ulrich	-	-
1975-M65	2442722-58	1975 Oct 28	Super Arcas	-	-	0.000	GFSC	SS	GFSC/HilSenrath	Aeronomy	WDRF	-	-
1975-M66	2442722-58	1975 Dec 18 0419	Super Arcas	-	MASA 15.110GH	0.000	GFSC	SS	GFSC/HilSenrath	Aeronomy	WDRF	-	-
1975-M67	2442764-59	1975 Dec 18 0210	Super Arcas	-	MASA 15.145GH	0.000	GFSC	SS	GFSC/HilSenrath	Aeronomy	WDRF	-	-
1975-M68	2442764-59	1975 Dec 18 0210	Super Arcas	-	MASA 15.145GH	0.000	GFSC	SS	GFSC/HilSenrath	Aeronomy	WDRF	-	-
1975-M69	2442764-59	1975 Dec 18 0213	Super Arcas	-	MASA 15.146GH	0.000	GFSC	SS	GFSC/HilSenrath	Aeronomy	WDRF	-	-
1975-M70	2442768-50	1975 Dec 22	Super Arcas	-	-	0.000	CHES	SS	CHES/?	Meteo	FDC/Ulrich	-	-
1975-M71	2442768-50	1976 Jan 20	Super Arcas	-	-	0.000	CHES	SS	CHES/?	Meteo	FDC/Ulrich	-	-
1975-M72	2442768-50	1976 Jan 20	Super Arcas	-	-	0.000	CHES	SS	CHES/?	Meteo	FDC/Ulrich	-	-
1975-M73	2442768-50	1976 Jan 20	Super Arcas	-	-	0.000	CHES	SS	CHES/?	Meteo	FDC/Ulrich	-	-
1975-M74	2442768-50	1976 Jan 20	Super Arcas	-	-	0.000	CHES	SS	CHES/?	Meteo	FDC/Ulrich	-	-
1975-M75	2442768-50	1976 Jan 20	Super Arcas	-	-	0.000	CHES	SS	CHES/?	Meteo	FDC/Ulrich	-	-
1975-M76	2442768-50	1976 Jan 20	Super Arcas	-	-	0.000	CHES	SS	CHES/?	Meteo	FDC/Ulrich	-	-
1975-M77	2442768-50	1976 Jan 20	Super Arcas	-	-	0.000	CHES	SS	CHES/?	Meteo	FDC/Ulrich	-	-
1975-M78	2442768-50	1976 Jan 20	Super Arcas	-	-	0.000	CHES	SS	CHES/?	Meteo	FDC/Ulrich	-	-
1975-M79	2442768-50	1976 Jan 20	Super Arcas	-	-	0.000	CHES	SS	CHES/?	Meteo	FDC/Ulrich	-	-
1975-M80	2442768-50	1976 Jan 20	Super Arcas	-	-	0.000	CHES	SS	CHES/?	Meteo	FDC/Ulrich	-	-
1975-M81	2442768-50	1976 Jan 20	Super Arcas	-	-	0.000	CHES	SS	CHES/?	Meteo	FDC/Ulrich	-	-
1975-M82	2442768-50	1976 Jan 20	Super Arcas	-	-	0.000	CHES	SS	CHES/?	Meteo	FDC/Ulrich	-	-
1975-M83	2442768-50	1976 Jan 20	Super Arcas	-	-	0.000	CHES	SS	CHES/?	Meteo	FDC/Ulrich	-	-
1975-M84	2442768-50	1976 Jan 20	Super Arcas	-	-	0.000	CHES	SS	CHES/?	Meteo	FDC/Ulrich	-	-
1975-M85	2442768-50	1976 Jan 20	Super Arcas	-	-	0.000	CHES	SS	CHES/?	Meteo	FDC/Ulrich	-	-
1975-M86	2442768-50	1976 Jan 20	Super Arcas	-	-	0.000	CHES	SS	CHES/?	Meteo	FDC/Ulrich	-	-
1975-M87	2442768-50	1976 Jan 20	Super Arcas	-	-	0.000	CHES	SS	CHES/?	Meteo	FDC/Ulrich	-	-
1975-M88	2442768-50	1976 Jan 20	Super Arcas	-	-	0.000	CHES	SS	CHES/?	Meteo	FDC/Ulrich	-	-
1975-M89	2442768-50	1976 Jan 20	Super Arcas	-	-	0.000	CHES	SS	CHES/?	Meteo	FDC/Ulrich	-	-
1975-M90	2442768-50	1976 Aug 15	Super Arcas	-	-	0.000	GFSC	SS	DMT/Horvath	Plasma	WDRF	-	-
1975-M91	2443748-50	1978 Aug 28	Super Arcas	-	-	0.000	GFSC	SS	DMT/Horvath	Aerom?	WDRF	-	-
1975-M92	2443748-50	1978 Aug 28	Super Arcas	-	-	0.000	GFSC	SS	DMT/Horvath	Aerom?	WDRF	-	-
1975-M93	2443748-50	1978 Aug 28	Super Arcas	-	-	0.000	GFSC	SS	DMT/Horvath	Aerom?	WDRF	-	-
1975-M94	2443748-50	1978 Aug 28	Super Arcas	-	-	0.000	GFSC	SS	DMT/Horvath	Aerom?	WDRF	-	-
1975-M95	2443748-50	1978 Aug 28	Super Arcas	-	-	0.000	GFSC	SS	DMT/Horvath	Aerom?	WDRF	-	-
1975-M96	2443748-50	1978 Aug 28	Super Arcas	-	-	0.000	GFSC	SS	DMT/Horvath	Aerom?	WDRF	-	-
1975-M97	2443748-50	1978 Aug 28	Super Arcas	-	-	0.000	GFSC	SS	DMT/Horvath	Aerom?	WDRF	-	-
1975-M98	2443748-50	1978 Aug 28	Super Arcas	-	-	0.000	GFSC	SS	DMT/Horvath	Aerom?	WDRF	-	-
1975-M99	2443748-50	1978 Aug 28	Super Arcas	-	-	0.000	GFSC	SS	DMT/Horvath	Aerom?	WDRF	-	-
1975-M100	2443748-50	1978 Aug 28	Super Arcas	-	-	0.000	GFSC	SS	DMT/Horvath	Aerom?	WDRF	-	-
1975-M101	2443748-50	1978 Aug 28	Super Arcas	-	-	0.000	GFSC	SS	DMT/Horvath	Aerom?	WDRF	-	-
1975-M102	2443748-50	1978 Aug 28	Super Arcas	-	-	0.000	GFSC	SS	DMT/Horvath	Aerom?	WDRF	-	-
1975-M103	2443748-50	1978 Aug 28	Super Arcas	-	-	0.000	GFSC	SS	DMT/Horvath	Aerom?	WDRF	-	-
1975-M104	2443748-50	1978 Aug 28	Super Arcas	-	-	0.000	GFSC	SS	DMT/Horvath	Aerom?	WDRF	-	-
1975-M105	2443748-50	1978 Aug 28	Super Arcas	-	-	0.000	GFSC	SS	DMT/Horvath	Aerom?	WDRF	-	-
1975-M106	2443748-50	1978 Aug 28	Super Arcas	-	-	0.000	GFSC	SS	DMT/Horvath	Aerom?	WDRF	-	-
1975-M107	2443748-50	1978 Aug 28	Super Arcas	-	-	0.000	GFSC	SS	DMT/Horvath	Aerom?	WDRF	-	-
1975-M108	2443748-50	1978 Aug 28	Super Arcas	-	-	0.000	GFSC	SS	DMT/Horvath	Aerom?	WDRF	-	-
1975-M109	2443748-50	1978 Aug 28	Super Arcas	-	-	0.000	GFSC	SS	DMT/Horvath	Aerom?	WDRF	-	-
1975-M110	2443748-50	1978 Aug 28	Super Arcas	-	-	0.000	GFSC	SS	DMT/Horvath	Aerom?	WDRF	-	-
1975-M111	2443748-50	1978 Aug 28	Super Arcas	-	-	0.000	GFSC	SS	DMT/Horvath	Aerom?	WDRF	-	-
1975-M112	2443748-50	1978 Aug 28	Super Arcas	-	-	0.000	GFSC	SS	DMT/Horvath	Aerom?	WDRF	-	-
1975-M113	2443748-50	1978 Aug 28	Super Arcas	-	-	0.000	GFSC	SS	DMT/Horvath	Aerom?	WDRF	-	-
1975-M114	2443748-50	1978 Aug 28	Super Arcas	-	-	0.000	GFSC	SS	DMT/Horvath	Aerom?	WDRF	-	-
1975-M115	2443748-50	1978 Aug 28	Super Arcas	-	-	0.000	GFSC	SS	DMT/Horvath	Aerom?	WDRF	-	-
1975-M116	2443748-50	1978 Aug 28	Super Arcas	-	-	0.000	GFSC	SS	DMT/Horvath	Aerom?	WDRF	-	-
1975-M117	2443748-50	1978 Aug 28	Super Arcas	-	-	0.000	GFSC	SS	DMT/Horvath	Aerom?	WDRF	-	-
1975-M118	2443748-50	1978 Aug 28	Super Arcas	-	-	0.000	GFSC	SS	DMT/Horvath	Aerom?	WDRF	-	-
1975-M119	2443748-50	1978 Aug 28	Super Arcas	-	-	0.000	GFSC	SS	DMT/Horvath	Aerom?	WDRF	-	-
1975-M120	2443748-50	1978 Aug 28	Super Arcas	-	-	0.000	GFSC	SS	DMT/Horvath	Aerom?	WDRF	-	-
1975-M121	2443748-5												



Launch

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Orbit	Agency	Launch_Code	Group	Category	LTCite	Cite	Notes
1987-Y220	2446990-90	1987 Jul 14 0929	Super Arcas	-	MASA 15.24500	0.000	GSFC	SS	USI/Ulvick	Aeron	WDCRF	ESA-SF291	-
1987-Y226	2446991-04	1987 Jul 14 1255	Super Arcas	-	MASA 15.24700	0.000	GSFC	SS	USI/Ulvick	Aeron	WDCRF	ESA-SF291	-
1987-Y229	2446992-02	1987 Jul 15 1232	Super Arcas	-	MASA 15.24600	0.000	GSFC	SS	USI/Ulvick	Aeron	WDCRF	ESA-SF291	-
1987-S272	2447120-50	1987 Nov 21	Super Arcas	-	-	0.000	ESA	SS	ESA/	Meteo	HDLCSSG	-	-
1988-S203	2447327-50	1988 Jun 15	Super Arcas	-	-	0.000	ESA	SS	ESA/	Meteo	HDLCSSG	-	-
1988-S204	2447506-50	1988 Jun 11	Super Arcas	-	-	0.000	ESA	SS	ESA/	Meteo	HDLCSSG	-	-
1989-S156	2447826-50	1989 Oct 27	Super Arcas	-	-	0.000	ESA	SS	ESA/	Meteo	HDLCSSG	-	-
1990-S216	2447912-50	1990 Jan 21	Super Arcas	-	-	0.000	ESA	SS	ESA/	Meteo	HDLCSSG	-	-
1990-S217	2448215-50	1990 Nov 20	Super Arcas	-	-	0.000	ESA	SS	ESA/	Meteo	HDLCSSG	-	-
1990-S225	2448464-50	1991 Jul 17	Super Arcas	-	-	0.000	ESA	SS	ESA/	Meteo	HDLCSSG	-	-
1991-Y22	2448469-56	1991 Aug 1 0128:00	Super Arcas	-	MASA 15.24900 NLC-91	0.000	GSFC	SS	USI/Ulvick	Ionos	ESA-SF365F-45	-	-
1991-Y27	2448474-47	1991 Aug 5 2321	Super Arcas	-	MASA 15.2500E NLC-91	0.000	GSFC	SS	USI/Ulvick	Plasma	WISR	-	-
1991-Y29	2448478-48	1991 Aug 9 2330	Super Arcas	-	MASA 15.2510E NLC-91	0.000	GSFC	SS	USI/Ulvick	Plasma	WISR	-	-
1992-S112	2448727-50	1992 Apr 15	Super Arcas	-	-	0.000	ESA	SS	ESA/	Meteo	HDLCSSG	-	-





Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Mission	FlightCode	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee_Km	Range_Km	Dest
1961-5462	2437299.50	1961	Boosted Arcas	-	-	Test	-	-	-	WS?	-	-	-	90?	-	-
1963-706	2438311.29	1963 Oct 8 1900:00	Boosted Arcas	-	-	UUD-1	-	-	-	WS	-	-	-	89	-	-
1963-707	2438313.17	1963 Oct 10 1600:00	Boosted Arcas	-	-	UUD-2	-	-	-	WS	-	-	-	81	-	-
1963-713	2438377.38	1963 Dec 13 2100:00	Boosted Arcas	-	-	UUD-3	-	-	-	WS	-	-	-	99	-	-
1964-710	2438461.48	1964 Mar 6 2225:00	Boosted Arcas	-	-	UUD-4 (Hw/L1)	-	-	-	WI	-	-	-	97	-	-
1965-715	2438621.05	1965 Mar 01 1312:00	Boosted Arcas	-	-	MASA 15-03II	-	-	-	AND	-	-	-	95	-	-
1965-716	2438622.34	1965 Mar 02 2009:00	Boosted Arcas	-	-	MASA 15-04II	-	-	-	AND	-	-	-	95	-	-
1965-742	2438635.70	1965 Mar 23 0452:30	Boosted Arcas	-	-	MASA 15-01GI	-	-	-	AND	-	-	-	74	-	-
1965-746	2438642.75	1965 Mar 23 0559:30	Boosted Arcas	-	-	MASA 15-02GI	-	-	-	AND	-	-	-	74	-	-
1965-774	2438906.33	1965 May 25 1959	Boosted Arcas	-	-	MASA 15-18GI	-	-	-	KARR	LI?	-	-	88	-	-
1965-781	2438911.29	1965 May 30 1900	Boosted Arcas	-	-	MASA 15-06GI	-	-	-	KARR	LI?	-	-	88	-	-
1965-782	2438911.31	1965 May 30 1920:24	Boosted Arcas	-	-	MASA 15-06GI	-	-	-	KARR	LI?	-	-	88	-	-
1965-783	2438911.32	1965 May 30 1940:05	Boosted Arcas	-	-	MASA 15-07GI	-	-	-	KARR	LI?	-	-	88	-	-
1965-784	2438911.33	1965 May 30 2000:01	Boosted Arcas	-	-	MASA 15-08GI	-	-	-	KARR	LI?	-	-	88	-	-
1965-785	2438911.35	1965 May 30 2020:01	Boosted Arcas	-	-	MASA 15-08GI	-	-	-	KARR	LI?	-	-	88	-	-
1965-786	2438911.38	1965 May 30 2100:02	Boosted Arcas	-	-	MASA 15-10GI	-	-	-	KARR	LI?	-	-	88	-	-
1965-7169	2439096.60	1965 Dec 2 0219	Boosted Arcas	-	-	MASA 15-20GI-II	-	-	-	AND	-	-	-	80?	-	-
1965-7160	2439101.08	1965 Dec 6 1555:30	Boosted Arcas	-	-	MASA 15-19GI	-	-	-	AND	-	-	-	85	-	-
1966-794	2439166.98	1966 Feb 10 1059	Boosted Arcas	?	-	Arcasounde IIA	-	-	-	USI66A	LP1	-	-	60?	-	-
1966-796	2439260.95	1966 May 15 1043	Boosted Arcas	-	-	Zerba I (Test)	-	-	-	RREC	LP1	-	-	20?	-	-
1966-714	2439265.53	1966 May 20 0800	Boosted Arcas	-	-	Zerba II	-	-	-	RREC	LP1	-	-	90?	-	-
1966-716	2439265.56	1966 May 20 0845	Boosted Arcas	-	-	Zerba III	-	-	-	RREC	LP1	-	-	99	-	-
1966-718	2439265.58	1966 May 20 0930	Boosted Arcas	-	-	Zerba IV	-	-	-	RREC	LP1	-	-	402	-	-
1966-720	2439265.53	1966 May 20 1015	Boosted Arcas	-	-	Zerba V	-	-	-	RREC	LP1	-	-	401	-	-
1966-722	2439265.96	1966 May 21 0930	Boosted Arcas	-	-	Zerba VII	-	-	-	RREC	LP1	-	-	90?	-	-
1966-724	2439266.50	1966 Jun 25	Boosted Arcas 2	-	-	Test 1	-	-	-	WS	-	-	-	445	-	-
1966-732	2439331.50	1966 Jun 25	Boosted Arcas	-	-	Test 1	-	-	-	WS	-	-	-	90?	-	-
1966-737	2439367.03	1966 Aug 29 1238	Boosted Arcas	-	-	D-region	-	-	-	WS	-	-	-	90?	-	-
1966-738	2439367.07	1966 Aug 29 1337	Boosted Arcas	-	-	D-region	-	-	-	WS	-	-	-	104	-	-
1967-716	2439517.28	1967 Jan 26 1846:00	Boosted Arcas	?	-	MASA 15-11	-	-	-	WS	-	-	-	104	-	-
1967-727	2439580.50	1967 Apr	Boosted Arcas	-	-	-	-	-	-	WI	-	-	-	90?	-	-
1967-728	2439580.50	1967 Apr	Boosted Arcas	-	-	-	-	-	-	WI	-	-	-	90?	-	-
1967-729	2439580.50	1967 Apr	Boosted Arcas	-	-	-	-	-	-	WI	-	-	-	90?	-	-
1967-730	2439580.50	1967 Apr	Boosted Arcas	-	-	-	-	-	-	WI	-	-	-	90?	-	-
1967-731	2439580.50	1967 Apr	Boosted Arcas	-	-	-	-	-	-	WI	-	-	-	90?	-	-
1967-732	2439580.50	1967 Apr	Boosted Arcas	-	-	-	-	-	-	WI	-	-	-	90?	-	-
1967-733	2439580.50	1967 Apr	Boosted Arcas	-	-	-	-	-	-	WI	-	-	-	90?	-	-
1967-734	2439580.50	1967 Apr	Boosted Arcas	-	-	-	-	-	-	WI	-	-	-	90?	-	-
1967-735	2439580.50	1967 Apr	Boosted Arcas	-	-	-	-	-	-	WI	-	-	-	90?	-	-
1967-736	2439580.50	1967 Apr	Boosted Arcas	-	-	-	-	-	-	WI	-	-	-	90?	-	-
1967-737	2439580.50	1967 Apr	Boosted Arcas	-	-	-	-	-	-	WI	-	-	-	90?	-	-
1967-738	2439580.50	1967 Apr	Boosted Arcas	-	-	-	-	-	-	WI	-	-	-	90?	-	-
1967-739	2439580.50	1967 Apr	Boosted Arcas	-	-	-	-	-	-	WI	-	-	-	90?	-	-
1967-740	2439580.50	1967 Apr	Boosted Arcas	-	-	-	-	-	-	WI	-	-	-	90?	-	-
1967-741	2439580.50	1967 Apr	Boosted Arcas	-	-	-	-	-	-	WI	-	-	-	90?	-	-
1967-742	2439580.50	1967 Apr	Boosted Arcas	-	-	-	-	-	-	WI	-	-	-	90?	-	-
1967-743	2439580.50	1967 Apr	Boosted Arcas	-	-	-	-	-	-	WI	-	-	-	90?	-	-
1967-744	2439580.50	1967 Apr	Boosted Arcas	-	-	-	-	-	-	WI	-	-	-	90?	-	-
1967-745	2439580.50	1967 Apr	Boosted Arcas	-	-	-	-	-	-	WI	-	-	-	90?	-	-
1967-746	2439580.50	1967 Apr	Boosted Arcas	-	-	-	-	-	-	WI	-	-	-	90?	-	-
1967-747	2439580.50	1967 Apr	Boosted Arcas	-	-	-	-	-	-	WI	-	-	-	90?	-	-
1967-748	2439580.50	1967 Apr	Boosted Arcas	-	-	-	-	-	-	WI	-	-	-	90?	-	-
1967-749	2439580.50	1967 Apr	Boosted Arcas	-	-	-	-	-	-	WI	-	-	-	90?	-	-
1967-750	2439580.50	1967 Apr	Boosted Arcas	-	-	-	-	-	-	WI	-	-	-	90?	-	-
1967-751	2439580.50	1967 Apr	Boosted Arcas	-	-	-	-	-	-	WI	-	-	-	90?	-	-
1967-752	2439580.50	1967 Apr	Boosted Arcas	-	-	-	-	-	-	WI	-	-	-	90?	-	-
1967-753	2439580.50	1967 Apr	Boosted Arcas	-	-	-	-	-	-	WI	-	-	-	90?	-	-
1967-754	2439580.50	1967 Apr	Boosted Arcas	-	-	-	-	-	-	WI	-	-	-	90?	-	-
1967-755	2439580.50	1967 Apr	Boosted Arcas	-	-	-	-	-	-	WI	-	-	-	90?	-	-
1967-756	2439580.50	1967 Apr	Boosted Arcas	-	-	-	-	-	-	WI	-	-	-	90?	-	-
1967-757	2439580.50	1967 Apr	Boosted Arcas	-	-	-	-	-	-	WI	-	-	-	90?	-	-
1967-758	2439580.50	1967 Apr	Boosted Arcas	-	-	-	-	-	-	WI	-	-	-	90?	-	-
1967-759	2439580.50	1967 Apr	Boosted Arcas	-	-	-	-	-	-	WI	-	-	-	90?	-	-
1967-760	2439580.50	1967 Apr	Boosted Arcas	-	-	-	-	-	-	WI	-	-	-	90?	-	-
1967-761	2439580.50	1967 Apr	Boosted Arcas	-	-	-	-	-	-	WI	-	-	-	90?	-	-
1967-762	2439580.50	1967 Apr	Boosted Arcas	-	-	-	-	-	-	WI	-	-	-	90?	-	-
1967-763	2439580.50	1967 Apr	Boosted Arcas	-	-	-	-	-	-	WI	-	-	-	90?	-	-
1967-764	2439580.50	1967 Apr	Boosted Arcas	-	-	-	-	-	-	WI	-	-	-	90?	-	-
1967-765	2439580.50	1967 Apr	Boosted Arcas	-	-	-	-	-	-	WI	-	-	-	90?	-	-
1967-766	2439580.50	1967 Apr	Boosted Arcas	-	-	-	-	-	-	WI	-	-	-	90?	-	-
1967-767	2439580.50	1967 Apr	Boosted Arcas	-	-	-	-	-	-	WI	-	-	-	90?	-	-
1967-768	2439580.50	1967 Apr	Boosted Arcas	-	-	-	-	-	-	WI	-	-	-	90?	-	-
1967-769	2439580.50	1967 Apr	Boosted Arcas	-	-	-	-	-	-	WI	-	-	-	90?	-	-
1967-770	2439580.50	1967 Apr	Boosted Arcas	-	-	-	-	-	-	WI	-	-	-	90?	-	-
1967-771	2439580.50	1967 Apr	Boosted Arcas	-	-	-	-	-	-	WI	-	-	-	90?	-	-
1967-772	2439580.50	1967 Apr	Boosted Arcas	-	-	-	-	-	-	WI	-	-	-	90?	-	-
1967-773	2439580.50	1967 Apr	Boosted Arcas	-	-	-	-	-	-	WI	-	-	-	90?	-	-
1967-774	2439580.50	1967 Apr	Boosted Arcas	-	-	-	-	-	-	WI	-	-	-	90?	-	-
1967-775	2439580.50	1967 Apr	Boosted Arcas	-	-	-	-	-	-	WI	-	-	-	90?	-	-
1967-776	2439580.50	1967 Apr	Boosted Arcas	-	-	-	-	-	-	WI	-	-	-	90?	-	-
1967-777	2439580.50	1967 Apr	Boosted Arcas	-	-	-	-	-	-	WI	-	-	-	90?	-	-
1967-778	2439580.50	1967 Apr	Boosted Arcas	-	-	-	-	-	-	WI	-	-	-	90?	-	-
1967-779	2439580.50	1967 Apr	Boosted Arcas	-	-	-	-	-	-	WI	-	-	-	90?	-	-
1967-780	2439580.50	1967 Apr	Boosted Arcas	-	-	-	-	-	-	WI	-	-	-	90?	-	-
1967-781	2439580.50	1967 Apr	Boosted Arcas	-	-	-	-	-	-	WI	-	-	-	90?	-	-
1967-782	2439580.50	1967 Apr	Boosted Arcas	-	-	-	-	-	-	WI	-	-	-	90?	-	-
1967-783	2439580.50	1967 Apr	Boosted Arcas	-	-	-	-	-	-	WI	-	-	-	90?	-	-
1967-784	2439580.50	1967 Apr	Boosted Arcas	-	-	-	-	-	-	WI	-	-	-	90?	-	-
1967-785	2439580.50	1967 Apr	Boosted Arcas	-	-	-	-	-	-	WI	-	-	-	90?	-	-
1967-786	2439580.50	1967 Apr	Boosted Arcas	-	-	-	-	-	-	WI	-	-	-	90?	-	-
1967-787	2439580.50	1967 Apr	Boosted Arcas	-	-	-	-	-	-	WI	-	-	-	90?	-	-
1967-788	2439580.50	1967 Apr	Boosted Arcas	-	-	-	-	-	-	WI	-	-	-	90?	-	-
1967-789	2439580.50	1967 Apr	Boosted Arcas	-	-	-	-	-	-	WI	-	-	-	90?	-	-
1967-790	2439580.50	1967 Apr	Boosted Arcas	-	-	-	-	-	-	WI	-	-	-	90?	-	-
1967-791	2439580.50	1967 Apr	Boosted Arcas	-	-	-	-	-	-	WI	-	-	-	90?	-	-
1967-792	2439580.50	1967 Apr	Boosted Arcas	-	-	-	-	-	-	WI	-	-	-	90?	-	-
1967-793	2439580.50	1967 Apr	Boosted Arcas	-	-	-	-	-	-	WI	-	-	-	90?	-	-
1967-794	2439580.50	1967 Apr	Boosted Arcas	-	-	-	-	-	-	WI						



Launch_Tag	Launch_JD	Launch_Date	LV_Type	Variant	Flight_ID	DrbPay	Agency	Launch_Code	Group	Category	LfCite	Cite	Notes
1961-5452	2437299.50	1961	Boosted Arcas	-	-	0.000	WSMR?	SS	WSMR/?	Test	ARC-Pamphlet	-	-
1963-106	2438311.29	1963 Oct 08 1900:00	Boosted Arcas	-	-	0.000	GSFC/UID	SS	UID/Pedersen	Ionos	Tellus17,1	SP-4401	-
1963-107	2438313.17	1963 Oct 10 1600:00	Boosted Arcas	-	-	0.000	GSFC/UID	SS	UID/Pedersen	Ionos	Tellus17,1	SP-4401	-
1964-113	2438377.38	1964 Mar 6 2325:00	Boosted Arcas	-	-	0.000	GSFC/UID	SS	UID/Pedersen	Ionos	Tellus17,1	SP-4004	-
1964-114	2438461.48	1964 Mar 6 2325:00	Boosted Arcas	-	-	0.000	GSFC/UID	SS	UID/Pedersen	Ionos	Tellus17,1	SP-4005	-
1965-115	2438821.05	1965 Mar 01 1312:00	Boosted Arcas	-	-	0.000	UID/GSFC	SS	UID/DerbLom	Aeron	AND	SP-4401	-
1965-116	2438822.34	1965 Mar 02 2009:00	Boosted Arcas	-	-	0.000	UID/GSFC	SS	UID/Pedersen	Ionos	AND	SP-4401	-
1965-142	2438835.70	1965 Mar 16 0452:30	Boosted Arcas	-	-	0.000	GSFC/NTMF	SS	GSFC/kane	Ionos	AND	SP-4401	-
1965-146	2438842.75	1965 Mar 23 0559:30	Boosted Arcas	-	-	0.000	GSFC/NTMF	SS	GSFC/kane	Ionos	AND	MDRF	-
1965-174	2438906.33	1965 May 26 1959	Boosted Arcas	-	-	0.000	GSFC	SS	GSFC/kane	Ionos	TH-X-55519	SP-4401	-
1965-181	2438911.29	1965 May 30 1900	Boosted Arcas	-	-	0.000	GSFC	SS	GSFC/kane,Alkin	Ionos/Eclipse	TH-X-55519	SP-4401	-
1965-182	2438911.31	1965 May 30 1921:24	Boosted Arcas	-	-	0.000	GSFC	SS	GSFC/kane,Alkin	Ionos/Eclipse	TH-X-55519	SP-4401	-
1965-183	2438911.32	1965 May 30 1940:05	Boosted Arcas	-	-	0.000	GSFC	SS	GSFC/kane,Alkin	Ionos/Eclipse	TH-X-55519	SP-4401	-
1965-184	2438911.33	1965 May 30 2000:01	Boosted Arcas	-	-	0.000	GSFC	SS	GSFC/kane,Alkin	Ionos/Eclipse	TH-X-55519	SP-4401	-
1965-185	2438911.35	1965 May 30 2020:01	Boosted Arcas	-	-	0.000	GSFC	SS	GSFC/kane,Alkin	Ionos/Eclipse	TH-X-55519	SP-4401	-
1965-186	2438911.38	1965 May 30 2100:02	Boosted Arcas	-	-	0.000	GSFC	SS	GSFC/kane,Alkin	Ionos/Eclipse	TH-X-55519	SP-4401	-
1965-1159	2439096.60	1965 Dec 2 0219	Boosted Arcas	-	-	0.000	NTMF	SS	ILC/MDRF/Jespersen,land.	Ionos	AND	SP-4401	-
1965-1160	2439101.08	1965 Dec 6 1388:30	Boosted Arcas	-	-	0.000	NTMF/GSFC	SS	GSFC/kane	Ionos	AND	MDRF	-
1966-194	2439166.96	1966 Feb 10 1059	Boosted Arcas	?	-	0.000	MRN	SS	USAF/?	Neveo	M064	SP-4007	-
1966-196	2439260.85	1966 Feb 15 1043	Boosted Arcas	-	-	0.000	GSFC	SF	GSFC/Alkin	Ionos-solar Eclipse	WDRF	SP-4007	-
1966-114	2439265.83	1966 May 20 0800	Boosted Arcas	-	-	0.000	GSFC	SS	GSFC/Alkin	Ionos-solar Eclipse	WDRF	SP-4401	-
1966-115	2439265.86	1966 May 20 0845	Boosted Arcas	-	-	0.000	GSFC	SS	GSFC/Alkin	Ionos-solar Eclipse	WDRF	SP-4401	-
1966-116	2439265.90	1966 May 20 0930	Boosted Arcas	-	-	0.000	GSFC	SS	GSFC/Alkin	Ionos-solar Eclipse	WDRF	SP-4401	-
1966-117	2439265.93	1966 May 20 1015	Boosted Arcas	-	-	0.000	GSFC	SS	GSFC/Alkin	Ionos-solar Eclipse	WDRF	SP-4401	-
1966-120	2439265.96	1966 May 20 1105	Boosted Arcas	-	-	0.000	GSFC	SS	GSFC/Alkin	Ionos-solar Eclipse	WDRF	SP-4401	-
1966-122	2439265.99	1966 May 21 0930	Boosted Arcas	-	-	0.000	GSFC	SS	GSFC/Alkin	Ionos-solar Eclipse	WDRF	SP-4401	-
1966-124	2439266.90	1966 Jul 25	Boosted Arcas 2	-	-	0.000	GSFC	SS	WSMR/?	Test	SP-4007	MR660801-10	-
1966-132	2439331.52	1966 Aug 29 1238	Boosted Arcas	-	-	0.000	GSFC	SS	GSFC/Pederson	Ionos	WDRF	SP-4401	-
1966-137	2439367.03	1966 Aug 29 1337	Boosted Arcas	-	-	0.000	GSFC	SS	GSFC/Pederson	Ionos	WDRF	SP-4401	-
1966-138	2439367.07	1966 Aug 29 1337	Boosted Arcas	-	-	0.000	GSFC	SS	GSFC/Pederson	Ionos	WDRF	SP-4401	-
1967-118	2439517.28	1967 Jan 26 1945:00	Boosted Arcas	?	-	0.000	ASL	SU	WSMR/?	Aeron	WDRF	SP-4401	-
1967-127	2439580.50	1967 Apr	Boosted Arcas	-	-	0.000	ASL	SU	WSMR/?	Aeron	WDRF	SP-4401	-
1967-128	2439580.50	1967 Apr	Boosted Arcas	-	-	0.000	ASL	SU	WSMR/?	Aeron	WDRF	SP-4401	-
1967-129	2439580.50	1967 Apr	Boosted Arcas	-	-	0.000	ASL	SU	WSMR/?	Aeron	WDRF	SP-4401	-
1967-130	2439580.50	1967 Apr	Boosted Arcas	-	-	0.000	ASL	SU	WSMR/?	Aeron	WDRF	SP-4401	-
1967-131	2439580.50	1967 Apr	Boosted Arcas	-	-	0.000	ASL	SU	WSMR/?	Aeron	WDRF	SP-4401	-
1967-132	2439580.50	1967 Apr	Boosted Arcas	-	-	0.000	ASL	SU	WSMR/?	Aeron	WDRF	SP-4401	-
1967-133	2439580.50	1967 Apr	Boosted Arcas	-	-	0.000	ASL	SU	WSMR/?	Aeron	WDRF	SP-4401	-
1967-134	2439580.50	1967 Apr	Boosted Arcas	-	-	0.000	ASL	SU	WSMR/?	Aeron	WDRF	SP-4401	-
1967-135	2439580.50	1967 Apr	Boosted Arcas	-	-	0.000	ASL	SU	WSMR/?	Aeron	WDRF	SP-4401	-
1967-136	2439580.50	1967 Apr	Boosted Arcas	-	-	0.000	ASL	SU	WSMR/?	Aeron	WDRF	SP-4401	-
1967-137	2439580.50	1967 Apr	Boosted Arcas	-	-	0.000	ASL	SU	WSMR/?	Aeron	WDRF	SP-4401	-
1967-123	2439766.50	1967 Oct 3	Boosted Arcas	-	-	0.000	GSFC	SF	GSFC/hood	Test	SP-4401	SP-4008	-
1967-124	2439766.50	1967 Oct 24 1400	Boosted Arcas	-	-	0.000	GSFC	SF	GSFC/hood	Test	SP-4401	SP-4008	-
1967-202	2439785.33	1967 Oct 24 1950	Boosted Arcas	-	-	0.000	GSFC	SS	GSFC/kane	Ionos	WDRF	SP-4008	-
1967-203	2439785.33	1967 Oct 24 1950	Boosted Arcas	-	-	0.000	GSFC	SS	GSFC/kane	Ionos	WDRF	SP-4008	-
1968-116	2439823.77	1968 Mar 6 0635	Boosted Arcas	-	-	0.000	GSFC	SS	GSFC/hood	Test	LJRadioSP1,81	SP-4010	-
1968-117	2439824.01	1968 Mar 8 1203	Boosted Arcas	-	-	0.000	GSFC	SS	GSFC/hood	Test	LJRadioSP1,81	SP-4010	-
1968-119	2439824.01	1968 Mar 8 1203	Boosted Arcas	-	-	0.000	GSFC	SS	GSFC/hood	Test	LJRadioSP1,81	SP-4010	-
1968-120	2439824.01	1968 Mar 8 1203	Boosted Arcas	-	-	0.000	GSFC	SS	GSFC/hood	Test	LJRadioSP1,81	SP-4010	-
1968-121	2439824.01	1968 Mar 8 1203	Boosted Arcas	-	-	0.000	GSFC	SS	GSFC/hood	Test	LJRadioSP1,81	SP-4010	-
1968-122	2439824.01	1968 Mar 8 1203	Boosted Arcas	-	-	0.000	GSFC	SS	GSFC/hood	Test	LJRadioSP1,81	SP-4010	-
1968-123	2439824.01	1968 Mar 8 1203	Boosted Arcas	-	-	0.000	GSFC	SS	GSFC/hood	Test	LJRadioSP1,81	SP-4010	-
1968-124	2439824.01	1968 Mar 8 1203	Boosted Arcas	-	-	0.000	GSFC	SS	GSFC/hood	Test	LJRadioSP1,81	SP-4010	-
1968-125	2439824.01	1968 Mar 8 1203	Boosted Arcas	-	-	0.000	GSFC	SS	GSFC/hood	Test	LJRadioSP1,81	SP-4010	-
1968-126	2439824.01	1968 Mar 8 1203	Boosted Arcas	-	-	0.000	GSFC	SS	GSFC/hood	Test	LJRadioSP1,81	SP-4010	-
1968-127	2439824.01	1968 Mar 8 1203	Boosted Arcas	-	-	0.000	GSFC	SS	GSFC/hood	Test	LJRadioSP1,81	SP-4010	-
1968-128	2439824.01	1968 Mar 8 1203	Boosted Arcas	-	-	0.000	GSFC	SS	GSFC/hood	Test	LJRadioSP1,81	SP-4010	-
1968-129	2439824.01	1968 Mar 8 1203	Boosted Arcas	-	-	0.000	GSFC	SS	GSFC/hood	Test	LJRadioSP1,81	SP-4010	-
1968-130	2439824.01	1968 Mar 8 1203	Boosted Arcas	-	-	0.000	GSFC	SS	GSFC/hood	Test	LJRadioSP1,81	SP-4010	-
1968-131	2439824.01	1968 Mar 8 1203	Boosted Arcas	-	-	0.000	GSFC	SS	GSFC/hood	Test	LJRadioSP1,81	SP-4010	-
1968-132	2439824.01	1968 Mar 8 1203	Boosted Arcas	-	-	0.000	GSFC	SS	GSFC/hood	Test	LJRadioSP1,81	SP-4010	-
1968-133	2439824.01	1968 Mar 8 1203	Boosted Arcas	-	-	0.000	GSFC	SS	GSFC/hood	Test	LJRadioSP1,81	SP-4010	-
1968-134	2439824.01	1968 Mar 8 1203	Boosted Arcas	-	-	0.000	GSFC	SS	GSFC/hood	Test	LJRadioSP1,81	SP-4010	-
1968-135	2439824.01	1968 Mar 8 1203	Boosted Arcas	-	-	0.000	GSFC	SS	GSFC/hood	Test	LJRadioSP1,81	SP-4010	-
1968-136	2439824.01	1968 Mar 8 1203	Boosted Arcas	-	-	0.000	GSFC	SS	GSFC/hood	Test	LJRadioSP1,81	SP-4010	-
1968-137	2439824.01	1968 Mar 8 1203	Boosted Arcas	-	-	0.000	GSFC	SS	GSFC/hood	Test	LJRadioSP1,81	SP-4010	-
1968-138	2439824.01	1968 Mar 8 1203	Boosted Arcas	-	-	0.000	GSFC	SS	GSFC/hood	Test	LJRadioSP1,81	SP-4010	-
1968-139	2439824.01	1968 Mar 8 1203	Boosted Arcas	-	-	0.000	GSFC	SS	GSFC/hood	Test	LJRadioSP1,81	SP-4010	-
1968-140	2439824.01	1968 Mar 8 1203	Boosted Arcas	-	-	0.000	GSFC	SS	GSFC/hood	Test	LJRadioSP1,81	SP-4010	-
1968-141	2439824.01	1968 Mar 8 1203	Boosted Arcas	-	-	0.000	GSFC	SS	GSFC/hood	Test	LJRadioSP1,81	SP-4010	-
1968-142	2439824.01	1968 Mar 8 1203	Boosted Arcas	-	-	0.000	GSFC	SS	GSFC/hood	Test	LJRadioSP1,81	SP-4010	-
1968-143	2439824.01	1968 Mar 8 1203	Boosted Arcas	-	-	0.000	GSFC	SS	GSFC/hood	Test	LJRadioSP1,81	SP-4010	-
1968-144	2439824.01	1968 Mar 8 1203	Boosted Arcas	-	-	0.000	GSFC	SS	GSFC/hood	Test	LJRadioSP1,81	SP-4010	-
1968-145	2439824.01	1968 Mar 8 1203	Boosted Arcas	-	-	0.000	GSFC	SS	GSFC/hood	Test	LJRadioSP1,81	SP-4010	-
1968-146	2439824.01	1968 Mar 8 1203	Boosted Arcas	-	-	0.000	GSFC	SS	GSFC/hood	Test	LJRadioSP1,81	SP-4010	-
1968-147	2439824.01	1968 Mar 8 1203	Boosted Arcas	-	-	0.000	GSFC	SS	GSFC/hood	Test	LJRadioSP1,81	SP-4010	-
1968-148	2439824.01	1968 Mar 8 1203	Boosted Arcas	-	-	0.000	GSFC	SS	GSFC/hood	Test	LJRadioSP1,81	SP-4010	-
1968-149	2439824.01	1968 Mar 8 1203	Boosted Arcas	-	-	0.000	GSFC	SS	GSFC/hood	Test	LJRadioSP1,81	SP-4010	-
1968-150	2439824.01	1968 Mar 8 1203	Boosted Arcas	-	-	0.000	GSFC	SS	GSFC/hood	Test	LJRadioSP1,81	SP-4010	-
1968-151	2439824.01	1968 Mar 8 1203	Boosted Arcas	-	-	0.000	GSFC	SS	GSFC/hood	Test	LJRadioSP1,81	SP-4010	-
1968-152	2439824.01	1968 Mar 8 1203	Boosted Arcas	-	-	0.000	GSFC	SS	GSFC/hood	Test	LJRadioSP1,81	SP-4010	-
1968-153	2439824.01	1968 Mar 8 1203	Boosted Arcas	-	-	0.000	GSFC	SS	GSFC/hood	Test	LJRadioSP1,81	SP-4010	-
1968-154	2439824.01	1968 Mar 8 1203	Boosted Arcas	-	-	0.000	GSFC	SS	GSFC/hood	Test	LJRadioSP1,81	SP-4010	-
1968-155	2439824.01	1968 Mar 8 1203	Boosted Arcas	-	-	0.000	GSFC	SS	GSFC/hood	Test	LJRadioSP1,81	SP-4010	-
1968-156	2439824.01	1968 Mar 8 1203	Boosted Arcas	-	-	0.000	GSFC	SS	GSFC/hood	Test	LJRadioSP1,81	SP-4010	-
1968-157	2439824.01	1968 Mar 8 1203	Boosted Arcas	-	-	0.000	GSFC	SS	GSFC/hood	Test	LJRadioSP1,81	SP-4010	-
1968-158	2439824.01	1968 Mar 8 1203	Boosted Arcas	-	-	0.000	GSFC	SS	GSFC/hood	Test	LJRadioSP1,81	SP-4010	-
1968-159	2439824.01	1968 Mar 8 1203	Boosted Arcas	-	-	0.000	GSFC	SS	GSFC/hood	Test	LJRadioSP1,81	SP-4010	-
1968-160	2439824.01	1968 Mar 8 1203	Boosted Arcas	-	-	0.000	GSFC	SS	GSFC/hood	Test	LJRadioSP1,81	SP-4010	-
1968-161	2439824.01	1968 Mar 8 1203	Boosted Arcas	-	-	0.000	GSFC	SS	GSFC/hood	Test	LJRadioSP1,81	SP-4010	-



Launch

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Mission	FlightCode	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee km	Range km	Dest
1988-A74	2486400.50	1988 Jul 16	Arcon	-	MRL-1	-	-	-	-	WI	-	-	-	1	-	-
1988-A78	2486406.50	1988 Jul 21	Arcon	-	SEL-1	-	-	-	-	WI	-	-	-	1	-	-
1988-A79	2486406.50	1988 Jul 22	Arcon	-	-	-	-	-	-	WI	-	-	-	20	-	-
1989-H13	2486703.26	1989 May 14 1755	Arcon	-	MASA 2.01GT	-	-	-	-	WI	-	-	-	68	-	-
1989-H14	2486704.22	1989 May 15 1710	Arcon	-	MASA 2.02GT	-	-	-	-	WI	-	-	-	60?	-	-
1989-A77	2486704.42	1989 May 15 2210	Arcon	-	MASA 2.03GT	-	-	-	-	WI	-	-	-	1	-	-
1989-A153	2486787.50	1989 Aug 7	Arcon	-	MASA 2.04GT	-	-	-	-	WI	-	-	-	20	-	-
1989-R25	2486787.50	1989 Aug 7	Arcon	-	MASA 2.05GT	-	-	-	-	WI	-	-	-	50	-	-
1989-S156	2486787.50	1989 Aug 7	Arcon	-	MASA 2.06GT	-	-	-	-	WI	-	-	-	104	-	-



Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	OrbPay	Agency	Launch_Code	Group	Category	LTCite	Cite	Notes
1988-A74	2436400.50	1988 Jul 16	Arcon	-	NRL-1	0.000	NRL	SF	NRL/	Test	RP-1028	Alway	-
1988-A78	2436406.50	1988 Jul 21	Arcon	-	SEL-1	0.000	SHDL	SF	SCEL/	Test	RP-1028	Alway	-
1988-A79	2436406.50	1988 Jul 22	Arcon	-	-	0.000	NRL?	SF	NRL/	Test	RP-1028	Alway	-
1989-A13	2436703.25	1989 May 14 1755	Arcon	-	MISA 2.01GT	0.000	GSFC	SS	GSFC/Redrow	Test	WDCRF	RP-1028	-
1989-A14	2436704.22	1989 May 15 1710	Arcon	-	MISA 2.02GT	0.000	GSFC	SS	GSFC/Redrow	Test	WDCRF	RP-1028	-
1989-A77	2436704.42	1989 May 15 2210	Arcon	-	MISA 2.03GT	0.000	GSFC	SF	GSFC/Redrow	Test	WDCRF	RP-1028	-
1989-A133	2436787.50	1989 Aug 7	Arcon	-	MISA 2.04GT	0.000	GSFC	SF	GSFC/Redrow	Test	WDCRF	RP-1028	-
1989-A25	2436787.50	1989 Aug 7	Arcon	-	MISA 2.05GT	0.000	GSFC	SF	GSFC/Redrow	Test	WDCRF	RP-1028	-
1989-S135	2436787.50	1989 Aug 7	Arcon	-	MISA 2.06GT	0.000	GSFC	SF	GSFC/Redrow	Test	SP-4401	RP-1028	-





Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Mission	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee_Km	Range_Km	Dest
1979-104	2444232.22	1979 Dec 24 17:14:38	Ariane 1	-	L01	-	CAT	-	CSG	E1A1	-	-	36836	-	-
1980-F01	2444383.10	1980 May 23 14:29:39	Ariane 1	-	L02	Fireweel	CAT	-	CSG	E1A1	-	-	207	-	-
1981-057	2444775.02	1981 Jun 19 12:52:59	Ariane 1	-	L03	Meteosat 2/Apple	Meteosat F2	-	CSG	E1A1	-	-	38328	-	-
1981-122	2444958.56	1981 Dec 20 01:29:00	Ariane 1	-	L04	Marecs 1	Marecs A	-	CSG	E1A1	-	-	37901	-	-
1982-F06	2445221.59	1982 Sep 9 02:12:00	Ariane 1	-	L5	Marecs B/Sirio B	Marecs B	-	CSG	E1A1	-	-	2207	-	-
1983-058	2445602.00	1983 Jun 16 11:59:03	Ariane 1	-	L6	EGS 1	EGS 1	-	CSG	E1A1	-	-	38994	-	-
1983-105	2445626.53	1983 Oct 19 00:45:36	Ariane 1	-	L7	Intelsat 507	Intelsat V F7	-	CSG	E1A1	-	-	40064	-	-
1984-023	2445764.53	1984 Mar 5 00:50:03	Ariane 1	-	L8	Intelsat 508	Intelsat V F8	-	CSG	E1A1	-	-	36463	-	-
1984-043	2445843.56	1984 May 23 13:32:29	Ariane 1	-	L9 L9	Spacenet 1	Spacenet F1	-	CSG	E1A1	-	-	37706	-	-
1984-061	2445917.06	1984 Aug 4 13:32:54	Ariane 3	-	L10 L12	EGS 2/Telecom 1A	EGS 2	-	CSG	E1A1	-	-	49861	-	-
1984-114	2446014.55	1984 Nov 10 01:14:18	Ariane 3	-	L11 L13	Spacenet 2/Marecs 2	Spacenet F2	-	CSG	E1A1	-	-	39451	-	-
1985-015	2446105.47	1985 Feb 5 23:22:00	Ariane 3	-	L12 L14	Arab 1A/Brasiliat 1A	Arab 1A	-	CSG	E1A1	-	-	36495	-	-
1985-035	2446193.55	1985 May 9 01:15:38	Ariane 3	-	L13 L15	Getar 1A/Telecom 1B	Getar 1A	-	CSG	E1A1	-	-	150000	-	-
1985-056	2446248.97	1985 Jun 12 11:23:13	Ariane 1	-	L14 L10	Glorio	Glorio	-	CSG	E1A1	-	-	2207	-	-
1985-F03	2446321.48	1985 Sep 12 23:26:00	Ariane 1	-	L15 L16	EGS 3/Spacenet 3	EGS 3	-	CSG	E1A1	-	-	13868	-	-
1986-019	2446463.57	1986 Feb 22 01:44:36	Ariane 1	-	L16 L11	Spot/Wikong	Spot	-	CSG	E1A1	-	-	2507	-	-
1986-026	2446518.48	1986 Mar 28 23:30:00	Ariane 3	-	L17 L17	Getar 2/Brasiliat 2	Getar 2	-	CSG	E1A2	-	-	36889	-	-
1986-F05	2446581.54	1986 May 31 00:53:03	Ariane 3	-	L18 L18	Intelsat 514	Intelsat VA F14	-	CSG	E1A1	-	-	37094	-	-
1987-078	2447054.53	1987 Sep 16 00:45:28	Ariane 3	-	L19 L19	Ausstat K3/EGS 4	Ausstat K3	-	CSG	E1A1	-	-	36454	-	-
1987-095	2447120.60	1987 Nov 21 02:19:00	Ariane 3	-	L20 L20	TV-SMT	TV-SMT	-	CSG	E1A2	-	-	37512	-	-
1988-018	2447232.48	1988 Mar 11 23:28:00	Ariane 3	-	L21 L21	Te1-1C/Spacenet 3R	Spacenet 3R	-	CSG	E1A1	-	-	36535	-	-
1988-040	2447299.50	1988 Jun 15 11:19:01	Ariane 2	-	L22 L22	Intelsat 513	Intelsat VA F13	-	CSG	E1A1	-	-	38535	-	-
1988-051	2447327.97	1988 Jun 15 11:19:01	Ariane 2	-	L23 L22	Meteosat 3/PAS 1	Meteosat F2	-	CSG	E1A2	-	-	38535	-	-
1988-061	2447413.46	1988 Jul 21 23:12:00	Ariane 3	-	L24 L23	Instat 1C/EGS 5	Instat 1C	-	CSG	E1A1	-	-	38783	-	-
1988-063	2447364.47	1988 Sep 5 23:05:00	Ariane 3	-	L25 L25	Getar 3/EGS 5	Getar 3	-	CSG	E1A1	-	-	36930	-	-
1988-098	2447462.60	1988 Dec 11 00:53:38	Ariane 2	-	L26 L26	Skyenet 4B/Astra 1A	Skyenet 4B	-	CSG	E1A1	-	-	35178	-	-
1988-109	2447506.52	1988 Dec 11 00:53:38	Ariane 2	-	L27 L26	Intelsat 515	Intelsat VA F15	-	CSG	E1A1	-	-	40539	-	-
1989-000	2447553.56	1989 Jan 27 01:21:00	Ariane 2	-	L28 L28	JCSMT 1/Arcecoat 4	JCSMT 1	-	CSG	E1A1	-	-	38239	-	-
1989-020	2447592.48	1989 Mar 6 23:29:00	Ariane 2	-	L29 L27	Te1-X	Te1-X	-	CSG	E1A1	-	-	38156	-	-
1989-041	2447683.44	1989 Apr 5 22:57:18	Ariane 2	-	L30 L27	Suparbird M/DPS 1	Suparbird A	-	CSG	E1A1	-	-	38633	-	-
1989-042	2447719.51	1989 Jun 12 00:14:00	Ariane 3	-	L31 L404	Olympus	Olympus	-	CSG	E1A1	-	-	36208	-	-
1989-053	2447747.48	1989 Aug 6 23:25:13	Ariane 3	-	L32 L28	Intelsat 602	Intelsat VI F-2	-	CSG	E1A2	-	-	37846	-	-
1989-062	2447915.57	1989 Aug 6 23:25:13	Ariane 3	-	L33 L405	TV-SMT 2/Hipparcos	TV-SMT 2	-	CSG	E1A2	-	-	630	-	-
1989-067	2447927.46	1989 Oct 27 23:55:00	Ariane 4	-	L34 L406	Intelsat 601	Intelsat VI F-2	-	CSG	E1A2	-	-	36656	-	-
1989-005	2447931.57	1989 Oct 27 23:55:00	Ariane 4	-	L35 L406	SPOT 2/ASAP-1	SPOT 2	-	CSG	E1A2	-	-	37937	-	-
1990-F01	2447946.47	1990 Feb 22 23:17:00	Ariane 4	-	L36 L407	Suparbird B/BS 2X	Suparbird B	-	CSG	E1A2	-	-	37937	-	-
1990-003	2448097.43	1990 Jun 24 22:25:00	Ariane 4	-	L37 L409	EGS 6/Skyenet 4C	Skyenet 4C	-	CSG	E1A2	-	-	38692	-	-
1990-074	2448134.45	1990 Aug 30 22:46:00	Ariane 4	-	L38 L410b	EGS 6/Galaxy 6	SBS 6	-	CSG	E1A2	-	-	36616	-	-
1990-091	2448177.46	1990 Oct 12 22:55:18	Ariane 4	-	L39 L411b	Satcom C/Getar 4	Satcom C1	-	CSG	E1A2	-	-	41420	-	-
1990-100	2448216.47	1990 Nov 20 23:11:00	Ariane 4	-	L40 L412b	Intelsat 1/EGS 2F2	Intelsat 1	-	CSG	E1A2	-	-	38098	-	-
1991-003	2448272.46	1991 Jan 15 23:10:49	Ariane 4	-	L41 L413a	Astra 1B/Meteosat 5	Astra 1B	-	CSG	E1A2	-	-	37457	-	-
1991-005	2448351.46	1991 Mar 4 23:35:00	Ariane 4	-	L42 L414	EGS 7/ASAP 2	EGS 7	-	CSG	E1A2	-	-	37457	-	-
1991-026	2448381.46	1991 Apr 4 23:35:00	Ariane 4	-	L43 L416a	Intelsat 605	Intelsat VI F-5	-	CSG	E1A2	-	-	371	-	-
1991-055	2448394.57	1991 Jun 17 01:46:13	Ariane 4	-	L44 L417	Intelsat 605	Intelsat VI F-5	-	CSG	E1A2	-	-	371	-	-
1991-056	2448393.47	1991 Aug 14 01:45:13	Ariane 4	-	L45 L417	Intelsat 605	Intelsat VI F-5	-	CSG	E1A2	-	-	371	-	-
1991-062	2448393.47	1991 Sep 26 23:45:00	Ariane 4	-	L46 L418	Intelsat 605	Intelsat VI F-5	-	CSG	E1A2	-	-	371	-	-
1991-075	2448393.47	1991 Oct 26 23:45:00	Ariane 4	-	L47 L418	Intelsat 605	Intelsat VI F-5	-	CSG	E1A2	-	-	371	-	-
1991-076	2448393.47	1991 Nov 26 23:45:00	Ariane 4	-	L48 L418	Intelsat 605	Intelsat VI F-5	-	CSG	E1A2	-	-	371	-	-
1991-084	2448393.47	1991 Dec 26 23:45:00	Ariane 4	-	L49 L418	Intelsat 605	Intelsat VI F-5	-	CSG	E1A2	-	-	371	-	-
1992-001	2448378.50	1992 Jun 9 23:45:27	Ariane 4	-	L50 L419	Intelsat 605	Intelsat VI F-5	-	CSG	E1A2	-	-	371	-	-
1992-021	2448378.50	1992 Jul 9 23:45:27	Ariane 4	-	L51 L419	Intelsat 605	Intelsat VI F-5	-	CSG	E1A2	-	-	371	-	-
1992-045	2448381.45	1992 Aug 10 23:04:00	Ariane 4	-	L52 L419	Intelsat 605	Intelsat VI F-5	-	CSG	E1A2	-	-	371	-	-
1992-056	2448381.45	1992 Sep 10 23:04:00	Ariane 4	-	L53 L419	Intelsat 605	Intelsat VI F-5	-	CSG	E1A2	-	-	371	-	-
1992-072	2448378.50	1992 Oct 10 23:04:00	Ariane 4	-	L54 L419	Intelsat 605	Intelsat VI F-5	-	CSG	E1A2	-	-	371	-	-
1992-084	2448378.50	1992 Nov 10 23:04:00	Ariane 4	-	L55 L419	Intelsat 605	Intelsat VI F-5	-	CSG	E1A2	-	-	371	-	-
1992-084	2448378.50	1992 Dec 10 23:04:00	Ariane 4	-	L56 L419	Intelsat 605	Intelsat VI F-5	-	CSG	E1A2	-	-	371	-	-
1993-031	2449119.54	1993 Dec 12 00:55:32	Ariane 4	-	L57 L420a	Intelsat 605	Intelsat VI F-5	-	CSG	E1A2	-	-	371	-	-
1993-039	2449193.51	1993 Jul 25 00:18:00	Ariane 4	-	L58 L420a	Intelsat 605	Intelsat VI F-5	-	CSG	E1A2	-	-	371	-	-
1993-048	2449193.51	1993 Jul 25 00:18:00	Ariane 4	-	L59 L420a	Intelsat 605	Intelsat VI F-5	-	CSG	E1A2	-	-	371	-	-
1993-061	2449256.57	1993 Sep 26 01:45:00	Ariane 4	-	L60 L420a	Intelsat 605	Intelsat VI F-5	-	CSG	E1A2	-	-	371	-	-
1993-062	2449282.78	1993 Oct 27 02:46:00	Ariane 4	-	L61 L420a	Intelsat 605	Intelsat VI F-5	-	CSG	E1A2	-	-	371	-	-
1993-073	2449311.55	1993 Nov 20 01:17:00	Ariane 4	-	L62 L420a	Intelsat 605	Intelsat VI F-5	-	CSG	E1A2	-	-	371	-	-
1993-078	2449339.56	1993 Dec 18 01:37:00	Ariane 4	-	L63 L420a	Intelsat 605	Intelsat VI F-5	-	CSG	E1A2	-	-	371	-	-
1994-F01	2449377.00	1994 Jun 24 21:37:00	Ariane 4	-	L64 L420a	Intelsat 605	Intelsat VI F-5	-	CSG	E1A2	-	-	371	-	-
1994-034	2449520.80	1994 Jun 17 07:07:19	Ariane 4	-	L65 L420a	Intelsat 605	Intelsat VI F-5	-	CSG	E1A2	-	-	371	-	-
1994-040	2449542.46	1994 Jul 8 23:05:32	Ariane 4	-	L66 L420a	Intelsat 605	Intelsat VI F-5	-	CSG	E1A2	-	-	371	-	-
1994-049	2449575.46	1994 Aug 10 23:05:24	Ariane 4	-	L67 L420a	Intelsat 605	Intelsat VI F-5	-	CSG	E1A2	-	-	371	-	-
1994-058	2449604.50	1994 Sep 8 00:29:40	Ariane 4	-	L68 L420a	Intelsat 605	Intelsat VI F-5	-	CSG	E1A2	-	-	371	-	-
1994-065	2449633.55	1994 Oct 8 01:07:00	Ariane 4	-	L69 L420a	Intelsat 605	Intelsat VI F-5	-	CSG	E1A2	-	-	371	-	-
1994-070	2449657.53	1994 Nov 1 00:37:00	Ariane 4	-	L70 L420a	Intelsat 605	Intelsat VI F-5	-	CSG	E1A2	-	-	371	-	-
1994-F04	2449688.46	1994 Dec 1 22:57:51	Ariane 4	-	L71 L420a	Intelsat 605	Intelsat VI F-5	-	CSG	E1A2	-	-	371	-	-
1995-021	2449805.57	1995 Mar 28 23:14:00	Ariane 4	-	L72 L420a	Intelsat 605	Intelsat VI F-5	-	CSG	E1A2	-	-	371	-	-
1995-021	2449828.57	1995 Apr 21 01:44:02	Ariane 4	-	L73 L420a	Intelsat 605	Intelsat VI F-5	-	CSG	E1A2	-	-	371	-	-
1995-029	2449854.77	1995 May 17 06:34:00	Ariane 4	-	L74 L420a	Intelsat 605	Intelsat VI F-5	-	CSG	E1A2	-	-	371	-	-
1995-033	2449878.50	1995 Jun 10 00:24:00	Ariane 4	-	L75 L420a	Intelsat 605	Intelsat VI F-5	-	CSG	E1A2	-	-	371	-	-
1995-040	2449906.18	1995 Jul 7 16:23:34	Ariane 4	-	L76 L420a	Intelsat 605	Intelsat VI F-5	-	CSG	E1A2	-	-	371	-	-
1995-043	2449933.46	1995 Aug 3 22:58:00	Ariane 4	-	L77 L420a	Intelsat 605	Intelsat VI F-5	-	CSG	E1A2	-	-	371	-	-
1995-044	2449958.78	1995 Aug 29 06:41:00	Ariane 4	-	L78 L420a	Intelsat 605	Intelsat VI F-5	-	CSG	E1A2	-	-	371	-	-
1995-049	2449984.50	1995 Sep 24 00:06:00	Ariane 4	-	L79 L420a	Intelsat 605	Intelsat VI F-5	-	CSG	E1A2	-	-	371	-	-
1995-055	2450009.53	1995 Oct 19 00:38:00	Ariane 4	-	L80 L420a	Intelsat 605	Intelsat VI F-5	-	CSG	E1A2	-	-	371	-	-
1995-055	2450038.56	1995 Nov 17 01:20:00	Ariane 4	-	L81 L420a	Intelsat 605	Intelsat VI F-5	-	CSG						

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Mission	FlightCode	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee km	Range km	Dest
1996-035	2450249.79	1996 Jun 15 0655:09	Ariane 44P	44P-3	W87 L459a	Intelsat 709	INTELSAT 709	-	-	CSG	ELA2	-	-	37503	-	-
1996-040	2450274.43	1996 Jun 9 2224:55	Ariane 44L	44L-3	W89 L460a	TurkSat 1C/Arab. 2A	Arabsat 2A	-	-	CSG	ELA2	-	-	37134	-	-
1996-044	2450304.45	1996 Aug 6 2249:00	Ariane 44L	44L-3	W90 L461a	Italsat 2/Telecom 2D	Italsat F2	-	-	CSG	ELA2	-	-	36877	-	-
1996-055	2450337.50	1996 Sep 13 0000:59	Ariane 42P	42P-3	Y91 L462	Echostar 2	Echostar 2	-	-	CSG	ELA2	-	-	36695	-	-
1996-063	2450401.44	1996 Nov 13 2240:00	Ariane 44L	44L-3	Y92 L463a	Arab. 2B/Measat 2	Arabsat 2B	-	-	CSG	ELA2	-	-	36451	-	-
1997-002	2450479.42	1997 Jan 30 2204:00	Ariane 44P	44P-3	Y93 L465b	Mahel 1A/GE-2	GE 2	-	-	CSG	ELA2	-	-	36078	-	-
1997-009	2450508.55	1997 Mar 1 0107:42	Ariane 44P	44P-3	Y94 L464c	Intelsat 801	INTELSAT 801	-	-	CSG	ELA2	-	-	37204	-	-
1997-016	2450555.46	1997 Apr 16 2308:44	Ariane 44LP	44LP-3	Y95 L467d	Thaicom 3	Thaicom 3	-	-	CSG	ELA2	-	-	36624	-	-
1997-027	2450603.47	1997 Jun 3 2320:06	Ariane 44L	44L-3	Y96 L468b	Immarsat 3/Insat 2D	IMMARSAT III F4	-	-	CSG	ELA2	-	-	36179	-	-
1997-031	2450625.49	1997 Jun 25 2344:00	Ariane 44P	44P-3	Y96 L469a	Intelsat 802	INTELSAT 802	-	-	CSG	ELA2	-	-	36544	-	-
1997-040	2450668.78	1997 Aug 5 0646:00	Ariane 44P	44P-3	Y96 L469b	PAS 6	PAS 6	-	-	CSG	ELA2	-	-	40827	-	-
1997-044	2450694.43	1997 Sep 2 2221:07	Ariane 44LP	44LP-3	Y99 L470e	Hot Bird 3/ATP	Hot Bird 3/ATP	-	-	CSG	ELA2	-	-	43527	-	-
1997-053	2450715.50	1997 Sep 23 2358	Ariane 42L	42L-3	Y100 L470f	Intelsat 803	INTELSAT 803	-	-	CSG	ELA2	-	-	36143	-	-
1997-071	2450765.41	1997 Nov 12 2148	Ariane 44L	44L-3	Y102 L472d	Sirius 2/Cakravarta	Sirius 2	-	-	CSG	ELA2	-	-	36789	-	-
1997-077	2450785.45	1997 Dec 2 2252	Ariane 44L	44L-3	Y103 L473	JCSAT-5/Equator-5	JCSAT 5	-	-	CSG	ELA2	-	-	67130	-	-
1998-003	2450804.51	1998 Dec 2 0016	Ariane 44LP	44LP-3	Y104 L474b	Intelsat 804	INTELSAT 804	-	-	CSG	ELA2	-	-	37520	-	-
1998-006	2450804.51	1998 Dec 2 0016	Ariane 44LP	44LP-3	Y105 L475d	Brasilsat RS/Immar 3FS	Brasilsat RS	-	-	CSG	ELA2	-	-	37026	-	-
1998-013	2450872.44	1998 Feb 27 2238	Ariane 42P	42P-3	Y106 L476c	Hot Bird 4	Hot Bird 4	-	-	CSG	ELA2	-	-	37369	-	-
1998-017	2450896.57	1998 Feb 27 2238	Ariane 40	40-3	Y107 L477b	SPOT 4	SPOT-4	-	-	CSG	ELA2	-	-	839	-	-
1998-024	2450932.45	1998 Mar 24 0146	Ariane 44P	44P-3	Y108 L478b	Intelsat 101/BSAT 1b	Intelsat 101	-	-	CSG	ELA2	-	-	36934	-	-
1998-040	2450951.46	1998 Apr 28 2253	Ariane 44P	44P-3	Y109 L479c	ST-1	Singapore-Taiwan 1	-	-	CSG	ELA2	-	-	37151	-	-
1998-052	2451022.77	1998 Aug 5 2205	Ariane 44LP	44LP-3	Y110 L480f	PAS 7	PAS 7	-	-	CSG	ELA2	-	-	57296	-	-
1998-056	2451092.45	1998 Oct 5 0631	Ariane 44L	44L-3	Y111 L481f	Eutelsat W2/Sirius 3	Eutelsat W2	-	-	CSG	ELA2	-	-	36177	-	-
1998-063	2451115.43	1998 Oct 28 2216:00	Ariane 44L	44L-3	Y113 L482d	Aristar	Aristar	-	-	CSG	ELA2	-	-	36268	-	-
1998-075	2451153.53	1998 Dec 6 0045	Ariane 42L	42L-3	Y114 L483a	Samux 5	Samux 5	-	-	CSG	ELA2	-	-	39407	-	-
1998-076	2451169.55	1998 Dec 22 0108	Ariane 42L	42L-3	Y115 L484d	PAS 6B	Arabsat 3A/SkyNet 4E	-	-	CSG	ELA2	-	-	44538	-	-
1998-078	2451236.45	1998 Dec 22 0108	Ariane 42L	42L-3	Y116 L485d	Insat 2E	Arabsat 3A	-	-	CSG	ELA2	-	-	37199	-	-
1998-079	2451246.44	1998 Apr 2 2205	Ariane 42P	42P-3	Y117 L486b	Insat 2E	Arabsat 3A	-	-	CSG	ELA2	-	-	37199	-	-
1998-082	2451271.42	1999 Apr 12 2252	Ariane 42P	42P-3	Y118 L487f	Telkom 1	Telkom 1	-	-	CSG	ELA2	-	-	37214	-	-
1999-042	2451403.45	1999 Oct 12 2252	Ariane 42P	42P-3	Y120 L488d	Korasaat 3	Korasaat 3	-	-	CSG	ELA2	-	-	37569	-	-
1999-046	2451426.44	1999 Sep 4 2234	Ariane 42P	42P-3	Y121 L489d	Telstar 7	Telstar 7	-	-	CSG	ELA2	-	-	64272	-	-
1999-052	2451446.77	1999 Sep 25 0629	Ariane 44LP	44LP-3	Y122 L490c	Orion 2	Orion 2	-	-	CSG	ELA2	-	-	31538	-	-
1999-059	2451470.77	1999 Oct 19 0622	Ariane 44LP	44LP-3	Y123 L491a	GE 4	GE 4	-	-	CSG	ELA2	-	-	37543	-	-
1999-060	2451496.45	1999 Nov 13 2254	Ariane 44LP	44LP-3	Y124 L492	Helios 1B/Clementine	Helios 1B	-	-	CSG	ELA2	-	-	397	-	-
1999-064	2451516.18	1999 Dec 5 1622:46	Ariane 40	40-3	Y125 L493	Galaxy 11	Galaxy 11	-	-	CSG	ELA2	-	-	39673	-	-
1999-071	2451534.53	1999 Dec 22 0050	Ariane 44L	44L-3	Y126 L494	Galaxy 10R	Galaxy 10R	-	-	CSG	ELA2	-	-	36008	-	-
2000-002	2451568.94	2000 Jan 25 0104	Ariane 42L	42L-3	Y126 L494	Superbird 4	Superbird 4	-	-	CSG	ELA2	-	-	37071	-	-
2000-012	2451592.94	2000 Feb 18 0104	Ariane 42L	42L-3	Y129 L496	Galaxy 4R	Galaxy 4R	-	-	CSG	ELA2	-	-	36015	-	-
2000-020	2451653.52	2000 Apr 19 0029	Ariane 42L	42L-3	Y129 L496	Galaxy 4R	Galaxy 4R	-	-	CSG	ELA2	-	-	36015	-	-
2000-046	2451774.47	2000 Aug 1 2316:00	Ariane 44LP	44LP-3	Y131 L4697	Brasilsat B4	Brasilsat B4	-	-	CSG	ELA2	-	-	36943	-	-
2000-062	2451794.44	2000 Sep 6 2235	Ariane 44P	44P-3	Y132 L4699	Eutelsat W1	Eutelsat W1	-	-	CSG	ELA2	-	-	37265	-	-
2000-068	2451824.45	2000 Oct 5 2850	Ariane 42P	42P-3	Y134 L4699	b-SAT-10	Superbird 5	-	-	CSG	ELA2	-	-	38812	-	-
2000-069	2451824.45	2000 Oct 5 2850	Ariane 42P	42P-3	Y134 L4699	Europa-Star F1	Europa-Star F1	-	-	CSG	ELA2	-	-	38812	-	-
2000-076	2451826.75	2000 Nov 21 2356	Ariane 44LP	44LP-3	Y135 L4102	Anik F1	Anik F1	-	-	CSG	ELA2	-	-	41556	-	-
2001-002	2451870.90	2001 Jan 7 2229	Ariane 44L	44L-3	Y139 L4101	Arabsat 2A	Arabsat 2A	-	-	CSG	ELA2	-	-	37489	-	-
2001-009	2451890.44	2001 Jan 30 0646	Ariane 44L	44L-3	Y139 L4101	Arabsat 2A	Arabsat 2A	-	-	CSG	ELA2	-	-	37489	-	-
2001-032	2452048.78	2001 Feb 7 2345:10	Ariane 44L	44L-3	Y139 L4101	Sirius/SkyNet 4F	Sirius/SkyNet 4F	-	-	CSG	ELA2	-	-	37530	-	-
2001-039	2452051.77	2001 Jun 30 0936	Ariane 44L	44L-3	Y143 L4106	Intelsat 901	Intelsat 901	-	-	CSG	ELA2	-	-	37138	-	-
2001-052	2452069.78	2001 Sep 26 0391	Ariane 44LP	44LP-3	Y143 L4106	Intelsat 902	INTELSAT 902	-	-	CSG	ELA2	-	-	37197	-	-
2002-002	2452248.50	2002 Jan 23 2345:57	Ariane 44LP	44LP-3	Y147 L4108	Direct-4S	Direct-4S	-	-	CSG	ELA2	-	-	36844	-	-
2002-007	2452328.70	2002 Feb 23 0659	Ariane 42L	42L-3	Y148 L4109	Intelsat 904	INTELSAT 904	-	-	CSG	ELA2	-	-	37316	-	-
2002-015	2452362.15	2002 Mar 29 0139	Ariane 44L	44L-3	Y149 L4110	Arabsat 3M/JCSAT-8	Arabsat 3M/JCSAT-8	-	-	CSG	ELA2	-	-	36466	-	-
2002-019	2452368.86	2002 Apr 16 2302	Ariane 44L	44L-3	Y150 L4111	NSS 7	NSS 7	-	-	CSG	ELA2	-	-	37295	-	-
2002-021	2452398.86	2002 May 1 0131:46	Ariane 42P	42P-3	Y151 L4112	SPOT 5	SPOT 5	-	-	CSG	ELA2	-	-	833	-	-
2002-031	2452430.78	2002 May 5 0644	Ariane 44L	44L-3	Y151 L4112	Intelsat 905	INTELSAT 905	-	-	CSG	ELA2	-	-	37191	-	-
2002-037	2452503.78	2002 Sep 5 0644	Ariane 44L	44L-3	Y154 L4114	Intelsat 906	INTELSAT 906	-	-	CSG	ELA2	-	-	37245	-	-
2002-041	2452523.46	2002 Dec 17 2304	Ariane 44L	44L-3	Y156 L4115	NSS 6	NSS 6	-	-	CSG	ELA2	-	-	37206	-	-
2003-007	2452685.79	2003 Feb 15 0700	Ariane 44L	44L-3	Y159 L4116	Intelsat 907	INTELSAT 907	-	-	CSG	ELA2	-	-	37110	-	-



Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Agency	Launch_Code	Group	Category	LTCite	Cite	Notes
1979-104	2444232.22	1979 Dec 24 17:14:38	Ariane 1	-	L01	ESA	05	G	Sat GTD 0	CNESS2	-	-
1980-F01	2444985.10	1980 May 23 14:29:39	Ariane 1	-	L02	ESA	0F	G	Sat GTD 0	CNESS2	-	-
1981-057	2444775.02	1981 Jun 19 12:32:59	Ariane 1	-	L03	ESA	05	G	Sat GTD 0	CNESS2	-	Desobeau
1981-122	2444956.56	1981 Dec 20 01:29:00	Ariane 1	-	L04	ESA	05	G	Sat GTD 0	CNESS2	-	-
1982-F06	2445221.59	1982 Sep 9 02:12:00	Ariane 1	-	L5	ESA	0F	G	Sat GTD 0 1	Desobeau	-	-
1983-058	2445502.00	1983 Jun 16 11:59:03	Ariane 1	-	L6	ESA	05	G	Sat GTD 0	CNESS2	-	CNESS2
1983-105	2445525.53	1983 Oct 19 00:45:36	Ariane 1	-	L7	ESA	05	G/06	Sat GTD 0	Desobeau	-	-
1984-023	2445764.53	1984 Mar 5 00:50:03	Ariane 1	-	L8	ESA	05	G/06	Sat GTD 0	Desobeau	-	-
1984-049	2445843.56	1984 Mar 23 01:33:29	Ariane 1	-	L9	ESA	05	CO	Sat GTD 0	Desobeau	-	-
1984-081	2446017.06	1984 Aug 4 13:32:54	Ariane 3	-	W9	AE	05	CO	Sat GTD 0	CNESS2	-	-
1984-114	2446014.55	1984 Nov 10 01:14:18	Ariane 3	-	W10	AE	05	CO/G	Sat GTD 0 1	CNESS2	-	-
1985-015	2446105.47	1985 Feb 8 23:22:00	Ariane 3	-	W11	AE	05	CO/G+C	Sat GTD 0 1	CNESS2	-	-
1985-035	2446193.55	1985 May 8 01:15:38	Ariane 3	-	W12	AE	05	CO/G	Sat GTD 0 1	CNESS2	-	-
1985-056	2446246.97	1985 Jul 2 11:23:13	Ariane 1	-	W13	AE	05	CO/G+C	Sat GTD 0 1	CNESS2	-	-
1985-F03	2446321.48	1985 Sep 12 23:26:00	Ariane 3	-	W14	AE	05	CO	Sat GTD 0 1	CNESS2	-	-
1986-019	2446553.57	1986 Feb 22 01:44:35	Ariane 1	-	W15	AE	0F	CO	Sat GTD 0 1	CNESS2	-	-
1986-026	2446515.48	1986 Feb 28 23:30:00	Ariane 3	-	W16	AE	05	CO/G	Sat SSO 0 1	CNESS2	-	-
1986-F05	2446581.54	1986 May 31 00:53:03	Ariane 3	-	W17	AE	05	CO/G+C	Sat GTD 0 1	CNESS2	-	-
1987-078	2447054.53	1987 Sep 16 00:45:28	Ariane 3	-	W18	AE	05	CO	Sat GTD 0 1	CNESS2	-	-
1987-095	2447120.60	1987 Nov 21 02:19:00	Ariane 3	-	W19	AE	05	CO	Sat GTD 0 1	CNESS2	-	-
1988-018	2447232.48	1988 Mar 11 23:28:00	Ariane 3	-	W20	AE	05	CO/G	Sat GTD 0 1	CNESS2	-	-
1988-040	2447299.50	1988 May 17 23:58:00	Ariane 2	-	W21	AE	05	CO/G	Sat GTD 0 1	CNESS2	-	-
1988-051	2447321.97	1988 Jun 15 11:19:01	Ariane 44LP	44LP	W22	AE	05	CO/G+C	Sat GTD 0 2	CNESS2	-	-
1988-063	2447354.47	1988 Jul 21 23:12:00	Ariane 3	-	W23	AE	05	CO	Sat GTD 0 1	CNESS2	-	-
1988-098	2447413.46	1988 Sep 6 23:07:00	Ariane 3	-	W24	AE	05	CO	Sat GTD 0 1	CNESS2	-	-
1988-098	2447462.60	1988 Oct 25 02:17:00	Ariane 2	-	W25	AE	05	CO/G	Sat GTD 0 1	CNESS2	-	-
1988-109	2447506.52	1988 Dec 11 00:33:36	Ariane 2	-	W26	AE	05	CO/G	Sat GTD 0 1	CNESS2	-	-
1989-006	2447553.56	1989 Jan 27 01:21:00	Ariane 2	-	W27	AE	05	CO/G+C	Sat GTD 0 1	CNESS2	-	-
1989-027	2447592.48	1989 Mar 6 23:28:00	Ariane 2	-	W28	AE	05	CO/G	Sat GTD 0 1	CNESS2	-	-
1989-027	2447615.60	1989 Apr 2 22:25:00	Ariane 2	-	W29	AE	05	CO/G+C	Sat GTD 0 1	CNESS2	-	-
1989-041	2447719.51	1989 Jun 5 23:37:16	Ariane 3	-	W30	AE	05	CO	Sat GTD 0 1	CNESS2	-	-
1989-053	2447853.44	1989 Jul 12 00:14:00	Ariane 3	-	W31	AE	05	CO/G+C	Sat GTD 0 1	CNESS2	-	-
1989-062	2447747.48	1989 Aug 6 23:25:53	Ariane 44LP	44LP	W32	AE	05	CO/G	Sat GTD 0 1	CNESS2	-	-
1989-062	2447827.46	1989 Oct 27 23:05:00	Ariane 44L	44L	W33	AE	05	CO/G	Sat GTD 0 1	CNESS2	-	-
1989-005	2447913.57	1989 Jan 22 01:35:27	Ariane 40	-	W34	AE	05	CO	Sat GTD 0 1	CNESS2	-	-
1990-F01	2447945.47	1990 Feb 22 23:07:00	Ariane 44L	44L	W35	AE	05	CO/G	Sat GTD 0 1	CNESS2	-	-
1990-063	2448097.43	1990 Jul 24 22:25:00	Ariane 44L	44L	W36	AE	05	CO/G	Sat GTD 0 1	CNESS2	-	-
1990-079	2448134.45	1990 Aug 30 22:46:00	Ariane 44LP	44LP	W37	AE	05	CO/G+C	Sat GTD 0 1	CNESS2	-	-
1990-091	2448177.46	1990 Oct 12 22:38:16	Ariane 44L	44L	W38	AE	05	CO	Sat GTD 0 1	CNESS2	-	-
1990-100	2448215.47	1990 Nov 20 23:11:00	Ariane 42P	42P	W39	AE	05	CO/G+C	Sat GTD 0 1	CNESS2	-	-
1991-003	2448322.47	1991 Jan 19 23:10:49	Ariane 44L	44L	W40	AE	05	CO/G	Sat GTD 0 1	CNESS2	-	-
1991-015	2448352.46	1991 Mar 2 23:37:00	Ariane 44LP	44LP	W41	AE	05	CO/G+C	Sat GTD 0 1	CNESS2	-	-
1991-026	2448351.49	1991 Mar 2 23:35:00	Ariane 44P	44P	W42	AE	05	CO	Sat GTD 0 1	CNESS2	-	-
1991-050	2448353.47	1991 Jul 17 01:46:13	Ariane 40	-	W43	AE	05	CO/G	Sat SSO 0 0	CNESS2	-	-
1991-055	2448385.47	1991 Aug 14 23:15:13	Ariane 44L	44L	W44	AE	05	CO/G	Sat GTD 0	CNESS2	-	-
1991-067	2448395.49	1991 Sep 26 23:03:00	Ariane 44P	44P	W45	AE	05	CO	Sat GTD 0	CNESS2	-	-
1991-065	2448452.47	1991 Oct 29 23:08:16	Ariane 44L	44L	W46	AE	05	CO/G	Sat GTD 0	CNESS2	-	-
1991-064	2448507.47	1991 Dec 26 23:58:16	Ariane 44L	44L	W47	AE	05	CO/G	Sat GTD 0 1	CNESS2	-	-
1992-011	2448725.48	1992 Feb 26 23:58:16	Ariane 44L	44L	W48	AE	05	CO/G	Sat GTD 0 1	CNESS2	-	-
1992-041	2448743.45	1992 Apr 9 23:42:17	Ariane 44L	44L+	W49	AE	05	CO/G	Sat GTD 0 1	CNESS2	-	-
1992-051	2448843.45	1992 Jul 9 23:05:00	Ariane 44L	44L	W50	AE	05	CO/G	Sat GTD 0 1	CNESS2	-	-
1992-052	2448845.45	1992 Jul 9 23:05:00	Ariane 42P	42P	W51	AE	05	CO/G+C	Sat GTD 0 1	CNESS2	-	-
1992-062	2448925.46	1992 Sep 10 23:04:00	Ariane 44L	44L	W52	AE	05	CO	Sat GTD 0 1	CNESS2	-	-
1992-072	2448923.45	1992 Sep 28 01:15:00	Ariane 42P	42P+	W53	AE	05	CO	Sat GTD 0 1	CNESS2	-	-
1992-084	2448953.45	1992 Dec 1 20:43:00	Ariane 42P	42P+	W54	AE	05	CO	Sat GTD 0 1	CNESS2	-	-
1993-031	2449119.54	1993 Dec 12 00:56:32	Ariane 42L	42L	W55	AE	05	CO	Sat GTD 0 1	CNESS2	-	-
1993-030	2449163.51	1993 Jul 22 01:18:00	Ariane 42L	42L	W56	AE	05	CO	Sat GTD 0 1	CNESS2	-	-
1993-048	2449191.46	1993 Jul 29 23:58:15	Ariane 42L	42L+	W57	AE	05	CO	Sat GTD 0 1	CNESS2	-	-
1993-048	2449256.57	1993 Sep 26 01:45:00	Ariane 44L	44L+	W58	AE	05	CO	Sat GTD 0 1	CNESS2	-	-
1993-066	2449292.57	1993 Oct 23 06:46:00	Ariane 44L	44L+	W59	AE	05	CO/G+C	Sat SSO 0 1	CNESS2	-	-
1993-073	2449311.55	1993 Nov 20 01:17:00	Ariane 44LP	44LP+	W60	AE	05	CO/G	Sat GTD 0	CNESS2	-	-
1993-073	2449339.56	1993 Dec 18 01:27:00	Ariane 44L	44L+	W61	AE	05	CO/G+C	Sat GTD 0 1	CNESS2	-	-
1994-F01	2449377.40	1994 Jan 24 21:37:00	Ariane 44LP	44LP+	W62	AE	05	CO	Sat GTD 0 1	CNESS2	-	-
1994-034	2449520.80	1994 Jan 17 07:07:19	Ariane 44LP	44LP+	W63	AE	05	CO	Sat GTD 0 1	CNESS2	-	-
1994-049	2449542.46	1994 Jul 8 23:05:32	Ariane 44L	44L+	W64	AE	05	CO	Sat GTD 0 1	CNESS2	-	-
1994-058	2449575.46	1994 Aug 10 23:05:24	Ariane 44LP	44LP+	W65	AE	05	CO	Sat GTD 0 1	CNESS2	-	-
1994-068	2449604.52	1994 Sep 9 00:29:34	Ariane 44L	44L+	W66	AE	05	CO	Sat GTD 0 1	CNESS2	-	-
1994-068	2449633.55	1994 Oct 8 01:07:00	Ariane 44L	44L+	W67	AE	05	CO	Sat GTD 0 1	CNESS2	-	-
1994-070	2449657.53	1994 Nov 1 00:37:00	Ariane 42P	42P+	W68	AE	05	CO	Sat GTD 0 1	CNESS2	-	-
1995-016	2449682.47	1994 Dec 1 22:57:51	Ariane 42P	42P-3	W69	AE	05	CO	Sat GTD 0 1	CNESS2	-	-
1995-021	2449825.57	1995 Mar 28 23:14:19	Ariane 44LP	44LP+	W70	AE	05	CO/G	Sat GTD 0 1	CNESS2	-	-
1995-023	2449854.77	1995 May 17 06:34:00	Ariane 44L	44L+	W71	AE	05	CO	Sat SSO 0 0	CNESS2	-	-
1995-023	2449873.52	1995 Jun 10 00:24:00	Ariane 42P	42P-3	W72	AE	05	CO	Sat GTD 0	CNESS2	-	-
1995-030	2449906.18	1995 Jul 7 16:23:34	Ariane 40	40-3	W73	AE	05	CO/G	Sat GTD 0	CNESS2	-	-
1995-040	2449933.46	1995 Aug 3 22:58:00	Ariane 42L	42L-3	W74	AE	05	CO/G	Sat GTD 0	CNESS2	-	-
1995-044	2449958.78	1995 Aug 29 06:41:00	Ariane 44P	44P-3	W75	AE	05	CO	Sat SSO 0 0	CNESS2	-	-
1995-049	2449984.50	1995 Sep 24 00:06:00	Ariane 42L	42L-3	W76	AE	05	CO	Sat GTD 0	CNESS2	-	-
1995-052	2450009.53	1995 Oct 19 00:38:00	Ariane 42L	42L-3	W77	AE	05	CO	Sat GTD 0	CNESS2	-	-
1995-062	2450038.56	1995 Nov 17 01:20:00	Ariane 44P	44P-3	W78	AE	05	CO/G	Sat GTD 0 1	CNESS2	-	-
1995-067	2450058.47	1995 Dec 6 23:23:16	Ariane 44L	44L-3	W79	AE	05	CO	Sat GTD 0 1	CNESS2	-	-
1996-007	2450118.81	1996 Feb 5 07:19:30	Ariane 44L	44L-3	W80	AE	05	CO	Sat GTD 0 1	CNESS2	-	-
1996-011	2450156.80	1996 Feb 14 07:11:01	Ariane 44P	44P-3	W81	AE	05	CO	Sat GTD 0	CNESS2	-	-
1996-022	2450194.44	1996 Mar 20 22:36:00	Ariane 42P	42P-3	W82	AE	05	CO	Sat GTD 0	CNESS2	-	-
1996-030	2450219.58	1996 May 16 01:56:29	Ariane 44L	44L-3	W83	AE	05	CO	Sat GTD 0 1	CNESS2	-	-

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variants	Flight_ID	Launch_Code	Group	Category	LTCite	Cite	Notes
1996-035	2450249.79	1996 Jun 15 0655:09	Ariane 44P	44P-3	W87 L459a	OS	CU/OG	Sat GTD 0			
1996-040	2450274.43	1996 Jul 9 2224:56	Ariane 44L	44L-3	W90 L460a	OS	CU	Sat GTD 0 1	CNES32		
1996-044	2450304.45	1996 Aug 8 2249:00	Ariane 44L	44L-3	W90 L460a	OS	CU/G	Sat GTD 0 1	PR/AE96009		
1996-055	2450337.50	1996 Sep 11 0000:59	Ariane 42P	42P-3	W91 L462	OS	CU	Sat GTD 0	PO/Ransoms960912		
1996-063	2450401.44	1996 Nov 13 2240:00	Ariane 44L	44L-3	W92 L463a	OS	CU	Sat GTD 0 1			
1997-002	2450479.42	1997 Jan 30 2234:00	Ariane 44L	44L-3	W94 L466b	OS	CU	Sat GTD 0 1			
1997-009	2450505.55	1997 Mar 1 0107:42	Ariane 44P	44P-3	W94 L466c	OS	CU/OG	Sat GTD 0 1			
1997-016	2450555.46	1997 Apr 16 2308:44	Ariane 44L	44L-3	W95 L467d	OS	CU	Sat GTD 0 1			
1997-027	2450603.47	1997 Jun 3 2320:06	Ariane 44L	44L-3	W97 L468b	OS	CU/OG	Sat GTD 0 1			
1997-031	2450625.49	1997 Jun 25 2344:00	Ariane 44P	44P-3	W96 L466b	OS	CU/OG	Sat GTD 0			
1997-040	2450668.78	1997 Aug 8 0646:00	Ariane 44P	44P-3	W98 L466b	OS	CU	Sat GTD 0 1			
1997-049	2450694.43	1997 Sep 2 2221:07	Ariane 44L	44L-3	W99 L470g	OS	CU	Sat GTD 0 1			
1997-053	2450715.50	1997 Sep 23 2358	Ariane 42L	42L-3	V100 L471e	OS	CU/OG	Sat GTD 0			
1997-071	2450765.41	1997 Jun 12 2148	Ariane 44L	44L-3	V102 L472a	OS	CU	Sat GTD 0 1			
1997-075	2450785.45	1997 Dec 2 2252	Ariane 44P	44P-3	V103 L473	OS	CU	Sat GTD 0 1			
1997-083	2450804.51	1997 Dec 22 0016	Ariane 42L	42L-3	V104 L474b	OS	CU/OG	Sat GTD 0 1			
1998-006	2450849.48	1998 Feb 4 2329	Ariane 44L	44L-3	V105 L475d	OS	CU	Sat GTD 0 1			
1998-013	2450872.44	1998 Feb 27 2238	Ariane 42P	42P-3	V106 L476c	OS	CU	Sat GTD 0			
1998-017	2450896.57	1998 Mar 24 0146	Ariane 40	40-3	V107 L477b	OS	CU/G	Sat S50 0			
1998-024	2450932.45	1998 Apr 28 2253	Ariane 44P	44P-3	V108 L478b	OS	CU	Sat GTD 0 1			
1998-049	2451051.46	1998 Aug 25 2307	Ariane 44P	44P-3	V109 L479c	OS	CU	Sat GTD 0			
1998-052	2451072.77	1998 Sep 16 0631	Ariane 44L	44L-3	V110 L480f	OS	CU	Sat GTD 0 1			
1998-056	2451092.45	1998 Oct 5 2251	Ariane 44L	44L-3	V111 L481f	OS	CU	Sat GTD 0 1			
1998-073	2451115.43	1998 Oct 28 2218:00	Ariane 42L	42L-3	V113 L482a	OS	CU	Sat GTD 0 1	JOH-P		
1998-075	2451159.55	1998 Dec 2 0108	Ariane 42L	42L-3	V114 L483c	OS	CU	Sat GTD 0			
1998-078	2451236.45	1998 Feb 26 2244	Ariane 44L	44L-3	V115 L484d	OS	CU/G+C	Sat GTD 0 1			
1998-084	2451271.42	1999 Apr 2 2205	Ariane 42P	42P-3	V116 L485	OS	CU/OG	Sat GTD 0			
1999-012	2451403.45	1999 Aug 12 2282	Ariane 42P	42P-3	V117 L486b	OS	CU	Sat GTD 0			
1999-046	2451426.44	1999 Sep 4 2234	Ariane 42P	42P-3	V118 L487f	OS	CU	Sat GTD 0			
1999-052	2451446.77	1999 Sep 25 0629	Ariane 44L	44L-3	V120 L488a	OS	CU	Sat GTD 0			
1999-059	2451470.77	1999 Oct 19 0622	Ariane 44L	44L-3	V121 L489d	OS	CU	Sat GTD 0			
1999-060	2451496.46	1999 Nov 13 2254	Ariane 44L	44L-3	V122 L490c	OS	CU	Sat GTD 0			
1999-064	2451516.18	1999 Dec 3 1622:46	Ariane 40	40-3	V123 L491a	OS	CU/G	Sat S50 0			
1999-071	2451534.53	1999 Dec 22 0050	Ariane 44L	44L-3	V124 L492	OS	CU	Sat GTD 0			
2000-002	2451595.54	2000 Jan 25 0104	Ariane 42L	42L-3	V125 L493	OS	CU	Sat GTD 0			
2000-012	2451692.54	2000 Feb 18 0104	Ariane 44L	44L-3	V126 L494	OS	CU	Sat GTD 0			
2000-020	2451693.52	2000 Apr 19 0629	Ariane 42L	42L-3	V127 L495	OS	CU	Sat GTD 0			
2000-046	2451774.47	2000 Aug 17 2316:00	Ariane 44L	44L-3	V129 L496	OS	CU	Sat GTD 0 1			
2000-052	2451794.44	2000 Sep 6 2233	Ariane 44P	44P-3	V131 L499f	OS	CU	Sat GTD 0			
2000-060	2451824.46	2000 Oct 2 2213	Ariane 42L	42L-3	V132 L499b	OS	CU	Sat GTD 0			
2000-076	2451870.50	2000 Oct 29 0659	Ariane 44L	44L-3	V133 L499b	OS	CU	Sat GTD 0			
2001-002	2451943.82	2001 Nov 11 2309	Ariane 44L	44L-3	V134 L410	OS	CU	Sat GTD 0			
2001-024	2452065.76	2001 Feb 9 0645	Ariane 44L	44L-3	V137 L410f	OS	CU/G	Sat GTD 0 1			
2001-049	2452081.78	2001 Aug 30 0646	Ariane 44L	44L-3	V139 L410f	OS	CU	Sat GTD 0			
2001-049	2452173.47	2001 Sep 25 2321	Ariane 44L	44L-3	V141 L410f	OS	CU	Sat GTD 0			
2001-052	2452240.52	2001 Nov 27 0335	Ariane 44L	44L-3	V143 L410f	OS	CU	Sat GTD 0			
2002-007	2452298.46	2002 Nov 23 0346:57	Ariane 44L	44L-3	V146 L410f	OS	CU/OG	Sat GTD 0			
2002-015	2452325.79	2002 Feb 23 0656	Ariane 42L	42L-3	V148 L410f	OS	CU	Sat GTD 0			
2002-015	2452381.56	2002 Mar 28 0139	Ariane 44L	44L-3	V149 L411	OS	CU	Sat GTD 0			
2002-021	2452398.56	2002 Apr 4 0131:46	Ariane 42P	42P-3	V151 L411f	OS	CU/G	Sat S50 0			
2002-027	2452430.78	2002 Jun 6 0644	Ariane 44L	44L-3	V152 L411f	OS	CU	Sat GTD 0			
2002-041	2452525.46	2002 Sep 17 2304	Ariane 44L	44L-3	V154 L411f	OS	CU	Sat GTD 0			
2003-007	2452685.79	2003 Feb 15 0700	Ariane 44L	44L-3	V156 L411f	OS	CU	Sat GTD 0			
2003-007	2452685.79	2003 Feb 15 0700	Ariane 44L	44L-3	V159 L411f	OS	CU	Sat GTD 0			



Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Launch_Mission	FlightCode	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee_Km	Range_Km	Dest
1996-F03	2450239-02	1996 Jun 4 12:34:06	Ariane 5G	-	W88 (501)	Cluster	Cluster Fl-F4	-	-	CSS	ELA3	-	-	4	-	-
1997-066	2450762-07	1997 Oct 30 13:43	Ariane 5G	-	V101 (502)	Cluster	TEMSAT	-	-	CSS	ELA3	-	-	26780	-	-
1998-069	2451106-19	1998 Oct 21 16:37:21	Ariane 5G	-	V112 (503)	ADQ/Meqat-3	Meqat-3	-	-	CSS	ELA3	-	-	36612	-	-
2000-016	2451523-11	1999 Dec 10 14:32:07	Ariane 5G	-	V128 (504a)	XMM	XMM	-	-	CSS	ELA3	-	-	115923	-	-
2000-064	2451802-45	2000 Mar 21 23:28:19	Ariane 5G	-	V139 (505)	Asiastar	Asiastar	-	-	CSS	ELA3	-	-	38731	-	-
2000-072	2451864-55	2000 Sep 14 22:54:07	Ariane 5G	-	V135 (507)	Astra 2E/GE 7	Astra 2B	-	-	CSS	ELA3	-	-	36254	-	-
2000-081	2451986-52	2000 Nov 16 01:07:07	Ariane 5G	-	V138 (508)	PAS 1R/MSAT P3D	PAS 1R	-	-	CSS	ELA3	-	-	59257	-	-
2001-011	2451977-45	2000 Dec 20 00:26	Ariane 5G	-	V140 (509)	Astra 2D/GE 8/DIRHEX	Astra 2D	-	-	CSS	ELA3	-	-	38734	-	-
2001-029	2452103-42	2001 Mar 8 23:51	Ariane 5G	-	V142 (510)	Eurobird/BSAT-2a	Eurobird	-	-	CSS	ELA3	-	-	38690	-	-
2002-009	2452334-55	2001 Jul 12 21:58	Ariane 5G	-	V145 (511)	Artemis/BSAT-2b	Artemis	-	-	CSS	ELA3	-	-	36136	-	-
2002-035	2452461-47	2002 Mar 1 01:07:59	Ariane 5G	-	V153 (512)	Envisat	Envisat PFF	-	-	CSS	ELA3	-	-	799	-	-
2002-040	2452515-45	2002 Jul 5 23:22:00	Ariane 5G	-	V155 (513)	Stellar/MSat c	Stellar 5	-	-	CSS	ELA3	-	-	36206	-	-
2002-F03	2452620-43	2002 Aug 28 22:45:00	Ariane 5G	-	V157 (517)	Atl. Bird 1/MSG 1	Atlantic Bird 1	-	-	CSS	ELA3	-	-	37652	-	-
2003-013	2452739-45	2002 Dec 9 11:22:22	Ariane 5G	-	V160 (514)	Hot Bird 7/Sentor	Hot Bird 7	-	-	CSS	ELA3	-	-	1507	-	-
2003-043	2452802-44	2003 Apr 11 22:52:19	Ariane 5G	-	V161 (515)	Galaxy 12/Insat 3A	Insat 3A	-	-	CSS	ELA3	-	-	36068	-	-
2003-046	2452910-47	2003 Jun 11 23:38:15	Ariane 5G	-	V162 (516)	Optus CI-e/BSAT-2c	BSAT-2c	-	-	CSS	ELA3	-	-	36136	-	-
2004-006	2453066-80	2003 Sep 27 23:14:46	Ariane 5G	-	V165 (518)	Insat 3E-e/Bird	e-Bird	-	-	CSS	ELA3	-	-	150000	-	-
2004-049	2453204-53	2004 Jul 18 00:44	Ariane 5G+	-	V163 (519)	Rosetta	Rosetta	-	-	CSS	ELA3	-	-	39083	-	-
2005-049	2453358-18	2004 Dec 16 16:26	Ariane 5G+	-	V165 (520)	Anik F2	Anik F2	-	-	CSS	ELA3	-	-	800	-	-
2005-028	2453414-38	2005 Feb 12 21:03:01	Ariane 5G	-	V164 (521)	Hellas 2A	Hellas 2A	-	-	CSS	ELA3	-	-	36140	-	-
2005-048	2453693-86	2005 Aug 11 06:20:44	Ariane 5G	-	V166 (523)	XMM-EDM/Meqat-B2	XMM-EDM	-	-	CSS	ELA3	-	-	36426	-	-
2005-046	2453657-44	2005 Oct 13 22:32	Ariane 5G	-	V167 (522a)	Thaicom 4	IPSTAR 1	-	-	CSS	ELA3	-	-	36042	-	-
2005-049	2453691-49	2005 Nov 16 23:46:00	Ariane 5G	-	V169 (525)	Syracuse 3A/Gal. 15	Galaxy 15	-	-	CSS	ELA3	-	-	43759	-	-
2006-007	2453806-44	2005 Dec 21 22:35	Ariane 5G	-	V170 (527)	Spaceway 2/Talcom 2	Talcom 2	-	-	CSS	ELA3	-	-	36690	-	-
2006-033	2453859-43	2006 Mar 11 22:09	Ariane 5G	-	V171 (529)	Insat 4A/MSG 2	Insat 4A	-	-	CSS	ELA3	-	-	36566	-	-
2006-020	2453983-36	2006 Aug 11 22:15	Ariane 5G	-	V172 (531)	Hot Bird 7A/Spainat	Spainat	-	-	CSS	ELA3	-	-	36524	-	-
2006-044	2454076-42	2006 Dec 6 22:08	Ariane 5G	-	V173 (533)	Starmec 6/Thaicom 5	Starmec 6	-	-	CSS	ELA3	-	-	36030	-	-
2007-007	2454171-42	2007 Aug 8 11:22:03	Ariane 5G	-	V174 (534)	DirectV-95/Opus 5B	DirectV 95	-	-	CSS	ELA3	-	-	36269	-	-
2007-036	2454225-44	2007 May 4 22:29	Ariane 5G	-	V175 (535)	Wildblue 1/MSG 16	Wildblue 1	-	-	CSS	ELA3	-	-	46360	-	-
2007-056	2454252-44	2007 Aug 14 23:44	Ariane 5G	-	V176 (537)	Skyline 5A/Insat 4B	Insat 4B	-	-	CSS	ELA3	-	-	35898	-	-
2007-064	2454379-42	2007 Oct 5 22:02	Ariane 5G	-	V178 (538)	Spaceway 3/BSat 3A	Spaceway 3	-	-	CSS	ELA3	-	-	46799	-	-
2007-063	2454459-42	2007 Nov 14 22:06	Ariane 5G	-	V179 (539)	IS-11/Opus 12	Opus 12	-	-	CSS	ELA3	-	-	35900	-	-
2008-010	2454554-67	2008 Dec 21 21:41:55	Ariane 5ES/ATV	-	V180 (550)	Skyline 5B/Starhub C1	Star One C1	-	-	CSS	ELA3	-	-	36179	-	-
2008-038	2454630-42	2008 Mar 16 04:03:11	Ariane 5G	-	V181 (528)	Rascom 1/Horizons 2	Rascom 1	-	-	CSS	ELA3	-	-	362	-	-
2008-038	2454630-42	2008 Apr 15 22:17	Ariane 5G	-	V182 (539)	Star One C2/Vinasat	Vinasat	-	-	CSS	ELA3	-	-	38491	-	-
2008-038	2454665-41	2008 Jun 12 22:05:09	Ariane 5G	-	V183 (540)	Skyline 5C/TurkSat 3A	Skyline 5C	-	-	CSS	ELA3	-	-	38665	-	-
2008-038	2454693-36	2008 Jul 14 21:47	Ariane 5G	-	V184 (541)	Protostar 1/Radur 6	Protostar 1	-	-	CSS	ELA3	-	-	36120	-	-
2008-068	2454821-44	2008 Feb 26 23:38:14	Ariane 5G	-	V185 (543)	Superbird 7/MSG 21	Superbird 7	-	-	CSS	ELA3	-	-	35892	-	-
2008-068	2454878-42	2008 Feb 12 23:05	Ariane 5G	-	V186 (545)	Hot Bird 9/MSG 22H	Hot Bird 9	-	-	CSS	ELA3	-	-	36536	-	-
2008-028	2454966-05	2008 May 14 13:12	Ariane 5G	-	V188 (548)	Hot Bird 9/MSG 9	MSG 9	-	-	CSS	ELA3	-	-	35226	-	-
2009-033	2455044-24	2008 Jul 17 07:52	Ariane 5G	-	V189 (547)	Herschel/Planck	Herschel	-	-	CSS	ELA3	-	-	150000	-	-
2009-033	2455066-06	2008 Aug 21 22:09	Ariane 5G	-	V190 (549)	Terratrail 1	Terratrail 1	-	-	CSS	ELA3	-	-	38211	-	-
2009-064	2455134-33	2009 Oct 29 20:00	Ariane 5G	-	V192 (550)	JCSAT 12/Opus D3	JCSAT 12	-	-	CSS	ELA3	-	-	38503	-	-
2009-073	2455194-33	2009 Dec 19 16:26	Ariane 5G	-	V193 (551)	Amazonas 2/COMSATB1	Amazonas 2	-	-	CSS	ELA3	-	-	38500	-	-
2010-021	2455298-42	2010 May 21 20:01	Ariane 5G	-	V194 (552)	MSG 12/Thor 6	MSG 12	-	-	CSS	ELA3	-	-	68999	-	-
2010-032	2455374-42	2010 Jun 26 21:41	Ariane 5G	-	V195 (554)	Hellas 2B	Hellas 2B	-	-	CSS	ELA3	-	-	36010	-	-
2010-037	2455413-40	2010 Aug 4 20:59	Ariane 5G	-	V196 (554)	Astra 2B/COMSATB-2	Astra 2B	-	-	CSS	ELA3	-	-	36700	-	-
2010-066	2455468-41	2010 Oct 26 21:51	Ariane 5G	-	V197 (555)	Tabosat/COMS-1	Tabosat/COMS-1	-	-	CSS	ELA3	-	-	36170	-	-
2010-066	2455527-25	2010 Nov 26 18:30	Ariane 5G	-	V198 (556)	Envisat 200/MSG	Envisat 200	-	-	CSS	ELA3	-	-	36107	-	-
2011-007	2455609-41	2011 Feb 16 21:51:02	Ariane 5G	-	V199 (557)	Envisat W3B/BSAT 3B	Envisat W3B	-	-	CSS	ELA3	-	-	36232	-	-
2011-016	2455674-41	2011 Apr 22 21:37	Ariane 5G	-	V200 (544)	Hisatp 1E/forestat 6	Hisatp 1E	-	-	CSS	ELA3	-	-	35876	-	-
2011-022	2455702-36	2011 May 20 20:38	Ariane 5G	-	V201 (558)	Yabusaka 1M/New Dawn	Yabusaka 1M	-	-	CSS	ELA3	-	-	389	-	-
2011-041	2455780-45	2011 Aug 6 22:52:37	Ariane 5G	-	V202 (559)	ST-2/BSAT-9	BSAT-9	-	-	CSS	ELA3	-	-	35952	-	-
2011-049	2455926-40	2011 Sep 21 21:38	Ariane 5G	-	V203 (561)	Astra 1N/BSAT-9c	Astra 1N	-	-	CSS	ELA3	-	-	36096	-	-
2012-010	2456009-69	2012 Mar 23 04:34:12	Ariane 5ES/ATV	-	V204 (563)	ArctSat 5C/SES-2	ArctSat 5C	-	-	CSS	ELA3	-	-	36081	-	-
2012-033	2456063-43	2012 Mar 15 22:13	Ariane 5G	-	V205 (565)	ATV 3	ATV 3	-	-	CSS	ELA3	-	-	4915	-	-
2012-038	2456114-40	2012 Jul 5 21:36	Ariane 5G	-	V206 (562)	JCSAT 13/Vinasat 2	JCSAT 13	-	-	CSS	ELA3	-	-	53476	-	-
2012-043	2456142-37	2012 Aug 2 20:54	Ariane 5G	-	V207 (563)	Echostar 17/MSG 3	Echostar 17	-	-	CSS	ELA3	-	-	37328	-	-
2012-062	2456198-39	2012 Sep 28 21:18:07	Ariane 5G	-	V208 (564)	IS-20/Hellas 2	Inspire 1	-	-	CSS	ELA3	-	-	35929	-	-
2012-062	2456242-38	2012 Dec 10 21:05:07	Ariane 5G	-	V209 (565)	Astra 2F/BSAT-10	Astra 2F	-	-	CSS	ELA3	-	-	35948	-	-
2012-075	2456281-41	2013 Feb 7 21:36	Ariane 5G	-	V210 (566)	Star One C3/BSAT-1B	Star One C3	-	-	CSS	ELA3	-	-	35879	-	-
2013-007	2456331-40	2013 Feb 7 21:36	Ariane 5G	-	V211 (567)	SkyNet 5D/Mesars-B	SkyNet 5D	-	-	CSS	ELA3	-	-	35971	-	-
2013-027	2456409-41	2013 Jun 5 21:52:18	Ariane 5ES/ATV	-	V212 (568)	Amazonas 3/Azerspace	Amazonas 3	-	-	CSS	ELA3	-	-	36590	-	-
2013-038	2456499-33	2013 Jul 26 19:54:07	Ariane 5G	-	V213 (569)	ATV 4	ATV 4	-	-	CSS	ELA3	-	-	421	-	-
2013-044	2456534-35	2014 Feb 6 21:30	Ariane 5G	-	V215 (570)	AlphaSat/Insat-3D	AlphaSat/Insat-3D	-	-	CSS	ELA3	-	-	36027	-	-
2014-004	2456739-42	2014 Feb 6 21:30	Ariane 5G	-	V217 (572)	Envisat 25B/BSAT-7	Envisat 25B	-	-	CSS	ELA3	-	-	36138	-	-
2014-064	2456912-42	2014 Oct 16 21:43:52	Ariane 5G	-	V219 (573)	ABS-2/ArctSat-1	ABS-2	-	-	CSS	ELA3	-	-	35972	-	-
2014-064	2456989-42	2014 Jul 29 23:47:38	Ariane 5ES/ATV	-	V216 (571)	Astra 5B/Amazonas 4A	Astra 5B	-	-	CSS	ELA3	-	-	35878	-	-
2014-062	2456912-42	2014 Oct 16 21:43:52	Ariane 5G	-	V220 (574)	Measat 3B/Opus 10	Measat 3B	-	-	CSS	ELA3	-	-	429	-	-
2015-022	2457139-33	2015 Apr 26 20:00:07	Ariane 5G	-	V221 (575)	IS-30/ArctSat-1	IS-30	-	-	CSS	ELA3	-	-	35892	-	-
2015-034	2457219-39	2015 Jul 15 21:42	Ariane 5G	-	V222 (576)	DirectTV-14/BSAT-16	DirectTV-14	-	-	CSS	ELA3	-	-	35953	-	-
2015-034	2457255-36	2015 May 27 21:16:07	Ariane 5G	-	V223 (577)	DirectTV-2/Thor 7	DirectTV-2	-	-	CSS	ELA3	-	-	35818	-	-
2015-039	2457265-36	2015 Aug 20 03:04:08	Ariane 5G	-	V224 (578)	DirectTV-15/SKYW-1	DirectTV-15	-	-	CSS	ELA3	-	-	35958	-	-
2015-064	2457296-35	2015 Sep 30 03:00:07	Ariane 5G	-	V225 (579)	Star One C4/MSG 4	Star One C4	-	-	CSS	ELA3	-	-	36191	-	-
2015-065	2457337-40	2015 Nov 10 21:34	Ariane 5G	-	V226 (580)	Envisat 8NB/IS-34	Envisat 8NB	-	-	CSS	ELA3	-	-	36002	-	-
2016-004	2457415-47	2016 Jan 27 23:20:07	Ariane 5G	-	V227 (581)	Sky Master/BSAT-2	Sky Master	-	-	CSS	ELA3	-	-	36799	-	-
2016-014	2457456-72	2016 Mar 9 05:20:07	Ariane 5G	-	V228 (583)	ArctSat 6B/BSAT 15	ArctSat 6B	-	-	CSS	ELA3	-	-	35952	-	-
2016-039	2457568-40	2016 Jun 18 21:38:39	Ariane 5G	-	V229 (584)	Intrastat 29e	Intrastat 29e	-	-	CSS	ELA3	-	-	35832	-	-
2016-039	2457568-40	2016 Jun 18														



Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Mission	FlightCode	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee_Km	Range_Km	Dest
2016-053	2457625-43	2016 Aug 24 22:16:01	Ariane 5ECA	-	W4232 (586)	IS-33e/IS-36	IS-33e/IS-36	-	-	CSG	ELA3	-	-	36166	-	-
2016-060	2457667-36	2016 Oct 5 20:30	Ariane 5ECA	-	W4231 (586)	Sky Muster 2/GSAT-18	Sky Muster/GSAT	-	-	CSG	ELA3	-	-	36043	-	-
2016-069	2457710-05	2016 Nov 17 13:06:55	Ariane 5ES	-	W4233 (594)	Galileo FOC-46	GalileoSat 15-18	-	-	CSG	ELA3	-	-	23640	-	-
2016-082	2457744-35	2016 Dec 21 20:30	Ariane 5ECA	-	W4234 (587)	JCSAT-15/Star One D1	JCSAT-15/Star One D1	-	-	CSG	ELA3	-	-	35908	-	-
2017-007	2457799-40	2017 Feb 14 21:39	Ariane 5ECA	-	W4238 (588)	SkyBrasil-1/Telkom-3S	SkyBrasil-1/Telkom-3S	-	-	CSG	ELA3	-	-	35931	-	-
2017-023	2457878-41	2017 May 4 21:50	Ariane 5ECA	-	W4236 (588)	SDC/Koreasat 7	SDC/Koreasat 7	-	-	CSG	ELA3	-	-	35831	-	-
2017-029	2457906-49	2017 Jun 1 23:45:07	Ariane 5ECA	-	W4237 (590)	Viasat 2/Eutelsat 172B	Viasat 2/Eutelsat 172B	-	-	CSG	ELA3	-	-	54454	-	-
2017-040	2457933-39	2017 Jun 28 21:15	Ariane 5ECA	-	W4238 (591)	Hellasat 3/GSAT 17	Hellasat 3/GSAT 17	-	-	CSG	ELA3	-	-	35916	-	-
2017-059	2458026-41	2017 Sep 28 21:56	Ariane 5ECA	-	W4239 (5100)	IS-37e/BSAT-4a	IS-37e/BSAT-4a	-	-	CSG	ELA3	-	-	35279	-	-
2017-079	2458100-27	2017 Dec 12 16:36	Ariane 5ES	-	W4240 (595)	Galileo FOC-M7	GalileoSat 19-22	-	-	CSG	ELA3	-	-	23316	-	-
2018-012	2458144-43	2018 Jan 25 22:20	Ariane 5ECA	-	W4241 (5101)	SES-14/Al Yah 3	SES-14/Al Yah 3	-	-	CSG	ELA3	-	-	53690	-	-
2018-033	2458214-40	2018 Apr 5 21:34:07	Ariane 5ECA	-	W4242 (5102)	Superbird 8-DSH/Hylas 4	Superbird 8/Hylas 4	-	-	CSG	ELA3	-	-	35981	-	-
2018-060	2458324-96	2018 Jul 25 11:26:08	Ariane 5ES	-	W4244 (596)	Galileo FOC-98	GalileoSat 23-26	-	-	CSG	ELA3	-	-	23252	-	-
2018-074	2458387-44	2018 Sep 25 22:38	Ariane 5ECA	-	W4243 (5103)	Horizons-3e/Azerspace-2	Horizons-3e/Azerspace-2	-	-	CSG	ELA3	-	-	41553	-	-
2018-080	2458411-57	2018 Oct 20 04:45:28	Ariane 5ECA	-	W4245 (5105)	BepiColombo	BepiColombo	-	-	CSG	ELA3	-	-	150000	-	-
2018-100	2458457-36	2018 Dec 4 20:37:07	Ariane 5ECA	-	W4246 (5104)	GSAT-11/Geo-Kompassat 2A	GSAT-11/Geo-Kompassat 2A	-	-	CSG	ELA3	-	-	35853	-	-
2019-007	2458520-38	2019 Feb 5 21:01:07	Ariane 5ECA	-	W4247 (5106)	SGS-1-4S-4/GSAT-31	SGS-1-4S-4/GSAT-31	-	-	CSG	ELA3	-	-	35921	-	-
2019-034	2458565-40	2019 Jun 20 21:43	Ariane 5ECA	-	W4248 (5107)	T-16/Eutelsat 7C	T-16/Eutelsat 7C	-	-	CSG	ELA3	-	-	49991	-	-
2019-049	2458702-31	2019 Aug 6 19:30:07	Ariane 5ECA	-	W4249 (5109)	EDRS-C/IS-39	EDRS-C/IS-39	-	-	CSG	ELA3	-	-	35961	-	-
2019-080	2458814-39	2019 Nov 26 21:23	Ariane 5ECA	-	W4250 (5108)	TIBA-1/Imarsat GMS	TIBA-1/Imarsat GMS	-	-	CSG	ELA3	-	-	35008	-	-
2020-005	2458865-38	2020 Jan 16 21:05	Ariane 5ECA	-	W4251 (5110)	Eutelsat Komnect/GSAT-30	Eutelsat Komnect/GSAT-30	-	-	CSG	ELA3	-	-	47468	-	-
2020-013	2458896-43	2020 Feb 18 22:16:07	Ariane 5ECA	-	W4252 (5111)	JCSAT-17/Geo-Kompassat 2B	JCSAT-17/Geo-Kompassat 2B	-	-	CSG	ELA3	-	-	36066	-	-
2020-066	2459077-42	2020 Aug 15 22:04:00	Ariane 5ECA	-	W4253 (5112)	Galaxy 30/REV2/BSAT-4b	Galaxy 30/REV2/BSAT-4b	-	-	CSG	ELA3	-	-	43577	-	-
2021-069	2459226-36	2021 Jul 30 21:00	Ariane 5ECA	-	W4254 (5113)	Star One D2/Eutelsat Q	Star One D2/Eutelsat Q	-	-	CSG	ELA3	-	-	35843	-	-
2021-098	2459241-01	2021 Oct 24 02:10	Ariane 5ECA	-	W4255 (5114)	SES-17/Syracuse 4A	SES-17/Syracuse 4A	-	-	CSG	ELA3	-	-	47141	-	-
2021-130	2459274-01	2021 Dec 25 12:20:07	Ariane 5ECA	-	W4256 (5116)	JNST	JNST	-	-	CSG	ELA3	-	-	150000	-	-
2022-067	2459753-41	2022 Sep 7 21:45:07	Ariane 5ECA	-	W4257 (5117)	Measat 3D/GSAT-24	Measat 3D/GSAT-24	-	-	CSG	ELA3	-	-	62914	-	-
2022-110	2459930-41	2022 Jun 22 21:50:07	Ariane 5ECA	-	W4258 (5118)	Eutelsat Komnect VHTS	Eutelsat Komnect VHTS	-	-	CSG	ELA3	-	-	-	-	-
2023-053	2460049-01	2023 Apr 14 12:14:29	Ariane 5ECA	-	W4260 (5120)	JUICE	JUICE	-	-	CSG	ELA3	-	-	-	-	-
2023-063	2460131-42	2023 Jul 5 22:00:07	Ariane 5ECA	-	W4261 (5119)	HZSAT/Syracuse 4B	HZSAT/Syracuse 4B	-	-	CSG	ELA3	-	-	-	-	-
2024-128	2460501-29	2024 Jul 9 19:00:00	Ariane 62	-	W4262 (L6001)	Dummy Payload	Heinrich Hertz/Syracuse CubeSats	-	-	CSG	ELA4	-	-	-	-	-



Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Launch_Weight	Agency	Launch_Code	Group	Category	LTCite	Cite	Notes
1996-F03	2450239.02	1996 Jun 4 1234:06	Ariane 5G	-	W88 (501)	4,500	ESA	DF	G	Sat GTD SO	ESAFR	OMES52	-
1997-066	2450752.07	1997 Oct 30 1343	Ariane 5G	-	V101 (502)	6,749	ESA	DS75	G	Sat GTD SO	Wire	-	-
1998-059	2451108.19	1998 Oct 21 1637:21	Ariane 5G	-	V112 (503)	8,924	ESA	US75	G	Sat GTD SO	Wire	-	-
1999-066	2451523.11	1999 Dec 10 1432:07	Ariane 5G	-	V119 (504a)	3,764	AE	US	CC	Sat DSU SO	Wire	-	-
2000-016	2451625.48	2000 Mar 21 2328:19	Ariane 5G	-	V128 (505)	5,287	AE	US	CC	Sat GTD SO 1	AE-TV	-	-
2000-054	2451802.45	2000 Sep 14 2254:07	Ariane 5G	-	V130 (506)	5,690	AE	US	CC	Sat GTD SO 1	Wire	-	-
2000-072	2451864.55	2000 Nov 16 0107:07	Ariane 5G	-	V136 (507)	5,613	AE	US	CC	Sat GTD SO 1	AE-TV	-	-
2000-081	2451898.52	2000 Dec 20 0026	Ariane 5G	-	V138 (508)	4,009	AE	US	CC	Sat GTD SO 1	AE-TV	-	-
2001-011	2451977.45	2001 Mar 8 2251	Ariane 5G	-	V140 (509)	4,807	AE	US	CC	Sat GTD SO 1	Wire	-	-
2001-029	2452103.42	2001 Jul 12 2158	Ariane 5G	-	V142 (510)	4,843	AE	DF50	CC	Sat GTD SO 1	Wire	-	-
2002-009	2452334.55	2002 Mar 1 0107:59	Ariane 5G	-	V146 (511)	8,211	AE	US	CC/G	Sat SSU SO	Wire	-	-
2002-035	2452461.47	2002 Jul 5 2322:00	Ariane 5G	-	V153 (512)	6,135	AE	US	CC	Sat GTD SO 1	Wire	-	-
2002-040	2452515.45	2002 Aug 28 2246:00	Ariane 5G	-	V155 (513)	5,182	AE	US	CC/G+C	Sat GTD SO 1	Wire	-	-
2002-F03	2452620.43	2002 Sep 11 2222	Ariane 5G	-	V157 (517)	5,510	AE	DF	CC	Sat GTD SO 1	Wire	-	-
2003-013	2452739.45	2003 Apr 9 2252:19	Ariane 5G	-	V160 (514)	5,150	AE	US	CC	Sat GTD SO 1	Wire	-	-
2003-028	2452802.44	2003 Jun 11 2238:15	Ariane 5G	-	V161 (515)	6,440	AE	US	CC	Sat GTD SO 1	Wire	-	-
2003-043	2452910.47	2003 Sep 27 2314:46	Ariane 5G	-	V162 (516)	5,472	AE	US	CC	Sat GTD SO 2	Wire	-	-
2004-006	2453066.80	2004 Mar 2 0717:44	Ariane 5G+	-	V158 (518)	3,065	AE	US	CC/G	Sat EEU SO	Wire	-	-
2004-027	2453204.53	2004 Jul 18 0044	Ariane 5G+	-	V165 (519F)	5,965	AE	US	CC	Sat SSU SO	Wire	-	-
2004-049	2453356.18	2004 Dec 16 1626	Ariane 5G+	-	V166 (520G)	4,807	AE	US	CC	Sat SSU SO	Wire	-	-
2005-005	2453414.38	2005 Feb 12 2103:01	Ariane 5GCA	-	V164 (521)	7,692	ESA	G/C	CC	Sat GTD SO 1	Wire	-	-
2005-028	2453593.85	2005 Feb 11 0920:44	Ariane 5G5	-	V168 (524G)	6,480	AE	US	CC	Sat GTD SO 1	Wire	-	-
2005-041	2453657.44	2005 Oct 13 2232	Ariane 5G5	-	V167 (522a)	8,151	ESA	US	CC	Sat GTD SO 1	Wire	-	-
2005-046	2453691.49	2005 Nov 16 2346:00	Ariane 5G5	-	V169 (525)	5,715	AE	US	CC	Sat GTD SO 1	Wire	-	-
2005-049	2453726.44	2005 Dec 21 2233	Ariane 5G5	-	V170 (527)	8,223	AE	US	CC	Sat GTD SO 1	Wire	-	-
2006-020	2453965.38	2006 Mar 11 2233	Ariane 5G5	-	V171 (528)	8,662	AE	US	CC	Sat GTD SO 1	Wire	-	-
2006-033	2453995.43	2006 May 27 2109	Ariane 5G5	-	V172 (531)	8,238	AE	US	CC	Sat GTD SO 1	Wire	-	-
2006-043	2454022.37	2006 Aug 11 2215	Ariane 5G5	-	V173 (533)	9,393	AE	US	CC	Sat GTD SO 1	Wire	-	-
2006-054	2454075.42	2006 Dec 8 2205	Ariane 5G5	-	V174 (534)	7,256	AE	US	CC	Sat GTD SO 1	Wire	-	-
2007-007	2454171.42	2007 Mar 11 2203	Ariane 5G5	-	V175 (535)	6,104	AE	US	CC	Sat GTD SO 1	Wire	-	-
2007-016	2454225.44	2007 May 4 2229	Ariane 5G5	-	V176 (537)	9,052	AE	US	CC	Sat GTD SO 1	Wire	-	-
2007-036	2454327.49	2007 Aug 14 2354	Ariane 5G5	-	V177 (537)	8,482	AE	US	CC	Sat GTD SO 1	Wire	-	-
2007-044	2454375.42	2007 Oct 5 2202	Ariane 5G5	-	V178 (528)	8,240	AE	US	CC	Sat GTD SO 1	Wire	-	-
2007-056	2454419.42	2007 Nov 14 2206	Ariane 5G5	-	V179 (538)	9,175	AE	US	CC	Sat GTD SO 1	Wire	-	-
2007-063	2454466.40	2007 Dec 21 2141:55	Ariane 5G5	-	V180 (538)	5,904	AE	US	CC	Sat GTD SO 1	Wire	-	-
2008-008	2454534.67	2008 Mar 9 0405:11	Ariane 5G5/MTV	-	V181 (528)	7,367	AE	US	CC/G	Sat SSU SO	Wire	-	-
2008-018	2454575.43	2008 Apr 15 2217	Ariane 5G5	-	V182 (539)	7,146	AE	US	CC	Sat GTD SO 1	Wire	-	-
2008-030	2454650.42	2008 Jun 12 2205:09	Ariane 5G5	-	V183 (540)	9,085	AE	US	CC	Sat GTD SO 1	Wire	-	-
2008-034	2454695.36	2008 Jul 14 2147	Ariane 5G5	-	V184 (541)	7,969	AE	US	CC	Sat GTD SO 1	Wire	-	-
2008-068	2454821.44	2008 Aug 14 2354	Ariane 5G5	-	V185 (543)	8,733	AE	US	CC	Sat GTD SO 1	Wire	-	-
2008-068	2454821.44	2008 Aug 14 2354	Ariane 5G5	-	V186 (543)	7,566	AE	US	CC	Sat GTD SO 1	Wire	-	-
2008-068	2454821.44	2008 Aug 14 2354	Ariane 5G5	-	V187 (545)	7,566	AE	US	CC	Sat GTD SO 1	Wire	-	-
2009-026	2454896.95	2009 Feb 12 2209	Ariane 5G5	-	V188 (548)	5,765	AE	US	CC/G	Sat EEU SE 1	Wire	-	-
2009-035	2455014.24	2009 May 14 1752	Ariane 5G5	-	V189 (547)	6,765	AE	US	CC	Sat GTD SO 1	Wire	-	-
2009-044	2455068.42	2009 Aug 21 2109	Ariane 5G5	-	V190 (548)	9,345	AE	US	CC	Sat GTD SO 1	Wire	-	-
2009-054	2455134.32	2009 Oct 29 2000	Ariane 5G5	-	V191 (549)	9,345	AE	US	CC	Sat GTD SO 1	Wire	-	-
2009-055	2455184.38	2009 Dec 16 1626	Ariane 5G5	-	V192 (550)	9,345	AE	US	CC	Sat GTD SO 1	Wire	-	-
2009-073	2455338.45	2009 Dec 16 1626	Ariane 5G5	-	V193 (552)	4,200	AE	US	CC	Sat SSU SO	Wire	-	-
2010-021	2455384.42	2010 May 21 2201	Ariane 5G5	-	V184 (551)	9,351	AE	US	CC	Sat SSU SO	Wire	-	-
2010-032	2455371.42	2010 Jun 26 2141	Ariane 5G5	-	V195 (552)	7,740	AE	US	CC	Sat GTD SO 1	Wire	-	-
2010-032	2455371.42	2010 Jun 26 2141	Ariane 5G5	-	V196 (554)	6,690	AE	US	CC	Sat GTD SO 1	Wire	-	-
2010-056	2455498.41	2010 Oct 26 2151	Ariane 5G5	-	V197 (555)	7,870	AE	US	CC	Sat GTD SO 1	Wire	-	-
2010-066	2455527.28	2010 Dec 26 1839	Ariane 5G5	-	V198 (556)	8,550	AE	US	CC	Sat GTD SO 1	Wire	-	-
2010-070	2455560.39	2010 Dec 29 2127	Ariane 5G5	-	V199 (557)	8,560	AE	US	CC	Sat GTD SO 1	Wire	-	-
2011-007	2455609.41	2011 Feb 16 2151:02	Ariane 5G5/MTV	-	V200 (544)	26,796	AE	US	CC/G	Sat SSU SO	Wire	-	-
2011-016	2455674.40	2011 Apr 29 2137	Ariane 5G5	-	VA201 (558)	9,375	AE	US	CC	Sat GTD SO 1	Wire	-	-
2011-022	2455703.36	2011 May 26 2038	Ariane 5G5	-	VA202 (559)	8,620	AE	US	CC	Sat GTD SO 1	Wire	-	-
2011-040	2455760.45	2011 Aug 6 2252:37	Ariane 5G5	-	VA203 (560)	8,260	AE	US	CC	Sat GTD SO 1	Wire	-	-
2011-040	2455826.40	2011 Aug 21 2138	Ariane 5G5	-	VA204 (561)	8,269	AE	US	CC	Sat GTD SO 1	Wire	-	-
2012-010	2456009.69	2012 Mar 23 0434:12	Ariane 5G5/MTV	-	VA205 (563)	26,309	AE	US	CC/G	Sat SSU SO	Wire	-	-
2012-023	2456063.43	2012 May 15 2213	Ariane 5G5	-	VA206 (562)	7,932	AE	US	CC	Sat GTD SO 1	Wire	-	-
2012-043	2456114.40	2012 Jul 5 2136	Ariane 5G5	-	VA207 (563)	8,875	AE	US	CC	Sat GTD SO 1	Wire	-	-
2012-043	2456142.37	2012 Aug 2 2054	Ariane 5G5	-	VA208 (564)	9,845	AE	US	CC	Sat GTD SO 1	Wire	-	-
2012-061	2456198.39	2012 Sep 28 2118:07	Ariane 5G5	-	VA209 (565)	9,808	AE	US	CC	Sat GTD SO 1	Wire	-	-
2012-062	2456242.38	2012 Nov 10 2105:07	Ariane 5G5	-	VA210 (566)	8,678	AE	US	CC	Sat GTD SO 1	Wire	-	-
2012-075	2456281.41	2012 Dec 19 2149:07	Ariane 5G5	-	VA211 (567)	8,218	AE	US	CC	Sat GTD SO 1	Wire	-	-
2013-006	2456331.40	2013 Feb 7 2136	Ariane 5G5	-	VA212 (568)	9,943	AE	US	CC	Sat GTD SO 1	Wire	-	-
2013-027	2456439.41	2013 Jun 5 2152:18	Ariane 5G5/MTV	-	VA213 (569)	26,434	AE	US	CC/G	Sat SSU SO	Wire	-	-
2013-038	2456499.33	2013 Jul 25 1954:07	Ariane 5G5	-	VA214 (569)	9,180	AE	US	CC	Sat GTD SO 1	Wire	-	-
2013-044	2456534.35	2013 Nov 29 2030	Ariane 5G5	-	VA215 (570)	9,400	AE	US	CC	Sat GTD SO 1	Wire	-	-
2014-006	2456695.40	2014 Feb 6 2130	Ariane 5G5	-	VA217 (572)	9,850	AE	US	CC	Sat GTD SO 1	Wire	-	-
2014-011	2456739.42	2014 Mar 22 2204	Ariane 5G5	-	VA216 (571)	9,102	AE	US	CC	Sat GTD SO 1	Wire	-	-
2014-044	2456868.49	2014 Jul 29 2347:38	Ariane 5G5/MTV	-	VA219 (593)	26,538	AE	US	CC/G	Sat SSU SO	Wire	-	-
2014-054	2456912.42	2014 Sep 11 2205	Ariane 5G5	-	VA218 (573)	10,307	AE	US	CC	Sat GTD SO 1	Wire	-	-
2014-062	2456947.41	2014 Oct 16 2143:52	Ariane 5G5	-	VA220 (574)	9,743	AE	US	CC	Sat GTD SO 1	Wire	-	-
2015-022	2456998.36	2015 Dec 6 2040	Ariane 5G5	-	VA221 (575)	9,920	AE	US	CC	Sat GTD SO 1	Wire	-	-
2015-026	2457130.33	2015 Mar 26 2000:07	Ariane 5G5	-	VA222 (576)	9,394	AE	US	CC	Sat GTD SO 1	Wire	-	-
2015-034	2457219.40	2015 Jul 15 2142	Ariane 5G5	-	VA223 (577)	8,848	AE	US	CC	Sat GTD SO 1	Wire	-	-
2015-039	2457296.35	2015 Aug 20 2034:08	Ariane 5G5	-	VA224 (578)	9,022	AE	US	CC	Sat GTD SO 1	Wire	-	-
2015-054	2457296.35	2015 Sep 30 2030:07	Ariane 5G5	-	VA225 (579)	9,857	AE	US	CC	Sat GTD SO 1	Wire	-	-
2015-065	2457337.40	2015 Nov 10 2134	Ariane 5G5	-	VA226 (580)	9,857	AE	US	CC	Sat GTD SO 1			

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Agency	Launch_Code	Group	Category	LTCite	Cite	Notes
2016-053	2457625_43	2016 Aug 24 22:16:01	Ariane 5ECA	-	VA232 (586)	AE	US	CO	Sat GTD SO 1	Wire	-	-
2016-060	2457667_35	2016 Oct 5 20:30	Ariane 5ECA	-	VA231 (585)	AE	US	CO/06+C	Sat GTD SO 1	Wire	-	-
2016-069	2457710_05	2016 Nov 17 13:06:55	Ariane 5ES	-	VA233 (594)	AE	US	CO/G	Sat MED SO 1	Wire	-	-
2016-082	2457744_35	2016 Dec 21 20:30	Ariane 5ECA	-	VA234 (587)	AE	US	CO	Sat GTD SO 1	Wire	-	-
2017-007	2457799_40	2017 Feb 14 21:39	Ariane 5ECA	-	VA235 (588)	AE	US	CO	Sat GTD SO 1	Wire	-	-
2017-023	2457875_41	2017 May 4 21:50	Ariane 5ECA	-	VA236 (589)	AE	US	CO/06+C	Sat GTD SO 1	Wire	-	-
2017-029	2457906_49	2017 Jun 1 23:45:07	Ariane 5ECA	-	VA237 (590)	AE	US	CO	Sat GTD SO 1	Wire	-	-
2017-040	2457933_39	2017 Jun 28 21:15	Ariane 5ECA	-	VA238 (591)	AE	US	CO	Sat GTD SO 1	Wire	-	-
2017-059	2458026_41	2017 Sep 29 21:56	Ariane 5ECA	-	VA239 (5100)	AE	US	CO	Sat GTD SO 1	Wire	-	-
2017-079	2458100_27	2017 Dec 12 18:56	Ariane 5ES	-	VA240 (595)	AE	US	CO/G	Sat MED SO 1	Wire	-	-
2018-012	2458144_43	2018 Jan 25 22:20	Ariane 5ECA	-	VA241 (5101)	AE	US865	CO	Sat GTD SO 1	Wire	-	-
2018-033	2458214_40	2018 Apr 5 21:34:07	Ariane 5ECA	-	VA242 (5102)	AE	US	CO/G	Sat GTD SO 1	Wire	-	-
2018-060	2458234_98	2018 Jul 25 11:28:08	Ariane 5ES	-	VA244 (596)	AE	US	CO	Sat MED SO 1	Wire	-	-
2018-074	2458387_44	2018 Sep 25 22:38	Ariane 5ECA	-	VA243 (5103)	AE	US	CO	Sat GTD SO 1	Wire	-	-
2018-080	2458411_57	2018 Oct 20 01:46:28	Ariane 5ECA	-	VA245 (5105)	AE	DS	CO/G	Sat EDL SE	Wire	-	-
2018-100	2458457_36	2018 Dec 4 20:37:07	Ariane 5ECA	-	VA246 (5104a)	AE	DS	CO/06	Sat GTD SO 1	Wire	-	-
2019-007	2458520_38	2019 Feb 5 21:01:07	Ariane 5ECA	-	VA247 (5106)	AE	US	CO	Sat GTD SO 1	Wire	-	-
2019-034	2458655_40	2019 Jun 20 21:43	Ariane 5ECA	-	VA248 (5107)	AE	US	CO	Sat GTD SO 1	Wire	-	-
2019-049	2458702_31	2019 Aug 6 19:30:07	Ariane 5ECA	-	VA249 (5109)	AE	US	CO/G+C	Sat GTD SO 1	Wire	-	-
2019-060	2458814_39	2019 Nov 26 21:23	Ariane 5ECA	-	VA250 (5108)	AE	US	CO/06+C	Sat GTD SO 1	Wire	-	-
2020-005	2458895_38	2020 Jan 16 21:05	Ariane 5ECA	-	VA251 (5110)	AE	US	CO/06+C	Sat GTD SO 1	Wire	-	-
2020-013	2458995_43	2020 Feb 18 22:18:07	Ariane 5ECA	-	VA252 (5111)	AE	US	CO/06+C	Sat GTD SO 1	Wire	-	-
2020-056	2459077_42	2020 Aug 15 22:04:00	Ariane 5ECA	-	VA253 (5112)	AE	US	CO	Sat GTD SO 1	Wire	-	-
2021-069	2459246_58	2021 Oct 24 02:10	Ariane 5ECA	-	VA254 (5113)	AE	US	CO	Sat GTD SO 1	Wire	-	-
2021-095	2459311_59	2021 Jul 30 21:00	Ariane 5ECA	-	VA255 (5115)	AE	US	CO/G+C	Sat GTD SO 1	Wire	-	-
2021-130	2459514_01	2021 Dec 25 12:20:07	Ariane 5ECA	-	VA256 (5114)	AE	US	CO/G	Sat EDL SE	Wire	-	-
2022-067	2459753_41	2022 Jun 22 21:50:07	Ariane 5ECA	-	VA257 (5117)	AE	US	CO/06+C	Sat GTD SO 1	Wire	-	-
2022-110	2459930_41	2022 Sep 7 21:45:07	Ariane 5ECA	-	VA258 (5117)	AE	US	CO	Sat GTD SO 1	Wire	-	-
2022-170	2459927_35	2022 Dec 13 20:30:07	Ariane 5ECA	-	VA259 (5116)	AE	US	CO/G+C	Sat STU SO 1	Wire	-	-
2023-053	2460049_01	2023 Apr 14 12:14:29	Ariane 5ECA	-	VA260 (5120)	AE	DS	CO/G	Sat EDL E	Wire	-	-
2023-093	2460131_42	2023 Jul 5 22:00:07	Ariane 5ECA	-	VA261 (5119)	AE	US	CO/G	Sat GTD SO 1	Wire	-	-
2024-128	2460501_29	2024 Jul 9 19:00:00	Ariane 62	-	VA262 (L6001)	ESA	US85	G	Sat LEO D	Wire	-	Stage 2 no restart



Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Launch_Mission	FlightCode	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee_Km	Range_Km	Dest
1973-8351	2441973.38	1973 Oct 17 21:03	Aries	-	RRL M254.265	Dummy payload	-	-	-	SML	-	-	-	270	-	-
1974-5223	2442217.09	1974 Jun 18 14:15	Aries	-	RRL M254.268	Crab Occultation	-	-	-	WS	LC36	-	-	300	-	-
1974-458	2442409.75	1974 Dec 28 06:00?	Aries	-	RRL M254.275	IMS Test	-	-	-	WS	LC36	-	-	10	-	-
1975-8248	2442643.03	1975 Aug 18 12:45	Aries	-	MASA 12.266F-IT	IMS Prototype	-	-	-	WS	LC36	-	-	417	-	-
1976-8185	2442866.35	1976 Mar 30 20:27	Aries	-	MASA 24.011E	Porcupine 1	IMS F-1	-	-	ESR	A	-	-	360	-	-
1976-8351	2443128.55	1976 Dec 16 01:10	Aries	-	RRL M254.277	IMS Test Rocket	HI-G Test	-	-	WS	LC36	-	-	512	-	-
1977-849	2443169.85	1977 Jan 26 08:25	Aries	-	RRL M254.276	Astro 8-1 (AB)	-	-	-	WS	LC36	-	-	347	-	-
1977-8123	2443223.31	1977 Mar 20 19:22	Aries	-	MASA 24.021E	DLR K-MR-82	Porcupine 2	IMS F-2	-	ESR	A	-	-	460	-	-
1977-8279	2443458.67	1977 Nov 11 04:00	Aries	-	GL A24.609-01	TEM-1	-	-	-	WS	LC36	-	-	228	-	-
1978-8155	2443871.86	1978 Jun 12 08:45	Aries	-	Astro 8-2	Astro 8-2	-	-	-	WS	LC36	-	-	355	-	-
1979-852	2443901.75	1979 Jan 28 06:06	Aries	-	GL A24.752-01	SPICE 1	-	-	-	WS	LC36	-	-	249	-	-
1979-898	2443952.46	1979 Mar 19 22:57	Aries	-	MASA 24.051E	DLR K-MR-92	Porcupine 3	IMS F-3	-	ESR	A	-	-	460	-	-
1979-8109	2443964.44	1979 Mar 31 22:29	Aries	-	MASA 24.061E	DLR K-MR-93	Porcupine 4	IMS F-4	-	ESR	A	-	-	462	-	-
1980-8112	2444381.01	1980 May 21 12:08	Aries	-	GL A24.609-02	TEM-2	-	-	-	WS	LC36	-	-	232	-	-
1980-8152	2444469.91	1980 Aug 18 09:50	Aries	-	GL A24.651-01	ZIF I (BHP)	-	-	-	WS	LC36	-	-	401	-	-
1980-8174	2444502.56	1980 Sep 20 01:30	Aries	-	MASA 24.03CH	LCIT	-	-	-	WS	LC36	-	-	309	-	-
1981-858	2444639.55	1981 Feb 4 01:10	Aries	-	GL A24.751-01	IRIS (BHP)	-	-	-	WS	LC36	-	-	387	-	-
1981-8101	2444722.47	1981 Apr 27 23:15	Aries	-	MASA 24.100G	JHU Aries-UVT	-	-	-	WS	LC36	-	-	293	-	-
1981-8136	2444816.95	1981 Jul 31 05:50	Aries	-	GL A24.651-02	ZIF II (BHP)	-	-	-	WS	LC36	-	-	266	-	-
1982-842	2444992.83	1982 Jun 23 08:00:00	Aries	-	GL A24.752-02	FIRSE (BHP)	-	-	-	WS	LC36	-	-	378	-	-
1982-8122	2445116.16	1982 May 28 15:47	Aries	-	GL A24.609-03	TEM-3	-	-	-	WS	LC36	-	-	236	-	-
1982-8128	2445138.70	1982 Jun 18 04:45	Aries	-	MASA 24.040G	DLR K-MR-116	UCS Aries 1 (1m UVT)	-	-	WS	LC36	-	-	247	-	-
1982-8161	2445221.93	1982 Sep 9 10:17	Aries	-	GL A24.752-03	Conestoga 1	-	-	-	MATI	-	-	-	509	-	-
1982-8166	2445227.70	1982 Sep 15 04:49	Aries	-	MASA 24.150G	SPICE 2	-	-	-	WS	LC36	-	-	359	-	-
1983-8186	2445652.98	1983 Oct 25 11:26	Aries	-	GL A24.260	ELC-1 (IR limb)	-	-	-	WS	LC36	-	-	282	-	-
1983-8208	2445656.47	1983 Nov 27 23:15	Aries	-	MASA 24.090H	UCS Aries 2	-	-	-	WS	LC36	-	-	300?	-	-
1986-409	2446066.69	1986 Aug 24 04:40	Aries	-	SDIO G-2	Delta 160 Target	-	-	-	WS	LC36	-	-	23	-	-
1986-858	2446073.19	1986 Sep 5 16:30	Aries	-	Queen March 1	Queen March 1	-	-	-	SHM	-	-	-	300?	-	-
1987-8185	2447003.50	1987 Jul 27	Aries	-	Queen March 2	Queen March 2	(Recovery failed)	-	-	SHM	-	-	-	300	-	-
1988-8107	2447373.50	1988 Aug	Aries	-	Queen March 3	Queen March 3	-	-	-	SHM	-	-	-	300	-	-
1989-8116	2447707.50	1989 Jul	Aries	-	GL A24.602	BEAR	-	-	-	WS	LC36	-	-	196	-	-
1989-871	2447720.85	1989 Jul 13 08:30	Aries	-	GL A24.570	EXCEDE-3	-	-	-	WS	SULF	-	-	116	-	-
1990-853	2448008.79	1990 Apr 27 07:00:59	Aries	-	SPFM-2	-	-	-	-	WS	LC36	-	-	27	-	-
1990-403	2448098.74	1990 Jul 26 09:51	Aries	-	SPFM-1	-	-	-	-	WS	LC36	-	-	270	-	-
1991-852	2448285.27	1991 Jan 28 18:24:24	ERIS	-	MASA 24.11CH	SXT/UGOS	-	-	-	ARR	Heck	-	-	300?	-	-
1991-810	2448396.61	1991 May 20 07:30	Aries	-	Red Tigris 1A	-	-	-	-	WS	LC36	-	-	2	-	-
1991-404	2448486.81	1991 Aug 20 09:45:48	Aries	-	Red Tigris 1B	-	-	-	-	CC	LC20	-	-	2	-	-
1991-8163	2448543.93	1991 Oct 14 10:17:20	Aries	-	LEP 1	-	-	-	-	WS	LC36	-	-	320	-	-
1992-817	2448670.50	1992 Feb 18	Aries	-	LEP 2	-	-	-	-	ARR	Heck	-	-	280	-	-
1992-850	2448695.28	1992 Mar 13 18:36:27	ERIS	-	LEP 3	-	-	-	-	WS	LC36	-	-	350	-	-
1992-856	2448747.86	1992 Jun 19 11:01	Aries	-	LEP 4 (LLV)	SPFE-3/Orbus 1	-	-	-	VI	LC36	-	-	200	-	-
1992-413	2448761.50	1992 Oct 22	Aries	-	LEP 5	-	-	-	-	VI	LC36	-	-	300?	-	-
1993-843	2448927.81	1993 Jun 22	Aries	-	MASA 24.17CH	SXT/UGOS	-	-	-	WS	LC36	-	-	8	-	-
1993-400	2449027.91	1993 Aug 28 09:45	Aries	-	LEP Target	LEP FTV-TD	-	-	-	VI	LC36	-	-	300?	-	-
1994-859	2449068.50	1994 Feb 25	Aries	-	LEP Target	LEP FTV-3 Target	-	-	-	VI	LC36	-	-	300?	-	-
1995-812	2449760.50	1995 Feb 1	Aries	-	LEP Target	LEP FTV-4 Target	-	-	-	VI	LC36	-	-	300?	-	-
1996-815	2449760.83	1996 Mar 4	Aries	-	LEP Target	LEP FTV-3 Target	-	-	-	VI	LC36	-	-	300?	-	-
1996-827	2449800.50	1996 Mar 26	Aries	-	LEP Target	TM tracking test	-	-	-	VI	LC36	-	-	300?	-	-
1996-837	2450273.50	1996 Jul 9	Aries	-	ABIE-TLV	ABIE-TLV	-	-	-	VI	LC36	-	-	300?	-	-
1998-864	2451138.02	1998 Nov 20 13:30	M56A1	-	Aegis TTV-1 Target	Aegis TTV-1	-	-	-	KAU	-	-	-	320?	-	-
2001-804	2451193.66	2001 Mar 28 03:57	M56A1	-	Aegis FTV-1A Target	Aegis FTV-1	-	-	-	KAU	-	-	-	163	-	-
2002-814	2451891.43	2002 Mar 26 02:15	M56A1	-	QAS-1 FM-2 Target	QAS-1 FM-2 Target	-	-	-	KLC	LP2	-	-	160	-	-
2002-804	2452300.58	2002 Apr 24 02:00	M56A1	-	QAS-2 FM-2 Target	QAS-2 FM-2 Target	-	-	-	KLC	LP2	-	-	160	-	-
2002-843	2452389.42	2002 Apr 14 01:23	M56A1	-	Aegis FTV-3 Target	Aegis FTV-3	-	-	-	KAU	-	-	-	300?	-	-
2002-843	2452439.56	2002 Apr 14 01:23	M56A1	-	Aegis FTV-4 Target	Aegis FTV-4	-	-	-	KAU	-	-	-	300?	-	-
2002-871	2452600.52	2002 Nov 23 03:30	M56A1	-	Aegis FTV-5 Target	Aegis FTV-5	-	-	-	KAU	-	-	-	325	-	-
2003-821	2452909.47	2003 Nov 18 23:15	M56A1	-	Aegis FTV-6 Target	Aegis FTV-6	-	-	-	KAU	LC1	-	-	300?	-	-
2003-850	2452985.47	2003 Dec 11 18:10	M56A1	-	Aegis FTV-7 Target	Aegis FTV-7	-	-	-	KAU	LC1	-	-	300?	-	-
2005-807	2453426.38	2005 Feb 24 21:03	M56A1	-	Aegis FTV-8 Target	Aegis FTV-8	-	-	-	KAU	-	-	-	150?	-	-
2006-869	2454076.50	2006 Dec 7	M56A1	-	Aegis FTV-11 Target	Aegis FTV-9	-	-	-	KAU	-	-	-	300?	-	-



Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	OrbPay	Agency	Launch_Code	Group	Category	LTCite	Cite	Notes
1973-5851	2441973-38	1973 Oct 17 1203	Aries	-	MRL N24-285	0.000	MRL	SS	MRL/Arritt	Test	WDRNF	JBS128-255	-
1974-5223	2442217-09	1974 Jun 18 1415	Aries	-	MRL N24-288	0.000	MRL	SS	MRL/Arritt	Test/Astron	WDRNF	JBS128-255	-
1974-468	2442409-75	1974 Dec 28 0600?	Aries	-	MRL N24-275	0.000	MRL	SF	MRL/Astron?	XR Astron?	JCM-R1	ESA-SP152-189	-
1975-5248	2442643-03	1975 Aug 18 1245	Aries	-	MASA 12-26GT-IT	0.000	GSEC	DLR	GSEC/Hoenecker	Test	ScttCon3	ESA-SP152-189	-
1976-5155	2442668-35	1976 Mar 30 2027	Aries	-	MASA 24-01E	0.000	DLR	SF	MPE/Haerendel	Magnetoospheric	Moraba	ESA-SP152-189	-
1976-5851	2443128-55	1977 Dec 16 0110	Aries	-	MRL N24-277	0.000	MRL	SS	MRL/Arritt	Test/Astron	JCM	-	-
1977-5849	2443169-85	1977 Jan 26 0825	Aries	-	MRL N24-276	0.000	MRL	SS	MPE/NRL/Zimmerman, Yentis	Magnetoospheric Ba	Ap2294,415	ESA-SP135	-
1977-5123	2443223-31	1977 Mar 20 1922	Aries	-	MASA 24-02IE	0.000	DLR	SS	MPE/Haerendel	XR Astron	Moraba	SR19-367	-
1977-5279	2443458-67	1977 Nov 11 0400	Aries	-	GL X24-009-01	0.000	AFGL2	SS	AFCRU/Price	ABM Tech IR	ALIAM-79-1064	ESA-SP152	-
1978-5155	2443671-36	1978 Jun 18 0845	Aries	-	Astro 8-2	0.000	DLR	SS	AFCRU/Price	IR Astron	WDC	AFCRU	-
1979-582	2443901-75	1979 Jan 28 0606	Aries	-	GL X24-782-01	0.000	DLR	SS	MPE/Haerendel	Magnetoospheric	Moraba	ESA-SP152	-
1979-588	2443952-46	1979 Mar 19 2257	Aries	-	MASA 24-05IE	0.000	DLR	SS	MPE/Haerendel	Magnetoospheric	Moraba	ESA-SP152	-
1979-5109	2443964-44	1979 Mar 31 2229	Aries	-	GL X24-061E	0.000	DLR	SS	MPE/Haerendel	Magnetoospheric	Moraba	JGR91, M6, 7057	-
1980-5112	2444381-01	1980 May 21 1208	Aries	-	GL X24-009-02	0.000	AFGL2	SS	AFCRU/McIntyre	ABM Tech IR/OV	WDRNF	AFCRU	-
1980-5152	2444469-91	1980 Aug 24 0950	Aries	-	GL X24-081-01	0.000	AFGL2	SS	AFCRU/McIntyre	IR Astron	AJ90,375	SMSO	-
1980-5174	2444502-56	1980 Sep 20 0130	Aries	-	MASA 24-03CH	0.000	GSEC	SS	LPARL/Catura	XR Astron	WDRNF	-	-
1981-585	2444639-19	1981 Feb 4 0110	Aries	-	GL X24-781-01	0.000	AFGL2	SS	AFCRU/Murock	ABM Tech IR/IR Astron	WDRNF	AFCRU	-
1981-5106	2444722-47	1981 Apr 27 2315	Aries	-	MASA 24-100G	0.000	GSEC	SS	JHU/Fastir, Davidse	UV Astron	WDRNF	-	-
1981-5136	2444816-96	1981 Jul 31 1050	Aries	-	GL X24-681-02	0.000	AFGL2	SS	AFCRU/Murock	UV Astron	AJ90,375	AFCRU	-
1982-582	2444992-83	1982 Jan 23 0900:00	Aries	-	GL X24-782-02	0.000	AFGL2	SS	AFCRU/Price	ABM Tech IR/IR Astron	AFGL-TR-83-0055	Ap2275,125	-
1982-5122	2445118-16	1982 May 28 1847	Aries	-	GL X24-009-03	0.000	AFGL2	SS	AFCRU/McIntyre	ABM Tech IR	WDRNF	AFCRU	-
1982-5128	2445138-70	1982 Jun 16 0445	Aries	-	DLR M-040G	0.000	GSEC	SS	UC2/Bowyer	EV Astron	MIA058, 89	AdvSpales2, 153	-
1982-5161	2445221-93	1982 Sep 9 1017	Aries	-	MASA 24-090H	0.000	GSEC	SS	SSL/	Test	Moraba	AFGL-TR-83-0161	-
1982-5166	2445227-70	1982 Sep 15 0449	Aries	-	DLR M-1116	0.000	AFGL2	SS	AFCRU/Price	IR Astron	WDRNF	AFGL-TR-83-0161	-
1983-5196	2445632-96	1983 Oct 25 1126	Aries	-	GL X24-260	0.000	GSEC	SF	AFCRU/Murock, Price, De	IR Astron	AUS	AFCRU	-
1983-5208	2445666-47	1983 Nov 27 2315	Aries	-	MASA 24-150H	0.000	GSEC	SF	UC2/Bowyer	UV Astron	WDRNF	AFCRU	-
1986-A09	2445666-69	1986 Aug 24 0440	Aries	-	MASA 24-090H	0.000	GSEC	SF	F5U/ChL/Gamire, Nov	XR Astron	WDRNF	MASA-PR86-119	-
1986-589	2446679-50	1986 Sep 5 1630	Aries	-	SDIO C-2	0.000	SDIO	SS	SDIO/	Target	AMST660915-16	-	-
1987-5165	2447003-30	1987 Jul 27	Aries	-	Queen Hatch 1	0.000	SDIO	SS	SDIO/	ABM Tech IR	spacevector.com	-	-
1988-5107	2447373-50	1988 Aug	Aries	-	Queen Hatch 2	0.000	SDIO	SS	SDIO/	ABM Tech IR	Powell	[Not in SIC list]	-
1989-571	2447707-50	1989 Jul 13 0830	Aries	-	Queen Hatch 3	0.000	SDIO	SS	SDIO/	ABM Tech IR	ALIA	[Not in SIC list]	-
1990-583	2447720-85	1990 Apr 27 0700:59	Aries	-	SPER-2	0.000	SDIO	SS	LARL/Hckema	Particle Beam	AFGL	-	-
1990-A03	2448098-74	1990 Jun 28 1824:24	Aries	-	GL X24-570	0.000	SDIO	SS	AFCRU/Paulson	Active Plasma	PL-TR-95-2110	SN9000514-8	-
1991-582	2448285-27	1991 Jan 28 1824:24	EMIS	-	GL X24-570	0.000	SDIO	SF	USU/Mait	Tech	Desind	AMST910204-22	-
1991-5110	2448396-81	1991 May 20 0730	Aries	-	EMIS 1	0.000	SFC	SS	LPARL/Catura	Intercaptor	AMST910826-64	CR-189245	-
1991-104	2448468-91	1991 Aug 20 0945:48	Aries	-	MASA 24-11CH	0.000	GSEC	SS	SDIO/MATIC/	XR Astron	WDRNF	AMST911021-15	-
1991-5163	2448543-93	1991 Oct 14 1017:20	Aries	-	Red Tigriss 1A	0.000	RMD	SS	SDIO/MATIC/	Target	Cleary-Cape	SN208224-6	-
1992-517	2448670-50	1992 Feb 18	Aries	-	LEAP 1	0.000	RMD	SS	SDIO/MATIC/	Target	AMST20921-22	AMST920323-20	-
1992-520	2448695-28	1992 Mar 13 1836:27	EMIS	-	LEAP 2	0.000	SFC	SS	SDIO/	Tech	www.uccusa.org	AMST920629-66	-
1992-556	2448752-96	1992 Jun 19 1101	Aries	-	LEAP 3	0.000	SDIO	SS	SDIO/	Intercaptor	AMST92109-62	SN21026-4	-
1992-515	2448917-50	1992 Oct 22	Aries	-	LEAP (41V)	0.000	SDIO	SS	SDIO/	Tech	AMST920712-4	-	-
1993-515	2449267-50	1993 Jun 26 0945	Aries	-	MASA 24-17CH	0.000	GSEC	SF	RMD/	Target	SN930712-4	-	-
1993-519	2449765-50	1993 Feb 25	Aries	-	LEAP Target	0.000	RMD	SS	LPARL/Catura	XR Astron	LEAP-TD-EA	CR-198856	-
1995-515	2449879-30	1995 Mar 8	Aries	-	-	0.000	RMD	SS	-	Target	Powell	-	-
1995-515	2449879-30	1995 Mar 9	Aries	-	-	0.000	RMD	SS	-	Target	Powerlink.mil	SN950403-94	-
1995-515	2449879-30	1995 Mar 9	Aries	-	-	0.000	RMD	SS	-	Target	SN9503-94	-	-
1996-584	2451973-50	1996 Jul 9	Aries	-	ABIE-TV	0.000	AFSNC	HS	-	Target	SN9503-94	-	-
2001-504	2451138-02	2000 Nov 20 1230	M66A1	-	Aegis ALI Target	0.000	AFSNC	HS	-	Target	SN9503-94	-	-
2001-514	2451931-46	2001 Jan 26 0357	M66A1	-	Aegis FTR-1A Target	0.000	USMAEC	HS	-	Target	SN9503-94	-	-
2002-504	2452300-58	2001 Mar 22 2315	M66A1	-	GRE-1	0.000	AFSNC	HS	-	Target	SVC-006-34	-	-
2002-504	2452389-43	2002 Jan 26 0200	M66A1	-	Aegis FN-2 Target	0.000	AFSNC	HS	-	Target	SN9503-94	-	-
2002-504	2452439-56	2002 Apr 24 2200	M66A1	-	GRE-2	0.000	AFSNC	HS	-	Target	AMST910204-22	-	-
2002-504	2452439-56	2002 Jun 14 0123	M66A1	-	Aegis FN-3 Target	0.000	AFSNC	HS	-	Target	AMST910204-22	-	-
2002-571	2452600-59	2002 Nov 22 0030	M66A1	-	Aegis FN-4 Target	0.000	USMAEC	HS	-	Target	AMST910204-22	-	-
2003-505	2452989-47	2003 Jun 18 2315	M66A1	-	Aegis FN-5 Target	0.000	USMAEC	HS	-	Target	AMST910204-22	-	-
2003-505	2452989-47	2003 Dec 11 1810	M66A1	-	Aegis FN-6 Target	0.000	USMAEC	HS	-	Target	AMST910204-22	-	-
2005-507	2453496-26	2005 Feb 24 2103	M66A1	-	Aegis FTH 04-1 Target	0.000	USMAEC	HS	-	Target	AMST910204-22	-	-
2006-589	2454076-50	2006 Dec 7	M66A1	-	Aegis FTH-11 Target	0.000	USMAEC	HS	-	Target	AMST910204-22	-	-





Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Launch_Mission	FlightCode	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee_Km	Range_Km	Dest
1990-S171	2448246.50	1990 Dec 21	Jericho-1	-	-	-	-	-	-	NEGEV	-	-	-	100?	-	-
1991-S164	2448655.50	1991 Oct 30	Jericho-1	-	-	-	-	-	-	NEGEV	-	-	-	100?	-	-
1996-A06	2449225.50	1996 Jul 30	Arrow 2	-	F1	III #21	-	-	-	PALB	ARW	-	-	20	-	-
1996-H01	2450133.50	1996 Feb 20?	Arrow 2	-	F2	III #22	-	-	-	PALB	ARW	-	-	60?	-	-
1996-H02	2450315.50	1996 Aug 20	Arrow 2	-	F3	ALT #21	-	-	-	PALB	ARW	-	-	60?	-	-
1997-H01	2450315.50	1997 Mar 11	Arrow 2	-	F4	ALT #22	-	-	-	PALB	ARW	-	-	60?	-	-
1997-H03	2450675.85	1997 Aug 19 0829	Arrow 2	-	F5	ALT #23	-	-	-	PALB	ARW	-	-	1?	-	-
1998-H02	2451071.03	1998 Sep 14 1241	Arrow 2	-	F6	AST-3	-	-	-	PALB	ARW	-	-	60?	-	-
1999-H02	2451483.90	1999 Nov 1 0942	Arrow 2	-	F7	AST-4	-	-	-	PALB	ARW	-	-	60?	-	-
2000-S18	2451640.50	2000 Apr 6	Jericho-1	-	-	-	-	-	-	NEGEV?	-	-	-	100	-	-
2000-H43	2451801.88	2000 Sep 14 0905?	Arrow 2	-	F8	AST-5 Black Sparrow	-	-	-	PALB	ARW	-	-	60?	-	-
2001-S39	2452148.95	2001 Aug 27 1050	Arrow 2	-	-	AST-6 Black Sparrow	-	-	-	PALB?	ARW	-	-	100	-	-
2003-A01	2452945.11	2003 Jan 5 1437	Arrow 2	-	F10?	AST-8	-	-	-	PALB	ARW	-	-	30?	-	-
2003-A15	2452995.50	2003 Dec 16	Arrow 2	-	F11	AST-9 Black Sparrow	-	-	-	PALB	ARW	-	-	30?	-	-
2004-A08	2453215.23	2004 Jul 29 1725	Arrow 2	-	F12	USFT-1	CARAVAN-1	-	-	PALB	ARW	-	-	40	-	-
2004-A09	2453244.23	2004 Aug 28 1720	Arrow 2	-	F13	USFT-2	CARAVAN-1	-	-	SMT	-	-	-	40	-	-
2005-A06	2453705.85	2005 Dec 2 0828	Arrow 2	-	F14	AST-10 Black Sparrow	-	-	-	PALB	ARW	-	-	40?	-	-
2007-A01	2454143.26	2007 Feb 11 1818	Arrow 2	-	M4	AST-11? Black Sparrow	-	-	-	PALB	ARW	-	-	40?	-	-
2007-A02	2454185.50	2007 Mar 26	Arrow 2	-	-	AST-12?	-	-	-	PALB	ARW	-	-	40?	-	-
2009-A01	2454225.50	2009 Apr 7	Arrow 2	-	-	AST-13? Black Sparrow	-	-	-	PALB	ARW	-	-	40?	-	-
2011-A02	2455615.77	2011 Feb 23 0632?	Arrow 2	-	-	USFT-3?	CARAVAN-2	-	-	SMT	-	-	-	40?	-	-
2014-A33	2456909.50	2014 Sep 9	Arrow 2	-	-	AST-14	-	-	-	PALB	ARW	-	-	40?	-	-
2017-A138	2457829.50	2017 Mar 17?	Arrow 2	-	-	Syrian S-200 intercept	-	-	-	PALB?	ARW	-	-	40?	-	-
2020-A17	2459073.50	2020 Aug 12	Arrow 2	-	F29?/F22?	AST	-	-	-	PALB	ARW	-	-	40?	-	-



Launch

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	OrbPay	Agency	Launch_Code	Group	Category	LTCite	Cite	Notes
1990-S171	2448246.50	1990 Dec 21	Jericho-1	-	-	0.000	IDF	MS	-	OT	Wire	-	-
1991-S164	2448655.50	1991 Oct 30	Jericho-1	-	-	0.000	IDF	MS	-	OT	Wire	-	-
1995-A06	2449925.50	1995 Jul 30	Arrow 2	-	F1	0.000	LAI	MS	-	Test	AMST960307-59	-	-
1996-A01	2450135.50	1996 Feb 20?	Arrow 2	-	F2	0.000	LAI	MS	-	Test	AMST960226-67	-	-
1996-A02	2450315.50	1996 Aug 20	Arrow 2	-	F3	0.000	LAI	MS	-	ATEM Test	AMST960326-73	-	-
1997-A01	2450515.50	1997 Mar 11	Arrow 2	-	F4	0.000	LAI	MS	-	ATEM Test	AMST970324-34	-	-
1997-A03	2450675.85	1997 Aug 19 0829	Arrow 2	-	F5	0.000	LAI	MF	-	ATEM Test	www.fas.org	-	AMST970825-16
1998-A02	2451071.03	1998 Sep 14 1241	Arrow 2	-	F6	0.000	LAI	MS	-	ATEM Test	CNN-WW	-	-
1999-A02	2451485.90	1999 Nov 1 0942	Arrow 2	-	F7	0.000	LAI	MS	-	ATEM Test	Wire	-	-
2000-S18	2451640.50	2000 Apr 6	Jericho-1	-	-	0.000	IDF	MS	-	OT	JerPost00603	-	-
2000-A43	2451801.88	2000 Sep 14 0905?	Arrow 2	-	F8	0.000	LAI	MS	-	ATEM Test	AMST000918-18	-	-
2001-S39	2452148.95	2001 Aug 27 1050	Arrow 2	-	-	0.000	LAI	MS	-	ATEM Test	Wire	-	-
2003-A01	2452645.11	2003 Jan 5 1437	Arrow 2	-	F10?	0.000	LAI	MS	-	ATEM Test	www.mfa.gov.il	-	AMST030113-399
2003-A15	2452985.50	2003 Dec 16	Arrow 2	-	F11	0.000	LAI	MS	-	ATEM Test	Wire	-	-
2004-A08	2453216.23	2004 Jul 29 1725	Arrow 2	-	F12	0.000	LAI/MDA	MS	-	ATEM Test	Wire	-	-
2004-A09	2453244.23	2004 Aug 26 1720	Arrow 2	-	F13	0.000	LAI/MDA	MS	-	ATEM Test	R-EG	-	AMST040802-19
2005-A06	2453706.85	2005 Dec 2 0828	Arrow 2	-	F14 BLK-3	0.000	LAI	MS	-	ATEM Test	Wire	-	SIN040830-4
2007-A01	2454143.26	2007 Feb 11 1818	Arrow 2	-	M4	0.000	LAI	MS	-	ATEM Test	Wire	-	-
2007-A02	2454185.50	2007 Mar 26	Arrow 2	-	-	0.000	LAI	MS	-	Test	Wire	-	-
2009-A01	2454225.50	2009 Apr 7	Arrow 2	-	-	0.000	LAI	MS	-	Test	Wire	-	-
2011-A02	2455615.77	2011 Feb 23 0632?	Arrow 2	-	-	0.000	LAI/MDA	MS	-	ATEM Test	mda.mil	-	-
2014-A33	2456909.50	2014 Sep 9	Arrow 2	-	-	0.000	LAI	MS	-	Test	mda.mil	-	-
2017-A138	2457829.50	2017 Mar 17?	Arrow 2	-	-	0.000	LAI	MS	-	Test	defenseews.com	-	-
2020-A17	2459073.50	2020 Aug 12	Arrow 2	-	F29/FZ2?	0.000	LAI	MS	-	Inveceptor	mda.mil	-	-



Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Mission	FlightCode	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee km	Range km	Dest
2011-A38	2455334.50	2011 Q4?	Arrow 3	-	F0	Canister eject test	-	-	-	PALB	-	-	-	0	-	-
2013-S20	2456348.75	2013 Feb 25 0600	Arrow 3	-	-	Heiz-3	-	-	-	PALB	-	-	-	100?	-	-
2014-S01	2456660.75	2014 Jan 3 0600	Arrow 3	-	A3F0-2	Heiz-3	-	-	-	PALB	-	-	-	100?	-	-
2015-S86	2457366.76	2015 Dec 10 0615	Arrow 3	-	-	Heiz-3	-	-	-	PALB	-	-	-	100?	-	-
2018-S12	2458168.48	2018 Feb 18 2350	Arrow 3	-	-	Heiz-3	-	-	-	PALB?	-	-	-	100?	-	-
2019-S05	2458505.50	2019 Jan 22	Arrow 3	-	-	Heiz-3	-	-	-	PALB?	-	-	-	100?	-	-
2019-S37	2458679.50	2019 Jul 15?	Arrow 3	-	-	Heiz-3	-	-	-	PSCA	LP2	-	-	100?	-	-
2019-S39	2458686.50	2019 Jul 22?	Arrow 3	-	-	Heiz-3	-	-	-	PSCA	LP2	-	-	100?	-	-
2019-S41	2458691.50	2019 Jul 27?	Arrow 3	-	-	Heiz-3	-	-	-	PSCA	LP2	-	-	100?	-	-
2022-S03	2458697.50	2022 Jan 18	Arrow 3	-	-	Heiz-3	-	-	-	SDTHR?	ALCI	-	-	100?	-	-
2022-S04	2458697.50	2022 Jan 18	Arrow 3	-	-	Heiz-3	-	-	-	SDTHR?	ALCI	-	-	100?	-	-
2023-S52	2460248.50	2023 Oct 31	Arrow 3	-	-	-	-	-	-	SDTHR?	ALCI	-	-	100?	-	-



Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	DrPay	Agency	Launch_Code	Group	Category	LTCite	Cite	Notes
2011-438	2465834.50	2011 Q4?	Arrow 3	-	F0	0.000	IDF	AS	-	Test	Wire	-	-
2013-520	2466348.75	2013 Feb 26 0600	Arrow 3	-	-	0.000	IDF	MS	-	Test	Wire	-	-
2014-501	2466660.75	2014 Jan 3 0600	Arrow 3	-	A3FU-2	0.000	IDF	MS	-	Test	mda.mil	-	-
2015-586	2467366.76	2015 Dec 10 0615	Arrow 3	-	-	0.000	IDF	MS	-	Interceptor	defensesnews.com	-	-
2018-512	2468168.48	2018 Feb 18 2330	Arrow 3	-	-	0.000	IDF	MS	-	Interceptor	mda.mil	-	-
2019-505	2468505.50	2019 Jan 22	Arrow 3	-	-	0.000	IDF	MS	-	Interceptor	mda.mil	-	-
2019-537	2468679.50	2019 Jul 15?	Arrow 3	-	-	0.000	IDF	MS	-	Interceptor	mda.mil	-	-
2019-539	2468686.50	2019 Jul 22?	Arrow 3	-	-	0.000	IDF	MS	-	Interceptor	mda.mil	-	-
2019-541	2468691.50	2019 Jul 27?	Arrow 3	-	-	0.000	IDF	MS	-	Interceptor	mda.mil	-	-
2022-503	2469597.50	2022 Jan 18	Arrow 3	-	-	0.000	IDF	MS	-	Interceptor	mda.mil	-	-
2022-504	2469597.50	2022 Jan 18	Arrow 3	-	-	0.000	IDF	MS	-	Interceptor	mda.mil	-	-
2023-552	2460248.50	2023 Oct 31	Arrow 3	-	-	0.000	IDF	MS	-	Interceptor	Wire	-	-









Launch

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Agency	Launch_Code	Group	Category	LTCite	Cite	Notes
1955-A600	2435468.50	1955 Dec 27	Asp	-	1	MRL	SS	MRL/SBRK/	Test	Newell	-	-
1955-A492	2435441.50	1955 Dec 7	Asp	-	2	MRL	SS	MRL/SBRK/	Test	Newell	-	-
1956-A01	2435472.50	1956 Jan	Asp	-	3	MRL	SS	MRL/SBRK/	Test	Newell	-	-
1956-A02	2435472.50	1956 Jan	Asp	-	4	MRL	SS	MRL/SBRK/	Test	Newell	-	-
1956-A12	2435509.50	1956 Feb 6	Asp	-	1	MRL	SS	MRL/SBRK/	Test	wsmr-history.org	-	-
1956-A16	2435513.50	1956 Feb 10	Asp	-	2	MRL	SS	MRL/SBRK/	Test	wsmr-history.org	-	-
1956-A17	2435513.50	1956 Feb 10	Asp	-	4	MRL	SS	MRL/SBRK/	Test	wsmr-history.org	-	-
1956-A18	2435513.50	1956 Feb 10	Asp	-	5	MRL	SS	MRL/SBRK/	Test	wsmr-history.org	-	-
1956-A19	2435513.50	1956 Feb 10	Asp	-	6	MRL	SS	MRL/SBRK/	Test	wsmr-history.org	-	-
1956-A48	2435593.50	1956 May	Asp	-	-	MRL	SS	MRL/SBRK/	Aeronomy	Newell	-	-
1956-A49	2435593.50	1956 May?	Asp	-	-	MRL	SS	MRL/SBRK/	Aeronomy	Newell	-	-
1956-A57	2435624.50	1956 Jun?	Asp	-	-	MRL	SS	MRL/SBRK/	Aeronomy	Newell	-	-
1956-A66	2435654.50	1956 Jul?	Asp	-	-	MRL	SS	MRL/SBRK/	Aeronomy	Newell	-	-
1956-A73	2435675.50	1956 Jul 21	Asp	-	-	MRL	SS	MRL/SBRK/	Aeronomy	Newell	-	-
1957-A31	2435958.50	1957 May?	Asp	-	-	LRL	SS	LRL/	Test	Newell	-	-
1957-A32	2435958.50	1957 May?	Asp	-	-	LRL	SS	LRL/	Test	Newell	-	-
1957-A45	2435988.50	1957 Jun?	Asp	-	-	LRL	SS	LRL/	Test	Newell	-	-
1957-A46	2435988.50	1957 Jun	Asp	-	-	LRL	SS	LRL/	Test	Newell	-	-
1957-A47	2435988.50	1957 Jun	Asp	-	-	LRL	SS	LRL/	Test	Newell	-	-
1957-A48	2435988.50	1957 Jun	Asp	-	-	LRL	SS	LRL/	Test	Newell	-	-
1957-A58	2436019.50	1957 Jul	Asp	-	-	LRL	SS	LRL/	Test	Newell	-	-
1957-A60	2436019.50	1957 Jul	Asp	-	-	LRL	SS	LRL/	Test	Newell	-	-
1957-A68	2436050.50	1957 Jul?	Asp	-	-	LRL	SS	LRL/	Aeronomy	Newell	-	-
1957-A69	2436050.50	1957 Aug?	Asp	-	-	LRL	SS	LRL/	Aeronomy	Newell	-	-
1957-A89	2436081.50	1957 Sep?	Asp	-	-	LRL	SS	LRL/	Aeronomy	Newell	-	-
1957-A91	2436081.50	1957 Sep?	Asp	-	-	LRL	SS	LRL/	Aeronomy	Newell	-	-
1957-A111	2436111.50	1957 Oct?	Asp	-	-	LRL	SS	LRL/	Aeronomy	Newell	-	-
1957-A112	2436111.50	1957 Oct	Asp	-	-	LRL	SS	LRL/	Aeronomy	Newell	-	-
1957-W01	2435938.50	1957	Asp III	-	-	LRL	SS	LRL/	Test	Horrow	-	-
1957-W02	2435938.50	1957	Asp III	-	-	LRL	SS	LRL/	Test	Horrow	-	-
1957-W03	2435938.50	1957	Asp III	-	-	LRL	SS	LRL/	Test	Horrow	-	-
1958-W01	2436203.50	1958	Asp III	4L	-	LRL	SS	LRL/	Test	Horrow	-	-
1958-W15	2436416.50	1958 Aug 17	ASCAMP	-	-	LRL	SS	LRL/	Aeronomy	Desind	-	-
1958-W16	2436416.50	1958 Aug 17	ASCAMP	-	-	LRL	SS	LRL/	Aeronomy	Desind	-	-
1958-W17	2436416.50	1958 Aug 17	ASCAMP	-	-	LRL	SS	LRL/	Aeronomy	Desind	-	-
1958-W18	2436416.50	1958 Aug 17	ASCAMP	-	-	LRL	SS	LRL/	Aeronomy	Desind	-	-
1958-W19	2436416.50	1958 Aug 17	ASCAMP	-	-	LRL	SS	LRL/	Aeronomy	Desind	-	-
1958-W20	2436416.50	1958 Aug 17	ASCAMP	-	-	LRL	SS	LRL/	Aeronomy	Desind	-	-
1958-W21	2436416.50	1958 Aug 17	ASCAMP	-	-	LRL	SS	LRL/	Aeronomy	Desind	-	-
1958-W22	2436416.50	1958 Aug 17	ASCAMP	-	-	LRL	SS	LRL/	Aeronomy	Desind	-	-
1958-W23	2436416.50	1958 Aug 17	ASCAMP	-	-	LRL	SS	LRL/	Aeronomy	Desind	-	-
1958-W24	2436416.50	1958 Aug 17	ASCAMP	-	-	LRL	SS	LRL/	Aeronomy	Desind	-	-
1958-W29	2436427.50	1958 Aug 12?	ASCAMP	-	-	LRL	SS	LRL/	Aeronomy	Desind	-	-
1958-W31	2436427.50	1958 Aug 12?	ASCAMP	-	-	LRL	SS	LRL/	Aeronomy	Desind	-	-
1958-W32	2436427.50	1958 Aug 12?	ASCAMP	-	-	LRL	SS	LRL/	Aeronomy	Desind	-	-
1958-W33	2436427.50	1958 Aug 12?	ASCAMP	-	-	LRL	SS	LRL/	Aeronomy	Desind	-	-
1958-W34	2436427.50	1958 Aug 12?	ASCAMP	-	-	LRL	SS	LRL/	Aeronomy	Desind	-	-
1958-W35	2436427.50	1958 Aug 12?	ASCAMP	-	-	LRL	SS	LRL/	Aeronomy	Desind	-	-
1958-W36	2436427.50	1958 Aug 12?	ASCAMP	-	-	LRL	SS	LRL/	Aeronomy	Desind	-	-
1958-W37	2436427.50	1958 Aug 12?	ASCAMP	-	-	LRL	SS	LRL/	Aeronomy	Desind	-	-
1958-W38	2436427.50	1958 Aug 12?	ASCAMP	-	-	LRL	SS	LRL/	Aeronomy	Desind	-	-
1958-W39	2436427.50	1958 Aug 12?	ASCAMP	-	-	LRL	SS	LRL/	Aeronomy	Desind	-	-
1958-W40	2436427.50	1958 Aug 12?	ASCAMP	-	-	LRL	SS	LRL/	Aeronomy	Desind	-	-
1959-W01	2436569.50	1959	Asp III	-	-	LRL	SS	LRL/	Test	NSMU	-	-
1959-W02	2436569.50	1959?	Pogo H, III	-	-	FTL	SS	NSMU/	Test	NSMU	-	-
1959-W03	2436569.50	1959?	Pogo H, III	-	-	FTL	SS	NSMU/	Test	NSMU	-	-
1959-W04	2436569.50	1959?	Pogo H, III	-	-	FTL	SS	NSMU/	Test	NSMU	-	-
1960-W01	2437072.50	1960 May 18	Asp IV	-	-	MRL?	SS	MRL/?	Target	Morrow	-	-
1962-W02	2437072.50	1960 May 19	Asp IV	-	-	MRL?	SS	MRL/?	Target	Morrow	-	-
1962-W05	2437093.50	1962 Jun 14	Asp IV	-	-	MRL?	SS	MRL/?	Target	Morrow	-	-
1963-W190	2438093.50	1963	Cleanweep III	-	-	PHR	SS	ASU/	Aercon	M620618-10	-	-
1964-W202	2438666.50	1964 Oct 18	Cleanweep III	-	-	PHR	SS	AEG/LRL/	Aercon	Gilbert64	-	-
1964-W203	2438691.50	1964 Oct 23	Cleanweep III	-	-	PHR	SS	AEG/LRL/	Aercon	Gilbert64	-	-



Launch

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Mission	FlightCode	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee km	Range km	Deet
2018-493	2456520.42	2018 Jul 20 22:00?	Astra Rocket 1.0	-	LW0001	Rocket 1.0	-	-	-	PSCA	LP2	-	-	27	-	-
2018-4188	2459451.50	2018 Nov 29	Astra Rocket 2.0	-	LW0002	Rocket 2.0	-	-	-	PSCA	LP2	-	-	27	-	-
2020-F07	2459104.64	2020 Sep 12 03:19	Astra Rocket 3.1	-	LW0004	Rocket 3.1	-	-	-	PSCA	LP3B	-	-	1?	-	-
2020-F09	2459198.37	2020 Dec 15 20:55	Astra Rocket 3.2	-	LW0005	Rocket 3.2	-	-	-	PSCA	LP3B	-	-	390	-	-
2021-F07	2459485.44	2021 Aug 28 22:38:00	Astra Rocket 3.3	-	LW0006	Rocket 3.3	STP-27AD1	-	-	PSCA	LP3B	-	-	40?	-	-
2021-108	2459635.76	2021 Nov 20 06:16:00	Astra Rocket 3.3	-	LW0007	Rocket 3.3	STP-27AD2	-	-	PSCA	LP3B	-	-	500?	-	-
2022-F01	2459621.33	2022 Feb 10 20:00	Astra Rocket 3.3	-	LW0008	Rocket 3.3	VGLS Demo 2	-	-	SPFLA	SLC46	-	-	200?	-	-
2022-026	2459654.18	2022 Mar 15 16:22	Astra Rocket 3.3	-	LW0009	Rocket 3.3	Spaceflight Astra 1	S4-CROSSOVER	-	PSCA	LP3B	-	-	546?	-	-
2022-F03	2459743.24	2022 Jun 12 17:43:00	Astra Rocket 3.3	-	LW0010	Rocket 3.3	TROPICS 1	TROPICS 1	-	SPFLA	SLC46	-	-	543	-	-



**Launch**

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	DrPay	Agency	Launch_Code	Group	Category	LTCite	Cite	Notes
2018-A93	248520.42	2018 Jul 20 22007	Astra Rocket 1.0	-	LV0001	0.000	ASTRW	SF	-	Test	SH180727	-	-
2018-A188	2489451.50	2018 Nov 29	Astra Rocket 2.0	-	LV0002	0.000	ASTRW	SF	-	Test	SH181206	-	-
2020-F07	248904.64	2020 Sep 12 0319	Astra Rocket 3.1	-	LV0004	0.005	ASTRW	DF	CI/G	Sat S50 0	SH181206	-	-
2020-F09	248909.37	2020 Dec 15 2055	Astra Rocket 3.2	-	LV0005	0.005	ASTRW	DF	CI/G	Sat S50 0	twitter.com	-	-
2021-F07	2489455.44	2021 Aug 28 2238:00	Astra Rocket 3.3	-	LV0006	0.050	ASTRW	DF	CI/G	Sat LE0 0	twitter.com	-	-
2021-I08	2489538.76	2021 Nov 20 0616:00	Astra Rocket 3.3	-	LV0007	0.201	ASTRW	DS	CI/G	Sat LE0 0	youtube.com	-	-
2022-F01	2489621.33	2022 Feb 10 2000	Astra Rocket 3.3	-	LV0008	0.013	ASTRW	DF	C	Sat LE0 0	youtube.com	-	-
2022-O26	2489654.18	2022 Mar 15 1452	Astra Rocket 3.3	-	LV0009	0.017	ASTRW	DS	C	Sat LE0 0	youtube.com	-	-
2022-F03	2489743.24	2022 Jun 12 1743:00	Astra Rocket 3.3	-	LV0010	0.008	ASTRW	DF	CI/G	Sat LE0 0	youtube.com	-	-





Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variante	Flight_ID	Flight	Mission	Launch	FlightCode	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee km	Range km	Dest
1994-403	2449387.50	1994 Feb 4	Astrid	-	-	Pumped Prop'n Test	-	V	-	-	LF08/Rail	-	-	-	2	-	-



Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Drbby	Agency	Launch_Code	Group	Category	LTCite	Cite	Notes
1994-A03	2449387.50	1994 Feb 4	Astrid	-	-	0.000	LLL	TS	-	Test	VAFB	LLETR9407	-





















Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Mission	Launch_FlightCode	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee km	Range km	Dest
2009-564	2455165.56	2009 Nov 30 0128	Atea-1	-	1	Manu Karere	-	-	-	GHI	-	-	-	120?	-	-



Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Launch Orbit	Agency	Launch_Code	Group	Category	LTCite	Cite	Notes
2009-S64	2455165.56	2009 Nov 30 0128	Ateas-1	-	1	0.000	RLABN	SS	RLABN/Beck	Test	rocketlab.co.nz	-	-







Launch Mission

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Launch_Mission	FlightCode	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee_Km	Range_Km	Dest
1961-A150	2437458.40	1961 Jun 7 2137:31	Atlas E	-	27E	Mk 4-5	R&D Cat II	SURE SHUT	-	OSTF1	-	-	-	0	-	-
1961-A157	2437473.62	1961 Jun 23 0300	Atlas E	-	17E	Mk 3-1B	R&D	-	-	CC	-	-	-	107	-	-
1961-S203	2437487.70	1961 Jul 7 0451	Atlas E	-	22E	Mk 3-2B	R&D	-	-	CC	-	-	-	15007	-	-
1961-SIG	2437493.13	1961 Jul 12 1511:46	Atlas Alpha B	-	97D/1201	Midas 3	Midas ETS-II F1	POLAR ORBIT	-	PA	-	-	-	3591	-	-
1961-S226	2437512.40	1961 Jul 31 2152	Atlas E	-	21E	Mk B-1	R&D	-	-	CC	-	-	-	15007	-	-
1961-S232	2437520.69	1961 Aug 9 0431	Atlas F	-	2F	Mk B-1	R&D	-	-	CC	-	-	-	14007	-	-
1961-S252	2437534.59	1961 Aug 23 0116	Atlas D	-	101D	Mk 3-3B	R&D	NEW MICKEL	-	V	-	-	-	18007	-	ENW
1961-PHI	2437534.92	1961 Aug 23 1004:10	Atlas Alpha B	-	111D/6001 (AA1)	Ranger 1	MASA P-32	-	-	CC	-	-	-	992	-	-
1961-S274	2437551.57	1961 Sep 9 0142:27	Atlas E	-	26E	Mk 4-2A-4 L-25599	R&D	FIRST MOTION	-	PA	-	-	-	1007	-	-
1961-F09	2437556.09	1961 Sep 9 1928:27	Atlas Alpha B	-	106D/2120	Samos 3	SAMOS E-2	-	-	CC	-	-	-	0	-	-
1961-A ALP	2437556.38	1961 Sep 13 1404	Atlas D	-	88D	Mk 4-1B	Mercury SC8A	-	-	CC	-	-	-	240	-	-
1961-S317	2437575.27	1961 Oct 5 1823	Atlas E	-	30E	Mk 4-1B	R&D	-	-	CC	-	-	-	15007	-	EFR-17
1961-S322	2437578.07	1961 Oct 5 1342:37	Atlas E	-	30E	Mk 4-1B	R&D	-	-	CC	-	-	-	15007	-	(ASC)
1961-A DEL	2437594.08	1961 Oct 21 1353:03	Atlas Alpha B	-	105D/1202	Midas 4	Midas ETS-II F2	-	-	CC	-	-	-	4828	-	-
1961-A423A	2437614.12	1961 Nov 10 1455	Atlas E	-	32E	RX-2A S/N 4244/Pod 13	RX-2A S/N 4244/Pod 13	-	-	CC	-	-	-	407	-	-
1961-A THE	2437621.94	1961 Nov 10 0812:21	Atlas Alpha B	-	111D/6002 (AA2)	Ranger 2	MASA P-33	-	-	CC	-	-	-	245	-	-
1961-F13	2437626.37	1961 Nov 22 2045:47	Atlas Alpha B	-	106D/2202	Samos 4	Samos 4 (E-5)	-	-	CC	-	-	-	2007	-	-
1961-S387	2437626.38	1961 Nov 22 2104	Atlas F	-	4F	Mk 5-2/Pod 3/Pod 22	R&D	-	-	CC	-	-	-	14007	-	-
1961-A IOT	2437633.33	1961 Nov 29 1507:57	Atlas D	-	93D	Mk 5	Mercury SC9	-	-	CC	-	-	-	237	-	-
1961-S394	2437633.46	1961 Nov 29 2301:49	Atlas D	-	53D	Mk 3-3B	OT	-	-	V	-	-	-	18007	-	ENW
1961-S403	2437635.36	1961 Dec 1 2040	Atlas E	-	35E	Mk 4-4/Pod 23	R&D	BIG PUSH	-	V	-	-	-	16007	-	ENW
1961-S412	2437641.39	1961 Dec 7 2118:36	Atlas D	-	62D	Mk 3-5B	OT	BIG CHIEF	-	CC	-	-	-	16007	-	ENW
1961-S420	2437646.34	1961 Dec 12 2016	Atlas F	-	5F	Mk 4-2M/Pod 24	R&D	-	-	CC	-	-	-	10007	-	-
1961-S430	2437654.65	1961 Dec 20 0352	Atlas E	-	36E	Mk 5-1M/Pod 6/Pod 8	R&D	-	-	CC	-	-	-	18007	-	ASC
1961-S431	2437654.65	1961 Dec 21 0355	Atlas F	-	6F	Mk 5-2/Pod 15/Pod 25	R&D	-	-	CC	-	-	-	5007	-	-
1961-A LHM	2437666.30	1961 Dec 22 1912:33	Atlas Alpha B	-	114D/2203	Samos 5	Samos E-5	OCEAN WAY	-	PA	-	-	-	626	-	ENW
1962-S19	2437682.38	1962 Jan 17 2102:25	Atlas D	-	123D	Mk 3F	OT	BLUE FIN	-	CC	-	-	-	16007	-	ENW
1962-S22	2437686.39	1962 Jan 23 2128:27	Atlas Alpha B	-	121D/6003 (AA3)	Ranger 3	MASA P-34	-	-	CC	-	-	-	150000	-	-
1962-ALP	2437691.35	1962 Jan 26 2050:11	Atlas Alpha B	-	40E	Mk 3-5B	R&D	-	-	CC	-	-	-	16007	-	ENW
1962-S37	2437709.37	1962 Feb 13 2065	Atlas E	-	137D	Mk 4-2A	OT	-	-	CC	-	-	-	16007	-	ENW
1962-S39	2437712.46	1962 Feb 16 2304	Atlas D	-	109D	Mk 3-5B	R&D	-	-	CC	-	-	-	16007	-	ENW
1962-S47	2437717.44	1962 Feb 21 1447:39	Atlas D	-	52D	Mk 3-2B	OT	BIG JOHN	-	V	-	-	-	249	-	ENW
1962-S50	2437724.51	1962 Mar 7 0014:09	Atlas Alpha B	-	66E	Mk 4-5B	OT	CHAIN SMOKE	-	CC	-	-	-	18007	-	ENW*
1962-ETA	2437731.42	1962 Mar 7 2210:31	Atlas Alpha B	-	112D/2204	Samos 6	Ranger Cat II	SILVER SPOK	-	V	-	-	-	16007	-	ENW
1962-S71	2437747.53	1962 Mar 24 0039:32	Atlas D	-	134D	Mk 3-5B	R&D	LUKE TOUTH	-	PA	-	-	-	685	-	ENW
1962-KAP	2437749.35	1962 Apr 9 1504:48	Atlas Alpha B	-	110D/1203	Midas 5	OT DASD/R&D Cat III	CURRY COMB I	-	PA	-	-	-	18007	-	ENW
1962-S47	2437764.38	1962 Apr 9 2107:40	Atlas F	-	11F	Mk 4-1B	R&D	NIGHT HUNT	-	PA	-	-	-	9461	-	ENW
1962-S36	2437766.95	1962 Apr 12 0157:26	Atlas F	-	129D	Mk 3-5B	OT DASD	CURRY COMB II	-	CC	-	-	-	0	-	ENW
1962-RU	2437776.37	1962 Apr 23 2059:08	Atlas Alpha B	-	133D/6004 (AA4)	Ranger 4	Ranger 4	-	-	CC	-	-	-	150000	-	-
1962-S13	2437781.28	1962 Apr 26 1856:08	Atlas Alpha B	-	116D/2401	Mk 4	APF-201 PFP 851	DAIRY DOLL	-	PA	-	-	-	2151	-	ENW
1962-S10	2437782.46	1962 Apr 27 2324	Atlas D	-	140D	Mk 3-5B	OT DASD	BLUE BALL	-	PA	-	-	-	18007	-	ENW
1962-S130	2437789.52	1962 May 6 1649	Atlas Centaur	-	F-1	Centaur R&D	R&D	-	-	CC	-	-	-	6	-	ENW
1962-S130	2437789.52	1962 May 6 1649	Atlas D	-	127D	Mk 3-5B	OT DASD	CANNONBALL FLYER	-	CC	-	-	-	5907	-	ENW
1962-S130	2437789.52	1962 May 6 1649	Atlas D	-	127D	Mk 3-5B	OT DASD	CANNONBALL FLYER	-	CC	-	-	-	286	-	ENW
1962-S130	2437789.52	1962 May 6 1649	Atlas D	-	127D	Mk 3-5B	OT DASD	CANNONBALL FLYER	-	CC	-	-	-	286	-	ENW
1962-S130	2437789.52	1962 May 6 1649	Atlas D	-	127D	Mk 3-5B	OT DASD	CANNONBALL FLYER	-	CC	-	-	-	286	-	ENW
1962-S130	2437789.52	1962 May 6 1649	Atlas D	-	127D	Mk 3-5B	OT DASD	CANNONBALL FLYER	-	CC	-	-	-	286	-	ENW
1962-S130	2437789.52	1962 May 6 1649	Atlas D	-	127D	Mk 3-5B	OT DASD	CANNONBALL FLYER	-	CC	-	-	-	286	-	ENW
1962-S130	2437789.52	1962 May 6 1649	Atlas D	-	127D	Mk 3-5B	OT DASD	CANNONBALL FLYER	-	CC	-	-	-	286	-	ENW
1962-S130	2437789.52	1962 May 6 1649	Atlas D	-	127D	Mk 3-5B	OT DASD	CANNONBALL FLYER	-	CC	-	-	-	286	-	ENW
1962-S130	2437789.52	1962 May 6 1649	Atlas D	-	127D	Mk 3-5B	OT DASD	CANNONBALL FLYER	-	CC	-	-	-	286	-	ENW
1962-S130	2437789.52	1962 May 6 1649	Atlas D	-	127D	Mk 3-5B	OT DASD	CANNONBALL FLYER	-	CC	-	-	-	286	-	ENW
1962-S130	2437789.52	1962 May 6 1649	Atlas D	-	127D	Mk 3-5B	OT DASD	CANNONBALL FLYER	-	CC	-	-	-	286	-	ENW
1962-S130	2437789.52	1962 May 6 1649	Atlas D	-	127D	Mk 3-5B	OT DASD	CANNONBALL FLYER	-	CC	-	-	-	286	-	ENW
1962-S130	2437789.52	1962 May 6 1649	Atlas D	-	127D	Mk 3-5B	OT DASD	CANNONBALL FLYER	-	CC	-	-	-	286	-	ENW
1962-S130	2437789.52	1962 May 6 1649	Atlas D	-	127D	Mk 3-5B	OT DASD	CANNONBALL FLYER	-	CC	-	-	-	286	-	ENW
1962-S130	2437789.52	1962 May 6 1649	Atlas D	-	127D	Mk 3-5B	OT DASD	CANNONBALL FLYER	-	CC	-	-	-	286	-	ENW
1962-S130	2437789.52	1962 May 6 1649	Atlas D	-	127D	Mk 3-5B	OT DASD	CANNONBALL FLYER	-	CC	-	-	-	286	-	ENW
1962-S130	2437789.52	1962 May 6 1649	Atlas D	-	127D	Mk 3-5B	OT DASD	CANNONBALL FLYER	-	CC	-	-	-	286	-	ENW
1962-S130	2437789.52	1962 May 6 1649	Atlas D	-	127D	Mk 3-5B	OT DASD	CANNONBALL FLYER	-	CC	-	-	-	286	-	ENW
1962-S130	2437789.52	1962 May 6 1649	Atlas D	-	127D	Mk 3-5B	OT DASD	CANNONBALL FLYER	-	CC	-	-	-	286	-	ENW
1962-S130	2437789.52	1962 May 6 1649	Atlas D	-	127D	Mk 3-5B	OT DASD	CANNONBALL FLYER	-	CC	-	-	-	286	-	ENW
1962-S130	2437789.52	1962 May 6 1649	Atlas D	-	127D	Mk 3-5B	OT DASD	CANNONBALL FLYER	-	CC	-	-	-	286	-	ENW
1962-S130	2437789.52	1962 May 6 1649	Atlas D	-	127D	Mk 3-5B	OT DASD	CANNONBALL FLYER	-	CC	-	-	-	286	-	ENW
1962-S130	2437789.52	1962 May 6 1649	Atlas D	-	127D	Mk 3-5B	OT DASD	CANNONBALL FLYER	-	CC	-	-	-	286	-	ENW
1962-S130	2437789.52	1962 May 6 1649	Atlas D	-	127D	Mk 3-5B	OT DASD	CANNONBALL FLYER	-	CC	-	-	-	286	-	ENW
1962-S130	2437789.52	1962 May 6 1649	Atlas D	-	127D	Mk 3-5B	OT DASD	CANNONBALL FLYER	-	CC	-	-	-	286	-	ENW
1962-S130	2437789.52	1962 May 6 1649	Atlas D	-	127D	Mk 3-5B	OT DASD	CANNONBALL FLYER	-	CC	-	-	-	286	-	ENW
1962-S130	2437789.52	1962 May 6 1649	Atlas D	-	127D	Mk 3-5B	OT DASD	CANNONBALL FLYER	-	CC	-	-	-	286	-	ENW
1962-S130	2437789.52	1962 May 6 1649	Atlas D	-	127D	Mk 3-5B	OT DASD	CANNONBALL FLYER	-	CC	-	-	-	286	-	ENW
1962-S130	2437789.52	1962 May 6 1649	Atlas D	-	127D	Mk 3-5B	OT DASD	CANNONBALL FLYER	-	CC	-	-	-	286	-	ENW
1962-S130	2437789.52	1962 May 6 1649	Atlas D	-	127D	Mk 3-5B	OT DASD	CANNONBALL FLYER	-	CC	-	-	-	286	-	ENW
1962-S130	2437789.52	1962 May 6 1649	Atlas D	-	127D	Mk 3-5B	OT DASD	CANNONBALL FLYER	-	CC	-	-	-	286	-	ENW
1962-S130	2437789.52	1962 May 6 1														





Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Launch	FlightCode	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee	Range	Dest
1967-075	2438704.44	1967 Aug 1 2238:00	Atlas SLV-3 Agena D	-	5605/6634 (A424)	Lunar Orbiter 5	Lunar Orbiter E	-	-	CC	LC13	-	-	150000	-	-
1967-084	2438741.53	1967 Sep 5 0757:01	Atlas SLV-3C Centaur	-	AC-13	Surveyor 5	Surveyor 5	-	-	CC	LC36B	-	-	150000	-	-
1967-3486	2438774.98	1967 Oct 11 1130:03	Atlas D	-	690	TX-13	ABRES TX-13	-	-	V	ABRES3	-	-	1800?	-	-
1967-3492	2438777.50	1967 Oct 14	Atlas F	-	118F	MWR No. 604	ABRES MWR-4	-	-	V	ABRES42	-	-	1400?	-	J1
1967-A131	2438791.05	1967 Oct 27 1310	Atlas F/Trident	-	81F	ABRES RPV-3	ABRES RPV-3/THP KX103	-	-	V	ABRES42	-	-	17	-	-
1967-111	2438800.48	1967 Nov 5 2337:00	Atlas SLV-3 Agena D	-	5103/6163 (A426)	ATS 3	ATS C	-	-	CC	LC12	-	-	42159	-	-
1967-3527	2438802.05	1967 Nov 7 0739:01	Atlas SLV-3C Centaur	-	AC-14	Surveyor 6	Surveyor 6	-	-	CC	LC36B	-	-	150000	-	-
1967-3530	2438805.01	1967 Nov 7 1317:54	Atlas F	-	94D	Mk 11A-5B AX-2	ABRES AX-2/PDV-3	-	-	V	ABRES2	-	-	1800?	-	RMR
1967-3531	2438846.77	1967 Dec 21 0938	Atlas F/Trident	-	113F	ABRES RPV-4	ABRES RPV-4/THP KX106	-	-	V	ABRES41	-	-	1400?	-	-
1968-001	2438862.90	1968 Jan 7 0630:00	Atlas SLV-3C Centaur	-	AC-15	Surveyor 7	Surveyor 7	-	-	CC	LC36A	-	-	150000	-	-
1968-S103	2438887.52	1968 Jan 31 1330	Atlas F/Trident	-	94F	ABRES RPV-4	ABRES RPV-4	-	-	V	ABRES41	-	-	1400?	-	-
1968-S151	2438913.82	1968 Feb 27 0735	Atlas F	-	116F	OGO 5	OGO E	-	-	CC	LC13	-	-	150000	-	WAKE
1968-014	2438920.25	1968 Mar 4 1306:01	Atlas SLV-3A Agena D	-	74E	5602A/6503 (A428)	ABRES RPV-6/THP KX105	-	-	V	ABRES43	-	-	1600?	-	-
1968-026	2438952.92	1968 Apr 6 0959:42	Atlas F/Trident	-	107F	WTIA-L1/WTIA-S1	ABRES RPV-7/THP KX107	-	-	V	ABRES42	-	-	1600?	-	-
1968-S267	2438964.53	1968 Apr 18 0755	Atlas F	-	77E	WTIA-L1/WTIA-S2	ABRES RPV-8/THP KX108	-	-	V	ABRES42	-	-	1400?	-	-
1968-S268	2438973.90	1968 Apr 27 0941	Atlas F/Trident	-	78E	Mk 12 RV Pre-Damaged	ABRES RPV-8/THP KX108	-	-	V	ABRES42	-	-	1400?	-	-
1968-S303	2438980.09	1968 Jun 1	Atlas F	-	95F	WTIA-L1/WTIA-S2	ABRES RPV-9/THP KX109	-	-	V	ABRES41	-	-	1400?	-	-
1968-S356	2440028.50	1968 Jun 22	Atlas F/Trident	-	86F	WTIA-L1/WTIA-S2	ABRES RPV-9/THP KX109	-	-	V	ABRES41	-	-	1400?	-	-
1968-S357	2440036.92	1968 Jun 29 1012	Atlas F	-	87F	WTIA-L1/WTIA-S2	ABRES RPV-9/THP KX109	-	-	V	ABRES41	-	-	1400?	-	-
1968-059	2440049.31	1968 Jul 11 1930	Atlas F	-	75F	AFB-827	ABRES RPV-9/THP KX109	-	-	CC	LC13	-	-	40286	-	-
1968-063	2440074.96	1968 Aug 6 1108	Atlas SLV-3A Agena D	-	5601M/2801F	ATS 4	ATS D	-	-	CC	LC36A	-	-	77?	-	-
1968-066	2440079.44	1968 Aug 10 2233:02	Atlas SLV-3C Centaur	-	AC-17	P88-1	ABRES RPV-9/THP KX109	-	-	V	ABRES43	-	-	600?	-	-
1968-F07	2440085.37	1968 Aug 16 2057:44	Atlas Burner 2	-	7004	ABRES RPV-9/THP KX109	ABRES RPV-9/THP KX109	-	-	V	ABRES41	-	-	1400?	-	-
1968-S509	2440125.50	1968 Sep 25 1154	Atlas F/Trident	-	99F	WTIA-L1/WTIA-S2	ABRES RPV-9/THP KX109	-	-	V	ABRES41	-	-	1400?	-	-
1968-S513	2440126.50	1968 Sep 27	Atlas F	-	84F	WTIA-L1/WTIA-S2	ABRES RPV-9/THP KX109	-	-	V	ABRES41	-	-	1400?	-	-
1968-S508	2440177.00	1968 Nov 24 1200	Atlas F/Trident	-	60F	WTIA-L1/WTIA-S2	ABRES RPV-9/THP KX109	-	-	V	ABRES41	-	-	1400?	-	-
1968-S506	2440185.01	1968 Dec 7 0940:09	Atlas F	-	60F	WTIA-L1/WTIA-S2	ABRES RPV-9/THP KX109	-	-	V	ABRES41	-	-	1400?	-	-
1968-110	2440197.86	1969 Jan 16 1153	Atlas F/Trident	-	70F	WTIA-L1/WTIA-S2	ABRES RPV-9/THP KX109	-	-	V	ABRES41	-	-	1400?	-	-
1969-368	2440237.96	1969 Feb 25 0129:02	Atlas SLV-3C Centaur	-	AC-20	Harrier 6	ABRES RPV-9/THP KX109	-	-	V	ABRES41	-	-	1400?	-	-
1969-014	2440287.52	1969 Mar 15 0747:35	Atlas F	-	104F	Harrier 7	ABRES RPV-9/THP KX109	-	-	V	ABRES41	-	-	1400?	-	-
1969-025	2440308.43	1969 Mar 27 2222:01	Atlas SLV-3C Centaur	-	AC-19	Harrier 7	ABRES RPV-9/THP KX109	-	-	V	ABRES41	-	-	1400?	-	-
1969-036	2440345.96	1969 Apr 13 0230	Atlas SLV-3A Agena D	-	5602M/2802F	ATS 5	ABRES RPV-9/THP KX109	-	-	V	ABRES41	-	-	1400?	-	-
1969-069	2440445.96	1969 Aug 12 1101:04	Atlas SLV-3C Centaur	-	AC-16	AFB-827	ABRES RPV-9/THP KX109	-	-	V	ABRES41	-	-	1400?	-	-
1969-3457	2440460.00	1969 Aug 20 1205	Atlas F/Trident	-	112F	WTIA-L1/WTIA-S2	ABRES RPV-9/THP KX109	-	-	V	ABRES41	-	-	1400?	-	-
1969-3503	2440468.50	1969 Sep 16	Atlas F/Trident	-	100F	WTIA-L1/WTIA-S2	ABRES RPV-9/THP KX109	-	-	V	ABRES41	-	-	1400?	-	-
1969-A174	2440695.00	1969 Oct 10 1207	Atlas F/Trident	-	98F	Mk 11 W-3A RV	ABRES RPV-9/THP KX109	-	-	V	ABRES41	-	-	1400?	-	-
1969-3643	2440699.89	1969 Dec 4 0915	Atlas F/Trident	-	93F	ABRES RPV-9/THP KX109	ABRES RPV-9/THP KX109	-	-	V	ABRES41	-	-	1400?	-	-
1969-3653	2440721.25	1969 Dec 12 1215	Atlas F/Trident	-	93F	ABRES RPV-9/THP KX109	ABRES RPV-9/THP KX109	-	-	V	ABRES41	-	-	1400?	-	-
1970-024	2440986.02	1970 Feb 8 1721	Atlas F/Trident	-	95F	ABRES RPV-9/THP KX109	ABRES RPV-9/THP KX109	-	-	V	ABRES41	-	-	1400?	-	-
1970-024	2440986.02	1970 Feb 8 1721	Atlas F/Trident	-	95F	ABRES RPV-9/THP KX109	ABRES RPV-9/THP KX109	-	-	V	ABRES41	-	-	1400?	-	-
1970-024	2440986.02	1970 Feb 8 1721	Atlas F/Trident	-	95F	ABRES RPV-9/THP KX109	ABRES RPV-9/THP KX109	-	-	V	ABRES41	-	-	1400?	-	-
1970-3376	2440979.86	1970 May 30 1835	Atlas F/Trident	-	91F	WTIA-L1/WTIA-S2	ABRES RPV-9/THP KX109	-	-	V	ABRES41	-	-	1400?	-	-
1970-3376	2440979.86	1970 May 30 1835	Atlas F/Trident	-	91F	WTIA-L1/WTIA-S2	ABRES RPV-9/THP KX109	-	-	V	ABRES41	-	-	1400?	-	-
1970-3382	2440979.86	1970 Jun 9 1223	Atlas SLV-3A Agena D	-	5201M/1551F	AFB-827	ABRES RPV-9/THP KX109	-	-	V	ABRES41	-	-	1400?	-	-
1970-046	2440980.26	1970 Jun 19 0737	Atlas SLV-3A Agena D	-	5201M/1551F	AFB-827	ABRES RPV-9/THP KX109	-	-	V	ABRES41	-	-	1400?	-	-
1970-046	2440980.26	1970 Jun 19 0737	Atlas SLV-3A Agena D	-	5201M/1551F	AFB-827	ABRES RPV-9/THP KX109	-	-	V	ABRES41	-	-	1400?	-	-
1970-103	2440992.54	1970 Sep 30 0200:05	Atlas SLV-3C Centaur	-	AC-21	WTIA-L1/WTIA-S2	ABRES RPV-9/THP KX109	-	-	V	ABRES41	-	-	1400?	-	-
1970-103	2440992.54	1970 Sep 30 0200:05	Atlas SLV-3C Centaur	-	AC-21	WTIA-L1/WTIA-S2	ABRES RPV-9/THP KX109	-	-	V	ABRES41	-	-	1400?	-	-
1970-366	2440994.96	1970 Nov 20 0838:00	Atlas F/Trident	-	105F	WTIA-L1/WTIA-S2	ABRES RPV-9/THP KX109	-	-	V	ABRES41	-	-	1400?	-	-
1971-008	2440977.96	1971 Jan 26 0936:03	Atlas SLV-3C Centaur	-	AC-25	WTIA-L1/WTIA-S2	ABRES RPV-9/THP KX109	-	-	V	ABRES41	-	-	1400?	-	-
1971-008	2440977.96	1971 Jan 26 0936:03	Atlas SLV-3C Centaur	-	AC-25	WTIA-L1/WTIA-S2	ABRES RPV-9/THP KX109	-	-	V	ABRES41	-	-	1400?	-	-
1971-008	2440977.96	1971 Jan 26 0936:03	Atlas SLV-3C Centaur	-	AC-25	WTIA-L1/WTIA-S2	ABRES RPV-9/THP KX109	-	-	V	ABRES41	-	-	1400?	-	-
1971-008	2440977.96	1971 Jan 26 0936:03	Atlas SLV-3C Centaur	-	AC-25	WTIA-L1/WTIA-S2	ABRES RPV-9/THP KX109	-	-	V	ABRES41	-	-	1400?	-	-
1971-008	2440977.96	1971 Jan 26 0936:03	Atlas SLV-3C Centaur	-	AC-25	WTIA-L1/WTIA-S2	ABRES RPV-9/THP KX109	-	-	V	ABRES41	-	-	1400?	-	-
1971-008	2440977.96	1971 Jan 26 0936:03	Atlas SLV-3C Centaur	-	AC-25	WTIA-L1/WTIA-S2	ABRES RPV-9/THP KX109	-	-	V	ABRES41	-	-	1400?	-	-
1971-008	2440977.96	1971 Jan 26 0936:03	Atlas SLV-3C Centaur	-	AC-25	WTIA-L1/WTIA-S2	ABRES RPV-9/THP KX109	-	-	V	ABRES41	-	-	1400?	-	-
1971-008	2440977.96	1971 Jan 26 0936:03	Atlas SLV-3C Centaur	-	AC-25	WTIA-L1/WTIA-S2	ABRES RPV-9/THP KX109	-	-	V	ABRES41	-	-	1400?	-	-
1971-008	2440977.96	1971 Jan 26 0936:03	Atlas SLV-3C Centaur	-	AC-25	WTIA-L1/WTIA-S2	ABRES RPV-9/THP KX109	-	-	V	ABRES41	-	-	1400?	-	-
1971-008	2440977.96	1971 Jan 26 0936:03	Atlas SLV-3C Centaur	-	AC-25	WTIA-L1/WTIA-S2	ABRES RPV-9/THP KX109	-	-	V	ABRES41	-	-	1400?	-	-
1971-008	2440977.96	1971 Jan 26 0936:03	Atlas SLV-3C Centaur	-	AC-25	WTIA-L1/WTIA-S2	ABRES RPV-9/THP KX109	-	-	V	ABRES41	-	-	1400?	-	-
1971-008	2440977.96	1971 Jan 26 0936:03	Atlas SLV-3C Centaur	-	AC-25	WTIA-L1/WTIA-S2	ABRES RPV-9/THP KX109	-	-	V	ABRES41	-	-	1400?	-	-
1971-008	2440977.96	1971 Jan 26 0936:03	Atlas SLV-3C Centaur	-	AC-25	WTIA-L1/WTIA-S2	ABRES RPV-9/THP KX109	-	-	V	ABRES41	-	-	1400?	-	-
1971-008	2440977.96	1971 Jan 26 0936:03	Atlas SLV-3C Centaur	-	AC-25	WTIA-L1/WTIA-S2	ABRES RPV-9/THP KX109	-	-	V	ABRES41	-	-	1400?	-	-
1971-008	2440977.96	1971 Jan 26 0936:03	Atlas SLV-3C Centaur	-	AC-25	WTIA-L1/WTIA-S2	ABRES RPV-9/THP KX109	-	-	V	ABRES41	-	-	1400?	-	-
1971-008	2440977.96	1971 Jan 26 0936:03	Atlas SLV-3C Centaur	-	AC-25	WTIA-L1/WTIA-S2	ABRES RPV-9/THP KX109	-	-	V	ABRES41	-	-	1400?	-	-
1971-008	2440977.96	1971 Jan 26 0936:03	Atlas SLV-3C Centaur	-	AC-25	WTIA-L1/WTIA-S2	ABRES RPV-9/THP KX109	-	-	V	ABRES41	-	-	1400?	-	-
1971-008	2440977.96	1971 Jan 26 0936:03	Atlas SLV-3C Centaur	-	AC-25	WTIA-L1/WTIA-S2	ABRES RPV-9/THP KX109	-	-	V	ABRES41	-	-	1400?	-	-
1971-008	2440977.96	1971 Jan 26 0936:03	Atlas SLV-3C Centaur	-	AC-25	WTIA-L1/WTIA										

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Mission	FlightCode	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee_Km	Range_Km	Dest
1976-042	2442912.44	1976 May 13 2228	Atlas SLV-3D Centaur	-	AC-38	Comstar D-1	Comstar D-1	-	-	CC	LC66A	-	-	36336	-	-
1976-073	2442982.42	1976 Jul 22 2204:00	Atlas SLV-3D Centaur	-	AC-40	Comstar D-2	Comstar D-2	-	-	CC	LC66B	-	-	36343	-	-
1977-038	2443287.26	1977 May 23 1813:00	Atlas SLV-3A Agena D	-	5507A/2807	AFP-827	AFP-827	-	-	CC	LC13	-	-	41573	-	-
1977-041	2443290.41	1977 May 26 2147:01	Atlas SLV-3D Centaur	-	AC-39	Intelsat 4A P-4	Intelsat IVA F4	-	-	CC	LC36A	-	-	36671	-	-
1977-053	2443317.85	1977 Jun 23 0817	Atlas F/SNS	-	65F	P76-4	NTS 2	-	-	VS	SLC3W	-	-	25535	-	-
1977-075	2443367.77	1977 Aug 12 0629:31	Atlas SLV-3D Centaur	-	AC-43	HEAD 1	HEAD A	-	-	CC	LC36B	-	-	450	-	-
1977-F05	2443414.54	1977 Sep 30 0129:59	Atlas SLV-3D Centaur	-	AC-45	Intelsat 4A P-5	Intelsat IVA F5	-	-	CC	LC36A	-	-	1785	-	-
1977-112	2443486.24	1977 Dec 8 1745	Atlas F/HSB	-	50F	OPS 8761 [NUS82]	PARCADE 3	-	-	CC	SLC3W	-	-	38916	-	-
1977-114	2443488.45	1977 Dec 11 2245:01	Atlas SLV-3A Agena D	-	AC-46	OPS 4258	AQUADE 3	-	-	CC	LC36A	-	-	37381	-	-
1978-002	2443515.51	1978 Jan 7 0015:00	Atlas SLV-3D Centaur	-	AC-44	Intelsat 4A P-3	Intelsat IVA F3	-	-	CC	LC36B	-	-	20812	-	-
1978-020	2443562.49	1978 Feb 9 2117:01	Atlas SLV-3D Centaur	-	AC-44	Intelsat 4A P-3	Intelsat IVA F3	-	-	CC	LC36A	-	-	41788	-	-
1978-035	2443589.48	1978 Feb 22 2344:47	Atlas F/SNS	-	64F	OPS 1	Intelsat IVA F6	-	-	CC	LC36B	-	-	36336	-	-
1978-038	2443594.53	1978 Mar 31 2336:01	Atlas SLV-3A Agena D	-	AC-48	Intelsat 4A P-6	AQUADE 4	-	-	CC	SLC3E	-	-	36338	-	-
1978-047	2443641.94	1978 Apr 7 0045:01	Atlas F/SNS	-	49F	OPS 8790	Intelsat IVA F6	-	-	CC	LC36A	-	-	21634	-	-
1978-051	2443649.05	1978 May 13 1034	Atlas SLV-3D Centaur	-	AC-50	OPS 2	Avastar GPS SWN 2	-	-	CC	LC36A	-	-	150000	-	-
1978-064	2443686.55	1978 May 20 1313:00	Atlas SLV-3D Centaur	-	AC-50	Seasat	Seasat Venus Orbiter	-	-	VS	SLC3W	-	-	798	-	-
1978-068	2443689.45	1978 Jun 27 0112:44	Atlas F/Agena D	-	23F/6391	Comstar D-3	Comstar D-3	-	-	CC	LC36B	-	-	36546	-	-
1978-078	2443728.51	1978 Jun 29 2224:59	Atlas SLV-3D Centaur	-	AC-41	Pioneer Venus 2	Pioneer Venus Multiprobe	-	-	CC	LC36A	-	-	150000	-	-
1978-093	2443768.52	1978 Aug 5 0733	Atlas SLV-3D Centaur	-	AC-51	OPS 3	Avastar GPS SWN 3	-	-	CC	SLC3E	-	-	21121	-	-
1978-096	2443794.97	1978 Oct 7 0028:17	Atlas F/SNS	-	47F	Tiros II	Tiros-II	-	-	VS	SLC3W	-	-	873	-	-
1978-103	2443825.73	1978 Oct 13 1123:00	Atlas F	-	29F	HEAD 2	HEAD B	-	-	CC	LC36B	-	-	560	-	-
1978-112	2443853.87	1978 Nov 13 0524	Atlas SLV-3D Centaur	-	AC-52	OPS 4	Avastar GPS SWN 4	-	-	CC	SLC3E	-	-	21237	-	-
1979-017	2443928.55	1978 Dec 11 0359	Atlas F/UIS	-	39F	P78-1	P78-1	-	-	VS	SLC3W	-	-	601	-	-
1979-017	2443928.55	1979 Feb 24 0820	Atlas SLV-3D Centaur	-	AC-47	FLTSATCOM 2	FLTSATCOM F2	-	-	CC	LC36A	-	-	36905	-	-
1979-038	2443998.29	1979 May 4 1857:00	Atlas F	-	28F	HEAD 6	HEAD C	-	-	CC	SLC3W	-	-	228	-	-
1979-057	2444052.16	1979 Jun 27 1551:59	Atlas SLV-3D Centaur	-	AC-53	HEAD 3	HEAD A	-	-	CC	LC36B	-	-	502	-	-
1979-062	2444136.73	1979 Sep 20 0528	Atlas SLV-3D Centaur	-	AC-49	FLTSATCOM 3	FLTSATCOM F3	-	-	CC	LC36A	-	-	36391	-	-
1980-004	2444256.56	1980 Jan 10 0126:00	Atlas SLV-3D Centaur	-	AC-49	OPS 5	Avastar GPS SWN 5	-	-	VS	SLC3E	-	-	37506	-	-
1980-011	2444279.46	1980 Feb 9 2306	Atlas F/SNS	-	35F	OPS 6	Avastar GPS SWN 6	-	-	VS	SLC3W	-	-	26636	-	-
1980-019	2444301.89	1980 Mar 5 0927	Atlas F/HSB	-	67F	HEAD 7	HEAD B	-	-	CC	SLC3W	-	-	1483	-	-
1980-043	2444368.95	1980 Apr 26 1000	Atlas SLV-3D Centaur	-	AC-57	FLTSATCOM 4	FLTSATCOM F4	-	-	CC	LC36A	-	-	36236	-	-
1980-043	2444368.95	1980 Oct 31 0394	Atlas SLV-3D Centaur	-	AC-54	Intelsat 502	Intelsat V F2	-	-	CC	LC36B	-	-	36289	-	-
1980-067	2444543.66	1980 Dec 9 0718	Atlas F/HSB	-	68E	Comstar D-4	Comstar D-4	-	-	CC	LC36A	-	-	10907	-	-
1980-068	2444560.80	1980 Dec 9 0718	Atlas SLV-3D Centaur	-	AC-54	Comstar D-4	Comstar D-4	-	-	CC	LC36A	-	-	36915	-	-
1980-072	2444562.90	1980 Dec 9 0718	Atlas SLV-3D Centaur	-	AC-54	Intelsat 501	Intelsat V F1	-	-	CC	SLC3W	-	-	36735	-	-
1981-018	2444567.47	1981 Feb 21 2323	Atlas SLV-3D Centaur	-	AC-42	Comstar D-4	Comstar D-4	-	-	CC	LC36B	-	-	10907	-	-
1981-060	2444748.46	1981 May 23 2242	Atlas SLV-3D Centaur	-	AC-56	Intelsat 501	Intelsat V F1	-	-	CC	SLC3W	-	-	36735	-	-
1981-069	2444768.95	1981 Jun 25 0822:59	Atlas SLV-3D Centaur	-	AC-56	Intelsat 502	Intelsat V F2	-	-	CC	LC36A	-	-	10907	-	-
1981-073	2444822.84	1981 Aug 6 0616:00	Atlas SLV-3D Centaur	-	AC-59	FLTSATCOM 5	FLTSATCOM F5	-	-	CC	SLC3W	-	-	14245	-	-
1981-119	2444864.46	1981 Dec 15 2355	Atlas SLV-3D Centaur	-	AC-55	Intelsat 503	Intelsat V F3	-	-	CC	SLC3W	-	-	866	-	-
1981-F03	2444897.85	1981 Dec 19 0110	Atlas F/SNS	-	70E	Intelsat 504	Intelsat VA F6	-	-	CC	SLC3E	-	-	36205	-	-
1982-007	2445033.52	1982 Mar 5 0927	Atlas SLV-3D Centaur	-	AC-60	Intelsat 504	Intelsat VA F6	-	-	CC	SLC3E	-	-	37000	-	-
1982-118	2445121.47	1982 Sep 28 2357	Atlas SLV-3D Centaur	-	AC-60	Intelsat 505	Intelsat V F5	-	-	CC	LC36B	-	-	36205	-	-
1982-118	2445121.47	1982 Sep 28 2357	Atlas SLV-3D Centaur	-	AC-60	Intelsat 505	Intelsat V F5	-	-	CC	LC36B	-	-	36205	-	-
1982-118	2445121.47	1982 Sep 28 2357	Atlas SLV-3D Centaur	-	AC-60	Intelsat 505	Intelsat V F5	-	-	CC	LC36B	-	-	36205	-	-
1982-118	2445121.47	1982 Sep 28 2357	Atlas SLV-3D Centaur	-	AC-60	Intelsat 505	Intelsat V F5	-	-	CC	LC36B	-	-	36205	-	-
1982-118	2445121.47	1982 Sep 28 2357	Atlas SLV-3D Centaur	-	AC-60	Intelsat 505	Intelsat V F5	-	-	CC	LC36B	-	-	36205	-	-
1982-118	2445121.47	1982 Sep 28 2357	Atlas SLV-3D Centaur	-	AC-60	Intelsat 505	Intelsat V F5	-	-	CC	LC36B	-	-	36205	-	-
1982-118	2445121.47	1982 Sep 28 2357	Atlas SLV-3D Centaur	-	AC-60	Intelsat 505	Intelsat V F5	-	-	CC	LC36B	-	-	36205	-	-
1982-118	2445121.47	1982 Sep 28 2357	Atlas SLV-3D Centaur	-	AC-60	Intelsat 505	Intelsat V F5	-	-	CC	LC36B	-	-	36205	-	-
1982-118	2445121.47	1982 Sep 28 2357	Atlas SLV-3D Centaur	-	AC-60	Intelsat 505	Intelsat V F5	-	-	CC	LC36B	-	-	36205	-	-
1982-118	2445121.47	1982 Sep 28 2357	Atlas SLV-3D Centaur	-	AC-60	Intelsat 505	Intelsat V F5	-	-	CC	LC36B	-	-	36205	-	-
1982-118	2445121.47	1982 Sep 28 2357	Atlas SLV-3D Centaur	-	AC-60	Intelsat 505	Intelsat V F5	-	-	CC	LC36B	-	-	36205	-	-
1982-118	2445121.47	1982 Sep 28 2357	Atlas SLV-3D Centaur	-	AC-60	Intelsat 505	Intelsat V F5	-	-	CC	LC36B	-	-	36205	-	-
1982-118	2445121.47	1982 Sep 28 2357	Atlas SLV-3D Centaur	-	AC-60	Intelsat 505	Intelsat V F5	-	-	CC	LC36B	-	-	36205	-	-
1982-118	2445121.47	1982 Sep 28 2357	Atlas SLV-3D Centaur	-	AC-60	Intelsat 505	Intelsat V F5	-	-	CC	LC36B	-	-	36205	-	-
1982-118	2445121.47	1982 Sep 28 2357	Atlas SLV-3D Centaur	-	AC-60	Intelsat 505	Intelsat V F5	-	-	CC	LC36B	-	-	36205	-	-
1982-118	2445121.47	1982 Sep 28 2357	Atlas SLV-3D Centaur	-	AC-60	Intelsat 505	Intelsat V F5	-	-	CC	LC36B	-	-	36205	-	-
1982-118	2445121.47	1982 Sep 28 2357	Atlas SLV-3D Centaur	-	AC-60	Intelsat 505	Intelsat V F5	-	-	CC	LC36B	-	-	36205	-	-
1982-118	2445121.47	1982 Sep 28 2357	Atlas SLV-3D Centaur	-	AC-60	Intelsat 505	Intelsat V F5	-	-	CC	LC36B	-	-	36205	-	-
1982-118	2445121.47	1982 Sep 28 2357	Atlas SLV-3D Centaur	-	AC-60	Intelsat 505	Intelsat V F5	-	-	CC	LC36B	-	-	36205	-	-
1982-118	2445121.47	1982 Sep 28 2357	Atlas SLV-3D Centaur	-	AC-60	Intelsat 505	Intelsat V F5	-	-	CC	LC36B	-	-	36205	-	-
1982-118	2445121.47	1982 Sep 28 2357	Atlas SLV-3D Centaur	-	AC-60	Intelsat 505	Intelsat V F5	-	-	CC	LC36B	-	-	36205	-	-
1982-118	2445121.47	1982 Sep 28 2357	Atlas SLV-3D Centaur	-	AC-60	Intelsat 505	Intelsat V F5	-	-	CC	LC36B	-	-	36205	-	-
1982-118	2445121.47	1982 Sep 28 2357	Atlas SLV-3D Centaur	-	AC-60	Intelsat 505	Intelsat V F5	-	-	CC	LC36B	-	-	36205	-	-
1982-118	2445121.47	1982 Sep 28 2357	Atlas SLV-3D Centaur	-	AC-60	Intelsat 505	Intelsat V F5	-	-	CC	LC36B	-	-	36205	-	-
1982-118	2445121.47	1982 Sep 28 2357	Atlas SLV-3D Centaur	-	AC-60	Intelsat 505	Intelsat V F5	-	-	CC	LC36B	-	-	36205	-	-
1982-118	2445121.47	1982 Sep 28 2357	Atlas SLV-3D Centaur	-	AC-60	Intelsat 505	Intelsat V F5	-	-	CC	LC36B	-	-	36205	-	-
1982-118	2445121.47	1982 Sep 28 2357	Atlas SLV-3D Centaur	-	AC-60	Intelsat 505	Intelsat V F5	-	-	CC	LC36B	-	-	36205	-	-
1982-118	2445121.47	1982 Sep 28 2357	Atlas SLV-3D Centaur	-	AC-60	Intelsat 505	Intelsat V F5	-	-	CC	LC36B	-	-	36205	-	-
1982-118	2445121.47	1982 Sep 28 2357	Atlas SLV-3D Centaur</													

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Launch_Mission	FlightCode	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee_Km	Range_Km	Dest
1993-077	2449337.53	1993 Dec 16 0040:02	Atlas IIAS	-	AC-108	Telstar 401	Telstar 401	-	-	CC	LC68B	-	-	35994	-	-
1994-022	2449455.75	1994 Apr 13 0604:02	Atlas I	-	AC-73	GDES 8	GDES I	-	-	CC	LC68B	-	-	42739	-	-
1994-035	2449528.08	1994 Jun 24 1350:02	Atlas I	-	AC-76	USA 104 (UHF F3)	USA 104 (UHF F3)	-	-	CC	LC68B	-	-	36954	-	-
1994-047	2449568.50	1994 Aug 3 2357:02	Atlas IIA	-	AC-107	DBS 2	DBS 2	-	-	CC	LC36A	-	-	39489	-	-
1994-057	2449594.23	1994 Aug 29 1738	Atlas E	-	20E	USA 106 (DMSP)	DMS Block 5D-2 S-11	-	-	VS	SLC3M	-	-	875	-	-
1994-064	2449631.77	1994 Oct 6 0635:02	Atlas IIAS	-	AC-110	Intelsat 703	Intelsat 703	-	-	CC	LC68B	-	-	38640	-	-
1994-079	2449685.93	1994 Nov 29 1021:02	Atlas IIA	-	AC-111	Orion 1	Orion 1	-	-	CC	LC68A	-	-	129436	-	-
1994-089	2449716.92	1994 Dec 30 1002	Atlas E	-	11E	NOAA J	NOAA J	-	-	VS	SLC3M	-	-	862	-	-
1995-001	2449727.76	1995 Jan 10 0618:02	Atlas IIAS	-	AC-113	Intelsat 704	Intelsat 704	-	-	CC	LC68B	-	-	42338	-	-
1995-003	2449746.56	1995 Jan 29 0125:01	Atlas II	-	AC-112	USA 108 (UHF F4)	USA 108 (UHF F4)	-	-	CC	LC68A	-	-	36437	-	-
1995-015	2449801.09	1995 Mar 24 1405	Atlas IAS	-	AC-115	Intelsat 705	Intelsat 705	-	-	CC	LC68B	-	-	40216	-	-
1995-025	2449860.74	1995 Apr 7 2347:00	Atlas IIA	-	46E	USA 109 (DMSP)	DMS Block 5D-2 S-13	-	-	VS	SLC3M	-	-	863	-	-
1995-025	2449860.74	1995 May 23 0552:02	Atlas I	-	AC-77	GDES 9	GDES J	-	-	CC	LC68A	-	-	40177	-	-
1995-027	2449869.14	1995 May 31 1527:01	Atlas II	-	AC-116	USA 111 (UHF F5)	UHF F/O F5-EHF	-	-	CC	LC68B	-	-	42419	-	-
1995-038	2449930.48	1995 Jun 11 2330:02	Atlas IIA	-	AC-117	JCSAT 3	DSSG III B-7	-	-	CC	LC68A	-	-	36532	-	-
1995-043	2449958.54	1995 Aug 29 0053:02	Atlas IIAS	-	AC-118	MLV-5/LABS-5	USA 108 (UHF F4)	-	-	CC	LC68A	-	-	80799	-	-
1995-057	2450012.83	1995 Oct 22 0800:02	Atlas II	-	AC-119	USA 114 (UHF F6)	USA 114 (UHF F6)	-	-	CC	LC68A	-	-	36620	-	-
1995-065	2450053.94	1995 Dec 2 0808:01	Atlas IIAS	-	AC-121	SORO	SORO	-	-	CC	LC68B	-	-	150000	-	-
1995-069	2450066.52	1995 Dec 15 0023:01	Atlas IIA	-	AC-120	Galaxy 3R	Galaxy 3R	-	-	CC	LC68B	-	-	35908	-	-
1995-069	2450066.52	1995 Feb 1 0115:01	Atlas IIA	-	AC-126	Palapa CI	Palapa CI	-	-	CC	LC68B	-	-	35995	-	-
1995-070	2450111.55	1996 Apr 3 2301:01	Atlas IIA	-	AC-122	Immarat 3F1	Immarat 3F1	-	-	CC	LC68A	-	-	36471	-	-
1995-070	2450111.55	1996 Apr 30 0431:01	Atlas I	-	AC-78	SAX	SAX	-	-	CC	LC68B	-	-	605	-	-
1995-077	2450203.69	1996 Jul 25 1241:01	Atlas II	-	AC-125	USA 127 (UHF F7)	USA 127 (UHF F7)	-	-	CC	LC68B	-	-	37471	-	-
1995-084	2450280.03	1996 Jul 25 1241:01	Atlas IIA	-	AC-123	GE 1	GE 1	-	-	CC	LC68B	-	-	56579	-	-
1995-084	2450335.41	1996 Sep 5 2149:01	Atlas IIA	-	AC-124	Hot Bird 2	Hot Bird 2	-	-	CC	LC68B	-	-	39424	-	-
1995-067	2450409.37	1996 Nov 21 2047:01	Atlas IIA	-	AC-124	Immarat 3F3	Immarat 3F3	-	-	CC	LC68B	-	-	36070	-	-
1995-067	2450435.58	1996 Dec 15 0157:01	Atlas IIA	-	AC-129	JCSAT 4	JCSAT 4	-	-	CC	LC68A	-	-	94559	-	-
1995-070	2450496.57	1997 Feb 17 0142:02	Atlas IIAS	-	AC-127	Tempo 2	Tempo 2	-	-	CC	LC68B	-	-	36285	-	-
1997-011	2450515.75	1997 Mar 6 0601:01	Atlas IIA	-	AC-128	Superbird C	Superbird C	-	-	CC	LC68A	-	-	42857	-	-
1997-019	2450563.74	1997 Apr 25 0549:01	Atlas I	-	AC-79	Superbird C	Superbird C	-	-	CC	LC68B	-	-	36285	-	-
1997-019	2450563.74	1997 Jul 25 0115:01	Atlas IAS	-	AC-133	GE 3	GE 3	-	-	CC	LC68A	-	-	91062	-	-
1997-050	2450696.30	1997 Sep 4 1203:00	Atlas IIAS	-	AC-146	Ecostar 3	Ecostar 3	-	-	CC	LC68A	-	-	36745	-	-
1997-059	2450727.38	1997 Oct 5 2101:01	Atlas IIA	-	AC-152	USA 136 (UHF F8)	USA 136 (UHF F8)	-	-	CC	LC68A	-	-	36745	-	-
1997-065	2450746.53	1997 Oct 25 0046:00	Atlas IIA	-	AC-154	Hot Bird 5	Hot Bird 5	-	-	CC	LC68B	-	-	36637	-	-
1997-078	2450791.91	1997 Dec 5 2352:01	Atlas IIA	-	AC-159	USA 140 (UHF F9)	USA 140 (UHF F9)	-	-	CC	LC68A	-	-	36985	-	-
1998-004	2450843.26	1998 Jan 29 1837:00	Atlas IIA	-	AC-135	Ecostar 3	Ecostar 3	-	-	CC	LC68A	-	-	50074	-	-
1998-014	2450872.51	1998 Feb 28 0217:00	Atlas IIA	-	AC-109	MLV-6/LABS-6	USA 135 (DSSG 3B-13)	-	-	CC	LC68B	-	-	40141	-	-
1998-016	2450889.40	1998 Mar 16 2132:00	Atlas II	-	AC-151	Intelsat 306	Intelsat 306	-	-	CC	SLC36A	-	-	36164	-	-
1998-037	2450963.46	1998 Jun 16 2246:01	Atlas IIAS	-	AC-152	Intelsat 305	Intelsat 305	-	-	CC	SLC36A	-	-	32837	-	-
1998-067	2451096.46	1998 Oct 9 2250:01	Atlas IIA	-	AC-154	Hot Bird 5	Hot Bird 5	-	-	CC	LC68B	-	-	36637	-	-
1998-068	2451106.80	1998 Oct 20 0719:02	Atlas IIA	-	AC-150	USA 146 (UHF F9)	USA 146 (UHF F9)	-	-	CC	LC68A	-	-	36798	-	-
1999-016	2451221.75	1999 Feb 16 1455:26	Atlas IIAS	-	AC-152	Ecoteat 13	Ecoteat 13	-	-	CC	SLC36A	-	-	45748	-	-
1999-016	2451241.75	1999 Apr 12 2250:01	Atlas IIAS	-	AC-154	Ecoteat 13	Ecoteat 13	-	-	CC	SLC36A	-	-	45748	-	-
1999-051	2451421.75	1999 Sep 23 0402:02	Atlas IAS	-	AC-154	Ecoteat 13	Ecoteat 13	-	-	CC	SLC36A	-	-	45748	-	-
1999-063	2451506.57	1999 Nov 23 0409:01	Atlas IIA	-	AC-136	JCSAT 6	JCSAT 6	-	-	CC	LC68B	-	-	36637	-	-
1999-068	2451531.24	1999 Dec 13 1837:01	Atlas IAS	-	AC-136	Ecoteat 13	Ecoteat 13	-	-	CC	SLC36A	-	-	45748	-	-
2000-007	2451578.54	2000 Jan 21 0330:01	Atlas IIA	-	AC-138	MLV-8/LABS-8	USA 148 (DSSG 3B-8)	-	-	VS	SLC3E	-	-	76985	-	-
2000-022	2451657.80	2000 Feb 3 0730:01	Atlas IIA	-	AC-137	Hiquest 1C	Hiquest 1C	-	-	CC	SLC3E	-	-	35869	-	-
2000-022	2451657.80	2000 May 24 1310:05	Atlas IA	-	AC-201	GDES L	GDES L	-	-	CC	LC68A	-	-	43848	-	-
2000-034	2451729.04	2000 Jun 14 0551:01	Atlas IIA	-	AC-151	Ecoteat 14	Ecoteat 14	-	-	CC	SLC36B	-	-	36137	-	-
2000-038	2451729.04	2000 Jul 20 0040:02	Atlas IIA	-	AC-151	Ecoteat 14	Ecoteat 14	-	-	CC	SLC36B	-	-	36137	-	-
2000-065	2451837.53	2000 Oct 20 0040:02	Atlas IIA	-	AC-161	Ecoteat 14	Ecoteat 14	-	-	CC	SLC36B	-	-	36137	-	-
2000-080	2451884.53	2000 Dec 6 0247:01	Atlas IIA	-	AC-156	USA 153 (DSSG 3B-11)	USA 153 (DSSG 3B-11)	-	-	CC	SLC36A	-	-	35947	-	-
2001-026	2452079.70	2001 Dec 6 0441:02	Atlas IIA	-	AC-156	USA 155 (DSSG 3B-11)	USA 155 (DSSG 3B-11)	-	-	CC	SLC36A	-	-	35988	-	-
2001-031	2452113.81	2001 Jan 23 0723:01	Atlas IIA	-	AC-149	GDES M	GDES M	-	-	CC	SLC36B	-	-	10769	-	-
2001-040	2452161.81	2001 Sep 8 1525:05	Atlas IIA	-	AC-160	MLV-10	USA 160 [DSSG14]	-	-	VS	SLC3E	-	-	42944	-	-
2001-046	2452193.61	2001 Sep 8 1525:05	Atlas IIA	-	AC-160	MLV-10	USA 160 [DSSG14]	-	-	VS	SLC3E	-	-	1518	-	-
2002-006	2452327.03	2002 Feb 21 1243:00	Atlas IAS	-	DEC	USA 162 [DSSG14]	USA 162 [DSSG14]	-	-	CC	SLC36B	-	-	37538	-	-
2002-011	2452342.46	2002 Mar 8 2259:01	Atlas IIA	-	AC-143	Ecoteat 7	Ecoteat 7	-	-	CC	SLC36B	-	-	57127	-	-
2002-044	2452536.42	2002 Sep 18 2204:01	Atlas IIA	-	AC-159	Hiquest 1D	Hiquest 1D	-	-	CC	SLC36A	-	-	45649	-	-
2002-055	2452613.61	2002 Sep 18 2204:01	Atlas IIA	-	AC-144	Hiquest 1D	Hiquest 1D	-	-	CC	SLC36A	-	-	45649	-	-
2003-014	2452741.53	2003 Apr 12 0047:01	Atlas IA	-	SEC	Atisat 4	Atisat 4	-	-	CC	SLC36B	-	-	47958	-	-
2003-054	2452975.92	2003 Dec 2 1004	Atlas IAS	-	AC-205	USA 173 [DSSG15]	USA 173 [DSSG15]	-	-	VS	SLC3E	-	-	37993	-	-
2004-003	2453041.49	2004 Feb 18 0230	Atlas IAS	-	AC-203	USA 174 (UHF F11)	USA 174 (UHF F11)	-	-	VS	SLC3E	-	-	1464	-	-
2004-007	2453077.74	2004 Mar 13 0540:01	Atlas IAS	-	AC-202	MESAT	MESAT	-	-	CC	SLC36B	-	-	35957	-	-
2004-011	2453111.53	2004 Apr 16 0045:00	Atlas IA	-	AC-163	Superbird 6	Superbird 6	-	-	CC	SLC36A	-	-	36144	-	-
2004-017	2453145.43	2004 May 19 2222:01	Atlas IAS	-	AC-166	AMC-11	AMC-11	-	-	CC	SLC36A	-	-	35969	-	-
2004-034	2453249.47	2004 Aug 31 2317:00	Atlas IAS	-	AC-167	USA 179 [DSSG15]	USA 179 [DSSG15]	-	-	CC	SLC36A	-	-	35875	-	-
2005-004	2453404.82	2005 Feb 3 0741:01	Atlas 3B	SEC	AC-206	MLV-15	USA 181 [DSSG16]	-	-	CC	SLC36B	-	-	1436	-	-









Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	OrbPay	Agency	Launch_Code	Group	Category	LTCite	Cite	Notes
1965-5180	2438146.59	1963 Apr 27 0203	Atlas F	-	135F	0.000	AFBSD	MS	-	Reentry Test	RM	-	-
1965-014	2438159.34	1963 May 9 2006:16	Atlas Agena B	-	119D/1206	1.582	AFSSD	US	G	Sat MED A 2	RHR-1	-	-
1965-014	2438165.04	1963 May 15 1304:13	Atlas D	-	130D	1.363	AFSSD/STG	US	G	Sat LED 0	RHR-1	-	-
1965-A86	2438162.52	1963 Jun 2 0026	Atlas F	-	77F	0.000	SAC	ME	-	Err	WV	-	SACMissileChron
1965-S268	2438165.34	1963 Jun 4 2012:18	Atlas E	-	62E	0.000	AFBSD	ME	-	Test	VCR	-	-
1965-S271	2438192.88	1963 Jun 12 0903:01	Atlas D	-	198D	0.000	SAC	US	-	Target	VCR	-	-
1965-F09	2438192.50	1963 Jun 12 0903:01	Atlas Agena B	-	198D	0.000	AFSSD	US	G	Sat MED A 2	VAFB	-	-
1965-S228	2438214.38	1963 Jul 3 2113:57	Atlas E	-	69E	0.000	SAC	US	-	Test	VCR	-	-
1965-S228	2438214.38	1963 Jul 3 2113:57	Atlas Agena B	-	69E	0.000	AFSSD	US	G	Sat MED A 2	VAFB	-	-
1965-S228	2438223.37	1963 Jul 12 2046:59	Atlas Agena D	-	201D/4702	2.190	AFSSD	US	G	Sat SS0 0	VCR	-	-
1965-S30	2438229.66	1963 Jul 19 0351:18	Atlas Agena B	-	75D/1207	1.582	AFSSD	US	G	Sat MED A 2	VCR	-	-
1965-S361	2438237.30	1963 Jul 26 1919:00	Atlas E	-	70E	0.000	SAC	US	-	Test	VCR	-	-
1965-S369	2438241.28	1963 Jul 30 1836:49	Atlas E	-	143D	0.000	SAC	US	-	Test	VCR	-	-
1965-S372	2438242.37	1963 Jul 31 2052	Atlas D	-	72E	0.000	SAC	US	-	Test	VCR	-	-
1965-S405	2438265.91	1963 Aug 24 0950:57	Atlas E	-	142D	0.000	SAC	US	-	Test	VCR	-	-
1965-S409	2438270.47	1963 Aug 28 2310	Atlas D	-	142D	0.000	AFSSD	US	G	Sat SS0 0	VCR	-	-
1965-S36	2438279.31	1963 Sep 6 1930:18	Atlas Agena D	-	63D	0.000	SAC	US	-	Test	VCR	-	-
1965-S434	2438279.42	1963 Sep 6 2129	Atlas D	-	84D	0.000	SAC	US	-	Test	VCR	-	-
1965-S440	2438284.38	1963 Sep 11 2100	Atlas D	-	71E	0.000	SAC	US	-	Test	VCR	-	-
1965-S468	2438297.96	1963 Sep 25 1104:41	Atlas E	-	48E	0.000	AFBSD	US	-	Test	VCR	-	-
1965-A139	2438306.72	1963 Oct 4 0517:49	Atlas F	-	136F	0.000	AFBSD	US	-	Test	VCR	-	-
1965-A142	2438310.40	1963 Oct 7 2131	Atlas D	-	197D/1801	0.000	AFBSD	US	G	Sat HED 0	AP	-	-
1965-039	2438319.61	1963 Oct 17 0237	Atlas Agena D	-	136F	0.000	AFBSD	US	G	Reentry Test/Plume	AP	-	-
1965-041	2438328.29	1963 Oct 25 1859:27	Atlas Agena D	-	136F	0.000	AFBSD	US	G	Reentry Test	AP	-	-
1965-S521	2438330.64	1963 Oct 28 0316	Atlas F	-	222D	0.000	SAC	US	-	Test	VCR	-	-
1965-S555	2438337.90	1963 Nov 4 0934	Atlas D	-	185D	0.000	SAC	US	-	Test	VCR	-	-
1965-S550	2438347.44	1963 Nov 13 2235:39	Atlas D	-	AC-2	4.600	LERC	US	G	Sat LED 0	VCR	-	TR-1022
1965-S609	2438361.29	1963 Nov 27 1903:23	Atlas D	-	AC-2	4.600	LERC	US	G	Sat LED 0	VCR	-	TR-1022
1965-051	2438362.41	1963 Dec 16 0952:27	Atlas D	-	232D	0.000	SAC	US	-	Test	VCR	-	-
1965-051	2438362.41	1963 Dec 16 0952:27	Atlas Agena D	-	232D	0.000	AFBSD	US	G	Reentry Test	VCR	-	-
1965-S610	2438362.46	1963 Dec 18 2256:22	Atlas F	-	109F	0.000	AFBSD	US	G	Sat SS0 0	VCR	-	-
1964-007	2438425.16	1964 Jan 30 1949:09	Atlas Agena B	-	195D/6008 (A48)	0.381	LERC/AFSSD	US	G	Sat EED E	VCR	-	TR-1022
1964-A23	2438436.35	1964 Feb 12 1959:40	Atlas E	-	48E	0.000	SAC	US	-	Test	VCR	-	-
1964-A24	2438439.26	1964 Feb 15 1811	Atlas F	-	68F	0.000	SAC	US	-	Test	VCR	-	-
1964-S118	2438451.35	1964 Feb 25 1859:47	Atlas Agena D	-	285D/4803	2.190	AFBSD	US	G	Accident	WV	-	MR640224-11
1964-A32	2438464.41	1964 Mar 9 2194	Atlas E	-	9E	0.000	AFBSD	US	G	Reentry Test	Desind	-	GP-Atlas
1964-012	2438466.34	1964 Mar 11 2014:24	Atlas Agena D	-	280D/4804	2.190	AFBSD	US	G	Accident	WV	-	MR640316-08
1964-S184	2438467.35	1964 Apr 1 2022	Atlas F	-	37F	0.000	AFBSD	US	G	Sat SS0 0	VCR	-	-
1964-A60	2438469.35	1964 Apr 3 2026:22	Atlas F	-	3E	0.000	AFBSD/LANCOI	US	G	Reentry Test/Plume	VCR	-	-
1964-002	2438500.40	1964 Apr 14 2142:25	Atlas D	-	26D	2.210	AFSSD/LANCOI	US	G	Reentry Test	TR-D-2996	-	-
1964-069	2438509.28	1964 Apr 23 1953	Atlas Agena D	-	361D/4805	2.190	AFSSD	US	G	Sat SS0 0	VCR	-	SP-4005
1964-069	2438530.20	1964 May 14 1650	Atlas F	-	361D/4805	2.190	AFSSD	US	G	Accident	VCR	-	-
1964-F11	2438535.31	1964 Jun 15 1651:14	Atlas Agena D	-	361D/4806	2.190	AFSSD	US	G	Accident	VCR	-	-
1964-S300	2438565.12	1964 Jun 30 1404:22	Atlas D	-	24D	0.000	LERC	US	G	Reentry Test	VCR	-	-
1964-036	2438565.29	1964 Jul 6 1851:27	Atlas Agena D	-	362D/4807	2.200	AFSSD	US	G	Sat LED 0	VCR	-	TR-1022
1964-036	2438565.29	1964 Jul 6 1851:27	Atlas Agena B	-	362D/4807	2.200	AFSSD	US	G	Sat LED 0	VCR	-	TR-1022
1964-036	2438565.29	1964 Jul 6 1851:27	Atlas Agena D	-	216D/1802?	0.473	AFSSD	US	G	Sat LED 0	VCR	-	MR640737-22
1964-036	2438565.29	1964 Jul 6 1851:27	Atlas Agena B	-	216D/1802?	0.473	AFSSD	US	G	Sat LED 0	VCR	-	MR640737-22
1964-S387	2438565.89	1964 Jul 29 0921:56	Atlas Agena B	-	260D/6009 (A49)	0.365	LERC/AFSSD	US	G	Sat EED E	VCR	-	TR-1022
1964-S387	2438565.89	1964 Jul 29 0921:56	Atlas Agena D	-	260D/6009 (A49)	0.365	LERC/AFSSD	US	G	Sat EED E	VCR	-	TR-1022
1964-S387	2438565.89	1964 Jul 29 0921:56	Atlas F	-	110F	0.000	SAC	US	-	Target	VCR	-	-
1964-S445	2438565.89	1964 Aug 14 2200:13	Atlas E	-	7101/4808	2.286	AFSSD	US	G	Sat SS0 0	VCR	-	-
1964-S445	2438565.89	1964 Aug 14 2200:13	Atlas Agena D	-	7101/4808	2.286	AFSSD	US	G	Sat SS0 0	VCR	-	-
1964-S445	2438565.89	1964 Aug 14 2200:13	Atlas F	-	57E	0.000	SAC	US	-	Target	VCR	-	-
1964-S445	2438565.89	1964 Aug 31 1546:17	Atlas F	-	36F	0.000	SAC	US	-	Target	VCR	-	-
1964-S445	2438565.89	1964 Aug 31 1546:17	Atlas Agena B	-	195D/6501 (A410)	0.487	LERC/AFSSD	US	G	Sat HED 0	VCR	-	TR-1022
1964-S445	2438565.89	1964 Aug 31 1546:17	Atlas Agena D	-	195D/6501 (A410)	0.487	LERC/AFSSD	US	G	Sat HED 0	VCR	-	TR-1022
1964-S445	2438565.89	1964 Aug 31 1546:17	Atlas F	-	247D	0.000	SAC	US	-	Target	VCR	-	-
1964-S445	2438565.89	1964 Aug 31 1546:17	Atlas D	-	247D	0.000	SAC	US	-	Target	VCR	-	-
1964-S445	2438565.89	1964 Aug 31 1546:17	Atlas Agena B	-	7102/4809	2.190	AFSSD	US	G	Reentry Test	VCR	-	-
1964-S445	2438565.89	1964 Aug 31 1546:17	Atlas Agena D	-	7102/4809	2.190	AFSSD	US	G	Reentry Test	VCR	-	-
1964-S445	2438565.89	1964 Aug 31 1546:17	Atlas Agena D	-	7103/4810	2.290	AFSSD	US	G	Sat SS0 0	VCR	-	VSatrolls
1964-S445	2438565.89	1964 Aug 31 1546:17	Atlas Agena D	-	363D/4811	2.290	AFSSD	US	G	Sat SS0 0	VCR	-	VSatrolls
1964-S445	2438565.89	1964 Aug 31 1546:17	Atlas Agena D	-	280D/6931 (A411)	0.397	LERC/AFSSD	US	G	Sat EED E	VCR	-	VSatrolls
1964-S445	2438565.89	1964 Aug 31 1546:17	Atlas Agena D	-	280D/6932 (A412)	0.261	LERC/AFSSD	US	G	Sat EED E	VCR	-	VSatrolls
1964-S445	2438565.89	1964 Aug 31 1546:17	Atlas Agena D	-	300D	0.000	SAC	US	-	Target	VCR	-	VSatrolls
1964-S445	2438565.89	1964 Aug 31 1546:17	Atlas D	-	300D	0.000	SAC	US	-	Target	VCR	-	VSatrolls
1964-S445	2438565.89	1964 Aug 31 1546:17	Atlas Agena B	-	7105/4813	2.190	AFSSD	US	G	Sat SS0 0	VCR	-	VSatrolls
1964-S445	2438565.89	1964 Aug 31 1546:17	Atlas Agena D	-	7105/4813	2.190	AFSSD	US	G	Sat SS0 0	VCR	-	VSatrolls
1964-S445	2438565.89	1964 Aug 31 1546:17	Atlas Agena D	-	AC-4	2.9E2	LERC	US	G	Sat HED 0	VCR	-	VSatrolls
1964-S445	2438565.89	1964 Aug 31 1546:17	Atlas Agena D	-	AC-4	2.9E2	LERC	US	G	Sat HED 0	VCR	-	VSatrolls
1964-S445	2438565.89	1964 Aug 31 1546:17	Atlas Agena D	-	106F	0.000	SAC	US	-	Test	VCR	-	VSatrolls
1964-S445	2438565.89	1964 Aug 31 1546:17	Atlas Agena D	-	166D	0.000	SAC	US	-	Test	VCR	-	VSatrolls
1964-S445	2438565.89	1964 Aug 31 1546:17	Atlas Agena D	-	172D	0.085	AFSSD	US	G	Target	VCR	-	VSatrolls
1964-S445	2438565.89	1964 Aug 31 1546:17	Atlas Agena D	-	7106/4812	2.190	AFSSD	US	G	Sat SS0 0	VCR	-	VSatrolls
1964-S445	2438565.89	1964 Aug 31 1546:17	Atlas Agena B	-	196D/6006 (A413)	0.368	LERC/AFSSD	US	G	Sat EED E	VCR	-	VSatrolls
1964-S445	2438565.89	1964 Aug 31 1546:17	Atlas D	-	211D	0.000	SAC	US	-	Target	VCR	-	VSatrolls
1964-S445	2438565.89	1964 Aug 31 1546:17	Atlas D	-	301D	0.000	SAC	US	-	Target	VCR	-	VSatrolls
1964-S445	2438565.89	1964 Aug 31 1546:17	Atlas Agena B	-	AC-5	0.643	LERC	US	G	Sat SS0 0	VCR	-	VSatrolls
1964-S445	2438565.89	1964 Aug 31 1546:17	Atlas Agena D	-	AC-5	0.643	LERC	US	G	Sat SS0 0	VCR	-	VSatrolls
1964-S445	2438565.89	1964 Aug 31 1546:17	Atlas Agena D	-	7104/4816	2.000	AFSSD	US	G	Sat LED 0	VCR	-	VSatrolls
1964-S445	2438565.89	1964 Aug 31 1546:17	Atlas Agena D	-	154D	0.000	SAC	US	-	Test	VCR	-	VSatrolls
1964-S445	2438565.89	1964 Aug 31 1546:17	Atlas Agena B	-	204D								

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	OrbPay	Agency	Launch_Code	Group	Category	LTCite	Cite	Notes
1965-5352	2438922.02	1965 Jun 10 1226:40	Atlas D	-	302D	0.000	AFSSD	MS	-	Reentry Test	VCR	-	-
1965-050	2438937.31	1965 Jun 25 1930	Atlas SLV-3 Agena D	-	7109/4817	2.295	AFSSD	US	G	Sat LED 0	VCR	-	-
1965-5416	2438942.91	1965 Jul 1 0954:11	Atlas SLV-3 Agena D	-	59D	0.000	AFSSD	US	G	Reentry Test	VCR	-	-
1965-F07	2438954.29	1965 Jul 12 0827	Atlas SLV-3 Agena D	-	7112/4819	0.463	AFSSD	US	G	Sat LED 0	MR650712	-	-
1965-068	2438961.86	1965 Jul 20 0927	Atlas Agena D	-	2250/1803	0.463	AFSSD	US	G	Sat LED 0	MR650726-29	-	-
1965-062	2438976.30	1965 Aug 3 1306	Atlas SLV-3 Agena D	-	7111/4818	2.295	AFSSD	US	G	Reentry Test	VCR	-	-
1965-5443	2438977.03	1965 Aug 4 1243:08	Atlas D	-	147F	0.000	AFSSD	US	G	Reentry Test	VCR	-	-
1965-5444	2438978.06	1965 Aug 5 1321:28	Atlas F	-	AC-6	0.000	AFSSD	US	G	Sat DSD E	TR-1022	-	-
1965-064	2438984.10	1965 Aug 11 1431:04	Atlas Centaur D	-	61D	0.000	AFSSD	US	G	Reentry Test	VCR	-	-
1965-5480	2438998.97	1965 Aug 26 1120:14	Atlas D	-	125D	0.000	AFSSD	US	G	Reentry Test	VCR	-	-
1965-5521	2439032.94	1965 Sep 29 1040	Atlas D	-	7114/4821	0.000	AFSSD	US	G	Reentry Test	VCR	-	-
1965-076	2439034.31	1965 Oct 3 1923:38	Atlas SLV-3 Agena D	-	340D/MB20.170 RS	2.190	AFSSD	US	G	Sat SSO 0	PE14022/65	LH650930	-
1965-078	2439038.88	1965 Oct 5 0907:07	Atlas D	-	5301/5002	0.156	AFSSD	US	G	Sat LED 0	VCR	-	-
1965-F11	2439059.12	1965 Oct 26 1500	Atlas SLV-3 Agena D	-	7113/4822	0.500	N5C/AFSSD	US	G	Sat LED A	KHR-1	-	-
1965-090	2439073.31	1965 Nov 8 1930	Atlas SLV-3 Agena D	-	200D	2.190	AFSSD	US	G	Sat LED 0	VCR	-	-
1965-5654	2439094.10	1965 Nov 29 1430:13	Atlas D	-	85D	0.000	AFSSD	US	G	Reentry Test	VCR	-	-
1965-5692	2439115.07	1965 Dec 20 1339:56	Atlas D	-	7114/4825	0.000	AFSSD	US	G	Sat LED 0	VCR	-	-
1966-002	2439145.34	1966 Jan 19 2003	Atlas SLV-3 Agena D	-	305D	2.190	AFSSD	US	G	Reentry Test/Plume	VCR	-	-
1966-5104	2439166.91	1966 Feb 10 0946:46	Atlas D	-	86D	0.000	AFSSD	US	G	Reentry Test	VCR	-	-
1966-5110	2439168.08	1966 Feb 11 1304:53	Atlas D	-	7116/4820	0.000	AFSSD	US	G	Reentry Test	VCR	-	-
1966-012	2439172.36	1966 Feb 15 2030	Atlas SLV-3 Agena D	-	73D	0.000	AFSSD	US	G	Reentry Test	VCR	-	-
1966-5119	2439175.91	1966 Feb 19 0956:42	Atlas D	-	303D	0.000	AFSSD	US	G	Reentry Test	VCR	-	-
1966-5150	2439189.02	1966 Mar 4 1229:55	Atlas D	-	5302/5003	3.228	N5C/AFSSD	US	G	Reentry Test	VCR	-	-
1966-019	2439201.13	1966 Mar 16 1500:03	Atlas SLV-3 Agena D	-	7116/4823	2.190	AFSSD	US	G	Sat SSO 0	VCR	-	-
1966-022	2439203.33	1966 Mar 18 2000	Atlas SLV-3 Agena D	-	304D	0.000	AFSSD	US	G	Sat SSO A	ISPRAD	-	-
1966-5175	2439204.01	1966 Mar 19 0920:12	Atlas D	-	720D/MB20.152 RS	0.451	AFSSD	US	G	Sat LED 0D	TR-1022	-	-
1966-025	2439214.89	1966 Mar 30 0920:12	Atlas D	-	AC-6	1.765	LERC	US	G	Sat LED 0	TR-1022	-	-
1966-031	2439223.54	1966 Apr 6 0100:02	Atlas Centaur D	-	5001/6703 (AA15)	2.190	AFSSD	US	G	Reentry Test	VCR	-	-
1966-031	2439224.32	1966 Apr 6 1935:00	Atlas SLV-3 Agena D	-	7117/4827	0.000	AFSSD	US	G	Reentry Test	VCR	-	-
1966-032	2439235.30	1966 Apr 9 1915:02	Atlas D	-	280D	0.000	AFSSD	US	G	Reentry Test	VCR	-	-
1966-5250	2439246.94	1966 May 3 1030:20	Atlas D	-	96D	0.000	AFSSD	US	G	Reentry Test	VCR	-	-
1966-5262	2439256.56	1966 May 13 1443:52	Atlas D	-	7118/4824	0.000	AFSSD	US	G	Reentry Test	VCR	-	-
1966-046	2439260.29	1966 May 14 1902:03	Atlas SLV-3 Agena D	-	41D	0.000	AFSSD	US	G	Reentry Test	VCR	-	-
1966-039	2439263.14	1966 May 26 1204:27	Atlas D	-	5303/5004	0.000	AFSSD	US	G	Reentry Test	VCR	-	-
1966-F07	2439272.00	1966 Jun 1 1501:02	Atlas Centaur D	-	AC-10	1.986	LERC	US	G	Sat LED A	TR-1022	-	-
1966-046	2439276.13	1966 Jun 3 1941:01	Atlas SLV-3 Agena D	-	5710/4826	0.060	N5C/AFSSD	US	G	Sat LED E	KHR-1	-	-
1966-046	2439280.31	1966 Jun 3 0248	Atlas SLV-3 Agena D	-	5001/6502 (AA16)	2.190	AFSSD	US	G	Sat LED 0	TR-1022	-	-
1966-049	2439283.62	1966 Jun 7 0248	Atlas SLV-3 Agena B	-	7201/1351	0.023	AFSSD	US	G	Reentry Test	VCR	-	-
1966-051	2439286.34	1966 Jun 9 2015	Atlas SLV-3 Agena D	-	96D	0.000	AFSSD	US	G	Reentry Test	VCR	-	-
1966-5309	2439286.97	1966 Jun 10 1115	Atlas D	-	246D	0.000	AFSSD	US	G	Reentry Test	VCR	-	-
1966-5345	2439303.15	1966 Jun 20 1058:47	Atlas D	-	7120/4828	0.000	AFSSD	US	G	Reentry Test	VCR	-	-
1966-5357	2439306.62	1966 Jun 30 0608:47	Atlas D	-	5305/5005	0.269	N5C/AFSSD	US	G	Sat SSO 0	VCR	-	-
1966-062	2439319.25	1966 Jul 12 1755	Atlas SLV-3 Agena D	-	5805/5005	0.269	N5C/AFSSD	US	G	Sat SSO 0 3	VCR	-	-
1966-065	2439320.58	1966 Jul 18 0210:02	Atlas SLV-3 Agena D	-	5805/5005	0.269	N5C/AFSSD	US	G	Sat SSO 0 3	VCR	-	-
1966-065	2439320.58	1966 Jul 18 0210:02	Atlas SLV-3 Agena D	-	5805/5005	0.269	N5C/AFSSD	US	G	Sat SSO 0 3	VCR	-	-
1966-5330	2439348.24	1966 Aug 6 1739:46	Atlas F	-	5801/6630 (AA17)	0.269	N5C/AFSSD	US	G	Reentry Test	VCR	-	-
1966-074	2439354.27	1966 Aug 16 1930:00	Atlas SLV-3 Agena D	-	5801/6630 (AA17)	0.269	N5C/AFSSD	US	G	Reentry Test	VCR	-	-
1966-077	2439357.31	1966 Aug 18 1930:00	Atlas SLV-3 Agena D	-	7021/4829	2.380	AFSSD	US	G	Sat LED E	TR-1022	-	-
1966-081	2439361.05	1966 Aug 19 1935	Atlas SLV-3 Agena D	-	7022/1352	2.023	AFSSD	US	G	Sat LED 0	VCR	-	-
1966-083	2439361.05	1966 Sep 15 1705:02	Atlas SLV-3 Agena D	-	5306/6506	3.265	N5C/AFSSD	US	G	Sat LED 0	VCR	-	-
1966-084	2439365.25	1966 Sep 16 1359:02	Atlas SLV-3 Agena D	-	7123/4832	2.295	AFSSD	US	G	Sat LED A	KHR-1	-	-
1966-084	2439369.02	1966 Sep 20 1232:00	Atlas SLV-3 Agena D	-	AC-7	1.004	LERC	US	G	Sat LED E	VCR	-	-
1966-089	2439404.42	1966 Oct 5 2200	Atlas Centaur D	-	7003/1353	2.019	AFSSD	US	G	Sat LED E	JPL-TR32-1086	-	-
1966-307	2439410.33	1966 Oct 21 1959:41	Atlas F	-	116F	0.000	AFSSD	US	G	Reentry Test	VCR	-	-
1966-095	2439414.30	1966 Oct 12 1915:12	Atlas SLV-3 Agena D	-	7122/4830	2.190	AFSSD	US	G	Sat LED 0	VCR	-	-
1966-095	2439424.97	1966 Oct 26 1112:02	Atlas Centaur D	-	AC-9	0.726	LERC	US	G	Sat LED 0	TR-1022	-	-
1966-100	2439436.47	1966 Nov 2 2024	Atlas SLV-3 Agena D	-	7124/4831	2.190	AFSSD	US	G	Sat LED 0	VCR	-	-
1966-103	2439441.30	1966 Nov 6 2321:00	Atlas SLV-3 Agena D	-	5802/4831	0.380	AFSSD	US	G	Sat LED 0	VCR	-	-
1966-109	2439441.30	1966 Nov 11 1907:59	Atlas SLV-3 Agena D	-	5307/5001R (AA18)	3.227	N5C/AFSSD	US	G	Sat LED E	TR-1022	-	-
1966-109	2439445.38	1966 Dec 7 0212:01	Atlas SLV-3 Agena D	-	7125/4833	2.190	AFSSD	US	G	Sat LED 0	VCR	-	-
1966-110	2439466.59	1966 Dec 11 2109:57	Atlas SLV-3 Agena D	-	5101/6151 (AA19)	0.714	LERC/AFSSD	US	G	Sat LED 0	VCR	-	-
1966-111	2439471.38	1966 Dec 21 2215:02	Atlas D	-	88D	0.480	AFSSD	US	G	Sat LED 0D	TR-1022	-	-
1966-108	2439481.43	1967 Jan 22 1544:54	Atlas SLV-3 Agena D	-	7001	2.716	AFSSD	US	G	Reentry Test	VCR	-	-
1967-567	2439513.16	1967 Jan 22 1544:54	Atlas D	-	148F	0.000	AFSSD	US	G	Reentry Test	VCR	-	-
1967-007	2439524.33	1967 Feb 2 2000	Atlas SLV-3 Agena D	-	35D	0.000	AFSSD	US	G	Reentry Test	VCR	-	-
1967-008	2439526.55	1967 Feb 5 0117:01	Atlas SLV-3 Agena D	-	5803/6632 (AA20)	0.389	LERC/AFSSD	US	G	Sat LED 0	LR670203	-	-
1967-1020	2439535.42	1967 Feb 13 2205	Atlas F	-	121F	0.000	AFSSD	US	G	Sat LED 0	TR-1022	-	-
1967-5122	2439555.46	1967 Mar 5 2305	Atlas SLV-3 Agena D	-	7002	2.716	AFSSD	US	G	Reentry Test	VCR	-	-
1967-5159	2439566.26	1967 Mar 16 1756	Atlas F	-	151F	0.000	AFSSD	US	G	Reentry Test	VCR	-	-
1967-5198	2439566.64	1967 Apr 6 0323:01	Atlas SLV-3 Agena D	-	5102/6152 (AA21)	0.325	LERC/AFSSD	US	G	Sat WFO 0	TR-1022	-	-
1967-5198	2439567.97	1967 Apr 7 1119:23	Atlas D	-	38D	0.000	AFSSD	US	G	Reentry Test/Ionos	VCR	-	-
1967-103	2439600.57	1967 Apr 17 0705:01	Atlas Centaur D	-	AC-12	1.041	LERC	US	G	Sat LED E	TR-1022	-	-
1967-040	2439615.43	1967 Apr 20 0135:01	Atlas SLV-3 Agena D	-	7003	2.716	AFSSD	US	G	Reentry Test	VCR	-	-
1967-5266	2439630.42	1967 May 4 2225:00	Atlas SLV-3 Agena D	-	5904/6633 (AA22)	0.389	LERC/AFSSD	US	G	Sat LED E	NASA-TR-X-3487	-	-
1967-050	2439633.27	1967 May 22 1930	Atlas F	-	119F	0.000	AFSSD	US	G	Reentry Test	RM	-	-
1967-055	2439646.25	1967 Jun 9 1407:01	Atlas SLV-3 Agena D	-	7127/4838	2.190	AFSSD	US	G	Sat LED 0	SR12.529	-	-
1967-5299	2439650.93	1967 Jun 9 1023	Atlas F/Trident	-	122F (KX-101)	0.000	AFSSD	US	G	Reentry Test	RM	-	-
1967-060	2439655.75	1967 Jun 14 0601:00	Atlas SLV-3 Agena D	-	5401/6633 (AA23)	0.245	LERC/AFSSD	US	G	Sat LED 0	TR-1022	-	-
1967-5338	2439677.50	1967 Jul 6	Atlas D	-	65D	0.000	SAN5B	US	G	Reentry Test	VAFB	-	-
1967-068	2439686.00	1967 Jul 14 1153:29	Atlas Centaur D	-	AC-11	1.042	LERC	US	G	Sat LED E	TR-1022	-	-
1967-5354	2439696.50	1967 Jul											

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	OrbPay	Agency	Launch_Code	Group	Category	LTCite	Cite	Notes
1967-075	2439704.44	1967 Aug 1 2233:00	Atlas SLV-3 Agena D	-	5065/6634 (AA24)	0.392	LERC/SANSO	DS	G	Sat EED E	TR-1022	-	-
1967-084	2439741.83	1967 Sep 8 0757:01	Atlas SLV-3 Centaur	-	AC-13	1.006	LERC	DS	G	Sat EED E	TR-1022	-	-
1967-8486	2439774.96	1967 Oct 11 1130:03	Atlas F	-	69D	0.000	SANSB	MS	-	Reentry Test	VCR	-	-
1967-8492	2439777.50	1967 Oct 14	Atlas F	-	81F	0.000	SANSB	MS	-	Reentry Test	VAFB	-	-
1967-A131	2439791.05	1967 Oct 27 1510	Atlas F/Trident	-	81F	0.000	SANSB	MS	-	Reentry Test	WIRE	VAFB	-
1967-111	2439800.48	1967 Nov 5 2337:00	Atlas SLV-3 Agena D	-	5039/6153 (AA25)	0.714	LERC/SANSO	DS	G	Sat STD 0	TR-1022	-	-
1967-112	2439801.82	1967 Nov 7 0739:01	Atlas SLV-3 Centaur	-	AC-14	1.007	LERC	DS	G	Sat EED E	TR-1022	-	-
1967-8527	2439802.01	1967 Nov 7 1317:54	Atlas D	-	94D	0.000	SANSB	MS	-	Reentry Test	JCR	-	-
1967-8530	2439805.01	1967 Nov 10 1220	Atlas F	-	113F	0.000	SANSB	MS	-	Reentry Test	VCR	-	-
1967-8591	2439845.90	1967 Dec 21 0938	Atlas F/Trident	-	117F	0.000	SANSB	MS	-	Reentry Test	ULich/AP	VAFB	-
1968-001	2439862.77	1968 Jan 7 0630:00	Atlas SLV-3 Centaur	-	AC-15	1.038	LERC	DS	G	Sat EED E	TR-1022	-	-
1968-S103	2439887.06	1968 Jan 31 1330	Atlas F/Trident	-	94F	0.000	SANSB	MS	-	Reentry Test	ULich/AP	VAFB	-
1968-S151	2439913.82	1968 Feb 27 0736	Atlas F	-	116F	0.000	SANSB	MS	-	Reentry Test	ULich/AP	VAFB	-
1968-014	2439920.05	1968 Mar 4 1306:01	Atlas SLV-3 Agena D	-	502A/6503 (AA26)	0.611	LERC/SANSO	DS	G	Sat DS0 0	TR-1022	-	-
1968-S168	2439921.93	1968 Mar 6 1015	Atlas F/Trident	-	74E	0.000	SANSB	MS	-	Reentry Test	ULich/AP	VAFB	-
1968-026	2439952.32	1968 Apr 6 0939:42	Atlas F	-	107F	0.458	SANSB	MS	G	Sat RED 00	VCR	-	-
1968-S267	2439964.83	1968 Apr 18 0756	Atlas E	-	77E	0.000	SANSB	MS	-	Reentry Test	ULich/UP1	VAFB	-
1968-S288	2439973.90	1968 Apr 27 0948	Atlas E/Trident	-	78E	0.000	SANSB	MS	-	Reentry Test	WIRE/ULrich	VAFB	-
1968-S303	2439980.09	1968 May 3 1408	Atlas F	-	95F	0.000	SANSB	MS	-	Reentry Test	VAFB	-	-
1968-S356	2440005.50	1968 Jun 1	Atlas F/Trident	-	89F	0.000	SANSB	MS	-	Reentry Test	VAFB	-	-
1968-S387	2440029.50	1968 Jun 22	Atlas F/Trident	-	89F	0.000	SANSB	MS	-	Reentry Test	VAFB	-	-
1968-059	2440036.32	1968 Jun 29 1012	Atlas F	-	32F	0.000	SANSB	MS	-	Reentry Test	VAFB	-	-
1968-063	2440049.31	1968 Jun 29 1012	Atlas F	-	5001A/28017	0.737	SANSO	US	G	Sat RED 00	Longseach,Ind660712	VAFB	-
1968-065	2440074.96	1968 Jul 11 1930	Atlas SLV-3 Agena D	-	AC-17	2.548	LERC	DS	G	Sat STD 0	Desind	-	-
1968-068	2440079.44	1968 Aug 10 2233:02	Atlas SLV-3 Centaur	-	7004	0.000	SANSB	MS	G	Sat STD 0	VCR	-	-
1968-F07	2440085.37	1968 Aug 16 2057:44	Atlas Burner 2	-	AC-17	0.000	SANSB	MS	G	Sat STD 0	ULich/Philling	VAFB	-
1968-S509	2440126.50	1968 Sep 25 1154	Atlas F/Trident	-	99F	0.000	SANSB	MS	-	Reentry Test	ULich/Bakersfield	IRL-0061	-
1968-S513	2440126.50	1968 Sep 27	Atlas F/Trident	-	84F	0.000	SANSB	MS	-	Reentry Test	ULich/AP	VAFB	-
1968-A111	2440177.00	1968 Nov 16 1200	Atlas F/Trident	-	60F	0.000	SANSB	MS	-	Reentry Test	ULich/Lompoch	VAFB	-
1968-S508	2440191.86	1968 Nov 24 1210	Atlas SLV-3 Centaur	-	70F	0.000	SANSB	MS	-	Reentry Test	ULich/Lompoch	VAFB	-
1968-110	2440237.36	1968 Dec 7 0940:09	Atlas F/Trident	-	AC-16	2.018	LERC	DS	G	Sat STD 0	ULich/Wire	VAFB	-
1968-056	2440251.01	1968 Dec 4 0915	Atlas F/Trident	-	98F	0.000	SANSB	MS	-	Reentry Test	ULich/Wire	VAFB	-
1968-063	2440259.89	1968 Dec 4 0915	Atlas F/Trident	-	98F	0.000	SANSB	MS	-	Reentry Test	ULich/Wire	VAFB	-
1968-065	2440268.01	1969 Dec 24 2113	Atlas F/Trident	-	93F	0.000	SANSB	MS	-	Reentry Test	ULich/Wire	VAFB	-
1970-S109	2440268.01	1970 Feb 6 1225	Atlas F/Trident	-	104F	0.000	SANSO	MS	G	Sat RED 000	ULich/UP1	VAFB	-
1970-S174	2440295.98	1970 Mar 13 0828	Atlas F/Trident	-	96F	0.000	SANSB	MS	-	Reentry Test	ULich/AP	VAFB	-
1970-S276	2440324.43	1969 Mar 27 2222:01	Atlas SLV-3 Centaur	-	29F	0.000	SANSB	MS	-	Reentry Test	ULich/Lompoch	VAFB	-
1970-S292	2440345.96	1969 Apr 12 1101:04	Atlas SLV-3 Agena D	-	91F	0.000	SANSB	MS	-	Reentry Test	ULich/Lompoch	VAFB	-
1968-8587	2440454.00	1969 Aug 20 1205	Atlas F/Trident	-	90F	0.000	SANSB	MS	-	Reentry Test	ULich/Lompoch	VAFB	-
1968-S503	2440460.50	1969 Sep 16	Atlas F/Trident	-	112F	0.000	SANSB	MS	-	Reentry Test	ULich/Lompoch	VAFB	-
1968-A174	2440655.00	1969 Oct 10 1927	Atlas F/Trident	-	100F	0.000	SANSB	MS	-	Reentry Test	ULich/Lompoch	VAFB	-
1968-063	2440659.89	1969 Dec 4 0915	Atlas F/Trident	-	98F	0.000	SANSB	MS	-	Reentry Test	ULich/Lompoch	VAFB	-
1968-065	2440659.89	1969 Dec 4 0915	Atlas F/Trident	-	98F	0.000	SANSB	MS	-	Reentry Test	ULich/Lompoch	VAFB	-
1970-S109	2440686.01	1970 Feb 6 1225	Atlas F/Trident	-	93F	0.000	SANSB	MS	-	Reentry Test	ULich/Wire	VAFB	-
1970-S174	2440695.98	1970 Mar 13 0828	Atlas F/Trident	-	96F	0.000	SANSB	MS	-	Reentry Test	ULich/Wire	VAFB	-
1970-S276	2440737.02	1970 May 30 0838	Atlas F/Trident	-	29F	0.000	SANSB	MS	-	Reentry Test	ULich/Wire	VAFB	-
1970-S292	2440747.02	1970 Jun 9 1237	Atlas F/Trident	-	90F	0.000	SANSB	MS	-	Reentry Test	ULich/Wire	VAFB	-
1970-068	2440756.00	1970 Jun 19 1037	Atlas SLV-3 Agena D	-	5001A/15517	0.700	SANSO	MS	G	Sat STD 0	ULich/Philling	VAFB	-
1970-068	2440831.54	1970 Sep 30 2040:05	Atlas SLV-3 Agena D	-	5003M/28037	0.260	SANSO	MS	G	Sat STD 0	ULich/Philling	VAFB	-
1970-8566	2440891.86	1970 Nov 20 0938:03	Atlas F/Trident	-	AC-21	2.130	LERC	DS	G	Sat STD 0	AFMTC	-	-
1971-8518	2440897.53	1971 Jan 26 0938:03	Atlas SLV-3 Centaur	-	106F	0.000	SANSB	MS	-	Reentry Test	ULich/UP1	VAFB	-
1971-8527	2441045.86	1971 Jan 26 0938:03	Atlas F/Trident	-	AC-25	1.408	LERC	DS	G	Sat STD 0	ULich/UP1	VAFB	-
1971-F044	2441080.55	1971 Apr 9 0111:02	Atlas SLV-3 Centaur	-	85F	0.000	SANSB	MS	-	Reentry Test	ULich/Lompoch	VAFB	-
1971-8561	2441182.43	1971 Apr 9 0111:02	Atlas SLV-3 Centaur	-	AC-24	1.031	LERC	DS	G	Sat EED E	ULich/Lompoch	VAFB	-
1971-8560	2441191.97	1971 May 30 2233:04	Atlas SLV-3 Centaur	-	AC-23	1.031	LERC	DS	G	Sat EED E	JPL-TR-32-1550	-	-
1971-8561	2441191.97	1971 Jun 29 1112	Atlas F/Trident	-	108F	0.000	SANSB	MS	-	Reentry Test	ULich/Lompoch	VAFB	-
1971-8518	2441195.98	1971 Aug 7 0011	Atlas F	-	76F	0.000	SANSB	MS	-	Reentry Test	ULich/Lompoch	VAFB	-
1971-8518	2441195.98	1971 Aug 7 0011	Atlas F	-	76F	0.000	SANSB	MS	-	Reentry Test	ULich/Lompoch	VAFB	-
1971-F13	2441280.44	1971 Dec 4 2233	Atlas SLV-3 Agena D	-	5503M/28047	0.240	SANSO	MS	G	Sat STD 0	ULich/UP1	VAFB	-
1971-116	2441305.55	1972 Dec 20 0110:04	Atlas SLV-3 Centaur	-	AC-26	1.408	LERC	DS	G	Sat STD 0	ULich/UP1	VAFB	-
1972-003	2441339.51	1972 Jan 23 0012:04	Atlas SLV-3 Centaur	-	AC-28	1.408	LERC	DS	G	Sat STD 0	ULich/UP1	VAFB	-
1972-012	2441379.58	1972 Mar 3 0149:04	Atlas SLV-3 Centaur	-	AC-29	0.340	LERC	DS	G	Sat STD 0	ULich/UP1	VAFB	-
1972-041	2441482.41	1972 Jun 13 2153:04	Atlas SLV-3 Centaur	-	AC-27	1.416	LERC	DS	G	Sat STD 0	ULich/UP1	VAFB	-
1972-045	2441550.94	1972 Aug 21 1028:02	Atlas SLV-3 Centaur	-	AC-22	2.177	LERC	DS	G	Sat STD 0	ULich/UP1	VAFB	-
1972-076	2441583.34	1972 Oct 2 2010:02	Atlas Burner 2	-	109F	0.773	SANSO	MS	G	Sat STD 0	ULich/UP1	VAFB	-
1972-101	2441672.43	1972 Dec 20 2220	Atlas SLV-3 Agena D	-	5204M/28057	0.350	SANSO	MS	G	Sat STD 0	ULich/UP1	VAFB	-
1973-013	2441747.90	1973 Mar 6 0930	Atlas SLV-3 Agena D	-	5202M/15527	0.700	SANSO	MS	G	Sat STD 0	ULich/UP1	VAFB	-
1973-019	2441718.46	1973 Apr 6 0211:00	Atlas SLV-3 Centaur	-	AC-30	0.340	LERC	DS	G	Sat STD 0	ULich/UP1	VAFB	-
1973-068	2441923.89	1973 Aug 23 2257:02	Atlas SLV-3 Centaur	-	AC-31	1.416	LERC	DS	G	Sat STD 0	ULich/UP1	VAFB	-
1973-S287	2441933.89	1973 Aug 29 0918	Atlas F	-	78F	0.000	SANSB	MS	-	Reentry Test	ULich/Lompoch	VAFB	-
1973-S281	2441955.50	1973 Sep 30	Atlas F	-	108F	0.000	SANSB	MS	-	Reentry Test	ULich/Lompoch	VAFB	-
1973-085	2441989.74	1973 Nov 3 0545:00	Atlas SLV-3 Centaur	-	AC-34	0.502	LERC	DS	G	Sat EED E	ULich/Lompoch	VAFB	-
1974-S127	2442112.50	1974 Mar 6	Atlas F	-	73F	0.000	SANSB	MS	-	Reentry Test	ULich/Lompoch	VAFB	-
1974-S148	2442129.50	1974 Mar 23	Atlas F	-	97F	0.000	SANSB	MS	-	Reentry Test	ULich/Lompoch	VAFB	-
1974-S186	2442169.18	1974 May 1 1617	Atlas F	-	54F	0.000	SANSB	MS	-	Reentry Test	ULich/Lompoch	VAFB	-
1974-S236	2442227.14	1974 Jun 28 1515	Atlas F	-	89F	0.000	SANSB	MS	-	Reentry Test	ULich/Lompoch	VAFB	-
1974-S264	2442242.72	1974 Jul 14 0517	Atlas F/PFS	-	69F	0.513	SANSO	MS	-	Sat STD 00	Falsworth	-	-
1974-S295	2442298.50	1974 Sep 8	Atlas F	-	80F	0.000	SANSB	MS	-	Reentry Test	ULich/Lompoch	VAFB	-
1974-S347	2442334.66	1974 Oct 14 0346	Atlas F	-	31F	0.000	SANSB	MS	-	Reentry Test	TucsonDly741014-1h	VAFB	-
1974-001	2442373.49	1974 Nov 21 2343:59	Atlas SLV-3 Centaur	-	AC-32	1.387	LERC	DS	G	Sat STD 0	TR-1022	-	-
1975-F01	2442464.48	1975 Feb 20 2335:00	Atlas SLV-3 Centaur	-	AC-33	1.408	LERC	DS	G	Sat STD 0	TR-1022	-	-
1975-F03	2442515.54	1975 Apr 13 0051	Atlas F	-	71F	0.725	LERC	DS	G	Sat STD 0			

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	OrbPay	Agency	Launch_Code	Group	Category	LTCite	Cite	Notes
1976-042	2442912.44	1976 May 13 2228	Atlas SLV-3D Centaur	-	AC-38	1.490	LERC	US	G/C	Sat GTD 0	RHR-1	-	-
1976-073	2442982.42	1976 Jul 22 2204:00	Atlas SLV-3D Centaur	-	AC-40	1.490	LERC	US	G/C	Sat GTD 0	COMPS	-	-
1977-038	2443287.26	1977 May 23 1613:00	Atlas SLV-3A Agena D	-	5507A/2807	0.450	LERC	US	G	Sat GTD 0	COMPS	-	-
1977-041	2443290.41	1977 Jun 26 2147:01	Atlas SLV-3D Centaur	-	AC-39	1.515	LERC	US	G	Sat GTD 0	COMPS	-	-
1977-053	2443317.85	1977 Jun 23 0817	Atlas F/SVS	-	65F	0.947	SMSD	US	G	Sat MTO SD	JCM	-	-
1977-075	2443367.77	1977 Aug 12 0629:31	Atlas SLV-3D Centaur	-	AC-45	2.514	LERC	US	G	Sat GTD 0	COMPS	-	-
1977-075	2443416.54	1977 Sep 30 0129:59	Atlas SLV-3D Centaur	-	AC-43	1.515	LERC	US	G	Sat GTD 0	COMPS	-	-
1977-112	2443486.24	1977 Dec 8 1745	Atlas F/MSD	-	50F	1.210	LERC	US	G	Sat GTD 0	JG9602	-	-
1977-114	2443489.45	1977 Dec 11 2245:01	Atlas SLV-3A Agena D	-	5504A/1553	0.700	SMSD	US	G	Sat GTD 0	COMPS	-	-
1978-002	2443515.51	1978 Jan 7 0015:00	Atlas SLV-3D Centaur	-	AC-46	1.515	LERC	US	G	Sat GTD 0	COMPS	-	-
1978-016	2443549.39	1978 Feb 21 2344:01	Atlas SLV-3D Centaur	-	AC-44	1.876	LERC	US	G	Sat GTD 0	COMPS	-	-
1978-020	2443562.49	1978 Mar 2 2344:01	Atlas F/SVS	-	64F	1.147	SMSD	US	G	Sat MTO SD	RAE	-	-
1978-038	2443599.48	1978 Mar 21 2344:01	Atlas SLV-3D Centaur	-	AC-48	1.480	LERC	US	G	Sat MTO SD	COMPS	-	-
1978-038	2443605.53	1978 Apr 7 0045:01	Atlas SLV-3A Agena D	-	5505A/1554	0.700	SMSD	US	G	Sat MTO SD	COMPS	-	-
1978-047	2443641.94	1978 May 13 1034	Atlas F/SVS	-	49F	1.147	SMSD	US	G	Sat MTO SD	JCM	-	-
1978-061	2443649.05	1978 May 27 0113:40	Atlas SLV-3D Centaur	-	AC-50	0.590	LERC	US	G	Sat ED E	COMPS	-	-
1978-064	2443656.55	1978 Jun 27 1212:44	Atlas SLV-3A Agena D	-	23F/6351	2.290	SMSD	US	G	Sat ED E	JPL80-38-II	-	-
1978-068	2443659.43	1978 Jun 29 2224:59	Atlas SLV-3D Centaur	-	AC-41	1.490	LERC	US	G/C	Sat ED E	MOR N-491-201-78-03	-	-
1978-078	2443728.81	1978 Aug 9 0723	Atlas SLV-3D Centaur	-	AC-51	0.875	LERC	US	G	Sat ED E	RHR-1	-	-
1978-093	2443794.97	1978 Oct 13 1123:00	Atlas F	-	47F	1.147	SMSD	US	G	Sat ED E	RAE	-	-
1978-103	2443825.73	1978 Nov 13 0524	Atlas SLV-3D Centaur	-	AC-52	3.135	SMSD	US	G	Sat MTO SD	RHR-1	-	-
1978-112	2443853.67	1978 Dec 11 0359	Atlas F/SVS	-	29F	1.147	SMSD	US	G	Sat MTO SD	JCM	-	-
1979-017	2443928.85	1979 Feb 24 0520	Atlas F/SVS	-	39F	1.147	SMSD	US	G	Sat MTO SD	JCM	-	-
1979-038	2443996.28	1979 May 4 1527:00	Atlas SLV-3D Centaur	-	Z7F	1.039	SMSD	US	G	Sat SSO 0 2	Falworth	-	-
1979-057	2444052.16	1979 Jun 27 1551:59	Atlas F	-	AC-47	1.876	LERC	US	G	Sat SSO A 2	patrick.af.mil	-	-
1979-082	2444136.73	1979 Sep 20 0528	Atlas SLV-3D Centaur	-	28F	1.418	SMSD	US	G	Sat SSO A 2	POES-WWV	-	-
1980-004	2444255.56	1980 Jan 16 0126:00	Atlas SLV-3D Centaur	-	AC-53	2.860	LERC	US	G	Sat GTD 0	SP-4024	-	-
1980-011	2444279.46	1980 Feb 9 2305	Atlas F/SVS	-	AC-49	1.164	LERC	US	G	Sat GTD 0	patrick.af.mil	-	-
1980-019	2444301.89	1980 Mar 3 0927	Atlas F/MSD	-	35F	1.260	AFSD	US	G	Sat MTO SD	LR600211	-	-
1980-032	2444355.92	1980 Apr 26 1000	Atlas F/SVS	-	67F	1.260	AFSD	US	G	Sat MTO SD 1	LR600303	-	-
1980-043	2444385.95	1980 May 29 1053	Atlas F	-	34F	1.418	AFSD	US	G	Sat SSO A 2	Falworth	-	-
1980-046	2444453.66	1980 Oct 31 0354	Atlas SLV-3D Centaur	-	19F	1.418	AFSD	US	G	Sat SSO A 2	Falworth	-	-
1980-058	2444580.46	1980 Dec 9 0718	Atlas SLV-3D Centaur	-	AC-94	1.870	LERC	US	G	Sat GTD 0	Falworth	-	-
1980-071	2444652.80	1980 Dec 9 0718	Atlas SLV-3D Centaur	-	AC-94	1.870	LERC	US	G	Sat GTD 0	Falworth	-	-
1981-018	2444657.47	1981 Feb 21 2323	Atlas SLV-3D Centaur	-	AC-92	1.196	AFSD	US	G	Sat GTD 0	ANST601215-19	-	-
1981-050	2444746.45	1981 Jun 23 0552:59	Atlas SLV-3D Centaur	-	68E	1.490	LERC	US	G	Sat GTD 0	JCM	-	-
1981-059	2444776.35	1981 Aug 6 0916:00	Atlas SLV-3D Centaur	-	AC-56	1.418	LERC	US	G	Sat SSO A 2	Falworth	-	-
1981-073	2444822.94	1981 Aug 6 0916:00	Atlas SLV-3D Centaur	-	AC-56	1.418	LERC	US	G	Sat SSO A 2	Falworth	-	-
1981-119	2444894.45	1981 Dec 15 2335	Atlas F/SVS	-	70E	0.928	AFSD	US	G	Sat GTD 0	JCM	-	-
1982-001	2444937.55	1982 Mar 5 0927	Atlas SLV-3D Centaur	-	AC-60	1.928	LERC	US	G	Sat MTO SD	LRV81220	-	-
1982-037	2445241.47	1982 Sep 25 0927	Atlas SLV-3D Centaur	-	AC-68	1.928	LERC	US	G	Sat MTO SD	Desind	-	-
1982-116	2445294.01	1982 Dec 21 1345	Atlas F	-	60E	1.460	AFSD	US	G	Sat SSO 2	JCM	-	-
1983-022	2445375.07	1983 Mar 28 1455:00	Atlas E	-	730LH	1.360	AFSD	US	G	Sat SSO 2	JCM	-	-
1983-022	2445422.13	1983 Mar 28 1455:00	Atlas E	-	730LH	1.360	AFSD	US	G	Sat SSO 2	JCM	-	-
1983-047	2445442.16	1983 May 9 2326	Atlas SLV-3D Centaur	-	AC-51	1.928	LERC	US	G	Sat SSO A 2	LR830009	-	-
1983-056	2445455.47	1983 Jun 14 0231	Atlas SLV-3D Centaur	-	60Q2H	1.928	LERC	US	G	Sat SSO A 2	LR830328	-	-
1983-072	2445559.93	1983 Jul 14 0521	Atlas E/SVS-2	-	75E	1.210	AFSD	US	G	Sat MTO SD 1	034602	-	-
1983-113	2445628.77	1983 Nov 9 0621	Atlas H	-	58E	0.792	AFSD	US	G	Sat MTO 1	034602	-	-
1984-012	2445735.28	1984 Feb 9 1844	Atlas H	-	60Q3H	1.513	AFSD	US	G	Sat SSO 2	LR840206	-	-
1984-057	2445804.48	1984 Feb 9 2303	Atlas G Centaur	-	AC-52	2.016	LERC	US	G	Sat SSO 2	LR840613	-	-
1984-059	2445854.98	1984 Jun 13 1137	Atlas E/SVS-2	-	43E	0.792	AFSD	US	G	Sat MTO 1	LR840909	-	-
1984-097	2445952.40	1984 Jun 9 2141	Atlas E/SVS-2	-	14E	0.792	AFSD	US	G	Sat MTO 1	JCM	-	-
1984-123	2446046.95	1984 Dec 12 1042:00	Atlas E	-	38E	1.712	AFSD	US	G	Sat SSO 2	LR850313	-	-
1985-014	2446137.58	1985 Mar 13 0200	Atlas E/OIS	-	41E	1.050	AFSD	US	G	Sat SSO 2	LR850313	-	-
1985-035	2446147.50	1985 Mar 22 2355	Atlas G Centaur	-	AC-53	2.013	LERC	US	G	Sat GTD 0	Falworth	-	-
1985-055	2446246.53	1985 Jun 30 0044	Atlas G Centaur	-	AC-64	2.016	LERC	US	G	Sat GTD 0	Falworth	-	-
1985-087	2446337.47	1985 Sep 28 2317	Atlas G Centaur	-	AC-65	2.016	LERC	US	G	Sat GTD 0	Falworth	-	-
1985-093	2446337.47	1985 Oct 9 0253	Atlas E/SVS-2	-	55E	0.792	AFSD	US	G	Sat MTO 1	Desind	-	-
1986-014	2446470.92	1986 Feb 9 1006	Atlas H	-	60Q4H	1.241	AFSD	US	G	Sat MTO 1	JCM	-	-
1986-073	2446591.16	1986 Sep 17 1552	Atlas E	-	53E	1.712	AFSD	US	G	Sat SSO SA 1	POES-WWV	-	-
1986-096	2446769.60	1986 Dec 5 0230:01	Atlas G Centaur	-	AC-66	1.928	LERC	US	G	Sat SSO 2	patrick.af.mil	-	-
1987-020	2446881.39	1987 Mar 26 2122:00	Atlas G Centaur	-	AC-67	1.872	LERC	US	G	Sat GTD 0	patrick.af.mil	-	-
1987-043	2446931.16	1987 May 15 1545	Atlas H	-	60Q5H	1.874	AFSD	US	G	Sat SSO SA 1	patrick.af.mil	-	-
1987-063	2446966.61	1987 Jun 20 0234	Atlas E	-	59E	1.493	AFSD	US	G	Sat SSO 2	Wize	-	-
1988-014	2447194.75	1988 Feb 3 0553	Atlas H	-	64E	1.493	AFSD	US	G	Sat SSO 2	Wize	-	-
1988-089	2447428.92	1988 Sep 24 1002:00	Atlas F	-	63E	1.712	AFSD	US	G	Sat SSO 2	POES-WWV	-	-
1989-077	2447793.12	1989 Sep 25 0556:02	Atlas G Centaur	-	AC-68	1.928	LERC	US	G	Sat GTD 0	patrick.af.mil	-	-
1990-031	2447998.31	1990 Apr 11 1500	Atlas E Altair	-	28E	0.182	AFSD	US	G	Sat GTD 0	SN900416-45	-	-
1990-105	2448227.16	1990 Dec 1 1557	Atlas F	-	61E	1.716	GNCLS	US	G/G	Sat GTD 0	Wize	-	-
1991-020	2448365.48	1991 Apr 18 2330	Atlas I	-	AC-69	1.488	AFSPRC	US	G	Sat SSO 2	SN910422-1	-	-
1991-032	2448391.16	1991 May 14 1552:03	Atlas E	-	50E	1.418	AFSPRC	US	G	Sat SSO 2	Wize	-	-
1991-082	2448598.06	1991 Nov 28 1323	Atlas E	-	53E	1.462	AFSPRC	US	G	Sat SSO 2	Wize	-	-
1991-083	2448598.45	1991 Dec 7 2247	Atlas II	-	AC-102	1.878	GNCLS	US	G	Sat GTD 0	Wize	-	-
1992-006	2448663.53	1992 Feb 11 0041:02	Atlas II	-	AC-101	1.418	GNCLS	US	G	Sat GTD 0	patrick.af.mil	-	-
1992-013	2448695.50	1992 Mar 14 0000	Atlas IIA	-	AC-72	1.412	GNCLS	US	G	Sat GTD 0	Wize	-	-
1992-032	2448763.50	1992 Jun 10 0000	Atlas IIA	-	AC-105	2.900	GNCLS	US	G	Sat GTD 0	Wize	-	-
1992-037	2448806.41	1992 Jul 2 2154:01	Atlas III	-	AC-103	1.418	GNCLS	US	G	Sat GTD 0	patrick.af.mil	-	-
1992-F02	2448857.44	1992 Aug 22 2240	Atlas I	-	AC-71	2.440	GNCLS	US	G/G	Sat GTD 0	ANST620631-22	-	-
1993-015	2449072.40	1993 Mar 25 2138:02	Atlas I	-	AC-74	1.812	GNCLS	US	G/G	Sat GTD 0	Wize	-	-
1993-046	2449188.42	1993 Jul 19 2204:02	Atlas II	-	AC-104	1.502	GNCLS	US	G/G	Sat GTD 0	SN930726-9	-	-
1993-056	2449208.92	1993 Aug 9 1002	Atlas E	-	34E	1.732	AFSPRC	US	G	Sat SSO 2	Wize	-	-
1993-056	2449233.97	1993 Sep 3 1117:02	Atlas I	-	AC-75	2.840	GNCLS	US	G/G	Sat GTD 0	Wize	-	-
1993-074	2449320.49	19											







Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Mission	Launch_Site	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee_Km	Range_Km	Dest
2005-038	2452508-42	2002 Aug 21 2205:00	Atlas V 401	-	AV-001	Hot Bird 6	Entelast HB6	SLC41	-	SLC41	-	-	-	45785	-	-
2005-020	2452773-42	2003 May 13 2210:00	Atlas V 401	-	AV-002	Hellas Sat 2	Hellas Sat 2	SLC41	CC	SLC41	-	-	-	84738	-	-
2005-033	2452838-49	2003 Jul 17 2345:01	Atlas V 521	-	AV-003	Rainbow 1	Rainbow 1	SLC41	CC	SLC41	-	-	-	36225	-	-
2004-048	2453357-40	2004 Dec 11 1240:00	Atlas V 431	-	AV-004	AMC 16	AMC 16	SLC41	CC	SLC41	-	-	-	36138	-	-
2005-009	2453441-40	2005 Mar 11 2142:00	Atlas V 431	-	AV-005	Inmarsat 4 F-1	Inmarsat 4 F1	SLC41	CC	SLC41	-	-	-	90139	-	-
2005-029	2453594-99	2005 Aug 12 1143:00	Atlas V 401	-	AV-007	MRD	New Horizons	SLC41	CC	SLC41	-	-	-	150000	-	-
2006-001	2453755-29	2006 Jan 19 1900:00	Atlas V 551	-	AV-010	New Horizons/Star 48	New Horizons	SLC41	CC	SLC41	-	-	-	150000	-	-
2006-012	2453846-35	2006 Apr 20 2027:00	Atlas V 411	-	AV-008	Astra 1KR	Astra 1KR	SLC41	CC	SLC41	-	-	-	36240	-	-
2007-006	2454168-63	2007 Mar 9 0310:00	Atlas V 401	-	AV-013	STP-1	Orbital Express	SLC41	CC	SLC41	-	-	-	565	-	-
2007-027	2454267-13	2007 Jun 15 1512:00	Atlas V 401	-	AV-013	USA 194 [NUSST17]	Wideband Global Satcom 1	SLC41	CC	SLC41	-	-	-	1376	-	-
2007-046	2454384-52	2007 Oct 11 0022	Atlas V 421	-	AV-011	USA 196 [NUSST-1]	Wideband Global Satcom 1	SLC41	CC	SLC41	-	-	-	66847	-	-
2007-060	2454446-42	2008 Dec 10 2205:00	Atlas V 401	-	AV-015	USA 198 [SBS16]	QUASAR 167	SLC41	CC	SLC41	-	-	-	38984	-	-
2008-010	2454538-92	2008 Mar 13 1002	Atlas V 411	-	AV-006	USA 200 [JIS12]	ADV TRUMPET 2	SLC41	VS	SLC41	-	-	-	38372	-	-
2008-017	2454571-34	2008 Apr 14 2012:00	Atlas V 421	-	AV-014	ICI G1	ICI G1	SLC41	CC	SLC41	-	-	-	36061	-	-
2009-010	2454926-52	2009 Apr 4 0031:00	Atlas V 421	-	AV-016	USA [WGS SV-2]	Wideband Global Satcom 2	SLC41	CC	SLC41	-	-	-	64309	-	-
2009-031	2455001-40	2009 Jun 18 2132:00	Atlas V 401	-	AV-020	LRO/LCRUSS	LRO	SLC41	CC	SLC41	-	-	-	150000	-	-
2009-047	2455063-40	2009 Sep 8 2135:00	Atlas V 401	-	AV-020	FAH	HERESIS 1	SLC41	CC	SLC41	-	-	-	35957	-	-
2009-064	2455123-18	2009 Oct 18 1612:01	Atlas V 401	-	AV-021	DNSP 5D-3 F18	DNSP Block 5D-3 S-18	SLC41	VS	SLC41	-	-	-	150000	-	-
2009-064	2455158-79	2009 Nov 23 0655:00	Atlas V 401	-	AV-024	Intelsat IS-14	IS-14	SLC41	VS	SLC41	-	-	-	38141	-	-
2010-015	2455239-14	2010 Feb 11 1523:00	Atlas V 431	-	AV-012	X-37B OTV FLT-1	X-37B No. 1	SLC41	CC	SLC41	-	-	-	36156	-	-
2010-039	2455309-49	2010 Apr 22 2352:00	Atlas V 501	-	AV-019	AEHF 1	AEHF SV-1	SLC41	CC	SLC41	-	-	-	150000	-	-
2010-046	2455422-96	2010 Aug 14 1107:007	Atlas V 501	-	AV-025	USA 216 (F1AR-1)	TOPAZ 1	SLC41	VS	SLC41	-	-	-	51723	-	-
2011-010	2455460-67	2010 Sep 21 0403:30	Atlas V 501	-	AV-026	X-37B OTV FLT-2	X-37B No. 2	SLC41	CC	SLC41	-	-	-	1110	-	-
2011-014	2455626-46	2011 Mar 5 2246	Atlas V 411	-	AV-027	USA 229	INTRUDER 9	SLC41	VS	SLC41	-	-	-	345	-	-
2011-044	2455666-68	2011 Apr 15 0424:10	Atlas V 401	-	AV-027	SBIRS GEO-1	SBIRS GEO-1	SLC41	VS	SLC41	-	-	-	1284	-	-
2011-049	2455779-18	2011 May 7 1610	Atlas V 401	-	AV-029	Junco	Junco	SLC41	CC	SLC41	-	-	-	35901	-	-
2011-070	2455862-13	2011 Nov 26 1502:00	Atlas V 541	-	AV-028	MSL	Mars Science Lab Rover	SLC41	CC	SLC41	-	-	-	150000	-	-
2012-009	2455922-43	2012 Feb 24 2215:00	Atlas V 541	-	AV-030	MOIS 1	MOIS 1	SLC41	CC	SLC41	-	-	-	36144	-	-
2012-033	2456052-28	2012 May 4 1642	Atlas V 531	-	AV-031	AEHF 2	AEHF SV-2	SLC41	CC	SLC41	-	-	-	50406	-	-
2012-046	2456169-84	2012 Aug 30 0605:27	Atlas V 401	-	AV-032	NSP A/B	QUASAR 177	SLC41	CC	SLC41	-	-	-	35884	-	-
2012-064	2456184-40	2012 Sep 13 2139:00	Atlas V 401	-	AV-033	USA 236/OUTSAT	INTRUDER 10	SLC41	VS	SLC41	-	-	-	36068	-	-
2012-071	2456273-25	2012 Dec 11 1603:00	Atlas V 501	-	AV-034	X-37B OTV FLT-3	X-37B No. 1	SLC41	CC	SLC41	-	-	-	1251	-	-
2013-004	2456323-58	2013 Jan 31 0148:00	Atlas V 401	-	AV-036	TDMS 11	TDMS K	SLC41	CC	SLC41	-	-	-	415	-	-
2013-008	2456335-25	2013 Feb 11 1602:00	Atlas V 401	-	AV-035	Landsat 8	Landsat LDCM	SLC41	VS	SLC41	-	-	-	35958	-	-
2013-011	2456371-39	2013 Mar 19 2121:00	Atlas V 401	-	AV-037	SBIRS GEO-2	SBIRS GEO-2	SLC41	VS	SLC41	-	-	-	150000	-	-
2013-023	2456428-40	2013 Jul 19 2138:00	Atlas V 401	-	AV-039	GFS II F-4	GFS SVN 66	SLC41	CC	SLC41	-	-	-	22342	-	-
2013-036	2456485-04	2013 Sep 18 0910:00	Atlas V 531	-	AV-040	MOIS 2	MOIS 2	SLC41	CC	SLC41	-	-	-	36234	-	-
2013-060	2456585-94	2013 Sep 18 0910:00	Atlas V 531	-	AV-041	AEHF 3	AEHF 3	SLC41	CC	SLC41	-	-	-	46321	-	-
2013-063	2456615-27	2013 Sep 18 0910:00	Atlas V 501	-	AV-042	MAVEN	MAVEN	SLC41	CC	SLC41	-	-	-	14300	-	-
2013-072	2456632-80	2013 Dec 6 0713:00	Atlas V 501	-	AV-038	MAVEN	MAVEN	SLC41	CC	SLC41	-	-	-	14300	-	-
2014-014	2456681-61	2014 Jan 24 0435:00	Atlas V 401	-	AV-042	TOPAZ 3	TOPAZ 3	SLC41	VS	SLC41	-	-	-	36222	-	-
2014-015	2456751-12	2014 Apr 3 1446:30	Atlas V 401	-	AV-043	TDMS 12	TDMS ED-13 F19	SLC41	VS	SLC41	-	-	-	350000	-	-
2014-027	2456786-24	2014 Apr 30 1746	Atlas V 541	-	AV-044	USA 260	ORION 97	SLC41	CC	SLC41	-	-	-	36306	-	-
2014-030	2456800-65	2014 May 22 1039:00	Atlas V 401	-	AV-046	GFS II F-7	GFS SVN 68	SLC41	CC	SLC41	-	-	-	36359	-	-
2014-046	2456863-27	2014 Aug 17 0350:30	Atlas V 401	-	AV-047	WorldView-3	WorldView-3	SLC41	VS	SLC41	-	-	-	43300	-	-
2014-058	2456917-51	2014 Sep 17 0830:30	Atlas V 401	-	AV-049	CLIVIEW-3	CLIVIEW-3	SLC41	VS	SLC41	-	-	-	150000	-	-
2014-065	2456960-22	2014 Oct 29 1721:00	Atlas V 401	-	AV-050	GFS II F-8	GFS SVN 69	SLC41	CC	SLC41	-	-	-	35872	-	-
2014-081	2457004-64	2014 Dec 13 0319:29	Atlas V 541	-	AV-051	USA 269	ADV TRUMPET 37	SLC41	VS	SLC41	-	-	-	21474	-	-
2015-002	2457043-54	2015 Jan 21 0144:00	Atlas V 541	-	AV-052	MOIS 3	MOIS 3	SLC41	CC	SLC41	-	-	-	36128	-	-
2015-011	2457084-61	2015 Mar 13 0244	Atlas V 431	-	AV-053	WMS 1-4	WMS 1-4	SLC41	CC	SLC41	-	-	-	150000	-	-
2015-025	2457163-13	2015 May 20 1504:00	Atlas V 501	-	AV-054	X-37B OTV FLT-4	X-37B No. 27	SLC41	CC	SLC41	-	-	-	701	-	-
2015-033	2457219-13	2015 Jul 15 1536:00	Atlas V 401	-	AV-055	GFS II F-10	GFS SVN 72	SLC41	CC	SLC41	-	-	-	21724	-	-
2015-044	2457267-93	2015 Sep 2 1018:00	Atlas V 401	-	AV-056	MOIS 4	MOIS 4	SLC41	CC	SLC41	-	-	-	36146	-	-
2015-056	2457297-94	2015 Oct 8 1038:30	Atlas V 431	-	AV-058	WorldView-3	WorldView-3	SLC41	VS	SLC41	-	-	-	35816	-	-
2015-068	2457304-03	2015 Dec 1 1249	Atlas V 401	-	AV-059	NR01-55	INTRUDER	SLC41	VS	SLC41	-	-	-	1205	-	-
2015-072	2457327-18	2015 Dec 31 1613	Atlas V 401	-	AV-060	GFS II F-11	GFS SVN 73	SLC41	CC	SLC41	-	-	-	21734	-	-
2015-077	2457363-41	2015 Dec 6 2144:57	Atlas V 401	-	AV-061	S. S. Duke Slayton II	S. S. Duke Slayton II	SLC41	CC	SLC41	-	-	-	418	-	-
2015-019	2457420-07	2016 Feb 5 1338:00	Atlas V 401	-	AV-062	GFS II F-12	GFS SVN 74	SLC41	CC	SLC41	-	-	-	21475	-	-
2015-041	2457564-10	2016 Mar 23 0305:52	Atlas V 551	-	AV-064	MOIS 5	MOIS 5	SLC41	CC	SLC41	-	-	-	769	-	-
2015-047	2457588-03	2016 Jun 24 1430:00	Atlas V 421	-	AV-065	USA 269	QUASAR 197	SLC41	CC	SLC41	-	-	-	35986	-	-
2015-065	2457604-27	2016 Sep 8 2305	Atlas V 411	-	AV-067	OSTRIS-REX	OSTRIS-REX	SLC41	CC	SLC41	-	-	-	150000	-	-
2015-077	2457704-20	2016 Nov 11 1830:33	Atlas V 401	-	AV-068	WorldView-4	WorldView-4	SLC41	VS	SLC41	-	-	-	35798	-	-
2015-079	2457712-49	2016 Nov 19 2342:00	Atlas V 541	-	AV-071	Echostar 19	Echostar 19 (Jupiter 2)	SLC41	CC	SLC41	-	-	-	65264	-	-
2017-004	2457774-53	2017 Mar 1 1749:51	Atlas V 401	-	AV-068	SBIRS GEO-3	SBIRS GEO-3	SLC41	CC	SLC41	-	-	-	35956	-	-
2017-011	2457814-24	2017 Mar 1 1749:51	Atlas V 401	-	AV-068	SBIRS GEO-3	SBIRS GEO-3	SLC41	CC	SLC41	-	-	-	1204	-	-
2017-019	2457862-13	2017 Apr 18 1511:26	Atlas V 401	-	AV-070	TDMS 13	TDMS 13	SLC41	CC	SLC41	-	-	-	491	-	-
2017-047	2457984-02	2017 Aug 18 1229	Atlas V 401	-	AV-074	GFS II F-13	GFS SVN 75	SLC41	CC	SLC41	-	-	-	35914	-	-
2017-066	2458020-74	2017 Sep 24 0549:47	Atlas V 541	-	AV-075	USA 278	Adv TRUMPET 47	SLC41	VS	SLC41	-	-	-	39266	-	-
2018-009	2458041-81	2017 Oct 15 0728	Atlas V 421	-	AV-072	USA 279	QUASAR									

Launch

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Mission	FlightCode	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee km	Range km	Deet
2021-042	2459353.23	2021 May 18 1737	Atlas V 421	C1	AV-091	SBIRS GEO-5 Landsat 9 Lucy	SBIRS GEO-5 Landsat 9 Lucy	-	-	CC	SLC41	-	-	36825	-	-
2021-088	2459485.26	2021 Sep 27 1812:00	Atlas V 401	C	AV-092	Lucy	Lucy	-	-	VSPBS	SLC3E	-	-	703	-	-
2021-093	2459503.90	2021 Oct 16 0934:00	Atlas V 401	C	AV-096	STP-3	STPSAT-6/LDPE-1	-	-	CC	SLC41	-	-	150000	-	-
2021-118	2459555.93	2021 Dec 7 1019	Atlas V 511	G	AV-093	GSSAP 5/6	GSSAP 5/6	USSF-8	-	CC	SLC41	-	-	36654	-	-
2022-006	2459601.29	2022 Jan 21 1900:00	Atlas V 511	G	AV-084	GSSAP 5/6	GSSAP 5/6	USSF-8	-	CC	SLC41	-	-	38470	-	-
2022-021	2459640.40	2022 Mar 1 2138:00	Atlas V 541	G	AV-095	GDES T	GDES T	-	-	CC	SLC41	-	-	35962	-	-
2022-065	2459719.45	2022 May 19 2254:47	Atlas V M22	-	AV-082	Starliner OFT-2	Starliner SC2	USSF-12	-	CC	SLC41	-	-	422	-	-
2022-073	2459762.47	2022 Jul 1 2315:00	Atlas V 541	G	AV-094	USSF-12	Starliner SC2	USSF-12	-	CC	SLC41	-	-	40060	-	-
2022-092	2459795.94	2022 Aug 4 1029:00	Atlas V 421	G1	AV-097	SBIRS GEO-6	SBIRS GEO-6	-	-	CC	SLC41	-	-	35799	-	-
2022-123	2459857.40	2022 Oct 4 2136:00	Atlas V 421	G1	AV-098	SES-20/SES-21	SES-20/SES-21	-	-	CC	SLC41	-	-	-	-	-
2022-140	2459893.91	2022 Nov 10 0949:00	Atlas V 531	G1	AV-099	JPS-2/LOFTID	JPS-2/LOFTID	-	-	VSPBS	SLC41	-	-	-	-	-
2023-150	2460196.03	2023 Sep 10 1247:00	Atlas V 561	G	AV-098	SILENT BARKER	SILENT BARKER	RR0L-107	-	CC	SLC41	-	-	-	-	-
2023-164	2460224.25	2023 Oct 6 1806:00	Atlas V 561	G	AV-102	SILENT BARKER	SILENT BARKER	RR0L-107	-	CC	SLC41	-	-	-	-	-
2024-109	2460467.12	2024 Jun 5 1462:16	Atlas V M22	-	AV-104	Kuiper Procrilight	KuiperSat-1/2	-	-	CC	SLC41	-	-	-	-	-
2024-134	2460521.96	2024 Jul 30 1045	Atlas V 561	G	AV-101	Starliner CFT	Starliner SC3	-	-	CC	SLC41	-	-	-	-	-



Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	OrbPay_t	Agency	Launch_Code	Group	Category	LTCite	Cite	Notes
2002-038	2452508.42	2002 Aug 21 2205:00	Atlas V 401	-	AV-001	3.905	ILSL	OS	C	Sat GTD 0	Wire	-	-
2003-020	2452773.42	2003 May 13 2210:00	Atlas V 401	-	AV-002	3.250	ILSL	OS	C	Sat STD 0	Wire	-	-
2003-033	2452838.49	2003 Jul 17 2345:01	Atlas V 521	-	AV-003	4.328	ILSL	OS	C	Sat STD 0	Wire	-	-
2004-048	2453357.00	2004 Dec 17 2102:00	Atlas V 521	-	AV-004	4.065	ILSL	OS	C	Sat STD 0	Wire	-	-
2005-009	2453441.40	2005 Mar 11 2142:00	Atlas V 431	-	AV-005	5.940	ILSL	OS	C	Sat STD 0	Wire	-	-
2005-029	2453594.99	2005 Aug 12 1143:00	Atlas V 401	-	AV-007	2.180	ILSL	DS	CG/G	Sat STD E	Wire	-	-
2006-001	2453755.29	2006 Jan 19 1900:00	Atlas V 551	-	AV-010	2.619	ILSL	DS	CG/G	Sat STD E	Wire	-	-
2006-012	2453846.35	2006 Apr 20 2027:00	Atlas V 411	-	AV-008	4.332	ILSL	OS	C	Sat STD 0	Wire	-	-
2007-006	2454168.63	2007 Mar 9 0310:00	Atlas V 401	-	AV-013	2.245	ILSL	OS	CG/G	Sat STD 0	Wire	-	-
2007-027	2454267.13	2007 Jun 15 1512:00	Atlas V 401	-	AV-009	2.000	ILSL	OS/75	CG/G	Sat STD 0	Wire	-	-
2007-046	2454384.52	2007 Oct 11 0022:00	Atlas V 421	-	AV-011	5.768	ILSL	OS	CG/G	Sat STD 0	Wire	-	-
2007-060	2454445.42	2007 Dec 10 2205:00	Atlas V 401	-	AV-015	3.000	ILSL	OS	CG/G	Sat STD 0	Wire	-	-
2008-010	2454658.92	2008 Mar 13 1002:00	Atlas V 411	-	AV-006	4.000	ILSL	OS	CG/G	Sat STD 0	Wire	-	-
2008-016	2454671.34	2008 Apr 14 2012:00	Atlas V 421	-	AV-014	6.600	ILSL	OS	CG/G	Sat STD 0	Wire	-	-
2009-017	2454925.52	2009 Apr 4 0031:00	Atlas V 421	-	AV-016	5.768	ILSL	OS	CG/G	Sat STD 0	Wire	-	-
2009-031	2455001.40	2009 Jun 18 2132:00	Atlas V 401	-	AV-020	2.807	ILSL	DS	CG/G	Sat STD 0	Wire	-	-
2009-047	2455083.40	2009 Sep 8 2135:00	Atlas V 401	-	AV-017	3.000	ILSL	DS	CG/G	Sat STD 0	Wire	-	-
2009-057	2455123.18	2009 Oct 18 1612:01	Atlas V 401	-	AV-024	5.663	ILSL	DS	C	Sat STD 0	Wire	-	-
2009-064	2455158.79	2009 Nov 23 0655:00	Atlas V 431	-	AV-021	3.100	ILSL	DS	CG/G	Sat STD 0	Wire	-	-
2010-005	2455239.14	2010 Feb 11 1523:00	Atlas V 501	-	AV-012	5.000	ILSL	DS	CG/G	Sat STD 0	Wire	-	-
2010-015	2455309.49	2010 Apr 22 2352:00	Atlas V 501	-	AV-019	6.200	ILSL	DS	CG/G	Sat STD 0	Wire	-	-
2010-039	2454422.96	2010 Aug 14 1107:00?	Atlas V 551	-	AV-025	7.000	ILSL	DS	CG/G	Sat STD 0	Wire	-	-
2010-046	2454600.87	2010 Sep 21 0403:30	Atlas V 501	-	AV-028	5.000	ILSL	DS	CG/G	Sat STD 0	Wire	-	-
2011-014	2455626.45	2011 Apr 5 0424:10	Atlas V 411	-	AV-027	2.000	ILSL	DS	CG/G	Sat STD 0	Wire	-	-
2011-019	2455666.68	2011 Apr 7 1610:00	Atlas V 401	-	AV-029	4.500	ILSL	DS	CG/G	Sat STD 0	Wire	-	-
2011-040	2455779.18	2011 Aug 5 1625:00	Atlas V 551	-	AV-030	3.625	ILSL	DS	CG/G	Sat STD 0	Wire	-	-
2011-070	2455892.43	2011 Nov 26 1502:00	Atlas V 541	-	AV-035	3.859	ILSL	DS	CG/G	Sat STD 0	Wire	-	-
2012-009	2455962.13	2012 Feb 24 2215:00	Atlas V 541	-	AV-030	6.740	ILSL	DS	CG/G	Sat STD 0	Wire	-	-
2012-019	2456052.28	2012 May 4 1642:00	Atlas V 531	-	AV-031	6.200	ILSL	DS	CG/G	Sat STD 0	Wire	-	-
2012-033	2456099.02	2012 Jun 20 1228:00	Atlas V 401	-	AV-032	4.300	ILSL	DS	CG/G	Sat STD 0	Wire	-	-
2012-046	2456169.94	2012 Sep 15 2139:00	Atlas V 401	-	AV-033	2.078	ILSL	DS	CG/G	Sat STD 0	Wire	-	-
2012-066	2456184.40	2012 Dec 11 1803:00	Atlas V 401	-	AV-034	5.000	ILSL	DS	CG/G	Sat STD 0	Wire	-	-
2012-071	2456273.28	2013 Jan 31 0146:00	Atlas V 501	-	AV-035	4.494	ILSL	DS	CG/G	Sat STD 0	Wire	-	-
2013-004	2456323.58	2013 Feb 11 1802:00	Atlas V 401	-	AV-036	2.762	ILSL	DS	CG/G	Sat STD 0	Wire	-	-
2013-008	2456356.28	2013 Mar 19 2121:00	Atlas V 401	-	AV-037	4.500	ILSL	DS	CG/G	Sat STD 0	Wire	-	-
2013-011	2456371.39	2013 Mar 19 1500:00	Atlas V 401	-	AV-039	1.650	ILSL	DS	CG/G	Sat STD 0	Wire	-	-
2013-023	2456428.40	2013 May 15 2138:00	Atlas V 401	-	AV-040	6.740	ILSL	DS	CG/G	Sat STD 0	Wire	-	-
2013-036	2456493.94	2013 Sep 18 0810:00	Atlas V 551	-	AV-041	6.200	ILSL	DS	CG/G	Sat STD 0	Wire	-	-
2013-060	2456553.54	2013 Nov 18 1826:00	Atlas V 401	-	AV-044	7.454	ILSL	DS	CG/G	Sat STD 0	Wire	-	-
2013-069	2456583.94	2013 Sep 18 0810:00	Atlas V 501	-	AV-042	3.076	ILSL	DS	CG/G	Sat STD 0	Wire	-	-
2013-072	2456615.27	2013 Dec 6 0734:30	Atlas V 501	-	AV-043	3.954	ILSL	DS	CG/G	Sat STD 0	Wire	-	-
2014-004	2456691.61	2014 Apr 5 1445:30	Atlas V 401	-	AV-044	3.223	ILSL	DS	CG/G	Sat STD 0	Wire	-	-
2014-005	2456781.12	2014 Apr 10 1746:00	Atlas V 541	-	AV-045	3.860	ILSL	DS	CG/G	Sat STD 0	Wire	-	-
2014-007	2456786.24	2014 Apr 10 1746:00	Atlas V 401	-	AV-046	1.300	ILSL	DS	CG/G	Sat STD 0	Wire	-	-
2014-046	2456871.94	2014 Aug 5 0320:00	Atlas V 401	-	AV-047	2.663	ILSL	DS	CG/G	Sat STD 0	Wire	-	-
2014-048	2456883.51	2014 Aug 17 0830:30	Atlas V 401	-	AV-048	3.615	ILSL	DS	CG/G	Sat STD 0	Wire	-	-
2014-055	2456917.71	2014 Sep 19 1731:00	Atlas V 401	-	AV-049	3.500	ILSL	DS	CG/G	Sat STD 0	Wire	-	-
2014-068	2456960.22	2014 Oct 29 0319:29	Atlas V 541	C	AV-050	4.650	ILSL	DS	CG/G	Sat STD 0	Wire	-	-
2014-088	2457004.54	2015 Dec 31 0134:00	Atlas V 541	C	AV-051	6.800	ILSL	DS	CG/G	Sat STD 0	Wire	-	-
2015-001	2457043.64	2015 Jan 13 0134:00	Atlas V 421	C	AV-052	5.440	ILSL	DS	CG/G	Sat STD 0	Wire	-	-
2015-011	2457057.81	2015 Jan 13 0204:00	Atlas V 421	C	AV-053	5.440	ILSL	DS	CG/G	Sat STD 0	Wire	-	-
2015-025	2457163.13	2015 Mar 20 1555:00	Atlas V 501	C	AV-054	7.097	ILSL	DS	CG/G	Sat STD 0	Wire	-	-
2015-033	2457219.15	2015 Jun 15 1536:00	Atlas V 401	C	AV-055	1.630	ILSL	DS	CG/G	Sat STD 0	Wire	-	-
2015-044	2457249.07	2015 Sep 2 1018:00	Atlas V 401	C	AV-056	6.800	ILSL	DS	CG/G	Sat STD 0	Wire	-	-
2015-056	2457267.94	2015 Sep 2 1018:00	Atlas V 421	C	AV-057	5.400	ILSL	DS	CG/G	Sat STD 0	Wire	-	-
2015-058	2457304.03	2015 Oct 8 1249:00	Atlas V 421	C	AV-058	4.097	ILSL	DS	CG/G	Sat STD 0	Wire	-	-
2015-062	2457327.18	2015 Oct 31 1613:00	Atlas V 401	C	AV-059	1.630	ILSL	DS	CG/G	Sat STD 0	Wire	-	-
2015-072	2457363.41	2015 Dec 8 2144:57	Atlas V 401	C	AV-061	11.270	ILSL	DS	CG/G	Sat STD 0	Wire	-	-
2016-007	2457424.97	2016 Feb 8 1339:00	Atlas V 401	C	AV-057	1.630	ILSL	DS	CG/G	Sat STD 0	Wire	-	-
2016-019	2457470.63	2016 Mar 23 0305:52	Atlas V 401	C	AV-064	11.253	ILSL	DS	CG/G	Sat STD 0	Wire	-	-
2016-041	2457564.10	2016 Jun 24 1430:00	Atlas V 551	C	AV-063	6.800	ILSL	DS	CG/G	Sat STD 0	Wire	-	-
2016-047	2457598.03	2016 Jul 28 1237:00	Atlas V 421	C	AV-065	5.600	ILSL	DS	CG/G	Sat STD 0	Wire	-	-
2016-055	2457640.46	2016 Sep 8 2305:00	Atlas V 411	C	AV-067	2.157	ILSL	DS	CG/G	Sat STD 0	Wire	-	-
2016-071	2457704.97	2016 Nov 11 1830:33	Atlas V 401	C	AV-062	2.105	ILSL	DS	CG/G	Sat STD 0	Wire	-	-
2016-071	2457712.49	2016 Nov 19 2342:00	Atlas V 401	C	AV-069	5.192	ILSL	DS	CG/G	Sat STD 0	Wire	-	-
2017-004	2457741.30	2016 Dec 18 1913:00	Atlas V 431	C	AV-071	6.675	ILSL	DS	C	Sat STD 0	Wire	-	-
2017-011	2457814.24	2017 Mar 1 1749:51	Atlas V 401	C	AV-066	4.500	ILSL	DS	CG/G	Sat STD 0	Wire	-	-
2017-047	2457984.02	2017 Apr 18 1511:26	Atlas V 401	C	AV-070	2.000	ILSL	DS	CG/G	Sat STD 0	Wire	-	-
2017-047	2457984.02	2017 Apr 18 1229:00	Atlas V 401	C	AV-072	3.454	ILSL	DS	CG/G	Sat STD 0	Wire	-	-
2017-056	2458020.74	2017 Sep 24 0549:47	Atlas V 421	C	AV-074	4.000	ILSL	DS	CG/G	Sat STD 0	Wire	-	-
2017-066	2458041.81	2017 Oct 15 0728:00	Atlas V 411	C	AV-075	5.600	ILSL	DS	CG/G	Sat STD 0	Wire	-	-
2018-009	2458138.53	2018 Jan 20 0048:00	Atlas V 541	C	AV-077	4.500	ILSL	DS	CG/G	Sat STD 0	Wire	-	-
2018-022	2458179.42	2018 Mar 1 2202:00	Atlas V 421	C	AV-078	4.000	ILSL	DS	CG/G	Sat STD 0	Wire	-	-
2018-042	2458223.47	2018 Apr 14 2313:00	Atlas V 551	C	AV-073	6.200	ILSL	DS	CG/G	Sat STD 0	Wire	-	-
2018-042	2458243.96	2018 Apr 15 1105:01	Atlas V 401	C	AV-079	4.000	ILSL	DS	CG/G	Sat STD 0	Wire	-	-
2019-051	2458703.93	2019 Dec 17 0415:00	Atlas V 551	C	AV-074	6.200	ILSL	DS	CG/G	Sat STD 0	Wire	-	-
2019-051	2458703.93	2019 Dec 20 1136:43	Atlas V 411	C	AV-083	12.000	ILSL	DS	CG/G	Sat STD 0	Wire	-	-
2020-010	2458688.67	2020 Feb 10 0403:00	Atlas V 501	C	AV-087	1.800	ILSL	DS	CG/06	Sat STD 0	Wire	-	-
2020-022	2458935.35	2020 Mar 26 2018:00	Atlas V 551	C	AV-086	6.220	ILSL	DS	CG/G	Sat STD 0	Wire	-	-
2020-029	2458987.05	2020 May 17 1314:00	Atlas V 501	C	AV-081	6.780	ILSL	DS	CG/G	Sat STD 0	Wire	-	-
2020-052	2459060.99	2020 Jul 30 1150:00	Atlas V 541	C	AV-088	3.965	ILSL	DS	CG/G	Sat STD 0	Wire	-	-
2020-083	2459167.44	2020 Nov 13 2232:00	Atlas V 531	G	AV-090	7.000	ILSL	DS	CG/G	Sat STD 0	Wire	-	-

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Launch_t	Agency	Launch_Code	Group	Category	LTCite	Cite	Notes
2021-042	2459553.23	2021 May 18 1737	At.las V 421	C1	AV-091	4.560	U/LAL	OS	CG/G	Sat GTU D	Wire	-	-
2021-088	2459486.26	2021 Sep 27 1812:00	At.las V 401	C	AV-092	2.910	U/LAL	OS	CG/G	Sat SSD D	Wire	-	-
2021-093	2459503.90	2021 Oct 16 0934:00	At.las V 401	C	AV-096	1.550	U/LAL	DS	CG/G	Sat SSD E	Wire	-	-
2021-118	2459556.93	2021 Dec 7 1019	At.las V 551	G	AV-093	1.525	U/LAL	OS	CG/G	Sat EDD 0 1	Wire	-	-
2022-006	2459601.29	2022 Jan 21 1900:00	At.las V 511	G	AV-094	1.000	U/LAL	OS	CG/G	Sat GED 0	Wire	-	-
2022-021	2459640.40	2022 Mar 1 2138:00	At.las V 541	G	AV-095	5.209	U/LAL	OS	CG/G	Sat GTU 0	Wire	-	-
2022-055	2459719.45	2022 May 19 2254:47	At.las V R22	-	AV-082	12.000	U/LAL	OS	CX/C	Sat ISS D	Wire	-	-
2022-073	2459762.37	2022 Jul 1 2315:00	At.las V 541	G	AV-094	3.700	U/LAL	OS	CG/G	Sat GED 0 1	Wire	-	-
2022-092	2459795.94	2022 Aug 4 1029:00	At.las V 421	G1	AV-097	4.500	U/LAL	OS	CG/G	Sat GTU 0	Wire	-	-
2022-123	2459857.40	2022 Oct 4 2136:00	At.las V 531	G1	AV-098	3.267	U/LAL	OS	CG/G	Sat GED 0	Wire	-	-
2022-160	2459893.91	2022 Nov 10 0949:00	At.las V 401	C	AV-098	4.220	U/LAL	OS	CG/G	Sat SSD D	Wire	-	-
2023-140	2460198.03	2023 Sep 10 1247:00	At.las V 551	G	AV-102	3.600	U/LAL	DS	CG/G	Sat GED 0	Wire	-	-
2023-154	2460224.25	2023 Oct 6 1806:00	At.las V 501	-	AV-104	1.200	U/LAL	DS	CG/C	Sat LED E	Wire	-	-
2024-109	2460467.12	2024 Jun 5 1452:15	At.las V R22	-	AV-085	12.000	U/LAL	OS	CX/C	Sat ISS D	Wire	-	-
2024-134	2460521.95	2024 Jul 30 1045	At.las V 551	G	AV-101	5.000	U/LAL	OS	CG/G	Sat GED 0	Wire	-	-



Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Mission	FlightCode	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee Km	Range Km	Dest
1964-W128	2438876.50	1964 Jul	Aurore	-	1	-	-	-	-	HMG	-	-	-	607	-	-
1966-W373	2439448.20	1966 Nov 18 1644:00	Aurore	?	-	-	-	-	-	HMG	-	-	-	507	-	-
1966-W374	2439449.20	1966 Nov 19 1644:00	Aurore	?	-	-	-	-	-	HMG	-	-	-	507	-	-
1966-W375	2439450.20	1966 Nov 20 1653:00	Aurore	?	-	-	-	-	-	HMG	-	-	-	507	-	-
1967-A148	2439619.16	1967 May 8 1547	Aurore	-	-	-	-	-	-	CERES	-	-	-	0	-	-
1967-A149	2439620.25	1967 May 9 1757	Aurore	-	-	-	-	-	-	CERES	-	-	-	0	-	-
1967-A150	2439621.99	1967 May 11 1147	Aurore	-	-	-	-	-	-	CERES	-	-	-	0	-	-





Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Orbit	Agency	Launch_Code	Group	Category	LTCite	Cite	Notes
1964-A128	2438576.50	1964 Jul	Aurora	-	1	0.000	MIF	SU	ONERA/	Aeron	Moulin/Serra	-	-
1966-W373	2439448.20	1966 Nov 18 1644:00	Aurora	?	-	0.000	CHES?	SU	ONERA/	Aeron	WDRP	-	-
1966-W374	2439449.20	1966 Nov 19 1644:00	Aurora	?	-	0.000	CHES?	SU	ONERA/	Aeron	WDRP	-	-
1966-W375	2439450.20	1966 Nov 20 1653:00	Aurora	?	-	0.000	CHES?	SU	ONERA/	Aeron	WDRP	-	-
1967-A148	2439619.16	1967 May 8 1547	Aurora	-	-	0.000	ONERA	SF	ONERA/	Aeron	Serra,pc	-	-
1967-A149	2439620.25	1967 May 9 1757	Aurora	-	-	0.000	ONERA	SF	ONERA/	Aeron	Serra,pc	-	-
1967-A150	2439621.99	1967 May 11 1147	Aurora	-	-	0.000	ONERA	SF	ONERA/	Aeron	Serra,pc	-	-



Launch

Launch_Tag	Launch_ID	Launch_Date	L_V_Type	Variant	Flight_ID	Flight	Mission	FlightCode	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee km	Range km	Deat
1967-A172	2439761.50	1967 Sep 28	D-21B	-	501	Accidental launch	-	-	B-52H-T	AS1	RM14/32	AS1	X1	107	0	-
1967-A164	2439800.50	1967 Nov 6	D-21B	-	507	Initial Test Series 1	-	-	B-52H-T	AS1	RM14/32	MTR	LP6	26	248	-
1967-A165	2439826.50	1967 Dec 2	D-21B	-	509	Initial Test Series 2	-	-	B-52H-T	AS1	RM14/32	MTR	LP6	26	2648	-
1968-A133	2439874.50	1968 Jan 19	D-21B	-	508	Initial Test Series 3	-	-	B-52H-T	AS1	RM14/32	MTR	LP6	26	518	-
1968-A134	2439976.50	1968 Apr 30	D-21B	-	511	Initial Test Series 4	-	-	B-52H-T	AS1	RM14/32	MTR	LP6	26	278	-
1968-A135	2440024.32	1968 Jun 16 1934	D-21B	-	512	Initial Test Series 5	-	-	B-52H-T	AS1	RM14/32	MTR	LP6	27	5278	-
1968-A136	2440039.21	1968 Jul 1 1700	D-21B	-	514	Capt Hook I	-	-	B-52H-T	AS1	RM14/32	KA07	LP4	26	148	-
1968-A137	2440096.50	1968 Aug 28	D-21B	-	516	Capt Hook II	-	-	B-52H-T	AS1	RM14/32	KA07	LP4	26	144	-
1968-A138	2440205.50	1968 Dec 15	D-21B	-	515	Capt Hook III	-	-	B-52H-T	AS1	RM14/32	KA07	LP4	26	5469	-
1969-A222	2440263.50	1969 Feb 11	D-21B	-	518	Capt Hook IV	-	-	B-52H-T	AS1	RM14/32	KA07	LP4	26	298	-
1969-A223	2440352.42	1969 May 10 2202	D-21B	-	519	Capt Hook V	-	-	B-52H-T	BEALE	RM15/33	KAU?	LP4	28	5504	-
1969-A224	2440413.41	1969 Jul 10 2156	D-21B	-	520	Capt Hook VI	-	-	B-52H-T	BEALE	RM15/33	KAU?	LP4	28	5439	-
1969-A225	2440535.50	1969 Nov 10	D-21B	-	517	SEILUR BOWL 02	-	South China op test	B-52H-T	GUMA	RM06L/2AR?	PHLDZ	-	26	-	-
1970-A178	2440637.50	1970 Feb 20	D-21B	-	521	LONG DRIVE	-	-	B-52H-T	BEALE	RM15/33	KAU?	LP4	29	5498	-
1971-A179	2440937.50	1970 Dec 17 0004	D-21B	-	523	SEILUR BOWL 04	-	South China	B-52H-T	GUMA	RM06L/2AR?	PHLDZ	-	26	4694	-
1971-A224	2441014.50	1971 Mar 4	D-21B	-	526	SEILUR BOWL	-	-	B-52H-T	GUMA	RM06L/2AR?	PHLDZ	-	26	5435	-
1971-A225	2441030.50	1971 Mar 20	D-21B	-	527	SEILUR BOWL	-	Lop Nor, shot down	B-52H-T	GUMA	RM06L/2AR?	PHLDZ?	-	26	5435	-



Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Agency	Launch_Code	Group	Category	LTcite	Cite	Notes
1967-A172	2438761.50	1967 Sep 28	D-21B	-	501	LAC/NRODD	MF	-	Test	wvi.com	-	-
1967-A164	2438900.50	1967 Nov 6	D-21B	-	507	LAC/NRODD	RS	-	Test	NRO	-	-
1967-A165	2438926.50	1967 Dec 2	D-21B	-	509	LAC/NRODD	RS	-	Test	NRO	-	-
1968-A133	2438974.50	1968 Jan 19	D-21B	-	508	LAC/NRODD	RS	-	Test	NRO	-	-
1968-A134	2438976.50	1968 Apr 30	D-21B	-	511	LAC/NRODD	RS	-	Test	NRO	-	-
1968-A136	2440024.32	1968 Jun 16 1934	D-21B	-	512	LAC/NRODD	RS	-	Test	NRO	-	-
1968-A137	2440039.21	1968 Jul 1 1700	D-21B	-	514	LAC/NRODD	RS	-	Test	NRO	-	-
1968-A138	2440096.50	1968 Aug 28	D-21B	-	516	LAC/NRODD	RS	-	Test	NRO	-	-
1968-A139	2440205.50	1968 Dec 15	D-21B	-	515	NRODD	RS	-	Test	NRO	-	-
1969-A222	2440283.50	1969 Feb 11	D-21B	-	518	NRODD	RS	-	Test	NRO	-	-
1969-A223	2440352.42	1969 May 10 2202	D-21B	-	519	NRODD	RS	-	Test	NRO	-	-
1969-A224	2440413.41	1969 Jul 10 2156	D-21B	-	520	NRODD	RS	-	Test	NRO	-	-
1970-A178	2440535.50	1970 Feb 20	D-21B	-	517	NRODD	RS	-	Test	NRO	-	-
1971-A224	2440537.50	1970 Dec 17 0004	D-21B	-	521	NRODD	RS	-	Test	NRO	-	-
1971-A225	2441014.50	1971 Mar 4	D-21B	-	526	NRODD	RS	-	Test	amarcoexperience.com	NRO	-
1971-A226	2441030.50	1971 Mar 20	D-21B	-	527	NRODD	RS	-	Test	wvi.com	-	-



Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Mission	Launch_Flightcode	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee km	Range km	Dest
2010-S01	2455207.99	2010 Jan 11 1150:00	B-611	-	ABM Target	CSS-X-11	-	-	-	JQ	-	-	-	250?	-	-
2013-S03	2456320.01	2013 Jan 27 1210?	B-611	?	ABM Target	-	-	-	-	JQ	-	-	-	100?	-	-
2014-S40	2456961.50	2014 Jul 23	B-611	?	ABM Target	-	-	-	-	JQ	-	-	-	100?	-	-
2015-S65	2457327.46	2015 Oct 31 2300?	B-611	?	ABM Target	-	-	-	-	JQ	-	-	-	100?	-	-
2016-S70	2457743.61	2016 Dec 21 0245?	B-611	?	-	-	Possible target	-	-	JQ	-	-	-	100?	-	KORLA?
2017-A139	2457934.50	2017 Jul?	TP 0.1	-	1	TP 0.1-1	Teknoloji Platformu	Bora-1?	-	SINOP	-	-	-	0?	-	Black Sea
2017-S59	2457958.08	2017 Jul 23 1400?	B-611	?	ABM Target	-	-	-	-	JQ	-	-	-	100?	-	-
2017-S111	2457753.50	2017	TP 0.2	-	2	TP 0.2-2	Teknoloji Platformu	-	-	SINOP	-	-	-	130	-	Black Sea
2018-S59	2458402.96	2018 Oct 11 1100	B-611	?	ABM Target?	-	-	-	-	JQ	-	-	-	100?	-	-
2018-S97	2458474.50	2018 Dec 22?	TP 0.2	-	3	TP 0.2-3	Teknoloji Platformu	-	-	SINOP	-	-	-	130?	-	Black Sea
2020-S38	2459146.50	2020 Oct 26?	SR 0.1	-	1	SR 0.1-1	Milli Sonda Roketi	-	-	SINOP	LP1B	-	-	130?	-	Black Sea
2020-S39	2459151.50	2020 Oct 29	SR 0.1	-	2	SR 0.1-2	Milli Sonda Roketi	-	-	SINOP	LP1B?	-	-	135	-	Black Sea
2021-S14	2459249.50	2021 Feb 4	B-611	?	ABM Target?	-	-	-	-	JQ	-	-	-	100?	-	-
2021-M03	2459363.50	2021 May 29	Bora-1	-	Bora-1	-	-	-	-	DEREC	-	-	-	40?	-	-
2021-M04	2459386.50	2021 Jun 21?	Bora-1	?	Bora-1	-	-	10th Mtn Commando Brig.	-	DEREC	-	-	-	40?	-	Kurdistan?
2021-S49	2459414.50	2021 Jul 19	SR 0.1	?	-	SR	Milli Sonda Roketi	-	-	SINOP	LP1B?	-	-	100?	-	Black Sea
2022-S104	2459870.67	2022 Oct 18 0400?	Tayrun	-	Tayrun	-	-	-	-	RIZE	-	-	-	100?	-	Black Sea
2022-S135	2459932.92	2022 Dec 19 1000?	B-611	?	ABM Target?	-	-	-	-	JQ	-	-	-	100?	-	-
2023-S17	2460046.50	2023 Apr 14	B-611	?	ABM Target?	-	-	-	-	JQ	-	-	-	100?	-	-





Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variants	Flight_ID	Agency	Launch_Code	Group	Category	LTCite	Cite	Notes
2010-S01	2455207.99	2010 Jan 11 1150:00	B-611	-	ABH Target	PLA2AC	MS	-	ABH	Wikileaks	-	-
2013-S03	2456320.01	2013 Jan 27 1210?	B-611	?	ABH Target	PLA2AC	MS	-	ABH	9fly.com	Wire	-
2014-S40	2456861.50	2014 Jul 23	B-611	?	ABH Target	PLA2AC	MS	-	ABH	Unconfirmed	-	-
2015-S65	2457327.46	2015 Oct 31 2300?	B-611	?	ABH Target	PLA2AC	MS	-	ABH	armscontrolhonk.com	-	-
2016-S70	2457743.61	2016 Dec 21 0245?	B-611	?	-	PLA2AC	MS	-	ABH	eastpendulum.com	-	-
2017-A139	2457994.50	2017 Jul?	TP 0.1	-	1	ROKSN	SF	-	Test	twitter.com	-	-
2017-S89	2457988.08	2017 Jul 23 1400?	B-611	?	ABH Target	PLA2AC	MS	-	ABH	lluqaanktt.blog.163	-	-
2017-S111	2457753.50	2017 Oct 11 1100	TP 0.2	?	2	ROKSN	SS	-	Test	twitter.com	-	-
2018-S89	2458402.96	2018 Dec 22?	B-611	?	ABH Target?	PLA2AC	MS	-	ABH	nasaapacflight.com	-	-
2020-S38	2458474.50	2020 Dec 22?	TP 0.2	-	3	ROKSN	SS	-	Test	twitter.com	-	-
2020-S39	2459149.50	2020 Oct 26?	SR 0.1	-	1	ROKSN	SS	-	Test	twitter.com	-	-
2021-S14	2459151.50	2020 Oct 29	SR 0.1	-	2	ROKSN	SS	-	Test	twitter.com	-	-
2021-M03	2459249.50	2021 Feb 4	B-611	?	ABH Target?	PLA2AC	MS	-	ABH	Wire	-	-
2021-M04	2459363.50	2021 May 29	Bora-1	-	Bora-1	TULF	MS	-	Test	armscontrolhonk.com	-	-
2021-S49	2459444.50	2021 Jun 21?	Bora-1	?	Bora-1	ROKSN	SS	-	Test	twitter.com	-	-
2022-S104	2459670.67	2021 Jul 19	SR 0.1	?	-	ROKSN	SS	-	Test	Wire	-	-
2022-S136	2459932.92	2022 Oct 18 0400?	Tayfun	-	Tayfun	PLA2AC	MS	-	ABH?	twitter.com	-	-
2023-S17	2460048.50	2022 Dec 19 1000?	B-611	?	ABH Target?	PLA2AC	MS	-	ABH	Wire	-	-
		2023 Apr 14	B-611	?	ABH Target?	PLA2AC	MS	-	ABH	Wire	-	-



Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Mission	FlightCode	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee Km	Range Km	Dest
1962-S185	2437631.34	1962 Jun 15 2014	Black Brant III	-	AA-3-1	BBS 01	-	-	-	WI	-	-	-	98	-	-
1962-S186	2437631.46	1962 Jun 15 2301	Black Brant III	-	AA-3-2	BBS 02	-	-	-	WI	-	-	-	92	-	-
1962-S189	2437634.50	1962 Jun 19	Black Brant III	-	AA-3-3	BBS 03	-	-	-	WI	-	-	-	100	-	-
1962-A102	2437643.50	1962 Jun 28	Black Brant III	-	AA-3-4	BBS 04	-	-	-	WI	-	-	-	13	-	-
1962-S559	2438012.14	1962 Dec 13 1520	Black Brant III	-	AA-3-5	BBS 05	-	-	-	WI	-	-	-	98	-	-
1962-S560	2438012.32	1962 Dec 13 1945	Black Brant III	-	AA-3-6	BBS 06	-	-	-	WI	-	-	-	90	-	-
1963-S315	2438211.50	1963 Jul 1	Black Brant III	-	AA-3-7	USN Eval 1	-	-	-	PA	LC-A	-	-	100	-	-
1963-S544	2438340.50	1963 Nov 7	Black Brant III	-	AA-3-8	USN Eval 3	-	-	-	PA	LC-A	-	-	116	-	-
1964-S221	2438360.50	1964 Apr 21 2356	Black Brant III	-	AA-3-9	BBS 09	-	-	-	FC	-	-	-	150	-	-
1965-S246	2438872.72	1965 Apr 22 0514	Black Brant III	-	AA-3-11	-	-	-	-	FC	-	-	-	136	-	-
1965-S248	2439103.06	1965 Apr 22 1521	Black Brant III	-	AA-3-11	-	-	-	-	FC	-	-	-	140	-	-
1966-S123	2439178.05	1966 Feb 21 1310	Black Brant III	-	NC7.181	-	-	-	-	EGL	-	-	-	178	-	-
1966-S124	2439178.33	1966 Feb 21 1957	Black Brant III	-	NC7.180	-	-	-	-	EGL	-	-	-	188	-	-
1966-S125	2439178.35	1966 Feb 21 2023	Black Brant III	-	NC7.178	-	-	-	-	EGL	-	-	-	196	-	-
1966-S581	2439326.71	1966 Jul 19 0500	Black Brant III	-	AF-3-14	-	-	-	-	RES	-	-	-	150	-	-
1966-S584	2439327.64	1966 Jul 21 0527	Black Brant III	-	AF-3-15	-	-	-	-	RES	-	-	-	150	-	-
1966-S461	2439364.35	1966 Aug 26 2030	Black Brant III	-	AF-3-13	-	-	-	-	FC	-	-	-	114	-	-
1966-S650	2439458.75	1966 Nov 29 0601	Black Brant III	-	AF-3-16	-	-	-	-	FC	-	-	-	140	-	-
1966-S679	2439472.30	1966 Dec 12 1919	Black Brant III	-	AF-3-12	-	-	-	-	FC	-	-	-	137	-	-
1967-S533	2439676.48	1967 Jul 4 2335	Black Brant III	-	ALF-3-18	-	-	-	-	FC	-	-	-	131	-	-
1967-S535	2439676.58	1967 Jul 5 0200	Black Brant III	-	ALF-3-19	-	-	-	-	FC	-	-	-	151	-	-
1967-S534	2439683.52	1967 Jul 12 0023	Black Brant III	-	ALF-3-20	-	-	-	-	FC	-	-	-	95	-	-
1967-S546	2439683.96	1967 Jul 12 1100	Black Brant III	-	ADP-3-24	-	-	-	-	FC	-	-	-	95	-	-
1967-S498	2439763.95	1967 Oct 20 1049	Black Brant III	-	ADP-3-26	-	-	-	-	RES	-	-	-	120?	-	-
1967-S500	2439765.90	1967 Oct 22 0942	Black Brant III	-	ADP-3-25	-	-	-	-	RES	-	-	-	156	-	-
1968-S525	2440137.71	1968 Oct 6 0607	Black Brant III	-	AF-3-27	-	-	-	-	RES	-	-	-	155	-	-
1968-S527	2440136.64	1968 Oct 9 0320	Black Brant III	-	AF-3-40	-	-	-	-	RES	-	-	-	140	-	-
1968-S562	2440161.37	1968 Oct 31 2056	Black Brant III	-	AF-3-31	-	-	-	-	FC	-	-	-	167	-	-
1968-S563	2440161.65	1968 Nov 1 0531	Black Brant III	-	AF-3-33	-	-	-	-	FC	-	-	-	138	-	-
1968-S569	2440179.57	1968 Nov 19 0138:30	Black Brant III	-	K-BB7/III-14	-	Kiruna-5	-	-	ESR	IV	-	-	288	-	-
1968-S591	2440179.69	1968 Nov 19 0429	Black Brant III	-	K-BB7/III-16	-	Kiruna-5	-	-	FC	-	-	-	168	-	-
1968-S619	2440194.42	1968 Dec 3 2158:00	Black Brant III	-	BES/2	-	-	-	-	FC	-	-	-	158	-	-
1968-S628	2440196.30	1968 Dec 4 1906	Black Brant III	-	DLR K-BB3-16	-	-	-	-	FC	-	-	-	170	-	-
1968-S626	2440196.44	1968 Dec 4 2228:30	Black Brant III	-	DLR K-BB3-15	-	-	-	-	FC	-	-	-	218	-	-
1969-S159	2440281.29	1969 Feb 28 1857	Black Brant IIIB	-	DLR K-BB3-15	-	-	-	-	FC	-	-	-	108	-	-
1969-S235	2440309.53	1969 Mar 29 0041	Black Brant III	-	02 IR profile	-	-	-	-	FC	-	-	-	114	-	-
1969-S237	2440310.00	1969 Mar 29 1158	Black Brant III	-	02 IR profile	-	-	-	-	FC	-	-	-	26	-	-
1969-S456	2440324.29	1969 Apr 12 1900	Black Brant III	-	AF-3-29	-	-	-	-	FC	-	-	-	192	-	-
1969-S514	2440343.27	1969 May 12 1626	Black Brant IIIB	-	WNSA 12.15CT	-	-	-	-	RES	-	-	-	197	-	-
1969-S577	2440319.75	1969 Oct 25 0600	Black Brant IIIB	-	AF-3B-50	-	-	-	-	RES	-	-	-	200?	-	-
1969-S578	2440220.78	1969 Oct 26 0640	Black Brant IIIB	-	AF-3B-51	-	-	-	-	RES	-	-	-	200?	-	-
1969-S576	2440226.94	1969 Nov 8 1028	Black Brant IIIB	-	AF-3B-48	-	-	-	-	RES	-	-	-	200?	-	-
1969-S618	2440250.56	1969 Nov 8 1416	Black Brant IIIB	-	AF-3B-49	-	-	-	-	RES	-	-	-	200?	-	-
1969-S614	2440559.25	1969 Dec 3 1842	Black Brant III	-	AF-3-47	-	-	-	-	FC	-	-	-	117	-	-
1970-S205	2440659.54	1970 Dec 7 2312	Black Brant III	-	AF-3-46	-	-	-	-	FC	-	-	-	152	-	-
1970-S206	2440659.54	1970 Mar 7 1650:41	Black Brant III	-	AF-3A-42	-	-	-	-	EQUUD	-	-	-	152	-	-
1970-S205	2440659.54	1970 Mar 7 1855:41	Black Brant III	-	AF-3A-43	-	-	-	-	EQUUD	-	-	-	158	-	-
1970-S205	2440659.54	1970 Mar 7 1855:41	Black Brant III	-	AF-3A-44	-	-	-	-	EQUUD	-	-	-	158	-	-
1970-S205	2440659.54	1970 Mar 7 1935:41	Black Brant III	-	AF-3A-44	-	-	-	-	EQUUD	-	-	-	158	-	-
1970-S205	2440659.54	1970 Mar 7 1935:41	Black Brant III	-	AF-3A-45	-	-	-	-	EQUUD	-	-	-	158	-	-
1971-S197	2441101.63	1971 Feb 28 0755	Black Brant III	-	AND-3A-41	-	-	-	-	FC	-	-	-	150?	-	-
1971-S433	2441101.63	1971 Feb 28 0755	Black Brant III	-	WNSA 27.02UE	-	-	-	-	RES	-	-	-	150?	-	-
1971-S434	2441101.63	1971 Sep 4 1342	Black Brant IIIB	-	WNSA 27.02UE	-	-	-	-	RES	-	-	-	150?	-	-
1972-S70	2441130.72	1972 Sep 15 0537	Black Brant III	-	AF-3B-53	-	-	-	-	CTLLAM	-	-	-	121	-	-
1972-S70	2441355.51	1972 Feb 8 0945	Black Brant III	-	ADP-3A-54	-	-	-	-	FC	-	-	-	119	-	-
1972-S131	2441397.96	1972 Feb 21 0837:58	Black Brant III	-	ADP-3A-54	-	-	-	-	FC	-	-	-	108	-	-
1972-S266	2441508.96	1972 Jul 10 1100	Black Brant III	-	ADP-3A-55	-	-	-	-	FC	-	-	-	115	-	-
1972-S269	2441508.96	1972 Jul 10 1960	Black Brant III	-	ADP-3A-56	-	-	-	-	FC	-	-	-	168	-	-
1972-S269	2441508.96	1972 Jul 10 1960	Black Brant III	-	ADP-3A-57	-	-	-	-	FC	-	-	-	103	-	-
1972-S269	2441508.96	1972 Jul 10 2026	Black Brant III	-	ADP-3A-58	-	-	-	-	FC	-	-	-	143	-	-
1972-S269	2441508.96	1972 Jul 10 2026	Black Brant III	-	ADP-3A-59	-	-	-	-	FC	-	-	-	144	-	-
1972-S269	2441508.96	1972 Jul 10 2026	Black Brant III	-	ADP-3A-60	-	-	-	-	EQUUD	-	-	-	144	-	-
1972-S269	2441508.96	1972 Jul 10 2139	Black Brant III	-	ADP-3A-61	-	-	-	-	EQUUD	-	-	-	144	-	-
1972-S269	2441508.96	1972 Jul 10 2139	Black Brant III	-	ADP-3A-62	-	-	-	-	EQUUD	-	-	-	152	-	-
1972-S269	2441508.96	1972 Jul 10 2139	Black Brant III	-	ADP-3A-63	-	-	-	-	EQUUD	-	-	-	165	-	-
1972-S269	2441508.96	1972 Dec 1 0123	Black Brant IIIB	-	AND-3B-67	-	-	-	-	FC	-	-	-	200	-	-
1973-S54	2441715.76	1973 Feb 22 0615	Black Brant IIIB	-	AND-3B-64	-	-	-	-	GILLAM	-	-	-	207	-	-
1973-S79	2441735.66	1973 Feb 22 0349	Black Brant IIIB	-	AND-3B-65	-	-	-	-	FC	-	-	-	190	-	-
1984-S88	2441737.81	1973 Feb 24 0720	Black Brant IIIB	-	ARS-3A-65	-	-	-	-	FC	-	-	-	103	-	-
1984-S88	2445831.97	1984 May 11 1122:31	Black Brant IIIB	-	ARS-3A-69	-	-	-	-	FC	-	-	-	103	-	-
1985-S74	2446192.45	1985 May 6 2245	Black Brant IIIB	-	ARS-3B-70	-	-	-	-	FC	-	-	-	114	-	-



Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	OrbPay	Agency	Launch_Code	Group	Category	LTCite	Cite	Notes
1962-S186	2437831.34	1962 Jun 15 2014	Black Brant III	-	AA-3-1	0.000	CARDE	SF	CARDE/	Test	UPI	CASJ20_386	-
1962-S186	2437831.46	1962 Jun 15 2301	Black Brant III	-	AA-3-2	0.000	CARDE	SF	CARDE/	Test	UPI	FI650107-14	-
1962-S186	2437834.50	1962 Jun 19	Black Brant III	-	AA-3-3	0.000	CARDE	SF	CARDE/	Test	FI650107-14	-	-
1962-A102	2437943.50	1962 Jun 28	Black Brant III	-	AA-3-4	0.000	CARDE	SF	CARDE/	Test	WI-P8621213	-	-
1962-S559	2438012.14	1962 Dec 13 1520	Black Brant III	-	AA-3-5	0.000	CARDE	SS	CARDE/	Test	WI-P8621213	HR621224-11	-
1962-S560	2438012.32	1962 Dec 13 1945	Black Brant III	-	AA-3-6	0.000	CARDE	SS	CARDE/	Test	WI-P8621213	HR621224-11	-
1963-S315	2438211.50	1963 Jul 1	Black Brant III	-	AA-3-7	0.000	RRL?	SS	RRL?	Test	VAFB	Bristol	-
1963-S315	2438240.50	1963 Nov 7	Black Brant III	-	AA-3-8	0.000	RRL?	SS	RRL?	Test	VAFB	Bristol	-
1964-S544	2438340.50	1964 Apr 21 2356	Black Brant III	-	FF-3-09	0.000	RRL?	SS	BAJ/Ruva	Test	FC	FI650107-14	-
1965-S245	2438672.72	1965 Dec 2 0514	Black Brant III	-	AA-3-11	0.000	RRL	SS	MCC/Budzinski	Auroral/Ionos	WDCRF	-	-
1965-S245	2439103.06	1965 Dec 8 1321	Black Brant III	-	AA-3-11	0.000	RRL	SS	MCC/Budzinski	Auroral/Ionos	WDCRF	-	-
1966-S123	2439178.05	1966 Feb 21 1310	Black Brant III	-	IC7-181	0.000	RRL	SS	MRL/Grobecker	Aeron	WDCRF	-	-
1966-S124	2439178.33	1966 Feb 21 1957	Black Brant III	-	IC7-180	0.000	RRL	SS	MRL/Grobecker	Aeron	WDCRF	-	-
1966-S125	2439178.35	1966 Feb 21 2023	Black Brant III	-	IC7-179	0.000	RRL	SS	MRL/Grobecker	Aeron	WDCRF	-	-
1966-S381	2439225.71	1966 Jul 21 0500	Black Brant III	-	IC7-178	0.000	RRL	SS	MRL/Brousseau	Aeron	WDCRF	-	-
1966-S384	2439227.64	1966 Jul 21 0327	Black Brant III	-	IC7-178	0.000	RRL	SS	MRL/Brousseau	Aeron	WDCRF	-	-
1966-S461	2439254.35	1966 Aug 26 2030	Black Brant III	-	AAF-3-15	0.000	RRL	SS	CALG/Wilson, Michimara	Ionos/Solar X	WDCRF	SrctCom6	-
1966-S461	2439254.35	1966 Aug 26 2030	Black Brant III	-	AAF-3-13	0.000	RRL	SS	CALG/Wilson, Michimara	Ionos/Solar X	WDCRF	SrctCom6	-
1966-S679	2439458.75	1966 Nov 29 0601	Black Brant III	-	AAF-3-12	0.000	RRL	SS	MCC/Meyer	Test/Aeron	FC	-	-
1966-S679	2439472.30	1966 Nov 29 0601	Black Brant III	-	AAF-3-12	0.000	RRL	SS	MCC/Meyer	Test/Aeron	FC	-	-
1967-S333	2439676.48	1967 Jul 4 2335	Black Brant III	-	ALF-3-18	0.000	RRL	SS	BMM/vonZahn	Plasma/Fields	FC	SR8-920	-
1967-S333	2439676.58	1967 Jul 4 2335	Black Brant III	-	ALF-3-18	0.000	RRL	SS	BMM/vonZahn	Plasma/Fields	FC	SR8-920	-
1967-S344	2439683.52	1967 Jul 12 0023	Black Brant III	-	ALF-3-19	0.000	RRL	SS	MFE/Zahringer	Aeron	FC	-	-
1967-S344	2439683.52	1967 Jul 12 0023	Black Brant III	-	ALF-3-19	0.000	RRL	SS	MFE/Zahringer	Aeron	FC	-	-
1967-S345	2439683.56	1967 Jul 12 1100	Black Brant III	-	ADP-3-24	0.000	RRL	SS	SASK/Llewellyn	Airglow IR	WDCRF	-	-
1967-S498	2439783.95	1967 Oct 20 1049	Black Brant III	-	ADP-3-25	0.000	RRL	SS	SASK/Llewellyn	Airglow IR	WDCRF	-	-
1967-S500	2439785.50	1967 Oct 22 0942	Black Brant III	-	ADP-3-26	0.000	RRL	SS	CALG/Baxter, Wilson	Ionos/AR Astron	WDCRF	SrctCom6	-
1968-S525	2440137.71	1968 Oct 8 0807	Black Brant III	-	AKF-3-27	0.000	RRL	SS	CALG/Baxter, Wilson	Ionos/AR Astron	WDCRF	SrctCom6	-
1968-S527	2440138.64	1968 Oct 9 0320	Black Brant III	-	AKF-3-40	0.000	RRL	SS	CALG/Baxter, Wilson	Ionos/AR Astron	WDCRF	SrctCom6	-
1968-S562	2440161.37	1968 Oct 31 0351	Black Brant III	-	AKF-3-39	0.000	RRL	SS	CALG/?	Ionos/CN/Solar X	WDCRF	-	-
1968-S562	2440161.65	1968 Oct 31 0351	Black Brant III	-	AKF-3-31	0.000	RRL	SS	SASK/Montebeetti, Wilson	Aeron/Ionos	WDCRF	-	-
1968-S569	2440179.57	1968 Nov 19 0138:30	Black Brant III	-	ADP-3-53	0.000	RRL	SS	SASK/Montebeetti, Anger	Aeron/Ionos/Plasma	WDCRF	SR10_766	-
1968-S569	2440179.57	1968 Nov 19 0429	Black Brant III	-	K-BB/111-14	0.000	DLA	SS	BMS/Heinrich, Reimer	Ionos/Plasma	Horaba	SR10_766	-
1968-S569	2440194.42	1968 Dec 3 2158:00	Black Brant III	-	K-BB/111-16	0.000	DLA	SS	SASK/Montebeetti	Ionos/Plasma	Horaba	SR10_766	-
1968-S569	2440194.42	1968 Dec 3 2158:00	Black Brant III	-	K-BB/111-16	0.000	DLA	SS	SASK/Montebeetti	Ionos/Plasma	Horaba	SR10_766	-
1968-S569	2440194.42	1968 Dec 3 2158:00	Black Brant III	-	K-BB/111-16	0.000	DLA	SS	SASK/Montebeetti	Ionos/Plasma	Horaba	SR10_766	-
1968-S569	2440194.42	1968 Dec 3 2158:00	Black Brant III	-	K-BB/111-16	0.000	DLA	SS	SASK/Montebeetti	Ionos/Plasma	Horaba	SR10_766	-
1968-S569	2440194.42	1968 Dec 3 2158:00	Black Brant III	-	K-BB/111-16	0.000	DLA	SS	SASK/Montebeetti	Ionos/Plasma	Horaba	SR10_766	-
1968-S569	2440194.42	1968 Dec 3 2158:00	Black Brant III	-	K-BB/111-16	0.000	DLA	SS	SASK/Montebeetti	Ionos/Plasma	Horaba	SR10_766	-
1968-S569	2440194.42	1968 Dec 3 2158:00	Black Brant III	-	K-BB/111-16	0.000	DLA	SS	SASK/Montebeetti	Ionos/Plasma	Horaba	SR10_766	-
1968-S569	2440194.42	1968 Dec 3 2158:00	Black Brant III	-	K-BB/111-16	0.000	DLA	SS	SASK/Montebeetti	Ionos/Plasma	Horaba	SR10_766	-
1968-S569	2440194.42	1968 Dec 3 2158:00	Black Brant III	-	K-BB/111-16	0.000	DLA	SS	SASK/Montebeetti	Ionos/Plasma	Horaba	SR10_766	-
1968-S569	2440194.42	1968 Dec 3 2158:00	Black Brant III	-	K-BB/111-16	0.000	DLA	SS	SASK/Montebeetti	Ionos/Plasma	Horaba	SR10_766	-
1968-S569	2440194.42	1968 Dec 3 2158:00	Black Brant III	-	K-BB/111-16	0.000	DLA	SS	SASK/Montebeetti	Ionos/Plasma	Horaba	SR10_766	-
1968-S569	2440194.42	1968 Dec 3 2158:00	Black Brant III	-	K-BB/111-16	0.000	DLA	SS	SASK/Montebeetti	Ionos/Plasma	Horaba	SR10_766	-
1968-S569	2440194.42	1968 Dec 3 2158:00	Black Brant III	-	K-BB/111-16	0.000	DLA	SS	SASK/Montebeetti	Ionos/Plasma	Horaba	SR10_766	-
1968-S569	2440194.42	1968 Dec 3 2158:00	Black Brant III	-	K-BB/111-16	0.000	DLA	SS	SASK/Montebeetti	Ionos/Plasma	Horaba	SR10_766	-
1968-S569	2440194.42	1968 Dec 3 2158:00	Black Brant III	-	K-BB/111-16	0.000	DLA	SS	SASK/Montebeetti	Ionos/Plasma	Horaba	SR10_766	-
1968-S569	2440194.42	1968 Dec 3 2158:00	Black Brant III	-	K-BB/111-16	0.000	DLA	SS	SASK/Montebeetti	Ionos/Plasma	Horaba	SR10_766	-
1968-S569	2440194.42	1968 Dec 3 2158:00	Black Brant III	-	K-BB/111-16	0.000	DLA	SS	SASK/Montebeetti	Ionos/Plasma	Horaba	SR10_766	-
1968-S569	2440194.42	1968 Dec 3 2158:00	Black Brant III	-	K-BB/111-16	0.000	DLA	SS	SASK/Montebeetti	Ionos/Plasma	Horaba	SR10_766	-
1968-S569	2440194.42	1968 Dec 3 2158:00	Black Brant III	-	K-BB/111-16	0.000	DLA	SS	SASK/Montebeetti	Ionos/Plasma	Horaba	SR10_766	-
1968-S569	2440194.42	1968 Dec 3 2158:00	Black Brant III	-	K-BB/111-16	0.000	DLA	SS	SASK/Montebeetti	Ionos/Plasma	Horaba	SR10_766	-
1968-S569	2440194.42	1968 Dec 3 2158:00	Black Brant III	-	K-BB/111-16	0.000	DLA	SS	SASK/Montebeetti	Ionos/Plasma	Horaba	SR10_766	-
1968-S569	2440194.42	1968 Dec 3 2158:00	Black Brant III	-	K-BB/111-16	0.000	DLA	SS	SASK/Montebeetti	Ionos/Plasma	Horaba	SR10_766	-
1968-S569	2440194.42	1968 Dec 3 2158:00	Black Brant III	-	K-BB/111-16	0.000	DLA	SS	SASK/Montebeetti	Ionos/Plasma	Horaba	SR10_766	-
1968-S569	2440194.42	1968 Dec 3 2158:00	Black Brant III	-	K-BB/111-16	0.000	DLA	SS	SASK/Montebeetti	Ionos/Plasma	Horaba	SR10_766	-
1968-S569	2440194.42	1968 Dec 3 2158:00	Black Brant III	-	K-BB/111-16	0.000	DLA	SS	SASK/Montebeetti	Ionos/Plasma	Horaba	SR10_766	-
1968-S569	2440194.42	1968 Dec 3 2158:00	Black Brant III	-	K-BB/111-16	0.000	DLA	SS	SASK/Montebeetti	Ionos/Plasma	Horaba	SR10_766	-
1968-S569	2440194.42	1968 Dec 3 2158:00	Black Brant III	-	K-BB/111-16	0.000	DLA	SS	SASK/Montebeetti	Ionos/Plasma	Horaba	SR10_766	-
1968-S569	2440194.42	1968 Dec 3 2158:00	Black Brant III	-	K-BB/111-16	0.000	DLA	SS	SASK/Montebeetti	Ionos/Plasma	Horaba	SR10_766	-
1968-S569	2440194.42	1968 Dec 3 2158:00	Black Brant III	-	K-BB/111-16	0.000	DLA	SS	SASK/Montebeetti	Ionos/Plasma	Horaba	SR10_766	-
1968-S569	2440194.42	1968 Dec 3 2158:00	Black Brant III	-	K-BB/111-16	0.000	DLA	SS	SASK/Montebeetti	Ionos/Plasma	Horaba	SR10_766	-
1968-S569	2440194.42	1968 Dec 3 2158:00	Black Brant III	-	K-BB/111-16	0.000	DLA	SS	SASK/Montebeetti	Ionos/Plasma	Horaba	SR10_766	-
1968-S569	2440194.42	1968 Dec 3 2158:00	Black Brant III	-	K-BB/111-16	0.000	DLA	SS	SASK/Montebeetti	Ionos/Plasma	Horaba	SR10_766	-
1968-S569	2440194.42	1968 Dec 3 2158:00	Black Brant III	-	K-BB/111-16	0.000	DLA	SS	SASK/Montebeetti	Ionos/Plasma	Horaba	SR10_766	-
1968-S569	2440194.42	1968 Dec 3 2158:00	Black Brant III	-	K-BB/111-16	0.000	DLA	SS	SASK/Montebeetti	Ionos/Plasma	Horaba	SR10_766	-
1968-S569	2440194.42	1968 Dec 3 2158:00	Black Brant III	-	K-BB/111-16	0.000	DLA	SS	SASK/Montebeetti	Ionos/Plasma	Horaba	SR10_766	-
1968-S569	2440194.42	1968 Dec 3 2158:00	Black Brant III	-	K-BB/111-16	0.000	DLA	SS	SASK/Montebeetti	Ionos/Plasma	Horaba	SR10_766	-
1968-S569	2440194.42	1968 Dec 3 2158:00	Black Brant III	-	K-BB/111-16	0.000	DLA	SS	SASK/Montebeetti	Ionos/Plasma	Horaba	SR10_766	-
1968-S569	2440194.42	1968 Dec 3 2158:00	Black Brant III	-	K-BB/111-16	0.000	DLA	SS	SASK/Montebeetti	Ionos/Plasma	Horaba	SR10_766	-
1968-S569	2440194.42	1968 Dec 3 2158:00	Black Brant III	-	K-BB/111-16	0.000	DLA	SS	SASK/Montebeetti	Ionos/Plasma	Horaba	SR10_766	-
1968-S569	2440194.42	1968 Dec 3 2158:00	Black Brant III	-	K-BB/111-16	0.000	DLA	SS	SASK/Montebeetti	Ionos/Plasma	Horaba	SR10_766	-
1968-S569	2440194.42	1968 Dec 3 2158:00	Black Brant III	-	K-BB/111-16	0.000	DLA	SS	SASK/Montebeetti	Ionos/Plasma	Horaba	SR10_766	-
1968-S569	2440194.42	1968 Dec 3 2158:00	Black Brant III	-	K-BB/111-16	0.000	DLA	SS	SASK/Montebeetti	Ionos/Plasma	Horaba	SR10_766	-
1968-S569	2440194.42	1968 Dec 3 2158:00	Black Brant III	-	K-BB/111-16	0.000	DLA	SS	SASK/Montebeetti	Ionos/Plasma	Horaba	SR10_766	-
1968-S569	2440194.42	1968 Dec 3 2158:00	Black Brant III	-	K-BB/111-16	0.000	DLA	SS	SASK/Montebeetti	Ionos/Plasma	Horaba	SR10_766	-
1968-S569	2440194.42	1968 Dec 3 2158:00	Black Brant III	-	K-BB/111-16	0.000	DLA	SS	SASK/Montebeetti	Ionos/Plasma	Horaba	SR10_766	-
1968-S569	2440194.42	1968 Dec 3 2158:00	Black Brant III	-	K-BB/111-16	0.000	DLA	SS	SASK/Montebeetti	Ionos/Plasma	Horaba	SR10_766	-
1968-S569	2440194.42	1968 Dec 3 2158:00	Black Brant III	-	K-BB/111-16	0.000	DLA	SS	SASK/Montebeetti	Ionos/Plasma	Horaba	SR10_766	-
1968-S569	2440194.42	1968 Dec 3 2158:00	Black Brant III	-	K-BB/111-16	0.000	DLA	SS	SASK/Montebeetti	Ionos/Plasma	Horaba	SR10_766	-
1968-S569	2440194.42	1968 Dec 3 2158:00	Black Brant III	-	K-BB/111-16	0.000	DLA	SS	SASK/Montebeetti	Ionos/Plasma	Horaba	SR10_766	-
1968-S569	2440194.42	1968 Dec 3 2158:00	Black Brant III	-	K-BB/111-16	0.000	DLA	SS	SASK/Montebeetti	Ionos/Plasma	Horaba	SR10_766	-
1968-S569	2440194.42	1968 Dec 3 2158:00	Black Brant III	-	K-BB/111-16	0.000	DLA	SS	SASK/Montebeetti	Ionos/Plasma	Horaba	SR10_766	-
1968-S569	2440194.42	1968 Dec 3 2158:00	Black Brant III	-	K-BB/111-16	0.000	DLA	SS	SASK/Montebeetti	Ionos/Plasma	Horaba	SR10_766	-
1968-S569	2440194.42	1968 Dec 3 2158:00	Black Brant III	-	K-BB/111-16	0.000	DLA	SS					







Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Mission	FlightCode	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee_Km	Range_Km	Dest
1968-8266	2439862.67	1968 Apr 16 0358	Black Brant II	-	AKD-2A-113	Auroral breakup	-	-	-	FC	-	-	-	155	-	-
1968-8269	2439864.74	1968 Apr 18 0542	Black Brant II	-	AKD-2A-110	Auroral breakup	-	-	-	FC	-	-	-	152	-	-
1968-8270	2439864.76	1968 Apr 18 0614	Black Brant II	-	AKD-2A-112	Auroral breakup	-	-	-	FC	-	-	-	155	-	-
1968-8274	2439869.70	1968 Apr 23 0447	Black Brant II	-	AFB-2A-115	(dup for 1167)	-	-	-	FC	-	-	-	337	-	-
1968-874	2439869.70	1968 Apr 23 0447	Black Brant II	-	AFB-2A-116	Auroral spectrum	-	-	-	FC	-	-	-	21	-	-
1968-8306	2439883.72	1968 May 7 0510	Black Brant IVA	-	ASA 19-0411	Isis test	-	-	-	WI	-	-	-	820	-	-
1968-8368	2440018.16	1968 Jun 10 1549	Black Brant IVA	-	CRL AH17.751D	D region protons	-	-	-	FC	-	-	-	112	-	-
1968-8373	2440019.48	1968 Jun 11 2330	Black Brant IVA	-	ASA 19-01HE	SAAP	-	-	-	CLBI	-	-	-	790	-	-
1968-8441	2440070.76	1968 Aug 2 0619	Black Brant VB	-	ADP-VB-18	-	-	-	-	FC	-	-	-	284	-	-
1968-8592	2440179.83	1968 Nov 19 0800:31	Black Brant VA	-	PCA D-region CLR AG17.757	-	-	-	-	FC	-	-	-	129	-	-
1968-8617	2440194.31	1968 Dec 3 1900	Black Brant IVA	-	-	-	-	-	-	FC	-	-	-	129	-	-
1968-8622	2440194.31	1968 Dec 4 1751	Black Brant IVA	?	-	-	-	-	-	FC	-	-	-	129	-	-
1968-8624	2440196.24	1968 Dec 4 1812	Black Brant IVA	-	ALF-IV-12	Mass spectrometer	-	-	-	FC	-	-	-	600?	-	-
1968-8624	2440196.24	1968 Dec 4 1812	Black Brant IVA	-	ALF-2-125	Geminids	-	-	-	FC	-	-	-	100?	-	-
1968-8650	2440203.91	1968 Dec 13 0945	Black Brant II	-	ADP-VB-21	Calgary aurora	-	-	-	FC	-	-	-	143	-	-
1968-8654	2440208.98	1968 Dec 18 1138	Black Brant VB	-	AF-4-17	-	-	-	-	FC	-	-	-	363	-	-
1968-8655	2440236.73	1969 Jan 14 0525	Black Brant IVA	-	AF-4-17	-	-	-	-	FC	-	-	-	99	-	-
1968-889	2440249.60	1969 Jan 28 0716	Black Brant II	-	AF-2-118	M2 temp profile	-	-	-	FC	-	-	-	149	-	-
1968-8133	2440256.47	1969 Feb 13 2311	Black Brant II	-	AF-2-46	-	-	-	-	FC	-	-	-	265	-	-
1968-8145	2440264.47	1969 Feb 13 2311	Black Brant II	-	AF-2-117	VUV auroral spectrum	-	-	-	FC	-	-	-	124	-	-
1968-8166	2440266.76	1969 Mar 6 0614	Black Brant IVA	-	ADP-4-16	-	-	-	-	FC	-	-	-	791	-	-
1968-8176	2440266.76	1969 Mar 6 0614	Black Brant VB	-	ADP-VB-20	-	-	-	-	FC	-	-	-	362	-	-
1968-8179	2440290.69	1969 Mar 10 0440	Black Brant VB	-	ADP-VB-20	-	-	-	-	FC	-	-	-	141	-	-
1968-8246	2440291.65	1969 Mar 11 0353	Black Brant VB	-	ADP-VB-23	-	-	-	-	FC	-	-	-	141	-	-
1968-8246	2440312.69	1969 Apr 1 0438	Black Brant VB	-	ADP-VB-23	VUV auroral	-	-	-	FC	-	-	-	372	-	-
1968-8313	2440343.33	1969 May 1 2000	Black Brant IVA	-	AF-4-16	Electron content	-	-	-	FC	-	-	-	760	-	-
1968-8316	2440349.08	1969 May 7 1400	Black Brant IVA	-	AF-4-16	Electron content	-	-	-	FC	-	-	-	820	-	-
1968-8366	2440365.09	1969 Jun 15 1405	Black Brant IVA	-	CRL A16.010-01	VLF Propagation	-	-	-	CLBI	-	-	-	862	-	-
1968-8466	2440471.09	1969 Sep 6 1410	Black Brant IVA	-	CRL A16.010-02	VLF Propagation	-	-	-	CLBI	-	-	-	623	-	-
1968-8484	2440475.55	1969 Sep 11 0107	Black Brant II	-	ADP-2-122	-	-	-	-	FC	-	-	-	137	-	-
1968-8486	2440475.55	1969 Sep 11 0107	Black Brant II	-	ADP-2-123	-	-	-	-	FC	-	-	-	138	-	-
1968-8508	2440463.94	1969 Sep 19 0315	Black Brant IVA	-	MSA 19.08NE	-	-	-	-	CLBI	-	-	-	866	-	-
1968-8508	2440463.94	1969 Sep 19 0315	Black Brant VA	-	CRL A117.602	POA69 U-2	-	-	-	FC	-	-	-	120	-	-
1968-8569	2440528.35	1969 Nov 3 0905	Black Brant VA	-	CRL A117.758	POA69 U-1	-	-	-	FC	-	-	-	126	-	-
1968-8562	2440528.35	1969 Nov 3 0905	Black Brant VA	-	CRL A117.758	POA69 U-1	-	-	-	FC	-	-	-	113	-	-
1968-8562	2440529.08	1969 Nov 3 1952	Black Brant VA	-	CRL A17.906-1	POA69 U-4	-	-	-	FC	-	-	-	126	-	-
1968-8562	2440529.22	1969 Nov 3 1711	Black Brant VA	-	CRL A17.906-1	POA69 U-4	-	-	-	FC	-	-	-	82	-	-
1968-8566	2440529.46	1969 Nov 3 2246	Black Brant VA	-	CRL A117.611	POA69 U-3	-	-	-	FC	-	-	-	126	-	-
1968-8515	2440535.63	1969 Nov 4 2308	Black Brant VA	-	CRL A117.617	POA69 U-6	-	-	-	FC	-	-	-	189	-	-
1968-8524	2440535.63	1969 Nov 8 0749	Black Brant VB	-	NRL NF9.207	-	-	-	-	FC	-	-	-	174	-	-
1968-8576	2440570.60	1969 Dec 15 0227	Black Brant VB	-	AF-IP-29	Auroral particles	-	-	-	FC	-	-	-	128	-	-
1970-865	2440600.70	1970 Jan 14 0441	Black Brant IVA	-	AF-IP-29	Auroral low elev.	-	-	-	FC	-	-	-	202	-	-
1970-870	2440620.46	1970 Feb 2 2307:31	Black Brant VA	-	MSA 19.08NE	-	-	-	-	FC	-	-	-	202	-	-
1970-8177	2440631.94	1970 Feb 14 0526:19	Black Brant VA	-	A-BBVA-23 (X1)	DLR A-BBVA-23 Synove	-	-	-	AUD	-	-	-	210	-	-
1970-8116	2440631.94	1970 Feb 14 0526:19	Black Brant VA	-	A-BBVA-24 (X2)	DLR A-BBVA-24 Honica	-	-	-	AUD	-	-	-	223	-	-
1970-8169	2440651.80	1970 Feb 24 0911:50	Black Brant VA	-	A-BBVA-25 (X3)	DLR A-BBVA-25 EveJyn	-	-	-	AUD	-	-	-	796	-	-
1970-8169	2440651.80	1970 Feb 24 0911:50	Black Brant IVA	-	ADP-VB-23	VLF Particles	-	-	-	FC	-	-	-	217	-	-
1970-8252	2440651.89	1970 Mar 6 0932:20	Black Brant VA	-	A-BBVA-27	DLR A-BBVA-27 Chr'line	-	-	-	AUD	-	-	-	161	-	-
1970-8252	2440651.89	1970 Mar 6 0932:20	Black Brant VA	-	A-BBVA-27	DLR A-BBVA-28 Eva	-	-	-	AUD	-	-	-	680	-	-
1970-8254	2440661.07	1970 Mar 15 1338	Black Brant IVA	-	-	DLR A-BBVA-28 Eva	-	-	-	AUD	-	-	-	954	-	-
1970-8254	2440661.07	1970 Mar 15 1338	Black Brant IVA	-	-	DLR A-BBVA-29 Gerda	-	-	-	AUD	-	-	-	954	-	-
1970-8298	2440681.23	1970 Mar 17 0728	Black Brant VA	-	AF-2-12	EUV	-	-	-	FC	-	-	-	288	-	-
1970-8329	2440708.84	1970 Apr 22 0811	Black Brant II	-	AF-2-12	-	-	-	-	FC	-	-	-	288	-	-
1970-8466	2440814.64	1970 Aug 16 0352	Black Brant VB	-	ADP-VB-21	F fields, electrons	-	-	-	FC	-	-	-	600?	-	-
1970-8466	2440814.64	1970 Aug 16 0352	Black Brant VB	-	ADP-VB-21	Propagation	-	-	-	FC	-	-	-	600?	-	-
1970-8525	2440854.63	1970 Aug 21 0117	Black Brant IVA	-	CRB A16.010-03	-	-	-	-	FC	-	-	-	800?	-	-
1970-8525	2440854.63	1970 Aug 21 0117	Black Brant IVA	-	CRB A16.010-03	-	-	-	-	FC	-	-	-	800?	-	-
1970-8525	2440854.63	1970 Sep 29 0300	Black Brant IVA	-	MSA 19.03NE	-	-	-	-	FC	-	-	-	770	-	-
1970-8636	2440854.62	1970 Sep 29 0300	Black Brant IVA	-	MSA 19.03NE	-	-	-	-	FC	-	-	-	770	-	-
1970-8636	2440854.62	1970 Sep 29 0300	Black Brant IVA	-	AF-4-19	Tailglow airglow	-	-	-	FC	-	-	-	146	-	-
1970-8636	2440854.62	1970 Dec 7 2134	Black Brant VB	-	ADP-VB-30	Geminids	-	-	-	FC	-	-	-	258	-	-
1970-8636	2440854.62	1970 Dec 7 2134	Black Brant VB	-	ADP-VB-30	Geminids	-	-	-	FC	-	-	-	258	-	-
1971-863	2440924.92	1971 Dec 14 1002	Black Brant II	-	ADP-2-124	O2 Profile	-	-	-	FC	-	-	-	375	-	-
1971-863	2440924.92	1971 Dec 14 1002	Black Brant II	-	ADP-2-124	O2 Profile	-	-	-	FC	-	-	-	282	-	-
1971-873	2440974.61	1971 Jan 21 0232	Black Brant VB	-	ADP-VB-27	Auroral	-	-	-	FC	-	-	-	375	-	-
1971-893	2440974.70	1971 Jan 23 0444	Black Brant VB	-	ADP-VB-24	Auroral VUV	-	-	-	FC	-	-	-	282	-	-
1971-892	2440978.22	1971 Jan 26 1723	Black Brant VB	-	ADP-VB-26	Auroral	-	-	-	FC	-	-	-	784	-	-
1971-892	2440978.22	1971 Jan 26 1723	Black Brant VB	-	ADP-VB-26	Auroral	-	-	-	FC	-	-	-	784	-	-
1971-8115	2440988.45	1971 Feb 5 2246	Black Brant IVB	-	AFV-4B-24	Impulse dipole	-	-	-	FC	-	-	-	275	-	-
1971-8125	2441002.64	1971 Feb 20 0323:05	Black Brant IVA	-	AFV-4B-18	Auroral emissions	-	-	-	FC	-	-	-	275	-	-
1971-8122	2441007.55	1971 Feb 25 0113:00	Black Brant VB	-	NRL NF9.7	Airglow/FIR BG	-	-	-	FC	-	-	-	275	-	-
1971-8146	2441013.79	1971 Mar 3 0852	Black Brant VB	-	AFV-IP-32	Electrons/Ions	-	-	-	FC	-	-	-	151	-	-
1971-8192	2441030.83	1971 Mar 20 0753	Black Brant II	-	AF-2-115	Auroral VUV	-	-	-	FC	-	-	-	366	-	-
1971-8192	2441030.83	1971 Mar 20 0753	Black Brant II	-	AF-2-115	Auroral VUV	-	-	-	FC	-	-	-	366	-	-
1971-8204	2441034.73	1971 Mar 24 0526	Black Brant IVA	-	CRB A18.006-3	Airglow/Auroral IR	-	-	-	FC	-	-	-	800	-	-
1971-8323	2441110.32	1971 Jul 7 1935	Black Brant IVA	-	CRB A16.108-1	VLF Propagation	-	-	-	FC	-	-	-	174	-	-
1971-8323	2441110.															

Launch_Tag	Launch_JD	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Mission	FlightCode	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee_Km	Range_Km	Dest
1972-8362	2441615.22	1972 Oct 24 1720	Black Brant VB	-	MASA 21.20GT	CALROC Test	-	-	-	WS	LC36	-	-	282	-	-
1972-8367	2441623.69	1972 Nov 2 0427	Black Brant VC	-	MASA 21.020U	-	-	-	-	FC	-	-	-	237	-	-
1972-8415	2441656.79	1972 Dec 5 0700	Black Brant VC	-	CR. A18-006-5	Auroral IR	-	-	-	WS	-	-	-	194	-	-
1973-824	2441705.47	1973 Jan 22 2310	Black Brant VC	-	MASA 21.096T-US	-	-	-	-	WS	LC36	-	-	277	-	-
1973-837	2441711.71	1973 Jan 29 0502	Black Brant IVB	-	AAF-4B-27	-	-	-	-	FC	-	-	-	760	-	-
1973-853	2441715.11	1973 Feb 1 1433:30	Black Brant VC	-	AAF-VB-36	DLR N-BBVC-62	-	-	-	CLBI	-	-	-	308	-	-
1973-855	2441716.76	1973 Feb 2 0620	Black Brant VB	-	-	Auroral substorm	-	-	-	FC	-	-	-	335	-	-
1973-857	2441716.50	1973 Feb 3	Black Brant VC	-	-	DLR N-BBVC-50?	-	-	-	CLBI	-	-	-	97	-	-
1973-863	2441721.09	1973 Feb 7 1409	Black Brant VC	-	-	DLR N-BBVC-54	-	-	-	FC	-	-	-	211	-	-
1973-865	2441722.62	1973 Feb 9 0253	Black Brant VC	-	AAF-4B-28	-	-	-	-	FC	-	-	-	760	-	-
1973-866	2441723.67	1973 Feb 9 0408	Black Brant IVB	-	MASA 21.160G	UCB EUV Phot/XR FC	-	-	-	FC	-	-	-	216	-	-
1973-870	2441729.72	1973 Feb 16 0516:00	Black Brant VC	-	ADD-2-127	DLR N-BBVC-53	-	-	-	CLBI	-	-	-	315	-	-
1973-884	2441739.64	1973 Feb 26 0323	Black Brant II	-	CR. A18-006-2	Auroral VUV	-	-	-	FC	-	-	-	132	-	-
1973-8115	2441764.01	1973 Mar 22 1212	Black Brant VC	-	CR. A18-206-1	-	-	-	-	PF	-	-	-	183	-	-
1973-8121	2441766.90	1973 Mar 27 0937:45	Black Brant VC	-	MASA 21.110S-WP	-	-	-	-	PF	-	-	-	181	-	-
1973-8141	2441776.22	1973 Apr 3 1720	Black Brant VC	-	A-BVC-51	DLR A-BBVC-51 Erna	-	-	-	WS	LC36	-	-	245	-	-
1973-8167	2441815.03	1973 Apr 12 1241:00	Black Brant VC	-	AAF-VB-37	Tower mod test	-	-	-	AND	-	-	-	305	-	-
1973-8168	2441818.69	1973 May 16 0919	Black Brant VB	-	MASA 21.190S-GT	-	-	-	-	FC	-	-	-	301	-	-
1973-8169	2441821.17	1973 May 18 1600	Black Brant VC	-	MASA 21.21NP-US	HCO CALROC 1	-	-	-	WS	LC36	-	-	267	-	-
1973-8194	2441838.22	1973 Jun 4 1710	Black Brant VC	-	MASA 21.21NP-US	HCO CALROC 2	-	-	-	WS	LC36	-	-	132?	-	-
1973-8201	2441847.23	1973 Jun 13 1738	Black Brant VC	-	MASA 21.120S-WP	HCO CALROC 2	-	-	-	WS	LC36	-	-	241	-	-
1973-8205	2441854.94	1973 Jun 21 1030	Black Brant IVB	-	AFP-4B-30	Galactic X-rays	-	-	-	KAU	-	-	-	686	-	-
1973-8229	2441867.64	1973 Jul 4 0327:11	Black Brant VC	-	A-BVC-49	DLR A-BBVC-49 Barbara	-	-	-	AND	-	-	-	260	-	-
1973-8270	2441903.50	1973 Aug 9 1730:58	Black Brant IVB	-	MASA 19.07GT	-	-	-	-	WI	-	-	-	260?	-	-
1973-8272	2441904.23	1973 Aug 9 1730:58	Black Brant VC	-	MASA 21.22NP-US	HCO CALROC 2	-	-	-	WS	LC36	-	-	605	-	-
1973-8273	2441904.34	1973 Aug 9 2012	Black Brant IVB	-	CR. A16-000-01	H1 Mate Midas Conv	-	-	-	WI	-	-	-	269	-	-
1973-8288	2441926.21	1973 Aug 30 1701	Black Brant VC	-	MASA 21.070S	-	-	-	-	WS	LC36	-	-	239	-	-
1973-8289	2441935.60	1973 Sep 4 1645	Black Brant VC	-	MASA 21.130S-WP	HCO CALROC 3	-	-	-	WS	LC36	-	-	235	-	-
1973-8285	2441975.20	1973 Oct 24 0305	Black Brant IVB	-	ML CALROC 3	ML CALROC 3	-	-	-	BDL	-	-	-	609	-	-
1973-8365	2441980.63	1973 Oct 25 0307	Black Brant VC	-	CR. A16-315-01	VLF Propagation	-	-	-	BDL	-	-	-	600	-	-
1973-8402	2442009.40	1973 Nov 22 2129	Black Brant IVB	-	VLF Propagation	-	-	-	-	BDL	-	-	-	600	-	-
1973-8406	2442012.46	1973 Nov 25 2247	Black Brant VC	-	AME-VI-40	-	-	-	-	FC	-	-	-	103	-	-
1973-8409	2442014.13	1973 Nov 27 1506:33	Black Brant VC	-	MASA 19.08UA	SkyLab Ba+	-	-	-	FC	-	-	-	852	-	-
1973-8418	2442021.14	1973 Dec 4 1620:35	Black Brant IVB	-	MASA 19.09UA	SkyLab Ba+	-	-	-	FC	-	-	-	870	-	-
1973-8418	2442021.14	1973 Dec 4 1620:35	Black Brant VC	-	MASA 21.23NP-US	HCO CALROC 3	-	-	-	WS	LC36	-	-	269	-	-
1973-8453	2442027.30	1973 Dec 10 1910	Black Brant VC	-	MASA 21.140S-WP	ML CALROC 4	-	-	-	WS	LC36	-	-	234	-	-
1974-859	2442065.33	1974 Jan 15 2000	Black Brant VC	-	ESRD D-101	DLR A-BB4-63	-	-	-	FC	-	-	-	208	-	-
1974-874	2442070.75	1974 Jan 23 0606	Black Brant VB	-	ESRD-VB-34	-	-	-	-	AND	-	-	-	546	-	-
1974-886	2442085.46	1974 Feb 6 2246:57	Black Brant IVB	-	AAF-4B-31	-	-	-	-	FC	-	-	-	638	-	-
1974-890	2442092.42	1974 Feb 13 2201	Black Brant IVB	-	AAF-4B-31	-	-	-	-	FC	-	-	-	200	-	-
1974-9100	2442095.75	1974 Feb 14 0607	Black Brant VC	-	CR. A18-006-4	CIV	-	-	-	FC	-	-	-	180	-	-
1974-9101	2442095.99	1974 Feb 14 0607	Black Brant VC	-	CR. A18-1306-1	HIRIS	-	-	-	FC	-	-	-	131	-	-
1974-9113	2442095.99	1974 Feb 14 0916	Black Brant VC	-	CR. A18-1306-1	Auroral VUV	-	-	-	FC	-	-	-	186	-	-
1974-9114	2442101.71	1974 Feb 22 0459	Black Brant VC	-	CR. A16-315-01	-	-	-	-	FC	-	-	-	234	-	-
1974-9116	2442109.82	1974 Feb 25 0749	Black Brant VC	-	MASA 21.180S	CU-H61 + LFSP-EUV3	-	-	-	WS	LC36	-	-	86	-	-
1974-9120	2442108.26	1974 Feb 26 1613	Black Brant VC	-	ESRD-VB-39	ESRD-VB-39	-	-	-	FC	-	-	-	246	-	-
1974-9121	2442136.62	1974 Feb 28 0353	Black Brant VB	-	AAF-VB-39	ESRD-VB-39	-	-	-	FC	-	-	-	772	-	-
1974-9152	2442151.68	1974 Mar 29 0200:01	Black Brant IVB	-	MASA 21.26UE	EGU III	-	-	-	FC	-	-	-	975	-	-
1974-9154	2442151.68	1974 Mar 29 0200:01	Black Brant VC	-	MASA 21.17UE	EGU III	-	-	-	FC	-	-	-	975	-	-
1974-9216	2442213.72	1974 Jun 15 0515	Black Brant VC	-	MASA 21.28UA	-	-	-	-	WS	LC36	-	-	184	-	-
1974-9238	2442235.72	1974 Jun 28 0916	Black Brant VC	-	MASA 21.150P	-	-	-	-	WS	LC36	-	-	227	-	-
1974-9398	2442325.18	1974 Oct 4 1516	Black Brant VC	-	AME-VB-41	-	-	-	-	WS	LC36	-	-	184	-	-
1974-8369	2442375.84	1974 Nov 25 0850	Black Brant VC	-	AME-VB-41	-	-	-	-	WS	LC36	-	-	184	-	-
1974-8409	2442393.45	1974 Dec 6 2322:06	Black Brant VB	-	ESRD D-102A?	Cusp	-	-	-	CP	-	-	-	600?	-	-
1974-8418	2442398.95	1974 Dec 17 2248	Black Brant IVB	-	ESRD D-102A?	-	-	-	-	CP	-	-	-	380	-	-
1974-851	2442398.96	1974 Dec 17 2248	Black Brant VC	-	Tordo I	DLR G-BB4-64 PolCusp	-	-	-	SSG	MORABA	-	-	60?	-	-
1974-851	2442398.96	1974 Dec 18 1104	Black Brant IVB	-	Tordo II	DLR G-BB4-65 PolCusp	-	-	-	SSG	MORABA	-	-	380	-	-
1975-833	2442423.52	1975 Jan 6 2349:49	Black Brant IVB	-	Periquito	Periquito	-	-	-	CP	-	-	-	540	-	-
1975-835	2442423.95	1975 Jan 11 0533	Black Brant IVB	-	Periquito	Periquito	-	-	-	CP	-	-	-	540	-	-
1975-836	2442432.27	1975 Jan 20 1830	Black Brant IVB	-	DLR-BB4-66	DLR-BB4-66	-	-	-	CP	-	-	-	290	-	-
1975-844	2442433.27	1975 Jan 30 0315	Black Brant VC	-	CU-W62 + LFSP-EUV4	-	-	-	-	SSG	MORABA	-	-	279	-	-
1975-852	2442443.59	1975 Mar 20 0215	Black Brant VC	-	ED-VB-43	-	-	-	-	FC	LC36	-	-	244	-	-
1975-8226	2442615.15	1975 Jul 21 1531	Black Brant VC	-	HRTS-1	-	-	-	-	WS	LC36	-	-	220	-	-
1975-8233	2442622.24	1975 Jul 28 1744	Black Brant VC	-	ED-VB-43	-	-	-	-	WS	LC36	-	-	278	-	-
1975-8327	2442742.49	1975 Nov 25 2339:18	Black Brant IVB	-	MASA 21.250S	Periquito	-	-	-	CP	-	-	-	500	-	-
1975-8330	2442742.49	1975 Nov 28 2339:18	Black Brant IVB	-	AEC-TV4-03	Periquito	-	-	-	CP	-	-	-	500	-	-
1975-8360	2442745.18	1975 Nov 28 2339:18	Black Brant IVB	-	SPAB 1	SPAB 1	-	-	-	CP	-	-	-	225	-	-
1975-8360	2442758.18	1975 Dec 11 1615	Black Brant VC	-	MASA 21.32NP	SSC S19A	-	-	-	WS	LC36	-	-	290	-	-
1975-855	2442788.09	1976 Jan 10 1416:00	Black Brant VC	-	GL A16 501-01	VLF	-	-	-	WI	LA5	-	-	632	-	-
1976-864	2442797.57	1976 Jan 20 0142	Black Brant IVB	-	MASA 21.27UE	EGU IV	-	-	-	FC	-	-	-	225	-	-
1976-868	2442808.78	1976 Jan 31 0644:10	Black Brant VC	-	AAF-VB-35	-	-	-	-	FC	-	-	-	65	-	-
1976-893	2442813.72	1976 Feb 5 0522	Black Brant IVB	-	AAF-4B-33	-	-	-	-	FC	-	-	-	730	-	-
1976-8104	2442827.24	1976 Feb 18 1740	Black Brant VC	-	MASA 21.30US-1S	OSO-I Cs1	-	-	-	WS	LC36	-	-	282	-	-
1976-8116	2442847.88	1976 Mar 10 0910	Black Brant IVB	-	Artto 6-1	DLR H-BB4-74	-	-	-	ELAR	-	-	-	0?	-	-
1976-8156	2442868.78	1976 Mar 31 0639	Black Brant VC	-	SPAB 2	-	-	-	-	WS	LC36	-	-	231	-	-
1976-8194	2442916.17	1976 May 17 1600	Black Brant VC	-	MASA 21.330U	-	-	-	-	WS	LC36	-	-	188	-	-
1976-8196	2442921.91	1976 May 23 0930	Black Brant VC	-	MASA 21.48NP	SFHA Experiment	-	-	-	WS	LC36	-	-	196	-	-
1976-8214	2442956.87	1976 Jun 27 0658	Black Brant IVB	-	Artto 6-2	DLR H-BB4B-76	-	-	-	ELAR	-	-	-	700	-	-
1976-8305	2443074.12	1976 Oct 22 1500	Black Brant VC	-	APD-VB-42	-	-	-	-	WS	LC36	-	-	239	-	-
1976-8321	2443092.02	1976 Nov 9 1232	Black Brant VC	-	SPAB 3	-	-	-	-	WS	LC36	-	-	215	-	-
1976-8348	2443127.32	1976 Dec 14 1935	Black Brant VC	-	ED-VB-46	-	-	-	-	WS	LC36	-	-	174	-	-
1977-835	2443150.82	1977 Jan 7 0745	Black Brant VC	-	MASA 21.34NP	-	-	-	-	WS	LC36	-	-	261	-	-
1977-838	2443156.68	1977 Jan 13 0422	Black Brant VA	-	ADA-VB-45	Auroral UV/IR	-	-	-	FC	-	-	-	268	-	-
1977-841	2443158.57	1977 Jan 15 0140	Black Brant VC	-	MASA 21.49UL	Colo. microchannel	-	-	-	WS	LC36	-	-	700	-	-
1977-8103	2443210.67	1977 Mar 8 0401	Black Brant IVB	-	AAF-4B-34	-	-	-	-	FC	-	-	-	191	-	-
1977-8105	2443210.67	1977 Mar 9 1640	Black Brant VC	-	AND-VB-44	-	-	-	-	WS						

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Mission	FlightCode	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee_Km	Range_Km	Dest
1977-5197	2443504.63	1977 Jun 10 0306:19	Black Brant VC	-	DLR H-BBV-84	Heatstrip 2	INTA BBE-BAC-7701	-	-	ELAR	-	-	-	322	-	-
1977-5204	2443516.17	1977 Jun 21 1600	Black Brant VC	-	MASA 21.450P	SPAR 4	-	-	-	WS	LC36	-	-	179	-	-
1977-5315	2443575.50	1977 Aug 23	Black Brant VC	?	Equatorial Wideband	-	-	-	-	KRR	RN	-	-	160	-	-
1978-586	2443549.73	1978 Feb 10 0530	Black Brant VC	-	MASA 21.560G	JHU FOT 2	-	-	-	WS	LC36	-	-	238	-	-
1978-570	2443553.22	1978 Feb 13 1715	Black Brant VC	-	MASA 21.420S	HRTS 2	-	-	-	WS	LC36	-	-	210	-	-
1978-576	2443566.73	1978 Feb 27 0530	Black Brant VC	-	AAF-4B-35	-	-	-	-	FC	-	-	-	785	-	-
1978-5110	2443610.57	1978 Apr 12 0143	Black Brant VA	-	ADD-VA-19	O/Dome profile	-	-	-	FC	-	-	-	140	-	-
1978-5206	2443765.17	1978 Sep 11 1600:00	Black Brant VC	-	MASA 21.460P	SPAR 5	-	-	-	WS	LC36	-	-	165	-	-
1978-5208	2443857.58	1978 Dec 15 0157	Black Brant VC	-	ADP-VP-47	-	-	-	-	FC	-	-	-	316	-	-
1979-587	2443901.22	1979 Jan 27 1712:32	Black Brant VC	-	SSC S23-L1	Substorm-DEUS	-	-	-	ESR	MM/URL?	-	-	266	-	-
1979-580	2443901.41	1979 Jan 27 2152:20	Black Brant VC	-	SSC S23-L2	Substorm-DEUS	-	-	-	ESR	MM/URL?	-	-	266	-	-
1979-573	2443931.20	1979 Mar 1 0944	Black Brant VA	-	AAF-VA-51	-	-	-	-	RLAKE	CUCH	-	-	132	-	-
1979-587	2443933.91	1979 Jun 29 0815	Black Brant VC	-	MASA 21.600S	HRTS 3	-	-	-	WS	LC36	-	-	210	-	-
1979-5164	2444053.84	1979 Jun 29 0815	Black Brant VC	-	MASA 21.590G	JHU FOT 3	-	-	-	WS	LC36	-	-	219	-	-
1979-5162	2444093.33	1979 Aug 7 1950	Black Brant VC	-	GL A16.005	PUSIBO	-	-	-	WS	LC36	-	-	219	-	-
1979-5205	2444137.38	1979 Sep 20 2100	Black Brant VC	-	MASA 21.570U	-	-	-	-	WS	LC36	-	-	278	-	-
1979-5213	2444143.98	1979 Sep 27 1130	Black Brant VC	-	MASA 21.620S	-	-	-	-	WS	LC36	-	-	247	-	-
1980-543	2444224.77	1979 Dec 17 0627	Black Brant VA	-	ADD-VA-48	-	-	-	-	FC	-	-	-	138	-	-
1980-543	2444284.99	1980 Feb 15 1143:24	Black Brant VC	-	ADD-VA-50	Pulsating aurora	-	-	-	SEMD	-	-	-	156	-	-
1980-543	2444292.92	1980 Feb 23 1006:09	Black Brant VC	-	ADD-VA-52	Pulsating aurora	-	-	-	SEMD	-	-	-	148	-	-
1980-5178	2444513.26	1980 Sep 30 1816	Black Brant VC	-	MASA 21.650U	-	-	-	-	WS	LC36	-	-	281	-	-
1981-551	2444623.65	1981 Jan 19 0337:27	Black Brant VC	-	ADP-VP-54	Upper Atm Compos.	-	-	-	FC	-	-	-	263	-	-
1981-551	2444630.81	1981 Jan 26 0720:06	Black Brant VC	-	ADP-VP-56	Substorm	-	-	-	FC	-	-	-	564	-	-
1981-588	2444691.58	1981 Mar 25 0194:06	Black Brant VC	-	AAF-VP-55	FALCOMS	-	-	-	FC	-	-	-	327	-	-
1981-587	2444751.68	1981 Mar 25 0194	Black Brant VC	-	AAF-VP-57	FALCOMS	-	-	-	FC	-	-	-	675	-	-
1981-5110	2444871.68	1981 May 27 0425	Black Brant VC	-	MASA 21.670G	JHU FOT 4 (to)	-	-	-	WS	LC36	-	-	225	-	-
1981-5158	2444877.50	1981 Sep 30	Black Brant VC	-	MASA 21.630S	-	-	-	-	WS	LC36	-	-	243	-	-
1981-5176	2444945.47	1981 Dec 6 2314:58	Black Brant VC	-	AAF-4B-38	CENTAUR	-	-	-	CP	-	-	-	615	-	-
1981-5177	2444952.40	1981 Dec 13 2131:38	Black Brant VC	-	AAF-4B-39	CENTAUR	-	-	-	CP	-	-	-	50	-	-
1982-5167	2445228.26	1982 Sep 15 1815	Black Brant VC	-	AAF-VC-53	-	-	-	-	WS	LC36	-	-	243	-	-
1982-5166	2445274.54	1982 Nov 1 0916	Black Brant VC	-	MASA 21.690H	MT WFSXC 2	-	-	-	WS	LC36	-	-	235	-	-
1982-5167	2445283.24	1982 Nov 9 1745	Black Brant VC	-	MASA 21.640S	EDV line profiles	-	-	-	WS	LC36	-	-	232	-	-
1982-5196	2445316.93	1982 Dec 13 1020	Black Brant VC	-	MASA 21.740G	JHU UVT F10	-	-	-	WS	LC36	-	-	200	-	-
1983-587	2445401.17	1983 Mar 7 1600	Black Brant VC	-	MASA 21.840S	HRTS 4	-	-	-	WS	LC36	-	-	200	-	-
1983-5111	2445496.84	1983 Jun 11 0810	Black Brant VC	-	ADD-VC-56	OASIS	-	-	-	WS	LC36	-	-	180	-	-
1983-5146	2445594.75	1983 Aug 6 0900	Black Brant VC	-	MASA 21.860E	CHANGE-1 (TPE-3)	-	-	-	WS	-	-	-	216	-	-
1984-584	2445754.36	1984 Feb 23 2034:47	Black Brant VC	-	MASA 21.850U	JHU UVT F11	-	-	-	VC	-	-	-	206	-	-
1984-580	2445762.69	1984 Mar 3 0440	Black Brant VC	-	MASA 21.910E	JHU UVT F11	-	-	-	VC	LC36	-	-	189	-	-
1984-5101	2445908.95	1984 Jul 24 1040:50	Black Brant VC	-	SSC S36	GSC M/DTR	-	-	-	VL	-	-	-	987	-	-
1984-5126	2445935.21	1984 Oct 16 0850	Black Brant VC	-	MASA 21.700H	TOR	-	-	-	ESR	URL	-	-	188	-	-
1985-559	2446146.87	1985 Jun 18 0710	Black Brant VC	-	MASA 21.810U	MT WFSXC 3	-	-	-	WS	LC36	-	-	238	-	-
1985-495	2446268.82	1985 Aug 26 2200:08	Black Brant VC	-	MASA 21.840S	JHU FOT 5 (to)	-	-	-	WS	LC36	-	-	107	-	-
1985-525	2446469.07	1986 Feb 26 1102	Black Brant VC	-	MASA 21.890U	Siz coordinated?	-	-	-	WS	LC36?	-	-	229	-	-
1986-551	2446592.57	1986 Mar 13 1145:52	Black Brant VC	-	MASA 21.870E	JHU FOT 6 Halley	-	-	-	WS	LC36?	-	-	231	-	-
1986-5134	2447271.23	1986 Apr 7 1900	Black Brant VC	-	MASA 21.970E	EBRHS I (e-79)	-	-	-	ESR	MM/URL?	-	-	128	-	-
1986-5135	2447474.25	1986 Nov 10 1900	Black Brant VC	-	MASA 21.910U	MGAR/Ch-1	-	-	-	ADU	LC36	-	-	320?	-	-
1986-539	2447569.28	1986 Nov 3 1817:14	Black Brant VC	-	MASA 21.100CE	EBRHS II	-	-	-	ESR	MM/URL?	-	-	174	-	-
1986-530	2447589.54	1986 Mar 4 0102:47	Black Brant VC	-	MASA 21.960E	EBRHS II	-	-	-	ESR	MM/URL?	-	-	250?	-	-
1986-559	2447673.50	1986 May 31	Black Brant VC	-	SDID Black Star 5	(Site CE)	-	-	-	CEL	CE	-	-	250?	-	-
1986-574	2447734.50	1986 Jul 31	Black Brant VC	-	SDID Black Star 6	-	-	-	-	CEL	CE	-	-	250?	-	-
1986-594	2447784.50	1986 Sep 15	Black Brant VC	-	MASA 21.102IE	-	-	-	-	ADU	CE	-	-	304	-	-
1986-5103	2448084.50	1986 Oct 15 2028:38	Black Brant VC	-	MASA 21.102IE	-	-	-	-	ADU	CE	-	-	250?	-	-
1986-5169	2448177.35	1986 Oct 15 2028:38	Black Brant VC	-	MASA 21.102IE	-	-	-	-	ADU	CE	-	-	250?	-	-
1986-5170	2448179.50	1986 Oct 15 2028:38	Black Brant VC	-	MASA 21.102IE	-	-	-	-	ADU	CE	-	-	250?	-	-
1986-5192	2448469.56	1981 Aug 9 0128:20	Black Brant VC	-	MASA 21.109CE	N-P-E03 EFIELD-B	-	-	-	ESR	CE	-	-	69	-	-
1986-5193	2448478.48	1981 Aug 9 2330:20	Black Brant VC	-	MASA 21.104CE	N-P-E16 EFIELD-A	-	-	-	ESR	CE	-	-	101	-	-
1986-5195	2448796.52	1982 Aug 23 0024	Black Brant VC	-	MASA 21.106CE	EL COUT NC-2	-	-	-	ESR	CE	-	-	129	-	-
1986-563	2449005.07	1984 Sep 9 1933:50	Black Brant VC	-	MASA 21.110CE	CUARA Electrojet	-	-	-	TOR	-	-	-	120?	-	-
1986-568	2449045.07	1984 Sep 9 1933:50	Black Brant VC	-	MASA 21.110CE	CUARA Electrojet	-	-	-	TOR	-	-	-	120?	-	-
1986-576	2449632.06	1984 Oct 6 1925	Black Brant VC	-	MASA 21.112CE	CUARA Electrojet	-	-	-	ALCA	-	-	-	120?	-	-
1986-575	2449641.07	1984 Oct 15 1341:31	Black Brant VC	-	MASA 21.112CE	CUARA Electrojet	-	-	-	ALCA	-	-	-	120?	-	-
1986-583	2450247.50	1986 Jun 13	Black Brant VC	-	MASA 21.113CE	CUARA Electrojet	-	-	-	ALCA	-	-	-	120?	-	-
1986-583	2450326.23	1986 Jun 29 1738	Black Brant VC	-	MASA 21.113CE	CUARA Electrojet	-	-	-	ALCA	-	-	-	180	-	-
1986-583	2450326.23	1986 Aug 8 1659	Black Brant VC	-	MASA 21.120NE	METEORS	-	-	-	WS	-	-	-	100?	-	-
1986-517	2450364.51	1986 Feb 20 0009:02	Black Brant VC	-	MASA 21.117UE	Coqui Dos/SAL	-	-	-	TOR	-	-	-	115	-	-
1986-518	2450364.53	1986 Feb 20 0037:43	Black Brant VC	-	MASA 21.117UE	Coqui Dos	-	-	-	TOR	-	-	-	150?	-	-
1986-520	2450369.64	1986 Feb 25 0317:00	Black Brant VC	-	MASA 21.118UE	Coqui Dos	-	-	-	TOR	-	-	-	150?	-	-
1986-527	2450379.56	1986 Mar 7 0133:07	Black Brant VC	-	MASA 21.114UE	Coqui Dos	-	-	-	TOR	-	-	-	250?	-	-
1986-532	2450397.57	1986 Mar 25 0145:21	Black Brant VC	-	MASA 21.115UE	Coqui Dos	-	-	-	TOR	-	-	-	250?	-	-
1986-543	2451201.14	1986 Jun 22 1620:17	Black Brant VC	-	MASA 21.116CE	-	-	-	-	PF	-	-	-	250?	-	-
1986-543	2451364.67	1986 Jul 5 0357:57	Black Brant VC	-	MASA 21.123CE	-	-	-	-	WT	-	-	-	250?	-	-
1986-543	2451364.68	1986 Jul 5 2336:30	Black Brant VC	-	MASA 21.123CE	-	-	-	-	WT	-	-	-	117	-	-
1986-547	2451373.64	1986 Jul 14 0328:40	Black Brant VA	-	MASA 21.124GE	MD-PR-04 DRPPPS-1	-	-	-	AND	-	-	-	118	-	-
1986-547	2451387.41	1986 Jul 27 2147:55	Black Brant VC	-	MASA 21.122GE	MD-PR-13 DRPPPS-2	-	-	-	AND	-	-	-	104	-	-
1986-547	2451387.41	1986 Jul 27 2147:55	Black Brant VC	-	MASA 21.122GE	MD-PR-13 DRPPPS-2	-	-	-	AND	-	-	-	104	-	

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Launch_Mission	FlightCode	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee km	Range km	Dest
2024-S51	2460555.90	2024 Sep 2 0941:00	Black Brant VC	-	BOLT-1B	BOLT-1B	-	-	-	AND	U3	-	-	254	-	-



Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	OrbPay	Agency	Launch_Code	Group	Category	LTCite	Cite	Notes
1959-5162	2438817.14	1959 Sep 5 1527	Black Brant I	-	MRC BB-1-01	0.000	CARDE	SS	CANDE/Delisle	Test	FC	CASJ201,396	-
1959-5163	2438817.43	1959 Sep 5 2224	Black Brant I	-	MRC BB-1-02	0.000	CARDE	SS	CANDE/Delisle	Test	FC	-	-
1959-5164	2438820.13	1959 Sep 5 1514	Black Brant I	-	MRC BB-1-03	0.000	CARDE	SS	CANDE/Delisle	Test	FC	-	-
1959-5167	2438822.41	1959 Sep 10 2148	Black Brant I	-	MRC BB-1-04	0.000	CARDE	SS	CANDE/Delisle	Test	FC	-	-
1960-599	2437073.38	1960 May 18 2104	Black Brant I	-	MRC BB-1-05	0.000	CARDE	SF	CANDE/Delisle	Test	FC	-	-
1960-5104	2437079.24	1960 May 24 1744	Black Brant I	-	MRC BB-1-06	0.000	CARDE	SS	CANDE/Delisle	Test	FC	-	-
1960-5100	2437083.27	1960 May 28 1827	Black Brant I	-	MRC BB-1-07	0.000	CARDE	SS	CANDE/Delisle	Test	FC	-	-
1960-5264	2437200.78	1960 Sep 23 0640	Black Brant I	-	MRC BB-1-08	0.000	CARDE	SS	CANDE/Breton	Aeron	FC	-	-
1960-5356	2437207.76	1960 Sep 30 0617	Black Brant I	-	MRC BB-1-09	0.000	CARDE	SS	CANDE/Breton	Aeron	FC	-	-
1960-5312	2437216.11	1960 Oct 5 1445	Black Brant I	-	BB-1-11	0.000	CARDE	SS	CRTE/Heikilla	Auroral	FC	-	-
1960-5317	2437220.19	1960 Oct 12 1637	Black Brant I	-	CC-2A-13	0.000	CARDE	SS	CRTE/Heikilla	Test	FC	-	-
1960-5318	2437220.39	1960 Oct 12 2127	Black Brant II	-	CC-2A-14	0.000	CARDE	SS	CRTE/Breton	Test	FC	-	-
1960-5332	2437228.33	1960 Oct 20 1950	Black Brant I	-	BB-1-10	0.000	DRTE	SS	DRTE/Heikilla	Ionos/Plasma	FC	-	-
1960-5339	2437236.01	1960 Oct 28 1221	Black Brant I	-	BB-1-12	0.000	DRTE	SS	DRTE/Heikilla	Ionos/Plasma	FC	-	-
1963-5109	2438109.66	1963 Mar 21 0353	Black Brant I	-	CC-1-28	0.000	CARDE	SS	CANDE/Spindler	Aeron	FC	-	-
1963-5113	2438113.64	1963 Mar 25 0317	Black Brant I	-	CC-1-38	0.000	CARDE	SS	CANDE/Spindler	Aeron	FC	-	-
1963-5136	2438125.67	1963 Apr 6 0403	Black Brant I	-	AD-1-26	0.000	NRCC	SS	SASK/Johnson	Auroral/Aeron/Ionos	FC	-	-
1963-5137	2438125.67	1963 Apr 6 0725	Black Brant I	-	AD-1-23	0.000	NRCC	SS	SASK/Budzinski	Auroral/Aeron/Ionos	FC	-	-
1963-5169	2438157.35	1963 May 7 2030	Black Brant I	-	BB-2A-22	0.000	NRCC	SS	SASK/Johnson	Auroral/Ionos/Field	FC	-	-
1963-5267	2438191.71	1963 Jun 11 0506	Black Brant II	-	BB-2A-21	0.000	NRCC	SS	DRTE/Heikilla	Ionos	FC	-	-
1963-5268	2438205.29	1963 Jun 24 1900	Black Brant II	-	CC-2A-16	0.000	CARDE	SS	DRTE/Heikilla	Ionos	FC	-	-
1963-5298	2438205.46	1963 Jun 24 2300	Black Brant II	-	CC-2A-17	0.000	CARDE	SS	CANDE/Clarke	Test	FC	-	-
1963-5324	2438231.38	1963 Jul 20 2105	Black Brant II	-	AC17-199	0.000	AFNRL	SS	U17/AFNRL/Haycock, Ulv.	Eclipse	FC	MR630729, AFNRL2	-
1963-5362	2438237.39	1963 Jul 26 2119	Black Brant II	-	AC17-61	0.000	AFNRL	SS	U17/AFNRL/Haycock, etc	Eclipse	FC	AFNRL2	-
1963-5468	2438316.73	1963 Oct 14 0534	Black Brant II	-	CC-2A-20	0.000	DRTE	SS	CANDE/Spindler	Aeron	FC	-	-
1963-5502	2438320.89	1963 Oct 18 0920	Black Brant II	-	CC-2A-39	0.000	DRTE	SS	CANDE/Spindler	Aeron	FC	-	-
1963-5516	2438328.58	1963 Oct 26 0200	Black Brant II	-	CC-2A-19	0.000	DRTE	SS	CANDE/Spindler	Aeron	FC	-	-
1963-5523	2438331.62	1963 Oct 29 0253	Black Brant II	-	CC-2A-40	0.000	DRTE	SS	CANDE/Spindler	Aeron	FC	-	-
1964-5322	2438403.72	1964 Jan 9 0522	Black Brant II	-	AD-2-41	0.000	NRCC	SS	ALB/Nichlamar	Auroral/Ionos/Micromet	FC	-	-
1964-5326	2438406.75	1964 Jan 14 0605	Black Brant II	-	AD-2-25	0.000	NRCC	SS	SASK/savadas	Test	FC	-	-
1964-5350	2438411.91	1964 Jan 17 0721	Black Brant II	-	AD-2-42	0.000	NRCC	SS	CANDE/Clarke	Test	FC	-	-
1964-541	2438415.26	1964 Jan 20 1810	Black Brant II	-	CC-2A-29	0.000	CARDE	SS	CANDE/Clarke	Test	FC	-	-
1964-542	2438415.39	1964 Jan 20 2115	Black Brant II	-	CC-2A-30	0.000	CARDE	SS	CANDE/Clarke	Test	FC	-	-
1964-5191	2438492.73	1964 Apr 7 0529	Black Brant II	-	AD-2A-43	0.000	NRCC	SS	NRCC/Nichlamar	Auroral/Ionos/Micromet	FC	-	-
1964-5193	2438494.82	1964 Apr 9 0747	Black Brant II	-	AD-2A-44	0.000	NRCC	SS	SASK/Johnson	Auroral/Aeron/Ionos	FC	-	-
1964-5211	2438501.80	1964 Apr 15 0716	Black Brant II	-	AD-2A-36	0.000	NRCC	SS	SASK/Johnson	Auroral/Ionos/Micromet	FC	-	-
1964-5212	2438502.53	1964 Apr 17 0044	Black Brant II	-	AD-2A-56	0.000	NRCC	SS	SASK/Johnson	Auroral/Ionos/Micromet	FC	-	-
1964-5706	2438571.36	1964 Jun 24 2034	Black Brant IVA	-	MRC FF-4-01	0.000	CARDE	SF	SASK/Johnson	Ionos/Particles/Micromet	FC	-	-
1964-5708	2438579.58	1964 Jul 2 2100	Black Brant IVA	-	MRC FF-4-02	0.000	CARDE	SF	SASK/Johnson	Test/Ionos	FC	-	-
1964-5131	2438646.65	1964 Sep 5 0545	Black Brant II	-	AR-2A-59	0.000	NRCC	SF	BAJ/Saviter	Test	FC	-	-
1964-5132	2438653.79	1964 Sep 5 0659	Black Brant II	-	AR-2A-58	0.000	NRCC	SF	BAJ/Saviter	Test	FC	-	-
1964-5567	2438675.35	1964 Oct 7 2830	Black Brant IIB	-	CC-2B-49	0.000	NRCC	SS	SASK/Johnson	Ionos	FC	-	-
1964-5568	2438676.27	1964 Oct 7 1630	Black Brant IIB	-	CC-2B-61	0.000	NRCC	SS	CANDE/Delisle	Test	FC	-	-
1964-5564	2438696.21	1964 Oct 27 1857	Black Brant IIB	-	CC-2B-48	0.000	NRCC	SS	CANDE/Delisle	Test	FC	-	-
1964-5649	2438726.85	1964 Nov 27 1802	Black Brant II	-	AC1-606	0.000	NRCC	SS	NRCC/Delisle	Test	FC	-	-
1965-544	2438783.41	1965 Jan 22 2146	Black Brant IVA	-	MRC FF-4-03	0.000	NRCC	SS	NRCC/Smiddy, Ulvick	Ionos	FC	-	-
1965-545	2438784.29	1965 Jan 25 1815	Black Brant IVA	-	MRC FF-4-04	0.000	NRCC	SS	NRCC/Smiddy, Ulvick	Ionos	FC	-	-
1965-548	2438786.27	1965 Jan 26 2003	Black Brant IIB	-	CC-2B-46	0.000	NRCC	SS	BAJ/Saviter	Test	FC	-	-
1965-5113	2438786.37	1965 Jan 26 2053	Black Brant IIB	-	CC-2B-46	0.000	NRCC	SS	BAJ/Saviter	Test	FC	-	-
1965-5167	2438836.77	1965 Mar 17 0339	Black Brant II	-	AE-2A-24	0.000	NRCC	SS	BAJ/Saviter	Test	FC	-	-
1965-5175	2438839.77	1965 Mar 19 0534	Black Brant II	-	AE-2A-24	0.000	NRCC	SS	BAJ/Saviter	Test	FC	-	-
1965-5168	2438840.54	1965 Mar 23 0524	Black Brant II	-	AE-2A-25	0.000	NRCC	SS	BAJ/Saviter	Test	FC	-	-
1965-5192	2438843.74	1965 Mar 24 0544	Black Brant II	-	AE-2A-60	0.000	NRCC	SS	BAJ/Saviter	Test	FC	-	-
1965-176	2438908.50	1965 May 27 2365	Black Brant II	-	BB-2A-51	0.000	NRCC	SS	DRTE/Habbeys	Auroral/Ionos	FC	-	-
1965-5338	2438914.10	1965 May 27 1857	Black Brant II	-	BB-2A-51	0.000	NRCC	SS	DRTE/Habbeys	Auroral/Ionos	FC	-	-
1965-5394	2438924.30	1965 Jun 12 1914	Black Brant II	-	FF-VP-01	0.000	BAL	SS	BAL/Tough	Test	FC	-	-
1965-5364	2438924.30	1965 Jun 12 1914	Black Brant II	-	FF-VP-02	0.000	BAL	SS	BAL/Tough	Test	FC	-	-
1965-5365	2438920.17	1965 Jun 18 1612	Black Brant VB	-	VP-03	0.000	AFNRL	SS	AFNRL/Height	Test	FC	-	-
1965-5406	2439020.46	1965 Jun 18 2305	Black Brant VB	-	AA-2A-103	0.000	NRCC	SS	NRCC/Mchamara, McDiarmid	Auroral/Solar, UV	FC	-	-
1966-5196	2439210.80	1966 Sep 16 0707	Black Brant II	-	AA-2A-104	0.000	NRCC	SS	NRCC/Mchamara, Anger	Auroral/Ionos/Plasma	UDCRF	-	-
1966-5445	2439354.85	1966 Sep 26 0419	Black Brant VB	-	ALF-VP-09	0.000	WPE	SS	WPE/Habbeys, Haerenda	Aeron Ba	UDCRF	-	-
1966-5449	2439356.82	1966 Aug 19 0724	Black Brant VB	-	ALF-VP-09	0.000	WPE	SS	WPE/Habbeys, Haerenda	Aeron Ba	UDCRF	-	-
1966-5610	2439397.26	1966 Sep 28 1816	Black Brant II	-	AC17-604D	0.000	AFNRL	SS	AFNRL/JUT/Ulvick, Baker	Ionos/Ton/Field	AFNRL2	-	-
1966-5634	2439438.51	1966 Nov 19 0010	Black Brant II	-	ADL-2A-106	0.000	NRCC	SS	SASK/Mchamara, Miller	Plasma/Fields	AnnaleGeo24,305	-	-
1966-5669	2439458.76	1966 Nov 29 0698	Black Brant IVA	-	ALF-4-08	0.000	NRCC	SS	NRCC/Budzinski	Test	FC	-	-
1966-5681	2439475.40	1966 Dec 15 1532	Black Brant IVA	-	ALF-4-08	0.000	NRCC	SS	NRCC/Budzinski	Test	FC	-	-
1966-5112	2439475.40	1966 Dec 15 2132	Black Brant IVA	-	ALF-4-07	0.000	NRCC	SS	BAL/Saviter	Test	FC	-	-
1967-5668	2439511.78	1967 Jan 21 0638	Black Brant II	-	ADL-VA-107	0.000	NRCC	SF	NRCC/Mchamara, McDiarmid	Auroral/Ionos/Metro	UDCRF	-	-
1967-5231	2439525.72	1967 Feb 4 0521	Black Brant II	-	AA-2-105	0.000	NRCC	SS	NRCC/Mchamara	Auroral/Ionos/Plasma	UDCRF	-	-
1967-5234	2439525.72	1967 Feb 4 0521	Black Brant II	-	AA-2-102	0.000	NRCC	SS	NRCC/Mchamara	Auroral/Ionos/Metro	UDCRF	-	-
1967-5237	2439525.72	1967 Feb 4 0521	Black Brant II	-	AA-2-101	0.000	NRCC	SS	NRCC/Mchamara	Auroral/Ionos/Metro	UDCRF	-	-
1967-5238	2439525.72	1967 Feb 4 0521	Black Brant II	-	AFV-VP-06	0.000	NRCC	SS	BAL/Saviter	Test/Ionos/Plasma	UDCRF	-	-
1967-5239	2439525.72	1967 Feb 4 0521	Black Brant II	-	AFV-VP-07	0.000	NRCC	SS	BAL/Saviter	Test/Ionos/Plasma	UDCRF	-	-
1967-5240	2439525.72	1967 Feb 4 0521	Black Brant II	-	AFV-VP-08	0.000	NRCC	SS	BAL/Saviter	Test/Ionos/Plasma	UDCRF	-	-
1967-5241	2439525.72	1967 Feb 4 0521	Black Brant II	-	AFV-VP-09	0.000	NRCC	SS	BAL/Saviter	Test/Ionos/Plasma	UDCRF	-	-
1967-5242	2439525.72	1967 Feb 4 0521	Black Brant II	-	AFV-VP-10	0.000	NRCC	SS	BAL/Saviter	Test/Ionos/Plasma	UDCRF	-	-
1967-5243	2439525.72	1967 Feb 4 0521	Black Brant II	-	AFV-VP-11	0.000	NRCC	SS	BAL/Saviter	Test/Ionos/Plasma	UDCRF	-	-
1967-5244	2439525.72	1967 Feb 4 0521	Black Brant II	-	AFV-VP-12	0.000	NRCC	SS	BAL/Saviter	Test/Ionos/Plasma	UDCRF	-	-
1967-5245	2439525.72	1967 Feb 4 0521	Black Brant II	-	AFV-VP-13	0.000	NRCC	SS	BAL/Saviter	Test/Ionos/Plasma	UDCRF	-	-
1967-5246	2439525.72	1967 Feb 4 0521	Black Brant II	-	AFV-VP-14	0.000	NRCC	SS	BAL/Saviter	Test/Ionos/Plasma	UDCRF	-	-
1967-5247	2439525.72	1967 Feb 4 0521	Black Brant II	-	AFV-VP-15	0.000	NRCC	SS	BAL/Saviter	Test/Ionos/Plasma	UDCRF	-	-
1967-5248	2439525.72	1967 Feb 4 0521	Black Brant II	-	AFV-VP-16	0.000	NRCC	SS	BAL/Saviter	Test/Ionos/Plasma	UDCRF	-	-
1967-5249	2439525.72	1967 Feb 4 0521	Black Brant II	-	AFV-VP-17	0.000	NRCC	SS	BAL/Saviter	Test/Ionos/Plasma	UDCRF	-	-
1967-5250	2439525.72	1967 Feb 4 0521	Black Brant II	-	AFV-VP-18	0.000	NRCC	SS	BAL/Saviter	Test/Ionos/Plasma	UDCRF	-	-
1967-5251	2439525.72	1967 Feb 4 0521	Black Brant II	-	AFV-VP-19	0.000	NRCC	SS	BAL/Saviter	Test/Ionos/Plasma	UDCRF	-	-
1967-5252	2439525.72	1967 Feb 4 0521	Black Brant II	-	AFV-VP-20	0.000	NRCC	SS	BAL/Saviter	Test/Ionos/Plasma	UDCRF	-	-
1967-5253	2439525.72	1967 Feb 4 0521	Black Brant II	-	AFV-VP-21	0.000	NRCC	SS	BAL/Saviter	Test/Ionos/Plasma	UDCRF	-	-
1967-5254	2439525.72	1967 Feb 4 0521	Black Brant II	-	AFV-VP-22	0.000	NRCC	SS	BAL/Saviter	Test/Ionos/Plasma	UDCRF	-	-
1967-5255	2439525.72	1967 Feb 4 0521	Black Brant II	-	AFV-VP-23	0.000	NRCC	SS	BAL/Saviter	Test/Ionos/Plasma	UDCRF	-	-
1967-5256	2439525.72	1967 Feb 4 0521	Black Brant II	-	AFV-VP-24	0.000	NRCC	SS	BAL/Saviter				



Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	OrbPay	Agency	Launch_Code	Group	Category	LTCite	Cite	Notes
1972-3562	2441615.22	1972 Oct 24 1720	Black Brant VB	-	MASA 21-20GT	0.000	GSFC	SS	HOU/GSFC/Drc, Timothy	Test	KPND	-	-
1972-3567	2441623.69	1972 Nov 2 0427	Black Brant VC	-	MASA 21-0001	0.000	GSFC	SS	UTD/Heikkila	Ionos	SP-4017	-	-
1972-3545	2441666.79	1972 Dec 5 0700	Black Brant VC	-	CRJ A16-0006-5	0.000	AFRL	SS	AFRL/Strair	Aeron	FC	AFRL	-
1973-324	2441705.47	1973 Jan 22 2310	Black Brant VC	-	MASA 21-09GT-US	0.000	GSFC	SS	GSFC/Boister, Lane, Wood	Aeron/Solar EVJ	WDRF	-	-
1973-357	2441711.71	1973 Jan 29 0502	Black Brant IVB	-	AMF-4B-27	0.000	NRCC	SS	NRCC/Whalen	Aurora	WDRF	-	-
1973-353	2441715.11	1973 Feb 1 1433:30	Black Brant VB	-	AMF-VB-36	0.000	NRCC	SS	DLK/Schlegel	Koraba	WDRF	-	-
1973-355	2441715.76	1973 Feb 2 0620	Black Brant VC	-	-	0.000	NRCC	SS	NRCC/Whalen	Aurora/Aeron/Plasm	WDRF	-	-
1973-357	2441716.50	1973 Feb 3	Black Brant VC	-	-	0.000	NRCC	SS	DLK/	Aeron?	Chesser	-	-
1973-363	2441721.09	1973 Feb 7 1409	Black Brant VC	-	-	0.000	NRCC	SS	DLK/Whalen	Koraba	Chesser	-	-
1973-366	2441722.67	1973 Feb 10 0408	Black Brant VC	-	AMF-4B-28	0.000	NRCC	SS	NRCC/Whalen	Aeron/Plasma/Aurora	WDRF	-	-
1973-370	2441729.72	1973 Feb 16 0516:00	Black Brant VC	-	MASA 21-160U	0.000	GSFC	SS	UCY/Booyer	Aeron	WDRF	-	-
1973-384	2441739.64	1973 Feb 26 0323	Black Brant II	-	ADM-2-127	0.000	NRCC	SS	DLK/NPE/Drescher, Sahai	EDV Astron/XR Astron	SR15, 251	ApJ190, 285 [Moraba Feb-15-0216]	
1973-316	2441764.01	1973 Mar 22 1212	Black Brant VC	-	CRJ A16-0006-2	0.000	AFRL	SS	AFRL/Strair, Wheeler	Aurora	WDRF	-	-
1973-3121	2441768.90	1973 Mar 27 0937:45	Black Brant VC	-	MASA 21-110U-HP	0.000	GSFC	SS	AFRL/Marcis, Ulicki	Aurora	AFRL	-	-
1973-3141	2441776.22	1973 Apr 5 1720	Black Brant VC	-	MASA 21-110U-HP	0.000	GSFC	SS	NRZ/Brueckner	Solar	WDRF	-	-
1973-3167	2441815.03	1973 Apr 12 1241:00	Black Brant VC	-	AMF-VB-37	0.000	NRCC	SS	NRZ/Brueckner	Aeronomy/Ionos	AND	-	-
1973-3168	2441816.69	1973 Apr 16 0919	Black Brant VB	-	AMF-VB-37	0.000	NRCC	SS	NRZ/Roberts	Test/Aeron/Ionos/So	WDRF	-	-
1973-3169	2441821.17	1973 May 1 1600	Black Brant VC	-	MASA 21-190S-GT	0.000	GSFC	SS	HOU/Timothy	Solar EVJ	WDRF	-	-
1973-3194	2441838.22	1973 Jun 4 1710	Black Brant VC	-	MASA 21-210P-US	0.000	GSFC	SS	NRZ/Brueckner	Solar UV/Solar X	WDRF	-	-
1973-3201	2441847.23	1973 Jun 13 1738	Black Brant VC	-	MASA 21-210P-US	0.000	GSFC	SS	NRZ/Brueckner	XR Astron	WDRF	-	-
1973-3205	2441854.94	1973 Jun 21 1030	Black Brant IVB	-	APP-4B-30	0.000	NRCC	SS	CRJ/Wilson	Aeronomy/Ionos	WDRF	-	-
1973-3229	2441867.64	1973 Jun 4 0327:11	Black Brant VC	-	AMF-VB-49	0.000	NRCC	SS	CRJ/Wilson	Aeronomy/Ionos	ESR073/AND	-	-
1973-3270	2441903.50	1973 Aug 9 1730:58	Black Brant IVB	-	MASA 19-07GT	0.000	GSFC	SS	GSFC/Boister	Test	WDRF	-	-
1973-3272	2441904.23	1973 Aug 9 1730:58	Black Brant VC	-	MASA 19-07GT	0.000	GSFC	SS	GSFC/Boister	Test	WDRF	-	-
1973-3273	2441904.94	1973 Aug 9 1730:58	Black Brant VC	-	MASA 19-07GT	0.000	GSFC	SS	GSFC/Boister	Test	WDRF	-	-
1973-3286	2441925.21	1973 Aug 30 1701	Black Brant VC	-	CRJ A16-0006-01	0.000	AFRL	SS	AFRL/Mansfield	Test	AFRL	-	-
1973-3289	2441930.20	1973 Sep 4 1645	Black Brant VC	-	MASA 21-070S	0.000	GSFC	SS	UCY/Rense	Solar	WDRF	-	-
1973-3285	2441979.63	1973 Oct 24 0305	Black Brant IVA	-	MASA 21-130S-HP	0.000	GSFC	SS	NRZ/Brueckner	Solar UV/Solar X	WDRF	-	-
1973-3565	2441980.63	1973 Oct 25 0307	Black Brant IVA	-	CRJ A16-313-01	0.000	AFRL	SS	AFRL/Lewis	Ionos VLF	WDRF	-	-
1973-3402	2442009.40	1973 Oct 25 2129	Black Brant IVB	-	CRJ A16-313-02	0.000	AFRL	SS	DLK/	Ionos VLF	AFRL	-	-
1973-3406	2442012.45	1973 Nov 25 2247	Black Brant VC	-	AMF-VB-40	0.000	NRCC	SS	DLK/	Ionos/Plasma?	JCH	-	-
1973-3409	2442014.13	1973 Nov 27 1506:33	Black Brant VA	-	AMF-VB-40	0.000	NRCC	SS	DLK/	Ionos/Plasma?	JCH	-	-
1973-3413	2442021.14	1973 Dec 1 1520:33	Black Brant IVA	-	MASA 19-080A	0.000	GSFC	SS	DMT/McScott	Aeronomy	WDRF	-	-
1973-3453	2442027.30	1973 Dec 10 1910	Black Brant VC	-	MASA 19-080A	0.000	GSFC	SS	DMT/McScott	Aeronomy	WDRF	-	-
1974-359	2442063.33	1974 Jan 15 2000	Black Brant VC	-	MASA 21-220P-US	0.000	GSFC	SS	HOU/Timothy	Solar EVJ	WDRF	-	-
1974-374	2442070.78	1974 Jan 23 0606	Black Brant VC	-	MASA 21-140S-HP	0.000	NRCC	SS	NRZ/Brueckner	Solar	WDRF	-	-
1974-380	2442086.45	1974 Feb 6 2246:57	Black Brant VB	-	ESRD D-101	0.000	NRCC	SS	NRZ/Shepherd	Aurora/Aeron/Tonos	FC	-	-
1974-3101	2442092.42	1974 Feb 13 0607	Black Brant VC	-	AMF-4B-31	0.000	NRCC	SS	NRZ/Shepherd	Aurora/Aeron/Tonos	FC	-	-
1974-3113	2442098.99	1974 Feb 14 0607	Black Brant VC	-	CRJ A16-006-4	0.000	AFRL	SS	AFRL/Strair	Aeron	AFRL	-	-
1974-3114	2442100.71	1974 Feb 15 0916	Black Brant VC	-	CRJ A16-006-4	0.000	AFRL	SS	AFRL/Strair	Aeron	AFRL	-	-
1974-3115	2442103.62	1974 Feb 22 0759	Black Brant VC	-	CRJ A16-116-1	0.000	AFRL	SS	AFRL/Strair	Aeron	AFRL	-	-
1974-3121	2442106.26	1974 Feb 26 1517	Black Brant VC	-	CRJ A16-128-1	0.000	AFRL	SS	AFRL/Strair	Aeron	AFRL	-	-
1974-3123	2442106.62	1974 Feb 26 1517	Black Brant VC	-	CRJ A16-128-1	0.000	AFRL	SS	AFRL/Strair	Aeron	AFRL	-	-
1974-3124	2442106.62	1974 Feb 26 1517	Black Brant VC	-	CRJ A16-128-1	0.000	AFRL	SS	AFRL/Strair	Aeron	AFRL	-	-
1974-3125	2442106.62	1974 Feb 26 1517	Black Brant VC	-	CRJ A16-128-1	0.000	AFRL	SS	AFRL/Strair	Aeron	AFRL	-	-
1974-3126	2442106.62	1974 Feb 26 1517	Black Brant VC	-	CRJ A16-128-1	0.000	AFRL	SS	AFRL/Strair	Aeron	AFRL	-	-
1974-3127	2442106.62	1974 Feb 26 1517	Black Brant VC	-	CRJ A16-128-1	0.000	AFRL	SS	AFRL/Strair	Aeron	AFRL	-	-
1974-3128	2442106.62	1974 Feb 26 1517	Black Brant VC	-	CRJ A16-128-1	0.000	AFRL	SS	AFRL/Strair	Aeron	AFRL	-	-
1974-3129	2442106.62	1974 Feb 26 1517	Black Brant VC	-	CRJ A16-128-1	0.000	AFRL	SS	AFRL/Strair	Aeron	AFRL	-	-
1974-3130	2442106.62	1974 Feb 26 1517	Black Brant VC	-	CRJ A16-128-1	0.000	AFRL	SS	AFRL/Strair	Aeron	AFRL	-	-
1974-3131	2442106.62	1974 Feb 26 1517	Black Brant VC	-	CRJ A16-128-1	0.000	AFRL	SS	AFRL/Strair	Aeron	AFRL	-	-
1974-3132	2442106.62	1974 Feb 26 1517	Black Brant VC	-	CRJ A16-128-1	0.000	AFRL	SS	AFRL/Strair	Aeron	AFRL	-	-
1974-3133	2442106.62	1974 Feb 26 1517	Black Brant VC	-	CRJ A16-128-1	0.000	AFRL	SS	AFRL/Strair	Aeron	AFRL	-	-
1974-3134	2442106.62	1974 Feb 26 1517	Black Brant VC	-	CRJ A16-128-1	0.000	AFRL	SS	AFRL/Strair	Aeron	AFRL	-	-
1974-3135	2442106.62	1974 Feb 26 1517	Black Brant VC	-	CRJ A16-128-1	0.000	AFRL	SS	AFRL/Strair	Aeron	AFRL	-	-
1974-3136	2442106.62	1974 Feb 26 1517	Black Brant VC	-	CRJ A16-128-1	0.000	AFRL	SS	AFRL/Strair	Aeron	AFRL	-	-
1974-3137	2442106.62	1974 Feb 26 1517	Black Brant VC	-	CRJ A16-128-1	0.000	AFRL	SS	AFRL/Strair	Aeron	AFRL	-	-
1974-3138	2442106.62	1974 Feb 26 1517	Black Brant VC	-	CRJ A16-128-1	0.000	AFRL	SS	AFRL/Strair	Aeron	AFRL	-	-
1974-3139	2442106.62	1974 Feb 26 1517	Black Brant VC	-	CRJ A16-128-1	0.000	AFRL	SS	AFRL/Strair	Aeron	AFRL	-	-
1974-3140	2442106.62	1974 Feb 26 1517	Black Brant VC	-	CRJ A16-128-1	0.000	AFRL	SS	AFRL/Strair	Aeron	AFRL	-	-
1974-3141	2442106.62	1974 Feb 26 1517	Black Brant VC	-	CRJ A16-128-1	0.000	AFRL	SS	AFRL/Strair	Aeron	AFRL	-	-
1974-3142	2442106.62	1974 Feb 26 1517	Black Brant VC	-	CRJ A16-128-1	0.000	AFRL	SS	AFRL/Strair	Aeron	AFRL	-	-
1974-3143	2442106.62	1974 Feb 26 1517	Black Brant VC	-	CRJ A16-128-1	0.000	AFRL	SS	AFRL/Strair	Aeron	AFRL	-	-
1974-3144	2442106.62	1974 Feb 26 1517	Black Brant VC	-	CRJ A16-128-1	0.000	AFRL	SS	AFRL/Strair	Aeron	AFRL	-	-
1974-3145	2442106.62	1974 Feb 26 1517	Black Brant VC	-	CRJ A16-128-1	0.000	AFRL	SS	AFRL/Strair	Aeron	AFRL	-	-
1974-3146	2442106.62	1974 Feb 26 1517	Black Brant VC	-	CRJ A16-128-1	0.000	AFRL	SS	AFRL/Strair	Aeron	AFRL	-	-
1974-3147	2442106.62	1974 Feb 26 1517	Black Brant VC	-	CRJ A16-128-1	0.000	AFRL	SS	AFRL/Strair	Aeron	AFRL	-	-
1974-3148	2442106.62	1974 Feb 26 1517	Black Brant VC	-	CRJ A16-128-1	0.000	AFRL	SS	AFRL/Strair	Aeron	AFRL	-	-
1974-3149	2442106.62	1974 Feb 26 1517	Black Brant VC	-	CRJ A16-128-1	0.000	AFRL	SS	AFRL/Strair	Aeron	AFRL	-	-
1974-3150	2442106.62	1974 Feb 26 1517	Black Brant VC	-	CRJ A16-128-1	0.000	AFRL	SS	AFRL/Strair	Aeron	AFRL	-	-
1974-3151	2442106.62	1974 Feb 26 1517	Black Brant VC	-	CRJ A16-128-1	0.000	AFRL	SS	AFRL/Strair	Aeron	AFRL	-	-
1974-3152	2442106.62	1974 Feb 26 1517	Black Brant VC	-	CRJ A16-128-1	0.000	AFRL	SS	AFRL/Strair	Aeron	AFRL	-	-
1974-3153	2442106.62	1974 Feb 26 1517	Black Brant VC	-	CRJ A16-128-1	0.000	AFRL	SS	AFRL/Strair	Aeron	AFRL	-	-
1974-3154	2442106.62	1974 Feb 26 1517	Black Brant VC	-	CRJ A16-128-1	0.000	AFRL	SS	AFRL/Strair	Aeron	AFRL	-	-
1974-3155	2442106.62	1974 Feb 26 1517	Black Brant VC	-	CRJ A16-128-1	0.000	AFRL	SS	AFRL/Strair	Aeron	AFRL	-	-
1974-3156	2442106.62	1974 Feb 26 1517	Black Brant VC	-	CRJ A16-128-1	0.000	AFRL	SS	AFRL/Strair	Aeron	AFRL	-	-
1974-3157	2442106.62	1974 Feb 26 1517	Black Brant VC	-	CRJ A16-128-1	0.000	AFRL	SS	AFRL/Strair	Aeron	AFRL	-	-
1974-3158	2442106.62	1974 Feb 26 1517	Black Brant VC	-	CRJ A16-128-1	0.000	AFRL	SS	AFRL/Strair	Aeron	AFRL	-	-
1974-3159	2442106.62	1974 Feb 26 1517	Black Brant VC	-	CRJ A16-128-1	0.000	AFRL	SS	AFRL/Strair	Aeron	AFRL	-	-
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Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	OrbPay	Agency	Launch_Code	Group	Category	LTCite	Cite	Notes
1977-5197	2443304.63	1977 Jun 10 0906:19	Black Brant VC	-	DLR H-BBV-84	0.000	DFVLR	SS	DORM/Koch	Tech	Moraba	ESA-SF135	-
1977-5204	2443316.17	1977 Aug 21 1600	Black Brant VC	-	MASA 21.40NP	0.000	GRFC	SS	MSCC/Chasey	Micrograv	WDRF	-	-
1977-5205	2443378.50	1977 Aug 23	Black Brant IVB	?	Equatorial Wideband	0.000	MRL/DHA	SS	MRL/Walker, Sznyszczewicz	Plasma	MRL	-	-
1978-566	2443549.73	1978 Feb 10 0530	Black Brant VC	-	MASA 21.4002S	0.000	GRFC	SS	JRU/Fastrie	UV Astron	WDRF	ESA-SF270-941	-
1978-570	2443553.22	1978 Feb 13 1715	Black Brant VC	-	MASA 21.4020S	0.000	GRFC	SS	MRL/Bruedner	Solar UV	WDRF	ESA-SF152	-
1978-575	2443566.73	1978 Feb 27 0530	Black Brant IVB	-	ARF-4B-35	0.000	RHCC	SS	SASK/Whalon	Auroral/Ionos	WDRF	-	-
1978-576	2443661.57	1978 Apr 12 0143	Black Brant VA	-	ADP-VA-49	0.000	RHCC	SS	MSCC/Liewell/Lyh	Auroral	FC	-	-
1978-5206	2443763.17	1978 Sep 11 1600:00	Black Brant VC	-	MASA 21.40NP	0.000	GRFC	SS	MSCC/Chasey	Micrograv	FC	-	-
1978-5205	2443857.58	1978 Dec 15 0157	Black Brant VC	-	APP-4B-47	0.000	RHCC	SS	UTDM/dEleuw	Auroral	FC	-	-
1979-540	2443901.41	1979 Jan 27 1712:32	Black Brant VC	-	SSC S23-L1	0.000	SSC	SS	KGL/Sandahl	Auroral	FC	-	-
1979-537	2443933.91	1979 Feb 26 1650:45	Black Brant VC	-	MSA 21.60DS	0.000	RHCC	SS	UKR7/1icholls	Auroral	WDRF	ESA-SF152-257	-
1979-5164	2444053.34	1979 Jan 29 0815	Black Brant VA	-	APP-VA-51	0.000	GRFC	SS	MRL/Bruedner	Solar	WDRF	ESA-SF152-257	-
1979-5162	2444093.33	1979 Aug 7 1950	Black Brant VC	-	GLA 18.60BS	0.000	AFGL2	SS	ARCW/McKenna	ABM Tech	WDRF	ESA-SF229-206	-
1979-5205	2444137.38	1979 Sep 20 2100	Black Brant VC	-	MASA 21.57VL	0.000	GRFC	SS	USCLM/Judge	Aeron	WDRF	ESA-SF152-141	-
1979-5251	2444224.77	1979 Sep 27 1130	Black Brant VC	-	MASA 21.6GSS	0.000	GRFC	SS	USCLM/Judge	Aeron	WDRF	-	-
1980-545	2444284.99	1980 Feb 15 1143:24	Black Brant VA	-	ADD-VA-48	0.000	RHCC	SS	SASK/Kewen	Auroral	WDRF	-	-
1980-547	2444294.92	1980 Feb 23 1005:09	Black Brant VC	-	ADD-VA-52	0.000	RHCC	SS	SASK/Kewen	Auroral	WDRF	ESA-SF229-206	-
1980-5178	2444513.26	1980 Sep 30 1816	Black Brant VC	-	MASA 21.60VL	0.000	RHCC	SS	USCLM/Judge	Auroral	WDRF	ESA-SF229-206	-
1981-551	2444623.65	1981 Jan 19 0537:27	Black Brant IVB	-	ARF-4B-34	0.000	RHCC	SS	UTDM/dEleuw	Auroral	FC	-	-
1981-555	2444630.81	1981 Jan 26 0720:06	Black Brant IVB	-	ARF-4B-36	0.000	RHCC	SS	MSCC/Whalon	Auroral	WDRF	-	-
1981-588	2444691.58	1981 Mar 28 0154:06	Black Brant IVB	-	ARF-4B-37	0.000	RHCC	SS	MSCC/Whalon	Ionos/Plasma/Fields	WDRF	-	-
1981-587	2444691.58	1981 Mar 28 0154	Black Brant IVB	-	ARF-4B-37	0.000	RHCC	SS	MSCC/Whalon	Ionos/Plasma/Fields	WDRF	-	-
1981-5110	2444751.68	1981 May 27 0425	Black Brant VC	-	MASA 21.6GSS	0.000	GRFC	SS	JRU/Feldman	UV Astron	WDRF	ApJ267, L125	-
1981-5158	2444677.50	1981 Sep 30	Black Brant VC	-	MASA 21.6GSS	0.000	GRFC	SS	JRU/Feldman	Solar	WDRF	-	-
1981-5176	2444946.47	1981 Dec 6 2314:58	Black Brant VC	-	ARF-4B-38	0.000	RHCC	SS	MSCC/Creutzberg	Auroral	WDRF	-	-
1981-5177	2444952.40	1981 Dec 13 2131:38	Black Brant IVB	-	ARF-4B-39	0.000	RHCC	SS	MSCC/Creutzberg	Auroral	WDRF	-	-
1982-5167	2445226.26	1982 Sep 15 1816	Black Brant VC	-	ARF-4C-53	0.000	GRFC	SS	MSCC/1icholls	Solar_IR	WDRF	-	-
1982-5168	2445274.94	1982 Nov 9 1745	Black Brant VC	-	MASA 21.64GSS	0.000	GRFC	SS	MSCC/1icholls	UV Astron	WDRF	-	-
1982-5167	2445283.24	1982 Nov 9 1745	Black Brant VC	-	MASA 21.64GSS	0.000	GRFC	SS	MSCC/1icholls	UV Astron	WDRF	-	-
1982-5198	2445316.93	1982 Dec 13 1020	Black Brant VC	-	MASA 21.74GSS	0.000	GRFC	SS	JRU/Feldman	UV Astron	WDRF	-	-
1983-567	2445401.17	1983 Mar 7 1050	Black Brant VC	-	MASA 21.84GSS	0.000	GRFC	SS	MSCC/Bruedner	Solar UV	WDRF	WJPR83-5	-
1983-5111	2445496.94	1983 Jun 11 0810	Black Brant VC	-	ADD-VC-56	0.000	RHCC	SS	MSCC/Richman	Aeron	WDRF	ESA-SF291-169	-
1983-5146	2445594.75	1983 Aug 6 0600	Black Brant VC	-	MASA 21.86UE	0.000	MASA/ISAS	SS	UM/Sharp	Ionos/Auroral	WDRF	J5624, 444	-
1984-564	2445794.36	1984 Feb 23 2034:47	Black Brant VB	-	MASA 21.86UE	0.000	GRFC	SS	JRU/Feldman	Ionos/Auroral	WDRF	ApJ292, 676	-
1984-569	2445762.69	1984 Mar 5 0440	Black Brant VB	-	MASA 21.86UE	0.000	GRFC	SS	JRU/Feldman	Ionos/Auroral	WDRF	WJPR85-10	-
1984-5101	2445906.95	1984 Jul 24 1040:50	Black Brant VB	-	MASA 21.91GSS	0.000	GRFC	SS	UTDM/Ingren	Ionos	WDRF	ESA-SF229-19	-
1984-5126	2445998.21	1984 Oct 24 1655:20	Black Brant VC	-	SSC S58	0.000	SSC	SS	UTDM/Ingren	Ionos	WDRF	-	-
1985-567	2446142.87	1985 Mar 18 0550	Black Brant VC	-	MASA 21.70UH	0.000	GRFC	SS	MRL/Whappoport	UV Astron	WDRF	-	-
1985-565	2446200.60	1985 Jun 14 1815	Black Brant VB	-	MASA 21.81GSS	0.000	GRFC	SS	ARF/Whalon	UV Astron	WDRF	-	-
1985-595	2446281.42	1985 Aug 2 2300:08	Black Brant VB	-	MASA 21.94GSS	0.000	GRFC	SS	ARF/Whalon	Solar	WDRF	-	-
1986-570	2446592.57	1986 Feb 26 1202	Black Brant VB	-	MASA 21.95GSS	0.000	GRFC	SS	ARF/Whalon	UV Astron	WDRF	-	-
1986-574	2446600.07	1986 Mar 13 0120	Black Brant VB	-	MASA 21.95GSS	0.000	GRFC	SS	ARF/Whalon	UV Astron	WDRF	-	-
1986-5134	2447373.29	1986 Apr 7 0902	Black Brant VC	-	MASA 21.96UE	0.000	GRFC	SS	GRSC/IRF/Praff	Ionos	sec-se	-	-
1986-5135	2447373.29	1986 Apr 7 0902	Black Brant VC	-	MASA 21.96UE	0.000	GRFC	SS	GRSC/IRF/Praff	Ionos	sec-se	-	-
1989-535	2447589.28	1989 Mar 2 1817:14	Black Brant VB	-	MASA 21.1002E	0.000	SSC/MASA	SS	UCU/Praff	Aeron/SolarUV	WDRF	-	-
1989-540	2447589.28	1989 Mar 2 1817:14	Black Brant VB	-	MASA 21.1002E	0.000	SSC/MASA	SS	UCU/Praff	Aeron/SolarUV	WDRF	-	-
1989-559	2447677.50	1989 May 4 1022:47	Black Brant VC	-	MASA 21.96GSS	0.000	SSC/MASA	SS	GRSC/IRF/Praff	Ionos	WDRF	-	-
1989-562	2447720.80	1989 Jun 21	Black Brant VC	-	SDIO Black Star 5	0.000	SDIO	SS	SDIO	Target	Chessee	-	-
1989-564	2447720.80	1989 Jun 21	Black Brant VC	-	SDIO Black Star 6	0.000	SDIO	SS	SDIO	Target	Chessee	-	-
1989-5103	2448084.50	1989 Sep 15	Black Brant VC	-	MASA 21.1021E	0.000	GRFC	SS	ARF/Whalon	UV Astron	WDRF	-	-
1989-5139	2448177.35	1989 Oct 15 2028:38	Black Brant VC	-	MASA 21.1021E	0.000	GRFC	SS	ARF/Whalon	UV Astron	WDRF	-	-
1989-5140	2448177.35	1989 Oct 15 2028:38	Black Brant VC	-	MASA 21.1021E	0.000	GRFC	SS	ARF/Whalon	UV Astron	WDRF	-	-
1989-5132	2448469.56	1991 Aug 9 0128:20	Black Brant VB	-	MASA 21.1032E	0.000	GRFC	SS	GRSC/Goldberg	Ionos	WDRF	ASR14, 9, 113	-
1989-5136	2448478.48	1991 Aug 9 0128:20	Black Brant VB	-	MASA 21.1032E	0.000	GRFC	SS	GRSC/Goldberg	Ionos	WDRF	ASR14, 9, 113	-
1989-587	2448798.52	1992 Aug 23 0034:20	Black Brant VC	-	MASA 21.1051E	0.000	GRFC	SS	GRSC/Praff	Ionos	WDRF	-	-
1989-583	2448798.52	1992 Aug 23 0034:20	Black Brant VC	-	MASA 21.1051E	0.000	GRFC	SS	GRSC/Praff	Ionos	WDRF	-	-
1989-563	2449005.07	1994 Sep 9 1335:50	Black Brant VC	-	MASA 21.1103E	0.000	GRFC	SS	GRSC/Praff	Ionos	WDRF	-	-
1989-568	2449617.08	1994 Sep 31 1355:00	Black Brant VC	-	MASA 21.1103E	0.000	GRFC	SS	GRSC/Praff	Ionos	WDRF	-	-
1989-576	2449632.06	1994 Oct 6 1322	Black Brant VC	-	MASA 21.1129E	0.000	GRFC	SS	GRSC/Praff	Ionos	WDRF	-	-
1989-578	2449641.07	1994 Oct 6 1322	Black Brant VC	-	MASA 21.1129E	0.000	GRFC	SS	GRSC/Praff	Ionos	WDRF	-	-
1989-575	2450247.50	1996 Jul 15 1341:31	Black Brant VC	-	MASA 21.1139E	0.000	GRFC	SS	GRSC/Praff	Ionos	WDRF	-	-
1989-553	2450925.23	1996 Aug 29 1738	Black Brant VC	-	MASA 21.1201E	0.000	GRFC	SS	USMA67	Target	Chessee	-	-
1989-552	2450969.19	1997 Aug 6 1629	Black Brant VC	-	MASA 21.1201E	0.000	GRFC	SS	USMA67	Target	Chessee	-	-
1989-5118	2450986.41	1998 Feb 20 0039:02	Black Brant VC	-	MASA 21.1171UE	0.000	GRFC	SS	LARC/Mlyczak	Ionos/Aeron	WDRF	www.edl.usu.edu	-
1989-5118	2450986.41	1998 Feb 20 0039:02	Black Brant VC	-	MASA 21.1171UE	0.000	GRFC	SS	LARC/Mlyczak	Ionos/Aeron	WDRF	www.edl.usu.edu	-
1989-520	2450989.64	1998 Feb 25 0317:00	Black Brant VC	-	MASA 21.1181UE	0.000	GRFC	SS	CLEM/Larson	Ionos/Release	WDRF	-	-
1989-527	2450989.64	1998 Feb 25 0317:00	Black Brant VC	-	MASA 21.1181UE	0.000	GRFC	SS	CLEM/Larson	Ionos/Release	WDRF	-	-
1989-532	2450989.64	1998 Mar 9 0133:07	Black Brant VC	-	MASA 21.1141UE	0.000	GRFC	SS	UTD/Fafile	Ionos/Release	WDRF	-	-
1989-533	2450989.64	1998 Mar 25 0145:21	Black Brant VC	-	MASA 21.1151UE	0.000	GRFC	SS	GRSC/Praff	Ionos?	WDRF	-	-
1989-543	2451201.14	1999 Jul 5 0357:57	Black Brant VB	-	MASA 21.1212E	0.000	GRFC	SS	ARND/Christiansen	Ionos?	www.sfrtr.alaska.edu	-	-
1989-545	2451364.67	1999 Jul 5 0357:57	Black Brant VB	-	MASA 21.1212E	0.000	GRFC	SS	ARND/Christiansen	Ionos?	www.sfrtr.alaska.edu	-	-
1989-547	2451373.84	1999 Jul 14 0328:45	Black Brant VA	-	MASA 21.1232E	0.000	GRFC	SS	GRSC/Goldberg	Aeron	WDRF	ESAASP-471-157	-
1989-549	2451387.41	1999 Jul 27 2147:50	Black Brant VB	-	MASA 21.1232E	0.000	GRFC	SS	GRSC/Goldberg	Aeron	WDRF	ESAASP-471-157	-
2000-561	2451843.91	2001 Oct 26 0957:00	Black Brant VC	-	MASA 21.1262E	0.000	GRFC	SS	ARND/Hecht	Plasma	www.sec.se	-	-
2000-533	2452089.70	2001 Jun 29 0444:01	Black Brant VC	-	MASA 21.1262E	0.000	GRFC	SS	ARND/Hecht	Plasma	www.sec.se	-	-
2002-509	2452326.91	2002 Feb 27 1252:01	Black Brant VB	-	MASA 21.1281UE	0.000	GRFC	SS	ARND/Christiansen	Ionos	www.off.nasa.gov	www.off.nasa.gov	-
2003-513	2452726.91	2003 Mar 27 0815:01	Black Brant VC	-	MASA 21.1311UE	0.000	GRFC	SS	CLEM/Larson	Ionos	www.off.nasa.gov	www.off.nasa.gov	-
2004-540	2453255.99	2004 Sep 7 1145:53	Black Brant VC	-	MASA 21.1332E	0.000							

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	OrbPay	Agency	Launch_Code	Group	Category	LTCite	Cite	Notes
2024-S51	2460655.90	2024 Sep 2 0941:00	Black Erant VC	-	BOLT-1B	0.000	DLR	SS	JHU/AFRL/	Hypersonic	nasaspacerflight.com	-	-



Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Mission	FlightCode	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee km	Range km	Dest
1969-188	2440495-50	1969 Oct 1	Black Brant VI	-	RD7&E XI-75	Test 1	-	-	-	WS	-	-	-	607	-	-
1972-0697	2441511-30	1972 Jul 12 1907	Black Brant VI	?	RD7&E?	MDS5 FP-019	-	-	-	FC	-	-	-	71	-	-
1972-0698	2441511-37	1972 Jul 12 2052	Black Brant VI	?	-	MDS5 FP-020	-	-	-	FC	-	-	-	72	-	-
1972-A72	2441511-44	1972 Jul 12 2230	Black Brant VI	?	-	MDS5 FP-021	-	-	-	FC	-	-	-	14	-	-
1972-0900	2441511-48	1972 Jul 12 2335	Black Brant VI	?	-	MDS5 FP-022	-	-	-	FC	-	-	-	67	-	-
1972-A73	2441511-51	1972 Jul 13 0013	Black Brant VI	?	-	MDS5 FP-023	-	-	-	FC	-	-	-	7	-	-
1972-0901	2441511-53	1972 Jul 13 0046	Black Brant VI	?	-	MDS5 FP-025	-	-	-	FC	-	-	-	77	-	-
1972-A74	2441512-29	1972 Jul 13 1854	Black Brant VI	?	-	MDS5 FP-028	-	-	-	FC	-	-	-	16	-	-
1972-0903	2441512-33	1972 Jul 13 1952	Black Brant VI	?	-	MDS5 FP-029	-	-	-	FC	-	-	-	73	-	-
1972-0904	2441512-48	1972 Jul 13 2134	Black Brant VI	?	-	MDS5 FP-027	-	-	-	FC	-	-	-	76	-	-
1972-0905	2441512-48	1972 Jul 13 2330	Black Brant VI	?	-	MDS5 FP-026	-	-	-	FC	-	-	-	74	-	-
1972-0909	2441513-12	1972 Jul 14 1453	Black Brant VI	?	-	MDS5 FP-024	-	-	-	FC	-	-	-	78	-	-
1973-0651	2441518-96	1973 May 16 1106	Black Brant VI	-	AKF-VI-01	Dust collector	-	-	-	FC	-	-	-	78	-	-
1974-0435	2442129-21	1974 Mar 22 1656	Black Brant VI	-	AKF-VI-02	Dust collector	-	-	-	FC	-	-	-	78	-	-
1974-1128	2442133-40	1974 Mar 26 2130:00	Black Brant VI	-	AKF-VI-04	Dust collector	-	-	-	FC	-	-	-	81	-	-
1974-0655	2442150-69	1974 Apr 23 0431	Black Brant VI	-	AKF-VI-03	Auroral X-rays	-	-	-	FC	-	-	-	76	-	-
1974-0691	2442187-50	1974 May 20	Black Brant VI	-	1-74	Quasah User Program	-	-	-	MS	-	-	-	78	-	-
1974-0666	2442188-50	1974 May 21	Black Brant VI	-	2-74	SIS	-	-	-	MS	-	-	-	75	-	-
1974-0667	2442189-50	1974 May 22	Black Brant VI	-	3-74	SIS	-	-	-	MS	-	-	-	74	-	-
1974-0668	2442189-50	1974 May 23	Black Brant VI	-	4-74	SIS	-	-	-	MS	-	-	-	74	-	-
1974-0669	2442190-50	1974 May 23	Black Brant VI	-	5-74	SIS	-	-	-	MS	-	-	-	73	-	-
1974-0670	2442196-50	1974 May 29	Black Brant VI	-	6-74	SIS	-	-	-	MS	-	-	-	67	-	-
1974-0671	2442197-50	1974 May 30	Black Brant VI	-	7-74	SIS	-	-	-	MS	-	-	-	71	-	-
1974-0672	2442198-50	1974 May 31	Black Brant VI	-	8-74	SIS	-	-	-	MS	-	-	-	85	-	-
1974-0673	2442210-50	1974 Jun 12	Black Brant VI	-	9-74	SIS	-	-	-	MS	-	-	-	86	-	-
1974-0674	2442211-50	1974 Jun 12	Black Brant VI	-	10-74	SIS	-	-	-	MS	-	-	-	67	-	-
1974-0675	2442216-50	1974 Jun 18	Black Brant VI	-	11-74	SIS	-	-	-	MS	-	-	-	74	-	-
1974-0676	2442217-50	1974 Jun 18	Black Brant VI	-	12-74	SIS	-	-	-	MS	-	-	-	57	-	-
1974-0677	2442267-50	1974 Aug 6	Black Brant VI	-	13-74	SIS	-	-	-	MS	-	-	-	69	-	-
1974-0678	2442268-50	1974 Aug 9	Black Brant VI	-	14-74	SIS	-	-	-	MS	-	-	-	70	-	-
1974-0679	2442280-50	1974 Aug 21	Black Brant VI	-	15-74	SIS/Starute	-	-	-	MS	-	-	-	91	-	-
1974-0680	2442280-50	1974 Aug 21	Black Brant VI	-	16-74	SIS/Starute	-	-	-	MS	-	-	-	76	-	-
1974-0681	2442286-50	1974 Aug 29	Black Brant VI	-	17-74	SIS/Starute	-	-	-	MS	-	-	-	70?	-	-
1974-0682	2442294-50	1974 Sep 4	Black Brant VI	-	18-74	Ozono/Starute	-	-	-	MS	-	-	-	70?	-	-
1974-0683	2442340-50	1974 Oct 20	Black Brant VI	-	19-74	Ozono/Starute	-	-	-	MS	-	-	-	67	-	-
1974-0684	2442366-50	1974 Nov 15	Black Brant VI	-	20-74	SIS/Starute	-	-	-	MS	-	-	-	70?	-	-
1974-0686	2442366-50	1974 Nov 15	Black Brant VI	-	21-74	SIS/Starute	-	-	-	MS	-	-	-	70?	-	-
1974-0687	2442370-50	1974 Nov 19	Black Brant VI	-	22-74	SIS/Starute	-	-	-	MS	-	-	-	71	-	-
1974-0688	2442372-50	1974 Nov 21	Black Brant VI	-	23-74	SIS/Starute	-	-	-	MS	-	-	-	82	-	-
1974-0689	2442372-50	1974 Nov 21	Black Brant VI	-	24-74	SIS/Starute	-	-	-	MS	-	-	-	82	-	-
1974-0689	2442372-50	1974 Nov 26	Black Brant VI	-	25-74	SIS/Starute	-	-	-	MS	-	-	-	94	-	-
1974-0689	2442391-50	1974 Dec 10	Black Brant VI	-	26-74	SIS/Starute	-	-	-	MS	-	-	-	76	-	-
1975-0153	2442343-50	1975 Feb 5	Black Brant VI	-	PC-74	SIS/Starute	-	-	-	MS	-	-	-	76	-	-
1975-0153	2442343-50	1975 Feb 5	Black Brant VI	-	PC-74	SIS/Starute	-	-	-	MS	-	-	-	71	-	-
1975-0154	2442348-50	1975 Feb 6	Black Brant VI	-	PC-74	SIS/Starute	-	-	-	MS	-	-	-	72	-	-
1975-0154	2442348-50	1975 Feb 6	Black Brant VI	-	PC-74	SIS/Starute	-	-	-	MS	-	-	-	72	-	-
1975-0155	2442349-50	1975 Feb 6	Black Brant VI	-	PC-74	SIS/Starute	-	-	-	MS	-	-	-	73	-	-
1975-0157	2442349-50	1975 Feb 7	Black Brant VI	-	PC-74	SIS/Starute	-	-	-	MS	-	-	-	90	-	-
1975-0157	2442349-50	1975 Feb 7	Black Brant VI	-	PC-74	SIS/Starute	-	-	-	MS	-	-	-	90	-	-
1975-0158	2442350-50	1975 Feb 7	Black Brant VI	-	PC-74	SIS/Starute	-	-	-	MS	-	-	-	70?	-	-
1975-0159	2442350-50	1975 Feb 7	Black Brant VI	-	PC-74	SIS/Starute	-	-	-	MS	-	-	-	74	-	-
1975-0160	2442375-50	1975 Mar 4	Black Brant VI	-	1-75	Arctic test	-	-	-	MS	-	-	-	74	-	-
1975-0161	2442375-50	1975 Mar 4	Black Brant VI	-	2-75	Arctic test	-	-	-	MS	-	-	-	79	-	-
1975-0161	2442389-50	1975 Mar 18	Black Brant VI	-	3-75	Arctic test	-	-	-	MS	-	-	-	76	-	-
1975-0162	2442389-50	1975 Mar 18	Black Brant VI	-	4-75	Arctic test	-	-	-	MS	-	-	-	76	-	-
1975-0163	2442381-50	1975 Mar 20	Black Brant VI	-	5-75	Arctic test	-	-	-	MS	-	-	-	78	-	-
1975-0163	2442381-50	1975 Mar 20	Black Brant VI	-	6-75	Arctic test	-	-	-	MS	-	-	-	78	-	-
1975-0164	2442366-50	1975 Mar 26	Black Brant VI	-	7-75	Arctic test	-	-	-	MS	-	-	-	82	-	-
1975-0165	2442366-50	1975 Mar 26	Black Brant VI	-	8-75	Arctic test	-	-	-	MS	-	-	-	79	-	-
1975-0167	2442369-50	1975 Mar 28	Black Brant VI	-	9-75	Arctic test	-	-	-	MS	-	-	-	70	-	-
1975-0167	2442369-50	1975 Mar 28	Black Brant VI	-	9-75	Arctic test	-	-	-	MS	-	-	-	73	-	-
1975-0168	2442334-50	1975 May 2	Black Brant VI	-	10-75	12cm Sphere	-	-	-	MS	-	-	-	78	-	-
1975-0168	2442334-50	1975 May 2	Black Brant VI	-	10-75	12cm Sphere	-	-	-	MS	-	-	-	78	-	-
1975-0169	2442344-50	1975 May 12	Black Brant VI	-	11-75	12cm Sphere	-	-	-	MS	-	-	-	0	-	-
1975-01219	2442716-80	1975 Oct 31 0712	Black Brant VI	-	AKF-VI-07	[Unc. FC]	-	-	-	FC	-	-	-	64	-	-
1976-0711	2442910-16	1976 May 11 1549	Black Brant VI	-	AKF-VI-10	Sig system test	-	-	-	FC	-	-	-	60	-	-
1977-060	2442901-71	1977 Feb 27 0520	Black Brant VI	-	AKF-VI-05	Non-artistic waves	-	-	-	FC	-	-	-	95	-	-
1977-062	2443207-67	1977 Mar 5 0447	Black Brant VI	-	AKF-VI-09	Auroral X-rays	-	-	-	FC	-	-	-	60	-	-
1977-072	2443210-67	1977 Mar 8 0406	Black Brant VI	-	AKF-VI-08	Auroral X-rays	-	-	-	FC	-	-	-	60	-	-
1978-058	2443547-68	1978 Feb 8 0423	Black Brant VI	-	AKF-VI-06	Coherent pulsed radar	-	-	-	FC	-	-	-	95	-	-
1978-0241	2443566-73	1978 Feb 27 0632	Black Brant VI	-	AKF-VI-14	Auroral X-rays	-	-	-	FC	-	-	-	85	-	-
1978-0256	2443567-63	1978 Feb 28 0309	Black Brant VI	-	AKF-VI-15	Auroral X-rays	-	-	-	FC	-	-	-	57	-	-
1978-0444	2443617-30	1978 Apr 18 1918	Black Brant VI	-	AKF-VI-13	Dust collector	-	-	-	FC	-	-	-	75	-	-
1979-0547	2443900-76	1979 Apr 27 0609	Black Brant VI	-	AKF-VI-16	Auroral X-rays	-	-	-	FC	-	-	-	50?	-	-
1979-0556	2443991-78	1979 Apr 28 0644	Black Brant VI	-	AKF-VI-17	Auroral X-rays	-	-	-	FC	-	-	-	60?	-	-



Launch

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Agency	Launch_Code	Group	Category	LTCite	Cite	Notes
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1969-M88	2440495-50	1969 Oct 1	Black Brant VI	-	RTRE XM-75	ASL	SS	ASL/	Test	EOMF-5688	-	-
1972-M897	2441511-30	1972 Jul 12 1907	Black Brant VI	?	RTRE?	BAL	SS	BAL/	Test	FC	-	-
1972-M898	2441511-37	1972 Jul 12 2052	Black Brant VI	?	-	BAL	SS	BAL/	Test	FC	-	-
1972-M72	2441511-44	1972 Jul 12 2230	Black Brant VI	?	-	BAL	SF	BAL/	Test	FC	-	-
1972-M900	2441511-48	1972 Jul 12 2335	Black Brant VI	?	-	BAL	SF	BAL/	Test	FC	-	-
1972-M73	2441511-51	1972 Jul 13 0013	Black Brant VI	?	-	BAL	SF	BAL/	Test	FC	-	-
1972-M901	2441511-53	1972 Jul 13 0046	Black Brant VI	?	-	BAL	SF	BAL/	Test	FC	-	-
1972-M74	2441512-29	1972 Jul 13 1854	Black Brant VI	?	-	BAL	SF	BAL/	Test	FC	-	-
1972-M903	2441512-33	1972 Jul 13 1952	Black Brant VI	?	-	BAL	SF	BAL/	Test	FC	-	-
1972-M904	2441512-40	1972 Jul 13 2134	Black Brant VI	?	-	BAL	SS	BAL/	Test	FC	-	-
1972-M905	2441512-48	1972 Jul 13 2330	Black Brant VI	?	-	BAL	SS	BAL/	Test	FC	-	-
1972-M909	2441513-12	1972 Jul 14 1453	Black Brant VI	?	-	BAL	SS	BAL/	Test	FC	-	-
1973-M651	2441818-96	1973 May 16 1106	Black Brant VI	-	AMF-VI-01	HRCC	SS	HRCC/Nlochovicz	Aeron	WDRF	-	-
1974-M436	2442129-21	1974 Mar 22 1656	Black Brant VI	-	AMF-VI-02	HRCC	SF	HRCC/Nlochovicz	Aeron	WDRF	CAS220_341	-
1974-M728	2442133-40	1974 Mar 26 2130:00	Black Brant VI	-	AMF-VI-04	HRCC	SS	HRCC/Nlochovicz	Aeron	WDRF	-	-
1974-M655	2442160-69	1974 Apr 23 0431	Black Brant VI	-	AMF-VI-03	HRCC	SS	CALG/Wenkatasean	Aeroyal	WDRF	-	-
1974-M1691	2442167-50	1974 May 20	Black Brant VI	-	1-74	ASL	SS	ASL/	Test	EOMF-5688	-	-
1974-M1666	2442188-50	1974 May 21	Black Brant VI	-	2-74	ASL	SS	ASL/	Test	EOMF-5688	-	-
1974-M1667	2442189-50	1974 May 22	Black Brant VI	-	3-74	ASL	SS	ASL/	Test	EOMF-5688	-	-
1974-M1668	2442190-50	1974 May 23	Black Brant VI	-	4-74	ASL	SS	ASL/	Test	EOMF-5688	-	-
1974-M1669	2442190-50	1974 May 23	Black Brant VI	-	5-74	ASL	SS	ASL/	Test	EOMF-5688	-	-
1974-M1670	2442196-50	1974 May 29	Black Brant VI	-	6-74	ASL	SS	ASL/	Test	EOMF-5688	-	-
1974-M1671	2442197-50	1974 May 30	Black Brant VI	-	7-74	ASL	SS	ASL/	Test	EOMF-5688	-	-
1974-M1672	2442198-50	1974 May 31	Black Brant VI	-	8-74	ASL	SS	ASL/	Test	EOMF-5688	-	-
1974-M1673	2442210-50	1974 Jun 12	Black Brant VI	-	10-74	ASL	SS	ASL/	Test	EOMF-5688	-	-
1974-M1675	2442211-50	1974 Jun 18	Black Brant VI	-	9-74	ASL	SS	ASL/	Test	EOMF-5688	-	-
1974-M1676	2442216-50	1974 Jun 18	Black Brant VI	-	11-74	ASL	SS	ASL/	Test	EOMF-5688	-	-
1974-M1677	2442217-50	1974 Jun 19	Black Brant VI	-	12-74	ASL	SS	ASL/	Test	EOMF-5688	-	-
1974-M1678	2442267-50	1974 Aug 6	Black Brant VI	-	13-74	ASL	SS	ASL/	Test	EOMF-5688	-	-
1974-M1679	2442268-50	1974 Aug 9	Black Brant VI	-	14-74	ASL	SS	ASL/	Test	EOMF-5688	-	-
1974-M1680	2442280-50	1974 Aug 21	Black Brant VI	-	15-74	ASL	SS	ASL/	Test	EOMF-5688	-	-
1974-M1681	2442286-50	1974 Aug 29	Black Brant VI	-	16-74	ASL	SS	ASL/	Test	EOMF-5688	-	-
1974-M1682	2442294-50	1974 Sep 4	Black Brant VI	-	17-74	ASL	SS	ASL/	Test	EOMF-5688	-	-
1974-M1683	2442340-50	1974 Oct 20	Black Brant VI	-	18-74	ASL	SS	ASL/	Test	EOMF-5688	-	-
1974-M1684	2442366-50	1974 Nov 15	Black Brant VI	-	20-74	ASL	SS	ASL/	Test	EOMF-5688	-	-
1974-M1685	2442366-50	1974 Nov 15	Black Brant VI	-	21-74	ASL	SS	ASL/	Test	EOMF-5688	-	-
1974-M1686	2442370-50	1974 Nov 19	Black Brant VI	-	22-74	ASL	SS	ASL/	Test	EOMF-5688	-	-
1974-M1687	2442372-50	1974 Nov 21	Black Brant VI	-	23-74	ASL	SS	ASL/	Test	EOMF-5688	-	-
1974-M1688	2442372-50	1974 Nov 21	Black Brant VI	-	24-74	ASL	SS	ASL/	Test	EOMF-5688	-	-
1974-M1689	2442377-50	1974 Nov 26	Black Brant VI	-	25-74	ASL	SS	ASL/	Test	EOMF-5688	-	-
1975-M1453	2442379-50	1974 Dec 10	Black Brant VI	-	26-74	ASL	SS	ASL/	Test	EOMF-5688	-	-
1975-M1454	2442383-50	1975 Feb 5	Black Brant VI	-	26-1-75	ASL	SS	ASL/	Test	EOMF-5688	-	-
1975-M1455	2442383-50	1975 Feb 6	Black Brant VI	-	PF-2-75	ASL	SS	ASL/	Test	EOMF-5688	-	-
1975-M1456	2442383-50	1975 Feb 6	Black Brant VI	-	PF-3-75	ASL	SS	ASL/	Test	EOMF-5688	-	-
1975-M1457	2442383-50	1975 Feb 7	Black Brant VI	-	PF-4-75	ASL	SS	ASL/	Test	EOMF-5688	-	-
1975-M1458	2442383-50	1975 Feb 7	Black Brant VI	-	PF-5-75	ASL	SS	ASL/	Test	EOMF-5688	-	-
1975-M1459	2442375-50	1975 Mar 4	Black Brant VI	-	1-75	ASL	SS	ASL/	Test	EOMF-5688	-	-
1975-M1460	2442375-50	1975 Mar 4	Black Brant VI	-	2-75	ASL	SS	ASL/	Test	EOMF-5688	-	-
1975-M1461	2442389-50	1975 Mar 18	Black Brant VI	-	3-75	ASL	SS	ASL/	Test	EOMF-5688	-	-
1975-M1462	2442389-50	1975 Mar 18	Black Brant VI	-	4-75	ASL	SS	ASL/	Test	EOMF-5688	-	-
1975-M1463	2442391-50	1975 Mar 20	Black Brant VI	-	5-75	ASL	SS	ASL/	Test	EOMF-5688	-	-
1975-M1464	2442396-50	1975 Mar 25	Black Brant VI	-	6-75	ASL	SS	ASL/	Test	EOMF-5688	-	-
1975-M1465	2442396-50	1975 Mar 25	Black Brant VI	-	7-75	ASL	SS	ASL/	Test	EOMF-5688	-	-
1975-M1466	2442398-50	1975 Mar 28	Black Brant VI	-	8-75	ASL	SS	ASL/	Test	EOMF-5688	-	-
1975-M1467	2442398-50	1975 Mar 28	Black Brant VI	-	9-75	ASL	SS	ASL/	Test	EOMF-5688	-	-
1975-M1468	2442394-50	1975 Mar 29	Black Brant VI	-	10-75	ASL	SS	ASL/	Test	EOMF-5688	-	-
1975-M1469	2442394-50	1975 Mar 29	Black Brant VI	-	11-75	ASL	SS	ASL/	Test	EOMF-5688	-	-
1975-M1219	24423716-50	1975 Oct 31 0712	Black Brant VI	-	AMF-VI-07	HRCC	SF	CALG/Wenkatasean	Aeroyal	WDRF	-	-
1977-M1211	24423910-16	1976 May 11 1549	Black Brant VI	-	AMF-VI-10	HRCC	SS	HRCC/Roberts	Test	WDRF	-	-
1977-M80	24423910-72	1977 Feb 27 0520	Black Brant VI	-	AMF-VI-05	HRCC	SS	HRCC/Roberts	Aeron	WDRF	-	-
1977-M462	24423910-67	1977 Mar 5 0406	Black Brant VI	-	AMF-VI-09	HRCC	SS	CALG/Wenkatasean	Aeroyal	WDRF	-	-
1977-M472	24423910-67	1977 Mar 5 0406	Black Brant VI	-	AMF-VI-08	HRCC	SS	CALG/Wenkatasean	Aeroyal	WDRF	-	-
1978-M568	24423567-68	1978 Feb 8 0423	Black Brant VI	-	AMF-VI-06	HRCC	SS	HRCC/Wenkatasean	Test	WDRF	-	-
1978-M241	24423566-73	1978 Feb 27 0520	Black Brant VI	-	AMF-VI-14	HRCC	SS	CALG/Wenkatasean	Aeroyal	WDRF	FC	-
1978-M256	24423567-63	1978 Feb 28 0309	Black Brant VI	-	AMF-VI-15	HRCC	SS	CALG/Wenkatasean	Aeroyal	WDRF	-	-
1978-M444	24423617-30	1978 Apr 18 1918	Black Brant VI	-	AMF-VI-13	HRCC	SS	HRCC/Nlochovicz	Metacrites	WDRF	-	-
1979-M517	24423900-76	1979 Apr 27 0609	Black Brant VI	-	AMF-VI-16	HRCC	SF	CALG/Wenkatasean	Aeroyal	FC	-	-
1979-M556	24423991-78	1979 Apr 28 0644	Black Brant VI	-	AMF-VI-17	HRCC	SS	CALG/Wenkatasean	Aeroyal	FC	-	-



Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Mission	Launch_Site	Platform	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee km	Range km	Dest
1970-A130	2440936.32	1970 Dec 15 1940	Black Brant VII	?	-	MDS-001	-	FC	-	-	-	-	30?	-	-
1970-A132	2440937.16	1970 Dec 16 1544	Black Brant VII	?	-	MDS-002	-	FC	-	-	-	-	30?	-	-
1970-A133	2440937.22	1970 Dec 16 1715	Black Brant VII	?	-	MDS-003	-	FC	-	-	-	-	30?	-	-
1970-A135	2440937.35	1970 Dec 16 2026	Black Brant VII	?	-	MDS-004	-	FC	-	-	-	-	29	-	-
1971-437	2441068.15	1971 Apr 26 1535	Black Brant VII	?	-	F-EM-006	-	FC	-	-	-	-	29	-	-
1971-439	2441068.21	1971 Apr 26 1702	Black Brant VII	?	-	F-EM-005	-	FC	-	-	-	-	37	-	-
1971-440	2441068.25	1971 Apr 26 1806	Black Brant VII	?	-	F-EM-008	-	FC	-	-	-	-	36	-	-
1971-441	2441068.31	1971 Apr 26 1933	Black Brant VII	?	-	F-EM-009	-	FC	-	-	-	-	32	-	-
1971-442	2441068.36	1971 Apr 26 2044	Black Brant VII	?	-	F-EM-007	-	FC	-	-	-	-	38	-	-
1971-444	2441077.11	1971 May 5 1443	Black Brant VII	?	-	F-EM-010	-	FC	-	-	-	-	38	-	-
1971-445	2441077.16	1971 May 5 1546	Black Brant VII	?	-	F-EM-011	-	FC	-	-	-	-	38	-	-
1971-446	2441077.20	1971 May 5 1645	Black Brant VII	?	-	F-EM-012	-	FC	-	-	-	-	34	-	-
1971-447	2441077.22	1971 May 5 1717	Black Brant VII	?	-	F-EM-013	-	FC	-	-	-	-	35	-	-
1971-448	2441077.27	1971 May 5 1825	Black Brant VII	?	-	F-EM-014	-	FC	-	-	-	-	35	-	-
1971-449	2441077.29	1971 May 5 1856	Black Brant VII	?	-	F-EM-015	-	FC	-	-	-	-	35	-	-
1971-450	2441077.31	1971 May 5 1924	Black Brant VII	?	-	F-EM-016	-	FC	-	-	-	-	38	-	-
1972-A10	2441344.15	1972 Jan 27 1539	Black Brant VII	?	-	F-EM-064	-	FC	-	-	-	-	34	-	-
1972-A11	2441344.27	1972 Jan 27 1832	Black Brant VII	?	-	F-EM-065	-	FC	-	-	-	-	34	-	-
1972-A12	2441344.32	1972 Jan 27 1936	Black Brant VII	?	-	F-EM-066	-	FC	-	-	-	-	40	-	-
1972-A13	2441344.41	1972 Jan 27 2148	Black Brant VII	?	-	F-EM-052	-	FC	-	-	-	-	-	-	-





Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	DrpPay	Agency	Launch_Code	Group	Category	LTCite	Cite	Notes
1970-A130	2440896.32	1970 Dec 15 1640	Black Brant VII	?	-	0.000	BAL	SS	BAL/	Test	FC	-	-
1970-A132	2440897.16	1970 Dec 16 1644	Black Brant VII	?	-	0.000	BAL	SS	BAL/	Test	FC	-	-
1970-A133	2440897.22	1970 Dec 16 1715	Black Brant VII	?	-	0.000	BAL	SS	BAL/	Test	FC	-	-
1970-A135	2440897.35	1970 Dec 16 2026	Black Brant VII	?	-	0.000	BAL	SS	BAL/	Test	FC	-	-
1971-A37	2441065.15	1971 Apr 26 1535	Black Brant VII	?	-	0.000	BAL	SS	BAL/	Test	FC	-	-
1971-A39	2441065.21	1971 Apr 26 1702	Black Brant VII	?	-	0.000	BAL	SS	BAL/	Test	FC	-	-
1971-A40	2441065.25	1971 Apr 26 1806	Black Brant VII	?	-	0.000	BAL	SS	BAL/	Test	FC	-	-
1971-A41	2441065.31	1971 Apr 26 1933	Black Brant VII	?	-	0.000	BAL	SS	BAL/	Test	FC	-	-
1971-A42	2441065.36	1971 Apr 26 2044	Black Brant VII	?	-	0.000	BAL	SS	BAL/	Test	FC	-	-
1971-A44	2441077.11	1971 May 5 1443	Black Brant VII	?	-	0.000	BAL	SS	BAL/	Test	FC	-	-
1971-A45	2441077.16	1971 May 5 1546	Black Brant VII	?	-	0.000	BAL	SS	BAL/	Test	FC	-	-
1971-A46	2441077.20	1971 May 5 1645	Black Brant VII	?	-	0.000	BAL	SS	BAL/	Test	FC	-	-
1971-A47	2441077.22	1971 May 5 1717	Black Brant VII	?	-	0.000	BAL	SS	BAL/	Test	FC	-	-
1971-A48	2441077.29	1971 May 5 1825	Black Brant VII	?	-	0.000	BAL	SS	BAL/	Test	FC	-	-
1971-A49	2441077.31	1971 May 5 1856	Black Brant VII	?	-	0.000	BAL	SS	BAL/	Test	FC	-	-
1971-A50	2441344.15	1972 Jan 27 1524	Black Brant VII	?	-	0.000	BAL	SS	BAL/	Test	FC	-	-
1972-A10	2441344.15	1972 Jan 27 1539	Black Brant VII	?	-	0.000	BAL	SS	BAL/	Test	FC	-	-
1972-A11	2441344.27	1972 Jan 27 1552	Black Brant VII	?	-	0.000	BAL	SS	BAL/	Test	FC	-	-
1972-A12	2441344.32	1972 Jan 27 1596	Black Brant VII	?	-	0.000	BAL	SS	BAL/	Test	FC	-	-
1972-A13	2441344.41	1972 Jan 27 2148	Black Brant VII	?	-	0.000	BAL	SS	BAL/	Test	FC	-	-



Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Mission	FlightCode	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee km	Range km	Dest
1972-A135	2441510-23	1972 Jul 11 1737	BLDT	-	AV-1	MASA ELDT AV-1	Supersonic	-	-	WS	-	-	-	44	-	-
1972-A136	2441525-20	1972 Jul 26 1655	BLDT	-	AV-2	MASA ELDT AV-2	Transonic	-	-	WS	-	-	-	41?	-	-
1972-A137	2441543-18	1972 Aug 13 1624:30	BLDT	-	AV-4	MASA ELDT AV-4	Supersonic	-	-	WS	-	-	-	45	-	-
1972-A138	2441549-24	1972 Aug 19 1745	BLDT	-	AV-3	MASA ELDT AV-3	Subsonic	-	-	WS	-	-	-	28	-	-



Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Agency	Launch_Code	Group	Category	LTCite	Cite	Notes
1972-A135	2441510.23	1972 Jul 11 1737	BLDT	-	AV-1	JPL	AF	-	Test	TR-D-7692	-	-
1972-A136	2441525.20	1972 Jul 26 1655	BLDT	-	AV-2	JPL	AS	-	Test	TR-D-7692	-	-
1972-A137	2441543.18	1972 Aug 13 1624:30	BLDT	-	AV-4	JPL	AS	-	Test	TR-3720296	-	-
1972-A138	2441549.24	1972 Aug 19 1745	BLDT	-	AV-3	JPL	AS	-	Test	TR-D-7692	-	-



Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Mission	LaunchCode	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee Km	Range Km	Dest
1967-S180	2439580.50	1967 Apr	Belenos	-	-	-	-	-	-	CERES?	-	-	-	100	-	-
1968-S05	2439915.50	1968 Mar	Belenos	-	-	-	-	-	-	CERES?	-	-	-	100	-	-
1968-S06	2439915.50	1968 Mar	Belenos	-	-	-	-	-	-	CERES?	-	-	-	100	-	-
1968-S175	2439927.50	1968 Mar 12	Belisana	-	-	-	-	-	-	CERES?	-	-	-	90	-	-
1968-S07	2439855.50	1968	Belisana	-	-	-	-	-	-	CEM?	-	-	-	90	-	-
1969-S01	2440221.50	1969	Belisana	-	-	-	-	-	-	CEM?	-	-	-	90	-	-
1969-S156	2440280.50	1969 Mar?	Granmos	-	-	-	-	-	-	CEM	-	-	-	130	-	-





Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	OrbPay	Agency	Launch_Code	Group	Category	LTCite	Cite	Notes
1967-S180	2439580.50	1967 Apr	Belenos	-	-	0.000	SECT	SS	SECT/	Metco	ESRD-SP39	-	-
1968-S06	2439915.50	1968 Mar	Belenos	-	-	0.000	SECT	SS	SECT/	Metco	ESRD-SP39	-	-
1968-S06	2439915.50	1968 Mar	Belenos	-	-	0.000	SECT	SS	SECT/	Metco	ESRD-SP39	-	-
1968-S175	2439927.50	1968 Mar 12	Bellisama	-	-	0.000	SECT?	SS	SECT/?	Metco	ESRD-SP39	-	-
1968-S07	2439865.50	1968	Bellisama	-	-	0.000	SECT?	SS	SECT/?	Metco	ESRD-SP39	-	-
1969-S01	2440221.50	1969	Bellisama	-	-	0.000	SECT?	SS	SECT/?	Metco	ESRD-SP39	-	-
1969-S156	2440280.50	1969 Mar?	Grannos	-	-	0.000	SECT	SS	CFTH/	Test	ATMA/O-71	-	-



Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Launch_Mission	FlightCode	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee_Km	Range_Km	Dest
1961-M16	2437443-50	1961 May 24	Bellier	-	E05	-	-	-	-	HMG	Bacchus	-	-	60?	-	-
1961-M17	2437444-50	1961 May 25	Bellier	-	E06	-	-	-	-	HMG	Bacchus	-	-	60?	-	-
1962-A75	2437793-50	1962 May 9	Bellier	-	E02	-	-	-	-	CERES	-	-	-	0?	-	-
1962-A78	2437799-50	1962 May 15	Bellier	-	E03	-	-	-	-	CERES	-	-	-	0?	-	-
1962-M08	2437800-50	1962 May 16	Bellier	-	E04	-	-	-	-	CERES	-	-	-	60?	-	-
1962-M09	2437813-50	1962 May 29	Bellier	-	E08	-	-	-	-	HMG	Bacchus	-	-	60?	-	-
1962-A92	2437821-50	1962 Jun 6	Bellier	-	E07	-	-	-	-	HMG	Bacchus	-	-	60?	-	-
1962-M52	2437989-50	1962 Nov 21	Bellier	-	E45	-	-	-	-	CERES	-	-	-	70	-	-
1962-M53	2437990-50	1962 Nov 22	Bellier	-	E41	-	-	-	-	CERES	-	-	-	60	-	-
1963-M29	2438155-50	1963 May 6	Bellier	-	E01	-	-	-	-	HMG	Bacchus	-	-	94	-	-
1963-M38	2438234-50	1963 Jul 24	Bellier	-	E73	-	-	-	-	CERES	-	-	-	60?	-	-
1964-M26	2438709-50	1964 Nov 10	Bellier	-	E69	-	-	-	-	CERES	-	-	-	68	-	-
1966-M28	2439327-21	1966 Jul 20 1701:07	Bellier	-	ESRD B12/1	-	-	-	-	ESRD B12/1 Neutrons	-	-	-	65	-	-
1966-M28	2439327-21	1966 Jul 20 1701:07	Bellier	-	ESRD B12/2	-	-	-	-	ESRD B12/2 Neutrons	-	-	-	67	-	-
1966-M28	2439332-26	1966 Jul 26 1810:00	Bellier	-	E301	-	-	-	-	S0Q	-	-	-	67	-	-
1966-M28	2439333-50	1966 Mar 18	Bellier III	-	E306	-	-	-	-	CEL	-	-	-	0?	-	-
1966-M317	2439990-50	1966 May 14	Bellier III	-	E304	-	-	-	-	S0Q	-	-	-	130	-	-
1969-S166	2440286-50	1969 Mar 6	Bellier III	-	E304	-	-	-	-	S0Q	-	-	-	130	-	-
1969-M14	2440330-50	1969 Apr 19	Bellier	-	B116	-	-	-	-	CSG	ALFS	-	-	60	-	-
1969-M27	2440451-50	1969 Apr 18	Bellier	-	B117	-	-	-	-	CSG	ALFS	-	-	70	-	-
1969-M31	2440489-50	1969 Sep 25	Bellier III	-	E307	-	-	-	-	CSG	ALFS	-	-	60?	-	-
1970-M04	2440620-50	1970 Feb 3	Bellier	-	B139	-	-	-	-	CEL	ALFS	-	-	64	-	-
1970-M28	2440896-50	1970 Nov 6	Bellier	-	E140	-	-	-	-	CSG	ALFS	-	-	58	-	-
1971-M680	2441215-75	1971 Sep 21 0600	RH-300	-	-	-	-	-	-	TELIS	-	-	-	80?	-	-
1973-S575	2441872-50	1973 Jul 9	RH-300	-	RH-300-01	-	-	-	-	SHAR	RH	-	-	100?	-	-
1975-S544	2442583-50	1975 Jun 20	RH-300	-	RH-300-02	-	-	-	-	SHAR	RH	-	-	100?	-	-
1975-S545	2442584-50	1975 Jun 21	RH-300	-	RH-300-03	-	-	-	-	SHAR	RH	-	-	100?	-	-
1975-S557	2442691-50	1975 Sep 26	RH-300	-	-	-	-	-	-	TELIS	-	-	-	130?	-	-
1977-S562	2443161-50	1977 Feb 7	RH-300	-	RH-300-16	-	-	-	-	SHAR	RH	-	-	100?	-	-
1977-S563	2443163-50	1977 Feb 9	RH-300	-	RH-300-15	-	-	-	-	SHAR	RH	-	-	100?	-	-
1978-S114	2443516-50	1978 Apr 16	RH-300	-	-	-	-	-	-	TELIS	-	-	-	130	-	-
1983-S309	2445594-50	1983 Jan 20	RH-300	-	RH-300-1 (IPP-40)	-	-	-	-	TELIS	-	-	-	150?	-	-
1983-S312	2445977-50	1983 May 23	RH-300	-	RH-300-2 (IPP-40)	-	-	-	-	TELIS	-	-	-	150?	-	-
1983-S313	2446611-50	1983 Oct 4	RH-300	-	RH-300-3 (IPP-40)	-	-	-	-	TELIS	-	-	-	150?	-	-
1985-S131	2446594-50	1985 Oct 16	SO-300-200	-	TI	-	-	-	-	SHAR	-	-	-	100?	-	-
1986-A21	2446594-50	1986 Mar 6	RH-300	-	-	-	-	-	-	TELIS	-	-	-	10	-	-
1986-S119	2446499-97	1986 Mar 10 0405	RH-300	-	-	-	-	-	-	TELIS	-	-	-	88	-	-
1986-S121	2446706-71	1986 Oct 3 0805	RH-300	-	-	-	-	-	-	TELIS	-	-	-	100?	-	-
1987-S120	2446740-63	1986 Nov 6 0310	RH-300	-	-	-	-	-	-	TELIS	-	-	-	92	-	-
1987-S236	2447089-50	1987 Sep 30	RH-300 Mk II	-	RH-300-HK2-01	-	-	-	-	SHAR	-	-	-	138	-	-
1988-S186	2447394-90	1988 Jun 22 0340	RH-300 Mk II	-	RH-300-HK2-02	-	-	-	-	SHAR	-	-	-	139?	-	-
1988-S188	2447253-68	1988 Apr 12 0340	RH-300 Mk II	-	RH-300-HK2-03	-	-	-	-	SHAR	-	-	-	139?	-	-
1988-S189	2447781-68	1988 Nov 6 0310	RH-300	-	-	-	-	-	-	SHAR	-	-	-	138	-	-
1988-S189	2447781-68	1988 Apr 12 0340	RH-300	-	-	-	-	-	-	SHAR	-	-	-	139?	-	-
1988-S189	2447781-68	1988 Nov 6 0310	RH-300	-	-	-	-	-	-	SHAR	-	-	-	139?	-	-
1988-S189	2447781-68	1988 Apr 12 0340	RH-300	-	-	-	-	-	-	SHAR	-	-	-	139?	-	-
1988-S189	2447781-68	1988 Nov 6 0310	RH-300	-	-	-	-	-	-	SHAR	-	-	-	139?	-	-
1988-S189	2447781-68	1988 Apr 12 0340	RH-300	-	-	-	-	-	-	SHAR	-	-	-	139?	-	-
1988-S189	2447781-68	1988 Nov 6 0310	RH-300	-	-	-	-	-	-	SHAR	-	-	-	139?	-	-
1988-S189	2447781-68	1988 Apr 12 0340	RH-300	-	-	-	-	-	-	SHAR	-	-	-	139?	-	-
1988-S189	2447781-68	1988 Nov 6 0310	RH-300	-	-	-	-	-	-	SHAR	-	-	-	139?	-	-
1988-S189	2447781-68	1988 Apr 12 0340	RH-300	-	-	-	-	-	-	SHAR	-	-	-	139?	-	-
1988-S189	2447781-68	1988 Nov 6 0310	RH-300	-	-	-	-	-	-	SHAR	-	-	-	139?	-	-
1988-S189	2447781-68	1988 Apr 12 0340	RH-300	-	-	-	-	-	-	SHAR	-	-	-	139?	-	-
1988-S189	2447781-68	1988 Nov 6 0310	RH-300	-	-	-	-	-	-	SHAR	-	-	-	139?	-	-
1988-S189	2447781-68	1988 Apr 12 0340	RH-300	-	-	-	-	-	-	SHAR	-	-	-	139?	-	-
1988-S189	2447781-68	1988 Nov 6 0310	RH-300	-	-	-	-	-	-	SHAR	-	-	-	139?	-	-
1988-S189	2447781-68	1988 Apr 12 0340	RH-300	-	-	-	-	-	-	SHAR	-	-	-	139?	-	-
1988-S189	2447781-68	1988 Nov 6 0310	RH-300	-	-	-	-	-	-	SHAR	-	-	-	139?	-	-
1988-S189	2447781-68	1988 Apr 12 0340	RH-300	-	-	-	-	-	-	SHAR	-	-	-	139?	-	-
1988-S189	2447781-68	1988 Nov 6 0310	RH-300	-	-	-	-	-	-	SHAR	-	-	-	139?	-	-
1988-S189	2447781-68	1988 Apr 12 0340	RH-300	-	-	-	-	-	-	SHAR	-	-	-	139?	-	-
1988-S189	2447781-68	1988 Nov 6 0310	RH-300	-	-	-	-	-	-	SHAR	-	-	-	139?	-	-
1988-S189	2447781-68	1988 Apr 12 0340	RH-300	-	-	-	-	-	-	SHAR	-	-	-	139?	-	-
1988-S189	2447781-68	1988 Nov 6 0310	RH-300	-	-	-	-	-	-	SHAR	-	-	-	139?	-	-
1988-S189	2447781-68	1988 Apr 12 0340	RH-300	-	-	-	-	-	-	SHAR	-	-	-	139?	-	-
1988-S189	2447781-68	1988 Nov 6 0310	RH-300	-	-	-	-	-	-	SHAR	-	-	-	139?	-	-
1988-S189	2447781-68	1988 Apr 12 0340	RH-300	-	-	-	-	-	-	SHAR	-	-	-	139?	-	-
1988-S189	2447781-68	1988 Nov 6 0310	RH-300	-	-	-	-	-	-	SHAR	-	-	-	139?	-	-
1988-S189	2447781-68	1988 Apr 12 0340	RH-300	-	-	-	-	-	-	SHAR	-	-	-	139?	-	-
1988-S189	2447781-68	1988 Nov 6 0310	RH-300	-	-	-	-	-	-	SHAR	-	-	-	139?	-	-
1988-S189	2447781-68	1988 Apr 12 0340	RH-300	-	-	-	-	-	-	SHAR	-	-	-	139?	-	-
1988-S189	2447781-68	1988 Nov 6 0310	RH-300	-	-	-	-	-	-	SHAR	-	-	-	139?	-	-
1988-S189	2447781-68	1988 Apr 12 0340	RH-300	-	-	-	-	-	-	SHAR	-	-	-	139?	-	-
1988-S189	2447781-68	1988 Nov 6 0310	RH-300	-	-	-	-	-	-	SHAR	-	-	-	139?	-	-
1988-S189	2447781-68	1988 Apr 12 0340	RH-300	-	-	-	-	-	-	SHAR	-	-	-	139?	-	-
1988-S189	2447781-68	1988 Nov 6 0310	RH-300	-	-	-	-	-	-	SHAR	-	-	-	139?	-	-
1988-S189	2447781-68	1988 Apr 12 0340	RH-300	-	-	-	-	-	-	SHAR	-	-	-	139?	-	-
1988-S189	2447781-68	1988 Nov 6 0310	RH-300	-	-	-	-	-	-	SHAR	-	-	-	139?	-	-
1988-S189	2447781-68	1988 Apr 12 0340	RH-300	-	-	-	-	-	-	SHAR	-	-	-	139?	-	-
1988-S189	2447781-68	1988 Nov 6 0310	RH-300	-	-	-	-	-	-	SHAR	-	-	-	139?	-	-
1988-S189	2447781-68	1988 Apr 12 0340	RH-300	-	-	-	-	-	-	SHAR	-	-	-	139?	-	-
1988-S189	2447781-68	1988 Nov 6 0310	RH-300	-	-	-	-	-	-	SHAR	-	-	-	139?	-	-
1988-S189	2447781-68	1988 Apr 12 0340	RH-300	-	-	-	-	-	-	SHAR	-	-	-	139?	-	-
1988-S189	2447781-68	1988 Nov 6 0310	RH-300	-	-	-	-	-	-	SHAR	-	-	-	139?	-	-
1988-S189	2447781-68	1988 Apr 12 0340	RH-300	-	-	-	-	-	-	SHAR	-	-	-	139?	-	-
1988-S189	2447781-68	1988 Nov 6 0310	RH-300	-	-	-	-	-	-	SHAR	-	-	-	139?	-	-
1988-S189	2447781-68	1988 Apr 12 0340	RH-300	-	-	-	-	-	-	SHAR	-	-	-	139?	-	-
1988-S189	2447781-68	1988 Nov 6 0310	RH-300	-	-	-	-	-	-	SHAR	-	-	-	139?	-	-
1988-S189	2447781-68	1988 Apr 12 0340	RH-300	-	-	-	-	-	-	SHAR	-	-	-	139?	-	-
1988-S189	2447781-68	1988 Nov 6 0310	RH-300	-	-	-	-	-	-	SHAR	-	-	-	139?	-	-
1988-S189	2447781-68	1988 Apr 12 0340	RH-300	-	-	-	-	-	-	SHAR	-	-	-	139?	-	-
1988-S189	2447781-68	1988 Nov 6 0310	RH-300	-	-	-	-	-	-	SHAR	-	-	-	139?	-	-
1988-S189	2447781-68	1988 Apr 12 0340	RH-300	-	-	-	-	-	-	SHAR						



Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	OrbPay	Agency	Launch_Code	Group	Category	LTCite	Cite	Notes
1961-H16	2437443.50	1961 May 24	Ballier	-	B05	0.000	CNET	SS	CNES/?	Test	AASH33-143	-	-
1961-H17	2437444.50	1961 May 25	Ballier	-	B06	0.000	CNET	SS	CNES/?	Test	AASH33-143	-	-
1962-A75	2437793.50	1962 May 9	Ballier	-	B02	0.000	CNES	SS	CNET/	Test	CNES	-	-
1962-A78	2437799.50	1962 May 15	Ballier	-	B03	0.000	CNES	SS	CNET/	Test	CNES	-	-
1962-H08	2437800.50	1962 May 16	Ballier	-	B04	0.000	CNES	SS	CNET/	Test	CNES	-	-
1962-H09	2437813.50	1962 May 29	Ballier	-	B07	0.000	CNES	SS	CNES/Blamont	Aeronomy	CNES	-	-
1962-A92	2437821.50	1962 Jun 6	Ballier	-	B08	0.000	CNES	SS	CNES/Blamont	Aeronomy	CNES	-	-
1962-H32	2437989.50	1962 Nov 21	Ballier	-	B45	0.000	CNES	SS	CNES/Blamont	Aeronomy	CNES	-	-
1962-H33	2437990.50	1962 Nov 22	Ballier	-	B41	0.000	CNES	SS	CNES/Blamont	Aeronomy	CNES	-	-
1963-H29	2438155.50	1963 May 6	Ballier	-	B01	0.000	CNES	SS	CNES/Bernateau	Aeronomy	CNES	-	-
1963-H38	2438234.50	1963 Jul 24	Ballier	-	B73	0.000	CNES	SS	CNES/Blamont	Aeronomy	CNES	-	-
1964-H26	2438709.50	1964 Nov 10	Ballier	-	B69	0.000	CNES	SS	LPA/Vasy	Aeronomy	CNES	-	-
1966-H22	2439327.21	1966 Jul 20 1701:07	Ballier	-	B89	0.000	ESRO	SS	MLAM/Uccialini	Ionospheric	ESRO-SP77	-	-
1966-H28	2439332.26	1966 Jul 25 1810:00	Ballier	-	B90	0.000	ESRO	SS	MLAM/Uccialini	Ionospheric	ESRO-SP77	-	-
1968-A67	2439990.50	1968 May 18	Ballier III	-	B301	0.000	CNES	SS	CNES/Cade	Test	CNES	-	-
1968-S317	2439990.50	1968 May 14	Ballier III	-	B306	0.000	ESRO/CNES	SS	CNES/Cade	Test	Serra	-	-
1969-S165	2440286.50	1969 Mar 6	Ballier III	-	B304	0.000	CNES	SS	CNES/Cade	Test	CNES	-	-
1969-H14	2440330.50	1969 Aug 19	Ballier	-	B116	0.000	CNES	SS	CNES/CSG/	Test	CNES	-	-
1969-H27	2440451.50	1969 Aug 18	Ballier	-	B117	0.000	CNES	SS	CNES/CSG/	Test	CNES	-	-
1969-H31	2440489.50	1969 Sep 25	Ballier III	-	B307	0.000	ONERA	SS	ONERA/	Reentry Test	Serra	-	-
1970-H04	2440620.50	1970 Feb 3	Ballier	-	B139	0.000	CNES	SS	CNES/CSG/	Test	CNES	-	-
1970-H26	2440696.50	1970 Nov 6	Ballier	-	B140	0.000	CNES	SS	CNES/CSG/	Test	CNES	-	-
1971-S680	2441215.75	1971 Sep 21 0600	RH-300	-	-	0.000	ISRO	SS	ISRO/	Test	POC/Ulich	-	-
1973-S575	2441672.50	1973 Jul 9	RH-300	-	RH-300-01	0.000	ISRO	SS	ISRO/	Test	S5SC-SR	-	-
1975-5414	2442653.50	1975 Jun 20	RH-300	-	RH-300-02	0.000	ISRO	SS	ISRO/	Test	S5SC-SR	-	-
1975-5415	2442654.50	1975 Jun 21	RH-300	-	RH-300-03	0.000	ISRO	SS	ISRO/	Test	S5SC-SR	-	-
1975-5357	2442681.50	1975 Sep 26	RH-300	-	-	0.000	ISRO	SS	ISRO/	Test	Serra	-	-
1977-5452	2443161.50	1977 Feb 7	RH-300	-	RH-300-16	0.000	ISRO	SS	ISRO/	Test	S5SC-SR	-	-
1977-5453	2443163.50	1977 Feb 9	RH-300	-	RH-300-15	0.000	ISRO	SS	ISRO/	Test	S5SC-SR	-	-
1978-S114	2445616.50	1978 Apr 18	RH-300	-	-	0.000	ISRO	SS	ISRO/	Test	ESA-SP162-9	-	-
1983-S309	2446354.50	1983 Jun 20	RH-300	-	RH-300-1 (1PP-40)	0.000	ISRO	SS	ISRO/	Test	S5SC-SR	-	-
1983-S312	2445477.50	1983 Jun 23	RH-300	-	RH-300-2 (1PP-40)	0.000	ISRO	SS	ISRO/	Test	S5SC-SR	-	-
1983-S313	2445611.50	1983 Oct 4	RH-300	-	RH-300-3 (1PP-40)	0.000	ISRO	SS	ISRO/	Test	S5SC-SR	-	-
1985-S131	2446354.50	1985 Oct 16	SP-300-200	-	T1	0.000	ISRO	SS	ISRO/	Test	Rao2015	-	-
1988-A421	2446495.50	1988 Mar 6	RH-300	-	-	0.000	ISRO	SS	ISRO/	Test	Serra	-	-
1988-S119	2446499.50	1988 Mar 10 0405	RH-300	-	-	0.000	ISRO	SS	ISRO/	Test	LJMS24.35	-	-
1988-S121	2446706.71	1988 Oct 3 0505	RH-300	-	-	0.000	ISRO	SS	ISRO/	Test	Advspatex10,10,123	-	-
1988-S120	2446940.63	1988 Nov 6 0310	RH-300	-	-	0.000	ISRO	SS	ISRO/	Test	Advspatex10,10,123	-	-
1987-S256	2446954.50	1987 Jun 8	RH-300 Hk. II	-	RH-300-M2-01	0.000	ISRO	SS	ISRO/	Test	S52000	-	-
1988-S168	2447058.50	1987 Sep 30	RH-300 Hk. II	-	RH-300-M2-02	0.000	ISRO	SS	ISRO/	Test	S5SC-SR	-	-
1988-S169	2447235.65	1988 Apr 22 0340	RH-300 Hk. II	-	RH-300-M2-03	0.000	ISRO	SS	ISRO/	Test	S5SC-SR	-	-
1989-S159	2447745.50	1988 Nov 6 0310	RH-300	-	-	0.000	ISRO	SS	ISRO/	Test	Serra	-	-
1989-S159	2447745.50	1988 Nov 6 0310	RH-300 Hk. II	-	RH-300-M2-04?	0.000	ISRO	SS	ISRO/	Test	Serra	-	-
1989-S159	2447745.50	1988 Sep 26	RH-300 Hk. II	-	RH-300-M2-05?	0.000	ISRO	SS	ISRO/	Test	NR22-90	-	-
1990-S196	2448083.50	1989 Dec 21	RH-300 Hk. II	-	RH-300-M2-06?	0.000	ISRO	SS	ISRO/	Test	S5SC-SR	-	-
1990-S196	2448083.50	1989 May 22	RH-300 Hk. II	-	RH-300-M2-07?	0.000	ISRO	SS	ISRO/	Test	S5SC-SR	-	-
1993-S02	2448097.50	1991 Aug 1	RH-300 Hk. II	-	-	0.000	ISRO	SS	ISRO/?	Test	TELSp-LyCom	-	-
1993-S02	2448097.50	1993	RH-300	-	-	0.000	ISRO	SS	ISRO/?	Test	TELSp-LyCom	-	-
1997-H02	2449773.23	1997 Nov 20 1720	RH-300 Hk. II	-	RH-300-M2-08?	0.000	NRSE	SS	NRSE/Thrane	Ionos?	SH971215-11	-	-
1999-S77	2451500.50	1999 Nov 18 0155	RH-300 Hk. II	-	RH-300-M2-09?	0.000	ISRO	SS	ISRO/	Ionos	ANU-HM	-	-
1999-S78	2451502.50	1999 Nov 18 0155	RH-300 Hk. II	-	RH-300-M2-10?	0.000	ISRO	SS	ISRO/	Ionos	ANU-HM	-	-
2004-S74	2453200.76	2004 Jul 23 0630	RH-300 Hk. II	-	RH-300-M2-11?	0.000	ISRO	SS	ISRO/	Ionosphere/Meteor	ThurMan091121	-	-
2005-S60	2453468.75	2005 Apr 8 0556	RH-300 Hk. II	-	RH-300-M2-12?	0.000	ISRO	SS	ISRO/	Ionosphere/Meteor	ThurMan091121	-	-
2005-S84	2453701.75	2005 Apr 27 0553	RH-300 Hk. II	-	RH-300-M2-13?	0.000	ISRO	SS	ISRO/	Aercon	CSM&P2006-A-00253	-	-
2007-S94	2454115.20	2007 Jun 15 1643	RH-300 Hk. II	-	RH-300-M2-14?	0.000	ISRO	SS	ISRO/	Aercon	CSM&P2006-A-00253	-	-
2008-S90	2454495.16	2008 Jun 29 1549	RH-300 Hk. II	-	RH-300-M2-15?	0.000	ISRO	SS	ISRO/	Aercon	CSM&P2006-A-00253	-	-
2010-S04	2455210.78	2010 Jun 14 0735	RH-300 Hk. II	-	RH-300-M2-16?	0.000	ISRO	SS	ISRO/	Aercon	CSM&P2006-A-00253	-	-
2010-S04	2455211.80	2010 Jun 14 0735	RH-300 Hk. II	-	RH-300-M2-17?	0.000	ISRO	SS	ISRO/	Aercon	CSM&P2006-A-00253	-	-
2010-S07	2455211.81	2010 Jun 15 0700?	RH-300 Hk. II	-	RH-300-M2-18?	0.000	ISRO	SS	ISRO/	Aercon	CSM&P2006-A-00253	-	-
2010-S08	2455211.94	2010 Jun 15 0730?	RH-300 Hk. II	-	RH-300-M2-19?	0.000	ISRO	SS	ISRO/	Aercon	CSM&P2006-A-00253	-	-
2018-S36	2458215.08	2018 Apr 6 1400	RH-300 Hk. II	-	RH-300-M2-20?	0.000	ISRO	SS	ISRO/	Aercon	CSM&P2006-A-00253	-	-
2022-S85	2458225.78	2022 Sep 3 0850	RH-300 Hk. II	-	RH-300-M2-21	0.000	ISRO	SS	ISRO/	Aercon	CSM&P2006-A-00253	-	-



Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Mission	LaunchCode	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee km	Range km	Dest
1966-W68	2439921.50	1968 Mar 6	Epona	-	1	-	-	-	-	CERES?	-	-	-	60?	-	-





Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Orbit	Agency	Launch_Code	Group	Category	LTCite	Cite	Notes
1968-468	2439921.50	1968 Mar 6	Epona	-	1	0.000	CNES?	SS	MNF/	Meeco	ATNA70-71	-	-



Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Mission	FlightCode	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee Km	Range Km	Dest
1969-A109	2440400.46	1969 Jun 27 2258	Black Arrow	BA0	R-0	-	-	-	-	W00	L6B8	-	-	4	-	-
1970-S187	2440649.39	1970 Mar 3 2115	Black Arrow	BA0	R-1	-	-	-	-	W00	L6B8	-	-	550	-	-
1970-F07	2440831.52	1970 Sep 2 0034:05	Black Arrow	-	R-2	X-2	X-2	-	-	W00	L6B8	-	-	550	-	-
1971-093	2441252.67	1971 Oct 28 0409:29	Black Arrow	-	R-3	X-3	X-3	-	-	W00	L6B8	-	-	1595	-	-



Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	DrpPay	Agency	Launch_Code	Group	Category	LTCite	Cite	Notes
1969-A109	2440400.46	1969 Jun 27 2258	Black Arrow	BA0	R-0	0.000	RAE	TF	-	Test	Morton	-	-
1970-S187	2440669.39	1970 Mar 3 2115	Black Arrow	BA0	R-1	0.000	RAE	TS	-	Test	Morton	-	-
1970-F07	2440831.62	1970 Sep 2 0034:05	Black Arrow	-	R-2	0.082	RAE	UF	G	Sat LED 0	Wroughton	Morton	-
1971-083	2441252.67	1971 Oct 28 0409:29	Black Arrow	-	R-3	0.067	RAE	US	G	Sat LED 0	TR-HSE-0199	Morton	-



Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Mission	FlightCode	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee km	Range km	Dest
1958-S195	2456453.94	1958 Sep 7 1033	Black Knight	201	BK.01	H01/Proving Trial	-	-	-	W00	LASA	-	-	225	-	-
1959-S25	2456539.95	1959 Mar 12 1050	Black Knight	201	BK.03	H02/Proving Trial	-	-	-	W00	LASA	-	-	537	-	-
1959-S86	2456731.04	1959 Jun 11 1303	Black Knight	201	BK.04	H03	-	-	-	W00	LASA	-	-	803	-	-
1959-S100	2456748.98	1959 Jun 29 1133	Black Knight	201	BK.05	H05	-	-	-	W00	LASA	-	-	442	-	-
1959-S228	2456871.99	1959 Oct 30 1149	Black Knight	201	BK.06	H06	-	-	-	W00	LASA	-	-	732	-	-
1960-S102	2457078.98	1960 May 24 1130	Black Knight	201/C	BK.08	H-201	-	-	-	W00	LASA	-	-	563	-	-
1960-S135	2457106.92	1960 Jun 21 1005	Black Knight	201/C	BK.09	H-202	-	-	-	W00	LASA	-	-	484	-	-
1960-S194	2457141.00	1960 Jul 25 1154	Black Knight	201	BK.07	H11	-	-	-	W00	LASA	-	-	531	-	-
1961-S37	2457338.03	1961 Feb 7 1246	Black Knight	201	BK.13	H14	-	-	-	W00	LASA	-	-	687	-	-
1961-S140	2457429.00	1961 May 9 1207	Black Knight	201/C	BK.14	H-204	-	-	-	W00	LASA	-	-	415	-	-
1961-S170	2457457.97	1961 Jun 7 1120	Black Knight	201/C	BK.17 UK-1 probe	H-203	-	-	-	W00	LASB	-	-	583	-	-
1962-S118	2457786.06	1962 Aug 1 1313	Black Knight	201	BK.15	H16	-	-	-	W00	LASB	-	-	795	-	-
1962-S311	2457900.98	1962 Aug 24 1138	Black Knight	301/C	BK.16	H-205	-	-	-	W00	LASA	-	-	573	-	-
1962-S502	2457998.19	1962 Nov 29 1653	Black Knight	301/C	BK.18	H-209	-	-	-	W00	LASA	-	-	576	-	-
1963-S498	2458319.95	1963 Oct 17 1052	Black Knight	201	BK.11	Elue Streak Test	-	-	-	W00	LAS	-	-	527	-	-
1964-S139	2458465.50	1964 Mar 11	Black Knight	201/C2	BK.12	Cuckoo II Test	-	-	-	W00	LAS	-	-	500	-	-
1964-S403	2458613.22	1964 Aug 5 1715:06	Black Knight	301/C2	BK.19	H-210/Dazzle 1	-	-	-	W00	LAS	-	-	602	-	-
1964-S597	2458706.07	1964 Nov 6 1345:06	Black Knight	301/C2	BK.20	H-206/Dazzle 1	-	-	-	W00	LAS	-	-	629	-	-
1965-S243	2458871.96	1965 Apr 21 1101:47	Black Knight	301/C2	BK.21	H-211/Dazzle 2	-	-	-	W00	LAS	-	-	651	-	-
1965-S436	2458965.25	1965 Jul 25 1759:38	Black Knight	301/C2	BK.23	H-207 II/Dazzle 3	-	-	-	W00	LAS	-	-	492	-	-
1965-S518	2459032.11	1965 Sep 28 1436:00	Black Knight	301/C2	BK.24	H-208 V/Dazzle 4	-	-	-	W00	LAS	-	-	605	-	-
1965-S650	2459090.06	1965 Nov 25 1320:00	Black Knight	301/C2	BK.25	H-212 II/Dazzle 6	-	-	-	W00	LAS	-	-	632	-	-





Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	OrbPay	Agency	Launch_Code	Group	Category	LTCite	Cite	Notes
1966-S195	2436453.94	1968 Sep 7 1033	Black Knight	201	BK.01	0.000	RAE	MS	-	Test	TMSpace57	Morton	-
1969-S25	2436659.95	1969 Mar 12 1050	Black Knight	201	BK.03	0.000	RAE	MS	-	Test	TMSpace57	Morton	-
1969-S66	2436731.04	1969 Jun 11 1303	Black Knight	201	BK.04	0.000	RAE	MS	-	Test	TMSpace57	Morton	-
1969-S100	2436748.98	1969 Jun 29 1133	Black Knight	201	BK.05	0.000	RAE	MS	-	Test	TMSpace57	Morton	-
1969-S228	2436871.99	1969 Oct 30 1149	Black Knight	201	BK.06	0.000	RAE	MS	RAE/ICST/Darwin,Queenby	Reentry Test/CR	TMSpace57	SRI/987	-
1960-S102	2437078.98	1960 May 24 1130	Black Knight	201/C	BK.08	0.000	RAE	MF	-	Reentry Test	TMSpace57	Morton	-
1960-S136	2437106.92	1960 Jun 21 1005	Black Knight	201/C	BK.09	0.000	RAE	MS	RAE/ICST/	Reentry Test/Ionos	TMSpace57	Morton	-
1960-S194	2437141.00	1960 Jul 25 1154	Black Knight	201	BK.07	0.000	RAE	MS	RAE/ICST/UCL/	Reentry/CR/Ionos	TMSpace57	Morton	-
1961-S37	2437338.03	1961 Feb 7 1246	Black Knight	201	BK.13	0.000	RAE	MS	ICST/UCL/JBU/	Reentry/RF Astron/Ionos	TMSpace57	Morton	-
1961-S140	2437429.00	1961 May 9 1207	Black Knight	201/C	BK.14	0.000	RAE	MF	ICST/UCL/JBU/	Reentry/RF Astron/Ionos	TMSpace57	Morton	-
1961-S170	2437457.97	1961 Jun 7 1120	Black Knight	201/C	BK.17	0.000	RAE	SF	ICST/UCL/Norman	Reentry Test/Ionos	TMSpace57	Morton	-
1962-S118	2437786.05	1962 May 1 1313	Black Knight	201	BK.15	0.000	RAE	SS	ICST/UCL/	Reentry Test/Ionos	TMSpace57	PlanSpace13,1	-
1962-S311	2437900.98	1962 Aug 24 1138	Black Knight	201	BK.16	0.000	RAE	SS	RAE/UCL/	Reentry Test/Ionos	TMSpace57	-	-
1962-S602	2437988.19	1962 Nov 29 1633	Black Knight	301/C	BK.18	0.000	RAE	MS	RAE/UCL/	Reentry Test/Ionos	TMSpace57	-	-
1965-S498	2438319.95	1963 Oct 17 1052	Black Knight	201	BK.11	0.000	ELDO/RAE	MS	-	Test	Wroughton	-	-
1964-S139	2438445.50	1964 Mar 11	Black Knight	201/C2	BK.12	0.000	RAE	MS	-	Reentry Test	FI640723-162	-	-
1964-S403	2438613.22	1964 Aug 5 1715:05	Black Knight	301/C2	BK.19	0.000	RAE	MS	-	Reentry Test	TH-68076	-	-
1964-S597	2438706.07	1964 Nov 6 1345:06	Black Knight	301/C2	BK.20	0.000	RAE	SS	UCL/	Reentry Test/Aeron	TH-68076	-	-
1965-S243	2438871.96	1965 Apr 21 1101:47	Black Knight	301/C2	BK.21	0.000	RAE	SS	UCL/	Reentry Test/Ionos	TH-68076	-	-
1965-S436	2438968.25	1965 Jul 26 1759:36	Black Knight	301/C2	BK.23	0.000	RAE	MS	-	Reentry Test	TH-68076	-	-
1965-S518	2439032.11	1965 Sep 28 1435:00	Black Knight	301/C2	BK.24	0.000	RAE	MS	-	Reentry Test	TH-68076	-	-
1965-S650	2439090.06	1965 Nov 25 1320:00	Black Knight	301/C2	BK.25	0.000	RAE	MS	-	Reentry Test	TH-68076	-	-



Launch

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Mission	FlightCode	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee_Km	Range_Km	Dest
2000-A06	2451801.88	2000 Sep 14 0900	Black Sparrow	-	-	-	-	-	F-15D-I	PALB?	RM03/21	PALB	LP1	40?	-	-
2001-A06	2452148.50	2001 Aug 27	Black Sparrow	-	-	-	-	-	F-15D-I	PALB?	RM03/21	PALB	LP1	40?	-	-
2003-A18	2452989.50	2003 Dec 16	Black Sparrow	-	-	-	-	-	F-15D-I	PALB?	RM03/21	PALB	LP1	40?	-	-
2005-A08	2453706.85	2005 Dec 2 0827?	Black Sparrow	-	-	-	-	-	F-15D-I	PALB?	RM03/21	PALB	LP1	40?	-	-
2007-A10	2454142.50	2007 Feb 11	Black Sparrow	-	-	-	-	-	F-15D-I	PALB?	RM03/21	PALB	LP1	40?	-	-
2008-S15	2454571.50	2008 Apr 15	Blue Sparrow	-	1	-	-	-	F-15D-I	CAZ	RM06/24	DGAEML	MEDR?	100?	-	-
2011-A39	2458880.50	2011 Nov 15	Blue Sparrow	-	-	-	Aster 30 Target	-	F-15D-I	PALB?	RM03/21	PALB	MEDR?	100?	-	-
2012-S45	2459367.88	2012 Feb 10 0900	Blue Sparrow	-	2	-	Radar target	-	F-15D-I	PALB?	RM06/24	DGAEML	MEDR?	100?	-	-
2013-S114	2456357.50	2013 Mar 6	Blue Sparrow	-	-	-	Aster 30 Target	-	F-15D-715	CAZ	RM06/24	DGAEML	MEDR?	150?	-	Med Sea
2013-S87	2456538.76	2013 Sep 9	Silver Sparrow	-	3	-	Radar target	-	F-15D-I	PALB?	RM03/21	PALB	MEDR?	100?	-	-
2014-S86	2456909.50	2014 Sep 9	Blue Sparrow	-	-	-	-	-	F-15D-I	PALB?	RM03/21	PALB	MEDR?	100?	-	-
2014-S80	2457007.50	2014 Dec 16	Silver Sparrow	?	-	-	-	-	F-15D-I	PALB?	RM03/21	PALB	MEDR?	100?	-	-
2015-S85	2457366.76	2015 Dec 10 0612	Silver Sparrow	-	-	-	-	-	F-15D-I	PALB?	RM03/21	PALB	MEDR?	100?	-	-
2017-A01	2457778.50	2017 Jan 25	Black Sparrow	-	-	-	DSI-S Target	-	F-15D-706	PALB	RM03/21	PALB	LP1	20?	-	-
2019-S04	2458605.50	2019 Jan 22	Silver Sparrow	?	-	-	-	-	F-15D-I	PALB?	RM03/21	PALB	MEDR?	100?	-	-
2020-S24	2458073.50	2020 Aug 12	Silver Sparrow	?	-	-	-	-	F-15D-I	PALB?	RM03/21	PALB	MEDR?	100?	-	-
2022-S02	2458697.50	2022 Jan 18	Silver Sparrow	?	-	-	-	-	F-15D-I	PALB?	RM03/21	PALB	MEDR?	100?	-	-



Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	OrbPay	Agency	Launch_Code	Group	Category	LTCite	Cite	Notes
2000-406	2451801.88	2000 Sep 14 0900	Black Sparrow	-	-	0.000	IDF	MS	-	Test	Mire	-	-
2001-406	2452148.50	2001 Aug 27	Black Sparrow	-	-	0.000	IDF	MS	-	Test	Mire	-	-
2003-418	2452988.50	2003 Dec 16	Black Sparrow	-	-	0.000	IDF	MS	-	Test	Mire	-	-
2006-408	2453705.85	2005 Dec 2 0827?	Black Sparrow	-	-	0.000	IDF	MS	-	Test	Mire	-	-
2007-A10	2454442.50	2007 Feb 11	Black Sparrow	-	-	0.000	IDF	MS	-	Test	Mire	-	-
2008-S15	2454871.50	2008 Apr 15	Blue Sparrow	-	1	0.000	IDF/DGA	MS	-	Test	Mire	-	-
2011-439	2455880.50	2011 Nov 15	Blue Sparrow	-	-	0.000	IDF/DGA	MS	-	Test	Mire	-	-
2012-545	2455987.88	2012 Feb 10 0900	Blue Sparrow	-	2	0.000	IDF/DGA	MS	-	Test	Mire	-	-
2013-S114	2456357.50	2013 Mar 6	Blue Sparrow	-	-	0.000	IDF/DGA	MS	-	Test	Mire	-	-
2013-S57	2456358.76	2013 Sep 3 0616	Silver Sparrow	-	-	0.000	IDF	MS	-	Test	Mire	-	-
2014-S56	2456993.50	2014 Sep 9	Blue Sparrow	-	3	0.000	IDF	MS	-	Test	Mire	-	-
2014-S80	2457007.50	2014 Dec 16	Silver Sparrow	?	-	0.000	IDF	MS	-	Test	Mire	-	-
2015-S85	2457365.76	2015 Dec 10 0612	Silver Sparrow	-	-	0.000	IDF	MS	-	Test	Mire	-	-
2017-A01	2457778.50	2017 Jan 25	Black Sparrow	-	-	0.000	IDF	MS	-	Test	Mire	-	-
2019-S04	2458605.50	2019 Jan 22	Silver Sparrow	?	-	0.000	IDF	MS	-	Test	Mire	-	-
2020-S24	2459073.50	2020 Aug 12	Silver Sparrow	?	-	0.000	IDF	MS	-	Test	Mire	-	-
2022-S02	2459597.50	2022 Jan 18	Silver Sparrow	?	-	0.000	IDF	MS	-	Test	Mire	-	-



Launch

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Mission	FlightCode	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee km	Range km	Dest
1964-S279	2438551.49	1964 Jun 4 2344	Blue Streak	-	F-1	-	-	-	-	WOO	LAGA	-	-	157	1015	-
1964-S532	2438688.46	1964 Oct 19 2300	Blue Streak	-	F-2	-	-	-	-	WOO	LAGA	-	-	243	-	-
1965-S181	2438941.46	1965 Mar 21 2308	Blue Streak	-	F-3	-	-	-	-	WOO	LAGA	-	-	263	-	-
1966-S276	2439269.48	1966 May 23 2336	ELDO A	-	F-4	STV	STV 1	-	-	WOO	LAGA	-	-	86	-	-
1966-S620	2439444.36	1966 Nov 14 2038:58	Europa I	-	F-5	STV	STV 2	-	-	WOO	LAGA	-	-	120	-	-
1967-S367	2439706.66	1967 Aug 4 0353	Europa I	-	F-6/1	STV	STV 3	-	-	WOO	LAGA	-	-	180?	-	-
1967-S561	2439830.38	1967 Dec 5 2101	Europa I	-	F-6/2	STV	STV 4	-	-	WOO	LAGA	-	-	200?	-	-
1968-F09	2440190.47	1968 Nov 29 2312:02	Europa I	-	F-7	STV	STV 5	-	-	WOO	LAGA	-	-	230?	-	-
1969-F09	2440405.45	1969 Jul 2 2255:00	Europa I	-	F-8	STV	STV 6/Adapter	-	-	WOO	LAGA	-	-	300?	-	-
1970-002	2440749.55	1970 Jun 12 0110:32	Europa I	-	F-9	STV	STV 7	-	-	WOO	LAGA	-	-	2000?	-	-
1971-F10	2441261.04	1971 Nov 5 1300	Europa II	-	F-11	STV	STV 8	-	-	CSG	CECLES	-	-	27	-	-





Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Launch			Launch_Code	Group	Category	LTCite	Cite	Notes
					Flight_ID	OrbPay	Agency						
1964-S279	2438551.49	1964 Jun 4 2344	Blue Streak	-	F-1	0.000	ELDD	TS	-	F1-RPT	Morton	-	
1964-S532	2438698.46	1964 Oct 19 2300	Blue Streak	-	F-2	0.000	ELDD	TS	-	Henderson	-	-	
1965-S181	2438841.46	1965 Mar 21 2308	Blue Streak	-	F-3	0.000	ELDD	TS	-	Morton	-	-	
1966-S276	2439269.48	1966 May 23 2336	ELDD A	-	F-4	0.000	ELDD	TS	-	Morton	SP-4007	-	
1966-S620	2439444.36	1966 Nov 14 2038:58	Europa I	-	F-5	0.000	ELDD	TS	-	Henderson	-	-	
1967-S367	2439706.66	1967 Aug 4 0353	Europa I	-	F-6/1	0.000	ELDD	TF	-	Rothmund	-	-	
1967-S561	2439830.38	1967 Dec 5 2101	Europa I	-	F-6/2	0.000	ELDD	TF	-	FP2-RPT	Henderson	-	
1968-F09	2440190.37	1968 Nov 29 2312:02	Europa I	-	F-7	0.280	ELDD	OF	G	Henderson	ELDDBall	-	
1969-F09	2440406.45	1969 Jul 2 2255:00	Europa I	-	F-8	0.385	ELDD	OF	G	Henderson	-	-	
1970-002	2440749.55	1970 Jun 12 0110:32	Europa I	-	F-9	0.215	ELDD	OF	G	FP-RPT	Morton	-	
1971-F10	2441261.04	1971 Nov 5 1300	Europa II	-	F-11	0.160	ELDD	OF	G	Rothmund	-	-	



Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Mission	FlightCode	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee_Km	Range_Km	Dest
1952-A149	2434265.50	1952 Sep 10	Bomarc A	-	621-1	-	-	-	-	CC	LC4	-	-	0	-	-
1953-A228	2434400.50	1953 Jan 23	Bomarc A	-	621-2	-	-	-	-	CC	LC3/4?	-	-	20?	-	-
1953-A238	2434538.50	1953 Jun 10	Bomarc A	-	623-1	-	-	-	-	CC	LC3/4?	-	-	20?	-	-
1953-A307	2434656.50	1953 Jul 27	Bomarc A	-	623-2	-	-	-	-	CC	LC3/4?	-	-	20?	-	-
1953-A346	2434624.50	1953 Sep 4	Bomarc A	-	623-3	-	-	-	-	CC	LC3/4?	-	-	20?	-	-
1954-A463	2434959.50	1954 Aug 5	Bomarc A	-	623-7	-	-	-	-	CC	LC3	-	-	20?	-	-
1954-A590	2435040.50	1954 Oct 25	Bomarc A	-	623-8	-	-	-	-	CC	LC3	-	-	20?	-	-
1954-A657	2435070.50	1954 Nov 24	Bomarc A	-	623-9	-	-	-	-	CC	LC3	-	-	20?	-	-
1955-A228	2435126.50	1955 Jan 19	Bomarc A	-	623-10	-	-	-	-	CC	LC3	-	-	22	-	-
1955-A128	2435162.50	1955 Feb 24	Bomarc A	-	623-21	-	-	-	-	CC	LC3	-	-	20?	-	-
1955-A146	2435169.50	1955 Mar 3	Bomarc A	-	623-11	-	-	-	-	CC	LC3	-	-	20?	-	-
1955-A337	2435232.50	1955 May 5	Bomarc A	-	623-22	-	-	-	-	CC	LC3	-	-	20?	-	-
1955-A461	2435315.50	1955 Jul 27	Bomarc A	-	623-12	-	-	-	-	CC	LC3/4?	-	-	20?	-	-
1955-A466	2435344.50	1955 Aug 25	Bomarc A	-	623-23	-	-	-	-	CC	LC3/4?	-	-	20?	-	-
1955-A478	2435379.50	1955 Sep 29	Bomarc A	-	623-24	-	-	-	-	CC	LC3/4?	-	-	20?	-	-
1955-A490	2435428.50	1955 Nov 17	Bomarc A	-	623-25	-	-	-	-	CC	LC3/4?	-	-	20?	-	-
1955-A493	2435441.50	1955 Nov 30	Bomarc A	-	623-26	-	-	-	-	CC	LC3/4?	-	-	20?	-	-
1956-A11	2435505.50	1956 Feb 2	Bomarc A	-	623-13	-	-	-	-	CC	LC4	-	-	20?	-	-
1956-A33	2435547.50	1956 Mar 15	Bomarc A	-	623-14	-	-	-	-	CC	LC3/4?	-	-	20?	-	-
1956-A47	2435577.50	1956 Apr 14	Bomarc A	-	623-15	-	-	-	-	CC	LC3/4?	-	-	20?	-	-
1956-A56	2435614.50	1956 May 21	Bomarc A	-	623-16	-	-	-	-	CC	LC3/4?	-	-	20?	-	-
1956-A62	2435643.50	1956 Jun 19	Bomarc A	-	623-17	-	-	-	-	CC	LC4	-	-	20?	-	-
1956-A71	2435667.50	1956 Jul 13	Bomarc A	-	623-18	-	-	-	-	CC	LC3/4?	-	-	20?	-	-
1956-A102	2435758.50	1956 Oct 12	Bomarc A	-	624-6	-	-	-	-	CC	LC3/4?	-	-	20?	-	-
1956-A114	2435806.50	1956 Nov 29	Bomarc A	-	624-2	-	-	-	-	CC	LC3/4?	-	-	20?	-	-
1957-A09	2435941.50	1957 Jan 3	Bomarc A	-	624-3	-	-	-	-	CC	-	-	-	20?	-	-
1957-A14	2435952.50	1957 Feb 13	Bomarc A	-	624-4	-	-	-	-	CC	-	-	-	20?	-	-
1957-A14	2435957.50	1957 Feb 26	Bomarc A	-	624-4	-	-	-	-	CC	-	-	-	20?	-	-
1957-A27	2435945.50	1957 Apr 17	Bomarc A	-	624-1	-	-	-	-	CC	LC4	-	-	20?	-	-
1957-A45	2436041.50	1957 Jul 22	Bomarc A	-	624-7	-	-	-	-	CC	LC4	-	-	20?	-	-
1957-A60	2436068.50	1957 Aug 15	Bomarc A	-	624-8	-	-	-	-	CC	-	-	-	20?	-	-
1957-A96	2436098.31	1957 Sep 16 1920	Bomarc A	-	624-9	-	-	-	-	CC	-	-	-	20?	-	-
1957-A110	2436109.40	1957 Sep 27 2140	Bomarc A	-	624-10	-	-	-	-	CC	-	-	-	20?	-	-
1957-A119	2436128.35	1957 Oct 11 2030	Bomarc A	-	624-11	-	-	-	-	CC	-	-	-	20?	-	-
1957-A122	2436156.23	1957 Oct 23 1725?	Bomarc A	-	624-16	-	-	-	-	CC	-	-	-	20?	-	-
1957-A129	2436156.50	1957 Nov 14	Bomarc A	-	624-12	-	-	-	-	CC	-	-	-	20?	-	-
1957-A136	2436161.50	1957 Dec 9	Bomarc A	-	624-14	-	-	-	-	CC	-	-	-	20?	-	-
1958-A03	2436218.20	1958 Jan 14 1645	Bomarc A	-	624-17	-	-	-	-	CC	-	-	-	20?	-	-
1958-A20	2436262.50	1958 Mar 20	Bomarc A	-	624-17	-	-	-	-	CC	-	-	-	20?	-	-
1958-A28	2436296.18	1958 Apr 2 1620	Bomarc A	-	624-16	-	-	-	-	CC	-	-	-	20?	-	-
1958-A40	2436235.16	1958 May 19 1945	Bomarc A	-	624-19	-	-	-	-	CC	LC4	-	-	20?	-	-
1958-A44	2436343.50	1958 May 20	Bomarc A	-	624-19	-	-	-	-	CC	-	-	-	20?	-	-
1958-A51	2436394.16	1958 Jun 9 1645	Bomarc A	-	624-21	-	-	-	-	CC	-	-	-	20?	-	-
1958-A56	2436379.31	1958 Jun 20 1920?	Bomarc A	-	624-23	-	-	-	-	CC	-	-	-	20?	-	-
1958-A59	2436354.11	1958 Jun 26 1460	Bomarc A	-	624-24	-	-	-	-	CC	-	-	-	20?	-	-
1958-A60	2436329.25	1958 Jun 26 1460	Bomarc A	-	624-20	-	-	-	-	CC	-	-	-	20?	-	-
1958-A67	2436349.50	1958 Jul 1 1800	Bomarc A	-	624-20	-	-	-	-	CC	-	-	-	20?	-	-
1958-A89	2436430.18	1958 Aug 7	Bomarc A	-	624-21	-	-	-	-	CC	LC4	-	-	20?	-	-
1958-A99	2436437.18	1958 Aug 15	Bomarc A	-	624-22	-	-	-	-	CC	-	-	-	20?	-	-
1958-A107	2436440.18	1958 Aug 21 1615?	Bomarc A	-	624-27	-	-	-	-	CC	-	-	-	20?	-	-
1958-A107	2436440.18	1958 Sep 3	Bomarc A	-	624-27	-	-	-	-	CC	-	-	-	20?	-	-
1958-A107	2436470.50	1958 Sep 24	Bomarc A	-	624-27	-	-	-	-	CC	LC4	-	-	20?	-	-
1958-A127	2436407.50	1958 Oct 21	Bomarc A	-	624-24	-	-	-	-	CC	LC4	-	-	20?	-	-
1958-A138	2436407.50	1958 Oct 21	Bomarc A	-	624-25	-	-	-	-	CC	LC4	-	-	20?	-	-
1958-A138	2436407.50	1958 Oct 21	Bomarc A	-	624-26	-	-	-	-	CC	LC4	-	-	20?	-	-
1958-A150	2436520.15	1958 Nov 21 1540	Bomarc A	-	624-26	-	-	-	-	CC	LC4	-	-	20?	-	-
1958-A163	2436550.50	1958 Nov 13	Bomarc A	-	624-27	-	-	-	-	CC	LC4	-	-	20?	-	-
1958-A168	2436557.21	1958 Dec 19 1659?	Bomarc A	-	624-28	-	-	-	-	CC	-	-	-	20?	-	-
1958-A168	2436561.50	1958 Dec 19 1659?	Bomarc A	-	624-28	-	-	-	-	CC	-	-	-	20?	-	-
1959-A115	2436596.11	1959 Feb 27 1440	Bomarc A	-	624-24	-	-	-	-	CC	LC4	-	-	20?	-	-
1959-A115	2436596.32	1959 Jan 27 1940?	Bomarc A	-	624-24	-	-	-	-	CC	LC4	-	-	20?	-	-
1959-A128	2436612.50	1959 Feb 13	Bomarc A	-	624-24	-	-	-	-	CC	LC4	-	-	20?	-	-
1959-A42	2436632.25	1959 Mar 4 1807	Bomarc A	-	624-24	-	-	-	-	CC	LC4	-	-	20?	-	-
1959-A51	2436658.50	1959 Mar 31	Bomarc A	-	624-24	-	-	-	-	CC	LC4	-	-	20?	-	-
1959-A63	2436679.50	1959 Apr 21	Bomarc A	-	624-24	-	-	-	-	CC	LC4	-	-	20?	-	-
1959-A83	2436716.07	1959 May 27 1347	Bomarc B	-	631-2	-	-	-	-	CC	LC4	-	-	20?	-	-
1959-A116	2436764.21	1959 Jul 14 1658	Bomarc B	-	631-2	-	-	-	-	CC	LC3/4?	-	-	20?	-	-
1959-A134	2436793.12	1959 Aug 12 1500	Bomarc B	-	631-3	-	-	-	-	CC	LC3/4?	-	-	20?	-	-
1959-A154	2436814.08	1959 Sep 2 1405	Bomarc B	-	631-4	-	-	-	-	CC	LC3/4?	-	-	20?	-	-
1959-A184	2436870.08	1959 Oct 28 1400	Bomarc B	-	631-4	-	-	-	-	CC	LC4	-	-	20?	-	-
1960-A22	2436962.50	1960 Jan 29	Bomarc B	-	631-5	-	-	-	-	CC	LC4	-	-	20?	-	-
1960-A99	2437040.12	1960 Apr 15 1450	Bomarc B	-	631-6	-	-	-	-	CC	LC4	-	-	20?	-	-
1966-A100	2439362.50	1966 Aug 25	Bomarc A	-	631-8	-	-	-	-	V	LC4	-	-	20?	-	-
1966-A121	2439413.33	1966 Oct 14 2000?	Bomarc A	-	A	-	-	-	-	V	LC4	-	-	0	-	-
1966-A133	2439430.50	1966 Feb 8	Bomarc A	-	A	-	-	-	-	V	LC4	-	-	0	-	-
1967-A57	2439529.50	1967 Feb 8	Bomarc A	-	A	-	-	-	-	V	LC4	-	-	0	-	-
1967-A86	2439635.50	1967 May 25	Bomarc A	-	A	-	-	-	-	V	LC4	-	-	0	-	-
1967-A86	2439635.50	1967 May 25	Bomarc A	-	A	-	-	-	-	V	LC4	-	-	0	-	-
1967-A94	2439677.50	1967 Jul 6	Bomarc A	-	A	-	-	-	-	V	LC4	-	-	0	-	-
1967-A140	2439925.50	1967 Dec 1	Bomarc A	-	A	-	-	-	-	V	LC4	-	-	0	-	-
1968-A70	2439950.50	1968 Apr 4	Bomarc A	-	A	-	-	-	-	V	LC4	-	-	0	-	-
1968-A79	2439998.50	1968 May 22	Bomarc A	-	A	-	-	-	-	V	LC4	-	-	0	-	-
1968-479	2440034.50	1968 Jun 27	Bomarc A	-	A	-	-	-	-	V	LC4	-	-	0	-	-
1968-482	2440087.50	1968 Aug 19	Bomarc A	-	A	-	-	-	-	V	LC4	-	-	0	-	-
1968-490	2440087.50	1968 Aug 19	Bomarc A	-	A	-	-	-	-	V	LC4	-	-	0	-	-
1968-A105	2440136.50	1968 Oct 7	Bomarc A	-	A	-	-	-	-	V	LC4	-	-	0	-	-
1968-A110	2440173.50	1968 Nov 13	Bomarc A	-	A	-	-	-	-	V	LC4	-	-	0	-	-
1969-A07	2440230.50	1969 Jan 9 0000	Bomarc A	-	A	-	-	-	-	V	LC4	-	-	0	-	-
1969-A37	2440250.50	1969 Jan 29	Bomarc A	-	A	-	-	-	-	V	LC4	-	-	0	-	-

Launch

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Mission	FlightCode	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee km	Range km	Dest
1989-A46	2440273.50	1989 Feb 21	Bomarc A	-	A	Target	-	-	-	BOM-2	-	-	-	207	-	-
1989-A51	2440296.50	1989 Mar 15	Bomarc A	-	A	Target	-	-	-	BOM-1	-	-	-	207	-	-
1989-A61	2440329.33	1989 Apr 17 1952	Bomarc A	-	A	Target	-	-	-	BOM-2	-	-	-	207	-	-
1989-A72	2440342.26	1989 Apr 30 1820	Bomarc A	-	A	Target	-	-	-	BOM-1	-	-	-	207	-	-
1989-A87	2440362.50	1989 May 21	Bomarc A	-	A	Target	-	-	-	BOM-2	-	-	-	207	-	-
1989-A103	2440392.13	1989 Jun 19 1502	Bomarc A	-	A	Target	-	-	-	BOM-1	-	-	-	207	-	-
1989-A117	2440408.50	1989 Jul 3	Bomarc A	-	A	Target	-	-	-	BOM-2	-	-	-	207	-	-
1989-A124	2440414.50	1989 Jul 12	Bomarc A	-	A	Target	-	-	-	BOM-1	-	-	-	207	-	-
1989-A146	2440457.50	1989 Aug 24	Bomarc A	-	A	Target	-	-	-	BOM-2	-	-	-	207	-	-
1989-A148	2440467.50	1989 Sep 3	Bomarc A	-	A	Target	-	-	-	BOM-1	-	-	-	207	-	-
1989-A155	2440488.39	1989 Sep 20 2126	Bomarc A	-	A	Target	-	-	-	BOM-2	-	-	-	207	-	-
1989-A189	2440538.50	1989 Nov 13	Bomarc A	-	A	Target	-	-	-	BOM-1	-	-	-	207	-	-
1989-A190	2440538.50	1989 Nov 13	Bomarc A	-	A	Target	-	-	-	BOM-2	-	-	-	207	-	-
1989-A191	2440543.50	1989 Nov 18	Bomarc A	-	A	Target	-	-	-	BOM-1	-	-	-	207	-	-
1970-A09	2440601.50	1970 Jan 15	Bomarc A	-	A	Target	-	-	-	BOM-2	-	-	-	207	-	-
1970-A26	2440652.50	1970 Mar 7	Bomarc A	-	A	Target	-	-	-	BOM-1	-	-	-	207	-	-
1970-A26	2440652.50	1970 Mar 7	Bomarc A	-	A	Target	-	-	-	BOM-2	-	-	-	207	-	-
1970-A56	2440694.50	1970 Apr 18	Bomarc A	-	A	Target	-	-	-	BOM-1	-	-	-	207	-	-
1970-A84	2440769.50	1970 Jul 2	Bomarc A	-	A	Target	-	-	-	BOM-2	-	-	-	207	-	-
1970-A91	2440796.50	1970 Jul 29	Bomarc A	-	A	Target	-	-	-	BOM-1	-	-	-	207	-	-
1970-A103	2440858.50	1970 Sep 26	Bomarc A	-	A	Target	-	-	-	BOM-2	-	-	-	207	-	-
1970-A104	2440858.50	1970 Sep 26	Bomarc A	-	A	Target	-	-	-	BOM-1	-	-	-	207	-	-
1971-A25	2441009.50	1971 Feb 27	Bomarc A	-	A	Target	-	-	-	BOM-2	-	-	-	207	-	-
1971-A25	2441009.50	1971 Feb 27	Bomarc A	-	A	Target	-	-	-	BOM-1	-	-	-	207	-	-
1971-A35	2441058.50	1971 Apr 14	Bomarc A	-	A	Target	-	-	-	BOM-2	-	-	-	207	-	-
1971-A36	2441058.50	1971 Apr 14	Bomarc A	-	A	Target	-	-	-	BOM-1	-	-	-	207	-	-
1971-A66	2441152.54	1971 Jun 30 0100	Bomarc A	-	A	Target	-	-	-	BOM-2	-	-	-	207	-	-
1971-A68	2441152.56	1971 Jun 30 0130	Bomarc A	-	A	Target	-	-	-	BOM-1	-	-	-	207	-	-
1971-A79	2441211.62	1971 Sep 17 0250	Bomarc A	-	A	Target	-	-	-	BOM-2	-	-	-	207	-	-
1971-A79	2441211.66	1971 Sep 17 0345	Bomarc A	-	A	Target	-	-	-	BOM-1	-	-	-	207	-	-
1972-A06	2441335.50	1972 Apr 14 2139	Bomarc A	-	A	Target	-	-	-	BOM-2	-	-	-	207	-	-
1972-A81	2441422.40	1972 Apr 14 2139	Bomarc A	-	A	Target	-	-	-	BOM-1	-	-	-	207	-	-
1972-A85	2441428.50	1972 Apr 21	Bomarc A	-	A	Target	-	-	-	BOM-2	-	-	-	207	-	-
1972-A81	2441428.50	1972 Apr 21	Bomarc A	-	A	Target	-	-	-	BOM-1	-	-	-	207	-	-
1972-A82	2441428.50	1972 Jul 27	Bomarc A	-	A	Target	-	-	-	BOM-2	-	-	-	207	-	-
1972-A82	2441428.50	1972 Jul 27	Bomarc A	-	A	Target	-	-	-	BOM-1	-	-	-	207	-	-
1972-A112	2441650.50	1972 Nov 29	Bomarc A	-	A	Target	-	-	-	BOM-2	-	-	-	207	-	-
1972-A114	2441652.50	1972 Dec 1	Bomarc A	-	A	Target	-	-	-	BOM-1	-	-	-	207	-	-
1972-A118	2441670.45	1972 Dec 18 2255	Bomarc A	-	A	Target	-	-	-	BOM-2	-	-	-	207	-	-
1972-A121	2441679.51	1972 Dec 28 0018	Bomarc A	-	A	Target	-	-	-	BOM-1	-	-	-	207	-	-
1972-A122	2441681.49	1972 Dec 29 2344	Bomarc A	-	A	Target	-	-	-	BOM-2	-	-	-	207	-	-
1973-A46	2441931.39	1973 Sep 11 2125	Bomarc B	-	B	Target	-	-	-	BOM-1	-	-	-	07	-	-
1973-A76	2441938.50	1973 Dec 17	Bomarc B	-	B	Target	-	-	-	BOM-2	-	-	-	207	-	-
1974-A12	2442120.50	1974 Mar 20	Bomarc B	-	B	Target	-	-	-	BOM-1	-	-	-	207	-	-
1974-A16	2442120.50	1974 Apr 10	Bomarc B	-	B	Target	-	-	-	BOM-2	-	-	-	207	-	-
1974-A24	2442197.50	1974 May 30	Bomarc B	-	B	Target	-	-	-	BOM-1	-	-	-	207	-	-
1974-A40	2442361.50	1974 Oct 16	Bomarc B	-	B	Target	-	-	-	BOM-2	-	-	-	207	-	-
1975-A14	2442361.50	1974 Oct 16	Bomarc B	-	B	Target	-	-	-	BOM-1	-	-	-	207	-	-
1975-A13	2442361.50	1975 Mar 20	Bomarc B	-	B	Target	-	-	-	BOM-2	-	-	-	207	-	-
1975-A19	2442354.50	1975 Apr 10	Bomarc B	-	B	Target	-	-	-	BOM-1	-	-	-	207	-	-
1975-A23	2442354.50	1975 May 22	Bomarc B	-	B	Target	-	-	-	BOM-2	-	-	-	207	-	-
1975-A43	2442354.50	1975 Jul 23	Bomarc B	-	B	Target	-	-	-	BOM-1	-	-	-	207	-	-
1975-A45	2442354.50	1975 Sep 16	Bomarc B	-	B	Target	-	-	-	BOM-2	-	-	-	207	-	-
1976-A25	2442393.50	1976 May 3	Bomarc B	-	B	Target	-	-	-	BOM-1	-	-	-	207	-	-
1976-A33	2442393.50	1976 May 3	Bomarc B	-	B	Target	-	-	-	BOM-2	-	-	-	207	-	-
1976-A41	2442393.50	1976 Jul 13	Bomarc B	-	B	Target	-	-	-	BOM-1	-	-	-	207	-	-
1976-A41	2442393.50	1976 Jul 13	Bomarc B	-	B	Target	-	-	-	BOM-2	-	-	-	207	-	-
1976-A61	2443044.50	1976 Sep 23	Bomarc B	-	B	Target	-	-	-	BOM-1	-	-	-	207	-	-
1976-A71	2443079.50	1976 Oct 28	Bomarc B	-	B	Target	-	-	-	BOM-2	-	-	-	207	-	-
1976-A71	2443079.50	1976 Oct 28	Bomarc B	-	B	Target	-	-	-	BOM-1	-	-	-	207	-	-
1977-A08	2443178.50	1977 Feb 4	Bomarc B	-	B	Target	-	-	-	BOM-2	-	-	-	207	-	-
1977-A18	2443294.50	1977 Feb 11 0000	Bomarc B	-	B	Target	-	-	-	BOM-1	-	-	-	207	-	-
1977-A24	2443274.50	1977 May 11	Bomarc B	-	B	Target	-	-	-	BOM-2	-	-	-	207	-	-
1977-A36	2443337.50	1977 Jul 13	Bomarc B	-	B	Target	-	-	-	BOM-1	-	-	-	207	-	-
1977-A37	2443338.50	1977 Jul 13	Bomarc B	-	B	Target	-	-	-	BOM-2	-	-	-	207	-	-
1977-A49	2443486.50	1977 Dec 9	Bomarc B	-	B	Target	-	-	-	BOM-1	-	-	-	207	-	-
1978-A11	2443569.50	1978 Feb 24	Bomarc B	-	B	Target	-	-	-	BOM-2	-	-	-	207	-	-
1979-A12	2443931.50	1979 Feb 27	Bomarc B	-	B	Target	-	-	-	BOM-1	-	-	-	207	-	-
1980-A32	2444452.50	1980 Aug 1	Bomarc B	-	B	Target	-	-	-	BOM-2	-	-	-	207	-	-
1980-A45	2444560.50	1980 Aug 17	Bomarc B	-	B	Target	-	-	-	BOM-1	-	-	-	207	-	-
1980-A54	2444560.50	1980 Dec 19	Bomarc B	-	B	Target	-	-	-	BOM-2	-	-	-	207	-	-
1982-A16	2445164.50	1982 Jul 14	Bomarc B	-	B	Target	-	-	-	BOM-1	-	-	-	207	-	-
1982-A17	2445164.50	1982 Jul 14	Bomarc B	-	B	Target	-	-	-	BOM-2	-	-	-	0	-	-



Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	DrPay	Agency	Launch_Code	Group	Category	LTcite	Cite	Notes	
1952-1149	2434265.50	1952 Sep 10	Bomarc A	-	621-1	0.000	APMTC	MF	-	Test	MT60-2644	Clarey	-	
1953-428	2434400.50	1953 Jan 23	Bomarc A	-	621-2	0.000	APMTC	MF	-	Test	MT60-2644	-	-	
1953-428B	2434538.50	1953 Jun 10	Bomarc A	-	623-1	0.000	APMTC	MF	-	Test	MT60-2644	-	-	
1953-4307	2434586.50	1953 Jul 27	Bomarc A	-	623-2	0.000	APMTC	MF	-	Test	MT60-2644	-	-	
1953-4346	2434624.50	1953 Sep 4	Bomarc A	-	623-3	0.000	APMTC	MF	-	Test	MT60-2644	-	-	
1954-4463	2434959.50	1954 Aug 5	Bomarc A	-	623-7	0.000	APMTC	MF	-	Test	MT60-2644	Clarey	-	
1954-4690	2435040.50	1954 Oct 25	Bomarc A	-	623-8	0.000	APMTC	MF	-	Test	MT60-2644	Clarey	-	
1954-4657	2435070.50	1954 Nov 24	Bomarc A	-	623-9	0.000	APMTC	MS	-	Test	MT60-2644	Clarey	-	
1955-428	2435126.50	1955 Jan 19	Bomarc A	-	623-10	0.000	APMTC	MS	-	Test	MT60-2644	Clarey	-	
1955-4128	2435162.50	1955 Feb 24	Bomarc A	-	623-11	0.000	APMTC	MS	-	Test	MT60-2644	Clarey	-	
1955-4146	2435169.50	1955 Mar 3	Bomarc A	-	623-11	0.000	APMTC	MS	-	Test	MT60-2644	Clarey	-	
1955-4337	2435232.50	1955 May 5	Bomarc A	-	623-21	0.000	APMTC	MS	-	Test	MT60-2644	Clarey	-	
1955-4361	2435315.50	1955 Jul 27	Bomarc A	-	623-12	0.000	APMTC	MF	-	Test	MT60-2644	Clarey	-	
1955-4466	2435344.50	1955 Aug 25	Bomarc A	-	623-12	0.000	APMTC	MS	-	Test	MT60-2644	Clarey	-	
1955-4478	2435379.50	1955 Sep 29	Bomarc A	-	623-23	0.000	APMTC	MS	-	Test	MT60-2644	Clarey	-	
1955-4490	2435428.50	1955 Nov 17	Bomarc A	-	623-25	0.000	APMTC	MS	-	Test	MT60-2644	Clarey	-	
1955-4493	2435441.50	1955 Nov 30	Bomarc A	-	623-26	0.000	APMTC	MS	-	Test	MT60-2644	Clarey	-	
1956-411	2435505.50	1956 Feb 2	Bomarc A	-	623-13	0.000	APMTC	MS	-	Test	MT60-2644	Clarey	-	
1956-433	2435547.50	1956 Mar 15	Bomarc A	-	623-14	0.000	APMTC	MS	-	Test	MT60-2644	Clarey	-	
1956-447	2435577.50	1956 Apr 14	Bomarc A	-	623-15	0.000	APMTC	MS	-	Test	MT60-2644	Clarey	-	
1956-456	2435614.50	1956 May 21	Bomarc A	-	623-16	0.000	APMTC	MF	-	Test	MT60-2644	Clarey	-	
1956-462	2435643.50	1956 Jun 19	Bomarc A	-	623-17	0.000	APMTC	MS	-	Test	MT60-2644	Clarey	-	
1956-471	2435667.50	1956 Jul 13	Bomarc A	-	623-17	0.000	APMTC	MS	-	Test	MT60-2644	Clarey	-	
1956-4102	2435758.50	1956 Oct 12	Bomarc A	-	623-18	0.000	APMTC	MS	-	Test	MT60-2644	Clarey	-	
1956-4114	2435806.50	1956 Nov 29	Bomarc A	-	624-6	0.000	APMTC	MS	-	OT	MT60-2644	Clarey	-	
1957-402	2435841.50	1957 Jan 5	Bomarc A	-	624-2	0.000	APMTC	MS	-	OT	MT60-2644	Clarey	-	
1957-409	2435862.50	1957 Feb 28	Bomarc A	-	624-4	0.000	APMTC	MS	-	OT	MT60-2644	Clarey	-	
1957-414	2435897.50	1957 Apr 17	Bomarc A	-	624-5	0.000	APMTC	MS	-	OT	MT60-2644	Clarey	-	
1957-465	2436041.50	1957 Jul 22	Bomarc A	-	624-7	0.000	APMTC	MS	-	OT	MT60-2644	Clarey	-	
1957-460	2436065.50	1957 Aug 15	Bomarc A	-	624-8	0.000	APMTC	MS	-	OT	MT60-2644	Clarey	-	
1957-496	2436096.31	1957 Sep 16 1920	Bomarc A	-	624-9	0.000	APMTC	MS	-	OT	Wire	Clarey	-	
1957-4110	2436109.40	1957 Sep 27 2140	Bomarc A	-	624-10	0.000	APMTC	MS	-	OT	Wire	MT60-2644	Clarey	-
1957-4119	2436123.35	1957 Oct 11 2030	Bomarc A	-	624-11	0.000	APMTC	MS	-	OT	Wire	MT60-2644	Clarey	-
1957-4122	2436136.23	1957 Oct 23 17267	Bomarc A	-	624-12	0.000	APMTC	MS	-	OT	Wire	MT60-2644	Clarey	-
1957-4129	2436166.50	1957 Nov 4	Bomarc A	-	624-14	0.000	APMTC	MS	-	OT	Wire	MT60-2644	Clarey	-
1957-4136	2436181.50	1957 Dec 9	Bomarc A	-	624-14	0.000	APMTC	MS	-	OT	Wire	MT60-2644	Clarey	-
1958-403	2436216.20	1958 Jan 14 1645	Bomarc A	-	624-17	0.000	APMTC	MS	-	OT	Wire	MT60-2644	Clarey	-
1958-420	2436282.50	1958 Mar 20	Bomarc A	-	624-16	0.000	APMTC	MS	-	OT	Wire	MT60-2644	Clarey	-
1958-428	2436296.18	1958 Apr 2 1620	Bomarc A	-	624-16	0.000	APMTC	MS	-	OT	Wire	MT60-2644	Clarey	-
1958-440	2436325.16	1958 May 1, 1945	Bomarc A	-	624-16	0.000	APMTC	MS	-	OT	Wire	MT60-2644	Clarey	-
1958-454	2436343.50	1958 May 20	Bomarc A	-	624-11	0.000	APMTC	MS	-	OT	Wire	MT60-2644	Clarey	-
1958-461	2436394.16	1958 Jun 1, 1645	Bomarc A	-	624-23	0.000	APMTC	MS	-	OT	Wire	MT60-2644	Clarey	-
1958-466	2436375.31	1958 Jun 20 13007	Bomarc A	-	624-24	0.000	APMTC	MS	-	OT	Wire	MT60-2644	Clarey	-
1958-469	2436384.11	1958 Jun 26 1440	Bomarc A	-	624-20	0.000	APMTC	MS	-	OT	Wire	MT60-2644	Clarey	-
1958-459	2436395.25	1958 Jun 26 1440	Bomarc A	-	624-20	0.000	APMTC	MS	-	OT	Wire	MT60-2644	Clarey	-
1958-460	2436396.25	1958 Jul 1 1800	Bomarc A	-	624-20	0.000	APMTC	MS	-	OT	Wire	MT60-2644	Clarey	-
1958-493	2436430.50	1958 Aug 7	Bomarc A	-	624-20	0.000	APMTC	MS	-	OT	Wire	MT60-2644	Clarey	-
1958-497	2436437.18	1958 Aug 15	Bomarc A	-	624-21	0.000	APMTC	MS	-	OT	Wire	MT60-2644	Clarey	-
1958-409	2436440.50	1958 Aug 21 16167	Bomarc A	-	624-21	0.000	APMTC	MS	-	OT	Wire	MT60-2644	Clarey	-
1958-4167	2436470.50	1958 Sep 24	Bomarc A	-	624-23	0.000	APMTC	MS	-	OT	Wire	MT60-2644	Clarey	-
1958-4174	2436407.50	1958 Oct 21	Bomarc A	-	624-24	0.000	APMTC	MS	-	OT	Wire	MT60-2644	Clarey	-
1958-4137	2436407.50	1958 Oct 21	Bomarc A	-	624-24	0.000	APMTC	MS	-	OT	Wire	MT60-2644	Clarey	-
1958-4138	2436407.50	1958 Oct 21	Bomarc A	-	624-24	0.000	APMTC	MS	-	OT	Wire	MT60-2644	Clarey	-
1958-4139	2436429.15	1958 Oct 21 1540	Bomarc A	-	624-24	0.000	APMTC	MS	-	OT	Wire	MT60-2644	Clarey	-
1958-4163	2436450.15	1958 Dec 13	Bomarc A	-	624-27	0.000	APMTC	MS	-	OT	Wire	MT60-2644	Clarey	-
1958-4168	2436457.21	1958 Dec 13 16597	Bomarc A	-	624-27	0.000	APMTC	MS	-	OT	Wire	MT60-2644	Clarey	-
1958-4168	2436457.21	1958 Dec 13 16597	Bomarc A	-	624-27	0.000	APMTC	MS	-	OT	Wire	MT60-2644	Clarey	-
1959-411	2436596.11	1959 Dec 24	Bomarc A	-	624-23	0.000	APMTC	MS	-	OT	Wire	MT60-2644	Clarey	-
1959-411	2436596.32	1959 Jan 27 19407	Bomarc A	-	624-23	0.000	APMTC	MS	-	OT	Wire	MT60-2644	Clarey	-
1959-4128	2436596.32	1959 Jan 27 19407	Bomarc A	-	624-23	0.000	APMTC	MS	-	OT	Wire	MT60-2644	Clarey	-
1959-4115	2436612.50	1959 Feb 13	Bomarc A	-	624-24	0.000	APMTC	MS	-	OT	Wire	MT60-2644	Clarey	-
1959-442	2436632.25	1959 Feb 13 1807	Bomarc A	-	624-24	0.000	APMTC	MS	-	OT	Wire	MT60-2644	Clarey	-
1959-451	2436658.50	1959 Mar 31	Bomarc A	-	624-24	0.000	APMTC	MS	-	OT	Wire	MT60-2644	Clarey	-
1959-463	2436679.50	1959 Mar 31	Bomarc A	-	624-24	0.000	APMTC	MS	-	OT	Wire	MT60-2644	Clarey	-
1959-483	2436716.07	1959 May 27 1347	Bomarc B	-	631-1	0.000	APMTC	MS	-	OT	Wire	MT60-2644	Clarey	-
1959-4116	2436764.21	1959 May 27 1347	Bomarc B	-	631-2	0.000	APMTC	MS	-	OT	Wire	MT60-2644	Clarey	-
1959-4134	2436793.12	1959 Aug 12 1500	Bomarc B	-	631-3	0.000	APMTC	MS	-	OT	Wire	MT60-2644	Clarey	-
1959-4154	2436814.08	1959 Aug 12 1408	Bomarc B	-	631-4	0.000	APMTC	MS	-	OT	Wire	MT60-2644	Clarey	-
1959-4184	2436870.08	1959 Oct 28 1400	Bomarc B	-	631-5	0.000	APMTC	MS	-	OT	Wire	MT60-2644	Clarey	-
1960-422	2436962.50	1960 Jan 29 1400	Bomarc B	-	631-6	0.000	APMTC	MS	-	OT	Wire	MT60-2644	Clarey	-
1960-490	2437040.12	1960 Apr 15 1450	Bomarc B	-	631-8	0.000	APMTC	MS	-	OT	Wire	MT60-2644	Clarey	-
1966-4100	2439362.50	1966 Aug 25	Bomarc A	-	A	0.000	OPTTEV/VK4	MF	-	Target	VAFB	-	-	
1966-4121	2439413.33	1966 Oct 14 20007	Bomarc A	-	A	0.000	OPTTEV	MF	-	Target	VAFB	-	-	
1966-4133	2439430.50	1966 Feb 8	Bomarc A	-	A	0.000	OPTTEV	MF	-	Target	VAFB	-	-	
1967-457	2439529.50	1967 Feb 8	Bomarc A	-	A	0.000	OPTTEV	MF	-	Target	VAFB	-	-	
1967-485	2439635.50	1967 May 25	Bomarc A	-	A	0.000	OPTTEV	MF	-	Target	VAFB	-	-	
1967-486	2439635.50	1967 May 25	Bomarc A	-	A	0.000	OPTTEV	MF	-	Target	VAFB	-	-	
1967-494	2439677.50	1967 Jul 6	Bomarc A	-	A	0.000	OPTTEV	MF	-	Target	VAFB	-	-	
1967-4140	2439825.50	1967 Dec 1	Bomarc A	-	A	0.000	OPTTEV	MF	-	Target	VAFB	-	-	
1968-470	2439850.50	1968 Apr 4	Bomarc A	-	A	0.000	OPTTEV	MF	-	Target	VAFB	-	-	
1968-479	2439998.50	1968 May 22	Bomarc A	-	A	0.000	OPTTEV	MF	-	Target	VAFB	-	-	
1968-480	2440034.50	1968 Jun 27	Bomarc A	-	A	0.000	OPTTEV	MF	-	Target	VAFB	-	-	
1968-490	2440087.50	1968 Aug 19	Bomarc A	-	A	0.000	OPTTEV	MF	-	Target	VAFB	-	-	
1968-4105	2440136.50	1968 Oct 7	Bomarc A	-	A	0.000	OPTTEV	MF	-	Target	VAFB	-	-	
1968-4110	2440173.50	1968 Oct 7	Bomarc A	-	A	0.000	OPTTEV	MF	-	Target	VAFB	-	-	
1969-407	2440230.50	1969 Jan 9 0000	Bomarc A	-	A	0.000	OPTTEV	MF	-	Target	VAFB	-	-	
1969-437	2440250.50	1969 Jan 29	Bomarc A	-	A	0.000	OPTTEV	MF	-	Target	VAFB	-	-	

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	OrbPay	Agency	Launch_Code	Group	Category	LTcite	Cite	Notes
1969-445	2440273.50	1969 Feb 21	Bomarc A	-	A	0.000	OPTEV	MU	-	Target	VAFB	-	-
1969-451	2440295.50	1969 Mar 15	Bomarc A	-	A	0.000	OPTEV	MU	-	Target	VAFB	-	-
1969-461	2440329.33	1969 Apr 17 1962	Bomarc A	-	A	0.000	OPTEV	MU	-	Target	Dirich/Lompock	VAFB	-
1969-472	2440342.26	1969 Apr 30 1820	Bomarc A	-	A	0.000	OPTEV	MU	-	Target	Dirich/Lompock	VAFB	-
1969-487	2440362.50	1969 May 21	Bomarc A	-	A	0.000	OPTEV	MU	-	Target	VAFB	-	-
1969-A103	2440392.13	1969 Jun 19 1502	Bomarc A	-	A	0.000	OPTEV	MU	-	Target	Dirich/Lompock	VAFB	-
1969-A117	2440405.50	1969 Jul 3	Bomarc A	-	A	0.000	OPTEV	MU	-	Target	VAFB	-	-
1969-A124	2440414.50	1969 Jul 12	Bomarc A	-	A	0.000	OPTEV	MU	-	Target	VAFB	-	-
1969-A146	2440457.50	1969 Aug 24	Bomarc A	-	A	0.000	OPTEV	MU	-	Target	VAFB	-	-
1969-A155	2440467.50	1969 Sep 3	Bomarc A	-	A	0.000	OPTEV	MU	-	Target	VAFB	-	-
1969-A189	2440486.39	1969 Sep 20 2126	Bomarc A	-	A	0.000	OPTEV	MU	-	Target	Dirich/AP	VAFB	-
1969-A190	2440538.50	1969 Nov 13	Bomarc A	-	A	0.000	OPTEV	MU	-	Target	VAFB	-	-
1969-A191	2440543.50	1969 Nov 13	Bomarc A	-	A	0.000	OPTEV	MU	-	Target	VAFB	-	-
1969-A191	2440543.50	1969 Nov 18	Bomarc A	-	A	0.000	OPTEV	MU	-	Target	VAFB	-	-
1970-409	2440601.50	1970 Jan 15	Bomarc A	-	A	0.000	OPTEV	MU	-	Target	VAFB	-	-
1970-425	2440652.50	1970 Mar 7	Bomarc A	-	A	0.000	OPTEV	MU	-	Target	VAFB	-	-
1970-425	2440652.50	1970 Mar 7	Bomarc A	-	A	0.000	OPTEV	MU	-	Target	VAFB	-	-
1970-465	2440694.50	1970 Apr 18	Bomarc A	-	A	0.000	OPTEV	MU	-	Target	VAFB	-	-
1970-484	2440769.50	1970 Jul 2	Bomarc A	-	A	0.000	OPTEV	MU	-	Target	VAFB	-	-
1970-491	2440796.50	1970 Jul 29	Bomarc A	-	A	0.000	OPTEV	MU	-	Target	VAFB	-	-
1970-A103	2440855.50	1970 Sep 26	Bomarc A	-	A	0.000	OPTEV	MU	-	Target	VAFB	-	-
1970-A104	2440855.50	1970 Sep 26	Bomarc A	-	A	0.000	OPTEV	MU	-	Target	VAFB	-	-
1971-425	2441009.50	1971 Feb 27	Bomarc A	-	A	0.000	OPTEV	MU	-	Target	VAFB	-	-
1971-425	2441009.50	1971 Feb 27	Bomarc A	-	A	0.000	OPTEV	MU	-	Target	VAFB	-	-
1971-435	2441059.50	1971 Apr 14	Bomarc A	-	A	0.000	OPTEV	MU	-	Target	VAFB	-	-
1971-435	2441059.50	1971 Apr 14	Bomarc A	-	A	0.000	OPTEV	MU	-	Target	VAFB	-	-
1971-456	2441055.50	1971 Jun 30 0100	Bomarc A	-	A	0.000	OPTEV	MU	-	Target	Dirich/UP1	VAFB	-
1971-456	2441132.54	1971 Jun 30 0100	Bomarc A	-	A	0.000	OPTEV	MU	-	Target	Dirich/UP1	VAFB	-
1971-479	2441211.62	1971 Sep 17 0250	Bomarc A	-	A	0.000	OPTEV	MU	-	Target	Dirich/Lompock	VAFB	-
1971-479	2441211.66	1971 Sep 17 0250	Bomarc A	-	A	0.000	OPTEV	MU	-	Target	Dirich/Lompock	VAFB	-
1972-406	2441321.50	1972 Jan 19	Bomarc A	-	A	0.000	OPTEV	MU	-	Target	VAFB	-	-
1972-431	2441422.40	1972 Apr 14 2139	Bomarc A	-	A	0.000	OPTEV	MU	-	Target	Dirich/Lompock	VAFB	-
1972-435	2441428.50	1972 Apr 21	Bomarc A	-	A	0.000	OPTEV	MU	-	Target	VAFB	-	-
1972-461	2441525.50	1972 Jul 27	Bomarc A	-	A	0.000	OPTEV	MU	-	Target	VAFB	-	-
1972-462	2441525.50	1972 Jul 27	Bomarc A	-	A	0.000	OPTEV	MU	-	Target	VAFB	-	-
1972-412	2441650.50	1972 Nov 29	Bomarc A	-	A	0.000	OPTEV	MU	-	Target	VAFB	-	-
1972-412	2441652.50	1972 Nov 29	Bomarc A	-	A	0.000	OPTEV	MU	-	Target	VAFB	-	-
1972-4118	2441670.45	1972 Dec 1 8 2255	Bomarc A	-	A	0.000	OPTEV	MU	-	Target	Dirich/Lompock	VAFB	-
1972-4118	2441679.51	1972 Dec 28 0018	Bomarc A	-	A	0.000	OPTEV	MU	-	Target	Dirich/Lompock	VAFB	-
1972-4121	2441681.49	1972 Dec 29 2344	Bomarc A	-	A	0.000	OPTEV	MU	-	Target	Dirich/Lompock	VAFB	-
1973-446	2441831.39	1973 Sep 11 2125	Bomarc B	-	B	0.000	OPTEV	MU	-	Target	Dirich/Lompock	VAFB	-
1973-476	2442058.50	1973 Dec 17	Bomarc B	-	B	0.000	OPTEV	MU	-	Target	VAFB	-	-
1974-412	2442125.50	1974 Mar 20	Bomarc B	-	B	0.000	OPTEV	MU	-	Target	VAFB	-	-
1974-416	2442125.50	1974 Apr 10	Bomarc B	-	B	0.000	OPTEV	MU	-	Target	VAFB	-	-
1974-424	2442197.50	1974 May 30	Bomarc B	-	B	0.000	OPTEV	MU	-	Target	VAFB	-	-
1974-440	2442321.50	1974 Oct 1	Bomarc B	-	B	0.000	OPTEV	MU	-	Target	VAFB	-	-
1974-444	2442324.50	1974 Oct 16	Bomarc B	-	B	0.000	OPTEV	MU	-	Target	VAFB	-	-
1974-444	2442326.50	1974 Oct 16	Bomarc B	-	B	0.000	OPTEV	MU	-	Target	VAFB	-	-
1975-415	2442351.50	1975 Mar 20	Bomarc B	-	B	0.000	OPTEV	MU	-	Target	VAFB	-	-
1975-415	2442351.50	1975 Mar 20	Bomarc B	-	B	0.000	OPTEV	MU	-	Target	VAFB	-	-
1975-423	2442354.50	1975 May 22	Bomarc B	-	B	0.000	OPTEV	MU	-	Target	VAFB	-	-
1975-445	2442376.50	1975 Jul 22	Bomarc B	-	B	0.000	OPTEV	MU	-	Target	VAFB	-	-
1975-475	2442384.50	1975 Dec 16	Bomarc B	-	B	0.000	OPTEV	MU	-	Target	VAFB	-	-
1976-425	2442403.50	1976 May 5	Bomarc B	-	B	0.000	OPTEV	MU	-	Target	VAFB	-	-
1976-433	2442403.50	1976 May 5	Bomarc B	-	B	0.000	OPTEV	MU	-	Target	VAFB	-	-
1976-441	2442497.50	1976 Jul 13	Bomarc B	-	B	0.000	OPTEV	MU	-	Target	VAFB	-	-
1976-461	2443044.50	1976 Sep 23	Bomarc B	-	B	0.000	OPTEV	MU	-	Target	VAFB	-	-
1976-471	2443079.50	1976 Sep 23	Bomarc B	-	B	0.000	OPTEV	MU	-	Target	VAFB	-	-
1976-471	2443079.50	1976 Oct 28	Bomarc B	-	B	0.000	OPTEV	MU	-	Target	VAFB	-	-
1977-408	2443176.50	1977 Feb 4	Bomarc B	-	B	0.000	OPTEV	MU	-	Target	VAFB	-	-
1977-418	2443234.50	1977 Mar 1 0000	Bomarc B	-	B	0.000	OPTEV	MU	-	Target	Dirich/Lompock	VAFB	-
1977-424	2443274.50	1977 Mar 11	Bomarc B	-	B	0.000	OPTEV	MU	-	Target	VAFB	-	-
1977-436	2443337.50	1977 Jul 13	Bomarc B	-	B	0.000	OPTEV	MU	-	Target	VAFB	-	-
1977-437	2443338.50	1977 Jul 14	Bomarc B	-	B	0.000	OPTEV	MU	-	Target	VAFB	-	-
1977-449	2443486.50	1977 Dec 9	Bomarc B	-	B	0.000	OPTEV	MU	-	Target	VAFB	-	-
1978-411	2443591.50	1978 Mar 24	Bomarc B	-	B	0.000	OPTEV	MU	-	Target	VAFB	-	-
1979-412	2443931.50	1979 Feb 27	Bomarc B	-	B	0.000	OPTEV	MU	-	Target	VAFB	-	-
1980-432	2444452.50	1980 Aug 1	Bomarc B	-	B	0.000	OPTEV	MU	-	Target	VAFB	-	-
1980-445	2444560.50	1980 Nov 17	Bomarc B	-	B	0.000	OPTEV	MU	-	Target	VAFB	-	-
1980-454	2444592.50	1980 Dec 19	Bomarc B	-	B	0.000	OPTEV	MU	-	Target	VAFB	-	-
1982-416	2445164.50	1982 Jul 14	Bomarc B	-	B	0.000	OPTEV	MS	-	Target	VAFB	-	-
1982-417	2445164.50	1982 Jul 14	Bomarc B	-	B	0.000	OPTEV	MF	-	Target	VAFB	-	-





Launch

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Mission	FlightCode	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee Km	Range Km	Dest
2015-A17	2457045.50	2015 Jan 23	Buugwekseong	?	KH-11	Ejection test	-	-	-	SIPPO?	-	-	-	1?	-	-
2015-A40	2457134.50	2015 Apr 22	Buugwekseong	-	KH-11	Ejection test	-	-	-	SIPPO?	-	-	-	1?	-	-
2015-A04	2457150.50	2015 May 8	Buugwekseong	-	-	Buugwekseong	-	-	REN-PLAT	SIPPO?	-	-	-	1?	-	-
2015-A41	2457354.50	2015 Nov 28	Buugwekseong	?	KH-11	Ejection test	-	-	REN-PLAT	SIPPO?	-	-	-	0	0	-
2015-A42	2457377.50	2015 Dec 21	Buugwekseong	?	KH-11	Ejection test	-	-	REN-PLAT	SIPPO?	-	-	-	0	0	-
2016-A27	2457501.90	2016 Apr 23 0930	Buugwekseong	-	-	Buugwekseong	-	-	82AYONG	SIPPO	-	-	-	10?	30	-
2016-A36	2457578.60	2016 Jul 9 0230	Buugwekseong	-	-	Buugwekseong	-	-	82AYONG	SIPPO	-	-	-	40?	-	-
2016-S51	2457624.35	2016 Aug 23 2030	Buugwekseong	-	-	Buugwekseong	-	-	82AYONG	SIPPO	-	-	-	500	500	-
2017-S10	2457796.45	2017 Feb 11 2255	Buugwekseong-2	-	KH-15	-	-	-	-	KUSONG	-	-	-	550	500?	Sea of J.
2017-S34	2457894.83	2017 May 21 0759	Buugwekseong-2	-	KH-15	-	-	-	-	PURCH	-	-	-	560	500	Sea of J.
2019-S89	2458758.42	2019 Oct 1 2211	Buugwekseong-3	-	-	-	-	-	-	WONSAN	-	-	-	910	450	Sea of J.



Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Launch		Agency	Launch_Code	Group	Category	LT/Cite	Cite	Notes
					Flight_ID	DrpPay							
2015-A17	2457045_50	2015 Jan 23	Buagvetsseong	?	KH-11	JRG	MS	-	Test	freebeacon.com	-	-	
2015-A40	2457134_50	2015 Apr 22	Buagvetsseong	?	KH-11	JRG	MS	-	Test	freebeacon.com	-	-	
2015-A04	2457150_50	2015 May 8	Buagvetsseong	-	-	JRG	AS	-	Test	KCHA	-	-	
2015-A41	2457354_50	2015 Nov 28	Buagvetsseong	?	KH-11	JRG	MF	-	Test	freebeacon.com	-	-	
2015-A42	2457377_50	2015 Dec 21	Buagvetsseong	?	KH-11	JRG	MF	-	Test	freebeacon.com	-	-	
2016-A27	2457501_90	2016 Apr 23 0930	Buagvetsseong	-	-	JRG	MS	-	Test	Mire	-	-	
2016-A36	2457578_60	2016 Jul 9 0230	Buagvetsseong	-	-	JRG	MF	-	Test	Mire	-	-	
2016-S51	2457624_35	2016 Aug 23 2030	Buagvetsseong	-	KH-15	JRG	MS	-	Test	Mire	-	-	
2017-S10	2457796_45	2017 Feb 11 2255	Buagvetsseong-2	-	-	JRG	MS	-	Test	Mire	-	-	
2017-S84	2457894_83	2017 May 21 0759	Buagvetsseong-2	-	KH-15	JRG	MS	-	Test	Mire	-	-	
2019-S89	2458758_42	2019 Oct 1 2211	Buagvetsseong-3	-	-	JRG	MS	-	Test	Mire	-	-	



Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variat	Flight_ID	Flight	Mission	FlightCode	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee km	Range km	Dest
2021-H08	2459506.55	2021 Oct 19 0117	Bukgukseong-6	?	-	-	-	-	KPH-PLAT?	SINPO	-	-	-	60	450	See of J.



Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Launch_Flight_ID	Agency	Launch_Code	Group	Category	LTCite	Cite	Notes
2021-M08	2459506.65	2021 Oct 19 0117	Bulgneukseong-6	?	-	JRC	MS	-	Test	Wire	-	-





Launch

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Mission	FlightCode	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee_Km	Range_Km	Dest
1957-A17	2435510.50	1957 Mar 13	Bull Goose	-	Dummy	-	-	-	-	CC	LC22	-	-	17	-	-
1957-A37	2435871.50	1957 May 13	Bull Goose	-	Dummy	-	-	-	-	CC	LC22	-	-	17	-	-
1957-A57	2436017.27	1957 Jun 27 1835	Bull Goose	-	2	-	-	-	-	CC	LC22	-	-	6	-	-
1957-A82	2436070.50	1957 Aug 20	Bull Goose	-	3	-	-	-	-	CC	LC22	-	-	10?	-	-
1957-A107	2436107.50	1957 Sep 26	Bull Goose	-	4	-	-	-	-	CC	LC22	-	-	4?	-	-
1957-A124	2436138.50	1957 Oct 27	Bull Goose	-	5	-	-	-	-	CC	LC22	-	-	11	-	-
1957-A153	2436169.20	1957 Nov 28 1646	Bull Goose	-	6	-	-	-	-	CC	LC22	-	-	13	-	-
1958-A07	2436234.50	1958 Jan 31	Bull Goose	-	7	-	-	-	-	CC	LC22	-	-	10?	-	-
1958-A19	2436280.50	1958 Mar 18	Bull Goose	-	9	-	-	-	-	CC	LC22	-	-	10?	-	-
1958-A32	2436311.50	1958 Apr 18	Bull Goose	-	10	-	-	-	-	CC	LC22	-	-	10?	-	-
1958-A42	2436339.17	1958 May 15 1602	Bull Goose	-	8	-	-	-	-	CC	LC22	-	-	10?	-	-
1958-A80	2436408.50	1958 Jul 24	Bull Goose	-	12	-	-	-	-	CC	LC21	-	-	10?	-	-
1958-A105	2436443.50	1958 Aug 28	Bull Goose	-	13	-	-	-	-	CC	LC21	-	-	10?	-	-
1958-A114	2436456.50	1958 Sep 12	Bull Goose	-	11	-	-	-	-	CC	LC21	-	-	10?	-	-
1958-A118	2436464.50	1958 Sep 18	Bull Goose	-	Dummy 4	-	-	-	-	CC	LC21	-	-	10?	-	-
1958-A126	2436471.50	1958 Sep 25	Bull Goose	-	Dummy 5	-	-	-	-	CC	LC21	-	-	10?	-	-
1958-A130	2436476.50	1958 Sep 30	Goose	-	14	-	-	-	-	CC	LC22	-	-	10?	-	-
1958-A144	2436521.50	1958 Nov 14	Goose	-	15	-	-	-	-	CC	LC22	-	-	10?	-	-
1958-A152	2436535.50	1958 Nov 28	Goose	-	18	-	-	-	-	CC	LC22	-	-	10?	-	-
1958-A161	2436542.50	1958 Dec 5	Goose	-	6	-	-	-	-	CC	LC21	-	-	10?	-	-



Launch

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	OrbPay	Agency	Launch_Code	Group	Category	LTCite	Cite	Notes
1987-A17	2438910.50	1987 Mar 13	Bull Goose	-	Dummy	0.000	WADD	MS	-	Test	MT60-2544	Cleary	-
1987-A37	2438971.50	1987 May 13	Bull Goose	-	2	0.000	WADD	MS	-	Test	MT60-2544	Cleary	-
1987-A57	2438017.27	1987 Jun 27 1835	Bull Goose	-	3	0.000	WADD	MS	-	Test	MT60-2544/Wire	Cleary	-
1987-A62	2438070.50	1987 Aug 20	Bull Goose	-	4	0.000	WADD	MS	-	Test	MT60-2544	Cleary	-
1987-A107	2436107.50	1987 Sep 26	Bull Goose	-	5	0.000	WADD	MS	-	Test	MT60-2544	Cleary	-
1987-A124	2436138.50	1987 Oct 27	Bull Goose	-	6	0.000	WADD	MS	-	Test	MT60-2544	Cleary	-
1987-A133	2436169.20	1987 Nov 26 1646	Bull Goose	-	7	0.000	WADD	MS	-	Test	Ulrich	MT60-2544	Cleary/Rigg
1989-A07	2436234.50	1988 Jan 31	Bull Goose	-	8	0.000	WADD	MS	-	Test	MT60-2544	Cleary	-
1989-A19	2436250.50	1988 Mar 18	Bull Goose	-	9	0.000	WADD	MS	-	Test	MT60-2544	Cleary	-
1989-A32	2436311.50	1988 Apr 18	Bull Goose	-	10	0.000	WADD	MS	-	Test	MT60-2544	Cleary	-
1989-A42	2436339.17	1988 May 15 1602	Bull Goose	-	11	0.000	WADD	MS	-	Test	MT60-2544/Wire	Cleary	-
1989-A60	2436408.50	1988 Jul 24	Bull Goose	-	12	0.000	WADD	MS	-	Test	MT60-2544	Cleary	-
1989-A105	2436443.50	1988 Aug 28	Bull Goose	-	13	0.000	WADD	MS	-	Test	MT60-2544	Cleary	-
1989-A114	2436458.50	1988 Sep 12	Bull Goose	-	1.1	0.000	WADD	MS	-	Test	MT60-2544	Cleary	-
1989-A118	2436464.50	1988 Sep 18	Bull Goose	-	Dummy 4	0.000	WADD	MS	-	Test	MT60-2544	Cleary	-
1989-A126	2436471.50	1988 Sep 25	Bull Goose	-	Dummy 5	0.000	WADD	MS	-	Test	MT60-2544	Cleary	-
1989-A130	2436476.50	1988 Sep 30	Goose	-	14	0.000	WADD	MS	-	Test	MT60-2544	Cleary	-
1989-A144	2436521.50	1988 Nov 14	Goose	-	15	0.000	WADD	MS	-	Test	MT60-2544	Cleary	-
1989-A152	2436535.50	1988 Nov 28	Goose	-	18	0.000	WADD	MS	-	Test	MT60-2544	Cleary	-
1989-A161	2436542.50	1988 Dec 5	Goose	-	6	0.000	WADD	MS	-	Test	MT60-2544	Cleary	-



Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Mission	FlightCode	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee km	Range km	Dest
1970-A10	2440602.96	1970 Jan 16 1106	Bullpup Cajun	-	MASA 20.01GM	-	-	-	-	WI	-	-	-	41	-	-
1970-RZ7	2440914.60	1970 Nov 24 0218	Bullpup Apache	-	-	-	-	-	-	PF	-	-	-	50?	-	-
1970-RZ9	2440922.68	1970 Dec 2 0200	Bullpup Apache	-	-	-	-	-	-	PF	-	-	-	50?	-	-
1971-R11	2441190.88	1971 Aug 27 0900	Bullpup Apache	-	-	-	-	-	-	PF	-	-	-	50?	-	-
1972-R04	2441406.35	1972 Mar 29 2024	Bullpup Apache	-	-	-	-	-	-	PF	-	-	-	50?	-	-



Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	DrPay	Agency	Launch_Code	Group	Category	LTCite	Cite	Notes
1970-A10	2440602.96	1970 Jan 16 1106	Bullpup Cajun	-	MASA 20.01GH	0.000	GSFC	SS	GSFC/Hillsemrath	Aeronomy	WDCRF	SF-4015	-
1970-H27	2440914.60	1970 Nov 24 0218	Bullpup Apache	-	-	0.000	NSF/UHF	SS	UAF/Wescott	Aeron Ba	MMW-PFRF	-	-
1970-H29	2440922.58	1970 Dec 2 0200	Bullpup Apache	-	-	0.000	NSF/UHF	SS	UAF/Wescott	Aeron Ba	MMW-PFRF	-	-
1971-H11	2441190.88	1971 Aug 27 0900	Bullpup Apache	-	-	0.000	NSF/UHF	SS	DENV/Barcas	Particles	MMW-PFRF	-	-
1972-H04	2441406.36	1972 Mar 28 2024	Bullpup Apache	-	-	0.000	NSF/UHF	SS	DENV/Barcas	Particles	MMW-PFRF	-	-





Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Mission	FlightCode	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee km	Range km	Dest
2017-A137	2458048.50	2017 Oct 22	ILR-33 Bursztyn 2K	-	1	-	-	-	-	DRAMP	-	-	-	15	-	-
2019-A109	2458629.50	2019 May 26	ILR-33 Bursztyn 2K	-	3	-	-	-	-	DRAMP	-	-	-	11	-	-
2019-A110	2458736.50	2019 Sep 10	ILR-33 Bursztyn 2K	-	4	-	-	-	-	USTKA	-	-	-	23	-	-
2024-S47	2460494.96	2024 Jul 3 11:09	ILR-33 Bursztyn 2K	-	5	-	-	-	-	AMD	-	-	-	101	-	-



Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	OrbPay	Agency	Launch_Code	Group	Category	LTCite	Cite	Notes
2017-A137	2458048.50	2017 Oct 22	ILR-33 Bursztyn 2K	-	1	0.000	PAI	SS	PAL/	Test	wikipedia	-	-
2019-A109	2458629.50	2019 May 26	ILR-33 Bursztyn 2K	-	3	0.000	PAI	SS	PAL/	Test	wikipedia	-	-
2019-A110	2458736.50	2019 Sep 10	ILR-33 Bursztyn 2K	-	4	0.000	PAI	SS	PAL/	Test	wikipedia	-	-
2024-S47	2460694.96	2024 Jul 3 1109	ILR-33 Bursztyn 2K	-	5	0.000	PAI	SS	PAL/	Test	Wire	-	-



Launch_Tag	Launch_ID	Launch_Date	L_V_Type	Variant	Flight_ID	Flight	Mission	Launch_FlightCode	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee km	Range km	Dest
1957-A70	2436051.50	1957 Aug 1	Burya	-	2/1	-	-	-	-	VLAD	-	-	-	0?	-	-
1957-A92	2436092.50	1957 Sep 1	Burya	-	2/1	-	-	-	-	VLAD	-	-	-	0?	-	-
1957-A126	2436141.50	1957 Oct 30	Burya	-	2/3	-	-	-	-	VLAD	-	-	-	0?	-	-
1958-A21	2436283.50	1958 Mar 21	Burya	-	2/2	-	-	-	-	VLAD	-	-	-	0?	-	-
1958-A39	2436321.50	1958 Apr 28	Burya	-	1-03	-	-	-	-	VLAD	-	-	-	15?	-	-
1958-A45	2436345.50	1958 May 22	Burya	-	2-01	-	-	-	-	VLAD	-	-	-	17	-	-
1958-A52	2436365.50	1958 Jun 11	Burya	-	3/1	-	-	-	-	VLAD	-	-	-	0?	-	-
1958-A67	2436397.50	1958 Jul 3	Burya	-	3/2	-	-	-	-	VLAD	-	-	-	15?	-	-
1958-A72	2436397.50	1958 Jul 13	Burya	-	3/2	-	-	-	-	VLAD	-	-	-	15?	-	-
1958-A112	2436456.50	1958 Sep 10	Burya	-	1-01	-	-	-	-	VLAD	-	-	-	15?	-	-
1958-A170	2436456.50	1958 Sep 28	Burya	-	2-04	-	-	-	-	VLAD	-	-	-	15?	-	-
1959-A49	2436656.50	1959 Mar 29	Burya	-	3-04	-	-	-	-	VLAD	-	-	-	15?	-	-
1959-A62	2436677.50	1959 Apr 19	Burya	-	2-05	-	-	-	-	VLAD	-	-	-	15?	-	-
1959-A167	2436677.50	1959 Oct 2	Burya	-	2/4	-	-	-	-	VLAD	-	-	-	17	-	-
1960-A52	2436943.50	1960 Feb 20	Burya	-	10-02	-	-	-	-	VLAD	-	-	-	15?	1600?	-
1960-A62	2436994.50	1960 Mar 6	Burya	-	10-04	-	-	-	-	VLAD	-	-	-	15?	6500	-
1960-A73	2437016.50	1960 Mar 23	Burya	-	10-03	-	-	-	-	VLAD	-	-	-	25	-	-
1960-A302	2437284.50	1960 Dec 16	Burya	-	10-05/15L17T	-	-	-	-	VLAD	-	-	-	15?	-	-
1961-A394	2437303.50	1961 Jan 4	Burya	-	16L-16T	-	-	-	-	VLAD	-	-	-	15?	1947	-



Launch  
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Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	DrPay	Agency	Launch_Code	Group	Category	LICite	Cite	Notes
1957-A170	2436051.50	1957 Aug 1	Burya	-	2/1	0.000	NPOL	MF	-	Test	Evstaaf'er99	-	-
1957-A92	2436092.50	1957 Sep 1	Burya	-	2/1	0.000	NPOL	MF	-	Test	Evstaaf'er99	-	-
1957-A126	2436141.50	1957 Oct 30	Burya	-	2/3	0.000	NPOL	MF	-	Test	Evstaaf'er99	-	-
1958-A21	2436283.50	1958 Mar 21	Burya	-	2/2	0.000	NPOL	MF	-	Test	Evstaaf'er99	-	-
1958-A39	2436321.50	1958 Apr 28	Burya	-	1-03	0.000	NPOL	MS	-	Test	Evstaaf'er99	-	-
1958-A46	2436346.50	1958 May 22	Burya	-	2-01	0.000	NPOL	MS	-	Test	Evstaaf'er99	-	-
1958-A52	2436366.50	1958 Jun 11	Burya	-	3/1	0.000	NPOL	MF	-	Test	Evstaaf'er99	-	-
1958-A67	2436387.50	1958 Jul 3	Burya	-	3/2	0.000	NPOL	MS	-	Test	Evstaaf'er99	-	-
1958-A72	2436397.50	1958 Jul 13	Burya	-	3/2	0.000	NPOL	MS	-	Test	Evstaaf'er99	-	-
1958-A112	2436456.50	1958 Sep 10	Burya	-	1-01	0.000	NPOL	MS	-	Test	Evstaaf'er99	-	-
1958-A170	2436456.50	1958 Dec 28	Burya	-	2-04	0.000	NPOL	MS	-	Test	Evstaaf'er99	-	-
1959-A49	2436656.50	1959 Mar 29	Burya	-	3-04	0.000	NPOL	MS	-	Test	Evstaaf'er99	-	-
1959-A62	2436677.50	1959 Apr 19	Burya	-	2-05	0.000	NPOL	MS	-	Test	Evstaaf'er99	-	-
1959-A167	2436643.50	1959 Oct 2	Burya	-	2/4	0.000	NPOL	MS	-	Test	Evstaaf'er99	-	-
1960-A62	2436984.50	1960 Feb 20	Burya	-	10-02	0.000	NPOL	MS	-	Test	Evstaaf'er99	-	-
1960-A73	2436999.50	1960 Mar 6	Burya	-	10-04	0.000	NPOL	MS	-	Test	Evstaaf'er99	-	-
1960-A302	2437016.50	1960 Mar 23	Burya	-	10-03	0.000	NPOL	MS	-	Test	Evstaaf'er99	-	-
1960-A302	2437284.50	1960 Dec 16	Burya	-	10-05/15L17T	0.000	NPOL	MS	-	Test	Evstaaf'er99	-	-
1961-A394	2437303.50	1961 Jan 4	Burya	-	16L-18T	0.000	NPOL	MS	-	Test	Evstaaf'er99	-	-





Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Mission	FlightCode	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee km	Range km	Dest
1973-A97	2441816.50	1973 May 14	CB-250/RH-125	-	-	CB-250	-	-	-	SHAR	RH	-	-	107	-	-
1973-A99	2441817.50	1973 May 15	CB-250/LPR-006	-	-	Liquid engine test	-	-	-	SHAR	RH	-	-	107	-	-
1973-A100	2441886.50	1973 Jun 2	CB-250/LPR-006	-	-	Liquid engine test	-	-	-	SHAR	RH	-	-	107	-	-



Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	OrbPay	Agency	Launch_Code	Group	Category	LTCite	Cite	Notes
1973-497	2441816:50	1973 May 14	CB-260/RH-125	-	-	0.000	ISR0	SS	ISR0/	Test	SDESC-SR	-	-
1973-499	2441817:50	1973 May 15	CB-260/LPR-006	-	-	0.000	ISR0	SS	ISR0/	Test	SDESC-SR	-	-
1973-A100	2441836:50	1973 Jun 2	CB-260/LPR-006	-	-	0.000	ISR0	SS	ISR0/	Test	SDESC-SR	-	-



Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Mission	FlightCode	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee km	Range km	Deest
2020-002	2459187.13	2020 Dec 3 15:04:21	CE-5 SSQ	-	-	Chang'e-5 Shangsheng Q1	CE-5 SSQ	-	-	LMMI	CE-5 ZQ	-	-	-	-	-
2024-002	2460465.48	2024 Jun 3 2338	CE-5 SSQ	-	-	Chang'e-6 Shangsheng Q1	CE-6 SSQ	-	-	APBS	CE-6 ZQ	-	-	-	-	-



Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	OrbPay	Agency	Launch_Code	Group	Category	LTCite	Cite	Notes
2020-002	2459187.13	2020 Dec 3 15:10:21	CE-5 SSQ	-	-	0.000	CAST	XS	G	Sat XD	twitter.com	-	-
2024-002	2460465.48	2024 Jun 3 2338	CE-5 SSQ	-	-	0.000	CAST	XS	G	Sat XD	twitter.com	-	-





**Launch**

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Mission	FlightCode	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee km	Range km	Dest
2022-S130	2459768.50	2022 Jun 28	CHGB Booster	-	1	-	-	-	-	KAU	-	-	-	1507	-	-
2024-S46	2460458.50	2024 May 25?	CHGB Booster	-	2	LRHW AUR	-	-	-	KAU	-	-	-	1507	-	RHR



Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Launch		Agency	Launch_Code	Group	Category	LTCite	Cite	Notes
						OrbPay	t							
2022-S130	2459788-50	2022 Jun 28	CHB8 Booster	-	1	0.000	AS	USH	AS	-	Test	Wire	-	-
2024-S45	2460455-50	2024 May 25?	CHB8 Booster	-	2	0.000	MS	USH	MS	-	Test	Wire	-	-



Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Mission	Launch				Ascent_Pad	Apogee km	Range km	Dest
								Platform	Launch_Site	Launch_Pad	Ascent_Site				
2000-407	2451817.15	2000 Sep 29 1540	CSXT	-	-	-	-	-	BRDCK	-	-	14	-	-	
2002-404	2452837.18	2002 Sep 19 1620	CSXT	-	-	-	-	-	BRDCK	-	-	0	-	-	
2004-S17	2453443.26	2004 May 17 1812:00	CSXT	-	-	GoFast	-	-	BRDCK	-	-	116	-	-	
2014-866	2456663.11	2014 Jul 14 1432	CSXT	-	-	GoFast	-	-	BRDCK	-	-	118	-	-	



Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Launch			Group	Category	LTCite	Cite	Notes
						OrbPay	Agency	Launch_Code					
2000-407	2451817.15	2000 Sep 29 1540	CSXT	-	-	0.000	CSXT	SF	CSXT/	Test	Rigg	wikipedia.org	-
2002-404	2452537.18	2002 Sep 19 1620	CSXT	-	-	0.000	CSXT	SF	CSXT/	Test	Wire	-	-
2004-S17	2453143.26	2004 May 17 1812:00	CSXT	-	-	0.000	CSXT	SS	CSXT/	Test	Wire	-	-
2014-S65	2456863.11	2014 Jul 14 1432	CSXT	-	-	0.000	CSXT	SS	CSXT/	Test	rocketryforum.com	-	-





Launch_Tag	Launch_ID	Launch_Date	L_V_Type	Variant	Flight_ID	Flight	Mission	FlightCode	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee km	Range km	Dest
2016-065	2457696.03	2016 Nov 3 1248:14	Chang Zheng 5/YZ-2	-	Y1	Shi Jian 17	SJ-17	-	-	WEN	LC101	-	-	40005	-	-
2017-F03	2457936.97	2017 Jul 2 1123:23	Chang Zheng 5	-	Y2	Shi Jian 18	SJ-18	-	-	WEN	LC101	-	-	1707	-	-
2019-097	2458646.03	2019 Dec 27 1246	Chang Zheng 5	-	Y3	Shi Jian 20	SJ-20	-	-	WEN	LC101	-	-	73762	-	-
2020-027	2458974.92	2020 May 5 1000:27	Chang Zheng 5B	-	Y1	XZF-SC/RCS-FC-SC	XZF-SC/RCS-FC-SC	-	-	WEN	LC101	-	-	6277	-	-
2020-049	2459053.70	2020 Jul 23 0441:12	Chang Zheng 5	-	Y4	Tianwen-1	Tianwen-1	-	-	WEN	LC101	-	-	160000	-	-
2020-087	2459177.36	2020 Nov 23 2030:22	Chang Zheng 5	-	Y6	Chang'e-5	Chang'e-5	-	-	WEN	LC101	-	-	160000	-	-
2021-036	2459333.64	2021 Apr 29 0323:16	Chang Zheng 5B	-	Y2	Tianhe	Tianhe	-	-	WEN	LC101	-	-	401	-	-
2022-086	2459784.77	2022 Jul 24 0622:30	Chang Zheng 5B	-	Y3	Wentian	Wentian	-	-	WEN	LC101	-	-	436	-	-
2022-143	2459863.62	2022 Oct 31 0737:23	Chang Zheng 5B	-	Y4	Heugtian	Heugtian	-	-	WEN	LC101	-	-	-	-	-
2023-197	2460294.07	2023 Dec 15 1341	Chang Zheng 5	-	Y6	Yaogan 41	Yaogan 41	-	-	WEN	LC101	-	-	-	-	-
2024-037	2460363.98	2024 Feb 23 1130	Chang Zheng 5	-	Y7	TJS 11	TJS 11	-	-	WEN	LC101	-	-	-	-	-
2024-083	2460433.89	2024 May 3 0927:29	Chang Zheng 5	-	Y8	Chang'e-6	Chang'e-6	-	-	WEN	LC101	-	-	-	-	-



Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Drpby	Agency	Launch_Code	Group	Category	LTCite	Cite	Notes
2016-065	2457696.03	2016 Nov 3 1243:14	Chang Zheng 5/YZ-2	-	Y1	3.000	CALT	05	G	Sat GED 00	masaspaceflight.com	xinhuanet.com	-
2017-F03	2457936.97	2017 Jul 2 1123:23	Chang Zheng 5	-	Y2	8.000	CALT	0F	G	Sat GTU 0	masaspaceflight.com	xinhuanet.com	-
2019-097	2458645.03	2019 Dec 27 1245	Chang Zheng 5	-	Y3	7.600	CALT	05	G	Sat STU 0	masaspaceflight.com	xinhuanet.com	-
2020-027	2458974.92	2020 May 5 1000:27	Chang Zheng 5B	-	Y1	21.800	CALT	05	G	Sat LED 0	masaspaceflight.com	xinhuanet.com	-
2020-049	2459053.70	2020 Jul 23 0441:12	Chang Zheng 5	-	Y4	4.921	CALT	DS	G	Sat EED E	masaspaceflight.com	xinhuanet.com	-
2020-067	2459177.35	2020 Nov 23 2030:22	Chang Zheng 5	-	Y5	8.250	CALT	DS	G	Sat DSD 0	masaspaceflight.com	xinhuanet.com	-
2021-035	2459333.64	2021 Apr 29 0323:16	Chang Zheng 5B	-	Y2	29.500	CALT	05	G	Sat LSS 0	masaspaceflight.com	xinhuanet.com	-
2022-065	2459784.77	2022 Jul 24 0622:30	Chang Zheng 5B	-	Y3	23.050	CALT	05	G	Sat LSS 0	masaspaceflight.com	xinhuanet.com	-
2022-143	2459863.62	2022 Oct 31 0737:23	Chang Zheng 5B	-	Y4	23.000	CALT	05	G	Sat LSS 0	masaspaceflight.com	xinhuanet.com	-
2023-197	2460294.07	2023 Dec 15 1341	Chang Zheng 5	-	Y6	12.000	CALT	05	G	Sat GTU 0	masaspaceflight.com	xinhuanet.com	-
2024-037	2460363.98	2024 Feb 23 1130	Chang Zheng 5	-	Y7	10.000	CALT	05	G	Sat GTU 0	masaspaceflight.com	xinhuanet.com	-
2024-063	2460433.89	2024 May 3 0927:29	Chang Zheng 5	-	Y8	8.257	CALT	DS	G	Sat DSD 0	masaspaceflight.com	xinhuanet.com	-



Launch

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Mission	FlightCode	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee_Km	Range_Km	Dest
1971-S226	2441045.21	1971 Apr 3 1700	Athena H	-	H00J.D [126]	ABRES ROCS	-	-	GRLC	-	-	-	2007	-	-
1971-S991	2441177.17	1971 Aug 13 1600	Athena H	-	H02 [130]	ADE-2	-	-	GRLC	-	-	-	2007	-	-
1972-S122	2441394.15	1972 Mar 17 1531	Athena H	-	H03 [133]	SAMST-1B	-	-	GRLC	-	-	-	281	-	-
1972-S286	2441541.89	1972 Aug 12 0928?	Athena H	-	H04 [134]	RVU-3B-2	-	-	GRLC	-	-	-	2007	-	-
1972-S986	2441617.50	1972 Oct 27	Athena H	-	H07 [135]	ABRES ARC-2	-	-	GRLC	-	-	-	2007	-	-
1973-S12	2441694.84	1973 Jan 12 0805	Athena H	-	H05 [136]	RANT	-	-	GRLC	-	-	-	2007	-	-
1973-S13	2441694.92	1973 Jan 12 1005	Athena H	-	H09 [137]	ABRES ARC-1	-	-	GRLC	-	-	-	2007	-	-
1973-S126	2441771.15	1973 Mar 29 1538	Athena H	-	H06 [138]	RVU-3B-3	-	-	GRLC	-	-	-	2007	-	-
1973-S127	2441771.22	1973 Mar 29 1723	Athena H	-	H08 [139]	RVU-3B-1	-	-	GRLC	-	-	-	2007	-	-
1973-S156	2441799.70	1973 Apr 27 0450	Athena H	-	H10 [140]	RVU-3B S/M 104?	-	-	GRLC	-	-	-	2007	-	-
1973-S286	2441918.80	1973 Aug 24 0715	Athena H	-	H01 [141]	ABRES ARC-3	-	-	GRLC	-	-	-	2007	-	-
1974-S98	2442091.90	1974 Feb 13	Athena H	-	H02? [144]	Mr 12 RV?	-	-	WAKE	-	-	-	480?	-	-
1974-S128	2442115.50	1974 Mar 9	Athena H	-	H03? [145]	HAVE MILL 1	-	-	WAKE	-	-	-	480?	-	-
1974-S150	2442130.50	1974 Mar 24	Athena H	-	H04? [146]	Mr 12 RV?	-	-	WAKE	-	-	-	480?	-	-
1974-S159	2442186.50	1974 May 19	Athena H	-	H05 [149]	Mr 12 RV?	-	-	WAKE	-	-	-	480?	-	-
1974-S208	2442196.50	1974 May 29	Athena H	-	H06? [150]	Mr 12 Rod	-	-	WAKE	-	-	-	480?	-	-
1974-S218	2442211.50	1974 Jun 13	Athena H	-	H07? [151]	HAVE MILL 5	-	-	WAKE	-	-	-	480?	-	-
1974-S232	2442221.50	1974 Jun 23	Athena H	-	H08? [152]	Mr 12 Blunt	-	-	WAKE	-	-	-	480?	-	-
1991-S105	2446394.66	1991 May 8 0354:00	Maxus	-	MAXUS 1	SSC MAXUS 1	-	-	ESR	A	LC20	-	157	-	-
1991-A03	2446425.96	1991 Jun 18 1134	Prospector	-	J05T 1	-	-	-	CC	-	-	-	2	-	-
1992-S87	2446911.50	1992 Oct 16	Castor 4A	-	SPFE 6/Orbus 1	-	-	-	WAKE	-	-	-	500?	-	-
1992-S82	2446934.93	1992 Nov 6 1025	Maxus	-	MAXUS 1B	SSC MAXUS 1B	-	-	ESR	A	717	-	717	-	-
1995-F05	2450014.42	1995 Oct 23 2203	Conestoga 1620	-	MAXUS 2	SSC MAXUS 1B Meteor SM	-	-	WT	LA0A	-	-	10	-	-
1995-S82	2450049.90	1995 Nov 28 0942	Maxus	-	MAXUS 2	SSC MAXUS 2	-	-	ESR	A	-	-	705	-	-
1996-S43	2450280.26	1996 Jul 15 1821	Castor 4B	-	TCP LIB	-	-	-	WAKE	-	-	-	317?	-	-
1997-S18	2450501.50	1997 Feb 22	Castor 4B	-	TCP LI	IRLV	-	-	WAKE	-	-	-	300?	-	-
1997-S22	2450508.50	1997 Mar 1	Castor 4B	-	TCP LIC	IRLV	-	-	WAKE	-	-	-	300?	-	-
1998-S65	2451141.91	1998 Nov 24 0953	Maxus	-	MAXUS 3	SSC MAXUS 3	-	-	ESR	A	-	-	713	-	-
1999-S60	2451437.38	1999 Sep 15 2100	Castor-M57A1	-	alt-2	-	-	-	ELC	LP2	-	-	1060	-	-
2001-S19	2452028.96	2001 Apr 29 1128	Maxus	-	MAXUS 4	SSC MAXUS 4	-	-	ESR	A	-	-	705	-	-
2003-S15	2452730.75	2003 Apr 1 0600:00	Maxus	-	MAXUS 5	SSC MAXUS 5	-	-	ESR	A	-	-	701	-	-
2004-S66	2453331.66	2004 Nov 22 0835:00	Maxus	-	MAXUS 6	SSC MAXUS 6	-	-	ESR	A	RM08N/26L	-	706	-	-
2005-S17	2453469.23	2005 Apr 6 1730	MRT	-	MRT	MRT-1 RNF	-	-	HICK	-	MID	-	500?	-	-
2005-S52	2453586.50	2005 Aug 4	Castor 4B	-	CRCH-1	-	-	-	KAU	-	-	-	400?	-	-
2005-S54	2453601.15	2005 Aug 18 1540?	Castor 4B	-	CRCH-1	-	-	-	KAU	-	-	-	400?	-	-
2005-S19	2453657.76	2005 May 2 0916	Maxus	-	MAXUS 7	SSC MAXUS 7	-	-	ESR	A	-	-	702	-	-
2005-S51	2453662.26	2005 Nov 17 1512	MRT	-	Aegis FTH-04-2 Targ.	MRT-2 (Sep MRT)	-	-	ESR	A	-	-	702	-	-
2005-S29	2453909.42	2005 Jun 22 2200?	MRT	-	Aegis FTH-10 Targ.	MRT-3 (Sep MRT)	-	-	KAU	-	-	-	150?	-	-
2007-S27	2454274.61	2007 Jun 23 0240	MRT	-	Aegis FTH-12-3 Targ	MRT-3 (Sep MRT)	-	-	KAU	-	-	-	150?	-	-
2007-S62	2454419.50	2007 Nov 19 2205	MRT	-	Aegis FTH target	MRT-5 (ARV-3? Sep)	-	-	KAU	-	-	-	150?	-	-
2007-S68	2454462.42	2008 Jun 26 0216	MRT	-	THAD FIT-09 target	MRT-7 (Sep) SH-3 Tgt	-	-	KAU	-	-	-	150?	-	-
2008-S24	2454463.59	2008 Jun 26 0216	MRT	-	Aegis FTH-3 target	MRT-7 (Sep) SH-3 Tgt	-	-	HICK	RM08N/26L	MID	-	500?	-	-
2008-S65	2454709.50	2008 Oct 30 0221	MRT	-	Aegis FTH-4 target	MRT-8 (Sep MRT)	-	-	KAU	-	-	-	150?	-	-
2009-S56	2455130.67	2009 Nov 20 0440	MRT	-	Aegis FTH-5 target	MRT-8 (Sep MRT)	-	-	KAU	-	-	-	150?	-	-
2010-S24	2455232.07	2010 Oct 28 1343	Maxus	-	MAXUS 8	SSC MAXUS 8	-	-	ESR	A	-	-	700	-	-
2010-S66	2455268.63	2010 Mar 26 0348	MRT	-	Aegis FTH-4 target	MRT-8 (Sep MRT)	-	-	ESR	-	-	-	150?	-	-
2012-S99	2457068.89	2012 Jun 27 0915	MRT	-	MAXUS 9 target	MRT-11 (Sep target)	-	-	KAU	-	-	-	150?	-	-
2017-S27	2457850.90	2017 Apr 7 0830	Maxus	-	MAXUS 9	SSC MAXUS 9	-	-	ESR	A	-	-	678	-	-
2019-S81	2458830.19	2019 Dec 12 1630	MRT	-	IREM Test	IREM Test	-	-	V	TP-01	-	-	500?	1200?	Pacific



Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Agency	Launch_Code	Group	Category	LTCite	Cite	Notes
1971-8226	2441045-21	1971 Apr 3 1700	Athens H	-	H001JD [1,25]	SMSD	RS	-	Reentry Test	NoabTIndep710408	SMSD-LL	-
1971-8391	2441177-17	1971 Aug 13 1600	Athens H	-	H002 [130]	SMSD	RS	-	Reentry Test	NoabTInd710819	SMSD	-
1972-8122	2441394-15	1972 Mar 17 1531	Athens H	-	H003 [133]	SMSD	RS	-	Reentry Test	Sunkadvocate/20323	SMSD	-
1972-8285	2441541-89	1972 Aug 12 0928?	Athens H	-	H004 [134]	SMSD	RS	-	Reentry Test	Wire	SMSD	-
1972-8365	2441617-50	1972 Oct 27	Athens H	-	H007 [135]	SMSD	RS	-	Reentry Test	SMSD/Wire	-	-
1973-812	2441694-84	1973 Jan 12 0805	Athens H	-	H005 [136]	SMSD	RS	-	Reentry Test	AP	-	-
1973-813	2441694-92	1973 Jan 12 1005	Athens H	-	H009 [137]	SMSD	RS	-	Reentry Test	AP	-	-
1973-8126	2441711-15	1973 Mar 29 1538	Athens H	-	H006 [138]	SMSD	RS	-	Reentry Test	Sunkadvocate/30405	-	-
1973-8127	2441711-22	1973 Mar 29 1723	Athens H	-	H008 [139]	SMSD	RS	-	Reentry Test	Sunkadvocate/30405	-	-
1973-8156	2441799-70	1973 Apr 27 0450	Athens H	-	H010 [140]	SMSD	RS	-	Reentry Test	AP	-	-
1973-8285	2441918-80	1973 Aug 24 0715	Athens H	-	H011 [141]	SMSD	RS	-	Reentry Test	AP	SMSD	-
1974-898	2442091-50	1974 Feb 13	Athens H	-	H012? [144]	SMSD	RS	-	Reentry Test	SMSD	AMS740304-49	-
1974-8128	2442115-50	1974 Mar 9	Athens H	-	H013? [145]	SMSD	RS	-	Reentry Test	JCH	-	-
1974-8150	2442130-50	1974 Mar 24	Athens H	-	H014? [146]	SMSD	RS	-	Reentry Test	JCH	-	-
1974-8199	2442186-50	1974 May 19	Athens H	-	H015 [149]	SMSD	RS	-	Reentry Test	JCH	-	-
1974-8205	2442196-50	1974 May 29	Athens H	-	H016? [150]	SMSD	RS	-	Reentry Test	JCH	-	-
1974-8218	2442211-50	1974 Jun 13	Athens H	-	H017? [151]	SMSD	RS	-	Reentry Test	JCH	-	-
1974-8232	2442221-50	1974 Jun 23	Athens H	-	H018? [152]	SMSD	RS	-	Reentry Test	JCH	-	-
1991-8105	2446394-66	1991 May 8 0354:00	Maxus	-	MMUS 1	SSC	SF	SSC/ESTEC/	Reentry Test	SMSD	-	-
1991-803	2446425-98	1991 Jun 18 1134	Propulsor	-	J00ST 1	SSC	SF	UMCQ/	Micrograv	AMS1910624-30	-	-
1992-887	2446911-50	1992 Oct 16	Castor 4A	-	SFE 6/Drbus 1	USC	SF	SD10/	Micrograv	AMS1921109-62	-	-
1992-892	2446934-93	1992 Nov 8 1025	Maxus	-	MMUS 1B	SSC/DLR	SS	SSC/ESTEC/	Reentry Test	Horaba	SSC-HW	-
1992-895	2450014-42	1992 Oct 23 2203	Conestoga 1620	-	FI	PER	UF	C	Sat LED 0	Wire	-	-
1995-882	2450049-90	1995 Nov 28 0942	Maxus	-	MMUS 2	SSC/DLR	SS	SSC/ESTEC/	Micrograv	ESPR66-95	Koraba	-
1995-843	2450280-26	1995 Jul 15 1621	Castor 4B	-	TCP IIB	USC	SS	MITLL/	Reentry Test	FR/USC960730	SIN960912-11	-
1997-818	2450501-50	1997 Feb 22	Castor 4B	-	TCP IIC	USC	SS	MITLL/	Reentry Test	www.smdc.army.mil	-	-
1997-822	2450506-50	1997 Mar 1	Castor 4B	-	TCP IIC	USC	SS	MITLL/	Reentry Test	www.smdc.army.mil	-	-
1998-865	2451141-91	1998 Nov 24 0953	Maxus	-	MMUS 3	SSC/ESA	RS	SSC/ESTEC/	Bio/Physics	Horaba	SIN981130-11	-
1999-850	2451437-38	1999 Sep 15 2100	Castor-M67A1	-	alt-2	AFSNC	RS	SSC/ESTEC/	Test	Wire	-	-
2001-819	2452028-98	2001 Apr 29 1128	Maxus	-	MMUS 4	SSC/ESA	SS	SSC/ESTEC/	Micrograv	SIO10607-24	-	-
2003-815	2452730-76	2003 Apr 1 0600:00	Maxus	-	MMUS 5	SSC/ESA	SS	SSC/ESTEC/	Micrograv	www.ssc.se	J5C841-644	-
2004-866	2453331-86	2004 Nov 22 0635:00	Maxus	-	MMUS 6	SSC/ESA	SS	SSC/ESTEC/	Micrograv	www.ssc.se	-	-
2005-817	2453469-23	2005 Apr 6 1730	MRT	-	MRT	USC	MS	USC	Test	acq.osd.mil	orbital.com	-
2005-832	2453586-50	2005 Aug 4	Castor 4B	-	CHC4-1	HDA	MS	-	Test	honoluluadvertiser	www.orbital.com	-
2005-834	2453601-15	2005 Aug 16 1540?	Castor 4B	-	CHC4-1	HDA	MS	-	Test	www.ssc.se	-	-
2005-819	2453857-76	2005 May 2 0616	Maxus	-	MMUS 7	SSC/ESA	SS	SSC/ESTEC/	Micrograv	Wire	-	-
2005-851	2453952-26	2005 Nov 17 1612	MRT	-	Aegis FTH-04-2 Targ.	USMBC	MS	-	Target	Wire	-	-
2005-829	2453959-42	2006 Jun 22 2200?	MRT	-	Aegis FTH-10 Target	USMBC	MS	-	Target	Wire	-	-
2007-827	2454274-61	2007 Jun 23 0240	MRT	-	Aegis FTH-12-3 Targ	USMBC	MS	-	Target	Wire	SandiaNews070706	-
2007-862	2454419-50	2007 Nov 15	MRT	?	Aegis JFTW Target	USMBC	MS	-	Target	www.mda.mil	-	-
2007-866	2454632-52	2007 Dec 22 2205	MRT	-	Aegis JFTW-3 Target	USMBC	MS	-	Target	Wire	-	-
2008-829	2454645-50	2008 Jun 26 0216	MRT	-	THAAD FTH-09 Target	USMBC	MS	-	Target	Wire	-	-
2008-865	2454785-60	2008 Oct 30 0921	MRT	-	JFTW-2 TRACEX	USMBC	MS	-	Target	mda.mil	-	-
2008-866	2454790-60	2008 Nov 26 0400	MRT	-	Aegis target	USMBC	MS	-	Target	mda.mil	-	-
2009-856	2455152-67	2009 Oct 28 1343	Maxus	-	MMUS JFTW-3 target	SSC/ESA	SS	SSC/ESTEC/	Micrograv	www.ssc.se	-	-
2010-854	2455262-07	2010 Mar 29 0306	Maxus	-	MMUS JFTW-4 target	SSC/ESA	SS	SSC/ESTEC/	Micrograv	www.ssc.se	-	-
2010-864	2455466-63	2010 Oct 29 0306	MRT	-	Aegis target	USMBC	MS	-	Target	mda.mil	-	-
2012-892	2456166-89	2012 Jun 7 0915	MRT	-	MMUS 9 target	USMBC	MS	-	Target	mda.mil	-	-
2017-897	2457680-80	2017 Apr 7 0930	Maxus	-	MMUS 9	SSC/ESA	SS	SSC/ESTEC/	Micrograv	www.ssc.se	-	-
2019-881	2458830-19	2019 Dec 12 1630	MRT	?	IRBN Test	SCD	MS	-	Test	vandenbergh.af.mil	-	-





Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Mission	Launch_FlightCode	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee_Km	Range_Km	Dest
1967-5656	2437989.50	1962 Nov 21	Cedre 3	-	Cedar 3	-	-	-	-	DBAY	-	-	-	40?	-	-
1967-5790	2438394.50	1964?	Cedre 4	-	Cedar 4	-	-	-	-	DBAY	-	-	-	40?	-	-
1967-5791	2438394.50	1964?	Cedre 4	?	Cedar 5	-	-	-	-	DBAY	-	-	-	40?	-	-
1967-5792	2438661.50	1964 Sep 23	Cedre 4	?	Cedar 6	-	-	-	-	DBAY	-	-	-	60?	-	-
1967-6596	2439257.50	1966 May 12	Cedre 4	?	Cedar 7	-	-	-	-	DBAY	-	-	-	60?	-	-
1967-5745	2439341.50	1966 Aug 4	Cedre 4	?	Cedar 8?	-	-	-	-	DBAY	-	-	-	140	-	-



Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Drbby	Agency	Launch_Code	Group	Category	LTCite	Cite	Notes
1962-5636	2437989.50	1962 Nov 21	Cedre 3	-	Cedar 3	0.000	LRS	SS	LRS/	Test	chanitz.org	-	-
1964-5790	2438394.50	1964?	Cedre 4	-	Cedar 4	0.000	LRS	SS	LRS/	Test	chanitz.org	-	-
1964-5791	2438394.50	1964?	Cedre 4	?	Cedar 5	0.000	LRS	SS	LRS/	Test	chanitz.org	-	-
1964-5792	2438661.50	1964 Sep 23	Cedre 4	?	Cedar 6	0.000	LRS	SS	LRS/	Test	chanitz.org	-	-
1966-6586	2439257.50	1966 May 12	Cedre 4	?	Cedar 7	0.000	LRS	SS	LRS/	Test	chanitz.org	-	-
1966-5745	2439341.50	1966 Aug 4	Cedre 4	?	Cedar 8?	0.000	LRS	SS	LRS/	Test	chanitz.org	-	-



Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Mission	FlightCode	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee km	Range km	Dest
2023-F06	2460095.39	2023 May 30 2127	Cheonlima-1	-	6	Manligyong-1	-	-	-	SOHAE	LC2	-	-	150?	-	-



Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Agency	Launch_Code	Group	Category	LTCite	Cite	Notes
2023-F06	2460095.39	2023 May 30 21:27	Cheonlima-1	-	6	KCST	0F	G	Sat SSO 0	nknews.org	-	-





Launch_Tag	Launch_JD	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Mission	LaunchCode	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee km	Range km	Dest
1961-4201	2437658.50	1961 Sep 16	Cirrus I	-	-	-	-	-	-	CUX	-	-	-	35	-	-
1961-4205	2437658.50	1961 Sep 16	Cirrus II	-	-	-	-	-	-	CUX	-	-	-	50	-	-
1963-4241	2438076.50	1963 Feb 16	Cirrus II	?	Cirrus B	-	-	-	-	CUX	-	-	-	38	-	-



Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	OrbPay	Agency	Launch_Code	Group	Category	LTCite	Cite	Notes
1961-4201	2437558.50	1961 Sep 16	Cirrus I	-	-	0.000	DRG	SS	H05/Hohr	Test	astronautix.com	Burgess, Dubbs	-
1961-425	2437558.50	1961 Sep 16	Cirrus II	-	-	0.000	DRG	SS	H05/Hohr	Test	astronautix.com	-	-
1963-4241	2438076.50	1963 Feb 16	Cirrus II	?	Cirrus B	0.000	DRG	SS	H05/Hohr	Test	Weltraumfahrt63-4	-	-



Launch

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Mission	FlightCode	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee km	Range km	Dest
1966-A145	2439456.89	1966 Nov 27 0921:14	Cora	-	G1	-	-	-	-	HMG	Beatrice	-	-	12	-	-
1966-W46	2439477.89	1966 Dec 18 0915	Cora	-	G2	-	-	-	-	HMG	Beatrice	-	-	55	-	-
1967-A129	2439789.15	1967 Oct 25 1534	Cora	-	G3	-	-	-	-	CEL	BS	-	-	10	-	-



Launch_Tag	Launch_JD	Launch_Date	LV_Type	Variant	Flight_ID	Display	Agency	Launch_Code	Group	Category	LTCite	Cite	Notes
1966-A145	2439456.89	1966 Nov 27 0921:14	Cora	-	G1	0.000	CNES	TF	-	Test	Europallig	Rothmund	-
1966-046	2439477.89	1966 Dec 18 0915	Cora	-	G2	0.000	CNES	TS	-	Test	Rothmund	-	-
1967-A129	2439789.15	1967 Oct 26 1534	Cora	-	G3	0.000	CNES	TF	-	Test	CNES-PR	Rothmund	-





Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Launch_Mission	FlightCode	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee_Km	Range_Km	Dest
1947-A12	2432327.50	1947 May 22	Corporal E	-	1	-	-	-	NS	LC33	-	-	39	-	-
1947-A14	2432384.23	1947 Jul 17 1730	Corporal E	-	2	-	-	-	NS	LC33	-	-	0	-	-
1947-A30	2432494.46	1947 Nov 4 2305	Corporal E	-	3	-	-	-	NS	LC33	-	-	0	-	-
1949-A22	2433074.50	1949 Jun 7	Corporal E	-	4E	-	-	-	NS	LC33	-	-	20	-	-
1960-A06	2433473.50	1960 Jul 11	Corporal E	-	5E	-	-	-	NS	LC33	-	-	20	-	-
1960-H12	2433587.50	1960 Nov 2	Corporal E	-	6E	-	-	-	NS	LC33	-	-	50?	-	-
1961-H01	2433662.50	1961 Jan 16	Corporal E	-	7R	-	-	-	NS	LC33	-	-	50?	-	-
1961-H02	2433727.50	1961 Mar 22	Corporal E	-	8R	-	-	-	NS	LC33	-	-	50?	-	-
1961-H06	2433639.50	1961 Jul 12	Corporal E	-	9R	-	-	-	NS	LC33	-	-	50?	-	-
1961-A70	2433929.50	1961 Oct 10	Corporal E	-	11-10	-	-	-	NS	LC33	-	-	0?	-	-
1961-A90	2433986.50	1961 Dec 06	Corporal	-	12R	-	-	-	NS	LC33	-	-	30?	-	-
1962-A09	2434035.50	1962 Jan 24	Corporal	-	14-12R	-	-	-	NS	LC33	-	-	30?	-	-
1962-A16	2434040.50	1962 Jan 29	Corporal	-	15-13 R	-	-	-	NS	LC33	-	-	30?	-	-
1962-A43	2434063.50	1962 Mar 12	Corporal	-	17-14R	-	-	-	NS	LC33	-	-	30?	-	-
1962-A46	2434068.50	1962 Mar 17	Corporal	-	18-15	-	-	-	NS	LC33	-	-	30?	-	-
1962-A50	2434092.50	1962 Mar 21	Corporal	-	19-16	-	-	-	NS	LC33	-	-	30?	-	-
1962-A68	2434126.50	1962 Apr 24	Corporal	-	21-17	-	-	-	NS	LC33	-	-	30?	-	-
1962-A71	2434131.50	1962 Apr 29	Corporal	-	22-18	-	-	-	NS	LC33	-	-	30?	-	-
1962-A76	2434144.50	1962 May 12	Corporal	-	23-19	-	-	-	NS	LC33	-	-	30?	-	-
1962-A86	2434148.50	1962 May 16	Corporal	-	24-20RSC	-	-	-	NS	LC33	-	-	30?	-	-
1962-A100	2434162.50	1962 Jun 19	Corporal	-	21R	-	-	-	NS	LC33	-	-	30?	-	-
1962-A103	2434167.50	1962 Jun 24	Corporal	-	22R	-	-	-	NS	LC33	-	-	30?	-	-
1962-A106	2434190.50	1962 Jun 27	Corporal	-	24R	-	-	-	NS	LC33	-	-	30?	-	-
1962-A106	2434195.50	1962 Jul 02	Corporal	-	28R	-	-	-	NS	LC33	-	-	30?	-	-
1962-A111	2434204.50	1962 Jul 11	Corporal	-	26R	-	-	-	NS	LC33	-	-	30?	-	-
1962-A113	2434210.50	1962 Jul 17	Corporal	-	26R	-	-	-	NS	LC33	-	-	30?	-	-
1962-A119	2434221.50	1962 Jul 28	Corporal	-	27R	-	-	-	NS	LC33	-	-	30?	-	-
1962-A129	2434231.50	1962 Aug 07	Corporal	-	28R	-	-	-	NS	LC33	-	-	30?	-	-
1962-A134	2434236.50	1962 Aug 12	Corporal	-	28R	-	-	-	NS	LC33	-	-	30?	-	-
1962-A144	2434251.50	1962 Aug 27	Corporal	-	30R	-	-	-	NS	LC33	-	-	30?	-	-
1962-A155	2434267.50	1962 Sep 12	Corporal	-	31R	-	-	-	NS	LC33	-	-	30?	-	-
1962-A164	2434280.50	1962 Sep 25	Corporal	-	32R	-	-	-	NS	LC33	-	-	30?	-	-
1962-A170	2434287.50	1962 Oct 02	Corporal	-	33R	-	-	-	NS	LC33	-	-	30?	-	-
1962-A216	2434326.50	1962 Nov 10	Corporal	-	34R	-	-	-	NS	LC33	-	-	30?	-	-
1962-A218	2434329.50	1962 Nov 13	Corporal	-	35R	-	-	-	NS	LC33	-	-	30?	-	-
1962-A224	2434333.50	1962 Nov 17	Corporal	-	36R	-	-	-	NS	LC33	-	-	30?	-	-
1962-A233	2434336.50	1962 Nov 20	Corporal	-	37R	-	-	-	NS	LC33	-	-	30?	-	-
1962-A250	2434349.50	1962 Dec 03	Corporal	-	38R	-	-	-	NS	LC33	-	-	30?	-	-
1962-A262	2434355.50	1962 Dec 09	Corporal	-	38R	-	-	-	NS	LC33	-	-	30?	-	-
1962-A270	2434362.50	1962 Dec 16	Corporal	-	40R	-	-	-	NS	LC33	-	-	30?	-	-
1963-A12	2434390.50	1963 Jan 13	Corporal	-	41R	-	-	-	NS	LC33	-	-	30?	-	-
1963-A43	2434399.50	1963 Jan 22	Corporal	-	42R	-	-	-	NS	LC33	-	-	30?	-	-
1963-A40	2434417.50	1963 Jan 30	Corporal	-	43R	-	-	-	NS	LC33	-	-	30?	-	-
1963-A70	2434433.50	1963 Feb 06	Corporal	-	43R	-	-	-	NS	LC33	-	-	30?	-	-
1963-A80	2434436.50	1963 Feb 20	Corporal	-	43R	-	-	-	NS	LC33	-	-	30?	-	-
1963-A106	2434443.50	1963 Feb 26	Corporal	-	43R	-	-	-	NS	LC33	-	-	30?	-	-
1963-A139	2434458.50	1963 Mar 12	Corporal	-	51E/1251	-	-	-	NS	LC33	-	-	30?	-	-
1963-A156	2434469.50	1963 Mar 23	Corporal	-	57RS/1261	-	-	-	NS	LC33	-	-	30?	-	-
1963-A182	2434469.50	1963 Apr 02	Corporal	-	36R/1261	-	-	-	NS	LC33	-	-	30?	-	-
1963-A186	2434486.50	1963 Apr 21	Corporal	-	1260RS	-	-	-	NS	LC33	-	-	30?	-	-
1963-A217	2434491.50	1963 Apr 27	Corporal	-	1260RS	-	-	-	NS	LC33	-	-	30?	-	-
1963-A222	2434511.50	1963 May 14	Corporal	-	1262 RS	-	-	-	NS	LC33	-	-	30?	-	-
1963-A223	2434515.50	1963 May 21	Corporal	-	45R	-	-	-	NS	LC33	-	-	30?	-	-
1963-A229	2434528.50	1963 May 29	Corporal	-	1264R	-	-	-	NS	LC33	-	-	30?	-	-
1963-A236	2434528.50	1963 May 29	Corporal	-	1264R	-	-	-	NS	LC33	-	-	30?	-	-
1963-A239	2434528.50	1963 May 29	Corporal	-	1266R	-	-	-	NS	LC33	-	-	30?	-	-
1963-A249	2434547.50	1963 Jun 19	Corporal	-	55R	-	-	-	NS	LC33	-	-	30?	-	-
1963-A282	2434560.50	1963 Jul 02	Corporal	-	1277R	-	-	-	NS	LC33	-	-	30?	-	-
1963-A282	2434565.50	1963 Jul 07	Corporal	-	1277R	-	-	-	NS	LC33	-	-	30?	-	-
1963-A294	2434574.50	1963 Jul 16	Corporal	-	1267R	-	-	-	NS	LC33	-	-	30?	-	-
1963-A310	2434593.50	1963 Aug 04	Corporal	-	1276R	-	-	-	NS	LC33	-	-	30?	-	-
1963-A314	2434595.50	1963 Aug 06	Corporal	-	1269E	-	-	-	NS	LC33	-	-	30?	-	-
1963-A315	2434595.50	1963 Aug 06	Corporal	-	1300R	-	-	-	NS	LC33	-	-	30?	-	-
1963-A323	2434602.50	1963 Aug 13	Corporal	-	1301R	-	-	-	NS	LC33	-	-	30?	-	-
1963-A364	2434634.50	1963 Sep 14	Corporal	-	1297E	-	-	-	NS	LC33	-	-	1?	-	-
1963-A364	2434634.50	1963 Sep 14	Corporal	-	1352R	-	-	-	NS	LC33	-	-	30?	-	-
1963-A368	2434644.50	1963 Sep 23	Corporal	-	1263R	-	-	-	NS	LC33	-	-	30?	-	-
1963-A375	2434644.50	1963 Sep 24	Corporal	-	1352R	-	-	-	NS	LC33	-	-	30?	-	-
1963-A377	2434649.50	1963 Sep 29	Corporal	-	1302R	-	-	-	NS	LC33	-	-	30?	-	-
1963-A392	2434658.50	1963 Oct 01	Corporal	-	1299E	-	-	-	NS	LC33	-	-	30?	-	-
1963-A415	2434663.50	1963 Oct 08	Corporal	-	1355R	-	-	-	NS	LC33	-	-	30?	-	-
1963-A440	2434665.50	1963 Oct 15	Corporal	-	1351E	-	-	-	NS	LC33	-	-	30?	-	-
1963-A419	2434677.50	1963 Oct 27	Corporal	-	1357R	-	-	-	NS	LC33	-	-	30?	-	-
1963-A432	2434685.50	1963 Nov 04	Corporal	-	1305E	-	-	-	NS	LC33	-	-	30?	-	-
1963-A434	2434687.50	1963 Nov 06	Corporal	-	1303R	-	-	-	NS	LC33	-	-	30?	-	-
1963-A439	2434694.50	1963 Nov 13	Corporal	-	1359R	-	-	-	NS	LC33	-	-	30?	-	-
1963-A447	2434700.50	1963 Nov 19	Corporal	-	1359R	-	-	-	NS	LC33	-	-	30?	-	-
1963-A468	2434714.50	1963 Dec 03	Corporal	-	1392R	-	-	-	NS	LC33	-	-	30?	-	-
1963-A474	2434721.50	1963 Dec 10	Corporal	-	1393R	-	-	-	NS	LC33	-	-	30?	-	-
1963-A477	2434726.50	1963 Dec 15	Corporal	-	125N	-	-	-	NS	LC33	-	-	30?	-	-
1963-A487	2434728.50	1963 Dec 17	Corporal	-	1356R	-	-	-	NS	LC33	-	-	30?	-	-
1964-A13	2434754.50	1964 Jan 12	Corporal	-	135N	-	-	-	NS	LC33	-	-	30?	-	-
1964-A17	2434757.50	1964 Jan 15	Corporal	-	1394R	-	-	-	NS	LC33	-	-	30?	-	-
1964-A28	2434763.50	1964 Jan 21	Corporal	-	1395R	-	-	-	NS	LC33	-	-	30?	-	-
1964-A31	2434764.50	1964 Jan 22	Corporal	-	1312E	-	-	-	NS	LC33	-	-	2?	-	-



Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Launch_Site	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee_Km	Range_Km	Dest
1955-4605	2435370.50	1955 Sep 20	Corporal	-	1621	Corporal EU	NS	-	NS	-	-	-	407	-	-
1955-4606	2435372.50	1955 Sep 22	Corporal	-	1660	Corporal TA-29	NS	-	NS	-	-	-	407	-	-
1955-4607	2435373.50	1955 Sep 23	Corporal	-	1659	Corporal T-01	NS	-	NS	-	-	-	407	-	-
1955-4608	2435379.50	1955 Sep 29	Corporal	-	1622	Corporal EU	NS	-	NS	-	-	-	407	-	-
1955-4609	2435380.50	1955 Sep 30	Corporal	-	1657	Corporal T-02	NS	-	NS	-	-	-	407	-	-
1955-4610	2435387.50	1955 Oct 7	Corporal	-	1616	Corporal U-5	NS	-	NS	-	-	-	407	-	-
1955-4611	2435391.50	1955 Oct 11	Corporal	-	1588	Corporal UM-7	NS	-	NS	-	-	-	407	-	-
1955-4612	2435392.50	1955 Oct 12	Corporal	-	1617	Corporal II U-6	NS	-	NS	-	-	-	407	-	-
1955-4613	2435394.50	1955 Oct 14	Corporal	-	1662	Corporal TA-30	NS	-	NS	-	-	-	407	-	-
1955-4614	2435399.50	1955 Oct 19	Corporal	-	1652	Corporal TA-32	NS	-	NS	-	-	-	407	-	-
1955-4615	2435400.50	1955 Oct 20	Corporal	-	1578	Corporal U-II U-8	NS	-	NS	-	-	-	407	-	-
1955-4616	2435404.50	1955 Oct 24	Corporal	-	1630	Corporal U-9	NS	-	NS	-	-	-	407	-	-
1955-4617	2435404.50	1955 Oct 24	Corporal	-	1578	Corporal TA-33	NS	-	NS	-	-	-	407	-	-
1955-4618	2435406.50	1955 Oct 26	Corporal	-	1631	Corporal U-10	NS	-	NS	-	-	-	407	-	-
1955-4619	2435411.50	1955 Oct 31	Corporal	-	1626	Corporal UM-11	NS	-	NS	-	-	-	407	-	-
1955-4620	2435413.50	1955 Nov 2	Corporal	-	1623	Corporal EU	NS	-	NS	-	-	-	407	-	-
1955-4621	2435419.50	1955 Nov 6	Corporal	-	1665	Corporal TA-36	NS	-	NS	-	-	-	407	-	-
1955-4622	2435421.50	1955 Nov 10	Corporal	-	1664	Corporal TA*	NS	-	NS	-	-	-	407	-	-
1955-4623	2435428.50	1955 Nov 17	Corporal	-	1414	Corporal C	NS	-	NS	-	-	-	407	-	-
1955-4624	2435429.50	1955 Nov 18	Corporal	-	1469	Corporal Chem	NS	-	NS	-	-	-	407	-	-
1955-4625	2435432.50	1955 Nov 21	Corporal	-	1651	Corporal TA-34	NS	-	NS	-	-	-	407	-	-
1955-4626	2435432.50	1955 Nov 21	Corporal	-	1667	Corporal TA-35	NS	-	NS	-	-	-	407	-	-
1955-4627	2435433.50	1955 Nov 22	Corporal	-	1596	Corporal EU	NS	-	NS	-	-	-	407	-	-
1955-4628	2435442.50	1955 Dec 1	Corporal	-	1638	Corporal TA-40	NS	-	NS	-	-	-	407	-	-
1955-4629	2435443.50	1955 Dec 2	Corporal	-	1677	Corporal TA-38	NS	-	NS	-	-	-	407	-	-
1955-4630	2435443.50	1955 Dec 2	Corporal	-	1637	Corporal TA-41	NS	-	NS	-	-	-	407	-	-
1955-4631	2435447.50	1955 Dec 6	Corporal	-	1412	Corporal C	NS	-	NS	-	-	-	407	-	-
1955-4632	2435446.50	1955 Dec 7	Corporal	-	1666	Corporal TA-39	NS	-	NS	-	-	-	407	-	-
1955-4633	2435449.50	1955 Dec 6	Corporal	-	1668	Corporal II U-14	NS	-	NS	-	-	-	407	-	-
1955-4634	2435449.50	1955 Dec 6	Corporal	-	1627	Corporal U-13	NS	-	NS	-	-	-	407	-	-
1955-4635	2435454.50	1955 Dec 13	Corporal	-	1606	Corporal TA-42	NS	-	NS	-	-	-	407	-	-
1955-4636	2435455.50	1955 Dec 14	Corporal	-	1596	Corporal TA-43	NS	-	NS	-	-	-	407	-	-
1955-4637	2435465.50	1956 Jan 13	Corporal	-	1669	Corporal EU	NS	-	NS	-	-	-	407	-	-
1955-4638	2435465.50	1956 Jan 13	Corporal	-	1676	Corporal TA-60	NS	-	NS	-	-	-	407	-	-
1955-4639	2435469.50	1956 Jan 17	Corporal	-	1672	Corporal EU	NS	-	NS	-	-	-	407	-	-
1955-4640	2435491.50	1956 Jan 19	Corporal	-	1597	Corporal TA-45	NS	-	NS	-	-	-	407	-	-
1955-4641	2435492.50	1956 Jan 20	Corporal	-	1679	Corporal TA-44	NS	-	NS	-	-	-	407	-	-
1955-4642	2435492.50	1956 Jan 20	Corporal	-	1641	Corporal TA-47	NS	-	NS	-	-	-	407	-	-
1955-4643	2435504.50	1956 Feb 1	Corporal	-	1678	Corporal TA-46	NS	-	NS	-	-	-	407	-	-
1955-4644	2435504.50	1956 Feb 1	Corporal	-	1367	Corporal Chem	NS	-	NS	-	-	-	407	-	-
1955-4645	2435506.50	1956 Feb 3	Corporal	-	1632	Corporal TA-61	NS	-	NS	-	-	-	407	-	-
1955-4646	2435509.50	1956 Feb 6	Corporal	-	1698	Corporal Chem	NS	-	NS	-	-	-	407	-	-
1955-4647	2435513.50	1956 Feb 10	Corporal	-	1711	Corporal EU	NS	-	NS	-	-	-	407	-	-
1955-4648	2435517.50	1956 Feb 14	Corporal	-	1711	Corporal TA-48	NS	-	NS	-	-	-	407	-	-
1955-4649	2435517.50	1956 Feb 14	Corporal	-	1714	Corporal TA-49	NS	-	NS	-	-	-	407	-	-
1955-4650	2435524.50	1956 Feb 21	Corporal	-	1713	Corporal TA-50	NS	-	NS	-	-	-	407	-	-
1955-4651	2435533.50	1956 Mar 1	Corporal	-	1670	Corporal TA-51	NS	-	NS	-	-	-	407	-	-
1955-4652	2435533.50	1956 Mar 1	Corporal	-	1707	Corporal U-12	NS	-	NS	-	-	-	407	-	-
1955-4653	2435534.50	1956 Mar 2	Corporal	-	1671	Corporal TA-51	NS	-	NS	-	-	-	407	-	-
1955-4654	2435534.50	1956 Mar 2	Corporal	-	1639	Corporal EU	NS	-	NS	-	-	-	407	-	-
1955-4655	2435534.50	1956 Mar 2	Corporal	-	1413	Corporal TA-52	NS	-	NS	-	-	-	407	-	-
1955-4656	2435545.50	1956 Mar 13	Corporal	-	1635	Corporal EU	NS	-	NS	-	-	-	407	-	-
1955-4657	2435545.50	1956 Mar 21	Corporal	-	1673	Corporal U-15	NS	-	NS	-	-	-	407	-	-
1955-4658	2435555.50	1956 Mar 22	Corporal	-	1686	Corporal EU	NS	-	NS	-	-	-	407	-	-
1955-4659	2435554.50	1956 Mar 22	Corporal	-	1686	Corporal EU	NS	-	NS	-	-	-	407	-	-
1955-4660	2435554.50	1956 Mar 22	Corporal	-	1686	Corporal TA-53	NS	-	NS	-	-	-	407	-	-
1955-4661	2435554.50	1956 Mar 22	Corporal	-	1686	Corporal TA-54	NS	-	NS	-	-	-	407	-	-
1955-4662	2435555.50	1956 Mar 23	Corporal	-	1688	Corporal U-16	NS	-	NS	-	-	-	407	-	-
1955-4663	2435555.50	1956 Mar 23	Corporal	-	1674	Corporal EU	NS	-	NS	-	-	-	407	-	-
1955-4664	2435568.50	1956 Apr 5	Corporal	-	1640	Corporal EU	NS	-	NS	-	-	-	407	-	-
1955-4665	2435573.50	1956 Apr 10	Corporal	-	1461	Corporal Chem	NS	-	NS	-	-	-	407	-	-
1955-4666	2435575.50	1956 Apr 10	Corporal	-	1687	Corporal EU	NS	-	NS	-	-	-	407	-	-
1955-4667	2435587.50	1956 Apr 12	Corporal	-	1684	Corporal EU	NS	-	NS	-	-	-	407	-	-
1955-4668	2435596.50	1956 Apr 24	Corporal	-	1685	Corporal EU	NS	-	NS	-	-	-	407	-	-
1955-4669	2435597.50	1956 May 3	Corporal	-	1795	Corporal TA-55	NS	-	NS	-	-	-	407	-	-
1955-4670	2435608.50	1956 May 15	Corporal	-	1805	Corporal TA-56	NS	-	NS	-	-	-	407	-	-
1955-4671	2435609.50	1956 May 16	Corporal	-	1675	Corporal II U-17	NS	-	NS	-	-	-	407	-	-
1955-4672	2435609.50	1956 May 16	Corporal	-	1807	Corporal TA-57	NS	-	NS	-	-	-	407	-	-
1955-4673	2435610.50	1956 May 17	Corporal	-	1807	Corporal TA-58	NS	-	NS	-	-	-	407	-	-
1955-4674	2435611.50	1956 May 18	Corporal	-	1827	Corporal II U-18	NS	-	NS	-	-	-	407	-	-
1955-4675	2435615.50	1956 May 22	Corporal	-	1818	Corporal EU MED-24	NS	-	NS	-	-	-	407	-	-
1955-4676	2435616.50	1956 May 23	Corporal	-	1823	Corporal TA-59	NS	-	NS	-	-	-	407	-	-
1955-4677	2435616.50	1956 May 23	Corporal	-	1824	Corporal TA-62	NS	-	NS	-	-	-	407	-	-
1955-4678	2435631.50	1956 Jun 7	Corporal	-	1822	Corporal TA-64	NS	-	NS	-	-	-	407	-	-
1955-4679	2435631.50	1956 Jun 7	Corporal	-	1821	Corporal TA-63	NS	-	NS	-	-	-	407	-	-
1955-4680	2435637.50	1956 Jun 13	Corporal	-	1820	Corporal EU MED-26	NS	-	NS	-	-	-	407	-	-
1955-4681	2435637.50	1956 Jun 13	Corporal	-	1373	Corporal Chem 8	NS	-	NS	-	-	-	407	-	-
1955-4682	2435639.50	1956 Jun 15	Corporal	-	1348	Corporal Chem 7	NS	-	NS	-	-	-	407	-	-
1955-4683	2435640.50	1956 Jun 16	Corporal	-	1781	Corporal EU	NS	-	NS	-	-	-	407	-	-
1955-4684	2435645.50	1956 Jun 21	Corporal	-	1686	Corporal TA-66	NS	-	NS	-	-	-	407	-	-
1955-4685	2435645.50	1956 Jun 21	Corporal	-	1712	Corporal TA-67	NS	-	NS	-	-	-	407	-	-
1955-4686	2435647.50	1956 Jun 23	Corporal	-	1829	Corporal II U-19	NS	-	NS	-	-	-	407	-	-
1955-4687	2435654.50	1956 Jun 30	Corporal	-	1780	Corporal EU	NS	-	NS	-	-	-	407	-	-
1955-4688	2435660.50	1956 Jul 6	Corporal	-	1350	Corporal TA-68	NS	-	NS	-	-	-	407	-	-
1955-4689	2435666.50	1956 Jul 12	Corporal	-	1700	Corporal EU	NS	-	NS	-	-	-	407	-	-
1955-4690	2435666.50	1956 Jul 12	Corporal	-	1688	Corporal EU	NS	-	NS	-	-	-	407	-	-
1955-4691	2435667.50	1956 Jul 13	Corporal	-	1798	Corporal II U-20	NS	-	NS	-	-	-	407	-	-

Launch Mission

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Launch_Site	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee_Km	Range_Km	Dest
1956-4312	2435667.50	1956 Jul 13	Corporal	-	1828	Corporal II U-21	NS	-	NS	-	-	-	407	-	-
1956-4313	2435668.50	1956 Jul 14	Corporal	-	1794	Corporal II U-23	NS	-	NS	-	-	-	407	-	-
1956-4314	2435670.50	1956 Jul 16	Corporal	-	1696	Corporal EU	NS	-	NS	-	-	-	407	-	-
1956-4315	2435678.50	1956 Jul 24	Corporal	-	1817	Corporal EU AEB-25	NS	-	NS	-	-	-	407	-	-
1956-4316	2435705.50	1956 Aug 20	Corporal	-	1691	Corporal TA-69	NS	-	NS	-	-	-	407	-	-
1956-4317	2435706.50	1956 Aug 21	Corporal	-	1793	Corporal TA-72	NS	-	NS	-	-	-	407	-	-
1956-4318	2435706.50	1956 Aug 21	Corporal	-	1694	Corporal TA-70	NS	-	NS	-	-	-	407	-	-
1956-4319	2435708.50	1956 Aug 23	Corporal	-	1792	Corporal TA-73	NS	-	NS	-	-	-	407	-	-
1956-4320	2435709.50	1956 Aug 24	Corporal	-	1706	Corporal TA-71	NS	-	NS	-	-	-	407	-	-
1956-4321	2435720.50	1956 Sep 4	Corporal	-	1826	Corporal TA-76	NS	-	NS	-	-	-	407	-	-
1956-4322	2435721.50	1956 Sep 5	Corporal	-	1819	Corporal EU	NS	-	NS	-	-	-	407	-	-
1956-4323	2435723.50	1956 Sep 7	Corporal	-	1791	Corporal TA-74	NS	-	NS	-	-	-	407	-	-
1956-4324	2435726.50	1956 Sep 10	Corporal	-	1837	Corporal EU AEB-29-A	NS	-	NS	-	-	-	407	-	-
1956-4325	2435727.50	1956 Sep 11	Corporal	-	1910	Corporal I UK-2	NS	-	NS	-	-	-	407	-	-
1956-4326	2435727.50	1956 Sep 11	Corporal	-	1826	Corporal TA-75	NS	-	NS	-	-	-	407	-	-
1956-4327	2435734.50	1956 Sep 18	Corporal	-	1906	Corporal I UK-1	NS	-	NS	-	-	-	407	-	-
1956-4328	2435758.50	1956 Oct 12	Corporal	-	1730	Corporal EU AEB-30	NS	-	NS	-	-	-	407	-	-
1956-4329	2435769.50	1956 Oct 23	Corporal	-	1363	Corporal Chem 9	NS	-	NS	-	-	-	407	-	-
1956-4330	2435769.50	1956 Oct 23	Corporal	-	1364	Corporal Chem 10	NS	-	NS	-	-	-	407	-	-
1956-4331	2435770.50	1956 Oct 24	Corporal	-	1896	Corporal TA-77	NS	-	NS	-	-	-	407	-	-
1956-4332	2435771.50	1956 Oct 24	Corporal	-	1893	Corporal TA-78	NS	-	NS	-	-	-	407	-	-
1956-4333	2435772.50	1956 Oct 26	Corporal	-	1799	Corporal TA-80	NS	-	NS	-	-	-	407	-	-
1956-4334	2435792.50	1956 Nov 15	Corporal	-	1694	Corporal TA-79	NS	-	NS	-	-	-	407	-	-
1956-4335	2435793.50	1956 Nov 16	Corporal	-	1962	Corporal TA-81	NS	-	NS	-	-	-	407	-	-
1956-4336	2435797.50	1956 Nov 20	Corporal	-	1636	Corporal EU AEB-31	NS	-	NS	-	-	-	407	-	-
1956-4337	2435804.50	1956 Nov 27	Corporal	-	1960	Corporal TA-83	NS	-	NS	-	-	-	407	-	-
1956-4338	2435806.50	1956 Nov 29	Corporal	-	1961	Corporal TA-84	NS	-	NS	-	-	-	407	-	-
1956-4339	2435807.50	1956 Nov 30	Corporal	-	1957	Corporal TA-82	NS	-	NS	-	-	-	407	-	-
1956-4340	2435811.50	1956 Dec 4	Corporal	-	1835	Corporal AEB-32	NS	-	NS	-	-	-	407	-	-
1957-4179	2435911.50	1957 Mar 14	Corporal	-	-	-	FTB	-	FTB	-	-	-	407	-	-
1957-4180	2435911.50	1957 Mar 14	Corporal	-	-	-	FTB	-	FTB	0B0	-	-	407	-	-
1957-4181	2436019.50	1957 Jul 1	Corporal	-	-	-	FTB	-	FTB	0B0	-	-	407	-	-
1957-4182	2436019.50	1957 Jul 1	Corporal	-	-	-	FTB	-	FTB	0B0	-	-	407	-	-
1957-4183	2436019.50	1957 Jul 1	Corporal	-	-	-	FTB	-	FTB	0B0	-	-	407	-	-
1957-4184	2436019.50	1957 Jul 1	Corporal	-	-	-	FTB	-	FTB	0B0	-	-	407	-	-
1957-4185	2436161.50	1957 Nov 19	Corporal	-	-	-	NS	-	NS	-	-	-	407	-	-
1958-4254	2436240.50	1958 Feb 6	Corporal	-	-	-	NS	-	NS	-	-	-	407	-	-
1958-4226	2436322.50	1958 Apr 29	Corporal	-	-	-	NS	-	NS	-	-	-	407	-	-
1958-4227	2436394.50	1958 Jun 30	Corporal	-	-	-	NS	-	NS	-	-	-	407	-	-
1958-4228	2436415.50	1958 Aug 15	Corporal	-	-	-	NS	-	NS	-	-	-	407	-	-
1958-4229	2436461.50	1958 Sep 15	Corporal	-	-	-	NS	-	NS	-	-	-	407	-	-
1958-4230	2436466.50	1958 Sep 15	Corporal	-	-	-	NS	-	NS	-	-	-	407	-	-
1958-4231	2436446.50	1958 Sep 15	Corporal	-	-	-	NS	-	NS	-	-	-	407	-	-
1958-4232	2436446.50	1958 Sep 15	Corporal	-	-	-	NS	-	NS	-	-	-	407	-	-
1958-4233	2436471.50	1958 Sep 25	Corporal	-	-	-	NS	-	NS	-	-	-	407	-	-
1959-417	2436599.50	1959 Feb	Corporal	-	-	-	NS	-	NS	-	-	-	407	-	-
1959-418	2436599.50	1959 Feb	Corporal	-	-	-	NS	-	NS	-	-	-	407	-	-
1959-419	2436599.50	1959 Feb	Corporal	-	-	-	NS	-	NS	-	-	-	407	-	-
1959-420	2436599.50	1959 Feb	Corporal	-	-	-	NS	-	NS	-	-	-	407	-	-
1959-421	2436599.50	1959 Feb	Corporal	-	-	-	NS	-	NS	-	-	-	407	-	-
1959-422	2436627.50	1959 Mar	Corporal	-	-	-	NS	-	NS	-	-	-	407	-	-
1959-423	2436627.50	1959 Mar	Corporal	-	-	-	NS	-	NS	-	-	-	407	-	-
1959-424	2436627.50	1959 Mar	Corporal	-	-	-	NS	-	NS	-	-	-	407	-	-
1959-425	2436658.50	1959 Apr	Corporal	-	-	-	NS	-	NS	-	-	-	407	-	-
1959-426	2436658.50	1959 Apr	Corporal	-	-	-	NS	-	NS	-	-	-	407	-	-
1959-427	2436658.50	1959 Apr	Corporal	-	-	-	NS	-	NS	-	-	-	407	-	-
1959-428	2436658.50	1959 Apr	Corporal	-	-	-	NS	-	NS	-	-	-	407	-	-
1959-429	2436658.50	1959 Apr	Corporal	-	-	-	NS	-	NS	-	-	-	407	-	-
1959-430	2436658.50	1959 Apr	Corporal	-	-	-	NS	-	NS	-	-	-	407	-	-
1959-431	2436658.50	1959 Apr	Corporal	-	-	-	NS	-	NS	-	-	-	407	-	-
1959-432	2436658.50	1959 Apr	Corporal	-	-	-	NS	-	NS	-	-	-	407	-	-
1959-433	2436658.50	1959 Apr	Corporal	-	-	-	NS	-	NS	-	-	-	407	-	-
1959-434	2436658.50	1959 Apr	Corporal	-	-	-	NS	-	NS	-	-	-	407	-	-
1959-435	2436658.50	1959 Apr	Corporal	-	-	-	NS	-	NS	-	-	-	407	-	-
1959-436	2436658.50	1959 Apr	Corporal	-	-	-	NS	-	NS	-	-	-	407	-	-
1959-437	2436658.50	1959 Apr	Corporal	-	-	-	NS	-	NS	-	-	-	407	-	-
1959-438	2436658.50	1959 Apr	Corporal	-	-	-	NS	-	NS	-	-	-	407	-	-
1959-439	2436658.50	1959 Apr	Corporal	-	-	-	NS	-	NS	-	-	-	407	-	-
1959-440	2436658.50	1959 Apr	Corporal	-	-	-	NS	-	NS	-	-	-	407	-	-
1959-441	2436658.50	1959 Apr	Corporal	-	-	-	NS	-	NS	-	-	-	407	-	-
1959-442	2436658.50	1959 Apr	Corporal	-	-	-	NS	-	NS	-	-	-	407	-	-
1959-443	2436658.50	1959 Apr	Corporal	-	-	-	NS	-	NS	-	-	-	407	-	-
1959-444	2436658.50	1959 Apr	Corporal	-	-	-	NS	-	NS	-	-	-	407	-	-
1959-445	2436658.50	1959 Apr	Corporal	-	-	-	NS	-	NS	-	-	-	407	-	-
1959-446	2436658.50	1959 Apr	Corporal	-	-	-	NS	-	NS	-	-	-	407	-	-
1959-447	2436658.50	1959 Apr	Corporal	-	-	-	NS	-	NS	-	-	-	407	-	-
1959-448	2436658.50	1959 Apr	Corporal	-	-	-	NS	-	NS	-	-	-	407	-	-
1959-449	2436658.50	1959 Apr	Corporal	-	-	-	NS	-	NS	-	-	-	407	-	-
1959-450	2436658.50	1959 Apr	Corporal	-	-	-	NS	-	NS	-	-	-	407	-	-
1959-451	2436658.50	1959 Apr	Corporal	-	-	-	NS	-	NS	-	-	-	407	-	-
1959-452	2436658.50	1959 Apr	Corporal	-	-	-	NS	-	NS	-	-	-	407	-	-
1959-453	2436658.50	1959 Apr	Corporal	-	-	-	NS	-	NS	-	-	-	407	-	-
1959-454	2436658.50	1959 Apr	Corporal	-	-	-	NS	-	NS	-	-	-	407	-	-
1959-455	2436658.50	1959 Apr	Corporal	-	-	-	NS	-	NS	-	-	-	407	-	-
1959-456	2436658.50	1959 Apr	Corporal	-	-	-	NS	-	NS	-	-	-	407	-	-
1959-457	2436658.50	1959 Apr	Corporal	-	-	-	NS	-	NS	-	-	-	407	-	-
1959-458	2436658.50	1959 Apr	Corporal	-	-	-	NS	-	NS	-	-	-	407	-	-
1959-459	2436658.50	1959 Apr	Corporal	-	-	-	NS	-	NS	-	-	-	407	-	-
1959-460	2436658.50	1959 Apr	Corporal	-	-	-	NS	-	NS	-	-	-	407	-	-
1959-461	2436658.50	1959 Apr	Corporal	-	-	-	NS	-	NS	-	-	-	407	-	-
1959-462	2436658.50	1959 Apr	Corporal	-	-	-	NS	-	NS	-	-	-	407	-	-
1959-463	2436658.50	1959 Apr	Corporal	-	-	-	NS	-	NS	-	-	-	407	-	-
1959-464	2436658.50	1959 Apr	Corporal	-	-	-	NS	-	NS	-	-	-	407	-	-
1959-465	2436658.50	1959 Apr	Corporal	-	-	-	NS	-	NS	-	-	-	407	-	-
1959-466	2436658.50	1959 Apr	Corporal	-	-	-	NS	-	NS	-	-	-	407	-	-
1959-467	2436658.50	1959 Apr	Corporal	-	-	-	NS	-	NS	-	-	-	407	-	-
1959-468	2436658.50	1959 Apr	Corporal	-	-	-	NS	-	NS	-	-	-	407	-	-
1959-469	2436658.50	1959 Apr	Corporal	-	-	-	NS	-	NS	-	-	-	407	-	-
1959-470	2436658.50	1959 Apr	Corporal	-	-	-	NS	-	NS	-	-	-	407	-	-
1959-471	2436658.50	1959 Apr	Corporal	-	-	-	NS	-	NS	-	-	-	407	-	-
1959-472	2436658.50	1959													

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Launch_Mission	FlightCode	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee_Km	Range_Km	Dest
1959-A149	2436811.50	1959 Sep	Corporal	-	-	-	-	-	-	NS	-	-	-	407	-	-
1959-A150	2436811.50	1959 Sep	Corporal	-	-	-	-	-	-	NS	-	-	-	407	-	-
1959-A151	2436811.50	1959 Sep	Corporal	-	-	-	-	-	-	NS	-	-	-	407	-	-
1959-A152	2436811.50	1959 Sep	Corporal	-	-	-	-	-	-	NS	-	-	-	407	-	-
1959-A153	2436811.50	1959 Sep	Corporal	-	-	-	-	-	-	NS	-	-	-	407	-	-
1959-A154	2436902.50	1959 Dec	Corporal	-	-	-	-	-	-	NS	-	-	-	407	-	-
1959-A198	2436902.50	1959 Dec	Corporal	-	-	-	-	-	-	NS	-	-	-	407	-	-
1960-A24	2436964.50	1960 Feb	Corporal	-	-	-	-	-	-	NS	-	-	-	407	-	-
1960-A25	2436964.50	1960 Feb	Corporal	-	-	-	-	-	-	NS	-	-	-	407	-	-
1960-A26	2436964.50	1960 Feb	Corporal	-	-	-	-	-	-	NS	-	-	-	407	-	-
1960-A27	2436964.50	1960 Feb	Corporal	-	-	-	-	-	-	NS	-	-	-	407	-	-
1960-A56	2436993.50	1960 Mar	Corporal	-	-	-	-	-	-	NS	-	-	-	407	-	-
1960-A57	2436993.50	1960 Mar	Corporal	-	-	-	-	-	-	NS	-	-	-	407	-	-
1960-A58	2436993.50	1960 Mar	Corporal	-	-	-	-	-	-	NS	-	-	-	407	-	-
1960-A59	2436993.50	1960 Mar	Corporal	-	-	-	-	-	-	NS	-	-	-	407	-	-
1960-A80	2437024.50	1960 Apr	Corporal	-	-	-	-	-	-	NS	-	-	-	407	-	-
1960-A81	2437024.50	1960 Apr	Corporal	-	-	-	-	-	-	NS	-	-	-	407	-	-
1960-A82	2437024.50	1960 Apr	Corporal	-	-	-	-	-	-	NS	-	-	-	407	-	-
1960-A83	2437024.50	1960 Apr	Corporal	-	-	-	-	-	-	NS	-	-	-	407	-	-
1960-A84	2437024.50	1960 Apr	Corporal	-	-	-	-	-	-	NS	-	-	-	407	-	-
1960-A85	2437024.50	1960 Apr	Corporal	-	-	-	-	-	-	NS	-	-	-	407	-	-
1960-A86	2437024.50	1960 Apr	Corporal	-	-	-	-	-	-	NS	-	-	-	407	-	-
1960-A87	2437024.50	1960 Apr	Corporal	-	-	-	-	-	-	NS	-	-	-	407	-	-
1960-A107	2437054.50	1960 May	Corporal	-	-	-	-	-	-	NS	-	-	-	407	-	-
1960-A108	2437054.50	1960 May	Corporal	-	-	-	-	-	-	NS	-	-	-	407	-	-
1960-A109	2437054.50	1960 May	Corporal	-	-	-	-	-	-	NS	-	-	-	407	-	-
1960-A110	2437054.50	1960 May	Corporal	-	-	-	-	-	-	NS	-	-	-	407	-	-
1960-A383	2437081.12	1960 May 26 1446	Corporal	-	UK_24	-	-	-	-	SUIST	-	-	-	407	-	-
1960-A384	2437082.10	1960 May 27 1421	Corporal	-	UK_24	-	-	-	-	SUIST	-	-	-	407	-	-
1960-A131	2437085.50	1960 Jun	Corporal	-	-	-	-	-	-	NS	-	-	-	407	-	-
1960-A132	2437085.50	1960 Jun	Corporal	-	-	-	-	-	-	NS	-	-	-	407	-	-
1960-A133	2437085.50	1960 Jun	Corporal	-	-	-	-	-	-	NS	-	-	-	407	-	-
1960-A134	2437085.50	1960 Jun	Corporal	-	-	-	-	-	-	NS	-	-	-	407	-	-
1960-A135	2437085.50	1960 Jun	Corporal	-	-	-	-	-	-	NS	-	-	-	407	-	-
1960-A136	2437085.50	1960 Jun	Corporal	-	-	-	-	-	-	NS	-	-	-	407	-	-
1960-A137	2437085.50	1960 Jun	Corporal	-	-	-	-	-	-	NS	-	-	-	407	-	-
1960-A385	2437087.22	1960 Jun 2 0033	Corporal	-	UK_25	-	-	-	-	SUIST	-	-	-	407	-	-
1960-A138	2437088.50	1960 Jun 3 1146	Corporal	-	-	-	-	-	-	NS	-	-	-	407	-	-
1960-A386	2437089.39	1960 Jun 4 1146	Corporal	-	UKH-2 Target	-	-	-	-	SUIST	-	-	-	407	-	-
1960-A387	2437090.39	1960 Jun 4 2116	Corporal	-	UK_26	-	-	-	-	SUIST	-	-	-	407	-	-
1960-A388	2437094.17	1960 Jun 6 1616	Corporal	-	UK_27	-	-	-	-	SUIST	-	-	-	407	-	-
1960-A389	2437095.34	1960 Jun 10 2045	Corporal	-	UK_28	-	-	-	-	SUIST	-	-	-	407	-	-
1960-A390	2437115.04	1960 Jun 29 1257	Corporal	-	UK_29	-	-	-	-	SUIST	-	-	-	407	-	-
1960-A391	2437115.16	1960 Jun 30 1549	Corporal	-	UK_30	-	-	-	-	SUIST	-	-	-	407	-	-
1960-A159	2437115.50	1960 Jun 1	Corporal	-	-	-	-	-	-	NS	-	-	-	407	-	-
1960-A160	2437115.50	1960 Jun 1	Corporal	-	-	-	-	-	-	NS	-	-	-	407	-	-
1960-A161	2437115.50	1960 Jun 1	Corporal	-	-	-	-	-	-	NS	-	-	-	407	-	-
1960-A392	2437118.16	1960 Jun 1 1545	Corporal	-	UK_32	-	-	-	-	SUIST	-	-	-	407	-	-
1960-A174	2437148.50	1960 Aug	Corporal	-	-	-	-	-	-	NS	-	-	-	407	-	-
1960-A175	2437148.50	1960 Aug	Corporal	-	-	-	-	-	-	NS	-	-	-	407	-	-
1960-A176	2437148.50	1960 Aug	Corporal	-	-	-	-	-	-	NS	-	-	-	407	-	-
1960-A177	2437148.50	1960 Aug	Corporal	-	-	-	-	-	-	NS	-	-	-	407	-	-
1960-A178	2437148.50	1960 Aug	Corporal	-	-	-	-	-	-	NS	-	-	-	407	-	-
1960-A179	2437148.50	1960 Aug	Corporal	-	-	-	-	-	-	NS	-	-	-	407	-	-
1960-A180	2437148.50	1960 Aug	Corporal	-	-	-	-	-	-	NS	-	-	-	407	-	-
1960-A181	2437148.50	1960 Aug	Corporal	-	-	-	-	-	-	NS	-	-	-	407	-	-
1960-A182	2437148.50	1960 Aug	Corporal	-	-	-	-	-	-	NS	-	-	-	407	-	-
1960-A211	2437177.50	1960 Sep	Corporal	-	-	-	-	-	-	NS	-	-	-	407	-	-
1960-A212	2437177.50	1960 Sep	Corporal	-	-	-	-	-	-	NS	-	-	-	407	-	-
1960-A213	2437177.50	1960 Sep	Corporal	-	-	-	-	-	-	NS	-	-	-	407	-	-
1960-A214	2437177.50	1960 Sep	Corporal	-	-	-	-	-	-	NS	-	-	-	407	-	-
1960-A233	2437207.50	1960 Oct	Corporal	-	-	-	-	-	-	NS	-	-	-	407	-	-
1960-A234	2437207.50	1960 Oct	Corporal	-	-	-	-	-	-	NS	-	-	-	407	-	-
1960-A235	2437207.50	1960 Oct	Corporal	-	-	-	-	-	-	NS	-	-	-	407	-	-
1960-A236	2437207.50	1960 Oct	Corporal	-	-	-	-	-	-	NS	-	-	-	407	-	-
1960-A276	2437268.50	1960 Dec	Corporal	-	-	-	-	-	-	NS	-	-	-	407	-	-
1960-A277	2437268.50	1960 Dec	Corporal	-	-	-	-	-	-	NS	-	-	-	407	-	-
1960-A278	2437268.50	1960 Dec	Corporal	-	-	-	-	-	-	NS	-	-	-	407	-	-
1960-A279	2437268.50	1960 Dec	Corporal	-	-	-	-	-	-	NS	-	-	-	407	-	-
1961-A02	2437299.50	1961 Jan	Corporal	-	-	-	-	-	-	NS	-	-	-	407	-	-
1961-A36	2437330.50	1961 Feb	Corporal	-	-	-	-	-	-	NS	-	-	-	407	-	-
1961-A37	2437330.50	1961 Feb	Corporal	-	-	-	-	-	-	NS	-	-	-	407	-	-
1961-A54	2437358.50	1961 Mar	Corporal	-	-	-	-	-	-	NS	-	-	-	407	-	-
1961-A55	2437358.50	1961 Mar	Corporal	-	-	-	-	-	-	NS	-	-	-	407	-	-
1961-A56	2437358.50	1961 Mar	Corporal	-	-	-	-	-	-	NS	-	-	-	407	-	-
1961-A57	2437358.50	1961 Mar	Corporal	-	-	-	-	-	-	NS	-	-	-	407	-	-
1961-A58	2437358.50	1961 Mar	Corporal	-	-	-	-	-	-	NS	-	-	-	407	-	-
1961-A59	2437358.50	1961 Mar	Corporal	-	-	-	-	-	-	NS	-	-	-	407	-	-
1961-A60	2437358.50	1961 Mar	Corporal	-	-	-	-	-	-	NS	-	-	-	407	-	-
1961-A84	2437389.50	1961 Apr	Corporal	-	-	-	-	-	-	NS	-	-	-	407	-	-
1961-A85	2437389.50	1961 Apr	Corporal	-	-	-	-	-	-	NS	-	-	-	407	-	-
1961-A86	2437389.50	1961 Apr	Corporal	-	-	-	-	-	-	NS	-	-	-	407	-	-
1961-A87	2437389.50	1961 Apr	Corporal	-	-	-	-	-	-	NS	-	-	-	407	-	-
1961-A88	2437389.50	1961 Apr	Corporal	-	-	-	-	-	-	NS	-	-	-	407	-	-
1961-A89	2437389.50	1961 Apr	Corporal	-	-	-	-	-	-	NS	-	-	-	407	-	-
1961-A114	2437419.50	1961 May	Corporal	-	-	-	-	-	-	NS	-	-	-	407	-	-
1961-A115	2437419.50	1961 May	Corporal	-	-	-	-	-	-	NS	-	-	-	407	-	-

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Launch_Mission	FlightCode	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee Km	Range Km	Dest
1961-A116	2437419.50	1961 May	Corporal	-	-	-	-	-	-	NS	-	-	-	407	-	-
1961-A117	2437419.50	1961 May	Corporal	-	-	-	-	-	-	NS	-	-	-	407	-	-
1961-A118	2437419.50	1961 May	Corporal	-	-	-	-	-	-	NS	-	-	-	407	-	-
1961-A396	2437423.50	1961 May 4?	Corporal	-	UK	-	-	-	-	SU1ST	-	-	-	407	-	-
1961-A397	2437442.50	1961 May 23?	Corporal	-	UK	-	-	-	-	SU1ST	-	-	-	407	-	-
1961-A132	2437450.50	1961 Jun	Corporal	-	-	-	-	-	-	NS	-	-	-	407	-	-
1961-A133	2437450.50	1961 Jun	Corporal	-	-	-	-	-	-	NS	-	-	-	407	-	-
1961-A134	2437450.50	1961 Jun	Corporal	-	-	-	-	-	-	NS	-	-	-	407	-	-
1961-A135	2437450.50	1961 Jun	Corporal	-	-	-	-	-	-	NS	-	-	-	407	-	-
1961-A136	2437450.50	1961 Jun	Corporal	-	-	-	-	-	-	NS	-	-	-	407	-	-
1961-A137	2437450.50	1961 Jun	Corporal	-	-	-	-	-	-	NS	-	-	-	407	-	-
1961-A138	2437450.50	1961 Jun	Corporal	-	-	-	-	-	-	NS	-	-	-	407	-	-
1961-A139	2437450.50	1961 Jun	Corporal	-	-	-	-	-	-	NS	-	-	-	407	-	-
1961-A159	2437480.50	1961 Jun	Corporal	-	-	-	-	-	-	NS	-	-	-	407	-	-
1961-A160	2437480.50	1961 Jun	Corporal	-	-	-	-	-	-	NS	-	-	-	407	-	-
1961-A161	2437480.50	1961 Jun	Corporal	-	-	-	-	-	-	NS	-	-	-	407	-	-
1961-A162	2437480.50	1961 Jun	Corporal	-	-	-	-	-	-	NS	-	-	-	407	-	-
1961-A163	2437480.50	1961 Jun	Corporal	-	-	-	-	-	-	NS	-	-	-	407	-	-
1961-A164	2437480.50	1961 Jun	Corporal	-	-	-	-	-	-	NS	-	-	-	407	-	-
1961-A173	2437511.50	1961 Aug	Corporal	-	-	-	-	-	-	NS	-	-	-	407	-	-
1961-A174	2437511.50	1961 Aug	Corporal	-	-	-	-	-	-	NS	-	-	-	407	-	-
1961-A175	2437511.50	1961 Aug	Corporal	-	-	-	-	-	-	NS	-	-	-	407	-	-
1961-A176	2437511.50	1961 Aug	Corporal	-	-	-	-	-	-	NS	-	-	-	407	-	-
1961-A177	2437511.50	1961 Aug	Corporal	-	-	-	-	-	-	NS	-	-	-	407	-	-
1961-A178	2437511.50	1961 Aug	Corporal	-	-	-	-	-	-	NS	-	-	-	407	-	-
1961-A179	2437511.50	1961 Aug	Corporal	-	-	-	-	-	-	NS	-	-	-	407	-	-
1961-A180	2437511.50	1961 Aug	Corporal	-	-	-	-	-	-	NS	-	-	-	407	-	-
1961-A395	2437322.50	1961 Jan 23	Corporal	-	-	Target	-	-	-	NS	-	-	-	407	-	-
1961-A208	2437572.50	1961 Oct	Corporal	-	-	-	-	-	-	NS	-	-	-	407	-	-
1961-A209	2437572.50	1961 Oct	Corporal	-	-	-	-	-	-	NS	-	-	-	407	-	-
1961-A210	2437572.50	1961 Oct	Corporal	-	-	-	-	-	-	NS	-	-	-	407	-	-
1961-A211	2437572.50	1961 Oct	Corporal	-	-	-	-	-	-	NS	-	-	-	407	-	-
1962-A24	2437723.50	1962 Mar	Corporal	-	-	-	-	-	-	NS	-	-	-	407	-	-
1962-A25	2437723.50	1962 Mar	Corporal	-	-	-	-	-	-	NS	-	-	-	407	-	-
1962-A26	2437723.50	1962 Mar	Corporal	-	-	-	-	-	-	NS	-	-	-	407	-	-
1962-A27	2437723.50	1962 Mar	Corporal	-	-	-	-	-	-	NS	-	-	-	407	-	-
1962-A43	2437754.50	1962 Apr	Corporal	-	-	-	-	-	-	NS	-	-	-	407	-	-
1962-A63	2437784.50	1962 May	Corporal	-	-	-	-	-	-	NS	-	-	-	407	-	-
1962-A68	2437815.50	1962 Jun	Corporal	-	-	-	-	-	-	NS	-	-	-	407	-	-
1962-A108	2437845.50	1962 Jul	Corporal	-	-	-	-	-	-	NS	-	-	-	407	-	-
1962-A118	2437876.50	1962 Aug	Corporal	-	-	-	-	-	-	NS	-	-	-	407	-	-
1962-A119	2437876.50	1962 Aug	Corporal	-	-	-	-	-	-	NS	-	-	-	407	-	-
1962-A147	2437907.50	1962 Sep	Corporal	-	-	-	-	-	-	NS	-	-	-	407	-	-
1962-A148	2437907.50	1962 Sep	Corporal	-	-	-	-	-	-	NS	-	-	-	407	-	-
1962-A149	2437907.50	1962 Sep	Corporal	-	-	-	-	-	-	NS	-	-	-	407	-	-
1962-A182	2437937.50	1962 Oct	Corporal	-	-	-	-	-	-	NS	-	-	-	407	-	-
1962-A183	2437937.50	1962 Oct	Corporal	-	-	-	-	-	-	NS	-	-	-	407	-	-
1962-A184	2437965.50	1962 Oct	Corporal	-	-	-	-	-	-	NS	-	-	-	407	-	-
1962-A182	2437965.50	1962 Nov	Corporal	-	-	-	-	-	-	NS	-	-	-	407	-	-
1962-A183	2437965.50	1962 Nov	Corporal	-	-	-	-	-	-	NS	-	-	-	407	-	-
1962-A204	2437995.50	1962 Nov	Corporal	-	-	-	-	-	-	NS	-	-	-	407	-	-
1965-A204	2439054.50	1965 Dec 21	Corporal	-	-	Anti-SLBM Target	-	-	-	SNI	-	-	-	407	-	-
1965-A205	2439054.50	1965 Nov?	Corporal	-	-	Anti-SLBM Target	-	-	-	SNI	-	-	-	407	-	-
1965-A226	2439064.50	1965 Nov?	Corporal	-	-	Anti-SLBM Target	-	-	-	SNI	-	-	-	407	-	-





Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	DrPay	Agency	Launch_Code	Group	Category	LCite	Cite	Notes
1947-A12	2432327.50	1947 May 22	Corporal E	-	1	0.000	ORD	MS	-	Test	WSMR-PAO	-	-
1947-A14	2432394.23	1947 Jul 17 1730	Corporal E	-	2	0.000	ORD	MF	-	Test	JPL-CSS1	WSMR-PAO	-
1947-A30	2432494.46	1947 Nov 4 2305	Corporal E	-	3	0.000	ORD	MS	-	Test	JPL-CSS1	WSMR-PAO	-
1949-A22	2433074.50	1949 Jun 7	Corporal E	-	4E	0.000	ORD	MF	-	Test	WSMR-PAO	-	-
1950-M06	2433473.50	1950 Jul 11	Corporal E	-	5E	0.000	ORDSA	MS	-	Test	WSMR-PAO	-	-
1950-M12	2433587.50	1950 Nov 2	Corporal E	-	6E	0.000	ORDSA	MS	-	Test	WSMR-PAO	-	-
1951-M01	2433662.50	1951 Jan 16	Corporal E	-	7R	0.000	ORDSA	MS	-	Test	WSMR-PAO	-	-
1951-M02	2433727.50	1951 Mar 22	Corporal E	-	8R	0.000	ORDSA	MS	-	Test	WSMR-PAO	-	-
1951-M06	2433839.50	1951 Jul 12	Corporal E	-	9R	0.000	ORDSA	MS	-	Test	WSMR-PAO	-	-
1951-A70	2433929.50	1951 Oct 10	Corporal E	-	11-10	0.000	ORDSA	MF	-	Test	WSMR-PAO	-	-
1951-A80	2433996.50	1951 Dec 06	Corporal E	-	12R	0.000	ORDSA	MF	-	Test	WSMR-PAO	-	-
1952-A09	2434035.50	1952 Jan 24	Corporal	-	14-12R	0.000	ORDSA	HU	-	Test	wsmr-history.org	-	-
1952-A16	2434040.50	1952 Jan 29	Corporal	-	15-13 R	0.000	ORDSA	HU	-	Test	wsmr-history.org	-	-
1952-A43	2434063.50	1952 Mar 12	Corporal	-	17-14R	0.000	ORDSA	HU	-	Test	wsmr-history.org	-	-
1952-A46	2434068.50	1952 Mar 17	Corporal	-	18-15	0.000	ORDSA	HU	-	Test	wsmr-history.org	-	-
1952-A60	2434092.50	1952 Mar 21	Corporal	-	19-16	0.000	ORDSA	HU	-	Test	wsmr-history.org	-	-
1952-A68	2434126.50	1952 Apr 24	Corporal	-	21-17	0.000	ORDSA	HU	-	Test	wsmr-history.org	-	-
1952-A71	2434131.50	1952 Apr 29	Corporal	-	22-18	0.000	ORDSA	HU	-	Test	wsmr-history.org	-	-
1952-A74	2434144.50	1952 May 12	Corporal	-	23-19	0.000	ORDSA	HU	-	Test	wsmr-history.org	-	-
1952-A76	2434148.50	1952 May 16	Corporal	-	24-20NSC	0.000	ORDSA	HU	-	Test	wsmr-history.org	-	-
1952-A88	2434185.50	1952 May 23	Corporal	-	21R	0.000	ORDSA	HU	-	Test	wsmr-history.org	-	-
1952-A100	2434187.50	1952 Jun 19	Corporal	-	22R	0.000	ORDSA	MS	-	Test	CorporalHist	-	-
1952-A103	2434190.50	1952 Jun 27	Corporal	-	24R	0.000	ORDSA	HU	-	Test	wsmr-history.org	-	-
1952-A106	2434195.50	1952 Jul 02	Corporal	-	99R	0.000	ORDSA	HU	-	Test	wsmr-history.org	-	-
1952-A111	2434204.50	1952 Jul 11	Corporal	-	26R	0.000	ORDSA	HU	-	Test	wsmr-history.org	-	-
1952-A113	2434210.50	1952 Jul 17	Corporal	-	26R	0.000	ORDSA	HU	-	Test	wsmr-history.org	-	-
1952-A119	2434221.50	1952 Jul 28	Corporal	-	27R	0.000	ORDSA	HU	-	Test	wsmr-history.org	-	-
1952-A129	2434231.50	1952 Aug 07	Corporal	-	28R	0.000	ORDSA	HU	-	Test	wsmr-history.org	-	-
1952-A134	2434236.50	1952 Aug 12	Corporal	-	29R	0.000	ORDSA	HU	-	Test	wsmr-history.org	-	-
1952-A144	2434261.50	1952 Aug 27	Corporal	-	30R	0.000	ORDSA	HU	-	Test	wsmr-history.org	-	-
1952-A155	2434267.50	1952 Sep 12	Corporal	-	31R	0.000	ORDSA	HU	-	Test	wsmr-history.org	-	-
1952-A164	2434280.50	1952 Sep 25	Corporal	-	32R	0.000	ORDSA	HU	-	Test	wsmr-history.org	-	-
1952-A170	2434287.50	1952 Oct 02	Corporal	-	33R	0.000	ORDSA	HU	-	Test	wsmr-history.org	-	-
1952-A216	2434326.50	1952 Nov 10	Corporal	-	34R	0.000	ORDSA	HU	-	Test	wsmr-history.org	-	-
1952-A218	2434329.50	1952 Nov 13	Corporal	-	35R	0.000	ORDSA	HU	-	Test	wsmr-history.org	-	-
1952-A224	2434353.50	1952 Nov 17	Corporal	-	36R	0.000	ORDSA	HU	-	Test	wsmr-history.org	-	-
1952-A253	2434356.50	1952 Nov 20	Corporal	-	37R	0.000	ORDSA	HU	-	Test	wsmr-history.org	-	-
1952-A250	2434359.50	1952 Dec 03	Corporal	-	38R	0.000	ORDSA	HU	-	Test	wsmr-history.org	-	-
1952-A262	2434365.50	1952 Dec 09	Corporal	-	39R	0.000	ORDSA	HU	-	Test	wsmr-history.org	-	-
1952-A270	2434362.50	1952 Dec 16	Corporal	-	40R	0.000	ORDSA	HU	-	Test	wsmr-history.org	-	-
1953-A23	2434380.50	1953 Jan 13	Corporal	-	41R	0.000	ORDSA	HU	-	Test	wsmr-history.org	-	-
1953-A43	2434407.50	1953 Jan 30	Corporal	-	42R	0.000	ORDSA	HU	-	Test	wsmr-history.org	-	-
1953-A46	2434413.50	1953 Feb 06	Corporal	-	43R	0.000	ORDSA	HU	-	Test	wsmr-history.org	-	-
1953-A70	2434428.50	1953 Feb 26	Corporal	-	1E/1247	0.000	ORDSA	HU	-	Test	wsmr-history.org	-	-
1953-A76	2434432.50	1953 Feb 26	Corporal	-	5R	0.000	ORDSA	HU	-	Test	wsmr-history.org	-	-
1953-A76	2434432.50	1953 Feb 26	Corporal	-	51E/1261	0.000	ORDSA	HU	-	Test	wsmr-history.org	-	-
1953-A76	2434432.50	1953 Feb 26	Corporal	-	57R	0.000	ORDSA	HU	-	Test	wsmr-history.org	-	-
1953-A106	2434448.50	1953 Mar 12	Corporal	-	3E/1247	0.000	ORDSA	HU	-	Test	wsmr-history.org	-	-
1953-A139	2434469.50	1953 Mar 23	Corporal	-	126NS	0.000	ORDSA	HU	-	Test	wsmr-history.org	-	-
1953-A156	2434486.50	1953 Apr 02	Corporal	-	126NS	0.000	ORDSA	HU	-	Test	wsmr-history.org	-	-
1953-A182	2434488.50	1953 Apr 21	Corporal	-	126NS	0.000	ORDSA	HU	-	Test	wsmr-history.org	-	-
1953-A182	2434488.50	1953 Apr 27	Corporal	-	126NS	0.000	ORDSA	HU	-	Test	wsmr-history.org	-	-
1953-A219	2434511.50	1953 Apr 14	Corporal	-	4E/2 RS	0.000	ORDSA	HU	-	Test	wsmr-history.org	-	-
1953-A227	2434518.50	1953 May 14	Corporal	-	126R	0.000	ORDSA	HU	-	Test	wsmr-history.org	-	-
1953-A229	2434519.50	1953 May 21	Corporal	-	126R	0.000	ORDSA	HU	-	Test	wsmr-history.org	-	-
1953-A229	2434519.50	1953 May 22	Corporal	-	1210R	0.000	ORDSA	HU	-	Test	wsmr-history.org	-	-
1953-A236	2434536.50	1953 May 29	Corporal	-	1266R	0.000	ORDSA	HU	-	Test	wsmr-history.org	-	-
1953-A236	2434536.50	1953 Jun 08	Corporal	-	5E/1R	0.000	ORDSA	HU	-	Test	wsmr-history.org	-	-
1953-A236	2434536.50	1953 Jun 19	Corporal	-	1268R	0.000	ORDSA	HU	-	Test	wsmr-history.org	-	-
1953-A239	2434557.50	1953 Jun 24	Corporal	-	1277R	0.000	ORDSA	HU	-	Test	wsmr-history.org	-	-
1953-A279	2434560.50	1953 Jul 02	Corporal	-	1267E	0.000	ORDSA	HU	-	Test	wsmr-history.org	-	-
1953-A292	2434565.50	1953 Jul 07	Corporal	-	1278R	0.000	ORDSA	HU	-	Test	wsmr-history.org	-	-
1953-A294	2434574.50	1953 Jul 16	Corporal	-	1269E	0.000	ORDSA	HU	-	Test	wsmr-history.org	-	-
1953-A310	2434593.50	1953 Aug 04	Corporal	-	1269E	0.000	ORDSA	HU	-	Test	wsmr-history.org	-	-
1953-A314	2434595.50	1953 Aug 06	Corporal	-	1300R	0.000	ORDSA	HU	-	Test	wsmr-history.org	-	-
1953-A315	2434595.50	1953 Aug 06	Corporal	-	1297E	0.000	ORDSA	MF	-	Test	CorporalHist	wsmr-history.org	-
1953-A323	2434602.50	1953 Aug 13	Corporal	-	1297E	0.000	ORDSA	MF	-	Test	CorporalHist	wsmr-history.org	-
1953-A364	2434634.50	1953 Sep 14	Corporal	-	1352R	0.000	ORDSA	HU	-	Test	wsmr-history.org	-	-
1953-A364	2434643.50	1953 Sep 23	Corporal	-	1295R	0.000	ORDSA	HU	-	Test	wsmr-history.org	-	-
1953-A364	2434644.50	1953 Sep 24	Corporal	-	1352R	0.000	ORDSA	HU	-	Test	wsmr-history.org	-	-
1953-A375	2434649.50	1953 Sep 29	Corporal	-	1302R	0.000	ORDSA	HU	-	Test	wsmr-history.org	-	-
1953-A377	2434651.50	1953 Oct 01	Corporal	-	1299E	0.000	ORDSA	HU	-	Test	wsmr-history.org	-	-
1953-A392	2434658.50	1953 Oct 08	Corporal	-	1355R	0.000	ORDSA	HU	-	Test	wsmr-history.org	-	-
1953-A415	2434663.50	1953 Oct 13	Corporal	-	1351E	0.000	ORDSA	HU	-	Test	CorporalHist	wsmr-history.org	-
1953-A400	2434665.50	1953 Oct 15	Corporal	-	1357E	0.000	ORDSA	HU	-	Test	wsmr-history.org	-	-
1953-A419	2434677.50	1953 Oct 27	Corporal	-	1305E	0.000	ORDSA	HU	-	Test	wsmr-history.org	-	-
1953-A432	2434685.50	1953 Nov 04	Corporal	-	1303R	0.000	ORDSA	HU	-	Test	wsmr-history.org	-	-
1953-A434	2434687.50	1953 Nov 06	Corporal	-	1356R	0.000	ORDSA	HU	-	Test	wsmr-history.org	-	-
1953-A439	2434694.50	1953 Nov 13	Corporal	-	1356R	0.000	ORDSA	HU	-	Test	wsmr-history.org	-	-
1953-A447	2434700.50	1953 Nov 19	Corporal	-	1391R	0.000	ORDSA	HU	-	Test	wsmr-history.org	-	-
1953-A468	2434714.50	1953 Dec 03	Corporal	-	1392R	0.000	ORDSA	HU	-	Test	wsmr-history.org	-	-
1953-A474	2434721.50	1953 Dec 10	Corporal	-	1393R	0.000	ORDSA	HU	-	Test	wsmr-history.org	-	-
1953-A477	2434726.50	1953 Dec 15	Corporal	-	12E/1	0.000	ORDSA	HU	-	Test	wsmr-history.org	-	-
1953-A487	2434728.50	1953 Dec 17	Corporal	-	1356R	0.000	ORDSA	HU	-	Test	wsmr-history.org	-	-
1954-A13	2434754.50	1954 Jan 12	Corporal	-	13E/1	0.000	ORDSA	HU	-	Test	wsmr-history.org	-	-
1954-A17	2434757.50	1954 Jan 15	Corporal	-	1394R	0.000	ORDSA	HU	-	Test	wsmr-history.org	-	-
1954-A28	2434763.50	1954 Jan 21	Corporal	-	1395R	0.000	ORDSA	HU	-	Test	wsmr-history.org	-	-
1954-A31	2434764.50	1954 Jan 22	Corporal	-	1312E	0.000	ORDSA	MF	-	Test	wsmr-history.org	-	-

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	DrPay	Agency	Launch_Code	Group	Category	LfCite	Cite	Notes
1964-A34	2434770.50	1964 Jan 28	Corporal	-	1360R	0.000	ORDNSA	HU	-	Test	wmr-history.org	-	-
1964-A32	2434794.50	1964 Feb 11	Corporal	-	1294R	0.000	ORDNSA	HU	-	Test	wmr-history.org	-	-
1964-A64	2434791.50	1964 Feb 18	Corporal	-	1294RD	0.000	ORDNSA	HU	-	Test	wmr-history.org	-	-
1964-A107	2434810.50	1964 Mar 09	Corporal	-	1293R	0.000	ORDNSA	HU	-	Test	wmr-history.org	-	-
1964-A112	2434819.50	1964 Mar 18	Corporal	-	1246F-1	0.000	ORDNSA	HU	-	Test	wmr-history.org	-	-
1964-A123	2434825.50	1964 Mar 24	Corporal	-	3T	0.000	ORDNSA	HU	-	Test	wmr-history.org	-	-
1964-A125	2434827.50	1964 Mar 26	Corporal	-	2T	0.000	ORDNSA	HU	-	Test	wmr-history.org	-	-
1964-A169	2434846.50	1964 Apr 14	Corporal	-	1401R	0.000	ORDNSA	HU	-	Test	wmr-history.org	-	-
1964-A173	2434847.50	1964 Apr 15	Corporal	-	1296R-S	0.000	ORDNSA	HU	-	Test	wmr-history.org	-	-
1964-A197	2434869.50	1964 Apr 27	Corporal	-	4T	0.000	ORDNSA	HU	-	Test	wmr-history.org	-	-
1964-A227	2434865.50	1964 May 03	Corporal	-	5T	0.000	ORDNSA	HU	-	Test	wmr-history.org	-	-
1964-A250	2434866.50	1964 May 04	Corporal	-	1326E	0.000	ORDNSA	HU	-	Test	wmr-history.org	-	-
1964-A251	2434873.50	1964 May 11	Corporal	-	1296R	0.000	ORDNSA	HU	-	Test	wmr-history.org	-	-
1964-A281	2434880.50	1964 May 18	Corporal	-	1403R	0.000	ORDNSA	HU	-	Test	wmr-history.org	-	-
1964-A296	2434887.50	1964 May 25	Corporal	-	1314E	0.000	ORDNSA	HU	-	Test	wmr-history.org	-	-
1964-A301	2434889.50	1964 May 27	Corporal	-	1404R	0.000	ORDNSA	HU	-	Test	wmr-history.org	-	-
1964-A329	2434901.50	1964 Jun 08	Corporal	-	1316E	0.000	ORDNSA	HU	-	Test	wmr-history.org	-	-
1964-A330	2434901.50	1964 Jun 08	Corporal	-	1402R	0.000	ORDNSA	HU	-	Test	wmr-history.org	-	-
1964-A364	2434915.50	1964 Jun 17	Corporal	-	6T	0.000	ORDNSA	HU	-	Test	wmr-history.org	-	-
1964-A381	2434915.50	1964 Jun 22	Corporal	-	1310	0.000	ORDNSA	HU	-	Test	wmr-history.org	-	-
1964-A382	2434922.50	1964 Jun 29	Corporal	-	T-7	0.000	ORDNSA	HU	-	Test	wmr-history.org	-	-
1964-A393	2434925.50	1964 Jun 29	Corporal	-	T-8	0.000	ORDNSA	HU	-	Test	wmr-history.org	-	-
1964-A408	2434945.50	1964 Jul 02	Corporal	-	T-9	0.000	ORDNSA	HU	-	Test	wmr-history.org	-	-
1964-A429	2434946.50	1964 Jul 13	Corporal	-	1328E	0.000	ORDNSA	HU	-	Test	wmr-history.org	-	-
1964-A443	2434950.50	1964 Jul 22	Corporal	-	1276R	0.000	ORDNSA	HU	-	Test	wmr-history.org	-	-
1964-A467	2434962.50	1964 Jul 27	Corporal	-	1406R	0.000	ORDNSA	HU	-	Test	wmr-history.org	-	-
1964-A610	2434994.50	1964 Jul 29	Corporal	-	1407R	0.000	ORDNSA	HU	-	Test	wmr-history.org	-	-
1964-A611	2434995.50	1964 Sep 09	Corporal	-	1405E	0.000	ORDNSA	HU	-	Test	wmr-history.org	-	-
1964-A629	2435006.50	1964 Sep 21	Corporal	-	1407E	0.000	ORDNSA	HU	-	Test	wmr-history.org	-	-
1964-A657	2435008.50	1964 Sep 23	Corporal	-	1408RD	0.000	ORDNSA	HU	-	Test	wmr-history.org	-	-
1964-A658	2435008.50	1964 Sep 23	Corporal	-	T 10	0.000	ORDNSA	HU	-	Test	wmr-history.org	-	-
1964-A658	2435013.50	1964 Sep 28	Corporal	-	T 11	0.000	ORDNSA	HU	-	Test	wmr-history.org	-	-
1964-A658	2435013.50	1964 Sep 28	Corporal	-	T 12	0.000	ORDNSA	HU	-	Test	wmr-history.org	-	-
1964-A646	2435014.50	1964 Sep 29	Corporal	-	1462EU	0.000	ORDNSA	HU	-	Test	wmr-history.org	-	-
1964-A656	2435014.50	1964 Sep 29	Corporal	-	T-14	0.000	ORDNSA	HU	-	Test	wmr-history.org	-	-
1964-A656	2435015.50	1964 Sep 30	Corporal	-	T-15	0.000	ORDNSA	HU	-	Test	wmr-history.org	-	-
1964-A655	2435019.50	1964 Oct 04	Corporal	-	1409RD	0.000	ORDNSA	HU	-	Test	wmr-history.org	-	-
1964-A657	2435019.50	1964 Oct 04	Corporal	-	1410RJ	0.000	ORDNSA	HU	-	Test	wmr-history.org	-	-
1964-A662	2435023.50	1964 Oct 08	Corporal	-	1594R	0.000	ORDNSA	HU	-	Test	wmr-history.org	-	-
1964-A666	2435028.50	1964 Oct 13	Corporal	-	1594R	0.000	ORDNSA	HU	-	Test	wmr-history.org	-	-
1964-A666	2435037.50	1964 Oct 22	Corporal	-	T 16	0.000	ORDNSA	HU	-	Test	wmr-history.org	-	-
1964-A697	2435043.50	1964 Oct 26	Corporal	-	1552RU	0.000	ORDNSA	HU	-	Test	wmr-history.org	-	-
1964-A690	2435047.50	1964 Nov 01	Corporal	-	T 17	0.000	ORDNSA	HU	-	Test	wmr-history.org	-	-
1964-A692	2435064.50	1964 Nov 18	Corporal	-	1551R	0.000	ORDNSA	HU	-	Test	wmr-history.org	-	-
1964-A695	2435069.50	1964 Dec 13	Corporal	-	1554R	0.000	ORDNSA	HU	-	Test	wmr-history.org	-	-
1964-A702	2435091.50	1964 Dec 17	Corporal	-	1558R	0.000	ORDNSA	HU	-	Test	wmr-history.org	-	-
1965-A11	2435093.50	1965 Dec 17	Corporal	-	1558R	0.000	ORDNSA	HU	-	Test	wmr-history.org	-	-
1965-A20	2435105.50	1965 Jan 11	Corporal	-	15462	0.000	ORDNSA	HU	-	Test	wmr-history.org	-	-
1965-A20	2435105.50	1965 Jan 18	Corporal	-	15461	0.000	ORDNSA	HU	-	Test	wmr-history.org	-	-
1965-A20	2435105.50	1965 Jan 19	Corporal	-	14601	0.000	ORDNSA	HU	-	Test	wmr-history.org	-	-
1965-A20	2435105.50	1965 Jan 19	Corporal	-	1467R	0.000	ORDNSA	HU	-	Test	wmr-history.org	-	-
1965-A20	2435105.50	1965 Jan 19	Corporal	-	14661	0.000	ORDNSA	HU	-	Test	wmr-history.org	-	-
1965-A20	2435105.50	1965 Feb 17	Corporal	-	1560R	0.000	ORDNSA	HU	-	Test	wmr-history.org	-	-
1965-A11	2435105.50	1965 Mar 15	Corporal	-	1568R	0.000	ORDNSA	HU	-	Test	wmr-history.org	-	-
1965-A20	2435105.50	1965 Mar 25	Corporal	-	1561E	0.000	ORDNSA	HU	-	Test	wmr-history.org	-	-
1965-A20	2435105.50	1965 Mar 25	Corporal	-	1568R	0.000	ORDNSA	HU	-	Test	wmr-history.org	-	-
1965-A20	2435105.50	1965 Apr 06	Corporal	-	1568R	0.000	ORDNSA	HU	-	Test	wmr-history.org	-	-
1965-A20	2435202.50	1965 Apr 07	Corporal	-	1567E	0.000	ORDNSA	HU	-	Test	wmr-history.org	-	-
1965-A20	2435204.50	1965 Apr 14	Corporal	-	1570E	0.000	ORDNSA	HU	-	Test	wmr-history.org	-	-
1965-A20	2435211.50	1965 Apr 14	Corporal	-	1570E	0.000	ORDNSA	HU	-	Test	wmr-history.org	-	-
1965-A20	2435205.50	1965 Apr 28	Corporal	-	1576E	0.000	ORDNSA	HU	-	Test	wmr-history.org	-	-
1965-A20	2435244.50	1965 May 17	Corporal	-	1411R	0.000	ORDNSA	HU	-	Test	wmr-history.org	-	-
1965-A20	2435250.50	1965 May 23	Corporal	-	1477R	0.000	ORDNSA	HU	-	Test	wmr-history.org	-	-
1965-A425	2435264.50	1965 Jun 06	Corporal	-	1473R	0.000	ORDNSA	HU	-	Test	wmr-history.org	-	-
1965-A442	2435272.50	1965 Jun 14	Corporal	-	1569R	0.000	ORDNSA	HU	-	Test	wmr-history.org	-	-
1965-A583	2435279.50	1965 Jun 21	Corporal	-	1602T	0.000	ORDNSA	HU	-	Test	wmr-history.org	-	-
1965-A583	2435282.50	1965 Jun 24	Corporal	-	1603T	0.000	ORDNSA	HU	-	Test	wmr-history.org	-	-
1965-A586	2435286.50	1965 Jun 28	Corporal	-	1604T	0.000	ORDNSA	HU	-	Test	wmr-history.org	-	-
1965-A586	2435289.50	1965 Jul 1	Corporal	-	1604T	0.000	ORDNSA	HU	-	Test	wmr-history.org	-	-
1965-A587	2435299.50	1965 Jul 11	Corporal	-	1571E	0.000	ORDNSA	HU	-	Test	wmr-history.org	-	-
1965-A588	2435306.50	1965 Jul 18	Corporal	-	1571E	0.000	ORDNSA	HU	-	Test	wmr-history.org	-	-
1965-A589	2435307.50	1965 Jul 19	Corporal	-	T1331	0.000	ORDNSA	HU	-	Test	wmr-history.org	-	-
1965-A590	2435307.50	1965 Jul 19	Corporal	-	T1337	0.000	ORDNSA	HU	-	Test	wmr-history.org	-	-
1965-A591	2435314.50	1965 Jul 26	Corporal	-	1566E	0.000	ORDNSA	HU	-	Test	wmr-history.org	-	-
1965-A593	2435314.50	1965 Jul 26	Corporal	-	1465E	0.000	ORDNSA	HU	-	Test	wmr-history.org	-	-
1965-A594	2435316.50	1965 Jul 28	Corporal	-	1340	0.000	ORDNSA	HU	-	Test	wmr-history.org	-	-
1965-A594	2435316.50	1965 Jul 28	Corporal	-	1579	0.000	ORDNSA	HU	-	Test	wmr-history.org	-	-
1965-A596	2435323.50	1965 Aug 4	Corporal	-	1585E	0.000	ORDNSA	HU	-	Test	wmr-history.org	-	-
1965-A596	2435336.50	1965 Aug 17	Corporal	-	1589	0.000	ORDNSA	HU	-	Test	wmr-history.org	-	-
1965-A597	2435338.50	1965 Aug 19	Corporal	-	1628	0.000	ORDNSA	HU	-	Test	wmr-history.org	-	-
1965-A598	2435342.50	1965 Aug 23	Corporal	-	1607-JS	0.000	ORDNSA	HU	-	Test	wmr-history.org	-	-
1965-A599	2435345.50	1965 Aug 26	Corporal	-	1388	0.000	ORDNSA	HU	-	Test	wmr-history.org	-	-
1965-A600	2435345.50	1965 Aug 26	Corporal	-	1389	0.000	ORDNSA	HU	-	Test	wmr-history.org	-	-
1965-A601	2435349.50	1965 Aug 30	Corporal	-	1618	0.000	ORDNSA	HU	-	Test	wmr-history.org	-	-
1965-A602	2435351.50	1965 Sep 1	Corporal	-	1614	0.000	ORDNSA	HU	-	Test	wmr-history.org	-	-
1965-A603	2435362.50	1965 Sep 12	Corporal	-	1608	0.000	ORDNSA	HU	-	Test	wmr-history.org	-	-
1965-A604	2435370.50	1965 Sep 20	Corporal	-	1654	0.000	ORDNSA	HU	-	Test	wmr-history.org	-	-







Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	DrPlay	Agency	Launch_Code	Group	Category	LCite	Cite	Notes
1961-A116	2437419-50	1961 May	Corporal	-	-	0.000	ORNSA	HU	-	Test	WSHR	-	-
1961-A117	2437419-50	1961 May	Corporal	-	-	0.000	ORNSA	HU	-	Test	WSHR	-	-
1961-A118	2437419-50	1961 May	Corporal	-	-	0.000	ORNSA	HU	-	Test	WSHR	-	-
1961-A396	2437423-50	1961 May 4*	Corporal	-	UK	0.000	ORNSA	HU	-	Test	Urrich	-	-
1961-A397	2437423-50	1961 May 23?	Corporal	-	UK	0.000	ORNSA	HU	-	Test	Urrich	-	-
1961-A132	2437450-50	1961 Jun	Corporal	-	-	0.000	ORNSA	HU	-	Test	WSHR	-	-
1961-A133	2437450-50	1961 Jun	Corporal	-	-	0.000	ORNSA	HU	-	Test	WSHR	-	-
1961-A134	2437450-50	1961 Jun	Corporal	-	-	0.000	ORNSA	HU	-	Test	WSHR	-	-
1961-A135	2437450-50	1961 Jun	Corporal	-	-	0.000	ORNSA	HU	-	Test	WSHR	-	-
1961-A136	2437450-50	1961 Jun	Corporal	-	-	0.000	ORNSA	HU	-	Test	WSHR	-	-
1961-A137	2437450-50	1961 Jun	Corporal	-	-	0.000	ORNSA	HU	-	Test	WSHR	-	-
1961-A138	2437450-50	1961 Jun	Corporal	-	-	0.000	ORNSA	HU	-	Test	WSHR	-	-
1961-A139	2437450-50	1961 Jun	Corporal	-	-	0.000	ORNSA	HU	-	Test	WSHR	-	-
1961-A159	2437480-50	1961 Jul	Corporal	-	-	0.000	ORNSA	HU	-	Test	WSHR	-	-
1961-A160	2437480-50	1961 Jul	Corporal	-	-	0.000	ORNSA	HU	-	Test	WSHR	-	-
1961-A161	2437480-50	1961 Jul	Corporal	-	-	0.000	ORNSA	HU	-	Test	WSHR	-	-
1961-A162	2437480-50	1961 Jul	Corporal	-	-	0.000	ORNSA	HU	-	Test	WSHR	-	-
1961-A163	2437480-50	1961 Jul	Corporal	-	-	0.000	ORNSA	HU	-	Test	WSHR	-	-
1961-A164	2437480-50	1961 Jul	Corporal	-	-	0.000	ORNSA	HU	-	Test	WSHR	-	-
1961-A173	2437511-50	1961 Aug	Corporal	-	-	0.000	ORNSA	HU	-	Test	WSHR	-	-
1961-A174	2437511-50	1961 Aug	Corporal	-	-	0.000	ORNSA	HU	-	Test	WSHR	-	-
1961-A175	2437511-50	1961 Aug	Corporal	-	-	0.000	ORNSA	HU	-	Test	WSHR	-	-
1961-A176	2437511-50	1961 Aug	Corporal	-	-	0.000	ORNSA	HU	-	Test	WSHR	-	-
1961-A177	2437511-50	1961 Aug	Corporal	-	-	0.000	ORNSA	HU	-	Test	WSHR	-	-
1961-A178	2437511-50	1961 Aug	Corporal	-	-	0.000	ORNSA	HU	-	Test	WSHR	-	-
1961-A179	2437511-50	1961 Aug	Corporal	-	-	0.000	ORNSA	HU	-	Test	WSHR	-	-
1961-A180	2437511-50	1961 Aug	Corporal	-	-	0.000	ORNSA	HU	-	Test	WSHR	-	-
1961-A395	2437522-50	1961 Jan 23	Corporal	-	-	0.000	ORNSA	HU	-	Test	WSHR	-	-
1961-A208	2437572-50	1961 Oct	Corporal	-	-	0.000	ORNSA	HU	-	Test	WSHR	-	-
1961-A209	2437572-50	1961 Oct	Corporal	-	-	0.000	ORNSA	HU	-	Test	WSHR	-	-
1961-A210	2437572-50	1961 Oct	Corporal	-	-	0.000	ORNSA	HU	-	Test	WSHR	-	-
1961-A211	2437572-50	1961 Oct	Corporal	-	-	0.000	ORNSA	HU	-	Test	WSHR	-	-
1962-A24	2437723-50	1962 Mar	Corporal	-	-	0.000	AUKC	HU	-	Test	WSHR	-	-
1962-A26	2437723-50	1962 Mar	Corporal	-	-	0.000	AUKC	HU	-	Test	WSHR	-	-
1962-A27	2437723-50	1962 Mar	Corporal	-	-	0.000	AUKC	HU	-	Test	WSHR	-	-
1962-A43	2437794-50	1962 Apr	Corporal	-	-	0.000	AUKC	HU	-	Test	WSHR	-	-
1962-A63	2437794-50	1962 May	Corporal	-	-	0.000	AUKC	HU	-	Test	WSHR	-	-
1962-A68	2437815-50	1962 Jun	Corporal	-	-	0.000	AUKC	HU	-	Test	WSHR	-	-
1962-A105	2437845-50	1962 Jul	Corporal	-	-	0.000	AUKC	HU	-	Test	WSHR	-	-
1962-A119	2437876-50	1962 Aug	Corporal	-	-	0.000	AUKC	HU	-	Test	WSHR	-	-
1962-A116	2437907-50	1962 Sep	Corporal	-	-	0.000	AUKC	HU	-	Test	WSHR	-	-
1962-A117	2437907-50	1962 Sep	Corporal	-	-	0.000	AUKC	HU	-	Test	WSHR	-	-
1962-A118	2437907-50	1962 Sep	Corporal	-	-	0.000	AUKC	HU	-	Test	WSHR	-	-
1962-A119	2437907-50	1962 Sep	Corporal	-	-	0.000	AUKC	HU	-	Test	WSHR	-	-
1962-A149	2437937-50	1962 Oct	Corporal	-	-	0.000	AUKC	HU	-	Test	WSHR	-	-
1962-A162	2437937-50	1962 Oct	Corporal	-	-	0.000	AUKC	HU	-	Test	WSHR	-	-
1962-A181	2437988-50	1962 Nov	Corporal	-	-	0.000	AUKC	HU	-	Test	WSHR	-	-
1962-A182	2437988-50	1962 Nov	Corporal	-	-	0.000	AUKC	HU	-	Test	WSHR	-	-
1962-A183	2437988-50	1962 Nov	Corporal	-	-	0.000	AUKC	HU	-	Test	WSHR	-	-
1962-A184	2437988-50	1962 Nov	Corporal	-	-	0.000	AUKC	HU	-	Test	WSHR	-	-
1962-A182	2437988-50	1962 Nov	Corporal	-	-	0.000	AUKC	HU	-	Test	WSHR	-	-
1962-A206	2437988-50	1962 Oct	Corporal	-	-	0.000	AUKC	HU	-	Test	WSHR	-	-
1965-A204	2439054-50	1965 Oct 21	Corporal	-	-	0.000	NHEX	HU	-	Test	PHRHst65	-	-
1965-A224	2439054-50	1965 Nov?	Corporal	-	-	0.000	NHEX	HU	-	Test	PHRHst65	-	-
1965-A226	2439064-50	1965 Nov?	Corporal	-	-	0.000	NHEX	HU	-	Test	PHRHst65	-	-



Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Mission	Launch_FlightCode	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee km	Range km	Dest
1963-M49	2438326.50	1963 Oct 24	DAC Roc	-	-	USN Eval 2	-	-	-	PA	LC-A	-	-	50?	-	-
1963-M52	2438373.50	1963 Dec 10	DAC Roc	-	-	USN Eval 4	-	-	-	PA	LC-A	-	-	50?	-	-





Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	OrbPay	Agency	Launch_Code	Group	Category	LTCite	Cite	Notes
1963-M49	2438326.50	1963 Oct 24	DAC Rec	-	-	0.000	NUTS?	SU	DAC/	Aeron?	VAFB	MR631028-16	-
1963-M52	2438373.50	1963 Dec 10	DAC Rec	-	-	0.000	NUTS?	SU	DAC/	Aeron?	VAFB	-	-



Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Launch			Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee_Km	Range_Km	Dest
							Mission	FlightCode	Platform								
1993-409	2449218.45	1993 Aug 18 2248:56	DC-X	-	-	-	-	-	WS	-	-	-	-	0	-	-	
1993-412	2449242.22	1993 Sep 11 1712:03	DC-X	-	-	-	-	-	WS	-	-	-	-	0	-	-	
1993-414	2449261.19	1993 Sep 30 1628	DC-X	-	-	-	-	-	WS	-	-	-	-	0	-	-	
1994-406	2449524.11	1994 Jun 20 1442	DC-X	-	-	-	-	-	WS	-	-	-	-	1	-	-	
1994-407	2449531.11	1994 Jun 27 1436	DC-X	-	-	-	-	-	WS	-	-	-	-	0	-	-	
1995-403	2449554.15	1995 May 16 1540:02	DC-X	-	-	-	-	-	WS	-	-	-	-	1	-	-	
1995-404	2449881.11	1995 Jun 12 1438	DC-X	-	-	-	-	-	WS	-	-	-	-	1	-	-	
1995-405	2449906.04	1995 Jul 7 1302	DC-X	-	-	-	-	-	WS	-	-	-	-	2	-	-	
1996-402	2450222.10	1996 May 18 1420	DC-XA	-	-	-	-	-	WS	-	-	-	-	0	-	-	
1996-403	2450242.18	1996 Jun 7 1615	DC-XA	-	-	-	-	-	WS	-	-	-	-	0	-	-	
1996-404	2450243.26	1996 Jun 8 1817	DC-XA	-	-	-	-	-	WS	-	-	-	-	3	-	-	
1996-405	2450296.30	1996 Jul 31 1915	DC-XA	-	-	-	-	-	WS	-	-	-	-	1	-	-	



Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Launch_Orbit	Agency	Launch_Code	Group	Category	LTCite	Cite	Notes
1993-A09	2449218.45	1993 Aug 18 22:43:56	DC-X	-	-	0.000	SDIO	TS	MDAC/	Test	AMST930623-26	-	-
1993-A12	2449242.22	1993 Sep 11 17:12:03	DC-X	-	-	0.000	SDIO	TS	MDAC/	Test	AMST930920-39	-	-
1993-A14	2449261.19	1993 Sep 30 16:28	DC-X	-	-	0.000	SDIO	TS	MDAC/	Test	Wire	AMST931004-19	-
1994-A06	2449524.11	1994 Jun 20 14:42	DC-X	-	-	0.000	SDIO	TS	MDAC/	Test	RiGE	AMST940627-26	-
1994-A07	2449531.11	1994 Jun 27 14:36	DC-X	-	-	0.000	SDIO	TS	MDAC/	Test	Wire	AMST940704-31	-
1995-A03	2449654.15	1995 May 16 15:40:02	DC-X	-	-	0.000	SDIO	TS	MDAC/	Test	RiGE	SN950522-8	-
1995-A04	2449661.11	1995 Jun 12 14:38	DC-X	-	-	0.000	SDIO	TS	MDAC/	Test	SN950619-17	-	-
1995-A05	2449906.04	1995 Jul 7 13:02	DC-X	-	-	0.000	SDIO	TS	MDAC/	Test	Wire	AMST960717-28	-
1996-A02	2450222.10	1996 May 18 14:20	DC-MA	-	-	0.000	MSFC	TS	MDAC/	Test	SN960527-4	-	-
1996-A03	2450242.18	1996 Jun 7 16:15	DC-MA	-	-	0.000	MSFC	TS	MDAC/	Test	SN960610-4	-	-
1996-A04	2450243.26	1996 Jun 8 18:17	DC-MA	-	-	0.000	MSFC	TS	MDAC/	Test	AMST960617-32	Wire	-
1996-A05	2450296.30	1996 Jul 31 19:15	DC-MA	-	-	0.000	MSFC	TF	MDAC/	Test	AP960731	-	-



Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Mission	FlightCode	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee km	Range km	Dest
1990-S188	2447851.50	1990	DF-11	-	-	Test launch	-	-	-	TVSC?	-	-	-	100?	-	-
2002-H34	2452420.50	2002 May 26	Ghaznavi	-	Hafz III	-	-	-	-	SOM?	-	-	-	50?	-	-
2003-M13	2452915.65	2003 Oct 3 0342	Ghaznavi	-	Hafz III	-	-	-	-	SOM?	-	-	-	50?	-	-
2004-M13	2453338.50	2004 Nov 29	Ghaznavi	-	Hafz III	-	-	-	-	SOM	-	-	-	50?	-	-
2006-M05	2453886.50	2006 Jun	Ghaznavi	-	Hafz III	-	-	-	-	SOM?	-	-	-	50?	-	-
2006-M06	2454078.50	2006 Dec 9	Ghaznavi	-	Hafz III	-	-	-	-	SOM?	-	-	-	50?	-	-
2008-M09	2454509.50	2008 Feb 13	Ghaznavi	-	Hafz III	-	-	-	-	SOM?	-	-	-	50?	-	-
2010-M11	2455324.50	2010 May 8	Ghaznavi	-	Hafz III	-	-	-	-	SOM?	-	-	-	50?	-	-
2014-M02	2456769.50	2014 Apr 22	Ghaznavi	-	Hafz III	-	-	-	-	SOM?	-	-	-	50?	-	-
2014-M03	2456785.50	2014 May 8	Ghaznavi	-	Hafz III	-	-	-	-	SOM?	-	-	-	50?	-	-
2018-A51	2458255.48	2018 May 16 2333	OS-X0	-	OS-X0	-	-	-	-	JQ?	-	-	-	39	-	-
2018-A136	2458368.67	2018 Sep 7 0410:03	OS-X1	-	Chongqing Liangjiang	-	-	-	-	JQ	-	-	-	35	-	-
2019-F03	2458569.90	2019 Mar 27 0939	OS-M1	-	OS-M1	-	-	-	-	JQ	-	-	-	10?	-	-
2021-S12	2458288.50	2021 Feb 3?	Ghaznavi	-	Hafz III	-	-	-	-	SOM?	-	-	-	80?	-	-
2021-S13	2458250.88	2021 Feb 5 0906:05	OS-X6B	-	Chongqing Lianjiang	-	-	-	-	JQ?	-	-	-	300?	-	-
2021-S53	2458438.50	2021 Aug 12	Ghaznavi	-	Hafz III	-	-	-	-	SOM?	-	-	-	80?	-	-





Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Agency	Launch_Code	Group	Category	LTCite	Cite	Notes
1990-S188	2447851-50	1990	DF-11	-	-	PLA	NS	-	Test	sinodefense.com	-	-
2002-M94	2452420-50	2002 May 26	Ghaznavi	-	Hatf III	MESCHMP	NS	-	Test	Rigg	missilethreat.com	-
2003-M13	2452915-65	2003 Oct 3 0342	Ghaznavi	-	Hatf III	MESCHMP	NS	-	Test	Rigg	missilethreat.com	-
2004-M13	2453338-50	2004 Nov 29	Ghaznavi	-	Hatf III	MESCHMP	NS	-	Test	AWST041206-22	missilethreat.com	-
2006-M05	2453886-50	2006 Jun	Ghaznavi	-	Hatf III	MESCHMP	NS	-	Test	missilethreat.com	-	-
2006-M06	2454078-50	2006 Dec 9	Ghaznavi	-	Hatf III	MESCHMP	NS	-	Test	missilethreat.com	-	-
2008-M09	2454509-50	2008 Feb 13	Ghaznavi	-	Hatf III	PMAFSC	NS	-	Test	missilethreat.com	-	-
2010-M11	2455294-50	2010 May 8	Ghaznavi	-	Hatf III	PMAFSC	NS	-	Test	Wire	-	-
2014-M02	2456769-50	2014 Apr 22	Ghaznavi	-	Hatf III	PMAFSC	NS	-	Test	Wire	-	-
2014-M03	2456785-50	2014 May 8	Ghaznavi	-	Hatf III	PMAFSC	NS	-	Test	Wire	-	-
2018-A51	2458255-48	2018 May 16 2338	DS-X0	-	DS-X0	LYK	SS	-	Test	Wire	-	-
2018-A136	2458368-67	2018 Sep 7 0410:03	DS-X1	-	Chongqing Liangjiang	LYK	SS	-	Test	nasaespaceflight.com	-	-
2019-F03	2458569-90	2019 Mar 27 0939	DS-M1	-	DS-M1	LYK	OP	CU	Test	nasaespaceflight.com	-	-
2021-S12	2459248-50	2021 Feb 37	Ghaznavi	-	Hatf III	PMAFSC	NS	-	Test	Wire	-	-
2021-S13	2459250-88	2021 Feb 5 0905:05	DS-X6B	-	Chongqing Lianjiang	LYK	SS	-	Test	chinadaily.com.cn	-	-
2021-S63	2459438-50	2021 Aug 12	Ghaznavi	-	Hatf III	PMAFSC	NS	-	Test	Wire	-	-



Launch

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Mission	FlightCode	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee_Km	Range_Km	Dest
1988-501	2447312.50	1988 Jun?	DF-15	-	-	-	-	-	-	TVSC?	-	-	-	100?	-	-
1995-501	2449717.50	1995	DF-15	-	-	-	-	-	-	LEPI	-	-	-	100?	-	-
1996-576	2450150.17	1996 Mar 7 1600?	DF-15	-	-	-	-	-	-	LEPI	-	-	-	100?	-	-
1996-577	2450150.21	1996 Mar 7 1700?	DF-15	-	-	-	-	-	-	LEPI	-	-	-	100?	-	-
1996-578	2450150.25	1996 Mar 7 1800?	DF-15	-	-	-	-	-	-	LEPI	-	-	-	100?	-	-
1996-579	2450155.50	1996 Mar 13	DF-15	-	-	-	-	-	-	LEPI	-	-	-	0?	-	-
1999-601	2451193.50	1999 Jan 15?	Shahen 1	-	-	-	-	-	-	SOM	-	-	-	100?	-	-
1999-526	2451283.71	1999 Apr 15 0458	Shahen 1	-	-	-	-	-	-	SOM	-	-	-	100?	-	Baluch.
2002-561	2452551.60	2002 Oct 4 0230	Shahen 1	-	-	-	-	-	-	SOM	-	-	-	100?	-	-
2003-557	2452920.63	2003 Oct 8 0313	Shahen 1	-	-	-	-	-	-	SOM	-	-	-	100?	-	-
2004-582	2453347.50	2004 Dec 8	Shahen 1	-	-	-	-	-	-	SOM	-	-	-	100?	-	-
2006-568	2454068.50	2006 Nov 29	Shahen 1	-	-	-	-	-	-	SOM	-	-	-	100?	-	-
2008-504	2454490.50	2008 Jan 25	Shahen 1	-	-	-	-	-	-	SOM	-	-	-	100?	-	-
2010-M10	2455524.50	2010 May 8	Shahen 1	-	-	-	-	-	-	SOM?	-	-	-	100?	-	-
2012-519	2456042.50	2012 Apr 25	Shahen 1A	-	-	-	-	-	-	SOM?	-	-	-	100?	-	-
2013-523	2456582.50	2013 Apr 10	Shahen 1	-	-	-	-	-	-	SOM?	-	-	-	100?	-	-
2014-573	2456978.50	2014 Nov 17	Shahen 1A	-	-	-	-	-	-	SOM?	-	-	-	100?	-	Sea
2015-582	2457371.50	2015 Dec 15	Shahen 1A	-	-	-	-	-	-	SOM?	-	-	-	100?	-	-
2016-571	2457734.50	2016 Dec 12	Shahen 1A	-	-	-	-	-	-	SOM?	-	-	-	100?	-	Arabian Sea
2021-581	2459299.50	2021 Mar 26	Shahen 1A	-	-	-	-	-	-	JQ	-	-	-	100?	-	Korla?
2021-587	2459543.50	2021 Nov 25	Shahen 1A	-	-	-	-	-	-	SOM?	-	-	-	100?	-	Arabian Sea
2022-561	2459795.75	2022 Aug 4 0556?	Shahen 1A	-	-	-	-	-	-	SOM?	-	-	-	100?	-	Arabian Sea
2022-562	2459795.75	2022 Aug 4 0500?	DF-15	-	-	-	-	-	-	PRC-T1	-	-	-	100?	-	Arabian Sea?
2022-563	2459795.75	2022 Aug 4 0500?	DF-15	-	-	-	-	-	-	PRC-T1	-	-	-	100?	-	Arabian Sea?
2022-564	2459795.75	2022 Aug 4 0500?	DF-15	-	-	-	-	-	-	PRC-T1	-	-	-	100?	-	Arabian Sea?
2022-565	2459795.75	2022 Aug 4 0500?	DF-15	-	-	-	-	-	-	PRC-T2	-	-	-	100?	-	120E 22NF
2022-566	2459795.75	2022 Aug 4 0500?	DF-15	-	-	-	-	-	-	PRC-T2	-	-	-	100?	-	119E 22-5N?
2022-567	2459795.75	2022 Aug 4 0500?	DF-15	-	-	-	-	-	-	PRC-T2	-	-	-	100?	-	121.8E25. 8NF
2022-568	2459795.75	2022 Aug 4 0500?	DF-15	-	-	-	-	-	-	PRC-T2	-	-	-	100?	-	-
2022-569	2459795.75	2022 Aug 4 0500?	DF-15	-	-	-	-	-	-	PRC-T2	-	-	-	100?	-	-
2022-570	2459795.75	2022 Aug 4 0500?	DF-15	-	-	-	-	-	-	PRC-T2	-	-	-	100?	-	-
2022-571	2459795.75	2022 Aug 4 0500?	DF-15	-	-	-	-	-	-	PRC-T2	-	-	-	100?	-	-
2022-572	2459795.75	2022 Aug 4 0500?	DF-15	-	-	-	-	-	-	PRC-T3	-	-	-	100?	-	123E 23N
2022-573	2459795.75	2022 Aug 4 0500?	DF-15	-	-	-	-	-	-	PRC-T3	-	-	-	100?	-	-
2022-574	2459795.75	2022 Aug 4 0500?	DF-15	-	-	-	-	-	-	PRC-T3	-	-	-	100?	-	-
2022-575	2459795.75	2022 Aug 4 0500?	DF-15	-	-	-	-	-	-	PRC-T3	-	-	-	100?	-	-
2022-576	2459795.75	2022 Aug 4 0500?	DF-15	-	-	-	-	-	-	PRC-T3	-	-	-	100?	-	-



Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	0r5Pay	Agency	Launch_Code	Group	Category	LTCite	Cite	Notes
1988-801	2447312.50	1988 Jun?	DF-15	-	-	0.000	PLA2AC	MS	-	Test	ww.fas.org	-	-
1995-301	2449717.50	1995	DF-15	-	-	0.000	PLA2AC	MS	-	Test	ww.fas.org	-	-
1996-376	2450150.17	1996 Mar 7 1600?	DF-15	-	-	0.000	PLA2AC	MS	-	Test	raivandc.org	-	-
1996-377	2450150.21	1996 Mar 7 1700?	DF-15	-	-	0.000	PLA2AC	MS	-	Test	raivandc.org	-	-
1996-378	2450150.25	1996 Mar 7 1800?	DF-15	-	-	0.000	PLA2AC	MS	-	Test	raivandc.org	-	-
1996-379	2450155.50	1996 Mar 13	DF-15	-	-	0.000	PLA2AC	MS	-	Test	raivandc.org	-	-
1999-A01	2451193.50	1999 Jan 15?	Shahen 1	-	-	0.000	PK	MF	-	Test	Wire	-	-
1999-326	2451283.71	1999 Apr 15 0458	Shahen 1	-	-	0.000	PK	MS	-	Test	Wire	-	-
2002-361	2452651.60	2002 Oct 4 0230	Shahen 1	-	Hati IV	0.000	NESSCHM	MS	-	Test	Wire	Rtgg	-
2003-357	2452920.63	2003 Oct 8 0313	Shahen 1	-	Hati IV	0.000	NESSCHM	MS	-	Test	spacedaily.com	missilethreat.com	-
2004-382	2453347.50	2004 Dec 8	Shahen 1	-	Hati IV	0.000	NESSCHM	MS	-	Test	Wire	-	-
2006-368	2454068.50	2006 Nov 29	Shahen 1	-	Hati IV	0.000	NESSCHM	MS	-	Test	missilethreat.com	-	-
2008-304	2454490.50	2008 Jan 25	Shahen 1	-	Hati IV	0.000	NESSCHM	MS	-	Test	Wire	-	-
2010-M10	2455324.50	2010 May 8	Shahen 1	-	Hati IV	0.000	PAFASC	MS	-	Test	Wire	-	-
2012-319	2456042.50	2012 Apr 25	Shahen 1	-	Hati IV	0.000	NESSCHM	MS	-	Test	Wire	-	-
2013-323	2456392.50	2013 Apr 10	Shahen 1	-	Hati IV	0.000	NESSCHM?	MS	-	Test	Wire	-	-
2014-373	2456978.50	2014 Nov 17	Shahen 1	-	Hati IV	0.000	NESSCHM	MS	-	Test	Wire	-	-
2015-352	2457371.50	2015 Dec 15	Shahen 1A	-	Hati IV	0.000	NESSCHM	MS	-	Test	Wire	-	-
2016-371	2457734.50	2016 Dec 12	Shahen 1A	-	DF-15C	0.000	PLA2AC	MS	-	Test	eastpendulum.com	-	-
2021-387	2458299.50	2021 Mar 26	Shahen 1A	-	Hati IV	0.000	NESSCHM	MS	-	Test	Wire	-	-
2021-387	2458299.50	2021 Nov 25	Shahen 1A	-	Hati IV	0.000	NESSCHM	MS	-	Test	Wire	-	-
2022-361	2458943.50	2022 Aug 4 0556?	Shahen 1A	-	-	0.000	PLA2AC	MS	-	Test	Wire	-	-
2022-361	2458936.75	2022 Aug 4 0600?	DF-15	-	-	0.000	PLA2AC	MS	-	Test	raivandc.org	-	-
2022-362	2458936.75	2022 Aug 4 0600?	DF-15	-	-	0.000	PLA2AC	MS	-	Test	raivandc.org	-	-
2022-363	2458936.75	2022 Aug 4 0600?	DF-15	-	-	0.000	PLA2AC	MS	-	Test	raivandc.org	-	-
2022-364	2458936.75	2022 Aug 4 0600?	DF-15	-	-	0.000	PLA2AC	MS	-	Test	raivandc.org	-	-
2022-365	2458936.75	2022 Aug 4 0600?	DF-15	-	-	0.000	PLA2AC	MS	-	Test	raivandc.org	-	-
2022-366	2458936.75	2022 Aug 4 0600?	DF-15	-	-	0.000	PLA2AC	MS	-	Test	raivandc.org	-	-
2022-367	2458936.75	2022 Aug 4 0600?	DF-15	-	-	0.000	PLA2AC	MS	-	Test	raivandc.org	-	-
2022-368	2458936.75	2022 Aug 4 0600?	DF-15	-	-	0.000	PLA2AC	MS	-	Test	raivandc.org	-	-
2022-369	2458936.75	2022 Aug 4 0600?	DF-15	-	-	0.000	PLA2AC	MS	-	Test	raivandc.org	-	-
2022-370	2458936.75	2022 Aug 4 0600?	DF-15	-	-	0.000	PLA2AC	MS	-	Test	raivandc.org	-	-
2022-371	2458936.75	2022 Aug 4 0600?	DF-15	-	-	0.000	PLA2AC	MS	-	Test	raivandc.org	-	-
2022-372	2458936.75	2022 Aug 4 0600?	DF-15	-	-	0.000	PLA2AC	MS	-	Test	raivandc.org	-	-
2022-373	2458936.75	2022 Aug 4 0600?	DF-15	-	-	0.000	PLA2AC	MS	-	Test	raivandc.org	-	-
2022-374	2458936.75	2022 Aug 4 0600?	DF-15	-	-	0.000	PLA2AC	MS	-	Test	raivandc.org	-	-
2022-375	2458936.75	2022 Aug 4 0600?	DF-15	-	-	0.000	PLA2AC	MS	-	Test	raivandc.org	-	-
2022-376	2458936.75	2022 Aug 4 0600?	DF-15	-	-	0.000	PLA2AC	MS	-	Test	raivandc.org	-	-



Launch

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Mission	FlightCode	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee_Km	Range_Km	Dest
1962-S112	2445089.50	1982 Apr 30	JL-1	-	CSS-IX-3	-	-	-	-	HULU	-	-	-	0?	-	-
1962-S174	2445254.50	1982 Oct 12	JL-1	-	-	-	-	-	CH200	YEL	-	-	-	500?	-	-
1965-S72	2446205.50	1985 May 20	DF-21	-	-	-	-	-	-	TYSC?	-	-	-	500?	-	-
1965-S273	2446215.50	1985 May 30	DF-21	-	-	-	-	-	-	TYSC?	-	-	-	500?	-	-
1965-A07	2446336.50	1985 Sep 28	JL-1	-	-	-	-	-	CH406	YEL	-	-	-	0?	-	-
1967-S184	2447038.50	1987 Sep 27	DF-21	-	-	-	-	-	-	TYSC?	-	-	-	500?	-	-
1968-S120	2447431.50	1988 Sep 27	JL-1	-	-	-	-	-	CH406	YEL	-	-	-	0?	-	-
1992-A08	2448741.50	1992 Apr 29	DF-21	-	-	-	-	-	-	TYSC?	-	-	-	0?	-	-
1992-A09	2448926.50	1992 Nov	DF-21	-	-	-	-	-	-	TYSC?	-	-	-	0?	-	-
1993-A01	2448997.50	1993?	DF-21	-	-	-	-	-	-	TYSC?	-	-	-	0?	-	-
1995-S92	2449171.50	1995 Jan	DF-21	-	-	-	-	-	-	TYSC?	-	-	-	500?	-	-
1995-S47	2449698.50	1995 Jul	DF-21	-	-	-	-	-	-	TYSC?	-	-	-	500?	-	-
1995-S75	2450031.50	1995 Nov 10	DF-21	-	-	-	-	-	-	TYSC?	-	-	-	1000?	-	-
1996-S03	2450092.50	1996 Jan 10	DF-21	-	-	-	-	-	-	TYSC	-	-	-	1000?	-	-
1996-S74	2450445.50	1996 Dec 28	DF-21	-	-	-	-	-	-	TYSC	-	-	-	1000?	-	-
2002-S82	2452455.50	2002 Jul	DF-21	-	-	-	-	-	-	TYSC?	-	-	-	1000?	-	-
2002-F01	2452532.94	2002 Sep 15 1030	KT-1	-	-	-	-	-	-	TYSC	-	-	-	1000?	-	-
2002-S83	2452608.50	2002 Dec	DF-21	-	-	-	-	-	-	TYSC?	-	-	-	1000?	-	-
2003-U01	2452698.94	2003 Sep 16 1030?	KT-1	-	-	-	-	-	-	TYSC	-	-	-	1000?	-	-
2004-S75	2453005.50	2004 Q1	DF-21	-	-	-	-	-	-	TYSC	-	-	-	1000?	-	-
2004-S11	2453073.50	2004 Mar 9	Shahen 2	-	-	-	-	-	-	SDM	-	-	-	300?	-	-
2005-S16	2453448.50	2005 Mar 19	Shahen 2	-	-	-	-	-	-	SDM	-	-	-	300?	-	-
2005-F04	2453530.50	2005 Jun 9	KT-1	-	-	-	-	-	-	TYSC	-	-	-	300?	-	-
2005-S63	2453558.50	2005 Jul 7	DF-21	-	-	-	-	-	-	XSC	-	-	-	850?	-	-
2006-S75	2453772.50	2006 Feb 6	DF-21	-	-	-	-	-	-	XSC	-	-	-	850?	-	-
2006-S16	2453864.50	2006 Apr 29	Shahen 2	-	-	-	-	-	-	SDM	-	-	-	300?	-	-
2007-S01	2454112.44	2007 Jan 11 2228?	DF-21	-	-	-	-	-	-	XSC	-	-	-	850?	-	-
2007-S46	2454154.50	2007 Feb 23	Shahen 2	-	-	-	-	-	-	SDM	-	-	-	300?	-	-
2008-S16	2454575.50	2008 Apr 19	Shahen 2	-	-	-	-	-	-	SDM	-	-	-	300?	-	-
2008-S17	2454577.50	2008 Apr 21	Shahen 2	-	-	-	-	-	-	SDM	-	-	-	300?	-	-
2010-S02	2455207.59	2010 Jan 11 1152:42	DF-21	-	-	-	-	-	-	UNDM?	-	-	-	300?	-	-
2012-S89	2456003.50	2012 Mar 17 1210?	Kuazhou	-	-	-	-	-	-	JL	-	-	-	200?	-	-
2013-S04	2456320.01	2013 Jan 27 1210?	DF-21	-	-	-	-	-	-	UNDM?	-	-	-	200?	-	-
2013-U01	2456426.04	2013 May 13 1285	DF-21	-	-	-	-	-	-	XSC	-	-	-	10000	-	-
2013-U01	2456426.04	2013 Sep 25 0437	DF-21	-	-	-	-	-	-	XSC	-	-	-	395	-	-
2014-S41	2456661.50	2014 Jul 23	Kuazhou	-	-	-	-	-	-	JL	-	-	-	300?	-	-
2014-S72	2456674.50	2014 Nov 13	Shahen 2	-	-	-	-	-	-	SDM	-	-	-	300?	-	-
2015-S18	2457090.50	2014 Nov 13 0637:08	Kuazhou	-	-	-	-	-	-	SDM	-	-	-	342	-	Arab. Sea
2015-S66	2457327.46	2015 Oct 31 2300?	Shahen 3	-	-	-	-	-	-	UNDM?	-	-	-	300?	-	Arab. Sea
2015-S91	2457367.50	2015 Dec 11	DF-21	-	-	-	-	-	-	SDM	-	-	-	300?	-	Arab. Sea
2017-S02	2457752.67	2017 Jan 24 0411:12	Kuazhou-1A	-	-	-	-	-	-	UNDM?	-	-	-	349	-	Arab. Sea
2017-S03	2457757.50	2017 Jan 24 1400?	Shahen 1	-	-	-	-	-	-	SDM?	-	-	-	300?	-	Arab. Sea
2017-S03	2457757.50	2017 Jan 24 1400?	Shahen 1	-	-	-	-	-	-	UNDM?	-	-	-	300?	-	Arab. Sea
2018-S09	2458154.50	2018 Feb 5	DF-21	-	-	-	-	-	-	UNDM?	-	-	-	160?	-	-
2018-S10	2458154.50	2018 Feb 5	DF-21	-	-	-	-	-	-	UNDM?	-	-	-	160?	-	-
2018-S20	2458213.25	2018 Feb 5 0500	Shuang Qixian 1	-	-	-	-	-	-	UNDM?	-	-	-	108	-	-
2018-S40	2458213.25	2018 Sep 29 0413:30	Shuang Qixian 1	-	-	-	-	-	-	HLL	-	-	-	820?	-	-
2018-S75	2458300.58	2018 Sep 29 0413:30	Kuazhou-1A	-	-	-	-	-	-	JL	-	-	-	327	-	Arab. Sea
2018-S92	2458341.65	2018 Oct 23 0800	Shuang Qixian 1	-	-	-	-	-	-	SDM	-	-	-	300?	-	Arab. Sea
2019-S24	2458658.71	2019 May 25 0500:00	Shahen 2	-	-	-	-	-	-	SDM	-	-	-	209	-	-
2019-S44	2458658.71	2019 Jul 20 0941	Kuazhou-1A	-	-	-	-	-	-	UNDM?	-	-	-	638	-	-
2019-S59	2458726.16	2019 Aug 13 0340	Kuazhou-1A	-	-	-	-	-	-	UNDM?	-	-	-	638	-	-
2018-S10	2458154.50	2018 Feb 5	DF-21	-	-	-	-	-	-	UNDM?	-	-	-	108	-	-
2018-S20	2458213.25	2018 Sep 29 0413:30	Shuang Qixian 1	-	-	-	-	-	-	UNDM?	-	-	-	108	-	-
2018-S40	2458213.25	2018 Sep 29 0413:30	Shuang Qixian 1	-	-	-	-	-	-	HLL	-	-	-	820?	-	-
2018-S75	2458300.58	2018 Sep 29 0413:30	Kuazhou-1A	-	-	-	-	-	-	JL	-	-	-	327	-	Arab. Sea
2018-S92	2458341.65	2018 Oct 23 0800	Shuang Qixian 1	-	-	-	-	-	-	SDM	-	-	-	300?	-	Arab. Sea
2019-S24	2458658.71	2019 May 25 0500:00	Shahen 2	-	-	-	-	-	-	SDM	-	-	-	209	-	-
2019-S44	2458658.71	2019 Jul 20 0941	Kuazhou-1A	-	-	-	-	-	-	UNDM?	-	-	-	638	-	-
2019-S59	2458726.16	2019 Aug 13 0340	Kuazhou-1A	-	-	-	-	-	-	UNDM?	-	-	-	638	-	-
2019-S75	2458800.92	2019 Nov 17 1000	Kuazhou-1A	-	-	-	-	-	-	UNDM?	-	-	-	108	-	-
2019-S86	2458924.52	2019 Dec 7 0955:46	Kuazhou-1A	-	-	-	-	-	-	TYSC	-	-	-	767	-	-
2019-S87	2458924.52	2019 Dec 7 0955:46	Kuazhou-1A	-	-	-	-	-	-	TYSC	-	-	-	767	-	-
2020-S04	2458964.53	2020 Jan 16 0302	Kuazhou-1A	-	-	-	-	-	-	TYSC	-	-	-	1134	-	-
2020-S04	2458964.53	2020 Jan 16 0302	Kuazhou-1A	-	-	-	-	-	-	TYSC	-	-	-	1134	-	-
2020-S28	2459084.55	2020 Aug 12 0116	Kuazhou-1A	-	-	-	-	-	-	TYSC	-	-	-	983	-	-
2020-S25	2459084.55	2020 Aug 25	DF-26	-	-	-	-	-	-	DADA	-	-	-	500?	-	S China Sea
2020-S26	2459084.55	2020 Aug 25	DF-26	-	-	-	-	-	-	NINGBO	-	-	-	500?	-	S China Sea
2020-F08	2459104.71	2020 Sep 12 0502	Kuazhou-1A	-	-	-	-	-	-	UNDM?	-	-	-	500?	-	Arab. Sea
2020-S80	2459160.50	2020 Sep 17 0712	Shahen 3	-	-	-	-	-	-	SDM	-	-	-	500?	-	Arab. Sea
2021-S11	2459234.50	2021 Jan 20	Shahen 3	-	-	-	-	-	-	SDM	-	-	-	500?	-	Arab. Sea
2021-F01	2459249.84	2021 Feb 1 0815	Shuang Qixian 1	-	-	-	-	-	-	UNDM?	-	-	-	260?	-	-
2021-S15	2459249.84	2021 Feb 4	DF-21	-	-	-	-	-	-	UNDM?	-	-	-	564	-	-
2021-F05	2459429.92	2021 Aug 3 0739	Shuang Qixian 1	-	-	-	-	-	-	UNDM?	-	-	-	564	-	-
2021-S86	2459484.76	2021 Sep 27 0619	Kuazhou-1A	-	-	-	-	-	-	UNDM?	-	-	-	834	-	-
2021-S87	2459514.76	2021 Oct 27 0619	Kuazhou-1A	-	-	-	-	-	-	UNDM?	-	-	-	834	-	-
2021-112	2459543.49	2021 Oct 24 2341	Kuazhou-1A	-	-	-	-	-	-	UNDM?	-	-	-	505	-	-
2021-117	2459555.68	2021 Dec 7 0412:30	Shahen 3	-	-	-	-	-	-	UNDM?	-	-	-	505	-	-
2021-F10	2459563.58	2021 Dec 15 0200	Kuazhou-1A	-	-	-	-	-	-	UNDM?	-	-	-	500?	-	Arab. Sea
2022-S24	2459678.50	2022 Apr 9	Shahen 3	-	-	-	-	-	-	UNDM?	-	-	-	500?	-	Arab. Sea
2022-F02	2459712.80	2022 May 13 0709	Shuang Qixian 1	-	-	-	-	-	-	UNDM?	-	-	-	509	-	-
2022-S66	2459752.59	2022 Jun 22 0208	Kuazhou-1A	-	-	-	-	-	-	UNDM?	-	-	-	550	-	-
2022-S95	2459800.67	2022 Aug 9 0411	Shahen 3	-	-	-	-	-	-	UNDM?	-	-	-	596	-	-
2022-102	2459814.61	2022 Aug 23 0236	Shahen 3	-	-	-	-	-	-	UNDM?	-	-	-	765	-	-
2022-S10	2459828.60	2022 Sep 6 0924	Kuazhou-1A	-	-	-	-	-	-	UNDM?	-	-	-	765	-	-
2022-108	2459847.45	2022 Sep 24 2255	Kuazhou-1A	-	-	-	-	-	-	UNDM?	-	-	-	765	-	-
2022-118	2459899.76	2022 Sep 24 2255	Kuazhou-1A	-	-	-	-	-	-	UNDM?	-	-	-	765	-	-
2022-155	2459899.76	2022 Nov 16 0620	Shahen 3	-	-	-	-	-	-	UNDM?	-	-	-	765	-	-
2023-S03	2459953.71	2023 Jan 9 0504	Shahen 3	-	-	-	-	-	-	UNDM?	-	-	-	2100	-	-
2023-S25	2460000.50	2023 Feb 25	DF-27	-	-	-	-	-	-	UNDM?	-	-	-	2100	-	-
2023-S39	2460025.88	2023 Mar 22 0909	Kuazhou-1A	-	-	-	-	-	-	UNDM?	-	-	-	2100	-	-
2023-S39	2460041.67	2023 Apr 7 0400	Shuang Qixian 1	-	-	-	-	-	-	UNDM?	-	-	-	2100	-	-
2023-S18	2460048.50	2023 Apr 14	DF-21	-	-	-	-	-	-	UNDM?	-	-	-	2100	-	-
2023-S82	2460104.61	2023 Jun 9 0235:30	Kuazhou-1A	-	-	-	-	-	-	UNDM?	-	-	-	260?	-	-



Launch

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Mission	FlightCode	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee km	Range km	Dest
2023-101	2460145.64	2023 Jul 20 0320	Kuizhou-1A	-	Y22	Tianmu-1 07-10	-	-	-	JQ	LC43/95A	-	-	-	-	-
2023-103	2460147.71	2023 Jul 22 0507	Guoshengxing 1	1	Y6	Lemon Tree	QK-1/XSD-16	-	-	JQ	LC43/95A	-	-	-	-	-
2023-117	2460166.67	2023 Aug 10 0403	Guoshengxing 1	1	Y7	Lucky Seven	Xiguang-1	-	-	JQ	LC43/95A	-	-	-	-	-
2023-121	2460170.73	2023 Aug 14 0532	Kuizhou-1A	-	Y21	Jiaotong-6/10	-	-	-	XSC	LC4	-	-	-	-	-
2023-127	2460181.71	2023 Aug 25 0459	Guoshengxing 1	1	Y8	Cornfield Chase	Jilin-1 Kuanfu 02A	-	-	JQ	LC43/95A	-	-	-	-	-
2023-135	2460192.90	2023 Sep 5 0934:46	Guoshengxing 1	S	Y1	The Little Mermaid	Tianqi-21/24	-	DF02	HHM1	LP4	-	-	-	-	-
2023-F09	2460208.71	2023 Sep 21 0459:10	Guoshengxing 1	1	Y11	Autumn Sonata	Jilin-1 GF04B	-	-	JQ	LC43/95A	-	-	-	-	-
2023-855	2460235.50	2023 Oct 18	Abbael	-	-	-	-	-	-	-	-	-	-	-	-	-
2023-189	2460283.48	2023 Dec 4 2333	Guoshengxing 1	1	Y9	We Won't Stop	Jiheng-1/Xingchi-1A	-	-	SMP?	-	-	-	300?	2200?	Arab. Sea
2023-199	2460295.79	2023 Dec 17 0700	Shuang Quxian 1	3?	Y7	DEAR-1	Dier-1	-	-	JQ	LC43/95A	-	-	-	-	-
2023-205	2460303.54	2023 Dec 25 0100	Kuizhou-1A	-	Y26	Tianmu-1 11-14	Tianmu-1 11-14	-	-	JQ	LC43/95A	-	-	-	-	-
2023-208	2460305.78	2023 Dec 27 0650	Kuizhou-1A	-	Y27	Tianmu-1 19-22	Tianmu-1 19-22	-	-	JQ	LC43/95A	-	-	-	-	-
2024-004	2460314.97	2024 Jan 5 1120	Kuizhou-1A	-	Y28	Tianmu-1 15-18	Tianmu-1 15-18	-	-	JQ	LC43/95A	-	-	-	-	-
2024-008	2460320.66	2024 Jan 11 0352	Kuizhou-1A	-	Y24	Tianxing-1 02	Chuangxing-16 02	-	-	JQ	LC43/95A	-	-	-	-	-
2024-102	2460459.64	2024 May 29 0812:27	Guoshengxing 1	S	Y2	Beautiful World	Tianqi-25/28	-	DFHT	HHM1	LP6	-	-	-	-	-
2024-105	2460461.49	2024 May 30 2339	Guoshengxing 1	-	Y12	Heroes	Jiguang 1/2/Yunhao-1	-	-	JQ	LC43/95A	-	-	-	-	-
2024-110	2460467.71	2024 Jun 6 0500	Guoshengxing 1	-	Y13	Love On Top	PEE-01B	-	-	JQ	LC43/95A	-	-	-	-	-
2024-F03	2460502.49	2024 Jul 10 2340	Shuang Quxian 1	3?	Y8	Yunhao-1 15-17	Yunhao-1	-	-	JQ	LC43/95A	-	-	-	-	-
2024-153	2460551.72	2024 Aug 29 0522	Guoshengxing 1	S	Y3	How Far I'll Go	Yunhao-1 15-17	-	DFHT	HHM1	LP6	-	-	-	-	-
2024-170	2460573.90	2024 Sep 20 0943	Kuizhou-1A	-	Y31	Tianqi 29-32	Tianqi 29-32	-	-	XSC	LC4	-	-	-	-	-





Launch

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	OrbPay	Agency	Launch_Code	Group	Category	LTCite	Cite	Notes
2023-101	2460145.64	2023 Jul 20 0320	Kuaizhou-1A	-	Y22	0.200	EXPACE	OS	C	Sat S80 P	nasaspaceflight.com	-	-
2023-103	2460147.71	2023 Jul 22 0507	Guohexing 1	1	Y6	0.225	XIDU	OS	C	Sat S80 P	nasaspaceflight.com	-	-
2023-117	2460166.67	2023 Aug 10 0403	Guohexing 1	1	Y7	0.363	XIDU	OS	C	Sat S80 D	nasaspaceflight.com	-	-
2023-121	2460170.73	2023 Aug 14 0532	Kuaizhou-1A	-	Y21	0.200	EXPACE	OS	C	Sat LE0 P	nasaspaceflight.com	-	-
2023-127	2460181.71	2023 Aug 25 0459	Guohexing 1	1	Y8	0.230	XIDU	OS	C	Sat S80 P	nasaspaceflight.com	-	-
2023-136	2460192.90	2023 Sep 5 0934:46	Guohexing 1	S	Y1	0.160	XIDU	OS	C	Sat LE0 P	nasaspaceflight.com	-	-
2023-F09	2460208.71	2023 Sep 21 0459:10	Guohexing 1	1	Y11	0.230	XIDU	OF	C	Sat S80 P	nasaspaceflight.com	-	-
2023-855	2460235.50	2023 Oct 18	Abbeel	-	-	0.000	PKAFSC	MS	-	Test	Wire	-	-
2023-189	2460283.48	2023 Dec 4 2333	Guohexing 1	1	Y9	0.200	XIDU	OS	C	Sat S80 0	nasaspaceflight.com	-	-
2023-199	2460295.79	2023 Dec 17 0700	Shuang Quxian 1	3?	Y7	0.300	XJRY	OS	C	Sat S80 0	Wire	-	-
2023-205	2460303.54	2023 Dec 25 0100	Kuaizhou-1A	-	Y26	0.200	EXPACE	OS	C	Sat S80 L	nasaspaceflight.com	-	-
2023-208	2460305.78	2023 Dec 27 0650	Kuaizhou-1A	-	Y27	0.200	EXPACE	OS	C	Sat S80 P	nasaspaceflight.com	-	-
2024-004	2460314.97	2024 Jan 5 1120	Kuaizhou-1A	-	Y28	0.200	EXPACE	OS	C	Sat S80 P	nasaspaceflight.com	-	-
2024-008	2460320.66	2024 Jan 11 0352	Kuaizhou-1A	-	Y24	0.200	EXPACE	OS	C	Sat S80 P	nasaspaceflight.com	-	-
2024-102	2460459.64	2024 May 29 0812:27	Guohexing 1	S	Y2	0.160	XIDU	OS	C	Sat LE0 D	nasaspaceflight.com	-	-
2024-110	2460461.49	2024 May 30 2339	Guohexing 1	-	Y12	0.300	XIDU	OS	C	Sat S80 D	nasaspaceflight.com	-	-
2024-110	2460467.71	2024 Jun 6 0500	Guohexing 1	-	Y13	0.300	XIDU	OS	C	Sat S80 0	Wire	-	-
2024-F03	2460502.49	2024 Jul 10 2340	Shuang Quxian 1	3?	Y8	0.300	XJRY	OF	C	Sat S80 0	nasaspaceflight.com	-	Stage 4 failed
2024-153	2460551.72	2024 Aug 29 0522	Guohexing 1	S	Y3	0.300	XIDU	OS	C	Sat S80 0	nasaspaceflight.com	-	-
2024-170	2460573.90	2024 Sep 20 0943	Kuaizhou-1A	-	Y31	0.160	EXPACE	OS	C	Sat LE0 L	nasaspaceflight.com	-	-



Launch

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Mission	FlightCode	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee_Km	Range_Km	Deer
1999-550	2451382.50	1999 Aug 2	DF-31	-	-	-	-	-	-	TYSC	-	-	-	1000?	-	-
2000-563	2451852.50	2000 Nov 4	DF-31	-	-	-	-	-	-	TYSC	-	-	-	1000?	-	-
2000-566	2451894.50	2000 Dec 16	DF-31	-	-	-	-	-	-	TYSC	-	-	-	1000?	-	-
2002-581	2452601.50	2002 Nov 23	DF-31	-	-	-	-	-	-	TYSC	-	-	-	1000?	-	-
2004-A07	2452212.50	2004 Jul 26?	JL-2	-	-	Julang-2	-	-	CH06	YEL	-	-	-	10?	-	-
2005-524	2453533.50	2005 Jun 12?	JL-2	-	-	-	-	-	CH06	YEL	-	-	-	1000?	-	-
2006-550	2453982.50	2006 Sep 4	DF-31	-	-	-	-	-	-	TYSC	-	-	-	1000?	-	2600
2008-525	2454615.50	2008 May 29	JL-2	-	-	-	-	-	-	TYSC	-	-	-	1000?	-	-
2012-544	2456132.50	2012 Jul 24	DF-41	-	-	DF-41	-	-	-	TYSC	-	-	-	1000?	-	-
2012-549	2456155.50	2012 Aug 16	JL-2	-	-	-	-	-	-	BOHAL	-	-	-	1000?	-	-
2012-561	2456169.50	2012 Aug 30	DF-31A?	-	-	DF-31A?	-	-	T094	TYSC	-	-	-	1000?	-	-
2012-588	2456251.50	2012 Nov 30	DF-31A?	-	-	DF-31A?	-	-	-	TYSC	-	-	-	1000?	-	-
2013-585	2456497.50	2013 Jul 24	DF-31	-	-	-	-	-	-	TYSC	-	-	-	1000?	-	-
2013-S110	2456639.50	2013 Dec 13	DF-41	-	-	DF-31B?	-	-	-	TYSC	-	-	-	1000?	-	-
2014-589	2456925.50	2014 Sep 25	DF-31	-	-	-	-	-	-	TYSC	-	-	-	1000?	-	-
2014-581	2457004.50	2014 Dec 13	DF-41	-	-	-	-	-	-	BOHAL	-	-	-	1000?	-	-
2014-507	2457045.50	2015 Jan 23	JL-2	-	-	-	-	-	T094?	TYSC	-	-	-	1000?	-	-
2015-587	2457240.50	2015 Aug 6	DF-41	-	-	-	-	-	-	TYSC	-	-	-	1000?	-	-
2015-551	2457290.57	2015 Sep 25 0141:40	Chang Zheng 11	-	-	TW-1?	-	-	-	JQ	LC43/95	-	-	570	-	Taklamakan
2015-551	2457290.57	2015 Sep 25 0141:40	DF-41	-	-	-	-	-	-	TYSC	-	-	-	1000?	-	-
2016-526	2457490.50	2016 Apr 12	DF-41	-	-	RV x 2	-	-	-	TYSC	-	-	-	1000?	-	-
2016-066	2457702.49	2016 Nov 9 2342	Chang Zheng 11	-	-	KXSW	-	-	-	JQ	LC43/95	-	-	1139	-	-
2017-012	2457615.50	2017 Mar 2 2383	KT-2	-	-	Tiankun-1	-	-	-	JQ	LC43/95	-	-	429	-	-
2018-008	2458137.68	2018 Jan 19 0412:50	Chang Zheng 11	-	-	Jilin-1 07.08	-	-	-	JQ	LC43/95	-	-	1070	-	-
2018-040	2458234.70	2018 Apr 26 0442	Chang Zheng 11	-	-	Zhuhai-1 02 za	-	-	-	JQ	LC43/95	-	-	552	-	-
2018-581	2458444.50	2018 Nov 22? 2451	JL-3	-	-	-	-	-	T094?	BOHAL	-	-	-	1000?	-	-
2018-108	2458474.49	2018 Dec 21 2351	Chang Zheng 11	-	-	Hongyun Gongcheng	-	-	-	JQ	LC43/95	-	-	1141	-	-
2018-005	2458504.74	2019 Jan 21 0542:21	Chang Zheng 11	-	-	Jilin Guangpu 1,2	-	-	-	HHAI	LC43/95	-	-	600	-	-
2019-005	2458504.74	2019 Jan 21 0542:21	Chang Zheng 11	H	-	Jilin Guangpu 1,2	-	-	-	HHAI	LC43/95	-	-	600	-	-
2019-528	2458639.67	2019 Jun 5 0406	Chang Zheng 11	H	-	Jilin/JSW	-	-	-	CCDC	LP1	-	-	653	-	-
2019-545	2458636.35	2019 Jun 5 2030?	JL-3	-	-	-	-	-	T094?	TYSC	-	-	-	1000?	-	-
2019-560	2458703.12	2019 Aug 7 1500?	DF-41	-	-	-	-	-	-	TYSC	-	-	-	3000?	-	-
2019-545	2458745.78	2019 Aug 7 1500?	Chang Zheng 11	-	-	Zhuhai-1 03 za	-	-	-	JQ	LC43/95	-	-	565	-	-
2019-574	2458809.94	2019 Sep 19 0642	DF-41	-	-	-	-	-	-	TYSC	-	-	-	3000?	-	-
2020-052	2458999.34	2020 Nov 22 1030?	DF-41	-	-	-	-	-	-	TYSC	-	-	-	3000?	-	-
2020-F06	2459040.68	2020 May 29 2015	Chang Zheng 11	-	-	XJS G, H	-	-	-	XSC	LC4	-	-	502	-	-
2020-065	2459107.56	2020 Jul 10 0417	Chang Zheng 11	H	-	Jilin Gaofen 02E	-	-	-	JQ	LC43/95	-	-	611	-	-
2020-094	2459183.34	2020 Sep 9 2014	Chang Zheng 11	H	-	Jilin-1 GF02	-	-	-	HHAI	LP2	-	-	665	-	-
2022-032	2459668.60	2022 Mar 30 0529	Chang Zheng 11	H	-	Jilin-1 GF03	-	-	-	XSC	LC43/95	-	-	669	-	-
2022-046	2459668.60	2022 Mar 30 0529	Chang Zheng 11	H	-	GEAR A/B	-	-	-	HHAI	LP3	-	-	892	-	-
2022-126	2459668.60	2022 Apr 30 0530	Chang Zheng 11	H	-	Tianping-2A/2B/2C	-	-	-	HHAI	LP3	-	-	892	-	-
2022-172	2459920.58	2022 Oct 7 1310:29	Chang Zheng 11	H	-	Jilin-1 G3B-G4/G7/O4A	-	-	-	HHAI	LP3	-	-	892	-	-
2022-164	2459920.58	2022 Dec 1 0115	Kaizhou-11	-	-	Centispace S6/S6	-	-	-	JQ	LC43/96?	-	-	-	-	-
2023-024	2459920.58	2022 Dec 1 0115	Chang Zheng 11	-	-	Xingyun Jiatong VDES	-	-	-	JQ	LC43/96?	-	-	-	-	-
2023-024	2459920.58	2022 Dec 1 0115	Chang Zheng 11	-	-	Shiyan-2	-	-	-	XSC	LC43/96A	-	-	-	-	-
2023-024	2460341.44	2023 Mar 15 0411	Chang Zheng 11	-	-	Shiyan-2C	-	-	-	XSC	LC43/96A	-	-	-	-	-
2023-024	2460341.44	2023 Mar 15 2239	Chang Zheng 11	H	-	Shiyan-24C 1-3	-	-	-	YJ	LP4	-	-	-	-	-
2024-065	2460341.44	2024 May 21 0415	Kaizhou-11	H	-	Shiyan-24C 1-3	-	-	-	YJ	LP4	-	-	-	-	-
2024-585	2460576.53	2024 Sep 25 0044	DF-31	-	-	DF-31AG	-	-	-	JQ	LC43/96?	-	-	1000?	11600	146.5W 10.5S



Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Launch_DrPay	Agency	Launch_Code	Group	Category	LTCite	Cite	Notes
1999-550	2451392.50	1999 Aug 2	DF-31	-	-	0.000	PLAZAC	MS	-	Test	www.cdiss.org	-	-
2000-563	2451852.50	2000 Nov 4	DF-31	-	-	0.000	PLAZAC	MS	-	Test	www.orbireport.com	-	-
2000-566	2451894.50	2000 Dec 16	DF-31	-	-	0.000	PLAZAC	MS	-	Test	www.orbireport.com	-	-
2002-581	2452801.50	2002 Nov 23	DF-31	-	-	0.000	PLAZAC	MS	-	Test	missilethreat.com	-	or JN?
2004-A07	2453212.50	2004 Jul 26?	JL-2	-	-	0.000	PLAZAC	MF	-	Test	Riggs	Wire	-
2005-524	2453533.50	2005 Jun 12?	JL-2	-	-	0.000	PLAZAC	MS	-	Test	Wire	-	-
2006-550	2453982.50	2006 Sep 4	DF-31	-	-	0.000	PLAZAC	MS	-	Test	TASS	-	-
2008-525	2454615.50	2008 May 29	JL-2	-	-	0.000	PLAZAC	MS	-	Test	redbamernthernflt	-	-
2012-344	2456132.50	2012 Jul 24	DF-41	-	-	0.000	PLAZAC	MS	-	Test	freebacon.com	-	-
2012-349	2456155.50	2012 Aug 16	JL-2	-	-	0.000	PLAZAC	MS	-	Test	freebacon.com	-	-
2012-351	2456169.50	2012 Aug 30	DF-31A?	-	-	0.000	PLAZAC	MS	-	Test	nasaspaceflight.com	-	-
2012-388	2456261.50	2012 Nov 30	DF-31	-	-	0.000	PLAZAC	MS	-	Test	freebacon.com	-	-
2013-585	2456497.50	2013 Jul 24	DF-31A?	-	-	0.000	PLAZAC	MS	-	Test	freebacon.com	-	-
2013-5110	2456539.50	2013 Dec 13	DF-31	-	-	0.000	PLAZAC	MS	-	Test	freebacon.com	-	-
2014-589	2456925.50	2014 Sep 25	DF-31	-	-	0.000	PLAZAC	MS	-	Test	freebacon.com	-	-
2014-581	2457004.50	2014 Dec 13	DF-41	-	-	0.000	PLAZAC	MS	-	Test	freebacon.com	-	-
2015-507	2457045.50	2015 Jan 23	JL-2	-	-	0.000	PLAZAC	MS	-	Test	freebacon.com	-	-
2015-537	2457240.50	2015 Aug 6	DF-41	-	-	0.000	PLAZAC	MS	-	Test	freebacon.com	-	-
2015-551	2457290.57	2015 Sep 25 0141:40	Chang Zheng 11	-	Y1	0.353	CALT	MS	G	Sat S50 P	nasaspaceflight.com	-	-
2016-526	2457490.50	2016 Apr 12	DF-41	-	RV x 2	0.000	PLAZAC	MS	-	Test	freebacon.com	-	-
2016-526	2457490.50	2016 Nov 9 2342	Chang Zheng 11	-	Y2	0.517	CALT	MS	G	Sat S50 U	nasaspaceflight.com	-	-
2017-012	2457702.49	2017 Mar 2 2363	RT-2	-	Y1	0.300	CMSICHA	MS	G	Sat S50 L	Wire	-	-
2018-040	2458137.68	2018 Jan 19 0412:50	Chang Zheng 11	-	Y3	0.211	CALT	MS	G	Sat S50 U	nasaspaceflight.com	-	-
2018-040	2458234.70	2018 Apr 26 0442	Chang Zheng 11	-	Y4	0.352	CALT	MS	G	Sat S50 P	nasaspaceflight.com	-	-
2018-581	2458444.50	2018 Dec 21 2351	JL-3	-	Y6	0.000	PLAZAC	MS	-	Test	freebacon.com	-	-
2018-108	2458474.49	2018 Nov 22?	Chang Zheng 11	-	Y5	0.250	CALT	MS	G	Sat S50 L	nasaspaceflight.com	-	-
2019-005	2458504.74	2019 Jan 21 0642:21	Chang Zheng 11	-	Y6	0.210	CALT	MS	G	Sat S50 P	nasaspaceflight.com	-	-
2019-032	2458539.67	2019 Jun 5 0406	Chang Zheng 11	H	Y1	0.207	CALT	MS	G	Sat LEU L	nasaspaceflight.com	-	-
2019-545	2458536.35	2019 Jun 1 2030?	JL-3	-	JL-3	0.000	PLAZAC	MS	-	Test	eastpendulum.com	-	-
2019-545	2458703.12	2019 Aug 15 0007	DF-41	?	Y7	0.000	PLAZAC	MS	G	Sat S50 P	sattrackcam.blogspot	-	-
2019-574	2458745.76	2019 Sep 19 0642	Chang Zheng 11	-	Y7	0.371	CALT	MS	G	Sat S50 P	eastpendulum.com	-	-
2019-574	2458809.94	2019 Nov 22 1030?	DF-41	?	Y8	0.000	PLAZAC	MS	G	Sat LEU 0	nasaspaceflight.com	-	-
2020-032	2458939.34	2020 May 29 2015	Chang Zheng 11	-	Y8	0.040	CALT	MS	G	Sat LEU 0	nasaspaceflight.com	-	-
2020-F06	2459040.66	2020 Jul 10 0417	Kuizhou-11	-	Y1	0.327	EXPACE	DF	CO	Sat S50 U	nasaspaceflight.com	-	-
2020-068	2459107.56	2020 Sep 15 0123	Chang Zheng 11	H	Y2	0.378	CALT	MS	G	Sat S50 L	nasaspaceflight.com	-	-
2020-094	2459193.34	2020 Dec 30 2015	Chang Zheng 11	-	Y9	0.300	CALT	MS	G	Sat LEU P	nasaspaceflight.com	-	-
2022-032	2459666.60	2022 Mar 30 0229	Chang Zheng 11	-	Y10	0.109	CALT	MS	G	Sat S50 P	nasaspaceflight.com	-	-
2022-046	2459699.66	2022 Apr 30 0350	Chang Zheng 11	-	Y3	0.267	CALT	MS	G	Sat S50 P	nasaspaceflight.com	-	-
2022-126	2459960.06	2022 Oct 7 1310:29	Chang Zheng 11	H	Y4?	0.194	CALT	MS	G	Sat S50 L	nasaspaceflight.com	-	-
2022-194	2459920.56	2022 Dec 7 0115	Kuizhou-11	-	Y2	0.500	EXPACE	MS	CO	Sat S50 L	nasaspaceflight.com	-	-
2022-172	2459928.76	2022 Dec 16 1617	Chang Zheng 11	-	Y12	0.100	CALT	MS	G	Sat LEU D	nasaspaceflight.com	-	-
2022-014	2459928.76	2023 Mar 15 1617	Chang Zheng 11	-	Y12	0.100	CALT	MS	G	Sat LEU D	nasaspaceflight.com	-	-
2023-208	2460316.39	2023 Mar 25 2239	Chang Zheng 11	-	Y11	0.240	CALT	MS	G	Sat S50 P	nasaspaceflight.com	-	-
2023-208	2460316.39	2023 Mar 25 2239	Chang Zheng 11	H	Y5	0.240	CALT	MS	G	Sat S50 P	nasaspaceflight.com	-	-
2024-085	2460351.68	2024 May 21 0415	Kuizhou-11	-	Y4	0.568	EXPACE	MS	CO	Sat S50 P	nasaspaceflight.com	-	-
2024-555	2460576.53	2024 Sep 25 0044	DF-31	-	-	0.000	PLAZAC	MS	-	Test	nasaspaceflight.com	-	-





Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Launch_Mission	FlightCode	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee_Km	Range_Km	Dest
1966-5699	2439485.62	1966 Dec 26 0300	DF-3	-	601601	R&D	-	-	-	JQ	L42A	-	-	500?	-	-
1967-5629	2439490.50	1967 Jan	DF-3	-	601602?	R&D	-	-	-	JQ	L42A	-	-	500?	-	-
1967-5630	2439636.50	1967 May 26	DF-3	-	-	R&D	-	-	-	JQ	L42A	-	-	500?	-	-
1967-5631	2439651.50	1967 Jun 10	DF-3	-	-	R&D	-	-	-	JQ	L42A	-	-	500?	-	-
1966-5684	2440208.50	1968 Dec 18	DF-3	-	602801	R&D batch 02	-	-	-	HRBEIM?	-	-	-	500?	-	-
1969-502	2440505.50	1969 Oct 11	DF-3	-	629903	Env test	-	-	-	HRBEIM?	-	-	-	500?	-	-
1969-5714	2440541.50	1969 Nov 16	DF-4	-	601902	R&D (Destruct)	-	-	-	JQ	L42A	-	-	500?	-	-
1970-588	2440596.50	1970 Jan 10	Chang Zheng 1	-	601901	R&D (Minifeng target)	-	-	-	JQ	L42A	-	-	500?	-	-
1970-034	2440701.07	1970 Apr 24 1335:45	Chang Zheng 1	-	601904	DFH-1	Dong Fang Hong	-	-	JQ	L42A	-	-	2392	-	-
1970-5667	2440913.50	1970 Nov 23	DF-4	-	601906	Long range test	-	-	-	JJMN	-	-	-	500?	-	-
1971-018	2441014.00	1971 Mar 3 1202?	DF-4	-	-	SJ-1	shljian	-	-	JJMN	L42A	-	-	1832	-	-
1971-5649	2441270.50	1971 Nov 15	DF-4	-	-	Long range test	-	-	-	HRBEIM?	-	-	-	500?	-	-
1974-5430	2442224.50	1974 Jun 26	DF-3	-	702009	Reentry wake test	-	-	-	JQ	L42A	-	-	500?	-	-
1974-5431	2442351.50	1974 Nov	DF-3	-	-	Reentry wake test	-	-	-	JQ	L42A	-	-	500?	-	-
1974-5432	2442381.50	1974 Dec	DF-3	-	-	Performance test	-	-	-	JQ	L42A	-	-	1000?	-	-
1976-5368	2442913.41	1976 May 14 2155	DF-4	-	702601	Performance test	-	-	-	JQ	L42A	-	-	1000?	-	-
1976-5369	2443015.42	1976 Aug 24 2200	DF-4	-	702602	Performance test	-	-	-	JQ	L42A	-	-	1000?	-	-
1977-5316	2443416.50	1977 Sep 30	DF-4	-	-	Full range test	-	-	-	JQ	L42A	-	-	1000?	-	-
1980-5246	2443469.50	1980 Feb 9	DF-4	-	-	Full range test	-	-	-	JQ	L42A	-	-	1000?	-	-
1980-5247	2444278.50	1980 Aug 2 1501	DF-4	-	-	Test	-	-	-	JINGYU	L42A	-	-	1000?	-	-
1980-5248	2444543.50	1980 Oct 31	DF-4	-	802013	-	-	-	-	JINGYU	-	-	-	1000?	-	-
1982-5223	2444583.50	1982	DF-3	-	-	-	-	-	-	JQ?	L42B?	-	-	500?	-	-
1982-5224	2444969.50	1982	DF-3	-	-	Long life test	-	-	-	JQ?	L42B?	-	-	500?	-	-
1986-5162	2446399.50	1986 Dec	DF-3A	-	-	Long life test	-	-	-	JQ?	L42B?	-	-	500?	-	-
1986-5125	2446430.50	1986 Jan	DF-3A	-	-	R&D range test	-	-	-	JQ?	L42B?	-	-	500?	-	-
1986-5126	2446703.50	1986 Oct	DF-4	-	-	R&D range test	-	-	-	JQ?	L42B?	-	-	500?	-	-
1992-5104	2446821.50	1992	DF-4	-	-	Up test	-	-	-	JQ?	L42B?	-	-	500?	-	-
1995-540	2449666.50	1995 May 29	Chang Zheng ID	?	-	Training	-	-	-	TJSC?	-	-	-	1000?	-	-
1997-571	2450752.50	1997 Nov	Chang Zheng ID	?	-	-	-	-	-	TJSC?	-	-	-	1000?	-	-
2001-565	2452142.50	2001 Aug 21	DF-3	-	-	-	-	-	-	JQ?	-	-	-	500?	-	-
2002-501	2452278.01	2002 Jan 3 1215	DF-4	?	-	DF-31 RV test	-	-	-	TJSC	-	-	-	100?	-	-
2017-568	2497988.50	2017 Aug 23	DF-4	?	-	-	-	-	-	TJSC	-	-	-	100?	-	-



Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	OrbPay	Agency	Launch_Code	Group	Category	LICite	Cite	Notes
1966-8699	2439485.62	1966 Dec 26 0300	DP-3	-	601601	0.000	GALT	MF	-	Test	www.xclub.net/6291	Harvey	-
1967-8629	2439490.50	1967 Jan 26	DP-3	-	601602?	0.000	GALT	MF	-	Test	www.xclub.net/6291	-	-
1967-8630	2439636.50	1967 May 26	DP-3	-	-	0.000	GALT	MS	-	Test	www.xclub.net/6291	-	-
1967-8631	2439651.50	1967 Jun 10	DP-3	-	-	0.000	GALT	MS	-	Test	www.xclub.net/6291	-	-
1968-8684	2440208.50	1968 Dec 18	DP-3	-	602801	0.000	GALT	MS	-	Test	www.xclub.net/6291	-	-
1968-8684	2440208.50	1968 Dec 18	DP-3	-	629903	0.000	GALT	MS	-	Test	www.xclub.net/6291	-	-
1969-8714	2440541.50	1969 Oct 11	DP-3	-	601902	0.000	GALT	MS	-	Test	Lissov	-	-
1969-8714	2440541.50	1969 Nov 16	DP-4	-	601903	0.000	GALT	MS	-	Test	PSC	xclub.net/Harvey	-
1970-888	2440596.50	1970 Jan 10	Chang Zheng 1	-	601901	0.000	GALT	MS	-	Test	LissovC	Harvey	-
1970-888	2440701.07	1970 Apr 24 1335:45	Chang Zheng 1	-	601904	0.173	GALT	OS	G	Sat LED 0	-	-	-
1970-8667	2440913.50	1970 Nov 23	DP-4	-	601906	0.000	GALT	MF	-	Test	xclub.net	MIEIS-8-71	-
1971-018	2441014.00	1971 Mar 3 1202?	Chang Zheng 1	-	-	0.221	GALT	OS	G	Sat LED 0	-	-	-
1971-8649	2441270.50	1971 Nov 15	DP-4	-	702009	0.000	GALT	MS	-	Test	xclub.net	MIEIS-8-74	-
1974-8630	2442224.50	1974 Jun 26	DP-3	-	-	0.000	PLAZAC	MS	-	Test	xclub.net	-	-
1974-8631	2442361.50	1974 Nov	DP-3	-	-	0.000	GALT	MS	-	Test	xclub.net	-	-
1974-8632	2442361.50	1974 Dec	DP-3	-	-	0.000	GALT	MS	-	Test	xclub.net	-	-
1976-8568	2442913.41	1976 May 14 2165	DP-4	-	702801	0.000	PLAZAC	MS	-	Test	xclub.net	-	-
1976-8568	2443015.42	1976 Aug 24 2200	DP-4	-	702602	0.000	PLAZAC	MS	-	Test	xclub.net	-	-
1977-8517	2443416.50	1977 Sep 30	DP-4	-	-	0.000	PLAZAC	MS	-	Test	xclub.net	-	-
1980-8246	2443469.50	1980 Feb 9	DP-4	-	-	0.000	PLAZAC	MS	-	Test	xclub.net	-	-
1980-8247	2444278.50	1980 Aug 2 1501	DP-4	-	802013	0.000	PLAZAC	MS	-	Test	xclub.net	[Year not certain]	-
1980-8248	2444464.13	1980 Aug 2 1501	DP-4	-	-	0.000	PLAZAC	MS	-	Test	xclub.net	[Year not certain]	-
1980-8248	2444543.50	1980 Oct 31	DP-4	-	-	0.000	PLAZAC	MS	-	Test	xclub.net	-	-
1982-8223	2444969.50	1982	DP-3	-	-	0.000	PLAZAC	MS	-	Test	xclub.net	-	-
1982-8224	2444969.50	1982	DP-3	-	-	0.000	PLAZAC	MS	-	Test	xclub.net	-	-
1985-8162	2446399.50	1985 Dec	DP-3A	-	-	0.000	PLAZAC	MS	-	Test	xclub.net	-	-
1986-8128	2446430.50	1986 Jan	DP-3A	-	-	0.000	PLAZAC	MS	-	Test	xclub.net	-	-
1986-8128	2446430.50	1986 Oct	DP-4	-	-	0.000	PLAZAC	MS	-	Test	xclub.net	-	-
1986-8128	2446703.50	1986 Oct	DP-4	-	-	0.000	PLAZAC	MS	-	Test	xclub.net	-	-
1986-8128	2446703.50	1986 Oct	DP-4	-	-	0.000	PLAZAC	MS	-	Test	xclub.net	-	-
1989-8504	2446821.50	1989 May 29	Chang Zheng ID	?	-	0.000	GALT	MS	-	Test	Wire	-	-
1995-850	2449666.50	1995 Nov 29	Chang Zheng ID	?	-	0.000	GALT	MS	-	Test	Wire	-	-
1997-850	2450752.50	1997 Nov	Chang Zheng ID	?	-	0.000	GALT	MS	-	Test	PSC	-	-
2001-866	2452142.50	2001 Aug 21	DP-3	-	-	0.000	PLAZAC	MS	-	Dpt Test	globalsecurity.org	-	-
2002-801	2452278.01	2002 Jan 3 1215	DP-4	-	-	0.000	PLAZAC	MF	-	Test	Wire	-	-
2017-868	2457968.50	2017 Aug 23	DP-4	-	-	0.000	PLAZAC	MS	-	Test	Wire	-	-



Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Mission	Launch_Site	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee_Km	Range_Km	Dest
1971-S438	2441204-50	1971 Sep 10	Dong Feng 5	-	-	1-01	-	-	-	-	L42B	-	-	1007	-	-
1972-S281	2441539-52	1972 Aug 10 0032	Feng Bao 1	-	701-02	Shiyan Peizhong	-	-	-	-	L42B	-	-	2007	-	-
1972-A139	2441621-50	1972 Nov	Dong Feng 5	-	-	-	-	-	-	-	L42B	-	-	1?	-	-
1972-S477	2441772-50	1973 Feb 5	Dong Feng 5	-	-	-	-	-	-	-	L42B	-	-	10?	-	-
1973-F07	2441944-01	1973 Sep 18 1212	Feng Bao 1	-	701-03	JSSM	-	-	-	-	L42B	-	-	185?	-	-
1974-F06	2442241-08	1974 Jul 12 1355	Feng Bao 1	-	701-04	JSSM	-	-	-	-	L42B	-	-	185?	-	-
1974-F07	2442356-90	1974 Nov 5 0940	Chang Zheng 2	-	Y1 (3)	FSM	FSW No. 1	-	-	-	L42B	-	-	20?	-	-
1975-F07	2442620-06	1975 Jul 26 1330	Feng Bao 1	-	701-05	JSSM	FSW No. 2	-	-	-	L42B	-	-	460	-	-
1975-111	2442742-64	1975 Nov 26 0327:52	Chang Zheng 2	-	Y2 (4)	FSM	FSW No. 3	-	-	-	L42B	-	-	723	-	-
1975-119	2442762-89	1975 Dec 16 0921	Feng Bao 1	-	701-06	JSSM 701-06	-	-	-	-	L42B	-	-	382	-	-
1975-F08	2443020-99	1976 Aug 30 1145	Feng Bao 1	-	701-07	JSSM 701-07	-	-	-	-	L42B	-	-	2149	-	-
1975-F03	2443092-88	1976 Nov 10 0905	Chang Zheng 2C	-	701-08	JSSM	FSW No. 4	-	-	-	L42B	-	-	485	-	-
1975-117	2443119-69	1976 Dec 7 0438	Feng Bao 1	-	CZCZ-3 (6)	FSM	FSW No. 3	-	-	-	L42B	-	-	185?	-	-
1975-S246	2443400-51	1977 Sep 24 0015	Chang Zheng 2C	-	701(CLI)-01	DDDS	-	-	-	-	L42B	-	-	200?	-	-
1975-011	2443534-71	1978 Jan 26 0500?	Chang Zheng 2C	-	CZCZ-4 (6)	FSM	FSW No. 4	-	-	-	L42B	-	-	50?	-	-
1975-S112	2443614-19	1978 Apr 15 1659	Feng Bao 1	-	701(CLI)-02	DDDS	Depressed Traj?	-	-	-	L42B	-	-	200?	-	-
1975-S34	2443781-30	1978 Oct	Dong Feng 5	-	-	2-01	-	-	-	-	L42B?	-	-	500?	-	-
1975-S34	2443860-50	1979 Jan 7	Dong Feng 5	-	-	2-02	-	-	-	-	L42B?	-	-	1000?	-	-
1975-S290	2443873-50	1979 Jan 15	Dong Feng 5	-	-	2-03	-	-	-	-	L42B?	-	-	1000?	-	-
1975-S162	2444069-50	1979 Jul 15	Dong Feng 5	-	-	2-04?	-	-	-	-	L42B?	-	-	1000?	-	-
1975-F02	2444082-39	1979 Jul 27 2128	Feng Bao 1	-	KCZ-1-02	SKW	-	-	-	-	L42B?	-	-	240?	-	-
1975-S189	2444106-50	1979 Aug 21	Dong Feng 5	-	-	2-05?	-	-	-	-	L42B?	-	-	1000?	-	-
1975-S198	2444120-50	1979 Sep 4	Dong Feng 5	-	-	2-06	-	-	-	-	L42B?	-	-	1000?	-	-
1975-S291	2444161-50	1979 Oct 15?	Dong Feng 5	-	-	2-07	-	-	-	-	L42B?	-	-	1000?	-	-
1975-S244	2444203-50	1979 Nov 26	Dong Feng 5	-	-	2-08?	-	-	-	-	L42B?	-	-	1000?	-	-
1980-S277	2444264-50	1980 Feb 5	Dong Feng 5	-	-	2-09?	-	-	-	-	L42B?	-	-	1000?	-	-
1980-S109	2444377-58	1980 May 16 0200	Dong Feng 5	-	-	580A	-	-	-	-	L42B?	-	-	1000?	-	-
1980-S111	2444380-64	1980 May 21 0319	Dong Feng 5	-	-	580B	-	-	-	-	L42B?	-	-	1000?	-	-
1981-095	2444667-39	1981 Sep 19 2128:40	Feng Bao 1	-	KCZ-1-02	SJ-2	shijian erhao B xing	-	-	-	L42B	-	-	1631	-	-
1981-S177	2444945-50	1981 Dec 7	Dong Feng 5	-	-	2-10?	-	-	-	-	L42B	-	-	1000?	-	-
1982-090	2445221-20	1982 Sep 9 0719	Chang Zheng 2C	-	Y1	FSM	FSW No. 5	-	-	-	L42B	-	-	860	-	-
1983-086	2445565-75	1983 Aug 19 0600	Chang Zheng 2C	-	Y2	FSM	FSW No. 6	-	-	-	L42B	-	-	972	-	-
1984-008	2445729-02	1984 Jan 29 1225	Chang Zheng 3	-	Y1	STW	STW-1	-	-	-	L42B	-	-	683?	-	-
1984-038	2445796-97	1984 Apr 6 1120	Chang Zheng 3	-	Y2	STW	STW	-	-	-	L42B	-	-	38173	-	-
1984-098	2445855-74	1984 Sep 12 0644	Chang Zheng 3	-	Y3	FSM	FSW No. 7	-	-	-	L42B	-	-	389	-	-
1985-096	2445865-71	1985 Oct 21 0504	Chang Zheng 2C	-	Y4	FSM	FSW No. 8	-	-	-	L42B	-	-	384	-	-
1986-010	2446463-03	1986 Feb 1 1237	Chang Zheng 3	-	Y5	DFH-2	DFH-2	-	-	-	L42B	-	-	465	-	-
1986-076	2446709-74	1986 Oct 6 0650	Chang Zheng 2C	-	Y6	FSM	FSW No. 9	-	-	-	L42B	-	-	386	-	-
1987-077	2447012-78	1987 Aug 5 0639	Chang Zheng 2C	-	Y7	FSM	FSW No. 10	-	-	-	L42B	-	-	310	-	-
1987-075	2447054-30	1987 Sep 9 0715	Chang Zheng 2C	-	Y8	FSM-1	FSM-1 No. 1	-	-	-	L42B	-	-	745	-	-
1988-014	2447228-03	1988 Mar 5 1251	Chang Zheng 3	-	Y4	Zhongxing 1	zhongxing 1	-	-	-	L42B	-	-	7120	-	-
1988-067	2447376-51	1988 Aug 5 0725:35	Chang Zheng 2C	-	Y1	FSM-1 RV	FSM-1 RV	-	-	-	L42B	-	-	825	-	-
1988-100	2447411-35	1988 Sep 20 2030:19	Chang Zheng 4	-	Y1	feng yun yi jia	feng yun yi jia	-	-	-	L42B	-	-	946	-	-
1988-111	2447418-53	1988 Dec 22 1240	Chang Zheng 3	-	Y6	DFH 2A-2	DFH 2A-2	-	-	-	L42B	-	-	37168	-	-
1988-134	2447627-02	1989 Feb 4 1207:03	Dong Feng 5	-	Y6	Zhongxing 2	Zhongxing 2	-	-	-	L42B	-	-	37168	-	-
1989-010	2447927-02	1989 Feb 4 1207:03	Chang Zheng 3	-	Y5	DFH 2A	DFH 2A	-	-	-	L42B	-	-	37168	-	-
1990-011	2447950-02	1990 Apr 7 1330:02	Chang Zheng 3	-	Y7	Antares 1	Antares 1	-	-	-	L42B	-	-	3700?	-	-
1990-019	2448088-53	1990 Jul 16 0030	Chang Zheng 2C	-	Y1	HS-601 Model	HS-601 Model	-	-	-	L42B	-	-	36746	-	-
1990-081	2448197-54	1990 Sep 3 0053	Chang Zheng 2C	-	Y2	Feng Yun 1	Feng Yun 1	-	-	-	L42B	-	-	99?	-	-
1990-089	2448169-76	1990 Oct 5 0853	Chang Zheng 2C	-	Y3	FSM-1 No. 3	FSM-1 No. 3	-	-	-	L42B	-	-	963	-	-
1991-088	2448619-76	1991 Dec 28 1200?	Chang Zheng 2C	-	Y9	FSM-2 No. 4	FSM-2 No. 4	-	-	-	L42B	-	-	313	-	-
1992-051	2448843-83	1992 Aug 13 2000?	Chang Zheng 2C	-	Y4	Zhongxing 4	Zhongxing 4	-	-	-	L42B	-	-	36376	-	-
1992-044	2448901-76	1992 Oct 6 0620:05	Chang Zheng 2C	-	Y3	FSM-2 No. 1	FSM-2 No. 1	-	-	-	L42B	-	-	347	-	-
1992-064	2448948-46	1992 Oct 6 0620:05	Chang Zheng 2C	-	Y10	FSM-2 No. 1	FSM-2 No. 1	-	-	-	L42B	-	-	37343	-	-
1992-090	2448977-97	1992 Dec 21 1121	Chang Zheng 2C	-	Y4	FSM-1/Freja	FSM-1/Freja	-	-	-	L42B	-	-	1844	-	-
1992-063	2449268-83	1993 Oct 8 0800	Chang Zheng 2C	-	Y11	DFH-2	DFH-2	-	-	-	L42B	-	-	1035	-	-
1993-879	2449897-50	1993	Dong Feng 5A	-	Y11	FSM-1 No. 5 (14)	FSM-1 No. 5 (14)	-	-	-	L42B	-	-	3019	-	-
1994-010	2449391-86	1994 Feb 8 0833:53	Chang Zheng 3A	-	Y1	shijian erhao	shijian erhao	-	-	-	L42B?	-	-	1000?	-	-
1994-037	2449536-83	1994 Jul 3 0800	Chang Zheng 3D	-	Y1	FSM-2 No. 2	FSM-2 No. 2	-	-	-	L42B	-	-	36153	-	-
1994-043	2449564-95	1994 Jul 21 1055	Chang Zheng 3	-	Y2	Antares 1	Antares 1	-	-	-	L42B	-	-	55?	-	-
1994-055	2449592-47	1994 Aug 27 2310	Chang Zheng 3E	-	Y8	Antares 1	Antares 1	-	-	-	L42B	-	-	42436	-	-
1994-080	2449686-21	1994 Nov 29 1702	Chang Zheng 3A	-	Y2	DFH-3	DFH-3	-	-	-	L42B	-	-	39123	-	-
1995-S91	2449717-50	1995	Dong Feng 5A	-	Y2	Zhongxing 6?	Zhongxing 6?	-	-	-	L42B	-	-	36064	-	-
1995-F01	2449743-44	1995 Jan 25 2240	Chang Zheng 3B	-	Y6	Antar 2	Antar 2	-	-	-	L42B	-	-	1000?	-	-
1995-064	2450049-98	1995 Nov 28 1130:05	Chang Zheng 2E	-	Y7	Antares 2	Antares 2	-	-	-	L42B	-	-	1	-	-
1995-073	2450079-99	1995 Dec 28 1150	Chang Zheng 2E	-	Y8	Antares 2	Antares 2	-	-	-	L42B	-	-	36554	-	-
1996-F01	2450128-29	1996 Feb 14 1901	Chang Zheng 3B	-	Y1	EchoStar 1	EchoStar 1	-	-	-	L42B	-	-	36203	-	-
1996-039	2450267-95	1996 Jul 3 1047	Chang Zheng 3	-	Y10A	Intelsat 708	Intelsat 708	-	-	-	L42B	-	-	1	-	-
1996-048	2450313-94	1996 Aug 18 1027	Chang Zheng 3	-	Y14	Antar 1A	Antar 1A	-	-	-	L42B	-	-	46560	-	-
1996-059	2450376-81	1996 Oct 20 0720	Chang Zheng 2D	-	Y3	Zhongxing 7	Zhongxing 7	-	-	-	L42B	-	-	4729?	-	-
1997-F79	2450448-50	1997	Dong Feng 5A	-	Y3	FSM-2 No. 3	FSM-2 No. 3	-	-	-	L42B	-	-	466	-	-
1997-021	2450580-18	1997 May 11 1617	Chang Zheng 3A	-	Y3?	Zhongxing 6	Zhongxing 6	-	-	-	L42B	-	-	1000?	-	-
1997-029	2450610-20	1997 Jun 10 1201	Chang Zheng 3	-	Y11	Feng Yun Er Jia	Feng Yun Er Jia	-	-	-	L42B	-	-	35998	-	-
1997-042	2450680-24	1997 Aug 19 1750	Chang Zheng 3B	-	Y2	Mababy	Mababy	-	-	-	L42B	-	-	37660	-	-
1997-048	2450693-08	1997 Sep 1 1400:15	Chang Zheng 3C-III/SD	-	Y1	Iridium MFS	Iridium MFS	-	-	-	L42B	-	-	50496	-	-
1997-062	2450738-30	1997 Oct 16 1913	Chang Zheng 3C	-	Y3	Antar 2R	Antar 2R	-	-	-	L42B	-	-	896	-	-
1997-077	2450790-80	1997 Dec 8 0716:49	Chang Zheng 2C-III/SD	-	Y2	Iridium 42/44	Iridium 42/44	-	-	-	L42B	-	-	4767?	-	-
1998-011	2450898-21	1998 Mar 25 1701:06	Chang Zheng 2C-III/SD	-	Y3	Iridium S1042	Iridium S1042	-	-	-	L42B	-	-	940	-	-
1998-026	2450935-89	1998 May 2 0916:53	Chang Zheng 3C	-	Y4	Iridium S1051	Iridium S1051	-	-	-	L42B	-	-	860	-	-
1998-033	2450963-92	1998 May 30 1000:04	Chang Zheng 3C	-	Y5	Iridium S1069	Iridium S1069	-	-	-	L42B	-	-	831	-	-
1998-044	2451012-89	1998 Jul 18 0920	Chang Zheng 3B	-	Y4	Chinastar 1	Chinastar 1	-	-	-	L42B	-	-	89459	-	-
1998-048	2451045-46	1998 Aug 19 2301:46	Chang Zheng 2C-III/SD	-	Y5	xinmo yihao	xinmo yihao	-	-	-	L42B	-	-	36165	-	-
1998-074	2451166-99	1998 Dec 19 1139:44	Chang Zheng 2C-III/SD	-	Y6	Iridium S1078	Iridium S1078	-	-	-	L42B	-	-	819	-	-
1999-025	2451308-56	1999 Mar 10 0138:00	Chang Zheng 4B	-	Y2	Iridium S1088?	Iridium S1088?	-	-	-	L42B	-	-	818	-	-
1999-032	2451341-22	1999 Jun 11 1715:33	Chang Zheng 2C-III/SD	-	Y7	Feng Yun Yi Bang	Feng Yun Yi Bang	-	-	-	L42B	-	-	884	-	-
1999-057	2451															

Launch_Year	Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Mission	FlightCode	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Range_Km	Dest
1999-061	2451502-44	1999 Nov 19 2230:04	Chang Zheng 2F	-	Y1	Shenzhou	Shenzhou 1 Fanhui Cang		-	-	JQ	LC921	-	-	507	-
2000-003	2451569-20	2000 Jun 25 1645:05	Chang Zheng 3A	-	Y4	Zhongxing-22	Feng Huo 1		-	-	NSC	LC2	-	-	42266	-
2000-032	2451720-99	2000 Jun 25 1150	Chang Zheng 3	-	Y12	Feng Yun 2	Feng Yun Er Yi		-	-	NSC	LC3	-	-	36397	-
2000-060	2451788-64	2000 Sep 1 0325	Chang Zheng 3B	-	Y3	Beiyou	ziyuan erhao 01 xing		-	-	TRSC	LC7	-	-	501	-
2000-069	2451848-17	2000 Oct 30 1602	Chang Zheng 3A	-	Y5?	Beiyou	yi ke beidou daohang s.w		-	-	NSC	LC2	-	-	41922	-
2000-082	2451899-18	2000 Dec 20 1620	Chang Zheng 3A	-	Y6?	Beiyou	er ke beidou daohang s.w		-	-	NSC	LC2	-	-	41870	-
2001-001	2451919-21	2001 Jan 9 1700:03	Chang Zheng 2F	-	Y2	Shenzhou 2	Shenzhou 2 Fanhui Cang		-	-	JQ	LC921	-	-	405	-
2002-088	2452274-50	2002 Feb 5 0000:00	Dong Feng 5A	-	-	-	-		-	-	TRSC	-	-	-	10007	-
2002-014	2452359-09	2002 Mar 25 1415:04	Chang Zheng 2F	-	Y3	Shenzhou 3	Shenzhou 3 Fanhui Cang		-	-	JQ	LC921	-	-	388	-
2002-024	2452409-58	2002 May 15 0150	Chang Zheng 4B	-	Y6	FY-1D/HY-1	haiyang yihao A		-	-	TRSC	LC7	-	-	1221	-
2002-049	2452574-64	2002 Oct 27 0317	Chang Zheng 4B	-	Y5	ZY-2	ziyuan erhao 02 xing		-	-	TRSC	LC7	-	-	663	-
2002-061	2452638-19	2003 Dec 29 1640:04	Chang Zheng 2F	-	Y4	Shenzhou 4	Shenzhou 4 Fanhui Cang		-	-	JQ	LC921	-	-	381	-
2002-021	2452764-19	2003 May 24 1634:04	Chang Zheng 3A	-	Y7	Beiyou	san ke beidou daohang s.		-	-	NSC	LC2	-	-	41981	-
2003-045	2452927-54	2003 Oct 15 0100:03	Chang Zheng 2F	-	Y5	Shenzhou 5	Shenzhou 5 Fanhui Cang		-	-	JQ	LC921	-	-	524	-
2003-049	2452933-64	2003 Oct 21 0516	Chang Zheng 4B	-	Y4	CHENG-5	ZF-1-2		-	-	TRSC	LC7	-	-	1073	-
2003-061	2452946-81	2003 Nov 3 0720:04	Chang Zheng 3A	-	Y8	Zhongxing-20	FSW Service Module		-	-	JQ	LC603	-	-	422	-
2003-052	2452965-17	2003 Nov 14 1601	Chang Zheng 2D	-	Y4	Shenzhou 2	Shentong yi hao 01 xing		-	-	NSC	LC2	-	-	41934	-
2003-011	2453003-30	2003 Dec 29 1906:18	Chang Zheng 2C	-	SH	TC-1	Double Star DSP-E		-	-	NSC	LC3	-	-	79886	-
2004-029	2453114-17	2004 Apr 18 1559:04	Chang Zheng 2C	-	a	SH	Shiyan 1		-	-	NSC	LC3	-	-	888	-
2004-033	2453211-80	2004 Jul 25 0705	Chang Zheng 2C	-	SH	TC-2	Double Star DSP-P		-	-	TRSC	LC7	-	-	38948	-
2004-038	2453246-85	2004 Aug 29 0750:05	Chang Zheng 2C	-	b	TC-2	Double Star DSP-P		-	-	JQ	LC603	-	-	623	-
2004-036	2453257-47	2004 Sep 8 2314	Chang Zheng 4B	-	Y7	FSW-3F	shijian liuhao B xing		-	-	JQ	LC7	-	-	913	-
2004-039	2453275-83	2004 Oct 19 0200:05	Chang Zheng 2D	-	Y5	FSW-3F	shijian liuhao B xing		-	-	TRSC	LC7	-	-	324	-
2004-044	2453315-63	2004 Nov 6 1045	Chang Zheng 4B	-	Y9	FT-2C	FT-2 04		-	-	NSC	LC2	-	-	40361	-
2004-046	2453473-00	2004 Nov 12 1200	Chang Zheng 3B	-	Y8	SH-2	ziyuan erhao 03 xing		-	-	TRSC	LC7	-	-	829	-
2005-012	2453473-00	2005 Apr 12 1200	Chang Zheng 3B	-	Y15	Apstar 6	Shiyan 2		-	-	NSC	LC2	-	-	920	-
2005-024	2453587-44	2005 Jul 5 2240	Chang Zheng 2D	-	Y6	FSW-3F	Tiansuo-2		-	-	JQ	LC603	-	-	664	-
2005-027	2453584-81	2005 Aug 2 0730:03	Chang Zheng 2C	-	b	FSW-3F	Tiansuo-2		-	-	JQ	LC603	-	-	704	-
2005-033	2453611-86	2005 Aug 29 0645:04	Chang Zheng 2D	-	Y7	FSW-3F	Tiansuo-2		-	-	JQ	LC603	-	-	326	-
2005-040	2453665-54	2005 Oct 12 0100:04	Chang Zheng 2D	-	Y6	FSW-3F	Tiansuo-2		-	-	JQ	LC603	-	-	505	-
2005-016	2453682-45	2006 Sep 9 0700:04	Chang Zheng 4C	-	Y1	Shenzhou 6	Shenzhou 6 Fanhui Cang		-	-	TRSC	LC7	-	-	903	-
2005-038	2453867-79	2006 Apr 26 2246	Chang Zheng 3A	-	Y16	taogun 1	yaogan weixing yihao		-	-	JQ	LC603	-	-	675	-
2005-046	2454032-16	2006 Oct 12 0100:04	Chang Zheng 4B	-	Y10	SJ-6	shijian bahaoyuzhong wei		-	-	NSC	LC2	-	-	41985	-
2005-048	2454032-16	2006 Oct 28 2334	Chang Zheng 4B	-	Y16	TA-22A	Feng Huo 2F		-	-	TRSC	LC7	-	-	936	-
2005-048	2454032-16	2006 Oct 28 2334	Chang Zheng 4B	-	Y16	TA-22A	shijian liuhao or zu B x		-	-	NSC	LC2	-	-	38189	-
2005-048	2454032-16	2006 Oct 28 2334	Chang Zheng 4B	-	Y16	TA-22A	shijian liuhao or zu B x		-	-	NSC	LC2	-	-	43072	-
2005-048	2454032-16	2006 Oct 28 2334	Chang Zheng 4B	-	Y16	TA-22A	shijian liuhao or zu B x		-	-	NSC	LC2	-	-	41925	-
2005-048	2454032-16	2006 Oct 28 2334	Chang Zheng 4B	-	Y16	TA-22A	shijian liuhao or zu B x		-	-	NSC	LC2	-	-	22466	-
2005-048	2454032-16	2006 Oct 28 2334	Chang Zheng 4B	-	Y16	TA-22A	shijian liuhao or zu B x		-	-	NSC	LC2	-	-	9326	-
2005-048	2454032-16	2006 Oct 28 2334	Chang Zheng 4B	-	Y16	TA-22A	shijian liuhao or zu B x		-	-	NSC	LC2	-	-	43085	-
2005-048	2454032-16	2006 Oct 28 2334	Chang Zheng 4B	-	Y16	TA-22A	shijian liuhao or zu B x		-	-	NSC	LC2	-	-	43085	-
2005-048	2454032-16	2006 Oct 28 2334	Chang Zheng 4B	-	Y16	TA-22A	shijian liuhao or zu B x		-	-	NSC	LC2	-	-	43085	-
2005-048	2454032-16	2006 Oct 28 2334	Chang Zheng 4B	-	Y16	TA-22A	shijian liuhao or zu B x		-	-	NSC	LC2	-	-	43085	-
2005-048	2454032-16	2006 Oct 28 2334	Chang Zheng 4B	-	Y16	TA-22A	shijian liuhao or zu B x		-	-	NSC	LC2	-	-	43085	-
2005-048	2454032-16	2006 Oct 28 2334	Chang Zheng 4B	-	Y16	TA-22A	shijian liuhao or zu B x		-	-	NSC	LC2	-	-	43085	-
2005-048	2454032-16	2006 Oct 28 2334	Chang Zheng 4B	-	Y16	TA-22A	shijian liuhao or zu B x		-	-	NSC	LC2	-	-	43085	-
2005-048	2454032-16	2006 Oct 28 2334	Chang Zheng 4B	-	Y16	TA-22A	shijian liuhao or zu B x		-	-	NSC	LC2	-	-	43085	-
2005-048	2454032-16	2006 Oct 28 2334	Chang Zheng 4B	-	Y16	TA-22A	shijian liuhao or zu B x		-	-	NSC	LC2	-	-	43085	-
2005-048	2454032-16	2006 Oct 28 2334	Chang Zheng 4B	-	Y16	TA-22A	shijian liuhao or zu B x		-	-	NSC	LC2	-	-	43085	-
2005-048	2454032-16	2006 Oct 28 2334	Chang Zheng 4B	-	Y16	TA-22A	shijian liuhao or zu B x		-	-	NSC	LC2	-	-	43085	-
2005-048	2454032-16	2006 Oct 28 2334	Chang Zheng 4B	-	Y16	TA-22A	shijian liuhao or zu B x		-	-	NSC	LC2	-	-	43085	-
2005-048	2454032-16	2006 Oct 28 2334	Chang Zheng 4B	-	Y16	TA-22A	shijian liuhao or zu B x		-	-	NSC	LC2	-	-	43085	-
2005-048	2454032-16	2006 Oct 28 2334	Chang Zheng 4B	-	Y16	TA-22A	shijian liuhao or zu B x		-	-	NSC	LC2	-	-	43085	-
2005-048	2454032-16	2006 Oct 28 2334	Chang Zheng 4B	-	Y16	TA-22A	shijian liuhao or zu B x		-	-	NSC	LC2	-	-	43085	-
2005-048	2454032-16	2006 Oct 28 2334	Chang Zheng 4B	-	Y16	TA-22A	shijian liuhao or zu B x		-	-	NSC	LC2	-	-	43085	-
2005-048	2454032-16	2006 Oct 28 2334	Chang Zheng 4B	-	Y16	TA-22A	shijian liuhao or zu B x		-	-	NSC	LC2	-	-	43085	-
2005-048	2454032-16	2006 Oct 28 2334	Chang Zheng 4B	-	Y16	TA-22A	shijian liuhao or zu B x		-	-	NSC	LC2	-	-	43085	-
2005-048	2454032-16	2006 Oct 28 2334	Chang Zheng 4B	-	Y16	TA-22A	shijian liuhao or zu B x		-	-	NSC	LC2	-	-	43085	-
2005-048	2454032-16	2006 Oct 28 2334	Chang Zheng 4B	-	Y16	TA-22A	shijian liuhao or zu B x		-	-	NSC	LC2	-	-	43085	-
2005-048	2454032-16	2006 Oct 28 2334	Chang Zheng 4B	-	Y16	TA-22A	shijian liuhao or zu B x		-	-	NSC	LC2	-	-	43085	-
2005-048	2454032-16	2006 Oct 28 2334	Chang Zheng 4B	-	Y16	TA-22A	shijian liuhao or zu B x		-	-	NSC	LC2	-	-	43085	-
2005-048	2454032-16	2006 Oct 28 2334	Chang Zheng 4B	-	Y16	TA-22A	shijian liuhao or zu B x		-	-	NSC	LC2	-	-	43085	-
2005-048	2454032-16	2006 Oct 28 2334	Chang Zheng 4B	-	Y16	TA-22A	shijian liuhao or zu B x		-	-	NSC	LC2	-	-	43085	-
2005-048	2454032-16	2006 Oct 28 2334	Chang Zheng 4B	-	Y16	TA-22A	shijian liuhao or zu B x		-	-	NSC	LC2	-	-	43085	-
2005-048	2454032-16	2006 Oct 28 2334	Chang Zheng 4B	-	Y16	TA-22A	shijian liuhao or zu B x		-	-	NSC	LC2	-	-	43085	-
2005-048	2454032-16	2006 Oct 28 2334	Chang Zheng 4B	-	Y16	TA-22A	shijian liuhao or zu B x		-	-	NSC	LC2	-	-	43085	-
2005-048	2454032-16	2006 Oct 28 2334	Chang Zheng 4B	-	Y16	TA-22A	shijian liuhao or zu B x		-	-	NSC	LC2	-	-	43085	-
2005-048	2454032-16	2006 Oct 28 2334	Chang Zheng 4B	-	Y16	TA-22A	shijian liuhao or zu B x		-	-	NSC	LC2	-	-	43085	-
2005-048	2454032-16	2006 Oct 28 2334	Chang Zheng 4B	-	Y16	TA-22A	shijian liuhao or zu B x		-	-	NSC	LC2	-	-	43085	-
2005-048	2454032-16	2006 Oct 28 2334	Chang Zheng 4B	-	Y16	TA-22A	shijian liuhao or zu B x		-	-	NSC	LC2	-	-	43085	-
2005-048	2454032-16	2006 Oct 28 2334	Chang Zheng 4B	-	Y16	TA-22A	shijian liuhao or zu B x		-	-	NSC	LC2	-	-	43085	-
2005-048	2454032-16	2006 Oct 28 2334	Chang Zheng 4B	-	Y16	TA-22A	shijian liuhao or zu B x		-	-	NSC	LC2	-	-	43085	-
2005-048	2454032-16	20														

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Mission	FlightCode	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee_Km	Range_Km	Dest
2011-039	245571.82	2011 Jul 29 07:42:03	Chang Zheng 2C	b	Y24	SJ-11-02	shijian shi yihao 02 xin	-	-	JQ	L0603	-	-	941	-	-
2011-042	245575.18	2011 Aug 11 16:15:04	Chang Zheng 3B	G2	Y19	Paksat-1R	Paksat 1R	-	-	NSC	L02	-	-	41879	-	-
2011-043	245576.46	2011 Aug 15 22:57:19	Chang Zheng 3B	b	Y14	Haiyang-2	Haiyang er hao	-	-	TRSC	L09	-	-	1310	-	-
2011-047	245579.89	2011 Aug 18 09:28:03	Chang Zheng 2C	b	Y26	SJ-11-04	shijian shi yihao 04 xin	-	-	NSC	L0603	-	-	1507	-	-
2011-F02	245582.19	2011 Aug 18 16:53:03	Chang Zheng 3B	G3	Y16	Zhongxing 1A	Fenghuo 2	-	-	JQ	L02	-	-	35841	-	-
2011-053	245583.45	2011 Sep 29 13:16:03	Chang Zheng 2F	T	Y1	Tiangong 1	Tiangong 1	-	-	NSC	L0921	-	-	544	-	-
2011-057	245584.85	2011 Oct 7 08:21:04	Chang Zheng 3B	G2	Y18	Eutelsat W3C	Eutelsat W3C	-	-	NSC	L02	-	-	36212	-	-
2011-063	245586.42	2011 Oct 31 21:58:10	Chang Zheng 2F	G	Y8	Shenzhou 8	shenzhou ba fanghui cang	-	-	JQ	L0921	-	-	494	-	-
2011-066	245587.64	2011 Nov 9 03:21:05	Chang Zheng 4B	-	Y21	Yaogan 12	tiankun yihao	-	-	TRSC	L09	-	-	847	-	-
2011-068	245588.51	2011 Nov 20 00:15:04	Chang Zheng 2D	-	Y19	SH-4/0X-1-03	chuangxin yihao 03 xing	-	-	JQ	L0603	-	-	1085	-	-
2011-072	245589.28	2011 Nov 29 18:50:04	Chang Zheng 2C	b	Y20	Yaogan 13	yaogan weixing shisan ha	-	-	TRSC	L09	-	-	665	-	-
2011-073	245589.38	2011 Dec 1 21:07:04	Chang Zheng 3A	-	Y23	Beidou DM10	di shi ke beidou daohang	-	-	NSC	L02	-	-	36152	-	-
2011-077	245591.20	2011 Dec 19 16:41:03	Chang Zheng 3B	-	Y21	Higcomsat 1R	higcomsat 1R	-	-	NSC	L02	-	-	41828	-	-
2011-079	245591.64	2011 Dec 22 02:26:14	Chang Zheng 4B	G2	Y15	ZY-1 02C	zyuyan yihao 02C weixing	-	-	TRSC	L09	-	-	882	-	-
2012-597	245592.26	2012	Chang Zheng 2C	?	-	ZY-3	zyenry test	-	-	TRSC	L09	-	-	-	-	-
2012-001	245593.64	2012 Jan 9 03:17:10	Chang Zheng 4B	-	Y26	FT-2F	feiyun san hao	-	-	TRSC	L09	-	-	850	-	-
2012-002	245593.64	2012 Jan 13 05:56:04	Chang Zheng 4B	-	Y22	FT-2F	feiyun erhao 07 xing	-	-	NSC	L03	-	-	37066	-	-
2012-008	245593.94	2012 Feb 24 16:12:04	Chang Zheng 3C	-	Y16	Beidou DM11	di shiyi ke beidou d.w.	-	-	NSC	L03	-	-	36065	-	-
2012-013	245597.18	2012 Mar 31 10:27:04	Chang Zheng 3B	G2	Y22	Apstar 7	Apstar 7	-	-	NSC	L02?	-	-	50126	-	-
2012-018	245600.37	2012 Apr 29 20:50:03	Chang Zheng 3B	G1	Y14	Beidou DM12/13	di shier ke beidou-2 w.	-	-	NSC	L02	-	-	21785	-	-
2012-020	245603.80	2012 May 6 07:10:05	Chang Zheng 2D	-	Y17	Tianhui 1-02	tianhui yi hao 02 xing	-	-	NSC	L02	-	-	851	-	-
2012-021	245603.80	2012 May 10 07:06:04	Chang Zheng 4B	G3	Y12	Yaogan 14	yaogan weixing shisi hao	-	-	JQ	L0603	-	-	732	-	-
2012-028	245607.16	2012 May 26 15:56:04	Chang Zheng 3B	-	Y17	Zhongxing 2A	zhongxing shiuhao	-	-	NSC	L02	-	-	36831	-	-
2012-029	245607.61	2012 May 29 07:31:05	Chang Zheng 4C	-	Y10	Shenzhou 15	yaogan weixing shiuhao	-	-	TRSC	L09	-	-	1340	-	-
2012-032	245609.94	2012 Jun 16 10:57:25	Chang Zheng 2F	G	Y9	Shenzhou 9	shenzhou jiu fanghui cang	-	-	JQ	L0921	-	-	498	-	-
2012-040	245613.15	2012 Jul 25 19:54:04	Chang Zheng 3C	-	Y9	Tian Lian-1-03	tianlian yihao 03 xing	-	-	NSC	L02	-	-	42667	-	-
2012-560	245615.50	2012 Aug 20	Dong Feng 5A	-	Y15	Beidou DM14/15	14 ke beidou daohang wei	-	-	TRSC	L02	-	-	10007	-	-
2012-050	245615.50	2012 Sep 18 19:10:04	Chang Zheng 3B	G1	Y16	WSS-1	WSS-1	-	-	NSC	L02	-	-	21674	-	-
2012-052	245615.66	2012 Sep 29 04:12:05	Chang Zheng 2D	-	Y16	WSS-1	WSS-1	-	-	JQ	L0603	-	-	964	-	-
2012-056	245619.66	2012 Oct 14 02:25:05	Chang Zheng 2C	SHA	Y10	SJ-9A/B	shi jian liuhao a weixin	-	-	TRSC	L09	-	-	691	-	-
2012-059	245622.14	2012 Oct 28 15:53:04	Chang Zheng 3C	-	Y10	Beidou DM16	di 16 ke beidou d.weixin	-	-	NSC	L02	-	-	35902	-	-
2012-064	245626.45	2012 Nov 18 22:53:05	Chang Zheng 2C	b	Y17	HJ-1C	huan jing yihao C weixin	-	-	TRSC	L09	-	-	743	-	-
2012-066	245626.67	2012 Nov 25 04:06:04	Chang Zheng 4C	-	Y9	Yaogan 16	yaogan weixing shiliu hao	-	-	JQ	L0603 ?	-	-	1364	-	-
2012-067	245626.95	2012 Nov 27 10:13:05	Chang Zheng 2D	G2	Y24	Zhongxing 12	zhongxing shier hao weix	-	-	NSC	L02	-	-	50233	-	-
2012-073	245628.18	2012 Dec 18 16:15:05	Chang Zheng 3B	-	Y22	CoKuirk-2	CoKuirk-2	-	-	JQ	L0603 ?	-	-	697	-	-
2012-078	245630.66	2012 Dec 26 04:13	Chang Zheng 2D	-	Y18	Gaoren 1	Gaoren 1	-	-	JQ	L0603 ?	-	-	664	-	-
2013-010	245644.17	2013 Apr 26 04:13	Chang Zheng 3B	G2	Y25	Zhongxing-11	Zhongxing-11	-	-	JQ	L02	-	-	45066	-	-
2013-020	245644.17	2013 May 1 16:06:04	Chang Zheng 3B	G2	Y10	Shenzhou 10	Shenzhou 10	-	-	TRSC	L09	-	-	965	-	-
2013-029	245646.30	2013 Jun 11 09:50:03	Chang Zheng 2C	G	Y13	SJ-15/CK-3/SY-7	SJ-15/CK-3/SY-7	-	-	TRSC	L0603 ?	-	-	1065	-	-
2013-035	245648.39	2013 Jun 15 02:27:04	Chang Zheng 2C	b	Y11	FW-17	FW-17	-	-	JQ	L0603	-	-	1347	-	-
2013-046	245651.46	2013 Jul 19 23:57:56	Chang Zheng 4C	-	Y13	Yaogan 17	yaogan 17	-	-	TRSC	L09	-	-	1617	-	-
2013-046	245651.46	2013 Sep 23 03:07:17	Chang Zheng 4C	-	Y11	Fengyun 3-3	Fengyun 3-3	-	-	TRSC	L0603	-	-	1617	-	-
2013-052	245655.66	2013 Sep 23 03:07:17	Chang Zheng 4C	-	Y25	Yaogan 18	yaogan 18	-	-	TRSC	L09	-	-	654	-	-
2013-059	245659.66	2013 Oct 23 03:50	Chang Zheng 4C	b	Y23	Yaogan 19	yaogan weixing 19	-	-	TRSC	L09	-	-	1297	-	-
2013-068	245664.62	2013 Oct 26 03:51:05	Chang Zheng 4C	-	Y14	Yaogan 19	yaogan weixing 19	-	-	TRSC	L09	-	-	654	-	-
2013-068	245664.62	2013 Nov 25 02:12	Chang Zheng 2C	-	Y23	Yaogan 18	yaogan 18	-	-	TRSC	L09	-	-	1297	-	-
2013-069	245665.59	2013 Oct 26 03:51:05	Chang Zheng 2C	-	Y23	Yaogan 19	yaogan weixing 19	-	-	TRSC	L09	-	-	654	-	-
2013-070	245665.59	2013 Dec 5 17:30:00	Chang Zheng 3B	-	Y23	Shiyan 5	shiyan 5	-	-	TRSC	L09	-	-	1297	-	-
2013-072	245665.59	2013 Dec 5 17:30:00	Chang Zheng 3B	-	Y23	Shiyan 5	shiyan 5	-	-	TRSC	L09	-	-	1297	-	-
2013-073	245665.64	2013 Dec 5 17:30:00	Chang Zheng 3B	G2	Y23	Shiyan 5	shiyan 5	-	-	TRSC	L09	-	-	1297	-	-
2013-076	245665.64	2013 Dec 5 17:30:00	Chang Zheng 3B	G2	Y23	Shiyan 5	shiyan 5	-	-	TRSC	L09	-	-	1297	-	-
2013-076	245665.64	2013 Dec 5 17:30:00	Chang Zheng 3B	G2	Y23	Shiyan 5	shiyan 5	-	-	TRSC	L09	-	-	1297	-	-
2013-076	245665.64	2013 Dec 5 17:30:00	Chang Zheng 3B	G2	Y23	Shiyan 5	shiyan 5	-	-	TRSC	L09	-	-	1297	-	-
2013-076	245665.64	2013 Dec 5 17:30:00	Chang Zheng 3B	G2	Y23	Shiyan 5	shiyan 5	-	-	TRSC	L09	-	-	1297	-	-
2013-076	245665.64	2013 Dec 5 17:30:00	Chang Zheng 3B	G2	Y23	Shiyan 5	shiyan 5	-	-	TRSC	L09	-	-	1297	-	-
2013-076	245665.64	2013 Dec 5 17:30:00	Chang Zheng 3B	G2	Y23	Shiyan 5	shiyan 5	-	-	TRSC	L09	-	-	1297	-	-
2013-076	245665.64	2013 Dec 5 17:30:00	Chang Zheng 3B	G2	Y23	Shiyan 5	shiyan 5	-	-	TRSC	L09	-	-	1297	-	-
2013-076	245665.64	2013 Dec 5 17:30:00	Chang Zheng 3B	G2	Y23	Shiyan 5	shiyan 5	-	-	TRSC	L09	-	-	1297	-	-
2013-076	245665.64	2013 Dec 5 17:30:00	Chang Zheng 3B	G2	Y23	Shiyan 5	shiyan 5	-	-	TRSC	L09	-	-	1297	-	-
2013-076	245665.64	2013 Dec 5 17:30:00	Chang Zheng 3B	G2	Y23	Shiyan 5	shiyan 5	-	-	TRSC	L09	-	-	1297	-	-
2013-076	245665.64	2013 Dec 5 17:30:00	Chang Zheng 3B	G2	Y23	Shiyan 5	shiyan 5	-	-	TRSC	L09	-	-	1297	-	-
2013-076	245665.64	2013 Dec 5 17:30:00	Chang Zheng 3B	G2	Y23	Shiyan 5	shiyan 5	-	-	TRSC	L09	-	-	1297	-	-
2013-076	245665.64	2013 Dec 5 17:30:00	Chang Zheng 3B	G2	Y23	Shiyan 5	shiyan 5	-	-	TRSC	L09	-	-	1297	-	-
2013-076	245665.64	2013 Dec 5 17:30:00	Chang Zheng 3B	G2	Y23	Shiyan 5	shiyan 5	-	-	TRSC	L09	-	-	1297	-	-
2013-076	245665.64	2013 Dec 5 17:30:00	Chang Zheng 3B	G2	Y23	Shiyan 5	shiyan 5	-	-	TRSC	L09	-	-	1297	-	-
2013-076	245665.64	2013 Dec 5 17:30:00	Chang Zheng 3B	G2	Y23	Shiyan 5	shiyan 5	-	-	TRSC	L09	-	-	1297	-	-
2013-076	245665.64	2013 Dec 5 17:30:00	Chang Zheng 3B	G2	Y23	Shiyan 5	shiyan 5	-	-	TRSC	L09	-	-	1297	-	-
2013-076	245665.64	2013 Dec 5 17:30:00	Chang Zheng 3B	G2	Y23	Shiyan 5	shiyan 5	-	-	TRSC	L09	-	-	1297	-	-
2013-076	245665.64	2013 Dec 5 17:30:00	Chang Zheng 3B	G2	Y23	Shiyan 5	shiyan 5	-	-	TRSC	L09	-	-	1297	-	-
2013-076	245665.64	2013 Dec 5 17:30:00	Chang Zheng 3B	G2	Y23	Shiyan 5	shiyan 5	-	-	TRSC	L09	-	-	1297	-	-
2013-076	245665.64	2013 Dec 5 17:30:00	Chang Zheng 3B	G2	Y23	Shiyan 5	shiyan 5	-	-	TRSC	L09	-	-	1297	-	-
2013-076	245665.64	2013 Dec 5 17:30:00														



Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Mission	FlightCode	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee_Km	Range_Km	Dest
2015-078	2457373-51	2015 Dec 17 00:12:04	Chang Zheng 2D	-	Y31	Wukong	DAMPE	-	-	L0603	JQ	-	-	784	-	-
2015-083	2457385-17	2015 Dec 28 1604	Chang Zheng 3B	G2	Y37	Gaofen 4	Gaofen si yao weixing	-	-	L0603	NASC	-	-	35832	-	-
2015-001	2457403-21	2016 Jan 15 1657	Chang Zheng 3C	G2	Y29	Beilintest-1	Beilintest-1	-	-	L0603	NASC	-	-	41781	-	-
2015-006	2457419-81	2016 Feb 1 07:29	Chang Zheng 3C/YZ-1	G2	Y14	Beidou D21	Beidou D21	-	-	L0603	NASC	-	-	28182	-	-
2015-021	2457477-34	2016 Mar 29 20:11	Chang Zheng 3A	-	Y26	Beidou D22	Beidou D22	-	-	L0603	NASC	-	-	35980	-	-
2015-023	2457484-23	2016 Apr 5 17:38	Chang Zheng 2D	-	Y36	Shi Jian 10	Shi Jian 10	-	-	L0603	JQ	-	-	601	-	-
2015-029	2457523-61	2016 May 15 02:43	Chang Zheng 2D	-	Y27	Yaogan 30	Yaogan 30	-	-	L0603	JQ	-	-	1010	-	-
2015-033	2457538-64	2016 May 30 03:17:04	Chang Zheng 3C	-	Y33	Ziyuan-3 02	Ziyuan-3 02	-	-	L0603	TYSC	-	-	791	-	-
2015-037	2457558-15	2016 Jun 12 15:50	Chang Zheng 3C	G2?	Y15	Beidou D23	Beidou D23	-	-	L0603	WEN	-	-	36341	-	-
2015-042	2457565-00	2016 Jun 25 12:00	Chang Zheng 7/YZ-1A	-	Y1	Fanhui Chang	Fanhui Chang	-	-	L0603	WEN	-	-	591	-	-
2015-044	2457568-64	2016 Jun 29 03:21	Chang Zheng 7/YZ-1A	-	Y35	Tiancong-1	Tiancong-1	-	-	L0603	TYSC	-	-	1012	-	-
2015-048	2457606-18	2016 Aug 5 16:22	Chang Zheng 3C	G3	Y35	Gaofen 3	Gaofen 3	-	-	L0603	TYSC	-	-	788	-	-
2015-049	2457610-45	2016 Aug 5 12:55	Chang Zheng 3C	-	Y19	Gaofen 3	Gaofen 3	-	-	L0603	TYSC	-	-	540	-	-
2015-051	2457616-24	2016 Aug 15 17:40:04	Chang Zheng 2D	-	Y22	Gaofen 10	Gaofen 10	-	-	L0603	TYSC	-	-	607	-	-
2015-052	2457632-29	2016 Aug 31 16:56:25	Chang Zheng 4C	-	Y22	Tiangong 2	Tiangong 2	-	-	L0603	TYSC	-	-	540	-	-
2015-057	2457647-09	2016 Sep 15 14:04:09	Chang Zheng 2F	T	Y11	Shenzhou 11	Shenzhou 11	-	-	L0603	JQ	-	-	547	-	-
2015-061	2457676-48	2016 Oct 16 23:00:31	Chang Zheng 2F	G	Y13	Tianlian-1 01	Tianlian-1 01	-	-	L0603	JQ	-	-	1114	-	-
2015-068	2457704-47	2016 Nov 11 23:14	Chang Zheng 3C	G2	Y34	Tianlian yihao 04 xing	Tianlian yihao 04 xing	-	-	L0603	NASC	-	-	41779	-	-
2015-072	2457715-14	2016 Dec 10 16:11	Chang Zheng 3D	G3	Y42	Fengyun 4-01	Fengyun 4-01	-	-	L0603	NASC	-	-	35852	-	-
2015-081	2457733-17	2016 Dec 21 13:22:04	Chang Zheng 2D	-	Y33	Tan Weixing	Tan Weixing	-	-	L0603	JQ	-	-	729	-	-
2015-083	2457744-31	2016 Dec 28 03:23	Chang Zheng 2D	-	Y39	Gaojing-1 1/2	Gaojing-1 1/2	-	-	L0603	TYSC	-	-	548	-	-
2015-001	2457759-14	2017 Jan 5 16:18:04	Chang Zheng 3B	G2	Y39	Supervise 1/2	Supervise 1/2	-	-	L0603	NASC	-	-	41394	-	-
2015-005	2457768-50	2017 Jan 15	Dong Feng 5C	-	Y43	RV x 10	RV x 10	-	-	L0603	TYSC	-	-	10007	-	Taklakan
2015-016	2457865-96	2017 Apr 12 11:04:04	Chang Zheng 3B	G2	Y43	Shi Jian 13	Shi Jian 13	-	-	L0603	NASC	-	-	41743	-	-
2015-018	2457865-96	2017 Apr 20 14:41:35	Chang Zheng 7	-	Y2	Tianzhou 1	Tianzhou 1	-	-	L0603	WEN	-	-	569	-	-
2015-034	2457919-62	2017 Jun 15 03:00	Chang Zheng 4B	-	Y31	Huayun	Huayun	-	-	L0603	NASC	-	-	894	-	-
2015-036	2457923-17	2017 Jun 16 16:11	Chang Zheng 3B	G2	Y28	Zhongxing-9A	Zhongxing-9A	-	-	L0603	NASC	-	-	35968	-	-
2015-068	2458025-66	2017 Sep 29 04:21:05	Chang Zheng 3C	b	Y29	Yaogan 30 01 zu	Yaogan 30 01 zu	-	-	L0603	NASC	-	-	678	-	-
2015-069	2458035-66	2017 Oct 9 04:13:14	Chang Zheng 2D	G3Z	Y46	WSS-2	WSS-2	-	-	L0603	JQ	-	-	675	-	-
2015-072	2458062-99	2017 Nov 5 11:48	Chang Zheng 3C/YZ-1	-	Y30	Beidou-3	Beidou-3	-	-	L0603	TYSC	-	-	22446	-	-
2015-074	2458072-27	2017 Nov 14 18:56:55	Chang Zheng 4C	-	Y21	Fengyun 3 04	Fengyun 3 04	-	-	L0603	TYSC	-	-	1146	-	-
2015-075	2458078-70	2017 Nov 24 18:01:05	Chang Zheng 6	b	Y33	Jilin-1	Jilin-1	-	-	L0603	TYSC	-	-	610	-	-
2015-077	2458082-26	2017 Dec 3 04:11	Chang Zheng 2D	-	Y47	Yaogan 30 02 zu	Yaogan 30 02 zu	-	-	L0603	NASC	-	-	913	-	-
2015-078	2458090-67	2017 Dec 10 16:40:04	Chang Zheng 3B	G2	Y40	Alcomsat 1	Alcomsat 1	-	-	L0603	NASC	-	-	41799	-	-
2015-084	2458110-66	2017 Dec 23 04:14	Chang Zheng 2D	b	Y46	Ludao	Ludao	-	-	L0603	NASC	-	-	921	-	-
2015-085	2458113-32	2017 Dec 25 19:44	Chang Zheng 2C	-	Y34	Ludao	Ludao	-	-	L0603	NASC	-	-	626	-	-
2015-088	2458127-64	2018 Jan 9 03:24:33	Chang Zheng 2D	G3Z	Y40	Ludao	Ludao	-	-	L0603	NASC	-	-	954	-	-
2015-093	2458130-47	2018 Jan 11 23:18:04	Chang Zheng 3B/YZ-1	-	Y45	Supervise 3/4	Supervise 3/4	-	-	L0603	TYSC	-	-	22747	-	-
2015-096	2458131-90	2018 Jan 15 07:10	Chang Zheng 2D	-	Y49	Gaojing-1 3/4	Gaojing-1 3/4	-	-	L0603	NASC	-	-	911	-	-
2015-111	2458145-84	2018 Jan 25 09:59:05	Chang Zheng 2D	b	Y36	Ludao	Ludao	-	-	L0603	NASC	-	-	613	-	-
2015-118	2458161-71	2018 Feb 17 09:51:04	Chang Zheng 2D	-	Y13	Zhongxing-9A	Zhongxing-9A	-	-	L0603	NASC	-	-	22865	-	-
2015-125	2458161-71	2018 Feb 17 09:51:04	Chang Zheng 3C/YZ-1	G3Z	Y17	Yaogan 30 04 zu	Yaogan 30 04 zu	-	-	L0603	NASC	-	-	525	-	-
2015-129	2458207-25	2018 Mar 29 17:05:04	Chang Zheng 3C	G3Z	Y26	Ludao	Ludao	-	-	L0603	NASC	-	-	22814	-	-
2015-134	2458208-64	2018 Mar 30 03:56:08	Chang Zheng 4C	-	Y38	Yaogan 30 03 zu	Yaogan 30 03 zu	-	-	L0603	TYSC	-	-	626	-	-
2015-134	2458210-66	2018 Apr 10 02:45:08	Chang Zheng 3C	-	Y25	Yaogan 31 01 zu	Yaogan 31 01 zu	-	-	L0603	TYSC	-	-	1321	-	-
2015-041	2458242-17	2018 Apr 16 06:05:03	Chang Zheng 3B	G2	Y55	Apsara 6C	Apsara 6C	-	-	L0603	TYSC	-	-	41827	-	-
2015-045	2458259-27	2018 May 20 21:29:50	Chang Zheng 3C	-	Y20	Gao Fen 5	Gao Fen 5	-	-	L0603	TYSC	-	-	703	-	-
2015-048	2458271-68	2018 Jun 5 04:13:04	Chang Zheng 5C	-	Y27	Chang e 4 Relay	Chang e 4 Relay	-	-	L0603	NASC	-	-	150000	-	-
2015-050	2458276-04	2018 Jun 5 13:07:04	Chang Zheng 3A	-	Y20	Gao Fen 6	Gao Fen 6	-	-	L0603	TYSC	-	-	671	-	-
2015-054	2458296-66	2018 Jun 27 03:00:06	Chang Zheng 3C	-	Y44	Xinshiji	Xinshiji	-	-	L0603	NASC	-	-	96377	-	-
2015-056	2458309-37	2018 Jul 9 03:56:14	Chang Zheng 3C	b	Y44	Xinshiji	Xinshiji	-	-	L0603	NASC	-	-	831	-	-
2015-057	2458320-58	2018 Jul 29 01:48:05	Chang Zheng 3C/YZ-1	-	Y27	PRSS-1/Pak-1e-1	PRSS-1/Pak-1e-1	-	-	L0603	TYSC	-	-	36005	-	-
2015-062	2458330-63	2018 Jul 31 03:00:04	Chang Zheng 4B	G3Z	Y49	Beidou-2	Beidou-2	-	-	L0603	TYSC	-	-	22393	-	-
2015-067	2458355-45	2018 Aug 24 23:52:04	Chang Zheng 3C/YZ-1	G3Z	Y37	Gao Fen 11	Gao Fen 11	-	-	L0603	TYSC	-	-	693	-	-
2015-068	2458368-64	2018 Sep 7 03:15:05	Chang Zheng 3C	b	Y39	Beidou D435/36	Beidou D435/36	-	-	L0603	NASC	-	-	22435	-	-
2015-072	2458381-04	2018 Sep 19 14:07:04	Chang Zheng 3C	G3Z	Y51	Beidou D437/38	Beidou D437/38	-	-	L0603	TYSC	-	-	787	-	-
2015-077	2458400-61	2018 Oct 9 02:43:03	Chang Zheng 3C/YZ-1	-	Y38	Yaogan 32 01 zu	Yaogan 32 01 zu	-	-	L0603	TYSC	-	-	22711	-	-
2015-078	2458406-66	2018 Oct 15 04:23:04	Chang Zheng 3C/YZ-1S	G3Z	Y52	Beidou-3	Beidou-3	-	-	L0603	TYSC	-	-	22732	-	-
2015-081	2458416-46	2018 Oct 24 22:57	Chang Zheng 4B	-	Y34	Beidou D439/40	Beidou D439/40	-	-	L0603	TYSC	-	-	529	-	-
2015-083	2458420-16	2018 Nov 1 15:57:04	Chang Zheng 3B	G3	Y41	Zhongxing-18	Zhongxing-18	-	-	L0603	NASC	-	-	36509	-	-
2015-084	2458441-25	2018 Nov 18 18:07:04	Chang Zheng 3C	-	Y22	Beidou D441	Beidou D441	-	-	L0603	TYSC	-	-	22843	-	-
2015-093	2458442-49	2018 Nov 18 23:40:04	Chang Zheng 2D	-	Y38	Shiyan 6	Shiyan 6	-	-	L0603	TYSC	-	-	537	-	-
2015-102	2458459-67	2018 Dec 7 04:12	Chang Zheng 3D	-	Y30	SaudiSat-5A/5B	SaudiSat-5A/5B	-	-	L0603	TYSC	-	-	554	-	-
2015-110	2458477-20	2018 Dec 24 16:53:04	Chang Zheng 3C	G2?	Y17	Chang'e-4	Chang'e-4	-	-	L0603	TYSC	-	-	150000	-	-
2015-112	2458481-83	2018 Dec 24 08:00:05	Chang Zheng 3C/YZ-3	-	Y35	TJS 3	TJS 3	-	-	L0603	TYSC	-	-	36367	-	-
2015-001	2458494-22	2019 Jan 10 17:11:04	Chang Zheng 3B	G3	Y56	Hongyan-1	Hongyan-1	-	-	L0603	TYSC	-	-	1100	-	-
2015-012	2458552-16	2019 Mar 9 16:28:04	Chang Zheng 3B	G3	Y54	Zhongxing 6C	Zhongxing 6C	-	-	L0603	TYSC	-	-	36819	-	-
2015-017	2458574-16	2019 Mar 31 15:51:04	Chang Zheng 3B	G3	Y44	Tianlian 2	Tianlian 2	-	-	L0603	TYSC	-	-	41761	-	-
2015-023	2458594-11	2019 Apr 20 14:41:03	Chang Zheng 3B	G2	Y59	Beidou D444	Beidou D444	-	-	L0603	TYSC	-	-	36935	-	-
2015-024	2458603-15	2019 Apr 29 22:52:05	Chang Zheng 4B	G2	Y36	Tianhui-2 01 zu	Tianhui-2 01 zu	-	-	L0603	TYSC	-	-	36886	-	-
2015-027	2458621-46	2019 May 17 15:48:05														

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Mission	FlightCode	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee_Km	Range_Km	Dest
2019-070	2458774-14	2019 Oct 17 1521:04	Chang Zheng 3B	G2	Y57	TJS 4	TJS 4	-	-	NSC	LC3	-	-	36051	-	-
2019-072	2458790-64	2019 Nov 3 0322	Chang Zheng 3B	G2	Y38	Gaofen 7	Gaofen 7	-	-	TRSC	LC9	-	-	512	-	-
2019-073	2458792-24	2019 Nov 4 1743:04	Chang Zheng 3B	G2	Y61	Beidou-3 I3Q	Beidou-3 I3Q	-	-	NSC	LC3?	-	-	35900	-	-
2019-076	2458800-77	2019 Nov 13 0636	Chang Zheng 3B/YZ-1	G32	Y4	Hingxia-1	Hingxia-1	-	-	TRSC	LC16	-	-	900	-	-
2019-078	2458810-54	2019 Nov 23 0856	Chang Zheng 3B/YZ-1	G32	Y66	Beidou-3 M21/M22	Beidou-3 M21/M22	-	-	NSC	LC3	-	-	22584	-	-
2019-082	2458815-49	2019 Nov 27 2352	Chang Zheng 3B/YZ-1	G32	Y24	Gaofen 12	Gaofen 12	-	-	TRSC	LC9	-	-	632	-	-
2019-090	2458833-81	2019 Dec 16 0722	Chang Zheng 3B	G2	Y67	Beidou-3 M19/M20	Beidou-3 M19/M20	-	-	NSC	LC9	-	-	22569	-	-
2019-093	2458837-64	2019 Dec 20 0322:29	Chang Zheng 3B	G2	Y44	CHERS-4A	CHERS-4A	-	-	TRSC	LC9	-	-	647	-	-
2020-002	2458856-14	2020 Jan 7 1520	Chang Zheng 3B	G2	Y62	TJS 5	TJS 5	-	-	NSC	LC2	-	-	35996	-	-
2020-003	2458863-62	2020 Jan 15 0253:04	Chang Zheng 3B	G2	Y58	Jilin-1/Kuanfu 1	Jilin-1/Kuanfu 1	-	-	TRSC	LC9	-	-	540	-	-
2020-014	2458869-38	2020 Feb 19 2107:41	Chang Zheng 2D	-	Y61	XJS C-F	XJS C-F	-	-	NSC	LC3	-	-	483	-	-
2020-017	2458899-00	2020 Mar 9 1155	Chang Zheng 2D	G2	Y69	Beidou-3 G2	Beidou-3 G2	-	-	NSC	LC3	-	-	35809	-	-
2020-F02	2458925-00	2020 Mar 16 1334	Chang Zheng 3A	b	Y1	YZ-5	YZ-5	-	-	WEN	LC201	-	-	2007	-	-
2020-F03	2458932-65	2020 Mar 24 0343:05	Chang Zheng 3C	G2	Y71	Paifeng 30 06 zu	Paifeng 30 06 zu	-	-	NSC	LC2	-	-	2007	-	-
2020-F04	2458945-99	2020 Apr 9 1146	Chang Zheng 3B	G2	Y71	Haifa M1	Haifa M1	-	-	NSC	LC2	-	-	624	-	-
2020-F04	2459001-87	2020 May 31 0853	Chang Zheng 2C	b	Y61	Gao Fen 9-02	Gao Fen 9-02	-	-	JQ	LC43/94	-	-	538	-	-
2020-F04	2459017-80	2020 Jun 17 0719:34	Chang Zheng 3B	G2	Y62	Haifeng ID	Haifeng ID	-	-	JQ	LC43/94	-	-	527	-	-
2020-F04	2459023-57	2020 Jun 23 0443:04	Chang Zheng 3B	G2	Y68	Gao Fen 9-03	Gao Fen 9-03	-	-	NSC	LC2	-	-	35833	-	-
2020-F04	2459033-63	2020 Jul 3 0310	Chang Zheng 4B	-	Y43	Beidou-3 G3	Beidou-3 G3	-	-	TRSC	LC9	-	-	651	-	-
2020-F04	2459035-49	2020 Jul 4 2344:04	Chang Zheng 4B	-	Y29	Gao Fen Duomo	Gao Fen Duomo	-	-	JQ	LC43/94	-	-	692	-	-
2020-F04	2459040-01	2020 Jul 9 1211:04	Chang Zheng 3B	G2	Y64	Shiyan 6-02	Shiyan 6-02	-	-	NSC	LC3	-	-	35884	-	-
2020-F05	2459055-63	2020 Jul 25 0313	Chang Zheng 4B	-	Y45	Apstar 6D	Apstar 6D	-	-	TRSC	LC9	-	-	513	-	-
2020-F04	2459067-67	2020 Aug 6 0401	Chang Zheng 2D	-	Y56	Gao Fen 9-04	Gao Fen 9-04	-	-	JQ	LC43/94	-	-	507	-	-
2020-F04	2459068-60	2020 Aug 23 0227:04	Chang Zheng 2D	-	Y57	Gao Fen 9-05	Gao Fen 9-05	-	-	JQ	LC43/94	-	-	507	-	-
2020-F06	2459096-61	2020 Sep 4 0730	Chang Zheng 2F	T	Y3	CSSHQ	CSSHQ	-	-	JQ	LC43/91	-	-	566	-	-
2020-F06	2459099-75	2020 Sep 7 0587:05	Chang Zheng 4B	-	Y46	Gao Fen 11-02	Gao Fen 11-02	-	-	TRSC	LC9	-	-	963	-	-
2020-F06	2459113-74	2020 Sep 21 0540:04	Chang Zheng 4B	-	Y41	Haifeng 2-03	Haifeng 2-03	-	-	JQ	LC43/94	-	-	746	-	-
2020-F07	2459119-64	2020 Sep 27 0323:04	Chang Zheng 4B	-	Y42	HJ-2A/B	HJ-2A/B	-	-	NSC	LC2	-	-	35836	-	-
2020-F11	2459134-21	2020 Oct 11 1657:04	Chang Zheng 3C	G2	Y43	Gao Fen 13	Gao Fen 13	-	-	NSC	LC3	-	-	617	-	-
2020-F16	2459149-14	2020 Oct 26 1519:05	Chang Zheng 2C	-	Y63	Huast 9-18	Huast 9-18	-	-	TRSC	LC16	-	-	461	-	-
2020-F19	2459159-64	2020 Nov 6 0319:15	Chang Zheng 6	-	Y35	Tiancong-1 02	Tiancong-1 02	-	-	NSC	LC2	-	-	35819	-	-
2020-F22	2459169-67	2020 Dec 6 0357:37	Chang Zheng 3B	G5	Y70	Gao Fen 14	Gao Fen 14	-	-	NSC	LC3	-	-	525	-	-
2020-F22	2459205-69	2020 Dec 22 0457:37	Chang Zheng 6	-	Y1	XJY 7	XJY 7	-	-	WEN	LC201	-	-	528	-	-
2020-F03	2459211-16	2020 Dec 27 1924	Chang Zheng 3C	G2	Y55	Taogun 33	Taogun 33	-	-	JQ	LC43/94	-	-	689	-	-
2020-F03	2459234-18	2021 Jan 19 0225	Chang Zheng 3C	G2	Y74	Tiancong-1 03	Tiancong-1 03	-	-	NSC	LC2	-	-	35821	-	-
2021-007	2459243-70	2021 Jan 29 0444	Chang Zheng 3C	G2	Y31	Taogun 31 02 zu	Taogun 31 02 zu	-	-	JQ	LC43/94	-	-	1134	-	-
2021-010	2459250-15	2021 Feb 24 0222	Chang Zheng 3C	G2	Y77	TJS 6	TJS 6	-	-	NSC	LC3	-	-	35831	-	-
2021-014	2459269-60	2021 Feb 24 0222	Chang Zheng 4C	-	Y32	Taogun 31 03 zu	Taogun 31 03 zu	-	-	JQ	LC43/94	-	-	1134	-	-
2021-019	2459285-24	2021 Mar 13 0751:28	Chang Zheng 7A	-	Y2	Shiyan 9	Shiyan 9	-	-	WEN	LC201	-	-	36110	-	-
2021-026	2459304-46	2021 Mar 30 0246	Chang Zheng 4C	-	Y36	Taogun 31 04 zu	Taogun 31 04 zu	-	-	JQ	LC43/94	-	-	1173	-	-
2021-028	2459313-46	2021 Apr 3 2301	Chang Zheng 4C	-	Y36	Gao Fen 12-02	Gao Fen 12-02	-	-	JQ	LC43/94	-	-	632	-	-
2021-033	2459331-66	2021 Apr 27 0920	Chang Zheng 4B	-	Y49	Shiyan 6 05	Shiyan 6 05	-	-	TRSC	LC9	-	-	1120	-	-
2021-037	2459334-64	2021 Apr 30 0721	Chang Zheng 6	-	Y5	Qilu-1/4	Qilu-1/4	-	-	TRSC	LC9	-	-	552	-	-
2021-039	2459341-51	2021 Apr 30 0721	Chang Zheng 4C	-	Y24	Taogun 30 08 zu	Taogun 30 08 zu	-	-	NSC	LC43/94	-	-	1128	-	-
2021-043	2459353-26	2021 May 19 1810:05	Chang Zheng 2C	-	Y47	Haifeng 2-04	Haifeng 2-04	-	-	NSC	LC3	-	-	971	-	-
2021-043	2459364-07	2021 May 29 1403:05	Chang Zheng 9	-	Y48	Tianzhou 2	Tianzhou 2	-	-	WEN	LC43/94	-	-	501	-	-
2021-047	2459368-14	2021 Jun 11 0203	Chang Zheng 3B	G2	Y72	Feng Yun 4-02	Feng Yun 4-02	-	-	NSC	LC2	-	-	35824	-	-
2021-050	2459376-63	2021 Jun 11 0203	Chang Zheng 3B	G2	Y54	BeiJing 3-01	BeiJing 3-01	-	-	TRSC	LC9	-	-	505	-	-
2021-050	2459382-56	2021 Jun 17 0123:32	Chang Zheng 3C	G	Y42	Shenzhou 12	Shenzhou 12	-	-	NSC	LC43/91	-	-	685	-	-
2021-055	2459388-67	2021 Jun 18 0430	Chang Zheng 2C	-	Y46	Taogun 30 09 zu	Taogun 30 09 zu	-	-	NSC	LC3	-	-	580	-	-
2021-061	2459398-62	2021 Jun 18 0251	Chang Zheng 3C	-	Y74	Jilin-1	Jilin-1	-	-	TRSC	LC9	-	-	647	-	-
2021-062	2459400-48	2021 Jul 4 2328	Chang Zheng 4C	-	Y43	Feng Yun 3E	Feng Yun 3E	-	-	JQ	LC43/94	-	-	834	-	-
2021-063	2459402-16	2021 Jul 6 1553	Chang Zheng 3C	G2?	Y18	Tian Jian 1-05	Tian Jian 1-05	-	-	NSC	LC2	-	-	35784	-	-
2021-064	2459405-00	2021 Jul 9 1159	Chang Zheng 6	-	Y48	Zhongxing 2-05	Zhongxing 2-05	-	-	TRSC	LC16	-	-	889	-	-
2021-065	2459414-51	2021 Jul 19 0819	Chang Zheng 2C	-	Y49	Taogun 30 10 zu	Taogun 30 10 zu	-	-	NSC	LC3	-	-	804	-	-
2021-067	2459424-67	2021 Jul 19 0401	Chang Zheng 2D	-	Y62	Tianhui 1-04	Tianhui 1-04	-	-	JQ	LC43/94	-	-	503	-	-
2021-070	2459422-50	2021 Jul 27	Chang Zheng 3B	-	-	DF-2F	DF-2F	-	-	TRSC?	-	-	-	-	-	-
2021-070	2459430-96	2021 Aug 4 1101	Chang Zheng 6	-	Y7	KL-Beita	KL-Beita	-	-	TRSC	LC16	-	-	913	-	-
2021-071	2459432-19	2021 Aug 5 1630:04	Chang Zheng 3B	G2	Y76	Shenzhou 2-05	Shenzhou 2-05	-	-	NSC	LC2	-	-	35822	-	-
2021-074	2459445-44	2021 Aug 18 2922	Chang Zheng 4B	-	Y50	Zhongxing 2E	Zhongxing 2E	-	-	TRSC	LC9	-	-	522	-	-
2021-076	2459450-97	2021 Aug 24 1115	Chang Zheng 3B/YZ-1S	-	Y51	Tianhui 2 02 zu	Tianhui 2 02 zu	-	-	JQ	LC43/94	-	-	1114	-	-
2021-077	2459451-15	2021 Aug 24 1541	Chang Zheng 3B	-	Y78	RSW	RSW	-	-	JQ	LC43/94	-	-	503	-	-
2021-077	2459464-63	2021 Sep 7 0301	Chang Zheng 3B	-	Y40	TJS 7	TJS 7	-	-	NSC	LC9	-	-	802	-	-
2021-080	2459466-90	2021 Sep 9 1150	Chang Zheng 3B	-	Y66	Gao Fen 5-02	Gao Fen 5-02	-	-	TRSC	LC9	-	-	802	-	-
2021-085	2459477-80	2021 Sep 20 0710:11	Chang Zheng 7	-	Y4	Zhongxing 9B	Zhongxing 9B	-	-	NSC	LC201	-	-	35804	-	-
2021-087	2459484-88	2021 Sep 27 0820	Chang Zheng 3B	G2	Y61	Tianzhou 3	Tianzhou 3	-	-	WEN	LC201	-	-	395	-	-
2021-091	2459501-95	2021 Oct 14 1051	Chang Zheng 2D	-	Y53	Shiyan 10	Shiyan 10	-	-	NSC	LC9	-	-	40428	-	-
2021-092	2459503-18	2021 Oct 15 1623:44	Chang Zheng 2F	G	Y13	CHASE	CHASE	-	-	TRSC	LC9	-	-	527	-	-
2021-094	2459511-56	2021 Oct 24 0127	Chang Zheng 3B	G2	Y63	Shenzhou 13	Shenzhou 13	-	-	NSC	LC43/91	-	-	390	-	-
2021-099	2459521-82	2021 Nov 3 0743	Chang Zheng 3B	-	Y41	YG-32 02 zu	YG-32 02 zu	-	-	JQ	LC2	-	-	703	-	-
2021-100	2459523-60	2021 Nov 5 0219	Chang Zheng 6	-	Y4	Guangmu (CAS/Earth)	Guangmu (CAS/Earth)	-	-	TRSC	LC43/94	-	-	516	-	-
2021-101	2459524-62	2021 Nov 6 0300	Chang Zheng 2D	-	Y63	YG-35	YG-35									

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Mission	FlightCode	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee_Km	Range_Km	Dest
2022-018	2459637.49	2022 Feb 26 2344	Chang Zheng 4C	-	Y30	Ludi Tance 1-01B	LTH-01B	-	-	JQ	L043/94	-	-	604	-	-
2022-019	2459637.63	2022 Feb 27 0306:28	Chang Zheng 8	0	Y2	Taijing 3/4, Jilin-1	Taijing 3/4, Jilin-1	-	-	WEN	L201	-	-	604	-	-
2022-023	2459643.75	2022 Mar 5 0601	Chang Zheng 2C	-	Y62	Yinhai 2-01/06	Yinhai 2-01/06	-	-	NSC	L201	-	-	645	-	-
2022-027	2459655.80	2022 Mar 17 0709	Chang Zheng 4C	-	Y47	Yaogan 34 02	Yaogan 34 02	-	-	JQ	L043/94	-	-	1102	-	-
2022-031	2459667.91	2022 Mar 29 0950	Chang Zheng 6A	-	Y1	TK-2/PJ-2	TK-2/PJ-2	-	-	JQ	L03A	-	-	606	-	-
2022-036	2459676.49	2022 Apr 6 2347	Chang Zheng 4C	-	Y88	Gao Fen 3-03	Gao Fen 3-03	-	-	JQ	L043/94	-	-	752	-	-
2022-038	2459685.26	2022 Apr 15 1200	Chang Zheng 3B	-	Y39	Zhongxing 6D	Zhongxing 6D	-	-	NSC	L2	-	-	703	-	-
2022-039	2459685.26	2022 Apr 15 1816	Chang Zheng 4C	-	Y78	Deq. Huangjing Jiance	DQHJW	-	-	JQ	L043/94	-	-	725	-	-
2022-043	2459698.67	2022 Apr 29 0411:33	Chang Zheng 2C	-	Y20	Shwei 1-01/02	Shwei CJ 1-01/02	-	-	JQ	L03	-	-	703	-	-
2022-048	2459704.61	2022 May 9 0238	Chang Zheng 2D	-	Y79	Jilin-1	Jilin-1	-	-	JQ	L03	-	-	548	-	-
2022-050	2459709.25	2022 May 9 1756:37	Chang Zheng 7	-	Y53/Y5	Tianzhou-4	Tianzhou-4	-	-	WEN	L201	-	-	401	-	-
2022-056	2459719.94	2022 May 20 1030	Chang Zheng 2C	-	Y65	BSX-1/2	BSX-1/2	-	-	JQ	L201	-	-	1184	-	-
2022-058	2459732.67	2022 Jun 2 0400	Chang Zheng 2C	-	Y14	Geely Xingguo 01 zu	Geely Xingguo 01 zu	-	-	NSC	L043/94	-	-	627	-	-
2022-060	2459735.61	2022 Jun 23 0244:10	Chang Zheng 2F	G	Y64	Shenzhou 14	Shenzhou 14	-	-	JQ	L043/91	-	-	521	-	-
2022-068	2459763.60	2022 Jun 23 0222	Chang Zheng 2F	-	Y46	YG-35 02	YG-35 02	-	-	NSC	L03	-	-	506	-	-
2022-069	2459775.16	2022 Jun 27 1546	Chang Zheng 4C	-	Y85	Gao Fen 12-03	Gao Fen 12-03	-	-	JQ	L043/94	-	-	661	-	-
2022-078	2459773.19	2022 Jul 12 1650	Chang Zheng 3B	G2	Y76	Tianlian 2-03	Tianlian 2-03	-	-	NSC	L2	-	-	36865	-	-
2022-082	2459776.46	2022 Jul 15 2257:16	Chang Zheng 2C	-	Y71	Shwei 2-01/02	Shwei CJ 2-01/02	-	-	JQ	L03	-	-	501	-	-
2022-088	2459790.06	2022 Jul 29 1528	Chang Zheng 2D	-	Y40	YG-35 03	YG-35 03	-	-	NSC	L03	-	-	526	-	-
2022-090	2459795.63	2022 Aug 4 0308	Chang Zheng 4B	-	Y74	Guomang	Guomang	-	-	JQ	L03	-	-	509	-	-
2022-093	2459796.17	2022 Aug 4 16007	Chang Zheng 2F	T	Y10	CSSHQ	CSSHQ	-	-	JQ	L043/91	-	-	845	-	-
2022-096	2459801.70	2022 Aug 10 0450	Chang Zheng 6	-	Y66	Jilin-1	Jilin-1	-	-	JQ	L03	-	-	562	-	-
2022-100	2459811.23	2022 Aug 19 1737	Chang Zheng 2D	-	Y16	YG-35 04	Yaogan 35 04	-	-	NSC	L03	-	-	515	-	-
2022-103	2459815.63	2022 Aug 24 0301	Chang Zheng 2D	-	Y75	Beijing-3B	Beijing-3B	-	-	JQ	L03	-	-	616	-	-
2022-106	2459825.49	2022 Sep 2 2344	Chang Zheng 4C	-	Y52	Yaogan 33 02	Yaogan 33 02	-	-	JQ	L043/94	-	-	697	-	-
2022-109	2459828.68	2022 Sep 2 2344	Chang Zheng 2C	-	Y67	YG-35 06	Yaogan 35 06	-	-	NSC	L03	-	-	504	-	-
2022-112	2459836.05	2022 Sep 6 0419	Chang Zheng 7A	-	Y5	Zhongxing-1E	Zhongxing-1E	-	-	WEN	L201	-	-	35797	-	-
2022-116	2459843.47	2022 Sep 15 1316:47	Chang Zheng 7A	-	Y76	Tianhai 1-03	Tianhai 1-03	-	-	JQ	L043/94	-	-	775	-	-
2022-120	2459849.07	2022 Sep 20 2315	Chang Zheng 2D	-	Y68	Tianhai 1-03	Tianhai 1-03	-	-	NSC	L03	-	-	-	-	-
2022-121	2459849.49	2022 Sep 26 2350	Chang Zheng 6	-	Y19	Yaogan 36 01	Yaogan 36 01	-	-	JQ	L03	-	-	-	-	-
2022-129	2459861.49	2022 Oct 6 2343	Chang Zheng 2C	-	Y55	Shiyan 16AB/17	Shiyan 16AB/17	-	-	JQ	L03	-	-	-	-	-
2022-132	2459865.46	2022 Oct 6 2343	Chang Zheng 2C	-	Y69	ASO-5	ASO-5	-	-	JQ	L043/94	-	-	-	-	-
2022-133	2459867.30	2022 Oct 14 1912	Chang Zheng 2C	-	Y66	HJ-2-05 (Em. S-SHR-01)	HJ-2-05 (Em. S-SHR-01)	-	-	JQ	L043/94	-	-	-	-	-
2022-142	2459881.54	2022 Oct 29 0101	Chang Zheng 2D	-	Y72	Shiyan 20C	Shiyan 20C	-	-	JQ	L043/94	-	-	-	-	-
2022-146	2459885.99	2022 Oct 29 0101	Chang Zheng 3B	-	Y91	Zhongxing 19	Zhongxing 19	-	-	JQ	L03	-	-	-	-	-
2022-148	2459888.99	2022 Nov 5 1150	Chang Zheng 3B	-	Y6	Tianhai-3	Tianhai-3	-	-	NSC	L2	-	-	-	-	-
2022-151	2459895.46	2022 Nov 11 2252	Chang Zheng 7	-	Y63	Tianzhou-5	Tianzhou-5	-	-	JQ	L03A	-	-	-	-	-
2022-152	2459895.59	2022 Nov 12 0203:12	Chang Zheng 7	-	Y63	Tianzhou-5	Tianzhou-5	-	-	JQ	L03A	-	-	-	-	-
2022-154	2459896.57	2022 Nov 15 0158	Chang Zheng 9C	-	Y88	Yaogan 34-03	Yaogan 34-03	-	-	JQ	L043/94	-	-	-	-	-
2022-160	2459911.02	2022 Nov 20 1223	Chang Zheng 2D	-	Y49	YG-35 03	YG-35 03	-	-	NSC	L03	-	-	-	-	-
2022-162	2459913.13	2022 Nov 29 1508:17	Chang Zheng 2F	G	Y15	Shenzhou 15	Shenzhou 15	-	-	JQ	L043/91	-	-	-	-	-
2022-166	2459925.27	2022 Dec 9 1831	Chang Zheng 2D	-	Y45	Georen 5-01A	Georen 5-01A	-	-	JQ	L03	-	-	-	-	-
2022-171	2459928.95	2022 Dec 14 0822	Chang Zheng 9C	-	Y57	Shiyan 20A/20B	Shiyan 20A/20B	-	-	JQ	L03	-	-	-	-	-
2022-174	2459932.57	2022 Dec 14 0822	Chang Zheng 9C	-	Y50	YG-36 04	YG-36 04	-	-	NSC	L03	-	-	-	-	-
2022-176	2459940.52	2022 Dec 27 0737	Chang Zheng 9B	-	Y88	Shiyan 10-02	Shiyan 10-02	-	-	JQ	L03	-	-	-	-	-
2022-178	2459945.70	2022 Dec 29 0443	Chang Zheng 3B	G2	Y68	Gao Fen 11-04	Gao Fen 11-04	-	-	JQ	L03	-	-	-	-	-
2022-182	2459957.72	2023 Jan 19 2200	Chang Zheng 7A	-	Y41	Shi Jiantan 25	Shi Jiantan 25	-	-	JQ	L03	-	-	-	-	-
2022-186	2459967.52	2023 Jan 13 0710	Chang Zheng 2D	-	Y73	Apstar 9E	Apstar 9E	-	-	JQ	L03	-	-	-	-	-
2022-190	2459981.63	2023 Jan 15 0747	Chang Zheng 2D	-	Y71	Jilin/QLU	Jilin/QLU	-	-	JQ	L043/94	-	-	-	-	-
2022-193	2459989.63	2023 Jan 15 0747	Chang Zheng 3D	-	Y63	Zhongxing 26	Zhongxing 26	-	-	JQ	L03	-	-	-	-	-
2022-197	2459999.67	2023 Feb 24 0149	Chang Zheng 9C	G2	Y63	Huastar 1	Huastar 1	-	-	JQ	L043/94	-	-	-	-	-
2022-203	2460013.47	2023 Feb 24 0149	Chang Zheng 9C	-	Y51	Huastar 1-6 01/02	Huastar 1-6 01/02	-	-	JQ	L043/94	-	-	-	-	-
2022-206	2460016.47	2023 Mar 13 0402	Chang Zheng 9C	-	Y64	Huastar 2	Huastar 2	-	-	JQ	L043/94	-	-	-	-	-
2022-232	2460020.86	2023 Mar 17 0833	Chang Zheng 9C	-	Y90	ChinaSat 13-02	ChinaSat 13-02	-	-	JQ	L043/94	-	-	-	-	-
2022-236	2460034.95	2023 Mar 17 0833	Chang Zheng 9D	-	Y60	PIESAT 1-4	PIESAT 1-4	-	-	JQ	L03	-	-	-	-	-
2022-247	2460034.95	2023 Mar 30 1953	Chang Zheng 9D	-	Y49	YG-34 04	YG-34 04	-	-	JQ	L03	-	-	-	-	-
2022-248	2460034.97	2023 Mar 31 0627	Chang Zheng 4C	-	Y51	YG-37	YG-37	-	-	JQ	L043/94	-	-	-	-	-
2022-255	2460075.57	2023 Apr 16 0136:30	Chang Zheng 7	-	Y63	Tianzhou-6	Tianzhou-6	-	-	JQ	L043/94	-	-	-	-	-
2022-263	2460075.57	2023 Apr 16 0136:30	Chang Zheng 7	-	Y63	Tianzhou-6	Tianzhou-6	-	-	JQ	L043/94	-	-	-	-	-
2022-266	2460081.62	2023 May 17 0242:51	Chang Zheng 3B	G2	Y87	Baidou DJ56	Baidou DJ56	-	-	JQ	L043/94	-	-	-	-	-
2022-269	2460085.83	2023 May 21 0800	Chang Zheng 3B	-	Y60	Kezhuo	Kezhuo	-	-	JQ	L043/94	-	-	-	-	-
2022-277	2460094.56	2023 May 30 0131:13	Chang Zheng 2F	G	Y16	Shenzhou 16	Shenzhou 16	-	-	JQ	L043/91	-	-	-	-	-
2022-282	2460110.73	2023 Jun 15 0539	Chang Zheng 2D	-	Y88	Jilin-1	Jilin-1	-	-	JQ	L03	-	-	-	-	-
2022-285	2460115.64	2023 Jun 20 0318	Chang Zheng 6	-	Y12	Shiyan 25	Shiyan 25	-	-	JQ	L03	-	-	-	-	-
2022-287	2460134.96	2023 Jun 20 0318	Chang Zheng 6	-	Y12	WHISH-1	WHISH-1	-	-	JQ	L03	-	-	-	-	-
2022-295	2460134.96	2023 Jun 20 0318	Chang Zheng 6	-	Y12	WHISH-1	WHISH-1	-	-	JQ	L03	-	-	-	-	-
2022-304	2460148.62	2023 Jul 9 1100	Chang Zheng 2D	-	Y91	Liangri-03/Sixiang	Liangri-03/Sixiang	-	-	JQ	L043/94	-	-	-	-	-
2022-306	2460148.62	2023 Jul 23 0250	Chang Zheng 2D	-	Y44	YG-36 05	YG-36 05	-	-	JQ	L03	-	-	-	-	-
2022-311	2460159.66	2023 Aug 3 0347:47	Chang Zheng 4C	-	Y46	HY-9F	HY-9F	-	-	JQ	L043/94	-	-	-	-	-
2022-316	2460165.45	2023 Aug 8 2263	Chang Zheng 2C	-	Y66	HJ2-06	HJ2-06	-	-	JQ	L03	-	-	-	-	-
2022-320	2460169.23	2023 Aug 12 1726	Chang Zheng 3B	G2	Y92	LSAR4-01	LSAR4-01	-	-	JQ	L03	-	-	-	-	-
2022-323	2460177.24	2023 Aug 20 1745	Chang Zheng 4C	-	Y56	GF12-04	GF12-04	-	-	JQ	L043/94	-	-	-	-	-
2022-330	2460187.82	2023 Aug 31 0736	Chang Zheng 2D	-	Y82	YG-39 01	Yaogan 39 01	-	-	JQ	L03	-	-	-	-	-
2022-336	2460194.26	2023 Sep 6 1814	Chang Zheng 4C	-	Y53	YG-40	Yaogan 40	-	-	JQ	L043/94	-	-	-	-	-
2022-339	2460197.69	2023 Sep 10 0430	Chang Zheng 6A	-	Y83	YG-39 02	Yaogan 39 02	-	-	JQ	L03	-	-	-	-	-
2022-345	2460204.68	2023 Sep 17 0413	Chang Zheng 2D	-	Y54	YG-33 04	Yaogan 33 04	-	-	JQ	L03	-	-	-	-	-
2022-349	2460214.34	2023 Sep 26 2015	Chang Zheng 4C	-	Y84	YG-39 03	Yaogan 39 03	-	-	JQ	L043/94	-	-	-	-	-
2022-352	2460222.52	2023 Oct 5 0024	Chang Zheng 2D	-	Y77	Yunhai-1 04	Yunhai-1 04	-	-	JQ	L043/94	-	-	-	-	-
2022-359	2460232.54	2023 Oct 15 0654	Chang Zheng 2D	-	Y65	YG-39 04	Yaogan 39 04	-	-	JQ	L03	-	-	-	-	-
2022-363	2460241.34	2023 Oct 23 2003	Chang Zheng 2D	-	Y17	Shenzhou 17	Shenzhou 17	-	-	JQ	L043/91	-	-	-	-	-
2022-364	2460243.63	2023 Oct 23 2003	Chang Zheng 2F	G	Y4	Tianhui-5	Tianhui-5	-	-	JQ	L03A	-	-	-	-	-
2022-368	2460249.45	2023 Oct 31 2250	Chang Zheng 6A	-	Y6	TJIS-10	TJIS-10	-	-	JQ						

Launch Mission

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Launch	FlightCode	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee_Km	Range_Km	Dest
2025-195	2460293-09	2023 Dec 14 14:27	Chang Zheng 2F	T	T5	CSSHQ	CSSHQ	-	-	JQ	LC43/91	-	-	-	-	-
2025-207	2460304-64	2023 Dec 26 0326	Chang Zheng 3B/YZ-1	G3Z	Y55/Y16	Beidou 57/68	Beidou	-	-	ASC	-	-	-	-	-	-
2025-212	2460308-51	2023 Dec 30 0013	Chang Zheng 2C/YZ-1S	-	Y30	WHJSM-4	WHJSM 04	-	-	ASC	LC43/94	-	-	-	-	-
2024-007	2460318-79	2024 Jan 9 0703	Chang Zheng 2C	-	Y8	Einstein Probe	Einstein Probe	-	-	ASC	LC3	-	-	-	-	-
2024-013	2460327-10	2024 Jan 17 1427:30	Chang Zheng 7	-	Y85	Tianzhou-7	Tianzhou-7	-	-	WEN	LC201	-	-	-	-	-
2024-023	2460343-48	2024 Feb 2 2337	Chang Zheng 3B	-	Y86	Geely Xingguo 02 zu	GeoSat	-	-	ASC	-	-	-	-	-	-
2024-040	2460370-04	2024 Feb 29 1303	Chang Zheng 3C	G2	Y85	Huilanwang Gaogui W.	Huilanwang Gaogui W.	-	-	ASC	-	-	-	-	-	-
2024-048	2460383-04	2024 Mar 13 1251	Chang Zheng 8	-	Y3	DRU-A/DRU-B	DRU-A/DRU-B	-	-	WEN	LC201	-	-	-	-	-
2024-051	2460389-52	2024 Mar 20 0351:28	Chang Zheng 2D/YZ-3	-	Y102	Queqiao-2	Queqiao-2	-	-	JQ	LC43/94	-	-	-	-	-
2024-052	2460390-73	2024 Mar 21 0527	Chang Zheng 2D/YZ-3	-	Y3	Yunhai-2 02	Yunhai-2 02	-	-	JQ	LC3A	-	-	-	-	-
2024-058	2460396-45	2024 Mar 26 2251	Chang Zheng 6A	-	Y102	Yunhai-3 02	Yunhai-3 02	-	-	ASC	-	-	-	-	-	-
2024-063	2460403-46	2024 Apr 2 2256	Chang Zheng 2D	-	Y103	Yaogan 42-01	Yaogan 42 01	-	-	ASC	LC43/94	-	-	-	-	-
2024-072	2460415-67	2024 Apr 15 0412	Chang Zheng 2D	-	Y97	Sivei Gaojing 3-01	Sivei Gaojing 3-01	-	-	ASC	-	-	-	-	-	-
2024-075	2460421-49	2024 Apr 20 2345	Chang Zheng 2F	-	Y18	Yaogan 42-02	Yaogan 42 02	-	-	ASC	-	-	-	-	-	-
2024-078	2460426-04	2024 Apr 25 1259:00	Chang Zheng 2F	G	Y18	Shenzhou 18	Shenzhou 18	-	-	JQ	LC43/91	-	-	-	-	-
2024-085	2460437-64	2024 May 7 0321	Chang Zheng 6C	-	Y1	Haivengxing-01/Zhixing	Haivengxing-01	-	-	ASC	-	-	-	-	-	-
2024-087	2460439-57	2024 May 9 0143	Chang Zheng 3B	G2	Y96?	Zhuhui Tianwang 1-01	Zhuhui Tianwang 1-01	-	-	ASC	-	-	-	-	-	-
2024-089	2460442-49	2024 May 11 2343	Chang Zheng 4C	-	Y50	Shiyan 23	Shiyan 23	-	-	JQ	LC43/94	-	-	-	-	-
2024-094	2460450-63	2024 May 20 0306	Chang Zheng 2D	-	Y98	Beijing-3C	Beijing-3C	-	-	TRSC	-	-	-	-	-	-
2024-104	2460461-01	2024 May 30 1212	Chang Zheng 3B	G2	Y98	Paksat-MH1	Paksat-MH1	-	-	ASC	LC2	-	-	-	-	-
2024-116	2460463-79	2024 May 30 0700	Chang Zheng 2C	-	Y50	SVOM	SVOM	-	-	ASC	LC3	-	-	-	-	-
2024-122	2460491-00	2024 Jun 29 1157	Chang Zheng 7A	-	Y8	ZX-3A	Zhongxing-3A	-	-	WEN	LC201	-	-	-	-	-
2024-126	2460496-45	2024 Jul 4 2249	Chang Zheng 6A	-	Y7	Tianhui 5-02	Tianhui 5-02	-	-	TRSC	LC3A	-	-	-	-	-
2024-130	2460510-63	2024 Jul 19 0303	Chang Zheng 4B	-	Y58	GF11-05	GF11-05	-	-	ASC	LC2	-	-	-	-	-
2024-135	2460524-05	2024 Aug 1 1314	Chang Zheng 3B	G2	Y72	Huilanwang Gaogui W.	Huilanwang Gaogui W.	-	-	ASC	-	-	-	-	-	-
2024-140	2460528-78	2024 Aug 6 0642	Chang Zheng 6A	-	Y21	Qianran Jigui 01	Qianran Jigui 01	-	-	ASC	LC201	-	-	-	-	-
2024-146	2460535-62	2024 Aug 16 0735	Chang Zheng 4B	-	Y72	ZX-4A	Zhongxing-4A	-	-	WEN	-	-	-	-	-	-
2024-151	2460545-02	2024 Aug 22 1225	Chang Zheng 7A	-	Y9	Yaogan 43-01	Yaogan 43 01	-	-	ASC	LC201	-	-	-	-	-
2024-156	2460556-56	2024 Sep 5 0122	Chang Zheng 4B	-	Y73	Yaogan 43-02	Yaogan 43 02	-	-	ASC	-	-	-	-	-	-
2024-159	2460559-27	2024 Sep 5 1830	Chang Zheng 6	-	Y11	Geely 5-01/3-10	Geely 5-01/3-10	-	-	ASC	-	-	-	-	-	-
2024-166	2460572-55	2024 Sep 19 0114	Chang Zheng 2D	G3Z	-	Beidou DW 59/60	Beidou-3H	-	-	ASC	-	-	-	-	-	-
2024-169	2460573-67	2024 Sep 20 0411	Chang Zheng 2D	-	Y44	Jilin-1 Kuanfu 02B	Jilin-1 Kuanfu 02B	-	-	TRSC	-	-	-	-	-	-
2024-177	2460580-94	2024 Sep 27 1050	Chang Zheng 2D	-	Y44	Shi Jian 19	Shi Jian 19	-	-	JQ	-	-	-	-	-	-
2024-181	2460594-08	2024 Oct 10 1350	Chang Zheng 3B	-	Y20	HGW 03	HGW 3	-	-	ASC	LC2	-	-	-	-	-
2024-186	2460595-96	2024 Oct 15 1106	Chang Zheng 6A	-	Y20	Qianran Jigui 02	Qianran Jigui 02	-	-	ASC	-	-	-	-	-	-
2024-186	2460599-49	2024 Oct 15 2346	Chang Zheng 3B	-	Y59	Gao Fen 12-05	GF12-05	-	-	JQ	LC43/94	-	-	-	-	-
2024-189	2460605-51	2024 Oct 15 0010	Chang Zheng 4C	-	Y33	Tianping-3	Tianping-3	-	-	TRSC	-	-	-	-	-	-
2024-190	2460606-56	2024 Oct 22 0109	Chang Zheng 6	-	Y82	Yaogan 43-03	Yaogan 43-03	-	-	ASC	-	-	-	-	-	-
2024-194	2460613-35	2024 Oct 29 2027:34	Chang Zheng 2C	G	Y19	Shenzhou 19	Shenzhou 19	-	-	JQ	LC43/91	-	-	-	-	-
2024-203	2460623-65	2024 Nov 9 0339	Chang Zheng 2C	-	Y53	RESAT-2	RESAT-2	-	-	JQ	-	-	-	-	-	-
2024-208	2460626-45	2024 Nov 13 2249	Chang Zheng 4B	-	Y53	Haiyang 4-01	Haiyang 4-01	-	-	TRSC	-	-	-	-	-	-
2024-211	2460630-13	2024 Nov 15 1515:18	Chang Zheng 4B	-	Y9	Tianzhou-9	Tianzhou-9	-	-	WEN	LC201	-	-	-	-	-
2024-218	2460639-49	2024 Nov 24 2359	Chang Zheng 2C	-	-	Sivei Gaojing 2-03/04	Supervision 2-03/04	-	-	TRSC	-	-	-	-	-	-



Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	OrbPay	Agency	Launch_Code	Group	Category	LTCite	Cite	Notes
1971-S638	2441204.50	1971 Sep 10	Dong Feng 5	-	-	0.000	CALT	MF	-	Test	MEI3-8-71	Harvey	-
1972-S281	2441539.52	1972 Jul 10 0032	Feng Bao 1	-	701-02	0.000	SAST	TS	-	Test	LissovC	Harvey	-
1972-A139	2441621.50	1972 Nov	Dong Feng 5	-	-	0.000	CALT	MF	-	Test	Brugge	-	-
1973-S077	2441772.50	1973 Apr	Dong Feng 5	-	-	0.000	CALT	MF	-	Test	Brugge	-	-
1973-F07	2441944.01	1973 Sep 18 1212	Feng Bao 1	-	701-03	1.138	SAST	OF	G	Sat LEO 0	LissovC	MEI3-8-74	-
1974-F05	2442241.08	1974 Jul 12 1355	Feng Bao 1	-	701-04	1.138	SAST	OF	G	Sat LEO 0	LissovC	JBIS55-226	-
1974-F07	2442586.06	1974 Jul 26 1330	Chang Zheng 2	-	701-05	1.108	SAST	OF	G	Sat LEO 0	LissovC	JBIS55-226	-
1975-070	2442650.06	1975 Jul 28 0327:52	Feng Bao 1	-	701-05	1.107	SAST	OF	G	Sat LEO 0	LissovC	JBIS55-226	-
1975-111	2442742.64	1975 Dec 16 0921	Chang Zheng 2	-	Y2 (4)	1.179	CALT	OS	G	Sat LEO 0	Lissov/TLE	MTR-1	-
1976-087	2443020.99	1976 Aug 30 1145	Feng Bao 1	-	701-06	1.109	SAST	OS	G	Sat LEO 0	LissovC	JBIS55-226	-
1976-F03	2443092.88	1976 Dec 7 0438	Feng Bao 1	-	701-08	1.108	SAST	OS	G	Sat LEO 0	LissovC	JBIS55-226	-
1976-117	2443119.69	1976 Dec 14 0015	Chang Zheng 2C	-	CZ20-3 (6)	1.791	SAST	OS	G	Sat LEO 0	LissovC	JBIS55-226	-
1977-S246	2443400.51	1977 Sep 14 0015	Feng Bao 1	-	701(11)-01	0.000	SAST	TS	G	Test	MTR-1	-	-
1978-011	2443534.71	1978 Jan 26 05007	Chang Zheng 2C	-	CZ28-4 (6)	0.000	CALT	TS	G	Test	Lissov/TLE	MTR-1	-
1978-S112	2443514.19	1978 Apr 15 1639	Feng Bao 1	-	701(11)-02	0.000	SAST	TS	G	Test	LissovC	JBIS55-226	-
1978-S301	2443781.50	1978 Oct	Dong Feng 5	-	-	0.000	CALT	MS	-	Test	RPCA	-	-
1979-S34	2443880.50	1979 Jan 7	Dong Feng 5	-	-	0.000	CALT	MS	-	Test	www.fas.org	-	-
1979-S290	2443873.50	1979 Jan 15	Dong Feng 5	-	-	0.000	PLAZAC/CALT	MS	-	Test	RPCA	-	-
1979-S162	2443669.50	1979 Jul 27 2128	Dong Feng 5	-	-	0.000	PLAZAC/CALT	MS	-	Test	www.fas.org	-	-
1979-F02	2444062.39	1979 Jul 21 2128	Feng Bao 1	-	KCZ-1-02	0.768	SAST	MS	G	Sat LEO 0	LissovC	JBIS55-226	-
1979-S169	2444106.50	1979 Aug 21	Dong Feng 5	-	-	0.000	PLAZAC/CALT	MS	-	Test	www.fas.org	-	-
1979-S169	2444120.50	1979 Sep 4	Dong Feng 5	-	-	0.000	PLAZAC/CALT	MS	-	Test	RPCA	-	-
1979-S291	2444161.50	1979 Oct 157	Dong Feng 5	-	-	0.000	PLAZAC/CALT	MS	-	Test	www.fas.org	-	-
1979-S244	2444203.50	1979 Nov 26	Dong Feng 5	-	-	0.000	PLAZAC/CALT	MS	-	Test	JCH	-	-
1980-S277	2444284.50	1980 Feb 15	Dong Feng 5	-	-	0.000	PLAZAC/CALT	MS	-	Test	www.fas.org	-	-
1980-S109	2444377.58	1980 May 15 0200	Dong Feng 5	-	-	0.000	PLAZAC/CALT	MS	-	Test	www.fas.org	-	-
1980-S111	2444380.64	1980 May 21 0319	Feng Bao 1	-	KCZ-1-02	0.820	SAST	MS	G	Sat LEO 0	LissovC	JBIS55-226	-
1981-S093	2444667.39	1981 Sep 19 2128:40	Dong Feng 5	-	-	0.000	PLAZAC/CALT	MS	-	Test	RPCA	-	-
1981-S177	2444946.50	1981 Dec 7	Dong Feng 5	-	Y1	0.000	PLAZAC/CALT	MS	-	Test	Brugge	-	-
1982-080	2445221.50	1982 Sep 9 0719	Chang Zheng 2C	-	Y1	1.781	CALT	MS	G	Sat LEO 0	MTR-4	-	-
1983-066	2445666.75	1983 Aug 19 0600	Chang Zheng 2C	-	Y2	1.844	CALT	MS	G	Sat LEO 0	MTR-4	-	-
1984-008	2445729.02	1984 Jan 29 1225	Chang Zheng 3	-	Y1	0.900	CALT	MS	G	Sat LEO 0	JCH	-	-
1984-058	2445796.97	1984 Apr 6 1120	Chang Zheng 3	-	Y2	0.820	CALT	MS	G	Sat LEO 0	JCH	-	-
1984-038	2445956.74	1984 Sep 12 0544	Chang Zheng 2C	-	Y3	1.812	CALT	MS	G	Sat LEO 0	MTR-4	-	-
1985-096	2446359.71	1985 Oct 21 0504	Chang Zheng 2C	-	Y4	1.812	CALT	MS	G	Sat LEO 0	MTR-4	-	-
1985-096	2446463.93	1985 Feb 1 1237	Chang Zheng 3	-	Y5	0.920	CALT	MS	G	Sat LEO 0	MTR-4	-	-
1986-010	2446463.93	1986 Oct 6 0940	Chang Zheng 2C	-	Y6	1.771	CALT	MS	G	Sat LEO 0	MTR-4	-	-
1987-067	2447012.78	1987 Aug 5 0639	Chang Zheng 2C	-	Y7	1.810	CALT	MS	G	Sat LEO 0	MTR-4	-	-
1987-075	2447047.80	1987 Sep 9 0715	Chang Zheng 2C	-	Y6	2.070	CALT	MS	G	Sat LEO 0	MTR-4	-	-
1988-014	2447228.93	1988 Mar 6 0728:35	Chang Zheng 3	-	Y4	1.040	CALT	MS	G	Sat LEO 0	PSO/2/89-1	-	-
1988-067	2447376.51	1988 Aug 2 0728:35	Chang Zheng 2C	-	Y4	1.040	CALT	MS	G	Sat LEO 0	MTR-4	-	-
1988-060	2447411.35	1988 Sep 6 2030:19	Chang Zheng 2C	-	Y1	2.152	CALT	MS	G	Sat LEO 0	PSO/2/89-1	-	-
1988-060	2447411.35	1988 Sep 6 2030:19	Chang Zheng 4	-	Y1	0.787	SAST	MS	G	Sat SS0 0	LissovC	-	-
1988-183	2447418.05	1988 Dec 22 1240	Chang Zheng 3	-	Y5	1.040	CALT	MS	G	Sat LEO 0	PSO/2/89-1	-	-
1989-S134	2447526.50	1989 Feb 4 1227:03	Dong Feng 5	-	Y6	0.000	PLAZAC	MS	-	Test	RPCA	-	-
1989-111	2447592.50	1989 Apr 7 1227:03	Chang Zheng 3	-	Y6	1.040	CALT	MS	G	Sat LEO 0	RPCA	-	-
1990-059	2447889.06	1990 Apr 16 1330:02	Chang Zheng 3	-	Y7	1.940	CALT	MS	G	Sat LEO 0	GMTC-RR	-	-
1990-059	2448089.06	1990 Jul 16 0840	Chang Zheng 2E	-	Y7	7.244	CALT	MS	G	Sat LEO 0	ANST900416-25	-	-
1990-059	2448132.54	1990 Sep 8 0813	Chang Zheng 4	-	Y2	7.244	CALT	MS	G	Sat LEO 0	JCH	-	-
1990-089	2448160.74	1990 Sep 8 0813	Chang Zheng 4	-	Y2	0.889	SAST	MS	G	Sat SS0 0	JCH	-	-
1990-089	2448160.74	1990 Oct 28 12007	Chang Zheng 2C	-	Y9	2.081	CALT	MS	G	Sat LEO 0	MTR-4	-	-
1991-088	2448561.93	1991 Dec 8 0800	Chang Zheng 2C	-	Y9	0.841	CALT	MS	G	Sat LEO 0	MTR-4	-	-
1992-051	2448843.93	1992 Aug 5 0820	Chang Zheng 2D	-	Y9	1.952	SAST	MS	G	Sat LEO 0	MTR-4	-	-
1992-051	2448848.46	1992 Aug 5 0820	Chang Zheng 2E	-	Y3	7.491	CALT	MS	G	Sat LEO 0	ANST90817-13	-	-
1992-064	2448901.76	1992 Oct 6 0620:05	Chang Zheng 2C	-	Y10	2.931	CALT	MS	G	Sat LEO 0	SN20817-2	-	-
1992-090	2448977.87	1992 Dec 21 1121	Chang Zheng 2E	-	Y1	0.759	CALT	MS	G	Sat LEO 0	Cham-pc	-	-
1993-063	2449268.93	1993 Oct 6 0800	Chang Zheng 2C	-	Y1	2.104	CALT	MS	G	Sat LEO 0	MTR-4	-	-
1993-S79	2449387.97	1993 Feb 8 0839:53	Dong Feng 5A	-	Y11	2.104	CALT	MS	G	Test	RPCA	-	-
1994-010	2449391.96	1994 Feb 8 0839:53	Chang Zheng 3A	-	Y1	1.738	CALT	MS	G	Sat LEO 0	LissovC	-	-
1994-037	2449366.83	1994 Jul 3 0800	Chang Zheng 2D	-	Y2	2.763	SAST	MS	G	Sat LEO 0	USL	-	-
1994-043	2449564.95	1994 Jul 21 1055	Chang Zheng 3	-	Y6	1.404	CALT	MS	G	Sat LEO 0	USL	-	-
1994-055	2449692.47	1994 Aug 27 2310	Chang Zheng 2E	-	Y5	7.491	CALT	MS	G	Sat LEO 0	USL	-	-
1994-080	2449886.21	1994 Nov 29 1702	Chang Zheng 3A	-	Y5	2.232	CALT	MS	G	Sat LEO 0	USL	-	-
1995-S91	2449717.50	1995 Jan 25 2240	Dong Feng 5A	-	-	0.000	PLAZAC	MS	-	Test	RPCA	-	-
1995-F01	2449743.34	1995 Jan 25 2240	Chang Zheng 2E	-	Y6	2.900	CALT	MS	G	Sat LEO 0	RPCA	-	-
1995-064	2450049.98	1995 Nov 28 1130:05	Chang Zheng 2E	-	Y7	9.445	CALT	MS	G	Sat LEO 0	ANST951204-25	-	-
1995-073	2450079.99	1995 Dec 28 1150	Chang Zheng 2E	-	Y8	9.300	CALT	MS	G	Sat LEO 0	USL	-	-
1996-F01	2450128.29	1996 Feb 14 1901	Chang Zheng 3B	-	Y1	3.750	CALT	MS	G	Sat LEO 0	ANST960219-25	-	-
1996-039	2450267.95	1996 Jul 3 1047	Chang Zheng 3	-	Y10A	1.400	CALT	MS	G	Sat LEO 0	ANST960708-17	-	-
1996-048	2450313.94	1996 Aug 18 1027	Chang Zheng 3	-	Y14	1.384	CALT	MS	G	Sat LEO 0	Wise	-	-
1996-059	2450376.81	1996 Oct 20 0720	Chang Zheng 2D	-	Y3	2.970	SAST	MS	G	Sat LEO 0	Wise	-	-
1997-S79	2450448.50	1997 Feb 5A	Dong Feng 5A	-	-	0.000	PLAZAC	MS	-	Test	RPCA	-	-
1997-021	2450680.18	1997 May 11 1617	Chang Zheng 3A	-	Y3?	2.267	CALT	MS	G	Sat LEO 0	Stain	-	-
1997-029	2450610.00	1997 Jun 10 1201	Chang Zheng 3	-	Y11	1.380	CALT	MS	G	Sat LEO 0	Wise	-	-
1997-042	2450680.24	1997 Aug 19 1750	Chang Zheng 3B	-	Y2	3.775	CALT	MS	G	Sat LEO 0	Wise	-	-
1997-048	2450693.08	1997 Sep 14400:15	Chang Zheng 2C-III/SD	-	Y1	1.997	CALT	MS	G	Sat LEO 0	LissovC	-	-
1997-062	2450738.30	1997 Oct 16 1913	Chang Zheng 3B	-	Y3	2.003	CALT	MS	G	Sat LEO 0	Wise	-	-
1997-077	2450790.80	1997 Dec 8 0716:49	Chang Zheng 2C-III/SD	-	Y2	2.013	CALT	MS	G	Sat LEO 0	Wise	-	-
1998-018	2450898.21	1998 Mar 25 1701:06	Chang Zheng 2C-III/SD	-	Y3	2.013	CALT	MS	G	Sat LEO 0	CALT-HW	-	-
1998-026	2450935.69	1998 May 2 0916:53	Chang Zheng 2C-III/SD	-	Y4	2.013	CALT	MS	G	Sat LEO 0	CALT-HW	-	-
1998-033	2450963.92	1998 May 30 1000:04	Chang Zheng 3B	-	Y5	2.917	CALT	MS	G	Sat LEO 0	CALT-HW	-	-
1998-044	2451012.89	1998 Jun 18 0920	Chang Zheng 3B	-	Y4	2.832	CALT	MS	G	Sat LEO 0	CALT-HW	-	-
1998-048	2451045.46	1998 Aug 19 2301:46	Chang Zheng 2C-III/SD	-	Y6	2.013	CALT	MS	G	Sat LEO 0	CALT-HW	-	-
1998-074	2451166.99	1998 Dec 19 1139:44	Chang Zheng 2C-III/SD	-	Y2	2.013	CALT	MS	G	Sat LEO 0	CALT-HW	-	-
1999-025	2451308.56	1999 May 10 0133:00	Chang Zheng 4B	-	Y6	1.266	SAST	MS	G	Sat SS0 0	CAL-HW	-	-
1999-032	2451341.22	1999 Jun 11 1715:33	Chang Zheng 2C-III/SD	-	Y7	2.014	CALT	MS	G	Sat LEO 0	CAL-HW	-	-
1999-057	2451465.64	1999 Oct 14 0315	Chang Zheng 4B	-	Y1	1.600	SAST	MS	G	Sat SS0 0	Wise	-	-

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	OrbPay	Agency	Launch_Code	Group	Category	LTCite	Cite	Notes
1999-061	2451502.44	1999 Nov 19 2230:04	Chang Zheng 2F	-	Y1	7.703	CALT	OS	G	Sat LEO 0 4	CALT-HW	-	-
2000-003	2451569.20	2000 Jan 25 1645:05	Chang Zheng 3A	-	Y4	2.320	CALT	OS	G	Sat GTD 0	CALT-PR	-	-
2000-032	2451720.99	2000 Jun 25 1150	Chang Zheng 3	-	Y2	1.380	CALT	OS	G	Sat GTD 0	CALT-HW	-	-
2000-050	2451788.64	2000 Sep 1 0325	Chang Zheng 4B	-	Y3	1.450	SAST	OS	G	Sat SSO 0	Wire	-	-
2000-069	2451848.17	2000 Oct 30 1602	Chang Zheng 3A	-	Y6?	2.315	CALT	OS	G	Sat GTD 0	Wire	-	-
2000-082	2451899.18	2000 Dec 20 1620	Chang Zheng 3A	-	Y6?	2.311	CALT	OS	G	Sat GTD 0	Wire	-	-
2001-001	2451919.21	2001 Jan 9 1700:03	Chang Zheng 2F	-	Y2	7.700	CALT	OS	G	Sat LEO 0	Wire	-	-
2002-385	2452274.50	2002 Mar 25 1415:04	Dong Feng 5A	-	-	0.000	PLAZAC	MS	-	Test	RPCA	-	-
2002-014	2452359.09	2002 May 15 0150	Chang Zheng 2F	-	Y3	7.700	CALT	OS	G	Sat LEO 0	Wire	-	-
2002-024	2452409.58	2002 Oct 27 0317	Chang Zheng 4B	-	Y5	1.360	SAST	OS	G	Sat SSO 0 4	Wire	-	-
2002-049	2452574.64	2002 Dec 29 1640:04	Chang Zheng 4B	-	Y6	1.450	SAST	OS	G	Sat SSO 0 4	Wire	-	-
2002-061	2452638.19	2003 Feb 24 1634:04	Chang Zheng 2F	-	Y4	7.794	CALT	OS	G	Sat LEO 0	Wire	-	-
2003-021	2452784.19	2003 Oct 15 0100:03	Chang Zheng 3A	-	Y7	2.525	CALT	OS	G	Sat GTD 0	Wire	-	-
2003-045	2452927.64	2003 Oct 15 0100:03	Chang Zheng 2F	-	Y4	7.204	CALT	OS	G	Sat LEO 0 4	Wire	-	-
2003-049	2452953.64	2003 Oct 21 0316	Chang Zheng 4B	-	Y5	3.092	SAST	OS	G	Sat SSO 0 4	Spaceflightnow.com	-	-
2003-051	2452946.81	2003 Nov 3 0720:01	Chang Zheng 2D	-	Y4	2.307	CALT	OS	G	Sat LEO 0 4	Aechina2008-5	-	-
2003-052	2452968.17	2003 Nov 14 1601	Chang Zheng 3A	-	Y8	0.350	CALT	OS	G	Sat HTD 0	Xinhua	-	-
2003-061	2453003.30	2003 Dec 29 1906:18	Chang Zheng 2C	SM	Y1	0.350	CALT	OS	G	Sat SSO 0 4	LisovC	-	-
2004-012	2453114.17	2004 Apr 19 1559:04	Chang Zheng 2C	a	Y4	0.233	CALT	OS	G	Sat HTD 0	LisovC	-	-
2004-029	2453211.80	2004 Jul 25 0705	Chang Zheng 2C	SM	Y2	0.343	CALT	OS	G	Sat LEO 0 4	Aechina2008-5	-	-
2004-033	2453246.53	2004 Aug 29 0750:05	Chang Zheng 2C	b	Y2	2.352	CALT	OS	G	Sat SSO L 4	xinhuaet.com	-	-
2004-035	2453257.47	2004 Sep 8 2314	Chang Zheng 4B	-	Y7	1.400	SAST	OS	G	Sat LEO 0	Aechina2008-5	-	-
2004-039	2453275.53	2004 Sep 27 0800:04	Chang Zheng 2D	-	Y5	2.351	SAST	OS	G	Sat GTD 0	LisovC	-	-
2004-042	2453297.56	2004 Oct 19 0120:05	Chang Zheng 3A	-	Y9	1.400	CALT	OS	G	Sat SSO L 4	xinhuaet.com	-	-
2004-044	2453315.63	2004 Nov 18 1045	Chang Zheng 4B	-	Y6	1.450	SAST	OS	G	Sat SSO 0 4	xinhuaet.com	-	-
2004-046	2453327.95	2004 Nov 18 1045	Chang Zheng 3B	a	Y6	0.304	CALT	OS	G	Sat SSO 0 4	xinhuaet.com	-	-
2005-012	2453473.00	2005 Jul 12 1200	Chang Zheng 3B	-	Y6	1.004	SAST	OS	G	Sat SSO 0 4	xinhuaet.com	-	-
2005-024	2453567.44	2005 Jul 5 2240	Chang Zheng 2D	-	Y6	1.004	SAST	OS	G	Sat SSO 0 4	xinhuaet.com	-	-
2005-027	2453584.81	2005 Aug 2 0730:03	Chang Zheng 2C	b	Y3	2.354	SAST	OS	G	Sat LEO 0 4	Aechina2008-5	-	-
2005-033	2453611.86	2005 Aug 29 0845:04	Chang Zheng 2C	-	Y7	2.352	SAST	OS	G	Sat LEO 0 4	Aechina2008-5	-	-
2005-040	2453656.94	2005 Oct 12 0100:04	Chang Zheng 2F	-	Y6	7.202	CALT	OS	G	Sat LEO 0 4	xinhuaet.com	-	-
2006-015	2453852.45	2006 Apr 26 2248	Chang Zheng 4C	-	Y1	2.354	CALT	OS	G	Sat SSO L 4	xinhuaet.com	-	-
2006-038	2453977.79	2006 Sep 9 0700:04	Chang Zheng 2C	b	Y16	2.350	CALT	OS	G	Sat GTD 0	Aechina2008-5	-	-
2006-046	2453991.17	2006 Sep 12 1602	Chang Zheng 3A	-	Y10	1.400	SAST	OS	G	Sat LEO L 4	xinhuaet.com	-	-
2006-048	2454032.48	2006 Oct 23 2354	Chang Zheng 4B	-	Y16	1.400	SAST	OS	G	Sat LEO L 4	xinhuaet.com	-	-
2006-048	2454037.18	2006 Oct 28 1620	Chang Zheng 3B	-	Y17	5.107	CALT	OS	G	Sat GTD 0	xinhuaet.com	-	-
2006-053	2454077.54	2006 Dec 6 0653	Chang Zheng 3A	-	Y11	1.390	CALT	OS	G	Sat GTD 0	xinhuaet.com	-	-
2007-003	2454134.19	2007 Feb 2 1628	Chang Zheng 3A	-	Y12	2.289	CALT	OS	G	Sat SSO 0	xinhuaet.com	-	-
2007-010	2454201.64	2007 Apr 11 0327	Chang Zheng 2C	b	Y18	0.440	CALT	OS	G	Sat SSO 0	xinhuaet.com	-	-
2007-018	2454204.34	2007 Apr 13 2011	Chang Zheng 3A	-	Y13	0.440	CALT	OS	G	Sat SSO 0	xinhuaet.com	-	-
2007-018	2454234.17	2007 Apr 13 2011	Chang Zheng 3B	G2	Y9	5.066	CALT	OS	G	Sat SSO D 4	xinhuaet.com	-	-
2007-019	2454256.99	2007 May 21 1612	Chang Zheng 2D	-	Y6	0.701	SAST	OS	G	Sat SSO 0 4	xinhuaet.com	-	-
2007-031	2454322.17	2007 May 21 1608	Chang Zheng 3A	-	Y15	2.220	CALT	OS	G	Sat GTD 0	xinhuaet.com	-	-
2007-032	2454367.01	2007 Jun 5 1336	Chang Zheng 3B	-	Y17	4.516	CALT	OS	G	Sat SSO L 4	xinhuaet.com	-	-
2007-032	2454367.01	2007 Sep 19 0356:13	Chang Zheng 3B	-	Y17	1.950	SAST	OS	G	Sat SSO L 4	nasaespaceflight.com	-	-
2007-051	2454372.64	2007 Oct 24 2008:04	Chang Zheng 3A	-	Y14	2.352	CALT	OS	G	Sat GTD 0	nasaespaceflight.com	-	-
2007-051	2454372.64	2007 Nov 14 2008:04	Chang Zheng 3C	-	Y14	2.700	SAST	OS	G	Sat SSO L 4	nasaespaceflight.com	-	-
2008-016	2454582.15	2008 Nov 15 1536:15	Chang Zheng 3C	-	Y1?	2.175	CALT	OS	G	Sat SSO L 4	xinhuaet.com	-	-
2008-028	2454613.63	2008 Apr 27 0329:33	Chang Zheng 4C	-	Y2	2.200	SAST	OS	G	Sat SSO L 4	nasaespaceflight.com	-	-
2008-028	2454613.63	2008 Jun 8 2145:07	Chang Zheng 3B	-	Y11	4.460	CALT	OS	G	Sat SSO L 4	xinhuaet.com	-	-
2008-044	2454715.01	2008 Sep 6 0325:07	Chang Zheng 2C	SHA	Y1	7.344	CALT	OS	G	Sat SSO 00 4	xinhuaet.com	-	-
2008-044	2454715.01	2008 Sep 13 0105	Chang Zheng 2C	-	Y1	7.344	CALT	OS	G	Sat LEO 00 4	xinhuaet.com	-	-
2008-053	2454763.55	2008 Oct 26 0115:04	Chang Zheng 2F	-	Y22	1.050	CALT	OS	G	Sat GTD L 5	xinhuaet.com	-	-
2008-055	2454769.30	2008 Oct 29 1653:43	Chang Zheng 3B	G2	Y12	5.060	CALT	OS	G	Sat SSO L 4	xinhuaet.com	-	-
2008-056	2454775.51	2008 Nov 5 0415:04	Chang Zheng 4B	-	Y12	0.927	SAST	OS	G	Sat SSO L 4	xinhuaet.com	-	-
2008-061	2454801.70	2008 Dec 1 0445:04	Chang Zheng 2D	-	Y9	0.700	SAST	OS	G	Sat SSO L 4	xinhuaet.com	-	-
2008-064	2454815.54	2008 Dec 15 0322:04	Chang Zheng 4B	-	Y20	2.700	SAST	OS	G	Sat SSO L 4	xinhuaet.com	-	-
2008-066	2454823.54	2008 Dec 23 0054:04	Chang Zheng 4B	-	Y20	3.060	CALT	OS	G	Sat SSO L 4	xinhuaet.com	-	-
2009-018	2454936.18	2009 Apr 14 1616:04	Chang Zheng 3C	-	Y3	2.000	CALT	OS	G	Sat GTD 0	xinhuaet.com	-	-
2009-021	2454943.62	2009 Apr 22 0255:04	Chang Zheng 2C	b	Y19	2.000	CALT	OS	G	Sat SSO L 4	xinhuaet.com	-	-
2009-046	2455074.89	2009 Apr 31 0928	Chang Zheng 3B	-	Y21	0.304	CALT	OS	G	Sat SSO 0 4	xinhuaet.com	-	-
2009-061	2455147.62	2009 Nov 12 0245:44	Chang Zheng 2C	b	Y10	0.304	CALT	OS	G	Sat SSO 0 4	xinhuaet.com	-	-
2009-072	2455174.96	2009 Dec 9 0842	Chang Zheng 4C	-	Y4	1.090	SAST	OS	G	Sat SSO L 4	xinhuaet.com	-	-
2009-072	2455180.60	2009 Dec 15 0231:05	Chang Zheng 4C	-	Y4	1.090	SAST	OS	G	Sat SSO L 4	nasaespaceflight.com	-	-
2010-001	2455196.50	2010 Jan 16 1612:04	Chang Zheng 2C	?	Y2	0.000	CALT	MS	-	Reentry test	nasaespaceflight.com	-	-
2010-001	2455213.18	2010 Jan 16 1612:04	Chang Zheng 3C	-	Y2	3.060	CALT	OS	G	Sat GTD 0	xinhuaet.com	-	-
2010-009	2455260.70	2010 Mar 5 0455:05	Chang Zheng 4C	-	Y5	1.500	SAST	OS	G	Sat LEO L 4	xinhuaet.com	-	-
2010-024	2455360.16	2010 Jun 2 1553:04	Chang Zheng 3C	-	Y4	3.060	CALT	OS	G	Sat GTD 0	xinhuaet.com	-	-
2010-027	2455362.57	2010 Jun 15 0139:04	Chang Zheng 2D	-	Y15	1.000	SAST	OS	G	Sat SSO 0 4	xinhuaet.com	-	-
2010-036	2455409.40	2010 Jul 31 2130:04	Chang Zheng 3A	-	Y16	2.300	CALT	OS	G	Sat GTD 0	xinhuaet.com	-	-
2010-038	2455418.45	2010 Aug 9 2249:05	Chang Zheng 4C	-	Y6	1.040	SAST	OS	G	Sat SSO L 4	xinhuaet.com	-	-
2010-040	2455432.80	2010 Aug 24 0710:04	Chang Zheng 2D	-	Y14	1.000	SAST	OS	G	Sat SSO 0 4	xinhuaet.com	-	-
2010-042	2455444.18	2010 Sep 4 1614:04	Chang Zheng 3B	G2	Y13	5.100	CALT	OS	G	Sat GTD 0	xinhuaet.com	-	-
2010-047	2455461.61	2010 Sep 22 0242:04	Chang Zheng 2D	-	Y11	0.806	CALT	OS	G	Sat SSO D 4	xinhuaet.com	-	-
2010-050	2455470.96	2010 Oct 1 1059:57	Chang Zheng 3C	-	Y7	2.480	CALT	OS	G	Sat DSO 0 4	xinhuaet.com	-	-
2010-051	2455475.53	2010 Oct 6 0049:05	Chang Zheng 4B	-	Y23	1.400	SAST	OS	G	Sat SSO L 4	nasaespaceflight.com	-	-
2010-059	2455505.28	2010 Oct 11 1626:04	Chang Zheng 4C	-	Y5	3.060	CALT	OS	G	Sat SSO L 4	nasaespaceflight.com	-	-
2010-064	2455526.17	2010 Nov 4 1837:12	Chang Zheng 3A	-	Y21	2.325	CALT	OS	G	Sat GTD 0	nasaespaceflight.com	-	-
2010-068	2455548.35	2010 Nov 24 1609:04	Chang Zheng 3A	-	Y21	2.300	CALT	OS	G	Sat GTD 0	xinhuaet.com	-	-
2011-013	2455661.50	2011 Dec 17 2020:04	Chang Zheng 2C	?	Y18	0.000	CALT	MS	-	Reentry test	nasaespaceflight.com	-	-
2011-013	2455661.37	2011 Apr 9 2047:04	Chang Zheng 3A	-	Y19	2.300	CALT	OS	G	Sat GTD 0	xinhuaet.com	-	-
2011-026	2455733.18	2011 Jun 20 1613:04	Chang Zheng 3B	G2	Y20	5.100	CALT	OS	G	Sat GTD 0	xinhuaet.com	-	-
2011-030	2455748.69	2011 Jun 6 0428:04	Chang Zheng 2C	-	Y25	0.304	CALT	OS	G	Sat SSO L 4	nasaespaceflight.com	-	-
2011-032	2455754.15	2011 Jun 11 1541:04	Chang Zheng 3C	-	Y8	2.500	CALT	OS	G	Sat GTD 0	xinhuaet.com	-	-
2011-038	2455769.41	2011 Jun 26 2144:28	Chang Zheng 3A	-	Y17	2.300	CALT	OS	G	Sat GTD 0	xinhuaet.com	-	-

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	OrbPay	Agency	Launch_Code	Group	Category	LTCite	Cite	Notes
2011-039	2455771.82	2011 Jun 29 07:42:03	Chang Zheng 2C	b	Y24	0.304	CALT	0S	G	Sat SS0 0 4	maspaceflight.com	xinhuaet.com	-
2011-042	2455785.18	2011 Aug 11 16:15:04	Chang Zheng 3B	G2	Y19	5.100	CALT	0S	G	Sat GTD 0 4	maspaceflight.com	xinhuaet.com	-
2011-043	2455789.46	2011 Aug 15 22:57:19	Chang Zheng 4B	-	Y14	1.500	SAST	0S	G	Sat SS0 L 4	maspaceflight.com	xinhuaet.com	-
2011-F02	2455791.89	2011 Aug 19 09:28:03	Chang Zheng 2C	b	Y16	0.304	CALT	0F	G	Sat SS0 0 4	maspaceflight.com	xinhuaet.com	-
2011-047	2455823.19	2011 Sep 18 16:33:03	Chang Zheng 3B	G3	Y16	5.320	CALT	0S	G	Sat GTD 0 4	maspaceflight.com	xinhuaet.com	-
2011-053	2455834.55	2011 Sep 29 13:16:03	Chang Zheng 2F	T	Y18	8.500	CALT	0S	G	Sat LSS 0 4	maspaceflight.com	xinhuaet.com	-
2011-057	2455841.95	2011 Oct 7 08:21:04	Chang Zheng 3B	G2	Y18	5.400	CALT	0S	G	Sat GTD 0 4	maspaceflight.com	xinhuaet.com	-
2011-063	2455866.42	2011 Oct 31 21:59:10	Chang Zheng 2F	G	Y21	7.346	CALT	0S	G	Sat LSS 0 4	maspaceflight.com	xinhuaet.com	-
2011-066	2455874.64	2011 Nov 20 00:15:04	Chang Zheng 4B	-	Y21	2.758	SAST	0S	G	Sat SS0 L 4	maspaceflight.com	xinhuaet.com	-
2011-068	2455885.51	2011 Nov 29 18:50:04	Chang Zheng 2D	b	Y19	0.290	SAST	0S	G	Sat SS0 L 4	maspaceflight.com	xinhuaet.com	-
2011-072	2455895.28	2011 Nov 29 18:50:04	Chang Zheng 2D	b	Y20	2.000	CALT	0S	G	Sat SS0 L 4	maspaceflight.com	xinhuaet.com	-
2011-073	2455897.38	2011 Dec 1 21:07:03	Chang Zheng 3A	-	Y23	2.300	CALT	0S	G	Sat GTD 0 4	maspaceflight.com	xinhuaet.com	-
2011-077	2455915.20	2011 Dec 19 16:41:03	Chang Zheng 3B	G2	Y21	5.086	CALT	0S	G	Sat GTD 0 4	maspaceflight.com	xinhuaet.com	-
2011-079	2455917.64	2011 Dec 22 03:26:14	Chang Zheng 4B	-	Y15	2.100	SAST	0S	G	Sat SS0 L 4	maspaceflight.com	xinhuaet.com	-
2012-597	2455926.50	2012	Chang Zheng 2C	?	Y15	0.000	CALT	MS	-	Reentry test	maspaceflight.com	-	-
2012-001	2455935.64	2012 Jan 9 03:17:10	Chang Zheng 4B	-	Y26	2.678	SAST	0S	G	Sat SS0 L 4	maspaceflight.com	xinhuaet.com	-
2012-002	2455939.54	2012 Jan 13 00:56:04	Chang Zheng 3A	-	Y22	1.440	CALT	0S	G	Sat GTD 0 4	maspaceflight.com	xinhuaet.com	-
2012-008	2455952.18	2012 Feb 24 16:12:04	Chang Zheng 3C	-	Y6	3.060	CALT	0S	G	Sat GTD 0 4	maspaceflight.com	xinhuaet.com	-
2012-013	2456017.94	2012 Mar 21 10:27:04	Chang Zheng 3B	G2	Y14	4.700	CALT	0S	G	Sat SS0 0 1	maspaceflight.com	xinhuaet.com	-
2012-018	2456047.37	2012 Apr 29 20:50:03	Chang Zheng 3B	G1	Y17	1.000	SAST	0S	G	Sat MTD 0 1	maspaceflight.com	xinhuaet.com	-
2012-020	2456053.80	2012 May 6 07:10:05	Chang Zheng 2D	-	Y12	1.000	SAST	0S	G	Sat SS0 L 4	maspaceflight.com	xinhuaet.com	-
2012-021	2456057.80	2012 May 10 07:06:04	Chang Zheng 4B	-	Y17	3.009	SAST	0S	G	Sat SS0 L 4	maspaceflight.com	xinhuaet.com	-
2012-028	2456074.16	2012 May 26 15:56:04	Chang Zheng 3B	G3	Y17	5.000	CALT	0S	G	Sat SS0 L 4	maspaceflight.com	xinhuaet.com	-
2012-029	2456076.81	2012 Jun 29 07:31:05	Chang Zheng 4B	-	Y10	1.040	SAST	0S	G	Sat SS0 L 4	maspaceflight.com	xinhuaet.com	-
2012-032	2456094.94	2012 Jun 16 10:37:25	Chang Zheng 2F	G	Y19	9.928	CALT	0S	G	Sat LSS 0 4	maspaceflight.com	xinhuaet.com	-
2012-040	2456134.15	2012 Jul 25 15:43:04	Chang Zheng 3C	-	Y9	2.462	CALT	0S	G	Sat GTD 0 4	maspaceflight.com	xinhuaet.com	-
2012-560	2456159.50	2012 Aug 20	Dong Feng 5A	-	Y15	0.000	PLAZAC	MS	-	Test	freebeacon.com	-	-
2012-050	2456169.30	2012 Sep 18 19:10:04	Chang Zheng 3B	G1	Y15	4.600	CALT	0S	G	Sat MTD 0 1	maspaceflight.com	xinhuaet.com	-
2012-052	2456199.66	2012 Sep 29 04:12:05	Chang Zheng 2D	-	Y16	0.860	SAST	0S	G	Sat SS0 0 4	maspaceflight.com	xinhuaet.com	-
2012-056	2456214.64	2012 Oct 14 03:25:05	Chang Zheng 2C	SHA	Y12	1.113	CALT	0S	G	Sat SS0 LL 4	maspaceflight.com	xinhuaet.com	-
2012-059	2456226.15	2012 Oct 25 15:53:04	Chang Zheng 3C	-	Y10	3.060	CALT	0S	G	Sat GTD 0 4	maspaceflight.com	xinhuaet.com	-
2012-064	2456250.46	2012 Nov 18 22:53:04	Chang Zheng 2C	b	Y17	1.180	CALT	0S	G	Sat SS0 0 4	maspaceflight.com	xinhuaet.com	-
2012-066	2456256.67	2012 Nov 25 04:06:04	Chang Zheng 4B	-	Y9	1.800	SAST	0S	G	Sat LEO L	maspaceflight.com	xinhuaet.com	-
2012-067	2456258.93	2012 Nov 27 10:13:05	Chang Zheng 3B	G2	Y24	5.054	CALT	0S	G	Sat STD 0	maspaceflight.com	xinhuaet.com	-
2012-073	2456280.18	2012 Dec 18 16:13:05	Chang Zheng 2D	-	Y22	0.460	SAST	0S	G	Sat SS0 P	maspaceflight.com	xinhuaet.com	-
2013-018	2456406.66	2013 Apr 26 04:13	Chang Zheng 3B	G2	Y18	1.070	SAST	0S	G	Sat SS0 0	maspaceflight.com	xinhuaet.com	-
2013-020	2456414.17	2013 May 11 16:06:04	Chang Zheng 3B	G2	Y25	6.234	CALT	0S	G	Sat SS0 0	maspaceflight.com	xinhuaet.com	-
2013-029	2456464.90	2013 Jun 11 09:36:03	Chang Zheng 2F	-	Y10	9.929	CALT	0S	G	Sat SS0 0 4	maspaceflight.com	xinhuaet.com	-
2013-035	2456468.89	2013 Jun 15 09:27:03	Chang Zheng 2C	b	Y23	0.304	CALT	0S	G	Sat SS0 0 4	maspaceflight.com	xinhuaet.com	-
2013-037	2456493.46	2013 Jun 19 23:37:56	Chang Zheng 4C	-	Y11	1.161	SAST	0S	G	Sat SS0 L 4	maspaceflight.com	xinhuaet.com	-
2013-046	2456537.30	2013 Sep 1 19:16	Chang Zheng 4C	-	Y15	1.500	SAST	0S	G	Sat SS0 L 4	maspaceflight.com	xinhuaet.com	-
2013-057	2456568.63	2013 Oct 25 03:50	Chang Zheng 4B	-	Y22	2.200	SAST	0S	G	Sat SS0 L 4	maspaceflight.com	xinhuaet.com	-
2013-059	2456594.62	2013 Oct 25 03:50	Chang Zheng 4B	-	Y25	2.000	SAST	0S	G	Sat SS0 L 4	maspaceflight.com	xinhuaet.com	-
2013-065	2456616.65	2013 Oct 29 02:50:03	Chang Zheng 2C	b	Y28	2.000	CALT	0S	G	Sat SS0 L 4	maspaceflight.com	xinhuaet.com	-
2013-068	2456621.59	2013 Nov 20 03:31:05	Chang Zheng 2D	-	Y14	1.040	SAST	0S	G	Sat SS0 L 4	maspaceflight.com	xinhuaet.com	-
2013-073	2456628.43	2013 Dec 4 07:30:00	Chang Zheng 3B	G2	Y23	3.920	CALT	0S	G	Sat SS0 0	maspaceflight.com	xinhuaet.com	-
2013-F03	2456647.94	2013 Dec 4 03:26	Chang Zheng 4B	-	Y27	5.086	CALT	0S	G	Sat SS0 0	zenite.nu	xinhuaet.com	-
2014-003	2456647.20	2013 Dec 20 16:42:04	Chang Zheng 3B	G2	Y27	5.086	CALT	0S	G	Sat GTD 0	zenite.nu	xinhuaet.com	-
2014-014	2456747.60	2014 Jan 31 02:46:03	Chang Zheng 2C	?	Y27	0.304	CALT	0S	G	Test	freebeacon.com	xinhuaet.com	-
2014-014	2456747.60	2014 Jan 31 02:46:03	Chang Zheng 2C	?	Y27	0.304	CALT	0S	G	Test	freebeacon.com	xinhuaet.com	-
2014-047	2456878.74	2014 Aug 6 05:45:03	Chang Zheng 4C	-	Y27	1.500	SAST	0S	G	Sat LEO L 4	maspaceflight.com	xinhuaet.com	-
2014-049	2456888.64	2014 Aug 9 03:15:04	Chang Zheng 4B	-	Y17	3.107	SAST	0S	G	Sat SS0 L 4	maspaceflight.com	xinhuaet.com	-
2014-051	2456900.51	2014 Sep 4 03:15:04	Chang Zheng 2D	-	Y26	0.225	SAST	0S	G	Sat SS0 L	maspaceflight.com	xinhuaet.com	-
2014-053	2456908.64	2014 Sep 8 03:25:05	Chang Zheng 4B	-	Y28	3.657	SAST	0S	G	Sat SS0 L 4	maspaceflight.com	xinhuaet.com	-
2014-059	2456928.77	2014 Sep 28 05:13	Chang Zheng 2C	b	Y31	1.040	CALT	0S	G	Sat SS0 0 4	maspaceflight.com	xinhuaet.com	-
2014-063	2456950.72	2014 Oct 20 18:00:04	Chang Zheng 4C	-	Y16	1.040	SAST	0S	G	Sat SS0 L	maspaceflight.com	xinhuaet.com	-
2014-065	2456954.35	2014 Oct 23 18:00:04	Chang Zheng 3C	G2	Y32	2.829	CALT	0S	G	Sat DS0 0	maspaceflight.com	xinhuaet.com	-
2014-066	2456957.79	2014 Oct 27 08:59:03	Chang Zheng 2C	b	Y32	0.304	CALT	0S	G	Sat SS0 0 4	maspaceflight.com	xinhuaet.com	-
2014-071	2456981.80	2014 Nov 14 18:53:05	Chang Zheng 2C	b	Y35	2.004	CALT	0S	G	Sat SS0 L 4	maspaceflight.com	xinhuaet.com	-
2014-072	2456981.80	2014 Nov 20 07:12:04	Chang Zheng 2D	-	Y24	0.800	SAST	0S	G	Sat SS0 D	maspaceflight.com	xinhuaet.com	-
2014-079	2456993.64	2014 Dec 7 03:28:04	Chang Zheng 4B	?	Y32	2.100	SAST	0S	G	Test	maspaceflight.com	xinhuaet.com	-
2014-080	2457002.31	2014 Dec 10 19:33:04	Chang Zheng 4C	-	Y17	1.500	SAST	0S	G	Sat SS0 L 4	maspaceflight.com	xinhuaet.com	-
2014-088	2457018.64	2014 Dec 27 03:22:04	Chang Zheng 4B	-	Y29	3.000	SAST	0S	G	Sat SS0 L 4	maspaceflight.com	xinhuaet.com	-
2014-090	2457022.54	2014 Dec 31 01:02:04	Chang Zheng 3A	-	Y24	1.440	CALT	0S	G	Sat GTD 0	maspaceflight.com	xinhuaet.com	-
2015-019	2457112.08	2015 Mar 30 13:52:31	Chang Zheng 3C/YZ-1	-	Y11	1.150	CALT	0S	G	Sat GEO 00	maspaceflight.com	xinhuaet.com	-
2015-008	2457180.50	2015 Jun 7	Chang Zheng 4B	?	Y30	0.000	PLAZAC	MS	-	Test	zenite.nu	xinhuaet.com	-
2015-030	2457199.77	2015 Jun 26 06:22:04	Chang Zheng 2C	G3Z	Y26	2.400	CALT	0S	G	Sat SS0 L 4	maspaceflight.com	xinhuaet.com	-
2015-037	2457229.02	2015 Jul 25 12:29	Chang Zheng 3B/YZ-1	-	Y26	0.000	PLAZAC	MS	-	Test	maspaceflight.com	xinhuaet.com	-
2015-040	2457254.50	2015 Aug 27 02:31:35	Chang Zheng 2C	-	Y18	1.040	CALT	0S	G	Test	maspaceflight.com	xinhuaet.com	-
2015-046	2457278.15	2015 Sep 12 15:42:04	Chang Zheng 3B	G2	Y32	4.000	CALT	0S	G	Sat SS0 L 4	maspaceflight.com	xinhuaet.com	-
2015-047	2457279.70	2015 Sep 14 04:42	Chang Zheng 2D	-	Y21	1.700	SAST	0S	G	Sat SS0 0 4	maspaceflight.com	xinhuaet.com	-
2015-049	2457285.46	2015 Sep 19 23:01:14	Chang Zheng 6	-	Y11	0.268	SAST	0S	G	Sat MTD 0	maspaceflight.com	xinhuaet.com	-
2015-053	2457295.47	2015 Sep 29 23:13	Chang Zheng 3B	G2	Y33	1.150	CALT	0S	G	Sat SS0 D	maspaceflight.com	xinhuaet.com	-
2015-057	2457302.68	2015 Oct 7 04:13:05	Chang Zheng 2D	-	Y37	0.660	SAST	0S	G	Sat SS0 D	maspaceflight.com	xinhuaet.com	-
2015-059	2457312.18	2015 Oct 16 16:16	Chang Zheng 3B	G2	Y36	5.000	CALT	0S	G	Sat SS0 D	maspaceflight.com	xinhuaet.com	-
2015-061	2457321.80	2015 Oct 26 07:10	Chang Zheng 2D	-	Y26	1.000	SAST	0S	G	Sat GTD 0	maspaceflight.com	xinhuaet.com	-
2015-063	2457330.18	2015 Nov 3 16:25:04	Chang Zheng 3B	G3	Y24	5.000	CALT	0S	G	Sat GTD 0 4	maspaceflight.com	xinhuaet.com	-
2015-064	2457334.94	2015 Nov 8 07:06:04	Chang Zheng 4B	-	Y24	3.000	SAST	0S	G	Sat SS0 L 4	maspaceflight.com	xinhuaet.com	-
2015-067	2457347.17	2015 Nov 20 16:07:04	Chang Zheng 4B	G2	Y38	5.086	CALT	0S	G	Sat GTD 0 4	maspaceflight.com	xinhuaet.com	-
2015-421	2457349.54	2015 Nov 23 01:00?	Chang Zheng 2C	-	Y8	0.000	PLAZAC	MS	-	Test	maspaceflight.com	xinhuaet.com	-
2015-069	2457353.39	2015 Nov 26 21:24:05	Chang Zheng 4C	-	Y8	1.040	SAST	0S	G	Sat SS0 L 4	maspaceflight.com	xinhuaet.com	-
2015-073	2457366.20	2015 Dec 9 16:46	Chang Zheng 3B	G3	Y31	5.000	CALT	0S	G	Sat GTD 0	maspaceflight.com	xinhuaet.com	-



Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	OrbPay	Agency	Launch_Code	Group	Category	LTCite	Cite	Notes
2015-078	2457373.51	2015 Dec 17 00:12:04	Chang Zheng 2D	-	Y31	1.860	SAST	OS	G	Sat S50 0 4	maspaceflight.com	xinhuaenet.com	-
2015-083	2457385.17	2015 Dec 28 16:04	Chang Zheng 3B	G2	Y37	5.000	CALT	OS	G	Sat GTD 0	maspaceflight.com	-	-
2016-001	2457403.21	2016 Jan 15 16:57	Chang Zheng 3B	G2	Y29	5.200	CALT	OS	G	Sat GTD 0	maspaceflight.com	-	-
2016-006	2457419.81	2016 Feb 1 07:29	Chang Zheng 3C/YZ-1	-	Y14	1.014	CALT	OS	G	Sat MEO 00	maspaceflight.com	-	-
2016-021	2457477.34	2016 Mar 29 20:11	Chang Zheng 3A	-	Y26	2.300	CALT	OS	G	Sat MTO 0	maspaceflight.com	-	-
2016-029	2457484.23	2016 Apr 5 17:38	Chang Zheng 2D	-	Y36	2.350	SAST	OS	G	Sat LEO 0 4	maspaceflight.com	xinhuaenet.com	-
2016-033	2457523.61	2016 Apr 15 02:43	Chang Zheng 2D	-	Y27	0.800	SAST	OS	G	Sat S50 0 4	maspaceflight.com	xinhuaenet.com	-
2016-037	2457538.64	2016 May 30 03:17:04	Chang Zheng 4B	-	Y33	2.724	SAST	OS	G	Sat S50 0	maspaceflight.com	-	-
2016-039	2457552.15	2016 Jun 12 15:30	Chang Zheng 3C	G2?	Y15	3.060	CALT	OS	G	Sat GTD 0	maspaceflight.com	-	-
2016-042	2457565.00	2016 Jun 29 12:00	Chang Zheng 7/YZ-1A	-	Y1	0.928	CALT	OS	G	Sat LEO 0D 4	maspaceflight.com	-	-
2016-043	2457568.64	2016 Jun 29 03:21	Chang Zheng 4B	-	Y35	2.000	SAST	OS	G	Sat LEO L 4	maspaceflight.com	xinhuaenet.com	-
2016-048	2457600.18	2016 Aug 5 16:22	Chang Zheng 3B	G3	Y35	5.200	CALT	OS	G	Sat GTD 0	maspaceflight.com	-	-
2016-049	2457610.48	2016 Aug 9 22:25	Chang Zheng 4C	-	Y19	2.779	SAST	OS	G	Sat S50 L 4	maspaceflight.com	-	-
2016-051	2457616.24	2016 Aug 31 16:55:25	Chang Zheng 2D	-	Y32	0.767	SAST	OS	G	Sat S50 L	maspaceflight.com	-	-
2016-F01	2457632.29	2016 Aug 31 18:55:25	Chang Zheng 4C	-	Y22	3.000	SAST	OF	G	Sat S50 L	maspaceflight.com	-	-
2016-057	2457647.09	2016 Sep 15 14:04:09	Chang Zheng 2F	T	Y2	8.651	CALT	OS	G	Sat LSS 0 4	maspaceflight.com	xinhuaenet.com	-
2016-061	2457676.48	2016 Oct 16 23:30:31	Chang Zheng 2F	T	Y11	9.928	CALT	OS	G	Sat LSS 0 4	maspaceflight.com	xinhuaenet.com	-
2016-068	2457704.47	2016 Nov 11 23:14	Chang Zheng 2D	-	Y34	0.800	SAST	OS	G	Sat S50 0 4	maspaceflight.com	-	-
2016-072	2457715.14	2016 Nov 22 15:24:04	Chang Zheng 3C	G2	Y13	2.500	CALT	OS	G	Sat GTD 0	maspaceflight.com	xinhuaenet.com	-
2016-077	2457733.17	2016 Dec 10 16:11	Chang Zheng 3B	G3	Y42	5.380	CALT	OS	G	Sat GTD 0	maspaceflight.com	xinhuaenet.com	-
2016-081	2457744.31	2016 Dec 10 19:22:04	Chang Zheng 3B	G3	Y33	0.766	SAST	OS	G	Sat S50 L	maspaceflight.com	xinhuaenet.com	-
2016-083	2457750.64	2016 Dec 28 03:23	Chang Zheng 2D	-	Y39	1.210	SAST	OS	G	Sat S50 L	maspaceflight.com	-	-
2017-001	2457759.14	2017 Jan 5 15:16:04	Chang Zheng 3B	G2	Y39	4.000	CALT	OS	G	Sat GTD 0	maspaceflight.com	xinhuaenet.com	-
2017-006	2457768.50	2017 Jan 15 11:04:04	Dong Feng 5C	-	PLAZAC	0.000	PLAZAC	NS	-	Test	freebeacon.com	-	-
2017-018	2457855.96	2017 Apr 12 11:04:04	Chang Zheng 3B	G2	Y43	4.600	CALT	OS	G	Sat GTD 0	maspaceflight.com	xinhuaenet.com	-
2017-021	2457863.99	2017 Apr 20 11:41:35	Chang Zheng 7	-	Y2	12.914	CALT	OS	G	Sat LSS 0 4	maspaceflight.com	-	-
2017-024	2457919.62	2017 Jun 15 03:00	Chang Zheng 4B	-	Y31	3.137	SAST	OS	G	Sat LEO L 4	maspaceflight.com	-	-
2017-038	2457923.17	2017 Jun 15 16:11	Chang Zheng 3B	G2	Y28	5.260	CALT	OS	G	Sat LEO L 4	maspaceflight.com	xinhuaenet.com	-
2017-058	2458025.68	2017 Sep 29 04:21:05	Chang Zheng 2C	b	Y29	1.500	CALT	OS	G	Sat GTD 0	maspaceflight.com	xinhuaenet.com	-
2017-068	2458035.65	2017 Oct 9 04:18:14	Chang Zheng 2D	b	Y30	0.942	SAST	OS	G	Sat S50 0 4	maspaceflight.com	-	-
2017-069	2458062.99	2017 Nov 5 11:45	Chang Zheng 3B/YZ-1	G3Z	Y36	2.028	CALT	OS	G	Sat MEO 00	maspaceflight.com	-	-
2017-072	2458072.27	2017 Nov 14 18:55:55	Chang Zheng 4C	-	Y21	3.496	SAST	OS	G	Sat S50 L 4	maspaceflight.com	xinhuaenet.com	-
2017-074	2458076.70	2017 Nov 21 04:50	Chang Zheng 6	-	Y2	0.285	SAST	OS	G	Sat S50 L	maspaceflight.com	-	-
2017-075	2458082.26	2017 Nov 24 18:10:05	Chang Zheng 2C	b	Y33	1.500	CALT	OS	G	Sat LEO L 4	maspaceflight.com	xinhuaenet.com	-
2017-077	2458090.57	2017 Dec 3 04:11	Chang Zheng 2D	b	Y37	2.004	SAST	OS	G	Sat S50 0 4	xinhuaenet.com	-	-
2017-078	2458098.19	2017 Dec 10 16:40:04	Chang Zheng 3B	G2	Y40	5.200	CALT	OS	G	Sat GTD 0	maspaceflight.com	xinhuaenet.com	-
2017-084	2458110.65	2017 Dec 23 04:14	Chang Zheng 2D	-	Y36	2.004	SAST	OS	G	Sat S50 0 4	xinhuaenet.com	-	-
2017-085	2458113.32	2017 Dec 25 13:44	Chang Zheng 2C	b	Y34	1.500	CALT	OS	G	Sat S50 0 4	xinhuaenet.com	-	-
2018-002	2458127.64	2018 Jan 9 03:24:33	Chang Zheng 2D	-	Y40	1.204	SAST	OS	G	Sat S50 0 4	maspaceflight.com	xinhuaenet.com	-
2018-003	2458130.47	2018 Jan 11 23:16:04	Chang Zheng 2D	G3Z	Y45	2.028	CALT	OS	G	Sat S50 0 4	maspaceflight.com	-	-
2018-006	2458131.90	2018 Jan 15 07:10	Chang Zheng 2D	-	Y49	2.004	SAST	OS	G	Sat S50 0 4	xinhuaenet.com	-	-
2018-011	2458153.74	2018 Feb 2 07:59:05	Chang Zheng 2C	b	Y13	1.895	SAST	OS	G	Sat S50 L 4	xinhuaenet.com	xinhuaenet.com	-
2018-015	2458161.71	2018 Feb 2 07:59:05	Chang Zheng 2C	b	Y33	0.850	SAST	OS	G	Sat S50 L 4	xinhuaenet.com	-	-
2018-018	2458171.14	2018 Feb 12 03:03:04	Chang Zheng 3B/YZ-1	G3Z	Y16	2.028	CALT	OS	G	Sat MEO 00	maspaceflight.com	-	-
2018-025	2458204.50	2018 Mar 12 07:05:04	Chang Zheng 3D	-	Y60	2.004	SAST	OS	G	Sat S50 0 4	xinhuaenet.com	-	-
2018-029	2458208.64	2018 Mar 29 17:05:04	Chang Zheng 3B/YZ-1	G3Z	Y46	2.028	CALT	OS	G	Sat S50 0 4	maspaceflight.com	-	-
2018-031	2458208.64	2018 Mar 31 03:25:03	Chang Zheng 4C	-	Y32	2.415	SAST	OS	G	Sat S50 0 4	maspaceflight.com	-	-
2018-034	2458215.97	2018 Apr 3 16:06:05	Chang Zheng 4C	-	Y32	1.500	CALT	OS	G	Sat LEO 0 4	xinhuaenet.com	-	-
2018-043	2458247.37	2018 Apr 3 16:06:05	Chang Zheng 3B	G2	Y35	5.700	SAST	OS	G	Sat GTD 0	maspaceflight.com	xinhuaenet.com	-
2018-045	2458255.40	2018 May 20 21:28:50	Chang Zheng 4C	-	Y37	2.010	SAST	OS	G	Sat D50 0	maspaceflight.com	xinhuaenet.com	-
2018-048	2458259.49	2018 May 20 04:15:04	Chang Zheng 4C	-	Y30	1.075	SAST	OS	G	Sat S50 0 4	maspaceflight.com	xinhuaenet.com	-
2018-050	2458275.95	2018 Jun 1 13:07:04	Chang Zheng 2D	-	Y35	1.446	CALT	OS	G	Sat GTD 0	xinhuaenet.com	-	-
2018-054	2458296.85	2018 Jun 27 03:20:06	Chang Zheng 2A	b	Y44	1.000	CALT	OS	G	Sat LEO 0	maspaceflight.com	xinhuaenet.com	-
2018-056	2458308.66	2018 Jul 9 03:58:14	Chang Zheng 2C	b	Y44	1.135	CALT	OS	G	Sat S50 0L 4	maspaceflight.com	-	-
2018-057	2458309.97	2018 Jul 9 20:58:14	Chang Zheng 3A	SMA	Y3	2.300	CALT	OS	G	Sat MTO 0	maspaceflight.com	-	-
2018-062	2458328.59	2018 Jul 29 01:48:05	Chang Zheng 3B/YZ-1	G3Z	Y27	2.038	CALT	OS	G	Sat MEO 00	maspaceflight.com	-	-
2018-063	2458330.83	2018 Jul 31 03:00:04	Chang Zheng 4B	-	Y49	3.038	CALT	OS	G	Sat S50 0	maspaceflight.com	-	-
2018-067	2458355.69	2018 Aug 24 23:52:04	Chang Zheng 3B/YZ-1	G3Z	Y37	2.028	SAST	OS	G	Sat MEO 00	maspaceflight.com	-	-
2018-068	2458368.84	2018 Sep 7 03:15:05	Chang Zheng 2C	b	Y30	0.443	CALT	OS	G	Sat S50 L	maspaceflight.com	-	-
2018-072	2458381.09	2018 Sep 19 14:07:04	Chang Zheng 3B/YZ-1	G3Z	Y38	2.028	CALT	OS	G	Sat MEO 00	maspaceflight.com	-	-
2018-077	2458400.61	2018 Oct 9 02:43:03	Chang Zheng 2C/YZ-1S	G3Z	Y82	2.028	CALT	OS	G	Sat S50 0D	maspaceflight.com	-	-
2018-081	2458406.68	2018 Oct 15 04:23:04	Chang Zheng 3B/YZ-1S	G3Z	Y82	2.028	CALT	OS	G	Sat MEO 00	maspaceflight.com	-	-
2018-088	2458416.46	2018 Oct 16 00:03:14	Chang Zheng 4B	-	Y34	2.521	SAST	OS	G	Sat S50 D 4	maspaceflight.com	xinhuaenet.com	-
2018-089	2458420.63	2018 Oct 29 00:43:14	Chang Zheng 2C	b	Y22	3.060	CALT	OS	G	Sat GTD 0	xinhuaenet.com	-	-
2018-093	2458424.16	2018 Nov 1 18:07:04	Chang Zheng 3B	G3	Y41	3.060	CALT	OS	G	Sat MEO 00	maspaceflight.com	-	-
2018-095	2458441.25	2018 Nov 1 18:07:04	Chang Zheng 2D	G3Z	Y28	1.100	SAST	OS	G	Sat MEO 00	maspaceflight.com	-	-
2018-099	2458442.49	2018 Nov 19 23:40:04	Chang Zheng 2D	-	Y38	1.000	SAST	OS	G	Sat S50 D 4	xinhuaenet.com	-	-
2018-102	2458460.97	2018 Dec 7 04:12	Chang Zheng 3B	-	Y30	1.033	SAST	OS	G	Sat S50 0 4	xinhuaenet.com	-	-
2018-103	2458460.97	2018 Dec 7 18:23	Chang Zheng 2D	-	Y30	3.920	CALT	OS	G	Sat D50 0	xinhuaenet.com	xinhuaenet.com	-
2018-110	2458477.20	2018 Dec 24 16:53:05	Chang Zheng 3C	G2?	Y17	3.200	CALT	OS	G	Sat GTD 0	maspaceflight.com	xinhuaenet.com	-
2018-112	2458481.83	2018 Dec 29 08:00:05	Chang Zheng 2D/YZ-3	-	Y35	5.000	CALT	OS	G	Sat GTD 0	maspaceflight.com	xinhuaenet.com	-
2019-011	2458494.22	2019 Jan 10 17:11:04	Chang Zheng 3B	G3	Y64	5.000	CALT	OS	G	Sat GTD 0	maspaceflight.com	xinhuaenet.com	-
2019-012	2458522.19	2019 Mar 9 16:28:04	Chang Zheng 3B	G3	Y56	5.000	CALT	OS	G	Sat GTD 0	maspaceflight.com	xinhuaenet.com	-
2019-023	2458569.11	2019 Mar 31 15:51:04	Chang Zheng 3B	G2	Y44	3.060	CALT	OS	G	Sat GTD 0	maspaceflight.com	xinhuaenet.com	-
2019-024	2458569.11	2019 Apr 20 14:41:03	Chang Zheng 3B	G2	Y54	3.060	CALT	OS	G	Sat GTD 0	maspaceflight.com	xinhuaenet.com	-
2019-027	2458620.45	2019 Apr 29 22:52:05	Chang Zheng 4B	G2?	Y36	2.100	SAST	OS	G	Sat S50 0	maspaceflight.com	xinhuaenet.com	-
2019-F04	2458620.45	2019 May 17 15:48:05	Chang Zheng 3C	G2?	Y16	3.060	CALT	OS	G	Sat GTD 0	maspaceflight.com	xinhuaenet.com	-
2019-035	2458626.45	2019 May 22 22:49	Chang Zheng 4C	G2	Y23	1.040	SAST	OS	G	Sat S50 0	maspaceflight.com	xinhuaenet.com	-
2019-045	2458659.26	2019 Jun 24 18:09	Chang Zheng 3B	G2	Y60	3.060	CALT	OS	G	Sat GTD 0	maspaceflight.com	xinhuaenet.com	-
2019-046	2458660.66	2019 Jun 26 03:57	Chang Zheng 2C	G2	Y37	1.50							

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	OrbPay	Agency	Launch_Code	Group	Category	LTCite	Cite	Notes
2019-070	2458774.14	2019 Oct 17 15:21:04	Chang Zheng 3B	G2	Y57	4.000	CALT	OS	G	Sat GTD 0	masapaceflight.com	xihuaenet.com	-
2019-072	2458790.64	2019 Oct 17 03:22	Chang Zheng 4B	-	Y38	2.570	SAST	OS	G	Sat S50 L	masapaceflight.com	xihuaenet.com	-
2019-073	2458792.24	2019 Nov 4 17:43:04	Chang Zheng 3B	G2	Y61	3.060	CALT	OS	G	Sat GTD 0	masapaceflight.com	xihuaenet.com	-
2019-076	2458800.77	2019 Nov 23 06:35	Chang Zheng 6	-	Y4	0.500	SAST	OS	G	Sat L50 0	masapaceflight.com	xihuaenet.com	-
2019-078	2458810.54	2019 Nov 23 06:55	Chang Zheng 3B/7Z-1	-	Y66	2.028	CALT	OS	G	Sat M50 00	masapaceflight.com	xihuaenet.com	-
2019-082	2458815.49	2019 Dec 27 23:52	Chang Zheng 4C	-	Y24	3.000	SAST	OS	G	Sat S50 L	masapaceflight.com	xihuaenet.com	-
2019-080	2458833.81	2019 Dec 26 07:22	Chang Zheng 3B/7Z-1	-	Y67	2.028	CALT	OS	G	Sat M50 00	masapaceflight.com	xihuaenet.com	-
2019-083	2458837.64	2019 Dec 20 03:22:29	Chang Zheng 4B	-	Y44	2.513	SAST	OS	G	Sat S50 L 4	masapaceflight.com	xihuaenet.com	-
2020-002	2458856.14	2020 Jan 7 15:20	Chang Zheng 3B	G2	Y62	4.000	CALT	OS	G	Sat GTD 0	masapaceflight.com	xihuaenet.com	-
2020-003	2458863.62	2020 Feb 15 02:53:04	Chang Zheng 2D	-	Y58	1.368	SAST	OS	G	Sat S50 0	masapaceflight.com	xihuaenet.com	-
2020-014	2458899.38	2020 Feb 19 21:07:41	Chang Zheng 2D	-	Y61	1.100	SAST	OS	G	Sat L50 0	masapaceflight.com	xihuaenet.com	-
2020-017	2459118.00	2020 Mar 16 13:34	Chang Zheng 3B	G2	Y69	3.060	CALT	OS	G	Sat GTD 0	masapaceflight.com	xihuaenet.com	-
2020-F02	2459225.07	2020 Mar 24 03:43:05	Chang Zheng 7A	-	Y1	5.000	CALT	OF	G	Sat GTD 0	masapaceflight.com	xihuaenet.com	-
2020-021	2459322.65	2020 Mar 24 03:43:05	Chang Zheng 3B	G2	Y42	1.500	CALT	OS	G	Sat L50 0	masapaceflight.com	xihuaenet.com	-
2020-F03	2459448.99	2020 Apr 9 11:46	Chang Zheng 2C	b	Y71	5.550	CALT	OF	G	Sat L50 0	masapaceflight.com	xihuaenet.com	-
2020-036	2459001.27	2020 May 31 08:53	Chang Zheng 2C	b	Y40	0.442	CALT	OS	G	Sat S50 D 4	masapaceflight.com	xihuaenet.com	-
2020-039	2459017.80	2020 Jun 17 07:19:04	Chang Zheng 2D	-	Y62	1.757	SAST	OS	G	Sat S50 0 4	masapaceflight.com	xihuaenet.com	-
2020-040	2459023.57	2020 Jun 23 01:43:04	Chang Zheng 3B	G2	Y68	3.060	CALT	OS	G	Sat GTD 0	masapaceflight.com	xihuaenet.com	-
2020-042	2459033.63	2020 Jul 1 03:10	Chang Zheng 4B	-	Y43	2.410	SAST	OS	G	Sat S50 L	masapaceflight.com	xihuaenet.com	-
2020-043	2459035.49	2020 Jul 4 23:44:04	Chang Zheng 2D	-	Y29	1.000	SAST	OS	G	Sat S50 D	masapaceflight.com	xihuaenet.com	-
2020-045	2459040.01	2020 Jul 19 12:11:04	Chang Zheng 3B	G2	Y64	5.000	CALT	OS	G	Sat GTD 0	masapaceflight.com	xihuaenet.com	-
2020-051	2459055.63	2020 Jul 26 03:13	Chang Zheng 4B	-	Y46	2.490	SAST	OS	G	Sat S50 L	masapaceflight.com	xihuaenet.com	-
2020-054	2459067.67	2020 Aug 6 04:01	Chang Zheng 2D	-	Y56	1.710	SAST	OS	G	Sat S50 D	masapaceflight.com	xihuaenet.com	-
2020-058	2459064.60	2020 Aug 23 02:27:04	Chang Zheng 2F	-	Y57	1.730	SAST	OS	G	Sat S50 D	masapaceflight.com	xihuaenet.com	-
2020-063	2459096.91	2020 Sep 4 07:307	Chang Zheng 4B	I	Y46	8.504	CALT	OS	G	Sat L5S 0 4	TLE	xihuaenet.com	-
2020-064	2459099.75	2020 Sep 7 05:57:05	Chang Zheng 2D	-	Y70	6.500	CALT	OS	G	Sat S50 L	masapaceflight.com	xihuaenet.com	-
2020-066	2459113.74	2020 Sep 27 03:23:04	Chang Zheng 4B	-	Y41	1.500	SAST	OS	G	Sat L50 L 4	masapaceflight.com	xihuaenet.com	-
2020-067	2459119.64	2020 Oct 11 16:57:04	Chang Zheng 3B	G2	Y42	4.600	CALT	OS	G	Sat GTD 0	masapaceflight.com	xihuaenet.com	-
2020-071	2459134.21	2020 Oct 26 15:19:05	Chang Zheng 2C	-	Y43	1.940	CALT	OS	G	Sat L50 L	masapaceflight.com	xihuaenet.com	-
2020-076	2459149.14	2020 Nov 6 03:19:15	Chang Zheng 6	-	Y73	0.850	SAST	OS	G	Sat S50 L	masapaceflight.com	xihuaenet.com	-
2020-082	2459166.17	2020 Nov 12 15:59	Chang Zheng 3B	G2	Y73	5.200	CALT	OS	G	Sat GTD 0	masapaceflight.com	xihuaenet.com	-
2020-084	2459189.67	2020 Dec 6 03:57:37	Chang Zheng 3B	G6	Y70	6.500	CALT	OS	G	Sat S50 L	tv/cnspacrfliht.com	xihuaenet.com	-
2020-102	2459205.69	2020 Dec 22 04:57:37	Chang Zheng 6	-	Y1	5.265	CALT	OS	G	Sat S50 L	masapaceflight.com	xihuaenet.com	-
2020-103	2459211.16	2020 Dec 27 15:44	Chang Zheng 4C	-	Y35	1.050	SAST	OS	G	Sat S50 L	masapaceflight.com	xihuaenet.com	-
2021-003	2459234.16	2021 Jan 19 16:25	Chang Zheng 3B	G2	Y74	5.200	CALT	OS	G	Sat GTD 0	masapaceflight.com	xihuaenet.com	-
2021-007	2459243.70	2021 Jan 29 04:47	Chang Zheng 4C	-	Y31	1.500	SAST	OS	G	Sat L50 L	masapaceflight.com	xihuaenet.com	-
2021-010	2459260.15	2021 Feb 4 15:56:04	Chang Zheng 3B	G2	Y77	4.000	CALT	OS	G	Sat GTD 0	masapaceflight.com	xihuaenet.com	-
2021-014	2459289.60	2021 Feb 24 02:22	Chang Zheng 4C	-	Y32	1.500	SAST	OS	G	Sat L50 L	masapaceflight.com	xihuaenet.com	-
2021-019	2459285.24	2021 Mar 11 17:51:28	Chang Zheng 1A	-	Y42	5.000	CALT	OS	G	Sat GTD 0	masapaceflight.com	xihuaenet.com	-
2021-021	2459286.60	2021 Mar 19 02:19	Chang Zheng 4C	-	Y36	1.500	SAST	OS	G	Sat S50 L	masapaceflight.com	xihuaenet.com	-
2021-026	2459314.46	2021 Mar 3 22:46	Chang Zheng 4C	-	Y42	3.000	SAST	OS	G	Sat S50 L	masapaceflight.com	xihuaenet.com	-
2021-028	2459313.64	2021 Apr 5 23:30	Chang Zheng 4B	-	Y49	1.500	SAST	OS	G	Sat S50 L	masapaceflight.com	xihuaenet.com	-
2021-032	2459331.94	2021 Apr 20 07:397	Chang Zheng 6C	-	Y6	0.557	SAST	OS	G	Sat S50 L	masapaceflight.com	xihuaenet.com	-
2021-037	2459344.51	2021 May 6 01:11:05	Chang Zheng 2C	-	Y44	0.800	SAST	OS	G	Sat L50 L	masapaceflight.com	xihuaenet.com	-
2021-043	2459341.26	2021 May 29 04:43	Chang Zheng 4B	-	Y46	1.540	SAST	OS	G	Sat L50 L	masapaceflight.com	xihuaenet.com	-
2021-046	2459368.04	2021 May 29 12:55:29	Chang Zheng 7	-	Y48	18.900	CALT	OS	G	Sat L5S 0 4	masapaceflight.com	xihuaenet.com	-
2021-047	2459368.04	2021 Jun 1 14:11	Chang Zheng 3B	G2	Y72	9.380	CALT	OS	G	Sat L5S 0	masapaceflight.com	xihuaenet.com	-
2021-050	2459375.68	2021 Jun 11 03:03	Chang Zheng 3B	G2	Y72	3.102	SAST	OS	G	Sat S50 D	masapaceflight.com	xihuaenet.com	-
2021-053	2459375.68	2021 Jun 11 01:52:32	Chang Zheng 2D	-	Y44	3.02	SAST	OS	G	Sat S50 D	masapaceflight.com	xihuaenet.com	-
2021-055	2459383.77	2021 Jun 19 06:30	Chang Zheng 2C	G	Y48	9.924	CALT	OS	G	Sat L5S 0	masapaceflight.com	xihuaenet.com	-
2021-061	2459398.62	2021 Jul 3 02:5	Chang Zheng 2C	-	Y74	1.84	CALT	OS	G	Sat S50 D	masapaceflight.com	xihuaenet.com	-
2021-062	2459400.36	2021 Jul 4 23:28	Chang Zheng 4C	-	Y43	2.452	SAST	OS	G	Sat S50 L 4	masapaceflight.com	xihuaenet.com	-
2021-063	2459402.16	2021 Jul 6 15:53	Chang Zheng 3C	-	Y19	1.540	CALT	OS	G	Sat GTD 0	masapaceflight.com	xihuaenet.com	-
2021-064	2459414.51	2021 Jul 19 11:59	Chang Zheng 6	-	Y6	1.500	SAST	OS	G	Sat L50 L	masapaceflight.com	xihuaenet.com	-
2021-065	2459414.51	2021 Jul 19 10:19	Chang Zheng 2C	-	Y69	1.540	CALT	OS	G	Sat L50 L	masapaceflight.com	xihuaenet.com	-
2021-067	2459424.67	2021 Jul 29 04:01	Chang Zheng 2C	-	Y62	1.000	SAST	OS	G	Sat S50 D	masapaceflight.com	xihuaenet.com	-
2021-101	2459422.50	2021 Jul 277	Chang Zheng 2C	-	-	1.000	CALT	OS	G	Sat L50 0	PT-211020	xihuaenet.com	-
2021-070	2459430.96	2021 Aug 4 11:01	Chang Zheng 6	-	Y7	0.200	SAST	OS	G	Sat L50 L	masapaceflight.com	xihuaenet.com	-
2021-071	2459432.19	2021 Aug 5 16:30:04	Chang Zheng 3B	G2	Y76	5.000	CALT	OS	G	Sat GTD 0	masapaceflight.com	xihuaenet.com	-
2021-074	2459445.44	2021 Aug 18 22:32	Chang Zheng 4B	-	Y50	2.100	SAST	OS	G	Sat S50 L	masapaceflight.com	xihuaenet.com	-
2021-076	2459450.97	2021 Aug 24 11:15	Chang Zheng 2C/7Z-1S	-	Y60	0.850	CALT	OS	G	Sat L50 S0	masapaceflight.com	xihuaenet.com	-
2021-077	2459451.15	2021 Aug 24 15:41	Chang Zheng 4C	-	Y78	4.000	CALT	OS	G	Sat GTD 0	masapaceflight.com	xihuaenet.com	-
2021-079	2459454.63	2021 Sep 7 03:01	Chang Zheng 4C	-	Y40	2.700	SAST	OS	G	Sat S50 L	masapaceflight.com	xihuaenet.com	-
2021-080	2459466.99	2021 Sep 7 11:50	Chang Zheng 3B	-	Y86	5.250	CALT	OS	G	Sat GTD 0	masapaceflight.com	xihuaenet.com	-
2021-085	2459477.80	2021 Sep 20 07:10:11	Chang Zheng 7	-	Y4	18.600	CALT	OS	G	Sat L5S 0	masapaceflight.com	xihuaenet.com	-
2021-087	2459484.95	2021 Sep 27 08:20	Chang Zheng 3B	G2	Y81	4.867	CALT	OS	G	Sat GTD 0	masapaceflight.com	xihuaenet.com	-
2021-091	2459501.95	2021 Oct 14 10:51	Chang Zheng 2D	-	Y63	0.887	SAST	OS	G	Sat S50 D	masapaceflight.com	xihuaenet.com	-
2021-092	2459503.18	2021 Oct 15 16:23:44	Chang Zheng 2F	G2	Y13	9.924	CALT	OS	G	Sat L5S 0	masapaceflight.com	xihuaenet.com	-
2021-094	2459511.56	2021 Oct 24 01:27	Chang Zheng 3B	-	Y83	5.200	CALT	OS	G	Sat GTD 0	masapaceflight.com	xihuaenet.com	-
2021-099	2459521.82	2021 Nov 3 07:43	Chang Zheng 6	-	Y41	1.200	CALT	OS	G	Sat S50 S0	masapaceflight.com	xihuaenet.com	-
2021-101	2459523.60	2021 Nov 5 02:19	Chang Zheng 2D	-	Y8	0.500	SAST	OS	G	Sat S50 D	masapaceflight.com	xihuaenet.com	-
2021-101	2459523.62	2021 Nov 6 03:00	Chang Zheng 2D	-	Y63	1.200	SAST	OS	G	Sat L50 0	masapaceflight.com	xihuaenet.com	-
2021-107	2459538.58	2021 Nov 20 01:51	Chang Zheng 4B	-	Y52	3.000	SAST	OS	G	Sat S50 0	masapaceflight.com	xihuaenet.com	-
2021-109	2459541.49	2021 Nov 22 23:45	Chang Zheng 4C	-	Y37	2.779	SAST	OS	G	Sat S50 L	masapaceflight.com	xihuaenet.com	-
2021-114	2459545.19	2021 Nov 26 16:40:04	Chang Zheng 3B	G3	Y79	5.250	CALT	OS	G	Sat GTD 0	masapaceflight.com	xihuaenet.com	-
2021-122	2459558.51	2021 Dec 10 00:11:30	Chang Zheng 4B	-	Y47	1.400	SAST	OS	G	Sat S50 L	masapaceflight.com	xihuaenet.com	-
2021-124	2459562.17	2021 Dec 13 16:09	Chang Zheng 3B	G3	Y62	5.000	CALT	OS	G	Sat GTD 0	masapaceflight.com	xihuaenet.com	-
2021-129	2459571.92	2021 Dec 23 10:12	Chang Zheng 7A	-	Y3	6.000	CALT	OS	G	Sat GTD 0 1	masapaceflight.com	xihuaenet.com	-
2021-131	2459574.63	2021 Dec 26 03:11:31	Chang Zheng 4C	-	Y39	1.851	SAST	OS	G	Sat S50 L	masapaceflight.com	xihuaenet.com	-
2021-134	2459577.97	2021 Dec 29 11:13	Chang Zheng 2D	-	Y41	2.000	SAST	OS	G	Sat L50 D	masapaceflight.com	xihuaenet.com	-
2021-135	2459578.20	2021 Dec 29 16:43	Chang Zheng 3B	G3	Y84	4.000	CALT	OS	G	Sat GTD 0	masapaceflight.com	xihuaenet.com	-
2022-004	2459596.61	2022 Jan 17 02:35	Chang Zheng 2D	-	Y70	0.500	SAST	OS	G	Sat L50 0	masapaceflight.com	xihuaenet.com	-
2022-007	2459605.49	2022 Jan 25 23:44	Chang Zheng 4C	-	Y29	3.201	SAST	OS	G	Sat S50 L	masapaceflight.com	xihuaenet.com	-

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	OrbPay	Agency	Launch_Code	Group	Category	LTCite	Cite	Notes
2022-018	2459637.49	2022 Feb 26 2344	Chang Zheng 4C	-	Y30	3.200	SAST	0S	G	Sat SS0 L	maspaceflight.com	xinhuaet.com	-
2022-019	2459637.63	2022 Feb 27 0306:28	Chang Zheng 8	0	Y2	1.759	CALT	0S	G	Sat SS0 L	maspaceflight.com	xinhuaet.com	-
2022-023	2459643.75	2022 Mar 5 0601	Chang Zheng 2C	-	Y62	1.147	CALT	0S	G	Sat LEO L	maspaceflight.com	xinhuaet.com	-
2022-027	2459655.90	2022 Mar 17 0709	Chang Zheng 4C	-	Y47	0.510	SAST	0S	G	Sat LEO L	maspaceflight.com	xinhuaet.com	-
2022-031	2459667.91	2022 Mar 29 0950	Chang Zheng 6A	-	Y1	2.090	SAST	0S	G	Sat SS0 L	maspaceflight.com	xinhuaet.com	-
2022-035	2459676.49	2022 Apr 5 1200	Chang Zheng 4C	-	Y89	2.779	CALT	0S	G	Sat SS0 L	maspaceflight.com	xinhuaet.com	-
2022-038	2459685.00	2022 Apr 15 1200	Chang Zheng 3B	-	Y38	6.250	SAST	0S	G	Sat GTD 0	maspaceflight.com	xinhuaet.com	-
2022-039	2459685.26	2022 Apr 15 1816	Chang Zheng 4C	-	Y28	2.080	SAST	0S	G	Sat SS0 L	maspaceflight.com	xinhuaet.com	-
2022-043	2459698.87	2022 Apr 29 0411:33	Chang Zheng 2C	-	Y70	1.080	CALT	0S	G	Sat SS0 L	maspaceflight.com	xinhuaet.com	-
2022-048	2459704.61	2022 May 5 0238	Chang Zheng 2D	-	Y79	1.944	SAST	0S	G	Sat SS0 D	maspaceflight.com	xinhuaet.com	-
2022-050	2459709.25	2022 May 9 1756:37	Chang Zheng 7	-	Y5	17.420	CALT	0S	G	Sat LSS 0	maspaceflight.com	xinhuaet.com	-
2022-056	2459719.94	2022 May 20 1030	Chang Zheng 2C/YZ-1S	-	Y53/Y5	0.850	CALT	0S	G	Sat LEO SP	maspaceflight.com	xinhuaet.com	-
2022-058	2459732.87	2022 Jun 2 0400	Chang Zheng 2C	-	Y65	1.170	CALT	0S	G	Sat LEO L	maspaceflight.com	xinhuaet.com	-
2022-060	2459735.61	2022 Jun 5 0244:10	Chang Zheng 2F	G	Y14	9.928	CALT	0S	G	Sat LSS 0 4	maspaceflight.com	xinhuaet.com	-
2022-068	2459753.00	2022 Jun 23 0222	Chang Zheng 2D	-	Y64	5.306	SAST	0S	G	Sat LEO 0	maspaceflight.com	xinhuaet.com	-
2022-078	2459773.19	2022 Jun 27 1546	Chang Zheng 4C	G2	Y46	3.000	CALT	0S	G	Sat SS0 L	maspaceflight.com	xinhuaet.com	-
2022-082	2459776.46	2022 Jul 12 1630	Chang Zheng 3B	-	Y71	1.200	CALT	0S	G	Sat GTD 0	maspaceflight.com	xinhuaet.com	-
2022-088	2459790.06	2022 Jul 15 2257:16	Chang Zheng 2C	-	Y65	5.306	SAST	0S	G	Sat SS0 L	maspaceflight.com	xinhuaet.com	-
2022-090	2459795.63	2022 Aug 4 0306	Chang Zheng 4B	-	Y40	1.645	SAST	0S	G	Sat LEO 0	maspaceflight.com	xinhuaet.com	-
2022-098	2459801.70	2022 Aug 10 0450	Chang Zheng 2F	I	Y40	8.605	CALT	0S	G	Sat SS0 D	maspaceflight.com	xinhuaet.com	-
2022-100	2459811.23	2022 Aug 10 0450	Chang Zheng 6	-	Y10	0.672	SAST	0S	G	Sat SS0 D	maspaceflight.com	xinhuaet.com	-
2022-103	2459815.63	2022 Aug 19 1737	Chang Zheng 2D	-	Y66	5.306	SAST	0S	G	Sat SS0 L	maspaceflight.com	xinhuaet.com	-
2022-106	2459825.49	2022 Sep 2 2344	Chang Zheng 4C	-	Y52	1.040	SAST	0S	G	Sat LEO 0	maspaceflight.com	xinhuaet.com	-
2022-112	2459836.58	2022 Sep 5 0419	Chang Zheng 7A	-	Y5	5.000	CALT	0S	G	Sat GTD 0	maspaceflight.com	xinhuaet.com	-
2022-119	2459836.66	2022 Sep 15 1318:47	Chang Zheng 2D	-	Y76	0.800	SAST	0S	G	Sat LEO 0	maspaceflight.com	xinhuaet.com	-
2022-120	2459843.47	2022 Sep 26 2315	Chang Zheng 2D	-	Y66	5.306	SAST	0S	G	Sat LEO 0	maspaceflight.com	xinhuaet.com	-
2022-121	2459849.49	2022 Sep 26 2350	Chang Zheng 6	-	Y9	0.300	SAST	0S	G	Sat SS0 0	maspaceflight.com	xinhuaet.com	-
2022-129	2459861.49	2022 Oct 6 2345	Chang Zheng 2D	-	Y85	0.886	SAST	0S	G	Sat SS0 0	maspaceflight.com	xinhuaet.com	-
2022-132	2459865.45	2022 Oct 12 2253	Chang Zheng 2C	-	Y66	0.510	CALT	0S	G	Sat LEO 0	maspaceflight.com	xinhuaet.com	-
2022-133	2459867.30	2022 Oct 14 1912	Chang Zheng 2D	-	Y69	5.306	SAST	0S	G	Sat SS0 0	maspaceflight.com	xinhuaet.com	-
2022-142	2459881.94	2022 Oct 29 0101	Chang Zheng 2D	-	Y72	1.300	CALT	0S	G	Sat LEO 0	maspaceflight.com	xinhuaet.com	-
2022-146	2459886.99	2022 Nov 5 1150	Chang Zheng 3B	-	Y91	5.260	SAST	0S	G	Sat LEO 0	maspaceflight.com	xinhuaet.com	-
2022-151	2459895.45	2022 Nov 12 0203:12	Chang Zheng 6A	-	Y6	16.222	CALT	0S	G	Sat LSS 0	maspaceflight.com	xinhuaet.com	-
2022-152	2459896.59	2022 Nov 12 0203:12	Chang Zheng 7C	-	Y6	0.500	SAST	0S	G	Sat LEO L	maspaceflight.com	xinhuaet.com	-
2022-160	2459911.02	2022 Nov 15 0138	Chang Zheng 4C	-	Y86	8.306	SAST	0S	G	Sat SS0 0 4	maspaceflight.com	xinhuaet.com	-
2022-162	2459913.13	2022 Nov 27 1223	Chang Zheng 2D	G	Y15	9.924	CALT	0S	G	Sat SS0 0	maspaceflight.com	xinhuaet.com	-
2022-166	2459922.27	2022 Dec 6 1631	Chang Zheng 2F	-	Y89	2.000	SAST	0S	G	Sat LEO L	maspaceflight.com	xinhuaet.com	-
2022-171	2459925.95	2022 Dec 12 1622	Chang Zheng 2C	-	Y87	1.100	SAST	0S	G	Sat LEO L	maspaceflight.com	xinhuaet.com	-
2022-176	2459928.27	2022 Dec 14 1853	Chang Zheng 4B	-	Y90	3.000	SAST	0S	G	Sat SS0 0	maspaceflight.com	xinhuaet.com	-
2022-178	2459942.70	2022 Dec 27 0446	Chang Zheng 4B	-	Y88	4.000	SAST	0S	G	Sat SS0 0	maspaceflight.com	xinhuaet.com	-
2023-002	2459953.34	2023 Jan 6 2020	Chang Zheng 7A	G2	Y4	5.200	CALT	0S	G	Sat GTD 0	maspaceflight.com	xinhuaet.com	-
2023-006	2459957.26	2023 Jan 12 0710	Chang Zheng 2C	-	Y61	1.940	SAST	0S	G	Sat LEO 0	maspaceflight.com	xinhuaet.com	-
2023-007	2459958.63	2023 Jan 15 0314:7	Chang Zheng 2D	-	Y71	1.560	SAST	0S	G	Sat LEO 0	maspaceflight.com	xinhuaet.com	-
2023-023	2459989.67	2023 Feb 23 0441	Chang Zheng 3B	-	Y03	6.954	CALT	0S	G	Sat SS0 D	maspaceflight.com	xinhuaet.com	-
2023-025	2459993.95	2023 Feb 24 0441	Chang Zheng 2C	-	Y63	0.300	CALT	0S	G	Sat LEO 0	maspaceflight.com	xinhuaet.com	-
2023-031	2460013.65	2023 Mar 6 0241	Chang Zheng 4C	-	Y64	2.930	CALT	0S	G	Sat SS0 L	maspaceflight.com	xinhuaet.com	-
2023-032	2460020.86	2023 Mar 17 0833	Chang Zheng 2C	G2	Y90	4.600	CALT	0S	G	Sat GTD 0	maspaceflight.com	xinhuaet.com	-
2023-047	2460033.95	2023 Mar 30 1050	Chang Zheng 3B	-	Y90	1.130	SAST	0S	G	Sat SS0 D	maspaceflight.com	xinhuaet.com	-
2023-048	2460034.77	2023 Mar 31 0637	Chang Zheng 4C	-	Y49	0.150	SAST	0S	G	Sat LEO L	maspaceflight.com	xinhuaet.com	-
2023-055	2460050.57	2023 Apr 16 0136:30	Chang Zheng 4B	-	Y51	2.450	SAST	0S	G	Sat LEO L	maspaceflight.com	xinhuaet.com	-
2023-063	2460075.06	2023 Apr 16 1322:51	Chang Zheng 7	-	Y7	19.717	CALT	0S	G	Sat LSS 0	maspaceflight.com	xinhuaet.com	-
2023-066	2460085.82	2023 May 17 0249	Chang Zheng 2C	G2	Y60	3.063	CALT	0S	G	Sat LEO 0	maspaceflight.com	xinhuaet.com	-
2023-069	2460085.93	2023 May 21 0800	Chang Zheng 2F	G	Y16	9.946	CALT	0S	G	Sat LEO 0	maspaceflight.com	xinhuaet.com	-
2023-077	2460094.56	2023 May 30 0131:13	Chang Zheng 2D	-	Y88	0.100	CALT	0S	G	Sat SS0 D	maspaceflight.com	xinhuaet.com	-
2023-085	2460110.73	2023 May 30 0530	Chang Zheng 2D	-	Y12	0.600	CALT	0S	G	Sat LEO 0	maspaceflight.com	xinhuaet.com	-
2023-092	2460115.64	2023 Jun 2 0318	Chang Zheng 6	-	Y81	1.200	SAST	0S	G	Sat SS0 L	maspaceflight.com	xinhuaet.com	-
2023-095	2460134.96	2023 Jun 10 1100	Chang Zheng 2C/YZ-1S	-	Y12/Y3	0.800	CALT	0S	G	Sat LEO 0	maspaceflight.com	xinhuaet.com	-
2023-104	2460148.62	2023 Jun 23 0250	Chang Zheng 2D	-	Y81	0.600	SAST	0S	G	Sat SS0 L	maspaceflight.com	xinhuaet.com	-
2023-106	2460152.33	2023 Jun 26 2002	Chang Zheng 2D	-	Y81	1.200	SAST	0S	G	Sat SS0 L	maspaceflight.com	xinhuaet.com	-
2023-111	2460159.66	2023 Jun 3 0347:47	Chang Zheng 4C	-	Y44	0.850	SAST	0S	G	Sat SS0 L	maspaceflight.com	xinhuaet.com	-
2023-116	2460165.45	2023 Jun 8 2253	Chang Zheng 2C	-	Y44	0.150	SAST	0S	G	Sat SS0 L	maspaceflight.com	xinhuaet.com	-
2023-120	2460169.23	2023 Jun 12 1726	Chang Zheng 3B	G2	Y92	3.060	CALT	0S	G	Sat SS0 0	maspaceflight.com	xinhuaet.com	-
2023-123	2460177.24	2023 Jun 20 1745	Chang Zheng 4C	-	Y62	3.000	SAST	0S	G	Sat SS0 0	maspaceflight.com	xinhuaet.com	-
2023-130	2460181.82	2023 Jun 31 0736	Chang Zheng 2D	-	Y82	1.200	SAST	0S	G	Sat SS0 L	maspaceflight.com	xinhuaet.com	-
2023-136	2460194.26	2023 Sep 6 1814	Chang Zheng 4C	-	Y63	1.040	SAST	0S	G	Sat SS0 L	maspaceflight.com	xinhuaet.com	-
2023-139	2460197.69	2023 Sep 10 0430	Chang Zheng 6A	-	Y5	1.500	SAST	0S	G	Sat LEO 0	maspaceflight.com	xinhuaet.com	-
2023-145	2460204.88	2023 Sep 17 0413	Chang Zheng 2D	-	Y83	1.200	SAST	0S	G	Sat LEO 0	maspaceflight.com	xinhuaet.com	-
2023-149	2460214.34	2023 Sep 26 2015	Chang Zheng 4C	-	Y64	1.040	SAST	0S	G	Sat LEO 0	maspaceflight.com	xinhuaet.com	-
2023-152	2460222.52	2023 Oct 5 0024	Chang Zheng 2D	-	Y84	1.200	SAST	0S	G	Sat LEO 0	maspaceflight.com	xinhuaet.com	-
2023-159	2460232.54	2023 Oct 15 0054	Chang Zheng 2D	-	Y77	0.800	SAST	0S	G	Sat LEO 0	maspaceflight.com	xinhuaet.com	-
2023-163	2460241.34	2023 Oct 23 2003	Chang Zheng 2D	-	Y85	1.200	SAST	0S	G	Sat LEO 0	maspaceflight.com	xinhuaet.com	-
2023-164	2460243.63	2023 Oct 26 0314:02	Chang Zheng 2F	G	Y17	9.942	CALT	0S	G	Sat LSS 0	maspaceflight.com	xinhuaet.com	-
2023-168	2460249.45	2023 Oct 31 2250	Chang Zheng 6A	-	Y4	2.050	SAST	0S	G	Sat LEO 0	maspaceflight.com	xinhuaet.com	-
2023-172	2460252.12	2023 Nov 3 1454	Chang Zheng 7A	-	Y4	5.000	CALT	0S	G	Sat GTD 0	maspaceflight.com	xinhuaet.com	-
2023-176	2460257.97	2023 Nov 9 1123	Chang Zheng 3B	G2	Y94	5.250	CALT	0S	G	Sat SS0 0	maspaceflight.com	xinhuaet.com	-
2023-181	2460264.66	2023 Nov 16 0355	Chang Zheng 2C/YZ-1S	-	Y66/Y9	1.500	SAST	0S	G	Sat SS0 0	maspaceflight.com	xinhuaet.com	-
2023-187	2460282.67	2023 Dec 4 0410	Chang Zheng 2C	-	Y64	0.900	SAST	0S	G	Sat LEO 0	maspaceflight.com	xinhuaet.com	-
2023-194	2460288.58	2023 Dec 10 0158	Chang Zheng 2D	-	Y86	1.200	SAST	0S	G	Sat SS0 0	maspaceflight.com	xinhuaet.com	-

Launch Agency

Notes

Clte

LTClte

Category

Group

Launch\_Code

Agency

OrbPay

Flight\_ID

Variant

LV\_Type

Launch\_Date

Launch\_ID

Launch\_Tag

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	OrbPay	Agency	Launch_Code	Group	Category	LTClte	Clte	Notes
2023-195	2460293.09	2023 Dec 14 14127	Chang Zheng 2F	T	T5	8.004	CALT	0S	G	Sat S50 D	TLE	xinhuaenet.com	-
2023-207	2460304.64	2023 Dec 26 0326	Chang Zheng 3B/7Z-1	G3Z	Y75/Y16	2.028	CALT	0S	G	Sat MEO 00	maspaceflight.com	xinhuaenet.com	-
2023-212	2460308.61	2023 Dec 30 0013	Chang Zheng 2C/7Z-1S	-	Y65/Y10?	0.900	CALT	0S	G	Sat LEO 0	maspaceflight.com	xinhuaenet.com	-
2024-007	2460318.79	2024 Jan 9 0703	Chang Zheng 2C	-	Y30	1.460	CALT	0S	G	Sat LEO L	maspaceflight.com	xinhuaenet.com	-
2024-013	2460327.10	2024 Jan 17 1427:30	Chang Zheng 7	-	Y8	18.860	CALT	0S	G	Sat LSS 0	maspaceflight.com	xinhuaenet.com	-
2024-023	2460343.48	2024 Feb 2 2337	Chang Zheng 2C	-	Y85	4.400	CALT	0S	G	Sat LEO 0	maspaceflight.com	news.cn	-
2024-040	2460370.04	2024 Feb 29 1303	Chang Zheng 3B	G2	Y95	4.000	CALT	0S	G	Sat GRD 0	maspaceflight.com	xinhuaenet.com	-
2024-048	2460383.04	2024 Mar 13 1261	Chang Zheng 2C/7Z-1S	-	-	0.801	CALT	0S75	G	Sat EEO 00	maspaceflight.com	xinhuaenet.com	Y2-IS underburn
2024-051	2460389.52	2024 Mar 20 0031:28	Chang Zheng 8	-	Y3	1.276	CALT	0S	G	Sat EEO 0	maspaceflight.com	xinhuaenet.com	-
2024-052	2460390.73	2024 Mar 21 0527	Chang Zheng 2D/7Z-3	-	Y87/Y3	0.600	SAST	0S	G	Sat LEO 0	maspaceflight.com	xinhuaenet.com	-
2024-058	2460396.45	2024 Mar 26 2261	Chang Zheng 6A	-	Y3	1.500	SAST	0S	G	Sat S50 L	maspaceflight.com	xinhuaenet.com	-
2024-063	2460403.46	2024 Apr 15 0412	Chang Zheng 2D	-	Y102	1.500	SAST	0S	G	Sat LEO 0	maspaceflight.com	xinhuaenet.com	-
2024-072	2460415.67	2024 Apr 20 2346	Chang Zheng 2D	-	Y97	0.600	SAST	0S	G	Sat S50 D	maspaceflight.com	xinhuaenet.com	-
2024-075	2460421.49	2024 Apr 20 2346	Chang Zheng 2D	-	Y103	1.500	SAST	0S	G	Sat LEO 0	maspaceflight.com	xinhuaenet.com	-
2024-078	2460426.04	2024 Apr 25 1259:00	Chang Zheng 2F	G	Y18	9.945	CALT	0S	G	Sat LSS 0	maspaceflight.com	xinhuaenet.com	-
2024-085	2460437.64	2024 May 7 0321	Chang Zheng 6C	-	Y1	0.150	SAST	0S	G	Sat LEO L	xinhuaenet.com	-	-
2024-087	2460439.57	2024 May 9 0143	Chang Zheng 3B	G2	Y96?	4.000	CALT	0S	G	Sat MEO 0	maspaceflight.com	xinhuaenet.com	-
2024-089	2460442.49	2024 May 11 2343	Chang Zheng 4C	-	Y50	1.000	CALT	0S	G	Sat S50 L	maspaceflight.com	xinhuaenet.com	-
2024-094	2460450.63	2024 May 20 0306	Chang Zheng 2D	-	Y98	1.000	SAST	0S	G	Sat LEO 0	maspaceflight.com	xinhuaenet.com	-
2024-104	2460461.01	2024 May 30 1212	Chang Zheng 3B	G2	Y96	5.400	CALT	0S	G	Sat LEO 0	maspaceflight.com	xinhuaenet.com	-
2024-116	2460463.79	2024 Jun 22 0700	Chang Zheng 2C	-	Y80	0.940	CALT	0S	G	Sat LEO L	maspaceflight.com	xinhuaenet.com	-
2024-122	2460491.00	2024 Jun 29 1167	Chang Zheng 7A	-	Y6	5.000	CALT	0S	G	Sat LEO 0	maspaceflight.com	xinhuaenet.com	-
2024-126	2460496.45	2024 Jul 4 2249	Chang Zheng 6A	-	Y7	1.500	SAST	0S	G	Sat S50 L	maspaceflight.com	xinhuaenet.com	-
2024-130	2460510.63	2024 Jul 19 0303	Chang Zheng 4B	-	Y68	3.000	SAST	0S	G	Sat S50 L	maspaceflight.com	xinhuaenet.com	-
2024-135	2460524.05	2024 Aug 1 1314	Chang Zheng 3B	G2	Y97	4.000	SAST	0S	G	Sat S50 L	maspaceflight.com	xinhuaenet.com	-
2024-140	2460528.78	2024 Aug 6 0642	Chang Zheng 6A	-	Y21	5.400	SAST	0S	G	Sat S50 L	maspaceflight.com	xinhuaenet.com	-
2024-145	2460538.52	2024 Aug 16 0736	Chang Zheng 4B	-	Y72	2.000	SAST	0S	G	Sat LEO L	maspaceflight.com	xinhuaenet.com	-
2024-151	2460545.02	2024 Aug 22 1225	Chang Zheng 7A	-	Y9	2.000	SAST	0S	G	Sat GRD 0	maspaceflight.com	xinhuaenet.com	-
2024-156	2460556.56	2024 Sep 3 0122	Chang Zheng 4B	-	Y73	2.000	SAST	0S	G	Sat LEO 0	maspaceflight.com	xinhuaenet.com	-
2024-159	2460559.27	2024 Sep 5 1630	Chang Zheng 6	-	Y11	1.300	SAST	0S	G	Sat S50 L	maspaceflight.com	xinhuaenet.com	-
2024-169	2460573.67	2024 Sep 19 0114	Chang Zheng 6	G3Z	-	2.028	CALT	0S	G	Sat MEO 00	maspaceflight.com	xinhuaenet.com	-
2024-177	2460580.94	2024 Sep 20 0411	Chang Zheng 2D	-	Y44	1.400	SAST	0S	G	Sat S50 D	maspaceflight.com	xinhuaenet.com	-
2024-181	2460594.08	2024 Sep 27 1030	Chang Zheng 3B	-	Y44	1.500	SAST	0S	G	Sat S50 D	maspaceflight.com	xinhuaenet.com	-
2024-185	2460598.96	2024 Oct 10 1350	Chang Zheng 3B	-	Y20	5.400	SAST	0S	G	Sat GRD 0	maspaceflight.com	xinhuaenet.com	-
2024-186	2460599.49	2024 Oct 15 1106	Chang Zheng 6A	-	Y20	5.400	SAST	0S	G	Sat S50 L	maspaceflight.com	xinhuaenet.com	-
2024-189	2460605.51	2024 Oct 15 2346	Chang Zheng 4C	-	Y69	3.000	SAST	0S	G	Sat S50 L	maspaceflight.com	xinhuaenet.com	-
2024-190	2460606.55	2024 Oct 22 0010	Chang Zheng 9C	-	Y13	1.000	SAST	0S	G	Sat S50 L	maspaceflight.com	xinhuaenet.com	-
2024-194	2460613.35	2024 Oct 23 0109	Chang Zheng 2C	-	Y82	2.000	CALT	0S	G	Sat LSS 0	maspaceflight.com	xinhuaenet.com	-
2024-203	2460623.65	2024 Oct 29 0227:34	Chang Zheng 2F	G	Y19	9.945	CALT	0S	G	Sat LSS 0	maspaceflight.com	xinhuaenet.com	-
2024-206	2460628.45	2024 Nov 9 0339	Chang Zheng 2C	-	Y63	1.130	SAST	0S	G	Sat S50 L	maspaceflight.com	xinhuaenet.com	-
2024-211	2460630.13	2024 Nov 15 1513:18	Chang Zheng 7B	-	Y9	1.000	SAST	0S	G	Sat S50 L	maspaceflight.com	xinhuaenet.com	-
2024-216	2460639.49	2024 Nov 24 2339	Chang Zheng 2C	-	-	1.000	CALT	0S	G	Sat S50 L	maspaceflight.com	xinhuaenet.com	-



Launch

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Mission	FlightCode	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee km	Range km	Dest
1967-H154	2439824.50	1967 Dec	DIM	-	-	Dardo de Invest. Met.	-	-	-	CCLPA	-	-	-	70?	-	-
1967-H155	2439824.50	1967 Dec	DIM	-	-	Dardo de Invest. Met.	-	-	-	CCLPA	-	-	-	70?	-	-
1967-H156	2439824.50	1967 Dec	DIM	-	-	Dardo de Invest. Met.	-	-	-	CCLPA	-	-	-	70?	-	-
1968-H60	2440160.50	1968 Nov	DIM	-	-	Dardo de Invest. Met.	-	-	-	CELAT	-	-	-	70?	-	-
1968-H61	2440160.50	1968 Nov	DIM	-	-	Dardo de Invest. Met.	-	-	-	CELAT	-	-	-	70?	-	-
1968-H62	2440160.50	1968 Nov	DIM	-	-	Dardo de Invest. Met.	-	-	-	CELAT	-	-	-	70?	-	-
1969-H89	2440280.50	1969 Mar	DIM	-	-	Dardo de Invest. Met.	-	-	-	CELAT	-	-	-	70?	-	-
1969-H90	2440280.50	1969 Mar	DIM	-	-	Dardo de Invest. Met.	-	-	-	CELAT	-	-	-	70?	-	-
1969-H91	2440280.50	1969 Mar	DIM	-	-	Dardo de Invest. Met.	-	-	-	CELAT	-	-	-	70?	-	-
1974-H41	2442198.50	1974 Jun	DIM	-	-	Dardo de Invest. Met.	-	-	-	CELAT	-	-	-	70?	-	-
1974-H42	2442198.50	1974 Jun	DIM	-	-	Dardo de Invest. Met.	-	-	-	CELAT	-	-	-	70?	-	-



**Launch**

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Orbit	Agency	Launch_Code	Group	Category	LTCite	Cite	Notes
1967-M154	2439524.50	1967 Dec	DIH	-	-	0.000	IIAE	SS	IIAE/	Metro	DeLeon	-	-
1967-M155	2439524.50	1967 Dec	DIH	-	-	0.000	IIAE	SS	IIAE/	Metro	DeLeon	-	-
1967-M156	2439524.50	1967 Dec	DIH	-	-	0.000	IIAE	SS	IIAE/	Metro	DeLeon	-	-
1968-M60	2440160.50	1968 Nov	DIH	-	-	0.000	IIAE	SS	IIAE/	Metro	DeLeon	-	-
1968-M61	2440160.50	1968 Nov	DIH	-	-	0.000	IIAE	SS	IIAE/	Metro	DeLeon	-	-
1968-M62	2440160.50	1968 Nov	DIH	-	-	0.000	IIAE	SS	IIAE/	Metro	DeLeon	-	-
1968-M69	2440280.50	1969 Mar	DIH	-	-	0.000	IIAE	SS	IIAE/	Metro	DeLeon	-	-
1968-M90	2440280.50	1969 Mar	DIH	-	-	0.000	IIAE	SS	IIAE/	Metro	DeLeon	-	-
1968-M91	2440280.50	1969 Mar	DIH	-	-	0.000	IIAE	SS	IIAE/	Metro	DeLeon	-	-
1974-M41	2442198.50	1974 Jun	DIH	-	-	0.000	IIAE	SS	IIAE/	Metro	DeLeon	-	-
1974-M42	2442198.50	1974 Jun	DIH	-	-	0.000	IIAE	SS	IIAE/	Metro	DeLeon	-	-





Launch

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Mission	Flightcode	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee Km	Range Km	Dest
1959-S07	2436596.21	1959 Jan 27 1700	Daniel	-	01	-	-	-	-	CERES	-	-	-	127	-	-
1961-S521	2437577.50	1961 Oct 5	Daniel	-	03	-	-	-	-	CERES	-	-	-	130	-	-
1961-S526	2437581.50	1961 Oct 9	Daniel	-	02	-	-	-	-	CERES	-	-	-	130?	-	-



Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Orbit	Agency	Launch_Code	Group	Category	LTCite	Cite	Notes
1959-S07	2436596.21	1959 Jan 27 1700	Daniel	-	01	0.000	OMERA	SS	OMERA/	Test/Aeron	SRI,215	SRI,215	-
1961-S321	2437577.50	1961 Oct 5	Daniel	-	03	0.000	OMERA	SS	OMERA/	Test/Aeron	IAA-00-IAA.2.03	Serra	-
1961-S328	2437551.50	1961 Oct 9	Daniel	-	02	0.000	OMERA	SS	OMERA/	Test/Aeron	Serra	-	-





Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Mission	FlightCode	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee_km	Range_km	Dest
1952-4275	2434364-50	1952 Dec 18	Deacon			D28 Model				W1				107		
1952-4276	2434364-50	1952 Dec 18	Deacon			D18 F100 Model				W1				107		
1953-401	2434377-50	1953	Deacon			F-100 Model				W1				107		
1953-402	2434377-50	1953 Jan	Deacon			D35 Model				W1				107		
1953-416	2434391-50	1953 Jan 14	Quad Deacon			Test				W1				107		
1953-424	2434399-50	1953 Jan 22	Deacon			B-58 Model				W1				107		
1953-494	2434441-50	1953 Mar 5	Double Deacon			Falcon Missile				W1				107		
1953-4134	2434456-50	1953 Mar 20	Double Deacon			B-58 Model				W1				07		
1953-4166	2434477-50	1953 Apr 10	Double Deacon			F36 Ramjet Model				W1				107		
1953-4210	2434505-50	1953 May 8	Triple Deacon							W1				107		
1953-4239	2434538-50	1953 Jun 10	Deacon			XF3H-1 Model				W1				107		
1953-4247	2434546-50	1953 Jun 18	Deacon			F29 Ramjet				W1				8		
1953-4259	2434553-50	1953 Jun 25	Triple Deacon			F23 Ramjet				W1				41		
1953-4293	2434573-50	1953 Jul 15	Deacon			E25 Model				W1				107		
1953-4297	2434577-44	1953 Jul 18 2227	Deacon			SUI 8				W1				11		
1953-4298	2434577-94	1953 Jul 19 1030	Deacon			SUI 9				W1				11		
1953-4299	2434578-16	1953 Jul 19 1563	Deacon			SUI 10				W1				11		
1953-4300	2434578-41	1953 Jul 19 2157	Deacon			SUI 11				W1				11		
1953-4306	2434583-19	1953 Jul 24 1640	Deacon			SUI 12				W1				11		
1953-527	2434586-90	1953 Jul 28 0941	Deacon			SUI 13				W1				90		
1953-4309	2434593-27	1953 Aug 3 1828	Deacon			SUI 14				W1				117		
1953-4311	2434593-50	1953 Aug 4	Deacon			Rascal Model				W1				107		
1953-4315	2434593-41	1953 Aug 5 2154	Deacon			NRL Rocketoon 1				W1				80		
1953-4317	2434596-13	1953 Aug 6 1507	Deacon			SUI 15				W1				68		
1953-4328	2434596-28	1953 Aug 6 1840	Deacon			SUI 16				W1				96		
1953-4306	2434598-13	1953 Aug 6 1509	Deacon			NRL Rocketoon 2				W1				80		
1953-529	2434598-75	1953 Aug 9 0594	Deacon			SUI 17				W1				100		
1953-4316	2434599-30	1953 Aug 9 1915	Deacon			NRL Rocketoon 3				W1				38		
1953-407	2434601-21	1953 Aug 11 1709	Deacon			NRL Rocketoon 4				W1				80		
1953-4330	2434608-50	1953 Aug 19	Deacon			D18 F100 Model				W1				107		
1953-4331	2434608-50	1953 Aug 19	Deacon			F29 Ramjet				W1				207		
1953-4332	2434609-50	1953 Aug 20 1400	Triple Deacon			E10 Hypersonic Test				W1				11		
1953-4338	2434620-08	1953 Aug 30 1620	Deacon			Eastwind 84-1				W1				11		
1953-4339	2434620-37	1953 Aug 30 2046	Deacon			Eastwind 84-2				W1				100		
1953-550	2434623-91	1953 Sep 3 0950	Deacon			Eastwind 84-3				W1				90		
1953-552	2434623-98	1953 Sep 3 1151	Deacon			Eastwind 84-4				W1				100		
1953-554	2434624-09	1953 Sep 3 1405	Deacon			Eastwind 84-5				W1				100		
1953-408	2434624-16	1953 Sep 4 0859	Deacon			Eastwind 84-6				W1				70		
1953-409	2434625-16	1953 Sep 4 1551	Deacon			NRL Rocketoon 5				W1				70		
1953-4390	2434667-50	1953 Oct 1	Deacon			NRL Rocketoon 6				W1				107		
1953-4414	2434668-30	1953 Oct 15	Deacon			SUI 18				W1				107		
1953-4418	2434676-30	1953 Oct 26	Deacon			SUI 19				W1				107		
1953-4452	2434701-30	1953 Nov 20	Double Deacon			E10 Hypersonic Test				W1				207		
1953-4465	2434713-30	1953 Dec 2	Deacon			E13 Model				W1				107		
1953-4469	2434719-50	1953 Dec 16	Double Deacon			E13 Model				W1				107		
1953-483	2434726-50	1953 Dec 17	Deacon			F11F Model				W1				107		
1953-488	2434726-50	1953 Dec 17	Deacon			F-104 Model				W1				107		
1954-406	2434749-50	1954 Jan 7	Deacon			FX-1 Model				W1				107		
1954-407	2434750-50	1954 Jan 27	Deacon			FX-1 Model				W1				107		
1954-426	2434752-50	1954 Feb 6	Double Deacon			FX-1 Model				W1				107		
1954-473	2434757-50	1954 Feb 24	Deacon			F29 Ramjet Model				W1				107		
1954-495	2434801-50	1954 Mar 19	Deacon			E17 Drag Model				W1				107		
1954-4116	2434820-50	1954 Mar 19	Deacon			XF2Y-1 Model				W1				107		
1954-4124	2434825-50	1954 Mar 24	Double Deacon			Regulus II Model				W1				107		
1954-4128	2434827-50	1954 Mar 26	Double Deacon			Regulus II Model				W1				107		
1954-4711	2434852-50	1954 Apr 21	Quad Deacon			POB 1				W1				307		
1954-4183	2434853-50	1954 Apr 21	Double Deacon			D35 Model				W1				107		
1954-4186	2434854-50	1954 Apr 22	Double Deacon			POB 1				W1				107		
1954-4719	2434859-50	1954 Apr 27	Double Deacon			Regulus II Model				W1				307		
1954-4214	2434861-50	1954 Apr 29	POB 1			POB 1				W1				107		
1954-4720	2434890-50	1954 May 28	Tri-Deacon			Regulus II Model				W1				107		
1954-4315	2434896-50	1954 Jun 3	POB 1			POB 1				W1				107		
1954-4318	2434897-50	1954 Jun 4	Deacon			POB 1				W1				107		
1954-4379	2434921-50	1954 Jun 28	Deacon			POB 1				W1				107		
1954-5244	2434940-01	1954 Jul 16 1213	Double Deacon			Starik Model				W1				107		
1954-4414	2434940-42	1954 Jul 16 2158	Deacon			MX-1712 Model				W1				90		
1954-4417	2434943-17	1954 Jul 19 1600	Deacon			SUI 24				W1				11		
1954-4418	2434943-35	1954 Jul 19 2035	Deacon			SUI 25				W1				88		
1954-545	2434943-62	1954 Jul 20 0255	Deacon			NRL Rocketoon 7				W1				43		
1954-401	2434944-88	1954 Jul 21 0903	Deacon			NRL Rocketoon 8				W1				90		
1954-546	2434945-03	1954 Jul 21 1245	Deacon			NRL Rocketoon 9				W1				60		
1954-4248	2434946-37	1954 Jul 21 2049	Deacon			SUI 27				W1				90		
1954-4318	2434946-30	1954 Jul 22 1915:00	Deacon			SUI 28				W1				40		
1954-4379	2434947-12	1954 Jul 23 1446	Deacon			SUI 29				W1				86		
1954-548	2434947-12	1954 Jul 23 1709	Deacon			NRL Rocketoon 10				W1				90		
1954-549	2434947-25	1954 Jul 23 1754	Deacon			NRL Rocketoon 9				W1				90		
1954-550	2434947-32	1954 Jul 23 1937	Deacon			SUI 31				W1				23		
1954-4435	2434947-87	1954 Jul 24 0857	Deacon			SUI 32				W1				90		
1954-551	2434948-05	1954 Jul 24 1316	Deacon			SUI 33				W1				90		
1954-552	2434948-05	1954 Jul 25 0651	Deacon			SUI 34				W1				90		
1954-553	2434948-02	1954 Jul 25 1236	Deacon			SUI 35				W1				90		
1954-554	2434949-15	1954 Jul 25 1530	Deacon			SUI 36				W1				90		
1954-555	2434949-15	1954 Jul 25 1530	Deacon			SUI 37				W1				90		
1954-556	2434949-28	1954 Jul 25 1845	Deacon			NRL Rocketoon 10				W1				85		

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Mission	FlightCode	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee_km	Range_km	Dest
1954-A442	2434949.52	1954 Jul 26 0029	Deacon, Rocketoon			NRL Rocketoon 11			AGB-3	USN54A	LP18			10		
1954-S88	2434949.96	1954 Jul 26 1102	Deacon, Rocketoon			NRL Rocketoon 12			AGB-3	USN54A	LP19			90		
1954-A444	2434950.50	1954 Jul 27	Deacon			POGD				WT				107		
1954-A721	2434960.50	1954 Aug 11	Pogo HI			FLIP-1 Model				WS				307		
1954-A469	2434965.50	1954 Aug 11	Deacon			POGD				WS				107		
1954-A722	2434967.50	1954 Aug 13	Pogo HI			DL Model				WS				307		
1954-A499	2434987.50	1954 Sep 2	Double Deacon			POGD				WS				307		
1954-A723	2434992.50	1954 Sep 7	Pogo HI			POGD				WS				307		
1954-A724	2435007.50	1954 Sep 22	Pogo HI			POGD				WS				307		
1954-A899	2435037.50	1954 Oct 22	Double Deacon			Double Deacon				WT				107		
1954-A707	2435092.50	1954 Dec 16	Double Deacon			Double Deacon				WT				107		
1955-A01	2435107.50	1955	Deacon			Deacon				WT				107		
1955-A02	2435107.50	1955	Deacon			Deacon				WT				107		
1955-A12	2435118.50	1955 Jan 11	Double Deacon			Delta-wing model				WT				107		
1955-A65	2435135.50	1955 Jan 28	Double Deacon			F29 Ramjet				WT				107		
1955-A207	2435189.50	1955 Mar 23	Deacon			E9 Model				WT				6		
1955-A228	2435194.50	1955 Mar 28	Deacon			Turbojet study				WT				107		
1955-A304	2435218.50	1955 Apr 21	Deacon			E9 Model				WT				107		
1955-A449	2435278.50	1955 Jun 20	Deacon			D35 Model				WT				107		
1955-A452	2435286.50	1955 Jun 28	Double Deacon			D35 Model				WT				107		
1955-A452	2435286.50	1955 Jun 28	Double Deacon			D35 Model				WT				107		
1955-S74	2435375.19	1955 Sep 24 1635	Deacon, Rocketoon			SUI 39			LSD-1	USN55A	LP2			100		
1955-A476	2435378.30	1955 Sep 27 1912	Deacon, Rocketoon			NRL Rocketoon 14			LSD-1	USN55A	LP20			11		
1955-S76	2435378.30	1955 Sep 27 1943	Deacon, Rocketoon			NRL Rocketoon 13			LSD-1	USN55A	LP19			90		
1955-S77	2435378.37	1955 Sep 27 2054	Deacon, Rocketoon			SUI 42			LSD-1	USN55A	LP5			100		
1955-S79	2435379.03	1955 Sep 28 1246	Deacon, Rocketoon			NRL Rocketoon 15			LSD-1	USN55A	LP21			90		
1955-S80	2435379.12	1955 Sep 28 1454	Deacon, Rocketoon			SUI 44			LSD-1	USN55A	LP7			100		
1955-A477	2435379.24	1955 Sep 28 1740	Deacon, Rocketoon			NRL Rocketoon 16			LSD-1	USN55A	LP22			11		
1955-S81	2435379.31	1955 Sep 28 1922	Deacon-Loki, Rocketoon			SUI 45			LSD-1	USN55A	LP8			102		
1955-S82	2435380.07	1955 Sep 29 1342	Deacon, Rocketoon			SUI 46			LSD-1	USN55A	LP9			100		
1955-S83	2435380.30	1955 Sep 29 1913	Deacon, Rocketoon			SUI 47			LSD-1	USN55A	LP10			100		
1955-S84	2435380.41	1955 Sep 29 2152	Deacon-Loki, Rocketoon			SUI 48			LSD-1	USN55A	LP11			107		
1955-A479	2435380.50	1955 Oct	Deacon			D35 Model			LSD-1	USN55A	LP23			11		
1955-A686	2435386.96	1955 Oct 6 1054	Deacon, Rocketoon			NRL Rocketoon 17			LSD-1	USN55A	LP14			100		
1955-S90	2435387.30	1955 Oct 6 1910	Deacon, Rocketoon			SUI 51			LSD-1	USN55A	LP14			100		
1955-A482	2435391.50	1955 Oct 11	Deacon			Shoke				WT				8		
1955-A483	2435391.50	1955 Oct 11 1433	Deacon			Shoke				WT				6		
1955-A684	2435392.11	1955 Oct 11 1437	Deacon, Rocketoon			SUI 52			LSD-1	USN55A	LP15			20		
1955-S92	2435392.11	1955 Oct 13 0037	Deacon, Rocketoon			NRL Rocketoon 18			LSD-1	USN55A	LP24			90		
1955-A07	2435393.78	1955 Oct 13 0037	Deacon, Rocketoon			NRL Rocketoon 19			LSD-1	USN55A	LP25			60		
1955-S94	2435394.03	1955 Oct 13 1444	Deacon, Rocketoon			SUI 53			LSD-1	USN55A	LP26			50		
1955-A08	2435394.07	1955 Oct 13 1542	Deacon, Rocketoon			NRL Rocketoon 20			LSD-1	USN55A	LP16			50		
1955-A685	2435394.14	1955 Oct 13 1544	Deacon, Rocketoon			SUI 54			LSD-1	USN55A	LP17			20		
1955-S95	2435394.24	1955 Oct 13 2013	Deacon, Rocketoon			SUI 55			LSD-1	USN55A	LP17			100		
1955-A489	2435427.50	1955 Nov 16	Double Deacon			Pogolus II Model				WT				107		
1955-A692	2435446.50	1955 Dec 6	Pogo HI			EDP-1 Model				WT				207		
1955-A696	2435464.50	1955 Dec 13	Double Deacon			E15 Model				WT				107		
1955-A07	2435468.50	1956 Jan 26	Tandem Double Deacon			Delta-wing model				WT				107		
1955-A209	2435493.50	1956 Feb 10	Deacon			Delta-wing model				WT				107		
1955-A210	2435513.50	1956 Feb 10	Pogo HI			Delta-wing model				WT				207		
1955-A211	2435524.50	1956 Feb 17	Pogo HI			Delta-wing model				WT				207		
1955-A211	2435524.50	1956 Feb 17	Pogo HI			Delta-wing model				WT				207		
1955-A211	2435524.50	1956 Feb 17	Pogo HI			Delta-wing model				WT				207		
1955-A212	2435524.50	1956 Feb 17	Pogo HI			Delta-wing model				WT				207		
1955-A212	2435524.50	1956 Feb 17	Pogo HI			Delta-wing model				WT				207		
1955-A213	2435524.50	1956 Feb 17	Pogo HI			Delta-wing model				WT				207		
1955-A63	2435646.50	1956 Jun 22	Double Deacon			Delta-wing model				WT				107		
1955-A65	2435651.50	1956 Jun 29	Double Deacon			Delta-wing model				WT				107		
1955-A214	2435653.50	1956 Jun 29	Double Deacon			Delta-wing model				WT				207		
1955-A215	2435660.50	1956 Jun 29	Double Deacon			Delta-wing model				WT				207		
1955-A216	2435660.50	1956 Jun 29	Double Deacon			Delta-wing model				WT				207		
1955-A216	2435660.50	1956 Jun 29	Double Deacon			Delta-wing model				WT				207		
1955-S93	2435672.32	1956 Jul 6	Pogo HI			Pogo HI II				WT				207		
1955-S93	2435672.32	1956 Jul 6	Pogo HI			Pogo HI II				WT				207		
1955-S94	2435672.33	1956 Jul 17 1940	Deacon, Rocketoon			Pogo HI II				WT				207		
1955-S96	2435674.31	1956 Jul 19 2000	Deacon, Rocketoon			Pogo HI II				WT				207		
1955-S99	2435674.31	1956 Jul 19 1932	Deacon, Rocketoon			Pogo HI II				WT				207		
1955-S99	2435675.30	1956 Jul 20 1915	Deacon, Rocketoon			Pogo HI II				WT				207		
1955-A274	2435676.42	1956 Jul 21 2200	Deacon, Rocketoon			Pogo HI II				WT				207		
1955-S90	2435677.30	1956 Jul 22 1910	Deacon, Rocketoon			Pogo HI II				WT				207		
1955-A175	2435679.30	1956 Jul 24 1910	Deacon, Rocketoon			Pogo HI II				WT				207		
1955-S93	2435680.38	1956 Jul 25 2110	Deacon, Rocketoon			Pogo HI II				WT				207		
1955-S95	2435681.38	1956 Jul 26 2100	Deacon, Rocketoon			Pogo HI II				WT				207		
1955-S96	2435682.21	1956 Jul 26 2100	Deacon, Rocketoon			Pogo HI II				WT				207		
1955-S96	2435682.21	1956 Jul 27 1705	Deacon, Rocketoon			Pogo HI II				WT				207		
1955-A89	2435737.50	1956 Sep 21	Terrapin			Pogo HI II				WT				16		
1955-S81	2435737.50	1956 Sep 21	Terrapin			Pogo HI II				WT				16		
1955-A217	2435764.50	1956 Oct 18	Pogo HI			Pogo HI Leki Haap				WT				207		
1955-A113	2435804.50	1956 Nov 27	Deacon			AGARD Model 2				WT				207		
1955-A121	2435820.50	1956 Dec 13	Rockaire			Rockair 2710				HADC	RN07/25?	NS	LP1	44		
1955-A123	2435821.50	1956 Dec 14	Rockaire			Rockair 2710				HADC	RN07/25?	NS	LP1	43		
1955-A124	2435824.50	1956 Dec 17	Rockaire			Rockair 2710				HADC	RN07/25?	NS	LP1	42		
1955-A125	2435826.50	1956 Dec 19	Rockaire			Rockair 2710				HADC	RN07/25?	NS	LP1	45		
1955-A218	2435827.50	1956 Dec 20	Pogo HI			Pogo HI II				NS				207		
1957-S01	2435838.50	1957	Terrapin							WT				100?		
1957-S02	2435838.50	1957	Terrapin							WT				100?		
1957-S03	2435838.50	1957	Terrapin							WT				100?		
1957-S04	2435838.50	1957	Terrapin							WT				100?		
1957-A10	2435882.50	1957 Feb 13	Deacon			Delta-wing model				WT				107		
1957-A42	2435981.50	1957 May 23	Double Deacon			Delta-wing model				WT				107		
1957-A162	2436162.50	1957 Nov 20	Double Cajun T40			W-2 Model				WT				107		
1958-A31	2436307.50	1958 Apr 14	Double Deacon			D3/D18 Model				WT				107		



Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Launch_Mission	FlightCode	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee_km	Range_km	Dest
1965-A206	2436412.50	1965 Jul 28	CaJun			Sea impact test				WI				107		
1965-M52	2436416.50	1965 Aug 1	Deacon Arrow II			Chaff				JJ				767		
1965-M53	2436427.89	1965 Aug 12 0927	Deacon Arrow II			RF Attenuation 1	[ or Mike Cajun?]			JJ				767		
1965-M54	2436427.89	1965 Aug 12 0927	Deacon Arrow II			RF Attenuation 2				JJ				767		
1965-M55	2436427.89	1965 Aug 12 0927	Deacon Arrow II			RF Attenuation 3				JJ				767		
1965-M56	2436427.89	1965 Aug 12 0927	Deacon Arrow II			RF Attenuation 4				JJ				767		
1965-M57	2436427.89	1965 Aug 12 0927	Deacon Arrow II			RF Attenuation 5				JJ				767		
1965-M58	2436427.89	1965 Aug 12 0927	Deacon Arrow II			RF Attenuation 6				JJ				767		
1965-M59	2436427.89	1965 Aug 25	Deacon			Pogo Target				USM58B?				307		
1965-A101	2436440.50	1965 Aug 25	Deacon			Pogo Target				AWH1				307		
1965-A102	2436440.50	1965 Aug 25	Deacon			Pogo Target				USM58B?				307		
1965-A104	2436441.50	1965 Aug 26	Deacon			Pogo Target				USM58B?				307		
1965-A110	2436454.50	1965 Sep 8	Double Deacon			EIS Model				AWH1				107		
1965-A210	2436203.50	1965?	Pogo HI			Pogo HI Type IC5a				WS				18		
1965-A211	2436203.50	1965?	Pogo HI			Pogo HI Type IC7a				WS				21		
1965-A213	2436203.50	1965?	Pogo HI			Pogo HI Type IC7a				WS				187		
1965-A207	2436203.50	1965?	Pogo HI			Pogo HI Type IC5c				WS				187		
1965-A208	2436203.50	1965?	Pogo HI			Pogo HI Type IC5c				CCDD				107		
1965-A209	2436203.50	1965?	Pogo HI			Pogo HI Type IC5c				CCDD				107		
1965-A214	2436203.50	1965?	Pogo HI II			Pogo HI Type IC5c				NS				367		
1965-M21	2436527.36	1965 Nov 19 2032	Deacon Arrow II			RM-104				NS				367		
1965-M22	2436527.60	1965 Nov 20 0228	Deacon Arrow II			RM-106				TTR				78		
1965-M23	2436527.65	1965 Nov 20 0818	Deacon Arrow II			RM-106				TTR				76		
1965-S264	2436528.09	1965 Nov 20 1410	Deacon Arrow II			RM-107				TTR				83		
1965-M28	2436553.40	1965 Dec 15 2137	Deacon Arrow II			RM-108				TTR				84		
1965-S289	2436553.64	1965 Dec 16 0328	Deacon Arrow II			RM-109				TTR				80		
1965-S290	2436553.67	1965 Dec 16 0849	Deacon Arrow II			RM-110				TTR				83		
1965-S291	2436554.12	1965 Dec 16 1447	Deacon Arrow II			RM-111				TTR				84		
1965-A248	2436568.50	1965?	Pogo HI II			Pogo HI Type IID3a				NS				84		
1965-A249	2436568.50	1965?	Pogo HI II			Pogo HI Type IIF3a				NS				24		
1965-A250	2436568.50	1965?	Pogo HI II			Pogo HI Type IIF3a				NS				24		
1965-A251	2436568.50	1965?	Pogo HI II			Pogo HI Type IIE5c				NS				24		
1965-S08	2436596.36	1965 Jan 27 2035	Deacon Arrow II			RM-112				TTR				83		
1965-S11	2436596.61	1965 Jan 28 0728	Deacon Arrow II			RM-114				TTR				82		
1965-S12	2436600.28	1965 Mar 12 1849	Deacon Arrow II			RM-118				TTR				85		
1965-S28	2436640.53	1965 Mar 13 0938	Deacon Arrow II			RM-119				TTR				84		
1965-A06	2436640.61	1965 Mar 13 0930	Deacon Arrow II			RM-120				TTR				69		
1965-S29	2436641.02	1965 Mar 13 1230	Deacon Arrow II			RM-121				TTR				83		
1965-M11	2436674.96	1965 Apr 16 1609	Deacon Arrow II			RM-122				TTR				66		
1965-M12	2436678.21	1965 Apr 16 1710	Deacon Arrow II			RM-124				TTR				79		
1965-S50	2436678.71	1965 Apr 19 0510	Deacon Arrow II			RM-125				TTR				83		
1965-S51	2436678.71	1965 Apr 19 0510	Deacon Arrow II			RM-125				TTR				82		
1965-S52	2436693.67	1965 Apr 17 0850	Deacon Arrow II			RM-126				TTR				81		
1965-S53	2436693.67	1965 May 6 0925	Deacon Arrow II			RM-127				TTR				82		
1965-S54	2436727.21	1965 May 9 1710	Deacon Arrow II			RM-128				TTR				81		
1965-S55	2436727.21	1965 Jun 16 1710	Deacon Arrow II			RM-129				TTR				81		
1965-M19	2436737.54	1965 Jun 16 0100	Deacon Arrow II			RM-130				TTR				80		
1965-S91	2436737.81	1965 Jun 18 0732	Deacon Arrow II			RM-131				TTR				82		
1965-M20	2436738.04	1965 Jun 18 1300	Deacon Arrow II			RM-131				TTR				80		
1965-M22	2436764.38	1965 Jun 14 2100	Deacon Arrow II			RM-132				TTR				76		
1965-S111	2436764.89	1965 Jul 15 0915	Deacon Arrow II			RM-134				TTR				81		
1965-S111	2436765.13	1965 Jul 15 0915	Deacon Arrow II			RM-134				TTR				81		
1965-M23	2436765.15	1965 Jul 15 1534	Deacon Arrow II			RM-135				TTR				81		
1965-S150	2436807.08	1965 Aug 26 1359	Deacon Arrow II			RM-137				TTR				78		
1965-M26	2436807.32	1965 Aug 26 1359	Deacon Arrow II			RM-138				TTR				75		
1965-M27	2436807.58	1965 Aug 27 0200	Deacon Arrow II			RM-139				TTR				80		
1965-M28	2436807.78	1965 Aug 27 0642	Deacon Arrow II			RM-140				TTR				80		
1965-M29	2436837.79	1965 Sep 26 0700	Deacon Arrow II			RM-141				TTR				72		
1965-M30	2436838.04	1965 Sep 26 1300	Deacon Arrow II			RM-143				TTR				77		
1965-M31	2436838.36	1965 Sep 26 2045	Deacon Arrow II			RM-144				TTR				71		
1965-M37	2436876.56	1965 Nov 5 0123	Deacon Arrow II			RM-146				TTR				78		
1965-S234	2436877.55	1965 Nov 5 0110	Deacon Arrow II			RM-147				TTR				84		
1965-S235	2436878.55	1965 Nov 6 0113	Deacon Arrow II			RM-148				TTR				83		
1965-M01	2436568.50	1965?	ALSOR			Model A (E1)				F-104-749				74		
1965-S01	2436568.50	1965?	ALSOR			Model A (E2)				EAFB	RN04/227	EAFB	LP1	74		
1965-M06	2437044.50	1960 Apr 20	ALSOR			Model A (E2)				EAFB	RN04/227	EAFB	LP1	74		
1965-M08	2437054.50	1960 Apr 30	ALSOR			Model A (E4)				EAFB?	RN04/227	MTR	LP9	602		
1965-M14	2437085.50	1960 Jun 1	Apache			Model A (E5)				EAFB?	RN04/227	MTR	LP9	602		
1965-M19	2437116.50	1960 Jul 1	Deacon Arrow II			HIGHBALL test				PA	LC-B			807		
1965-M20	2437129.50	1960 Jul 8	Deacon Arrow II							PA	LC-B			807		
1965-M21	2437129.50	1960 Jul 14	Deacon Arrow II							PA	LC-B			807		
1965-M38	2437207.50	1960 Oct	Apache							US				607		
1965-M39	2437207.50	1960 Oct?	Apache			HIGHBALL IA test				US				607		
1965-M40	2437207.50	1960 Oct?	Apache			HIGHBALL IB test				US				607		
1961-M87	2437299.50	1961 Jan?	ALSOR			HIGHBALL IC test				US				607		
1961-S01	2437299.50	1961 Jan?	Kieha Judd			NOTS Viperacan				EAFB	RN04/227	EAFB	LP1	71		
1961-A03	2437299.50	1961	Pogo HI II			Target test				TTR?				100		
1961-M06	2437385.50	1961 Mar 27	Deacon Arrow II			Wind sphere				PM				25		
1961-M36	2437330.50	1961 Feb	Apache			HIGHBALL III test				PA	LC-B			887		
1961-M37	2437419.50	1961 May	CaJun			HIGHBALL II test				PA				607		
1961-A265	2437618.50	1961 Nov 15	CaJun			HIGHBALL II (Zens)				US				607		
1962-M43	2437701.50	1962 Feb 6	Apache			HIGHBALL IIM SN 45				US	LC38			207		
1962-M44	2437725.50	1962 Mar 2	Apache			HIGHBALL IIM SN 9				US				607		
1962-M45	2437743.50	1962 Mar 20	CaJun			HIGHBALL IIM SN 46				US				607		
1962-M46	2437743.50	1962 Mar 20	Apache			HIGHBALL IIM SN 10				US				607		

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Launch_Mission	FlightCode	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee_Km	Range_Km	Dest
1962-M47	243744.50	1962 Mar 21	Apache	-	HIGHBALL 63	HIGHBALL IE SM11	-	-	-	WS	-	-	-	607	-	-
1962-M48	2437745.50	1962 Mar 22	Apache	-	HIGHBALL 64	HIGHBALL IH SM12	-	-	-	WS	-	-	-	607	-	-
1962-M49	2437749.50	1962 Mar 26	Apache	-	HIGHBALL 65	HIGHBALL IH SM13	-	-	-	WS	-	-	-	607	-	-
1962-M50	2437749.50	1962 Mar 26	Apache	-	HIGHBALL 66	HIGHBALL IH SM47	-	-	-	WS	-	-	-	607	-	-
1962-M51	2437751.50	1962 Mar 28	Apache	-	HIGHBALL 67	HIGHBALL IH SM14	-	-	-	WS	-	-	-	607	-	-
1963-S17	2438053.50	1963 Jan 24	Deacon Arrow II	-	-	Tracking Flare Test	-	-	-	TTR	-	-	-	90	-	-
1963-S18	2438053.50	1963 Jan 24	Deacon Arrow II	-	-	Tracking Flare Test	-	-	-	TTR	-	-	-	90	-	-
1963-S182	2438149.76	1963 Apr 30 0613	Deacon Judi	-	-	RED-1 Support	-	-	-	BERM	-	-	-	907	-	-
1963-S183	2438149.89	1963 Apr 30 0921	Deacon Judi	-	-	Standia Chaff	-	-	-	BERM	-	-	-	907	-	-
1963-S8566	2438180.50	1963 May?	Deacon Judi	-	-	Standia Chaff	-	-	-	KAU	-	-	-	1207	-	-
1963-S857	2438180.50	1963 Jun?	Deacon Judi	-	-	Standia Chaff	-	-	-	KAU	-	-	-	1207	-	-
1964-M62	2438627.33	1964 Aug 19 1951	CaJun Dart	-	01	-	-	-	-	EGL	-	-	-	75	-	-
1964-M65	2438629.32	1964 Aug 21 1939	CaJun Dart	-	02	-	-	-	-	EGL	-	-	-	75	-	-
1964-M66	2438632.24	1964 Aug 24 1745	CaJun Dart	-	03	-	-	-	-	EGL	-	-	-	75	-	-
1964-M67	2438636.28	1964 Aug 28 1846	CaJun Dart	-	04	-	-	-	-	EGL	-	-	-	75	-	-
1964-M68	2438669.96	1964 Oct 01 1047:00	CaJun Dart	?	NO!	-	-	-	-	EGL	-	-	-	75?	-	-
1964-A153	2438664.50	1964 Oct 16	CaJun Dart	-	05	-	-	-	-	EGL	-	-	-	0?	-	-
1964-A154	2438664.50	1964 Oct 22	CaJun Dart	-	06	-	-	-	-	EGL	-	-	-	75	-	-
1964-A159	2438690.50	1965 Feb 17 1904	CaJun Dart	-	07	-	-	-	-	CC	-	-	-	75	-	-
1965-M18	2438809.29	1965 Feb 24 1508	CaJun Dart	-	08	-	-	-	-	CC	-	-	-	75	-	-
1965-M19	2438816.13	1965 Feb 26 1730	CaJun Dart	-	09	-	-	-	-	CC	-	-	-	75	-	-
1965-M20	2438818.23	1965 Feb 26 1730	CaJun Dart	-	09	-	-	-	-	CC	-	-	-	75	-	-
1965-M22	2438824.50	1965 Mar 5	CaJun Dart	-	10	-	-	-	-	CC	-	-	-	75	-	-
1965-M27	2438830.17	1965 Mar 10 1600	CaJun Dart	?	11	-	-	-	-	CC	-	-	-	75	-	-
1965-M28	2438830.32	1965 Mar 10 1942:00	CaJun Dart	-	-	-	-	-	-	CC	-	-	-	75?	-	-
1965-M44	2438837.22	1965 Mar 17 1710	CaJun Dart	-	12	-	-	-	-	CC	-	-	-	75	-	-
1965-M44	2438844.24	1965 Mar 24 1745	CaJun Dart	-	13	-	-	-	-	CC	-	-	-	75	-	-
1965-M47	2438851.21	1965 Mar 31 1701	CaJun Dart	-	14	-	-	-	-	CC	-	-	-	75	-	-
1965-M64	2438861.21	1965 Apr 7 1700	CaJun Dart	-	15	-	-	-	-	CC	-	-	-	75	-	-
1965-M65	2438868.21	1965 Apr 14 1744	CaJun Dart	-	16	-	-	-	-	CC	-	-	-	75	-	-
1965-M66	2438868.21	1965 Apr 17 1700	CaJun Dart	?	-	-	-	-	-	CC	-	-	-	75?	-	-
1965-M67	2438872.22	1965 Apr 21 1715	CaJun Dart	-	17	-	-	-	-	CC	-	-	-	75	-	-
1965-M68	2438878.50	1965 Apr 25	CaJun Dart	-	18	-	-	-	-	CC	-	-	-	75	-	-
1965-M69	2438893.29	1965 May 12 1900	CaJun Dart	-	19	-	-	-	-	CC	-	-	-	75	-	-
1965-M72	2438907.21	1965 May 26 1700	CaJun Dart	-	20	-	-	-	-	CC	-	-	-	75	-	-
1965-M79	2438914.21	1965 Jun 2 1700	CaJun Dart	-	21	-	-	-	-	CC	-	-	-	75	-	-
1965-M80	2438923.21	1965 Jun 11 1700	CaJun Dart	-	22	-	-	-	-	CC	-	-	-	75	-	-
1965-M82	2438928.28	1965 Jun 16 1500	CaJun Dart	-	23	-	-	-	-	CC	-	-	-	75	-	-
1965-M83	2438935.23	1965 Jun 23 1728	CaJun Dart	-	24	-	-	-	-	CC	-	-	-	75	-	-
1965-M85	2438942.13	1965 Jun 30 1503	CaJun Dart	-	25	-	-	-	-	CC	-	-	-	75	-	-
1965-M86	2438949.12	1965 Jul 7 1500	CaJun Dart	-	26	-	-	-	-	CC	-	-	-	75	-	-
1965-M88	2438956.21	1965 Jul 14 1709	CaJun Dart	-	27	-	-	-	-	CC	-	-	-	75?	-	-
1965-M101	2438965.21	1965 Jul 21 1700	CaJun Dart	-	28	-	-	-	-	CC	-	-	-	75	-	-
1965-M102	2438970.28	1965 Jul 23 1700	CaJun Dart	-	29	-	-	-	-	CC	-	-	-	75	-	-
1965-M103	2438976.78	1965 Jul 25 1400	CaJun Dart	-	30	-	-	-	-	CC	-	-	-	75	-	-
1965-M110	2438979.28	1965 Jul 29 1700	CaJun Dart	-	31	-	-	-	-	CC	-	-	-	75	-	-
1965-M117	2438986.22	1965 Aug 13 1722:00	CaJun Dart	-	32	-	-	-	-	CC	-	-	-	75?	-	-
1965-M120	2438988.21	1965 Aug 15 1700:00	CaJun Dart	-	33	-	-	-	-	CC	-	-	-	75?	-	-
1965-M123	2438988.21	1965 Aug 20 1700:00	CaJun Dart	-	34	-	-	-	-	CC	-	-	-	75?	-	-
1965-M129	2439005.21	1965 Aug 25 1700:00	CaJun Dart	-	35	-	-	-	-	CC	-	-	-	75?	-	-
1965-M131	2439012.60	1965 Sep 01 1700:00	CaJun Dart	-	36	-	-	-	-	CC	-	-	-	75?	-	-
1965-M134	2439021.60	1965 Sep 07 1700:00	CaJun Dart	-	37	-	-	-	-	CC	-	-	-	75?	-	-
1965-M137	2439026.21	1965 Sep 20 1700:00	CaJun Dart	-	38	-	-	-	-	CC	-	-	-	75?	-	-
1965-M147	2439033.17	1965 Sep 26 1600:00	CaJun Dart	-	39	-	-	-	-	CC	-	-	-	75?	-	-
1965-M148	2439040.22	1965 Sep 26 1600:00	CaJun Dart	-	38	-	-	-	-	CC	-	-	-	75?	-	-
1965-M147	2439046.60	1965 Oct 13	CaJun Dart	-	39	-	-	-	-	CC	-	-	-	75?	-	-
1965-M148	2439046.60	1965 Oct 13	CaJun Dart	-	39	-	-	-	-	CC	-	-	-	75?	-	-
1965-M149	2439054.21	1965 Oct 30 1700:00	CaJun Dart	-	40	-	-	-	-	CC	-	-	-	75?	-	-
1965-M152	2439060.60	1965 Oct 30 1700:00	CaJun Dart	-	41	-	-	-	-	CC	-	-	-	75?	-	-
1965-M161	2439066.21	1965 Oct 30 1700:00	CaJun Dart	-	42	-	-	-	-	CC	-	-	-	75?	-	-
1965-M162	2439072.60	1965 Nov 08	CaJun Dart	-	43	-	-	-	-	CC	-	-	-	75?	-	-
1965-M163	2439072.60	1965 Nov 08	CaJun Dart	-	43	-	-	-	-	CC	-	-	-	75?	-	-
1965-M173	2439082.21	1965 Nov 17 1700:00	CaJun Dart	-	44	-	-	-	-	CC	-	-	-	75?	-	-
1965-M174	2439082.21	1965 Nov 24 1700:00	CaJun Dart	-	45	-	-	-	-	CC	-	-	-	75?	-	-
1965-M177	2439094.21	1965 Nov 24 1700:00	CaJun Dart	-	46	-	-	-	-	CC	-	-	-	75?	-	-
1965-M198	2439103.21	1965 Dec 08 1700:00	CaJun Dart	-	47	-	-	-	-	CC	-	-	-	75?	-	-
1965-M203	2439112.21	1965 Dec 08 1700:00	CaJun Dart	-	48	-	-	-	-	CC	-	-	-	75?	-	-
1965-M205	2439117.19	1965 Dec 22 1640:00	CaJun Dart	-	49	-	-	-	-	CC	-	-	-	75?	-	-
1966-M09	2439131.17	1966 Jan 5 1600	CaJun Dart	-	50	-	-	-	-	CC	-	-	-	75?	-	-
1966-M13	2439137.60	1966 Jan 12	CaJun Dart	-	51	-	-	-	-	CC	-	-	-	75?	-	-
1966-M20	2439144.60	1966 Jan 19	CaJun Dart	-	52	-	-	-	-	CC	-	-	-	75?	-	-
1966-M29	2439153.21	1966 Jan 27 1705:00	CaJun Dart	-	53	-	-	-	-	CC	-	-	-	75?	-	-
1966-M143	2439167.60	1966 Feb 11	CaJun Dart	-	54	-	-	-	-	CC	-	-	-	75?	-	-
1966-M165	2439175.50	1966 Feb 19	CaJun Dart	-	55	-	-	-	-	CC	-	-	-	75?	-	-
1966-M165	2439178.96	1966 Feb 22 1100:00	CaJun Dart	-	54	-	-	-	-	CC	-	-	-	75?	-	-
1966-M168	2439182.27	1966 Feb 25 1830:00	CaJun Dart	-	55	-	-	-	-	CC	-	-	-	75?	-	-
1966-M195	2439183.26	1966 Feb 26 1812:00	CaJun Dart	-	56	-	-	-	-	CC	-	-	-	75?	-	-
1966-M08	2439230.60	1966 Apr 15	CaJun Dart	-	-	-	-	-	-	CC	-	-	-	93	-	-
1966-M25	2439250.50	1966 May 5	CaJun Dart	-	-	-	-	-	-	UT	-	-	-	94	-	-
1966-M25	2439292.50	1966 Jun 16	CaJun Dart	-	-	-	-	-	-	UT	-	-	-	94	-	-
1966-M27	2439304.50	1966 Jun 28	CaJun Dart	-	-	-	-	-	-	UT	-	-	-	96	-	-
1966-M298	2439310.50	1966 Jul 04	CaJun Dart	-	57	-	-	-	-	CC	-	-	-	75?	-	-
1966-M144	2439312.20	1966 Jul 5 1645	CaJun Dart	-	-	-	-	-	-	CC	-	-	-	75?	-	-
1966-M289	2439312.20	1966 Jul 06	CaJun Dart	-	58	-	-	-	-	CC	-	-	-	75?	-	-
1966-M308	2439362.19	1966 Aug 24 1630:00	CaJun Dart	-	59	-	-	-	-	CC	-	-	-	75?	-	-
1966-M309	2439363.30	1966 Aug 25 1908:00	CaJun Dart	-	60	-	-	-	-	CC	-	-	-	75?	-	-
1967-M34	2439514.84	1967 Jan 24 0806:00	CaJun Dart	-	-	-	-	-	-	CC	-	-	-	75?	-	-
1967-M49	2439559.50	1967 Mar 10	CaJun Dart	-	-	-	-	-	-	EGL?	-	-	-	76	-	-
1967-M145	2439607.50	1967 Apr 27	CaJun Dart	?	-	-	-	-	-	WS	-	-	-	60?	-	-
1967-M214	2439803.04	1967 Nov 08 1300:00	CaJun Dart	-	-	-	-	-	-	CC	-	-	-	75?	-	-

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Mission	FlightCode	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee km	Range km	Dest
1967-W215	243904.10	1967 Nov 09 1430:00	Cajun Dart	-	-	-	-	-	-	CC	-	-	-	757	-	-
1968-W30	243978.58	1968 Jan 23 0200:00	Cajun Dart	-	-	-	-	-	-	CC	-	-	-	757	-	-
1968-W63	2439951.29	1968 Apr 04 1851:00	Cajun Dart	-	-	-	-	-	-	CC	-	-	-	757	-	-
1968-A126	2440037.50	1968 Jul?	Cajun	-	-	-	Kangaroo	-	-	PM?	-	-	-	407	-	-
1968-A128	2440129.50	1968 Oct?	Cajun	-	-	-	Kangaroo	-	-	PM?	-	-	-	407	-	-
1968-A127	2440129.50	1968 Oct?	Cajun	-	-	-	Kangaroo	-	-	PM	-	-	-	50	-	-
1968-A128	2440160.50	1968 Nov?	Cajun	-	-	-	Kangaroo	-	-	PM	-	-	-	407	-	-
1968-A129	2440160.50	1968 Nov?	Cajun	-	-	-	Kangaroo	-	-	PM	-	-	-	407	-	-
1968-A130	2440160.50	1968 Nov?	Cajun	-	-	-	Kangaroo	-	-	PM	-	-	-	407	-	-
1968-A131	2440160.50	1968 Nov?	Cajun	-	-	-	Kangaroo	-	-	PM	-	-	-	407	-	-
1968-W228	2440141.33	1968 Oct 11 2001:00	Cajun Dart	-	-	-	-	-	-	CC	-	-	-	757	-	-
1968-W246	2440181.32	1968 Nov 20 1941:00	Cajun Dart	-	-	-	-	-	-	CC	-	-	-	757	-	-
1970-W420	2440685.21	1970 Mar 19 1707:00	Cajun Dart	-	-	-	-	-	-	CC	-	-	-	757	-	-
1970-W426	2440685.21	1970 Mar 20 1700:00	Cajun Dart	-	-	-	-	-	-	CC	-	-	-	757	-	-
1970-W431	2440689.17	1970 Mar 23 1600:00	Cajun Dart	-	-	-	-	-	-	CC	-	-	-	757	-	-
1970-W444	2440671.17	1970 Mar 25 1600:00	Cajun Dart	-	-	-	-	-	-	CC	-	-	-	757	-	-
1970-W51	2440671.50	1970 Mar 26	Cajun Dart	-	-	-	-	-	-	CC	-	-	-	757	-	-
1970-W457	2440673.21	1970 Mar 27 1700:00	Cajun Dart	-	-	-	-	-	-	CC	-	-	-	757	-	-
1970-W52	2440675.50	1970 Mar 30	Cajun Dart	-	-	-	-	-	-	CC	-	-	-	757	-	-
1970-W466	2440677.21	1970 Mar 31 1700:00	Cajun Dart	-	-	-	-	-	-	CC	-	-	-	757	-	-
1970-W53	2440677.50	1970 Apr 1	Cajun Dart	-	-	-	-	-	-	CC	-	-	-	757	-	-
1970-W54	2440678.50	1970 Apr 2	Cajun Dart	-	-	-	-	-	-	CC	-	-	-	757	-	-
1970-W55	2440679.50	1970 Apr 3	Cajun Dart	-	-	-	-	-	-	CC	-	-	-	757	-	-
1970-W493	2440683.21	1970 Apr 06 1700:00	Cajun Dart	-	-	-	-	-	-	CC	-	-	-	757	-	-
1970-W499	2440684.14	1970 Apr 07 1528:00	Cajun Dart	-	-	-	-	-	-	CC	-	-	-	757	-	-
1970-W504	2440685.21	1970 Apr 08 1700:00	Cajun Dart	-	-	-	-	-	-	CC	-	-	-	757	-	-
1970-W512	2440686.21	1970 Apr 09 1700:00	Cajun Dart	-	-	-	-	-	-	CC	-	-	-	757	-	-
1970-W56	2440689.50	1970 Apr 13	Cajun Dart	-	-	-	-	-	-	CC	-	-	-	757	-	-
1970-W57	2440690.50	1970 Apr 14	Cajun Dart	-	-	-	-	-	-	CC	-	-	-	757	-	-
1970-W544	2440692.21	1970 Apr 15 1700:00	Cajun Dart	-	-	-	-	-	-	CC	-	-	-	757	-	-
1970-W554	2440693.21	1970 Apr 16 1700:00	Cajun Dart	-	-	-	-	-	-	CC	-	-	-	757	-	-
1970-W560	2440694.21	1970 Apr 17 1700:00	Cajun Dart	-	-	-	-	-	-	CC	-	-	-	757	-	-
1970-W570	2440697.21	1970 Apr 20 1700:00	Cajun Dart	-	-	-	-	-	-	CC	-	-	-	757	-	-



Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	OrbPay	Agency	Launch_Code	Group	Category	LTCite	Cite	Notes
1947-A07	2432275.50	1947 Apr	Deacon	-	-	0.000	PARO	AS	-	Test	RP-1028	-	-
1947-A15	2432397.50	1947 Aug	Deacon	-	-	0.000	PARO	AS	-	Test	RP-1028	-	-
1948-A01	2432550.50	1948	Deacon	-	-	0.000	PARO	AS	-	Test	RP-1028	-	-
1948-A21	2432782.50	1948 Aug 19	Deacon	-	-	0.000	PARO	AS	-	Test	RP-1028	-	-
1948-A32	2432818.50	1948 Sep 24	Deacon	-	-	0.000	PARO	AS	-	Test	RP-1028	-	-
1948-A45	2432908.50	1948 Dec 23	Deacon	-	-	0.000	PARO	AF	-	Test	RP-1028	-	-
1949-A05	2432949.50	1949 Feb 2	Deacon	-	-	0.000	PARO	AS	-	Test	RP-1028	-	-
1949-A08	2433003.50	1949 Mar 28	Deacon	-	-	0.000	PARO	AS	-	Test	RP-1028	-	-
1949-A09	2433004.50	1949 Mar 29	Deacon	-	-	0.000	PARO	AS	-	Test	RP-1028	-	-
1949-A10	2433006.50	1949 Mar 30	Deacon	-	-	0.000	PARO	AS	-	Test	RP-1028	-	-
1949-A11	2433006.50	1949 Apr	Deacon	-	-	0.000	PARO	AS	-	Test	RP-1028	-	-
1949-A12	2433006.50	1949 Apr	Deacon	-	-	0.000	PARO	AS	-	Test	RP-1028	-	-
1949-A13	2433027.50	1949 Apr 21	Deacon	-	-	0.000	PARO	AS	-	Test	RP-1028	-	-
1949-A20	2433060.50	1949 May 24	Deacon	-	-	0.000	PARO	AS	-	Test	RP-1028	-	-
1949-A23	2433151.50	1949 Aug 23	Deacon	-	-	0.000	PARO	AS	-	Test	RP-1028	-	-
1949-A25	2433180.50	1949 Sep 21	Deacon	-	-	0.000	PARO	AS	-	Test	RP-1028	-	-
1949-A27	2433236.50	1949 Nov 16	Double Deacon	-	-	0.000	PARO	AF	-	Test	RP-1028	-	-
1949-A29	2433273.50	1949 Dec 23	Double Deacon	-	-	0.000	PARO	AS	-	Test	RP-1028	-	-
1950-A01	2433292.50	1950 Jan 11	Deacon	-	-	0.000	PARO	AS	-	Test	RP-1028	-	-
1950-A02	2433306.50	1950 Jan 25	Deacon	-	-	0.000	PARO	AS	-	Test	RP-1028	-	-
1950-A14	2433364.50	1950 Mar 24	Double Deacon	-	-	0.000	PARO	AS	-	Test	RP-1028	-	-
1950-A21	2433413.50	1950 May 12	Deacon	-	-	0.000	PARO	AS	-	Test	RP-1028	-	-
1950-A24	2433424.50	1950 May 23	Deacon	-	-	0.000	PARO	AS	-	Test	RP-1028	-	-
1950-A26	2433468.50	1950 Jun 6	Double Deacon	-	-	0.000	PARO	AS	-	Test	RP-1028	-	-
1950-A28	2433493.50	1950 Aug	Deacon	-	-	0.000	PARO	AS	-	Test	RP-1028	-	-
1950-A29	2433493.50	1950 Aug	Deacon	-	-	0.000	PARO	AS	-	Test	RP-1028	-	-
1950-A33	2433511.50	1950 Aug 18	Deacon	-	-	0.000	PARO	AF	-	Test	RP-1028	-	-
1950-A35	2433524.50	1950 Aug 31	Double Deacon	-	-	0.000	PARO	AS	-	Test	RP-1028	-	-
1950-A36	2433552.50	1950 Sep 6	Deacon	-	-	0.000	PARO	AS	-	Test	RP-1028	-	-
1950-A39	2433566.50	1950 Oct 2	Deacon	-	-	0.000	PARO	AS	-	Test	RP-1028	-	-
1950-A46	2433587.50	1950 Nov 2	Deacon	-	-	0.000	PARO	AS	-	Test	RP-1028	-	-
1950-A52	2433600.50	1950 Nov 15	Deacon	-	-	0.000	PARO	AS	-	Test	RP-1028	-	-
1950-A53	2433601.50	1950 Nov 16	Deacon	-	-	0.000	PARO	AS	-	Test	RP-1028	-	-
1950-A59	2433622.50	1950 Dec 7	Double Deacon	-	-	0.000	PARO	AS	-	Test	RP-1028	-	-
1951-A03	2433655.50	1951 Feb 6	Double Deacon	-	-	0.000	PARO	AS	-	Test	RP-1028	-	-
1951-A06	2433728.50	1951 Mar 23	Deacon	-	-	0.000	PARO	AS	-	Test	RP-1028	-	-
1951-A17	2433773.50	1951 May 17	Deacon	-	-	0.000	PARO	AS	-	Test	RP-1028	-	-
1951-A21	2433785.50	1951 May 17	Deacon	-	-	0.000	PARO	AS	-	Test	RP-1028	-	-
1951-A52	2433822.50	1951 Jun 25	Deacon	-	-	0.000	PARO	AS	-	Test	RP-1028	-	-
1951-A34	2433824.50	1951 Jun 27	Deacon	-	-	0.000	PARO	AS	-	Test	RP-1028	-	-
1951-A45	2433846.50	1951 Jul 18	Double Deacon	-	Double Deacon	0.000	PARO	AF	-	Test	RP-1028	-	-
1951-A50	2433866.50	1951 Aug 7	Deacon	-	-	0.000	PARO	AS	-	Test	RP-1028	-	-
1951-A54	2433875.50	1951 Aug 27	Deacon	-	-	0.000	PARO	AS	-	Test	RP-1028	-	-
1951-A59	2433894.50	1951 Sep 5	Deacon	-	-	0.000	PARO	AS	-	Test	RP-1028	-	-
1951-A69	2433894.50	1951 Sep 5	Deacon	-	-	0.000	PARO	AS	-	Test	RP-1028	-	-
1951-A100	2433899.50	1951 Nov 29	Double Deacon	-	-	0.000	PARO	AS	-	Test	RP-1028	-	-
1951-A101	2433899.50	1951 Dec 19	Double Deacon	-	-	0.000	PARO	AS	-	Test	RP-1028	-	-
1952-A01	2434034.50	1952 Jun 23	Double Deacon	-	Double Deacon	0.000	PARO	AF	-	Test	RP-1028	-	-
1952-A06	2434074.50	1952 Jun 23	Double Deacon	-	-	0.000	PARO	AS	-	Test	RP-1028	-	-
1952-A11	2434074.50	1952 Jun 23	Double Deacon	-	-	0.000	PARO	AS	-	Test	RP-1028	-	-
1952-A44	2434084.50	1952 Mar 13	Deacon	-	-	0.000	PARO	AS	-	Test	RP-1028	-	-
1952-A47	2434084.50	1952 Mar 13	Deacon	-	-	0.000	PARO	AS	-	Test	RP-1028	-	-
1952-A48	2434084.50	1952 Mar 16	Deacon	-	-	0.000	PARO	AS	-	Test	RP-1028	-	-
1952-A49	2434090.50	1952 Mar 19	Double Deacon	-	-	0.000	PARO	AS	-	Test	RP-1028	-	-
1952-A55	2434103.50	1952 Mar 19	Double Deacon	-	-	0.000	PARO	AS	-	Test	RP-1028	-	-
1952-A67	2434126.50	1952 Apr 23	Deacon	-	-	0.000	PARO	AS	-	Test	RP-1028	-	-
1952-A77	2434148.50	1952 Apr 23	Deacon	-	-	0.000	PARO	AS	-	Test	RP-1028	-	-
1952-A83	2434154.50	1952 May 16	Deacon	-	-	0.000	PARO	AS	-	Test	RP-1028	-	-
1952-A84	2434154.50	1952 May 22	Double Deacon	-	-	0.000	PARO	AS	-	Test	RP-1028	-	-
1952-A95	2434176.50	1952 May 13	Double Deacon	-	-	0.000	PARO	AS	-	Test	RP-1028	-	-
1952-A283	2434190.07	1952 Jun 26 1345	Deacon	-	-	0.000	SUIT	SS	SUIT/Meredith	CR	PhysRev99,198	-	-
1952-A288	2434193.50	1952 Jul 7	Deacon	-	-	0.000	SUIT	SS	SUIT/Meredith	CR	PhysRev99,198	-	-
1952-A289	2434193.50	1952 Jul 7	Deacon	-	-	0.000	SUIT	SS	SUIT/Meredith	CR	PhysRev99,198	-	-
1952-A109	2434201.50	1952 Jul 8	Double Deacon	-	-	0.000	PARO	AS	-	Test	RP-1028	-	-
1952-A126	2434220.50	1952 Aug 6	Deacon	-	-	0.000	PARO	AS	-	Test	RP-1028	-	-
1952-A127	2434230.50	1952 Aug 6	Double Deacon	-	-	0.000	PARO	AS	-	Test	RP-1028	-	-
1952-A128	2434230.50	1952 Aug 6	Deacon	-	-	0.000	PARO	AS	-	Test	RP-1028	-	-
1952-A141	2434245.77	1952 Aug 21 0625	Deacon	-	-	0.000	SUIT	SF	SUIT/VachAllan	Test	PhysRev99,198	-	-
1952-A142	2434248.65	1952 Aug 24 0324	Deacon	-	-	0.000	SUIT	SF	SUIT/VachAllan	Test	PhysRev99,198	-	-
1952-A143	2434253.52	1952 Aug 29 0226	Deacon	-	-	0.000	SUIT	SS	SUIT/VachAllan	Test	PhysRev99,198	-	-
1952-A065	2434253.52	1952 Aug 29 0726	Deacon	-	-	0.000	SUIT	SS	SUIT/VachAllan	Test	PhysRev99,198	-	-
1952-S23	2434254.26	1952 Aug 29 1815	Deacon	-	-	0.000	SUIT	SS	SUIT/VachAllan	Test	PhysRev99,198	-	-
1952-W07	2434256.38	1952 Aug 31 2110	Deacon	-	-	0.000	SUIT	SS	SUIT/VachAllan	Test	PhysRev99,198	-	-
1952-A146	2434255.50	1952 Sep 4	Deacon	-	-	0.000	PARO	AS	-	Test	RP-1028	-	-
1952-W08	2434259.89	1952 Sep 4 0917	Deacon	-	-	0.000	SUIT	SS	SUIT/VachAllan	Test	PhysRev99,198	-	-
1952-A147	2434265.50	1952 Sep 5	Deacon	-	-	0.000	PARO	AS	-	Test	RP-1028	-	-
1952-A153	2434266.50	1952 Sep 11	Double Deacon	-	-	0.000	PARO	AS	-	Test	RP-1028	-	-
1952-A160	2434274.50	1952 Sep 19	Deacon	-	-	0.000	PARO	AS	-	Test	RP-1028	-	-
1952-A162	2434279.50	1952 Sep 24	Deacon	-	-	0.000	PARO	AS	-	Test	RP-1028	-	-
1952-A165	2434280.50	1952 Sep 25	Deacon	-	-	0.000	PARO	AF	-	Test	RP-1028	-	-
1952-A198	2434315.50	1952 Oct 30	Double Deacon	-	-	0.000	PARO	AS	-	Test	RP-1028	-	-
1952-A202	2434316.50	1952 Oct 31	Double Deacon	-	-	0.000	PARO	AF	-	Test	RP-1028	-	-
1952-A203	2434316.50	1952 Nov 7	Deacon	-	-	0.000	PARO	AS	-	Test	RP-1028	-	-
1952-A209	2434323.50	1952 Nov 12	Deacon	-	-	0.000	PARO	AS	-	Test	RP-1028	-	-
1952-A217	2434329.50	1952 Nov 12	Deacon	-	-	0.000	PARO	AS	-	Test	RP-1028	-	-
1952-A231	2434335.50	1952 Nov 19	Deacon	-	-	0.000	PARO	AS	-	Test	RP-1028	-	-
1952-A266	2434358.50	1952 Dec 12	Deacon	-	-	0.000	PARO	AS	-	Test	RP-1028	-	-

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	OrbPay	Agency	Launch_Code	Group	Category	LTCite	Cite	Notes
1952-A275	2434364.50	1952 Dec 18	Deacon			0.000	PARO	AS	-	Test	RP-1028	-	-
1952-A276	2434364.50	1952 Dec 18	Deacon			0.000	PARO	AS	-	Test	RP-1028	-	-
1953-A01	2434377.50	1953 Jan	Deacon			0.000	PARO	AS	-	Test	RP-1028	-	-
1953-A02	2434377.50	1953 Jan	Deacon			0.000	PARO	AS	-	Test	RP-1028	-	-
1953-A16	2434391.50	1953 Jan 14	Quad Deacon			0.000	PARO	AS	-	Test	RP-1028	-	-
1953-A24	2434399.50	1953 Jan 22	Deacon			0.000	PARO	AS	-	Test	RP-1028	-	-
1953-A94	2434441.50	1953 Mar 5	Double Deacon			0.000	PARO	AF	-	Test	RP-1028	-	-
1953-A134	2434456.50	1953 Mar 20	Double Deacon			0.000	PARO	AF	-	Test	RP-1028	-	-
1953-A165	2434477.50	1953 Apr 1	Double Deacon			0.000	PARO	AS	-	Test	RP-1028	-	-
1953-A210	2434506.50	1953 May 8	Triple Deacon			0.000	PARO	AS	-	Test	RP-1028	-	-
1953-A239	2434538.50	1953 Jun 10	Deacon			0.000	PARO	AS	-	Test	RP-1028	-	-
1953-A247	2434546.50	1953 Jun 18	Deacon			0.000	PARO	AS	-	Test	RP-1028	-	-
1953-A259	2434553.50	1953 Jun 25	Deacon			0.000	PARO	AS	-	Test	RP-1028	-	-
1953-A287	2434573.50	1953 Jul 15	Triple Deacon			0.000	SUI/	SF	SUI/	CR	newell	PhysRev95,147	-
1953-A288	2434577.94	1953 Jul 18 2227	Deacon Rocketoon		MUSHMAT 1	0.000	SUI/	SF	SUI/	CR	newell	-	-
1953-A289	2434578.16	1953 Jul 19 1030	Deacon Rocketoon		MUSHMAT 2	0.000	SUI/	SF	SUI/	CR	newell	-	-
1953-A300	2434578.41	1953 Jul 19 1563	Deacon Rocketoon		MUSHMAT 3	0.000	SUI/	SF	SUI/	CR	newell	-	-
1953-A306	2434583.19	1953 Jul 19 2157	Deacon Rocketoon		MUSHMAT 4	0.000	SUI/	SF	SUI/	CR	newell	-	-
1953-S27	2434586.90	1953 Jul 28 0941	Deacon Rocketoon		MUSHMAT 5	0.000	SUI/	SS	SUI/	CR	newell	-	-
1953-A309	2434593.27	1953 Aug 3 1828	Deacon Rocketoon		MUSHMAT 6	0.000	SUI/	SS	SUI/	CR	newell	-	-
1953-A311	2434593.50	1953 Aug 4	Deacon		MUSHMAT 7	0.000	PARO	AS	-	Test	RP-1028	-	-
1953-A311	2434593.50	1953 Aug 4	Deacon		MUSHMAT 9	0.000	MRL	AS	MRL/Ladog	Test	newell	JOR61,77	-
1953-A305	2434596.41	1953 Aug 5 2154	Deacon Rocketoon		MUSHMAT 10	0.000	SUI/	SS	SUI/	CR	newell	PhysRev95,147	-
1953-A317	2434596.13	1953 Aug 6 1507	Deacon Rocketoon		MUSHMAT 11	0.000	SUI/	SS	SUI/	CR	newell	-	-
1953-A326	2434596.28	1953 Aug 6 1940	Deacon Rocketoon		MUSHMAT 12	0.000	SUI/	SS	SUI/	CR	newell	-	-
1953-A306	2434596.13	1953 Aug 6 1509	Deacon Rocketoon		MUSHMAT 13	0.000	MRL	SS	MRL/Ladog	Aeron	newell	JOR61,77	-
1953-S29	2434596.75	1953 Aug 9 0954	Deacon Rocketoon		MUSHMAT 12	0.000	SUI/	SS	SUI/	CR	newell	PhysRev95,147	-
1953-S29	2434599.30	1953 Aug 9 0954	Deacon Rocketoon		MUSHMAT 13	0.000	SUI/	SS	SUI/	CR	newell	JOR61,77	-
1953-A316	2434599.30	1953 Aug 9 1915	Deacon Rocketoon		MUSHMAT 14	0.000	MRL	SS	MRL/Ladog	Aeron	newell	JOR61,77	-
1953-A316	2434601.21	1953 Aug 11 1709	Deacon Rocketoon		MUSHMAT 15	0.000	MRL	SS	MRL/Ladog	Aeron	newell	JOR61,77	-
1953-A330	2434606.50	1953 Aug 19	Deacon			0.000	PARO	AS	-	Test	RP-1028	-	-
1953-A331	2434606.50	1953 Aug 19	Deacon			0.000	PARO	AS	-	Test	RP-1028	-	-
1953-A332	2434609.50	1953 Aug 20	Triple Deacon HPAG			0.000	PARO	AS	-	Test	RP-1028	TH-D-216	-
1953-A338	2434620.08	1953 Aug 30 1400	Deacon Rocketoon		Eastwind 54-1	0.000	SUI/	SF	SUI/	CR	newell	-	-
1953-A339	2434620.19	1953 Aug 30 1620	Deacon Rocketoon		Eastwind 54-2	0.000	SUI/	SF	SUI/	CR	newell	-	-
1953-S30	2434620.37	1953 Aug 30 2046	Deacon Rocketoon		Eastwind 54-3	0.000	SUI/	SS	SUI/	CR	newell	-	-
1953-S32	2434623.31	1953 Sep 3 0950	Deacon Rocketoon		Eastwind 54-4	0.000	SUI/	SS	SUI/	CR	newell	PhysRev95,147	-
1953-S33	2434623.99	1953 Sep 3 1151	Deacon Rocketoon		Eastwind 54-5	0.000	SUI/	SS	SUI/	CR	newell	PhysRev95,147	-
1953-S34	2434624.09	1953 Sep 3 1405	Deacon Rocketoon		Eastwind 54-6	0.000	SUI/	SS	SUI/	CR	newell	JOR61,77	-
1953-A316	2434624.07	1953 Sep 4 0959	Deacon Rocketoon		Eastwind 54-7	0.000	MRL	SS	MRL/	Aeron	newell	JOR61,77	-
1953-A309	2434625.16	1953 Sep 4 1851	Deacon Rocketoon		Eastwind 54-8	0.000	MRL	SS	MRL/	Aeron	newell	JOR61,77	-
1953-A390	2434657.50	1953 Oct 1	Deacon			0.000	PARO	AS	-	Test	RP-1028	-	-
1953-A401	2434661.50	1953 Oct 15	Deacon Slidewinder			0.000	PARO	AS	-	Test	RP-1028	-	-
1953-A415	2434676.50	1953 Oct 26	Deacon			0.000	PARO	AS	-	Test	RP-1028	-	-
1953-A422	2434676.50	1953 Oct 26	Deacon			0.000	PARO	AS	-	Test	RP-1028	-	-
1953-A465	2434701.50	1953 Nov 20	Double Deacon			0.000	PARO	AF	-	Test	RP-1028	-	-
1953-A466	2434713.50	1953 Nov 20	Triple Deacon HPAG			0.000	PARO	AF	-	Test	RP-1028	-	-
1953-A468	2434713.50	1953 Dec 7	Deacon			0.000	PARO	AS	-	Test	RP-1028	-	-
1953-A469	2434713.50	1953 Dec 7	Deacon			0.000	PARO	AS	-	Test	RP-1028	-	-
1953-A488	2434727.50	1953 Dec 16	Double Deacon			0.000	PARO	AS	-	Test	RP-1028	TH-D-177	-
1954-A03	2434728.50	1953 Dec 17	Deacon			0.000	PARO	AS	-	Test	RP-1028	-	-
1954-A03	2434748.50	1953 Dec 17	Deacon			0.000	PARO	AS	-	Test	RP-1028	-	-
1954-A35	2434748.50	1954 Jan 7	Deacon			0.000	PARO	AS	-	Test	RP-1028	-	-
1954-A35	2434748.50	1954 Jan 7	Deacon			0.000	PARO	AS	-	Test	RP-1028	-	-
1954-A46	2434769.50	1954 Feb 27	Double Deacon			0.000	PARO	AS	-	Test	RP-1028	-	-
1954-A46	2434769.50	1954 Feb 27	Deacon			0.000	PARO	AS	-	Test	RP-1028	-	-
1954-A75	2434797.50	1954 Feb 24	Deacon			0.000	PARO	AS	-	Test	RP-1028	-	-
1954-A85	2434801.50	1954 Feb 24	Deacon			0.000	PARO	AS	-	Test	RP-1028	-	-
1954-A116	2434820.50	1954 Mar 19	Deacon			0.000	PARO	AS	-	Test	RP-1028	-	-
1954-A124	2434820.50	1954 Mar 19	Deacon			0.000	PARO	AS	-	Test	RP-1028	-	-
1954-A126	2434827.50	1954 Mar 24	Double Deacon			0.000	PARO	AS	-	Test	RP-1028	-	-
1954-A126	2434827.50	1954 Mar 26	Deacon			0.000	PARO	AS	-	Test	RP-1028	-	-
1954-A1711	2434852.50	1954 Apr 20	Quad Deacon			0.000	PARO	AS	-	Test	RP-1028	-	-
1954-A193	2434852.50	1954 Apr 21	Double Deacon			0.000	PARO	AS	-	Test	RP-1028	-	-
1954-A196	2434852.50	1954 Apr 22	Double Deacon			0.000	PARO	AS	-	Test	RP-1028	-	-
1954-A199	2434865.50	1954 Apr 27	Deacon			0.000	PARO	AS	-	Test	RP-1028	-	-
1954-A214	2434865.50	1954 Apr 29	Deacon			0.000	PARO	AS	-	Test	RP-1028	-	-
1954-A214	2434865.50	1954 Apr 29	Deacon			0.000	PARO	AS	-	Test	RP-1028	-	-
1954-A700	2434890.50	1954 May 28	Tri-Deacon Deacon HPAG			0.000	PARO	AS	-	Test	RP-1028	-	-
1954-A315	2434896.50	1954 May 28	Deacon			0.000	PARO	AS	-	Test	RP-1028	-	-
1954-A315	2434896.50	1954 Jun 4	Deacon			0.000	PARO	AS	-	Test	RP-1028	-	-
1954-A379	2434897.50	1954 Jun 4	Deacon			0.000	PARO	AS	-	Test	RP-1028	-	-
1954-A379	2434897.50	1954 Jun 4	Deacon			0.000	PARO	AS	-	Test	RP-1028	-	-
1954-A379	2434921.50	1954 Jun 28	Double Deacon			0.000	PARO	AS	-	Test	RP-1028	-	-
1954-A414	2434940.01	1954 Jul 16 1213	Deacon Rocketoon			0.000	SUI/	SS	SUI/	CR	newell	PhysRev95,147	-
1954-A414	2434940.42	1954 Jul 16 2158	Deacon Rocketoon			0.000	SUI/	SS	SUI/	CR	newell	PhysRev95,147	-
1954-A417	2434943.17	1954 Jul 19 1600	Deacon Rocketoon			0.000	NBL	AS	NBL/Ladog	Aeron	JOR61,77	News11/437UTC	-
1954-A418	2434943.35	1954 Jul 19 2030	Deacon Rocketoon			0.000	NBL	AS	NBL/Ladog	Aeron	newell	-	-
1954-A445	2434943.62	1954 Jul 20 0250	Deacon Rocketoon			0.000	NBL	AS	NBL/Ladog	Aeron	newell	-	-
1954-A45	2434943.92	1954 Jul 21 0903	Deacon Rocketoon			0.000	NBL	AS	NBL/Ladog	Aeron	newell	-	-
1954-A45	2434944.88	1954 Jul 21 1245	Deacon Rocketoon			0.000	NBL	AS	NBL/Ladog	Aeron	newell	-	-
1954-A46	2434945.03	1954 Jul 21 1245	Deacon Rocketoon			0.000	NBL	AS	NBL/Ladog	Aeron	newell	-	-
1954-A428	2434945.37	1954 Jul 21 2049	Deacon Rocketoon			0.000	NBL	AS	NBL/Ladog	Aeron	newell	-	-
1954-A428	2434946.30	1954 Jul 22 1915:00	Deacon Rocketoon			0.000	NBL	AS	NBL/Ladog	Aeron	newell	-	-
1954-A48	2434947.12	1954 Jul 23 1446	Deacon Rocketoon			0.000	NBL	AS	NBL/Ladog	Aeron	newell	-	-
1954-A49	2434947.21	1954 Jul 23 1709	Deacon Rocketoon			0.000	NBL	AS	NBL/Ladog	Aeron	newell	-	-
1954-A50	2434947.25	1954 Jul 23 1754	Deacon Rocketoon			0.000	NBL	AS	NBL/Ladog	Aeron	newell	-	-
1954-A435	2434947.32	1954 Jul 23 1937	Deacon Rocketoon			0.000	NBL	AS	NBL/Ladog	Aeron	newell	-	-
1954-S51	2434947.87	1954 Jul 24 0857	Deacon Rocketoon			0.000	SUI/	SS	SUI/	CR	newell	-	-
1954-S52	2434948.05	1954 Jul 24 1316	Deacon Rocketoon			0.000	SUI/	SS	SUI/	CR	newell	-	-
1954-S53	2434948.79	1954 Jul 25 0651	Deacon Rocketoon			0.000	SUI/	SS	SUI/	CR	newell	-	-
1954-S54	2434949.02	1954 Jul 25 1236	Deacon Rocketoon			0.000	SUI/	SS	SUI/	CR	newell	-	-
1954-S54	2434949.15	1954 Jul 25 1530	Deacon Rocketoon			0.000	SUI/	SS	SUI/	CR	newell	-	-
1954-S55	2434949.15	1954 Jul 25 1530	Deacon Rocketoon			0.000	SUI/	SS	SUI/	CR	newell	-	-
1954-S55	2434949.28	1954 Jul 25 1845	Deacon Rocketoon			0.000	NBL	AS	NBL/Ladog	Aeron	JOR61,77	News11/1727UTC	-

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	OrbPay	Agency	Launch_Code	Group	Category	LTCite	Cite	Notes
1954-4442	2434949.52	1954 Jul 26 0029	Deacon Rockoon	-	-	0.000	NRL	SF	NRL/	Ionos/aeron?	Howell	-	-
1954-558	2434949.96	1954 Jul 26 1102	Deacon Rockoon	-	-	0.000	NRL	SS	NRL/	Ionos/aeron?	Howell	-	-
1954-4444	2434950.50	1954 Jul 27	Deacon	-	-	0.000	PARO	AF	-	Test	RP-1028	-	-
1954-4721	2434950.50	1954 Jul 27	Pogo HI	-	-	0.000	MNSU/NUTS	SS	MNSU/Moore	Target	wsm-history.org	-	-
1954-4469	2434956.50	1954 Aug 13	Deacon	-	-	0.000	PARO	AS	-	Test	RP-1028	-	-
1954-4722	2434967.50	1954 Aug 13	Double Deacon	-	-	0.000	MNSU/NUTS	SS	MNSU/Moore	Target	wsm-history.org	-	-
1954-4499	2434987.50	1954 Sep 7	Pogo HI	-	-	0.000	PARO	AS	-	Test	RP-1028	-	-
1954-4723	2434992.50	1954 Sep 7	Double Deacon	-	-	0.000	MNSU/NUTS	SS	MNSU/Moore	Target	wsm-history.org	-	-
1954-4724	2435007.50	1954 Oct 22	Pogo HI	-	-	0.000	PARO	AF	-	Test	RP-1028	-	-
1954-4689	2435037.50	1954 Oct 22	Double Deacon	-	-	0.000	PARO	AS	-	Test	RP-1028	-	-
1954-4707	2435092.50	1954 Dec 16	Double Deacon	-	-	0.000	PARO	AS	-	Test	RP-1028	-	-
1955-401	2435107.50	1955	Deacon	-	-	0.000	PARO	AS	-	Test	RP-1028	-	-
1955-402	2435107.50	1955	Deacon	-	-	0.000	PARO	AS	-	Test	RP-1028	-	-
1955-412	2435118.50	1955 Jan 11	Double Deacon	-	-	0.000	PARO	AS	-	Test	RP-1028	-	-
1955-415	2435138.50	1955 Jan 28	Double Deacon	-	-	0.000	PARO	AS	-	Test	RP-1028	-	-
1955-4207	2435189.50	1955 Mar 23	Deacon	-	-	0.000	PARO	AS	-	Test	RP-1028	-	-
1955-4228	2435194.50	1955 Mar 28	Deacon	-	-	0.000	PARO	AS	-	Test	RP-1028	-	-
1955-4304	2435218.50	1955 Apr 21	Deacon	-	-	0.000	PARO	AS	-	Test	RP-1028	-	-
1955-4449	2435278.50	1955 Jun 20	Deacon	-	-	0.000	PARO	AS	-	Test	RP-1028	-	-
1955-4452	2435286.50	1955 Jun 28	Double Deacon	-	-	0.000	PARO	AS	-	Test	RP-1028	-	-
1955-574	2435375.19	1955 Sep 24 1635	Deacon Rockoon	-	-	0.000	SUI/	SS	SUI/	Ionos/aeron?	Howell	-	-
1955-4476	2435378.30	1955 Sep 27 1912	Deacon Rockoon	-	-	0.000	NRL/	SF	NRL/	Ionos/aeron?	Howell	-	-
1955-576	2435378.32	1955 Sep 27 1943	Deacon Rockoon	-	-	0.000	NRL/	SS	NRL/	Ionos/aeron?	Howell	-	-
1955-577	2435378.37	1955 Sep 27 2094	Deacon Rockoon	-	-	0.000	SUI/	SS	SUI/	Ionos/aeron?	Howell	-	-
1955-579	2435379.03	1955 Sep 28 1245	Deacon Rockoon	-	-	0.000	NRL/	SS	NRL/	Ionos/aeron?	Howell	-	-
1955-580	2435379.12	1955 Sep 28 1464	Deacon Rockoon	-	-	0.000	SUI/	SS	SUI/	Ionos/aeron?	Howell	-	-
1955-4477	2435379.24	1955 Sep 28 1740	Deacon Rockoon	-	-	0.000	NRL/	SF	NRL/	Ionos/aeron?	Howell	-	-
1955-581	2435379.31	1955 Sep 28 1922	Deacon-Loki Rockoon	-	-	0.000	SUI/	SS	SUI/	Ionos/aeron?	Howell	-	-
1955-582	2435380.07	1955 Sep 29 1342	Deacon Rockoon	-	-	0.000	SUI/	SS	SUI/	Ionos/aeron?	Howell	-	-
1955-583	2435380.30	1955 Sep 29 1913	Deacon Rockoon	-	-	0.000	SUI/	SS	SUI/	Ionos/aeron?	Howell	-	-
1955-584	2435380.41	1955 Sep 29 2152	Deacon-Loki Rockoon	-	-	0.000	SUI/	SS	SUI/	Ionos/aeron?	Howell	-	-
1955-4479	2435380.50	1955 Oct 6 1054	Deacon	-	-	0.000	PARO	AS	-	Test	RP-1028	-	-
1955-4480	2435386.95	1955 Oct 6 1054	Deacon	-	-	0.000	NRL/	AS	NRL/	Ionos/aeron?	Howell	-	-
1955-590	2435387.50	1955 Oct 6 1910	Deacon Rockoon	-	-	0.000	SUI/	SS	SUI/	Ionos/aeron?	Howell	-	-
1955-4482	2435391.50	1955 Oct 11	Deacon	-	-	0.000	PARO/USN	AS	-	Aeron/Test	RP-1028	-	-
1955-4483	2435391.50	1955 Oct 11	Deacon	-	-	0.000	SUI/	AS	-	Aeron/Test	RP-1028	-	-
1955-4494	2435392.11	1955 Oct 11 1433	Deacon Rockoon	-	-	0.000	SUI/	AS	-	Aeron/Test	RP-1028	-	-
1955-592	2435392.11	1955 Oct 11 1437	Deacon Rockoon	-	-	0.000	NRL/	SS	NRL/	Ionos/aeron?	Howell	-	-
1955-607	2435393.78	1955 Oct 13 0637	Deacon Rockoon	-	-	0.000	NRL/	SS	NRL/	Ionos/aeron?	Howell	-	-
1955-594	2435394.03	1955 Oct 13 1244	Deacon Rockoon	-	-	0.000	SUI/	SS	SUI/	Ionos/aeron?	Howell	-	-
1955-608	2435394.07	1955 Oct 13 1542	Deacon Rockoon	-	-	0.000	NRL/	SS	NRL/	Ionos/aeron?	Howell	-	-
1955-4485	2435394.14	1955 Oct 13 1524	Deacon Rockoon	-	-	0.000	NRL/	SS	NRL/	Ionos/aeron?	Howell	-	-
1955-598	2435393.54	1955 Oct 13 2013	Deacon Rockoon	-	-	0.000	SUI/	SS	SUI/	Ionos/aeron?	Howell	-	-
1955-4489	2435421.50	1955 Nov 16	Double Deacon	-	-	0.000	PARO	AS	-	Test	RP-1028	-	-
1955-4482	2435421.50	1955 Dec 5	Pogo HI	-	-	0.000	MNSU/NUTS	SS	MNSU/Moore	Target	wsm-history.org	-	-
1955-4496	2435421.50	1955 Dec 5	Double Deacon	-	-	0.000	PARO	AS	-	Test	RP-1028	-	-
1955-4707	2435409.50	1956 Jun 26	Tandem Double Deacon	-	-	0.000	PARO	AS	-	Test	RP-1028	-	-
1955-4707	2435409.50	1956 Jun 26	Deacon	-	-	0.000	PARO	AS	-	Test	RP-1028	-	-
1955-4209	2435512.50	1956 Feb 10	Pogo HI	-	-	0.000	MNSU/NUTS	SS	MNSU/Moore	Target	wsm-history.org	-	-
1955-4210	2435520.50	1956 Feb 17	Pogo HI	-	-	0.000	MNSU/NUTS	SS	MNSU/Moore	Target	wsm-history.org	-	-
1955-4211	2435520.50	1956 Feb 17	Deacon	-	-	0.000	PARO	AS	-	Test	RP-1028	-	-
1955-4212	2435520.50	1956 Feb 16	Pogo HI	-	-	0.000	MNSU/NUTS	SS	MNSU/Moore	Target	wsm-history.org	-	-
1955-4213	2435520.50	1956 Mar 31	Pogo HI	-	-	0.000	MNSU/NUTS	SS	MNSU/Moore	Target	wsm-history.org	-	-
1955-465	2435544.50	1956 Jun 27	Tandem Double Deacon	-	-	0.000	PARO	AS	-	Test	RP-1028	-	-
1955-465	2435544.50	1956 Jun 27	Double Deacon	-	-	0.000	PARO	AS	-	Test	RP-1028	-	-
1955-4214	2435552.50	1956 Jun 29	Pogo HI	-	-	0.000	MNSU/NUTS	SS	MNSU/Moore	Target	wsm-history.org	-	-
1955-4215	2435552.50	1956 Jun 29	Pogo HI	-	-	0.000	MNSU/NUTS	SS	MNSU/Moore	Target	wsm-history.org	-	-
1955-4216	2435560.50	1956 Jul 6	Pogo HI	-	-	0.000	MNSU/NUTS	SS	MNSU/Moore	Target	wsm-history.org	-	-
1955-553	2435572.32	1956 Jul 17 1940	Deacon Rockoon	-	-	0.000	NRL/Chubb, Friedman	SS	NRL/Chubb, Friedman	Solar UW/Solar X	Nature/79,861	-	-
1955-554	2435572.32	1956 Jul 19 2000	Deacon Rockoon	-	-	0.000	NRL/Chubb, Friedman	SS	NRL/Chubb, Friedman	Solar UW/Solar X	Nature/79,861	-	-
1955-556	2435574.31	1956 Jul 19 1932	Deacon Rockoon	-	-	0.000	NRL/Chubb, Friedman	SS	NRL/Chubb, Friedman	Solar UW/Solar X	Nature/79,861	-	-
1955-555	2435574.31	1956 Jul 20 1915	Deacon Rockoon	-	-	0.000	NRL/Chubb, Friedman	SS	NRL/Chubb, Friedman	Solar UW/Solar X	Nature/79,861	-	-
1955-559	2435576.42	1956 Jul 21 2200	Deacon Rockoon	-	-	0.000	NRL/Chubb, Friedman	SS	NRL/Chubb, Friedman	Solar UW/Solar X	Nature/79,861	-	-
1955-174	2435577.42	1956 Jul 21 2200	Deacon Rockoon	-	-	0.000	NRL/Chubb, Friedman	SS	NRL/Chubb, Friedman	Solar UW/Solar X	Nature/79,861	-	-
1955-560	2435577.42	1956 Jul 22 1910	Deacon Rockoon	-	-	0.000	NRL/Chubb, Friedman	SS	NRL/Chubb, Friedman	Solar UW/Solar X	Nature/79,861	-	-
1955-475	2435579.30	1956 Jul 24 1910	Deacon Rockoon	-	-	0.000	NRL/Chubb, Friedman	SS	NRL/Chubb, Friedman	Solar UW/Solar X	Nature/79,861	-	-
1955-563	2435580.39	1956 Jul 26 2100	Deacon Rockoon	-	-	0.000	NRL/Chubb, Friedman	SS	NRL/Chubb, Friedman	Solar UW/Solar X	Nature/79,861	-	-
1955-565	2435583.38	1956 Jul 26 2100	Deacon Rockoon	-	-	0.000	NRL/Chubb, Friedman	SS	NRL/Chubb, Friedman	Solar UW/Solar X	Nature/79,861	-	-
1955-566	2435589.21	1956 Jul 27 1705	Deacon Rockoon	-	-	0.000	NRL/Chubb, Friedman	SS	NRL/Chubb, Friedman	Solar UW/Solar X	Nature/79,861	-	-
1955-489	2435737.50	1956 Sep 21	Terrapin	-	-	0.000	PARO/NSA	SF	UMD/	Test	RP-1028	-	-
1955-881	2435737.50	1956 Sep 21	Terrapin	-	-	0.000	PARO/NSA	SS	UMD/	Test	RP-1028	-	-
1955-4217	2435764.50	1956 Oct 18	Pogo HI	-	-	0.000	MNSU/NUTS	SS	MNSU/Moore	Target	wsm-history.org	-	-
1955-4123	2435804.50	1956 Oct 18	Deacon	-	-	0.000	PARO	AS	-	Test	RP-1028	-	-
1955-1131	2435820.50	1956 Dec 13	Rockaire	-	-	0.000	AFCEB/Kraff, Slavin	SS	AFCEB/Kraff, Slavin	Test	RP-1028	-	-
1955-4123	2435821.50	1956 Dec 14	Rockaire	-	-	0.000	AFCEB/Kraff, Slavin	SS	AFCEB/Kraff, Slavin	Test	RP-1028	-	-
1955-4124	2435824.50	1956 Dec 17	Rockaire	-	-	0.000	AFCEB/Kraff, Slavin	SS	AFCEB/Kraff, Slavin	Test	RP-1028	-	-
1955-4125	2435826.50	1956 Dec 19	Rockaire	-	-	0.000	AFCEB/Kraff, Slavin	SS	AFCEB/Kraff, Slavin	Test	RP-1028	-	-
1955-4218	2435827.50	1956 Dec 20	Pogo HI	-	-	0.000	MNSU/NUTS	SS	MNSU/Moore	Target	wsm-history.org	-	-
1955-502	2435838.50	1957	Terrapin	-	-	0.000	NSA	SS	UMD/	CR?	RP-1028	-	-
1957-101	2435838.50	1957	Terrapin	-	-	0.000	NSA	SS	UMD/	CR?	RP-1028	-	-
1957-503	2435838.50	1957	Terrapin	-	-	0.000	NSA	SS	UMD/	CR?	RP-1028	-	-
1957-504	2435838.50	1957	Terrapin	-	-	0.000	NSA	SS	UMD/	CR?	RP-1028	-	-
1957-110	2435882.50	1957 Feb 13	Deacon	-	-	0.000	PARO	AS	-	Test	RP-1028	-	-
1957-442	2435981.50	1957 May 23	Double Deacon	-	-	0.000	PARO	AS	-	Test	RP-1028	-	-
1957-1131	2436162.50	1957 Nov 20	Double Cajun T40	-	-	0.000	PARO	AS	-	Test	RP-1028	-	-
1958-431	2436307.50	1958 Apr 14	Double Deacon	-	-	0.000	PARO	AS	-	Test	RP-1028	-	-





Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	OrbPay	Agency	Launch_Code	Group	Category	LTCite	Cite	Notes
1962-147	2437744.50	1962 Mar 21	Apache	-	HIGHBALL 63	0.000	MICOM	MS	INNSU/	Target	SpeedballRpt	-	-
1962-148	2437745.50	1962 Mar 22	Apache	-	HIGHBALL 64	0.000	MICOM	MS	INNSU/	Target	SpeedballRpt	-	-
1962-149	2437749.50	1962 Mar 26	Apache	-	HIGHBALL 65	0.000	MICOM	MS	INNSU/	Target	SpeedballRpt	-	-
1962-150	2437749.50	1962 Mar 26	Cajun	-	HIGHBALL 66	0.000	MICOM	MS	INNSU/	Target	SpeedballRpt	-	-
1962-151	2437751.50	1962 Mar 28	Apache	-	HIGHBALL 67	0.000	MICOM	MS	INNSU/	Target	SpeedballRpt	-	-
1963-317	2438053.50	1963 Jan 24	Deacon Arrow II	-	-	0.000	SAND	SS	SAND/	Test	SP-4004	-	SandIve630118
1963-318	2438053.50	1963 Jan 24	Deacon Arrow II	-	-	0.000	WFF	SS	WFF/?	Test	SP-4004	-	SP-4004
1963-3182	2438149.76	1963 Apr 30 0613	Deacon Judi	-	-	0.000	WFF	SS	WFF/?	Aeron	MI-PR63-43	-	SP-4004
1963-3183	2438149.89	1963 Apr 30 0921	Deacon Judi	-	-	0.000	WFF	SS	WFF/?	Aeron	MI-PR63-43	-	SP-4004
1963-3657	2438180.50	1963 Jun?	Deacon Judi	-	Sandia	0.000	SAND	SS	SAND/Smith	Aeron	SandIve630229	-	-
1964-462	2438627.33	1964 Aug 19 1951	Deacon Judi	-	01	0.000	MSFC	SS	MSFC/	Test	WDCRF	-	Norror
1964-465	2438629.32	1964 Aug 21 1939	Cajun Dart	-	02	0.000	MSFC	SS	MSFC/	Test	WDCRF	-	Norror
1964-466	2438632.24	1964 Aug 24 1745	Cajun Dart	-	03	0.000	MSFC	SS	MSFC/	Test	CR-74067	-	Norror
1964-467	2438636.28	1964 Aug 28 1846	Cajun Dart	-	04	0.000	MSFC	SS	MSFC/	Test	CR-74067	-	Norror
1964-468	2438669.95	1964 Oct 01 1047:00	Cajun Dart	-	NDI?	0.000	MSFC	SU	MSFC/	Aeron	WDCRF	-	Norror
1964-4153	2438668.50	1964 Oct 16	Cajun Dart	-	05	0.000	MSFC	SF	MSFC/	Test	Norror	-	Norror
1964-494	2438690.50	1964 Oct 22	Cajun Dart	-	06	0.000	MSFC	SS	MSFC/	Test	Norror	-	Norror
1965-418	2438609.29	1965 Feb 17 1904	Cajun Dart	-	07	0.000	MSFC	SS	MSFC/	Aeron	TR-X-53303	-	Norror
1965-419	2438616.13	1965 Feb 24 1508	Cajun Dart	-	08	0.000	MSFC	SS	MSFC/	Aeron	TR-X-53303	-	Norror
1965-420	2438618.23	1965 Feb 26 1730	Cajun Dart	-	09	0.000	MSFC	SS	MSFC/	Aeron	TR-X-53303	-	Norror
1965-432	2438624.00	1965 Mar 5	Cajun Dart	-	10	0.000	MSFC	SS	MSFC/	Aeron	Norror	-	Norror
1965-437	2438630.17	1965 Mar 10 1600	Cajun Dart	-	11	0.000	MSFC	SS	MSFC/	Aeron	Norror	-	Norror
1965-438	2438630.32	1965 Mar 10 1942:00	Cajun Dart	-	?	0.000	MSFC	SU	MSFC/	Aeron	Norror	-	Norror
1965-444	2438657.22	1965 Mar 17 1710	Cajun Dart	-	12	0.000	MSFC	SU	MSFC/	Aeron	Norror	-	Norror
1965-444	2438657.22	1965 Mar 17 1710	Cajun Dart	-	13	0.000	MSFC	SU	MSFC/	Aeron	Norror	-	Norror
1965-464	2438644.24	1965 Mar 24 1745	Cajun Dart	-	14	0.000	MSFC	SS	MSFC/	Aeron	Norror	-	Norror
1965-464	2438651.21	1965 Mar 31 1701	Cajun Dart	-	15	0.000	MSFC	SS	MSFC/	Aeron	Norror	-	Norror
1965-465	2438656.24	1965 Apr 7 1700	Cajun Dart	-	16	0.000	MSFC	SS	MSFC/	Aeron	Norror	-	Norror
1965-466	2438666.24	1965 Apr 14 1744	Cajun Dart	-	17	0.000	MSFC	SS	MSFC/	Aeron	Norror	-	Norror
1965-467	2438666.24	1965 Apr 17 1700	Cajun Dart	-	?	0.000	MSFC	SS	MSFC/	Aeron	Norror	-	Norror
1965-468	2438672.22	1965 Apr 21 1715	Cajun Dart	-	17	0.000	MSFC	SS	MSFC/	Aeron	Norror	-	Norror
1965-469	2438676.50	1965 May 12 1900	Cajun Dart	-	18	0.000	MSFC	SS	MSFC/	Aeron	Norror	-	Norror
1965-472	2438693.29	1965 May 26 1700	Cajun Dart	-	19	0.000	MSFC	SS	MSFC/	Aeron	Norror	-	Norror
1965-472	2438697.21	1965 Jun 2 1700	Cajun Dart	-	20	0.000	MSFC	SS	MSFC/	Aeron	Norror	-	Norror
1965-479	2438914.21	1965 Jun 2 1700	Cajun Dart	-	21	0.000	MSFC	SS	MSFC/	Aeron	Norror	-	Norror
1965-480	2438923.21	1965 Jun 11 1700	Cajun Dart	-	22	0.000	MSFC	SS	MSFC/	Aeron	Norror	-	Norror
1965-482	2438928.25	1965 Jun 16 1900	Cajun Dart	-	23	0.000	MSFC	SS	MSFC/	Aeron	Norror	-	Norror
1965-485	2438956.23	1965 Jun 23 1723	Cajun Dart	-	24	0.000	MSFC	SS	MSFC/	Aeron	Norror	-	Norror
1965-492	2438942.13	1965 Jun 30 1503	Cajun Dart	-	25	0.000	MSFC	SS	MSFC/	Aeron	Norror	-	Norror
1965-495	2438949.12	1965 Jul 1 1900	Cajun Dart	-	26	0.000	MSFC	SS	MSFC/	Aeron	Norror	-	Norror
1965-496	2438956.21	1965 Jul 14 1709	Cajun Dart	-	27	0.000	MSFC	SF	MSFC/	Aeron	Norror	-	Norror
1965-4101	2438965.24	1965 Jul 21 1700	Cajun Dart	-	28	0.000	MSFC	SS	MSFC/	Aeron	Norror	-	Norror
1965-4102	2438965.24	1965 Jul 23 1700	Cajun Dart	-	29	0.000	MSFC	SS	MSFC/	Aeron	Norror	-	Norror
1965-4103	2438960.08	1965 Jul 23 1700	Cajun Dart	-	30	0.000	MSFC	SU	MSFC/	Aeron	Norror	-	Norror
1965-4117	2438966.22	1965 Aug 18 1722:00	Cajun Dart	-	31	0.000	MSFC	SU	MSFC/	Aeron	Norror	-	Norror
1965-4119	2438966.22	1965 Aug 18 1700:00	Cajun Dart	-	32	0.000	MSFC	SU	MSFC/	Aeron	Norror	-	Norror
1965-4128	2438966.21	1965 Aug 25 1700:00	Cajun Dart	-	33	0.000	MSFC	SU	MSFC/	Aeron	Norror	-	Norror
1965-4129	2438966.21	1965 Aug 25 1700:00	Cajun Dart	-	34	0.000	MSFC	SU	MSFC/	Aeron	Norror	-	Norror
1965-4133	2439013.21	1965 Sep 01 1700:00	Cajun Dart	-	35	0.000	MSFC	SU	MSFC/	Aeron	Norror	-	Norror
1965-4134	2439021.21	1965 Sep 07 1700:00	Cajun Dart	-	36	0.000	MSFC	SU	MSFC/	Aeron	Norror	-	Norror
1965-4135	2439026.21	1965 Sep 17 1700:00	Cajun Dart	-	37	0.000	MSFC	SU	MSFC/	Aeron	Norror	-	Norror
1965-4136	2439033.21	1965 Sep 22 1600:00	Cajun Dart	-	38	0.000	MSFC	SU	MSFC/	Aeron	Norror	-	Norror
1965-4137	2439040.20	1965 Sep 28 1718:00	Cajun Dart	-	39	0.000	MSFC	SU	MSFC/	Aeron	Norror	-	Norror
1965-4147	2439046.50	1965 Oct 13	Cajun Dart	-	40	0.000	MSFC	SU	MSFC/	Aeron	Norror	-	Norror
1965-4150	2439054.31	1965 Oct 27 1700:00	Cajun Dart	-	41	0.000	MSFC	SU	MSFC/	Aeron	Norror	-	Norror
1965-4152	2439065.50	1965 Oct 31 1700:00	Cajun Dart	-	42	0.000	MSFC	SU	MSFC/	Aeron	Norror	-	Norror
1965-4161	2439072.50	1965 Nov 01 1700:00	Cajun Dart	-	43	0.000	MSFC	SU	MSFC/	Aeron	Norror	-	Norror
1965-4162	2439072.50	1965 Nov 08	Cajun Dart	-	44	0.000	MSFC	SU	MSFC/	Aeron	Norror	-	Norror
1965-4173	2439089.21	1965 Nov 24 1700:00	Cajun Dart	-	45	0.000	MSFC	SU	MSFC/	Aeron	Norror	-	Norror
1965-4174	2439094.21	1965 Nov 24 1700:00	Cajun Dart	-	46	0.000	MSFC	SU	MSFC/	Aeron	Norror	-	Norror
1965-4198	2439103.21	1965 Dec 08 1700:00	Cajun Dart	-	47	0.000	MSFC	SU	MSFC/	Aeron	Norror	-	Norror
1965-4203	2439112.21	1965 Dec 17 1700:00	Cajun Dart	-	48	0.000	MSFC	SU	MSFC/	Aeron	Norror	-	Norror
1965-4205	2439119.21	1965 Dec 22 1640:00	Cajun Dart	-	49	0.000	MSFC	SU	MSFC/	Aeron	Norror	-	Norror
1966-409	2439131.17	1966 Jan 5 1600	Cajun Dart	-	50	0.000	MSFC	SU	MSFC/	Aeron	Norror	-	Norror
1966-413	2439137.50	1966 Jan 12	Cajun Dart	-	51	0.000	MSFC	SU	MSFC/	Aeron	Norror	-	Norror
1966-420	2439144.50	1966 Jan 19	Cajun Dart	-	52	0.000	MSFC	SU	MSFC/	Aeron	Norror	-	Norror
1966-420	2439153.21	1966 Jan 27 1705:00	Cajun Dart	-	53	0.000	MSFC	SU	MSFC/	Aeron	Norror	-	Norror
1966-4143	2439167.50	1966 Feb 11	Cajun Dart	-	-	0.000	MSFC	SF	MSFC/	Aeron	TK-X-64758	-	-
1966-4165	2439175.50	1966 Feb 19	Cajun Dart	-	54	0.000	MSFC	SU	MSFC/	Aeron	Norror	-	Norror
1966-4188	2439179.96	1966 Feb 22 1100:00	Cajun Dart	-	55	0.000	MSFC	SU	MSFC/	Aeron	Norror	-	Norror
1966-4192	2439182.27	1966 Feb 25 1830:00	Cajun Dart	-	56	0.000	MSFC	SU	MSFC/	Aeron	Norror	-	Norror
1966-4195	2439183.26	1966 Feb 26 1812:00	Cajun Dart	-	57	0.000	MSFC	SU	MSFC/	Aeron	Norror	-	Norror
1966-4198	2439230.50	1966 Mar 15	Cajun Dart	-	58	0.000	MSFC	SU	MSFC/	Aeron	Norror	-	Norror
1966-4198	2439230.50	1966 Mar 15	Cajun Dart	-	59	0.000	MSFC	SU	MSFC/	Aeron	Norror	-	Norror
1966-4228	2439250.50	1966 Mar 16	Cajun Dart	-	60	0.000	MSFC	SU	MSFC/	Aeron	Norror	-	Norror
1966-4228	2439250.50	1966 Mar 16	Cajun Dart	-	61	0.000	MSFC	SU	MSFC/	Aeron	Norror	-	Norror
1966-4235	2439292.50	1966 Jun 16	Cajun Dart	-	-	0.000	NOL	SS	NOL/	Aeron	CR-61175	-	CR-61175
1966-4235	2439292.50	1966 Jun 16	Cajun Dart	-	-	0.000	NOL	SS	NOL/	Aeron	CR-61175	-	CR-61175
1966-4277	2439304.50	1966 Jun 28	Cajun Dart	-	-	0.000	NOL	SS	NOL/	Aeron	CR-61175	-	CR-61175
1966-4298	2439310.50	1966 Jul 04	Cajun Dart	-	57	0.000	MSFC	SU	MSFC/	Aeron	TK-X-64758	-	-
1966-4144	2439312.20	1966 Jul 5 1645	Cajun Dart	-	58	0.000	MSFC	SU	MSFC/	Aeron	Norror	-	Norror
1966-4289	2439312.20	1966 Jul 06	Cajun Dart	-	59	0.000	MSFC	SU	MSFC/	Aeron	Norror	-	Norror
1966-4398	2439362.19	1966 Aug 24 1630:00	Cajun Dart	-	60	0.000	MSFC	SU	MSFC/	Aeron	Norror	-	Norror
1966-4399	2439363.30	1966 Aug 25 1908:00	Cajun Dart	-	61	0.000	MSFC	SU	MSFC/	Aeron	Norror	-	Norror
1967-434	2439514.84	1967 Jan 24 0806:00	Cajun Dart	-	-	0.000	MSFC	SU	MSFC/	Aeron	Norror	-	Norror
1967-459	2439559.50	1967 Mar 10	Cajun Dart	-	-	0.000	MSFC	SS	MSFC/	Aeron	SP-219	-	-
1967-4145	2439607.50	1967 Mar 27	Cajun Dart	-	?	0.000	MSMR	MS	USM/	Radar targets	COBMD	-	-
1967-4214	2439803.04	1967 Nov 08 1300:00	Cajun Dart	-	-	0.000	MSFC?	SU	MSFC/	Aeron	Norror	-	Norror

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	OrbPay	Agency	Launch_Code	Group	Category	LTCite	Cite	Notes
1967-4215	2439804.10	1967 Nov 09 14:30:00	CaJun Dart	-	-	0.000	MSFC?	SU	MSFC/	Aeron	WDCRF	-	-
1968-430	2439878.58	1968 Jan 23 02:00:00	CaJun Dart	-	-	0.000	MSFC?	SU	MSFC/	Aeron	WDCRF	-	-
1968-463	2439951.29	1968 Apr 04 18:51:00	CaJun Dart	-	-	0.000	MSFC?	SU	MSFC/	Aeron	WDCRF	-	-
1968-A125	2440037.50	1968 Jul?	CaJun	-	-	0.000	PRR	SS	PRR/	Test	PRRlist68	-	-
1968-A126	2440129.50	1968 Oct?	CaJun	-	-	0.000	PRR	SS	PRR/	Test	PRRlist68	-	-
1968-A127	2440129.50	1968 Oct?	CaJun	-	-	0.000	PRR	SS	PRR/	Test	PRRlist68	-	-
1968-A128	2440129.50	1968 Oct?	CaJun	-	-	0.000	PRR	SS	PRR/	Test	PRRlist68	-	-
1968-A129	2440160.50	1968 Nov?	CaJun	-	-	0.000	PRR	SS	PRR/	Test	PRRlist68	-	-
1968-A130	2440160.50	1968 Nov?	CaJun	-	-	0.000	PRR	SS	PRR/	Test	PRRlist68	-	-
1968-A131	2440160.50	1968 Nov?	CaJun	-	-	0.000	PRR	SS	PRR/	Test	PRRlist68	-	-
1968-A131	2440141.33	1968 Oct 11 20:01:00	CaJun Dart	-	-	0.000	MSFC?	SU	MSFC/	Aeron	WDCRF	-	-
1968-4228	2440181.32	1968 Nov 20 19:41:00	CaJun Dart	-	-	0.000	MSFC?	SU	MSFC/	Aeron	WDCRF	-	-
1968-4245	2440181.32	1970 Mar 19 17:07:00	CaJun Dart	-	-	0.000	MSFC?	SU	MSFC/	Aeron	WDCRF	-	-
1970-4420	2440666.21	1970 Mar 20 17:00:00	CaJun Dart	-	-	0.000	MSFC?	SU	MSFC/	Aeron	WDCRF	-	-
1970-4425	2440666.21	1970 Mar 23 16:00:00	CaJun Dart	-	-	0.000	MSFC?	SU	MSFC/	Aeron	WDCRF	-	-
1970-4431	2440669.17	1970 Mar 25 16:00:00	CaJun Dart	-	-	0.000	MSFC?	SU	MSFC/	Aeron	WDCRF	-	-
1970-4444	2440671.17	1970 Mar 26 16:00:00	CaJun Dart	-	-	0.000	MSFC?	SU	MSFC/	Aeron	WDCRF	-	-
1970-4531	2440671.50	1970 Mar 27 17:00:00	CaJun Dart	-	-	0.000	MSFC?	SU	MSFC/	Aeron	WDCRF	-	-
1970-4457	2440673.21	1970 Mar 30 17:00:00	CaJun Dart	-	-	0.000	MSFC?	SU	MSFC/	Aeron	WDCRF	-	-
1970-4532	2440675.50	1970 Mar 31 17:00:00	CaJun Dart	-	-	0.000	MSFC?	SU	MSFC/	Aeron	WDCRF	-	-
1970-4466	2440677.50	1970 Apr 1	CaJun Dart	-	-	0.000	MSFC?	SU	MSFC/	Aeron	WDCRF	-	-
1970-4534	2440678.50	1970 Apr 2	CaJun Dart	-	-	0.000	MSFC?	SU	MSFC/	Aeron	WDCRF	-	-
1970-4535	2440679.50	1970 Apr 3	CaJun Dart	-	-	0.000	MSFC?	SU	MSFC/	Aeron	WDCRF	-	-
1970-4493	2440683.21	1970 Apr 06 17:00:00	CaJun Dart	-	-	0.000	MSFC?	SS	MSFC/	Aeron	WDCRF	-	-
1970-4499	2440684.14	1970 Apr 07 15:25:00	CaJun Dart	-	-	0.000	MSFC?	SU	MSFC/	Aeron	WDCRF	-	-
1970-4504	2440686.21	1970 Apr 08 17:00:00	CaJun Dart	-	-	0.000	MSFC?	SU	MSFC/	Aeron	WDCRF	-	-
1970-4512	2440686.21	1970 Apr 09 17:00:00	CaJun Dart	-	-	0.000	MSFC?	SU	MSFC/	Aeron	WDCRF	-	-
1970-4536	2440688.50	1970 Apr 13	CaJun Dart	-	-	0.000	MSFC?	SU	MSFC/	Aeron	WDCRF	-	-
1970-4537	2440690.50	1970 Apr 14	CaJun Dart	-	-	0.000	MSFC?	SS	MSFC/	Aeron	WDCRF	-	-
1970-4544	2440692.21	1970 Apr 15 17:00:00	CaJun Dart	-	-	0.000	MSFC?	SU	MSFC/	Aeron	WDCRF	-	-
1970-4554	2440693.21	1970 Apr 16 17:00:00	CaJun Dart	-	-	0.000	MSFC?	SU	MSFC/	Aeron	WDCRF	-	-
1970-4560	2440694.21	1970 Apr 17 17:00:00	CaJun Dart	-	-	0.000	MSFC?	SU	MSFC/	Aeron	WDCRF	-	-
1970-4570	2440697.21	1970 Apr 20 17:00:00	CaJun Dart	-	-	0.000	MSFC?	SU	MSFC/	Aeron	WDCRF	-	-



Launch

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Mission	FlightCode	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee_Km	Range_Km	Dest
2002-051	2452595_44	2002 Nov 20 22:39:00	Delta 4H+(4,2)	-	D4-1/D2893	Eutelsat W5	Eutelsat W5	-	-	CC	SLC37B	-	-	35977	-	-
2003-008	2452705_54	2003 Mar 11 00:39:00	Delta 4H	-	D4-2/D2896/1IABS-10	USA 167 (USCS 3A-3)	USA 170 (USCS 3B-6)	-	-	CC	SLC37B	-	-	35970	-	-
2003-040	2452881_47	2003 Aug 29 23:13:00	Delta 4H	-	D4-3/D3001/1IABS-7	USA 170 (USCS 3B-6)	USA 170 (USCS 3B-6)	-	-	CC	SLC37B	-	-	36226	-	-
2004-050	2453361_41	2004 Dec 21 21:00:00	Delta 4H	-	D4-4/D3010	Demosat	Demosat	-	-	CC	SLC37B	-	-	36924	-	-
2006-018	2453890_42	2006 May 24 22:11:00	Delta 4H+(4,2)	-	D4-6/D3035	GSES N	GSES N	-	-	CC	SLC37B	-	-	35918	-	-
2006-027	2453914_65	2006 Jun 28 03:33:00	Delta 4H+(4,2)	-	D4-6/D3037	USA 184 [SRI1]	USA 191 (ONSP 17)	MDL-22	-	VS	SLC6	-	-	39944	-	-
2006-050	2454044_08	2006 Nov 4 1:35:00	Delta 4H	-	D4-7/D3020	USA 191 (ONSP 17)	USA 197 (ONSP 23)	-	-	VS	SLC6	-	-	862	-	-
2007-054	2454415_58	2007 Nov 11 01:50:00	Delta 4H	-	D4-8/D3029	USA 197 (ONSP 23)	USA 202 [RH10]	-	-	CC	SLC37B	-	-	38231	-	-
2009-001	2454843_62	2009 Jan 18 02:47:00	Delta 4H	-	D4-9/D3037	GSES 0	GSES 0	MDL-26	-	CC	SLC37B	-	-	38200	-	-
2009-033	2455010_45	2009 Jun 27 22:51:00	Delta 4H+(4,2)	-	D4-11/D3042	Wideband Global Satcom 3	Wideband Global Satcom 3	-	-	CC	SLC37B	-	-	35943	-	-
2009-068	2455174_57	2009 Dec 6 04:47:00	Delta 4H+(4,2)	-	D4-11/D3046	GSES P	GSES P	-	-	CC	SLC37B	-	-	35943	-	-
2010-008	2455260_50	2010 Mar 4 2:35:00	Delta 4H+(4,2)	-	D4-12/D3048	GSES IIF SV-1	GSES IIF SV-1	-	-	CC	SLC37B	-	-	62374	-	-
2010-022	2455344_62	2010 May 28 03:00:00	Delta 4H+(4,2)	-	D4-13/D3049	USA 223 [RH11]	USA 224 [LC]	MDL-32	-	CC	SLC37B	-	-	43343	-	-
2010-063	2455522_46	2010 Nov 21 22:38:00	Delta 4H+(4,2)	-	D4-14/D3051	USA 224 [LC]	USA 227 [SBS17]	MDL-49	-	CC	SLC37B	-	-	21747	-	-
2011-002	2455552_38	2011 Jan 20 21:10:30	Delta 4H	-	D4-15/D3052	GSES IIF SV-2	GSES IIF SV-2	MDL-27	-	CC	SLC37B	-	-	36015	-	-
2011-011	2455552_48	2011 Mar 11 23:38:00	Delta 4H+(4,2)	-	D4-17/D3055	GSES IIF SV-2	GSES IIF SV-2	-	-	CC	SLC37B	-	-	37943	-	-
2011-036	2455758_78	2011 Jul 16 09:41:00	Delta 4H+(4,2)	-	D4-17/D3056	WGS 4	WGS 4	-	-	CC	SLC37B	-	-	22171	-	-
2012-003	2455946_53	2012 Jan 20 00:38:00	Delta 4H+(4,2)	-	D4-18/D3058	USA 234	USA 234	MDL-25 ELECTRA	-	VS	SLC6	-	-	66739	-	-
2012-004	2456021_47	2012 Apr 3 23:12:57	Delta 4H+(4,2)	-	D4-19/D3060	USA 237 [RH12]	USA 237 [RH12]	MDL-15	-	CC	SLC37B	-	-	1110	-	-
2012-034	2456108_05	2012 Jun 29 13:15:00	Delta 4H	A	D4-20/D3060	GSES IIF SV-3	GSES IIF SV-3	-	-	CC	SLC37B	-	-	36100	-	-
2012-053	2456205_01	2012 Oct 4 12:10:00	Delta 4H+(4,2)	-	D4-21/D3061	WGS 5	WGS 5	-	-	CC	SLC37B	-	-	22016	-	-
2013-024	2456347_52	2013 May 25 00:27:00	Delta 4H+(4,2)	-	D4-22/D3062	WGS 6	WGS 6	-	-	CC	SLC37B	-	-	66751	-	-
2013-043	2456533_25	2013 Aug 28 18:03:00	Delta 4H+(4,2)	-	D4-23/D3063	USA 245 [LC]	USA 245 [LC]	MDL-65	-	VS	SLC6	-	-	1089	-	-
2014-008	2456709_58	2014 Feb 21 01:59:00	Delta 4H+(4,2)	-	D4-24/D3064	GSES IIF SV-4	GSES IIF SV-4	-	-	CC	SLC37B	-	-	20226	-	-
2014-026	2456794_50	2014 May 17 00:03:00	Delta 4H+(4,2)	-	D4-25/D3066	GSES IIF SV-4	GSES IIF SV-4	-	-	CC	SLC37B	-	-	21730	-	-
2014-043	2456861_48	2014 Jul 26 23:28:00	Delta 4H+(4,2)	-	D4-26/D3066	AFSPC-4	AFSPC-4	-	-	CC	SLC37B	-	-	36941	-	-
2014-077	2456997_00	2014 Dec 5 12:05:00	Delta 4H	-	D4-27/D3068	Orion EFT-1	Orion EFT-1	AFSPC-4	-	CC	SLC37B	-	-	5794	-	-
2015-013	2457107_27	2015 Mar 25 18:36:00	Delta 4H+(4,2)	-	D4-28/D3069	GSES IIF-7	GSES IIF-7	-	-	CC	SLC37B	-	-	20959	-	-
2015-036	2457221_50	2015 Jul 24 00:07:00	Delta 4H+(4,2)	A	D4-29/D3071	WGS 7	WGS 7	-	-	CC	SLC37B	-	-	1111	-	-
2016-010	2457428_99	2016 Feb 10 11:40:32	Delta 4H+(4,2)	A	D4-30/D3072	USA 267	USA 267	MDL-45	-	VS	SLC6	-	-	66801	-	-
2016-056	2457551_24	2016 Jun 11 17:51:00	Delta 4H	A	D4-31/D3074	USA 268	USA 268	MDL-37	-	CC	SLC37B	-	-	36096	-	-
2016-052	2457519_70	2016 Aug 19 04:52:00	Delta 4H+(4,2)	A	D4-32/D3074	AFSPC-6	AFSPC-6	-	-	CC	SLC37B	-	-	39620	-	-
2016-075	2457730_50	2016 Dec 7 2:35:00	Delta 4H+(4,2)	A	D4-33/D3076	WGS 8	WGS 8	AFSPC-6	-	CC	SLC37B	-	-	46142	-	-
2017-016	2457730_51	2017 Mar 19 00:18:00	Delta 4H+(4,2)	A	D4-34/D3076	WGS 9	WGS 9	-	-	CC	SLC37B	-	-	46183	-	-
2018-005	2458131_52	2018 Aug 12 07:31:00	Delta 4H+(4,2)	A	D4-35/D3079	USA 281	USA 281	MDL-47 PERSEUS	-	VS	SLC6	-	-	1085	-	-
2018-004	2458594_81	2018 Jun 12 22:11:00	Delta 4H/Star 48BV	A	D4-35/D3079	Iranian Solar Probe	Iranian Solar Probe	-	-	VS	SLC37B	-	-	150000	-	-
2019-004	2458594_80	2019 Jan 19 19:10:00	Delta 4H+(4,2)	A	D4-36/D3082	WGS 10	WGS 10	MDL-71	-	VS	SLC6	-	-	46382	-	-
2019-014	2458710_52	2019 Mar 16 09:28:00	Delta 4H+(4,2)	A	D4-37/D3083	GSES IIF SV02	GSES IIF SV02	-	-	CC	SLC37B	-	-	46382	-	-
2019-066	2458710_55	2019 Apr 22 13:06:00	Delta 4H+(4,2)	A	D4-41/D3084	USA 311	USA 311	MDL-44	-	CC	SLC37B	-	-	20282	-	-
2020-095	2459341_95	2020 Apr 11 01:07:00	Delta 4H	A	D4-42/D3086	USA 311	USA 311	MDL-82	-	CC	SLC37B	-	-	36470	-	-
2021-032	2459341_97	2021 Apr 26 02:00:00	Delta 4H	B	D4-43/D3086	Improved CRYSTAL?	Improved CRYSTAL?	-	-	VS	SLC6	-	-	767	-	-
2022-089	2460117_43	2022 Sep 24 02:25:30	Delta 4H	B	D4-44/D3086	USA 345	USA 345	MDL-81	-	VS	SLC6	-	-	-	-	-
2023-069	2460117_89	2023 Jun 22 09:18:00	Delta 4H	B	D4-44/D3086	ORION 11?	ORION 11?	MDL-68	-	CC	SLC37B	-	-	-	-	-
2024-067	2460410_20	2024 Apr 9 1:55:00	Delta 4H	B	D4-45/D3086	USA 353	USA 353	MDL-70	-	CC	SLC37B	-	-	-	-	-



Launch

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	OrbPay	Agency	Launch_Code	Group	Category	LTCite	Cite	Notes
2002-051	2452599.44	2002 Nov 20 2239:00	Delta 4H*(4,2)	-	D4-1/D293	3.170	BLS	OS	C	Sat GTD 0	Wire	-	-
2003-008	2452709.54	2003 Mar 11 0059:00	Delta 4H	-	D4-2/D296/1ABS-10	1.244	BLS	OS	CG/G	Sat GTD 0	Wire	-	-
2003-040	2452861.47	2003 Aug 29 2313:00	Delta 4H	-	D4-3/D301/1ABS-7	1.244	BLS	OS	CG/G	Sat GTD 0	Wire	-	-
2004-060	2453361.41	2004 Dec 21 2150:00	Delta 4H	-	D4-4/D310	6.025	BLS	OF45	CG/G	Sat GTD 0	Wire	-	-
2006-018	2453860.42	2006 May 24 2211:00	Delta 4H*(4,2)	-	D4-5/D315	3.209	BLS	OS	CG/G	Sat GTD 0	Wire	-	-
2006-027	2453914.65	2006 Jun 28 0333:00	Delta 4H*(4,2)	-	D4-6/D317	4.000	BLS	OS	CG/G	Sat MLD 0	Wire	-	-
2006-080	2454004.08	2006 Nov 4 1383:00	Delta 4H	-	D4-7/D320	4.000	BLS	OS	CG/G	Sat SSO D	Wire	-	-
2007-054	2454415.58	2007 Nov 11 0150:00	Delta 4H	-	D4-8/D329	2.349	ULAB	OS	CG/G	Sat GTD 0	Wire	-	-
2009-001	2454849.62	2009 Jan 18 0247:00	Delta 4H	-	D4-9/D337	5.000	ULAB	OS	CG/G	Sat GTD 0	Wire	-	-
2009-033	2455010.45	2009 Jun 27 2251:00	Delta 4H*(4,2)	-	D4-10/D342	3.209	ULAB	OS	CG/G	Sat GTD 0	Wire	-	-
2009-068	2455171.57	2009 Dec 6 0147:00	Delta 4H*(5,4)	-	D4-11/D346	5.768	ULAB	OS	CG/G	Sat STD 0	Wire	-	-
2010-008	2455260.50	2010 Mar 4 2357:00	Delta 4H*(4,2)	-	D4-12/D348	3.215	ULAB	OS	CG/G	Sat GTD 0	Wire	-	-
2010-022	2455344.62	2010 May 28 0300:00	Delta 4H*(4,2)	-	D4-13/D349	1.630	ULAB	OS	CG/G	Sat MED 0	Wire	-	-
2010-063	2455522.46	2010 Nov 21 2258:00	Delta 4H*(4,2)	-	D4-14/D351	5.000	ULAB	OS	CG/G	Sat GTD 0	Wire	-	-
2011-011	2455522.38	2011 Jan 20 2110:30	Delta 4H	-	D4-15/D352	4.000	ULAB	OS	CG/G	Sat SSO D	Wire	-	-
2011-011	2455522.48	2011 Mar 11 2338:00	Delta 4H*(4,2)	-	D4-16/D353	3.000	ULAB	OS	CG/G	Sat GTD 0	Wire	-	-
2011-036	2455758.78	2011 Jul 16 0641:00	Delta 4H*(4,2)	-	D4-17/D355	1.630	ULAB	OS	CG/G	Sat MED 0	Wire	-	-
2012-003	2455946.53	2012 Jan 20 0038:00	Delta 4H*(4,2)	-	D4-18/D358	5.768	ULAB	OS	CG/G	Sat STD 0	Wire	-	-
2012-014	2456021.47	2012 Apr 3 2312:57	Delta 4H*(5,4)	-	D4-19/D359	7.000	ULAB	OS	CG/G	Sat LEU D	Wire	-	-
2012-034	2456108.05	2012 Jun 29 1315:00	Delta 4H*(5,4)	-	D4-20/D360	6.500	ULAB	OS	CG/G	Sat GTD 0	Wire	-	-
2012-053	2456205.01	2012 Oct 4 1210:00	Delta 4H	A	D4-21/D361	1.630	ULAB	OS	CG/G	Sat MED 0	Wire	-	-
2012-054	2456347.52	2013 May 26 0027:00	Delta 4H*(4,2)	-	D4-22/D362	5.768	ULAB	OS	CG/G	Sat STD 0	Wire	-	-
2013-041	2456512.52	2013 Aug 6 0029:00	Delta 4H*(5,4)	-	D4-23/D363	5.768	ULAB	OS	CG/G	Sat SSO D	Wire	-	AF
2014-008	2456533.26	2013 Aug 28 1603:00	Delta 4H	-	D4-24/D364	14.000	ULAB	OS	CG/G	Sat SSO D	Wire	-	-
2014-008	2456709.58	2014 Feb 21 0159:00	Delta 4H*(4,2)	-	D4-25/D365	1.630	ULAB	OS	CG/G	Sat MED 0	Wire	-	-
2014-026	2456794.50	2014 May 17 0003:00	Delta 4H*(4,2)	-	D4-26/D366	1.630	ULAB	OS	CG/G	Sat MED 0	Wire	-	-
2014-043	2456867.46	2014 Jul 26 2328:00	Delta 4H*(4,2)	-	D4-27/D368	1.230	ULAB	OS	CG/G	Sat GTD 0	Wire	-	-
2014-077	2456957.00	2014 Dec 5 1205:00	Delta 4H	-	D4-28/D369	12.360	ULAB	OS	CG/G	Sat LEU D	Wire	-	-
2015-013	2457107.27	2015 Mar 25 1636:00	Delta 4H*(4,2)	-	D4-29/D371	1.630	ULAB	OS	CG/G	Sat MED 0	Wire	-	-
2015-036	2457227.50	2015 Jul 24 0007:00	Delta 4H*(5,4)	A	D4-30/D372	7.900	ULAB	OS	CG/G	Sat STD 0	Wire	-	-
2016-010	2457426.99	2016 Feb 10 1140:32	Delta 4H*(5,2)	A	D4-31/D373	7.000	ULAB	OS	CG/G	Sat LEU D	Wire	-	-
2016-036	2457551.24	2016 Jun 11 1751:00	Delta 4H	A	D4-32/D374	6.500	ULAB	OS	CG/G	Sat GTD 0	Wire	-	-
2016-052	2457619.70	2016 Aug 19 0452:00	Delta 4H*(4,2)	A	D4-33/D375	1.160	ULAB	OS	CG/G	Sat GTD 0	Wire	-	-
2016-075	2457730.50	2016 Dec 7 2353:00	Delta 4H*(5,4)	A	D4-34/D376	6.397	ULAB	OS	CG/G	Sat GTD 0	Wire	-	-
2017-016	2457831.51	2017 Mar 19 0018:00	Delta 4H*(5,4)	A	D4-35/D377	7.000	ULAB	OS	CG/G	Sat GTD 0	Wire	-	-
2018-005	2458131.42	2018 Jan 12 2211:00	Delta 4H*(5,2)	A	D4-36/D379	0.665	ULAB	OS	CG/G	Sat LEU EE	Wire	-	-
2018-065	2458542.81	2018 Aug 12 0731:00	Delta 4H	A	D4-37/D380	20.000	ULAB	OS	CG/G	Sat LEU D	Wire	-	-
2018-065	2458542.81	2018 Jan 19 1910:00	Delta 4H*(5,2)	A	D4-38/D382	6.000	ULAB	OS	CG/G	Sat LEU D	Wire	-	-
2018-065	2458542.81	2019 Jan 19 1910:00	Delta 4H*(5,2)	A	D4-39/D382	6.000	ULAB	OS	CG/G	Sat LEU D	Wire	-	-
2018-066	2458542.81	2019 Mar 16 1306:00	Delta 4H*(5,2)	A	D4-40/D384	4.400	ULAB	OS	CG/G	Sat RTD D	Wire	-	-
2019-056	2458718.05	2019 Aug 22 1306:00	Delta 4H	A	D4-41/D384	5.000	ULAB	OS	CG/G	Sat SSO D	Wire	-	-
2021-036	245934.95	2020 Dec 11 0047:00	Delta 4H	A	D4-42/D384	20.000	ULAB	OS	CG/G	Sat SSO D	Wire	-	-
2021-036	245934.95	2021 Apr 20 2047:00	Delta 4H	B	D4-43/D387	20.000	ULAB	OS	CG/G	Sat SSO D	Wire	-	-
2022-117	2459847.43	2022 Sep 24 2245:30	Delta 4H	B	D4-44/D388	5.000	ULAB	OS	CG/G	Sat SSO D	Wire	-	-
2023-069	2460117.69	2023 Jun 22 0918:00	Delta 4H	B	D4-45/D388	5.000	ULAB	OS	CG/G	Sat SSO D	Wire	-	-
2024-067	2460410.20	2024 Apr 9 1653:00	Delta 4H	B	D4-45/D389	5.000	ULAB	OS	CG/G	Sat SSO D	Wire	-	-



Launch

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Mission	FlightCode	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee Km	Range Km	Dest
1964-A199	2438394.50	1964	HABC	-	1	Test	-	-	-	W00	-	-	-	45?	-	-
1964-A200	2438394.50	1964?	HABC	-	2	Test	-	-	-	W00	-	-	-	45?	-	-
1965-A219	2438760.50	1965?	HABC	-	3	Test	-	-	-	W00	-	-	-	45?	-	-
1965-A220	2438760.50	1965?	HABC	-	4	Test	-	-	-	W00	-	-	-	45?	-	-
1966-A684	2439125.50	1966?	HABC	-	5	Test	-	-	-	W00	-	-	-	45?	-	-
1966-A685	2439125.50	1966	HABC	-	6	Test	-	-	-	W00	-	-	-	45?	-	-
1973-S322	2441955.50	1973 Q4	Lorikeet	-	-	-	-	-	-	W00	LK2	-	-	100?	-	-
1974-S01	2442125.62	1974 Mar 19 0300	Lorikeet	-	1002	-	-	-	-	W00	LK2	-	-	100?	-	-
1974-S02	2442047.50	1974?	Lorikeet Mk 2	-	-	-	-	-	-	W00	LK2	-	-	140?	-	-
1976-S419	2442832.48	1976 Feb 23 2330	Lorikeet Mk 2	-	2011	-	-	-	-	W00	LK2	-	-	118?	-	-
1976-S111	2442832.60	1976 Feb 24 0230	Lorikeet Mk 2	-	2013	-	-	-	-	W00	LK2	-	-	107	-	-
1976-S362	2442959.57	1976 Jun 30 0136	Lorikeet Mk 2	-	2012	-	-	-	-	W00	-	-	-	105	-	-
1976-S420	2442959.52	1976 Jun 30 0030	Lorikeet Mk 2	-	2015	-	-	-	-	W00	LK2	-	-	150	-	-
1976-S363	2443000.50	1976 Aug 10	Lorikeet	-	1002	Mass Spec	-	-	-	W00	-	-	-	140?	-	-
1976-S364	2443001.50	1976 Aug 11	Lorikeet	-	1003	Mass Spec	-	-	-	W00	-	-	-	140?	-	-
1976-S416	2443031.36	1976 Sep 9 2034	Lorikeet Mk 2	-	2005	-	-	-	-	W00	-	-	-	140	-	-





Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	DrbPay	Agency	Launch_Code	Group	Category	LTCite	Cite	Notes
1964-A199	2438394.50	1964	HAEC	-	1	0.000	WRE	AS	WRE/	Test	JBIS25.61	-	-
1964-A200	2438394.50	1964?	HAEC	-	2	0.000	WRE	AS	WRE/	Test	JBIS25.61	-	-
1965-A219	2438760.50	1965?	HAEC	-	3	0.000	WRE	AS	WRE/	Test	JBIS25.61	-	-
1965-A220	2438760.50	1965?	HAEC	-	4	0.000	WRE	AS	WRE/	Test	JBIS25.61	-	-
1966-A684	2439126.50	1966?	HAEC	-	5	0.000	WRE	AS	WRE/	Test	JBIS25.61	-	-
1966-A685	2439126.50	1966	HAEC	-	6	0.000	WRE	AS	WRE/	Test	JBIS25.61	-	-
1973-S322	2441985.50	1973 Q4	LoriKeet	-	-	0.000	WRE	SS	WRE/	Aeron?	FDC	Morton	-
1974-S01	2442126.62	1974 Mar 19 0300	LoriKeet	-	1002	0.000	WRE	SS	WRE/	Aeron?	FDC/Ulrich	Morton	-
1974-S02	2442047.50	1974?	LoriKeet	-	-	0.000	WRE	SS	WRE/	Aeron?	Morton	-	-
1976-S419	2442832.48	1976 Feb 23 2330	LoriKeet	Rk 2	2011	0.000	WRE	SS	WRE/	Aeron?	ADA051077	-	-
1976-S111	2442832.60	1976 Feb 24 0230	LoriKeet	Rk 2	2013	0.000	WRE	SS	WRE/	Aeron?	ADA051077	users.senet.com.au	-
1976-S362	2442989.57	1976 Jun 24 0230	LoriKeet	Rk 2	2012	0.000	WRE	SS	WRE/Lloyd	Ionos	WRE-TR1816	-	-
1976-S920	2442989.52	1976 Jun 30 0136	LoriKeet	Rk 2	2015	0.000	WRE	SS	WRE/	Aeron?	ADA051077	-	-
1976-S363	2443000.50	1976 Jun 30 0030	LoriKeet	Rk 2	2015	0.000	WRE	SS	WRE/	Aeron?	ADA051077	-	-
1976-S364	2443001.50	1976 Aug 10	LoriKeet	-	1003	0.000	WRE	SF	ADEL/Bibbo	Aeron	Bibbo10	-	-
1976-S416	2443031.36	1976 Sep 9 2034	LoriKeet	Rk 2	2005	0.000	WRE	SF	ADEL/Bibbo?	Aeron	FDC	-	-



Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Mission	FlightCode	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee km	Range km	Dest
2021-S09	2459230.50	2021 Jan 16	Dezful	-	-	-	-	-	-	GARM	-	-	-	200?	800?	Indian O.
2023-S27	2460085.50	2023 May 25?	Kheibar Shekan	?	-	-	Kheibar	-	-	SEY?	-	-	-	300?	2000	-
2024-S17	2460414.46	2024 Apr 13 2300?	Kheibar Shekan	?	-	-	-	-	-	IRAN	-	-	-	300?	2000	Israel
2024-S18	2460414.46	2024 Apr 13 2300?	Kheibar Shekan	?	(many)	-	-	-	-	IRAN	-	-	-	300?	2000	Israel
2024-S19	2460414.46	2024 Apr 13 2300?	Dezful	?	-	-	-	-	-	YEMEN	-	-	-	200?	1000?	Israel
2024-S20	2460414.46	2024 Apr 13 2300?	Dezful	?	-	-	-	-	-	IRAN	-	-	-	200?	1000?	Israel
2024-S66	2460685.19	2024 Oct 1 1630?	Fatah-1	-	(many)	-	-	-	-	SHIRK	-	-	-	200?	1000?	Israel
2024-S57	2460685.19	2024 Oct 1 1630?	Kheibar Shekan	?	(many)	-	-	-	-	SHIRK	-	-	-	200?	1000?	Israel
2024-S54	2460685.65	2024 Sep 15 0330	Kheibar Shekan?	?	-	-	-	-	-	SUMMA?	-	-	-	300?	2000?	Israel
2024-S72	2460622.50	2024 Nov 8	Kheibar Shekan?	?	-	-	-	-	-	SUMMA?	-	-	-	300?	2000?	Israel
2024-S73	2460625.50	2024 Nov 11	Kheibar Shekan?	?	-	-	-	-	-	SUMMA?	-	-	-	300?	2000?	Israel



Launch

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Agency	Launch_Code	Group	Category	LTCite	Cite	Notes
2021-S09	2459230.50	2021 Jan 16	Dezful	-	-	IR	MS	-	Test	twitter/inbarspace	-	-
2023-S27	2460089.50	2023 May 25?	Rheibar Shekan	?	-	IR	MS	-	Test	Wire	-	-
2024-S17	2460414.46	2024 Apr 13 2300?	Rheibar Shekan	?	-	IR	MS	-	Weapon	Wire	-	-
2024-S18	2460414.46	2024 Apr 13 2300?	Rheibar Shekan	?	(many)	IR	MS	-	Weapon	Wire	-	-
2024-S19	2460414.46	2024 Apr 13 2300?	Rheibar Shekan	?	-	IR	MS	-	Weapon	Wire	-	-
2024-S20	2460414.46	2024 Apr 13 2300?	Dezful	?	-	IR	MS	-	Weapon	Wire	-	-
2024-S26	2460686.19	2024 Oct 1 1630?	Fattah-1	-	(many)	IR	MS	-	Weapon	Wire	-	-
2024-S56	2460686.19	2024 Oct 1 1630?	Rheibar Shekan	?	-	IR	MS	-	Weapon	Wire	-	-
2024-S57	2460686.19	2024 Oct 1 1630?	Rheibar Shekan?	?	(many)	IR	MS	-	Weapon	Wire	-	-
2024-S54	2460686.65	2024 Sep 15 0330	Rheibar Shekan?	?	-	ANSAL	MS	-	Weapon	Wire	-	-
2024-S72	2460622.50	2024 Nov 8	Rheibar Shekan?	?	-	ANSAL	MS	-	Weapon	Wire	-	-
2024-S73	2460625.50	2024 Nov 11	Rheibar Shekan?	?	-	ANSAL	MS	-	Weapon	Wire	-	-



Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Mission	Launch_FlightCode	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee_Km	Range_Km	Dest
1984-428	2446915.50	1984 Aug 3	Dolphin	-	-	-	-	-	-	WTR	SCL LP3	-	-	0?	-	-





Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	OrbPay	Agency	Launch_Code	Group	Category	LTCite	Cite	Notes
1984-428	2446915.50	1984 Aug 3	Dolphin	-	-	0.000	STST	SF	STST/ordah1	Test	ANST840813-20	ANST840625-166	-



Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Mission	Launch	FlightCode	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee km	Range km	Dest
2015-403	2457149_04	2015 May 6 1300:00	Dragon V2	-	1	Pad Abort	-	-	-	-	CC	SLC40	-	-	1	1	CC



Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Day	Agency	Launch_Code	Group	Category	LTCite	Cite	Notes
2015-A03	2457149-04	2015 May 6 1300:00	Dragon V2	-	1	0.000	SPX	AS	SPX/	Test	Wire	-	-



Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Mission	FlightCode	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee km	Range km	Dest
1970-001	2440850.52	1970 Sep 21 0743	E-8-5 VA	-	No. 406	Lunar-16	VA	-	-	FEC	KT-406	-	-	-	-	-
1972-001	2441370.46	1972 Feb 22 2258	E-8-5 VA	-	No. 408	Lunar-20	VA	-	-	AFC	KT-408	-	-	-	-	-
1976-001	2443009.73	1976 Aug 19 0525	E-8-5 VA	-	No. 413	Lunar-24	VA	-	-	CKL24	KT-413	-	-	-	-	-





Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Launch			Group	Category	LTCite	Cite	Notes
						Agency	Launch_Code	OrbPay					
1970-001	2440850.82	1970 Sep 21 0743	E-8-5 VA	-	No. 406	NPDL	XS	G	Sat XD	JCH	-	-	
1972-001	2441370.46	1972 Feb 22 2258	E-8-5 VA	-	No. 408	NPDL	XS	G	Sat XD	JCH	-	-	
1976-001	2443009.73	1976 Aug 19 0525	E-8-5 VA	-	No. 413	NPDL	XS	G	Sat XD	JCH	-	-	



Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Mission	Launch_Site	Platform	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee_Km	Range_Km	Dest
2017-F02	2457898.68	2017 May 25 04:20:00	Electron	-	1	It's A Test	-	MARIA	-	LCIA	-	-	224	-	-
2018-010	2458139.57	2018 Jan 21 01:43	Electron	-	3	Still Testing	Electron 02 Rideshare	MARIA	-	LCIA	-	-	536	-	-
2018-088	2458433.66	2018 Nov 11 03:50	Electron	-	3	It's Business Time	Electron 03 Rideshare	MARIA	-	LCIA	-	-	520	-	-
2018-104	2458468.77	2018 Dec 18 06:53	Electron	-	4	This One's For Pickering	Electron 04 Rideshare	MARIA	-	LCIA	-	-	441	-	-
2019-016	2458571.48	2019 Mar 28 23:27	Electron	-	5	Two Thumbs Up	R3D2	MARIA	-	LCIA	-	-	515	-	-
2019-026	2458608.75	2019 May 5 06:00	Electron	-	6	T.A.Funny Looking Cactus	STP 2TRD	MARIA	-	LCIA	-	-	465	-	-
2019-037	2458663.69	2019 Jun 29 04:30	Electron	-	7	Make It Rain	BlackSky Global 3	MARIA	-	LCIA	-	-	588	-	-
2019-054	2458715.01	2019 Aug 19 12:12	Electron	-	8	Look Ma No Hands	BlackSky Global 4	MARIA	-	LCIA	-	-	1224	-	-
2019-069	2458773.56	2019 Oct 17 01:22	Electron	-	9	As The Crow Flies	Pallisade	MARIA	-	LCIA	-	-	416	-	-
2019-084	2458823.85	2019 Dec 6 08:18	Electron	-	10	Running out of Fingers	Electron 10 Rideshare	MARIA	-	LCIA	-	-	596	-	-
2020-007	2458879.62	2020 Jan 31 02:56	Electron	-	11	Birds of a Feather	MDL-151	MARIA	-	LCIA	-	-	604	-	-
2020-037	2459013.72	2020 Jun 13 05:12:12	Electron	-	12	Don't Stop Me Now	NRD/ANDESITE/M2PF	MARIA	-	LCIA	-	-	195	-	-
2020-F05	2459035.39	2020 Jul 4 21:19:36	Electron	-	13	Pics of It Didn't Happen	Electron 13 Rideshare	MARIA	-	LCIA	-	-	546	-	-
2020-060	2459092.63	2020 Aug 31 03:06:47	Electron	-	14	I Can't Believe It's...	Sequoia	MARIA	-	LCIA	-	-	529	-	-
2020-077	2459151.39	2020 Oct 28 21:21:27	Electron	-	15	In Focus	Electron 15 Rideshare	MARIA	-	LCIA	-	-	551	-	-
2020-085	2459173.60	2020 Nov 20 02:20:01	Electron	-	16	Return To Sender	Electron 16 Rideshare	MARIA	-	LCIA	-	-	513	-	-
2020-098	2459196.92	2020 Dec 15 11:09:27	Electron	-	17	The Owl's Night Begins	Strix-Alpha	MARIA	-	LCIA	-	-	1218	-	-
2021-024	2459234.81	2021 Jan 20 07:26	Electron	-	18	Another One Leaves..	BIU GMS-1	MARIA	-	LCIA	-	-	589	-	-
2021-033	2459296.44	2021 Mar 22 23:20	Electron	-	19	They Go Up So Fast	Global-5/Fyathstone	MARIA	-	LCIA	-	-	136	-	-
2021-062	2459349.97	2021 May 15 11:11:39	Electron	-	20	Running out of Toots	Global-6/Global-9	MARIA	-	LCIA	-	-	611	-	-
2021-068	2459424.75	2021 Jul 29 06:00	Electron	-	21	It's a Little Chile Up!	Monolith	MARIA	-	LCIA	-	-	505	-	-
2021-106	2459535.57	2021 Nov 18 01:38	Electron	-	22	Love at First Insight	Global-14/Global-15	MARIA	-	LCIA	-	-	444	-	-
2021-120	2459587.50	2021 Dec 9 00:02:07	Electron	-	23	Data With Destiny	Strix Beta	MARIA	-	LCIA	-	-	613	-	-
2022-030	2459639.36	2022 Feb 28 23:57:26	Electron	-	24	Without Mission a Beat	Global-16/Global-17	MARIA	-	LCIA	-	-	469	-	-
2022-034	2459672.03	2022 Apr 2 15:41:56	Electron	-	25	There and Back Again	E-Space Demo	MARIA	-	LCIA	-	-	536	-	-
2022-047	2459702.45	2022 May 2 22:49:52	Electron	-	26	CAPSTONE	Electron 16 Rideshare	MARIA	-	LCIA	-	-	150000	-	-
2022-070	2459758.91	2022 Jun 28 09:55	Electron	L	27	Wise One Looks Ahead	Electron 16 Rideshare	MARIA	-	LCIA	-	-	595	-	-
2022-079	2459773.77	2022 Jul 13 06:50	Electron	-	28	Antipodean Adventures	MDL-162	MARIA	-	LCIA	-	-	643	-	-
2022-091	2459795.71	2022 Aug 4 05:00	Electron	-	29	The Owl Spreads Its Wings	MDL-199	MARIA	-	LCIA	-	-	589	-	-
2022-113	2459835.36	2022 Sep 15 23:38	Electron	-	30	It Argos From Up Here	Strix-1	MARIA	-	LCIA	-	-	569	-	-
2022-127	2459860.21	2022 Oct 7 17:07:21	Electron	-	31	Catch Me If You Can	Gazelle	MARIA	-	LCIA	-	-	-	-	-
2023-011	2459865.23	2022 Nov 4 17:27:14	Electron	-	32	VA is for Launch Lovers	HAWK 6	MARIA	-	LCIA	-	-	-	-	-
2023-035	2459893.46	2023 Jan 24 23:00:00	Electron	-	33	Stronger Together	Capella 9/10	MARS	-	Pad 0C	-	-	-	-	-
2023-041	2460021.89	2023 Mar 16 23:38:59	Electron	-	34	The Beat Goes On	Global-19/Global-5	MARS	-	Pad 0C	-	-	-	-	-
2023-055	2460074.54	2023 Mar 24 09:14:56	Electron	-	35	Rocket Like A Hurricane	Tropics SV05/SV06	MARIA	-	LCIA	-	-	-	-	-
2023-062	2460074.54	2023 May 8 01:00	Electron	-	36	Coming To A Storm Near Y	Tropics SV05/SV07	MARIA	-	LCIA	-	-	-	-	-
2023-073	2460093.66	2023 May 26 03:46	Electron	-	37	Scout's Arrow	Electron 39 Rideshare	MARS	-	Pad 0C	-	-	300?	-	-
2023-100	2460113.56	2023 Jun 16 01:24	HASTE	-	38	Baby Comes Back	Electron 39 Rideshare	MARS	-	Pad 0C	-	-	100?	-	-
2023-126	2460143.56	2023 Jun 16 01:24	Electron	-	39	We Love The Nightlife	Capella 11 Acadia-1	MARIA	-	LCIA	-	-	-	-	-
2023-128	2460150.49	2023 Aug 23 23:45	Electron	-	40	We Will Never Desert You	Capella 12 Acadia-2	MARIA	-	LCIA	-	-	-	-	-
2023-168	2460203.79	2023 Sep 15 06:55	Electron	-	41	The Moon God Awakens	GPS-SAR-5	MARIA	-	LCIA	-	-	-	-	-
2024-022	2460243.77	2023 Dec 15 03:56:54?	Electron	-	42	Four of a Kind	Lear SSA 1-4	MARIA	-	LCIA	-	-	-	-	-
2024-034	2460349.12	2024 Jan 31 04:34	Electron	-	43	On Closer Inspection	SRMS-3	MARIA	-	LCIA	-	-	-	-	-
2024-041	2460382.12	2024 Feb 18 14:52	Electron	-	44	MDL Might Long	SRMS-3	MARIA	-	LCIA	-	-	-	-	-
2024-077	2460390.81	2024 Mar 21 07:25	Electron	-	45	Live and Let Fly	MDL-123	MARS	-	Pad 0C	-	-	-	-	-
2024-098	2460434.44	2024 Apr 23 23:22	Electron	-	46	Beginning of the Swarm	MDL-123	MARS	-	Pad 0C	-	-	-	-	-
2024-108	2460455.82	2024 May 25 02:11	Electron	-	47	Ready, Aim, Pre-fire	PREFIRE-1	MARIA	-	LCIA	-	-	-	-	-
2024-114	2460462.26	2024 Jun 5 03:15	Electron	-	48	Pre-fire and Ice	PREFIRE-2	MARIA	-	LCIA	-	-	-	-	-
2024-140	2460482.26	2024 Jun 20 18:13	Electron	-	49	On Line Outdose for Owl	Kineis 1A-1E	MARIA	-	LCIA	-	-	-	-	-
2024-147	2460525.15	2024 Aug 11 13:18	Electron	-	50	A Sky Full of Stars	Strix-4	MARIA	-	LCIA	-	-	-	-	-
2024-172	2460534.06	2024 Aug 11 13:18	Electron	-	51	Kineis Killed the RadIOT	Capella 13 Acadia-3	MARIA	-	LCIA	-	-	-	-	-
2024-201	2460574.46	2024 Sep 20 23:01	Electron	-	52	Changes in Latitudes...	Capella 14 Acadia-2E	MARIA	-	LCIA	-	-	-	-	-
2024-202	2460574.46	2024 Sep 20 23:01	Electron	-	53	Changes in Latitudes...	E-Space Demo	MARIA	-	LCIA	-	-	-	-	-
2024-574	2460598.75	2024 Nov 5 10:54	Electron	-	54	HYPF0	MACH-TP-2	MARS	-	LCIA	-	-	-	-	-
2024-574	2460598.75	2024 Nov 24 06:00	HASTE	-	55	Ice AIS Baby	MACH-TP-2	MARS	-	Pad 0C	-	-	300?	-	22W 34M?
2024-219	2460639.66	2024 Nov 25 03:55	Electron	-	56	Ice AIS Baby	Kineis 3k-3E	MARIA	-	LCIA	-	-	-	-	-



Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	DrbPay	Agency	Launch_Code	Group	Category	LTCite	Cite	Notes
2017-F02	2457898.68	2017 May 25 04:20:00	Electron	-	1	0.020	RLAHN	0F	C	Sat LED 00	twitter.com	-	-
2018-010	2458139.57	2018 Jan 21 01:43	Electron	-	2	0.022	RLAHN	OS	C	Sat LED 00	twitter.com	-	-
2018-088	2458433.66	2018 Nov 11 03:50	Electron	-	3	0.125	RLAHN	OS	C	Sat LED 00	twitter.com	-	-
2018-104	2458468.77	2018 Dec 16 06:53	Electron	-	4	0.062	RLAHN	OS	C/G	Sat LED 00	Wire	-	-
2019-016	2458871.48	2019 Mar 28 23:27	Electron	-	5	0.160	RLAHN	OS	C/G	Sat LED 00	Wire	-	-
2019-026	2458868.75	2019 May 5 06:00	Electron	-	6	0.161	RLAHN	OS	C/G	Sat LED 00	Wire	-	-
2019-037	2458863.69	2019 Jun 29 04:30	Electron	-	7	0.066	RLAHN	OS	C	Sat LED 00	Wire	-	-
2019-054	2458715.01	2019 Aug 19 12:12	Electron	-	8	0.085	RLAHN	OS	C	Sat LED 00	Wire	-	-
2019-069	2458773.56	2019 Oct 17 01:22	Electron	-	9	0.040	RLAHN	OS	C	Sat LED 0L	Wire	-	-
2019-084	2458823.85	2019 Dec 6 08:18	Electron	-	10	0.080	RLAHN	OS	C	Sat SSD 00	Wire	-	-
2020-007	2458879.62	2020 Jan 31 02:56	Electron	-	11	0.150	RLAHN	OS	C/G	Sat LED 00	Wire	-	-
2020-037	2459013.72	2020 Jun 13 05:12:12	Electron	-	12	0.213	RLAHN	OS	C/G	Sat SSD 00	Wire	-	-
2020-F05	2459035.39	2020 Jul 4 21:19:36	Electron	-	13	0.103	RLAHN	0F	C	Sat SSD 00	Wire	-	-
2020-060	2459092.63	2020 Aug 31 03:05:47	Electron	-	14	0.150	RLAHN	OS	C	Sat SSD 00	Wire	-	-
2020-077	2459151.39	2020 Oct 28 21:21:27	Electron	-	15	0.066	RLAHN	OS	C	Sat SSD 00	Wire	-	-
2020-085	2459173.60	2020 Nov 20 02:20:01	Electron	-	16	0.063	RLAHN	OS	C	Sat SSD 00	Wire	-	-
2020-098	2459196.92	2020 Dec 15 10:09:27	Electron	-	17	0.150	RLAHN	OS	C	Sat SSD 00	Wire	-	-
2021-004	2459234.81	2021 Jan 20 07:26	Electron	-	18	0.060	RLAHN	OS	C	Sat LED 0L	Wire	-	-
2021-023	2459234.44	2021 Mar 22 23:30	Electron	-	19	0.153	RLAHN	OS	C	Sat LED 0L	Wire	-	-
2021-F02	2459343.97	2021 May 15 11:11:39	Electron	-	20	0.110	RLAHN	0F	C	Sat LED 0L	Wire	-	-
2021-106	2459356.57	2021 Nov 18 01:38	Electron	-	21	0.020	RLAHN	OS	C/G	Sat LED 00	Wire	-	-
2021-068	2459357.50	2021 Dec 9 00:02:07	Electron	-	22	0.130	RLAHN	OS	C	Sat LED OP 1	Wire	-	-
2021-120	2459359.36	2022 Feb 28 20:57:26	Electron	-	24	0.150	RLAHN	OS	C	Sat LED OP 1	Wire	-	-
2022-020	2459672.03	2022 Apr 2 14:1:56	Electron	-	25	0.130	RLAHN	OS	C	Sat SSD 0L	Wire	-	-
2022-034	2459702.45	2022 May 2 24:49:52	Electron	-	26	0.064	RLAHN	OS	C	Sat SSD 0L	Wire	-	-
2022-047	2459758.91	2022 Jun 28 09:55	Electron	L	27	0.325	RLAHN	OS	C/G	Sat SSD 00	Wire	-	-
2022-079	2459773.77	2022 Jul 13 06:30	Electron	-	28	0.100	RLAHN	OS	C/G	Sat LED 00	Wire	-	-
2022-091	2459795.71	2022 Aug 4 09:00	Electron	-	29	0.100	RLAHN	OS	C/G	Sat LED 00	Wire	-	-
2022-113	2459835.36	2022 Sep 15 20:38	Electron	-	30	0.150	RLAHN	OS	C	Sat SSD 00	Wire	-	-
2022-127	2459860.21	2022 Oct 7 17:09:21	Electron	-	31	0.118	RLAHN	OS	C	Sat SSD 0L	Wire	-	-
2022-147	2459885.23	2022 Nov 4 17:27:14	Electron	-	32	0.064	RLAHN	OS	C/0G	Sat SSD 0L	Wire	-	-
2023-011	2459963.46	2023 Jan 24 23:00:00	Electron	-	33	0.093	RLAHN	OS	C	Sat LED 0L	Wire	-	-
2023-035	2460020.44	2023 Mar 16 23:38:59	Electron	-	34	0.224	RLAHN	OS	C	Sat LED 0L	Wire	-	-
2023-041	2460027.89	2023 Mar 24 09:14:56	Electron	-	35	0.130	RLAHN	OS	C	Sat LED 0L	Wire	-	-
2023-052	2460072.54	2023 May 6 01:00	Electron	-	36	0.068	RLAHN	OS	C/G	Sat LED 00	Wire	-	-
2023-073	2460090.66	2023 May 28 03:46	Electron	-	37	0.068	RLAHN	OS	C/G	Hyperpersonc	youtube.com	-	-
2023-100	2460113.56	2023 Jun 18 01:24	HASTE	-	38	0.068	RLAHN	OS	C	Sat LED 00	Wire	-	-
2023-126	2460150.49	2023 Jul 8 01:27	Electron	-	39	0.068	RLAHN	OS	C	Sat LED 00	Wire	-	-
2023-F08	2460203.79	2023 Aug 23 23:45	Electron	-	40	0.180	RLAHN	OS	C	Sat LED 00	Wire	-	-
2023-108	2460203.77	2023 Sep 15 06:55	Electron	-	41	0.120	RLAHN	OS	C	Sat LED 00	Wire	-	-
2024-024	2460203.77	2023 Dec 15 04:55:54?	Electron	-	42	0.150	RLAHN	OS	C	Sat LED 00	Wire	-	-
2024-034	2460203.77	2024 Jan 31 04:34	Electron	-	43	0.150	RLAHN	OS	C	Sat LED 00	Wire	-	-
2024-047	2460203.12	2024 Feb 18 14:52	Electron	-	44	0.150	RLAHN	OS	C	Sat LED 00	Wire	-	-
2024-053	2460203.81	2024 Mar 11 15:03	Electron	-	45	0.130	RLAHN	OS	C/G	Sat SSD 00	Wire	-	-
2024-077	2460204.44	2024 Mar 21 07:25	Electron	-	47	0.130	RLAHN	OS	C/0G	Sat SSD 00	Wire	-	-
2024-089	2460455.82	2024 Apr 23 07:22	Electron	-	48	0.010	RLAHN	OS	C/G	Sat SSD 00	Wire	-	-
2024-108	2460465.62	2024 May 25 07:41	Electron	-	49	0.140	RLAHN	OS	C	Sat SSD 00	Wire	-	-
2024-114	2460482.26	2024 Jun 5 03:11	Electron	-	50	0.140	RLAHN	OS	C	Sat SSD 00	Wire	-	-
2024-137	2460525.15	2024 Jun 20 18:13	Electron	-	51	0.150	RLAHN	OS	C	Sat LED 00	Wire	-	-
2024-142	2460534.05	2024 Aug 11 13:18	Electron	-	52	0.180	RLAHN	OS	C	Sat LED 00	Wire	-	-
2024-172	2460574.46	2024 Sep 20 23:01	Electron	-	53	0.140	RLAHN	OS	C	Sat SSD 00	Wire	-	-
2024-201	2460574.46	2024 Sep 5 10:54	Electron	-	54	0.150	RLAHN	OS	C	Sat SSD 00	Wire	-	-
2024-572	2460538.75	2024 Nov 24 08:00	HASTE	-	55	0.000	RLAHN	SS	C/G	Hyperpersonc	youtube.com	-	-
2024-219	2460639.66	2024 Nov 25 03:55	Electron	-	56	0.140	RLAHN	OS	C	Sat SSD 00	Wire	-	-

Stage 2 electrical arc



Launch

Launch_Tag	Launch_ID	Launch_Date	L_V_Type	Variant	Flight_ID	Flight	Mission	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee_Km	Range_Km	Dest
1964-A86	2438563.50	1964 Jun 17	Emeraude VE121	-	No. 4	-	-	HMG	Brigitte	-	-	0?	-	-
1964-A89	2438572.50	1964 Jun 26	Emeraude VE121	-	No. 5	-	-	HMG	Brigitte	-	-	0?	-	-
1964-A155	2438688.50	1964 Oct 20	Emeraude VE121	-	No. 6	-	-	HMG	Brigitte	-	-	0?	-	-
1965-S106	2438818.50	1965 Feb 27	Emeraude VE121	-	No. 7	-	-	HMG	Brigitte	-	-	200?	-	-
1965-S269	2438832.50	1965 Mar 13	Emeraude VE121	-	No. 8	-	Dummy Topaze	HMG	Brigitte	-	-	200?	-	-
1965-S418	2438946.50	1965 Jul 5	Saphir VE231	-	P1	-	-	HMG	Brigitte	-	-	1000?	-	-
1965-M23	2438951.50	1965 Jul 10	Saphir VE231	-	P2	-	-	HMG	Brigitte	-	-	50?	-	-
1965-S546	2438942.50	1965 Oct 9	Saphir VE231	-	P3	-	-	HMG	Brigitte	-	-	1150	-	-
1965-S96	2438904.50	1965 Nov 26 1447:21	Diamant A	-	No. 1	A-1	A-1	HMG	Brigitte	-	-	1812	-	-
1966-013	2438173.86	1966 Feb 17 0833:36	Diamant A	-	No. 2	D-1A	Diapason D-1A	HMG	Brigitte	-	-	2803	-	-
1966-S162	2438197.50	1966 Mar 13	Saphir VE231	-	G1	-	-	HMG	Brigitte	-	-	1000?	-	-
1966-S174	2438202.50	1966 Mar 18	Saphir VE231	-	G2	-	-	HMG	Brigitte	-	-	1000?	-	-
1966-S194	2438212.50	1966 Mar 28	Saphir VE231	-	R2	-	-	HMG	Brigitte	-	-	1000?	-	-
1966-S210	2438220.50	1966 Apr 5	Saphir VE231	-	R1	-	-	HMG	Brigitte	-	-	1000?	-	-
1966-S529	2438299.50	1966 Jun 23	Saphir VE231	-	R4	-	-	HMG	Brigitte	-	-	1000?	-	-
1966-S529	2438403.50	1966 Jun 23	Saphir VE231	-	R3	-	-	HMG	Brigitte	-	-	1000?	-	-
1966-S570	2438426.50	1966 Oct 28	Saphir VE231	-	R3	-	-	HMG	Brigitte	-	-	1000?	-	-
1966-S580	2438431.50	1966 Nov 2	Saphir VE231	-	G4	-	-	HMG	Brigitte	-	-	1000?	-	-
1966-M45	2438461.50	1966 Dec 2	Saphir VE231	-	R5	-	-	HMG	Brigitte	-	-	50?	-	-
1966-S680	2438472.50	1966 Dec 13	Saphir VE231	-	R6	-	-	HMG	Brigitte	-	-	1000?	-	-
1967-S64	2438509.50	1967 Jan 19	Saphir VE231	-	G6	-	-	HMG	Brigitte	-	-	1000?	-	-
1967-S64	2438517.50	1967 Jan 27	Saphir VE231	-	G6	-	-	HMG	Brigitte	-	-	1000?	-	-
1967-011	2438529.50	1967 Feb 8 0939:39	Diamant A	-	No. 3	D-1C	Diademe D-1C	HMG	Brigitte	-	-	1447	-	-
1967-014	2438529.50	1967 Feb 15 1006:57	Diamant A	-	No. 4	D-1D	Diademe D-1D	HMG	Brigitte	-	-	1900	-	-
1970-017	2440656.01	1970 Mar 10 1220	Diamant B	-	No. 1	Mike/Wika	DIAL Wissenschaftliche K	HMG	Diamant	-	-	1673	-	-
1970-109	2440583.04	1970 Dec 12 1304:44	Diamant B	-	No. 2	Peole	Peole	CSG	Diamant	-	-	752	-	-
1971-050	2441056.69	1971 Apr 15 0919:37	Diamant B	-	No. 3	D-2A	D-2A	CSG	Diamant	-	-	702	-	-
1971-F14	2441291.18	1971 Dec 5 1620	Diamant B	-	No. 4	D-2A	D-2A	CSG	Diamant	-	-	300?	-	-
1973-002	2441323.67	1973 May 21 0847	Diamant B	-	No. 5	D-5A/D-5B	D-5A	CSG	Diamant	-	-	200?	-	-
1975-010	2442460.19	1975 Feb 6 1635	Diamant EP-4	-	No. 1	Scarlette	Scarlette	CSG	Diamant	-	-	1138	-	-
1975-039	2442549.94	1975 May 17 1032	Diamant EP-4	-	No. 2	D-5A/D-5B	D-5A	CSG	Diamant	-	-	1286	-	-
1975-092	2442662.86	1975 Sep 27 0837	Diamant EP-4	-	No. 3	D-2B	D-2B	CSG	Diamant	-	-	730	-	-





Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Orbpay	Agency	Launch_Code	Group	Category	LTcite	Cite	Notes
1964-A86	2438563.50	1964 Jun 17	Eneraude VE121	-	No. 4	0.000	CNES	MF	-	Test	NorddvJT	-	-
1964-A89	2438572.50	1964 Jun 26	Eneraude VE121	-	No. 5	0.000	CNES	MF	-	Test	NorddvJT	-	JT old: Jun 15
1964-A155	2438688.50	1964 Oct 20	Eneraude VE121	-	No. 6	0.000	CNES	MS	-	Test	NorddvJT	-	JT old: Jun 17
1965-S106	2438618.50	1965 Feb 27	Eneraude VE121	-	No. 7	0.000	CNES	MS	-	Test	NorddvJT	-	-
1965-S289	2438832.50	1965 Mar 13	Eneraude VE121	-	No. 8	0.000	CNES	MS	-	Test	NorddvJT	-	MR650531-11
1965-5418	2438946.50	1965 Jul 5	Saphir VE231	-	P1	0.000	ONERA	MS	-	Reentry Test	NorddvJT	-	Announced May 17
1965-W23	2438951.50	1965 Jul 10	Saphir VE231	-	P2	0.000	ONERA	MS	-	Reentry Test	NorddvJT	-	-
1965-S546	2439042.50	1965 Oct 9	Saphir VE231	-	P3	0.000	ONERA	MS	-	Reentry Test	NorddvJT	-	-
1965-096	2439091.12	1965 Nov 26 1447:21	Diamant A	-	No. 1	0.042	CNES	OS	G	Sat LED 0 1	Tizlou	-	-
1966-013	2439173.86	1966 Feb 17 0533:36	Diamant A	-	No. 2	0.019	CNES	OS	G	Sat LED 0	Tizlou	-	-
1966-S162	2439197.50	1966 Mar 13	Saphir VE231	-	G1	0.000	ONERA	MS	-	Reentry Test	Tizlou	-	-
1966-S174	2439202.50	1966 Mar 18	Saphir VE231	-	R2	0.000	ONERA	MS	-	Reentry Test	Tizlou	-	-
1966-S194	2439212.50	1966 Mar 28	Saphir VE231	-	R1	0.000	ONERA	MS	-	Reentry Test	Tizlou	-	-
1966-S210	2439220.50	1966 Apr 5	Saphir VE231	-	R4	0.000	ONERA	MS	-	Reentry Test	Tizlou	-	-
1966-S329	2439299.50	1966 Jun 23	Saphir VE231	-	R3	0.000	ONERA	MS	-	Reentry Test	NorddvJT	-	-
1966-S529	2439403.50	1966 Oct 5	Saphir VE231	-	G3	0.000	ONERA	MS	-	Reentry Test	NorddvJT	-	-
1966-S570	2439426.50	1966 Nov 2	Saphir VE231	-	G4	0.000	ONERA	MS	-	Reentry Test	NorddvJT	-	-
1966-S580	2439431.50	1966 Nov 2	Saphir VE231	-	R6	0.000	ONERA	MS	-	Reentry Test	NorddvJT	-	-
1966-W45	2439461.50	1966 Dec 2	Saphir VE231	-	R6	0.000	ONERA	MS	-	Reentry Test	NorddvJT	-	-
1966-S680	2439472.50	1966 Dec 13	Saphir VE231	-	R6	0.000	ONERA	MS	-	Reentry Test	NorddvJT	-	-
1967-S64	2439509.50	1967 Jan 19	Saphir VE231	-	G6	0.000	ONERA	MS	-	Reentry Test	NorddvJT	-	-
1967-S64	2439517.50	1967 Jan 27	Saphir VE231	-	G6	0.000	ONERA	MS	-	Reentry Test	NorddvJT	-	-
1967-011	2439529.90	1967 Feb 8 0939:39	Diamant A	-	No. 3	0.023	CNES	OS	G	Sat LED 0	Tizlou	-	-
1967-014	2439536.52	1967 Feb 15 1006:57	Diamant A	-	No. 4	0.023	CNES	OS	G	Sat LED 0	Tizlou	-	-
1970-017	2440696.01	1970 Mar 10 1220	Diamant B	-	No. 1	0.210	CNES	OS	G	Sat LED 0	LeHonde701213	-	-
1970-109	2440953.04	1970 Dec 12 1304:44	Diamant B	-	No. 2	0.057	CNES	OS	G	Sat LED 0	JCR	-	-
1971-030	2441056.89	1971 Apr 15 0919:37	Diamant B	-	No. 3	0.096	CNES	OS	G	Sat LED 0	JCR	-	-
1971-F14	2441291.18	1971 Dec 5 1620	Diamant B	-	No. 4	0.096	CNES	OF	G	Sat LED 0	LeHonde730522	-	-
1973-002	2441623.87	1973 May 21 0947	Diamant B	-	No. 5	0.106	CNES	OF	G	Sat LED 0	JCR	-	-
1975-010	2442460.19	1975 Feb 6 1635	Diamant BP-4	-	No. 1	0.048	CNES	OS	G	Sat LED 0 2	Falworth	-	-
1975-039	2442549.94	1975 May 17 1032	Diamant BP-4	-	No. 2	0.106	CNES	OS	G	Sat LED 0 2	Falworth	-	-
1975-092	2442662.86	1975 Sep 27 0537	Diamant BP-4	-	No. 3	0.107	CNES	OS	G	Sat LED 0 2	Falworth	-	-



Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Mission	LaunchCode	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee Km	Range Km	Deot
1963-W08	2438079-50	1963 Feb 19	Emma	-	Emma 05	-	-	-	-	HRC	-	-	-	60	-	-
1963-W09	2438080-50	1963 Feb 20	Emma	-	Emma 06	-	-	-	-	HRC	-	-	-	60	-	-
1963-A188	2438086-50	1963 Feb 26	Emma	-	Emma 02	-	-	-	-	HRC	-	-	-	32	-	-
1963-W10	2438088-50	1963 Feb 28	Emma	-	Emma 01	-	-	-	-	HRC	-	-	-	55	-	-
1963-W15	2438159-50	1963 May 10	Emma	-	Emma	-	-	-	-	HRC	-	-	-	18	-	-
1963-W16	2438159-50	1963 May 10	Emma	-	Emma	-	-	-	-	HRC	-	-	-	26	-	-
1963-W37	2438310-50	1963 Oct 8	Emma	-	Emma 03	-	-	-	-	HRC	-	-	-	2	-	-
1963-W38	2438312-50	1963 Oct 10	Emma	-	Emma 04	-	-	-	-	HRC	-	-	-	55	-	-



Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	OrbPay	Agency	Launch_Code	Group	Category	LTCite	Cite	Notes
1963-W08	2438079.50	1963 Feb 19	Emma	-	Emma 05	0.000	CNES	SS	MIF/Facy	Aeron	CNES	-	-
1963-W09	2438080.50	1963 Feb 20	Emma	-	Emma 06	0.000	CNES	SS	MIF/Facy	Aeron	CNES	-	-
1963-W188	2438086.50	1963 Feb 26	Emma	-	Emma 02	0.000	CNES	SS	MIF/Facy	Aeron	CNES	-	-
1963-W10	2438088.50	1963 Feb 28	Emma	-	Emma 01	0.000	CNES	SS	MIF/Facy	Aeron	CNES	-	-
1963-W15	2438159.50	1963 May 10	Emma	-	Emma	0.000	CNES	SS	MIF/Facy	Aeron	CNES	-	-
1963-W16	2438159.50	1963 May 10	Emma	-	Emma	0.000	CNES	SS	MIF/Facy	Aeron	CNES	-	-
1963-W37	2438310.50	1963 Oct 8	Emma	-	Emma 03	0.000	CNES	SF	MIF/Facy	Aeron	CNES	-	-
1963-W38	2438312.50	1963 Oct 10	Emma	-	Emma 04	0.000	CNES	SS	MIF/Facy	Aeron	CNES	-	-



Launch

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Mission	FlightCode	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee Km	Range Km	Dest
1987-001	2446931.23	1987 May 15 1730:01	EnergIya	-	L1506SL	Polyus	Skif-DM Tsh	-	-	MIP-5	LC260	-	-	155	-	-
1988-100	2447480.63	1988 Nov 15 0300:01	EnergIya/Buran	-	L1501L	Buran	Buran DK-1K No. 711 (K1)	-	-	MIP-5	LC110L	-	-	248	-	-





Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	OrbPay	Agency	Launch_Code	Group	Category	LTCite	Cite	Notes
1987-001	2446931.23	1987 May 15 1730:01	Energya	-	L15068L	70.000	UNKS	DF	G	Sat LED SA	Energya	-	[or: 1830?]
1988-100	2447480.63	1988 Nov 15 0300:01	Energya/Baren	-	L15011L	79.400	UNKS	DS	G	Sat LED SR	Energya	-	-



Launch

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Mission	FlightCode	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee km	Range km	Deet
2021-M10	2459652.12	2021 Nov 13 1449	Evo Space	-	-	Evolution Space ES1	Too Busy Chasing Stars	-	-	FAR	-	-	-	57	-	-
2023-S22	2460057.13	2023 Apr 22 1512	Evo Space	-	-	Evolution Space ES4	Gold Chain Cowboy	-	-	FAR	-	-	-	124	-	-
2024-A08	2460653.50	2024 Aug 31	Evo Space	-	-	Spaceport Co. Test	-	-	OIALT	PBLA	-	-	-	17	-	-



Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Launch Orbit	Agency	Launch_Code	Group	Category	LTCite	Cite	Notes
2021-H10	2459532.12	2021 Nov 13 1449	Evo Space	-	-	0.000	EVOL	SS	EVOL/	Test	Wire	-	-
2023-S22	2460057.13	2023 Apr 22 1512	Evo Space	-	-	0.000	EVOL	SS	EVOL/	Test	Wire	-	-
2024-A08	2460563.50	2024 Aug 31	Evo Space	-	-	0.000	SPUR/EVOL	AS	EVOL/	Test	evolutionospace.com	-	-



Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Mission	FlightCode	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee km	Range km	Dest
1999-S39	2451358.50	1999 Jun 29	Excalibur	-	-	TEM Target	-	-	-	FTB	MCG	-	-	100?	-	-
1999-S40	2451359.50	1999 Jun 30	Excalibur	-	-	TEM Target	-	-	-	FTB	MCG	-	-	100?	-	-
1999-S41	2451359.50	1999 Jun 30	Excalibur	-	-	TEM Target	-	-	-	FTB	MCG	-	-	100?	-	-
2000-S22	2451667.50	2000 May 3?	Excalibur	-	-	TEM Target	-	-	-	FTB	MCG	-	-	90?	-	-
2000-S23	2451668.50	2000 May 4?	Excalibur	-	-	TEM Target	-	-	-	FTB	MCG	-	-	90?	-	-
2000-S24	2451668.50	2000 May 4?	Excalibur	-	-	TEM Target	-	-	-	FTB	MCG	-	-	90?	-	-
2000-S25	2451668.50	2000 May 4?	Excalibur	-	-	TEM Target	-	-	-	FTB	MCG	-	-	90?	-	-
2000-S26	2451668.50	2000 May 4?	Excalibur	-	-	TEM Target	-	-	-	FTB	MCG	-	-	90?	-	-
2003-132	2452802.18	2003 Jun 11 1618:45	Excalibur	-	-	Mini-DUSTY MD-08	-	-	-	AMD	-	-	-	90?	-	-
2003-133	2452804.15	2003 Jun 13 1530:20	Excalibur	-	-	Mini-DUSTY MD-09	-	-	-	AMD	-	-	-	90?	-	-
2005-127	2453556.44	2005 Jun 4 2232	Excalibur	-	2	Mini-DUSTY MD-11	-	-	-	AMD	-	-	-	90?	-	-





Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Launch_Cost	Agency	Launch_Code	Group	Category	LTCite	Cite	Notes
1999-S39	2451358.50	1999 Jun 29	Excalibur	-	-	0.000	SMDC	MS	-	Target	Ulrich	coat.ncf.ca	-
1999-S40	2451359.50	1999 Jun 30	Excalibur	-	-	0.000	SMDC	MS	-	Target	Ulrich	coat.ncf.ca	-
1999-S41	2451359.50	1999 Jun 30	Excalibur	-	-	0.000	SMDC	MS	-	Target	Ulrich	coat.ncf.ca	-
2000-S22	2451667.50	2000 May 3?	Excalibur	-	-	0.000	SMDC	MS	-	Target	coat.ncf.ca	-	-
2000-S23	2451668.50	2000 May 4?	Excalibur	-	-	0.000	SMDC	MS	-	Target	coat.ncf.ca	-	-
2000-S24	2451668.50	2000 May 4?	Excalibur	-	-	0.000	SMDC	MS	-	Target	coat.ncf.ca	-	-
2000-S25	2451668.50	2000 May 4?	Excalibur	-	-	0.000	SMDC	MS	-	Target	coat.ncf.ca	-	-
2000-S26	2451668.50	2000 May 4?	Excalibur	-	-	0.000	SMDC	MS	-	Target	coat.ncf.ca	-	-
2003-S12	2452802.18	2003 Jun 11 1618:45	Excalibur	-	-	0.000	DLR	SS	TRON/	Aeron	ww.rocketrangle.no	-	-
2003-S13	2452804.15	2003 Jun 13 1530:20	Excalibur	-	-	0.000	DLR	SS	TRON/	Aeron	ww.rocketrangle.no	-	-
2005-S127	2459556.44	2005 Jul 4 2232	Excalibur	-	2	0.000	DLR	SS	TRON/	Aeron	ww.rocketrangle.no	-	-



Launch

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Mission	FlightCode	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee km	Range km	Dest
1946-A03	2431940.50	1946 May	FFAR	-	-	RM-5 Model	-	-	-	WI	-	-	-	57	-	-
1946-A08	2432001.50	1946 Jul	FFAR	-	-	RM-5 Model	-	-	-	WI	-	-	-	57	-	-
1947-A04	2432227.50	1947 Feb 11	FFAR	-	-	RM-10 Model	-	-	-	WI	-	-	-	57	-	-
1947-A09	2432303.50	1947 Apr 28	Double FFAR	-	-	RM-5 Model	-	-	-	WI	-	-	-	57	-	-
1947-A10	2432303.50	1947 Apr 28	FFAR	-	-	XF-91 Model	-	-	-	WI	-	-	-	57	-	-
1947-A32	2432503.50	1947 Nov 14	Double FFAR	-	-	D-569-II Model	-	-	-	WI	-	-	-	57	-	-
1964-A710	2435096.50	1964 Dec 20	FFAR	-	-	D37 Model	-	-	-	WI	-	-	-	57	-	-
1965-A465	2435335.50	1965 Aug 16	Rockair	-	-	-	-	F2H2-N	WAOVS	WAOVS	RM04/22	WI	LP1	9	-	-
1965-A04	2435335.50	1965 Aug 16	Rockair	-	-	-	-	F2H2-N	WAOVS	WAOVS	RM04/22	WI	LP1	55	-	-
1965-A05	2435335.50	1965 Aug 16?	Rockair	-	-	-	-	F2H2-N	WAOVS	WAOVS	RM04/22	WI	LP1	50	-	-
1965-A09	2435411.50	1965 Nov	Rockair	-	-	-	-	F2H2-N	WAOVS	WAOVS	RM04/22	WI	LP1	50	-	-
1965-M10	2435411.50	1965 Nov	Rockair	-	-	-	-	F2H2-N	WAOVS	WAOVS	RM04/22	WI	LP1	50	-	-
1969-A233	2440464.50	1969 Sep	FFAR	-	-	-	NUMAD Buoy launch	-	RES	RES	LP2	-	-	57	-	-
1998-A08	2451094.07	1998 Oct 7 1335:00	FFAR	-	-	-	-	-	-	ESR	-	-	-	57	-	-



Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Launch_OrbPay	Agency	Launch_Code	Group	Category	LTCite	Cite	Notes
1946-A03	2431940.50	1946 May	FFAR	-	-	0.000	PARD	AS	-	Test	RP-1028	-	-
1946-A08	2432001.50	1946 Jul	FFAR	-	-	0.000	PARD	AS	-	Test	RP-1028	-	-
1947-A04	2432227.50	1947 Feb 11	FFAR	-	-	0.000	PARD	AS	-	Test	RP-1028	-	-
1947-A09	2432303.50	1947 Apr 28	Double FFAR	-	-	0.000	PARD	AS	-	Test	RP-1028	-	-
1947-A10	2432303.50	1947 Apr 28	FFAR	-	-	0.000	PARD	AS	-	Test	RP-1028	-	-
1947-A32	2432503.50	1947 Nov 14	Double FFAR	-	-	0.000	PARD	AS	-	Test	RP-1028	-	-
1954-A710	2435096.50	1954 Dec 20	FFAR	-	-	0.000	PARD	AS	-	Test	RP-1028	-	-
1955-A465	2435335.50	1955 Aug 16	Rockair	-	-	0.000	BOER	SF	UMD/DNY/Singer, Roos	Test	Newell	-	-
1955-M04	2435335.50	1955 Aug 16	Rockair	-	-	0.000	BOER	SS	UMD/DNY/Singer, Roos	Test	Newell	-	-
1955-M05	2435335.50	1955 Aug 16	Rockair	-	-	0.000	BOER	SS	UMD/DNY/Singer, Roos	Test	Newell	-	-
1955-M09	2435411.50	1955 Aug 16?	Rockair	-	-	0.000	BOER	SF	UMD/DNY/Singer, Roos	Test	Newell	-	-
1955-M10	2435411.50	1955 Nov	Rockair	-	-	0.000	BOER	SF	UMD/DNY/Singer, Roos	Test	Newell	-	-
1959-A233	2440464.50	1959 Sep	FFAR	-	-	0.000	UMI	SS	-	Test	Swanson96	-	-
1995-A08	2451094.07	1995 Oct 7 1335:00	FFAR	-	-	0.000	SSC7	AS	-	Test	ESRLV	-	-



Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Mission	LaunchCode	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee km	Range km	Dest
1972-A104	2441601.08	1972 Oct 10 1400:00	Forschungsflugkorper	-	1	DLR C-FFK-45	-	-	-	CEL	-	-	-	0?	-	-
1972-A109	2441615.12	1972 Oct 24 1500:00	Forschungsflugkorper	-	2	DLR C-FFK-46	-	-	-	CEL	-	-	-	0?	-	-
1974-S188	2442175.04	1974 May 7 1300:01	Forschungsflugkorper	-	3	DLR C-FFK-47	-	-	-	CEL	-	-	-	120	-	-





Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	OrbPay	Agency	Launch_Code	Group	Category	LTCite	Cite	Notes
1972-A104	2441601.08	1972 Oct 10 1400:00	Forschungsflugcorper	-	1	0.000	DLR	SF	ERMU/	Test	Moraba	-	-
1972-A109	2441616.12	1972 Oct 24 1500:00	Forschungsflugcorper	-	2	0.000	DLR	SF	ERMU/	Test	Moraba	-	-
1974-S188	2442176.04	1974 May 7 1300:01	Forschungsflugcorper	-	3	0.000	DLR	SS	ERMU/Uppermann	Test	Moraba	WDC	-



Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Mission	Launch_FlightCode	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee_Km	Range_Km	Dest
2009-A11	245054.26	2009 Aug 10 1818	FTB	-	1	-	-	-	-	ALCA	UL	-	-	32	-	-
2009-A12	245057.10	2009 Aug 13 1421	FTB	-	2	-	-	-	-	ALCA	UL	-	-	31	-	-
2009-A13	245128.34	2009 Oct 20 2016	FTB	-	3	-	-	-	-	CLBI	-	-	-	32	-	-
2009-A14	245128.35	2009 Oct 21 2030	FTB	-	4	-	-	-	-	CLBI	-	-	-	32	-	-
2010-A15	245253.27	2010 Feb 25 1830	FTB	-	5	-	-	-	-	CLBI	-	-	-	32	-	-
2010-A16	245534.25	2010 Apr 27 1800	FTB	-	6	-	-	-	-	ALCA	UL	-	-	32	-	-
2010-A17	245534.25	2010 Apr 29 1800	FTB	-	7	-	-	-	-	CLBI	-	-	-	32	-	-
2010-A18	245504.23	2010 Jul 28 1730	FTB	-	8	-	-	-	-	ALCA	UL	-	-	32	-	-
2010-A20	245504.26	2010 Sep 20 1810	FTB	-	9	-	-	-	-	ALCA	UL	-	-	32	-	-
2011-A31	245579.25	2011 Jun 16 1730	FTB	-	10	-	-	-	-	CLBI	-	-	-	32	-	-
2011-A34	245579.25	2011 Jun 17 1700	FTB	-	11	-	-	-	-	ALCA	UL	-	-	32	-	-
2011-A35	245584.50	2011 Oct 20	FTB	-	12	-	-	-	-	CLBI	-	-	-	32	-	-
2011-A37	245601.28	2012 Mar 29	FTB	-	13	-	-	-	-	ALCA	UL	-	-	32	-	-
2012-A11	245601.50	2012 Mar 29	FTB	-	14	-	-	-	-	CLBI	-	-	-	32	-	-
2012-A12	245601.50	2012 Mar 29	FTB	-	15	-	-	-	-	ALCA	UL	-	-	32	-	-
2012-A13	245609.21	2012 May 21 1700	FTB	-	16	-	-	-	-	ALCA	UL	-	-	32	-	-
2012-A14	245607.20	2012 May 29 1650	FTB	-	17	-	-	-	-	CLBI	-	-	-	32	-	-
2012-A15	245600.25	2012 Jun 21 1800	FTB	-	18	-	-	-	-	ALCA	UL	-	-	32	-	-
2012-A16	245646.33	2012 Aug 8 1959	FTB	-	19	-	-	-	-	CLBI	-	-	-	32	-	-
2012-A17	245668.50	2012 Sep 19	FTB	-	20	-	-	-	-	ALCA	UL	-	-	32	-	-
2012-A18	245696.22	2012 Sep 27 1711	FTB	-	21	-	-	-	-	ALCA	UL	-	-	32	-	-
2012-A21	245623.21	2012 Oct 31 1703	FTB	-	22	-	-	-	-	ALCA	UL	-	-	32	-	-
2012-A23	245623.21	2012 Nov 7 1700	FTB	-	23	-	-	-	-	ALCA	UL	-	-	32	-	-
2013-A03	245696.00	2013 Mar 13 1200	FTB	-	24?	-	-	-	-	CLBI	-	-	-	32?	-	-
2013-A10	245645.50	2013 May 23	FTB	-	25?	-	-	-	-	ALCA	UL	-	-	32	-	-
2013-A17	2456513.24	2013 Aug 6 1751	FTB	-	26	-	-	-	-	ALCA	UL	-	-	32	-	-
2014-A05	2456729.17	2014 Mar 12 1600	FTB	-	27	-	-	-	-	ALCA	UL	-	-	32	-	-
2014-A15	2456897.50	2014 Aug 28	FTB	-	28	-	-	-	-	CLBI	-	-	-	32	-	-
2014-A35	2456933.02	2014 Oct 2 1235	FTB	-	29	-	-	-	-	CLBI	-	-	-	32	-	-
2014-A41	2457002.04	2014 Dec 10 1300	FTB	-	30	-	-	-	-	CLBI	-	-	-	32	-	-
2015-A15	2457152.50	2015 Jun 19	FTB	-	31	-	-	-	-	CLBI	-	-	-	32	-	-
2015-A16	2457262.11	2015 Aug 27 1445	FTB	-	32	-	-	-	-	ALCA	UL	-	-	32	-	-
2016-A106	2457676.11	2016 Oct 14 1445	FTB	-	AL30?	-	-	-	-	ALCA	UL	-	-	32	-	-
2016-A108	2457722.17	2016 Nov 29 1602	FTB	-	31?	-	-	-	-	ALCA	UL	-	-	32	-	-
2017-A135	2457513.12	2017 Jun 9 1450	FTB	-	AL20	-	-	-	-	ALCA	UL	-	-	31	-	-
2017-A136	2456995.01	2017 Dec 11 1208	FTB	-	-	-	-	-	-	ALCA	UL	-	-	32	-	-
2018-A169	2456220.20	2018 Apr 11 1645	FTB	-	-	-	-	-	-	ALCA	UL	-	-	32	-	-
2018-A190	2456530.15	2018 Nov 07 1550	FTB	-	-	-	-	-	-	ALCA	UL	-	-	32	-	-
2020-A15	2459026.37	2020 Jun 25 2052	FTB	-	-	-	-	-	-	ALCA	UL	-	-	30	-	-



Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Drbpay	Agency	Launch_Code	Group	Category	LTCite	Cite	Notes
2009-A11	2455054_26	2009 Aug 10 1618	FTB	-	1	0.000	REE	AS	-	Test	brazillianspace.blog	-	Z-3 assumed
2009-A12	2455057_10	2009 Aug 13 1421	FTB	-	2	0.000	REE	AS	-	Test	brazillianspace.blog	-	-
2009-A13	2455125_34	2009 Oct 20 2016	FTB	-	3	0.000	REE	AS	-	Test	brazillianspace.blog	-	-
2009-A14	2455126_35	2009 Oct 21 2030	FTB	-	4	0.000	REE	AS	-	Test	brazillianspace.blog	-	-
2010-A15	2455253_27	2010 Feb 25 1830	FTB	-	5	0.000	REE	AS	-	Test	brazillianspace.blog	-	-
2010-A16	2455314_25	2010 Apr 27 1800	FTB	-	6	0.000	REE	AS	-	Test	brazillianspace.blog	-	-
2010-A17	2455316_25	2010 Apr 29 1800	FTB	-	7	0.000	REE	AS	-	Test	brazillianspace.blog	-	-
2010-A18	2455404_23	2010 Jul 26 1730	FTB	-	8	0.000	REE	AS	-	Test	brazillianspace.blog	-	-
2010-A20	2455460_26	2010 Sep 20 1810	FTB	-	9	0.000	REE	AS	-	Test	brazillianspace.blog	-	-
2011-A31	2455679_25	2011 Apr 27 1800	FTB	-	10	0.000	REE	AS	-	Test	brazillianspace.blog	-	-
2011-A34	2455729_23	2011 Jun 16 1730	FTB	-	11	0.000	REE	AS	-	Test	brazillianspace.blog	-	-
2011-A35	2455730_21	2011 Jun 17 1700	FTB	-	12	0.000	REE	AS	-	Test	brazillianspace.blog	-	-
2011-A37	2455664_50	2011 Oct 20	FTB	-	13	0.000	REE	AS	-	Test	brazillianspace.blog	-	-
2012-A11	2456001_28	2012 Mar 14 1839	FTB	-	14	0.000	REE	AS	-	Test	brazillianspace.blog	-	-
2012-A12	2456015_50	2012 Mar 29	FTB	-	15	0.000	REE	AS	-	Test	brazillianspace.blog	-	-
2012-A13	2456069_21	2012 May 21 1700	FTB	-	16	0.000	REE	AS	-	Test	brazillianspace.blog	-	-
2012-A14	2456077_20	2012 May 29 1650	FTB	-	17	0.000	REE	AS	-	Test	brazillianspace.blog	-	-
2012-A15	2456100_25	2012 Jun 21 1800	FTB	-	18	0.000	REE	AS	-	Test	brazillianspace.blog	-	-
2012-A16	2456148_35	2012 Aug 6 1969	FTB	-	19	0.000	REE	AS	-	Test	brazillianspace.blog	-	-
2012-A17	2456189_50	2012 Sep 19	FTB	-	20	0.000	REE	AS	-	Test	brazillianspace.blog	-	-
2012-A18	2456198_22	2012 Sep 27 1711	FTB	-	21	0.000	REE	AS	-	Test	brazillianspace.blog	-	-
2012-A21	2456232_21	2012 Oct 31 1703	FTB	-	22	0.000	REE	AS	-	Test	brazillianspace.blog	-	-
2012-A23	2456239_21	2012 Nov 7 1700	FTB	-	23	0.000	REE	AS	-	Test	brazillianspace.blog	-	-
2013-A03	2456435_00	2013 Mar 13 1200	FTB	-	24?	0.000	REE	AS	-	Test	brazillianspace.blog	-	-
2013-A10	2456435_00	2013 May 23	FTB	-	25	0.000	REE	AS	-	Test	brazillianspace.blog	-	Z-3
2013-A17	2456513_24	2013 Aug 6 1751	FTB	-	26	0.000	REE	AS	-	Test	brazillianspace.blog	-	Z-3
2014-A05	2456729_17	2014 Mar 12 1600	FTB	-	27	0.000	REE	AS	-	Test	brazillianspace.blog	-	-
2014-A16	2456697_50	2014 Aug 28	FTB	-	28	0.000	REE	AS	-	Test	brazillianspace.blog	-	-
2014-A35	2456933_02	2014 Oct 2 1235	FTB	-	29	0.000	REE	AS	-	Test	brazillianspace.blog	-	1535LT
2014-A41	2457002_04	2014 Dec 10 1300	FTB	-	30	0.000	REE	AS	-	Test	www.fab.mil.br	-	-
2015-A15	2457182_50	2015 Jun 19	FTB	-	31	0.000	REE	AS	-	Test	brazillianspace.blog	-	-
2016-A16	2457262_11	2016 Aug 27 1445	FTB	-	32	0.000	REE	AS	-	Test	brazillianspace.blog	-	Z-3
2016-A106	2457676_11	2016 Oct 14 1445	FTB	-	AL30?	0.000	REE	AS	-	Test	brazillianspace.blog	-	-
2016-A108	2457722_17	2016 Nov 29 1602	FTB	-	31?	0.000	REE	AS	-	Test	brazillianspace.blog	-	-
2017-A136	2457913_12	2017 Jun 6 1480	FTB	-	AL20	0.000	REE	AS	-	Test	www.fab.mil.br	-	-
2017-A138	2458095_01	2017 Dec 7 1209	FTB	-	-	0.000	REE	AS	-	Test	www.fab.mil.br	-	-
2018-A189	2458220_20	2018 Apr 11 1645	FTB	-	-	0.000	REE	AS	-	Test	www.fab.mil.br	-	Z-2
2018-A190	2458430_15	2018 Nov 07 1550	FTB	-	-	0.000	REE	AS	-	Test	www.fab.mil.br	-	Z-2
2020-A15	2459026_37	2020 Jun 25 2052	FTB	-	-	0.000	REE	AS	-	Test	www.fab.mil.br	-	-



Launch

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Mission	FlightCode	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee km	Range km	Dest
2010-A19	2455412.14	2010 Aug 3 1525	FTI	-	1	-	-	-	-	CBEI	-	-	-	38	-	-
2010-A21	2455470.29	2010 Sep 30 1900	FTI	-	2	-	-	-	-	ALCA	UL	-	-	32	-	-
2011-H06	2455708.21	2011 May 26 1700	FTI	-	3	-	-	-	-	ALCA	UL	-	-	56	-	-
2011-H07	2455709.22	2011 May 27 1710	FTI	-	4	-	-	-	-	ALCA	UL	-	-	65	-	-
2011-R36	2455804.50	2011 Aug 31	FTI	-	5	-	-	-	-	ALCA	UL	-	-	39	-	-
2011-H08	2455806.50	2011 Sep 2	FTI	-	6	-	-	-	-	ALCA	UL	-	-	52	-	-
2012-H06	2456245.29	2012 Nov 13 1900	FTI	-	7	-	-	-	-	ALCA	UL	-	-	53	-	-
2012-H03	2456261.24	2012 Nov 29 1752	FTI	-	8	-	-	-	-	ALCA	UL	-	-	52	-	-
2013-H04	2456457.26	2013 Jun 13 1814	FTI	-	9	-	-	-	-	ALCA	UL	-	-	52	-	-
2013-H05	2456470.25	2013 Jun 26 1800	FTI	-	10	-	-	-	-	CBEI	-	-	-	52P	-	-
2014-H01	2456787.26	2014 May 9 1608	FTI	-	11	-	Op. Agnia I	-	-	ALCA	UL	-	-	52P	-	-
2014-R30	2456891.21	2014 Aug 21 1658	FTI	-	12	-	-	-	-	ALCA	UL	-	-	49	-	-
2015-H05	2457326.20	2015 Oct 30 1650	FTI	-	13	-	-	-	-	ALCA	UL	-	-	52P	-	-
2018-H06	2458211.50	2018 Apr 37	FTI	-	14	-	Op. Agnia I/2018	-	-	ALCA	UL	-	-	51	-	-
2018-H07	2458450.19	2018 Nov 27 1630	FTI	-	15	-	Op. Nutti	-	-	ALCA	UL	-	-	52	-	-
2019-H10	2458526.50	2019 May 23	FTI	-	-	-	Op. Agnia I/2019	-	-	ALCA	UL	-	-	52P	-	-
2019-H11	2458528.20	2019 May 24 1644	FTI	-	-	-	Op. Agnia I/2019	-	-	ALCA	UL	-	-	52P	-	-
2019-H12	2458752.22	2019 Sep 25 1711	FTI	-	-	-	Op. Agnia I/2019	-	-	ALCA	UL	-	-	52	75	-





Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variation	Flight_ID	Orbit	Agency	Launch_Code	Group	Category	LTCite	Cite	Notes
2010-119	2455412.14	2010 Aug 3 1525	FTI	-	1	0.000	AEB	AS	-	Test	brazillianspace.blog	-	-
2010-121	2455470.29	2010 Sep 30 1900	FTI	-	2	0.000	AEB	AS	-	Test	brazillianspace.blog	-	-
2011-006	2455708.21	2011 May 26 1700	FTI	-	3	0.000	AEB	AS	-	Test	brazillianspace.blog	-	-
2011-007	2455709.22	2011 May 27 1710	FTI	-	4	0.000	AEB	AS	-	Test	brazillianspace.blog	-	-
2011-A36	2455504.50	2011 Aug 31	FTI	-	5	0.000	AEB	AF	-	Test	brazillianspace.blog	-	-
2011-008	2455506.50	2011 Sep 2	FTI	-	6	0.000	AEB	AS	-	Test	brazillianspace.blog	-	-
2012-006	2456245.29	2012 Nov 13 1900	FTI	-	7	0.000	AEB	AS	-	Test	brazillianspace.blog	-	Z-3
2012-003	2456261.24	2012 Nov 29 1752	FTI	-	8	0.000	AEB	AS	-	Test	brazillianspace.blog	-	-
2013-004	2456457.26	2013 Jun 13 1814	FTI	-	9	0.000	AEB	AS	-	Test	brazillianspace.blog	-	Z-3
2013-005	2456470.25	2013 Jun 26 1800	FTI	-	10	0.000	AEB	AS	-	Test	brazillianspace.blog	-	-
2014-001	2456787.26	2014 May 9 1808	FTI	-	11	0.000	AEB	AS	-	Test	brazillianspace.blog	-	-
2014-030	2456991.21	2014 Aug 21 1658	FTI	-	12	0.000	AEB	AS	-	Test	cia.aer.mil.br	-	-
2015-005	2457236.20	2015 Oct 30 1650	FTI	-	14	0.000	AEB	AS	-	Test	brazillianspace.blog	-	-
2018-006	2458211.50	2018 Apr 37	FTI	-	15	0.000	AEB	AS	-	Test	brazillianspace.blog	-	-
2018-007	2458450.19	2018 Nov 27 1630	FTI	-	-	0.000	AEB	AS	-	Test	fab.mil.br	-	-
2019-010	2458526.50	2019 May 23	FTI	-	-	0.000	AEB	AS	-	Test	fab.mil.br	-	-
2019-011	2458528.20	2019 May 24 1644	FTI	-	-	0.000	AEB	AS	-	Test	fab.mil.br	-	-
2019-012	2458752.22	2019 Sep 25 1711	FTI	-	-	0.000	AEB	AS	-	Test	fab.mil.br	-	-



Launch

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Mission	FlightCode	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee km	Range km	Dest
2006-F01	2453819.44	2006 Mar 24 2230	Falcon 1	-	F001	Falconset-2	Falconset 2	-	-	RHR	OK	-	-	57	-	-
2007-F02	2454180.65	2007 Mar 21 0110	Falcon 1	-	F002	Demosat	AFSS/LCT2	-	-	RHR	OK	-	-	3307	-	-
2008-F01	2454681.65	2008 Aug 3 0334	Falcon 1	-	F003	TrailBlazer	URS Trailblazer	-	-	RHR	OK	-	-	407	-	-
2008-048	2454738.47	2008 Sep 28 2315	Falcon 1	-	F004	Ratcat	Mass simulator	-	-	RHR	OK	-	-	644	-	-
2009-037	2455026.65	2009 Jul 14 0336	Falcon 1	-	F005	Razakast	MACSat	-	-	RHR	OK	-	-	690	-	-



Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Launch			Agency	Launch_Code	Group	Category	LICite	Cite	Notes
					Flight_ID	OrbPay	t							
2006-F01	2453819.44	2006 Mar 24 2230	Falcon 1	-	F001	0.020	SPX	OF	C	Sat LEO 0	Wire	-	-	
2007-F02	2454180.55	2007 Mar 21 0110	Falcon 1	-	F002	0.020	SPX	OF	C	Sat LEO 0	Wire	-	-	
2008-F01	2454681.65	2008 Aug 3 0334	Falcon 1	-	F003	0.170	SPX	OF	C	Sat LEO 0	Wire	-	-	
2008-048	2454738.47	2008 Sep 28 2315	Falcon 1	-	F004	0.165	SPX	OS	C	Sat LEO 0	Wire	-	-	
2009-037	2455026.65	2009 Jul 14 0336	Falcon 1	-	F005	0.180	SPX	OS	C	Sat LEO 0	Wire	-	-	



Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Mission	FlightCode	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee_Km	Range_Km	Dest
2010-026	2455352.28	2010 Jun 4 1845:00	Falcon 9	-	001/B00003?	Dragon Qual Unit	Dragon Spacecraft	-	-	CC	LC40	-	-	276	-	-
2010-066	2455639.15	2010 Dec 8 1643	Falcon 9	-	002/B00044?	Dragon C1	Dragon C101	-	-	CC	LC40	-	-	11094	-	-
2012-027	2456069.82	2012 May 22 0744:38	Falcon 9	-	003/B00005?	Dragon C2	Dragon C102	-	-	CC	LC40	-	-	463	-	-
2012-A10	2456191.50	2012 Sep 21	Grasshopper	-	80002?	-	Dragon C103	-	-	SPXMC	-	-	-	0	-	-
2012-054	2456208.52	2012 Oct 6 0035:07	Falcon 9	-	004/B00006?	Dragon CRS-1	Dragon C103	-	-	CC	LC40	-	-	426	-	-
2012-425	2456232.50	2012 Nov 1	Grasshopper	-	80002?	-	-	-	-	SPXMC	-	-	-	0	-	-
2012-K22	2456278.50	2012 Dec 17	Grasshopper	-	80002?	-	Dragon C104	-	-	CC	LC40	-	-	507	-	-
2013-010	2456353.13	2013 Mar 1 1510:13	Falcon 9	-	005/B00007?	-	-	-	-	CC	LC40	-	-	0	-	-
2013-040	2456358.50	2013 Mar 7	Grasshopper	-	80002?	-	-	-	-	SPXMC	-	-	-	0	-	-
2013-A06	2456401.50	2013 Jun 14	Grasshopper	-	80002?	-	-	-	-	SPXMC	-	-	-	0	-	-
2013-A11	2456457.50	2013 Jun 19	Grasshopper	-	80002?	-	-	-	-	SPXMC	-	-	-	0	-	-
2013-A12	2456517.50	2013 Aug 13	Grasshopper	-	80002?	-	-	-	-	SPXMC	-	-	-	0	-	-
2013-055	2456565.10	2013 Sep 29 1600:13	Falcon 9	1.1	006/B10003?	Cassiope/Demo	-	-	-	VS	SLC4E	-	-	1490	-	-
2013-071	2456650.45	2013 Dec 7	Grasshopper	-	007	-	-	-	-	CC	LC40	-	-	1	-	-
2014-002	2456664.42	2014 Dec 3 2241	Falcon 9	1.1	008	SES-8	SES-8	-	-	CC	LC40	-	-	80415	-	-
2014-006	2456764.50	2014 Jan 6 2206	Falcon 9	1.1	009	Thaicom 6	Thaicom 6	-	-	CC	LC40	-	-	93117	-	-
2014-006	2456766.31	2014 Apr 17	Falcon 9R	1.1	001/B1002.1?	FPR Devi F001	-	-	-	CC	LC40	-	-	421	-	-
2014-007	2456778.50	2014 Apr 18 1925:22	Falcon 9R	1.1	009	Dragon CRS-3	Dragon C105	-	-	CC	LC40	-	-	0	-	-
2014-009	2456826.42	2014 May 1	Falcon 9R	1.1	002/B1002.2?	FPR Devi F002	-	-	-	CC	LC40	-	-	1	-	-
2014-040	2456853.14	2014 Jun 17 2204	Falcon 9R	1.1	003/B1002.3?	FPR Devi F003 Fin	-	-	-	SPXMC	-	-	-	1	-	-
2014-040	2456853.14	2014 Jun 14 1515:00	Falcon 9	1.1	010	Orbcomm 022 Mission 1	Orbcomm 022	-	-	SPXMC	-	-	-	748	-	-
2014-046	2456870.50	2014 Aug 1	Falcon 9R	1.1	004/B1002.4?	FPR Devi F004	-	-	-	SPXMC	-	-	-	1	-	-
2014-046	2456874.83	2014 Aug 5 0800	Falcon 9R	1.1	011	AsiaSat 6	AsiaSat 6	-	-	CC	LC40	-	-	35987	-	-
2014-A13	2456892.45	2014 Aug 22 2246?	Falcon 9R	1.1	005/B1002.5?	FPR Devi F004	-	-	-	SPXMC	-	-	-	1	-	-
2014-062	2456907.71	2014 Sep 7 0600:00	Falcon 9	1.1	015/B10101?	AsiaSat 6	AsiaSat 6/Thaicom	-	-	CC	LC40	-	-	35947	-	-
2015-001	2457032.91	2015 Sep 21 0522:03	Falcon 9	1.1	012/B1010?	Dragon CRS-4	Dragon C106	-	-	CC	LC40	-	-	444	-	-
2015-001	2457032.91	2015 Jan 10 0947:10	Falcon 9	1.1	014/B1010?	Dragon CRS-5	Dragon C107	-	-	CC	LC40	-	-	411	-	-
2015-007	2457065.46	2015 Feb 11 2303:42	Falcon 9	1.1	016/B1010?	Dragon CRS-6	Dragon C108	-	-	CC	LC40	-	-	150000	-	-
2015-010	2457065.46	2015 Mar 2 0300:00	Falcon 9	1.1	017/B1010?	Dragon CRS-6	Dragon C108	-	-	CC	LC40	-	-	404	-	-
2015-023	2457127.34	2015 Apr 14 2010:41	Falcon 9	1.1	018/B1010?	Dragon CRS-6	Dragon C108	-	-	CC	LC40	-	-	457	-	-
2015-023	2457127.34	2015 Apr 27 2303:00	Falcon 9	1.1	019/B1010?	Dragon CRS-6	Dragon C108	-	-	CC	LC40	-	-	35897	-	-
2015-061	2457378.56	2015 Jun 28 1421:11	Falcon 9	1.1	020/B1010?	Dragon CRS-7	Dragon C109	-	-	CC	LC40	-	-	162	-	-
2016-002	2457405.28	2016 Dec 22 0129:00	Falcon 9	1.1	021/B1010?	Orbcomm 002 Mission 2	Orbcomm 002	-	-	VS	SLC4E	-	-	1387	-	-
2016-013	2457462.48	2016 Jan 17 1842:16	Falcon 9	1.1	019/B1010?	Jason-3	Jason-3	-	-	CC	LC40	-	-	41805	-	-
2016-024	2457467.36	2016 Mar 4 2335	Falcon 9	1.1	022/B1010?	Dragon CRS-8	Dragon C110	-	-	CC	LC40	-	-	406	-	-
2016-028	2457514.72	2016 Apr 6 2043:31	Falcon 9	1.1	023/B1010?	Thaicom 6	Thaicom 6	-	-	CC	LC40	-	-	35966	-	-
2016-031	2457586.40	2016 Jun 15 1429	Falcon 9	1.1	025/B1010?	Dragon CRS-9	Dragon C111	-	-	CC	LC40	-	-	97580	-	-
2016-038	2457587.70	2016 Jun 18 0645:29	Falcon 9	1.1	026/B1010?	Dragon CRS-9	Dragon C111	-	-	CC	LC40	-	-	406	-	-
2016-060	2457614.75	2016 Aug 14 0526	Falcon 9	1.1	027/B1010?	Jason-3	Jason-3	-	-	CC	LC40	-	-	36183	-	-
2016-001	2457683.05	2016 Sep 1 1301:00	Falcon 9	1.1	030/B1010?	Amos 6	Amos 6	-	-	CC	LC40	-	-	765	-	-
2017-003	2457768.25	2017 Jan 14 1154:39	Falcon 9	1.1	031/B1010?	Iridium-1	Iridium Next SV1-10	-	-	VS	SLC4E	-	-	0	-	-
2017-009	2457824.11	2017 Feb 19 0839:00	Falcon 9	1.1	032/B1010?	Dragon CRS-10	Dragon C112	-	-	KSC	LC39A	-	-	32899	-	-
2017-014	2457828.75	2017 Mar 15 0600	Falcon 9	1.1	033/B1010?	Dragon CRS-10	Dragon C112	-	-	KSC	LC39A	-	-	36226	-	-
2017-022	2457874.97	2017 Mar 22 2227	Falcon 9	1.1	034/B1010?	SES-10	SES-10	-	-	KSC	LC39A	-	-	763	-	-
2017-022	2457874.97	2017 May 15 2351	Falcon 9	1.1	035/B1010?	USA 276	USA 276	-	-	KSC	LC39A	-	-	42181	-	-
2017-026	2457898.36	2017 May 15 2351	Falcon 9	1.1	036/B1010?	Immaratus EF4	Immaratus EF4	-	-	KSC	LC39A	-	-	65512	-	-
2017-038	2457920.35	2017 Jun 23 1917:38	Falcon 9	1.1	037/B1010?	Dragon CRS-11	Dragon C106-2	-	-	KSC	LC39A	-	-	792	-	-
2017-039	2457930.35	2017 Jun 25 2025:14	Falcon 9	1.1	038/B1010?	BulgariSat-1	BulgariSat-1	-	-	KSC	LC39A	-	-	42352	-	-
2017-044	2457940.38	2017 Jun 26 0300:00	Falcon 9	1.1	039/B1010?	Iridium Next SV1-20	Iridium Next SV1-20	-	-	VS	SLC4E	-	-	409	-	-
2017-045	2457940.38	2017 Jun 26 0300:00	Falcon 9	1.1	040/B1010?	Dragon CRS-12	Dragon C113	-	-	KSC	LC39A	-	-	731	-	-
2017-049	2457960.19	2017 Jul 1 1631:37	Falcon 9	1.1	041/B1010?	Dragon CRS-12	Dragon C113	-	-	KSC	LC39A	-	-	416	-	-
2017-052	2458004.08	2017 Aug 14 1951	Falcon 9	1.1	042/B1010?	Dragon CRS-12	Dragon C113	-	-	KSC	LC39A	-	-	783	-	-
2017-063	2458038.15	2017 Sep 6 1237:01	Falcon 9	1.1	043/B1010?	Dragon CRS-12	Dragon C113	-	-	VS	SLC4E	-	-	40866	-	-
2017-067	2458059.32	2017 Oct 30 1434	Falcon 9	1.1	044/B1010?	Dragon CRS-12	Dragon C113	-	-	KSC	LC39A	-	-	50200	-	-
2017-080	2458103.15	2017 Dec 15 1536:09	Falcon 9	1.1	045/B1010?	Dragon CRS-13	Dragon C108-2	-	-	CC	LC40	-	-	490	-	-
2018-003	2458110.55	2017 Dec 23 0127:34	Falcon 9	1.1	046/B1010?	Iridium-4	Iridium Next SV31-40	-	-	CC	LC40	-	-	784	-	-
2018-011	2458126.54	2018 Dec 8 0100	Falcon 9	1.1	047/B1010?	Zuma-4	Zuma-4	-	-	CC	LC40	-	-	1005	-	-
2018-013	2458150.39	2018 Jan 31 2125	Falcon 9	1.1	048/B1010?	GovSat-1	GovSat-1	-	-	CC	LC40	-	-	57861	-	-
2018-017	2458156.36	2018 Feb 6 2045	Falcon Heavy	1.1	049/B1010?	GovSat-1	GovSat-1	-	-	CC	LC40	-	-	150000	-	-
2018-020	2458172.10	2018 Feb 22 1417	Falcon Heavy	1.1	050/B1010?	Tealja Roadster	Tealja Roadster	-	-	VS	SLC4E	-	-	519	-	-
2018-023	2458183.73	2018 Mar 6 0533	Falcon 9	1.1	051/B1010?	PAZ	Tealja Prototypes	-	-	CC	LC40	-	-	36118	-	-
2018-030	2458208.09	2018 Mar 30 1413:51	Falcon 9	1.1	052/B1010?	Iridium-5	Hispasat 30M-6	-	-	CC	LC40	-	-	831	-	-
2018-032	2458211.35	2018 Apr 2 2030:38	Falcon 9	1.1	053/B1010?	Dragon CRS-14	Iridium Next SV41-50	-	-	VS	SLC4E	-	-	408	-	-
2018-038	2458227.35	2018 Apr 18 2251:30	Falcon 9	1.1	054/B1010?	Dragon CRS-14	Dragon C110-2	-	-	CC	LC40	-	-	150000	-	-
2018-044	2458250.34	2018 May 11 2014	Falcon 9	1.1	055/B1010?	Bangabandhu 1	Bangabandhu 1	-	-	VS	SLC4E	-	-	37939	-	-
2018-047	2458262.92	2018 May 22 1947:58	Falcon 9	1.1	056/B1010?	Dragon CRS-15	Iridium-6/GRACE-F0	-	-	CC	LC40	-	-	66933	-	-
2018-049	2458273.70	2018 Jun 4 0445	Falcon 9	1.1	057/B1010?	SES-12	SES-12	-	-	CC	LC40	-	-	409	-	-
2018-055	2458298.90	2018 Jun 29 0942:42	Falcon 9	1.1	058/B1010?	Dragon CRS-15	Dragon C111-2	-	-	CC	LC40	-	-	35941	-	-
2018-059	2458321.74	2018 Jul 25 0550	Falcon 9	1.1	059/B1010?	Telstar 19V	Telstar 19V	-	-	CC	LC40	-	-	781	-	-
2018-061	2458324.99	2018 Jul 25 1139:26	Falcon 9	1.1	060/B1010?	Iridium-7	Iridium-7	-	-	VS	SLC4E	-	-	35970	-	-
2018-064	2458337.72	2018 Aug 7 0518	Falcon 9	1.1	061/B1010?	Merah Putih	Telkom 4	-	-	CC	LC40	-	-	35904	-	-
2018-069	2458371.70	2018 Sep 10 0445	Falcon 9	1.1	062/B1010?	Telstar 18V	Telstar 18V	-	-	CC	LC40	-	-	635		



Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Mission	FlightCode	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee_Km	Range_Km	Dest
2019-029	2458627.60	2019 May 24 0230	Falcon 9	FT5	072/B/1049.3	Starlink-1	Starlink V0.9	-	-	CC	LC40	-	-	588	-	-
2019-033	2458647.12	2019 Jun 12 1417	Falcon 9	FT5	002/B/1051.1	ROM	Radarcast Const. Mission	-	-	VS	SLC4E	-	-	607	-	-
2019-036	2458659.77	2019 Jun 25 0630	Falcon Heavy	-	002/B/1051.2	STP-2	Starlink-2	BL052.2,B1053.2	-	KSC	LC39A	-	-	12080	-	-
2019-044	2458690.42	2019 Jul 25 2201:56	Falcon 9	FT5	074/B/1056.2	Dragon CRS-18	AMOS 17	-	-	CC	LC40	-	-	494	-	-
2019-050	2458702.47	2019 Aug 6 2323:00	Falcon 9	FT5	075/B/1047.3	AMOS 17	Dragon C108.3	-	-	CC	LC40	-	-	39579	-	-
2019-074	2458799.12	2019 Nov 11 1456	Falcon 9	FT5	076/B/1048.4	Starlink-2	Starlink V1.0-L1	-	-	CC	LC40	-	-	577	-	-
2019-083	2458823.23	2019 Dec 5 1729:24	Falcon 9	FT5	077/B/1069.4	Dragon CRS-19	Dragon C106.3	-	-	CC	LC40	-	-	474	-	-
2019-091	2458834.51	2019 Dec 17 0010	Falcon 9	FT5	078/B/1066.3	JCSAT-18-Racific-1	JCSAT-18-Racific-1	-	-	CC	LC40	-	-	39801	-	-
2020-001	2458855.60	2020 Jan 7 0219:21	Falcon 9	FT5	079/B/1049.4	Starlink-3	Starlink V1.0-L2	-	-	CC	LC40	-	-	561	-	-
2020-004	2458868.15	2020 Jan 19 1530:00	Falcon 9	FT5	080/B/1046.4	Dragon IPA	Dragon C205	-	-	KSC	LC39A	-	-	40	32	Atlantic
2020-006	2458878.09	2020 Jan 29 1406	Falcon 9	FT5	081/B/1051.3	Starlink-4	Starlink V1.0-L3	-	-	CC	LC40	-	-	566	-	-
2020-012	2458897.13	2020 Feb 17 1505:55	Falcon 9	FT5	082/B/1065.4	Starlink-5	Starlink V1.0-L4	-	-	CC	LC40	-	-	567	-	-
2020-016	2458915.70	2020 Feb 27 0450:31	Falcon 9	FT5	083/B/1069.2	Dragon CRS-20	Dragon C112.3	-	-	CC	LC40	-	-	486	-	-
2020-019	2458927.01	2020 Mar 18 1216:39	Falcon 9	FT5	084/B/1048.5	Starlink-6	Starlink V1.0-L5	-	-	KSC	LC39A	-	-	573	-	-
2020-025	2458962.31	2020 Apr 22 1930	Falcon 9	FT5	086/B/1061.4	Starlink-7	Starlink V1.0-L6	-	-	KSC	LC39A	-	-	565	-	-
2020-033	2459000.31	2020 May 30 1922:46	Falcon 9	FT5	087/B/1068.1	Dragon DM-2	Dragon C206	-	-	KSC	LC39A	-	-	564	-	-
2020-035	2459004.56	2020 Jun 4 0255:33	Falcon 9	FT5	087/B/1049.5	Starlink-8	Starlink V1.0-L7	-	-	CC	LC40	-	-	566	-	-
2020-038	2459013.59	2020 Jun 13 0921:18	Falcon 9	FT5	088/B/1069.3	Starlink-9	Starlink V1.0-L8/SkySat	-	-	CC	LC40	-	-	20252	-	-
2020-041	2459031.34	2020 Jun 30 2010:46	Falcon 9	FT5	089/B/1066.1	AMOS 17	GPS III SV-03	-	-	CC	LC40	-	-	46547	-	-
2020-046	2459061.40	2020 Jul 20 2130	Falcon 9	FT5	090/B/1051.2	AMOS 17	AMOS 18-2	-	-	CC	LC40	-	-	571	-	-
2020-055	2459068.72	2020 Aug 7 0512:05	Falcon 9	FT5	091/B/1061.5	Starlink-10	Starlink V1.0-L9/SkySat	-	-	KSC	LC39A	-	-	577	-	-
2020-057	2459080.10	2020 Aug 18 1431:00	Falcon 9	FT5	092/B/1049.6	Starlink-11	Starlink V1.0-L10/SkySat	-	-	CC	LC40	-	-	624	-	-
2020-059	2459092.47	2020 Aug 30 2316:00	Falcon 9	FT5	093/B/1069.4	SACOM-1B	SACOM-1B	-	-	CC	LC40	-	-	575	-	-
2020-062	2459096.03	2020 Sep 3 1246:14	Falcon 9	FT5	094/B/1060.2	Starlink-12	Starlink V1.0-L11	-	-	KSC	LC39A	-	-	565	-	-
2020-070	2459126.98	2020 Oct 6 1129:34	Falcon 9	FT5	095/B/1068.3	Starlink-13	Starlink V1.0-L12	-	-	KSC	LC39A	-	-	562	-	-
2020-073	2459141.02	2020 Oct 18 1226:57	Falcon 9	FT5	096/B/1061.6	Starlink-14	Starlink V1.0-L13	-	-	KSC	LC39A	-	-	559	-	-
2020-074	2459147.15	2020 Oct 24 1531:34	Falcon 9	FT5	097/B/1069.3	Starlink-15	Starlink V1.0-L14	-	-	CC	LC40	-	-	20245	-	-
2020-078	2459159.46	2020 Nov 5 2324:23	Falcon 9	FT5	098/B/1062.1	Dragon Crew-1	Dragon C207	-	-	CC	LC40	-	-	422	-	-
2020-084	2459169.52	2020 Nov 16 0027:17	Falcon 9	FT5	099/B/1061.1	Sentinel-6	Sentinel-6	-	-	VS	SLC4E	-	-	1344	-	-
2020-086	2459175.22	2020 Nov 21 1717:06	Falcon 9	FT5	100/B/1063.1	Starlink-16	Starlink V1.0-L15	-	-	CC	LC40	-	-	563	-	-
2020-088	2459176.59	2020 Nov 25 0215:12	Falcon 9	FT5	101/B/1049.7	Dragon C208	Dragon C208	-	-	KSC	LC39A	-	-	422	-	-
2020-089	2459190.18	2020 Dec 6 1617:08	Falcon 9	FT5	102/B/1068.4	Dragon C208	Dragon C208	-	-	CC	LC40	-	-	706	-	-
2020-096	2459197.23	2020 Dec 13 1730	Falcon 9	FT5	103/B/1051.7	SMX-1	SMX-1	-	-	CC	LC40	-	-	38808	-	-
2020-101	2459203.08	2020 Dec 19 1400	Falcon 9	FT5	104/B/1069.5	Turksat 5A	NRUL-108	NRUL-108	-	CC	LC39A	-	-	61693	-	-
2020-105	2459222.59	2021 Jan 5 0215	Falcon 9	FT5	105/B/1069.5	Turksat 5A	NRUL-108	-	-	CC	LC40	-	-	597	-	-
2021-005	2459235.04	2021 Jan 20 1502	Falcon 9	FT5	107/B/1051.8	Starlink-17	Starlink V1.0-L16	-	-	KSC	LC39A	-	-	867	-	-
2021-006	2459239.12	2021 Jan 24 1830	Falcon 9	FT5	107/B/1051.8	Starlink-17	Starlink V1.0-L16	-	-	CC	LC40	-	-	862	-	-
2021-009	2459249.76	2021 Feb 4 0619	Falcon 9	FT5	109/B/1069.5	Transporter-1	Transporter-1	-	-	CC	LC40	-	-	584	-	-
2021-012	2459261.67	2021 Feb 16 0359:37	Falcon 9	FT5	109/B/1069.5	Starlink-18 (N18)	Starlink V1.0-L16	Starlink-18	-	CC	LC40	-	-	584	-	-
2021-017	2459277.85	2021 Mar 4 0824:58	Falcon 9	FT5	110/B/1049.8	Starlink-20 (N20)	Starlink V1.0-L17	-	-	CC	LC40	-	-	561	-	-
2021-018	2459284.84	2021 Mar 11 0813:29	Falcon 9	FT5	110/B/1068.6	Starlink-21 (N21)	Starlink V1.0-L17	-	-	KSC	LC39A	-	-	560	-	-
2021-021	2459297.52	2021 Mar 14 201:26	Falcon 9	FT5	111/B/1051.9	Starlink-22 (N22)	Starlink V1.0-L20	-	-	KSC	LC39A	-	-	576	-	-
2021-024	2459307.52	2021 Mar 14 0826	Falcon 9	FT5	112/B/1061.9	Starlink-23 (N23)	Starlink V1.0-L21	-	-	CC	LC40	-	-	587	-	-
2021-027	2459307.55	2021 Mar 24 0826	Falcon 9	FT5	112/B/1061.9	Starlink-23 (N23)	Starlink V1.0-L21	-	-	CC	LC40	-	-	587	-	-
2021-037	2459322.19	2021 Apr 25 0649:02	Falcon 9	FT5	114/B/1061.7	Dragon Crew-2	Dragon C206.2	-	-	KSC	LC39A	-	-	426	-	-
2021-038	2459327.21	2021 Apr 25 0949:02	Falcon 9	FT5	114/B/1061.7	Dragon Crew-2	Dragon C206.2	-	-	CC	LC40	-	-	426	-	-
2021-038	2459333.66	2021 Apr 29 0944:30	Falcon 9	FT5	115/B/1069.7	Starlink-27 (N26)	Starlink V1.0-L24	-	-	KSC	LC39A	-	-	562	-	-
2021-038	2459339.78	2021 Apr 29 0944:30	Falcon 9	FT5	115/B/1069.7	Starlink-27 (N26)	Starlink V1.0-L25	-	-	CC	LC40	-	-	562	-	-
2021-040	2459343.78	2021 May 6 0641	Falcon 9	FT5	115/B/1051.9	Starlink-28 (N25)	Starlink V1.0-L25	-	-	CC	LC40	-	-	583	-	-
2021-041	2459350.16	2021 May 15 2256	Falcon 9	FT5	115/B/1051.9	Starlink-28 (N25)	Starlink V1.0-L25	-	-	CC	LC40	-	-	583	-	-
2021-041	2459350.16	2021 May 15 2256	Falcon 9	FT5	115/B/1051.9	Starlink-28 (N25)	Starlink V1.0-L26	-	-	KSC	LC39A	-	-	583	-	-
2021-048	2459365.23	2021 May 26 1859	Falcon 9	FT5	119/B/1068.3	Starlink-30 (N28)	Starlink V1.0-L26	-	-	CC	LC40	-	-	421	-	-
2021-049	2459365.23	2021 May 26 1859	Falcon 9	FT5	119/B/1068.3	Starlink-30 (N28)	Starlink V1.0-L26	-	-	KSC	LC39A	-	-	421	-	-
2021-054	2459381.67	2021 Jun 6 0429:15	Falcon 9	FT5	120/B/1067.2	Dragon CRS-22	Dragon C209	-	-	CC	LC40	-	-	36300	-	-
2021-059	2459386.31	2021 Jun 6 1609:35	Falcon 9	FT5	120/B/1067.2	Dragon CRS-22	Dragon C209	-	-	CC	LC40	-	-	20302	-	-
2021-059	2459386.31	2021 Jun 6 1609:35	Falcon 9	FT5	120/B/1067.2	Dragon CRS-22	Dragon C209	-	-	CC	LC40	-	-	20302	-	-
2021-078	2459471.66	2021 Aug 29 0714:48	Falcon 9	FT5	126/B/1060.8	Transporter-2	Transporter-2	Starlink-31	-	CC	LC40	-	-	6620	-	-
2021-084	2459471.66	2021 Aug 29 0714:48	Falcon 9	FT5	126/B/1060.8	Transporter-2	Transporter-2	Starlink-31	-	CC	LC40	-	-	6620	-	-
2021-084	2459471.66	2021 Aug 29 0714:48	Falcon 9	FT5	126/B/1060.8	Transporter-2	Transporter-2	Starlink-31	-	CC	LC40	-	-	6620	-	-
2021-103	2459520.59	2021 Sep 16 0002:56	Falcon 9	FT5	127/B/1069.10	Dragon CRS-23	Dragon C208.2	-	-	KSC	LC39A	-	-	437	-	-
2021-103	2459520.59	2021 Sep 16 0002:56	Falcon 9	FT5	127/B/1069.10	Dragon CRS-23	Dragon C208.2	-	-	VSERS	SLC4E	-	-	587	-	-
2021-104	2459532.91	2021 Sep 16 0002:56	Falcon 9	FT5	127/B/1069.10	Dragon CRS-23	Dragon C208.2	-	-	VSERS	SLC4E	-	-	587	-	-
2021-104	2459532.91	2021 Sep 16 0002:56	Falcon 9	FT5	127/B/1069.10	Dragon CRS-23	Dragon C208.2	-	-	VSERS	SLC4E	-	-	587	-	-
2021-104	2459532.91	2021 Sep 16 0002:56	Falcon 9	FT5	127/B/1069.10	Dragon CRS-23	Dragon C208.2	-	-	VSERS	SLC4E	-	-	587	-	-
2021-110	2459542.76	2021 Nov 24 0621:02	Falcon 9	FT5	129/B/1068.9	Dragon C210	Dragon C210	-	-	KSC	LC39A	-	-	424	-	-
2021-110	2459542.76	2021 Nov 24 0621:02	Falcon 9	FT5	129/B/1068.9	Dragon C210	Dragon C210	-	-	CC	LC40	-	-	544	-	-
2021-110	2459542.76	2021 Nov 24 0621:02	Falcon 9	FT5	129/B/1068.9	Dragon C210	Dragon C210	-	-	CC	LC40	-	-	544	-	-
2021-115	2459551.47	2021 Dec 2 2312	Falcon 9	FT5	130/B/1068.3	DART	DART	-	-	VSERS	SLC4E	-	-	150000	-	-
2021-121	2459557.75	20														

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Mission	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee_Km	Range_Km	Dest
2022-057	2459725.27	2022 May 25 1835:00	Falcon 9	FT5	157/B1061.8	Transporter-5	CC	LC40	-	-	544	-	-
2022-061	2459739.38	2022 Jun 6 2104	Falcon 9	FT5	158/B1062.7	Milesat 301	CC	LC40	-	-	45460	-	-
2022-062	2459748.17	2022 Jun 17 1608:50	Falcon 9	FT5	159/B1060.13	Starlink-50	KSC	LC39A	-	-	541	-	-
2022-063	2459749.10	2022 Jun 18 1419:52	Falcon 9	FT5	160/B1071.3	SfMaaH-1	VSFBS	SLC4E	-	-	751	-	-
2022-064	2459749.69	2022 Jun 19 0427:36	Falcon 9	FT5	161/B1061.9	Globalstar FM15	CC	LC40	-	-	1126	-	-
2022-071	2459760.38	2022 Jun 29 2104	Falcon 9	FT5	162/B1073.2	SES-22	CC	LC40	-	-	36807	-	-
2022-076	2459768.05	2022 Jul 7 1311:00	Falcon 9	FT5	163/B1068.13	Starlink-51	CC	LC40	-	-	541	-	-
2022-077	2459771.57	2022 Jul 11 0139:40	Falcon 9	FT5	164/B1063.6	Starlink-52	VSFBS	SLC4E	-	-	567	-	-
2022-081	2459775.53	2022 Jul 15 0044:22	Falcon 9	FT5	165/B1067.5	Dragon CMS-26	KSC	LC39A	-	-	421	-	-
2022-084	2459783.24	2022 Jul 17 1420:00	Falcon 9	FT5	166/B1051.13	Starlink-53	CC	LC40	-	-	567	-	-
2022-086	2459785.07	2022 Jul 24 1739:40	Falcon 9	FT5	167/B1071.4	Starlink-54	VSFBS	SLC4E	-	-	567	-	-
2022-089	2459786.07	2022 Jul 24 1338:20	Falcon 9	FT5	168/B1062.8	Starlink-55	KSC	LC39A	-	-	541	-	-
2022-094	2459796.46	2022 Aug 4 2308:48	Falcon 9	FT5	169/B1062.6	Damuri	CC	LC40	-	-	150000	-	-
2022-097	2459801.59	2022 Aug 10 0214:40	Falcon 9	FT5	170/B1073.3	Starlink-56	KSC	LC39A	-	-	541	-	-
2022-099	2459804.40	2022 Aug 12 2140:20	Falcon 9	FT5	171/B1061.10	Starlink-57	VSFBS	SLC4E	-	-	554	-	-
2022-101	2459811.31	2022 Aug 19 0521:20	Falcon 9	FT5	172/B1062.9	Starlink-58	CC	LC40	-	-	479	-	-
2022-104	2459819.65	2022 Aug 28 0341:20	Falcon 9	FT5	173/B1069.2	Starlink-59	CC	LC40	-	-	423	-	-
2022-105	2459822.74	2022 Aug 31 0540:10	Falcon 9	FT5	174/B1063.7	Starlink-60	VSFBS	SLC4E	-	-	351	-	-
2022-107	2459827.59	2022 Sep 5 0209:40	Falcon 9	FT5	175/B1062.7	Starlink-61	CC	LC40	-	-	337	-	-
2022-111	2459833.56	2022 Sep 11 0120:00	Falcon 9	FT5	176/B1068.14	Dragon Crew-5	CC	LC40	-	-	-	-	-
2022-114	2459841.51	2022 Sep 19 0018:40	Falcon 9	FT5	177/B1073.4	Starlink-62	VSFBS	SLC4E	-	-	-	-	-
2022-119	2459847.48	2022 Sep 24 2332:10	Falcon 9	FT5	178/B1073.4	Starlink-63	CC	LC40	-	-	-	-	-
2022-125	2459858.17	2022 Oct 5 1600:57	Falcon 9	FT5	179/B1077.1	Dragon Crew-5	CC	LC40	-	-	-	-	-
2022-126	2459858.47	2022 Oct 5 1600:57	Falcon 9	FT5	180/B1071.5	Starlink-65	CC	LC40	-	-	-	-	-
2022-128	2459861.46	2022 Oct 5 2310:30	Falcon 9	FT5	181/B1060.14	Galaxy 33/34	CC	LC40	-	-	-	-	-
2022-134	2459867.72	2022 Oct 15 0522:40	Falcon 9	FT5	182/B1069.3	Hot Bird 13F	CC	LC40	-	-	-	-	-
2022-136	2459873.12	2022 Oct 20 1450:40	Falcon 9	FT5	183/B1062.10	Starlink-66	CC	LC40	-	-	-	-	-
2022-141	2459880.55	2022 Oct 28 0114:10	Falcon 9	FT5	184/B1063.6	Starlink-67	VSFBS	SLC4E	-	-	-	-	-
2022-144	2459885.07	2022 Nov 1 1341	Falcon Heavy	FT5	004/B1066.1	USFS-44	ASCS	LC39A	-	-	-	-	-
2022-146	2459886.72	2022 Nov 3 0522	Falcon 9	FT5	185/B1067.1	Hot Bird 13G	CC	LC40	-	-	-	-	-
2022-153	2459896.17	2022 Nov 12 1606	Falcon 9	FT5	186/B1061.14	Galaxy 31/32	CC	LC40	-	-	-	-	-
2022-157	2459906.62	2022 Nov 23 0257	Falcon 9	FT5	187/B1049.11	Euclidat 10B	CC	LC40	-	-	-	-	-
2022-159	2459910.31	2022 Nov 26 1920:43	Falcon 9	FT5	188/B1076.1	Dragon CMS-26	ASCS	LC39A	-	-	-	-	-
2022-166	2459922.44	2022 Dec 5 2227:48	Falcon 9	FT5	189/B1069.4	OneWeb L15	ASCS	LC39A	-	-	-	-	-
2022-168	2459924.62	2022 Dec 11 0738:13	Falcon 9	FT5	190/B1073.5	OneWeb R H1	CC	LC40	-	-	-	-	-
2022-173	2459929.99	2022 Dec 16 1146:47	Falcon 9	FT5	191/B1071.6	SMU1	VSFBS	SLC4E	-	-	-	-	-
2022-174	2459930.45	2022 Dec 16 2246:00	Falcon 9	FT5	192/B1067.5	OSB mPOWER 1/2	CC	LC40	-	-	-	-	-
2022-175	2459931.40	2022 Dec 17 2132:30	Falcon 9	FT5	193/B1068.15	Starlink-68	ASCS	LC39A	-	-	-	-	-
2022-177	2459941.90	2022 Dec 28 0954:00	Falcon 9	FT5	194/B1062.11	Starlink-69	CC	LC40	-	-	-	-	-
2022-179	2459943.62	2022 Dec 30 0736	Falcon 9	FT5	195/B1061.11	EMUS C3	VSFBS	SLC4E	-	-	-	-	-
2023-001	2459946.12	2023 Jan 5 1455:56	Falcon 9	FT5	196/B1069.15	Transporter-6	CC	LC40	-	-	-	-	-
2023-004	2459954.76	2023 Jan 10 0850:17	Falcon Heavy	FT5	037/B1076.2	Transporter-6	CC	LC40	-	-	-	-	-
2023-008	2459960.46	2023 Jan 15 1256	Falcon Heavy	FT5	038/B1077.1	USFS-67	KSC	LC39A	-	-	-	-	-
2023-009	2459963.02	2023 Jan 18 1454	Falcon 9	FT5	197/B1071.2	USFS-67	CC	LC40	-	-	-	-	-
2023-010	2459974.15	2023 Jan 18 1454	Falcon 9	FT5	198/B1075.2	GFS III, S106	VSFBS	SLC4E	-	-	-	-	-
2023-013	2459979.90	2023 Jan 20 0832:20	Falcon 9	FT5	199/B1075.1	Starlink-70	CC	LC40	-	-	-	-	-
2023-015	2459976.18	2023 Jan 20 0832:20	Falcon 9	FT5	200/B1071.9	Starlink-71	CC	LC40	-	-	-	-	-
2023-016	2459977.48	2023 Jan 21 0758:20	Falcon 9	FT5	201/B1069.7	Starlink-72	VSFBS	SLC4E	-	-	-	-	-
2023-017	2459977.86	2023 Feb 7 0138:20	Falcon 9	FT5	202/B1069.7	Starlink-73	KSC	LC39A	-	-	-	-	-
2023-020	2459982.72	2023 Feb 7 0138:20	Falcon 9	FT5	203/B1073.5	Amazonas Nexus	CC	LC40	-	-	-	-	-
2023-021	2459983.76	2023 Feb 17 0510:10	Falcon 9	FT5	204/B1062.12	Starlink-74	CC	LC40	-	-	-	-	-
2023-021	2459983.76	2023 Feb 17 1912:20	Falcon 9	FT5	205/B1067.3	Starlink-75	VSFBS	SLC4E	-	-	-	-	-
2023-021	2459983.76	2023 Feb 17 1912:20	Falcon 9	FT5	206/B1067.3	Starlink-76	CC	LC40	-	-	-	-	-
2023-026	2460001.97	2023 Feb 27 2313:50	Falcon 9	FT5	207/B1076.3	Imarsat 6 F2	CC	LC40	-	-	-	-	-
2023-027	2460006.77	2023 Feb 27 2313:50	Falcon 9	FT5	208/B1076.3	Starlink Group 6-1	CC	LC40	-	-	-	-	-
2023-028	2460007.98	2023 Mar 2 0524:14	Falcon 9	FT5	209/B1078.1	Dragon CMS-27	KSC	LC39A	-	-	-	-	-
2023-029	2460013.30	2023 Mar 2 1938:58	Falcon 9	FT5	210/B1061.12	Starlink Group 2-7	VSFBS	SLC4E	-	-	-	-	-
2023-033	2460018.52	2023 Mar 9 1939:38	Falcon 9	FT5	211/B1073.7	OneWeb L17	CC	LC40	-	-	-	-	-
2023-037	2460021.91	2023 Mar 15 0030:42	Falcon 9	FT5	212/B1073.8	Dragon CMS-27	KSC	LC39A	-	-	-	-	-
2023-038	2460021.91	2023 Mar 17 1936:40	Falcon 9	FT5	213/B1071.8	Dragon CMS-27	VSFBS	SLC4E	-	-	-	-	-
2023-042	2460021.48	2023 Mar 17 2338:00	Falcon 9	FT5	214/B1069.6	SES-18/19	CC	LC40	-	-	-	-	-
2023-044	2460028.15	2023 Mar 24 1543:10	Falcon 9	FT5	215/B1067.10	Starlink-79	CC	LC40	-	-	-	-	-
2023-046	2460033.33	2023 Mar 29 2001:00	Falcon 9	FT5	216/B1077.4	Starlink-80	CC	LC40	-	-	-	-	-
2023-050	2460037.10	2023 Apr 2 1429	Falcon 9	FT5	218/B1075.2	SDA-0A	VSFBS	SLC4E	-	-	-	-	-
2023-052	2460041.69	2023 Apr 7 0430:00	Falcon 9	FT5	217/B1076.4	Intelsat IS-40e/TEJPO	CC	LC40	-	-	-	-	-
2023-054	2460049.78	2023 Apr 15 0647:38	Falcon 9	FT5	219/B1063.10	Transporter-7	VSFBS	SLC4E	-	-	-	-	-
2023-056	2460054.10	2023 Apr 19 1431:10	Falcon 9	FT5	219/B1073.8	Starlink-81	CC	LC40	-	-	-	-	-
2023-058	2460062.07	2023 Apr 27 1340:50	Falcon 9	FT5	220/B1061.13	Starlink-82	VSFBS	SLC4E	-	-	-	-	-
2023-059	2460063.42	2023 Apr 28 2212	Falcon 9	FT5	221/B1078.2	OSB mPOWER 3/4	CC	LC40	-	-	-	-	-
2023-060	2460065.52	2023 Apr 31 0026	Falcon Heavy	FT5	006/B1068.1	Viasat-3 1	KSC	LC39A	-	-	-	-	-
2023-061	2460068.91	2023 May 4 0731:00	Falcon 9	FT5	222/B1069.7	Starlink-83	CC	LC40	-	-	-	-	-
2023-064	2460075.94	2023 May 10 2009:00	Falcon 9	FT5	223/B1069.7	Starlink-84	CC	LC40	-	-	-	-	-
2023-065	2460078.71	2023 May 14 0503:30	Falcon 9	FT5	224/B1067.11	Starlink-85	VSFBS	SLC4E	-	-	-	-	-
2023-067	2460083.76	2023 May 19 0619:30	Falcon 9	FT5	225/B1076.5	Starlink-86	CC	LC40	-	-	-	-	-
2023-068	2460085.05	2023 May 20 1316:33	Falcon 9	FT5	226/B1063.11	Tridium-OneWeb	VSFBS	SLC4E	-	-	-	-	-
2023-070	2460086.40	2023 May 27 2137:09	Falcon 9	FT5	227/B1080.1	Axiom Ax-2	KSC	LC39A	-	-	-	-	-
2023-075	2460091.69	2023 May 27 0430	Falcon 9	FT5	228/B1062.14	Badr 6	CC	LC40	-	-	-	-	-
2023-078	2460095.75	2023 May 31 0602:30	Falcon 9	FT5	229/B1061.14	Starlink-87	VSFBS	SLC4E	-	-	-	-	-
2023-079	2461000.43	2023 Jun 4 1220:00	Falcon 9	FT5	230/B1078.3	Starlink-88	CC	LC40	-	-	-	-	-
2023-080	2461001.16	2023 Jun 4 1220:00	Falcon 9	FT5	231/B1077.5	Dragon CMS-28	KSC	LC39A	-	-	-	-	-
2023-083	2461007.80	2023 Jun 12 0710:50	Falcon 9	FT5	232/B1073.9	Starlink-89	CC	LC40	-	-	-	-	-
2023-084	2461014.43	2023 Jun 12 21											

Launch

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Mission	FlightCode	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee_Km	Range_Km	Dest
2023-099	2460141.66	2023 Jun 16 0350:00	Falcon 9	FTS	240/B1060.16	Starlink-94	Starlink Group 5-15	-	-	CC	LC40	-	-	-	-	-
2023-102	2460146.67	2023 Jun 20 0409:30	Falcon 9	FTS	242/B1071.10	Starlink-95	Starlink Group 6-16	-	-	VSFS	SLCE	-	-	-	-	-
2023-105	2460149.64	2023 Jun 24 0050:30	Falcon 9	FTS	242/B1076.6	Starlink-96	Starlink Group 6-6	-	-	CC	LC40	-	-	-	-	-
2023-107	2460153.67	2023 Jun 28 0401:10	Falcon 9	FTS	242/B1062.15	Starlink-97	Starlink Group 6-7	-	-	CC	LC40	-	-	-	-	-
2023-108	2460154.63	2023 Jun 29 0304	Falcon Heavy	-	007/B1042.1	Jupiter 3	Jupiter 3/EchoStar 24	B1064_3,B1065.3	-	KSC	LC39A	-	-	-	-	-
2023-111	2460159.71	2023 Aug 3 0500	Falcon 9	FTS	244/B1077.6	Galaxy 37	Galaxy 37	-	-	CC	LC40	-	-	-	-	-
2023-112	2460163.61	2023 Aug 7 0241:10	Falcon 9	FTS	245/B1078.4	Starlink-98	Starlink Group 6-8	-	-	CC	LC40	-	-	-	-	-
2023-115	2460164.66	2023 Aug 8 0357:00	Falcon 9	FTS	246/B1075.5	Starlink-99	Starlink Group 6-20	-	-	VSFS	SLCE	-	-	-	-	-
2023-119	2460167.72	2023 Aug 11 0517:40	Falcon 9	FTS	247/B1069.9	Starlink-100	Starlink Group 6-9	-	-	CC	LC40	-	-	-	-	-
2023-122	2460173.65	2023 Aug 17 0336:50	Falcon 9	FTS	249/B1067.13	Starlink-101	Starlink Group 6-10	-	-	VSFS	SLCE	-	-	-	-	-
2023-124	2460178.90	2023 Aug 22 0937:30	Falcon 9	FTS	249/B1061.15	Starlink-102	Starlink Group 7-1	-	-	CC	LC40	-	-	-	-	-
2023-128	2460182.91	2023 Aug 26 0727:27	Falcon 9	FTS	250/B1081.1	Dragon Crew-7	Dragon CZ10.3	-	-	KSC	LC39A	-	-	-	-	-
2023-129	2460183.55	2023 Aug 27 0105:40	Falcon 9	FTS	251/B1080.3	Starlink-103	Starlink Group 6-11	-	-	CC	LC40	-	-	-	-	-
2023-131	2460188.60	2023 Sep 1 0221:50	Falcon 9	FTS	252/B1077.7	Starlink-104	Starlink Group 6-13	-	-	CC	LC40	-	-	-	-	-
2023-133	2460190.10	2023 Sep 2 1425	Falcon 9	FTS	253/B1063.13	SDA-08	SDA-08	-	-	VSFS	SLCE	-	-	-	-	-
2023-134	2460191.62	2023 Sep 4 0247:20	Falcon 9	FTS	253/B1073.10	Starlink-105	Starlink Group 6-12	-	-	CC	LC39A	-	-	-	-	-
2023-138	2460196.63	2023 Sep 9 0312:50	Falcon 9	FTS	255/B1076.7	Starlink-106	Starlink Group 6-14	-	-	KSC	LC39A	-	-	-	-	-
2023-141	2460199.79	2023 Sep 12 0657:50	Falcon 9	FTS	256/B1071.11	Starlink-107	Starlink Group 7-2	-	-	VSFS	SLCE	-	-	-	-	-
2023-144	2460203.65	2023 Sep 15 0338:20	Falcon 9	FTS	257/B1078.5	Starlink-108	Starlink Group 6-16	-	-	CC	LC40	-	-	-	-	-
2023-146	2460207.65	2023 Sep 20 0338:10	Falcon 9	FTS	259/B1068.17	Starlink-109	Starlink Group 6-17	-	-	CC	LC40	-	-	-	-	-
2023-147	2460211.65	2023 Sep 24 0338:30	Falcon 9	FTS	259/B1075.6	Starlink-110	Starlink Group 6-18	-	-	CC	LC40	-	-	-	-	-
2023-148	2460212.87	2023 Sep 25 0848:20	Falcon 9	FTS	260/B1069.10	Starlink-111	Starlink Group 7-3	-	-	VSFS	SLCE	-	-	-	-	-
2023-151	2460217.58	2023 Sep 30 0200:00	Falcon 9	FTS	261/B1076.8	Starlink-112	Starlink Group 6-19	-	-	CC	LC40	-	-	-	-	-
2023-153	2460222.73	2023 Oct 5 0536:30	Falcon 9	FTS	262/B1076.8	Starlink-113	Starlink Group 6-21	-	-	CC	LC40	-	-	-	-	-
2023-156	2460226.62	2023 Oct 5 0743	Falcon 9	FTS	263/B1063.14	Starlink-114	Starlink Group 7-4	-	-	VSFS	SLCE	-	-	-	-	-
2023-157	2460231.10	2023 Oct 13 1419:43	Falcon Heavy	-	009/B1079.1	Psyche	Psyche	B1064_4,B1065.4	-	KSC	LC39A	-	-	-	-	-
2023-158	2460231.46	2023 Oct 13 2301:10	Falcon 9	FTS	264/B1067.14	Starlink-115	Starlink Group 6-22	-	-	CC	LC40	-	-	-	-	-
2023-160	2460235.53	2023 Oct 15 0039	Falcon 9	FTS	265/B1062.16	Starlink-116	Starlink Group 6-23	-	-	CC	LC40	-	-	-	-	-
2023-161	2460238.65	2023 Oct 21 0623:00	Falcon 9	FTS	266/B1061.16	Starlink-117	Starlink Group 7-5	-	-	VSFS	SLCE	-	-	-	-	-
2023-162	2460239.60	2023 Oct 22 0217:00	Falcon 9	FTS	267/B1069.4	Starlink-118	Starlink Group 6-24	-	-	CC	LC40	-	-	-	-	-
2023-166	2460246.95	2023 Oct 29 0900:00	Falcon 9	FTS	269/B1075.7	Starlink-119	Starlink Group 7-6	-	-	VSFS	SLCE	-	-	-	-	-
2023-167	2460248.47	2023 Oct 30 2320:30	Falcon 9	FTS	269/B1077.8	Starlink-120	Starlink Group 6-25	-	-	CC	LC40	-	-	-	-	-
2023-170	2460252.53	2023 Nov 4 0037:20	Falcon 9	FTS	270/B1058.18	Starlink-121	Starlink Group 6-26	-	-	CC	LC40	-	-	-	-	-
2023-171	2460256.71	2023 Nov 6 0605:30	Falcon 9	FTS	271/B1073.11	Starlink-122	Starlink Group 6-27	-	-	CC	LC40	-	-	-	-	-
2023-173	2460260.56	2023 Nov 10 0128:14	Falcon 9	FTS	272/B1081.2	Dragon CMS-29	Dragon CZ11.2	-	-	KSC	LC39A	-	-	-	-	-
2023-174	2460260.28	2023 Nov 10 1849:00	Falcon 9	FTS	273/B1076.9	Transporter-9	Transporter-9	-	-	VSFS	SLCE	-	-	-	-	-
2023-175	2460261.36	2023 Nov 12 2108	Falcon 9	FTS	274/B1071.12	OSR #POWER 6/6	OSR #POWER 6/6	-	-	CC	LC40	-	-	-	-	-
2023-177	2460266.71	2023 Nov 15 0655:50	Falcon 9	FTS	275/B1069.11	Starlink-123	Starlink Group 6-28	-	-	VSFS	SLCE	-	-	-	-	-
2023-180	2460270.62	2023 Nov 20 1030:40	Falcon 9	FTS	276/B1063.15	Starlink-124	Starlink Group 7-8	-	-	CC	LC40	-	-	-	-	-
2023-183	2460276.68	2023 Nov 22 0747:40	Falcon 9	FTS	277/B1067.15	Starlink-125	Starlink Group 6-29	-	-	CC	LC40	-	-	-	-	-
2023-185	2460280.26	2023 Nov 28 0420:00	Falcon 9	FTS	279/B1082.17	Starlink-126	Starlink Group 6-30	-	-	VSFS	SLCE	-	-	-	-	-
2023-188	2460286.74	2023 Dec 1 1819	Falcon 9	FTS	280/B1061.17	Project 425	Korea 425	-	-	CC	LC40	-	-	-	-	-
2023-189	2460288.91	2023 Dec 1 000:50	Falcon 9	FTS	280/B1075.6	Starlink-127	Starlink Group 6-31	-	-	CC	LC40	-	-	-	-	-
2023-191	2460288.74	2023 Dec 6 0607:30	Falcon 9	FTS	281/B1077.9	Starlink-128	Starlink Group 6-33	-	-	CC	LC40	-	-	-	-	-
2023-192	2460289.84	2023 Dec 6 0603	Falcon 9	FTS	282/B1081.13	Starlink-129	Starlink Group 7-3	-	-	VSFS	SLCE	-	-	-	-	-
2023-203	2460297.97	2023 Dec 19 0901:00	Falcon 9	FTS	283/B1084.19	Starlink-130	Starlink Group 6-34	-	-	CC	LC40	-	-	-	-	-
2023-204	2460298.16	2023 Dec 24 1915:00	Falcon 9	FTS	284/B1085.19	SABAH mk-131	SABAH mk-131	-	-	CC	LC40	-	-	-	-	-
2023-209	2460301.65	2023 Dec 24 1915:00	Falcon 9	FTS	285/B1092.19	SABAH mk-131	SABAH mk-131	-	-	VSFS	SLCE	-	-	-	-	-
2023-210	2460303.55	2023 Dec 29 0401:00	Falcon Heavy	-	009/B1084.8	X-37B 2/3	X-37B 2/3	B1064_5,B1065.5	-	KSC	LC39A	-	-	-	-	-
2023-211	2460307.67	2023 Dec 29 0401:40	Falcon 9	FTS	286/B1069.12	Starlink-132	Starlink Group 6-36	-	-	VSFS	SLCE	-	-	-	-	-
2024-002	2460312.66	2024 Jan 2 0344:20	Falcon 9	FTS	287/B1082.12	Starlink-133	Starlink Group 7-9	-	-	VSFS	SLCE	-	-	-	-	-
2024-004	2460317.44	2024 Jan 3 2025:40	Falcon 9	FTS	289/B1076.1	Starlink-134	Starlink Group 6-37	-	-	CC	LC40	-	-	-	-	-
2024-005	2460321.97	2024 Jan 14 0859:30	Falcon 9	FTS	289/B1067.16	Starlink-135	Starlink Group 6-35	-	-	CC	LC40	-	-	-	-	-
2024-011	2460328.58	2024 Jan 18 0152:00	Falcon 9	FTS	290/B1081.18	Starlink-136	Starlink Group 7-10	-	-	VSFS	SLCE	-	-	-	-	-
2024-012	2460329.58	2024 Jan 18 2149:11	Falcon 9	FTS	291/B1073.12	Starlink-137	Starlink Group 6-37	-	-	VSFS	SLCE	-	-	-	-	-
2024-014	2460333.52	2024 Jan 19 0305:00	Falcon 9	FTS	292/B1080.5	Aspire mk-137	Dragon CZ12.3	-	-	KSC	LC39A	-	-	-	-	-
2024-017	2460338.52	2024 Jan 24 2011:50	Falcon 9	FTS	293/B1063.16	Starlink-138	Starlink Group 7-11	-	-	VSFS	SLCE	-	-	-	-	-
2024-019	2460339.55	2024 Jan 29 0110:00	Falcon 9	FTS	294/B1062.18	Starlink-139	Starlink Group 6-38	-	-	KSC	LC39A	-	-	-	-	-
2024-020	2460339.75	2024 Jan 29 0557:20	Falcon 9	FTS	295/B1075.9	Starlink-140	Starlink Group 6-39	-	-	VSFS	SLCE	-	-	-	-	-
2024-021	2460340.71	2024 Jan 30 1707:21	Falcon 9	FTS	296/B1077.10	Cygnus NG-20	Cygnus NG-20	-	-	CC	LC40	-	-	-	-	-
2024-023	2460348.77	2024 Feb 8 0633:21	Falcon 9	FTS	297/B1081.4	PACE	PACE	-	-	CC	LC40	-	-	-	-	-
2024-025	2460350.52	2024 Feb 10 0034:00	Falcon 9	FTS	298/B1071.14	Starlink-140	Starlink Group 7-13	-	-	VSFS	SLCE	-	-	-	-	-
2024-028	2460355.44	2024 Feb 14 2230:00	Falcon 9	FTS	299/B1078.7	USFSF-124	HESS/SDA-0C	-	-	CC	LC40	-	-	-	-	-
2024-030	2460356.40	2024 Feb 15 0605:37	Falcon 9	FTS	300/B1060.18	IM-1	IM-1	-	-	KSC	LC39A	-	-	-	-	-
2024-031	2460356.40	2024 Feb 20 2011:30	Falcon 9	FTS	301/B1082.2	Starlink-141	Starlink Group 7-14	-	-	VSFS	SLCE	-	-	-	-	-
2024-033	2460361.34	2024 Feb 23 0411:50	Falcon 9	FTS	302/B1067.17	Marah Puth 2	Starlink Group 7-15	-	-	CC	LC40	-	-	-	-	-
2024-036	2460363.67	2024 Feb 25 2206:00	Falcon 9	FTS	303/B1061.19	Starlink-142	Starlink Group 6-39	-	-	VSFS	SLCE	-	-	-	-	-
2024-038	2460366.62	2024 Feb 25 2206:00	Falcon 9	FTS	304/B1069.13	Starlink-143	Starlink Group 6-39	-	-	VSFS	SLCE	-	-	-	-	-
2024-041	2460370.75	2024 Feb 29 1530:00	Falcon 9	FTS	305/B1076.11	Starlink-144	Starlink Group 6-40	-	-	CC	LC40	-	-	-	-	-
2024-042	2460373.66	2024 Mar 4 0353:38	Falcon 9	FTS	307/B1083.1	Dragon Crew-8	Dragon CZ06.5	-	-	KSC	LC39A	-	-	-	-	-
2024-043	2460374.42	2024 Mar 4 2356:00	Falcon 9	FTS	307/B1081.5	Transporter-10	Transporter-10	-	-	VSFS	SLCE	-	-	-	-	-
2024-044	2460380.46	2024 Mar 4 2356:00	Falcon 9	FTS	309/B1073.13	Starlink-145	Starlink Group 6-41	-	-	CC	LC40	-	-	-	-	-
2024-046	2460380.67	2024 Mar 11 0409:00	Falcon 9	FTS	309/B1077.11	Starlink-146	Starlink Group 6-43	-	-	CC	LC40	-	-	-	-	-
2024-049	2460385.51	2024 Mar 16 0021:00	Falcon 9	FTS	310/B1063.17	Starlink-147	Starlink Group 7-17	-	-	VSFS	SLCE	-	-	-	-	-
2024-050	2460388.60	2024 Mar 19 0228:00	Falcon 9	FTS	312/B1075.10	Starlink-148	Starlink Group 6-44	-	-	KSC	LC39A	-	-	-	-	-
2024-054	2460391.37	2024 Mar 21 2055:09	Falcon 9	FTS	312/B1076.12	Starlink-149	Starlink Group 7-16	-	-	VSFS	SLCE	-	-	-	-	-
2024-056	2460393.63	2024 Mar 24 0309:00	Falcon 9	FTS	313/B1080.6	Dragon CMS-30	Dragon CZ09.4	-	-	CC	LC40	-	-	-	-	-
2024-059	2460395.49	2024 Mar 25 2342:00	Falcon 9	FTS	315/B1078.8	Starlink-150	Starlink Group 6-46	-								

Launch

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Mission	FlightCode	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee_Km	Range_Km	Dest
2024-070	2460412.10	2024 Apr 11 1425	Falcon 9	FTS	325/B1082.3	USF-H SVI	USF-H	-	-	VSFB	SLCBE	-	-	-	-	-
2024-071	2460413.57	2024 Apr 13 0140.00	Falcon 9	FTS	324/B1062.20	Starlink-157	Starlink Group 6-49	-	-	CC	LC40	-	-	-	-	-
2024-072	2460418.39	2024 Apr 17 2126.00	Falcon 9	FTS	325/B1077.12	Starlink-158	Starlink Group 6-51	-	-	KSC	LC39A	-	-	-	-	-
2024-073	2460419.44	2024 Apr 18 2240.00	Falcon 9	FTS	326/B1080.7	Starlink-159	Starlink Group 6-52	-	-	CC	LC40	-	-	-	-	-
2024-074	2460424.43	2024 Apr 23 2217.00	Falcon 9	FTS	327/B1078.9	Starlink-160	Starlink Group 6-53	-	-	CC	LC40	-	-	-	-	-
2024-075	2460428.52	2024 Apr 28 0034	Falcon 9	FTS	328/B1060.20	Galileo F265/FM27	Galileo L12	-	-	KSC	LC39A	-	-	-	-	-
2024-076	2460428.52	2024 Apr 28 0034	Falcon 9	FTS	329/B1060.20	Galileo F265/FM27	Galileo L12	-	-	KSC	LC39A	-	-	-	-	-
2024-077	2460428.52	2024 Apr 28 0034	Falcon 9	FTS	329/B1060.20	Galileo F265/FM27	Galileo L12	-	-	KSC	LC39A	-	-	-	-	-
2024-078	2460433.27	2024 May 2 1836	Falcon 9	FTS	330/B1061.20	WV Legion 1/2	Maxar 1	-	-	VSFB	SLCBE	-	-	-	-	-
2024-079	2460433.61	2024 May 3 0237.00	Falcon 9	FTS	331/B1067.19	Starlink-161	Starlink Group 6-54	-	-	VSFB	SLCBE	-	-	-	-	-
2024-080	2460437.26	2024 May 6 1841.00	Falcon 9	FTS	332/B1069.15	Starlink-162	Starlink Group 6-55	-	-	CC	LC40	-	-	-	-	-
2024-081	2460437.26	2024 May 6 1841.00	Falcon 9	FTS	332/B1069.15	Starlink-162	Starlink Group 6-55	-	-	CC	LC40	-	-	-	-	-
2024-082	2460437.26	2024 May 6 1841.00	Falcon 9	FTS	332/B1069.15	Starlink-162	Starlink Group 6-55	-	-	CC	LC40	-	-	-	-	-
2024-083	2460440.69	2024 May 10 0430.00	Falcon 9	FTS	333/B1083.3	Starlink-163	Starlink Group 6-56	-	-	KSC	LC39A	-	-	-	-	-
2024-084	2460440.69	2024 May 10 0430.00	Falcon 9	FTS	333/B1083.3	Starlink-163	Starlink Group 6-56	-	-	KSC	LC39A	-	-	-	-	-
2024-085	2460443.54	2024 May 13 0653.00	Falcon 9	FTS	334/B1073.15	Starlink-164	Starlink Group 8-2	-	-	VSFB	SLCBE	-	-	-	-	-
2024-086	2460443.54	2024 May 13 0653.00	Falcon 9	FTS	334/B1073.15	Starlink-164	Starlink Group 8-2	-	-	VSFB	SLCBE	-	-	-	-	-
2024-087	2460446.28	2024 May 14 1839.00	Falcon 9	FTS	335/B1065.18	Starlink-165	Starlink Group 6-58	-	-	CC	LC40	-	-	-	-	-
2024-088	2460446.28	2024 May 14 1839.00	Falcon 9	FTS	335/B1065.18	Starlink-165	Starlink Group 6-58	-	-	CC	LC40	-	-	-	-	-
2024-089	2460446.28	2024 May 14 1839.00	Falcon 9	FTS	335/B1065.18	Starlink-165	Starlink Group 6-58	-	-	CC	LC40	-	-	-	-	-
2024-090	2460452.83	2024 May 18 0032.00	Falcon 9	FTS	337/B1062.21	Starlink-166	Starlink Group 8-7	-	-	VSFB	SLCBE	-	-	-	-	-
2024-091	2460452.83	2024 May 18 0032.00	Falcon 9	FTS	337/B1062.21	Starlink-166	Starlink Group 8-7	-	-	VSFB	SLCBE	-	-	-	-	-
2024-092	2460452.83	2024 May 18 0032.00	Falcon 9	FTS	337/B1062.21	Starlink-166	Starlink Group 8-7	-	-	VSFB	SLCBE	-	-	-	-	-
2024-093	2460452.83	2024 May 18 0032.00	Falcon 9	FTS	337/B1062.21	Starlink-166	Starlink Group 8-7	-	-	VSFB	SLCBE	-	-	-	-	-
2024-094	2460453.61	2024 May 23 0235	Falcon 9	FTS	338/B1071.16	NR0-146	NR0 Starshield 1-1	-	-	CC	LC40	-	-	-	-	-
2024-095	2460453.61	2024 May 23 0235	Falcon 9	FTS	338/B1071.16	NR0-146	NR0 Starshield 1-1	-	-	CC	LC40	-	-	-	-	-
2024-096	2460453.61	2024 May 23 0235	Falcon 9	FTS	338/B1071.16	NR0-146	NR0 Starshield 1-1	-	-	CC	LC40	-	-	-	-	-
2024-097	2460454.61	2024 May 24 0245	Falcon 9	FTS	340/B1077.13	Starlink-167	Starlink Group 6-62	-	-	KSC	LC39A	-	-	-	-	-
2024-098	2460454.61	2024 May 24 0245	Falcon 9	FTS	340/B1077.13	Starlink-167	Starlink Group 6-62	-	-	KSC	LC39A	-	-	-	-	-
2024-099	2460459.43	2024 May 28 1424	Falcon 9	FTS	341/B1078.10	Starlink-170	Starlink Group 6-63	-	-	CC	LC40	-	-	-	-	-
2024-100	2460459.43	2024 May 28 1424	Falcon 9	FTS	341/B1078.10	Starlink-170	Starlink Group 6-63	-	-	CC	LC40	-	-	-	-	-
2024-101	2460459.43	2024 May 28 1424	Falcon 9	FTS	341/B1078.10	Starlink-170	Starlink Group 6-63	-	-	CC	LC40	-	-	-	-	-
2024-102	2460462.61	2024 Jun 1 0237.00	Falcon 9	FTS	342/B1081.7	EarthCARE	Starlink Group 6-64	-	-	VSFB	SLCBE	-	-	-	-	-
2024-103	2460462.61	2024 Jun 1 0237.00	Falcon 9	FTS	342/B1081.7	EarthCARE	Starlink Group 6-64	-	-	VSFB	SLCBE	-	-	-	-	-
2024-104	2460462.61	2024 Jun 1 0237.00	Falcon 9	FTS	342/B1081.7	EarthCARE	Starlink Group 6-64	-	-	VSFB	SLCBE	-	-	-	-	-
2024-105	2460469.58	2024 Jun 5 0156.00	Falcon 9	FTS	343/B1076.14	Starlink-172	Starlink Group 8-5	-	-	CC	LC40	-	-	-	-	-
2024-106	2460469.58	2024 Jun 5 0156.00	Falcon 9	FTS	343/B1076.14	Starlink-172	Starlink Group 8-5	-	-	CC	LC40	-	-	-	-	-
2024-107	2460469.58	2024 Jun 5 0156.00	Falcon 9	FTS	343/B1076.14	Starlink-172	Starlink Group 8-5	-	-	CC	LC40	-	-	-	-	-
2024-108	2460470.04	2024 Jun 8 0156.00	Falcon 9	FTS	344/B1069.16	Starlink-173	Starlink Group 10-1	-	-	CC	LC40	-	-	-	-	-
2024-109	2460470.04	2024 Jun 8 0156.00	Falcon 9	FTS	344/B1069.16	Starlink-173	Starlink Group 10-1	-	-	CC	LC40	-	-	-	-	-
2024-110	2460470.04	2024 Jun 8 0156.00	Falcon 9	FTS	344/B1069.16	Starlink-173	Starlink Group 10-1	-	-	CC	LC40	-	-	-	-	-
2024-111	2460480.65	2024 Jun 8 1259	Falcon 9	FTS	345/B1082.5	Starlink-174	Starlink Group 8-6	-	-	VSFB	SLCBE	-	-	-	-	-
2024-112	2460480.65	2024 Jun 8 1259	Falcon 9	FTS	345/B1082.5	Starlink-174	Starlink Group 8-6	-	-	VSFB	SLCBE	-	-	-	-	-
2024-113	2460480.65	2024 Jun 8 1259	Falcon 9	FTS	345/B1082.5	Starlink-174	Starlink Group 8-6	-	-	VSFB	SLCBE	-	-	-	-	-
2024-114	2460482.40	2024 Jun 19 0340.00	Falcon 9	FTS	346/B1081.21	Starlink-175	Starlink Group 9-1	-	-	CC	LC40	-	-	-	-	-
2024-115	2460482.40	2024 Jun 19 0340.00	Falcon 9	FTS	346/B1081.21	Starlink-175	Starlink Group 9-1	-	-	CC	LC40	-	-	-	-	-
2024-116	2460482.40	2024 Jun 19 0340.00	Falcon 9	FTS	346/B1081.21	Starlink-175	Starlink Group 9-1	-	-	CC	LC40	-	-	-	-	-
2024-117	2460486.22	2024 Jun 20 2115	Falcon 9	FTS	347/B1082.5	Astra IP	Starlink Group 10-2	-	-	CC	LC40	-	-	-	-	-
2024-118	2460486.22	2024 Jun 20 2115	Falcon 9	FTS	347/B1082.5	Astra IP	Starlink Group 10-2	-	-	CC	LC40	-	-	-	-	-
2024-119	2460486.22	2024 Jun 20 2115	Falcon 9	FTS	347/B1082.5	Astra IP	Starlink Group 10-2	-	-	CC	LC40	-	-	-	-	-
2024-120	2460486.39	2024 Jun 24 0347.00	Falcon 9	FTS	349/B1076.11	Starlink-177	Starlink Group 9-2	-	-	VSFB	SLCBE	-	-	-	-	-
2024-121	2460486.39	2024 Jun 24 0347.00	Falcon 9	FTS	349/B1076.11	Starlink-177	Starlink Group 9-2	-	-	VSFB	SLCBE	-	-	-	-	-
2024-122	2460486.39	2024 Jun 24 0347.00	Falcon 9	FTS	349/B1076.11	Starlink-177	Starlink Group 9-2	-	-	VSFB	SLCBE	-	-	-	-	-
2024-123	2460490.63	2024 Jun 27 1114	Falcon 9	FTS	350/B1087.1	DMES U	Starlink Group 10-3	-	-	ASC	LC39A	-	-	-	-	-
2024-124	2460490.63	2024 Jun 27 1114	Falcon 9	FTS	350/B1087.1	DMES U	Starlink Group 10-3	-	-	ASC	LC39A	-	-	-	-	-
2024-125	2460494.97	2024 Jun 29 0814	Falcon 9	FTS	352/B1081.6	NR0-186	NR0 Starshield 1-2	-	-	CC	LC40	-	-	-	-	-
2024-126	2460494.97	2024 Jun 29 0814	Falcon 9	FTS	352/B1081.6	NR0-186	NR0 Starshield 1-2	-	-	CC	LC40	-	-	-	-	-
2024-127	2460500.46	2024 Jun 3 0855.00	Falcon 9	FTS	353/B1073.16	Turksat 6A	Starlink Group 8-9	-	-	CC	LC40	-	-	-	-	-
2024-128	2460500.46	2024 Jun 3 0855.00	Falcon 9	FTS	353/B1073.16	Turksat 6A	Starlink Group 8-9	-	-	CC	LC40	-	-	-	-	-
2024-129	2460503.61	2024 Jun 12 0235.00	Falcon 9	FTS	355/B1063.19	Starlink-181	Starlink Group 9-3	-	-	VSFB	SLCBE	-	-	-	-	-
2024-130	2460503.61	2024 Jun 12 0235.00	Falcon 9	FTS	355/B1063.19	Starlink-181	Starlink Group 9-3	-	-	VSFB	SLCBE	-	-	-	-	-
2024-131	2460516.74	2024 Jun 12 0235.00	Falcon 9	FTS	356/B1076.15	Starlink-182	Starlink Group 10-5	-	-	CC	LC40	-	-	-	-	-
2024-132	2460516.74	2024 Jun 12 0235.00	Falcon 9	FTS	356/B1076.15	Starlink-182	Starlink Group 10-5	-	-	CC	LC40	-	-	-	-	-
2024-133	2460519.71	2024 Jun 27 0945.00	Falcon 9	FTS	357/B1077.14	Starlink-183	Starlink Group 10-9	-	-	ASC	LC39A	-	-	-	-	-
2024-134	2460519.71	2024 Jun 27 0945.00	Falcon 9	FTS	357/B1077.14	Starlink-183	Starlink Group 10-9	-	-	ASC	LC39A	-	-	-	-	-
2024-135	2460519.71	2024 Jun 27 0945.00	Falcon 9	FTS	357/B1077.14	Starlink-183	Starlink Group 10-9	-	-	ASC	LC39A	-	-	-	-	-
2024-136	2460524.71	2024 Aug 2 0591.00	Falcon 9	FTS	359/B1078.12	Starlink-185	Starlink Group 10-6	-	-	VSFB	SLCBE	-	-	-	-	-
2024-137	2460524.71	2024 Aug 2 0591.00	Falcon 9	FTS	359/B1078.12	Starlink-185	Starlink Group 10-6	-	-	VSFB	SLCBE	-	-	-	-	-
2024-138	2460524.71	2024 Aug 2 0591.00	Falcon 9	FTS	359/B1078.12	Starlink-185	Starlink Group 10-6	-	-	VSFB	SLCBE	-	-	-	-	-
2024-139	2460527.13	2024 Aug 4 1502.35	Falcon 9	FTS</												



Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	DrPay	Agency	Launch_Code	Group	Category	LTCite	Cite	Notes
2010-026	2455852.28	2010 Jun 4 1845:00	Falcon 9	-	001/B00037	6.000	SPX	US	CX	Sat LEO D	Wire	-	-
2010-066	2455839.15	2010 Dec 8 1843	Falcon 9	-	002/B00047	8.774	SPX	US	CX	Sat LEO D	Wire	-	-
2012-027	2456069.82	2012 May 22 0744:38	Falcon 9	-	003/B00057	7.379	SPX	US	CX	Sat ISS D	Wire	-	-
2012-A10	2456191.50	2012 Sep 21	Grasshopper	-	B0002?	0.000	SPX	US86	-	Test	spacox.com	-	2m hop
2012-054	2456208.52	2012 Oct 8 0035:07	Falcon 9	-	004/B00067	8.249	SPX	AS	CX	Sat ISS D	Wire	-	-
2012-A22	2456232.50	2012 Nov 1	Grasshopper	-	B0002?	0.000	SPX	AS	-	Test	spacox.com	-	5m hop
2012-A25	2456278.50	2012 Dec 17	Grasshopper	-	B0002?	0.000	SPX	AS	-	Test	spacox.com	-	40m hop
2013-010	2456353.13	2013 Mar 1 1510:13	Falcon 9	-	005/B00077	9.630	SPX	US	CX	Sat ISS D	Wire	-	-
2013-A06	2456401.50	2013 Apr 19	Grasshopper	-	B0002?	0.000	SPX	AS	-	Test	spacox.com	-	80m
2013-A11	2456457.50	2013 Jun 14	Grasshopper	-	B0002?	0.000	SPX	AS	-	Test	spacox.com	-	250m
2013-055	2456565.17	2013 Aug 13	Grasshopper	-	B0002?	0.000	SPX	AS	-	Test	spacox.com	-	250m
2013-A19	2456572.50	2013 Oct 7	Grasshopper	1.1	006/B1003?	0.578	SPX	AS	CX/OG	Sat LEO D	Wire	-	325m
2014-002	2456630.45	2013 Dec 3 2241	Falcon 9	-	007	0.000	SPX	AS	-	Test	spacox.com	-	-
2014-002	2456664.42	2014 Jan 6 2206	Falcon 9	1.1	008	3.138	SPX	AS	C	Sat STD D	Wire	-	-
2014-A06	2456764.50	2014 Apr 17	Falcon 9R	1.1	009	0.000	SPX	AS	-	Test	spacox.com	-	250m
2014-022	2456766.31	2014 Apr 18 1925:22	Falcon 9	1.1	001/B1002.1?	0.000	SPX	AS	-	Test	spacox.com	-	-
2014-A09	2456778.50	2014 May 1	Falcon 9R	1.1	002/B1002.2?	0.000	SPX	AS	-	Test	spacox.com	-	-
2014-A09	2456826.42	2014 Jun 17 2204	Falcon 9R	1.1	003/B1002.3?	0.000	SPX	AS	-	Test	spacox.com	-	-
2014-A51	2456853.14	2014 Jul 14 1515:00	Falcon 9R	1.1	010	1.702	SPX	AS	C	Sat LEO D	Wire	-	FIS
2014-A51	2456870.50	2014 Aug 1	Falcon 9R	1.1	004/B1002.4?	0.000	SPX	AS	C	Sat GTD D	Wire	-	FIS
2014-A46	2456874.83	2014 Aug 5 0800	Falcon 9R	1.1	011	4.535	SPX	US	C	Sat LEO D	Wire	-	FIS
2014-A13	2456882.45	2014 Aug 22 2246?	Falcon 9R	1.1	005/B1002.5?	0.000	SPX	AF	-	Test	spacox.com	-	-
2014-052	2456907.71	2014 Sep 7 0900:00	Falcon 9	1.1	013/B1011?	3.700	SPX	US	C	Sat GTD D	Wire	-	-
2014-056	2456921.74	2014 Sep 21 0552:03	Falcon 9	1.1	012/B1010?	12.303	SPX	US	CX	Sat ISS D	Wire	-	-
2015-001	2457032.91	2015 Jan 10 0947:10	Falcon 9	1.1	014/B1012?	12.410	SPX	US	CX	Sat ISS D	Wire	-	-
2015-007	2457055.46	2015 Feb 11 2303:42	Falcon 9	1.1	015/B1013?	0.570	SPX	US	CX/G	Sat ERO E	Wire	-	-
2015-010	2457053.66	2015 Mar 2 0350:00	Falcon 9	1.1	016/B1014?	4.159	SPX	US	CX	Sat STD D	Wire	-	-
2015-021	2457127.34	2015 Apr 14 2010:41	Falcon 9	1.1	017/B1015?	12.156	SPX	US	CX	Sat ISS D	Wire	-	-
2015-025	2457140.46	2015 Apr 27 2303:00	Falcon 9	1.1	018/B1016?	4.700	SPX	US	CX	Sat GTD D	Wire	-	-
2015-F02	2457202.10	2015 Jun 28 1421:11	Falcon 9	1.1	020/B1018?	12.215	SPX	US	CX	Sat LEO D	Wire	-	-
2015-061	2457376.56	2015 Dec 22 0129:00	Falcon 9	FIS	021/B1019	12.853	SPX	US	CX/OG	Sat LEO D	Wire	-	-
2016-002	2457405.28	2016 Jan 17 1842:18	Falcon 9	1.1	019/B1017?	0.553	SPX	US	C	Sat GTD D	Wire	-	-
2016-024	2457452.46	2016 Mar 4 2335	Falcon 9	FIS	022/B1020?	5.271	SPX	US	CX	Sat ISS D	Wire	-	-
2016-024	2457467.36	2016 Apr 8 2043:31	Falcon 9	FIS	023/B1021?	12.661	SPX	US	CX	Sat ISS D	Wire	-	-
2016-031	2457514.72	2016 May 9 0921	Falcon 9	FIS	024/B1022?	4.096	SPX	US	C	Sat GTD D	Wire	-	-
2016-031	2457536.40	2016 May 27 2139	Falcon 9	FIS	025/B1023	3.110	SPX	US	C	Sat STD D	Wire	-	-
2016-038	2457555.10	2016 Jun 15 1429	Falcon 9	FIS	026/B1024?	3.310	SPX	US	C	Sat STD D	Wire	-	-
2016-046	2457597.70	2016 Jul 13 0446:29	Falcon 9	FIS	027/B1025	12.244	SPX	US	CX	Sat ISS D	Wire	-	-
2016-501	2457614.73	2016 Aug 14 0626	Falcon 9	FIS	028/B1026?	4.600	SPX	US	C	Sat GTD D	Wire	-	-
2017-009	2457658.25	2017 Sep 14 1354:39	Falcon 9	FIS	029/B1028?	0.000	SPX	DE	C	Sat GTD D	Wire	-	-
2017-014	2457693.75	2017 Jan 14 1754:29	Falcon 9	FIS	030/B1029	8.000	SPX	US	CX	Sat ISS D	Wire	-	-
2017-022	2457733.94	2017 Feb 19 1459:00	Falcon 9	FIS	031/B1031	11.741	SPX	US	CX	Sat LEO D	Wire	-	-
2017-025	2457769.47	2017 Mar 30 2020	Falcon 9	FIS	032/B1031.2	5.200	SPX	US	CX/G	Sat LEO D	Wire	-	-
2017-033	2457798.38	2017 May 15 2131	Falcon 9	FIS/4	033/B1032	2.700	SPX	US	CX/G	Sat LEO D	Wire	-	-
2017-033	2457798.38	2017 Jun 23 0107:38	Falcon 9	FIS/4	034/B1032	6.070	SPX	US	CX/G	Sat LEO D	Wire	-	-
2017-041	2457840.35	2017 Jun 25 2026:14	Falcon 9	FIS/4	035/B1035	12.053	SPX	US	CX	Sat STD D	Wire	-	-
2017-043	2457840.35	2017 Jul 5 2338	Falcon 9	FIS/4	036/B1035.2	4.000	SPX	US	C/OG	Sat STD D	Wire	-	-
2017-046	2457860.15	2017 Jul 15 1631:37	Falcon 9	FIS/4	037/B1039	6.761	SPX	US	C/OG	Sat LEO D	Wire	-	-
2017-046	2457860.15	2017 Aug 24 1851	Falcon 9	FIS/4	040/B1039	12.509	SPX	US	CX	Sat ISS D	Wire	-	-
2017-052	2458004.08	2017 Sep 7 1400	Falcon 9	FIS/4	042/B1040	0.525	SPX	US	CX/G	Sat LEO D	Wire	-	-
2017-063	2458058.08	2017 Oct 9 1237:01	Falcon 9	FIS/4	043/B1041	5.015	SPX	US	CX/G	Sat LEO D	Wire	-	-
2017-063	2458057.35	2017 Oct 30 1834	Falcon 9	FIS/4	044/B1041.2	5.900	SPX	US	C	Sat GTD D	Wire	-	-
2017-069	2458103.15	2017 Dec 15 1536:09	Falcon 9	FIS/4	045/B1042	3.700	SPX	US	C	Sat STD D	Wire	-	-
2017-083	2458110.56	2017 Dec 23 0127:34	Falcon 9	FIS/4	046/B1036.2	12.443	SPX	US	CX	Sat ISS D	Wire	-	-
2018-010	2458126.54	2018 Jan 8 0100	Falcon 9	FIS/4	048/B1043	8.403	SPX	US	C	Sat LEO D	Wire	-	-
2018-013	2458150.39	2018 Jan 31 2125	Falcon 9	FIS/4	049/B1032.2	4.000	SPX	US	CX/G	Sat LEO D	Wire	-	-
2018-020	2458158.36	2018 Feb 6 2045	Falcon 9 Heavy	-	001/B1033.1	1.000	SPX	US	OG	Sat STD D	Wire	-	-
2018-023	2458163.73	2018 Feb 22 1417	Falcon 9	FIS/4	050/B1038.2	2.100	SPX	US	C/OG	Sat ERO E	Wire	-	-
2018-032	2458208.09	2018 Mar 6 0533	Falcon 9	FIS/4	051/B1044	6.182	SPX	US	C	Sat GTD D	Wire	-	-
2018-032	2458211.35	2018 Mar 30 1413:51	Falcon 9	FIS/4	052/B1041.2	8.600	SPX	US	C	Sat LEO D	Wire	-	-
2018-036	2458227.45	2018 Apr 2 2030:38	Falcon 9	FIS/4	053/B1039.2	12.551	SPX	US	CX/G	Sat ISS D	Wire	-	-
2018-044	2458250.34	2018 Apr 18 2051:30	Falcon 9	FIS/4	054/B1045	0.362	SPX	US	CX/G	Sat STD D	Wire	-	-
2018-047	2458261.32	2018 May 11 2014	Falcon 9	FIS/4	055/B1046	3.700	SPX	US	C/OG	Sat LEO D	Wire	-	-
2018-047	2458261.32	2018 May 22 1947:58	Falcon 9	FIS/4	056/B1043.2	5.600	SPX	US	C	Sat LEO D	Wire	-	-
2018-055	2458273.70	2018 Jun 4 0445	Falcon 9	FIS/4	057/B1040.2	12.433	SPX	US	CX	Sat STD D	Wire	-	-
2018-055	2458298.90	2018 Jun 29 0942:42	Falcon 9	FIS/4	058/B1045.2	12.433	SPX	US	CX	Sat ISS D	Wire	-	-
2018-061	2458321.74	2018 Jul 22 0650	Falcon 9	FIS/4	059/B1047	7.075	SPX	US	C	Sat GTD D	Wire	-	-
2018-064	2458324.94	2018 Jul 25 1139:26	Falcon 9	FIS/4	060/B1048	8.600	SPX	US	C	Sat LEO D	Wire	-	-
2018-069	2458337.72	2018 Aug 7 0518	Falcon 9	FIS/4	061/B1046.2	7.060	SPX	US	C	Sat GTD D	Wire	-	-
2018-076	2458399.60	2018 Sep 10 0445	Falcon 9	FIS/4	062/B1049	5.900	SPX	US	C	Sat STD D	Wire	-	-
2018-099	2458438.37	2018 Oct 8 0221:28	Falcon 9	FIS/4	063/B1048.2	3.000	SPX	US	C/OG	Sat STD D	Wire	-	-
2018-101	2458458.26	2018 Nov 15 2046	Falcon 9	FIS/4	064/B1047.2	4.568	SPX	US	C	Sat ISS D	Wire	-	-
2018-109	2458476.08	2018 Dec 5 1816:16	Falcon 9	FIS/4	065/B1046.3	12.870	SPX	US	CX	Sat STD D	Wire	-	-
2019-002	2458495.15	2019 Dec 23 1351	Falcon 9	FIS/4	066/B1046.3	4.400	SPX	US	CX/G	Sat LEO D	Wire	-	-
2019-009	2458536.57	2019 Jan 11 1531:33	Falcon 9	FIS/4	067/B1054	8.600	SPX	US	CX	Sat LEO D	Wire	-	-
2019-011	2458544.83	2019 Feb 22 0145	Falcon 9	FIS/4	068/B1049.2	13.259	SPX	US	CX	Sat STD D	Wire	-	-
2019-021	2458585.44	2019 Mar 2 0749	Falcon 9	FIS/4	070/B1051	5.412	SPX	US	C	Sat ISS D	Wire	-	-
2019-025	2458607.78	2019 Apr 11 2235	Falcon 9 Heavy	-	002/B1055.1	6.465	SPX	US	C	Sat STD D	Wire	-	-
2019-025	2458607.78	2019 May 4 0648:58	Falcon 9	FIS/4	071/B1056.1	12.740	SPX	US	CX	Sat ISS D	Wire	-	-

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Agency	Launch_Code	Group	Category	LTCite	Cite	Notes
2019-029	2458627.60	2019 May 24 0230	Falcon 9	F15	072/B1049.3	SPX	US	C	Sat LEO D 4	Wire	-	-
2019-030	2458647.10	2019 Jun 12 1417	Falcon 9	F15	073/B1051.2	SPX	US	C/DG	Sat SSO D	Wire	-	-
2019-036	2458659.77	2019 Jun 25 0630	Falcon Heavy	-	003/B1057.1	SPX	US	CX/G	Sat MEO D	Wire	-	-
2019-044	2458690.42	2019 Jul 25 2201:56	Falcon 9	F15	074/B1056.2	SPX	US	CX	Sat ISS D	Wire	-	-
2019-050	2458702.47	2019 Aug 6 2233:00	Falcon 9	F15	075/B1047.3	SPX	US	C	Sat GEO D	Wire	-	-
2019-074	2458799.12	2019 Nov 11 1456	Falcon 9	F15	076/B1048.4	SPX	US	C	Sat LEO D 4	Wire	-	-
2019-083	2458823.23	2019 Dec 5 1729:24	Falcon 9	F15	077/B1059	SPX	US	CX	Sat ISS D	Wire	-	-
2019-091	2458834.51	2019 Dec 17 0010	Falcon 9	F15	078/B1056.3	SPX	US	C	Sat GEO D	Wire	-	-
2020-001	2458855.61	2020 Jan 7 0219:21	Falcon 9	F15	079/B1049.4	SPX	US	C	Sat LEO D 4	Wire	-	-
2020-004	2458868.15	2020 Jan 19 1530:00	Falcon 9	F15	080/B1046.4	SPX	AS	-	Abort test	Wire	-	-
2020-006	2458878.09	2020 Jan 29 1406	Falcon 9	F15	081/B1051.3	SPX	US	C	Sat LEO D 4	Wire	-	-
2020-012	2458915.70	2020 Feb 17 1506:55	Falcon 9	F15	082/B1056.4	SPX	US	C	Sat LEO D 4	Wire	-	-
2020-016	2458945.31	2020 Mar 7 0450:31	Falcon 9	F15	083/B1059.2	SPX	US	CX	Sat ISS D	Wire	-	-
2020-019	2458927.01	2020 Mar 18 1216:39	Falcon 9	F15	084/B1048.5	SPX	US	C	Sat LEO D 4	Wire	-	-
2020-025	2458962.31	2020 Apr 22 1950	Falcon 9	F15	085/B1051.4	SPX	US	C	Sat LEO D 4	Wire	-	-
2020-033	2458900.31	2020 May 30 1222:45	Falcon 9	F15	086/B1058.1	SPX	US	CX	Sat ISS D	Wire	-	-
2020-038	2458904.56	2020 Jun 4 0126:33	Falcon 9	F15	087/B1049.5	SPX	US	C	Sat LEO D 4	Wire	-	-
2020-041	2458913.89	2020 Jun 13 0921:18	Falcon 9	F15	088/B1059.3	SPX	US	C	Sat LEO D 5	Wire	-	-
2020-044	2458903.34	2020 Jun 30 2010:46	Falcon 9	F15	089/B1058.2	SPX	US	CX/G	Sat MEO D	Wire	-	-
2020-048	2458951.40	2020 Jul 20 2130	Falcon 9	F15	090/B1058.2	SPX	US	C	Sat GEO D	Wire	-	-
2020-055	2458968.72	2020 Aug 7 0612:06	Falcon 9	F15	091/B1051.5	SPX	US	C	Sat LEO D 5	Wire	-	-
2020-057	2459080.10	2020 Aug 18 1431:00	Falcon 9	F15	092/B1049.6	SPX	US	C	Sat LEO D 5	Wire	-	-
2020-059	2459092.47	2020 Aug 30 2316:00	Falcon 9	F15	093/B1059.4	SPX	US	C	Sat LEO D 5	Wire	-	-
2020-062	2459096.03	2020 Sep 3 1246:14	Falcon 9	F15	094/B1060.2	SPX	US	C	Sat LEO D 4	Wire	-	-
2020-070	2459128.96	2020 Oct 6 1129:34	Falcon 9	F15	095/B1058.3	SPX	US	C	Sat LEO D 4	Wire	-	-
2020-073	2459141.02	2020 Oct 16 1226:57	Falcon 9	F15	096/B1051.6	SPX	US	C	Sat LEO D 4	Wire	-	-
2020-074	2459147.15	2020 Oct 24 1531:34	Falcon 9	F15	097/B1060.3	SPX	US	C	Sat LEO D 4	Wire	-	-
2020-078	2459159.46	2020 Nov 5 2324:23	Falcon 9	F15	098/B1062.1	SPX	US	C	Sat MEO D	Wire	-	-
2020-084	2459169.52	2020 Nov 16 0027:17	Falcon 9	F15	099/B1061.1	SPX	US	CX/G	Sat ISS D	Wire	-	-9
2020-086	2459176.22	2020 Nov 21 1717:05	Falcon 9	F15	100/B1063.1	SPX	US	C	Sat LEO D 4	Wire	-	-
2020-088	2459176.59	2020 Nov 25 0213:12	Falcon 9	F15	101/B1049.7	SPX	US	C	Sat LEO D 4	Wire	-	-
2020-093	2459190.16	2020 Dec 6 1617:06	Falcon 9	F15	102/B1058.4	SPX	US	CX	Sat ISS D	Wire	-	-
2020-096	2459197.23	2020 Dec 13 1730	Falcon 9	F15	103/B1051.7	SPX	US	C	Sat GEO D	Wire	-	-
2020-101	2459203.06	2020 Dec 19 1400	Falcon 9	F15	104/B1059.5	SPX	US	C	Sat LEO D 4	Wire	-	-
2021-001	2459222.59	2021 Jan 8 0215	Falcon 9	F15	105/B1060.4	SPX	US	CX/G	Sat GEO D	Wire	-	-
2021-005	2459235.04	2021 Jan 20 1302	Falcon 9	F15	106/B1051.8	SPX	US	C	Sat LEO D 4	Wire	-	-
2021-006	2459238.12	2021 Jan 24 1500	Falcon 9	F15	107/B1058.5	SPX	US	C	Sat SSO D	Wire	-	-
2021-009	2459249.76	2021 Feb 4 0619	Falcon 9	F15	108/B1060.5	SPX	US	C	Sat LEO D 4	Wire	-	-
2021-012	2459261.67	2021 Feb 16 0359:37	Falcon 9	F15	109/B1059.6	SPX	US	C	Sat LEO D 4	Wire	-	-
2021-017	2459277.85	2021 Mar 4 0624:54	Falcon 9	F15	110/B1049.8	SPX	US	C	Sat LEO D 4	Wire	-	-
2021-015	2459284.64	2021 Mar 14 0613:29	Falcon 9	F15	111/B1058.6	SPX	US	C	Sat LEO D 4	Wire	-	-
2021-021	2459297.92	2021 Mar 14 1601:26	Falcon 9	F15	112/B1061.9	SPX	US	C	Sat LEO D 4	Wire	-	-
2021-024	2459311.85	2021 Mar 24 1632	Falcon 9	F15	113/B1059.9	SPX	US	C	Sat LEO D 4	Wire	-	-
2021-027	2459327.31	2021 Apr 7 1634	Falcon 9	F15	114/B1058.7	SPX	US	C	Sat LEO D 4	Wire	-	-
2021-030	2459333.26	2021 Apr 23 0949:02	Falcon 9	F15	115/B1061.2	SPX	US	CX	Sat ISS D	Wire	-	-
2021-033	2459339.26	2021 Apr 29 0344:30	Falcon 9	F15	116/B1060.9	SPX	US	C	Sat LEO D 4	Wire	-	-
2021-038	2459343.78	2021 May 4 1431:00	Falcon 9	F15	117/B1059.9	SPX	US	C	Sat LEO D 4	Wire	-	-
2021-041	2459360.46	2021 May 15 2256	Falcon 9	F15	118/B1055.0	SPX	US	C	Sat LEO D 4	Wire	-	-
2021-044	2459361.29	2021 May 26 1859	Falcon 9	F15	119/B1053.6	SPX	US	C	Sat LEO D 4	Wire	-	-
2021-043	2459369.23	2021 Jun 3 1729:15	Falcon 9	F15	120/B1057.2	SPX	US	CX	Sat ISS D	Wire	-	-
2021-046	2459371.61	2021 Jun 6 0648	Falcon 9	F15	121/B1057.1	SPX	US	C	Sat GEO D	Wire	-	-
2021-054	2459383.17	2021 Jun 17 1609:35	Falcon 9	F15	122/B1067.5	SPX	US	CX/G	Sat GEO D	Wire	-	-
2021-056	2459386.31	2021 Jun 30 1931	Falcon 9	F15	123/B1060.5	SPX	US	C	Sat SSO D	Wire	-	-
2021-072	2459455.80	2021 Aug 29 0714:48	Falcon 9	F15	124/B1060.6	SPX	US	C	Sat SSO D	Wire	-	-
2021-073	2459471.66	2021 Aug 14 0355:50	Falcon 9	F15	125/B1061.4	SPX	US	CX	Sat ISS D	Wire	-	-
2021-084	2459473.59	2021 Sep 16 0002:56	Falcon 9	F15	126/B1049.10	SPX	US	C	Sat LEO D 4	Wire	-	-
2021-089	2459529.59	2021 Sep 14 0203:31	Falcon 9	F15	127/B1067.3	SPX	US	CX	Sat ISS D	Wire	-	-
2021-104	2459532.01	2021 Nov 13 1218:56	Falcon 9	F15	128/B1057.5	SPX	US	CX	Sat LEO D 4	Wire	-	-
2021-110	2459542.76	2021 Nov 24 0621:02	Falcon 9	F15	129/B1059.8	SPX	US	C	Sat LEO D 4	Wire	-	-
2021-115	2459551.47	2021 Dec 2 2312	Falcon 9	F15	130/B1063.3	SPX	US	CX/G	Sat GEO E	Wire	-	-
2021-121	2459557.75	2021 Dec 9 0600	Falcon 9	F15	131/B1060.9	SPX	US	C	Sat LEO D 4	Wire	-	-
2021-126	2459567.03	2021 Dec 18 1241:40	Falcon 9	F15	132/B1061.5	SPX	US	CX/G	Sat LEO D 4	Wire	-	-
2021-128	2459567.67	2021 Dec 19 0358:39	Falcon 9	F15	133/B1051.11	SPX	US	C	Sat LEO D 4	Wire	-	-
2021-127	2459569.92	2021 Dec 21 1007:08	Falcon 9	F15	134/B1067.3	SPX	US	C	Sat GEO D	Wire	-	-
2022-001	2459568.41	2022 Jan 6 2149	Falcon 9	F15	135/B1069.2	SPX	US	CX	Sat ISS D	Wire	-	-
2022-002	2459563.14	2022 Jan 13 1625	Falcon 9	F15	136/B1062.4	SPX	US	C	Sat LEO D 4	Wire	-	-
2022-005	2459568.59	2022 Jan 19 0202:40	Falcon 9	F15	137/B1058.10	SPX	US	C	Sat LEO D 4	Wire	-	-
2022-009	2459611.47	2022 Jan 31 2311	Falcon 9	F15	138/B1052.3	SPX	US	C	Sat LEO D 4	Wire	-	-
2022-009	2459613.35	2022 Feb 2 2027:26	Falcon 9	F15	139/B1071.1	SPX	US	CX/G	Sat SSO D	Wire	-	-
2022-010	2459614.26	2022 Feb 3 1813:20	Falcon 9	F15	141/B1068.16	SPX	US	C	Sat LEO D 4	Wire	-	-
2022-016	2459632.11	2022 Feb 21 1444:20	Falcon 9	F15	142/B1058.11	SPX	US	C	Sat LEO D 4	Wire	-	-
2022-017	2459636.22	2022 Feb 25 1712:10	Falcon 9	F15	143/B1060.4	SPX	US	C	Sat LEO D 4	Wire	-	-
2022-022	2459642.07	2022 Mar 3 1405:00	Falcon 9	F15	144/B1060.11	SPX	US	C	Sat LEO D 4	Wire	-	-
2022-025	2459648.07	2022 Mar 9 1345:00	Falcon 9	F15	145/B1052.4	SPX	US	C	Sat LEO D 4	Wire	-	-
2022-033	2459657.70	2022 Mar 19 0442:30	Falcon 9	F15	146/B1051.12	SPX	US	C	Sat LEO D 4	Wire	-	-
2022-037	2459671.18	2022 Apr 1 1624:16	Falcon 9	F15	147/B1061.7	SPX	US	C	Sat SSO D	Wire	-	-
2022-040	2459678.14	2022 Apr 8 1517:11	Falcon 9	F15	148/B1062.5	SPX	US	C	Sat ISS D	Wire	-	-
2022-041	2459687.05	2022 Apr 17 1313	Falcon 9	F15	149/B1071.2	SPX	US	CX/G	Sat LEO D	Wire	-	-
2022-042	2459691.24	2022 Apr 24 1751:40	Falcon 9	F15	150/B1060.12	SPX	US	C	Sat LEO D 4	Wire	-	-
2022-042	2459696.83	2022 Apr 27 0752:55	Falcon 9	F15	151/B1062.6	SPX	US	CX	Sat ISS D	Wire	-	-
2022-049	2459699.39	2022 Apr 29 2127:10	Falcon 9	F15	152/B1062.6	SPX	US	C	Sat LEO D 4	Wire	-	-
2022-051	2459705.90	2022 May 6 0942:00	Falcon 9	F15	153/B1058.12	SPX	US	C	Sat LEO D 4	Wire	-	-
2022-051	2459713.42	2022 May 13 2207:50	Falcon 9	F15	154/B1063.5	SPX	US	C	Sat LEO D 4	Wire	-	-
2022-052	2459714.36	2022 May 14 2040:50	Falcon 9	F15	155/B1073.1	SPX	US	C	Sat LEO D 4	Wire	-	-
2022-053	2459717.96	2022 May 18 1059:40	Falcon 9	F15	156/B1052.5	SPX	US	C	Sat LEO D 4	Wire	-	-

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	OrbPay	Agency	Launch_Code	Group	Category	LTCite	Cite	Notes
2022-057	2459725.27	2022 May 25 1835:00	Falcon 9	F7S	157/B1061.8	2.469	SPX	US	C	Sat S50 D	Wire	-	-
2022-061	2459739.38	2022 Jun 8 2104	Falcon 9	F7S	159/B1062.7	3.938	SPX	US	C	Sat STD D	Wire	-	-
2022-062	2459748.17	2022 Jun 17 1608:50	Falcon 9	F7S	159/B1060.13	15.941	SPX	US	C	Sat LED D 4	Wire	-	-
2022-063	2459749.10	2022 Jun 18 1419:52	Falcon 9	F7S	160/B1071.3	4.000	SPX	US	C/OIG	Sat S50 D	Wire	-	-
2022-064	2459749.69	2022 Jun 19 0427:36	Falcon 9	F7S	161/B1061.9	2.465	SPX	US	CX/G	Sat LED D	Wire	-	-
2022-071	2459760.38	2022 Jun 29 2104	Falcon 9	F7S	162/B1073.2	3.500	SPX	US	C	Sat STD D	Wire	-	-
2022-075	2459768.05	2022 Jun 7 1311:00	Falcon 9	F7S	163/B1068.13	15.941	SPX	US	C	Sat LED D 4	Wire	-	-
2022-077	2459771.57	2022 Jul 11 0139:40	Falcon 9	F7S	164/B1063.6	13.862	SPX	US	C	Sat S50 D 4	Wire	-	-
2022-081	2459775.53	2022 Jul 15 0044:22	Falcon 9	F7S	165/B1067.5	17.447	SPX	US	CX	Sat LED D 4	Wire	-	-
2022-084	2459778.10	2022 Jul 17 1420:00	Falcon 9	F7S	166/B1051.13	15.941	SPX	US	C	Sat LED D 4	Wire	-	-
2022-086	2459785.24	2022 Jul 22 1739:40	Falcon 9	F7S	167/B1071.4	13.862	SPX	US	C	Sat S50 D 4	Wire	-	-
2022-088	2459786.07	2022 Jul 24 1338:20	Falcon 9	F7S	168/B1062.8	0.678	SPX	US	C	Sat LED D 4	Wire	-	-
2022-094	2459796.46	2022 Aug 4 2308:48	Falcon 9	F7S	169/B1052.6	15.941	SPX	US	C/OIG	Sat LED D 4	Wire	-	-
2022-097	2459801.59	2022 Aug 10 0214:40	Falcon 9	F7S	170/B1073.3	15.644	SPX	US	C	Sat S50 D 4	Wire	-	-
2022-099	2459804.40	2022 Aug 12 2140:20	Falcon 9	F7S	171/B1061.10	14.000	SPX	US	C	Sat LED D 4	Wire	-	-
2022-101	2459811.31	2022 Aug 19 1921:20	Falcon 9	F7S	172/B1062.9	16.100	SPX	US	C	Sat LED D 4	Wire	-	-
2022-104	2459819.65	2022 Aug 28 0341:20	Falcon 9	F7S	173/B1069.2	16.400	SPX	US	C	Sat LED D 4	Wire	-	-
2022-105	2459822.74	2022 Aug 31 0540:10	Falcon 9	F7S	174/B1063.7	14.000	SPX	US	C	Sat S50 D 4	Wire	-	-
2022-107	2459827.59	2022 Sep 5 0209:40	Falcon 9	F7S	175/B1058.14	15.965	SPX	US	C	Sat LED D 5	Wire	-	-
2022-111	2459833.56	2022 Sep 11 0120:00	Falcon 9	F7S	176/B1067.6	16.670	SPX	US	C	Sat LED D 5	Wire	-	-
2022-114	2459841.51	2022 Sep 19 0018:40	Falcon 9	F7S	177/B1068.14	12.240	SPX	US	C	Sat LED D 5	Wire	-	-
2022-119	2459847.48	2022 Sep 24 2332:10	Falcon 9	F7S	178/B1067.6	16.670	SPX	US	C	Sat LED D 4	Wire	-	-
2022-124	2459856.17	2022 Oct 5 1600:57	Falcon 9	F7S	179/B1073.4	16.060	SPX	US	CX	Sat LED D 4	Wire	-	-
2022-128	2459866.47	2022 Oct 5 2310:30	Falcon 9	F7S	180/B1077.1	13.085	SPX	US	C	Sat S50 D 4	Wire	-	-
2022-132	2459861.46	2022 Oct 6 2305	Falcon 9	F7S	181/B1060.14	7.350	SPX	US	C	Sat STD D	Wire	-	-
2022-136	2459867.72	2022 Oct 15 0922	Falcon 9	F7S	182/B1062.10	4.476	SPX	US	C	Sat LED D 4	Wire	-	-
2022-141	2459873.12	2022 Oct 20 1460:40	Falcon 9	F7S	183/B1069.3	16.670	SPX	US	C	Sat S50 D 4	Wire	-	-
2022-144	2459880.55	2022 Oct 28 0114:10	Falcon 9	F7S	184/B1063.6	16.365	SPX	US	C	Sat LED D 4	Wire	-	-
2022-146	2459885.07	2022 Nov 1 1941	Falcon Heavy	-	004/B1066.1	1.443	SPX	US	CX/G	Sat STD D	Wire	-	-
2022-148	2459886.72	2022 Nov 5 0922	Falcon 9	F7S	185/B1067.7	4.476	SPX	US	C	Sat STD D	Wire	-	-
2022-149	2459886.17	2022 Nov 12 1606	Falcon 9	F7S	186/B1051.14	6.600	SPX	US	C	Sat STD D	Wire	-	-
2022-153	2459906.62	2022 Nov 26 0287	Falcon 9	F7S	187/B1049.11	4.800	SPX	US	C	Sat STD D	Wire	-	-
2022-159	2459910.31	2022 Nov 26 1920:43	Falcon 9	F7S	188/B1076.1	16.584	SPX	US	CX	Sat STD D	Wire	-	-
2022-166	2459922.44	2022 Dec 6 2227:46	Falcon 9	F7S	189/B1069.4	5.920	SPX	US	C	Sat LED D	Wire	-	-
2022-168	2459924.82	2022 Dec 11 0738:13	Falcon 9	F7S	189/B1073.4	5.920	SPX	US	C	Sat LED D	Wire	-	-
2022-173	2459929.99	2022 Dec 16 1146:57	Falcon 9	F7S	190/B1071.6	1.074	SPX	US	C	Sat LED E	Wire	-	-
2022-174	2459933.46	2022 Dec 16 2248:007	Falcon 9	F7S	191/B1071.6	3.400	SPX	US	C	Sat LED D	Wire	-	-
2022-175	2459931.40	2022 Dec 17 2132:30	Falcon 9	F7S	192/B1067.8	3.400	SPX	US	C	Sat LED D	Wire	-	-
2022-177	2459941.90	2022 Dec 28 0934:00	Falcon 9	F7S	193/B1068.15	16.670	SPX	US	C	Sat LED D 4	Wire	-	-
2022-179	2459945.82	2022 Dec 30 0738	Falcon 9	F7S	194/B1062.11	0.400	SPX	US	C	Sat LED D 4	Wire	-	-
2023-001	2459951.12	2023 Jan 3 1485:56	Falcon 9	F7S	195/B1060.15	5.511	SPX	US	C	Sat S50 D	Wire	-	-
2023-004	2459956.10	2023 Jan 10 0450:17	Falcon 9	F7S	197/B1066.11	3.920	SPX	US	C	Sat LED D	Wire	-	-
2023-005	2459963.46	2023 Jan 18 2236	Falcon Heavy	-	005/B1070.1	3.920	SPX	US	CX/G	Sat STD D	Wire	-	-
2023-009	2459968.02	2023 Jan 18 2236	Falcon 9	F7S	198/B1077.2	4.950	SPX	US	CX/G	Sat STD D	Wire	-	-
2023-013	2459973.35	2023 Jan 19 1543	Falcon 9	F7S	199/B1075.1	15.755	SPX	US	C	Sat LED D 4	Wire	-	-
2023-013	2459970.10	2023 Jan 26 0932:20	Falcon 9	F7S	201/B1077.9	17.395	SPX	US	C	Sat LED D 4	Wire	-	-
2023-014	2459973.16	2023 Jan 31 0105:00	Falcon 9	F7S	202/B1077.1	15.395	SPX	US	C	Sat LED D 4	Wire	-	-
2023-015	2459977.83	2023 Feb 7 0758:20	Falcon 9	F7S	202/B1068.5	16.385	SPX	US	C	Sat LED D 4	Wire	-	-
2023-017	2459987.83	2023 Feb 7 0130	Falcon 9	F7S	203/B1073.6	4.600	SPX	US	C	Sat STD D	Wire	-	-
2023-021	2459987.72	2023 Feb 12 0510:10	Falcon 9	F7S	204/B1062.12	16.675	SPX	US	C	Sat LED D 4	Wire	-	-
2023-021	2459993.67	2023 Feb 18 1912:20	Falcon 9	F7S	205/B1068.9	16.675	SPX	US	C	Sat LED D 4	Wire	-	-
2023-022	2460003.47	2023 Feb 27 2313:50	Falcon 9	F7S	206/B1077.3	5.470	SPX	US	C	Sat STD D	Wire	-	-
2023-023	2460005.73	2023 Feb 27 2313:50	Falcon 9	F7S	207/B1078.1	15.750	SPX	US	C	Sat LED D 4	Wire	-	-
2023-023	2460007.38	2023 Mar 2 0534:14	Falcon 9	F7S	208/B1078.1	13.055	SPX	US	C	Sat LED D 4	Wire	-	-
2023-023	2460013.38	2023 Mar 9 1838:58	Falcon 9	F7S	209/B1068.12	15.755	SPX	US	C	Sat LED D 4	Wire	-	-
2023-033	2460018.32	2023 Mar 15 0030:43	Falcon 9	F7S	211/B1062.13	5.920	SPX	US	C	Sat LED D 4	Wire	-	-
2023-037	2460021.32	2023 Mar 17 0926:40	Falcon 9	F7S	212/B1071.8	17.862	SPX	US	C	Sat LED D 4	Wire	-	-
2023-038	2460021.48	2023 Mar 17 2339:007	Falcon 9	F7S	213/B1069.6	7.985	SPX	US	C	Sat STD D	Wire	-	-
2023-038	2460028.15	2023 Mar 24 1543:10	Falcon 9	F7S	214/B1067.10	17.100	SPX	US	C	Sat LED D 4	Wire	-	-
2023-040	2460033.33	2023 Mar 29 2001:00	Falcon 9	F7S	215/B1077.4	17.100	SPX	US	C	Sat LED D 4	Wire	-	-
2023-046	2460037.10	2023 Apr 2 1429	Falcon 9	F7S	216/B1075.2	4.000	SPX	US	C	Sat LED D 4	Wire	-	-
2023-052	2460041.69	2023 Apr 7 0430:00	Falcon 9	F7S	217/B1076.4	6.305	SPX	US	C	Sat STD D	Wire	-	-
2023-054	2460049.78	2023 Apr 15 0647:39	Falcon 9	F7S	218/B1063.10	2.795	SPX	US	C	Sat S50 D	Wire	-	-
2023-058	2460064.10	2023 Apr 19 1431:10	Falcon 9	F7S	219/B1073.8	15.750	SPX	US	C	Sat LED D	Wire	-	-
2023-064	2460062.07	2023 Apr 27 1340:50	Falcon 9	F7S	220/B1061.13	13.820	SPX	US	C	Sat S50 D 4	Wire	-	-
2023-069	2460063.42	2023 Apr 28 2212	Falcon 9	F7S	221/B1078.2	3.400	SPX	US	C	Sat STD D	Wire	-	-
2023-069	2460065.52	2023 Apr 1 0026	Falcon Heavy	-	006/B1068.1	6.840	SPX	US	C	Sat STD D	Wire	-	-
2023-069	2460068.81	2023 May 4 0731:00	Falcon 9	F7S	222/B1069.7	17.100	SPX	US	C	Sat LED D 4	Wire	-	-
2023-069	2460075.34	2023 May 10 2009:00	Falcon 9	F7S	223/B1075.3	15.575	SPX	US	C	Sat LED D 4	Wire	-	-
2023-065	2460078.71	2023 May 14 0503:30	Falcon 9	F7S	224/B1067.11	17.100	SPX	US	C	Sat LED D 4	Wire	-	-
2023-067	2460083.76	2023 May 19 0619:30	Falcon 9	F7S	225/B1076.5	16.500	SPX	US	C	Sat LED D 4	Wire	-	-
2023-068	2460085.05	2023 May 20 1316:33	Falcon 9	F7S	226/B1063.11	6.668	SPX	US	C	Sat LED D	Wire	-	-
2023-073	2460086.40	2023 May 21 2137:09	Falcon 9	F7S	227/B1080.1	13.000	SPX	US	C	Sat LED D	Wire	-	-
2023-075	2460091.69	2023 May 27 0430	Falcon 9	F7S	228/B1062.14	4.500	SPX	US	C	Sat STD D	Wire	-	-
2023-079	2460095.75	2023 May 31 0602:30	Falcon 9	F7S	229/B1061.14	15.880	SPX	US	C	Sat LED D	Wire	-	-
2023-080	2460101.16	2023 Jun 4 1220:00	Falcon 9	F7S	230/B1078.3	16.500	SPX	US	C	Sat LED D	Wire	-	-
2023-083	2460108.40	2023 Jun 5 1547:00	Falcon 9	F7S	231/B1077.5	18.940	SPX	US	CX	Sat LED D	Wire	-	-
2023-084	2460114.43	2023 Jun 12 0710:50	Falcon 9	F7S	232/B1073.9	15.880	SPX	US	C	Sat LED D	Wire	-	-
2023-086	2460117.80	2023 Jun 18 2221	Falcon 9	F7S	233/B1071.9	4.011	SPX	US	C	Sat STD D	Wire	-	-
2023-088	2460147.43	2023 Jun 22 0719:00	Falcon 9	F7S	234/B1067.12	4.600	SPX	US	C	Sat S50 D	Wire	-	-
2023-090	2460119.15	2023 Jun 23 1635:10	Falcon 9	F7S	235/B1075.4	14.355	SPX	US	C	Sat LED D	Wire	-	-
2023-092	2460127.13	2023 Jul 1 1512	Falcon 9	F7S	237/B1080.2	17.100	SPX	US	C	Sat LED E	Wire	-	-
2023-094	2460133.31	2023 Jul 7 1929:50	Falcon 9	F7S	238/B1063.12	14.660	SPX	US	C	Sat LED D	Wire	-	-
2023-096	2460135.67	2023 Jul 10 0858:50	Falcon 9	F7S	239/B1058.16	16.500	SPX	US	C	Sat LED D	Wire	-	-



Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Agency	Launch_Code	Group	Category	LTCite	Cite	Notes
2023-099	2460141.66	2023 Jul 16 0550:00	Falcon 9	F1S	240/B1060.16	SPX	US	C	Sat LE0 D	Wire	-	-
2023-102	2460145.67	2023 Jul 20 0409:30	Falcon 9	F1S	241/B1071.10	SPX	US	C	Sat LE0 D	Wire	-	-
2023-105	2460149.54	2023 Jul 24 0650:30	Falcon 9	F1S	242/B1076.6	SPX	US	C	Sat LE0 D	Wire	-	-
2023-107	2460153.67	2023 Jul 28 0401:10	Falcon 9	F1S	243/B1062.15	SPX	US	C	Sat LE0 D	Wire	-	-
2023-108	2460154.63	2023 Jul 29 0304	Falcon Heavy	-	007/B1074.1	SPX	US	C	Sat LE0 D	Wire	-	-
2023-112	2460159.71	2023 Aug 3 0500	Falcon 9	F1S	244/B1077.6	SPX	US	C	Sat LE0 D	Wire	-	-
2023-113	2460163.61	2023 Aug 7 0241:10	Falcon 9	F1S	245/B1078.4	SPX	US	C	Sat LE0 D	Wire	-	-
2023-115	2460164.66	2023 Aug 8 0357:00	Falcon 9	F1S	246/B1075.5	SPX	US	C	Sat LE0 D	Wire	-	-
2023-119	2460167.72	2023 Aug 11 0517:40	Falcon 9	F1S	247/B1069.9	SPX	US	C	Sat LE0 D	Wire	-	-
2023-122	2460173.65	2023 Aug 17 0336:50	Falcon 9	F1S	248/B1067.13	SPX	US	C	Sat LE0 D	Wire	-	-
2023-124	2460178.90	2023 Aug 22 0937:30	Falcon 9	F1S	249/B1061.15	SPX	US	C	Sat LE0 D	Wire	-	-
2023-128	2460182.81	2023 Aug 28 0727:27	Falcon 9	F1S	250/B1081.1	SPX	US	CX	Sat LE0 D	Wire	-	-
2023-129	2460183.55	2023 Aug 27 0106:40	Falcon 9	F1S	251/B1080.3	SPX	US	C	Sat LE0 D	Wire	-	-
2023-131	2460186.60	2023 Sep 1 0221:50	Falcon 9	F1S	252/B1077.7	SPX	US	C	Sat LE0 D	Wire	-	-
2023-133	2460190.10	2023 Sep 2 1425	Falcon 9	F1S	253/B1063.13	SPX	US	CX/G	Sat LE0 D	Wire	-	-
2023-134	2460191.62	2023 Sep 4 0247:20	Falcon 9	F1S	254/B1073.10	SPX	US	C	Sat LE0 D	Wire	-	-
2023-138	2460196.63	2023 Sep 9 0312:50	Falcon 9	F1S	255/B1076.7	SPX	US	C	Sat LE0 D	Wire	-	-
2023-141	2460198.79	2023 Sep 12 0657:50	Falcon 9	F1S	256/B1071.11	SPX	US	C	Sat LE0 D	Wire	-	-
2023-144	2460203.65	2023 Sep 16 0338:20	Falcon 9	F1S	257/B1078.5	SPX	US	C	Sat LE0 D	Wire	-	-
2023-146	2460207.65	2023 Sep 20 0338:10	Falcon 9	F1S	258/B1068.17	SPX	US	C	Sat LE0 D	Wire	-	-
2023-147	2460211.65	2023 Sep 24 0338:30	Falcon 9	F1S	259/B1060.17	SPX	US	C	Sat LE0 D	Wire	-	-
2023-148	2460212.87	2023 Sep 28 0846:20	Falcon 9	F1S	260/B1075.6	SPX	US	C	Sat LE0 D	Wire	-	-
2023-151	2460217.58	2023 Sep 30 0200:00	Falcon 9	F1S	261/B1069.10	SPX	US	C	Sat LE0 D	Wire	-	-
2023-153	2460222.73	2023 Oct 5 0536:30	Falcon 9	F1S	262/B1076.8	SPX	US	C	Sat LE0 D	Wire	-	-
2023-156	2460226.82	2023 Oct 9 0743	Falcon 9	F1S	263/B1063.14	SPX	US	C	Sat LE0 D	Wire	-	-
2023-157	2460231.10	2023 Oct 13 1419:43	Falcon Heavy	-	006/B1079.1	SPX	US	CX/G	Sat LE0 E	Wire	-	-
2023-158	2460231.46	2023 Oct 13 2301:10	Falcon 9	F1S	264/B1067.14	SPX	US	C	Sat LE0 D	Wire	-	-
2023-160	2460235.53	2023 Oct 18 0039	Falcon 9	F1S	265/B1062.16	SPX	US	C	Sat LE0 D	Wire	-	-
2023-161	2460236.85	2023 Oct 21 0823:00	Falcon 9	F1S	266/B1061.16	SPX	US	C	Sat LE0 D	Wire	-	-
2023-162	2460239.60	2023 Oct 22 0217:00	Falcon 9	F1S	267/B1080.4	SPX	US	C	Sat LE0 D	Wire	-	-
2023-166	2460246.86	2023 Oct 28 0900:00	Falcon 9	F1S	268/B1075.7	SPX	US	C	Sat LE0 D	Wire	-	-
2023-167	2460246.47	2023 Oct 30 2320:30	Falcon 9	F1S	269/B1077.8	SPX	US	C	Sat LE0 D	Wire	-	-
2023-170	2460252.53	2023 Nov 4 0037:20	Falcon 9	F1S	270/B1058.16	SPX	US	C	Sat LE0 D	Wire	-	-
2023-171	2460256.71	2023 Nov 8 0805:30	Falcon 9	F1S	271/B1073.11	SPX	US	C	Sat LE0 D	Wire	-	-
2023-173	2460258.56	2023 Nov 10 0128:14	Falcon 9	F1S	272/B1061.12	SPX	US	CX	Sat LE0 D	Wire	-	-
2023-174	2460260.28	2023 Nov 12 1849:00	Falcon 9	F1S	273/B1076.9	SPX	US	C	Sat LE0 D	Wire	-	-
2023-175	2460261.58	2023 Nov 12 2108	Falcon 9	F1S	274/B1076.9	SPX	US	C	Sat LE0 D	Wire	-	-
2023-177	2460266.71	2023 Nov 16 0606:50	Falcon 9	F1S	275/B1069.11	SPX	US	C	Sat LE0 D	Wire	-	-
2023-178	2460266.94	2023 Nov 20 1030:40	Falcon 9	F1S	276/B1063.15	SPX	US	C	Sat LE0 D	Wire	-	-
2023-180	2460270.82	2023 Nov 22 0747:40	Falcon 9	F1S	277/B1067.15	SPX	US	C	Sat LE0 D	Wire	-	-
2023-183	2460276.68	2023 Nov 28 0420:00	Falcon 9	F1S	278/B1062.17	SPX	US	C	Sat LE0 D	Wire	-	-
2023-185	2460280.26	2023 Dec 3 1819	Falcon 9	F1S	279/B1071.17	SPX	US	C/DG	Sat LE0 D	Wire	-	-
2023-186	2460281.77	2023 Dec 3 0507:50	Falcon 9	F1S	280/B1078.16	SPX	US	C	Sat LE0 D	Wire	-	-
2023-191	2460288.84	2023 Dec 8 0803:30	Falcon 9	F1S	282/B1071.3	SPX	US	C	Sat LE0 D	Wire	-	-
2023-192	2460297.77	2023 Dec 9 0401:00	Falcon 9	F1S	283/B1081.3	SPX	US	C	Sat LE0 D	Wire	-	-
2023-193	2460301.73	2023 Dec 23 0533:00	Falcon 9	F1S	284/B1058.19	SPX	US	C	Sat LE0 D	Wire	-	-
2023-203	2460303.05	2023 Dec 24 1311:00	Falcon 9	F1S	285/B1075.9	SPX	US	C/DG	Sat LE0 D	Wire	-	-
2023-204	2460307.55	2023 Dec 29 0101:40	Falcon Heavy	-	009/B1089.16	SPX	US	CX/G	Sat LE0 D	Wire	-	-
2023-211	2460307.66	2023 Dec 29 0401:40	Falcon 9	F1S	286/B1069.12	SPX	US	C	Sat LE0 D	Wire	-	-
2024-002	2460312.66	2024 Jan 3 0344:20	Falcon 9	F1S	287/B1082.10	SPX	US	C	Sat LE0 D	Wire	-	-
2024-002	2460313.46	2024 Jan 3 2304:20	Falcon 9	F1S	288/B1072.10	SPX	US	C	Sat LE0 D	Wire	-	-
2024-003	2460317.46	2024 Jan 7 2205:40	Falcon 9	F1S	289/B1067.16	SPX	US	C	Sat LE0 D	Wire	-	-
2024-003	2460323.87	2024 Jan 14 0859:30	Falcon 9	F1S	290/B1061.19	SPX	US	C	Sat LE0 D	Wire	-	-
2024-012	2460324.58	2024 Jan 15 0152:00	Falcon 9	F1S	291/B1073.12	SPX	US	C	Sat LE0 D	Wire	-	-
2024-014	2460328.43	2024 Jan 24 0149:11	Falcon 9	F1S	292/B1089.15	SPX	US	CX	Sat LE0 D	Wire	-	-
2024-014	2460333.53	2024 Jan 24 0335:00	Falcon 9	F1S	293/B1063.16	SPX	US	C	Sat LE0 D	Wire	-	-
2024-010	2460338.55	2024 Jan 29 0119:00	Falcon 9	F1S	294/B1069.13	SPX	US	C	Sat LE0 D	Wire	-	-
2024-020	2460338.75	2024 Jan 29 0857:20	Falcon 9	F1S	295/B1075.9	SPX	US	C	Sat LE0 D	Wire	-	-
2024-021	2460340.21	2024 Jan 30 1707:21	Falcon 9	F1S	296/B1077.10	SPX	US	CX	Sat LE0 D	Wire	-	-
2024-025	2460348.77	2024 Feb 8 0633:32	Falcon 9	F1S	297/B1081.4	SPX	US	CX/G	Sat LE0 D	Wire	-	-
2024-027	2460350.52	2024 Feb 10 0034:00	Falcon 9	F1S	298/B1071.14	SPX	US	C	Sat LE0 D	Wire	-	-
2024-028	2460355.44	2024 Feb 14 2230:00	Falcon 9	F1S	299/B1078.7	SPX	US	CX/G	Sat LE0 D	Wire	-	-
2024-030	2460356.44	2024 Feb 15 0605:37	Falcon 9	F1S	300/B1069.18	SPX	US	C	Sat LE0 D	Wire	-	-
2024-031	2460361.34	2024 Feb 20 2011	Falcon 9	F1S	301/B1082.2	SPX	US	C	Sat LE0 D	Wire	-	-
2024-038	2460363.67	2024 Feb 23 0411:50	Falcon 9	F1S	302/B1067.17	SPX	US	C	Sat LE0 D	Wire	-	-
2024-038	2460366.42	2024 Feb 25 2206:00	Falcon 9	F1S	303/B1061.19	SPX	US	C	Sat LE0 D	Wire	-	-
2024-041	2460370.15	2024 Feb 29 1530:00	Falcon 9	F1S	304/B1069.13	SPX	US	C	Sat LE0 D	Wire	-	-
2024-042	2460373.66	2024 Mar 4 0353:38	Falcon 9	F1S	305/B1076.11	SPX	US	C	Sat LE0 D	Wire	-	-
2024-043	2460374.42	2024 Mar 4 2205:00	Falcon 9	F1S	306/B1083.1	SPX	US	CX	Sat LE0 D	Wire	-	-
2024-044	2460374.50	2024 Mar 4 2356:00	Falcon 9	F1S	307/B1081.5	SPX	US	C	Sat LE0 D	Wire	-	-
2024-045	2460380.46	2024 Mar 10 2305:00	Falcon 9	F1S	308/B1073.13	SPX	US	C	Sat LE0 D	Wire	-	-
2024-045	2460380.67	2024 Mar 11 0409:00	Falcon 9	F1S	309/B1077.11	SPX	US	C	Sat LE0 D	Wire	-	-
2024-050	2460385.51	2024 Mar 16 0021:00	Falcon 9	F1S	310/B1063.17	SPX	US	C	Sat LE0 D	Wire	-	-
2024-050	2460388.60	2024 Mar 19 0228:00	Falcon 9	F1S	311/B1062.19	SPX	US	C	Sat LE0 D	Wire	-	-
2024-054	2460391.37	2024 Mar 21 2055:09	Falcon 9	F1S	312/B1075.10	SPX	US	C	Sat LE0 D	Wire	-	-
2024-054	2460393.63	2024 Mar 24 0309:00	Falcon 9	F1S	313/B1080.6	SPX	US	CX	Sat LE0 D	Wire	-	-
2024-057	2460395.49	2024 Mar 25 2342:00	Falcon 9	F1S	314/B1069.19	SPX	US	C	Sat LE0 D	Wire	-	-
2024-060	2460400.41	2024 Mar 30 2152:00	Falcon 9	F1S	315/B1078.8	SPX	US	C	Sat LE0 D	Wire	-	-
2024-062	2460402.60	2024 Mar 31 0130:00	Falcon 9	F1S	316/B1076.12	SPX	US	C	Sat LE0 D	Wire	-	-
2024-064	2460405.88	2024 Apr 2 0230:00	Falcon 9	F1S	317/B1067.18	SPX	US	C	Sat LE0 D	Wire	-	-
2024-065	2460407.60	2024 Apr 5 0912:00	Falcon 9	F1S	318/B1071.15	SPX	US	C	Sat LE0 D	Wire	-	-
2024-066	2460408.47	2024 Apr 7 2316	Falcon 9	F1S	319/B1069.14	SPX	US	C	Sat LE0 D	Wire	-	-
2024-068	2460410.74	2024 Apr 10 0540:00	Falcon 9	F1S	320/B1081.6	SPX	US	C	Sat LE0 D	Wire	-	-
2024-068	2460411.74	2024 Apr 10 0540:00	Falcon 9	F1S	321/B1073.14	SPX	US	C	Sat LE0 D	Wire	-	-
2024-068	2460411.74	2024 Apr 10 0540:00	Falcon 9	F1S	322/B1083.2	SPX	US	C	Sat LE0 D	Wire	-	-

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	OrbPay	Agency	Launch_Code	Group	Category	LTCite	Cite	Notes
2024-070	2460412.10	2024 Apr 11 1425	Falcon 9	FTS	323/B1082.3	1,200	SPX	US	CX/G	Sat SS0 D	Wire	-	-
2024-071	2460413.57	2024 Apr 13 0140:00	Falcon 9	FTS	324/B1062.20	17,250	SPX	US	C	Sat LE0 D	Wire	-	-
2024-073	2460418.39	2024 Apr 17 2126:00	Falcon 9	FTS	325/B1077.12	17,250	SPX	US	C	Sat LE0 D	Wire	-	-
2024-074	2460419.44	2024 Apr 18 2240:00	Falcon 9	FTS	326/B1080.7	17,250	SPX	US	C	Sat LE0 D	Wire	-	-
2024-076	2460424.43	2024 Apr 23 2217:00	Falcon 9	FTS	327/B1078.9	17,250	SPX	US	C	Sat LE0 D	Wire	-	-
2024-079	2460428.52	2024 Apr 28 0034	Falcon 9	FTS	328/B1080.20	1,466	SPX	US	C	Sat MED D	Wire	-	-
2024-080	2460429.42	2024 Apr 28 2208:00	Falcon 9	FTS	329/B1076.13	17,250	SPX	US	C	Sat LE0 D	Wire	-	-
2024-081	2460433.27	2024 May 2 1836	Falcon 9	FTS	330/B1061.20	1,400	SPX	US	C	Sat SS0 D	Wire	-	-
2024-082	2460435.61	2024 May 3 0237:00	Falcon 9	FTS	331/B1067.19	17,250	SPX	US	C	Sat LE0 D	Wire	-	-
2024-084	2460437.26	2024 May 6 1814:00	Falcon 9	FTS	332/B1069.15	17,250	SPX	US	C	Sat LE0 D	Wire	-	-
2024-086	2460440.69	2024 May 8 1842:00	Falcon 9	FTS	333/B1083.3	17,250	SPX	US	C	Sat LE0 D	Wire	-	-
2024-088	2460443.54	2024 May 10 0430:00	Falcon 9	FTS	334/B1073.15	15,750	SPX	US	C	Sat LE0 D	Wire	-	-
2024-090	2460446.28	2024 May 13 0853:00	Falcon 9	FTS	335/B1073.15	17,250	SPX	US	C	Sat LE0 D	Wire	-	-
2024-091	2460446.52	2024 May 14 1839:00	Falcon 9	FTS	336/B1085.16	15,750	SPX	US	C	Sat LE0 D	Wire	-	-
2024-093	2460448.22	2024 May 15 0332:00	Falcon 9	FTS	337/B1062.21	17,250	SPX	US	C	Sat LE0 D	Wire	-	-
2024-096	2460452.83	2024 May 22 0800	Falcon 9	FTS	338/B1071.16	15,500	SPX	US	C	Sat LE0 D	Wire	-	-
2024-097	2460453.61	2024 May 23 0235	Falcon 9	FTS	339/B1080.8	17,250	SPX	US	C	Sat LE0 D	Wire	-	-
2024-098	2460454.61	2024 May 24 0245	Falcon 9	FTS	340/B1077.13	17,250	SPX	US	C	Sat LE0 D	Wire	-	-
2024-100	2460459.10	2024 May 28 1424	Falcon 9	FTS	342/B1061.7	2,200	SPX	US	C	Sat SS0 D	Wire	-	-
2024-101	2460459.43	2024 May 28 2220	Falcon 9	FTS	343/B1076.14	17,250	SPX	US	C	Sat LE0 D	Wire	-	-
2024-106	2460462.61	2024 Jun 1 0237:00	Falcon 9	FTS	344/B1067.20	15,000	SPX	US	C	Sat LE0 D	Wire	-	-
2024-107	2460466.59	2024 Jun 5 0216:00	Falcon 9	FTS	345/B1069.16	16,500	SPX	US	C	Sat LE0 D	Wire	-	-
2024-111	2460469.58	2024 Jun 8 0156:00	Falcon 9	FTS	346/B1061.21	15,750	SPX	US	C	Sat LE0 D	Wire	-	-
2024-112	2460470.04	2024 Jun 8 1258	Falcon 9	FTS	347/B1082.5	15,750	SPX	US	C	Sat LE0 D	Wire	-	-
2024-115	2460480.65	2024 Jun 19 0340:00	Falcon 9	FTS	348/B1080.9	5,000	SPX	US	C	Sat LTD D	Wire	-	-
2024-116	2460482.40	2024 Jun 20 2135	Falcon 9	FTS	349/B1078.11	16,500	SPX	US	C	Sat LTD D	Wire	-	-
2024-117	2460485.22	2024 Jun 23 1715:00	Falcon 9	FTS	350/B1075.11	15,750	SPX	US	C	Sat LTD D	Wire	-	-
2024-119	2460487.39	2024 Jun 25 2126	Falcon Heavy	FTS	010/B1087.1	5,000	SPX	US	C	Sat LTD D	Wire	-	-
2024-120	2460488.97	2024 Jun 27 1114	Falcon 9	FTS	351/B1062.22	17,250	SPX	US	C	Sat LTD D	Wire	-	-
2024-121	2460490.65	2024 Jun 28 0314	Falcon 9	FTS	352/B1061.6	15,500	SPX	US	C	Sat LTD D	Wire	-	-
2024-124	2460494.67	2024 Jul 3 0855:00	Falcon 9	FTS	353/B1076.15	15,000	SPX	US	C	Sat LTD D	Wire	-	-
2024-127	2460500.46	2024 Jul 6 2330	Falcon 9	FTS	354/B1076.15	4,250	SPX	US	C	Sat LTD D	Wire	-	-
2024-129	2460503.61	2024 Jul 12 0235:00	Falcon 9	FTS	355/B1063.19	15,750	SPX	US	C	Sat LTD D	Wire	-	-
2024-131	2460516.74	2024 Jul 17 0546:00	Falcon 9	FTS	356/B1069.17	17,250	SPX	US	C	Sat LTD D	Wire	-	-
2024-132	2460519.71	2024 Jul 28 0609:00	Falcon 9	FTS	357/B1077.14	17,250	SPX	US	C	Sat LTD D	Wire	-	-
2024-133	2460531.99	2024 Jul 28 0922:10	Falcon 9	FTS	358/B1071.17	15,500	SPX	US	C	Sat LTD D	Wire	-	-
2024-136	2460524.71	2024 Aug 2 0501:00	Falcon 9	FTS	359/B1078.12	17,250	SPX	US	C	Sat LTD D	Wire	-	-
2024-138	2460526.81	2024 Aug 4 0724:00	Falcon 9	FTS	360/B1082.6	17,250	SPX	US	C	Sat LTD D	Wire	-	-
2024-139	2460527.13	2024 Aug 4 1502:55	Falcon 9	FTS	361/B1080.10	12,000	SPX	US	CX	Sat SS0 D	Wire	-	-
2024-141	2460531.63	2024 Aug 10 1250:00	Falcon 9	FTS	362/B1067.21	15,500	SPX	US	C	Sat LTD D	Wire	-	-
2024-143	2460534.56	2024 Aug 12 0302:00	Falcon 9	FTS	363/B1071.12	7,250	SPX	US	C	Sat LTD D	Wire	-	-
2024-144	2460538.94	2024 Aug 15 1806:00	Falcon 9	FTS	365/B1076.16	1,400	SPX	US	C	Sat LTD D	Wire	-	-
2024-145	2460539.29	2024 Aug 16 1806:00	Falcon 9	FTS	366/B1075.12	3,000	SPX	US	C	Sat SS0 D	Wire	-	-
2024-146	2460543.26	2024 Aug 20 1328:00	Falcon 9	FTS	367/B1085.15	16,000	SPX	US	C	Sat LTD D	Wire	-	-
2024-150	2460549.82	2024 Aug 28 0748:00	Falcon 9	FTS	368/B1085.15	16,000	SPX	US	C	Sat LTD D	Wire	-	-
2024-152	2460550.83	2024 Aug 30 0748:00	Falcon 9	FTS	369/B1089.19	16,000	SPX	US	C	Sat LTD D	Wire	-	-
2024-154	2460553.82	2024 Aug 31 0748:00	Falcon 9	FTS	370/B1089.19	16,000	SPX	US	C	Sat LTD D	Wire	-	-
2024-155	2460559.15	2024 Sep 1 0848:00	Falcon 9	FTS	371/B1077.0	16,000	SPX	US	C	Sat LTD D	Wire	-	-
2024-156	2460559.64	2024 Sep 6 0333:00	Falcon 9	FTS	372/B1083.20	15,500	SPX	US	C	Sat LTD D	Wire	-	-
2024-160	2460563.89	2024 Sep 10 0923:49	Falcon 9	FTS	373/B1083.20	15,500	SPX	US	C	Sat LTD D	Wire	-	-
2024-162	2460565.87	2024 Sep 13 0852	Falcon 9	FTS	374/B1078.13	7,500	SPX	US	C	Sat LTD D	Wire	-	-
2024-164	2460566.57	2024 Sep 13 0145:00	Falcon 9	FTS	375/B1071.19	16,000	SPX	US	C	Sat LTD D	Wire	-	-
2024-167	2460571.45	2024 Sep 17 2050	Falcon 9	FTS	376/B1067.22	1,466	SPX	US	C	Sat MED D	Wire	-	-
2024-171	2460574.08	2024 Sep 20 1359:00	Falcon 9	FTS	377/B1075.13	16,000	SPX	US	C	Sat LTD D	Wire	-	-
2024-172	2460578.67	2024 Sep 25 0401:00	Falcon 9	FTS	378/B1081.10	16,000	SPX	US	C	Sat LTD D	Wire	-	-
2024-176	2460582.22	2024 Sep 28 1717:20	Falcon 9	FTS	379/B1085.2	13,055	SPX	US	CX	Sat SS0 D	Wire	-	-
2024-180	2460591.12	2024 Oct 7 1452	Falcon 9	FTS	380/B1085.2	1,200	SPX	US	CX/G	Sat MED E	Wire	-	-
2024-182	2460598.17	2024 Oct 14 1606:00	Falcon Heavy	-	011/B1090.1	5,700	SPX	US	CX/G	Sat MED E	Wire	-	-
2024-183	2460598.76	2024 Oct 15 0610	Falcon 9	FTS	381/B1080.11	17,500	SPX	US	C	Sat LTD D	Wire	-	-
2024-184	2460598.85	2024 Oct 15 0921	Falcon 9	FTS	382/B1071.11	14,600	SPX	US	C	Sat LTD D	Wire	-	-
2024-187	2460602.48	2024 Oct 18 2031	Falcon 9	FTS	383/B1082.7	17,500	SPX	US	C	Sat LTD D	Wire	-	-
2024-188	2460603.72	2024 Oct 20 0513	Falcon 9	FTS	384/B1082.7	3,000	SPX	US	C	Sat LTD D	Wire	-	-
2024-191	2460607.41	2024 Oct 23 2147:00	Falcon 9	FTS	385/B1073.18	17,500	SPX	US	C	Sat LTD D	Wire	-	-
2024-192	2460608.22	2024 Oct 24 1714	Falcon 9	FTS	386/B1063.21	15,500	SPX	US	C	Sat LTD D	Wire	-	-
2024-193	2460610.41	2024 Oct 26 2147:00	Falcon 9	FTS	387/B1069.19	17,500	SPX	US	C	Sat LTD D	Wire	-	-
2024-196	2460614.38	2024 Oct 30 1207:00	Falcon 9	FTS	388/B1075.14	14,600	SPX	US	C	Sat LTD D	Wire	-	-
2024-200	2460619.60	2024 Oct 30 2110	Falcon 9	FTS	389/B1078.14	17,500	SPX	US	C	Sat LTD D	Wire	-	-
2024-202	2460622.35	2024 Nov 7 0229:30	Falcon 9	FTS	390/B1083.5	17,870	SPX	US	CX	Sat SS0 D	Wire	-	-
2024-204	2460623.76	2024 Nov 7 0614:00	Falcon 9	FTS	391/B1085.3	17,500	SPX	US	C	Sat LTD D	Wire	-	-
2024-206	2460626.22	2024 Nov 11 1722	Falcon 9	FTS	392/B1081.11	14,600	SPX	US	C	Sat LTD D	Wire	-	-
2024-207	2460626.39	2024 Nov 11 2128:00	Falcon 9	FTS	393/B1067.23	3,500	SPX	US	C	Sat LTD D	Wire	-	-
2024-209	2460628.72	2024 Nov 14 0523:00	Falcon 9	FTS	394/B1080.12	17,500	SPX	US	C	Sat LTD D	Wire	-	-
2024-210	2460629.06	2024 Nov 14 1301:00	Falcon 9	FTS	395/B1082.8	14,600	SPX	US	C	Sat LTD D	Wire	-	-
2024-212	2460632.44	2024 Nov 17 2228	Falcon 9	FTS	396/B1076.18	17,500	SPX	US	C	Sat LTD D	Wire	-	-
2024-213	2460632.75	2024 Nov 18 0553:00	Falcon 9	FTS	397/B1077.16	4,500	SPX	US	C	Sat LTD D	Wire	-	-
2024-214	2460633.27	2024 Nov 18 1831	Falcon 9	FTS	398/B1073.19	4,700	SPX	US	C	Sat LTD D	Wire	-	-
2024-216	2460636.17	2024 Nov 21 1607:50	Falcon 9	FTS	400/B1069.20	17,500	SPX	US	C	Sat LTD D	Wire	-	-
2024-217	2460638.73	2024 Nov 24 0525:30	Falcon 9	FTS	401/B1075.15	14,600	SPX	US	C	Sat LTD D	Wire	-	-
2024-220	2460639.92	2024 Nov 25 1002:20	Falcon 9	FTS	402/B1080.13	16,800	SPX	US	C	Sat LTD D	Wire	-	-
2024-222	2460641.70	2024 Nov 27 0441:30	Falcon 9	FTS	403/B1078.15	17,500	SPX	US	C	Sat LTD D	Wire	-	-

Stage 2 no restart

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Launch

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Mission	FlightCode	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee km	Range km	Dest
2000-A08	2451788-50	2000 Sep 1	Al. Fatah	-	F6	Test	-	-	-	IRAQ-A	-	-	-	17	-	-
2000-A09	2451840-50	2000 Oct 23	Al. Fatah	-	F8	Test	-	-	-	IRAQ-A	-	-	-	60?	-	-
2000-A62	2451866-50	2000 Nov 18	Al. Fatah	-	F9	Test	-	-	-	IRAQ-A	-	-	-	60?	-	-
2001-H16	2451985-50	2001 Mar 17	Al. Fatah	-	F11	Test	-	-	-	IRAQ-A	-	-	-	60?	-	-
2001-H17	2451985-50	2001 Mar 17	Al. Fatah	-	F12	Test	-	-	-	IRAQ-A	-	-	-	60?	-	-
2001-A19	2452028-50	2001 Apr 29	Al. Fatah	-	F13	Test	-	-	-	IRAQ-A	-	-	-	20?	-	-
2001-A20	2452059-50	2001 May 30	Al. Fatah	-	F14	Test	-	-	-	IRAQ-A	-	-	-	5?	-	-
2001-H18	2452129-50	2001 Aug 8	Al. Fatah	-	F17	Test	-	-	-	IRAQ-A	-	-	-	60?	-	-
2001-A21	2452129-50	2001 Aug 8	Al. Fatah	-	F18	Test	-	-	-	IRAQ-A	-	-	-	2?	-	-
2001-A22	2452143-50	2001 Aug 22	Al. Fatah	-	F19	Test	-	-	-	IRAQ-A	-	-	-	2?	-	-
2001-H19	2452188-50	2001 Sep 6	Al. Fatah	-	F20	Test	-	-	-	IRAQ-A	-	-	-	60?	-	-
2001-A23	2452216-50	2001 Nov 3	Al. Fatah	-	F21	Test	-	-	-	IRAQ-A	-	-	-	60?	-	-
2001-H20	2452235-50	2001 Nov 22	Al. Fatah	-	F22	Test	-	-	-	IRAQ-A	-	-	-	60?	-	-
2001-H21	2452248-50	2001 Dec 5	Al. Fatah	-	F22	Test	-	-	-	IRAQ-A	-	-	-	60?	-	-
2001-H22	2452288-50	2001 Dec 15	Al. Fatah	-	F24	Test	-	-	-	IRAQ-A	-	-	-	60?	-	-
2001-H23	2452288-50	2001 Dec 15	Al. Fatah	-	F24	Test	-	-	-	IRAQ-A	-	-	-	60?	-	-
2001-H24	2452261-50	2001 Dec 18	Al. Fatah	-	F26	Test	-	-	-	IRAQ-A	-	-	-	60?	-	-
2002-H19	2452263-50	2001 Dec 20	Al. Fatah	-	F26	Test	-	-	-	IRAQ-A	-	-	-	60?	-	-
2002-H19	2452300-50	2002 Jan 26	Al. Fatah	-	F37	Test	-	-	-	IRAQ-A	-	-	-	60?	-	-
2002-H20	2452347-50	2002 Mar 14	Al. Fatah	-	F29	Test	-	-	-	IRAQ-A	-	-	-	60?	-	-
2002-H21	2452386-50	2002 Apr 22	Al. Fatah	-	F46	Test	-	-	-	IRAQ-A	-	-	-	60?	-	-
2002-H22	2452434-50	2002 Jun 9	Al. Fatah	-	F59	Test	-	-	-	IRAQ-A	-	-	-	60?	-	-
2002-H23	2452434-50	2002 Jun 9	Al. Fatah	-	F60	Test	-	-	-	IRAQ-A	-	-	-	60?	-	-
2002-H24	2452477-50	2002 Jun 9	Al. Fatah	-	F67	Test	-	-	-	IRAQ-A	-	-	-	60?	-	-
2002-A08	2452604-50	2002 Jul 22	Al. Fatah	-	F75	Test	-	-	-	IRAQ-A	-	-	-	2?	-	-
2002-H25	2452608-50	2002 Aug 18	Al. Fatah	-	F76	Test	-	-	-	IRAQ-A	-	-	-	60?	-	-
2002-H26	2452610-50	2002 Aug 24	Al. Fatah	-	F74	Test	-	-	-	IRAQ-A	-	-	-	60?	-	-
2002-H27	2452647-50	2002 Sep 30	Al. Fatah	-	F70	Test	-	-	-	IRAQ-A	-	-	-	60?	-	-
2002-H28	2452647-50	2002 Sep 30	Al. Fatah	-	F79	Test	-	-	-	IRAQ-A	-	-	-	60?	-	-
2002-H29	2452647-50	2002 Sep 30	Al. Fatah	-	F80	Test	-	-	-	IRAQ-A	-	-	-	60?	-	-
2002-H30	2452675-50	2002 Oct 28	Al. Fatah	-	F94	Test	-	-	-	IRAQ-A	-	-	-	60?	-	-
2002-H31	2452675-50	2002 Oct 28	Al. Fatah	-	F78	Test	-	-	-	IRAQ-A	-	-	-	60?	-	-
2002-H32	2452603-50	2002 Nov 25	Al. Fatah	-	F43	Test	-	-	-	IRAQ-A	-	-	-	60?	-	-
2002-H33	2452603-50	2002 Nov 25	Al. Fatah	-	F44	Test	-	-	-	IRAQ-A	-	-	-	60?	-	-
2003-H05	2452718-89	2003 Mar 20 0924	Al. Fatah	-	-	IAA Thunder, Kuwait	-	-	-	Q9K	-	-	-	60?	-	-
2003-H06	2452718-94	2003 Mar 20 1030	Al. Fatah	-	-	Camp Doha	-	-	-	Q9K	-	-	-	60?	-	-
2003-H07	2452719-40	2003 Mar 20 2130	Al. Fatah	-	-	Persian Gulf	-	-	-	Q9K	-	-	-	60?	-	-
2003-H08	2452719-07	2003 Mar 20 2320	Al. Fatah	-	-	Camp Udairi	-	-	-	Q9K	-	-	-	60?	-	-
2003-H09	2452719-92	2003 Mar 21 0701	Al. Fatah	-	-	Al Jahra/Camp Doha	-	-	-	Q9K	-	-	-	60?	-	-
2003-H10	2452723-07	2003 Mar 24 1342	Al. Fatah	-	-	Camp Doha	-	-	-	Q9K	-	-	-	60?	-	-
2003-H11	2452724-03	2003 Mar 25 1248	Al. Fatah	-	-	Camp Commando, H Kuwait	-	-	-	Q9K	-	-	-	60?	-	-
2003-H12	2452725-56	2003 Mar 26 0854	Al. Fatah	-	-	Camp Doha?	-	-	-	Q9K	-	-	-	60?	-	-
2003-H14	2452726-37	2003 Mar 27 2056	Al. Fatah	-	-	Camp Doha	-	-	-	Q9K	-	-	-	60?	-	-



Launch

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	DrpPly	Agency	Launch_Code	Group	Category	LTCite	Cite	Notes
2000-408	2461788.50	2000 Sep 1	Al Fatah	-	F6	0.000	IQMIC	MF	-	Test	UNMOVIC	-	-
2000-409	2461940.50	2000 Oct 23	Al Fatah	-	F8	0.000	IQMIC	MS	-	Test	UNMOVIC	-	-
2000-462	2461966.50	2000 Nov 18	Al Fatah	-	F9	0.000	IQMIC	MS	-	Test	UNMOVIC	-	-
2001-416	2461986.50	2001 Mar 17	Al Fatah	-	F11	0.000	IQMIC	MS	-	Test	UNMOVIC	-	-
2001-417	2461996.50	2001 Mar 27	Al Fatah	-	F12	0.000	IQMIC	MS	-	Test	UNMOVIC	-	-
2001-419	2462028.50	2001 Apr 29	Al Fatah	-	F13	0.000	IQMIC	MF	-	Test	UNMOVIC	-	-
2001-420	2462059.50	2001 May 30	Al Fatah	-	F14	0.000	IQMIC	MF	-	Test	UNMOVIC	-	-
2001-418	2462129.50	2001 Aug 8	Al Fatah	-	F17	0.000	IQMIC	MS	-	Test	UNMOVIC	-	-
2001-421	2462129.50	2001 Aug 8	Al Fatah	-	F18	0.000	IQMIC	MF	-	Test	UNMOVIC	-	-
2001-422	2462143.50	2001 Aug 22	Al Fatah	-	F19	0.000	IQMIC	MF	-	Test	UNMOVIC	-	-
2001-419	2462158.50	2001 Sep 6	Al Fatah	-	F20	0.000	IQMIC	MS	-	Test	UNMOVIC	-	-
2001-423	2462216.50	2001 Nov 3	Al Fatah	-	F21	0.000	IQMIC	MS	-	Test	UNMOVIC	-	-
2001-420	2462236.50	2001 Nov 22	Al Fatah	-	F23	0.000	IQMIC	MS	-	Test	UNMOVIC	-	-
2001-421	2462248.50	2001 Dec 5	Al Fatah	-	F22	0.000	IQMIC	MS	-	Test	UNMOVIC	-	-
2001-422	2462268.50	2001 Dec 15	Al Fatah	-	F24	0.000	IQMIC	MS	-	Test	UNMOVIC	-	-
2001-423	2462261.50	2001 Dec 18	Al Fatah	-	F25	0.000	IQMIC	MS	-	Test	UNMOVIC	-	-
2001-424	2462263.50	2001 Dec 20	Al Fatah	-	F26	0.000	IQMIC	MS	-	Test	UNMOVIC	-	-
2002-419	2462300.50	2002 Jan 26	Al Fatah	-	F37	0.000	IQMIC	MS	-	Test	UNMOVIC	-	-
2002-420	2462347.50	2002 Mar 14	Al Fatah	-	F29	0.000	IQMIC	MS	-	Test	UNMOVIC	-	-
2002-421	2462386.50	2002 Apr 22	Al Fatah	-	F46	0.000	IQMIC	MS	-	Test	UNMOVIC	-	-
2002-422	2462434.50	2002 Jun 9	Al Fatah	-	F59	0.000	IQMIC	MS	-	Test	UNMOVIC	-	-
2002-423	2462477.50	2002 Jun 9	Al Fatah	-	F60	0.000	IQMIC	MS	-	Test	UNMOVIC	-	-
2002-424	2462504.50	2002 Jul 22	Al Fatah	-	F67	0.000	IQMIC	MS	-	Test	UNMOVIC	-	-
2002-408	2462504.50	2002 Aug 18	Al Fatah	-	F75	0.000	IQMIC	MF	-	Test	UNMOVIC	-	-
2002-425	2462508.50	2002 Aug 22	Al Fatah	-	F76	0.000	IQMIC	MS	-	Test	UNMOVIC	-	-
2002-426	2462510.50	2002 Aug 24	Al Fatah	-	F74	0.000	IQMIC	MS	-	Test	UNMOVIC	-	-
2002-427	2462547.50	2002 Sep 30	Al Fatah	-	F79	0.000	IQMIC	MS	-	Test	UNMOVIC	-	-
2002-428	2462547.50	2002 Sep 30	Al Fatah	-	F79	0.000	IQMIC	MS	-	Test	UNMOVIC	-	-
2002-430	2462547.50	2002 Sep 30	Al Fatah	-	F80	0.000	IQMIC	MS	-	Test	UNMOVIC	-	-
2002-430	2462575.50	2002 Oct 28	Al Fatah	-	F84	0.000	IQMIC	MS	-	Test	UNMOVIC	-	-
2002-431	2462575.50	2002 Oct 28	Al Fatah	-	F78	0.000	IQMIC	MS	-	Test	UNMOVIC	-	-
2002-432	2462603.50	2002 Nov 25	Al Fatah	-	F43	0.000	IQMIC	MS	-	Test	UNMOVIC	-	-
2002-433	2462603.50	2002 Nov 25	Al Fatah	-	F44	0.000	IQMIC	MS	-	Test	UNMOVIC	-	-
2003-406	2462718.59	2003 Mar 20 0924	Al Fatah	-	-	0.000	IQA	MS	-	Weapon	OIF-TRMD	-	-
2003-406	2462718.94	2003 Mar 20 1030	Al Fatah	-	-	0.000	IQA	MS	-	Weapon	OIF-TRMD	-	-
2003-407	2462718.40	2003 Mar 20 2130	Al Fatah	-	-	0.000	IQA	MS	-	Weapon	OIF-TRMD	-	-
2003-408	2462719.47	2003 Mar 20 2320	Al Fatah	-	-	0.000	IQA	MS	-	Weapon	OIF-TRMD	-	-
2003-409	2462719.52	2003 Mar 21 1001	Al Fatah	-	-	0.000	IQA	MS	-	Weapon	OIF-TRMD	-	-
2003-410	2462723.07	2003 Mar 24 1342	Al Fatah	-	-	0.000	IQA	MS	-	Weapon	OIF-TRMD	-	-
2003-411	2462724.03	2003 Mar 25 1246	Al Fatah	-	-	0.000	IQA	MS	-	Weapon	OIF-TRMD	-	-
2003-412	2462725.24	2003 Mar 26 1826	Al Fatah	-	-	0.000	IQA	MF	-	Weapon	OIF-TRMD	-	-
2003-412	2462725.24	2003 Mar 26 1826	Al Fatah	-	-	0.000	IQA	MF	-	Weapon	OIF-TRMD	-	-
2003-412	2462726.37	2003 Mar 27 0851	Al Fatah	-	-	0.000	IQA	MS	-	Weapon	OIF-TRMD	-	-
2003-414	2462726.37	2003 Mar 27 2036	Al Fatah	-	-	0.000	IQA	MS	-	Weapon	OIF-TRMD	-	-



Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Launch				Ascent_Pad	Range km	Apogee km	Dest
							Mission	FlightCode	Platform	Launch_Site				
2001-S40	2452153.33	2001 Aug 31 2000	GBI EV	-	BV-2	GBDS BVF-2	-	-	V	LF21	-	2007	-	
2001-A04	2452257.26	2001 Dec 13 1815	GBI EV	-	BV-3	GBDS BVF-3	-	-	V	LF21	-	57	-	
2004-S01	2453014.28	2004 Jan 9 1840	GBI BV+	-	BV-5+	GBDS BVF-5 +BV+	-	-	V	LF21	-	2007	-	





Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	OrbPay	Agency	Launch_Code	Group	Category	LTCite	Cite	Notes
2001-S40	2452153.33	2001 Aug 31 2000	GBI BV	-	BV-2	0.000	AFMC	RS	-	Test	Wire	-	-
2001-A04	2452257.26	2001 Dec 13 1815	GBI BV	-	BV-3	0.000	AFSEC	RF	-	Test	SMT011214	-	-
2004-S01	2453014.28	2004 Jan 9 1840	GBI BV+	-	BV-5+	0.000	AFSEC?	RS	-	Test	vandenbergh.af.mil	-	-



Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Mission	LaunchCode	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee km	Range km	Dest
1985-409	2446380.50	1985 Oct 22	GLCM	-	1	DT	-	-	-	V	HP-06	-	-	20?	-	-



Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Display	Agency	Launch_Code	Group	Category	LTCite	Cite	Notes
1985-A09	2446360.50	1985 Oct 22	GLCH	-	1	0.000	AFTAC	MS	-	Test	VAFB	-	-



Launch

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Mission	FlightCode	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee km	Range km	Dest
2014-879	2457009.67	2014 Dec 18 04:00	GSLV Mk III	a	LVM3-X	CARE	CARE/LVM3-X	-	-	SHAR	SLP	-	-	125	1600	B.Bengal
2017-031	2457910.00	2017 Jun 5 11:58	GSLV Mk III	a	LVM3-D1	GSAT-19	GSAT-19	-	-	SHAR	SLP	-	-	36904	-	-
2018-089	2458436.98	2018 Nov 14 11:38	GSLV Mk III	-	LVM3-D2	GSAT-29	GSAT-29	-	-	SHAR	SLP	-	-	36126	-	-
2019-042	2458686.88	2019 Jul 22 09:13	LVM3	-	LVM3-H1	Chandrayaan-2	Chandrayaan-2	-	-	SHAR	SLP	-	-	150000	-	-
2022-138	2459875.28	2022 Oct 22 18:37:40	LVM3	-	LVM3-H2	OneWeb India-1	OneWeb L14	-	-	SHAR	SLP	-	-	-	-	-
2023-043	2460029.65	2023 Mar 26 03:30:20	LVM3	-	LVM3-H3	OneWeb India-2	OneWeb L18	-	-	SHAR	SLP	-	-	-	-	-
2023-098	2460139.88	2023 Jul 14 09:05:17	LVM3	-	LVM3-H4	Chandrayaan-3	Chandrayaan-3	-	-	SHAR	SLP	-	-	-	-	-





Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	OrbPay	Agency	Launch_Code	Group	Category	LTCite	Cite	Notes
2014-S79	2457003.67	2014 Dec 18 0400	GSLV Mk III	a	LWS-X	0.000	ISRO	SS	-	Test	Wire	-	-
2017-031	2457910.00	2017 Jun 5 1158	GSLV Mk III	a	LWS-D1	3.136	ISRO	US	G	Sat GTD 0	Wire	-	-
2018-089	2458436.98	2018 Nov 14 1138	GSLV Mk III	-	LWS-D2	3.423	ISRO	US	G	Sat GTD 0	Wire	-	-
2019-042	2458686.88	2019 Jul 22 0913	LWS	-	LWS-M1	5.348	ISRO	US	G	Sat STD 0	Wire	-	-
2022-138	2459875.28	2022 Oct 22 1837:40	LWS	-	LWS-M2	5.328	ISIL	US	CU/C	Sat LE0 0	Wire	-	-
2023-043	2460023.65	2023 Mar 26 0330:20	LWS	-	LWS-M3	5.328	ISIL	US	CU/C	Sat LE0 0	Wire	-	-
2023-098	2460138.88	2023 Jul 14 0906:17	LWS	-	LWS-M4	3.895	ISRO	DS	G	Sat GTD 0	Wire	-	-



Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Mission	FlightCode	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee km	Range km	Dest
1962-A252	2437983.50	1962 Nov 15	Gamma Centauro	-	-	Dummy St 2	-	-	-	CELPA	-	-	-	57	-	-
1962-A253	2437983.50	1962 Nov 15	Gamma Centauro	-	-	Dummy St 2	-	-	-	CELPA	-	-	-	57	-	-
1962-A254	2437983.50	1962 Nov 15	Gamma Centauro	-	-	Dummy St 2	-	-	-	CELPA	-	-	-	57	-	-
1962-A255	2438004.50	1962 Dec 6	Gamma Centauro	-	-	-	-	-	-	CELPA	-	-	-	357	-	-
1963-A189	2438241.50	1963 Aug	Gamma Centauro	-	-	-	-	-	-	CELPA	-	-	-	357	-	-
1963-A211	2438241.50	1963 Aug	Gamma Centauro	-	-	-	-	-	-	CELPA	-	-	-	357	-	-
1963-A212	2438241.50	1963 Aug	Gamma Centauro	-	-	-	-	-	-	CELPA	-	-	-	357	-	-
1964-A109	2438603.50	1964 Jul 27	Gamma Centauro	-	-	-	-	-	-	PDI	-	-	-	35	-	-
1965-A24	2438797.50	1965 Feb 6	Gamma Centauro	-	-	-	-	-	-	CELPA	-	-	-	357	-	-
1965-A183	2438798.10	1965 Feb 6 1430	Gamma Centauro	-	14	Matienzo Ionos XR	-	-	-	CELPA	-	-	-	357	-	-
1965-A25	2438798.42	1965 Feb 6 2200	Gamma Centauro	-	14	Matienzo Ionos XR	-	-	-	MATZ	-	-	-	357	-	-
1965-A185	2438800.42	1965 Feb 8 2200	Gamma Centauro	-	16	Matienzo Ionos XR	-	-	-	MATZ	-	-	-	357	-	-
1965-A186	2438800.42	1965 Feb 8 2203	Gamma Centauro	-	16	Matienzo Ionos XR	-	-	-	MATZ	-	-	-	357	-	-
1965-A184	2438799.50	1965 Feb 8	Gamma Centauro	-	-	-	-	-	-	CELPA	-	-	-	357	-	-



Launch

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	OrbPay t	Agency	Launch_Code	Group	Category	LTCite	Cite	Notes
1962-A262	2437983-50	1962 Nov 15	Gamma Centauro	-	-	0.000	IIAE	SS	REMR/	Meteo	DeLeon	Telex621122	90-100 km claimed
1962-A263	2437983-50	1962 Nov 15	Gamma Centauro	-	-	0.000	IIAE	SS	REMR/	Meteo	DeLeon	Telex621122	Dates suspect
1962-A264	2437983-50	1962 Nov 15	Gamma Centauro	-	-	0.000	IIAE	SS	REMR/	Meteo	DeLeon	Telex621122	-
1962-A265	2438004-50	1962 Dec 6	Gamma Centauro	-	-	0.000	IIAE	SS	REMR/	Meteo	DeLeon	Telex621122	-
1963-A189	2438241-50	1963 Aug	Gamma Centauro	-	-	0.000	IIAE	SS	REMR/	Meteo	DeLeon	JJSerra	-
1963-A211	2438241-50	1963 Aug	Gamma Centauro	-	-	0.000	IIAE	SS	REMR/	Meteo	DeLeon	-	-
1963-A212	2438241-50	1963 Aug	Gamma Centauro	-	-	0.000	IIAE	SS	REMR/	Meteo	DeLeon	-	-
1964-A109	2438903-50	1964 Jul 27	Gamma Centauro	-	-	0.000	IIAE	SS	REMR/	Meteo	DeLeon	primahost3.prima.com	-
1965-A24	2438797-50	1965 Feb 6	Gamma Centauro	-	-	0.000	IIAE	SS	IIAE/	Meteo	AASD28-485	primahost3.prima.com	-
1965-A183	2438798-10	1965 Feb 6	Gamma Centauro	-	-	0.000	IIAE	SS	IIAE/	Meteo	AASD28-485	-	-
1965-A25	2438798-10	1965 Feb 6 1430	Gamma Centauro	-	14	0.000	IIAE	SS	IIAE/	Aeron/Ionos	AASD28-485	-	-
1965-A186	2438798-42	1965 Feb 6 2200	Gamma Centauro	-	16	0.000	IIAE	SS	IIAE/	Aeron/Ionos	AASD28-485	-	-
1965-A186	2438900-42	1965 Feb 8 2203	Gamma Centauro	-	15	0.000	IIAE	SS	IIAE/	Aeron/Ionos	AASD28-485	-	-
1965-A184	2438799-50	1965 Feb 8	Gamma Centauro	-	-	0.000	IIAE	SS	IIAE/	Meteo	AASD28-485	-	-







Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Mission	FlightCode	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee km	Range km	Dest
1976-A24	2442894.78	1976 Apr 26 0648	Paute Tomahawk	-	GL A10.403-4	Auroral ions	-	-	-	FC	-	-	-	19	-	-
1976-S174	2442898.69	1976 Apr 30 0436	Paute Tomahawk	-	GL A10.001-2	Auroral ions	-	-	-	FC	-	-	-	218	-	-
1977-S263	2443411.01	1977 Sep 24 1215	Paute Tomahawk	-	GL A10.705-1	DSP MS SP	-	-	-	MS	-	-	-	195	-	-
1979-S82	2443931.20	1979 Feb 26 1652:30	Paute Tomahawk	-	GL A10.802-1	-	-	-	-	RLAKE	CHK	-	-	115	-	-
1979-S84	2443931.24	1979 Feb 26 1741	Paute Tomahawk	-	GL A10.802-2	-	-	-	-	RLAKE	CHK	-	-	116	-	-
1980-S191	2444635.35	1980 Oct 22 2031:00	Paute Tomahawk	-	GL A10.901-1	SPE-1	-	-	-	PF	-	-	-	88	-	-
1981-S80	2444670.86	1981 Mar 7 0838	Paute Tomahawk	-	GL A10.901-3	SPE-3/AURORAL E4	-	-	-	PF	-	-	-	187	-	-
1981-S166	2444904.40	1981 Oct 26 2130	Paute Tomahawk	-	GL A10.901-2	SPE-2	-	-	-	PF	-	-	-	96	-	-
1988-A10	2447432.50	1988 Sep 28	Genie Genie	-	RSP-101	RSP-101/Genie	-	-	-	TTR	-	-	-	107	-	-



Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	OrbPay	Agency	Launch_Code	Group	Category	LTCite	Cite	Notes
1957-A176	2436039.08	1957 Jul 19 14:00	F9J/Genie	-	-	0.000	SMND	AS	DOE/	Nuclear Test	DMA-6006F	-	-
1960-A72	2437015.50	1960 Mar 22	Astrosbee 500	-	PLUMBBOB JDRM	0.000	AFCRN	SF	AFSCM/Swenson	Test	Alway	-	-
1966-A48	2439212.50	1966 Mar 28	ALARR	-	Geodesic Hires	0.000	AFSCM	SS	AFSCM/	Test	SP-4007	-	-
1966-A609	2439306.50	1966 Jun 17	ALARR	-	-	0.000	AFSCM	SS	AFSCM/	Test	FIER	-	-
1966-5622	2439447.34	1966 Jul 17 20:15	ALARR	-	-	0.000	AFSCM	SS	AFSCM/MFTAC?	Test/Meteorites	JGR75.869	Quest3-1-34	-
1967-A173	2439521.50	1967 Feb	ALARR	-	-	0.000	AFSCM	SU	AFSCM/	Test?	ANS1670227-40	-	-
1968-5234	2439946.50	1968 Apr	ALARR	-	-	0.000	AFSCM	SU	AFSCM/	Test?	WSR	-	-
1968-5235	2439946.50	1968 Apr	ALARR	-	-	0.000	AFSCM	SU	AFSCM/	Test?	WSR	-	-
1968-5236	2439976.50	1968 May	ALARR	-	-	0.000	AFSCM	SU	AFSCM/	Test?	WSR	-	-
1968-5296	2439976.50	1968 May	ALARR	-	-	0.000	AFSCM	SU	AFSCM/	Test?	WSR	-	-
1968-5859	2440100.50	1968 Nov	ALARR	-	-	0.000	AFSCM	SU	AFSCM/	Test?	WSR	-	-
1968-5860	2440100.50	1968 Nov	ALARR	-	-	0.000	AFSCM	SU	AFSCM/	Test?	WSR	-	-
1969-5157	2440280.50	1969 Mar	ALARR	-	-	0.000	AFSCM	SU	AFSCM/	Test?	WSR	-	-
1969-5306	2440341.50	1969 May	ALARR	-	-	0.000	AFSCM	SU	AFSCM/	Test?	WSR	-	-
1969-5307	2440341.50	1969 May	ALARR	-	-	0.000	AFSCM	SU	AFSCM/	Test?	WSR	-	-
1969-5308	2440341.50	1969 May	ALARR	-	-	0.000	AFSCM	SU	AFSCM/	Test?	WSR	-	-
1969-5309	2440341.50	1969 May	ALARR	-	-	0.000	AFSCM	SU	AFSCM/	Test?	WSR	-	-
1969-5472	2440464.50	1969 Sep	ALARR	-	-	0.000	AFSCM	SU	AFSCM/	Test?	WSR	-	-
1969-5473	2440464.50	1969 Sep	ALARR	-	-	0.000	AFSCM	SU	AFSCM/	Test?	WSR	-	-
1969-5874	2440464.50	1969 Sep	ALARR	-	-	0.000	AFSCM	SU	AFSCM/	Test?	WSR	-	-
1969-5875	2440464.50	1969 Oct	ALARR	-	-	0.000	AFSCM	SU	AFSCM/	Test?	WSR	-	-
1970-5274	2440494.50	1970 Oct	ALARR	-	-	0.000	AFSCM	SU	AFSCM/	Test?	WSR	-	-
1971-5860	2440676.50	1971 Nov 16 23:18	Ute Tomahawk	-	CRL A09.106-5	0.000	AFSCM	SS	AFSCM/Vickery	Aeron/Test	AFCRN	-	-
1972-5128	2441272.47	1972 Mar 18 09:03	Ute Apache	-	-	0.000	NSF	SS	USU/Baker	Auroral/Airglow	WWW-PFRR	-	-
1972-A27	2441394.88	1972 Mar 28 12:12	Palute Apache	-	-	0.000	NSF	SS	DMV/Barcus	Auroral/Airglow	WWW-PFRR	-	-
1972-5169	2441422.94	1972 Apr 15 01:04	Palute Tomahawk	-	-	0.000	AFCRN	SS	AFSCM/Bansfield	Auroral/Test	AFCRN	-	-
1972-5416	2441688.74	1972 Dec 7 05:45	Ute Tomahawk	-	CRL A10.005-1	0.000	AFCRN	SS	AFSCM/Philbrick	Auroral	AFCRN	-	-
1973-5119	2441688.94	1973 Mar 24 10:31	Palute Tomahawk	-	CRL A10.205-2	0.000	AFCRN	SS	AFSCM/Philbrick	Auroral	AFCRN	-	-
1973-5122	2441768.90	1973 Mar 27 09:58:25	Ute Tomahawk	-	CRL A10.216-3	0.000	AFCRN	SS	AFSCM/Duick	Auroral	AFCRN	-	-
1973-5149	2441788.82	1973 Apr 16 10:04	Ute Tomahawk	-	CRL A09.209-1	0.000	AFCRN	SS	AFSCM/Faire,Champion	Auroral	AFCRN	-	-
1973-5150	2441789.00	1973 Apr 16 10:58	Ute Tomahawk	-	CRL A09.102-1	0.000	AFCRN	SS	AFSCM/Weeks	Auroral	AFCRN	-	-
1973-5159	2441846.17	1973 Jun 12 16:17	Ute Tomahawk	-	CRL A09.210-1	0.000	AFCRN	SS	AFSCM/Weeks	Auroral	AFCRN	-	-
1973-5200	2441846.18	1973 Jun 12 16:17	Ute Tomahawk	-	CRL A09.210-2	0.000	AFCRN	SS	AFSCM/Weeks	Auroral	AFCRN	-	-
1973-5202	2441936.64	1973 Sep 11 03:19	Ute Tomahawk	-	CRL A09.312-5	0.000	AFCRN	SS	AFSCM/Sherman	Auroral	AFCRN	-	-
1973-5209	2441944.16	1973 Sep 18 19:50:15	Ute Tomahawk	-	CRL A09.312-6	0.000	AFCRN	SS	AFSCM/Weeks	Auroral	AFCRN	-	-
1973-5310	2441944.22	1973 Sep 18 17:21:39	Palute Tomahawk	-	CRL A10.306-1	0.000	AFCRN	SS	AFSCM/Weeks	Auroral	AFCRN	-	-
1973-5318	2441982.82	1973 Oct 29 19:42	Ute Tomahawk	-	CRL A10.306-2	0.000	AFCRN	SS	AFSCM/Weeks	Auroral	AFCRN	-	-
1973-5356	2441974.51	1973 Oct 19 23:20	Ute Tomahawk	-	CRL A09.301-3	0.000	AFCRN	SS	AFSCM/Rosenberg	Auroral	AFCRN	-	-
1973-5360	2441975.49	1973 Oct 19 23:20	Ute Tomahawk	-	CRL A10.106-5	0.000	AFCRN	SS	AFSCM/Rosenberg	Auroral	AFCRN	-	-
1973-5363	2441976.50	1973 Oct 21 09:30	Palute Tomahawk	-	CRL A10.207-3	0.000	AFCRN	SS	AFSCM/Philbrick	Auroral	AFCRN	-	-
1973-5634	2442027.31	1973 Dec 10 18:03	Ute Tomahawk	-	CRL A09.107-4	0.000	AFCRN	SS	AFSCM/Faire	Auroral	AFCRN	-	-
1974-A09	2442027.75	1974 Feb 14 00:34	Ute Tomahawk	-	CRL A09.307-5	0.000	AFCRN	SS	AFSCM/Faire	Auroral	AFCRN	-	-
1974-B162	2442034.87	1974 Feb 16 00:03	Ute Tomahawk	-	CRL A09.308-1	0.000	AFCRN	SS	AFSCM/Faire	Auroral	AFCRN	-	-
1974-S160	2442140.66	1974 Mar 26 04:07	Ute Tomahawk	-	CRL A09.308-5	0.000	AFCRN	SS	AFSCM/Faire	Auroral	AFCRN	-	-
1974-S168	2442141.30	1974 Apr 5 03:47	Ute Tomahawk	-	CRL A09.309-1	0.000	AFCRN	SS	AFSCM/Faire	Auroral	AFCRN	-	-
1974-S176	2442141.30	1974 Apr 5 03:47	Ute Tomahawk	-	CRL A09.309-5	0.000	AFCRN	SS	AFSCM/Faire	Auroral	AFCRN	-	-
1974-S243	2442228.33	1974 Apr 16 09:40:15	Palute Tomahawk	-	CRL A09.309-1	0.000	AFCRN	SS	AFSCM/Faire	Auroral	AFCRN	-	-
1974-S249	2442228.33	1974 Jun 29 20:00	Ute Tomahawk	-	CRL A09.309-5	0.000	AFCRN	SS	AFSCM/Faire	Auroral	AFCRN	-	-
1974-S246	2442228.55	1974 Jun 29 21:20	Ute Tomahawk	-	CRL A09.309-1	0.000	AFCRN	SS	AFSCM/Faire	Auroral	AFCRN	-	-
1974-S247	2442228.55	1974 Jun 30 01:11	Ute Tomahawk	-	CRL A09.309-5	0.000	AFCRN	SS	AFSCM/Faire	Auroral	AFCRN	-	-
1974-A78	2442228.68	1974 Jun 30 01:26	Ute Tomahawk	-	CRL A09.309-1	0.000	AFCRN	SS	AFSCM/Faire	Auroral	AFCRN	-	-
1974-S248	2442228.68	1974 Jun 30 03:45	Ute Tomahawk	-	CRL A09.309-5	0.000	AFCRN	SS	AFSCM/Faire	Auroral	AFCRN	-	-
1974-S251	2442228.75	1974 Jun 30 05:58	Ute Tomahawk	-	CRL A09.309-1	0.000	AFCRN	SS	AFSCM/Faire	Auroral	AFCRN	-	-
1974-S253	2442228.81	1974 Jun 30 07:30	Ute Tomahawk	-	CRL A09.309-5	0.000	AFCRN	SS	AFSCM/Faire	Auroral	AFCRN	-	-
1974-S254	2442228.81	1974 Jun 30 08:45	Ute Tomahawk	-	CRL A09.309-1	0.000	AFCRN	SS	AFSCM/Faire	Auroral	AFCRN	-	-
1974-S255	2442228.86	1974 Jun 30 09:35	Ute Tomahawk	-	CRL A09.309-5	0.000	AFCRN	SS	AFSCM/Faire	Auroral	AFCRN	-	-
1974-S256	2442228.86	1974 Jun 30 09:35	Ute Tomahawk	-	CRL A09.309-1	0.000	AFCRN	SS	AFSCM/Faire	Auroral	AFCRN	-	-
1974-S257	2442228.92	1974 Jun 30 10:01	Ute Tomahawk	-	CRL A10.209-2	0.000	AFCRN	SS	AFSCM/Faire	Auroral	AFCRN	-	-
1974-S258	2442228.92	1974 Jun 30 12:85	Ute Tomahawk	-	CRL A10.301-6	0.000	AFCRN	SS	AFSCM/Faire	Auroral	AFCRN	-	-
1974-S259	2442229.04	1974 Jun 30 12:85	Ute Tomahawk	-	CRL A09.001-4	0.000	AFCRN	SS	AFSCM/Faire	Auroral	AFCRN	-	-
1974-S260	2442229.22	1974 Jun 30 17:20	Ute Tomahawk	-	CRL A09.105-9	0.000	AFCRN	SS	AFSCM/Faire	Auroral	AFCRN	-	-
1974-S261	2442276.71	1974 Aug 17 05:00	Ute Tomahawk	-	CRL A09.301-7	0.000	AFCRN	SS	AFSCM/Faire	Auroral	AFCRN	-	-
1974-S263	2442385.43	1974 Aug 17 22:25	Ute Tomahawk	-	CRL A09.407-1	0.000	AFCRN	SS	AFSCM/Faire	Auroral	AFCRN	-	-
1975-S36	2442427.37	1975 Jan 14 20:56	Ute Tomahawk	-	CRL A09.301-8	0.000	AFCRN	SS	AFSCM/Faire	Auroral	AFCRN	-	-
1975-S39	2442428.45	1975 Jan 15 22:46	Ute Tomahawk	-	CRL A09.301-8	0.000	AFCRN	SS	AFSCM/Faire	Auroral	AFCRN	-	-
1975-S39	2442430.45	1975 Jan 17 22:43	Ute Tomahawk	-	CRL A09.301-9	0.000	AFCRN	SS	AFSCM/Faire	Auroral	AFCRN	-	-
1975-S41	2442430.69	1975 Jan 18 04:35	Ute Tomahawk	-	CRL A09.301-9	0.000	AFCRN	SS	AFSCM/Faire	Auroral	AFCRN	-	-
1975-S41	2442430.70	1975 Jan 18 04:45	Ute Tomahawk	-	CRL A10.213-1	0.000	AFCRN	SS	AFSCM/Faire	Auroral	AFCRN	-	-
1975-S417	2442512.91	1975 Apr 10 09:54:00	Palute Tomahawk	-	CRL A10.302-3	0.000	AFCRN	SS	AFSCM/Faire	Auroral	AFCRN	-	-
1975-S118	2442512.91	1975 Apr 10 09:54:30	Palute Tomahawk	-	CRL A10.302-10	0.000	AFCRN	SS	AFSCM/Faire	Auroral	AFCRN	-	-
1975-S119	2442512.92	1975 Apr 21 09:07:00	Palute Tomahawk	-	CRL A10.403-3	0.000	AFCRN	SS	AFSCM/Faire	Auroral	AFCRN	-	-
1975-S120	2442523.88	1975 Apr 21 09:07:30	Palute Tomahawk	-	CRL A10.403-2	0.000	AFCRN	SS	AFSCM/Faire	Auroral	AFCRN	-	-
1975-S130	2442523.88	1975 Apr 21 09:12:00	Palute Tomahawk	-	CRL A10.302-2	0.000	AFCRN	SS	AFSCM/Faire	Auroral	AFCRN	-	-
1975-S136	2442527.68	1975 Apr 25 04:13:00	Palute Tomahawk	-	CRL A10.403-1	0.000	AFCRN	SS	AFSCM/Faire	Auroral	AFCRN	-	-
1975-S137	2442527.68	1975 Apr 25 04:18:00	Palute Tomahawk	-	CRL A10.302-7	0.000	AFCRN	SS	AFSCM/Faire	Auroral	AFCRN	-	-
1975-S138	2442527.68	1975 Apr 25 04:18:00	Palute Tomahawk	-	CRL A10.403-2	0.000	AFCRN	SS	AFSCM/Faire	Auroral	AFCRN	-	-
1975-S244	2442639.72	1975 Aug 15 05:21	Ute Tomahawk	-	CRL A10.406-2	0.000	AFCRN	SS	AFSCM/Faire	Auroral	AFCRN	-	-
1975-S276	2442674.30	1975 Sep 18 19:47	Ute Tomahawk	-	CRL A10.304-1	0.000	AFSCM/CHLI	SS	AFSCM/Philbrick	Auroral	AFCRN	-	-
1975-S278	2442674.72	1975 Sep 19 16:15	Ute Tomahawk	-	CRL A10.304-2	0.000	AFSCM/CHLI	SS	AFSCM/Philbrick	Auroral	AFCRN	-	-
1975-S304	2442702.10	1975 Oct 16 16:30	Ute Tomahawk	-	CRL A10.000-1	0.000	AFSCM/CHLI	SS	AFSCM/Mansfield	Auroral	AFCRN	-	-
1975-S351	2442758.71	1975 Dec 12 05:09	Ute Tomahawk	-	CRL A09.406-1	0.000	AFSCM/CHLI	SS	AFSCM/Faire	Auroral	AFCRN	-	-
1976-S75	2442801.44	1976 Jan 23 23:34	Ute Tomahawk	-	GL A09.402-2	0.000	AFGL2	SS	AFSCM/Philbrick	Auroral	AFCRN	-	406-2?
1976-S108	2442830.55	1976 Feb 22 01:18	Palute Tomahawk	-	GL A10.504-1	0.000	AFGL2/DMA	SS	AFSCM/Weeks,Faire	Auroral	AFCRN	-	-
1976-S122	2442841.24	1976 Mar 3 17:44	Palute Tomahawk	-	GL A10.507-1	0.000	AFGL2	SS	AFSCM/Faire	Auroral	AFCRN	-	-

Launch

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	OrbPay t	Agency	Launch_Code	Group	Category	LTCite	Cite	Notes
1976-A24	2442894.78	1976 Apr 26 0648	Palute Tomhawk	-	GL A10.403-4	0.000	AFGL2	SF	AFRL/Marcisi	Aeron	FC	AFRL	-
1976-S174	2442898.69	1976 Apr 30 0435	Palute Tomhawk	-	GL A10.901-2	0.000	AFGL2	SS	AFRL/Marcisi	Aeron	FC	AFRL	-
1977-S253	2443411.01	1977 Sep 24 1215	Palute Tomhawk	-	GL A10.706-1	0.000	AFGL2	SS	AFRL/Philbrick	Aeron	WDGF	-	-
1979-S82	2443931.20	1979 Feb 26 1652:30	Palute Tomhawk	-	GL A10.802-1	0.000	AFGL2	SS	AFRL/Marcisi	Eclipse/Aeron	JATP46-461	-	-
1979-S84	2443931.24	1979 Feb 26 1741	Palute Tomhawk	-	GL A10.802-2	0.000	AFGL2	SS	AFRL/Marcisi	Eclipse/Aeron	JATP46-461	-	-
1980-S191	2444535.35	1980 Oct 22 2031:00	Palute Tomhawk	-	GL A10.901-1	0.000	AFGL2	SS	AFRL/Marcisi	Plasma	WDGF	AFRL	-
1981-S80	2444670.86	1981 Mar 7 0938	Palute Tomhawk	-	GL A10.901-3	0.000	AFGL2	SS	AFRL/	Auroral	WDGF	AFRL	-
1981-S166	2444904.40	1981 Oct 26 2130	Palute Tomhawk	-	GL A10.901-2	0.000	AFGL2	SS	AFRL/Marcisi	Ionoz/Particles	WDGF	AFRL	-
1988-A10	2447432.50	1988 Sep 28	Genie Genie	-	RSP-101	0.000	SMND	AS	SMND/Lapetina	Test	SAND90-8211	SandNews890224	-



Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Mission	FlightCode	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee	Range	Dent
1959-A254	2436756.50	1959 Jul 9	Gosling-Lobster			Jaguar R&D				WOO	-			207	-	-
1959-A255	2436801.50	1959 Aug 21	Gosling-Lobster			Jaguar R&D				WOO	-			207	-	-
1959-A256	2436890.50	1959 Nov 18	Gosling-Lobster			Jaguar R&D				WOO	-			207	-	-
1960-A337	2437087.50	1960 Jun 2	Gosling-Lobster			Jaguar R&D				WOO	-			207	-	-
1960-A338	2437156.50	1960 Aug 10	Gosling-Lobster			Jaguar R&D				WOO	-			207	-	-
1960-A339	2437199.50	1960 Sep 22	Gosling-Lobster			Jaguar R&D				WOO	-			207	-	-
1961-M10	2437413.62	1961 Apr 24 0253	HAD		HAD 101 (HMT 2017)					WOO	L42 HAD			58	-	-
1961-S426	2437647.94	1961 Dec 14 1029	HAD		HAD 103					WOO	L42 HAD			130	-	-
1962-881	2437752.89	1962 Mar 28 0928	HAD		HAD 105					WOO	L42 HAD			125	-	-
1962-S200	2437841.86	1962 Jun 28 0838	HAD		HAD 108					WOO	L42 HAD			116	-	-
1962-S313	2437903.88	1962 Aug 27 0908	HAD		HAD 107					WOO	L42 HAD			114	-	-
1962-S418	2437981.91	1962 Oct 24 0946	HAD		HAD 111					WOO	L42 HAD			133	-	-
1962-S494	2437995.93	1962 Nov 27 1017	HAD		HAD 112					WOO	L42 HAD			133	-	-
1962-S529	2438002.94	1962 Dec 4 1028	HAD		HAD 113					WOO	L42 HAD			113	-	-
1963-S27	2438059.94	1963 Jan 30 1032	HAD		HAD 115					WOO	L42 HAD			94	-	-
1963-S90	2438100.91	1963 Mar 12 0950	HAD		HAD 116					WOO	L42 HAD			124	-	-
1963-S118	2438109.91	1963 Mar 21 0930	HAD		HAD 118					WOO	L42 HAD			134	-	-
1963-S558	2438369.49	1963 Dec 5 2342	HAD		HAD 301	UV absorption				WOO	L42 HAD			54	-	-
1963-S598	2438376.30	1963 Dec 12 1906	HAD		HAD 122					WOO	L42 HAD			1007	-	-
1964-N05	2438457.91	1964 Feb 12 0946	HAD		HAD 124					WOO	L42 HAD			75	-	-
1964-S132	2438465.91	1964 Mar 4 0953	HAD		HAD 127					WOO	L42 HAD			111	-	-
1964-S207	2438499.86	1964 Apr 14 0832	HAD		HAD 129					WOO	L42 HAD			121	-	-
1964-S245	2438529.86	1964 May 14 0837	HAD		HAD 126					WOO	L42 HAD			88	-	-
1964-S292	2438557.85	1964 Jun 11 0831	HAD		HAD 128					WOO	L42 HAD			113	-	-
1964-A94	2438576.50	1964 Q3	Aero High							WOO	L42 AH			07	-	-
1964-A95	2438576.50	1964 Q3	Aero High							WOO	L42 AH			07	-	-
1964-S329	2438585.86	1964 Jul 9 0839	HAD		HAD 141					WOO	L42 HAD			111	-	-
1964-S344	2438589.63	1964 Jul 13 0304	HAD		HAD 130					WOO	L42 HAD			122	-	-
1964-S346	2438590.62	1964 Jul 14 0300	HAD		HAD 131					WOO	L42 HAD			122	-	-
1964-A208	2438590.50	1964 Jul 14	HAD		HAD 132				CARN		L42 HAD			17	-	-
1964-A209	2438591.50	1964 Jul 15	HAD		HAD 135				CARN		L42 HAD			106	-	-
1964-S349	2438591.60	1964 Jul 15 0219	HAD		HAD 133				WOO	L42 HAD				106	-	-
1964-S359	2438592.59	1964 Jul 16 0213	HAD		HAD 134				WOO	L42 HAD				114	-	-
1964-S360	2438592.72	1964 Jul 16 0530	HAD		HAD 136				WOO	L42 HAD				106	-	-
1964-S367	2438593.72	1964 Jul 17 0515	HAD		HAD 137				CARN		L42 HAD			120	-	-
1964-S439	2438627.88	1964 Aug 20 0902	HAD		HAD 135				WOO	L42 HAD				119	-	-
1964-S472	2438655.90	1964 Sep 16 0917	HAD		HAD 144				WOO	L42 HAD				99	-	-
1964-S522	2438683.90	1964 Oct 19 0936	HAD		HAD 146				WOO	L42 HAD				102	-	-
1964-S526	2438688.50	1964 Oct 21	HAD		HAD 142				CARN		L42 HAD			1007	-	-
1964-S535	2438690.38	1964 Oct 22 2112	HAD		HAD 146				CARN		L42 HAD			1007	-	-
1964-S536	2438690.36	1964 Oct 22 1103	HAD		HAD 140				CARN		L42 HAD			1007	-	-
1964-S539	2438690.50	1964 Oct 22	HAD		HAD 145				CARN		L42 HAD			1007	-	-
1964-S540	2438690.50	1964 Oct 22	HAD		HAD 145				CARN		L42 HAD			1007	-	-
1964-S541	2438690.50	1964 Oct 22	HAD		HAD 145				CARN		L42 HAD			1007	-	-
1964-S542	2438690.50	1964 Oct 22	HAD		HAD 145				CARN		L42 HAD			1007	-	-
1964-S543	2438690.50	1964 Oct 22	HAD		HAD 145				CARN		L42 HAD			1007	-	-
1964-S544	2438690.50	1964 Oct 22	HAD		HAD 145				CARN		L42 HAD			1007	-	-
1964-S545	2438690.50	1964 Oct 22	HAD		HAD 145				CARN		L42 HAD			1007	-	-
1964-S546	2438690.50	1964 Oct 22	HAD		HAD 145				CARN		L42 HAD			1007	-	-
1964-S547	2438690.50	1964 Oct 22	HAD		HAD 145				CARN		L42 HAD			1007	-	-
1964-S548	2438690.50	1964 Oct 22	HAD		HAD 145				CARN		L42 HAD			1007	-	-
1964-S549	2438690.50	1964 Oct 22	HAD		HAD 145				CARN		L42 HAD			1007	-	-
1964-S550	2438690.50	1964 Oct 22	HAD		HAD 145				CARN		L42 HAD			1007	-	-
1964-S551	2438690.50	1964 Oct 22	HAD		HAD 145				CARN		L42 HAD			1007	-	-
1964-S552	2438690.50	1964 Oct 22	HAD		HAD 145				CARN		L42 HAD			1007	-	-
1964-S553	2438690.50	1964 Oct 22	HAD		HAD 145				CARN		L42 HAD			1007	-	-
1964-S554	2438690.50	1964 Oct 22	HAD		HAD 145				CARN		L42 HAD			1007	-	-
1964-S555	2438690.50	1964 Oct 22	HAD		HAD 145				CARN		L42 HAD			1007	-	-
1964-S556	2438690.50	1964 Oct 22	HAD		HAD 145				CARN		L42 HAD			1007	-	-
1964-S557	2438690.50	1964 Oct 22	HAD		HAD 145				CARN		L42 HAD			1007	-	-
1964-S558	2438690.50	1964 Oct 22	HAD		HAD 145				CARN		L42 HAD			1007	-	-
1964-S559	2438690.50	1964 Oct 22	HAD		HAD 145				CARN		L42 HAD			1007	-	-
1964-S560	2438690.50	1964 Oct 22	HAD		HAD 145				CARN		L42 HAD			1007	-	-
1964-S561	2438690.50	1964 Oct 22	HAD		HAD 145				CARN		L42 HAD			1007	-	-
1964-S562	2438690.50	1964 Oct 22	HAD		HAD 145				CARN		L42 HAD			1007	-	-
1964-S563	2438690.50	1964 Oct 22	HAD		HAD 145				CARN		L42 HAD			1007	-	-
1964-S564	2438690.50	1964 Oct 22	HAD		HAD 145				CARN		L42 HAD			1007	-	-
1964-S565	2438690.50	1964 Oct 22	HAD		HAD 145				CARN		L42 HAD			1007	-	-
1964-S566	2438690.50	1964 Oct 22	HAD		HAD 145				CARN		L42 HAD			1007	-	-
1964-S567	2438690.50	1964 Oct 22	HAD		HAD 145				CARN		L42 HAD			1007	-	-
1964-S568	2438690.50	1964 Oct 22	HAD		HAD 145				CARN		L42 HAD			1007	-	-
1964-S569	2438690.50	1964 Oct 22	HAD		HAD 145				CARN		L42 HAD			1007	-	-
1964-S570	2438690.50	1964 Oct 22	HAD		HAD 145				CARN		L42 HAD			1007	-	-
1964-S571	2438690.50	1964 Oct 22	HAD		HAD 145				CARN		L42 HAD			1007	-	-
1964-S572	2438690.50	1964 Oct 22	HAD		HAD 145				CARN		L42 HAD			1007	-	-
1964-S573	2438690.50	1964 Oct 22	HAD		HAD 145				CARN		L42 HAD			1007	-	-
1964-S574	2438690.50	1964 Oct 22	HAD		HAD 145				CARN		L42 HAD			1007	-	-
1964-S575	2438690.50	1964 Oct 22	HAD		HAD 145				CARN		L42 HAD			1007	-	-
1964-S576	2438690.50	1964 Oct 22	HAD		HAD 145				CARN		L42 HAD			1007	-	-
1964-S577	2438690.50	1964 Oct 22	HAD		HAD 145				CARN		L42 HAD			1007	-	-
1964-S578	2438690.50	1964 Oct 22	HAD		HAD 145				CARN		L42 HAD			1007	-	-
1964-S579	2438690.50	1964 Oct 22	HAD		HAD 145				CARN		L42 HAD			1007	-	-
1964-S580	2438690.50	1964 Oct 22	HAD		HAD 145				CARN		L42 HAD			1007	-	-
1964-S581	2438690.50	1964 Oct 22	HAD		HAD 145				CARN		L42 HAD			1007	-	-
1964-S582	2438690.50	1964 Oct 22	HAD		HAD 145				CARN		L42 HAD			1007	-	-
1964-S583	2438690.50	1964 Oct 22	HAD		HAD 145				CARN		L42 HAD			1007	-	-
1964-S584	2438690.50	1964 Oct 22	HAD		HAD 145				CARN		L42 HAD			1007	-	-
1964-S585	2438690.50	1964 Oct 22	HAD		HAD 145				CARN		L42 HAD			1007	-	-
1964-S586	2438690.50	1964 Oct 22	HAD		HAD 145				CARN		L42 HAD			1007	-	-
1964-S587	2438690.50	1964 Oct 22	HAD		HAD 145				CARN		L42 HAD			1007	-	-
1964-S588	2438690.50	1964 Oct 22	HAD		HAD 145				CARN		L42 HAD			1007	-	-
1964-S589	2438690.50	1964 Oct 22	HAD		HAD 145				CARN		L42 HAD			1007	-	-
1964-S590	2438690.50	1964 Oct 22	HAD		HAD 145				CARN		L42 HAD			1007	-	-
1964-S591	2438690.50	1964 Oct 22	HAD		HAD 145				CARN		L42 HAD			1007	-	-
1964-S592	2438690.50	1964 Oct 22	HAD		HAD 145				CARN		L42 HAD			1007	-	-
1964-S593	2438690.50	1964 Oct 22	HAD		HAD 145				CARN		L42 HAD			1007	-	-
1964-S594	2438690.50	1964 Oct 22	HAD		HAD 145				CARN		L42 HAD			1007	-	-
1964-S595	2438690.50	1964 Oct 2														









Launch

Notes

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	OrbPay	Agency	Launch_Code	Group	Category	LTCite	Cite	Notes
1969-836	2440575.97	1969 Dec 20 1110	INTA-285	-	INTA I-6901	0.000	INTA	SS	INTA/	Test	ElAren	JBIS24.87	-
1970-A01	2440586.50	1970 Aero High	Cockatoo	-	WRE Cockatoo 101	0.000	WRE	SF	WRE/	Aeron?	Horton	-	-
1970-S303	2440582.78	1970 Apr 16 0638:00	Cockatoo	-	WRE Cockatoo 102	0.000	WRE	SU	WRE/	Aeron	WDORF	JBIS25.61	-
1970-S308	2440582.92	1970 May 21 1015:00	Cockatoo	-	WRE Cockatoo 104	0.000	WRE	SU	ADEL/Carver	Aeron	WDORF	-	-
1970-S363	2440732.79	1970 May 26 0700:00	Cockatoo	-	WRE Cockatoo 103	0.000	WRE	SU	WRE/	Aeron	WDORF	PlanSpaSci20,217	-
1970-S572	2440880.90	1970 Oct 21 0939	Cockatoo	-	WRE Cockatoo 106	0.000	WRE	SS	WRE/	Aeron	WDORF	-	-
1970-S724	2440733.08	1970 May 26 1359	Aero High	-	FC9/1	0.000	WRE	SS	WRE/	Aeron	FDC	-	-
1970-S725	2440733.86	1970 May 27 0837	Aero High	-	WRE/	0.000	WRE	SS	WRE/Lloyd,Low	Aeron	WDORF	-	-
1970-S872	2440896.29	1970 Nov 5 1869	Aero High	-	WRE/	0.000	WRE	SS	WRE/Lloyd	Aeron	WDORF	-	-
1970-S873	2440896.30	1970 Nov 12 1100	Cockatoo	-	WRE Cockatoo 108	0.000	WRE	SS	WRE/Lloyd	Aeron	WDORF	-	-
1970-S874	2440902.96	1970 Dec 12 1515	Cockatoo	-	WRE Cockatoo 105	0.000	WRE	SS	WRE/	Aeron	WDORF	PlanSpaSci21,653	-
1970-S875	2440933.14	1970 Dec 12 1008	Cockatoo	-	INTA I-7001	0.000	INTA	SS	INTA/	Test	ConetesINTA	ElAren	-
1971-S144	2441012.92	1971 Mar 2 1210	Cockatoo	-	WRE AH0203.110	0.000	WRE	SS	WRE/	Aeron	WDORF	users.senet.com.au	-
1971-S145	2441013.01	1971 Mar 2 1210	Aero High	-	WRE AH0203.404	0.000	WRE	SS	WRE/	Aeron	WDORF	users.senet.com.au	-
1971-S222	2441013.33	1971 Mar 2 1394	Aero High	-	WRE HI024 (AH6/16P)	0.000	WRE	SS	WRE/	Aeron	WDORF	-	-
1971-S292	2441089.86	1971 May 18 0839	Cockatoo	-	WRE C112	0.000	WRE	SS	WRE/	Aeron	WDORF	-	-
1971-S371	2441151.86	1971 Jul 19 0943	Cockatoo	-	WRE C1016	0.000	WRE	SS	WRE/	Aeron	WDORF	-	-
1971-S410	2441137.88	1971 Aug 24 0905	Cockatoo	-	WRE C1017	0.000	WRE	SS	WRE/	Aeron	WDORF	-	-
1971-S466	2441214.89	1971 Sep 20 0918	Cockatoo	-	WRE AH010.3	0.000	WRE	SS	WRE/	Aeron	WDORF	-	-
1971-S657	2441215.37	1971 Sep 20 2056	Aero High	-	WRE AH010.3	0.000	WRE	SS	WRE/	Aeron	WDORF	-	-
1971-S659	2441242.90	1971 Oct 18 0938	Cockatoo	-	WRE C1019	0.000	WRE	SS	WRE/	Aeron	WDORF	-	-
1971-S654	2441263.91	1971 Nov 8 0954	Cockatoo	-	WRE C1022	0.000	WRE	SS	WRE/	Aeron	WDORF	-	-
1971-S609	2441300.94	1971 Dec 15 1032	Cockatoo	-	WRE C1025	0.000	WRE	SS	WRE/	Aeron	WDORF	-	-
1972-A01	2441316.50	1972 Aero High	Cockatoo	-	WRE C1023	0.000	WRE	SF	WRE/	Aeron	Horton	-	-
1972-S82	2441350.94	1972 Feb 3 1027	Cockatoo	-	WRE C1024	0.000	WRE	SS	WRE/	Aeron	WDORF	-	-
1972-S80	2441370.92	1972 Feb 23 1006	Cockatoo	-	WRE C1023	0.000	WRE	SS	WRE/	Aeron	WDORF	-	-
1972-S134	2441396.90	1972 Mar 22 0953	Cockatoo	-	WRE C1026	0.000	WRE	SS	WRE/	Aeron	WDORF	-	-
1972-S174	2441426.32	1972 Apr 19 1001	Cockatoo	-	WRE C1027	0.000	WRE	SS	WRE/	Aeron	WDORF	-	-
1972-S203	2441465.86	1972 May 18 0837	Cockatoo	-	WRE C1030	0.000	WRE	SS	WRE/	Aeron	WDORF	-	-
1972-S211	2441466.94	1972 May 29 1034	Cockatoo	-	WRE C1014	0.000	WRE	SS	WRE/	Aeron	WDORF	-	-
1972-S241	2441463.85	1972 Jul 15 0831	Cockatoo	-	WRE C1033	0.000	WRE	SS	WRE/	Aeron	WDORF	-	-
1972-S464	2441518.50	1972 Jul 20	Cockatoo	-	WRE C1020	0.000	WRE	SS	WRE/	Aeron	WDORF	-	-
1972-S769	2441608.35	1972 Oct 17 1951	Cockatoo	-	WRE C1047	0.000	WRE	SS	WRE/	Aeron	WDORF	-	-
1972-S463	2441644.46	1972 Nov 22 2255	Cockatoo	-	WRE C1029	0.000	WRE	SS	WRE/	Aeron	WDORF	-	-
1973-S82	2441707.58	1973 Jan 28 2035	Cockatoo	-	WRE C1	0.000	WRE	SS	WRE/	Aeron	WDORF	-	-
1973-S493	2441791.36	1973 Apr 18 2035	Cockatoo	-	WRE C2003	0.000	WRE	SS	WRE/	Aeron	WDORF	-	-
1973-S461	2441864.77	1973 Jun 20 2320	Cockatoo Mk 4	-	WRE C2004	0.000	WRE	SS	WRE/	Aeron	WDORF	-	-
1973-S276	2441908.87	1973 Aug 14 0858	Cockatoo Mk 4	-	WRE C2004	0.000	WRE	SS	WRE/	Aeron	WDORF	-	-
1973-S544	2441944.71	1973 Sep 19 0930	Cockatoo Mk 4	-	WRE C4001	0.000	WRE	SS	WRE/	Aeron	WDORF	-	-
1973-S545	2441975.00	1973 Oct 22 0938	Cockatoo Mk 4	-	WRE C4002	0.000	WRE	SS	WRE/	Aeron	WDORF	-	-
1973-S546	2442095.89	1973 Nov 19 1059	Cockatoo Mk 4	-	WRE C4004	0.000	WRE	SS	WRE/	Aeron	WDORF	-	-
1973-S547	2442265.62	1974 Mar 28 0258	Cockatoo Mk 4	-	WRE C4004	0.000	WRE	SS	WRE/	Aeron	WDORF	-	-
1974-S100	2443222.40	1974 Jun 28 2950	Cockatoo Mk 4	-	WRE C4006	0.000	WRE	SS	WRE/	Aeron	WDORF	-	-
1974-S438	2443225.40	1974 Oct 1 6735	Cockatoo Mk 4	-	WRE C4007	0.000	WRE	SS	WRE/	Aeron	WDORF	-	-
1974-S439	2443222.83	1974 Oct 2 6735	Cockatoo Mk 4	-	WRE C4007	0.000	WRE	SS	WRE/	Aeron	WDORF	-	-
1975-S802	2443297.30	1975 Apr 24 0930	Cockatoo Mk 4	-	INTA IT-P1-7401	0.000	INTA	SS	INTA/Mateo,Rodriguez	Test	Serra	-	-
1975-S803	2443297.36	1975 Apr 28 2130	Cockatoo Mk 4	-	WRE AH015	0.000	WRE	SS	WRE/	Aeron	WDORF	-	-
1975-S804	2443297.40	1975 Apr 28 2045	Cockatoo Mk 4	-	WRE C4018	0.000	WRE	SS	WRE/	Aeron	WDORF	-	-
1975-S805	2443297.49	1975 Apr 28 2045	Cockatoo Mk 4	-	WRE C4018	0.000	WRE	SS	WRE/	Aeron	WDORF	-	-
1975-S806	2443297.99	1975 Aug 18 0431	Cockatoo Mk 4	-	INTA IT-P2-7501	0.000	INTA	SS	INTA/Mateo,Rodriguez	Aeron/Test	Serra	-	-
1975-S807	2443298.30	1975 Oct 2 1142	Cockatoo	-	WRE C4009	0.000	WRE	SS	WRE/	Aeron	WDORF	-	-
1975-S808	2443298.30	1975 Dec 4 1892	Copella	-	WRE C4002	0.000	WRE	SS	WRE/	Aeron	WDORF	-	-
1976-S417	2443297.30	1976 Feb 23 2130	Copella	-	WRE C4003	0.000	WRE	SS	WRE/	Aeron	WDORF	-	-
1976-S468	2443297.40	1976 Apr 28 2035	Copella	-	WRE C4020	0.000	WRE	SS	WRE/	Aeron	WDORF	-	-
1976-S364	2443295.69	1976 May 27 0900	Cockatoo	-	F2	0.000	WRE	SS	WRE/	Aeron	WDORF	-	-
1976-S365	2443295.69	1976 May 27 0900	Cockatoo	-	F3	0.000	WRE	SS	WRE/	Aeron	WDORF	-	-
1976-S366	2443103.61	1976 Nov 11 2114:47	Fulmar	-	F5	0.000	WRE	SS	WRE/	Aeron	WDORF	-	-
1976-S367	2443103.61	1976 Oct 16 2223:26	Fulmar	-	F3	0.000	WRE	SS	WRE/	Aeron	WDORF	-	-
1977-S296	2443433.43	1977 Nov 17 2134:06	Fulmar	-	F1	0.000	WRE	SS	WRE/	Aeron	WDORF	-	-
1977-S295	2443465.43	1977 Dec 5 0208:10	Fulmar	-	F4	0.000	WRE	SS	WRE/	Aeron	WDORF	-	-
1977-S294	2443482.69	1977 Dec 5 0208:10	Fulmar	-	F2	0.000	WRE	SS	WRE/	Aeron	WDORF	-	-
1978-S299	2443687.67	1978 Jun 28 0400	Fulmar	-	INTA IT-S1B-7801	0.000	INTA	SF	INTA/	Aircraft/Aeron/Tonos	WDORF	-	-
1978-A14	2443951.57	1979 Mar 19 0934:48	Fulmar	-	F6	0.000	WRE	SF	WRE/	Aeron	WDORF	-	-
1981-S71	2444653.97	1981 Feb 18 1112	Cockatoo	-	INTA IT-P4-8101	0.000	INTA	SF	INTA/	Test	WDORF	-	-
1983-S65	2449281.57	1983 Oct 21 0146	INTA-3008	-	TAA	0.000	INTA	SS	INTA/TAA/	Aeron	WDORF	-	-
1984-S29	2449456.56	1984 Apr 16 0122:51	INTA-3008	-	TAA	0.000	INTA	SS	INTA/TAA/	Aeron	WDORF	-	-



Launch

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Mission	FlightCode	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee_km	Range_km	Dest
2018-403	2458124-50	2018 Jan 6	Badr-1	?	New SRBM 1	-	-	-	-	YEMEN	-	-	-	107	-	Majran
2018-408	2458134-50	2018 Jan 16	Badr-1	?	New SRBM 2	-	-	-	-	YEMEN	-	-	-	107	-	Jizan AB
2018-426	2458136-50	2018 Jan 18	Badr-1	-	New SRBM 3	-	-	-	-	YEMEN	-	-	-	107	-	Majran
2018-427	2458138-50	2018 Jan 20	Badr-1	?	New SRBM 4	-	-	-	-	YEMEN	-	-	-	107	-	Majran
2018-431	2458199-50	2018 Mar 22	Badr-1	-	Badr-1	-	-	-	-	YEMEN	-	-	-	107	-	Majran Aram
2018-432	2458201-50	2018 Mar 24	Badr-1	-	Badr-1	-	-	-	-	YEMEN	-	-	-	107	-	Jizan
2018-441	2458208-50	2018 Mar 31	Badr-1	-	Badr-1	-	-	-	-	YEMEN	-	-	-	107	-	Majran
2018-438	2458209-50	2018 Apr 1	Badr-1	-	Grad	-	-	-	-	YEMEN	-	-	-	107	-	Lahj
2018-439	2458210-50	2018 Apr 2	Badr-1	-	Badr-1	-	-	-	-	YEMEN	-	-	-	107	-	Asir
2018-468	2458216-50	2018 Apr 8	Badr-1	-	Badr-1	-	-	-	-	YEMEN	-	-	-	107	-	Asir
2018-446	2458220-50	2018 Apr 12	Badr-1	-	Badr-1	-	-	-	-	YEMEN	-	-	-	107	-	Majran
2018-444	2458220-50	2018 Apr 12	Badr-1	-	Badr-1	-	-	-	-	YEMEN	-	-	-	107	-	Jizan
2018-445	2458221-50	2018 Apr 13	Badr-1	-	Badr-1	-	-	-	-	YEMEN	-	-	-	107	-	Jizan
2018-464	2458224-50	2018 Apr 16	Badr-1	-	Badr-1	-	-	-	-	YEMEN	-	-	-	107	-	Majran
2018-480	2458226-50	2018 Apr 18	Badr-1	-	Badr-1	-	-	-	-	YEMEN	-	-	-	107	-	Majran
2018-463	2458228-50	2018 Apr 20	Badr-1	-	Badr-1	-	-	-	-	YEMEN	-	-	-	107	-	Jizan
2018-482	2458231-50	2018 Apr 23	Badr-1	-	Badr-1	-	-	-	-	YEMEN	-	-	-	107	-	Jizan
2018-481	2458231-50	2018 Apr 23	Badr-1	-	Badr-1	-	-	-	-	YEMEN	-	-	-	107	-	Jizan
2018-471	2458236-50	2018 Apr 28	Badr-1	-	Badr-1	-	-	-	-	YEMEN	-	-	-	107	-	Jizan
2018-472	2458236-50	2018 Apr 28	Badr-1	-	Badr-1	-	-	-	-	YEMEN	-	-	-	107	-	Jizan
2018-473	2458236-50	2018 Apr 28	Badr-1	-	Badr-1	-	-	-	-	YEMEN	-	-	-	107	-	Jizan
2018-474	2458236-50	2018 Apr 28	Badr-1	-	Badr-1	-	-	-	-	YEMEN	-	-	-	107	-	Jizan
2018-475	2458236-50	2018 Apr 28	Badr-1	-	Badr-1	-	-	-	-	YEMEN	-	-	-	107	-	Jizan
2018-476	2458236-50	2018 Apr 28	Badr-1	-	Badr-1	-	-	-	-	YEMEN	-	-	-	107	-	Jizan
2018-477	2458236-50	2018 Apr 28	Badr-1	-	Badr-1	-	-	-	-	YEMEN	-	-	-	107	-	Jizan
2018-478	2458236-50	2018 Apr 28	Badr-1	-	Badr-1	-	-	-	-	YEMEN	-	-	-	107	-	Jizan
2018-468	2458244-50	2018 May 6	Badr-1	-	Badr-1	-	-	-	-	YEMEN	-	-	-	107	-	Majran
2018-469	2458244-50	2018 May 6	Badr-1	-	Badr-1	-	-	-	-	YEMEN	-	-	-	107	-	Majran
2018-463	2458247-50	2018 May 9	Badr-1	-	Badr-1	-	-	-	-	YEMEN	-	-	-	107	-	Majran
2018-460	2458247-50	2018 May 9	Badr-1	-	Badr-1	-	-	-	-	YEMEN	-	-	-	107	-	Majran
2018-462	2458249-50	2018 May 11	Badr-1	-	Badr-1	-	-	-	-	YEMEN	-	-	-	107	-	Majran
2018-461	2458252-50	2018 May 14	Badr-1	-	Badr-1	-	-	-	-	YEMEN	-	-	-	107	-	Jizan
2018-469	2458256-50	2018 May 16	Badr-1	-	Badr-1	-	-	-	-	YEMEN	-	-	-	107	-	Jizan
2018-467	2458257-50	2018 May 19	Badr-1	-	Badr-1	-	-	-	-	YEMEN	-	-	-	107	-	Asir
2018-465	2458259-50	2018 May 21	Badr-1	-	Badr-1	-	-	-	-	YEMEN	-	-	-	107	-	Jizan
2018-464	2458262-50	2018 May 24	Badr-1	-	Badr-1	-	-	-	-	YEMEN	-	-	-	107	-	Majran
2018-468	2458263-50	2018 May 26	Badr-1	-	Badr-1	-	-	-	-	YEMEN	-	-	-	107	-	Majran
2018-466	2458263-50	2018 May 26	Badr-1	-	Badr-1	-	-	-	-	YEMEN	-	-	-	107	-	Majran
2018-469	2458277-50	2018 Jun 6	Badr-1	?	-	-	-	-	-	YEMEN	-	-	-	107	-	Majran
2018-4100	2458279-50	2018 Jun 10	Badr-1	-	Badr-1	-	-	-	-	YEMEN	-	-	-	107	-	Jizan
2018-4101	2458282-50	2018 Jun 13	Badr-1	-	Badr-1	-	-	-	-	YEMEN	-	-	-	107	-	Jizan
2018-4103	2458282-50	2018 Jun 14	Badr-1	-	Badr-1	-	-	-	-	YEMEN	-	-	-	107	-	Jizan
2018-4106	2458288-50	2018 Jun 17	Badr-1	-	Badr-1	-	-	-	-	YEMEN	-	-	-	107	-	Jizan
2018-4107	2458288-50	2018 Jun 19	Badr-1	-	Badr-1	-	-	-	-	YEMEN	-	-	-	107	-	Jizan
2018-4110	2458288-50	2018 Jun 23	Badr-1	-	SRBM	-	-	-	-	YEMEN	-	-	-	107	-	V Coast
2018-4111	2458289-50	2018 Jun 30	Badr-1	?	SRBM	-	-	-	-	YEMEN	-	-	-	107	-	V Coast
2018-4112	2458302-50	2018 Jul 3	Badr-1	?	SRBM	-	-	-	-	YEMEN	-	-	-	107	-	V Coast
2018-4113	2458305-50	2018 Jul 6	Badr-1	-	Badr-1	-	-	-	-	YEMEN	-	-	-	107	-	Asir
2018-4114	2458305-50	2018 Jul 7	Badr-1	?	SRBM	-	-	-	-	YEMEN	-	-	-	107	-	Jizan
2018-4115	2458309-50	2018 Jul 10	Badr-1	-	SRBM	-	-	-	-	YEMEN	-	-	-	107	-	V Coast
2018-4116	2458310-50	2018 Jul 11	Badr-1	?	SRBM	-	-	-	-	YEMEN	-	-	-	107	-	V Coast
2018-4117	2458313-50	2018 Jul 14	Badr-1	?	SRBM	-	-	-	-	YEMEN	-	-	-	107	-	V Coast
2018-4118	2458315-50	2018 Jul 16	Badr-1	?	SRBM	-	-	-	-	YEMEN	-	-	-	107	-	Majran
2018-4120	2458318-50	2018 Jul 16	Badr-1	?	SRBM	-	-	-	-	YEMEN	-	-	-	107	-	V Coast
2018-4121	2458318-50	2018 Jul 19	Badr-1	-	Badr-1	-	-	-	-	YEMEN	-	-	-	107	-	Jizan
2018-4122	2458328-50	2018 Jul 29	Badr-1	?	SRBM	-	-	-	-	YEMEN	-	-	-	107	-	Jizan
2018-4124	2458331-50	2018 Aug 1	Badr-1	?	SRBM	-	-	-	-	YEMEN	-	-	-	107	-	Mayda
2018-4125	2458338-50	2018 Aug 8	Badr-1	?	SRBM	-	-	-	-	YEMEN	-	-	-	107	-	Marib
2018-4127	2458338-50	2018 Aug 8	Badr-1	?	SRBM	-	-	-	-	YEMEN	-	-	-	107	-	V Coast
2018-4128	2458339-50	2018 Aug 9	Badr-1	-	Badr-1	-	-	-	-	YEMEN	-	-	-	107	-	Jizan
2018-4129	2458342-50	2018 Aug 12	Badr-1	-	Badr-1	-	-	-	-	YEMEN	-	-	-	107	-	Jizan
2018-4130	2458343-50	2018 Aug 13	Badr-1	?	SRBM	-	-	-	-	YEMEN	-	-	-	107	-	V Coast
2018-4131	2458346-50	2018 Aug 16	Badr-1	-	Badr-1	-	-	-	-	YEMEN	-	-	-	107	-	Majran
2018-4132	2458347-50	2018 Aug 17	Badr-1	?	Badr-1	-	-	-	-	YEMEN	-	-	-	107	-	V Coast
2018-4138	2458349-50	2018 Aug 19	Badr-1	-	Badr-1	-	-	-	-	YEMEN	-	-	-	107	-	Jizan
2018-4139	2458350-50	2018 Aug 20	Badr-1	-	Badr-1	-	-	-	-	YEMEN	-	-	-	107	-	V Coast
2018-4140	2458351-50	2018 Aug 21	Badr-1	-	Badr-1	-	-	-	-	YEMEN	-	-	-	107	-	Majran
2018-4144	2458359-50	2018 Aug 29	Badr-1	-	Badr-1	-	-	-	-	YEMEN	-	-	-	107	-	V Coast
2018-4150	2458360-50	2018 Aug 30	Badr-1	-	Badr-1	-	-	-	-	YEMEN	-	-	-	107	-	Majran
2018-4151	2458365-50	2018 Sep 4	Badr-1	-	Badr-1	-	-	-	-	YEMEN	-	-	-	107	-	Majran
2018-4152	2458365-50	2018 Sep 4	Badr-1	?	Badr-1	-	-	-	-	YEMEN	-	-	-	107	-	Jizan
2018-4153	2458365-50	2018 Sep 4	Badr-1	?	Badr-1	-	-	-	-	YEMEN	-	-	-	107	-	Jizan
2018-4154	2458367-50	2018 Sep 4	Badr-1	?	Badr-1	-	-	-	-	YEMEN	-	-	-	107	-	Majran
2018-4157	2458367-50	2018 Sep 6	Badr-1	-	Badr-1	-	-	-	-	YEMEN	-	-	-	107	-	Jizan
2018-4158	2458368-50	2018 Sep 7	Badr-1	-	Badr-1	-	-	-	-	YEMEN	-	-	-	107	-	Jizan
2018-4159	2458368-50	2018 Sep 7	Badr-1	-	Badr-1	-	-	-	-	YEMEN	-	-	-	107	-	Jizan
2018-4160	2458371-50	2018 Sep 8	Badr-1	-	Badr-1	-	-	-	-	YEMEN	-	-	-	107	-	Asir
2018-4161	2458375-50	2018 Sep 10	Badr-1	-	Badr-1	-	-	-	-	YEMEN	-	-	-	107	-	Jizan-Aramco
2018-4162	2458376-50	2018 Sep 14	Badr-1	-	Badr-1	-	-	-	-	YEMEN	-	-	-	107	-	Jizan
2018-4163	2458376-50	2018 Sep 15	Badr-1	-	Badr-1	-	-	-	-	YEMEN	-	-	-	107	-	Jizan
2018-4166	2458377-50	2018 Sep 16	Badr-1	-	Badr-1	-	-	-	-	YEMEN	-	-	-	107	-	Asir
2018-4167	2458379-50	2018 Sep 18	Badr-1	-	Badr-1	-	-	-	-	YEMEN	-	-	-	107	-	Asir
2018-4168	2458381-50	2018 Sep 20	Badr-1	-	Badr-1	-	-	-	-	YEMEN	-	-	-	107	-	Jizan
2018-4168	2458384-50	2018 Sep 20	Badr-1	-	Badr-1	-	-	-	-	YEMEN	-	-	-	107	-	Jizan
2018-4183	2458407-50	2018 Oct 16	Badr-1	-	Badr-1	-	-	-	-	YEMEN	-	-	-	107	-	Marib
2018-4184	2458407-50	2018 Oct 16	Badr-1	-	Badr-1	-	-	-	-	YEMEN	-	-	-	107	-	Marib

Launch

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Mission	FlightCode	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee km	Range km	Dest
2018-A185	2458409-50	2018 Oct 18	Badr-1	-	Badr-1	-	-	-	-	YEMEN	-	-	-	107	-	Majran
2018-A195	2458418-50	2018 Oct 27	Badr-1	?	Badr-1	-	-	-	-	YEMEN	-	-	-	107	-	Hodeidah
2018-A196	2458424-50	2018 Nov 2	Badr-1	-	Badr-1P	-	-	-	-	YEMEN	-	-	-	107	-	Majran
2018-A199	2458425-50	2018 Nov 3	Badr-1	-	Badr-1	-	-	-	-	YEMEN	-	-	-	107	-	Boq'ea
2018-A200	2458426-50	2018 Nov 4	Badr-1	-	Badr-1	-	-	-	-	YEMEN	-	-	-	107	-	Hodeidah
2018-A201	2458429-50	2018 Nov 7	Badr-1	-	Badr-1P	-	-	-	-	YEMEN	-	-	-	107	-	YE W Coast
2018-A202	2458430-50	2018 Nov 8	Badr-1	-	Badr-1	-	-	-	-	YEMEN	-	-	-	107	-	Jawf
2018-A203	2458430-50	2018 Nov 8	Badr-1	-	Badr-1P	-	-	-	-	YEMEN	-	-	-	107	-	Jawf
2018-A208	2458441-50	2018 Nov 19	Badr-1	-	Badr-1P	-	-	-	-	YEMEN	-	-	-	107	-	Maj'jah
2018-A214	2458447-50	2018 Nov 25	Badr-1	-	Badr-1P	-	-	-	-	YEMEN	-	-	-	107	-	Asir
2018-A215	2458447-50	2018 Nov 25	Badr-1	-	Badr-1P	-	-	-	-	YEMEN	-	-	-	107	-	Mehm
2018-A219	2458451-50	2018 Nov 29	Badr-1	-	Badr-1	-	-	-	-	YEMEN	-	-	-	107	-	Maj'ran
2018-A220	2458451-50	2018 Nov 29	Badr-1	-	Badr-1	-	-	-	-	YEMEN	-	-	-	107	-	Maj'ran
2018-A221	2458452-50	2018 Nov 30	Badr-1	-	Badr-1	-	-	-	-	YEMEN	-	-	-	107	-	YE W Coast
2018-A222	2458452-50	2018 Nov 30	Badr-1	-	Badr-1	-	-	-	-	YEMEN	-	-	-	107	-	Taiz
2018-A04	2458469-50	2019 Jan 6	Badr-1	-	Badr-1	-	-	-	-	YEMEN	-	-	-	107	-	Maj'ran
2018-A07	2458497-50	2019 Jan 14	Badr-1	-	Badr-1P	-	-	-	-	YEMEN	-	-	-	107	-	Jizan
2018-A10	2458504-50	2019 Jan 21	Badr-1	-	Badr-1P	-	-	-	-	YEMEN	-	-	-	107	-	Asir
2018-A11	2458504-50	2019 Jan 21	Badr-1	-	Badr-1P	-	-	-	-	YEMEN	-	-	-	107	-	Jizan
2018-A12	2458509-50	2019 Jan 26	Badr-1	-	Badr-1P	-	-	-	-	YEMEN	-	-	-	107	-	Maj'ran
2018-A28	2458538-50	2019 Feb 24	Badr-1	-	Badr-1	-	-	-	-	YEMEN	-	-	-	107	-	Asir
2018-A36	2458546-50	2019 Mar 4	Badr-1	-	Badr-1P	-	-	-	-	YEMEN	-	-	-	107	-	Maj'ran
2018-A39	2458546-50	2019 Mar 6	Badr-1	-	Badr-1	-	-	-	-	YEMEN	-	-	-	107	-	Maj'ran
2018-A43	2458552-50	2019 Mar 10	Badr-1	-	Badr-1P	-	-	-	-	YEMEN	-	-	-	107	-	Maj'ran
2018-A44	2458552-50	2019 Mar 13	Badr-1	-	Badr-1P	-	-	-	-	YEMEN	-	-	-	107	-	Maj'ran
2018-A45	2458555-50	2019 Mar 13	Badr-1	-	Badr-1P	-	-	-	-	YEMEN	-	-	-	107	-	Maj'ran
2018-A48	2458562-50	2019 Mar 20	Badr-1	-	Badr-1P	-	-	-	-	YEMEN	-	-	-	107	-	Maj'ran
2018-A46	2458562-50	2019 Mar 20	Badr-1	-	Badr-1P	-	-	-	-	YEMEN	-	-	-	107	-	Maj'ran
2018-A61	2458570-50	2019 Mar 24	Badr-1	-	Badr-1P	-	-	-	-	YEMEN	-	-	-	107	-	Maj'ran
2018-A62	2458566-50	2019 Mar 24	Badr-1	-	Badr-1P	-	-	-	-	YEMEN	-	-	-	107	-	Maj'ran
2018-A63	2458570-50	2019 Mar 24	Badr-1	-	Badr-1P	-	-	-	-	YEMEN	-	-	-	107	-	Maj'ran
2018-A64	2458582-50	2019 Apr 19	Badr-1	-	Badr-1P	-	-	-	-	YEMEN	-	-	-	107	-	Maj'jah
2018-A66	2458594-50	2019 Apr 21	Badr-1	-	Badr-1	-	-	-	-	YEMEN	-	-	-	107	-	Maj'jah
2018-A64	2458594-50	2019 Apr 19	Badr-1	-	Badr-1P	-	-	-	-	YEMEN	-	-	-	107	-	Maj'jah
2018-A64	2458594-50	2019 Apr 21	Badr-1	-	Badr-1P	-	-	-	-	YEMEN	-	-	-	107	-	Maj'jah
2018-A64	2458594-50	2019 Apr 19	Badr-1	-	Badr-1P	-	-	-	-	YEMEN	-	-	-	107	-	Maj'jah
2018-A64	2458594-50	2019 Apr 21	Badr-1	-	Badr-1P	-	-	-	-	YEMEN	-	-	-	107	-	Maj'jah
2018-A64	2458594-50	2019 Apr 19	Badr-1	-	Badr-1P	-	-	-	-	YEMEN	-	-	-	107	-	Maj'jah
2018-A64	2458594-50	2019 Apr 21	Badr-1	-	Badr-1P	-	-	-	-	YEMEN	-	-	-	107	-	Maj'jah
2021-A20	2459462-50	2021 Sep 5	Badr-1	-	Badr-F	-	-	-	-	YEMEN	-	-	-	107	-	Jeddah?
2021-A21	2459462-50	2021 Sep 5	Badr-1	-	Badr-F	-	-	-	-	YEMEN	-	-	-	107	-	Jeddah?
2021-A22	2459462-50	2021 Sep 5	Badr-1	-	Badr-F	-	-	-	-	YEMEN	-	-	-	107	-	Jeddah?
2021-A23	2459462-50	2021 Sep 5	Badr-1	-	Badr-F	-	-	-	-	YEMEN	-	-	-	107	-	Jeddah?
2021-A23	2459462-50	2021 Sep 5	Badr-1	-	Badr-F	-	-	-	-	YEMEN	-	-	-	107	-	Jeddah?
2021-A24	2459462-50	2021 Sep 5	Badr-1	-	Badr-F	-	-	-	-	YEMEN	-	-	-	107	-	Jeddah?





Launch  
Display

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Agency	Launch_Code	Group	Category	LTCite	Cite	Notes
2018-A185	2455409.50	2018 Oct 18	Badr-1	-	Badr-1	ANSAL	MS	-	Weapon	sabaneers.net	-	-
2018-A195	2455418.50	2018 Oct 27	Badr-1	-	Badr-1	ANSAL	MS	-	Weapon	sabaneers.net	-	-
2018-A198	2455424.50	2018 Nov 2	Badr-1	?	Badr-1P	ANSAL	MS	-	Weapon	sabaneers.net	-	-
2018-A199	2455425.50	2018 Nov 3	Badr-1	-	Badr-1	ANSAL	MS	-	Weapon	sabaneers.net	-	-
2018-A200	2455426.50	2018 Nov 4	Badr-1	-	Badr-1	ANSAL	MS	-	Weapon	sabaneers.net	-	-
2018-A201	2455429.50	2018 Nov 7	Badr-1	-	Badr-1P	ANSAL	MS	-	Weapon	sabaneers.net	-	-
2018-A202	2455430.50	2018 Nov 8	Badr-1	-	Badr-1	ANSAL	MS	-	Weapon	sabaneers.net	-	-
2018-A203	2455430.50	2018 Nov 8	Badr-1	-	Badr-1P	ANSAL	MS	-	Weapon	sabaneers.net	-	-
2018-A208	2455441.50	2018 Nov 19	Badr-1	-	Badr-1P	ANSAL	MS	-	Weapon	sabaneers.net	-	-
2018-A214	2455447.50	2018 Nov 25	Badr-1	-	Badr-1P	ANSAL	MS	-	Weapon	sabaneers.net	-	-
2018-A219	2455451.50	2018 Nov 29	Badr-1	-	Badr-1	ANSAL	MS	-	Weapon	sabaneers.net	-	-
2018-A220	2455462.50	2018 Nov 29	Badr-1	-	Badr-1	ANSAL	MS	-	Weapon	sabaneers.net	-	-
2018-A221	2455462.50	2018 Nov 30	Badr-1	-	Badr-1	ANSAL	MS	-	Weapon	sabaneers.net	-	-
2019-A04	2455469.50	2019 Jan 6	Badr-1	-	Badr-1	ANSAL	MS	-	Weapon	sabaneers.net	-	-
2019-A07	2455497.50	2019 Jan 14	Badr-1	-	Badr-1P	ANSAL	MS	-	Weapon	sabaneers.net	-	-
2019-A10	2455504.50	2019 Jan 21	Badr-1	-	Badr-1P	ANSAL	MS	-	Weapon	sabaneers.net	-	-
2019-A11	2455504.50	2019 Jan 21	Badr-1	-	Badr-1	ANSAL	MS	-	Weapon	sabaneers.net	-	-
2019-A12	2455509.50	2019 Jan 26	Badr-1	-	Badr-1P	ANSAL	MS	-	Weapon	sabaneers.net	-	-
2019-A28	2455538.50	2019 Feb 24	Badr-1	-	Badr-1P	ANSAL	MS	-	Weapon	sabaneers.net	-	-
2019-A36	2455546.50	2019 Mar 4	Badr-1	-	Badr-1P	ANSAL	MS	-	Weapon	sabaneers.net	-	-
2019-A39	2455548.50	2019 Mar 6	Badr-1	-	Badr-1	ANSAL	MS	-	Weapon	sabaneers.net	-	-
2019-A43	2455552.50	2019 Mar 10	Badr-1	-	Badr-1P	ANSAL	MS	-	Weapon	sabaneers.net	-	-
2019-A44	2455555.50	2019 Mar 13	Badr-1	-	Badr-1P	ANSAL	MS	-	Weapon	sabaneers.net	-	-
2019-A45	2455562.50	2019 Mar 20	Badr-1	-	Badr-1P	ANSAL	MS	-	Weapon	sabaneers.net	-	-
2019-A46	2455566.50	2019 Mar 24	Badr-1	-	Badr-1P	ANSAL	MS	-	Weapon	sabaneers.net	-	-
2019-A61	2455570.50	2019 Mar 28	Badr-1	-	Badr-1P	ANSAL	MS	-	Weapon	sabaneers.net	-	-
2019-A62	2455570.50	2019 Mar 28	Badr-1	-	Badr-1	ANSAL	MS	-	Weapon	sabaneers.net	-	-
2019-A63	2455592.50	2019 Apr 19	Badr-1	-	Badr-F	ANSAL	MS	-	Weapon	sabaneers.net	-	-
2019-A64	2455594.50	2019 Apr 21	Badr-1	-	Badr-F	ANSAL	MS	-	Weapon	sabaneers.net	-	-
2019-A98	2455694.50	2019 Jun 20	Badr-1	-	Badr-F	ANSAL	MS	-	Weapon	sabaneers.net	-	-
2021-A20	2459462.50	2021 Sep 5	Badr-1	-	Badr-F	ANSAL	MS	-	Weapon	sabaneers.net	-	-
2021-A21	2459462.50	2021 Sep 5	Badr-1	-	Badr-F	ANSAL	MS	-	Weapon	sabaneers.net	-	-
2021-A22	2459462.50	2021 Sep 5	Badr-1	-	Badr-F	ANSAL	MS	-	Weapon	sabaneers.net	-	-
2021-A23	2459462.50	2021 Sep 5	Badr-1	-	Badr-F	ANSAL	MS	-	Weapon	sabaneers.net	-	-
2021-A24	2459462.50	2021 Sep 5	Badr-1	-	Badr-F	ANSAL	MS	-	Weapon	sabaneers.net	-	-





Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Mission	Launch				Apogee km	Range km	Dest
								Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad			
2009-A10	2455183.00	2009 Dec 17 1153?	Gradicom 1	-	-	-	-	-	-	-	-	40	-	-
2011-S30	2455764.16	2011 Jul 11 1536?	Gradicom 2	-	-	-	-	SERE	-	-	-	100	-	-
								CELPA	-	-	-			



Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	DrPay	Agency	Launch_Code	Group	Category	LTCite	Cite	Notes
2009-A10	2455183.00	2009 Dec 17 11537	Gradicom 1	-	-	0.000	CITED	SS	CITED/	Test	mundef.gov.ar	ricjvirtual.com	-
2011-S30	2455754.15	2011 Jul 11 15357	Gradicom 2	-	-	0.000	CITED	SS	CITED/	Test	mundef.gov.ar	ricjvirtual.com	-



Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Mission	FlightCode	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee_Km	Range_Km	Dest
1965-M48	2438793.50	1965 Feb 2	Gun Projectile 5-inch	-	-	BRL WS 5-1	-	-	-	WS	51N	-	-	61?	-	-
1965-M49	2438796.50	1965 Feb 5	Gun Projectile 5-inch	-	-	BRL WS 5-2	-	-	-	WS	51N	-	-	61?	-	-
1965-M50	2438796.50	1965 Feb 5	Gun Projectile 5-inch	-	-	BRL WS 5-3	-	-	-	WS	51N	-	-	61?	-	-
1965-M51	2438797.50	1965 Feb 6	Gun Projectile 5-inch	-	-	BRL WS 5-4	-	-	-	WS	51N	-	-	61?	-	-
1965-M52	2438800.50	1965 Feb 9	Gun Projectile 5-inch	-	-	BRL WS 5-5	-	-	-	WS	51N	-	-	61?	-	-
1965-M53	2438800.50	1965 Feb 9	Gun Projectile 5-inch	-	-	BRL WS 5-6	-	-	-	WS	51N	-	-	61?	-	-
1965-M54	2438809.50	1965 Feb 18	Gun Projectile 5-inch	-	-	BRL WS 5-7	-	-	-	WS	51N	-	-	61?	-	-
1965-M55	2438814.50	1965 Feb 23	Gun Projectile 5-inch	-	-	BRL WS 5-8	-	-	-	WS	51N	-	-	61?	-	-
1965-M56	2438821.50	1965 Mar 2	Gun Projectile 5-inch	-	-	BRL WS 5-9	-	-	-	WS	51N	-	-	61?	-	-
1965-M57	2438828.50	1965 Mar 9	Gun Projectile 5-inch	-	-	BRL WS 5-10	-	-	-	WS	51N	-	-	61?	-	-
1965-M58	2438894.50	1965 May 14	Gun Projectile 5-inch	-	-	BRL WS 5-11	-	-	-	WS	51N	-	-	61?	-	-
1965-M59	2438900.50	1965 May 20	Gun Projectile 5-inch	-	-	BRL WS 5-12	-	-	-	WS	51N	-	-	61?	-	-
1965-M60	2438940.50	1965 Jun 29	Gun Projectile 5-inch	-	-	BRL WS 5-13	-	-	-	WS	51N	-	-	61?	-	-
1965-M61	2438963.50	1965 Jul 22	Gun Projectile 5-inch	-	-	BRL WS 5-14	-	-	-	WS	51N	-	-	61?	-	-
1965-M62	2438984.50	1965 Aug 12	Gun Projectile 5-inch	-	-	BRL WS 5-15	-	-	-	WS	51N	-	-	61?	-	-
1965-M63	2438990.50	1965 Aug 18	Gun Projectile 5-inch	-	-	BRL WS 5-16	-	-	-	WS	51N	-	-	61?	-	-
1965-M64	2438995.50	1965 Aug 23	Gun Projectile 5-inch	-	-	BRL WS 5-17	-	-	-	WS	51N	-	-	61?	-	-
1965-M65	2439004.50	1965 Sep 1	Gun Projectile 5-inch	-	-	BRL WS 5-18	-	-	-	WS	51N	-	-	61?	-	-
1965-M66	2439005.50	1965 Sep 2	Gun Projectile 5-inch	-	-	BRL WS 5-19	-	-	-	WS	51N	-	-	61?	-	-
1965-M67	2439011.50	1965 Sep 8	Gun Projectile 5-inch	-	-	BRL WS 5-20	-	-	-	WS	51N	-	-	61?	-	-
1965-M68	2439011.50	1965 Sep 8	Gun Projectile 5-inch	-	-	BRL WS 5-21	-	-	-	WS	51N	-	-	61?	-	-
1965-M69	2439014.50	1965 Sep 11	Gun Projectile 5-inch	-	-	BRL WS 5-22	-	-	-	WS	51N	-	-	61?	-	-
1965-M70	2439014.50	1965 Sep 14	Gun Projectile 5-inch	-	-	BRL WS 5-23	-	-	-	WS	51N	-	-	61?	-	-
1965-M71	2439019.50	1965 Sep 16	Gun Projectile 5-inch	-	-	BRL WS 5-24	-	-	-	WS	51N	-	-	61?	-	-
1965-M72	2439031.50	1965 Sep 28	Gun Projectile 5-inch	-	-	BRL WS 5-25	-	-	-	WS	51N	-	-	61?	-	-
1965-M73	2439037.50	1965 Oct 4	Gun Projectile 5-inch	-	-	BRL WS 5-26	-	-	-	WS	51N	-	-	61?	-	-
1965-M74	2439038.50	1965 Oct 5	Gun Projectile 5-inch	-	-	BRL WS 5-27	-	-	-	WS	51N	-	-	61?	-	-
1965-M75	2439044.50	1965 Oct 11	Gun Projectile 5-inch	-	-	BRL WS 5-28	-	-	-	WS	51N	-	-	61?	-	-
1965-M76	2439046.50	1965 Oct 13	Gun Projectile 5-inch	-	-	BRL WS 5-29	-	-	-	WS	51N	-	-	61?	-	-
1965-M77	2439061.50	1965 Oct 28	Gun Projectile 5-inch	-	-	BRL WS 5-30	-	-	-	WS	51N	-	-	61?	-	-
1965-M78	2439061.50	1965 Oct 28	Gun Projectile 5-inch	-	-	BRL WS 5-31	-	-	-	WS	51N	-	-	61?	-	-
1965-M79	2439061.50	1965 Oct 28	Gun Projectile 5-inch	-	-	BRL WS 5-32	-	-	-	WS	51N	-	-	61?	-	-
1965-M80	2439061.50	1965 Oct 28	Gun Projectile 5-inch	-	-	BRL WS 5-33	-	-	-	WS	51N	-	-	61?	-	-
1965-M81	2439074.50	1965 Nov 10	Gun Projectile 5-inch	-	-	BRL WS 5-34	-	-	-	WS	51N	-	-	61?	-	-
1965-M82	2439143.38	1966 Jan 17 2021	Gun Projectile 5-inch	-	-	1	-	-	-	BARB	51N	-	-	67	-	-
1965-M83	2439143.38	1966 Jan 18 1411?	Gun Projectile 5-inch	-	-	2	-	-	-	BARB	51N	-	-	69	-	-
1965-M84	2439144.09	1966 Jan 18 1921	Gun Projectile 5-inch	-	-	3	-	-	-	BARB	51N	-	-	66	-	-
1965-M85	2439144.31	1966 Jan 18 1921	Gun Projectile 5-inch	-	-	4	-	-	-	BARB	51N	-	-	67	-	-
1965-M86	2439144.34	1966 Jan 18 2007	Gun Projectile 5-inch	-	-	5	-	-	-	BARB	51N	-	-	67	-	-
1965-M87	2439145.12	1966 Jan 19 1900	Gun Projectile 5-inch	-	-	6	-	-	-	BARB	51N	-	-	68	-	-
1965-M88	2439145.28	1966 Jan 19 1945	Gun Projectile 5-inch	-	-	7	-	-	-	BARB	51N	-	-	68	-	-
1965-M89	2439145.35	1966 Jan 19 1957	Gun Projectile 5-inch	-	-	8	-	-	-	BARB	51N	-	-	68	-	-
1965-M90	2439146.31	1966 Jan 20 1905	Gun Projectile 5-inch	-	-	9	-	-	-	BARB	51N	-	-	71	-	-
1965-M91	2439146.31	1966 Jan 20 1925	Gun Projectile 5-inch	-	-	10	-	-	-	BARB	51N	-	-	66	-	-
1965-M92	2439147.33	1966 Jan 21 1652	Gun Projectile 5-inch	-	-	11	-	-	-	BARB	51N	-	-	64	-	-
1965-M93	2439147.33	1966 Jan 21 1650	Gun Projectile 5-inch	-	-	12	-	-	-	BARB	51N	-	-	64	-	-
1965-M94	2439149.17	1966 Jan 26 1610	Gun Projectile 5-inch	-	-	13	-	-	-	BARB	51N	-	-	64	-	-
1965-M95	2439152.17	1966 Jan 26 1610	Gun Projectile 5-inch	-	-	14	-	-	-	BARB	51N	-	-	64	-	-
1965-M96	2439157.17	1966 Jan 28 1600	Gun Projectile 5-inch	-	-	15	-	-	-	BARB	51N	-	-	67	-	-
1965-M97	2439157.17	1966 Jan 31 1640	Gun Projectile 5-inch	-	-	16	-	-	-	BARB	51N	-	-	67	-	-
1965-M98	2439159.32	1966 Feb 2 1635	Gun Projectile 5-inch	-	-	17	-	-	-	BARB	51N	-	-	67	-	-
1965-M99	2439162.17	1966 Feb 7 1635	Gun Projectile 5-inch	-	-	18	-	-	-	BARB	51N	-	-	64	-	-
1965-M100	2439162.17	1966 Feb 7 1600	Gun Projectile 5-inch	-	-	19	-	-	-	BARB	51N	-	-	64	-	-
1965-M101	2439165.30	1966 Feb 8 1916	Gun Projectile 5-inch	-	-	20	-	-	-	WT	51N?	-	-	60?	-	-
1965-M102	2439165.37	1966 Feb 8 2058	Gun Projectile 5-inch	-	-	21	-	-	-	WT	51N?	-	-	60?	-	-
1965-M103	2439166.17	1966 Feb 9 1603	Gun Projectile 5-inch	-	-	22	-	-	-	BARB	51N	-	-	61	-	-
1965-M104	2439168.17	1966 Feb 11 1600	Gun Projectile 5-inch	-	-	23	-	-	-	BARB	51N	-	-	58	-	-
1965-M105	2439173.17	1966 Feb 16 1600	Gun Projectile 5-inch	-	-	24	-	-	-	BARB	51N	-	-	54	-	-
1965-M106	2439174.23	1966 Feb 17 1726	Gun Projectile 5-inch	-	-	25	-	-	-	BARB	51N	-	-	54	-	-
1965-M107	2439175.13	1966 Feb 18 1501	Gun Projectile 5-inch	-	-	26	-	-	-	BARB	51N	-	-	61?	-	-
1965-M108	2439175.13	1966 Feb 19 0509	Gun Projectile 5-inch	-	-	27	-	-	-	GRLY	51N	-	-	61?	-	-
1965-M109	2439176.17	1966 Feb 19 1607	Gun Projectile 5-inch	-	-	28	-	-	-	GRLY	51N	-	-	20?	-	-
1965-M110	2439176.50	1966 Feb 20 0000	Gun Projectile 5-inch	-	-	29	-	-	-	GRLY	51N	-	-	20?	-	-
1965-M111	2439176.69	1966 Feb 20 0300	Gun Projectile 5-inch	-	-	30	-	-	-	GRLY	51N	-	-	20?	-	-
1965-M112	2439176.69	1966 Feb 20 0431	Gun Projectile 5-inch	-	-	31	-	-	-	GRLY	51N	-	-	61	-	-
1965-M113	2439177.41	1966 Feb 23 0000	Gun Projectile 5-inch	-	-	32	-	-	-	GRLY	51N	-	-	61	-	-
1965-M114	2439180.44	1966 Feb 23 2238	Gun Projectile 5-inch	-	-	33	-	-	-	BARB	51N	-	-	20?	-	-
1965-M115	2439180.62	1966 Feb 24 0300	Gun Projectile 5-inch	-	-	34	-	-	-	GRLY	51N	-	-	66	-	-
1965-M116	2439180.64	1966 Feb 24 0323	Gun Projectile 5-inch	-	-	35	-	-	-	BARB	51N	-	-	56	-	-
1965-M117	2439180.79	1966 Feb 24 0700	Gun Projectile 5-inch	-	-	36	-	-	-	BARB	51N	-	-	60	-	-
1965-M118	2439181.23	1966 Feb 24 1738	Gun Projectile 5-inch	-	-	37	-	-	-	GRLY	51N	-	-	20?	-	-
1965-M119	2439181.36	1966 Feb 24 2038	Gun Projectile 5-inch	-	-	38	-	-	-	GRLY	51N	-	-	43	-	-
1965-M120	2439181.56	1966 Feb 25 0133	Gun Projectile 5-inch	-	-	39	-	-	-	GRLY	51N	-	-	40	-	-
1965-M121	2439182.17	1966 Feb 25 1606	Gun Projectile 5-inch	-	-	40	-	-	-	GRLY	51N	-	-	45?	-	-
1965-M122	2439182.34	1966 Feb 25 2010	Gun Projectile 5-inch	-	-	41	-	-	-	BARB	51N	-	-	56	-	-
1965-M123	2439182.34	1966 Feb 25 2010	Gun Projectile 5-inch	-	-	42	-	-	-	GRLY	51N	-	-	42	-	-
1965-M124	2439186.19	1966 Mar 3 0000	Gun Projectile 5-inch	-	-	43	-	-	-	BARB	51N	-	-	10?	-	-
1965-M125	2439187.50	1966 Mar 3 0200	Gun Projectile 5-inch	-	-	44	-	-	-	BARB	51N	-	-	41	-	-
1965-M126	2439187.58	1966 Mar 3 0200	Gun Projectile 5-inch	-	-	45	-	-	-	GRLY	51N	-	-	42	-	-
1965-M127	2439187.62	1966 Mar 3 0300	Gun Projectile 5-inch	-	-	46	-	-	-	GRLY	51N	-	-	45	-	-
1965-M128	2439187.62	1966 Mar 3 0300	Gun Projectile 5-inch	-	-	47	-	-	-	GRLY	51N	-	-	45?	-	-
1965-M129	2439188.17	1966 Mar 3 1600	Gun Projectile 5-inch	-	-	48	-	-	-	BARB	51N	-	-	10?	-	-
1965-M130	2439188.38	1966 Mar 3 2103	Gun Projectile 5-inch	-	-	49	-	-	-	BARB	51N	-	-	61	-	-
1965-M131	2439188.42	1966 Mar 3 2201	Gun Projectile 5-inch	-	-	50	-	-	-	GRLY	51N	-	-	60?	-	-
1965-M132	2439188.46	1966 Mar 3 2300	Gun Projectile 5-inch	-	-	51	-	-	-	GRLY	51N	-	-	20?	-	-
1965-M133	2439188.50	1966 Mar 4 0000	Gun Projectile 5-inch	-	-	52	-	-	-	GRLY	51N	-	-	20?	-	-

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Mission	FlightCode	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee km	Range km	Dest
1966-A182	2439188-52	1966 Mar 4 0033	Gun Projectile 5-inch	-	-	G22	-	-	-	GRLY	51N	-	-	33	-	-
1966-A183	2439188-56	1966 Mar 4 0130	Gun Projectile 5-inch	-	-	G23	-	-	-	GRLY	51N	-	-	39	-	-
1966-M9	2439188-60	1966 Mar 4 0230	Gun Projectile 5-inch	-	-	G24	-	-	-	GRLY	51N	-	-	60?	-	-
1966-M91	2439189-17	1966 Mar 4 1608	Gun Projectile 5-inch	-	-	30	-	-	-	BARB	51N	-	-	59	-	-
1966-M47	2439413-46	1966 Oct 14 2303	Gun Projectile 5-inch	-	-	HARF 5001	-	-	-	YOMA	51N	-	-	62	-	-
1966-M48	2439424-38	1966 Oct 25 2112	Gun Projectile 5-inch	-	-	HARF 5002	-	-	-	YOMA	51N	-	-	65	-	-
1966-A162	2439424-44	1966 Oct 25 2332	Gun Projectile 5-inch	-	-	HARF 5003	-	-	-	YOMA	51N	-	-	48	-	-
1966-M49	2439424-71	1966 Oct 26 0501	Gun Projectile 5-inch	-	-	HARF 5004	-	-	-	YOMA	51N	-	-	66	-	-
1966-A163	2439426-22	1966 Oct 27 1715	Gun Projectile 5-inch	-	-	HARF 5005	-	-	-	YOMA	51N	-	-	47	-	-
1966-M50	2439446-42	1966 Nov 16 2210	Gun Projectile 5-inch	-	-	HARF 5006	-	-	-	YOMA	51N	-	-	64	-	-
1966-M51	2439446-57	1966 Nov 17 0144	Gun Projectile 5-inch	-	-	HARF 5007	-	-	-	YOMA	51N	-	-	64	-	-
1966-M52	2439446-66	1966 Nov 17 0944	Gun Projectile 5-inch	-	-	HARF 5008	-	-	-	YOMA	51N	-	-	71	-	-
1966-M53	2439446-74	1966 Nov 17 0944	Gun Projectile 5-inch	-	-	HARF 5009	-	-	-	YOMA	51N	-	-	60?	-	-
1966-M54	2439446-93	1966 Nov 17 1019	Gun Projectile 5-inch	-	-	HARF 5010	-	-	-	YOMA	51N	-	-	67	-	-
1966-M55	2439446-97	1966 Nov 17 1110	Gun Projectile 5-inch	-	-	HARF 5011	-	-	-	YOMA	51N	-	-	66	-	-
1966-M56	2439448-34	1966 Nov 18 2006	Gun Projectile 5-inch	-	-	HARF 5012	-	-	-	YOMA	51N	-	-	68	-	-
1966-M57	2439448-56	1966 Nov 19 0123	Gun Projectile 5-inch	-	-	HARF 5013	-	-	-	YOMA	51N	-	-	52	-	-
1966-M58	2439448-64	1966 Nov 19 0315	Gun Projectile 5-inch	-	-	HARF 5014	-	-	-	YOMA	51N	-	-	67	-	-
1966-M59	2439448-70	1966 Nov 19 0452	Gun Projectile 5-inch	-	-	HARF 5015	-	-	-	YOMA	51N	-	-	68	-	-
1966-M60	2439448-78	1966 Nov 19 0645	Gun Projectile 5-inch	-	-	HARF 5016	-	-	-	YOMA	51N	-	-	63	-	-
1966-M61	2439448-84	1966 Nov 19 0937	Gun Projectile 5-inch	-	-	HARF 5017	-	-	-	YOMA	51N	-	-	71	-	-
1966-A164	2439448-90	1966 Nov 19 0937	Gun Projectile 5-inch	-	-	HARF 5018	-	-	-	YOMA	51N	-	-	40?	-	-
1966-M62	2439449-00	1966 Nov 19 1154	Gun Projectile 5-inch	-	-	HARF 5019	-	-	-	YOMA	51N	-	-	60?	-	-
1966-A165	2439449-05	1966 Nov 19 1311	Gun Projectile 5-inch	-	-	HARF 5020	-	-	-	YOMA	51N	-	-	40?	-	-
1966-M63	2439449-62	1966 Nov 20 0247	Gun Projectile 5-inch	-	-	HARF 5021	-	-	-	YOMA	51N	-	-	69	-	-
1966-W349	2440141-14	1966 Oct 11 1517	Gun Projectile 5-inch	-	-	EXAMETNET W 104	-	-	-	WI	51N	-	-	68	-	-
1977-M27	2445416-50	1977 Oct 7	Gun Projectile 5-inch	-	-	Chave	-	-	-	TTR	51N	-	-	78?	-	-
1977-M28	2445416-50	1977 Oct 7	Gun Projectile 5-inch	-	-	BRL Test	-	-	-	TTR	51N	-	-	78?	-	-
2002-M04	2452283-50	2002 Jan 9	Gun Projectile 5-inch	-	-	ANSR	-	-	-	WI	51N	-	-	50?	-	-
2002-M05	2452283-50	2002 Jan 11	Gun Projectile 5-inch	-	-	Barrage Round	-	-	-	WI	51N	-	-	50?	-	-
2003-M03	2452380-50	2003 Jul 10	Gun Projectile 5-inch	-	-	ANSR	-	-	-	WI	51N	-	-	50?	-	-
2003-M04	2452396-50	2003 Sep 24	Gun Projectile 5-inch	-	-	ANSR	-	-	-	WI	51N	-	-	50?	-	-
2004-M12	2453196-50	2004 Jul 10	Gun Projectile 5-inch	-	-	ANSR Boost Test	-	-	-	WS	51N	-	-	50?	-	-
2005-M06	2453674-50	2005 Oct 31	Gun Projectile 5-inch	-	-	ANSR Boost Test	-	-	-	WS	51N	-	-	50?	-	-
2006-M04	2453787-50	2006 Feb 21	Gun Projectile 5-inch	-	-	ANSR	-	-	-	WS	51N	-	-	50?	-	-
2006-M04	2454666-50	2006 Apr 10	Gun Projectile 5-inch	-	-	AGMD Round	-	-	-	WI	AGMD	-	-	50?	-	-
2006-M05	2454666-50	2006 Apr 10	Gun Projectile 5-inch	-	-	AGMD Round	-	-	-	WI	AGMD	-	-	50?	-	-
2006-M06	2454666-50	2006 Apr 10	Gun Projectile 5-inch	-	-	AGMD Round	-	-	-	WI	AGMD	-	-	50?	-	-
2006-M07	2454666-50	2006 Apr 10	Gun Projectile 5-inch	-	-	AGMD Round (Inset)	-	-	-	WI	AGMD	-	-	50?	-	-
2006-M08	2454666-50	2006 Apr 10	Gun Projectile 5-inch	-	-	AGMD Round (Inset)	-	-	-	WI	AGMD	-	-	50?	-	-







Launch

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	DrPay	Agency	Launch_Code	Group	Category	LTCite	Cite	Notes
1966-A152	2439188.52	1966 Mar 4 0033	Gun Projectile 5-inch	-	-	0.000	HARP	SS	SRCI/Bull	Aeron	BRL-TM1657	-	-
1966-A153	2439188.56	1966 Mar 4 0130	Gun Projectile 5-inch	-	-	0.000	HARP	SS	SRCI/Bull	Aeron	BRL-TM1657	-	-
1966-A159	2439188.60	1966 Mar 4 0230	Gun Projectile 5-inch	-	-	0.000	HARP	SS	SRCI/Bull	Aeron	BRL-TM1657	-	-
1966-A161	2439189.17	1966 Mar 4 1608	Gun Projectile 5-inch	-	-	0.000	HARP	SS	SRCI/Bull	Aeron	BRL-MR1771	-	-
1966-A167	2439413.46	1966 Oct 14 2303	Gun Projectile 5-inch	-	-	0.000	HARP	SS	SRCI/Bull	Aeron	BRL-MR1625	-	-
1966-A168	2439424.38	1966 Oct 25 2112	Gun Projectile 5-inch	-	-	0.000	HARP	SS	SRCI/Bull	Aeron	BRL-MR1625	-	-
1966-A162	2439424.44	1966 Oct 25 2232	Gun Projectile 5-inch	-	-	0.000	HARP	SS	SRCI/Bull	Aeron	BRL-MR1625	-	-
1966-A169	2439424.71	1966 Oct 26 0501	Gun Projectile 5-inch	-	-	0.000	HARP	SS	SRCI/Bull	Aeron	BRL-MR1625	-	-
1966-A163	2439426.22	1966 Oct 27 1715	Gun Projectile 5-inch	-	-	0.000	HARP	SS	SRCI/Bull	Aeron	BRL-MR1625	-	-
1966-A160	2439446.42	1966 Nov 16 2210	Gun Projectile 5-inch	-	-	0.000	HARP	SS	SRCI/Bull	Aeron	BRL-MR1625	-	-
1966-A161	2439446.57	1966 Nov 17 0144	Gun Projectile 5-inch	-	-	0.000	HARP	SS	SRCI/Bull	Aeron	BRL-MR1625	-	-
1966-A162	2439446.66	1966 Nov 17 0344	Gun Projectile 5-inch	-	-	0.000	HARP	SS	SRCI/Bull	Aeron	BRL-MR1625	-	-
1966-A163	2439446.74	1966 Nov 17 0544	Gun Projectile 5-inch	-	-	0.000	HARP	SS	SRCI/Bull	Aeron	BRL-MR1625	-	-
1966-A164	2439446.83	1966 Nov 17 1019	Gun Projectile 5-inch	-	-	0.000	HARP	SS	SRCI/Bull	Aeron	BRL-MR1625	-	-
1966-A165	2439446.97	1966 Nov 17 1110	Gun Projectile 5-inch	-	-	0.000	HARP	SS	SRCI/Bull	Aeron	BRL-MR1625	-	-
1966-A166	2439448.34	1966 Nov 18 2006	Gun Projectile 5-inch	-	-	0.000	HARP	SS	SRCI/Bull	Aeron	BRL-MR1625	-	-
1966-A167	2439448.56	1966 Nov 19 0123	Gun Projectile 5-inch	-	-	0.000	HARP	SS	SRCI/Bull	Aeron	BRL-MR1625	-	-
1966-A168	2439448.64	1966 Nov 19 0315	Gun Projectile 5-inch	-	-	0.000	HARP	SS	SRCI/Bull	Aeron	BRL-MR1625	-	-
1966-A169	2439448.70	1966 Nov 19 0645	Gun Projectile 5-inch	-	-	0.000	HARP	SS	SRCI/Bull	Aeron	BRL-MR1625	-	-
1966-A160	2439448.84	1966 Nov 19 0903	Gun Projectile 5-inch	-	-	0.000	HARP	SS	SRCI/Bull	Aeron	BRL-MR1625	-	-
1966-A161	2439448.94	1966 Nov 19 0937	Gun Projectile 5-inch	-	-	0.000	HARP	SS	SRCI/Bull	Aeron	BRL-MR1625	-	-
1966-A164	2439448.90	1966 Nov 19 1154	Gun Projectile 5-inch	-	-	0.000	HARP	SS	SRCI/Bull	Aeron	BRL-MR1625	-	-
1966-A165	2439449.05	1966 Nov 19 1311	Gun Projectile 5-inch	-	-	0.000	HARP	SS	SRCI/Bull	Aeron	BRL-MR1625	-	-
1966-A166	2439449.02	1966 Nov 20 0247	Gun Projectile 5-inch	-	-	0.000	HARP	SS	SRCI/Bull	Aeron	BRL-MR1625	-	-
1966-A169	2440141.14	1966 Oct 11 1517	Gun Projectile 5-inch	-	EXAMETHET W 104	0.000	WFF	SS	WFF/	Meteo	SP-231	-	-
1977-A127	2443416.50	1977 Oct?	Gun Projectile 5-inch	-	-	0.000	BRL	SS	BRL/	Test	SandInews7712	-	-
1977-A128	2443416.50	1977 Oct?	Gun Projectile 5-inch	-	-	0.000	BRL	SS	BRL/	Test	SandInews7712	-	-
2002-A104	2452283.50	2002 Jan 9	Gun Projectile 5-inch	-	-	0.000	USN	SS	USN/	Test	onr.navy.mil	-	-
2002-A105	2452285.50	2002 Jan 11	Gun Projectile 5-inch	-	-	0.000	USN	SS	USN/	Test	onr.navy.mil	-	-
2003-A103	2452630.50	2003 Jul 10	Gun Projectile 5-inch	-	-	0.000	USN	SS	USN/	Test	onr.navy.mil	-	-
2003-A104	2452906.50	2003 Sep 24	Gun Projectile 5-inch	-	-	0.000	USN	SS	USN/	Test	onr.navy.mil	-	-
2004-A112	2453196.50	2004 Jul 10	Gun Projectile 5-inch	-	-	0.000	USN	SS	USN/	Test	onr.navy.mil	-	-
2005-A106	2453674.50	2005 Oct 31	Gun Projectile 5-inch	-	-	0.000	USN	SS	USN/	Test	onr.navy.mil	-	-
2006-A104	2453787.50	2006 Feb 21	Gun Projectile 5-inch	-	-	0.000	USN	SS	USN/	Test	onr.navy.mil	-	-
2008-A104	2454566.50	2008 Apr 10	Gun Projectile 5-inch	-	-	0.000	USN	SS	USN/	Test	WallOpsML080605	-	-
2008-A105	2454566.50	2008 Apr 10	Gun Projectile 5-inch	-	-	0.000	USN	SS	USN/	Test	WallOpsML080605	-	-
2008-A106	2454566.50	2008 Apr 10	Gun Projectile 5-inch	-	-	0.000	USN	SS	USN/	Test	WallOpsML080605	-	-
2008-A107	2454566.50	2008 Apr 10	Gun Projectile 5-inch	-	-	0.000	USN	SS	USN/	Test	WallOpsML080605	-	-
2008-A108	2454566.50	2008 Apr 10	Gun Projectile 5-inch	-	-	0.000	USN	SS	USN/	Test	WallOpsML080605	-	-



Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Mission	FlightCode	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee km	Range km	Dest
1968-8679	2439959.27	1968 Apr 12 1823	Gun Projectile 7-inch	-	-	Cesium package	-	-	-	WI	71N	-	-	96	-	-
1968-8680	2439964.36	1968 Apr 17 2043:01	Gun Projectile 7-inch	-	-	Cesium package	-	-	-	WI	71N	-	-	94	-	-
1968-8681	2440111.39	1968 Sep 11 2115	Gun Projectile 7-inch	-	-	Cesium package	-	-	-	WI	71N	-	-	92	-	-
1968-8682	2440111.47	1968 Sep 11 2315	Gun Projectile 7-inch	-	-	Cesium package	-	-	-	WI	71N	-	-	93	-	-
1968-8683	2440111.64	1968 Sep 12 0327	Gun Projectile 7-inch	-	-	Cesium package	-	-	-	WI	71N	-	-	88	-	-
1969-8695	2440266.55	1969 Feb 14 0107	Gun Projectile 7-inch	-	-	Cesium package	-	-	-	WI	71N	-	-	100?	-	-
1969-8696	2440266.64	1969 Feb 14 0324	Gun Projectile 7-inch	-	-	Cesium package	-	-	-	WI	71N	-	-	100?	-	-
1969-8697	2440266.71	1969 Feb 14 0505	Gun Projectile 7-inch	-	-	Cesium package	-	-	-	WI	71N	-	-	99	-	-
1969-8698	2440266.80	1969 Feb 14 0705	Gun Projectile 7-inch	-	-	Cesium package	-	-	-	WI	71N	-	-	97	-	-
1969-8699	2440266.88	1969 Feb 14 0910	Gun Projectile 7-inch	-	-	Cesium package	-	-	-	WI	71N	-	-	100?	-	-
1969-8700	2440266.97	1969 Feb 14 1123	Gun Projectile 7-inch	-	-	Cesium package	-	-	-	WI	71N	-	-	103	-	-
1969-8710	2440376.25	1969 Jun 3 1758	Gun Projectile 7-inch	-	-	Cesium package	-	-	-	WI	71N	-	-	102	-	-
1969-8711	2440421.22	1969 Jul 18 1716	Gun Projectile 7-inch	-	-	Cesium package	-	-	-	WI	71N	-	-	95	-	-
1969-8712	2440426.46	1969 Jul 23 2259	Gun Projectile 7-inch	-	-	Cesium package	-	-	-	WI	71N	-	-	99	-	-
1969-8713	2440427.93	1969 Jul 25 1019	Gun Projectile 7-inch	-	-	Cesium package	-	-	-	WI	71N	-	-	92	-	-



Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Launch	Agency	Launch_Code	Group	Category	LTCite	Cite	Notes
1968-8679	2439959.27	1968 Apr 12 1823	Gun Projectile 7-inch	-	-	0.000	BRL	SS	BRL/Murphy	Meteo	MRL-7105	-	-
1968-8680	2439964.36	1968 Apr 17 2043:01	Gun Projectile 7-inch	-	-	0.000	BRL	SS	BRL/Murphy	Meteo	MRL-6665	-	-
1968-8681	2440111.39	1968 Sep 11 2115	Gun Projectile 7-inch	-	-	0.000	BRL	SS	BRL/Murphy	Meteo	MRL-7105	-	-
1968-8682	2440111.47	1968 Sep 11 2315	Gun Projectile 7-inch	-	-	0.000	BRL	SS	BRL/Murphy	Meteo	MRL-7105	-	-
1968-8683	2440111.64	1968 Sep 12 0327	Gun Projectile 7-inch	-	-	0.000	BRL	SS	BRL/Murphy	Meteo	MRL-7105	-	-
1969-8695	2440286.55	1969 Feb 14 0107	Gun Projectile 7-inch	-	-	0.000	BRL	SS	BRL	Meteo	WI-PR69-5	-	-
1969-8696	2440286.64	1969 Feb 14 0324	Gun Projectile 7-inch	-	-	0.000	BRL	SS	BRL	Meteo	WI-PR69-5	-	-
1969-8697	2440286.71	1969 Feb 14 0505	Gun Projectile 7-inch	-	-	0.000	BRL	SS	BRL	Meteo	WI-PR69-5	MRL-7105	-
1969-8698	2440286.80	1969 Feb 14 0705	Gun Projectile 7-inch	-	-	0.000	BRL	SS	BRL	Meteo	WI-PR69-5	MRL-7105	-
1969-8699	2440286.88	1969 Feb 14 0910	Gun Projectile 7-inch	-	-	0.000	BRL	SS	BRL	Meteo	WI-PR69-5	MRL-7105	-
1969-8700	2440286.97	1969 Feb 14 1123	Gun Projectile 7-inch	-	-	0.000	BRL	SS	BRL	Meteo	WI-PR69-5	MRL-7105	-
1969-8710	2440376.25	1969 Jun 3 1758	Gun Projectile 7-inch	-	-	0.000	BRL	SS	BRL/Murphy	Meteo	MRL-7105	-	-
1969-8711	2440421.22	1969 Jul 18 1716	Gun Projectile 7-inch	-	-	0.000	BRL	SS	BRL/Murphy	Meteo	MRL-7105	-	-
1969-8712	2440426.46	1969 Jul 23 2259	Gun Projectile 7-inch	-	-	0.000	BRL	SS	BRL/Murphy	Meteo	MRL-7105	-	-
1969-8713	2440427.93	1969 Jul 25 1019	Gun Projectile 7-inch	-	-	0.000	BRL	SS	BRL/Murphy	Meteo	MRL-7105	-	-



Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Mission	FlightCode	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee km	Range km	Dest
1963-M68						1A I				BABB	HARP16			26		
1963-M69	2438060.50	1963 Jan 21	Martlet 1			1B I				BABB	HARP16			27		
1963-M69	2438061.50	1963 Feb 1	Martlet 2			2A II-1				BABB	HARP16			80?		
1963-M69	2438119.50	1963 Apr	Martlet 1			2A II-2				BABB	HARP16			92		
1963-M69	2438198.50	1963 Jun 18	Martlet 2			2A II-3				BABB	HARP16			70?		
1963-M69	2438180.50	1963 Jun	Martlet 2			2A II-4				BABB	HARP16			80?		
1963-M69	2438180.50	1963 Jun	Martlet 2			2B III-1				BABB	HARP16			80?		
1963-M69	2438269.50	1963 Aug 28	Martlet 2			2B III-2				BABB	HARP16			100		
1963-M69	2438269.50	1963 Aug 28?	Martlet 3A			3A III-1				BABB	HARP16			80?		
1963-M69	2438277.50	1963 Sep 5	Martlet 3A			3A III-2				BABB	HARP16			80?		
1963-M69	2438277.50	1963 Sep 5?	Martlet 3A			3A III-3				BABB	HARP16			80?		
1963-M69	2438277.50	1963 Sep 5?	Martlet 3A			3A III-4				BABB	HARP16			80		
1964-M01	2438398.50	1964 Jan 4	Martlet 2			2A IV-1				BABB	HARP16			80		
1964-M01	2438398.50	1964 Jan	Martlet 2			2A IV-2				BABB	HARP16			80		
1964-M01	2438394.50	1964 Jan	Martlet 2			2A IV-3				BABB	HARP16			80		
1964-M01	2438394.50	1964 Jan	Martlet 2			2A IV-4				BABB	HARP16			80		
1964-M01	2438394.50	1964 Jan	Martlet 2			2A IV-5				BABB	HARP16			80		
1964-M01	2438394.50	1964 Jan	Martlet 2			2A IV-6				BABB	HARP16			80		
1964-M01	2438394.50	1964 Jan	Martlet 2			2A IV-7				BABB	HARP16			80		
1964-M01	2438394.50	1964 Jan	Martlet 2			2A IV-8				BABB	HARP16			80		
1964-M01	2438394.50	1964 Jan	Martlet 2			3A IV-1				BABB	HARP16			80?		
1964-M01	2438394.50	1964 Jan	Martlet 3A			3A IV-2				BABB	HARP16			80?		
1964-M01	2438394.50	1964 Jan	Martlet 3A			3A IV-3				BABB	HARP16			80?		
1964-M01	2438394.50	1964 Jan	Martlet 3A			3A IV-4				BABB	HARP16			80?		
1964-M01	2438394.50	1964 Jan	Martlet 3A			3A IV-5				BABB	HARP16			80?		
1964-M01	2438394.50	1964 Jan	Martlet 3A			3A IV-6				BABB	HARP16			80?		
1964-M01	2438394.50	1964 Jan	Martlet 3A			3A IV-7				BABB	HARP16			80		
1964-M01	2438409.50	1964 Jan 15	Martlet 2			2A V-1				BABB	HARP16			80		
1964-M01	2438569.50	1964 Jun 23	Martlet 2			2A V-2				BABB	HARP16			80		
1964-M01	2438571.50	1964 Jun 28?	Martlet 2			2A V-3				BABB	HARP16			80		
1964-M01	2438571.50	1964 Jun 28?	Martlet 2			2A V-4				BABB	HARP16			80		
1964-M01	2438572.50	1964 Jun 26	Martlet 2			2A V-5				BABB	HARP16			80		
1964-M01	2438562.50	1964 Jul 6	Martlet 2			2A VI-1				BABB	HARP16			80		
1964-M01	2438564.46	1964 Jul 7 2302	Martlet 2		42 THA-1	2A VI-2				BABB	HARP16			95		
1964-M01	2438564.46	1964 Jul 8 0110	Martlet 2		43 THA-2	2A VI-3				BABB	HARP16			109		
1964-M01	2438576.50	1964 Jul	Martlet 2			2A VI-4				BABB	HARP16			80		
1964-M01	2438576.50	1964 Jul	Martlet 2			2A VI-5				BABB	HARP16			80		
1964-M01	2438576.50	1964 Jul	Martlet 2			2A VI-6				BABB	HARP16			80		
1964-M01	2438576.50	1964 Jul	Martlet 2			2A VI-7				BABB	HARP16			80		
1964-M01	2438576.50	1964 Jul	Martlet 2			2A VI-8				BABB	HARP16			80		
1964-M01	2438576.50	1964 Jul	Martlet 2			2A VI-9				BABB	HARP16			80		
1964-M01	2438576.50	1964 Jul	Martlet 2			2A VI-10				BABB	HARP16			80		
1964-M01	2438576.50	1964 Jul	Martlet 2			2A VI-11				BABB	HARP16			80		
1964-M01	2438576.50	1964 Jul	Martlet 2			2A VI-12				BABB	HARP16			80		
1964-M01	2438576.50	1964 Jul	Martlet 2			2A VI-13				BABB	HARP16			80		
1964-M01	2438576.50	1964 Jul	Martlet 2			2A VI-14				BABB	HARP16			80		
1964-M01	2438576.50	1964 Jul	Martlet 2			2A VI-15				BABB	HARP16			80		
1964-M01	2438576.50	1964 Jul	Martlet 2			2A VI-16				BABB	HARP16			80		
1964-M01	2438576.50	1964 Jul	Martlet 2			2A VI-17				BABB	HARP16			80		
1964-M01	2438576.50	1964 Jul	Martlet 2			2A VI-18				BABB	HARP16			80		
1964-M01	2438576.50	1964 Jul	Martlet 2			2A VI-19				BABB	HARP16			80		
1964-M01	2438576.50	1964 Jul	Martlet 2			2A VI-20				BABB	HARP16			80		
1964-M01	2438576.50	1964 Jul	Martlet 2			2B VI-1				BABB	HARP16			98		
1964-M01	2438569.46	1964 Jul 22 2300	Martlet 2		62 THA-3	2A VI-21	SHARDON			BABB	HARP16			80		
1964-M01	2438569.50	1964 Jul 23?	Martlet 2			2B VI-22				BABB	HARP16			80?		
1964-M01	2438569.50	1964 Jul 23?	Martlet 2			3B VI-1				BABB	HARP16			80?		
1964-M01	2438569.50	1964 Jul 23?	Martlet 2			3B VI-2				BABB	HARP16			80?		
1964-M01	2438569.50	1964 Jul 23?	Martlet 2			3B VI-3				BABB	HARP16			96		
1964-M01	2438601.49	1964 Jul 24 2345	Martlet 2		67 THA-4	2A VI-23	QUEENTE			BABB	HARP16			80?		
1964-M01	2438576.50	1964 Jul	Martlet 2			3B VI-4				BABB	HARP16			80		
1964-M01	2438576.50	1964 Jul	Martlet 2			3B VI-5				BABB	HARP16			80		
1964-M01	2438576.50	1964 Jul	Martlet 2			3B VI-6				BABB	HARP16			80		
1964-M01	2438576.50	1964 Jul	Martlet 2			3B VI-7				BABB	HARP16			80		
1964-M01	2438576.50	1964 Jul	Martlet 2			3B VI-8				BABB	HARP16			80		
1964-M01	2438576.50	1964 Jul	Martlet 2			3B VI-9				BABB	HARP16			80		
1964-M01	2438576.50	1964 Jul	Martlet 2			3B VI-10				BABB	HARP16			80		
1964-M01	2438646.50	1964 Jul 25	Martlet 2			3B VII-1				BABB	HARP16			80?		
1964-M01	2438646.50	1964 Sep 8	Martlet 2			3B VII-2				BABB	HARP16			80?		
1964-M01	2438646.50	1964 Sep 8?	Martlet 2			3B VII-3				BABB	HARP16			80?		
1964-M01	2438647.50	1964 Sep 9?	Martlet 2			3B VII-4				BABB	HARP16			80?		
1964-M01	2438737.50	1964 Sep 9	Martlet 2		77?	2A IX-1				BABB	HARP16			80		
1964-M01	2438737.50	1964 Sep 8	Martlet 2		84?	2A IX-2				BABB	HARP16			80		
1964-M01	2438729.50	1964 Dec	Martlet 2			2A IX-3				BABB	HARP16			80		
1964-M01	2438729.50	1964 Dec	Martlet 2			2A IX-4				BABB	HARP16			80		
1964-M01	2438729.50	1964 Dec	Martlet 2			2C IX-1				BABB	HARP16			80		
1964-M01	2438729.50	1964 Dec	Martlet 2			2C IX-2				BABB	HARP16			80		
1964-M01	2438729.50	1964 Dec	Martlet 2			2C IX-3				BABB	HARP16			80		
1964-M01	2438729.50	1964 Dec	Martlet 2			2C IX-4				BABB	HARP16			80		
1964-M01	2438729.50	1964 Dec	Martlet 2			3B IX-1				BABB	HARP16			80		
1964-M01	2438729.50	1964 Dec	Martlet 2			3B IX-2				BABB	HARP16			80?		
1964-M01	2438729.50	1964 Dec	Martlet 2			3B IX-3				BABB	HARP16			80?		
1964-M01	2438729.50	1964 Dec	Martlet 2			3B IX-4				BABB	HARP16			80		
1964-M01	2438743.50	1964 Dec 14	Martlet 2			2A X-1				BABB	HARP16			80		
1964-M01	2438842.50	1965 Mar 23	Martlet 2			2A X-2				BABB	HARP16			80		
1965-M705	2438842.50	1965 Mar 23?	Martlet 2			2C X-1				BABB	HARP16			80		
1965-M709	2438843.56	1965 Mar 24?	Martlet 2			2C X-2				BABB	HARP16			114		
1965-M709	2438843.56	1965 Mar 24 0124	Martlet 2		97 THA-5	2A X-3	LUPACA			BABB	HARP16			110		
1965-M708	2438843.71	1965 Mar 24 0503	Martlet 2		98 THA-6	2A X-4	MIAMI			BABB	HARP16			80		
1965-M710	2438843.50	1965 Mar 24?	Martlet 2		99	2C X-2				BABB	HARP16			80		



Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Mission	FlightCode	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee km	Range km	Dest
1965-5711	2438843.50	1965 Mar 247	Martlet 2	-	100	2C X-3	-	-	-	BABB	HARP16	-	-	80	-	-
1965-5744	2438844.50	1965 Mar 257	Martlet 3B	-	101	3B X-1	-	-	-	BABB	HARP16	-	-	807	-	-
1965-5745	2438844.50	1965 Mar 257	Martlet 3B	-	102	3B X-2	-	-	-	BABB	HARP16	-	-	807	-	-
1965-5712	2438846.76	1965 Mar 27 0620	Martlet 2	-	103 THA-7	2C X-4 NOUTKA	-	-	-	BABB	HARP16	-	-	111	-	-
1965-5713	2438848.50	1965 Mar 29 0002	Martlet 2	-	104 THA-8	2C X-5 UTMWA	-	-	-	BABB	HARP16	-	-	119	-	-
1965-5714	2438848.60	1965 Mar 29 0220	Martlet 2	-	105 THA-9	2C X-6 PUEBLO	-	-	-	BABB	HARP16	-	-	117	-	-
1965-5715	2438844.50	1965 Mar 257	Martlet 2	-	106?	2D X-1	-	-	-	BABB	HARP16	-	-	80	-	-
1965-5716	2438848.50	1965 Mar 297	Martlet 3B	-	107?	3B X-3	-	-	-	BABB	HARP16	-	-	807	-	-
1965-5717	2438912.20	1965 May 31 1047	Martlet 2	-	108 Chaff	2A XI-1 APLIUS	-	-	-	BABB	HARP16	-	-	84	-	-
1965-5718	2438914.26	1965 Jun 2 1815	Martlet 2	-	109 Chaff	2A XI-2 RUFUS	-	-	-	BABB	HARP16	-	-	79	-	-
1965-5731	2438915.23	1965 Jun 3 1732	Martlet 3B	-	110 Grain test	3B XI-1 DEVILS	-	-	-	BABB	HARP16	-	-	1?	-	-
1965-5941	2438915.37	1965 Jun 3 2054	Martlet 2C	-	111 Telem	2C XI-1 IRE	-	-	-	BABB	HARP16	-	-	105	-	-
1965-5720	2438915.50	1965 Jun 3 2357	Martlet 2	-	112 THA-10	2C XI-2 MARIUS	-	-	-	BABB	HARP16	-	-	111	-	-
1965-5721	2438915.61	1965 Jun 4 0241	Martlet 2	-	113 THA-11	2C XI-3 NEMO	-	-	-	BABB	HARP16	-	-	94	-	-
1965-5722	2438915.73	1965 Jun 4 0594:166	Martlet 2	-	114 THA-12 B-12	2C XI-9 ELAGABOLUS	-	-	-	BABB	HARP16	-	-	119	-	-
1965-5723	2438915.80	1965 Jun 4 0717	Martlet 2	-	115 THA-13	2C XI-7 FABRIS	-	-	-	BABB	HARP16	-	-	110	-	-
1965-5994	2438917.12	1965 Jun 5 1500	Martlet 2	-	116	2C XI GRACCHUS	-	-	-	BABB	HARP16	-	-	115	-	-
1965-5719	2438917.22	1965 Jun 5 1722	Martlet 2	-	117 Chaff	2A XI-3 SPARTIA	-	-	-	BABB	HARP16	-	-	76	-	-
1965-5943	2438917.35	1965 Jun 5 2020	Martlet 2	-	118	2C XI-2 BRUTUS	-	-	-	BABB	HARP16	-	-	120	-	-
1965-5944	2438917.45	1965 Jun 5 2243	Martlet 2	-	119	2C XI-1 JANUS	-	-	-	BABB	HARP16	-	-	117	-	-
1965-5732	2438919.17	1965 Jun 7 1611	Martlet 3B	-	120 Grain test	3B XI-2 EAGLE	-	-	-	BABB	HARP16	-	-	1?	-	-
1965-5728	2438921.45	1965 Jun 9 2251	Martlet 2	-	121 THA	2C XI-12 LUCRETTIA	-	-	-	BABB	HARP16	-	-	118	-	-
1965-5724	2438921.58	1965 Jun 10 0157	Martlet 2	-	122 THA-14	2C XI-8 OVID	-	-	-	BABB	HARP16	-	-	105	-	-
1965-5725	2438921.67	1965 Jun 10 0358	Martlet 2	-	123 THA-15	2C XI-9 CICERO	-	-	-	BABB	HARP16	-	-	109	-	-
1965-5726	2438921.77	1965 Jun 10 0658	Martlet 2	-	124 THA	2C XI-10 DIANA	-	-	-	BABB	HARP16	-	-	107	-	-
1965-5727	2438922.55	1965 Jun 11 0107	Martlet 2	-	125 THA-16	2C XI-11 FLINX	-	-	-	BABB	HARP16	-	-	133	-	-
1965-5729	2438923.79	1965 Jun 12 0700	Martlet 2	-	126 THA	2C XI-13 QUINTUS	-	-	-	BABB	HARP16	-	-	135	-	-
1965-5730	2438923.85	1965 Jun 12 0831	Martlet 2	-	127 THA	2C XI-14 HADRIAN	-	-	-	BABB	HARP16	-	-	133	-	-
1965-5733	2438976.50	1965 Aug 4	Martlet 2	-	128	2C XII-1	-	-	-	BABB	HARP16	-	-	100	-	-
1965-5734	2438978.51	1965 Aug 6 0020	Martlet 2	-	129 THA-17	2C XII-2	-	-	-	BABB	HARP16	-	-	107	-	-
1965-5735	2438978.76	1965 Aug 6 0644	Martlet 2	-	130 THA-18	2C XII-3	-	-	-	BABB	HARP16	-	-	106	-	-
1965-5746	2439003.50	1965 Sep 14	Martlet 2	-	-	2A XIII-1	-	-	-	BABB	HARP16	-	-	100	-	-
1965-5748	2439003.50	1965 Sep 14	Martlet 2	-	-	2A XIII-1	-	-	-	BABB	HARP16	-	-	100	-	-
1965-5749	2439024.46	1965 Sep 20 2330:00	Martlet 2	-	133 THA-19 B-19	2C XIII-6 BELAIR	-	-	-	BABB	HARP16	-	-	132	-	-
1965-5749	2439024.54	1965 Sep 20 0052	Martlet 2	-	134 THA-20	2C XIII-9 CONQUINGO	-	-	-	BABB	HARP16	-	-	136	-	-
1965-5757	2439003.50	1965 Sep 21 0424	Martlet 2	-	136 THA-21	2C XIII-2	-	-	-	BABB	HARP16	-	-	100	-	-
1965-5750	2439024.98	1965 Sep 21 0650	Martlet 2	-	137 THA-22	2C XIII-10 EDGEWOOD	-	-	-	BABB	HARP16	-	-	123	-	-
1965-5751	2439024.76	1965 Sep 21 0921	Martlet 2	-	138 THA-23	2C XIII-11 FO GREEN	-	-	-	BABB	HARP16	-	-	109	-	-
1965-5752	2439024.82	1965 Sep 21 0735	Martlet 2	-	139 THA-24	2C XIII-12 GALERIA	-	-	-	BABB	HARP16	-	-	138	-	-
1965-5753	2439024.86	1965 Sep 21 0900	Martlet 2	-	139 THA-24	2C XIII-13 HAVRE DE	-	-	-	BABB	HARP16	-	-	123	-	-
1965-5758	2439003.50	1965 Sep	Martlet 2	-	-	2C XIII-3	-	-	-	BABB	HARP16	-	-	100	-	-
1965-5759	2439003.50	1965 Sep	Martlet 2	-	-	2C XIII-3	-	-	-	BABB	HARP16	-	-	100	-	-
1965-5764	2439026.46	1965 Sep 22 2324	Martlet 2	-	142 THA-25	2C XIII-4 LINTHICUM	-	-	-	BABB	HARP16	-	-	127	-	-
1965-5765	2439026.46	1965 Sep 22 2324	Martlet 2	-	142 THA-25	2C XIII-4 LINTHICUM	-	-	-	BABB	HARP16	-	-	127	-	-
1965-5765	2439026.74	1965 Sep 23 0550	Martlet 2	-	144 THA-26	2C XIII-5	-	-	-	BABB	HARP16	-	-	100	-	-
1965-5765	2439026.60	1965 Sep 23 0715	Martlet 2	-	144 THA-26	2C XIII-15 MACONLIA	-	-	-	BABB	HARP16	-	-	136	-	-
1965-5765	2439026.84	1965 Sep 23 0917	Martlet 2	-	145 THA-27	2C XIII-19 MARULCOKE	-	-	-	BABB	HARP16	-	-	136	-	-
1965-5765	2439026.84	1965 Sep 23 0917	Martlet 2	-	146 THA-28	2C XIII-18 OUREA	-	-	-	BABB	HARP16	-	-	135	-	-
1965-5765	2439026.88	1965 Sep 23 0905	Martlet 2	-	147 THA-29	2C XIII-18 FERRYMAN	-	-	-	BABB	HARP16	-	-	124	-	-
1965-5741	2439003.50	1965 Sep	Martlet 2	-	-	2C XIII-6	-	-	-	BABB	HARP16	-	-	100	-	-
1965-5742	2439003.50	1965 Sep	Martlet 2	-	-	2C XIII-6	-	-	-	BABB	HARP16	-	-	100	-	-
1965-5742	2439038.17	1965 Sep 25	Martlet 2	-	-	2A XIII-2	-	-	-	BABB	HARP16	-	-	100	-	-
1965-5742	2439038.17	1965 Sep 25	Martlet 2	-	-	2A XIII-2	-	-	-	BABB	HARP16	-	-	100	-	-
1965-5745	2439038.17	1965 Sep 15 1600	Martlet 3B	-	154	3B FOAM	-	-	-	BABB	HARP16	-	-	100	-	-
1965-5745	2439038.34	1965 Sep 15 2003	Martlet 3B	-	155	3B COUSE	-	-	-	BABB	HARP16	-	-	107	-	-
1965-5759	2439031.22	1965 Sep 16 1718	Martlet 2	-	156	2C2 ZENMAC	-	-	-	BABB	HARP16	-	-	110	-	-
1965-5760	2439031.43	1965 Sep 16 2215	Martlet 2	-	157	2C3 GSUM	-	-	-	BABB	HARP16	-	-	119	-	-
1965-5760	2439032.27	1965 Sep 17 1831	Martlet 2	-	158	3B HANA	-	-	-	BABB	HARP16	-	-	12	-	-
1965-5761	2439032.34	1965 Sep 17 2016	Martlet 2	-	159	2C3 BRUDSTOWN Chaff	-	-	-	BABB	HARP16	-	-	82	-	-
1965-5763	2439032.43	1965 Sep 17 2215:00	Martlet 2	-	160 B-31	2C2 GHATSTOWN	-	-	-	BABB	HARP16	-	-	120	-	-
1965-5764	2439032.53	1965 Sep 17 2334:00	Martlet 2	-	161 B-32	2C2 POWEN	-	-	-	BABB	HARP16	-	-	122	-	-
1965-5764	2439032.53	1965 Sep 18 0038	Martlet 2	-	162 B-33	2C2 ENTERPRISE	-	-	-	BABB	HARP16	-	-	71	-	-
1965-5765	2439032.64	1965 Sep 18 0315:00	Martlet 2	-	163 B-33	2C2 FOULBAY	-	-	-	BABB	HARP16	-	-	123	-	-
1965-5766	2439032.70	1965 Sep 18 0445	Martlet 2	-	164	2C2 GUNHILL	-	-	-	BABB	HARP16	-	-	126	-	-
1965-5766	2439032.76	1965 Sep 18 0558	Martlet 2	-	165	2C2 HASTINGS	-	-	-	BABB	HARP16	-	-	32	-	-
1965-5767	2439032.81	1965 Sep 18 0730	Martlet 2	-	166	2C2 INDIAN GROUND	-	-	-	BABB	HARP16	-	-	122	-	-
1965-5768	2439032.88	1965 Sep 19 1730	Martlet 2	-	167	2C3 JEMDALL	-	-	-	BABB	HARP16	-	-	119	-	-
1965-5769	2439035.37	1965 Sep 20 1600	Martlet 2	-	170	2C2 WORTHING	-	-	-	BABB	HARP16	-	-	72	-	-
1965-5770	2439036.17	1965 Sep 20 2047	Martlet 2	-	171	2C3 LANCASTER	-	-	-	BABB	HARP16	-	-	104	-	-
1965-5770	2439037.46	1965 Sep 21 1610	Martlet 2	-	172	2C3 LANCHESTER	-	-	-	BABB	HARP16	-	-	58	-	-
1965-5640	2439037.46	1965 Sep 22 2309	Martlet 2	-	173	2C2 WARDHALL	-	-	-	BABB	HARP16	-	-	128	-	-
1965-5771	2439037.54	1965 Sep 23 0055	Martlet 2	-	174	2C2 WARDHALL	-	-	-	BABB	HARP16	-	-	142	-	-
1965-5771	2439037.62	1965 Sep 23 0259	Martlet 2	-	175	2C2 NEEDHAM'S POINT	-	-	-	BABB	HARP16	-	-	133	-	-
1965-5643	2439037.73	1965 Sep 23 0531	Martlet 2	-	176	2C2 PARAGON	-	-	-	BABB	HARP16	-	-	135	-	-
1965-5644	2439037.81	1965 Sep 23 0728	Martlet 2	-	177	2C2 OUBRY	-	-	-	BABB	HARP16	-	-	143	-	-
1965-5645	2439037.89	1965 Sep 23 0916	Martlet 2	-	178	2C2 ROCKLEY	-	-	-	BABB	HARP16	-	-	141	-	-
1966-5645	2439159.23	1966 Feb 7 1735	Martlet 2	-	179	2C2 SEAWELL	-	-	-	BABB	HARP16	-	-	53	-	-
1966-127	2439164.17	1966 Feb 7 1600	Martlet 2	-	-	-	-	-	-	BABB	HARP16	-	-	487	-	-
1966-137	2439168.17	1966 Feb 11 1600	Martlet 2	-	-	-	-	-	-	BABB	HARP16	-	-	467	-	-
1966-509	2439173.21	1966 Feb 16 1700	Martlet 2	-	-	-	-	-	-	BABB	HARP16	-	-	607	-	-
1966-5706	2439174.54	1966 Feb 18 0103:00	Martlet 2	-	-	-	-	-	-	BABB	HARP16	-	-	123	-	-
1966-M10	2439177.41	1966 Feb 20 2153	Martlet 2	-	-	-	-	-	-	BABB	HARP16	-	-	607	-	-
1966-M11	2439180.44	1966 Feb 23 2238	Martlet 2	-	-	-	-	-	-	BABB	HARP16	-	-	607	-	-
1966-M12	2439180.64	1966 Feb 24 0323	Martlet 2	-	-	-	-	-	-	BABB	HARP16	-	-	607	-	-
1966-M13	2439180.76	1966 Feb 24 0616	Martlet 2	-	-	-	-	-	-	BABB	HARP16	-	-	607	-	-
1966-5707	2439180.89	1966 Feb 24 0923:30	Martlet 2	-	-											

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Launch	Mission	FlightCode	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee km	Range km	Dest
1966-M14	2439181.17	1966 Feb 24 1600	Martlet 2	-	-	-	-	-	-	-	BARB	HARP16	-	-	607	-	-
1966-M15	2439182.17	1966 Feb 25 1600	Martlet 2	-	-	-	-	-	-	-	BARB	HARP16	-	-	607	-	-
1966-S713	2439290.64	1966 Jun 14 0325	Martlet 2C	-	-	Y-1 SHOT-04	-	-	-	-	YONA	HARP16	-	-	126	-	-
1966-S714	2439290.72	1966 Jun 14 0515	Martlet 2C	-	-	Y-2 SHOT-05	-	-	-	-	YONA	HARP16	-	-	121	-	-
1966-S715	2439291.70	1966 Jun 15 0446	Martlet 2C	-	-	Y-3 SHOT-06	-	-	-	-	YONA	HARP16	-	-	122	-	-
1966-S716	2439291.76	1966 Jun 15 0617	Martlet 2C	-	-	SHOT-07	-	-	-	-	YONA	HARP16	-	-	1007	-	-
1966-S717	2439291.85	1966 Jun 15 0827	Martlet 2	-	-	Y-4 MCCONNELL SHOT-8	-	-	-	-	YONA	HARP16	-	-	114	-	-
1966-S718	2439291.92	1966 Jun 15 1005	Martlet 2C	-	-	Y-5 SHOT-09	-	-	-	-	YONA	HARP16	-	-	125	-	-
1966-S708	2439388.54	1966 Sep 20 0055:09	Martlet 2	-	-	B-51 BETA	-	-	-	-	BARB	HARP16	-	-	128	-	-
1966-S709	2439388.54	1966 Sep 20 0224:06	Martlet 2	-	-	B-52 GAMMA	-	-	-	-	BARB	HARP16	-	-	134	-	-
1966-S710	2439388.67	1966 Sep 20 0410:00	Martlet 2	-	-	B-53 DELTA	-	-	-	-	BARB	HARP16	-	-	122	-	-
1966-S711	2439388.77	1966 Sep 20 0624:00	Martlet 2	-	-	B-55 ZETA	-	-	-	-	BARB	HARP16	-	-	117	-	-
1966-S712	2439388.84	1966 Sep 20 0803:00	Martlet 2	-	-	B-57 THETA	-	-	-	-	BARB	HARP16	-	-	128	-	-
1966-S719	2439424.71	1966 Oct 26 0459	Martlet 2C	-	-	SHOT-10	-	-	-	-	YONA	HARP16	-	-	94	-	-
1966-S720	2439425.66	1966 Oct 27 0656	Martlet 2C	-	-	SHOT-11	-	-	-	-	YONA	HARP16	-	-	125	-	-
1966-S721	2439425.79	1966 Oct 27 0656	Martlet 2C	-	-	SHOT-12	-	-	-	-	YONA	HARP16	-	-	165	-	-
1966-S722	2439426.45	1966 Oct 27 2247	Martlet 2C	-	-	SHOT-13	-	-	-	-	YONA	HARP16	-	-	807	-	-
1966-S723	2439426.62	1966 Oct 28 0252	Martlet 2C	-	-	SHOT-14	-	-	-	-	YONA	HARP16	-	-	126	-	-
1966-S724	2439426.70	1966 Oct 28 0446	Martlet 2C	-	-	SHOT-15	-	-	-	-	YONA	HARP16	-	-	163	-	-
1966-S725	2439426.76	1966 Oct 28 0620	Martlet 2C	-	-	SHOT-16	-	-	-	-	YONA	HARP16	-	-	1007	-	-
1966-S628	2439446.57	1966 Nov 17 0141:24	Martlet 2C	-	-	Y-10 SHOT-17	-	-	-	-	YONA	HARP16	-	-	121	-	-
1966-S629	2439446.65	1966 Nov 17 0341:52	Martlet 2C	-	-	Y-11 SHOT-18	-	-	-	-	YONA	HARP16	-	-	120	-	-
1966-S630	2439446.73	1966 Nov 17 0532:07	Martlet 2C	-	-	Y-12 SHOT-19	-	-	-	-	YONA	HARP16	-	-	114	-	-
1966-S631	2439446.80	1966 Nov 17 0716:13	Martlet 2C	-	-	Y-13 SHOT-20	-	-	-	-	YONA	HARP16	-	-	1007	-	-
1966-S632	2439446.93	1966 Nov 17 1016	Martlet 2C	-	-	SHOT-21	-	-	-	-	YONA	HARP16	-	-	126	-	-
1966-S633	2439446.95	1966 Nov 19 0118:47	Martlet 2C	-	-	Y-14 SHOT-22	-	-	-	-	YONA	HARP16	-	-	122	-	-
1966-S634	2439446.63	1966 Nov 19 0312:21	Martlet 2C	-	-	Y-15 SHOT-23	-	-	-	-	YONA	HARP16	-	-	155	-	-
1966-S635	2439446.70	1966 Nov 19 0449:42	Martlet 2C	-	-	Y-16 SHOT-24	-	-	-	-	YONA	HARP16	-	-	122	-	-
1966-S636	2439446.83	1966 Nov 19 0643:09	Martlet 2C	-	-	Y-17 SHOT-25	-	-	-	-	YONA	HARP16	-	-	149	-	-
1966-S639	2439446.83	1966 Nov 19 0801:22	Martlet 2C	-	-	Y-18 SHOT-26	-	-	-	-	YONA	HARP16	-	-	161	-	-
1966-S640	2439446.90	1966 Nov 19 0935:35	Martlet 2C	-	-	Y-19 SHOT-27	-	-	-	-	YONA	HARP16	-	-	122	-	-
1966-S641	2439449.00	1966 Nov 19 1152:53	Martlet 2C	-	-	Y-20 SHOT-28	-	-	-	-	YONA	HARP16	-	-	160	-	-
1966-S726	2439449.05	1966 Nov 19 1308	Martlet 2C	-	-	SHOT-29	-	-	-	-	YONA	HARP16	-	-	1007	-	-
1966-S643	2439449.61	1966 Nov 20 0246:00	Martlet 2C	-	-	Y-21 SHOT-30	-	-	-	-	YONA	HARP16	-	-	146	-	-
1966-S644	2439449.68	1966 Nov 20 0421:29	Martlet 2C	-	-	Y-22 SHOT-31	-	-	-	-	YONA	HARP16	-	-	112	-	-
1966-S645	2439449.73	1966 Nov 20 0537:53	Martlet 2C	-	-	Y-23 SHOT-32	-	-	-	-	YONA	HARP16	-	-	143	-	-
1966-S646	2439449.79	1966 Nov 20 0639:14	Martlet 2C	-	-	Y-24 SHOT-33	-	-	-	-	YONA	HARP16	-	-	168	-	-
1967-S607	2439537.58	1967 Feb 16 0117:00	Martlet 2	-	-	B-59 BELFAST	-	-	-	-	BARB	HARP16	-	-	123	-	-
1967-S611	2439537.66	1967 Feb 16 0356:00	Martlet 2	-	-	B-61 HOLLYWOOD	-	-	-	-	BARB	HARP16	-	-	117	-	-
1967-S612	2439538.61	1967 Feb 17 0245:00	Martlet 2	-	-	B-63 PINEWOOD	-	-	-	-	BARB	HARP16	-	-	114	-	-
1967-S613	2439538.65	1967 Feb 17 0314:00	Martlet 2	-	-	B-65 PINEWOOD	-	-	-	-	BARB	HARP16	-	-	136	-	-
1967-S608	2439665.63	1967 Jun 19 0314:04	Martlet 2	-	-	Y-26 THAL 36	-	-	-	-	YONA	HARP16	-	-	107	-	-
1967-S609	2439665.62	1967 Jun 22 0247:00	Martlet 2	-	-	B-67 CALDO	-	-	-	-	BARB	HARP16	-	-	107	-	-
1967-S610	2439664.49	1967 Jun 22 2351:00	Martlet 2	-	-	B-68 DUREAN	-	-	-	-	BARB	HARP16	-	-	110	-	-







Launch

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	OrbDay	Agency	Launch_Code	Group	Category	LTCite	Cite	Notes
1966-M14	2439181.17	1966 Feb 24 1600	Martlet 2	-	-	0.000	HARP	SS	SCL7/Bull	Aeron	HRM54	-	-
1966-M15	2439182.17	1966 Feb 25 1600	Martlet 2	-	-	0.000	HARP	SS	SCL7/Bull	Aeron	HRM54	-	-
1966-S713	2439290.64	1966 Jun 14 0325	Martlet 2C	-	-	0.000	HARP	SS	SCL7/Bull	Aeron	BRL-MR1825	-	-
1966-S714	2439290.72	1966 Jun 14 0515	Martlet 2C	-	-	0.000	HARP	SS	SCL7/Bull	Aeron	BRL-MR1825	-	-
1966-S715	2439291.70	1966 Jun 15 0446	Martlet 2C	-	-	0.000	HARP	SS	SCL7/Bull	Aeron	BRL-MR1825	-	-
1966-S716	2439291.76	1966 Jun 15 0617	Martlet 2C	-	-	0.000	HARP	SS	SCL7/Bull	Aeron	BRL-MR1825	-	-
1966-S717	2439291.85	1966 Jun 15 0827	Martlet 2C	-	-	0.000	HARP	SS	SCL7/Bull	Aeron	BRL-MR1825	-	-
1966-S718	2439291.92	1966 Jun 15 1005	Martlet 2C	-	-	0.000	HARP	SS	SCL7/Bull	Aeron	BRL-MR1825	-	-
1966-S708	2439388.54	1966 Sep 20 0055:09	Martlet 2	-	-	0.000	HARP	SS	SCL7/Bull	Aeron	BRL-MR1825	-	-
1966-S709	2439388.60	1966 Sep 20 0224:06	Martlet 2	-	-	0.000	HARP	SS	SCL7/Bull	Aeron	BRL-MR1825	-	-
1966-S710	2439388.67	1966 Sep 20 0410:00	Martlet 2	-	-	0.000	HARP	SS	SCL7/Bull	Aeron	BRL-MR1825	-	-
1966-S711	2439388.77	1966 Sep 20 0624:00	Martlet 2	-	-	0.000	HARP	SS	SCL7/Bull	Aeron	BRL-MR1825	-	-
1966-S712	2439388.84	1966 Sep 20 0803:00	Martlet 2	-	-	0.000	HARP	SS	SCL7/Bull	Aeron	BRL-MR1825	-	-
1966-S719	2439424.71	1966 Oct 26 0459	Martlet 2C	-	-	0.000	HARP	SS	SCL7/Bull	Aeron	BRL-MR1825	-	-
1966-S720	2439425.66	1966 Oct 27 0356	Martlet 2C	-	-	0.000	HARP	SS	SCL7/Bull	Aeron	BRL-MR1825	-	-
1966-S721	2439425.79	1966 Oct 27 0556	Martlet 2C	-	-	0.000	HARP	SS	SCL7/Bull	Aeron	BRL-MR1825	-	-
1966-S722	2439426.45	1966 Oct 27 2247	Gun Projectile 16-inch	-	-	0.000	HARP	SS	SCL7/Bull	Aeron	BRL-MR1825	-	-
1966-S723	2439426.62	1966 Oct 28 0252	Martlet 2C	-	-	0.000	HARP	SS	SCL7/Bull	Aeron	BRL-MR1825	-	-
1966-S724	2439426.70	1966 Oct 28 0446	Martlet 2C	-	-	0.000	HARP	SS	SCL7/Bull	Aeron	BRL-MR1825	-	-
1966-S725	2439426.76	1966 Oct 28 0620	Martlet 2C	-	-	0.000	HARP	SS	SCL7/Bull	Aeron	BRL-MR1825	-	-
1966-S627	2439446.57	1966 Nov 17 0141:24	Martlet 2C	-	-	0.000	BRL	SS	SCL7/Bull	Aeron	AFWL-TR-68-132	-	-
1966-S628	2439446.65	1966 Nov 17 0341:52	Martlet 2C	-	-	0.000	BRL	SS	SCL7/Bull	Aeron	AFWL-TR-68-132	-	-
1966-S629	2439446.73	1966 Nov 17 0532:07	Martlet 2C	-	-	0.000	BRL	SS	SCL7/Bull	Aeron	AFWL-TR-68-132	-	-
1966-S630	2439446.80	1966 Nov 17 0716:13	Martlet 2C	-	-	0.000	BRL	SS	SCL7/Bull	Aeron	AFWL-TR-68-132	-	-
1966-S631	2439446.93	1966 Nov 17 1016	Martlet 2C	-	-	0.000	BRL	SS	SCL7/Bull	Aeron	AFWL-TR-68-132	-	-
1966-S632	2439446.95	1966 Nov 19 0116:47	Martlet 2C	-	-	0.000	BRL	SS	SCL7/Bull	Aeron	AFWL-TR-68-132	-	-
1966-S633	2439446.63	1966 Nov 19 0312:21	Martlet 2C	-	-	0.000	BRL	SS	SCL7/Bull	Aeron	AFWL-TR-68-132	-	-
1966-S634	2439446.70	1966 Nov 19 0449:42	Martlet 2C	-	-	0.000	BRL	SS	SCL7/Bull	Aeron	AFWL-TR-68-132	-	-
1966-S635	2439446.78	1966 Nov 19 0645:09	Martlet 2C	-	-	0.000	BRL	SS	SCL7/Bull	Aeron	AFWL-TR-68-132	-	-
1966-S636	2439446.83	1966 Nov 19 0801:22	Martlet 2C	-	-	0.000	BRL	SS	SCL7/Bull	Aeron	AFWL-TR-68-132	-	-
1966-S637	2439446.90	1966 Nov 19 0955:35	Martlet 2C	-	-	0.000	BRL	SS	SCL7/Bull	Aeron	AFWL-TR-68-132	-	-
1966-S640	2439449.00	1966 Nov 19 1152:53	Martlet 2C	-	-	0.000	BRL	SS	SCL7/Bull	Aeron	AFWL-TR-68-132	-	-
1966-S641	2439449.05	1966 Nov 19 1306	Martlet 2C	-	-	0.000	HARP	SS	SCL7/Bull	Aeron	BRL-MR1825	BRL-MR1825	-
1966-S642	2439449.61	1966 Nov 20 0245:00	Martlet 2C	-	-	0.000	BRL	SS	SCL7/Bull	Aeron	BRL-MR1825	-	-
1966-S643	2439449.68	1966 Nov 20 0421:29	Martlet 2C	-	-	0.000	BRL	SS	SCL7/Bull	Aeron	AFWL-TR-68-132	-	-
1966-S644	2439449.73	1966 Nov 20 0557:53	Martlet 2C	-	-	0.000	BRL	SS	SCL7/Bull	Aeron	AFWL-TR-68-132	-	-
1966-S645	2439449.79	1966 Nov 20 0659:14	Martlet 2C	-	-	0.000	BRL	SS	SCL7/Bull	Aeron	AFWL-TR-68-132	-	-
1966-S646	2439537.56	1967 Feb 16 0117:00	Martlet 2	-	-	0.000	BRL	SS	SCL7/Bull	Heleo	BRL-CMI169	-	-
1967-S607	2439537.66	1967 Feb 16 0306:00	Martlet 2	-	-	0.000	BRL	SS	SCL7/Bull	Heleo	BRL-CMI169	-	-
1967-S611	2439538.61	1967 Feb 17 0245:00	Martlet 2	-	-	0.000	BRL	SS	SCL7/Bull	Heleo	BRL-CMI169	-	-
1967-S612	2439538.61	1967 Feb 17 0245:00	Martlet 2	-	-	0.000	BRL	SS	SCL7/Bull	Heleo	BRL-CMI169	-	-
1967-S613	2439538.85	1967 Jun 13 0317:04	Martlet 2	-	-	0.000	BRL	SS	SCL7/Bull	Heleo	BRL-CMI169	-	-
1967-S614	2439538.85	1967 Jun 13 0317:04	Martlet 2	-	-	0.000	BRL	SS	SCL7/Bull	Heleo	BRL-CMI169	-	-
1967-S608	2439663.62	1967 Jun 22 0347:00	Martlet 2	-	-	0.000	BRL	SS	BRL	Heleo	BRL-CMI169	-	-
1967-S609	2439663.62	1967 Jun 22 0347:00	Martlet 2	-	-	0.000	BRL	SS	BRL	Heleo	BRL-CMI169	-	-
1967-S610	2439664.49	1967 Jun 22 2351:00	Martlet 2	-	-	0.000	BRL	SS	BRL	Heleo	BRL-CMI169	-	-



Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Mission	Launch				Range_Km	Dest
								FlightCode	Platform	Launch_Site	Launch_Pad		
1996-507	2450125.46	1996 Feb 11 2300	J-1	-	J-1-1F	Hyflex	-	-	TNSC	N	-	110	-
2013-049	2456549.71	2013 Sep 14 0500:00	Epsilon	-	E-1	SPRINT-A	-	-	USC	EP	-	1156	-
2016-080	2457742.96	2016 Dec 20 1100:00	Epsilon	2	E-2	ERG	-	-	USC	EP	-	32424	-
2018-007	2458136.38	2018 Jan 17 2106:11	Epsilon	2P8S	E-3	ASIMARO 2	-	-	USC	EP	-	644	-
2019-003	2458501.53	2019 Jan 18 0050:20	Epsilon	2P8S	E-4	RAPIS	-	-	USC	EP	-	736	-
2021-102	2459527.54	2021 Nov 9 0055:16	Epsilon	2P8S	E-5	RAISE-2	-	-	USC	EP	-	579	-
2022-F04	2459864.54	2022 Oct 12 0050:43	Epsilon	2P8S	E-6	RAISE-3	-	-	USC	EP	-	237	-





Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	OrbPay	Agency	Launch_Code	Group	Category	LTCite	Cite	Notes
1996-S07	2450125.46	1996 Feb 11 2300	J-1	-	J-1-IF	0.000	MASDA	TS	-	SC Test	Wire	ANST960219-27	-
2013-049	2456549.71	2013 Sep 14 0500:00	Epsilon	-	E-1	0.340	JAXA	DS	G	Sat LEI 00	Wire	-	-
2016-080	2457742.96	2016 Dec 20 1100:00	Epsilon	2	E-2	0.350	JAXA	DS	G	Sat CTU 0	Wire	-	-
2018-007	2458136.38	2018 Jan 17 2106:11	Epsilon	2PFS	E-3	0.570	JAXA	DS	G	Sat SSO 00	Wire	-	-
2019-003	2458501.53	2019 Jan 18 0950:20	Epsilon	2PFS	E-4	0.386	JAXA	DS	G	Sat SSO 00	Wire	-	-
2021-102	2459527.54	2021 Nov 9 0055:16	Epsilon	2PFS	E-5	0.553	JAXA	DS	G	Sat SSO 00	Wire	-	-
2022-F04	2459864.54	2022 Oct 12 0950:43	Epsilon	2PFS	E-6	0.692	JAXA	DF	G	Sat SSO 00	Wire	-	-



Launch

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Mission	FlightCode	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee_Km	Range_Km	Dest
1994-007	2449387.43	1994 Feb 3 2220	H-II	-	H-II-1F	OREX	OREX	-	-	TNSC	Y	-	-	36167	-	-
1994-056	2449592.83	1994 Aug 28 0750	H-II	-	H-II-2F	ETS-6/LAPS	ETS-6	-	-	TNSC	Y	-	-	38925	-	-
1994-011	2449794.83	1994 Mar 18 0801	H-II	(2S)	H-II-3F	SFU/GMS-5	SFU	-	-	TNSC	Y	-	-	40191	-	-
1996-046	2450312.58	1996 Aug 17 0153	H-II	-	H-II-4F	AREDS	AREDS	-	-	TNSC	Y	-	-	1325	-	-
1997-074	2450780.39	1997 Nov 27 2127	H-II	-	H-II-6F	TRMW/ETS-7	TRMW	-	-	TNSC	Y	-	-	548	-	-
1998-011	2450985.83	1998 Feb 21 0755	H-II	-	H-II-5F	COMETS	COMETS	-	-	TNSC	Y	-	-	17738	-	-
1999-004	2451497.81	1999 Feb 15 0729	H-II	-	H-II-8F	MISAT	MISAT	-	-	TNSC	Y	-	-	1007	-	-
2001-038	2452150.79	2001 Aug 29 0700:00	H-IIA 202	-	H-IIA-1F	VEP-2/LRE	RDS-1	-	-	TNSC	Y	-	-	36220	-	-
2002-003	2452209.61	2002 Feb 4 0945	H-IIA 202	-	H-IIA-2F	VEP-3/WDS-1/DASH	USERS SEM	-	-	TNSC	Y	-	-	35779	-	-
2002-042	2452527.85	2002 Sep 10 0820	H-IIA 202	-	H-IIA-3F	USERS/DRYS	USERS SEM	-	-	TNSC	Y	-	-	36169	-	-
2002-056	2452622.56	2002 Dec 14 0131	H-IIA 202	-	H-IIA-4F	AREDS-2	AREDS-2	-	-	TNSC	Y	-	-	847	-	-
2003-009	2452726.56	2003 Mar 28 0127	H-IIA 202	-	H-IIA-5F	AREDS-2	AREDS-2	-	-	TNSC	Y	-	-	557	-	-
2003-002	2452972.69	2003 Mar 29 0433	H-IIA 202	-	H-IIA-6F	IGS 0-1/IGS R-1	IGS Optical-1	-	-	TNSC	Y	-	-	422	-	-
2006-006	2453427.89	2006 Feb 26 0925	H-IIA 202	-	H-IIA-7F	IGS 0-2a/IGS R-2a	IGS Optical-2	-	-	TNSC	Y	-	-	36263	-	-
2006-002	2453759.56	2006 Jan 24 0133	H-IIA 202	-	H-IIA-8F	MISAT-1R	MISAT-1R	-	-	TNSC	Y	-	-	740	-	-
2006-004	2453784.77	2006 Feb 18 0627	H-IIA 202	-	H-IIA-9F	ALUS	ALUS	-	-	TNSC	Y	-	-	36155	-	-
2006-037	2453989.69	2006 Sep 11 0435	H-IIA 202	-	H-IIA-10	MISAT-2	MISAT-2	-	-	TNSC	Y	-	-	494	-	-
2006-059	2454097.77	2006 Dec 18 0632	H-IIA 204	-	H-IIA-11	MISAT-2	IGS Optical-2	-	-	TNSC	Y	-	-	36209	-	-
2007-005	2454158.70	2007 Feb 24 0441	H-IIA 202	-	H-IIA-11	ETS-8	ETS-8	-	-	TNSC	Y	-	-	505	-	-
2007-039	2454357.56	2007 Sep 14 0131:01	H-IIA 202	-	H-IIA-12	IGS R-2/0-3V	IGS Radar-2	-	-	TNSC	Y	-	-	150000	-	-
2008-007	2454519.87	2008 Feb 23 0858:00	H-IIA 202	-	H-IIA-13	SELENE	SELENE	-	-	TNSC	Y	-	-	36909	-	-
2009-002	2454854.66	2009 Jan 23 0394	H-IIA 202	1	H-IIA-14	WINDS	WINDS	-	-	TNSC	Y	-	-	675	-	-
2009-006	2455163.56	2009 Jan 28 0121	H-IIA 202	1	H-IIA-15	GOSAT	GOSAT	-	-	TNSC	Y	-	-	597	-	-
2010-045	2455450.97	2010 May 20 2188:22	H-IIA 202	1	H-IIA-16	IGS 0-3	IGS Optical-3	-	-	TNSC	Y	-	-	150000	-	-
2010-020	2455537.42	2010 Sep 11 1117:00	H-IIA 202	1	H-IIA-17	PLANET-C	PLANET-C	-	-	TNSC	Y	-	-	39272	-	-
2011-050	2455627.69	2011 Sep 23 0436:50	H-IIA 202	-	H-IIA-18	IGS 0-4	IGS Optical-4	-	-	TNSC	Y	-	-	597	-	-
2011-075	2455907.56	2011 Dec 12 0121	H-IIA 202	-	H-IIA-19	IGS 0-5	IGS Radar-3	-	-	TNSC	Y	-	-	520	-	-
2012-025	2456065.19	2012 May 17 1639	H-IIA 202	1	H-IIA-20	IGS R-3	IGS Radar-3	-	-	TNSC	Y	-	-	707	-	-
2014-002	2456513.69	2014 Jan 27 0440	H-IIA 202	1	H-IIA-21	GCOM-W1/KOMPAT-3	GCOM-W1	-	-	TNSC	Y	-	-	586	-	-
2014-009	2456716.28	2014 Feb 27 1537	H-IIA 202	1	H-IIA-22	IGS R-4/Demo	IGS Radar-4	-	-	TNSC	Y	-	-	1692	-	-
2014-029	2456801.63	2014 May 24 0305:14	H-IIA 202	1	H-IIA-23	GPH-C	GPH-C	-	-	TNSC	Y	-	-	658	-	-
2014-076	2456937.72	2014 Oct 7 0816:00	H-IIA 202	1	H-IIA-24	ALUS-2	ALUS-2	-	-	TNSC	Y	-	-	36883	-	-
2014-004	2456994.68	2014 Oct 3 0422:04	H-IIA 202	1	H-IIA-25	Himawari 8	Himawari 8	-	-	TNSC	Y	-	-	150000	-	-
2016-015	2457054.56	2016 Feb 1 0121	H-IIA 202	1	H-IIA-26	Himawari 8	Himawari 8	-	-	TNSC	Y	-	-	499	-	-
2016-008	2457350.78	2016 Mar 26 0121	H-IIA 202	1	H-IIA-27	IGS R-Spare	IGS Radar-Spare	-	-	TNSC	Y	-	-	56518	-	-
2016-012	2457435.96	2016 Feb 17 0845	H-IIA 202	2	H-IIA-28	IGS 0-5	IGS Optical-5	-	-	TNSC	Y	-	-	522	-	-
2016-064	2457694.96	2016 Nov 24 0650:00	H-IIA 204	2	H-IIA-29	Reistar 12V	Reistar 12V	-	-	TNSC	Y	-	-	865	-	-
2017-005	2457777.82	2016 Feb 2 0620	H-IIA 202	1	H-IIA-30	Hitomi	Hitomi	-	-	TNSC	Y	-	-	36857	-	-
2017-015	2457828.56	2017 Jan 24 0744:00	H-IIA 202	2	H-IIA-31	Himawari 9	Himawari 9	-	-	TNSC	Y	-	-	498	-	-
2017-028	2457995.91	2017 Mar 17 0120	H-IIA 202	1	H-IIA-32	DSR 2	DSR 2	-	-	TNSC	Y	-	-	39867	-	-
2017-028	2457995.91	2017 Jun 15 0527:36	H-IIA 202	1	H-IIA-33	IGS R-5	IGS R-5	-	-	TNSC	Y	-	-	36890	-	-
2017-052	2458094.93	2017 Aug 15 0652:37	H-IIA 204	2	H-IIA-34	Michibiki 2	Michibiki 2	-	-	TNSC	Y	-	-	39029	-	-
2017-052	2458094.93	2017 Oct 2 2101:37	H-IIA 204	2	H-IIA-35	Michibiki 3	Michibiki 3	-	-	TNSC	Y	-	-	502	-	-
2017-052	2458094.93	2017 Dec 23 0126:22	H-IIA 202	1	H-IIA-36	Michibiki 4	Michibiki 4	-	-	TNSC	Y	-	-	510	-	-
2018-052	2458176.56	2018 Feb 23 0436:22	H-IIA 202	1	H-IIA-37	Shiketsui/Fubane	IGS C-2/SIATGS	-	-	TNSC	Y	-	-	802	-	-
2018-052	2458176.56	2018 Feb 27 0434	H-IIA 202	1	H-IIA-38	IGS 0-6	IGS 0-6	-	-	TNSC	Y	-	-	510	-	-
2018-052	2458176.56	2018 Jun 12 0430:00	H-IIA 202	1	H-IIA-39	IGS R-9	IGS R-9	-	-	TNSC	Y	-	-	872	-	-
2018-052	2458200.69	2018 Oct 29 0408	H-IIA 202	1	H-IIA-40	IGS 0-7	IGS 0-7	-	-	TNSC	Y	-	-	150000	-	-
2018-052	2458200.69	2018 Feb 9 0134	H-IIA 202	1	H-IIA-41	ALUS-1	ALUS-1	-	-	TNSC	Y	-	-	150000	-	-
2020-007	2459095.42	2020 Jul 19 1158:14	H-IIA 202	1	H-IIA-42	Hope Probe	Hope Probe	-	-	TNSC	Y	-	-	36903	-	-
2020-006	2459182.60	2020 Nov 28 0725	H-IIA 202	1	H-IIA-43	DRS-1/ODNS	DRS-1/ODNS	-	-	TNSC	Y	-	-	36903	-	-
2021-026	2459512.60	2021 Oct 26 0219:37	H-IIA 202	1	H-IIA-44	QZSS-1R	QZSS-1R	-	-	TNSC	Y	-	-	70659	-	-
2021-126	2459571.15	2021 Dec 26 1529	H-IIA 204	2	H-IIA-45	IGS R-7	IGS R-7	-	-	TNSC	Y	-	-	-	-	-
2023-137	2460970.59	2023 Jan 26 0150:21	H-IIA 202	1	H-IIA-46	KRISH/SLIM	KRISH/SLIM	-	-	TNSC	Y	-	-	-	-	-
2023-137	2460970.59	2023 Sep 6 2342:11	H-IIA 202	1	H-IIA-47	KRISH/SLIM	KRISH/SLIM	-	-	TNSC	Y	-	-	-	-	-
2024-010	2460921.70	2024 Jan 12 0444:26	H-IIA 202	1	H-IIA-48	IGS 0-5	IGS 0-5	-	-	TNSC	Y	-	-	-	-	-
2024-176	2460579.73	2024 Sep 26 0624	H-IIA 202	1	H-IIA-49	IGS 0-9	IGS 0-9	-	-	TNSC	Y	-	-	-	-	-







Launch

Launch_Year	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Mission	FlightCode	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee_Km	Range_Km	Dest
2009-048	2455085.21	2009 Sep 10 17:01:46	H-IIB	-	H-IIB-1F1	HTV-1	HTV 1 Gijutsu jisho-ki	-	-	TNSC	Y2	-	-	353	-	-
2011-003	2455583.73	2011 Jan 22 05:37:57	H-IIB	-	H-IIB-F2	HTV-2	HTV 2	-	-	TNSC	Y2	-	-	357	-	-
2012-038	2456129.59	2012 Jul 21 02:06:18	H-IIB	-	H-IIB-F3	HTV-3	HTV 3	-	-	TNSC	Y2	-	-	430	-	-
2013-040	2456508.33	2013 Aug 3 19:48:46	H-IIB	-	H-IIB-F4	HTV-4	HTV 4	-	-	TNSC	Y2	-	-	425	-	-
2015-038	2457253.99	2015 Aug 19 11:50:49	H-IIB	-	H-IIB-F5	HTV-5	HTV 5	-	-	TNSC	Y2	-	-	415	-	-
2016-076	2457732.06	2016 Dec 9 13:26:47	H-IIB	-	H-IIB-F6	HTV-6	HTV 6	-	-	TNSC	Y2	-	-	411	-	-
2018-073	2458394.24	2018 Sep 22 17:52:27	H-IIB	-	H-IIB-F7	HTV-7	HTV 7	-	-	TNSC	Y2	-	-	408	-	-
2019-062	2458751.17	2019 Sep 24 16:55:05	H-IIB	-	H-IIB-F8	HTV-8	HTV 8	-	-	TNSC	Y2	-	-	422	-	-
2020-030	2458990.23	2020 May 20 17:31:00	H-IIB	-	H-IIB-F9	HTV-9	HTV 9	-	-	TNSC	Y2	-	-	422	-	-
2023-F03	2460010.57	2023 Mar 7 01:37:55	H3-Z2S	-	H3-1F1	Daichi 3	ALLUS 3	-	-	TNSC	Y2	-	-	632	-	-
2024-032	2460357.52	2024 Feb 17 00:22:55	H3-Z2S	-	H3-1F2	VER-4	VER-4	-	-	TNSC	Y2	-	-	-	-	-
2024-123	2460492.63	2024 Jul 1 03:06:00	H3-Z2S	-	H3-F3	Daichi 4	ALLUS 4	-	-	TNSC	Y2	-	-	-	-	-
2024-198	2460618.78	2024 Nov 4 06:48	H3-Z2S	-	H3-F4	Kirameki 3	DSV 3	-	-	TNSC	Y2	-	-	-	-	-





Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Launch			Group	Category	LT/Cite	Cite	Notes
						OrbPay	Agency	Launch_Code					
2009-048	2455085.21	2009 Sep 10 1701:46	H-IIB	-	H-IIB-TF1	21.000	JAXA	DS	G	Sat ISS 0	Wire	-	-
2011-003	2455583.73	2011 Jan 22 0537:57	H-IIB	-	H-IIB-F2	20.900	JAXA	DS	G	Sat ISS D	Wire	-	-
2012-038	2456129.59	2012 Jul 21 0206:18	H-IIB	-	H-IIB-F3	20.637	JAXA	DS	G	Sat ISS D	Wire	-	-
2013-040	2456508.33	2013 Aug 3 1948:46	H-IIB	-	H-IIB-F4	19.544	MHI	DS	CG	Sat ISS D	Wire	-	-
2015-038	2457253.99	2015 Aug 19 1150:49	H-IIB	-	H-IIB-F5	21.497	MHI	DS	CG	Sat ISS D	Wire	-	-
2016-076	2457732.06	2016 Dec 9 1326:47	H-IIB	-	H-IIB-F6	19.953	MHI	DS	CG	Sat ISS D	Wire	-	-
2018-073	2458384.24	2018 Sep 22 1752:27	H-IIB	-	H-IIB-F7	19.808	MHI	DS	CG	Sat ISS D	Wire	-	-
2019-062	2458751.17	2019 Sep 24 1605:05	H-IIB	-	H-IIB-F8	19.807	MHI	DS	CG	Sat ISS D	Wire	-	-
2020-030	2458990.23	2020 May 20 1731:00	H-IIB	-	H-IIB-F9	18.905	MHI	DS	CG	Sat ISS D	Wire	-	-
2023-F03	2460010.57	2023 Mar 7 0137:55	H3-22S	-	H3-TF1	2.900	JAXA	DF	G	Sat ISS D	Wire	-	-
2024-032	2460357.52	2024 Feb 17 0022:55	H3-22S	-	H3-TF2	2.975	JAXA	DS	G	Sat ISS D	Wire	-	Stage 2 attitude failure
2024-123	2460492.63	2024 Jul 1 0305:00	H3-22S	-	H3-F3	2.990	JAXA	DS	G	Sat LEU D	Wire	-	-
2024-198	2460618.78	2024 Nov 4 0648	H3-22S	-	H3-F4	5.000	JAXA	DS	G	Sat LEU D	Wire	-	-



Launch																
Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Mission	FlightCode	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee km	Range km	Dest
1987-M07	2450680.02	1987 May 11 1225	HALO	-	SL-1	Rockoon	-	-	BLM-HALS	HAWIC	-	-	-	677	-	-



Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	OrbPay	Agency	Launch_Code	Group	Category	LTCite	Cite	Notes
1997-007	2460680.02	1997 May 11 1225	HALD	-	SL-1	0.000	HAL5	SS	HAL5/Allison	Test	chapters.mss.org/al	-	-



Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Mission	FlightCode	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee km	Range km	Dest
2023-407	2460023.24	2023 Mar 19 1752	HANBIT-TLV	-	1	Test	-	-	-	ALCA	HAN	-	-	367	-	-





Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	OrbPay	Agency	Launch_Code	Group	Category	LTCite	Cite	Notes
2023-407	2460023.24	2023 Mar 19 1752	HAMBIT-TLV	-	1	0.000	INMOSP	SS	-	Test	Wire	-	-



Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Launch			Ascent_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee km	Range km	Dest
							Mission	FlightCode	Platform							
1965-A34	2438817.16	1965 Feb 25 1544	HIBEX	-	1	HIBEX A-1	-	-	-	WS	-	-	88	96	-	
1965-A63	2438851.50	1965 May 1	HIBEX	-	2	HIBEX B-1	-	-	-	WS	-	-	207	-	-	
1965-A91	2438955.50	1965 Jul 14	HIBEX	-	3	HIBEX B-2	-	-	-	WS	-	-	17	17	-	
1965-A128	2438925.50	1965 Sep 22	HIBEX	-	4	HIBEX D-1	-	-	-	WS	-	-	207	-	-	
1965-A148	2439061.50	1965 Oct 28	HIBEX	-	5	HIBEX D-2	-	-	-	WS	LC60	-	17	-	-	
1965-A168	2439096.50	1965 Dec 2	HIBEX	-	6	HIBEX D-3	-	-	-	WS	LC60	-	207	-	-	
1966-A16	2439130.50	1966 Jan 6	HIBEX	-	7	HIBEX D-4	10	-	-	WS	-	-	207	-	-	
1971-A91	2441272.50	1971 Nov 17	Upstage	-	-	External burning	-	-	-	WS	LC37	-	57	-	-	
1972-A19	2441398.50	1972 Mar 22	Upstage	-	-	-	-	-	-	WS	LC37	-	57	-	-	
1972-A41	2441437.50	1972 May	Upstage	-	-	-	-	-	-	WS	LC37	-	57	-	-	
1972-A63	2441529.50	1972 Aug	Upstage	-	-	Jet interaction	-	-	-	WS	LC37	-	57	-	-	
1972-A84	2441529.50	1972 Aug	Upstage	-	-	-	-	-	-	WS	LC37	-	57	-	-	



Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	OrbPay	Agency	Launch_Code	Group	Category	LTCite	Cite	Notes
1965-434	2438817.16	1965 Feb 25 1544	HIBEX	-	1	0.000	ARPA/NIKEK	MS	-	Test	DXS-Boeing	MR650308-11	www.usmr.army.mil
1965-463	2438881.50	1965 May 1	HIBEX	-	2	0.000	ARPA/NIKEK	MS	-	Test	MR65017-13	-	-
1965-491	2438955.50	1965 Jul 14	HIBEX	-	3	0.000	ARPA/NIKEK	MF	-	Test	DXS-Boeing	WSMR	-
1965-A128	2439025.50	1965 Sep 22	HIBEX	-	4	0.000	ARPA/NIKEK	MS	-	Test	WSMR	-	-
1965-A148	2439061.50	1965 Oct 28	HIBEX	-	5	0.000	ARPA/NIKEK	MS	-	Test	MR61108-09	-	-
1965-A168	2439096.50	1965 Dec 2	HIBEX	-	6	0.000	ARPA/NIKEK	MF	-	Test	Ulrich	WSMR	-
1966-A16	2439130.50	1966 Jan 5	HIBEX	-	7	0.000	ARPA/NIKEK	MS	-	Test	Ulrich/MR660124-9	SP-4007	-
1971-491	2441272.50	1971 Nov 17	Upstage	-	-	0.000	ARPA/SAFSC	MS	-	Test	AWS711206-23	WSMR	-
1972-441	2441398.50	1972 Mar 22	Upstage	-	-	0.000	ARPA/SAFSC	MS	-	Test	WSMR	-	Mar 22 or later
1972-483	2441437.50	1972 May	Upstage	-	-	0.000	ARPA/SAFSC	MS	-	Test	WSMR	-	-
1972-484	2441529.50	1972 Aug	Upstage	-	-	0.000	ARPA/SAFSC	MS	-	Test	WSMR	-	-









Launch Mission

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Launch_Mission	FlightCode	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee_Km	Range_Km	Dest
1953-A503	2434632.50	1953 Sep 12	X-7A-1	-	-	-	-	-	B-29	HADC	RM07/25?	WS	LPI	107	-	-
1953-A357	2434635.50	1953 Sep 15	Honest John	-	568	-	-	-	-	WS	-	-	-	107	-	-
1953-A359	2434636.50	1953 Sep 16	Honest John	-	313	-	-	-	-	WS	-	-	-	107	-	-
1953-A360	2434636.50	1953 Sep 16	Honest John	-	323	-	-	-	-	WS	-	-	-	107	-	-
1953-A365	2434643.50	1953 Sep 23	Honest John	-	569	-	-	-	-	WS	-	-	-	107	-	-
1953-A366	2434643.50	1953 Sep 23	Honest John	-	560	-	-	-	-	WS	-	-	-	107	-	-
1953-A370	2434645.50	1953 Sep 25	Honest John	-	70	-	-	-	-	WS	-	-	-	107	-	-
1953-A376	2434649.50	1953 Sep 29	Honest John	-	359G	-	-	-	-	WS	-	-	-	107	-	-
1953-A378	2434651.50	1953 Oct 01	Honest John	-	321S	-	-	-	-	WS	-	-	-	107	-	-
1953-A382	2434652.50	1953 Oct 02	Honest John	-	319S	-	-	-	-	WS	-	-	-	107	-	-
1953-A383	2434655.50	1953 Oct 05	Honest John	-	48P	-	-	-	-	WS	-	-	-	107	-	-
1953-A384	2434655.50	1953 Oct 05	Honest John	-	358G	-	-	-	-	WS	-	-	-	107	-	-
1953-A385	2434655.50	1953 Oct 05	Honest John	-	316S	-	-	-	-	WS	-	-	-	107	-	-
1953-A394	2434663.50	1953 Oct 13	Honest John	-	322S	-	-	-	-	WS	-	-	-	107	-	-
1953-A395	2434663.50	1953 Oct 13	Honest John	-	3	-	Warhead Accel Test	-	-	WS	-	-	-	107	-	-
1953-A494	2434665.50	1953 Oct 16	Father John	2	69H	-	-	-	-	WS	-	-	-	107	-	-
1953-A411	2434672.50	1953 Oct 22	Honest John	-	1DU	-	Demol John	-	-	WS	-	-	-	1P	-	-
1953-A416	2434673.50	1953 Oct 23	Honest John	-	4	-	Warhead Accel Test	-	-	WS	-	-	-	107	-	-
1953-A495	2434679.50	1953 Oct 29	Father John	2	5	-	Warhead Accel Test	-	-	WS	-	-	-	107	-	-
1953-A496	2434680.50	1953 Oct 30	Father John	2	208M	-	Warhead Accel Test	-	-	WS	-	-	-	107	-	-
1953-A424	2434684.50	1953 Nov 03	Honest John	-	207H	-	-	-	-	WS	-	-	-	107	-	-
1953-A425	2434684.50	1953 Nov 03	Honest John	-	2DU	-	-	-	-	WS	-	-	-	107	-	-
1953-A433	2434685.50	1953 Nov 04	Honest John	-	3DU	-	-	-	-	WS	-	-	-	107	-	-
1953-A435	2434691.50	1953 Nov 10	Honest John	-	4DU	-	-	-	-	WS	-	-	-	107	-	-
1953-A436	2434691.50	1953 Nov 10	Honest John	-	5DU	-	-	-	-	WS	-	-	-	107	-	-
1953-A437	2434693.50	1953 Nov 12	Honest John	-	209M	-	-	-	-	WS	-	-	-	107	-	-
1953-A442	2434695.50	1953 Nov 17	Honest John	-	210M	-	-	-	-	WS	-	-	-	107	-	-
1953-A443	2434695.50	1953 Nov 17	Honest John	-	356G	-	-	-	-	WS	-	-	-	107	-	-
1953-A445	2434695.50	1953 Nov 20	Honest John	-	6DU	-	-	-	-	WS	-	-	-	107	-	-
1953-A456	2434701.50	1953 Nov 20	Honest John	-	214M	-	-	-	B-29	HADC	RM07/25?	WS	LPI	107	-	-
1953-A457	2434701.50	1953 Nov 20	Honest John	-	356G	-	-	-	-	WS	-	-	-	107	-	-
1953-A459	2434705.50	1953 Nov 25	Honest John	-	422H	-	-	-	-	WS	-	-	-	107	-	-
1953-A504	2434720.50	1953 Dec 09	Honest John	-	6	-	Warhead Accel Test	-	-	WS	-	-	-	107	-	-
1953-A472	2434720.50	1953 Dec 10	Honest John	-	500C	-	-	-	-	WS	-	-	-	107	-	-
1953-A475	2434721.50	1953 Dec 10	Honest John	-	422H	-	-	-	-	WS	-	-	-	107	-	-
1953-A491	2434729.50	1953 Dec 18	Honest John	2	10	-	Warhead Accel Test	-	-	WS	-	-	-	107	-	-
1953-A497	2434777.50	1954	Father John	2	58P	-	-	-	-	WS	-	-	-	107	-	-
1954-A716	2434772.50	1954	Honest John	-	201M	-	-	-	-	WS	-	-	-	107	-	-
1954-A14	2434754.50	1954 Jan 12	Honest John	-	1618M	-	-	-	B-29	HADC	RM07/25?	WS	LPI	107	-	-
1954-A16	2434757.50	1954 Jan 15	Honest John	-	409M	-	-	-	-	WS	-	-	-	107	-	-
1954-A19	2434757.50	1954 Jan 15	Honest John	-	402ST	-	-	-	-	WS	-	-	-	107	-	-
1954-A25	2434761.50	1954 Jan 15	Honest John	-	417ET	-	-	-	-	WS	-	-	-	107	-	-
1954-A27	2434762.50	1954 Jan 16	Honest John	-	416ST	-	-	-	-	WS	-	-	-	107	-	-
1954-A28	2434762.50	1954 Jan 16	Honest John	-	217M	-	-	-	-	WS	-	-	-	107	-	-
1954-A31	2434766.50	1954 Jan 20	Honest John	-	430ST	-	-	-	-	WS	-	-	-	107	-	-
1954-A35	2434770.50	1954 Jan 26	Honest John	-	431ST	-	-	-	-	WS	-	-	-	107	-	-
1954-A38	2434774.50	1954 Jan 28	Honest John	-	432ST	-	-	-	-	WS	-	-	-	107	-	-
1954-A39	2434774.50	1954 Feb 01	Honest John	-	433ST	-	-	-	-	WS	-	-	-	107	-	-
1954-A40	2434775.50	1954 Feb 02	Honest John	-	434ST	-	-	-	-	WS	-	-	-	107	-	-
1954-A41	2434775.50	1954 Feb 02	Honest John	-	435ST	-	-	-	-	WS	-	-	-	107	-	-
1954-A42	2434782.50	1954 Feb 09	Honest John	-	378-0	-	-	-	-	WS	-	-	-	107	-	-
1954-A43	2434782.50	1954 Feb 09	Honest John	-	379-0	-	-	-	-	WS	-	-	-	107	-	-
1954-A46	2434783.50	1954 Feb 10	Honest John	-	436ST	-	-	-	-	WS	-	-	-	107	-	-
1954-A48	2434783.50	1954 Feb 10	Honest John	-	437ST	-	-	-	-	WS	-	-	-	107	-	-
1954-A50	2434784.50	1954 Feb 11	Honest John	-	438ST	-	-	-	-	WS	-	-	-	107	-	-
1954-A53	2434784.50	1954 Feb 11	Honest John	-	439ST	-	-	-	-	WS	-	-	-	107	-	-
1954-A54	2434785.50	1954 Feb 12	Honest John	-	440ST	-	-	-	-	WS	-	-	-	107	-	-
1954-A55	2434785.50	1954 Feb 12	Honest John	-	441ST	-	-	-	-	WS	-	-	-	107	-	-
1954-A56	2434785.50	1954 Feb 12	Honest John	-	442ST	-	-	-	-	WS	-	-	-	107	-	-
1954-A57	2434785.50	1954 Feb 15	Honest John	-	443ST	-	-	-	-	WS	-	-	-	107	-	-
1954-A58	2434789.50	1954 Feb 16	Honest John	-	444ST	-	-	-	-	WS	-	-	-	107	-	-
1954-A59	2434789.50	1954 Feb 16	Honest John	-	445ST	-	-	-	-	WS	-	-	-	107	-	-
1954-A60	2434789.50	1954 Feb 17	Honest John	-	446ST	-	-	-	-	WS	-	-	-	107	-	-
1954-A61	2434790.50	1954 Feb 17	Honest John	-	447ST	-	-	-	-	WS	-	-	-	107	-	-
1954-A65	2434791.50	1954 Feb 18	Honest John	-	203H	-	-	-	-	WS	-	-	-	107	-	-
1954-A67	2434791.50	1954 Feb 18	Honest John	-	448ST	-	-	-	-	WS	-	-	-	107	-	-
1954-A68	2434792.50	1954 Feb 19	Honest John	-	449ST	-	-	-	-	WS	-	-	-	107	-	-
1954-A71	2434792.50	1954 Feb 19	Honest John	-	450ST	-	-	-	-	WS	-	-	-	107	-	-
1954-A72	2434796.50	1954 Feb 23	Honest John	-	451ST	-	-	-	-	WS	-	-	-	107	-	-
1954-A77	2434796.50	1954 Feb 23	Honest John	-	452ST	-	-	-	-	WS	-	-	-	107	-	-
1954-A74	2434797.50	1954 Feb 24	Honest John	-	453ST	-	-	-	-	WS	-	-	-	107	-	-
1954-A75	2434797.50	1954 Feb 24	Honest John	-	454ST	-	-	-	-	WS	-	-	-	107	-	-
1954-A76	2434797.50	1954 Feb 24	Honest John	-	455ST	-	-	-	-	WS	-	-	-	107	-	-
1954-A722	2434797.50	1954 Feb 24	Honest John	-	456ST	-	-	-	-	WS	-	-	-	107	-	-
1954-A732	2434797.50	1954 Feb 24	Honest John	-	457ST	-	-	-	-	WS	-	-	-	107	-	-
1954-A78	2434798.50	1954 Feb 25	Honest John	-	458ST	-	-	-	-	WS	-	-	-	107	-	-
1954-A79	2434798.50	1954 Feb 25	Honest John	-	459ST	-	-	-	-	WS	-	-	-	107	-	-
1954-A82	2434798.50	1954 Feb 26	Honest John	-	460ST	-	-	-	-	WS	-	-	-	107	-	-
1954-A83	2434799.50	1954 Feb 26	Honest John	-	461ST	-	-	-	-	WS	-	-	-	107	-	-
1954-A87	2434799.50	1954 Feb 26	Honest John	-	462ST	-	-	-	-	WS	-	-	-	107	-	-
1954-A88	2434802.50	1954 Feb 26	Honest John	-	463ST	-	-	-	-	WS	-	-	-	107	-	-
1954-A90	2434802.50	1954 Feb 26	Honest John	-	464ST	-	-	-	-	WS	-	-	-	107	-	-
1954-A91	2434804.50	1954 Mar 03	Honest John	-	381-0	-	-	-	-	WS	-	-	-	107	-	-
1954-A93	2434804.50	1954 Mar 03	Honest John	-	380-0	-	-	-	-	WS	-	-	-	107	-	-
1954-A94	2434805.50	1954 Mar 04	Honest John	-	292-T	-	-	-	-	WS	-	-	-	107	-	-
1954-A95	2434805.50	1954 Mar 04	Honest John	-	293-T	-	-	-	-	WS	-	-	-	107	-	-
1954-A96	2434805.50	1954 Mar 04	Honest John	-	294-T	-	-	-	-	WS	-	-	-	107	-	-
1954-A97	2434805.50	1954 Mar 04	Honest John	-	295-T	-	-	-	-	WS	-	-	-	107	-	-
1954-A98	2434806.50	1954 Mar 05	Honest John	-	296-T	-	-	-	-	WS	-	-	-	107	-	-
1954-A108	2434811.50	1954 Mar 10	Honest John	-	220	-	-	-	-	WS	-	-	-	107	-	-
1954-A113	2434819.50	1954 Mar 18	Honest John	-	202	-	-	-	-	WS	-	-	-	107	-	-
1954-A117	2434820.50	1954 Mar 19	Honest John	-	500	-	-	-	-	WS	-	-	-	107	-	-



Launch Mission

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Mission	FlightCode	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee_Km	Range_Km	Dest
1954-4602	2435045.50	1954 Nov 02	Honest John	-	450M	-	-	-	-	WS	-	-	-	107	-	-
1954-4603	2435045.50	1954 Nov 02	Honest John	-	416M	-	-	-	-	WS	-	-	-	107	-	-
1954-4604	2435045.50	1954 Nov 03	Honest John	-	455M	-	-	-	-	WS	-	-	-	107	-	-
1954-4605	2435045.50	1954 Nov 04	Honest John	-	742	-	-	-	-	WS	-	-	-	107	-	-
1954-4606	2435050.50	1954 Nov 04	Honest John	-	653	-	-	-	-	WS	-	-	-	107	-	-
1954-4607	2435050.50	1954 Nov 05	Honest John	-	735	-	-	-	-	WS	-	-	-	107	-	-
1954-4610	2435051.50	1954 Nov 05	Honest John	-	471H	-	-	-	-	WS	-	-	-	107	-	-
1954-4616	2435055.50	1954 Nov 09	Honest John	-	473M	-	-	-	-	WS	-	-	-	107	-	-
1954-4617	2435055.50	1954 Nov 09	Honest John	-	547H	-	-	-	-	WS	-	-	-	107	-	-
1954-4621	2435056.50	1954 Nov 10	Honest John	2	9	-	Papa John 553-3	-	-	WS	-	-	-	107	-	-
1954-4631	2435061.50	1954 Nov 15	Honest John	-	795	-	-	-	-	WS	-	-	-	107	-	-
1954-4632	2435061.50	1954 Nov 15	Honest John	-	791	-	-	-	-	WS	-	-	-	107	-	-
1954-4635	2435063.50	1954 Nov 17	Honest John	-	442	-	-	-	-	WS	-	-	-	107	-	-
1954-4636	2435063.50	1954 Nov 19	Honest John	-	789	-	-	-	-	WS	-	-	-	107	-	-
1954-4643	2435065.50	1954 Nov 19	Honest John	-	790	-	-	-	-	WS	-	-	-	107	-	-
1954-4644	2435065.50	1954 Nov 19	Honest John	-	861	-	-	-	-	WS	-	-	-	107	-	-
1954-4649	2435066.50	1954 Nov 22	Honest John	-	862	-	-	-	-	WS	-	-	-	107	-	-
1954-4652	2435068.50	1954 Nov 23	Honest John	-	456M	-	-	-	-	WS	-	-	-	107	-	-
1954-4653	2435069.50	1954 Nov 23	Honest John	-	509M	-	-	-	-	WS	-	-	-	107	-	-
1954-4658	2435070.50	1954 Nov 24	Honest John	-	409M	-	-	-	-	WS	-	-	-	107	-	-
1954-4663	2435075.50	1954 Nov 29	Honest John	-	MX-883	-	-	-	B-29	HADC	RM07/25?	WS	LPI	107	-	-
1954-4664	2435075.50	1954 Nov 29	Honest John	-	494ES	-	-	-	-	WS	-	-	-	107	-	-
1954-4665	2435077.50	1954 Dec 01	Honest John	-	494H	-	-	-	-	WS	-	-	-	107	-	-
1954-4673	2435082.50	1954 Dec 06	Honest John	-	722FO	-	-	-	-	WS	-	-	-	107	-	-
1954-4674	2435082.50	1954 Dec 06	Honest John	-	794FO	-	-	-	-	WS	-	-	-	107	-	-
1954-4680	2435084.50	1954 Dec 06	Honest John	-	117AEM	-	-	-	-	WS	-	-	-	107	-	-
1954-4684	2435085.50	1954 Dec 06	Honest John	-	549ES	-	-	-	-	WS	-	-	-	107	-	-
1954-4689	2435089.50	1954 Dec 13	Honest John	-	596ES	-	-	-	-	WS	-	-	-	107	-	-
1954-4695	2435090.50	1954 Dec 13	Honest John	-	MX-624-NM	-	-	-	-	WS	-	-	-	107	-	-
1954-4698	2435090.50	1954 Dec 14	Honest John	-	MX-644-NM	-	-	-	-	HADC	RM07/25?	WS	LPI	107	-	-
1954-4737	2435090.50	1954 Dec 14	Honest John	-	MX-883	-	-	-	B-29	HADC	RM07/25?	WS	LPI	107	-	-
1954-4758	2435097.50	1954 Dec 21	Honest John	-	MX-883	-	-	-	B-29	HADC	RM07/25?	WS	LPI	107	-	-
1955-4655	2435125.50	1955 Jan 16	Honest John	-	467	-	-	-	-	WS	-	-	-	107	-	-
1955-430	2435125.50	1955 Jan 19	Honest John	-	758M	-	-	-	-	WS	-	-	-	107	-	-
1955-435	2435125.50	1955 Jan 21	Honest John	-	793M	-	-	-	-	WS	-	-	-	107	-	-
1955-436	2435125.50	1955 Jan 21	Honest John	-	794M	-	-	-	-	WS	-	-	-	107	-	-
1955-437	2435125.50	1955 Jan 21	Honest John	-	794M	-	-	-	-	WS	-	-	-	107	-	-
1955-438	2435125.50	1955 Jan 21	Honest John	-	759M	-	-	-	-	WS	-	-	-	107	-	-
1955-443	2435132.50	1955 Jan 25	Honest John	-	MX-87A	-	-	-	-	WS	-	-	-	107	-	-
1955-444	2435132.50	1955 Jan 25	Honest John	-	3-5HA	-	-	-	-	WS	-	-	-	107	-	-
1955-445	2435132.50	1955 Jan 25	Honest John	-	3-5HA	-	-	-	-	WS	-	-	-	107	-	-
1955-446	2435132.50	1955 Jan 25	Honest John	-	2-668M	-	-	-	-	WS	-	-	-	107	-	-
1955-451	2435134.50	1955 Jan 27	Honest John	-	MX-790-AO	-	-	-	-	WS	-	-	-	107	-	-
1955-452	2435134.50	1955 Jan 27	Honest John	-	894-AO	-	-	-	-	WS	-	-	-	107	-	-
1955-455	2435135.50	1955 Jan 28	Honest John	-	914-AO	-	-	-	-	WS	-	-	-	107	-	-
1955-456	2435135.50	1955 Jan 28	Honest John	-	975-AO	-	-	-	-	WS	-	-	-	107	-	-
1955-457	2435135.50	1955 Jan 28	Honest John	-	510-RN	-	-	-	-	WS	-	-	-	107	-	-
1955-462	2435139.50	1955 Feb 01	Honest John	-	469-RN	-	-	-	-	WS	-	-	-	107	-	-
1955-463	2435139.50	1955 Feb 01	Honest John	-	MX-583	-	-	-	B-29	HADC	RM07/25?	WS	LPI	107	-	-
1955-4656	2435145.50	1955 Feb 08	Honest John	-	9608M	-	-	-	-	WS	-	-	-	107	-	-
1955-480	2435145.50	1955 Feb 08	Honest John	-	9328M	-	-	-	-	WS	-	-	-	107	-	-
1955-481	2435145.50	1955 Feb 08	Honest John	-	9348M	-	-	-	-	WS	-	-	-	107	-	-
1955-482	2435145.50	1955 Feb 08	Honest John	-	289-ES	-	-	-	-	WS	-	-	-	107	-	-
1955-483	2435145.50	1955 Feb 11	Honest John	-	136-ES	-	-	-	-	WS	-	-	-	107	-	-
1955-4553	2435153.50	1955 Feb 11	Honest John	-	939-ES	-	-	-	-	WS	-	-	-	107	-	-
1955-4554	2435153.50	1955 Feb 14	Honest John	-	935-ES	-	-	-	-	WS	-	-	-	107	-	-
1955-4559	2435162.50	1955 Feb 24	Honest John	-	835-FO	-	-	-	-	WS	-	-	-	107	-	-
1955-4130	2435162.50	1955 Feb 24	Honest John	-	839-FO	-	-	-	-	WS	-	-	-	107	-	-
1955-4131	2435162.50	1955 Feb 24	Honest John	-	839-FO	-	-	-	-	WS	-	-	-	107	-	-
1955-4132	2435162.50	1955 Feb 24	Honest John	-	911-ES	-	-	-	-	WS	-	-	-	107	-	-
1955-4657	2435162.50	1955 Feb 24	Honest John	-	MX-583	-	-	-	B-29	HADC	RM07/25?	WS	LPI	107	-	-
1955-4141	2435168.50	1955 Mar 02	Honest John	-	5708M	-	-	-	-	WS	-	-	-	107	-	-
1955-4141	2435175.50	1955 Mar 09	Honest John	-	MX-102-EM	-	-	-	-	WS	-	-	-	107	-	-
1955-4192	2435180.50	1955 Mar 14	Honest John	-	MX-930-RM	-	-	-	-	WS	-	-	-	107	-	-
1955-4193	2435180.50	1955 Mar 14	Honest John	-	MX-919-RM	-	-	-	-	WS	-	-	-	107	-	-
1955-4197	2435182.50	1955 Mar 16	Honest John	-	172-A-EM	-	-	-	-	WS	-	-	-	107	-	-
1955-4204	2435188.50	1955 Mar 22	Honest John	-	9148M	-	-	-	-	WS	-	-	-	107	-	-
1955-4205	2435188.50	1955 Mar 22	Honest John	-	9988M	-	-	-	-	WS	-	-	-	107	-	-
1955-4208	2435188.50	1955 Mar 23	Honest John	-	417EM	-	-	-	-	WS	-	-	-	107	-	-
1955-4213	2435190.50	1955 Mar 24	Honest John	-	840FO	-	-	-	-	WS	-	-	-	107	-	-
1955-4214	2435190.50	1955 Mar 24	Honest John	-	837FO	-	-	-	-	WS	-	-	-	107	-	-
1955-4217	2435191.50	1955 Mar 25	Honest John	-	MX-957-PO	-	-	-	-	WS	-	-	-	107	-	-
1955-4218	2435191.50	1955 Mar 25	Honest John	-	MX-959-PO	-	-	-	-	WS	-	-	-	107	-	-
1955-4219	2435191.50	1955 Mar 25	Honest John	-	MX-958-PO	-	-	-	-	WS	-	-	-	107	-	-
1955-4220	2435191.50	1955 Mar 25	Honest John	-	MX-961-PO	-	-	-	-	WS	-	-	-	107	-	-
1955-4223	2435194.50	1955 Mar 28	Honest John	-	9178S	-	-	-	-	WS	-	-	-	107	-	-
1955-4229	2435196.50	1955 Mar 30	Honest John	-	944-EM	-	-	-	-	WS	-	-	-	107	-	-
1955-4232	2435198.50	1955 Apr 01	Honest John	-	MX-970-PO	-	-	-	-	WS	-	-	-	107	-	-
1955-4236	2435198.50	1955 Apr 01	Honest John	-	9318M	-	-	-	-	WS	-	-	-	107	-	-
1955-4237	2435198.50	1955 Apr 01	Honest John	-	MX-967-PO	-	-	-	-	WS	-	-	-	107	-	-
1955-4239	2435201.50	1955 Apr 04	Honest John	-	9228M	-	-	-	-	WS	-	-	-	107	-	-
1955-4240	2435201.50	1955 Apr 04	Honest John	-	MX-829-PO	-	-	-	-	WS	-	-	-	107	-	-
1955-4246	2435202.50	1955 Apr 05	Honest John	-	MX-834-PO	-	-	-	-	WS	-	-	-	107	-	-
1955-4247	2435202.50	1955 Apr 05	Honest John	-	11A-EM	-	-	-	-	WS	-	-	-	107	-	-
1955-4251	2435203.50	1955 Apr 06	Honest John	-	MX-883	-	-	-	-	WS	-	-	-	107	-	-
1955-4670	2435204.50	1955 Apr 7	Honest John	-	MX-77A-1	-	-	-	B-29	HADC	RM07/25?	WS	LPI	107	-	-

Launch Mission

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee_Km	Range_Km	Dest
1955-A262	2435205.50	1955 Apr 08	Honest John	-	M-116-ABS	-	WS	-	-	-	107	-	-
1955-A263	2435205.50	1955 Apr 08	Honest John	-	M-969-PD	-	WS	-	-	-	107	-	-
1955-A264	2435205.50	1955 Apr 08	Honest John	-	M-971-PD	-	WS	-	-	-	107	-	-
1955-A265	2435205.50	1955 Apr 08	Honest John	-	1046RM	-	WS	-	-	-	107	-	-
1955-A282	2435216.50	1955 Apr 19	Honest John	-	1045RM	-	WS	-	-	-	107	-	-
1955-A283	2435216.50	1955 Apr 19	Honest John	-	M-830-PD	-	WS	-	-	-	107	-	-
1955-A288	2435217.50	1955 Apr 20	Honest John	-	M-838-PD	-	WS	-	-	-	107	-	-
1955-A289	2435217.50	1955 Apr 20	Honest John	-	921-ES	-	WS	-	-	-	107	-	-
1955-A566	2435218.50	1955 Apr 21	Honest John	-	M-883	-	WS	-	-	-	107	-	-
1955-A668	2435230.50	1955 Apr 29	X-A-1	-	M-883	-	WS	RM07/25?	WS	-	107	-	-
1955-A330	2435230.50	1955 May 03	Honest John	-	1019RM	-	WS	-	-	-	107	-	-
1955-A351	2435230.50	1955 May 03	Honest John	-	1034RM	-	WS	-	-	-	107	-	-
1955-A369	2435237.50	1955 May 10	Honest John	-	1029RM	-	WS	-	-	-	107	-	-
1955-A369	2435237.50	1955 May 10	Honest John	-	1087RM	-	WS	-	-	-	107	-	-
1955-A360	2435237.50	1955 May 10	Honest John	-	1028RM	-	WS	-	-	-	107	-	-
1955-A376	2435251.50	1955 May 24	Honest John	-	1018RM	-	WS	-	-	-	107	-	-
1955-A377	2435251.50	1955 May 24	Honest John	-	1035RO	-	WS	-	-	-	107	-	-
1955-A398	2435254.50	1955 May 27	Honest John	-	1056RO	-	WS	-	-	-	107	-	-
1955-A413	2435260.50	1955 Jun 02	Honest John	-	1032RS	-	WS	-	-	-	107	-	-
1955-A418	2435261.50	1955 Jun 03	Honest John	-	1036RO	-	WS	-	-	-	107	-	-
1955-A419	2435261.50	1955 Jun 03	Honest John	-	1036RO	-	WS	-	-	-	107	-	-
1955-A671	2435274.50	1955 Jun 16	Honest John	-	-	-	WS	-	-	-	107	-	-
1955-A672	2435275.50	1955 Jun 17	Honest John	-	-	-	WS	-	-	-	107	-	-
1955-A673	2435275.50	1955 Jun 20	Honest John	-	-	-	WS	-	-	-	107	-	-
1955-A674	2435275.50	1955 Jun 20	Honest John	-	-	-	WS	-	-	-	107	-	-
1955-A675	2435279.50	1955 Jun 21	Honest John	-	-	-	WS	-	-	-	107	-	-
1955-A676	2435279.50	1955 Jun 21	Honest John	-	-	-	WS	-	-	-	107	-	-
1955-A677	2435285.50	1955 Jun 28	Honest John	-	-	-	WS	-	-	-	107	-	-
1955-A678	2435285.50	1955 Jun 30	Honest John	-	-	-	WS	-	-	-	107	-	-
1955-A679	2435285.50	1955 Jun 30	Honest John	-	-	-	WS	-	-	-	107	-	-
1955-A680	2435293.50	1955 Jul 5	Honest John	-	-	-	WS	-	-	-	107	-	-
1955-A681	2435293.50	1955 Jul 5	Honest John	-	-	-	WS	-	-	-	107	-	-
1955-A682	2435301.50	1955 Jul 13	Honest John	-	-	-	WS	-	-	-	107	-	-
1955-A683	2435301.50	1955 Jul 13	Honest John	-	-	-	WS	-	-	-	107	-	-
1955-A684	2435306.50	1955 Jul 13	Honest John	-	-	-	WS	-	-	-	107	-	-
1955-A685	2435306.50	1955 Jul 16	Honest John	-	-	-	WS	-	-	-	107	-	-
1955-A686	2435314.50	1955 Jul 16	Honest John	-	-	-	WS	-	-	-	107	-	-
1955-A686	2435314.50	1955 Jul 16	Honest John	-	-	-	WS	-	-	-	107	-	-
1955-A687	2435316.50	1955 Jul 26	Honest John	-	-	-	WS	-	-	-	107	-	-
1955-A471	2435365.50	1955 Sep 15	HJ Mike	-	-	-	WT	-	-	-	107	-	-
1955-A489	2435367.50	1955 Dec 21	HJ Mike T40 T55	-	-	-	WT	-	-	-	107	-	-
1956-A32	2435391.50	1956 Mar 9	HJ Mike	-	-	-	WT	-	-	-	107	-	-
1956-A46	2435397.50	1956 Apr 9	HJ Mike	-	-	-	WT	-	-	-	107	-	-
1956-A61	2435397.50	1956 Jun 6	HJ Mike Tri-Deacon T40	-	-	-	WT	-	-	-	307	-	-
1956-A69	2435399.50	1956 Jun 6	HJ Mike T40	-	-	-	WT	-	-	-	307	-	-
1956-A69	2435399.50	1956 Jun 24	HJ Mike Mike Recruit T55	-	-	-	WT	-	-	-	307	-	-
1956-A69	2435399.50	1956 Aug 24	HJ Mike Mike Recruit T55	-	-	-	WT	-	-	-	307	-	-
1956-A69	2435399.50	1956 Oct 11	HJ Mike Mike Recruit T55	-	-	-	WT	-	-	-	307	-	-
1956-A126	2435399.50	1956 Dec 20	HJ Mike Mike Recruit T55	-	-	-	WT	-	-	-	307	-	-
1957-A15	2435399.50	1957 Jan 24	HJ Mike Mike Recruit T55	-	-	-	WT	-	-	-	307	-	-
1957-A20	2435399.50	1957 Mar 16	HJ Mike Mike Recruit T55	-	-	-	WT	-	-	-	307	-	-
1957-A22	2435399.50	1957 Apr 10	HJ Mike Mike Recruit T55	-	-	-	WT	-	-	-	307	-	-
1957-A51	2435399.50	1957 Jun 19	HJ Mike Mike Recruit T55	-	-	-	WT	-	-	-	307	-	-
1957-A87	2435399.50	1957 Aug 2	HJ Mike Mike Recruit T55	-	-	-	WT	-	-	-	307	-	-
1957-A87	2435399.50	1957 Aug 29	HJ Mike Mike Recruit T55	-	-	-	WT	-	-	-	307	-	-
1957-A117	2435399.50	1957 Oct 8	HJ Mike Mike Recruit T55	-	-	-	WT	-	-	-	307	-	-
1957-A117	2435399.50	1957 Oct 25	HJ Mike Mike Recruit T55	-	-	-	WT	-	-	-	307	-	-
1958-A04	2435399.50	1958 Feb 28	HJ Mike Mike Recruit T55	-	-	-	WT	-	-	-	307	-	-
1958-A13	2435399.50	1958 Feb 28	HJ Mike Mike Recruit T55	-	-	-	WT	-	-	-	307	-	-
1958-A13	2435399.50	1958 Apr 24	HJ Mike Mike Recruit T55	-	-	-	WT	-	-	-	307	-	-
1958-A43	2435399.50	1958 May 16	HJ Mike Mike Recruit T55	-	-	-	WT	-	-	-	307	-	-
1958-A176	2435399.50	1958 May 17	Improved Honest John	-	-	-	WT	-	-	-	307	-	-
1958-A89	2435399.50	1958 Jun 26	HJ Mike Mike Recruit T55	-	-	-	WT	-	-	-	307	-	-
1958-A89	2435399.50	1958 Jun 27	HJ Mike Mike Recruit T55	-	-	-	WT	-	-	-	307	-	-
1958-A177	2435399.50	1958 Jul 9	Improved Honest John	-	-	-	WT	-	-	-	307	-	-
1958-A177	2435399.50	1958 Jul 11	Jason	-	-	-	WT	-	-	-	307	-	-
1958-A175	2435399.50	1958 Jul 17	Jason	-	-	-	WT	-	-	-	307	-	-
1958-A178	2435399.50	1958 Jul 17	Jason	-	-	-	WT	-	-	-	307	-	-
1958-A178	2435399.50	1958 Jul 24	Improved Honest John	-	-	-	WT	-	-	-	307	-	-
1958-A178	2435399.50	1958 Aug 1	Improved Honest John	-	-	-	WT	-	-	-	307	-	-
1958-A179	2435399.50	1958 Aug 6	Improved Honest John	-	-	-	WT	-	-	-	307	-	-
1958-A180	2435399.50	1958 Aug 12	Improved Honest John	-	-	-	WT	-	-	-	307	-	-
1958-A180	2435399.50	1958 Aug 15 0416	Improved Honest John	-	-	-	WT	-	-	-	307	-	-
1958-A181	2435399.50	1958 Aug 19	Improved Honest John	-	-	-	WT	-	-	-	307	-	-
1958-A181	2435399.50	1958 Aug 20 1127	Improved Honest John	-	-	-	WT	-	-	-	307	-	-
1958-A182	2435399.50	1958 Aug 25	Improved Honest John	-	-	-	WT	-	-	-	307	-	-
1958-A183	2435399.50	1958 Aug 25	Improved Honest John	-	-	-	WT	-	-	-	307	-	-
1958-A183	2435399.50	1958 Aug 25 1817	Jason	-	-	-	WT	-	-	-	307	-	-
1958-A183	2435399.50	1958 Aug 27 0333	Jason	-	-	-	WT	-	-	-	307	-	-
1958-A183	2435399.50	1958 Aug 27 0424	Jason	-	-	-	WT	-	-	-	307	-	-
1958-A183	2435399.50	1958 Aug 27 0642	Jason	-	-	-	WT	-	-	-	307	-	-
1958-A173	2435399.50	1958 Aug 27 0642	Jason	-	-	-	WT	-	-	-	307	-	-
1958-A179	2435399.50	1958 Aug 30 0348	Jason	-	-	-	WT	-	-	-	307	-	-
1958-A179	2435399.50	1958 Aug 30 0348	Jason	-	-	-	WT	-	-	-	307	-	-
1958-A180	2435399.50	1958 Aug 30 0431	Jason	-	-	-	WT	-	-	-	307	-	-
1958-A181	2435399.50	1958 Aug 30 0518	Jason	-	-	-	WT	-	-	-	307	-	-
1958-A182	2435399.50	1958 Aug 30 0552	Jason	-	-	-	WT	-	-	-	307	-	-
1958-A183	2435399.50	1958 Aug 30 0636	Jason	-	-	-	WT	-	-	-	307	-	-
1958-A184	2435399.50	1958 Aug 30 0721	Jason	-	-	-	WT	-	-	-	307	-	-
1958-A185	2435399.50	1958 Aug 30 2202	Jason	-	-	-	WT	-	-	-	307	-	-



Launch Mission

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Launch_Mission	FlightCode	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee_Km	Range_Km	Dest
1961-3853	2437946.50	1961 Feb 18	Strongarm	-	E22-HI-2	Geodetic Flares	-	-	-	WI	-	-	-	2027	-	-
1961-002	2437410.75	1961 Apr 21 0656:20	Trailblazer 1	-	TB Ig	-	Meteor	-	-	WI	-	-	-	280	-	-
1961-3128	2437411.33	1961 Apr 27 2002	Javelin	-	MSA 8.10GI	P-21 program	-	-	-	WI	-	-	-	724	-	-
1961-3153	2437437.76	1961 May 18 0610	Trailblazer 1	-	TB Ih	-	-	-	-	WI	-	-	-	260	-	-
1961-3177	2437463.72	1961 Jun 13 0512	Javelin	-	MSA 8.09GI	P-21 program	-	-	-	WI	-	-	-	867	-	-
1961-3179	2437465.50	1961 Jun 15 0002:59	Javelin	-	MSA 8.131I	Antenna deploy test	-	-	-	WI	-	-	-	901	-	-
1961-3157	2437475.47	1961 Jun 24 2317	Javelin	-	MSA 8.15AI	S-48 Topside Sounder	-	-	-	WI	-	-	-	1018	-	-
1961-3235	2437507.99	1961 Jul 27 1145	Strongarm	1	CRL AM11.50I	Ion density	-	-	-	WS	-	-	-	75	-	-
1961-3235	2437523.10	1961 Aug 11 1430	Exos	-	CRL AM13.194	MS release	-	-	-	EGL	-	-	-	114	-	-
1961-3283	2437555.90	1961 Sep 13 0932	Javelin	-	MSA 8.06CA	MS release	-	-	-	WI	-	-	-	331	-	-
1961-3283	2437556.50	1961 Sep 17 0447	Javelin	-	MSA 8.23GA	MS release	-	-	-	WI	-	-	-	260	-	-
1961-3289	2437565.70	1961 Oct 10 1740	Trailblazer 1	-	TB Ii	Topside Sounder	-	-	-	WI	-	-	-	431	-	-
1961-3289	2437565.70	1961 Oct 10 1740	Javelin	-	MSA 8.17AI	MS release	-	-	-	WI	-	-	-	1055	-	-
1961-3333	2437586.68	1961 Oct 14 0426	Javelin	-	MSA 8.16AI	MS release	-	-	-	WI	-	-	-	610	-	-
1961-3381	2437621.17	1961 Nov 17 1606	Javelin	-	MSA 8.16AI	MS release	-	-	-	WI	-	-	-	960	-	-
1962-3356	2437702.99	1962 Feb 7 1150	Javelin	-	TB Ij	Topside Sounder	-	-	-	WI	-	-	-	260	-	-
1962-3356	2437757.71	1962 Apr 3 0457	Trailblazer 1	-	TB Ij	Topside Sounder	-	-	-	WI	-	-	-	260	-	-
1962-3124	2437786.33	1962 May 3 2000	Javelin	-	MSA 8.21GI	ELF electron trap	-	-	-	WI	-	-	-	645	-	-
1962-3228	2437854.87	1962 Jul 9 0850	Javelin	-	Project 6.4/J1	STARFISH Diag.	-	-	-	WI	-	-	-	325?	-	-
1962-4107	2437854.87	1962 Jul 9 0858:30	HJ Mike	-	Project 6.3/A-X-3	STARFISH Rad X-3	-	-	-	WI	-	-	-	0?	-	-
1962-5236	2437854.88	1962 Jul 9 0907:00	HJ Mike	-	Project 6.3/A-X-4	STARFISH Rad X-4	-	-	-	WI	-	-	-	89?	-	-
1962-5229	2437854.88	1962 Jul 9 0907:00	Javelin	-	Project 6.4/J2	STARFISH Diag.	-	-	-	WI	-	-	-	500?	-	-
1962-3523	2437854.89	1962 Jul 9 0916	Javelin	-	Project 6.4/J2	STARFISH Diag.	-	-	-	WI	-	-	-	500?	-	-
1962-3524	2437854.89	1962 Jul 9 0920:12	Javelin	-	Project 6.2	STARFISH Diag.	-	-	-	WI	-	-	-	640?	-	-
1962-3525	2437854.90	1962 Jul 9 0940	Javelin	-	Project 6.2	STARFISH Diag.	-	-	-	WI	-	-	-	640?	-	-
1962-3254	2437858.50	1962 Jul 23	Javelin	-	TB Ix	Bipolar Probe	-	-	-	WI	-	-	-	500?	-	-
1962-3270	2437873.62	1962 Jul 28 0250	Trailblazer 1	-	TB Ix	Bipolar Probe	-	-	-	WI	-	-	-	280?	-	-
1962-3277	2437880.24	1962 Aug 3 1746	Exos	-	-	-	-	-	-	EGL	-	-	-	365	-	-
1962-3353	2437946.50	1962 Oct 11	HJ Mike	?	-	-	-	-	-	KAU	-	-	-	100?	-	-
1962-3408	2437958.50	1962 Oct 21	HJ Mike	-	AC20.463	Firefly III ETHEL	-	-	-	KAU	-	-	-	100?	-	-
1962-3417	2437961.30	1962 Oct 23 1910:00	HJ Mike Mike	-	CRL AM13.195	Firefly III ETHEL	-	-	-	EGL	-	-	-	159	-	-
1962-3429	2437962.75	1962 Oct 26 0600	Exos	-	X-11	-	-	-	-	EGL	-	-	-	669	-	-
1962-3429	2437963.92	1962 Oct 26 0958	HJ Mike	-	X-12	-	-	-	-	JI	-	-	-	100?	-	-
1962-3430	2437963.92	1962 Oct 26 1005	HJ Mike	-	X-14	-	-	-	-	JI	-	-	-	100?	-	-
1962-3431	2437963.92	1962 Oct 26 1011	HJ Mike	-	X-17	-	-	-	-	JI	-	-	-	100?	-	-
1962-3433	2437963.93	1962 Oct 26 1022	HJ Mike	-	-	Mass spectrometer	-	-	-	JI	-	-	-	500?	-	-
1962-3425	2437963.90	1962 Oct 26	Javelin	-	-	-	-	-	-	KAU	-	-	-	100?	-	-
1962-3426	2437966.50	1962 Oct 29	HJ Mike	?	AC20.461	Firefly III HAZEL	-	-	-	EGL	-	-	-	100?	-	-
1962-3451	2437969.48	1962 Oct 31 2332:00	HJ Mike Mike	-	AC20.461	Firefly III HAZEL	-	-	-	EGL	-	-	-	96	-	-
1962-3454	2437970.01	1962 Nov 1 1208	HJ Mike	-	X-20	Electron density	-	-	-	JI	-	-	-	100?	-	-
1962-3455	2437970.01	1962 Nov 1 1216	HJ Mike	-	X-24	Electron density	-	-	-	JI	-	-	-	100?	-	-
1962-3456	2437970.02	1962 Nov 1 1224	HJ Mike	-	X-25	Electron density	-	-	-	JI	-	-	-	100?	-	-
1962-3456	2437970.03	1962 Nov 1 1224	HJ Mike	-	X-26	Electron density	-	-	-	JI	-	-	-	100?	-	-
1962-3459	2437970.69	1962 Nov 2 0427:59	HJ Mike	-	AC20.462	Firefly III LISA	-	-	-	EGL	-	-	-	170?	-	-
1962-3461	2437995.50	1962 Nov 27	Javelin	-	AC20.462	Firefly III LISA	-	-	-	EGL	-	-	-	170?	-	-
1962-3461	2437995.50	1962 Nov 27 0000	HJ Mike	-	AC20.464	Firefly III MABEL	-	-	-	EGL	-	-	-	600?	-	-
1962-3462	2438005.50	1962 Nov 27 0445:00	HJ Mike Mike	-	AC20.465	Firefly III DORIS	-	-	-	EGL	-	-	-	121	-	-
1962-3526	2438003.50	1962 Dec 5 0945:00	HJ Mike Mike	-	AC20.465	Firefly III DORIS	-	-	-	EGL	-	-	-	150?	-	-
1962-3526	2438004.93	1962 Dec 6 1031:00	HJ Mike Mike	-	AC20.469	Firefly III PATSY	-	-	-	EGL	-	-	-	89?	-	-
1962-3526	2438004.93	1962 Dec 6 1031:00	HJ Mike Mike	-	AC20.469	Firefly III PATSY	-	-	-	EGL	-	-	-	89?	-	-
1962-3528	2438001.48	1962 Dec 12 2346	HJ Mike Mike	-	AC20.466	Firefly III EWA	-	-	-	EGL	-	-	-	40?	-	-
1962-3528	2438001.48	1962 Dec 12 2346	HJ Mike Mike	-	AC20.466	Firefly III EWA	-	-	-	EGL	-	-	-	40?	-	-
1962-3528	2438001.48	1962 Dec 12 2346	HJ Mike Mike	-	AC20.466	Firefly III HEITY	-	-	-	EGL	-	-	-	40?	-	-
1962-3528	2438001.48	1962 Dec 12 2346	HJ Mike Mike	-	AC20.466	Firefly III HEITY	-	-	-	EGL	-	-	-	40?	-	-
1962-3528	2438001.48	1962 Dec 12 2346	HJ Mike Mike	-	AC20.466	Firefly III HEITY	-	-	-	EGL	-	-	-	40?	-	-
1962-3528	2438001.48	1962 Dec 12 2346	HJ Mike Mike	-	AC20.466	Firefly III HEITY	-	-	-	EGL	-	-	-	40?	-	-
1962-3528	2438001.48	1962 Dec 12 2346	HJ Mike Mike	-	AC20.466	Firefly III HEITY	-	-	-	EGL	-	-	-	40?	-	-
1962-3528	2438001.48	1962 Dec 12 2346	HJ Mike Mike	-	AC20.466	Firefly III HEITY	-	-	-	EGL	-	-	-	40?	-	-
1962-3528	2438001.48	1962 Dec 12 2346	HJ Mike Mike	-	AC20.466	Firefly III HEITY	-	-	-	EGL	-	-	-	40?	-	-
1962-3528	2438001.48	1962 Dec 12 2346	HJ Mike Mike	-	AC20.466	Firefly III HEITY	-	-	-	EGL	-	-	-	40?	-	-
1962-3528	2438001.48	1962 Dec 12 2346	HJ Mike Mike	-	AC20.466	Firefly III HEITY	-	-	-	EGL	-	-	-	40?	-	-
1962-3528	2438001.48	1962 Dec 12 2346	HJ Mike Mike	-	AC20.466	Firefly III HEITY	-	-	-	EGL	-	-	-	40?	-	-
1962-3528	2438001.48	1962 Dec 12 2346	HJ Mike Mike	-	AC20.466	Firefly III HEITY	-	-	-	EGL	-	-	-	40?	-	-
1962-3528	2438001.48	1962 Dec 12 2346	HJ Mike Mike	-	AC20.466	Firefly III HEITY	-	-	-	EGL	-	-	-	40?	-	-
1962-3528	2438001.48	1962 Dec 12 2346	HJ Mike Mike	-	AC20.466	Firefly III HEITY	-	-	-	EGL	-	-	-	40?	-	-
1962-3528	2438001.48	1962 Dec 12 2346	HJ Mike Mike	-	AC20.466	Firefly III HEITY	-	-	-	EGL	-	-	-	40?	-	-
1962-3528	2438001.48	1962 Dec 12 2346	HJ Mike Mike	-	AC20.466	Firefly III HEITY	-	-	-	EGL	-	-	-	40?	-	-
1962-3528	2438001.48	1962 Dec 12 2346	HJ Mike Mike	-	AC20.466	Firefly III HEITY	-	-	-	EGL	-	-	-	40?	-	-
1962-3528	2438001.48	1962 Dec 12 2346	HJ Mike Mike	-	AC20.466	Firefly III HEITY	-	-	-	EGL	-	-	-	40?	-	-
1962-3528	2438001.48	1962 Dec 12 2346	HJ Mike Mike	-	AC20.466	Firefly III HEITY	-	-	-	EGL	-	-	-	40?	-	-
1962-3528	2438001.48	1962 Dec 12 2346	HJ Mike Mike	-	AC20.466	Firefly III HEITY	-	-	-	EGL	-	-	-	40?	-	-
1962-3528	2438001.48	1962 Dec 12 2346	HJ Mike Mike	-	AC20.466	Firefly III HEITY	-	-	-	EGL	-	-	-	40?	-	-
1962-3528	2438001.48	1962 Dec 12 2346	HJ Mike Mike	-	AC20.466	Firefly III HEITY	-	-	-	EGL	-	-	-	40?	-	-
1962-3528	2438001.48	1962 Dec 12 2346	HJ Mike Mike	-	AC20.466	Firefly III HEITY	-	-	-	EGL	-	-	-	40?	-	-
1962-3528	2438001.48	1962 Dec 12 2346	HJ Mike Mike	-	AC20.466	Firefly III HEITY	-	-	-	EGL	-	-	-	40?	-	-
1962-3528	2438001.48	1962 Dec 12 2346	HJ Mike Mike	-	AC20.466	Firefly III HEITY	-	-	-	EGL	-	-	-	40?	-	-
1962-3528	2438001.48	1962 Dec 12 2346	HJ Mike Mike	-	AC20.466	Firefly III HEITY	-	-	-	EGL	-	-	-	40?	-	-
1962-3528	2438001.48	1962 Dec 12 2346	HJ Mike Mike													

Launch Mission

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee_Km	Range_Km	Dest
1965-5132	2438624.27	1965 Mar 4 1832	HJ Mike Mike	-	Sandia 152-16	LRL Payload Test	KAU	-	-	-	181	-	-
1965-5300	2438900.34	1965 May 19 2011:00	Javelin	-	MASA 8.2901	M/DTR 2	WI	-	-	-	947	-	-
1965-5310	2438906.47	1965 May 25 2320	Exos	-	CL AD13.815	EM Absorption	EGL	-	-	-	488	-	-
1965-5316	2438907.29	1965 May 26 1901	Javelin	-	MASA 8.37G1	-	WI	-	-	-	320	-	-
1965-5347	2438907.47	1965 May 26 2320	Exos	-	CL AD13.812	EM Absorption	EGL	-	-	-	488	-	-
1965-5345	2438915.24	1965 Jun 6 1745	HJ Mike	?	-	DASA Dc. 4	EGL	-	-	-	1007	-	-
1965-5345	2438924.14	1965 Jun 12 1515	HJ Mike Mike	?	Sandia 152-80	LRL RDX-1	KAU	-	-	-	172	-	-
1965-5345	2438925.84	1965 Jun 18 0806:00	HJ Mike	?	-	Sandia TMA?	KAU	-	-	-	1007	-	-
1965-5345	2438930.14	1965 Jun 18 1517	HJ Mike Mike	?	-	Textile Ballute 3	EGL	-	-	-	557	-	-
1965-5370	2438935.75	1965 Jun 22 0607:00	HJ Mike	?	ADPEP TB-3	Sandia Falling Sphere?	KAU	-	-	-	1007	-	-
1965-5388	2438941.24	1965 Jun 29 1745	HJ Mike Javelin	?	-	Sandia Chaff?	KAU	-	-	-	1007	-	-
1965-5391	2438995.27	1965 Aug 25 1831	Javelin	-	MASA 6.4	-	EGL	-	-	-	3007	-	-
1965-5478	2438995.27	1965 Aug 25 1831	Javelin	-	MASA 8.110A	He ionization	WI	-	-	-	902	-	-
1965-5508	2439027.11	1965 Sep 23 1436	Javelin	-	MASA 8.36G1	Alouette underflight	WI	-	-	-	805	-	-
1965-5540	2439038.53	1965 Oct 5 0442	Javelin	-	MASA 8.3001	M/DTR 3	WI	-	-	-	960	-	-
1965-5143	2439043.56	1965 Oct 10 0125	Javelin	-	MASA 8.4201	M/DTR 4	WI	-	-	-	32	-	-
1965-5146	2439045.50	1965 Oct 15	HJ PRV	-	Pacemaker	Apollo ablator test	WI	-	-	-	23	-	-
1965-5591	2439051.33	1965 Nov 2 2000	Exos	-	CL AD13.569	IRST Sphere	EGL	-	-	-	686	-	-
1965-5794	2439050.50	1965 Nov 16	HJ Mike Mike	-	CL AD13.569	AEC SKUL	KAU	-	-	-	1507	-	-
1965-5802	2439073.50	1965 Nov 9	HJ Mike Hydac	-	-	-	KAU	-	-	-	1007	-	-
1965-5819	2439081.46	1965 Nov 16 2300	HJ Mike Hydac	-	-	-	EGL	-	-	-	521	-	-
1965-5819	2439081.46	1965 Nov 16 2300	HJ Mike Mike	-	-	-	EGL	-	-	-	183	-	-
1965-5832	2439085.06	1965 Nov 20 1350	HJ Mike	-	-	-	EGL	-	-	-	17	-	-
1966-5146	2439246.72	1966 Mar 2 1759	Javelin	-	LRL RCS-1	-	WI	-	-	-	536	-	-
1966-5244	2439247.47	1966 May 1 0517	Javelin	-	Geoprobe	-	FC	-	-	-	710	-	-
1966-5272	2439246.29	1966 May 20 1304	Javelin	-	CL AD19.286	B/p/6	KAU	-	-	-	80	-	-
1966-5357	2439245.38	1966 Jul 12 2100	Javelin	-	Sandia 152-61	LRL RDX-1	WI	-	-	-	998	-	-
1966-5357	2439315.38	1966 Jul 12 2100	Javelin	-	MASA 8.446R	RME development	WI	-	-	-	1016	-	-
1966-5357	2439335.18	1966 Jun 28 1623	Javelin	-	MASA 8.120A	EOV Aringlow	WI	-	-	-	646	-	-
1966-5402	2439335.29	1966 Jul 28 1900	HJ Mike Mike	-	CL AC19.191	Pulse Phase Delay	KAU	-	-	-	173	-	-
1966-5403	2439337.50	1966 Aug 15 1828	HJ Mike Hydac	-	Sandia 152-44	LRL RCS-2 (Daisy 2)	EGL	-	-	-	644	-	-
1966-5440	2439353.27	1966 Aug 15 1828	Javelin	-	MASA 8.32DA	Composition	EGL	-	-	-	698	-	-
1966-5503	2439352.88	1966 Sep 24 0913	Javelin	-	MASA 8.271A	HFE Ba	WI	-	-	-	950	-	-
1966-5552	2439405.35	1966 Oct 6 2029	Javelin	-	MASA 8.38G1	-	WI	-	-	-	650	-	-
1966-5135	2439429.50	1966 Oct 31	HJ PRV	-	Pacemaker	Apollo ablator test	WI	-	-	-	37	-	-
1966-5140	2439434.50	1966 Nov 21	HJ Mike	-	PEP [F1]	Voyager parachute	NS	-	-	-	39	-	-
1966-5143	2439454.07	1966 Nov 24 1345	HJ Mike	-	PEP [F2]	-	NS	-	-	-	40	-	-
1966-5151	2439470.22	1966 Dec 10 1712	HJ Mike	-	PEP [F3]	31.2-ft Ringsail	NS	-	-	-	23	-	-
1967-401	2439490.50	1967 Jan	HJ Mike	?	PEP [F3]	30-ft DDP Para	NS	-	-	-	40	-	-
1967-5119	2439530.56	1967 Feb 6 0616	Javelin	-	MASA 6.1	Rice auroral	NS	-	-	-	782	-	-
1967-459	2439545.50	1967 Feb 28 0547	HJ Mike	-	MASA 6.41UE	Bice auroral	FC	-	-	-	407	-	-
1967-5065	2439590.74	1967 Mar 10 0522	Javelin	-	MASA 8.47UE	Bice TWINS i auroral	NS	-	-	-	794	-	-
1967-5209	2439590.72	1967 Apr 12 0822	Javelin	-	MASA 8.39G1	ISIS test/overflight	FC	-	-	-	870	-	-
1967-5252	2439625.24	1967 May 17 2058	Javelin	-	MESA 05	40-ft Ringsail	NS	-	-	-	46	-	-
1967-5294	2439625.37	1967 May 16 0837	Javelin	-	MASA 8.43UA	Ion density/compos.	WI	-	-	-	1006	-	-
1967-5306	2439655.84	1967 Jun 16 0837	Javelin	-	MASA 8.50TE	ONS Test	CLBI	-	-	-	500	-	-
1967-489	2439665.18	1967 Jun 17 0837	Javelin	-	PEP 0.50TE	30-ft Cross Para	NS	-	-	-	451	-	-
1967-490	2439665.18	1967 Jun 20 1545	HJ Mike	-	MASA 8.26U	ISIS overflight	WI	-	-	-	792	-	-
1967-5310	2439665.26	1967 Jun 21 1902	Javelin	-	PEP/SPED-1	40-ft DDP Para	NS	-	-	-	407	-	-
1967-5113	2439753.15	1967 Sep 19 1532	HJ Mike Mike	?	DASA 6.1	-	NS	-	-	-	407	-	-
1967-5447	2439754.82	1967 Sep 21 0738	HJ Mike	-	MASA 8.44U1	-	WI	-	-	-	768	-	-
1967-5447	2439754.82	1967 Sep 21 0738	HJ Mike	-	MASA 8.44U1	-	WI	-	-	-	768	-	-
1967-5447	2439784.82	1967 Oct 17 1745	HJ Mike Mike	-	PEP/SPED-1	-	NS	-	-	-	552	-	-
1967-5152	2439794.50	1967 Nov	HJ Mike	?	DASA 6.1	-	NS	-	-	-	407	-	-
1967-5573	2439823.54	1967 Dec 8 0100	Javelin	-	MASA 8.35U1	Ion-proton transitin	FC	-	-	-	805	-	-
1968-165	2439855.50	19687	HJ Mike Mike	?	-	4-ft Ballute test	NS?	-	-	-	73	-	-
1968-165	2439915.50	1968 Mar 2 0500	HJ Mike	?	DASA 6.1	-	NS	-	-	-	407	-	-
1968-5153	2439917.71	1968 Mar 2 0500	Javelin	-	MASA 8.48UE	Bice TWINS 2 auroral	FC	-	-	-	805	-	-
1968-5260	2439956.39	1968 Apr 9 2128	Javelin	-	MASA 8.40UA	EOV Darglow	WI	-	-	-	856	-	-
1968-5349	2440001.72	1968 May 25 0519	Javelin	-	MASA 8.48U1	VLF radio noise	FC	-	-	-	805	-	-
1968-5119	2440035.19	1968 Jun 27 1637	HJ PRV	-	Pacemaker 7	Phenolic ny. ablator	WI	-	-	-	307	-	-
1968-5119	2440129.50	1968 Oct	HJ Mike	?	DASA 6.1	-	NS	-	-	-	407	-	-
1968-5122	2440129.50	1968 Oct	HJ Mike	?	DASA 6.1	-	NS	-	-	-	407	-	-
1968-502	2440153.15	1968 Oct 23 1532	HJ Mike Mike	-	PEP/SHAPE	-	NS	-	-	-	53	-	-
1968-5576	2440169.87	1968 Nov 9 0855	Javelin	-	CL AD19.287	P/F	FC	-	-	-	592	-	-
1968-5639	2440201.22	1968 Dec 10 1716	Javelin	-	MASA 8.51UA	He ionization	FC	-	-	-	837	-	-
1968-928	2440201.22	1968 Dec 11 1716	Javelin	-	PEP	SHAPE Parachute test	NS	-	-	-	53	-	-
1968-5192	2440295.71	1968 Mar 15 0506	HJ Mike Mike	-	SECEDE R6	SECEDE III FIR	PF	-	-	-	165	-	-
1968-5203	2440298.72	1968 Mar 18 0517	HJ Mike Hydac	-	SECEDE R7	SECEDE III GUM	PF	-	-	-	168	-	-
1968-5303	2440387.66	1968 May 16 0353	Javelin	-	CL AC19.269	B field	FC	-	-	-	789	-	-
1968-5352	2440371.87	1968 May 30 0851	Javelin	-	CL AD19.291	B field	FC	-	-	-	825	-	-
1968-494	2440391.18	1968 Jun 18 1617	HJ Mike Mike	-	PEP	40-ft Ringsail Para	NS	-	-	-	407	-	-
1968-5392	2440399.27	1968 Jun 26 1830	Javelin	-	-	-	CLBI	-	-	-	795	-	-
1968-5796	2440399.40	1968 Jun 26 2141	HJ Mike Hydac	-	MASA 8.53U1	-	EGL	-	-	-	384	-	-
1968-4110	2440402.50	1968 Jul	HJ Mike	?	DASA 6.1	-	NS	-	-	-	407	-	-
1968-4111	2440402.50	1968 Jul	HJ Mike	?	DASA 6.1	-	NS	-	-	-	407	-	-
1968-4212	2440413.23	1968 Jul 10 1730	HJ PRV	-	Pacemaker	Carbon phen. ablator	WI	-	-	-	20	-	-
1968-4211	2440571.50	1968 Dec 16	HJ Mike Mike	-	PEP	40-ft DDP Para	NS	-	-	-	407	-	-
1970-585	2440613.44	1970 Jan 26 2230	Javelin	-	N-J-19	DLR H-1-19	CLBI	-	-	-	800?	-	-
1970-591	2440617.44	1970 Jan 30 2230	Javelin	-	N-J-20	DLR H-1-20	CLBI	-	-	-	800?	-	-
1970-5125	2440635.82	1970 Feb 18 0734	Javelin	-	MASA 8.55UE	Auroral substorm	FC	-	-	-	494	-	-
1970-5220	2440653.28	1970 Mar 7 1847	Javelin	-	MASA 8.57CE	Auroral substorm	FC	-	-	-	829	-	-
1970-5200	2440679.71	1970 Apr 3 0459	Javelin	-	MASA 8.56UE	Auroral substorm	FC	-	-	-	557	-	-
1970-473	2440755.22	1970 Jun 20 1715	HJ Mike Mike	-	PEP/SHAPE	40-ft Beefed DDB	NS	-	-	-	44	-	-
1970-5501	2440831.34	1970 Sep 1 2010	Javelin	-	MASA 8.52UA	-	WI	-	-	-	800?	-	-
1970-5552	2440864.88	1970 Oct 5 0905	Javelin	-	MASA 8.58TE	MPE Ba	WI	-	-	-	900	-	-



Launch Mission

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Launch_Mission	FlightCode	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee_Km	Range_Km	Dest
1971-8541	2441127.86	1971 Jun 25 0844	Javelin	-	MASA 8.59AI	MMA Ionus Sounder	-	-	-	WI	-	-	-	660	-	-
1972-572	2441365.21	1972 Feb 10 1702	Javelin	-	MASA 8.60AE	Composition	-	-	-	WI	-	-	-	851	-	-
1972-5303	2441572.73	1972 Sep 12 0651	Javelin	-	MASA 8.62DE	Auroral substorm	-	-	-	FC	-	-	-	718?	-	-
1973-5239	2441861.43	1973 Jul 17 2213	Javelin	-	MASA 8.610A	-	-	-	-	WI	-	-	-	724	-	-
1973-5395	2442005.39	1973 Nov 18 2122	Javelin	-	MASA 8.630I-II	-	-	-	-	CLBI	-	-	-	650	-	-
1973-5403	2442009.40	1973 Nov 22 2129	Javelin	-	MASA 8.640I-II	-	-	-	-	CLBI	-	-	-	650	-	-
1974-5003	2442009.40	1974 Dec 7	HJ Rike Hydac	-	-	HAVE JEEP II A?	-	-	-	KMR	-	-	-	500?	-	-
1974-5442	2442381.50	1974 Dec	HJ Rike Hydac	-	-	HAVE JEEP II B?	-	-	-	KMR	-	-	-	500?	-	-
1974-5443	2442381.50	1974 Dec	HJ Rike Hydac	-	-	HAVE JEEP II C?	-	-	-	KMR	-	-	-	500?	-	-
1975-570	2442354.60	1975 Feb 11 0216:56	Javelin	-	MASA 8.65UE	ICECAP	-	-	-	FC	-	-	-	791	-	-
1975-598	2442482.77	1975 Mar 11 0633:09	HJ Rike Javelin	-	DMA ICS11.21-1A	-	-	-	-	PF	-	-	-	183	-	-
1975-435	2442351.50	1975 Jun 4	HJ	-	-	-	-	-	-	TTR	-	-	-	10?	-	-
1975-449	2442851.50	1975 Aug 27	HJ Hydac	-	-	-	-	-	-	TTR	-	-	-	10?	-	-
1976-5158	2442895.89	1976 Apr 1 0928:20	HJ Hydac	-	APPA W8650.27-1	Ballistics	-	-	-	WI	-	-	-	150?	-	-
1976-444	2442977.56	1976 Jul 18 0123	Javelin	-	MASA 12.17760T	Chem Release test	-	-	-	WI	-	-	-	26	-	-
1976-5223	2442988.50	1976 Jul 29	HJ Rike Hydac	-	HAVE JEEP IV-1	-	-	-	-	KMR	-	-	-	500?	-	-
1976-5223	2442988.50	1976 Jul 29	HJ Rike Hydac	-	MASA 12.17760T	Chem Release test	-	-	-	WI	-	-	-	26	-	-
1976-5323	2443095.94	1976 Nov 13 1031:30	HJ Rike Hydac	-	APPA W8614.51-3	WIDERAND	-	-	-	PF	-	-	-	500?	-	-
1976-5357	2443108.93	1976 Nov 26 1026:40	HJ Rike Hydac	-	APPA W8614.51-4	WIDERAND	-	-	-	PF	-	-	-	500?	-	-
1976-5385	2443114.46	1976 Dec 1 2306:37	HJ Hydac	-	DMA ST610.31-1	STRESS AMIE	-	-	-	EGL	-	-	-	180?	-	-
1977-593	2443201.49	1977 Feb 26 2349:33	HJ Hydac	-	DMA ST710.31-2	STRESS BETTY	-	-	-	EGL	-	-	-	179?	-	-
1977-595	2443205.49	1977 Mar 7 2351:00	HJ Hydac	-	DMA ST710.31-3	STRESS CAROLYN	-	-	-	EGL	-	-	-	186?	-	-
1977-5101	2443210.50	1977 Mar 7 2358:00	HJ Hydac	-	DMA ST710.31-4	STRESS DIANNE	-	-	-	EGL	-	-	-	186?	-	-
1977-5107	2443215.46	1977 Mar 13 2258:00	HJ Hydac	-	DMA ST710.31-5	STRESS ESTHER	-	-	-	EGL	-	-	-	186?	-	-
1977-5109	2443217.45	1977 Mar 14 2243:00	HJ Hydac	-	DMA ST710.31-6	STRESS FERN	-	-	-	EGL	-	-	-	186?	-	-
1977-5194	2443301.44	1977 Jun 6 2234	HJ Javelin	-	TE720.95-1	Ballistics	-	-	-	PF	-	-	-	300?	-	-
1977-5216	2443344.29	1977 Jul 19 1900	Taurus Orion	-	MASA 12.1001WT	-	-	-	-	WI	-	-	-	240	-	-
1977-5222	2443353.50	1977 Jul 29	HJ Rike Hydac	-	SRK-1	HAVE JEEP IV	-	-	-	KMR	-	-	-	500?	-	-
1977-5283	2443462.94	1977 Nov 15 1033:40	HJ Hydac	-	APPA W8710.51-1	WIDERAND	-	-	-	PF	-	-	-	170?	-	-
1977-5283	2443460.32	1977 Dec 2 1934	Taurus Orion	-	MASA 12.1002WT	WIDERAND	-	-	-	WI	-	-	-	24?	-	-
1978-585	2443569.30	1978 Mar 1 1906	HJ Hydac	-	APPA W8610.51-2	EVJ airglow	-	-	-	PF	-	-	-	170?	-	-
1978-592	2443560.69	1978 Mar 15 0440	Taurus Orion	-	MASA 33.010A	Auroral UV	-	-	-	FC	-	-	-	204	-	-
1978-594	2443560.63	1978 Mar 15 0750	Taurus Orion	-	MASA 33.026A	-	-	-	-	FC	-	-	-	186	-	-
1978-5224	2443513.32	1978 Oct 31 1947	Taurus Tomahawk	-	MASA 12.1005WT	-	-	-	-	WI	-	-	-	854	-	-
1979-574	2443591.20	1979 Feb 26 1653:30	Taurus Orion	-	MASA 33.040A	-	-	-	-	CHK	-	-	-	200?	-	-
1979-5104	2443595.96	1979 Feb 26 1653:46	Taurus Tomahawk	-	MASA 12.1003UE	-	-	-	-	BLAKE	-	-	-	200?	-	-
1979-5110	2443596.94	1979 Mar 24 1104:40	Taurus Tomahawk	-	MASA 12.1004UE	-	-	-	-	BLAKE	-	-	-	200?	-	-
1979-5226	2444138.50	1979 Apr 1 1031:41	Taurus Tomahawk	-	MASA 33.069UL	-	-	-	-	IF	-	-	-	500?	-	-
1980-455	2444235.50	1980 Nov 6	HJ	-	MASA 33.069UL	-	-	-	-	NS	-	-	-	200?	-	-
1980-585	2444235.50	1980 Jan 6	Taurus Tomahawk	-	Five naze feet	KLING CLMB	-	-	-	TTR	-	-	-	10?	-	-
1980-585	2444315.00	1980 Mar 16 1155:39	Taurus Tomahawk	-	MASA 34.030E	-	-	-	-	PF	-	-	-	871	-	-
1980-587	2444317.83	1980 Mar 19 0759:37	Taurus Tomahawk	-	MASA 34.010E	-	-	-	-	FF	-	-	-	896	-	-
1980-517	2444449.29	1980 Mar 22 1136:37	Taurus Tomahawk	-	MASA 34.020E	-	-	-	-	FF	-	-	-	616	-	-
1980-5166	2444452.51	1980 Jul 31 1218	Taurus Orion	-	MASA 33.130E	-	-	-	-	WI	-	-	-	229	-	-
1980-5169	2444465.56	1980 Aug 14 0202	Taurus Orion	-	MASA 33.050E	-	-	-	-	WI	-	-	-	111	-	-
1980-5150	2444497.50	1980 Sep 15	Taurus Orion	-	MASA 33.069U?	-	-	-	-	NS	-	-	-	30?	-	-
1980-5150	2444519.50	1980 Oct 8 1839	Taurus Orion	-	MASA 33.070E	-	-	-	-	NS	-	-	-	200?	-	-
1980-5152	2444520.42	1980 Oct 11 2157:54	HJ Orion	-	MASA 33.160E	-	-	-	-	NS	-	-	-	120	-	-
1980-5202	2444550.52	1980 Oct 18 0208:14	Taurus Orion	-	MASA 33.170E	-	-	-	-	AND	-	-	-	117	-	-
1980-5206	2444559.63	1980 Nov 16 0316:00	Taurus Orion	-	MASA 33.100E	ENERGY B	-	-	-	AND	-	-	-	195	-	-
1980-5207	2444559.69	1980 Nov 16 0316:00	Taurus Orion	-	MASA 33.110E	ERC-B F11a	-	-	-	ESB	-	-	-	180	-	-
1980-5207	2444559.69	1980 Nov 16 0415:00	Taurus Orion	-	MASA 33.090E	ERC-B F11b	-	-	-	ESR	-	-	-	181	-	-
1980-5218	2444574.49	1980 Nov 30 2344:30	Taurus Orion	-	MASA 33.090E	ERC-B F11a	-	-	-	ESR	-	-	-	171	-	-
1981-572	2444670.84	1981 Mar 7 0809	Taurus Orion	-	A13.20	AURORAL E1	-	-	-	PF	-	-	-	156	-	-
1981-572	2444670.84	1981 Mar 7 0809	Taurus Orion	-	A13.20	AURORAL E3	-	-	-	PF	-	-	-	203	-	-
1981-579	2444670.85	1981 Mar 7 0828	Taurus Orion	-	A13.20	AURORAL E2	-	-	-	PF	-	-	-	169	-	-
1981-582	2444689.84	1981 Mar 25 0805:16	Taurus Tomahawk	-	MASA 34.051E	BUBBLE MACHINE 1	-	-	-	PF	-	-	-	496?	-	-
1981-581	2444685.88	1981 Apr 1 0904:35	Taurus Tomahawk	-	MASA 34.041E	-	-	-	-	PF	-	-	-	500?	-	-
1981-583	2444696.91	1981 Apr 2 0943	Taurus Orion	-	MASA 33.200E	-	-	-	-	PF	-	-	-	220	-	-
1981-584	2444697.91	1981 Apr 3 0951	Taurus Orion	-	MASA 33.190E	-	-	-	-	WI	-	-	-	210	-	-
1981-5138	2444825.50	1981 Aug 9	Taurus Orion	-	MASA 33.220E	-	-	-	-	WI	-	-	-	160	-	-
1981-5168	2444917.50	1981 Aug 25	Taurus Orion	-	MASA 33.260E?	-	-	-	-	NS	-	-	-	200?	-	-
1982-562	2445026.66	1982 Feb 26 0950	Taurus Orion	-	MASA 33.211U	-	-	-	-	FC	-	-	-	160	-	-
1982-581	2445043.78	1982 Mar 15 0638:20	Taurus Tomahawk	-	MASA 34.080E	BUBBLE MACHINE II	-	-	-	FC	-	-	-	460	-	-
1982-584	2445058.94	1982 Mar 30 1026:35	Taurus Tomahawk	-	MASA 34.070E	LINERLOCK	-	-	-	PF	-	-	-	606	-	-
1982-5116	2445106.50	1982 Mar 30 1026:35	Taurus Orion	-	MASA 33.280U	-	-	-	-	PF	-	-	-	200?	-	-
1982-5124	2445143.96	1982 Jun 29 1101	Taurus Orion	-	MASA 33.290U	-	-	-	-	WI	-	-	-	147	-	-
1982-5154	2445192.52	1982 Aug 11 0035	Taurus Orion	-	MASA 33.24CE	-	-	-	-	PF	-	-	-	200?	-	-
1982-5193	2445298.07	1982 Nov 24 1339:48	Taurus Orion	-	MASA 33.24CE	-	-	-	-	PF	-	-	-	200?	-	-
1983-544	2445347.29	1983 Jan 12 1900	Taurus Orion	-	MASA 33.300U	-	-	-	-	NS	-	-	-	200?	-	-
1983-550	2445367.04	1983 Jan 22 1302:10	Taurus Orion	-	MASA 33.29CE	-	-	-	-	NS	-	-	-	200?	-	-
1983-457	2445366.50	1983 Feb 7	HJ	-	Sardis	B83 Parachute Test	-	-	-	TTR	-	-	-	12	-	-
1983-859	2445377.82	1983 Feb 12 0739:15	Taurus Orion	-	MASA 33.311U	-	-	-	-	PF	-	-	-	200?	-	-
1983-566	2445396.66	1983 Mar 3 0364	Taurus Orion	-	MASA 33.311U	CONDOR Fields	-	-	-	CHI	-	-	-	115?	-	-
1983-573	2445406.15	1983 Mar 12 1635	Taurus Orion	-	MASA 33.271E	CONDOR Fields	-	-	-	CHI	-	-	-	135?	-	-
1983-881	2445414.90	1983 Mar 21 0932	Taurus Tomahawk	-	MASA 34.101E	CONDOR/Star of Condor	-	-	-	CHI	-	-	-	555	-	-
1983-882	2445416.91	1983 Mar 23 0949	Taurus Tomahawk	-	MASA 34.090E	CONDOR/Star of Lima	-	-	-	CHI	-	-	-	425	-	-

Launch Mission

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Launch_Mission	FlightCode	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee_Km	Range_Km	Dest
1984-866	2445765.22	1984 Feb 28 1713	Taurus Orion	-	MASA 33.390U	-	-	-	-	PF	-	-	-	200?	-	-
1984-876	2445792.80	1984 Apr 2 0715:50	Taurus Mike Tomahaok	-	MASA 38.010E	-	-	-	-	PF	-	-	-	500?	-	-
1984-877	2445792.80	1984 Apr 2 0717:57	Taurus Orion	-	MASA 33.420E	-	-	-	-	PF	-	-	-	200?	-	-
1984-5104	2445913.68	1984 Aug 1 0418	Taurus Mike Tomahaok	-	MASA 38.020E	-	-	-	-	WI	-	-	-	423	-	-
1984-5105	2445913.68	1984 Aug 7 0100	Taurus Orion	-	MASA 33.430E	-	-	-	-	Electrojet	-	-	-	115?	-	-
1984-5125	2445995.77	1984 Oct 22 0627	Taurus Orion	-	MASA 33.470E	-	-	-	-	OR UV Glow 1	-	-	-	150?	-	-
1984-5127	2445997.60	1984 Oct 24 0219:59	Taurus Orion	-	MASA 33.4410E	-	-	-	-	MIM (Metal Ions)	-	-	-	170	-	-
1984-440	2446034.50	1984 Dec	HJ	-	Sandia	-	-	-	-	Stores parachute 1	-	-	-	12	-	-
1985-419	2446065.50	1985	HJ	-	Sandia	-	-	-	-	Stores parachute 2	-	-	-	12	-	-
1985-837	2446105.26	1985 Feb 8 1814	Taurus Orion	-	MASA 33.480U	-	-	-	-	TTR	-	-	-	200?	-	-
1985-851	2446130.36	1985 Mar 5 2038	Taurus Orion	-	MASA 33.440E	-	-	-	-	COPE Cornell E1	-	-	-	200?	-	-
1985-856	2446139.04	1985 Mar 14 1254:34	Taurus Tomahaok	-	MASA 34.110E	-	-	-	-	SSG	-	-	-	500?	-	-
1985-860	2446145.44	1985 Mar 20 2234	Taurus Tomahaok	-	MASA 34.090E	-	-	-	-	COPE Cornell E2	-	-	-	500?	-	-
1985-5115	2446315.50	1985 Sep 10 0002:10	Taurus Orion	-	MASA 33.500E	-	-	-	-	SSG	-	-	-	200?	-	-
1985-5129	2446385.93	1985 Nov 20 1019	Taurus Mike Tomahaok	-	MASA 38.090E	-	-	-	-	WI	-	-	-	500?	-	-
1985-529	2446497.31	1986 Mar 7 1930	Taurus Orion	-	MASA 33.510U	-	-	-	-	WI	-	-	-	200?	-	-
1986-413	2446520.50	1986 Apr	HJ	-	Sandia	-	-	-	-	TTR	-	-	-	12	-	-
1986-543	2446545.58	1986 Apr 28 0158	Taurus Mike Tomahaok	-	MASA 38.050E	-	-	-	-	WI	-	-	-	420	-	-
1986-847	2446563.83	1986 May 13 0756	Taurus Mike Tomahaok	-	MASA 38.080E	-	-	-	-	LA2	-	-	-	547	-	-
1986-5112	2446739.36	1986 Nov 4 2044:01	Taurus Orion	-	SC 841H	-	-	-	-	ESR	-	-	-	206	-	-
1986-5116	2446777.35	1986 Dec 12 2021:56	Taurus Orion	-	SC 841H	-	-	-	-	ESR	-	-	-	185	-	-
1987-853	2446844.41	1987 Feb 17 2185	Taurus Orion	-	MASA 33.560E	-	-	-	-	OR UV Glow 2	-	-	-	179	-	-
1987-859	2446859.78	1987 Feb 5 0638:40	Taurus Mike Tomahaok	-	MASA 38.120E	-	-	-	-	SSG	-	-	-	500?	-	-
1987-865	2446875.60	1987 Mar 21 0706	Taurus Tomahaok	-	MASA 34.140E	-	-	-	-	SSG	-	-	-	380?	-	-
1987-875	2446885.70	1987 Mar 31 0447:05	Taurus Mike Tomahaok	-	MASA 38.100E	-	-	-	-	COPE II Release	-	-	-	467	-	-
1987-876	2446885.70	1987 Mar 31 0447:11	Taurus Mike Tomahaok	-	MASA 38.110E	-	-	-	-	SSG	-	-	-	441	-	-
1987-5109	2446891.58	1987 Jul 15 0185	Taurus Orion	-	MASA 33.526E	-	-	-	-	WI	-	-	-	177	-	-
1987-5112	2447003.77	1987 Jul 27 0625	Taurus Orion	-	MASA 33.536E	-	-	-	-	WLP/SFC Thunder.	-	-	-	600?	-	-
1987-5149	2447072.60	1987 Oct 4	HJ Mike Hydac	?	-	-	-	-	-	KMR	-	-	-	600?	-	-
1987-5175	2447117.50	1987 Nov 16	HJ Mike Hydac	?	-	-	-	-	-	KMR	-	-	-	600?	-	-
1988-5106	2447285.74	1988 Jul 27 0548:03	Taurus Mike Tomahaok	-	MASA 38.070E	-	-	-	-	WI	-	-	-	600?	-	-
1988-5127	2447453.50	1988 Oct 19	HJ Mike Hydac	?	-	-	-	-	-	KMR	-	-	-	600?	-	-
1988-5128	2447453.50	1988 Oct 20 2029:51	Taurus Orion	-	MASA 33.570U	-	-	-	-	PF	-	-	-	200?	-	-
1989-542	2447595.35	1989 Mar 7 2200	Taurus Orion	-	MASA 33.570U	-	-	-	-	PF	-	-	-	200?	-	-
1989-414	2447595.34	1989 Mar 21 2006	Taurus Orion	-	MASA 33.570U	-	-	-	-	WI	-	-	-	107	-	-
1990-833	2447692.34	1990 Dec 21 2006	Taurus Orion	-	MASA 33.590E	-	-	-	-	PF	-	-	-	130	-	-
1990-855	2448025.40	1990 May 13 2123:02	Taurus Orion	-	MASA 33.600E	-	-	-	-	PF	-	-	-	130?	-	-
1990-5116	2448114.84	1990 Aug 15 0910:00	Taurus Mike Tomahaok	-	MASA 38.170E	-	-	-	-	ORNS IA-5	-	-	-	375	-	-
1990-5118	2448115.86	1990 Aug 15 0910:00	Taurus Mike Tomahaok	-	MASA 38.150E	-	-	-	-	ORNS IA-6	-	-	-	428	-	-
1990-5119	2448115.86	1990 Aug 15 0923:00	Taurus Mike Tomahaok	-	MASA 38.160E	-	-	-	-	ORNS	-	-	-	440?	-	-
1990-5123	2448125.66	1990 Aug 22 0940:10	Taurus Mike Tomahaok	-	MASA 38.160E	-	-	-	-	ORNS	-	-	-	359	-	-
1991-5178	2448265.64	1991 Dec 6 0049	Taurus Mike Tomahaok	-	MASA 38.200E	-	-	-	-	RED A1X 2	-	-	-	369	-	-
1991-5179	2448265.64	1991 Dec 6 0049	Taurus Mike Tomahaok	-	MASA 38.200E	-	-	-	-	RED A1X 2	-	-	-	369	-	-
1991-863	2448265.32	1991 Dec 6 1938	Taurus Orion	-	MASA 33.620E	-	-	-	-	WI	-	-	-	300?	-	-
1994-843	2448921.42	1994 Jun 6 2305	Taurus Orion	-	MASA 33.620E	-	-	-	-	NS	-	-	-	200?	-	-
1996-841	2448921.42	1996 Jun 6 2305:00	Taurus Orion	-	MASA 33.620E	-	-	-	-	PF	-	-	-	200?	-	-
1996-871	2448921.42	1996 Feb 25 0743:00	Taurus Orion	-	MASA 33.620E	-	-	-	-	PF	-	-	-	200?	-	-
1998-504	2451291.12	1998 Jan 15 0402:00	Taurus Orion	-	MASA 33.670E	-	-	-	-	TORT	-	-	-	200?	-	-
1998-844	2451264.67	1998 Jan 15 0402:00	Taurus Orion	-	MASA 33.670E	-	-	-	-	PF	-	-	-	200?	-	-
1998-848	2451264.67	1998 Jan 15 0402:00	Taurus Orion	-	MASA 33.670E	-	-	-	-	PF	-	-	-	200?	-	-
1998-848	2451264.67	1998 Jan 15 0402:00	Taurus Orion	-	MASA 33.670E	-	-	-	-	PF	-	-	-	200?	-	-
2002-510	2452925.92	2002 Feb 21 0957:01	Taurus Orion	-	MASA 33.680E	-	-	-	-	WI	-	-	-	200?	-	-
2002-511	2452925.92	2002 Feb 21 0957:01	Taurus Orion	-	MASA 33.680E	-	-	-	-	WI	-	-	-	200?	-	-
2002-512	2452925.92	2002 Feb 21 0957:01	Taurus Orion	-	MASA 33.680E	-	-	-	-	PF	-	-	-	200?	-	-
2014-442	2457009.65	2014 Dec 17 0330	Taurus Orion	-	MASA 12.082CR	-	-	-	-	US	-	-	-	27	-	-
2021-405	2459303.50	2021 Mar 30	Taurion	?	MASA 12.086BR	-	-	-	-	NS	-	-	-	27	-	-



Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	OrbPay	Agency	Launch_Code	Group	Category	LfCite	Cite	Notes
1951-A102	2433762.50	1951 Apr 26	X-7A-1	-	1	0.000	WADD?	AF	-	Test	X-Planes	-	-
1951-A103	2433950.50	1951 Nov	X-7A-1	-	2	0.000	WADD?	AF	-	Test	X-Planes	-	-
1951-A37	2433826.50	1951 Jun 29	Honest John	-	1	0.000	ORRSA	AS	-	Test	wmr.history.org	-	-
1951-A44	2433846.50	1951 Jul 18	Honest John	-	2	0.000	ORRSA	AS	-	Test	wmr.history.org	-	-
1951-A47	2433852.50	1951 Jul 25	Honest John	-	3	0.000	ORRSA	AU	-	Test	wmr.history.org	-	-
1951-A49	2433859.50	1951 Aug 01	Honest John	-	4	0.000	ORRSA	AU	-	Test	wmr.history.org	-	-
1951-A51	2433865.50	1951 Aug 07	Honest John	-	5	0.000	ORRSA	AU	-	Test	wmr.history.org	-	-
1951-A73	2433936.50	1951 Oct 17	Honest John	-	6	0.000	ORRSA	AU	-	Test	wmr.history.org	-	-
1951-A74	2433936.50	1951 Oct 17	Honest John	-	7	0.000	ORRSA	AU	-	Test	wmr.history.org	-	-
1951-A75	2433943.50	1951 Oct 24	Honest John	-	8	0.000	ORRSA	AU	-	Test	wmr.history.org	-	-
1951-A76	2433943.50	1951 Oct 24	Honest John	-	9	0.000	ORRSA	AU	-	Test	wmr.history.org	-	-
1951-A79	2433963.50	1951 Nov 13	Honest John	-	13	0.000	ORRSA	AU	-	Test	wmr.history.org	-	-
1951-A80	2433964.50	1951 Nov 14	Honest John	-	11	0.000	ORRSA	AU	-	Test	wmr.history.org	-	-
1951-A81	2433964.50	1951 Nov 14	Honest John	-	12	0.000	ORRSA	AU	-	Test	wmr.history.org	-	-
1951-A86	2433978.50	1951 Nov 28	Honest John	-	10	0.000	ORRSA	AU	-	Test	wmr.history.org	-	-
1951-A97	2433997.50	1951 Dec 17	Honest John	-	14	0.000	ORRSA	AU	-	Test	wmr.history.org	-	-
1951-A98	2433997.50	1951 Dec 17	Honest John	-	15	0.000	ORRSA	AU	-	Test	wmr.history.org	-	-
1952-A02	2434015.50	1952 Jan 04	Honest John	-	16	0.000	ORRSA	AU	-	Test	wmr.history.org	-	-
1952-A03	2434015.50	1952 Jan 04	Honest John	-	17	0.000	ORRSA	AU	-	Test	wmr.history.org	-	-
1952-A04	2434020.50	1952 Jan 09	Honest John	-	18	0.000	ORRSA	AU	-	Test	wmr.history.org	-	-
1952-A05	2434020.50	1952 Jan 09	Honest John	-	19	0.000	ORRSA	AU	-	Test	wmr.history.org	-	-
1952-A25	2434053.50	1952 Feb 11	Honest John	-	20	0.000	ORRSA	AU	-	Test	wmr.history.org	-	-
1952-A26	2434053.50	1952 Feb 11	Honest John	-	21	0.000	ORRSA	AU	-	Test	wmr.history.org	-	-
1952-A27	2434053.50	1952 Feb 11	Honest John	-	22	0.000	ORRSA	AU	-	Test	wmr.history.org	-	-
1952-A28	2434053.50	1952 Feb 11	Honest John	-	23	0.000	ORRSA	AU	-	Test	wmr.history.org	-	-
1952-A35	2434069.50	1952 Feb 27	Honest John	-	24	0.000	ORRSA	AU	-	Test	wmr.history.org	-	-
1952-A36	2434069.50	1952 Feb 27	Honest John	-	25	0.000	ORRSA	AU	-	Test	wmr.history.org	-	-
1952-A56	2434102.50	1952 Mar 31	Honest John	-	26	0.000	ORRSA	AU	-	Test	wmr.history.org	-	-
1952-A57	2434102.50	1952 Mar 31	Honest John	-	27	0.000	ORRSA	AU	-	Test	wmr.history.org	-	-
1952-A58	2434104.50	1952 Apr 02	Honest John	-	28	0.000	ORRSA	AU	-	Test	wmr.history.org	-	-
1952-A59	2434104.50	1952 Apr 02	Honest John	-	29	0.000	ORRSA	AU	-	Test	wmr.history.org	-	-
1952-A65	2434154.50	1952 May 22	Honest John	-	30	0.000	ORRSA	AU	-	Test	wmr.history.org	-	-
1952-A66	2434154.50	1952 May 22	Honest John	-	31	0.000	ORRSA	AU	-	Test	wmr.history.org	-	-
1952-A69	2434155.50	1952 May 23	Honest John	-	32	0.000	ORRSA	AU	-	Test	wmr.history.org	-	-
1952-A91	2434161.50	1952 Jun 17	Honest John	-	33	0.000	ORRSA	AU	-	Test	wmr.history.org	-	-
1952-A96	2434180.50	1952 Jun 17	Honest John	-	36	0.000	ORRSA	AU	-	Test	wmr.history.org	-	-
1952-A99	2434180.50	1952 Jun 17	Honest John	-	34	0.000	ORRSA	AU	-	Test	wmr.history.org	-	-
1952-A98	2434180.50	1952 Jun 17	Honest John	-	35	0.000	ORRSA	AU	-	Test	wmr.history.org	-	-
1952-A96	2434180.50	1952 Jun 30	Honest John	-	38	0.000	ORRSA	AU	-	Test	wmr.history.org	-	-
1952-A104	2434193.50	1952 Jun 30	Honest John	-	37	0.000	ORRSA	AU	-	Test	wmr.history.org	-	-
1952-A105	2434193.50	1952 Jun 30	Honest John	-	39	0.000	ORRSA	AU	-	Test	wmr.history.org	-	-
1952-A107	2434200.50	1952 Jul 07	Honest John	-	40	0.000	ORRSA	AU	-	Test	wmr.history.org	-	-
1952-A107	2434216.50	1952 Jul 23	Honest John	-	41	0.000	ORRSA	AU	-	Test	wmr.history.org	-	-
1952-A115	2434216.50	1952 Jul 23	Honest John	-	43	0.000	ORRSA	AU	-	Test	wmr.history.org	-	-
1952-A121	2434221.50	1952 Jul 28	Honest John	-	42	0.000	ORRSA	AU	-	Test	wmr.history.org	-	-
1952-A121	2434228.50	1952 Jul 28	Honest John	-	44	0.000	ORRSA	AU	-	Test	wmr.history.org	-	-
1952-A124	2434228.50	1952 Aug 04	Honest John	-	45	0.000	ORRSA	AU	-	Test	wmr.history.org	-	-
1952-A125	2434228.50	1952 Aug 11	Honest John	-	47	0.000	ORRSA	AU	-	Test	wmr.history.org	-	-
1952-A133	2434235.50	1952 Aug 11	Honest John	-	46	0.000	ORRSA	AU	-	Test	wmr.history.org	-	-
1952-A138	2434244.50	1952 Aug 20	Honest John	-	48	0.000	ORRSA	AU	-	Test	wmr.history.org	-	-
1952-A139	2434244.50	1952 Aug 20	Honest John	-	49	0.000	ORRSA	AU	-	Test	wmr.history.org	-	-
1952-A150	2434265.50	1952 Sep 10	Honest John	-	51	0.000	ORRSA	AU	-	Test	wmr.history.org	-	-
1952-A151	2434265.50	1952 Sep 10	Honest John	-	51	0.000	ORRSA	AU	-	Test	wmr.history.org	-	-
1952-A159	2434272.50	1952 Sep 17	Honest John	-	52	0.000	ORRSA	AU	-	Test	wmr.history.org	-	-
1952-A167	2434288.50	1952 Sep 26	Honest John	-	53	0.000	ORRSA	AU	-	Test	wmr.history.org	-	-
1952-A172	2434288.50	1952 Oct 03	Honest John	-	54	0.000	ORRSA	AU	-	Test	wmr.history.org	-	-
1952-A173	2434288.50	1952 Oct 03	Honest John	-	55	0.000	ORRSA	AU	-	Test	wmr.history.org	-	-
1952-A184	2434300.50	1952 Oct 15	Honest John	-	56	0.000	ORRSA	AU	-	Test	wmr.history.org	-	-
1952-A185	2434300.50	1952 Oct 15	Honest John	-	57	0.000	ORRSA	AU	-	Test	wmr.history.org	-	-
1952-A186	2434302.50	1952 Oct 17	Honest John	-	58	0.000	ORRSA	AU	-	Test	wmr.history.org	-	-
1952-A187	2434302.50	1952 Oct 17	Honest John	-	59	0.000	ORRSA	AU	-	Test	wmr.history.org	-	-
1952-A196	2434314.50	1952 Oct 29	Honest John	-	60	0.000	ORRSA	AU	-	Test	wmr.history.org	-	-
1952-A210	2434323.50	1952 Nov 07	Honest John	-	61	0.000	ORRSA	AU	-	Test	wmr.history.org	-	-
1952-A210	2434323.50	1952 Nov 07	Honest John	-	62	0.000	ORRSA	AU	-	Test	wmr.history.org	-	-
1952-A211	2434323.50	1952 Nov 07	Honest John	-	63	0.000	ORRSA	AU	-	Test	wmr.history.org	-	-
1952-A232	2434335.50	1952 Nov 19	Honest John	-	64	0.000	ORRSA	AU	-	Test	wmr.history.org	-	-
1952-A234	2434336.50	1952 Nov 20	Honest John	-	66	0.000	ORRSA	AU	-	Test	wmr.history.org	-	-
1952-A235	2434336.50	1952 Nov 20	Honest John	-	65	0.000	ORRSA	AU	-	Test	wmr.history.org	-	-
1952-A238	2434337.50	1952 Nov 21	Honest John	-	67	0.000	ORRSA	AU	-	Test	wmr.history.org	-	-
1952-A242	2434342.50	1952 Nov 26	Honest John	-	68	0.000	ORRSA	AU	-	Test	wmr.history.org	-	-
1952-A243	2434342.50	1952 Nov 26	Honest John	-	70	0.000	ORRSA	AU	-	Test	wmr.history.org	-	-
1952-A244	2434342.50	1952 Nov 26	Honest John	-	69	0.000	ORRSA	AU	-	Test	wmr.history.org	-	-
1952-A245	2434342.50	1952 Nov 26	Honest John	-	71	0.000	ORRSA	AU	-	Test	wmr.history.org	-	-
1952-A251	2434349.50	1952 Dec 03	Honest John	-	72	0.000	ORRSA	AU	-	Test	wmr.history.org	-	-
1952-A260	2434351.50	1952 Dec 05	Honest John	-	73	0.000	ORRSA	AU	-	Test	wmr.history.org	-	-
1952-A261	2434351.50	1952 Dec 05	Honest John	-	74	0.000	ORRSA	AU	-	Test	wmr.history.org	-	-
1952-A267	2434361.50	1952 Dec 15	Honest John	-	75	0.000	ORRSA	AU	-	Test	wmr.history.org	-	-
1952-A268	2434361.50	1952 Dec 15	Honest John	-	76	0.000	ORRSA	AU	-	Test	wmr.history.org	-	-
1952-A286	2434363.50	1952 Dec 17	Honest John	-	-	0.000	WADD?	AS	-	Test	X-Planes	-	-
1952-A287	2434365.50	1952 Dec 17	Honest John	-	78	0.000	ORRSA	AU	-	Test	wmr.history.org	-	-
1952-A278	2434365.50	1952 Dec 19	Honest John	-	77	0.000	ORRSA	AU	-	Test	wmr.history.org	-	-
1953-A05	2434382.50	1953 Jan 05	Honest John	-	79	0.000	ORRSA	AU	-	Test	wmr.history.org	-	-
1953-A09	2434389.50	1953 Jan 12	Honest John	-	80	0.000	ORRSA	AU	-	Test	wmr.history.org	-	-
1953-A10	2434389.50	1953 Jan 12	Honest John	-	81	0.000	ORRSA	AU	-	Test	wmr.history.org	-	-
1953-A13	2434390.50	1953 Jan 13	Honest John	-	82	0.000	ORRSA	AU	-	Test	wmr.history.org	-	-
1953-A492	2434392.50	1953 Jan 15	Father John	1	1	0.000	ORRSA	AU	-	Test	RSA-HJ-History	-	-



Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	OrbPay	Agency	Launch_Code	Group	Category	LfCite	Cite	Notes
1953-A503	2434632.50	1953 Sep 12	X-7A-1	-	-	0.000	WADD?	AS	-	Test	X-Planes	-	-
1953-A357	2434635.50	1953 Sep 15	Honest John	-	568	0.000	ORORSA	AU	-	Test	wmar.history.org	-	-
1953-A359	2434636.50	1953 Sep 16	Honest John	-	313	0.000	ORORSA	AU	-	Test	wmar.history.org	-	-
1953-A360	2434636.50	1953 Sep 16	Honest John	-	323	0.000	ORORSA	AU	-	Test	wmar.history.org	-	-
1953-A366	2434643.50	1953 Sep 23	Honest John	-	559	0.000	ORORSA	AU	-	Test	wmar.history.org	-	-
1953-A366	2434643.50	1953 Sep 23	Honest John	-	560	0.000	ORORSA	AU	-	Test	wmar.history.org	-	-
1953-A370	2434645.50	1953 Sep 25	Honest John	-	70	0.000	ORORSA	AU	-	Test	wmar.history.org	-	-
1953-A376	2434649.50	1953 Sep 29	Honest John	-	359G	0.000	ORORSA	AU	-	Test	wmar.history.org	-	-
1953-A378	2434651.50	1953 Oct 01	Honest John	-	321S	0.000	ORORSA	AU	-	Test	wmar.history.org	-	-
1953-A382	2434652.50	1953 Oct 02	Honest John	-	319S	0.000	ORORSA	AU	-	Test	wmar.history.org	-	-
1953-A383	2434655.50	1953 Oct 05	Honest John	-	2SP	0.000	ORORSA	AU	-	Test	wmar.history.org	-	-
1953-A384	2434655.50	1953 Oct 05	Honest John	-	4SP	0.000	ORORSA	AU	-	Test	wmar.history.org	-	-
1953-A385	2434655.50	1953 Oct 05	Honest John	-	358G	0.000	ORORSA	AU	-	Test	wmar.history.org	-	-
1953-A394	2434663.50	1953 Oct 13	Honest John	-	316S	0.000	ORORSA	AU	-	Test	wmar.history.org	-	-
1953-A395	2434663.50	1953 Oct 13	Honest John	-	322S	0.000	ORORSA	AU	-	Test	wmar.history.org	-	-
1953-A494	2434666.50	1953 Oct 16	Falcher John	2	3	0.000	ORORSA	AU	-	Test	NSA-HJ-History	-	-
1953-A411	2434672.50	1953 Oct 22	Honest John	-	69H	0.000	ORORSA	AU	-	Test	wmar.history.org	-	-
1953-A416	2434673.50	1953 Oct 23	Honest John	-	1DJ	0.000	ORORSA	AU	-	Test	wmar.history.org	-	-
1953-A495	2434679.50	1953 Oct 29	Falcher John	2	4	0.000	ORORSA	AU	-	Test	NSA-HJ-History	-	-
1953-A496	2434680.50	1953 Oct 30	Falcher John	2	5	0.000	ORORSA	AU	-	Test	NSA-HJ-History	-	-
1953-A424	2434684.50	1953 Nov 03	Honest John	-	208H	0.000	ORORSA	AU	-	Test	wmar.history.org	-	-
1953-A425	2434684.50	1953 Nov 03	Honest John	-	207H	0.000	ORORSA	AU	-	Test	wmar.history.org	-	-
1953-A453	2434685.50	1953 Nov 04	Honest John	-	20J	0.000	ORORSA	AU	-	Test	wmar.history.org	-	-
1953-A453	2434685.50	1953 Nov 10	Honest John	-	30J	0.000	ORORSA	AU	-	Test	wmar.history.org	-	-
1953-A456	2434691.50	1953 Nov 10	Honest John	-	40J	0.000	ORORSA	AU	-	Test	wmar.history.org	-	-
1953-A457	2434693.50	1953 Nov 12	Honest John	-	50J	0.000	ORORSA	AU	-	Test	wmar.history.org	-	-
1953-A443	2434695.50	1953 Nov 17	Honest John	-	209H	0.000	ORORSA	AU	-	Test	wmar.history.org	-	-
1953-A443	2434695.50	1953 Nov 17	Honest John	-	210H	0.000	ORORSA	AU	-	Test	wmar.history.org	-	-
1953-A443	2434695.50	1953 Nov 17	Honest John	-	356G	0.000	ORORSA	AU	-	Test	wmar.history.org	-	-
1953-A457	2434701.50	1953 Nov 20	Honest John	-	356G	0.000	ORORSA	AU	-	Test	wmar.history.org	-	-
1953-A459	2434706.50	1953 Nov 25	Honest John	-	60J	0.000	ORORSA	AU	-	Test	wmar.history.org	-	-
1953-A504	2434719.50	1953 Dec 6	X-7A-1	-	590C	0.000	WADD?	AS	-	Test	X-Planes	-	-
1953-A472	2434720.50	1953 Dec 10	Honest John	-	214H	0.000	ORORSA	AU	-	Test	wmar.history.org	-	-
1953-A475	2434721.50	1953 Dec 10	Honest John	-	3566	0.000	ORORSA	AU	-	Test	wmar.history.org	-	-
1953-A491	2434729.50	1953 Dec 18	Honest John	-	422H	0.000	ORORSA	AU	-	Test	wmar.history.org	-	-
1953-A497	2434777.50	1953	Falcher John	2	0	0.000	ORORSA	AU	-	Test	NSA-HJ-History	-	-
1954-A716	2434782.50	1954	Falcher John	2	0	0.000	ORORSA	AU	-	Test	NSA-HJ-History	-	-
1954-A114	2434754.50	1954 Jan 12	Honest John	-	590C	0.000	ORORSA	AU	-	Test	wmar.history.org	-	-
1954-A116	2434757.50	1954 Jan 15	Honest John	-	53P	0.000	ORORSA	AU	-	Test	wmar.history.org	-	-
1954-A119	2434757.50	1954 Jan 15	Honest John	-	219H	0.000	ORORSA	AU	-	Test	wmar.history.org	-	-
1954-A126	2434761.50	1954 Jan 19	Honest John	-	61M	0.000	ORORSA	AU	-	Test	wmar.history.org	-	-
1954-A424	2434762.50	1954 Jan 20	Honest John	-	219H	0.000	ORORSA	AU	-	Test	wmar.history.org	-	-
1954-A421	2434766.50	1954 Jan 26	Honest John	-	MC-983	0.000	WADD?	AS	-	Test	X-Planes	-	-
1954-A359	2434770.50	1954 Jan 28	Honest John	-	409E	0.000	ORORSA	AU	-	Test	wmar.history.org	-	-
1954-A49	2434775.50	1954 Feb 01	Honest John	-	202T	0.000	ORORSA	AU	-	Test	wmar.history.org	-	-
1954-A49	2434782.50	1954 Feb 02	Honest John	-	417ST	0.000	ORORSA	AU	-	Test	wmar.history.org	-	-
1954-A49	2434782.50	1954 Feb 09	Honest John	-	416ST	0.000	ORORSA	AU	-	Test	wmar.history.org	-	-
1954-A49	2434782.50	1954 Feb 09	Honest John	-	218H	0.000	ORORSA	AU	-	Test	wmar.history.org	-	-
1954-A49	2434783.50	1954 Feb 10	Honest John	-	217H	0.000	ORORSA	AU	-	Test	wmar.history.org	-	-
1954-A53	2434783.50	1954 Feb 10	Honest John	-	420ST	0.000	ORORSA	AU	-	Test	wmar.history.org	-	-
1954-A53	2434784.50	1954 Feb 11	Honest John	-	378E	0.000	ORORSA	AU	-	Test	wmar.history.org	-	-
1954-A53	2434784.50	1954 Feb 12	Honest John	-	379E-0	0.000	ORORSA	AU	-	Test	wmar.history.org	-	-
1954-A55	2434788.50	1954 Feb 15	Honest John	-	430ST	0.000	ORORSA	AU	-	Test	wmar.history.org	-	-
1954-A57	2434788.50	1954 Feb 15	Honest John	-	431ST	0.000	ORORSA	AU	-	Test	wmar.history.org	-	-
1954-A57	2434788.50	1954 Feb 16	Honest John	-	432ST	0.000	ORORSA	AU	-	Test	wmar.history.org	-	-
1954-A59	2434788.50	1954 Feb 16	Honest John	-	418ST	0.000	ORORSA	AU	-	Test	wmar.history.org	-	-
1954-A61	2434790.50	1954 Feb 17	Honest John	-	219H	0.000	ORORSA	AU	-	Test	wmar.history.org	-	-
1954-A65	2434791.50	1954 Feb 18	Honest John	-	220M	0.000	ORORSA	AU	-	Test	wmar.history.org	-	-
1954-A67	2434791.50	1954 Feb 18	Honest John	-	203H	0.000	ORORSA	AU	-	Test	wmar.history.org	-	-
1954-A67	2434792.50	1954 Feb 19	Honest John	-	434ST	0.000	ORORSA	AU	-	Test	wmar.history.org	-	-
1954-A71	2434796.50	1954 Feb 23	Honest John	-	414ST	0.000	ORORSA	AU	-	Test	wmar.history.org	-	-
1954-A72	2434796.50	1954 Feb 23	Honest John	-	429ST	0.000	ORORSA	AU	-	Test	wmar.history.org	-	-
1954-A74	2434797.50	1954 Feb 24	Honest John	-	424ST	0.000	ORORSA	AU	-	Test	wmar.history.org	-	-
1954-A75	2434797.50	1954 Feb 24	Honest John	-	421ST	0.000	ORORSA	AU	-	Test	wmar.history.org	-	-
1954-A76	2434797.50	1954 Feb 24	Honest John	-	433ST	0.000	ORORSA	AU	-	Test	wmar.history.org	-	-
1954-A732	2434797.50	1954 Feb 24	X-7A-1	-	MY-983	0.000	WADD?	AS	-	Test	X-Planes	-	-
1954-A773	2434798.50	1954 Feb 25	Honest John	-	413ST	0.000	ORORSA	AU	-	Test	wmar.history.org	-	-
1954-A777	2434798.50	1954 Feb 25	Honest John	-	428ST	0.000	ORORSA	AU	-	Test	wmar.history.org	-	-
1954-A778	2434798.50	1954 Feb 25	Honest John	-	415ST	0.000	ORORSA	AU	-	Test	wmar.history.org	-	-
1954-A779	2434798.50	1954 Feb 25	Honest John	-	427ST	0.000	ORORSA	AU	-	Test	wmar.history.org	-	-
1954-A82	2434799.50	1954 Feb 26	Honest John	-	425ST	0.000	ORORSA	AU	-	Test	wmar.history.org	-	-
1954-A83	2434799.50	1954 Feb 26	Honest John	-	425ST	0.000	ORORSA	AU	-	Test	wmar.history.org	-	-
1954-A87	2434802.50	1954 Mar 01	Honest John	-	426ST	0.000	ORORSA	AU	-	Test	wmar.history.org	-	-
1954-A88	2434804.50	1954 Mar 03	Honest John	-	381-0	0.000	ORORSA	AU	-	Test	wmar.history.org	-	-
1954-A90	2434804.50	1954 Mar 03	Honest John	-	380-0	0.000	ORORSA	AU	-	Test	wmar.history.org	-	-
1954-A91	2434805.50	1954 Mar 04	Honest John	-	292-T	0.000	ORORSA	AU	-	Test	wmar.history.org	-	-
1954-A93	2434805.50	1954 Mar 04	Honest John	-	293-T	0.000	ORORSA	AU	-	Test	wmar.history.org	-	-
1954-A94	2434805.50	1954 Mar 04	Honest John	-	291-T	0.000	ORORSA	AU	-	Test	wmar.history.org	-	-
1954-A95	2434805.50	1954 Mar 04	Honest John	-	294-T	0.000	ORORSA	AU	-	Test	wmar.history.org	-	-
1954-A96	2434805.50	1954 Mar 05	Honest John	-	295-T	0.000	ORORSA	AU	-	Test	wmar.history.org	-	-
1954-A97	2434806.50	1954 Mar 05	Honest John	-	296-T	0.000	ORORSA	AU	-	Test	wmar.history.org	-	-
1954-A98	2434806.50	1954 Mar 05	Honest John	-	220	0.000	ORORSA	AU	-	Test	wmar.history.org	-	-
1954-A108	2434811.50	1954 Mar 10	Honest John	-	202	0.000	ORORSA	AU	-	Test	wmar.history.org	-	-
1954-A113	2434819.50	1954 Mar 18	Honest John	-	500	0.000	ORORSA	AU	-	Test	wmar.history.org	-	-
1954-A117	2434820.50	1954 Mar 19	Honest John	-	500	0.000	ORORSA	AU	-	Test	wmar.history.org	-	-

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	OrbPay	Agency	Launch_Code	Group	Category	LfCite	Cite	Notes
1954-A127	2434827.50	1954 Mar 26	Honest John	-	166	0.000	ORRSA	AU	-	Test	wmr.history.org	-	-
1954-A128	2434827.50	1954 Mar 26	Honest John	-	490	0.000	ORRSA	AU	-	Test	wmr.history.org	-	-
1954-A129	2434830.50	1954 Mar 29	Honest John	-	443	0.000	ORRSA	AU	-	Test	wmr.history.org	-	-
1954-A130	2434833.50	1954 Apr 01	Honest John	-	86A	0.000	ORRSA	AU	-	Test	wmr.history.org	-	-
1954-A139	2434833.50	1954 Apr 01	Honest John	-	161A	0.000	ORRSA	AU	-	Test	wmr.history.org	-	-
1954-A140	2434833.50	1954 Apr 01	Honest John	-	452A	0.000	ORRSA	AU	-	Test	wmr.history.org	-	-
1954-A144	2434838.50	1954 Apr 06	Honest John	-	454H	0.000	ORRSA	AU	-	Test	wmr.history.org	-	-
1954-A145	2434838.50	1954 Apr 06	Honest John	-	296H	0.000	ORRSA	AU	-	Test	wmr.history.org	-	-
1954-A151	2434840.50	1954 Apr 08	Honest John	-	470H	0.000	ORRSA	AU	-	Test	wmr.history.org	-	-
1954-A152	2434840.50	1954 Apr 08	Honest John	-	501	0.000	ORRSA	AU	-	Test	wmr.history.org	-	-
1954-A154	2434841.50	1954 Apr 09	Honest John	-	511	0.000	ORRSA	AU	-	Test	wmr.history.org	-	-
1954-A164	2434853.50	1954 Apr 21	Honest John	-	476H	0.000	ORRSA	AU	-	Test	wmr.history.org	-	-
1954-A168	2434853.50	1954 Apr 21	Honest John	-	479H	0.000	ORRSA	AU	-	Test	wmr.history.org	-	-
1954-A198	2434859.50	1954 Apr 27	Honest John	-	503H	0.000	ORRSA	AU	-	Test	wmr.history.org	-	-
1954-A199	2434859.50	1954 Apr 27	Honest John	-	472H	0.000	ORRSA	AU	-	Test	wmr.history.org	-	-
1954-A216	2434861.50	1954 Apr 29	Honest John	-	477H	0.000	ORRSA	AU	-	Test	wmr.history.org	-	-
1954-A221	2434861.50	1954 Apr 29	Honest John	-	475H	0.000	ORRSA	AU	-	Test	wmr.history.org	-	-
1954-A226	2434862.50	1954 Apr 30	Honest John	-	212	0.000	ORRSA	AU	-	Test	wmr.history.org	-	-
1954-A227	2434862.50	1954 Apr 30	Honest John	-	277	0.000	ORRSA	AU	-	Test	wmr.history.org	-	-
1954-A232	2434867.50	1954 May 05	Honest John	-	211H	0.000	ORRSA	AU	-	Test	wmr.history.org	-	-
1954-A233	2434867.50	1954 May 05	Honest John	-	207H	0.000	ORRSA	AU	-	Test	wmr.history.org	-	-
1954-A252	2434873.50	1954 May 11	Honest John	-	220H	0.000	ORRSA	AU	-	Test	wmr.history.org	-	-
1954-A253	2434873.50	1954 May 11	Honest John	-	268H	0.000	ORRSA	AU	-	Test	wmr.history.org	-	-
1954-A255	2434873.50	1954 May 12	Honest John	-	586	0.000	ORRSA	AU	-	Test	wmr.history.org	-	-
1954-A256	2434874.50	1954 May 12	Honest John	-	588	0.000	ORRSA	AU	-	Test	wmr.history.org	-	-
1954-A267	2434875.50	1954 May 13	Honest John	-	580	0.000	ORRSA	AU	-	Test	wmr.history.org	-	-
1954-A268	2434875.50	1954 May 13	Honest John	-	584	0.000	ORRSA	AU	-	Test	wmr.history.org	-	-
1954-A270	2434876.50	1954 May 14	Honest John	-	577	0.000	ORRSA	AU	-	Test	wmr.history.org	-	-
1954-A271	2434876.50	1954 May 14	Honest John	-	591	0.000	ORRSA	AU	-	Test	wmr.history.org	-	-
1954-A278	2434879.50	1954 May 17	Honest John	-	576H	0.000	ORRSA	AU	-	Test	wmr.history.org	-	-
1954-A279	2434879.50	1954 May 17	Honest John	-	578	0.000	ORRSA	AU	-	Test	wmr.history.org	-	-
1954-A282	2434883.50	1954 May 21	Honest John	-	205	0.000	ORRSA	AU	-	Test	wmr.history.org	-	-
1954-A283	2434883.50	1954 May 24	Honest John	-	213	0.000	ORRSA	AU	-	Test	wmr.history.org	-	-
1954-A284	2434886.50	1954 May 24	Honest John	-	536	0.000	ORRSA	AU	-	Test	wmr.history.org	-	-
1954-A306	2434895.50	1954 Jun 2	Honest John	-	582	0.000	ORRSA	AU	-	Test	wmr.history.org	-	-
1954-A307	2434895.50	1954 Jun 2	Honest John	-	579	0.000	ORRSA	AU	-	Test	wmr.history.org	-	-
1954-A323	2434897.50	1954 Jun 7	Honest John	-	575	0.000	ORRSA	AU	-	Test	wmr.history.org	-	-
1954-A324	2434900.50	1954 Jun 7	Honest John	-	193M	0.000	ORRSA	AU	-	Test	wmr.history.org	-	-
1954-A325	2434900.50	1954 Jun 7	Honest John	-	206M	0.000	ORRSA	AU	-	Test	wmr.history.org	-	-
1954-A326	2434900.50	1954 Jun 7	Honest John	-	209M	0.000	ORRSA	AU	-	Test	wmr.history.org	-	-
1954-A327	2434901.50	1954 Jun 6	X-7A-1	-	MC-883	0.000	WADP	AS	-	Test	wmr.history.org	-	-
1954-A338	2434903.50	1954 Jun 10	Honest John	-	282	0.000	ORRSA	AU	-	Test	wmr.history.org	-	-
1954-A339	2434903.50	1954 Jun 10	Honest John	-	276M	0.000	ORRSA	AU	-	Test	wmr.history.org	-	-
1954-A346	2434907.50	1954 Jun 14	Honest John	-	203M	0.000	ORRSA	AU	-	Test	wmr.history.org	-	-
1954-A348	2434907.50	1954 Jun 14	Honest John	-	246C	0.000	ORRSA	AU	-	Test	wmr.history.org	-	-
1954-A359	2434910.50	1954 Jun 17	Honest John	-	274CC	0.000	ORRSA	AU	-	Test	wmr.history.org	-	-
1954-A369	2434914.50	1954 Jun 21	Honest John	-	270M	0.000	ORRSA	AU	-	Test	wmr.history.org	-	-
1954-A382	2434914.50	1954 Jun 21	Honest John	-	308M	0.000	ORRSA	AU	-	Test	wmr.history.org	-	-
1954-A386	2434916.50	1954 Jun 23	Honest John	-	432M	0.000	ORRSA	AU	-	Test	wmr.history.org	-	-
1954-A387	2434923.50	1954 Jun 30	Honest John	-	437M	0.000	ORRSA	AU	-	Test	wmr.history.org	-	-
1954-A389	2434923.50	1954 Jun 30	Honest John	-	434	0.000	ORRSA	AU	-	Test	wmr.history.org	-	-
1954-A412	2434935.50	1954 Jul 11	Honest John	-	438	0.000	ORRSA	AU	-	Test	wmr.history.org	-	-
1954-A413	2434943.50	1954 Jul 20	Honest John	-	413	0.000	ORRSA	AU	-	Test	wmr.history.org	-	-
1954-A420	2434943.50	1954 Jul 20	Honest John	-	462	0.000	ORRSA	AU	-	Test	wmr.history.org	-	-
1954-A449	2434951.50	1954 Jul 28	Honest John	-	409M	0.000	ORRSA	AU	-	Test	wmr.history.org	-	-
1954-A466	2434958.50	1954 Jul 28	Honest John	-	214M	0.000	ORRSA	AU	-	Test	wmr.history.org	-	-
1954-A468	2434958.50	1954 Aug 4	Father John	2	7	0.000	ORRSA	AU	-	Test	wmr.history.org	RSK-HJ-History	-
1954-A469	2434964.50	1954 Aug 10	Honest John	-	464S	0.000	ORRSA	AU	-	Test	wmr.history.org	-	-
1954-A474	2434964.50	1954 Aug 10	Honest John	-	439C	0.000	ORRSA	AU	-	Test	wmr.history.org	-	-
1954-A475	2434966.50	1954 Aug 12	Honest John	-	486M	0.000	ORRSA	AU	-	Test	wmr.history.org	-	-
1954-A476	2434966.50	1954 Aug 12	Honest John	-	487M	0.000	ORRSA	AU	-	Test	wmr.history.org	-	-
1954-A481	2434973.50	1954 Aug 19	Honest John	-	447	0.000	ORRSA	AU	-	Test	wmr.history.org	-	-
1954-A490	2434980.50	1954 Aug 26	Honest John	-	550	0.000	ORRSA	AU	-	Test	wmr.history.org	-	-
1954-A495	2434986.50	1954 Sep 01	Honest John	-	384M	0.000	ORRSA	AU	-	Test	wmr.history.org	-	-
1954-A502	2434993.50	1954 Sep 08	Honest John	-	435M	0.000	ORRSA	AU	-	Test	wmr.history.org	-	-
1954-A522	2435000.50	1954 Sep 15	Honest John	-	546M	0.000	ORRSA	AU	-	Test	wmr.history.org	-	-
1954-A533	2435007.50	1954 Sep 22	Honest John	-	551M	0.000	ORRSA	AU	-	Test	wmr.history.org	-	-
1954-A539	2435008.50	1954 Sep 23	Honest John	-	390M	0.000	ORRSA	AU	-	Test	wmr.history.org	-	-
1954-A540	2435008.50	1954 Sep 23	Honest John	-	497M	0.000	ORRSA	AU	-	Test	wmr.history.org	-	-
1954-A734	2435008.50	1954 Sep 23	X-7A-1	-	MY-883	0.000	WADP	AS	-	Test	wmr.history.org	RSK-HJ-History	-
1954-A771	2435014.50	1954 Sep 29	Father John	2	8	0.000	ORRSA	AU	-	Test	wmr.history.org	-	-
1954-A549	2435021.50	1954 Sep 29	Honest John	-	549M	0.000	ORRSA	AU	-	Test	wmr.history.org	-	-
1954-A559	2435021.50	1954 Oct 06	Honest John	-	407M	0.000	ORRSA	AU	-	Test	wmr.history.org	-	-
1954-A565	2435026.50	1954 Oct 11	Honest John	-	394ES	0.000	ORRSA	AU	-	Test	wmr.history.org	-	-
1954-A566	2435026.50	1954 Oct 11	Honest John	-	280AM	0.000	ORRSA	AU	-	Test	wmr.history.org	-	-
1954-A573	2435029.50	1954 Oct 13	Honest John	-	138ES	0.000	ORRSA	AU	-	Test	wmr.history.org	-	-
1954-A574	2435029.50	1954 Oct 14	Honest John	-	122ES	0.000	ORRSA	AU	-	Test	wmr.history.org	-	-
1954-A581	2435035.50	1954 Oct 20	Honest John	-	548M	0.000	ORRSA	AU	-	Test	wmr.history.org	-	-
1954-A735	2435036.50	1954 Oct 21	X-7A-1	-	MY-883	0.000	WADP	AS	-	Test	wmr.history.org	-	-
1954-A591	2435040.50	1954 Oct 25	Honest John	-	813M	0.000	ORRSA	AU	-	Test	wmr.history.org	-	-
1954-A593	2435042.50	1954 Oct 27	Honest John	-	559M	0.000	ORRSA	AU	-	Test	wmr.history.org	-	-
1954-A598	2435043.50	1954 Oct 28	Honest John	-	814M	0.000	ORRSA	AU	-	Test	wmr.history.org	-	-

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	OrbPay	Agency	Launch_Code	Group	Category	LfCite	Cite	Notes
1954-4602	2435048.50	1954 Nov 02	Honest John	-	450M	0.000	ORRSA	AU	-	Test	wmr.history.org	-	-
1954-4603	2435048.50	1954 Nov 02	Honest John	-	416M	0.000	ORRSA	AU	-	Test	wmr.history.org	-	-
1954-4604	2435049.50	1954 Nov 03	Honest John	-	465M	0.000	ORRSA	AU	-	Test	wmr.history.org	-	-
1954-4605	2435050.50	1954 Nov 04	Honest John	-	742	0.000	ORRSA	AU	-	Test	wmr.history.org	-	-
1954-4606	2435050.50	1954 Nov 04	Honest John	-	653	0.000	ORRSA	AU	-	Test	wmr.history.org	-	-
1954-4610	2435051.50	1954 Nov 05	Honest John	-	735	0.000	ORRSA	AU	-	Test	wmr.history.org	-	-
1954-4611	2435051.50	1954 Nov 05	Honest John	-	471M	0.000	ORRSA	AU	-	Test	wmr.history.org	-	-
1954-4616	2435055.50	1954 Nov 09	Honest John	-	473M	0.000	ORRSA	AU	-	Test	wmr.history.org	-	-
1954-4617	2435056.50	1954 Nov 10	Honest John	-	547M	0.000	ORRSA	AU	-	Test	wmr.history.org	-	-
1954-4621	2435061.50	1954 Nov 15	Facher John	2	9	0.000	ORRSA	AU	-	Test	wmr.history.org	-	RSA-HJ-History
1954-4631	2435061.50	1954 Nov 15	Honest John	-	795	0.000	ORRSA	AU	-	Test	wmr.history.org	-	-
1954-4632	2435061.50	1954 Nov 15	Honest John	-	791	0.000	ORRSA	AU	-	Test	wmr.history.org	-	-
1954-4633	2435063.50	1954 Nov 17	Honest John	-	442	0.000	ORRSA	AU	-	Test	wmr.history.org	-	-
1954-4634	2435065.50	1954 Nov 19	Honest John	-	790	0.000	ORRSA	AU	-	Test	wmr.history.org	-	-
1954-4644	2435065.50	1954 Nov 19	Honest John	-	789	0.000	ORRSA	AU	-	Test	wmr.history.org	-	-
1954-4649	2435068.50	1954 Nov 22	Honest John	-	861	0.000	ORRSA	AU	-	Test	wmr.history.org	-	-
1954-4650	2435068.50	1954 Nov 22	Honest John	-	456M	0.000	ORRSA	AU	-	Test	wmr.history.org	-	-
1954-4652	2435069.50	1954 Nov 23	Honest John	-	509M	0.000	ORRSA	AU	-	Test	wmr.history.org	-	-
1954-4653	2435069.50	1954 Nov 23	Honest John	-	460M	0.000	ORRSA	AU	-	Test	wmr.history.org	-	-
1954-4658	2435070.50	1954 Nov 24	X-7A-1	-	MX-863	0.000	WADD?	AS	-	Test	wmr.history.org	-	-
1954-4664	2435075.50	1954 Nov 29	Honest John	-	494ES	0.000	ORRSA	AU	-	Test	wmr.history.org	-	-
1954-4665	2435075.50	1954 Nov 29	Honest John	-	449ES	0.000	ORRSA	AU	-	Test	wmr.history.org	-	-
1954-4666	2435077.50	1954 Dec 01	Honest John	-	494M	0.000	ORRSA	AU	-	Test	wmr.history.org	-	-
1954-4673	2435082.50	1954 Dec 06	Honest John	-	792F0	0.000	ORRSA	AU	-	Test	wmr.history.org	-	-
1954-4674	2435082.50	1954 Dec 06	Honest John	-	794F0	0.000	ORRSA	AU	-	Test	wmr.history.org	-	-
1954-4680	2435084.50	1954 Dec 08	Honest John	-	LITAEH	0.000	ORRSA	AU	-	Test	wmr.history.org	-	-
1954-4694	2435089.50	1954 Dec 13	Honest John	-	546ES	0.000	ORRSA	AU	-	Test	wmr.history.org	-	-
1954-4695	2435089.50	1954 Dec 13	Honest John	-	M-62A-RM	0.000	ORRSA	AU	-	Test	wmr.history.org	-	-
1954-4696	2435090.50	1954 Dec 14	Honest John	-	M-64A-RM	0.000	ORRSA	AU	-	Test	wmr.history.org	-	-
1954-4699	2435090.50	1954 Dec 14	Honest John	-	MX-863	0.000	WADD?	AS	-	Test	wmr.history.org	-	-
1954-4737	2435097.50	1954 Dec 21	X-7A-1	-	MX-863	0.000	WADD?	AS	-	Test	wmr.history.org	-	-
1955-4655	2435125.50	1955 Jan 18	Honest John	-	MX-863	0.000	WADD?	AS	-	Test	wmr.history.org	-	-
1955-4300	2435126.50	1955 Jan 19	Honest John	-	867	0.000	ORRSA	AU	-	Test	wmr.history.org	-	-
1955-4335	2435128.50	1955 Jan 21	Honest John	-	785M	0.000	ORRSA	AU	-	Test	wmr.history.org	-	-
1955-4336	2435128.50	1955 Jan 21	Honest John	-	793M	0.000	ORRSA	AU	-	Test	wmr.history.org	-	-
1955-4337	2435128.50	1955 Jan 21	Honest John	-	794M	0.000	ORRSA	AU	-	Test	wmr.history.org	-	-
1955-4338	2435128.50	1955 Jan 21	Honest John	-	785M	0.000	ORRSA	AU	-	Test	wmr.history.org	-	-
1955-4443	2435132.50	1955 Jan 25	Honest John	-	M-67A	0.000	ORRSA	AU	-	Test	wmr.history.org	-	-
1955-4444	2435132.50	1955 Jan 25	Honest John	-	M-67A	0.000	ORRSA	AU	-	Test	wmr.history.org	-	-
1955-4445	2435132.50	1955 Jan 25	Honest John	-	M-67A	0.000	ORRSA	AU	-	Test	wmr.history.org	-	-
1955-4446	2435132.50	1955 Jan 25	Honest John	-	M-67A	0.000	ORRSA	AU	-	Test	wmr.history.org	-	-
1955-4451	2435134.50	1955 Jan 27	Honest John	-	874-A0	0.000	ORRSA	AU	-	Test	wmr.history.org	-	-
1955-4452	2435135.50	1955 Jan 28	Honest John	-	974-A0	0.000	ORRSA	AU	-	Test	wmr.history.org	-	-
1955-4459	2435135.50	1955 Jan 28	Honest John	-	974-A0	0.000	ORRSA	AU	-	Test	wmr.history.org	-	-
1955-4462	2435135.50	1955 Jan 28	Honest John	-	974-A0	0.000	ORRSA	AU	-	Test	wmr.history.org	-	-
1955-4463	2435139.50	1955 Feb 01	Honest John	-	469-RM	0.000	ORRSA	AU	-	Test	wmr.history.org	-	-
1955-4656	2435139.50	1955 Feb 01	X-7A-1	-	MX-863	0.000	WADD?	AS	-	Test	wmr.history.org	-	-
1955-4800	2435146.50	1955 Feb 08	Honest John	-	960R0	0.000	ORRSA	AU	-	Test	wmr.history.org	-	-
1955-4801	2435146.50	1955 Feb 08	Honest John	-	923RM	0.000	ORRSA	AU	-	Test	wmr.history.org	-	-
1955-4802	2435146.50	1955 Feb 08	Honest John	-	924RM	0.000	ORRSA	AU	-	Test	wmr.history.org	-	-
1955-4803	2435146.50	1955 Feb 08	Honest John	-	924RM	0.000	ORRSA	AU	-	Test	wmr.history.org	-	-
1955-4809	2435146.50	1955 Feb 11	Honest John	-	289A-ES	0.000	ORRSA	AU	-	Test	wmr.history.org	-	-
1955-4893	2435148.50	1955 Feb 11	Honest John	-	126-ES	0.000	ORRSA	AU	-	Test	wmr.history.org	-	-
1955-4563	2435152.50	1955 Feb 14	Honest John	-	925-RS	0.000	ORRSA	AU	-	Test	wmr.history.org	-	-
1955-4564	2435152.50	1955 Feb 14	Honest John	-	925-RS	0.000	ORRSA	AU	-	Test	wmr.history.org	-	-
1955-4129	2435162.50	1955 Feb 24	Honest John	-	915-RS	0.000	ORRSA	AU	-	Test	wmr.history.org	-	-
1955-4130	2435162.50	1955 Feb 24	Honest John	-	939-P0	0.000	ORRSA	AU	-	Test	wmr.history.org	-	-
1955-4131	2435162.50	1955 Feb 24	Honest John	-	939-P0	0.000	ORRSA	AU	-	Test	wmr.history.org	-	-
1955-4132	2435162.50	1955 Feb 24	Honest John	-	911-RS	0.000	ORRSA	AU	-	Test	wmr.history.org	-	-
1955-4657	2435162.50	1955 Feb 24	X-7A-1	-	MX-863	0.000	WADD?	AS	-	Test	wmr.history.org	-	-
1955-4180	2435168.50	1955 Mar 02	Honest John	-	570EM	0.000	ORRSA	AU	-	Test	wmr.history.org	-	-
1955-4141	2435175.50	1955 Mar 09	Honest John	-	M-102-EM	0.000	ORRSA	AU	-	Test	wmr.history.org	-	-
1955-4182	2435180.50	1955 Mar 14	Honest John	-	M-930-RM	0.000	ORRSA	AU	-	Test	wmr.history.org	-	-
1955-4183	2435180.50	1955 Mar 14	Honest John	-	M-919-RM	0.000	ORRSA	AU	-	Test	wmr.history.org	-	-
1955-4187	2435182.50	1955 Mar 16	Honest John	-	172A-A-EM	0.000	ORRSA	AU	-	Test	wmr.history.org	-	-
1955-4205	2435188.50	1955 Mar 22	Honest John	-	914EM	0.000	ORRSA	AU	-	Test	wmr.history.org	-	-
1955-4206	2435188.50	1955 Mar 22	Honest John	-	928RM	0.000	ORRSA	AU	-	Test	wmr.history.org	-	-
1955-4208	2435189.50	1955 Mar 23	Honest John	-	417EM	0.000	ORRSA	AU	-	Test	wmr.history.org	-	-
1955-4213	2435190.50	1955 Mar 24	Honest John	-	840P0	0.000	ORRSA	AU	-	Test	wmr.history.org	-	-
1955-4214	2435190.50	1955 Mar 24	Honest John	-	837P0	0.000	ORRSA	AU	-	Test	wmr.history.org	-	-
1955-4217	2435191.50	1955 Mar 25	Honest John	-	M-957-P0	0.000	ORRSA	AU	-	Test	wmr.history.org	-	-
1955-4218	2435191.50	1955 Mar 25	Honest John	-	M-959-P0	0.000	ORRSA	AU	-	Test	wmr.history.org	-	-
1955-4219	2435191.50	1955 Mar 25	Honest John	-	M-958-P0	0.000	ORRSA	AU	-	Test	wmr.history.org	-	-
1955-4220	2435191.50	1955 Mar 25	Honest John	-	M-961-P0	0.000	ORRSA	AU	-	Test	wmr.history.org	-	-
1955-4229	2435196.50	1955 Mar 28	Honest John	-	917BS	0.000	ORRSA	AU	-	Test	wmr.history.org	-	-
1955-4233	2435196.50	1955 Mar 30	Honest John	-	944A-EM	0.000	ORRSA	AU	-	Test	wmr.history.org	-	-
1955-4236	2435198.50	1955 Apr 01	Honest John	-	M-970-P0	0.000	ORRSA	AU	-	Test	wmr.history.org	-	-
1955-4237	2435198.50	1955 Apr 01	Honest John	-	M-967-P0	0.000	ORRSA	AU	-	Test	wmr.history.org	-	-
1955-4239	2435201.50	1955 Apr 04	Honest John	-	931RM	0.000	ORRSA	AU	-	Test	wmr.history.org	-	-
1955-4240	2435201.50	1955 Apr 04	Honest John	-	922RM	0.000	ORRSA	AU	-	Test	wmr.history.org	-	-
1955-4246	2435202.50	1955 Apr 05	Honest John	-	M-825-P0	0.000	ORRSA	AU	-	Test	wmr.history.org	-	-
1955-4247	2435202.50	1955 Apr 05	Honest John	-	M-834-P0	0.000	ORRSA	AU	-	Test	wmr.history.org	-	-
1955-4251	2435203.50	1955 Apr 06	Honest John	-	11A-EM	0.000	ORRSA	AU	-	Test	wmr.history.org	-	-
1955-4670	2435204.50	1955 Apr 7	X-7A-1	-	MX-863	0.000	WADD?	AS	-	Test	wmr.history.org	-	-





Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	OrbPay	Agency	Launch_Code	Group	Category	LICite	Cite	Notes
1988-S186	2436446.46	1988 Aug 30 2303	Jason	-	Jason 2026	0.000	AFSVC	SS	AFSVC/Allen.L.	Nuclear Obs	WDRF	-	-
1988-S189	2436446.50	1988 Aug 31 0007	Jason	-	Jason 2020	0.000	AFSVC	SS	AFSVC/Allen.L.	Nuclear Obs	WDRF	-	-
1988-S190	2436449.29	1988 Sep 2 1902	Jason	-	Jason 2041	0.000	AFSVC	SS	AFSVC/Allen.L.	Nuclear Obs	WDRF	-	-
1988-S191	2436449.34	1988 Sep 2 2003	Jason	-	Jason 2042 J-20	0.000	AFSVC	SS	AFSVC/Allen.L.	Nuclear Obs	WDRF	-	-
1988-S192	2436449.43	1988 Sep 2 2215	Jason	-	Jason 2043	0.000	AFSVC	SS	AFSVC/Allen.L.	Nuclear Obs	WDRF	-	-
1988-A184	2436469.50	1988 Sep 23	Improved Honest John	-	8R0	0.000	ARGMA	SS	-	Test	IHL-History	-	-
1988-S205	2436471.50	1988 Sep 25	Exos	-	-	0.000	PARD/AFRCPL	SS	UMI/Hansen	Test	WDRF	TH-D-219	-
1988-S206	2436476.50	1988 Sep 30	Improved Honest John	-	10R0	0.000	ARGMA	AS	-	Reentry Test	IHL-History	-	-
1988-A185	2436482.50	1988 Oct 6	HJ Mike Mike Recruit	-	-	0.000	USNSPU	AS	-	Test	RP-1028	-	-
1988-A132	2436489.50	1988 Oct 13	HJ Mike Mike	-	-	0.000	PARD	AS	-	Test	RP-1028	-	-
1988-A134	2436489.50	1988 Oct 13	HJ Mike Mike	-	-	0.000	PARD	AS	-	Test	RP-1028	-	-
1988-A140	2436513.50	1988 Nov 6	HJ Mike Mike Recruit T55	-	-	0.000	PARD	AS	-	Reentry Test	RP-1028	-	-
1988-A146	2436527.50	1988 Nov 20	HJ Mike Mike Recruit T55	-	-	0.000	PARD	AS	-	Reentry Test	RP-1028	-	-
1988-A165	2436554.50	1988 Dec 17	HJ Mike Mike	-	-	0.000	PARD	AS	-	Test	RP-1028	-	-
1988-A166	2436554.50	1988 Dec 18	HJ Mike Mike	-	-	0.000	PARD	AS	-	Test	RP-1028	-	-
1988-A165	2436557.50	1988 Dec?	HJ Mike Mike	-	-	0.000	PARD	AS	-	Test	RP-1028	-	-
1989-A02	2436568.50	1989	HJ Mike Mike Recruit	-	-	0.000	USNSPU	AS	-	Reentry Test	RP-1028	-	-
1989-A03	2436568.50	1989	HJ Mike Mike Recruit T55	-	-	0.000	PARD	AS	-	Reentry Test	RP-1028	-	-
1989-A04	2436568.50	1989	HJ Mike Mike Recruit T55	-	-	0.000	PARD	AS	-	Reentry Test	RP-1028	-	-
1989-A05	2436568.50	1989	HJ Mike Mike Recruit T55	-	-	0.000	PARD	AS	-	Reentry Test	RP-1028	-	-
1989-A218	2436590.50	1989 Jan 22	Improved Honest John	-	21R0	0.000	ARGMA	AS	-	Test	IHL-History	-	-
1989-A219	2436590.50	1989 Jan 22	Improved Honest John	-	22R0	0.000	ARGMA	AS	-	Test	IHL-History	-	-
1989-A221	2436604.50	1989 Feb 5	HJ Trailblazer 1	-	TB I alpha	0.000	PARD	AS	-	Test	RP-1028	-	-
1989-S21	2436603.50	1989 Mar 9	HJ Mike Mike 20'SN	-	-	0.000	LARC/	SS	LARC/	Reentry Test	RP-1028	TH-D-441	-
1989-A46	2436604.50	1989 Mar 17	HJ Mike Mike Recruit T55	-	-	0.000	LARC/	SS	LARC/	Reentry Test	RP-1028	-	-
1989-A420	2436622.50	1989 Mar 17	Improved Honest John	-	E1R0	0.000	LARC/	AF	LARC/	Reentry Test	RP-1028	-	-
1989-A221	2436652.50	1989 Mar 25	Improved Honest John	-	E2R0	0.000	ARGMA	AS	-	Test	IHL-History	-	-
1989-A222	2436652.50	1989 Mar 25	Improved Honest John	-	E3R0	0.000	ARGMA	AS	-	Test	IHL-History	-	-
1989-A223	2436667.50	1989 Apr 9	Improved Honest John	-	E4R0	0.000	ARGMA	AS	-	Test	IHL-History	-	-
1989-A224	2436668.50	1989 Apr	Improved Honest John	-	E5R0	0.000	ARGMA	AS	-	Test	IHL-History	-	-
1989-A225	2436668.50	1989 Apr	Improved Honest John	-	E6R0	0.000	ARGMA	AS	-	Test	IHL-History	-	-
1989-A226	2436668.50	1989 Apr	Improved Honest John	-	E7R0	0.000	ARGMA	AS	-	Test	IHL-History	-	-
1989-A227	2436668.50	1989 Apr	Improved Honest John	-	E8R0	0.000	ARGMA	AS	-	Test	IHL-History	-	-
1989-A228	2436668.50	1989 Apr	Improved Honest John	-	E9R0	0.000	ARGMA	AS	-	Test	IHL-History	-	-
1989-A229	2436668.50	1989 Apr	Improved Honest John	-	E10R0	0.000	ARGMA	AS	-	Test	IHL-History	-	-
1989-A230	2436668.50	1989 Apr	Improved Honest John	-	E11R0	0.000	ARGMA	AS	-	Test	IHL-History	-	-
1989-A231	2436693.50	1989 May 5	Improved Honest John	-	E12R0	0.000	ARGMA	AS	-	Test	IHL-History	-	-
1989-A481	2436713.50	1989 May 27	HJ Mike Mike	-	-	0.000	PARD	AS	LARC/	Reentry Test	RP-1028	-	-
1989-A482	2436713.50	1989 May 27	HJ Mike Mike	-	-	0.000	PARD	AS	-	Test	RP-1028	-	-
1989-A232	2436721.50	1989 Jun 2	Improved Honest John	-	E13R0	0.000	ARGMA	AS	-	Test	IHL-History	-	-
1989-A233	2436721.50	1989 Jun 2	Improved Honest John	-	E14R0	0.000	ARGMA	AS	-	Test	IHL-History	-	-
1989-A234	2436721.50	1989 Jun 2	Improved Honest John	-	E15R0	0.000	ARGMA	AS	-	Test	IHL-History	-	-
1989-A235	2436721.50	1989 Jun 2	Improved Honest John	-	E16R0	0.000	ARGMA	AS	-	Test	IHL-History	-	-
1989-A236	2436724.50	1989 Jun 5	Improved Honest John	-	E17R0	0.000	ARGMA	AS	-	Test	IHL-History	-	-
1989-A237	2436724.50	1989 Jun 5	Improved Honest John	-	E18R0	0.000	ARGMA	AS	-	Test	IHL-History	-	-
1989-A238	2436724.50	1989 Jun 5	Improved Honest John	-	E19R0	0.000	ARGMA	AS	-	Test	IHL-History	-	-
1989-A239	2436724.50	1989 Jun 5	Improved Honest John	-	E20R0	0.000	ARGMA	AS	-	Test	IHL-History	-	-
1989-A240	2436724.50	1989 Jun 5	Improved Honest John	-	E21R0	0.000	ARGMA	AS	-	Test	IHL-History	-	-
1989-A241	2436724.50	1989 Jun 5	Improved Honest John	-	E22R0	0.000	ARGMA	AS	-	Test	IHL-History	-	-
1989-A242	2436724.50	1989 Jun 5	Improved Honest John	-	E23R0	0.000	ARGMA	AS	-	Test	IHL-History	-	-
1989-A243	2436724.50	1989 Jun 5	Improved Honest John	-	E24R0	0.000	ARGMA	AS	-	Test	IHL-History	-	-
1989-A244	2436724.50	1989 Jun 5	Improved Honest John	-	E25R0	0.000	ARGMA	AS	-	Test	IHL-History	-	-
1989-A245	2436724.50	1989 Jun 5	Improved Honest John	-	E26R0	0.000	ARGMA	AS	-	Test	IHL-History	-	-
1989-A246	2436724.50	1989 Jun 5	Improved Honest John	-	E27R0	0.000	ARGMA	AS	-	Test	IHL-History	-	-
1989-A247	2436724.50	1989 Jun 5	Improved Honest John	-	E28R0	0.000	ARGMA	AS	-	Test	IHL-History	-	-
1989-A248	2436724.50	1989 Jun 5	Improved Honest John	-	E29R0	0.000	ARGMA	AS	-	Test	IHL-History	-	-
1989-A249	2436724.50	1989 Jun 5	Improved Honest John	-	E30R0	0.000	ARGMA	AS	-	Test	IHL-History	-	-
1989-A250	2436724.50	1989 Jun 5	Improved Honest John	-	E31R0	0.000	ARGMA	AS	-	Test	IHL-History	-	-
1989-A251	2436724.50	1989 Jun 5	Improved Honest John	-	E32R0	0.000	ARGMA	AS	-	Test	IHL-History	-	-
1989-A252	2436724.50	1989 Jun 5	Improved Honest John	-	E33R0	0.000	ARGMA	AS	-	Test	IHL-History	-	-
1989-A253	2436724.50	1989 Jun 5	Improved Honest John	-	E34R0	0.000	ARGMA	AS	-	Test	IHL-History	-	-
1989-A254	2436724.50	1989 Jun 5	Improved Honest John	-	E35R0	0.000	ARGMA	AS	-	Test	IHL-History	-	-
1989-A255	2436724.50	1989 Jun 5	Improved Honest John	-	E36R0	0.000	ARGMA	AS	-	Test	IHL-History	-	-
1989-A256	2436724.50	1989 Jun 5	Improved Honest John	-	E37R0	0.000	ARGMA	AS	-	Test	IHL-History	-	-
1989-A257	2436724.50	1989 Jun 5	Improved Honest John	-	E38R0	0.000	ARGMA	AS	-	Test	IHL-History	-	-
1989-A258	2436724.50	1989 Jun 5	Improved Honest John	-	E39R0	0.000	ARGMA	AS	-	Test	IHL-History	-	-
1989-A259	2436724.50	1989 Jun 5	Improved Honest John	-	E40R0	0.000	ARGMA	AS	-	Test	IHL-History	-	-
1989-A260	2436724.50	1989 Jun 5	Improved Honest John	-	E41R0	0.000	ARGMA	AS	-	Test	IHL-History	-	-
1989-A261	2436724.50	1989 Jun 5	Improved Honest John	-	E42R0	0.000	ARGMA	AS	-	Test	IHL-History	-	-
1989-A262	2436724.50	1989 Jun 5	Improved Honest John	-	E43R0	0.000	ARGMA	AS	-	Test	IHL-History	-	-
1989-A263	2436724.50	1989 Jun 5	Improved Honest John	-	E44R0	0.000	ARGMA	AS	-	Test	IHL-History	-	-
1989-A264	2436724.50	1989 Jun 5	Improved Honest John	-	E45R0	0.000	ARGMA	AS	-	Test	IHL-History	-	-
1989-A265	2436724.50	1989 Jun 5	Improved Honest John	-	E46R0	0.000	ARGMA	AS	-	Test	IHL-History	-	-
1989-A266	2436724.50	1989 Jun 5	Improved Honest John	-	E47R0	0.000	ARGMA	AS	-	Test	IHL-History	-	-
1989-A267	2436724.50	1989 Jun 5	Improved Honest John	-	E48R0	0.000	ARGMA	AS	-	Test	IHL-History	-	-
1989-A268	2436724.50	1989 Jun 5	Improved Honest John	-	E49R0	0.000	ARGMA	AS	-	Test	IHL-History	-	-
1989-A269	2436724.50	1989 Jun 5	Improved Honest John	-	E50R0	0.000	ARGMA	AS	-	Test	IHL-History	-	-
1989-A270	2436724.50	1989 Jun 5	Improved Honest John	-	E51R0	0.000	ARGMA	AS	-	Test	IHL-History	-	-
1989-A271	2436724.50	1989 Jun 5	Improved Honest John	-	E52R0	0.000	ARGMA	AS	-	Test	IHL-History	-	-
1989-A272	2436724.50	1989 Jun 5	Improved Honest John	-	E53R0	0.000	ARGMA	AS	-	Test	IHL-History	-	-
1989-A273	2436724.50	1989 Jun 5	Improved Honest John	-	E54R0	0.000	ARGMA	AS	-	Test	IHL-History	-	-
1989-A274	2436724.50	1989 Jun 5	Improved Honest John	-	E55R0	0.000	ARGMA	AS	-	Test	IHL-History	-	-
1989-A275	2436724.50	1989 Jun 5	Improved Honest John	-	E56R0	0.000	ARGMA	AS	-	Test	IHL-History	-	-
1989-A276	2436724.50	1989 Jun 5	Improved Honest John	-	E57R0	0.000	ARGMA	AS	-	Test	IHL-History	-	-
1989-A277	2436724.50	1989 Jun 5	Improved Honest John	-	E58R0	0.000	ARGMA	AS	-	Test	IHL-History	-	-
1989-A278	2436724.50	1989 Jun 5	Improved Honest John	-	E59R0	0.000	ARGMA	AS	-	Test	IHL-History	-	-
1989-A279	2436724.50	1989 Jun 5	Improved Honest John	-	E60R0	0.000	ARGMA	AS	-	Test	IHL-History	-	-
1989-A280	2436724.50	1989 Jun 5	Improved Honest John	-	E61R0	0.000	ARGMA	AS	-	Test	IHL-History	-	-
1989-A281	2436724.50	1989 Jun 5	Improved Honest John	-	E62R0	0.000	ARGMA	AS	-	Test	IHL-History	-	-
1989-A282	2436724.50	1989 Jun 5	Improved Honest John	-	E63R0	0.000	ARGMA	AS	-				

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Orb_Pay	Agency	Launch_Code	Group	Category	LICite	Cite	Notes
1961-553	2437348.50	1961 Feb 18	Strongarm	-	E22-RH-2	0.000	BRL	HS	BRL/AFRL/Swenson	Test	RP-1028	-	-
1961-1002	2437410.75	1961 Apr 21 0556:20	Traillblazer 1	-	TB Ig	0.001	LARCN	SS	AFRL/Soberman	Reentry Test	SAD-SR317	TH-D-2063	-
1961-5128	2437417.33	1961 Apr 27 2002	Javelin	-	MSA 8.10GI	0.000	GSFC	SS	GSFC/Jackson	Ionos	WDRF	TH-D-413	-
1961-5153	2437437.76	1961 May 18 0512	Traillblazer 1	-	TB Th	0.000	GSFC	SS	LARC/	Reentry Test	WDRF	TH-D-2063	-
1961-5177	2437463.72	1961 Jun 13 0512	Javelin	-	MSA 8.09GI	0.000	GSFC	SS	GSFC/Jackson	Ionos	WDRF	-	-
1961-5179	2437465.50	1961 Jun 15 0002:59	Javelin	-	MSA 8.13II	0.000	GSFC	SS	DREY/CHR/Moiozzi	Ionos	WDRF	TH-D-1538	-
1961-5187	2437475.47	1961 Jun 24 2317	Javelin	-	MSA 8.15AI	0.000	GSFC	SS	MSFC/CHA/Lozetti	Ionos	WDRF	TH-D-1538	-
1961-4220	2437507.99	1961 Jul 27 1145	Strongarm	1	CRL AM13.501	0.000	AFRL	HF	AFRL/Ashefelter	Aeron	WDRF	AFRL	-
1961-5236	2437523.10	1961 Aug 11 1430	Exos	-	CRL AM13.194	0.000	AFRL	SS	AFRL/Saughlin	Test/Ionos	WDRF	-	-
1961-5262	2437555.90	1961 Sep 13 0952	Javelin	-	MSA 8.09CA	0.000	GSFC	SS	CGA/Smith	Aeronomy	WDRF	-	-
1961-5263	2437556.50	1961 Sep 13 0952	Javelin	-	MSA 8.22CA	0.000	GSFC	SS	CGA/Smith	Aeronomy	WDRF	-	-
1961-5269	2437559.70	1961 Sep 17 0447	Traillblazer 1	-	TB 11	0.000	LARCN	SS	GSFC/Taylor/Spencer	Reentry Test	WDRF	TH-D-2063	-
1961-5329	2437583.24	1961 Oct 10 1740	Javelin	-	MSA 8.230A	0.000	GSFC	SS	GSFC/Jackson/Kuecht	Aeronomy	WDRF	-	-
1961-5333	2437586.69	1961 Nov 14 0426	Javelin	-	MSA 8.17AI	0.000	GSFC	SS	AFSMC/?	Ionos	WDRF	TH-D-1538	-
1961-5381	2437621.17	1961 Nov 17 1606	Javelin	-	MSA 8.16AI	0.000	GSFC	SS	GSFC/Jackson	Aeron	WDRF	-	-
1962-535	2437702.99	1962 Feb 7 1150	Javelin	-	TB 11	0.000	GSFC	SS	GSFC/Jackson	Reentry Test	WDRF	TH-D-2063	-
1962-536	2437757.71	1962 Apr 3 0457	Traillblazer 1	-	TB 11	0.000	LARCN	SS	LARC/	Ionos	WDRF	-	-
1962-5124	2437786.33	1962 May 3 0850	Javelin	-	MSA 8.21GI	0.000	GSFC	SS	GSFC/Sarbu	Ionos	WDRF	-	-
1962-5228	2437854.87	1962 Jul 9 2000	Javelin	-	Project 6.4/J1	0.000	AFRL	SS	AFRL/PF/Isler	Ionos	WDRF	-	-
1962-5107	2437854.87	1962 Jul 9 0859:30	HJ Mike	-	Project 6.3/A-3	0.000	BRL	SF	BRL/Berning	Ionos	AD-A955411	AFRL2	-
1962-5236	2437854.88	1962 Jul 9 0907:00	HJ Mike	-	Project 6.3/A-4	0.000	BRL	SS	BRL/Berning	Ionos	AD-A955411	AFRL2	-
1962-5229	2437854.88	1962 Jul 9 0907:00	Javelin	-	Project 6.4/J2	0.000	AFRL	SS	AFRL/Hinteregger	Ionos	AD-A955411	AFRL2	-
1962-5232	2437854.89	1962 Jul 9 0916	Javelin	-	Project 6.4	0.000	AFRL	SS	AFRL/Hinteregger	Ionos	AD-A955411	AFRL2	-
1962-5624	2437854.89	1962 Jul 9 0920:12	Javelin	-	Project 6.2	0.000	BRL	SS	BRL/Berning	Ionos	AD-A955411	AFRL2	-
1962-5625	2437854.90	1962 Jul 28 0250	Javelin	-	TB 1k	0.000	AFRL	SS	AFRL/Marcisi	Aeron	WDRF	TH-D-2063	-
1962-5254	2437866.50	1962 Jul 28 0250	Javelin	-	-	0.000	LARCN	SS	LARC/	Ionos	WDRF	-	-
1962-5270	2437873.62	1962 Jul 28 0250	Traillblazer 1	-	-	0.000	AFRL	SS	AFRL/Strick/Vancour	Reentry Test	WDRF	TH-D-2063	-
1962-5277	2437880.24	1962 Aug 9 1746	Exos	-	-	0.000	AFRL	SS	UHL/Smith.L	Ionos	WDRF	-	-
1962-5363	2437946.50	1962 Oct 11	HJ Mike	?	-	0.000	BRL?	SU	UHL/Smith.L	Aeron	WDRF	-	-
1962-5406	2437966.50	1962 Oct 21	HJ Mike	?	-	0.000	AFRL	SU	UHL/Smith.L	Aeron	WDRF	-	-
1962-5417	2437961.30	1962 Oct 23 1910:00	HJ Mike Mike	-	AC20.463	0.000	AFRL	SU	AFRL/Rosenberg,Wright	Ionos	WDRF	-	-
1962-5420	2437962.75	1962 Oct 25 0600	Exos	-	CRL AM13.195	0.000	AFRL	SS	AFRL/Olrick	Ionos	WDRF	-	-
1962-5429	2437963.52	1962 Oct 26 0958	HJ Mike	-	X-11	0.000	AFRL	SS	AFRL/Olrick	Ionos	WDRF	-	-
1962-5430	2437963.52	1962 Oct 26 1005	HJ Mike	-	X-12	0.000	AFRL	SS	AFRL/Olrick	Ionos	WDRF	-	-
1962-5431	2437963.52	1962 Oct 26 1011	HJ Mike	-	X-14	0.000	AFRL	SS	AFRL/Olrick	Ionos	WDRF	-	-
1962-5432	2437963.52	1962 Oct 26 1022	HJ Mike	-	X-17	0.000	AFRL	SS	AFRL/Olrick	Ionos	WDRF	-	-
1962-5438	2437963.50	1962 Oct 26	Javelin	-	-	0.000	AFRL	SS	AFRL/Marcisi	Ionos	WDRF	-	-
1962-5461	2437969.50	1962 Oct 29	HJ Mike	?	-	0.000	BRL?	SU	UHL/Smith.L	Aeron	WDRF	-	-
1962-5462	2437969.46	1962 Oct 31 2332:00	HJ Mike Mike	-	AC20.461	0.000	AFRL	SF	AFRL/Rosenberg	Ionos	WDRF	-	-
1962-5464	2437970.01	1962 Nov 1 1206	HJ Mike	-	X-20	0.000	AFRL	SS	AFRL/Olrick	Ionos	WDRF	-	-
1962-5465	2437970.01	1962 Nov 1 1216	HJ Mike	-	X-24	0.000	AFRL	SS	AFRL/Olrick	Ionos	WDRF	-	-
1962-5466	2437970.02	1962 Nov 1 1224	HJ Mike	-	X-28	0.000	AFRL	SS	AFRL/Olrick	Ionos	WDRF	-	-
1962-5468	2437970.65	1962 Nov 2 0430	HJ Mike	-	X-28	0.000	AFRL	SS	AFRL/Olrick	Ionos	WDRF	-	-
1962-5469	2437970.69	1962 Nov 2 0427:59	HJ Mike Mike	-	AC20.462	0.000	AFRL	SS	AFRL/Olrick	Ionos	WDRF	-	-
1962-5484	2437996.50	1962 Nov 27	Javelin	-	-	0.000	AFRL	SS	AFRL/Rosenberg	Ionos	WDRF	-	-
1962-5486	2437996.50	1962 Nov 28 0000	HJ Mike	-	AC20.454	0.000	AFRL	SS	AFRL/Hinteregger	Ionos	WDRF	-	-
1962-5506	2438002.50	1962 Dec 5 0445:00	HJ Mike Mike	-	AC20.455	0.000	AFRL	SS	AFRL/Rosenberg	Aeron	WDRF	-	-
1962-5509	2438002.59	1962 Dec 5 0151:00	HJ Mike Mike	-	AC20.456	0.000	AFRL	SS	AFRL/Rosenberg	Aeron	WDRF	-	-
1962-5530	2438004.95	1962 Dec 6 1021	HJ Mike Mike	-	AC20.459	0.000	AFRL	SS	AFRL/Rosenberg	Aeron	WDRF	-	-
1962-5536	2438001.45	1962 Dec 6 1024	HJ Mike Mike	-	AC20.452	0.000	AFRL	SS	AFRL/Rosenberg	Aeron	WDRF	-	-
1962-5568	2438013.49	1962 Dec 12 2345	HJ Mike Mike	-	AC20.456	0.000	AFRL	SS	AFRL/Rosenberg	Aeron	WDRF	-	-
1962-5569	2438013.47	1962 Dec 12 2352	HJ Mike Mike	-	AC20.458	0.000	AFRL	SS	AFRL/Rosenberg	Aeron	WDRF	-	-
1962-4262	2438013.27	1962 Dec 18 1830	HJ Mike	-	-	0.000	AFRL	AS	AFRL/Rosenberg	Parachute Test	U-H-1h	-	-
1962-4202	2438020.50	19627	HJ PRV	-	-	0.000	LARCN	AS	-	Parachute Test	TH-D-2438	-	-
1962-4233	2438068.05	1962 Feb 7 1311	HJ Mike	-	-	0.000	LARCN	AS	-	Parachute Test	TH-D-2438	-	-
1962-4554	2438076.50	1962 Feb 16	Traillblazer 1	-	-	0.000	LARCN	AS	LARC/	Parachute Test	RP-1028	-	-
1962-4234	2438080.05	1962 Feb 21 1310	HJ Mike	-	-	0.000	AFRL	AS	LARC/	Parachute Test	RP-1028	-	-
1962-4191	2438106.50	1962 May 18	HJ PRV	-	-	0.000	LARCN	AS	NRL/LARC/	Test	U-H-1h	-	-
1962-4192	2438131.30	1962 May 7	HJ PRV	-	-	0.000	LARCN	AS	NRL/LARC/	Parachute Test	U-H-1h	-	-
1962-5658	2438131.39	1962 May 11 2121	HJ Mike Mike	-	-	0.000	AFRL	AS	HADD/	Parachute Test	U-H-1h	-	-
1962-4235	2438170.23	1962 May 20 1730	HJ Mike	-	-	0.000	AFRL	AS	HADD/	Parachute Test	U-H-1h	-	-
1962-5240	2438170.73	1962 May 26 0534:00	HJ Mike	-	-	0.000	AFRL	AS	HADD/	Parachute Test	U-H-1h	-	-
1962-5659	2438208.34	1962 Jun 27 2003	HJ Mike Mike	-	Sandia	0.000	SAND	SU	SAND/?	Aerachute Test	WDRF	Sandia6630426	-
1962-4322	2438213.10	1962 Jul 2 1418	Javelin	-	MSA 8.14GI	0.000	AFRL	SS	GSFC/Bauer	Ionos	WDRF	-	-
1962-4365	2438236.44	1962 Jul 25 2238	Exos	-	MSA 8.31DA	0.000	AFRL	SS	NRL/Hoffmann	Aeronomy	CD-82513	MR63093-12	-
1962-4229	2438242.23	1962 Jul 31 1730	HJ Mike Mike	-	CRL AC13.831	0.000	AFRL	SS	LRL/	Test	U-H-1h	SP-4004	-
1962-5660	2438247.21	1962 Aug 15 1701	HJ Mike Mike	-	-	0.000	AFRL	SS	LRL/	Ionos	WDRF	U-H-1h	-
1962-5661	2438247.21	1962 Aug 21 2007	HJ Mike Mike	-	-	0.000	AFRL	SS	LRL/	Ionos	WDRF	U-H-1h	-
1962-5662	2438263.34	1962 Sep 3 1737	HJ Mike Mike	-	-	0.000	AFRL	SS	HADD/	Parachute Test	U-H-1h	-	-
1962-4124	2438276.23	1962 Sep 12 1154	HJ Mike	-	-	0.000	AFRL	SS	HADD/	Parachute Test	U-H-1h	-	-
1962-5668	2438301.61	1962 Sep 29 0237	Javelin	-	MSA 8.18GI	0.000	GSFC	SS	GSFC/Bauer	Parachute Test	U-H-1h	MR63093-12	-
1962-5559	2438351.50	1962 Nov 18	Javelin	-	HJD-1	0.000	AFRL	SS	LRL/	Test	U-H-1h	SP-4004	-
1964-419	2438411.71	1964 Jan 17 0501	HJ Mike Mike	-	HJD-3	0.000	AFRL	SS	LRL/	Aeronomy	U-H-1h	U-H-1h	-
1964-419	2438411.71	1964 Jan 17 0501	Javelin	-	HJD-3	0.000	AFRL	SS	LRL/	Aeronomy	U-H-1h	U-H-1h	-
1964-4149	2438468.50	1964 Mar 14	HJ Mike Mike	-	HJD-3	0.000	AFRL	SS	LRL/	Solar X	U-H-1h	U-H-1h	-
1964-5210	2438501.48	1964 Apr 15 2325	Javelin	-	ADDPPE TB-1A	0.000	GSFC	SS	GSFC/Guidetti	Test	AFDFD-TB-67-25	TH-D-2063	-
1964-4214	2438555.08	1964 Jun 8 1354	HJ Mike	-	ADDPPE TB-1B	0.000	AFASD	AS	-	Test	AFDFD-TB-67-25	-	-
1964-4215	2438605.10	1964 Jul 28 1430	HJ Mike	-	ADDPPE TB-2	0.000	AFASD	AS	-	Test	AFDFD-TB-67-25	-	-
1964-4216	2438625.28	1964 Aug 17 1839	HJ Mike Mike	-	ADDPPE TB-1	0.000	AFASD	AS	-	Test	AFDFD-TB-67-25	-	-
1964-5509	2438676.66	1964 Oct 8 0952	Javelin	-	MSA 8.03CA/GI	0.000	GSFC	SS	PABL/Sharp	Ionos/Aeron	DC/U-H-1h	-	-
1964-5531	2438698.15	1964 Oct 19 1542	Javelin	-	MSA 8.24GI-II	0.000	GSFC	SS	GSFC/BRL/Hirao/Sarbu	Ionos	WDRF	-	-
1964-5533	2438692.17	1964 Oct 23 1600	Javelin	-	MSA 8.33GR								

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Orb_Pay	Agency	Launch_Code	Group	Category	Lit_Cite	Cite	Notes
1965-S132	2438824.27	1965 Mar 4 1832	HJ Mike Mike	-	Sandia 152-16	0.000	SAND	SS	LRL/	Test	FIS	UCRL-50687	-
1965-S300	2438900.34	1965 May 19 2011.00	Javelin	-	MISA 8.290U	0.000	GSFC	SS	AFRL/Harvey	Ionos	WDGR	HR650524-10	-
1965-S310	2438906.47	1965 May 25 2320	Exos	-	CRL AD13.515	0.000	AFRL	SS	AFRL/Harvey	Ionos	WDGR	-	-
1965-S316	2438907.29	1965 May 26 1901	Javelin	-	MISA 8.370U	0.000	GSFC	SF	AFRL/Harvey	Ionos	WDGR	SP-4006	-
1965-S317	2438907.47	1965 May 26 2320	Exos	-	CRL AD13.512	0.000	AFRL	SS	AFRL/Harvey	Ionos	WDGR	-	-
1965-S345	2438918.24	1965 Jun 12 1745	HJ Mike	?	-	0.000	DASA	SS	LRL/Chodell	XR Astron	FIS	UCRL-50687	-
1965-S353	2438924.14	1965 Jun 18 0906.00	HJ Mike Mike	?	Sandia 152-80	0.000	SAND	SU	DASA/SAND/Smith	Aeron	WDGR	-	-
1965-S364	2438929.04	1965 Jun 18 1517	HJ Mike	?	ADDFEP TB-3	0.000	AFSD	SU	-	Test	AFDOL-TR-67-26	-	-
1965-S370	2438933.75	1965 Jun 22 0600.00	HJ Mike	?	-	0.000	SAND	SU	DASA/SAND/Smith	Aeron	WDGR	-	-
1965-S388	2438935.75	1965 Jun 24 0607.00	HJ Mike	?	-	0.000	SAND	SU	DASA/SAND/Smith	Aeron	WDGR	-	-
1965-S391	2438941.24	1965 Jun 29 1745	HJ Mike Javelin	-	DASA 6.4	0.000	DASA	SU	DASA/SAND/Smith	Aeron	WDGR	-	-
1965-S478	2438998.27	1965 Aug 25 1831	Javelin	-	MISA 6.110A	0.000	GSFC	SS	PITTDamon	Aeronomy	WDGR	-	-
1965-S508	2439027.11	1965 Sep 23 1436	Javelin	-	MISA 8.360U	0.000	GSFC	SS	PSU/Harver, Serbu	Ionos	WDGR	-	-
1965-S540	2439038.53	1965 Oct 6 0042	Javelin	-	MISA 8.420U	0.000	GSFC	SF	PSU/Harvet, King	Ionos	WDGR	-	-
1965-A143	2439043.56	1965 Oct 10 0125	Javelin	-	Pacemaker	0.000	LARL	SS	LRL/Harvet, King	Reentry test	WDGR	SP-4006	-
1965-S591	2439048.50	1965 Oct 15	HJ PRV	-	CRL AE13.559	0.000	AFRL	SS	AFRL/Faire	Aeron	PHD1265	HR651115-12	-
1965-S794	2439067.33	1965 Nov 2 2000	Exos	-	Sandia17	0.000	SAND	SS	SAND/AEC/	Aeron	AFRL2	-	-
1965-S794	2439068.50	1965 Nov 16	HJ Mike Mike	-	-	0.000	AFRL	SS	LRL/7	Aeron?	HR651122-11	-	-
1965-S602	2439073.50	1965 Nov 9	HJ Mike Hydac	-	-	0.000	SAND	SS	AFRL/7	Aeron?	FIS	UCRL-50687	-
1965-S619	2439081.46	1965 Nov 16 2300	HJ Mike Hydac	-	Sandia 152-90	0.000	SAND	SF	AFRL/7	Ionos	AP	-	-
1965-A1232	2439085.06	1965 Nov 20 1330	HJ Mike	-	MISA 8.250A-61	0.000	GSFC	SF	AFRL/Palz, Brace	Aeron/Ionos	WDGR	CR-78317	-
1965-S146	2439167.25	1966 May 2 1759	Javelin	-	CRL AD19.286	0.000	AFRL	SS	AFRL/Vancouver	Auroral/Fields	WDGR	-	-
1966-S244	2439246.72	1966 May 1 0517	Javelin	-	Sandia 152-81	0.000	AFRL	SS	AFRL/	XR Astron	FC	UCRL-50687	-
1966-H16	2439257.47	1966 May 11 2320	HJ Mike Mike	-	MISA 8.440R	0.000	GSFC	SF	GSFC/Stone	RF Astron	FIS	-	-
1966-S272	2439266.29	1966 May 20 1904	Javelin	-	MISA 8.120A	0.000	GSFC	SS	PITTDamon, Donahue	Aeronomy	WDGR	-	-
1966-S367	2439319.38	1966 Jun 12 2100	Javelin	-	CRL AC19.191	0.000	AFRL	SS	AFRL/DUT/Olrick	Ionos	AFRL2	-	-
1966-S347	2439335.29	1966 Jun 28 1623	Javelin	-	Sandia 152-44	0.000	SAND	SS	LRL/	Aeronomy	FIS	UCRL-50687	-
1966-S402	2439355.29	1966 Jun 28 1900	HJ Mike Mike	-	MISA 8.32DA	0.000	AFRL	SS	AFRL/7	Aeronomy	JCH	-	-
1966-S403	2439357.50	1966 Aug 15 1828	HJ Mike Hydac	-	MISA 8.271A	0.000	GSFC	SS	IRL/Johnson	Aeronomy	WDGR	-	-
1966-S440	2439363.27	1966 Sep 24 0913	Javelin	-	MISA 8.360U	0.000	GSFC	SS	RFE/News	Aeronomy	SP-264	SP-4007	-
1966-S503	2439392.88	1966 Sep 24 2029	Javelin	-	Pacemaker	0.000	LARL	SS	LRL/	Ionos	WDGR	-	-
1966-S532	2439405.35	1966 Oct 5 91	HJ PRV	-	PEPP [P1]	0.000	LARL	SS	LRL/	Reentry test	SP-4007	ISTIS/TH-D-4791	-
1966-A127	2439429.50	1966 Oct 31	HJ Mike	-	PEPP [P2]	0.000	LARL	SS	LRL/	Test	SP-4007	-	-
1966-A135	2439434.50	1966 Nov 5	HJ Mike	-	PEPP [P3]	0.000	LARL	SS	LRL/	Test	TR-X-1414	SP-4007	-
1966-A140	2439450.50	1966 Nov 21 1345	HJ Mike	-	MISA 6.1	0.000	DASA	SS	RICE/O'Brien	Aeron?	WDGR	-	-
1966-A145	2439454.07	1966 Nov 24 1078	HJ Mike	-	MISA 8.41UE	0.000	GSFC	SS	RICE/O'Brien	Plasma	WDGR	-	-
1966-A151	2439470.22	1966 Dec 10 1712	HJ Mike	?	MISA 8.47UE	0.000	LARL	SS	RICE/O'Brien	Test	TR-X-1542	HR670403-13	-
1967-401	2439490.50	1967 Jan	HJ Mike	-	MISA 8.390U	0.000	GSFC	SS	GSFC/Harver, Harrington	Plasma	HR674361	SP-4008	-
1967-S119	2439530.76	1967 Feb 9 0616	Javelin	-	PEPP [P2]	0.000	GSFC	SS	GSFC/Harver, Harrington	Plasma	HR674361	SP-4008	-
1967-A159	2439549.50	1967 Feb 28 0547	HJ Mike	-	MISA 8.43UA	0.000	GSFC	SS	GSFC/Harver, Harrington	Plasma	HR674361	SP-4008	-
1967-S165	2439567.74	1967 Mar 18 0922	Javelin	-	MISA 8.43UE	0.000	GSFC	SS	GSFC/Harver, Harrington	Plasma	HR674361	SP-4008	-
1967-416	2439580.54	1967 May 9 1746	HJ Mike	-	PEPP [P2]	0.000	LARL	SS	GSFC/Harver, Harrington	Plasma	HR674361	SP-4008	-
1967-S202	2439586.57	1967 May 17 2059	Javelin	-	MISA 8.43UE	0.000	GSFC	SS	GSFC/Harver, Harrington	Plasma	HR674361	SP-4008	-
1967-S204	2439587.84	1967 Jun 17 0937	Javelin	-	PEPP [P2]	0.000	LARL	SS	GSFC/Harver, Harrington	Plasma	HR674361	SP-4008	-
1967-S305	2439662.65	1967 Jun 17 0535	HJ Mike	-	PEPP [P3]	0.000	LARL	SS	GSFC/Harver, Harrington	Plasma	HR674361	SP-4008	-
1967-S309	2439662.59	1967 Jun 21 0535	HJ Mike	-	PEPP [P3]	0.000	LARL	SS	GSFC/Harver, Harrington	Plasma	HR674361	SP-4008	-
1967-A310	2439663.50	1967 Jun 21 1902	HJ Mike	-	PEPP [P3]	0.000	LARL	SS	GSFC/Harver, Harrington	Plasma	HR674361	SP-4008	-
1967-A313	2439673.45	1967 Sep 19 1532	HJ Mike	-	PEPP [P3]	0.000	LARL	SS	GSFC/Harver, Harrington	Plasma	HR674361	SP-4008	-
1967-A114	2439753.40	1967 Sep 19 1532	HJ Mike	?	MISA 6.45U1U	0.000	DASA	MS	DASA/	Aeron?	WDGR	TH-X-1575	-
1967-A114	2439753.40	1967 Sep 19 1532	HJ Mike	?	MISA 6.45U1U	0.000	DASA	MS	DASA/	Aeron?	WDGR	TH-X-1575	-
1967-A121	2439784.34	1967 Oct 17 1745	HJ Mike	?	PEPP [P2]	0.000	LARL	SS	DASA/	Ionos	WDGR	TH-X-1623	-
1967-A132	2439794.50	1967 Oct 17 1745	HJ Mike	?	PEPP [P2]	0.000	LARL	SS	DASA/	Ionos	WDGR	TH-X-1623	-
1967-S573	2439835.54	1967 Dec 8 0100	Javelin	-	MISA 8.35U1	0.000	GSFC	SS	UTD/Schmerling, Hanson	Aeron?	WDGR	SP-4008	-
1968-A105	2439855.50	1968 Feb 8 0100	Javelin	-	MISA 6.1	0.000	DASA	MS	UTD/Schmerling, Hanson	Test	WDGR	TH-D-4943	-
1968-A165	2439915.50	1968 Mar 2 0500	HJ Mike	?	MISA 6.1	0.000	DASA	MS	UTD/Schmerling, Hanson	Test	WDGR	TH-D-4943	-
1968-S163	2439917.71	1968 Mar 9 2126	Javelin	-	MISA 8.47UE	0.000	GSFC	SS	RICE/O'Brien, Reasmer	Aeron?	WDGR	-	-
1968-S260	2439956.39	1968 Mar 9 2126	Javelin	-	MISA 8.40UA	0.000	GSFC	SS	RICE/O'Brien, Reasmer	Aeron?	WDGR	10875.2176	-
1968-S349	2440001.72	1968 Mar 25 0519	Javelin	-	MISA 8.46U1	0.000	GSFC	SS	USCLA/PITTDamon, Judge	Aeronomy	WDGR	WDGR	-
1968-A119	2440035.19	1968 Mar 27 1637	HJ PRV	-	Pacemaker 7	0.000	LARL	SS	LARL/O'Hare	Reentry test	WDGR	WDGR	-
1968-A101	2440129.50	1968 Oct	HJ Mike	?	MISA 6.1	0.000	DASA	MS	DASA/	Aeron?	WDGR	WDGR	-
1968-A102	2440129.50	1968 Oct	HJ Mike	?	MISA 6.1	0.000	DASA	MS	DASA/	Aeron?	WDGR	WDGR	-
1968-M24	2440153.15	1968 Oct 23 1532	Javelin	-	PEPP SHAPE	0.000	LARL	SS	PEPP SHAPE	Test	WDGR	WDGR	-
1968-S639	2440201.22	1968 Dec 10 1716	Javelin	-	CRL AB19.287	0.000	AFRL	SS	CRL AB19.287	Plasma	WDGR	SP-4010	-
1968-M28	2440201.50	1968 Dec 11	HJ Mike	-	MISA 8.510A	0.000	GSFC	SS	LARL/	Plasma	WDGR	WDGR	-
1968-S192	2440295.71	1969 Mar 15 0506	HJ Mike Hydac	-	PEPP	0.000	ARPA	SS	PITTDamon, Hanson	Aeronomy	WDGR	WDGR	-
1968-S203	2440298.72	1969 Mar 18 0517	HJ Mike Hydac	-	SECENE R6	0.000	ARPA	SS	UTD/Donahue, Hanson	Test	WDGR	WDGR	-
1968-S330	2440357.66	1969 Mar 16 0363	Javelin	-	SECENE R7	0.000	ARPA	SS	UTD/Donahue, Hanson	Test	WDGR	WDGR	-
1969-S352	2440371.87	1969 Mar 30 0851	Javelin	-	CRL AC19.289	0.000	AFRL	SS	AFRL/Hutchinson	Aeronomy	WDGR	WDGR	-
1969-A94	2440391.18	1969 Jun 18 1617	HJ Mike Mike	-	CRL AF19.291	0.000	AFRL	SS	AFRL/Hutchinson	Plasma	FC	AFRL	-
1969-S382	2440399.27	1969 Jun 26 1830	Javelin	-	PEPP	0.000	LARL	SS	LARL/	Test	WDGR	WDGR	-
1969-S786	2440399.40	1969 Jun 26 2141	HJ Mike Hydac	-	MISA 8.53U1	0.000	GSFC	SS	UTD/Lippincott, Hanson	Ionos	WDGR	WDGR	-
1969-A110	2440402.50	1969 Jul	HJ Mike	?	MISA 6.1	0.000	DASA	MS	DASA/	Aeron?	WDGR	WDGR	-
1969-A111	2440402.50	1969 Jul	HJ Mike	?	MISA 6.1	0.000	DASA	MS	DASA/	Aeron?	WDGR	WDGR	-
1969-A212	2440413.23	1969 Jul 10 1730	HJ PRV	-	Pacemaker	0.000	LARL	SS	LARL/	Reentry test	WDGR	WDGR	-
1969-A211	2440571.50	1969 Dec 16	HJ Mike Mike	-	PEPP	0.000	LARL	SS	LARL/	Test	WDGR	WDGR	-
1970-S85	2440617.44	1970 Jan 26 2230	Javelin	-	N-1-20	0.000	DLR	SS	GSOC/	Ionos?	WDGR	WDGR	-
1970-S91	2440617.44	1970 Jan 30 2230	Javelin	-	MISA 8.55UE	0.000	GSFC	SS	UCB/Mozer, Carlson	Plasma	WDGR	WDGR	-
1970-S125	2440635.82	1970 Feb 18 0734	Javelin	-	MISA 8.57CF	0.000	GSFC	SS	UCB/Mozer, Carlson	Eclipse Plasma	WDGR	WDGR	-
1970-S220	2440653.28	1970 Mar 7 1847	Javelin	-	MISA 8.56UE	0.000	GSFC	SS	UCB/Mozer	Plasma	WDGR	WDGR	-
1970-S280	2440679.71	1970 Apr 3 0459	Javelin	-	PEPP SHAPE	0.000	LARL	SS	PEPP SHAPE	Parachute test	WDGR	WDGR	-
1970-A73	2440758.22	1970 Jun 20 1715	HJ Mike Mike	-	MISA 8.57UA	0.000	GSFC	SS	MISA 8.57UA	Aeronomy	WDGR	WDGR	-
1970-S501	2440831.34	1970 Sep 1 2010	Javelin										

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Orb_Pay	Agency	Launch_Code	Group	Category	LTCite	Cite	Notes
1971-S341	2441127.86	1971 Jun 25 0944	Javelin	-	MISA 8.59AI	0.000	GSFC	SS	NMAA/KcA/Fee,Whipple	Ionos	WDCRF	-	-
1972-S72	2441358.21	1972 Feb 10 1702	Javelin	-	MISA 8.60UE	0.000	GSFC	SS	TRM/Bernstein	Plasma	WDCRF	-	-
1972-S303	2441572.73	1972 Sep 12 0531	Javelin	-	MISA 8.62ZE	0.000	GSFC	SS	GFCF/Johnstone	Auroral	FC	SP-4017	-
1973-S239	2441881.43	1973 Jul 17 2123	Javelin	-	MISA 8.61UA	0.000	GSFC	SS	P1TY/Zjpf	Aeronomy	WDCRF	-	-
1973-S395	2442005.39	1973 Nov 18 2123	Javelin	-	MISA 8.63OU-II	0.000	GSFC	SS	UCB/Anderson	Ionos	WDCRF	-	-
1973-S403	2442009.40	1973 Nov 22 2129	Javelin	-	MISA 8.64UI-II	0.000	GSFC	SS	UCB/Anderson	Ionos	WDCRF	-	-
1974-S403	2442388.50	1974 Dec 7	HJ Mike Hydac	-	-	0.000	SMSO	SS	MILL/	Reentry Test?	SMSO	-	-
1974-S442	2442381.50	1974 Dec	HJ Mike Hydac	-	-	0.000	SMSO	SS	MILL/	Reentry Test?	SMSO	-	-
1974-S443	2442381.50	1974 Dec	HJ Mike Hydac	-	-	0.000	SMSO	SS	MILL/	Reentry Test?	SMSO	-	-
1975-S370	2442454.60	1975 Feb 11 0216:56	Javelin	-	MISA 8.65UE	0.000	GSFC	SS	UAF/Scherb	Ionos	WDCRF	-	-
1975-S398	2442482.77	1975 Mar 11 0633:09	Javelin	-	DMA IC5511.21-1A	0.000	ARPA/DMA	SS	AFRL/Olwick	Auroral?	WDCRF	-	-
1975-S435	2442567.50	1975 Jun 4	HJ	-	-	0.000	SAND	AS	SAND/	Test	JCH	-	-
1975-S449	2442651.50	1975 Aug 27	HJ Hydac	-	ARPA WS650.27-1	0.000	ARPA	AS	SAND/	Test	JCH	-	-
1976-S156	2442689.89	1976 Apr 1 0928:20	HJ Hydac	-	MISA 12.1776GT	0.000	ARPA	SF	SDCO/Allen	Test/Plasma	WDCRF	-	-
1976-S444	2442977.56	1976 Jul 18 0123	Javelin	-	HAVE JEEP IV-1	0.000	SMSO	SF	GFCF/Hopper	Test	WDCRF	-	-
1976-S233	2442988.50	1976 Jul 29	HJ Mike Hydac	-	ARPA WS614.51-3	0.000	ARPA	SS	MILL/	Ionos	WDCRF	-	-
1976-S337	2443095.94	1976 Nov 13 1031:30	HJ Mike Hydac	-	ARPA WS614.51-4	0.000	ARPA	SS	DMA/Clark	Ionos	WDCRF	-	-
1976-S387	2443108.93	1976 Nov 26 1025:40	HJ Hydac	-	DMA ST610.31-1	0.000	DMA	SS	DMA/Clark	Ionos	WDCRF	-	-
1976-S386	2443114.46	1976 Dec 1 2305:37	HJ Hydac	-	DMA ST710.31-2	0.000	DMA	SS	DMA/Clark	Ionos	WDCRF	-	-
1977-S395	2443201.49	1977 Feb 2 2349:33	HJ Hydac	-	DMA ST710.31-3	0.000	DMA	SS	DMA/Clark	Ionos	WDCRF	-	-
1977-S396	2443205.49	1977 Mar 7 2358:00	HJ Hydac	-	DMA ST710.31-4	0.000	DMA	SS	DMA/Clark	Ionos	WDCRF	-	-
1977-S101	2443210.50	1977 Mar 13 2258:00	HJ Hydac	-	DMA ST710.31-5	0.000	DMA	SS	DMA/Clark	Ionos	WDCRF	-	-
1977-S109	2443217.45	1977 Mar 13 2258:00	HJ Hydac	-	DMA ST710.31-6	0.000	DMA	SS	DMA/Clark	Ionos	WDCRF	-	-
1977-S194	2443301.44	1977 Jun 6 2234	HJ Javelin	-	TE720.95-1	0.000	DMA?	SS	DMA/	Test	WDCRF	-	-
1977-S216	2443344.29	1977 Jul 19 1900	Taurus Orion	-	MISA 12.1001MT	0.000	GSFC	SS	WFF/Heedleman	Reentry Test?	WDCRF	-	-
1977-S222	2443353.50	1977 Jul 29	HJ Mike Hydac	-	SRK-11	0.000	SMSO	SS	MILL/	Test	WDCRF	-	-
1977-S262	2443462.94	1977 Nov 15 1033:40	HJ Mike Hydac	-	ARPA WS710.51-1	0.000	ARPA	SS	WFF/Fremont	Ionos	WDCRF	-	-
1977-S285	2443460.32	1977 Dec 2 1934	Taurus Orion	-	MISA 12.1002MT	0.000	GSFC	SS	WFF/Fremont	Ionos	WDCRF	-	-
1978-S56	2443569.30	1978 Mar 1 1906	HJ Hydac	-	ARPA WS610.51-2	0.000	ARPA	SS	WFF/Fremont	Test	WDCRF	-	-
1978-S52	2443580.69	1978 Mar 13 0940	Taurus Orion	-	MISA 35.01UA	0.000	GSFC	SS	SR1/Baron	Ionos	WDCRF	-	-
1978-S594	2443580.63	1978 Mar 13 0750	Taurus Orion	-	MISA 35.02GA	0.000	GSFC	SS	SR1/Baron	Ionos	WDCRF	-	-
1978-S224	2443813.32	1978 Oct 31 1947	Taurus Tomahawk	-	MISA 12.1005MT	0.000	GSFC	SS	GFCF/Ontleu	Aeronomy	WDCRF	-	-
1979-S74	2443931.20	1979 Feb 26 1653:30	Taurus Orion	-	MISA 35.09UE	0.000	GSFC	SS	WFF/Flores	Test	WDCRF	-	-
1979-S75	2443931.20	1979 Feb 26 1653:46	Taurus Orion	-	MISA 35.03UA	0.000	GSFC	SS	WFF/Flores	Test	WDCRF	-	-
1979-S104	2443956.96	1979 Mar 24 1104:40	Taurus Tomahawk	-	MISA 12.1003UE	0.000	GSFC	SS	CRM/Kalvey	Aeronomy	WDCRF	-	-
1979-S110	2443964.94	1979 Apr 8 1031:41	Taurus Tomahawk	-	MISA 12.1004UE	0.000	GSFC	SS	P1TY/Zjpf	Aeronomy	WDCRF	-	-
1979-S238	2444186.50	1979 Nov 8	Taurus Orion	-	MISA 35.06UL	0.000	GSFC	SS	UAF/Davis	Plasma	WDCRF	-	-
1980-S498	2444238.50	1980 Jun 7	Taurus Orion	-	MISA 35.06UL	0.000	SAND	AS	UCG/Wilshusen	Aeron	WDCRF	-	-
1980-S566	2444315.00	1980 Mar 16 1155:39	Taurus Tomahawk	-	Five Fuses Test	0.000	SAND	AS	UCG/Wilshusen	Test	WDCRF	-	-
1980-S570	2444317.63	1980 Mar 19 0759:37	Taurus Tomahawk	-	MISA 34.03UE	0.000	GSFC	SS	UAF/Wescott	Plasma Ba	WDCRF	ASR4, 325	-
1980-S570	2444320.95	1980 Mar 22 1156:37	Taurus Tomahawk	-	MISA 34.01UE	0.000	GSFC	SS	UAF/Wescott	Plasma	WDCRF	-	-
1980-S117	2444452.01	1980 Jul 28 1900	Taurus Orion	-	MISA 35.19UE	0.000	GSFC	SS	UAF/Wescott	Plasma	WDCRF	-	-
1980-S148	2444462.01	1980 Jul 31 1215	HJ Orion	-	MISA 35.19UE	0.000	GSFC	SS	UAF/Wescott	Plasma	WDCRF	-	-
1980-S169	2444465.25	1980 Aug 14 0252	Taurus Orion	-	MISA 35.16UE	0.000	GSFC	SS	UAF/Wescott	Plasma	WDCRF	-	-
1980-S169	2444467.29	1980 Sep 15	Taurus Orion	-	MISA 35.16UE	0.000	GSFC	SS	UAF/Wescott	Plasma	WDCRF	-	-
1980-S182	2444519.65	1980 Oct 7 0337:42	Taurus Orion	-	MISA 35.08UE?	0.000	GSFC	SS	UAF/Wescott	Plasma	WDCRF	-	-
1980-S183	2444521.25	1980 Oct 16 0836	Taurus Orion	-	MISA 35.08UE?	0.000	GSFC	SS	UAF/Wescott	Plasma	WDCRF	-	-
1980-S183	2444524.25	1980 Oct 18 0218:54	HJ Orion	-	MISA 35.17UE	0.000	GSFC	SS	UAF/Wescott	Plasma	WDCRF	-	-
1980-S202	2444559.64	1980 Oct 18 0318:00	Taurus Orion	-	MISA 35.17UE	0.000	GSFC	SS	UAF/Wescott	Plasma	WDCRF	-	-
1980-S206	2444559.65	1980 Nov 16 0349:40	Taurus Orion	-	MISA 35.17UE	0.000	GSFC	SS	UAF/Wescott	Plasma	WDCRF	-	-
1980-S207	2444559.68	1980 Nov 16 0415:00	Taurus Orion	-	MISA 35.17UE	0.000	GSFC	SS	UAF/Wescott	Plasma	WDCRF	-	-
1980-S219	2444572.89	1980 Nov 30 0244:30	Taurus Orion	-	MISA 33.09UE	0.000	GSFC	SS	UAF/Wescott	Plasma	WDCRF	-	-
1981-S777	2444670.84	1981 Nov 7 0800	Taurus Orion	-	MISA 33.09UE	0.000	GSFC	SS	UAF/Wescott	Plasma	WDCRF	-	-
1981-S778	2444670.84	1981 Nov 7 0800	Taurus Orion	-	MISA 33.09UE	0.000	GSFC	SS	UAF/Wescott	Plasma	WDCRF	-	-
1981-S779	2444670.84	1981 Nov 7 0800	Taurus Orion	-	MISA 33.09UE	0.000	GSFC	SS	UAF/Wescott	Plasma	WDCRF	-	-
1981-S784	2444698.84	1981 Nov 25 0905:16	Taurus Tomahawk	-	MISA 34.05UE	0.000	GSFC	SS	UAF/Wescott	Plasma	WDCRF	-	-
1981-S891	2444698.84	1981 Nov 25 0905:16	Taurus Tomahawk	-	MISA 34.04UE	0.000	GSFC	SS	UAF/Wescott	Plasma	WDCRF	-	-
1981-S891	2444698.84	1981 Nov 25 0905:16	Taurus Tomahawk	-	MISA 34.04UE	0.000	GSFC	SS	UAF/Wescott	Plasma	WDCRF	-	-
1981-S891	2444698.84	1981 Nov 25 0905:16	Taurus Tomahawk	-	MISA 34.04UE	0.000	GSFC	SS	UAF/Wescott	Plasma	WDCRF	-	-
1981-S891	2444698.84	1981 Nov 25 0905:16	Taurus Tomahawk	-	MISA 34.04UE	0.000	GSFC	SS	UAF/Wescott	Plasma	WDCRF	-	-
1981-S891	2444698.84	1981 Nov 25 0905:16	Taurus Tomahawk	-	MISA 34.04UE	0.000	GSFC	SS	UAF/Wescott	Plasma	WDCRF	-	-
1981-S891	2444698.84	1981 Nov 25 0905:16	Taurus Tomahawk	-	MISA 34.04UE	0.000	GSFC	SS	UAF/Wescott	Plasma	WDCRF	-	-
1981-S891	2444698.84	1981 Nov 25 0905:16	Taurus Tomahawk	-	MISA 34.04UE	0.000	GSFC	SS	UAF/Wescott	Plasma	WDCRF	-	-
1981-S891	2444698.84	1981 Nov 25 0905:16	Taurus Tomahawk	-	MISA 34.04UE	0.000	GSFC	SS	UAF/Wescott	Plasma	WDCRF	-	-
1981-S891	2444698.84	1981 Nov 25 0905:16	Taurus Tomahawk	-	MISA 34.04UE	0.000	GSFC	SS	UAF/Wescott	Plasma	WDCRF	-	-
1981-S891	2444698.84	1981 Nov 25 0905:16	Taurus Tomahawk	-	MISA 34.04UE	0.000	GSFC	SS	UAF/Wescott	Plasma	WDCRF	-	-
1981-S891	2444698.84	1981 Nov 25 0905:16	Taurus Tomahawk	-	MISA 34.04UE	0.000	GSFC	SS	UAF/Wescott	Plasma	WDCRF	-	-
1981-S891	2444698.84	1981 Nov 25 0905:16	Taurus Tomahawk	-	MISA 34.04UE	0.000	GSFC	SS	UAF/Wescott	Plasma	WDCRF	-	-
1981-S891	2444698.84	1981 Nov 25 0905:16	Taurus Tomahawk	-	MISA 34.04UE	0.000	GSFC	SS	UAF/Wescott	Plasma	WDCRF	-	-
1981-S891	2444698.84	1981 Nov 25 0905:16	Taurus Tomahawk	-	MISA 34.04UE	0.000	GSFC	SS	UAF/Wescott	Plasma	WDCRF	-	-
1981-S891	2444698.84	1981 Nov 25 0905:16	Taurus Tomahawk	-	MISA 34.04UE	0.000	GSFC	SS	UAF/Wescott	Plasma	WDCRF	-	-
1981-S891	2444698.84	1981 Nov 25 0905:16	Taurus Tomahawk	-	MISA 34.04UE	0.000	GSFC	SS	UAF/Wescott	Plasma	WDCRF	-	-
1981-S891	2444698.84	1981 Nov 25 0905:16	Taurus Tomahawk	-	MISA 34.04UE	0.000	GSFC	SS	UAF/Wescott	Plasma	WDCRF	-	-
1981-S891	2444698.84	1981 Nov 25 0905:16	Taurus Tomahawk	-	MISA 34.04UE	0.000	GSFC	SS	UAF/Wescott	Plasma	WDCRF	-	-
1981-S891	2444698.84	1981 Nov 25 0905:16	Taurus Tomahawk	-	MISA 34.04UE	0.000	GSFC	SS	UAF/Wescott	Plasma	WDCRF	-	-
1981-S891	2444698.84	1981 Nov 25 0905:16	Taurus Tomahawk	-	MISA 34.04UE	0.000	GSFC	SS	UAF/Wescott	Plasma	WDCRF	-	-
1981-S891	2444698.84	1981 Nov 25 0905:16	Taurus Tomahawk	-	MISA 34.04UE	0.000	GSFC	SS	UAF/Wescott	Plasma	WDCRF	-	-
1981-S891	2444698.84	1981 Nov 25 0905:16	Taurus Tomahawk	-	MISA 34.04UE	0.000	GSFC	SS	UAF/Wescott	Plasma	WDCRF	-	-
1981-S891	2444698.84	1981 Nov 25 0905:16	Taurus Tomahawk	-	MISA 34.04UE	0.000	GSFC	SS	UAF/Wescott	Plasma	WDCRF	-	-
1981-S891	2444698.84	1981 Nov 25 0905:16	Taurus Tomahawk	-	MISA 34.04UE	0.000	GSFC	SS	UAF/Wescott	Plasma	WDCRF	-	-
1981-S891	2444698.84	1981 Nov 25 0905:16	Taurus Tomahawk	-	MISA 34.04UE	0.000	GSFC	SS					

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	OrbPay	Agency	Launch_Code	Group	Category	LTCite	Cite	Notes
1984-866	2445759.22	1984 Feb 28 17:13	Taurus Orion	-	MASA 33.39UL	0.000	GSFC	SS	UCD/Barth	Aeron	WISR	-	-
1984-876	2445792.80	1984 Apr 2 07:15:50	Taurus Mike Tomahawk	-	MASA 38.07UE	0.000	GSFC	SS	UAF/Weesco	Plasma	WISR	-	-
1984-877	2445792.80	1984 Apr 2 07:17:57	Taurus Orion	-	MASA 33.42UE	0.000	GSFC	SS	UAF/Weesco	Plasma	WISR	-	-
1984-S104	2445913.68	1984 Aug 1 04:18	Taurus Mike Tomahawk	-	MASA 38.02UE	0.000	GSFC	SS	BU/Hendillo	Plasma	WISR	JG897, M4, 4085	-
1984-S105	2445919.54	1984 Aug 7 01:00	Taurus Orion	-	MASA 33.43UE	0.000	GSFC	SS	CHM/Kelley	Plasma	WISR	-	-
1984-S125	2445995.77	1984 Oct 22 06:27	Taurus Orion	-	MASA 33.47UE	0.000	GSFC	SS	UHI/Sharp	Plasma	WISR	-	-
1984-S127	2445997.60	1984 Oct 24 02:19:59	Taurus Orion	-	MASA 33.41UE	0.000	GSFC	SS	UUCO/Saith	Plasma	ESN-SF530-363	-	-
1984-A40	2446034.50	1984 Dec	HJ	-	Sandia	0.000	SAND	AS	SAND/Kollistin	Test	SHCOM7-162	-	-
1985-A19	2446065.50	1985	HJ	-	Sandia	0.000	SAND	AS	SAND/Kollistin	Test	SHCOM7-162	-	-
1985-537	2446105.26	1985 Feb 8 18:14	Taurus Orion	-	MASA 33.46UJ	0.000	GSFC	SS	UCO/Kottman	Aeron	WISR	-	-
1985-538	2446105.36	1985 Mar 5 20:38	Taurus Orion	-	MASA 33.44UE	0.000	GSFC	SS	CHM/Kelley	Plasma	WISR	-	-
1985-556	2446139.04	1985 Mar 14 12:54:34	Taurus Tomahawk	-	MASA 34.11UE	0.000	GSFC	SS	UAF/Weesco	Plasma	WISR	-	-
1985-560	2446145.44	1985 Mar 20 22:34	Taurus Tomahawk	-	MASA 34.06UE	0.000	GSFC	SS	CHM/Kelley	Plasma	WISR	-	-
1985-S115	2446318.50	1985 Sep 10 00:02:10	Taurus Orion	-	MASA 33.50UE	0.000	GSFC	SS	NSFC/Reasoner	Plasma	WISR	-	-
1985-S139	2446389.93	1985 Nov 20 10:19	Taurus Mike Tomahawk	-	MASA 38.09UE	0.000	GSFC	SS	UCO/Kottman	Plasma	WISR	-	-
1985-S29	2446497.31	1986 Mar 7 19:30	Taurus Orion	-	MASA 33.51UJ	0.000	GSFC	AS	SAND/Kollistin	Aeron	SHCOM7-162	-	-
1986-A13	2446520.50	1986 Apr	HJ	-	Sandia	0.000	SAND	AS	SAND/Kollistin	Test	SHCOM7-162	-	-
1986-543	2446546.68	1986 Apr 28 01:58	Taurus Mike Tomahawk	-	MASA 38.05UE	0.000	GSFC	SS	UAF/Weesco	Plasma	WISR	JG897, M4, 4085	-
1986-545	2446563.63	1986 May 13 07:56	Taurus Mike Tomahawk	-	MASA 38.06UE	0.000	GSFC	SS	UAF/Weesco	Plasma	WISR	Desind	-
1986-S112	2446739.36	1986 Nov 4 20:44:01	Taurus Orion	-	SSC 541H	0.000	SSC	SS	UAF/Weesco	Plasma	ESN-SF270-55	-	-
1986-S116	2446777.35	1986 Dec 12 20:21:36	Taurus Orion	-	SSC 541L	0.000	SSC	SS	UAF/Weesco	Plasma	ESN-SF270-55	-	-
1987-553	2446844.41	1987 Feb 17 21:55	Taurus Orion	-	MASA 33.56UE	0.000	GSFC	SS	UHI/Sharp	Plasma	WISR	WIPR87-9	-
1987-559	2446859.78	1987 Mar 5 06:38:40	Taurus Mike Tomahawk	-	MASA 38.12UE	0.000	GSFC	SS	UHI/Sharp	Plasma	WISR	-	-
1987-565	2446875.80	1987 Mar 21 07:05	Taurus Tomahawk	-	MASA 34.10UE	0.000	GSFC	SS	CLEM/DJI/Larson	Plasma	WISR	-	-
1987-575	2446885.70	1987 Mar 31 04:47:05	Taurus Mike Tomahawk	-	MASA 38.10UE	0.000	GSFC	SS	CHM/Kelley	Plasma	WISR	-	-
1987-576	2446885.70	1987 Mar 31 04:47:11	Taurus Mike Tomahawk	-	MASA 38.11UE	0.000	GSFC	SS	CHM/Kelley	Plasma	WISR	-	-
1987-S109	2446991.95	1987 Jul 15 01:55	Taurus Orion	-	MASA 33.52AE	0.000	GSFC	SS	GSFC/Golberg	Plasma	www.case.usu.edu	-	-
1987-S112	2447003.77	1987 Jul 27 06:25	Taurus Orion	-	MASA 33.53AE	0.000	GSFC	SS	GSFC/Golberg	Plasma	www.case.usu.edu	-	-
1987-S149	2447072.80	1987 Oct 4	HJ Mike Hydac	?	-	0.000	AFBMD	SS	HILL/?	Reentry Test?	WISR	-	-
1987-S175	2447117.50	1987 Nov 19	HJ Mike Hydac	?	-	0.000	AFBMD	SS	HILL/?	Reentry Test?	WISR	-	-
1988-S106	2447369.74	1988 Jul 27 05:46:03	Taurus Mike Tomahawk	-	MASA 38.07UE	0.000	GSFC	SS	UHI/Sharp	Plasma	WISR	-	-
1988-S127	2447453.50	1988 Oct 19 20:29:51	HJ Mike Hydac	?	MASA 33.49UL	0.000	GSFC	SS	UCD/Barth	Aeron	WISR	-	-
1989-542	2447455.35	1988 Dec 20 20:29:51	Taurus Orion	-	MASA 33.57UL	0.000	GSFC	SS	UCD/Barth	Aeron	WISR	-	-
1989-A14	2447593.42	1989 Mar 22:00	Taurus Orion	-	MASA 33.57UL	0.000	GSFC	SS	WFF/Flovers	Test	WISR	-	-
1990-588	2447862.34	1989 Dec 21 20:06	Taurus Orion	-	MASA 33.49UL	0.000	GSFC	SS	WFF/Flovers	Test	WISR	-	-
1990-599	2448026.40	1990 May 13 21:29:02	Taurus Orion	-	MASA 12.45M1	0.000	GSFC	SS	WFF/Flovers	Test	WISR	-	-
1990-S116	2448114.84	1990 Aug 11 06:10:00	Taurus Mike Tomahawk	-	MASA 33.59AE	0.000	GSFC	SS	GSFC/Baker	Plasma	WISR	-	-
1990-S118	2448116.85	1990 Aug 15 06:29:00	Taurus Mike Tomahawk	-	MASA 33.59AE	0.000	GSFC	SS	GSFC/Baker	Plasma	WISR	-	-
1990-S119	2448118.86	1990 Aug 15 06:43:56	Taurus Mike Tomahawk	-	MASA 38.10UE	0.000	GSFC	SS	BU/Hendillo	Plasma	WISR	-	-
1990-S123	2448265.86	1990 Aug 22 08:40:10	Taurus Mike Tomahawk	-	MASA 38.10UE	0.000	GSFC	SS	BU/Hendillo	Plasma	WISR	-	-
1991-S178	2448266.84	1991 Dec 6 00:34	Taurus Mike Tomahawk	-	MASA 38.10UE	0.000	GSFC	SS	BU/Hendillo	Plasma	WISR	JCR101, A9, 19683	-
1991-S179	2448266.84	1991 Dec 6 00:34	Taurus Mike Tomahawk	-	MASA 38.10UE	0.000	GSFC	SS	BU/Hendillo	Plasma	WISR	JCR101, A9, 19683	-
1993-563	2448396.55	1993 Oct 4 19:39	Taurus Mike Tomahawk	-	MASA 35.05UE	0.000	GSFC	SS	UCO/Barth	Plasma	WISR	-	-
1994-543	2448396.55	1993 Oct 4 19:39	Taurus Orion	-	MASA 35.05UE	0.000	GSFC	SS	UCO/Barth	Plasma	WISR	-	-
1995-541	2448397.44	1994 Jun 27 22:05	Taurus Orion	-	MASA 35.05UE	0.000	GSFC	SS	UCO/Barth	Plasma	WISR	WVW-PFRR	-
1998-521	2450869.92	1998 Jun 6 22:00:00	Taurus Orion	-	MASA 33.05UE	0.000	GSFC	SS	UCO/Barth	Plasma	WISR	-	-
1999-S21	2451290.15	1998 Feb 25 07:30:00	Taurus Orion	-	MASA 33.05UE	0.000	GSFC	SS	CLEM/Larson	Plasma	WVW-PFRR	-	-
1999-S24	2451367.67	1998 Jun 25 15:31:00	Taurus Orion	-	MASA 33.05UE	0.000	GSFC	SS	CLEM/Larson	Plasma	WVW-PFRR	-	-
1999-S48	2451377.65	1999 Jul 5 04:01:00	Taurus Orion	-	MASA 33.05UE	0.000	GSFC	SS	CLEM/Larson	Plasma	WVW-PFRR	-	-
2002-S10	2452326.91	2002 Jul 18 03:41:00	Taurus Orion	-	MASA 33.05UE	0.000	GSFC	SS	CLEM/Larson	Plasma	WVW-PFRR	-	-
2002-S11	2452326.91	2002 Jul 21 09:57:01	Taurus Orion	-	MASA 33.05UE	0.000	GSFC	SS	CLEM/Larson	Plasma	WVW-PFRR	-	-
2002-S12	2452326.92	2002 Feb 21 09:59:01	Taurus Orion	-	MASA 33.07UE	0.000	GSFC	SS	CLEM/Larson	Plasma	www.wff.nasa.gov	-	-
2014-A42	2457008.85	2014 Dec 17 03:30	Taurus Orion	-	MASA 32.052R	0.000	GSFC	SS	CLEM/Larson	Plasma	www.wff.nasa.gov	-	-
2021-A05	2459303.50	2021 Mar 30	Taurion	?	MASA 12.058RR	0.000	GSFC	AS	LARONE/Gilbert	Tech	www.wff.nasa.gov	-	-



Launch

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Mission	FlightCode	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee km	Range km	Dest
1988-468	2436388.50	1988 Jul 4	NOTS EVI	1	-	-	-	-	-	NOTS	G-2	-	-	0?	-	-
1988-476	2436402.50	1988 Jul 18	NOTS EVI	1	-	-	-	-	-	NOTS	G-2	-	-	0?	-	-
1988-F07	2436409.50	1988 Jul 25	NOTS EVI	1	1	Diagnostic 1	Diagnostic Payload 1	-	F-4D-747	NOTS	RM03/21?	WTR	LP4	12	-	-
1988-F08	2436427.50	1988 Aug 12	NOTS EVI	2	2	Diagnostic 2	Diagnostic Payload 2	-	F-4D-747	NOTS	RM03/21?	WTR	LP4	12	-	-
1988-497	2436431.50	1988 Aug 16	NOTS EVI	1	-	-	-	-	-	NOTS	G-2	-	-	0?	-	-
1988-498	2436432.50	1988 Aug 17	NOTS EVI	1	-	-	-	-	-	NOTS	G-2	-	-	0?	-	-
1988-F10	2436437.50	1988 Aug 22	NOTS EVI	3	3	Diagnostic 3	Diagnostic Payload 3	-	F-4D-747	NOTS	RM03/21?	WTR	LP4	80?	-	-
1988-F12	2436440.50	1988 Aug 25	NOTS EVI	4	4	Argus Radiation 1	Radiation Payload 1	-	F-4D-747	NOTS	RM03/21?	WTR	LP4	12	-	-
1988-F13	2436441.50	1988 Aug 26	NOTS EVI	5	5	Argus Radiation 2	Radiation Payload 2	-	F-4D-747	NOTS	RM03/21?	WTR	LP4	12	-	-
1988-F14	2436443.50	1988 Aug 28	NOTS EVI	6	6	Argus Radiation 3	Radiation Payload 3	-	F-4D-747	NOTS	RM03/21?	WTR	LP4	12	-	-





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Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	DrPay	Agency	Launch_Code	Group	Category	LTCite	Cite	Notes
1988-468	2436398.50	1958 Jul 4	NUTS EV1	1	-	0.000	NUTS	SF	NUTS/	Test	NUTS	-	-
1988-476	2436402.50	1958 Jul 18	NUTS EV1	1	-	0.000	NUTS	SF	NUTS/	Test	NUTS	-	-
1988-F07	2436409.50	1958 Jul 25	NUTS EV1	-	1	0.001	NUTS	OF	G	Sat REG 00	NUTS	-	-
1988-F08	2436427.50	1958 Aug 12	NUTS EV1	-	2	0.001	NUTS	OF	G	Sat REG 00	NUTS	-	-
1988-497	2436431.50	1958 Aug 16	NUTS EV1	1	-	0.000	NUTS	SF	NUTS/	Test	NUTS	-	-
1988-498	2436432.50	1958 Aug 17	NUTS EV1	1	-	0.000	NUTS	SF	NUTS/	Test	NUTS	-	-
1988-F10	2436437.50	1958 Aug 22	NUTS EV1	-	3	0.001	NUTS	OF	G	Sat REG 00	NUTS	-	-
1988-F12	2436440.50	1958 Aug 25	NUTS EV1	-	4	0.001	NUTS	OF	G	Sat REG 00	NUTS	-	-
1988-F13	2436441.50	1958 Aug 26	NUTS EV1	-	5	0.001	NUTS	OF	G	Sat REG 00	NUTS	-	-
1988-F14	2436443.50	1958 Aug 28	NUTS EV1	-	6	0.001	NUTS	OF	G	Sat REG 00	NUTS	-	-



Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Mission	FlightCode	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee_Km	Range_Km	Dest
2007-A04	2454224.04	2007 May 3 1250:56	Hybrid Test Rocket	-	-	HTR	-	-	-	AMD	03	-	-	13	-	-



Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variat	Flight_ID	OrbPay	Agency	Launch_Code	Group	Category	LTCite	Cite	Notes
2007-A04	2454224.04	2007 May 3 1250:56	Hybrid Test Rocket	-	-	0.000	IMMRO/ARR	AS	IMMRO/LH-Michoud	Tech	www.rocketrangle.no	ESA-SF647-181	-



Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Mission	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee_Km	Range_Km	Dest
1945-A09	2431741.50	1945 Oct 13	HVAR	-	-	R-1	-	WS	-	-	-	57	-	-
1945-A10	2431741.50	1945 Oct 13	HVAR	-	-	R-2	-	WS	-	-	-	57	-	-
1945-A11	2431741.50	1945 Oct 13	HVAR	-	-	R-3	-	WS	-	-	-	57	-	-
1945-A12	2431741.50	1945 Oct 13	HVAR	-	-	R-4	-	WS	-	-	-	57	-	-
1945-A13	2431742.50	1945 Oct 14	HVAR	-	-	R-5	-	WS	-	-	-	57	-	-
1945-A14	2431742.50	1945 Oct 14	HVAR	-	-	R-6	-	WS	-	-	-	57	-	-
1947-A08	2432289.50	1947 Apr 24	HVAR FFAR	-	-	RM-10 Model	-	WI	-	-	-	57	-	-
1947-A11	2432305.50	1947 May	HVAR	-	-	FR-2 Model	-	WI	-	-	-	57	-	-
1948-A04	2432702.50	1948 Jun	HVAR FFAR	-	-	Rascal Model	-	WI	-	-	-	57	-	-
1948-A12	2432740.50	1948 Jul 8	HVAR FFAR	-	-	Rascal Model	-	WI	-	-	-	57	-	-
1948-A35	2432824.50	1948 Sep	HVAR FFAR	-	-	Rascal Model	-	WI	-	-	-	57	-	-
1949-A01	2432927.50	1949 Jan 11	HVAR	-	-	E14 Model	-	WI	-	-	-	57	-	-
1949-A16	2433048.50	1949 May 12	HVAR FFAR	-	-	D13 Model	-	WI	-	-	-	57	-	-
1950-A22	2433419.50	1950 May 18	HVAR	-	-	F25 Drag Model	-	WI	-	-	-	57	-	-
1950-A27	2433490.50	1950 Jun 18	HVAR FFAR	-	-	E2 Model	-	WI	-	-	-	57	-	-
1950-A34	2433517.50	1950 Aug 24	HVAR	-	-	F25 Model	-	WI	-	-	-	57	-	-
1950-A38	2433539.50	1950 Sep 15	HVAR	-	-	D28 Model	-	WI	-	-	-	57	-	-
1950-A40	2433556.50	1950 Oct 2	HVAR	-	-	D27 Model	-	WI	-	-	-	57	-	-
1950-A41	2433564.50	1950 Oct 10	HVAR FFAR	-	-	D85 Model	-	WI	-	-	-	57	-	-
1950-A51	2433594.50	1950 Nov 9	HVAR FFAR	-	-	F25 Drag Model	-	WI	-	-	-	57	-	-
1950-A63	2433616.50	1950 Dec 1	HVAR	-	-	F25 Drag Model	-	WI	-	-	-	57	-	-
1950-A63	2433634.50	1950 Dec 19	HVAR	-	-	Rascal Model	-	WI	-	-	-	57	-	-
1951-A04	2433708.50	1951 Mar	HVAR FFAR	-	-	F25 Drag Model	-	WI	-	-	-	57	-	-
1951-A40	2433836.50	1951 Jul 9	HVAR	-	-	D27 Model	-	WI	-	-	-	57	-	-
1951-A46	2433854.50	1951 Jul 27	HVAR	-	-	Hermes ASK Model	-	WI	-	-	-	57	-	-
1951-A66	2433901.50	1951 Aug 22	HVAR	-	-	E2 Model	-	WI	-	-	-	57	-	-
1951-A61	2433901.50	1951 Sep 12	HVAR	?	-	DS2 Model	-	WI	-	-	-	57	-	-
1952-A76	2434148.50	1952 May 16	HVAR	-	-	D18 Model	-	WI	-	-	-	57	-	-
1952-A92	2434166.50	1952 Jun 3	HVAR	-	-	F12 Model	-	WI	-	-	-	57	-	-
1952-A146	2434200.50	1952 Sep 5	HVAR	-	-	Rascal Model	-	WI	-	-	-	57	-	-
1952-A174	2434288.50	1952 Oct 3	HVAR FFAR	-	-	ES9 Model	-	WI	-	-	-	1	-	-
1952-A175	2434288.50	1952 Oct 3	HVAR FFAR	-	-	ES9 Model	-	WI	-	-	-	2	-	-
1952-A222	2434300.50	1952 Oct 14	HVAR FFAR	-	-	ES1 Model	-	WI	-	-	-	57	-	-
1952-A229	2434340.50	1952 Nov 24	HVAR	-	-	D32 Model	-	WI	-	-	-	57	-	-
1953-A03	2434377.50	1953	HVAR	-	-	D18 F8U-1 Model	-	WI	-	-	-	10?	-	-
1953-A351	2434697.50	1953 Oct 7	HVAR	-	-	E14 Model	-	WI	-	-	-	57	-	-
1953-A426	2434694.50	1953 Nov 3	HVAR	-	-	ES7 Model	-	WI	-	-	-	57	-	-
1954-A01	2434742.50	1954	HVAR	-	-	Turkey study	-	WI	-	-	-	57	-	-
1954-A29	2434763.50	1954 Jan 21	HVAR	-	-	-	-	WI	-	-	-	57	-	-
1954-A69	2435003.50	1954 Mar 21	HVAR	-	-	D18 F8U-1 Model	-	WI	-	-	-	10?	-	-
1954-A79	2435014.50	1954 Sep 29	HVAR	-	-	-	-	WI	-	-	-	57	-	-
1954-A750	2435034.50	1954 Sep 29	HVAR	-	-	-	-	NS	-	-	-	57	-	-
1957-A12	2435864.50	1957 Feb 15	HVAR	-	-	D27 Model	-	WI	-	-	-	57	-	-





Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variante	Flight_ID	Launch_Cost	Agency	Launch_Code	Group	Category	LTCite	Cite	Notes
1945-A09	2431741.50	1945 Oct 13	HVAR	-	-	0.000	JPL	AS	-	Test	JPL-41	-	-
1945-A10	2431741.50	1945 Oct 13	HVAR	-	-	0.000	JPL	AS	-	Test	JPL-41	-	-
1945-A11	2431741.50	1945 Oct 13	HVAR	-	-	0.000	JPL	AS	-	Test	JPL-41	-	-
1945-A12	2431741.50	1945 Oct 13	HVAR	-	-	0.000	JPL	AS	-	Test	JPL-41	-	-
1945-A13	2431741.50	1945 Oct 14	HVAR	-	-	0.000	JPL	AS	-	Test	JPL-41	-	-
1945-A14	2431742.50	1945 Oct 14	HVAR	-	-	0.000	JPL	AS	-	Test	JPL-41	-	-
1947-A08	2432299.50	1947 Apr 24	HVAR FFAR	-	-	0.000	PARD	AS	-	Test	RP-1028	-	-
1947-A11	2432305.50	1947 May	HVAR	-	-	0.000	PARD	AS	-	Test	RP-1028	-	-
1948-A04	2432702.50	1948 Jun	HVAR FFAR	-	-	0.000	PARD	AS	-	Test	RP-1028	-	-
1948-A12	2432740.50	1948 Jul 8	HVAR FFAR	-	-	0.000	PARD	AS	-	Test	RP-1028	-	-
1948-A25	2432794.50	1948 Sep	HVAR FFAR	-	-	0.000	PARD	AS	-	Test	RP-1028	-	-
1948-A35	2432824.50	1948 Oct	HVAR	-	-	0.000	PARD	AS	-	Test	RP-1028	-	-
1949-A01	2432927.50	1949 Jan 11	HVAR	-	-	0.000	PARD	AS	-	Test	RP-1028	-	-
1949-A16	2433048.50	1949 May 12	HVAR FFAR	-	-	0.000	PARD	AS	-	Test	RP-1028	-	-
1960-A12	2433419.50	1960 May 18	HVAR	-	-	0.000	PARD	AS	-	Test	RP-1028	-	-
1960-A22	2433460.50	1960 Jul 18	HVAR FFAR	-	-	0.000	PARD	AS	-	Test	RP-1028	-	-
1960-A27	2433517.50	1960 Aug 24	HVAR	-	-	0.000	PARD	AS	-	Test	RP-1028	-	-
1960-A34	2433559.50	1960 Sep 15	HVAR	-	-	0.000	PARD	AS	-	Test	RP-1028	-	-
1960-A38	2433596.50	1960 Oct 2	HVAR	-	-	0.000	PARD	AS	-	Test	RP-1028	-	-
1960-A40	2433596.50	1960 Oct 10	HVAR FFAR	-	-	0.000	PARD	AF	-	Test	RP-1028	-	-
1960-A41	2433594.50	1960 Nov 9	HVAR FFAR	-	-	0.000	PARD	AS	-	Test	RP-1028	-	-
1960-A51	2433594.50	1960 Nov 9	HVAR	-	-	0.000	PARD	AS	-	Test	RP-1028	-	-
1960-A57	2433616.50	1960 Dec 1	HVAR	-	-	0.000	PARD	AS	-	Test	RP-1028	-	-
1960-A63	2433634.50	1960 Dec 19	HVAR	-	-	0.000	PARD	AS	-	Test	RP-1028	-	-
1951-A04	2433705.50	1951 Mar	HVAR FFAR	-	-	0.000	PARD	AS	-	Test	RP-1028	-	-
1951-A40	2433696.50	1951 Jul 9	HVAR	-	-	0.000	PARD	AS	-	Test	RP-1028	-	-
1951-A46	2433694.50	1951 Jul 27	HVAR	-	-	0.000	PARD	AS	-	Test	RP-1028	-	-
1951-A56	2433680.50	1951 Aug 22	HVAR	-	-	0.000	PARD	AS	-	Test	RP-1028	-	-
1951-A61	2433901.50	1951 Sep 12	HVAR	?	-	0.000	PARD	AS	-	Test	RP-1028	-	-
1952-A76	2434146.50	1952 May 16	HVAR	-	-	0.000	PARD	AS	-	Test	RP-1028	-	-
1952-A92	2434166.50	1952 Jun 5	HVAR	-	-	0.000	PARD	AS	-	Test	RP-1028	-	-
1952-A146	2434260.50	1952 Sep 5	HVAR	-	-	0.000	PARD	AS	-	Test	RP-1028	-	-
1952-A174	2434286.50	1952 Oct 5	HVAR FFAR	-	-	0.000	PARD	AS	-	Test	RP-1028	-	-
1952-A175	2434286.50	1952 Oct 5	HVAR FFAR	-	-	0.000	PARD	AS	-	Test	RP-1028	-	-
1952-A222	2434330.50	1952 Nov 14	HVAR FFAR	-	-	0.000	PARD	AS	-	Test	RP-1028	-	-
1952-A239	2434340.50	1952 Nov 24	HVAR	-	-	0.000	PARD	AS	-	Test	RP-1028	-	-
1953-A03	2434377.50	1953	HVAR	-	-	0.000	PARD	AS	-	Test	RP-1028	-	-
1953-A391	2434697.50	1953 Oct 7	HVAR	-	-	0.000	PARD	AS	-	Test	RP-1028	-	-
1953-A426	2434694.50	1953 Nov 3	HVAR	-	-	0.000	PARD	AS	-	Test	RP-1028	-	-
1954-A01	2434742.50	1954	HVAR	-	-	0.000	PARD	AS	-	Test	RP-1028	-	-
1954-A29	2434765.50	1954 Jan 21	HVAR	-	-	0.000	PARD	AS	-	Test	RP-1028	-	-
1954-A59	2435605.50	1954 Mar 2	HVAR	-	-	0.000	PARD	AS	-	Test	RP-1028	-	-
1954-A239	2435014.50	1954 Sep 29	HVAR	-	-	0.000	USAF	AS	-	Test	RP-1028	-	-
1954-A730	2435014.50	1954 Sep 29	HVAR	-	-	0.000	USAF	AS	-	Test	RP-1028	-	-
1957-A12	2435884.50	1957 Feb 15	HVAR	-	-	0.000	PARD	AS	-	Test	RP-1028	-	-



Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Mission	FlightCode	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee km	Range km	Dest
2002-H03	2482626.97	2002 Dec 18 1115	HYSR	-	-	SUREX-2	-	-	-	WI	-	-	-	70	-	-



Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	OrbPay	Agency	Launch_Code	Group	Category	LTCite	Cite	Notes
2002-H03	2462626.97	2002 Dec 18 1115	HYSR	-	-	0.000	ARC	SS	ARC/WFF/Hurbach	Tech	www.gsfc.nasa.gov	-	-



Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Mission	LaunchCode	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee km	Range km	Dest
1985-5137	2447487.50	1988 Nov 22	Hades	-	-	-	-	-	-	CEL	-	-	-	1507	-	-
1985-543	2447593.50	1989 Mar 8	Hades	-	-	-	-	-	-	CEL	-	-	-	1507	-	-
1992-501	2448621.50	1992	Hades	-	-	-	-	-	-	CEL	-	-	-	1507	-	-





Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Drbby	Agency	Launch_Code	Group	Category	LTCite	Cite	Notes
1986-5137	2447487.50	1988 Nov 22	Hades	-	-	0.000	DGA	MS	-	Test	JCM	-	-
1988-543	2447593.50	1989 Mar 8	Hades	-	-	0.000	DGA	MS	-	Test	JCM	-	-
1992-501	2448621.50	1992	Hades	-	-	0.000	DGA	MS	-	Test	www.fas.org	-	-







Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Mission	FlightCode	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee_Km	Range_Km	Dest
1961-1229	2437623-50	1961 Nov 20	Nike Hercules		INH-18	Highball II intercept				WS				207		
1961-1240	2437633-50	1961 Dec 5	Nike Hercules		INH-19	Redstone intercept	745 warhead			WS				207		
1961-1241	2437636-50	1961 Dec 6	Nike Hercules		STD 84HE					WS				207		
1961-1242	2437639-50	1961 Dec 12	Nike Hercules		ZURF-13					WS	ZURF			207		
1961-1243	2437645-50	1961 Dec 14	Nike Hercules		ZURF-14	Mike Zeus System Demo				WS	ZURF			207		
1962-104	2437647-50	1962 Jan 12	Nike Hercules		B-324	Mike Zeus System Demo				WS				207		
1962-1261	2437676-50	1962 Jan 29	Nike Hercules		STD 85HE					WS				207		
1962-114	2437704-50	1962 Feb 9	Nike Hercules		B-326					WS				207		
1962-1151	2437731-50	1962 Mar 14	Nike Hercules		STD FS-4					WS				207		
1962-128	2437751-50	1962 Mar 28	Nike Hercules		ZURF-15	Mike Zeus System Demo				WS	ZURF			207		
1962-164	2437796-50	1962 May 12	Nike Hercules		B-327					WS				207		
1962-169	2437843-50	1962 Jun 28	Nike Hercules		B-328					WS				207		
1962-1120	2437892-50	1962 Aug 16	Nike Hercules							WS				207		
1962-1121	2437876-50	1962 Aug	Nike Hercules							WS				207		
1962-1122	2437876-50	1962 Aug	Nike Hercules							WS				207		
1962-1123	2437876-50	1962 Aug	Nike Hercules			Cerrification				WS				57		
1962-1150	2437907-50	1962 Sep 7	Nike Hercules			Space point intercept				WS				57		
1962-1655	2437917-50	1962 Sep 10	Nike Hercules	B-330						WS				85		
1962-1152	2437907-50	1962 Sep	Nike Hercules			Radar transmitter				WS				207		
1962-1157	2437972-80	1962 Nov 4 0715?	Nike Hercules			DOMINIC TIGTROPE				WS				24		
1962-1158	2437972-80	1962 Nov 4 0715?	Nike Hercules							WS				207		
1963-103	2438029-50	1963 Jan	Nike Hercules							WS				207		
1963-117	2438060-50	1963 Feb	Nike Hercules							WS				207		
1963-129	2438068-50	1963 Mar	Nike Hercules							WS				207		
1963-1222	2438122-50	1963 Apr 3	Nike Hercules		ATBM-1 Target					WS	ZURF			207		
1963-1221	2438122-50	1963 Apr 3	Nike Hercules		ATBM-1					WS				207		
1963-1223	2438122-50	1963 Apr 11	Nike Hercules		ATBM-2					WS				207		
1963-1224	2438160-50	1963 May 17	Nike Hercules		ATBM-3 Target					WS	ZURF?			31		
1963-1225	2438166-50	1963 May 11	Nike Hercules		ATBM-3					WS				207		
1963-1217	2438166-50	1963 May 17	Nike Hercules		ATBM-4 Target					WS	ZURF?			207		
1963-1226	2438177-50	1963 May 28	Nike Hercules		ATBM-4					WS				207		
1963-1218	2438177-50	1963 May 28	Nike Hercules		ATBM-5 Target					WS	ZURF?			207		
1963-1226	2438185-50	1963 Jun 5	Nike Hercules		ATBM-5					WS				207		
1963-1219	2438185-50	1963 Jun 5	Nike Hercules		ATBM-6 Target					WS	ZURF?			207		
1963-1227	2438185-50	1963 Jun 5	Nike Hercules		ATBM-6					WS				207		
1963-1220	2438185-50	1963 Jun 26	Nike Hercules		ATBM-7					WS				36		
1963-1215	2438206-50	1963 Jun 26	Nike Hercules		ATBM-8	Space point intercept				WS				36		
1963-1216	2438206-50	1963 Jul 19	Nike Hercules		ATBM-7	Space point intercept				WS				20		
1963-1213	2438229-50	1963 Sep 5	Nike Hercules		ATBM-9 Target					WS				20		
1963-1214	2438277-50	1963 Sep 5	Nike Hercules		ATBM-9					WS				20		
1963-1131	2438302-50	1963 Oct 5	Nike Hercules							WS				12		
1963-1132	2438302-50	1963 Oct 5	Nike Hercules		ATBM-11	Redstone intercept				WS				207		
1963-1129	2438313-50	1963 Oct 11	Nike Hercules		ATBM-12					WS				207		
1963-1130	2438326-50	1963 Oct 24	Nike Hercules		ATBM-13					WS				207		
1963-1134	2438333-50	1963 Nov	Nike Hercules							WS				207		
1963-1135	2438333-50	1963 Nov	Nike Hercules							WS				207		
1963-1136	2438333-50	1963 Nov	Nike Hercules							WS				207		
1963-1137	2438333-50	1963 Nov	Nike Hercules							WS				207		
1963-1138	2438333-50	1963 Nov	Nike Hercules							WS				207		
1963-1139	2438333-50	1963 Nov	Nike Hercules							WS				207		
1963-1140	2438333-50	1963 Nov	Nike Hercules							WS				207		
1963-1141	2438333-50	1963 Nov	Nike Hercules							WS				207		
1963-1142	2438333-50	1963 Nov	Nike Hercules							WS				207		
1963-1143	2438333-50	1963 Nov	Nike Hercules							WS				207		
1963-1144	2438333-50	1963 Nov	Nike Hercules							WS				207		
1963-1145	2438333-50	1963 Nov	Nike Hercules							WS				207		
1963-1146	2438333-50	1963 Nov	Nike Hercules							WS				207		
1963-1147	2438333-50	1963 Nov	Nike Hercules							WS				207		
1963-1148	2438333-50	1963 Nov	Nike Hercules							WS				207		
1963-1149	2438333-50	1963 Nov	Nike Hercules							WS				207		
1963-1150	2438333-50	1963 Nov	Nike Hercules							WS				207		
1963-1151	2438333-50	1963 Nov	Nike Hercules							WS				207		
1963-1152	2438333-50	1963 Nov	Nike Hercules							WS				207		
1963-1153	2438333-50	1963 Nov	Nike Hercules							WS				207		
1963-1154	2438333-50	1963 Nov	Nike Hercules							WS				207		
1963-1155	2438333-50	1963 Nov	Nike Hercules							WS				207		
1963-1156	2438333-50	1963 Nov	Nike Hercules							WS				207		
1963-1157	2438333-50	1963 Nov	Nike Hercules							WS				207		
1964-1197	2438400-50	1964 Jan 6	Nike Hercules		ATBM-14	T-45 Sergeant intercept				ELM?	S			107		
1964-1198	2438400-50	1964 Jan 6	Nike Hercules		ATBM-15	T-45 Sergeant intercept				ELM?	S			107		
1964-1211	2438400-50	1964 Jan 21	Nike Hercules		ATBM-16	T-45 Sergeant intercept				ELM	S			107		
1964-1212	2438415-50	1964 Jan 21	Nike Hercules		ATBM-17	HJ intercept				ELM	S			107		
1964-1213	2438424-50	1964 Jan 21	Nike Hercules		ATBM-18	HJ intercept				ELM	S			6		
1964-1214	2438424-50	1964 Jan 30	Nike Hercules		ATBM-19	ASFT (Last Anchorage?)				ELM	S			7		
1964-1141	2438668-50	1964 Oct	Nike Hercules							WS				207		
1964-1142	2438668-50	1964 Oct	Nike Hercules							WS				207		
1964-1143	2438668-50	1964 Oct	Nike Hercules							WS				207		
1964-1144	2438668-50	1964 Oct	Nike Hercules							WS				207		
1964-1145	2438668-50	1964 Oct	Nike Hercules							WS				207		
1964-1146	2438668-50	1964 Oct	Nike Hercules							WS				207		
1964-1147	2438668-50	1964 Oct	Nike Hercules							WS				207		
1964-1148	2438668-50	1964 Oct	Nike Hercules							WS				207		
1964-1149	2438668-50	1964 Oct	Nike Hercules							WS				207		
1964-1150	2438668-50	1964 Oct	Nike Hercules							WS				207		
1964-1151	2438668-50	1964 Oct	Nike Hercules							WS				207		
1964-1152	2438668-50	1964 Oct	Nike Hercules							WS				207		
1964-1153	2438668-50	1964 Oct	Nike Hercules							WS				207		
1964-1154	2438668-50	1964 Oct	Nike Hercules							WS				207		
1964-1155	2438668-50	1964 Oct	Nike Hercules							WS				207		
1964-1156	2438668-50	1964 Oct	Nike Hercules							WS				207		
1964-1157	2438668-50	1964 Oct	Nike Hercules							WS				207		
1964-1158	2438668-50	1964 Oct	Nike Hercules							WS				207		
1964-1159	2438668-50	1964 Oct	Nike Hercules							WS				207		
1964-1160	2438668-50	1964 Oct	Nike Hercules							WS				207		
1964-1161	2438668-50	1964 Oct	Nike Hercules							WS				207		
1964-1162	2438668-50	1964 Oct	Nike Hercules							WS				207		
1964-1163	2438668-50	1964 Oct	Nike Hercules							WS				207		
1964-1164	2438668-50	1964 Oct	Nike Hercules							WS				207		
1964-1165	2438668-50	1964 Oct	Nike Hercules							WS				207		
1964-1166	2438668-50	1964 Oct	Nike Hercules							WS				207		
1964-1167	2438668-50	1964 Oct	Nike Hercules							WS				207		
1964-1168	2438668-50	1964 Oct	Nike Hercules							WS				207		
1964-1169	2438668-50	1964 Oct	Nike Hercules							WS				207		
1964-1170	2438668-50	1964 Oct	Nike Hercules							WS				207		
1964-1171	2438668-50	1964 Oct	Nike Hercules							WS				207		
1964-1172	2438668-50	1964 Oct	Nike Hercules							WS				207		
1964-1173	2438668-50	1964 Oct	Nike Hercules							WS				207		
1964-1174	2438668-50	1964 Oct	Nike Hercules							WS						

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Mission	FlightCode	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee km	Range km	Dest
1966-A128	2439429-50	1966 Nov	Mike Hercules	-	-	-	-	-	-	WS	-	-	-	207	-	-
1966-A129	2439429-50	1966 Nov	Mike Hercules	-	-	-	-	-	-	WS	-	-	-	207	-	-
1966-A130	2439429-50	1966 Nov	Mike Hercules	-	-	-	-	-	-	WS	-	-	-	207	-	-
1966-A147	2439459-50	1966 Dec	Mike Hercules	-	-	-	-	-	-	WS	-	-	-	207	-	-
1967-A173	2439610-50	1967 May	Mike Hercules	-	-	-	-	-	-	WS	-	-	-	207	-	-
1967-A68	2439641-50	1967 Jun	Mike Hercules	-	-	-	-	-	-	WS	-	-	-	207	-	-
1967-A100	2439702-50	1967 Aug	Mike Hercules	-	-	-	-	-	-	WS	-	-	-	207	-	-
1970-A157	2440827-50	1970 Feb 10	Mike Hercules	-	-	-	-	-	-	FWAK	-	-	-	107	-	-
1970-A158	2440859-50	1970 Oct	Mike J	-	1	Japan test	-	-	-	FTB	MCG	-	-	207	-	-
1970-A159	2440859-50	1970 Oct?	Mike J	-	2	Japan test	-	-	-	FTB	MCG	-	-	207	-	-
1970-A160	2440859-50	1970 Oct?	Mike J	-	3	Japan test	-	-	-	FTB	MCG	-	-	207	-	-
1970-A161	2440859-50	1970 Oct?	Mike J	-	4	Japan test	-	-	-	FTB	MCG	-	-	207	-	-
1970-A162	2440859-50	1970 Oct?	Mike J	-	5	Japan test	-	-	-	FTB	MCG	-	-	207	-	-
1970-A163	2440890-50	1970 Nov?	Mike J	-	6	Japan test	-	-	-	FTB	MCG	-	-	207	-	-
1970-A164	2440890-50	1970 Nov?	Mike J	-	7	Japan test	-	-	-	FTB	MCG	-	-	207	-	-
1970-A165	2440890-50	1970 Nov?	Mike J	-	8	Japan test	-	-	-	FTB	MCG	-	-	207	-	-
1970-A166	2440890-50	1970 Nov	Mike J	-	9	Japan test	-	-	-	FTB	MCG	-	-	207	-	-
1971-A117	2440951-50	1971	Mike Hercules	-	-	ASF (Last Fairbanks)	-	-	-	FWAK	-	-	-	107	-	-
1978-A60	2443627-50	1978 Apr 29	Puekkrom	-	1	MiK-1	-	-	-	AMRU	-	-	-	207	-	-
1978-A61	2443628-50	1978 May?	Puekkrom	-	2	MiK-1	-	-	-	AMRU	-	-	-	207	-	-
1978-A62	2443596-50	1978 Q2?	Puekkrom	-	3	MiK-1	-	-	-	AMRU	-	-	-	207	-	-
1978-A63	2443596-50	1978 Q2?	Puekkrom	-	4	MiK-1	-	-	-	AMRU	-	-	-	207	-	-
1978-A64	2443689-50	1978 Q3?	Puekkrom	-	5	MiK-1	-	-	-	AMRU	-	-	-	207	-	-
1978-A65	2443689-50	1978 Q3?	Puekkrom	-	6	MiK-1	-	-	-	AMRU	-	-	-	207	-	-
1978-A66	2443689-50	1978 Q3?	Puekkrom	-	7	MiK-1	-	-	-	AMRU	-	-	-	207	-	-
1978-A67	2443767-50	1978 Sep 16	Puekkrom	-	8	MiK-1	-	-	-	AMRU	-	-	-	207	-	-
1978-A68	2443777-50	1978 Sep 26	Puekkrom	-	9	MiK-1	-	-	-	AMRU	-	-	-	407	-	-





Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Launch_Upsay	Agency	Launch_Code	Group	Category	LTCite	Cite	Notes
1965-A14	2435120.50	1965 Jan 13	Nike Hercules 1810	-	B1 1810-1	0.000	ORD	MU	-	Test	redstone.army.mil	-	-
1965-A67	2435141.50	1965 Feb 3	Nike Hercules 1810	-	B2 1810-2R	0.000	ORD	MU	-	Test	wsm-history.org	Hierchistory	-
1965-A177	2435177.50	1965 Mar 11	Nike Hercules 1810	-	B3 1810-3	0.000	ORD	MU	-	Test	wsm-history.org	Hierchistory	-
1965-A257	2435203.50	1965 Apr 6	Nike Hercules 1810	-	B4 1810-5B	0.000	ORD	MU	-	Test	wsm-history.org	Hierchistory	-
1965-A445	2435203.50	1965 Jul 15	Nike Hercules 1810	-	B5 1810-8	0.000	ORD	MU	-	Test	wsm-history.org	Hierchistory	-
1965-A547	2435317.50	1965 Jul 29	Nike Hercules 1810	-	B6 1810-9	0.000	ORD	MU	-	Test	wsm-history.org	Hierchistory	-
1965-A548	2435335.50	1965 Aug 16	Nike Hercules 1810	-	B7 1810-11	0.000	ORD	MU	-	Test	wsm-history.org	Hierchistory	-
1965-A549	2435338.50	1965 Aug 19	Nike Hercules 1810	-	B8 1810-12	0.000	ORD	MU	-	Test	wsm-history.org	Hierchistory	-
1965-A550	2435352.50	1965 Sep 2	Nike Hercules 1810	-	B9 1810-13	0.000	ORD	MU	-	Test	wsm-history.org	Hierchistory	-
1965-A551	2435362.50	1965 Sep 12	Nike Hercules 1810	-	B10 1810-10	0.000	ORD	MU	-	Test	wsm-history.org	Hierchistory	-
1965-A552	2435406.50	1965 Oct 26	Nike Hercules 1810	-	B11 1810-17	0.000	ORD	MU	-	Test	wsm-history.org	Hierchistory	-
1965-A553	2435413.50	1965 Nov 2	Nike Hercules 1810	-	B12 1810-16	0.000	ORD	MU	-	Test	wsm-history.org	Hierchistory	-
1965-A554	2435427.50	1965 Nov 16	Nike Hercules 1810	-	B13 1810-19	0.000	ORD	MU	-	Test	wsm-history.org	Hierchistory	-
1965-A555	2435434.50	1965 Nov 23	Nike Hercules 1810	-	B14 1810-18	0.000	ORD	MU	-	Test	wsm-history.org	Hierchistory	-
1965-A556	2435442.50	1965 Dec 1	Nike Hercules 1810	-	B15 1810-4	0.000	ORD	MU	-	Test	wsm-history.org	Hierchistory	-
1965-A557	2435448.50	1965 Dec 7	Nike Hercules 1810	-	B16 1810-20	0.000	ORD	MU	-	Test	wsm-history.org	Hierchistory	-
1965-A558	2435455.50	1965 Dec 14	Nike Hercules 1810	-	B17 1810-15	0.000	ORD	MU	-	Test	wsm-history.org	Hierchistory	-
1965-A559	2435465.50	1965 Dec 14	Nike Hercules 1810	-	B18 1810-22	0.000	ORD	MU	-	Test	wsm-history.org	Hierchistory	-
1965-A560	2435107.50	1965	Nike Hercules 1810	-	B19	0.000	ORD	MU	-	Test	Hierchistory	-	-
1965-A561	2435107.50	1965	Nike Hercules 1810	-	B20	0.000	ORD	MU	-	Test	Hierchistory	-	-
1965-A562	2435172.50	1965	Nike Hercules 1810	-	B21	0.000	ORD	MU	-	Test	Hierchistory	-	-
1965-A193	2435472.50	1965	Nike Hercules 1810	-	B22 1810-24	0.000	ORD	MU	-	Test	wsm-history.org	Hierchistory	-
1966-A194	2435494.50	1966 Jan 12	Nike Hercules 1810	-	B23 1810-25	0.000	ORD	MU	-	Test	wsm-history.org	Hierchistory	-
1966-A195	2435491.50	1966 Jan 19	Nike Hercules 1810	-	B24 1810-23	0.000	ORD	MU	-	Test	wsm-history.org	Hierchistory	-
1966-A196	2435503.50	1966 Jan 31	Nike Hercules 1810	-	B25 1810-26	0.000	ORD	MU	-	Test	wsm-history.org	Hierchistory	-
1966-A197	2435512.50	1966 Feb 9	Nike Hercules 1810	-	B26 1810-14	0.000	ORD	MU	-	Test	wsm-history.org	Hierchistory	-
1966-A198	2435513.50	1966 Feb 10	Nike Hercules 1810	-	B27 1810-28	0.000	ORD	MU	-	Test	wsm-history.org	Hierchistory	-
1966-A199	2435527.50	1966 Feb 24	Nike Hercules 1810	-	B28 1810-29	0.000	ORD	MU	-	Test	wsm-history.org	Hierchistory	-
1966-A200	2435532.50	1966 Feb 29	Nike Hercules 1810	-	B29 1810-36	0.000	ORD	MU	-	Test	wsm-history.org	Hierchistory	-
1966-A201	2435524.50	1966 May 31	Nike Hercules 1810	-	B30 1810-37	0.000	ORD	MU	-	Test	wsm-history.org	Hierchistory	-
1966-A202	2435530.50	1966 Jun 6	Nike Hercules 1810	-	B31 1810-38	0.000	ORD	MU	-	Test	wsm-history.org	Hierchistory	-
1966-A203	2435546.50	1966 Jun 22	Nike Hercules 1810	-	B32 1510-56	0.000	ORD	MU	-	Test	wsm-history.org	Hierchistory	-
1966-A204	2435563.50	1966 Jun 29	Nike Hercules 1810	-	1510-30	0.000	ORD	MS	-	Test	wsm-history.org	Hierchistory	-
1966-A205	2435579.50	1966 Jul 25	Nike Hercules 1810	-	1510-51	0.000	ORD	MS	-	Test	wsm-history.org	Hierchistory	-
1966-A206	2435566.50	1966 Aug 1	Nike Hercules 1810	-	1510-52	0.000	ORD	MS	-	Test	wsm-history.org	Hierchistory	-
1966-A378	2435668.50	1966 Aug 1	Nike Hercules 1810	-	2052	0.000	ORD	MS	-	Test	wsm-history.org	Hierchistory	-
1966-A379	2435666.50	1966 Aug 1	Nike Hercules 1810	-	1510-21	0.000	ORD	MS	-	Test	wsm-history.org	Hierchistory	-
1966-A380	2435701.50	1966 Aug 16	Nike Hercules 1810	-	1510-25	0.000	ORD	MS	-	Test	wsm-history.org	Hierchistory	-
1966-A381	2435726.50	1966 Sep 10	Nike Hercules 1810	-	1510-41	0.000	ORD	MS	-	Test	wsm-history.org	Hierchistory	-
1966-A382	2435728.50	1966 Sep 26	Nike Hercules 1810	-	1510-43	0.000	ORD	MS	-	Test	wsm-history.org	Hierchistory	-
1966-A383	2435742.50	1966 Sep 26	Nike Hercules 1810	-	1510-54	0.000	ORD	MS	-	Test	wsm-history.org	Hierchistory	-
1966-A384	2435749.50	1966 Oct 3	Nike Hercules 1810	-	1510-42	0.000	ORD	MS	-	Test	wsm-history.org	Hierchistory	-
1966-A385	2435777.50	1966 Oct 11	Nike Hercules 1810	-	1510-44	0.000	ORD	MS	-	Test	wsm-history.org	Hierchistory	-
1966-A386	2435777.50	1966 Oct 31	Nike Hercules 1810	-	1510-44	0.000	ORD	MS	-	Test	wsm-history.org	Hierchistory	-
1966-A387	2435777.50	1966 Oct 31	Nike Hercules 1810	-	1510-47	0.000	ORD	MS	-	Test	wsm-history.org	Hierchistory	-
1966-A388	2435777.50	1966 Nov 7	Nike Hercules 1810	-	-	0.000	ORD	MS	-	Test	wsm-history.org	Hierchistory	-
1966-A389	2435772.50	1966	Nike Hercules 1810	-	-	0.000	ORD	MS	-	Test	Hierchistory	-	-
1966-A390	2435772.50	1966	Nike Hercules 1810	-	-	0.000	ORD	MS	-	Test	Hierchistory	-	-
1966-A391	2435772.50	1966	Nike Hercules 1810	-	-	0.000	ORD	MS	-	Test	Hierchistory	-	-
1966-A392	2435772.50	1966	Nike Hercules 1810	-	-	0.000	ORD	MS	-	Test	Hierchistory	-	-
1967-A185	2435856.50	1967 Dec 14	Nike Hercules 1810	-	1810-48 B477	0.000	ORD	MS	-	Test	wsm-history.org	Hierchistory	-
1967-A186	2435856.50	1967 Dec 19	Nike Hercules 1810	-	1810-50	0.000	ORD	MS	-	Test	wsm-history.org	Hierchistory	-
1967-A187	2435856.50	1967 Mar 13	Nike Hercules 1810	-	B-57	0.000	ORD	MS	-	Test	wsm-history.org	Hierchistory	-
1967-A188	2435856.50	1967 Apr 25	Nike Hercules 1810	-	-	0.000	ORD	MS	-	Test	Hierchistory	-	-
1967-A189	2435856.50	1967 May 2	Nike Hercules 1810	-	-	0.000	ORD	MS	-	Test	Hierchistory	-	-
1967-A190	2435856.50	1967 May 21	Nike Hercules 1810	-	-	0.000	ORD	MS	-	Test	Hierchistory	-	-
1967-A191	2435856.50	1967 May 21	Nike Hercules 1810	-	-	0.000	ORD	MS	-	Test	Hierchistory	-	-
1967-A192	2435856.50	1967 Sep 11	Nike Hercules 1810	-	-	0.000	ORD	MS	-	Test	Hierchistory	-	-
1967-A193	2435856.50	1967 Sep 11	Nike Hercules 1810	-	-	0.000	ORD	MS	-	Test	Hierchistory	-	-
1967-A194	2435856.50	1967 Oct 11	Nike Hercules 1810	-	-	0.000	ORD	MS	-	Test	Hierchistory	-	-
1967-A195	2435856.50	1967 Nov 27	Nike Hercules 1810	-	-	0.000	ORD	MS	-	Test	Hierchistory	-	-
1967-A196	2435856.50	1967 Dec 7	Nike Hercules 1810	-	-	0.000	ORD	MS	-	Test	Hierchistory	-	-
1968-A187	2435904.50	1968 Apr 11	Nike Hercules 1810	-	-	0.000	ORD	MS	-	Test	Hierchistory	-	-
1968-A188	2435904.50	1968 Apr 28	Nike Hercules 1810	-	-	0.000	ORD	MS	-	Test	Hierchistory	-	-
1968-A189	2435921.50	1968 May 7	Nike Hercules 1810	-	-	0.000	ORD	MS	-	Test	Hierchistory	-	-
1968-A190	2435923.50	1968 May 7	Nike Hercules 1810	-	-	0.000	ORD	MS	-	Test	Hierchistory	-	-
1968-A191	2435923.50	1968 May 7	Nike Hercules 1810	-	-	0.000	ORD	MS	-	Test	Hierchistory	-	-
1968-A192	2435923.50	1968 May 7	Nike Hercules 1810	-	-	0.000	ORD	MS	-	Test	Hierchistory	-	-
1968-A193	2435923.50	1968 May 7	Nike Hercules 1810	-	-	0.000	ORD	MS	-	Test	Hierchistory	-	-
1968-A194	2435923.50	1968 May 7	Nike Hercules 1810	-	-	0.000	ORD	MS	-	Test	Hierchistory	-	-
1968-A195	2435923.50	1968 May 7	Nike Hercules 1810	-	-	0.000	ORD	MS	-	Test	Hierchistory	-	-
1968-A196	2435954.50	1968 Jun 7	Nike Hercules 1810	-	-	0.000	ORD	MS	-	Test	Hierchistory	-	-
1968-A197	2435954.50	1968 Jun 7	Nike Hercules 1810	-	-	0.000	ORD	MS	-	Test	Hierchistory	-	-
1968-A198	2435954.50	1968 Jun 7	Nike Hercules 1810	-	-	0.000	ORD	MS	-	Test	Hierchistory	-	-
1968-A199	2435954.50	1968 Jun 7	Nike Hercules 1810	-	-	0.000	ORD	MS	-	Test	Hierchistory	-	-
1968-A200	2435954.50	1968 Jul 1	Nike Hercules 1810	-	-	0.000	ORD	MS	-	Test	Hierchistory	-	-
1968-A201	2435938.50	1968 Jul 14	Nike Hercules 1810	-	-	0.000	ORD	MS	-	Test	Hierchistory	-	-
1968-A202	2436401.50	1968 Jul 17	Nike Hercules 1810	-	-	0.000	ORD	MS	-	Test	Hierchistory	-	-
1968-A203	2436409.23	1968 Jul 24 1730	Nike Hercules 1810	-	-	0.000	ORD	MS	-	Test	Hierchistory	-	-
1968-A204	2436409.23	1968 Jul 24 1730	Nike Hercules 1810	-	-	0.000	ORD	MS	-	Test	Hierchistory	-	-
1968-A205	2436414.17	1968 Jul 29 16057	Nike Hercules 1810	-	-	0.000	ORD	MS	-	Test	Hierchistory	-	-
1968-A206	2436414.17	1968 Jul 29 16057	Nike Hercules 1810	-	-	0.000	ORD	MS	-	Test	Hierchistory	-	-
1968-A217	2436513.50	1968 Nov 6	Nike Hercules 1810	-	-	0.000	ORD	MS	-	Test	Hierchistory	-	-
1968-A218	2436526.50	1968 Nov 19	Nike Hercules 1810	-	-	0.000	ORD	MS	-	Test	Hierchistory	-	-
1968-A189	2436547.50	1968 Dec 10	Nike Hercules 1810	-	-	0.000	ORD	MS	-	Test	Hierchistory	-	-
1969-A257	2436575.50	1969 Jan 7	Nike Hercules 1810	-	-	0.000	ORD	MS	-	Test	Hierchistory	-	-
1969-A258	2436575.50	1969 Jan 7	Nike Hercules 1810	-	-	0.000	ORD	MS	-	Test	Hierchistory	-	-
1969-A16	2436599.36	1969 Jan 30 2040	Nike Hercules 1810	-	-	0.000	ORD	MS	-	Test	Hierchistory	-	-
1969-A22	2436603.35	1969 Feb 3 2025	Nike Hercules 1810	-	-	0.000	ORD	MS	-	Test	Hierchistory	-	-
1969-A259	2436605.50	1969 Feb 6	Nike Hercules 1810	-	-	0.000	ORD	MS	-	Test	Hierchistory	-	-
1969-A24	2436606.50	1969 Feb 7	Nike Hercules 1810	-	-	0.000	ORD	MS	-	Test	Hierchistory	-	-
1969-A25	2436610.40	1969 Feb 10 2130	Nike Hercules 1810	-	-	0.000	ORD	MS	-	Test	Hierchistory	-	-





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Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Agency	Launch_Code	Group	Category	LTCite	Cite	Notes
1966-A128	2439429-50	1966 Nov	Mike Hercules	-	-	MICOM	MU	-	Test	WSRR	-	-
1966-A129	2439429-50	1966 Nov	Mike Hercules	-	-	MICOM	MU	-	Test	WSRR	-	-
1966-A130	2439429-50	1966 Nov	Mike Hercules	-	-	MICOM	MU	-	Test	WSRR	-	-
1966-A147	2439459-50	1966 Dec	Mike Hercules	-	-	MICOM	MU	-	Test	WSRR	-	-
1967-A73	2439610-50	1967 May	Mike Hercules	-	-	MICOM	MU	-	Test	WSRR	-	-
1967-A88	2439641-50	1967 Jun	Mike Hercules	-	-	MICOM	MU	-	Test	WSRR	-	-
1967-A100	2439702-50	1967 Aug	Mike Hercules	-	-	MICOM	MU	USA/	Test	Hollinger04	-	-
1970-A157	2440627-50	1970 Feb 10	Mike Hercules	-	-	MICOM	MS	-	Test	Hollinger04	-	-
1970-A158	2440859-50	1970 Oct	Mike J	-	1	JDA	MS	-	Test	Hollinger04	-	-
1970-A159	2440859-50	1970 Oct?	Mike J	-	2	JDA	MS	-	Test	Hollinger04	-	-
1970-A160	2440859-50	1970 Oct?	Mike J	-	3	JDA	MS	-	Test	Hollinger04	-	-
1970-A161	2440859-50	1970 Oct?	Mike J	-	4	JDA	MS	-	Test	Hollinger04	-	-
1970-A162	2440880-50	1970 Nov?	Mike J	-	5	JDA	MS	-	Test	Hollinger04	-	-
1970-A163	2440880-50	1970 Nov?	Mike J	-	6	JDA	MS	-	Test	Hollinger04	-	-
1970-A164	2440880-50	1970 Nov?	Mike J	-	7	JDA	MS	-	Test	Hollinger04	-	-
1970-A165	2440880-50	1970 Nov?	Mike J	-	8	JDA	MS	-	Test	Hollinger04	-	-
1970-A166	2440880-50	1970 Nov	Mike J	-	9	JDA	MS	-	Test	Hollinger04	-	-
1971-A117	2440951-50	1971	Mike Hercules	-	-	MICOM	MS	USA/	Test	Hollinger04	-	-
1978-A60	2443627-50	1978 Apr 29	Paektom	-	1	ADD	MS	-	Test	Al2015	-	-
1978-A61	2443628-50	1978 May?	Paektom	-	2	ADD	MS	-	Test	Al2015	-	-
1978-A62	2443598-50	1978 Q2?	Paektom	-	3	ADD	MS	-	Test	Al2015	-	-
1978-A63	2443598-50	1978 Q2?	Paektom	-	4	ADD	MS	-	Test	Al2015	-	-
1978-A64	2443689-50	1978 Q3?	Paektom	-	5	ADD	MS	-	Test	Al2015	-	-
1978-A65	2443689-50	1978 Q3?	Paektom	-	6	ADD	MS	-	Test	Al2015	-	-
1978-A66	2443689-50	1978 Q3?	Paektom	-	7	ADD	MS	-	Test	Al2015	-	-
1978-A67	2443767-50	1978 Sep 16	Paektom	-	8	ADD	MS	-	Test	Al2015	-	-
1978-A68	2443777-50	1978 Sep 26	Paektom	-	9	ADD	MS	-	Test	Al2015	-	-



Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Mission	FlightCode	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee km	Range km	Dest
1944-403	2431145.50	1944 Feb 29	Wasserfall	-	2	-	-	-	-	HVP	GM0?	-	-	0?	-	-
1944-404	2431157.50	1944 Mar 8	Wasserfall	-	3	-	-	-	-	HVP	GM0?	-	-	1	-	-
1944-461	2431393.50	1944 Oct 30	Wasserfall	-	-	-	-	-	-	HVP	-	-	-	17	-	-
1950-423	2433420.50	1950 May 19	Hermes A-1	-	1	-	-	-	-	WS	LC33	-	-	0?	-	-
1950-437	2433538.50	1950 Sep 14	Hermes A-1	-	2	-	-	-	-	WS	LC33	-	-	0?	-	-
1951-402	2433685.50	1951 Feb 8	Hermes A-1	-	4	-	-	-	-	WS	LC33	-	-	24?	-	-
1951-407	2433720.50	1951 Mar 15	Hermes A-1	-	5	-	-	-	-	WS	LC33	-	-	24?	-	-
1951-A15	2433762.50	1951 Apr 26	Hermes A-1	-	6	-	-	-	-	WS	LC33	-	-	24?	-	-



Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	DrPay	Agency	Launch_Code	Group	Category	LTCite	Cite	Notes
1944-403	2431145.50	1944 Feb 29	Wasserfall	-	2	0.000	WEHR	HF	-	Test	Alway-Shadow	-	-
1944-404	2431157.50	1944 Mar 8	Wasserfall	-	3	0.000	WEHR	MS	-	Test	Alway-Shadow	-	-
1944-461	2431393.50	1944 Oct 30	Wasserfall	-	-	0.000	WEHR	MS	-	Test	Deftes	-	-
1950-423	2433420.50	1950 May 19	Hermes A-1	-	1	0.000	ORD	HF	-	Test	wsmr-history.org	-	-
1951-407	2433638.50	1951 Sep 14	Hermes A-1	-	2	0.000	ORD	HF	-	Test	wsmr-history.org	-	-
1951-402	2433685.50	1951 Feb 8	Hermes A-1	-	4	0.000	ORD	MS	-	Test	wsmr-history.org	-	-
1951-A07	2433720.50	1951 Mar 15	Hermes A-1	-	5	0.000	ORD	MS	-	Test	wsmr-history.org	-	-
1951-A15	2433762.50	1951 Apr 26	Hermes A-1	-	6	0.000	ORD	MS	-	Test	wsmr-history.org	-	-





Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Mission	Launch			Ascent_Site	Ascent_Pad	Apogee km	Range km	Dest
								Platform	Launch_Site	Launch_Pad					
1953-4116	2434449.50	1953 Mar 13	Hermes A-3A	-	1	RV-A-8	-	WS	LC33	-	-	307	-	-	
1953-4248	2434546.50	1953 Jun 18	Hermes A-3A	-	2	RV-A-8	-	WS	LC33	-	-	307	-	-	
1953-4324	2434602.50	1953 Aug 13	Hermes A-3A	-	3	RV-A-8	-	WS	LC33	-	-	307	-	-	
1953-4356	2434655.50	1953 Oct 5	Hermes A-3A	-	4	RV-A-8	-	WS	LC33	-	-	307	-	-	
1953-4409	2434671.50	1953 Oct 21	Hermes A-3A	-	5	RV-A-8	-	WS	LC33	-	-	307	-	-	
1953-4468	2434701.50	1953 Nov 20	Hermes A-3A	-	6	RV-A-8	-	WS	LC33	-	-	307	-	-	
1954-420	2434757.50	1954 Jan 15	Hermes A-3A	-	7	RV-A-8	-	WS	LC33	-	-	307	-	-	
1954-4254	2434873.50	1954 May 11	Hermes A-3B	-	1	XSSM-A-16	-	WS	LC33	-	-	32	-	-	
1954-4421	2434943.50	1954 Jul 20	Hermes A-3B	-	2/A-16	XSSM-A-16	-	WS	LC33	-	-	35	-	-	
1954-4491	2434980.50	1954 Aug 26	Hermes A-3B	-	3	XSSM-A-16	-	WS	LC33	-	-	3	-	-	
1954-4530	2435006.50	1954 Sep 21	Hermes A-3B	-	4	XSSM-A-16	-	WS	LC33	-	-	36	-	-	
1954-4580	2435034.50	1954 Oct 19	Hermes A-3B	-	5	XSSM-A-16	-	WS	LC33	-	-	36	-	-	
1954-4633	2435062.50	1954 Nov 16	Hermes A-3B	-	6	XSSM-A-16	-	WS	LC33	-	-	34	-	-	



Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	OrbPay	Agency	Launch_Code	Group	Category	LTcite	Cite	Notes
1953-A116	2434449.50	1953 Mar 13	Hermes A-3A	-	1	0.000	ORD	RS	-	Test	wsm-history.org	-	-
1953-A248	2434546.50	1953 Jun 18	Hermes A-3A	-	2	0.000	ORD	RS	-	Test	wsm-history.org	-	-
1953-A324	2434602.50	1953 Aug 13	Hermes A-3A	-	3	0.000	ORD	RS	-	Test	wsm-history.org	-	-
1953-A386	2434655.50	1953 Oct 5	Hermes A-3A	-	4	0.000	ORD	RS	-	Test	wsm-history.org	-	-
1953-A409	2434671.50	1953 Oct 21	Hermes A-3A	-	5	0.000	ORD	RS	-	Test	wsm-history.org	-	-
1953-A458	2434701.50	1953 Nov 20	Hermes A-3A	-	6	0.000	ORD	RS	-	Test	wsm-history.org	-	-
1954-A20	2434757.50	1954 Jan 15	Hermes A-3A	-	7	0.000	ORD	RS	-	Test	wsm-history.org	-	-
1954-A254	2434873.50	1954 May 11	Hermes A-3B	-	1	0.000	GEMTS	RS	-	Test	WSRR-PAO	-	-
1954-A421	2434943.50	1954 Jul 20	Hermes A-3B	-	2/A-16	0.000	GEMTS	RS	-	Test	WSRR-PAO	-	-
1954-A491	2434980.50	1954 Aug 26	Hermes A-3B	-	3	0.000	GEMTS	RF	-	Test	WSRR-PAO	-	-
1954-A630	2435006.50	1954 Sep 21	Hermes A-3B	-	4	0.000	GEMTS	RS	-	Test	WSRR-PAO	-	-
1954-A680	2435034.50	1954 Oct 19	Hermes A-3B	-	5	0.000	GEMTS	RS	-	Test	WSRR-PAO	-	-
1954-A633	2435062.50	1954 Nov 16	Hermes A-3B	-	6	0.000	GEMTS	RS	-	Test	WSRR-PAO	-	-







Launch

Launch\_Tag Launch\_ID Launch\_Date LV\_Type Variant Flight\_ID DrpDay Agency Launch\_Code Group Category LITCite Cite Notes

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	DrpDay	Agency	Launch_Code	Group	Category	LITCite	Cite	Notes
1963-430	2438068.50	1963 Feb 28	Hopl Dart	-	F1	0.000	MSFC	SF	MSFC/	Test	Horrow	-	-
1963-444	2438115.50	1963 Mar 27	Hopl Dart	-	F2	0.000	MSFC	SF	MSFC/	Test	Horrow	-	-
1963-462	2438144.50	1963 Apr 25	Hopl Dart	-	F3	0.000	MSFC	SF	MSFC/	Test	Horrow	-	-
1963-4203	2438029.50	1963	Raven	-	1	0.000	ONR	SF	ONR/	Meteo	Horrow	-	-
1963-4204	2438029.50	1963	Raven	-	2	0.000	ONR	SF	ONR/	Meteo	Horrow	-	-
1963-4205	2438029.50	1963	Raven	-	3	0.000	ONR	SF	ONR/	Meteo	Horrow	-	-
1963-4206	2438029.50	1963	Raven	-	4	0.000	ONR	SF	ONR/	Meteo	Horrow	-	-
1963-412	2438119.50	1963 Apr	Raven	-	5	0.000	ONR	SS	ONR/	Meteo	Horrow	-	-
1963-413	2438119.50	1963 Apr	Raven	-	6	0.000	ONR	SS	ONR/	Meteo	Horrow	-	-
1963-414	2438149.50	1963 May	Raven	-	7	0.000	ONR	SS	ONR/	Meteo	Horrow	-	-
1963-446	2438029.50	1963	Raven	-	8	0.000	ONR	SS	ONR/	Meteo	Horrow	-	-
1963-447	2438029.50	1963	Raven	-	9	0.000	ONR	SS	ONR/	Meteo	Horrow	-	-
1963-448	2438029.50	1963	Raven	-	10	0.000	ONR	SS	ONR/	Meteo	Horrow	-	-
1963-4207	2438029.50	1963?	Raven	-	11	0.000	ONR	SF	ONR/	Meteo	Horrow	-	-
1963-4208	2438029.50	1963?	Raven	-	12	0.000	ONR	SF	ONR/	Meteo	Horrow	-	-
1963-4209	2438029.50	1963?	Raven	-	13	0.000	ONR	SF	ONR/	Meteo	Horrow	-	-
1963-4202	2438029.50	1963?	Raven	-	14	0.000	ONR	SF	ONR/	Meteo	Horrow	-	-
1963-449	2438029.50	1963?	Raven	-	15	0.000	ONR	SS	ONR/	Meteo	Horrow	-	-
1963-471	2438156.50	1963 May 9	Hopl Dart	-	F4	0.000	MSFC	SS	MSFC/	Test	Horrow	-	-
1963-471	2438159.50	1963 May 10	Hopl Dart	-	F5	0.000	MSFC	SS	MSFC/	Test	Horrow	-	-
1963-423	2438185.50	1963 Jun 5	Hopl Dart	-	F6	0.000	MSFC	SS	MSFC/	Test	Horrow	-	-
1963-402	2438226.50	1963 Jul 18	Hopl Dart	-	F7	0.000	MSFC	SS	MSFC/	Test	Horrow	-	-
1963-103	2438246.50	1963 Aug 7	Hopl Dart	-	F8	0.000	MSFC	SS	MSFC/	Test	Horrow	-	-
1963-104	2438250.50	1963 Aug 9	Hopl Dart	-	F9	0.000	MSFC	SS	MSFC/	Test	Horrow	-	-
1963-105	2438263.50	1963 Aug 22	Hopl Dart	-	F10	0.000	MSFC	SS	MSFC/	Test	Horrow	-	-
1963-4122	2438263.50	1963 Aug 22	Hopl Dart	-	F11	0.000	MSFC	SF	MSFC/	Test	Horrow	-	-
1963-110	2438331.50	1963 Oct 29	Hopl Dart	-	F12	0.000	MSFC	SS	MSFC/	Aeron	Horrow	-	-
1963-111	2438331.50	1963 Oct 29	Hopl Dart	-	F13	0.000	MSFC	SS	MSFC/	Aeron	Horrow	-	-
1963-112	2438331.50	1963 Oct 29	Hopl Dart	-	F14	0.000	MSFC	SS	MSFC/	Aeron	Horrow	-	-
1964-4152	2438394.50	1964?	Raven	-	16	0.000	ONR	SF	ONR/	Meteo	Horrow	-	-
1964-4156	2438394.50	1964?	Raven	-	17	0.000	ONR	SS	ONR/	Meteo	Horrow	-	-
1964-4157	2438394.50	1964?	Raven	-	18	0.000	ONR	SS	ONR/	Meteo	Horrow	-	-
1964-4153	2438394.50	1964?	Raven	-	19	0.000	ONR	SF	ONR/	Meteo	Horrow	-	-
1964-4158	2438394.50	1964?	Raven	-	20	0.000	ONR	SF	ONR/	Meteo	Horrow	-	-
1964-4194	2438394.50	1964?	Raven	-	21	0.000	ONR	SF	ONR/	Meteo	Horrow	-	-
1964-4159	2438394.50	1964?	Raven	-	22	0.000	ONR	SF	ONR/	Meteo	Horrow	-	-
1964-4155	2438394.50	1964?	Raven	-	23	0.000	ONR	SF	ONR/	Meteo	Horrow	-	-
1964-4160	2438394.50	1964?	Raven	-	24	0.000	ONR	SS	ONR/	Meteo	Horrow	-	-
1964-4196	2438439.50	1964?	Raven	-	25	0.000	MSFC	SF	MSFC/	Meteo	Horrow	-	-
1964-106	2438439.50	1964 Feb 13 1928	Hopl Dart	-	F15	0.000	MSFC	SS	MSFC/	Aeron	TH-X-53303	CC	-
1964-107	2438439.50	1964 Feb 13 1928	Hopl Dart	-	F16	0.000	MSFC	SS	MSFC/	Aeron	TH-X-53303	CC	-
1964-112	2438440.50	1964 Feb 14 1639?	Hopl Dart	-	F17	0.000	MSFC	SS	MSFC/	Aeron	TH-X-53303	CC	-
1964-109	2438440.50	1964 Feb 14 1639?	Hopl Dart	-	F18	0.000	MSFC	SS	MSFC/	Aeron	TH-X-53303	CC	-
1964-108	2438440.50	1964 Feb 14 2103	Hopl Dart	-	F19	0.000	MSFC	SS	MSFC/	Aeron	Horrow	-	-
1964-109	2438463.50	1964 Oct 14 2123	Hopl Dart	-	F20	0.000	MSFC	SS	MSFC/	Aeron	Horrow	-	-
1964-109	2438463.50	1964 Oct 14 2228	Hopl Dart	-	F21	0.000	MSFC	SS	MSFC/	Aeron	Horrow	-	-
1964-110	2438723.41	1964 Nov 23 2148	Hopl Dart	-	F21	0.000	MSFC	SS	MSFC/	Aeron	Horrow	-	-
1964-111	2438723.41	1964 Nov 23 2211	Hopl Dart	-	F22	0.000	MSFC	SS	MSFC/	Aeron	Horrow	-	-





Launch

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Mission	FlightCode	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee km	Range km	Dest
2016-A41	2457676.65	2016 Oct 15 0333	Hwasong-12	?	-	-	-	-	-	KUSONG	LP1	-	-	0?	-	-
2016-A42	2457681.42	2016 Oct 19 2200	Hwasong-12	?	-	-	-	-	-	KUSONG	LP1	-	-	0?	-	-
2017-S25	2457848.40	2017 Apr 4 2142	Hwasong-12	-	RII-17	-	-	-	-	SINPO	-	-	-	189	60	Sea of J.
2017-A04	2457859.39	2017 Apr 15 2120	Hwasong-12	-	RII-17	-	-	-	-	SINPO	-	-	-	1?	-	Sea of J.
2017-M01	2457872.36	2017 Apr 28 2033	Hwasong-12	-	RII-17	-	-	-	-	PUKCH	-	-	-	71	39	Tokchon
2017-S31	2457887.35	2017 May 13 2028	Hwasong-12	-	RII-17	11831851	-	-	-	KUSONG	LP3	-	-	2111	787	134.6E 41.6N
2017-S53	2457938.53	2017 Jul 4 0040	Hwasong-14	-	RII-20	36311771	-	-	-	KUSONG	LP4	-	-	2802	933	-
2017-S62	2457963.11	2017 Jul 28 1441	Hwasong-14	-	RII-20	36311672	-	-	-	ROPYONG	LP1	-	-	3725	998	-
2017-S74	2457994.37	2017 Aug 28 2058	Hwasong-12	-	RII-17	11831805	-	-	-	SOMNI	-	-	-	550	2700	-
2017-S78	2458011.41	2017 Sep 14 2157	Hwasong-12	-	RII-17	11831886	-	-	-	SOMNI	-	-	-	770	3700	-
2021-M07	2459485.40	2021 Sep 27 2140	Hwasong-12A	-	-	-	Hwasong 12A	-	-	ROPYONG	LP2	-	-	60?	200?	-
2022-M01	2459584.47	2022 Jan 4 2310	Hwasong-12A	-	-	-	Glide RV	-	-	ROPYONG	LP1	-	-	50	700	-
2022-M02	2459590.44	2022 Jan 10 2227	Hwasong-12A	-	-	-	Glide RV?	-	-	ROPYONG	LP2?	-	-	60	700	-
2022-S11	2459609.45	2022 Jan 29 2252	Hwasong-12	?	-	-	-	-	-	ROPYONG	LP1	-	-	2000	800	-
2022-S13	2459637.45	2022 Feb 26 2252	Hwasong-12A	?	-	-	Recon Test	-	-	SOMNI	-	-	-	620	300	-
2022-S14	2459643.49	2022 Mar 4 2348	Hwasong-12A	?	-	-	Recon Test	-	-	SOMNI	-	-	-	550	300	-
2022-S30	2459703.63	2022 May 4 0304?	Hwasong-12A	?	-	-	Recon Test?	-	-	SOMNI	LP2	-	-	780	470	-
2022-S35	2459724.32	2022 May 24 1937	Hwasong-12A	?	-	-	-	-	-	SOMNI	-	-	-	50	750	-
2022-S36	2459724.32	2022 May 24 1942	Hwasong-12A	?	-	-	-	-	-	SOMNI	-	-	-	550	300	-
2022-S88	2459856.43	2022 Oct 3 2222	Hwasong-12	A	-	-	Recon Test?	-	-	ROPYONG	LP1?	-	-	970	4500	-



Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variat	Flight_ID	OrbPay	Agency	Launch_Code	Group	Category	LfCite	Cite	Notes
2016-441	2457676.65	2016 Oct 15 0333	Haasong-12	?	-	0.000	JRG	NF	-	Test	Wire	-	-
2016-442	2457681.42	2016 Oct 19 2200	Haasong-12	?	-	0.000	JRG	NF	-	Test	Wire	-	-
2017-525	2457648.40	2017 Apr 4 2142	Haasong-12	-	KH-17	0.000	JRG	NF	-	Test	Wire	-	-
2017-404	2457659.39	2017 Apr 15 2120	Haasong-12	-	KH-17	0.000	JRG	NF	-	Test	Wire	-	-
2017-401	2457872.36	2017 Apr 28 2033	Haasong-12	-	KH-17	0.000	JRG	NF	-	Test	Wire	-	-
2017-531	2457887.35	2017 May 13 2028	Haasong-12	-	KH-17	0.000	JRG	NS	-	Test	Wire	-	-
2017-553	2457938.53	2017 Jul 4 0040	Haasong-14	-	KH-20	0.000	JRG	NS	-	Test	Wire	-	-
2017-562	2457963.11	2017 Jul 28 1441	Haasong-14	-	KH-20	0.000	JRG	NS	-	Test	Wire	-	-
2017-374	2457994.37	2017 Aug 28 2068	Haasong-12	-	KH-17	0.000	JRG	NS	-	Test	Wire	-	-
2017-378	2458011.41	2017 Sep 14 2157	Haasong-12	-	KH-17	0.000	JRG	NS	-	Test	Wire	-	-
2021-407	2459485.40	2021 Sep 27 2140	Haasong-12A	-	-	0.000	JRG	NS	-	Test	Wire	-	-
2022-401	2459694.47	2022 Jan 4 2310	Haasong-12A	-	-	0.000	JRG	NS	IKDSI/	Test	Wire	-	-
2022-402	2459690.44	2022 Jan 10 2227	Haasong-12A	-	-	0.000	JRG	NS	IKDSI/	Test	Wire	-	-
2022-511	2459609.45	2022 Jan 29 2252	Haasong-12	?	-	0.000	JRG	NS	-	Test	Wire	-	-
2022-513	2459637.45	2022 Feb 26 2252	Haasong-12A	?	-	0.000	JRG/HADA	SS	IMDA/	Test	Wire	-	-
2022-514	2459643.49	2022 Mar 4 2348	Haasong-12A	?	-	0.000	JRG/HADA	SS	IMDA/	Test	Wire	-	-
2022-530	2459703.63	2022 May 4 0304?	Haasong-12A	?	-	0.000	JRG	NS	-	Test	Wire	-	-
2022-535	2459724.32	2022 May 24 1937	Haasong-12A	?	-	0.000	JRG	NS	-	Test	Wire	-	-
2022-536	2459724.32	2022 May 24 1942	Haasong-12A	?	-	0.000	JRG	NS	-	Test	Wire	-	-
2022-588	2459856.43	2022 Oct 3 2222	Haasong-12	A	-	0.000	JRG	NS	-	Test	Wire	-	-



Launch

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Mission	FlightCode	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee_Km	Range_Km	Dest
2017-S102	2456086.26	2017 Nov 28 1818	Hwasong-15	-	-	Missile 11111701	-	-	-	PYONGS	-	-	-	4475	950	-
2022-S110	2459886.49	2022 Nov 2 2340	Hwasong-15	?	-	-	-	-	-	SWAN	LP1?	-	-	1920	760	-
2022-A07	2459654.52	2022 Mar 16 0030	Hwasong-17	?	-	Missile 03031203	-	-	-	SWAN	LP1	-	-	107	0	-
2022-001	2459662.73	2022 Mar 24 0534	Hwasong-17	?	-	-	-	Hwasong-1S?	-	SWAN	LP4	-	-	6248	1090	-
2022-003	2459901.55	2022 Nov 18 0114	Hwasong-17	-	-	Missile 09151751	-	-	-	SWAN	LP4	-	-	6100	1000	-
2023-001	2459993.55	2023 Feb 18 0922	Hwasong-15	-	-	-	-	-	-	SWAN	LP5	-	-	5768	989	-
2023-002	2460019.42	2023 Mar 15 2210	Hwasong-17	-	-	Missile 09151775	-	-	-	SWAN	LP5	-	-	6045	1000	136E 41N?
2023-F06	2460096.39	2023 May 30 2127	Cheonllima-1	-	6	Manligyeong-1 F1	-	-	-	SHAE	LC2	-	-	1507	-	-
2023-F07	2460180.28	2023 Aug 23 1850?	Cheonllima-1	-	-	Manligyeong-1 F2	-	-	-	SHAE	LC2	-	-	5007	-	-
2023-179	2460270.07	2023 Nov 21 1342:58	Cheonllima-1	-	-	Manligyeong-1 F3	-	-	-	SHAE	LC2	-	-	-	0	-
2023-420	2460271.09	2023 Nov 22 1405	Hwasong-15	?	-	Unknown missile	-	-	-	SWAN	-	-	-	107	0	-
2024-F02	2460458.07	2024 May 27 1344?	NK Kerolox LV	-	-	Manligyeong-1 F4	-	-	-	SHAE	LC2	-	-	107	-	-



Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Launch		Launch_Code	Group	Category	LTCite	Cite	Notes
						OrbPay	Agency						
2017-S102	2458086.26	2017 Nov 28 1818	Hwasong-15	-	-	0.000	JRG	MS	-	Test	Wire	-	-
2022-S110	2459886.49	2022 Nov 2 2340	Hwasong-15	?	-	0.000	JRG	MS	-	Test	Wire	-	-
2022-F07	2459854.52	2022 Mar 16 0030	Hwasong-17	?	-	0.000	JRG	MF	-	Test	Wire	-	-
2022-U01	2459627.73	2022 Mar 24 0534	Hwasong-17	?	-	0.000	JRG	MS	-	Sat LEO S	Wire	-	-
2022-U03	2459901.56	2022 Nov 18 0114	Hwasong-17	-	-	0.000	JRG	MS	-	Sat LEO S	Wire	-	-
2023-U01	2459993.86	2023 Feb 18 0822	Hwasong-15	-	-	0.000	JRG	MS	-	Sat LEO S	Wire	-	-
2023-U02	2460019.42	2023 Mar 15 2210	Hwasong-17	-	-	0.000	JRG	MS	-	Sat LEO S	Wire	-	-
2023-F06	2460095.39	2023 May 30 2127	Cheonliama-1	-	6	0.200	KCST	OF	G	Sat SSO 0	rdnews.org	-	-
2023-F07	2460180.28	2023 Aug 23 18507	Cheonliama-1	-	-	0.200	KCST	OF	G	Sat SSO 0	rdnews.org	-	Stage 3 accidental destruct
2023-F79	2460707.07	2023 Nov 21 1342:58	Cheonliama-1	-	-	0.200	KCST	OS	G	Sat SSO 0	rdnews.org	-	-
2023-A20	2460271.09	2023 Nov 22 1405	Hwasong-15	?	-	0.000	JRG	MF	-	Test	Wire	-	-
2024-F02	2460468.07	2024 May 27 1344?	MK Kerolos LV	-	-	0.200	KCST	OF	G	Sat SSO 0	Wire	-	Stage 1 explosion





Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Mission	Launch	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee km	Range km	Dest
2022-A07	2469664.52	2022 Mar 16 0030	Hwasongpho-17	?	-	03031203	-	SUNAM	-	LP1	-	-	-	10?	0	-



Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Launch_Flight_ID	Agency	Launch_Code	Group	Category	LTcite	Cite	Notes
2022-A07	2459664.52	2022 Mar 16 0030	Hwasongpho-17	?	-	JRG	MF	-	Test	Wire	-	-



Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Mission	FlightCode	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee km	Range km	Dest
2023-S15	2460047.43	2023 Apr 12 2223	Hwasong-18	-	-	-	-	-	-	CHDUNG	-	-	-	2500?	1000?	-
2023-003	2460137.64	2023 Jul 12 0069	Hwasong-18	-	-	-	-	-	-	CHDUNG	-	-	-	6648	1001	-
2023-004	2460286.48	2023 Dec 17 2324	Hwasong-18	-	-	-	-	-	-	CHDUNG	-	-	-	6518	1002	137E 42N
2024-H01	2460323.75	2024 Jan 14 0565	Hwasong-16	-	-	-	-	-	-	CHDUNG	-	-	-	50	1000	-
2024-S12	2460402.41	2024 Apr 1 2182	Hwasong-16Ha	-	-	-	19060015	-	-	CHDUNG?	-	-	-	101	1000	-
2024-S41	2460487.35	2024 Jun 26 2030	Hwasong-16Ha	-	-	-	Hwasong-16Ha?	-	-	CHDUNG	-	-	-	100	200	-
2024-U05	2460614.42	2024 Oct 30 2211	Hwasong-19	-	-	-	-	-	-	CHDUNG?	-	-	-	7687	1001	137E 42N



Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Agency	Launch_Code	Group	Category	LTCite	Cite	Notes
2023-S15	2460047.43	2023 Apr 12 2223	Hwasong-18	-	-	JRC	MS	-	Test	Wire	-	-
2023-003	2460137.64	2023 Jul 12 0659	Hwasong-18	-	-	JRC	MS	-	Sat LED S	Wire	-	-
2023-004	2460286.48	2023 Dec 17 2324	Hwasong-18	-	-	JRC	MS	-	Sat LED S	Wire	-	-
2024-M01	2460323.75	2024 Jan 14 0555	Hwasong-16	-	-	RPA	MS	-	Test	Wire	-	-
2024-S12	2460402.41	2024 Apr 1 2152	Hwasong-160a	-	-	RPA	MS	-	Test	Wire	-	-
2024-S41	2460487.35	2024 Jun 25 2030	Hwasong-160a	-	-	RPA	MS	-	Test	Wire	-	-
2024-U05	2460614.42	2024 Oct 30 2211	Hwasong-19	-	-	JRC	MS	-	Sat LED S	Wire	-	-





Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Mission	Launch_Mission	FlightCode	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee_Km	Range_Km	Dest
1982-H51	2445272.50	1982 Oct 30	Hyunmo-1	-	-	-	-	-	-	-	ANHU	-	-	-	50?	180?	-
1986-H100	2446430.50	1986	Hyunmo-1	-	-	-	-	-	-	-	ANHU	-	-	-	50?	180?	-
2006-S79	2453735.50	2006	Hyunmo-2A	?	-	-	-	-	-	-	ANHU	LP1?	-	-	150?	300?	-
2012-S96	2455926.50	2012	Hyunmo-2A	?	-	-	-	-	-	-	ANHU	LP1?	-	-	150?	500?	-
2014-S16	2456739.50	2014 Mar 23	Hyunmo-2B	?	-	-	-	-	-	-	ANHU	LP1?	-	-	150?	500?	-
2015-S37	2457176.50	2015 Jun 3	Hyunmo-2B	?	-	-	-	-	-	-	ANHU	LP1	-	-	150	500	-
2017-S26	2457812.50	2017 Mar	Hyunmo-2C	-	-	-	-	-	-	-	ANHU	-	-	-	150	500	-
2017-S47	2457927.50	2017 Jun 23 0130?	Hyunmo-2C	-	-	-	-	-	-	-	ANHU	-	-	-	150?	-	-
2017-S55	2457939.42	2017 Jul 4 2200?	Hyunmo-2B	?	-	-	-	-	-	-	ANHU	-	-	-	150?	-	-
2017-S64	2457963.42	2017 Jul 28 2200?	Hyunmo-2B	?	-	-	-	-	-	-	ANHU	-	-	-	150?	-	-
2017-S71	2457988.50	2017 Aug 23	Hyunmo-2C	?	-	-	-	-	-	-	ANHU	LP1	-	-	150?	350?	-
2017-S72	2457988.50	2017 Aug 23	Hyunmo-2C	?	-	-	-	-	-	-	ANHU	LP2?	-	-	150?	350?	-
2017-S73	2457990.50	2017 Aug 26?	Hyunmo-2C	?	-	-	-	-	-	-	ANHU	LP3?	-	-	150?	300?	-
2017-S76	2458000.38	2017 Sep 5 2100?	Hyunmo-2A	-	-	-	-	-	-	-	ANHU	LP3?	-	-	150?	300?	-
2017-S79	2458011.42	2017 Sep 14 2205	Hyunmo-2A	-	-	-	-	-	-	-	ANHU	-	-	-	150?	250	-
2017-S81	2458011.42	2017 Sep 14 2205	Hyunmo-2A	-	-	-	-	-	-	-	ANHU	-	-	-	150?	250	-
2017-S103	2458046.27	2017 Nov 28 1823	Hyunmo-2B	?	-	-	-	-	-	-	ANHU	-	-	-	150?	300?	-
2020-S21	2458932.50	2020 Mar 24	Hyunmo-4	-	-	-	-	-	-	-	ANHU	-	-	-	150?	350?	-
2020-A12	2458932.50	2020 Mar 24	Hyunmo-4	-	-	-	-	-	-	-	ANHU	-	-	-	150?	350?	-
2021-A19	2459455.50	2021 Sep 17	Hyunmo-4	-	Hyunmo-4-4	Sub ejection test	-	-	-	SS-083	ANHU	-	-	-	150?	-	-
2021-S62	2459472.50	2021 Sep 15	Hyunmo-4	-	Hyunmo-4-4	Sub launch	-	-	-	SS-083	ANHU	-	-	-	150?	-	-
2022-S28	2459667.50	2022 Apr 18	Hyunmo-4	-	Hyunmo-4-4	Sub launch	-	-	-	SS-083	ANHU	-	-	-	400	-	-
2022-S29	2459667.50	2022 Apr 18	Hyunmo-4	-	Hyunmo-4-4	Sub launch	-	-	-	SS-083	ANHU	-	-	-	400	-	-
2022-S92	2459667.17	2022 Oct 4 1600?	Hyunmo-2B	?	-	-	-	-	-	-	ANHU	-	-	-	150?	-	-
2022-S92	2459667.17	2022 Oct 4 1600?	Hyunmo-2B	?	-	-	-	-	-	-	ANHU	-	-	-	150?	-	-
2022-426	2459667.17	2022 Oct 4 1600?	Hyunmo-2B	?	-	-	-	-	-	-	ANHU	-	-	-	80?	-	-
2022-426	2459667.17	2022 Oct 4 1600?	Hyunmo-2B	?	-	-	-	-	-	-	ANHU	-	-	-	0?	-	-



Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Launch_t	Agency	Launch_Code	Group	Category	LTCite	Cite	Notes
1982-H51	2445272.50	1982 Oct 30	Hyunoo-1	-	-	0.000	ADD	MS	-	Test	An2015	-	-
1986-H100	2446430.50	1986	Hyunoo-1	-	-	0.000	ADD	MS	-	Test	Wire	-	-
2006-S79	2453735.50	2006	Hyunoo-2A	?	-	0.000	ADD	MS	-	Test	Wire	-	-
2012-S96	2455926.50	2012	Hyunoo-2A	?	-	0.000	ADD	MS	-	Test	Wire	-	-
2014-S16	2456739.50	2014 Mar 23	Hyunoo-2B	?	-	0.000	ADD	MS	-	Test	Wire	-	-
2015-S37	2457176.50	2015 Jun 3	Hyunoo-2B	?	-	0.000	ADD	MS	-	Test	Wire	-	-
2017-S26	2457812.50	2017 Mar	Hyunoo-2C	-	-	0.000	ADD	MS	-	Test	Wire	-	-
2017-S47	2457927.56	2017 Jun 23 0130?	Hyunoo-2C	-	-	0.000	ADD	MS	-	Test	usfk.mil	-	-
2017-S55	2457939.42	2017 Jul 4 2200?	Hyunoo-2B	?	-	0.000	ADD	MS	-	Test	usfk.mil	-	-
2017-S64	2457963.42	2017 Jul 28 2200?	Hyunoo-2C	?	-	0.000	ADD	MS	-	Test	twitter/hktpnd	-	-
2017-S71	2457988.50	2017 Aug 23	Hyunoo-2C	?	-	0.000	ADD	MS	-	Test	twitter/hktpnd	-	-
2017-S72	2457988.50	2017 Aug 26?	Hyunoo-2C	?	-	0.000	ADD	MS	-	Test	twitter/hktpnd	-	-
2017-S73	2457990.50	2017 Aug 26?	Hyunoo-2C	?	-	0.000	ADD	MS	-	Test	twitter/hktpnd	-	-
2017-S76	2458000.38	2017 Sep 14 2205	Hyunoo-2A	-	-	0.000	ADD	MS	-	Test	twitter/hktpnd	-	-
2017-S79	2458011.42	2017 Sep 14 2205	Hyunoo-2A	-	-	0.000	ADD	MS	-	Test	twitter/hktpnd	-	-
2017-S103	2458066.27	2017 Sep 14 2205	Hyunoo-2B	?	-	0.000	ADD	MS	-	Test	twitter/hktpnd	-	-
2020-S21	2458932.50	2020 Mar 24	Hyunoo-4	-	-	0.000	ADD	MS	-	Test	Wire	-	-
2020-A12	2458932.50	2020 Mar 24	Hyunoo-4	-	-	0.000	ADD	MS	-	Test	AMST200518-37	-	-
2021-A19	2459456.50	2021 Sep 17	Hyunoo-4	-	Hyunoo-4-4	0.000	ADD/ROKX	MS	-	Test	Wire	-	-
2021-S62	2459472.50	2021 Sep 15	Hyunoo-4	-	Hyunoo-4-4	0.000	ADD/ROKX	MS	-	Test	Wire	-	-
2022-S28	2459667.50	2022 Apr 18	Hyunoo-4	-	Hyunoo-4-4	0.000	ADD/ROKX	MS	-	Test	Wire	-	-
2022-S29	2459667.50	2022 Apr 18	Hyunoo-4	-	Hyunoo-4-4	0.000	ADD/ROKX	MS	-	Test	Wire	-	-
2022-S92	2459667.17	2022 Oct 4 1600?	Hyunoo-2B	?	-	0.000	ADD	MS	-	Test	Wire	-	-
2022-426	2459667.17	2022 Oct 4 1600?	Hyunoo-2B	?	-	0.000	ADD	MS	-	Test	Wire	-	-



Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Launch			Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee_Km	Range_Km	Dest
							Mission	FlightCode	FlightCode								
1965-S522	2439053.50	1965 Oct 20	Orion-1	-	Mo. 1	-	-	-	-	CELPA?	-	-	-	90?	-	-	
1966-S700	2439264.50	1966 May 19	Orion-2	-	-	-	-	-	-	CELPA?	-	-	-	100?	-	-	
1966-S348	2439306.50	1966 JUL	Orion-1	-	Mo. 8	-	-	-	-	CELPA?	-	-	-	90?	-	-	
1966-S437	2439350.50	1966 Aug 13	Orion-2	-	Mo. 1	-	-	-	-	CELPA?	-	-	-	114	-	-	
1966-S468	2439368.50	1966 Sep	Orion-2	-	Mo. 4	-	-	-	-	CELPA?	-	-	-	90?	-	-	
1966-S582	2439433.50	1966 Nov 4	Orion-2	-	-	-	-	-	-	WI	-	-	-	90?	-	-	
1966-A136	2439436.50	1966 Nov 7	Orion-2	-	-	-	-	-	-	WI	-	-	-	1?	-	-	
1966-S591	2439439.24	1966 Nov 9 1743	Orion-2	-	-	-	-	-	-	WI	-	-	-	82	-	-	
1966-S597	2439441.50	1966 Nov 12	Orion-2	-	-	-	-	-	-	TART	-	-	-	90?	-	-	
1966-S598	2439441.50	1966 Nov 12	Orion-2	-	-	-	-	-	-	TART	-	-	-	90?	-	-	
1966-S599	2439441.50	1966 Nov 12	Orion-2	-	-	-	-	-	-	TART	-	-	-	90?	-	-	
1967-S624	2439629.50	1967 May 19	Orion-2	-	BlO-1	-	-	-	-	CELPA	-	-	-	90?	-	-	
1967-S620	2439740.44	1967 Sep 6 2235	Orion-2	-	AER 1/67	Rat payload	-	-	-	CELPA	-	-	-	90?	-	-	
1967-S422	2439740.75	1967 Sep 7 0605	Orion-2	-	AER 1/67-2	-	-	-	-	CELPA	-	-	-	90?	-	-	
1967-S423	2439740.91	1967 Sep 7 0950	Orion-2	-	AER 1/67-3	-	-	-	-	CELPA	-	-	-	90?	-	-	
1967-A146	2439839.46	1967 Dec 14 2300	Orion-2	-	Rad 1/67	-	-	-	-	CELPA	-	-	-	35	-	-	
1967-H21	2439841.12	1967 Dec 16 1458	Orion-2	-	Rad 2/67	-	-	-	-	CELPA	-	-	-	70	-	-	
1966-S599	2439879.98	1968 Jan 24 1130	Orion-2	-	Rad 2/68	-	-	-	-	CELAT	-	-	-	90	-	-	
1966-W298	2440188.16	1968 Nov 27 1550	Orion-2	-	EXHIBIT C49	Chaff	-	-	-	CELAT	-	-	-	56	-	-	
1969-S346	2440369.50	1969 May 28	Orion-2	?	Mo. 26	-	-	-	-	CELAT?	-	-	-	90?	-	-	
1969-S470	2440463.50	1969 Aug 30	Orion-2	-	Mo. 31	-	-	-	-	CELAT?	-	-	-	90?	-	-	
1969-S471	2440464.23	1969 Aug 30 1730	Orion-2	-	Mo. 27	-	-	-	-	CELAT?	-	-	-	15	-	-	
1970-S541	2440710.03	1970 May 3 1245	Orion-2	-	-	-	-	-	-	CELAT?	-	-	-	90	-	-	
1971-S616	2441305.48	1971 Dec 19 2533	Orion-2	-	Campus	-	-	-	-	CELAT	-	-	-	106	-	-	



Launch

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	OrbPay	Agency	Launch_Code	Group	Category	LTCite	Cite	Notes
1965-S522	2439053.50	1965 Oct 20	Dr-ion-1	-	No. 1	0.000	CNIE	SS	CNIE/	Test	DeLeon	Serra	-
1966-S700	2439264.50	1966 May 19	Dr-ion-2	-	-	0.000	CNIE	SS	CNIE/	Test	historia.mforos.com	-	dubious?
1966-S348	2439306.50	1966 Jul	Dr-ion-1	-	No. 8	0.000	CNIE	SS	CNIE/	Test	Serra	DeLeon	-
1966-S437	2439350.50	1966 Aug 13	Dr-ion-2	-	No. 1	0.000	CNIE	SS	CNIE/	Test	Serra	-	-
1966-S468	2439368.50	1966 Sep	Dr-ion-2	-	No. 4	0.000	CNIE	SS	CNIE/	Test	Serra	-	-
1966-S582	2439433.50	1966 Nov 4	Dr-ion-2	-	-	0.000	CNIE	SS	CNIE/	Test	SP-4401	-	-
1966-A136	2439436.50	1966 Nov 7	Dr-ion-2	-	-	0.000	CNIE	SF	CNIE/	Test	SP-4401	SP-4007	-
1966-S591	2439439.24	1966 Nov 9 1743	Dr-ion-2	-	-	0.000	CNIE	SS	CNIE/	Test	MR661121-08	SP-4401	-
1966-S598	2439441.50	1966 Nov 12	Dr-ion-2	-	-	0.000	CNIE	SS	CNIE/	Eclipse	Atsuy	-	-
1966-S599	2439441.50	1966 Nov 12	Dr-ion-2	-	-	0.000	CNIE	SS	CNIE/	Eclipse	Atsuy	-	-
1967-S624	2439629.50	1967 May 19	Dr-ion-2	-	-	0.000	LIAE	SS	LIAE/	Eclipse	Atsuy	-	-
1967-S420	2439740.44	1967 Sep 6 2235	Dr-ion-2	-	BLD-1	0.000	LIAE	SS	LIAE/	Eclipse	Atsuy	-	-
1967-S422	2439740.75	1967 Sep 7 0605	Dr-ion-2	-	BLD-1	0.000	LIAE	SS	LIAE/	Eclipse	Atsuy	-	-
1967-S423	2439740.91	1967 Sep 7 0950	Dr-ion-2	-	BLD-1	0.000	LIAE	SS	LIAE/	Eclipse	Atsuy	-	-
1967-A146	2439839.46	1967 Dec 14 2300	Dr-ion-2	-	BLD-1	0.000	LIAE	SS	LIAE/	Eclipse	Atsuy	-	-
1967-A121	2439841.12	1967 Dec 16 1458	Dr-ion-2	-	BLD-1	0.000	LIAE	SS	LIAE/	Eclipse	Atsuy	-	-
1968-S599	2439879.98	1968 Jan 24 1130	Dr-ion-2	-	BLD-1	0.000	LIAE	SS	LIAE/	Eclipse	Atsuy	-	-
1968-W298	2440188.16	1968 Nov 27 1550	Dr-ion-2	-	BLD-1	0.000	LIAE	SS	LIAE/	Eclipse	Atsuy	-	-
1969-S346	2440369.50	1969 May 28	Dr-ion-2	-	BLD-1	0.000	LIAE	SS	LIAE/	Eclipse	Atsuy	-	-
1969-S470	2440463.50	1969 Aug 30	Dr-ion-2	-	BLD-1	0.000	LIAE	SS	LIAE/	Eclipse	Atsuy	-	-
1969-S471	2440464.23	1969 Aug 30 1730	Dr-ion-2	-	BLD-1	0.000	LIAE	SS	LIAE/	Eclipse	Atsuy	-	-
1970-S341	2440710.03	1970 May 3 1245	Dr-ion-2	-	BLD-1	0.000	LIAE	SS	LIAE/	Eclipse	Atsuy	-	-
1971-S615	2441305.48	1971 Dec 19 2533	Dr-ion-2	-	Campus	0.000	LIAE	SS	LIAE/	Eclipse	Atsuy	-	-





Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Mission	FlightCode	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee km	Range km	Dest
1984-S137	2445662.96	1984 Jun 11 1104	INTA-100	-	INTA MZ-8401	Test	Zorzal-1 (Hequeta)	-	-	ELAR	-	-	-	17	-	-
1984-S138	2445663.96	1984 Jun 12 1103	INTA-100	-	INTA MZ-8402	Test	Zorzal-2 (Hequeta)	-	-	ELAR	-	-	-	17	-	-
1984-S139	2445664.96	1984 Jun 13 1104	INTA-100	-	INTA RP-8401	Test (Ballast)	Rocio-1	-	-	ELAR	-	-	-	45	-	-
1985-S149	2446151.99	1985 Mar 27 1146	INTA-100	-	INTA RP-8501	Test (Ballast)	Rocio-2	-	-	ELAR	-	-	-	33	-	-
1985-S150	2446294.99	1985 Jun 18 1149	INTA-100	-	INTA RP-8502	Test (Ballast)	Rocio-3	-	-	ELAR	-	-	-	17	-	-
1985-S151	2446240.96	1985 Jun 24 1101	INTA-100	-	INTA RP-8503	Test (Ballast)	Rocio-4	-	-	ELAR	-	-	-	74	-	-
1985-S271	2446383.01	1985 Nov 13 1217	INTA-100	-	INTA RP-8504	Test (Ballast)	Rocio-5	-	-	ELAR	-	-	-	110	-	-
1985-S272	2446394.97	1985 Nov 15 1123	INTA-100	-	INTA RP-8505	Chaff	Rocio-6	-	-	ELAR	-	-	-	507	-	-
1990-S175	2448181.98	1990 Oct 17 1133	INTA-100	-	INTA MZ-9001	Test	NO	-	-	ELAR	-	-	-	17	-	-
1990-S176	2448186.03	1990 Oct 21 1242	INTA-100	-	INTA MZ-9002	Test	M1	-	-	ELAR	-	-	-	4	-	-
1990-S177	2448187.00	1990 Oct 22 1158	INTA-100	-	INTA MZ-9003	Test	M2	-	-	ELAR	-	-	-	4	-	-
1991-S186	2448275.01	1991 Jan 18 1213	INTA-100	-	INTA RP-9101	Test	Rocio-7	-	-	ELAR	-	-	-	118	-	-
1991-S187	2448275.08	1991 Jan 18 1400	INTA-100	-	INTA RP-9102	Neteo	Rocio-8	-	-	ELAR	-	-	-	22	-	-
1991-S188	2448544.01	1991 Oct 14 1216	INTA-100	-	INTA RP-9103	Test	Rocio-9	-	-	ELAR	-	-	-	100?	-	-
1991-S215	2448545.02	1991 Oct 15 1230	INTA-100	-	INTA RP-9104	Test	Rocio-10	-	-	ELAR	-	-	-	73	-	-
1992-S106	2448719.93	1992 Apr 7 1025	INTA-100	-	INTA RP-9201	Tech Payload	Rocio-11	-	-	ELAR	-	-	-	100?	-	-
1992-S107	2448721.00	1992 Apr 8 1201	INTA-100	-	INTA RP-9202	Tech Payload	Rocio-12	-	-	ELAR	-	-	-	100?	-	-



Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Launch		Launch_Code	Group	Category	LICSite	Cite	Notes
						OrbPay	Agency						
1984-S137	2445862.96	1984 Jun 11 1104	INTA-100	-	INTA MZ-8401	0.000	INTA	SS	INTA/	Test	ELåren	IAC-06-E4,4-06	-
1984-S138	2445863.96	1984 Jun 12 1103	INTA-100	-	INTA MZ-8402	0.000	INTA	SS	INTA/	Test	ELåren	IAC-06-E4,4-06	-
1984-S139	2445864.96	1984 Jun 13 1104	INTA-100	-	INTA RP-8401	0.000	INTA	SS	INTA/	Test	ELåren	IAC-06-E4,4-06	-
1985-S149	2446151.99	1985 Mar 27 1146	INTA-100	-	INTA RP-8501	0.000	INTA	SS	INTA/	Test	ELåren	IAC-06-E4,4-06	-
1985-S150	2446234.99	1985 Jun 18 1149	INTA-100	-	INTA RP-8502	0.000	INTA	SF	INTA/	Test	ELåren	IAC-06-E4,4-06	-
1985-S151	2446240.96	1985 Jun 24 1101	INTA-100	-	INTA RP-8503	0.000	INTA	SS	INTA/	Test	ELåren	IAC-06-E4,4-06	-
1985-S271	2446383.01	1985 Nov 13 1217	INTA-100	-	INTA RP-8504	0.000	INTA	SS	INTA/	Test	ELåren	CoheesiNTA	-
1985-S272	2446384.97	1985 Nov 15 1123	INTA-100	-	INTA RP-8505	0.000	INTA	SS	INTA/	Aeron	ELåren	CoheesiNTA	-
1985-S275	2448181.98	1990 Oct 17 1153	INTA-100	-	INTA MZ-9001	0.000	INTA	SS	INTA/	Test	ELåren	IAC-06-E4,4-06	-
1985-S176	2448186.03	1990 Oct 21 1242	INTA-100	-	INTA MZ-9002	0.000	INTA	SS	INTA/	Test	ELåren	IAC-06-E4,4-06	-
1985-S177	2448187.00	1990 Oct 22 1168	INTA-100	-	INTA MZ-9003	0.000	INTA	SS	INTA/	Test	ELåren	IAC-06-E4,4-06	-
1991-S186	2448275.01	1991 Jan 18 1213	INTA-100	-	INTA RP-9101	0.000	INTA	SS	INTA/	Test	ELåren	IAC-06-E4,4-06	-
1991-S187	2448275.08	1991 Jan 18 1400	INTA-100	-	INTA RP-9102	0.000	INTA	SF	INTA/	Aeron	ELåren	IAC-06-E4,4-06	-
1991-S188	2448644.01	1991 Oct 14 1215	INTA-100	-	INTA RP-9103	0.000	INTA	SS	INTA/	Test	ELåren	IAC-06-E4,4-06	-
1991-S215	2448645.02	1991 Oct 15 1230	INTA-100	-	INTA RP-9104	0.000	INTA	SS	INTA/	Test	ELåren	CoheesiNTA	-
1992-S106	2448719.83	1992 Apr 7 1025	INTA-100	-	INTA RP-9201	0.000	INTA	SS	INTA/	Tech	ELåren	CoheesiNTA	-
1992-S107	2448721.00	1992 Apr 8 1201	INTA-100	-	INTA RP-9202	0.000	INTA	SS	INTA/	Tech	ELåren	CoheesiNTA	-



Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Mission	Launch	FlightCode	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee_Km	Range_Km	Dest
2018-4252	2468304-56	2018 Jul 5 0130	ISRO-CES	-	-	Pad Abort Test	Gaganyaan boilerplate	-	-	-	SISC	-	-	-	3	3	-



Launch													
Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	OrbPay	Agency	Launch_Code	Group	Category	LTCite	Cite	Notes
2018-4252	2468304.56	2018 Jul 5 0130	ISR0-CES	-	-	0.000	ISR0	AS	-	Test	Wire	-	-





Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Mission	Launch	FlightCode	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee km	Range km	Dest
2023-A17	2460238.69	2023 Oct 21 0430	ISRO TV	-	TV-D1	Gaganyaan Test	CES/CH	SHAR	-	-	SHAR	FLP	-	-	17	-	-



Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variat	Flight_ID	Orbit	Agency	Launch_Code	Group	Category	LTCite	Cite	Notes
2023-A17	2460238.69	2023 Oct 21 0430	ISRO TV	-	TV-D1	0.000	ISRO	AS	ISRO/	Test	nasaspaceflight.com	-	-



Launch

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Mission	FlightCode	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee km	Range km	Dest
1976-A127	2442886.50	1976 Apr 20	FTV	-	-	FTV-MK I-01	-	-	-	SHAR	RH	-	-	107	-	-
1976-A128	2442904.50	1976 May 6	FTV	-	-	FTV-MK I-02	-	-	-	SHAR	RH	-	-	107	-	-
1976-A129	2443129.50	1976 Dec 17	SEGRD	-	-	SEGRD-01	-	-	-	SHAR	RH	-	-	107	-	-
1977-A89	2443266.50	1977 Apr 22	FTV	-	-	FTV-MK II	-	-	-	SHAR	RH	-	-	107	-	-
1977-A60	2443331.50	1977 Jul 7	SEGRD	-	-	SEGRD-02	-	-	-	SHAR	RH	-	-	107	-	-
1977-A61	2443376.50	1977 Aug 20	FTV	-	-	FTV-MK II	-	-	-	SHAR	RH	-	-	107	-	-
1984-A42	2445877.50	1984 Jun 26	FTV	-	-	SS-46	-	-	-	SHAR	RH	-	-	107	-	-
1986-A22	2446416.50	1986 Dec 17	FTV	-	-	PTA 1	-	-	-	SHAR	RH	-	-	107	-	-
1986-A16	2446443.50	1986 Jan 13	FTV	-	-	PTA 2	-	-	-	SHAR	RH	-	-	107	-	-
1986-A17	2446510.50	1986 Mar 21	FTV	-	-	PTA 3	-	-	-	SHAR	RH	-	-	107	-	-
1986-A18	2446565.50	1986 May 15	FTV	-	-	PTA 4	-	-	-	SHAR	RH	-	-	107	-	-
1986-A19	2446634.50	1986 Jul 23	FTV	-	-	PTA 5	-	-	-	SHAR	RH	-	-	107	-	-
1986-A20	2446702.50	1986 Sep 29	FTV	-	-	PTA 6 (PTA-08)	-	-	-	SHAR	RH	-	-	107	-	-
1987-A31	2446831.50	1987 Feb 5	FTV	-	-	PTA 7	-	-	-	SHAR	RH	-	-	107	-	-
1988-A86	2447159.50	1988 Jan 29	FTV	-	-	PTA 8	-	-	-	SHAR	RH	-	-	107	-	-
1988-A87	2447203.50	1988 Feb 12	FTV	-	-	PTA 9	-	-	-	SHAR	RH	-	-	107	-	-
1988-A88	2447216.50	1988 Feb 25	FTV	-	-	POL	-	-	-	SHAR	RH	-	-	107	-	-
1988-A89	2447231.50	1988 Mar 11	FTV	-	-	FTV-07	-	-	-	SHAR	RH	-	-	107	-	-
1988-A90	2447234.50	1988 Mar 14	FTV	-	-	FTV-08	-	-	-	SHAR	RH	-	-	107	-	-
1988-A91	2447396.50	1988 Aug 26	FTV	-	-	PTA 9	-	-	-	SHAR	RH	-	-	107	-	-
1988-A92	2447406.50	1988 Sep 1	FTV	-	-	PTA 10	-	-	-	SHAR	RH	-	-	107	-	-
1988-A93	2447411.50	1988 Sep 7	FTV	-	-	PTA 11	-	-	-	SHAR	RH	-	-	107	-	-
1988-A94	2447516.50	1988 Dec 21	FTV	-	-	PTA 12	-	-	-	SHAR	RH	-	-	107	-	-
1989-A16	2447601.50	1989 Mar 16	FTV	-	-	PTA 13	-	-	-	SHAR	RH	-	-	107	-	-
1989-A19	2447606.50	1989 Mar 20	FTV	-	-	PTA 14	-	-	-	SHAR	RH	-	-	107	-	-
1989-A20	2447796.50	1989 Sep 27	FTV	-	-	P02	-	-	-	SHAR	RH	-	-	107	-	-
1989-A21	2447832.50	1989 Nov 2	FTV	-	-	PTA 15	-	-	-	SHAR	RH	-	-	107	-	-
1991-A09	2446296.50	1991 Feb 11	FTV	-	-	P05	-	-	-	SHAR	RH	-	-	107	-	-
1991-A10	2446441.50	1991 Jul 4	FTV	-	-	P04	-	-	-	SHAR	RH	-	-	107	-	-
1991-A11	2446476.50	1991 Aug	FTV	-	-	P06	-	-	-	SHAR	RH	-	-	107	-	-
1992-A20	2446666.50	1992 Feb 13	FTV	-	-	P08	-	-	-	SHAR	RH	-	-	107	-	-
1995-A19	2449150.50	1995 Jun 12	FTV	-	-	P14	-	-	-	SHAR	RH	-	-	107	-	-



Launch

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Agency	Launch_Code	Group	Category	LTCite	Cite	Notes
1976-A127	2442888-50	1976 Apr 20	FIV	-	-	ISRO	SU	-	Test	SDESC-SR	-	-
1976-A128	2442904-50	1976 May 6	FIV	-	-	ISRO	SU	-	Test	SDESC-SR	-	-
1976-A129	2443129-50	1976 Dec 17	SEDPHD	-	-	ISRO	SU	-	Test	SDESC-SR	-	-
1977-A69	2443255-50	1977 Apr 22	FIV	-	-	ISRO	SU	-	Test	SDESC-SR	-	-
1977-A60	2443331-50	1977 Jul 7	SEDPHD	-	-	ISRO	SU	-	Test	SDESC-SR	-	-
1977-A61	2443375-50	1977 Aug 20	FIV	-	-	ISRO	SU	-	Test	SDESC-SR	-	-
1984-A42	2446577-50	1984 Jun 26	FIV	-	-	ISRO	SU	-	Test	SDESC-SR	-	-
1984-A42	2446416-50	1985 Dec 17	FIV	-	-	ISRO	SU	-	Test	SDESC-SR	-	-
1985-A22	2446443-50	1986 Jan 13	FIV	-	-	ISRO	SU	-	Test	SDESC-SR	-	-
1985-A16	2446510-50	1986 Mar 21	FIV	-	-	ISRO	SU	-	Test	SDESC-SR	-	-
1986-A17	2446510-50	1986 May 15	FIV	-	-	ISRO	SU	-	Test	SDESC-SR	-	-
1986-A18	2446565-50	1986 Jul 23	FIV	-	-	ISRO	SU	-	Test	SDESC-SR	-	-
1986-A19	2446634-50	1986 Sep 29	FIV	-	-	ISRO	SU	-	Test	SDESC-SR	-	-
1986-A20	2446702-50	1987 Feb 5	FIV	-	-	ISRO	SU	-	Test	SDESC-SR	-	-
1987-A31	2446831-50	1987 Sep 23	FIV	-	-	ISRO	SU	-	Test	SDESC-SR	-	-
1987-A32	2447061-50	1988 Jan 29	FIV	-	-	ISRO	SU	-	Test	SDESC-SR	-	-
1988-A86	2447189-50	1988 Feb 12	FIV	-	-	ISRO	SU	-	Test	SDESC-SR	-	-
1988-A87	2447203-50	1988 Feb 26	FIV	-	-	ISRO	SU	-	Test	SDESC-SR	-	-
1988-A88	2447216-50	1988 Mar 11	FIV	-	-	ISRO	SU	-	Test	SDESC-SR	-	-
1988-A89	2447231-50	1988 Mar 14	FIV	-	-	ISRO	SU	-	Test	SDESC-SR	-	-
1988-A90	2447234-50	1988 Mar 25	FIV	-	-	ISRO	SU	-	Test	SDESC-SR	-	-
1988-A91	2447398-50	1988 Aug 26	FIV	-	-	ISRO	SU	-	Test	SDESC-SR	-	-
1988-A92	2447405-50	1988 Sep 1	FIV	-	-	ISRO	SU	-	Test	SDESC-SR	-	-
1988-A93	2447411-50	1988 Sep 7	FIV	-	-	ISRO	SU	-	Test	SDESC-SR	-	-
1988-A94	2447516-50	1988 Dec 21	FIV	-	-	ISRO	SU	-	Test	SDESC-SR	-	-
1989-A18	2447601-50	1989 Mar 16	FIV	-	-	ISRO	SU	-	Test	SDESC-SR	-	-
1989-A19	2447605-50	1989 Mar 20	FIV	-	-	ISRO	SU	-	Test	SDESC-SR	-	-
1989-A20	2447796-50	1989 Sep 27	FIV	-	-	ISRO	SU	-	Test	SDESC-SR	-	-
1989-A21	2447832-50	1989 Nov 2	FIV	-	-	ISRO	SU	-	Test	SDESC-SR	-	-
1991-A09	2446296-50	1991 Feb 11	FIV	-	-	ISRO	SU	-	Test	SDESC-SR	-	-
1991-A10	2446441-50	1991 Jul 4	FIV	-	-	ISRO	SU	-	Test	SDESC-SR	-	-
1991-A11	2446475-50	1991 Aug 7	FIV	-	-	ISRO	SU	-	Test	SDESC-SR	-	-
1992-A20	2446665-50	1992 Feb 13	FIV	-	-	ISRO	SU	-	Test	SDESC-SR	-	-
1992-A20	2446665-50	1992 Feb 13	FIV	-	-	ISRO	SU	-	Test	SDESC-SR	-	-
1995-A19	2449150-50	1995 Jun 12	FIV	-	-	ISRO	SU	-	Test	SDESC-SR	-	-





Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Mission	LaunchCode	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee km	Range km	Dest
2007-H01	2454181.93	2007 Mar 22 1015	Icarus	-	1	ERMU/Icarus	-	-	-	WI	-	-	-	60	-	-



Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Agency	Launch_Code	Group	Category	LTCite	Cite	Notes
2007-M01	2454151.93	2007 Mar 22 1015	Icarus	-	1	ERAU	SS	ERAU/	Test	wff.nasa.gov	-	-



Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Mission	Launch				Apogee km	Range km	Dest
								Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad			
1990-A09	2448064.50	1990 Jun 22	Iraqi 6m Projectile	-	-	-	-	JHIM	G550	-	-	34	-	-
1990-A10	2448088.50	1990 Jul 16	Iraqi 6m Projectile	-	-	-	-	JHIM	G550	-	-	33	-	-
1990-A17	2448158.50	1990 Sep 24	Iraqi 6m Projectile	-	-	-	-	JHIM	G550	-	-	62	-	-



Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	OrbPay	Agency	Launch_Code	Group	Category	LTCite	Cite	Notes
1990-A09	2448064.50	1990 Jun 22	Iraqi Gun Projectile	-	-	0.000	IQMIC	SS	SRCL/	Test	UNRNOVIC	-	-
1990-A10	2448088.50	1990 Jul 16	Iraqi Gun Projectile	-	-	0.000	IQMIC	SS	SRCL/	Test	UNRNOVIC	-	-
1990-H17	2448168.50	1990 Sep 24	Iraqi Gun Projectile	-	-	0.000	IQMIC	SS	SRCL/	Test	UNRNOVIC	-	-





Launch_Tag	Launch_JD	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Mission	FlightCode	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee km	Range km	Dest
1960-S190	2437138.00	1960 Jul 22 1205	Iris	-	MASA 5.01GT	-	-	-	-	WI	LA1	-	-	224	-	-
1960-S328	2437226.10	1960 Oct 18 1417	Iris	-	MASA 5.02GT	-	-	-	-	WI	LA1	-	-	225	-	-
1961-S23	2437319.03	1961 Jan 19 1242	Iris	-	MASA 5.03GT	-	-	-	-	WI	LA1	-	-	138	-	-
1961-A286	2437502.50	1961 Oct 30	Iris	-	3-Fin Test	Dummy Iris	-	-	-	EGL	-	-	-	17	-	-
1962-S123	2437788.25	1962 May 3 1803	Iris	-	MASA 5.04GA	Structure	-	-	-	WI	LA1	-	-	113	-	-
1964-S416	2438617.50	1964 Aug 10	Hydra-Iris	-	GSP-1	LRL GSP-1	-	-	T-AGM-8	WTR	HLP1	-	-	200?	-	-
1965-A07	2438767.50	1965 Jan 7	Hydra-Iris	-	SAP-1	LRL SAP-1	-	-	T-AGM-8	USN65A	LP1	-	-	2	-	-
1965-S49	2438786.90	1965 Jan 28 0940:26	Hydra-Iris	-	SAP-2	LRL SAP-2 (SAA)	-	-	T-AGM-8	USN65A	LP2	-	-	289	-	-
1965-S52	2439062.25	1965 Oct 28 1801:50	Hydra-Iris	-	BOX-2	LRL BOX-2	-	-	T-AGM-8	HYD	LP1	-	-	194	-	-
1966-S294	2439277.22	1966 May 31 1716	Hydra-Iris	-	BOX-4	LRL BOX-4	-	-	T-AGM-8	HYD	LP2	-	-	188	-	-
1966-A126	2439293.24	1966 Oct 30 1745	Hydra-Iris	-	BOX-5	LRL BOX-5/FL-B	-	-	T-AGM-8	HYD	LP2	-	-	12	-	-
1966-S196	2439336.33	1966 Mar 20 1956:05	Hydra-Iris	-	BAR-1	LRL BAR-1/FL-B	-	-	AW1	HYD	LP3	-	-	195	-	-
1968-S567	2440164.25	1968 Nov 3 1800	Hydra-Iris	-	BOX-15	LRL BOX-15	-	-	T-AGM-8	HYD	LP4	-	-	227	-	-



Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	OrbPay	Agency	Launch_Code	Group	Category	LTCite	Cite	Notes
1960-S190	2437138.00	1960 Jul 22 1205	Iris	-	MSA S. 01GT	0.000	GSFC	SS	GSFC/Sorgnit	Aeronomy/Test	WDGRF	-	-
1960-S328	2437226.10	1960 Oct 18 1417	Iris	-	MSA S. 02GT	0.000	GSFC	SS	GSFC/Sorgnit	Aeronomy/Test	WDGRF	-	-
1961-S323	2437319.03	1961 Jan 19 1242	Iris	-	MSA S. 03GT	0.000	GSFC	SF	GSFC/Sorgnit	Aeronomy/Test	WDGRF	-	-
1961-4266	2437602.50	1961 Oct 30	Iris	-	3-Fin Test	0.000	AFRL	AS	AFRL/	Test	AD273788	-	-
1962-S123	2437768.25	1962 May 3 1803	Iris	-	MSA S. 04GA	0.000	GSFC	SS	GSFC/Taylor	Aeronomy	WDGRF	-	-
1964-S416	2438617.50	1964 Aug 10	Hydra-Iris	-	GSP-1	0.000	NMC	SS	LRL/	Magnetspheric	UCRL-50687	-	-
1965-407	2438767.50	1965 Jan 7	Hydra-Iris	-	SAP-1	0.000	NMC	SF	LRL/	Ionos/Hag	UCRL-50687	-	-
1965-S49	2438786.90	1965 Jan 26 0940.28	Hydra-Iris	-	SAP-2	0.000	NMC	SS	NMC/Herron	Ionos/Hag	SR6.132	-	-
1965-S582	2438962.25	1965 Oct 28 1801.50	Hydra-Iris	-	BOX-2	0.000	NMC	SS	LRL/Grader	XR Astron	FDS	MR650208-08	-
1965-S294	2439277.22	1966 May 31 1716	Hydra-Iris	-	BOX-4	0.000	NMC	SS	LRL/	XR Astron	FDS	UCRL-50687	-
1966-A126	2439429.24	1966 Oct 30 1745	Hydra-Iris	-	BOX-5	0.000	NMC	SF	LRL/	XR Astron	FDS	UCRL-50687	-
1968-S196	2439936.33	1968 Mar 20 1955.05	Hydra-Iris	-	BAR-1	0.000	NMC	SS	LRL/NMC/	Test	FDS	UCRL-50687	-
1968-S567	2440164.25	1968 Nov 3 1800	Hydra-Iris	-	BOX-15	0.000	NMC	SS	LRL/	XR Astron	FDS	LRL-EMW73-172	-



Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Mission	Launch_FlightCode	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee km	Range km	Dest
1946-401	2431898.50	1946 Mar 19	Ivanov	-	-	-	-	-	-	GTSP-4?	-	-	-	1?	-	-
1946-405	2431971.50	1946 Jun	Ivanov	-	-	-	-	-	-	GTSP-4?	-	-	-	0	-	-
1946-406	2431971.50	1946 Jun	Ivanov	-	-	-	-	-	-	GTSP-4?	-	-	-	0	-	-
1946-407	2431971.50	1946 Jun	Ivanov	-	-	-	-	-	-	GTSP-4?	-	-	-	38?	-	-



Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	OrbPay	Agency	Launch_Code	Group	Category	LTCite	Cite	Notes
1946-401	2431895.50	1946 Mar 19	Ivanov	-	-	0.000	FIAM	SF	RMLI/	Test	AASH7-2-65	-	-
1946-405	2431971.50	1946 Jun	Ivanov	-	-	0.000	FIAM	SF	RMLI/	Test	AASH7-2-65	-	-
1946-406	2431971.50	1946 Jun	Ivanov	-	-	0.000	FIAM	SF	RMLI/	Test	AASH7-2-65	-	-
1946-407	2431971.50	1946 Jun	Ivanov	-	-	0.000	FIAM	SS	RMLI/	Test	AASH7-2-65	-	-





Launch

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Mission	FlightCode	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee km	Range km	Dest
1969-8501	2440479.57	1969 Sep 15 0140	JCR	-	JCR-1	-	-	-	-	THSC	T	-	-	140?	-	-
1969-8504	2440480.78	1969 Sep 16 0640	JCR	-	JCR-2	-	-	-	-	THSC	T	-	-	140?	-	-
1970-892	2440618.54	1970 Feb 1 0100	JCR	-	JCR-3	-	-	-	-	THSC	T	-	-	140	-	-
1970-898	2440833.50	1970 Sep 4	JCR	-	JCR-4	-	-	-	-	THSC	T	-	-	19	-	-
1971-8107	2440983.56	1971 Feb 1 0130	JCR	-	JCR-5	-	-	-	-	THSC	T	-	-	150	-	-
1971-8460	2441211.78	1971 Sep 17 0640	JCR	-	JCR-6	-	-	-	-	THSC	T	-	-	133	-	-
1972-867	2441353.77	1972 Feb 6 0635	JCR	-	JCR-7	-	-	-	-	THSC	T	-	-	146	-	-
1973-862	2441720.59	1973 Feb 7 0150	JCR	-	JCR-8	-	-	-	-	THSC	T	-	-	138	-	-
1973-8299	2441932.57	1973 Sep 7 0140	JCR	-	JCR-9	-	-	-	-	THSC	T	-	-	128	-	-
1974-885	2442079.77	1974 Feb 1 0630	JCR	-	JCR-10	-	-	-	-	THSC	T	-	-	120	-	-
1977-848	2443168.56	1977 Jan 25 0130	TT-500	-	TT-500-1F	-	-	-	-	THSC	T	-	-	75	-	-
1977-8235	2443380.56	1977 Aug 25 0130	TT-500	-	TT-500-2F	-	-	-	-	THSC	T	-	-	230	-	-
1978-846	2443524.56	1978 Jan 16 0130	TT-500	-	TT-500-3F	-	-	-	-	THSC	T	-	-	300?	-	-
1978-8200	2443745.56	1978 Aug 25 0130	TT-500	-	TT-500-4F	-	-	-	-	THSC	T	-	-	300?	-	-
1979-846	2443900.56	1979 Jan 27 0130	TT-500	-	TT-500-5F	-	-	-	-	THSC	T	-	-	300?	-	-
1979-8193	2444110.57	1979 Aug 25 0140	TT-500	-	TT-500-6F	-	-	-	-	THSC	T	-	-	300?	-	-
1980-831	2444266.56	1980 Jan 28 0130	TT-500	-	TT-500-7F	-	-	-	-	THSC	T	-	-	300?	-	-
1980-8168	2444496.42	1980 Sep 13 2200	TT-500A	-	TT-500A-8F	-	-	-	-	THSC	T	-	-	320?	-	-
1981-850	2444619.42	1981 Jan 14 2200	TT-500A	-	TT-500A-9F	-	-	-	-	THSC	T	-	-	320?	-	-
1981-8137	2444615.42	1981 Aug 1 2200	TT-500A	-	TT-500A-10F	-	-	-	-	THSC	T	-	-	320?	-	-
1982-8157	2446197.47	1982 Aug 15 2315	TT-500A	-	TT-500A-11F	-	-	-	-	THSC	T	-	-	320?	-	-
1983-851	2446361.46	1983 Jan 26 2300	TT-500A	-	TT-500A-12F	-	-	-	-	THSC	T	-	-	320?	-	-
1983-8148	2446565.46	1983 Aug 18 2300	TT-500A	-	TT-500A-13F	-	-	-	-	THSC	T	-	-	320?	-	-



Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	DrpPay	Agency	Launch_Code	Group	Category	LTCite	Cite	Notes
1969-S501	2440479.57	1969 Sep 15 0140	JCR	-	JCR-1	0.000	MASDA	SS	MASDA/	Test	MASDA-WWW	-	-
1969-S504	2440480.78	1969 Sep 16 0640	JCR	-	JCR-2	0.000	MASDA	SS	MASDA/	Test	MASDA-WWW	-	-
1970-S82	2440618.54	1970 Feb 1 0100	JCR	-	JCR-3	0.000	MASDA	SS	MASDA/	Test	MASDA-WWW	SFLT18-399	-
1970-S98	2440833.50	1970 Sep 4	JCR	-	JCR-4	0.000	MASDA	SF	MASDA/	Test	SFLT18-399	-	-
1971-S107	2440983.56	1971 Feb 1 0130	JCR	-	JCR-5	0.000	MASDA	SS	MASDA/	Test	MASDA-WWW	SFLT18-399	-
1971-S450	2441211.78	1971 Sep 17 0640	JCR	-	JCR-6	0.000	MASDA	SS	MASDA/	Test	MASDA-WWW	SFLT18-399	-
1972-S87	2441353.77	1972 Feb 6 0638	JCR	-	JCR-7	0.000	MASDA	SS	MASDA/	Test	MASDA-WWW	SFLT18-399	-
1973-S82	2441720.58	1973 Feb 7 0150	JCR	-	JCR-8	0.000	MASDA	SS	MASDA/	Test	MASDA-WWW	SFLT18-399	-
1973-S299	2441932.57	1973 Sep 7 0140	JCR	-	JCR-9	0.000	MASDA	SS	MASDA/	Test	MASDA-WWW	SFLT18-399	-
1974-S85	2442079.77	1974 Feb 1 0630	JCR	-	JCR-10	0.000	MASDA	SS	MASDA/	Test	MASDA-WWW	SFLT18-399	-
1977-S48	2443168.56	1977 Jan 25 0130	TT-500	-	TT-500-1F	0.000	MASDA	SS	MASDA/	Test	MASDA-WWW	-	Or 1330? (FDC)
1977-S235	2443380.56	1977 Aug 25 0130	TT-500	-	TT-500-2F	0.000	MASDA	SS	MASDA/	Test	MASDA-WWW	-	-
1978-S46	2443524.56	1978 Jan 16 0130	TT-500	-	TT-500-3F	0.000	MASDA	SS	MASDA/	Test	MASDA-WWW	-	-
1978-S200	2443745.56	1978 Aug 25 0130	TT-500	-	TT-500-4F	0.000	MASDA	SS	MASDA/	Test	MASDA-WWW	-	-
1979-S46	2443900.56	1979 Jan 27 0130	TT-500	-	TT-500-5F	0.000	MASDA	SS	MASDA/	Test	MASDA-WWW	-	-
1979-S193	2444110.57	1979 Aug 25 0140	TT-500	-	TT-500-6F	0.000	MASDA	SS	MASDA/	Test	MASDA-WWW	-	-
1980-S31	2444265.56	1980 Jan 28 0130	TT-500	-	TT-500-7F	0.000	MASDA	SS	MASDA/	Test	MASDA-WWW	-	-
1980-S168	2444495.42	1980 Sep 13 2200	TT-500A	-	TT-500A-8F	0.000	MASDA	SS	MASDA/	Test	MASDA-WWW	SFLT23,265	-
1981-S60	2444619.42	1981 Jan 14 2200	TT-500A	-	TT-500A-9F	0.000	MASDA	SS	MASDA/	Test	MASDA-WWW	SFLT23,265	-
1981-S137	2444618.42	1981 Aug 1 2200	TT-500A	-	TT-500A-10F	0.000	MASDA	SS	MASDA/	Test	MASDA-WWW	-	-
1982-S157	2446137.47	1982 Aug 15 2315	TT-500A	-	TT-500A-11F	0.000	MASDA	SS	MASDA/	Test	MASDA-WWW	-	-
1983-S81	2446561.46	1983 Jan 26 2300	TT-500A	-	TT-500A-12F	0.000	MASDA	SS	MASDA/	Test	MASDA-WWW	-	-
1983-S148	2446565.46	1983 Aug 18 2300	TT-500A	-	TT-500A-13F	0.000	MASDA	SS	MASDA/	Micrograv	MASDA-WWW	-	-



Launch																
Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Mission	FlightCode	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee km	Range km	Dest
2019-052	2468712.67	2019 Aug 17 0411	JieLong-1	-	Y1	QSI-01	-	-	-	JQ	-	-	-	561	-	-



Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	OrbPay	Agency	Launch_Code	Group	Category	LTCite	Cite	Notes
2019-052	2465712.67	2019 Aug 17 0411	Jielong-1	-	Y1	0.093	CZHQ	DS	G	Sat SSD D	Wire	-	-





Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Launch				Ascent_Pad	Apogee km	Range km	Dest
							Mission	FlightCode	Platform	Launch_Site				
1964-M153	2438557-50	1964 Jun 11	Javelin 3	-	-	Test	-	-	WS	-	68	-	-	
1965-S01	2438760-50	1965	Javelin 3	-	-	Test	-	-	WS?	-	80?	-	-	
1968-S172	2439926-50	1968 Mar 11	Javelin 3	-	-	Triple launch test	-	-	WS	-	80?	-	-	
1968-S173	2439926-50	1968 Mar 11	Javelin 3	-	-	Triple launch test	-	-	WS	-	80?	-	-	
1968-S174	2439926-50	1968 Mar 11	Javelin 3	-	-	Triple launch test	-	-	WS	-	80?	-	-	



Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	DrPay	Agency	Launch_Code	Group	Category	LTCite	Cite	Notes
1964-M153	2438557.50	1964 Jun 11	Javelin 3	-	-	0.000	SAMD	SS	SAMD/	Test	Ulrich/AP	-	-
1965-S01	2438760.50	1965	Javelin 3	-	-	0.000	SAMD	SS	SAMD/	Test	RDTM2004	-	-
1968-S172	2439926.50	1968 Mar 11	Javelin 3	-	-	0.000	SAMD	SS	SAMD/	Test	RDTM2004	-	-
1968-S173	2439926.50	1968 Mar 11	Javelin 3	-	-	0.000	SAMD	SS	SAMD/	Test	RDTM2004	-	-
1968-S174	2439926.50	1968 Mar 11	Javelin 3	-	-	0.000	SAMD	SS	SAMD/	Test	RDTM2004	-	-







Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	OrbPay	Agency	Launch_Code	Group	Category	LTCite	Cite	Notes
1987-380	2446915.50	1987 May	Jericho II	-	-	0.000	IDF	MS	-	Test	INT970722	-	-
1988-3148	2447160.50	1988 Jan	Jericho II	-	1	0.000	IDF	MS	-	Test	ChicagoDlyHer890915	-	-
1988-087	2447423.90	1988 Sep 19 0931	Shavit	-	1	0.156	USA	OS	G	Sat LE0 0	TalLinbar	-	SFLT98-2-45
1989-368	2447712.50	1989 Jul 5	RSA-3	-	2	0.000	HDDW/SAMF	MS	-	Test	JSD97	-	-
1989-392	2447783.50	1989 Sep 14	Jericho II	-	-	0.000	IDF	MS	-	Test	ChicagoDlyHer890915	-	-
1990-027	2447985.00	1990 Apr 3 1202	Shavit	-	2	0.160	USA	OS	G	Sat LE0 0	SN900409	-	-
1990-004	2448112.50	1990 Aug 9	Arrow 1	-	1	0.000	IAL	MF	-	Test	AMST931025-30	-	-
1990-3154	2448214.50	1990 Nov 19?	RSA-3	-	3	0.000	HDDW/SAMF	MF	-	Test	nrl.org	-	AMST910401-79
1991-006	2448340.50	1991 Mar 25	Arrow 1	-	2	0.000	IAL	MF	-	Test	AMST931025-30	-	-
1991-002	2448559.50	1991 Oct 30	Arrow 1	-	3	0.000	IAL	MF	-	Test	AMST931025-30	-	-
1992-006	2448888.50	1992 Sep 23	Arrow 1	-	4	0.000	IAL	MS	-	Test	AMST931025-30	-	-
1992-004	2449046.50	1993 Feb 28	Arrow 1	-	5a	0.000	IAL	MS	-	Test	AMST931025-30	-	-
1993-005	2449046.50	1993 Feb 28	Arrow 1	-	5b	0.000	IAL	MS	-	Test	AMST931025-30	-	-
1993-008	2449182.50	1993 Jul 14	Arrow 1	-	6	0.000	IAL	MS	-	Test	AMST931025-30	-	AMST930719-17
1993-009	2449274.50	1993 Oct 14	Arrow 1	-	7a	0.000	IAL	MS	-	Test	AMST931025-30	-	-
1993-015	2449274.50	1993 Oct 14	Arrow 1	-	7b	0.000	IAL	MS	-	Test	AMST931025-30	-	-
1994-004	2449411.50	1994 Mar	Arrow 1	-	8	0.000	IAL	MS	-	Test	AMST940620-26	-	-
1994-005	2449411.50	1994 Jun 12	Arrow 1	-	9	0.000	IAL	MS	-	Test	AMST940620-26	-	-
1994-006	2449615.50	1994 Sep 15	Jericho II	?	9	0.000	IDF	MF	-	Test?	F1960204-22	-	WMM-Wade
1994-365	2449610.50	1994 Sep 15	Jericho II	-	3?	0.000	IDF	MF	-	Test?	F1960204-22	-	AMST950410-67
1995-018	2449812.97	1995 Apr 5 1116	Shavit 1	-	3	0.225	USA	OS	G	Sat LE0 0	WSL	-	-
1996-003	2450315.50	1996 Aug 20	Arrow 1	-	-	0.000	IAL	MS	-	Target	AMST960826-73	-	-
1997-002	2450679.85	1997 Aug 19 0820?	Arrow 1	-	-	0.000	IAL	MS	-	Target	www.fas.org	-	-
1998-F01	2450686.04	1998 Jan 22 1256	Shavit 1	-	4	0.250	USA	OF	G	Sat LE0 0	Wire	-	AMST970825-16
1999-003	2450686.04	1998 Jan 22 1256	Shavit 1	-	-	0.000	IAL	MS	-	Target	Wire	-	-
2001-351	2452087.50	2001 Nov 1 0942	Arrow 1	-	TH-91C	0.000	IDF	MS	-	OT	Wire	-	-
2002-025	2452423.14	2002 May 28 1525	Jericho II	-	-	0.000	USA	MS	-	Sat LE0 0	www.isi.co.il	-	-
2004-F01	2452584.95	2004 Sep 6 1053	Shavit 1	-	5	0.300	USA	OS	G	Sat LE0 0	jpost.com	-	-
2007-025	2452622.49	2007 Jun 10 2340	Shavit 2	-	6	0.300	USA	OS	G	Sat LE0 0	Wire	-	-
2008-302	2454462.78	2008 Jan 17 0645	Jericho III	-	HL	0.000	IDF	MS	-	Test	Wire	-	-
2010-031	2455370.29	2010 Jun 22 1900?	Shavit 2	-	6	0.300	IDF	MS	-	Sat LE0 0	ILE	-	Wire
2011-351	2455367.63	2011 Nov 2 0750	Jericho III	-	-	0.000	IDF	MS	-	Test	israelhayam.com	-	-
2013-352	2456465.50	2013 Jul 12	Jericho III	-	-	0.000	IDF	MS	-	Test	Wire	-	-
2014-019	2456757.30	2014 Apr 9 1906:02?	Shavit 2	-	9	0.300	USA	OS	G	Sat LE0 0	Y7/IsraelHodOnline	-	jpost.com
2016-056	2457646.11	2016 Sep 13 1438	Shavit 2	-	10	0.300	USA	OS	G	Sat LE0 0	novosti-kosmonavtika	-	-
2020-044	2458036.94	2020 Jul 6 0100	Shavit 2	-	11	0.300	USA	OS	G	Sat LE0 0	Wire	-	-
2023-044	2460032.47	2023 Mar 28 2310	Shavit 2	-	12	0.300	USA	OS	G	Sat LE0 0	Wire	-	-





Launch

Launch_Tag	Launch_ID	Launch_Date	L_V_Type	Variant	Flight_ID	Flight	Mission	FlightCode	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee_Km	Range_Km	Dest
1957-A15	2435989.41	1957 Mar 1 2151	Jupiter IRBM	-	AM-1A	RMD	-	-	-	CC	LC5	-	-	14	-	-
1957-A30	2435985.34	1957 Apr 26 2012	Jupiter IRBM	-	AM-1B	RMD	-	-	-	CC	LC5	-	-	18	-	-
1957-S37	2435990.26	1957 May 31 1808	Jupiter IRBM	-	AM-1	RMD	-	-	-	CC	LC5	-	-	650	2130	-
1957-S99	2436079.38	1957 Aug 28 2102	Jupiter IRBM	-	AM-2	RMD	-	-	-	CC	LC26A	-	-	500?	2759	-
1957-S141	2436134.55	1957 Oct 23 0107	Jupiter IRBM	-	AM-3	RMD	-	-	-	CC	LC26B	-	-	500?	2020	-
1957-A134	2436169.59	1957 Nov 27 0210	Jupiter IRBM	-	AM-3A	RMD	-	-	-	CC	LC26B	-	-	20	-	-
1957-S181	2436191.50	1957 Dec 19 0007	Jupiter IRBM	-	AM-4	RMD	-	-	-	CC	LC26B	-	-	92	-	-
1958-S84	2436341.71	1958 May 18 0505	Jupiter IRBM	-	AM-5	RMD/GasLight	-	-	-	CC	LC26B	-	-	500?	2328	-
1958-S104	2436401.88	1958 Jul 17 0904	Jupiter IRBM	-	AM-6B	RMD/GasLight	-	-	-	CC	LC26B	-	-	500?	2298	-
1958-S176	2436443.47	1958 Aug 27 2315	Jupiter IRBM	-	AM-7	RMD	-	-	-	CC	LC26A	-	-	500?	2235	-
1958-A133	2436486.66	1958 Oct 10 0349	Jupiter IRBM	-	AM-9	RMD	-	-	-	CC	LC26B	-	-	2	9	-
1958-TH8	2436543.74	1958 Dec 6 0644:52	Juno II	-	AM-11	Pioneer 3	-	-	-	CC	LC5	-	-	102200	-	-
1958-S268	2436550.87	1958 Dec 13 0853:44	Jupiter IRBM	-	AM-13	Bioflight 1	-	-	-	CC	LC26B	-	-	500	2420	-
1959-S06	2436590.51	1959 Jan 22 0010	Jupiter IRBM	-	CH-21	Tactical Test	-	-	-	CC	LC5	-	-	500?	2417	-
1959-S19	2436627.49	1959 Feb 27 2350	Jupiter IRBM	-	CH-22	RMD	-	-	-	CC	LC26B	-	-	500?	2411	-
1959-300	2436650.72	1959 Mar 3 0610:56	Juno II	-	AM-14	Pioneer 4	-	-	-	CC	LC5	-	-	150000	-	-
1959-S53	2436662.52	1959 Apr 4 0034	Jupiter IRBM	-	CH-22A	RMD	-	-	-	CC	LC26B	-	-	500?	-	-
1959-S54	2436695.57	1959 May 7 0147	Jupiter IRBM	-	AM-12	RMD	-	-	-	CC	LC26B	-	-	500?	-	-
1959-S64	2436702.74	1959 May 14 0552	Jupiter IRBM	-	AM-17	RMD	-	-	-	CC	LC26B	-	-	500?	-	-
1959-S78	2436716.82	1959 May 28 0735:02	Jupiter IRBM	-	AM-18	Bioflight 2	-	-	-	CC	LC5	-	-	500?	2411	-
1959-S106	2436759.54	1959 Jul 10 0101	Jupiter IRBM	-	AM-18	RMD	-	-	-	CC	LC26B	-	-	483	-	-
1959-F05	2436766.23	1959 Jul 16 1737:03	Juno II	-	AM-15	RMD	-	-	-	CC	LC26B	-	-	500	2411	-
1959-F07	2436796.52	1959 Aug 15 0031:00	Juno II	(3)	AM-16	RMSA S-1	-	-	-	CC	LC5	-	-	0	-	-
1959-S153	2436807.56	1959 Aug 27 0130	Jupiter IRBM	-	AM-19B	Beacon 2	-	-	-	CC	LC26B	-	-	831	-	-
1959-S173	2436827.41	1959 Sep 15 2146	Jupiter IRBM	-	AM-19	RMD Short range	-	-	-	CC	LC5	-	-	500?	556	-
1959-S193	2436842.96	1959 Oct 1 0128	Jupiter IRBM	-	AM-23	Bioflight 3	-	-	-	CC	LC26B	-	-	500?	-	-
1959-10T	2436855.15	1959 Oct 13 1530:04	Juno II	-	AM-24	RMD	-	-	-	CC	LC6	-	-	500?	2406	-
1959-S219	2436863.64	1959 Oct 22 0320	Jupiter IRBM	-	AM-19A	Explorer 7	-	-	-	CC	LC5	-	-	1091	-	-
1959-S233	2436877.53	1959 Nov 5 0038	Jupiter IRBM	-	CH-31	RMD	-	-	-	CC	LC26A	-	-	500?	2864	-
1959-S244	2436891.96	1959 Nov 19 0131	Jupiter IRBM	-	CH-33	RMD	-	-	-	CC	LC6	-	-	500?	2806	-
1959-S267	2436912.51	1959 Dec 10 0008	Jupiter IRBM	-	AM-25	RMD	-	-	-	CC	LC26B	-	-	500?	1231	-
1959-S272	2436919.50	1959 Dec 17 0003	Jupiter IRBM	-	AM-26	RMD	-	-	-	CC	LC6	-	-	500?	2406	-
1960-S20	2436959.53	1960 Jan 26 0046	Jupiter IRBM	-	AM-28	RMD	-	-	-	CC	LC26B	-	-	500?	596	-
1960-S51	2436969.51	1960 Feb 5 0019	Jupiter IRBM	-	AM-30	RMD	-	-	-	CC	LC26B	-	-	500?	2406	-
1960-F04	2437017.07	1960 Mar 23 1335:11	Juno II	-	AM-19C	RMSA S-46	-	-	-	CC	LC26B	-	-	501	-	-
1960-S531	2437226.17	1960 Oct 20 1602	Jupiter IRBM	-	CH-217	Live System Test	-	-	-	CC	LC26A	-	-	500?	1782	-
1960-X1	2437241.72	1960 Nov 5 0623:10	Juno II	-	AM-19D	Explorer 8	-	-	-	CC	LC26B	-	-	2290	-	-
1961-S1	2437355.51	1961 Feb 25 0013:16	Juno II	-	AM-19F	RMSA S-30	-	-	-	CC	LC26B	-	-	396	-	-
1961-S126	2437412.09	1961 Apr 22 1410	Jupiter IRBM	-	CH-209	RMSA S-45	-	-	-	CC	LC26B	-	-	500?	2804	-
1961-304	2437417.09	1961 Apr 27 1416:38	Juno II	-	AM-19E	Explorer 11	-	-	-	CC	LC26A	-	-	500?	-	-
1961-S04	2437444.35	1961 May 24 1346:05	Juno II	-	AM-19G	RMSA S-45A	-	-	-	CC	LC26B	-	-	4790	-	-
1961-S030	2437516.51	1961 Aug 8 0239	Jupiter IRBM	-	CH-216	CTL	-	-	-	CC	LC26B	-	-	444	-	-
1961-S011	2437640.54	1961 Dec 6 0729	Jupiter IRBM	-	CH-115	CTL	-	-	-	CC	LC26A	-	-	500?	2804	-
1962-S104	2437773.56	1962 Apr 18 1817:54	Jupiter IRBM	-	CH-114	CTL	-	-	-	CC	LC26A	-	-	500?	2808	-
1962-S076	2437878.28	1962 Aug 16 040:49	Jupiter IRBM	-	CH-111	CTL	-	-	-	CC	LC26A	-	-	500?	23767	-
1963-S15	2438052.52	1963 Jan 23 0027:37	Jupiter IRBM	-	CH-106	CTL	-	-	-	CC	LC26A	-	-	500?	28467	-



Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	OrbPay	Agency	Launch_Code	Group	Category	LTCite	Cite	Notes
1957-A15	2435689.41	1957 Mar 1 21:51	Jupiter IRBH	-	AM-1A	0.000	AFBMD/ABMA	MF	-	Test	Jupiter	-	-
1957-A30	2435955.34	1957 Apr 26 20:12	Jupiter IRBH	-	AM-1B	0.000	AFBMD/ABMA	MF	-	Test	Jupiter	-	-
1957-S37	2435990.26	1957 May 31 18:08	Jupiter IRBH	-	AM-1	0.000	AFBMD/ABMA	MS	-	Test	Jupiter	-	-
1957-S89	2436079.38	1957 Aug 28 21:02	Jupiter IRBH	-	AM-2	0.000	AFBMD/ABMA	MS	-	Test	Jupiter	-	-
1957-S141	2436134.55	1957 Oct 23 01:07	Jupiter IRBH	-	AM-3	0.000	AFBMD/ABMA	MS	-	Test	Jupiter	-	-
1957-A134	2436169.59	1957 Dec 19 00:07	Jupiter IRBH	-	AM-3A	0.000	AFBMD/ABMA	MF	-	Test	Jupiter	-	-
1957-S181	2436341.71	1958 May 18 05:05	Jupiter IRBH	-	AM-5	0.000	AFBMD/ABMA	MS	-	Reentry Test	Jupiter	-	-
1959-S64	2436341.71	1958 May 18 05:05	Jupiter IRBH	-	AM-5	0.000	AFBMD/ABMA	MS	-	Reentry Test	Jupiter	-	-
1959-S104	2436401.88	1958 Jul 17 09:04	Jupiter IRBH	-	AM-6B	0.000	AFBMD/ABMA	MS	-	Test	Jupiter	-	-
1959-S176	2436443.47	1958 Aug 27 23:15	Jupiter IRBH	-	AM-7	0.000	AFBMD/ABMA	MS	-	Test	Jupiter	-	-
1959-A133	2436466.66	1958 Oct 10 03:49	Jupiter IRBH	-	AM-9	0.000	AFBMD/ABMA	MF	-	Test	Jupiter	-	-
1959-TBE	2436543.74	1958 Dec 6 05:44:52	Juno II	-	AM-11	0.006	ABMA	OS	G	Sat LED 0	JPL32-31-2	-	-
1959-S285	2436550.87	1958 Dec 13 08:53:44	Jupiter IRBH	-	AM-13	0.000	AFBMD/ABMA	RS	-	Bio	Jupiter	-	-
1959-S06	2436590.51	1959 Jan 22 00:10	Jupiter IRBH	-	CR-21	0.000	AFBMD/ABMA	MS	-	Test	Jupiter	-	-
1959-S19	2436627.49	1959 Feb 27 23:50	Jupiter IRBH	-	CR-22	0.000	AFBMD/ABMA	MS	-	Test	Jupiter	-	-
1959-110	2436630.72	1959 Mar 3 05:10:56	Juno II	-	AM-12A	0.007	ABMA	DS	G	Sat LED E	JPL32-31-2	-	-
1959-S43	2436632.52	1959 Apr 4 00:34	Jupiter IRBH	-	CR-22A	0.000	AFBMD/ABMA	MS	-	Test	Jupiter	-	-
1959-S43	2436632.52	1959 Apr 4 00:34	Jupiter IRBH	-	CR-22A	0.000	AFBMD/ABMA	MS	-	Test	Jupiter	-	-
1959-S64	2436695.57	1959 May 7 01:47	Jupiter IRBH	-	AM-17	0.000	AFBMD/ABMA	MS	PSU/Nisbet	Test/Ionos	Jupiter	J0665,2597	-
1959-S71	2436702.74	1959 May 14 05:52	Jupiter IRBH	-	AM-17	0.000	AFBMD/ABMA	MS	PSU/Nisbet	Test/Ionos	Jupiter	J0665,2597	-
1959-S78	2436716.82	1959 May 28 07:35:02	Jupiter IRBH	-	AM-18	0.000	AFBMD/ABMA	MS	PSU/Nisbet	Test/Ionos	Jupiter	WDRE	-
1959-S106	2436759.54	1959 Jul 10 01:01	Jupiter IRBH	-	AM-15	0.000	AFBMD/ABMA	MS	PSU/Nisbet	Test/Ionos	Jupiter	J0665,2597	-
1959-F05	2436766.23	1959 Jul 16 17:37:03	Jupiter IRBH	-	AM-16	0.041	ABMA	OF	G	Sat LED 0	JPL32-31-3	-	-
1959-F07	2436795.52	1959 Aug 15 03:10:00	Juno II	(3)	AM-19B	0.000	AFBMD/ABMA	MS	PSU/Bowhill	Test/Ionos	Jupiter	SR2,1208	-
1959-S153	2436807.56	1959 Aug 27 01:30	Jupiter IRBH	-	AM-19	0.000	AFBMD/ABMA	MS	-	Bio	Jupiter	-	-
1959-S173	2436827.41	1959 Sep 15 21:45	Jupiter IRBH	-	AM-23	0.000	AFBMD/ABMA	MF	-	Test	Jupiter	-	-
1959-S193	2436855.15	1959 Oct 1 01:28	Jupiter IRBH	-	AM-24	0.000	AFBMD/ABMA	MS	-	Test	Jupiter	-	-
1959-101	2436863.64	1959 Oct 13 15:30:04	Juno II	-	AM-19A	0.041	ABMA	MS	G	Sat LED 0	F0H-J100-AM16A	JPL32-31-3	-
1959-S219	2436863.64	1959 Oct 22 03:20	Jupiter IRBH	-	CR-31	0.000	AFBMD/ABMA	MS	-	Test	Jupiter	-	-
1959-S233	2436877.53	1959 Nov 5 00:38	Jupiter IRBH	-	CR-33	0.000	AFBMD/ABMA	MS	-	Test	Jupiter	-	-
1959-S244	2436891.56	1959 Nov 19 01:31	Jupiter IRBH	-	AM-25	0.000	AFBMD/ABMA	MS	-	Test	Jupiter	-	-
1959-S267	2436912.51	1959 Dec 10 00:06	Jupiter IRBH	-	AM-25	0.000	AFBMD/ABMA	MS	-	Test	Jupiter	-	-
1959-S272	2436919.50	1959 Dec 17 00:03	Jupiter IRBH	-	AM-26	0.000	AFBMD/ABMA	MS	-	Test	Jupiter	-	-
1960-S20	2436959.53	1960 Jan 26 00:46	Jupiter IRBH	-	AM-28	0.000	AFBMD/ABMA	MS	-	Test	Jupiter	TH-D-1544	-
1960-S51	2436969.51	1960 Feb 5 00:19	Jupiter IRBH	-	AM-30	0.000	AFBMD/ABMA	MS	-	Test	Jupiter	-	-
1960-F04	2437017.07	1960 Feb 23 13:55:11	Juno II	-	AM-19C	0.010	NSFC	OF	G	Sat LED 0	ABMA	-	-
1960-S331	2437228.17	1960 Oct 20 00:21	Jupiter IRBH	-	CR-217	0.000	ABMA	MS	-	Test	Jupiter	-	-
1960-11	2437241.72	1960 Nov 5 05:23:10	Juno II	-	AM-19D	0.042	NSFC	OS	G	Sat LED 0	ABMA	-	-
1961-101	2437385.51	1961 Feb 25 00:13:16	Juno II	-	AM-19F	0.054	NSFC	OF	G	Sat LED 0	ABMA Memo	JPL32-31-3	-
1961-S126	2437412.09	1961 Apr 22 14:16:38	Jupiter IRBH	-	CR-209	0.000	36A1S	MS	-	OT	Clear/Army/06	Jupiter	-
1961-104	2437417.99	1961 Apr 27 03:46:05	Juno II	-	AM-19E	0.046	NSFC	OS	G	WTP-L0D-01R-61-13.1	-	-	-
1961-S230	2437516.51	1961 May 24 03:46:05	Juno II	-	AM-19G	0.054	36A1S	MS	-	Sat LED 0	ABMA	-	-
1961-104	2437516.51	1961 Aug 6 09:29	Jupiter IRBH	-	CR-215	0.000	36A1S	MS	-	OT	Jupiter	-	-
1961-S111	2437773.26	1962 Dec 6 02:29	Jupiter IRBH	-	CR-115	0.000	TUAT	MF	-	OT	Jupiter	-	-
1962-S101	2437773.26	1962 Apr 16 18:17:54	Jupiter IRBH	-	CR-114	0.000	TUAT	MF	-	OT	Jupiter	HR620423-10	-
1962-S275	2437678.28	1962 Aug 1 18:40:40	Jupiter IRBH	-	CR-111	0.000	36A1S	MS	-	OT	Jupiter	-	-
1962-S275	2437678.28	1962 Aug 1 18:40:40	Jupiter IRBH	-	CR-111	0.000	36A1S	MS	-	OT	Jupiter	-	-
1963-S15	2438002.52	1963 Jan 23 00:27:37	Jupiter IRBH	-	CR-106	0.000	36A1S	MS	-	OT	msf-koenn	Jupiter	-



Launch

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Mission	FlightCode	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee km	Range km	Dest
2008-S11	2454522.51	2008 Feb 26 0728	K-15	-	1	Sagarika	-	-	-	VISHH	-	-	-	300?	-	-
2008-S60	2454762.75	2008 Nov 12 0555	Shaurya	-	1	R&D	-	-	-	CHAN	IC3	-	-	200?	-	-
2011-A24	2455628.88	2011 Sep 24 0900	Shaurya	-	2	R&D	-	-	-	CHAN	IC3	-	-	40	-	-
2013-S02	2456319.54	2013 Jan 27 0810	K-15	?	14	B0-5	-	-	-	VISHHP	-	-	-	300?	-	-
2015-S99	2457326.50	2015 Nov	K-15	-	-	Sagarika	-	-	INS-S73	VISHH	-	-	-	300?	700?	-
2018-S94	2458341.50	2018 Aug 11	K-15	-	-	Sagarika	-	-	INS-S73	VISHH	-	-	-	300?	700?	-
2018-S95	2458341.50	2018 Aug 11	K-15	-	-	Sagarika	-	-	INS-S73	VISHH	-	-	-	300?	700?	-
2018-S96	2458342.50	2018 Aug 12	K-15	-	-	Sagarika	-	-	INS-S73	VISHH	-	-	-	300?	700?	-
2020-S44	2459125.78	2020 Oct 3 0640	Shaurya	-	-	Shaurya	-	-	-	CHAN	IC4	-	-	300?	850?	-
2022-S101	2459866.50	2022 Oct 14	K-15	?	-	-	-	-	INS-S73	CHAN	IC4?	-	-	300?	700?	-



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Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Agency	Launch_Code	Group	Category	LTCite	Cite	Notes
2008-S11	2454522.81	2008 Feb 26 0728	K-15	-	1	DR00	MS	-	Test	newindpress.com	Rigg	-
2008-S60	2454762.75	2008 Nov 12 0656	Shaurya	-	1	DR00	MS	-	Test	Wire	-	-
2011-A24	2455628.88	2011 Sep 24 0900	Shaurya	-	2	DR00	MS	-	Test	Wire	-	-
2013-S02	2456319.84	2013 Jan 27 0810	K-15	?	14	DR00	MS	-	Test	ndtv.com	-	-
2015-S99	2457326.50	2015 Nov	K-15	-	-	DR00	MS	-	Test	thediplomat.com	-	-
2015-S94	2458341.50	2018 Aug 11	K-15	-	-	DR00	MS	-	Test	thediplomat.com	-	-
2015-S95	2458341.50	2018 Aug 11	K-15	-	-	DR00	MS	-	Test	thediplomat.com	-	-
2015-S96	2458342.50	2018 Aug 12	K-15	-	-	DR00	MS	-	Test	thediplomat.com	-	-
2020-S44	2459125.78	2020 Oct 3 0640	Shaurya	-	-	DR00	MS	-	Test	Wire	-	-
2022-S101	2459866.50	2022 Oct 14	K-15	?	-	DR00	MS	-	Test	navalnews.com	-	-





Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Mission	FlightCode	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee km	Range km	Dest
2016-S27	2457478.50	2016 Mar 31	K-4	-	1	-	-	-	INS-S73	VISRH	-	-	-	500?	3500?	-
2019-A02	2458526.74	2019 Feb 12 0540?	PDV Mk II	-	-	Prithvi Defense Vehicle	-	-	-	CHRI	IC4	-	-	10?	-	-
2019-S14	2458569.74	2019 Mar 27 0540?	PDV Mk II	-	-	Prithvi Defense Vehicle	Mission Shakti	-	-	CHRI	IC4	-	-	280?	-	-
2020-S11	2458867.50	2020 Jan 19	K-4	-	-	-	Pontoon launch	-	-	VISRH	-	-	-	500?	3500?	-
2020-S15	2458872.50	2020 Jan 24	K-4	-	-	-	Pontoon launch	-	-	VISRH	-	-	-	500?	3500?	-



Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Agency	Launch_Code	Group	Category	LTCite	Cite	Notes
2016-S27	2457478.50	2016 Mar 31	K-4	-	1	DRDD	NS	-	Test	Wire	-	-
2019-A02	2458526.74	2019 Feb 12 0540?	PDV Rk II	-	-	DRDL	MF	-	ASKT	thediplomat.com	-	-
2019-S14	2458569.74	2019 Mar 27 0540?	PDV Rk II	-	-	DRDL	NS	-	ASKT	Wire	-	-
2020-S11	2458867.50	2020 Jan 19	K-4	-	-	DRDD	NS	-	Test	Wire	-	-
2020-S15	2458872.50	2020 Jan 24	K-4	-	-	DRDD	NS	-	Test	Wire	-	-



Launch

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Mission	FlightCode	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee km	Range km	Dest
1958-A30	2436301.56	1958 Apr 8 0131	K150	-	K150S-1	-	-	-	-	AKT	-	-	-	6?	-	-
1958-A37	2436317.52	1958 Apr 24 0030	K150	-	K150T-1	-	-	-	-	AKT	-	-	-	6	-	-
1958-A38	2436317.67	1958 Apr 24 0400	K150	-	K150T-2	-	-	-	-	AKT	-	-	-	6	-	-
1958-A48	2436350.66	1958 May 27 0345	K150	-	K150G	-	-	-	-	AKT	-	-	-	5	-	-
1960-K280	2437268.50	1960 Dec	K150	-	SP-150-1	K-9L 1/1.6 Model	-	-	-	AKT	-	-	-	5?	-	-
1960-K281	2437268.50	1960 Dec	K150	-	SP-150-2	K-9L 1/1.6 Model	-	-	-	AKT	-	-	-	5?	-	-
1961-K284	2437398.61	1961 Oct 26 0243	K150	-	FR-150	Four Nozzle test	-	-	-	AKT	-	-	-	5	-	-
1961-K272	2437553.75	1961 Dec 20 0605	K150	-	RT-150	Four Nozzle test	-	-	-	AKT	-	-	-	5	-	-
1962-K257	2437752.61	1962 Mar 29 0234	K150	-	HT-150-1	Heating test	K-6S Prototype	-	-	AKT	-	-	-	20	-	-
1962-K124	2437998.67	1962 Aug 22 0400	K150	-	AT-150	Antenna Test	-	-	-	AKT	-	-	-	13	-	-
1962-K288	2437998.59	1962 Nov 21 0209	K150	-	LT-150-1	Launcher Test	-	-	-	RASC	-	-	-	5	-	-
1962-K286	2437998.76	1962 Nov 21 0609	K150	-	SP-150-3	Spin test	-	-	-	RASC	-	-	-	6	-	-
1962-K289	2437998.76	1962 Nov 25 0611	K150	-	SP-150-4	Spin test	-	-	-	RASC	-	-	-	10	-	-
1962-K280	2438018.63	1962 Dec 20 0311	K150	-	SO-150-1	Operational Reliability	Electronics test	-	-	RASC	-	-	-	12	-	-



Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Launch			Category	LTCite	Cite	Notes
						DrPay	Agency	Group				
1958-430	2436301.56	1958 Apr 8 0131	K150	-	K150S-1	0.000	ISAS	ISAS/	Test	ISTSI	-	-
1958-437	2436317.52	1958 Apr 24 0030	K150	-	K150T-1	0.000	ISAS	ISAS/	Test	ISTSI	-	-
1958-438	2436317.67	1958 Apr 24 0400	K150	-	K150T-2	0.000	ISAS	ISAS/	Test	ISTSI	-	-
1958-448	2436350.66	1958 May 27 0345	K150	-	K150S	0.000	ISAS	ISAS/	Test	ISTSI	-	-
1960-4280	2437268.50	1960 Dec	K150	-	SP-150-1	0.000	ISAS	ISAS/	Test	ISTSI/	ISTS2	-
1960-4281	2437268.50	1960 Dec	K150	-	SP-150-2	0.000	ISAS	ISAS/	Test	ISTSI/	ISTS2	-
1961-4254	2437698.61	1961 Oct 26 0243	K150	-	FW-150	0.000	ISAS	ISAS/	Test	TI-F-303	-	-
1961-4272	2437653.75	1961 Dec 20 0605	K150	-	RT-150	0.000	ISAS	ISAS/	Test	TI-F-303	-	-
1962-4257	2437752.61	1962 Mar 29 0234	K150	-	RT-150-1	0.000	ISAS	ISAS/	Test	TI-F-303-p422	TI-F-303-p280	-
1962-4124	2437698.67	1962 Aug 22 0400	K150	-	LT-150	0.000	ISAS	ISAS/	Test	TI-F-303-p425	ISTIS4	-
1962-4258	2437989.59	1962 Nov 21 0209	K150	-	SP-150-1	0.000	ISAS	ISAS/	Test	TI-F-303	-	-
1962-4256	2437989.76	1962 Nov 21 0609	K150	-	SP-150-3	0.000	ISAS	ISAS/	Test	TI-F-303	-	-
1962-4259	2437993.76	1962 Nov 25 0611	K150	-	SP-150-4	0.000	ISAS	ISAS/	Test	TI-F-303	-	-
1962-4260	2438016.63	1962 Dec 20 0311	K150	-	SO-150-1	0.000	ISAS	ISAS/	Test	TI-F-303	-	-





Launch

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Mission	FlightCode	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee km	Range km	Dest
1957-A33	2435958.50	1957 Apr 30	Kappa 2	-	K-2-1	-	-	-	-	AKT	-	-	-	307	-	-
1957-A34	2435960.50	1957 May 2	Kappa 3	-	K-3-1	-	-	-	-	AKT	-	-	-	307	-	-
1957-A34	2436011.50	1957 Jun 22	Kappa 3	-	K-3-2	-	-	-	-	AKT	-	-	-	307	-	-
1957-A35	2436046.50	1957 Jul 26	Kappa 3	-	K-3-3	-	-	-	-	AKT	-	-	-	307	-	-
1958-A34	2436313.50	1958 Apr 20 0000	Kappa 5	-	K-5-1	-	-	-	-	AKT	-	-	-	9	-	-
1958-A47	2436349.65	1958 May 26 0341	Kappa 5	-	K-5-L	-	-	-	-	AKT	-	-	-	15	-	-
1958-A53	2436388.55	1958 Jun 14 0111	K245	-	-	-	-	-	-	AKT	-	-	-	1	-	-
1958-A54	2436370.61	1958 Jun 16 0236	Kappa 6	-	K-6-1	-	-	-	-	AKT	-	-	-	307	-	-
1958-A58	2436378.58	1958 Jun 20 0615	Kappa 6	-	K-6-2	-	-	-	-	AKT	-	-	-	45	-	-
1958-A66	2436384.83	1958 Jun 30 0752	Kappa 6	-	K-6-TW-1	-	S1	-	-	AKT	-	-	-	25	-	-
1958-A116	2436458.56	1958 Sep 12 0131	Kappa 6	-	K-6-TW-2	-	S2	-	-	AKT	-	-	-	45	-	-
1958-A117	2436460.61	1958 Sep 14 0240	Kappa 6	-	K-6-3	-	-	-	-	AKT	-	-	-	4	-	-
1960-A129	2436471.62	1968 Sep 25 0265	Kappa 6	-	K-6-4	-	-	-	-	AKT	-	-	-	40	-	-
1965-M11	2436471.74	1968 Sep 25 0560	Kappa 6	-	K-6-TW-3	-	S3	-	-	AKT	-	-	-	44	-	-
1965-M12	2436472.66	1968 Sep 26 0360	Kappa 6	-	K-6-RS-1	-	S4	-	-	AKT	-	-	-	51	-	-
1965-A153	2436535.63	1968 Nov 28 0305	Kappa 6	-	K-6-TW-4	-	S5	-	-	AKT	-	-	-	58	-	-
1965-A154	2436536.63	1968 Nov 29 0305	Kappa 6	-	K-6-CP-1	-	-	-	-	AKT	-	-	-	36	-	-
1965-A154	2436536.63	1968 Nov 29 0305	Kappa 6	-	K-6-RS-2	-	-	-	-	AKT	-	-	-	40	-	-
1965-A156	2436537.67	1968 Nov 30 0400	Kappa 6	-	K-6-RS-2	-	-	-	-	AKT	-	-	-	49	-	-
1965-M30	2436600.63	1968 Dec 23 0303	Kappa 6	-	K-6-CP-2	-	-	-	-	AKT	-	-	-	60	-	-
1969-M07	2436644.57	1969 Mar 17 0135	Kappa 6	-	K-6-TW-5	-	Grenade	-	-	AKT	-	-	-	60	-	-
1969-M08	2436646.61	1969 Mar 18 0245	Kappa 6	-	K-6-RS-3	-	-	-	-	AKT	-	-	-	60	-	-
1969-M09	2436646.55	1969 Mar 19 0115	Kappa 6	-	K-6-TW-6	-	Grenade	-	-	AKT	-	-	-	50	-	-
1969-M10	2436647.62	1969 Mar 20 0260	Kappa 6	-	K-6-RS-4	-	-	-	-	AKT	-	-	-	50	-	-
1960-A220	2437194.62	1960 Sep 17 0247	Kappa 6	-	K-6-TW-7	-	Grenade	-	-	AKT	-	-	-	50	-	-
1960-M29	2437206.62	1960 Sep 29 0246	Kappa 6H	-	K-6-TW-8	-	Grenade	-	-	AKT	-	-	-	46	-	-
1962-S308	2437899.80	1962 Aug 23 0715	Kappa 8L	-	K-6H-TW-9	-	Grenade	-	-	AKT	-	-	-	70	-	-
1963-S396	2438375.67	1963 Dec 12 0650	Kappa 8L	-	K-8L-1	-	-	-	-	KASC	-	-	-	173	-	-
1964-S183	2438466.63	1964 Apr 1 0310	Kappa 8L	-	K-8L-2	-	-	-	-	KASC	-	-	-	103	-	-
1964-S381	2438602.86	1964 Jul 26 0907	Kappa 8L	-	K-8L-3	-	-	-	-	KASC	-	-	-	100?	-	-
1964-S382	2438602.96	1964 Jul 26 1051	Kappa 8L	-	K-8L-4	-	-	-	-	KASC	-	-	-	124	-	-
1964-S386	2438701.86	1964 Nov 2 0903	Kappa 8L	-	K-8L-5	-	-	-	-	KASC	-	-	-	112	-	-
1964-S609	2438709.89	1964 Nov 10 0205	Kappa 8L	-	K-8L-7	-	-	-	-	KASC	-	-	-	156	-	-
1964-S617	2438711.63	1964 Nov 12 0305	Kappa 8L	-	K-8L-8	-	-	-	-	KASC	-	-	-	148	-	-
1965-S546	2439039.67	1965 Oct 6 0400	Kappa 8L	-	K-8L-9	-	-	-	-	KASC	-	-	-	100?	-	-
1966-A23	2439131.59	1966 Jan 26 0210	S-250	-	KI-280-1	-	-	-	-	KASC	-	-	-	6	-	-
1966-A23	2439349.00	1966 Aug 11 1205	Kappa 8L	-	K-8L-10	-	-	-	-	KASC	-	-	-	130	-	-
1966-S546	2439416.89	1966 Oct 18 0917	Kappa 8L	-	K-8L-11	-	-	-	-	KASC	-	-	-	150	-	-
1966-S679	2439469.56	1966 Dec 10 0200	Kappa 8L	-	K-8L-12	-	-	-	-	KASC	-	-	-	147	-	-
1969-S65	2440229.50	1969 Jan 08	S-250	-	SU-280-B	-	-	-	-	KASC	-	-	-	100?	-	-



Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	OrbPay	Agency	Launch_Code	Group	Category	LTCite	Cite	Notes
1957-A33	2435958.50	1957 Apr 30	Kappa 2	-	K-2-1	0.000	ISAS	SS	ISAS/	Test	ISTSI	IG76	-
1957-A34	2435960.50	1957 May 2	Kappa 3	-	K-3-1	0.000	ISAS	SS	ISAS/	Test	ISTSI	IG76	-
1957-A35	2436011.50	1957 Jun 22	Kappa 3	-	K-3-2	0.000	ISAS	SS	ISAS/	Test	ISTSI	IG76	-
1957-A36	2436045.50	1957 Jul 26	Kappa 3	-	K-3-3	0.000	ISAS	SS	ISAS/	Test	ISTSI	IG76	-
1958-A34	2436313.50	1958 Apr 20 0000	Kappa 5	-	K-5-1	0.000	ISAS	SS	ISAS/	Test	ISTSI	-	-
1958-A47	2436349.66	1958 May 26 0341	Kappa 5	-	K-5-L	0.000	ISAS	SS	ISAS/	Test	ISTSI	-	-
1958-A53	2436368.56	1958 Jun 14 0111	K245	-	-	0.000	ISAS	SS	ISAS/	Test	ISTSI	-	-
1958-A54	2436370.61	1958 Jun 16 0236	Kappa 6	-	K-6-1	0.000	ISAS	SU	ISAS/	Test?	TT-F303	-	-
1958-A58	2436374.76	1958 Jun 20 0615	Kappa 6	-	K-6-2	0.000	ISAS	SS	ISAS/	Test	TT-F303	-	-
1958-A66	2436378.58	1958 Jun 24 0151	Kappa 6	-	K-6-TW-1	0.000	ISAS	SS	KOBE/Matsumoto	Aeron	IG76	-	-
1958-A68	2436384.83	1958 Jun 30 0752	Kappa 6	-	K-6-TW-2	0.000	ISAS	SS	KOBE/Matsumoto	Aeron	IG76	-	-
1958-A116	2436458.56	1958 Sep 12 0131	Kappa 6	-	K-6-4	0.000	ISAS	SS	ISAS/	Test	TT-F303	-	-
1958-A129	2436471.62	1958 Sep 14 0240	Kappa 6	-	K-6-3	0.000	ISAS	SS	ISAS/	Test	TT-F303	-	-
1958-H11	2436471.74	1958 Sep 25 0255	Kappa 6	-	K-6-TW-3	0.000	ISAS	SS	ISAS/	Test	TT-F303	-	-
1958-H12	2436472.66	1958 Sep 26 0650	Kappa 6	-	K-6-TW-4	0.000	ISAS	SS	ISAS/	Test	IG76	-	-
1958-H153	2436535.63	1958 Sep 28 0350	Kappa 6	-	K-6-TW-5	0.000	ISAS	SS	KOBE/Matsumoto	Aeron	IG76	-	-
1958-H154	2436535.63	1958 Nov 28 0305	Kappa 6	-	K-6-TW-6	0.000	ISAS	SS	KOBE/Matsumoto	Aeron	IG76	-	-
1958-H156	2436537.67	1958 Nov 29 0305	Kappa 6	-	K-6-TW-7	0.000	ISAS	SS	KOBE/Matsumoto	Aeron	IG76	-	-
1958-H130	2436560.63	1958 Dec 23 0303	Kappa 6	-	K-6-TW-8	0.000	ISAS	SS	KOBE/Matsumoto	Aeron	IG76	-	-
1959-H07	2436644.57	1959 Mar 17 0135	Kappa 6	-	K-6-TW-9	0.000	ISAS	SS	KOBE/Matsumoto	Aeron	IG76	-	-
1959-H08	2436645.61	1959 Mar 18 0245	Kappa 6	-	K-6-TW-10	0.000	ISAS	SS	KOBE/Matsumoto	Aeron	IG76	-	-
1959-H09	2436646.56	1959 Mar 19 0115	Kappa 6	-	K-6-TW-11	0.000	ISAS	SS	KOBE/Matsumoto	Aeron	IG76	-	-
1959-H10	2436647.62	1959 Mar 20 0250	Kappa 6	-	K-6-TW-12	0.000	ISAS	SS	KOBE/Matsumoto	Aeron	IG76	-	-
1960-H220	2437194.62	1960 Sep 17 0247	Kappa 6	-	K-6-TW-13	0.000	ISAS	SS	KOBE/Matsumoto	Aeron	IG76	-	-
1960-H29	2437206.62	1960 Sep 23 0246	Kappa 6H	-	K-6H-TW-9	0.000	ISAS	SS	KOBE/Matsumoto	Aeron	TT-F303	SR2,1080	-
1962-S308	2437699.80	1962 Aug 23 0715	Kappa 8L	-	K-8L-1	0.000	ISAS	SS	ISAS/	Test	TT-F303	SR2,1080	-
1963-S396	2438375.87	1963 Dec 12 0650	Kappa 8L	-	K-8L-2	0.000	ISAS	SS	ISAS/	Test	ISTSG-6	ISTSG-6	-
1964-S163	2438486.63	1964 Apr 1 0310	Kappa 8L	-	K-8L-3	0.000	ISAS	SS	ISAS/	Aeron/Fields	ISTSG-6	-	-
1964-S381	2438602.86	1964 Jul 26 0907	Kappa 8L	-	K-8L-4	0.000	ISAS	SS	ISAS/	Aeron	ISRG20-214	SR6-1121	-
1964-S382	2438602.96	1964 Jul 26 1051	Kappa 8L	-	K-8L-5	0.000	ISAS	SS	ISAS/	Aeron	ISRG20-214	SR6-1121	-
1964-S366	2438701.86	1964 Nov 2 0903	Kappa 8L	-	K-8L-7	0.000	ISAS	SS	TAG/Saito	Aeron	ISRG20-214	SR6-1121	-
1964-S609	2438709.59	1964 Nov 10 0205	Kappa 8L	-	K-8L-8	0.000	ISAS	SS	TAG/Huruhata	Aeron	ISRG20-214	SR6-1121	-
1964-S617	2438711.63	1964 Nov 12 0305	Kappa 8L	-	K-8L-6	0.000	ISAS	SS	USMAA/Okumoto	Ionos	WDCRF	-	-
1966-S946	2439039.67	1966 Oct 6 0400	Kappa 8L	-	K-8L-9	0.000	ISAS	SS	TOKAI/Toyama	Aeron	WDCRF	-	-
1966-H23	2439151.59	1966 Jan 26 0210	S-250	-	BT-250-1	0.000	ISAS	AS	ISAS/	Test	ISTSG	-	-
1966-S435	2439349.00	1966 Aug 11 0205	Kappa 8L	-	K-8L-10	0.000	ISAS	SS	TOY/Kimura, H	Aeron	WDCRF	-	-
1966-S946	2439349.00	1966 Oct 14 0917	Kappa 8L	-	K-8L-11	0.000	ISAS	SS	TOY/Kimura, H	Aeron	WDCRF	-	-
1966-S675	2439369.56	1966 Dec 10 0200	Kappa 8L	-	K-8L-12	0.000	ISAS	SS	ISAS/Ohmatsu	Aeron	WDCRF	-	-
1969-S95	2440229.50	1969 Jan 08	S-250	-	SU-250-B	0.000	ISAS	SS	ISAS/	Test	WDCRF	-	-



Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Launch_Mission	FlightCode	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee_km	Range_km	Dest
1959-H38	2436890.71	1959 Nov 18 0503	Kappa 7	-	K-7-1	-	-	-	-	AKT	-	-	-	53	-	-
1960-A309	2437021.50	1960 Mar 28	Kappa 8	-	K-80-1	-	-	-	-	AKT	-	-	-	20	-	-
1960-S169	2437126.68	1960 Jul 11 0424	Kappa 8	-	K-8-1	-	-	-	-	AKT	-	-	-	150	-	-
1960-S179	2437132.67	1960 Jul 17 0411	Kappa 8	-	K-8-2	-	-	-	-	AKT	-	-	-	182	-	-
1960-S280	2437199.77	1960 Sep 22 0632	Kappa 8	-	K-8-3	-	-	-	-	AKT	-	-	-	200	-	-
1960-S287	2437203.96	1960 Sep 26 1125	Kappa 8	-	K-8-4	-	-	-	-	AKT	-	-	-	185	-	-
1961-S983	2437385.67	1961 Mar 27 0408	Kappa 8	-	K-8-5	-	-	-	-	AKT	-	-	-	172	-	-
1961-S989	2437390.64	1961 Apr 1 0325	Kappa 9L	-	K-9L-1	-	-	-	-	AKT	-	-	-	350	-	-
1961-S112	2437408.02	1961 Apr 18 1227	Kappa 8	-	K-8-6	-	-	-	-	AKT	-	-	-	150	-	-
1961-S215	2437501.61	1961 Jul 21 0242	Kappa 8	-	K-8-7	-	-	-	-	AKT	-	-	-	158	-	-
1961-S348	2437596.67	1961 Oct 24 0359	Kappa 8	-	K-8-8	-	-	-	-	AKT	-	-	-	200	-	-
1961-S361	2437602.97	1961 Oct 30 1113	Kappa 8	-	K-8-9	-	-	-	-	AKT	-	-	-	175	-	-
1961-S439	2437659.71	1961 Dec 26 0505	Kappa 9L	-	K-9L-2	-	-	-	-	AKT	-	-	-	343	-	-
1962-A634	2437808.95	1962 May 24 1050	Kappa 8	-	K-8-10	-	-	-	-	AKT	-	-	-	0	-	-
1962-S569	2437993.58	1962 May 25 0201	Kappa 9H	-	K-9H-1	-	-	-	-	KASC	-	-	-	58	-	-
1963-S218	2438016.71	1963 May 20 0209	Kappa 8	-	K-8-11	-	-	-	-	KASC	-	-	-	202	-	-
1964-S389	2438169.59	1963 Aug 18 0503	Kappa 9H	-	K-9H-2	-	-	-	-	KASC	-	-	-	345	-	-
1964-S381	2438204.63	1964 Jul 29 1007	Kappa 9H	-	K-9H-3	-	-	-	-	KASC	-	-	-	356	-	-
1965-S41	2438704.63	1964 Nov 5 0301	Kappa 9H	-	K-9H-4	-	-	-	-	KASC	-	-	-	350	-	-
1965-S81	2438752.72	1965 Feb 6 0501	Kappa 9H	-	K-9H-5	-	-	-	-	KASC	-	-	-	325	-	-
1965-S82	2438797.71	1965 Feb 6 1002	Kappa 9H	-	K-9H-6	-	-	-	-	KASC	-	-	-	335	-	-
1965-S193	2438844.92	1965 Feb 6 1002	Kappa 9H	-	K-9H-6	-	-	-	-	KASC	-	-	-	320	-	-
1965-S200	2438846.71	1965 Mar 25 1121	Kappa 9H	-	K-9H-6	-	-	-	-	KASC	-	-	-	335	-	-
1965-S202	2438847.79	1965 Mar 28 0701	Kappa 9H	-	K-9H-9	-	-	-	-	KASC	-	-	-	335	-	-
1965-S426	2438957.95	1965 Jul 16 1050	Kappa 6	-	K-8-12	-	-	-	-	KASC	-	-	-	160	-	-
1965-S435	2438968.00	1965 Jul 26 1201	Kappa 9H	-	K-9H-12	-	-	-	-	KASC	-	-	-	350	-	-
1965-S437	2438968.63	1965 Jul 27 0310	Kappa 9H	-	K-9H-13	-	-	-	-	KASC	-	-	-	317	-	-
1965-S445	2438979.50	1965 Aug 7	Kappa 6	-	K-8(L)	-	-	-	-	LAP	-	-	-	100	-	-
1965-S464	2438983.57	1965 Aug 11 0135	Kappa 6	-	K-8(L)-4	-	-	-	-	LAP	-	-	-	191	-	-
1965-S469	2438989.50	1965 Aug 17 0005:00	Kappa 6	-	K-8(L)	-	-	-	-	LAP	-	-	-	100	-	-
1965-S483	2439000.58	1965 Aug 28 0202	Kappa 10S	-	K-10S-1	-	-	-	-	KASC	-	-	-	742	-	-
1965-S539	2439057.62	1965 Oct 4 0300	Kappa 9H	-	K-9H-14	-	-	-	-	KASC	-	-	-	299	-	-
1965-S601	2439072.71	1965 Nov 6 0505	Kappa 10	-	K-10-1	-	-	-	-	KASC	-	-	-	228	-	-
1965-S677	2439107.76	1965 Dec 13 0520	Kappa 9H	-	K-9H-16	-	-	-	-	KASC	-	-	-	318	-	-
1965-S689	2439112.75	1965 Dec 15 0500	Kappa 9H	-	K-9H-17	-	-	-	-	KASC	-	-	-	316	-	-
1966-S177	2439285.01	1966 Mar 20 1218	Kappa 9H	-	K-9H-15	-	-	-	-	KASC	-	-	-	300	-	-
1966-S225	2439285.00	1966 Apr 20 1205	Kappa 6	-	K-8-13	-	-	-	-	KASC	-	-	-	355	-	-
1966-S375	2439285.69	1966 Jul 17 0210	Kappa 9H	-	K-9H-18	-	-	-	-	KASC	-	-	-	325	-	-
1966-S413	2439340.58	1966 Aug 3 0202	Kappa 9H	-	K-9H-18	-	-	-	-	KASC	-	-	-	328	-	-
1966-S413	2439340.58	1966 Aug 3 0202	Kappa 9H	-	K-9H-11	-	-	-	-	KASC	-	-	-	100	-	-
1966-S453	2439348.03	1966 Aug 10 0237	Kappa 9H	-	K-9H-19	-	-	-	-	KASC	-	-	-	351	-	-
1966-S459	2439418.95	1966 Oct 20 0820	Kappa 6	-	K-9H-20	-	-	-	-	KASC	-	-	-	353	-	-
1966-S668	2439418.95	1966 Oct 20 0820	Kappa 9H	-	K-9H-21	-	-	-	-	KASC	-	-	-	325	-	-
1966-S677	2439444.98	1966 Dec 5 0200	Kappa 9H	-	K-10-2	-	-	-	-	KASC	-	-	-	307	-	-
1967-S077	2439521.59	1966 Dec 10 1930	Kappa 10	-	K-9H-22	-	-	-	-	KASC	-	-	-	300	-	-
1967-S146	2439551.98	1967 Jan 31 0205	Kappa 9H	-	K-9H-22	-	-	-	-	KASC	-	-	-	248	-	-
1968-S256	2440220.99	1969 Mar 6 0100	Kappa 10	-	K-10-3	-	-	-	-	KASC	-	-	-	343	-	-
1968-S257	2440230.82	1969 Jan 6 0710	Kappa 9H	-	K-9H-25	-	-	-	-	KASC	-	-	-	188	-	-
1968-S257	2440230.82	1969 Jan 12 0510	Kappa 10C	-	K-10-1	-	-	-	-	KASC	-	-	-	229	-	-
1968-S257	2440230.82	1969 Jan 14 0510	Kappa 10C	-	K-10-1	-	-	-	-	KASC	-	-	-	229	-	-
1968-S257	2440230.82	1969 Jan 15 1200	Kappa 9H	-	K-9H-24	-	-	-	-	KASC	-	-	-	340	-	-
1968-S257	2440230.82	1969 Jan 15 1200	Kappa 9H	-	K-9H-24	-	-	-	-	KASC	-	-	-	340	-	-
1968-S130	2440255.69	1969 Feb 13 0205	Kappa 9H	-	K-9H-23	-	-	-	-	KASC	-	-	-	310	-	-
1968-S247	2440441.01	1969 Feb 13 0205	Kappa 10	-	PT-400-001	-	-	-	-	KASC	-	-	-	16	-	-
1968-S467	2440457.84	1969 Aug 7 0215	Kappa 9H	-	K-9H-27	-	-	-	-	KASC	-	-	-	341	-	-
1968-S467	2440457.84	1969 Aug 24 0804	Kappa 9H	-	K-9H-26	-	-	-	-	KASC	-	-	-	247	-	-
1968-S467	2440457.84	1969 Aug 24 0804	Kappa 10	-	K-10-5	-	-	-	-	KASC	-	-	-	107	-	-
1968-S521	2440490.98	1969 Sep 6 1135	Kappa 10C	-	K-10C-2	-	-	-	-	KASC	-	-	-	367	-	-
1968-S521	2440490.98	1969 Sep 25 0500	Kappa 9H	-	K-9H-28	-	-	-	-	KASC	-	-	-	369	-	-
1968-S521	2440490.98	1969 Sep 25 0500	Kappa 9H	-	K-9H-29	-	-	-	-	KASC	-	-	-	367	-	-
1970-S864	2440611.71	1970 Jan 27 1020	Kappa 9H	-	K-9H-29	-	-	-	-	KASC	-	-	-	174	-	-
1970-S864	2440611.71	1970 Jan 27 1020	Kappa 9H	-	K-8-16	-	-	-	-	KASC	-	-	-	160	-	-
1970-S503	2440831.93	1970 Sep 3 1014	Kappa 6	-	K-10C-3	-	-	-	-	KASC	-	-	-	338	-	-
1970-S517	2440842.83	1970 Sep 27 0642	Kappa 10C	-	K-10C-3	-	-	-	-	KASC	-	-	-	367	-	-
1970-S517	2440842.83	1970 Sep 27 0642	Kappa 9H	-	K-9H-30	-	-	-	-	KASC	-	-	-	357	-	-
1970-S517	2440842.83	1970 Sep 27 0642	Kappa 9H	-	K-9H-32	-	-	-	-	KASC	-	-	-	367	-	-
1970-S536	2440956.78	1971 Jan 16 0715	Kappa 9H	-	K-9H-30	-	-	-	-	KASC	-	-	-	338	-	-
1971-S627	2440957.05	1971 Jan 23 1320	Kappa 9H	-	K-9H-35	-	-	-	-	KASC	-	-	-	357	-	-
1971-S824	2440975.68	1971 Jan 24 0200	Kappa 9H	-	K-9H-31	-	-	-	-	KASC	-	-	-	330	-	-
1971-S824	2440975.68	1971 Jan 24 0200	Kappa 9H	-	K-10-7	-	-	-	-	KASC	-	-	-	274	-	-
1971-S393	2441184.01	1971 Aug 18 1200	Kappa 9H	-	K-9H-33	-	-	-	-	KASC	-	-	-	07	-	-
1971-S411	2441184.74	1971 Aug 20 1210	Kappa 10	-	K-9H-36	-	-	-	-	KASC	-	-	-	340	-	-
1971-A770	2441189.94	1971 Aug 25 0540	Kappa 9H	-	K-9H-33	-	-	-	-	KASC	-	-	-	340	-	-
1971-S424	2441195.69	1971 Aug 26 1035	Kappa 9H	-	K-10-6	-	-	-	-	KASC	-	-	-	228	-	-
1971-S424	2441195.69	1971 Sep 1 0210	Kappa 10	-	K-9H-37	-	-	-	-	KASC	-	-	-	310	-	-
1972-S60	2441339.97	1972 Jan 23 1122	Kappa 9H	-	K-9H-37	-	-	-	-	KASC	-	-	-	340	-	-
1972-S60	2441339.97	1972 Jan 23 1122	Kappa 9H	-	K-9H-38	-	-	-	-	KASC	-	-	-	352	-	-
1972-S89	2441369.75	1972 Feb 18 0928	Kappa 9H	-	K-9H-38	-	-	-	-	KASC	-	-	-	269	-	-
1972-S304	2441572.97	1972 Sep 12 1110	Kappa 10	-	K-10-8	-	-	-	-	KASC	-	-	-	326	-	-
1972-S311	2441580.71	1972 Sep 20 0500	Kappa 9H	-	K-9H-40	-	-	-	-	KASC	-	-	-	330	-	-
1973-S210	2441701.88	1973 Jan 19 0900	Kappa 9H	-	K-9H-41	-	-	-	-	KASC	-	-	-	236	-	-
1973-S72	2441732.52	1973 Feb 19 0022	Kappa 10	-	K-10-9	-	-	-	-	KASC	-	-	-	306	-	-
1973-S61	2441736.90	1973 Feb 23 0938	Kappa 9H	-	K-9H-42	-	-	-	-	KASC	-	-	-	355	-	-
1973-S281	2441915.79	1973 Aug 21 0700	Kappa 9H	-	K-9H-43	-	-	-	-	KASC	-	-	-	341	-	-
1973-S286	2441922.00	1973 Aug 27 1200	Kappa 9H	-	K-10C-4	-	-	-	-	KASC	-	-	-	1007	-	-
1973-S484	2441940.50	1973 Sep 15	Kappa 10C	-	K-10C-4	-	-	-	-	KASC	-	-	-	242	-	-
1973-S313	2441947.88	1973 Sep 22 0920	Kappa 10	-	K-10-10	-	-	-	-	KASC	-	-	-	360	-	-
1974-S61	2442063.63	1974 Jan 16 0200	Kappa 9H	-	K-9H-45	-	-	-	-	KASC	-	-	-	336	-	-
1974-S303	2442307.15	1974 Sep 16 1540	Kappa 9H	-	K-9H-46	-	-	-	-	KASC	-	-	-	328	-	-
1974-S306	2442309.58	1974 Sep 19 0200	Kappa 9H	-	K-9H-47	-	-	-	-	KASC	-	-	-	328	-	-

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Mission	FlightCode	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee km	Range km	Dest
1974-S317	2442310.98	1974 Sep 20 1132	Kappa 9H	-	K-9H-48	Precip. Electrons	-	-	-	KASC	-	-	-	348	-	-
1975-S38	2442429.90	1975 Jan 17 0935	Kappa 9H	-	K-9H-49	Airglow	-	-	-	KASC	-	-	-	363	-	-
1975-S45	2442435.96	1975 Jan 23 1105	Kappa 9H	-	K-9H-50	-	-	-	-	KASC	-	-	-	363	-	-
1975-S360	2442647.50	1975 Aug 23	Kappa 10C	-	K-10C-5	M-S SRMC test	-	-	-	KASC	-	-	-	1007	-	-
1975-S255	2442650.94	1975 Aug 26 1040	Kappa 9H	-	K-9H-53	-	-	-	-	KASC	-	-	-	351	-	-
1975-S264	2442658.00	1975 Sep 2 1200	Kappa 9H	-	K-9H-51	-	-	-	-	KASC	-	-	-	311	-	-
1975-S281	2442679.00	1975 Sep 23 1200	Kappa 9H	-	K-9H-52	Soft XR	-	-	-	KASC	-	-	-	336	-	-
1975-S282	2442679.71	1975 Sep 24 0500	Kappa 10	-	K-10-11	-	-	-	-	KASC	-	-	-	196	-	-
1976-S289	2442794.38	1976 Jan 16 2100	Kappa 9H	-	K-9H-54	-	-	-	-	KASC	-	-	-	367	-	-
1976-S289	2442795.72	1976 Jan 18 0520	Kappa 10	-	K-10-12	-	-	-	-	KASC	-	-	-	350	-	-
1976-S274	2443021.33	1976 Aug 30 1955	Kappa 9H	-	K-9H-55	-	-	-	-	KASC	-	-	-	288	-	-
1976-S291	2443037.58	1976 Sep 16 0200	Kappa 9H	-	K-9H-56	-	-	-	-	KASC	-	-	-	359	-	-
1976-S293	2443039.92	1976 Sep 18 1000	Kappa 9H	-	K-9H-58	-	-	-	-	KASC	-	-	-	3007	-	-
1977-S363	2443160.03	1977 Jan 16 1245	Kappa 9H	-	K-9H-58	-	-	-	-	KASC	-	-	-	324	-	-
1977-S240	2443389.92	1977 Sep 3 1000	Kappa 9H	-	K-9H-59	-	-	-	-	KASC	-	-	-	204	-	-
1977-S249	2443401.02	1977 Sep 14 1222	Kappa 10	-	K-10-13	MIR Galactic Plane	-	-	-	KASC	-	-	-	369	-	-
1978-S249	2443530.58	1978 Jan 22 0200	Kappa 9H	-	K-9H-62	-	-	-	-	KASC	-	-	-	292	-	-
1978-S249	2443535.96	1978 Jan 27 1100	Kappa 9H	-	K-9H-61	-	-	-	-	KASC	-	-	-	340	-	-
1978-S274	2443565.96	1978 Feb 26 1100	Kappa 9H	-	K-9H-60	-	-	-	-	KASC	-	-	-	340	-	-
1978-S281	2443735.51	1978 Aug 15 0015	Kappa 9H	-	K-9H-63	-	-	-	-	KASC	-	-	-	354	-	-
1978-S198	2443740.98	1978 Aug 20 1130	Kappa 9H	-	K-9H-64	-	-	-	-	KASC	-	-	-	319	-	-
1979-S36	2443894.68	1979 Jan 16 2050	Kappa 9H	-	K-9H-66	-	-	-	-	KASC	-	-	-	353	-	-
1979-S41	2443894.68	1979 Jan 21 0906	Kappa 9H	-	K-9H-66	-	-	-	-	KASC	-	-	-	336	-	-
1979-S188	2444103.79	1979 Aug 18 0700	Kappa 9H	-	K-9H-67	TED/TP/REL/PW	-	-	-	KASC	-	-	-	365	-	-
1979-S200	2444127.64	1979 Sep 11 0100	Kappa 9H	-	K-9H-68	SUV/ADV/REL/EPA	-	-	-	KASC	-	-	-	365	-	-
1980-S26	2444254.62	1980 Jan 16 0300	Kappa 9H	-	K-9H-69	DPE-1	-	-	-	KASC	-	-	-	328	-	-
1980-S158	2444477.99	1980 Aug 26 1140	Kappa 10	-	K-10-14	GRV/GW/STS	-	-	-	KASC	-	-	-	219	-	-
1980-S166	2444464.94	1980 Sep 2 1040	Kappa 9H	-	K-9H-70	-	-	-	-	KASC	-	-	-	230	-	-
1980-S167	2444467.03	1980 Sep 4 1245	Kappa 9H	-	K-9H-71	-	-	-	-	KASC	-	-	-	308	-	-
1982-S24	2444964.69	1982 Jan 15 0920	Kappa 9H	-	K-9H-73	-	-	-	-	KASC	-	-	-	303	-	-
1982-S55	2445013.58	1982 Feb 13 0200	Kappa 9H	-	K-9H-72	-	-	-	-	KASC	-	-	-	328	-	-
1982-S57	2445019.03	1982 Feb 18 1240	Kappa 9H	-	K-9H-74	-	-	-	-	KASC	-	-	-	315	-	-
1982-S163	2445226.02	1982 Sep 13 1230	Kappa 9H	-	K-9H-75	-	-	-	-	KASC	-	-	-	320	-	-
1983-S47	2445349.36	1983 Jan 14 2040	Kappa 9H	-	K-9H-76	MIR Background	-	-	-	KASC	-	-	-	349	-	-
1984-S41	2445713.31	1984 Jan 13 1930	Kappa 9H	-	K-9H-77	CIR	-	-	-	KASC	-	-	-	517	-	-
1985-S119	2446523.11	1985 Sep 14 1440	Kappa 9H	-	K-9H-78	CIR	-	-	-	KASC	-	-	-	397	-	-
1986-S118	2446461.63	1986 Jan 31 0600	Kappa 9H	-	K-9H-79	CIR	-	-	-	KASC	-	-	-	319	-	-
1987-S55	2446949.12	1987 Feb 25 1500	Kappa 9H	-	K-9H-80	CIR	-	-	-	KASC	-	-	-	317	-	-
1988-S47	2447165.58	1988 Jan 25 0200	Kappa 9H	-	K-9H-81	CIR/EX	-	-	-	KASC	-	-	-	389	-	-





Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	OrbPay	Agency	Launch_Code	Group	Category	LTCite	Cite	Notes
1959-338	2436890.71	1959 Nov 18 0503	Kappa 7	-	K-7-1	0.000	ISAS	SS	ISAS/	Test	IST54	-	-
1960-3309	2437021.50	1960 Mar 28	Kappa 8	-	K-8D-1	0.000	ISAS	SS	ISAS/	Test	IST52	-	-
1960-3169	2437126.68	1960 Jun 11 0424	Kappa 8	-	K-8-1	0.000	ISAS	SS	ISAS/	Test	TT-F303	IST53	-
1960-3179	2437132.67	1960 Jun 17 0411	Kappa 8	-	K-8-2	0.000	ISAS	SS	ISAS/RRU/Hirao	Test	TT-F303	IST54	-
1960-3280	2437199.77	1960 Sep 22 0652	Kappa 8	-	K-8-3	0.000	ISAS	SS	ISAS/RRU/Hirao	Ionos	TT-F303	SR2,1215	-
1960-3287	2437203.98	1960 Sep 26 1125	Kappa 8	-	K-8-4	0.000	ISAS	SS	ISAS/RRU/Hirao	Ionos	TT-F303	SR2,1215	-
1961-3393	2437385.67	1961 Mar 27 0408	Kappa 8	-	K-8-5	0.000	ISAS	SS	ISAS/RRU/Hirao	Ionos	TT-F303	-	-
1961-3399	2437390.64	1961 Apr 1 0325	Kappa 9L	-	K-9L-1	0.000	ISAS	SS	TAU/TDK/Hakamura	Test	TT-F303	-	-
1961-3112	2437408.02	1961 Apr 18 1227	Kappa 8	-	K-8-6	0.000	ISAS	SS	ISAS/KYO/Hirao,Oya	Ionos	TT-F303	-	-
1961-3215	2437501.61	1961 Jun 21 0242	Kappa 8	-	K-8-7	0.000	ISAS	SS	ISAS/Hirao	Aeron/Ionos	TT-F303	-	-
1961-3348	2437596.67	1961 Oct 24 0359	Kappa 8	-	K-8-8	0.000	ISAS	SS	ISAS/Hirao	Ionos	TT-F303	-	-
1961-3361	2437602.97	1961 Dec 26 0505	Kappa 8	-	K-8-9	0.000	ISAS	SS	ISAS/Hirao	Ionos	TT-F303	-	-
1961-3439	2437659.71	1961 Dec 26 0505	Kappa 8	-	K-8-10	0.000	ISAS	SS	ISAS/Hirao	Ionos	TT-F303	-	-
1962-483	2437608.98	1962 May 24 1050	Kappa 6	-	K-8-10	0.000	ISAS	SF	RRL/Hiyazaki	Ionos	TT-F303	-	-
1962-4634	2437993.55	1962 May 25 0201	Kappa 9H	-	K-9H-1	0.000	ISAS	SF	RRL/Hiyazaki	Ionos	TT-F303	-	-
1962-3569	2438016.71	1962 Dec 18 0503	Kappa 6	-	K-8-11	0.000	ISAS	SS	TAU/Takakura	Cosmic rays	TT-F303	-	-
1963-3218	2438169.59	1963 May 20 0209	Kappa 9H	-	K-9H-2	0.000	ISAS	SS	TAU/Takakura	CK	TT-F303	-	-
1964-3589	2438605.92	1964 Jun 29 1007	Kappa 9H	-	K-9H-3	0.000	ISAS	SS	ISAS/	Ionos	JRLL13,75	-	-
1964-3581	2438704.63	1964 Nov 5 0301	Kappa 9H	-	K-9H-4	0.000	ISAS	SS	ISAS/	Ionos	JRLL13,75	-	-
1965-382	2438797.72	1965 Feb 6 0501	Kappa 9H	-	K-9H-5	0.000	ISAS	SS	OSMA/Oshio	Ionos?	IST56-6	-	-
1965-382	2438797.92	1965 Feb 6 0501	Kappa 9H	-	K-9H-6	0.000	ISAS	SS	OSMA/Oshio	Ionos	JRLL13,75	-	-
1965-3193	2438844.97	1965 Mar 25 1121	Kappa 9H	-	K-9H-7	0.000	ISAS	SS	TAU/Tsuchiya	Aeron/RP	WDRF	JRLL13,75	-
1965-3200	2438846.71	1965 Mar 27 0501	Kappa 9H	-	K-9H-8	0.000	ISAS	SS	TAU/Tanabe,Hiruhata	Solar/RP	WDRF	JRLL13,75	-
1965-3202	2438847.79	1965 Mar 28 0701	Kappa 9H	-	K-9H-9	0.000	ISAS	SS	KYO/Tomatsu	Aeron/Ionos	ISK20-223	-	-
1965-3426	2438957.95	1965 Jun 16 1050	Kappa 6	-	K-9H-10	0.000	ISAS	SS	KYO/Tomatsu	Ionos	WDRF	JRLL13,75	-
1965-3435	2438965.00	1965 Jun 16 1201	Kappa 6	-	K-9H-12	0.000	ISAS	SS	TOK/Hakamura	Ionos/Plasma	WDRF	JRLL13,75	-
1965-3437	2438965.63	1965 Jun 17 0310	Kappa 9H	-	K-9H-13	0.000	ISAS	SS	TOK/Hakamura	Aeron/Ionos	WDRF	JRLL13,75	-
1965-3445	2438979.50	1965 Aug 7 0135	Kappa 6	-	K-9H-13	0.000	ISAS	SS	TOKAI/Aoyama	Opt Astron/AR Astron	ISK20-460	-	-
1965-3464	2438983.57	1965 Aug 11 0005:00	Kappa 6	-	K-9(L)-4	0.000	ISAS	SS	ISAS/	Ionos	SP-4006	-	-
1965-3469	2438985.50	1965 Aug 17 0005:00	Kappa 6	-	K-9(L)-4	0.000	ISAS	SS	LAPAN/Kusumoto,Baijuni	Aeron/Ionos/Fields	SP-4006	-	-
1965-3485	2439000.58	1965 Aug 28 0202	Kappa 10S	-	K-9(L)	0.000	ISAS	SS	LAPAN/karjoto,Pringg.	Aeron	SRP-346	-	-
1965-3539	2439057.62	1965 Oct 4 0300	Kappa 10	-	K-10S-1	0.000	ISAS	SS	ISAS/Hirao	Aeron	SRP-385	-	-
1965-3601	2439072.71	1965 Nov 6 0600	Kappa 10	-	K-10-1	0.000	ISAS	SS	KYO/Oya	Ionos	JRLL13,75	-	-
1965-3677	2439107.76	1965 Nov 6 0600	Kappa 9H	-	K-10-1	0.000	ISAS	SS	ISAS/	Test/Ionos	IST56-6	-	-
1965-3669	2439112.75	1965 Dec 13 0620	Kappa 9H	-	K-9H-16	0.000	ISAS	SS	OSMA/Oshio	Ionos/Aeron	JRLL13,75	-	-
1966-3177	2439112.75	1966 Dec 13 0620	Kappa 9H	-	K-9H-16	0.000	ISAS	SS	OSMA/Oshio	Ionos/Aeron	JRLL13,75	-	-
1966-3177	2439112.75	1966 Dec 13 0620	Kappa 9H	-	K-9H-15	0.000	ISAS	SS	OSMA/Oshio	Ionos/Aeron	JRLL13,75	-	-
1966-3225	2439236.00	1966 Apr 20 1215	Kappa 9H	-	K-9H-15	0.000	ISAS	SS	RRL/TMO/TMG/Shiro,Tanabe	Aeron/Plasma/Fields	WDRF	ISK20-460	-
1966-3225	2439236.00	1966 Apr 20 1215	Kappa 9H	-	K-9H-15	0.000	ISAS	SS	RRL/TMO/TMG/Shiro,Tanabe	Aeron/Plasma/Fields	WDRF	ISK20-460	-
1966-3375	2439323.59	1966 Jul 17 0210	Kappa 9H	-	K-9H-16	0.000	ISAS	SS	TOK/Kimura	Ionos/Solar	WDRF	ISK20-460	-
1966-3413	2439450.58	1966 Aug 5 0200	Kappa 9H	-	K-9H-11	0.000	ISAS	SS	TOK/Kimura	Hero	IST57	-	-
1966-3433	2439450.58	1966 Aug 5 0200	Kappa 9H	-	K-9H-11	0.000	ISAS	SS	TOK/Kimura	Hero	IST57	-	-
1966-3433	2439450.58	1966 Aug 5 0200	Kappa 9H	-	K-9H-19	0.000	ISAS	SS	TOK/Kimura	Ionos/Aeron	WDRF	SRP-305	-
1966-3433	2439450.58	1966 Aug 5 0200	Kappa 9H	-	K-9H-19	0.000	ISAS	SS	TOK/Kimura	Ionos/Aeron	WDRF	SRP-305	-
1966-3433	2439450.58	1966 Aug 5 0200	Kappa 9H	-	K-9H-20	0.000	ISAS	SS	TOK/Kimura	Ionos/Aeron	WDRF	SRP-305	-
1966-3433	2439450.58	1966 Aug 5 0200	Kappa 9H	-	K-9H-21	0.000	ISAS	SS	TOK/Kimura	Ionos/Aeron	WDRF	SRP-305	-
1966-3433	2439450.58	1966 Aug 5 0200	Kappa 9H	-	K-9H-22	0.000	ISAS	SS	TOK/Kimura	Ionos/Aeron	WDRF	SRP-305	-
1966-3433	2439450.58	1966 Aug 5 0200	Kappa 9H	-	K-9H-23	0.000	ISAS	SS	TOK/Kimura	Ionos/Aeron	WDRF	SRP-305	-
1966-3433	2439450.58	1966 Aug 5 0200	Kappa 9H	-	K-9H-24	0.000	ISAS	SS	TOK/Kimura	Ionos/Aeron	WDRF	SRP-305	-
1966-3433	2439450.58	1966 Aug 5 0200	Kappa 9H	-	K-9H-25	0.000	ISAS	SS	TOK/Kimura	Ionos/Aeron	WDRF	SRP-305	-
1966-3433	2439450.58	1966 Aug 5 0200	Kappa 9H	-	K-9H-26	0.000	ISAS	SS	TOK/Kimura	Ionos/Aeron	WDRF	SRP-305	-
1966-3433	2439450.58	1966 Aug 5 0200	Kappa 9H	-	K-9H-27	0.000	ISAS	SS	TOK/Kimura	Ionos/Aeron	WDRF	SRP-305	-
1966-3433	2439450.58	1966 Aug 5 0200	Kappa 9H	-	K-9H-28	0.000	ISAS	SS	TOK/Kimura	Ionos/Aeron	WDRF	SRP-305	-
1966-3433	2439450.58	1966 Aug 5 0200	Kappa 9H	-	K-9H-29	0.000	ISAS	SS	TOK/Kimura	Ionos/Aeron	WDRF	SRP-305	-
1966-3433	2439450.58	1966 Aug 5 0200	Kappa 9H	-	K-9H-30	0.000	ISAS	SS	TOK/Kimura	Ionos/Aeron	WDRF	SRP-305	-
1966-3433	2439450.58	1966 Aug 5 0200	Kappa 9H	-	K-9H-31	0.000	ISAS	SS	TOK/Kimura	Ionos/Aeron	WDRF	SRP-305	-
1966-3433	2439450.58	1966 Aug 5 0200	Kappa 9H	-	K-9H-32	0.000	ISAS	SS	TOK/Kimura	Ionos/Aeron	WDRF	SRP-305	-
1966-3433	2439450.58	1966 Aug 5 0200	Kappa 9H	-	K-9H-33	0.000	ISAS	SS	TOK/Kimura	Ionos/Aeron	WDRF	SRP-305	-
1966-3433	2439450.58	1966 Aug 5 0200	Kappa 9H	-	K-9H-34	0.000	ISAS	SS	TOK/Kimura	Ionos/Aeron	WDRF	SRP-305	-
1966-3433	2439450.58	1966 Aug 5 0200	Kappa 9H	-	K-9H-35	0.000	ISAS	SS	TOK/Kimura	Ionos/Aeron	WDRF	SRP-305	-
1966-3433	2439450.58	1966 Aug 5 0200	Kappa 9H	-	K-9H-36	0.000	ISAS	SS	TOK/Kimura	Ionos/Aeron	WDRF	SRP-305	-
1966-3433	2439450.58	1966 Aug 5 0200	Kappa 9H	-	K-9H-37	0.000	ISAS	SS	TOK/Kimura	Ionos/Aeron	WDRF	SRP-305	-
1966-3433	2439450.58	1966 Aug 5 0200	Kappa 9H	-	K-9H-38	0.000	ISAS	SS	TOK/Kimura	Ionos/Aeron	WDRF	SRP-305	-
1966-3433	2439450.58	1966 Aug 5 0200	Kappa 9H	-	K-9H-39	0.000	ISAS	SS	TOK/Kimura	Ionos/Aeron	WDRF	SRP-305	-
1966-3433	2439450.58	1966 Aug 5 0200	Kappa 9H	-	K-9H-40	0.000	ISAS	SS	TOK/Kimura	Ionos/Aeron	WDRF	SRP-305	-
1966-3433	2439450.58	1966 Aug 5 0200	Kappa 9H	-	K-9H-41	0.000	ISAS	SS	TOK/Kimura	Ionos/Aeron	WDRF	SRP-305	-
1966-3433	2439450.58	1966 Aug 5 0200	Kappa 9H	-	K-9H-42	0.000	ISAS	SS	TOK/Kimura	Ionos/Aeron	WDRF	SRP-305	-
1966-3433	2439450.58	1966 Aug 5 0200	Kappa 9H	-	K-9H-43	0.000	ISAS	SS	TOK/Kimura	Ionos/Aeron	WDRF	SRP-305	-
1966-3433	2439450.58	1966 Aug 5 0200	Kappa 9H	-	K-9H-44	0.000	ISAS	SS	TOK/Kimura	Ionos/Aeron	WDRF	SRP-305	-
1966-3433	2439450.58	1966 Aug 5 0200	Kappa 9H	-	K-9H-45	0.000	ISAS	SS	TOK/Kimura	Ionos/Aeron	WDRF	SRP-305	-
1966-3433	2439450.58	1966 Aug 5 0200	Kappa 9H	-	K-9H-46	0.000	ISAS	SS	TOK/Kimura	Ionos/Aeron	WDRF	SRP-305	-
1966-3433	2439450.58	1966 Aug 5 0200	Kappa 9H	-	K-9H-47	0.000	ISAS	SS	TOK/Kimura	Ionos/Aeron	WDRF	SRP-305	-
1966-3433	2439450.58	1966 Aug 5 0200	Kappa 9H	-	K-9H-48	0.000	ISAS	SS	TOK/Kimura	Ionos/Aeron	WDRF	SRP-305	-
1966-3433	2439450.58	1966 Aug 5 0200	Kappa 9H	-	K-9H-49	0.000	ISAS	SS	TOK/Kimura	Ionos/Aeron	WDRF	SRP-305	-
1966-3433	2439450.58	1966 Aug 5 0200	Kappa 9H	-	K-9H-50	0.000	ISAS	SS	TOK/Kimura	Ionos/Aeron	WDRF	SRP-305	-
1966-3433	2439450.58	1966 Aug 5 0200	Kappa 9H	-	K-9H-51	0.000	ISAS	SS	TOK/Kimura	Ionos/Aeron	WDRF	SRP-305	-
1966-3433	2439450.58	1966 Aug 5 0200	Kappa 9H	-	K-9H-52	0.000	ISAS	SS	TOK/Kimura	Ionos/Aeron	WDRF	SRP-305	-
1966-3433	2439450.58	1966 Aug 5 0200	Kappa 9H	-	K-9H-53	0.000	ISAS	SS	TOK/Kimura	Ionos/Aeron	WDRF	SRP-305	-
1966-3433	2439450.58	1966 Aug 5 0200	Kappa 9H	-	K-9H-54	0.000	ISAS	SS	TOK/Kimura	Ionos/Aeron	WDRF	SRP-305	-
1966-3433	2439450.58	1966 Aug 5 0200	Kappa 9H	-	K-9H-55	0.000	ISAS	SS	TOK/Kimura	Ionos/Aeron	WDRF	SRP-305	-
1966-3433	2439450.58	1966 Aug 5 0200	Kappa 9H	-	K-9H-56	0.000	ISAS	SS	TOK/Kimura	Ionos/Aeron	WDRF	SRP-305	-
1966-3433	2439450.58	1966 Aug 5 0200	Kappa 9H	-	K-9H-57	0.000	ISAS	SS	TOK/Kimura	Ionos/Aeron	WDRF	SRP-305	-
1966-3433	2439450.58	1966 Aug 5 0200	Kappa 9H	-	K-9H-58	0.000	ISAS	SS	TOK/Kimura	Ionos/Aeron	WDRF	SRP-305	-
1966-3433	2439450.58	1966 Aug 5 0200	Kappa 9H	-	K-9H-59	0.000	ISAS	SS	TOK/Kimura	Ionos/Aeron	WDRF	SRP-305	-
1966-3433	2439450.58	1966 Aug 5 0200	Kappa 9H	-	K-9H-60	0.000	ISAS	SS	TOK/Kimura	Ionos/Aeron	WDRF	SRP-305	-
1966-3433	2439450.58	1966 Aug 5 0200	Kappa 9H	-	K-9H-61	0.000	ISAS	SS	TOK/Kimura	Ionos/Aeron	WDRF	SRP-305	-
1966-3433	2439450.58	1966 Aug 5 0200	Kappa 9H	-	K-9H-62	0.000	ISAS	SS	TOK/Kimura	Ionos/Aeron	WDRF	SRP-305	-
1966-3433	2439450.58	1966 Aug 5 0200	Kappa 9H	-	K-9H-63	0.000	ISAS	SS	TOK/Kimura	Ionos/Aeron	WDRF	SRP-305	-

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	OrbPay	Agency	Launch_Code	Group	Category	LTCite	Cite	Notes
1974-SS17	2442310.98	1974 Sep 20 1132	Kappa 9H	-	K-9H-48	0.000	ISAS	SS	ISAS/	Ionos/UV	ISRJ29-1	SR16, 491	-
1975-SS38	2442429.99	1975 Jan 17 0958	Kappa 9H	-	K-9H-49	0.000	ISAS	SS	ISAS/	Aeron/Ionos	ISRJ29-1	-	-
1975-SS46	2442643.96	1975 Jan 23 1105	Kappa 9H	-	K-9H-50	0.000	ISAS	SS	MAG/Ivanami	XR Astron	ISRJ29-1	ApSS61, 1217	-
1975-SS80	2442647.50	1975 Aug 23	Kappa 10C	-	K-10C-5	0.000	ISAS	SS	ISAS/	Test	AsianAmanac14	ISASBull116, 261, 8610	-
1975-SS55	2442650.94	1975 Sep 26 1040	Kappa 9H	-	K-9H-53	0.000	ISAS	SS	ISAS/	Ionos	ISRJ30-1	-	-
1975-SS64	2442658.00	1975 Sep 2 1200	Kappa 9H	-	K-9H-52	0.000	ISAS	SS	ISAS/	Ionos	ISRJ30-1	-	-
1975-SS82	2442679.00	1975 Sep 23 1200	Kappa 9H	-	K-9H-54	0.000	ISAS	SS	ISAS/	XR Astron	ISRJ30-1	-	-
1975-SS82	2442679.71	1975 Sep 24 0500	Kappa 10	-	K-10-11	0.000	ISAS	SS	ISAS/Hirao	XR Astron/Solar UV	ISRJ30-1	-	-
1976-SS59	2442794.38	1976 Jan 16 2100	Kappa 9H	-	K-9H-54	0.000	ISAS	SS	ISAS/Obayashi	Magnetospheric	ISRJ30-1	PlanSpaceSci27, 13	-
1976-SS61	2442796.72	1976 Jan 18 0520	Kappa 10	-	K-10-12	0.000	ISAS	SS	ISAS/Kawashima	Ionos	WDOF	-	-
1976-SS274	2443021.33	1976 Aug 30 1955	Kappa 9H	-	K-9H-57	0.000	ISAS	SS	ISAS/Fields	Ionos/Fields	WDOF	PlanSpaceSci27, 183	-
1976-SS291	2443037.68	1976 Sep 16 0200	Kappa 9H	-	K-9H-56	0.000	ISAS	SS	ISAS/	Ionos/Fields	WDOF	-	-
1976-SS293	2443039.92	1976 Sep 18 1000	Kappa 9H	-	K-9H-56	0.000	ISAS	SS	ISAS/	IR Astron/Ionos	WDOF	-	-
1977-SS43	2443160.03	1977 Jan 16 1245	Kappa 9H	-	K-9H-58	0.000	ISAS	SS	ISAS/	Aeron/Ionos/Solar EUV	WDOF	-	-
1977-SS40	2443389.92	1977 Sep 5 1000	Kappa 9H	-	K-9H-59	0.000	ISAS	SS	ISAS/	UV Astron/EUV Astron	WDOF	-	-
1977-SS249	2443401.02	1977 Sep 14 1222	Kappa 10	-	K-10-13	0.000	ISAS	SS	ISAS/	Ionos/Fields/Solar	WDOF	PlanSpaceSci33, 875	-
1978-SS49	2443500.68	1978 Jan 22 0200	Kappa 9H	-	K-9H-62	0.000	ISAS	SS	ISAS/	Aeron/Ionos/Plasma	WDOF	-	-
1978-SS50	2443535.96	1978 Jan 27 1100	Kappa 9H	-	K-9H-61	0.000	ISAS	SS	ISAS/	UV Astron/EUV Astron	WDOF	-	-
1978-SS74	2443565.96	1978 Feb 26 1100	Kappa 9H	-	K-9H-60	0.000	ISAS	SS	ISAS/	Ionos?	WDOF	-	-
1978-SS281	2443735.51	1978 Aug 15 0015	Kappa 9H	-	K-9H-63	0.000	ISAS	SS	MAG/Moguchi	Test/IR Astron/UV Astron	WDOF	PAJ33, 663	Pl fail
1978-SS198	2443740.96	1978 Aug 20 1130	Kappa 9H	-	K-9H-64	0.000	ISAS	SS	ISAS/	Aeron/Ionos	WDOF	-	-
1979-SS36	2443690.37	1979 Jan 16 2050	Kappa 9H	-	K-9H-66	0.000	ISAS	SS	ISAS/	Test/Aeron/Ionos/P1	WDOF	-	-
1979-SS41	2443694.88	1979 Jan 21 0906	Kappa 9H	-	K-9H-66	0.000	ISAS	SS	ISAS/	Ionos	WDOF	-	-
1979-SS188	2444103.79	1979 Sep 18 0700	Kappa 9H	-	K-9H-67	0.000	ISAS	SS	ISAS/Oyama, Hirao	Ionos/Solar UV	SRJ	PlanSpaceSci33, 875	-
1979-SS200	2444127.64	1979 Sep 11 0100	Kappa 9H	-	K-9H-68	0.000	ISAS	SS	ISAS/	Ionos/Teether	SRJ	-	-
1980-SS26	2444254.62	1980 Jan 16 0300	Kappa 9H	-	K-9H-69	0.000	ISAS	SS	ISAS/OSU/Kawashima, Will.	Ionos/Teether	SRJ	AdvMstSci62-497	-
1980-SS168	2444477.99	1980 Aug 26 1140	Kappa 10	-	K-10-14	0.000	ISAS	SS	ISAS/	XR Astron/IR Astron	SRJ	-	-
1980-SS166	2444484.94	1980 Sep 2 1040	Kappa 9H	-	K-9H-70	0.000	ISAS	SS	ISAS/	Test/Aeron/Ionos	SRJ	-	-
1980-SS167	2444487.03	1980 Sep 4 1245	Kappa 9H	-	K-9H-71	0.000	ISAS	SS	ISAS/	Aeron?	SRJ	-	-
1982-SS34	2444694.89	1982 Jan 15 0920	Kappa 9H	-	K-9H-73	0.000	ISAS	SS	ISAS/	Ionos	SRJ	-	-
1982-SS55	2445013.68	1982 Feb 13 0200	Kappa 9H	-	K-9H-72	0.000	ISAS	SS	ISAS/	Test/Ionos/Plasma/F	SRJ	-	-
1982-SS5	2445019.03	1982 Feb 18 1240	Kappa 9H	-	K-9H-74	0.000	ISAS	SS	ISAS/	UV/AR Astron	SRJ	-	-
1982-SS5	2445226.02	1982 Sep 13 1230	Kappa 9H	-	K-9H-75	0.000	ISAS	SS	MAG/Hatsumoto	IR Astron	SRJ	ASR3, 10, 469	-
1983-SS47	2445349.36	1983 Jan 14 2040	Kappa 9H	-	K-9H-76	0.000	ISAS	SS	RIXEY/Ammiya, Tanabe	Aeron/Ionos	SRJ	PlanSpaceSci33, 875	-
1983-SS41	2445713.31	1984 Jan 13 1930	Kappa 9H	-	K-9H-77	0.000	ISAS	SS	MAG/Hatsumoto	IR Astron	SRJ	ApJ332, 1575	-
1985-SS119	2446323.11	1985 Sep 14 1440	Kappa 9H	-	K-9H-76	0.000	ISAS	SS	MAG/UCB/Hatsumoto	IR Astron	SRJ	-	-
1986-SS16	2446461.63	1986 Jan 31 0800	Kappa 9H	-	K-9H-78	0.000	ISAS	SS	ISAS/DIRK7/Keaya	Submm Astron	SRJ	-	-
1987-SS5	2446649.12	1987 Feb 22 1500	Kappa 9H	-	K-9H-80	0.000	ISAS	SS	MAG/UCB/Hatsumoto	Ionos	SRJ	ApJ329, 667	-
1988-SS47	2447185.68	1988 Jan 25 0200	Kappa 9H	-	K-9H-81	0.000	ISAS	SS	ISAS/BOUCH/Oyama, Piel	Submm Astron	SRJ	ESA-SP291-24	-



Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Launch					Ascent_Pad	Apogee km	Range km	Dest
							Mission	FlightCode	Platform	Launch_Site	Launch_Pad				
1988-416	2447425.50	1988 Sep 21	HIMES Rockoon	-	RFT-1	HIMES RFT-1	-	-	KASC	-	-	-	18	-	-
1992-401	2448667.46	1992 Feb 14 2300	HIMES Rockoon	-	RFT-2	HIMES RFT-2	-	-	KASC	-	-	-	67	-	-



Launch													
Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	OrbPay	Agency	Launch_Code	Group	Category	LTCite	Cite	Notes
1988-A16	2447425.50	1988 Sep 21	HIMES Rocketoon	-	RFT-1	0.000	ISMS	TF	-	Test	ALAA-92-5053	-	-
1992-401	2448867.46	1992 Feb 14 2300	HIMES Rocketoon	-	RFT-2	0.000	ISMS	TS	-	Test	ALAA-92-5053	-	-



Launch

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Mission	FlightCode	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee km	Range km	Dest
2019-A102	245705.36	2019 Aug 9 2034	Heasong-11Ma	-	KI-ATACKS	-	-	-	-	HAMH	-	-	-	48	400	-
2019-A103	245705.37	2019 Aug 9 2050	Heasong-11Ma	-	-	-	-	-	-	HAMH	-	-	-	48	400	-
2019-A104	245711.46	2019 Aug 15 2301	Heasong-11Ma	-	-	-	-	-	-	TUNG	-	-	-	30	230	-
2019-A105	245711.47	2019 Aug 15 2316	Heasong-11Ma	-	-	-	-	-	-	TUNG	-	-	-	30	230	-
2020-H04	245929.41	2020 Mar 20 2146	Heasong-11Ma	-	-	-	-	-	-	SDIC	-	-	-	50	410	-
2020-H05	245929.41	2020 Mar 20 2150	Heasong-11Ma	-	-	-	-	-	-	SDIC	-	-	-	50	410	-
2022-A03	245956.49	2022 Jan 16 2350	Heasong-11Ma	-	-	-	-	-	-	SDAN	-	-	-	42	380	-
2022-A04	245956.50	2022 Jan 16 2354	Heasong-11Ma	-	-	-	-	-	-	SDAN	-	-	-	42	380	-
2022-A15	2459735.56	2022 Jun 5 01307	Heasong-11Ma	-	-	-	-	-	-	SDAN	-	-	-	42?	380?	-
2022-A16	2459735.56	2022 Jun 5 01307	Heasong-11Ma	-	-	-	-	-	-	SDAN	-	-	-	42?	380?	-
2023-H08	2460187.11	2023 Aug 30 1438	Heasong-11Ma	-	-	-	-	-	-	SDAN?	-	-	-	50	350	-
2023-H09	2460187.12	2023 Aug 30 1446	Heasong-11Ma	-	-	-	-	-	-	SDAN?	-	-	-	50	350	-
2023-H10	2460200.61	2023 Sep 13 0243	Heasong-11Ma	?	-	-	-	-	-	SDAN	-	-	-	50	350	-
2023-H11	2460200.62	2023 Sep 13 0253	Heasong-11Ma	?	-	-	-	-	-	SDAN	-	-	-	50	350	-
2024-H03	2460387.45	2024 Mar 17 2242	Heasong-11Ma	?	-	-	-	-	-	SDAN	-	-	-	50	300	-
2024-H04	2460387.46	2024 Mar 17 23007	Heasong-11Ma	?	-	-	-	-	-	SDAN	-	-	-	50	300	-
2024-H05	2460387.47	2024 Mar 17 2322	Heasong-11Ma	?	-	-	-	-	-	SDAN	-	-	-	50	300	-
2024-H07	2460665.42	2024 Sep 11 22107	Heasong-11Ma	?	-	-	-	-	-	SDAN	-	-	-	50	360	-
2024-H08	2460665.42	2024 Sep 11 22107	Heasong-11Ma	?	-	-	-	-	-	SDAN	-	-	-	50	360	-
2024-H09	2460665.42	2024 Sep 11 22107	Heasong-11Ma	?	-	-	-	-	-	SDAN	-	-	-	50	360	-





Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	OrbPay	Agency	Launch_Code	Group	Category	LTCite	Cite	Notes
2019-A102	2458705_36	2019 Aug 9 2034	Hasong-11Na	-	RH-ATACMS	0.000	JRG	MS	-	DT	Wire	-	-
2019-A103	2458705_37	2019 Aug 9 2050	Hasong-11Na	-	-	0.000	JRG	MS	-	DT	Wire	-	-
2019-A104	2458711_46	2019 Aug 15 2301	Hasong-11Na	-	-	0.000	JRG	MS	-	DT	Wire	-	-
2019-A105	2458711_47	2019 Aug 15 2316	Hasong-11Na	-	-	0.000	JRG	MS	-	DT	Wire	-	-
2020-M04	2458929_41	2020 Mar 20 2145	Hasong-11Na	-	-	0.000	RFA	MS	-	Test	Wire	-	-
2020-M05	2458929_41	2020 Mar 20 2150	Hasong-11Na	-	-	0.000	RFA	MS	-	Test	Wire	-	-
2022-A03	2458996_49	2022 Jan 16 2350	Hasong-11Na	-	-	0.000	JRG	MS	-	DT	Wire	-	-
2022-A04	2458996_50	2022 Jan 16 2354	Hasong-11Na	-	-	0.000	JRG	MS	-	DT	Wire	-	-
2022-A15	2458735_56	2022 Jun 5 0130?	Hasong-11Na	-	-	0.000	JRG	MS	-	DT	Wire	-	-
2022-A16	2458735_56	2022 Jun 5 0130?	Hasong-11Na	-	-	0.000	JRG	MS	-	DT	Wire	-	-
2023-M08	2460157_11	2023 Aug 30 1438	Hasong-11Na	-	-	0.000	JRG	MS	-	DT	Wire	-	-
2023-M09	2460157_12	2023 Aug 30 1446	Hasong-11Na	-	-	0.000	JRG	MS	-	DT	Wire	-	-
2023-M10	2460200_61	2023 Sep 13 0243	Hasong-11Na	?	-	0.000	JRG	MS	-	DT	Wire	-	-
2023-M11	2460200_62	2023 Sep 13 0253	Hasong-11Na	?	-	0.000	JRG	MS	-	DT	Wire	-	-
2024-M03	2460357_45	2024 Mar 17 2242	Hasong-11Na	?	-	0.000	JRG	MS	-	DT	Wire	-	-
2024-M04	2460357_46	2024 Mar 17 2300?	Hasong-11Na	?	-	0.000	JRG	MS	-	DT	Wire	-	-
2024-M05	2460357_47	2024 Mar 17 2322	Hasong-11Na	?	-	0.000	JRG	MS	-	DT	Wire	-	-
2024-M07	2460565_42	2024 Sep 11 2210?	Hasong-11Na	?	-	0.000	JRG	MS	-	DT	Wire	-	-
2024-M08	2460565_42	2024 Sep 11 2210?	Hasong-11Na	?	-	0.000	JRG	MS	-	DT	Wire	-	-
2024-M09	2460565_42	2024 Sep 11 2210?	Hasong-11Na	?	-	0.000	JRG	MS	-	DT	Wire	-	-



Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Mission	Launch_FlightCode	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee_Km	Range_Km	Dest
2019-846	2458719.41	2019 Aug 23 2145	KR-25	-	-	-	-	-	-	SONDOK	-	-	-	97	380	-
2019-847	2458719.42	2019 Aug 23 2202	KR-25	-	-	-	-	-	-	SONDOK	-	-	-	97	380	-
2019-848	2458736.41	2019 Sep 9 2153	KR-25	-	-	-	-	-	-	MAECH	-	-	-	55?	330	-
2019-849	2458736.42	2019 Sep 9 2212	KR-25	-	-	-	-	-	-	MAECH	-	-	-	55?	330	-
2019-850	2458787.82	2019 Oct 31 0735	KR-25	-	-	-	-	-	-	POKCH?	-	-	-	90	370	-
2019-851	2458787.82	2019 Oct 31 0738	KR-25	-	-	-	-	-	-	POKCH?	-	-	-	90	370	-
2019-852	2458815.83	2019 Nov 28 0759	KR-25	-	-	-	-	-	-	RYOMPO	-	-	-	97	380	-
2019-853	2458815.83	2019 Nov 28 0759	KR-25	-	-	-	-	-	-	RYOMPO	-	-	-	97	380	-
2020-405	2458910.65	2020 Mar 2 0337	KR-25	-	-	-	20s salvo	-	-	WONSAN	-	-	-	35	230	-
2020-406	2458910.65	2020 Mar 2 0337	KR-25	-	-	-	20s salvo	-	-	WONSAN	-	-	-	35	230	-
2020-401	2458917.45	2020 Mar 8 2246	KR-25	-	-	-	-	-	-	SONDOK	-	-	-	50	200	-
2020-402	2458917.45	2020 Mar 8 2246	KR-25	-	-	-	-	-	-	SONDOK	-	-	-	50	200	-
2020-403	2458917.45	2020 Mar 8 2246	KR-25	-	-	-	-	-	-	SONDOK	-	-	-	50	200	-
2020-407	2458937.38	2020 Mar 28 2110	KR-25	-	-	-	-	-	-	SONDOK	-	-	-	50	200	-
2020-408	2458937.38	2020 Mar 28 2110	KR-25	-	-	-	-	-	-	SONDOK	-	-	-	50	200	-
2022-532	2459711.81	2022 May 12 0729	KR-25	?	-	-	-	-	-	WONSAN	-	-	-	30	230	-
2022-533	2459711.81	2022 May 12 0729	KR-25	?	-	-	-	-	-	SUNAN	-	-	-	90	360	-
2022-534	2459711.81	2022 May 12 0729	KR-25	?	-	-	-	-	-	SUNAN	-	-	-	90	360	-
2022-535	2459724.29	2022 May 24 1900	KR-25	?	-	-	-	-	-	SUNAN	-	-	-	90	360	-
2022-538	2459735.56	2022 Jun 5 0108?	KR-25	?	-	-	-	-	-	SUNAN	-	-	-	20	0	-
2022-539	2459735.56	2022 Jun 5 0120?	KR-25	?	-	-	-	-	-	SUNAN	-	-	-	90	360	-
2022-540	2459735.57	2022 Jun 5 0143?	KR-25	?	-	-	-	-	-	SUNAN	-	-	-	90	360	-
2022-424	2459841.41	2022 Sep 24 2153	KR-25	?	-	-	Submerged launch	-	-	SUNAN	-	-	-	60?	330?	-
2022-425	2459851.03	2022 Sep 28 1248	KR-25	?	-	-	Submerged launch	-	-	KOSUNG	LP5	-	-	60?	600?	-
2022-426	2459851.04	2022 Sep 28 1257	KR-25	?	-	-	Submerged launch	-	-	POKCH?	-	-	-	50	350	-
2022-427	2459851.20	2022 Oct 5 2101	KR-25	?	-	-	Submerged launch	-	-	POKCH?	-	-	-	50	350	-
2022-428	2459861.20	2022 Oct 8 1646	KR-25	?	-	-	Submerged launch	-	-	SUNAN	LP3	-	-	80	350	-
2022-429	2459861.21	2022 Oct 8 1668	KR-25	?	-	-	Submerged launch	-	-	WONSAN	LP4	-	-	90	350	-
2022-430	2459866.49	2022 Nov 2 2339	KR-25	?	-	-	Submerged launch	-	-	WONSAN	LP4	-	-	90	350	-
2022-431	2459866.49	2022 Nov 2 2339	KR-25	?	-	-	Submerged launch	-	-	MAECH	-	-	-	70	330	-
2022-432	2459866.49	2022 Nov 17 0148	KR-25	?	-	-	Submerged launch	-	-	MAECH	-	-	-	70	330	-
2022-433	2459901.58	2022 Dec 30 2306?	KR-25	?	-	-	Submerged launch	-	-	WONSAN	-	-	-	30?	300?	-
2022-434	2459944.46	2022 Dec 30 2306?	KR-25	?	-	-	Submerged launch	-	-	CHWA	-	-	-	100?	300?	Alseom
2022-3139	2459944.47	2022 Dec 30 2310?	KR-25	?	-	-	Submerged launch	-	-	CHWA	-	-	-	100?	300?	Alseom
2022-3140	2459944.47	2022 Dec 30 2315?	KR-25	?	-	-	Submerged launch	-	-	CHWA	-	-	-	100?	300?	Alseom
2023-304	2459951.43	2023 Feb 19 2215?	KR-25	?	-	-	Submerged launch	-	-	SUNCH	-	-	-	100	390	-
2023-401	2459951.43	2023 Feb 19 2215?	KR-25	?	-	-	Submerged launch	-	-	SUNCH	-	-	-	80	340	-
2023-403	2460030.46	2023 Mar 26 2244	KR-25	?	-	-	Submerged launch	-	-	SUNCH	-	-	-	80?	350	-
2023-404	2460030.46	2023 Mar 26 2258?	KR-25	?	-	-	Submerged launch	-	-	CHWA	-	-	-	80?	350	-
2023-405	2460110.83	2023 Jun 15 1025	KR-25	?	-	-	Submerged launch	-	-	CHWA	-	-	-	60?	330?	-
2023-407	2460110.94	2023 Jun 15 1037	KR-25	?	-	-	Submerged launch	-	-	SUNAN	-	-	-	60?	330?	-
2023-402	2460150.12	2023 Jul 24 1454	KR-25	?	-	-	Submerged launch	-	-	SUNAN?	-	-	-	100	350	-
2023-553	2460150.12	2023 Jul 24 1459	KR-25	?	-	-	Submerged launch	-	-	SUNAN?	-	-	-	100	400	-



Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Launch	Agency	Launch_Code	Group	Category	LFCite	Cite	Notes
						DrPay							
2019-546	2458719.41	2019 Aug 23 2145	KN-25	-	-	0.000	RFA	MS	-	Test	Wire	-	-
2019-547	2458719.42	2019 Aug 23 2202	KN-25	-	-	0.000	RFA	MS	-	Test	Wire	-	-
2019-A106	2458736.41	2019 Sep 9 2153	KN-25	-	-	0.000	JRG	MS	-	DT	Wire	-	-
2019-A107	2458736.42	2019 Sep 9 2212	KN-25	-	-	0.000	JRG	MS	-	DT	Wire	-	-
2019-568	2458787.82	2019 Oct 31 0735	KN-25	-	-	0.000	RFA	MS	-	Test	Wire	-	-
2019-569	2458787.82	2019 Oct 31 0738	KN-25	-	-	0.000	RFA	MS	-	Test	Wire	-	-
2019-576	2458815.83	2019 Nov 28 0759	KN-25	-	-	0.000	RFA	MS	-	Test	Wire	-	-
2019-577	2458815.83	2019 Nov 28 0759	KN-25	-	-	0.000	RFA	MS	-	Test	Wire	-	-
2020-A05	2458910.65	2020 Mar 2 0337	KN-25	-	-	0.000	RFA	MS	-	Test	Wire	-	-
2020-A06	2458910.65	2020 Mar 2 0337	KN-25	-	-	0.000	RFA	MS	-	Test	Wire	-	-
2020-M01	2458917.45	2020 Mar 8 2246	KN-25	-	-	0.000	RFA	MS	-	Test	Wire	-	-
2020-M02	2458917.45	2020 Mar 8 2246	KN-25	-	-	0.000	RFA	MS	-	Test	Wire	-	-
2020-M03	2458937.38	2020 Mar 8 2246	KN-25	-	-	0.000	RFA	MS	-	Test	Wire	-	-
2020-A07	2458937.38	2020 Mar 28 2110	KN-25	-	-	0.000	RFA	MS	-	Test	Wire	-	-
2020-A08	2458937.38	2020 Mar 28 2110	KN-25	-	-	0.000	RFA	MS	-	Test	Wire	-	-
2022-S52	2458711.81	2022 May 12 0729	KN-25	?	-	0.000	RFA	MS	-	Test	Wire	-	-
2022-S53	2458711.81	2022 May 12 0729	KN-25	?	-	0.000	RFA	MS	-	Test	Wire	-	-
2022-S54	2458711.81	2022 May 12 0729	KN-25	?	-	0.000	RFA	MS	-	Test	Wire	-	-
2022-A11	2458724.29	2022 May 24 1900	KN-25	?	-	0.000	RFA	MS	-	Test	Wire	-	-
2022-S38	2458735.55	2022 Jun 5 0108?	KN-25	?	-	0.000	RFA	MS	-	Test	Wire	-	-
2022-S39	2458735.55	2022 Jun 5 0120?	KN-25	?	-	0.000	RFA	MS	-	Test	Wire	-	-
2022-S40	2458735.57	2022 Jun 5 0143?	KN-25	?	-	0.000	RFA	MS	-	Test	Wire	-	-
2022-M24	2458847.41	2022 Sep 24 2153	KN-25	?	-	0.000	RFA	MS	-	Test	Wire	-	-
2022-M25	2458851.03	2022 Sep 28 1248	KN-25	?	-	0.000	RFA	MS	-	Test	Wire	-	-
2022-M26	2458851.04	2022 Sep 28 1257	KN-25	?	-	0.000	RFA	MS	-	Test	Wire	-	-
2022-S96	2458868.38	2022 Oct 5 2101	KN-25	?	-	0.000	RFA	MS	-	Test	Wire	-	-
2022-S97	2458861.20	2022 Oct 6 1645	KN-25	?	-	0.000	RFA	MS	-	Test	Wire	-	-
2022-S98	2458861.21	2022 Oct 6 1658	KN-25	?	-	0.000	RFA	MS	-	Test	Wire	-	-
2022-M28	2458866.49	2022 Nov 2 2339	KN-25	?	-	0.000	RFA	MS	-	Test	Wire	-	-
2022-M29	2458866.49	2022 Nov 2 2339	KN-25	?	-	0.000	RFA	MS	-	Test	Wire	-	-
2022-A36	2458944.46	2022 Nov 17 0146	KN-25	?	-	0.000	RFA	MS	-	Test	Wire	-	-
2022-S138	2458944.46	2022 Dec 30 2305?	KN-25	?	-	0.000	RFA	MS	-	Test	Wire	-	-
2022-S139	2458944.47	2022 Dec 30 2310?	KN-25	?	-	0.000	RFA	MS	-	Test	Wire	-	-
2022-S140	2458944.47	2022 Dec 30 2316?	KN-25	?	-	0.000	RFA	MS	-	Test	Wire	-	-
2023-S04	2458995.43	2023 Feb 19 2215?	KN-25	?	-	0.000	RFA	MS	-	Test	Wire	-	-
2023-M01	2458995.43	2023 Feb 19 2215?	KN-25	?	-	0.000	RFA	MS	-	Test	Wire	-	-
2023-M03	2460030.46	2023 Mar 26 2257?	KN-25	?	-	0.000	RFA	MS	-	Test	Wire	-	-
2023-M04	2460030.46	2023 Mar 26 2257?	KN-25	?	-	0.000	RFA	MS	-	Test	Wire	-	-
2023-M06	2460110.93	2023 Jun 15 0225?	KN-25	?	-	0.000	RFA	MS	-	Test	Wire	-	-
2023-M07	2460110.94	2023 Jun 15 0257	KN-25	?	-	0.000	RFA	MS	-	Test	Wire	-	-
2023-S52	2460160.12	2023 Jul 24 1454	KN-25	?	-	0.000	RFA	MS	-	Test	Wire	-	-
2023-S53	2460160.12	2023 Jul 24 1459	KN-25	?	-	0.000	RFA	MS	-	Test	Wire	-	-



Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Mission	LaunchCode	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee km	Range km	Dest
2018-S69	2458460.79	2018 Nov 28 0700	KSLV-II TLV	-	1	-	-	-	-	MARO	LC1	-	-	1867	-	-





Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Day	Agency	Launch_Code	Group	Category	LTCite	Cite	Notes
2018-569	2458450.79	2018 Nov 28 0700	KSLV-II TLV	-	1	0.000	KARI	SU	-	Test	Wire	-	-



Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Mission	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee km	Range km	Dest
2021-F09	2459505.83	2021 Oct 21 0800:00	Muri	-	1	Dummy satellite	-	MAR0	LC2	-	-	750?	-	-
2022-065	2459751.79	2022 Jun 21 0700:00	Muri	-	2	PVSKIT	-	MAR0	LC2	-	-	709?	-	-
2023-072	2460089.89	2023 May 25 0924	Muri	-	3	HEXTSAT-2	-	MAR0	LC2	-	-	0	-	-



Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	DrPay	Agency	Launch_Code	Group	Category	LTCite	Cite	Notes
2021-F09	2459508.83	2021 Oct 21 0800:00	Nuri	-	1	1.500	KARI	DF	G	Sat SSO 0	Wire	-	-
2022-065	2459751.79	2022 Jun 21 0700:00	Nuri	-	2	1.503	KARI	OS	G	Sat SSO 0	Wire	-	-
2023-072	2460089.89	2023 May 25 0924	Nuri	-	3	0.236	KARI	OS	G	Sat SSO 0	Wire	-	-



Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Mission	FlightCode	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee km	Range km	Dest
2002-A03	2452606.74	2002 Nov 28 0652:26	KSR-III	-	KSR-I-1	-	-	-	-	AMHU	-	-	-	43	-	-





Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	OrbPay	Agency	Launch_Code	Group	Category	LTCite	Cite	Notes
2002-403	2452806.74	2002 Nov 28 0552:26	KSR-III	-	KSR-I-1	0.000	KARI	SS	KARI/Hwang	Aeronomy	Wire	-	-



Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Mission	Launch				Apogee km	Range km	Dest
								Platform	Launch_Site	Launch_Pad	Ascent_Site			
1989-A06	2449142.50	1989 Jun 4	KSR-I	-	KSR-4208-1	-	-	-	AMHU	-	-	39	-	-
1989-A11	2449231.50	1989 Sep 1	KSR-I	-	KSR-4208-2	-	-	-	AMHU	-	-	49	-	-
1987-S60	2450638.50	1987 Jul 9	KSR-II	-	KSR-II-1	-	-	-	AMHU	-	-	150	-	-
1988-S46	2450975.54	1988 Jun 11 0100	KSR-II	-	KSR-II-2	-	-	-	AMHU	-	-	137	-	-



Launch_Tag	Launch_JD	Launch_Date	LV_Type	Variant	Flight_ID	Drbby	Agency	Launch_Code	Group	Category	LTCite	Cite	Notes
1993-406	2449142.50	1993 Jun 4	KSR-I	-	KSR-4208-1	0.000	KARI	SS	KARI/	Aeronomy	Kim9807	-	-
1993-411	2449231.50	1993 Sep 1	KSR-I	-	KSR-4208-2	0.000	KARI	SS	KARI/	Aeronomy	Kim9807	-	-
1997-550	2460638.50	1997 Jul 9	KSR-II	-	KSR-II-1	0.000	KARI	SS	KARI/	XR Astron/Ionos	Kim9807	-	-
1998-546	2460976.54	1998 Jun 11 0100	KSR-II	-	KSR-II-2	0.000	KARI	SS	KARI/Kim	XR Astron/Ionos	Kim9807	-	-



Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Mission	Launch	FlightCode	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee km	Range km	Dest
2024-F01	2460382.88	2024 Mar 13 0201:12	Kaires	-	1	-	Tanki Uchtagagata Kogata	Launch	-	-	KII	LC1	-	-	1	-	-





Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Agency	Launch_Code	Group	Category	LTCite	Cite	Notes
2024-F01	2460362.68	2024 Mar 13 0201:12	Kairos	-	1	SFDNE	0F	C/G	Sat S80 00	youtube.co	-	Stl failure



Launch

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Mission	FlightCode	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee km	Range km	Dest
1966-A90	2435740_50	1966 Sep 24 0002	Kappa 1	-	K-1-1	K-1-S-1	-	-	-	AKT	-	-	-	5	-	-
1966-A94	2435744_59	1966 Sep 28 0215	Kappa 1	-	K-1-2	K-1-S-2	-	-	-	AKT	-	-	-	5?	-	-
1966-A95	2435745_58	1966 Sep 29 0150	Kappa 1	-	K-1-3	K-1-S-3	-	-	-	AKT	-	-	-	5	-	-
1966-A116	2438810_68	1966 Dec 3 0420	Kappa 1	-	K-1-4	K-1-T-1	-	-	-	AKT	-	-	-	5?	-	-
1966-A119	2438815_65	1966 Dec 8 0332	Kappa 1	-	K-1-5	K-1-T-2	-	-	-	AKT	-	-	-	5?	-	-
1966-A120	2438818_64	1966 Dec 11 0326	Kappa 1	-	K-1-6	K-1-T-3	-	-	-	AKT	-	-	-	5?	-	-
1966-A122	2438820_59	1966 Dec 13 0210	Kappa 1	-	K-1-7	K-1-T-4	-	-	-	AKT	-	-	-	5?	-	-



Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	OrbPay	Agency	Launch_Code	Group	Category	LTCite	Cite	Notes
1956-A90	2435740.50	1966 Sep 24 0002	Kappa 1	-	K-1-1	0.000	ISAS	AS	ISAS/	Test	ISTSI	-	-
1956-A94	2435744.59	1966 Sep 28 0215	Kappa 1	-	K-1-2	0.000	ISAS	AS	ISAS/	Test	ISTSI	-	-
1956-A95	2435745.58	1966 Sep 29 0150	Kappa 1	-	K-1-3	0.000	ISAS	AS	ISAS/	Test	ISTSI	-	-
1956-A116	2435810.68	1966 Dec 3 0420	Kappa 1	-	K-1-4	0.000	ISAS	AS	ISAS/	Test	ISTSI	-	-
1956-A119	2435815.65	1966 Dec 8 0352	Kappa 1	-	K-1-5	0.000	ISAS	AS	ISAS/	Test	ISTSI	-	-
1956-A120	2435818.64	1966 Dec 11 0326	Kappa 1	-	K-1-6	0.000	ISAS	AS	ISAS/	Test	ISTSI	-	-
1956-A122	2435820.59	1966 Dec 13 0210	Kappa 1	-	K-1-7	0.000	ISAS	AS	ISAS/	Test	ISTSI	-	-



Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Launch				Ascent_Pad	Apogee_Km	Range_Km	Dest
							Mission	FlightCode	Platform	Launch_Site				
1957-A102	2436101.92	1957 Sep 20 1003	Kappa 4	-	K-4-1	-	-	-	AKT	-	40	-	-	
1957-A103	2436103.92	1957 Sep 22 1000	Kappa 4	-	K-4-2	-	-	-	AKT	-	40	-	-	
1961-S182	2437468.69	1961 Jun 18 0436	Kappa 4	-	K-4-2	Sigma 4 Rockoon	-	-	DBA	-	105	-	-	





Launch_Tag	Launch_JD	Launch_Date	LV_Type	Variant	Flight_ID	Launch_Cost	Agency	Launch_Code	Group	Category	LTCite	Cite	Notes
1957-A102	2436101.92	1957 Sep 20 1003	Kappa 4	-	K-4-1	0.000	ISAS	SS	ISAS/	CR	ISTS1	-	-
1957-A103	2436103.92	1957 Sep 22 1000	Kappa 4	-	K-4-2	0.000	ISAS	SS	ISAS/	CR	ISTS1	-	-
1961-S182	2437468.69	1961 Jun 18 0436	Kappa 4	-	K-4-2	0.000	ISAS	SS	TUK/Takenuchi,Hirao	CR	WDRF	ISTS3	-



Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Launch				Apogee Km	Range Km	Dest	
							Mission	FlightCode	Platform	Launch_Site				Launch_Pad
2006-A11	2454039.50	2006 Nov	Kavoshgar M5	-	Kavoshgar-1	Kavoshgar Class A	-	-	SHARR?	-	-	10	-	-
2006-S67	2454796.50	2008 Nov 26	Mazat 6H	?	Kavoshgar-2	Kavoshgar Class B	-	-	SHARR?	-	-	40	-	-
2010-S14	2455230.50	2010 Feb 3	Mazat 6H	?	Kavoshgar-3	Kavoshgar Class B	-	-	SHARR?	-	-	55	-	-
2022-S95	2459865.50	2022 Oct 3?	Mazat 6H	?	Saman Test	-	-	-	SHARR?	-	-	100?	-	-



Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Agency	Launch_Code	Group	Category	LTCite	Cite	Notes
2006-A11	2454039.50	2006 Nov	Kavoshgar HS	-	Kavoshgar-1	IRSA	SS	IRSA/	Test	Wire	-	-
2008-S67	2454796.50	2008 Nov 26	Mazeat GH	?	Kavoshgar-2	IRSA	SS	IRSA/	Test	Wire	-	-
2010-S14	2455230.50	2010 Feb 3	Mazeat GH	?	Kavoshgar-3	IRSA	SS	IRSA/	Bio	Wire	-	-
2022-S95	2459856.50	2022 Oct 31	Mazeat GH	?	Saman Test	IRSA	SS	IRSA/	Test	Wire	-	-



Launch																
Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Mission	FlightCode	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee km	Range km	Dest
2021-429	2459473.78	2021 Sep 16 0639	Hapith I	-	1	Test	-	-	-	WVAY	-	-	-	0	-	-





Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Display	Agency	Launch_Code	Group	Category	LTCite	Cite	Notes
2021-429	2459473.78	2021 Sep 16 0639	Hapith I	-	1	0.000	TISPACE	SF	-	Test	satnews.com	-	-



Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Mission	Launch_FlightCode	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee km	Range km	Dest
2022-S107	2459871.50	2022 Oct 19?	Kingfisher	-	1	-	-	-	-	SU1ST7	-	-	-	185	-	-
2022-S108	2459871.50	2022 Oct 19?	Kingfisher	-	1	-	-	-	-	SU1ST7	-	-	-	185	-	-



Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	0rBPay	Agency	Launch_Code	Group	Category	LTCite	Cite	Notes
2022-S107	2459871.50	2022 Oct 19?	Kingfisher	-	1	0.000	TMHUS	SS	TMHUS/	Test	linkedin.com	-	[Oct 17-21]
2022-S108	2459871.50	2022 Oct 19?	Kingfisher	-	1	0.000	TMHUS	SS	TMHUS/	Test	linkedin.com	-	[Oct 17-21]



Launch

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Mission	FlightCode	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee km	Range km	Dest
1960-5134	2437106.50	1960 Jun 21	Kiva/Hopi	-	-	PHOENIX 1	-	-	-	PH	-	-	-	3007	-	-
1960-5153	2437115.50	1960 Jul	Kiva/Hopi	-	-	PHOENIX 5	-	-	-	PH	-	-	-	325	-	-
1960-5234	2437158.50	1960 Aug 12	Kiva/Hopi	-	-	-	-	-	-	PA	LC-B	-	-	3007	-	-
1960-5316	2437219.50	1960 Oct 12	Kiva/Hopi	-	-	-	-	-	-	PA	LC-B	-	-	3007	-	-
1960-5337	2437234.50	1960 Oct 27	Kiva/Hopi	-	-	-	-	-	-	PA	LC-B	-	-	3007	-	-
1960-5394	2437275.28	1960 Dec 6 1844	Kiva/Hopi	-	-	PHOENIX	-	-	-	PA	LC-B	-	-	367	-	-
1960-5405	2437282.50	1960 Dec 14	Kiva/Hopi	-	-	-	-	-	-	PA	LC-B	-	-	3007	-	-
1960-5406	2437282.50	1960 Dec 14	Kiva/Hopi	-	-	-	-	-	-	PA	LC-B	-	-	3007	-	-
1960-5412	2437284.50	1960 Dec 16	Kiva/Hopi	-	-	-	-	-	-	PA	LC-B	-	-	3007	-	-
1961-5130	2437419.50	1961 May?	Kiva/Hopi	-	-	-	-	-	-	PA	LC-B	-	-	273	-	-
1962-5279	2437681.50	1962 Aug 5	Kiva/Hopi	-	-	PHOENIX Chaff	-	-	-	WI	-	-	-	3007	-	-
1963-5198	2438160.50	1963 May 11	Kiva/Hopi	-	-	-	-	-	-	PA	LC-B	-	-	3007	-	-





Launch  
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Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Agency	Launch_Code	Group	Category	LTCite	Clte	Notes
1960-S134	2437106.50	1960 Jun 21	Kiva/Hopi	-	-	AFCRLL	SS	AFCRLL/UNB/	Test	Morrore	-	-
1960-S153	2437115.50	1960 Jul	Kiva/Hopi	-	-	AFCRLL	SS	AFCRLL/UNB/	Test	MR60801-23	-	-
1960-S234	2437158.50	1960 Aug 12	Kiva/Hopi	-	-	AFCRLL	SU	AFCRLL/UNB/	Aeron?	VARB	-	-
1960-S316	2437219.50	1960 Oct 12	Kiva/Hopi	-	-	AFCRLL	SU	AFCRLL/UNB/	Aeron?	VARB	-	-
1960-S337	2437234.50	1960 Oct 27	Kiva/Hopi	-	-	AFCRLL	SU	AFCRLL/UNB/	Aeron?	VARB	-	-
1960-S394	2437275.28	1960 Dec 6 1844	Kiva/Hopi	-	-	AFCRLL	SS	AFCRLL/UNB/	Ionos	WDC	-	-
1960-S405	2437282.50	1960 Dec 14	Kiva/Hopi	-	-	AFCRLL	SU	AFCRLL/UNB/	Aeron?	VARB	-	-
1960-S406	2437282.50	1960 Dec 14	Kiva/Hopi	-	-	AFCRLL	SU	AFCRLL/UNB/	Aeron?	VARB	-	-
1960-S412	2437284.50	1960 Dec 16	Kiva/Hopi	-	-	AFCRLL	SU	AFCRLL/UNB/	Aeron?	VARB	-	-
1961-S130	2437419.50	1961 May?	Kiva/Hopi	-	-	AFCRLL	SS	AFCRLL/UNB/	Aeron?	MR6.0605-21	-	-
1962-S279	2437881.50	1962 Aug 5	Kiva/Hopi	-	-	AFCRLL	SU	AFCRLL/UNB/	Aeron?	VARB	-	-
1963-S198	2438160.50	1963 May 11	Kiva/Hopi	-	-	AFCRLL	SU	AFCRLL/UNB/	Aeron?	VARB	-	-



Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Mission	LaunchCode	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee km	Range km	Dest
1991-S216	2446463.50	1991 Jul 26	Kontraakt	-	1 -	79M6 test flight	-	-	MIG31D-72	BALKH	-	-	-	200?	-	-



Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Orbby	Agency	Launch_Code	Group	Category	LTCite	Cite	Notes
1991-S216	2448463.50	1991 Jul 26	Kontakt	-	1 -	0.000	PKU	MS	-	ASKT Test	garmaev.livejournal	-	-



Launch

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Mission	FlightCode	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee km	Range km	Dest
1989-A15	2447601.68	1989 Mar 16 0425	Ruryer	-	1 -	15Z89 B-1	Mobile launch test	-	-	MIP-53	-	-	-	1?	-	-
1989-A16	244768.10	1989 Aug 19 1420	Ruryer	-	2 -	15Z89 B-2	Mobile launch test	-	-	MIP-53	-	-	-	1?	-	-
1990-A15	2448057.85	1990 Jun 15 0822	Ruryer	-	3 -	15Z89 B-3	Mobile launch test	-	-	MIP-53	-	-	-	1?	-	-
1991-A08	2448406.50	1991 May 30	Ruryer	-	4 -	15Z89 B-4	Mobile launch test	-	-	MIP-53	-	-	-	1?	-	-





Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	OrbPay	Agency	Launch_Code	Group	Category	LTCite	Cite	Notes
1989-A15	2447601.68	1989 Mar 16 0425	Kuryer	-	1 -	0.000	RVSN	MS	-	Test	RPCB	-	-
1989-A16	2447759.10	1989 Aug 19 1420	Kuryer	-	2 -	0.000	RVSN	MS	-	Test	RML	-	-
1990-A15	2448057.85	1990 Jun 15 0822	Kuryer	-	3 -	0.000	RVSN	MS	-	Test	RML	-	-
1991-A08	2448406.50	1991 May 30	Kuryer	-	4 -	0.000	RVSN	MS	-	Test	RPCB	-	-



**Launch**

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Mission	FlightCode	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee km	Range km	Dest
2015-F03	2457330.66	2015 Nov 4 0345	Super Strypi	-	1	DRS-4	Hiakasat	-	-	K4U	RP	-	-	307	-	-



Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Display	Agency	Launch_Code	Group	Category	LTCite	Cite	Notes
2015-F03	24E7330.66	2015 Nov 4 0345	Super Strypi	-	1	0.086	AFONS/SMID	DF	G	Sat LED 0	Wire	-	-



Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Mission	Launch	FlightCode	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee Km	Range Km	Dest
1959-A141	2436802.17	1959 Aug 21 1600	Little Joe 1	4P	LJ-1	-	-	WI	-	-	LA1	-	-	-	1	-	-
1959-R36	2436845.92	1959 Oct 4 1000	Little Joe 1	4P	LJ-6	LJ-I	-	WI	-	-	LA1	-	-	-	59	-	-
1959-A137	2436877.12	1959 Nov 4 1455	Little Joe 1	2P	LJ-1A	LJ-II	-	WI	-	-	LA1	-	-	-	14	-	-
1959-S264	2436907.18	1959 Dec 4 1625	Little Joe 1	4C	LJ-2	LJ-III	-	WI	-	-	LA1	-	-	-	89	-	-
1960-A17	2436955.10	1960 Jan 21 1423	Little Joe 1	2C	LJ-1B	LJ-IV	-	WI	-	-	LA1	-	-	-	14	-	-
1960-K258	2437247.14	1960 Nov 8 1515:23	Little Joe 1	2P	LJ-5	LJ-V	-	WI	-	-	LA1	-	-	-	16	-	-
1961-A77	2437377.20	1961 Mar 18 1609	Little Joe 1	4C	LJ-5A	LJ-VI	-	WI	-	-	LA1	-	-	-	12	-	-
1961-A113	2437416.09	1961 Apr 28 1403	Little Joe 1	4C	LJ-5B	LJ-VII	-	WI	-	-	LA4	-	-	-	4	-	-





Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	OrbPay	Agency	Launch_Code	Group	Category	LTCite	Cite	Notes
1959-A141	2436802.17	1959 Aug 21 1600	Little Joe 1	4P	LJ-1	0.000	LARCH	TF	-	SC Test	AP	WDGRF	1100ET
1959-435	2436846.92	1959 Oct 4 1000	Little Joe 1	4P	LJ-6	0.000	LARCH	TS	-	SC Test	LJ-WorkingPaper133	WDGRF	-
1959-A187	2436877.12	1959 Nov 4 1455	Little Joe 1	2P	LJ-1A	0.000	LARCH	TS	-	SC Test	LJ-WorkingPaper134	WDGRF	-
1959-S264	2436907.18	1959 Dec 4 1625	Little Joe 1	4C	LJ-2	0.000	LARCH	TS	-	SC Test	TU-D-976	LJ-WorkingPaper169	-
1960-A17	2436955.10	1960 Jan 21 1423	Little Joe 1	2C	LJ-1B	0.000	LARCH	TS	-	SC Test	LJ-WorkingPaper173	WDGRF	-
1960-K259	2437247.14	1960 Nov 5 1518:23	Little Joe 1	2P	LJ-5	0.000	LARCH	TF	-	SC Test	LJ-WorkingPaper166	WDGRF	-
1961-AV7	2437377.20	1961 Mar 18 1649	Little Joe 1	4C	LJ-5A	0.000	LARCH	TS	-	SC Test	WDGRF	-	-
1961-A113	2437418.09	1961 Apr 28 1403	Little Joe 1	4C	LJ-5B	0.000	LARCH	TS	-	SC Test	WDGRF	-	-



Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Mission	FlightCode	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee km	Range km	Dest
1963-A123	2438270.17	1963 Aug 28 1600:02	Little Joe II	6-1-0	LJII-1 (12-50-1)	QTV	-	-	WS	WS	LC36	-	-	8	-	-
1964-468	2438529.04	1964 May 13 1259:59	Little Joe II	6-1-0	LJII-2 (12-50-2)	A-001	-	-	WS	WS	LC36	-	-	5	-	-
1964-A180	2438738.12	1964 Dec 8 1500:00	Little Joe II	4-2-0	LJII-3 (12-51-1)	A-002	-	-	WS	WS	LC36	-	-	5	-	-
1965-A173	2438900.04	1965 May 19 1301:04	Little Joe II	0-3-3	LJII-4 (12-51-2)	A-003	-	-	WS	WS	LC36	-	-	6	-	-
1966-A18	2439146.14	1966 Jan 20 1517:01	Little Joe II	5-2-2	LJII-5 (12-51-3)	A-004	-	-	WS	WS	LC36	-	-	23	-	-



Launch

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variation	Flight_ID	OrbPay	Agency	Launch_Code	Group	Category	LTCite	Cite	Notes
1963-A123	2438270.17	1963 Aug 28 1600:02	Little Joe II	6-1-0	LJII-1 (12-50-1)	0.000	JSC	TS	-	SC Test	CR-117547	SP-4004	-
1964-A68	2438529.04	1964 May 13 1259:59	Little Joe II	6-1-0	LJII-2 (12-50-2)	0.000	JSC	TS	-	SC Test	WDCRF	-	-
1964-A180	2438738.12	1964 Dec 8 1500:00	Little Joe II	4-2-0	LJII-3 (12-51-1)	0.000	JSC	TS	-	SC Test	WDCRF	-	-
1965-A73	2438900.04	1965 May 19 1301:04	Little Joe II	0-3-3	LJII-4 (12-51-2)	0.000	JSC	TF	-	SC Test	WDCRF	-	-
1966-A18	2439146.14	1966 Jan 20 1517:01	Little Joe II	5-2-2	LJII-5 (12-51-3)	0.000	JSC	TS	-	SC Test	WDCRF	-	-



Launch

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Mission	FlightCode	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee km	Range km	Dest
1969-001	244024.25	1969 Jul 21 1754:01	LH AS	-	5	Apollo 11	LH 5 Ascent Stage	-	-	TRAN	LM5-DS	-	-	-	-	-
1969-002	244034.10	1969 Nov 20 1426:56	LH AS	-	6	Apollo 12	LH 6 Ascent Stage	-	-	SY3	LM6-DS	-	-	-	-	-
1971-001	244039.28	1971 Feb 6 1848	LH AS	-	8	Apollo 14	LH 8 Ascent Stage	-	-	PRR	LM8-DS	-	-	-	-	-
1971-002	244166.22	1971 Aug 2 1711:23	LH AS	-	10	Apollo 15	LH 10 Ascent Stage	-	-	HAD	LM10-DS	-	-	-	-	-
1972-002	244163.56	1972 Apr 24 0126:48	LH AS	-	11	Apollo 16	LH 11 Ascent Stage	-	-	DES	LM11-DS	-	-	-	-	-
1972-003	244166.45	1972 Dec 14 2254:37	LH AS	-	12	Apollo 17	LH 12 Ascent Stage	-	-	LIT	LM12-DS	-	-	-	-	-





Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	OrbPay	Agency	Launch_Code	Group	Category	LTCite	Cite	Notes
1969-001	2440424.25	1969 Jul 21 1754:01	LH AS	-	5	0.000	RSC	XS	G	Sat XD	ApolloHR	-	-
1969-002	2440546.10	1969 Nov 20 1425:56	LH AS	-	6	0.000	RSC	XS	G	Sat XD	ApolloHR	-	-
1971-001	2440989.28	1971 Feb 6 1948	LH AS	-	8	0.000	RSC	XS	G	Sat XD	ApolloHR	-	-
1971-002	2441166.22	1971 Aug 2 1711:23	LH AS	-	10	0.000	RSC	XS	G	Sat XD	ApolloHR	-	-
1972-002	2441431.56	1972 Apr 24 0125:48	LH AS	-	11	0.000	RSC	XS	G	Sat XD	ApolloHR	-	-
1972-003	2441666.46	1972 Dec 14 2254:37	LH AS	-	12	0.000	RSC	XS	G	Sat XD	ApolloHR	-	-



Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Launch			Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee km	Range km	Dest
							Mission	FlightCode	Platform								
1963-839	2438251.64	1963 Aug 10 0317	LS-A	-	LS-A Sustainer	-	-	-	-	-	-	-	-	107	-	-	
1964-3377	2438598.62	1964 Jul 22 0250	LS-A	-	LS-A-1	-	-	-	-	MIJ	-	-	-	607	-	-	
1964-3378	2438598.87	1964 Jul 22 0855	LS-A	-	LS-A-2	-	-	-	-	MIJ	-	-	-	607	-	-	
1965-3639	2439086.77	1965 Nov 22 0635	LS-A	-	LS-A-3	-	-	-	-	MIJ	-	-	-	607	-	-	
1968-3499	2440118.58	1968 Sep 19 0158	LS-C	-	LS-C-D	-	-	-	-	TNSC	T	-	-	107	-	-	
1969-3111	2440268.77	1969 Feb 6 0631	LS-C	-	LS-C-1	-	-	-	-	TNSC	T	-	-	207	-	-	
1969-3491	2440474.77	1969 Sep 10 0630	LS-C	-	LS-C-2	-	-	-	-	TNSC	T	-	-	107	-	-	
1970-396	2440520.75	1970 Feb 3 0603	LS-C	-	LS-C-3	-	-	-	-	TNSC	T	-	-	65	-	-	
1970-3514	2440538.78	1970 Sep 9 0640	LS-C	-	LS-C-4	-	-	-	-	TNSC	T	-	-	45	-	-	
1971-3440	2441204.78	1971 Sep 10 0647	LS-C	-	LS-C-5	-	-	-	-	TNSC	T	-	-	53	-	-	
1972-3316	2441585.75	1972 Sep 25 0605	LS-C	-	LS-C-6	-	-	-	-	TNSC	T	-	-	40	-	-	
1974-396	2442087.77	1974 Feb 9 0630	LS-C	7	LS-C-7	LE-3 Test	-	-	-	TNSC	T	-	-	15	-	-	



Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Orbpay	Agency	Launch_Code	Group	Category	LTCite	Cite	Notes
1963-H39	2438251.64	1963 Aug 10 0317	LS-A	-	LS-A Sustainer	0.000	STA	SF	STA/	Test	IMSDA-WWW	SFLT18-399	-
1964-S377	2438598.62	1964 Jul 22 0250	LS-A	-	LS-A-1	0.000	STA	SS	STA/	Test	IMSDA-WWW	ALMA83-2598	-
1964-S378	2438598.87	1964 Jul 22 0855	LS-A	-	LS-A-2	0.000	STA	SS	STA/	Test	IMSDA-WWW	-	-
1965-S639	2439086.77	1965 Nov 22 0635	LS-A	-	LS-A-3	0.000	STA	SS	STA/	Test	IMSDA-WWW	-	-
1968-S699	2440118.69	1968 Sep 19 0158	LS-C	-	LS-C-D	0.000	STA	SS	STA/	Test	IMSDA-WWW	-	-
1969-S111	2440258.77	1969 Feb 6 0531	LS-C	-	LS-C-1	0.000	MASDA	SF	STA/	Test	IMSDA-WWW	ALMA83-2598	-
1969-S491	2440474.77	1969 Sep 10 0630	LS-C	-	LS-C-2	0.000	MASDA	SF	STA/	Test	IMSDA-WWW	ALMA83-2598	-
1970-S896	2440620.75	1970 Feb 3 0603	LS-C	-	LS-C-3	0.000	MASDA	SS	STA/	Test	IMSDA-WWW	-	-
1970-S514	2440838.78	1970 Sep 9 0540	LS-C	-	LS-C-4	0.000	MASDA	SS	STA/	Test	IMSDA-WWW	-	-
1971-S840	2441204.78	1971 Sep 10 0647	LS-C	-	LS-C-5	0.000	MASDA	SS	STA/	Test	IMSDA-WWW	-	-
1972-S316	2441585.75	1972 Sep 25 0605	LS-C	-	LS-C-6	0.000	MASDA	SS	STA/	Test	IMSDA-WWW	-	-
1974-S896	2442087.77	1974 Feb 9 0630	LS-C	7	LS-C-7	0.000	MASDA	SF	STA/	Test	IMSDA-WWW	-	-



Launch

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Mission	FlightCode	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee km	Range km	Dest
1957-S05	2435688-50	1957	Doorknob	2	-	-	[Needs confirmation]	-	-	TTR	-	-	-	84	-	-
1957-M05	2435928-50	1957 Apr	Doorknob	2	-	Test 17 (Last RAD)	[Needs confirmation]	-	-	TTR	-	-	-	80?	-	-
1957-A66	2436046-50	1957 Jul 27	Doorknob	1	-	-	-	-	-	TTR	-	-	-	24	-	-
1957-A175	2436061-50	1957 Aug 1	Doorknob	1	-	-	-	-	-	TTR	-	-	-	24	-	-
1958-A83	2436416-91	1958 Aug 1 0950?	Doorknob	1	-	Particle/X 1	-	-	-	JJ	-	-	-	12	-	-
1958-A84	2436416-91	1958 Aug 1 0950?	Doorknob	1	-	Particle/X 2	-	-	-	JJ	-	-	-	15	-	-
1958-A85	2436416-91	1958 Aug 1 0950?	Doorknob	1	-	Particle/X 3	-	-	-	JJ	-	-	-	18	-	-
1958-A86	2436416-91	1958 Aug 1 0950?	Doorknob	1	-	Particle/X 4	-	-	-	JJ	-	-	-	24	-	-
1958-S129	2436416-91	1958 Aug 1 0950?	Doorknob	2	-	Particle/X 5	-	-	-	JJ	-	-	-	83	-	-
1958-S130	2436416-91	1958 Aug 1 0950?	Doorknob	2	-	Particle/X 6	-	-	-	JJ	-	-	-	83	-	-
1958-S131	2436416-91	1958 Aug 1 0950?	Doorknob	2	-	Sampler 1	-	-	-	JJ	-	-	-	83	-	-
1958-S132	2436416-91	1958 Aug 1 0950?	Doorknob	2	-	Sampler 2	-	-	-	JJ	-	-	-	83	-	-
1958-S137	2436426-90	1958 Aug 11 0930?	Doorknob	2	-	Sampler 1	-	-	-	JJ	-	-	-	83	-	-
1958-S138	2436426-90	1958 Aug 11 0930?	Doorknob	2	-	Sampler 2	-	-	-	JJ	-	-	-	83	-	-
1958-S139	2436426-90	1958 Aug 11 0930?	Doorknob	2	-	Sampler 3	-	-	-	JJ	-	-	-	83	-	-
1958-S140	2436426-90	1958 Aug 11 0930?	Doorknob	2	-	Sampler 4	-	-	-	JJ	-	-	-	83	-	-
1958-S141	2436426-90	1958 Aug 11 0930?	Doorknob	2	-	-	-	-	-	JJ	-	-	-	83	-	-
1958-S142	2436426-90	1958 Aug 11 0930?	Doorknob	2	-	Particle/X 1	-	-	-	JJ	-	-	-	83	-	-
1958-S143	2436426-90	1958 Aug 11 0930?	Doorknob	2	-	Particle/X 2	-	-	-	JJ	-	-	-	83	-	-
1958-A88	2436415-50	1968 Aug 11 0930?	Doorknob	1	-	Particle/X 3	-	-	-	JJ	-	-	-	24	-	-
1958-S111	2436415-50	1968 Aug	Doorknob	2	-	-	-	-	-	EMW	-	-	-	84	-	-
1959-A21	2436599-50	1959 Jan 31	Doorknob	1	-	-	-	-	-	TTR	-	-	-	24	-	-





Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Launch_Cost	Agency	Launch_Code	Group	Category	LTCite	Cite	Notes
1957-505	2435838.50	1957	Doorknob	2	-	0.000	SAND	SS	SAND/	Test	SrctCon3	-	-
1957-405	2435928.50	1957 Apr	Doorknob	2	-	0.000	SAND	SS	SAND/	Test	Alway2002	-	-
1957-466	2436046.50	1957 Jul 27	Doorknob	1	-	0.000	SAND	SS	SAND/	Test	Sandialeases7/0809	-	-
1957-4175	2436051.50	1957 Aug 1	Doorknob	1	-	0.000	SAND	SS	SAND/	Test	Sandialeases7/0809	-	-
1958-483	2436416.91	1958 Aug 1 09507	Doorknob	1	-	0.000	SAND	SS	SAND/	Aeron	Alway2002	-	-
1958-484	2436416.91	1958 Aug 1 09507	Doorknob	1	-	0.000	SAND	SS	SAND/	Aeron	Alway2002	-	-
1958-485	2436416.91	1958 Aug 1 09507	Doorknob	1	-	0.000	SAND	SS	SAND/	Aeron	Alway2002	-	-
1958-486	2436416.91	1958 Aug 1 09507	Doorknob	1	-	0.000	SAND	SS	SAND/	Aeron	Alway2002	-	-
1958-5129	2436416.91	1958 Aug 1 09507	Doorknob	2	-	0.000	SAND	SS	SAND/	Aeron	Alway2002	-	-
1958-5130	2436416.91	1958 Aug 1 09507	Doorknob	2	-	0.000	SAND	SS	SAND/	Aeron	Alway2002	-	-
1958-5131	2436416.91	1958 Aug 1 09507	Doorknob	2	-	0.000	SAND	SS	SAND/	Aeron	Alway2002	-	-
1958-5132	2436416.91	1958 Aug 1 09507	Doorknob	2	-	0.000	SAND	SS	SAND/	Aeron	Alway2002	-	-
1958-5137	2436426.90	1958 Aug 11 09307	Doorknob	2	-	0.000	SAND	SS	SAND/	Aeron	Alway2002	-	-
1958-5138	2436426.90	1958 Aug 11 09307	Doorknob	2	-	0.000	SAND	SS	SAND/	Aeron	Alway2002	-	-
1958-5139	2436426.90	1958 Aug 11 09307	Doorknob	2	-	0.000	SAND	SS	SAND/	Aeron	Alway2002	-	-
1958-5140	2436426.90	1958 Aug 11 09307	Doorknob	2	-	0.000	SAND	SS	SAND/	Aeron	Alway2002	-	-
1958-5141	2436426.90	1958 Aug 11 09307	Doorknob	2	-	0.000	SAND	SS	SAND/	Aeron	Alway2002	-	-
1958-5142	2436426.90	1958 Aug 11 09307	Doorknob	2	-	0.000	SAND	SS	SAND/	Aeron	Alway2002	-	-
1958-5143	2436426.90	1958 Aug 11 09307	Doorknob	2	-	0.000	SAND	SS	SAND/	Aeron	Alway2002	-	-
1958-488	2436426.90	1958 Aug 11 09307	Doorknob	1	-	0.000	SAND	SS	SAND/	Aeron	Alway2002	-	-
1958-5111	2436416.50	1958 Aug	Doorknob	2	-	0.000	SAND	SS	SAND/	Aeron	SrctCon3	-	-
1959-421	2436599.50	1959 Jan 31	Doorknob	1	-	0.000	SAND	SS	SAND/	Aeron	Alway2002	-	-



Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Launch_Mission	FlightCode	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee km	Range km	Dest
1963-M43	2438265.58	1963 Aug 24 0200	Lambda 2	-	L-2-1	-	-	-	-	MASC	L	-	-	51	-	-
1963-S594	2438274.71	1963 Dec 11 0600	Lambda 2	-	L-2-2	-	-	-	-	MASC	L	-	-	410	-	-
1964-S342	2438387.58	1964 Jul 11 0202	Lambda 3	-	L-3-1	-	-	-	-	MASC	L	-	-	857	-	-
1965-S85	2438791.71	1965 Jan 31 0601	Lambda 3	-	L-3-2	-	-	-	-	MASC	L	-	-	1040	-	-
1966-S170	2438837.92	1965 Mar 18 1007	Lambda 3	-	L-3-3	-	-	-	-	MASC	L	-	-	1085	-	-
1966-S151	2439189.70	1966 Mar 5 0450	Lambda 3H	-	L-3H-1	-	-	-	-	MASC	L	-	-	1829	-	-
1966-S357	2439239.77	1966 Jul 23 0635	Lambda 3H	-	L-3H-2	-	-	-	-	MASC	L	-	-	1800	-	-
1966-F10	2439394.62	1966 Sep 28 0258	Lambda 4S	-	L-4S-1	-	L-4S-1	-	-	MASC	L	-	-	400	-	-
1966-F13	2439479.60	1966 Dec 20 0220	Lambda 4S	-	L-4S-2	-	L-4S-2	-	-	MASC	L	-	-	400	-	-
1967-S117	2439527.59	1967 Feb 6 0210	Lambda 3H	-	L-3H-3	-	-	-	-	MASC	L	-	-	2150	-	-
1967-F03	2439593.61	1967 Apr 13 0240	Lambda 4S	-	L-4S-3	-	-	-	-	MASC	L	-	-	200	-	-
1969-S89	2440238.36	1969 Jan 16 2028	Lambda 3H	-	L-3H-4	-	-	-	-	MASC	L	-	-	1007	-	-
1969-S460	2440667.59	1969 Sep 3 0210:00	Lambda 4T	-	L-4T-1	-	-	-	-	MASC	L	-	-	400	-	-
1969-F13	2440668.59	1969 Sep 22 0210:00	Lambda 4S	-	L-4S-4	-	L-4S-4	-	-	MASC	L	-	-	400	-	-
1970-S78	2440607.59	1970 Jan 21 0210	Lambda 3H	-	L-3H-6	-	-	-	-	MASC	L	-	-	1848	-	-
1970-S111	2440628.68	1970 Feb 11 0425	Lambda 4S	-	L-4S-5	-	L-4S-5	-	-	MASC	L	-	-	5142	-	-
1970-S526	2440648.98	1970 Sep 19 1130	Lambda 3H	-	L-3H-5	-	-	-	-	MASC	L	-	-	2017	-	-
1971-S395	2441163.50	1971 Aug 20	Lambda 4SC	-	L-4SC-1	-	-	-	-	MASC	L	-	-	1007	-	-
1971-S432	2441196.00	1971 Sep 3 1200	Lambda 3H	-	L-3H-7	-	-	-	-	MASC	L	-	-	1718	-	-
1973-S36	2441710.72	1973 Jan 28 0515	Lambda 4SC	-	L-4SC-2	-	-	-	-	MASC	L	-	-	1007	-	-
1974-S72	2442069.96	1974 Jan 22 1100	Lambda 3H	-	L-3H-8	-	-	-	-	MASC	L	-	-	1571	-	-
1974-S288	2442279.73	1974 Aug 20 0650	Lambda 4SC	-	L-4SC-3	-	-	-	-	MASC	L	-	-	1007	-	-
1976-S357	2443020.73	1976 Aug 30 0655	Lambda 4SC	-	L-4SC-4	-	-	-	-	MASC	L	-	-	1007	-	-
1977-S230	2443371.97	1977 Aug 16 1115	Lambda 3H	-	L-3H-9	-	-	-	-	MASC	L	-	-	1294	-	-
1979-S263	2444136.60	1979 Sep 20 0230	Lambda 4SC	-	L-4SC-5	-	-	-	-	MASC	L	-	-	82	150	-



Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	OrbPay	Agency	Launch_Code	Group	Category	LTCite	Cite	Notes
1963-M43	2438265.58	1963 Aug 24 0200	Lambda 2	-	L-2-1	0.000	ISAS	SF	ISAS/ TUKIYU/Kimura	Ionos/Test	ISTS6-8	-	-
1963-S594	2438374.71	1963 Dec 11 0500	Lambda 2	-	L-2-2	0.000	ISAS	SS	TUKAI/Aoyama	Ionos	ISR18-329	SRS,1071	-
1964-S342	2438887.58	1964 Jul 11 0202	Lambda 3	-	L-3-1	0.000	ISAS	SS	USAKI/Osaka	Ionos	JRRL13.75	-	-
1965-S85	2438931.71	1965 Jan 31 0501	Lambda 3	-	L-3-2	0.000	ISAS	SS	MAG/TUK/Hayakawa	Ionos	ISR121-68	JRRL13.75	-
1965-S170	2439387.92	1965 Mar 18 1007	Lambda 3	-	L-3-3	0.000	ISAS	SS	ISAS/ RRL/USAKA/Fugono,Higash.	XR Astron	ISR120-480,JRRL13.75	SRS,68	-
1966-S151	2439188.70	1966 Mar 5 0450	Lambda 3H	-	L-3H-1	0.000	ISAS	HS	G	Ionos/Aeron	ISR121-1	SRS-339	-
1966-F10	2439394.62	1966 Sep 26 0258	Lambda 4S	-	L-4S-1	0.000	ISAS	OF	G	Sat LEU A	ISTS7	RR661017-34	-
1966-F13	2439473.60	1966 Dec 20 0220	Lambda 4S	-	L-4S-2	0.009	ISAS	OF	G	Sat LEU A	ISTS7	-	-
1967-S117	2439527.59	1967 Feb 6 0210	Lambda 4S	-	L-4S-3	0.000	ISAS	HS	ISAS/MAG/Hatsuoaka,Ha.	Ionos/CR/XR Astron	WDCRF	APS4,44	-
1969-F03	2439593.61	1967 Apr 13 0240	Lambda 4S	-	L-4S-4	0.000	ISAS	OF	G	Sat LEU A	Asahi670413	SP-4008	-
1969-S69	2440238.35	1969 Jan 16 2028	Lambda 3H	-	L-3H-4	0.000	ISAS	HF	ISAS/ KYO/Tsukuda	Ionos	ISASBull	WDCRF	-
1969-S460	2440267.59	1969 Sep 3 0210:00	Lambda 4I	-	L-4I-1	0.000	ISAS	TS	ISAS/ ISAS/Obayashi	Test	ISAS-Doc379	ISST9	-
1969-F13	2440486.59	1969 Sep 22 0210:00	Lambda 4S	-	L-4S-4	0.009	ISAS	OF	G	Sat LEU A	ISAS-Doc379	-	-
1970-S78	2440607.59	1970 Jan 21 0210	Lambda 3H	-	L-3H-6	0.000	ISAS	HS	G	Ionos/Plasma	WDC	ISST9	-
1970-S11	2440625.68	1970 Feb 11 0425	Lambda 4S	-	L-4S-5	0.024	ISAS	OS	G	Sat LEU A	ISST9	-	-
1970-S526	2440628.98	1970 Sep 19 1130	Lambda 4S	-	L-4S-5	0.000	ISAS	HS	MAG/Hayakawa	XR Astron/UV Astron	WDC	ISST9,ApSS17,30	-
1971-S395	2441183.50	1971 Aug 20	Lambda 3H	-	L-4S-1	0.000	ISAS	SF	ISAS/ ISAS/MAG/Hayakawa	Test	ISTS10	[Doc310: Aug 18]	-
1971-S432	2441198.00	1971 Sep 3 1200	Lambda 3H	-	L-4S-1	0.000	ISAS	HS	ISAS/ ISAS/MAG/Hayakawa	Aeron/Tonos/XR Ast	WDCRF	ISTS10	-
1973-S56	2441710.72	1973 Jan 28 0515	Lambda 4S	-	L-4S-2	0.000	ISAS	SS	ISAS/ ISAS/MAG/Hayakawa	Test	ISASDoc312	APS32.11	-
1974-S72	2442093.96	1974 Jan 22 1100	Lambda 3H	-	L-3H-7	0.000	ISAS	HS	ISAS/ ISAS/MAG/Hayakawa	XR Astron	ShctCon2	-	-
1974-S288	2442279.73	1974 Aug 20 0530	Lambda 4S	-	L-3H-8	0.000	ISAS	SS	ISAS/ ISAS/MAG/Hayakawa	Test	FirstDayCover	meisei.co.jp	-
1976-S557	2443021.73	1976 Aug 30 0535	Lambda 4S	-	L-4S-3	0.000	ISAS	SS	ISAS/ ISAS/MAG/Hayakawa	Test	ISAS-Doc312	meisei.co.jp	-
1977-S230	2443371.97	1977 Aug 16 1115	Lambda 3H	-	L-4S-4	0.000	ISAS	SS	ISAS/ ISAS/MAG/Hayakawa	Aeron/Tonos/Plasma	JG532,1651	WDCRF	-
1979-S263	2444136.60	1979 Sep 20 0230	Lambda 4S	-	L-4S-5	0.000	ISAS	SS	ISAS/ ISAS/MAG/Hayakawa	Test	ISAS-SBS-K676	ISAS-Doc470	-



Launch

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Mission	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee_km	Range_km	Dest
1965-A235	2438834-50	1965 Mar 15	Lance	-	XMG-52A FT-1	-	WS	-	-	-	10?	-	-
1965-A246	2438865-50	1965 Apr 15	Lance	-	-	-	WS	-	-	-	10?	-	-
1965-A247	2438880-50	1965 May	Lance	-	-	-	WS	-	-	-	10?	-	-
1965-A248	2438962-50	1965 Jul 21	Lance	-	-	-	WS	-	-	-	10?	-	-
1965-A241	2438975-50	1965 Aug 3	Lance	-	-	-	WS	LC33	-	-	10?	-	-
1965-A242	2438990-50	1965 Aug 18	Lance	-	-	-	WS	-	-	-	10?	-	-
1965-A249	2438972-50	1965 Aug	Lance	-	-	-	WS	-	-	-	10?	-	-
1965-A250	2439024-50	1965 Sep 21	Lance	-	FT-5	-	WS	-	-	-	10?	-	-
1965-A251	2439026-50	1965 Sep 23	Lance	-	-	-	WS	-	-	-	10?	-	-
1965-A252	2439043-50	1965 Oct 10	Lance	-	-	-	WS	-	-	-	10?	-	-
1965-A253	2439064-50	1965 Nov	Lance	-	-	-	WS	-	-	-	10?	-	-
1965-A254	2439062-50	1965 Nov 18	Lance	-	FT-12	-	WS	-	-	-	10?	-	-
1965-A255	2439094-50	1965 Dec	Lance	-	-	-	WS	-	-	-	10?	-	-
1965-A256	2439094-50	1965 Dec	Lance	-	-	-	WS	-	-	-	10?	-	-
1965-A257	2439094-50	1965 Dec	Lance	-	-	-	WS	-	-	-	10?	-	-
1966-A164	2439151-50	1966 Jan 26	Lance	-	16	-	WS	-	-	-	10?	-	-
1966-A165	2439223-50	1966 Apr 8	Lance	-	17RBL	-	WS	-	-	-	10?	-	-
1966-A166	2439230-50	1966 Apr 15	Lance	-	18RBL	031	WS	-	-	-	10?	-	-
1966-A167	2439243-50	1966 Apr 28	Lance	-	19RBL	028	WS	-	-	-	10?	-	-
1966-A168	2439249-50	1966 May 4	Lance	-	-	-	WS	-	-	-	10?	-	-
1966-A169	2439272-50	1966 May 27	Lance	-	20RBL	043	WS	-	-	-	10?	-	-
1966-A170	2439300-50	1966 Jun 24	Lance	-	21RBL	032	WS	-	-	-	10?	-	-
1966-A171	2439306-50	1966 Jun 30	Lance	-	-	-	WS	-	-	-	10?	-	-
1966-A172	2439307-50	1966 Jul 1	Lance	-	22	-	WS	-	-	-	10?	-	-
1966-A173	2439312-50	1966 Jul 6	Lance	-	23	-	WS	-	-	-	10?	-	-
1966-A174	2439333-50	1966 Jul 27	Lance	-	FT-27	-	WS	-	-	-	10?	-	-
1966-A175	2439333-50	1966 Jul 15	Lance	-	24RGT	026	WS	-	-	-	10?	-	-
1966-A176	2439321-50	1966 Jul 22	Lance	-	25RSL	046	WS	-	-	-	10?	-	-
1966-A177	2439328-50	1966 Jul 27	Lance	-	26	-	WS	-	-	-	10?	-	-
1966-A178	2439333-50	1966 Aug 5	Lance	-	27RST	033	WS	-	-	-	10?	-	-
1966-A179	2439342-50	1966 Aug 10	Lance	-	28RST	019	WS	-	-	-	10?	-	-
1966-A180	2439347-50	1966 Aug 12	Lance	-	29RML	024	WS	-	-	-	10?	-	-
1966-A181	2439349-50	1966 Aug 30	Lance	-	30RBL	064	WS	-	-	-	10?	-	-
1966-A182	2439375-50	1966 Sep 7	Lance	-	31RBL	061	WS	-	-	-	10?	-	-
1966-A183	2439381-50	1966 Sep 13	Lance	-	32RGT	047	WS	-	-	-	10?	-	-
1966-A184	2439396-50	1966 Sep 28	Lance	-	33RBL	055	WS	-	-	-	10?	-	-
1966-A185	2439401-50	1966 Oct 3	Lance	-	34	-	WS	-	-	-	10?	-	-
1966-A186	2439423-50	1966 Oct 27	Lance	-	35RML	067	WS	-	-	-	10?	-	-
1966-A187	2439433-50	1966 Nov 4	Lance	-	36RBL	063	WS	-	-	-	10?	-	-
1966-A188	2439438-50	1966 Nov 9	Lance	-	37RBL	111	WS	-	-	-	10?	-	-
1966-A189	2439456-50	1966 Nov 29	Lance	-	38RBL	TP-6	WS	LC33	-	-	10?	-	-
1967-A177	2439546-50	1967 Feb 27	Lance	-	39RST	TP-6	WS	-	-	-	10?	-	-
1967-A176	2439559-50	1967 Mar 10	Lance	-	40RST	TP-12	WS	-	-	-	10?	-	-
1967-A175	2439570-50	1967 Mar 21	Lance	-	41RST	TP-54	WS	-	-	-	10?	-	-
1967-A180	2439580-50	1967 Mar 31	Lance	-	42RST	TP-25	WS	-	-	-	10?	-	-
1967-A181	2439580-50	1967 Apr 14	Lance	-	43RST	TP-43	WS	-	-	-	10?	-	-
1967-A182	2439604-50	1967 Apr 14	Lance	-	44	-	WS	-	-	-	10?	-	-
1967-A183	2439608-50	1967 Apr 28	Lance	-	45	-	WS	-	-	-	10?	-	-
1967-A184	2439635-50	1967 Apr 28	Lance	-	46RMT	TP-27	WS	-	-	-	10?	-	-
1967-A185	2439635-50	1967 May 25	Lance	-	-	-	WS	-	-	-	10?	-	-
1967-A186	2439641-50	1967 Jun	Lance	-	Air drop test	-	WS	-	-	-	10?	-	-
1967-A187	2439641-50	1967 Jun	Lance	-	Air drop test	-	WS	-	-	-	10?	-	-
1967-A188	2439641-50	1967 Jun	Lance	-	P-60 drop test	-	WS	LC33	-	-	10?	-	-
1967-A189	2439643-50	1967 Jun 2	Lance	-	-	-	WS	-	-	-	10?	-	-
1967-A190	2439653-50	1967 Jun 12?	Lance	-	47RMT	TP-21	WS	-	-	-	10?	-	-
1967-A191	2439671-50	1967 Jun 20	Lance	-	48RMT	P39	WS	-	-	-	10?	-	-
1967-A192	2439711-50	1967 Jun 29	Lance	-	49RBL	P52	WS	-	-	-	10?	-	-
1967-A193	2439716-50	1967 Aug 13	Lance	-	50RBL	TP-39	WS	-	-	-	10?	-	-
1967-A194	2439755-50	1967 Sep 22	Lance	-	51RML	TP-33	WS	-	-	-	10?	-	-
1967-A195	2439762-50	1967 Sep 29	Lance	-	52RPL	TP-59	WS	-	-	-	10?	-	-
1967-A196	2439780-50	1967 Oct 17	Lance	-	53RSL	XTB-59	WS	-	-	-	10?	-	-
1967-A197	2439783-50	1967 Oct 20	Lance	-	54RBL	XTB-59	WS	-	-	-	10?	-	-
1967-A198	2439833-50	1967 Dec 9	Lance	-	55RPT	P-27	WS	-	-	-	10?	-	-
1967-A199	2439833-50	1967 Dec 9	Lance	-	56RPT	P-27	WS	-	-	-	10?	-	-
1968-A150	2439858-50	1968 Feb 3	Lance	-	57RPT	P-56	WS	-	-	-	10?	-	-
1968-A151	2439909-50	1968 Feb 23	Lance	-	58RPT	P-63	WS	-	-	-	10?	-	-
1968-A152	2440004-50	1968 May 28	Lance	-	59RPT	P-101	WS	-	-	-	10?	-	-
1968-A153	2440007-50	1968 Jun 20	Lance	-	59RPT	P-37	WS	-	-	-	10?	-	-
1968-A132	2440068-50	1968 Aug 30	Lance	-	60RPT	7102	WS	-	-	-	10?	-	-
1968-A154	2440124-50	1968 Sep 25	Lance	-	61RPT	1101	WS	-	-	-	10?	-	-
1968-A155	2440147-50	1968 Oct 18	Lance	-	62RPT	1102	WS	-	-	-	10?	-	-
1968-A156	2440243-50	1968 Jan 22	Lance	-	63	1103	WS	-	-	-	10?	-	-
1969-A234	2440248-50	1969 Jan 27	Lance	-	64RML	1106	WS	LC33	-	-	10?	-	-
1969-A231	2440280-50	1969 Mar 13	Lance	-	Recert flight 5	-	WS	-	-	-	10?	-	-
1969-A219	2440283-50	1969 Mar 13	Lance	-	XBL Test 1	-	WS	-	-	-	10?	-	-
1969-A235	2440311-50	1969 Apr 8	Lance	-	65RPT	7101	WS	-	-	-	10?	-	-
1969-A232	2440349-50	1969 May 8	Lance	-	66RML	1107	WS	-	-	-	10?	-	-
1969-A236	2440354-50	1969 May 13	Lance	-	67RGL	7104	WS	-	-	-	10?	-	-
1969-A220	2440413-50	1969 Jul 11	Lance	-	-	-	WS	-	-	-	10?	-	-
1969-A237	2440474-50	1969 Sep 10	Lance	-	XBL Test	5134	WS	-	-	-	10?	-	-
1969-A238	2440496-50	1969 Oct 2	Lance	-	68RGT	5135	WS	-	-	-	10?	-	-
1969-A239	2440516-50	1969 Oct 22	Lance	-	69RGL	3101	WS	-	-	-	10?	-	-
1969-A240	2440516-50	1969 Oct 22	Lance	-	70	3101	WS	-	-	-	10?	-	-
1969-A241	2440518-50	1969 Oct 24	Lance	-	-	-	WS	-	-	-	10?	-	-
1969-A242	2440522-50	1969 Oct 28	Lance	-	XBL Test	3103	WS	-	-	-	10?	-	-
1969-A243	2440537-50	1969 Nov 12	Lance	-	71	3104	WS	-	-	-	10?	-	-
1969-A244	2440565-50	1969 Dec 10	Lance	-	72	3103	WS	-	-	-	10?	-	-
1970-A191	2440598-50	1970 Jan 12	Lance	-	73	3102	WS	-	-	-	10?	-	-
1970-A192	2440614-50	1970 Jan 28	Lance	-	74	5101	WS	-	-	-	10?	-	-
1970-A192	2440614-50	1970 Jan 28	Lance	-	75	5101	WS	-	-	-	10?	-	-





Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Mission	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee_Km	Range_Km	Dest
1972-A186	2441316-50	1972	Lance	-	162	-	WS	-	-	-	10?	-	-
1972-A187	2441585-50	1972 Sep 25	Lance	-	163RBL/2154	-	WS	-	-	-	10?	-	-
1972-A188	2441589-50	1972 Sep 29	Lance	-	164ESL/5175	-	WS	-	-	-	10?	-	-
1972-A189	2441608-50	1972 Oct 18	Lance	-	165RBT/2138	-	WS	-	-	-	10?	-	-
1972-A190	2441627-50	1972 Nov 6	Lance	-	166EET/2310	-	WS	-	-	-	10?	-	-
1972-A191	2441629-50	1972 Nov 8?	Lance	-	167APT/2183	-	WS	-	-	-	10?	-	-
1972-A192	2441631-20	1972 Nov 9 4650	Lance	-	168APT/2184	-	WS	LC39	-	-	10?	-	-
1972-A193	2441631-38	1972 Nov 9 2100	Lance	-	169APL/2186	-	WS	-	-	-	10?	-	-
1972-A194	2441635-50	1972 Nov 14	Lance	-	170APT/2383	-	WS	-	-	-	10?	-	-
1972-A195	2441638-50	1972 Nov 17	Lance	-	171 / 2177	-	WS	-	-	-	10?	-	-
1972-A196	2441638-50	1972 Nov 17	Lance	-	172 / 2184	-	WS	-	-	-	10?	-	-
1972-A197	2441638-50	1972 Dec 1	Lance	-	173 / 2188	-	WS	-	-	-	10?	-	-
1972-A198	2441652-50	1972 Dec 6	Lance	-	174ESL/2180	-	WS	-	-	-	10?	-	-
1972-A199	2441667-50	1972 Dec 13	Lance	-	176RCL/2147	-	WS	-	-	-	10?	-	-
1972-A200	2441669-50	1972 Dec 18	Lance	-	176SS/2170	-	WS	-	-	-	10?	-	-
1972-A201	2441672-50	1972 Dec 21	Lance	-	177ES/2382	-	WS	-	-	-	10?	-	-
1972-A202	2441673-50	1972 Dec 22	Lance	-	178ES/2148	-	WS	-	-	-	10?	-	-
1972-A203	2441673-50	1972 Dec 22	Lance	-	179EST/2381	-	WS	-	-	-	10?	-	-
1972-A204	2441691-50	1973 Jan 9	Lance	-	180EST/2148	-	WS	-	-	-	10?	-	-
1972-A205	2441698-50	1973 Jan 16	Lance	-	181ES/2174	-	WS	-	-	-	10?	-	-
1972-A206	2441701-50	1973 Jan 19	Lance	-	182ES/2384	-	WS	-	-	-	10?	-	-
1972-A207	2441705-50	1973 Jan 23	Lance	-	183ES/2176	-	WS	-	-	-	10?	-	-
1972-A208	2441740-50	1973 Feb 27	Lance	-	184ES/2385	-	WS	-	-	-	10?	-	-
1972-A209	2441791-50	1973 Apr 19	Lance	-	186RCL/2237	-	WS	-	-	-	10?	-	-
1972-A210	2441806-50	1973 May 4	Lance	-	187RCL/2238	-	WS	-	-	-	10?	-	-
1972-A211	2441855-50	1973 Jun 21	Lance	-	188RCL/2169	-	WS	-	-	-	10?	-	-
1972-A212	2441855-50	1973 Jun 22	Lance	-	189RCL/2426	-	WS	-	-	-	10?	-	-
1972-A213	2441890-50	1973 Jun 22	Lance	-	190RCL/2164	-	WS	-	-	-	10?	-	-
1972-A214	2441916-50	1973 Aug 22	Lance	-	191RCL/2386	-	WS	-	-	-	10?	-	-
1972-A215	2441920-50	1973 Aug 22	Lance	-	192RCL/2165	-	WS	-	-	-	10?	-	-
1972-A216	2441936-50	1973 Sep 13	Lance	-	193RCL/2121	-	WS	-	-	-	10?	-	-
1972-A217	2441981-50	1973 Sep 26	Lance	-	194APT/2185	-	WS	-	-	-	10?	-	-
1972-A218	2441981-50	1973 Sep 26	Lance	-	195APT/2186	-	WS	-	-	-	10?	-	-
1972-A219	2441983-50	1973 Sep 26	Lance	-	196APT/2500	-	WS	-	-	-	10?	-	-
1972-A220	2441989-50	1973 Oct 4	Lance	-	197APT/2207	-	WS	-	-	-	10?	-	-
1972-A221	2441989-50	1973 Oct 4	Lance	-	198APT/2180	-	WS	-	-	-	10?	-	-
1972-A222	2441985-50	1973 Oct 4	Lance	-	199APT/2181	-	WS	-	-	-	10?	-	-
1972-A223	2441985-50	1973 Oct 4	Lance	-	200APT/2187	-	WS	-	-	-	10?	-	-
1972-A224	2441973-50	1973 Oct 18	Lance	-	201APT/2182	-	WS	-	-	-	10?	-	-
1972-A225	2441973-50	1973 Oct 18	Lance	-	202APT/2284	-	WS	-	-	-	10?	-	-
1972-A226	2441974-50	1973 Oct 19	Lance	-	203APT/2284	-	WS	-	-	-	10?	-	-
1972-A227	2442029-50	1973 Oct 19	Lance	-	204APT/2501	-	WS	-	-	-	10?	-	-
1972-A228	2442071-50	1973 Dec 13	Lance	-	205APT/2507	-	WS	-	-	-	10?	-	-
1972-A229	2442071-50	1974 Jan 24	Lance	-	206APT/2208	-	WS	-	-	-	10?	-	-
1972-A230	2442071-50	1974 Jan 24	Lance	-	207APT/2208	-	WS	-	-	-	10?	-	-
1972-A231	2442076-50	1974 Jan 31	Lance	-	208APT/2206	-	WS	-	-	-	10?	-	-
1972-A232	2442076-50	1974 Jan 31	Lance	-	209APT/2206	-	WS	-	-	-	10?	-	-
1972-A233	2442085-50	1974 Feb 7	Lance	-	210APT/2579	-	WS	-	-	-	10?	-	-
1972-A234	2442085-50	1974 Feb 7	Lance	-	211RST/2118	-	WS	-	-	-	10?	-	-
1972-A235	2442078-50	1974 Feb 7	Lance	-	212APT/2117	-	WS	-	-	-	10?	-	-
1972-A236	2442173-50	1974 Apr 4	Lance	-	213APT/2218	-	WS	-	-	-	10?	-	-
1972-A237	2442141-50	1974 Apr 4	Lance	-	214APT/2563	-	WS	-	-	-	10?	-	-
1972-A238	2442148-50	1974 Apr 11	Lance	-	215APT/2476	-	WS	-	-	-	10?	-	-
1972-A239	2442148-50	1974 Apr 11	Lance	-	216RST/2158	-	WS	-	-	-	10?	-	-
1972-A240	2442149-50	1974 Apr 12	Lance	-	217APT/2565	-	WS	-	-	-	10?	-	-
1972-A241	2442155-50	1974 Apr 18	Lance	-	218APT/2566	-	WS	-	-	-	10?	-	-
1972-A242	2442155-50	1974 Apr 18	Lance	-	219RBT/2132	-	WS	-	-	-	10?	-	-
1972-A243	2442160-50	1974 Apr 23	Lance	-	220APT/2186	-	WS	-	-	-	10?	-	-
1972-A244	2442162-50	1974 Apr 26	Lance	-	221RST/2134	-	WS	-	-	-	10?	-	-
1972-A245	2442163-50	1974 Apr 26	Lance	-	222RST/2132	-	WS	-	-	-	10?	-	-
1972-A246	2442169-50	1974 May 2	Lance	-	223RST/2132	-	WS	-	-	-	10?	-	-
1972-A247	2442174-50	1974 May 7	Lance	-	224RST/2246	-	WS	-	-	-	10?	-	-
1972-A248	2442176-50	1974 May 9	Lance	-	225RST/2246	-	WS	-	-	-	10?	-	-
1972-A249	2442182-50	1974 May 15	Lance	-	226RST/2246	-	WS	-	-	-	10?	-	-
1972-A250	2442190-50	1974 May 23	Lance	-	227RCL/2244	-	WS	-	-	-	10?	-	-
1972-A251	2442205-50	1974 Jun 7	Lance	-	228RST/2172	-	WS	-	-	-	10?	-	-
1972-A252	2442211-50	1974 Jun 13	Lance	-	229APT/2173	-	WS	-	-	-	10?	-	-
1972-A253	2442211-50	1974 Jun 21	Lance	-	230RCL/2242	-	WS	-	-	-	10?	-	-
1972-A254	2442226-50	1974 Jun 28	Lance	-	231APT/2559	-	WS	-	-	-	10?	-	-
1972-A255	2442239-50	1974 Jul 11	Lance	-	232APT/2561	-	WS	-	-	-	10?	-	-
1972-A256	2442239-50	1974 Jul 11	Lance	-	233RST/2189	-	WS	-	-	-	10?	-	-
1972-A257	2442240-50	1974 Jul 12	Lance	-	234APT/2212	-	WS	-	-	-	10?	-	-
1972-A258	2442246-50	1974 Jul 17	Lance	-	235APT/2212	-	WS	-	-	-	10?	-	-
1972-A259	2442246-50	1974 Jul 18	Lance	-	236APT/2562	-	WS	-	-	-	10?	-	-
1972-A260	2442246-50	1974 Jul 18	Lance	-	237APT/2220	-	WS	-	-	-	10?	-	-
1972-A261	2442253-50	1974 Jul 25	Lance	-	238APT/2214	-	WS	-	-	-	10?	-	-
1972-A262	2442253-50	1974 Oct 1	Lance	-	239APT/2900	-	WS	-	-	-	10?	-	-
1972-A263	2442321-50	1974 Oct 1	Lance	-	240APT/2224	-	WS	-	-	-	10?	-	-
1972-A264	2442323-50	1974 Oct 3	Lance	-	241APT/2228	-	WS	-	-	-	10?	-	-
1972-A265	2442323-50	1974 Oct 3	Lance	-	242APT/2225	-	WS	-	-	-	10?	-	-
1972-A266	2442330-50	1974 Oct 10	Lance	-	243APT/2221	-	WS	-	-	-	10?	-	-
1972-A267	2442330-50	1974 Oct 10	Lance	-	244APT/2229	-	WS	-	-	-	10?	-	-
1972-A268	2442337-50	1974 Oct 17	Lance	-	245APT/2231	-	WS	-	-	-	10?	-	-
1972-A269	2442337-50	1974 Oct 17	Lance	-	246APT/2231	-	WS	-	-	-	10?	-	-
1972-A270	2442344-50	1974 Oct 24	Lance	-	247APT/2901	-	WS	-	-	-	10?	-	-
1972-A271	2442344-50	1974 Oct 24	Lance	-	247APT/2226	-	WS	-	-	-	10?	-	-



Launch Mission

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Mission	Launch_Site	Platform	FlightCode	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee km	Range km	Dest
1979-A70	2443990-16	1979 Apr 26 1546	Lance	-	330ACL/A388	-	WS	-	-	WS	RAT	-	-	10?	-	-
1979-A71	2443996-19	1979 May 2 1629	Lance	-	331APT/3390	-	WS	-	-	WS	LC39	-	-	10?	-	-
1979-A72	2443993-50	1979 May	Lance	-	332MCL/A724	-	WS	-	-	WS	-	-	-	10?	-	-
1979-A73	2444046-13	1979 Jun 21 1510	Lance	-	333APT/3396	-	WS	-	-	WS	LC39	-	-	10?	-	-
1979-A74	2444053-26	1979 Jun 28 1803	Lance	-	334APT/3390	-	WS	-	-	WS	LC39	-	-	10?	-	-
1979-A75	2444099-38	1979 Aug 13 2100	Lance	-	335MCL/A819	-	WS	-	-	WS	LC33	-	-	10?	-	-
1979-A76	2444141-36	1979 Sep 24 2032	Lance	-	336ECL/A312	-	WS	-	-	WS	LC33	-	-	10?	-	-
1979-A77	2444158-08	1979 Oct 11 1400	Lance	-	337DSL/2222	-	WS	-	-	WS	LC33	-	-	10?	-	-
1979-A78	2444186-10	1979 Nov 8 1430	Lance	-	338MCL/A883	-	WS	-	-	WS	RL10	-	-	10?	-	-
1979-A79	2444213-45	1979 Dec 5 2260	Lance	-	339DSL/2491	-	WS	-	-	WS	LC33	-	-	10?	-	-
1980-A67	2444242-12	1980 Jan 3 1487	Lance	-	340ECL/3357	-	WS	Spec Site	-	WS	SPEC	-	-	10?	-	-
1980-A68	2444296-47	1980 Feb 28 2315:03	Lance	-	341MCL/3871	-	WS	-	-	WS	RAT	-	-	10?	-	-
1980-A69	2444304-18	1980 Mar 5 1619:01	Lance	-	342ECL/A998	-	WS	-	-	WS	RAT	-	-	10?	-	-
1980-A70	2444341-16	1980 Apr 11 1555	Lance	-	343MCL/3717	-	WS	-	-	WS	DLN	-	-	10?	-	-
1980-A71	2444346-12	1980 Apr 16 1500	Lance	-	344ECL/5953	-	WS	-	-	WS	DLN	-	-	10?	-	-
1980-A72	2444355-11	1980 Apr 25 1437	Lance	-	345ECL/4382	-	WS	-	-	WS	DLN	-	-	10?	-	-
1980-A73	2444362-09	1980 May 2 1409	Lance	-	346ECL/A362	-	WS	-	-	WS	RL10	-	-	10?	-	-
1980-A74	2444369-30	1980 May 9 1908	Lance	-	347APT/4570	-	WS	-	-	WS	LC39	-	-	10?	-	-
1980-A75	2444371-92	1980 May 12 0959	Lance	-	348APT/4586	-	WS	-	-	WS	LC39	-	-	10?	-	-
1980-A76	2444408-10	1980 May 17 1415	Lance	-	349APT/2419	-	WS	-	-	WS	LC39	-	-	10?	-	-
1980-A77	2444411-09	1980 Jun 17 1421:38	Lance	-	350ECL/3974	-	WS	Spec	-	WS	SPEC	-	-	10?	-	-
1980-A78	2444422-11	1980 Jun 20 1405:32	Lance	-	351ECL/A244	-	WS	-	-	WS	SPEC	-	-	10?	-	-
1980-A79	2444425-38	1980 Jul 1 1443	Lance	-	352ECL/A379	-	WS	-	-	WS	DLN	-	-	10?	-	-
1980-A80	2444431-07	1980 Jul 10 1335	Lance	-	353MPL/5194	-	WS	-	-	WS	DLN	-	-	10?	-	-
1980-A81	2444451-94	1980 Sep 29 1031	Lance	-	354ECL/A240	-	WS	-	-	WS	DLN	-	-	10?	-	-
1980-A82	2444513-14	1980 Sep 30 1517	Lance	-	355APT/4520	-	WS	-	-	WS	LC39	-	-	10?	-	-
1980-A83	2444514-35	1980 Oct 1 2017	Lance	-	356DSL/2227	-	WS	-	-	WS	LC39	-	-	10?	-	-
1980-A84	2444515-19	1980 Oct 2 1634	Lance	-	357APT/4571	-	WS	-	-	WS	LC39	-	-	10?	-	-
1980-A85	2444526-09	1980 Oct 13 1400	Lance	-	358MCL/4502	-	WS	-	-	WS	LC39	-	-	10?	-	-
1980-A86	2444585-14	1980 Dec 11 1520	Lance	-	359APT/4646	-	WS	-	-	WS	LC39	-	-	10?	-	-
1981-A41	2444685-25	1981 Feb 19 1600	Lance	-	360DSL/2513	-	WS	-	-	WS	LC39	-	-	10?	-	-
1981-A42	2444689-17	1981 Feb 23 1606	Lance	-	361APT/4243	-	WS	-	-	WS	LC39	-	-	10?	-	-
1981-A43	2444693-21	1981 Feb 27 1702	Lance	-	362APT/4246	-	WS	-	-	WS	LC39	-	-	10?	-	-
1981-A44	2444768-25	1981 Jun 12 1946	Lance	-	363APT/4575	-	WS	-	-	WS	LC39	-	-	10?	-	-
1981-A45	2444772-32	1981 Jun 16 1936:59	Lance	-	364APT/4575	-	WS	-	-	WS	LC39	-	-	10?	-	-
1981-A46	2444775-35	1981 Jun 19 2034:52	Lance	-	365APT/5338	-	WS	-	-	WS	LC39	-	-	10?	-	-
1981-A47	2444802-17	1981 Jul 16 1600	Lance	-	366MPL/5336	-	WS	-	-	WS	LC39	-	-	10?	-	-
1981-A48	2444811-37	1981 Oct 2 1600	Lance	-	367MCL/4572	-	WS	-	-	WS	RAT	-	-	10?	-	-
1981-A49	2444815-31	1981 Nov 2 2094	Lance	-	368DSL/5536	-	WS	-	-	WS	LC39	-	-	10?	-	-
1981-A50	2444822-01	1981 Nov 6 1921:34	Lance	-	369DSL/2518	-	WS	-	-	WS	LC39	-	-	10?	-	-
1981-A51	2444828-06	1981 Nov 13 1211	Lance	-	370APT/4576	-	WS	-	-	WS	LC39	-	-	10?	-	-
1981-A52	2444835-06	1981 Nov 16 1946	Lance	-	371APT/4579	-	WS	-	-	WS	LC39	-	-	10?	-	-
1982-A65	2444836-50	1982 Dec 25 1606	Lance	-	372APT/4573	-	WS	-	-	WS	LC39	-	-	10?	-	-
1982-A66	2444836-17	1982 Feb 25 1606	Lance	-	373MCL/4577	-	WS	-	-	WS	DLN	-	-	10?	-	-
1982-A67	2444810-09	1982 May 11 1415	Lance	-	374MCT/4536	-	WS	-	-	WS	DLN	-	-	10?	-	-
1982-A68	2444810-09	1982 May 11 1415	Lance	-	375MCT/4536	-	WS	-	-	WS	DLN	-	-	10?	-	-
1982-A69	2444810-09	1982 May 17 1506:06	Lance	-	376APT/4537	-	WS	-	-	WS	DLN	-	-	10?	-	-
1982-A70	2444810-13	1982 May 17 1506:06	Lance	-	377APT/4537	-	WS	-	-	WS	DLN	-	-	10?	-	-
1982-A81	244510-13	1982 May 20 1510:03	Lance	-	378APT/4537	-	WS	-	-	WS	LC39	-	-	10?	-	-
1982-A82	2445270-46	1982 Oct 30 2510:03	Lance	-	379MPL/4538	-	WS	-	-	WS	LC39	-	-	10?	-	-
1982-A83	2445270-46	1982 Oct 30 2510:03	Lance	-	379DSL/2323	-	WS	-	-	WS	LC39	-	-	10?	-	-
1982-A84	2445270-46	1982 Nov 6 1530:47	Lance	-	380DSL/4531	-	WS	-	-	WS	LC33	-	-	10?	-	-
1982-A85	2445370-15	1982 Nov 6 1530:47	Lance	-	381DSL/7850	-	WS	-	-	WS	LC33	-	-	10?	-	-
1982-A86	2445403-48	1983 Mar 6 2332:35	Lance	-	382MCL/4652	-	WS	-	-	WS	LC33	-	-	10?	-	-
1982-A87	2445403-50	1983 Mar 7 10	Lance	-	383	-	WS	-	-	WS	-	-	-	10?	-	-
1982-A88	2445393-50	1983 Mar 7 10	Lance	-	383	-	WS	-	-	WS	-	-	-	10?	-	-
1982-A89	2445451-18	1983 Mar 26 1619:48	Lance	-	384MST/4849	-	WS	-	-	WS	LC39	-	-	10?	-	-
1982-A90	2445451-00	1983 Apr 30 1200	Lance	-	385APT/4850	-	WS	-	-	WS	LC39	-	-	10?	-	-
1982-A91	2445455-00	1983 Apr 30 1200	Lance	-	386APT/4850	-	WS	-	-	WS	LC39	-	-	10?	-	-
1982-A92	2445459-13	1983 May 4 1507:28	Lance	-	387APT/4537	-	WS	-	-	WS	LC39	-	-	10?	-	-
1982-A93	2445485-30	1983 May 10 1915:05	Lance	-	388APT/4537	-	WS	-	-	WS	LC39	-	-	10?	-	-
1982-A94	2445501-48	1983 Jun 15 2330:04	Lance	-	389MPL/4537	-	WS	-	-	WS	LC39	-	-	10?	-	-
1982-A95	2445508-48	1983 Jun 22 2330:04	Lance	-	390MPL/4537	-	WS	-	-	WS	LC39	-	-	10?	-	-
1982-A96	2445600-65	1983 Sep 23 0329:20	Lance	-	391MPL/4537	-	WS	-	-	WS	LC39	-	-	10?	-	-
1982-A97	2445603-50	1983 Sep 26 0329:20	Lance	-	392MPL/4537	-	WS	-	-	WS	LC39	-	-	10?	-	-
1982-A98	2445606-49	1983 Sep 28 2344:22	Lance	-	393MST/4584	-	WS	-	-	WS	LC39	-	-	10?	-	-
1982-A99	2445608-34	1983 Sep 30 2006:04	Lance	-	394MST/4584	-	WS	-	-	WS	LC39	-	-	10?	-	-
1983-A70	2445655-50	1983 Sep 17	Lance	-	395DSL/2549	-	WS	-	-	WS	DLN	-	-	10?	-	-
1983-A71	2445759-33	1984 Feb 28 1948:23	Lance	-	396MPL/2549	-	WS	-	-	WS	LC39	-	-	10?	-	-
1984-A48	2445801-22	1984 Apr 10 1718:26	Lance	-	397MPL/2549	-	WS	-	-	WS	LC39	-	-	10?	-	-
1984-A49	2445803-02	1984 Apr 12 1225:03	Lance	-	398	-	WS	-	-	WS	LC39	-	-	10?	-	-
1984-A50	2445804-50	1984 Apr 14	Lance	-	399	-	WS	-	-	WS	LC39	-	-	10?	-	-
1984-A51	2445871-18	1984 Jun 19 1620	Lance	-	399MPL/4534	-	WS	-	-	WS	LC39	-	-	10?	-	-
1984-A52	2445990-50	1984 Oct 17	Lance	-	405/2209	-	WS	-	-	WS	LC39	-	-	10?	-	-
1985-A25	2446117-50	1985 Feb 21	Lance	-	-	-	WS	-	-	WS	LC39	-	-	10?	-	-
1985-A26	2446179-50	1985 Apr 24	Lance	-	-	-	WS	-	-	WS	LC39	-	-	10?	-	-
1985-A27	2446510-50	1986 Apr 21	Lance	-	-	-	WS	-	-	WS	LC39	-	-	10?	-	-
1985-A28	2446510-50	1986 Apr 24	Lance	-	-	-	WS	-	-	WS	LC39	-	-	10?	-	-
1985-A29	2446584-50	1986 Mar 11	Lance	-	-	-	WS	-	-	WS	LC39	-	-	10?	-	-
1987-A43	2446900-50	1987 Apr 15	Lance	-	-	-	WS	-	-	WS	LC39	-	-	10?	-	-
1987-A44	2446900-50	1987 Apr 15	Lance	-	-	-	WS	-	-	WS	LC39	-	-	10?	-	-
1987-A45	2446936-50	1987 May 21	Lance	-	-	-	WS	-	-	WS	LC39	-	-	10?	-	-
1987-A46	2447067-50	1987 Sep 29	Lance	-	-	-	WS	-	-	WS	LC39	-	-	10?	-	-
1987-A47	2447067-50	1987 Sep 29	Lance	-	-	-	WS	-	-	WS	LC39	-	-	10?	-	-
1987-A48	2447104-50	1987 Nov 5	Lance	-	-	-	WS	-	-	WS	LC39	-	-	10?	-	-
1987-A49	2447152-50	1987 Dec 23	Lance	-	-	-	WS	-	-	WS	LC39	-	-	10?	-	-
1988-A99	2447214-50	1988 Feb 23	Lance	-	-	-	WS	-	-	WS	LC39	-	-	10?	-	-
1988-A100	2447300-50	1988 May 19	Lance	-	-	-	WS	-	-	WS	LC39	-	-	10?	-	-
1988-A101	2447461-50	1988 Oct 27	Lance	-	-	-	WS	-	-	WS	LC39	-	-	10?	-	-
1989-A17	2447684-50	1989 Jun 7	Lance	-	-	-	WS	-	-	WS	LC39	-	-	10?	-	-
1989-A17	2447684-50	1989 Jun 7	Lance</													

Launch

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Mission	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee km	Range km	Dest
1989-A31	2447787-50	1989 Sep 18	Lance	-	-	-	-	WS	-	-	-	10?	-	-
1989-A32	2447787-50	1989 Sep 18	Lance	-	-	-	-	WS	-	-	-	10?	-	-
1991-A28	2448381-50	1991 May 5	Lance	-	-	-	-	WS	-	-	-	10?	-	-
1992-A21	2448692-50	1992 Mar 11	Lance	-	Test firing	-	-	MANFI	-	-	-	10?	-	-
1992-A22	2448699-50	1992 Mar 18	Lance	-	Test firing	-	-	MANFI	-	-	-	10?	-	-
1992-A24	2448784-50	1992 Jun 11	Lance	-	-	-	-	WS	-	-	-	10?	-	-
1992-A23	2448973-50	1992 Dec 17	Lance	-	Test firing	-	-	MANFI	-	-	-	10?	-	-
1993-A18	2449146-50	1993 Jun 8	Lance	-	ERLMT Target	-	-	WS	-	-	-	10?	-	-
1994-A09	2449616-50	1994 Sep 21	Lance	-	Hawk target	-	-	WS	-	-	-	10?	-	-
1994-A10	2449616-50	1994 Sep 21	Lance	-	-	-	-	WS	-	-	-	10?	-	-
1994-A11	2449660-50	1995 Sep	Lance	-	-	-	-	WS	-	-	-	10?	-	-
1995-A11	2449660-50	1995 Sep	Lance	-	Hawk Target	-	-	WS	-	-	-	10?	-	-
1995-A08	2450068-50	1995 Dec 7	Lance	-	Hawk Target	-	-	WS	-	-	-	10?	-	-
1995-A09	2450069-50	1995 Dec 8	Lance	-	Hawk Target	-	-	WS	-	-	-	10?	-	-
1995-A10	2450069-50	1995 Dec 8	Lance	-	Hawk Target	-	-	WS	-	-	-	10?	-	-
1996-A17	2450309-50	1996 Aug 14	Lance	-	Hawk Target	-	-	WS	-	-	-	20?	-	-
1996-A18	2450310-50	1996 Aug 15	Lance	-	Hawk Target	-	-	WS	-	-	-	20?	-	-
1996-A19	2450316-50	1996 Aug 21	Lance	-	Hawk Target	-	-	WS	-	-	-	20?	-	-
1996-A12	2450317-50	1996 Aug 22	Lance	-	Hawk Target	-	-	WS	-	-	-	20?	-	-
1996-A14	2450323-50	1996 Aug 28	Lance	-	Hawk Target	-	-	WS	-	-	-	20?	-	-
1996-A20	2450325-50	1996 Aug 30	Lance	-	Hawk Target	-	-	WS	-	-	-	20?	-	-
1996-A15	2450424-50	1996 Dec 7	Lance	-	Hawk Target	-	-	WS	-	-	-	40?	-	-
1997-A57	2450473-15	1997 Jan 24 1530?	Lance	-	Aegis Target	-	-	WS	-	-	-	10?	-	-
2000-A11	2451893-50	2000 Dec 15	Lance	-	Patriot Target	-	-	WS	-	-	-	10?	-	-
2002-A23	2452535-50	2002 Sep 18	Lance	-	-	-	-	WS	-	-	-	10?	-	-
2002-A24	2452535-50	2002 Sep 18	Lance	-	-	-	-	WS	-	-	-	10?	-	-
2003-A24	2452639-50	2003 Q1	Lance	-	RF	MLP Test (F703)	-	MLP	-	-	-	40?	-	-
2003-A25	2452639-50	2003 Q1	Lance	-	RF	MLP Test (F703)	-	MLP	-	-	-	40?	-	-
2006-A09	2453979-50	2006 May 24	Lance	-	Aegis SBT Target	Unitary SBT	-	MANFI	-	-	-	50?	-	-
2009-A02	2454917-31	2009 Mar 26 1920?	Lance	-	Aegis SH-2 target	SBT	-	SMT	-	-	-	10?	-	-
2013-A53	2456473-50	2013 JUL	Lance	-	MEADS Target	-	-	WS?	-	-	-	10?	-	-
2013-A54	2456473-50	2013 JUL	Lance	-	MEADS Target	-	-	WS?	-	-	-	10?	-	-
2013-A55	2456473-50	2013 JUL	Lance	-	MEADS Target	-	-	WS?	-	-	-	10?	-	-
2013-A56	2456504-50	2013 Aug?	Lance	-	MEADS Target	-	-	WS?	-	-	-	10?	-	-
2013-A57	2456504-50	2013 Aug?	Lance	-	MEADS Target	-	-	WS?	-	-	-	10?	-	-
2013-A58	2456535-50	2013 Sep?	Lance	-	MEADS Target	-	-	WS?	-	-	-	10?	-	-
2013-A59	2456535-50	2013 Sep?	Lance	-	MEADS Target	-	-	WS?	-	-	-	10?	-	-
2013-A40	2456565-50	2013 Oct?	Lance	-	MEADS Target	-	-	WS?	-	-	-	10?	-	-
2013-A41	2456565-50	2013 Oct?	Lance	-	MEADS Target	-	-	WS?	-	-	-	10?	-	-
2013-A42	2456602-50	2013 Nov 6	Lance	-	MEADS Target	-	-	WS?	-	-	-	10?	-	-
2014-A4	2457091-50	2015 Mar 0	Lance	-	Risk Reduction	-	-	WS?	-	-	-	10?	-	-
2015-A2	2457321-50	2015 Jul 29 0830	Lance	-	Aegis MW E1 Target	Stellar War Ax	Multi-Mission Warfare	WS?	-	-	-	20?	-	-
2015-S43	2457321-50	2015 Jul 29 0830	Lance	-	Aegis MW E2 Target	-	-	KAU	-	-	-	20?	-	-
2015-S43	2457321-50	2015 Jul 30 0615	Lance	-	Aegis MW E2 Target	-	-	KAU	-	-	-	20?	-	-
2016-A109	2457736-50	2016 Dec 14	Lance	-	SH-6 Target	-	-	KAU	-	-	-	10?	-	-



Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Agency	Launch_Code	Group	Category	LTCite	Cite	Notes
1965-4235	2438834.50	1965 Mar 15	Lance	-	XMK-52A FT-1	MICOM	NS	-	Test	army_mil	-	-
1965-4246	2438866.50	1965 Apr 15	Lance	-	-	MICOM	NS	-	Test	Ulrich/NSR	-	-
1965-4247	2438880.50	1965 May	Lance	-	-	MICOM	NS	-	Test	Ulrich/NSR	-	-
1965-4248	2438962.50	1965 Jul 21	Lance	-	-	MICOM	NS	-	Test	Ulrich/NSR	-	-
1965-4249	2438975.50	1965 Aug 3	Lance	-	-	MICOM	NS	-	Test	Ulrich/NSR	-	Dr Aug 5
1965-4250	2438990.50	1965 Aug 18	Lance	-	FT-5	MICOM	NS	-	Test	Ulrich/NSR	-	-
1965-4251	2438972.50	1965 Aug	Lance	-	-	MICOM	NS	-	Test	Ulrich/NSR	-	-
1965-4252	2439024.50	1965 Sep 21	Lance	-	-	MICOM	NS	-	Test	Ulrich/NSR	-	-
1965-4253	2439026.50	1965 Sep 23	Lance	-	-	MICOM	NS	-	Test	Ulrich/NSR	-	-
1965-4254	2439043.50	1965 Oct 10	Lance	-	FT-12	MICOM	NS	-	Test	Ulrich/NSR	-	-
1965-4255	2439082.50	1965 Nov 18	Lance	-	-	MICOM	NS	-	Test	Ulrich/NSR	-	-
1965-4256	2439094.50	1965 Dec	Lance	-	-	MICOM	NS	-	Test	Ulrich/NSR	-	-
1965-4256	2439094.50	1965 Dec	Lance	-	-	MICOM	NS	-	Test	Ulrich/NSR	-	-
1965-4256	2439094.50	1965 Dec	Lance	-	-	MICOM	NS	-	Test	Ulrich/NSR	-	-
1966-4614	2439151.50	1966 Jan 26	Lance	-	16	MICOM	NS	-	Test	Ulrich/NSR	-	-
1966-4615	2439223.50	1966 Apr 8	Lance	-	17RBL	MICOM	NS	-	Test	Ulrich/NSR	-	-
1966-4616	2439230.50	1966 Apr 15	Lance	-	18RBL	MICOM	NS	-	Test	Ulrich/NSR	-	-
1966-4617	2439243.50	1966 Apr 28	Lance	-	19RBL	MICOM	NS	-	Test	Ulrich/NSR	-	-
1966-4618	2439249.50	1966 May 4	Lance	-	-	MICOM	NS	-	Test	Ulrich/NSR	-	-
1966-4618	2439272.50	1966 May 27	Lance	-	20RBL	MICOM	NS	-	Test	Ulrich/NSR	-	-
1966-4619	2439300.50	1966 Jun 24	Lance	-	21RBL	MICOM	NS	-	Test	Ulrich/NSR	-	-
1966-4611	2439306.50	1966 Jun 30	Lance	-	-	MICOM	NS	-	Test	Ulrich/NSR	-	-
1966-4620	2439307.50	1966 Jul 1	Lance	-	22	MICOM	NS	-	Test	Ulrich/NSR	-	-
1966-4621	2439312.50	1966 Jul 6	Lance	-	FT-27	MICOM	NS	-	Test	Ulrich/NSR	-	-
1966-4612	2439333.50	1966 Jul 27	Lance	-	24RGT	MICOM	NS	-	Test	Ulrich/NSR	-	-
1966-4622	2439321.50	1966 Jul 15	Lance	-	26RSL	MICOM	NS	-	Test	Ulrich/NSR	-	-
1966-4623	2439326.50	1966 Jul 22	Lance	-	27RST	MICOM	NS	-	Test	Ulrich/NSR	-	-
1966-4624	2439333.50	1966 Aug 5	Lance	-	28RST	MICOM	NS	-	Test	Ulrich/NSR	-	-
1966-4625	2439342.50	1966 Aug 10	Lance	-	30RBL	MICOM	NS	-	Test	Ulrich/NSR	-	-
1966-4626	2439347.50	1966 Aug 12	Lance	-	31RBL	MICOM	NS	-	Test	Ulrich/NSR	-	-
1966-4613	2439367.50	1966 Aug 30	Lance	-	32RGT	MICOM	NS	-	Test	Ulrich/NSR	-	-
1966-4628	2439375.50	1966 Sep 7	Lance	-	34X3RBL	MICOM	NS	-	Test	army_mil	-	-
1966-4629	2439381.50	1966 Sep 13	Lance	-	34X3RBL	MICOM	NS	-	Test	army_mil	-	-
1966-4651	2439396.50	1966 Sep 28	Lance	-	EM Test 6	MICOM	NS	-	Test	army_mil	-	-
1966-4652	2439396.50	1966 Sep 28	Lance	-	35RML	MICOM	NS	-	Test	Ulrich/NSR	-	-
1966-4653	2439425.50	1966 Oct 5	Lance	-	36RML	MICOM	NS	-	Test	Ulrich/NSR	-	-
1966-4653	2439433.50	1966 Nov 4	Lance	-	38RBL	MICOM	NS	-	Test	Ulrich/NSR	-	-
1966-4653	2439436.50	1966 Nov 4	Lance	-	39RBL	MICOM	NS	-	Test	Ulrich/NSR	-	-
1967-4176	2439456.50	1967 Feb 27	Lance	-	40RBL	MICOM	NS	-	Test	Ulrich/NSR	-	-
1967-4176	2439456.50	1967 Feb 27	Lance	-	41RST	MICOM	NS	-	Test	Ulrich/NSR	-	-
1967-4179	2439559.50	1967 Mar 21	Lance	-	42RST	MICOM	NS	-	Test	Ulrich/NSR	-	-
1967-4180	2439590.50	1967 Mar 31	Lance	-	43RST	MICOM	NS	-	Test	Ulrich/NSR	-	-
1967-4181	2439590.50	1967 Apr 14	Lance	-	44RML	MICOM	NS	-	Test	Ulrich/NSR	-	-
1967-4182	2439606.50	1967 Apr 24	Lance	-	45RML	MICOM	NS	-	Test	Ulrich/NSR	-	-
1967-4183	2439606.50	1967 Apr 28	Lance	-	46RML	MICOM	NS	-	Test	Ulrich/NSR	-	-
1967-4184	2439641.50	1967 May 25	Lance	-	Air drop test	MICOM	NS	-	Test	army_mil	-	-
1967-4185	2439641.50	1967 Jun	Lance	-	Air drop test	MICOM	NS	-	Test	army_mil	-	-
1967-4174	2439643.50	1967 Jun	Lance	-	P-60	MICOM	NS	-	Test	Ulrich/NSR	-	-
1967-4156	2439653.50	1967 Jun 12	Lance	-	47RMT	MICOM	NS	-	Test	Ulrich/NSR	-	-
1967-4175	2439671.50	1967 Jun 30	Lance	-	48RMT	MICOM	NS	-	Test	Ulrich/NSR	-	-
1967-4156	2439731.50	1967 Aug 29	Lance	-	49RML	MICOM	NS	-	Test	Ulrich/NSR	-	-
1967-4157	2439746.50	1967 Aug 13	Lance	-	50RML	MICOM	NS	-	Test	Ulrich/NSR	-	-
1967-4158	2439756.50	1967 Sep 13	Lance	-	51RML	MICOM	NS	-	Test	Ulrich/NSR	-	-
1967-4159	2439762.50	1967 Sep 29	Lance	-	52RML	MICOM	NS	-	Test	Ulrich/NSR	-	-
1967-4176	2439780.50	1967 Oct 17	Lance	-	53RSL	MICOM	NS	-	Test	Ulrich/NSR	-	-
1967-4161	2439783.50	1967 Oct 17	Lance	-	54RSL	MICOM	NS	-	Test	Ulrich/NSR	-	-
1967-4190	2439833.50	1967 Dec 9	Lance	-	55RPT	MICOM	NS	-	Test	army_mil	-	-
1968-4150	2439858.50	1968 Jan 3	Lance	-	56RPT	MICOM	NS	-	Test	Ulrich/NSR	-	-
1968-4151	2439909.50	1968 Feb 23	Lance	-	57RPT	MICOM	NS	-	Test	Ulrich/NSR	-	-
1968-4152	2440004.50	1968 May 28	Lance	-	58RPT	MICOM	NS	-	Test	Ulrich/NSR	-	-
1968-4153	2440027.50	1968 May 20	Lance	-	59RPT	MICOM	NS	-	Test	Ulrich/NSR	-	-
1968-4156	2440088.50	1968 Aug 30	Lance	-	60RPT	MICOM	NS	-	Test	Ulrich/NSR	-	-
1968-4157	2440124.50	1968 Sep 25	Lance	-	61RPT	MICOM	NS	-	Test	Ulrich/NSR	-	-
1968-4157	2440147.50	1968 Oct 18	Lance	-	62RPT	MICOM	NS	-	Test	Ulrich/NSR	-	-
1968-4234	2440243.50	1969 Jan 22	Lance	-	63	MICOM	NS	-	Test	Ulrich/NSR	-	-
1969-4231	2440248.50	1969 Jan 27	Lance	-	64RML	MICOM	NS	-	Test	Ulrich/NSR	-	-
1969-4231	2440280.50	1969 Mar	Lance	-	Recart flight 5	MICOM	NS	-	Test	army_mil	-	-
1969-4231	2440293.50	1969 Mar 13	Lance	-	65RPT	MICOM	NS	-	Test	army_mil	-	-
1969-4235	2440311.50	1969 Apr	Lance	-	66RML	MICOM	NS	-	Test	Ulrich/NSR	-	-
1969-4236	2440349.50	1969 May 8	Lance	-	67RML	MICOM	NS	-	Test	Ulrich/NSR	-	-
1969-4236	2440354.50	1969 May 13	Lance	-	68RML	MICOM	NS	-	Test	Ulrich/NSR	-	-
1969-4237	2440413.50	1969 Jul 11	Lance	-	69RML	MICOM	NS	-	Test	army_mil	-	-
1969-4237	2440474.50	1969 Sep 10	Lance	-	70	MICOM	NS	-	Test	Ulrich/NSR	-	-
1969-4238	2440496.50	1969 Oct 2	Lance	-	69RST	MICOM	NS	-	Test	Ulrich/NSR	-	-
1969-4239	2440516.50	1969 Oct 10	Lance	-	69RST	MICOM	NS	-	Test	Ulrich/NSR	-	-
1969-4240	2440518.50	1969 Oct 24	Lance	-	71	MICOM	NS	-	Test	army_mil	-	-
1969-4240	2440522.50	1969 Oct 28	Lance	-	72	MICOM	NS	-	Test	Ulrich/NSR	-	-
1969-4241	2440537.50	1969 Dec 12	Lance	-	73	MICOM	NS	-	Test	Ulrich/NSR	-	-
1969-4242	2440565.50	1969 Dec 10	Lance	-	74	MICOM	NS	-	Test	Ulrich/NSR	-	-
1970-4191	2440598.50	1970 Jan 12	Lance	-	74	MICOM	NS	-	Test	Ulrich/NSR	-	-
1970-4192	2440614.50	1970 Jan 28	Lance	-	75	MICOM	NS	-	Test	Ulrich/NSR	-	-

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Launch_t	Agency	Launch_Code	Group	Category	LTCite	Cite	Notes
1970-A193	2440621.50	1970 Feb 4	Lance	-	76RMT	0.000	MICOM	NS	-	Test	Ulrich/MSHR	-	-
1970-A177	2440651.50	1970 Mar 6	Lance	-	77ST	0.000	MICOM	NS	-	Test	army_mil	-	-
1970-A194	2440659.50	1970 Mar 14	Lance	-	78RST	0.000	MICOM	NS	-	Test	Ulrich/MSHR	-	-
1970-A195	2440664.50	1970 Mar 19	Lance	-	79RBT	0.000	MICOM	NS	-	Test	Ulrich/MSHR	-	-
1970-A196	2440671.50	1970 Mar 26	Lance	-	80RML	0.000	MICOM	NS	-	Test	Ulrich/MSHR	-	-
1970-A197	2440682.50	1970 Apr 6	Lance	-	81RBL	0.000	MICOM	NS	-	Test	Ulrich/MSHR	-	-
1970-A198	2440691.50	1970 Apr 15	Lance	-	82	0.000	MICOM	NS	-	Test	Ulrich/MSHR	-	-
1970-A199	2440676.50	1970 Apr 30	Lance	-	83	0.000	MICOM	NS	-	Test	Ulrich/MSHR	-	-
1970-A200	2440706.50	1970 Apr 30	Lance	-	84RBL	0.000	MICOM	NS	-	Test	Ulrich/MSHR	-	-
1970-A201	2440721.50	1970 May 15	Lance	-	85RGL	0.000	MICOM	NS	-	Test	Ulrich/MSHR	-	-
1970-A202	2440725.50	1970 May 19	Lance	-	86RGL	0.000	MICOM	NS	-	Test	Ulrich/MSHR	-	-
1970-A203	2440734.50	1970 May 28	Lance	-	87RGL	0.000	MICOM	NS	-	Test	Ulrich/MSHR	-	-
1970-A204	2440762.50	1970 Jun 25	Lance	-	88	0.000	MICOM	NS	-	Test	Ulrich/MSHR	-	-
1970-A205	2440767.50	1970 Jun 30	Lance	-	89RGT	0.000	MICOM	NS	-	Test	Ulrich/MSHR	-	-
1970-A206	2440773.50	1970 Jul 6	Lance	-	90	0.000	MICOM	NS	-	Test	Ulrich/MSHR	-	-
1970-A207	2440788.50	1970 Jul 21	Lance	-	91	0.000	MICOM	NS	-	Test	Ulrich/MSHR	-	-
1970-A208	2440790.50	1970 Jul 23	Lance	-	92	0.000	MICOM	NS	-	Test	Ulrich/MSHR	-	-
1970-A209	2440796.50	1970 Jul 28	Lance	-	93	0.000	MICOM	NS	-	Test	Ulrich/MSHR	-	-
1970-A210	2440798.50	1970 Jul 31	Lance	-	94	0.000	MICOM	NS	-	Test	Ulrich/MSHR	-	-
1970-A211	2440804.50	1970 Aug 6	Lance	-	95	0.000	MICOM	NS	-	Test	Ulrich/MSHR	-	-
1970-A212	2440811.50	1970 Aug 13	Lance	-	96	0.000	MICOM	NS	-	Test	Ulrich/MSHR	-	-
1970-A213	2440818.50	1970 Aug 20	Lance	-	97	0.000	MICOM	NS	-	Test	Ulrich/MSHR	-	-
1970-A214	2440825.50	1970 Aug 27	Lance	-	98R	0.000	MICOM	NS	-	Test	Ulrich/MSHR	-	-
1970-A215	2440829.50	1970 Sep	Lance	-	99	0.000	MICOM	NS	-	Test	Ulrich/MSHR	-	-
1970-A216	2440859.50	1970 Oct	Lance	-	100	0.000	MICOM	NS	-	Test	Ulrich/MSHR	-	-
1970-A217	2440859.50	1970 Oct	Lance	-	101	0.000	MICOM	NS	-	Test	Ulrich/MSHR	-	-
1970-A218	2440859.50	1970 Oct	Lance	-	102	0.000	MICOM	NS	-	Test	Ulrich/MSHR	-	-
1970-A219	2440859.50	1970 Oct	Lance	-	103	0.000	MICOM	NS	-	Test	Ulrich/MSHR	-	-
1970-A220	2440859.50	1970 Oct	Lance	-	104	0.000	MICOM	NS	-	Test	Ulrich/MSHR	-	-
1970-A221	2440890.50	1970 Nov	Lance	-	105	0.000	MICOM	NS	-	Test	Ulrich/MSHR	-	-
1970-A222	2440890.50	1970 Nov	Lance	-	106	0.000	MICOM	NS	-	Test	Ulrich/MSHR	-	-
1970-A223	2440920.50	1970 Dec	Lance	-	107	0.000	MICOM	NS	-	Test	Ulrich/MSHR	-	-
1970-A224	2440920.50	1970 Dec	Lance	-	108	0.000	MICOM	NS	-	Test	Ulrich/MSHR	-	-
1971-A231	2440951.50	1971 Jan	Lance	-	109	0.000	MICOM	NS	-	Test	Ulrich/MSHR	-	-
1971-A232	2440952.50	1971 Feb	Lance	-	110	0.000	MICOM	NS	-	Test	Ulrich/MSHR	-	-
1971-A233	2441010.50	1971 Mar	Lance	-	111	0.000	MICOM	NS	-	Test	Ulrich/MSHR	-	-
1971-A234	2441010.50	1971 Mar	Lance	-	112	0.000	MICOM	NS	-	Test	Ulrich/MSHR	-	-
1971-A235	2441071.50	1971 May	Lance	-	113	0.000	MICOM	NS	-	Test	Ulrich/MSHR	-	-
1971-A236	2441071.50	1971 May	Lance	-	114	0.000	MICOM	NS	-	Test	Ulrich/MSHR	-	-
1971-A237	2441102.50	1971 Jun	Lance	-	115	0.000	MICOM	NS	-	Test	Ulrich/MSHR	-	-
1971-A238	2441102.50	1971 Jun	Lance	-	116	0.000	MICOM	NS	-	Test	Ulrich/MSHR	-	-
1971-A239	2441132.50	1971 Jun	Lance	-	117	0.000	MICOM	NS	-	Test	Ulrich/MSHR	-	-
1971-A240	2441132.50	1971 Jul	Lance	-	118	0.000	MICOM	NS	-	Test	Ulrich/MSHR	-	-
1971-A241	2441132.50	1971 Jul	Lance	-	119	0.000	MICOM	NS	-	Test	Ulrich/MSHR	-	-
1971-A242	2441132.50	1971 Jul	Lance	-	120	0.000	MICOM	NS	-	Test	Ulrich/MSHR	-	-
1971-A243	2441163.50	1971 Aug	Lance	-	121	0.000	MICOM	NS	-	Test	Ulrich/MSHR	-	-
1971-A244	2441163.50	1971 Aug	Lance	-	122	0.000	MICOM	NS	-	Test	Ulrich/MSHR	-	-
1971-A245	2441176.50	1971 Aug	Lance	-	123	0.000	MICOM	NS	-	Test	Ulrich/MSHR	-	-
1971-A246	2441183.50	1971 Aug	Lance	-	124RBT	0.000	MICOM	NS	-	Test	Ulrich/MSHR	-	-
1971-A247	2441183.50	1971 Aug	Lance	-	125RBT	0.000	MICOM	NS	-	Test	Ulrich/MSHR	-	-
1971-A248	2441190.50	1971 Aug	Lance	-	126RBT	0.000	MICOM	NS	-	Test	Ulrich/MSHR	-	-
1971-A249	2441197.50	1971 Sep	Lance	-	127RBT	0.000	MICOM	NS	-	Test	Ulrich/MSHR	-	-
1971-A250	2441211.50	1971 Sep	Lance	-	128	0.000	MICOM	NS	-	Test	Ulrich/MSHR	-	-
1971-A251	2441211.50	1971 Sep	Lance	-	129RBT	0.000	MICOM	NS	-	Test	Ulrich/MSHR	-	-
1971-A252	2441218.50	1971 Oct	Lance	-	130RBT	0.000	MICOM	NS	-	Test	Ulrich/MSHR	-	-
1971-A253	2441226.50	1971 Oct	Lance	-	131RBL	0.000	MICOM	NS	-	Test	Ulrich/MSHR	-	-
1971-A254	2441226.50	1971 Oct	Lance	-	132RBT	0.000	MICOM	NS	-	Test	Ulrich/MSHR	-	-
1971-A255	2441267.50	1971 Nov	Lance	-	133RBT	0.000	MICOM	NS	-	Test	Ulrich/MSHR	-	-
1971-A256	2441267.50	1971 Nov	Lance	-	134RBL	0.000	MICOM	NS	-	Test	Ulrich/MSHR	-	-
1971-A257	2441278.50	1971 Nov	Lance	-	135RBT	0.000	MICOM	NS	-	Test	Ulrich/MSHR	-	-
1971-A258	2441285.50	1971 Nov	Lance	-	136RBT	0.000	MICOM	NS	-	Test	Ulrich/MSHR	-	-
1971-A259	2441292.50	1971 Dec	Lance	-	137	0.000	MICOM	NS	-	Test	Ulrich/MSHR	-	-
1971-A260	2441294.50	1971 Dec	Lance	-	138RBT/5129	0.000	MICOM	NS	-	Test	Ulrich/MSHR	-	-
1971-A261	2441295.50	1971 Dec	Lance	-	139RBT/2107	0.000	MICOM	NS	-	Test	Ulrich/MSHR	-	-
1971-A262	2441316.50	1971 Dec	Lance	-	140RBT/2108	0.000	MICOM	NS	-	Test	Ulrich/MSHR	-	-
1972-A169	2441341.50	1972 Jan	Lance	-	141RBT/2106	0.000	MICOM	NS	-	Test	Ulrich/MSHR	-	-
1972-A170	2441341.50	1972 Jan	Lance	-	142RBT/2110	0.000	MICOM	NS	-	Test	Ulrich/MSHR	-	-
1972-A171	2441344.50	1972 Jan	Lance	-	143RBT/2127	0.000	MICOM	NS	-	Test	Ulrich/MSHR	-	-
1972-A172	2441351.50	1972 Feb	Lance	-	144RBT/2141	0.000	MICOM	NS	-	Test	Ulrich/MSHR	-	-
1972-A173	2441355.50	1972 Feb	Lance	-	145RBT/2135	0.000	MICOM	NS	-	Test	Ulrich/MSHR	-	-
1972-A174	2441358.50	1972 Feb	Lance	-	146RBT/2142	0.000	MICOM	NS	-	Test	Ulrich/MSHR	-	-
1972-A161	2441362.50	1972 Feb	Lance	-	147RBT/2122	0.000	MICOM	NS	-	Test	Ulrich/MSHR	-	-
1972-A175	2441365.50	1972 Feb	Lance	-	148RBT/2136	0.000	MICOM	NS	-	Test	Ulrich/MSHR	-	-
1972-A176	2441372.50	1972 Feb	Lance	-	149RBT/2140	0.000	MICOM	NS	-	Test	Ulrich/MSHR	-	-
1972-A177	2441379.50	1972 Feb	Lance	-	150RBT/2101	0.000	MICOM	NS	-	Test	Ulrich/MSHR	-	-
1972-A178	2441383.50	1972 Mar	Lance	-	151RBT/2126	0.000	MICOM	NS	-	Test	Ulrich/MSHR	-	-
1972-A179	2441392.50	1972 Mar	Lance	-	152RBT/2119	0.000	MICOM	NS	-	Test	Ulrich/MSHR	-	-
1972-A180	2441400.50	1972 Mar	Lance	-	153RBT/2116	0.000	MICOM	NS	-	Test	Ulrich/MSHR	-	-
1972-A181	2441403.50	1972 Mar	Lance	-	154	0.000	MICOM	NS	-	Test	Ulrich/MSHR	-	-
1972-A182	2441403.50	1972 Mar	Lance	-	155RBT/2131	0.000	MICOM	NS	-	Test	Ulrich/MSHR	-	-
1972-A183	2441427.50	1972 Apr	Lance	-	156RBT/2146	0.000	MICOM	NS	-	Test	Ulrich/MSHR	-	-
1972-A184	2441456.50	1972 May	Lance	-	157RBT/2166	0.000	MICOM	NS	-	Test	Ulrich/MSHR	-	-
1972-A185	2441469.50	1972 Jun	Lance	-	158RBT/2143	0.000	MICOM	NS	-	Test	Ulrich/MSHR	-	-
1972-A186	2441489.50	1972 Jun	Lance	-	159RBT/2168	0.000	MICOM	NS	-	Test	Ulrich/MSHR	-	-
1972-A187	2441505.50	1972 Jul	Lance	-	160RBT/2159	0.000	MICOM	NS	-	Test	Ulrich/MSHR	-	-



Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Agency	Launch_Code	Group	Category	LTCite	Cite	Notes
1972-A186	2441316.50	1972	Lance	-	162	MICOM	NS	-	Test	Ulrich/MSHR	-	-
1972-A187	2441586.50	1972 Sep 25	Lance	-	163RBL/2154	MICOM	NS	-	Test	Ulrich/MSHR	-	-
1972-A188	2441588.50	1972 Sep 29	Lance	-	164SBL/5175	MICOM	NS	-	Test	Ulrich/MSHR	-	-
1972-A189	2441608.50	1972 Oct 18	Lance	-	166BET/2138	MICOM	NS	-	Test	Ulrich/MSHR	-	-
1972-A190	2441627.50	1972 Nov 6	Lance	-	166BET/2310	MICOM	NS	-	Test	Ulrich/MSHR	-	-
1972-A191	2441629.50	1972 Nov 8	Lance	-	167APT/2183	MICOM	NS	-	Test	Ulrich/MSHR	-	-
1972-A192	2441631.20	1972 Nov 9	Lance	-	168APT/2184	MICOM	NS	-	Test	Ulrich/MSHR	-	-
1972-A193	2441631.38	1972 Nov 9	Lance	-	169APL/2186	MICOM	NS	-	Test	Ulrich/MSHR	-	-
1972-A194	2441638.50	1972 Nov 14	Lance	-	170APT/2353	MICOM	NS	-	Test	Ulrich/MSHR	-	-
1972-A195	2441638.50	1972 Nov 17	Lance	-	171/2177	MICOM	NS	-	Test	Ulrich/MSHR	-	-
1972-A196	2441638.50	1972 Nov 17	Lance	-	172/2184	MICOM	NS	-	Test	Ulrich/MSHR	-	-
1972-A197	2441638.50	1972 Nov 17	Lance	-	173/2188	MICOM	NS	-	Test	Ulrich/MSHR	-	-
1972-A198	2441652.50	1972 Dec 1	Lance	-	174SBL/2150	MICOM	NS	-	Test	Ulrich/MSHR	-	-
1972-A199	2441652.50	1972 Dec 1	Lance	-	176SST/2147	MICOM	NS	-	Test	Ulrich/MSHR	-	-
1972-A200	2441657.50	1972 Dec 6	Lance	-	176SST/2170	MICOM	NS	-	Test	Ulrich/MSHR	-	-
1972-A201	2441664.50	1972 Dec 13	Lance	-	177EST/2352	MICOM	NS	-	Test	Ulrich/MSHR	-	-
1972-A202	2441669.50	1972 Dec 18	Lance	-	177EST/2146	MICOM	NS	-	Test	Ulrich/MSHR	-	-
1972-A203	2441672.50	1972 Dec 21	Lance	-	178EST/2351	MICOM	NS	-	Test	Ulrich/MSHR	-	-
1972-A204	2441673.50	1972 Dec 22	Lance	-	180EST/2148	MICOM	NS	-	Test	Ulrich/MSHR	-	-
1972-A205	2441673.50	1972 Dec 22	Lance	-	181SIS/2174	MICOM	NS	-	Test	Ulrich/MSHR	-	-
1973-A101	2441691.50	1973 Jan 9	Lance	-	182SIS/2354	MICOM	NS	-	Test	Ulrich/MSHR	-	-
1973-A102	2441698.50	1973 Jan 16	Lance	-	183SIS/2176	MICOM	NS	-	Test	Ulrich/MSHR	-	-
1973-A103	2441701.50	1973 Jan 19	Lance	-	184SIS/2355	MICOM	NS	-	Test	Ulrich/MSHR	-	-
1973-A104	2441705.50	1973 Jan 23	Lance	-	186SST/2237	MICOM	NS	-	Test	Ulrich/MSHR	-	-
1973-A105	2441740.50	1973 Feb 27	Lance	-	186SST/2239	MICOM	NS	-	Test	Ulrich/MSHR	-	-
1973-A106	2441791.50	1973 Feb 19	Lance	-	187SST/2238	MICOM	NS	-	Test	Ulrich/MSHR	-	-
1973-A107	2441806.50	1973 May 4	Lance	-	188SST/2168	MICOM	NS	-	Test	Ulrich/MSHR	-	-
1973-A108	2441854.50	1973 Jun 21	Lance	-	189SST/2426	MICOM	NS	-	Test	Ulrich/MSHR	-	-
1973-A109	2441855.50	1973 Jun 22	Lance	-	190SST/2164	MICOM	NS	-	Test	Ulrich/MSHR	-	-
1973-A110	2441890.50	1973 Jun 22	Lance	-	191SST/2356	MICOM	NS	-	Test	Ulrich/MSHR	-	-
1973-A111	2441916.50	1973 Aug 22	Lance	-	192SST/2165	MICOM	NS	-	Test	Ulrich/MSHR	-	-
1973-A112	2441920.50	1973 Aug 26	Lance	-	193SST/2121	MICOM	NS	-	Test	Ulrich/MSHR	-	-
1973-A113	2441956.50	1973 Sep 13	Lance	-	194APT/2196	MICOM	NS	-	Test	Ulrich/MSHR	-	-
1973-A114	2441951.50	1973 Sep 26	Lance	-	194APT/2196	MICOM	NS	-	Test	Ulrich/MSHR	-	-
1973-A115	2441953.50	1973 Sep 26	Lance	-	196APT/2500	MICOM	NS	-	Test	Ulrich/MSHR	-	-
1973-A116	2441954.50	1973 Oct 4	Lance	-	197APT/2207	MICOM	NS	-	Test	Ulrich/MSHR	-	-
1973-A117	2441959.50	1973 Oct 4	Lance	-	198APT/2190	MICOM	NS	-	Test	Ulrich/MSHR	-	-
1973-A118	2441955.50	1973 Oct 4	Lance	-	199APT/2187	MICOM	NS	-	Test	Ulrich/MSHR	-	-
1973-A119	2441955.50	1973 Oct 18	Lance	-	200APT/2192	MICOM	NS	-	Test	Ulrich/MSHR	-	-
1973-A120	2441973.50	1973 Oct 18	Lance	-	202APT/2204	MICOM	NS	-	Test	Ulrich/MSHR	-	-
1973-A121	2441973.50	1973 Oct 19	Lance	-	203SST/2181	MICOM	NS	-	Test	Ulrich/MSHR	-	-
1973-A122	2442029.50	1973 Dec 13	Lance	-	204SST/2501	MICOM	NS	-	Test	Ulrich/MSHR	-	-
1974-A02	2442071.50	1974 Jan 24	Lance	-	205SST/2301	MICOM	NS	-	Test	Ulrich/MSHR	-	-
1974-A03	2442071.50	1974 Jan 24	Lance	-	206SST/2208	MICOM	NS	-	Test	Ulrich/MSHR	-	-
1974-A04	2442078.50	1974 Jan 31	Lance	-	208APT/2205	MICOM	NS	-	Test	Ulrich/MSHR	-	-
1974-A05	2442078.50	1974 Jan 31	Lance	-	209APT/2205	MICOM	NS	-	Test	Ulrich/MSHR	-	-
1974-A06	2442085.50	1974 Feb 7	Lance	-	209APT/2118	MICOM	NS	-	Test	Ulrich/MSHR	-	-
1974-A07	2442085.50	1974 Feb 7	Lance	-	210APT/2118	MICOM	NS	-	Test	Ulrich/MSHR	-	-
1974-A08	2442078.50	1974 Apr 4	Lance	-	211SST/2118	MICOM	NS	-	Test	Ulrich/MSHR	-	-
1974-A09	2442141.50	1974 Apr 4	Lance	-	213APT/2218	MICOM	NS	-	Test	Ulrich/MSHR	-	-
1974-A10	2442143.50	1974 Apr 11	Lance	-	214APT/2218	MICOM	NS	-	Test	Ulrich/MSHR	-	-
1974-A11	2442148.50	1974 Apr 11	Lance	-	214APT/2218	MICOM	NS	-	Test	Ulrich/MSHR	-	-
1974-A12	2442148.50	1974 Apr 11	Lance	-	214APT/2218	MICOM	NS	-	Test	Ulrich/MSHR	-	-
1974-A13	2442148.50	1974 Apr 12	Lance	-	214APT/2218	MICOM	NS	-	Test	Ulrich/MSHR	-	-
1974-A14	2442155.50	1974 Apr 18	Lance	-	216APT/2168	MICOM	NS	-	Test	Ulrich/MSHR	-	-
1974-A15	2442155.50	1974 Apr 18	Lance	-	217APT/2566	MICOM	NS	-	Test	Ulrich/MSHR	-	-
1974-A16	2442165.50	1974 Apr 25	Lance	-	219APT/2192	MICOM	NS	-	Test	Ulrich/MSHR	-	-
1974-A17	2442165.50	1974 Apr 25	Lance	-	220APT/2196	MICOM	NS	-	Test	Ulrich/MSHR	-	-
1974-A18	2442163.50	1974 Apr 26	Lance	-	221SST/2155	MICOM	NS	-	Test	Ulrich/MSHR	-	-
1974-A19	2442169.50	1974 May 7	Lance	-	222SST/2134	MICOM	NS	-	Test	Ulrich/MSHR	-	-
1974-A20	2442174.50	1974 May 7	Lance	-	223SST/2134	MICOM	NS	-	Test	Ulrich/MSHR	-	-
1974-A21	2442182.50	1974 May 9	Lance	-	223SST/2243	MICOM	NS	-	Test	Ulrich/MSHR	-	-
1974-A22	2442182.50	1974 May 9	Lance	-	223SST/2243	MICOM	NS	-	Test	Ulrich/MSHR	-	-
1974-A23	2442190.50	1974 May 23	Lance	-	226SST/2244	MICOM	NS	-	Test	Ulrich/MSHR	-	-
1974-A24	2442190.50	1974 May 23	Lance	-	227SST/2245	MICOM	NS	-	Test	Ulrich/MSHR	-	-
1974-A25	2442211.50	1974 Jun 13	Lance	-	228SST/2172	MICOM	NS	-	Test	Ulrich/MSHR	-	-
1974-A26	2442219.50	1974 Jun 21	Lance	-	229SST/2173	MICOM	NS	-	Test	Ulrich/MSHR	-	-
1974-A27	2442226.50	1974 Jun 28	Lance	-	230SST/2242	MICOM	NS	-	Test	Ulrich/MSHR	-	-
1974-A28	2442239.50	1974 Jul 11	Lance	-	231SST/2569	MICOM	NS	-	Test	Ulrich/MSHR	-	-
1974-A29	2442239.50	1974 Jul 11	Lance	-	232APT/2561	MICOM	NS	-	Test	Ulrich/MSHR	-	-
1974-A30	2442239.50	1974 Jul 12	Lance	-	233SST/2189	MICOM	NS	-	Test	Ulrich/MSHR	-	-
1974-A31	2442246.50	1974 Jul 17	Lance	-	234APT/2212	MICOM	NS	-	Test	Ulrich/MSHR	-	-
1974-A32	2442246.50	1974 Jul 18	Lance	-	234APT/2212	MICOM	NS	-	Test	Ulrich/MSHR	-	-
1974-A33	2442246.50	1974 Jul 25	Lance	-	236APT/2562	MICOM	NS	-	Test	Ulrich/MSHR	-	-
1974-A34	2442253.50	1974 Jul 25	Lance	-	237APT/2220	MICOM	NS	-	Test	Ulrich/MSHR	-	-
1974-A35	2442253.50	1974 Jul 25	Lance	-	238APT/2214	MICOM	NS	-	Test	Ulrich/MSHR	-	-
1974-A36	2442321.50	1974 Oct 1	Lance	-	239APT/2500	MICOM	NS	-	Test	Ulrich/MSHR	-	-
1974-A37	2442323.50	1974 Oct 3	Lance	-	240APT/2224	MICOM	NS	-	Test	Ulrich/MSHR	-	-
1974-A38	2442323.50	1974 Oct 3	Lance	-	241APT/2228	MICOM	NS	-	Test	Ulrich/MSHR	-	-
1974-A39	2442330.50	1974 Oct 10	Lance	-	242APT/2225	MICOM	NS	-	Test	Ulrich/MSHR	-	-
1974-A40	2442330.50	1974 Oct 10	Lance	-	243APT/2221	MICOM	NS	-	Test	Ulrich/MSHR	-	-
1974-A41	2442337.50	1974 Oct 17	Lance	-	244APT/2229	MICOM	NS	-	Test	Ulrich/MSHR	-	-
1974-A42	2442337.50	1974 Oct 17	Lance	-	245APT/2223	MICOM	NS	-	Test	Ulrich/MSHR	-	-
1974-A43	2442344.50	1974 Oct 24	Lance	-	246APT/2501	MICOM	NS	-	Test	Ulrich/MSHR	-	-
1974-A44	2442344.50	1974 Oct 24	Lance	-	247APT/2226	MICOM	NS	-	Test	Ulrich/MSHR	-	-

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Launch_t	Agency	Launch_Code	Group	Category	LTCite	Cite	Notes
1974-A131	2442366.50	1974 Nov 15	Lance	-	248AS7/2598	0.000	MICOM	NS	-	Test	Ulrich/NSHR	-	-
1974-A132	2442366.50	1974 Nov 15	Lance	-	249AS7/2599	0.000	MICOM	NS	-	Test	Ulrich/NSHR	-	-
1974-A133	2442366.50	1974 Nov 15	Lance	-	250AS7/2612	0.000	MICOM	NS	-	Test	Ulrich/NSHR	-	-
1974-A134	2442377.50	1974 Nov 26	Lance	-	251AS7/2193	0.000	MICOM	NS	-	Test	Ulrich/NSHR	-	-
1974-A135	2442386.50	1974 Dec 5	Lance	-	252AS7/2977	0.000	MICOM	NS	-	Test	Ulrich/NSHR	-	-
1974-A136	2442386.50	1974 Dec 5	Lance	-	253AS7/2978	0.000	MICOM	NS	-	Test	Ulrich/NSHR	-	-
1974-A137	2442386.50	1974 Dec 5	Lance	-	254AS7/2979	0.000	MICOM	NS	-	Test	Ulrich/NSHR	-	-
1974-A138	2442386.50	1974 Dec 5	Lance	-	255AS7/2983	0.000	MICOM	NS	-	Test	Ulrich/NSHR	-	-
1974-A139	2442387.50	1974 Dec 6	Lance	-	256AS7/2984	0.000	MICOM	NS	-	Test	Ulrich/NSHR	-	-
1974-A140	2442387.50	1974 Dec 6	Lance	-	257AS7/2987	0.000	MICOM	NS	-	Test	Ulrich/NSHR	-	-
1974-A141	2442466.50	1975 Feb 13	Lance	-	258AS7/3037	0.000	MICOM	NS	-	Test	Ulrich/NSHR	-	-
1975-A87	2442466.50	1975 Feb 13	Lance	-	259AP7/2213	0.000	MICOM	NS	-	Test	Ulrich/NSHR	-	-
1975-A88	2442466.50	1975 Feb 13	Lance	-	260AP7/2232	0.000	MICOM	NS	-	Test	Ulrich/NSHR	-	-
1975-A96	2442466.50	1975 Feb 13	Lance	-	261AP7/2234	0.000	MICOM	NS	-	Test	Ulrich/NSHR	-	-
1975-A97	2442547.50	1975 May 15	Lance	-	262SL/3196	0.000	MICOM	NS	-	Test	Ulrich/NSHR	-	-
1975-A99	2442553.50	1975 May 21	Lance	-	263AP7/2608	0.000	MICOM	NS	-	Test	Ulrich/NSHR	-	-
1975-A80	2442553.50	1975 May 21	Lance	-	264AP7/2609	0.000	MICOM	NS	-	Test	Ulrich/NSHR	-	-
1975-A85	2442562.50	1975 May 30	Lance	-	265AS7/3268	0.000	MICOM	NS	-	Test	Ulrich/NSHR	-	-
1975-A91	2442562.50	1975 May 30	Lance	-	266AP7/2510	0.000	MICOM	NS	-	Test	Ulrich/NSHR	-	-
1975-A99	2442706.50	1975 Oct 21	Lance	-	267AS7/2202	0.000	MICOM	NS	-	Test	Ulrich/NSHR	-	-
1975-A99	2442685.50	1975 Oct 21	Lance	-	268AS7/3389	0.000	MICOM	NS	-	Test	Ulrich/NSHR	-	-
1975-A100	2442727.50	1975 Nov 11	Lance	-	269AS7/2458	0.000	MICOM	NS	-	Test	Ulrich/NSHR	-	-
1975-A93	2442706.50	1975 Oct 21	Lance	-	270AS7/3251	0.000	MICOM	NS	-	Test	Ulrich/NSHR	-	-
1975-A94	2442735.50	1975 Nov 19	Lance	-	271AS7/2940	0.000	MICOM	NS	-	Test	Ulrich/NSHR	-	-
1975-A94	2442620.50	1975 Feb 12	Lance	-	273SL/2152	0.000	MICOM	NS	-	Test	Ulrich/NSHR	-	-
1976-A143	2442637.50	1976 Mar	Lance	-	274SL/2163	0.000	MICOM	NS	-	Test	Ulrich/NSHR	-	-
1976-A146	2442637.50	1976 Mar	Lance	-	276SL/2240	0.000	MICOM	NS	-	Test	Ulrich/NSHR	-	-
1976-A146	2442666.50	1976 Apr	Lance	-	276SL/2160	0.000	MICOM	NS	-	Test	Ulrich/NSHR	-	-
1976-A147	2442666.50	1976 Apr	Lance	-	277AS7/2711	0.000	MICOM	NS	-	Test	Ulrich/NSHR	-	-
1976-A148	2442666.50	1976 Apr	Lance	-	278SL/3067	0.000	MICOM	NS	-	Test	Ulrich/NSHR	-	-
1976-A149	2442966.50	1976 Jul 9	Lance	-	280SL/3075	0.000	MICOM	NS	-	Test	Ulrich/NSHR	-	-
1976-A150	2442972.50	1976 Jul 13	Lance	-	280SL/2211	0.000	MICOM	NS	-	Test	Ulrich/NSHR	-	-
1976-A151	2442974.50	1976 Jul 15	Lance	-	282AP7/3203	0.000	MICOM	NS	-	Test	Ulrich/NSHR	-	-
1976-A152	2442981.50	1976 Jul 22	Lance	-	282AP7/3203	0.000	MICOM	NS	-	Test	Ulrich/NSHR	-	-
1976-A153	2442983.09	1976 Jul 23	Lance	-	283AP7/3206	0.000	MICOM	NS	-	Test	Ulrich/NSHR	-	-
1976-A154	2442985.17	1976 Jul 29	Lance	-	284AP7/3206	0.000	MICOM	NS	-	Test	Ulrich/NSHR	-	-
1976-A155	2442985.19	1976 Jul 29	Lance	-	285AP7/3206	0.000	MICOM	NS	-	Test	Ulrich/NSHR	-	-
1976-A156	2443062.07	1976 Sep 30	Lance	-	286AP7/2207	0.000	MICOM	NS	-	Test	Ulrich/NSHR	-	-
1976-A157	2443062.33	1976 Sep 30	Lance	-	287AP7/2211	0.000	MICOM	NS	-	Test	Ulrich/NSHR	-	-
1976-A158	2443069.09	1976 Oct 7	Lance	-	288AS7/2714	0.000	MICOM	NS	-	Test	Ulrich/NSHR	-	-
1976-A159	2443069.27	1976 Oct 7	Lance	-	289AS7/3242	0.000	MICOM	NS	-	Test	Ulrich/NSHR	-	-
1976-A160	2443077.10	1976 Oct 15	Lance	-	290AS7/3242	0.000	MICOM	NS	-	Test	Ulrich/NSHR	-	-
1976-A161	2443072.33	1976 Oct 20	Lance	-	293SL/2200	0.000	MICOM	NS	-	Test	Ulrich/NSHR	-	-
1976-A85	2443187.74	1977 Jun 14	Lance	-	293SL/4143	0.000	MICOM	NS	-	Test	Ulrich/NSHR	-	-
1976-A82	2443252.38	1977 Jun 18	Lance	-	294SL/4143	0.000	MICOM	NS	-	Test	Ulrich/NSHR	-	-
1976-A89	2443252.38	1977 Apr 21	Lance	-	295SL/4143	0.000	MICOM	NS	-	Test	Ulrich/NSHR	-	-
1976-A84	2443294.35	1977 Jun 21	Lance	-	296	0.000	MICOM	NS	-	Test	Ulrich/NSHR	-	-
1976-A85	2443294.35	1977 Jun 21	Lance	-	297AP7/3205	0.000	MICOM	NS	-	Test	Ulrich/NSHR	-	-
1976-A85	2443294.35	1977 Jun 21	Lance	-	Test_firing	0.000	BHEHR	NS	-	Test	Ulrich/NSHR	-	-
1976-A85	2443294.35	1977 Jun 21	Lance	-	Test_firing	0.000	BHEHR	NS	-	Test	Ulrich/NSHR	-	-
1976-A85	2443294.35	1977 Jun 21	Lance	-	298AP7/3205	0.000	MICOM	NS	-	Test	Ulrich/NSHR	-	-
1976-A85	2443381.28	1977 Aug 25	Lance	-	298AP7/3205	0.000	MICOM	NS	-	Test	Ulrich/NSHR	-	-
1976-A85	2443381.28	1977 Aug 25	Lance	-	300AS7/3203	0.000	MICOM	NS	-	Test	Ulrich/NSHR	-	-
1976-A82	2443422.20	1977 Oct 5	Lance	-	300AS7/3203	0.000	MICOM	NS	-	Test	Ulrich/NSHR	-	-
1976-A82	2443422.23	1977 Oct 5	Lance	-	301AS7/3204	0.000	MICOM	NS	-	Test	Ulrich/NSHR	-	-
1976-A91	2443423.12	1977 Oct 6	Lance	-	302SL/2215	0.000	MICOM	NS	-	Test	Ulrich/NSHR	-	-
1976-A92	2443458.30	1977 Oct 6	Lance	-	303AP7/3206	0.000	MICOM	NS	-	Test	Ulrich/NSHR	-	-
1976-A93	2443481.16	1977 Oct 6	Lance	-	304SL/4143	0.000	MICOM	NS	-	Test	Ulrich/NSHR	-	-
1976-A94	2443485.14	1977 Dec 7	Lance	-	304SL/4143	0.000	MICOM	NS	-	Test	Ulrich/NSHR	-	-
1976-A76	2443521.47	1977 Dec 8	Lance	-	306AS7/3278	0.000	MICOM	NS	-	Test	Ulrich/NSHR	-	-
1976-A76	2443521.47	1977 Dec 8	Lance	-	307SL/3231	0.000	MICOM	NS	-	Test	Ulrich/NSHR	-	-
1976-A74	2443528.15	1978 Jan 12	Lance	-	307SL/3231	0.000	MICOM	NS	-	Test	Ulrich/NSHR	-	-
1976-A77	2443534.27	1978 Jan 19	Lance	-	309AP7/3316	0.000	MICOM	NS	-	Test	Ulrich/NSHR	-	-
1976-A78	2443534.50	1978 Jan 25	Lance	-	309AP7/3316	0.000	MICOM	NS	-	Test	Ulrich/NSHR	-	-
1976-A78	2443564.42	1978 Feb 24	Lance	-	310AP7/3316	0.000	MICOM	NS	-	Test	Ulrich/NSHR	-	-
1976-A69	2443569.50	1978 Feb 24	Lance	-	311SL/3317	0.000	MICOM	NS	-	Test	Ulrich/NSHR	-	-
1976-A80	2443571.44	1978 Mar 2	Lance	-	Test_firing	0.000	BHEHR	NS	-	Test	Ulrich/NSHR	-	-
1976-A81	2443571.44	1978 Mar 2	Lance	-	Test_firing	0.000	BHEHR	NS	-	Test	Ulrich/NSHR	-	-
1976-A82	2443583.46	1978 Mar 15	Lance	-	312SL/3314	0.000	MICOM	NS	-	Test	Ulrich/NSHR	-	-
1976-A82	2443674.35	1978 Jun 15	Lance	-	313AP7/2835	0.000	MICOM	NS	-	Test	Ulrich/NSHR	-	-
1976-A83	2443675.12	1978 Jun 15	Lance	-	314AP7/2835	0.000	MICOM	NS	-	Test	Ulrich/NSHR	-	-
1976-A84	2443703.08	1978 Jun 15	Lance	-	315AS7/3330	0.000	MICOM	NS	-	Test	Ulrich/NSHR	-	-
1976-A85	2443703.08	1978 Jun 13	Lance	-	316SL/3338	0.000	MICOM	NS	-	Test	Ulrich/NSHR	-	-
1976-A86	2443710.25	1978 Jun 20	Lance	-	317SL/3370	0.000	MICOM	NS	-	Test	Ulrich/NSHR	-	-
1976-A86	2443746.11	1978 Aug 25	Lance	-	317SL/3370	0.000	MICOM	NS	-	Test	Ulrich/NSHR	-	-
1976-A87	2443751.50	1978 Sep 7	Lance	-	319	0.000	MICOM	NS	-	Test	Ulrich/NSHR	-	-
1976-A87	2443751.50	1978 Sep 7	Lance	-	Test_firing	0.000	BHEHR	NS	-	Test	Ulrich/NSHR	-	-
1976-A88	2443802.31	1978 Oct 20	Lance	-	320AS7/2219	0.000	MICOM	NS	-	Test	Ulrich/NSHR	-	-
1976-A89	2443802.42	1978 Oct 20	Lance	-	321AS7/3324	0.000	MICOM	NS	-	Test	Ulrich/NSHR	-	-
1976-A90	2443781.50	1978 Oct 20	Lance	-	322	0.000	MICOM	NS	-	Test	Ulrich/NSHR	-	-
1976-A91	2443815.21	1978 Nov 2	Lance	-	323SL/3306	0.000	MICOM	NS	-	Test	Ulrich/NSHR	-	-
1976-A92	2443868.21	1978 Dec 17	Lance	-	324AP7/4661	0.000	MICOM	NS	-	Test	Ulrich/NSHR	-	-
1976-A93	2443868.21	1978 Dec 17	Lance	-	325SL/2466	0.000	MICOM	NS	-	Test	Ulrich/NSHR	-	-
1976-A65	2443895.22	1979 Jan 18	Lance	-	326SL/4347	0.000	MICOM	NS	-	Test	Ulrich/NSHR	-	-
1976-A66	2443935.22	1979 Mar 2	Lance	-	327SL/3382	0.000	MICOM	NS	-	Test	Ulrich/NSHR	-	-
1976-A67	2443941.15	1979 Mar 8	Lance	-	328AP7/3388	0.000	MICOM	NS	-	Test	Ulrich/NSHR	-	-
1976-A68	2443974.24	1979 Apr 10	Lance	-	329AP7/3388	0.000	MICOM	NS	-	Test	Ulrich/NSHR	-	-
1976-A69	2443989.35	1979 Apr 25	Lance	-	329AP7/4365	0.000	MICOM	NS	-	Test	Ulrich/NSHR	-	-

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Launch_t	Agency	Launch_Code	Group	Category	LTCite	Cite	Notes
1979-A70	2443990.16	1979 Apr 26 1546	Lance	-	330ACL/4388	0.000	MICOM	NS	-	Test	Ulrich/MSHR	-	-
1979-A71	2443996.19	1979 May 2 1629	Lance	-	331MPT/3390	0.000	MICOM	NS	-	Test	Ulrich/MSHR	-	-
1979-A72	2443993.50	1979 May 2 1629	Lance	-	332MPT/4724	0.000	MICOM	NS	-	Test	Ulrich/MSHR	-	-
1979-A73	2444046.13	1979 Jun 28 1803	Lance	-	333APL/3396	0.000	MICOM	NS	-	Test	Ulrich/MSHR	-	-
1979-A74	2444053.25	1979 Jun 28 1803	Lance	-	334MPT/4190	0.000	MICOM	NS	-	Test	Ulrich/MSHR	-	-
1979-A75	2444099.38	1979 Aug 13 2100	Lance	-	335MPT/4619	0.000	MICOM	NS	-	Test	Ulrich/MSHR	-	-
1979-A76	2444141.36	1979 Sep 24 2032	Lance	-	336MPT/3312	0.000	MICOM	NS	-	Test	Ulrich/MSHR	-	-
1979-A77	2444186.08	1979 Oct 11 1400	Lance	-	337MPT/2222	0.000	MICOM	NS	-	Test	Ulrich/MSHR	-	-
1979-A78	2444186.10	1979 Nov 8 1430	Lance	-	338MPT/4683	0.000	MICOM	NS	-	Test	Ulrich/MSHR	-	-
1979-A79	2444213.45	1979 Dec 5 2250	Lance	-	339MPT/2491	0.000	MICOM	NS	-	Test	Ulrich/MSHR	-	-
1980-A67	2444242.12	1980 Jan 3 1457	Lance	-	340MPT/3357	0.000	MICOM	NS	-	Test	Ulrich/MSHR	-	-
1980-A68	2444298.47	1980 Feb 28 2315:03	Lance	-	341MPT/3571	0.000	MICOM	NS	-	Test	Ulrich/MSHR	-	-
1980-A69	2444304.18	1980 Mar 5 1619:01	Lance	-	342MPT/4998	0.000	MICOM	NS	-	Test	Ulrich/MSHR	-	-
1980-A70	2444341.16	1980 Apr 11 1555	Lance	-	343MPT/9717	0.000	MICOM	NS	-	Test	Ulrich/MSHR	-	-
1980-A71	2444346.12	1980 Apr 16 1500	Lance	-	344MPT/5095	0.000	MICOM	NS	-	Test	Ulrich/MSHR	-	-
1980-A72	2444355.11	1980 Apr 25 1437	Lance	-	345MPT/4382	0.000	MICOM	NS	-	Test	Ulrich/MSHR	-	-
1980-A73	2444362.09	1980 Apr 25 1437	Lance	-	346MPT/4382	0.000	MICOM	NS	-	Test	Ulrich/MSHR	-	-
1980-A74	2444369.30	1980 May 9 1908	Lance	-	347MPT/4570	0.000	MICOM	NS	-	Test	Ulrich/MSHR	-	-
1980-A75	2444371.52	1980 May 12 0959	Lance	-	348MPT/4566	0.000	MICOM	NS	-	Test	Ulrich/MSHR	-	-
1980-A76	2444372.09	1980 May 12 1415	Lance	-	349MPT/2419	0.000	MICOM	NS	-	Test	Ulrich/MSHR	-	-
1980-A77	2444406.10	1980 Jun 17 1421:38	Lance	-	350MPT/3974	0.000	MICOM	NS	-	Test	Ulrich/MSHR	-	-
1980-A78	2444411.09	1980 Jun 20 1405:32	Lance	-	351MPT/4244	0.000	MICOM	NS	-	Test	Ulrich/MSHR	-	-
1980-A79	2444422.11	1980 Jun 1 1443	Lance	-	352MPT/4244	0.000	MICOM	NS	-	Test	Ulrich/MSHR	-	-
1980-A80	2444425.38	1980 Jun 10 1335	Lance	-	353MPT/5194	0.000	MICOM	NS	-	Test	Ulrich/MSHR	-	-
1980-A81	2444511.94	1980 Sep 29 1031	Lance	-	354MPT/4240	0.000	MICOM	NS	-	Test	Ulrich/MSHR	-	-
1980-A82	2444513.14	1980 Sep 30 1517	Lance	-	355MPT/4520	0.000	MICOM	NS	-	Test	Ulrich/MSHR	-	-
1980-A83	2444514.35	1980 Oct 1 2017	Lance	-	356MPT/2227	0.000	MICOM	NS	-	Test	Ulrich/MSHR	-	-
1980-A84	2444515.19	1980 Oct 2 1634	Lance	-	357MPT/4571	0.000	MICOM	NS	-	Test	Ulrich/MSHR	-	-
1980-A85	2444526.08	1980 Oct 13 1400	Lance	-	358MPT/5302	0.000	MICOM	NS	-	Test	Sandness/010123	-	-
1980-A86	2444526.08	1980 Oct 13 1400	Lance	-	359MPT/4546	0.000	MICOM	NS	-	Test	Ulrich/MSHR	-	-
1980-A87	2444526.14	1980 Dec 11 1520	Lance	-	360MPT/2513	0.000	MICOM	NS	-	Test	Ulrich/MSHR	-	-
1981-A41	2444655.25	1981 Feb 29 1000	Lance	-	361MPT/4243	0.000	MICOM	NS	-	Test	Ulrich/MSHR	-	-
1981-A42	2444659.17	1981 Feb 29 1000	Lance	-	362MPT/4246	0.000	MICOM	NS	-	Test	Ulrich/MSHR	-	-
1981-A43	2444663.21	1981 Feb 27 1702	Lance	-	363MPT/4278	0.000	MICOM	NS	-	Test	Ulrich/MSHR	-	-
1981-A44	2444766.28	1981 Jun 12 1545	Lance	-	364MPT/4578	0.000	MICOM	NS	-	Test	Ulrich/MSHR	-	-
1981-A45	2444772.32	1981 Jun 16 1336:39	Lance	-	365MPT/5338	0.000	MICOM	NS	-	Test	Ulrich/MSHR	-	-
1981-A46	2444775.36	1981 Jun 19 2034:52	Lance	-	366MPT/5339	0.000	MICOM	NS	-	Test	Ulrich/MSHR	-	-
1981-A47	2444802.17	1981 Oct 2 1600	Lance	-	367MPT/4572	0.000	MICOM	NS	-	Test	Ulrich/MSHR	-	-
1981-A48	2444911.37	1981 Nov 6 1921:34	Lance	-	368MPT/5338	0.000	MICOM	NS	-	Test	Ulrich/MSHR	-	-
1981-A49	2444915.31	1981 Nov 2 2054	Lance	-	369MPT/2518	0.000	MICOM	NS	-	Test	Ulrich/MSHR	-	-
1981-A50	2444922.01	1981 Nov 3 1211	Lance	-	370MPT/4576	0.000	MICOM	NS	-	Test	Ulrich/MSHR	-	-
1981-A51	2444922.01	1981 Nov 3 1211	Lance	-	371MPT/4579	0.000	MICOM	NS	-	Test	Ulrich/MSHR	-	-
1981-A52	2444925.16	1981 Nov 16 1545	Lance	-	372MPT/4573	0.000	MICOM	NS	-	Test	Ulrich/MSHR	-	-
1981-A53	2444925.16	1981 Dec 7	Lance	-	373	0.000	MICOM	NS	-	Test	Ulrich/MSHR	-	-
1981-A54	2444925.16	1981 Dec 7	Lance	-	374MPT/4573	0.000	MICOM	NS	-	Test	Ulrich/MSHR	-	-
1982-A57	2445026.17	1982 Feb 25 1606	Lance	-	375MPT/4577	0.000	MICOM	NS	-	Test	Ulrich/MSHR	-	-
1982-A58	2445026.17	1982 Feb 25 1606	Lance	-	376MPT/4577	0.000	MICOM	NS	-	Test	Ulrich/MSHR	-	-
1982-A59	2445026.17	1982 Feb 25 1606	Lance	-	377MPT/4577	0.000	MICOM	NS	-	Test	Ulrich/MSHR	-	-
1982-A60	2445026.17	1982 Feb 25 1606	Lance	-	378MPT/4577	0.000	MICOM	NS	-	Test	Ulrich/MSHR	-	-
1982-A61	2445026.17	1982 Feb 25 1606	Lance	-	379MPT/4577	0.000	MICOM	NS	-	Test	Ulrich/MSHR	-	-
1982-A62	2445026.17	1982 Feb 25 1606	Lance	-	380MPT/4577	0.000	MICOM	NS	-	Test	Ulrich/MSHR	-	-
1982-A63	2445026.17	1982 Feb 25 1606	Lance	-	381MPT/4577	0.000	MICOM	NS	-	Test	Ulrich/MSHR	-	-
1982-A64	2445026.17	1982 Feb 25 1606	Lance	-	382MPT/4577	0.000	MICOM	NS	-	Test	Ulrich/MSHR	-	-
1982-A65	2445026.17	1982 Feb 25 1606	Lance	-	383MPT/4577	0.000	MICOM	NS	-	Test	Ulrich/MSHR	-	-
1982-A66	2445026.17	1982 Feb 25 1606	Lance	-	384MPT/4577	0.000	MICOM	NS	-	Test	Ulrich/MSHR	-	-
1982-A67	2445026.17	1982 Feb 25 1606	Lance	-	385MPT/4577	0.000	MICOM	NS	-	Test	Ulrich/MSHR	-	-
1982-A68	2445026.17	1982 Feb 25 1606	Lance	-	386MPT/4577	0.000	MICOM	NS	-	Test	Ulrich/MSHR	-	-
1982-A69	2445026.17	1982 Feb 25 1606	Lance	-	387MPT/4577	0.000	MICOM	NS	-	Test	Ulrich/MSHR	-	-
1982-A70	2445026.17	1982 Feb 25 1606	Lance	-	388MPT/4577	0.000	MICOM	NS	-	Test	Ulrich/MSHR	-	-
1982-A71	2445026.17	1982 Feb 25 1606	Lance	-	389MPT/4577	0.000	MICOM	NS	-	Test	Ulrich/MSHR	-	-
1982-A72	2445026.17	1982 Feb 25 1606	Lance	-	390MPT/4577	0.000	MICOM	NS	-	Test	Ulrich/MSHR	-	-
1982-A73	2445026.17	1982 Feb 25 1606	Lance	-	391MPT/4577	0.000	MICOM	NS	-	Test	Ulrich/MSHR	-	-
1982-A74	2445026.17	1982 Feb 25 1606	Lance	-	392MPT/4577	0.000	MICOM	NS	-	Test	Ulrich/MSHR	-	-
1982-A75	2445026.17	1982 Feb 25 1606	Lance	-	393MPT/4577	0.000	MICOM	NS	-	Test	Ulrich/MSHR	-	-
1982-A76	2445026.17	1982 Feb 25 1606	Lance	-	394MPT/4577	0.000	MICOM	NS	-	Test	Ulrich/MSHR	-	-
1982-A77	2445026.17	1982 Feb 25 1606	Lance	-	395MPT/4577	0.000	MICOM	NS	-	Test	Ulrich/MSHR	-	-
1982-A78	2445026.17	1982 Feb 25 1606	Lance	-	396MPT/4577	0.000	MICOM	NS	-	Test	Ulrich/MSHR	-	-
1982-A79	2445026.17	1982 Feb 25 1606	Lance	-	397MPT/4577	0.000	MICOM	NS	-	Test	Ulrich/MSHR	-	-
1982-A80	2445026.17	1982 Feb 25 1606	Lance	-	398MPT/4577	0.000	MICOM	NS	-	Test	Ulrich/MSHR	-	-
1982-A81	2445026.17	1982 Feb 25 1606	Lance	-	399MPT/4577	0.000	MICOM	NS	-	Test	Ulrich/MSHR	-	-
1982-A82	2445026.17	1982 Feb 25 1606	Lance	-	400MPT/4577	0.000	MICOM	NS	-	Test	Ulrich/MSHR	-	-
1982-A83	2445026.17	1982 Feb 25 1606	Lance	-	401MPT/4577	0.000	MICOM	NS	-	Test	Ulrich/MSHR	-	-
1982-A84	2445026.17	1982 Feb 25 1606	Lance	-	402MPT/4577	0.000	MICOM	NS	-	Test	Ulrich/MSHR	-	-
1982-A85	2445026.17	1982 Feb 25 1606	Lance	-	403MPT/4577	0.000	MICOM	NS	-	Test	Ulrich/MSHR	-	-
1982-A86	2445026.17	1982 Feb 25 1606	Lance	-	404MPT/4577	0.000	MICOM	NS	-	Test	Ulrich/MSHR	-	-
1982-A87	2445026.17	1982 Feb 25 1606	Lance	-	405MPT/4577	0.000	MICOM	NS	-	Test	Ulrich/MSHR	-	-
1982-A88	2445026.17	1982 Feb 25 1606	Lance	-	406MPT/4577	0.000	MICOM	NS	-	Test	Ulrich/MSHR	-	-
1982-A89	2445026.17	1982 Feb 25 1606	Lance	-	407MPT/4577	0.000	MICOM	NS	-	Test	Ulrich/MSHR	-	-
1982-A90	2445026.17	1982 Feb 25 1606	Lance	-	408MPT/4577	0.000	MICOM	NS	-	Test	Ulrich/MSHR	-	-
1982-A91	2445026.17	1982 Feb 25 1606	Lance	-	409MPT/4577	0.000	MICOM	NS	-	Test	Ulrich/MSHR	-	-
1982-A92	2445026.17	1982 Feb 25 1606	Lance	-	410MPT/4577	0.000	MICOM	NS	-	Test	Ulrich/MSHR	-	-
1982-A93	2445026.17	1982 Feb 25 1606	Lance	-	411MPT/4577	0.000	MICOM	NS	-	Test	Ulrich/MSHR	-	-
1982-A94	2445026.17	1982 Feb 25 1606	Lance	-	412MPT/4577	0.000	MICOM	NS	-	Test	Ulrich/MSHR	-	-
1982-A95	2445026.17	1982 Feb 25 1606	Lance	-	413MPT/4577	0.000	MICOM	NS	-	Test	Ulrich/MSHR	-	-
1982-A96	2445026.17	1982 Feb 25 1606	Lance	-	414MPT/4577	0.000	MICOM	NS	-	Test	Ulrich/MSHR	-	-
1982-A97	2445026.17	1982 Feb 25 1606	Lance	-	415MPT/4577	0.000	MICOM	NS	-	Test	Ulrich/MSHR	-	-
1982-A98	2445026.17	1982 Feb 25 1606	Lance	-	416MPT/4577	0.000	MICOM	NS	-	Test	Ulrich/MSHR	-	-
1982-A99	2445026.17	1982 Feb 25 1606	Lance	-	417MPT/4577	0.000	MICOM	NS	-	Test	Ulrich/MSHR	-	-
1982-A100	2445026.17	1982 Feb 25 1606	Lance	-	418MPT/4577	0.000	MICOM	NS	-	Test	Ulrich/MSHR	-	-
1982-A101	2445026.17	1982 Feb 25 1606	Lance	-	419MPT/4577	0.000	MICOM	NS	-	Test	Ulrich/MSHR	-	-
1982-A102	2445026.17	1982 Feb 25 1606	Lance	-	420MPT/4577	0.000	MICOM	NS	-	Test	Ulrich/MSHR	-	-
1982-A103	2445026.17	1982 Feb 25 1606	Lance	-	421MPT/4577	0.000	MICOM	NS	-	Test	Ulrich/MSHR	-	-
1982-A104	2445026.17	1982 Feb 25 1606	Lance	-	422MPT/4577	0.000	MICOM	NS	-	Test	Ulrich/MSHR	-	-
1982-A105	2445026.17	1982 Feb 25 1606	Lance	-	423MPT/4577	0.000	MICOM	NS	-	Test	Ulrich/MSHR	-	-
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Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Agency	Launch_Code	Group	Category	LTCite	Cite	Notes
1989-A31	2447767.50	1989 Sep 18	Lance	-	-	MICOM	NS	-	Test	Ulrich/WSHR	-	-
1989-A32	2447767.50	1989 Sep 18	Lance	-	-	MICOM	NS	-	Test	Ulrich/WSHR	-	-
1991-A32	2448381.50	1991 May 5	Lance	-	-	MICOM	NS	-	Test	Ulrich/WSHR	-	-
1992-A21	2448692.50	1992 Mar 11	Lance	-	Test firing	BWHR	NS	-	Test	Ulrich	-	-
1992-A22	2448699.50	1992 Mar 18	Lance	-	Test firing	BWHR	NS	-	Test	Ulrich	-	-
1992-A23	2448784.50	1992 Jun 11	Lance	-	-	MICOM	NS	-	Test	Ulrich/WSHR	-	-
1992-A24	2448973.50	1992 Dec 17	Lance	-	Test firing	BWHR	NS	-	Test	Ulrich	-	-
1993-A18	2449146.50	1993 Jun 8	Lance	-	ERJMT Target	MICOM	NS	-	Test	army.mil	-	-
1994-A09	2449161.50	1994 Sep 21	Lance	-	Hawk target	MICOM	NS	-	Test	Ulrich/WSHR	-	-
1994-A10	2449161.50	1994 Sep 21	Lance	-	-	MICOM	NS	-	Test	Ulrich/WSHR	-	-
1994-A11	2449161.50	1994 Sep 21	Lance	-	-	MICOM	NS	-	Test	Ulrich/WSHR	-	-
1995-A11	2449960.50	1995 Sep	Lance	-	-	MICOM	NS	-	Test	Ulrich/WSHR	-	-
1995-A12	2450058.50	1995 Dec 7	Lance	-	Hawk Target	MICOM	NS	-	Test	Ulrich/WSHR	-	-
1995-A09	2450059.50	1995 Dec 8	Lance	-	Hawk Target	MICOM	NS	-	Test	Ulrich/WSHR	-	-
1995-A10	2450059.50	1995 Dec 8	Lance	-	Hawk Target	MICOM	NS	-	Test	Ulrich/WSHR	-	-
1996-A17	2450309.50	1996 Aug 14	Lance	-	Hawk Target	BROD	NS	-	Test	Ulrich/WSHR	-	-
1996-A18	2450310.50	1996 Aug 15	Lance	-	Hawk Target	BROD	NS	-	Test	Ulrich/WSHR	-	-
1996-A19	2450316.50	1996 Aug 21	Lance	-	Hawk Target	BROD	NS	-	Test	Ulrich/WSHR	-	-
1996-A12	2450323.50	1996 Aug 22	Lance	-	Hawk Target	BROD	NS	-	Test	Ulrich/WSHR	-	-
1996-A20	2450325.50	1996 Aug 28	Lance	-	Hawk Target	BROD	NS	-	Test	Ulrich/WSHR	-	-
1996-A15	2450424.50	1996 Aug 30	Lance	-	Hawk Target	BROD	NS	-	Test	ww.mda.mil	-	-
1997-A57	2450473.15	1997 Jan 24 1530?	Lance	-	Aegis Target	BROD	NS	-	Test	od.mil/endo	-	-
2000-A11	2451693.50	2000 Dec 15	Lance	-	Patriot Target	ARCDCM	NS	-	Test	Ulrich/WSHR	-	-
2002-A23	2452535.50	2002 Sep 18	Lance	-	-	ARCDCM	NS	-	Test	Ulrich/WSHR	-	-
2002-A24	2452535.50	2002 Sep 18	Lance	-	-	ARCDCM	NS	-	Test	Ulrich/WSHR	-	-
2003-A24	2452639.50	2003 Q1	Lance	-	RF	HDA	NS	-	Test	ADABudget04	-	-
2003-A25	2452639.50	2003 Q1	Lance	-	RF	HDA	NS	-	Test	ADABudget04	-	-
2006-A09	2453079.50	2006 May 24	Lance	-	Aegis SBT Target	USMAG	NS	-	Target	ww.mda.mil	-	-
2009-A02	2454917.31	2009 Mar 26 1920?	Lance	-	Aegis SH-2 target	USMAG	NS	-	Target	ww.navy.mil	-	-
2013-A33	2456473.50	2013 Jul	Lance	-	HEADS Target	SHOC	NS	-	Target	army.mil	-	-
2013-A34	2456473.50	2013 Jul	Lance	-	HEADS Target	SHOC	NS	-	Target	army.mil	-	-
2013-A35	2456473.50	2013 Jul	Lance	-	HEADS Target	SHOC	NS	-	Target	army.mil	-	-
2013-A36	2456604.50	2013 Aug	Lance	-	HEADS Target	SHOC	NS	-	Target	army.mil	-	-
2013-A37	2456604.50	2013 Aug	Lance	-	HEADS Target	SHOC	NS	-	Target	army.mil	-	-
2013-A38	2456635.50	2013 Sep	Lance	-	HEADS Target	SHOC	NS	-	Target	army.mil	-	-
2013-A39	2456635.50	2013 Sep	Lance	-	HEADS Target	SHOC	NS	-	Target	army.mil	-	-
2013-A40	2456665.50	2013 Oct	Lance	-	HEADS Target	SHOC	NS	-	Target	army.mil	-	-
2013-A41	2456665.50	2013 Oct	Lance	-	HEADS Target	SHOC	NS	-	Target	army.mil	-	-
2013-A42	2456665.50	2013 Oct	Lance	-	HEADS Target	SHOC	NS	-	Target	army.mil	-	-
2013-A43	2456665.50	2013 Nov 6	Lance	-	HEADS Target	SHOC	NS	-	Target	army.mil	-	-
2015-A54	2457021.50	2015 Mar 6	Lance	-	Risk Reduction	SHOC	NS	-	Target	army.mil	-	-
2015-A55	2457021.50	2015 Mar 29 0830	Lance	-	Aegis NML E1 Target	HDA	NS	-	Target	mda.mil	-	-
2015-A56	2457021.50	2015 Jul 30 0615	Lance	-	Aegis NML E2 Target	HDA	NS	-	Target	mda.mil	-	-
2015-A45	2457233.76	2015 Jul 30 0615	Lance	-	SH-6 Target	HDA	NS	-	Target	mda.mil	-	-
2016-A109	2457736.50	2016 Dec 14	Lance	-	-	HDA	NS	-	Target	mda.mil	-	-



Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Mission	Launch_FlightCode	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee_Km	Range_Km	Dest
1950-A44	2433579-50	1950 Oct 25	Lark	-	225	-	-	-	-	CC	LA	-	-	87	-	-
1950-A45	2433580-50	1950 Oct 26	Lark	-	226	-	-	-	-	CC	LA	-	-	07	-	-
1950-A66	2433606-50	1950 Nov 21	Lark	-	227	-	-	-	-	CC	LA	-	-	87	-	-
1951-A10	2433747-50	1951 Apr 11	Lark	-	231	-	-	-	-	CC	LA	-	-	07	-	-
1951-A14	2433753-50	1951 Apr 17	Lark	-	232	-	-	-	-	CC	LA	-	-	87	-	-
1951-A16	2433769-50	1951 May 3	Lark	-	234	-	-	-	-	CC	LA	-	-	87	-	-
1951-A20	2433777-50	1951 May 11	Lark	-	235	-	-	-	-	CC	LA	-	-	07	-	-
1951-A23	2433795-50	1951 May 29	Lark	-	242	-	-	-	-	CC	LA	-	-	07	-	-
1951-A25	2433804-50	1951 Jun 7	Lark	-	236	-	-	-	-	CC	LA	-	-	07	-	-
1951-A26	2433830-50	1951 Jun 7	Lark	-	238	-	-	-	-	CC	LA	-	-	07	-	-
1951-A39	2433850-50	1951 Jul 3	Lark	-	240	-	-	-	-	CC	LA	-	-	87	-	-
1951-A46	2433847-50	1951 Jul 20	Lark	-	239	-	-	-	-	CC	LA	-	-	07	-	-
1951-A62	2433902-50	1951 Sep 13	Lark	-	593	-	-	-	-	CC	LA	-	-	07	-	-
1951-A63	2433908-50	1951 Sep 19	Lark	-	595	-	-	-	-	CC	LA	-	-	87	-	-
1951-A67	2433923-50	1951 Oct 4	Lark	-	597	-	-	-	-	CC	LA	-	-	07	-	-
1951-A92	2433991-50	1951 Dec 11	Lark	-	588	-	-	-	-	CC	LA	-	-	87	-	-
1952-A13	2434039-50	1952 Jan 28	Lark	-	600	-	-	-	-	CC	LA	-	-	07	-	-
1952-A29	2434054-50	1952 Feb 12	Lark	-	604	-	-	-	-	CC	LA	-	-	07	-	-
1952-A37	2434070-50	1952 Feb 28	Lark	-	594	-	-	-	-	CC	LA	-	-	07	-	-
1952-A61	2434092-50	1952 Mar 21	Lark	-	594	-	-	-	-	CC	LA	-	-	07	-	-
1952-A65	2434112-50	1952 Mar 28	Lark	-	602	-	-	-	-	CC	LA	-	-	07	-	-
1952-A66	2434119-50	1952 Apr 17	Lark	-	601	-	-	-	-	CC	LA	-	-	07	-	-
1952-A79	2434188-50	1952 May 16	Lark	-	603	-	-	-	-	CC	LA	-	-	87	-	-
1952-A101	2434187-50	1952 Jun 24	Lark	-	230	-	-	-	-	CC	LA	-	-	87	-	-
1952-A106	2434200-50	1952 Jul 7	Lark	-	592	-	-	-	-	CC	LA	-	-	87	-	-
1952-A112	2434208-50	1952 Jul 15	Lark	-	606	-	-	-	-	CC	LA	-	-	07	-	-
1952-A159	2434272-50	1952 Sep 17	Lark	-	608	-	-	-	-	CC	LA	-	-	87	-	-
1952-A249	2434344-50	1952 Nov 28	Lark	-	610	-	-	-	-	CC	LA	-	-	87	-	-
1952-A254	2434350-50	1952 Dec 4	Lark	-	589	-	-	-	-	CC	LA	-	-	87	-	-
1952-A271	2434362-50	1952 Dec 16	Lark	-	605	-	-	-	-	CC	LA	-	-	07	-	-
1953-A65	2434420-50	1953 Feb 12	Lark	-	607	-	-	-	-	CC	LA	-	-	87	-	-
1953-A74	2434432-50	1953 Feb 24	Lark	-	612	-	-	-	-	CC	LA	-	-	87	-	-
1953-A89	2434439-50	1953 Mar 3	Lark	-	611	-	-	-	-	CC	LA	-	-	87	-	-
1953-A119	2434452-50	1953 Mar 16	Lark	-	621	-	-	-	-	CC	LA	-	-	8	-	-
1953-A161	2434475-50	1953 Apr 6	Lark	-	622	-	-	-	-	CC	LA	-	-	87	-	-
1953-A164	2434469-50	1953 Apr 22	Lark	-	614	-	-	-	-	CC	LA	-	-	07	-	-
1953-A191	2434486-50	1953 Apr 28	Lark	-	623	-	-	-	-	CC	LA	-	-	07	-	-
1953-A211	2434509-50	1953 May 12	Lark	-	624	-	-	-	-	CC	LA	-	-	87	-	-
1953-A216	2434511-50	1953 May 14	Lark	-	613	-	-	-	-	CC	LA	-	-	87	-	-
1953-A225	2434566-50	1953 Jul 6	Lark	-	626	-	-	-	-	CC	LA	-	-	87	-	-



Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	UrbPay	Agency	Launch_Code	Group	Category	LfCite	Cite	Notes
1950-A44	2453575.50	1950 Oct 25	Lark	-	225	0.000	36MS	MS	-	Test	MT60-2644	-	-
1950-A45	2453580.50	1950 Oct 26	Lark	-	226	0.000	36MS	MF	-	Test	MT60-2644	-	-
1950-A56	2453605.50	1950 Nov 21	Lark	-	227	0.000	36MS	MS	-	Test	MT60-2644	-	-
1951-A10	2453747.50	1951 Apr 11	Lark	-	231	0.000	36MS	MF	-	Test	MT60-2644	-	-
1951-A14	2453753.50	1951 Apr 17	Lark	-	232	0.000	36MS	MS	-	Test	MT60-2644	-	-
1951-A16	2453769.50	1951 May 3	Lark	-	234	0.000	4803GHS	MS	-	Test	MT60-2644	-	-
1951-A20	2453777.50	1951 May 11	Lark	-	235	0.000	4803GHS	MS	-	Test	MT60-2644	-	-
1951-A23	2453795.50	1951 May 29	Lark	-	242	0.000	4803GHS	MF	-	Test	MT60-2644	-	-
1951-A25	2453804.50	1951 Jun 7	Lark	-	236	0.000	655GHS	MS	-	Test	MT60-2644	-	-
1951-A26	2453804.50	1951 Jun 7	Lark	-	238	0.000	655GHS	MF	-	Test	MT60-2644	-	-
1951-A39	2453830.50	1951 Jul 3	Lark	-	240	0.000	655GHS	MS	-	Test	MT60-2644	-	-
1951-A46	2453897.50	1951 Jul 20	Lark	-	239	0.000	655GHS	MF	-	Test	MT60-2644	-	-
1951-A62	2453902.50	1951 Sep 13	Lark	-	593	0.000	655GHS	MF	-	Test	MT60-2644	-	-
1951-A63	2453905.50	1951 Sep 19	Lark	-	595	0.000	655GHS	MS	-	Test	MT60-2644	-	-
1951-A67	2453923.50	1951 Oct 4	Lark	-	597	0.000	655GHS	MF	-	Test	MT60-2644	-	-
1951-A92	2453991.50	1951 Dec 11	Lark	-	598	0.000	655GHS	MS	-	Test	MT60-2644	-	-
1952-A13	2454039.50	1952 Jan 28	Lark	-	600	0.000	655GHS	MS	-	Test	MT60-2644	-	-
1952-A29	2454054.50	1952 Feb 12	Lark	-	604	0.000	655GHS	MF	-	Test	MT60-2644	-	-
1952-A37	2454070.50	1952 Feb 28	Lark	-	596	0.000	655GHS	MF	-	Test	MT60-2644	-	-
1952-A51	2454092.50	1952 Mar 21	Lark	-	594	0.000	655GHS	MF	-	Test	MT60-2644	-	-
1952-A65	2454112.50	1952 Apr 10	Lark	-	602	0.000	655GHS	MF	-	Test	MT60-2644	-	-
1952-A66	2454148.50	1952 Apr 17	Lark	-	601	0.000	655GHS	MF	-	Test	MT60-2644	-	-
1952-A79	2454148.50	1952 May 16	Lark	-	603	0.000	655GHS	MS	-	Test	MT60-2644	-	-
1952-A101	2454187.50	1952 Jun 24	Lark	-	230	0.000	655GHS	MS	-	Test	MT60-2644	-	-
1952-A108	2454200.50	1952 Jul 7	Lark	-	592	0.000	655GHS	MF	-	Test	MT60-2644	-	-
1952-A112	2454205.50	1952 Jul 15	Lark	-	606	0.000	655GHS	MS	-	Test	MT60-2644	-	-
1952-A169	2454272.50	1952 Sep 17	Lark	-	608	0.000	655GHS	MS	-	Test	MT60-2644	-	-
1952-A249	2454344.50	1952 Nov 28	Lark	-	610	0.000	655GHS	MS	-	Test	MT60-2644	-	-
1952-A254	2454350.50	1952 Nov 4	Lark	-	599	0.000	655GHS	MS	-	Test	MT60-2644	-	-
1952-A271	2454362.50	1952 Dec 16	Lark	-	605	0.000	655GHS	MF	-	Test	MT60-2644	-	-
1953-A55	2454420.50	1953 Feb 12	Lark	-	607	0.000	655GHS	MS	-	Test	MT60-2644	-	-
1953-A74	2454432.50	1953 Feb 24	Lark	-	612	0.000	655GHS	MS	-	Test	MT60-2644	-	-
1953-A85	2454439.50	1953 Mar 3	Lark	-	611	0.000	655GHS	MS	-	Test	MT60-2644	-	-
1953-A119	2454462.50	1953 Mar 16	Lark	-	621	0.000	655GHS	MS	-	Test	MT60-2644	-	-
1953-A161	2454475.50	1953 Apr 6	Lark	-	622	0.000	655GHS	MS	-	Test	MT60-2644	-	-
1953-A164	2454468.50	1953 Apr 22	Lark	-	614	0.000	655GHS	MF	-	Test	MT60-2644	-	-
1953-A191	2454495.50	1953 Apr 26	Lark	-	623	0.000	655GHS	MS	-	Test	MT60-2644	-	-
1953-A211	2454693.50	1953 May 12	Lark	-	624	0.000	655GHS	MS	-	Test	MT60-2644	-	-
1953-A218	2454611.50	1953 May 14	Lark	-	613	0.000	655GHS	MS	-	Test	MT60-2644	-	-
1953-A253	2454666.50	1953 Jul 8	Lark	-	626	0.000	655GHS	MS	-	Test	MT60-2644	-	-





Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Mission	FlightCode	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee km	Range km	Dest
2020-F04	2459995.33	2020 May 25 1950	LauncherOne	-	R02	Starshine 4?	-	-	B/47-744	MHW	RM12/30	WTR	LP15	10?	-	-
2021-002	2459232.32	2021 Jan 17 1938:51	LauncherOne	-	R03	Elana XX	-	-	B/47-744	MHW	RM12/30	WTR	LP15	535	-	-
2021-068	2459396.12	2021 Jun 30 1447	LauncherOne	-	R04	STP-2/VPB	Tubular Bells I	-	B/47-744	MHW	RM12/30	WTR	LP16	543	-	-
2022-003	2459593.45	2022 Jan 13 2252	LauncherOne	-	R05	STP-2/VPB	Above The Clouds	-	B/47-744	MHW	RM12/30	WTR	LP17 A	505	-	-
2022-074	2459762.79	2022 Jul 2 0653:00	LauncherOne	-	R06	STP-S28A	Straight Up	-	B/47-744	MHW	RM12/30	WTR	LP17 B	499	-	-
2023-F01	2459964.46	2023 Jan 9 2308:59?	LauncherOne	-	R07	UK Launch	Start Me Up	-	B/47-744	NEWQ	RM12/30	CELS	LP1	-	-	-



Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Launch	OrbPay	Agency	Launch_Code	Group	Category	LTCite	Cite	Notes
2020-F04	2458995.33	2020 May 25 1950	LauncherOne	-	R02	OF	0.040	VORR	OF	CG/G	Sat SSD L	Wire	-	-
2021-002	2459232.32	2021 Jan 17 1938:151	LauncherOne	-	R03	OS	0.030	VORR	OS	CG/G	Sat LED L	Wire	-	-
2021-058	2459396.12	2021 Jun 30 1447	LauncherOne	-	R04	OS	0.036	VORR	OS	CG/G	Sat LED L	Wire	-	-
2022-003	2459693.45	2022 Jan 13 2252	LauncherOne	-	R05	OS	0.044	VORR	OS	CG/G	Sat LED L	Wire	-	-
2022-074	2459762.79	2022 Jul 2 0653:00	LauncherOne	-	R06	OS	0.078	VORR	OS	CG/G	Sat LED L	Wire	-	-
2023-F01	2459954.46	2023 Jan 9 2308:59?	LauncherOne	-	R07	OF	0.073	VORR	OF	C/UG	Sat LED L	Wire	-	-



Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Mission	Launch_FlightCode	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee km	Range km	Dest
1964-A187	2438510.50	1964 Apr 25	Lex	-	01	LEX-01	-	-	-	CERES	-	-	-	1?	-	-
1966-M45	2438911.50	1966 Jun	Lex	-	02/1	-	-	-	-	CERES	-	-	-	68	-	-
1966-M46	2438911.50	1966 Jun	Lex	-	02/2	-	-	-	-	CERES	-	-	-	60?	-	-
1966-M47	2438911.50	1966 Jun	Lex	-	02/3	-	-	-	-	CERES	-	-	-	60?	-	-
1967-S06	2439794.50	1967 Nov	Lex	-	02B/1	-	-	-	-	CERES	-	-	-	115	-	-
1967-S07	2439794.50	1967 Nov	Lex	-	02B/2	-	-	-	-	CERES	-	-	-	115?	-	-
1967-S08	2439794.50	1967 Nov	Lex	-	02B/3	SECT Meteo	-	-	-	CERES	-	-	-	80?	-	-
1967-S597	2439794.50	1967 Nov	Lex	-	02B/4	SECT Meteo	-	-	-	CERES	-	-	-	101?	-	-



Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	OrbPay	Agency	Launch_Code	Group	Category	LTCite	Cite	Notes
1964-A187	2438510.50	1964 Apr 25	Lex	-	01	0.000	OMERA	SF	OMERA/	Test	ww.hybridraketen.de	ESR0-SP39	-
1965-M45	2438911.50	1965 Jun	Lex	-	02/1	0.000	OMERA	SS	OMERA/	Test	Moullir-Serra	-	-
1965-M46	2438911.50	1965 Jun	Lex	-	02/2	0.000	OMERA	SS	OMERA/	Test	Moullir-Serra	-	-
1965-M47	2438911.50	1965 Jun	Lex	-	02/3	0.000	OMERA	SS	OMERA/	Test	Moullir-Serra	-	-
1967-S06	2438794.50	1967 Nov	Lex	-	02B/1	0.000	OMERA	SS	OMERA/	Test	Moullir-Serra	-	-
1967-S07	2438794.50	1967 Nov	Lex	-	02B/2	0.000	OMERA	SS	OMERA/	Test	Moullir-Serra	-	-
1967-S08	2438794.50	1967 Nov	Lex	-	02B/3	0.000	OMERA	SS	SECT/	Meteo	Moullir-Serra	-	-
1967-S897	2438794.50	1967 Nov	Lex	-	02B/4	0.000	OMERA	SS	SECT/	Meteo	Moullir-Serra	-	-









Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Launch_Mission	FlightCode	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee_Km	Range_Km	Dest
1960-W59	2437166.22	1960 Aug 19 1720	Loki	-	-	-	-	-	-	CC	LC43	-	-	607	-	-
1960-W60	2437169.18	1960 Aug 22 1626	Loki	-	-	-	-	-	-	CC	LC43	-	-	607	-	-
1960-W61	2437169.20	1960 Aug 22 1650	Loki	-	-	-	-	-	-	CC	LC43	-	-	607	-	-
1960-W62	2437171.26	1960 Aug 24 1812	Loki	-	-	-	-	-	-	CC	LC43	-	-	607	-	-
1960-W63	2437171.29	1960 Aug 24 1856	Loki	-	-	-	-	-	-	CC	LC43	-	-	607	-	-
1960-W64	2437172.13	1960 Aug 25 1503	Loki	-	-	-	-	-	-	CC	LC43	-	-	607	-	-
1960-W65	2437172.14	1960 Aug 25 1520	Loki	-	-	-	-	-	-	CC	LC43	-	-	607	-	-
1960-W66	2437172.15	1960 Aug 25 1540	Loki	-	-	-	-	-	-	CC	LC43	-	-	607	-	-
1960-W25	2437219.51	1960 Oct 12 0015	Loki Dart	?	-	-	-	-	-	EdL	-	-	-	62	-	-
1960-W26	2437220.53	1960 Oct 13 0045	Loki Dart	?	-	-	-	-	-	WS	-	-	-	65	-	-
1960-W27	2437233.49	1960 Oct 27 2305	Loki Dart	?	-	-	-	-	-	EdL	-	-	-	69	-	-
1960-W28	2437235.46	1960 Oct 27 2305	Loki Dart	?	-	-	-	-	-	EdL	-	-	-	69	-	-
1960-W39	2437239.46	1960 Oct 31 2300:00	Loki Dart	?	-	-	-	-	-	EdL	-	-	-	607	-	-
1960-W41	2437256.42	1960 Nov 17 2212	Loki Dart	?	-	-	-	-	-	EdL	-	-	-	65	-	-
1960-W42	2437259.95	1960 Nov 21 1050	Loki Dart	?	-	-	-	-	-	EdL	-	-	-	07	-	-
1961-W05	2437299.50	1961 Jan	Loki Dart	-	-	-	-	-	-	FC	-	-	-	07	-	-
1961-W06	2437299.50	1961 Jan	Loki Dart	-	-	-	-	-	-	FC	-	-	-	07	-	-
1961-W03	2437317.22	1961 Jan 17 1715	Loki Dart	?	-	-	-	-	-	WS	-	-	-	57	-	-
1961-W23	2437317.25	1961 Jan 17 1804	Loki Dart	?	-	-	-	-	-	PM	-	-	-	37	-	-
1961-W28	2437317.60	1961 Jan 18 0231	Loki Dart	?	-	-	-	-	-	PM	LC43	-	-	43	-	-
1961-W28	2437326.56	1961 Jan 26 0157	Loki Dart	?	-	-	-	-	-	CC	LC43	-	-	35	-	-
1961-W29	2437326.47	1961 Jan 26 2320	Loki Dart	?	-	-	-	-	-	CC	LC43	-	-	34	-	-
1961-W05	2437332.01	1961 Feb 1 1219	Loki Dart	?	-	-	-	-	-	PM	-	-	-	62	-	-
1961-W05	2437347.28	1961 Feb 16 1658	Loki Dart	?	-	-	-	-	-	WS	-	-	-	51	-	-
1961-W07	2437376.11	1961 Mar 17 1445	Loki Dart	?	-	-	-	-	-	WS	-	-	-	69	-	-
1961-W08	2437390.11	1961 Mar 31 1443	Loki Dart	?	-	-	-	-	-	WS	-	-	-	68	-	-
1961-W09	2437400.42	1961 Apr 10 2210	Loki Dart	?	-	-	-	-	-	WS	-	-	-	72	-	-
1961-W10	2437409.49	1961 Apr 19 2345	Loki Dart	?	-	-	-	-	-	WS	-	-	-	66	-	-
1961-W11	2437410.10	1961 Apr 20 1450	Loki Dart	?	-	-	-	-	-	WS	-	-	-	607	-	-
1961-W12	2437424.41	1961 May 4 2147	Loki Dart	?	-	-	-	-	-	WS	-	-	-	66	-	-
1961-W12	2437424.46	1961 May 4 2325	Loki Dart	?	-	-	-	-	-	EdL	-	-	-	66	-	-
1961-W40	2437467.35	1961 Jun 16 2018:00	Loki Dart	?	-	-	-	-	-	EdL	-	-	-	44	-	-
1961-W41	2437701.37	1962 Feb 5 2069	Loki Dart	?	-	-	-	-	-	EdL	-	-	-	67	-	-
1962-W37	2437950.36	1962 Oct 12 2101:00	Loki Dart	?	-	-	-	-	-	EdL	-	-	-	61	-	-
1962-W38	2437950.40	1962 Oct 12 2132:00	Loki Dart	?	-	-	-	-	-	EdL	-	-	-	65	-	-
1962-W39	2437950.44	1962 Oct 12 2238:00	Loki Dart	?	-	-	-	-	-	EdL	-	-	-	60	-	-
1962-W40	2437950.46	1962 Oct 12 2309:00	Loki Dart	?	-	-	-	-	-	EdL	-	-	-	61	-	-
1962-W41	2437950.51	1962 Oct 13 0015:00	Loki Dart	?	-	-	-	-	-	EdL	-	-	-	68	-	-
1962-W42	2437950.56	1962 Oct 13 0131:00	Loki Dart	?	-	-	-	-	-	EdL	-	-	-	66	-	-
1962-W43	2437950.57	1962 Oct 13 0136:00	Loki Dart	?	-	-	-	-	-	EdL	-	-	-	63	-	-
1962-W44	2437950.59	1962 Oct 13 0214:00	Loki Dart	?	-	-	-	-	-	EdL	-	-	-	64	-	-
1962-W45	2437950.61	1962 Oct 13 0325:00	Loki Dart	?	-	-	-	-	-	EdL	-	-	-	62	-	-
1962-W47	2437950.66	1962 Oct 13 0352:00	Loki Dart	?	-	-	-	-	-	EdL	-	-	-	78	-	-
1964-W150	243828.50	1964 Jan 31	Loki Dart	-	-	-	-	-	-	PH7	-	-	-	607	-	-
1964-W152	243863.20	1964 Sep 25	Judi-Dart	-	-	-	-	-	-	PH7	-	-	-	78	-	-
1964-W152	243863.20	1964 Sep 25	Judi-Dart	-	-	-	-	-	-	PH7	-	-	-	78	-	-
1964-W07	243881.29	1964 Feb 5 1900	Loki Dart	-	-	-	-	-	-	OBLC	-	-	-	607	-	-
1964-W11	2438871.44	1964 Feb 5 2230	Loki Dart	-	-	-	-	-	-	OBLC	-	-	-	607	-	-
1964-W11	2438871.44	1964 Mar 18 1436	Loki Dart	-	-	-	-	-	-	OBLC	-	-	-	607	-	-
1964-W11	2438901.79	1964 Jul 14 0954	Judi-Dart	-	-	-	-	-	-	OBLC	-	-	-	607	-	-
1964-W42	2438931.91	1964 Jul 15 0855	Judi-Dart	-	-	-	-	-	-	OBLC	-	-	-	607	-	-
1964-W43	2438932.86	1964 Jul 16 0911	Judi-Dart	-	-	-	-	-	-	OBLC	-	-	-	607	-	-
1964-W60	2438926.85	1964 Jul 19 0801	Judi-Dart	-	-	-	-	-	-	OBLC	-	-	-	607	-	-
1964-W65	2438918.27	1964 Aug 10 1830:00	Loki Dart	?	-	-	-	-	-	TELS	TUTO	-	-	757	-	-
1964-W66	2438920.26	1964 Aug 12 1852:00	Loki Dart	?	-	-	-	-	-	TELS	TUTO	-	-	757	-	-
1964-W67	2438925.27	1964 Aug 17 1824:00	Loki Dart	?	-	-	-	-	-	TELS	TUTO	-	-	757	-	-
1964-W67	2438925.27	1964 Aug 17 1824:00	Loki Dart	?	-	-	-	-	-	TELS	TUTO	-	-	757	-	-
1964-W61	2438927.30	1964 Aug 19 1907:00	Loki Dart	?	-	-	-	-	-	TELS	TUTO	-	-	757	-	-
1964-W63	2438927.30	1964 Aug 20	Loki Dart	-	-	-	-	-	-	TELS	TUTO	-	-	757	-	-
1964-W64	2438927.50	1964 Aug 20	Loki Dart	-	-	-	-	-	-	TELS	TUTO	-	-	757	-	-
1964-W75	2438955.50	1964 Sep 17	Loki Dart	-	-	-	-	-	-	TELS	TUTO	-	-	757	-	-
1964-W129	2438990.08	1964 Sep 21 1358	Judi-Dart	-	-	-	-	-	-	TELS	TUTO	-	-	757	-	-
1964-W105	2438709.50	1964 Nov 10	Loki Dart	-	-	-	-	-	-	TELS	TUTO	-	-	657	-	-
1964-W130	2438718.09	1964 Nov 18 1408	Loki Dart	-	-	-	-	-	-	TELS	TUTO	-	-	657	-	-
1964-W131	2438730.59	1964 Dec 1 0215	Loki Dart	-	-	-	-	-	-	TELS	TUTO	-	-	657	-	-
1964-W117	2438731.50	1964 Dec 2 0215	Loki Dart	-	-	-	-	-	-	TELS	TUTO	-	-	657	-	-
1964-W119	2438734.79	1964 Dec 5 0655	Loki Dart	-	-	-	-	-	-	TELS	TUTO	-	-	657	-	-
1964-W123	2438744.77	1964 Dec 15 0630	Loki Dart	-	-	-	-	-	-	TELS	TUTO	-	-	657	-	-
1964-W124	2438745.82	1964 Dec 16 0738	Loki Dart	-	-	-	-	-	-	TELS	TUTO	-	-	657	-	-
1964-W132	2438746.04	1964 Dec 16 1303	Loki Dart	-	-	-	-	-	-	TELS	TUTO	-	-	657	-	-
1965-W08	2438772.96	1965 Jan 12 1059	Loki Dart	-	-	-	-	-	-	TELS	TUTO	-	-	657	-	-
1965-W08	2438773.93	1965 Jan 13 1015	Loki Dart	-	-	-	-	-	-	TELS	TUTO	-	-	657	-	-
1965-W207	2438774.09	1965 Jan 13 1410	Loki Dart	-	-	-	-	-	-	TELS	TUTO	-	-	657	-	-
1965-W207	2438774.09	1965 Feb 3 0739	Loki Dart	-	-	-	-	-	-	TELS	TUTO	-	-	657	-	-
1965-W208	2438809.06	1965 Mar 17 1325	Loki Dart	-	-	-	-	-	-	TELS	TUTO	-	-	657	-	-
1965-W243	2438830.50	1965 Mar 17	Loki Dart	-	-	-	-	-	-	TELS	TUTO	-	-	657	-	-
1965-W244	2438836.50	1965 Mar 17	Loki Dart	-	-	-	-	-	-	TELS	TUTO	-	-	657	-	-
1965-W245	2438836.79	1965 Mar 17 0655	Loki Dart	-	-	-	-	-	-	TELS	TUTO	-	-	657	-	-
1965-W249	2438837.23	1965 Mar 17 1732	Loki Dart	-	-	-	-	-	-	TELS	TUTO	-	-	657	-	-
1965-W245	2438838.50	1965 Mar 17	Loki Dart	-	-	-	-	-	-	TELS	TUTO	-	-	657	-	-
1965-W246	2438841.50	1965 Mar 22	Loki Dart	-	-	-	-	-	-	TELS	TUTO	-	-	657	-	-
1965-W247	2438844.50	1965 Mar 25	Loki Dart	-	-	-	-	-	-	TELS	TUTO	-	-	657	-	-
1965-W248	2438847.50	1965 Mar 28	Loki Dart	-	-	-	-	-	-	TELS	TUTO	-	-	657	-	-
1965-W249	2438858.50	1965 Apr 8	Loki Dart	-	-	-	-	-	-	TELS	TUTO	-	-	657	-	-
1965-W69	2438899.79	1965 May 19 0704	Loki-Dart	-	-	-	-	-	-	TELS	TUTO	-	-	657	-	-
1965-W81	2438927.79	1965 Jun 16 0704	Judi-Dart	-	-	-	-	-	-	TELS	TUTO	-	-	77	-	-





Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Launch_Mission	FlightCode	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee_Km	Range_Km	Dest
1966-M135	2439438-99	1966 Nov 9 1139	Judi-Barr	-	INTA H-6605	-	-	-	-	ELAR	-	-	-	707	-	-
1966-M126	2439444-29	1966 Nov 14 1900	Loki Barr	-	-	Ballute	-	-	-	CC	-	-	-	607	-	-
1966-M125	2439444-34	1966 Nov 14 2007	Loki Barr	-	-	Ballute	-	-	-	CC	-	-	-	607	-	-
1966-M127	2439445-14	1966 Nov 15 1520	Loki Barr	-	-	Ballute	-	-	-	CC	-	-	-	607	-	-
1966-M128	2439444-50	1966 Nov 15	Loki Barr	-	-	Ballute	-	-	-	CC	-	-	-	607	-	-
1966-M371	2439446-08	1966 Nov 16 1401:00	Judi-Barr	?	SUPARCO-032/66	-	-	-	-	SOM	-	-	-	64	-	-
1966-M372	2439446-15	1966 Nov 16 1530	Judi-Barr	-	EXAMENET C14?	-	-	-	-	TART	-	-	-	61	-	-
1966-M136	2439447-96	1966 Nov 18 1109	Judi-Barr	-	INTA H-6606	-	-	-	-	ELAR	-	-	-	707	-	-
1966-M137	2439452-96	1966 Nov 23 1105	Judi-Barr	-	INTA H-6607	-	-	-	-	ELAR	-	-	-	707	-	-
1966-M138	2439461-96	1966 Dec 2 1106	Judi-Barr	-	INTA H-6608	-	-	-	-	ELAR	-	-	-	707	-	-
1966-M139	2439466-96	1966 Dec 7 1136	Judi-Barr	-	INTA H-6609	-	-	-	-	ELAR	-	-	-	707	-	-
1966-M385	2439468-98	1966 Dec 10 0337:00	Loki Barr	?	-	-	-	-	-	AIT	-	-	-	757	-	-
1966-M386	2439469-65	1966 Dec 10 0628:00	Loki Barr	?	-	-	-	-	-	SHER	-	-	-	757	-	-
1966-M388	2439469-77	1966 Dec 10 0630:00	Loki Barr	?	-	-	-	-	-	CELPA	-	-	-	60	-	-
1966-M390	2439474-09	1966 Dec 14 1407	Judi-Barr	-	EXAMENET C14?	-	-	-	-	CELPA	-	-	-	60	-	-
1966-M394	2439474-35	1966 Dec 14 2025	Judi-Barr	-	EXAMENET C15	-	-	-	-	WI	-	-	-	66	-	-
1966-M395	2439474-36	1966 Dec 14 2039	Judi-Barr	-	EXAMENET W22	Robnette	-	-	-	CELPA	-	-	-	68	-	-
1967-M25	2439509-09	1967 Jan 18 1415	Judi-Barr	-	EXAMENET C16	Chaff	-	-	-	CELPA	-	-	-	67	-	-
1967-M300	2439521-21	1967 Jan 30 1703	Loki Barr	-	EXAMENET N17	Ballute	-	-	-	CC	-	-	-	607	-	-
1967-M301	2439522-12	1967 Jan 31 1608	Loki Barr	-	-	Ballute	-	-	-	CC	-	-	-	607	-	-
1967-M302	2439523-12	1967 Feb 1 1500	Judi-Barr	-	EXAMENET M18	Chaff	-	-	-	CELPI	-	-	-	65	-	-
1967-M316	2439531-13	1967 Feb 9 1501	Judi-Barr	-	EXAMENET W26	Chaff	-	-	-	WI	-	-	-	67	-	-
1967-M46	2439537-06	1967 Feb 15 1401	Judi-Barr	-	EXAMENET W26	Chaff	-	-	-	CELPA	-	-	-	32	-	-
1967-M303	2439537-12	1967 Feb 15 1500	Judi-Barr	-	EXAMENET C17	Chaff	-	-	-	WI	-	-	-	59	-	-
1967-M304	2439544-12	1967 Feb 22 1500	Judi-Barr	-	EXAMENET M22	Chaff	-	-	-	CELPI	-	-	-	607	-	-
1967-M305	2439544-12	1967 Feb 22 1500	Judi-Barr	-	EXAMENET W31	Chaff	-	-	-	WI	-	-	-	71	-	-
1967-M306	2439579-19	1967 Mar 28 1627	Judi-Barr	-	EXAMENET M23	Chaff	-	-	-	CELPI	-	-	-	67	-	-
1967-M320	2439579-35	1967 Mar 28 1627	Judi-Barr	-	EXAMENET M23	Chaff	-	-	-	CELPI	-	-	-	66	-	-
1967-M34	2439586-89	1967 Apr 8 0925:00	Loki Barr	?	-	-	-	-	-	EGL	-	-	-	78	-	-
1967-M38	2439591-11	1967 Apr 11	Loki Barr	-	-	Ballute	-	-	-	CC	-	-	-	607	-	-
1967-M39	2439592-50	1967 Apr 12 1446	Loki Barr	-	EXAMENET C19	Ballute	-	-	-	CELPA	-	-	-	607	-	-
1967-M97	2439593-12	1967 Apr 12 1446	Judi-Barr	-	-	Chaff	-	-	-	CELPA	-	-	-	70	-	-
1967-M140	2439620-10	1967 May 9 1421	Loki Barr	-	-	Ballute	-	-	-	CC	-	-	-	607	-	-
1967-M141	2439619-50	1967 May 9 1527	Loki Barr	-	-	Ballute	-	-	-	CC	-	-	-	607	-	-
1967-M142	2439623-14	1967 May 10 1627	Loki Barr	-	-	Ballute	-	-	-	CC	-	-	-	607	-	-
1967-M143	2439623-19	1967 May 10 1627	Loki Barr	-	-	Ballute	-	-	-	CC	-	-	-	607	-	-
1967-M144	2439626-77	1967 May 14 1115	Loki Barr	-	-	Ballute	-	-	-	CC	-	-	-	607	-	-
1967-M326	2439628-13	1967 Jun 17 1511	Judi-Barr	-	EXAMENET W24	Chaff	-	-	-	CELPI	-	-	-	64	-	-
1967-M327	2439629-50	1967 Jun 17	Loki Barr	-	EXAMENET W24	Qual Test 1-1	-	-	-	CELPI	-	-	-	64	-	-
1967-M328	2439629-50	1967 Jun 18	Loki Barr	-	EXAMENET W24	Qual Test 1-2	-	-	-	CELPI	-	-	-	64	-	-
1967-M329	2439629-50	1967 Jun 18	Loki Barr	-	EXAMENET W24	Qual Test 1-3	-	-	-	CELPI	-	-	-	64	-	-
1967-M330	2439629-50	1967 Jun 18	Loki Barr	-	EXAMENET W24	Qual Test 1-4	-	-	-	CELPI	-	-	-	64	-	-
1967-M331	2439629-50	1967 Jun 18	Loki Barr	-	EXAMENET W24	Chaff	-	-	-	CELPI	-	-	-	64	-	-
1967-M332	2439629-50	1967 Jun 18	Loki Barr	-	EXAMENET W24	Chaff	-	-	-	CELPI	-	-	-	64	-	-
1967-M333	2439629-50	1967 Jun 18	Loki Barr	-	EXAMENET W24	Chaff	-	-	-	CELPI	-	-	-	64	-	-
1967-M334	2439629-50	1967 Jun 18	Loki Barr	-	EXAMENET W24	Chaff	-	-	-	CELPI	-	-	-	64	-	-
1967-M335	2439629-50	1967 Jun 18	Loki Barr	-	EXAMENET W24	Chaff	-	-	-	CELPI	-	-	-	64	-	-
1967-M336	2439629-50	1967 Jun 18	Loki Barr	-	EXAMENET W24	Chaff	-	-	-	CELPI	-	-	-	64	-	-
1967-M337	2439629-50	1967 Jun 18	Loki Barr	-	EXAMENET W24	Chaff	-	-	-	CELPI	-	-	-	64	-	-
1967-M338	2439629-50	1967 Jun 18	Loki Barr	-	EXAMENET W24	Chaff	-	-	-	CELPI	-	-	-	64	-	-
1967-M339	2439629-50	1967 Jun 18	Loki Barr	-	EXAMENET W24	Chaff	-	-	-	CELPI	-	-	-	64	-	-
1967-M340	2439629-50	1967 Jun 18	Loki Barr	-	EXAMENET W24	Chaff	-	-	-	CELPI	-	-	-	64	-	-
1967-M341	2439629-50	1967 Jun 18	Loki Barr	-	EXAMENET W24	Chaff	-	-	-	CELPI	-	-	-	64	-	-
1967-M342	2439629-50	1967 Jun 18	Loki Barr	-	EXAMENET W24	Chaff	-	-	-	CELPI	-	-	-	64	-	-
1967-M343	2439629-50	1967 Jun 18	Loki Barr	-	EXAMENET W24	Chaff	-	-	-	CELPI	-	-	-	64	-	-
1967-M344	2439629-50	1967 Jun 18	Loki Barr	-	EXAMENET W24	Chaff	-	-	-	CELPI	-	-	-	64	-	-
1967-M345	2439629-50	1967 Jun 18	Loki Barr	-	EXAMENET W24	Chaff	-	-	-	CELPI	-	-	-	64	-	-
1967-M346	2439629-50	1967 Jun 18	Loki Barr	-	EXAMENET W24	Chaff	-	-	-	CELPI	-	-	-	64	-	-
1967-M347	2439629-50	1967 Jun 18	Loki Barr	-	EXAMENET W24	Chaff	-	-	-	CELPI	-	-	-	64	-	-
1967-M348	2439629-50	1967 Jun 18	Loki Barr	-	EXAMENET W24	Chaff	-	-	-	CELPI	-	-	-	64	-	-
1967-M349	2439629-50	1967 Jun 18	Loki Barr	-	EXAMENET W24	Chaff	-	-	-	CELPI	-	-	-	64	-	-
1967-M350	2439629-50	1967 Jun 18	Loki Barr	-	EXAMENET W24	Chaff	-	-	-	CELPI	-	-	-	64	-	-
1967-M351	2439629-50	1967 Jun 18	Loki Barr	-	EXAMENET W24	Chaff	-	-	-	CELPI	-	-	-	64	-	-
1967-M352	2439629-50	1967 Jun 18	Loki Barr	-	EXAMENET W24	Chaff	-	-	-	CELPI	-	-	-	64	-	-
1967-M353	2439629-50	1967 Jun 18	Loki Barr	-	EXAMENET W24	Chaff	-	-	-	CELPI	-	-	-	64	-	-
1967-M354	2439629-50	1967 Jun 18	Loki Barr	-	EXAMENET W24	Chaff	-	-	-	CELPI	-	-	-	64	-	-
1967-M355	2439629-50	1967 Jun 18	Loki Barr	-	EXAMENET W24	Chaff	-	-	-	CELPI	-	-	-	64	-	-
1967-M356	2439629-50	1967 Jun 18	Loki Barr	-	EXAMENET W24	Chaff	-	-	-	CELPI	-	-	-	64	-	-
1967-M357	2439629-50	1967 Jun 18	Loki Barr	-	EXAMENET W24	Chaff	-	-	-	CELPI	-	-	-	64	-	-
1967-M358	2439629-50	1967 Jun 18	Loki Barr	-	EXAMENET W24	Chaff	-	-	-	CELPI	-	-	-	64	-	-
1967-M359	2439629-50	1967 Jun 18	Loki Barr	-	EXAMENET W24	Chaff	-	-	-	CELPI	-	-	-	64	-	-
1967-M360	2439629-50	1967 Jun 18	Loki Barr	-	EXAMENET W24	Chaff	-	-	-	CELPI	-	-	-	64	-	-
1967-M361	2439629-50	1967 Jun 18	Loki Barr	-	EXAMENET W24	Chaff	-	-	-	CELPI	-	-	-	64	-	-
1967-M362	2439629-50	1967 Jun 18	Loki Barr	-	EXAMENET W24	Chaff	-	-	-	CELPI	-	-	-	64	-	-
1967-M363	2439629-50	1967 Jun 18	Loki Barr	-	EXAMENET W24	Chaff	-	-	-	CELPI	-	-	-	64	-	-
1967-M364	2439629-50	1967 Jun 18	Loki Barr	-	EXAMENET W24	Chaff	-	-	-	CELPI	-	-	-	64	-	-
1967-M365	2439629-50	1967 Jun 18	Loki Barr	-	EXAMENET W24	Chaff	-	-	-	CELPI	-	-	-	64	-	-
1967-M366	2439629-50	1967 Jun 18	Loki Barr	-	EXAMENET W24	Chaff	-	-	-	CELPI	-	-	-	64	-	-
1967-M367	2439629-50	1967 Jun 18	Loki Barr	-	EXAMENET W24	Chaff	-	-	-	CELPI	-	-	-	64	-	-
1967-M368	2439629-50	1967 Jun 18	Loki Barr	-	EXAMENET W24	Chaff	-	-	-	CELPI	-	-	-	64	-	-
1967-M369	2439629-50	1967 Jun 18	Loki Barr	-	EXAMENET W24	Chaff	-	-	-	CELPI	-	-	-	64	-	-
1967-M370	2439629-50	1967 Jun 18	Loki Barr	-	EXAMENET W24	Chaff	-	-	-	CELPI	-	-	-	64	-	-
1967-M371	2439629-50	1967 Jun 18	Loki Barr	-	EXAMENET W24	Chaff	-	-	-	CELPI	-	-	-	64	-	-
1967-M372	2439629-50	1967 Jun 18	Loki Barr	-	EXAMENET W24	Chaff	-	-	-	CELPI	-	-	-	64	-	-
1967-M373	2439629-50	1967 Jun 18	Loki Barr	-	EXAMENET W24	Chaff	-	-	-	CELPI	-	-	-	64	-	-
1967-M374	2439629-50	1967 Jun 18	Loki Barr	-	EXAMENET W24	Chaff	-	-	-	CELPI	-	-	-	64	-	-
1967-M375	2439629-50	1967 Jun 18	Loki Barr	-	EXAMENET W24	Chaff	-	-	-	CELPI	-	-	-	64	-	-
1967-M376	2439629-50	1967 Jun 18	Loki Barr	-	EXAMENET W24	Chaff	-	-	-	CELPI	-	-	-	64	-	-
1967-M377	2439629-50	1967 Jun 18	Loki Barr	-	EXAMENET W24	Chaff	-	-	-	CELPI	-	-	-	64	-	-
1967-M378	2439629-50	1967 Jun 18	Loki Barr	-	EXAMENET W24	Chaff	-	-	-	CELPI	-	-	-	64	-	-
1967-M379	2439629-50	1967 Jun 18	Loki Barr	-	EXAMENET W24	Chaff	-	-	-	CELPI	-	-	-	64	-	-
1967-M380	2439629-50	1967 Jun 18	Loki Barr	-	EXAMENET W24	Chaff	-	-	-	CELPI	-	-	-	64	-	-
1967-M381	2439629-50	1967 Jun 18	Loki Barr													





Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Launch_Mission	FlightCode	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee_Km	Range_Km	Deat
1969-W131	2440246.25	1969 Jan 23 1755:00	Judi-Barr	?	-	Starute, Datasonde	-	-	-	FC	-	-	-	53	-	-
1969-W135	2440246.95	1969 Jan 24 1054:59	Judi-Barr	?	LINTA H-6903	Starute, Datasonde	-	-	-	ELAR	-	-	-	58	-	-
1969-W139	2440246.25	1969 Jan 24 1756:00	Judi-Barr	?	-	Starute, Datasonde	-	-	-	FC	-	-	-	65	-	-
1969-W151	2440249.78	1969 Jan 28 0649:59	Judi-Barr	?	-	Starute, Datasonde	-	-	-	FC	-	-	-	61	-	-
1969-W152	2440249.86	1969 Jan 28 0837:00	Judi-Barr	?	-	Starute, Datasonde	-	-	-	FC	-	-	-	58	-	-
1969-W155	2440250.95	1969 Jan 29 1054:59	Judi-Barr	?	LINTA H-6904	Starute	-	-	-	ELAR	-	-	-	50	-	-
1969-W160	2440251.25	1969 Jan 29 1756:00	Judi-Barr	?	-	Starute	-	-	-	FC	-	-	-	54	-	-
1969-W172	2440252.34	1969 Jan 30 2006:00	Judi-Barr	?	-	Starute, Datasonde	-	-	-	FC	-	-	-	54	-	-
1969-W139	2440253.24	1969 Jan 31 1747:00	Judi-Barr	?	-	Starute, Datasonde	-	-	-	FC	-	-	-	47	-	-
1969-W176	2440252.50	1969 Feb	Judi-Barr	-	-	-	-	-	-	FC	-	-	-	607	-	-
1969-W177	2440252.50	1969 Feb	Judi-Barr	-	-	-	-	-	-	FC	-	-	-	607	-	-
1969-W215	2440258.93	1969 Feb 6 1023:59	Judi-Barr	-	-	Starute, Datasonde	-	-	-	FC	-	-	-	65	-	-
1969-W215	2440258.93	1969 Feb 8 0546:00	Judi-Barr	-	-	Starute, Datasonde	-	-	-	FC	-	-	-	63	-	-
1969-W230	2440260.74	1969 Feb 14 2256:59	Judi-Barr	-	-	Met Para, Datasonde	-	-	-	FC	-	-	-	57	-	-
1969-W269	2440267.46	1969 Feb 19 0456:59	Judi-Barr	-	-	Met Para, Datasonde	-	-	-	FC	-	-	-	53	-	-
1969-W280	2440271.71	1969 Feb 19 0456:59	Judi-Barr	-	-	Met Para, Datasonde	-	-	-	FC	-	-	-	53	-	-
1969-W310	2440279.64	1969 Feb 27 0318:00	Judi-Barr	-	-	Met Para, Datasonde	-	-	-	FC	-	-	-	53	-	-
1969-W323	2440281.74	1969 Mar 1 0548:59	Judi-Barr	-	-	Met Para, Datasonde	-	-	-	FC	-	-	-	53	-	-
1969-W346	2440286.62	1969 Mar 6 0248:00	Judi-Barr	-	-	Met Para, Datasonde	-	-	-	FC	-	-	-	57	-	-
1969-W349	2440287.57	1969 Mar 7 0144:59	Judi-Barr	-	-	Starute, Datasonde	-	-	-	FC	-	-	-	67	-	-
1969-W359	2440294.59	1969 Mar 14 0203:00	Judi-Barr	-	-	Starute, Datasonde	-	-	-	FC	-	-	-	66	-	-
1969-W359	2440295.59	1969 Mar 15 0203:00	Judi-Barr	-	-	Starute, Datasonde	-	-	-	FC	-	-	-	607	-	-
1969-W44	2440294.96	1969 Mar 19 1057	Judi-Barr	-	LINTA H-6905	Starute, Datasonde	-	-	-	ELAR	-	-	-	64	-	-
1969-W428	2440301.67	1969 Mar 21 0358:59	Judi-Barr	-	-	Starute, Datasonde	-	-	-	FC	-	-	-	56	-	-
1969-W442	2440305.64	1969 Mar 25 0322:59	Judi-Barr	-	-	Starute, Datasonde	-	-	-	FC	-	-	-	65	-	-
1969-W453	2440307.56	1969 Mar 27 0131:59	Judi-Barr	-	-	Starute, Datasonde	-	-	-	FC	-	-	-	65	-	-
1969-W457	2440306.51	1969 Mar 28 0021:00	Judi-Barr	-	LINTA H-6906	Starute, Datasonde	-	-	-	FC	-	-	-	67	-	-
1969-W465	2440306.57	1969 Mar 28 0139	Judi-Barr	-	LINTA H-6907	Starute, Datasonde	-	-	-	ELAR	-	-	-	607	-	-
1969-W466	2440309.55	1969 Mar 29 0105	Judi-Barr	-	-	Starute, Datasonde	-	-	-	ELAR	-	-	-	607	-	-
1969-W470	2440309.55	1969 Mar 29 0111:59	Judi-Barr	-	-	Starute, Datasonde	-	-	-	FC	-	-	-	66	-	-
1969-W475	2440312.54	1969 Apr 1 0059:59	Judi-Barr	-	-	Starute, Datasonde	-	-	-	FC	-	-	-	67	-	-
1969-W519	2440321.61	1969 Apr 10 0240:00	Judi-Barr	-	-	Starute, Datasonde	-	-	-	FC	-	-	-	67	-	-
1969-W534	2440326.14	1969 Apr 15 1523:59	Judi-Barr	-	-	Starute, Datasonde	-	-	-	FC	-	-	-	65	-	-
1969-W543	2440326.63	1969 Apr 15 0311:59	Judi-Barr	-	-	Starute, Datasonde	-	-	-	FC	-	-	-	65	-	-
1969-W547	2440327.97	1969 Apr 16 1133:00	Judi-Barr	-	LINTA H-6908	Starute, Datasonde	-	-	-	FC	-	-	-	57	-	-
1969-W594	2440335.60	1969 Apr 24 0222:00	Judi-Barr	-	-	Met Para, Datasonde	-	-	-	ELAR	-	-	-	61	-	-
1969-W603	2440337.60	1969 Apr 26 0231:00	Judi-Barr	-	LINTA H-6909	Met Para, Datasonde	-	-	-	FC	-	-	-	63	-	-
1969-W622	2440341.95	1969 Apr 30 0044:59	Judi-Barr	-	-	Met Para, Datasonde	-	-	-	ELAR	-	-	-	92	-	-
1969-W718	2440349.12	1969 May 7 1457:00	Judi-Barr	-	-	Met Para, Datasonde	-	-	-	FC	-	-	-	38	-	-
1969-W661	2440349.15	1969 May 7 1538:59	Judi-Barr	-	LINTA H-6910	Met Para, Datasonde	-	-	-	FC	-	-	-	66	-	-
1969-W675	2440349.54	1969 May 8 0102:59	Judi-Barr	-	-	Met Para, Datasonde	-	-	-	ELAR	-	-	-	60	-	-
1969-W675	2440351.20	1969 May 9 1649:59	Judi-Barr	-	-	Starute, Datasonde	-	-	-	FC	-	-	-	57	-	-
1969-W680	2440351.25	1969 May 9 1649:59	Judi-Barr	?	-	Starute, Datasonde	-	-	-	US	-	-	-	707	-	-
1969-W680	2440351.62	1969 May 10 0255:00	Judi-Barr	-	LINTA H-6911	Starute, Datasonde	-	-	-	ELAR	-	-	-	60	-	-
1969-W693	2440354.20	1969 May 12 0245:59	Judi-Barr	-	-	Met Para, Datasonde	-	-	-	FC	-	-	-	67	-	-
1969-W701	2440355.17	1969 May 13 1646:59	Judi-Barr	-	-	Met Para, Datasonde	-	-	-	FC	-	-	-	57	-	-
1969-W704	2440356.96	1969 May 14 1046:59	Judi-Barr	-	-	Met Para, Datasonde	-	-	-	FC	-	-	-	56	-	-
1969-W704	2440360.26	1969 May 15 1911:00	Judi-Barr	-	-	Starute, Datasonde	-	-	-	ELAR	-	-	-	56	-	-
1969-W704	2440360.26	1969 May 15 1911:00	Judi-Barr	-	-	Starute, Datasonde	-	-	-	FC	-	-	-	70	-	-
1969-W742	2440363.51	1969 May 22 0104:59	Judi-Barr	-	LINTA H-6912	Starute, Datasonde	-	-	-	FC	-	-	-	577	-	-
1969-W742	2440363.51	1969 May 22 0104:59	Judi-Barr	-	-	Starute, Datasonde	-	-	-	FC	-	-	-	63	-	-
1969-W764	2440365.29	1969 May 23 1856:59	Judi-Barr	-	-	Starute, Datasonde	-	-	-	FC	-	-	-	69	-	-
1969-W764	2440368.54	1969 May 27 0053:00	Judi-Barr	-	-	Starute, Datasonde	-	-	-	FC	-	-	-	69	-	-
1969-W773	2440372.34	1969 May 27 0053:00	Judi-Barr	-	-	Starute, Datasonde	-	-	-	FC	-	-	-	69	-	-
1969-W783	2440372.35	1969 May 30 1956:59	Judi-Barr	-	-	Met Para, Datasonde	-	-	-	FC	-	-	-	64?	-	-
1969-W784	2440372.35	1969 May 30 1956:59	Judi-Barr	-	-	Met Para, Datasonde	-	-	-	FC	-	-	-	66	-	-
1969-W803	2440377.20	1969 Jun 4 1644:59	Judi-Barr	-	-	Met Para, Datasonde	-	-	-	FC	-	-	-	62	-	-
1969-W803	2440379.22	1969 Jun 6 1713:00	Judi-Barr	-	-	Met Para, Datasonde	-	-	-	TELS	-	-	-	62	-	-
1969-W816	2440383.72	1969 Jun 6 1713:00	Judi-Barr	-	TELS-110	Met Para, Datasonde	-	-	-	TELS	-	-	-	65	-	-
1969-W823	2440384.21	1969 Jun 11 0520:00	Judi-Barr	-	-	Met Para, Datasonde	-	-	-	FC	-	-	-	64	-	-
1969-W843	2440391.21	1969 Jun 11 0520:00	Judi-Barr	-	-	Met Para, Datasonde	-	-	-	FC	-	-	-	64	-	-
1969-W843	2440391.21	1969 Jun 18 1646:59	Judi-Barr	-	-	Met Para, Datasonde	-	-	-	FC	-	-	-	64	-	-
1969-W855	2440393.10	1969 Jun 20 1436:59	Judi-Barr	-	-	Met Para, Datasonde	-	-	-	SOM	-	-	-	59	-	-
1969-W855	2440393.76	1969 Jun 25 0812	Judi-Barr	?	SUPARCO	Met Para, Datasonde	-	-	-	SOM	-	-	-	59	-	-
1969-W855	2440397.76	1969 Jun 25 0812	Judi-Barr	-	TELS-115	Met Para, Datasonde	-	-	-	TELS	-	-	-	64	-	-
1969-W901	2440400.20	1969 Jun 27 1854:59	Judi-Barr	-	-	Starute, Datasonde	-	-	-	FC	-	-	-	66	-	-
1969-W901	2440405.20	1969 Jun 27 1854:59	Judi-Barr	-	-	Starute, Datasonde	-	-	-	FC	-	-	-	66	-	-
1969-W922	2440400.20	1969 Jun 2 1645:59	Judi-Barr	-	-	Starute, Datasonde	-	-	-	FC	-	-	-	61	-	-
1969-W943	2440412.26	1969 Jun 9 1818:00	Judi-Barr	-	-	Starute, Datasonde	-	-	-	FC	-	-	-	67	-	-
1969-W953	2440417.10	1969 Jun 14 1431:00	Judi-Barr	-	-	Starute, Datasonde	-	-	-	CC	-	-	-	61	-	-
1969-W956	2440417.16	1969 Jun 14 1545:00	Judi-Barr	-	-	Starute, Datasonde	-	-	-	CC	-	-	-	62	-	-
1969-W956	2440418.73	1969 Jun 16 0530	Judi-Barr	-	TELS-116	Starute, Datasonde	-	-	-	TELS	-	-	-	64	-	-
1969-W956	2440419.11	1969 Jun 16 0530	Judi-Barr	?	SUPARCO	Starute, Datasonde	-	-	-	SOM	-	-	-	65	-	-
1969-W956	2440419.11	1969 Jun 16 1434:00	Judi-Barr	-	-	Starute, Datasonde	-	-	-	CC	-	-	-	65	-	-
1969-W968	2440419.13	1969 Jun 16 1511:59	Judi-Barr	-	-	Starute, Datasonde	-	-	-	FC	-	-	-	59	-	-
1969-W971	2440419.20	1969 Jun 16 1646:59	Judi-Barr	-	-	Starute, Datasonde	-	-	-	FC	-	-	-	64	-	-
1969-W989	2440425.74	1969 Jun 23 0550	Judi-Barr	-	TELS-117	Starute, Datasonde	-	-	-	TELS	-	-	-	64	-	-
1969-W1011	2440428.23	1969 Jun 25 0812	Judi-Barr	-	-	Starute, Datasonde	-	-	-	FC	-	-	-	65	-	-
1969-W1011	2440432.73	1969 Jun 25 0812	Judi-Barr	-	-	Starute, Datasonde	-	-	-	FC	-	-	-	61	-	-
1969-W1022	2440433.11	1969 Jun 30 0530	Judi-Barr	-	ISRO 11_34	Starute, Datasonde	-	-	-	TELS	-	-	-	64	-	-
1969-W1022	2440433.11	1969 Jun 30 0530	Judi-Barr	?	SUPARCO	Starute, Datasonde	-	-	-	SOM	-	-	-	64	-	-
1969-W1025	2440433.21	1969 Jun 30 1856:59	Judi-Barr	-	-	Starute, Datasonde	-	-	-	FC	-	-	-	66	-	-
1969-W1035	2440435.28	1969 Aug 1 1837:59	Judi-Barr	-	ISRO 11_35	Starute, Datasonde	-	-	-	TELS	-	-	-	66	-	-
1969-W1067	2440439.74	1969 Aug 6 0550	Judi-Barr	-	-	Starute, Datasonde	-	-	-	FC	-	-	-	62	-	-
1969-W1079	2440440.70	1969 Aug 7 0446:59	Judi-Barr	-	ISRO 11_36	Starute, Datasonde	-	-	-	TELS	-	-	-	62	-	-
1969-W1083	2440447.33	1969 Aug 13 1956:59	Judi-Barr	-	-	Starute, Datasonde	-	-	-	FC	-	-	-	65	-	-
1969-W1086	2440449.20	1969 Aug 15 1430:00	Judi-Barr	?	SUPARCO	Starute, Datasonde	-	-	-	SOM	-	-	-	63	-	-
1969-W1086	2440449.20	1969 Aug 15 1430:00	Judi-Barr	-	-	Starute, Datasonde	-	-	-	FC	-	-	-	64	-	-
1969-W1096	2440452.20	1969 Aug 18 1649:59	Judi-Barr	-	-	Starute, Datasonde	-	-	-	FC	-	-	-	64	-	-
1969																

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Launch_Mission	FlightCode	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee_Km	Range_Km	Deat
1969-M163	2440464.50	1969 Sep	Judi-Barr	-	-	-	-	-	-	FC	-	-	-	647	-	-
1969-M164	2440464.50	1969 Sep	Judi-Barr	-	-	-	-	-	-	FC	-	-	-	647	-	-
1969-M165	2440464.50	1969 Sep	Judi-Barr	-	-	-	-	-	-	FC	-	-	-	647	-	-
1969-M174	2440468.20	1969 Sep 3 1649:59	Judi-Barr	-	-	-	-	-	-	FC	-	-	-	59	-	-
1969-M175	2440476.10	1969 Sep 10 1430:00	Judi-Barr	?	SUPARCO	-	-	-	-	SOM	-	-	-	63	-	-
1969-M176	2440476.59	1969 Sep 11 0215:00	Judi-Barr	-	-	-	-	-	-	FC	-	-	-	67	-	-
1969-M177	2440476.56	1969 Sep 12 0124:59	Judi-Barr	-	-	-	-	-	-	FC	-	-	-	64	-	-
1969-M178	2440477.26	1969 Sep 12 1818:00	Judi-Barr	-	-	-	-	-	-	FC	-	-	-	62	-	-
1969-M179	2440480.20	1969 Sep 15 1654:59	Judi-Barr	-	-	-	-	-	-	FC	-	-	-	58	-	-
1969-M180	2440480.20	1969 Sep 17 1649:59	Judi-Barr	-	-	-	-	-	-	FC	-	-	-	61	-	-
1969-M181	2440482.20	1969 Sep 19 1653:59	Judi-Barr	-	-	-	-	-	-	FC	-	-	-	65	-	-
1969-M182	2440482.20	1969 Sep 22 1834:59	Judi-Barr	-	-	-	-	-	-	FC	-	-	-	63	-	-
1969-M183	2440487.27	1969 Sep 24 1703:00	Judi-Barr	-	-	-	-	-	-	FC	-	-	-	56	-	-
1969-M184	2440489.21	1969 Sep 24 1703:00	Judi-Barr	-	-	-	-	-	-	FC	-	-	-	65	-	-
1969-M185	2440494.20	1969 Sep 29 1651:00	Judi-Barr	-	-	-	-	-	-	FC	-	-	-	647	-	-
1969-M186	2440496.20	1969 Oct 1 1647:59	Judi-Barr	-	-	-	-	-	-	FC	-	-	-	66	-	-
1969-M187	2440503.20	1969 Oct 8 1651:00	Judi-Barr	-	-	-	-	-	-	FC	-	-	-	67	-	-
1969-M188	2440505.54	1969 Oct 11 0653:00	Judi-Barr	-	-	-	-	-	-	FC	-	-	-	62	-	-
1969-M189	2440509.96	1969 Oct 15 1049:59	Judi-Barr	-	-	-	-	-	-	ELAR	-	-	-	67	-	-
1969-M190	2440510.64	1969 Oct 16 0327:59	Judi-Barr	-	-	-	-	-	-	FC	-	-	-	63	-	-
1969-M191	2440512.56	1969 Oct 16 0154:59	Judi-Barr	-	-	-	-	-	-	FC	-	-	-	67	-	-
1969-M192	2440515.64	1969 Oct 21 0322:00	Judi-Barr	-	-	-	-	-	-	FC	-	-	-	61	-	-
1969-M193	2440517.09	1969 Oct 22 1410:00	Judi-Barr	?	SUPARCO-047/69	-	-	-	-	SOM	-	-	-	63	-	-
1969-M194	2440517.61	1969 Oct 23 0245:00	Judi-Barr	-	-	-	-	-	-	FC	-	-	-	65	-	-
1969-M195	2440519.25	1969 Oct 24 1600:00	Judi-Barr	-	-	-	-	-	-	FC	-	-	-	64	-	-
1969-M196	2440522.24	1969 Oct 27 1751:00	Judi-Barr	-	-	-	-	-	-	FC	-	-	-	57	-	-
1969-M197	2440524.24	1969 Oct 29 1749:59	Judi-Barr	-	-	-	-	-	-	FC	-	-	-	62	-	-
1969-M198	2440527.50	1969 Nov 21	Judi-Barr	-	-	-	-	-	-	FC	-	-	-	657	-	-
1969-M199	2440528.70	1969 Nov 3 0454:59	Judi-Barr	-	-	-	-	-	-	FC	-	-	-	63	-	-
1969-M200	2440529.05	1969 Nov 3 1310:59	Judi-Barr	-	-	-	-	-	-	FC	-	-	-	64	-	-
1969-M201	2440529.25	1969 Nov 3 1901:59	Judi-Barr	-	-	-	-	-	-	FC	-	-	-	64	-	-
1969-M202	2440529.40	1969 Nov 3 2130:00	Judi-Barr	-	-	-	-	-	-	FC	-	-	-	62	-	-
1969-M203	2440531.31	1969 Nov 5 1927:59	Judi-Barr	-	-	-	-	-	-	FC	-	-	-	53	-	-
1969-M204	2440532.63	1969 Nov 5 0309:00	Judi-Barr	-	-	-	-	-	-	FC	-	-	-	57	-	-
1969-M205	2440537.97	1969 Nov 12 1120:00	Judi-Barr	-	-	-	-	-	-	ELAR	-	-	-	62	-	-
1969-M206	2440536.70	1969 Nov 15 0449:59	Judi-Barr	-	-	-	-	-	-	FC	-	-	-	94	-	-
1969-M207	2440540.66	1969 Nov 15 0423:59	Judi-Barr	-	-	-	-	-	-	FC	-	-	-	67	-	-
1969-M208	2440543.24	1969 Nov 16 1747:00	Judi-Barr	-	-	-	-	-	-	FC	-	-	-	59	-	-
1969-M209	2440544.24	1969 Nov 16 1751:00	Judi-Barr	-	-	-	-	-	-	FC	-	-	-	60	-	-
1969-M210	2440546.24	1969 Nov 19 1746:59	Judi-Barr	-	-	-	-	-	-	FC	-	-	-	61	-	-
1969-M211	2440546.24	1969 Nov 25 1747:00	Judi-Barr	-	-	-	-	-	-	FC	-	-	-	63	-	-
1969-M212	2440550.24	1969 Nov 26 1748:59	Judi-Barr	-	-	-	-	-	-	FC	-	-	-	59	-	-
1969-M213	2440551.96	1969 Nov 26 1748:59	Judi-Barr	-	-	-	-	-	-	FC	-	-	-	59	-	-
1969-M214	2440552.24	1969 Nov 26 1748:59	Judi-Barr	-	-	-	-	-	-	FC	-	-	-	60	-	-
1969-M215	2440553.24	1969 Nov 27 1748:59	Judi-Barr	-	-	-	-	-	-	FC	-	-	-	60	-	-
1969-M216	2440554.11	1969 Nov 29 1748:59	Judi-Barr	-	-	-	-	-	-	FC	-	-	-	60	-	-
1969-M217	2440546.11	1969 Nov 30 1335:00	Judi-Barr	?	SUPARCO-048/69	-	-	-	-	SOM	-	-	-	64	-	-
1969-M218	2440546.11	1969 Nov 30 1335:00	Judi-Barr	?	SUPARCO-049/69	-	-	-	-	SOM	-	-	-	62	-	-
1969-M219	2440549.24	1969 Dec 2 1719:00	Judi-Barr	-	-	-	-	-	-	FC	-	-	-	57	-	-
1969-M220	2440549.24	1969 Dec 2 1719:00	Judi-Barr	-	-	-	-	-	-	FC	-	-	-	57	-	-
1969-M221	2440551.25	1969 Dec 5 1800:00	Judi-Barr	-	-	-	-	-	-	FC	-	-	-	59	-	-
1969-M222	2440556.55	1969 Dec 10 0045:59	Judi-Barr	-	-	-	-	-	-	FC	-	-	-	59	-	-
1969-M223	2440556.55	1969 Dec 10 0045:59	Judi-Barr	-	-	-	-	-	-	FC	-	-	-	59	-	-
1969-M224	2440566.54	1969 Dec 11 0103:59	Judi-Barr	-	-	-	-	-	-	FC	-	-	-	35	-	-
1969-M225	2440567.54	1969 Dec 12 0233:00	Judi-Barr	-	-	-	-	-	-	FC	-	-	-	57	-	-
1969-M226	2440568.55	1969 Dec 13 0203:00	Judi-Barr	-	-	-	-	-	-	FC	-	-	-	57	-	-
1969-M227	2440571.25	1969 Dec 15 1745:00	Judi-Barr	-	-	-	-	-	-	FC	-	-	-	64	-	-
1969-M228	2440572.25	1969 Dec 16 1748:59	Judi-Barr	-	-	-	-	-	-	FC	-	-	-	64	-	-
1969-M229	2440573.05	1969 Dec 17 1316:00	Judi-Barr	-	-	-	-	-	-	FC	-	-	-	64	-	-
1969-M230	2440573.05	1969 Dec 17 1756:00	Judi-Barr	-	-	-	-	-	-	FC	-	-	-	59	-	-
1969-M231	2440574.24	1969 Dec 18 1747:00	Judi-Barr	-	-	-	-	-	-	FC	-	-	-	63	-	-
1969-M232	2440574.24	1969 Dec 18 1747:00	Judi-Barr	-	-	-	-	-	-	FC	-	-	-	63	-	-
1969-M233	2440575.24	1969 Dec 19 1747:00	Judi-Barr	-	-	-	-	-	-	FC	-	-	-	61	-	-
1969-M234	2440587.05	1969 Dec 31 1315:00	Judi-Barr	?	SUPARCO-051/69	-	-	-	-	SOM	-	-	-	757	-	-
1970-M01	2440586.50	1970 Jan	Judi-Barr	-	-	-	-	-	-	FC	-	-	-	647	-	-
1970-M02	2440586.50	1970 Jan	Judi-Barr	-	-	-	-	-	-	FC	-	-	-	647	-	-
1970-M03	2440586.50	1970 Jan	Judi-Barr	-	-	-	-	-	-	FC	-	-	-	647	-	-
1970-M04	2440586.50	1970 Jan	Judi-Barr	-	-	-	-	-	-	FC	-	-	-	647	-	-
1970-M05	2440586.50	1970 Jan	Judi-Barr	-	-	-	-	-	-	FC	-	-	-	647	-	-
1970-M06	2440586.50	1970 Jan	Judi-Barr	-	-	-	-	-	-	FC	-	-	-	647	-	-
1970-M07	2440586.50	1970 Jan	Judi-Barr	-	-	-	-	-	-	FC	-	-	-	647	-	-
1970-M08	2440586.50	1970 Jan	Judi-Barr	-	-	-	-	-	-	FC	-	-	-	647	-	-
1970-M09	2440586.50	1970 Jan	Judi-Barr	-	-	-	-	-	-	FC	-	-	-	647	-	-
1970-M10	2440586.50	1970 Jan	Judi-Barr	-	-	-	-	-	-	FC	-	-	-	647	-	-
1970-M11	2440586.50	1970 Jan	Judi-Barr	-	-	-	-	-	-	FC	-	-	-	647	-	-
1970-M12	2440586.50	1970 Jan	Judi-Barr	-	-	-	-	-	-	FC	-	-	-	647	-	-
1970-M13	2440589.26	1970 Jan 2 1812:59	Judi-Barr	-	-	-	-	-	-	FC	-	-	-	46	-	-
1970-M14	2440589.34	1970 Jan 2 2015:59	Judi-Barr	-	-	-	-	-	-	FC	-	-	-	56	-	-
1970-M15	2440589.75	1970 Jan 3 0600:00	Judi-Barr	-	-	-	-	-	-	FC	-	-	-	58	-	-
1970-M16	2440589.77	1970 Jan 3 0633:59	Judi-Barr	-	-	-	-	-	-	FC	-	-	-	63	-	-
1970-M17	2440590.25	1970 Jan 3 1800:00	Judi-Barr	-	-	-	-	-	-	FC	-	-	-	54	-	-
1970-M18	2440590.75	1970 Jan 4 0602:59	Judi-Barr	-	-	-	-	-	-	FC	-	-	-	66	-	-
1970-M19	2440591.25	1970 Jan 4 1802:59	Judi-Barr	-	-	-	-	-	-	FC	-	-	-	61	-	-
1970-M20	2440591.75	1970 Jan 5 0600:59	Judi-Barr	-	-	-	-	-	-	FC	-	-	-	60	-	-
1970-M21	2440592.15	1970 Jan 5 1534:59	Judi-Barr	-	-	-	-	-	-	FC	-	-	-	62	-	-
1970-M22	2440592.24	1970 Jan 5 1748:59	Judi-Barr	-	-	-	-	-	-	FC	-	-	-	66	-	-
1970-M23	2440592.42	1970 Jan 5 2200:59	Judi-Barr	-	-	-	-	-	-	FC	-	-	-	60	-	-
1970-M24	2440592.75	1970 Jan 6 0600:59	Judi-Barr	-	-	-	-	-	-	FC	-	-	-	60	-	-
1970-M25	2440593.68	1970 Jan 7 0417:00	Judi-Barr	-	-	-	-	-	-	FC	-	-	-	58	-	-
1970-M26	2440594.46	1970 Jan 7 2303:00	Judi-Barr	-	-	-	-	-	-	FC	-	-	-	64	-	-
1970-M27	2440596.99	1970 Jan 10 1140:00	Judi-Barr	-	-	-	-	-	-	FC	-	-	-	65	-	-
1970-M28	2440600.58	1970 Jan 14 1155:59	Judi-Barr	-	-	-	-	-	-	ELAR	-	-	-	57	-	-
1970-M29	2440600.98	1970 Jan 14 1135:00	Judi-Barr	-	-	-	-	-	-	ELAR	-	-	-	64	-	-



Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Launch_Mission	FlightCode	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee_Km	Range_Km	Dest
1970-W1357	2440845-96	1970 Sep 16 11:00:00	Judi-Barr	-	INTA H-7019	-	-	-	-	ELAR	-	-	-	63	-	-
1970-W1360	2440846-13	1970 Sep 16 15:13:59	Judi-Barr	-	-	-	-	-	-	FC	-	-	-	61	-	-
1970-W1369	2440846-50	1970 Sep 17	Loki Barr	-	-	-	-	-	-	WI	-	-	-	70?	-	-
1970-W1380	2440847-35	1970 Sep 17 20:20:00	Judi-Barr	-	-	-	-	-	-	FC	-	-	-	62	-	-
1970-W1386	2440848-15	1970 Sep 18 15:38:59	Judi-Barr	-	-	-	-	-	-	FC	-	-	-	57	-	-
1970-W1389	2440848-39	1970 Sep 18 21:28:59	Judi-Barr	-	-	-	-	-	-	FC	-	-	-	64	-	-
1970-W1393	2440851-11	1970 Sep 21 14:33:00	Judi-Barr	-	-	-	-	-	-	FC	-	-	-	61	-	-
1970-W40	2440850-50	1970 Sep 21	Loki Barr	-	-	-	-	-	-	WI	-	-	-	70?	-	-
1970-W411	2440853-11	1970 Sep 23 14:37:59	Judi-Barr	-	-	-	-	-	-	FC	-	-	-	61	-	-
1970-W420	2440854-96	1970 Sep 25 11:00:00	Judi-Barr	-	INTA H-7020	-	-	-	-	ELAR	-	-	-	64	-	-
1970-W438	2440859-96	1970 Sep 30 11:00:00	Judi-Barr	-	INTA H-7021	-	-	-	-	ELAR	-	-	-	57	-	-
1970-W441	2440860-11	1970 Sep 30 14:42:00	Judi-Barr	-	-	-	-	-	-	FC	-	-	-	60	-	-
1970-W445	2440865-12	1970 Oct 5 14:47:00	Judi-Barr	-	-	-	-	-	-	FC	-	-	-	62	-	-
1970-W466	2440866-96	1970 Oct 7 11:00:00	Judi-Barr	-	-	-	-	-	-	ELAR	-	-	-	59	-	-
1970-W490	2440869-13	1970 Oct 9 15:11:59	Judi-Barr	-	[Det in FC]	-	-	-	-	FC	-	-	-	65	-	-
1970-W1529	2440874-13	1970 Oct 14 16:00:59	Judi-Barr	-	-	-	-	-	-	FC	-	-	-	60	-	-
1970-W112	2440876-11	1970 Oct 16 14:45:00	Judi-Barr	-	-	-	-	-	-	FC	-	-	-	42	-	-
1970-W1553	2440881-01	1970 Oct 21 12:09:00	Judi-Barr	-	INTA H-7023	-	-	-	-	ELAR	-	-	-	65?	-	-
1970-W1562	2440881-12	1970 Oct 21 15:45:00	Judi-Barr	-	-	-	-	-	-	SOM	-	-	-	61	-	-
1970-W1587	2440887-96	1970 Oct 28 11:26:59	Judi-Barr	-	INTA H-7024	-	-	-	-	ELAR	-	-	-	56	-	-
1970-W1606	2440888-15	1970 Oct 28 15:40:00	Judi-Barr	-	[Det in FC]	-	-	-	-	FC	-	-	-	66	-	-
1970-W1620	2440890-15	1970 Oct 30 15:37:59	Judi-Barr	-	[Det in FC]	-	-	-	-	FC	-	-	-	64?	-	-
1970-W1612	2440890-50	1970 Nov 2 15:51:00	Judi-Barr	-	-	-	-	-	-	FC	-	-	-	62	-	-
1970-W1617	2440893-16	1970 Nov 3 15:43:00	Judi-Barr	-	-	-	-	-	-	FC	-	-	-	60	-	-
1970-W1624	2440894-15	1970 Nov 4 15:43:00	Judi-Barr	-	-	-	-	-	-	FC	-	-	-	61	-	-
1970-W1632	2440895-15	1970 Nov 6 15:37:59	Judi-Barr	-	-	-	-	-	-	FC	-	-	-	62	-	-
1970-W1643	2440897-15	1970 Nov 6 15:37:59	Judi-Barr	-	-	-	-	-	-	FC	-	-	-	66	-	-
1970-W1652	2440900-15	1970 Nov 9 15:41:00	Judi-Barr	-	-	-	-	-	-	FC	-	-	-	59	-	-
1970-W1660	2440901-24	1970 Nov 10 17:42:00	Judi-Barr	-	-	-	-	-	-	FC	-	-	-	63	-	-
1970-W1664	2440903-15	1970 Nov 12 15:36:59	Judi-Barr	-	-	-	-	-	-	FC	-	-	-	36	-	-
1970-W1674	2440904-35	1970 Nov 12 20:27:59	Judi-Barr	-	-	-	-	-	-	FC	-	-	-	36	-	-
1970-W1678	2440907-15	1970 Nov 16 15:37:59	Judi-Barr	-	-	-	-	-	-	FC	-	-	-	36	-	-
1970-W1684	2440908-15	1970 Nov 17 15:37:59	Judi-Barr	-	-	-	-	-	-	FC	-	-	-	37	-	-
1970-W1690	2440910-15	1970 Nov 19 15:41:00	Judi-Barr	-	-	-	-	-	-	FC	-	-	-	63	-	-
1970-W1698	2440910-15	1970 Nov 19 15:42:00	Judi-Barr	-	-	-	-	-	-	FC	-	-	-	61	-	-
1970-W1706	2440911-16	1970 Nov 20 15:16:00	Judi-Barr	-	-	-	-	-	-	FC	-	-	-	61	-	-
1970-W1716	2440914-24	1970 Nov 23 17:52:00	Judi-Barr	-	-	-	-	-	-	FC	-	-	-	61	-	-
1970-W1722	2440915-05	1970 Nov 24 15:41:00	Judi-Barr	-	-	-	-	-	-	FC	-	-	-	61	-	-
1970-W1728	2440916-05	1970 Nov 25 13:15:00	Judi-Barr	-	-	-	-	-	-	FC	-	-	-	70?	-	-
1970-W1734	2440916-24	1970 Nov 25 17:45:00	Judi-Barr	-	-	-	-	-	-	SOM	-	-	-	64	-	-
1970-W1749	2440921-16	1970 Nov 30 15:44:00	Judi-Barr	-	-	-	-	-	-	FC	-	-	-	60	-	-
1970-W1744	2440920-50	1970 Dec	Loki Barr	-	-	-	-	-	-	FC	-	-	-	64?	-	-
1970-W1745	2440920-50	1970 Dec	Loki Barr	-	-	-	-	-	-	FC	-	-	-	64?	-	-
1970-W1746	2440920-50	1970 Dec	Loki Barr	-	-	-	-	-	-	FC	-	-	-	64?	-	-
1970-W1748	2440920-50	1970 Dec	Loki Barr	-	-	-	-	-	-	FC	-	-	-	64?	-	-
1970-W1749	2440920-50	1970 Dec	Loki Barr	-	-	-	-	-	-	FC	-	-	-	64?	-	-
1970-W1758	2440922-15	1970 Dec 1 15:43:00	Loki Barr	-	-	-	-	-	-	FC	-	-	-	64?	-	-
1970-W1768	2440922-15	1970 Dec 2 18:00:00	Loki Barr	-	-	-	-	-	-	FC	-	-	-	62	-	-
1970-W1764	2440923-25	1970 Dec 3 15:45:59	Loki Barr	-	-	-	-	-	-	FC	-	-	-	66	-	-
1970-W1769	2440925-16	1970 Dec 3 15:45:59	Loki Barr	-	-	-	-	-	-	FC	-	-	-	65	-	-
1970-W1768	2440925-16	1970 Dec 3 15:45:59	Loki Barr	-	-	-	-	-	-	FC	-	-	-	65	-	-
1970-W1769	2440929-15	1970 Dec 8 15:51:00	Loki Barr	-	-	-	-	-	-	FC	-	-	-	61	-	-
1970-W1796	2440930-16	1970 Dec 9 15:44:00	Loki Barr	-	-	-	-	-	-	FC	-	-	-	61	-	-
1970-W1801	2440931-16	1970 Dec 10 15:45:59	Loki Barr	-	-	-	-	-	-	FC	-	-	-	63	-	-
1970-W1800	2440932-25	1970 Dec 11 17:57:00	Loki Barr	-	-	-	-	-	-	FC	-	-	-	60	-	-
1970-W1826	2440937-05	1970 Dec 16 12:00:00	Loki Barr	-	-	-	-	-	-	FC	-	-	-	63	-	-
1970-W1830	2440938-16	1970 Dec 17 15:45:00	Loki Barr	-	INTA H-7025	-	-	-	-	ELAR	-	-	-	61	-	-
1970-W1836	2440939-16	1970 Dec 18 15:45:59	Loki Barr	-	-	-	-	-	-	FC	-	-	-	61	-	-
1970-W1842	2440942-16	1970 Dec 18 15:45:59	Loki Barr	-	-	-	-	-	-	FC	-	-	-	60	-	-
1970-W1854	2440943-16	1970 Dec 21 15:45:59	Loki Barr	-	-	-	-	-	-	FC	-	-	-	61	-	-
1970-W1860	2440944-16	1970 Dec 22 15:45:59	Loki Barr	-	-	-	-	-	-	FC	-	-	-	64	-	-
1970-W1872	2440944-36	1970 Dec 23 20:34:00	Loki Barr	-	-	-	-	-	-	FC	-	-	-	64	-	-
1970-W1875	2440945-16	1970 Dec 24 15:45:00	Loki Barr	-	-	-	-	-	-	FC	-	-	-	63	-	-
1970-W1878	2440949-15	1970 Dec 28 15:38:59	Loki Barr	-	-	-	-	-	-	FC	-	-	-	63	-	-
1970-W1884	2440950-15	1970 Dec 29 15:40:00	Loki Barr	-	-	-	-	-	-	FC	-	-	-	63	-	-
1970-W1889	2440951-15	1970 Dec 29 15:40:00	Loki Barr	-	-	-	-	-	-	FC	-	-	-	75?	-	-
1970-W1890	2440951-11	1970 Dec 30 16:27:59	Loki Barr	-	-	-	-	-	-	SOM	-	-	-	63	-	-
1970-W1895	2440952-16	1970 Dec 31 15:53:00	Loki Barr	-	-	-	-	-	-	FC	-	-	-	62	-	-
1971-001	2440951-50	1971 Jan 1 15:53:00	Loki Barr	-	-	-	-	-	-	FC	-	-	-	64?	-	-
1971-005	2440956-16	1971 Jan 4 15:56:59	Judi-Barr	-	-	-	-	-	-	FC	-	-	-	58	-	-
1971-008	2440957-29	1971 Jan 5 19:03:59	Judi-Barr	-	-	-	-	-	-	FC	-	-	-	62	-	-
1971-015	2440958-35	1971 Jan 6 20:18:00	Judi-Barr	-	-	-	-	-	-	FC	-	-	-	56	-	-
1971-017	2440959-30	1971 Jan 7 19:07:00	Judi-Barr	-	-	-	-	-	-	FC	-	-	-	62	-	-
1971-029	2440960-32	1971 Jan 8 19:38:59	Judi-Barr	-	-	-	-	-	-	FC	-	-	-	63	-	-
1971-039	2440963-35	1971 Jan 11 20:26:00	Judi-Barr	-	-	-	-	-	-	FC	-	-	-	63	-	-
1971-045	2440964-37	1971 Jan 12 20:52:00	Judi-Barr	-	-	-	-	-	-	FC	-	-	-	63	-	-
1971-049	2440965-03	1971 Jan 13 12:41:00	Judi-Barr	-	INTA H-7101	-	-	-	-	ELAR	-	-	-	64	-	-
1971-054	2440965-18	1971 Jan 13 16:19:59	Judi-Barr	-	-	-	-	-	-	FC	-	-	-	62	-	-
1971-057	2440965-32	1971 Jan 13 19:36:59	Judi-Barr	-	-	-	-	-	-	FC	-	-	-	62	-	-
1971-061	2440966-15	1971 Jan 14 15:41:00	Judi-Barr	-	-	-	-	-	-	FC	-	-	-	60	-	-
1971-073	2440967-17	1971 Jan 15 16:01:59	Judi-Barr	-	-	-	-	-	-	FC	-	-	-	61	-	-
1971-076	2440967-39	1971 Jan 15 21:22:59	Judi-Barr	-	-	-	-	-	-	FC	-	-	-	61	-	-
1971-089	2440970-55	1971 Jan 16 11:45	Judi-Barr	-	-	-	-	-	-	FC	-	-	-	63	-	-
1971-099	2440972-02	1971 Jan 19 01:07:59	Judi-Barr	-	INTA H-7102	-	-	-	-	ELAR	-	-	-	61	-	-
1971-101	2440972-65	1971 Jan 20 12:34:59	Judi-Barr	-	-	-	-	-	-	FC	-	-	-	64	-	-
1971-111	2440973-63	1971 Jan 21 03:33:59	Judi-Barr	-	INTA H-7103	-	-	-	-	ELAR	-	-	-	67	-	-
1971-129	2440974-60	1971 Jan 23 02:19:00	Judi-Barr	-	-	-	-	-	-	FC	-	-	-	63	-	-
1971-141	2440977-45	1971 Jan 25 22:51:00	Judi-Barr	-	-	-	-	-	-	FC	-	-	-	65	-	-

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Launch_Mission	FlightCode	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee_Km	Range_Km	Deat
1971-W145	2440978-30	1971 Jan 26 1918:59	Judi-Barr	-	-	Starute_Datasonde	-	-	-	FC	-	-	-	62	-	-
1971-W152	2440979-18	1971 Jan 27 1622:59	Judi-Barr	-	-	Starute_Datasonde	-	-	-	FC	-	-	-	60	-	-
1971-W181	2440984-19	1971 Feb 1 1636:59	Judi-Barr	-	-	Starute_Datasonde	-	-	-	FC	-	-	-	59	-	-
1971-W198	2440986-16	1971 Feb 3 1548:59	Judi-Barr	-	-	Starute_Datasonde	-	-	-	FC	-	-	-	62	-	-
1971-W221	2440988-48	1971 Feb 5 2326:59	Judi-Barr	-	-	Starute_Datasonde	-	-	-	FC	-	-	-	65	-	-
1971-W228	2440991-34	1971 Feb 8 2013:00	Judi-Barr	-	-	Starute_Datasonde	-	-	-	FC	-	-	-	64	-	-
1971-W245	2440993-25	1971 Feb 10 1801:59	Judi-Barr	-	-	Starute_Datasonde	-	-	-	FC	-	-	-	64	-	-
1971-W259	2440993-50	1971 Feb 11	Loki Barr	-	-	WRE HASP 1A	-	-	-	W00	-	-	-	607	-	-
1971-W300	2440993-50	1971 Feb 11	Loki Barr	-	-	WRE HASP 1B	-	-	-	W00	-	-	-	607	-	-
1971-W250	2440994-16	1971 Feb 11 1555:00	Judi-Barr	-	-	Starute_Datasonde	-	-	-	FC	-	-	-	64	-	-
1971-W257	2440994-16	1971 Feb 12 1624:59	Judi-Barr	-	-	Starute_Datasonde	-	-	-	FC	-	-	-	65	-	-
1971-W263	2440998-51	1971 Feb 15 0019:00	Judi-Barr	-	-	Starute_Datasonde	-	-	-	FC	-	-	-	65	-	-
1971-W268	2440999-53	1971 Feb 17 0041:00	Judi-Barr	-	-	Starute_Datasonde	-	-	-	FC	-	-	-	67	-	-
1971-W289	2441000-12	1971 Feb 17 1500:00	Judi-Barr	-	-	Starute_Datasonde	-	-	-	FC	-	-	-	62	-	-
1971-W286	2441002-70	1971 Feb 20 0446:59	Judi-Barr	-	-	Starute_Datasonde	-	-	-	FC	-	-	-	657	-	-
1971-W289	2441006-98	1971 Feb 24 1130	Judi-Barr	-	-	Starute_Datasonde	-	-	-	ELAR	-	-	-	62	-	-
1971-W297	2441007-02	1971 Feb 24 1222:59	Judi-Barr	-	-	Starute_Datasonde	-	-	-	ELAR	-	-	-	657	-	-
1971-W327	2441013-98	1971 Mar 3 1131:00	Judi-Barr	-	-	Starute_Datasonde	-	-	-	ELAR	-	-	-	66	-	-
1971-W351	2441014-25	1971 Mar 3 1807:00	Judi-Barr	-	-	Starute_Datasonde	-	-	-	FC	-	-	-	52	-	-
1971-W355	2441016-15	1971 Mar 4 1542:00	Judi-Barr	-	-	Starute_Datasonde	-	-	-	FC	-	-	-	63	-	-
1971-W343	2441016-27	1971 Mar 5 1825:59	Judi-Barr	-	-	Starute_Datasonde	-	-	-	FC	-	-	-	63	-	-
1971-W354	2441019-61	1971 Mar 9 0244:00	Judi-Barr	-	-	Starute_Datasonde	-	-	-	FC	-	-	-	65	-	-
1971-W356	2441020-59	1971 Mar 10 0206:00	Judi-Barr	-	-	Starute_Datasonde	-	-	-	FC	-	-	-	63	-	-
1971-W359	2441020-98	1971 Mar 10 1135	Loki Barr	-	-	WRE HASP 4	-	-	-	ELAR	-	-	-	657	-	-
1971-W420	2441020-98	1971 Mar 17	Loki Barr	-	-	Starute_Datasonde	-	-	-	W00	-	-	-	307	-	-
1971-W173	2441027-50	1971 Mar 17 1130:00	Judi-Barr	-	-	Starute_Datasonde	-	-	-	ELAR	-	-	-	66	-	-
1971-W382	2441027-96	1971 Mar 23 0251:00	Judi-Barr	-	-	Starute_Datasonde	-	-	-	ELAR	-	-	-	66	-	-
1971-W404	2441033-62	1971 Mar 23 0251:00	Judi-Barr	-	-	Starute_Datasonde	-	-	-	ELAR	-	-	-	66	-	-
1971-W405	2441034-50	1971 Mar 24 0300:59	Judi-Barr	-	-	Starute_Datasonde	-	-	-	W00	-	-	-	307	-	-
1971-W406	2441034-63	1971 Mar 24 0300:59	Judi-Barr	-	-	Starute_Datasonde	-	-	-	FC	-	-	-	63	-	-
1971-W406	2441035-00	1971 Mar 24 1200:00	Judi-Barr	-	-	Starute_Datasonde	-	-	-	FC	-	-	-	63	-	-
1971-W415	2441036-25	1971 Mar 28 1600:00	Judi-Barr	-	-	Starute_Datasonde	-	-	-	FC	-	-	-	65	-	-
1971-W422	2441037-31	1971 Mar 28 1927:59	Judi-Barr	-	-	Starute_Datasonde	-	-	-	FC	-	-	-	60	-	-
1971-W427	2441040-25	1971 Mar 29 1757:00	Judi-Barr	-	-	Starute_Datasonde	-	-	-	FC	-	-	-	59	-	-
1971-W438	2441042-25	1971 Mar 29 1803:59	Judi-Barr	-	-	Starute_Datasonde	-	-	-	FC	-	-	-	59	-	-
1971-W448	2441044-25	1971 Apr 2 1503:59	Judi-Barr	-	-	Starute_Datasonde	-	-	-	FC	-	-	-	61	-	-
1971-W448	2441044-25	1971 Apr 2 1503:59	Judi-Barr	-	-	Starute_Datasonde	-	-	-	FC	-	-	-	65	-	-
1971-W462	2441047-16	1971 Apr 5 1546:59	Judi-Barr	-	-	Starute_Datasonde	-	-	-	ELAR	-	-	-	65	-	-
1971-W471	2441049-00	1971 Apr 14 1207:00	Loki Barr	-	-	Starute_Datasonde	-	-	-	ELAR	-	-	-	37	-	-
1971-W21	2441056-07	1971 Apr 14 1340	Loki Barr	-	-	Starute_Datasonde	-	-	-	ELAR	-	-	-	607	-	-
1971-W609	2441056-16	1971 Apr 14 1613:59	Judi-Barr	-	-	Starute_Datasonde	-	-	-	FC	-	-	-	66	-	-
1971-W622	2441058-16	1971 Apr 16 1945:59	Judi-Barr	-	-	Starute_Datasonde	-	-	-	FC	-	-	-	96	-	-
1971-W626	2441063-25	1971 Apr 23 1757:00	Judi-Barr	-	-	Starute_Datasonde	-	-	-	FC	-	-	-	62	-	-
1971-W691	2441066-26	1971 Apr 26 1695:00	Judi-Barr	-	-	Starute_Datasonde	-	-	-	FC	-	-	-	65	-	-
1971-W691	2441066-37	1971 Apr 26 2059:00	Judi-Barr	-	-	Starute_Datasonde	-	-	-	FC	-	-	-	62	-	-
1971-W696	2441068-91	1971 Apr 26 2059:00	Judi-Barr	-	-	Starute_Datasonde	-	-	-	FC	-	-	-	62	-	-
1971-W696	2441069-96	1971 Apr 26 2135	Judi-Barr	-	-	Starute_Datasonde	-	-	-	FC	-	-	-	98	-	-
1971-W692	2441070-22	1971 Apr 28 1717:00	Judi-Barr	-	-	Starute_Datasonde	-	-	-	FC	-	-	-	63	-	-
1971-W692	2441072-11	1971 Apr 30 1445:00	Judi-Barr	-	-	Starute_Datasonde	-	-	-	FC	-	-	-	61	-	-
1971-W691	2441072-11	1971 Apr 30 1445:00	Judi-Barr	-	-	Starute_Datasonde	-	-	-	FC	-	-	-	667	-	-
1971-W699	2441076-10	1971 May 3 1459:00	Judi-Barr	-	-	Starute_Datasonde	-	-	-	FC	-	-	-	60	-	-
1971-W699	2441076-12	1971 May 3 1459:00	Judi-Barr	-	-	Starute_Datasonde	-	-	-	FC	-	-	-	60	-	-
1971-W639	2441079-98	1971 May 5 1131:00	Loki Barr	-	-	Starute_Datasonde	-	-	-	ELAR	-	-	-	57	-	-
1971-W639	2441079-98	1971 May 5 1131:00	Loki Barr	-	-	Starute_Datasonde	-	-	-	ELAR	-	-	-	62	-	-
1971-W642	2441079-12	1971 May 7 1455:00	Judi-Barr	-	-	Starute_Datasonde	-	-	-	FC	-	-	-	62	-	-
1971-W642	2441082-12	1971 May 7 1455:00	Judi-Barr	-	-	Starute_Datasonde	-	-	-	FC	-	-	-	62	-	-
1971-W622	2441083-98	1971 May 10 1455:00	Judi-Barr	-	-	Starute_Datasonde	-	-	-	FC	-	-	-	607	-	-
1971-W656	2441084-12	1971 May 12 1457:00	Judi-Barr	-	-	Starute_Datasonde	-	-	-	FC	-	-	-	60	-	-
1971-W671	2441084-12	1971 May 14 1545:00	Judi-Barr	-	-	Starute_Datasonde	-	-	-	FC	-	-	-	63	-	-
1971-W671	2441084-12	1971 May 14 1545:00	Judi-Barr	-	-	Starute_Datasonde	-	-	-	FC	-	-	-	61	-	-
1971-W686	2441089-15	1971 May 17 1654:59	Judi-Barr	-	-	Starute_Datasonde	-	-	-	FC	-	-	-	63	-	-
1971-W689	2441089-20	1971 May 17 1654:59	Judi-Barr	-	-	Starute_Datasonde	-	-	-	FC	-	-	-	59	-	-
1971-W689	2441089-20	1971 May 19 1509:00	Judi-Barr	-	-	Starute_Datasonde	-	-	-	ELAR	-	-	-	65	-	-
1971-W639	2441091-13	1971 May 19 1509:00	Judi-Barr	-	-	Starute_Datasonde	-	-	-	FC	-	-	-	607	-	-
1971-W639	2441091-13	1971 May 26 1134	Loki Barr	-	-	Starute_Datasonde	-	-	-	FC	-	-	-	60	-	-
1971-W723	2441098-98	1971 May 26 1446:00	Judi-Barr	-	-	Starute_Datasonde	-	-	-	FC	-	-	-	61	-	-
1971-W723	2441098-98	1971 May 26 1446:00	Judi-Barr	-	-	Starute_Datasonde	-	-	-	FC	-	-	-	60	-	-
1971-W752	2441100-21	1971 May 28 1709:00	Judi-Barr	-	-	Starute_Datasonde	-	-	-	FC	-	-	-	61	-	-
1971-W752	2441100-21	1971 May 28 1709:00	Judi-Barr	-	-	Starute_Datasonde	-	-	-	FC	-	-	-	61	-	-
1971-W757	2441102-28	1971 May 31 1836:59	Judi-Barr	-	-	Starute_Datasonde	-	-	-	FC	-	-	-	61	-	-
1971-W756	2441102-50	1971 Jun 2	Judi-Barr	-	-	Starute_Datasonde	-	-	-	FC	-	-	-	647	-	-
1971-W31	2441104-50	1971 Jun 2	Loki Barr	-	-	WRE HASP 7	-	-	-	W00	-	-	-	307	-	-
1971-W32	2441104-50	1971 Jun 2	Loki Barr	-	-	WRE HASP 6	-	-	-	W00	-	-	-	307	-	-
1971-W676	2441105-13	1971 Jun 2 1509:00	Judi-Barr	-	-	Starute_Datasonde	-	-	-	W00	-	-	-	307	-	-
1971-W676	2441105-13	1971 Jun 2 1509:00	Judi-Barr	-	-	Starute_Datasonde	-	-	-	W00	-	-	-	307	-	-
1971-W803	2441112-13	1971 Jun 9 1513:59	Judi-Barr	-	-	Starute_Datasonde	-	-	-	FC	-	-	-	64	-	-
1971-W831	2441118-99	1971 Jun 16 1142:00	Loki Barr	-	-	Starute_Datasonde	-	-	-	FC	-	-	-	64	-	-
1971-W632	2441123-50	1971 Jun 21	Loki Barr	-	-	HASP	-	-	-	FC	-	-	-	57	-	-
1971-W175	2441123-50	1971 Jun 21	Loki Barr	-	-	HASP	-	-	-	FC	-	-	-	57	-	-
1971-W856	2441126-22	1971 Jun 23 1729:00	Judi-Barr	-	-	Starute_Datasonde	-	-	-	FC	-	-	-	607	-	-
1971-W862	2441127-16	1971 Jun 24 1556:59	Judi-Barr	-	-	Starute_Datasonde	-	-	-	FC	-	-	-	307	-	-
1971-W24	2441132-98	1971 Jun 30 1134	Loki Barr	-	-	Starute_Datasonde	-	-	-	FC	-	-	-	61	-	-
1971-W884	2441133-12	1971 Jun 30 1448:00	Loki Barr	-	-	Starute_Datasonde	-	-	-	FC	-	-	-	607	-	-
1971-W884	2441134-17	1971 Jul 1 1604:59	Loki Barr	-	-	Starute_Datasonde	-	-	-	FC	-	-	-	63	-	-
1971-W889	2441134-17	1971 Jul 1 1604:59	Loki Barr	-	-	Starute_Datasonde	-	-	-	FC	-	-	-	55	-	-
1971-W889	2441135-16	1971 Jul 2 1545:00	Judi-Barr	-	-	Starute_Datasonde	-	-	-	FC	-	-	-	63	-	-
1971-W629	2441139-98	1971 Jul 7 1137:59	Loki Barr	-	-	Starute_Datasonde	-	-	-	FC	-	-	-	40	-	-
1971-W911	2441140-14	1971 Jul 7 1520:00	Judi-Barr	-	-	Starute_Datasonde	-	-	-	ELAR	-	-	-	62	-	-
1971-W928	2441145-15	1971 Jul 12 1534:59	Judi-Barr	-	-	Starute_Datasonde	-	-	-	FC	-	-	-	63	-	-
1971-W176	2441146-50	1971 Jul 14	Loki Barr	-	-	WRE HASP 10	-	-	-	W00	-	-	-	307	-	-
1971-W943	2441148-18	1971 Jul 15 1614:59	Loki Barr	-	-	Starute_Datasonde	-	-	-	FC	-	-	-	61	-	-

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Mission	FlightCode	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee_Km	Range_Km	Deat
1971-1664	2441163.50	1971 Aug	Judi-Barr	-	-	-	-	-	FC	-	-	-	-	107	-	-
1971-16029	2441163.50	1971 Aug	Judi-Barr	-	-	-	-	-	FC	-	-	-	-	647	-	-
1971-16030	2441163.50	1971 Aug	Judi-Barr	-	-	-	-	-	FC	-	-	-	-	647	-	-
1971-1685	2441166.50	1971 Aug 3	Loki Barr	-	HASP	-	-	-	WDO	-	-	-	-	607	-	-
1971-16049	2441168.14	1971 Aug 4 1523:59	Judi-Barr	-	-	WRE HASP 12	-	-	FC	-	-	-	-	58	-	-
1971-16063	2441170.12	1971 Aug 6 1346:00	Judi-Barr	-	-	Starute_Datasonde	-	-	FC	-	-	-	-	59	-	-
1971-16084	2441175.14	1971 Aug 11 1517:00	Judi-Barr	-	-	Starute_Datasonde	-	-	FC	-	-	-	-	61	-	-
1971-16147	2441187.12	1971 Aug 23 1447:00	Judi-Barr	-	-	Starute_Datasonde	-	-	FC	-	-	-	-	61	-	-
1971-16161	2441189.13	1971 Aug 25 1507:00	Judi-Barr	-	-	Starute_Datasonde	-	-	FC	-	-	-	-	62	-	-
1971-16172	2441191.12	1971 Aug 27 1456:00	Judi-Barr	-	-	Starute_Datasonde	-	-	FC	-	-	-	-	65	-	-
1971-16182	2441194.13	1971 Aug 30 1504:59	Judi-Barr	-	-	Starute_Datasonde	-	-	FC	-	-	-	-	61	-	-
1971-16190	2441194.14	1971 Aug 31 1527:59	Judi-Barr	-	-	Starute_Datasonde	-	-	FC	-	-	-	-	107	-	-
1971-16173	2441194.50	1971 Sep	Judi-Barr	-	-	-	-	-	FC	-	-	-	-	647	-	-
1971-16187	2441194.50	1971 Sep	Judi-Barr	-	-	-	-	-	FC	-	-	-	-	59	-	-
1971-16200	2441196.12	1971 Sep 1 1458:00	Judi-Barr	-	-	Starute_Datasonde	-	-	FC	-	-	-	-	54	-	-
1971-16222	2441202.96	1971 Sep 8 1135:00	Loki Barr	-	LINTA HT-7112	-	-	-	ELAR	-	-	-	-	43	-	-
1971-1675	2441203.31	1971 Sep 8 1924:59	Judi-Barr	-	-	Starute_Datasonde	-	-	FC	-	-	-	-	62	-	-
1971-16237	2441206.11	1971 Sep 10 1435:00	Judi-Barr	-	-	Starute_Datasonde	-	-	FC	-	-	-	-	66	-	-
1971-16244	2441208.11	1971 Sep 13 1437:00	Judi-Barr	-	-	Starute_Datasonde	-	-	FC	-	-	-	-	54	-	-
1971-16260	2441210.00	1971 Sep 15 1556:00	Loki Barr	-	LINTA HT-7113	-	-	-	ELAR	-	-	-	-	63	-	-
1971-16265	2441210.11	1971 Sep 15 1440:00	Loki Barr	-	-	Starute_Datasonde	-	-	FC	-	-	-	-	64	-	-
1971-16267	2441212.11	1971 Sep 17 1444:00	Judi-Barr	-	-	Starute_Datasonde	-	-	FC	-	-	-	-	65	-	-
1971-16275	2441215.12	1971 Sep 20 1449:59	Judi-Barr	-	-	Starute_Datasonde	-	-	FC	-	-	-	-	46	-	-
1971-161	2441217.01	1971 Sep 22 1214:59	Loki Barr	-	LINTA HT-7114	WRE HASP 13	-	-	WDO	-	-	-	-	307	-	-
1971-1617	2441216.50	1971 Sep 22	Loki Barr	-	HASP	-	-	-	FC	-	-	-	-	63	-	-
1971-16266	2441217.11	1971 Sep 22 1438:59	Judi-Barr	-	-	Starute_Datasonde	-	-	FC	-	-	-	-	32	-	-
1971-16286	2441219.00	1971 Sep 24 1200:00	Loki Barr	-	LINTA HT-7115	-	-	-	ELAR	-	-	-	-	60	-	-
1971-16298	2441219.00	1971 Sep 24 1438:59	Judi-Barr	-	-	Starute_Datasonde	-	-	FC	-	-	-	-	51	-	-
1971-16302	2441219.11	1971 Sep 27 1438:59	Judi-Barr	-	-	Starute_Datasonde	-	-	FC	-	-	-	-	32	-	-
1971-16307	2441221.99	1971 Sep 27 1149:59	Loki Barr	-	LINTA HT-7116	-	-	-	ELAR	-	-	-	-	62	-	-
1971-16316	2441223.99	1971 Sep 28 1145:00	Loki Barr	-	LINTA HT-7117	-	-	-	FC	-	-	-	-	61	-	-
1971-16317	2441224.16	1971 Sep 28 1445:00	Judi-Barr	-	-	Starute_Datasonde	-	-	FC	-	-	-	-	63	-	-
1971-16326	2441226.11	1971 Oct 1 1441:00	Judi-Barr	-	-	Starute_Datasonde	-	-	FC	-	-	-	-	63	-	-
1971-16333	2441228.11	1971 Oct 4 1438:59	Judi-Barr	-	-	Starute_Datasonde	-	-	FC	-	-	-	-	63	-	-
1971-1626	2441230.99	1971 Oct 6 1159	Loki Barr	-	LINTA HT-7118	-	-	-	ELAR	-	-	-	-	607	-	-
1971-16343	2441231.10	1971 Oct 6 1423:00	Judi-Barr	-	-	Starute_Datasonde	-	-	FC	-	-	-	-	64	-	-
1971-16349	2441232.11	1971 Oct 7 1440:00	Loki Barr	-	-	Starute_Datasonde	-	-	CELAT	-	-	-	-	64	-	-
1971-16362	2441233.14	1971 Oct 8 1517:00	Judi-Barr	-	-	Starute_Datasonde	-	-	FC	-	-	-	-	65	-	-
1971-16370	2441236.11	1971 Oct 13 1437:59	Judi-Barr	-	-	Starute_Datasonde	-	-	FC	-	-	-	-	57	-	-
1971-16381	2441236.10	1971 Oct 13 1430:00	Loki Barr	-	-	Starute_Datasonde	-	-	FC	-	-	-	-	65	-	-
1971-16388	2441240.12	1971 Oct 18 1447:00	Judi-Barr	-	-	Starute_Datasonde	-	-	FC	-	-	-	-	63	-	-
1971-16393	2441243.11	1971 Oct 30 1432:00	Judi-Barr	-	-	Starute_Datasonde	-	-	FC	-	-	-	-	63	-	-
1971-16401	2441246.11	1971 Oct 30 1438:59	Loki Barr	-	-	Starute_Datasonde	-	-	FC	-	-	-	-	63	-	-
1971-16402	2441246.15	1971 Oct 30 1502:59	Judi-Barr	-	HASP	-	-	-	CELAT	-	-	-	-	307	-	-
1971-16416	2441249.50	1971 Oct 22 1649:59	Loki Barr	-	-	Starute_Datasonde	-	-	WDO	-	-	-	-	96	-	-
1971-16412	2441249.20	1971 Oct 22 1438:59	Judi-Barr	-	-	Starute_Datasonde	-	-	FC	-	-	-	-	66	-	-
1971-16423	2441251.11	1971 Oct 26 1438:59	Judi-Barr	-	-	Starute_Datasonde	-	-	FC	-	-	-	-	81	-	-
1971-16429	2441259.11	1971 Oct 27 1440:00	Judi-Barr	-	-	Starute_Datasonde	-	-	FC	-	-	-	-	61	-	-
1971-16427	2441259.11	1971 Oct 27 1440:00	Loki Barr	-	-	Starute_Datasonde	-	-	CELAT	-	-	-	-	66	-	-
1971-16428	2441259.11	1971 Oct 27 1440:00	Judi-Barr	-	-	Starute_Datasonde	-	-	FC	-	-	-	-	63	-	-
1971-16431	2441262.20	1971 Oct 27 1651:00	Loki Barr	-	-	Starute_Datasonde	-	-	FC	-	-	-	-	63	-	-
1971-16433	2441264.11	1971 Oct 29 1443:00	Judi-Barr	-	-	Starute_Datasonde	-	-	FC	-	-	-	-	107	-	-
1971-16445	2441265.50	1971 Nov 1 1541:00	Judi-Barr	-	-	Starute_Datasonde	-	-	FC	-	-	-	-	45	-	-
1971-16445	2441267.15	1971 Nov 2 2041:00	Judi-Barr	-	-	Starute_Datasonde	-	-	FC	-	-	-	-	64	-	-
1971-16450	2441268.36	1971 Nov 2 2041:00	Judi-Barr	-	-	Starute_Datasonde	-	-	FC	-	-	-	-	62	-	-
1971-16455	2441269.16	1971 Nov 3 1546:59	Judi-Barr	-	-	Starute_Datasonde	-	-	FC	-	-	-	-	56	-	-
1971-16459	2441269.42	1971 Nov 3 2204:59	Loki Barr	-	LINTA HT-7119	-	-	-	ELAR	-	-	-	-	67	-	-
1971-16460	2441269.00	1971 Nov 4 1349:59	Loki Barr	-	-	Starute_Datasonde	-	-	FC	-	-	-	-	64	-	-
1971-16463	2441269.16	1971 Nov 4 1545:59	Judi-Barr	-	-	Starute_Datasonde	-	-	CELAT	-	-	-	-	67	-	-
1971-16468	2441269.50	1971 Nov 5 1540:00	Loki Barr	-	HASP	-	-	-	WDO	-	-	-	-	607	-	-
1971-16474	2441264.15	1971 Nov 8 1540:00	Judi-Barr	-	-	Starute_Datasonde	-	-	WDO	-	-	-	-	64	-	-
1971-16474	2441264.53	1971 Nov 9 0050:00	Loki Barr	-	HASP	-	-	-	WDO	-	-	-	-	607	-	-
1971-16486	2441266.16	1971 Nov 10 1544:00	Judi-Barr	-	HASP	-	-	-	WDO	-	-	-	-	56	-	-
1971-16486	2441266.54	1971 Nov 10 1544:00	Loki Barr	-	HASP	-	-	-	WDO	-	-	-	-	607	-	-
1971-16496	2441268.54	1971 Nov 12 1748:59	Judi-Barr	-	-	Starute_Datasonde	-	-	WDO	-	-	-	-	54	-	-
1971-16500	2441271.16	1971 Nov 15 1545:59	Judi-Barr	-	-	Starute_Datasonde	-	-	FC	-	-	-	-	61	-	-
1971-16508	2441272.16	1971 Nov 16 1546:59	Judi-Barr	-	-	Starute_Datasonde	-	-	FC	-	-	-	-	63	-	-
1971-16513	2441273.10	1971 Nov 17 1430:00	Loki Barr	-	-	Starute_Datasonde	-	-	CELAT	-	-	-	-	63	-	-
1971-16516	2441273.16	1971 Nov 17 1553:00	Judi-Barr	-	-	Starute_Datasonde	-	-	FC	-	-	-	-	607	-	-
1971-16519	2441273.50	1971 Nov 18	Loki Barr	-	HASP	-	-	-	WDO	-	-	-	-	64	-	-
1971-16521	2441274.16	1971 Nov 18 1545:00	Judi-Barr	-	-	Starute_Datasonde	-	-	FC	-	-	-	-	64	-	-
1971-16531	2441275.16	1971 Nov 19 1546:59	Judi-Barr	-	-	Starute_Datasonde	-	-	FC	-	-	-	-	65	-	-
1971-16536	2441278.16	1971 Nov 22 1556:00	Judi-Barr	-	-	Starute_Datasonde	-	-	FC	-	-	-	-	62	-	-
1971-16546	2441280.16	1971 Nov 24 1553:00	Judi-Barr	-	-	Starute_Datasonde	-	-	FC	-	-	-	-	62	-	-
1971-16553	2441281.17	1971 Nov 25 1602:59	Judi-Barr	-	-	Starute_Datasonde	-	-	FC	-	-	-	-	65	-	-
1971-16558	2441282.16	1971 Nov 26 1549:59	Judi-Barr	-	-	Starute_Datasonde	-	-	FC	-	-	-	-	60	-	-
1971-16564	2441285.16	1971 Nov 29 1553:00	Judi-Barr	-	-	Starute_Datasonde	-	-	FC	-	-	-	-	64	-	-
1971-16570	2441286.16	1971 Nov 30 1545:59	Judi-Barr	-	-	Starute_Datasonde	-	-	FC	-	-	-	-	64	-	-
1971-16579	2441287.16	1971 Dec 1 1547:59	Judi-Barr	-	-	Starute_Datasonde	-	-	FC	-	-	-	-	63	-	-
1971-16584	2441288.16	1971 Dec 2 1546:59	Judi-Barr	-	-	Starute_Datasonde	-	-	FC	-	-	-	-	61	-	-
1971-16589	2441289.16	1971 Dec 3 1555:00	Judi-Barr	-	-	Starute_Datasonde	-	-	FC	-	-	-	-	64	-	-
1971-16594	2441292.16	1971 Dec 6 1549:59	Judi-Barr	-	-	Starute_Datasonde	-	-	FC	-	-	-	-	59	-	-
1971-16598	2441293.25	1971 Dec 7 1756:00	Judi-Barr	-	-	Starute_Datasonde	-	-	FC	-	-	-	-	60	-	-
1971-16603	2441294.16	1971 Dec 8 2132:00	Loki Barr	-	-	Starute_Datasonde	-	-	FC	-	-	-	-	67	-	-
1971-16607	2441295.40	1971 Dec 8 1929:00	Judi-Barr	-	LINTA HT-7120	-	-	-	ELAR	-	-	-	-	65	-	-
1971-16612	2441296.10	1971 Dec 9 1404:59	Judi-Barr	-	-	Starute_Datasonde	-	-	FC	-	-	-	-	65	-	-
1971-16614	2441296.09	1971 Dec 10 1404:59	Judi-Barr	-	-	Starute_Datasonde	-	-	FC	-	-	-	-	65	-	-
1971-16619	2441296.15	1971 Dec 10 1538:59	Judi-Barr	-	-	Starute_Datasonde	-	-	FC	-	-	-	-	65	-	-

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Launch_Mission	FlightCode	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee_Km	Range_Km	Deat
1971-W1622	2441296.20	1971 Dec 10 1649:59	Judi-Barr	-	-	Starute_Datasonde	-	-	-	FC	-	-	-	63	-	-
1971-W1623	2441296.27	1971 Dec 10 1823:59	Judi-Barr	-	-	Starute_Datasonde	-	-	-	FC	-	-	-	62	-	-
1971-W1626	2441299.17	1971 Dec 13 1658:59	Judi-Barr	-	-	Starute_Datasonde	-	-	-	FC	-	-	-	61	-	-
1971-W1627	2441301.43	1971 Dec 15 2219	Loki Barr	-	LINTA HT-7121	-	-	-	-	ELAR	-	-	-	60?	-	-
1971-W1637	2441301.16	1971 Dec 15 1647:59	Judi-Barr	-	-	Starute_Datasonde	-	-	-	FC	-	-	-	59	-	-
1971-W1642	2441301.53	1971 Dec 16 0040:00	Loki Barr	-	-	Starute_Datasonde	-	-	-	CELAT	-	-	-	59	-	-
1971-W1644	2441302.16	1971 Dec 16 1546:00	Judi-Barr	-	-	Starute_Datasonde	-	-	-	FC	-	-	-	62	-	-
1971-W1650	2441303.15	1971 Dec 17 1640:00	Judi-Barr	-	-	Starute_Datasonde	-	-	-	FC	-	-	-	65	-	-
1971-W1656	2441306.17	1971 Dec 20 1603:59	Judi-Barr	-	-	Starute_Datasonde	-	-	-	FC	-	-	-	59	-	-
1971-W1660	2441307.17	1971 Dec 21 1557:59	Judi-Barr	-	-	Starute_Datasonde	-	-	-	FC	-	-	-	63	-	-
1971-W1663	2441308.00	1971 Dec 22 1204:59	Loki Barr	-	LINTA HT-7122	-	-	-	-	ELAR	-	-	-	52	-	-
1971-W1666	2441308.16	1971 Dec 22 1646:00	Judi-Barr	-	-	Starute_Datasonde	-	-	-	FC	-	-	-	57	-	-
1971-W1669	2441308.43	1971 Dec 22 2218:59	Loki Barr	-	LINTA HT-7123	-	-	-	-	ELAR	-	-	-	56	-	-
1971-W1670	2441309.16	1971 Dec 23 1646:59	Judi-Barr	-	-	Starute_Datasonde	-	-	-	FC	-	-	-	57	-	-
1971-W1672	2441310.16	1971 Dec 23 1647:59	Judi-Barr	-	-	Starute_Datasonde	-	-	-	FC	-	-	-	56	-	-
1971-W1676	2441314.16	1971 Dec 28 1656:59	Judi-Barr	-	-	Starute_Datasonde	-	-	-	FC	-	-	-	63	-	-
1971-W1677	2441314.36	1971 Dec 28 2057:59	Judi-Barr	-	-	Starute_Datasonde	-	-	-	FC	-	-	-	48	-	-
1971-W1681	2441315.15	1971 Dec 29 1641:00	Judi-Barr	-	-	Starute_Datasonde	-	-	-	FC	-	-	-	62	-	-
1971-W1683	2441315.37	1971 Dec 29 2055:00	Judi-Barr	-	-	Starute_Datasonde	-	-	-	FC	-	-	-	61	-	-
1971-W1687	2441316.37	1971 Dec 30 1653:59	Judi-Barr	-	-	Starute_Datasonde	-	-	-	FC	-	-	-	63	-	-
1971-W1689	2441316.37	1971 Dec 30 2047:00	Judi-Barr	-	-	Starute_Datasonde	-	-	-	FC	-	-	-	64	-	-
1971-W1691	2441317.15	1971 Dec 31 1641:00	Judi-Barr	-	-	Starute_Datasonde	-	-	-	FC	-	-	-	62	-	-
1972-W11	2441321.15	1972 Jan 4 1642:00	Judi-Barr	-	-	Starute_Datasonde	-	-	-	FC	-	-	-	64	-	-
1972-W16	2441322.16	1972 Jan 5 1646:59	Judi-Barr	-	-	Starute_Datasonde	-	-	-	FC	-	-	-	65	-	-
1972-W24	2441323.24	1972 Jan 6 1751:00	Judi-Barr	-	-	Starute_Datasonde	-	-	-	FC	-	-	-	63	-	-
1972-W37	2441324.24	1972 Jan 7 1741:00	Judi-Barr	-	LINTA HD-7201	-	-	-	-	ELAR	-	-	-	61	-	-
1972-W39	2441324.44	1972 Jan 12 2216	Loki Barr	-	LINTA HD-7202	-	-	-	-	ELAR	-	-	-	60?	-	-
1972-W59	2441329.46	1972 Jan 12 2300:00	Loki Barr	-	-	Starute_Datasonde	-	-	-	ELAR	-	-	-	60	-	-
1972-W71	2441331.54	1972 Jan 15 0101:59	Judi-Barr	-	-	Starute_Datasonde	-	-	-	FC	-	-	-	59	-	-
1972-W76	2441334.17	1972 Jan 17 1857:59	Judi-Barr	-	-	Starute_Datasonde	-	-	-	FC	-	-	-	62	-	-
1972-W84	2441335.16	1972 Jan 18 1851:00	Judi-Barr	-	-	Starute_Datasonde	-	-	-	FC	-	-	-	61	-	-
1972-W92	2441336.16	1972 Jan 19 1645:00	Judi-Barr	-	-	Starute_Datasonde	-	-	-	FC	-	-	-	62	-	-
1972-W100	2441336.45	1972 Jan 19 2244:59	Loki Barr	-	LINTA HW-7201	-	-	-	-	ELAR	-	-	-	56	-	-
1972-W103	2441337.15	1972 Jan 20 1642:00	Judi-Barr	-	-	Starute_Datasonde	-	-	-	FC	-	-	-	59	-	-
1972-W108	2441338.15	1972 Jan 21 1642:00	Judi-Barr	-	-	Starute_Datasonde	-	-	-	FC	-	-	-	63	-	-
1972-W119	2441338.56	1972 Jan 22 0155	Loki Barr	-	LINTA HD-7203	-	-	-	-	ELAR	-	-	-	60?	-	-
1972-W123	2441340.96	1972 Jan 24 1647:59	Loki Barr	-	LINTA HD-7204	-	-	-	-	ELAR	-	-	-	58	-	-
1972-W125	2441341.15	1972 Jan 24 1641:00	Judi-Barr	-	-	Starute_Datasonde	-	-	-	FC	-	-	-	66	-	-
1972-W132	2441342.96	1972 Jan 26 1534:00	Loki Barr	-	LINTA HW-7202	-	-	-	-	ELAR	-	-	-	61	-	-
1972-W138	2441343.25	1972 Jan 26 1756:00	Judi-Barr	-	-	Starute_Datasonde	-	-	-	FC	-	-	-	37	-	-
1972-W146	2441346.16	1972 Jan 28 1654:00	Judi-Barr	-	-	Starute_Datasonde	-	-	-	FC	-	-	-	60	-	-
1972-W148	2441346.16	1972 Jan 28 1756:00	Judi-Barr	-	-	Starute_Datasonde	-	-	-	FC	-	-	-	62	-	-
1972-W153	2441349.16	1972 Jan 31 1655:59	Judi-Barr	-	-	Starute_Datasonde	-	-	-	FC	-	-	-	62	-	-
1972-W171	2441349.96	1972 Feb 1 1534:59	Judi-Barr	-	LINTA HW-7203	-	-	-	-	ELAR	-	-	-	58	-	-
1972-W174	2441350.15	1972 Feb 2 1534:00	Loki Barr	-	-	Starute_Datasonde	-	-	-	FC	-	-	-	63	-	-
1972-W179	2441351.16	1972 Feb 2 1548:00	Judi-Barr	-	-	Starute_Datasonde	-	-	-	FC	-	-	-	63	-	-
1972-W183	2441355.16	1972 Feb 3 1548:00	Judi-Barr	-	-	Starute_Datasonde	-	-	-	FC	-	-	-	60	-	-
1972-W189	2441356.16	1972 Feb 7 1201:59	Judi-Barr	-	-	Starute_Datasonde	-	-	-	FC	-	-	-	62	-	-
1972-W201	2441356.80	1972 Feb 8 0710:59	Judi-Barr	-	-	Starute_Datasonde	-	-	-	FC	-	-	-	62	-	-
1972-W204	2441356.96	1972 Feb 9 1133:59	Loki Barr	-	LINTA HW-7204	-	-	-	-	ELAR	-	-	-	57	-	-
1972-W216	2441357.47	1972 Feb 9 2323:00	Loki Barr	-	LINTA HW-7205	-	-	-	-	ELAR	-	-	-	51	-	-
1972-W217	2441357.57	1972 Feb 10 0117:00	Loki Barr	-	-	Starute_Datasonde	-	-	-	FC	-	-	-	64	-	-
1972-W221	2441358.67	1972 Feb 11 0407:59	Judi-Barr	-	-	Starute_Datasonde	-	-	-	FC	-	-	-	64	-	-
1972-W222	2441359.04	1972 Feb 11 1255:00	Loki Barr	-	LINTA HW-7206	-	-	-	-	ELAR	-	-	-	57	-	-
1972-W234	2441359.76	1972 Feb 12 0646:59	Loki Barr	-	-	Starute_Datasonde	-	-	-	FC	-	-	-	59	-	-
1972-W242	2441362.44	1972 Feb 14 2336:59	Loki Barr	-	LINTA HW-7207	-	-	-	-	ELAR	-	-	-	58	-	-
1972-W243	2441362.75	1972 Feb 15 0555:00	Judi-Barr	-	-	Starute_Datasonde	-	-	-	FC	-	-	-	60	-	-
1972-W246	2441363.26	1972 Feb 15 1901:59	Judi-Barr	-	-	Starute_Datasonde	-	-	-	FC	-	-	-	60	-	-
1972-W249	2441363.98	1972 Feb 16 1130:00	Loki Barr	-	LINTA HW-7208	-	-	-	-	ELAR	-	-	-	59	-	-
1972-W254	2441364.16	1972 Feb 16 1545:00	Loki Barr	-	-	Starute_Datasonde	-	-	-	FC	-	-	-	57	-	-
1972-W258	2441365.17	1972 Feb 17 1606:00	Judi-Barr	-	-	Starute_Datasonde	-	-	-	FC	-	-	-	58	-	-
1972-W261	2441365.98	1972 Feb 18 1137:59	Loki Barr	-	LINTA HW-7209	-	-	-	-	ELAR	-	-	-	59	-	-
1972-W265	2441366.16	1972 Feb 18 1545:59	Judi-Barr	-	-	Starute_Datasonde	-	-	-	FC	-	-	-	61	-	-
1972-W271	2441370.16	1972 Feb 22 1652:00	Judi-Barr	-	-	Starute_Datasonde	-	-	-	FC	-	-	-	59	-	-
1972-W272	2441370.54	1972 Feb 23 1100:00	Loki Barr	-	HASP	IRE HASP 66	-	-	-	W00	-	-	-	30?	-	-
1972-W275	2441370.99	1972 Feb 23 1149:00	Loki Barr	-	LINTA HW-7210	-	-	-	-	ELAR	-	-	-	63	-	-
1972-W278	2441371.16	1972 Feb 23 1647:59	Judi-Barr	-	-	Starute_Datasonde	-	-	-	FC	-	-	-	62	-	-
1972-W285	2441372.16	1972 Feb 24 1551:00	Judi-Barr	-	-	Starute_Datasonde	-	-	-	FC	-	-	-	64	-	-
1972-W308	2441376.16	1972 Mar 1 1545:59	Judi-Barr	-	-	Starute_Datasonde	-	-	-	FC	-	-	-	64	-	-
1972-W313	2441379.16	1972 Mar 2 1551:00	Judi-Barr	-	-	Starute_Datasonde	-	-	-	FC	-	-	-	64	-	-
1972-W318	2441380.17	1972 Mar 3 1600:59	Judi-Barr	-	-	Starute_Datasonde	-	-	-	FC	-	-	-	63	-	-
1972-W334	2441384.68	1972 Mar 8 0418:59	Judi-Barr	-	-	Starute_Datasonde	-	-	-	FC	-	-	-	63	-	-
1972-W342	2441386.59	1972 Mar 10 0214:00	Judi-Barr	-	-	Starute_Datasonde	-	-	-	FC	-	-	-	62	-	-
1972-W352	2441387.57	1972 Mar 11 0145:59	Judi-Barr	-	-	Starute_Datasonde	-	-	-	FC	-	-	-	60	-	-
1972-W358	2441392.00	1972 Mar 15 1157:00	Loki Barr	-	LINTA HD-7205	-	-	-	-	ELAR	-	-	-	61	-	-
1972-W362	2441392.15	1972 Mar 15 1533:00	Loki Barr	-	TI-5839	-	-	-	-	WT	-	-	-	68	-	-
1972-W373	2441392.59	1972 Mar 16 0203:59	Judi-Barr	-	-	Starute_Datasonde	-	-	-	FC	-	-	-	64	-	-
1972-W388	2441394.35	1972 Mar 17 2026:59	Judi-Barr	-	-	Starute_Datasonde	-	-	-	FC	-	-	-	64	-	-
1972-W399	2441397.33	1972 Mar 20 2000:00	Loki Barr	-	-	Starute_Datasonde	-	-	-	FC	-	-	-	59	-	-
1972-W400	2441397.56	1972 Mar 21 0132:59	Loki Barr	-	TI-5849	-	-	-	-	WT	-	-	-	57	-	-
1972-W402	2441398.81	1972 Mar 22 0732:59	Judi-Barr	-	TI-5850	-	-	-	-	WT	-	-	-	65	-	-
1972-W403	2441398.98	1972 Mar 22 1137:59	Loki Barr	-	-	Starute_Datasonde	-	-	-	FC	-	-	-	59	-	-
1972-W413	2441400.60	1972 Mar 24 0224:00	Judi-Barr	-	LINTA HD-7206	-	-	-	-	ELAR	-	-	-	64	-	-
1972-W422	2441401.64	1972 Mar 25 0319:00	Judi-Barr	-	-	Starute_Datasonde	-	-	-	FC	-	-	-	66	-	-
1972-W431	2441404.86	1972 Mar 28 0832:00	Judi-Barr	-	-	Starute_Datasonde	-	-	-	FC	-	-	-	61	-	-
1972-W440	2441406.89	1972 Mar 30 0924:59	Judi-Barr	-	-	Starute_Datasonde	-	-	-	FC	-	-	-	61	-	-

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Mission	FlightCode	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee_Km	Range_Km	Dest
1972-W444	2441407.90	1972 Mar 31 0958:59	Judi-Barr	-	-	Starute_Datasonde	-	-	-	FC	-	-	-	67	-	-
1972-W461	2441413.00	1972 Apr 5 1165:00	Loki Barr	-	LINTA HD-7207	-	-	-	-	ELAR	-	-	-	60	-	-
1972-W470	2441413.90	1972 Apr 6 0932:00	Loki Barr	-	-	Starute_Datasonde	-	-	-	FC	-	-	-	66	-	-
1972-W479	2441415.88	1972 Apr 8 0913:59	Judi-Barr	-	-	Starute_Datasonde	-	-	-	FC	-	-	-	63	-	-
1972-W490	2441419.66	1972 Apr 12 0346:59	Judi-Barr	-	-	Starute_Datasonde	-	-	-	FC	-	-	-	59	-	-
1972-W499	2441419.98	1972 Apr 12 1137:00	Loki Barr	-	LINTA HD-7208	-	-	-	-	ELAR	-	-	-	61	-	-
1972-W499	2441420.72	1972 Apr 13 0512:00	Loki Barr	-	-	Starute_Datasonde	-	-	-	FC	-	-	-	64	-	-
1972-W507	2441422.66	1972 Apr 15 0356:59	Loki Barr	-	-	Starute_Datasonde	-	-	-	FC	-	-	-	61	-	-
1972-W529	2441427.67	1972 Apr 19 1338:59	Loki Barr	-	-	Starute_Datasonde	-	-	-	ELAR	-	-	-	48	-	-
1972-W529	2441427.67	1972 Apr 20 0409:59	Loki Barr	-	-	Starute_Datasonde	-	-	-	FC	-	-	-	64	-	-
1972-W537	2441429.64	1972 Apr 22 0317:00	Judi-Barr	-	-	Starute_Datasonde	-	-	-	FC	-	-	-	61	-	-
1972-W547	2441432.67	1972 Apr 25 0359:59	Loki Barr	-	-	Starute_Datasonde	-	-	-	FC	-	-	-	58	-	-
1972-W549	2441434.04	1972 Apr 25 1300:59	Loki Barr	-	-	Starute_Datasonde	-	-	-	ELAR	-	-	-	39	-	-
1972-W559	2441434.68	1972 Apr 27 0424:59	Judi-Barr	-	-	Starute_Datasonde	-	-	-	FC	-	-	-	63	-	-
1972-W559	2441441.11	1972 May 3 1300:59	Judi-Barr	-	-	Starute_Datasonde	-	-	-	FC	-	-	-	59	-	-
1972-W559	2441441.04	1972 May 3 1300:59	Loki Barr	-	LINTA HD-7211	-	-	-	-	ELAR	-	-	-	63	-	-
1972-W606	2441443.33	1972 May 5 1965:59	Judi-Barr	-	-	Starute_Datasonde	-	-	-	FC	-	-	-	62	-	-
1972-W612	2441447.12	1972 May 8 1462:00	Judi-Barr	-	-	Starute_Datasonde	-	-	-	FC	-	-	-	60	-	-
1972-W622	2441447.12	1972 May 9 1464:00	Judi-Barr	-	-	Starute_Datasonde	-	-	-	FC	-	-	-	60	-	-
1972-W622	2441447.12	1972 May 10 1308:00	Loki Barr	-	-	Starute_Datasonde	-	-	-	ELAR	-	-	-	56	-	-
1972-W629	2441448.05	1972 May 10 1446:00	Loki Barr	-	-	Starute_Datasonde	-	-	-	FC	-	-	-	67	-	-
1972-W638	2441460.11	1972 May 12 1442:00	Judi-Barr	-	-	Starute_Datasonde	-	-	-	FC	-	-	-	63	-	-
1972-W646	2441465.11	1972 May 15 1440:00	Judi-Barr	-	-	Starute_Datasonde	-	-	-	FC	-	-	-	64	-	-
1972-W654	2441465.04	1972 May 17 1251:00	Loki Barr	-	LINTA HW-7212	-	-	-	-	ELAR	-	-	-	58	-	-
1972-W654	2441465.20	1972 May 17 1654:59	Loki Barr	-	-	Starute_Datasonde	-	-	-	FC	-	-	-	62	-	-
1972-W670	2441466.26	1972 May 18 1810:00	Judi-Barr	-	-	Starute_Datasonde	-	-	-	FC	-	-	-	63	-	-
1972-W670	2441467.12	1972 May 19 1451:00	Judi-Barr	-	-	Starute_Datasonde	-	-	-	FC	-	-	-	66	-	-
1972-W670	2441467.12	1972 May 19 1451:00	Loki Barr	-	LINTA HT-7201	-	-	-	-	ELAR	-	-	-	60?	-	-
1972-W687	2441462.00	1972 May 24 1206	Loki Barr	-	-	Starute_Datasonde	-	-	-	FC	-	-	-	62	-	-
1972-W687	2441462.11	1972 May 24 1458:00	Judi-Barr	-	-	Starute_Datasonde	-	-	-	FC	-	-	-	60	-	-
1972-W689	2441463.16	1972 May 25 1552:00	Judi-Barr	-	-	Starute_Datasonde	-	-	-	FC	-	-	-	56	-	-
1972-W689	2441464.11	1972 May 26 1443:00	Judi-Barr	-	-	Starute_Datasonde	-	-	-	FC	-	-	-	61	-	-
1972-W705	2441467.20	1972 May 29 1647:59	Judi-Barr	-	-	Starute_Datasonde	-	-	-	FC	-	-	-	61	-	-
1972-W720	2441469.11	1972 May 31 1442:00	Judi-Barr	-	-	Starute_Datasonde	-	-	-	FC	-	-	-	65	-	-
1972-W710	2441468.50	1972 Jun	Judi-Barr	-	-	Starute_Datasonde	-	-	-	FC	-	-	-	60?	-	-
1972-W711	2441468.50	1972 Jun	Judi-Barr	-	-	Starute_Datasonde	-	-	-	FC	-	-	-	60?	-	-
1972-W712	2441468.50	1972 Jun	Judi-Barr	-	-	Starute_Datasonde	-	-	-	FC	-	-	-	60?	-	-
1972-W713	2441468.50	1972 Jun	Judi-Barr	-	-	Starute_Datasonde	-	-	-	FC	-	-	-	61	-	-
1972-W863	2441504.12	1972 Jul 5 1487:00	Loki Barr	-	-	Starute_Datasonde	-	-	-	FC	-	-	-	64	-	-
1972-W811	2441513.19	1972 Jul 14 1640:00	Loki Barr	-	-	Starute_Datasonde	-	-	-	FC	-	-	-	64	-	-
1972-W859	2441520.11	1972 Jul 21 1446:00	Loki Barr	-	-	Starute_Datasonde	-	-	-	FC	-	-	-	64	-	-
1972-W862	2441526.11	1972 Jul 26 1445:00	Loki Barr	-	-	Starute_Datasonde	-	-	-	FC	-	-	-	63	-	-
1972-W860	2441529.50	1972 Aug	Loki Barr	-	-	Starute_Datasonde	-	-	-	FC	-	-	-	60?	-	-
1972-W891	2441532.11	1972 Aug 2 1445:00	Loki Barr	-	-	Starute_Datasonde	-	-	-	FC	-	-	-	65	-	-
1972-W891	2441539.11	1972 Aug 9 1443:00	Loki Barr	-	-	Starute_Datasonde	-	-	-	FC	-	-	-	65	-	-
1972-W825	2441541.11	1972 Aug 11 1441:00	Loki Barr	-	T 1-6097	-	-	-	-	VL	-	-	-	25	-	-
1972-W840	2441544.26	1972 Aug 14 1643:00	Loki Barr	-	-	Starute_Datasonde	-	-	-	FC	-	-	-	62	-	-
1972-W840	2441544.26	1972 Aug 14 1643:00	Loki Barr	-	-	Starute_Datasonde	-	-	-	FC	-	-	-	62	-	-
1972-W1048	2441546.11	1972 Aug 15 1641:59	Loki Barr	-	-	Starute_Datasonde	-	-	-	FC	-	-	-	65	-	-
1972-W1050	2441546.11	1972 Aug 15 1650:59	Loki Barr	-	-	Starute_Datasonde	-	-	-	FC	-	-	-	62	-	-
1972-W1059	2441548.11	1972 Aug 18 1446:59	Loki Barr	-	-	Starute_Datasonde	-	-	-	FC	-	-	-	63	-	-
1972-W1068	2441551.11	1972 Aug 21 1443:00	Loki Barr	-	-	Starute_Datasonde	-	-	-	FC	-	-	-	63	-	-
1972-W1396	2441551.54	1972 Aug 22 0109:00	Loki Barr	-	HASP	URE HASP 89	-	-	-	W00	-	-	-	30?	-	-
1972-W1073	2441555.14	1972 Aug 23 1518:00	Loki Barr	-	-	Starute_Datasonde	-	-	-	FC	-	-	-	65	-	-
1972-W1092	2441558.14	1972 Aug 26 1446:00	Loki Barr	-	-	Starute_Datasonde	-	-	-	FC	-	-	-	62	-	-
1972-W1091	2441558.11	1972 Aug 28 1446:59	Loki Barr	-	-	Starute_Datasonde	-	-	-	FC	-	-	-	64	-	-
1972-W1104	2441560.11	1972 Aug 30 1444:00	Loki Barr	-	-	Starute_Datasonde	-	-	-	FC	-	-	-	61	-	-
1972-W1106	2441560.11	1972 Aug 30 1524:59	Loki Barr	-	-	Starute_Datasonde	-	-	-	CELAT	-	-	-	65	-	-
1972-W1106	2441560.50	1972 Sep	Loki Barr	-	-	Starute_Datasonde	-	-	-	FC	-	-	-	10?	-	-
1972-W1110	2441560.50	1972 Sep	Loki Barr	-	-	Starute_Datasonde	-	-	-	FC	-	-	-	60?	-	-
1972-W1120	2441567.61	1972 Sep 7 0233:00	Loki Barr	-	-	Starute_Datasonde	-	-	-	FC	-	-	-	60?	-	-
1972-W1128	2441572.58	1972 Sep 12 0148:59	Loki Barr	-	-	Starute_Datasonde	-	-	-	FC	-	-	-	63	-	-
1972-W1143	2441574.59	1972 Sep 14 0203:59	Loki Barr	-	-	Starute_Datasonde	-	-	-	FC	-	-	-	63	-	-
1972-W1154	2441574.59	1972 Sep 15 1235	Loki Barr	-	-	Starute_Datasonde	-	-	-	FC	-	-	-	60?	-	-
1972-W21	2441576.02	1972 Sep 16 1235	Loki Barr	-	LINTA HW-7213	-	-	-	-	ELAR	-	-	-	60?	-	-
1972-W1161	2441576.58	1972 Sep 16 0158:59	Loki Barr	-	-	Starute_Datasonde	-	-	-	FC	-	-	-	64	-	-
1972-W1172	2441579.83	1972 Sep 19 0802:00	Loki Barr	-	-	Starute_Datasonde	-	-	-	FC	-	-	-	60?	-	-
1972-W22	2441581.00	1972 Sep 20 1204	Loki Barr	-	LINTA HW-7214	-	-	-	-	ELAR	-	-	-	60?	-	-
1972-W1176	2441581.21	1972 Sep 20 1704:59	Loki Barr	-	-	Starute_Datasonde	-	-	-	FC	-	-	-	57	-	-
1972-W1185	2441583.63	1972 Sep 23 0312:59	Loki Barr	-	-	Starute_Datasonde	-	-	-	FC	-	-	-	64	-	-
1972-W1190	2441586.17	1972 Sep 25 1607:59	Loki Barr	-	-	Starute_Datasonde	-	-	-	FC	-	-	-	65	-	-
1972-W23	2441587.92	1972 Sep 27 1006	Loki Barr	-	LINTA HW-7215	-	-	-	-	ELAR	-	-	-	60?	-	-
1972-W1199	2441588.08	1972 Sep 27 1400:00	Loki Barr	-	-	Starute_Datasonde	-	-	-	FC	-	-	-	61	-	-
1972-W1204	2441588.21	1972 Sep 27 1657:59	Loki Barr	-	-	Starute_Datasonde	-	-	-	FC	-	-	-	65	-	-
1972-W1209	2441590.11	1972 Sep 29 1438:59	Loki Barr	-	-	Starute_Datasonde	-	-	-	FC	-	-	-	62	-	-
1972-W1217	2441593.12	1972 Oct 2 1452:00	Loki Barr	-	-	Starute_Datasonde	-	-	-	FC	-	-	-	64	-	-
1972-W1235	2441595.64	1972 Oct 5 0203:59	Loki Barr	-	-	Starute_Datasonde	-	-	-	FC	-	-	-	66	-	-
1972-W1268	2441602.30	1972 Oct 7 0206:00	Loki Barr	-	-	Starute_Datasonde	-	-	-	FC	-	-	-	66	-	-
1972-W1268	2441604.20	1972 Oct 11 1904:59	Loki Barr	-	-	Starute_Datasonde	-	-	-	FC	-	-	-	66	-	-
1972-W1268	2441604.20	1972 Oct 13 1645:59	Loki Barr	-	-	Starute_Datasonde	-	-	-	FC	-	-	-	64	-	-
1972-W1268	2441607.11	1972 Oct 16 1443:00	Loki Barr	-	-	Starute_Datasonde	-	-	-	FC	-	-	-	64	-	-
1972-W1291	2441609.12	1972 Oct 18 1452:00	Loki Barr	-	-	Starute_Datasonde	-	-	-	FC	-	-	-	64	-	-
1972-W1296	2441611.12	1972 Oct 20 1452:00	Loki Barr	-	-	Starute_Datasonde	-	-	-	FC	-	-	-	64	-	-
1972-W1302	2441614.12	1972 Oct 23 1501:59	Loki Barr	-	-	Starute_Datasonde	-	-	-	FC	-	-	-	64	-	-
1972-W1302	2441616.14	1972 Oct 25 1517:00	Loki Barr	-	-	Starute_Datasonde	-	-	-	FC	-	-	-	64	-	-
1972-W1318	2441618.12	1972 Oct 27 1456:00	Loki Barr	-	-	Starute_Datasonde	-	-	-	FC	-	-	-	65	-	-
1972-W1331	2441621.66	1972 Oct 31 0347:59	Loki Barr	-	-	Starute_Datasonde	-	-	-	FC	-	-	-	60?	-	-
1972-W1330	2441621.50	1972 Nov	Loki Barr	-	-	Starute_Datasonde	-	-	-	FC	-	-	-	60?	-	-



Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Launch_Mission	FlightCode	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee_Km	Range_Km	Dest
1972-W1347	2441623.74	1972 Nov 2 0543:00	Loki Barr	-	-	Starute_Datasonde	-	-	-	FC	-	-	-	61	-	-
1972-W1352	2441626.16	1972 Nov 3 1555:00	Loki Barr	-	-	Starute_Datasonde	-	-	-	FC	-	-	-	60	-	-
1972-W1360	2441628.16	1972 Nov 6 1549:59	Loki Barr	-	-	Starute_Datasonde	-	-	-	FC	-	-	-	56	-	-
1972-W1365	2441629.16	1972 Nov 7 1545:59	Loki Barr	-	-	Starute_Datasonde	-	-	-	FC	-	-	-	61	-	-
1972-W1370	2441630.15	1972 Nov 8 1542:00	Loki Barr	-	-	Starute_Datasonde	-	-	-	FC	-	-	-	65	-	-
1972-W1381	2441631.16	1972 Nov 9 1545:59	Loki Barr	-	-	Starute_Datasonde	-	-	-	FC	-	-	-	67	-	-
1972-W1389	2441632.15	1972 Nov 10 1543:00	Loki Barr	-	-	Starute_Datasonde	-	-	-	FC	-	-	-	64	-	-
1972-W1402	2441636.16	1972 Nov 14 1545:00	Loki Barr	-	-	Starute_Datasonde	-	-	-	FC	-	-	-	62	-	-
1972-W1405	2441637.15	1972 Nov 15 1543:00	Loki Barr	-	-	Starute_Datasonde	-	-	-	FC	-	-	-	63	-	-
1972-W1412	2441638.15	1972 Nov 17 1542:00	Loki Barr	-	-	Starute_Datasonde	-	-	-	FC	-	-	-	65	-	-
1972-W1419	2441639.15	1972 Nov 17 1543:00	Loki Barr	-	-	Starute_Datasonde	-	-	-	FC	-	-	-	62	-	-
1972-W1428	2441642.16	1972 Nov 20 1544:00	Loki Barr	-	-	Starute_Datasonde	-	-	-	FC	-	-	-	63	-	-
1972-W1435	2441643.15	1972 Nov 21 1543:00	Loki Barr	-	-	Starute_Datasonde	-	-	-	FC	-	-	-	62	-	-
1972-W1440	2441644.15	1972 Nov 22 1543:00	Loki Barr	-	-	Starute_Datasonde	-	-	-	FC	-	-	-	65	-	-
1972-W1446	2441645.16	1972 Nov 23 1553:00	Loki Barr	-	-	Starute_Datasonde	-	-	-	FC	-	-	-	63	-	-
1972-W1447	2441646.16	1972 Nov 24 1551:00	Loki Barr	-	-	Starute_Datasonde	-	-	-	FC	-	-	-	64	-	-
1972-W1456	2441649.63	1972 Nov 28 0304:59	Loki Barr	-	-	Starute_Datasonde	-	-	-	FC	-	-	-	53	-	-
1972-W1457	2441650.55	1972 Nov 28 0118:59	Loki Barr	-	-	Starute_Datasonde	-	-	-	FC	-	-	-	53	-	-
1972-W1458	2441651.02	1972 Nov 29 1227:59	Loki Barr	-	-	Starute_Datasonde	-	-	-	ELAR	-	-	-	53	-	-
1972-W1465	2441651.36	1972 Nov 29 2104:59	Loki Barr	-	-	Starute_Datasonde	-	-	-	FC	-	-	-	66	-	-
1972-W1466	2441651.50	1972 Dec 2 0243:00	Loki Barr	-	-	Starute_Datasonde	-	-	-	FC	-	-	-	607	-	-
1972-W1473	2441653.61	1972 Dec 5 0043:00	Loki Barr	-	-	Starute_Datasonde	-	-	-	FC	-	-	-	64	-	-
1972-W1480	2441656.53	1972 Dec 6 0200:00	Loki Barr	-	-	Starute_Datasonde	-	-	-	FC	-	-	-	61	-	-
1972-W1485	2441657.59	1972 Dec 6 1217:00	Loki Barr	-	-	Starute_Datasonde	-	-	-	FC	-	-	-	57	-	-
1972-W1486	2441658.01	1972 Dec 6 1217:00	Loki Barr	-	-	Starute_Datasonde	-	-	-	ELAR	-	-	-	57	-	-
1972-W1493	2441658.62	1972 Dec 7 0255:00	Loki Barr	-	-	Starute_Datasonde	-	-	-	FC	-	-	-	63	-	-
1972-W1494	2441658.82	1972 Dec 7 0737:59	Loki Barr	-	-	Starute_Datasonde	-	-	-	FC	-	-	-	63	-	-
1972-W1496	2441658.86	1972 Dec 7 0634:00	Loki Barr	-	-	Starute_Datasonde	-	-	-	FC	-	-	-	62	-	-
1972-W1499	2441659.62	1972 Dec 8 0251:00	Loki Barr	-	-	Starute_Datasonde	-	-	-	FC	-	-	-	64	-	-
1972-W1505	2441660.60	1972 Dec 9 0229:00	Loki Barr	-	-	Starute_Datasonde	-	-	-	FC	-	-	-	66	-	-
1972-W1506	2441662.54	1972 Dec 11 0205:59	Loki Barr	-	-	Starute_Datasonde	-	-	-	FC	-	-	-	64	-	-
1972-W1507	2441662.59	1972 Dec 11 0245:00	Loki Barr	-	-	Starute_Datasonde	-	-	-	FC	-	-	-	62	-	-
1972-W1517	2441663.60	1972 Dec 12 0230:00	Loki Barr	-	-	Starute_Datasonde	-	-	-	FC	-	-	-	65	-	-
1972-W1522	2441665.16	1972 Dec 13 1547:59	Loki Barr	-	-	Starute_Datasonde	-	-	-	FC	-	-	-	62	-	-
1972-W1527	2441666.16	1972 Dec 14 1545:00	Loki Barr	-	-	Starute_Datasonde	-	-	-	FC	-	-	-	58	-	-
1972-W1530	2441667.16	1972 Dec 15 1547:59	Loki Barr	-	-	Starute_Datasonde	-	-	-	FC	-	-	-	39	-	-
1972-W1538	2441670.17	1972 Dec 16 1559:59	Loki Barr	-	-	Starute_Datasonde	-	-	-	FC	-	-	-	63	-	-
1972-W1545	2441671.16	1972 Dec 16 1553:00	Loki Barr	-	-	Starute_Datasonde	-	-	-	FC	-	-	-	63	-	-
1972-W1552	2441672.16	1972 Dec 20 1618:59	Loki Barr	-	-	Starute_Datasonde	-	-	-	FC	-	-	-	62	-	-
1972-W1557	2441673.15	1972 Dec 22 1540:00	Loki Barr	-	-	Starute_Datasonde	-	-	-	FC	-	-	-	82	-	-
1972-W1559	2441674.16	1972 Dec 27 1544:00	Loki Barr	-	-	Starute_Datasonde	-	-	-	FC	-	-	-	65	-	-
1972-W1564	2441679.15	1972 Dec 27 1544:00	Loki Barr	-	-	Starute_Datasonde	-	-	-	FC	-	-	-	62	-	-
1972-W1570	2441680.16	1972 Dec 28 1544:00	Loki Barr	-	-	Starute_Datasonde	-	-	-	FC	-	-	-	62	-	-
1972-W1572	2441681.16	1972 Dec 29 1544:00	Loki Barr	-	-	Starute_Datasonde	-	-	-	FC	-	-	-	607	-	-
1972-W1573	2441682.50	1973 Jan 1	Loki Barr	-	-	-	-	-	-	FC	-	-	-	607	-	-
1972-W1574	2441682.50	1973 Jan 1	Loki Barr	-	-	-	-	-	-	FC	-	-	-	607	-	-
1972-W1575	2441682.50	1973 Jan 1	Loki Barr	-	-	-	-	-	-	FC	-	-	-	607	-	-
1972-W1576	2441682.50	1973 Jan 1	Loki Barr	-	-	-	-	-	-	FC	-	-	-	607	-	-
1972-W1577	2441682.50	1973 Jan 1	Loki Barr	-	-	-	-	-	-	FC	-	-	-	607	-	-
1972-W1578	2441682.50	1973 Jan 1	Loki Barr	-	-	-	-	-	-	FC	-	-	-	607	-	-
1972-W1579	2441682.50	1973 Jan 1	Loki Barr	-	-	-	-	-	-	FC	-	-	-	607	-	-
1972-W1580	2441682.50	1973 Jan 1	Loki Barr	-	-	-	-	-	-	FC	-	-	-	607	-	-
1972-W1581	2441682.50	1973 Jan 1	Loki Barr	-	-	-	-	-	-	FC	-	-	-	607	-	-
1972-W1582	2441682.50	1973 Jan 1	Loki Barr	-	-	-	-	-	-	FC	-	-	-	607	-	-
1972-W1583	2441682.50	1973 Jan 1	Loki Barr	-	-	-	-	-	-	FC	-	-	-	607	-	-
1972-W1584	2441682.50	1973 Jan 1	Loki Barr	-	-	-	-	-	-	FC	-	-	-	607	-	-
1972-W1585	2441682.50	1973 Jan 1	Loki Barr	-	-	-	-	-	-	FC	-	-	-	607	-	-
1972-W1586	2441682.50	1973 Jan 1	Loki Barr	-	-	-	-	-	-	FC	-	-	-	607	-	-
1972-W1587	2441682.50	1973 Jan 1	Loki Barr	-	-	-	-	-	-	FC	-	-	-	607	-	-
1972-W1588	2441682.50	1973 Jan 1	Loki Barr	-	-	-	-	-	-	FC	-	-	-	607	-	-
1972-W1589	2441682.50	1973 Jan 1	Loki Barr	-	-	-	-	-	-	FC	-	-	-	607	-	-
1972-W1590	2441682.50	1973 Jan 1	Loki Barr	-	-	-	-	-	-	FC	-	-	-	607	-	-
1972-W1591	2441682.50	1973 Jan 1	Loki Barr	-	-	-	-	-	-	FC	-	-	-	607	-	-
1972-W1592	2441682.50	1973 Jan 1	Loki Barr	-	-	-	-	-	-	FC	-	-	-	607	-	-
1972-W1593	2441682.50	1973 Jan 1	Loki Barr	-	-	-	-	-	-	FC	-	-	-	607	-	-
1972-W1594	2441682.50	1973 Jan 1	Loki Barr	-	-	-	-	-	-	FC	-	-	-	607	-	-
1972-W1595	2441682.50	1973 Jan 1	Loki Barr	-	-	-	-	-	-	FC	-	-	-	607	-	-
1972-W1596	2441682.50	1973 Jan 1	Loki Barr	-	-	-	-	-	-	FC	-	-	-	607	-	-
1972-W1597	2441682.50	1973 Jan 1	Loki Barr	-	-	-	-	-	-	FC	-	-	-	607	-	-
1972-W1598	2441682.50	1973 Jan 1	Loki Barr	-	-	-	-	-	-	FC	-	-	-	607	-	-
1972-W1599	2441682.50	1973 Jan 1	Loki Barr	-	-	-	-	-	-	FC	-	-	-	607	-	-
1972-W1600	2441682.50	1973 Jan 1	Loki Barr	-	-	-	-	-	-	FC	-	-	-	607	-	-
1972-W1601	2441682.50	1973 Jan 1	Loki Barr	-	-	-	-	-	-	FC	-	-	-	607	-	-
1972-W1602	2441682.50	1973 Jan 1	Loki Barr	-	-	-	-	-	-	FC	-	-	-	607	-	-
1972-W1603	2441682.50	1973 Jan 1	Loki Barr	-	-	-	-	-	-	FC	-	-	-	607	-	-
1972-W1604	2441682.50	1973 Jan 1	Loki Barr	-	-	-	-	-	-	FC	-	-	-	607	-	-
1972-W1605	2441685.16	1973 Jan 2 1549:59	Loki Barr	-	-	Starute_Datasonde	-	-	-	FC	-	-	-	63	-	-
1972-W1610	2441686.16	1973 Jan 3 1648:59	Loki Barr	-	-	Starute_Datasonde	-	-	-	FC	-	-	-	61	-	-
1972-W1619	2441687.20	1973 Jan 4 1545:59	Loki Barr	-	-	Starute_Datasonde	-	-	-	FC	-	-	-	63	-	-
1972-W1624	2441688.16	1973 Jan 5 1542:00	Loki Barr	-	-	Starute_Datasonde	-	-	-	FC	-	-	-	61	-	-
1972-W1629	2441689.21	1973 Jan 6 1752:00	Loki Barr	-	-	Starute_Datasonde	-	-	-	FC	-	-	-	64	-	-
1972-W1630	2441689.21	1973 Jan 7 1757:00	Loki Barr	-	-	Starute_Datasonde	-	-	-	FC	-	-	-	63	-	-
1972-W1636	2441691.11	1973 Jan 8 1630:00	Loki Barr	-	-	Starute_Datasonde	-	-	-	FC	-	-	-	65	-	-
1972-W1643	2441692.31	1973 Jan 9 1932:59	Loki Barr	-	-	Starute_Datasonde	-	-	-	FC	-	-	-	63	-	-
1972-W1648	2441693.01	1973 Jan 10 1644:59	Loki Barr	-	-	Starute_Datasonde	-	-	-	ELAR	-	-	-	607	-	-
1972-W1651	2441693.20	1973 Jan 10 1644:59	Loki Barr	-	-	Starute_Datasonde	-	-	-	FC	-	-	-	64	-	-
1972-W1654	2441694.15	1973 Jan 11 1542:00	Loki Barr	-	-	Starute_Datasonde	-	-	-	FC	-	-	-	65	-	-
1972-W1660	2441695.16	1973 Jan 12 1544:00	Loki Barr	-	-	Starute_Datasonde	-	-	-	FC	-	-	-	63	-	-
1972-W1670	2441698.29	1973 Jan 16 1543:00	Loki Barr	-	-	Starute_Datasonde	-	-	-	FC	-	-	-	64	-	-
1972-W1684	2441699.15	1973 Jan 16 1543:00	Loki Barr	-	-	Starute_Datasonde	-	-	-	FC	-	-	-	62	-	-
1972-W1687	2441699.15	1973 Jan 17 1703:59	Loki Barr	-	-	Starute_Datasonde	-	-	-	FC	-	-	-	65	-	-
1972-W1688	2441700.21	1973 Jan 19 1549:59	Loki Barr	-	-	Starute_Datasonde	-	-	-	FC	-	-	-	63	-	-
1972-W1702	2441702.16	1973 Jan 22 0338:59	Loki Barr	-	-	Starute_Datasonde	-	-	-	FC	-	-	-	65	-	-
197																

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Launch_Mission	FlightCode	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee_Km	Range_Km	Dest
1973-0273	2441736.55	1973 Feb 22 0118:59	Loki Dart	-	-	Starute_Datasonde	-	-	-	FC	-	-	-	69	-	-
1973-0277	2441736.63	1973 Feb 23 0308:00	Loki Dart	-	-	Starute_Datasonde	-	-	-	FC	-	-	-	69	-	-
1973-0286	2441737.66	1973 Feb 24 0348:59	Loki Dart	-	-	Starute_Datasonde	-	-	-	FC	-	-	-	68	-	-
1973-0304	2441742.67	1973 Mar 1 0407:59	Loki Dart	-	-	Starute_Datasonde	-	-	-	FC	-	-	-	68	-	-
1973-0306	2441743.25	1973 Mar 1 1757:00	Loki Dart	-	-	Starute_Datasonde	-	-	-	FC	-	-	-	63	-	-
1973-0313	2441744.16	1973 Mar 2 1547:59	Loki Dart	-	-	Starute_Datasonde	-	-	-	FC	-	-	-	63	-	-
1973-0320	2441747.16	1973 Mar 5 1545:00	Loki Dart	-	-	Starute_Datasonde	-	-	-	FC	-	-	-	65	-	-
1973-0326	2441748.18	1973 Mar 6 1617:00	Loki Dart	-	-	Starute_Datasonde	-	-	-	FC	-	-	-	66	-	-
1973-0331	2441749.05	1973 Mar 7 1304:59	Loki Dart	-	-	Starute_Datasonde	-	-	-	ELAR	-	-	-	57	-	-
1973-0335	2441749.15	1973 Mar 7 1541:00	Loki Dart	-	-	Starute_Datasonde	-	-	-	FC	-	-	-	67	-	-
1973-0344	2441750.19	1973 Mar 8 1630:00	Loki Dart	-	-	Starute_Datasonde	-	-	-	FC	-	-	-	68	-	-
1973-0347	2441751.15	1973 Mar 9 1540:00	Loki Dart	-	-	Starute_Datasonde	-	-	-	FC	-	-	-	68	-	-
1973-0356	2441754.16	1973 Mar 12 1549:59	Loki Dart	-	-	Starute_Datasonde	-	-	-	FC	-	-	-	64	-	-
1973-0363	2441755.18	1973 Mar 13 1614:59	Loki Dart	-	-	Starute_Datasonde	-	-	-	FC	-	-	-	64	-	-
1973-0365	2441756.18	1973 Mar 14 1543:00	Loki Dart	-	-	Starute_Datasonde	-	-	-	FC	-	-	-	67	-	-
1973-0377	2441757.19	1973 Mar 15 1543:59	Loki Dart	-	-	Starute_Datasonde	-	-	-	FC	-	-	-	68	-	-
1973-0381	2441758.15	1973 Mar 16 1542:00	Loki Dart	-	-	Starute_Datasonde	-	-	-	FC	-	-	-	66	-	-
1973-0388	2441761.15	1973 Mar 19 1543:00	Loki Dart	-	-	Starute_Datasonde	-	-	-	FC	-	-	-	65	-	-
1973-0389	2441762.19	1973 Mar 20 1530:59	Loki Dart	-	-	Starute_Datasonde	-	-	-	FC	-	-	-	66	-	-
1973-0397	2441762.19	1973 Mar 21 1533:00	Loki Dart	-	-	Starute_Datasonde	-	-	-	FC	-	-	-	68	-	-
1973-0403	2441764.19	1973 Mar 22 1534:59	Loki Dart	-	-	Starute_Datasonde	-	-	-	FC	-	-	-	65	-	-
1973-0409	2441764.19	1973 Mar 23 1540:00	Loki Dart	-	-	Starute_Datasonde	-	-	-	FC	-	-	-	66	-	-
1973-0416	2441768.15	1973 Mar 25 1543:00	Loki Dart	-	-	Starute_Datasonde	-	-	-	FC	-	-	-	66	-	-
1973-0426	2441768.15	1973 Mar 26 1543:00	Loki Dart	-	-	Starute_Datasonde	-	-	-	FC	-	-	-	66	-	-
1973-0434	2441769.18	1973 Mar 27 1624:59	Loki Dart	-	-	Starute_Datasonde	-	-	-	FC	-	-	-	66	-	-
1973-0442	2441770.16	1973 Mar 28 1545:59	Loki Dart	-	-	Starute_Datasonde	-	-	-	FC	-	-	-	66	-	-
1973-0450	2441771.19	1973 Mar 29 1640:00	Loki Dart	-	-	Starute_Datasonde	-	-	-	FC	-	-	-	64	-	-
1973-0460	2441772.24	1973 Mar 30 1742:00	Loki Dart	-	-	Starute_Datasonde	-	-	-	FC	-	-	-	53	-	-
1973-0465	2441776.19	1973 Apr 3 1530:00	Loki Dart	-	-	Starute_Datasonde	-	-	-	FC	-	-	-	68	-	-
1973-0473	2441777.15	1973 Apr 4 1537:59	Loki Dart	-	-	Starute_Datasonde	-	-	-	FC	-	-	-	60	-	-
1973-0476	2441779.15	1973 Apr 6 1540:00	Loki Dart	-	-	Starute_Datasonde	-	-	-	FC	-	-	-	64	-	-
1973-0486	2441781.15	1973 Apr 10 1530:00	Loki Dart	-	-	Starute_Datasonde	-	-	-	FC	-	-	-	60	-	-
1973-0600	2441783.19	1973 Apr 11 1220:00	Loki Dart	-	-	Starute_Datasonde	-	-	-	ELAR	-	-	-	67	-	-
1973-0603	2441784.01	1973 Apr 11 1536:59	Loki Dart	-	-	Starute_Datasonde	-	-	-	FC	-	-	-	60	-	-
1973-0606	2441784.15	1973 Apr 11 1536:59	Loki Dart	-	-	Starute_Datasonde	-	-	-	FC	-	-	-	66	-	-
1973-0619	2441790.19	1973 Apr 17 1534:59	Loki Dart	-	-	Starute_Datasonde	-	-	-	FC	-	-	-	66	-	-
1973-0631	2441791.15	1973 Apr 18 1535:59	Loki Dart	-	-	Starute_Datasonde	-	-	-	FC	-	-	-	66	-	-
1973-0637	2441791.15	1973 Apr 18 1535:59	Loki Dart	-	-	Starute_Datasonde	-	-	-	FC	-	-	-	66	-	-
1973-0659	2441797.19	1973 Apr 24 1640:00	Loki Dart	-	-	Starute_Datasonde	-	-	-	FC	-	-	-	66	-	-
1973-0665	2441798.15	1973 Apr 25 1534:59	Loki Dart	-	-	Starute_Datasonde	-	-	-	FC	-	-	-	82	-	-
1973-0675	2441800.17	1973 Apr 26 1629:59	Loki Dart	-	-	Starute_Datasonde	-	-	-	FC	-	-	-	62	-	-
1973-0682	2441805.11	1973 Apr 30 1436:00	Loki Dart	-	-	Starute_Datasonde	-	-	-	FC	-	-	-	64	-	-
1973-0690	2441806.11	1973 May 2 1543:00	Loki Dart	-	-	Starute_Datasonde	-	-	-	FC	-	-	-	64	-	-
1973-0694	2441807.16	1973 May 8 1544:59	Loki Dart	-	-	Starute_Datasonde	-	-	-	FC	-	-	-	63	-	-
1973-0697	2441811.22	1973 May 8 1721:00	Loki Dart	-	-	Starute_Datasonde	-	-	-	FC	-	-	-	63	-	-
1973-0699	2441812.02	1973 May 9 1535:00	Loki Dart	-	-	Starute_Datasonde	-	-	-	ELAR	-	-	-	60	-	-
1973-0702	2441812.13	1973 May 9 1535:00	Loki Dart	-	-	Starute_Datasonde	-	-	-	FC	-	-	-	60	-	-
1973-0719	2441814.15	1973 May 11 1618:59	Loki Dart	-	-	Starute_Datasonde	-	-	-	FC	-	-	-	66	-	-
1973-0724	2441817.16	1973 May 11 1618:59	Loki Dart	-	-	Starute_Datasonde	-	-	-	FC	-	-	-	66	-	-
1973-0734	2441819.12	1973 May 15 1629:59	Loki Dart	-	-	Starute_Datasonde	-	-	-	FC	-	-	-	68	-	-
1973-0753	2441826.15	1973 May 23 1609:59	Loki Dart	-	-	Starute_Datasonde	-	-	-	FC	-	-	-	61	-	-
1973-0867	2441828.11	1973 May 25 1629:59	Loki Dart	-	-	Starute_Datasonde	-	-	-	FC	-	-	-	62	-	-
1973-0702	2441831.16	1973 May 28 1457:59	Loki Dart	-	-	Starute_Datasonde	-	-	-	FC	-	-	-	63	-	-
1973-0772	2441833.12	1973 May 30 1614:59	Loki Dart	-	-	Starute_Datasonde	-	-	-	FC	-	-	-	61	-	-
1973-0774	2441840.01	1973 Jun 6 1621:59	Loki Dart	-	-	Starute_Datasonde	-	-	-	ELAR	-	-	-	67	-	-
1973-0740	2441840.01	1973 Jun 6 1621:59	Loki Dart	-	-	Starute_Datasonde	-	-	-	FC	-	-	-	61	-	-
1973-0746	2441847.21	1973 Jun 13 1655:59	Loki Dart	-	-	Starute_Datasonde	-	-	-	FC	-	-	-	65	-	-
1973-0781	2441854.12	1973 Jun 20 1627:59	Loki Dart	-	-	Starute_Datasonde	-	-	-	FC	-	-	-	65	-	-
1973-0836	2441861.15	1973 Jun 27 1630:00	Loki Dart	-	-	Starute_Datasonde	-	-	-	FC	-	-	-	64	-	-
1973-0845	2441863.50	1973 Jun 27 1630:00	Loki Dart	-	-	Starute_Datasonde	-	-	-	FC	-	-	-	607	-	-
1973-0859	2441868.18	1973 Jun 4 1624:59	Loki Dart	-	-	Starute_Datasonde	-	-	-	ELAR	-	-	-	64	-	-
1973-0871	2441874.21	1973 Jun 11 1659:59	Loki Dart	-	-	Starute_Datasonde	-	-	-	FC	-	-	-	607	-	-
1973-0874	2441875.01	1973 Jun 11 1659:59	Loki Dart	-	-	Starute_Datasonde	-	-	-	FC	-	-	-	67	-	-
1973-0913	2441882.12	1973 Jun 18 1447:00	Loki Dart	-	-	Starute_Datasonde	-	-	-	FC	-	-	-	67	-	-
1973-0933	2441889.15	1973 Jun 25 1627:59	Loki Dart	-	-	Starute_Datasonde	-	-	-	FC	-	-	-	67	-	-
1973-0959	2441894.50	1973 Jun 25 1627:59	Loki Dart	-	-	Starute_Datasonde	-	-	-	FC	-	-	-	607	-	-
1973-0971	2441896.12	1973 Aug 1 1459:00	Loki Dart	-	-	Starute_Datasonde	-	-	-	FC	-	-	-	68	-	-
1973-0974	2441897.20	1973 Aug 2 1651:00	Loki Dart	-	-	Starute_Datasonde	-	-	-	FC	-	-	-	66	-	-
1973-0992	2441903.13	1973 Aug 8 1507:00	Loki Dart	-	-	Starute_Datasonde	-	-	-	FC	-	-	-	65	-	-
1973-1000	2441904.11	1973 Aug 9 1437:59	Loki Dart	-	-	Starute_Datasonde	-	-	-	FC	-	-	-	61	-	-
1973-1013	2441908.18	1973 Aug 13 1624:59	Loki Dart	-	-	Starute_Datasonde	-	-	-	FC	-	-	-	65	-	-
1973-1027	2441910.12	1973 Aug 15 1451:00	Loki Dart	-	-	Starute_Datasonde	-	-	-	FC	-	-	-	66	-	-
1973-1035	2441911.18	1973 Aug 16 1624:59	Loki Dart	-	-	Starute_Datasonde	-	-	-	FC	-	-	-	66	-	-
1973-1048	2441915.12	1973 Aug 20 1447:00	Loki Dart	-	-	Starute_Datasonde	-	-	-	FC	-	-	-	66	-	-
1973-1057	2441917.12	1973 Aug 22 1448:00	Loki Dart	-	-	Starute_Datasonde	-	-	-	FC	-	-	-	67	-	-
1973-1081	2441922.11	1973 Aug 27 1444:00	Loki Dart	-	-	Starute_Datasonde	-	-	-	FC	-	-	-	67	-	-
1973-1099	2441924.29	1973 Aug 29 1854:00	Loki Dart	-	-	Starute_Datasonde	-	-	-	FC	-	-	-	63	-	-
1973-1105	2441925.18	1973 Aug 30 1624:59	Loki Dart	-	-	Starute_Datasonde	-	-	-	FC	-	-	-	66	-	-
1973-1115	2441937.18	1973 Sep 12 1518:00	Loki Dart	-	-	Starute_Datasonde	-	-	-	FC	-	-	-	66	-	-
1973-1116	2441938.14	1973 Sep 12 1518:00	Loki Dart	-	-	Starute_Datasonde	-	-	-	FC	-	-	-	66	-	-
1973-1165	2441939.18	1973 Sep 13 1624:59	Loki Dart	-	-	Starute_Datasonde	-	-	-	FC	-	-	-	69	-	-
1973-1238	2441955.50	1973 Oct	Loki Dart	-	-	Starute_Datasonde	-	-	-	FC	-	-	-	607	-	-
1973-1239	2441955.50	1973 Oct	Loki Dart	-	-	Starute_Datasonde	-	-	-	FC	-	-	-	607	-	-
1973-1240	2441955.50	1973 Oct	Loki Dart	-	-	Starute_Datasonde	-	-	-	FC	-	-	-	607	-	-
1973-1241	2441955.50	1973 Oct	Loki Dart	-	-	Starute_Datasonde	-	-	-	FC	-	-	-	607	-	-
1973-1242	2441955.50	1973 Oct	Loki Dart	-	-	Starute_Datasonde	-	-	-	FC	-	-	-	607	-	-
1973-1243	2441955.50	1973 Oct	Loki Dart	-	-	Starute_Datasonde	-	-	-	FC	-	-	-	607	-	-
1973-1359	2441986.50	1973 Nov	Loki Dart	-	-	Starute_Datasonde	-	-	-	FC	-	-	-	607	-	-

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Launch_Mission	FlightCode	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee_Km	Range_Km	Dest
1973-W1360	2441986.50	1973 Nov	Loki Dart	-	-	-	-	-	-	FC	-	-	-	607	-	-
1973-W1361	2441986.50	1973 Nov	Loki Dart	-	-	-	-	-	-	FC	-	-	-	607	-	-
1973-W1362	2441986.50	1973 Nov	Loki Dart	-	-	-	-	-	-	FC	-	-	-	607	-	-
1973-W1379	2441989.18	1973 Nov 7 1624:59	Loki Dart	-	-	-	-	-	-	FC	-	-	-	68	-	-
1973-W1393	2441994.18	1973 Nov 8 1546:59	Loki Dart	-	-	-	-	-	-	FC	-	-	-	66	-	-
1973-W67	2441995.16	1973 Nov 8 1546:59	Loki Dart	-	-	-	-	-	-	FC	-	-	-	41	-	-
1973-W403	2441996.18	1973 Nov 9 1624:59	Loki Dart	-	-	-	-	-	-	FC	-	-	-	67	-	-
1973-W416	2442000.15	1973 Nov 13 1642:00	Loki Dart	-	-	-	-	-	-	FC	-	-	-	65	-	-
1973-W40	2442001.01	1973 Nov 14 1212	Loki Dart	-	-	-	-	-	-	ELAR	-	-	-	607	-	-
1973-W423	2442001.18	1973 Nov 14 1624:59	Loki Dart	-	-	-	-	-	-	FC	-	-	-	66	-	-
1973-W429	2442002.15	1973 Nov 15 1641:00	Loki Dart	-	-	-	-	-	-	FC	-	-	-	55	-	-
1973-W435	2442003.18	1973 Nov 16 1624:59	Loki Dart	-	-	-	-	-	-	FC	-	-	-	66	-	-
1973-W446	2442006.48	1973 Nov 19 2326:59	Loki Dart	-	-	-	-	-	-	FC	-	-	-	65	-	-
1973-W460	2442007.48	1973 Nov 20 2330:00	Loki Dart	-	-	-	-	-	-	FC	-	-	-	66	-	-
1973-W469	2442008.51	1973 Nov 22 0015:59	Loki Dart	-	-	-	-	-	-	FC	-	-	-	64	-	-
1973-W465	2442013.24	1973 Nov 26 1738:59	Loki Dart	-	-	-	-	-	-	FC	-	-	-	61	-	-
1973-W473	2442015.16	1973 Nov 28 1646:59	Loki Dart	-	-	-	-	-	-	FC	-	-	-	65	-	-
1973-W480	2442017.18	1973 Nov 30 1624:59	Loki Dart	-	-	-	-	-	-	FC	-	-	-	65	-	-
1973-W489	2442020.16	1973 Dec 3 1544:00	Loki Dart	-	-	-	-	-	-	FC	-	-	-	67	-	-
1973-W495	2442021.15	1973 Dec 4 1542:00	Loki Dart	-	-	-	-	-	-	FC	-	-	-	63	-	-
1973-W501	2442022.18	1973 Dec 5 1624:59	Loki Dart	-	-	-	-	-	-	FC	-	-	-	66	-	-
1973-W504	2442023.16	1973 Dec 6 1544:00	Loki Dart	-	-	-	-	-	-	FC	-	-	-	67	-	-
1973-W512	2442024.18	1973 Dec 7 1624:59	Loki Dart	-	-	-	-	-	-	FC	-	-	-	65	-	-
1973-W521	2442027.16	1973 Dec 10 1646:59	Loki Dart	-	-	-	-	-	-	FC	-	-	-	66	-	-
1973-W529	2442028.24	1973 Dec 11 1742:00	Loki Dart	-	-	-	-	-	-	FC	-	-	-	68	-	-
1973-W537	2442029.03	1973 Dec 12 1247	Loki Dart	-	-	-	-	-	-	ELAR	-	-	-	607	-	-
1973-W41	2442029.03	1973 Dec 12 1247	Loki Dart	-	-	-	-	-	-	ELAR	-	-	-	607	-	-
1973-W542	2442030.16	1973 Dec 12 1624:59	Loki Dart	-	-	-	-	-	-	FC	-	-	-	63	-	-
1973-W560	2442030.16	1973 Dec 13 1644:00	Loki Dart	-	-	-	-	-	-	FC	-	-	-	66	-	-
1973-W566	2442031.16	1973 Dec 14 1624:59	Loki Dart	-	-	-	-	-	-	FC	-	-	-	61	-	-
1973-W562	2442034.16	1973 Dec 17 1646:59	Loki Dart	-	-	-	-	-	-	FC	-	-	-	64	-	-
1973-W567	2442036.16	1973 Dec 18 1646:59	Loki Dart	-	-	-	-	-	-	FC	-	-	-	65	-	-
1973-W572	2442036.16	1973 Dec 19 1624:59	Loki Dart	-	-	-	-	-	-	FC	-	-	-	63	-	-
1973-W577	2442037.15	1973 Dec 20 1641:00	Loki Dart	-	-	-	-	-	-	FC	-	-	-	64	-	-
1973-W581	2442038.16	1973 Dec 21 1624:59	Loki Dart	-	-	-	-	-	-	FC	-	-	-	59	-	-
1973-W584	2442044.15	1973 Dec 27 1941:00	Loki Dart	-	-	-	-	-	-	FC	-	-	-	63	-	-
1973-W594	2442044.30	1973 Dec 27 1916:59	Loki Dart	-	-	-	-	-	-	FC	-	-	-	58	-	-
1973-W597	2442045.16	1973 Dec 28 1624:59	Loki Dart	-	-	-	-	-	-	FC	-	-	-	66	-	-
1974-W01	2442047.50	1974 Jan	Loki Dart	-	-	-	-	-	-	FC	-	-	-	607	-	-
1974-W02	2442047.50	1974 Jan	Loki Dart	-	-	-	-	-	-	FC	-	-	-	607	-	-
1974-W09	2442060.24	1974 Jan 2 1741:00	Loki Dart	-	-	-	-	-	-	FC	-	-	-	62	-	-
1974-W18	2442061.16	1974 Jan 3 1556:59	Loki Dart	-	-	-	-	-	-	FC	-	-	-	68	-	-
1974-W18	2442062.16	1974 Jan 3 1548:00	Loki Dart	-	-	-	-	-	-	FC	-	-	-	60	-	-
1974-W26	2442065.13	1974 Jan 9 1303:59	Loki Dart	-	-	-	-	-	-	FC	-	-	-	61	-	-
1974-W30	2442067.01	1974 Jan 9 1303:59	Loki Dart	-	-	-	-	-	-	FC	-	-	-	607	-	-
1974-W36	2442067.24	1974 Jan 9 1710:00	Loki Dart	-	-	-	-	-	-	FC	-	-	-	66	-	-
1974-W36	2442068.16	1974 Jan 10 1553:00	Loki Dart	-	-	-	-	-	-	FC	-	-	-	66	-	-
1974-W31	2442068.98	1974 Jan 11 1543:00	Loki Dart	-	-	-	-	-	-	ELAR	-	-	-	607	-	-
1974-W32	2442069.15	1974 Jan 14 1130:00	Loki Dart	-	-	-	-	-	-	FC	-	-	-	66	-	-
1974-W32	2442081.98	1974 Jan 14 1130:00	Loki Dart	-	-	-	-	-	-	FC	-	-	-	607	-	-
1974-W32	2442083.15	1974 Jan 15 1541:00	Loki Dart	-	-	-	-	-	-	FC	-	-	-	69	-	-
1974-W33	2442083.98	1974 Jan 15 1541:00	Loki Dart	-	-	-	-	-	-	FC	-	-	-	607	-	-
1974-W38	2442084.20	1974 Jan 16 1741:00	Loki Dart	-	-	-	-	-	-	FC	-	-	-	64	-	-
1974-W33	2442085.16	1974 Jan 17 1553:00	Loki Dart	-	-	-	-	-	-	FC	-	-	-	64	-	-
1974-W34	2442086.00	1974 Jan 18 1303:00	Loki Dart	-	-	-	-	-	-	FC	-	-	-	607	-	-
1974-W34	2442086.52	1974 Jan 19 0930:00	Loki Dart	-	-	-	-	-	-	FC	-	-	-	66	-	-
1974-W36	2442087.04	1974 Jan 19 1255	Loki Dart	-	-	-	-	-	-	FC	-	-	-	607	-	-
1974-W36	2442089.04	1974 Jan 21 1959	Loki Dart	-	-	-	-	-	-	FC	-	-	-	607	-	-
1974-W39	2442089.54	1974 Jan 22 0054:00	Loki Dart	-	-	-	-	-	-	FC	-	-	-	61	-	-
1974-W37	2442090.51	1974 Jan 23 0019:00	Loki Dart	-	-	-	-	-	-	FC	-	-	-	66	-	-
1974-W37	2442091.04	1974 Jan 23 1301:00	Loki Dart	-	-	-	-	-	-	FC	-	-	-	607	-	-
1974-W110	2442092.16	1974 Jan 24 1645:00	Loki Dart	-	-	-	-	-	-	FC	-	-	-	61	-	-
1974-W38	2442093.04	1974 Jan 25 1743:00	Loki Dart	-	-	-	-	-	-	FC	-	-	-	607	-	-
1974-W115	2442093.24	1974 Jan 26 1743:00	Loki Dart	-	-	-	-	-	-	FC	-	-	-	61	-	-
1974-W122	2442097.16	1974 Jan 28 1544:00	Loki Dart	-	-	-	-	-	-	FC	-	-	-	65	-	-
1974-W129	2442097.15	1974 Jan 29 1541:00	Loki Dart	-	-	-	-	-	-	FC	-	-	-	70	-	-
1974-W136	2442097.15	1974 Jan 30 1540:00	Loki Dart	-	-	-	-	-	-	FC	-	-	-	65	-	-
1974-W150	2442097.15	1974 Jan 31 1538:59	Loki Dart	-	-	-	-	-	-	FC	-	-	-	68	-	-
1974-W144	2442097.50	1974 Feb 4 1604:59	Loki Dart	-	-	-	-	-	-	FC	-	-	-	607	-	-
1974-W163	2442083.17	1974 Feb 4 1604:59	Loki Dart	-	-	-	-	-	-	FC	-	-	-	62	-	-
1974-W167	2442084.24	1974 Feb 5 1738:59	Loki Dart	-	-	-	-	-	-	FC	-	-	-	62	-	-
1974-W173	2442085.17	1974 Feb 6 1609:59	Loki Dart	-	-	-	-	-	-	FC	-	-	-	62	-	-
1974-W176	2442086.16	1974 Feb 7 1545:59	Loki Dart	-	-	-	-	-	-	FC	-	-	-	66	-	-
1974-W181	2442087.15	1974 Feb 8 1538:59	Loki Dart	-	-	-	-	-	-	FC	-	-	-	66	-	-
1974-W184	2442090.16	1974 Feb 11 1545:00	Loki Dart	-	-	-	-	-	-	FC	-	-	-	68	-	-
1974-W192	2442091.24	1974 Feb 12 1743:00	Loki Dart	-	-	-	-	-	-	FC	-	-	-	67	-	-
1974-W201	2442092.54	1974 Feb 14 0059:59	Loki Dart	-	-	-	-	-	-	FC	-	-	-	65	-	-
1974-W205	2442093.50	1974 Feb 15 0000:59	Loki Dart	-	-	-	-	-	-	FC	-	-	-	67	-	-
1974-W218	2442097.53	1974 Feb 19 0037:59	Loki Dart	-	-	-	-	-	-	FC	-	-	-	66	-	-
1974-W232	2442099.52	1974 Feb 21 0033:00	Loki Dart	-	-	-	-	-	-	FC	-	-	-	61	-	-
1974-W241	2442101.60	1974 Feb 23 0217:00	Loki Dart	-	-	-	-	-	-	FC	-	-	-	63	-	-
1974-W249	2442104.53	1974 Feb 26 0049:59	Loki Dart	-	-	-	-	-	-	FC	-	-	-	67	-	-
1974-W255	2442105.54	1974 Feb 27 0057:59	Loki Dart	-	-	-	-	-	-	FC	-	-	-	67	-	-
1974-W270	2442106.54	1974 Feb 28 0102:59	Loki Dart	-	-	-	-	-	-	FC	-	-	-	65	-	-
1974-W265	2442106.50	1974 Mar	Loki Dart	-	-	-	-	-	-	FC	-	-	-	607	-	-
1974-W274	2442107.55	1974 Mar 1 0108:59	Loki Dart	-	-	-	-	-	-	FC	-	-	-	66	-	-







Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Launch_Mission	FlightCode	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee_Km	Range_Km	Deat
1975-W1015	2442866.19	1975 Sep 10 1658:59	Loki Dart	-	-	Starute_Datasonde	-	-	-	FC	-	-	-	60	-	-
1975-W1020	2442868.20	1975 Sep 12 1652:59	Loki Dart	-	-	Starute_Datasonde	-	-	-	FC	-	-	-	61	-	-
1975-W1026	2442871.18	1975 Sep 15 1614:59	Loki Dart	-	-	Starute_Datasonde	-	-	-	FC	-	-	-	60	-	-
1975-W1042	2442873.21	1975 Sep 17 1656:59	Loki Dart	-	-	Starute_Datasonde	-	-	-	FC	-	-	-	63	-	-
1975-W1047	2442876.25	1975 Sep 19 1757:00	Loki Dart	-	-	Starute_Datasonde	-	-	-	FC	-	-	-	62	-	-
1975-W1065	2442878.19	1975 Sep 22 1650:59	Loki Dart	-	-	Starute_Datasonde	-	-	-	FC	-	-	-	61	-	-
1975-W1065	2442880.24	1975 Sep 24 1741:00	Loki Dart	-	-	Starute_Datasonde	-	-	-	FC	-	-	-	59	-	-
1975-W1082	2442882.20	1975 Sep 26 1646:59	Loki Dart	-	-	Starute_Datasonde	-	-	-	FC	-	-	-	56	-	-
1975-W1095	2442885.50	1975 Oct	Loki Dart	-	-	-	-	-	-	FC	-	-	-	607	-	-
1975-W1096	2442885.50	1975 Oct	Loki Dart	-	-	-	-	-	-	FC	-	-	-	607	-	-
1975-W1097	2442885.50	1975 Oct	Loki Dart	-	-	-	-	-	-	FC	-	-	-	607	-	-
1975-W1097	2442885.50	1975 Oct	Loki Dart	-	-	-	-	-	-	FC	-	-	-	607	-	-
1975-W1102	2442887.24	1975 Oct 1 1745:00	Loki Dart	-	-	Starute_Datasonde	-	-	-	FC	-	-	-	62	-	-
1975-W1109	2442889.11	1975 Oct 3 1438:59	Loki Dart	-	-	Starute_Datasonde	-	-	-	FC	-	-	-	59	-	-
1975-W1121	2442892.25	1975 Oct 6 1804:59	Loki Dart	-	-	Starute_Datasonde	-	-	-	FC	-	-	-	63	-	-
1975-W1130	2442894.19	1975 Oct 8 1627:59	Loki Dart	-	-	Starute_Datasonde	-	-	-	FC	-	-	-	60	-	-
1975-W1139	2442896.16	1975 Oct 10 1652:00	Loki Dart	-	-	Starute_Datasonde	-	-	-	FC	-	-	-	60	-	-
1975-W1154	2442701.19	1975 Oct 15 1655:59	Loki Dart	-	-	Starute_Datasonde	-	-	-	FC	-	-	-	59	-	-
1975-W1169	2442706.20	1975 Oct 20 1651:00	Loki Dart	-	-	Starute_Datasonde	-	-	-	FC	-	-	-	61	-	-
1975-W1163	2442708.13	1975 Oct 22 1512:59	Loki Dart	-	-	Starute_Datasonde	-	-	-	FC	-	-	-	53	-	-
1975-W1196	2442710.19	1975 Oct 24 1634:59	Loki Dart	-	-	Starute_Datasonde	-	-	-	FC	-	-	-	61	-	-
1975-W1202	2442713.19	1975 Oct 27 1630:59	Loki Dart	-	-	Starute_Datasonde	-	-	-	FC	-	-	-	60	-	-
1975-W1227	2442720.19	1975 Nov 3 1634:59	Loki Dart	-	-	Starute_Datasonde	-	-	-	FC	-	-	-	54	-	-
1975-W1232	2442721.17	1975 Nov 4 1639:59	Loki Dart	-	-	Starute_Datasonde	-	-	-	FC	-	-	-	58	-	-
1975-W1245	2442722.20	1975 Nov 5 1646:59	Loki Dart	-	-	Starute_Datasonde	-	-	-	FC	-	-	-	64	-	-
1975-W1262	2442724.30	1975 Nov 7 1907:00	Loki Dart	-	-	Starute_Datasonde	-	-	-	FC	-	-	-	56	-	-
1975-W1267	2442727.20	1975 Nov 10 1654:59	Loki Dart	-	-	Starute_Datasonde	-	-	-	FC	-	-	-	57	-	-
1975-W1263	2442728.16	1975 Nov 11 1614:59	Loki Dart	-	-	Starute_Datasonde	-	-	-	FC	-	-	-	61	-	-
1975-W1269	2442729.30	1975 Nov 12 1904:59	Loki Dart	-	-	Starute_Datasonde	-	-	-	FC	-	-	-	63	-	-
1975-W1274	2442730.20	1975 Nov 13 1641:59	Loki Dart	-	-	Starute_Datasonde	-	-	-	FC	-	-	-	63	-	-
1975-W1278	2442731.15	1975 Nov 14 1643:00	Loki Dart	-	-	Starute_Datasonde	-	-	-	FC	-	-	-	58	-	-
1975-W1287	2442736.16	1975 Nov 16 1624:59	Loki Dart	-	-	Starute_Datasonde	-	-	-	FC	-	-	-	62	-	-
1975-W1290	2442736.17	1975 Nov 16 1624:59	Loki Dart	-	-	Starute_Datasonde	-	-	-	FC	-	-	-	60	-	-
1975-W1300	2442737.15	1975 Nov 20 1620:59	Loki Dart	-	-	Starute_Datasonde	-	-	-	FC	-	-	-	62	-	-
1975-W1303	2442736.17	1975 Nov 21 1606:00	Loki Dart	?	-	Starute_Datasonde	-	-	-	FC	-	-	-	61	-	-
1975-W1306	2442741.16	1975 Nov 28 1549:59	Loki Dart	?	-	Starute_Datasonde	-	-	-	FC	-	-	-	60	-	-
1975-W1309	2442742.16	1975 Nov 28 1618:59	Loki Dart	?	-	Starute_Datasonde	-	-	-	FC	-	-	-	61	-	-
1975-W1314	2442743.16	1975 Nov 29 1617:00	Loki Dart	?	-	Starute_Datasonde	-	-	-	FC	-	-	-	59	-	-
1975-W1320	2442744.29	1975 Nov 29 1659:59	Loki Dart	?	-	Starute_Datasonde	-	-	-	FC	-	-	-	61	-	-
1975-W1321	2442745.19	1975 Nov 29 1640:00	Loki Dart	?	-	Starute_Datasonde	-	-	-	FC	-	-	-	63	-	-
1975-W1322	2442746.16	1975 Dec 1 1617:00	Loki Dart	-	-	Starute_Datasonde	-	-	-	FC	-	-	-	61	-	-
1975-W1336	2442749.30	1975 Dec 2 1913:59	Loki Dart	-	-	Starute_Datasonde	-	-	-	FC	-	-	-	61	-	-
1975-W1357	2442751.30	1975 Dec 8 1713:59	Loki Dart	-	-	Starute_Datasonde	-	-	-	FC	-	-	-	63	-	-
1975-W1369	2442756.24	1975 Dec 8 1614:00	Loki Dart	-	-	Starute_Datasonde	-	-	-	FC	-	-	-	63	-	-
1975-W1371	2442759.26	1975 Dec 10 1636:59	Loki Dart	-	-	Starute_Datasonde	-	-	-	FC	-	-	-	61	-	-
1975-W1391	2442761.29	1975 Dec 12 1855:59	Loki Dart	-	-	Starute_Datasonde	-	-	-	FC	-	-	-	62	-	-
1975-W1397	2442764.29	1975 Dec 17 1857:59	Loki Dart	-	-	Starute_Datasonde	-	-	-	FC	-	-	-	57	-	-
1975-W1403	2442766.24	1975 Dec 18 1745:59	Loki Dart	-	-	Starute_Datasonde	-	-	-	FC	-	-	-	59	-	-
1975-W1410	2442769.21	1975 Dec 19 1912:59	Loki Dart	-	-	Starute_Datasonde	-	-	-	FC	-	-	-	59	-	-
1975-W1419	2442770.19	1975 Dec 22 1636:59	Loki Dart	?	-	Starute_Datasonde	-	-	-	FC	-	-	-	60	-	-
1975-W1424	2442771.37	1975 Dec 24 1938:59	Loki Dart	?	-	Starute_Datasonde	-	-	-	FC	-	-	-	60	-	-
1975-W1431	2442777.21	1975 Dec 30 1824:59	Loki Dart	?	-	Starute_Datasonde	-	-	-	FC	-	-	-	63	-	-
1975-W1432	2442784.16	1975 Dec 31 1654:59	Loki Dart	-	-	Starute_Datasonde	-	-	-	FC	-	-	-	60	-	-
1975-W145	2442784.16	1976 Jan 6 1545:59	Loki Dart	-	-	Starute_Datasonde	-	-	-	FC	-	-	-	62	-	-
1975-W149	2442785.17	1976 Jan 8 1559:50	Loki Dart	-	-	Starute_Datasonde	-	-	-	FC	-	-	-	59	-	-
1975-W159	2442786.17	1976 Jan 9 1830:00	Loki Dart	-	-	Starute_Datasonde	-	-	-	FC	-	-	-	61	-	-
1975-W167	2442790.17	1976 Jan 12 1607:00	Loki Dart	-	-	Starute_Datasonde	-	-	-	FC	-	-	-	64	-	-
1975-W177	2442791.19	1976 Jan 13 1636:59	Loki Dart	-	-	Starute_Datasonde	-	-	-	FC	-	-	-	65	-	-
1975-W183	2442792.19	1976 Jan 14 1629:00	Loki Dart	-	-	Starute_Datasonde	-	-	-	FC	-	-	-	61	-	-
1975-W185	2442793.17	1976 Jan 15 1601:59	Loki Dart	-	-	Starute_Datasonde	-	-	-	FC	-	-	-	64	-	-
1975-W186	2442794.29	1976 Jan 16 1901:59	Loki Dart	-	-	Starute_Datasonde	-	-	-	FC	-	-	-	61	-	-
1975-W189	2442797.63	1976 Jan 20 0308:00	Loki Dart	?	-	Starute_Datasonde	-	-	-	FC	-	-	-	59	-	-
1975-W190	2442798.20	1976 Jan 20 1852:00	Loki Dart	?	-	Starute_Datasonde	-	-	-	FC	-	-	-	65	-	-
1975-W105	2442800.17	1976 Jan 22 1610:59	Loki Dart	?	-	Starute_Datasonde	-	-	-	FC	-	-	-	60	-	-
1975-W115	2442801.19	1976 Jan 23 1626:59	Loki Dart	?	-	Starute_Datasonde	-	-	-	FC	-	-	-	62	-	-
1975-W142	2442806.58	1976 Jan 29 0151:00	Loki Dart	?	-	Starute_Datasonde	-	-	-	FC	-	-	-	60	-	-
1975-W146	2442807.56	1976 Jan 30 0125:59	Loki Dart	?	-	Starute_Datasonde	-	-	-	FC	-	-	-	63	-	-
1975-W155	2442808.50	1976 Feb	Loki Dart	-	-	Starute_Datasonde	-	-	-	FC	-	-	-	607	-	-
1975-W156	2442808.50	1976 Feb	Loki Dart	-	-	Starute_Datasonde	-	-	-	FC	-	-	-	607	-	-
1975-W157	2442808.50	1976 Feb	Loki Dart	-	-	Starute_Datasonde	-	-	-	FC	-	-	-	607	-	-
1975-W158	2442808.50	1976 Feb	Loki Dart	-	-	Starute_Datasonde	-	-	-	FC	-	-	-	607	-	-
1975-W159	2442808.50	1976 Feb	Loki Dart	-	-	Starute_Datasonde	-	-	-	FC	-	-	-	607	-	-
1975-W160	2442808.50	1976 Feb	Loki Dart	-	-	Starute_Datasonde	-	-	-	FC	-	-	-	607	-	-
1975-W161	2442808.50	1976 Feb	Loki Dart	-	-	Starute_Datasonde	-	-	-	FC	-	-	-	607	-	-
1975-W162	2442808.50	1976 Feb	Loki Dart	-	-	Starute_Datasonde	-	-	-	FC	-	-	-	607	-	-
1975-W186	2442813.57	1976 Feb 5 0136:59	Loki Dart	-	-	Starute_Datasonde	-	-	-	FC	-	-	-	63	-	-
1975-W190	2442814.30	1976 Feb 5 1917:00	Loki Dart	-	-	Starute_Datasonde	-	-	-	FC	-	-	-	53	-	-
1975-W54	2442815.15	1976 Feb 6 1533:59	Loki Dart	-	-	Met Sphere	-	-	-	FC	-	-	-	101	-	-
1975-W195	2442815.17	1976 Feb 6 1608:59	Loki Dart	-	-	Starute_Datasonde	-	-	-	FC	-	-	-	65	-	-
1975-W202	2442818.18	1976 Feb 9 1618:59	Loki Dart	-	-	Starute_Datasonde	-	-	-	FC	-	-	-	65	-	-
1975-W214	2442820.18	1976 Feb 11 1624:59	Loki Dart	-	-	Starute_Datasonde	-	-	-	FC	-	-	-	67	-	-
1975-W223	2442821.16	1976 Feb 12 1555:00	Loki Dart	-	-	Starute_Datasonde	-	-	-	FC	-	-	-	67	-	-





Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Mission	FlightCode	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee_Km	Range_Km	Dest
1976-W1558	2443082.50	1976 Nov	Loki Dart	-	-	-	-	-	-	FC	-	-	-	607	-	-
1976-W1559	2443082.50	1976 Nov	Loki Dart	-	-	-	-	-	-	FC	-	-	-	607	-	-
1976-W1560	2443082.50	1976 Nov	Loki Dart	-	-	-	-	-	-	FC	-	-	-	607	-	-
1976-W1561	2443082.50	1976 Nov	Loki Dart	-	-	-	-	-	-	FC	-	-	-	607	-	-
1976-W1562	2443082.50	1976 Nov	Loki Dart	-	-	-	-	-	-	FC	-	-	-	607	-	-
1976-W1563	2443082.50	1976 Nov	Loki Dart	-	-	-	-	-	-	FC	-	-	-	607	-	-
1976-W1564	2443082.50	1976 Nov	Loki Dart	-	-	-	-	-	-	FC	-	-	-	607	-	-
1976-W1565	2443082.50	1976 Nov	Loki Dart	-	-	-	-	-	-	FC	-	-	-	607	-	-
1976-W1566	2443082.50	1976 Nov	Loki Dart	-	-	-	-	-	-	FC	-	-	-	607	-	-
1976-W1571	2443084.20	1976 Nov 1 1647:59	Loki Dart	-	-	-	-	-	-	FC	-	-	-	56	-	-
1976-W1582	2443086.20	1976 Nov 3 1642:59	Loki Dart	-	-	-	-	-	-	FC	-	-	-	60	-	-
1976-W1591	2443087.15	1976 Nov 4 1543:00	Loki Dart	-	-	-	-	-	-	FC	-	-	-	54	-	-
1976-W1610	2443092.20	1976 Nov 9 1654:59	Loki Dart	-	-	-	-	-	-	FC	-	-	-	60	-	-
1976-W1635	2443095.20	1976 Nov 12 1641:59	Loki Dart	-	-	-	-	-	-	FC	-	-	-	58	-	-
1976-W1667	2443101.17	1976 Nov 15 1601:59	Loki Dart	-	-	-	-	-	-	FC	-	-	-	57	-	-
1976-W1660	2443102.20	1976 Nov 19 1643:59	Loki Dart	-	-	-	-	-	-	FC	-	-	-	58	-	-
1976-W1687	2443106.17	1976 Nov 23 1641:00	Loki Dart	-	-	-	-	-	-	FC	-	-	-	58	-	-
1976-W1696	2443107.22	1976 Nov 23 1600:59	Loki Dart	-	-	-	-	-	-	FC	-	-	-	63	-	-
1976-W1704	2443108.17	1976 Nov 25 1607:00	Loki Dart	-	-	-	-	-	-	FC	-	-	-	58	-	-
1976-W1710	2443109.15	1976 Nov 26 1612:59	Loki Dart	-	-	-	-	-	-	FC	-	-	-	59	-	-
1976-W1732	2443114.17	1976 Dec 1 1609:59	Loki Dart	-	-	-	-	-	-	FC	-	-	-	60	-	-
1976-W1738	2443115.16	1976 Dec 2 1544:00	Loki Dart	-	-	-	-	-	-	FC	-	-	-	57	-	-
1976-W1747	2443116.16	1976 Dec 3 1551:00	Loki Dart	-	-	-	-	-	-	FC	-	-	-	55	-	-
1976-W1768	2443120.23	1976 Dec 7 1733:00	Loki Dart	-	-	-	-	-	-	FC	-	-	-	56	-	-
1976-W1773	2443121.23	1976 Dec 8 1537:59	Loki Dart	-	-	-	-	-	-	FC	-	-	-	55	-	-
1976-W1790	2443123.15	1976 Dec 9 1637:59	Loki Dart	-	-	-	-	-	-	FC	-	-	-	59	-	-
1976-W1802	2443126.15	1976 Dec 10 1534:59	Loki Dart	-	-	-	-	-	-	FC	-	-	-	59	-	-
1976-W1811	2443127.15	1976 Dec 13 1537:59	Loki Dart	-	-	-	-	-	-	FC	-	-	-	61	-	-
1976-W1822	2443128.15	1976 Dec 14 1537:59	Loki Dart	-	-	-	-	-	-	FC	-	-	-	54	-	-
1976-W1838	2443130.15	1976 Dec 15 1537:59	Loki Dart	-	-	-	-	-	-	FC	-	-	-	60	-	-
1976-W1846	2443133.15	1976 Dec 17 1537:59	Loki Dart	-	-	-	-	-	-	FC	-	-	-	62	-	-
1976-W1867	2443134.23	1976 Dec 20 1538:59	Loki Dart	?	-	-	-	-	-	FC	-	-	-	47	-	-
1976-W1870	2443135.24	1976 Dec 21 1743:00	Loki Dart	?	-	-	-	-	-	FC	-	-	-	55	-	-
1976-W1874	2443137.15	1976 Dec 23 1536:59	Loki Dart	?	-	-	-	-	-	FC	-	-	-	61	-	-
1977-W06	2443143.50	1977 Jan	Loki Dart	-	-	-	-	-	-	FC	-	-	-	61	-	-
1977-W09	2443145.50	1977 Jan	Loki Dart	-	-	-	-	-	-	FC	-	-	-	607	-	-
1977-W10	2443145.50	1977 Jan	Loki Dart	-	-	-	-	-	-	FC	-	-	-	607	-	-
1977-W11	2443145.50	1977 Jan	Loki Dart	-	-	-	-	-	-	FC	-	-	-	607	-	-
1977-W12	2443145.50	1977 Jan	Loki Dart	-	-	-	-	-	-	FC	-	-	-	607	-	-
1977-W13	2443146.16	1977 Jan 4 1615:59	Loki Dart	-	-	-	-	-	-	FC	-	-	-	62	-	-
1977-W15	2443146.16	1977 Jan 5 1600:59	Loki Dart	-	-	-	-	-	-	FC	-	-	-	30	-	-
1977-W16	2443145.47	1977 Jan 13 0029:59	Loki Dart	-	-	-	-	-	-	FC	-	-	-	61	-	-
1977-W17	2443146.16	1977 Jan 13 0049:59	Loki Dart	-	-	-	-	-	-	FC	-	-	-	63	-	-
1977-W18	2443148.55	1977 Jan 14 1639:59	Loki Dart	-	-	-	-	-	-	FC	-	-	-	55	-	-
1977-W19	2443148.55	1977 Jan 14 1639:59	Loki Dart	-	-	-	-	-	-	FC	-	-	-	58	-	-
1977-W20	2443148.55	1977 Jan 17 1652:00	Loki Dart	-	-	-	-	-	-	FC	-	-	-	63	-	-
1977-W21	2443148.55	1977 Jan 19 1716:59	Loki Dart	-	-	-	-	-	-	FC	-	-	-	61	-	-
1977-W22	2443163.22	1977 Jan 20 1616:59	Loki Dart	-	-	-	-	-	-	FC	-	-	-	60	-	-
1977-W23	2443164.11	1977 Jan 20 1616:59	Loki Dart	-	-	-	-	-	-	FC	-	-	-	60	-	-
1977-W24	2443165.16	1977 Jan 21 1555:00	Loki Dart	-	-	-	-	-	-	FC	-	-	-	63	-	-
1977-W25	2443170.17	1977 Jan 26 1607:59	Loki Dart	-	-	-	-	-	-	FC	-	-	-	55	-	-
1977-W26	2443171.16	1977 Jan 31 1616:00	Loki Dart	-	-	-	-	-	-	FC	-	-	-	59	-	-
1977-W27	2443171.16	1977 Jan 31 1545:00	Loki Dart	-	-	-	-	-	-	FC	-	-	-	607	-	-
1977-W28	2443174.50	1977 Feb	Loki Dart	-	-	-	-	-	-	FC	-	-	-	607	-	-
1977-W29	2443174.50	1977 Feb	Loki Dart	-	-	-	-	-	-	FC	-	-	-	607	-	-
1977-W30	2443174.50	1977 Feb	Loki Dart	-	-	-	-	-	-	FC	-	-	-	607	-	-
1977-W31	2443174.50	1977 Feb	Loki Dart	-	-	-	-	-	-	FC	-	-	-	607	-	-
1977-W32	2443174.50	1977 Feb	Loki Dart	-	-	-	-	-	-	FC	-	-	-	607	-	-
1977-W33	2443174.50	1977 Feb	Loki Dart	-	-	-	-	-	-	FC	-	-	-	607	-	-
1977-W34	2443174.50	1977 Feb	Loki Dart	-	-	-	-	-	-	FC	-	-	-	607	-	-
1977-W35	2443174.50	1977 Feb	Loki Dart	-	-	-	-	-	-	FC	-	-	-	607	-	-
1977-W36	2443198.63	1977 Feb 24 0307:00	Loki Dart	-	-	-	-	-	-	FC	-	-	-	60	-	-
1977-W40	2443202.50	1977 Mar	Loki Dart	-	-	-	-	-	-	FC	-	-	-	607	-	-
1977-W41	2443202.50	1977 Mar	Loki Dart	-	-	-	-	-	-	FC	-	-	-	607	-	-
1977-W42	2443202.50	1977 Mar	Loki Dart	-	-	-	-	-	-	FC	-	-	-	607	-	-
1977-W43	2443202.50	1977 Mar	Loki Dart	-	-	-	-	-	-	FC	-	-	-	607	-	-
1977-W44	2443202.50	1977 Mar	Loki Dart	-	-	-	-	-	-	FC	-	-	-	607	-	-
1977-W45	2443202.50	1977 Mar	Loki Dart	-	-	-	-	-	-	FC	-	-	-	607	-	-
1977-W46	2443202.50	1977 Mar	Loki Dart	-	-	-	-	-	-	FC	-	-	-	607	-	-
1977-W47	2443202.50	1977 Mar	Loki Dart	-	-	-	-	-	-	FC	-	-	-	607	-	-
1977-W48	2443202.50	1977 Mar	Loki Dart	-	-	-	-	-	-	FC	-	-	-	607	-	-
1977-W49	2443202.50	1977 Mar	Loki Dart	-	-	-	-	-	-	FC	-	-	-	607	-	-
1977-W50	2443202.50	1977 Mar	Loki Dart	-	-	-	-	-	-	FC	-	-	-	607	-	-
1977-W51	2443202.50	1977 Mar 2 0326:59	Loki Dart	-	-	-	-	-	-	FC	-	-	-	61	-	-
1977-W52	2443204.64	1977 Mar 4 0226:59	Loki Dart	-	-	-	-	-	-	FC	-	-	-	63	-	-
1977-W53	2443206.60	1977 Mar 8 1549:59	Loki Dart	-	-	-	-	-	-	FC	-	-	-	55	-	-
1977-W54	2443211.16	1977 Mar 8 1549:59	Loki Dart	-	-	-	-	-	-	FC	-	-	-	59	-	-
1977-W55	2443214.18	1977 Mar 11 1614:59	Loki Dart	-	-	-	-	-	-	FC	-	-	-	57	-	-
1977-W56	2443217.20	1977 Mar 14 1643:59	Loki Dart	-	-	-	-	-	-	FC	-	-	-	59	-	-
1977-W57	2443218.24	1977 Mar 15 1746:00	Loki Dart	-	-	-	-	-	-	FC	-	-	-	62	-	-
1977-W58	2443219.18	1977 Mar 15 1612:59	Loki Dart	-	-	-	-	-	-	FC	-	-	-	62	-	-
1977-W59	2443220.61	1977 Mar 18 0248:00	Loki Dart	-	-	-	-	-	-	FC	-	-	-	63	-	-
1977-W60	2443221.62	1977 Mar 18 0248:00	Loki Dart	-	-	-	-	-	-	FC	-	-	-	62	-	-
1977-W61	2443225.19	1977 Mar 22 1630:00	Loki Dart	-	-	-	-	-	-	FC	-	-	-	59	-	-
1977-W62	2443227.17	1977 Mar 24 1604:59	Loki Dart	-	-	-	-	-	-	FC	-	-	-	47	-	-
1977-W63	2443228.18	1977 Mar 26 1620:59	Loki Dart	-	-	-	-	-	-	FC	-	-	-	56	-	-
1977-W64	2443231.17	1977 Mar 26 1557:59	Loki Dart	-	-	-	-	-	-	FC	-	-	-	62	-	-
1977-W65	2443233.18	1977 Mar 30 1618:59	Loki Dart	-	-	-	-	-	-	FC	-	-	-	58	-	-
1977-W66	2443235.19	1977 Apr 1 1638:59	Loki Dart	-	-	-	-	-	-	FC	-	-	-	59	-	-

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Mission	FlightCode	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee_Km	Range_Km	Dest
1977-0661	2443247.17	1977 Apr 13 1606:00	Loki Dart	-	-	Arcasonde	-	-	-	FC	-	-	-	59	-	-
1977-0679	2443249.19	1977 Apr 15 1627:59	Loki Dart	-	-	Arcasonde	-	-	-	FC	-	-	-	58	-	-
1977-0699	2443254.18	1977 Apr 20 1615:59	Loki Dart	-	-	Arcasonde	-	-	-	FC	-	-	-	63	-	-
1977-0714	2443256.18	1977 Apr 22 1612:59	Loki Dart	-	-	Arcasonde	-	-	-	FC	-	-	-	63	-	-
1977-0723	2443259.17	1977 Apr 25 1606:00	Loki Dart	-	-	Arcasonde	-	-	-	FC	-	-	-	59	-	-
1977-0737	2443261.19	1977 Apr 27 1626:59	Loki Dart	-	-	Arcasonde	-	-	-	FC	-	-	-	61	-	-
1977-0747	2443263.12	1977 Apr 29 1447:00	Loki Dart	-	-	Arcasonde	-	-	-	FC	-	-	-	61	-	-
1977-0756	2443263.50	1977 May 2 1623:59	Loki Dart	-	-	Arcasonde	-	-	-	FC	-	-	-	60?	-	-
1977-0763	2443266.18	1977 May 4 1632:59	Loki Dart	-	-	Arcasonde	-	-	-	FC	-	-	-	58	-	-
1977-0779	2443268.19	1977 May 6 1636:59	Loki Dart	-	-	Arcasonde	-	-	-	FC	-	-	-	58	-	-
1977-0795	2443270.19	1977 May 9 1630:59	Loki Dart	-	-	Arcasonde	-	-	-	FC	-	-	-	53	-	-
1977-0804	2443273.19	1977 May 13 1626:59	Loki Dart	-	-	Arcasonde	-	-	-	FC	-	-	-	62	-	-
1977-0828	2443280.18	1977 May 16 1618:00	Loki Dart	-	-	Arcasonde	-	-	-	FC	-	-	-	61	-	-
1977-0835	2443282.19	1977 May 18 1652:59	Loki Dart	-	-	Arcasonde	-	-	-	FC	-	-	-	62	-	-
1977-0855	2443291.20	1977 May 27 1648:59	Loki Dart	-	-	Arcasonde	-	-	-	FC	-	-	-	55	-	-
1977-0905	2443294.19	1977 May 30 1626:59	Loki Dart	-	-	Arcasonde	-	-	-	FC	-	-	-	59	-	-
1977-0921	2443296.22	1977 Jun 1 1712:00	Loki Dart	-	-	Arcasonde	-	-	-	FC	-	-	-	59	-	-
1977-0970	2443303.21	1977 Jun 8 1701:00	Loki Dart	-	-	Arcasonde	-	-	-	FC	-	-	-	59	-	-
1977-1010	2443310.19	1977 Jun 15 1652:59	Loki Dart	-	-	Arcasonde	-	-	-	FC	-	-	-	65	-	-
1977-1062	2443317.18	1977 Jun 22 1626:59	Loki Dart	-	-	Arcasonde	-	-	-	FC	-	-	-	65	-	-
1977-1099	2443324.21	1977 Jun 29 1707:00	Loki Dart	-	-	Arcasonde	-	-	-	FC	-	-	-	61	-	-
1977-1101	2443324.50	1977 Jul	Loki Dart	-	-	Arcasonde	-	-	-	FC	-	-	-	60?	-	-
1977-1102	2443324.50	1977 Jul	Loki Dart	-	-	Arcasonde	-	-	-	FC	-	-	-	60?	-	-
1977-1128	2443331.15	1977 Jul 6 1638:59	Loki Dart	-	-	Arcasonde	-	-	-	FC	-	-	-	91	-	-
1977-1195	2443345.20	1977 Jul 20 1641:59	Loki Dart	-	-	Arcasonde	-	-	-	FC	-	-	-	94	-	-
1977-11264	2443352.22	1977 Jul 27 1710:00	Loki Dart	-	-	Arcasonde	-	-	-	FC	-	-	-	94	-	-
1977-11263	2443355.50	1977 Aug	Loki Dart	-	-	Arcasonde	-	-	-	FC	-	-	-	57	-	-
1977-11264	2443355.50	1977 Aug	Loki Dart	-	-	Arcasonde	-	-	-	FC	-	-	-	60?	-	-
1977-11265	2443355.50	1977 Aug	Loki Dart	-	-	Arcasonde	-	-	-	FC	-	-	-	60?	-	-
1977-11266	2443355.50	1977 Aug	Loki Dart	-	-	Arcasonde	-	-	-	FC	-	-	-	60?	-	-
1977-11305	2443359.19	1977 Aug 3 1626:59	Loki Dart	-	-	Arcasonde	-	-	-	FC	-	-	-	56	-	-
1977-11316	2443364.10	1977 Aug 5 1617:00	Loki Dart	-	-	Arcasonde	-	-	-	FC	-	-	-	60?	-	-
1977-11318	2443364.20	1977 Aug 8 1430:00	Loki Dart	-	-	Arcasonde	-	-	-	FC	-	-	-	60?	-	-
1977-11350	2443366.20	1977 Aug 12 1641:00	Loki Dart	-	-	Arcasonde	-	-	-	FC	-	-	-	91	-	-
1977-11359	2443371.16	1977 Aug 15 1619:59	Loki Dart	-	-	Arcasonde	-	-	-	FC	-	-	-	97	-	-
1977-11367	2443373.19	1977 Aug 16 1636:59	Loki Dart	-	-	Arcasonde	-	-	-	FC	-	-	-	60	-	-
1977-11379	2443375.21	1977 Aug 19 1709:00	Loki Dart	-	-	Arcasonde	-	-	-	FC	-	-	-	60	-	-
1977-11384	2443376.20	1977 Aug 22 1654:59	Loki Dart	-	-	Arcasonde	-	-	-	FC	-	-	-	57	-	-
1977-11391	2443380.10	1977 Aug 24 1630:00	Loki Dart	-	-	Arcasonde	-	-	-	FC	-	-	-	57	-	-
1977-11405	2443382.16	1977 Aug 26 1624:59	Loki Dart	-	-	Arcasonde	-	-	-	FC	-	-	-	60	-	-
1977-11410	2443385.10	1977 Aug 29 1450:00	Loki Dart	-	-	Arcasonde	-	-	-	FC	-	-	-	52	-	-
1977-11424	2443386.17	1977 Aug 31 1607:00	Loki Dart	-	-	Arcasonde	-	-	-	FC	-	-	-	60	-	-
1977-11430	2443386.50	1977 Sep 2 1622:59	Loki Dart	-	-	Arcasonde	-	-	-	FC	-	-	-	60?	-	-
1977-11431	2443389.16	1977 Sep 2 1622:59	Loki Dart	-	-	Arcasonde	-	-	-	FC	-	-	-	60?	-	-
1977-11463	2443394.20	1977 Sep 9 1647:59	Loki Dart	-	-	Arcasonde	-	-	-	FC	-	-	-	53	-	-
1977-11465	2443394.20	1977 Sep 9 1647:59	Loki Dart	-	-	Arcasonde	-	-	-	FC	-	-	-	53	-	-
1977-11495	2443399.20	1977 Sep 16 1643:59	Loki Dart	-	-	Arcasonde	-	-	-	FC	-	-	-	63	-	-
1977-11497	2443403.17	1977 Sep 19 1652:59	Loki Dart	-	-	Arcasonde	-	-	-	FC	-	-	-	61	-	-
1977-11483	2443406.20	1977 Sep 21 1652:59	Loki Dart	-	-	Arcasonde	-	-	-	FC	-	-	-	62	-	-
1977-11491	2443408.10	1977 Sep 23 1636:59	Loki Dart	-	-	Arcasonde	-	-	-	FC	-	-	-	55	-	-
1977-11505	2443410.19	1977 Sep 23 1636:59	Loki Dart	-	-	Arcasonde	-	-	-	FC	-	-	-	60	-	-
1977-11510	2443413.10	1977 Sep 26 1632:59	Loki Dart	-	-	Arcasonde	-	-	-	FC	-	-	-	60	-	-
1977-11524	2443415.18	1977 Sep 28 1436:00	Loki Dart	-	-	Arcasonde	-	-	-	FC	-	-	-	64	-	-
1977-11534	2443417.18	1977 Sep 28 1436:00	Loki Dart	-	-	Arcasonde	-	-	-	FC	-	-	-	64	-	-
1977-11536	2443416.50	1977 Sep 30 1619:59	Loki Dart	-	-	Arcasonde	-	-	-	FC	-	-	-	60?	-	-
1977-11536	2443416.50	1977 Oct	Loki Dart	-	-	Arcasonde	-	-	-	FC	-	-	-	60?	-	-
1977-11564	2443422.18	1977 Oct 5 1623:59	Loki Dart	-	-	Arcasonde	-	-	-	FC	-	-	-	51	-	-
1977-11564	2443424.17	1977 Oct 7 1608:59	Loki Dart	-	-	Arcasonde	-	-	-	FC	-	-	-	63	-	-
1977-11579	2443429.21	1977 Oct 12 1700:00	Loki Dart	-	-	Arcasonde	-	-	-	FC	-	-	-	63	-	-
1977-11601	2443436.11	1977 Oct 19 1430:00	Loki Dart	-	-	Arcasonde	-	-	-	FC	-	-	-	64	-	-
1977-11616	2443438.10	1977 Oct 21 1430:00	Loki Dart	-	-	Arcasonde	-	-	-	FC	-	-	-	56	-	-
1977-11625	2443441.10	1977 Oct 24 1430:00	Loki Dart	-	-	Arcasonde	-	-	-	FC	-	-	-	59	-	-
1977-11645	2443445.18	1977 Oct 28 1619:59	Loki Dart	-	-	Arcasonde	-	-	-	FC	-	-	-	59	-	-
1977-11685	2443448.17	1977 Oct 31 1600:59	Loki Dart	-	-	Arcasonde	-	-	-	FC	-	-	-	64	-	-
1977-11649	2443447.50	1977 Nov	Loki Dart	-	-	Arcasonde	-	-	-	FC	-	-	-	60?	-	-
1977-11650	2443447.50	1977 Nov	Loki Dart	-	-	Arcasonde	-	-	-	FC	-	-	-	60?	-	-
1977-11651	2443447.50	1977 Nov	Loki Dart	-	-	Arcasonde	-	-	-	FC	-	-	-	60?	-	-
1977-11652	2443447.50	1977 Nov	Loki Dart	-	-	Arcasonde	-	-	-	FC	-	-	-	60?	-	-
1977-11663	2443447.50	1977 Nov	Loki Dart	-	-	Arcasonde	-	-	-	FC	-	-	-	60?	-	-
1977-11667	2443450.20	1977 Nov 2 1647:59	Loki Dart	-	-	Arcasonde	-	-	-	FC	-	-	-	55	-	-
1977-11675	2443452.20	1977 Nov 4 1649:59	Loki Dart	-	-	Arcasonde	-	-	-	FC	-	-	-	61	-	-
1977-11683	2443455.19	1977 Nov 7 1636:59	Loki Dart	-	-	Arcasonde	-	-	-	FC	-	-	-	60	-	-
1977-11691	2443456.15	1977 Nov 8 1530:00	Loki Dart	-	-	Arcasonde	-	-	-	FC	-	-	-	67	-	-
1977-11698	2443457.20	1977 Nov 9 1654:59	Loki Dart	-	-	Arcasonde	-	-	-	FC	-	-	-	62	-	-
1977-11705	2443458.19	1977 Nov 10 1626:59	Loki Dart	-	-	Arcasonde	-	-	-	FC	-	-	-	63	-	-
1977-11718	2443462.23	1977 Nov 14 1726:59	Loki Dart	-	-	Arcasonde	-	-	-	FC	-	-	-	59	-	-
1977-11725	2443463.19	1977 Nov 15 1632:59	Loki Dart	-	-	Arcasonde	-	-	-	FC	-	-	-	59	-	-
1977-11729	2443464.16	1977 Nov 16 1556:00	Loki Dart	-	-	Arcasonde	-	-	-	FC	-	-	-	62	-	-
1977-11740	2443465.19	1977 Nov 17 1640:00	Loki Dart	-	-	Arcasonde	-	-	-	FC	-	-	-	59	-	-
1977-11745	2443470.20	1977 Nov 22 1644:59	Loki Dart	-	-	Arcasonde	-	-	-	FC	-	-	-	61	-	-
1977-11762	2443471.20	1977 Nov 23 1654:59	Loki Dart	-	-	Arcasonde	-	-	-	FC	-	-	-	62	-	-
1977-11769	2443473.18	1977 Nov 25 1626:59	Loki Dart	-	-	Arcasonde	-	-	-	FC	-	-	-	54	-	-
1977-11776	2443476.20	1977 Nov 28 1648:59	Loki Dart	-	-	Arcasonde	-	-	-	FC	-	-	-	63	-	-
1977-11783	2443477.15	1977 Nov 29 1530:00	Loki Dart	-	-	Arcasonde	-	-	-	FC	-	-	-	50	-	-
1977-11796	2443478.19	1977 Nov 30 1630:00	Loki Dart	-	-	Arcasonde	-	-	-	FC	-	-	-	50	-	-
1977-11787	2443477.50	1977 Dec	Loki Dart	-	-	Arcasonde	-	-	-	FC	-	-	-	60?	-	-

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Launch_Mission	FlightCode	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee_Km	Range_Km	Dest
1977-M1788	2443477.50	1977 Dec	Loki Dart	-	-	-	-	-	-	FC	-	-	-	607	-	-
1977-M1789	2443477.50	1977 Dec	Loki Dart	-	-	-	-	-	-	FC	-	-	-	607	-	-
1977-M1790	2443477.50	1977 Dec	Loki Dart	-	-	-	-	-	-	FC	-	-	-	607	-	-
1977-M1791	2443477.50	1977 Dec	Loki Dart	-	-	-	-	-	-	FC	-	-	-	607	-	-
1977-M1792	2443477.50	1977 Dec	Loki Dart	-	-	-	-	-	-	FC	-	-	-	607	-	-
1977-M1793	2443477.50	1977 Dec	Loki Dart	-	-	-	-	-	-	FC	-	-	-	607	-	-
1977-M1807	2443480.15	1977 Dec 2 1530:00	Loki Dart	-	-	-	-	-	-	FC	-	-	-	607	-	-
1977-M1817	2443483.19	1977 Dec 5 1633:59	Loki Dart	-	-	-	-	-	-	FC	-	-	-	59	-	-
1977-M1823	2443484.20	1977 Dec 6 1645:59	Loki Dart	-	-	-	-	-	-	FC	-	-	-	60	-	-
1977-M1828	2443485.17	1977 Dec 7 1602:59	Loki Dart	-	-	-	-	-	-	FC	-	-	-	62	-	-
1977-M1839	2443487.19	1977 Dec 9 1630:59	Loki Dart	-	-	-	-	-	-	FC	-	-	-	58	-	-
1977-M1845	2443490.18	1977 Dec 12 1615:59	Loki Dart	-	-	-	-	-	-	FC	-	-	-	60	-	-
1977-M1860	2443491.18	1977 Dec 13 1619:59	Loki Dart	-	-	-	-	-	-	FC	-	-	-	64	-	-
1977-M1860	2443492.20	1977 Dec 14 1643:59	Loki Dart	-	-	-	-	-	-	FC	-	-	-	63	-	-
1977-M1864	2443494.21	1977 Dec 16 1703:00	Loki Dart	-	-	-	-	-	-	FC	-	-	-	56	-	-
1977-M1864	2443496.18	1977 Dec 20 1612:59	Loki Dart	-	-	-	-	-	-	FC	-	-	-	59	-	-
1977-M1890	2443499.24	1977 Dec 21 1748:59	Loki Dart	-	-	-	-	-	-	FC	-	-	-	53	-	-
1977-M1896	2443500.20	1977 Dec 22 1641:00	Loki Dart	-	-	-	-	-	-	FC	-	-	-	64	-	-
1977-M1899	2443501.19	1977 Dec 23 1629:00	Loki Dart	-	-	-	-	-	-	FC	-	-	-	51	-	-
1977-M1905	2443507.15	1977 Dec 29 1530:00	Loki Dart	-	-	-	-	-	-	FC	-	-	-	62	-	-
1978-M01	2443512.15	1978 Jan 3 1530:00	Loki Dart	-	-	-	-	-	-	FC	-	-	-	66	-	-
1978-M10	2443513.22	1978 Jan 4 1720:00	Loki Dart	-	-	-	-	-	-	FC	-	-	-	62	-	-
1978-M15	2443514.17	1978 Jan 5 1611:59	Loki Dart	-	-	-	-	-	-	FC	-	-	-	51	-	-
1978-M15	2443515.15	1978 Jan 6 1530:00	Loki Dart	-	-	-	-	-	-	FC	-	-	-	66	-	-
1978-M18	2443527.16	1978 Jan 16 1618:00	Loki Dart	-	-	-	-	-	-	FC	-	-	-	62	-	-
1978-M69	2443528.15	1978 Jan 19 1530:00	Loki Dart	-	-	-	-	-	-	FC	-	-	-	63	-	-
1978-M68	2443528.15	1978 Jan 20 1637:59	Loki Dart	-	-	-	-	-	-	FC	-	-	-	63	-	-
1978-M71	2443529.19	1978 Jan 23 1621:59	Loki Dart	-	-	-	-	-	-	FC	-	-	-	94	-	-
1978-M79	2443532.16	1978 Jan 25 1646:59	Loki Dart	-	-	-	-	-	-	FC	-	-	-	63	-	-
1978-M85	2443534.19	1978 Jan 28 1635:59	Loki Dart	-	-	-	-	-	-	FC	-	-	-	61	-	-
1978-M92	2443535.16	1978 Jan 29 1659:59	Loki Dart	-	-	-	-	-	-	FC	-	-	-	52	-	-
1978-M100	2443535.16	1978 Jan 27 1659:59	Loki Dart	-	-	-	-	-	-	FC	-	-	-	58	-	-
1978-M104	2443536.21	1978 Jan 30 1640:00	Loki Dart	-	-	-	-	-	-	FC	-	-	-	66	-	-
1978-M109	2443539.19	1978 Jan 31 1530:00	Loki Dart	-	-	-	-	-	-	FC	-	-	-	55	-	-
1978-M112	2443540.15	1978 Feb 1 1703:00	Loki Dart	-	-	-	-	-	-	FC	-	-	-	60	-	-
1978-M122	2443541.21	1978 Feb 1 1703:00	Loki Dart	-	-	-	-	-	-	FC	-	-	-	31	-	-
1978-M126	2443542.16	1978 Feb 2 1620:59	Loki Dart	-	-	-	-	-	-	FC	-	-	-	60	-	-
1978-M137	2443546.16	1978 Feb 6 1566:59	Loki Dart	-	-	-	-	-	-	FC	-	-	-	63	-	-
1978-M145	2443547.54	1978 Feb 6 1566:59	Loki Dart	-	-	-	-	-	-	FC	-	-	-	89	-	-
1978-M149	2443547.54	1978 Feb 8 1053:00	Loki Dart	-	-	-	-	-	-	FC	-	-	-	63	-	-
1978-M149	2443548.16	1978 Feb 8 1624:59	Loki Dart	-	-	-	-	-	-	FC	-	-	-	63	-	-
1978-M185	2443549.20	1978 Feb 9 1646:59	Loki Dart	-	-	-	-	-	-	FC	-	-	-	61	-	-
1978-M185	2443550.15	1978 Feb 9 1646:59	Loki Dart	-	-	-	-	-	-	FC	-	-	-	58	-	-
1978-M181	2443550.15	1978 Feb 13 1530:00	Loki Dart	-	-	-	-	-	-	FC	-	-	-	61	-	-
1978-M196	2443551.20	1978 Feb 13 1654:59	Loki Dart	-	-	-	-	-	-	FC	-	-	-	58	-	-
1978-M196	2443551.20	1978 Feb 15 1622:59	Loki Dart	-	-	-	-	-	-	FC	-	-	-	63	-	-
1978-M172	2443554.20	1978 Feb 15 1622:59	Loki Dart	-	-	-	-	-	-	FC	-	-	-	62	-	-
1978-M179	2443556.17	1978 Feb 16 1611:59	Loki Dart	-	-	-	-	-	-	FC	-	-	-	63	-	-
1978-M189	2443556.16	1978 Feb 16 1622:59	Loki Dart	-	-	-	-	-	-	FC	-	-	-	73	-	-
1978-M196	2443557.19	1978 Feb 17 1622:59	Loki Dart	-	-	-	-	-	-	FC	-	-	-	73	-	-
1978-M209	2443561.16	1978 Feb 20 1635:59	Loki Dart	-	-	-	-	-	-	FC	-	-	-	56	-	-
1978-M201	2443562.21	1978 Feb 22 1654:59	Loki Dart	-	-	-	-	-	-	FC	-	-	-	64	-	-
1978-M221	2443563.61	1978 Feb 24 0242:00	Loki Dart	-	-	-	-	-	-	FC	-	-	-	64	-	-
1978-M255	2443567.50	1978 Feb 24 0242:00	Loki Dart	-	-	-	-	-	-	FC	-	-	-	60	-	-
1978-M247	2443567.50	1978 Feb 28 0000:59	Loki Dart	-	-	-	-	-	-	FC	-	-	-	607	-	-
1978-M248	2443567.50	1978 Mar	Loki Dart	-	-	-	-	-	-	FC	-	-	-	607	-	-
1978-M249	2443567.50	1978 Mar	Loki Dart	-	-	-	-	-	-	FC	-	-	-	607	-	-
1978-M250	2443567.50	1978 Mar	Loki Dart	-	-	-	-	-	-	FC	-	-	-	607	-	-
1978-M251	2443567.50	1978 Mar	Loki Dart	-	-	-	-	-	-	FC	-	-	-	607	-	-
1978-M252	2443567.50	1978 Mar	Loki Dart	-	-	-	-	-	-	FC	-	-	-	607	-	-
1978-M253	2443567.50	1978 Mar	Loki Dart	-	-	-	-	-	-	FC	-	-	-	607	-	-
1978-M254	2443567.50	1978 Mar	Loki Dart	-	-	-	-	-	-	FC	-	-	-	607	-	-
1978-M264	2443569.56	1978 Mar 2 0130:00	Loki Dart	-	-	-	-	-	-	FC	-	-	-	57	-	-
1978-M269	2443575.59	1978 Mar 8 0204:59	Loki Dart	-	-	-	-	-	-	FC	-	-	-	53	-	-
1978-M279	2443576.57	1978 Mar 9 0141:00	Loki Dart	-	-	-	-	-	-	FC	-	-	-	59	-	-
1978-M293	2443577.58	1978 Mar 10 0149:59	Loki Dart	-	-	-	-	-	-	FC	-	-	-	61	-	-
1978-M295	2443582.56	1978 Mar 15 0121:59	Loki Dart	-	-	-	-	-	-	FC	-	-	-	57	-	-
1978-M310	2443583.56	1978 Mar 16 0129:00	Loki Dart	-	-	-	-	-	-	FC	-	-	-	57	-	-
1978-M319	2443585.56	1978 Mar 18 0119:59	Loki Dart	-	-	-	-	-	-	FC	-	-	-	61	-	-
1978-M327	2443589.15	1978 Mar 22 1630:00	Loki Dart	-	-	-	-	-	-	FC	-	-	-	62	-	-
1978-M342	2443590.19	1978 Mar 22 1640:00	Loki Dart	-	-	-	-	-	-	FC	-	-	-	58	-	-
1978-M377	2443597.58	1978 Mar 30 0153:59	Loki Dart	-	-	-	-	-	-	FC	-	-	-	66	-	-
1978-M379	2443598.16	1978 Mar 30 1636:59	Loki Dart	-	-	-	-	-	-	FC	-	-	-	64	-	-
1978-M386	2443599.16	1978 Mar 31 1554:00	Loki Dart	-	-	-	-	-	-	FC	-	-	-	63	-	-
1978-M381	2443598.50	1978 Apr	Loki Dart	-	-	-	-	-	-	FC	-	-	-	607	-	-
1978-M382	2443598.50	1978 Apr	Loki Dart	-	-	-	-	-	-	FC	-	-	-	607	-	-
1978-M383	2443598.50	1978 Apr	Loki Dart	-	-	-	-	-	-	FC	-	-	-	607	-	-
1978-M383	2443598.50	1978 Apr	Loki Dart	-	-	-	-	-	-	FC	-	-	-	607	-	-
1978-M408	2443604.64	1978 Apr 6 0322:59	Loki Dart	-	-	-	-	-	-	FC	-	-	-	62	-	-
1978-M408	2443606.59	1978 Apr 8 0214:00	Loki Dart	-	-	-	-	-	-	FC	-	-	-	64	-	-
1978-M415	2443609.50	1978 Apr 11 0000:59	Loki Dart	-	-	-	-	-	-	FC	-	-	-	63	-	-
1978-M421	2443611.20	1978 Apr 12 1647:59	Loki Dart	-	-	-	-	-	-	FC	-	-	-	63	-	-
1978-M441	2443616.29	1978 Apr 17 1859:59	Loki Dart	-	-	-	-	-	-	FC	-	-	-	60	-	-
1978-M447	2443618.15	1978 Apr 19 1530:00	Loki Dart	-	-	-	-	-	-	FC	-	-	-	61	-	-
1978-M454	2443620.17	1978 Apr 21 1600:59	Loki Dart	-	-	-	-	-	-	FC	-	-	-	66	-	-
1978-M461	2443625.18	1978 Apr 26 1613:59	Loki Dart	-	-	-	-	-	-	FC	-	-	-	63	-	-
1978-M468	2443627.24	1978 Apr 28 1740:00	Loki Dart	-	-	-	-	-	-	FC	-	-	-	57	-	-
1978-M471	2443628.50	1978 May	Loki Dart	-	-	-	-	-	-	FC	-	-	-	607	-	-
1978-M472	2443628.50	1978 May	Loki Dart	-	-	-	-	-	-	FC	-	-	-	607	-	-
1978-M473	2443628.50	1978 May	Loki Dart	-	-	-	-	-	-	FC	-	-	-	607	-	-

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Mission	FlightCode	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee_Km	Range_Km	Dest
1978-W475	2443630.19	1978 May 1 1627:59	Loki Dart	-	-	Arcasonde	-	-	-	FC	-	-	-	59	-	-
1978-W489	2443634.11	1978 May 5 1433:00	Loki Dart	-	-	Arcasonde	-	-	-	FC	-	-	-	57	-	-
1978-W495	2443637.10	1978 May 8 1430:00	Loki Dart	-	-	Arcasonde	-	-	-	FC	-	-	-	55	-	-
1978-W507	2443639.18	1978 May 10 1615:59	Loki Dart	-	-	Arcasonde	-	-	-	FC	-	-	-	56	-	-
1978-W516	2443641.17	1978 May 12 1607:59	Loki Dart	-	-	Arcasonde	-	-	-	FC	-	-	-	56	-	-
1978-W559	2443648.15	1978 May 19 1530:00	Loki Dart	-	-	Arcasonde	-	-	-	FC	-	-	-	50	-	-
1978-W581	2443653.21	1978 May 24 1700:00	Loki Dart	-	-	Arcasonde	-	-	-	FC	-	-	-	57	-	-
1978-W591	2443655.10	1978 May 26 1430:00	Loki Dart	-	-	Arcasonde	-	-	-	FC	-	-	-	59	-	-
1978-W597	2443658.10	1978 May 28 1430:00	Loki Dart	-	-	Arcasonde	-	-	-	FC	-	-	-	59	-	-
1978-W607	2443660.16	1978 May 31 1654:00	Loki Dart	-	-	Arcasonde	-	-	-	FC	-	-	-	54	-	-
1978-W629	2443667.20	1978 Jun 7 1651:00	Loki Dart	-	-	Arcasonde	-	-	-	FC	-	-	-	58	-	-
1978-W674	2443674.22	1978 Jun 14 1717:00	Loki Dart	-	-	Arcasonde	-	-	-	FC	-	-	-	51	-	-
1978-W674	2443681.16	1978 Jun 21 1655:00	Loki Dart	-	-	Arcasonde	-	-	-	FC	-	-	-	53	-	-
1978-W696	2443688.19	1978 Jun 28 1635:59	Loki Dart	-	-	Arcasonde	-	-	-	FC	-	-	-	57	-	-
1978-W702	2443690.11	1978 Jun 30 1445:00	Loki Dart	-	-	Arcasonde	-	-	-	FC	-	-	-	55	-	-
1978-W717	2443695.19	1978 Jul 5 1630:00	Loki Dart	-	-	Arcasonde	-	-	-	FC	-	-	-	61	-	-
1978-W728	2443697.18	1978 Jul 7 1618:00	Loki Dart	-	-	Arcasonde	-	-	-	FC	-	-	-	46	-	-
1978-W728	2443700.10	1978 Jul 10 1430:00	Loki Dart	-	-	Arcasonde	-	-	-	FC	-	-	-	60	-	-
1978-W739	2443702.22	1978 Jul 12 1720:00	Loki Dart	-	-	Arcasonde	-	-	-	FC	-	-	-	60	-	-
1978-W744	2443704.19	1978 Jul 14 1433:00	Loki Dart	-	-	Arcasonde	-	-	-	FC	-	-	-	64	-	-
1978-W750	2443707.20	1978 Jul 17 1641:00	Loki Dart	-	-	Arcasonde	-	-	-	FC	-	-	-	61	-	-
1978-W760	2443709.20	1978 Jul 19 1642:59	Loki Dart	-	-	Arcasonde	-	-	-	FC	-	-	-	65	-	-
1978-W770	2443711.10	1978 Jul 21 1430:00	Loki Dart	-	-	Arcasonde	-	-	-	FC	-	-	-	64	-	-
1978-W783	2443714.12	1978 Jul 24 1453:00	Loki Dart	-	-	Arcasonde	-	-	-	FC	-	-	-	59	-	-
1978-W783	2443716.17	1978 Jul 26 1607:59	Loki Dart	-	-	Arcasonde	-	-	-	FC	-	-	-	60	-	-
1978-W790	2443718.17	1978 Jul 28 1602:59	Loki Dart	-	-	Arcasonde	-	-	-	FC	-	-	-	60	-	-
1978-W797	2443721.10	1978 Jul 31 1430:00	Loki Dart	-	-	Arcasonde	-	-	-	FC	-	-	-	60	-	-
1978-W811	2443725.19	1978 Aug 4 1638:59	Loki Dart	-	-	Arcasonde	-	-	-	FC	-	-	-	57	-	-
1978-W821	2443730.12	1978 Aug 9 1451:00	Loki Dart	-	-	Arcasonde	-	-	-	FC	-	-	-	50	-	-
1978-W830	2443732.10	1978 Aug 11 1430:00	Loki Dart	-	-	Arcasonde	-	-	-	FC	-	-	-	59	-	-
1978-W836	2443735.11	1978 Aug 14 1433:00	Loki Dart	-	-	Arcasonde	-	-	-	FC	-	-	-	62	-	-
1978-W847	2443737.21	1978 Aug 16 1706:00	Loki Dart	-	-	Arcasonde	-	-	-	FC	-	-	-	50	-	-
1978-W857	2443739.17	1978 Aug 18 1603:59	Loki Dart	-	-	Arcasonde	-	-	-	FC	-	-	-	58	-	-
1978-W865	2443742.16	1978 Aug 21 1546:59	Loki Dart	-	-	Arcasonde	-	-	-	FC	-	-	-	63	-	-
1978-W872	2443744.16	1978 Aug 23 1622:59	Loki Dart	-	-	Arcasonde	-	-	-	FC	-	-	-	54	-	-
1978-W885	2443746.20	1978 Aug 26 1652:59	Loki Dart	-	-	Arcasonde	-	-	-	FC	-	-	-	60	-	-
1978-W885	2443749.19	1978 Aug 28 1629:59	Loki Dart	-	-	Arcasonde	-	-	-	FC	-	-	-	58	-	-
1978-W899	2443751.10	1978 Aug 30 1430:00	Loki Dart	-	-	Arcasonde	-	-	-	FC	-	-	-	61	-	-
1978-W915	2443753.10	1978 Sep 1 1430:00	Loki Dart	-	-	Arcasonde	-	-	-	FC	-	-	-	60	-	-
1978-W935	2443760.01	1978 Sep 8 1127:00	Loki Dart	-	-	Arcasonde	-	-	-	FC	-	-	-	57	-	-
1978-W942	2443763.16	1978 Sep 13 0615:59	Loki Dart	-	-	Arcasonde	-	-	-	FC	-	-	-	62	-	-
1978-W942	2443765.16	1978 Sep 13 0615:59	Loki Dart	-	-	Arcasonde	-	-	-	FC	-	-	-	52	-	-
1978-W956	2443764.96	1978 Sep 13 0122:59	Loki Dart	-	-	Arcasonde	-	-	-	FC	-	-	-	61	-	-
1978-W960	2443764.96	1978 Sep 13 0122:59	Loki Dart	-	-	Arcasonde	-	-	-	FC	-	-	-	58	-	-
1978-W966	2443770.10	1978 Sep 15 1337:59	Loki Dart	-	-	Arcasonde	-	-	-	FC	-	-	-	58	-	-
1978-W966	2443770.20	1978 Sep 15 1642:59	Loki Dart	-	-	Arcasonde	-	-	-	FC	-	-	-	51	-	-
1978-W974	2443772.21	1978 Sep 20 1700:00	Loki Dart	-	-	Arcasonde	-	-	-	FC	-	-	-	55	-	-
1978-W986	2443777.10	1978 Sep 22 1430:00	Loki Dart	-	-	Arcasonde	-	-	-	FC	-	-	-	58	-	-
1978-W995	2443777.10	1978 Sep 25 1430:00	Loki Dart	-	-	Arcasonde	-	-	-	FC	-	-	-	57	-	-
1978-W1005	2443779.10	1978 Sep 26 1430:00	Loki Dart	-	-	Arcasonde	-	-	-	FC	-	-	-	62	-	-
1978-W1005	2443781.16	1978 Sep 27 1651:00	Loki Dart	-	-	Arcasonde	-	-	-	FC	-	-	-	60	-	-
1978-W1019	2443781.50	1978 Sep 29 1618:59	Loki Dart	-	-	Arcasonde	-	-	-	FC	-	-	-	60	-	-
1978-W1020	2443781.50	1978 Oct	Loki Dart	-	-	Arcasonde	-	-	-	FC	-	-	-	60	-	-
1978-W1021	2443781.50	1978 Oct	Loki Dart	-	-	Arcasonde	-	-	-	FC	-	-	-	60	-	-
1978-W1025	2443784.13	1978 Oct 2 1634:59	Loki Dart	-	-	Arcasonde	-	-	-	FC	-	-	-	55	-	-
1978-W1037	2443784.13	1978 Oct 6 1430:00	Loki Dart	-	-	Arcasonde	-	-	-	FC	-	-	-	60	-	-
1978-W1046	2443783.10	1978 Oct 11 1430:00	Loki Dart	-	-	Arcasonde	-	-	-	FC	-	-	-	61	-	-
1978-W1057	2443785.10	1978 Oct 13 1430:00	Loki Dart	-	-	Arcasonde	-	-	-	FC	-	-	-	63	-	-
1978-W1074	2443800.21	1978 Oct 18 1700:00	Loki Dart	-	-	Arcasonde	-	-	-	FC	-	-	-	59	-	-
1978-W1094	2443807.14	1978 Oct 26 1525:59	Loki Dart	-	-	Arcasonde	-	-	-	FC	-	-	-	62	-	-
1978-W1102	2443809.11	1978 Oct 27 1430:00	Loki Dart	-	-	Arcasonde	-	-	-	FC	-	-	-	60	-	-
1978-W1112	2443812.50	1978 Nov	Loki Dart	-	-	Arcasonde	-	-	-	FC	-	-	-	60	-	-
1978-W1113	2443812.50	1978 Nov	Loki Dart	-	-	Arcasonde	-	-	-	FC	-	-	-	60	-	-
1978-W1114	2443812.50	1978 Nov	Loki Dart	-	-	Arcasonde	-	-	-	FC	-	-	-	60	-	-
1978-W1115	2443812.50	1978 Nov	Loki Dart	-	-	Arcasonde	-	-	-	FC	-	-	-	60	-	-
1978-W1116	2443812.50	1978 Nov	Loki Dart	-	-	Arcasonde	-	-	-	FC	-	-	-	60	-	-
1978-W1117	2443812.50	1978 Nov	Loki Dart	-	-	Arcasonde	-	-	-	FC	-	-	-	60	-	-
1978-W1121	2443814.18	1978 Nov 1 1622:59	Loki Dart	-	-	Arcasonde	-	-	-	FC	-	-	-	53	-	-
1978-W1127	2443815.17	1978 Nov 2 1602:59	Loki Dart	-	-	Arcasonde	-	-	-	FC	-	-	-	54	-	-
1978-W1130	2443816.15	1978 Nov 3 1530:00	Loki Dart	-	-	Arcasonde	-	-	-	FC	-	-	-	55	-	-
1978-W1136	2443819.16	1978 Nov 6 1549:59	Loki Dart	-	-	Arcasonde	-	-	-	FC	-	-	-	62	-	-
1978-W1139	2443820.15	1978 Nov 7 1530:00	Loki Dart	-	-	Arcasonde	-	-	-	FC	-	-	-	55	-	-
1978-W1144	2443821.20	1978 Nov 8 1652:59	Loki Dart	-	-	Arcasonde	-	-	-	FC	-	-	-	62	-	-
1978-W1151	2443822.26	1978 Nov 9 1814:59	Loki Dart	-	-	Arcasonde	-	-	-	FC	-	-	-	59	-	-
1978-W1153	2443823.15	1978 Nov 10 1530:00	Loki Dart	-	-	Arcasonde	-	-	-	FC	-	-	-	59	-	-
1978-W1157	2443826.18	1978 Nov 13 1619:59	Loki Dart	-	-	Arcasonde	-	-	-	FC	-	-	-	56	-	-
1978-W1162	2443827.15	1978 Nov 14 1530:00	Loki Dart	-	-	Arcasonde	-	-	-	FC	-	-	-	57	-	-
1978-W1165	2443828.19	1978 Nov 15 1637:59	Loki Dart	-	-	Arcasonde	-	-	-	FC	-	-	-	50	-	-
1978-W1171	2443829.17	1978 Nov 16 1607:59	Loki Dart	-	-	Arcasonde	-	-	-	FC	-	-	-	62	-	-
1978-W1175	2443830.16	1978 Nov 17 1549:59	Loki Dart	-	-	Arcasonde	-	-	-	FC	-	-	-	51	-	-
1978-W1186	2443832.17	1978 Nov 19 1559:59	Loki Dart	-	-	Arcasonde	-	-	-	FC	-	-	-	59	-	-
1978-W1192	2443834.18	1978 Nov 20 1530:00	Loki Dart	-	-	Arcasonde	-	-	-	FC	-	-	-	61	-	-
1978-W1198	2443834.18	1978 Nov 21 1620:59	Loki Dart	-	-	Arcasonde	-	-	-	FC	-	-	-	62	-	-
1978-W1198	2443835.16	1978 Nov 22 1548:59	Loki Dart	-	-	Arcasonde	-	-	-	FC	-	-	-	62	-	-
1978-W1203	2443836.15	1978 Nov 23 1530:00	Loki Dart	-	-	Arcasonde	-	-	-	FC	-	-	-	55	-	-
1978-W1211	2443840.16	1978 Nov 27 1555:00	Loki Dart	-	-	Arcasonde	-	-	-	FC	-	-	-	66	-	-
1978-W1218	2443841.34	1978 Nov 28 2012:00	Loki Dart	-	-	Arcasonde	-	-	-	FC	-	-	-	55	-	-



Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Mission	FlightCode	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee km	Range km	Dest
1982-W64	2444994.11	1982 Jan 24 1432:00	Loki Dart	-	TMI-0233	-	-	-	-	PF	-	-	-	65	-	-
1982-W151	2445028.29	1982 Feb 27 1900:00	Loki Dart	-	T 1-0109	-	-	-	-	WI	-	-	-	60	-	-
1982-W163	2445036.29	1982 Mar 06 1902:00	Loki Dart	-	T 1-0120	-	-	-	-	WI	-	-	-	60	-	-
1982-W165	2445036.29	1982 Mar 07 1901:00	Loki Dart	-	T 1-0121	-	-	-	-	WI	-	-	-	59	-	-
1982-W177	2445042.29	1982 Mar 13 1903:00	Loki Dart	-	T 1-0127	-	-	-	-	WI	-	-	-	61	-	-
1982-W178	2445043.29	1982 Mar 14 1901:00	Loki Dart	-	T 1-0128	-	-	-	-	WI	-	-	-	61	-	-
1982-W179	2445044.29	1982 Mar 15 1900:00	Loki Dart	-	T 1-0129	-	-	-	-	WI	-	-	-	74	-	-
1982-W188	2445049.29	1982 Mar 20 1900:00	Loki Dart	-	T 1-0134	-	-	-	-	WI	-	-	-	62	-	-
1982-W190	2445050.31	1982 Mar 21 1920:00	Loki Dart	-	T 1-0288	-	-	-	-	WI	-	-	-	61	-	-
1982-W197	2445052.29	1982 Mar 23 1900:00	Loki Dart	-	T 1-0291	-	-	-	-	WI	-	-	-	62	-	-
1982-W437	2445264.86	1982 Oct 22 0822:00	Loki Dart	-	T 1-0442	-	-	-	-	WI	-	-	-	59	-	-
1982-W463	2445269.86	1982 Nov 16 0824:00	Loki Dart	-	T 1-0443	-	-	-	-	WI	-	-	-	59	-	-
1982-W478	2445297.86	1982 Nov 24 0833:00	Loki Dart	-	T 1-0444	-	-	-	-	WI	-	-	-	63	-	-
1982-W489	2445305.86	1982 Dec 02 0827:00	Loki Dart	-	T 1-0450	-	-	-	-	WI	-	-	-	60	-	-
1982-W491	2445306.84	1982 Dec 02 0827:00	Loki Dart	-	T 1-0451	-	-	-	-	WI	-	-	-	62	-	-
1982-W606	2445323.84	1982 Dec 20 0815:00	Loki Dart	-	T 1-0452	-	-	-	-	WI	-	-	-	61	-	-
1983-W10	2445348.86	1983 Jan 14 0822:00	Loki Dart	-	T 1-0471	-	-	-	-	WI	-	-	-	66	-	-
1983-W17	2445355.86	1983 Jan 21 0825:00	Loki Dart	-	T 1-0472	-	-	-	-	WI	-	-	-	61	-	-
1983-W27	2445372.86	1983 Feb 07 0817:00	Loki Dart	-	T 1-0482	-	-	-	-	WI	-	-	-	64	-	-
1983-W35	2445380.86	1983 Feb 15 0822:00	Loki Dart	-	T 1-0484	-	-	-	-	WI	-	-	-	62	-	-
1983-W48	2445388.87	1983 Feb 23 0848:00	Loki Dart	-	T 1-0517	-	-	-	-	WI	-	-	-	56	-	-
1983-W60	2445397.84	1983 Mar 04 0815:00	Loki Dart	-	T 1-0492	-	-	-	-	WI	-	-	-	61	-	-
1983-W71	2445404.86	1983 Mar 11 0835:00	Loki Dart	-	T 1-0494	-	-	-	-	WI	-	-	-	61	-	-
1983-W76	2445416.31	1983 Mar 14 1920:00	Loki Dart	-	T 1-0496	-	-	-	-	WI	-	-	-	60	-	-
1983-W89	2445416.31	1983 Mar 22 1925:00	Loki Dart	-	T 1-0600	-	-	-	-	WI	-	-	-	54	-	-
1983-W97	2445421.86	1983 Mar 28 0830:00	Loki Dart	-	T 1-0602	-	-	-	-	WI	-	-	-	66	-	-
1983-W107	2445424.31	1983 Mar 30 1925:00	Loki Dart	-	T 1-0606	-	-	-	-	WI	-	-	-	55	-	-
1983-W107	2445430.86	1983 Apr 06 0820:00	Loki Dart	-	T 1-0490	-	-	-	-	WI	-	-	-	50	-	-
1983-W108	2445430.86	1983 Apr 06 0841:00	Loki Dart	-	T 1-0629	-	-	-	-	WI	-	-	-	58	-	-
1983-W123	2445440.32	1983 Apr 15 1935:00	Loki Dart	-	T 1-0166	-	-	-	-	WI	-	-	-	63	-	-
1983-W145	2445457.32	1983 May 02 1935:00	Loki Dart	-	T 1-0496	-	-	-	-	WI	-	-	-	63	-	-
1983-W146	2445465.31	1983 May 17 0820:00	Loki Dart	-	T 1-0625	-	-	-	-	WI	-	-	-	37	-	-
1983-W158	2445471.86	1983 May 24 1430:00	Loki Dart	-	T 1-0627	-	-	-	-	WI	-	-	-	66	-	-
1983-W164	2445479.10	1983 Jun 02 0825:00	Loki Dart	-	T 1-0841	-	-	-	-	WI	-	-	-	60	-	-
1983-W177	2445487.86	1983 Jun 02 0825:00	Loki Dart	-	T 1-0650	-	-	-	-	WI	-	-	-	60	-	-
1983-W184	2445495.84	1983 Jun 10 0815:00	Loki Dart	-	T 1-0652	-	-	-	-	WI	-	-	-	62	-	-
1983-W186	2445498.30	1983 Jun 13 1915:00	Loki Dart	-	T 1-0650	-	-	-	-	WI	-	-	-	56	-	-
1983-W192	2445506.31	1983 Jun 27 1920:00	Loki Dart	-	T 1-0634	-	-	-	-	WI	-	-	-	61	-	-
1983-W201	2445512.84	1983 Jun 27 0815:00	Loki Dart	-	T 1-0636	-	-	-	-	WI	-	-	-	60	-	-
1983-W203	2445514.32	1983 Jun 28 1935:00	Loki Dart	-	T 1-0658	-	-	-	-	WI	-	-	-	62	-	-
1983-W207	2445516.50	1983 Jul 01 0001:00	Loki Dart	-	T 1-0642	-	-	-	-	WI	-	-	-	63	-	-
1983-W210	2445523.29	1983 Jul 01 0001:00	Loki Dart	-	T 1-0644	-	-	-	-	WI	-	-	-	64	-	-
1983-W211	2445526.32	1983 Jul 13 0945:00	Loki Dart	-	T 1-0646	-	-	-	-	WI	-	-	-	63	-	-
1983-W215	2445531.32	1983 Jul 15 0825:00	Loki Dart	-	T 1-0651	-	-	-	-	WI	-	-	-	63	-	-
1983-W219	2445536.86	1983 Jul 21 0829:00	Loki Dart	-	T 1-0654	-	-	-	-	WI	-	-	-	64	-	-
1983-W224	2445544.84	1983 Jul 29 1915:00	Loki Dart	-	T 1-0654	-	-	-	-	WI	-	-	-	64	-	-
1983-W225	2445551.03	1983 Jul 29 1915:00	Loki Dart	-	T 1-0656	-	-	-	-	WI	-	-	-	62	-	-
1983-W234	2445557.02	1983 Aug 10 1230:00	Loki Dart	-	T 1-0655	-	-	-	-	WI	-	-	-	62	-	-
1983-W249	2445570.02	1983 Sep 01 1245:00	Loki Dart	-	T 1-0666	-	-	-	-	WI	-	-	-	66	-	-
1983-W270	2445593.03	1983 Sep 15 1245:00	Loki Dart	-	T 1-0666	-	-	-	-	WI	-	-	-	62	-	-
1983-W274	2445597.30	1983 Sep 19 1914:00	Loki Dart	-	T 1-0670	-	-	-	-	WI	-	-	-	55	-	-
1983-W275	2445598.03	1983 Sep 20 1245:00	Loki Dart	-	T 1-0672	-	-	-	-	WI	-	-	-	62	-	-
1983-W286	2445612.84	1983 Oct 04 2355:00	Loki Dart	-	T 1-0714	-	-	-	-	WI	-	-	-	58	-	-
1983-W292	2445621.50	1983 Oct 14 0000:00	Loki Dart	-	T 1-0714	-	-	-	-	WI	-	-	-	62	-	-
1983-W292	2445621.50	1983 Oct 28 0015:00	Loki Dart	-	T 1-0714	-	-	-	-	WI	-	-	-	62	-	-
1983-W304	2445639.04	1983 Oct 31 1955:00	Loki Dart	-	T 1-0716	-	-	-	-	WI	-	-	-	54	-	-
1983-W315	2445649.49	1983 Nov 10 2355:00	Loki Dart	-	T 1-0716	-	-	-	-	WI	-	-	-	56	-	-
1983-W316	2445653.03	1983 Nov 14 1245:00	Loki Dart	-	T 1-0733	-	-	-	-	WI	-	-	-	60	-	-
1983-W325	2445662.03	1983 Nov 23 1950:00	Loki Dart	-	T 1-0733	-	-	-	-	WI	-	-	-	61	-	-
1983-W344	2445676.04	1983 Dec 07 1255:00	Loki Dart	-	T 1-0739	-	-	-	-	WI	-	-	-	62	-	-
1983-W373	2445690.04	1983 Dec 21 1255:00	Loki Dart	-	T 1-0739	-	-	-	-	WI	-	-	-	59	-	-
1984-W109	2445709.50	1984 Feb 09 2359:00	Loki Dart	-	T 1-0800	-	-	-	-	WI	-	-	-	59	-	-
1984-W168	2445742.02	1984 Feb 11 1230:00	Loki Dart	-	T 1-0735	-	-	-	-	WI	-	-	-	51	-	-
1984-W169	2445760.50	1984 Feb 29 2359:00	Loki Dart	-	T 1-0863	-	-	-	-	WI	-	-	-	51	-	-
1984-W199	2445774.51	1984 Mar 15 0014:00	Loki Dart	-	T 1-0863	-	-	-	-	WI	-	-	-	57	-	-
1984-W199	2445774.51	1984 Mar 29 0026:00	Loki Dart	-	T 1-0867	-	-	-	-	WI	-	-	-	57	-	-
1984-W222	2445788.52	1984 Mar 29 0026:00	Loki Dart	-	T 1-0867	-	-	-	-	WI	-	-	-	62	-	-
1984-W166	2445816.49	1984 Apr 25 2345:00	Loki Dart	-	T 1-0859	-	-	-	-	WI	-	-	-	62	-	-
1984-W175	2445828.99	1984 Apr 08 1145:00	Loki Dart	-	T 1-0857	-	-	-	-	WI	-	-	-	67	-	-
1985-W220	2446285.12	1985 Aug 30 1500:00	Loki Dart	-	LOWI DATASONDE	-	-	-	-	WI	-	-	-	55	-	-
1985-W227	2446308.12	1985 Aug 30 1500:00	Loki Dart	-	LOWI DATASONDE	-	-	-	-	WI	-	-	-	55	-	-
1985-W236	2446314.04	1985 Sep 05 1300:00	Loki Dart	-	LOWI DATASONDE	-	-	-	-	WI	-	-	-	53	-	-
1985-W240	2446320.29	1985 Sep 11 1855:00	Loki Dart	-	LOWI DATASONDE	-	-	-	-	WI	-	-	-	57	-	-
1985-W249	2446328.56	1985 Sep 20 0130:00	Loki Dart	-	LOWI DATASONDE	-	-	-	-	WI	-	-	-	62	-	-
1985-W250	2446329.55	1985 Sep 21 0119:00	Loki Dart	-	LOWI DATASONDE	-	-	-	-	WI	-	-	-	54	-	-
1985-W251	2446329.60	1985 Sep 21 0219:00	Loki Dart	-	LOWI DATASONDE	-	-	-	-	WI	-	-	-	60	-	-
1985-W252	2446329.64	1985 Sep 21 0319:00	Loki Dart	-	LOWI DATASONDE	-	-	-	-	WI	-	-	-	50	-	-
1985-W263	2446348.26	1985 Oct 09 1813:00	Loki Dart	-	LOWI	-	-	-	-	WI	-	-	-	50	-	-
1985-W268	2446355.32	1985 Oct 16 1947:00	Loki Dart	-	LOWI	-	-	-	-	WI	-	-	-	51	-	-
1985-W274	2446367.28	1985 Oct 28 1845:00	Loki Dart	-	LOWI	-	-	-	-	WI	-	-	-	53	-	-
1985-W294	2446376.28	1985 Nov 06 1850:00	Loki Dart	-	LOWI	-	-	-	-	WI	-	-	-	56	-	-
1985-W112	2446385.08	1985 Nov 15 1400:00	Loki Dart	-	LOWI	-	-	-	-	WI	-	-	-	49	-	-
1985-W300	2446390.29	1985 Nov 20 1900:00	Loki Dart	-	LOWI	-	-	-	-	WI	-	-	-	57	-	-
1985-W114	2446395.29	1985 Nov 25 1857:00	Loki Dart	-	LOWI	-	-	-	-	WI	-	-	-	35	-	-
1985-W322	2446405.29	1985 Dec 05 1900:00	Loki Dart	-	LOWI	-	-	-	-	WI	-	-	-	55	-	-
1985-W324	2446407.64	1985 Dec 8 0315:00	Loki Dart	-	LOWI	-	-	-	-	WI	-	-	-	56	-	-
1985-W326	2446409.50	1985 Dec 10 0000:00	Loki Dart	-	LOWI	-	-	-	-	WI	-	-	-	56	-	-

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Mission	FlightCode	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee km	Range km	Dest
1985-W329	2446410.54	1985 Dec 11 0100:00	Loki Dart	-	LDKI	PWJ-8B	-	-	-	WI	-	-	-	56	-	-
1985-W332	2446411.48	1985 Dec 11 2330:00	Loki Dart	-	LDKI	PWJ-8B	-	-	-	WI	-	-	-	57	-	-
1985-W336	2446416.26	1985 Dec 16 1800:00	Loki Dart	-	LDKI	PWJ-8B	-	-	-	WI	-	-	-	56	-	-
1985-A17	2446416.60	1985 Dec 17 0230:00	Loki Dart	-	LDKI	PWJ-8B	-	-	-	WI	-	-	-	34	-	-
1985-A18	2446417.50	1985 Dec 18 0000:00	Loki Dart	-	LDKI	-	-	-	-	WI	-	-	-	48	-	-
1985-W342	2446417.61	1985 Dec 18 0236:00	Loki Dart	-	PWJ-8B	PWJ-8B	-	-	-	WI	-	-	-	56	-	-
1985-W344	2446423.29	1985 Dec 23 1900:00	Loki Dart	-	LDKI PWJ-8B	PWJ-8B	-	-	-	WI	-	-	-	54	-	-
1985-W348	2446430.12	1985 Dec 30 1500:00	Loki Dart	-	LDKI PWJ-8B	Final US NET Loki	-	-	-	WI	-	-	-	55	-	-







Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Agency	Launch_Code	Group	Category	LCI_Cite	Cite	Notes
1957-3150	2436142.57	1957 Oct 31 0144	Loki Rocketoon	-	SUI 96	SUI	SS	SUI/VanAllen?	Aeron/CR	WDCRF	-	-
1957-3151	2436143.33	1957 Oct 31 1951	Loki Rocketoon	-	SUI 97	SUI	SS	SUI/VanAllen?	Aeron/Fields	WDCRF	-	-
1957-3152	2436143.54	1957 Nov 1 0100	Loki Rocketoon	-	SUI 98	SUI	SF	SUI/VanAllen?	Aeron/Fields	WDCRF	-	-
1957-3153	2436146.34	1957 Nov 3 2008	Loki Rocketoon	-	SUI 99	SUI	SF	SUI/VanAllen?	Aeron/Fields	WDCRF	-	-
1957-3154	2436146.53	1957 Nov 4 0039	Loki Rocketoon	-	SUI 100	SUI	SS	SUI/VanAllen?	Aeron/CR	WDCRF	JGR100,14485	-
1957-3155	2436146.66	1957 Nov 4 0347	Loki Rocketoon	-	SUI 101	SUI	SS	SUI/VanAllen?	Aeron/Fields	WDCRF	-	-
1957-3156	2436146.80	1957 Nov 4 0716	Loki Rocketoon	-	SUI 102	SUI	SF	SUI/VanAllen?	Aeron/Fields	WDCRF	-	-
1957-3157	2436147.29	1957 Nov 4 1852	Loki Rocketoon	-	SUI 103	SUI	SF	SUI/VanAllen?	Aeron/CR	WDCRF	-	-
1957-3158	2436147.56	1957 Nov 5 0126	Loki Rocketoon	-	SUI 104	SUI	SS	SUI/VanAllen?	Aeron/Fields	WDCRF	-	-
1957-3159	2436148.35	1957 Nov 5 2023	Loki Rocketoon	-	SUI 105	SUI	SS	SUI/VanAllen?	Aeron/CR	WDCRF	-	-
1957-3160	2436148.47	1957 Nov 8 2200	Loki Rocketoon	-	SUI 106	SUI	SS	SUI/VanAllen?	Aeron/Fields	WDCRF	-	-
1957-3161	2436151.42	1957 Nov 8 2317	Loki Rocketoon	-	SUI 107	SUI	SS	SUI/VanAllen?	Aeron/Fields	WDCRF	-	-
1957-3165	2436151.42	1957 Nov 8 2200	Loki Rocketoon	-	SUI 108	SUI	SS	SUI/VanAllen?	Aeron/CR	WDCRF	JGR100,14485	-
1957-3166	2436151.50	1957 Nov 9 0000	Loki Rocketoon	-	SUI 109	SUI	SS	SUI/VanAllen?	Aeron/CR	WDCRF	JGR100,14485	-
1958-414	2436227.50	1958 Aug 12	Loki Dart	-	-	TF88	SS	USN/	Test	ARGUS	-	-
1958-402	2436245.50	1958 Aug	Loki Dart	-	-	TF88	SS	USN/	Test	ARGUS	-	-
1958-403	2436245.50	1958 Aug	Loki Dart	-	-	TF88	SS	USN/	Test	ARGUS	-	-
1958-404	2436245.50	1958 Aug	Loki Dart	-	-	TF88	SS	USN/	Test	ARGUS	-	-
1958-405	2436245.50	1958 Aug	Loki Dart	-	-	TF88	SS	USN/	Test	ARGUS	-	-
1958-406	2436245.50	1958 Aug	Loki Dart	-	-	TF88	SS	USN/	Test	ARGUS	-	-
1958-407	2436245.50	1958 Aug	Loki Dart	-	-	TF88	SS	USN/	Test	ARGUS	-	-
1958-408	2436245.50	1958 Aug	Loki Dart	-	-	TF88	SS	USN/	Test	ARGUS	-	-
1958-409	2436245.50	1958 Aug	Loki Dart	-	-	TF88	SS	USN/	Test	ARGUS	-	-
1958-410	2436245.50	1958 Aug	Loki Dart	-	-	TF88	SS	USN/	Test	ARGUS	-	-
1958-411	2436245.50	1958 Aug	Loki Dart	-	-	TF88	SS	USN/	Test	ARGUS	-	-
1958-412	2436245.50	1958 Aug	Loki Dart	-	-	TF88	SS	USN/	Test	ARGUS	-	-
1958-413	2436245.50	1958 Aug	Loki Dart	-	-	TF88	SS	USN/	Test	ARGUS	-	-
1958-480	2436228.50	1958 Aug 14	Loki Dart	-	-	PARV/HRD	SS	HRD/	Aeron/Test	ARGUS	-	-
1958-491	2436228.50	1958 Aug 14	Loki Dart	-	-	PARV/HRD	SS	HRD/	Aeron/Test	RP-1028	-	-
1958-492	2436228.50	1958 Aug 14	Loki Dart	-	-	PARV/HRD	SS	HRD/	Aeron/Test	RP-1028	-	-
1958-494	2436230.50	1958 Aug 15	Loki Dart	-	-	PARV/HRD	SS	HRD/	Aeron/Test	RP-1028	-	-
1958-495	2436230.50	1958 Aug 15	Loki Dart	-	-	PARV/HRD	SS	HRD/	Aeron/Test	RP-1028	-	-
1958-496	2436230.50	1958 Aug 15	Loki Dart	-	-	PARV/HRD	SS	HRD/	Aeron/Test	RP-1028	-	-
1958-415	2436237.50	1958 Aug 22	Loki Dart	-	-	TF88	SS	USN/	Test	ARGUS	-	-
1958-416	2436260.21	1958 Sep 3 1703	Loki Dart	-	IT9.01F	SUI	SS	HRD/	Test/CR/Plasma	WDCRF	-	-
1958-417	2436260.31	1958 Sep 3 1930	Loki Dart	-	IT9.02F	SUI	SS	HRD/	CR/Plasma	WDCRF	-	-
1958-418	2436261.31	1958 Sep 7 1930	Loki Dart	-	IT9.03F	SUI	SS	HRD/	CR/Plasma	WDCRF	-	-
1958-419	2436264.46	1958 Sep 7 2330	Loki Dart	-	IT9.04F	SUI	SF	HRD/	CR/Plasma	WDCRF	-	-
1958-420	2436264.59	1958 Sep 8 0204	Loki Dart	-	IT9.05F	SUI	SS	HRD/	CR/Plasma	WDCRF	-	-
1958-421	2436264.62	1958 Sep 22	Loki Dart	-	IT9.06F	SUI	SS	HRD/	CR/Plasma	WDCRF	-	-
1958-422	2436266.50	1958 Sep 22	Loki Dart	-	-	PARV/HRD	SS	HRD/	Aeron/Test	RP-1028	-	-
1958-4122	2436266.50	1958 Sep 22	Loki Dart	-	-	PARV/HRD	SS	HRD/	Aeron/Test	RP-1028	-	-
1958-4123	2436266.50	1958 Sep 22	Loki Dart	-	-	PARV/HRD	SS	HRD/	Aeron/Test	RP-1028	-	-
1958-4127	2436271.50	1958 Sep 25	Loki Dart	-	-	PARV/HRD	SS	HRD/	Aeron/Test	RP-1028	-	-
1958-4128	2436271.50	1958 Sep 25	Loki Dart	-	-	PARV/HRD	SS	HRD/	Aeron/Test	RP-1028	-	-
1958-411	2436271.39	1958 Nov 13 2118	Loki Dart	-	IT9.07F	SUI	SS	HRD/	CR/Plasma	WDCRF	-	-
1958-422	2436271.39	1958 Nov 13 2115	Loki Dart	-	IT9.08F	SUI	SS	HRD/	CR/Plasma	WDCRF	-	-
1958-423	2436271.41	1958 Nov 13 2146	Loki Dart	-	IT9.09F	SUI	SS	HRD/	CR/Plasma	WDCRF	-	-
1958-424	2436271.41	1958 Nov 17 1800	Loki Dart	-	IT9.10F	SUI	SS	HRD/	CR/Plasma	WDCRF	-	-
1958-425	2436271.27	1958 Nov 19 1830	Loki Dart	-	IT9.11F	SUI	SS	HRD/	CR/Plasma	WDCRF	-	-
1958-426	2436271.59	1958 Nov 20 0214	Loki Dart	-	IT9.12F	SUI	SS	HRD/	CR/Plasma	WDCRF	-	-
1958-4148	2436271.64	1958 Nov 20 0214	Loki Dart	-	IT9.13F	SUI	SF	HRD/	CR/Plasma	TCV	-	-
1958-4149	2436271.64	1958 Nov 20 0225	Loki Dart	-	IT9.14F	SUI	SF	HRD/	CR/Plasma	WDCRF	-	-
1959-403	2436271.46	1959 Feb 11 2300	Loki Dart	-	-	US2?	SS	USN/	Aeron	WDCRF	-	-
1959-469	2436260.73	1959 Apr 2 0700	Loki Dart	-	-	US2?	SS	USN/	Aeron	WDCRF	-	-
1959-4170	2436260.33	1959 Oct 8 2000	Loki Dart	-	-	US2?	SS	USN/	Aeron	WDCRF	-	-
1959-405	2436264.50	1959 Oct 13	Loki	-	Loki II	PHR/	SS	PHR/	Aeron	MohrBar8,187	-	-
1959-406	2436264.50	1959 Oct 14	Loki	-	Loki II	PHR/	SS	PHR/	Aeron	MohrBar8,187	-	-
1959-407	2436261.50	1959 Oct 20	Loki	-	Loki I	PHR/	SS	PHR/	Aeron	MohrBar8,187	-	-
1959-411	2436261.50	1959 Oct 20	Loki	-	Loki I	PHR/	SS	PHR/	Aeron	MohrBar8,187	-	-
1959-408	2436262.50	1959 Oct 21	Loki	-	Loki II	PHR/	SS	PHR/	Aeron	MohrBar8,187	-	-
1959-4212	2436262.50	1959 Oct 21	Loki	-	Loki I	PHR/	SS	PHR/	Aeron	MohrBar8,187	-	-
1959-409	2436267.50	1959 Oct 26	Loki	-	Loki II	PHR/	SS	PHR/	Aeron	MohrBar8,187	-	-
1959-410	2436268.50	1959 Oct 27	Loki	-	Loki II	PHR/	SS	PHR/	Aeron	MohrBar8,187	-	-
1959-411	2436268.50	1959 Nov 12	Loki	-	Loki II	PHR/	SS	PHR/	Aeron	MohrBar8,187	-	-
1959-412	2436269.50	1959 Nov 18	Loki	-	Loki II	PHR/	SS	PHR/	Aeron	MohrBar8,187	-	-
1960-4310	2436268.50	1960 Jan 15	Loki	-	Loki I	PHR/	SS	PHR/	Aeron	MohrBar8,187	-	-
1960-4311	2436268.50	1960 Jan 21	Loki	-	Loki I	PHR/	SS	PHR/	Aeron	MohrBar8,187	-	-
1960-469	2436269.50	1960 Jan 26	Loki	-	Loki II	PHR/	SS	PHR/	Aeron	MohrBar8,187	-	-
1960-4312	2436269.50	1960 Jan 26	Loki	-	Loki I	PHR/	SS	PHR/	Aeron	MohrBar8,187	-	-
1960-4313	2436269.50	1960 Jan 28	Loki	-	Loki I	PHR/	SS	PHR/	Aeron	MohrBar8,187	-	-
1960-4314	2436266.50	1960 Feb 2	Loki	-	Loki I	PHR/	SS	PHR/	Aeron	MohrBar8,187	-	-
1960-4315	2436275.50	1960 Feb 11	Loki	-	Loki I	PHR/	SS	PHR/	Aeron	MohrBar8,187	-	-
1960-466	2437129.28	1960 Jul 13 1839	Loki	-	-	SDUL	SS	SDUL/Losenthal	Aeron	SR2,1049	-	-
1960-467	2437129.30	1960 Jul 13 1915	Loki	-	-	SDUL	SS	SDUL/Losenthal	Aeron	SR2,1049	-	-
1960-468	2437155.21	1960 Aug 8 1701	Loki	-	-	SDUL	SS	SDUL/Losenthal	Aeron	SR2,1049	-	-
1960-469	2437155.22	1960 Aug 8 1720	Loki	-	-	SDUL	SS	SDUL/Losenthal	Aeron	SR2,1049	-	-
1960-450	2437158.12	1960 Aug 11 1500	Loki	-	-	SDUL	SS	SDUL/Losenthal	Aeron	SR2,1049	-	-
1960-451	2437158.17	1960 Aug 11 1600	Loki	-	-	SDUL	SS	SDUL/Losenthal	Aeron	SR2,1049	-	-
1960-452	2437159.06	1960 Aug 12 1330	Loki	-	-	SDUL	SS	SDUL/Losenthal	Aeron	SR2,1049	-	-
1960-453	2437159.10	1960 Aug 12 1430	Loki	-	-	SDUL	SS	SDUL/Losenthal	Aeron	SR2,1049	-	-
1960-454	2437159.15	1960 Aug 12 1530	Loki	-	-	SDUL	SS	SDUL/Losenthal	Aeron	SR2,1049	-	-
1960-455	2437159.20	1960 Aug 12 1645	Loki	-	-	SDUL	SS	SDUL/Losenthal	Aeron	SR2,1049	-	-
1960-456	2437162.25	1960 Aug 15 1800	Loki	-	-	SDUL	SS	SDUL/Losenthal	Aeron	SR2,1049	-	-
1960-457	2437162.26	1960 Aug 15 1820	Loki	-	-	SDUL	SS	SDUL/Losenthal	Aeron	SR2,1049	-	-
1960-458	2437166.21	1960 Aug 19 1700	Loki	-	-	SDUL	SS	SDUL/Losenthal	Aeron	SR2,1049	-	-

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	DrbPay	Agency	Launch_Code	Group	Category	LTCite	Cite	Notes
1960-059	2437166.22	1960 Aug 19 1720	Lok1	-	-	0.000	SDDL	SS	SDDL/Loventhal	Aeron	SR2,1049	-	-
1960-060	2437169.18	1960 Aug 22 1626	Lok1	-	-	0.000	SDDL	SS	SDDL/Loventhal	Aeron	SR2,1049	-	-
1960-061	2437169.20	1960 Aug 22 1650	Lok1	-	-	0.000	SDDL	SS	SDDL/Loventhal	Aeron	SR2,1049	-	-
1960-062	2437171.26	1960 Aug 24 1812	Lok1	-	-	0.000	SDDL	SS	SDDL/Loventhal	Aeron	SR2,1049	-	-
1960-063	2437171.29	1960 Aug 24 1856	Lok1	-	-	0.000	SDDL	SS	SDDL/Loventhal	Aeron	SR2,1049	-	-
1960-064	2437172.13	1960 Aug 25 1503	Lok1	-	-	0.000	SDDL	SS	SDDL/Loventhal	Aeron	SR2,1049	-	-
1960-065	2437172.14	1960 Aug 25 1520	Lok1	-	-	0.000	SDDL	SS	SDDL/Loventhal	Aeron	SR2,1049	-	-
1960-066	2437172.15	1960 Aug 25 1540	Lok1	-	-	0.000	SDDL	SS	SDDL/Loventhal	Aeron	SR2,1049	-	-
1960-025	2437219.51	1960 Oct 12 0015	Lok1	?	-	0.000	ANS?	SS	AFCDL/Rosenberg	Aeron	WDCRF	-	-
1960-026	2437220.53	1960 Oct 13 0045	Lok1	?	-	0.000	ANS?	SS	AFCDL/	Aeron	WDCRF	-	-
1960-027	2437233.49	1960 Oct 27 2305	Lok1	?	-	0.000	ANS?	SS	AFCDL/	Aeron	WDCRF	-	-
1960-028	2437235.46	1960 Oct 27 2305	Lok1	?	-	0.000	ANS?	SS	AFCDL/	Aeron	WDCRF	-	-
1960-039	2437239.46	1960 Oct 31 2300:00	Lok1	?	-	0.000	ANS?	SS	AFCDL/	Aeron	WDCRF	-	-
1960-041	2437256.42	1960 Nov 17 2212	Lok1	?	-	0.000	ANS?	SS	AFCDL/	Aeron	WDCRF	-	-
1960-042	2437259.95	1960 Nov 21 1050	Lok1	?	-	0.000	SRSB/WSRR	SS	WSRR/	Aeron	FC	-	-
1961-005	2437299.50	1961 Jan	Lok1	?	-	0.000	SRSB/WSRR	SS	WSRR/	Aeron	FC	-	-
1961-006	2437299.50	1961 Jan	Lok1	?	-	0.000	WSRR/	SS	WSRR/	Aeron	WSRR	-	-
1961-003	2437317.22	1961 Jan 17 1715	Lok1	?	-	0.000	WSRR/	SS	WSRR/	Aeron	WSRR	-	-
1961-023	2437317.25	1961 Jan 17 1804	Lok1	?	-	0.000	PHR	SS	USN/	Aeron	WDCRF	-	-
1961-028	2437317.60	1961 Jan 18 0231	Lok1	?	-	0.000	ANS?	SS	USNE/	Aeron	WDCRF	-	-
1961-028	2437326.56	1961 Jan 28 0157	Lok1	?	-	0.000	ANS?	SS	USNE/	Aeron	WDCRF	-	-
1961-029	2437326.47	1961 Jan 28 2320	Lok1	?	-	0.000	USN?	SS	PHR/	Aeron	WDCRF	-	-
1961-005	2437332.01	1961 Feb 1 1219	Lok1	?	-	0.000	USN?	SS	WSRR/	Aeron	WDCRF	-	-
1961-005	2437347.28	1961 Feb 10 1858	Lok1	?	-	0.000	USN?	SS	WSRR/	Aeron	WDCRF	-	-
1961-007	2437376.11	1961 Mar 17 1445	Lok1	?	-	0.000	USN?	SS	WSRR/	Aeron	WDCRF	-	-
1961-009	2437390.11	1961 Mar 31 1443	Lok1	?	-	0.000	USN?	SS	WSRR/	Aeron	WDCRF	-	-
1961-008	2437400.42	1961 Apr 10 2210	Lok1	?	-	0.000	USN?	SS	WSRR/	Aeron	WDCRF	-	-
1961-010	2437409.49	1961 Apr 19 2345	Lok1	?	-	0.000	USN?	SS	WSRR/	Aeron	WDCRF	-	-
1961-011	2437410.10	1961 Apr 20 1430	Lok1	?	-	0.000	USN?	SS	WSRR/	Aeron	WDCRF	-	-
1961-012	2437424.41	1961 May 4 2147	Lok1	?	-	0.000	USN?	SS	WSRR/	Aeron	WDCRF	-	-
1961-013	2437424.46	1961 May 4 2147	Lok1	?	-	0.000	ANS?	SS	USNE/	Aeron	WDCRF	-	-
1961-040	2437467.35	1961 Jun 16 2018:00	Lok1	?	-	0.000	ANS?	SS	USNE/	Aeron	WDCRF	-	-
1961-041	2437467.41	1961 Jun 16 2153:00	Lok1	?	-	0.000	ANS?	SS	USNE/	Aeron	WDCRF	-	-
1962-016	2437701.37	1962 Feb 5 2059	Lok1	?	-	0.000	ANS?	SS	USNE/	Aeron	WDCRF	-	-
1962-037	2437950.36	1962 Oct 12 2101:00	Lok1	?	-	0.000	ANS?	SS	USNE/	Aeron	WDCRF	-	-
1962-038	2437950.40	1962 Oct 12 2132:00	Lok1	?	-	0.000	ANS?	SS	USNE/	Aeron	WDCRF	-	-
1962-039	2437950.44	1962 Oct 12 2238:00	Lok1	?	-	0.000	ANS?	SS	USNE/	Aeron	WDCRF	-	-
1962-040	2437950.46	1962 Oct 12 2309:00	Lok1	?	-	0.000	ANS?	SS	USNE/	Aeron	WDCRF	-	-
1962-041	2437950.51	1962 Oct 13 0013:00	Lok1	?	-	0.000	ANS?	SS	USNE/	Aeron	WDCRF	-	-
1962-042	2437950.56	1962 Oct 13 0131:00	Lok1	?	-	0.000	ANS?	SS	USNE/	Aeron	WDCRF	-	-
1962-043	2437950.57	1962 Oct 13 0136:00	Lok1	?	-	0.000	ANS?	SS	USNE/	Aeron	WDCRF	-	-
1962-044	2437950.59	1962 Oct 13 0214:00	Lok1	?	-	0.000	ANS?	SS	USNE/	Aeron	WDCRF	-	-
1962-045	2437950.61	1962 Oct 13 0335:00	Lok1	?	-	0.000	ANS?	SS	USNE/	Aeron	WDCRF	-	-
1962-046	2437950.66	1962 Oct 13 0352:00	Lok1	?	-	0.000	PHS	SS	USNE/	Aeron	WDCRF	-	-
1962-047	2437950.66	1962 Oct 13 0352:00	Lok1	?	-	0.000	PHS	SS	USNE/	Aeron	WDCRF	-	-
1964-010	2438205.50	1964 Jan 31	Lok1	?	HASP II	0.000	PHR	SS	PHR/	Aeron	PHR/1stF4	-	-
1964-011	2438205.50	1964 Sep 26	Lok1	?	HASP/JUDI	0.000	PHR	SS	PHR/	Aeron	PHR/1stF4	-	-
1964-006	2438263.70	1964 Feb 5 1900	Lok1	?	-	0.000	ANS	SS	PHR/	Aeron	PHR/1stF4	-	-
1964-007	2438331.29	1964 Feb 5 2230	Lok1	?	-	0.000	ANS	SS	PHR/	Aeron	PHR/1stF4	-	-
1964-011	2438373.14	1964 Feb 19 1436	Lok1	?	-	0.000	ANS	SS	PHR/	Aeron	PHR/1stF4	-	-
1964-011	2438500.79	1964 Jul 14 0655	Lok1	?	-	0.000	SUDA	SS	SUDA/	Aeron	PHR/1stF4	-	-
1964-012	2438561.91	1964 Jul 15 0955	Lok1	?	-	0.000	TSRD	SS	TSRD/Rao	Aeron	PHR/1stF4	-	-
1964-014	2438562.84	1964 Jul 16 0915	Lok1	?	-	0.000	TSRD	SS	TSRD/Rao	Aeron	PHR/1stF4	-	-
1964-044	2438562.76	1964 Jul 16 0915	Lok1	?	-	0.000	TSRD	SS	TSRD/Rao	Aeron	PHR/1stF4	-	-
1964-060	2438562.76	1964 Jul 16 0915	Lok1	?	-	0.000	TSRD	SS	TSRD/Rao	Aeron	PHR/1stF4	-	-
1964-055	2438568.27	1964 Aug 10 1830:00	Lok1	?	-	0.000	ANS	SS	ETAC/	Aeron	PHR/1stF4	-	-
1964-056	2438568.27	1964 Aug 12 1852:00	Lok1	?	-	0.000	ANS	SS	ETAC/	Aeron	PHR/1stF4	-	-
1964-057	2438568.27	1964 Aug 17 1834:00	Lok1	?	-	0.000	ANS	SS	ETAC/	Aeron	PHR/1stF4	-	-
1964-061	2438567.30	1964 Aug 19 1907:00	Lok1	?	-	0.000	ANS?	SS	ETAC/	Aeron	PHR/1stF4	-	-
1964-063	2438567.30	1964 Aug 20	Lok1	?	-	0.000	ANS?	SS	ETAC/	Aeron	PHR/1stF4	-	-
1964-064	2438567.50	1964 Aug 20	Lok1	?	-	0.000	ANS?	SS	ETAC/	Aeron	PHR/1stF4	-	-
1964-075	2438565.50	1964 Aug 21	Lok1	?	-	0.000	ANS?	SS	ETAC/	Aeron	PHR/1stF4	-	-
1964-076	2438565.50	1964 Aug 21	Lok1	?	-	0.000	ANS?	SS	ETAC/	Aeron	PHR/1stF4	-	-
1964-0129	2438560.08	1964 Oct 21 1358	Lok1	?	-	0.000	ANS?	SS	ETAC/	Aeron	PHR/1stF4	-	-
1964-0106	2438709.50	1964 Nov 10	Lok1	?	-	0.000	ANS?	SS	ETAC/	Aeron	PHR/1stF4	-	-
1964-0130	2438718.09	1964 Nov 18 1408	Lok1	?	-	0.000	ANS?	SS	ETAC/	Aeron	PHR/1stF4	-	-
1964-0131	2438730.59	1964 Dec 1 0215	Lok1	?	-	0.000	ANS?	SS	ETAC/	Aeron	PHR/1stF4	-	-
1964-0117	2438731.50	1964 Dec 2 0215	Lok1	?	-	0.000	ANS?	SS	ETAC/	Aeron	PHR/1stF4	-	-
1964-0119	2438734.79	1964 Dec 5 0655	Lok1	?	-	0.000	ANS?	SS	ETAC/	Aeron	PHR/1stF4	-	-
1964-0123	2438744.77	1964 Dec 15 0630	Lok1	?	-	0.000	ANS?	SS	ETAC/	Aeron	PHR/1stF4	-	-
1964-0132	2438745.82	1964 Dec 16 0738	Lok1	?	-	0.000	ANS?	SS	ETAC/	Aeron	PHR/1stF4	-	-
1964-0132	2438746.04	1964 Dec 16 1303	Lok1	?	-	0.000	ANS?	SS	ETAC/	Aeron	PHR/1stF4	-	-
1965-007	2438772.96	1965 Jan 12 1059	Lok1	?	-	0.000	ANS?	SS	ETAC/	Aeron	PHR/1stF4	-	-
1965-008	2438773.93	1965 Jan 13 1015	Lok1	?	-	0.000	ANS?	SS	ETAC/	Aeron	PHR/1stF4	-	-
1965-0207	2438774.09	1965 Jan 13 1410	Lok1	?	-	0.000	ANS?	SS	ETAC/	Aeron	PHR/1stF4	-	-
1965-017	2438774.82	1965 Feb 3 0739	Lok1	?	-	0.000	ANS?	SS	ETAC/	Aeron	PHR/1stF4	-	-
1965-0208	2438809.06	1965 Feb 17 1325	Lok1	?	-	0.000	ANS?	SS	ETAC/	Aeron	PHR/1stF4	-	-
1965-0243	2438830.50	1965 Mar 11	Lok1	?	-	0.000	ANS?	SS	ETAC/	Aeron	PHR/1stF4	-	-
1965-0244	2438836.79	1965 Mar 17 0655	Lok1	?	-	0.000	ANS?	SS	ETAC/	Aeron	PHR/1stF4	-	-
1965-0209	2438837.23	1965 Mar 17 1732	Lok1	?	-	0.000	ANS?	SS	ETAC/	Aeron	PHR/1stF4	-	-
1965-0245	2438838.50	1965 Mar 19	Lok1	?	-	0.000	ANS?	SS	ETAC/	Aeron	PHR/1stF4	-	-
1965-0246	2438841.50	1965 Mar 22	Lok1	?	-	0.000	ANS?	SS	ETAC/	Aeron	PHR/1stF4	-	-
1965-0247	2438844.50	1965 Mar 25	Lok1	?	-	0.000	ANS?	SS	ETAC/	Aeron	PHR/1stF4	-	-
1965-0248	2438847.50	1965 Mar 28	Lok1	?	-	0.000	ANS?	SS	ETAC/	Aeron	PHR/1stF4	-	-
1965-0249	2438858.50	1965 Apr 8	Lok1	?	-	0.000	ANS?	SS	ETAC/	Aeron	PHR/1stF4	-	-
1965-069	2438859.79	1965 May 19 0704	Lok1	?	-	0.000	ANS?	SS	ETAC/	Aeron	PHR/1stF4	-	-
1965-081	2438927.79	1965 Jun 16 0704	Lok1	?	-	0.000	ANS?	SS	ETAC/	Aeron	PHR/1stF4	-	-

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	DrbPay	Agency	Launch_Code	Group	Category	LTCite	Cite	Notes
1965-H100	2438962.62	1965 Jul 21 0250	Judi-Bart	-	TEMLS-26	0.000	ISRO	SS	ISRO/Rao	Aeron	WDCRF	-	-
1965-H118	2438990.80	1965 Aug 18 0710	Judi-Bart	-	EXAMINET 27	0.000	ISRO	SS	ISRO/Rao	Aeron	WDCRF	-	-
1965-H229	2439012.41	1965 Sep 8 2145	Judi-Bart	-	EXAMINET 265-01	0.000	WFF	SS	INDL/WFF/	Metro	TH-X-1288	-	-
1965-H230	2439012.46	1965 Sep 8 2307	Judi-Bart	-	EXAMINET 265-02	0.000	WFF	SS	INDL/WFF/	Metro	TH-X-1288	-	-
1965-H231	2439012.55	1965 Sep 9 0047	Judi-Bart	-	EXAMINET 265-03	0.000	WFF	SS	INDL/WFF/	Metro	TH-X-1288	-	-
1965-H232	2439012.57	1965 Sep 9 0141	Judi-Bart	-	EXAMINET 265-04	0.000	WFF	SS	INDL/WFF/	Metro	TH-X-1288	-	-
1965-H233	2439012.71	1965 Sep 9 0225	Judi-Bart	-	EXAMINET 265-05	0.000	WFF	SS	INDL/WFF/	Metro	TH-X-1288	-	-
1965-H234	2439012.84	1965 Sep 9 0501	Judi-Bart	-	EXAMINET 265-06	0.000	WFF	SS	INDL/WFF/	Metro	TH-X-1288	-	-
1965-H235	2439013.00	1965 Sep 9 0805	Judi-Bart	-	EXAMINET 265-07	0.000	WFF	SS	INDL/WFF/	Metro	TH-X-1288	-	-
1965-H236	2439013.19	1965 Sep 9 1201	Judi-Bart	-	EXAMINET 265-08	0.000	WFF	SS	INDL/WFF/	Metro	TH-X-1288	-	-
1965-H237	2439013.20	1965 Sep 9 1648	Judi-Bart	-	EXAMINET 265-09	0.000	WFF	SS	INDL/WFF/	Metro	TH-X-1288	-	-
1965-H238	2439013.44	1965 Sep 9 2234	Judi-Bart	-	EXAMINET 265-11	0.000	WFF	SS	INDL/WFF/	Metro	TH-X-1288	-	-
1965-H239	2439013.55	1965 Sep 10 0115	Judi-Bart	-	EXAMINET 265-12	0.000	WFF	SS	INDL/WFF/	Metro	TH-X-1288	-	-
1965-H240	2439013.71	1965 Sep 10 0600	Judi-Bart	-	EXAMINET 265-13	0.000	WFF	SS	INDL/WFF/	Metro	TH-X-1288	-	-
1965-H241	2439013.83	1965 Sep 10 0800	Judi-Bart	-	EXAMINET 265-14	0.000	WFF	SS	INDL/WFF/	Metro	TH-X-1288	-	-
1965-H242	2439014.03	1965 Sep 10 1238	Judi-Bart	-	EXAMINET 265-15	0.000	WFF	SS	INDL/WFF/	Metro	TH-X-1288	-	-
1965-H133	2439016.90	1965 Sep 15 0931	Judi-Bart	-	TEMLS-28	0.000	ISRO	SS	ISRO/Rao	Aeron	WDCRF	-	-
1965-H269	2439039.29	1965 Oct 5 1851	Judi-Bart	-	EXAMINET 265-16	0.000	WFF	SS	WFF/	Metro	SP-175	-	-
1965-H270	2439042.32	1965 Oct 8 1934	Judi-Bart	-	EXAMINET 265-17	0.000	WFF	SS	WFF/	Metro	SP-175	-	-
1965-H271	2439046.26	1965 Oct 12 1849	Judi-Bart	-	EXAMINET 265-18	0.000	WFF	SS	WFF/	Metro	SP-175	-	-
1965-H272	2439046.31	1965 Oct 14 1929	Judi-Bart	-	EXAMINET 265-19	0.000	WFF	SS	WFF/	Metro	SP-175	-	-
1965-H273	2439049.34	1965 Oct 15 2016	Judi-Bart	-	EXAMINET 265-20	0.000	WFF	SS	WFF/	Metro	SP-175	-	-
1965-H149	2439053.27	1965 Oct 19 1827	Judi-Bart	-	EXAMINET 265-21	0.000	WFF	SS	WFF/	Metro	SP-175	-	-
1965-H280	2439053.60	1965 Oct 20 0705	Judi-Bart	-	TEMLS-29	0.000	ISRO	SS	ISRO/Rao	Aeron	WDCRF	-	-
1965-H281	2439054.04	1965 Oct 20 1258	Judi-Bart	-	EXAMINET 265-22	0.000	WFF	SS	WFF/	Metro	SBS-871	-	-
1965-H282	2439054.27	1965 Oct 20 1532	Judi-Bart	-	EXAMINET 265-23	0.000	WFF	SS	WFF/	Metro	SP-175	-	-
1965-H276	2439061.46	1965 Oct 27 2331	Judi-Bart	-	EXAMINET 265-24	0.000	WFF	SS	WFF/	Metro	SP-175	-	-
1965-H278	2439066.31	1965 Nov 3 1927	Judi-Bart	-	EXAMINET 265-25	0.000	WFF	SS	WFF/	Metro	SP-175	-	-
1965-H163	2439068.86	1965 Nov 17 0636	Judi-Bart	-	TEMLS-30	0.000	ISRO	SS	ISRO/Rao	Aeron	WDCRF	-	-
1965-H281	2439082.01	1965 Nov 17 1210	Judi-Bart	-	-	0.000	ISRO	SS	ISRO/Rao	Aeron	SBS-871	-	-
1965-H165	2439082.52	1965 Nov 18 0334:00	Loki Bart	?	-	0.000	ANS?	SU	AFCL/	Aeron	WDCRF	-	-
1965-H166	2439082.66	1965 Nov 18 0415:00	Loki Bart	?	-	0.000	ANS?	SU	AFCL/	Aeron	WDCRF	-	-
1965-H167	2439082.74	1965 Nov 18 0545:00	Loki Bart	?	-	0.000	ANS?	SU	AFCL/	Aeron	WDCRF	-	-
1965-H168	2439082.85	1965 Nov 18 0630:00	Loki Bart	?	-	0.000	ANS?	SU	AFCL/	Aeron	WDCRF	-	-
1965-H169	2439082.92	1965 Nov 18 1008:00	Loki Bart	?	-	0.000	ANS?	SU	AFCL/	Aeron	WDCRF	-	-
1965-H170	2439082.96	1965 Nov 18 1334:00	Loki Bart	?	-	0.000	ANS?	SU	AFCL/Rosenberg	Aeron	WDCRF	-	-
1965-H171	2439087.60	1965 Nov 23 0227	Judi-Bart	-	TEMLS-31	0.000	ISRO	SS	ISRO/Rao	Aeron	WDCRF	-	-
1965-H200	2439108.65	1965 Dec 19 0333	Judi-Bart	-	-	0.000	ISRO	SS	ISRO/Rao	Aeron	MRN64	-	-
1965-H201	2439109.92	1965 Dec 19 0735	Judi-Bart	-	TEMLS-32	0.000	ISRO	SS	ISRO/Rao	Aeron	WDCRF	-	-
1965-H202	2439111.77	1965 Dec 19 0636	Judi-Bart	-	TEMLS-33	0.000	ISRO	SS	ISRO/Rao	Aeron	WDCRF	-	-
1965-H194	2439132.76	1965 Dec 19 0207	Judi-Bart	-	TEMLS-34	0.000	ISRO	SS	ISRO/Rao	Aeron	WDCRF	-	-
1965-H195	2439138.02	1966 Jan 12 1250	Judi-Bart	-	-	0.000	ISRO	SS	ISRO/Rao	Aeron	WDCRF	-	-
1965-H196	2439138.12	1966 Jan 12 1500	Judi-Bart	-	-	0.000	ISRO	SS	ISRO/Rao	Aeron	WDCRF	-	-
1965-H197	2439138.14	1966 Jan 12 1523	Judi-Bart	-	-	0.000	ISRO	SS	ISRO/Rao	Aeron	WDCRF	-	-
1965-H198	2439144.50	1966 Jan 15 0309	Judi-Bart	-	-	0.000	ISRO	SS	ISRO/Rao	Aeron	WDCRF	-	-
1965-H22	2439144.90	1966 Jan 19 0309	Judi-Bart	-	EXAMINET W01	0.000	ISRO	SS	ISRO/Rao	Aeron	WDCRF	-	-
1965-H26	2439152.01	1966 Jan 26 1218	Judi-Bart	-	EXAMINET W01	0.000	ISRO	SS	ISRO/Rao	Aeron	WDCRF	-	-
1965-H27	2439152.50	1966 Jan 27 0000	Judi-Bart	-	TEMLS-36	0.000	ISRO	SS	ISRO/Rao	Aeron	WDCRF	-	-
1965-H25	2439159.50	1966 Feb 2 1541	Judi-Bart	-	-	0.000	ISRO	SS	ISRO/Rao	Aeron	WDCRF	-	-
1965-H41	2439169.11	1966 Feb 2 1600	Judi-Bart	-	-	0.000	ISRO	SS	ISRO/Rao	Aeron	WDCRF	-	-
1965-H46	2439169.51	1966 Feb 3 0009	Judi-Bart	-	-	0.000	ISRO	SS	ISRO/Rao	Aeron	WDCRF	-	-
1965-H49	2439169.33	1966 Feb 3 1959	Judi-Bart	-	-	0.000	ISRO	SS	ISRO/Rao	Aeron	WDCRF	-	-
1965-H52	2439169.42	1966 Feb 3 2200	Judi-Bart	-	-	0.000	ISRO	SS	ISRO/Rao	Aeron	WDCRF	-	-
1965-H53	2439169.46	1966 Feb 4 0705	Loki Bart	-	-	0.000	ISRO	SS	ISRO/Rao	Aeron	WDCRF	-	-
1965-H54	2439169.80	1966 Feb 4 0726	Loki Bart	-	-	0.000	ISRO	SS	ISRO/Rao	Aeron	WDCRF	-	-
1965-H55	2439161.14	1966 Feb 4 1528	Loki Bart	-	-	0.000	ISRO	SS	ISRO/Rao	Aeron	WDCRF	-	-
1965-H59	2439161.23	1966 Feb 4 1725	Loki Bart	-	-	0.000	ISRO	SS	ISRO/Rao	Aeron	WDCRF	-	-
1965-H62	2439161.25	1966 Feb 4 1805	Loki Bart	-	-	0.000	ISRO	SS	ISRO/Rao	Aeron	WDCRF	-	-
1965-H71	2439164.25	1966 Feb 7 1800	Judi-Bart	-	-	0.000	ISRO	SS	ISRO/Rao	Aeron	WDCRF	-	-
1965-H72	2439164.43	1966 Feb 7 2219	Loki Bart	-	-	0.000	ISRO	SS	ISRO/Rao	Aeron	WDCRF	-	-
1965-H93	2439165.20	1966 Feb 8 1641	Loki Bart	-	-	0.000	ISRO	SS	ISRO/Rao	Aeron	WDCRF	-	-
1965-H94	2439165.23	1966 Feb 8 1732	Loki Bart	-	-	0.000	ISRO	SS	ISRO/Rao	Aeron	WDCRF	-	-
1965-H95	2439166.15	1966 Feb 9 1541	Loki Bart	-	-	0.000	ISRO	SS	ISRO/Rao	Aeron	WDCRF	-	-
1965-H96	2439166.70	1966 Feb 10 0654	Loki Bart	-	-	0.000	ISRO	SS	ISRO/Rao	Aeron	WDCRF	-	-
1965-H97	2439167.12	1966 Feb 10 1500	Loki Bart	-	-	0.000	ISRO	SS	ISRO/Rao	Aeron	WDCRF	-	-
1965-H100	2439167.40	1966 Feb 10 2300	Loki Bart	-	-	0.000	ISRO	SS	ISRO/Rao	Aeron	WDCRF	-	-
1965-H108	2439168.22	1966 Feb 11 1713	Loki Bart	-	-	0.000	ISRO	SS	ISRO/Rao	Aeron	WDCRF	-	-
1965-H109	2439168.26	1966 Feb 11 1811	Loki Bart	-	-	0.000	ISRO	SS	ISRO/Rao	Aeron	WDCRF	-	-
1965-H38	2439168.29	1966 Feb 11 1857	Judi-Bart	-	-	0.000	ISRO	SS	ISRO/Rao	Aeron	WDCRF	-	-
1965-H119	2439171.27	1966 Feb 14 1827	Judi-Bart	-	-	0.000	ISRO	SS	ISRO/Rao	Aeron	WDCRF	-	-
1965-H122	2439171.52	1966 Feb 15 0023	Judi-Bart	-	-	0.000	ISRO	SS	ISRO/Rao	Aeron	WDCRF	-	-
1965-H124	2439172.33	1966 Feb 15 2000	Loki Bart	-	TEMLS-37	0.000	ISRO	SS	ISRO/Rao	Aeron	WDCRF	-	-
1965-H125	2439172.65	1966 Feb 16 0330	Judi-Bart	-	-	0.000	ISRO	SS	ISRO/Rao	Aeron	WDCRF	-	-
1965-H126	2439172.69	1966 Feb 16 0430	Judi-Bart	-	-	0.000	ISRO	SS	ISRO/Rao	Aeron	WDCRF	-	-
1965-H127	2439173.07	1966 Feb 16 1336	Judi-Bart	-	-	0.000	ISRO	SS	ISRO/Rao	Aeron	WDCRF	-	-
1965-H484	2439173.09	1966 Feb 16 1405	Judi-Bart	-	EXAMINET W02	0.000	ISRO	SS	ISRO/Rao	Aeron	WDCRF	-	-
1965-H132	2439173.25	1966 Feb 16 1805	Loki Bart	-	-	0.000	ISRO	SS	ISRO/Rao	Aeron	WDCRF	-	-
1965-H135	2439173.52	1966 Feb 17 0032	Judi-Bart	-	-	0.000	ISRO	SS	ISRO/Rao	Aeron	WDCRF	-	-
1965-H136	2439174.12	1966 Feb 17 1500	Judi-Bart	-	-	0.000	ISRO	SS	ISRO/Rao	Aeron	WDCRF	-	-
1965-H139	2439174.20	1966 Feb 17 1815	Judi-Bart	-	-	0.000	ISRO	SS	ISRO/Rao	Aeron	WDCRF	-	-
1965-H137	2439174.26	1966 Feb 17 1815	Judi-Bart	-	-	0.000	ISRO	SS	ISRO/Rao	Aeron	WDCRF	-	-
1965-H139	2439174.38	1966 Feb 17 2104	Loki Bart	-	-	0.000	ISRO	SS	ISRO/Rao	Aeron	WDCRF	-	-
1965-H140	2439174.53	1966 Feb 18 0045	Loki Bart	-	-	0.000	ISRO	SS	ISRO/Rao	Aeron	WDCRF	-	-



Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	OrbPay	Agency	Launch_Code	Group	Category	LTCite	Cite	Notes
1966-H135	2439438.99	1966 Nov 9 1139	Judi-Bart	-	INTA H-6605	0.000	INTA	SU	INTA/NASA/	Met	ELaren	-	-
1966-H125	2439444.29	1966 Nov 14 1900	Loki Bart	-	-	0.000	AFCLR	SS	AFCLR/	Test	AFCLR-66-0622	-	-
1966-H126	2439444.34	1966 Nov 14 2007	Loki Bart	-	-	0.000	AFCLR	SS	AFCLR/	Test	AFCLR-66-0622	-	-
1966-H127	2439445.14	1966 Nov 15 1520	Loki Bart	-	-	0.000	AFCLR	SS	AFCLR/	Test	AFCLR-66-0622	-	-
1966-H128	2439444.50	1966 Nov 15	Loki Bart	-	-	0.000	AFCLR	SS	AFCLR/	Test	AFCLR-66-0622	-	-
1966-H371	2439446.15	1966 Nov 16 1401:00	Judi-Bart	?	SUPARCO-032/66	0.000	SUPA	SS	SUPA/Jarri_Purcell	Aeron	WDRF	-	-
1966-H372	2439446.18	1966 Nov 16 1530	Judi-Bart	-	EXAMINET C14?	0.000	COMAE	SS	COMAE/Lichtenstein	Aeron	WDRF	-	SP-176
1966-H136	2439447.96	1966 Nov 18 1109	Judi-Bart	-	INTA H-6606	0.000	INTA	SU	INTA/NASA/	Met	ELaren	-	-
1966-H137	2439452.96	1966 Nov 23 1109	Judi-Bart	-	INTA H-6607	0.000	INTA	SU	INTA/NASA/	Met	ELaren	-	-
1966-H138	2439461.96	1966 Dec 2 1106	Judi-Bart	-	INTA H-6609	0.000	INTA	SU	INTA/NASA/	Met	ELaren	-	-
1966-H139	2439466.96	1966 Dec 7 1100	Judi-Bart	-	INTA H-6610	0.000	INTA	SU	INTA/NASA/	Met	ELaren	-	-
1966-H385	2439468.98	1966 Dec 10 0337:00	Loki Bart	?	-	0.000	HRU	SU	USAE/	Aeron	WDRF	-	-
1966-H388	2439469.77	1966 Dec 10 0628:00	Loki Bart	?	-	0.000	HRU	SU	USAE/	Aeron	WDRF	-	-
1966-H390	2439474.09	1966 Dec 14 1407	Loki Bart	?	-	0.000	HRU	SU	USAE/	Aeron	WDRF	-	-
1966-H394	2439474.35	1966 Dec 14 2025	Judi-Bart	-	EXAMINET C144?	0.000	COMAE	SS	COMAE/Lichtenstein	Aeron	WDRF	-	-
1966-H395	2439474.36	1966 Dec 14 2039	Judi-Bart	-	EXAMINET C15	0.000	COMAE	SS	COMAE/Lichtenstein	Aeron	WDRF	-	SP-176
1966-H425	2439505.09	1967 Jan 18 1415	Judi-Bart	-	EXAMINET W22	0.000	WFF	SS	WFF/	Aeron	WDRF	-	-
1967-H300	2439509.12	1967 Jan 18 1500	Judi-Bart	-	EXAMINET C16	0.000	COMAE	SS	COMAE/Lichtenstein	Aeron	WDRF	-	SP-176
1967-H134	2439521.21	1967 Jan 30 1703	Loki Bart	-	EXAMINET N17	0.000	CHAE	SS	DIFE/DeMendoza	Aeron	WDRF	-	-
1967-H135	2439522.12	1967 Jan 31 1608	Loki Bart	-	-	0.000	AFCLR	SS	AFCLR/	Test	AFCLR-66-0622	-	-
1967-H301	2439523.12	1967 Feb 1 1500	Judi-Bart	-	-	0.000	AFCLR	SS	AFCLR/	Test	AFCLR-66-0622	-	-
1967-H316	2439531.06	1967 Feb 9 1501	Judi-Bart	-	EXAMINET N18	0.000	CHAE	SS	DIFE/DeMendoza	Aeron	WDRF	-	-
1967-H46	2439537.10	1967 Feb 15 1401	Judi-Bart	-	EXAMINET W26	0.000	WFF	SS	WFF/	Aeron	WDRF	-	-
1967-H302	2439543.12	1967 Feb 15 1500	Judi-Bart	-	EXAMINET C17	0.000	COMAE	SS	COMAE/Lichtenstein	Aeron	WDRF	-	-
1967-H303	2439544.12	1967 Feb 22 1500	Judi-Bart	-	EXAMINET N19	0.000	CHAE	SS	DIFE/DeMendoza	Aeron	WDRF	-	-
1967-H136	2439549.12	1967 Feb 27 1500	Loki Bart	-	EXAMINET N20	0.000	CHAE	SS	DIFE/DeMendoza	Aeron	WDRF	-	-
1967-H137	2439550.19	1967 Feb 28 1500	Loki Bart	-	-	0.000	AFCLR	SS	AFCLR/	Test	AFCLR-66-0622	-	-
1967-H304	2439551.12	1967 Mar 1 1500	Judi-Bart	-	EXAMINET N21	0.000	AFCLR	SS	DIFE/DeMendoza	Aeron	WDRF	-	-
1967-H317	2439555.20	1967 Mar 5 1646	Judi-Bart	-	EXAMINET W28	0.000	WFF	SS	WFF/	Aeron	WDRF	-	-
1967-H63	2439564.97	1967 Mar 15 1110	Judi-Bart	-	EXAMINET W30	0.000	WFF	SS	WFF/	Aeron	WDRF	-	-
1967-H318	2439566.10	1967 Mar 15 1429	Judi-Bart	-	EXAMINET W50	0.000	WFF	SS	WFF/	Aeron	WDRF	-	-
1967-H305	2439572.12	1967 Mar 22 1500	Judi-Bart	-	EXAMINET N22	0.000	CHAE	SS	DIFE/DeMendoza	Aeron	WDRF	-	-
1967-H319	2439572.26	1967 Mar 22 1845	Judi-Bart	-	EXAMINET W51	0.000	WFF	SS	WFF/	Aeron	WDRF	-	-
1967-H306	2439579.19	1967 Mar 29 1627	Judi-Bart	-	EXAMINET N23	0.000	CHAE	SS	DIFE/DeMendoza	Aeron	WDRF	-	-
1967-H320	2439579.35	1967 Mar 29 1962	Judi-Bart	-	EXAMINET W52	0.000	WFF	SS	WFF/	Aeron	WDRF	-	-
1967-H49	2439586.89	1967 Apr 8 0925:00	Loki Bart	?	-	0.000	AFCLR	SU	AFCLR/Rosenberg	Aeron	WDRF	-	-
1967-H138	2439591.50	1967 Apr 11	Loki Bart	-	-	0.000	AFCLR	SS	AFCLR/	Test	AFCLR-66-0622	-	-
1967-H139	2439592.50	1967 Apr 12 1446	Judi-Bart	-	EXAMINET C19	0.000	AFCLR	SS	COMAE/Lichtenstein	Aeron	WDRF	-	SP-176
1967-H40	2439600.10	1967 May 9 1421	Loki Bart	-	-	0.000	AFCLR	SS	AFCLR/	Test	AFCLR-66-0622	-	-
1967-H141	2439603.50	1967 May 12 1527	Loki Bart	-	-	0.000	AFCLR	SS	AFCLR/	Test	AFCLR-66-0622	-	-
1967-H142	2439623.14	1967 May 12 1627	Loki Bart	-	-	0.000	AFCLR	SS	AFCLR/	Test	AFCLR-66-0622	-	-
1967-H143	2439623.19	1967 May 12 1627	Loki Bart	-	-	0.000	AFCLR	SS	AFCLR/	Test	AFCLR-66-0622	-	-
1967-H144	2439626.77	1967 May 14 1115	Loki Bart	-	-	0.000	AFCLR	SS	AFCLR/	Test	AFCLR-66-0622	-	-
1967-H307	2439628.15	1967 Jun 14 1511	Judi-Bart	-	EXAMINET N24	0.000	CHAE	SS	DIFE/DeMendoza	Aeron	WDRF	-	-
1967-H326	2439648.50	1967 Jun 17	Loki Bart	PHH-88	EXAMINET N24	0.000	CHAE	SS	DIFE/DeMendoza	Aeron	WDRF	-	-
1967-H327	2439649.50	1967 Jun 18	Loki Bart	PHH-88	JD-07-14	0.000	AFCLR	SS	AFCLR/	Test	AFCLR-66-0132	-	-
1967-H153	2439659.50	1967 Jun 18	Loki Bart	PHH-88	JD-07-16	0.000	AFCLR	SS	AFCLR/	Test	AFCLR-66-0132	-	-
1967-H154	2439667.50	1967 Jun 18	Loki Bart	PHH-88	JD-07-17	0.000	AFCLR	SS	AFCLR/	Test	AFCLR-66-0132	-	-
1967-H308	2439677.12	1967 Jul 5 1500	Loki Bart	PHH-88	JD-07-17	0.000	AFCLR	SS	AFCLR/	Test	AFCLR-66-0132	-	-
1967-H309	2439677.50	1967 Jul 12 1658	Loki Bart	PHH-88	EXAMINET N25	0.000	CHAE	SS	DIFE/DeMendoza	Aeron	WDRF	-	-
1967-H310	2439684.21	1967 Jul 12 1702	Judi-Bart	-	EXAMINET N26	0.000	CHAE	SS	DIFE/DeMendoza	Aeron	WDRF	-	-
1967-H155	2439700.50	1967 Jul 29	Loki Bart	PHH-88	EXAMINET C22	0.000	COMAE	SS	COMAE/Lichtenstein	Aeron	WDRF	-	-
1967-H328	2439700.50	1967 Jul 29	Loki Bart	PHH-88	LD-07-01	0.000	AFCLR	SS	AFCLR/	Test	AFCLR-66-0132	-	-
1967-H156	2439700.50	1967 Jul 29	Loki Bart	PHH-88	LD-07-03	0.000	AFCLR	SS	AFCLR/	Test	AFCLR-66-0132	-	-
1967-H310	2439705.10	1967 Aug 2 1500	Judi-Bart	-	EXAMINET N27	0.000	COMAE	SS	COMAE/Lichtenstein	Aeron	WDRF	-	-
1967-H311	2439719.12	1967 Aug 16 1425	Judi-Bart	-	EXAMINET C23	0.000	COMAE	SS	COMAE/Lichtenstein	Aeron	WDRF	-	SP-176
1967-H312	2439747.12	1967 Aug 16 1500	Judi-Bart	-	EXAMINET N28	0.000	CHAE	SS	DIFE/DeMendoza	Aeron	WDRF	-	-
1967-H178	2439747.35	1967 Sep 13 2030	Judi-Bart	-	EXAMINET N29	0.000	CHAE	SS	DIFE/DeMendoza	Aeron	WDRF	-	-
1967-H193	2439776.50	1967 Oct 13 2103	Loki Bart	-	EXAMINET C24	0.000	COMAE	SS	COMAE/Lichtenstein	Aeron	WDRF	-	-
1967-H195	2439782.38	1967 Oct 18 2103	Loki Bart	-	EXAMINET C25	0.000	COMAE	SS	COMAE/Lichtenstein	Aeron	WDRF	-	-
1967-H196	2439783.50	1967 Oct 19	Loki Bart	-	EXAMINET C25	0.000	COMAE	SS	COMAE/Lichtenstein	Aeron	WDRF	-	-
1967-H198	2439783.50	1967 Oct 20	Loki Bart	-	EXAMINET N30	0.000	CHAE	SS	DIFE/DeMendoza	Aeron	WDRF	-	-
1967-H211	2439789.19	1967 Oct 26 1630	Loki Bart	-	EXAMINET N30	0.000	CHAE	SS	DIFE/DeMendoza	Aeron	WDRF	-	-
1967-H213	2439796.50	1967 Nov 2	Loki Bart	-	EXAMINET N31	0.000	CHAE	SS	DIFE/DeMendoza	Aeron	WDRF	-	-
1967-H314	2439810.08	1967 Nov 8 1400	Loki Bart	-	187 R114	0.000	HRU	SS	USAE/	Aeron	WDRF	-	-
1967-H323	2439810.24	1967 Nov 15 1744	Judi-Bart	-	EXAMINET N31	0.000	CHAE	SS	DIFE/DeMendoza	Aeron	WDRF	-	-
1967-H220	2439814.72	1967 Nov 20 0515	Judi-Bart	-	EXAMINET N32	0.000	CHAE	SS	DIFE/DeMendoza	Aeron	WDRF	-	-
1967-H226	2439823.52	1967 Nov 29 0210	Judi-Bart	-	EXAMINET N32	0.000	CHAE	SS	DIFE/DeMendoza	Aeron	WDRF	-	-
1967-H236	2439831.39	1967 Dec 6 1945	Judi-Bart	?	SUPARCO-033/67	0.000	SUPA	SU	SUPA/Rahmatullah	Aeron	WDRF	-	-
1967-H237	2439836.88	1967 Dec 12 0913:00	Judi-Bart	?	SUPARCO-034/67	0.000	SUPA	SU	SUPA/Rahmatullah	Aeron	WDRF	-	-
1967-H315	2439838.10	1967 Dec 13 1355	Judi-Bart	-	EXAMINET N32	0.000	CHAE	SS	DIFE/DeMendoza	Aeron	WDRF	-	-
1967-H329	2439841.12	1967 Dec 17 1500	Loki Bart	PHH-88	EXAMINET N32	0.000	CHAE	SS	DIFE/DeMendoza	Aeron	WDRF	-	SP-176
1967-H330	2439841.50	1967 Dec 17	Loki Bart	PHH-88	LD-12-17-1	0.000	AFCLR	SS	AFCLR/	Test	AFCLR-66-0132	-	-
1967-H331	2439841.50	1967 Dec 17	Loki Bart	PHH-88	LD-12-17-2	0.000	AFCLR	SS	AFCLR/	Test	AFCLR-66-0132	-	-
1967-H332	2439841.50	1967 Dec 17	Loki Bart	PHH-88	LD-12-17-3	0.000	AFCLR	SS	AFCLR/	Test	AFCLR-66-0132	-	-
1967-H333	2439841.50	1967 Dec 17	Loki Bart	PHH-88	LD-12-17-4	0.000	AFCLR	SS	AFCLR/	Test	AFCLR-66-0132	-	-
1967-H334	2439841.50	1967 Dec 17	Loki Bart	PHH-88	LD-12-17-5	0.000	AFCLR	SS	AFCLR/	Test	AFCLR-66-0132	-	-
1967-H335	2439841.50	1967 Dec 17	Loki Bart	PHH-88	LD-12-17-6	0.000	AFCLR	SS	AFCLR/	Test	AFCLR-66-0132	-	-
1967-H336	2439841.50	1967 Dec 17	Loki Bart	PHH-88	LD-12-17-7	0.000	AFCLR	SS	AFCLR/	Test	AFCLR-66-0132	-	-
1967-H337	2439841.50	1967 Dec 17	Loki Bart	PHH-88	LD-12-17-8	0.000	AFCLR	SS	AFCLR/	Test	AFCLR-66-0132	-	-
1967-H338	2439844.90	1967 Dec 20 0939	Judi-Bart	-	TELS-55	0.000	TSRU	SS	TSRU/Rao	Aeron	WDRF	-	-



Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	OrbPay	Agency	Launch_Code	Group	Category	LTCite	Cite	Notes
1969-H131	2440245.25	1969 Jan 23 17:55:00	Judi-Barr	?	-	0.000	MRN	SS	USAF/6MW	Metro	DS1-5860	-	-
1969-H135	2440246.95	1969 Jan 24 10:54:59	Judi-Barr	?	INTA H-6903	0.000	INTA	SS	INTA/	Metro	DS1-5860	-	-
1969-H139	2440246.25	1969 Jan 24 17:56:00	Judi-Barr	?	-	0.000	MRN	SS	USAF/6MW	Metro	DS1-5860	-	-
1969-H151	2440249.78	1969 Jan 28 06:49:59	Judi-Barr	?	-	0.000	MRN	SS	USAF/6MW	Metro	DS1-5860	-	-
1969-H152	2440249.86	1969 Jan 28 08:37:00	Judi-Barr	?	-	0.000	MRN	SS	USAF/6MW	Metro	DS1-5860	-	-
1969-H155	2440250.95	1969 Jan 29 10:54:59	Judi-Barr	?	INTA H-6904	0.000	INTA	SS	INTA/	Metro	DS1-5860	-	-
1969-H160	2440251.25	1969 Jan 29 17:55:00	Judi-Barr	?	-	0.000	MRN	SS	USAF/6MW	Metro	DS1-5860	-	-
1969-H172	2440252.34	1969 Jan 30 20:06:00	Judi-Barr	?	-	0.000	MRN	SS	USAF/6MW	Metro	DS1-5860	-	-
1969-H39	2440253.24	1969 Jan 31 17:47:00	Judi-Barr	?	-	0.000	MRN	SS	USAF/6MW	Metro	DS1-5860	-	-
1969-H176	2440252.50	1969 Feb	Judi-Barr	?	-	0.000	ANS	SS	USAF/6MW	Aeron	FC	-	-
1969-H177	2440252.50	1969 Feb	Judi-Barr	?	-	0.000	ANS	SS	USAF/6MW	Aeron	FC	-	-
1969-H215	2440256.93	1969 Feb 6 10:23:59	Judi-Barr	?	-	0.000	MRN	SS	USAF/6MW	Metro	DS1-5860	-	-
1969-H230	2440260.74	1969 Feb 8 05:46:00	Judi-Barr	?	-	0.000	MRN	SS	USAF/6MW	Metro	DS1-5860	-	-
1969-H269	2440267.46	1969 Feb 14 22:56:59	Judi-Barr	?	-	0.000	MRN	SS	USAF/6MW	Metro	DS1-5860	-	-
1969-H280	2440271.71	1969 Feb 19 04:56:59	Judi-Barr	?	-	0.000	MRN	SS	USAF/6MW	Metro	DS1-5860	-	-
1969-H310	2440279.64	1969 Feb 27 03:18:00	Judi-Barr	?	-	0.000	MRN	SS	USAF/6MW	Metro	DS1-5860	-	-
1969-H323	2440281.74	1969 Mar 1 05:48:59	Judi-Barr	?	-	0.000	MRN	SS	USAF/6MW	Metro	DS1-5860	-	-
1969-H346	2440286.62	1969 Mar 6 02:48:00	Judi-Barr	?	-	0.000	MRN	SS	USAF/6MW	Metro	DS1-5860	-	-
1969-H359	2440287.57	1969 Mar 7 01:44:59	Judi-Barr	?	-	0.000	MRN	SS	USAF/6MW	Metro	DS1-5860	-	-
1969-H359	2440294.59	1969 Mar 15 02:03:00	Judi-Barr	?	-	0.000	MRN	SS	USAF/6MW	Metro	DS1-5860	-	-
1969-H44	2440299.96	1969 Mar 19 10:57	Judi-Barr	?	-	0.000	MRN	SS	USAF/6MW	Metro	DS1-5860	-	-
1969-H428	2440301.67	1969 Mar 21 03:58:59	Judi-Barr	?	INTA H-6905	0.000	INTA	SS	INTA/	Metro	ELaren	-	-
1969-H453	2440305.64	1969 Mar 25 03:21:59	Judi-Barr	?	-	0.000	MRN	SS	USAF/6MW	Metro	DS1-5860	-	-
1969-H462	2440307.56	1969 Mar 27 01:51:59	Judi-Barr	?	-	0.000	MRN	SS	USAF/6MW	Metro	DS1-5860	-	-
1969-H457	2440306.51	1969 Mar 28 02:21:00	Judi-Barr	?	INTA H-6906	0.000	INTA	SS	INTA/	Metro	ELaren	-	-
1969-H45	2440306.57	1969 Mar 28 01:39	Judi-Barr	?	INTA H-6907	0.000	INTA	SS	INTA/	Metro	ELaren	-	-
1969-H46	2440309.55	1969 Mar 29 01:05	Judi-Barr	?	-	0.000	MRN	SS	USAF/6MW	Metro	DS1-5860	-	-
1969-H470	2440309.55	1969 Mar 29 01:11:59	Judi-Barr	?	-	0.000	MRN	SS	USAF/6MW	Metro	DS1-5860	-	-
1969-H475	2440312.61	1969 Apr 1 06:59:59	Judi-Barr	?	-	0.000	MRN	SS	USAF/6MW	Metro	DS1-5860	-	-
1969-H619	2440321.61	1969 Apr 10 02:40:00	Judi-Barr	?	-	0.000	MRN	SS	USAF/6MW	Metro	DS1-5860	-	-
1969-H634	2440326.14	1969 Apr 13 15:23:59	Judi-Barr	?	-	0.000	MRN	SS	USAF/6MW	Metro	DS1-5860	-	-
1969-H643	2440326.63	1969 Apr 15 03:11:59	Judi-Barr	?	-	0.000	MRN	SS	USAF/6MW	Metro	DS1-5860	-	-
1969-H647	2440327.97	1969 Apr 16 11:53:00	Judi-Barr	?	INTA H-6908	0.000	INTA	SS	INTA/	Metro	DS1-5860	-	-
1969-H694	2440335.60	1969 Apr 24 02:22:00	Judi-Barr	?	-	0.000	MRN	SS	USAF/6MW	Metro	DS1-5860	-	-
1969-H603	2440337.60	1969 Apr 26 02:31:00	Judi-Barr	?	INTA H-6909	0.000	INTA	SS	INTA/	Metro	DS1-5860	-	-
1969-H75	2440341.95	1969 Apr 30 10:44:59	Judi-Barr	?	-	0.000	MRN	SS	USAF/6MW	Metro	DS1-5860	-	-
1969-H661	2440348.15	1969 May 7 14:57:00	Judi-Barr	?	INTA H-6910	0.000	INTA	SS	INTA/	Metro	DS1-5860	-	-
1969-H669	2440349.54	1969 May 8 01:02:59	Judi-Barr	?	-	0.000	MRN	SS	USAF/6MW	Metro	DS1-5860	-	-
1969-H675	2440351.20	1969 May 9 10:49:59	Judi-Barr	?	-	0.000	MRN	SS	USAF/6MW	Metro	DS1-5860	-	-
1969-H677	2440351.25	1969 May 9 10:49:59	Judi-Barr	?	-	0.000	MRN	SS	USAF/6MW	Metro	DS1-5860	-	-
1969-H690	2440351.62	1969 May 10 02:55:00	Judi-Barr	?	INTA H-6911	0.000	INTA	SS	INTA/	Metro	DS1-5860	-	-
1969-H693	2440351.20	1969 May 12 16:46:59	Judi-Barr	?	-	0.000	MRN	SS	USAF/6MW	Metro	DS1-5860	-	-
1969-H693	2440351.17	1969 May 13 16:02:59	Judi-Barr	?	-	0.000	MRN	SS	USAF/6MW	Metro	DS1-5860	-	-
1969-H701	2440356.17	1969 May 14 16:16:59	Judi-Barr	?	-	0.000	MRN	SS	USAF/6MW	Metro	DS1-5860	-	-
1969-H704	2440358.95	1969 May 14 16:16:59	Judi-Barr	?	-	0.000	MRN	SS	USAF/6MW	Metro	DS1-5860	-	-
1969-H720	2440360.36	1969 May 19 19:21	Judi-Barr	?	INTA H-6912	0.000	INTA	SS	INTA/	Metro	DS1-5860	-	-
1969-H762	2440363.51	1969 May 22 01:10:59	Judi-Barr	?	-	0.000	MRN	SS	USAF/6MW	Metro	DS1-5860	-	-
1969-H752	2440365.55	1969 May 23 18:56:59	Judi-Barr	?	-	0.000	MRN	SS	USAF/6MW	Metro	DS1-5860	-	-
1969-H764	2440368.29	1969 May 27 09:53:00	Judi-Barr	?	-	0.000	MRN	SS	USAF/6MW	Metro	DS1-5860	-	-
1969-H753	2440372.33	1969 May 30 19:56:59	Judi-Barr	?	-	0.000	MRN	SS	USAF/6MW	Metro	DS1-5860	-	-
1969-H794	2440377.50	1969 Jun 4 16:44:59	Judi-Barr	?	-	0.000	MRN	SS	USAF/6MW	Metro	DS1-5860	-	-
1969-H803	2440379.20	1969 Jun 6 17:13:00	Judi-Barr	?	-	0.000	MRN	SS	USAF/6MW	Metro	DS1-5860	-	-
1969-H816	2440383.72	1969 Jun 11 05:20:00	Judi-Barr	?	TEHLS-110	0.000	TEHLS	SS	PRL/Pisharoty	Metro	DS1-5860	-	-
1969-H823	2440384.21	1969 Jun 11 16:46:59	Judi-Barr	?	-	0.000	MRN	SS	USAF/6MW	Metro	DS1-5860	-	-
1969-H843	2440391.10	1969 Jun 18 16:49:59	Judi-Barr	?	-	0.000	MRN	SS	USAF/6MW	Metro	DS1-5860	-	-
1969-H855	2440393.10	1969 Jun 20 14:30:00	Judi-Barr	?	SUPARCO	0.000	SUPA	SS	USAF/6MW	Metro	DS1-5860	-	-
1969-H895	2440397.76	1969 Jun 25 08:12	Judi-Barr	?	TEHLS-115	0.000	TEHLS	SS	PRL/Pisharoty	Metro	DS1-5860	-	-
1969-H901	2440400.20	1969 Jun 27 16:54:59	Judi-Barr	?	-	0.000	MRN	SS	USAF/6MW	Metro	DS1-5860	-	-
1969-H922	2440405.20	1969 Jul 2 16:45:59	Judi-Barr	?	-	0.000	MRN	SS	USAF/6MW	Metro	DS1-5860	-	-
1969-H943	2440412.26	1969 Jul 9 18:18:00	Judi-Barr	?	-	0.000	MRN	SS	USAF/6MW	Metro	DS1-5860	-	-
1969-H953	2440417.10	1969 Jul 14 14:31:00	Judi-Barr	?	-	0.000	MRN	SS	USAF/6MW	Metro	DS1-5860	-	-
1969-H956	2440417.16	1969 Jul 14 15:45:00	Judi-Barr	?	-	0.000	MRN	SS	USAF/6MW	Metro	DS1-5860	-	-
1969-H965	2440418.73	1969 Jul 16 05:30	Judi-Barr	?	TEHLS-116	0.000	TEHLS	SS	PRL/Pisharoty	Metro	DS1-5860	-	-
1969-H968	2440419.11	1969 Jul 16 14:34:00	Judi-Barr	?	SUPARCO	0.000	SUPA	SS	USAF/6MW	Metro	DS1-5860	-	-
1969-H968	2440419.13	1969 Jul 16 15:11:59	Judi-Barr	?	-	0.000	MRN	SS	USAF/6MW	Metro	DS1-5860	-	-
1969-H971	2440419.20	1969 Jul 16 16:45:59	Judi-Barr	?	-	0.000	MRN	SS	USAF/6MW	Metro	DS1-5860	-	-
1969-H989	2440425.74	1969 Jul 23 05:50	Judi-Barr	?	TEHLS-117	0.000	TEHLS	SS	PRL/Pisharoty	Metro	DS1-5860	-	-
1969-H1011	2440428.23	1969 Jul 25 17:33:00	Judi-Barr	?	-	0.000	MRN	SS	USAF/6MW	Metro	DS1-5860	-	-
1969-H1022	2440433.21	1969 Jul 30 15:45:00	Judi-Barr	?	ISRD 11_34	0.000	ISRD	SS	USAF/6MW	Metro	DS1-5860	-	-
1969-H1025	2440433.11	1969 Jul 30 16:58:59	Judi-Barr	?	SUPARCO	0.000	SUPA	SS	USAF/6MW	Metro	DS1-5860	-	-
1969-H1035	2440435.28	1969 Aug 1 18:37:59	Judi-Barr	?	-	0.000	MRN	SS	USAF/6MW	Metro	DS1-5860	-	-
1969-H1056	2440440.70	1969 Aug 6 05:50	Judi-Barr	?	ISRD 11_35	0.000	ISRD	SS	USAF/6MW	Metro	DS1-5860	-	-
1969-H1079	2440447.33	1969 Aug 7 04:46:59	Judi-Barr	?	-	0.000	MRN	SS	USAF/6MW	Metro	DS1-5860	-	-
1969-H1083	2440449.10	1969 Aug 13 19:56:59	Judi-Barr	?	-	0.000	MRN	SS	USAF/6MW	Metro	DS1-5860	-	-
1969-H1086	2440449.20	1969 Aug 15 14:30:00	Judi-Barr	?	-	0.000	MRN	SS	USAF/6MW	Metro	DS1-5860	-	-
1969-H1096	2440462.20	1969 Aug 18 16:49:59	Judi-Barr	?	-	0.000	MRN	SS	USAF/6MW	Metro	DS1-5860	-	-
1969-H1105	2440463.96	1969 Aug 20 10:57	Judi-Barr	?	ISRD 11_36	0.000	ISRD	SS	USAF/6MW	Metro	DS1-5860	-	-
1969-H1127	2440466.36	1969 Aug 22 20:41:00	Judi-Barr	?	-	0.000	MRN	SS	USAF/6MW	Metro	DS1-5860	-	-
1969-H1130	2440466.20	1969 Aug 25 16:41:00	Judi-Barr	?	-	0.000	MRN	SS	USAF/6MW	Metro	DS1-5860	-	-
1969-H1148	2440461.22	1969 Aug 27 17:15:00	Judi-Barr	?	-	0.000	MRN	SS	USAF/6MW	Metro	DS1-5860	-	-
1969-H1159	2440463.20	1969 Aug 29 16:54:59	Judi-Barr	?	-	0.000	MRN	SS	USAF/6MW	Metro	DS1-5860	-	-



Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	DrbPay	Agency	Launch_Code	Group	Category	LTCite	Cite	Notes
1969-H163	2440464.50	1969 Sep	Judi-Bart	-	-	0.000	MRU	SU	USAE/	Metro	FC	-	-
1969-H164	2440464.50	1969 Sep	Judi-Bart	-	-	0.000	MRU	SU	USAE/	Metro	FC	-	-
1969-H165	2440464.50	1969 Sep	Judi-Bart	-	-	0.000	MRU	SU	USAE/	Metro	FC	-	-
1969-H174	2440468.20	1969 Sep 10 1649:59	Judi-Bart	-	-	0.000	MRU	SS	USAE/	Metro	DSI-5860	-	-
1969-H1210	2440476.10	1969 Sep 10 1430:00	Judi-Bart	?	SUPARCO	0.000	SUPA	SS	SUPA/Rahmatullah	Aeron	WDRF	-	-
1969-H1216	2440476.59	1969 Sep 11 0215:00	Judi-Bart	-	-	0.000	MRU	SS	USAE/	Metro	DSI-5860	-	-
1969-H1221	2440476.56	1969 Sep 12 0124:59	Judi-Bart	-	-	0.000	MRU	SS	USAE/	Metro	DSI-5860	-	-
1969-H1229	2440477.26	1969 Sep 12 1818:00	Judi-Bart	-	-	0.000	MRU	SS	USAE/	Metro	DSI-5860	-	-
1969-H1241	2440480.20	1969 Sep 12 1654:59	Judi-Bart	-	-	0.000	MRU	SS	USAE/	Metro	DSI-5860	-	-
1969-H1255	2440482.20	1969 Sep 17 1649:59	Judi-Bart	-	-	0.000	MRU	SS	USAE/	Metro	DSI-5860	-	-
1969-H1272	2440482.20	1969 Sep 17 1653:59	Judi-Bart	-	-	0.000	MRU	SS	USAE/	Metro	DSI-5860	-	-
1969-H1284	2440487.27	1969 Sep 22 1834:59	Judi-Bart	-	-	0.000	MRU	SS	USAE/	Metro	DSI-5860	-	-
1969-H1299	2440489.21	1969 Sep 24 1703:00	Judi-Bart	-	-	0.000	MRU	SS	USAE/	Metro	DSI-5860	-	-
1969-H1320	2440494.20	1969 Sep 29 1651:00	Judi-Bart	-	-	0.000	MRU	SS	USAE/	Metro	DSI-5860	-	-
1969-H1326	2440494.50	1969 Oct	Judi-Bart	-	-	0.000	MRU	SS	USAE/	Metro	FC	-	-
1969-H1332	2440496.20	1969 Oct 1 1647:59	Judi-Bart	-	-	0.000	MRU	SS	USAE/	Metro	DSI-5860	-	-
1969-H1359	2440503.20	1969 Oct 8 1651:00	Judi-Bart	-	-	0.000	MRU	SS	USAE/	Metro	DSI-5860	-	-
1969-H1377	2440505.54	1969 Oct 11 0053:00	Judi-Bart	-	-	0.000	MRU	SS	USAE/	Metro	DSI-5860	-	-
1969-H1390	2440509.95	1969 Oct 16 0327:59	Judi-Bart	-	-	0.000	MRU	SS	USAE/	Metro	DSI-5860	-	-
1969-H1401	2440510.64	1969 Oct 16 0327:59	Judi-Bart	-	-	0.000	MRU	SS	USAE/	Metro	DSI-5860	-	-
1969-H1418	2440512.56	1969 Oct 18 0154:59	Judi-Bart	-	-	0.000	MRU	SS	USAE/	Metro	DSI-5860	-	-
1969-H1423	2440515.64	1969 Oct 21 0322:00	Judi-Bart	-	-	0.000	MRU	SS	USAE/	Metro	DSI-5860	-	-
1969-H1429	2440517.09	1969 Oct 22 1410:00	Judi-Bart	?	SUPARCO-047/69	0.000	SUPA	SU	SUPA/Rahmatullah	Aeron	WDRF	-	-
1969-H1437	2440517.61	1969 Oct 23 0246:00	Judi-Bart	-	-	0.000	MRU	SS	USAE/	Metro	DSI-5860	-	-
1969-H1443	2440519.25	1969 Oct 24 1900:00	Judi-Bart	-	-	0.000	MRU	SS	USAE/	Metro	DSI-5860	-	-
1969-H1460	2440522.24	1969 Oct 27 1751:00	Judi-Bart	-	-	0.000	MRU	SS	USAE/	Metro	DSI-5860	-	-
1969-H1466	2440524.24	1969 Oct 29 1749:59	Judi-Bart	-	-	0.000	MRU	SS	USAE/	Metro	DSI-5860	-	-
1969-H1477	2440527.50	1969 Nov 2	Judi-Bart	-	-	0.000	MRU	SS	USAE/	Metro	DSI-5860	-	-
1969-H1478	2440528.70	1969 Nov 3 0454:59	Judi-Bart	-	-	0.000	MRU	SS	USAE/	Metro	DSI-5860	-	-
1969-H1463	2440528.05	1969 Nov 3 1310:59	Judi-Bart	-	-	0.000	MRU	SS	USAE/	Metro	DSI-5860	-	-
1969-H1490	2440528.59	1969 Nov 3 1901:59	Judi-Bart	-	-	0.000	MRU	SS	USAE/	Metro	DSI-5860	-	-
1969-H1491	2440529.40	1969 Nov 3 2130:00	Judi-Bart	-	-	0.000	MRU	SS	USAE/	Metro	DSI-5860	-	-
1969-H1505	2440531.31	1969 Nov 5 1927:59	Judi-Bart	-	-	0.000	MRU	SS	USAE/	Metro	DSI-5860	-	-
1969-H1510	2440532.63	1969 Nov 9 0309:00	Judi-Bart	-	-	0.000	MRU	SS	USAE/	Metro	DSI-5860	-	-
1969-H1521	2440537.97	1969 Nov 12 1120:00	Judi-Bart	-	-	0.000	MRU	SS	USAE/	Metro	DSI-5860	-	-
1969-H1529	2440538.70	1969 Nov 13 0449:59	Judi-Bart	-	-	0.000	MRU	SS	USAE/	Metro	DSI-5860	-	-
1969-H1537	2440538.66	1969 Nov 15 0423:59	Judi-Bart	-	-	0.000	MRU	SS	USAE/	Metro	DSI-5860	-	-
1969-H1543	2440543.24	1969 Nov 16 1747:00	Judi-Bart	-	-	0.000	MRU	SS	USAE/	Metro	DSI-5860	-	-
1969-H1562	2440544.24	1969 Nov 16 1751:00	Judi-Bart	-	-	0.000	MRU	SS	USAE/	Metro	DSI-5860	-	-
1969-H1569	2440546.24	1969 Nov 19 1746:59	Judi-Bart	-	-	0.000	MRU	SS	USAE/	Metro	DSI-5860	-	-
1969-H1576	2440550.24	1969 Nov 19 1747:00	Judi-Bart	-	-	0.000	MRU	SS	USAE/	Metro	DSI-5860	-	-
1969-H1578	2440551.24	1969 Nov 26 1747:00	Judi-Bart	-	-	0.000	MRU	SS	USAE/	Metro	DSI-5860	-	-
1969-H1589	2440552.96	1969 Nov 26 1703:59	Judi-Bart	-	-	0.000	MRU	SS	USAE/	Metro	DSI-5860	-	-
1969-H1589	2440552.24	1969 Nov 27 1744:00	Judi-Bart	-	-	0.000	MRU	SS	USAE/	Metro	DSI-5860	-	-
1969-H1593	2440554.11	1969 Nov 19 1435:00	Judi-Bart	-	-	0.000	MRU	SS	USAE/	Metro	DSI-5860	-	-
1969-H1593	2440548.26	1969 Nov 20 1305:00	Judi-Bart	?	SUPARCO-048/69	0.000	SUPA	SU	SUPA/Rahmatullah	Aeron	WDRF	-	-
1969-H1608	2440549.10	1969 Dec 4 1737:00	Judi-Bart	?	SUPARCO-049/69	0.000	SUPA	SU	SUPA/Rahmatullah	Aeron	WDRF	-	-
1969-H1621	2440560.22	1969 Dec 4 1719:00	Judi-Bart	-	-	0.000	MRU	SS	USAE/	Metro	DSI-5860	-	-
1969-H1627	2440561.22	1969 Dec 5 1800:00	Judi-Bart	-	-	0.000	MRU	SS	USAE/	Metro	DSI-5860	-	-
1969-H1643	2440561.25	1969 Dec 10 0046:59	Judi-Bart	-	-	0.000	MRU	SS	USAE/	Metro	DSI-5860	-	-
1969-H1643	2440566.55	1969 Dec 10 0046:59	Judi-Bart	-	-	0.000	MRU	SS	USAE/	Metro	DSI-5860	-	-
1969-H1643	2440566.06	1969 Dec 11 0103:59	Judi-Bart	-	-	0.000	MRU	SS	USAE/	Metro	DSI-5860	-	-
1969-H1651	2440567.54	1969 Dec 12 0233:00	Judi-Bart	-	-	0.000	MRU	SS	USAE/	Metro	DSI-5860	-	-
1969-H1657	2440568.55	1969 Dec 13 0203:00	Judi-Bart	-	-	0.000	MRU	SS	USAE/	Metro	DSI-5860	-	-
1969-H1667	2440569.55	1969 Dec 15 1753:00	Judi-Bart	-	-	0.000	MRU	SS	USAE/	Metro	DSI-5860	-	-
1969-H1674	2440571.25	1969 Dec 16 1748:00	Judi-Bart	-	-	0.000	MRU	SS	USAE/	Metro	DSI-5860	-	-
1969-H1682	2440572.05	1969 Dec 17 1310:00	Judi-Bart	-	-	0.000	MRU	SS	USAE/	Metro	DSI-5860	-	-
1969-H1686	2440573.05	1969 Dec 17 1756:00	Judi-Bart	-	-	0.000	MRU	SS	USAE/	Metro	DSI-5860	-	-
1969-H1691	2440574.25	1969 Dec 18 1747:00	Judi-Bart	-	-	0.000	MRU	SS	USAE/	Metro	DSI-5860	-	-
1969-H1705	2440574.24	1969 Dec 19 1747:00	Judi-Bart	-	-	0.000	MRU	SS	USAE/	Metro	DSI-5860	-	-
1969-H1738	2440587.05	1969 Dec 31 1315:00	Judi-Bart	?	SUPARCO-051/69	0.000	SUPA	SU	SUPA/Rahmatullah	Aeron	WDRF	-	-
1970-H06	2440586.50	1970 Jan	Judi-Bart	-	-	0.000	MRU	SU	-	Metro	FC	-	-
1970-H07	2440586.50	1970 Jan	Judi-Bart	-	-	0.000	MRU	SU	-	Metro	FC	-	-
1970-H08	2440586.50	1970 Jan	Judi-Bart	-	-	0.000	MRU	SU	-	Metro	FC	-	-
1970-H09	2440586.50	1970 Jan	Judi-Bart	-	-	0.000	MRU	SU	-	Metro	FC	-	-
1970-H10	2440586.50	1970 Jan	Judi-Bart	-	-	0.000	MRU	SU	-	Metro	FC	-	-
1970-H11	2440586.50	1970 Jan	Judi-Bart	-	-	0.000	MRU	SU	-	Metro	FC	-	-
1970-H12	2440586.50	1970 Jan	Judi-Bart	-	-	0.000	MRU	SU	-	Metro	FC	-	-
1970-H12	2440586.50	1970 Jan 2 1812:59	Judi-Bart	-	-	0.000	MRU	SU	USAE/	Metro	DSI-5860	-	-
1970-H02	2440589.26	1970 Jan 2 2015:59	Judi-Bart	-	-	0.000	MRU	SS	USAE/	Metro	DSI-5860	-	-
1970-H23	2440589.34	1970 Jan 3 0600:00	Judi-Bart	-	-	0.000	MRU	SS	USAE/	Metro	DSI-5860	-	-
1970-H23	2440589.75	1970 Jan 3 0633:59	Judi-Bart	-	-	0.000	MRU	SS	USAE/	Metro	DSI-5860	-	-
1970-H24	2440589.77	1970 Jan 3 0633:59	Judi-Bart	-	-	0.000	MRU	SS	USAE/	Metro	DSI-5860	-	-
1970-H25	2440590.25	1970 Jan 3 1800:00	Judi-Bart	-	-	0.000	MRU	SS	USAE/	Metro	DSI-5860	-	-
1970-H28	2440590.75	1970 Jan 4 0602:59	Judi-Bart	-	-	0.000	MRU	SS	USAE/	Metro	DSI-5860	-	-
1970-H29	2440591.25	1970 Jan 4 1802:59	Judi-Bart	-	-	0.000	MRU	SS	USAE/	Metro	DSI-5860	-	-
1970-H33	2440591.75	1970 Jan 5 1534:59	Judi-Bart	-	-	0.000	MRU	SS	USAE/	Metro	DSI-5860	-	-
1970-H37	2440591.75	1970 Jan 5 0600:59	Judi-Bart	-	-	0.000	MRU	SS	USAE/	Metro	DSI-5860	-	-
1970-H39	2440592.24	1970 Jan 5 1748:59	Judi-Bart	-	-	0.000	MRU	SS	USAE/	Metro	DSI-5860	-	-
1970-H43	2440592.42	1970 Jan 5 2200:59	Judi-Bart	-	-	0.000	MRU	SS	USAE/	Metro	DSI-5860	-	-
1970-H45	2440592.75	1970 Jan 6 0600:59	Judi-Bart	-	-	0.000	MRU	SS	USAE/	Metro	DSI-5860	-	-
1970-H49	2440593.68	1970 Jan 7 0417:00	Judi-Bart	-	-	0.000	MRU	SS	USAE/	Metro	DSI-5860	-	-
1970-H58	2440594.46	1970 Jan 7 2303:00	Judi-Bart	-	-	0.000	MRU	SS	USAE/	Metro	DSI-5860	-	-
1970-H71	2440596.99	1970 Jan 10 1140:00	Judi-Bart	-	-	0.000	MRU	SS	USAE/	Metro	DSI-5860	-	-
1970-H81	2440600.58	1970 Jan 14 0155:59	Judi-Bart	-	-	0.000	MRU	SS	USAE/	Metro	DSI-5860	-	-
1970-H82	2440600.98	1970 Jan 14 1135:00	Judi-Bart	-	-	0.000	MRU	SS	USAE/	Metro	DSI-5860	-	-





Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	OrbPay	Agency	Launch_Code	Group	Category	LTCite	Cite	Notes
1971-1415	2440978-30	1971 Jan 26 19:18:59	Judi-Barr	-	-	0.000	MRU	SS	USAE/	Metro	DSI-5860	-	-
1971-14152	2440979-18	1971 Jan 27 16:22:59	Judi-Barr	-	-	0.000	MRU	SS	USAE/	Metro	DSI-5860	-	-
1971-14151	2440984-19	1971 Feb 1 16:36:59	Judi-Barr	-	-	0.000	MRU	SS	USAE/	Metro	DSI-5860	-	-
1971-14198	2440986-16	1971 Feb 3 15:48:59	Judi-Barr	-	-	0.000	MRU	SS	USAE/	Metro	DSI-5860	-	-
1971-14221	2440988-48	1971 Feb 5 23:26:59	Judi-Barr	-	-	0.000	MRU	SS	USAE/	Metro	DSI-5860	-	-
1971-14228	2440991-34	1971 Feb 8 20:13:00	Judi-Barr	-	-	0.000	MRU	SS	USAE/	Metro	DSI-5860	-	-
1971-14285	2440993-25	1971 Feb 10 18:01:59	Judi-Barr	-	-	0.000	MRU	SS	USAE/	Metro	DSI-5860	-	-
1971-14299	2440993-50	1971 Feb 11	Loki Barr	HASP	-	0.000	WRE	SS	CBRET/	Aeron	Ulrich/FDC	-	-
1971-14350	2440993-50	1971 Feb 11	Loki Barr	HASP	-	0.000	WRE	SS	CBRET/	Aeron	Ulrich/FDC	-	-
1971-14250	2440994-16	1971 Feb 11 16:55:00	Judi-Barr	-	-	0.000	MRU	SS	USAE/	Metro	DSI-5860	-	-
1971-14257	2440994-16	1971 Feb 12 16:24:59	Judi-Barr	-	-	0.000	MRU	SS	USAE/	Metro	DSI-5860	-	-
1971-14263	2440996-51	1971 Feb 16 00:19:00	Judi-Barr	-	-	0.000	MRU	SS	USAE/	Metro	DSI-5860	-	-
1971-14266	2440999-53	1971 Feb 17 00:41:00	Judi-Barr	-	-	0.000	MRU	SS	USAE/	Metro	DSI-5860	-	-
1971-14269	2441000-12	1971 Feb 17 15:00:00	Judi-Barr	-	-	0.000	MRU	SS	USAE/	Metro	DSI-5860	-	-
1971-14286	2441002-70	1971 Feb 20 04:46:59	Judi-Barr	-	-	0.000	MRU	SS	USAE/	Metro	DSI-5860	-	-
1971-1419	2441006-96	1971 Feb 24 11:30	Judi-Barr	-	-	0.000	MRU	SS	USAE/	Metro	DSI-5860	-	-
1971-14297	2441007-02	1971 Feb 24 12:22:59	Judi-Barr	-	-	0.000	MRU	SS	USAE/	Metro	DSI-5860	-	-
1971-14297	2441007-02	1971 Feb 24 12:22:59	Judi-Barr	-	-	0.000	MRU	SS	USAE/	Metro	DSI-5860	-	-
1971-14327	2441013-96	1971 Mar 3 11:31:00	Judi-Barr	-	-	0.000	MRU	SS	USAE/	Metro	DSI-5860	-	-
1971-14331	2441014-25	1971 Mar 3 18:07:00	Judi-Barr	-	-	0.000	MRU	SS	USAE/	Metro	DSI-5860	-	-
1971-14335	2441016-15	1971 Mar 4 15:42:00	Judi-Barr	-	-	0.000	MRU	SS	USAE/	Metro	DSI-5860	-	-
1971-14343	2441016-27	1971 Mar 5 18:25:59	Judi-Barr	-	-	0.000	MRU	SS	USAE/	Metro	DSI-5860	-	-
1971-14356	2441019-61	1971 Mar 9 02:44:00	Judi-Barr	-	-	0.000	MRU	SS	USAE/	Metro	DSI-5860	-	-
1971-14359	2441020-59	1971 Mar 10 02:06:00	Judi-Barr	-	-	0.000	MRU	SS	USAE/	Metro	DSI-5860	-	-
1971-1420	2441020-96	1971 Mar 10 11:35	Judi-Barr	-	-	0.000	MRU	SS	USAE/	Metro	DSI-5860	-	-
1971-14173	2441027-50	1971 Mar 17 11:30:00	Loki Barr	-	-	0.000	WRE	SS	USAE/	Metro	FDC	-	-
1971-14582	2441032-62	1971 Mar 23 02:51:00	Judi-Barr	-	-	0.000	MRU	SS	USAE/	Metro	DSI-5860	-	-
1971-14404	2441034-50	1971 Mar 24	Judi-Barr	-	-	0.000	MRU	SS	USAE/	Metro	DSI-5860	-	-
1971-14174	2441034-63	1971 Mar 24 03:00:59	Loki Barr	-	-	0.000	MRU	SS	USAE/	Metro	DSI-5860	-	-
1971-14405	2441035-00	1971 Mar 24 12:00:00	Judi-Barr	-	-	0.000	MRU	SS	USAE/	Metro	DSI-5860	-	-
1971-14406	2441035-00	1971 Mar 24 12:00:00	Judi-Barr	-	-	0.000	MRU	SS	USAE/	Metro	DSI-5860	-	-
1971-14415	2441036-25	1971 Mar 25 18:00:00	Judi-Barr	-	-	0.000	MRU	SS	USAE/	Metro	DSI-5860	-	-
1971-14422	2441037-31	1971 Mar 26 19:27:59	Judi-Barr	-	-	0.000	MRU	SS	USAE/	Metro	DSI-5860	-	-
1971-14427	2441040-25	1971 Mar 29 17:57:00	Judi-Barr	-	-	0.000	MRU	SS	USAE/	Metro	DSI-5860	-	-
1971-14438	2441044-25	1971 Apr 1 18:03:59	Judi-Barr	-	-	0.000	MRU	SS	USAE/	Metro	DSI-5860	-	-
1971-14448	2441044-25	1971 Apr 2 15:46:59	Judi-Barr	-	-	0.000	MRU	SS	USAE/	Metro	DSI-5860	-	-
1971-14462	2441047-16	1971 Apr 5 12:07:00	Loki Barr	-	-	0.000	MRU	SS	USAE/	Metro	DSI-5860	-	-
1971-14471	2441048-00	1971 Apr 14 13:40	Judi-Barr	-	-	0.000	MRU	SS	USAE/	Metro	DSI-5860	-	-
1971-1421	2441066-07	1971 Apr 14 16:13:59	Judi-Barr	-	-	0.000	MRU	SS	USAE/	Metro	DSI-5860	-	-
1971-14609	2441066-18	1971 Apr 14 16:13:59	Judi-Barr	-	-	0.000	MRU	SS	USAE/	Metro	DSI-5860	-	-
1971-14622	2441068-16	1971 Apr 16 19:45:59	Judi-Barr	-	-	0.000	MRU	SS	USAE/	Metro	DSI-5860	-	-
1971-14636	2441068-25	1971 Apr 16 17:57:00	Judi-Barr	-	-	0.000	MRU	SS	USAE/	Metro	DSI-5860	-	-
1971-14651	2441068-26	1971 Apr 23 16:59:00	Judi-Barr	-	-	0.000	MRU	SS	USAE/	Metro	DSI-5860	-	-
1971-14571	2441068-37	1971 Apr 26 20:59:00	Judi-Barr	-	-	0.000	MRU	SS	USAE/	Metro	DSI-5860	-	-
1971-14656	2441069-96	1971 Apr 28 11:35	Loki Barr	-	-	0.000	MRU	SS	USAE/	Metro	DSI-5860	-	-
1971-14652	2441072-22	1971 Apr 28 17:17:00	Judi-Barr	-	-	0.000	MRU	SS	USAE/	Metro	DSI-5860	-	-
1971-14671	2441074-11	1971 Apr 30 14:45:00	Judi-Barr	-	-	0.000	MRU	SS	USAE/	Metro	DSI-5860	-	-
1971-14659	2441075-10	1971 May 3 14:59:00	Judi-Barr	-	-	0.000	MRU	SS	USAE/	Metro	DSI-5860	-	-
1971-14669	2441076-12	1971 May 3 14:59:00	Judi-Barr	-	-	0.000	MRU	SS	USAE/	Metro	DSI-5860	-	-
1971-14619	2441076-96	1971 May 5 11:31:00	Loki Barr	-	-	0.000	MRU	SS	USAE/	Metro	DSI-5860	-	-
1971-14634	2441078-12	1971 May 7 14:55:00	Judi-Barr	-	-	0.000	MRU	SS	USAE/	Metro	DSI-5860	-	-
1971-14652	2441082-11	1971 May 10 14:56:00	Judi-Barr	-	-	0.000	MRU	SS	USAE/	Metro	DSI-5860	-	-
1971-14623	2441082-12	1971 May 10 14:56:00	Judi-Barr	-	-	0.000	MRU	SS	USAE/	Metro	DSI-5860	-	-
1971-14622	2441083-96	1971 May 12 13:19	Loki Barr	-	-	0.000	MRU	SS	USAE/	Metro	DSI-5860	-	-
1971-14656	2441084-12	1971 May 12 14:57:00	Judi-Barr	-	-	0.000	MRU	SS	USAE/	Metro	DSI-5860	-	-
1971-14671	2441086-11	1971 May 14 15:45:00	Judi-Barr	-	-	0.000	MRU	SS	USAE/	Metro	DSI-5860	-	-
1971-14686	2441089-07	1971 May 17 16:54:59	Judi-Barr	-	-	0.000	MRU	SS	USAE/	Metro	DSI-5860	-	-
1971-14694	2441090-97	1971 May 19 11:15:00	Loki Barr	-	-	0.000	MRU	SS	USAE/	Metro	DSI-5860	-	-
1971-14699	2441091-13	1971 May 19 15:09:00	Judi-Barr	-	-	0.000	MRU	SS	USAE/	Metro	DSI-5860	-	-
1971-14723	2441097-98	1971 May 26 11:31	Loki Barr	-	-	0.000	MRU	SS	USAE/	Metro	DSI-5860	-	-
1971-14752	2441100-21	1971 May 26 17:09:00	Judi-Barr	-	-	0.000	MRU	SS	USAE/	Metro	DSI-5860	-	-
1971-14757	2441103-28	1971 May 28 13:38:59	Judi-Barr	-	-	0.000	MRU	SS	USAE/	Metro	DSI-5860	-	-
1971-14756	2441103-28	1971 May 31 18:36:59	Judi-Barr	-	-	0.000	MRU	SS	USAE/	Metro	DSI-5860	-	-
1971-14631	2441104-50	1971 Jun 2	Loki Barr	-	-	0.000	MRU	SS	USAE/	Metro	DSI-5860	-	-
1971-14632	2441104-50	1971 Jun 2	Loki Barr	-	-	0.000	MRU	SS	USAE/	Metro	DSI-5860	-	-
1971-14767	2441105-13	1971 Jun 2 15:09:00	Judi-Barr	-	-	0.000	MRU	SS	USAE/	Metro	DSI-5860	-	-
1971-14603	2441112-13	1971 Jun 9 15:13:59	Judi-Barr	-	-	0.000	MRU	SS	USAE/	Metro	DSI-5860	-	-
1971-14631	2441118-99	1971 Jun 16 11:42:00	Loki Barr	-	-	0.000	MRU	SS	USAE/	Metro	DSI-5860	-	-
1971-14633	2441123-50	1971 Jun 21	Loki Barr	-	-	0.000	MRU	SS	USAE/	Metro	DSI-5860	-	-
1971-14175	2441123-50	1971 Jun 21	Loki Barr	-	-	0.000	MRU	SS	USAE/	Metro	DSI-5860	-	-
1971-14662	2441126-22	1971 Jun 23 17:22:00	Judi-Barr	-	-	0.000	MRU	SS	USAE/	Metro	DSI-5860	-	-
1971-14656	2441127-16	1971 Jun 24 15:56:59	Judi-Barr	-	-	0.000	MRU	SS	USAE/	Metro	DSI-5860	-	-
1971-1424	2441132-98	1971 Jun 30 11:34	Loki Barr	-	-	0.000	MRU	SS	USAE/	Metro	DSI-5860	-	-
1971-14684	2441134-17	1971 Jun 30 14:48:00	Judi-Barr	-	-	0.000	MRU	SS	USAE/	Metro	DSI-5860	-	-
1971-14695	2441134-17	1971 Jul 1 16:04:59	Loki Barr	-	-	0.000	MRU	SS	USAE/	Metro	DSI-5860	-	-
1971-14699	2441135-16	1971 Jul 2 15:45:00	Judi-Barr	-	-	0.000	MRU	SS	USAE/	Metro	DSI-5860	-	-
1971-14692	2441139-98	1971 Jul 7 11:37:59	Loki Barr	-	-	0.000	MRU	SS	USAE/	Metro	DSI-5860	-	-
1971-14911	2441140-14	1971 Jul 7 15:20:00	Judi-Barr	-	-	0.000	MRU	SS	USAE/	Metro	DSI-5860	-	-
1971-14928	2441145-15	1971 Jul 12 15:34:59	Judi-Barr	-	-	0.000	MRU	SS	USAE/	Metro	DSI-5860	-	-
1971-14176	2441146-50	1971 Jul 14	Loki Barr	-	-	0.000	MRU	SS	USAE/	Metro	DSI-5860	-	-
1971-14943	2441148-18	1971 Jul 15 16:14:59	Loki Barr	-	-	0.000	MRU	SS	USAE/	Metro	DSI-5860	-	-
1971-14961	2441152-32	1971 Jul 19 18:35:59	Judi-Barr	-	-	0.000	MRU	SS	USAE/	Metro	DSI-5860	-	-
1971-14925	2441153-98	1971 Jul 21 11:35	Loki Barr	-	-	0.000	MRU	SS	USAE/	Metro	DSI-5860	-	-
1971-14971	2441154-14	1971 Jul 21 15:23:59	Judi-Barr	-	-	0.000	MRU	SS	USAE/	Metro	DSI-5860	-	-
1971-14934	2441159-50	1971 Jul 27	Loki Barr	-	-	0.000	MRU	SS	USAE/	Metro	DSI-5860	-	-
1971-141009	2441161-13	1971 Jul 28 15:00:59	Judi-Barr	-	-	0.000	MRU	SS	USAE/	Metro	DSI-5860	-	-
1971-141014	2441161-21	1971 Jul 28 17:04:59	Loki Barr	-	-	0.000	MRU	SS	USAE/	Metro	DSI-5860	-	-

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	DrbPay	Agency	Launch_Code	Group	Category	LTCite	Cite	Notes
1971-A64	2441163.50	1971 Aug	Judi-Barr	-	-	0.000	MRN	SU	USAF/GNW	Metro	FC	-	-
1971-H1029	2441163.50	1971 Aug	Judi-Barr	-	-	0.000	MRN	SU	USAF/GNW	Metro	FC	-	-
1971-H1030	2441163.50	1971 Aug	Judi-Barr	-	-	0.000	MRN	SU	USAF/GNW	Metro	FC	-	-
1971-H35	2441166.50	1971 Aug 3	Loki Barr	-	HASP	0.000	WRE	SS	WRE/	Metro	FDC/Ulrich	-	-
1971-H1049	2441168.14	1971 Aug 6 1446:00	Judi-Barr	-	-	0.000	MRN	SS	USAF/	Metro	DSI-5850	-	-
1971-H1063	2441170.12	1971 Aug 6 1446:00	Judi-Barr	-	-	0.000	MRN	SS	USAF/	Metro	DSI-5850	-	-
1971-H1084	2441175.14	1971 Aug 11 1517:00	Judi-Barr	-	-	0.000	MRN	SS	USAF/	Metro	DSI-5850	-	-
1971-H1147	2441187.12	1971 Aug 23 1447:00	Judi-Barr	-	-	0.000	MRN	SS	USAF/	Metro	DSI-5850	-	-
1971-H1161	2441189.13	1971 Aug 25 1447:00	Judi-Barr	-	-	0.000	MRN	SS	USAF/	Metro	DSI-5850	-	-
1971-H1172	2441191.12	1971 Aug 28 1456:00	Judi-Barr	-	-	0.000	MRN	SS	USAF/	Metro	DSI-5850	-	-
1971-H1182	2441194.13	1971 Aug 30 1504:59	Judi-Barr	-	-	0.000	MRN	SS	USAF/	Metro	DSI-5850	-	-
1971-H1190	2441196.14	1971 Aug 31 1527:59	Judi-Barr	-	-	0.000	MRN	SS	USAF/	Metro	DSI-5850	-	-
1971-H173	2441194.50	1971 Sep	Judi-Barr	-	-	0.000	MRN	SF	USAF/	Metro	FC	-	-
1971-H1187	2441194.50	1971 Sep	Judi-Barr	-	-	0.000	MRN	SU	USAF/GNW	Metro	FC	-	-
1971-H1200	2441196.12	1971 Sep 1 1468:00	Judi-Barr	-	-	0.000	MRN	SS	USAF/	Metro	DSI-5850	-	-
1971-H1200	2441196.12	1971 Sep 8 1135:00	Loki Barr	-	INTA HT-7112	0.000	INTA	SS	USAF/	Metro	DSI-5850	SR13,177	-
1971-H176	2441202.96	1971 Sep 8 1924:59	Judi-Barr	-	-	0.000	MRN	SS	USAF/	Metro	DSI-5850	-	-
1971-H1237	2441205.11	1971 Sep 10 1435:00	Judi-Barr	-	-	0.000	MRN	SS	USAF/	Metro	DSI-5850	-	-
1971-H1244	2441206.11	1971 Sep 13 1437:00	Judi-Barr	-	-	0.000	MRN	SS	USAF/	Metro	DSI-5850	-	-
1971-H1250	2441210.00	1971 Sep 15 1155:00	Loki Barr	-	INTA HT-7113	0.000	INTA	SS	USAF/	Metro	DSI-5850	SR13,177	-
1971-H1253	2441210.11	1971 Sep 15 1440:00	Judi-Barr	-	-	0.000	MRN	SS	USAF/	Metro	DSI-5850	-	-
1971-H1267	2441212.11	1971 Sep 17 1444:00	Judi-Barr	-	-	0.000	MRN	SS	USAF/	Metro	DSI-5850	-	-
1971-H1275	2441215.12	1971 Sep 20 1449:59	Judi-Barr	-	-	0.000	MRN	SS	USAF/	Metro	DSI-5850	-	-
1971-H81	2441217.01	1971 Oct 1 1441:00	Judi-Barr	-	INTA HT-7114	0.000	INTA	SS	USAF/	Metro	DSI-5850	SR13,177	-
1971-H177	2441217.01	1971 Sep 22	Loki Barr	-	HASP	0.000	WRE	SS	WRE/	Metro	FDC	-	-
1971-H1286	2441216.50	1971 Sep 22 1438:59	Judi-Barr	-	-	0.000	MRN	SS	USAF/	Metro	DSI-5850	-	-
1971-H1217.11	2441217.11	1971 Sep 24 1200:00	Loki Barr	-	INTA HT-7115	0.000	INTA	SS	USAF/	Metro	DSI-5850	SR13,177	-
1971-H1296	2441219.00	1971 Sep 24 1438:59	Judi-Barr	-	-	0.000	MRN	SS	USAF/	Metro	DSI-5850	-	-
1971-H1302	2441219.11	1971 Sep 24 1438:59	Judi-Barr	-	-	0.000	MRN	SS	USAF/	Metro	DSI-5850	-	-
1971-H1307	2441221.99	1971 Sep 27 1149:59	Loki Barr	-	INTA HT-7116	0.000	INTA	SS	USAF/	Metro	DSI-5850	SR13,177	-
1971-H1316	2441223.99	1971 Sep 29 1145:00	Loki Barr	-	INTA HT-7117	0.000	INTA	SS	USAF/	Metro	DSI-5850	SR13,177	-
1971-H1317	2441224.16	1971 Sep 29 1444:00	Judi-Barr	-	-	0.000	MRN	SS	USAF/	Metro	DSI-5850	-	-
1971-H1326	2441226.11	1971 Oct 1 1441:00	Judi-Barr	-	-	0.000	MRN	SS	USAF/	Metro	DSI-5850	-	-
1971-H1333	2441228.11	1971 Oct 4 1438:59	Judi-Barr	-	-	0.000	MRN	SS	USAF/	Metro	DSI-5850	-	-
1971-H26	2441230.99	1971 Oct 6 1159	Judi-Barr	-	INTA HT-7118	0.000	INTA	SS	DTIA/PASAM/	Metro	ELAREN	-	-
1971-H1343	2441231.10	1971 Oct 6 1423:00	Judi-Barr	-	-	0.000	MRN	SS	USAF/	Metro	DSI-5850	-	-
1971-H1349	2441232.11	1971 Oct 7 1440:00	Judi-Barr	-	-	0.000	MRN	SS	USAF/	Metro	DSI-5850	-	-
1971-H1362	2441233.14	1971 Oct 7 1517:00	Judi-Barr	-	-	0.000	MRN	SS	USAF/	Metro	DSI-5850	-	-
1971-H1370	2441236.11	1971 Oct 13 1437:59	Judi-Barr	-	-	0.000	MRN	SS	USAF/	Metro	DSI-5850	-	-
1971-H1381	2441236.11	1971 Oct 14 1430:00	Loki Barr	-	-	0.000	MRN	SS	USAF/	Metro	DSI-5850	-	-
1971-H1388	2441240.12	1971 Oct 15 1447:00	Judi-Barr	-	-	0.000	MRN	SS	USAF/	Metro	DSI-5850	-	-
1971-H1393	2441243.11	1971 Oct 16 1432:00	Judi-Barr	-	-	0.000	MRN	SS	USAF/	Metro	DSI-5850	-	-
1971-H1401	2441245.11	1971 Oct 20 1438:59	Judi-Barr	-	-	0.000	MRN	SS	USAF/	Metro	DSI-5850	-	-
1971-H1402	2441246.15	1971 Oct 20 1502:59	Judi-Barr	-	-	0.000	MRN	SS	USAF/	Metro	DSI-5850	-	-
1971-H176	2441247.20	1971 Oct 20 1649:59	Loki Barr	-	HASP	0.000	WRE	SS	WRE/	Metro	FDC	-	-
1971-H112	2441247.20	1971 Oct 22 1435:00	Judi-Barr	-	-	0.000	MRN	SS	USAF/	Metro	DSI-5850	-	-
1971-H112	2441247.20	1971 Oct 22 1435:00	Judi-Barr	-	-	0.000	MRN	SS	USAF/	Metro	DSI-5850	-	-
1971-H112	2441247.20	1971 Oct 27 1440:00	Judi-Barr	-	-	0.000	MRN	SS	USAF/	Metro	DSI-5850	-	-
1971-H112	2441247.20	1971 Oct 27 1440:00	Judi-Barr	-	-	0.000	MRN	SS	USAF/	Metro	DSI-5850	-	-
1971-H112	2441247.20	1971 Oct 27 1440:00	Judi-Barr	-	-	0.000	MRN	SS	USAF/	Metro	DSI-5850	-	-
1971-H112	2441247.20	1971 Oct 27 1440:00	Judi-Barr	-	-	0.000	MRN	SS	USAF/	Metro	DSI-5850	-	-
1971-H131	2441252.20	1971 Oct 27 1651:00	Judi-Barr	-	-	0.000	MRN	SS	USAF/	Metro	DSI-5850	-	-
1971-H138	2441254.11	1971 Oct 29 1443:00	Judi-Barr	-	-	0.000	MRN	SS	USAF/	Metro	DSI-5850	-	-
1971-H145	2441255.50	1971 Nov 1 1541:00	Judi-Barr	-	-	0.000	MRN	SF	USAF/GNW	Metro	FC	-	-
1971-H145	2441257.35	1971 Nov 2 2041:00	Judi-Barr	-	-	0.000	MRN	SS	USAF/	Metro	DSI-5850	-	-
1971-H165	2441258.36	1971 Nov 2 2041:00	Judi-Barr	-	-	0.000	MRN	SS	USAF/	Metro	DSI-5850	-	-
1971-H165	2441259.16	1971 Nov 3 1546:59	Judi-Barr	-	-	0.000	MRN	SS	USAF/	Metro	DSI-5850	-	-
1971-H169	2441259.42	1971 Nov 3 2204:59	Loki Barr	-	-	0.000	MRN	SS	USAF/	Metro	DSI-5850	-	-
1971-H169	2441260.02	1971 Nov 4 1304:59	Loki Barr	-	-	0.000	MRN	SS	USAF/	Metro	DSI-5850	-	-
1971-H163	2441260.16	1971 Nov 5 1545:59	Judi-Barr	-	-	0.000	MRN	SS	USAF/	Metro	DSI-5850	-	-
1971-H163	2441260.16	1971 Nov 5 1545:59	Judi-Barr	-	-	0.000	MRN	SS	USAF/	Metro	DSI-5850	-	-
1971-H174	2441264.15	1971 Nov 9 0050	Loki Barr	-	HASP	0.000	WRE	SS	WRE/	Metro	FDC/Ulrich	-	-
1971-H174	2441264.15	1971 Nov 9 0050	Loki Barr	-	HASP	0.000	WRE	SS	WRE/	Metro	FDC/Ulrich	-	-
1971-H174	2441264.15	1971 Nov 9 0050	Loki Barr	-	HASP	0.000	WRE	SS	WRE/	Metro	FDC/Ulrich	-	-
1971-H174	2441264.15	1971 Nov 10 1544:00	Loki Barr	-	HASP	0.000	WRE	SS	WRE/	Metro	FDC/Ulrich	-	-
1971-H174	2441264.15	1971 Nov 10 1544:00	Loki Barr	-	HASP	0.000	WRE	SS	WRE/	Metro	FDC/Ulrich	-	-
1971-H174	2441264.15	1971 Nov 11 0100	Loki Barr	-	HASP	0.000	WRE	SS	WRE/	Metro	FDC/Ulrich	-	-
1971-H174	2441264.15	1971 Nov 12 1749:59	Judi-Barr	-	-	0.000	MRN	SS	USAF/	Metro	DSI-5850	-	-
1971-H174	2441264.15	1971 Nov 15 1545:59	Judi-Barr	-	-	0.000	MRN	SS	USAF/	Metro	DSI-5850	-	-
1971-H1500	2441271.16	1971 Nov 16 1546:59	Judi-Barr	-	-	0.000	MRN	SS	USAF/	Metro	DSI-5850	-	-
1971-H1508	2441272.16	1971 Nov 16 1546:59	Judi-Barr	-	-	0.000	MRN	SS	USAF/	Metro	DSI-5850	-	-
1971-H1513	2441273.10	1971 Nov 17 1430:00	Loki Barr	-	-	0.000	MRN	SS	USAF/	Metro	DSI-5850	-	-
1971-H1516	2441273.16	1971 Nov 17 1553:00	Judi-Barr	-	-	0.000	MRN	SS	USAF/	Metro	DSI-5850	-	-
1971-H1516	2441273.50	1971 Nov 18	Loki Barr	-	HASP	0.000	WRE	SS	WRE/	Metro	FDC/Ulrich	-	-
1971-H1521	2441274.16	1971 Nov 18 1545:59	Judi-Barr	-	-	0.000	MRN	SS	USAF/	Metro	DSI-5850	-	-
1971-H1521	2441274.16	1971 Nov 19 1546:59	Judi-Barr	-	-	0.000	MRN	SS	USAF/	Metro	DSI-5850	-	-
1971-H1531	2441275.16	1971 Nov 19 1546:59	Judi-Barr	-	-	0.000	MRN	SS	USAF/	Metro	DSI-5850	-	-
1971-H1535	2441278.16	1971 Nov 22 1553:00	Judi-Barr	-	-	0.000	MRN	SS	USAF/	Metro	DSI-5850	-	-
1971-H1546	2441280.16	1971 Nov 24 1553:00	Judi-Barr	-	-	0.000	MRN	SS	USAF/	Metro	DSI-5850	-	-
1971-H1553	2441281.17	1971 Nov 26 1602:59	Judi-Barr	-	-	0.000	MRN	SS	USAF/	Metro	DSI-5850	-	-
1971-H1558	2441282.16	1971 Nov 26 1549:59	Judi-Barr	-	-	0.000	MRN	SS	USAF/	Metro	DSI-5850	-	-
1971-H1564	2441286.16	1971 Nov 29 1553:00	Judi-Barr	-	-	0.000	MRN	SS	USAF/	Metro	DSI-5850	-	-
1971-H1570	2441286.16	1971 Nov 30 1545:59	Judi-Barr	-	-	0.000	MRN	SS	USAF/	Metro	DSI-5850	-	-
1971-H1579	2441287.16	1971 Dec 1 1547:59	Judi-Barr	-	-	0.000	MRN	SS	USAF/	Metro	DSI-5850	-	-
1971-H1584	2441288.16	1971 Dec 2 1546:59	Judi-Barr	-	-	0.000	MRN	SS	USAF/	Metro	DSI-5850	-	-
1971-H1589	2441289.16	1971 Dec 3 1555:00	Judi-Barr	-	-	0.000	MRN	SS	USAF/	Metro	DSI-5850	-	-
1971-H1594	2441292.16	1971 Dec 6 1549:59	Judi-Barr	-	-	0.000	MRN	SS	USAF/	Metro	DSI-5850	-	-
1971-H1598	2441293.25	1971 Dec 7 1756:00	Judi-Barr	-	-	0.000	MRN	SS	USAF/	Metro	DSI-5850	-	-
1971-H1603	2441294.16	1971 Dec 8 1554:00	Judi-Barr	-	-	0.000	MRN	SS	USAF/	Metro	DSI-5850	-	-
1971-H1607	2441294.40	1971 Dec 8 2132:00	Loki Barr	-	INTA HT-7120	0.000	INTA	SS	USAF/	Metro	DSI-5850	-	-
1971-H1612	2441295.31	1971 Dec 9 1929:00	Judi-Barr	-	-	0.000	MRN	SS	USAF/	Metro	DSI-5850	-	-
1971-H1614	2441296.09	1971 Dec 10 1404:59	Judi-Barr	-	-	0.000	MRN	SS	USAF/	Metro	DSI-5850	-	-
1971-H1619	2441296.15	1971 Dec 10 1538:59	Judi-Barr	-	-	0.000	MRN	SS	USAF/	Metro	DSI-5850	-	-

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	OrbPay	Agency	Launch_Code	Group	Category	LTCite	Cite	Notes
1971-H1622	2441296.20	1971 Dec 10 1649:59	Judi-Bart	-	-	0.000	MRU	SS	USAE/	Metro	DSI-5860	-	-
1971-H1623	2441296.17	1971 Dec 10 1823:59	Judi-Bart	-	-	0.000	MRU	SS	USAE/	Metro	DSI-5860	-	-
1971-H1626	2441299.17	1971 Dec 13 1558:59	Judi-Bart	-	-	0.000	MRU	SS	USAE/	Metro	DSI-5860	-	-
1971-H27	2441301.43	1971 Dec 15 2219	Loki Bart	-	INTA HT-7121	0.000	INTA	SS	INTA/MASA/	Metro	ELAREN	-	-
1971-H1637	2441301.16	1971 Dec 15 1547:59	Judi-Bart	-	-	0.000	MRU	SS	USAE/	Metro	DSI-5860	-	-
1971-H1642	2441301.53	1971 Dec 16 0040:00	Loki Bart	-	-	0.000	MRU	SS	USAE/	Metro	DSI-5860	-	-
1971-H1644	2441302.16	1971 Dec 16 1545:00	Judi-Bart	-	-	0.000	MRU	SS	USAE/	Metro	DSI-5860	-	-
1971-H1650	2441303.15	1971 Dec 17 1540:00	Judi-Bart	-	-	0.000	MRU	SS	USAE/	Metro	DSI-5860	-	-
1971-H1656	2441306.17	1971 Dec 20 1603:59	Judi-Bart	-	-	0.000	MRU	SS	USAE/	Metro	DSI-5860	-	-
1971-H1660	2441307.17	1971 Dec 21 1557:59	Judi-Bart	-	-	0.000	MRU	SS	USAE/	Metro	DSI-5860	-	-
1971-H1663	2441308.00	1971 Dec 22 1204:59	Loki Bart	-	INTA HT-7122	0.000	INTA	SS	INTA/	Metro	DSI-5860	-	-
1971-H1666	2441308.16	1971 Dec 22 1545:00	Judi-Bart	-	-	0.000	MRU	SS	USAE/	Metro	DSI-5860	-	-
1971-H1669	2441308.43	1971 Dec 22 2218:59	Loki Bart	-	INTA HT-7123	0.000	INTA	SS	INTA/	Metro	DSI-5860	-	-
1971-H1670	2441309.16	1971 Dec 23 1545:59	Judi-Bart	-	-	0.000	MRU	SS	USAE/	Metro	DSI-5860	-	-
1971-H1672	2441309.16	1971 Dec 24 1547:59	Judi-Bart	-	-	0.000	MRU	SS	USAE/	Metro	DSI-5860	-	-
1971-H1676	2441314.19	1971 Dec 28 1636:59	Judi-Bart	-	-	0.000	MRU	SS	USAE/	Metro	DSI-5860	-	-
1971-H111	2441314.36	1971 Dec 28 2037:59	Judi-Bart	-	-	0.000	MRU	SS	USAE/	Metro	DSI-5860	-	-
1971-H1681	2441315.15	1971 Dec 29 1541:00	Judi-Bart	-	-	0.000	MRU	SS	USAE/	Metro	DSI-5860	-	-
1971-H1683	2441315.37	1971 Dec 29 2055:00	Judi-Bart	-	-	0.000	MRU	SS	USAE/	Metro	DSI-5860	-	-
1971-H1687	2441316.15	1971 Dec 30 1533:59	Judi-Bart	-	-	0.000	MRU	SS	USAE/	Metro	DSI-5860	-	-
1971-H1689	2441316.37	1971 Dec 30 2047:00	Judi-Bart	-	-	0.000	MRU	SS	USAE/	Metro	DSI-5860	-	-
1971-H1691	2441317.15	1971 Dec 31 1541:00	Judi-Bart	-	-	0.000	MRU	SS	USAE/	Metro	DSI-5860	-	-
1972-H11	2441321.15	1972 Jan 4 1542:00	Judi-Bart	-	-	0.000	MRU	SS	USAE/	Metro	DSI-5860	-	-
1972-H16	2441322.16	1972 Jan 5 1545:59	Judi-Bart	-	-	0.000	MRU	SS	USAE/	Metro	DSI-5860	-	-
1972-H24	2441323.24	1972 Jan 6 1751:00	Judi-Bart	-	-	0.000	MRU	SS	USAE/	Metro	DSI-5860	-	-
1972-H37	2441324.24	1972 Jan 7 1741:00	Judi-Bart	-	-	0.000	MRU	SS	USAE/	Metro	DSI-5860	-	-
1972-H16	2441328.43	1972 Jan 12 2218	Loki Bart	-	INTA HD-7201	0.000	INTA	SS	INTA/MASA/	Metro	ELAREN	-	-
1972-H69	2441329.46	1972 Jan 12 2300:00	Loki Bart	-	INTA HD-7202	0.000	INTA	SS	INTA/	Metro	DSI-5860	-	-
1972-H71	2441331.54	1972 Jan 15 0101:59	Judi-Bart	-	-	0.000	MRU	SS	USAE/	Metro	DSI-5860	-	-
1972-H76	2441334.17	1972 Jan 17 1557:59	Judi-Bart	-	-	0.000	MRU	SS	USAE/	Metro	DSI-5860	-	-
1972-H64	2441335.16	1972 Jan 18 1551:00	Judi-Bart	-	-	0.000	MRU	SS	USAE/	Metro	DSI-5860	-	-
1972-H92	2441336.16	1972 Jan 19 1545:00	Judi-Bart	-	-	0.000	MRU	SS	USAE/	Metro	DSI-5860	-	-
1972-H100	2441336.45	1972 Jan 19 2244:59	Loki Bart	-	INTA HW-7201	0.000	INTA	SS	INTA/	Metro	DSI-5860	-	-
1972-H103	2441337.15	1972 Jan 20 1542:00	Judi-Bart	-	-	0.000	MRU	SS	USAE/	Metro	DSI-5860	-	-
1972-H108	2441338.15	1972 Jan 21 1542:00	Judi-Bart	-	-	0.000	MRU	SS	USAE/	Metro	DSI-5860	-	-
1972-H19	2441338.56	1972 Jan 22 0155	Loki Bart	-	-	0.000	MRU	SS	USAE/	Metro	DSI-5860	-	-
1972-H119	2441340.96	1972 Jan 24 1047:59	Loki Bart	-	INTA HD-7203	0.000	INTA	SS	INTA/	Metro	ELAREN	-	-
1972-H123	2441341.15	1972 Jan 24 1541:00	Judi-Bart	-	INTA HD-7204	0.000	INTA	SS	INTA/	Metro	DSI-5860	-	-
1972-H132	2441342.96	1972 Jan 28 1534:00	Judi-Bart	-	-	0.000	MRU	SS	USAE/	Metro	DSI-5860	-	-
1972-H138	2441345.25	1972 Jan 28 1758:00	Loki Bart	-	-	0.000	MRU	SS	USAE/	Metro	DSI-5860	-	-
1972-H156	2441346.16	1972 Jan 28 1544:00	Judi-Bart	-	-	0.000	MRU	SS	USAE/	Metro	DSI-5860	-	-
1972-H185	2441348.16	1972 Jan 31 1555:59	Judi-Bart	-	-	0.000	MRU	SS	USAE/	Metro	DSI-5860	-	-
1972-H139	2441349.16	1972 Feb 1 1547:59	Judi-Bart	-	-	0.000	MRU	SS	USAE/	Metro	DSI-5860	-	-
1972-H171	2441350.96	1972 Feb 2 1534:00	Loki Bart	-	INTA HW-7203	0.000	INTA	SS	INTA/	Metro	DSI-5860	-	-
1972-H179	2441351.15	1972 Feb 2 1545:00	Judi-Bart	-	-	0.000	MRU	SS	USAE/	Metro	DSI-5860	-	-
1972-H183	2441352.16	1972 Feb 3 1546:59	Judi-Bart	-	-	0.000	MRU	SS	USAE/	Metro	DSI-5860	-	-
1972-H193	2441353.16	1972 Feb 3 1546:59	Judi-Bart	-	-	0.000	MRU	SS	USAE/	Metro	DSI-5860	-	-
1972-H201	2441355.00	1972 Feb 8 0710:59	Judi-Bart	-	-	0.000	MRU	SS	USAE/	Metro	DSI-5860	-	-
1972-H204	2441356.90	1972 Feb 9 1130:59	Judi-Bart	-	INTA HW-7204	0.000	INTA	SS	INTA/	Metro	DSI-5860	-	-
1972-H216	2441356.95	1972 Feb 9 2323:00	Loki Bart	-	INTA HW-7205	0.000	INTA	SS	INTA/	Metro	DSI-5860	-	-
1972-H217	2441357.47	1972 Feb 10 0111:00	Loki Bart	-	-	0.000	MRU	SS	USAE/	Metro	DSI-5860	-	-
1972-H221	2441358.67	1972 Feb 11 0405:59	Judi-Bart	-	-	0.000	MRU	SS	USAE/	Metro	DSI-5860	-	-
1972-H222	2441359.04	1972 Feb 11 1952:00	Loki Bart	-	INTA HW-7206	0.000	INTA	SS	INTA/	Metro	DSI-5860	-	-
1972-H234	2441359.74	1972 Feb 12 0645:59	Judi-Bart	-	-	0.000	MRU	SS	USAE/	Metro	DSI-5860	-	-
1972-H242	2441362.44	1972 Feb 14 2038:59	Loki Bart	-	INTA HW-7207	0.000	INTA	SS	INTA/	Metro	DSI-5860	-	-
1972-H243	2441363.75	1972 Feb 15 0855:00	Judi-Bart	-	-	0.000	MRU	SS	USAE/	Metro	DSI-5860	-	-
1972-H246	2441363.20	1972 Feb 15 1901:59	Judi-Bart	-	-	0.000	MRU	SS	USAE/	Metro	DSI-5860	-	-
1972-H248	2441363.98	1972 Feb 16 1130:00	Loki Bart	-	INTA HW-7208	0.000	INTA	SS	INTA/	Metro	DSI-5860	-	-
1972-H254	2441364.16	1972 Feb 16 1545:00	Judi-Bart	-	-	0.000	MRU	SS	USAE/	Metro	DSI-5860	-	-
1972-H258	2441365.17	1972 Feb 17 1606:00	Judi-Bart	-	-	0.000	MRU	SS	USAE/	Metro	DSI-5860	-	-
1972-H261	2441365.98	1972 Feb 18 1137:59	Loki Bart	-	INTA HW-7209	0.000	INTA	SS	INTA/	Metro	DSI-5860	-	-
1972-H265	2441366.16	1972 Feb 18 1545:59	Judi-Bart	-	-	0.000	MRU	SS	USAE/	Metro	DSI-5860	-	-
1972-H271	2441370.15	1972 Feb 22 1552:00	Judi-Bart	-	-	0.000	MRU	SS	USAE/	Metro	DSI-5860	-	-
1972-H133	2441370.54	1972 Feb 23 0100:00	Loki Bart	-	HASP	0.000	HBE	SS	HBE/	Metro	FDC	-	-
1972-H275	2441370.99	1972 Feb 23 1140:00	Loki Bart	-	INTA HW-7210	0.000	INTA	SS	INTA/	Metro	DSI-5860	-	-
1972-H278	2441371.16	1972 Feb 23 1547:59	Judi-Bart	-	-	0.000	MRU	SS	USAE/	Metro	DSI-5860	-	-
1972-H285	2441372.11	1972 Feb 24 1551:00	Judi-Bart	-	-	0.000	MRU	SS	USAE/	Metro	DSI-5860	-	-
1972-H308	2441378.16	1972 Mar 1 1545:59	Judi-Bart	-	-	0.000	MRU	SS	USAE/	Metro	DSI-5860	-	-
1972-H313	2441379.16	1972 Mar 2 1551:00	Judi-Bart	-	-	0.000	MRU	SS	USAE/	Metro	DSI-5860	-	-
1972-H318	2441380.17	1972 Mar 3 1600:59	Judi-Bart	-	-	0.000	MRU	SS	USAE/	Metro	DSI-5860	-	-
1972-H334	2441384.68	1972 Mar 8 0418:59	Judi-Bart	-	-	0.000	MRU	SS	USAE/	Metro	DSI-5860	-	-
1972-H342	2441386.59	1972 Mar 8 0418:59	Judi-Bart	-	-	0.000	MRU	SS	USAE/	Metro	DSI-5860	-	-
1972-H352	2441387.57	1972 Mar 10 0214:00	Judi-Bart	-	-	0.000	MRU	SS	USAE/	Metro	DSI-5860	-	-
1972-H358	2441392.00	1972 Mar 11 0145:59	Judi-Bart	-	INTA HD-7205	0.000	INTA	SS	INTA/	Metro	DSI-5860	-	-
1972-H362	2441392.15	1972 Mar 15 1157:00	Loki Bart	-	TI-5939	0.000	MRU	SS	HFE/	Metro	DSI-5860	-	-
1972-H373	2441392.59	1972 Mar 16 2020:59	Judi-Bart	-	-	0.000	MRU	SS	USAE/	Metro	DSI-5860	-	-
1972-H388	2441394.35	1972 Mar 17 0206:00	Judi-Bart	-	-	0.000	MRU	SS	USAE/	Metro	DSI-5860	-	-
1972-H399	2441397.33	1972 Mar 20 2000:00	Loki Bart	-	-	0.000	MRU	SS	USAE/	Metro	DSI-5860	-	-
1972-H400	2441397.56	1972 Mar 21 0132:59	Loki Bart	-	-	0.000	MRU	SS	HFE/	Metro	DSI-5860	-	-
1972-H401	2441398.81	1972 Mar 22 0732:59	Judi-Bart	-	TI-5949	0.000	MRU	SS	HFE/	Metro	DSI-5860	-	-
1972-H402	2441398.98	1972 Mar 22 1137:59	Loki Bart	-	INTA HD-7206	0.000	INTA	SS	INTA/	Metro	DSI-5860	-	-
1972-H413	2441400.60	1972 Mar 24 0224:00	Judi-Bart	-	-	0.000	MRU	SS	USAE/	Metro	DSI-5860	-	-
1972-H422	2441401.64	1972 Mar 25 0319:00	Judi-Bart	-	-	0.000	MRU	SS	USAE/	Metro	DSI-5860	-	-
1972-H431	2441404.86	1972 Mar 28 0832:00	Judi-Bart	-	-	0.000	MRU	SS	USAE/	Metro	DSI-5860	-	-
1972-H440	2441406.89	1972 Mar 30 0924:59	Judi-Bart	-	-	0.000	MRU	SS	USAE/	Metro	DSI-5860	-	-







Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	DrbPay	Agency	Launch_Code	Group	Category	LTCite	Cite	Notes
1973-4273	2441735-55	1973 Feb 22 0118:59	Loki Dart	-	-	0.000	MRU	SS	USAE/	Metro	DS1-5860	-	-
1973-4277	2441736-63	1973 Feb 23 0308:00	Loki Dart	-	-	0.000	MRU	SS	USAE/	Metro	DS1-5860	-	-
1973-4286	2441737-66	1973 Feb 24 0348:59	Loki Dart	-	-	0.000	MRU	SS	USAE/	Metro	DS1-5860	-	-
1973-4304	2441742-67	1973 Mar 1 1407:59	Loki Dart	-	-	0.000	MRU	SS	USAE/	Metro	DS1-5860	-	-
1973-4306	2441743-25	1973 Mar 1 1757:00	Loki Dart	-	-	0.000	MRU	SS	USAE/	Metro	DS1-5860	-	-
1973-4313	2441744-16	1973 Mar 2 1547:59	Loki Dart	-	-	0.000	MRU	SS	USAE/	Metro	DS1-5860	-	-
1973-4320	2441747-16	1973 Mar 5 1545:00	Loki Dart	-	-	0.000	MRU	SS	USAE/	Metro	DS1-5860	-	-
1973-4326	2441748-18	1973 Mar 6 1617:00	Loki Dart	-	-	0.000	MRU	SS	USAE/	Metro	DS1-5860	-	-
1973-4331	2441749-05	1973 Mar 7 1304:59	Loki Dart	-	INTA HW-7303	0.000	INTA	SS	INTA/	Metro	DS1-5860	-	-
1973-4335	2441749-15	1973 Mar 7 1541:00	Loki Dart	-	-	0.000	MRU	SS	USAE/	Metro	DS1-5860	-	-
1973-4344	2441750-19	1973 Mar 8 1630:00	Loki Dart	-	-	0.000	MRU	SS	USAE/	Metro	DS1-5860	-	-
1973-4347	2441751-15	1973 Mar 9 1540:00	Loki Dart	-	-	0.000	MRU	SS	USAE/	Metro	DS1-5860	-	-
1973-4356	2441754-16	1973 Mar 12 1549:59	Loki Dart	-	-	0.000	MRU	SS	USAE/	Metro	DS1-5860	-	-
1973-4363	2441755-18	1973 Mar 13 1614:59	Loki Dart	-	-	0.000	MRU	SS	USAE/	Metro	DS1-5860	-	-
1973-4366	2441756-15	1973 Mar 14 1543:00	Loki Dart	-	-	0.000	MRU	SS	USAE/	Metro	DS1-5860	-	-
1973-4377	2441757-19	1973 Mar 15 1634:59	Loki Dart	-	-	0.000	MRU	SS	USAE/	Metro	DS1-5860	-	-
1973-4381	2441758-15	1973 Mar 16 1542:00	Loki Dart	-	-	0.000	MRU	SS	USAE/	Metro	DS1-5860	-	-
1973-4388	2441761-15	1973 Mar 19 1543:00	Loki Dart	-	-	0.000	MRU	SS	USAE/	Metro	DS1-5860	-	-
1973-4397	2441762-19	1973 Mar 20 1630:59	Loki Dart	-	-	0.000	MRU	SS	USAE/	Metro	DS1-5860	-	-
1973-4403	2441763-16	1973 Mar 21 1653:00	Loki Dart	-	-	0.000	MRU	SS	USAE/	Metro	DS1-5860	-	-
1973-4409	2441764-19	1973 Mar 22 1634:59	Loki Dart	-	-	0.000	MRU	SS	USAE/	Metro	DS1-5860	-	-
1973-4416	2441765-15	1973 Mar 23 1540:00	Loki Dart	-	-	0.000	MRU	SS	USAE/	Metro	DS1-5860	-	-
1973-4426	2441768-15	1973 Mar 26 1543:00	Loki Dart	-	-	0.000	MRU	SS	USAE/	Metro	DS1-5860	-	-
1973-4434	2441769-18	1973 Mar 28 1546:59	Loki Dart	-	-	0.000	MRU	SS	USAE/	Metro	DS1-5860	-	-
1973-4442	2441770-16	1973 Mar 28 1640:00	Loki Dart	-	-	0.000	MRU	SS	USAE/	Metro	DS1-5860	-	-
1973-4450	2441771-19	1973 Mar 29 1742:00	Loki Dart	-	-	0.000	MRU	SS	USAE/	Metro	DS1-5860	-	-
1973-4455	2441772-24	1973 Mar 30 1742:00	Loki Dart	-	-	0.000	MRU	SS	USAE/	Metro	DS1-5860	-	-
1973-4473	2441776-19	1973 Apr 3 1630:00	Loki Dart	-	-	0.000	MRU	SS	USAE/	Metro	DS1-5860	-	-
1973-4476	2441777-15	1973 Apr 4 1537:59	Loki Dart	-	-	0.000	MRU	SS	USAE/	Metro	DS1-5860	-	-
1973-4466	2441779-15	1973 Apr 6 1540:00	Loki Dart	-	-	0.000	MRU	SS	USAE/	Metro	DS1-5860	-	-
1973-4600	2441783-19	1973 Apr 10 1630:00	Loki Dart	-	INTA HW-7304	0.000	MRU	SS	INTA/	Metro	DS1-5860	-	-
1973-4603	2441784-01	1973 Apr 11 1220:00	Loki Dart	-	-	0.000	MRU	SS	USAE/	Metro	DS1-5860	-	-
1973-4606	2441784-15	1973 Apr 11 1536:59	Loki Dart	-	-	0.000	MRU	SS	USAE/	Metro	DS1-5860	-	-
1973-4619	2441790-19	1973 Apr 17 1634:59	Loki Dart	-	-	0.000	MRU	SS	USAE/	Metro	DS1-5860	-	-
1973-4631	2441791-15	1973 Apr 18 1536:59	Loki Dart	-	-	0.000	MRU	SS	USAE/	Metro	DS1-5860	-	-
1973-4637	2441791-19	1973 Apr 24 1640:00	Loki Dart	-	-	0.000	MRU	SS	USAE/	Metro	DS1-5860	-	-
1973-4659	2441796-15	1973 Apr 25 1534:59	Loki Dart	-	-	0.000	MRU	SS	USAE/	Metro	DS1-5860	-	-
1973-4665	2441800-17	1973 Apr 25 1609:59	Loki Dart	-	-	0.000	MRU	SS	USAE/	Metro	DS1-5860	-	-
1973-4662	2441805-11	1973 Apr 30 1436:00	Loki Dart	-	-	0.000	MRU	SS	USAE/	Metro	DS1-5860	-	-
1973-4690	2441806-11	1973 May 2 1643:00	Loki Dart	-	-	0.000	MRU	SS	USAE/	Metro	DS1-5860	-	-
1973-4674	2441811-26	1973 May 8 1724:00	Loki Dart	-	-	0.000	MRU	SS	USAE/	Metro	DS1-5860	-	-
1973-4610	2441812-22	1973 May 8 1724:00	Loki Dart	-	INTA HW-7305	0.000	MRU	SS	INTA/	Metro	DS1-5860	-	-
1973-4621	2441812-02	1973 May 9 1235:00	Loki Dart	-	-	0.000	MRU	SS	USAE/	Metro	DS1-5860	-	-
1973-4619	2441812-13	1973 May 9 1501:00	Loki Dart	-	-	0.000	MRU	SS	USAE/	Metro	DS1-5860	-	-
1973-4624	2441814-16	1973 May 11 1419:59	Loki Dart	-	-	0.000	MRU	SS	USAE/	Metro	DS1-5860	-	-
1973-4634	2441817-12	1973 May 14 1649:59	Loki Dart	-	-	0.000	MRU	SS	USAE/	Metro	DS1-5860	-	-
1973-4658	2441819-12	1973 May 16 1624:59	Loki Dart	-	-	0.000	MRU	SS	USAE/	Metro	DS1-5860	-	-
1973-4657	2441826-15	1973 May 23 1609:59	Loki Dart	-	-	0.000	MRU	SS	USAE/	Metro	DS1-5860	-	-
1973-4656	2441828-17	1973 May 26 1624:59	Loki Dart	-	-	0.000	MRU	SS	USAE/	Metro	DS1-5860	-	-
1973-4702	2441831-12	1973 May 29 1454:59	Loki Dart	-	-	0.000	MRU	SS	USAE/	Metro	DS1-5860	-	-
1973-4712	2441833-12	1973 May 30 1614:59	Loki Dart	-	-	0.000	MRU	SS	USAE/	Metro	DS1-5860	-	-
1973-4710	2441840-01	1973 Jun 6 1621:59	Loki Dart	-	INTA HW-7306	0.000	MRU	SS	INTA/	Metro	DS1-5860	-	-
1973-4716	2441840-10	1973 Jun 6 1621:59	Loki Dart	-	-	0.000	MRU	SS	USAE/	Metro	DS1-5860	-	-
1973-4781	2441847-21	1973 Jun 20 1627:59	Loki Dart	-	-	0.000	MRU	SS	USAE/	Metro	DS1-5860	-	-
1973-4812	2441854-11	1973 Jun 23 1655:59	Loki Dart	-	-	0.000	MRU	SS	USAE/	Metro	DS1-5860	-	-
1973-4836	2441861-13	1973 Jun 27 1630:00	Loki Dart	-	-	0.000	MRU	SS	USAE/	Metro	DS1-5860	-	-
1973-4845	2441863-55	1973 Jun 27 1630:00	Loki Dart	-	-	0.000	MRU	SS	USAE/	Metro	DS1-5860	-	-
1973-4856	2441868-18	1973 Jul 4 1624:59	Loki Dart	-	-	0.000	MRU	SS	USAE/	Metro	DS1-5860	-	-
1973-4839	2441876-21	1973 Jul 11 1659:59	Loki Dart	-	INTA HW-7307	0.000	MRU	SS	INTA/	Metro	DS1-5860	-	-
1973-4874	2441876-01	1973 Jul 11 1620	Loki Dart	-	-	0.000	MRU	SS	USAE/	Metro	DS1-5860	-	-
1973-4813	2441882-12	1973 Jul 18 1447:00	Loki Dart	-	-	0.000	MRU	SS	USAE/	Metro	DS1-5860	-	-
1973-4833	2441889-13	1973 Jul 25 1627:59	Loki Dart	-	-	0.000	MRU	SS	USAE/	Metro	DS1-5860	-	-
1973-4859	2441894-50	1973 Aug 2 1627:59	Loki Dart	-	-	0.000	MRU	SS	USAE/	Metro	DS1-5860	-	-
1973-4871	2441896-10	1973 Aug 8 1459:00	Loki Dart	-	-	0.000	MRU	SS	USAE/	Metro	DS1-5860	-	-
1973-4874	2441897-20	1973 Aug 8 1651:00	Loki Dart	-	-	0.000	MRU	SS	USAE/	Metro	DS1-5860	-	-
1973-4892	2441903-13	1973 Aug 9 1437:59	Loki Dart	-	-	0.000	MRU	SS	USAE/	Metro	DS1-5860	-	-
1973-4900	2441904-11	1973 Aug 9 1607:00	Loki Dart	-	-	0.000	MRU	SS	USAE/	Metro	DS1-5860	-	-
1973-4913	2441908-12	1973 Aug 13 1624:59	Loki Dart	-	-	0.000	MRU	SS	USAE/	Metro	DS1-5860	-	-
1973-4927	2441910-12	1973 Aug 15 1451:00	Loki Dart	-	-	0.000	MRU	SS	USAE/	Metro	DS1-5860	-	-
1973-4938	2441911-18	1973 Aug 16 1624:59	Loki Dart	-	-	0.000	MRU	SS	USAE/	Metro	DS1-5860	-	-
1973-4948	2441915-12	1973 Aug 20 1447:00	Loki Dart	-	-	0.000	MRU	SS	USAE/	Metro	DS1-5860	-	-
1973-4957	2441917-12	1973 Aug 22 1448:00	Loki Dart	-	-	0.000	MRU	SS	USAE/	Metro	DS1-5860	-	-
1973-4981	2441922-11	1973 Aug 27 1444:00	Loki Dart	-	-	0.000	MRU	SS	USAE/	Metro	DS1-5860	-	-
1973-4989	2441924-29	1973 Aug 29 1954:00	Loki Dart	-	-	0.000	MRU	SS	USAE/	Metro	DS1-5860	-	-
1973-49105	2441925-18	1973 Aug 30 1624:59	Loki Dart	-	-	0.000	MRU	SS	USAE/	Metro	DS1-5860	-	-
1973-49150	2441937-18	1973 Sep 11 1624:59	Loki Dart	-	-	0.000	MRU	SS	USAE/	Metro	DS1-5860	-	-
1973-49157	2441938-14	1973 Sep 12 1518:00	Loki Dart	-	-	0.000	MRU	SS	USAE/	Metro	DS1-5860	-	-
1973-49165	2441939-18	1973 Sep 13 1624:59	Loki Dart	-	-	0.000	MRU	SS	USAE/	Metro	DS1-5860	-	-
1973-49238	2441955-50	1973 Oct	Loki Dart	-	-	0.000	MRU	SS	USAE/	Metro	DS1-5860	-	-
1973-49239	2441955-50	1973 Oct	Loki Dart	-	-	0.000	MRU	SS	USAE/	Metro	DS1-5860	-	-
1973-49240	2441955-50	1973 Oct	Loki Dart	-	-	0.000	MRU	SS	USAE/	Metro	DS1-5860	-	-
1973-49241	2441955-50	1973 Oct	Loki Dart	-	-	0.000	MRU	SS	USAE/	Metro	DS1-5860	-	-
1973-49242	2441955-50	1973 Oct	Loki Dart	-	-	0.000	MRU	SS	USAE/	Metro	DS1-5860	-	-
1973-49243	2441955-50	1973 Oct	Loki Dart	-	-	0.000	MRU	SS	USAE/	Metro	DS1-5860	-	-
1973-49359	2441986-50	1973 Nov	Loki Dart	-	-	0.000	MRU	SS	USAE/	Metro	DS1-5860	-	-

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	DrbPay	Agency	Launch_Code	Group	Category	LTCite	Cite	Notes
1973-11360	2441986.50	1973 Nov	Loki Dart	-	-	0.000	MRU	SS	USAF/GHW	Metro	FC	-	-
1973-11361	2441986.50	1973 Nov	Loki Dart	-	-	0.000	MRU	SS	USAF/GHW	Metro	FC	-	-
1973-11362	2441986.50	1973 Nov	Loki Dart	-	-	0.000	MRU	SS	USAF/GHW	Metro	FC	-	-
1973-11379	2441989.18	1973 Nov 2 1624:59	Loki Dart	-	-	0.000	MRU	SS	-	Metro	DSI-5860	-	-
1973-11393	2441994.18	1973 Nov 7 1620:59	Loki Dart	-	-	0.000	MRU	SS	-	Metro	DSI-5860	-	-
1973-11395	2441995.16	1973 Nov 8 1546:59	Loki Dart	-	-	0.000	MRU	SS	-	Metro	DSI-5860	-	-
1973-11403	2441996.18	1973 Nov 9 1624:59	Loki Dart	-	-	0.000	MRU	SS	-	Metro	DSI-5860	-	-
1973-11416	2442000.15	1973 Nov 13 1542:00	Loki Dart	-	-	0.000	MRU	SS	-	Metro	DSI-5860	-	-
1973-11440	2442001.01	1973 Nov 14 1212	Loki Dart	-	-	0.000	DTTA	SS	DTTA/NASA/	Metro	ELAREN	-	-
1973-11423	2442001.18	1973 Nov 14 1624:59	Loki Dart	-	-	0.000	MRU	SS	-	Metro	DSI-5860	-	-
1973-11423	2442002.15	1973 Nov 15 1541:00	Loki Dart	-	-	0.000	MRU	SS	-	Metro	DSI-5860	-	-
1973-11438	2442003.18	1973 Nov 16 1624:59	Loki Dart	-	-	0.000	MRU	SS	-	Metro	DSI-5860	-	-
1973-11446	2442006.48	1973 Nov 19 2326:59	Loki Dart	-	-	0.000	MRU	SS	-	Metro	DSI-5860	-	-
1973-11460	2442007.48	1973 Nov 20 2330:00	Loki Dart	-	-	0.000	MRU	SS	-	Metro	DSI-5860	-	-
1973-11469	2442008.51	1973 Nov 22 0015:59	Loki Dart	-	-	0.000	MRU	SS	-	Metro	DSI-5860	-	-
1973-11465	2442013.24	1973 Nov 25 1738:59	Loki Dart	-	-	0.000	MRU	SS	-	Metro	DSI-5860	-	-
1973-11473	2442015.16	1973 Nov 28 1546:59	Loki Dart	-	-	0.000	MRU	SS	-	Metro	DSI-5860	-	-
1973-11480	2442017.18	1973 Nov 30 1624:59	Loki Dart	-	-	0.000	MRU	SS	-	Metro	DSI-5860	-	-
1973-11495	2442020.16	1973 Dec 3 1544:00	Loki Dart	-	-	0.000	MRU	SS	-	Metro	DSI-5860	-	-
1973-11501	2442021.15	1973 Dec 4 1942:00	Loki Dart	-	-	0.000	MRU	SS	-	Metro	DSI-5860	-	-
1973-11504	2442022.18	1973 Dec 5 1624:59	Loki Dart	-	-	0.000	MRU	SS	-	Metro	DSI-5860	-	-
1973-11512	2442023.16	1973 Dec 6 1944:00	Loki Dart	-	-	0.000	MRU	SS	-	Metro	DSI-5860	-	-
1973-11521	2442024.18	1973 Dec 7 1624:59	Loki Dart	-	-	0.000	MRU	SS	-	Metro	DSI-5860	-	-
1973-11529	2442027.16	1973 Dec 10 1546:59	Loki Dart	-	-	0.000	MRU	SS	-	Metro	DSI-5860	-	-
1973-11537	2442028.24	1973 Dec 11 1742:00	Loki Dart	-	-	0.000	MRU	SS	-	Metro	DSI-5860	-	-
1973-1141	2442028.03	1973 Dec 12 1247	Loki Dart	-	-	0.000	DTTA	SS	DTTA/NASA/	Metro	ELAREN	-	-
1973-11542	2442029.16	1973 Dec 12 1624:59	Loki Dart	-	-	0.000	MRU	SS	-	Metro	DSI-5860	-	-
1973-11550	2442030.16	1973 Dec 13 1544:00	Loki Dart	-	-	0.000	MRU	SS	-	Metro	DSI-5860	-	-
1973-11556	2442031.16	1973 Dec 14 1624:59	Loki Dart	-	-	0.000	MRU	SS	-	Metro	DSI-5860	-	-
1973-11562	2442034.16	1973 Dec 17 1545:00	Loki Dart	-	-	0.000	MRU	SS	-	Metro	DSI-5860	-	-
1973-11567	2442035.16	1973 Dec 18 1545:00	Loki Dart	-	-	0.000	MRU	SS	-	Metro	DSI-5860	-	-
1973-11572	2442036.16	1973 Dec 19 1624:59	Loki Dart	-	-	0.000	MRU	SS	-	Metro	DSI-5860	-	-
1973-11577	2442037.15	1973 Dec 20 1541:00	Loki Dart	-	-	0.000	MRU	SS	-	Metro	DSI-5860	-	-
1973-11581	2442038.16	1973 Dec 21 1624:59	Loki Dart	-	-	0.000	MRU	SS	-	Metro	DSI-5860	-	-
1973-11594	2442044.15	1973 Dec 27 1541:00	Loki Dart	-	-	0.000	MRU	SS	-	Metro	DSI-5860	-	-
1973-11596	2442044.30	1973 Dec 27 1918:59	Loki Dart	-	-	0.000	MRU	SS	-	Metro	DSI-5860	-	-
1973-11597	2442045.16	1973 Dec 28 1624:59	Loki Dart	-	-	0.000	MRU	SS	-	Metro	DSI-5860	-	-
1974-1101	2442047.50	1974 Jan	Loki Dart	-	-	0.000	MRU	SS	USAF/GHW	Metro	FC	-	-
1974-1102	2442047.50	1974 Jan	Loki Dart	-	-	0.000	MRU	SS	USAF/GHW	Metro	FC	-	-
1974-1109	2442050.24	1974 Jan 2 1741:00	Loki Dart	-	-	0.000	MRU	SS	-	Metro	DSI-5860	-	-
1974-1114	2442050.16	1974 Jan 3 1556:59	Loki Dart	-	-	0.000	MRU	SS	-	Metro	DSI-5860	-	-
1974-1118	2442052.16	1974 Jan 7 1545:00	Loki Dart	-	-	0.000	MRU	SS	-	Metro	DSI-5860	-	-
1974-1125	2442057.13	1974 Jan 9 1309:59	Loki Dart	-	-	0.000	MRU	SS	-	Metro	DSI-5860	-	-
1974-1130	2442057.01	1974 Jan 9 1715	Loki Dart	-	-	0.000	DTTA	SS	DTTA/	Metro	ELAREN	-	-
1974-1130	2442058.24	1974 Jan 10 1755:00	Loki Dart	-	-	0.000	MRU	SS	-	Metro	DSI-5860	-	-
1974-1131	2442058.06	1974 Jan 10 1553:00	Loki Dart	-	-	0.000	MRU	SS	-	Metro	DSI-5860	-	-
1974-1139	2442059.95	1974 Jan 11 1543:00	Loki Dart	-	-	0.000	MRU	SS	-	Metro	DSI-5860	-	-
1974-1143	2442061.95	1974 Jan 14 1130	Loki Dart	-	-	0.000	MRU	SS	-	Metro	DSI-5860	-	-
1974-1149	2442063.95	1974 Jan 15 1541:00	Loki Dart	-	-	0.000	MRU	SS	-	Metro	DSI-5860	-	-
1974-1152	2442063.95	1974 Jan 16 1741:00	Loki Dart	-	-	0.000	MRU	SS	-	Metro	DSI-5860	-	-
1974-1153	2442064.21	1974 Jan 16 1741:00	Loki Dart	-	-	0.000	MRU	SS	-	Metro	DSI-5860	-	-
1974-1158	2442065.16	1974 Jan 17 1555:00	Loki Dart	-	-	0.000	MRU	SS	-	Metro	DSI-5860	-	-
1974-1172	2442066.00	1974 Jan 19 1200:00	Loki Dart	-	-	0.000	MRU	SS	-	Metro	DSI-5860	-	-
1974-1182	2442066.00	1974 Jan 19 0330:00	Loki Dart	-	-	0.000	MRU	SS	-	Metro	DSI-5860	-	-
1974-1182	2442066.52	1974 Jan 19 1956	Loki Dart	-	-	0.000	MRU	SS	-	Metro	DSI-5860	-	-
1974-1188	2442067.04	1974 Jan 21 1959	Loki Dart	-	-	0.000	DTTA	SS	DTTA/	Metro	ELAREN	-	-
1974-1195	2442069.04	1974 Jan 22 0054:00	Loki Dart	-	-	0.000	DTTA	SS	DTTA/	Metro	ELAREN	-	-
1974-1192	2442069.54	1974 Jan 22 0054:00	Loki Dart	-	-	0.000	MRU	SS	-	Metro	DSI-5860	-	-
1974-1197	2442070.51	1974 Jan 23 0019:00	Loki Dart	-	-	0.000	MRU	SS	-	Metro	DSI-5860	-	-
1974-1197	2442071.04	1974 Jan 23 1301	Loki Dart	-	-	0.000	MRU	SS	-	Metro	DSI-5860	-	-
1974-1110	2442072.16	1974 Jan 24 1545:00	Loki Dart	-	-	0.000	MRU	SS	-	Metro	DSI-5860	-	-
1974-1188	2442073.04	1974 Jan 26 1959	Loki Dart	-	-	0.000	MRU	SS	-	Metro	DSI-5860	-	-
1974-1115	2442073.24	1974 Jan 26 1743:00	Loki Dart	-	-	0.000	MRU	SS	-	Metro	DSI-5860	-	-
1974-1122	2442076.16	1974 Jan 28 1544:00	Loki Dart	-	-	0.000	MRU	SS	-	Metro	DSI-5860	-	-
1974-1129	2442077.15	1974 Jan 29 1541:00	Loki Dart	-	-	0.000	MRU	SS	-	Metro	DSI-5860	-	-
1974-1136	2442078.15	1974 Jan 30 1540:00	Loki Dart	-	-	0.000	MRU	SS	-	Metro	DSI-5860	-	-
1974-1150	2442078.15	1974 Jan 31 1538:59	Loki Dart	-	-	0.000	MRU	SS	-	Metro	DSI-5860	-	-
1974-1144	2442078.50	1974 Feb 4 1604:59	Loki Dart	-	-	0.000	MRU	SS	USAF/GHW	Metro	FC	-	-
1974-1163	2442083.17	1974 Feb 5 1738:59	Loki Dart	-	-	0.000	MRU	SS	-	Metro	DSI-5860	-	-
1974-1173	2442084.24	1974 Feb 6 1609:59	Loki Dart	-	-	0.000	MRU	SS	-	Metro	DSI-5860	-	-
1974-1173	2442085.17	1974 Feb 7 1545:59	Loki Dart	-	-	0.000	MRU	SS	-	Metro	DSI-5860	-	-
1974-1176	2442086.16	1974 Feb 7 1538:59	Loki Dart	-	-	0.000	MRU	SS	-	Metro	DSI-5860	-	-
1974-1181	2442087.15	1974 Feb 8 1538:59	Loki Dart	-	-	0.000	MRU	SS	-	Metro	DSI-5860	-	-
1974-1184	2442090.16	1974 Feb 11 1743:00	Loki Dart	-	-	0.000	MRU	SS	-	Metro	DSI-5860	-	-
1974-1192	2442091.24	1974 Feb 12 1545:00	Loki Dart	-	-	0.000	MRU	SS	-	Metro	DSI-5860	-	-
1974-1205	2442092.54	1974 Feb 15 0059:59	Loki Dart	-	-	0.000	MRU	SS	-	Metro	DSI-5860	-	-
1974-1218	2442097.53	1974 Feb 15 0037:59	Loki Dart	-	-	0.000	MRU	SS	-	Metro	DSI-5860	-	-
1974-1192	2442099.52	1974 Feb 21 0033:00	Loki Dart	-	-	0.000	MRU	SS	-	Metro	DSI-5860	-	-
1974-1232	2442101.60	1974 Feb 23 0217:00	Loki Dart	-	-	0.000	MRU	SS	-	Metro	DSI-5860	-	-
1974-1241	2442101.60	1974 Feb 26 0049:59	Loki Dart	-	-	0.000	MRU	SS	-	Metro	DSI-5860	-	-
1974-1255	2442105.54	1974 Feb 27 0057:59	Loki Dart	-	-	0.000	MRU	SS	-	Metro	DSI-5860	-	-
1974-1270	2442106.54	1974 Feb 28 0102:59	Loki Dart	-	-	0.000	MRU	SS	-	Metro	DSI-5860	-	-
1974-1265	2442106.50	1974 Mar	Loki Dart	-	-	0.000	MRU	SS	USAF/GHW	Metro	FC	-	-
1974-1274	2442107.55	1974 Mar 1 0108:59	Loki Dart	-	-	0.000	MRU	SS	-	Metro	DSI-5860	-	-



Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	DrbPay	Agency	Launch_Code	Group	Category	LTCite	Cite	Notes
1974-M174	2442504.11	1974 Sep 13 1437:00	LoKi Dart	-	-	0.000	MRU	SS	-	Metro	DS1-5860	-	-
1974-M181	2442507.11	1974 Sep 16 1443:00	LoKi Dart	-	-	0.000	MRU	SS	-	Metro	DS1-5860	-	-
1974-M196	2442509.13	1974 Sep 18 1506:00	LoKi Dart	-	-	0.000	MRU	SS	-	Metro	DS1-5860	-	-
1974-M209	2442311.19	1974 Sep 20 1636:59	LoKi Dart	-	-	0.000	MRU	SS	-	Metro	DS1-5860	-	-
1974-M214	2442314.11	1974 Sep 23 1446:00	LoKi Dart	-	-	0.000	MRU	SS	-	Metro	DS1-5860	-	-
1974-M228	2442316.14	1974 Sep 25 1519:00	LoKi Dart	-	-	0.000	MRU	SS	-	Metro	DS1-5860	-	-
1974-M237	2442318.11	1974 Sep 27 1443:00	LoKi Dart	-	-	0.000	MRU	SS	-	Metro	DS1-5860	-	-
1974-M251	2442321.17	1974 Sep 30 1611:59	LoKi Dart	-	-	0.000	MRU	SS	-	Metro	DS1-5860	-	-
1974-M242	2442320.50	1974 Oct	LoKi Dart	-	-	0.000	MRU	SS	USAF/GWW	Metro	FC	-	-
1974-M243	2442320.50	1974 Oct	LoKi Dart	-	-	0.000	MRU	SS	USAF/GWW	Metro	FC	-	-
1974-M244	2442320.50	1974 Oct	LoKi Dart	-	-	0.000	MRU	SS	USAF/GWW	Metro	FC	-	-
1974-M245	2442320.50	1974 Oct	LoKi Dart	-	-	0.000	MRU	SS	USAF/GWW	Metro	FC	-	-
1974-M246	2442320.50	1974 Oct	LoKi Dart	-	-	0.000	MRU	SS	USAF/GWW	Metro	FC	-	-
1974-M252	2442323.11	1974 Oct 2 1443:00	LoKi Dart	-	-	0.000	MRU	SS	-	Metro	DS1-5860	-	-
1974-M251	2442323.11	1974 Oct 4 1443:00	LoKi Dart	-	-	0.000	MRU	SS	-	Metro	DS1-5860	-	-
1974-M251	2442323.11	1974 Oct 9 1442:00	LoKi Dart	-	-	0.000	MRU	SS	-	Metro	DS1-5860	-	-
1974-M321	2442337.13	1974 Oct 16 1509:00	LoKi Dart	-	-	0.000	MRU	SS	-	Metro	DS1-5860	-	-
1974-M324	2442339.24	1974 Oct 18 1742:00	LoKi Dart	-	-	0.000	MRU	SS	-	Metro	DS1-5860	-	-
1974-M342	2442342.17	1974 Oct 21 1607:59	LoKi Dart	-	-	0.000	MRU	SS	-	Metro	DS1-5860	-	-
1974-M364	2442349.19	1974 Oct 28 1630:00	LoKi Dart	-	-	0.000	MRU	SS	-	Metro	DS1-5860	-	-
1974-M374	2442351.16	1974 Oct 30 1618:00	LoKi Dart	-	-	0.000	MRU	SS	-	Metro	DS1-5860	-	-
1974-M378	2442351.50	1974 Nov	LoKi Dart	-	-	0.000	MRU	SS	USAF/GWW	Metro	FC	-	-
1974-M387	2442355.16	1974 Nov 1 1585:00	LoKi Dart	-	-	0.000	MRU	SS	-	Metro	DS1-5860	-	-
1974-M393	2442356.15	1974 Nov 4 1540:00	LoKi Dart	-	-	0.000	MRU	SS	-	Metro	DS1-5860	-	-
1974-M398	2442357.16	1974 Nov 5 1621:59	LoKi Dart	-	-	0.000	MRU	SS	-	Metro	DS1-5860	-	-
1974-M404	2442356.16	1974 Nov 6 1614:59	LoKi Dart	-	-	0.000	MRU	SS	-	Metro	DS1-5860	-	-
1974-M410	2442356.16	1974 Nov 7 1545:59	LoKi Dart	-	-	0.000	MRU	SS	-	Metro	DS1-5860	-	-
1974-M416	2442350.24	1974 Nov 8 1740:00	LoKi Dart	-	-	0.000	MRU	SS	-	Metro	DS1-5860	-	-
1974-M419	2442354.15	1974 Nov 11 1540:00	LoKi Dart	-	-	0.000	MRU	SS	-	Metro	DS1-5860	-	-
1974-M424	2442361.17	1974 Nov 12 1537:59	LoKi Dart	-	-	0.000	MRU	SS	-	Metro	DS1-5860	-	-
1974-M434	2442366.17	1974 Nov 13 1610:59	LoKi Dart	-	-	0.000	MRU	SS	-	Metro	DS1-5860	-	-
1974-M440	2442367.16	1974 Nov 14 1601:59	LoKi Dart	-	-	0.000	MRU	SS	-	Metro	DS1-5860	-	-
1974-M446	2442370.17	1974 Nov 15 1619:59	LoKi Dart	-	-	0.000	MRU	SS	-	Metro	DS1-5860	-	-
1974-M452	2442371.15	1974 Nov 18 1558:59	LoKi Dart	-	-	0.000	MRU	SS	-	Metro	DS1-5860	-	-
1974-M452	2442372.16	1974 Nov 19 1541:00	LoKi Dart	-	-	0.000	MRU	SS	-	Metro	DS1-5860	-	-
1974-M461	2442373.16	1974 Nov 20 1622:59	LoKi Dart	-	-	0.000	MRU	SS	-	Metro	DS1-5860	-	-
1974-M464	2442374.15	1974 Nov 21 1544:00	LoKi Dart	-	-	0.000	MRU	SS	-	Metro	DS1-5860	-	-
1974-M473	2442377.19	1974 Nov 22 1540:00	LoKi Dart	-	-	0.000	MRU	SS	-	Metro	DS1-5860	-	-
1974-M478	2442376.15	1974 Nov 28 1626:59	LoKi Dart	-	-	0.000	MRU	SS	-	Metro	DS1-5860	-	-
1974-M464	2442380.20	1974 Nov 25 1541:00	LoKi Dart	-	-	0.000	MRU	SS	-	Metro	DS1-5860	-	-
1974-M490	2442381.16	1974 Nov 28 1646:59	LoKi Dart	-	-	0.000	MRU	SS	-	Metro	DS1-5860	-	-
1974-M493	2442381.16	1974 Nov 29 1618:59	LoKi Dart	-	-	0.000	MRU	SS	-	Metro	DS1-5860	-	-
1974-M493	2442381.16	1974 Nov 29 1551:00	LoKi Dart	-	-	0.000	MRU	SS	USAF/GWW	Metro	FC	-	-
1974-M493	2442381.50	1974 Dec	LoKi Dart	-	-	0.000	MRU	SS	USAF/GWW	Metro	FC	-	-
1974-M496	2442381.50	1974 Dec	LoKi Dart	-	-	0.000	MRU	SS	USAF/GWW	Metro	FC	-	-
1974-M496	2442384.15	1974 Dec 2 1545:59	LoKi Dart	-	-	0.000	MRU	SS	-	Metro	DS1-5860	-	-
1974-M506	2442387.11	1974 Dec 3 1610:59	LoKi Dart	-	-	0.000	MRU	SS	-	Metro	DS1-5860	-	-
1974-M519	2442387.15	1974 Dec 5 1540:00	LoKi Dart	-	-	0.000	MRU	SS	-	Metro	DS1-5860	-	-
1974-M528	2442388.21	1974 Dec 6 1741:00	LoKi Dart	-	-	0.000	MRU	SS	-	Metro	DS1-5860	-	-
1974-M527	2442381.67	1974 Dec 10 0355:59	LoKi Dart	-	-	0.000	MRU	SS	-	Metro	DS1-5860	-	-
1974-M559	2442384.46	1974 Dec 12 2300:00	LoKi Dart	-	-	0.000	MRU	SS	-	Metro	DS1-5860	-	-
1974-M561	2442385.16	1974 Dec 13 1621:59	LoKi Dart	-	-	0.000	MRU	SS	-	Metro	DS1-5860	-	-
1974-M568	2442389.16	1974 Dec 17 1546:59	LoKi Dart	-	-	0.000	MRU	SS	-	Metro	DS1-5860	-	-
1974-M577	2442389.16	1974 Dec 17 1546:59	LoKi Dart	-	-	0.000	MRU	SS	-	Metro	DS1-5860	-	-
1974-M583	2442400.16	1974 Dec 19 1619:59	LoKi Dart	-	-	0.000	MRU	SS	-	Metro	DS1-5860	-	-
1974-M580	2442401.16	1974 Dec 19 1549:59	LoKi Dart	-	-	0.000	MRU	SS	-	Metro	DS1-5860	-	-
1974-M596	2442402.16	1974 Dec 19 1630:59	LoKi Dart	-	-	0.000	MRU	SS	-	Metro	DS1-5860	-	-
1974-M603	2442405.13	1974 Dec 23 1629:59	LoKi Dart	-	-	0.000	MRU	SS	-	Metro	DS1-5860	-	-
1974-M609	2442406.16	1974 Dec 24 1544:00	LoKi Dart	-	-	0.000	MRU	SS	-	Metro	DS1-5860	-	-
1974-M617	2442412.15	1974 Dec 30 1541:00	LoKi Dart	-	-	0.000	MRU	SS	-	Metro	DS1-5860	-	-
1974-M624	2442413.17	1974 Dec 31 1607:00	LoKi Dart	-	-	0.000	MRU	SS	-	Metro	DS1-5860	-	-
1975-001	2442412.50	1975 Dec	LoKi Dart	-	-	0.000	MRU	SS	USAF/GWW	Metro	FC	-	-
1975-002	2442412.50	1975 Dec	LoKi Dart	-	-	0.000	MRU	SS	USAF/GWW	Metro	FC	-	-
1975-010	2442416.16	1975 Jan 3 1545:00	LoKi Dart	-	-	0.000	MRU	SS	-	Metro	DS1-5860	-	-
1975-016	2442419.15	1975 Jan 6 1540:00	LoKi Dart	-	-	0.000	MRU	SS	-	Metro	DS1-5860	-	-
1975-019	2442420.16	1975 Jan 7 1544:00	LoKi Dart	-	-	0.000	MRU	SS	-	Metro	DS1-5860	-	-
1975-025	2442421.16	1975 Jan 8 1548:59	LoKi Dart	-	-	0.000	MRU	SS	-	Metro	DS1-5860	-	-
1975-028	2442422.15	1975 Jan 9 1542:00	LoKi Dart	-	-	0.000	MRU	SS	-	Metro	DS1-5860	-	-
1975-033	2442423.19	1975 Jan 10 1635:59	LoKi Dart	-	-	0.000	MRU	SS	-	Metro	DS1-5860	-	-
1975-039	2442426.24	1975 Jan 13 1745:00	LoKi Dart	-	-	0.000	MRU	SS	-	Metro	DS1-5860	-	-
1975-044	2442427.18	1975 Jan 14 1624:59	LoKi Dart	-	-	0.000	MRU	SS	-	Metro	DS1-5860	-	-
1975-051	2442428.17	1975 Jan 15 1607:59	LoKi Dart	-	-	0.000	MRU	SS	-	Metro	DS1-5860	-	-
1975-057	2442429.16	1975 Jan 16 1619:59	LoKi Dart	-	-	0.000	MRU	SS	-	Metro	DS1-5860	-	-
1975-063	2442430.16	1975 Jan 17 1545:00	LoKi Dart	-	-	0.000	MRU	SS	-	Metro	DS1-5860	-	-
1975-073	2442433.16	1975 Jan 21 1548:59	LoKi Dart	-	-	0.000	MRU	SS	-	Metro	DS1-5860	-	-
1975-084	2442434.16	1975 Jan 20 1615:59	LoKi Dart	-	-	0.000	MRU	SS	-	Metro	DS1-5860	-	-
1975-090	2442436.15	1975 Jan 22 1618:59	LoKi Dart	-	-	0.000	MRU	SS	-	Metro	DS1-5860	-	-
1975-096	2442437.16	1975 Jan 23 1542:00	LoKi Dart	-	-	0.000	MRU	SS	-	Metro	DS1-5860	-	-
1975-106	2442441.52	1975 Jan 29 0035:59	LoKi Dart	-	-	0.000	MRU	SS	-	Metro	DS1-5860	-	-
1975-113	2442442.69	1975 Feb 5 0423:59	LoKi Dart	-	-	0.000	MRU	SS	-	Metro	DS1-5860	-	-
1975-1135	2442448.68	1975 Feb 5 0423:59	LoKi Dart	-	-	0.000	MRU	SS	-	Metro	DS1-5860	-	-
1975-1145	2442460.53	1975 Feb 7 0046:59	LoKi Dart	-	-	0.000	MRU	SS	-	Metro	DS1-5860	-	-
1975-1164	2442465.54	1975 Feb 12 0051:00	LoKi Dart	-	-	0.000	MRU	SS	-	Metro	DS1-5860	-	-

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	DrbPay	Agency	Launch_Code	Group	Category	LTCite	Cite	Notes
1975-H170	2442856.53	1975 Feb 13 0047:59	LoKi Dart	-	-	0.000	MRU	SS	-	Metro	DST-5860	-	-
1975-H183	2442858.53	1975 Feb 15 0037:59	LoKi Dart	-	-	0.000	MRU	SS	-	Metro	DST-5860	-	-
1975-H185	2442861.53	1975 Feb 18 0047:59	LoKi Dart	-	-	0.000	MRU	SS	-	Metro	DST-5860	-	-
1975-H190	2442862.53	1975 Feb 19 0047:59	LoKi Dart	-	-	0.000	MRU	SS	-	Metro	DST-5860	-	-
1975-H204	2442864.54	1975 Feb 21 0052:00	LoKi Dart	-	-	0.000	MRU	SS	-	Metro	DST-5860	-	-
1975-H214	2442865.54	1975 Feb 22 0103:59	LoKi Dart	-	-	0.000	MRU	SS	-	Metro	DST-5860	-	-
1975-H219	2442868.53	1975 Feb 25 0046:59	LoKi Dart	-	-	0.000	MRU	SS	-	Metro	DST-5860	-	-
1975-H223	2442869.28	1975 Feb 25 1847:59	LoKi Dart	-	-	0.000	MRU	SS	-	Metro	DST-5860	-	-
1975-H229	2442870.21	1975 Feb 25 1704:59	LoKi Dart	-	-	0.000	MRU	SS	-	Metro	DST-5860	-	-
1975-H236	2442871.20	1975 Feb 27 1641:59	LoKi Dart	-	-	0.000	MRU	SS	-	Metro	DST-5860	-	-
1975-H239	2442871.50	1975 Mar	LoKi Dart	-	-	0.000	MRU	SS	USAF/GHW	Metro	FC	-	-
1975-H240	2442871.50	1975 Mar	LoKi Dart	-	-	0.000	MRU	SS	USAF/GHW	Metro	FC	-	-
1975-H251	2442872.50	1975 Mar 1 0000:00	LoKi Dart	-	-	0.000	MRU	SS	-	Metro	DST-5860	-	-
1975-H256	2442876.61	1975 Mar 5 0236:00	LoKi Dart	-	-	0.000	MRU	SS	-	Metro	DST-5860	-	-
1975-H275	2442877.54	1975 Mar 6 0068:59	LoKi Dart	-	-	0.000	MRU	SS	-	Metro	DST-5860	-	-
1975-H282	2442878.54	1975 Mar 7 0102:59	LoKi Dart	-	-	0.000	MRU	SS	-	Metro	DST-5860	-	-
1975-H280	2442879.54	1975 Mar 8 0102:59	LoKi Dart	-	-	0.000	MRU	SS	-	Metro	DST-5860	-	-
1975-H297	2442882.55	1975 Mar 11 0109:59	LoKi Dart	-	-	0.000	MRU	SS	-	Metro	DST-5860	-	-
1975-H301	2442883.57	1975 Mar 12 0144:59	LoKi Dart	-	-	0.000	MRU	SS	-	Metro	DST-5860	-	-
1975-H312	2442885.23	1975 Mar 13 1726:00	LoKi Dart	-	-	0.000	MRU	SS	-	Metro	DST-5860	-	-
1975-H316	2442886.21	1975 Mar 14 1708:00	LoKi Dart	-	-	0.000	MRU	SS	-	Metro	DST-5860	-	-
1975-H330	2442889.15	1975 Mar 17 1538:59	LoKi Dart	-	-	0.000	MRU	SS	-	Metro	DST-5860	-	-
1975-H339	2442890.15	1975 Mar 18 1540:00	LoKi Dart	-	-	0.000	MRU	SS	-	Metro	DST-5860	-	-
1975-H344	2442891.23	1975 Mar 19 1735:00	LoKi Dart	-	-	0.000	MRU	SS	-	Metro	DST-5860	-	-
1975-H344	2442892.21	1975 Mar 20 1657:59	LoKi Dart	-	-	0.000	MRU	SS	-	Metro	DST-5860	-	-
1975-H356	2442893.19	1975 Mar 21 1638:59	LoKi Dart	-	-	0.000	MRU	SS	-	Metro	DST-5860	-	-
1975-H356	2442895.23	1975 Mar 24 1724:00	LoKi Dart	-	-	0.000	MRU	SS	-	Metro	DST-5860	-	-
1975-H362	2442897.21	1975 Mar 25 1706:00	LoKi Dart	-	-	0.000	MRU	SS	-	Metro	DST-5860	-	-
1975-H369	2442898.20	1975 Mar 25 1647:59	LoKi Dart	-	-	0.000	MRU	SS	-	Metro	DST-5860	-	-
1975-H376	2442899.26	1975 Mar 27 1810:00	LoKi Dart	-	-	0.000	MRU	SS	USAF/GHW	Metro	FC	-	-
1975-H383	2442902.50	1975 Apr	LoKi Dart	-	-	0.000	MRU	SS	USAF/GHW	Metro	FC	-	-
1975-H394	2442902.50	1975 Apr	LoKi Dart	-	-	0.000	MRU	SS	USAF/GHW	Metro	FC	-	-
1975-H409	2442906.96	1975 Apr 4 1049:59	LoKi Dart	-	-	0.000	MRU	SS	-	Metro	DST-5860	-	-
1975-H414	2442909.87	1975 Apr 7 0857:00	LoKi Dart	-	-	0.000	MRU	SS	-	Metro	DST-5860	-	-
1975-H422	2442910.87	1975 Apr 8 0855:00	LoKi Dart	-	-	0.000	MRU	SS	-	Metro	DST-5860	-	-
1975-H427	2442911.87	1975 Apr 9 0847:00	LoKi Dart	-	-	0.000	MRU	SS	-	Metro	DST-5860	-	-
1975-H435	2442912.86	1975 Apr 10 0842:00	LoKi Dart	-	-	0.000	MRU	SS	-	Metro	DST-5860	-	-
1975-H436	2442912.94	1975 Apr 10 027:59	LoKi Dart	-	-	0.000	MRU	SS	-	Metro	DST-5860	-	-
1975-H460	2442913.86	1975 Apr 14 0911:00	LoKi Dart	-	-	0.000	MRU	SS	-	Metro	DST-5860	-	-
1975-H462	2442916.91	1975 Apr 16 0946:59	LoKi Dart	-	-	0.000	MRU	SS	-	Metro	DST-5860	-	-
1975-H481	2442920.90	1975 Apr 18 0958:59	LoKi Dart	-	-	0.000	MRU	SS	-	Metro	DST-5860	-	-
1975-H482	2442923.62	1975 Apr 24 0254:00	LoKi Dart	-	-	0.000	MRU	SS	USAF/GHW	Metro	FC	-	-
1975-H501	2442938.21	1975 May	LoKi Dart	-	-	0.000	MRU	SS	USAF/GHW	Metro	FC	-	-
1975-H514	2442938.21	1975 May 2 1658:59	LoKi Dart	-	-	0.000	MRU	SS	-	Metro	DST-5860	-	-
1975-H522	2442938.11	1975 May 5 1449:00	LoKi Dart	-	-	0.000	MRU	SS	-	Metro	DST-5860	-	-
1975-H522	2442940.19	1975 May 9 1037:59	LoKi Dart	-	-	0.000	MRU	SS	-	Metro	DST-5860	-	-
1975-H548	2442942.15	1975 May 9 1037:59	LoKi Dart	-	-	0.000	MRU	SS	-	Metro	DST-5860	-	-
1975-H548	2442945.19	1975 May 13 1444:00	LoKi Dart	-	-	0.000	MRU	SS	-	Metro	DST-5860	-	-
1975-H551	2442947.12	1975 May 14 1446:00	LoKi Dart	-	-	0.000	MRU	SS	-	Metro	DST-5860	-	-
1975-H551	2442947.14	1975 May 14 1520:00	LoKi Dart	-	-	0.000	MRU	SS	-	Metro	DST-5860	-	-
1975-H592	2442954.14	1975 May 21 1520:00	LoKi Dart	-	-	0.000	MRU	SS	-	Metro	DST-5860	-	-
1975-H601	2442956.11	1975 May 23 1443:00	LoKi Dart	-	-	0.000	MRU	SS	-	Metro	DST-5860	-	-
1975-H611	2442959.11	1975 May 26 1444:00	LoKi Dart	-	-	0.000	MRU	SS	-	Metro	DST-5860	-	-
1975-H621	2442961.11	1975 May 28 1517:00	LoKi Dart	-	-	0.000	MRU	SS	-	Metro	DST-5860	-	-
1975-H636	2442963.13	1975 May 30 1632:59	LoKi Dart	-	-	0.000	MRU	SS	-	Metro	DST-5860	-	-
1975-H640	2442963.50	1975 Jun	LoKi Dart	-	-	0.000	MRU	SS	USAF/GHW	Metro	FC	-	-
1975-H641	2442963.50	1975 Jun	LoKi Dart	-	-	0.000	MRU	SS	USAF/GHW	Metro	FC	-	-
1975-H642	2442963.50	1975 Jun	LoKi Dart	-	-	0.000	MRU	SS	USAF/GHW	Metro	FC	-	-
1975-H643	2442963.50	1975 Jun	LoKi Dart	-	-	0.000	MRU	SS	USAF/GHW	Metro	FC	-	-
1975-H644	2442963.50	1975 Jun	LoKi Dart	-	-	0.000	MRU	SS	USAF/GHW	Metro	FC	-	-
1975-H645	2442963.50	1975 Jun	LoKi Dart	-	-	0.000	MRU	SS	USAF/GHW	Metro	FC	-	-
1975-H646	2442963.50	1975 Jun	LoKi Dart	-	-	0.000	MRU	SS	USAF/GHW	Metro	FC	-	-
1975-H647	2442963.50	1975 Jun	LoKi Dart	-	-	0.000	MRU	SS	USAF/GHW	Metro	FC	-	-
1975-H648	2442963.50	1975 Jun	LoKi Dart	-	-	0.000	MRU	SS	USAF/GHW	Metro	FC	-	-
1975-H663	2442968.13	1975 Jun 4 1508:00	LoKi Dart	-	-	0.000	MRU	SS	-	Metro	DST-5860	-	-
1975-H693	2442975.14	1975 Jun 11 1518:00	LoKi Dart	-	-	0.000	MRU	SS	-	Metro	DST-5860	-	-
1975-H709	2442982.14	1975 Jun 18 1520:00	LoKi Dart	-	-	0.000	MRU	SS	-	Metro	DST-5860	-	-
1975-H719	2442983.50	1975 Jun	LoKi Dart	-	-	0.000	MRU	SS	USAF/GHW	Metro	FC	-	-
1975-H752	2442986.13	1975 Jul 2 1511:00	LoKi Dart	-	-	0.000	MRU	SS	-	Metro	DST-5860	-	-
1975-H779	2442983.19	1975 Jul 9 1629:00	LoKi Dart	-	-	0.000	MRU	SS	-	Metro	DST-5860	-	-
1975-H779	2442983.19	1975 Jul 16 1815:59	LoKi Dart	-	-	0.000	MRU	SS	-	Metro	DST-5860	-	-
1975-H825	2442917.23	1975 Jul 23 1730:00	LoKi Dart	-	-	0.000	MRU	SS	-	Metro	DST-5860	-	-
1975-H825	2442922.26	1975 Jul 28 1815:59	LoKi Dart	-	-	0.000	MRU	SS	-	Metro	DST-5860	-	-
1975-H855	2442924.23	1975 Jul 30 1734:00	LoKi Dart	-	-	0.000	MRU	SS	-	Metro	DST-5860	-	-
1975-H867	2442926.12	1975 Aug 1 1448:00	LoKi Dart	-	-	0.000	MRU	SS	-	Metro	DST-5860	-	-
1975-H898	2442931.24	1975 Aug 6 1742:00	LoKi Dart	-	-	0.000	MRU	SS	-	Metro	DST-5860	-	-
1975-H916	2442938.20	1975 Aug 13 1646:59	LoKi Dart	-	-	0.000	MRU	SS	-	Metro	DST-5860	-	-
1975-H931	2442940.19	1975 Aug 15 1631:59	LoKi Dart	-	-	0.000	MRU	SS	-	Metro	DST-5860	-	-
1975-H939	2442943.24	1975 Aug 18 1740:00	LoKi Dart	-	-	0.000	MRU	SS	-	Metro	DST-5860	-	-
1975-H945	2442945.21	1975 Aug 22 1443:00	LoKi Dart	-	-	0.000	MRU	SS	-	Metro	DST-5860	-	-
1975-H952	2442947.11	1975 Aug 22 1443:00	LoKi Dart	-	-	0.000	MRU	SS	-	Metro	DST-5860	-	-
1975-H958	2442950.20	1975 Aug 25 1649:59	LoKi Dart	-	-	0.000	MRU	SS	-	Metro	DST-5860	-	-
1975-H968	2442952.19	1975 Aug 27 1638:59	LoKi Dart	-	-	0.000	MRU	SS	-	Metro	DST-5860	-	-
1975-H976	2442954.18	1975 Aug 29 1619:59	LoKi Dart	-	-	0.000	MRU	SS	-	Metro	DST-5860	-	-
1975-H991	2442959.19	1975 Sep 3 1631:59	LoKi Dart	-	-	0.000	MRU	SS	-	Metro	DST-5860	-	-
1975-H1001	2442961.19	1975 Sep 5 1640:00	LoKi Dart	-	-	0.000	MRU	SS	-	Metro	DST-5860	-	-
1975-H1005	2442964.19	1975 Sep 8 1626:59	LoKi Dart	-	-	0.000	MRU	SS	-	Metro	DST-5860	-	-

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	DrbPay	Agency	Launch_Code	Group	Category	LTCite	Cite	Notes
1975-M1015	2442866.19	1975 Sep 10 1635:59	Loki Dart	-	-	0.000	MRU	SS	-	Metro	DST-5860	-	-
1975-M1020	2442868.20	1975 Sep 12 1652:59	Loki Dart	-	-	0.000	MRU	SS	-	Metro	DST-5860	-	-
1975-M1026	2442871.18	1975 Sep 15 1614:59	Loki Dart	-	-	0.000	MRU	SS	-	Metro	DST-5860	-	-
1975-M1042	2442873.21	1975 Sep 17 1656:59	Loki Dart	-	-	0.000	MRU	SS	-	Metro	DST-5860	-	-
1975-M1065	2442876.25	1975 Sep 19 1757:00	Loki Dart	-	-	0.000	MRU	SS	-	Metro	DST-5860	-	-
1975-M1065	2442878.19	1975 Sep 22 1630:59	Loki Dart	-	-	0.000	MRU	SS	-	Metro	DST-5860	-	-
1975-M1065	2442880.24	1975 Sep 24 1741:00	Loki Dart	-	-	0.000	MRU	SS	-	Metro	DST-5860	-	-
1975-M1082	2442882.20	1975 Sep 26 1646:59	Loki Dart	-	-	0.000	MRU	SS	-	Metro	DST-5860	-	-
1975-M1096	2442885.50	1975 Oct	Loki Dart	-	-	0.000	MRU	SS	USAF/GW	Metro	DST-5860	-	-
1975-M1097	2442885.50	1975 Oct	Loki Dart	-	-	0.000	MRU	SS	USAF/GW	Metro	DST-5860	-	-
1975-M1097	2442885.50	1975 Oct	Loki Dart	-	-	0.000	MRU	SS	USAF/GW	Metro	DST-5860	-	-
1975-M1102	2442887.24	1975 Oct 1 1745:00	Loki Dart	-	-	0.000	MRU	SS	-	Metro	DST-5860	-	-
1975-M1109	2442889.11	1975 Oct 3 1438:59	Loki Dart	-	-	0.000	MRU	SS	-	Metro	DST-5860	-	-
1975-M1121	2442892.25	1975 Oct 6 1804:59	Loki Dart	-	-	0.000	MRU	SS	-	Metro	DST-5860	-	-
1975-M1130	2442894.19	1975 Oct 8 1627:59	Loki Dart	-	-	0.000	MRU	SS	-	Metro	DST-5860	-	-
1975-M1139	2442896.16	1975 Oct 10 1652:00	Loki Dart	-	-	0.000	MRU	SS	-	Metro	DST-5860	-	-
1975-M1154	2442701.19	1975 Oct 15 1635:59	Loki Dart	-	-	0.000	MRU	SS	-	Metro	DST-5860	-	-
1975-M1169	2442706.20	1975 Oct 20 1651:00	Loki Dart	-	-	0.000	MRU	SS	-	Metro	DST-5860	-	-
1975-M1163	2442710.19	1975 Oct 22 1512:59	Loki Dart	-	-	0.000	MRU	SS	-	Metro	DST-5860	-	-
1975-M1196	2442713.19	1975 Oct 24 1634:59	Loki Dart	-	-	0.000	MRU	SS	-	Metro	DST-5860	-	-
1975-M1202	2442720.19	1975 Oct 27 1630:59	Loki Dart	-	-	0.000	MRU	SS	-	Metro	DST-5860	-	-
1975-M1227	2442721.17	1975 Nov 3 1634:59	Loki Dart	-	-	0.000	MRU	SS	-	Metro	DST-5860	-	-
1975-M1232	2442721.17	1975 Nov 4 1634:59	Loki Dart	-	-	0.000	MRU	SS	-	Metro	DST-5860	-	-
1975-M1238	2442722.20	1975 Nov 5 1646:59	Loki Dart	-	-	0.000	MRU	SS	-	Metro	DST-5860	-	-
1975-M1246	2442724.30	1975 Nov 6 1614:59	Loki Dart	-	-	0.000	MRU	SS	-	Metro	DST-5860	-	-
1975-M1252	2442727.20	1975 Nov 7 1907:00	Loki Dart	-	-	0.000	MRU	SS	-	Metro	DST-5860	-	-
1975-M1257	2442728.16	1975 Nov 10 1634:59	Loki Dart	-	-	0.000	MRU	SS	-	Metro	DST-5860	-	-
1975-M1263	2442728.16	1975 Nov 11 1614:59	Loki Dart	-	-	0.000	MRU	SS	-	Metro	DST-5860	-	-
1975-M1269	2442730.20	1975 Nov 12 1904:59	Loki Dart	-	-	0.000	MRU	SS	-	Metro	DST-5860	-	-
1975-M1274	2442731.15	1975 Nov 13 1641:59	Loki Dart	-	-	0.000	MRU	SS	-	Metro	DST-5860	-	-
1975-M1278	2442731.15	1975 Nov 14 1943:00	Loki Dart	-	-	0.000	MRU	SS	-	Metro	DST-5860	-	-
1975-M1287	2442735.16	1975 Nov 16 1624:59	Loki Dart	-	-	0.000	MRU	SS	-	Metro	DST-5860	-	-
1975-M1290	2442736.17	1975 Nov 19 1601:59	Loki Dart	-	-	0.000	MRU	SS	-	Metro	DST-5860	-	-
1975-M1300	2442737.16	1975 Nov 20 1620:59	Loki Dart	?	-	0.000	MRU	SS	-	Metro	DST-5860	-	-
1975-M1303	2442736.17	1975 Nov 21 1606:00	Loki Dart	-	-	0.000	MRU	SS	-	Metro	DST-5860	-	-
1975-M1306	2442741.16	1975 Nov 24 1648:59	Loki Dart	-	-	0.000	MRU	SS	-	Metro	DST-5860	-	-
1975-M1309	2442742.16	1975 Nov 25 1618:59	Loki Dart	?	-	0.000	MRU	SS	-	Metro	DST-5860	-	-
1975-M1314	2442745.16	1975 Nov 25 1617:00	Loki Dart	?	-	0.000	MRU	SS	-	Metro	DST-5860	-	-
1975-M1320	2442744.25	1975 Nov 28 1859:59	Loki Dart	?	-	0.000	MRU	SS	-	Metro	DST-5860	-	-
1975-M1321	2442746.19	1975 Nov 28 1640:00	Loki Dart	?	-	0.000	MRU	SS	-	Metro	DST-5860	-	-
1975-M1322	2442746.16	1975 Dec 1 1617:00	Loki Dart	-	-	0.000	MRU	SS	-	Metro	DST-5860	-	-
1975-M1336	2442751.30	1975 Dec 2 1913:59	Loki Dart	-	-	0.000	MRU	SS	-	Metro	DST-5860	-	-
1975-M1357	2442751.30	1975 Dec 8 1713:59	Loki Dart	-	-	0.000	MRU	SS	-	Metro	DST-5860	-	-
1975-M1367	2442756.24	1975 Dec 8 1614:00	Loki Dart	-	-	0.000	MRU	SS	-	Metro	DST-5860	-	-
1975-M1369	2442757.16	1975 Dec 10 1636:59	Loki Dart	-	-	0.000	MRU	SS	-	Metro	DST-5860	-	-
1975-M1391	2442759.25	1975 Dec 10 1636:59	Loki Dart	-	-	0.000	MRU	SS	-	Metro	DST-5860	-	-
1975-M1392	2442759.25	1975 Dec 11 165:59	Loki Dart	-	-	0.000	MRU	SS	-	Metro	DST-5860	-	-
1975-M1378	2442764.29	1975 Dec 12 1857:59	Loki Dart	-	-	0.000	MRU	SS	-	Metro	DST-5860	-	-
1975-M1397	2442766.24	1975 Dec 18 1742:59	Loki Dart	-	-	0.000	MRU	SS	-	Metro	DST-5860	-	-
1975-M1403	2442766.24	1975 Dec 19 1742:59	Loki Dart	-	-	0.000	MRU	SS	-	Metro	DST-5860	-	-
1975-M1410	2442769.21	1975 Dec 20 1859:59	Loki Dart	-	-	0.000	MRU	SS	-	Metro	DST-5860	-	-
1975-M1418	2442770.13	1975 Dec 22 1636:59	Loki Dart	?	-	0.000	MRU	SS	-	Metro	DST-5860	-	-
1975-M1424	2442771.35	1975 Dec 24 1938:59	Loki Dart	?	-	0.000	MRU	SS	-	Metro	DST-5860	-	-
1975-M1434	2442771.35	1975 Dec 24 1938:59	Loki Dart	?	-	0.000	MRU	SS	-	Metro	DST-5860	-	-
1975-M1434	2442777.27	1975 Dec 30 1834:59	Loki Dart	?	-	0.000	MRU	SS	-	Metro	DST-5860	-	-
1975-M1432	2442778.21	1975 Dec 31 1656:59	Loki Dart	?	-	0.000	MRU	SS	-	Metro	DST-5860	-	-
1975-M15	2442784.16	1975 Jan 6 1545:00	Loki Dart	-	-	0.000	MRU	SS	-	Metro	DST-5860	-	-
1975-M19	2442786.17	1975 Jan 7 1559:59	Loki Dart	-	-	0.000	MRU	SS	-	Metro	DST-5860	-	-
1975-M29	2442786.17	1975 Jan 8 1557:59	Loki Dart	-	-	0.000	MRU	SS	-	Metro	DST-5860	-	-
1975-M33	2442787.27	1975 Jan 9 1830:00	Loki Dart	-	-	0.000	MRU	SS	-	Metro	DST-5860	-	-
1975-M37	2442790.17	1975 Jan 12 1607:00	Loki Dart	-	-	0.000	MRU	SS	-	Metro	DST-5860	-	-
1975-M47	2442791.19	1975 Jan 13 1636:59	Loki Dart	-	-	0.000	MRU	SS	-	Metro	DST-5860	-	-
1975-M53	2442792.19	1975 Jan 14 1629:00	Loki Dart	-	-	0.000	MRU	SS	-	Metro	DST-5860	-	-
1975-M65	2442793.17	1975 Jan 15 1601:59	Loki Dart	-	-	0.000	MRU	SS	-	Metro	DST-5860	-	-
1975-M65	2442794.29	1975 Jan 16 1901:59	Loki Dart	-	-	0.000	MRU	SS	-	Metro	DST-5860	-	-
1975-M75	2442794.29	1975 Jan 20 0308:00	Loki Dart	?	-	0.000	MRU	SS	-	Metro	DST-5860	-	-
1975-M89	2442798.20	1975 Jan 20 1652:00	Loki Dart	?	-	0.000	MRU	SS	-	Metro	DST-5860	-	-
1975-M105	2442800.17	1975 Jan 22 1610:59	Loki Dart	?	-	0.000	MRU	SS	-	Metro	DST-5860	-	-
1975-M115	2442801.19	1975 Jan 23 1626:59	Loki Dart	?	-	0.000	MRU	SS	-	Metro	DST-5860	-	-
1975-M142	2442806.58	1975 Jan 29 0151:00	Loki Dart	?	-	0.000	MRU	SS	-	Metro	DST-5860	-	-
1975-M146	2442807.56	1975 Jan 30 0125:59	Loki Dart	?	-	0.000	MRU	SS	-	Metro	DST-5860	-	-
1975-M155	2442808.50	1975 Feb	Loki Dart	-	-	0.000	MRU	SS	USAF/GW	Metro	DST-5860	-	-
1975-M156	2442808.50	1975 Feb	Loki Dart	-	-	0.000	MRU	SS	USAF/GW	Metro	DST-5860	-	-
1975-M157	2442808.50	1975 Feb	Loki Dart	-	-	0.000	MRU	SS	USAF/GW	Metro	DST-5860	-	-
1975-M158	2442808.50	1975 Feb	Loki Dart	-	-	0.000	MRU	SS	USAF/GW	Metro	DST-5860	-	-
1975-M159	2442808.50	1975 Feb	Loki Dart	-	-	0.000	MRU	SS	USAF/GW	Metro	DST-5860	-	-
1975-M160	2442808.50	1975 Feb	Loki Dart	-	-	0.000	MRU	SS	USAF/GW	Metro	DST-5860	-	-
1975-M161	2442808.50	1975 Feb	Loki Dart	-	-	0.000	MRU	SS	USAF/GW	Metro	DST-5860	-	-
1975-M162	2442808.50	1975 Feb	Loki Dart	-	-	0.000	MRU	SS	USAF/GW	Metro	DST-5860	-	-
1975-M186	2442813.57	1975 Feb 5 0136:59	Loki Dart	-	-	0.000	MRU	SS	-	Metro	DST-5860	-	-
1975-M190	2442814.30	1975 Feb 5 1917:00	Loki Dart	-	-	0.000	MRU	SS	-	Metro	DST-5860	-	-
1975-M54	2442815.15	1975 Feb 6 1533:59	Loki Dart	-	-	0.000	MRU	SS	-	Metro	DST-5860	-	-
1975-M195	2442815.17	1975 Feb 6 1608:59	Loki Dart	-	-	0.000	MRU	SS	-	Metro	DST-5860	-	-
1975-M202	2442818.18	1975 Feb 9 1618:59	Loki Dart	-	-	0.000	MRU	SS	-	Metro	DST-5860	-	-
1975-M214	2442820.18	1975 Feb 11 1624:59	Loki Dart	-	-	0.000	MRU	SS	-	Metro	DST-5860	-	-
1975-M223	2442821.16	1975 Feb 12 1555:00	Loki Dart	-	-	0.000	MRU	SS	-	Metro	DST-5860	-	-

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	DrbPay	Agency	Launch_Code	Group	Category	LTCite	Cite	Notes
1976-H233	2442822.18	1976 Feb 13 16:18:59	Loki Dart	-	-	0.000	MRU	SS	-	Metro	DST-5860	-	-
1976-H251	2442825.17	1976 Feb 16 16:04:59	Loki Dart	-	-	0.000	MRU	SS	-	Metro	DST-5860	-	-
1976-H256	2442827.19	1976 Feb 18 16:50:59	Loki Dart	-	-	0.000	MRU	SS	-	Metro	DST-5860	-	-
1976-H318	2442837.50	1976 Mar	Loki Dart	-	-	0.000	MRU	SS	USAF/GHW	Metro	FC	-	-
1976-H319	2442837.50	1976 Mar	Loki Dart	-	-	0.000	MRU	SS	USAF/GHW	Metro	FC	-	-
1976-H320	2442837.50	1976 Mar	Loki Dart	-	-	0.000	MRU	SS	USAF/GHW	Metro	FC	-	-
1976-H321	2442837.50	1976 Mar	Loki Dart	-	-	0.000	MRU	SS	USAF/GHW	Metro	FC	-	-
1976-H322	2442837.50	1976 Mar	Loki Dart	-	-	0.000	MRU	SS	USAF/GHW	Metro	FC	-	-
1976-H452	2442850.55	1976 Mar 23 01:12:59	Loki Dart	-	-	0.000	MRU	SS	-	Metro	DST-5860	-	-
1976-H465	2442852.55	1976 Mar 25 01:13:59	Loki Dart	-	-	0.000	MRU	SS	-	Metro	DST-5860	-	-
1976-H470	2442854.55	1976 Mar 28 01:14:59	Loki Dart	-	-	0.000	MRU	SS	-	Metro	DST-5860	-	-
1976-H480	2442854.56	1976 Mar 27 02:26:59	Loki Dart	-	-	0.000	MRU	SS	-	Metro	DST-5860	-	-
1976-H490	2442857.76	1976 Mar 30 06:17:00	Loki Dart	-	-	0.000	MRU	SS	-	Metro	DST-5860	-	-
1976-H492	2442858.56	1976 Mar 31 02:26:59	Loki Dart	-	-	0.000	MRU	SS	-	Metro	DST-5860	-	-
1976-H508	2442871.19	1976 Apr 2 16:32:59	Loki Dart	-	-	0.000	MRU	SS	-	Metro	DST-5860	-	-
1976-H526	2442876.20	1976 Apr 7 16:45:59	Loki Dart	-	-	0.000	MRU	SS	-	Metro	DST-5860	-	-
1976-H537	2442876.20	1976 Apr 9 16:41:00	Loki Dart	-	-	0.000	MRU	SS	-	Metro	DST-5860	-	-
1976-H546	2442881.19	1976 Apr 12 16:26:59	Loki Dart	-	-	0.000	MRU	SS	-	Metro	DST-5860	-	-
1976-H553	2442883.20	1976 Apr 14 16:46:59	Loki Dart	-	-	0.000	MRU	SS	-	Metro	DST-5860	-	-
1976-H563	2442885.20	1976 Apr 20 02:49:59	Loki Dart	-	-	0.000	MRU	SS	-	Metro	DST-5860	-	-
1976-H567	2442886.56	1976 Apr 24 02:34:00	Loki Dart	-	-	0.000	MRU	SS	-	Metro	DST-5860	-	-
1976-H611	2442892.61	1976 Apr 28 02:26:59	Loki Dart	-	-	0.000	MRU	SS	-	Metro	DST-5860	-	-
1976-H620	2442895.61	1976 Apr 29 02:37:59	Loki Dart	-	-	0.000	MRU	SS	-	Metro	DST-5860	-	-
1976-H634	2442897.61	1976 Apr 29 02:37:59	Loki Dart	-	-	0.000	MRU	SS	-	Metro	DST-5860	-	-
1976-H644	2442898.50	1976 May	Loki Dart	-	-	0.000	MRU	SS	USAF/GHW	Metro	FC	-	-
1976-H645	2442898.50	1976 May	Loki Dart	-	-	0.000	MRU	SS	USAF/GHW	Metro	FC	-	-
1976-H646	2442898.50	1976 May	Loki Dart	-	-	0.000	MRU	SS	USAF/GHW	Metro	FC	-	-
1976-H647	2442898.50	1976 May	Loki Dart	-	-	0.000	MRU	SS	USAF/GHW	Metro	FC	-	-
1976-H657	2442902.20	1976 May 3 16:42:59	Loki Dart	-	-	0.000	MRU	SS	-	Metro	DST-5860	-	-
1976-H677	2442904.15	1976 May 5 15:35:00	Loki Dart	-	-	0.000	MRU	SS	-	Metro	DST-5860	-	-
1976-H694	2442906.19	1976 May 7 16:40:00	Loki Dart	-	-	0.000	MRU	SS	-	Metro	DST-5860	-	-
1976-H705	2442909.16	1976 May 10 16:15:59	Loki Dart	-	-	0.000	MRU	SS	-	Metro	DST-5860	-	-
1976-H721	2442911.21	1976 May 12 17:03:00	Loki Dart	-	-	0.000	MRU	SS	-	Metro	DST-5860	-	-
1976-H733	2442913.21	1976 May 14 17:07:00	Loki Dart	-	-	0.000	MRU	SS	-	Metro	DST-5860	-	-
1976-H740	2442916.19	1976 May 17 16:56:59	Loki Dart	-	-	0.000	MRU	SS	-	Metro	DST-5860	-	-
1976-H773	2442920.16	1976 May 24 16:13:59	Loki Dart	-	-	0.000	MRU	SS	-	Metro	DST-5860	-	-
1976-H807	2442927.15	1976 May 28 15:50:00	Loki Dart	-	-	0.000	MRU	SS	-	Metro	DST-5860	-	-
1976-H816	2442930.16	1976 May 31 15:46:59	Loki Dart	-	-	0.000	MRU	SS	-	Metro	DST-5860	-	-
1976-H856	2442932.16	1976 Jun 2 15:46:00	Loki Dart	-	-	0.000	MRU	SS	-	Metro	DST-5860	-	-
1976-H858	2442933.15	1976 Jun 9 16:35:59	Loki Dart	-	-	0.000	MRU	SS	-	Metro	DST-5860	-	-
1976-H859	2442934.22	1976 Jun 16 17:15:59	Loki Dart	-	-	0.000	MRU	SS	-	Metro	DST-5860	-	-
1976-H865	2442936.16	1976 Jun 23 15:55:00	Loki Dart	-	-	0.000	MRU	SS	-	Metro	DST-5860	-	-
1976-H876	2442938.16	1976 Jun 29 16:49:59	Loki Dart	-	-	0.000	MRU	SS	-	Metro	DST-5860	-	-
1976-H899	2442946.19	1976 Jun 30 16:54:59	Loki Dart	-	-	0.000	MRU	SS	-	Metro	DST-5860	-	-
1976-H921	2442967.20	1976 Jul 9 16:27:59	Loki Dart	-	-	0.000	MRU	SS	-	Metro	DST-5860	-	-
1976-H951	2442972.19	1976 Jul 14 16:17:59	Loki Dart	-	-	0.000	MRU	SS	-	Metro	DST-5860	-	-
1976-H952	2442972.19	1976 Jul 14 16:17:59	Loki Dart	-	-	0.000	MRU	SS	-	Metro	DST-5860	-	-
1976-H978	2442974.15	1976 Jul 14 16:17:59	Loki Dart	-	-	0.000	MRU	SS	-	Metro	DST-5860	-	-
1976-H1005	2442981.21	1976 Jul 21 17:02:00	Loki Dart	-	-	0.000	MRU	SS	-	Metro	DST-5860	-	-
1976-H1039	2442988.15	1976 Jul 28 16:36:59	Loki Dart	-	-	0.000	MRU	SS	-	Metro	DST-5860	-	-
1976-H1060	2442990.50	1976 Aug	Loki Dart	-	-	0.000	MRU	SS	USAF/GHW	Metro	FC	-	-
1976-H1080	2442995.20	1976 Aug 4 16:48:59	Loki Dart	-	-	0.000	MRU	SS	USAF/GHW	Metro	FC	-	-
1976-H1091	2442997.21	1976 Aug 6 16:44:59	Loki Dart	-	-	0.000	MRU	SS	USAF/GHW	Metro	FC	-	-
1976-H1101	2443000.21	1976 Aug 9 16:58:59	Loki Dart	-	-	0.000	MRU	SS	-	Metro	DST-5860	-	-
1976-H1112	2443003.15	1976 Aug 11 16:21:59	Loki Dart	-	-	0.000	MRU	SS	-	Metro	DST-5860	-	-
1976-H1128	2443004.15	1976 Aug 13 16:26:59	Loki Dart	-	-	0.000	MRU	SS	-	Metro	DST-5860	-	-
1976-H1138	2443007.11	1976 Aug 16 14:45:00	Loki Dart	-	-	0.000	MRU	SS	-	Metro	DST-5860	-	-
1976-H1171	2443011.15	1976 Aug 20 16:29:59	Loki Dart	-	-	0.000	MRU	SS	-	Metro	DST-5860	-	-
1976-H1179	2443014.17	1976 Aug 23 16:11:59	Loki Dart	-	-	0.000	MRU	SS	-	Metro	DST-5860	-	-
1976-H1192	2443016.15	1976 Aug 25 16:30:00	Loki Dart	-	-	0.000	MRU	SS	-	Metro	DST-5860	-	-
1976-H1205	2443018.19	1976 Aug 26 16:30:00	Loki Dart	-	-	0.000	MRU	SS	-	Metro	DST-5860	-	-
1976-H1220	2443021.50	1976 Aug 27 16:27:59	Loki Dart	-	-	0.000	MRU	SS	-	Metro	DST-5860	-	-
1976-H1221	2443021.50	1976 Sep	Loki Dart	-	-	0.000	MRU	SS	USAF/GHW	Metro	FC	-	-
1976-H1222	2443021.50	1976 Sep	Loki Dart	-	-	0.000	MRU	SS	USAF/GHW	Metro	FC	-	-
1976-H1236	2443023.19	1976 Sep 1 16:34:59	Loki Dart	-	-	0.000	MRU	SS	-	Metro	DST-5860	-	-
1976-H1271	2443030.17	1976 Sep 8 16:07:00	Loki Dart	-	-	0.000	MRU	SS	-	Metro	DST-5860	-	-
1976-H1287	2443032.19	1976 Sep 10 16:29:00	Loki Dart	-	-	0.000	MRU	SS	-	Metro	DST-5860	-	-
1976-H1303	2443037.18	1976 Sep 15 16:24:59	Loki Dart	-	-	0.000	MRU	SS	-	Metro	DST-5860	-	-
1976-H1316	2443039.18	1976 Sep 17 16:21:59	Loki Dart	-	-	0.000	MRU	SS	-	Metro	DST-5860	-	-
1976-H1326	2443042.17	1976 Sep 20 16:07:00	Loki Dart	-	-	0.000	MRU	SS	-	Metro	DST-5860	-	-
1976-H1358	2443046.19	1976 Sep 24 16:34:59	Loki Dart	-	-	0.000	MRU	SS	-	Metro	DST-5860	-	-
1976-H1372	2443049.17	1976 Sep 27 16:10:59	Loki Dart	-	-	0.000	MRU	SS	-	Metro	DST-5860	-	-
1976-H1398	2443051.50	1976 Oct	Loki Dart	-	-	0.000	MRU	SS	USAF/GHW	Metro	FC	-	-
1976-H1399	2443051.50	1976 Oct	Loki Dart	-	-	0.000	MRU	SS	USAF/GHW	Metro	FC	-	-
1976-H1400	2443051.50	1976 Oct	Loki Dart	-	-	0.000	MRU	SS	USAF/GHW	Metro	FC	-	-
1976-H1412	2443053.19	1976 Oct 1 16:36:59	Loki Dart	-	-	0.000	MRU	SS	-	Metro	DST-5860	-	-
1976-H1449	2443060.19	1976 Oct 8 16:30:00	Loki Dart	-	-	0.000	MRU	SS	-	Metro	DST-5860	-	-
1976-H1462	2443065.19	1976 Oct 13 16:32:59	Loki Dart	-	-	0.000	MRU	SS	-	Metro	DST-5860	-	-
1976-H1477	2443067.18	1976 Oct 15 16:23:59	Loki Dart	-	-	0.000	MRU	SS	-	Metro	DST-5860	-	-
1976-H1498	2443072.17	1976 Oct 20 16:10:59	Loki Dart	-	-	0.000	MRU	SS	-	Metro	DST-5860	-	-
1976-H1518	2443077.19	1976 Oct 25 16:32:59	Loki Dart	-	-	0.000	MRU	SS	-	Metro	DST-5860	-	-
1976-H1533	2443079.20	1976 Oct 27 16:44:59	Loki Dart	-	-	0.000	MRU	SS	-	Metro	DST-5860	-	-
1976-H1546	2443081.18	1976 Oct 29 16:18:59	Loki Dart	-	-	0.000	MRU	SS	-	Metro	DST-5860	-	-
1976-H1557	2443082.50	1976 Nov	Loki Dart	-	-	0.000	MRU	SS	USAF/GHW	Metro	FC	-	-





Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	DrbPay	Agency	Launch_Code	Group	Category	LTCite	Cite	Notes
1977-0651	2443247.17	1977 Apr 13 1606:00	Loki Dart	-	-	0.000	MRU	SS	-	Metro	DS1-5860	-	-
1977-0679	2443249.19	1977 Apr 15 1627:59	Loki Dart	-	-	0.000	MRU	SS	-	Metro	DS1-5860	-	-
1977-0699	2443254.18	1977 Apr 20 1616:59	Loki Dart	-	-	0.000	MRU	SS	-	Metro	DS1-5860	-	-
1977-0714	2443256.18	1977 Apr 22 1612:59	Loki Dart	-	-	0.000	MRU	SS	-	Metro	DS1-5860	-	-
1977-0723	2443259.17	1977 Apr 25 1606:00	Loki Dart	-	-	0.000	MRU	SS	-	Metro	DS1-5860	-	-
1977-0737	2443261.19	1977 Apr 27 1626:59	Loki Dart	-	-	0.000	MRU	SS	-	Metro	DS1-5860	-	-
1977-0747	2443263.12	1977 Apr 29 1447:00	Loki Dart	-	-	0.000	MRU	SS	USAF/GHW	Metro	FC	-	-
1977-0756	2443263.50	1977 May 2 1623:59	Loki Dart	-	-	0.000	MRU	SS	-	Metro	DS1-5860	-	-
1977-0763	2443266.18	1977 May 6 1632:59	Loki Dart	-	-	0.000	MRU	SS	-	Metro	DS1-5860	-	-
1977-0779	2443268.19	1977 May 6 1636:59	Loki Dart	-	-	0.000	MRU	SS	-	Metro	DS1-5860	-	-
1977-0795	2443270.19	1977 May 6 1636:59	Loki Dart	-	-	0.000	MRU	SS	-	Metro	DS1-5860	-	-
1977-0804	2443273.19	1977 May 9 1630:59	Loki Dart	-	-	0.000	MRU	SS	-	Metro	DS1-5860	-	-
1977-0828	2443277.18	1977 May 13 1626:59	Loki Dart	-	-	0.000	MRU	SS	-	Metro	DS1-5860	-	-
1977-0835	2443280.18	1977 May 16 1618:00	Loki Dart	-	-	0.000	MRU	SS	-	Metro	DS1-5860	-	-
1977-0855	2443282.19	1977 May 19 1632:59	Loki Dart	-	-	0.000	MRU	SS	-	Metro	DS1-5860	-	-
1977-0905	2443291.20	1977 May 27 1648:59	Loki Dart	-	-	0.000	MRU	SS	-	Metro	DS1-5860	-	-
1977-0921	2443294.19	1977 May 30 1626:59	Loki Dart	-	-	0.000	MRU	SS	-	Metro	DS1-5860	-	-
1977-0935	2443296.22	1977 Jun 1 1712:00	Loki Dart	-	-	0.000	MRU	SS	-	Metro	DS1-5860	-	-
1977-0970	2443303.21	1977 Jun 8 1701:00	Loki Dart	-	-	0.000	MRU	SS	-	Metro	DS1-5860	-	-
1977-01010	2443310.19	1977 Jun 15 1632:59	Loki Dart	-	-	0.000	MRU	SS	-	Metro	DS1-5860	-	-
1977-01052	2443317.18	1977 Jun 22 1626:59	Loki Dart	-	-	0.000	MRU	SS	-	Metro	DS1-5860	-	-
1977-01099	2443324.21	1977 Jun 29 1707:00	Loki Dart	-	-	0.000	MRU	SS	-	Metro	DS1-5860	-	-
1977-01101	2443324.50	1977 Jul	Loki Dart	-	-	0.000	MRU	SS	USAF/GHW	Metro	FC	-	-
1977-01102	2443324.50	1977 Jul 6 1638:59	Loki Dart	-	-	0.000	MRU	SS	-	Metro	DS1-5860	-	-
1977-01128	2443331.15	1977 Jul 20 1641:59	Loki Dart	-	-	0.000	MRU	SS	-	Metro	DS1-5860	-	-
1977-01196	2443346.20	1977 Jul 27 1710:00	Loki Dart	-	-	0.000	MRU	SS	-	Metro	DS1-5860	-	-
1977-01254	2443352.22	1977 Jul 27 1710:00	Loki Dart	-	-	0.000	MRU	SS	USAF/GHW	Metro	FC	-	-
1977-01263	2443356.50	1977 Aug	Loki Dart	-	-	0.000	MRU	SS	USAF/GHW	Metro	FC	-	-
1977-01264	2443356.50	1977 Aug	Loki Dart	-	-	0.000	MRU	SS	-	Metro	DS1-5860	-	-
1977-01266	2443356.50	1977 Aug	Loki Dart	-	-	0.000	MRU	SS	-	Metro	DS1-5860	-	-
1977-01306	2443359.19	1977 Aug 3 1626:59	Loki Dart	-	-	0.000	MRU	SS	-	Metro	DS1-5860	-	-
1977-01318	2443361.16	1977 Aug 5 1617:00	Loki Dart	-	-	0.000	MRU	SS	-	Metro	DS1-5860	-	-
1977-01330	2443364.10	1977 Aug 8 1430:00	Loki Dart	-	-	0.000	MRU	SS	-	Metro	DS1-5860	-	-
1977-01350	2443366.20	1977 Aug 12 1641:00	Loki Dart	-	-	0.000	MRU	SS	-	Metro	DS1-5860	-	-
1977-01359	2443371.16	1977 Aug 15 1619:59	Loki Dart	-	-	0.000	MRU	SS	-	Metro	DS1-5860	-	-
1977-01367	2443373.19	1977 Aug 16 1636:59	Loki Dart	-	-	0.000	MRU	SS	-	Metro	DS1-5860	-	-
1977-01379	2443375.21	1977 Aug 19 1709:00	Loki Dart	-	-	0.000	MRU	SS	-	Metro	DS1-5860	-	-
1977-01384	2443376.20	1977 Aug 22 1654:59	Loki Dart	-	-	0.000	MRU	SS	-	Metro	DS1-5860	-	-
1977-01391	2443380.10	1977 Aug 24 1430:00	Loki Dart	-	-	0.000	MRU	SS	-	Metro	DS1-5860	-	-
1977-01405	2443382.16	1977 Aug 26 1624:59	Loki Dart	-	-	0.000	MRU	SS	-	Metro	DS1-5860	-	-
1977-01410	2443387.10	1977 Aug 29 1430:00	Loki Dart	-	-	0.000	MRU	SS	-	Metro	DS1-5860	-	-
1977-01424	2443387.17	1977 Aug 31 1607:00	Loki Dart	-	-	0.000	MRU	SS	USAF/GHW	Metro	FC	-	-
1977-01430	2443386.50	1977 Sep 2 1622:59	Loki Dart	-	-	0.000	MRU	SS	-	Metro	DS1-5860	-	-
1977-01431	2443386.50	1977 Sep 2 1622:59	Loki Dart	-	-	0.000	MRU	SS	-	Metro	DS1-5860	-	-
1977-01463	2443394.16	1977 Sep 7 1647:59	Loki Dart	-	-	0.000	MRU	SS	-	Metro	DS1-5860	-	-
1977-01463	2443394.20	1977 Sep 9 1643:59	Loki Dart	-	-	0.000	MRU	SS	-	Metro	DS1-5860	-	-
1977-01476	2443393.20	1977 Sep 16 1601:59	Loki Dart	-	-	0.000	MRU	SS	-	Metro	DS1-5860	-	-
1977-01476	2443393.20	1977 Sep 16 1601:59	Loki Dart	-	-	0.000	MRU	SS	-	Metro	DS1-5860	-	-
1977-01481	2443396.20	1977 Sep 19 1652:59	Loki Dart	-	-	0.000	MRU	SS	-	Metro	DS1-5860	-	-
1977-01481	2443396.20	1977 Sep 19 1652:59	Loki Dart	-	-	0.000	MRU	SS	-	Metro	DS1-5860	-	-
1977-01483	2443398.10	1977 Sep 21 1636:59	Loki Dart	-	-	0.000	MRU	SS	-	Metro	DS1-5860	-	-
1977-01506	2443410.19	1977 Sep 23 1436:59	Loki Dart	-	-	0.000	MRU	SS	-	Metro	DS1-5860	-	-
1977-01515	2443413.10	1977 Sep 26 1630:59	Loki Dart	-	-	0.000	MRU	SS	-	Metro	DS1-5860	-	-
1977-01524	2443415.19	1977 Sep 28 1436:59	Loki Dart	-	-	0.000	MRU	SS	-	Metro	DS1-5860	-	-
1977-01524	2443417.18	1977 Sep 30 1619:59	Loki Dart	-	-	0.000	MRU	SS	USAF/GHW	Metro	FC	-	-
1977-01536	2443416.50	1977 Oct	Loki Dart	-	-	0.000	MRU	SS	USAF/GHW	Metro	FC	-	-
1977-01536	2443416.50	1977 Oct	Loki Dart	-	-	0.000	MRU	SS	-	Metro	DS1-5860	-	-
1977-01559	2443422.19	1977 Oct 5 1623:59	Loki Dart	-	-	0.000	MRU	SS	-	Metro	DS1-5860	-	-
1977-01564	2443424.17	1977 Oct 7 1608:59	Loki Dart	-	-	0.000	MRU	SS	-	Metro	DS1-5860	-	-
1977-01579	2443429.21	1977 Oct 12 1700:00	Loki Dart	-	-	0.000	MRU	SS	-	Metro	DS1-5860	-	-
1977-01601	2443436.11	1977 Oct 19 1430:00	Loki Dart	-	-	0.000	MRU	SS	-	Metro	DS1-5860	-	-
1977-01616	2443436.11	1977 Oct 21 1430:00	Loki Dart	-	-	0.000	MRU	SS	-	Metro	DS1-5860	-	-
1977-01625	2443441.10	1977 Oct 24 1430:00	Loki Dart	-	-	0.000	MRU	SS	-	Metro	DS1-5860	-	-
1977-01645	2443445.18	1977 Oct 24 1430:00	Loki Dart	-	-	0.000	MRU	SS	-	Metro	DS1-5860	-	-
1977-01685	2443448.17	1977 Oct 28 1619:59	Loki Dart	-	-	0.000	MRU	SS	-	Metro	DS1-5860	-	-
1977-01689	2443447.50	1977 Oct 31 1600:59	Loki Dart	-	-	0.000	MRU	SS	-	Metro	DS1-5860	-	-
1977-01689	2443447.50	1977 Nov	Loki Dart	-	-	0.000	MRU	SS	USAF/GHW	Metro	FC	-	-
1977-01689	2443447.50	1977 Nov	Loki Dart	-	-	0.000	MRU	SS	USAF/GHW	Metro	FC	-	-
1977-01689	2443447.50	1977 Nov	Loki Dart	-	-	0.000	MRU	SS	USAF/GHW	Metro	FC	-	-
1977-01683	2443447.50	1977 Nov	Loki Dart	-	-	0.000	MRU	SS	USAF/GHW	Metro	FC	-	-
1977-01687	2443450.20	1977 Nov 2 1647:59	Loki Dart	-	-	0.000	MRU	SS	-	Metro	DS1-5860	-	-
1977-01675	2443452.19	1977 Nov 4 1649:59	Loki Dart	-	-	0.000	MRU	SS	-	Metro	DS1-5860	-	-
1977-01683	2443455.20	1977 Nov 7 1636:59	Loki Dart	-	-	0.000	MRU	SS	-	Metro	DS1-5860	-	-
1977-01691	2443456.15	1977 Nov 8 1530:00	Loki Dart	-	-	0.000	MRU	SS	-	Metro	DS1-5860	-	-
1977-01698	2443457.20	1977 Nov 9 1654:59	Loki Dart	-	-	0.000	MRU	SS	-	Metro	DS1-5860	-	-
1977-01705	2443458.19	1977 Nov 10 1626:59	Loki Dart	-	-	0.000	MRU	SS	-	Metro	DS1-5860	-	-
1977-01718	2443462.23	1977 Nov 14 1726:59	Loki Dart	-	-	0.000	MRU	SS	-	Metro	DS1-5860	-	-
1977-01725	2443464.16	1977 Nov 15 1632:59	Loki Dart	-	-	0.000	MRU	SS	-	Metro	DS1-5860	-	-
1977-01729	2443464.16	1977 Nov 16 1556:00	Loki Dart	-	-	0.000	MRU	SS	-	Metro	DS1-5860	-	-
1977-01740	2443465.19	1977 Nov 17 1640:00	Loki Dart	-	-	0.000	MRU	SS	-	Metro	DS1-5860	-	-
1977-01755	2443470.20	1977 Nov 22 1644:59	Loki Dart	-	-	0.000	MRU	SS	-	Metro	DS1-5860	-	-
1977-01762	2443471.20	1977 Nov 23 1654:59	Loki Dart	-	-	0.000	MRU	SS	-	Metro	DS1-5860	-	-
1977-01769	2443473.18	1977 Nov 25 1625:59	Loki Dart	-	-	0.000	MRU	SS	-	Metro	DS1-5860	-	-
1977-01776	2443476.20	1977 Nov 28 1648:59	Loki Dart	-	-	0.000	MRU	SS	-	Metro	DS1-5860	-	-
1977-01783	2443477.15	1977 Nov 29 1530:00	Loki Dart	-	-	0.000	MRU	SS	-	Metro	DS1-5860	-	-
1977-01796	2443478.19	1977 Nov 30 1630:00	Loki Dart	-	-	0.000	MRU	SS	-	Metro	DS1-5860	-	-
1977-01787	2443477.50	1977 Dec	Loki Dart	-	-	0.000	MRU	SS	USAF/GHW	Metro	FC	-	-

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	DrbPay	Agency	Launch_Code	Group	Category	LTCite	Cite	Notes
1977-M1788	2443477.50	1977 Dec	Loki Dart	-	-	0.000	MRU	SS	USAF/6HW	Metro	FC	-	-
1977-M1789	2443477.50	1977 Dec	Loki Dart	-	-	0.000	MRU	SS	USAF/6HW	Metro	FC	-	-
1977-M1790	2443477.50	1977 Dec	Loki Dart	-	-	0.000	MRU	SS	USAF/6HW	Metro	FC	-	-
1977-M1791	2443477.50	1977 Dec	Loki Dart	-	-	0.000	MRU	SS	USAF/6HW	Metro	FC	-	-
1977-M1792	2443477.50	1977 Dec	Loki Dart	-	-	0.000	MRU	SS	USAF/6HW	Metro	FC	-	-
1977-M1793	2443477.50	1977 Dec	Loki Dart	-	-	0.000	MRU	SS	USAF/6HW	Metro	FC	-	-
1977-M1807	2443480.15	1977 Dec 2 1530:00	Loki Dart	-	-	0.000	MRU	SS	-	Metro	DS1-5860	-	-
1977-M1817	2443483.19	1977 Dec 5 1633:59	Loki Dart	-	-	0.000	MRU	SS	-	Metro	DS1-5860	-	-
1977-M1823	2443484.20	1977 Dec 6 1645:59	Loki Dart	-	-	0.000	MRU	SS	-	Metro	DS1-5860	-	-
1977-M1828	2443485.17	1977 Dec 7 1602:59	Loki Dart	-	-	0.000	MRU	SS	-	Metro	DS1-5860	-	-
1977-M1839	2443487.19	1977 Dec 9 1630:59	Loki Dart	-	-	0.000	MRU	SS	-	Metro	DS1-5860	-	-
1977-M1845	2443490.18	1977 Dec 12 1615:59	Loki Dart	-	-	0.000	MRU	SS	-	Metro	DS1-5860	-	-
1977-M1850	2443491.18	1977 Dec 13 1619:59	Loki Dart	-	-	0.000	MRU	SS	-	Metro	DS1-5860	-	-
1977-M1860	2443492.20	1977 Dec 14 1643:59	Loki Dart	-	-	0.000	MRU	SS	-	Metro	DS1-5860	-	-
1977-M1875	2443494.21	1977 Dec 16 1703:00	Loki Dart	-	-	0.000	MRU	SS	-	Metro	DS1-5860	-	-
1977-M1884	2443496.18	1977 Dec 20 1612:59	Loki Dart	-	-	0.000	MRU	SS	-	Metro	DS1-5860	-	-
1977-M1890	2443499.24	1977 Dec 21 1748:59	Loki Dart	-	-	0.000	MRU	SS	-	Metro	DS1-5860	-	-
1977-M1896	2443500.20	1977 Dec 22 1641:00	Loki Dart	-	-	0.000	MRU	SS	-	Metro	DS1-5860	-	-
1977-M1899	2443501.19	1977 Dec 23 1629:00	Loki Dart	-	-	0.000	MRU	SS	-	Metro	DS1-5860	-	-
1977-M1905	2443507.15	1977 Dec 29 1530:00	Loki Dart	-	-	0.000	MRU	SS	-	Metro	DS1-5860	-	-
1978-M01	2443512.15	1978 Jan 3 1530:00	Loki Dart	-	-	0.000	MRU	SS	-	Metro	DS1-5860	-	-
1978-M15	2443514.17	1978 Jan 4 1720:00	Loki Dart	-	-	0.000	MRU	SS	-	Metro	DS1-5860	-	-
1978-M16	2443515.15	1978 Jan 5 1611:59	Loki Dart	-	-	0.000	MRU	SS	-	Metro	DS1-5860	-	-
1978-M18	2443527.16	1978 Jan 16 1618:00	Loki Dart	-	-	0.000	MRU	SS	-	Metro	DS1-5860	-	-
1978-M19	2443528.15	1978 Jan 19 1530:00	Loki Dart	-	-	0.000	MRU	SS	-	Metro	DS1-5860	-	-
1978-M21	2443529.19	1978 Jan 20 1657:59	Loki Dart	-	-	0.000	MRU	SS	-	Metro	DS1-5860	-	-
1978-M25	2443532.16	1978 Jan 23 1621:59	Loki Dart	-	-	0.000	MRU	SS	-	Metro	DS1-5860	-	-
1978-M26	2443533.16	1978 Jan 24 1546:59	Loki Dart	-	-	0.000	MRU	SS	-	Metro	DS1-5860	-	-
1978-M29	2443534.19	1978 Jan 25 1636:59	Loki Dart	-	-	0.000	MRU	SS	-	Metro	DS1-5860	-	-
1978-M30	2443535.16	1978 Jan 26 1614:59	Loki Dart	-	-	0.000	MRU	SS	-	Metro	DS1-5860	-	-
1978-M34	2443536.21	1978 Jan 27 1658:59	Loki Dart	-	-	0.000	MRU	SS	-	Metro	DS1-5860	-	-
1978-M36	2443538.19	1978 Jan 30 1640:00	Loki Dart	-	-	0.000	MRU	SS	-	Metro	DS1-5860	-	-
1978-M41	2443541.21	1978 Jan 31 1530:00	Loki Dart	-	-	0.000	MRU	SS	-	Metro	DS1-5860	-	-
1978-M42	2443541.21	1978 Feb 1 1703:00	Loki Dart	-	-	0.000	MRU	SS	-	Metro	DS1-5860	-	-
1978-M42	2443542.16	1978 Feb 2 1620:59	Loki Dart	-	-	0.000	MRU	SS	-	Metro	DS1-5860	-	-
1978-M37	2443546.16	1978 Feb 6 1536:59	Loki Dart	-	-	0.000	MRU	SS	-	Metro	DS1-5860	-	-
1978-M46	2443547.54	1978 Feb 8 1053:00	Loki Dart	-	-	0.000	MRU	SS	-	Metro	DS1-5860	-	-
1978-M49	2443546.16	1978 Feb 8 1624:59	Loki Dart	-	-	0.000	MRU	SS	-	Metro	DS1-5860	-	-
1978-M55	2443546.20	1978 Feb 9 1646:59	Loki Dart	-	-	0.000	MRU	SS	-	Metro	DS1-5860	-	-
1978-M61	2443546.20	1978 Feb 10 1530:00	Loki Dart	-	-	0.000	MRU	SS	-	Metro	DS1-5860	-	-
1978-M66	2443553.20	1978 Feb 13 1644:59	Loki Dart	-	-	0.000	MRU	SS	-	Metro	DS1-5860	-	-
1978-M72	2443554.20	1978 Feb 14 1602:59	Loki Dart	-	-	0.000	MRU	SS	-	Metro	DS1-5860	-	-
1978-M79	2443556.17	1978 Feb 15 1621:59	Loki Dart	-	-	0.000	MRU	SS	-	Metro	DS1-5860	-	-
1978-M89	2443557.16	1978 Feb 16 1633:59	Loki Dart	-	-	0.000	MRU	SS	-	Metro	DS1-5860	-	-
1978-M96	2443560.19	1978 Feb 20 1651:59	Loki Dart	-	-	0.000	MRU	SS	-	Metro	DS1-5860	-	-
1978-M07	2443561.16	1978 Feb 20 1634:59	Loki Dart	-	-	0.000	MRU	SS	-	Metro	DS1-5860	-	-
1978-M21	2443562.21	1978 Feb 21 1654:59	Loki Dart	-	-	0.000	MRU	SS	-	Metro	DS1-5860	-	-
1978-M21	2443563.41	1978 Feb 24 0242:00	Loki Dart	-	-	0.000	MRU	SS	-	Metro	DS1-5860	-	-
1978-M25	2443567.41	1978 Feb 24 0242:00	Loki Dart	-	-	0.000	MRU	SS	-	Metro	DS1-5860	-	-
1978-M27	2443567.50	1978 Feb 28 0000:59	Loki Dart	-	-	0.000	MRU	SS	USAF/6HW	Metro	FC	-	-
1978-M28	2443567.50	1978 Mar	Loki Dart	-	-	0.000	MRU	SS	USAF/6HW	Metro	FC	-	-
1978-M28	2443567.50	1978 Mar	Loki Dart	-	-	0.000	MRU	SS	USAF/6HW	Metro	FC	-	-
1978-M29	2443567.50	1978 Mar	Loki Dart	-	-	0.000	MRU	SS	USAF/6HW	Metro	FC	-	-
1978-M29	2443567.50	1978 Mar	Loki Dart	-	-	0.000	MRU	SS	USAF/6HW	Metro	FC	-	-
1978-M30	2443567.50	1978 Mar	Loki Dart	-	-	0.000	MRU	SS	USAF/6HW	Metro	FC	-	-
1978-M32	2443567.50	1978 Mar	Loki Dart	-	-	0.000	MRU	SS	USAF/6HW	Metro	FC	-	-
1978-M32	2443567.50	1978 Mar	Loki Dart	-	-	0.000	MRU	SS	USAF/6HW	Metro	FC	-	-
1978-M34	2443567.50	1978 Mar	Loki Dart	-	-	0.000	MRU	SS	USAF/6HW	Metro	FC	-	-
1978-M34	2443567.50	1978 Mar	Loki Dart	-	-	0.000	MRU	SS	USAF/6HW	Metro	FC	-	-
1978-M36	2443569.56	1978 Mar 2 0130:00	Loki Dart	-	-	0.000	MRU	SS	USAF/6HW	Metro	FC	-	-
1978-M37	2443576.59	1978 Mar 8 0204:59	Loki Dart	-	-	0.000	MRU	SS	-	Metro	DS1-5860	-	-
1978-M39	2443576.57	1978 Mar 9 0141:00	Loki Dart	-	-	0.000	MRU	SS	-	Metro	DS1-5860	-	-
1978-M39	2443577.58	1978 Mar 10 0149:59	Loki Dart	-	-	0.000	MRU	SS	-	Metro	DS1-5860	-	-
1978-M39	2443582.56	1978 Mar 15 0121:59	Loki Dart	-	-	0.000	MRU	SS	-	Metro	DS1-5860	-	-
1978-M40	2443583.56	1978 Mar 16 0129:00	Loki Dart	-	-	0.000	MRU	SS	-	Metro	DS1-5860	-	-
1978-M37	2443585.56	1978 Mar 18 0119:59	Loki Dart	-	-	0.000	MRU	SS	-	Metro	DS1-5860	-	-
1978-M37	2443589.15	1978 Mar 21 1530:00	Loki Dart	-	-	0.000	MRU	SS	-	Metro	DS1-5860	-	-
1978-M32	2443590.19	1978 Mar 22 1640:00	Loki Dart	-	-	0.000	MRU	SS	-	Metro	DS1-5860	-	-
1978-M37	2443597.58	1978 Mar 30 0153:59	Loki Dart	-	-	0.000	MRU	SS	-	Metro	DS1-5860	-	-
1978-M37	2443598.19	1978 Mar 30 1636:59	Loki Dart	-	-	0.000	MRU	SS	-	Metro	DS1-5860	-	-
1978-M38	2443599.16	1978 Mar 31 1554:00	Loki Dart	-	-	0.000	MRU	SS	-	Metro	DS1-5860	-	-
1978-M38	2443598.50	1978 Apr	Loki Dart	-	-	0.000	MRU	SS	USAF/6HW	Metro	FC	-	-
1978-M38	2443598.50	1978 Apr	Loki Dart	-	-	0.000	MRU	SS	USAF/6HW	Metro	FC	-	-
1978-M38	2443598.50	1978 Apr	Loki Dart	-	-	0.000	MRU	SS	USAF/6HW	Metro	FC	-	-
1978-M40	2443604.64	1978 Apr 6 0322:59	Loki Dart	-	-	0.000	MRU	SS	-	Metro	DS1-5860	-	-
1978-M40	2443606.59	1978 Apr 8 0214:00	Loki Dart	-	-	0.000	MRU	SS	-	Metro	DS1-5860	-	-
1978-M41	2443609.50	1978 Apr 11 0000:59	Loki Dart	-	-	0.000	MRU	SS	-	Metro	DS1-5860	-	-
1978-M41	2443611.20	1978 Apr 12 1647:59	Loki Dart	-	-	0.000	MRU	SS	-	Metro	DS1-5860	-	-
1978-M41	2443616.29	1978 Apr 17 1859:59	Loki Dart	-	-	0.000	MRU	SS	-	Metro	DS1-5860	-	-
1978-M47	2443618.15	1978 Apr 19 1530:00	Loki Dart	-	-	0.000	MRU	SS	-	Metro	DS1-5860	-	-
1978-M45	2443620.17	1978 Apr 21 1600:59	Loki Dart	-	-	0.000	MRU	SS	-	Metro	DS1-5860	-	-
1978-M41	2443625.18	1978 Apr 26 1613:59	Loki Dart	-	-	0.000	MRU	SS	-	Metro	DS1-5860	-	-
1978-M46	2443627.24	1978 Apr 28 1740:00	Loki Dart	-	-	0.000	MRU	SS	-	Metro	DS1-5860	-	-
1978-M46	2443628.50	1978 May	Loki Dart	-	-	0.000	MRU	SS	USAF/6HW	Metro	FC	-	-
1978-M47	2443628.50	1978 May	Loki Dart	-	-	0.000	MRU	SS	USAF/6HW	Metro	FC	-	-
1978-M47	2443628.50	1978 May	Loki Dart	-	-	0.000	MRU	SS	USAF/6HW	Metro	FC	-	-

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	DrbPay	Agency	Launch_Code	Group	Category	LTCite	Cite	Notes
1978-W475	2443630.19	1978 May 1 1627:59	LoKi Dart	-	-	0.000	MRU	SS	-	Metro	DS1-5860	-	-
1978-W489	2443634.11	1978 May 5 1433:00	LoKi Dart	-	-	0.000	MRU	SS	-	Metro	DS1-5860	-	-
1978-W495	2443637.10	1978 May 8 1430:00	LoKi Dart	-	-	0.000	MRU	SS	-	Metro	DS1-5860	-	-
1978-W516	2443639.18	1978 May 10 1615:59	LoKi Dart	-	-	0.000	MRU	SS	-	Metro	DS1-5860	-	-
1978-W517	2443641.17	1978 May 12 1607:59	LoKi Dart	-	-	0.000	MRU	SS	-	Metro	DS1-5860	-	-
1978-W548	2443648.15	1978 May 19 1530:00	LoKi Dart	-	-	0.000	MRU	SS	-	Metro	DS1-5860	-	-
1978-W551	2443653.21	1978 May 24 1700:00	LoKi Dart	-	-	0.000	MRU	SS	-	Metro	DS1-5860	-	-
1978-W551	2443655.10	1978 May 26 1430:00	LoKi Dart	-	-	0.000	MRU	SS	-	Metro	DS1-5860	-	-
1978-W597	2443658.10	1978 May 29 1430:00	LoKi Dart	-	-	0.000	MRU	SS	-	Metro	DS1-5860	-	-
1978-W609	2443667.20	1978 Jun 7 1654:00	LoKi Dart	-	-	0.000	MRU	SS	-	Metro	DS1-5860	-	-
1978-W629	2443674.22	1978 Jun 14 1717:00	LoKi Dart	-	-	0.000	MRU	SS	-	Metro	DS1-5860	-	-
1978-W674	2443681.16	1978 Jun 21 1555:00	LoKi Dart	-	-	0.000	MRU	SS	-	Metro	DS1-5860	-	-
1978-W696	2443688.19	1978 Jun 28 1635:59	LoKi Dart	-	-	0.000	MRU	SS	-	Metro	DS1-5860	-	-
1978-W702	2443690.11	1978 Jun 30 1446:00	LoKi Dart	-	-	0.000	MRU	SS	-	Metro	DS1-5860	-	-
1978-W717	2443695.19	1978 Jul 5 1630:00	LoKi Dart	-	-	0.000	MRU	SS	-	Metro	DS1-5860	-	-
1978-W728	2443697.18	1978 Jul 7 1618:00	LoKi Dart	-	-	0.000	MRU	SS	-	Metro	DS1-5860	-	-
1978-W729	2443700.10	1978 Jul 10 1430:00	LoKi Dart	-	-	0.000	MRU	SS	-	Metro	DS1-5860	-	-
1978-W739	2443702.22	1978 Jul 12 1720:00	LoKi Dart	-	-	0.000	MRU	SS	-	Metro	DS1-5860	-	-
1978-W744	2443704.19	1978 Jul 14 1630:00	LoKi Dart	-	-	0.000	MRU	SS	-	Metro	DS1-5860	-	-
1978-W750	2443707.20	1978 Jul 17 1641:00	LoKi Dart	-	-	0.000	MRU	SS	-	Metro	DS1-5860	-	-
1978-W760	2443709.20	1978 Jul 19 1642:59	LoKi Dart	-	-	0.000	MRU	SS	-	Metro	DS1-5860	-	-
1978-W770	2443711.10	1978 Jul 21 1430:00	LoKi Dart	-	-	0.000	MRU	SS	-	Metro	DS1-5860	-	-
1978-W773	2443714.12	1978 Jul 24 1453:00	LoKi Dart	-	-	0.000	MRU	SS	-	Metro	DS1-5860	-	-
1978-W783	2443716.17	1978 Jul 26 1607:59	LoKi Dart	-	-	0.000	MRU	SS	-	Metro	DS1-5860	-	-
1978-W790	2443718.17	1978 Jul 28 1602:59	LoKi Dart	-	-	0.000	MRU	SS	-	Metro	DS1-5860	-	-
1978-W797	2443721.10	1978 Jul 31 1430:00	LoKi Dart	-	-	0.000	MRU	SS	-	Metro	DS1-5860	-	-
1978-W811	2443725.19	1978 Aug 4 1636:59	LoKi Dart	-	-	0.000	MRU	SS	-	Metro	DS1-5860	-	-
1978-W821	2443730.12	1978 Aug 9 1451:00	LoKi Dart	-	-	0.000	MRU	SS	-	Metro	DS1-5860	-	-
1978-W830	2443732.10	1978 Aug 11 1430:00	LoKi Dart	-	-	0.000	MRU	SS	-	Metro	DS1-5860	-	-
1978-W836	2443735.11	1978 Aug 14 1433:00	LoKi Dart	-	-	0.000	MRU	SS	-	Metro	DS1-5860	-	-
1978-W847	2443737.21	1978 Aug 16 1706:00	LoKi Dart	-	-	0.000	MRU	SS	-	Metro	DS1-5860	-	-
1978-W857	2443739.17	1978 Aug 18 1603:59	LoKi Dart	-	-	0.000	MRU	SS	-	Metro	DS1-5860	-	-
1978-W865	2443742.16	1978 Aug 21 1622:59	LoKi Dart	-	-	0.000	MRU	SS	-	Metro	DS1-5860	-	-
1978-W872	2443744.16	1978 Aug 23 1546:59	LoKi Dart	-	-	0.000	MRU	SS	-	Metro	DS1-5860	-	-
1978-W885	2443746.20	1978 Aug 26 1652:59	LoKi Dart	-	-	0.000	MRU	SS	-	Metro	DS1-5860	-	-
1978-W893	2443749.19	1978 Aug 28 1629:00	LoKi Dart	-	-	0.000	MRU	SS	-	Metro	DS1-5860	-	-
1978-W899	2443751.10	1978 Aug 30 1430:00	LoKi Dart	-	-	0.000	MRU	SS	-	Metro	DS1-5860	-	-
1978-W915	2443755.10	1978 Sep 1 1430:00	LoKi Dart	-	-	0.000	MRU	SS	-	Metro	DS1-5860	-	-
1978-W935	2443760.01	1978 Sep 8 1217:00	LoKi Dart	-	-	0.000	MRU	SS	-	Metro	DS1-5860	-	-
1978-W942	2443763.18	1978 Sep 13 1615:59	LoKi Dart	-	-	0.000	MRU	SS	-	Metro	DS1-5860	-	-
1978-W946	2443764.56	1978 Sep 13 1132:59	LoKi Dart	-	-	0.000	MRU	SS	-	Metro	DS1-5860	-	-
1978-W950	2443764.96	1978 Sep 13 137:59	LoKi Dart	-	-	0.000	MRU	SS	-	Metro	DS1-5860	-	-
1978-W956	2443770.10	1978 Sep 15 1430:00	LoKi Dart	-	-	0.000	MRU	SS	-	Metro	DS1-5860	-	-
1978-W976	2443772.20	1978 Sep 20 1742:59	LoKi Dart	-	-	0.000	MRU	SS	-	Metro	DS1-5860	-	-
1978-W976	2443774.10	1978 Sep 20 1430:00	LoKi Dart	-	-	0.000	MRU	SS	-	Metro	DS1-5860	-	-
1978-W989	2443777.10	1978 Sep 26 1430:00	LoKi Dart	-	-	0.000	MRU	SS	-	Metro	DS1-5860	-	-
1978-W1005	2443779.10	1978 Sep 26 1551:59	LoKi Dart	-	-	0.000	MRU	SS	-	Metro	DS1-5860	-	-
1978-W1014	2443781.16	1978 Sep 27 1618:59	LoKi Dart	-	-	0.000	MRU	SS	-	Metro	DS1-5860	-	-
1978-W1020	2443781.50	1978 Oct	LoKi Dart	-	-	0.000	MRU	SS	USAF/GRW	Metro	FC	-	-
1978-W1020	2443781.50	1978 Oct	LoKi Dart	-	-	0.000	MRU	SS	USAF/GRW	Metro	FC	-	-
1978-W1026	2443784.13	1978 Oct 2 1634:59	LoKi Dart	-	-	0.000	MRU	SS	-	Metro	DS1-5860	-	-
1978-W1036	2443788.10	1978 Oct 6 1430:00	LoKi Dart	-	-	0.000	MRU	SS	-	Metro	DS1-5860	-	-
1978-W1037	2443793.11	1978 Oct 11 1430:00	LoKi Dart	-	-	0.000	MRU	SS	-	Metro	DS1-5860	-	-
1978-W1057	2443795.10	1978 Oct 13 1430:00	LoKi Dart	-	-	0.000	MRU	SS	-	Metro	DS1-5860	-	-
1978-W1074	2443800.21	1978 Oct 18 1700:00	LoKi Dart	-	-	0.000	MRU	SS	-	Metro	DS1-5860	-	-
1978-W1094	2443807.11	1978 Oct 26 1505:59	LoKi Dart	-	-	0.000	MRU	SS	-	Metro	DS1-5860	-	-
1978-W1102	2443809.14	1978 Oct 27 1430:00	LoKi Dart	-	-	0.000	MRU	SS	-	Metro	DS1-5860	-	-
1978-W1112	2443812.50	1978 Nov	LoKi Dart	-	-	0.000	MRU	SS	USAF/GRW	Metro	FC	-	-
1978-W1113	2443812.50	1978 Nov	LoKi Dart	-	-	0.000	MRU	SS	USAF/GRW	Metro	FC	-	-
1978-W1114	2443812.50	1978 Nov	LoKi Dart	-	-	0.000	MRU	SS	USAF/GRW	Metro	FC	-	-
1978-W1115	2443812.50	1978 Nov	LoKi Dart	-	-	0.000	MRU	SS	USAF/GRW	Metro	FC	-	-
1978-W1116	2443812.50	1978 Nov	LoKi Dart	-	-	0.000	MRU	SS	USAF/GRW	Metro	FC	-	-
1978-W1117	2443812.50	1978 Nov	LoKi Dart	-	-	0.000	MRU	SS	USAF/GRW	Metro	FC	-	-
1978-W1121	2443814.17	1978 Nov 1 1622:59	LoKi Dart	-	-	0.000	MRU	SS	-	Metro	DS1-5860	-	-
1978-W1127	2443815.17	1978 Nov 2 1602:59	LoKi Dart	-	-	0.000	MRU	SS	-	Metro	DS1-5860	-	-
1978-W1130	2443816.15	1978 Nov 3 1530:00	LoKi Dart	-	-	0.000	MRU	SS	-	Metro	DS1-5860	-	-
1978-W1135	2443819.16	1978 Nov 6 1549:59	LoKi Dart	-	-	0.000	MRU	SS	-	Metro	DS1-5860	-	-
1978-W1139	2443820.15	1978 Nov 7 1530:00	LoKi Dart	-	-	0.000	MRU	SS	-	Metro	DS1-5860	-	-
1978-W1144	2443821.20	1978 Nov 8 1652:59	LoKi Dart	-	-	0.000	MRU	SS	-	Metro	DS1-5860	-	-
1978-W1151	2443822.26	1978 Nov 9 1814:59	LoKi Dart	-	-	0.000	MRU	SS	-	Metro	DS1-5860	-	-
1978-W1153	2443823.15	1978 Nov 10 1530:00	LoKi Dart	-	-	0.000	MRU	SS	-	Metro	DS1-5860	-	-
1978-W1157	2443826.18	1978 Nov 13 1619:59	LoKi Dart	-	-	0.000	MRU	SS	-	Metro	DS1-5860	-	-
1978-W1162	2443827.15	1978 Nov 14 1530:00	LoKi Dart	-	-	0.000	MRU	SS	-	Metro	DS1-5860	-	-
1978-W1165	2443828.19	1978 Nov 15 1637:59	LoKi Dart	-	-	0.000	MRU	SS	-	Metro	DS1-5860	-	-
1978-W1171	2443829.17	1978 Nov 16 1607:59	LoKi Dart	-	-	0.000	MRU	SS	-	Metro	DS1-5860	-	-
1978-W1176	2443830.16	1978 Nov 17 1549:59	LoKi Dart	-	-	0.000	MRU	SS	-	Metro	DS1-5860	-	-
1978-W1182	2443832.17	1978 Nov 19 1559:59	LoKi Dart	-	-	0.000	MRU	SS	-	Metro	DS1-5860	-	-
1978-W1186	2443833.15	1978 Nov 20 1530:00	LoKi Dart	-	-	0.000	MRU	SS	-	Metro	DS1-5860	-	-
1978-W1192	2443834.18	1978 Nov 21 1620:59	LoKi Dart	-	-	0.000	MRU	SS	-	Metro	DS1-5860	-	-
1978-W1198	2443836.15	1978 Nov 22 1548:59	LoKi Dart	-	-	0.000	MRU	SS	-	Metro	DS1-5860	-	-
1978-W1203	2443838.15	1978 Nov 23 1530:00	LoKi Dart	-	-	0.000	MRU	SS	-	Metro	DS1-5860	-	-
1978-W1211	2443840.16	1978 Nov 27 1555:00	LoKi Dart	-	-	0.000	MRU	SS	-	Metro	DS1-5860	-	-
1978-W1218	2443841.34	1978 Nov 28 2012:00	LoKi Dart	-	-	0.000	MRU	SS	-	Metro	DS1-5860	-	-





Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	OrbPay	Agency	Launch_Code	Group	Category	LTCite	Cite	Notes
1985-W329	2446410.54	1985 Dec 11 0100:00	Lok1 Dart	-	LDKI	0.000	WFF	SU	WFF/	Test/Aeron	WDCRF	-	-
1985-W332	2446411.48	1985 Dec 11 2330:00	Lok1 Dart	-	LDKI	0.000	WFF	SU	WFF/	Test/Aeron	WDCRF	-	-
1985-W336	2446416.25	1985 Dec 16 1800:00	Lok1 Dart	-	LDKI	0.000	WFF	SU	WFF/	Test/Aeron	WDCRF	-	-
1985-A17	2446416.60	1985 Dec 17 0230:00	Lok1 Dart	-	LDKI	0.000	WFF	SU	WFF/	Test/Aeron	WDCRF	-	-
1985-A18	2446417.50	1985 Dec 18 0000:00	Lok1 Dart	-	LDKI	0.000	WFF	SU	WFF/	Test/Aeron	WDCRF	-	-
1985-W342	2446417.61	1985 Dec 18 0236:00	Lok1 Dart	-	PW-8B	0.000	WFF	SU	WFF/	Test/Aeron	WDCRF	-	-
1985-W344	2446423.29	1985 Dec 23 1900:00	Lok1 Dart	-	LDKI PW-8B	0.000	WFF	SU	WFF/	Test/Aeron	WDCRF	-	-
1985-W348	2446430.12	1985 Dec 30 1500:00	Lok1 Dart	-	LDKI PW-8B	0.000	WFF	SU	WFF/	Test/Aeron	WDCRF	-	-



Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Mission	FlightCode	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee km	Range km	Dest
1987-S115	2436111.50	1987 Oct	Long Tom	-	LTI	-	-	-	-	WOO	LA2 SL	-	-	100?	-	-
1988-S01	2436203.50	1988	Long Tom	-	LIT2?	-	-	-	-	WOO	LA2 SL	-	-	100?	-	-
1988-S02	2436203.50	1988	Long Tom	-	LIT3?	-	-	-	-	WOO	LA2 SL	-	-	100?	-	-
1988-S03	2436203.50	1988	Long Tom	-	LIT4?	-	-	-	-	WOO	LA2 LT	-	-	100?	-	-
1988-S04	2436203.50	1988	Long Tom	-	LIT5?	-	-	-	-	WOO	LA2 LT	-	-	100?	-	-
1988-S05	2436203.50	1988	Long Tom	-	LIT6?	-	-	-	-	WOO	LA2 LT	-	-	100?	-	-
1988-H27	2436541.55	1988 Dec 4 0113	Aeolus	-	-	AL1	-	-	-	WOO	LA2 LT	-	-	78	-	-
1989-S88	2436688.50	1989 May	Long Tom	-	LIT7?	-	-	-	-	WOO	LA2 LT	-	-	100?	-	-
1989-S292	2436688.50	1989?	Aeolus	-	-	-	-	-	-	WOO	LA2 LT	-	-	81	-	-
1989-S292	2436688.50	1989?	Long Tom	-	LIT8	-	-	-	-	WOO	LA2 LT	-	-	80?	-	-
1989-S292	2436933.50	1989?	Aeolus	-	-	-	-	-	-	WOO	LA2 LT	-	-	81	-	-
1989-S292	2436933.50	1989?	Long Tom	-	-	-	-	-	-	WOO	LA2 LT	-	-	81	-	-
1989-S292	2436933.50	1989?	Aeolus	-	-	-	-	-	-	WOO	LA2 LT	-	-	81	-	-
1989-S292	2436933.50	1989?	Long Tom	-	HAT01	-	-	-	-	WOO	LA2 LT	-	-	80?	-	-
1989-S292	2436933.50	1989?	HAT	-	LIT9	-	-	-	-	WOO	LA2 LT	-	-	80?	-	-
1989-S292	2436933.50	1989?	Long Tom	-	LIT10	-	-	-	-	WOO	LA2 LT	-	-	80?	-	-
1989-S292	2436933.50	1989?	Long Tom	-	LIT11	-	-	-	-	WOO	LA2 LT	-	-	80?	-	-
1989-S292	2437016.97	1989 Mar 23 1120	Aeolus	-	-	AL5	-	-	-	WOO	LA2 LT	-	-	81	-	-
1989-S292	2437144.32	1989 Jul 28 1936	Long Tom	-	LIT12	-	-	-	-	WOO	LA2 LT	-	-	126	-	-
1989-S292	2437299.50	1989?	Aeolus	-	-	-	-	-	-	WOO	LA2 LT	-	-	81	-	-
1989-S292	2437299.50	1989?	Long Tom	-	-	-	-	-	-	WOO	LA2 LT	-	-	81	-	-
1989-S292	2437299.50	1989?	Aeolus	-	LIT13	-	-	-	-	WOO	LA2 LT	-	-	80?	-	-
1989-S292	2437299.50	1989?	Long Tom	-	LIT14	-	-	-	-	WOO	LA2 LT	-	-	137	-	-
1989-S292	2437815.63	1989 May 31 0301	Long Tom	-	-	Weather imaging	-	-	-	WOO	LA2 LT	-	-	88	-	-
1989-S292	2438198.69	1983 Jun 18 0430:00	HAT	-	-	-	-	-	-	WOO	LA2 LT	-	-	88	-	-
1989-S292	2438198.69	1983 Oct 15 1509:00	HAT	-	-	-	-	-	-	WOO	LA2 LT	-	-	80?	-	-
1989-S292	2438198.69	1983 Oct 15 1922:00	HAT	-	-	-	-	-	-	WOO	LA2 LT	-	-	80?	-	-
1989-S292	2438198.69	1984?	HAT	-	-	-	-	-	-	WOO	LA2 LT	-	-	80?	-	-
1989-S292	2438394.50	1984?	Long Tom	-	LIT15	-	-	-	-	WOO	LA2 LT	-	-	80?	-	-
1989-S292	2438685.50	1988	HAT	-	-	Explorer 37 cal	-	-	-	WOO	LA2 LT?	-	-	80?	-	-
1989-S292	2440427.50	1969 Jul 25	HAT	-	WRE HAT 54	-	-	-	-	WOO	LA2 LT	-	-	80?	-	-
1989-S292	2441279.90	1971 Nov 24 0936	HAT	-	WRE HAT 637	-	-	-	-	WOO	LA2 LT	-	-	81	-	-
1989-S292	2441517.84	1972 Jul 19 0815	HAT	-	WRE HAT 638	-	-	-	-	WOO	LA2 LT	-	-	80?	-	-
1989-S292	2441517.84	1972 Oct 11 0905	HAT	-	WRE HAT 639	-	-	-	-	WOO	LA2 LT	-	-	80?	-	-





Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Launch_Cost	Agency	Launch_Code	Group	Category	LTCite	Cite	Notes
1957-S115	2436111.50	1957 Oct	Long Tom	-	LTI	0.000	WRE	SS	WRE/	Test	Morton	-	-
1958-S01	2436203.50	1958	Long Tom	-	LIT2?	0.000	WRE	SS	WRE/	Test	Morton	-	-
1958-S02	2436203.50	1958	Long Tom	-	LIT3?	0.000	WRE	SS	WRE/	Test	Morton	-	-
1958-S03	2436203.50	1958	Long Tom	-	LIT4?	0.000	WRE	SS	WRE/	Test	Morton	-	-
1958-S04	2436203.50	1958	Long Tom	-	LIT5?	0.000	WRE	SS	WRE/	Test	Morton	-	-
1958-S05	2436203.50	1958	Long Tom	-	LIT6?	0.000	WRE	SS	WRE/	Test	Morton	-	-
1958-H27	2436541.55	1958 Dec 4 0113	Aeolus	-	-	0.000	WRE	SS	WRE/	Aeron	IGT36-S79	-	-
1959-S58	2436688.50	1959 May	Long Tom	-	LIT7?	0.000	WRE	SS	WRE/	Test/Aeron	Morton	-	-
1959-S02	2436688.50	1959?	Aeolus	-	-	0.000	WRE	SS	WRE/	Aeron	Always	-	-
1959-S292	2436688.50	1959?	Long Tom	-	LIT8	0.000	WRE	SU	WRE/	Aeron	JBI325,61	-	-
1960-S01	2436933.50	1960?	Aeolus	-	-	0.000	WRE	SS	WRE/	Aeron	Always	-	-
1960-S02	2436933.50	1960?	Aeolus	-	-	0.000	WRE	SS	WRE/	Aeron	Always	-	-
1960-S531	2436933.50	1960	HAT	-	HAT01	0.000	WRE	SS	WRE/	Aeron	JBI325,61	-	-
1960-S532	2436933.50	1960?	Long Tom	-	LIT9	0.000	WRE	SU	WRE/	Aeron	JBI325,61	-	-
1960-S533	2436933.50	1960?	Long Tom	-	LIT10	0.000	WRE	SU	WRE/	Aeron	JBI325,61	-	-
1960-S534	2436933.50	1960?	Long Tom	-	LIT11	0.000	WRE	SU	WRE/	Aeron	JBI325,61	-	-
1960-S59	2437016.97	1960 Mar 23 1120	Aeolus	-	-	0.000	WRE	SS	WRE/	Aeron	WDCRF	-	-
1960-S202	2437144.32	1960 Jul 28 1936	Long Tom	-	LIT12	0.000	WRE	SS	WRE/	Aeron	WDCRF	-	-
1961-S02	2437299.50	1961?	Aeolus	-	-	0.000	WRE	SS	WRE/	Aeron	Always	-	-
1961-S03	2437299.50	1961?	Aeolus	-	-	0.000	WRE	SS	WRE/	Aeron	Always	-	-
1961-S466	2437299.50	1961?	Long Tom	-	LIT13	0.000	WRE	SU	WRE/	Aeron	JBI325,61	-	-
1962-S151	2437615.63	1962 May 31 0301	Long Tom	-	LIT14	0.000	WRE	SU	WRE/	Aeron	IGT36	WRE-TN-SAD184	WDCRF
1963-101	2438198.69	1963 Jun 18 0430:00	HAT	?	-	0.000	WRE	SU	WRE/	Tonus	WDCRF	-	-
1963-108	2438318.13	1963 Oct 15 1509:00	HAT	?	-	0.000	WRE	SU	WRE/	Aeron	WDCRF	-	-
1963-109	2438318.31	1963 Oct 15 1922:00	HAT	?	-	0.000	WRE	SU	WRE/	Aeron	WDCRF	-	-
1964-S788	2438394.50	1964?	Long Tom	-	LIT15	0.000	WRE	SU	WRE/	Aeron	JBI325,61	-	-
1968-S665	2438885.50	1968	HAT	-	-	0.000	WRE	SS	WRE/	Aeron	Morton	-	-
1969-S717	2440427.50	1969 Jul 25	HAT	-	WRE HAT 54	0.000	WRE	SS	WRE/	Aeron	FDC	JBI325,61	-
1971-S647	2441279.90	1971 Nov 24 0936	HAT	-	WRE HAT 637	0.000	WRE	SS	WRE/	Aeron	WRE-TN866	-	-
1972-S472	2441517.84	1972 Jul 19 0615	HAT	-	WRE HAT 638	0.000	WRE	SS	WRE/	Aeron	WRE-TN866	-	-
1972-S473	2441601.86	1972 Oct 11 0903	HAT	-	WRE HAT 639	0.000	WRE	SS	WRE/	Aeron	WRE-TN866	-	-



Launch

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Mission	FlightCode	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee km	Range km	Dest
1961-M38	2437660.50	1961 Dec 27	Luna-M	-	-	First launch	-	-	-	GTSP-4	-	-	-	70?	-	-



Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Display	Agency	Launch_Code	Group	Category	LTCite	Cite	Notes
1961-R38	2437660.50	1961 Dec 27	Luna-H	-	-	0.000	RVSN	MS	-	Test	KY60	-	-



Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Launch_Mission	FlightCode	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee_Km	Range_Km	Dest
1968-R34	2440084.56	1968 Aug 16 0133	Kookaburra	-	WRE K113	Met	-	-	-	W00	-	-	-	74	-	-
1968-R35	2440103.95	1968 Sep 4 1042	Kookaburra	-	WRE K115	Met	-	-	-	W00	-	-	-	73	-	-
1968-R36	2440118.02	1968 Sep 16 1233	Kookaburra	-	WRE K114	Met	-	-	-	W00	-	-	-	76	-	-
1968-R37	2440138.52	1968 Oct 9 0026	Kookaburra	-	WRE K119	Met	-	-	-	W00	-	-	-	78	-	-
1968-R38	2440139.56	1968 Oct 10 0133	Kookaburra	-	WRE K117	Met	-	-	-	W00	-	-	-	70	-	-
1968-R39	2440168.37	1968 Nov 7 2047	Kookaburra	-	WRE K118	Met	-	-	-	W00	-	-	-	91	-	-
1968-R40	2440179.98	1968 Nov 19 1134	Kookaburra	-	WRE K120	Met	-	-	-	W00	-	-	-	73	-	-
1968-R41	2440181.25	1968 Nov 20 1803	Kookaburra	-	WRE K123	Met	-	-	-	W00	-	-	-	80	-	-
1968-R42	2440184.57	1968 Nov 20 1903	Kookaburra	-	WRE K138	Met	-	-	-	W00	-	-	-	90	-	-
1968-R43	2440264.57	1969 Dec 09 0141:00	Kookaburra	-	WRE K140	-	-	-	-	W00	-	-	-	73	-	-
1970-S198	2440051.60	1970 Mar 06 0231:00	Kookaburra	-	WRE K139	-	-	-	-	W00	-	-	-	93	-	-
1970-S199	2440055.65	1970 Mar 12 0333:00	Kookaburra	-	WRE K141	-	-	-	-	W00	-	-	-	88	-	-
1970-S200	2440057.66	1970 Mar 12 0348:00	Kookaburra	-	WRE K141	-	-	-	-	W00	-	-	-	80?	-	-
1970-A32	2440051.60	1970 Mar 12 0229:00	Kookaburra	-	WRE K142	-	-	-	-	W00	-	-	-	38	-	-
1970-S362	2440727.62	1970 May 21 0256:00	Kookaburra	-	WRE K143	-	-	-	-	W00	-	-	-	85	-	-
1970-S370	2440732.65	1970 May 26 0338:00	Kookaburra	-	WRE K144	-	-	-	-	W00	-	-	-	87	-	-
1970-S373	2440735.12	1970 May 26 1453	Kookaburra	-	WRE K145	-	-	-	-	W00	-	-	-	43?	-	-
1970-S429	2440781.62	1970 Jul 14 0247:00	Kookaburra	-	WRE K146	-	-	-	-	W00	-	-	-	85	-	-
1970-S474	2440829.88	1970 Aug 31 0903	Kookaburra	-	WRE K147	-	-	-	-	W00	-	-	-	85?	-	-
1970-S575	2440830.89	1970 Oct 21 0918	Kookaburra	-	WRE K148	-	-	-	-	W00	-	-	-	85?	-	-
1970-A167	2440850.90	1970 Oct 21 0959	Kookaburra	-	WRE K149	-	-	-	-	W00	-	-	-	20?	-	-
1970-S676	2440856.19	1970 Nov 5 1633	Kookaburra	-	WRE K151	-	-	-	-	W00	-	-	-	85?	-	-
1970-A168	2440856.65	1970 Nov 6 0336	Kookaburra	-	WRE K150	-	-	-	-	W00	-	-	-	20?	-	-
1971-S638	2440984.61	1971 Feb 2 0232	Kookaburra	-	WRE K152	-	-	-	-	W00	-	-	-	85?	-	-
1971-A169	2441013.26	1971 Mar 2 1610	Kookaburra	-	WRE K153	-	-	-	-	W00	-	-	-	0?	-	-
1971-S639	2441089.61	1971 May 18 0237	Kookaburra	-	WRE K153	-	-	-	-	W00	-	-	-	85?	-	-
1971-S640	2441089.66	1971 May 18 0639	Kookaburra	-	WRE K154	-	-	-	-	W00	-	-	-	85?	-	-
1971-S641	2441124.61	1971 Jun 22 0245	Kookaburra	-	WRE K155	-	-	-	-	W00	-	-	-	85?	-	-
1971-S642	2441151.66	1971 Jul 19 0637	Kookaburra	-	WRE K156	-	-	-	-	W00	-	-	-	85?	-	-
1971-S643	2441152.62	1971 Jul 20 0248	Kookaburra	-	WRE K157	-	-	-	-	W00	-	-	-	85?	-	-
1971-S644	2441216.56	1971 Sep 21 0130	Kookaburra	-	WRE K1058	-	-	-	-	W00	-	-	-	85?	-	-
1971-S645	2441242.90	1971 Oct 18 0959	Kookaburra	-	WRE K1059	-	-	-	-	W00	-	-	-	85?	-	-
1971-S646	2441231.60	1971 Nov 26 0230	Kookaburra	-	WRE K1060	-	-	-	-	W00	-	-	-	85?	-	-
1972-S465	2441370.65	1972 Feb 23 0334	Kookaburra	-	WRE K1061	-	-	-	-	W00	-	-	-	85?	-	-
1972-S466	2441396.62	1972 Mar 22 0300	Kookaburra	-	WRE K1062	-	-	-	-	W00	-	-	-	85?	-	-
1972-S467	2441426.61	1972 Apr 19 0246	Kookaburra	-	WRE K1063	-	-	-	-	W00	-	-	-	85?	-	-
1972-A131	2441465.60	1972 May 19 0246	Kookaburra	-	WRE K1064	-	-	-	-	W00	-	-	-	85?	-	-
1972-S468	2441532.60	1972 May 19 0230	Kookaburra	-	WRE K1065	-	-	-	-	W00	-	-	-	20?	-	-
1972-S469	2441573.67	1972 Aug 23 0230	Kookaburra	-	WRE K1066	-	-	-	-	W00	-	-	-	85?	-	-
1972-S470	2441636.62	1972 Sep 19 0400	Kookaburra	-	WRE K1067	-	-	-	-	W00	-	-	-	85?	-	-
1972-S471	2441656.62	1972 Nov 19 0280	Kookaburra	-	WRE K1068	-	-	-	-	W00	-	-	-	85?	-	-
1973-S472	2441664.65	1972 Dec 13 0306	Kookaburra	-	WRE K1070	-	-	-	-	W00	-	-	-	85?	-	-
1973-S473	2441724.50	1973 Mar 21	Kookaburra	-	WRE K1072	-	-	-	-	W00	-	-	-	85?	-	-
1973-S474	2441781.50	1973 Apr 19	Kookaburra	-	WRE K1073	-	-	-	-	W00	-	-	-	85?	-	-
1973-S475	2441841.50	1973 Apr 19	Kookaburra	-	WRE K1074	-	-	-	-	W00	-	-	-	85?	-	-
1973-S476	2441934.89	1973 Jul 18 0917:00	Kookaburra	-	WRE K2007	-	-	-	-	W00	-	-	-	91	-	-
1973-S477	2441972.89	1973 Sep 17 0333:00	Kookaburra 2	-	WRE K2008	-	-	-	-	W00	-	-	-	118	-	-
1973-S478	2442007.92	1973 Oct 21 1008:00	Kookaburra 2	-	WRE K2009	-	-	-	-	W00	-	-	-	118	-	-
1973-S479	2442033.82	1973 Nov 25 1008:00	Kookaburra 2	-	WRE K2010	-	-	-	-	W00	-	-	-	100?	-	-
1976-S207	2442583.82	1976 Feb 25 1003	Kookaburra 2	-	WRE K2021	-	-	-	-	W00	-	-	-	120?	-	-
1976-S208	2442583.82	1976 Jun 30	Kookaburra 3	-	ADTV	-	-	-	-	W00	-	-	-	12?	-	-
1976-S209	2443119.50	1976 Nov 30	ADTV	-	NSRL ADTV1	-	-	-	-	W00	-	-	-	12?	-	-
1976-S210	2443270.50	1977 Aug 24	ADTV	-	NSRL ADTV2	-	-	-	-	W00	-	-	-	12?	-	-
1977-S483	2443441.50	1977 Oct 25	ADTV	-	NSRL ADTV3	-	-	-	-	W00	-	-	-	17	-	-
1977-S484	2443441.50	1977 Oct 25	ADTV	-	NSRL ADTV4	-	-	-	-	W00	-	-	-	18	-	-
1977-S485	2443469.50	1977 Nov 22	ADTV	-	NSRL ADTV4	-	-	-	-	W00	-	-	-	18	-	-
1977-S487	2443470.50	1977 Nov 23	ADTV	-	NSRL ADTV4	-	-	-	-	W00	-	-	-	18	-	-





Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	DrbPay	Agency	Launch_Code	Group	Category	LTCite	Cite	Notes
1968-H34	2440084.56	1968 Aug 16 0133	Koekaburra	-	WRE K113	0.000	WRE	SS	WRE/CBNET/Callus	Neteco	SR11,781	-	-
1968-H35	2440103.95	1968 Sep 4 1042	Koekaburra	-	WRE K115	0.000	WRE	SS	WRE/CBNET/Callus	Neteco	SR11,781	-	-
1968-H36	2440118.02	1968 Sep 18 1233	Koekaburra	-	WRE K114	0.000	WRE	SS	WRE/CBNET/Callus	Neteco	SR11,781	-	-
1968-H37	2440138.52	1968 Oct 9 0026	Koekaburra	-	WRE K119	0.000	WRE	SS	WRE/CBNET/Callus	Neteco	SR11,781	-	-
1968-H38	2440139.56	1968 Oct 10 0133	Koekaburra	-	WRE K117	0.000	WRE	SS	WRE/CBNET/Callus	Neteco	SR11,781	-	-
1968-H39	2440168.37	1968 Nov 7 2047	Koekaburra	-	WRE K120	0.000	WRE	SS	WRE/CBNET/Callus	Neteco	SR11,781	-	-
1968-H39	2440179.98	1968 Nov 19 1134	Koekaburra	-	WRE K120	0.000	WRE	SS	WRE/CBNET/Callus	Neteco	SR11,781	-	-
1968-H39	2440181.25	1968 Nov 20 1803	Koekaburra	-	WRE K123	0.000	WRE	SS	WRE/CBNET/Callus	Neteco	SR11,781	-	-
1968-H35	2440654.57	1969 Dec 09 0141.00	Koekaburra	-	WRE K138	0.000	WRE	SU	WRE/	Aeron	WDCHF	-	-
1970-S198	2440651.60	1970 Mar 06 0231.00	Koekaburra	-	WRE K140	0.000	WRE	SS	WRE/	Aeron	WDCHF	-	-
1970-S240	2440655.65	1970 Mar 10 0333.00	Koekaburra	-	WRE K139	0.000	WRE	SS	WRE/	Aeron	WDCHF	-	-
1970-H10	2440657.66	1970 Mar 12 0348.00	Koekaburra	-	WRE K141	0.000	WRE	SF	WRE/	Aeron	WDCHF	-	-
1970-A32	2440661.61	1970 Mar 16 0229.00	Koekaburra	-	WRE K142	0.000	WRE	SF	WRE/	Aeron	WDCHF	-	-
1970-S362	2440727.62	1970 May 21 0256.00	Koekaburra	-	WRE K143	0.000	WRE	SS	WRE/	Aeron	WDCHF	-	-
1970-S370	2440732.65	1970 May 26 0338.00	Koekaburra	-	WRE K144	0.000	WRE	SS	WRE/	Aeron	WDCHF	-	-
1970-S429	2440733.12	1970 May 26 0338.00	Koekaburra	-	WRE K145	0.000	WRE	SS	WRE/	Aeron	WDCHF	-	-
1970-S429	2440781.62	1970 Jul 14 0247.00	Koekaburra	-	WRE K146	0.000	WRE	SS	WRE/	Aeron	WDCHF	-	-
1970-S674	2440829.88	1970 Aug 31 0903	Koekaburra	-	WRE K147	0.000	WRE	SS	WRE/	Aeron	FDC	-	-
1970-S675	2440880.89	1970 Oct 21 0918	Koekaburra	-	WRE K148	0.000	WRE	SS	WRE/	Aeron	WRE-TN968	-	-
1970-A167	2440890.90	1970 Oct 21 0918	Koekaburra	-	WRE K149	0.000	WRE	SF	WRE/	Aeron	WRE-TN968	-	-
1970-S676	2440896.19	1970 Nov 5 1633	Koekaburra	-	WRE K151	0.000	WRE	SF	WRE/	Aeron	WRE-TN968	-	-
1970-A168	2440896.65	1970 Feb 2 0336	Koekaburra	-	WRE K152	0.000	WRE	SF	WRE/	Aeron	WRE-TN968	-	-
1971-S638	2440994.61	1971 Feb 2 0336	Koekaburra	-	WRE K152	0.000	WRE	SF	WRE/	Aeron	WRE-TN968	-	-
1971-A169	2441013.26	1971 Mar 2 1610	Koekaburra	-	WRE K154	0.000	WRE	SF	WRE/	Aeron	WRE-TN968	-	-
1971-S639	2441089.61	1971 May 18 0237	Koekaburra	-	WRE K155	0.000	WRE	SF	WRE/	Aeron	WRE-TN968	-	-
1971-S640	2441089.86	1971 May 18 0237	Koekaburra	-	WRE K155	0.000	WRE	SF	WRE/	Aeron	WRE-TN968	-	-
1971-S641	2441124.61	1971 Jun 22 0245	Koekaburra	-	WRE K156	0.000	WRE	SS	WRE/	Aeron	WRE-TN968	-	-
1971-S642	2441151.86	1971 Jul 19 0637	Koekaburra	-	WRE K157	0.000	WRE	SS	WRE/	Aeron	WRE-TN968	-	-
1971-S643	2441152.62	1971 Jul 20 0248	Koekaburra	-	WRE K158	0.000	WRE	SS	WRE/	Aeron	WRE-TN968	-	-
1971-S644	2441215.56	1971 Sep 21 0130	Koekaburra	-	WRE K159	0.000	WRE	SS	WRE/	Aeron	WRE-TN968	-	-
1971-S645	2441242.90	1971 Oct 18 0939	Koekaburra	-	WRE K160	0.000	WRE	SS	WRE/	Aeron	WRE-TN968	-	-
1971-S646	2441281.60	1971 Nov 26 0230	Koekaburra	-	WRE K162	0.000	WRE	SS	WRE/	Aeron	WRE-TN968	-	-
1972-S466	2441370.65	1972 Feb 23 0334	Koekaburra	-	WRE K166	0.000	WRE	SS	WRE/	Aeron	WRE-TN968	-	-
1972-S466	2441396.62	1972 Mar 22 0300	Koekaburra	-	WRE K166	0.000	WRE	SS	WRE/	Aeron	WRE-TN968	-	-
1972-S467	2441426.61	1972 Apr 19 0245	Koekaburra	-	WRE K164	0.000	WRE	SS	WRE/	Aeron	WRE-TN968	-	-
1972-A131	2441465.60	1972 May 18 0230	Koekaburra	-	WRE K166	0.000	WRE	SF	WRE/	Aeron	WRE-TN968	-	-
1972-S468	2441592.60	1972 Aug 23 0230	Koekaburra	-	WRE K166	0.000	WRE	SF	WRE/	Aeron	WRE-TN968	-	-
1972-S469	2441973.67	1972 Sep 13 0400	Koekaburra	-	WRE K167	0.000	WRE	SS	WRE/	Aeron	WRE-TN968	-	-
1972-S470	2441636.62	1972 Nov 15 0250	Koekaburra	-	WRE K169	0.000	WRE	SS	WRE/	Aeron	WRE-TN968	-	-
1973-S517	2441694.65	1972 Dec 13 0306	Koekaburra	-	WRE K170	0.000	WRE	SS	WRE/	Aeron	WSRL-0012-TR	-	-
1973-S517	2441762.50	1973 Mar 21	Koekaburra	-	WRE K172	0.000	WRE	SS	WRE/	Aeron	WSRL-0012-TR	-	-
1973-S518	2441841.50	1973 Apr 18	Koekaburra	-	WRE K173	0.000	WRE	SS	WRE/	Aeron	WSRL-0012-TR	-	-
1973-S519	2441881.50	1973 Jul 16 0917.00	Koekaburra	-	WRE K174	0.000	WRE	SS	WRE/	Aeron	WSRL-0012-TR	-	-
1973-S520	2441944.89	1973 Sep 17 0933.00	Koekaburra 2	-	WRE K2006	0.000	WRE	SU	WRE/Heartson	Aeron	WDCHF	-	-
1973-S521	2441972.90	1973 Oct 17 0933.00	Koekaburra 2	-	WRE K2006	0.000	WRE	SU	WRE/Heartson	Aeron	WDCHF	-	-
1973-S522	2442007.90	1973 Nov 21 1008.00	Koekaburra 2	-	WRE K2009	0.000	WRE	SU	WRE/Heartson	Aeron	WDCHF	-	-
1973-S523	2442037.90	1976 Feb 25 1003	Koekaburra 2	-	WRE K2021	0.000	WRE	SS	WRE/	Aeron?	FDC/Urich	-	-
1976-S250	2442983.52	1976 Jun 30	Koekaburra 3	-	WSRL ADT11	0.000	WRE	SS	WRE/	Test	WSRL-0004-TR	-	-
1976-S250	2443113.50	1976 Jun 30	ADTV	-	WSRL ADT11	0.000	WRE	SS	WRE/	Test	WSRL-0004-TR	-	-
1976-S250	2443373.50	1976 Aug 24	ADTV	-	WSRL ADT12	0.000	WRE	SS	WRE/	Test	WSRL-0004-TR	-	-
1977-A51	2443244.50	1977 Oct 25	ADTV	-	WSRL ADT13	0.000	WRE	AS	WRE/	Test	WSRL-0004-TR	-	No eject
1977-A51	2443464.50	1977 Nov 22	ADTV	-	WSRL ADT14	0.000	WRE	AS	WRE/	Test	WSRL-0004-TR	-	No eject
1977-A51	2443465.50	1977 Nov 22	ADTV	-	WSRL ADT14	0.000	WRE	AS	WRE/	Test	WSRL-0004-TR	-	No eject
1977-A51	2443470.50	1977 Nov 23	ADTV	-	WSRL ADT14	0.000	WRE	AS	WRE/	Test	WSRL-0004-TR	-	No eject

Note FDC Nov 25



Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Launch_Mission	FlightCode	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee_Km	Range_Km	Dest
1957-Y01	2436030.59	1957 Jul 11 0205	M-100	-	-	-	-	-	-	GTSP-4	-	-	-	857	-	-
1957-Y02	2436046.60	1957 Jul 27 0220	M-100	-	-	-	-	-	-	GTSP-4	-	-	-	857	-	-
1957-Y03	2436064.68	1957 Aug 14 0423	M-100	-	-	-	-	-	-	GTSP-4	-	-	-	857	-	-
1957-Y04	2436069.63	1957 Aug 19 0313	M-100	-	-	-	-	-	-	GTSP-4	-	-	-	857	-	-
1957-Y05	2436095.62	1957 Sep 14 0300	M-100	-	-	-	-	-	-	GTSP-4	-	-	-	857	-	-
1957-Y06	2436098.62	1957 Sep 17 0300	M-100	-	-	-	-	-	-	GTSP-4	-	-	-	857	-	-
1957-Y07	2436101.60	1957 Sep 20 0230	M-100	?	-	-	-	-	-	UK	-	-	-	857	-	-
1957-Y08	2436146.63	1957 Nov 4 0755	M-100	-	-	-	-	-	-	UK	-	-	-	857	-	-
1957-Y09	2436188.69	1957 Dec 16 0435	M-100	-	-	-	-	-	-	UK	-	-	-	857	-	-
1957-Y10	2436188.69	1957 Dec 16 0435	M-100	?	-	-	-	-	-	UK	-	-	-	857	-	-
1957-Y11	2436193.69	1957 Dec 21 0440	M-100	-	-	-	-	-	-	UK	-	-	-	857	-	-
1957-Y12	2436193.69	1957 Dec 21 0440	M-100	-	-	-	-	-	-	UK	-	-	-	857	-	-
1957-Y13	2436193.69	1957 Dec 21 0440	M-100	-	-	-	-	-	-	UK	-	-	-	857	-	-
1958-Y01	2436213.61	1958 Jan 10 0727	M-100	-	-	-	-	-	-	UK	-	-	-	857	-	-
1958-Y02	2436222.96	1958 Jan 10 0727	M-100	-	-	-	-	-	-	UK	-	-	-	857	-	-
1958-Y03	2436222.91	1958 Jan 19 0945	M-100	?	-	-	-	-	-	UK	-	-	-	857	-	-
1958-Y04	2436223.47	1958 Jan 19 2321	M-100	-	-	-	-	-	-	UK	-	-	-	857	-	-
1958-Y10	2436244.86	1958 Feb 10 0945	M-100	?	-	-	-	-	-	UK	-	-	-	857	-	-
1958-Y11	2436245.91	1958 Feb 11 0944	M-100	-	-	-	-	-	-	UK	-	-	-	857	-	-
1958-Y12	2436253.05	1958 Feb 18 1310	M-100	-	-	-	-	-	-	UK	-	-	-	857	-	-
1958-Y13	2436253.10	1958 Feb 18 1431	M-100	-	-	-	-	-	-	UK	-	-	-	857	-	-
1958-Y14	2436260.65	1958 Feb 26 0335	M-100	?	-	-	-	-	-	UK	-	-	-	857	-	-
1958-Y15	2436260.65	1958 Feb 26 0435	M-100	-	-	-	-	-	-	UK	-	-	-	857	-	-
1958-Y16	2436279.62	1958 Mar 17 0300	M-100	-	-	-	-	-	-	UK	-	-	-	857	-	-
1958-Y17	2436283.41	1958 Mar 20 2145	M-100	-	-	-	-	-	-	UK	-	-	-	857	-	-
1958-Y18	2436283.65	1958 Mar 21 0335	M-100	-	-	-	-	-	-	UK	-	-	-	857	-	-
1958-Y19	2436290.65	1958 Mar 28 0335	M-100	-	-	-	-	-	-	UK	-	-	-	857	-	-
1958-Y20	2436290.65	1958 Mar 28 0335	M-100	?	-	-	-	-	-	UK	-	-	-	857	-	-
1958-Y21	2436295.00	1958 Apr 1 1200	M-100	-	-	-	-	-	-	UK	-	-	-	857	-	-
1958-Y22	2436314.15	1958 Apr 20 1540	M-100	-	-	-	-	-	-	UK	-	-	-	857	-	-
1958-Y23	2436341.53	1958 May 18 0050	M-100	-	-	-	-	-	-	UK	-	-	-	857	-	-
1958-Y24	2436341.53	1958 May 18 0050	M-100	-	-	-	-	-	-	UK	-	-	-	857	-	-
1958-Y25	2436341.59	1958 May 18 0156	M-100	-	-	-	-	-	-	UK	-	-	-	857	-	-
1958-Y26	2436342.95	1958 May 19 0105	M-100	-	-	-	-	-	-	UK	-	-	-	857	-	-
1958-Y27	2436352.94	1958 May 29 0100	M-100	-	-	-	-	-	-	UK	-	-	-	857	-	-
1958-Y28	2436354.57	1958 May 31 0145	M-100	-	-	-	-	-	-	UK	-	-	-	857	-	-
1958-Y29	2436363.53	1958 Jun 9 0050	M-100	-	-	-	-	-	-	UK	-	-	-	857	-	-
1958-Y30	2436376.53	1958 Jun 24 0045	M-100	?	-	-	-	-	-	UK	-	-	-	857	-	-
1958-Y31	2436376.57	1958 Jun 24 0145	M-100	-	-	-	-	-	-	UK	-	-	-	857	-	-
1958-Y32	2436383.96	1958 Jun 29 0130	M-100	-	-	-	-	-	-	UK	-	-	-	857	-	-
1958-Y33	2436400.36	1958 Jul 15 2045	M-100	-	-	-	-	-	-	UK	-	-	-	857	-	-
1958-Y34	2436400.41	1958 Jul 15 2045	M-100	-	-	-	-	-	-	UK	-	-	-	857	-	-
1958-Y35	2436400.56	1958 Jul 16 0200	M-100	-	-	-	-	-	-	UK	-	-	-	857	-	-
1958-Y36	2436401.85	1958 Jul 17 0105	M-100	-	-	-	-	-	-	UK	-	-	-	857	-	-
1958-Y37	2436411.60	1958 Jul 27 1220	M-100	?	-	-	-	-	-	UK	-	-	-	857	-	-
1958-Y38	2436412.15	1958 Jul 27 1510	M-100	-	-	-	-	-	-	UK	-	-	-	857	-	-
1958-Y39	2436422.86	1958 Aug 7 0845	M-100	?	-	-	-	-	-	UK	-	-	-	857	-	-
1958-Y40	2436427.65	1958 Aug 12 0310	M-100	-	-	-	-	-	-	UK	-	-	-	857	-	-
1958-Y41	2436427.65	1958 Aug 12 0440	M-100	-	-	-	-	-	-	UK	-	-	-	857	-	-
1958-Y42	2436427.65	1958 Aug 12 0440	M-100	-	-	-	-	-	-	UK	-	-	-	857	-	-
1958-Y43	2436427.65	1958 Aug 12 0440	M-100	?	-	-	-	-	-	UK	-	-	-	857	-	-
1958-Y44	2436429.67	1958 Aug 15 0440	M-100	-	-	-	-	-	-	UK	-	-	-	857	-	-
1958-Y45	2436430.60	1958 Aug 15 0440	M-100	-	-	-	-	-	-	UK	-	-	-	857	-	-
1958-Y46	2436430.60	1958 Aug 15 0440	M-100	-	-	-	-	-	-	UK	-	-	-	857	-	-
1958-Y47	2436460.66	1958 Sep 6 0420	M-100	-	-	-	-	-	-	UK	-	-	-	857	-	-
1958-Y48	2436460.66	1958 Sep 14 0440	M-100	-	-	-	-	-	-	UK	-	-	-	857	-	-
1958-Y49	2436463.70	1958 Sep 17 0443	M-100	-	-	-	-	-	-	UK	-	-	-	857	-	-
1958-Y50	2436466.72	1958 Sep 19 0350	M-100	-	-	-	-	-	-	UK	-	-	-	857	-	-
1958-Y51	2436466.72	1958 Sep 19 0350	M-100	-	-	-	-	-	-	UK	-	-	-	857	-	-
1958-Y52	2436468.66	1958 Sep 22 0230	M-100	-	-	-	-	-	-	UK	-	-	-	857	-	-
1958-Y53	2436468.66	1958 Sep 22 0230	M-100	-	-	-	-	-	-	UK	-	-	-	857	-	-
1958-Y54	2436473.90	1958 Sep 27 0348	M-100	-	-	-	-	-	-	UK	-	-	-	857	-	-
1958-Y55	2436477.90	1958 Sep 27 0348	M-100	(A-1)	-	-	-	-	-	UK	-	-	-	857	-	-
1958-Y56	2436477.90	1958 Sep 27 0348	M-100	(A-1)	-	-	-	-	-	UK	-	-	-	857	-	-
1958-Y57	2436477.95	1958 Oct 1 1045	M-100	(A-1)	-	-	-	-	-	UK	-	-	-	857	-	-
1958-Y58	2436479.65	1958 Oct 3 0332	M-100	(A-1)	-	-	-	-	-	UK	-	-	-	857	-	-
1958-Y59	2436482.94	1958 Oct 6 1030	M-100	(A-1)	-	-	-	-	-	UK	-	-	-	857	-	-
1958-Y60	2436484.66	1958 Oct 8 0350	M-100	(A-1)	-	-	-	-	-	UK	-	-	-	857	-	-
1958-Y61	2436492.67	1958 Oct 16 0400	M-100	(A-1)	-	-	-	-	-	UK	-	-	-	857	-	-
1958-Y62	2436493.67	1958 Oct 17 0405	M-100	(A-1)	-	-	-	-	-	UK	-	-	-	857	-	-
1958-Y63	2436499.60	1958 Oct 23 0220	M-100	(A-1)	-	-	-	-	-	UK	-	-	-	857	-	-
1958-Y64	2436499.64	1958 Oct 23 0320	M-100	?	-	-	-	-	-	UK	-	-	-	857	-	-
1958-Y65	2436501.93	1958 Oct 25 0800	M-100	?	-	-	-	-	-	UK	-	-	-	857	-	-
1958-Y66	2436505.33	1958 Oct 28 2000	M-100	-	-	-	-	-	-	UK	-	-	-	857	-	-
1958-Y67	2436507.83	1958 Oct 31 0800	M-100	-	-	-	-	-	-	UK	-	-	-	857	-	-
1958-Y68	2436512.01	1958 Nov 4 1220	M-100	?	-	-	-	-	-	UK	-	-	-	857	-	-
1958-Y69	2436518.36	1958 Nov 10 2045	M-100	-	-	-	-	-	-	UK	-	-	-	857	-	-
1958-Y70	2436521.83	1958 Nov 14 0800	M-100	-	-	-	-	-	-	UK	-	-	-	857	-	-
1958-Y71	2436525.86	1958 Nov 18 0845	M-100	-	-	-	-	-	-	UK	-	-	-	857	-	-
1958-Y72	2436536.34	1958 Nov 28 2006	M-100	?	-	-	-	-	-	UK	-	-	-	857	-	-
1958-Y73	2436546.29	1958 Dec 8 1900	M-100	-	-	-	-	-	-	UK	-	-	-	857	-	-
1958-Y74	2436547.96	1958 Dec 10 1100	M-100	?	-	-	-	-	-	UK	-	-	-	857	-	-
1958-Y75	2436549.00	1958 Dec 11 1200	M-100	-	-	-	-	-	-	UK	-	-	-	857	-	-
1958-Y76	2436549.96	1958 Dec 12 1100	M-100	?	-	-	-	-	-	UK	-	-	-	857	-	-
1958-Y77	2436549.96	1958 Dec 12 1100	M-100	-	-	-	-	-	-	UK	-	-	-	857	-	-
1958-Y78	2436554.91	1958 Dec 27 0950	M-100	(A-1)	-	-	-	-	-	UK	-	-	-	857	-	-
1958-Y79	2436571.50	1959 Jan 3 0000	M-100	-	-	-	-	-	-	UK	-	-	-	857	-	-
1958-Y80	2436579.00	1959 Jan 10 1200	M-100	?	-	-	-	-	-	UK	-	-	-	857	-	-
1958-Y81	2436611.50	1959 Feb 12 0000	M-100	-	-	-	-	-	-	UK	-	-	-	857	-	-
1958-Y82	2436639.96	1959 Mar 12 1109	M-100	-	-	-	-	-	-	UK	-	-	-	857	-	-
1958-Y83	2436640.15	1959 Mar 12 1540	M-100	-	-	-	-	-	-	UK	-	-	-	857	-	-

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Launch_Mission	FlightCode	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee Km	Range Km	Dest
1959-Y06	2436641.13	1959 Mar 13 1510	M-100	-	-	-	-	-	-	GISP-4	-	-	-	85?	-	-
1959-Y07	2436660.83	1959 Apr 2 0800	M-100	-	-	-	-	-	-	UK	-	-	-	85?	-	-
1959-Y08	2436694.00	1959 May 5 1200	M-100	-	-	-	-	-	-	UK	-	-	-	85?	-	-
1959-Y09	2436751.65	1959 Jul 1 0341	M-100	-	-	-	-	-	-	GISP-4	-	-	-	85?	-	-
1959-Y10	2436752.66	1959 Jul 3 0345	M-100	-	-	-	-	-	-	GISP-4	-	-	-	85?	-	-
1959-Y11	2436819.03	1959 Sep 7 1245	M-100	-	-	-	-	-	-	UK	-	-	-	85?	-	-
1959-Y12	2436821.51	1959 Sep 10 0020	M-100	-	-	-	-	-	-	UK	-	-	-	85?	-	-
1959-Y13	2436825.38	1959 Sep 13 2100	M-100	-	-	-	-	-	-	UK	-	-	-	85?	-	-
1959-Y14	2436830.29	1959 Sep 18 1900	M-100	-	-	-	-	-	-	UK	-	-	-	85?	-	-
1959-Y15	2436836.38	1959 Sep 24 2100	M-100	-	-	-	-	-	-	UK	-	-	-	85?	-	-
1959-Y16	2436850.38	1959 Oct 6 2100	M-100	?	-	-	-	-	-	UK	-	-	-	85?	-	-
1959-Y17	2436857.38	1959 Oct 15 2100	M-100	?	-	-	-	-	-	UK	-	-	-	85?	-	-
1959-S212	2436856.50	1959 Oct 15	M-100	-	-	-	-	-	-	UK	-	-	-	86?	-	-
1959-S213	2436856.50	1959 Oct 15	M-100	-	-	-	-	-	-	UK	-	-	-	86?	-	-
1959-Y18	2436862.05	1959 Oct 20 1315	M-100	?	-	-	-	-	-	GISP-4	-	-	-	85?	-	-
1959-Y19	2436863.65	1959 Oct 22 0355	M-100	-	-	-	-	-	-	GISP-4	-	-	-	85?	-	-
1959-Y20	2436863.77	1959 Oct 22 0629	M-100	-	-	-	-	-	-	GISP-4	-	-	-	85?	-	-
1959-Y21	2436863.91	1959 Oct 22 0955	M-100	-	-	-	-	-	-	GISP-4	-	-	-	85?	-	-
1959-Y22	2436864.38	1959 Oct 22 2100	M-100	-	-	-	-	-	-	UK	-	-	-	85?	-	-
1959-Y23	2436871.38	1959 Oct 29 2100	M-100	-	-	-	-	-	-	UK	-	-	-	85?	-	-
1959-Y24	2436885.38	1959 Nov 12 2100	M-100	-	-	-	-	-	-	UK	-	-	-	85?	-	-
1959-Y25	2436892.38	1959 Nov 19 2100	M-100	-	-	-	-	-	-	UK	-	-	-	85?	-	-
1959-S262	2436905.50	1959 Dec 3	M-100	?	-	-	-	-	-	UK	-	-	-	86?	-	-
1959-S263	2436905.50	1959 Dec 3	M-100	?	-	-	-	-	-	UK	-	-	-	86?	-	-
1959-S265	2436905.63	1959 Dec 3 0800	M-100	-	-	-	-	-	-	GISP-4	-	-	-	85?	-	-
1959-Y26	2436905.52	1959 Dec 3 1004	M-100	-	-	-	-	-	-	GISP-4	-	-	-	85?	-	-
1959-Y27	2436906.02	1959 Dec 3 1225	M-100	-	-	-	-	-	-	GISP-4	-	-	-	85?	-	-
1959-Y28	2436906.02	1959 Dec 3 2100	M-100	-	-	-	-	-	-	UK	-	-	-	85?	-	-
1959-Y29	2436906.36	1959 Dec 4 0607	M-100	?	-	-	-	-	-	UK	-	-	-	85?	-	-
1959-Y30	2436906.71	1959 Dec 4 0700	M-100	-	-	-	-	-	-	GISP-4	-	-	-	85?	-	-
1959-Y31	2436906.79	1959 Dec 4 0700	M-100	-	-	-	-	-	-	GISP-4	-	-	-	85?	-	-
1959-Y32	2436906.53	1959 Dec 4 1025	M-100	-	-	-	-	-	-	GISP-4	-	-	-	85?	-	-
1959-Y33	2436927.35	1959 Dec 24 2100	M-100	-	-	-	-	-	-	UK	-	-	-	85?	-	-
1959-S303	2436979.00	1959 Jan 10 1200	M-100	?	-	-	-	-	-	UK	-	-	-	100?	-	-
1960-Y19	2436977.79	1960 Jan 24 0659:59	M-100	-	-	-	-	-	-	VKRY	H9002	-	-	44	-	-
1960-Y20	2436984.00	1960 Jan 30 1154:00	M-100	-	-	-	-	-	-	VKRY	H9003	-	-	42	-	-
1960-Y21	2436985.94	1960 Feb 1 1030:00	M-100	-	-	-	-	-	-	VKRY	H9004	-	-	46	-	-
1960-Y22	2436986.94	1960 Feb 2 1037:59	M-100	-	-	-	-	-	-	VKRY	H9005	-	-	46	-	-
1960-Y23	2436987.57	1960 Feb 3 1121:00	M-100	-	-	-	-	-	-	VKRY	H9006	-	-	43	-	-
1960-Y24	2436988.96	1960 Feb 4 1100:00	M-100	-	-	-	-	-	-	VKRY	H9007	-	-	44	-	-
1960-Y25	2436988.96	1960 Feb 5 1100:00	M-100	-	-	-	-	-	-	VKRY	H9008	-	-	38	-	-
1960-Y26	2436970.96	1960 Feb 7 1100:00	M-100	-	-	-	-	-	-	VKRY	H9009	-	-	38	-	-
1960-Y27	2436971.96	1960 Feb 8 1103:59	M-100	-	-	-	-	-	-	VKRY	H9010	-	-	44	-	-
1960-Y28	2436972.96	1960 Feb 8 1102:00	M-100	-	-	-	-	-	-	VKRY	H9011	-	-	43	-	-
1960-Y29	2436973.96	1960 Feb 9 1107:00	M-100	-	-	-	-	-	-	VKRY	H9012	-	-	42	-	-
1960-Y30	2436975.00	1960 Feb 10 1200:00	M-100	-	-	-	-	-	-	VKRY	H9013	-	-	42	-	-
1960-Y31	2436976.00	1960 Feb 11 1100:00	M-100	-	-	-	-	-	-	VKRY	H9014	-	-	35	-	-
1960-Y32	2436976.96	1960 Feb 12 0854:59	M-100	-	-	-	-	-	-	VKRY	H9015	-	-	35	-	-
1960-Y33	2436977.96	1960 Feb 13 0955:00	M-100	-	-	-	-	-	-	VKRY	H9016	-	-	42	-	-
1960-Y34	2437005.96	1960 Feb 12 1100:00	M-100	-	-	-	-	-	-	VKRY	H9017	-	-	41	-	-
1960-Y35	2437008.96	1960 Feb 13 1100:00	M-100	-	-	-	-	-	-	VKRY	H9018	-	-	45	-	-
1960-Y36	2437011.96	1960 Feb 13 1100:00	M-100	-	-	-	-	-	-	VKRY	H9019	-	-	43	-	-
1960-Y37	2437017.96	1960 Feb 27 1100:00	M-100	-	-	-	-	-	-	VKRY	H9020	-	-	45	-	-
1960-Y38	2437023.96	1960 Feb 27 1100:00	M-100	-	-	-	-	-	-	VKRY	H9021	-	-	45	-	-
1960-Y39	2437023.96	1960 Feb 31 1100:00	M-100	-	-	-	-	-	-	VKRY	H9022	-	-	44	-	-
1960-Y40	2437147.96	1960 Aug 1 1100:00	M-100	-	-	-	-	-	-	VKRY	H9023	-	-	42	-	-
1960-Y41	2437148.96	1960 Aug 2 1100:00	M-100	-	-	-	-	-	-	VKRY	H9024	-	-	44	-	-
1960-Y42	2437149.96	1960 Aug 3 1100:00	M-100	-	-	-	-	-	-	VKRY	H9025	-	-	40	-	-
1960-Y43	2437151.96	1960 Aug 5 1100:00	M-100	-	-	-	-	-	-	VKRY	H9026	-	-	43	-	-
1960-Y44	2437152.96	1960 Aug 6 1100:00	M-100	-	-	-	-	-	-	VKRY	H9027	-	-	44	-	-
1960-Y45	2437153.96	1960 Aug 6 1100:00	M-100	-	-	-	-	-	-	VKRY	H9028	-	-	43	-	-
1960-Y46	2437155.96	1960 Aug 9 1100:00	M-100	-	-	-	-	-	-	VKRY	H9029	-	-	39	-	-
1960-Y47	2437158.96	1960 Aug 12 1100:00	M-100	-	-	-	-	-	-	VKRY	H9030	-	-	33	-	-
1960-Y48	2437159.96	1960 Aug 13 1100:00	M-100	-	-	-	-	-	-	VKRY	H9031	-	-	47	-	-
1960-Y49	2437160.96	1960 Aug 14 1100:00	M-100	-	-	-	-	-	-	VKRY	H9032	-	-	44	-	-
1960-Y50	2437162.46	1960 Aug 15 2300:00	M-100	-	-	-	-	-	-	VKRY	H9033	-	-	50	-	-
1960-Y51	2437247.09	1960 Nov 8 1404:59	M-100	-	-	-	-	-	-	SHDK	H9034	-	-	44	-	-
1960-Y52	2437251.96	1960 Nov 13 1104:59	M-100	-	-	-	-	-	-	SHDK	H9035	-	-	40	-	-
1960-Y53	2437253.96	1960 Nov 15 1100:00	M-100	-	-	-	-	-	-	SHDK	H9036	-	-	45	-	-
1960-Y54	2437255.96	1960 Nov 17 1104:59	M-100	-	-	-	-	-	-	SHDK	H9037	-	-	35	-	-
1960-Y55	2437257.96	1960 Nov 19 1100:00	M-100	-	-	-	-	-	-	SHDK	H9038	-	-	45	-	-
1960-Y56	2437259.96	1960 Nov 21 1107:00	M-100	-	-	-	-	-	-	SHDK	H9039	-	-	44	-	-
1960-Y57	2437264.96	1960 Nov 26 1100:00	M-100	-	-	-	-	-	-	SHDK	H9040	-	-	44	-	-
1960-Y58	2437266.99	1960 Nov 30 1142:00	M-100	-	-	-	-	-	-	SHDK	H9041	-	-	42	-	-
1960-Y59	2437268.99	1960 Nov 30 1148:00	M-100	-	-	-	-	-	-	SHDK	H9042	-	-	46	-	-
1960-Y60	2437270.96	1960 Dec 1 1104:59	M-100	-	-	-	-	-	-	SHDK	H9043	-	-	41	-	-
1960-Y61	2437272.96	1960 Dec 2 1100:00	M-100	-	-	-	-	-	-	SHDK	H9044	-	-	39	-	-
1960-Y62	2437273.96	1960 Dec 4 1100:00	M-100	-	-	-	-	-	-	SHDK	H9045	-	-	55	-	-
1960-Y63	2437274.96	1960 Dec 5 1100:00	M-100	-	-	-	-	-	-	SHDK	H9046	-	-	41	-	-
1960-Y64	2437274.96	1960 Dec 6 1100:00	M-100	-	-	-	-	-	-	SHDK	H9047	-	-	51	-	-
1960-Y65	2437276.96	1960 Dec 8 1100:00	M-100	-	-	-	-	-	-	SHDK	H9048	-	-	39	-	-
1960-Y66	2437277.96	1960 Dec 9 1054:59	M-100	-	-	-	-	-	-	SHDK	H9049	-	-	52	-	-
1960-Y67	2437279.94	1960 Dec 11 1030:00	M-100	-	-	-	-	-	-	SHDK	H9050	-	-	46	-	-
1960-Y68	2437280.96	1960 Dec 12 1100:00	M-100	-	-	-	-	-	-	SHDK	H9051	-	-	48	-	-
1960-Y69	2437281.38	1962 Feb 25 2100:00	M-100	-	-	-	-	-	-	SHDK	H9052	-	-	43	-	-
1962-Y451	2437770.71	1962 Apr 16 0500:00	M-100	-	-	-	-	-	-	DK	-	-	-	44	-	-
1962-Y406	2437771.04	1962 Apr 16 1259:59	M-100	-	-	-	-	-	-	DK	-	-	-	50	-	-

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Launch_Mission	FlightCode	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee_Km	Range_Km	Dest
1962-A52	2437772.04	1962 Apr 17 1259:59	N-100	-	-	-	-	-	-	OK	-	-	-	42	-	-
1962-A79	2437804.38	1962 May 19 2100:00	N-100	-	-	-	-	-	-	OK	-	-	-	47	-	-
1962-A81	2437807.38	1962 May 22 2100:00	N-100	-	-	-	-	-	-	OK	-	-	-	47	-	-
1962-A82	2437808.38	1962 May 23 2100:00	N-100	-	-	-	-	-	-	OK	-	-	-	37	-	-
1962-A86	2437812.38	1962 May 27 2100:00	N-100	-	-	-	-	-	-	OK	-	-	-	41	-	-
1962-A127	2437878.38	1962 Aug 5 2100:00	N-100	-	-	-	-	-	-	OK	-	-	-	44	-	-
1962-A129	2437882.38	1962 Aug 5 2100:00	N-100	-	-	-	-	-	-	OK	-	-	-	46	-	-
1962-A130	2437884.38	1962 Aug 7 2100:00	N-100	-	-	-	-	-	-	OK	-	-	-	44	-	-
1962-A134	2437886.38	1962 Aug 9 2100:00	N-100	-	-	-	-	-	-	OK	-	-	-	44	-	-
1962-A137	2437890.38	1962 Aug 13 2100:00	N-100	-	-	-	-	-	-	OK	-	-	-	47	-	-
1962-A138	2437892.38	1962 Aug 15 2100:00	N-100	-	-	-	-	-	-	OK	-	-	-	45	-	-
1962-A141	2437896.38	1962 Aug 19 2100:00	N-100	-	-	-	-	-	-	OK	-	-	-	46	-	-
1962-A143	2437899.38	1962 Aug 22 2100:00	N-100	-	-	-	-	-	-	OK	-	-	-	31	-	-
1962-A144	2437900.38	1962 Aug 23 2100:00	N-100	-	-	-	-	-	-	OK	-	-	-	39	-	-
1962-A205	2437998.38	1962 Nov 29 2100:00	N-100	-	-	-	-	-	-	OK	-	-	-	38	-	-
1962-A210	2438001.38	1962 Dec 2 2100:00	N-100	-	-	-	-	-	-	OK	-	-	-	43	-	-
1962-A215	2438007.38	1962 Dec 6 2100:00	N-100	-	-	-	-	-	-	OK	-	-	-	45	-	-
1962-A218	2438009.38	1962 Dec 10 2100:00	N-100	-	-	-	-	-	-	OK	-	-	-	45	-	-
1962-A221	2438011.38	1962 Dec 12 2100:00	N-100	-	-	-	-	-	-	OK	-	-	-	40	-	-
1962-A227	2438013.38	1962 Dec 14 2100:00	N-100	-	-	-	-	-	-	OK	-	-	-	40	-	-
1962-A234	2438019.38	1962 Dec 20 2100:00	N-100	-	-	-	-	-	-	OK	-	-	-	40	-	-
1962-A237	2438023.38	1962 Dec 24 2100:00	N-100	-	-	-	-	-	-	OK	-	-	-	48	-	-
1963-S23	2438056.54	1963 Jan 27 0100	N-100	?	-	-	-	-	-	OK	GTSP-4	-	-	367	-	-
1963-A19	2438061.38	1963 Jan 31 2100:00	N-100	-	-	-	-	-	-	OK	-	-	-	49	-	-
1963-A20	2438064.38	1963 Feb 3 2100:00	N-100	-	-	-	-	-	-	OK	-	-	-	51	-	-
1963-A26	2438073.38	1963 Feb 12 2100:00	N-100	-	-	-	-	-	-	OK	-	-	-	44	-	-
1963-A38	2438101.38	1963 Mar 12 2100:00	N-100	-	-	-	-	-	-	OK	-	-	-	44	-	-
1963-A56	2438132.38	1963 Apr 5 2200	N-100	-	-	-	-	-	-	OK	-	-	-	35	-	-
1964-T04	2438400.42	1964 Jan 13 2100	N-100	-	-	-	-	-	-	OK	-	-	-	857	-	-
1964-T04	2438406.38	1964 Jan 15 2100	N-100	-	-	-	-	-	-	OK	-	-	-	857	-	-
1964-T05	2438410.38	1964 Jan 15 2100	N-100	-	-	-	-	-	-	OK	-	-	-	857	-	-
1964-T06	2438412.42	1964 Jan 17 2200	N-100	-	-	-	-	-	-	OK	-	-	-	857	-	-
1964-T12	2438504.42	1964 Apr 18 2200	N-100	-	-	-	-	-	-	OK	-	-	-	857	-	-
1964-T14	2438506.53	1964 Apr 19 2000	N-100	-	-	-	-	-	-	OK	-	-	-	857	-	-
1964-T15	2438506.38	1964 Apr 20 2100	N-100	-	-	-	-	-	-	OK	-	-	-	857	-	-
1964-T16	2438508.44	1964 Apr 22 2230	N-100	-	-	-	-	-	-	OK	-	-	-	857	-	-
1964-T17	2438510.38	1964 Apr 24 2100	N-100	-	-	-	-	-	-	OK	-	-	-	857	-	-
1964-T18	2438512.34	1964 Apr 26 2008	N-100	-	-	-	-	-	-	OK	-	-	-	857	-	-
1964-T19	2438513.23	1964 Apr 27 1732	N-100	-	-	-	-	-	-	OK	GTSP-4	-	-	857	-	-
1964-T20	2438515.34	1964 Apr 27 2008	N-100	-	-	-	-	-	-	OK	-	-	-	857	-	-
1964-T20	2438514.21	1964 Apr 28 1700	N-100	-	-	-	-	-	-	OK	GTSP-4	-	-	857	-	-
1964-T21	2438515.23	1964 Apr 29 1053	N-100	-	-	-	-	-	-	OK	GTSP-4	-	-	857	-	-
1964-T22	2438516.34	1964 Apr 29 2008	N-100	-	-	-	-	-	-	OK	GTSP-4	-	-	857	-	-
1964-T23	2438520.23	1964 May 4 1729	N-100	-	-	-	-	-	-	OK	GTSP-4	-	-	857	-	-
1964-T24	2438520.34	1964 May 6 2106	N-100	-	-	-	-	-	-	OK	GTSP-4	-	-	857	-	-
1964-T25	2438522.30	1964 May 7 2006	N-100	-	-	-	-	-	-	OK	GTSP-4	-	-	857	-	-
1964-T26	2438522.34	1964 May 7 2006	N-100	-	-	-	-	-	-	OK	GTSP-4	-	-	857	-	-
1964-T27	2438524.34	1964 May 8 2008	N-100	-	-	-	-	-	-	OK	GTSP-4	-	-	857	-	-
1964-T28	2438526.34	1964 May 10 2008	N-100	-	-	-	-	-	-	OK	GTSP-4	-	-	857	-	-
1964-T29	2438528.34	1964 May 12 2008	N-100	-	-	-	-	-	-	OK	GTSP-4	-	-	857	-	-
1964-T29	2438528.21	1964 May 12 1706	N-100	-	-	-	-	-	-	OK	GTSP-4	-	-	857	-	-
1964-T30	2438528.21	1964 May 12 2200	N-100	-	-	-	-	-	-	OK	GTSP-4	-	-	857	-	-
1964-T31	2438529.34	1964 May 13 2008	N-100	-	-	-	-	-	-	OK	GTSP-4	-	-	857	-	-
1964-T32	2438529.34	1964 May 14 1736	N-100	-	-	-	-	-	-	OK	GTSP-4	-	-	857	-	-
1964-T33	2438530.23	1964 May 15 2008	N-100	-	-	-	-	-	-	OK	GTSP-4	-	-	857	-	-
1964-T34	2438531.34	1964 May 15 2008	N-100	-	-	-	-	-	-	OK	GTSP-4	-	-	857	-	-
1964-T35	2438533.34	1964 May 15 2008	N-100	-	-	-	-	-	-	OK	GTSP-4	-	-	857	-	-
1964-T36	2438534.33	1964 May 18 2000	N-100	-	-	-	-	-	-	OK	GTSP-4	-	-	857	-	-
1964-T37	2438535.21	1964 May 19 1702	N-100	-	-	-	-	-	-	OK	GTSP-4	-	-	857	-	-
1964-T38	2438535.33	1964 May 19 2000	N-100	-	-	-	-	-	-	OK	GTSP-4	-	-	857	-	-
1964-T39	2438536.21	1964 May 20 1700	N-100	-	-	-	-	-	-	OK	GTSP-4	-	-	857	-	-
1964-T40	2438536.38	1964 May 20 2100	N-100	-	-	-	-	-	-	OK	GTSP-4	-	-	857	-	-
1964-T41	2438537.21	1964 May 21 1700	N-100	-	-	-	-	-	-	OK	GTSP-4	-	-	857	-	-
1964-T42	2438537.25	1964 May 21 1805	N-100	-	-	-	-	-	-	OK	GTSP-4	-	-	857	-	-
1964-T43	2438537.33	1964 May 21 2000	N-100	-	-	-	-	-	-	OK	GTSP-4	-	-	857	-	-
1964-T44	2438538.42	1964 May 22 2200	N-100	-	-	-	-	-	-	OK	GTSP-4	-	-	857	-	-
1964-T45	2438554.33	1964 Jun 7 2000	N-100	-	-	-	-	-	-	OK	GTSP-4	-	-	857	-	-
1964-T46	2438555.33	1964 Jun 8 2000	N-100	-	-	-	-	-	-	OK	GTSP-4	-	-	857	-	-
1964-T47	2438557.33	1964 Jun 10 2000	N-100	-	-	-	-	-	-	OK	GTSP-4	-	-	857	-	-
1964-T48	2438559.33	1964 Jun 12 2000	N-100	-	-	-	-	-	-	OK	GTSP-4	-	-	857	-	-
1964-T49	2438561.33	1964 Jun 14 2000	N-100	-	-	-	-	-	-	OK	GTSP-4	-	-	857	-	-
1964-T50	2438563.33	1964 Jun 16 2000	N-100	-	-	-	-	-	-	OK	GTSP-4	-	-	857	-	-
1964-T51	2438564.33	1964 Jun 17 2000	N-100	-	-	-	-	-	-	OK	GTSP-4	-	-	857	-	-
1964-T52	2438565.33	1964 Jun 18 2000	N-100	-	-	-	-	-	-	OK	GTSP-4	-	-	857	-	-
1964-T53	2438565.33	1964 Jun 18 2000	N-100	-	-	-	-	-	-	OK	GTSP-4	-	-	857	-	-
1964-T54	2438566.33	1964 Jun 18 2000	N-100	-	-	-	-	-	-	OK	GTSP-4	-	-	857	-	-
1964-T55	2438567.38	1964 Jun 19 2000	N-100	-	-	-	-	-	-	OK	GTSP-4	-	-	857	-	-
1964-T56	2438569.33	1964 Jun 19 2000	N-100	-	-	-	-	-	-	OK	GTSP-4	-	-	857	-	-
1964-T57	2438569.33	1964 Jun 19 2000	N-100	-	-	-	-	-	-	OK	GTSP-4	-	-	857	-	-
1964-T58	2438569.33	1964 Jun 19 2000	N-100	-	-	-	-	-	-	OK	GTSP-4	-	-	857	-	-
1964-T59	2438569.33	1964 Jun 19 2000	N-100	-	-	-	-	-	-	OK	GTSP-4	-	-	857	-	-
1964-T60	2438569.33	1964 Jun 19 2000	N-100	-	-	-	-	-	-	OK	GTSP-4	-	-	857	-	-
1964-T61	2438569.33	1964 Jun 17 2000	N-100	-	-	-	-	-	-	OK	GTSP-4	-	-	857	-	-
1964-T62	2438569.33	1964 Jun 20 2000	N-100	-	-	-	-	-	-	OK	GTSP-4	-	-	857	-	-
1964-T63	2438569.33	1964 Jun 22 2000	N-100	-	-	-	-	-	-	OK	GTSP-4	-	-	857	-	-
1964-T64	2438601.33	1964 Jun 24 2000	N-100	-	-	-	-	-	-	OK	GTSP-4	-	-	857	-	-
1964-T65	2438618.33	1964 Aug 10 2000	N-100	-	-	-	-	-	-	OK	GTSP-4	-	-	857	-	-

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Launch_Mission	FlightCode	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee_Km	Range_Km	Dest
1964-166	2438620.33	1964 Aug 12 2000	M-100							UK				857		
1964-167	2438622.33	1964 Aug 14 2000	M-100							UK				857		
1964-168	2438624.33	1964 Aug 16 2000	M-100							UK				857		
1964-169	2438626.17	1964 Aug 18 1600	M-100							GISP-4				857		
1964-170	2438626.33	1964 Aug 18 2000	M-100							UK				857		
1964-171	2438627.08	1964 Aug 19 1400	M-100							GISP-4				857		
1964-172	2438627.38	1964 Aug 19 2100	M-100							UK				857		
1964-173	2438628.22	1964 Aug 20 1711	M-100							GISP-4				857		
1964-174	2438628.38	1964 Aug 20 2100	M-100							UK				857		
1964-175	2438630.33	1964 Aug 22 2000	M-100							UK				857		
1964-176	2438632.23	1964 Aug 24 1736	M-100							GISP-4				857		
1964-177	2438632.33	1964 Aug 24 2100	M-100							UK				857		
1964-178	2438634.26	1964 Aug 26 1808	M-100							GISP-4				857		
1964-179	2438634.33	1964 Aug 26 2000	M-100							UK				857		
1964-180	2438639.23	1964 Aug 31 1731	M-100							GISP-4				857		
1964-181	2438640.22	1964 Sep 1 1715	M-100							UK				857		
1964-182	2438641.26	1964 Sep 2 1753	M-100							GISP-4				857		
1964-183	2438646.21	1964 Sep 9 1705	M-100							UK				857		
1964-184	2438646.33	1964 Sep 9 2000	M-100							UK				857		
1964-185	2438649.38	1964 Sep 10 2100	M-100							UK				857		
1964-186	2438651.33	1964 Sep 12 2000	M-100							UK				857		
1964-187	2438653.33	1964 Sep 14 2000	M-100							UK				857		
1964-188	2438653.33	1964 Sep 24 2000	M-100							UK				857		
1964-189	2438661.33	1964 Oct 12 2000	M-100							UK				857		
1964-192	2438663.33	1964 Oct 14 2000	M-100							UK				857		
1964-195	2438665.33	1964 Oct 16 2000	M-100							UK				857		
1964-194	2438666.33	1964 Oct 17 2000	M-100							UK				857		
1964-196	2438668.33	1964 Oct 19 2000	M-100							UK				857		
1964-199	2438668.38	1964 Oct 19 2100	M-100							UK				857		
1964-197	2438669.35	1964 Oct 20 2000	M-100							UK				857		
1964-198	2438690.35	1964 Oct 21 2030	M-100							UK				857		
1964-199	2438690.40	1964 Oct 21 2140	M-100							UK				857		
1964-1100	2438691.33	1964 Oct 22 2000	M-100							UK				857		
1964-1101	2438692.33	1964 Oct 23 2000	M-100							UK				857		
1964-1102	2438692.38	1964 Oct 23 2100	M-100							UK				857		
1964-1103	2438696.33	1964 Oct 26 2000	M-100							UK				857		
1964-1104	2438696.33	1964 Oct 27 2000	M-100							UK				857		
1964-1105	2438697.42	1964 Oct 28 2200	M-100							UK				857		
1964-1106	2438698.33	1964 Oct 29 2000	M-100							UK				857		
1964-1107	2438699.33	1964 Oct 30 2000	M-100							UK				857		
1964-1108	2438716.33	1964 Nov 15 2000	M-100							UK				857		
1964-1109	2438716.33	1964 Nov 18 2000	M-100							UK				857		
1965-102	2438772.01	1965 Jan 11 1215	M-100							UK				857		
1965-103	2438772.04	1965 Jan 11 1215	M-100							UK				857		
1965-104	2438774.04	1965 Jan 13 1300	M-100							UK				857		
1965-105	2438776.00	1965 Jan 13 1300	M-100							UK				857		
1965-106	2438779.00	1965 Jan 15 1200	M-100							UK				857		
1965-107	2438781.00	1965 Jan 20 1430	M-100							UK				857		
1965-108	2438783.20	1965 Jan 22 1230	M-100							UK				857		
1965-109	2438783.24	1965 Jan 22 1742	M-100							UK				857		
1965-110	2438783.26	1965 Jan 22 1842	M-100							UK				857		
1965-111	2438785.26	1965 Jan 22 1205	M-100							UK				857		
1965-112	2438802.00	1965 Feb 16 1200	M-100							UK				857		
1965-113	2438810.00	1965 Feb 16 1200	M-100							UK				857		
1965-114	2438811.00	1965 Feb 19 1200	M-100							UK				857		
1965-115	2438823.00	1965 Feb 19 1200	M-100							UK				857		
1965-116	2438828.14	1965 Feb 8 1200	M-100							UK				857		
1965-118	2438828.14	1965 Mar 8 1517	M-100							UK				857		
1965-119	2438829.82	1965 Mar 10 0745	M-100							UK				857		
1965-120	2438830.00	1965 Mar 10 1205	M-100							UK				857		
1965-121	2438830.14	1965 Mar 10 1515	M-100							UK				857		
1965-122	2438830.22	1965 Mar 10 1715	M-100							UK				857		
1965-123	2438832.00	1965 Mar 12 1200	M-100							UK				857		
1965-124	2438834.82	1965 Mar 15 0745	M-100							UK				857		
1965-125	2438835.00	1965 Mar 15 1205	M-100							UK				857		
1965-126	2438837.00	1965 Mar 17 1200	M-100							UK				857		
1965-127	2438837.08	1965 Mar 17 1400	M-100							UK				857		
1965-128	2438838.00	1965 Mar 18 1205	M-100							UK				857		
1965-129	2438838.02	1965 Mar 18 1230	M-100							UK				857		
1965-130	2438839.00	1965 Mar 19 1205	M-100							UK				857		
1965-131	2438839.11	1965 Mar 19 1441	M-100							UK				857		
1965-132	2438865.01	1965 Apr 14 1215	M-100							UK				857		
1965-133	2438867.91	1965 Apr 17 0944	M-100							UK				857		
1965-134	2438869.09	1965 Apr 20 1416	M-100							UK				857		
1965-135	2438871.01	1965 Apr 20 1215	M-100							UK				857		
1965-136	2438873.01	1965 Apr 22 1210	M-100							UK				857		
1965-137	2438879.04	1965 Apr 28 1303	M-100							UK				857		
1965-138	2438880.94	1965 Apr 30 1030	M-100							UK				857		
1965-139	2438881.00	1965 Apr 30 1200	M-100							UK				857		
1965-140	2438881.10	1965 May 1 1124	M-100							UK				857		
1965-141	2438881.98	1965 May 1 1124	M-100							UK				857		
1965-142	2438882.00	1965 May 1 1159	M-100							UK				857		
1965-143	2438883.01	1965 May 2 1209	M-100							UK				857		
1965-144	2438884.01	1965 May 3 1211	M-100							UK				857		
1965-145	2438884.90	1965 May 4 0941	M-100							UK				857		
1965-146	2438885.01	1965 May 4 1211	M-100							UK				857		
1965-147	2438885.13	1965 May 4 1507:00	M-100							UK				857		

Ion density  
Error for May 5?

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Launch_Mission	FlightCode	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee_Km	Range_Km	Dest
1965-Y48	2438886.13	1965 May 5 1507	M-100						SHDK	G8656A	LP8			857		
1965-Y47	2438886.05	1965 May 5 1305	M-100						SHDK	G8656A	LP9			857		
1965-Y49	2438886.87	1965 May 6 0858	M-100						VOKV	G8656B	LP6			857		
1965-Y50	2438887.00	1965 May 6 1158	M-100						SHDK	G8656A	LP10			857		
1965-Y51	2438887.91	1965 May 7 0957	M-100						VOKV	G8656B	LP7			857		
1965-Y52	2438888.02	1965 May 7 1222	M-100						SHDK	G8656A	LP11			857		
1965-Y53	2438888.00	1965 May 8 1200	M-100						SHDK	G8656A	LP12			857		
1965-Y54	2438889.08	1965 May 8 1351:00	M-100						VOKV	G8656B	LP8			857		
1965-Y55	2438889.87	1965 May 9 0859	M-100						VOKV	G8656B	LP9			857		
1965-Y56	2438890.00	1965 May 9 1200	M-100						SHDK	G8656A	LP13			857		
1965-Y57	2438890.08	1965 May 9 1351	M-100						VOKV	G8656B	LP8			857		
1965-Y58	2438890.90	1965 May 10 0943	M-100						VOKV	G8656B	LP10			857		
1965-Y59	2438891.03	1965 May 10 1242	M-100						SHDK	G8656A	LP14			857		
1965-Y60	2438891.52	1965 May 11 0959	M-100						VOKV	G8656B	LP11			857		
1965-Y61	2438891.96	1965 May 11 1100	M-100						SHDK	G8656A	LP15			857		
1965-Y62	2438892.88	1965 May 12 0905	M-100						VOKV	G8656B	LP12			857		
1965-Y63	2438892.98	1965 May 12 1132	M-100						SHDK	G8656A	LP16			857		
1965-Y64	2438893.01	1965 May 12 1215	M-100						SHDK	G8656A	LP17			857		
1965-Y65	2438893.52	1965 May 13 1000	M-100						VOKV	G8656B	LP13			857		
1965-Y66	2438894.87	1965 May 14 0859	M-100						VOKV	G8656B	LP14			857		
1965-Y67	2438895.88	1965 May 15 0913	M-100						SHDK	G8656A	LP18			857		
1965-Y68	2438895.95	1965 May 15 1041	M-100						SHDK	G8656A	LP19			857		
1965-Y69	2438896.52	1965 May 16 1000	M-100						SHDK	G8656A	LP20			857		
1965-Y70	2438897.52	1965 May 17 1000	M-100						SHDK	G8656A	LP20			857		
1965-Y71	2438899.01	1965 May 19 1215	M-100						SHDK	G8656A	LP20			857		
1965-Y72	2438900.01	1965 May 19 1215	M-100						SHDK	G8656A	LP20			857		
1965-Y73	2438901.00	1965 May 20 1205	M-100						SHDK	G8656A	LP20			857		
1965-Y74	2438906.96	1965 May 26 1058	M-100						SHDK	G8656A	LP15			857		
1965-Y75	2438907.96	1965 May 27 1053	M-100						VOKV	G8656B	LP15			857		
1965-Y76	2438908.95	1965 May 28 1042	M-100						SHDK	G8656A	LP21			857		
1965-Y77	2438909.42	1965 May 28 2263	M-100						SHDK	G8656A	LP22			857		
1965-Y78	2438909.96	1965 May 29 1058	M-100						SHDK	G8656A	LP23			857		
1965-Y79	2438910.42	1965 May 29 2206	M-100						VOKV	G8656B	LP17			857		
1965-Y80	2438911.42	1965 May 30 2201	M-100						VOKV	G8656B	LP18			857		
1965-Y81	2438911.46	1965 May 30 2309	M-100						VOKV	G8656B	LP19			857		
1965-Y82	2438914.11	1965 Jun 2 1445	M-100						VOKV	G8656B	LP20			857		
1965-Y83	2438914.96	1965 Jun 3 1100	M-100						SHDK	G8656A	LP24			857		
1965-Y84	2438915.02	1965 Jun 3 1232	M-100						VOKV	G8656B	LP21			857		
1965-Y85	2438916.00	1965 Jun 4 1206	M-100						VOKV	G8656B	LP22			857		
1965-Y86	2438916.96	1965 Jun 5 1102	M-100						SHDK	G8656A	LP23			857		
1965-Y87	2438917.00	1965 Jun 5 1155	M-100						SHDK	G8656A	LP23			857		
1965-Y88	2438917.96	1965 Jun 6 1000	M-100						SHDK	G8656A	LP26			857		
1965-Y89	2438918.00	1965 Jun 7 1130	M-100						SHDK	G8656A	LP26			857		
1965-Y90	2438918.96	1965 Jun 7 1150	M-100						SHDK	G8656A	LP24			857		
1965-Y91	2438919.00	1965 Jun 8 1235	M-100						VOKV	G8656B	LP25			857		
1965-Y92	2438920.02	1965 Jun 8 1202	M-100						VOKV	G8656B	LP26			857		
1965-Y93	2438921.96	1965 Jun 9 1212	M-100						VOKV	G8656B	LP27			857		
1965-Y94	2438921.96	1965 Jun 10 1100	M-100						SHDK	G8656A	LP29			857		
1965-Y95	2438922.96	1965 Jun 10 1201	M-100						VOKV	G8656B	LP28			857		
1965-Y96	2438922.96	1965 Jun 11 1200	M-100						VOKV	G8656B	LP28			857		
1965-Y97	2438923.00	1965 Jun 12 1200	M-100						VOKV	G8656B	LP29			857		
1965-Y98	2438923.00	1965 Jun 13 1205	M-100						SHDK	G8656A	LP30			857		
1965-Y99	2438925.01	1965 Jun 13 1231	M-100						SHDK	G8656A	LP32			857		
1965-Y100	2438925.01	1965 Jun 13 1231	M-100						SHDK	G8656A	LP32			857		
1965-Y101	2438925.01	1965 Jun 13 1231	M-100						SHDK	G8656A	LP32			857		
1965-Y102	2438925.01	1965 Jun 13 1231	M-100						SHDK	G8656A	LP32			857		
1965-Y103	2438925.01	1965 Jun 13 1231	M-100						SHDK	G8656A	LP32			857		
1965-Y104	2438925.01	1965 Jun 13 1231	M-100						SHDK	G8656A	LP32			857		
1965-Y105	2438925.01	1965 Jun 13 1231	M-100						SHDK	G8656A	LP32			857		
1965-Y106	2438925.01	1965 Jun 13 1231	M-100						SHDK	G8656A	LP32			857		
1965-Y107	2438925.01	1965 Jun 13 1231	M-100						SHDK	G8656A	LP32			857		
1965-Y108	2438925.01	1965 Jun 13 1231	M-100						SHDK	G8656A	LP32			857		
1965-Y109	2438925.01	1965 Jun 13 1231	M-100						SHDK	G8656A	LP32			857		
1965-Y110	2438925.01	1965 Jun 13 1231	M-100						SHDK	G8656A	LP32			857		
1965-Y111	2438925.01	1965 Jun 13 1231	M-100						SHDK	G8656A	LP32			857		
1965-Y112	2438926.01	1965 Jun 14 1205	M-100						SHDK	G8656A	LP30			857		
1965-Y113	2438926.01	1965 Jun 14 1205	M-100						SHDK	G8656A	LP30			857		
1965-Y114	2438926.99	1965 Jun 15 1127	M-100						SHDK	G8656A	LP30			857		
1965-Y115	2438927.02	1965 Jun 15 1225	M-100						SHDK	G8656A	LP30			857		
1965-Y116	2438927.02	1965 Jun 15 1509	M-100						SHDK	G8656A	LP30			857		
1965-Y117	2438928.00	1965 Jun 16 1153	M-100						SHDK	G8656A	LP32			857		
1965-Y118	2438928.00	1965 Jun 16 1200	M-100						SHDK	G8656A	LP34			857		
1965-Y119	2438930.01	1965 Jun 18 1210	M-100						SHDK	G8656A	LP34			857		
1965-Y120	2438930.21	1965 Jun 18 1705	M-100						SHDK	G8656A	LP34			857		
1965-Y121	2438931.04	1965 Jun 19 1251	M-100						SHDK	G8656A	LP34			857		
1965-Y122	2438933.12	1965 Jun 21 1500	M-100						SHDK	G8656A	LP34			857		
1965-Y123	2438933.99	1965 Jun 21 2115	M-100						SHDK	G8656A	LP34			857		
1965-Y124	2438935.01	1965 Jun 23 1153	M-100						SHDK	G8656A	LP34			857		
1965-Y125	2438935.00	1965 Jun 23 1210	M-100						SHDK	G8656A	LP34			857		
1965-Y126	2438935.01	1965 Jun 23 1210	M-100						SHDK	G8656A	LP34			857		
1965-Y127	2438947.90	1965 Jul 6 0830	M-100						SHDK	G8656A	LP34			857		
1965-Y128	2438950.84	1965 Jul 9 0815	M-100						SHDK	G8656A	LP34			857		
1965-Y129	2438954.84	1965 Jul 13 0815	M-100						SHDK	G8656A	LP34			857		
1965-Y130	2438962.83	1965 Jul 13 0815	M-100						SHDK	G8656A	LP34			857		
1965-Y131	2438963.85	1965 Jul 22 0817	M-100						SHDK	G8656A	LP34			857		
1965-Y132	2438964.05	1965 Jul 22 1315	M-100						SHDK	G8656A	LP34			857		
1965-Y133	2438964.84	1965 Jul 26 1215	M-100						SHDK	G8656A	LP34			857		
1965-Y134	2438968.01	1965 Jul 27 0817	M-100						SHDK	G8656A	LP34			857		
1965-Y135	2438968.85	1965 Jul 27 0817	M-100						SHDK	G8656A	LP34			857		
1965-Y136	2438970.01	1965 Jul 28 1215	M-100						SHDK	G8656A	LP34			857		
1965-Y137	2438984.84	1965 Aug 12 0816	M-100						SHDK	G8656A	LP34			857		
1965-Y138	2438986.01	1965 Aug 13 1215	M-100						SHDK	G8656A	LP34			857		



Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Launch_Mission	FlightCode	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee_Km	Range_Km	Dest
1965-Y139	2438990.00	1965 Aug 17 1200	M-100	-	-	-	-	-	-	DK	-	-	-	85?	-	-
1965-Y140	2438991.01	1965 Aug 18 1215	M-100	-	-	-	-	-	-	DK	-	-	-	85?	-	-
1965-Y141	2439011.85	1965 Sep 8 0817	M-100	-	-	-	-	-	-	GISP-4	-	-	-	85?	-	-
1965-Y142	2439018.85	1965 Sep 15 0817	M-100	-	-	-	-	-	-	GISP-4	-	-	-	85?	-	-
1965-Y143	2439023.02	1965 Sep 19 1235	M-100	-	-	-	-	-	-	DK	-	-	-	85?	-	-
1965-Y144	2439024.03	1965 Sep 20 1240	M-100	-	-	-	-	-	-	DK	-	-	-	85?	-	-
1965-Y145	2439025.93	1965 Sep 22 1013	M-100	-	-	-	-	-	-	GISP-4	-	-	-	85?	-	-
1965-Y146	2439026.02	1965 Sep 22 1225	M-100	-	-	-	-	-	-	DK	-	-	-	85?	-	-
1965-Y147	2439026.89	1965 Sep 23 0916	M-100	-	-	-	-	-	-	GISP-4	-	-	-	85?	-	-
1965-Y148	2439028.00	1965 Sep 24 1205	M-100	-	-	-	-	-	-	DK	-	-	-	85?	-	-
1965-Y149	2439039.37	1965 Oct 6 1116	M-100	-	-	-	-	-	-	GISP-4	-	-	-	85?	-	-
1965-Y150	2439053.01	1965 Oct 19 1211	M-100	-	-	-	-	-	-	DK	-	-	-	85?	-	-
1965-Y151	2439054.00	1965 Oct 20 1200	M-100	-	-	-	-	-	-	DK	-	-	-	85?	-	-
1965-Y152	2439061.00	1965 Oct 27 1206	M-100	-	-	-	-	-	-	GISP-4	-	-	-	85?	-	-
1965-Y153	2439061.96	1965 Oct 28 1107	M-100	-	-	-	-	-	-	DK	-	-	-	85?	-	-
1965-Y154	2439062.86	1965 Oct 29 0636	M-100	-	-	-	-	-	-	GISP-4	-	-	-	85?	-	-
1965-Y155	2439081.00	1965 Nov 16 1203	M-100	-	-	-	-	-	-	DK	-	-	-	85?	-	-
1965-Y156	2439082.00	1965 Nov 17 1200	M-100	-	-	-	-	-	-	DK	-	-	-	85?	-	-
1965-Y157	2439083.07	1965 Nov 18 1344	M-100	-	-	-	-	-	-	DK	-	-	-	85?	-	-
1965-Y158	2439089.00	1965 Nov 24 1202	M-100	-	-	-	-	-	-	DK	-	-	-	85?	-	-
1965-Y161	2439108.02	1965 Dec 13 1235	M-100	-	-	-	-	-	-	DK	-	-	-	85?	-	-
1965-Y162	2439110.01	1965 Dec 15 1210	M-100	-	-	-	-	-	-	DK	-	-	-	85?	-	-
1965-Y163	2439112.00	1965 Dec 17 1200	M-100	-	-	-	-	-	-	DK	-	-	-	60	-	-
1966-W08	2439130.01	1966 Jan 4 1214:59	M-100	-	-	-	-	-	-	DK	-	-	-	50	-	-
1966-W12	2439134.01	1966 Jan 6 1214:59	M-100	-	-	-	-	-	-	DK	-	-	-	44	-	-
1966-W15	2439138.01	1966 Jan 12 1221:00	M-100	-	-	-	-	-	-	DK	-	-	-	44	-	-
1966-W18	2439143.02	1966 Jan 17 1222:59	M-100	-	-	-	-	-	-	DK	-	-	-	55	-	-
1966-W23	2439145.02	1966 Jan 19 1230:00	M-100	-	-	-	-	-	-	DK	-	-	-	70	-	-
1966-W19	2439147.02	1966 Jan 21 1222:00	M-100	-	-	-	-	-	-	DK	-	-	-	47	-	-
1966-W20	2439148.00	1966 Jan 22 1200:00	M-100	-	-	-	-	-	-	DK	-	-	-	45	-	-
1966-W21	2439149.04	1966 Jan 23 1237:59	M-100	-	-	-	-	-	-	DK	-	-	-	44	-	-
1966-W01	2439150.02	1966 Jan 24 1233:59	M-100	-	-	-	-	-	-	DK	-	-	-	80	-	-
1966-W25	2439151.00	1966 Jan 25 1200:00	M-100	-	-	-	-	-	-	DK	-	-	-	75	-	-
1966-W28	2439153.00	1966 Jan 27 1200:00	M-100	-	-	-	-	-	-	DK	-	-	-	80	-	-
1966-W02	2439154.00	1966 Jan 28 1204:59	M-100	-	-	-	-	-	-	DK	-	-	-	80	-	-
1966-W30	2439155.02	1966 Jan 29 1225:59	M-100	-	-	-	-	-	-	DK	-	-	-	80	-	-
1966-W03	2439157.00	1966 Jan 31 1200:00	M-100	-	-	-	-	-	-	DK	-	-	-	80	-	-
1966-W32	2439158.02	1966 Feb 1 1225:59	M-100	-	-	-	-	-	-	DK	-	-	-	80	-	-
1966-W37	2439159.02	1966 Feb 2 1225:59	M-100	-	-	-	-	-	-	DK	-	-	-	70	-	-
1966-W47	2439160.03	1966 Feb 3 1235:59	M-100	-	-	-	-	-	-	DK	-	-	-	76	-	-
1966-W46	2439161.00	1966 Feb 7 1201:59	M-100	-	-	-	-	-	-	DK	-	-	-	80	-	-
1966-W04	2439164.00	1966 Feb 8 1200:00	M-100	-	-	-	-	-	-	DK	-	-	-	80	-	-
1966-W05	2439165.00	1966 Feb 8 1200:00	M-100	-	-	-	-	-	-	DK	-	-	-	80	-	-
1966-W09	2439166.00	1966 Feb 8 1201:59	M-100	-	-	-	-	-	-	DK	-	-	-	50	-	-
1966-W39	2439166.26	1966 Feb 8 1201:59	M-100	-	-	-	-	-	-	DK	-	-	-	41	-	-
1966-W421	2439168.00	1966 Feb 8 1200:00	M-100	-	-	-	-	-	-	DK	-	-	-	55	-	-
1966-W422	2439168.00	1966 Feb 8 1207:00	M-100	-	-	-	-	-	-	DK	-	-	-	45	-	-
1966-W46	2439168.00	1966 Feb 10 1200:00	M-100	-	-	-	-	-	-	DK	-	-	-	45	-	-
1966-W07	2439196.00	1966 Feb 11 1200:00	M-100	-	-	-	-	-	-	DK	-	-	-	46	-	-
1966-W23	2439199.00	1966 Feb 14 1200:00	M-100	-	-	-	-	-	-	DK	-	-	-	59	-	-
1966-W23	2439201.01	1966 Feb 16 1213:59	M-100	-	-	-	-	-	-	DK	-	-	-	59	-	-
1966-W45	2439206.01	1966 Feb 20 1213:59	M-100	-	-	-	-	-	-	DK	-	-	-	52	-	-
1966-W25	2439236.00	1966 Feb 22 1204:59	M-100	-	-	-	-	-	-	DK	-	-	-	80	-	-
1966-W06	2439238.00	1966 Feb 23 1204:59	M-100	-	-	-	-	-	-	DK	-	-	-	80	-	-
1966-W10	2439239.00	1966 Feb 23 1200:00	M-100	-	-	-	-	-	-	DK	-	-	-	28	-	-
1966-W45	2439243.01	1966 Feb 25 1207:00	M-100	-	-	-	-	-	-	DK	-	-	-	78	-	-
1966-W23	2439243.01	1966 Feb 27 1208:00	M-100	-	-	-	-	-	-	DK	-	-	-	62	-	-
1966-W26	2439262.00	1966 Feb 16 1200:00	M-100	-	-	-	-	-	-	DK	-	-	-	80	-	-
1966-W26	2439262.00	1966 Feb 20 1204:59	M-100	-	-	-	-	-	-	DK	-	-	-	80	-	-
1966-W23	2439266.00	1966 Feb 24 1208:00	M-100	-	-	-	-	-	-	DK	-	-	-	46	-	-
1966-W70	2439270.01	1966 Feb 24 1208:00	M-100	-	-	-	-	-	-	DK	-	-	-	52	-	-
1966-W273	2439290.00	1966 Jun 14 1206:00	M-100	-	-	-	-	-	-	DK	-	-	-	60	-	-
1966-W274	2439291.00	1966 Jun 15 1201:59	M-100	-	-	-	-	-	-	DK	-	-	-	48	-	-
1966-W77	2439292.00	1966 Jun 15 1201:59	M-100	-	-	-	-	-	-	DK	-	-	-	80	-	-
1966-W26	2439293.01	1966 Jun 16 1212:59	M-100	-	-	-	-	-	-	DK	-	-	-	80	-	-
1966-W28	2439318.00	1966 Jul 11 1200:00	M-100	-	-	-	-	-	-	DK	-	-	-	80	-	-
1966-W29	2439319.00	1966 Jul 12 1200:00	M-100	-	-	-	-	-	-	DK	-	-	-	80	-	-
1966-W30	2439321.00	1966 Jul 14 1200:00	M-100	-	-	-	-	-	-	DK	-	-	-	74	-	-
1966-W294	2439321.72	1966 Jul 15 0514:00	M-100	-	-	-	-	-	-	GISP-4	-	-	-	80	-	-
1966-W31	2439322.00	1966 Jul 15 1200:00	M-100	-	-	-	-	-	-	DK	-	-	-	80	-	-
1966-W33	2439355.00	1966 Aug 17 1201:59	M-100	-	-	-	-	-	-	DK	-	-	-	80	-	-
1966-W35	2439357.00	1966 Aug 19 1200:00	M-100	-	-	-	-	-	-	DK	-	-	-	80	-	-
1966-W36	2439358.00	1966 Aug 19 1200:00	M-100	-	-	-	-	-	-	DK	-	-	-	80	-	-
1966-W310	2439363.79	1966 Aug 26 0659:59	M-100	-	-	-	-	-	-	GISP-4	-	-	-	50	-	-
1966-W39	2439369.00	1966 Aug 31 1200:00	M-100	-	-	-	-	-	-	DK	-	-	-	42	-	-
1966-W41	2439384.00	1966 Sep 15 1200:00	M-100	-	-	-	-	-	-	DK	-	-	-	37	-	-
1966-W42	2439393.00	1966 Sep 16 1200:00	M-100	-	-	-	-	-	-	DK	-	-	-	80	-	-
1966-W43	2439404.00	1966 Oct 5 1200:00	M-100	-	-	-	-	-	-	DK	-	-	-	80	-	-
1966-W43	2439415.79	1966 Oct 17 0702:59	M-100	-	-	-	-	-	-	GISP-4	-	-	-	42	-	-
1966-W353	2439422.82	1966 Oct 24 0736:59	M-100	-	-	-	-	-	-	GISP-4	-	-	-	58	-	-
1966-W362	2439429.80	1966 Oct 31 0712:59	M-100	-	-	-	-	-	-	GISP-4	-	-	-	73	-	-
1966-W57	2439443.79	1966 Nov 14 0659:59	M-100	-	-	-	-	-	-	GISP-4	-	-	-	80	-	-
1966-W414	2439450.79	1966 Nov 21 0659:59	M-100	-	-	-	-	-	-	GISP-4	-	-	-	47	-	-
1966-W58	2439459.92	1966 Nov 30 1007:00	M-100	-	-	-	-	-	-	GISP-4	-	-	-	80	-	-
1966-W363	2439473.77	1966 Dec 14 0630:00	M-100	-	-	-	-	-	-	GISP-4	-	-	-	50	-	-

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Launch_Mission	FlightCode	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee_Km	Range_Km	Dest
1966-W396	2439474.79	1966 Dec 15 0659:59	M-100	-	-	-	-	-	-	GPSP-4	-	-	-	70	-	-
1966-A154	2439478.79	1966 Dec 19 0659:59	M-100	-	-	-	-	-	-	GPSP-4	-	-	-	48	-	-
1966-A155	2439479.00	1966 Dec 19 1200:00	M-100	-	-	-	-	-	-	GPSP-4	-	-	-	45	-	-
1966-W397	2439479.13	1966 Dec 19 1501:59	M-100	-	-	-	-	-	-	SHUK?	H9115	-	-	48	-	-
1966-W398	2439480.37	1966 Dec 21 1121:00	M-100	-	-	-	-	-	-	VOKY?	H9199	-	-	52	-	-
1966-A156	2439481.00	1966 Dec 21 1200:00	M-100	-	-	-	-	-	-	SHUK?	H9199	-	-	78	-	-
1966-A157	2439481.09	1966 Dec 21 1410:00	M-100	-	-	-	-	-	-	SHUK?	H9114	-	-	40	-	-
1966-W399	2439481.96	1966 Dec 22 1100:00	M-100	-	-	-	-	-	-	SHUK?	H9113	-	-	47	-	-
1966-W400	2439482.32	1966 Dec 23 0959:59	M-100	-	-	-	-	-	-	SHUK?	H9113	-	-	50	-	-
1966-W401	2439483.37	1966 Dec 24 0659:59	M-100	-	-	-	-	-	-	SHUK?	H9112	-	-	79	-	-
1966-W402	2439484.52	1966 Dec 25 0847:00	M-100	-	-	-	-	-	-	GPSP-4	-	-	-	80	-	-
1966-W403	2439485.88	1966 Dec 25 0959:59	M-100	-	-	-	-	-	-	VOKY?	H9194	-	-	50	-	-
1966-W404	2439487.37	1966 Dec 26 0912:59	M-100	-	-	-	-	-	-	VOKY?	H9111	-	-	80	-	-
1966-W405	2439487.79	1966 Dec 27 2046:00	M-100	-	-	-	-	-	-	VOKY?	H9195	-	-	80	-	-
1966-W406	2439488.85	1966 Dec 28 0659:59	M-100	-	-	-	-	-	-	VOKY?	H9196	-	-	78	-	-
1966-A160	2439488.92	1966 Dec 29 0830:00	M-100	-	-	-	-	-	-	GPSP-4	-	-	-	70	-	-
1966-A161	2439488.92	1966 Dec 29 0830:00	M-100	-	-	-	-	-	-	GPSP-4	-	-	-	80	-	-
1966-A162	2439490.85	1966 Dec 30 0830:00	M-100	-	-	-	-	-	-	SHUK?	H9110	-	-	60	-	-
1966-A163	2439490.85	1966 Dec 31 0820:00	M-100	-	-	-	-	-	-	VOKY?	H9198	-	-	42	-	-
1966-A164	2439490.85	1966 Dec 31 0959:59	M-100	-	-	-	-	-	-	VOKY?	H9169	-	-	80	-	-
1967-T01	2439491.51	1967 Jan 1 0732:59	M-100	-	-	-	-	-	-	SHUK?	H9109	-	-	80	-	-
1967-T02	2439492.32	1967 Jan 2 0959:59	M-100	-	-	-	-	-	-	SHUK?	H9192	-	-	39	-	-
1967-T03	2439493.53	1967 Jan 3 0600:00	M-100	-	-	-	-	-	-	SHUK?	H9108	-	-	83	-	-
1967-T04	2439493.53	1967 Jan 3 0600:00	M-100	-	-	-	-	-	-	SHUK?	H9191	-	-	64	-	-
1967-T05	2439494.88	1967 Jan 4 0912:59	M-100	-	-	-	-	-	-	GPSP-4	-	-	-	60	-	-
1967-T06	2439494.88	1967 Jan 4 0912:59	M-100	-	-	-	-	-	-	GPSP-4	-	-	-	80	-	-
1967-T07	2439495.86	1967 Jan 5 0634:00	M-100	-	-	-	-	-	-	VOKY?	H9190	-	-	78	-	-
1967-T08	2439496.32	1967 Jan 6 0959:59	M-100	-	-	-	-	-	-	VOKY?	H9209	-	-	73	-	-
1967-T09	2439496.32	1967 Jan 6 0959:59	M-100	-	-	-	-	-	-	VOKY?	H9209	-	-	78	-	-
1967-T10	2439497.41	1967 Jan 7 0853:00	M-100	-	-	-	-	-	-	VOKY?	H9188	-	-	85	-	-
1967-T11	2439497.41	1967 Jan 7 0853:00	M-100	-	-	-	-	-	-	VOKY?	H9188	-	-	85	-	-
1967-T12	2439498.52	1967 Jan 8 1002:59	M-100	-	-	-	-	-	-	VOKY?	H9186	-	-	44	-	-
1967-T13	2439498.52	1967 Jan 8 1002:59	M-100	-	-	-	-	-	-	VOKY?	H9186	-	-	44	-	-
1967-T14	2439500.85	1967 Jan 10 0904:59	M-100	-	-	-	-	-	-	VOKY?	H9184	-	-	75	-	-
1967-T15	2439500.85	1967 Jan 10 1009:59	M-100	-	-	-	-	-	-	VOKY?	H9210	-	-	83	-	-
1967-T16	2439501.89	1967 Jan 11 0920:00	M-100	-	-	-	-	-	-	VOKY?	H9183	-	-	94	-	-
1967-T17	2439505.30	1967 Jan 14 1911:59	M-100	-	-	-	-	-	-	SHUK?	H9207	-	-	94	-	-
1967-T18	2439506.32	1967 Jan 16 0959:59	M-100	-	-	-	-	-	-	VOKY?	H9154	-	-	80	-	-
1967-T19	2439507.51	1967 Jan 17 0944:00	M-100	-	-	-	-	-	-	SHUK?	H9182	-	-	33	-	-
1967-T20	2439507.51	1967 Jan 17 0944:00	M-100	-	-	-	-	-	-	SHUK?	H9182	-	-	33	-	-
1967-T21	2439508.69	1967 Jan 18 0922:59	M-100	-	-	-	-	-	-	SHUK?	H9185	-	-	90	-	-
1967-T22	2439508.69	1967 Jan 18 0922:59	M-100	-	-	-	-	-	-	SHUK?	H9185	-	-	90	-	-
1967-T23	2439508.82	1967 Jan 18 0959:59	M-100	-	-	-	-	-	-	GPSP-4	-	-	-	80	-	-
1967-T24	2439508.82	1967 Jan 18 0959:59	M-100	-	-	-	-	-	-	GPSP-4	-	-	-	73	-	-
1967-T25	2439509.96	1967 Jan 19 1154:00	M-100	-	-	-	-	-	-	SHUK?	H9156	-	-	85	-	-
1967-T26	2439510.96	1967 Jan 20 1104:59	M-100	-	-	-	-	-	-	SHUK?	H9180	-	-	83	-	-
1967-T27	2439511.96	1967 Jan 21 1100:59	M-100	-	-	-	-	-	-	SHUK?	H9187	-	-	79	-	-
1967-T28	2439511.96	1967 Jan 21 1100:59	M-100	-	-	-	-	-	-	SHUK?	H9187	-	-	79	-	-
1967-T29	2439513.04	1967 Jan 22 1030:00	M-100	-	-	-	-	-	-	SHUK?	H9159	-	-	50	-	-
1967-T30	2439513.04	1967 Jan 23 1200:00	M-100	-	-	-	-	-	-	SHUK?	H9175	-	-	52	-	-
1967-T31	2439514.95	1967 Jan 23 1200:00	M-100	-	-	-	-	-	-	SHUK?	H9175	-	-	43	-	-
1967-T32	2439514.95	1967 Jan 25 0448:59	M-100	-	-	-	-	-	-	SHUK?	H9176	-	-	86	-	-
1967-T33	2439515.96	1967 Jan 26 1100:00	M-100	-	-	-	-	-	-	GPSP-4	-	-	-	85	-	-
1967-T34	2439515.96	1967 Jan 26 1100:00	M-100	-	-	-	-	-	-	GPSP-4	-	-	-	85	-	-
1967-T35	2439517.97	1967 Jan 27 1108:00	M-100	-	-	-	-	-	-	VOKY?	H9173	-	-	70	-	-
1967-T36	2439520.97	1967 Jan 28 1113:00	M-100	-	-	-	-	-	-	VOKY?	H9174	-	-	80	-	-
1967-T37	2439520.97	1967 Jan 28 1113:00	M-100	-	-	-	-	-	-	VOKY?	H9174	-	-	80	-	-
1967-T38	2439525.96	1967 Feb 1 1055:59	M-100	-	-	-	-	-	-	VOKY?	H9177	-	-	78	-	-
1967-T39	2439527.94	1967 Feb 6 1026:59	M-100	-	-	-	-	-	-	VOKY?	H9177	-	-	78	-	-
1967-T40	2439529.92	1967 Feb 7 0957:59	M-100	-	-	-	-	-	-	VOKY?	H9176	-	-	80	-	-
1967-T41	2439529.92	1967 Feb 7 0957:59	M-100	-	-	-	-	-	-	SHUK?	H9176	-	-	80	-	-
1967-T42	2439531.91	1967 Feb 8 0900:59	M-100	-	-	-	-	-	-	SHUK?	H9105	-	-	46	-	-
1967-T43	2439531.91	1967 Feb 8 0953:00	M-100	-	-	-	-	-	-	SHUK?	H9104	-	-	48	-	-
1967-T44	2439536.63	1967 Feb 15 0310:00	M-100	-	-	-	-	-	-	GPSP-4	-	-	-	82	-	-
1967-T45	2439536.63	1967 Feb 15 0310:00	M-100	-	-	-	-	-	-	GPSP-4	-	-	-	82	-	-
1967-T46	2439536.88	1967 Feb 15 0800:00	M-100	-	-	-	-	-	-	SHUK?	H9119	-	-	78	-	-
1967-T47	2439538.91	1967 Feb 16 1212:59	M-100	-	-	-	-	-	-	SHUK?	H9118	-	-	80	-	-
1967-T48	2439539.01	1967 Feb 18 0853:00	M-100	-	-	-	-	-	-	SHUK?	H9117	-	-	31	-	-
1967-T49	2439541.91	1967 Feb 22 1019:59	M-100	-	-	-	-	-	-	SHUK?	H9116	-	-	80	-	-
1967-T50	2439551.93	1967 Mar 22 1109:59	M-100	-	-	-	-	-	-	DK	-	-	-	82	-	-
1967-T51	2439571.96	1967 Mar 22 1100:00	M-100	-	-	-	-	-	-	GPSP-4	-	-	-	52	-	-
1967-T52	2439578.92	1967 Mar 29 1008:59	M-100	-	-	-	-	-	-	GPSP-4	-	-	-	68	-	-
1967-T53	2439590.92	1967 Apr 10 1002:59	M-100	-	-	-	-	-	-	GPSP-4	-	-	-	74	-	-
1967-T54	2439590.92	1967 Apr 12 1256:59	M-100	-	-	-	-	-	-	DK	-	-	-	73	-	-
1967-T55	2439593.04	1967 Apr 15 1100:00	M-100	-	-	-	-	-	-	GPSP-4	-	-	-	76	-	-
1967-T56	2439596.00	1967 Apr 17 1200:00	M-100	-	-	-	-	-	-	DK	-	-	-	74	-	-
1967-T57	2439598.00	1967 Apr 17 1200:00	M-100	-	-	-	-	-	-	DK	-	-	-	79	-	-
1967-T58	2439598.00	1967 Apr 17 1200:00	M-100	-	-	-	-	-	-	DK	-	-	-	65	-	-
1967-T59	2439599.92	1967 Apr 19 1002:59	M-100	-	-	-	-	-	-	GPSP-4	-	-	-	65	-	-
1967-T60	2439603.00	1967 Apr 22 1202:59	M-100	-	-	-	-	-	-	GPSP-4	-	-	-	68	-	-
1967-T61	2439604.92	1967 Apr 24 1002:59	M-100	-	-	-	-	-	-	GPSP-4	-	-	-	60	-	-
1967-T62	2439607.71	1967 Apr 27 0503:00	M-100	-	-	-	-	-	-	GPSP-4	-	-	-	68	-	-
1967-T63	2439616.92	1967 May 7 1000:59	M-100	-	-	-	-	-	-	GPSP-4	-	-	-	72	-	-
1967-T64	2439617.92	1967 May 7 1002:59	M-100	-	-	-	-	-	-	GPSP-4	-	-	-	80	-	-
1967-T65	2439618.14	1967 May 7 1526:59	M-100	-	-	-	-	-	-	GPSP-4	-	-	-	907	-	-
1967-T66	2439620.92	1967 May 10 1004:59	M-100	-	-	-	-	-	-	GPSP-4	LP1	-	-	38	-	-
1967-T67	2439621.00	1967 May 10 1200:00	M-100	-	-	-	-	-	-	DK	-	-	-	80	-	-
1967-T68	2439623.67	1967 May 13 0404:59	M-100	-	-	-	-	-	-	GPSP-4	-	-	-	70	-	-

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Launch_Mission	FlightCode	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee_Km	Range_Km	Dest
1967-Y39	2439623.88	1967 May 13 0900:00	M-100	-	-	-	-	-	-	UK	-	-	-	80	-	-
1967-W115	2439625.88	1967 May 15 0900:00	M-100	-	-	-	-	-	-	UK	-	-	-	79	-	-
1967-S598	2439625.22	1967 May 14 1720	M-100	-	-	-	-	-	VUKV	G8S7A	LP2	-	-	90?	-	-
1967-W116	2439625.92	1967 May 15 1003:59	M-100	-	-	-	-	-	-	G18P-4	-	-	-	50	-	-
1967-W117	2439627.92	1967 May 17 1006:00	M-100	-	-	-	-	-	-	G18P-4	-	-	-	62	-	-
1967-S300	2439655.19	1967 Jun 13 1636	M-100	-	-	-	-	-	VUKV	G8S7A	LP3	-	-	90?	-	-
1967-S303	2439657.19	1967 Jun 15 1638:00	M-100	?	-	-	-	-	VUKV	G8S7A	LP4	-	-	90?	-	-
1967-S306	2439659.39	1967 Jun 17 1628	M-100	-	-	-	-	-	VUKV	G8S7A	LP5	-	-	90?	-	-
1967-S307	2439661.92	1967 Jun 17 2115	M-100	-	-	-	-	-	VUKV	G8S7A	LP6	-	-	90?	-	-
1967-W131	2439661.92	1967 Jun 20 1006:00	M-100	-	-	-	-	-	-	G18P-4	-	-	-	64	-	-
1967-Y40	2439662.92	1967 Jun 21 1007:00	M-100	-	-	-	-	-	-	UK	-	-	-	78	-	-
1967-W133	2439665.88	1967 Jun 24 0900:00	M-100	-	-	-	-	-	-	UK	-	-	-	63	-	-
1967-W134	2439667.90	1967 Jun 26 0930:00	M-100	-	-	-	-	-	-	G18P-4	-	-	-	70	-	-
1967-W135	2439668.96	1967 Jun 27 1100:00	M-100	-	-	-	-	-	-	UK	-	-	-	53	-	-
1967-W136	2439669.68	1967 Jun 28 0900:00	M-100	-	-	-	-	-	-	G18P-4	-	-	-	73	-	-
1967-W137	2439669.92	1967 Jun 28 1003:59	M-100	-	-	-	-	-	-	UK	-	-	-	79	-	-
1967-W146	2439681.68	1967 Jul 10 0902:59	M-100	-	-	-	-	-	-	G18P-4	-	-	-	53	-	-
1967-W149	2439683.69	1967 Jul 12 0924:59	M-100	-	-	-	-	-	-	UK	-	-	-	73	-	-
1967-W150	2439683.92	1967 Jul 12 0959:59	M-100	-	-	-	-	-	-	G18P-4	-	-	-	77	-	-
1967-W152	2439686.68	1967 Jul 15 0900:00	M-100	-	-	-	-	-	-	UK	-	-	-	76	-	-
1967-W153	2439686.88	1967 Jul 17 0900:00	M-100	-	-	-	-	-	-	G18P-4	-	-	-	74	-	-
1967-W154	2439688.92	1967 Jul 17 0959:59	M-100	-	-	-	-	-	-	UK	-	-	-	90	-	-
1967-W165	2439690.92	1967 Jul 19 0959:59	M-100	-	-	-	-	-	-	G18P-4	-	-	-	70	-	-
1967-W166	2439714.35	1967 Aug 11 2025	M-100	-	-	-	-	-	-	G8S7A	LP7	-	-	90?	-	-
1967-W169	2439720.92	1967 Aug 18 1001:59	M-100	-	-	-	-	-	-	G18P-4	-	-	-	80	-	-
1967-W169	2439721.88	1967 Aug 19 0900:00	M-100	-	-	-	-	-	-	UK	-	-	-	72	-	-
1967-W169	2439723.88	1967 Aug 19 0900:00	M-100	-	-	-	-	-	-	G18P-4	-	-	-	86	-	-
1967-W172	2439723.92	1967 Aug 21 1001:59	M-100	-	-	-	-	-	-	G18P-4	-	-	-	85	-	-
1967-W172	2439725.92	1967 Aug 23 1001:59	M-100	-	-	-	-	-	-	G18P-4	-	-	-	85	-	-
1967-W175	2439727.94	1967 Aug 25 1035:59	M-100	-	-	-	-	-	-	UK	-	-	-	76	-	-
1967-W173	2439732.88	1967 Aug 30 0900:00	M-100	-	-	-	-	-	-	G18P-4	-	-	-	70	-	-
1967-W177	2439734.92	1967 Sep 1 1006:00	M-100	-	-	-	-	-	-	G18P-4	-	-	-	85	-	-
1967-W177	2439737.92	1967 Sep 4 1000:59	M-100	-	-	-	-	-	-	UK	-	-	-	84	-	-
1967-W177	2439739.69	1967 Sep 6 0917:00	M-100	-	-	-	-	-	-	G18P-4	-	-	-	84	-	-
1967-W177	2439747.92	1967 Sep 14 1002:59	M-100	-	-	-	-	-	-	G18P-4	-	-	-	87	-	-
1967-W182	2439751.88	1967 Sep 18 0906:00	M-100	-	-	-	-	-	-	UK	-	-	-	75	-	-
1967-W185	2439751.92	1967 Sep 18 1006:00	M-100	-	-	-	-	-	-	G18P-4	-	-	-	80	-	-
1967-W186	2439753.88	1967 Sep 20 0909:00	M-100	-	-	-	-	-	-	G18P-4	-	-	-	84	-	-
1967-W186	2439753.92	1967 Sep 20 1002:59	M-100	-	-	-	-	-	-	UK	-	-	-	84	-	-
1967-W189	2439759.92	1967 Oct 16 0959:59	M-100	-	-	-	-	-	-	G18P-4	-	-	-	84	-	-
1967-W189	2439761.92	1967 Oct 18 0959:59	M-100	-	-	-	-	-	-	G18P-4	-	-	-	84	-	-
1967-W190	2439761.92	1967 Oct 18 0959:59	M-100	-	-	-	-	-	-	G18P-4	-	-	-	80	-	-
1967-W199	2439763.92	1967 Oct 20 0959:59	M-100	-	-	-	-	-	-	G18P-4	-	-	-	80	-	-
1967-W201	2439766.92	1967 Oct 23 0959:59	M-100	-	-	-	-	-	-	G18P-4	-	-	-	50	-	-
1967-W208	2439790.82	1967 Oct 27 1000:59	M-100	-	-	-	-	-	-	G18P-4	-	-	-	54	-	-
1967-W216	2439806.88	1967 Nov 11 0901:59	M-100	-	-	-	-	-	-	UK	-	-	-	78	-	-
1967-W216	2439809.92	1967 Nov 15 0959:59	M-100	-	-	-	-	-	-	G18P-4	-	-	-	84	-	-
1967-W251	2439811.92	1967 Nov 17 0959:59	M-100	-	-	-	-	-	-	G18P-4	-	-	-	84	-	-
1967-W201	2439811.92	1967 Nov 22 1101:59	M-100	-	-	-	-	-	-	G18P-4	-	-	-	84	-	-
1967-W202	2439816.88	1967 Nov 22 1101:59	M-100	-	-	-	-	-	-	UK	-	-	-	78	-	-
1967-W203	2439816.87	1967 Nov 22 1101:59	M-100	-	-	-	-	-	-	G18P-4	-	-	-	80	-	-
1967-W204	2439821.84	1967 Nov 27 1030:59	M-100	-	-	-	-	-	-	G18P-4	-	-	-	54	-	-
1967-W205	2439823.71	1967 Nov 28 0503:59	M-100	-	-	-	-	-	-	G18P-4	-	-	-	54	-	-
1967-W205	2439823.92	1967 Nov 29 1007:59	M-100	-	-	-	-	-	-	G18P-4	-	-	-	80	-	-
1967-W207	2439824.71	1967 Nov 30 0501:59	M-100	-	-	-	-	-	-	G18P-4	-	-	-	80	-	-
1967-W54	2439830.92	1967 Dec 8 0959:59	M-100	-	-	-	-	-	-	UK	-	-	-	72	-	-
1967-W205	2439835.92	1967 Dec 11 0959:59	M-100	-	-	-	-	-	-	G18P-4	-	-	-	80	-	-
1967-W55	2439840.88	1967 Dec 16 0900:00	M-100	-	-	-	-	-	-	UK	-	-	-	75	-	-
1967-W208	2439844.88	1967 Dec 20 0900:59	M-100	-	-	-	-	-	-	G18P-4	-	-	-	80	-	-
1967-W56	2439844.88	1967 Dec 20 0900:59	M-100	-	-	-	-	-	-	UK	-	-	-	80	-	-
1968-H25	2439858.88	1968 Jan 3 0900:59	M-100	-	-	-	-	-	-	UK	-	-	-	74	-	-
1968-Y01	2439858.92	1968 Jan 3 1003:59	M-100	-	-	-	-	-	-	G18P-4	-	-	-	80	-	-
1968-A53	2439864.92	1968 Jan 9 1003:59	M-100	-	-	-	-	-	-	G18P-4	-	-	-	46	-	-
1968-H26	2439868.88	1968 Jan 13 0901:59	M-100	-	-	-	-	-	-	G18P-4	-	-	-	52	-	-
1968-Y02	2439872.52	1968 Jan 17 0037:59	M-100	-	-	-	-	-	-	G18P-4	-	-	-	80	-	-
1968-Y03	2439872.54	1968 Jan 17 0059:59	M-100	-	-	-	-	-	-	UK	-	-	-	80	-	-
1968-H27	2439872.71	1968 Jan 17 0500:00	M-100	-	-	-	-	-	-	UK	-	-	-	56	-	-
1968-Y04	2439872.95	1968 Jan 17 0826:00	M-100	-	-	-	-	-	-	G18P-4	-	-	-	80	-	-
1968-Y05	2439873.02	1968 Jan 17 1237:59	M-100	-	-	-	-	-	-	G18P-4	-	-	-	86	-	-
1968-H28	2439873.04	1968 Jan 17 1259:59	M-100	-	-	-	-	-	-	UK	-	-	-	77	-	-
1968-Y06	2439873.18	1968 Jan 17 1623:59	M-100	-	-	-	-	-	-	G18P-4	-	-	-	80	-	-
1968-Y07	2439875.91	1968 Jan 24 1002:59	M-100	-	-	-	-	-	-	UK	-	-	-	80	-	-
1968-H31	2439879.92	1968 Jan 24 1256:59	M-100	-	-	-	-	-	-	G18P-4	-	-	-	51	-	-
1968-H32	2439880.04	1968 Jan 24 1256:59	M-100	-	-	-	-	-	-	UK	-	-	-	74	-	-
1968-Y09	2439881.90	1968 Jan 31 1002:59	M-100	-	-	-	-	-	-	G18P-4	-	-	-	80	-	-
1968-H45	2439891.92	1968 Feb 5 1000:59	M-100	-	-	-	-	-	-	UK	-	-	-	77	-	-
1968-H46	2439898.92	1968 Feb 5 1000:59	M-100	-	-	-	-	-	-	G18P-4	-	-	-	64	-	-
1968-H47	2439900.69	1968 Feb 12 1002:59	M-100	-	-	-	-	-	-	G18P-4	-	-	-	50	-	-
1968-H49	2439902.67	1968 Feb 14 0440:00	M-100	-	-	-	-	-	-	G18P-4	-	-	-	38	-	-
1968-Y13	2439905.88	1968 Feb 16 0402:59	M-100	-	-	-	-	-	-	G18P-4	-	-	-	78	-	-
1968-Y14	2439912.88	1968 Feb 26 0901:59	M-100	-	-	-	-	-	-	UK	-	-	-	80	-	-
1968-H50	2439914.67	1968 Feb 26 0401:59	M-100	-	-	-	-	-	-	UK	-	-	-	84	-	-
1968-Y15	2439916.37	1968 Feb 29 2049:59	M-100	-	-	-	-	-	-	G18P-4	-	-	-	52	-	-
1968-H67	2439919.92	1968 Mar 4 1002:59	M-100	-	-	-	-	-	-	G18P-4	-	-	-	55	-	-
1968-Y19	2439928.88	1968 Mar 13 0900:00	M-100	-	-	-	-	-	-	UK	-	-	-	80	-	-

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Launch_Mission	FlightCode	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee_Km	Range_Km	Dest
1968-Y20	2438930.62	1968 Mar 15 0500:00	M-100							GTSP-4				80		
1968-W84	2438951.88	1968 Apr 5 0901:59	M-100							DK				76		
1968-W90	2438965.88	1968 Apr 19 0900:00	M-100							DK				78		
1968-W98	2438980.88	1968 May 4 0900:00	M-100							DK				76		
1968-T26	2438982.92	1968 May 6 1006:00	M-100							GTSP-4				82		
1968-W101	2438994.88	1968 May 8 0912:59	M-100							DK				68		
1968-W102	2438991.88	1968 May 15 0904:59	M-100							DK				70		
1968-W104	2438992.92	1968 May 16 1007:59	M-100							GTSP-4				84		
1968-T31	2438999.90	1968 May 23 0934:59	M-100							GTSP-4				80		
1968-T32	2440005.63	1968 May 29 0301:59	M-100							DK				80		
1968-T33	2440005.88	1968 May 29 0900:00	M-100							DK				80		
1968-T34	2440012.63	1968 Jun 5 0301:59	M-100							GTSP-4				83		
1968-W123	2440019.63	1968 Jun 12 0301:59	M-100							DK				76		
1968-W124	2440019.89	1968 Jun 12 0927:59	M-100							DK				80		
1968-T36	2440026.63	1968 Jun 19 0300:59	M-100							GTSP-4				76		
1968-W126	2440026.96	1968 Jun 19 1102:00	M-100							DK				80		
1968-T38	2440033.63	1968 Jun 26 0303:59	M-100							GTSP-4				82		
1968-W127	2440033.88	1968 Jun 26 0900:00	M-100							DK				76		
1968-T39	2440038.88	1968 Jun 11 0900:00	M-100							DK				90		
1968-W146	2440040.35	1968 Jun 12 0227:59	M-100							GTSP-4				75		
1968-T41	2440040.52	1968 Jun 13 0027:59	M-100							DK				90		
1968-W147	2440040.94	1968 Jun 13 0659:59	M-100							DK				78		
1968-T42	2440040.69	1968 Jun 13 0432:59	M-100							DK				90		
1968-W146	2440040.71	1968 Jun 13 0603:59	M-100							DK				78		
1968-T45	2440040.85	1968 Jun 13 0627:59	M-100							DK				78		
1968-W149	2440040.88	1968 Jun 13 1227:59	M-100							DK				82		
1968-T46	2440041.11	1968 Jun 13 1437:59	M-100							DK				80		
1968-W150	2440041.21	1968 Jun 13 1700:00	M-100							DK				85		
1968-T48	2440043.52	1968 Jun 16 1006:00	M-100						SHIR?	GTSP-4	H9161			92		
1968-W148	2440044.71	1968 Jun 16 0900:00	M-100							DK				100		
1968-T49	2440047.62	1968 Jun 17 0332:00	M-100							GTSP-4				84		
1968-T50	2440047.88	1968 Jun 17 0900:00	M-100							DK				78		
1968-W151	2440047.88	1968 Jun 17 0900:00	M-100							DK				78		
1968-W151	2440054.94	1968 Jun 17 0203:59	M-100							GTSP-4				54		
1968-T51	2440058.88	1968 Jun 17 0900:00	M-100							DK				90		
1968-T52	2440062.69	1968 Jun 21 0432:59	M-100							DK				80		
1968-T53	2440066.88	1968 Jun 28 0900:00	M-100							DK				80		
1968-W152	2440066.88	1968 Jun 31 0900:00	M-100							DK				77		
1968-T54	2440077.52	1968 Aug 9 0959:59	M-100						SHIR?	GTSP-4	H9162			80		
1968-T64	2440082.29	1968 Aug 13 1859:59	M-100						SHIR?	DK				78		
1968-T69	2440082.95	1968 Aug 14 0900:00	M-100							DK				80		
1968-T80	2440083.17	1968 Aug 14 1600:00	M-100							TOCR				93		
1968-T61	2440083.25	1968 Aug 14 1500:00	M-100							TOCR				80		
1968-T61	2440083.25	1968 Aug 15 1600:00	M-100							TOCR				80		
1968-T65	2440086.29	1968 Aug 16 1859:59	M-100							TOCR				78		
1968-T65	2440086.29	1968 Aug 16 1859:59	M-100							TOCR				80		
1968-W166	2440088.48	1968 Aug 19 2300:00	M-100							H9164				80		
1968-W167	2440088.98	1968 Aug 20 0907:00	M-100							DK				74		
1968-W168	2440089.98	1968 Aug 21 1700:00	M-100							DK				76		
1968-T64	2440090.71	1968 Aug 22 1600:00	M-100							TOCR				80		
1968-T64	2440091.50	1968 Aug 22 1859:59	M-100							TOCR				80		
1968-T66	2440092.21	1968 Aug 23 1700:00	M-100							TOCR				92		
1968-W169	2440092.50	1968 Aug 23 1859:59	M-100							TOCR				76		
1968-T68	2440093.17	1968 Aug 24 1559:59	M-100							TOCR				80		
1968-T68	2440093.17	1968 Aug 24 1700:00	M-100							TOCR				80		
1968-T71	2440096.88	1968 Aug 28 0900:59	M-100							DK				91		
1968-T71	2440101.17	1968 Aug 01 1600:00	M-100							CNS688	H9136			90		
1968-T72	2440101.29	1968 Aug 01 1900:00	M-100							CNS688	H9136			82		
1968-T73	2440102.21	1968 Aug 2 1700:00	M-100							CNS688	H9135			82		
1968-W179	2440102.25	1968 Aug 2 1900:00	M-100							CNS688	H9135			78		
1968-W180	2440103.25	1968 Aug 3 1900:00	M-100							CNS688	H9135			78		
1968-W181	2440104.29	1968 Aug 4 1859:59	M-100							CNS688	H9135			78		
1968-W174	2440105.21	1968 Aug 5 1700:00	M-100							CNS688	H9172			80		
1968-T75	2440107.21	1968 Aug 6 1700:00	M-100							CNS688	H9132			80		
1968-W182	2440110.38	1968 Aug 10 2100:00	M-100							CNS688	H9171			54		
1968-W183	2440110.46	1968 Aug 10 2300:00	M-100							DK				74		
1968-T76	2440110.88	1968 Aug 11 0900:00	M-100							CNS688	H9168			90		
1968-T77	2440112.33	1968 Aug 12 2000:00	M-100							CNS688	H9167			76		
1968-W186	2440115.17	1968 Aug 15 1559:59	M-100							DK				80		
1968-T78	2440117.88	1968 Aug 18 0900:00	M-100							CNS688				80		
1968-W179	2440117.92	1968 Aug 18 1002:59	M-100							DK				80		
1968-W180	2440118.21	1968 Aug 18 1700:00	M-100							CNS688				80		
1968-W181	2440121.08	1968 Aug 21 1400:00	M-100							CTA-P-4				93		
1968-W182	2440121.17	1968 Aug 21 1600:00	M-100							CNS688	H9166			80		
1968-W183	2440121.21	1968 Aug 21 1700:00	M-100							CNS688	H9165			94		
1968-W184	2440121.29	1968 Aug 21 1900:00	M-100							CNS688	H9165			76		
1968-W185	2440121.89	1968 Aug 22 0914:59	M-100							DK				96		
1968-W186	2440124.88	1968 Aug 25 0900:00	M-100							DK				84		
1968-W186	2440127.00	1968 Aug 27 1202:59	M-100							DK				80		
1968-W186	2440131.89	1968 Oct 2 0915:59	M-100							CNS688				82		
1968-W187	2440138.88	1968 Oct 9 0906	M-100							CNS688				60		
1968-W187	2440139.09	1968 Oct 9 1403:00	M-100							DK				60		
1968-W187	2440145.92	1968 Oct 16 1001:59	M-100							CTA-P-4				75		
1968-W188	2440152.88	1968 Oct 23 0908:00	M-100							DK				86		
1968-W188	2440159.88	1968 Oct 30 0908:00	M-100							DK				80		

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Launch_Mission	FlightCode	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee Km	Range Km	Dest
1968-W230	2440160.00	1968 Dec 30 1202:59	M-100							GPS-4				75		
1968-W243	2440164.84	1968 Nov 4 0803:00	M-100							GPS-4				65		
1968-W244	2440173.89	1968 Nov 13 0914:59	M-100			Particle flux 4				UK				82		
1968-W245	2440176.75	1968 Nov 15 0602:59	M-100							GPS-4				78		
1968-W246	2440180.89	1968 Nov 20 0924:59	M-100							UK				86		
1968-W247	2440183.04	1968 Nov 22 1302:59	M-100							GPS-4				73		
1968-W248	2440187.63	1968 Nov 27 0302:59	M-100							UK				76		
1968-W249	2440187.88	1968 Nov 27 0901:59	M-100			Particle flux 5				GPS-4				80		
1968-W254	2440194.88	1968 Nov 29 0820:00	M-100							UK				76		
1968-W264	2440194.88	1968 Dec 4 0904:59	M-100							GPS-4				80		
1968-W101	2440201.67	1968 Dec 11 0402:59	M-100							UK				88		
1968-W102	2440201.88	1968 Dec 13 0912	M-100			Particle flux 6				GPS-4				88?		
1968-W290	2440208.88	1968 Dec 18 0912	M-100			Particle flux 7				GPS-4				76		
1968-W105	2440210.96	1968 Dec 20 1100:00	M-100							GPS-4				80		
1968-W274	2440213.95	1968 Dec 23 0830:00	M-100							GPS-4				76		
1968-W116	2440215.71	1968 Dec 25 0500:00	M-100							GPS-4				80		
1968-W291	2440215.89	1968 Dec 25 0911	M-100			Particle flux 8				UK				88?		
1968-W106	2440217.17	1968 Dec 26 1559:59	M-100						VUKV	TOLZ	RDRR			90		
1968-W275	2440217.48	1968 Dec 26 2330:00	M-100						VUKV	TOLZ	RDRR			74		
1968-W107	2440217.72	1968 Dec 27 0511:00	M-100						VUKV	TOLZ	RDRR			90		
1968-W276	2440220.71	1968 Dec 30 0502:00	M-100						VUKV	TOLZ	RDRR			78		
1968-W108	2440220.96	1968 Dec 30 1100:00	M-100						VUKV	TOLZ	RDRR			80		
1968-W109	2440221.16	1968 Dec 30 1549:59	M-100						VUKV	TOLZ	RDRR			80		
1968-W277	2440221.25	1968 Dec 30 1753:00	M-100						VUKV	TOLZ	RDRR			74		
1968-W110	2440221.49	1968 Dec 30 2351:00	M-100						VUKV	TOLZ	RDRR			80		
1969-T02	2440223.66	1969 Jan 2 0850	M-100						VUKV	TOLZ	RDRR			88		
1969-T03	2440223.90	1969 Jan 2 0850	M-100						VUKV	TOLZ	RDRR			89		
1969-T04	2440224.19	1969 Jan 2 0942	M-100						SHOK?	TOLZ	RDRR			95		
1969-T05	2440224.20	1969 Jan 2 1640	M-100						VUKV?	GPS-4	H9127			91		
1969-T06	2440224.42	1969 Jan 2 2205	M-100						SHOK?	TOLZ	RDRR			92		
1969-T07	2440224.50	1969 Jan 3 0000	M-100						VUKV?	GPS-4	H9127			91		
1969-T08	2440226.62	1969 Jan 7 0350	M-100						VUKV?	GPS-4	H9127			94		
1969-T09	2440226.66	1969 Jan 7 0352	M-100						SHOK?	TOLZ	RDRR			90		
1969-T10	2440226.91	1969 Jan 7 0950	M-100						SHOK?	TOLZ	RDRR			91		
1969-T11	2440226.92	1969 Jan 7 1000	M-100						VUNK?	GPS-4	H9127			94		
1969-T12	2440226.92	1969 Jan 7 1001	M-100						SHOK?	TOLZ	RDRR			90		
1969-T14	2440228.41	1969 Jan 7 2147	M-100						SHOK?	TOLZ	RDRR			94		
1969-T15	2440228.68	1969 Jan 8 0900	M-100						SHOK?	TOLZ	RDRR			91		
1969-T16	2440232.91	1969 Jan 11 0945	M-100						SHOK?	TOLZ	RDRR			94		
1969-T17	2440232.96	1969 Jan 11 0951	M-100						SHOK?	TOLZ	RDRR			92		
1969-T18	2440232.92	1969 Jan 11 0946	M-100						VUKV?	GPS-4	H9127			94		
1969-T19	2440233.16	1969 Jan 11 1000	M-100						SHOK?	TOLZ	RDRR			92		
1969-T20	2440233.16	1969 Jan 11 1856	M-100						VUKV?	GPS-4	H9127			94		
1969-T21	2440233.41	1969 Jan 11 1539	M-100						SHOK?	TOLZ	RDRR			95		
1969-T22	2440233.41	1969 Jan 11 2145	M-100						VUKV?	GPS-4	H9127			91		
1969-T23	2440233.66	1969 Jan 11 2200	M-100		MR-12?				SHOK?	TOLZ	RDRR			89		
1969-T24	2440234.86	1969 Jan 13 0900	M-100		MR-12?				VUNK?	GPS-4	H9127			90		
1969-T25	2440234.86	1969 Jan 13 0900	M-100						UK	GPS-4				88		
1969-T26	2440236.84	1969 Jan 15 0926	M-100						UK	GPS-4				90		
1969-T27	2440236.84	1969 Jan 15 0926	M-100						UK	GPS-4				90		
1969-T28	2440236.88	1969 Jan 17 0905	M-100						UK	GPS-4				91		
1969-T29	2440236.88	1969 Jan 17 0905	M-100						UK	GPS-4				92		
1969-T30	2440236.88	1969 Jan 18 0905	M-100						UK	GPS-4				91		
1969-T31	2440240.88	1969 Jan 18 0900	M-100						UK	GPS-4				91		
1969-T32	2440240.88	1969 Jan 18 0900	M-100						UK	GPS-4				92		
1969-T33	2440240.88	1969 Jan 18 0900	M-100						UK	GPS-4				91		
1969-T34	2440240.88	1969 Jan 18 0900	M-100						UK	GPS-4				92		
1969-T35	2440240.88	1969 Jan 18 0900	M-100						UK	GPS-4				91		
1969-T36	2440240.88	1969 Jan 18 0900	M-100						UK	GPS-4				92		
1969-T37	2440240.88	1969 Jan 18 0900	M-100						UK	GPS-4				91		
1969-T38	2440240.88	1969 Jan 18 0900	M-100						UK	GPS-4				92		
1969-T39	2440240.88	1969 Jan 18 0900	M-100						UK	GPS-4				91		
1969-T40	2440240.88	1969 Jan 18 0900	M-100						UK	GPS-4				92		
1969-T41	2440240.88	1969 Jan 18 0900	M-100						UK	GPS-4				91		
1969-T42	2440240.88	1969 Jan 18 0900	M-100						UK	GPS-4				92		
1969-T43	2440240.88	1969 Jan 18 0900	M-100						UK	GPS-4				91		
1969-T44	2440240.88	1969 Jan 18 0900	M-100						UK	GPS-4				92		
1969-T45	2440240.88	1969 Jan 18 0900	M-100						UK	GPS-4				91		
1969-T46	2440240.88	1969 Jan 18 0900	M-100						UK	GPS-4				92		
1969-T47	2440240.88	1969 Jan 18 0900	M-100						UK	GPS-4				91		
1969-T48	2440240.88	1969 Jan 18 0900	M-100						UK	GPS-4				92		
1969-T49	2440240.88	1969 Jan 18 0900	M-100						UK	GPS-4				91		
1969-T50	2440240.88	1969 Jan 18 0900	M-100						UK	GPS-4				92		
1969-T51	2440240.88	1969 Jan 18 0900	M-100						UK	GPS-4				91		
1969-T52	2440240.88	1969 Jan 18 0900	M-100						UK	GPS-4				92		
1969-T53	2440240.88	1969 Jan 18 0900	M-100						UK	GPS-4				91		
1969-T54	2440240.88	1969 Jan 18 0900	M-100						UK	GPS-4				92		
1969-T55	2440240.88	1969 Jan 18 0900	M-100						UK	GPS-4				91		
1969-T56	2440240.88	1969 Jan 18 0900	M-100						UK	GPS-4				92		
1969-T57	2440240.88	1969 Jan 18 0900	M-100						UK	GPS-4				91		
1969-T58	2440240.88	1969 Jan 18 0900	M-100						UK	GPS-4				92		
1969-T59	2440240.88	1969 Jan 18 0900	M-100						UK	GPS-4				91		
1969-T60	2440240.88	1969 Jan 18 0900	M-100						UK	GPS-4				92		
1969-T61	2440240.88	1969 Jan 18 0900	M-100						UK	GPS-4				91		
1969-T62	2440240.88	1969 Jan 18 0900	M-100						UK	GPS-4				92		
1969-T63	2440240.88	1969 Jan 18 0900	M-100						UK	GPS-4				91		
1969-T64	2440240.88	1969 Jan 18 0900	M-100						UK	GPS-4				92		
1969-T65	2440240.88	1969 Jan 18 0900	M-100						UK	GPS-4				91		
1969-T66	2440240.88	1969 Jan 18 0900	M-100						UK	GPS-4				92		
1969-T67	2440240.88	1969 Jan 18 0900	M-100						UK	GPS-4				91		
1969-T68	2440240.88	1969 Jan 18 0900	M-100						UK	GPS-4				92		
1969-T69	2440240.88	1969 Jan 18 0900	M-100						UK	GPS-4				91		
1969-T70	2440240.88	1969 Jan 18 0900	M-100						UK	GPS-4				92		
1969-T71	2440240.88	1969 Jan 18 0900	M-100						UK	GPS-4				91		
1969-T72	2440240.88	1969 Jan 18 0900	M-100						UK	GPS-4				92		
1969-T73	2440240.88	1969 Jan 18 0900	M-100						UK	GPS-4				91		
1969-T74	2440240.88	1969 Jan 18 0900	M-100						UK	GPS-4				92		
1969-T75	2440240.88	1969 Jan 18 0900	M-100						UK	GPS-4				91		
1969-T76	2440240.88	1969 Jan 18 0900	M-100						UK	GPS-4				92		
1969-T77	2440240.88	1969 Jan 18 0900	M-100						UK	GPS-4				91		
1969-T78																

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Launch_Mission	FlightCode	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee_Km	Range_Km	Dest
1969-Y78	2440256.33	1969 Feb 03 20:00:00	M-100	-	M-100	-	MR-12	-	VUKV	KER	H9128	-	-	90	-	-
1969-Y79	2440257.25	1969 Feb 04 18:00:00	M-100	-	M-100	-	MR-12	-	SHDK	GNS699	H9124	-	-	96	-	-
1969-Y80	2440257.33	1969 Feb 04 20:00:00	M-100	-	M-100	-	MR-12	-	SHDK	GNS699	H9203	-	-	98	-	-
1969-Y81	2440257.63	1969 Feb 05 08:00:00	M-100	-	M-100	-	-	-	-	GRS-P-4	-	-	-	85	-	-
1969-Y82	2440257.68	1969 Feb 05 09:00:00	M-100	-	M-100	-	-	-	-	GRS-P-4	-	-	-	85	-	-
1969-Y83	2440258.25	1969 Feb 05 18:00:00	M-100	-	M-100	-	-	-	SHDK	GNS699	H9123	-	-	89	-	-
1969-Y84	2440258.33	1969 Feb 05 20:00:00	M-100	-	M-100	-	-	-	VUKV	GNS699	H9201	-	-	89	-	-
1969-Y85	2440258.68	1969 Feb 06 09:00:00	M-100	-	M-100	-	-	-	VUKV	GRS69A	LP01	-	-	87	-	-
1969-Y86	2440259.24	1969 Feb 06 17:45:00	M-100	-	M-100	-	-	-	VUKV	GRS69A	H9122	-	-	90	-	-
1969-Y87	2440259.27	1969 Feb 06 18:25:00	M-100	-	M-100	-	-	-	VUKV	GRS69A	H9202	-	-	94	-	-
1969-Y88	2440259.33	1969 Feb 06 20:00:00	M-100	-	M-100	-	-	-	SHDK	GRS699	-	-	-	89	-	-
1969-Y89	2440259.68	1969 Feb 07 09:00:00	M-100	-	M-100	-	-	-	SHDK	GRS699	H9120	-	-	86	-	-
1969-Y90	2440260.22	1969 Feb 07 17:20:00	M-100	-	M-100	-	-	-	SHDK	GRS699	LP02	-	-	91	-	-
1969-Y91	2440262.42	1969 Feb 09 22:00:00	M-100	-	M-100	-	-	-	SHDK	GRS699	-	-	-	89	-	-
1969-Y92	2440262.68	1969 Feb 10 09:00:00	M-100	-	M-100	-	-	-	SHDK	GRS699	-	-	-	93	-	-
1969-Y93	2440263.42	1969 Feb 11 22:00:00	M-100	-	M-100	-	-	-	SHDK	GRS699	H9166	-	-	93	-	-
1969-Y94	2440263.42	1969 Feb 11 22:00:00	M-100	-	M-100	-	-	-	SHDK	GRS699	-	-	-	90	-	-
1969-Y95	2440264.68	1969 Feb 12 09:00:00	M-100	-	M-100	-	-	-	SHDK	GRS699	-	-	-	81	-	-
1969-Y96	2440265.04	1969 Feb 12 13:03:00	M-100	-	M-100	-	-	-	SHDK	GRS699	-	-	-	85	-	-
1969-Y97	2440266.68	1969 Feb 14 09:00:00	M-100	-	M-100	-	-	-	SHDK	GRS699	-	-	-	80	-	-
1969-Y98	2440269.68	1969 Feb 17 09:00:00	M-100	-	M-100	-	-	-	SHDK	GRS699	-	-	-	85	-	-
1969-Y99	2440271.69	1969 Feb 19 09:28:00	M-100	-	M-100	-	-	-	SHDK	GRS699	-	-	-	80	-	-
1969-Y100	2440272.08	1969 Feb 19 13:48:00	M-100	-	M-100	-	-	-	SHDK	GRS699	-	-	-	84	-	-
1969-Y101	2440274.68	1969 Feb 22 09:00:00	M-100	-	M-100	-	-	-	SHDK	GRS699	-	-	-	94	-	-
1969-Y102	2440285.68	1969 Feb 5 09:00	M-100	-	M-100	-	-	-	SHDK	GRS699	-	-	-	807	-	-
1969-Y103	2440285.68	1969 Feb 12 09:00	M-100	-	M-100	-	-	-	SHDK	GRS699	-	-	-	807	-	-
1969-Y104	2440292.68	1969 Mar 13 16:17	M-100	-	M-100	-	-	-	SHDK	GRS699	-	-	-	807	-	-
1969-Y105	2440294.26	1969 Mar 13 21:53	M-100	-	M-100	-	-	-	SHDK	GRS699	-	-	-	807	-	-
1969-Y106	2440296.40	1969 Mar 14 21:30	M-100	-	M-100	-	-	-	SHDK	GRS699	-	-	-	807	-	-
1969-Y107	2440296.40	1969 Mar 14 21:30	M-100	-	M-100	-	-	-	SHDK	GRS699	-	-	-	807	-	-
1969-Y108	2440304.52	1969 Mar 26 09:02	M-100	-	M-100	-	-	-	SHDK	GRS699	-	-	-	83	-	-
1969-Y109	2440306.68	1969 Mar 26 09:02	M-100	-	M-100	-	-	-	SHDK	GRS699	-	-	-	83	-	-
1969-Y110	2440310.02	1969 Mar 29 12:30:00	M-100	-	M-100	-	-	-	SHDK	GRS699	-	-	-	83	-	-
1969-Y111	2440310.02	1969 Mar 29 15:34:59	M-100	-	M-100	-	-	-	SHDK	GRS699	-	-	-	807	-	-
1969-Y112	2440310.07	1969 Mar 29 15:30:00	M-100	-	M-100	-	-	-	SHDK	GRS699	-	-	-	807	-	-
1969-Y113	2440313.31	1969 Apr 1 19:50	M-100	-	M-100	-	-	-	SHDK	GRS699	-	-	-	857	-	-
1969-Y114	2440315.86	1969 Apr 2 06:52	M-100	-	M-100	-	-	-	SHDK	GRS699	-	-	-	83	-	-
1969-Y115	2440320.52	1969 Apr 9 06:53	M-100	-	M-100	-	-	-	SHDK	GRS699	-	-	-	83	-	-
1969-Y116	2440327.28	1969 Apr 15 18:49:00	M-100	-	M-100	-	-	-	SHDK	GRS699	-	-	-	807	-	-
1969-Y117	2440327.63	1969 Apr 16 08:00:00	M-100	-	M-100	-	-	-	SHDK	GRS699	-	-	-	94	-	-
1969-Y118	2440327.52	1969 Apr 16 10:03:00	M-100	-	M-100	-	-	-	SHDK	GRS699	-	-	-	94	-	-
1969-Y119	2440330.06	1969 Apr 18 15:30:00	M-100	-	M-100	-	-	-	SHDK	GRS699	-	-	-	91	-	-
1969-Y120	2440330.16	1969 Apr 18 15:30:00	M-100	-	M-100	-	-	-	SHDK	GRS699	-	-	-	97	-	-
1969-Y121	2440331.06	1969 Apr 19 15:52:00	M-100	-	M-100	-	-	-	SHDK	GRS699	-	-	-	88	-	-
1969-Y122	2440331.19	1969 Apr 19 15:52:00	M-100	-	M-100	-	-	-	SHDK	GRS699	-	-	-	88	-	-
1969-Y123	2440331.21	1969 Apr 19 15:52:00	M-100	-	M-100	-	-	-	SHDK	GRS699	-	-	-	80	-	-
1969-Y124	2440332.02	1969 Apr 20 12:34:00	M-100	-	M-100	-	-	-	SHDK	GRS699	-	-	-	857	-	-
1969-Y125	2440332.02	1969 Apr 20 12:34:00	M-100	-	M-100	-	-	-	SHDK	GRS699	-	-	-	90	-	-
1969-Y126	2440332.07	1969 Apr 21 15:34:00	M-100	-	M-100	-	-	-	SHDK	GRS699	-	-	-	90	-	-
1969-Y127	2440333.07	1969 Apr 21 15:34:00	M-100	-	M-100	-	-	-	SHDK	GRS699	-	-	-	97	-	-
1969-Y128	2440333.07	1969 Apr 21 15:34:00	M-100	-	M-100	-	-	-	SHDK	GRS699	-	-	-	97	-	-
1969-Y129	2440334.63	1969 Apr 23 08:00:00	M-100	-	M-100	-	-	-	SHDK	GRS699	-	-	-	88	-	-
1969-Y130	2440334.63	1969 Apr 23 08:00:00	M-100	-	M-100	-	-	-	SHDK	GRS699	-	-	-	88	-	-
1969-Y131	2440335.01	1969 Apr 23 12:10:00	M-100	-	M-100	-	-	-	SHDK	GRS699	-	-	-	88	-	-
1969-Y132	2440335.01	1969 Apr 23 12:10:00	M-100	-	M-100	-	-	-	SHDK	GRS699	-	-	-	88	-	-
1969-Y133	2440335.59	1969 Apr 24 04:01:00	M-100	-	M-100	-	-	-	SHDK	GRS699	-	-	-	94	-	-
1969-Y134	2440341.67	1969 Apr 24 04:01:00	M-100	-	M-100	-	-	-	SHDK	GRS699	-	-	-	94	-	-
1969-Y135	2440341.67	1969 Apr 30 09:00:00	M-100	-	M-100	-	-	-	SHDK	GRS699	-	-	-	94	-	-
1969-Y136	2440349.63	1969 Apr 07 03:03:00	M-100	-	M-100	-	-	-	SHDK	GRS699	-	-	-	89	-	-
1969-Y137	2440355.83	1969 Apr 14 08:00:00	M-100	-	M-100	-	-	-	SHDK	GRS699	-	-	-	92	-	-
1969-Y138	2440360.67	1969 Apr 19 04:00:00	M-100	-	M-100	-	-	-	SHDK	GRS699	-	-	-	76	-	-
1969-Y139	2440361.17	1969 Apr 19 04:00:00	M-100	-	M-100	-	-	-	SHDK	GRS699	-	-	-	80	-	-
1969-Y140	2440361.42	1969 Apr 19 23:00:00	M-100	-	M-100	-	-	-	SHDK	GRS699	-	-	-	86	-	-
1969-Y141	2440361.42	1969 Apr 20 23:00:00	M-100	-	M-100	-	-	-	SHDK	GRS699	-	-	-	91	-	-
1969-Y142	2440362.42	1969 Apr 20 23:00:00	M-100	-	M-100	-	-	-	SHDK	GRS699	-	-	-	92	-	-
1969-Y143	2440362.94	1969 Apr 21 08:03:00	M-100	-	M-100	-	-	-	SHDK	GRS699	-	-	-	86	-	-
1969-Y144	2440362.94	1969 Apr 21 11:03:00	M-100	-	M-100	-	-	-	SHDK	GRS699	-	-	-	83	-	-
1969-Y145	2440363.17	1969 Apr 21 16:00:00	M-100	-	M-100	-	-	-	SHDK	GRS699	-	-	-	82	-	-
1969-Y146	2440363.42	1969 Apr 21 23:00:00	M-100	-	M-100	-	-	-	SHDK	GRS699	-	-	-	88	-	-
1969-Y147	2440363.42	1969 Apr 22 04:00:00	M-100	-	M-100	-	-	-	SHDK	GRS699	-	-	-	88	-	-
1969-Y148	2440363.67	1969 Apr 22 10:00:00	M-100	-	M-100	-	-	-	SHDK	GRS699	-	-	-	89	-	-
1969-Y149	2440363.92	1969 Apr 23 23:00:00	M-100	-	M-100	-	-	-	SHDK	GRS699	-	-	-	89	-	-
1969-Y150	2440365.42	1969 Apr 24 11:00:00	M-100	-	M-100	-	-	-	SHDK	GRS699	-	-	-	87	-	-
1969-Y151	2440365.96	1969 Apr 24 16:00:00	M-100	-	M-100	-	-	-	SHDK	GRS699	-	-	-	92	-	-
1969-Y152	2440366.17	1969 Apr 25 02:00:00	M-100	-	M-100	-	-	-	SHDK	GRS699	-	-	-	87	-	-
1969-Y153	2440366.58	1969 Apr 25 02:00:00	M-100	-	M-100	-	-	-	SHDK	GRS699	-	-	-	92	-	-
1969-Y154	2440366.67	1969 Apr 25 04:00:00	M-100	-	M-100	-	-	-	SHDK	GRS699	-	-	-	92	-	-
1969-Y155	2440367.42	1969 Apr 26 23:00:00	M-100	-	M-100	-	-	-	SHDK	GRS699	-	-	-	88	-	-
1969-Y156	2440369.17	1969 Apr 27 16:00:00	M-100	-	M-100	-	-	-	SHDK	GRS699	-	-	-	88	-	-
1969-Y157	2440369.17	1969 Apr 28 02:00:00	M-100	-	M-100	-	-	-	SHDK	GRS699	-	-	-	90	-	-
1969-Y158	2440369.68	1969 Apr 28 08:35:00	M-100	-	M-100	-	-	-	SHDK	GRS699	-	-	-	91	-	-
1969-Y159	2440369.98	1969 Apr 28 11:26:00	M-100	-	M-100	-	-	-	SHDK	GRS699	-	-	-	87	-	-
1969-Y160	2440371.63	1969 Apr 30 03:02:00	M-100	-	M-100	-	-	-	SHDK	GRS699	-	-	-	86	-	-
1969-Y161	2440372.58	1969 May 02 22:00:00	M-100	-	M-100	-	-	-	SHDK	GRS699	-	-	-	89	-	-
1969-Y162	2440375.42	1969 Jun 02 02:00:00	M-100	-	M-100	-	-	-	SHDK	GRS699	-	-	-	91	-	-
1969-Y163	2440376.42	1969 Jun 03 22:00:00	M-100	-	M-100	-	-	-	SHDK	GRS699	-	-	-	9		

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Launch_Mission	FlightCode	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee_Km	Range_Km	Dest
1969-Y168	2440379.42	1969 Jun 06 2200:00	M-100	-	M-100	-	-	-	SHDK	TOLZ	I065	-	-	92	-	-
1969-Y169	2440379.67	1969 Jun 07 0400:00	M-100	-	M-100	-	-	-	SHDK	TOLZ	I065	-	-	89	-	-
1969-Y170	2440379.92	1969 Jun 07 1000:00	M-100	-	M-100	-	-	-	SHDK	GNS9C	R9146	-	-	83	-	-
1969-Y171	2440380.17	1969 Jun 07 1600:00	M-100	-	M-100	-	-	-	SHDK	GNS9C	R9147	-	-	92	-	-
1969-Y172	2440381.42	1969 Jun 08 2200:00	M-100	-	M-100	-	-	-	SHDK	GNS9C	R9148	-	-	89	-	-
1969-Y173	2440382.42	1969 Jun 09 2200:00	M-100	-	M-100	-	-	-	SHDK	GNS9C	R9149	-	-	87	-	-
1969-Y174	2440382.42	1969 Jun 09 2200:00	M-100	-	M-100	-	-	-	SHDK	GNS9C	R9150	-	-	86	-	-
1969-Y175	2440383.43	1969 Jun 10 2214:00	M-100	-	M-100	-	-	-	-	GRS-P-4	-	-	-	87	-	-
1969-Y176	2440383.58	1969 Jun 11 0200:00	M-100	-	M-100	-	-	-	-	MLD	-	-	-	88	-	-
1969-Y177	2440383.94	1969 Jun 11 0805:00	M-100	-	M-100	-	-	-	-	UK	-	-	-	85	-	-
1969-Y178	2440384.42	1969 Jun 11 2200:00	M-100	-	M-100	-	-	-	SHDK	GNS9C	R9151	-	-	80	-	-
1969-Y180	2440385.42	1969 Jun 12 2200:00	M-100	-	M-100	-	-	-	SHDK	GNS9C	LP1	-	-	907	-	-
1969-Y181	2440385.67	1969 Jun 13 0400:00	M-100	-	M-100	-	-	-	SHDK	GNS9C	R9152	-	-	91	-	-
1969-Y182	2440386.17	1969 Jun 13 1600:00	M-100	-	M-100	-	-	-	SHDK	GNS9C	R9153	-	-	86	-	-
1969-Y183	2440390.86	1969 Jun 18 0637:00	M-100	-	M-100	-	-	-	-	UK	-	-	-	91	-	-
1969-Y184	2440397.53	1969 Jun 25 0600:00	M-100	-	M-100	-	-	-	-	UK	-	-	-	92	-	-
1969-Y185	2440397.52	1969 Jun 25 1001:00	M-100	-	M-100	-	-	-	-	GRS-P-4	-	-	-	90	-	-
1969-Y187	2440404.68	1969 Jun 02 0900:00	M-100	-	M-100	-	-	-	-	UK	-	-	-	94	-	-
1969-Y188	2440404.52	1969 Jun 02 1001:00	M-100	-	M-100	-	-	-	-	GRS-P-4	-	-	-	87	-	-
1969-Y190	2440411.88	1969 Jun 09 0900:00	M-100	-	M-100	-	-	-	-	UK	-	-	-	90	-	-
1969-Y192	2440418.88	1969 Jun 16 0900:00	M-100	-	M-100	-	-	-	-	UK	-	-	-	92	-	-
1969-Y193	2440418.52	1969 Jun 16 1004:00	M-100	-	M-100	-	-	-	-	UK	-	-	-	86	-	-
1969-Y195	2440425.88	1969 Jun 23 0903:00	M-100	-	M-100	-	-	-	-	GRS-P-4	-	-	-	90	-	-
1969-Y196	2440425.52	1969 Jun 23 1001:00	M-100	-	M-100	-	-	-	-	GRS-P-4	-	-	-	88	-	-
1969-Y197	2440426.38	1969 Jun 23 2100:00	M-100	-	M-100	-	-	-	-	GRS-P-4	-	-	-	90	-	-
1969-Y198	2440427.38	1969 Jun 24 2102:00	M-100	-	M-100	-	-	-	-	GRS-P-4	-	-	-	857	-	-
1969-Y202	2440432.63	1969 Jun 30 0301:00	M-100	-	M-100	-	-	-	-	UK	-	-	-	91	-	-
1969-Y203	2440432.88	1969 Jun 30 0900:00	M-100	-	M-12	-	-	-	-	UK	-	-	-	89	-	-
1969-Y205	2440439.88	1969 Aug 06 0900:00	M-100	-	M-100	-	-	-	-	UK	-	-	-	90	-	-
1969-Y209	2440453.88	1969 Aug 20 0900:00	M-100	-	M-100	-	-	-	-	UK	-	-	-	907	-	-
1969-Y211	2440460.94	1969 Aug 27 1037:00	M-100	-	M-12	-	-	-	-	UK	-	-	-	90	-	-
1969-Y212	2440467.58	1969 Sep 03 0200:00	M-100	-	M-100	-	-	-	-	MLD	-	-	-	80	-	-
1969-Y213	2440467.58	1969 Sep 03 0900:00	M-100	-	M-100	-	-	-	-	GRS-P-4	-	-	-	83	-	-
1969-Y214	2440467.52	1969 Sep 03 1003:00	M-100	-	M-100	-	-	-	-	GRS-P-4	-	-	-	85	-	-
1969-Y215	2440474.58	1969 Sep 10 0200:00	M-100	-	M-12	-	-	-	-	UK	-	-	-	91	-	-
1969-Y216	2440474.88	1969 Sep 10 0900:00	M-100	-	M-100	-	-	-	-	UK	-	-	-	83	-	-
1969-Y217	2440481.33	1969 Sep 16 1950:00	M-100	-	M-100	-	-	-	-	UK	-	-	-	88	-	-
1969-Y218	2440481.40	1969 Sep 16 2143:00	M-100	-	M-100	-	-	-	VOKV	TOLZ	I065	-	-	907	-	-
1969-Y219	2440481.58	1969 Sep 17 0200:00	M-100	-	M-100	-	-	-	VOKV	TOLZ	I065	-	-	89	-	-
1969-Y220	2440481.88	1969 Sep 17 0910:00	M-100	-	M-100	-	-	-	-	MLD	-	-	-	90	-	-
1969-Y221	2440481.52	1969 Sep 17 1022:00	M-100	-	M-100	-	-	-	VOKV	GRS-P-4	-	-	-	86	-	-
1969-Y222	2440482.35	1969 Sep 17 1950:00	M-100	-	M-100	-	-	-	-	TOLZ	-	-	-	90	-	-
1969-Y223	2440482.40	1969 Sep 17 2148:00	M-100	-	M-100	-	-	-	VOKV	TOLZ	I065	-	-	87	-	-
1969-Y224	2440482.40	1969 Sep 18 1145:00	M-100	-	M-100	-	-	-	VOKV	TOLZ	I065	-	-	89	-	-
1969-Y225	2440483.42	1969 Sep 18 2305:00	M-100	-	M-100	-	-	-	VOKV	TOLZ	I065	-	-	88	-	-
1969-Y226	2440483.46	1969 Sep 18 2305:00	M-100	-	M-100	-	-	-	VOKV	TOLZ	I065	-	-	88	-	-
1969-Y227	2440484.34	1969 Sep 19 2230:00	M-100	-	M-100	-	-	-	VOKV	TOLZ	I065	-	-	77	-	-
1969-Y228	2440484.34	1969 Sep 19 2230:00	M-100	-	M-100	-	-	-	VOKV	TOLZ	I065	-	-	90	-	-
1969-Y1976	2440484.92	1969 Sep 20 1037:00	M-100	-	M-100	-	-	-	-	MLD	-	-	-	85	-	-
1969-Y230	2440485.34	1969 Sep 20 2008:00	M-100	-	M-100	-	-	-	-	GRS-P-4	-	-	-	95	-	-
1969-Y231	2440485.58	1969 Sep 24 0408:00	M-100	-	M-100	-	-	-	-	UK	-	-	-	87	-	-
1969-Y232	2440486.87	1969 Sep 24 0408:00	M-100	-	M-100	-	-	-	-	GRS-P-4	-	-	-	89	-	-
1969-Y233	2440486.89	1969 Sep 24 0930:00	M-100	-	M-100	-	-	-	VOKV	TOLZ	R00R	-	-	90	-	-
1969-Y234	2440490.37	1969 Sep 25 2315:00	M-100	-	M-100	-	-	-	VOKV	TOLZ	R00R	-	-	89	-	-
1969-Y235	2440491.34	1969 Sep 26 2005:00	M-100	-	M-100	-	-	-	VOKV	TOLZ	R00R	-	-	91	-	-
1969-Y236	2440491.42	1969 Sep 26 2005:00	M-100	-	M-100	-	-	-	VOKV	TOLZ	R00R	-	-	88	-	-
1969-Y237	2440492.29	1969 Sep 26 2200:00	M-100	-	M-100	-	-	-	VOKV	TOLZ	R00R	-	-	90	-	-
1969-Y238	2440493.34	1969 Sep 27 1900	M-100	-	M-100	-	-	-	-	MLD	-	-	-	88	-	-
1969-Y239	2440493.42	1969 Sep 28 2003	M-100	-	M-100	-	-	-	-	GRS-P-4	-	-	-	92	-	-
1969-Y240	2440494.39	1969 Sep 28 2200	M-100	-	M-100	-	-	-	-	UK	-	-	-	89	-	-
1969-Y241	2440494.44	1969 Sep 29 2123:00	M-100	-	M-100	-	-	-	-	GRS-P-4	-	-	-	92	-	-
1969-Y242	2440495.88	1969 Sep 29 2231:00	M-100	-	M-100	-	-	-	-	UK	-	-	-	91	-	-
1969-Y243	2440497.08	1969 Oct 02 1401:00	M-100	-	M-100	-	-	-	-	GRS-P-4	-	-	-	87	-	-
1969-Y244	2440497.96	1969 Oct 03 0841:00	M-100	-	M-100	-	-	-	-	UK	-	-	-	92	-	-
1969-Y245	2440502.58	1969 Oct 08 0200:00	M-100	-	M-100	-	-	-	-	MLD	-	-	-	87	-	-
1969-Y246	2440502.87	1969 Oct 08 0405:00	M-100	-	M-100	-	-	-	-	GRS-P-4	-	-	-	86	-	-
1969-Y247	2440502.98	1969 Oct 08 0900:00	M-100	-	M-100	-	-	-	-	UK	-	-	-	87	-	-
1969-Y249	2440506.33	1969 Oct 11 2000:00	M-100	-	M-100	-	-	-	VOKV	TOLZ	I065	-	-	87	-	-
1969-Y250	2440506.41	1969 Oct 11 2154:00	M-100	-	M-100	-	-	-	VOKV	TOLZ	I065	-	-	88	-	-
1969-Y251	2440507.33	1969 Oct 12 1950:00	M-100	-	M-100	-	-	-	VOKV	TOLZ	I065	-	-	88	-	-
1969-Y252	2440507.41	1969 Oct 12 2144:00	M-100	-	M-100	-	-	-	VOKV	TOLZ	I065	-	-	87	-	-
1969-Y253	2440508.33	1969 Oct 13 1955:00	M-100	-	M-100	-	-	-	VOKV	TOLZ	I065	-	-	87	-	-
1969-Y254	2440508.41	1969 Oct 13 2155:00	M-100	-	M-100	-	-	-	VOKV	TOLZ	I065	-	-	87	-	-
1969-Y255	2440509.41	1969 Oct 14 2145:00	M-100	-	M-100	-	-	-	-	MLD	-	-	-	87	-	-
1969-Y256	2440509.88	1969 Oct 15 0900:00	M-100	-	M-100	-	-	-	-	UK	-	-	-	87	-	-
1969-Y257	2440509.88	1969 Oct 15 1957:00	M-100	-	M-100	-	-	-	VOKV	TOLZ	I065	-	-	89	-	-
1969-Y258	2440510.33	1969 Oct 15 0200:00	M-100	-	M-100	-	-	-	VOKV	TOLZ	I065	-	-	93	-	-
1969-Y259	2440510.41	1969 Oct 15 2145:00	M-100	-	M-100	-	-	-	-	MLD	-	-	-	88	-	-
1969-Y260	2440510.58	1969 Oct 16 0200:00	M-100	-	M-100	-	-	-	-	GRS-P-4	-	-	-	91	-	-
1969-Y261	2440510.92	1969 Oct 16 1002:00	M-100	-	M-100	-	-	-	-	TOLZ	-	-	-	88	-	-
1969-Y263	2440513.40	1969 Oct 18 2136:00	M-100	-	M-100	-	-	-	VOKV	TOLZ	I065	-	-	87	-	-
1969-Y264	2440513.44	1969 Oct 18 2236:00	M-100	-	M-100	-	-	-	VOKV	TOLZ	I065	-	-	88	-	-
1969-Y265	2440514.30	1969 Oct 19 1905:00	M-100	-	M-100	-	-	-	VOKV	TOLZ	I065	-	-	91	-	-
1969-Y266	2440514.42	1969 Oct 19 2200:00	M-100	-	M-100	-	-	-	VOKV	TOLZ	I065	-	-	83	-	-
1969-Y267	2440515.31	1969 Oct 20 1920:00	M-100	-	M-100	-	-	-	VOKV	TOLZ	I065	-	-	95	-	-
1969-Y268	2440515.43	1969 Oct 20 2217:00	M-100	-	M-100	-	-	-	VOKV	TOLZ	I065	-	-	94	-	-

Launch_Tag	Launch_ID	Launch_Date	Lv_Type	Variant	Flight_ID	Flight	Launch_Mission	FlightCode	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee Km	Range Km	Dest
1969-Y269	2440515.91	1969 Dec 21 0949:00	N-100	-	-	-	-	-	VOKV	TOLZ	106540	-	-	89	-	-
1969-Y270	2440516.29	1969 Dec 21 1854:00	N-100	-	-	-	-	-	VOKV	TOLZ	106540	-	-	88	-	-
1969-Y271	2440516.37	1969 Dec 21 2058:00	N-100	-	-	-	-	-	VOKV	TOLZ	106540	-	-	88	-	-
1969-Y272	2440516.62	1969 Dec 22 0300:00	N-100	-	-	-	-	-	-	MLD	-	-	-	96	-	-
1969-Y273	2440516.88	1969 Dec 22 0900:00	N-100	-	-	-	-	-	-	UK	-	-	-	90	-	-
1969-Y274	2440523.59	1969 Dec 29 0207:00	N-100	-	-	-	-	-	-	MLD	-	-	-	90	-	-
1969-Y277	2440523.88	1969 Dec 29 0900:00	N-100	-	-	-	-	-	-	UK	-	-	-	89	-	-
1969-Y278	2440530.59	1969 Nov 05 0207:00	N-100	-	-	-	-	-	-	MLD	-	-	-	90	-	-
1969-Y279	2440530.88	1969 Nov 05 0900:00	N-100	-	-	-	-	-	-	UK	-	-	-	90	-	-
1969-Y280	2440537.60	1969 Nov 12 0219:00	N-100	-	-	-	-	-	-	MLD	-	-	-	90	-	-
1969-Y281	2440537.88	1969 Nov 12 0900:00	N-100	-	-	-	-	-	-	UK	-	-	-	89	-	-
1969-Y284	2440544.58	1969 Nov 19 0155:00	N-100	-	-	-	-	-	-	MLD	-	-	-	92	-	-
1969-Y285	2440544.88	1969 Nov 19 0903:00	N-100	-	-	-	-	-	-	UK	-	-	-	90	-	-
1969-Y286	2440551.58	1969 Nov 26 0155:00	N-100	-	-	-	-	-	-	MLD	-	-	-	91	-	-
1969-Y287	2440551.88	1969 Nov 26 0900:00	N-100	-	-	-	-	-	-	UK	-	-	-	92	-	-
1969-Y288	2440552.92	1969 Nov 27 1003:00	N-100	-	-	-	-	-	-	UK	-	-	-	87	-	-
1969-Y289	2440555.58	1969 Dec 10 0155:00	N-100	-	-	-	-	-	-	GISP-4	-	-	-	88	-	-
1969-Y289	2440556.52	1969 Dec 11 1001:00	N-100	-	-	-	-	-	-	MLD	-	-	-	92	-	-
1969-Y290	2440572.88	1969 Dec 17 0200:00	N-100	-	-	-	-	-	-	GISP-4	-	-	-	87	-	-
1969-Y293	2440572.89	1969 Dec 17 0915:00	N-100	-	-	-	-	-	-	UK	-	-	-	92	-	-
1969-Y295	2440573.67	1969 Dec 18 0407:00	N-100	-	-	-	-	-	-	UK	-	-	-	91	-	-
1969-Y296	2440579.69	1969 Dec 24 0430:00	N-100	-	-	-	-	-	-	MLD	-	-	-	90	-	-
1969-Y298	2440585.22	1969 Dec 29 1710:00	N-100	-	-	-	-	-	-	UK	-	-	-	93	-	-
1969-Y299	2440586.58	1969 Dec 31 0200:00	N-100	-	-	-	-	-	-	UK	-	-	-	96	-	-
1969-Y300	2440586.88	1969 Dec 31 0900:00	N-100	-	-	-	-	-	-	UK	-	-	-	93	-	-
1970-Y01	2440593.42	1970 Jan 06 2200:00	N-100	-	-	-	-	-	-	UK	-	-	-	95	-	-
1970-Y02	2440593.50	1970 Jan 07 0001:00	N-100	-	-	-	-	-	SHDK	TOLZ	1065	-	-	91	-	-
1970-Y03	2440593.58	1970 Jan 07 0200:00	N-100	-	-	-	-	-	SHDK	TOLZ	1065	-	-	93	-	-
1970-Y04	2440594.35	1970 Jan 07 2025:00	N-100	-	-	-	-	-	-	MLD	-	-	-	93	-	-
1970-Y05	2440594.43	1970 Jan 07 2218:00	N-100	-	-	-	-	-	SHDK	TOLZ	1065	-	-	89	-	-
1970-Y07	2440595.36	1970 Jan 08 2034:00	N-100	-	-	-	-	-	SHDK	TOLZ	1065	-	-	86	-	-
1970-Y08	2440595.44	1970 Jan 08 2239:00	N-100	-	-	-	-	-	SHDK	TOLZ	1065	-	-	857	-	-
1970-Y10	2440596.44	1970 Jan 09 2020:00	N-100	-	-	-	-	-	SHDK	TOLZ	1065	-	-	92	-	-
1970-Y11	2440596.42	1970 Jan 09 2200:00	N-100	-	-	-	-	-	SHDK	TOLZ	1065	-	-	87	-	-
1970-Y12	2440597.33	1970 Jan 10 2000:00	N-100	-	-	-	-	-	SHDK	TOLZ	1065	-	-	93	-	-
1970-Y13	2440598.33	1970 Jan 11 2000:00	N-100	-	-	-	-	-	SHDK	TOLZ	1065	-	-	93	-	-
1970-Y15	2440600.88	1970 Jan 14 0200:00	N-100	-	-	-	-	-	SHDK	TOLZ	1065	-	-	957	-	-
1970-Y17	2440600.88	1970 Jan 14 0417:00	N-100	-	-	-	-	-	-	MLD	-	-	-	94	-	-
1970-Y18	2440600.89	1970 Jan 14 0917:00	N-100	-	-	-	-	-	-	UK	-	-	-	91	-	-
1970-Y19	2440600.94	1970 Jan 14 1055:00	N-100	-	-	-	-	-	-	UK	-	-	-	91	-	-
1970-Y21	2440604.33	1970 Jan 16 2000:00	N-100	-	-	-	-	-	SHDK	RDDR	-	-	-	88	-	-
1970-Y22	2440605.34	1970 Jan 16 2000:00	N-100	-	-	-	-	-	SHDK	RDDR	-	-	-	81	-	-
1970-Y23	2440605.42	1970 Jan 18 2200:00	N-100	-	-	-	-	-	SHDK	RDDR	-	-	-	86	-	-
1970-Y24	2440606.33	1970 Jan 18 2200:00	N-100	-	-	-	-	-	SHDK	RDDR	-	-	-	90	-	-
1970-Y25	2440606.42	1970 Jan 19 2200:00	N-100	-	-	-	-	-	SHDK	RDDR	-	-	-	84	-	-
1970-Y26	2440606.42	1970 Jan 19 2200:00	N-100	-	-	-	-	-	SHDK	RDDR	-	-	-	87	-	-
1970-Y26	2440607.37	1970 Jan 20 2020:00	N-100	-	-	-	-	-	SHDK	RDDR	-	-	-	91	-	-
1970-Y26	2440607.37	1970 Jan 20 2020:00	N-100	-	-	-	-	-	SHDK	RDDR	-	-	-	86	-	-
1970-Y28	2440607.34	1970 Jan 20 2237:00	N-100	-	-	-	-	-	-	MLD	-	-	-	94	-	-
1970-Y29	2440607.58	1970 Jan 21 0200:00	N-100	-	-	-	-	-	SHDK	RDDR	-	-	-	88	-	-
1970-Y30	2440608.35	1970 Jan 21 1115:00	N-100	-	-	-	-	-	-	UK	-	-	-	85	-	-
1970-Y31	2440608.35	1970 Jan 21 0945:00	N-100	-	-	-	-	-	-	MLD	-	-	-	93	-	-
1970-Y32	2440611.88	1970 Jan 28 0200:00	N-100	-	-	-	-	-	-	UK	-	-	-	89	-	-
1970-Y34	2440614.88	1970 Jan 28 0900:00	N-100	-	-	-	-	-	-	UK	-	-	-	91	-	-
1970-Y35	2440614.93	1970 Jan 28 1015:00	N-100	-	-	-	-	-	-	UK	-	-	-	92	-	-
1970-Y37	2440616.88	1970 Jan 28 0900:00	N-100	-	-	-	-	-	-	UK	-	-	-	94	-	-
1970-Y38	2440618.88	1970 Feb 01 0900:00	N-100	-	-	-	-	-	-	UK	-	-	-	88	-	-
1970-Y39	2440621.88	1970 Feb 04 0200:00	N-100	-	-	-	-	-	-	MLD	-	-	-	90	-	-
1970-Y40	2440621.88	1970 Feb 04 0900:00	N-100	-	-	-	-	-	-	UK	-	-	-	90	-	-
1970-Y41	2440621.88	1970 Feb 04 0900:00	N-100	-	-	-	-	-	-	UK	-	-	-	90	-	-
1970-Y42	2440622.33	1970 Feb 04 2001:00	N-100	-	-	-	-	-	SHDK	TOLZ	TOSHR	-	-	87	-	-
1970-Y43	2440622.42	1970 Feb 04 2201:00	N-100	-	-	-	-	-	SHDK	TOLZ	TOSHR	-	-	87	-	-
1970-Y44	2440622.92	1970 Feb 05 1005:00	N-100	-	-	-	-	-	-	GISP-4	-	-	-	88	-	-
1970-Y45	2440623.36	1970 Feb 05 2045:00	N-100	-	-	-	-	-	SHDK	TOLZ	TOSHR	-	-	83	-	-
1970-Y46	2440623.56	1970 Feb 06 0123:00	N-100	-	-	-	-	-	SHDK	TOLZ	TOSHR	-	-	86	-	-
1970-Y47	2440623.89	1970 Feb 06 0919:00	N-100	-	-	-	-	-	-	UK	-	-	-	91	-	-
1970-Y48	2440624.33	1970 Feb 06 2001:00	N-100	-	-	-	-	-	-	UK	-	-	-	87	-	-
1970-Y49	2440624.42	1970 Feb 06 2200:00	N-100	-	-	-	-	-	SHDK	TOLZ	TOSHR	-	-	86	-	-
1970-Y50	2440625.37	1970 Feb 07 2050:00	N-100	-	-	-	-	-	SHDK	TOLZ	TOSHR	-	-	89	-	-
1970-Y51	2440625.44	1970 Feb 07 2232:00	N-100	-	-	-	-	-	SHDK	TOLZ	TOSHR	-	-	91	-	-
1970-Y52	2440625.88	1970 Feb 08 0900:00	N-100	-	-	-	-	-	-	UK	-	-	-	91	-	-
1970-Y53	2440628.59	1970 Feb 11 0210:00	N-100	-	-	-	-	-	-	MLD	-	-	-	89	-	-
1970-Y54	2440628.70	1970 Feb 11 0210:00	N-100	-	-	-	-	-	-	GISP-4	-	-	-	93	-	-
1970-Y55	2440628.88	1970 Feb 11 0900:00	N-100	-	-	-	-	-	-	UK	-	-	-	91	-	-
1970-Y56	2440628.92	1970 Feb 11 1010:00	N-100	-	-	-	-	-	-	UK	-	-	-	88	-	-
1970-Y57	2440629.42	1970 Feb 12 2000:00	N-100	-	-	-	-	-	SHDK	TOLZ	106540	-	-	88	-	-
1970-Y58	2440630.33	1970 Feb 12 2000:00	N-100	-	-	-	-	-	SHDK	TOLZ	106540	-	-	90	-	-
1970-Y59	2440631.33	1970 Feb 13 2000:00	N-100	-	-	-	-	-	SHDK	TOLZ	106540	-	-	90	-	-
1970-Y60	2440631.42	1970 Feb 13 2200:00	N-100	-	-	-	-	-	-	UK	-	-	-	93	-	-
1970-Y61	2440631.88	1970 Feb 14 0910:00	N-100	-	-	-	-	-	-	UK	-	-	-	91	-	-
1970-Y62	2440632.33	1970 Feb 14 2200:00	N-100	-	-	-	-	-	SHDK	TOLZ	106540	-	-	90	-	-
1970-Y63	2440632.42	1970 Feb 14 2200:00	N-100	-	-	-	-	-	SHDK	TOLZ	106540	-	-	90	-	-
1970-Y64	2440633.88	1970 Feb 16 0900:00	N-100	-	-	-	-	-	-	UK	-	-	-	93	-	-
1970-Y65	2440635.36	1970 Feb 17 2043:00	N-100	-	-	-	-	-	SHDK	KEE	LEC	-	-	83	-	-
1970-Y35.9	2440635.38	1970 Feb 17 2100	N-100	-	-	-	-	-	SHDK	KEE	LEC	-	-	907	-	-
1970-Y66	2440635.45	1970 Feb 17 2245:00	N-100	-	-	-	-	-	SHDK	KEE	LEC	-	-	90	-	-

[Same as 206327]

Atomic 0



Launch_Tag	Launch_ID	Launch_Date	Lv_Type	Variant	Flight_ID	Flight	Launch_Mission	FlightCode	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee_Km	Range_Km	Dest
1970-Y67	2440635.58	1970 Feb 18 0200:00	M-100	-	-	-	-	-	-	MLD	-	-	-	94	-	-
1970-Y68	2440635.68	1970 Feb 18 0418:00	M-100	-	-	-	-	-	-	GRSP-4	-	-	-	93	-	-
1970-Y69	2440635.88	1970 Feb 18 0900:00	M-100	-	-	-	-	-	-	UK	-	-	-	89	-	-
1970-Y70	2440635.88	1970 Feb 18 0900:00	M-100	-	-	-	-	-	-	SHDK	-	-	-	87	-	-
1970-Y71	2440636.35	1970 Feb 18 2218:00	M-100	-	-	-	-	-	-	SHDK	LEC	-	-	88	-	-
1970-Y72	2440636.43	1970 Feb 18 2218:00	M-100	-	-	-	-	-	-	SHDK	LEC	-	-	88	-	-
1970-Y73	2440636.43	1970 Feb 18 2218:00	M-100	-	-	-	-	-	-	SHDK	LEC	-	-	88	-	-
1970-Y74	2440638.88	1970 Feb 21 0900:00	M-100	-	-	-	-	-	-	UK	-	-	-	93	-	-
1970-Y75	2440642.59	1970 Feb 25 0210:00	M-100	-	-	-	-	-	-	MLD	-	-	-	90	-	-
1970-Y76	2440642.59	1970 Feb 25 0210:00	M-100	-	-	-	-	-	-	MLD	-	-	-	90	-	-
1970-Y77	2440643.02	1970 Feb 25 1230:00	M-100	-	-	-	-	-	-	UK	-	-	-	89	-	-
1970-Y78	2440643.88	1970 Feb 26 0900:00	M-100	-	-	-	-	-	-	GRSP-4	-	-	-	94	-	-
1970-Y79	2440646.13	1970 Feb 28 1510:00	M-100	-	-	-	-	-	-	UK	-	-	-	93	-	-
1970-Y80	2440649.64	1970 Mar 04 0315:00	M-100	-	-	-	-	-	-	UK	-	-	-	85?	-	-
1970-Y81	2440649.88	1970 Mar 04 0900:00	M-100	-	-	-	-	-	-	UK	-	-	-	90	-	-
1970-Y82	2440650.94	1970 Mar 05 1030:00	M-100	-	-	-	-	-	-	UK	-	-	-	88	-	-
1970-Y83	2440652.88	1970 Mar 07 0900:00	M-100	-	-	-	-	-	-	GRSP-4	-	-	-	88	-	-
1970-Y84	2440654.34	1970 Mar 08 2010:00	M-100	-	-	-	-	-	-	UK	-	-	-	85?	-	-
1970-Y85	2440654.42	1970 Mar 08 2211:00	M-100	-	-	-	-	-	-	UK	-	-	-	94	-	-
1970-Y86	2440656.36	1970 Mar 10 2034:00	M-100	-	-	-	-	-	-	VUKY	1065	-	-	85?	-	-
1970-Y87	2440656.45	1970 Mar 10 2242:00	M-100	-	-	-	-	-	-	VUKY	1065	-	-	96	-	-
1970-Y88	2440656.58	1970 Mar 11 0200:00	M-100	-	-	-	-	-	-	VUKY	1065	-	-	94	-	-
1970-Y89	2440656.88	1970 Mar 11 0900:00	M-100	-	-	-	-	-	-	UK	-	-	-	95	-	-
1970-Y90	2440657.33	1970 Mar 11 1944:00	M-100	-	-	-	-	-	-	VUKY	1065	-	-	94	-	-
1970-Y91	2440657.41	1970 Mar 11 2144:00	M-100	-	-	-	-	-	-	VUKY	1065	-	-	94	-	-
1970-Y92	2440657.52	1970 Mar 12 1001:00	M-100	-	-	-	-	-	-	GRSP-4	-	-	-	94	-	-
1970-Y93	2440658.35	1970 Mar 12 2025:00	M-100	-	-	-	-	-	-	VUKY	1065	-	-	94	-	-
1970-Y94	2440658.41	1970 Mar 12 2154:00	M-100	-	-	-	-	-	-	VUKY	1065	-	-	91	-	-
1970-Y95	2440658.41	1970 Mar 13 2013:00	M-100	-	-	-	-	-	-	VUKY	1065	-	-	92	-	-
1970-Y96	2440659.34	1970 Mar 13 2134:00	M-100	-	-	-	-	-	-	VUKY	1065	-	-	90	-	-
1970-Y97	2440663.58	1970 Mar 18 0200:00	M-100	-	-	-	-	-	-	MLD	-	-	-	85?	-	-
1970-Y98	2440663.68	1970 Mar 18 0900:00	M-100	-	-	-	-	-	-	UK	-	-	-	89	-	-
1970-Y99	2440664.67	1970 Mar 19 0405:00	M-100	-	-	-	-	-	-	GRSP-4	-	-	-	94	-	-
1970-Y100	2440666.88	1970 Mar 21 0900:00	M-100	-	-	-	-	-	-	UK	-	-	-	96	-	-
1970-Y101	2440670.31	1970 Mar 24 1923:00	M-100	-	-	-	-	-	-	UK	RODR	-	-	94	-	-
1970-Y102	2440670.40	1970 Mar 24 2132:00	M-100	-	-	-	-	-	-	UK	RODR	-	-	94	-	-
1970-Y103	2440670.58	1970 Mar 25 0200:00	M-100	-	-	-	-	-	-	UK	RODR	-	-	83	-	-
1970-Y104	2440670.88	1970 Mar 25 0900:00	M-100	-	-	-	-	-	-	UK	RODR	-	-	90	-	-
1970-Y105	2440671.32	1970 Mar 25 1947:00	M-100	-	-	-	-	-	-	VUKY	RODR	-	-	85?	-	-
1970-Y106	2440671.37	1970 Mar 25 2059:00	M-100	-	-	-	-	-	-	VUKY	RODR	-	-	94	-	-
1970-Y107	2440671.38	1970 Mar 25 2100:00	M-100	-	-	-	-	-	-	VUKY	RODR	-	-	91	-	-
1970-Y108	2440671.38	1970 Mar 25 2100:00	M-100	-	-	-	-	-	-	VUKY	RODR	-	-	91	-	-
1970-Y109	2440672.36	1970 Mar 26 2032:00	M-100	-	-	-	-	-	-	VUKY	RODR	-	-	90	-	-
1970-Y110	2440672.39	1970 Mar 26 2120:00	M-100	-	-	-	-	-	-	UK	RODR	-	-	94	-	-
1970-Y111	2440673.88	1970 Mar 28 0900:00	M-100	-	-	-	-	-	-	VUKY	RODR	-	-	89	-	-
1970-Y112	2440673.88	1970 Mar 28 0900:00	M-100	-	-	-	-	-	-	VUKY	RODR	-	-	92	-	-
1970-Y113	2440675.35	1970 Mar 29 1953:00	M-100	-	-	-	-	-	-	VUKY	RODR	-	-	92	-	-
1970-Y114	2440676.35	1970 Mar 29 2137:00	M-100	-	-	-	-	-	-	VUKY	RODR	-	-	92	-	-
1970-Y115	2440676.40	1970 Mar 29 1956:00	M-100	-	-	-	-	-	-	VUKY	RODR	-	-	92	-	-
1970-Y116	2440676.40	1970 Mar 29 1956:00	M-100	-	-	-	-	-	-	VUKY	RODR	-	-	92	-	-
1970-Y117	2440677.25	1970 Mar 31 0500:00	M-100	-	-	-	-	-	-	MLD	-	-	-	85	-	-
1970-Y118	2440677.59	1970 Apr 01 0501:00	M-100	-	-	-	-	-	-	GRSP-4	-	-	-	92	-	-
1970-Y119	2440677.68	1970 Apr 01 0501:00	M-100	-	-	-	-	-	-	UK	-	-	-	92	-	-
1970-Y120	2440677.68	1970 Apr 01 0501:00	M-100	-	-	-	-	-	-	UK	-	-	-	92	-	-
1970-Y121	2440680.88	1970 Apr 04 0900:00	M-100	-	-	-	-	-	-	UK	-	-	-	95	-	-
1970-Y122	2440680.93	1970 Apr 04 0900:00	M-100	-	-	-	-	-	-	VUKY	TOISR	-	-	95	-	-
1970-Y123	2440683.33	1970 Apr 06 2145:00	M-100	-	-	-	-	-	-	VUKY	TOISR	-	-	88	-	-
1970-Y124	2440684.31	1970 Apr 07 1931:00	M-100	-	-	-	-	-	-	VUKY	TOISR	-	-	91	-	-
1970-Y125	2440684.31	1970 Apr 07 1931:00	M-100	-	-	-	-	-	-	VUKY	TOISR	-	-	91	-	-
1970-Y126	2440684.88	1970 Apr 08 0900:00	M-100	-	-	-	-	-	-	UK	-	-	-	93	-	-
1970-Y127	2440686.32	1970 Apr 08 1940:00	M-100	-	-	-	-	-	-	UK	-	-	-	92	-	-
1970-Y128	2440686.40	1970 Apr 08 2130:00	M-100	-	-	-	-	-	-	VUKY	TOISR	-	-	93	-	-
1970-Y129	2440686.40	1970 Apr 09 1949:00	M-100	-	-	-	-	-	-	VUKY	TOISR	-	-	92	-	-
1970-Y130	2440686.88	1970 Apr 09 2110:00	M-100	-	-	-	-	-	-	VUKY	TOISR	-	-	94	-	-
1970-Y131	2440687.31	1970 Apr 11 0931:00	M-100	-	-	-	-	-	-	VUKY	TOISR	-	-	95	-	-
1970-Y132	2440687.31	1970 Apr 11 0931:00	M-100	-	-	-	-	-	-	VUKY	TOISR	-	-	92	-	-
1970-Y133	2440687.31	1970 Apr 11 0931:00	M-100	-	-	-	-	-	-	VUKY	TOISR	-	-	94	-	-
1970-Y134	2440687.31	1970 Apr 11 0931:00	M-100	-	-	-	-	-	-	VUKY	TOISR	-	-	92	-	-
1970-Y135	2440687.88	1970 Apr 13 0900:00	M-100	-	-	-	-	-	-	UK	-	-	-	94	-	-
1970-Y136	2440689.33	1970 Apr 13 2000:00	M-100	-	-	-	-	-	-	VUKY	TOISR	-	-	93	-	-
1970-Y137	2440689.33	1970 Apr 13 2000:00	M-100	-	-	-	-	-	-	VUKY	TOISR	-	-	87	-	-
1970-Y138	2440689.33	1970 Apr 14 2000:00	M-100	-	-	-	-	-	-	MLD	-	-	-	96	-	-
1970-Y139	2440689.33	1970 Apr 14 2000:00	M-100	-	-	-	-	-	-	UK	-	-	-	92	-	-
1970-Y140	2440689.33	1970 Apr 15 0931:00	M-100	-	-	-	-	-	-	UK	-	-	-	92	-	-
1970-Y141	2440689.33	1970 Apr 15 0931:00	M-100	-	-	-	-	-	-	UK	-	-	-	92	-	-
1970-Y142	2440689.33	1970 Apr 15 0931:00	M-100	-	-	-	-	-	-	UK	-	-	-	92	-	-
1970-Y143	2440689.33	1970 Apr 15 1935:00	M-100	-	-	-	-	-	-	UK	-	-	-	95	-	-
1970-Y144	2440689.33	1970 Apr 15 2126:00	M-100	-	-	-	-	-	-	UK	-	-	-	89	-	-
1970-Y145	2440689.33	1970 Apr 16 1950:00	M-100	-	-	-	-	-	-	VUKY	TOISR	-	-	96	-	-
1970-Y146	2440689.33	1970 Apr 16 1950:00	M-100	-	-	-	-	-	-	VUKY	TOISR	-	-	95	-	-
1970-Y147	2440689.33	1970 Apr 16 1950:00	M-100	-	-	-	-	-	-	VUKY	TOISR	-	-	96	-	-
1970-Y148	2440689.33	1970 Apr 16 1950:00	M-100	-	-	-	-	-	-	VUKY	TOISR	-	-	92	-	-
1970-Y149	2440689.33	1970 Apr 16 1950:00	M-100	-	-	-	-	-	-	VUKY	TOISR	-	-	92	-	-
1970-Y150	2440689.33	1970 Apr 16 1950:00	M-100	-	-	-	-	-	-	VUKY	TOISR	-	-	92	-	-
1970-Y151	2440689.33	1970 Apr 16 1950:00	M-100	-	-	-	-	-	-	VUKY	TOISR	-	-	92	-	-
1970-Y152	2440689.33	1970 Apr 16 1950:00	M-100	-	-	-	-	-	-	VUKY	TOISR	-	-	92	-	-
1970-Y153	2440689.33	1970 Apr 16 1950:00	M-100	-	-	-	-	-	-	VUKY	TOISR	-	-	92	-	-
1970-Y154	2440689.33	1970 Apr 16 1950:00	M-100	-	-	-	-	-	-	VUKY	TOISR	-	-	92	-	-
1970-Y155	2440689.33	1970 Apr 16 1950:00	M-100	-	-	-	-	-	-	VUKY	TOISR	-	-	92	-	-
1970-Y156	2440689.33	1970 Apr 16 1950:00	M-100	-	-	-	-	-	-	VUKY	TOISR	-	-	94	-	-
1970-Y157	2440689.33	1970 Apr 16 1950:00	M-100	-	-	-	-	-	-	VUKY	TOISR	-	-	94	-	-
1970-Y158	2440703.71	1970 Apr 22 1050:00	M-100	-	-	-	-	-	-	UK	-	-				

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Launch_Mission	FlightCode	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee Km	Range Km	Dest
1970-Y171	2440733.59	1970 May 27 0205:00	N-100	-	-	-	-	-	-	MLD	-	-	-	97	-	-
1970-Y172	2440733.88	1970 May 27 0900:00	N-100	-	-	-	-	-	-	UK	-	-	-	94	-	-
1970-Y173	2440741.92	1970 Jun 04 1001:00	N-100	-	-	-	-	-	-	GISP-4	-	-	-	95	-	-
1970-Y174	2440747.59	1970 Jun 10 0210:00	N-100	-	-	-	-	-	-	MLD	-	-	-	95	-	-
1970-Y175	2440747.88	1970 Jun 10 0900:00	N-100	-	-	-	-	-	-	UK	-	-	-	87	-	-
1970-Y176	2440749.67	1970 Jun 12 0359:00	N-100	-	-	-	-	-	-	GISP-4	-	-	-	93	-	-
1970-Y177	2440754.58	1970 Jun 17 0200:00	N-100	-	-	-	-	-	-	UK	-	-	-	94	-	-
1970-Y178	2440754.88	1970 Jun 17 0900:00	N-100	-	-	-	-	-	-	UK	-	-	-	89	-	-
1970-Y179	2440755.46	1970 Jun 17 2300:00	N-100	-	-	-	-	-	-	GISP-4	-	-	-	91	-	-
1970-Y180	2440756.33	1970 Jun 18 2000:00	N-100	-	-	-	-	-	-	GISP-4	-	-	-	91	-	-
1970-Y181	2440756.33	1970 Jun 18 2000:00	N-100	-	-	-	-	-	-	SHDK	LP1	-	-	90	-	-
1970-Y182	2440759.38	1970 Jun 21 2100:00	N-100	-	-	-	-	-	-	SHDK	LP2	-	-	90	-	-
1970-Y183	2440761.88	1970 Jun 24 0905:00	N-100	-	-	-	-	-	-	SHDK	LP3	-	-	91	-	-
1970-Y184	2440761.88	1970 Jun 24 0905:00	N-100	-	-	-	-	-	-	SHDK	-	-	-	90	-	-
1970-Y185	2440768.69	1970 Jul 01 0205:00	N-100	-	-	-	-	-	-	MLD	-	-	-	95	-	-
1970-Y186	2440768.69	1970 Jul 01 0900:00	N-100	-	-	-	-	-	-	UK	-	-	-	90	-	-
1970-Y187	2440769.34	1970 Jul 01 2010:00	N-100	-	-	-	-	-	-	UK	-	-	-	90	-	-
1970-Y188	2440769.34	1970 Jul 01 2010:00	N-100	-	-	-	-	-	-	SHDK	IOSNR	-	-	89	-	-
1970-Y189	2440769.42	1970 Jul 01 2200:00	N-100	-	-	-	-	-	-	IOSNR	-	-	-	92	-	-
1970-Y190	2440773.34	1970 Jul 05 2005:00	N-100	-	-	-	-	-	-	IOSNR	-	-	-	88	-	-
1970-Y191	2440774.27	1970 Jul 06 1624:00	N-100	-	-	-	-	-	-	IOLZ	-	-	-	84	-	-
1970-Y192	2440774.27	1970 Jul 06 2015:00	N-100	-	-	-	-	-	-	GISP-4	LP4	-	-	88	-	-
1970-Y193	2440774.50	1970 Jul 07 0005:00	N-100	-	-	-	-	-	-	GISP-4	-	-	-	86	-	-
1970-Y194	2440774.50	1970 Jul 07 0005:00	N-100	-	-	-	-	-	-	GISP-4	LP5	-	-	86	-	-
1970-Y195	2440775.80	1970 Jul 08 0900:00	N-100	-	-	-	-	-	-	UK	-	-	-	91	-	-
1970-Y196	2440775.80	1970 Jul 08 0900:00	N-100	-	-	-	-	-	-	UK	-	-	-	93	-	-
1970-Y197	2440775.92	1970 Jul 08 1956:00	N-100	-	-	-	-	-	-	SHDK	LP6	-	-	85	-	-
1970-Y198	2440776.33	1970 Jul 08 1956:00	N-100	-	-	-	-	-	-	SHDK	LP7	-	-	85	-	-
1970-Y199	2440776.27	1970 Jul 10 1630:00	N-100	-	-	-	-	-	-	SHDK	LP8	-	-	86	-	-
1970-Y200	2440781.33	1970 Jul 13 2000:00	N-100	-	-	-	-	-	-	SHDK	LP8	-	-	92	-	-
1970-Y201	2440781.33	1970 Jul 13 2230:00	N-100	-	-	-	-	-	-	MLD	-	-	-	93	-	-
1970-Y202	2440782.61	1970 Jul 15 0720:00	N-100	-	-	-	-	-	-	UK	-	-	-	95	-	-
1970-Y203	2440782.61	1970 Jul 15 0900:00	N-100	-	-	-	-	-	-	UK	-	-	-	95	-	-
1970-Y204	2440782.68	1970 Jul 15 1600:00	N-100	-	-	-	-	-	-	SHDK	LP9	-	-	95	-	-
1970-Y205	2440783.26	1970 Jul 15 2000:00	N-100	-	-	-	-	-	-	SHDK	LP9	-	-	85	-	-
1970-Y206	2440783.35	1970 Jul 15 2000:00	N-100	-	-	-	-	-	-	SHDK	LP10	-	-	85	-	-
1970-Y207	2440785.35	1970 Jul 17 2024:00	N-100	-	-	-	-	-	-	SHDK	LP11	-	-	86	-	-
1970-Y208	2440785.43	1970 Jul 18 2015:00	N-100	-	-	-	-	-	-	SHDK	LP10	-	-	86	-	-
1970-Y209	2440786.34	1970 Jul 18 2205:00	N-100	-	-	-	-	-	-	SHDK	LP10	-	-	89	-	-
1970-Y210	2440786.42	1970 Jul 18 2205:00	N-100	-	-	-	-	-	-	SHDK	LP10	-	-	91	-	-
1970-Y211	2440786.35	1970 Jul 20 2000:00	N-100	-	-	-	-	-	-	SHDK	LP10	-	-	91	-	-
1970-Y212	2440788.41	1970 Jul 20 2150:00	N-100	-	-	-	-	-	-	SHDK	LP12	-	-	92	-	-
1970-Y213	2440789.68	1970 Jul 21 2000:00	N-100	-	-	-	-	-	-	SHDK	GISP-4	-	-	89	-	-
1970-Y214	2440790.97	1970 Jul 22 0900:00	N-100	-	-	-	-	-	-	MLD	-	-	-	89	-	-
1970-Y215	2440790.97	1970 Jul 22 1535:00	N-100	-	-	-	-	-	-	UK	-	-	-	89	-	-
1970-Y216	2440790.97	1970 Jul 22 2054:00	N-100	-	-	-	-	-	-	UK	-	-	-	91	-	-
1970-Y217	2440796.88	1970 Jul 29 0855:00	N-100	-	-	-	-	-	-	UK	-	-	-	89	-	-
1970-Y218	2440796.88	1970 Jul 29 0900:00	N-100	-	-	-	-	-	-	UK	-	-	-	89	-	-
1970-Y219	2440803.60	1970 Aug 05 0220:00	N-100	-	-	-	-	-	-	UK	-	-	-	89	-	-
1970-Y220	2440804.24	1970 Aug 05 0900:00	N-100	-	-	-	-	-	-	UK	-	-	-	91	-	-
1970-Y221	2440806.68	1970 Aug 05 0900:00	N-100	-	-	-	-	-	-	UK	-	-	-	93	-	-
1970-Y222	2440810.88	1970 Aug 12 0900:00	N-100	-	-	-	-	-	-	UK	-	-	-	91	-	-
1970-Y223	2440810.88	1970 Aug 12 0900:00	N-100	-	-	-	-	-	-	UK	-	-	-	93	-	-
1970-Y224	2440811.75	1970 Aug 12 0622:00	N-100	-	-	-	-	-	-	GISP-4	-	-	-	85	-	-
1970-Y225	2440811.75	1970 Aug 13 0150:00	N-100	-	-	-	-	-	-	MLD	-	-	-	93	-	-
1970-Y226	2440811.75	1970 Aug 13 0150:00	N-100	-	-	-	-	-	-	UK	-	-	-	93	-	-
1970-Y227	2440816.96	1970 Aug 19 0900:00	N-100	-	-	-	-	-	-	UK	-	-	-	90	-	-
1970-Y228	2440820.88	1970 Aug 22 0900:00	N-100	-	-	-	-	-	-	UK	-	-	-	91	-	-
1970-Y229	2440824.88	1970 Aug 26 0155:00	N-100	-	-	-	-	-	-	MLD	-	-	-	95	-	-
1970-Y230	2440825.88	1970 Aug 26 0900:00	N-100	-	-	-	-	-	-	UK	-	-	-	91	-	-
1970-Y231	2440825.92	1970 Aug 27 0900:00	N-100	-	-	-	-	-	-	UK	-	-	-	93	-	-
1970-Y232	2440825.92	1970 Aug 27 1002:00	N-100	-	-	-	-	-	-	UK	-	-	-	92	-	-
1970-Y233	2440831.88	1970 Aug 02 0900:00	N-100	-	-	-	-	-	-	GISP-4	-	-	-	92	-	-
1970-Y234	2440832.07	1970 Aug 02 1335:00	N-100	-	-	-	-	-	-	MLD	-	-	-	92	-	-
1970-Y235	2440832.71	1970 Aug 03 0501:00	N-100	-	-	-	-	-	-	MLD	-	-	-	93	-	-
1970-Y236	2440838.58	1970 Aug 09 0200:00	N-100	-	-	-	-	-	-	MLD	-	-	-	93	-	-
1970-Y237	2440838.58	1970 Aug 09 0200:00	N-100	-	-	-	-	-	-	UK	-	-	-	90	-	-
1970-Y238	2440838.88	1970 Aug 09 0900:00	N-100	-	-	-	-	-	-	UK	-	-	-	91	-	-
1970-Y239	2440839.92	1970 Aug 10 1002:00	N-100	-	-	-	-	-	-	GISP-4	-	-	-	90	-	-
1970-Y240	2440844.92	1970 Aug 15 1000:00	N-100	-	-	-	-	-	-	GISP-4	-	-	-	98	-	-
1970-Y241	2440844.92	1970 Aug 16 0205:00	N-100	-	-	-	-	-	-	MLD	-	-	-	93	-	-
1970-Y242	2440845.59	1970 Aug 23 0900:00	N-100	-	-	-	-	-	-	UK	-	-	-	97	-	-
1970-Y243	2440852.88	1970 Aug 23 0900:00	N-100	-	-	-	-	-	-	UK	-	-	-	94	-	-
1970-Y244	2440855.58	1970 Aug 30 0155:00	N-100	-	-	-	-	-	-	UK	-	-	-	99	-	-
1970-Y245	2440859.88	1970 Aug 30 0905:00	N-100	-	-	-	-	-	-	UK	-	-	-	94	-	-
1970-Y246	2440860.30	1970 Aug 30 1910:00	N-100	-	-	-	-	-	-	UK	-	-	-	93	-	-
1970-Y247	2440866.67	1970 Oct 07 0150:00	N-100	-	-	-	-	-	-	MLD	-	-	-	96	-	-
1970-Y248	2440866.67	1970 Oct 07 0400:00	N-100	-	-	-	-	-	-	MLD	-	-	-	90	-	-
1970-Y249	2440873.58	1970 Oct 14 0200:00	N-100	-	-	-	-	-	-	MLD	-	-	-	96	-	-
1970-Y250	2440873.58	1970 Oct 14 0403:00	N-100	-	-	-	-	-	-	MLD	-	-	-	90	-	-
1970-Y251	2440880.59	1970 Oct 14 0905:00	N-100	-	-	-	-	-	-	UK	-	-	-	91	-	-
1970-Y252	2440880.59	1970 Oct 21 0215:00	N-100	-	-	-	-	-	-	UK	-	-	-	97	-	-
1970-Y253	2440880.59	1970 Oct 21 0400:00	N-100	-	-	-	-	-	-	UK	-	-	-	91	-	-
1970-Y254	2440880.59	1970 Oct 21 0910:00	N-100	-	-	-	-	-	-	UK	-	-	-	92	-	-
1970-Y255	2440887.88	1970 Oct 28 0900:00	N-100	-	-	-	-	-	-	MLD	-	-	-	95	-	-
1970-Y256	2440887.88	1970 Oct 28 0900:00	N-100	-	-	-	-	-	-	MLD	-	-	-	96	-	-
1970-Y257	2440887.88	1970 Oct 28 1900:00	N-100	-	-	-	-	-	-	UK	-	-	-	92	-	-
1970-Y258	2440888.29	1970 Nov 01 2200:00	N-100	-	-	-	-	-	-	SHTR	IOLZ	-	-	96	-	-
1970-Y259	2440889.42	1970 Nov 01 2200:00	N-100	-	-	-	-	-	-	SHTR	LP1	-	-	93	-	-
1970-Y260	2440894.58	1970 Nov 04 0401:00	N-100	-	-	-	-	-	-	-	-	-	-	92	-	-
1970-Y261	2440894.58	1970 Nov 04 0401:00	N-100	-	-	-	-	-	-	UK	-	-	-	91	-	-
1970-Y262	2440894.58	1970 Nov 04 0920:00	N-100	-	-	-	-	-	-	UK	-	-	-	94	-	-
1970-Y263																

Launch_Tag	Launch_ID	Launch_Date	Lv_Type	Variant	Flight_ID	Flight	Launch_Mission	FlightCode	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee_Km	Range_Km	Dest
1970-Y278	2440897.54	1970 Nov 07 01:00:00	M-100	-	-	-	-	-	SHIR	IDLZ	ID70	-	-	96	-	-
1970-Y279	2440901.88	1970 Nov 11 09:00:00	M-100	-	-	-	-	-	-	UK	-	-	-	95	-	-
1970-Y280	2440902.88	1970 Nov 12 09:01:00	M-100	-	-	-	-	-	-	G18P-4	-	-	-	90	-	-
1970-Y281	2440905.12	1970 Nov 14 15:00:00	M-100	-	-	-	-	-	VOKV	GNS70D	LP2	-	-	93	-	-
1970-Y282	2440906.12	1970 Nov 17 15:00:00	M-100	-	-	-	-	-	VOKV	GNS70D	LP3	-	-	90	-	-
1970-Y283	2440908.64	1970 Nov 18 03:20:00	M-100	-	-	-	-	-	-	MLD	-	-	-	94	-	-
1970-Y284	2440908.88	1970 Nov 18 09:00:00	M-100	-	-	-	-	-	-	UK	-	-	-	94	-	-
1970-Y285	2440909.12	1970 Nov 18 15:00:00	M-100	-	-	-	-	-	VOKV	GNS70D	LP4	-	-	90	-	-
1970-Y286	2440910.12	1970 Nov 19 15:00:00	M-100	-	-	-	-	-	VOKV	GNS70D	LP5	-	-	91	-	-
1970-Y287	2440910.12	1970 Nov 19 15:00:00	M-100	-	-	-	-	-	SHIR	GNS70C	LP2	-	-	91	-	-
1970-Y288	2440910.67	1970 Nov 20 00:00:00	M-100	-	-	-	-	-	-	G18P-4	-	-	-	93	-	-
1970-Y289	2440911.17	1970 Nov 20 04:01:00	M-100	-	-	-	-	-	VOKV	GNS70D	LP6	-	-	87	-	-
1970-Y290	2440911.17	1970 Nov 20 16:00:00	M-100	-	-	-	-	-	VOKV	GNS70D	LP7	-	-	91	-	-
1970-Y291	2440912.12	1970 Nov 21 15:00:00	M-100	-	-	-	-	-	SHIR	GNS70C	LP3	-	-	94	-	-
1970-Y292	2440912.50	1970 Nov 22 00:00:00	M-100	-	-	-	-	-	SHIR	GNS70C	LP4	-	-	96	-	-
1970-Y293	2440913.54	1970 Nov 23 01:00:00	M-100	-	-	-	-	-	VOKV	GNS70D	LP8	-	-	88	-	-
1970-Y294	2440914.12	1970 Nov 23 15:00:00	M-100	-	-	-	-	-	VOKV	GNS70D	LP9	-	-	90	-	-
1970-Y295	2440915.12	1970 Nov 24 15:00:00	M-100	-	-	-	-	-	SHIR	GNS70C	LP5	-	-	95	-	-
1970-Y296	2440915.29	1970 Nov 24 15:00:00	M-100	-	-	-	-	-	SHIR	GNS70C	LP6	-	-	87	-	-
1970-Y297	2440916.63	1970 Nov 26 08:01:00	M-100	-	-	-	-	-	-	G18P-4	-	-	-	93	-	-
1970-Y298	2440917.21	1970 Nov 26 17:00:00	M-100	-	-	-	-	-	VOKV	GNS70C	LP6	-	-	86	-	-
1970-Y299	2440917.73	1970 Nov 27 05:25:00	M-100	-	-	-	-	-	-	G18P-4	-	-	-	87	-	-
1970-Y300	2440920.12	1970 Nov 29 05:00:00	M-100	-	-	-	-	-	VOKV	GNS70D	LP7	-	-	92	-	-
1970-Y301	2440920.62	1970 Nov 30 03:00:00	M-100	-	-	-	-	-	SHIR	GNS70C	LP10	-	-	87	-	-
1970-Y302	2440920.62	1970 Dec 02 09:00:00	M-100	-	-	-	-	-	SHIR	GNS70C	LP7	-	-	96	-	-
1970-Y303	2440922.88	1970 Dec 02 15:00:00	M-100	-	-	-	-	-	SHIR	GNS70C	LP8	-	-	95	-	-
1970-Y304	2440923.29	1970 Dec 02 19:00:00	M-100	-	-	-	-	-	SHIR	GNS70C	LP9	-	-	92	-	-
1970-Y305	2440923.38	1970 Dec 02 21:00:00	M-100	-	-	-	-	-	SHIR	GNS70C	LP9	-	-	90	-	-
1970-Y306	2440923.79	1970 Dec 03 07:03:00	M-100	-	-	-	-	-	VOKV	G18P-4	-	-	-	92	-	-
1970-Y307	2440923.92	1970 Dec 03 10:00:00	M-100	-	-	-	-	-	SHIR	GNS70C	LP10	-	-	87	-	-
1970-Y308	2440926.29	1970 Dec 05 19:00:00	M-100	-	-	-	-	-	SHIR	GNS70C	LP10	-	-	93	-	-
1970-Y309	2440926.52	1970 Dec 06 10:00:00	M-100	-	-	-	-	-	SHIR	GNS70C	LP11	-	-	92	-	-
1970-Y310	2440926.17	1970 Dec 07 16:00:00	M-100	-	-	-	-	-	SHIR	GNS70C	LP11	-	-	91	-	-
1970-Y311	2440928.17	1970 Dec 08 15:00:00	M-100	-	-	-	-	-	VOKV	GNS70D	LP11	-	-	95	-	-
1970-Y312	2440929.58	1970 Dec 09 02:00:00	M-100	-	-	-	-	-	-	MLD	-	-	-	90	-	-
1970-Y313	2440929.58	1970 Dec 09 02:00:00	M-100	-	-	-	-	-	-	UK	-	-	-	92	-	-
1970-Y314	2440929.52	1970 Dec 09 09:00:00	M-100	-	-	-	-	-	KORO	GNS70E	LP1	-	-	90	-	-
1970-Y315	2440929.52	1970 Dec 09 10:00:00	M-100	-	-	-	TEHLS-266	-	-	TEHLS	-	-	-	91	-	-
1970-Y316	2440930.24	1970 Dec 09 17:45:00	M-100	-	-	-	-	-	-	G18P-4	-	-	-	90	-	-
1970-Y317	2440931.65	1970 Dec 11 03:41:00	M-100	-	-	-	-	-	KORO	GNS70E	LP2	-	-	88	-	-
1970-Y318	2440931.92	1970 Dec 13 15:00:00	M-100	-	-	-	-	-	VOKV	GNS70D	LP2	-	-	90	-	-
1970-Y319	2440934.12	1970 Dec 14 15:00:00	M-100	-	-	-	-	-	VOKV	GNS70D	LP12	-	-	88	-	-
1970-Y320	2440935.12	1970 Dec 14 15:00:00	M-100	-	-	-	-	-	-	MLD	-	-	-	95	-	-
1970-Y321	2440936.88	1970 Dec 16 02:00:00	M-100	-	-	-	-	-	-	MLD	-	-	-	90	-	-
1970-Y322	2440936.88	1970 Dec 16 09:00:00	M-100	-	-	-	-	-	VOKV	GNS70D	LP14	-	-	94	-	-
1970-Y323	2440937.12	1970 Dec 16 15:00:00	M-100	-	-	-	TEHLS-270	-	-	TEHLS	-	-	-	93	-	-
1970-Y324	2440937.25	1970 Dec 17 15:00:00	M-100	-	-	-	-	-	SHIR	GNS70C	LP12	-	-	92	-	-
1970-Y325	2440938.25	1970 Dec 17 18:00:00	M-100	-	-	-	-	-	SHIR	GNS70C	LP3	-	-	92	-	-
1970-Y326	2440940.08	1970 Dec 19 09:00:00	M-100	-	-	-	-	-	-	G18P-4	-	-	-	92	-	-
1970-Y327	2440942.92	1970 Dec 22 03:22:00	M-100	-	-	-	-	-	KORO	GNS70E	LP4	-	-	93	-	-
1970-Y328	2440942.92	1970 Dec 22 07:00:00	M-100	-	-	-	-	-	-	MLD	-	-	-	92	-	-
1970-Y329	2440942.92	1970 Dec 22 09:00:00	M-100	-	-	-	-	-	-	UK	-	-	-	93	-	-
1970-Y330	2440943.68	1970 Dec 23 09:06:00	M-100	-	-	-	-	-	KORO	GNS70E	LP5	-	-	91	-	-
1970-Y331	2440943.68	1970 Dec 23 14:06:00	M-100	-	-	-	-	-	-	TEHLS	-	-	-	93	-	-
1970-Y332	2440944.96	1970 Dec 23 17:00:00	M-100	-	-	-	TEHLS-271	-	-	TEHLS	-	-	-	90	-	-
1970-Y333	2440944.96	1970 Dec 24 11:03:00	M-100	-	-	-	-	-	-	G18P-4	-	-	-	94	-	-
1970-Y334	2440947.12	1970 Dec 26 15:00:00	M-100	-	-	-	-	-	VOKV	GNS70D	LP15	-	-	88	-	-
1970-Y335	2440948.08	1970 Dec 27 14:00:00	M-100	-	-	-	-	-	SHIR	GNS70C	LP13	-	-	89	-	-
1970-Y336	2440948.08	1970 Dec 28 14:00:00	M-100	-	-	-	-	-	SHIR	GNS70C	LP13	-	-	94	-	-
1970-Y337	2440948.93	1970 Dec 28 20:00:00	M-100	-	-	-	-	-	SHIR	GNS70C	LP13	-	-	92	-	-
1970-Y338	2440948.93	1970 Dec 29 11:00:00	M-100	-	-	-	-	-	KORO	GNS70E	LP6	-	-	91	-	-
1970-Y339	2440950.88	1970 Dec 30 02:00:00	M-100	-	-	-	-	-	-	MLD	-	-	-	90	-	-
1970-Y340	2440950.88	1970 Dec 30 04:31:00	M-100	-	-	-	-	-	-	G18P-4	-	-	-	93	-	-
1970-Y341	2440950.87	1970 Dec 30 08:55:00	M-100	-	-	-	-	-	VOKV	GNS70E	LP5	-	-	93	-	-
1970-Y342	2440951.12	1970 Dec 30 15:00:00	M-100	-	-	-	-	-	VOKV	ANTIM	-	-	-	94	-	-
1970-Y343	2440951.23	1970 Dec 31 07:35:00	M-100	-	-	-	TEHLS-272	-	-	TEHLS	-	-	-	94	-	-
1970-Y344	2440951.79	1970 Dec 31 07:00:00	M-100	-	-	-	-	-	KORO	GNS70E	LP7	-	-	91	-	-
1970-Y345	2440953.34	1971 Jan 01 20:03:00	M-100	-	-	-	-	-	SHIR	GNS70C	LP14	-	-	94	-	-
1970-Y346	2440953.34	1971 Jan 01 20:03:00	M-100	-	-	-	-	-	-	MLD	-	-	-	90	-	-
1970-Y347	2440957.58	1971 Jan 06 02:00:00	M-100	-	-	-	-	-	-	UK	-	-	-	97	-	-
1970-Y348	2440957.58	1971 Jan 06 09:01:00	M-100	-	-	-	-	-	-	TEHLS	-	-	-	89	-	-
1970-Y349	2440958.23	1971 Jan 06 17:30:00	M-100	-	-	-	TEHLS-275	-	-	TEHLS	-	-	-	85	-	-
1970-Y350	2440958.23	1971 Jan 07 09:00:00	M-100	-	-	-	-	-	-	G18P-4	-	-	-	88	-	-
1970-Y351	2440958.88	1971 Jan 07 09:00:00	M-100	-	-	-	-	-	KORO	GNS70E	LP8	-	-	90	-	-
1970-Y352	2440959.88	1971 Jan 08 09:00:00	M-100	-	-	-	-	-	SHIR	GNS70C	LP15	-	-	90	-	-
1970-Y353	2440959.88	1971 Jan 08 09:00:00	M-100	-	-	-	-	-	SHIR	GNS70C	LP16	-	-	90	-	-
1970-Y354	2440962.96	1971 Jan 11 22:06:00	M-100	-	-	-	-	-	SHIR	GNS70C	LP16	-	-	90	-	-
1970-Y355	2440963.42	1971 Jan 12 05:55:00	M-100	-	-	-	-	-	SHIR	GNS70C	LP16	-	-	90	-	-
1970-Y356	2440963.75	1971 Jan 12 11:30:00	M-100	-	-	-	-	-	SHIR	GNS70C	LP16	-	-	90	-	-
1970-Y357	2440964.21	1971 Jan 12 16:57:00	M-100	-	-	-	-	-	SHIR	GNS70C	LP16	-	-	90	-	-
1970-Y358	2440964.35	1971 Jan 12 20:30:00	M-100	-	-	-	-	-	SHIR	GNS70C	LP16	-	-	90	-	-
1970-Y359	2440964.88	1971 Jan 13 02:00:00	M-100	-	-	-	-	-	SHIR	GNS70C	LP16	-	-	92	-	-
1970-Y360	2440964.88	1971 Jan 13 09:01:00	M-100	-	-	-	-	-	-	UK	-	-	-	90	-	-
1970-Y361	2440965.12	1971 Jan 13 15:00:00	M-100	-	-	-	-	-	VOKV	GNS70D	LP16	-	-	92	-	-
1970-Y362	2440965.21	1971 Jan 13 17:00:00	M-100	-	-	-	-	-	VOKV	GNS70D	LP17	-	-	90	-	-
1970-Y363	2440965.23	1971 Jan 13 17:35:00	M-100	-	-	-	TEHLS-277	-	-	TEHLS	-	-	-	84	-	-
1970-Y364	2440965.23	1971 Jan 13 17:35:00	M-100	-	-	-	-	-	-	G18P-4	-	-	-	89	-	-
1970-Y365	2440966.00	1971 Jan 14 12:00:00	M-100	-	-	-	-	-	KORO	GNS70E	LP9	-	-	87	-	-
1970-Y366	2440966.12	1971 Jan 14 15:00:00	M-100													

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Launch_Mission	FlightCode	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee_Km	Range_Km	Dest
1971-Y26	2440969.88	1971 Jan 18 0901:00	M-100	-	-	-	-	-	-	UK	LP11	-	-	92	-	-
1971-Y27	2440969.98	1971 Jan 18 1100:00	M-100	-	-	-	-	-	KURO	GNS7OE	-	-	-	90	-	-
1971-Y28	2440971.56	1971 Jan 20 0200:00	M-100	-	-	-	TEMLS-278	-	-	MJD	-	-	-	91	-	-
1971-Y29	2440971.69	1971 Jan 20 0430:00	M-100	-	-	ISRU-S.007	-	-	-	TERLS	-	-	-	91	-	-
1971-Y30	2440971.88	1971 Jan 20 0901:00	M-100	-	-	-	-	-	-	UK	-	-	-	89	-	-
1971-Y31	2440971.96	1971 Jan 20 1100:00	M-100	-	-	-	TEMLS-279	-	KURO	GNS7OE	LP12	-	-	92	-	-
1971-Y32	2440972.23	1971 Jan 20 1730:00	M-100	-	-	-	-	-	-	TERLS	-	-	-	87	-	-
1971-Y33	2440973.92	1971 Jan 21 1000:00	M-100	-	-	-	-	-	-	G7SP-4	-	-	-	87	-	-
1971-Y34	2440973.23	1971 Jan 21 1000:00	M-100	-	-	-	-	-	-	UK	-	-	-	94	-	-
1971-Y35	2440973.88	1971 Jan 22 0901:00	M-100	-	-	-	-	-	KURO	GNS7OE	LP13	-	-	93	-	-
1971-Y36	2440973.96	1971 Jan 22 1100:00	M-100	-	-	-	-	-	KURO	GNS7OE	LP14	-	-	92	-	-
1971-Y37	2440976.08	1971 Jan 24 1400:00	M-100	-	-	-	-	-	-	UK	-	-	-	91	-	-
1971-Y38	2440976.68	1971 Jan 25 0912:00	M-100	-	-	-	-	-	-	G7SP-4	-	-	-	86	-	-
1971-Y39	2440978.62	1971 Jan 27 0300:00	M-100	-	-	-	-	-	-	UK	-	-	-	92	-	-
1971-Y40	2440978.68	1971 Jan 27 0912:00	M-100	-	-	-	-	-	-	UK	-	-	-	93	-	-
1971-Y41	2440980.88	1971 Jan 29 0912:00	M-100	-	-	-	-	-	-	UK	-	-	-	89	-	-
1971-Y42	2440981.72	1971 Jan 30 0522:00	M-100	-	-	ISRU-S.009	TEMLS-283	-	KURO	TERLS	LP15	-	-	82	-	-
1971-Y43	2440983.75	1971 Feb 01 0600:00	M-100	-	-	-	-	-	-	GNS7OE	-	-	-	92	-	-
1971-Y44	2440983.88	1971 Feb 01 0901:00	M-100	-	-	-	-	-	-	UK	-	-	-	92	-	-
1971-Y45	2440985.58	1971 Feb 03 0200:00	M-100	-	-	-	-	-	KURO	MJD	-	-	-	89	-	-
1971-Y46	2440985.71	1971 Feb 03 0500:00	M-100	-	-	-	TEMLS-284	-	KURO	GNS7OE	LP16	-	-	89	-	-
1971-Y47	2440986.30	1971 Feb 03 1905:00	M-100	-	-	ISRU-S.010	-	-	-	TERLS	-	-	-	91	-	-
1971-Y48	2440986.62	1971 Feb 04 0300:00	M-100	-	-	-	-	-	-	G7SP-4	-	-	-	87	-	-
1971-Y49	2440987.75	1971 Feb 05 0600:00	M-100	-	-	-	-	-	KURO	GNS7OE	LP17	-	-	89	-	-
1971-Y50	2440987.88	1971 Feb 05 0901:00	M-100	-	-	-	-	-	-	UK	-	-	-	88	-	-
1971-Y51	2440990.63	1971 Feb 08 0800:00	M-100	-	-	-	-	-	KURO	GNS7OE	LP18	-	-	91	-	-
1971-Y52	2440992.88	1971 Feb 08 0901:00	M-100	-	-	-	-	-	-	UK	-	-	-	88	-	-
1971-Y53	2440992.92	1971 Feb 10 1000:00	M-100	-	-	-	-	-	KURO	GNS7OE	LP19	-	-	87	-	-
1971-Y54	2440995.26	1971 Feb 10 1000:00	M-100	-	-	ISRU-S.011	TEMLS-285	-	-	TERLS	-	-	-	91	-	-
1971-Y55	2440994.88	1971 Feb 12 0900:00	M-100	-	-	-	-	-	-	UK	-	-	-	89	-	-
1971-Y56	2440995.88	1971 Feb 12 0900:00	M-100	-	-	-	-	-	-	GNS7OE	-	-	-	89	-	-
1971-Y57	2440997.88	1971 Feb 15 0901:00	M-100	-	-	-	-	-	-	UK	-	-	-	91	-	-
1971-Y58	2440999.54	1971 Feb 15 0900:00	M-100	-	-	-	-	-	-	G7SP-4	-	-	-	85	-	-
1971-Y59	2440999.88	1971 Feb 17 0200:00	M-100	-	-	-	-	-	-	UK	-	-	-	82	-	-
1971-Y60	2440999.88	1971 Feb 17 0900:00	M-100	-	-	-	-	-	KURO	GNS7OE	LP21	-	-	87	-	-
1971-Y61	2441000.23	1971 Feb 17 1730:00	M-100	-	-	ISRU-S.012	TEMLS-286	-	-	UK	-	-	-	94	-	-
1971-Y62	2441004.88	1971 Feb 22 0901:00	M-100	-	-	-	-	-	-	UK	-	-	-	91	-	-
1971-Y63	2441006.88	1971 Feb 24 0200:00	M-100	-	-	-	-	-	-	MJD	-	-	-	93	-	-
1971-Y64	2441006.88	1971 Feb 24 0800:00	M-100	-	-	-	-	-	-	G7SP-4	-	-	-	87	-	-
1971-Y65	2441006.88	1971 Feb 24 0901:00	M-100	-	-	-	-	-	-	UK	-	-	-	90	-	-
1971-Y66	2441006.88	1971 Feb 24 1530:00	M-100	-	-	ISRU-S.013	TEMLS-289	-	-	UK	-	-	-	91	-	-
1971-Y67	2441007.23	1971 Feb 26 0900:00	M-100	-	-	-	-	-	-	UK	-	-	-	86	-	-
1971-Y68	2441008.29	1971 Feb 26 0900:00	M-100	-	-	-	-	-	-	UK	-	-	-	92	-	-
1971-Y69	2441013.88	1971 Feb 28 0200:00	M-100	-	-	-	-	-	-	G7SP-4	-	-	-	86	-	-
1971-Y70	2441013.88	1971 Feb 28 0200:00	M-100	-	-	-	-	-	-	UK	-	-	-	90	-	-
1971-Y71	2441013.88	1971 Feb 28 0901:00	M-100	-	-	ISRU-S.014	TEMLS-290	-	-	TERLS	-	-	-	85	-	-
1971-Y72	2441013.88	1971 Feb 28 0901:00	M-100	-	-	-	-	-	-	G7SP-4	-	-	-	94	-	-
1971-Y73	2441020.88	1971 Feb 10 0200:00	M-100	-	-	-	-	-	-	UK	-	-	-	93	-	-
1971-Y74	2441020.88	1971 Feb 10 0200:00	M-100	-	-	-	-	-	-	TERLS	-	-	-	91	-	-
1971-Y75	2441021.93	1971 Feb 17 0200:00	M-100	-	-	ISRU-S.015	TEMLS-291	-	-	MJD	-	-	-	90	-	-
1971-Y76	2441027.88	1971 Feb 17 0200:00	M-100	-	-	-	-	-	-	UK	-	-	-	91	-	-
1971-Y77	2441027.88	1971 Feb 17 0901:00	M-100	-	-	-	-	-	-	UK	-	-	-	90	-	-
1971-Y78	2441028.12	1971 Feb 17 1500:00	M-100	-	-	ISRU-S.016	TEMLS-292	-	-	UK	-	-	-	87	-	-
1971-Y79	2441028.12	1971 Feb 19 1500:00	M-100	-	-	-	-	-	-	G7SP-4	-	-	-	92	-	-
1971-Y80	2441030.12	1971 Feb 19 1500:00	M-100	-	-	-	-	-	-	TERLS	-	-	-	86	-	-
1971-Y81	2441034.87	1971 Feb 24 0400:00	M-100	-	-	-	-	-	-	G7SP-4	-	-	-	95	-	-
1971-Y82	2441034.88	1971 Feb 24 0901:00	M-100	-	-	-	-	-	-	UK	-	-	-	89	-	-
1971-Y83	2441035.20	1971 Feb 24 1650:00	M-100	-	-	ISRU-S.017	TEMLS-299	-	-	UK	-	-	-	90	-	-
1971-Y84	2441037.88	1971 Feb 27 0901:00	M-100	-	-	-	-	-	-	TERLS	-	-	-	89	-	-
1971-Y85	2441041.61	1971 Feb 31 0236:00	M-100	-	-	-	-	-	-	UK	-	-	-	92	-	-
1971-Y86	2441041.62	1971 Feb 31 0300:00	M-100	-	-	-	-	-	-	MJD	-	-	-	85	-	-
1971-Y87	2441041.88	1971 Feb 31 0901:00	M-100	-	-	-	-	-	-	UK	-	-	-	93	-	-
1971-Y88	2441042.19	1971 Feb 31 1630:00	M-100	-	-	ISRU-S.018	TEMLS-300	-	-	TERLS	-	-	-	89	-	-
1971-Y89	2441042.19	1971 Feb 31 1630:00	M-100	-	-	ISRU-S.019	TEMLS-301	-	-	TERLS	-	-	-	88	-	-
1971-Y90	2441047.06	1971 Feb 05 1327:00	M-100	-	-	ISRU-S.020	TEMLS-302	-	-	TERLS	-	-	-	90	-	-
1971-Y91	2441047.06	1971 Feb 05 1462:00	M-100	-	-	-	-	-	-	MJD	-	-	-	93	-	-
1971-Y92	2441048.88	1971 Feb 07 0209:00	M-100	-	-	-	-	-	-	G7SP-4	-	-	-	87	-	-
1971-Y93	2441048.88	1971 Feb 07 0300:00	M-100	-	-	-	-	-	-	UK	-	-	-	89	-	-
1971-Y94	2441051.88	1971 Feb 10 0901:00	M-100	-	-	-	-	-	-	UK	-	-	-	89	-	-
1971-Y95	2441055.61	1971 Feb 14 0235:00	M-100	-	-	-	-	-	-	MJD	-	-	-	83	-	-
1971-Y96	2441055.62	1971 Feb 14 0300:00	M-100	-	-	-	-	-	-	G7SP-4	-	-	-	86	-	-
1971-Y97	2441062.60	1971 Feb 21 0226:00	M-100	-	-	-	-	-	-	MJD	-	-	-	92	-	-
1971-Y98	2441062.88	1971 Feb 21 0901:00	M-100	-	-	-	-	-	-	UK	-	-	-	90	-	-
1971-Y99	2441063.00	1971 Feb 21 1200:00	M-100	-	-	-	-	-	-	UK	-	-	-	86	-	-
1971-Y100	2441069.88	1971 Feb 28 0200:00	M-100	-	-	-	-	-	-	G7SP-4	-	-	-	87	-	-
1971-Y101	2441069.88	1971 Feb 28 0901:00	M-100	-	-	-	-	-	-	UK	-	-	-	94	-	-
1971-Y102	2441070.17	1971 Feb 28 1603:00	M-100	-	-	-	-	-	-	MJD	-	-	-	90	-	-
1971-Y103	2441074.91	1971 Feb 03 0948:00	M-100	-	-	-	-	-	-	UK	-	-	-	92	-	-
1971-Y104	2441076.58	1971 Feb 05 0200:00	M-100	-	-	-	-	-	-	MJD	-	-	-	87	-	-
1971-Y105	2441076.88	1971 Feb 05 0903:00	M-100	-	-	-	-	-	-	UK	-	-	-	88	-	-
1971-Y106	2441077.62	1971 Feb 06 0300:00	M-100	-	-	-	-	-	-	UK	-	-	-	85	-	-
1971-Y107	2441079.88	1971 Feb 08 0901:00	M-100	-	-	-	-	-	-	G7SP-4	-	-	-	92	-	-
1971-Y108	2441083.56	1971 Feb 12 0130:00	M-100	-	-	-	-	-	-	UK	-	-	-	94	-	-
1971-Y109	2441083.56	1971 Feb 12 0901:00	M-100	-	-	-	-	-	-	UK	-	-	-	90	-	-
1971-Y110	2441089.37	1971 Feb 17 2048:00	M-100	-	-	-	-	-	SHTR	GNS71A	LP1	-	-	78	-	-

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Launch_Mission	FlightCode	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee_Km	Range_Km	Dest
1971-Y148	2441090.88	1971 May 19 0200:00	M-100							GRS-P-4				85		
1971-Y149	2441090.88	1971 May 19 0914:00	M-100							UK				89		
1971-Y151	2441091.11	1971 May 19 1435:00	M-100			ISRO-S. 21	TEMLS-309			TERLS				90		
1971-Y152	2441091.11	1971 May 19 1445:00	M-100							MJD				96		
1971-Y156	2441092.35	1971 May 20 2022:00	M-100						SHIR	GRS7A	LP2			93		
1971-Y157	2441092.42	1971 May 20 2200:00	M-100						SHIR	GRS7A	LP3			88		
1971-Y159	2441094.35	1971 May 22 2030:00	M-100						SHIR	GRS7A	LP4			88		
1971-Y160	2441096.38	1971 May 24 2100:00	M-100						SHIR	GRS7A	1065			92		
1971-Y161	2441097.90	1971 May 26 0931:00	M-100							UK				86		
1971-Y162	2441098.10	1971 May 26 1430:00	M-100							MJD				92		
1971-Y163	2441098.11	1971 May 26 1440:00	M-100				TEMLS-310		SHIR	TERLS				96		
1971-Y165	2441099.40	1971 May 27 2130:00	M-100						SHIR	GRS7A	LP5			85		
1971-Y166	2441099.58	1971 May 28 0200:00	M-100							GRS-P-4				86		
1971-Y167	2441101.23	1971 May 29 1734:00	M-100						SHIR	GRS7A	LP6			92		
1971-Y168	2441104.10	1971 Jun 01 1427:00	M-100							MJD				92		
1971-Y169	2441104.91	1971 Jun 02 0955:00	M-100							UK				89		
1971-Y170	2441106.11	1971 Jun 02 1440:00	M-100				TEMLS-311		SHIR	TERLS				89		
1971-Y173	2441109.33	1971 Jun 06 1957:00	M-100							GRS7A	LP7			87		
1971-Y174	2441111.58	1971 Jun 09 0200:00	M-100							GRS-P-4				87		
1971-Y176	2441112.11	1971 Jun 09 1440:00	M-100				TEMLS-312		SHIR	TERLS				857		
1971-Y178	2441112.30	1971 Jun 09 1905:00	M-100						SHIR	GRS7A	LP8			87		
1971-Y179	2441113.33	1971 Jun 10 2000:00	M-100						SHIR	GRS7A	LP9			87		
1971-Y180	2441115.29	1971 Jun 12 1859:00	M-100						SHIR	GRS7A	LP10			82		
1971-Y181	2441116.29	1971 Jun 13 1859:00	M-100						SHIR	GRS7A	LP11			82		
1971-Y182	2441117.29	1971 Jun 14 1853:00	M-100						SHIR	GRS7A	LP12			87		
1971-Y183	2441118.68	1971 Jun 16 0910:00	M-100				TEMLS-316			UK				89		
1971-Y184	2441119.10	1971 Jun 16 1430:00	M-100							TERLS				91		
1971-Y186	2441119.11	1971 Jun 16 1440:00	M-100						SHIR	MJD				94		
1971-Y189	2441119.29	1971 Jun 16 1856:00	M-100							GRS7A	LP13			90		
1971-Y189	2441126.11	1971 Jun 23 1445:00	M-100				TEMLS-322		SHIR	TERLS				91		
1971-Y191	2441127.35	1971 Jun 24 2000:00	M-100						SHIR	GRS7A	LP14			89		
1971-Y193	2441129.21	1971 Jun 26 1707:00	M-100						SHIR	GRS7A	LP15			89		
1971-Y194	2441131.35	1971 Jun 28 2001:00	M-100						SHIR	GRS7A	LP16			88		
1971-Y195	2441131.95	1971 Jun 29 1043:00	M-100						SHIR	GRS7A	1065			82		
1971-Y196	2441132.85	1971 Jun 30 0200:00	M-100							GRS-P-4				85		
1971-Y197	2441132.85	1971 Jun 30 0601:00	M-100				TEMLS-323			UK				83		
1971-Y198	2441133.17	1971 Jun 30 1606:00	M-100						SHIR	TERLS				88		
1971-Y199	2441133.34	1971 Jun 30 2003:00	M-100						SHIR	GRS7A	LP17			90		
1971-Y202	2441134.35	1971 Jul 01 2000:00	M-100						SHIR	GRS7A	LP18			86		
1971-Y204	2441136.38	1971 Jul 01 02 2100:00	M-100						SHIR	GRS7A	LP19			91		
1971-Y206	2441138.35	1971 Jul 01 09 1500:00	M-100						SHIR	GRS7A	LP20			89		
1971-Y208	2441139.68	1971 Jul 01 07 0800:00	M-100							GRS-P-4				92		
1971-Y209	2441139.68	1971 Jul 01 08 1430:00	M-100				TEMLS-324			TERLS				88		
1971-Y210	2441140.10	1971 Jul 01 08 1500:00	M-100						SHIR	GRS7A	LP21			94		
1971-Y213	2441141.21	1971 Jul 01 09 1000:00	M-100						SHIR	GRS7A	LP22			91		
1971-Y214	2441142.29	1971 Jul 01 14 0900:00	M-100							GRS7A				88		
1971-Y215	2441146.88	1971 Jul 01 14 0900:00	M-100							OK				88		
1971-Y215	2441146.88	1971 Jul 01 14 1434:00	M-100				TEMLS-325			TERLS				89		
1971-Y218	2441147.11	1971 Jul 01 14 1500:00	M-100							MJD				90		
1971-Y219	2441147.11	1971 Jul 01 14 1500:00	M-100							OK				92		
1971-Y222	2441153.88	1971 Jul 01 21 0900:00	M-100							GRS-P-4				88		
1971-Y224	2441154.10	1971 Jul 01 21 1430:00	M-100				TEMLS-326			TERLS				92		
1971-Y224	2441154.10	1971 Jul 01 21 1430:00	M-100							MJD				85		
1971-Y225	2441154.10	1971 Jul 01 21 1500:00	M-100							OK				94		
1971-Y227	2441160.88	1971 Jul 01 28 0900:00	M-100							OK				94		
1971-Y229	2441161.11	1971 Jul 01 28 1437:00	M-100				TEMLS-327			TERLS				85		
1971-Y232	2441167.58	1971 Aug 04 0200:00	M-100							GRS-P-4				91		
1971-Y233	2441167.88	1971 Aug 04 0900:00	M-100							OK				91		
1971-Y236	2441168.10	1971 Aug 04 1430:00	M-100				TEMLS-337			TERLS				86		
1971-Y237	2441168.12	1971 Aug 04 1500:00	M-100							MJD				86		
1971-Y237	2441168.12	1971 Aug 04 1500:00	M-100							TERLS				91		
1971-Y241	2441174.88	1971 Aug 11 0900:00	M-100				TEMLS-338			OK				89		
1971-Y243	2441175.11	1971 Aug 11 1433:00	M-100							TERLS				87		
1971-Y244	2441175.12	1971 Aug 11 1500:00	M-100							MJD				89		
1971-Y245	2441175.12	1971 Aug 11 1500:00	M-100							TERLS				90		
1971-Y248	2441175.54	1971 Aug 12 0100:00	M-100							GRS-P-4				85		
1971-Y249	2441181.58	1971 Aug 18 0200:00	M-100							GRS-P-4				86		
1971-Y250	2441181.88	1971 Aug 18 0900:00	M-100							OK				90		
1971-Y251	2441182.10	1971 Aug 18 1430:00	M-100				TEMLS-343			TERLS				92		
1971-Y252	2441182.12	1971 Aug 18 1500:00	M-100							MJD				87		
1971-Y255	2441188.12	1971 Aug 24 1500:00	M-100							MJD				85		
1971-Y256	2441188.92	1971 Aug 25 0200:00	M-100							OK				84		
1971-Y257	2441188.92	1971 Aug 25 1000:00	M-100							GRS-P-4				86		
1971-Y259	2441189.10	1971 Aug 25 1430:00	M-100				TEMLS-344			OK				90		
1971-Y281	2441194.58	1971 Aug 31 0200:00	M-100							TERLS				86		
1971-Y283	2441195.58	1971 Sep 01 0900:00	M-100							OK				93		
1971-Y284	2441195.88	1971 Sep 01 0900:00	M-100				TEMLS-345			OK				90		
1971-Y286	2441196.10	1971 Sep 01 1430:00	M-100							TERLS				92		
1971-Y287	2441197.58	1971 Sep 01 1500:00	M-100		TEMLS-345					MJD				85		
1971-Y287	2441197.58	1971 Sep 03 0200:00	M-100							GRS-P-4				91		
1971-Y289	2441197.88	1971 Sep 03 0900:00	M-100							OK				84		
1971-Y291	2441203.00	1971 Sep 08 1206:00	M-100							GRS-P-4				94		
1971-Y292	2441203.10	1971 Sep 08 1430:00	M-100				TEMLS-346			TERLS				90		
1971-Y293	2441207.12	1971 Sep 12 1500:00	M-100							MJD				88		
1971-Y294	2441209.46	1971 Sep 14 2300:00	M-100							GRS-P-4				85		
1971-Y295	2441209.88	1971 Sep 15 0900:00	M-100							OK				92		

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Launch_Mission	FlightCode	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee_Km	Range_Km	Dest
1971-Y277	2441210.09	1971 Sep 15 1405:00	M-100		TEML5-347	ISR0-5.38	TEML5-347	-	-	TERLS	-	-	-	91	-	-
1971-Y278	2441210.12	1971 Sep 15 1500:00	M-100			-		-	-	MJD	-	-	-	90	-	-
1971-Y279	2441210.25	1971 Sep 15 1800:00	M-100			-		-	-	GRSP-4	-	-	-	86	-	-
1971-Y280	2441210.33	1971 Sep 15 2000:00	M-100			-		-	-	GRSP-4	-	-	-	85	-	-
1971-Y281	2441216.89	1971 Sep 22 0920:00	M-100			-		-	-	UK	-	-	-	93	-	-
1971-Y283	2441217.10	1971 Sep 22 1430:00	M-100			-	TEML5-349	-	-	TERLS	-	-	-	90	-	-
1971-Y285	2441217.17	1971 Sep 22 1600:00	M-100			-		-	-	MJD	-	-	-	93	-	-
1971-Y286	2441219.11	1971 Sep 24 1440:00	M-100			-		-	-	GRSP-4	-	-	-	87	-	-
1971-Y287	2441223.62	1971 Sep 29 0300:00	M-100			-		-	-	GRSP-4	-	-	-	86	-	-
1971-Y288	2441223.88	1971 Sep 29 0900:00	M-100			-		-	-	UK	-	-	-	93	-	-
1971-Y289	2441226.17	1971 Oct 01 1600:00	M-100			-	TEML5-350	-	-	TERLS	-	-	-	88	-	-
1971-Y290	2441226.65	1971 Oct 01 0530:00	M-100			-		-	-	GRSP-4	-	-	-	88	-	-
1971-Y291	2441226.65	1971 Oct 03 0530:00	M-100			-		-	-	GRSP-4	-	-	-	87	-	-
1971-Y292	2441227.65	1971 Oct 03 0530:00	M-100			-		-	-	UK	-	-	-	88	-	-
1971-Y293	2441228.15	1971 Oct 03 0530:00	M-100			-		-	-	UK	-	-	-	85	-	-
1971-Y294	2441228.65	1971 Oct 04 0530:00	M-100			-		-	-	UK	-	-	-	92	-	-
1971-Y295	2441229.15	1971 Oct 04 0530:00	M-100			-		-	-	UK	-	-	-	89	-	-
1971-Y296	2441229.65	1971 Oct 05 0530:00	M-100			-		-	-	UK	-	-	-	91	-	-
1971-Y297	2441230.12	1971 Oct 06 0200:00	M-100			-		-	-	GRSP-4	-	-	-	91	-	-
1971-Y298	2441230.88	1971 Oct 06 0200:00	M-100			-		-	-	UK	-	-	-	94	-	-
1971-Y301	2441231.10	1971 Oct 06 1440:00	M-100		TEML5-363	ISR0-5.41	TEML5-363	-	-	TERLS	-	-	-	89	-	-
1971-Y302	2441231.11	1971 Oct 06 1440:00	M-100			-		-	-	GRSP-4	-	-	-	96	-	-
1971-Y303	2441231.12	1971 Oct 06 1500:00	M-100			-		-	-	UK	-	-	-	88	-	-
1971-Y304	2441231.65	1971 Oct 07 0530:00	M-100			-		-	-	GRSP-4	-	-	-	88	-	-
1971-Y305	2441231.73	1971 Oct 07 0535:00	M-100			-		-	-	GRSP-4	-	-	-	88	-	-
1971-Y306	2441232.11	1971 Oct 07 1440:00	M-100			-		-	-	UK	-	-	-	86	-	-
1971-Y307	2441232.65	1971 Oct 08 0530:00	M-100			-		-	-	GRSP-4	-	-	-	96	-	-
1971-Y308	2441232.65	1971 Oct 08 0530:00	M-100			-		-	-	UK	-	-	-	89	-	-
1971-Y309	2441233.12	1971 Oct 08 1500:00	M-100			-		-	-	GRSP-4	-	-	-	88	-	-
1971-Y310	2441234.08	1971 Oct 09 1400:00	M-100			-		-	-	GRSP-4	-	-	-	88	-	-
1971-Y311	2441237.88	1971 Oct 13 0200:00	M-100			-		-	-	GRSP-4	-	-	-	87	-	-
1971-Y312	2441237.88	1971 Oct 13 0900:00	M-100			-		-	-	UK	-	-	-	94	-	-
1971-Y313	2441238.10	1971 Oct 13 1431:00	M-100			-	TEML5-364	-	-	TERLS	-	-	-	87	-	-
1971-Y314	2441238.12	1971 Oct 13 1500:00	M-100			-		-	-	MJD	-	-	-	94	-	-
1971-Y316	2441244.88	1971 Oct 20 0900:00	M-100			-	TEML5-371	-	-	GRSP-4	-	-	-	93	-	-
1971-Y317	2441246.10	1971 Oct 20 0900:00	M-100			-		-	-	UK	-	-	-	80	-	-
1971-Y319	2441246.10	1971 Oct 20 1430:00	M-100			-		-	-	TERLS	-	-	-	90	-	-
1971-Y320	2441246.12	1971 Oct 20 1500:00	M-100			-		-	-	MJD	-	-	-	94	-	-
1971-Y321	2441261.88	1971 Oct 27 0100:00	M-100			-		-	-	UK	-	-	-	90	-	-
1971-Y322	2441261.88	1971 Oct 27 1500:00	M-100			-		-	-	GRSP-4	-	-	-	87	-	-
1971-Y323	2441262.12	1971 Oct 27 1500:00	M-100			-	TEML5-372	-	-	TERLS	-	-	-	89	-	-
1971-Y324	2441262.48	1971 Oct 27 1500:00	M-100			-		-	-	GRSP-4	-	-	-	86	-	-
1971-Y325	2441266.88	1971 Nov 03 0200:00	M-100			-		-	-	UK	-	-	-	91	-	-
1971-Y326	2441266.88	1971 Nov 03 0200:00	M-100			-		-	-	GRSP-4	-	-	-	88	-	-
1971-Y327	2441269.10	1971 Nov 03 1430:00	M-100			-	TEML5-376	-	-	TERLS	-	-	-	90	-	-
1971-Y328	2441269.48	1971 Nov 03 1430:00	M-100			-		-	-	GRSP-4	-	-	-	73	-	-
1971-Y329	2441269.55	1971 Nov 03 1430:00	M-100			-		-	-	UK	-	-	-	90	-	-
1971-Y330	2441269.55	1971 Nov 03 1430:00	M-100			-		-	-	GRSP-4	-	-	-	89	-	-
1971-Y331	2441269.55	1971 Nov 03 1430:00	M-100			-		-	-	GRSP-4	-	-	-	93	-	-
1971-Y332	2441269.55	1971 Nov 03 1430:00	M-100			-		-	-	GRSP-4	-	-	-	93	-	-
1971-Y333	2441269.55	1971 Nov 03 1430:00	M-100			-	TEML5-383	-	-	TERLS	-	-	-	87	-	-
1971-Y334	2441272.65	1971 Nov 10 1500:00	M-100			-		-	-	MJD	-	-	-	93	-	-
1971-Y335	2441272.65	1971 Nov 17 0200:00	M-100			-		-	-	GRSP-4	-	-	-	94	-	-
1971-Y336	2441272.65	1971 Nov 17 0200:00	M-100			-		-	-	TERLS	-	-	-	92	-	-
1971-Y337	2441273.88	1971 Nov 17 1430:00	M-100			-		-	-	GRSP-4	-	-	-	94	-	-
1971-Y339	2441273.10	1971 Nov 17 1430:00	M-100			-	TEML5-384	-	-	TERLS	-	-	-	92	-	-
1971-Y341	2441273.10	1971 Nov 17 1430:00	M-100			-		-	-	MJD	-	-	-	90	-	-
1971-Y341	2441273.12	1971 Nov 17 1500:00	M-100			-		-	-	UK	-	-	-	95	-	-
1971-Y344	2441273.88	1971 Nov 24 0900:00	M-100			-		-	-	TERLS	-	-	-	90	-	-
1971-Y345	2441280.10	1971 Nov 24 1430:00	M-100			-		-	-	MJD	-	-	-	84	-	-
1971-Y346	2441280.12	1971 Nov 24 1500:00	M-100			-		-	-	GRSP-4	-	-	-	90	-	-
1971-Y347	2441280.58	1971 Nov 25 0200:00	M-100			-		-	-	GRSP-4	-	-	-	90	-	-
1971-Y349	2441286.88	1971 Dec 01 0200:00	M-100			-		-	-	UK	-	-	-	90	-	-
1971-Y350	2441286.88	1971 Dec 01 0900:00	M-100			-		-	-	TERLS	-	-	-	90	-	-
1971-Y352	2441287.33	1971 Dec 01 1430:00	M-100			-		-	-	GRSP-4	-	-	-	87	-	-
1971-Y354	2441287.33	1971 Dec 08 0300:00	M-100			-		-	-	MJD	-	-	-	90	-	-
1971-Y355	2441293.62	1971 Dec 08 0300:00	M-100			-		-	-	GRSP-4	-	-	-	87	-	-
1971-Y356	2441293.88	1971 Dec 08 0900:00	M-100			-		-	-	UK	-	-	-	87	-	-
1971-Y357	2441294.17	1971 Dec 08 1430:00	M-100		TEML5-390	ISR0-5.50	TEML5-390	-	-	TERLS	-	-	-	87	-	-
1971-Y358	2441294.17	1971 Dec 08 1430:00	M-100			-		-	-	MJD	-	-	-	85	-	-
1971-Y359	2441300.25	1971 Dec 14 1800:00	M-100			-		-	-	MJD	-	-	-	86	-	-
1971-Y360	2441300.88	1971 Dec 15 0200:00	M-100			-		-	-	GRSP-4	-	-	-	92	-	-
1971-Y361	2441300.89	1971 Dec 15 0920:00	M-100			-		-	-	UK	-	-	-	88	-	-
1971-Y363	2441301.12	1971 Dec 15 1500:00	M-100			-		-	-	TERLS	-	-	-	87	-	-
1971-Y364	2441301.12	1971 Dec 15 1500:00	M-100			-	TEML5-391	-	-	TERLS	-	-	-	87	-	-
1971-Y366	2441307.29	1971 Dec 21 1900:00	M-100			-		-	-	MJD	-	-	-	86	-	-
1971-Y369	2441307.88	1971 Dec 22 0900:00	M-100			-		-	-	GRSP-4	-	-	-	90	-	-
1971-Y370	2441307.88	1971 Dec 22 0900:00	M-100			-		-	-	UK	-	-	-	87	-	-
1971-Y371	2441308.12	1971 Dec 22 1500:00	M-100			-		-	-	TERLS	-	-	-	86	-	-
1971-Y372	2441308.12	1971 Dec 22 1500:00	M-100		TEML5-396	ISR0-5.52	TEML5-396 Spartans	-	-	TERLS	-	-	-	90	-	-
1971-Y373	2441314.38	1971 Dec 28 2100:00	M-100			-		-	-	TERLS	-	-	-	85	-	-
1971-Y374	2441314.38	1971 Dec 29 0200:00	M-100			-		-	-	GRSP-4	-	-	-	92	-	-
1971-Y375	2441314.88	1971 Dec 29 0900:00	M-100			-		-	-	UK	-	-	-	87	-	-
1971-Y376	2441315.10	1971 Dec 29 1430:00	M-100			-		-	-	TERLS	-	-	-	87	-	-
1971-Y377	2441315.12	1971 Dec 29 1500:00	M-100			-	TEML5-397	-	-	TERLS	-	-	-	92	-	-
1972-Y01	2441320.04	1972 Jan 03 1100:00	M-100			-		-	-	SHTR	LP1	-	-	91	-	-
1972-Y02	2441320.96	1972 Jan 05 0200:00	M-100			-		-	-	SHTR	LP2	-	-	90	-	-
1972-Y03	2441321.81	1972 Jan 05 0200:00	M-100			-		-	-	-	-	-	-	88	-	-
1972-Y04	2441321.91	1972 Jan 05 0850:00	M-100			-		-	-	OK	-	-	-	92	-	-



Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Launch_Mission	FlightCode	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee_Km	Range_Km	Dest
1972-Y110	2441398.42	1972 Mar 21 2200:00	N-100							GTSP-4				90		
1972-Y111	2441398.88	1972 Mar 22 0900:00	N-100							UK				96		
1972-Y112	2441399.10	1972 Mar 22 1430:00	N-100		TEPLS-427		TEPLS-427			TEPLS				91		
1972-Y113	2441399.12	1972 Mar 22 1430:00	N-100			ISRO-S.65				TEPLS				92		
1972-Y114	2441399.96	1972 Mar 23 1100:00	N-100							MJD				86		
1972-Y117	2441400.96	1972 Mar 24 1100:00	N-100						KURO	GNS72B	LP11			90		
1972-Y118	2441400.96	1972 Mar 25 1200:00	N-100						KURO	GNS72B	LP12			90		
1972-Y119	2441402.00	1972 Mar 25 1100:00	N-100						KURO	GNS72B	LP13			83		
1972-Y120	2441403.96	1972 Mar 27 0200:00	N-100						KURO	GNS72B	LP14			81		
1972-Y121	2441405.88	1972 Mar 29 0900:00	N-100							UK				94		
1972-Y122	2441406.68	1972 Mar 29 0900:00	N-100		TEPLS-428		TEPLS-428			TEPLS				90		
1972-Y123	2441406.12	1972 Mar 29 1430:00	N-100							MJD				87		
1972-Y124	2441406.12	1972 Mar 29 1500:00	N-100							TEPLS				90		
1972-Y125	2441413.10	1972 Apr 05 1430:00	N-100		TEPLS-429		TEPLS-429			TEPLS				91		
1972-Y126	2441413.10	1972 Apr 12 1430:00	N-100		TEPLS-431		TEPLS-431			TEPLS				857		
1972-Y127	2441427.10	1972 Apr 19 1430:00	N-100		TEPLS-432		TEPLS-432			TEPLS				87		
1972-Y130	2441434.10	1972 Apr 26 1430:00	N-100		TEPLS-433		TEPLS-433			TEPLS				857		
1972-Y133	2441441.08	1972 May 3 1400	N-100							MJD				88		
1972-Y136	2441441.08	1972 May 03 1430:00	N-100		TEPLS-434		TEPLS-434			TEPLS				92		
1972-Y135	2441444.09	1972 May 6 1410	N-100							MJD				88		
1972-Y139	2441448.19	1972 May 17 1505:00	N-100		TEPLS-435		TEPLS-435			TEPLS				91		
1972-Y137	2441455.13	1972 May 17 1750	N-100		TEPLS-436		TEPLS-436			TEPLS				88		
1972-Y139	2441455.24	1972 May 17 1750	N-100							MJD				88		
1972-Y142	2441469.11	1972 May 31 1437:00	N-100		TEPLS-444		TEPLS-444			TEPLS				90		
1972-Y144	2441476.10	1972 Jun 07 1430:00	N-100		TEPLS-445		TEPLS-445			TEPLS				90		
1972-Y145	2441483.10	1972 Jun 14 1430:00	N-100		TEPLS-446		TEPLS-446			TEPLS				89		
1972-Y147	2441490.08	1972 Jun 21 1400	N-100							MJD				88		
1972-Y147	2441490.10	1972 Jun 21 1430:00	N-100		TEPLS-447		TEPLS-447			TEPLS				90		
1972-Y142	2441490.09	1972 Jun 21 1405	N-100							MJD				88		
1972-Y146	2441497.11	1972 Jun 28 1440:00	N-100		TEPLS-448		TEPLS-448			TEPLS				88		
1972-Y159	2441500.08	1972 Jul 01 1400:00	N-100							MJD				94		
1972-Y151	2441500.33	1972 Jul 01 2000:00	N-100						SHIR	GNS72C	LP1			89		
1972-Y152	2441502.33	1972 Jul 03 2000:00	N-100						SHIR	IDLZ	106540			88		
1972-Y153	2441503.88	1972 Jul 05 0900:00	N-100							UK				88		
1972-Y154	2441504.08	1972 Jul 05 1400:00	N-100							MJD				87		
1972-Y154	2441504.11	1972 Jul 05 1432:00	N-100		TEPLS-449		TEPLS-449			TEPLS				93		
1972-Y159	2441506.21	1972 Jul 06 1700:00	N-100							GNS72C	LP3			83		
1972-Y157	2441506.21	1972 Jul 07 1700:00	N-100							GNS72C	LP4			90		
1972-Y158	2441506.21	1972 Jul 07 1700:00	N-100							IDLZ	106540			94		
1972-Y159	2441506.21	1972 Jul 09 1700:00	N-100							GNS72C	LP5			94		
1972-Y161	2441511.08	1972 Jul 12 1400:00	N-100							REK	LEC			91		
1972-Y162	2441511.08	1972 Jul 12 1430:00	N-100		TEPLS-451		TEPLS-451			TEPLS				89		
1972-Y164	2441512.08	1972 Jul 12 1430:00	N-100							GNS72C	LP7			89		
1972-Y164	2441514.12	1972 Jul 15 1500:00	N-100							IDLZ				89		
1972-Y168	2441515.23	1972 Jul 16 0900:00	N-100							TEPLS				89		
1972-Y167	2441517.88	1972 Jul 19 0900:00	N-100							OK				80		
1972-Y168	2441518.88	1972 Jul 19 1400:00	N-100							MJD				85		
1972-Y169	2441518.88	1972 Jul 19 1405:00	N-100		TEPLS-452		TEPLS-452			TEPLS				85		
1972-Y170	2441521.08	1972 Jul 22 1400:00	N-100							MJD				91		
1972-Y171	2441521.08	1972 Jul 22 1400:00	N-100							OK				81		
1972-Y172	2441524.88	1972 Jul 26 0900:00	N-100							OK				86		
1972-Y173	2441526.10	1972 Jul 26 1430:00	N-100		TEPLS-453		TEPLS-453			MJD				89		
1972-Y176	2441526.33	1972 Jul 26 2000:00	N-100							TEPLS				89		
1972-Y178	2441531.33	1972 Jul 31 2000:00	N-100							GNS72C	LP10			88		
1972-Y179	2441531.33	1972 Aug 01 2000:00	N-100							GNS72C	LP11			88		
1972-Y180	2441531.88	1972 Aug 02 0900:00	N-100							GNS72C	LP12			89		
1972-Y181	2441532.08	1972 Aug 02 1400:00	N-100							OK				91		
1972-Y182	2441532.11	1972 Aug 02 1444:00	N-100		TEPLS-454		TEPLS-454			MJD				94		
1972-Y184	2441532.25	1972 Aug 02 1800:00	N-100							TEPLS				88		
1972-Y185	2441536.08	1972 Aug 06 1400:00	N-100							GNS72C				89		
1972-Y186	2441538.42	1972 Aug 08 2300:00	N-100							GTAP-4				89		
1972-Y187	2441539.88	1972 Aug 09 0900:00	N-100							MJD				93		
1972-Y188	2441539.88	1972 Aug 09 1430:00	N-100							OK				90		
1972-Y189	2441539.10	1972 Aug 09 1430:00	N-100		TEPLS-462		TEPLS-462			MJD				87		
1972-Y190	2441539.33	1972 Aug 09 2000:00	N-100							TEPLS				92		
1972-Y191	2441539.58	1972 Aug 10 0200:00	N-100							GNS72C	LP14			90		
1972-Y192	2441542.33	1972 Aug 12 2000:00	N-100							GTAP-4				92		
1972-Y193	2441543.33	1972 Aug 13 2000:00	N-100							GNS72C	LP15			88		
1972-Y194	2441544.33	1972 Aug 14 2000:00	N-100							GNS72C	LP16			91		
1972-Y195	2441545.58	1972 Aug 16 0200:00	N-100							GNS72C				92		
1972-Y196	2441545.88	1972 Aug 16 0900:00	N-100							OK				90		
1972-Y197	2441546.08	1972 Aug 16 1400:00	N-100							MJD				90		
1972-Y198	2441546.10	1972 Aug 16 1430:00	N-100		TEPLS-464		TEPLS-464			TEPLS				88		
1972-Y199	2441550.08	1972 Aug 20 1400:00	N-100							MJD				92		
1972-Y200	2441552.54	1972 Aug 23 0100:00	N-100							GTAP-4				90		
1972-Y201	2441553.08	1972 Aug 23 1400:00	N-100							MJD				88		
1972-Y203	2441554.10	1972 Aug 24 1430:00	N-100		TEPLS-472		TEPLS-472			TEPLS				87		
1972-Y204	2441559.54	1972 Aug 30 0100:00	N-100							GTAP-4				91		
1972-Y205	2441560.08	1972 Aug 30 1400:00	N-100							MJD				90		
1972-Y206	2441560.10	1972 Aug 30 1430:00	N-100		TEPLS-473		TEPLS-473			TEPLS				90		
1972-Y207	2441566.42	1972 Sep 05 2200:00	N-100							GTAP-4				87		
1972-Y208	2441566.90	1972 Sep 06 0930:00	N-100							OK				84		
1972-Y209	2441567.08	1972 Sep 06 1400:00	N-100							MJD				83		
1972-Y210	2441567.10	1972 Sep 06 1430:00	N-100		TEPLS-474		TEPLS-474			TEPLS				87		



Launch_Tag	Launch_ID	Launch_Date	Lv_Type	Variant	Flight_ID	Flight	Launch_Mission	FlightCode	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee_Km	Range_Km	Dest
1972-Y211	2441568.42	1972 Sep 07 2200:00	M-100							GRSP-4				86		
1972-Y212	2441568.88	1972 Sep 08 0900:00	M-100							UK				85		
1972-Y213	2441571.88	1972 Sep 11 0900:00	M-100							GRSP-4				87		
1972-Y214	2441573.46	1972 Sep 12 2300:00	M-100							UK				87		
1972-Y215	2441573.88	1972 Sep 13 0900:00	M-100							UK				91		
1972-Y216	2441574.08	1972 Sep 13 1400:00	M-100		TEMLS-475					TEMLS				86		
1972-Y218	2441574.21	1972 Sep 13 1657:00	M-100			ISRU-S.89	TEMLS-475			GRSP-4				89		
1972-Y219	2441575.42	1972 Sep 14 2200:00	M-100							GRSP-4				88		
1972-Y220	2441578.46	1972 Sep 17 2300:00	M-100							GRSP-4				91		
1972-Y221	2441580.50	1972 Sep 20 0000:00	M-100							UK				89		
1972-Y222	2441580.88	1972 Sep 20 0900:00	M-100							MLD				90		
1972-Y223	2441581.09	1972 Sep 20 1405:00	M-100							TEMLS				87		
1972-Y224	2441581.11	1972 Sep 20 1435:00	M-100				TEMLS-484			GRSP-4				86		
1972-Y225	2441581.44	1972 Sep 26 2240:00	M-100							UK				87		
1972-Y229	2441587.90	1972 Sep 27 0940:00	M-100							GRSP-4				93		
1972-Y230	2441588.08	1972 Sep 27 1400:00	M-100							MLD				93		
1972-Y231	2441588.10	1972 Sep 27 1430:00	M-100							TEMLS				87		
1972-Y232	2441594.42	1972 Oct 03 2200:00	M-100		TEMLS-485					GRSP-4				87		
1972-Y233	2441594.88	1972 Oct 04 0900:00	M-100							UK				89		
1972-Y234	2441595.10	1972 Oct 04 1430:00	M-100		TEMLS-486					TEMLS				90		
1972-Y235	2441595.08	1972 Oct 04 1553:00	M-100							MLD				87		
1972-Y237	2441601.42	1972 Oct 10 2200:00	M-100							UK				87		
1972-Y238	2441601.88	1972 Oct 11 0900:00	M-100							GRSP-4				96		
1972-Y239	2441602.10	1972 Oct 11 1400:00	M-100							MLD				93		
1972-Y240	2441602.10	1972 Oct 11 1430:00	M-100							TEMLS				90		
1972-Y242	2441608.42	1972 Oct 17 2200:00	M-100		TEMLS-487					GRSP-4				87		
1972-Y243	2441608.88	1972 Oct 18 0900:00	M-100							UK				95		
1972-Y244	2441609.08	1972 Oct 18 1400:00	M-100							MLD				88		
1972-Y245	2441609.13	1972 Oct 18 1506:00	M-100		TEMLS-490					GRSP-4				91		
1972-Y246	2441615.38	1972 Oct 24 2110:00	M-100	?						UK				90		
1972-Y249	2441615.88	1972 Oct 25 0900:00	M-100		TEMLS-497					TEMLS				86		
1972-Y250	2441616.10	1972 Oct 25 1430:00	M-100							MLD				89		
1972-Y252	2441616.12	1972 Oct 25 1500:00	M-100							GRSP-4				85		
1972-Y253	2441616.21	1972 Oct 25 1700:00	M-100		TEMLS-498					TEMLS				86		
1972-Y254	2441623.11	1972 Nov 01 1444:00	M-100							GRSP-4				96		
1972-Y255	2441623.12	1972 Nov 01 1500:00	M-100			Atomic 0				UK				91		
1972-Y256	2441630.89	1972 Nov 09 0916:00	M-100		TEMLS-499					TEMLS				88		
1972-Y259	2441631.10	1972 Nov 09 1430:00	M-100							GRSP-4				88		
1972-Y260	2441631.12	1972 Nov 09 1500:00	M-100							UK				98		
1972-Y261	2441636.94	1972 Nov 15 0100:00	M-100							TEMLS				88		
1972-Y262	2441636.89	1972 Nov 15 0926:00	M-100							MLD				91		
1972-Y263	2441637.08	1972 Nov 15 1400:00	M-100		TEMLS-500					GRSP-4				89		
1972-Y264	2441637.48	1972 Nov 22 0900:00	M-100							MLD				88		
1972-Y266	2441641.88	1972 Nov 22 0900:00	M-100							TEMLS				86		
1972-Y268	2441643.88	1972 Nov 22 0900:00	M-100							GRSP-4				88		
1972-Y269	2441644.08	1972 Nov 22 1430:00	M-100		TEMLS-501					TEMLS				88		
1972-Y270	2441644.08	1972 Nov 22 1430:00	M-100							GRSP-4				88		
1972-Y272	2441644.88	1972 Nov 23 0900:00	M-100							UK				88		
1972-Y274	2441650.88	1972 Nov 29 0900:00	M-100							GRSP-4				95		
1972-Y275	2441651.08	1972 Nov 29 1400:00	M-100							UK				88		
1972-Y276	2441651.08	1972 Nov 29 1400:00	M-100							MLD				84		
1972-Y277	2441651.08	1972 Nov 29 1400:00	M-100							TEMLS				92		
1972-Y278	2441651.17	1972 Nov 29 1430:00	M-100		TEMLS-502					GRSP-4				88		
1972-Y279	2441652.83	1972 Dec 01 0900:00	M-100							GRSP-4				95		
1972-Y281	2441652.83	1972 Dec 01 0900:00	M-100							UK				87		
1972-Y284	2441657.88	1972 Dec 06 1400:00	M-100		TEMLS-503					MLD				88		
1972-Y285	2441658.08	1972 Dec 06 1400:00	M-100							GRSP-4				88		
1972-Y286	2441658.17	1972 Dec 06 1433:00	M-100							TEMLS				83		
1972-Y287	2441658.17	1972 Dec 06 1600:00	M-100							GRSP-4				84		
1972-Y288	2441664.88	1972 Dec 13 0900:00	M-100							UK				94		
1972-Y289	2441665.08	1972 Dec 13 1400:00	M-100							GRSP-4				82		
1972-Y290	2441665.08	1972 Dec 13 1400:00	M-100							MLD				88		
1972-Y291	2441665.08	1972 Dec 13 1400:00	M-100							TEMLS				89		
1972-Y292	2441671.58	1972 Dec 20 0200:00	M-100		TEMLS-504					GRSP-4				82		
1972-Y293	2441672.10	1972 Dec 20 1430:00	M-100							MLD				82		
1972-Y294	2441672.10	1972 Dec 20 1430:00	M-100							TEMLS				88		
1972-Y296	2441673.82	1972 Dec 22 0300:00	M-100							GRSP-4				84		
1972-Y297	2441677.04	1972 Dec 25 1300:00	M-100							MLD				92		
1972-Y298	2441678.82	1972 Dec 27 0300:00	M-100							SHTR	LP1			88		
1972-Y299	2441679.00	1972 Dec 27 1200:00	M-100							SHTR	LP1			92		
1972-Y300	2441679.08	1972 Dec 27 1400:00	M-100							MLD				85		
1972-Y301	2441679.10	1972 Dec 27 1430:00	M-100		TEMLS-510					TEMLS				87		
1972-Y304	2441680.00	1972 Dec 28 1200:00	M-100							SHTR	LP2			85		
1972-Y305	2441681.00	1972 Dec 28 1200:00	M-100							SHTR	LP3			83		
1972-Y306	2441682.00	1972 Dec 30 1200:00	M-100							SHTR	LP4			87		
1972-Y307	2441684.04	1972 Dec 30 1200:00	M-100							SHTR	LP5			86		
1972-Y308	2441684.04	1972 Dec 30 1200:00	M-100							SHTR	LP6			91		
1972-Y309	2441685.04	1972 Dec 30 1300:00	M-100							MLD				89		
1972-Y310	2441686.10	1972 Dec 30 1430:00	M-100		TEMLS-511					TEMLS				89		
1972-Y311	2441686.10	1972 Dec 30 1430:00	M-100							MLD				89		
1972-Y312	2441686.12	1972 Dec 30 1550:00	M-100							TEMLS				86		
1972-Y313	2441686.16	1972 Dec 30 1550:00	M-100		TEMLS-512					SHTR	LP7			81		
1972-Y314	2441687.04	1972 Dec 30 1700:00	M-100							SHTR	LP8			89		
1972-Y315	2441687.21	1972 Dec 30 1700:00	M-100							SHTR	LP9			86		
1972-Y316	2441688.12	1972 Dec 30 1700:00	M-100							SHTR	LP9			86		
1972-Y317	2441688.12	1972 Dec 30 1700:00	M-100							OK				95		

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Launch_Mission	FlightCode	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee_Km	Range_Km	Dest
1973-Y23	2441689.12	1973 Jan 06 1500:00	M-100	-	-	-	-	-	SHIR	GNS72D	LP10	-	-	87	-	-
1973-Y24	2441689.17	1973 Jan 06 1600:00	M-100	-	-	-	-	-	SHIR	GNS72D	LP10	-	-	86	-	-
1973-Y25	2441692.89	1973 Jan 10 0920:00	M-100	-	TEPLS-517	ISRU-S.107	TEPLS-517	-	-	UK	-	-	-	93	-	-
1973-Y26	2441693.12	1973 Jan 10 1430:00	M-100	-	-	-	-	-	-	TEPLS	-	-	-	84	-	-
1973-Y27	2441693.12	1973 Jan 10 1500:00	M-100	-	-	-	-	-	-	MJD	-	-	-	91	-	-
1973-A01	2441694.17	1973 Jan 11 1610:00	M-100	-	TEPLS-518	ISRU-S.108	TEPLS-518	-	-	TEPLS	-	-	-	23	-	-
1973-Y30	2441695.88	1973 Jan 13 0900:00	M-100	-	-	-	-	-	-	UK	-	-	-	94	-	-
1973-Y32	2441699.88	1973 Jan 17 0900:00	M-100	-	-	-	-	-	-	UK	-	-	-	93	-	-
1973-Y33	2441700.08	1973 Jan 17 1400:00	M-100	-	-	-	-	-	-	MJD	-	-	-	93	-	-
1973-Y34	2441700.10	1973 Jan 17 1430:00	M-100	-	TEPLS-519	ISRU-S.109	TEPLS-519	-	-	TEPLS	-	-	-	86	-	-
1973-Y37	2441701.59	1973 Jan 19 0210:00	M-100	-	-	-	-	-	-	GTS-P-4	-	-	-	87	-	-
1973-Y38	2441706.74	1973 Jan 24 0540:00	M-100	-	-	-	-	-	-	GTS-P-4	-	-	-	88	-	-
1973-Y39	2441706.88	1973 Jan 24 0900:00	M-100	-	-	-	-	-	-	UK	-	-	-	94	-	-
1973-Y40	2441707.00	1973 Jan 24 1200:00	M-100	-	-	-	-	-	-	GNS72D	LP8	-	-	89	-	-
1973-Y41	2441707.10	1973 Jan 24 1430:00	M-100	-	TEPLS-521	ISRU-S.110	TEPLS-521	-	-	TEPLS	-	-	-	90	-	-
1973-Y42	2441707.12	1973 Jan 24 1500:00	M-100	-	-	-	-	-	-	GNS72D	-	-	-	83	-	-
1973-Y45	2441709.00	1973 Jan 26 1200:00	M-100	-	-	-	-	-	-	MJD	-	-	-	89	-	-
1973-Y46	2441709.04	1973 Jan 26 1300:00	M-100	-	-	-	-	-	-	GNS72D	LP11	-	-	89	-	-
1973-Y47	2441709.88	1973 Jan 27 0900:00	M-100	-	-	-	-	-	-	UK	-	-	-	88	-	-
1973-Y48	2441711.00	1973 Jan 28 1200:00	M-100	-	-	-	-	-	-	UK	-	-	-	90	-	-
1973-Y49	2441711.08	1973 Jan 28 1400:00	M-100	-	-	-	-	-	-	SHIR	LP12	-	-	87	-	-
1973-Y50	2441712.62	1973 Jan 30 0900:00	M-100	-	-	-	-	-	-	GNS72D	-	-	-	85	-	-
1973-Y61	2441715.88	1973 Jan 31 0900:00	M-100	-	-	-	-	-	-	UK	-	-	-	94	-	-
1973-Y62	2441714.04	1973 Jan 31 1400:00	M-100	-	-	-	-	-	-	GNS72D	LP13	-	-	88	-	-
1973-Y63	2441714.08	1973 Jan 31 1400:00	M-100	-	-	-	-	-	-	SHIR	LP13	-	-	88	-	-
1973-Y64	2441714.11	1973 Jan 31 1437:00	M-100	-	TEPLS-522	ISRU-S.111	TEPLS-522	-	-	TEPLS	-	-	-	85	-	-
1973-Y65	2441714.12	1973 Jan 31 1500:00	M-100	-	-	-	-	-	-	MJD	-	-	-	93	-	-
1973-Y69	2441715.33	1973 Feb 01 2000:00	M-100	-	-	-	-	-	-	GNS73A	LP1	-	-	85	-	-
1973-Y72	2441716.68	1973 Feb 03 0900:00	M-100	-	-	-	-	-	-	UK	-	-	-	88	-	-
1973-Y73	2441717.12	1973 Feb 03 1500:00	M-100	-	-	-	-	-	-	UK	-	-	-	83	-	-
1973-Y74	2441717.35	1973 Feb 03 2000:00	M-100	-	-	-	-	-	-	GNS72D	LP14	-	-	88	-	-
1973-Y75	2441718.29	1973 Feb 04 1900:00	M-100	-	-	-	-	-	-	KORO	LP2	-	-	88	-	-
1973-Y76	2441718.29	1973 Feb 04 1900:00	M-100	-	-	-	-	-	-	GNS73A	LP3	-	-	90	-	-
1973-Y77	2441720.68	1973 Feb 05 0900:00	M-100	-	-	-	-	-	-	GNS73A	10B5	-	-	85	-	-
1973-Y78	2441720.68	1973 Feb 07 0900:00	M-100	-	-	-	-	-	-	UK	-	-	-	86	-	-
1973-Y79	2441721.12	1973 Feb 07 0900:00	M-100	-	-	-	-	-	-	MJD	-	-	-	87	-	-
1973-Y81	2441721.35	1973 Feb 08 1435:00	M-100	-	TEPLS-524	ISRU-S.112	TEPLS-524	-	-	10COR	-	-	-	89	-	-
1973-Y82	2441722.11	1973 Feb 08 1435:00	M-100	-	-	-	-	-	-	TEPLS	-	-	-	90	-	-
1973-Y83	2441723.88	1973 Feb 10 0900:00	M-100	-	-	-	-	-	-	UK	-	-	-	86	-	-
1973-Y84	2441723.88	1973 Feb 10 0900:00	M-100	-	-	-	-	-	-	GTS-P-4	-	-	-	97	-	-
1973-Y85	2441727.42	1973 Feb 13 2200:00	M-100	-	-	-	-	-	-	GTS-P-4	-	-	-	89	-	-
1973-Y86	2441727.68	1973 Feb 14 0900:00	M-100	-	-	-	-	-	-	GTS-P-4	-	-	-	86	-	-
1973-Y87	2441727.68	1973 Feb 14 0900:00	M-100	-	-	-	-	-	-	UK	-	-	-	99	-	-
1973-Y88	2441728.88	1973 Feb 14 1600:00	M-100	-	-	-	-	-	-	UK	-	-	-	91	-	-
1973-Y89	2441730.88	1973 Feb 17 0900:00	M-100	-	-	-	-	-	-	MJD	-	-	-	89	-	-
1973-Y90	2441734.46	1973 Feb 20 2300:00	M-100	-	-	-	-	-	-	UK	-	-	-	97	-	-
1973-Y91	2441734.89	1973 Feb 21 0930:00	M-100	-	-	-	-	-	-	GTS-P-4	-	-	-	87	-	-
1973-Y92	2441735.08	1973 Feb 21 1400:00	M-100	-	-	-	-	-	-	MJD	-	-	-	97	-	-
1973-Y93	2441735.08	1973 Feb 22 1430:00	M-100	-	-	-	-	-	-	GTS-P-4	-	-	-	85	-	-
1973-Y94	2441736.10	1973 Feb 22 1430:00	M-100	-	-	-	-	-	-	MJD	-	-	-	85	-	-
1973-Y95	2441737.33	1973 Feb 23 1500:00	M-100	-	TEPLS-529	ISRU-S.113	TEPLS-529	-	-	SHIR	LP9	-	-	85	-	-
1973-Y96	2441737.33	1973 Feb 23 2000:00	M-100	-	-	-	-	-	-	TEPLS	-	-	-	85	-	-
1973-Y97	2441737.33	1973 Feb 23 2000:00	M-100	-	-	-	-	-	-	SHIR	LP9	-	-	84	-	-
1973-Y98	2441737.45	1973 Feb 23 2300:00	M-100	-	-	-	-	-	-	KORO	LP9	-	-	88	-	-
1973-Y99	2441737.45	1973 Feb 23 2300:00	M-100	-	-	-	-	-	-	KORO	ROBR	-	-	85	-	-
1973-Y00	2441737.45	1973 Feb 23 2300:00	M-100	-	-	-	-	-	-	KORO	ROBR	-	-	85	-	-
1973-Y01	2441737.45	1973 Feb 23 2300:00	M-100	-	-	-	-	-	-	KORO	ROBR	-	-	85	-	-
1973-Y02	2441737.45	1973 Feb 23 2300:00	M-100	-	-	-	-	-	-	KORO	ROBR	-	-	85	-	-
1973-Y03	2441737.45	1973 Feb 23 2300:00	M-100	-	-	-	-	-	-	KORO	ROBR	-	-	85	-	-
1973-Y04	2441740.39	1973 Feb 26 1900:00	M-100	-	-	-	-	-	-	UK	-	-	-	90	-	-
1973-Y05	2441740.39	1973 Feb 26 1900:00	M-100	-	-	-	-	-	-	KORO	TOSR	-	-	85	-	-
1973-Y06	2441740.39	1973 Feb 26 2000:00	M-100	-	-	-	-	-	-	KORO	TOSR	-	-	86	-	-
1973-Y07	2441740.39	1973 Feb 26 2100:00	M-100	-	-	-	-	-	-	KORO	TOSR	-	-	87	-	-
1973-Y08	2441740.39	1973 Feb 26 2100:00	M-100	-	-	-	-	-	-	KORO	TOSR	-	-	87	-	-
1973-Y09	2441740.39	1973 Feb 27 0800:00	M-100	-	-	-	-	-	-	UK	-	-	-	857	-	-
1973-Y10	2441741.12	1973 Feb 27 1500:00	M-100	-	-	-	-	-	-	UK	-	-	-	92	-	-
1973-Y11	2441741.12	1973 Feb 27 1500:00	M-100	-	-	-	-	-	-	UK	-	-	-	91	-	-
1973-Y12	2441741.12	1973 Feb 27 1500:00	M-100	-	-	-	-	-	-	UK	-	-	-	86	-	-
1973-Y13	2441741.54	1973 Feb 28 0100:00	M-100	-	-	-	-	-	-	GTS-P-4	-	-	-	89	-	-
1973-Y14	2441741.88	1973 Feb 28 0900:00	M-100	-	-	-	-	-	-	UK	-	-	-	90	-	-
1973-Y15	2441742.00	1973 Feb 28 1300:00	M-100	-	-	-	-	-	-	MJD	-	-	-	89	-	-
1973-Y16	2441742.10	1973 Feb 28 1430:00	M-100	-	TEPLS-530	ISRU-S.114	TEPLS-530	-	-	TEPLS	-	-	-	23	-	-
1973-Y17	2441743.12	1973 Feb 28 1430:00	M-100	-	TEPLS-531	ISRU-S.115	TEPLS-531	-	-	TEPLS	-	-	-	88	-	-
1973-Y18	2441743.29	1973 Mar 01 1900:00	M-100	-	-	-	-	-	-	TEPLS	-	-	-	86	-	-
1973-Y19	2441743.38	1973 Mar 01 2100:00	M-100	-	-	-	-	-	-	TOSR	10B540	-	-	86	-	-
1973-Y20	2441743.42	1973 Mar 04 1800:00	M-100	-	-	-	-	-	-	TOSR	10B540	-	-	86	-	-
1973-Y21	2441746.25	1973 Mar 04 2000:00	M-100	-	-	-	-	-	-	TOSR	10B540	-	-	89	-	-
1973-Y22	2441746.33	1973 Mar 04 2000:00	M-100	-	-	-	-	-	-	TOSR	10B540	-	-	87	-	-
1973-Y23	2441746.33	1973 Mar 06 1200:00	M-100	-	-	-	-	-	-	SHIR	LP10	-	-	88	-	-
1973-Y24	2441748.42	1973 Mar 06 2200:00	M-100	-	-	-	-	-	-	GTS-P-4	-	-	-	88	-	-
1973-Y25	2441748.88	1973 Mar 07 0900:00	M-100	-	-	-	-	-	-	UK	-	-	-	88	-	-
1973-Y26	2441749.00	1973 Mar 07 1200:00	M-100	-	-	-	-	-	-	GNS72D	LP9	-	-	89	-	-
1973-Y27	2441749.08	1973 Mar 07 1400:00	M-100	-	-	-	-	-	-	MJD	-	-	-	89	-	-
1973-Y28	2441749.10	1973 Mar 07 1430:00	M-100	-	TEPLS-534	ISRU-S.116	TEPLS-534	-	-	TEPLS	-	-	-	87	-	-
1973-Y29	2441749.38	1973 Mar 07 2100:00	M-100	-	-	-	-	-	-	KORO	LP5	-	-	87	-	-
1973-Y30	2441749.42	1973 Mar 07 2200:00	M-100	-	-	-	-	-	-	KORO	LP5	-	-	88	-	-
1973-Y31	2441750.12	1973 Mar 08 1500:00	M-100	-	-	-	-	-	-	SHIR	LP15	-	-	88	-	-
1973-Y32	2441751.04	1973 Mar 09 1300:00	M-100	-	-	-	-	-	-	SHIR	LP16	-	-	90	-	-
1973-Y33	2441751.12	1973 Mar 09 1500:00	M-100	-	-	-	-	-	-	UK	-	-	-	90	-	-
1973-Y34	2441751.12	1973 Mar 10 1400:00	M-100	-	-	-	-	-	-	SHIR	LP17	-	-	92	-	-
1973-Y35	2441752.08	1973 Mar 10 2000:00	M-100	-	-	-	-									

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Launch_Mission	FlightCode	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee_Km	Range_Km	Dest
1973-Y129	2441756.00	1973 Mar 14 1200:00	M-100						SHIR	GNS72D	LP19			86		
1973-Y130	2441756.08	1973 Mar 14 1400:00	M-100		TEPLS-545	ISRU-8.117	TEPLS-545			MLD				89		
1973-Y131	2441756.12	1973 Mar 14 1600:00	M-100							TERLS				86		
1973-Y132	2441756.12	1973 Mar 14 1500:00	M-100							TERLS				89		
1973-Y133	2441756.58	1973 Mar 15 0200:00	M-100							GRSP-4				87		
1973-Y134	2441757.00	1973 Mar 15 1200:00	M-100						SHIR	GNS72D	LP20			89		
1973-Y135	2441757.00	1973 Mar 15 1200:00	M-100						SHIR	GNS72D	LP21			89		
1973-Y136	2441761.00	1973 Mar 19 1200:00	M-100						SHIR	GNS72D	LP8			89		
1973-Y137	2441761.29	1973 Mar 19 1900:00	M-100						KURO	GNS72D	LP22			89		
1973-Y138	2441761.88	1973 Mar 20 0900:00	M-100						SHIR	GNS72D	LP8			89		
1973-Y139	2441761.88	1973 Mar 20 0900:00	M-100						KURO	GNS72D	1065			83		
1973-Y140	2441762.33	1973 Mar 20 2000:00	M-100						KURO	10LZ	1065			90		
1973-Y141	2441762.42	1973 Mar 20 2000:00	M-100							GRSP-4				86		
1973-Y142	2441762.88	1973 Mar 21 0900:00	M-100							UK				92		
1973-Y143	2441762.88	1973 Mar 21 0900:00	M-100							MLD				91		
1973-Y144	2441763.08	1973 Mar 21 1400:00	M-100		TEPLS-548	ISRU-8.118	TEPLS-548			TERLS				87		
1973-Y145	2441763.10	1973 Mar 21 1400:00	M-100							TERLS				91		
1973-Y146	2441763.12	1973 Mar 21 1500:00	M-100							TERLS				87		
1973-Y147	2441763.12	1973 Mar 21 1500:00	M-100							TERLS				92		
1973-Y148	2441763.29	1973 Mar 22 1900:00	M-100							GRSP-4				86		
1973-Y149	2441764.29	1973 Mar 22 1900:00	M-100							GRSP-4				92		
1973-Y150	2441765.68	1973 Mar 24 0900:00	M-100							GRSP-4				86		
1973-Y151	2441766.12	1973 Mar 24 1500:00	M-100							GRSP-4				86		
1973-Y152	2441766.29	1973 Mar 24 1500:00	M-100							GRSP-4				86		
1973-Y153	2441766.29	1973 Mar 24 1500:00	M-100							GRSP-4				85		
1973-Y154	2441769.54	1973 Mar 28 0100:00	M-100							GRSP-4				93		
1973-Y155	2441769.88	1973 Mar 28 0900:00	M-100							GRSP-4				85		
1973-Y156	2441770.08	1973 Mar 28 1400:00	M-100		TEPLS-549	ISRU-8.119	TEPLS-549			TERLS				91		
1973-Y157	2441770.10	1973 Mar 28 1400:00	M-100							MLD				91		
1973-Y158	2441772.12	1973 Mar 28 1500:00	M-100							TERLS				81		
1973-Y159	2441772.12	1973 Mar 28 1500:00	M-100							GRSP-4				86		
1973-Y160	2441776.54	1973 Apr 04 0100:00	M-100							GRSP-4				87		
1973-Y161	2441776.88	1973 Apr 04 0900:00	M-100							GRSP-4				85		
1973-Y162	2441777.08	1973 Apr 04 1400:00	M-100							GRSP-4				85		
1973-Y163	2441777.08	1973 Apr 04 1400:00	M-100							MLD				91		
1973-Y164	2441777.21	1973 Apr 04 1700:00	M-100							TERLS				90		
1973-Y165	2441778.00	1973 Apr 05 0200:00	M-100							GRSP-4				85		
1973-Y166	2441778.00	1973 Apr 05 0200:00	M-100							GRSP-4				84		
1973-Y167	2441779.88	1973 Apr 07 0900:00	M-100							GRSP-4				85		
1973-Y168	2441782.54	1973 Apr 11 1400:00	M-100		TEPLS-550	ISRU-8.120	TEPLS-550			GRSP-4				86		
1973-Y169	2441784.08	1973 Apr 11 1400:00	M-100							GRSP-4				86		
1973-Y170	2441784.12	1973 Apr 11 1500:00	M-100		TEPLS-551	ISRU-8.121	TEPLS-551			TERLS				84		
1973-Y171	2441786.12	1973 Apr 13 1500:00	M-100							GRSP-4				85		
1973-Y172	2441786.12	1973 Apr 13 1500:00	M-100							GRSP-4				87		
1973-Y173	2441790.65	1973 Apr 18 0300:00	M-100							GRSP-4				84		
1973-Y174	2441790.88	1973 Apr 18 0900:00	M-100							GRSP-4				87		
1973-Y175	2441791.08	1973 Apr 18 1400:00	M-100							GRSP-4				84		
1973-Y176	2441791.10	1973 Apr 18 1400:00	M-100		TEPLS-553	ISRU-8.122	TEPLS-553			GRSP-4				84		
1973-Y177	2441791.12	1973 Apr 18 1500:00	M-100			Atomic 0				GRSP-4				84		
1973-Y178	2441793.52	1973 Apr 20 1500:00	M-100							GRSP-4				83		
1973-Y179	2441793.52	1973 Apr 20 1500:00	M-100							GRSP-4				83		
1973-Y180	2441793.52	1973 Apr 21 0900:00	M-100							GRSP-4				85		
1973-Y181	2441797.88	1973 Apr 25 0200:00	M-100							GRSP-4				85		
1973-Y182	2441797.88	1973 Apr 25 0200:00	M-100							GRSP-4				88		
1973-Y183	2441798.08	1973 Apr 25 0400:00	M-100							GRSP-4				88		
1973-Y184	2441798.08	1973 Apr 25 0400:00	M-100		TEPLS-554	ISRU-8.123	TEPLS-554			GRSP-4				84		
1973-Y185	2441798.10	1973 Apr 25 1400:00	M-100			Atomic 0				GRSP-4				85		
1973-Y186	2441798.12	1973 Apr 25 1400:00	M-100			Atomic 0				GRSP-4				84		
1973-Y187	2441800.12	1973 Apr 27 1400:00	M-100							GRSP-4				93		
1973-Y188	2441804.30	1973 Apr 02 1400:00	M-100		TEPLS-555	ISRU-8.124	TEPLS-555			GRSP-4				84		
1973-Y189	2441805.12	1973 Apr 02 1500:00	M-100							GRSP-4				84		
1973-Y190	2441805.58	1973 Apr 03 0200:00	M-100							GRSP-4				86		
1973-Y191	2441811.00	1973 Apr 03 0700:00	M-100							GRSP-4				84		
1973-Y192	2441811.00	1973 Apr 03 0900:00	M-100							GRSP-4				90		
1973-Y193	2441812.10	1973 Apr 09 1400:00	M-100		TEPLS-556	ISRU-8.125	TEPLS-556			GRSP-4				88		
1973-Y194	2441812.12	1973 Apr 09 1500:00	M-100							GRSP-4				86		
1973-Y195	2441812.12	1973 Apr 09 1500:00	M-100							GRSP-4				85		
1973-Y196	2441812.58	1973 Apr 14 1400:00	M-100		TEPLS-557	ISRU-8.126	TEPLS-557			GRSP-4				86		
1973-Y197	2441817.10	1973 Apr 14 1400:00	M-100							GRSP-4				86		
1973-Y198	2441819.08	1973 Apr 16 1400:00	M-100		TEPLS-558	ISRU-8.127	TEPLS-558			GRSP-4				84		
1973-Y199	2441819.10	1973 Apr 16 1400:00	M-100							GRSP-4				84		
1973-Y200	2441819.42	1973 Apr 16 2200:00	M-100							GRSP-4				84		
1973-Y201	2441821.10	1973 Apr 18 1400:00	M-100		TEPLS-559	ISRU-8.128	TEPLS-559			GRSP-4				83		
1973-Y202	2441822.17	1973 Apr 19 1600:00	M-100							GRSP-4	LP1			87		
1973-Y203	2441824.10	1973 Apr 21 1400:00	M-100		TEPLS-562	ISRU-8.129	TEPLS-562			GRSP-4				89		
1973-Y204	2441824.10	1973 Apr 21 1400:00	M-100							GRSP-4				89		
1973-Y205	2441825.88	1973 Apr 23 0900:00	M-100							GRSP-4				84		
1973-Y206	2441826.08	1973 Apr 23 1400:00	M-100		TEPLS-566	ISRU-8.130	TEPLS-566			GRSP-4				94		
1973-Y207	2441826.10	1973 Apr 23 1400:00	M-100		TEPLS-567	ISRU-8.131	TEPLS-567			GRSP-4				90		
1973-Y208	2441828.10	1973 Apr 25 1400:00	M-100							GRSP-4	LP2			84		
1973-Y209	2441828.29	1973 Apr 25 1900:00	M-100							GRSP-4				90		
1973-Y210	2441828.29	1973 Apr 25 1900:00	M-100							GRSP-4				85		
1973-Y211	2441829.08	1973 Apr 26 1400:00	M-100							GRSP-4	LP3			85		
1973-Y212	2441832.33	1973 Apr 29 2000:00	M-100							GRSP-4				91		
1973-Y213	2441832.33	1973 Apr 30 0900:00	M-100							GRSP-4				88		
1973-Y214	2441833.08	1973 Apr 30 1400:00	M-100		TEPLS-568	ISRU-8.132	TEPLS-568			GRSP-4				86		
1973-Y215	2441833.10	1973 Apr 30 1400:00	M-100							GRSP-4				88		
1973-Y216	2441835.33	1973 Jun 01 2000:00	M-100							GRSP-4				87		
1973-Y217	2441835.33	1973 Jun 01 2000:00	M-100							GRSP-4				86		
1973-Y218	2441838.33	1973 Jun 04 2000:00	M-100							GRSP-4	LP3			86		
1973-Y219	2441839.79	1973 Jun 06 0700:00	M-100							GRSP-4				86		
1973-Y220	2441839.88	1973 Jun 06 0900:00	M-100							GRSP-4				89		
1973-Y221	2441840.08	1973 Jun 06 1400:00	M-100							GRSP-4				87		
1973-Y222	2441840.10	1973 Jun 06 1400:00	M-100		TEPLS-570	ISRU-8.133	TEPLS-570			GRSP-4				88		
1973-Y223	2441840.10	1973 Jun 06 1400:00	M-100							GRSP-4	LP3			86		
1973-Y224	2441840.33															

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Launch_Mission	FlightCode	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee_Km	Range_Km	Dest
1973-Y239	2441843.08	1973 Jun 09 14:00:00	M-100	-	-	-	-	-	-	MJD	-	-	-	90	-	-
1973-Y240	2441845.69	1973 Jun 12 04:30:00	M-100	-	Diurnal Variation	-	-	-	-	GRSP-4	-	-	-	87	-	-
1973-Y241	2441846.75	1973 Jun 12 06:00:00	M-100	-	Diurnal Variation	-	-	-	-	GRSP-4	-	-	-	87	-	-
1973-Y242	2441846.94	1973 Jun 12 10:40:00	M-100	-	Diurnal Variation	-	-	-	-	GRSP-4	-	-	-	85	-	-
1973-Y243	2441846.03	1973 Jun 12 12:50:00	M-100	-	Diurnal Variation	-	-	-	-	GRSP-4	-	-	-	85	-	-
1973-Y244	2441846.28	1973 Jun 12 18:50:00	M-100	-	Diurnal Variation	-	-	-	-	GRSP-4	-	-	-	87	-	-
1973-Y245	2441846.46	1973 Jun 12 23:00:00	M-100	-	Diurnal Variation	-	-	-	-	GRSP-4	-	-	-	86	-	-
1973-Y249	2441847.08	1973 Jun 13 14:00:00	M-100	-	-	-	-	-	-	TERLS	-	-	-	87	-	-
1973-Y251	2441847.12	1973 Jun 13 15:00:00	M-100	-	-	-	-	-	-	TERLS	-	-	-	82	-	-
1973-Y252	2441848.10	1973 Jun 14 14:00:00	M-100	-	TERLS-573	-	ISRU-S.134	-	-	TERLS	-	-	-	93	-	-
1973-Y254	2441848.48	1973 Jun 20 02:00:00	M-100	-	-	-	-	-	-	GRSP-4	-	-	-	85	-	-
1973-Y255	2441853.58	1973 Jun 20 09:00:00	M-100	-	-	-	-	-	-	UK	-	-	-	89	-	-
1973-Y256	2441853.88	1973 Jun 20 14:00:00	M-100	-	-	-	-	-	-	MJD	-	-	-	92	-	-
1973-Y257	2441854.08	1973 Jun 20 14:00:00	M-100	-	TERLS-574	-	ISRU-S.135	-	-	TERLS	-	-	-	88	-	-
1973-Y258	2441854.10	1973 Jun 20 14:00:00	M-100	-	-	-	-	-	-	TERLS	-	-	-	89	-	-
1973-Y263	2441857.58	1973 Jun 24 02:00:00	M-100	-	-	-	-	-	-	MJD	-	-	-	84	-	-
1973-Y264	2441860.54	1973 Jun 27 01:00:00	M-100	-	-	-	-	-	-	GRSP-4	-	-	-	87	-	-
1973-Y265	2441861.08	1973 Jun 27 14:00:00	M-100	-	TERLS-577	-	ISRU-S.136	-	-	TERLS	-	-	-	89	-	-
1973-Y266	2441861.29	1973 Jun 27 14:00:00	M-100	-	-	-	-	-	-	GRSP-4	-	-	-	88	-	-
1973-Y267	2441861.29	1973 Jun 30 20:00:00	M-100	-	-	-	-	-	-	GRSP-4	-	-	-	85	-	-
1973-Y269	2441864.33	1973 Jun 30 20:00:00	M-100	-	-	-	-	-	-	GRSP-4	-	-	-	84	-	-
1973-Y270	2441865.12	1973 Jul 01 15:00:00	M-100	-	-	-	-	-	-	GRSP-4	-	-	-	82	-	-
1973-Y271	2441866.29	1973 Jul 02 19:00:00	M-100	-	-	-	-	-	-	GRSP-4	-	-	-	86	-	-
1973-Y272	2441866.52	1973 Jul 03 02:50:00	M-100	-	-	-	-	-	-	GRSP-4	-	-	-	89	-	-
1973-Y274	2441866.79	1973 Jul 03 07:00:00	M-100	-	-	-	-	-	-	GRSP-4	-	-	-	82	-	-
1973-Y275	2441867.68	1973 Jul 04 09:10:00	M-100	-	-	-	-	-	-	UK	-	-	-	92	-	-
1973-Y276	2441868.10	1973 Jul 04 14:30:00	M-100	-	TERLS-579	-	ISRU-S.137	-	-	TERLS	-	-	-	84	-	-
1973-Y277	2441868.29	1973 Jul 04 19:00:00	M-100	-	-	-	-	-	-	GRSP-4	-	-	-	85	-	-
1973-Y278	2441869.96	1973 Jul 06 11:00:00	M-100	-	-	-	-	-	-	GRSP-4	-	-	-	92	-	-
1973-Y280	2441871.04	1973 Jul 07 13:00:00	M-100	-	-	-	-	-	-	GRSP-4	-	-	-	90	-	-
1973-Y281	2441874.88	1973 Jul 11 09:00:00	M-100	-	-	-	-	-	-	UK	-	-	-	84	-	-
1973-Y283	2441875.08	1973 Jul 11 14:00:00	M-100	-	TERLS-580	-	ISRU-S.138	-	-	TERLS	-	-	-	90	-	-
1973-Y284	2441876.10	1973 Jul 11 14:30:00	M-100	-	-	-	-	-	-	GRSP-4	-	-	-	89	-	-
1973-Y286	2441876.17	1973 Jul 14 16:00:00	M-100	-	-	-	-	-	-	GRSP-4	-	-	-	89	-	-
1973-Y289	2441879.17	1973 Jul 15 16:00:00	M-100	-	-	-	-	-	-	GRSP-4	-	-	-	85	-	-
1973-Y291	2441881.12	1973 Jul 17 16:00:00	M-100	-	-	-	-	-	-	GRSP-4	-	-	-	89	-	-
1973-Y300	2441881.88	1973 Jul 18 09:00:00	M-100	-	-	-	-	-	-	UK	-	-	-	87	-	-
1973-Y301	2441882.08	1973 Jul 18 14:00:00	M-100	-	TERLS-583	-	ISRU-S.139	-	-	TERLS	-	-	-	87	-	-
1973-Y302	2441882.21	1973 Jul 18 14:30:00	M-100	-	-	-	-	-	-	GRSP-4	-	-	-	88	-	-
1973-Y303	2441882.21	1973 Jul 18 17:00:00	M-100	-	-	-	-	-	-	GRSP-4	-	-	-	97	-	-
1973-Y304	2441883.00	1973 Jul 19 12:00:00	M-100	-	-	-	-	-	-	GRSP-4	-	-	-	91	-	-
1973-Y307	2441885.08	1973 Jul 21 14:00:00	M-100	-	-	-	-	-	-	MJD	-	-	-	87	-	-
1973-Y309	2441889.08	1973 Jul 25 14:00:00	M-100	-	TERLS-584	-	ISRU-S.140	-	-	TERLS	-	-	-	87	-	-
1973-Y310	2441890.10	1973 Jul 25 14:30:00	M-100	-	-	-	-	-	-	GRSP-4	-	-	-	89	-	-
1973-Y311	2441892.08	1973 Jul 28 09:00:00	M-100	-	-	-	-	-	-	GRSP-4	-	-	-	85	-	-
1973-Y314	2441895.68	1973 Aug 01 02:30:00	M-100	-	-	-	-	-	-	MJD	-	-	-	95	-	-
1973-Y315	2441896.68	1973 Aug 01 09:00:00	M-100	-	-	-	-	-	-	GRSP-4	-	-	-	86	-	-
1973-Y316	2441896.68	1973 Aug 01 14:30:00	M-100	-	TERLS-587	-	ISRU-S.141	-	-	TERLS	-	-	-	88	-	-
1973-Y317	2441896.68	1973 Aug 08 09:00:00	M-100	-	-	-	-	-	-	GRSP-4	-	-	-	91	-	-
1973-Y323	2441902.88	1973 Aug 08 14:00:00	M-100	-	-	-	-	-	-	GRSP-4	-	-	-	87	-	-
1973-Y324	2441902.88	1973 Aug 08 19:00:00	M-100	-	-	-	-	-	-	GRSP-4	-	-	-	88	-	-
1973-Y325	2441903.00	1973 Aug 09 14:30:00	M-100	-	TERLS-588	-	ISRU-S.142	-	-	TERLS	-	-	-	87	-	-
1973-Y329	2441903.58	1973 Aug 09 02:00:00	M-100	-	-	-	-	-	-	GRSP-4	-	-	-	88	-	-
1973-Y330	2441905.71	1973 Aug 11 05:00:00	M-100	-	-	-	-	-	-	GRSP-4	-	-	-	86	-	-
1973-Y332	2441909.68	1973 Aug 15 09:00:00	M-100	-	-	-	-	-	-	GRSP-4	-	-	-	87	-	-
1973-Y333	2441910.08	1973 Aug 15 14:00:00	M-100	-	-	-	-	-	-	GRSP-4	-	-	-	87	-	-
1973-Y337	2441911.10	1973 Aug 16 14:30:00	M-100	-	TERLS-589	-	ISRU-S.143	-	-	TERLS	-	-	-	86	-	-
1973-Y338	2441913.67	1973 Aug 19 04:00:00	M-100	-	-	-	-	-	-	GRSP-4	-	-	-	84	-	-
1973-Y339	2441915.62	1973 Aug 21 03:00:00	M-100	-	-	-	-	-	-	GRSP-4	-	-	-	92	-	-
1973-Y340	2441916.88	1973 Aug 22 09:00:00	M-100	-	-	-	-	-	-	GRSP-4	-	-	-	90	-	-
1973-Y341	2441917.08	1973 Aug 22 14:00:00	M-100	-	-	-	-	-	-	GRSP-4	-	-	-	88	-	-
1973-Y342	2441917.10	1973 Aug 23 03:00:00	M-100	-	TERLS-590	-	ISRU-S.144	-	-	TERLS	-	-	-	89	-	-
1973-Y343	2441917.10	1973 Aug 23 14:30:00	M-100	-	-	-	-	-	-	GRSP-4	-	-	-	88	-	-
1973-Y344	2441918.88	1973 Aug 26 09:00:00	M-100	-	-	-	-	-	-	GRSP-4	-	-	-	90	-	-
1973-Y346	2441921.46	1973 Aug 26 23:00:00	M-100	-	-	-	-	-	-	GRSP-4	-	-	-	85	-	-
1973-Y347	2441921.52	1973 Aug 27 03:30:00	M-100	-	-	-	-	-	-	GRSP-4	-	-	-	84	-	-
1973-Y348	2441922.71	1973 Aug 28 05:00:00	M-100	-	-	-	-	-	-	GRSP-4	-	-	-	83	-	-
1973-Y349	2441923.54	1973 Aug 29 01:00:00	M-100	-	-	-	-	-	-	GRSP-4	-	-	-	87	-	-
1973-Y350	2441923.58	1973 Aug 29 02:00:00	M-100	-	-	-	-	-	-	GRSP-4	-	-	-	81	-	-
1973-Y351	2441923.88	1973 Aug 29 09:00:00	M-100	-	-	-	-	-	-	GRSP-4	-	-	-	89	-	-
1973-Y353	2441924.08	1973 Aug 29 14:00:00	M-100	-	-	-	-	-	-	GRSP-4	-	-	-	93	-	-
1973-Y354	2441924.10	1973 Aug 29 14:30:00	M-100	-	TERLS-593	-	ISRU-S.145	-	-	TERLS	-	-	-	87	-	-
1973-Y356	2441924.54	1973 Aug 30 01:00:00	M-100	-	-	-	-	-	-	GRSP-4	-	-	-	86	-	-
1973-Y357	2441925.46	1973 Aug 30 23:00:00	M-100	-	-	-	-	-	-	GRSP-4	-	-	-	86	-	-
1973-Y358	2441925.58	1973 Aug 31 02:00:00	M-100	-	-	-	-	-	-	GRSP-4	-	-	-	89	-	-
1973-Y359	2441925.73	1973 Aug 31 05:30:00	M-100	-	-	-	-	-	-	GRSP-4	-	-	-	90	-	-
1973-Y360	2441925.88	1973 Aug 31 09:00:00	M-100	-	-	-	-	-	-	GRSP-4	-	-	-	89	-	-
1973-Y364	2441926.42	1973 Sep 01 09:00:00	M-100	-	-	-	-	-	-	GRSP-4	-	-	-	87	-	-
1973-Y365	2441926.42	1973 Sep 01 22:00:00	M-100	-	-	-	-	-	-	GRSP-4	-	-	-	84	-	-
1973-Y366	2441927.50	1973 Sep 02 00:00:00	M-100	-	-	-	-	-	-	GRSP-4	-	-	-	89	-	-
1973-Y367	2441929.42	1973 Sep 03 22:00:00	M-100	-	-	-	-	-	-	GRSP-4	-	-	-	87	-	-
1973-Y368	2441929.46	1973 Sep 03 23:00:00	M-100	-	-	-	-	-	-	GRSP-4	-	-	-	84	-	-
1973-Y369	2441930.57	1973 Sep 05 01:40:00	M-100	-	-	-	-	-	-	GRSP-4	-	-	-	90	-	-
1973-Y370	2441930.89	1973 Sep 05 09:20:00	M-100	-	-	-	-	-	-	GRSP-4	-	-	-	89	-	-
1973-Y371	2441931.08	1973 Sep 05 14:00:00	M-100	-	-	-	-	-	-	MJD	-	-	-	90	-	-

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Launch_Mission	FlightCode	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee_Km	Range_Km	Dest
1973-Y372	2441931.10	1973 Sep 05 1430:00	M-100		TEHLS-594	ISR0-5.146	TEHLS-594			TEHLS				86		
1973-Y375	2441935.42	1973 Sep 09 2200:00	M-100						KURO	GNS73D	LP8			87		
1973-Y376	2441935.46	1973 Sep 09 2300:00	M-100						KURO	GNS73D	LP8			83		
1973-Y377	2441937.08	1973 Sep 11 1400:00	M-100						KURO	GNS73D	LP16			82		
1973-Y378	2441937.90	1973 Sep 12 0940:00	M-100							UK				90		
1973-Y379	2441938.08	1973 Sep 12 1400:00	M-100							MJD				89		
1973-Y380	2441938.10	1973 Sep 12 1430:00	M-100				TEHLS-595			TEHLS				84		
1973-Y381	2441939.54	1973 Sep 14 0100:00	M-100							G73P-4				89		
1973-Y382	2441940.33	1973 Sep 14 2000:00	M-100		Pre CHNO				KURO	CSG	HER			87		
1973-Y383	2441944.21	1973 Sep 18 1700:00	M-100		Pre CHNO				KURO	CSG	HER			84		
1973-Y384	2441944.54	1973 Sep 19 0100:00	M-100							G73P-4				91		
1973-Y385	2441944.68	1973 Sep 19 0900:00	M-100							UK				88		
1973-Y386	2441945.08	1973 Sep 19 1400:00	M-100							MJD				90		
1973-Y387	2441945.10	1973 Sep 19 1430:00	M-100				TEHLS-596			TEHLS				88		
1973-Y388	2441946.11	1973 Sep 20 1440	M-100		CHNO				KURO	CSG	HER			95		
1973-Y389	2441947.14	1973 Sep 21 0420	M-100		CHNO				KURO	CSG	HER			77		
1973-Y390	2441947.67	1973 Sep 22 0410	M-100		CHNO				KURO	CSG	HER			80		
1973-Y391	2441950.22	1973 Sep 24 1720	M-100		CHNO				KURO	CSG	HER			68		
1973-Y392	2441950.52	1973 Sep 25 0030	M-100		CHNO				KURO	CSG	HER			79		
1973-Y393	2441951.08	1973 Sep 25 1400:00	M-100							MJD				96		
1973-Y394	2441951.26	1973 Sep 25 1810	M-100		CHNO				KURO	CSG	HER			77		
1973-Y395	2441951.51	1973 Sep 26 0020	M-100		CHNO					UK				91		
1973-Y396	2441951.88	1973 Sep 26 0900:00	M-100		CHNO				KURO	CSG	HER			80		
1973-Y397	2441952.09	1973 Sep 26 1410	M-100		CHNO				KURO	CSG	HER			80		
1973-Y398	2441953.09	1973 Sep 27 1410	M-100		CHNO				KURO	CSG	HER			84		
1973-Y399	2441953.10	1973 Sep 27 1430:00	M-100		TEHLS-597		TEHLS-597			TEHLS				84		
1973-Y400	2441953.61	1973 Sep 29 0240	M-100		CHNO				KURO	CSG	HER			80		
1973-Y401	2441954.62	1973 Sep 29 0300:00	M-100		CHNO					CSG	HER			78		
1973-Y402	2441956.65	1973 Oct 1 0340	M-100							G73P-4				80		
1973-Y403	2441956.66	1973 Oct 03 0100:00	M-100							UK				87		
1973-Y404	2441956.94	1973 Oct 03 1316:00	M-100							TEHLS				86		
1973-Y405	2441959.10	1973 Oct 06 0900:00	M-100		TEHLS-598		TEHLS-598			TEHLS				91		
1973-Y406	2441959.12	1973 Oct 06 1500:00	M-100							MJD				82		
1973-Y407	2441961.88	1973 Oct 08 0900:00	M-100						VOKV	GNS73E	LP1			857		
1973-Y408	2441963.88	1973 Oct 10 0100:00	M-100						VOKV	GNS73E	LP2			89		
1973-Y409	2441966.54	1973 Oct 10 0900:00	M-100							G73P-4				91		
1973-Y410	2441966.10	1973 Oct 10 1430:00	M-100		TEHLS-599		TEHLS-599			TEHLS				86		
1973-Y411	2441966.12	1973 Oct 10 1500:00	M-100							UK				89		
1973-Y412	2441966.28	1973 Oct 14 0900:00	M-100							MJD				91		
1973-Y413	2441969.88	1973 Oct 14 1500:00	M-100						VOKV	GNS73E	LP3			86		
1973-Y414	2441971.88	1973 Oct 19 0900:00	M-100						VOKV	ANTIM				88		
1973-Y415	2441972.88	1973 Oct 17 0800:00	M-100						VOKV	ANTIM				88		
1973-Y416	2441973.10	1973 Oct 17 0900:00	M-100		TEHLS-600		TEHLS-600			TEHLS				85		
1973-Y417	2441973.68	1973 Oct 18 0900:00	M-100							MJD				91		
1973-Y418	2441973.82	1973 Oct 18 1500:00	M-100						VOKV	GNS73E	LP5			87		
1973-Y419	2441973.94	1973 Oct 23 1900:00	M-100							UK				91		
1973-Y420	2441980.10	1973 Oct 24 1430:00	M-100		TEHLS-601		TEHLS-601			TEHLS				91		
1973-Y421	2441980.12	1973 Oct 24 1500:00	M-100							MJD				88		
1973-Y422	2441986.00	1973 Oct 30 1200:00	M-100						VOKV	GNS73E	LP6			88		
1973-Y423	2441987.00	1973 Oct 31 1430:00	M-100		TEHLS-602		TEHLS-602			TEHLS				91		
1973-Y424	2441987.10	1973 Oct 31 1500:00	M-100							UK				86		
1973-Y425	2441987.12	1973 Oct 31 2300:00	M-100							MJD				93		
1973-Y426	2441987.46	1973 Nov 02 0100:00	M-100							MJD				90		
1973-Y427	2441987.84	1973 Nov 02 1000:00	M-100							TEHLS				87		
1973-Y428	2441988.92	1973 Nov 06 1440:00	M-100							TEHLS				82		
1973-Y429	2441993.11	1973 Nov 06 1500:00	M-100							UK				88		
1973-Y430	2441994.08	1973 Nov 07 1400:00	M-100						KURO	GNS73D	LP19			92		
1973-Y431	2441994.10	1973 Nov 07 1430:00	M-100				TEHLS-603			TEHLS				92		
1973-Y432	2441998.10	1973 Nov 11 1200:00	M-100						KURO	GNS73D	LP20			87		
1973-Y433	2441998.88	1973 Nov 13 0900:00	M-100						KURO	GNS73D	LP8			88		
1973-Y434	2442000.88	1973 Nov 14 0900:00	M-100						VOKV	GNS73E	LP6			89		
1973-Y435	2442001.10	1973 Nov 14 1430:00	M-100				TEHLS-604			TEHLS				85		
1973-Y436	2442001.12	1973 Nov 14 1500:00	M-100							MJD				90		
1973-Y437	2442002.88	1973 Nov 17 1430:00	M-100						VOKV	GNS73E	LP9			87		
1973-Y438	2442004.10	1973 Nov 17 1500:00	M-100				TEHLS-605			TEHLS				87		
1973-Y439	2442004.92	1973 Nov 18 1000:00	M-100							UK				857		
1973-Y440	2442007.88	1973 Nov 21 0900:00	M-100						VOKV	GNS73E	LP10			87		
1973-Y441	2442008.12	1973 Nov 21 1500:00	M-100							UK				89		
1973-Y442	2442008.14	1973 Nov 21 1515:00	M-100				TEHLS-612			TEHLS				857		
1973-Y443	2442011.10	1973 Nov 24 0910:00	M-100						VOKV	GNS73E	LP5			88		
1973-Y444	2442012.10	1973 Nov 25 1430:00	M-100				TEHLS-614			TEHLS				90		
1973-Y445	2442013.88	1973 Nov 27 0900:00	M-100						VOKV	ANTIM				90		
1973-Y446	2442014.30	1973 Nov 27 1910:00	M-100						VOKV	GNS73E	LP11			87		
1973-Y447	2442015.11	1973 Nov 28 1438:00	M-100				TEHLS-615			TEHLS				90		
1973-Y448	2442015.12	1973 Nov 28 1500:00	M-100							MJD				86		
1973-Y449	2442015.43	1973 Nov 28 2215:00	M-100							MJD				89		
1973-Y450	2442018.10	1973 Dec 01 1430:00	M-100				TEHLS-616			TEHLS				84		
1973-Y451	2442020.56	1973 Dec 04 0120:00	M-100							UK				88		
1973-Y452	2442020.88	1973 Dec 05 1430:00	M-100						VOKV	GNS73E	LP12			87		
1973-Y453	2442022.12	1973 Dec 05 1500:00	M-100				TEHLS-617			TEHLS				84		
1973-Y454	2442022.88	1973 Dec 06 0900:00	M-100						VOKV	GNS73E	LP13			86		

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Launch_Mission	FlightCode	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee_Km	Range_Km	Dest
1973-Y494	2442023.25	1973 Dec 06 1800:00	M-100	-	-	-	-	-	-	GRSP-4	-	-	-	91	-	-
1973-Y495	2442025.88	1973 Dec 09 0900:00	M-100	-	-	-	-	-	VUKV	GRSP-4	LP14	-	-	86	-	-
1973-Y496	2442027.56	1973 Dec 11 0120:00	M-100	-	-	-	-	-	-	UK	-	-	-	89	-	-
1973-Y497	2442028.26	1973 Dec 11 1820:00	M-100	-	-	-	-	-	SHIR	GRSP-4	LP1	-	-	91	-	-
1973-Y498	2442029.01	1973 Dec 12 1220:00	M-100	-	-	-	TEMLS-618	-	-	GRSP-4	LP1	-	-	87	-	-
1973-Y499	2442029.10	1973 Dec 12 1430:00	M-100	-	-	-	-	-	-	TERLS	-	-	-	85	-	-
1973-Y500	2442029.12	1973 Dec 12 1500:00	M-100	-	-	-	-	-	-	MJD	-	-	-	88	-	-
1973-Y501	2442032.10	1973 Dec 15 1430:00	M-100	-	-	-	TEMLS-619	-	-	GRSP-4	LP2	-	-	87	-	-
1973-Y502	2442034.04	1973 Dec 17 1300:00	M-100	-	-	-	-	-	SHIR	GRSP-4	LP2	-	-	82	-	-
1973-Y503	2442034.56	1973 Dec 18 0120:00	M-100	-	-	-	-	-	-	UK	-	-	-	90	-	-
1973-Y504	2442035.52	1973 Dec 19 1000:00	M-100	-	-	-	-	-	SHIR	GRSP-4	LP3	-	-	85?	-	-
1973-Y505	2442036.04	1973 Dec 19 1300:00	M-100	-	-	-	TEMLS-620	-	-	GRSP-4	LP3	-	-	82	-	-
1973-Y506	2442036.10	1973 Dec 19 1430:00	M-100	-	-	-	-	-	SHIR	GRSP-4	LP3	-	-	83	-	-
1973-Y507	2442036.12	1973 Dec 19 1500:00	M-100	-	-	-	-	-	SHIR	GRSP-4	LP4	-	-	91	-	-
1973-Y508	2442040.04	1973 Dec 23 1300:00	M-100	-	-	-	-	-	SHIR	GRSP-4	LP5	-	-	91	-	-
1973-Y509	2442041.04	1973 Dec 24 1300:00	M-100	-	-	-	-	-	SHIR	GRSP-4	LP6	-	-	88	-	-
1973-Y510	2442041.56	1973 Dec 25 0130:00	M-100	-	-	-	-	-	SHIR	GRSP-4	LP6	-	-	89	-	-
1973-Y511	2442042.42	1973 Dec 25 1300:00	M-100	-	-	-	-	-	-	GRSP-4	-	-	-	85	-	-
1973-Y512	2442042.42	1973 Dec 25 2200:00	M-100	-	-	-	-	-	-	TERLS	-	-	-	86	-	-
1973-Y513	2442043.10	1973 Dec 26 1430:00	M-100	-	-	-	TEMLS-621	-	-	GRSP-4	-	-	-	92	-	-
1973-Y514	2442043.12	1973 Dec 26 1500:00	M-100	-	-	-	-	-	-	MJD	-	-	-	92	-	-
1973-Y515	2442043.12	1973 Dec 26 1600:00	M-100	-	-	-	-	-	-	UK	-	-	-	90	-	-
1973-Y516	2442049.88	1974 Jan 02 0900:00	M-100	-	-	-	TEMLS-622	-	-	MJD	-	-	-	92	-	-
1973-Y517	2442050.08	1974 Jan 02 1400:00	M-100	-	-	-	-	-	-	TERLS	-	-	-	85	-	-
1973-Y518	2442050.10	1974 Jan 02 1430:00	M-100	-	-	-	-	-	-	GRSP-4	-	-	-	88	-	-
1973-Y519	2442050.42	1974 Jan 02 2200:00	M-100	-	-	-	-	-	-	GRSP-4	-	-	-	90	-	-
1973-Y520	2442052.52	1974 Jan 05 1000:00	M-100	-	-	-	-	-	-	UK	-	-	-	90	-	-
1973-Y521	2442056.42	1974 Jan 08 2200:00	M-100	-	-	-	-	-	-	GRSP-4	-	-	-	93	-	-
1973-Y522	2442056.88	1974 Jan 09 0900:00	M-100	-	-	-	TEMLS-623	-	-	UK	-	-	-	91	-	-
1973-Y523	2442057.08	1974 Jan 09 1400:00	M-100	-	-	-	-	-	-	MJD	-	-	-	86	-	-
1973-Y524	2442057.10	1974 Jan 09 1430:00	M-100	-	-	-	-	-	-	TERLS	-	-	-	86	-	-
1973-Y525	2442059.68	1974 Jan 12 0900:00	M-100	-	-	-	-	-	-	GRSP-4	-	-	-	85	-	-
1973-Y526	2442063.42	1974 Jan 15 2200:00	M-100	-	-	-	TEMLS-624	-	-	UK	-	-	-	86	-	-
1973-Y527	2442063.68	1974 Jan 16 0900:00	M-100	-	-	-	-	-	-	TERLS	-	-	-	86	-	-
1973-Y528	2442064.26	1974 Jan 16 1500:00	M-100	-	-	-	-	-	-	MJD	-	-	-	86	-	-
1973-Y529	2442064.26	1974 Jan 16 1600:00	M-100	-	-	-	-	-	-	GRSP-4	-	-	-	86	-	-
1973-Y530	2442065.88	1974 Jan 18 0900:00	M-100	-	-	-	-	-	-	UK	-	-	-	82	-	-
1973-Y531	2442066.88	1974 Jan 18 0900:00	M-100	-	-	-	-	-	-	UK	-	-	-	91	-	-
1973-Y532	2442066.88	1974 Jan 18 0900:00	M-100	-	-	-	-	-	-	GRSP-4	-	-	-	88	-	-
1973-Y533	2442070.88	1974 Jan 21 0900:00	M-100	-	-	-	TEMLS-625	-	-	GRSP-4	-	-	-	88	-	-
1973-Y534	2442070.88	1974 Jan 23 0900:00	M-100	-	-	-	-	-	-	UK	-	-	-	92	-	-
1973-Y535	2442071.10	1974 Jan 23 0900:00	M-100	-	-	-	-	-	-	TERLS	-	-	-	87	-	-
1973-Y536	2442071.10	1974 Jan 23 1430:00	M-100	-	-	-	-	-	-	MJD	-	-	-	97	-	-
1973-Y537	2442071.12	1974 Jan 23 1430:00	M-100	-	-	-	-	-	-	UK	-	-	-	86	-	-
1973-Y538	2442074.08	1974 Jan 26 1400:00	M-100	-	-	-	-	-	-	GRSP-4	-	-	-	86	-	-
1973-Y539	2442074.08	1974 Jan 26 1400:00	M-100	-	-	-	-	-	SHIR	GRSP-4	LP7	-	-	94	-	-
1973-Y540	2442075.92	1974 Jan 28 1400:00	M-100	-	-	-	-	-	SHOK	GRSP-4	LP1	-	-	95	-	-
1973-Y541	2442075.92	1974 Jan 28 1700:00	M-100	-	-	-	-	-	SHOK	GRSP-4	LP1	-	-	95	-	-
1973-Y542	2442077.68	1974 Jan 29 1700:00	M-100	-	-	-	-	-	SHIR	GRSP-4	LP8	-	-	81	-	-
1973-Y543	2442077.68	1974 Jan 29 1700:00	M-100	-	-	-	-	-	-	GRSP-4	-	-	-	91	-	-
1973-Y544	2442077.68	1974 Jan 30 0900:00	M-100	-	-	-	-	-	-	UK	-	-	-	86	-	-
1973-Y545	2442077.68	1974 Jan 30 0900:00	M-100	-	-	-	-	-	-	TERLS	-	-	-	85	-	-
1973-Y546	2442078.10	1974 Jan 30 1430:00	M-100	-	-	-	TEMLS-626	-	-	TERLS	-	-	-	86	-	-
1973-Y547	2442078.10	1974 Jan 30 1500:00	M-100	-	-	-	-	-	-	MJD	-	-	-	86	-	-
1973-Y548	2442078.68	1974 Feb 01 0900:00	M-100	-	-	-	-	-	-	UK	-	-	-	86	-	-
1973-Y549	2442079.68	1974 Feb 01 1100:00	M-100	-	-	-	-	-	SHOK	GRSP-4	LP2	-	-	86	-	-
1973-Y550	2442082.21	1974 Feb 03 1700:00	M-100	-	-	-	-	-	SHIR	GRSP-4	LP9	-	-	86	-	-
1973-Y551	2442084.40	1974 Feb 05 2200:00	M-100	-	-	-	-	-	-	GRSP-4	-	-	-	86	-	-
1973-Y552	2442084.40	1974 Feb 06 0900:00	M-100	-	-	-	TEMLS-627	-	-	GRSP-4	-	-	-	89	-	-
1973-Y553	2442084.88	1974 Feb 06 0900:00	M-100	-	-	-	-	-	-	TERLS	-	-	-	84	-	-
1973-Y554	2442085.10	1974 Feb 06 1430:00	M-100	-	-	-	-	-	-	GRSP-4	-	-	-	87	-	-
1973-Y555	2442085.25	1974 Feb 06 1430:00	M-100	-	-	-	-	-	-	GRSP-4	LP10	-	-	89	-	-
1973-Y556	2442086.88	1974 Feb 07 0900:00	M-100	-	-	-	-	-	SHOK	GRSP-4	LP9	-	-	89	-	-
1973-Y557	2442086.88	1974 Feb 08 0900:00	M-100	-	-	-	-	-	-	GRSP-4	-	-	-	88	-	-
1973-Y558	2442086.88	1974 Feb 08 0900:00	M-100	-	-	-	-	-	SHIR	GRSP-4	LP10	-	-	87	-	-
1973-Y559	2442088.29	1974 Feb 09 0900:00	M-100	-	-	-	-	-	SHOK	GRSP-4	LP9	-	-	89	-	-
1973-Y560	2442088.29	1974 Feb 09 0900:00	M-100	-	-	-	-	-	-	GRSP-4	-	-	-	88	-	-
1973-Y561	2442087.88	1974 Feb 09 0900:00	M-100	-	-	-	-	-	-	GRSP-4	LP10	-	-	90	-	-
1973-Y562	2442088.29	1974 Feb 09 1800:00	M-100	-	-	-	-	-	SHOK	GRSP-4	LP4	-	-	90	-	-
1973-Y563	2442088.88	1974 Feb 09 1800:00	M-100	-	-	-	-	-	SHOK	GRSP-4	LP5	-	-	90	-	-
1973-Y564	2442089.12	1974 Feb 11 1500:00	M-100	-	-	-	-	-	SHIR	GRSP-4	LP11	-	-	86	-	-
1973-Y565	2442089.12	1974 Feb 11 1500:00	M-100	-	-	-	-	-	SHOK	GRSP-4	LP6	-	-	91	-	-
1973-Y566	2442090.19	1974 Feb 11 1630:00	M-100	-	-	-	-	-	-	GRSP-4	-	-	-	85	-	-
1973-Y567	2442090.19	1974 Feb 11 1630:00	M-100	-	-	-	-	-	SHIR	GRSP-4	LP12	-	-	85	-	-
1973-Y568	2442091.88	1974 Feb 13 0900:00	M-100	-	-	-	-	-	-	GRSP-4	-	-	-	88	-	-
1973-Y569	2442092.08	1974 Feb 13 1400:00	M-100	-	-	-	-	-	-	MJD	-	-	-	86	-	-
1973-Y570	2442092.08	1974 Feb 13 1400:00	M-100	-	-	-	-	-	SHOK	GRSP-4	LP7	-	-	90	-	-
1973-Y571	2442092.10	1974 Feb 13 1430:00	M-100	-	-	-	TEMLS-633	-	-	TERLS	-	-	-	85	-	-
1973-Y572	2442092.29	1974 Feb 13 1900:00	M-100	-	-	-	-	-	SHIR	GRSP-4	LP13	-	-	87	-	-
1973-Y573	2442093.29	1974 Feb 14 1900:00	M-100	-	-	-	-	-	SHIR	GRSP-4	LP14	-	-	89	-	-
1973-Y574	2442093.29	1974 Feb 14 1900:00	M-100	-	-	-	-	-	-	GRSP-4	-	-	-	91	-	-
1973-Y575	2442094.00	1974 Feb 15 1200:00	M-100	-	-	-	-	-	-	GRSP-4	-	-	-	85	-	-
1973-Y576	2442094.25	1974 Feb 15 1800:00	M-100	-	-	-	-	-	-	GRSP-4	LP1	-	-	79	-	-
1973-Y577	2442096.29	1974 Feb 17 1900:00	M-100	-	-	-	-	-	-	GRSP-4	-	-	-	81	-	-
1973-Y578	2442097.12	1974 Feb 18 1500:00	M-100	-	-	-	-	-	SHOK	GRSP-4	LP7	-	-	90	-	-
1973-Y579	2442098.42	1974 Feb 18 1500:00	M-100	-	-	-	-	-	SHOK	GRSP-4	LP2	-	-	95	-	-
1973-Y580	2442098.88	1974 Feb 19 2200:00	M-100	-	-	-	-	-	SHOK	GRSP-4	LP2	-	-	93	-	-
1973-Y581	2442099.08	1974 Feb 20 0900:00	M-100	-	-	-	-	-	-	MJD	-	-	-	86	-	-
1973-Y582	2442099.12	1974 Feb 20 1430:00	M-100	-	-	-	-	-	SHIR	GRSP-4	LP7	-	-	85	-	-
1973-Y583	2442099.12	1974 Feb 20 1430:00	M-100	-	-	-	-	-	SHIR	GRSP-4	LP7	-	-	84	-	-

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Launch_Mission	FlightCode	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee_Km	Range_Km	Dest
1974-Y77	2442105.33	1974 Feb 26 2000:00	M-100	-	-	-	-	-	SHIR	IDLZ	ID70	-	-	85	-	-
1974-Y78	2442106.42	1974 Feb 26 2200:00	M-100	-	-	-	-	-	SHIR	GRSP-4	-	-	-	85	-	-
1974-Y79	2442106.92	1974 Feb 27 1000:00	M-100	-	-	-	-	-	SHIR	OK	-	-	-	91	-	-
1974-Y80	2442106.08	1974 Feb 27 1400:00	M-100	-	-	-	-	-	SHIR	MJD	-	-	-	87	-	-
1974-Y81	2442106.12	1974 Feb 27 1600:00	M-100	-	-	-	-	-	SHIR	OK	-	-	-	90	-	-
1974-Y82	2442106.17	1974 Feb 27 1800:00	M-100	-	-	-	TEMLS-641	-	SHIR	TERLS	-	-	-	89	-	-
1974-Y83	2442107.21	1974 Feb 28 1700:00	M-100	-	-	-	-	-	SHIR	GRSP-4	LP16	-	-	92	-	-
1974-Y84	2442108.25	1974 Mar 01 1800:00	M-100	-	-	-	-	-	SHIR	GRSP-4	LP17	-	-	89	-	-
1974-Y85	2442108.68	1974 Mar 02 0900:00	M-100	-	-	-	-	-	SHIR	GRSP-4	LP9	-	-	89	-	-
1974-Y86	2442109.12	1974 Mar 02 0900:00	M-100	-	-	-	-	-	SHIR	GRSP-4	LP9	-	-	89	-	-
1974-Y87	2442109.12	1974 Mar 02 1500:00	M-100	-	-	-	-	-	SHIR	OK	-	-	-	87	-	-
1974-Y88	2442111.08	1974 Mar 04 1400:00	M-100	-	-	-	-	-	SHIR	GRSP-4	-	-	-	89	-	-
1974-Y89	2442111.29	1974 Mar 04 1900:00	M-100	-	-	-	-	-	SHIR	GRSP-4	LP10	-	-	85	-	-
1974-Y90	2442111.58	1974 Mar 05 0200:00	M-100	-	-	-	-	-	SHIR	MJD	-	-	-	90	-	-
1974-Y91	2442111.58	1974 Mar 05 0200:00	M-100	-	-	-	-	-	SHIR	MJD	-	-	-	88	-	-
1974-Y92	2442112.08	1974 Mar 05 1400:00	M-100	-	-	-	-	-	SHIR	GRSP-4	-	-	-	85	-	-
1974-Y93	2442112.42	1974 Mar 05 2200:00	M-100	-	-	-	-	-	SHIR	GRSP-4	-	-	-	87	-	-
1974-Y94	2442112.58	1974 Mar 06 0200:00	M-100	-	-	-	-	-	SHIR	OK	-	-	-	90	-	-
1974-Y95	2442112.58	1974 Mar 06 0900:00	M-100	-	-	-	-	-	SHIR	OK	-	-	-	87	-	-
1974-Y96	2442112.68	1974 Mar 06 0900:00	M-100	-	-	-	-	-	SHIR	OK	-	-	-	87	-	-
1974-Y97	2442113.12	1974 Mar 06 1500:00	M-100	-	-	-	-	-	SHIR	GRSP-4	-	-	-	85	-	-
1974-Y98	2442113.12	1974 Mar 06 1500:00	M-100	-	-	-	-	-	SHIR	GRSP-4	-	-	-	83	-	-
1974-Y99	2442113.12	1974 Mar 06 1500:00	M-100	-	-	-	-	-	SHIR	GRSP-4	-	-	-	93	-	-
1974-Y100	2442113.88	1974 Mar 07 0900:00	M-100	-	-	-	-	-	SHIR	GRSP-4	LP11	-	-	88	-	-
1974-Y101	2442117.38	1974 Mar 10 2100:00	M-100	-	-	-	-	-	SHIR	GRSP-4	LP3	-	-	88	-	-
1974-Y102	2442120.12	1974 Mar 13 1500:00	M-100	-	-	-	-	-	SHIR	OK	-	-	-	87	-	-
1974-Y103	2442120.12	1974 Mar 13 1500:00	M-100	-	-	-	TEMLS-647	-	SHIR	TERLS	-	-	-	89	-	-
1974-Y104	2442120.12	1974 Mar 13 1500:00	M-100	-	-	-	-	-	SHIR	OK	-	-	-	83	-	-
1974-Y105	2442120.12	1974 Mar 13 1500:00	M-100	-	-	-	-	-	SHIR	OK	-	-	-	81	-	-
1974-Y106	2442120.12	1974 Mar 13 1500:00	M-100	-	-	-	-	-	SHIR	GRSP-4	LP4	-	-	84	-	-
1974-Y107	2442121.42	1974 Mar 14 2200:00	M-100	-	-	-	-	-	SHIR	GRSP-4	LP5	-	-	84	-	-
1974-Y108	2442124.42	1974 Mar 17 2200:00	M-100	-	-	-	-	-	SHIR	GRSP-4	LP12	-	-	90	-	-
1974-Y109	2442126.63	1974 Mar 20 0900:00	M-100	-	-	-	-	-	SHIR	OK	-	-	-	86	-	-
1974-Y110	2442127.12	1974 Mar 20 1500:00	M-100	-	-	-	-	-	SHIR	OK	-	-	-	85	-	-
1974-Y111	2442127.12	1974 Mar 20 1500:00	M-100	-	-	-	-	-	SHIR	OK	-	-	-	86	-	-
1974-Y112	2442127.12	1974 Mar 20 1500:00	M-100	-	-	-	-	-	SHIR	OK	-	-	-	86	-	-
1974-Y113	2442127.12	1974 Mar 20 1500:00	M-100	-	-	-	-	-	SHIR	OK	-	-	-	86	-	-
1974-Y114	2442127.12	1974 Mar 20 1500:00	M-100	-	-	-	-	-	SHIR	OK	-	-	-	86	-	-
1974-Y115	2442127.12	1974 Mar 20 1500:00	M-100	-	-	-	-	-	SHIR	OK	-	-	-	86	-	-
1974-Y116	2442127.38	1974 Mar 20 2300:00	M-100	-	-	-	-	-	SHIR	OK	-	-	-	85	-	-
1974-Y117	2442127.46	1974 Mar 22 0900:00	M-100	-	-	-	-	-	SHIR	OK	-	-	-	91	-	-
1974-Y118	2442128.68	1974 Mar 22 1500:00	M-100	-	-	-	-	-	SHIR	OK	-	-	-	85	-	-
1974-Y119	2442129.12	1974 Mar 23 1700:00	M-100	-	-	-	-	-	SHIR	OK	-	-	-	86	-	-
1974-Y120	2442129.12	1974 Mar 23 1700:00	M-100	-	-	-	-	-	SHIR	OK	-	-	-	86	-	-
1974-Y121	2442130.21	1974 Mar 23 2100:00	M-100	-	-	-	-	-	SHIR	OK	-	-	-	82	-	-
1974-Y122	2442130.38	1974 Mar 23 2100:00	M-100	-	-	-	-	-	SHIR	OK	-	-	-	86	-	-
1974-Y123	2442130.38	1974 Mar 23 2100:00	M-100	-	-	-	-	-	SHIR	OK	-	-	-	86	-	-
1974-Y124	2442130.38	1974 Mar 23 2100:00	M-100	-	-	-	-	-	SHIR	OK	-	-	-	88	-	-
1974-Y125	2442130.63	1974 Mar 24 0900:00	M-100	-	-	-	-	-	SHIR	OK	-	-	-	88	-	-
1974-Y126	2442131.12	1974 Mar 24 1500:00	M-100	-	-	-	-	-	SHIR	OK	-	-	-	89	-	-
1974-Y127	2442131.12	1974 Mar 24 1500:00	M-100	-	-	-	-	-	SHIR	OK	-	-	-	88	-	-
1974-Y128	2442133.46	1974 Mar 27 0900:00	M-100	-	-	-	-	-	SHIR	OK	-	-	-	87	-	-
1974-Y129	2442133.88	1974 Mar 27 0900:00	M-100	-	-	-	-	-	SHIR	OK	-	-	-	87	-	-
1974-Y130	2442133.88	1974 Mar 27 0900:00	M-100	-	-	-	-	-	SHIR	OK	-	-	-	87	-	-
1974-Y131	2442133.88	1974 Mar 27 1100:00	M-100	-	-	-	-	-	SHIR	OK	-	-	-	93	-	-
1974-Y132	2442134.09	1974 Mar 27 1200:00	M-100	-	-	-	-	-	SHIR	OK	-	-	-	82	-	-
1974-Y133	2442134.09	1974 Mar 27 1200:00	M-100	-	-	-	-	-	SHIR	OK	-	-	-	85	-	-
1974-Y134	2442134.09	1974 Mar 27 1200:00	M-100	-	-	-	-	-	SHIR	OK	-	-	-	93	-	-
1974-Y135	2442134.12	1974 Mar 27 1500:00	M-100	-	-	-	-	-	SHIR	OK	-	-	-	91	-	-
1974-Y136	2442134.12	1974 Mar 27 1500:00	M-100	-	-	-	-	-	SHIR	OK	-	-	-	83	-	-
1974-Y137	2442134.92	1974 Mar 31 1000:00	M-100	-	-	-	TEMLS-655	-	SHIR	TERLS	-	-	-	87	-	-
1974-Y138	2442137.92	1974 Mar 31 1000:00	M-100	-	-	-	-	-	SHIR	OK	-	-	-	93	-	-
1974-Y139	2442140.20	1974 Apr 02 2000:00	M-100	-	-	-	-	-	SHIR	OK	-	-	-	87	-	-
1974-Y140	2442140.88	1974 Apr 02 2000:00	M-100	-	-	-	-	-	SHIR	OK	-	-	-	88	-	-
1974-Y141	2442141.12	1974 Apr 03 1500:00	M-100	-	-	-	-	-	SHIR	OK	-	-	-	90	-	-
1974-Y142	2442141.12	1974 Apr 03 1500:00	M-100	-	-	-	-	-	SHIR	OK	-	-	-	87	-	-
1974-Y143	2442141.12	1974 Apr 03 1500:00	M-100	-	-	-	-	-	SHIR	OK	-	-	-	87	-	-
1974-Y144	2442141.17	1974 Apr 03 1500:00	M-100	-	-	-	-	-	SHIR	OK	-	-	-	87	-	-
1974-Y145	2442142.33	1974 Apr 04 2000:00	M-100	-	-	-	TEMLS-656	-	SHIR	TERLS	-	-	-	88	-	-
1974-Y146	2442142.50	1974 Apr 05 0900:00	M-100	-	-	-	-	-	SHIR	OK	-	-	-	87	-	-
1974-Y147	2442142.50	1974 Apr 05 0900:00	M-100	-	-	-	-	-	SHIR	OK	-	-	-	89	-	-
1974-Y148	2442142.88	1974 Apr 05 0900:00	M-100	-	-	-	-	-	SHIR	OK	-	-	-	89	-	-
1974-Y149	2442142.88	1974 Apr 05 0900:00	M-100	-	-	-	-	-	SHIR	OK	-	-	-	89	-	-
1974-Y150	2442142.88	1974 Apr 05 0900:00	M-100	-	-	-	-	-	SHIR	OK	-	-	-	91	-	-
1974-Y151	2442142.88	1974 Apr 05 0900:00	M-100	-	-	-	-	-	SHIR	OK	-	-	-	88	-	-
1974-Y152	2442142.88	1974 Apr 05 0900:00	M-100	-	-	-	-	-	SHIR	OK	-	-	-	89	-	-
1974-Y153	2442142.88	1974 Apr 05 0900:00	M-100	-	-	-	-	-	SHIR	OK	-	-	-	88	-	-
1974-Y154	2442142.88	1974 Apr 05 0900:00	M-100	-	-	-	-	-	SHIR	OK	-	-	-	88	-	-
1974-Y155	2442142.88	1974 Apr 05 0900:00	M-100	-	-	-	-	-	SHIR	OK	-	-	-	88	-	-
1974-Y156	2442142.88	1974 Apr 05 0900:00	M-100	-	-	-	-	-	SHIR	OK	-	-	-	88	-	-
1974-Y157	2442142.88	1974 Apr 05 0900:00	M-100	-	-	-	-	-	SHIR	OK	-	-	-	88	-	-
1974-Y158	2442142.88	1974 Apr 05 0900:00	M-100	-	-	-	-	-	SHIR	OK	-	-	-	88	-	-
1974-Y159	2442142.88	1974 Apr 05 0900:00	M-100	-	-	-	-	-	SHIR	OK	-	-	-	88	-	-
1974-Y160	2442142.88	1974 Apr 05 0900:00	M-100	-	-	-	-	-	SHIR	OK	-	-	-	88	-	-
1974-Y161	2442142.88	1974 Apr 05 0900:00	M-100	-	-	-	-	-	SHIR	OK	-	-	-	88	-	-
1974-Y162	2442142.88	1974 Apr 05 0900:00	M-100	-	-	-	-	-	SHIR	OK	-	-	-	88	-	-
1974-Y163	2442142.88	1974 Apr 05 0900:00	M-100	-	-	-	-	-	SHIR	OK	-	-	-	88	-	-
1974-Y164	2442142.88	1974 Apr 05 0900:00	M-100	-	-	-	-	-	SHIR	OK	-	-	-	88	-	-
1974-Y165	2442142.88	1974 Apr 05 0900:00	M-100	-	-	-	-	-	SHIR	OK	-	-	-	88	-	-
1974-Y166	2442142.88	1974 Apr 05 0900:00	M-100	-	-	-	-	-	SHIR	OK	-	-	-	88	-	-
1974-Y167	2442142.88	1974 Apr 05 0900:00	M-100	-	-	-	-	-	SHIR	OK	-	-	-	88	-	-

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Launch_Mission	FlightCode	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee_Km	Range_Km	Dest
1974-Y184	2442168.42	1974 Apr 30 2200:00	N-100			ISRO 8.184	TEMLS-674			GTSP-4				89		
1974-Y185	2442169.12	1974 May 01 1500:00	N-100						SHOK	TERLS	LP17			86		
1974-Y186	2442172.92	1974 May 05 1600:00	N-100							GTSP-4				87		
1974-Y187	2442175.44	1974 May 07 2240:00	N-100							UK				85		
1974-Y188	2442176.04	1974 May 08 1300:00	N-100							TERLS				83		
1974-Y189	2442176.12	1974 May 08 1500:00	N-100							UK				99		
1974-Y190	2442176.12	1974 May 08 1500:00	N-100			ISRO 8.185	TEMLS-681			GTSP-4				83		
1974-Y191	2442177.04	1974 May 09 1300:00	N-100						KURO	DJP				89		
1974-Y193	2442182.42	1974 May 15 0745:00	N-100						KURO	GTSP-4	LP9			87		
1974-Y194	2442182.82	1974 May 15 0745:00	N-100							UK				85		
1974-Y195	2442182.89	1974 May 15 0920:00	N-100							TERLS				87		
1974-Y196	2442183.12	1974 May 16 1500:00	N-100							TERLS				84		
1974-Y197	2442184.12	1974 May 16 1500:00	N-100							GTSP-4	LP10			85		
1974-Y198	2442185.78	1974 May 18 0640:00	N-100							GTSP-4				90		
1974-Y199	2442189.42	1974 May 21 2200:00	N-100							GTSP-4	LP11			87		
1974-Y200	2442189.78	1974 May 22 0640:00	N-100							UK				89		
1974-Y201	2442189.88	1974 May 22 0640:00	N-100							TERLS				90		
1974-Y202	2442190.12	1974 May 22 1500:00	N-100							TERLS				81		
1974-Y203	2442190.12	1974 May 22 1500:00	N-100			ISRO 8.187	TEMLS-689			TERLS	LP12			87		
1974-Y205	2442192.71	1974 May 25 0600:00	N-100							GTSP-4	LP13			85		
1974-Y206	2442194.07	1974 May 27 0400:00	N-100							GTSP-4				85		
1974-Y208	2442196.42	1974 May 28 2200:00	N-100							UK				85		
1974-Y209	2442196.68	1974 May 29 0900:00	N-100							TERLS				97		
1974-Y210	2442197.12	1974 May 29 1500:00	N-100			ISRO 8.188	TEMLS-692			TERLS				86		
1974-Y211	2442197.12	1974 May 29 1500:00	N-100			ISRO 8.189	TEMLS-695			GTSP-4				80F		
1974-Y212	2442198.50	1974 Jun 05 0010:00	N-100							UK				85		
1974-Y215	2442203.51	1974 Jun 05 0010:00	N-100							UK				89		
1974-Y216	2442203.88	1974 Jun 05 0900:00	N-100							UK				87		
1974-Y218	2442210.68	1974 Jun 12 1500:00	N-100			ISRO 8.190	TEMLS-694			TERLS				91		
1974-Y219	2442211.12	1974 Jun 12 1500:00	N-100							TERLS				84		
1974-Y221	2442211.12	1974 Jun 18 2200:00	N-100							GTSP-4				86		
1974-Y222	2442217.42	1974 Jun 18 2200:00	N-100							UK				90		
1974-Y223	2442217.68	1974 Jun 19 0900:00	N-100							TERLS				85		
1974-Y224	2442218.12	1974 Jun 19 1500:00	N-100							TERLS				90		
1974-Y225	2442220.52	1974 Jun 22 0030	N-100							UK				85		
1974-Y226	2442220.82	1974 Jun 22 0600:00	N-100							TERLS				85		
1974-Y227	2442224.68	1974 Jun 26 1500:00	N-100							UK				89		
1974-Y228	2442225.12	1974 Jun 26 1500:00	N-100							UK				94		
1974-Y229	2442231.68	1974 Jun 28 0900:00	N-100							UK				88		
1974-Y230	2442232.12	1974 Jun 31 03 0900:00	N-100							UK				86		
1974-Y231	2442236.69	1974 Jun 31 03 0900:00	N-100							UK				92		
1974-Y232	2442238.42	1974 Jun 31 0920:00	N-100							UK				86		
1974-Y233	2442239.12	1974 Jun 31 17 0900:00	N-100							UK				86		
1974-Y234	2442246.68	1974 Jun 31 24 0900:00	N-100							UK				86		
1974-Y235	2442252.88	1974 Jun 31 24 0900:00	N-100							UK				86		
1974-Y236	2442253.42	1974 Jun 31 17 0900:00	N-100							UK				86		
1974-Y237	2442256.68	1974 Jun 31 31 0900:00	N-100							UK				91		
1974-Y238	2442260.68	1974 Jun 31 1500:00	N-100							UK				91		
1974-Y239	2442260.88	1974 Aug 07 0900:00	N-100							UK				93		
1974-Y240	2442266.68	1974 Aug 07 1500:00	N-100							UK				89		
1974-Y241	2442277.68	1974 Aug 14 0900:00	N-100							UK				89		
1974-Y242	2442277.68	1974 Aug 14 1500:00	N-100							UK				89		
1974-Y243	2442277.68	1974 Aug 14 1500:00	N-100							UK				89		
1974-Y244	2442277.68	1974 Aug 14 1500:00	N-100							UK				89		
1974-Y245	2442277.68	1974 Aug 14 1500:00	N-100							UK				89		
1974-Y246	2442277.68	1974 Aug 14 1500:00	N-100							UK				89		
1974-Y247	2442277.68	1974 Aug 14 1500:00	N-100							UK				89		
1974-Y248	2442277.68	1974 Aug 14 1500:00	N-100							UK				89		
1974-Y249	2442277.68	1974 Aug 14 1500:00	N-100							UK				89		
1974-Y250	2442277.68	1974 Aug 14 1500:00	N-100							UK				89		
1974-Y251	2442277.68	1974 Aug 14 1500:00	N-100							UK				89		
1974-Y252	2442277.68	1974 Aug 14 1500:00	N-100							UK				89		
1974-Y253	2442277.68	1974 Aug 14 1500:00	N-100							UK				89		
1974-Y254	2442277.68	1974 Aug 14 1500:00	N-100							UK				89		
1974-Y255	2442277.68	1974 Aug 14 1500:00	N-100							UK				89		
1974-Y256	2442277.68	1974 Aug 14 1500:00	N-100							UK				89		
1974-Y257	2442277.68	1974 Aug 14 1500:00	N-100							UK				89		
1974-Y258	2442277.68	1974 Aug 14 1500:00	N-100							UK				89		
1974-Y259	2442277.68	1974 Aug 14 1500:00	N-100							UK				89		
1974-Y260	2442277.68	1974 Aug 14 1500:00	N-100							UK				89		
1974-Y261	2442277.68	1974 Aug 14 1500:00	N-100							UK				89		
1974-Y262	2442277.68	1974 Aug 14 1500:00	N-100							UK				89		
1974-Y263	2442277.68	1974 Aug 14 1500:00	N-100							UK				89		
1974-Y264	2442277.68	1974 Aug 14 1500:00	N-100							UK				89		
1974-Y265	2442277.68	1974 Aug 14 1500:00	N-100							UK				89		
1974-Y266	2442277.68	1974 Aug 14 1500:00	N-100							UK				89		
1974-Y267	2442277.68	1974 Aug 14 1500:00	N-100							UK				89		
1974-Y268	2442277.68	1974 Aug 14 1500:00	N-100							UK				89		
1974-Y269	2442277.68	1974 Aug 14 1500:00	N-100							UK				89		
1974-Y270	2442277.68	1974 Aug 14 1500:00	N-100							UK				89		
1974-Y271	2442277.68	1974 Aug 14 1500:00	N-100							UK				89		
1974-Y272	2442277.68	1974 Aug 14 1500:00	N-100							UK				89		
1974-Y273	2442277.68	1974 Aug 14 1500:00	N-100							UK				89		
1974-Y274	2442277.68	1974 Aug 14 1500:00	N-100							UK				89		
1974-Y275	2442277.68	1974 Aug 14 1500:00	N-100							UK				89		
1974-Y276	2442277.68	1974 Aug 14 1500:00	N-100							UK				89		
1974-Y277	2442277.68	1974 Aug 14 1500:00	N-100							UK				89		
1974-Y278	2442277.68	1974 Aug 14 1500:00	N-100							UK				89		
1974-Y279	2442277.68	1974 Aug 14 1500:00	N-100							UK				89		
1974-Y280	2442277.68	1974 Aug 14 1500:00	N-100							UK				89		
1974-Y281	2442277.68	1974 Aug 14 1500:00	N-100							UK				89		
1974-Y282	2442277.68	1974 Aug 14 1500:00	N-100							UK				89		
1974-Y283	2442277.68	1974 Aug 14 1500:00	N-100							UK				89		
1974-Y284	2442277.68	1974 Aug 14 1500:00	N-100							UK				89		
1974-Y285	2442277.68	1974 Aug 14 1500:00	N-100							UK				89		
1974-Y286	2442277.68	1974 Aug 14 1500:00	N-100							UK				89		
1974-Y287	2442277.68	1974 Aug 14 1500:00	N-100							UK				89		
1974-Y288	2442277.68	1974 Aug 14 1500:00	N-100							UK				89		
1974-Y289	2442277.68	1974 Aug 14 1500:00	N-100							UK				89		
1974-Y290	2442277.68	1974 Aug 14 1500:00	N-100							UK				89		



Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Launch_Mission	FlightCode	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee Km	Range Km	Dest
1974-Y300	2442310.63	1974 Sep 20 0310:00	M-100	-	-	Diurnal Variation	-	-	-	GTSP-4	-	-	-	87	-	-
1974-Y301	2442310.62	1974 Sep 20 0740:00	M-100	-	-	Diurnal Variation	-	-	-	GTSP-4	-	-	-	89	-	-
1974-Y302	2442311.10	1974 Sep 20 1430:00	M-100	-	-	Diurnal Variation	-	-	-	GTSP-4	-	-	-	90	-	-
1974-Y303	2442311.21	1974 Sep 20 1700:00	M-100	-	-	-	-	-	-	GTSP-4	-	-	-	93	-	-
1974-Y304	2442311.28	1974 Sep 20 1840:00	M-100	-	-	Diurnal Variation	-	-	SHOK	GTSP-4	-	-	-	87	-	-
1974-Y305	2442311.29	1974 Sep 20 1900:00	M-100	-	-	-	-	-	-	GNS74C	LP11	-	-	88	-	-
1974-Y306	2442311.69	1974 Sep 21 0440:00	M-100	-	-	Diurnal Variation	-	-	-	GTSP-4	-	-	-	91	-	-
1974-Y307	2442311.90	1974 Sep 21 0930:00	M-100	-	-	-	-	-	-	GTSP-4	-	-	-	88	-	-
1974-Y308	2442311.98	1974 Sep 21 1130:00	M-100	-	-	Diurnal Variation	-	-	-	GTSP-4	-	-	-	90	-	-
1974-Y309	2442315.42	1974 Sep 25 0910:00	M-100	-	-	-	-	-	-	UK	-	-	-	91	-	-
1974-Y310	2442315.68	1974 Sep 25 0910:00	M-100	-	-	-	-	-	-	MLD	-	-	-	86	-	-
1974-Y311	2442316.12	1974 Sep 25 1500:00	M-100	-	-	-	-	-	-	GTSP-4	-	-	-	87	-	-
1974-Y313	2442322.27	1974 Oct 01 1825:00	M-100	-	-	-	-	-	-	GTSP-4	-	-	-	86	-	-
1974-Y314	2442322.33	1974 Oct 01 2000:00	M-100	-	-	-	-	-	-	GTSP-4	-	-	-	87	-	-
1974-Y315	2442322.47	1974 Oct 01 2320:00	M-100	-	-	-	-	-	-	UK	-	-	-	88	-	-
1974-Y316	2442322.68	1974 Oct 02 0900:00	M-100	-	-	-	-	-	-	MLD	-	-	-	86	-	-
1974-Y317	2442323.12	1974 Oct 02 1500:00	M-100	-	-	-	-	-	-	GTSP-4	-	-	-	77	-	-
1974-Y1288	2442329.32	1974 Oct 08 1940:00	M-100	-	-	-	-	-	-	GTSP-4	-	-	-	86	-	-
1974-W1290	2442329.42	1974 Oct 08 2210:00	M-100	-	-	-	-	-	-	GTSP-4	-	-	-	79	-	-
1974-Y323	2442329.47	1974 Oct 08 2320:00	M-100	-	-	-	-	-	-	GTSP-4	-	-	-	87	-	-
1974-Y324	2442329.50	1974 Oct 09 0000:00	M-100	-	-	-	-	-	-	UK	-	-	-	86	-	-
1974-Y325	2442329.68	1974 Oct 09 0900:00	M-100	-	-	-	-	-	-	MLD	-	-	-	90	-	-
1974-Y326	2442330.08	1974 Oct 09 1400:00	M-100	-	-	-	-	-	-	GTSP-4	-	-	-	92	-	-
1974-Y327	2442331.31	1974 Oct 10 1930:00	M-100	-	-	-	-	-	-	GTSP-4	-	-	-	85	-	-
1974-Y329	2442336.46	1974 Oct 15 2300:00	M-100	-	-	-	-	-	-	GTSP-4	-	-	-	89	-	-
1974-Y330	2442337.00	1974 Oct 16 1200:00	M-100	-	-	-	-	-	-	UK	-	-	-	91	-	-
1974-Y334	2442342.62	1974 Oct 22 0300:00	M-100	-	-	-	-	-	-	GNS74D	LP1	-	-	87	-	-
1974-Y335	2442343.42	1974 Oct 22 2200:00	M-100	-	-	-	-	-	-	GTSP-4	-	-	-	86	-	-
1974-Y336	2442343.69	1974 Oct 23 0920:00	M-100	-	-	-	-	-	-	UK	-	-	-	89	-	-
1974-Y337	2442344.08	1974 Oct 23 1400:00	M-100	-	-	-	-	-	-	MLD	LP1	-	-	88	-	-
1974-Y339	2442347.67	1974 Oct 27 0400:00	M-100	-	-	-	-	-	-	GNS74D	LP2	-	-	84	-	-
1974-Y340	2442350.67	1974 Oct 30 0400:00	M-100	-	-	-	-	-	-	GNS74D	-	-	-	80	-	-
1974-Y341	2442350.68	1974 Oct 30 0900:00	M-100	-	-	-	-	-	-	UK	-	-	-	89	-	-
1974-Y342	2442351.12	1974 Oct 30 1500:00	M-100	-	-	-	-	-	-	MLD	-	-	-	83	-	-
1974-Y344	2442351.42	1974 Oct 30 2200:00	M-100	-	-	-	-	-	-	GTSP-4	-	-	-	90	-	-
1974-Y346	2442353.79	1974 Nov 02 0700:00	M-100	-	-	-	-	-	-	GNS74D	LP3	-	-	91	-	-
1974-Y346	2442356.63	1974 Nov 05 0800:00	M-100	-	-	-	-	-	-	GNS74D	LP4	-	-	94	-	-
1974-Y346	2442356.65	1974 Nov 05 0800:00	M-100	-	-	-	-	-	-	MLD	-	-	-	89	-	-
1974-Y346	2442357.25	1974 Nov 05 1800:00	M-100	-	-	-	-	-	-	UK	-	-	-	90	-	-
1974-Y346	2442357.42	1974 Nov 05 2200:00	M-100	-	-	-	-	-	-	GTSP-4	-	-	-	86	-	-
1974-Y349	2442357.52	1974 Nov 06 1000:00	M-100	-	-	-	-	-	-	UK	-	-	-	85	-	-
1974-Y349	2442364.68	1974 Nov 13 0900:00	M-100	-	-	-	-	-	-	MLD	-	-	-	86	-	-
1974-Y351	2442365.98	1974 Nov 13 1400:00	M-100	-	-	-	-	-	-	UK	-	-	-	85	-	-
1974-Y351	2442365.98	1974 Nov 13 1400:00	M-100	-	-	-	-	-	-	GTSP-4	-	-	-	89	-	-
1974-Y353	2442371.35	1974 Nov 19 0600:00	M-100	-	-	-	-	-	-	GTSP-4	-	-	-	93	-	-
1974-Y354	2442372.12	1974 Nov 20 0500:00	M-100	-	-	-	-	-	-	MLD	-	-	-	82	-	-
1974-Y355	2442372.12	1974 Nov 20 0500:00	M-100	-	-	-	-	-	-	UK	-	-	-	86	-	-
1974-Y356	2442377.94	1974 Nov 26 1430:00	M-100	-	-	-	-	-	-	GNS74D	LP5	-	-	91	-	-
1974-Y356	2442378.60	1974 Nov 26 1430:00	M-100	-	-	-	-	-	-	GNS74D	LP6	-	-	97	-	-
1974-Y361	2442378.98	1974 Nov 27 2100:00	M-100	-	-	-	-	-	-	UK	-	-	-	87	-	-
1974-Y363	2442379.24	1974 Nov 27 2200:00	M-100	-	-	-	-	-	-	GTSP-4	-	-	-	86	-	-
1974-Y364	2442381.70	1974 Nov 27 0700:00	M-100	-	-	-	-	-	-	GTSP-4	-	-	-	86	-	-
1974-Y364	2442381.70	1974 Nov 27 0700:00	M-100	-	-	-	-	-	-	GTSP-4	-	-	-	87	-	-
1974-Y365	2442385.51	1974 Dec 02 1930:00	M-100	-	-	-	-	-	-	GTSP-4	-	-	-	88	-	-
1974-Y366	2442386.00	1974 Dec 02 1930:00	M-100	-	-	-	-	-	-	UK	-	-	-	92	-	-
1974-Y367	2442386.00	1974 Dec 04 1200:00	M-100	-	-	-	-	-	-	MLD	-	-	-	90	-	-
1974-Y368	2442386.00	1974 Dec 04 1500:00	M-100	-	-	-	-	-	-	GTSP-4	-	-	-	89	-	-
1974-Y371	2442390.54	1974 Dec 11 0100:00	M-100	-	-	-	-	-	-	MLD	-	-	-	84	-	-
1974-Y372	2442390.08	1974 Dec 11 1400:00	M-100	-	-	-	-	-	-	UK	-	-	-	93	-	-
1974-Y373	2442390.10	1974 Dec 11 1430:00	M-100	-	-	-	-	-	-	UK	-	-	-	94	-	-
1974-Y375	2442395.88	1974 Dec 14 0910:00	M-100	-	-	-	-	-	-	UK	-	-	-	89	-	-
1974-Y376	2442399.88	1974 Dec 18 0200:00	M-100	-	-	-	-	-	-	GTSP-4	-	-	-	82	-	-
1974-Y377	2442399.88	1974 Dec 18 0900:00	M-100	-	-	-	-	-	-	MLD	-	-	-	83	-	-
1974-Y378	2442400.08	1974 Dec 18 1400:00	M-100	-	-	-	-	-	-	NER	-	-	-	88	-	-
1974-Y380	2442404.46	1974 Dec 22 2300:00	M-100	-	-	-	-	-	-	GTSP-4	-	-	-	86	-	-
1974-Y381	2442406.28	1974 Dec 24 1850:00	M-100	-	-	-	-	-	-	UK	-	-	-	85	-	-
1974-Y383	2442406.50	1974 Dec 25 0000:00	M-100	-	-	-	-	-	-	GTSP-4	LP2	-	-	90	-	-
1974-Y384	2442406.57	1974 Dec 25 0140:00	M-100	-	-	-	-	-	-	MLD	-	-	-	86	-	-
1974-Y384	2442407.12	1974 Dec 25 1500:00	M-100	-	-	-	-	-	-	GTSP-4	LP3	-	-	91	-	-
1974-Y387	2442409.50	1974 Dec 28 0000:00	M-100	-	-	-	-	-	-	UK	-	-	-	85	-	-
1974-Y387	2442413.12	1974 Dec 31 1500:00	M-100	-	-	-	-	-	-	MLD	-	-	-	88	-	-
1975-Y01	2442415.06	1975 Jan 02 1320:00	M-100	-	-	-	-	-	-	UK	-	-	-	85	-	-
1975-Y02	2442415.21	1975 Jan 02 1700:00	M-100	-	-	-	-	-	-	GTSP-4	-	-	-	86	-	-
1975-Y05	2442417.06	1975 Jan 04 1320:00	M-100	-	-	-	-	-	-	UK	-	-	-	88	-	-
1975-Y06	2442417.29	1975 Jan 04 1900:00	M-100	-	-	-	-	-	-	TOI.Z	1065	-	-	92	-	-
1975-Y07	2442418.68	1975 Jan 06 0200:00	M-100	-	-	-	-	-	-	UK	-	-	-	86	-	-
1975-Y08	2442418.88	1975 Jan 06 0900:00	M-100	-	-	-	-	-	-	GTSP-4	-	-	-	87	-	-
1975-Y09	2442420.42	1975 Jan 07 2200:00	M-100	-	-	-	-	-	-	MLD	-	-	-	84	-	-
1975-Y10	2442421.08	1975 Jan 08 1400:00	M-100	-	-	-	-	-	-	UK	-	-	-	87	-	-
1975-Y11	2442421.17	1975 Jan 08 1600:00	M-100	-	-	-	-	-	-	GTSP-4	-	-	-	90	-	-
1975-Y13	2442422.42	1975 Jan 09 2200:00	M-100	-	-	-	-	-	-	UK	-	-	-	80	-	-
1975-Y14	2442422.88	1975 Jan 10 0900:00	M-100	-	-	-	-	-	-	GNS74E	LP5	-	-	80	-	-
1975-Y16	2442423.31	1975 Jan 11 1930:00	M-100	-	-	-	-	-	-	GNS74E	LP6	-	-	81	-	-
1975-Y17	2442424.31	1975 Jan 12 2000:00	M-100	-	-	-	-	-	-	GNS74E	LP7	-	-	83	-	-
1975-Y18	2442425.33	1975 Jan 12 2050:00	M-100	-	-	-	-	-	-	TOI.Z	1065	-	-	87	-	-
1975-Y19	2442426.37	1975 Jan 14 2050:00	M-100	-	-	-	-	-	-	GNS74E	LP8	-	-	89	-	-
1975-Y20	2442427.33	1975 Jan 14 2000:00	M-100	-	-	-	-	-	-	UK	-	-	-	80	-	-
1975-Y21	2442427.88	1975 Jan 15 0900:00	M-100	-	-	-	-	-	-	UK	-	-	-	80	-	-

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Launch_Mission	FlightCode	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee_Km	Range_Km	Dest
1975-Y22	2442427.90	1975 Jan 15 0930:00	M-100							GTSP-4				86		
1975-Y23	2442428.12	1975 Jan 15 1500:00	M-100						SHIR	MNS/4E	LP9			84		
1975-Y24	2442428.33	1975 Jan 16 1950:00	M-100						SHIR	10C0R				85		
1975-Y27	2442429.33	1975 Jan 16 2000:00	M-100											87		
1975-Y28	2442429.88	1975 Jan 17 0900:00	M-100											88		
1975-Y31	2442434.89	1975 Jan 22 0920:00	M-100											93		
1975-Y32	2442435.12	1975 Jan 22 1500:00	M-100											89		
1975-Y35	2442435.47	1975 Jan 22 2310:00	M-100											88		
1975-Y36	2442442.25	1975 Jan 29 1400:00	M-100											87		
1975-Y38	2442443.90	1975 Jan 31 0930:00	M-100											89		
1975-Y39	2442447.40	1975 Feb 03 2140:00	M-100											88		
1975-W130	2442448.42	1975 Feb 04 2200:00	M-100											76		
1975-W134	2442449.25	1975 Feb 05 1800:00	M-100											53		
1975-Y42	2442450.99	1975 Feb 07 1130:00	M-100											79		
1975-W147	2442455.67	1975 Feb 12 0400:00	M-100											93		
1975-Y46	2442455.88	1975 Feb 12 0900:00	M-100											89		
1975-Y47	2442457.88	1975 Feb 14 0900:00	M-100											84		
1975-Y60	2442462.30	1975 Feb 18 1915:00	M-100											87		
1975-Y61	2442462.36	1975 Feb 18 2035:00	M-100											85		
1975-Y62	2442462.67	1975 Feb 19 0400:00	M-100											88		
1975-Y63	2442462.88	1975 Feb 19 0900:00	M-100											83		
1975-Y64	2442463.12	1975 Feb 19 1500:00	M-100											88		
1975-Y65	2442465.17	1975 Feb 21 1600:00	M-100											82		
1975-Y66	2442469.42	1975 Feb 25 2200:00	M-100											88		
1975-Y68	2442469.68	1975 Feb 26 0900:00	M-100											87		
1975-Y69	2442470.12	1975 Feb 26 1500:00	M-100											88		
1975-Y69	2442471.88	1975 Feb 28 0900:00	M-100											87		
1975-Y63	2442473.17	1975 Mar 01 1600:00	M-100						SHIR	GNS76A	LP1			91		
1975-Y64	2442475.17	1975 Mar 03 1600:00	M-100						SHIR	GNS76A	LP2			89		
1975-Y66	2442476.42	1975 Mar 04 2200:00	M-100											88		
1975-Y67	2442476.68	1975 Mar 05 0900:00	M-100											87		
1975-Y68	2442477.33	1975 Mar 05 2000:00	M-100											86		
1975-Y69	2442478.26	1975 Mar 06 1820:00	M-100						SHIR	GNS76A	LP3			83		
1975-Y70	2442479.25	1975 Mar 07 1800:00	M-100						SHIR	GNS76A	LP4			86		
1975-Y71	2442479.32	1975 Mar 07 1940:00	M-100						SHIR	GNS76A	LP4			89		
1975-Y72	2442481.19	1975 Mar 09 1630:00	M-100						KURO	GNS76B	LP1			91		
1975-Y73	2442483.20	1975 Mar 11 1630:00	M-100						SHIR	GNS76A	LP5			92		
1975-Y74	2442483.42	1975 Mar 11 2200:00	M-100											85		
1975-Y75	2442483.97	1975 Mar 12 1120:00	M-100											97		
1975-Y76	2442484.12	1975 Mar 12 1800:00	M-100											92		
1975-Y77	2442485.17	1975 Mar 13 1500:00	M-100						SHIR	GNS76A	LP6			89		
1975-Y78	2442486.26	1975 Mar 14 1820:00	M-100						SHIR	GNS76A	LP7			89		
1975-Y79	2442487.16	1975 Mar 15 1530:00	M-100						SHIR	GNS76A	LP8			89		
1975-Y80	2442488.05	1975 Mar 16 1700:00	M-100						SHIR	GNS76A	LP9			87		
1975-Y81	2442490.24	1975 Mar 18 1700:00	M-100						KURO	GNS76A	LP1			91		
1975-Y82	2442490.28	1975 Mar 18 1840:00	M-100						KURO	GNS76B	LP2			93		
1975-Y83	2442490.49	1975 Mar 18 2200:00	M-100						KURO	GNS76B	LP2			91		
1975-Y84	2442490.88	1975 Mar 19 0900:00	M-100											91		
1975-Y85	2442491.15	1975 Mar 19 1500:00	M-100											89		
1975-Y86	2442491.15	1975 Mar 19 1500:00	M-100											87		
1975-Y87	2442491.31	1975 Mar 19 1700:00	M-100											92		
1975-Y88	2442492.51	1975 Mar 20 1700:00	M-100						SHIR	1070				88		
1975-Y89	2442494.51	1975 Mar 22 1700:00	M-100						SHIR	GNS76A	LP11			87		
1975-Y90	2442497.40	1975 Mar 25 2200:00	M-100						SHIR	GNS76A	LP12			89		
1975-Y91	2442497.96	1975 Mar 26 1105:00	M-100											86		
1975-Y92	2442498.12	1975 Mar 26 1500:00	M-100											85		
1975-Y93	2442504.88	1975 Mar 02 0900:00	M-100											92		
1975-Y94	2442505.12	1975 Mar 02 1500:00	M-100											88		
1975-Y95	2442505.71	1975 Mar 02 1800:00	M-100											89		
1975-Y96	2442506.05	1975 Mar 03 0500:00	M-100											87		
1975-Y99	2442511.42	1975 Mar 08 2200:00	M-100											81		
1975-Y100	2442511.96	1975 Mar 09 1100:00	M-100											84		
1975-Y101	2442511.96	1975 Mar 09 1500:00	M-100											80		
1975-Y103	2442512.12	1975 Mar 11 0900:00	M-100											87		
1975-Y104	2442513.88	1975 Mar 11 0900:00	M-100											88		
1975-Y106	2442515.12	1975 Mar 12 1500:00	M-100											88		
1975-Y107	2442515.12	1975 Mar 12 1500:00	M-100											88		
1975-Y108	2442517.12	1975 Mar 14 1500:00	M-100											87		
1975-Y109	2442518.88	1975 Mar 16 0900:00	M-100											87		
1975-Y110	2442519.12	1975 Mar 16 1500:00	M-100											857		
1975-Y111	2442519.12	1975 Mar 16 1500:00	M-100											93		
1975-Y113	2442521.02	1975 Mar 18 1230:00	M-100											87		
1975-Y114	2442521.12	1975 Mar 18 1500:00	M-100											88		
1975-Y115	2442525.57	1975 Mar 23 0140:00	M-100											88		
1975-Y116	2442525.88	1975 Mar 23 0900:00	M-100											84		
1975-Y117	2442526.12	1975 Mar 23 1500:00	M-100											89		
1975-Y118	2442526.12	1975 Mar 23 1500:00	M-100											88		
1975-Y120	2442527.83	1975 Mar 25 0800:00	M-100											90		
1975-Y121	2442527.83	1975 Mar 25 0900:00	M-100						SHOK	GNS76C	LP1			89		
1975-Y122	2442528.12	1975 Mar 25 1500:00	M-100											86		
1975-Y123	2442530.54	1975 Mar 28 0100:00	M-100											88		
1975-Y124	2442530.88	1975 Mar 28 0900:00	M-100											84		
1975-Y125	2442531.12	1975 Mar 28 1500:00	M-100											81		



Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Launch_Mission	FlightCode	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee_Km	Range_Km	Dest
1975-Y230	2442616.90	1975 Jul 23 0930:00	M-100	-	-	-	-	-	-	UK	-	-	-	83	-	-
1975-Y231	2442617.12	1975 Jul 23 1500:00	M-100	-	-	-	TEMLS-770	-	-	MLD	-	-	-	83	-	-
1975-Y232	2442617.12	1975 Jul 23 1500:00	M-100	-	-	ISRO 8.204	-	-	-	TERLS	-	-	-	87	-	-
1975-Y233	2442623.96	1975 Jul 30 1100:00	M-100	-	-	-	-	-	-	UK	-	-	-	85	-	-
1975-Y236	2442624.12	1975 Jul 30 1500:00	M-100	-	-	-	TEMLS-771	-	-	MLD	-	-	-	93	-	-
1975-Y237	2442624.12	1975 Jul 30 1500:00	M-100	-	-	-	TEMLS-771	-	-	TERLS	-	-	-	88	-	-
1975-Y239	2442630.46	1975 Aug 05 2300:00	M-100	-	-	-	-	-	-	TERLS-4	-	-	-	87	-	-
1975-Y240	2442630.88	1975 Aug 06 0900:00	M-100	-	-	-	-	-	-	UK	-	-	-	90	-	-
1975-Y241	2442631.12	1975 Aug 06 1500:00	M-100	-	-	-	TEMLS-772	-	-	TERLS	-	-	-	87	-	-
1975-Y243	2442631.21	1975 Aug 06 1700:00	M-100	-	-	-	-	-	-	MLD	-	-	-	86	-	-
1975-Y245	2442638.00	1975 Aug 13 1200:00	M-100	-	-	-	-	-	-	UK	-	-	-	86	-	-
1975-Y246	2442638.12	1975 Aug 13 1500:00	M-100	-	-	-	-	-	-	MLD	-	-	-	82	-	-
1975-Y247	2442638.12	1975 Aug 13 1500:00	M-100	-	-	-	TEMLS-773	-	-	TERLS	-	-	-	89	-	-
1975-Y249	2442638.31	1975 Aug 13 1930:00	M-100	-	-	-	-	-	-	TERLS-4	-	-	-	87	-	-
1975-Y252	2442644.12	1975 Aug 19 1500:00	M-100	-	-	-	TEMLS-774	-	-	TERLS	-	-	-	87	-	-
1975-Y253	2442644.53	1975 Aug 20 0900:00	M-100	-	-	-	-	-	-	TERLS-4	-	-	-	85	-	-
1975-Y254	2442644.68	1975 Aug 20 0900:00	M-100	-	-	-	-	-	-	UK	-	-	-	80	-	-
1975-Y255	2442645.12	1975 Aug 20 1500:00	M-100	-	-	-	-	-	-	MLD	-	-	-	90	-	-
1975-Y256	2442646.12	1975 Aug 20 1500:00	M-100	-	-	-	-	-	-	UK	-	-	-	85	-	-
1975-Y258	2442646.88	1975 Aug 27 0630:00	M-100	-	-	-	-	-	-	MLD	-	-	-	92	-	-
1975-Y260	2442651.85	1975 Aug 27 0930:00	M-100	-	-	-	-	-	-	UK	-	-	-	85	-	-
1975-Y261	2442652.12	1975 Aug 27 1500:00	M-100	-	-	-	ISRO 8.209	-	-	UK	-	-	-	88	-	-
1975-Y262	2442653.88	1975 Aug 29 0900:00	M-100	-	-	-	-	-	-	UK	-	-	-	84	-	-
1975-Y263	2442653.88	1975 Sep 02 0500:00	M-100	-	-	-	-	-	-	TERLS	-	-	-	80	-	-
1975-Y265	2442657.71	1975 Sep 03 0600:00	M-100	-	-	-	-	-	-	MLD	-	-	-	87	-	-
1975-Y266	2442658.63	1975 Sep 03 0600:00	M-100	-	-	-	-	-	-	UK	-	-	-	80	-	-
1975-Y268	2442658.68	1975 Sep 03 0900:00	M-100	-	-	-	TEMLS-782	-	-	TERLS	-	-	-	85	-	-
1975-Y269	2442659.22	1975 Sep 03 1500:00	M-100	-	-	-	-	-	-	TERLS	-	-	-	84	-	-
1975-Y269	2442659.33	1975 Sep 03 2000:00	M-100	-	-	-	-	-	-	TERLS-4	-	-	-	85	-	-
1975-Y271	2442665.44	1975 Sep 09 2230:00	M-100	-	-	-	-	-	-	TERLS-4	-	-	-	94	-	-
1975-Y272	2442665.63	1975 Sep 10 0600:00	M-100	-	-	-	-	-	-	TERLS-4	-	-	-	84	-	-
1975-Y273	2442665.68	1975 Sep 10 0600:00	M-100	-	-	-	-	-	-	MLD	-	-	-	85	-	-
1975-Y274	2442666.12	1975 Sep 10 0900:00	M-100	-	-	-	TEMLS-783	-	-	UK	-	-	-	91	-	-
1975-Y275	2442666.67	1975 Sep 11 0400:00	M-100	-	-	-	-	-	-	TERLS	-	-	-	84	-	-
1975-Y276	2442667.67	1975 Sep 11 0600:00	M-100	-	-	-	-	-	-	TERLS-4	-	-	-	82	-	-
1975-Y279	2442672.48	1975 Sep 16 2330:00	M-100	-	-	-	-	-	-	TERLS-4	-	-	-	86	-	-
1975-Y280	2442672.68	1975 Sep 17 0900:00	M-100	-	-	-	-	-	-	TERLS-4	-	-	-	94	-	-
1975-Y281	2442673.12	1975 Sep 17 1500:00	M-100	-	-	-	TEMLS-786	-	-	TERLS	-	-	-	85	-	-
1975-Y284	2442674.67	1975 Sep 19 0400:00	M-100	-	-	-	-	-	-	MLD	-	-	-	89	-	-
1975-Y289	2442677.63	1975 Sep 22 0600:00	M-100	-	-	-	-	-	-	TERLS-4	-	-	-	84	-	-
1975-Y289	2442677.63	1975 Sep 22 0600:00	M-100	-	-	-	-	-	-	TERLS-4	-	-	-	91	-	-
1975-Y289	2442677.72	1975 Sep 22 0600:00	M-100	-	-	-	-	-	-	TERLS-4	-	-	-	86	-	-
1975-Y288	2442679.48	1975 Sep 23 2220:00	M-100	-	-	-	-	-	-	TERLS-4	-	-	-	86	-	-
1975-Y288	2442679.48	1975 Sep 24 0900:00	M-100	-	-	-	-	-	-	MLD	-	-	-	84	-	-
1975-Y289	2442680.12	1975 Sep 24 1500:00	M-100	-	-	-	TEMLS-789	-	-	TERLS	-	-	-	88	-	-
1975-Y290	2442680.12	1975 Sep 24 1500:00	M-100	-	-	-	-	-	-	TERLS-4	-	-	-	86	-	-
1975-Y291	2442680.12	1975 Sep 24 1500:00	M-100	-	-	-	-	-	-	TERLS-4	-	-	-	87	-	-
1975-Y291	2442680.88	1975 Sep 20 1100:00	M-100	-	-	-	-	-	-	UK	-	-	-	90	-	-
1975-Y294	2442684.12	1975 Sep 21 0900:00	M-100	-	-	-	-	-	-	UK	-	-	-	87	-	-
1975-Y295	2442687.15	1975 Oct 01 1500:00	M-100	-	-	-	TEMLS-791	-	-	MLD	-	-	-	90	-	-
1975-Y297	2442687.73	1975 Oct 01 1730:00	M-100	-	-	-	-	-	-	TERLS	-	-	-	87	-	-
1975-Y297	2442687.73	1975 Oct 08 0900:00	M-100	-	-	-	-	-	-	TERLS-4	-	-	-	83	-	-
1975-Y300	2442693.68	1975 Oct 08 1500:00	M-100	-	-	-	-	-	-	UK	-	-	-	89	-	-
1975-Y301	2442694.12	1975 Oct 08 1500:00	M-100	-	-	-	-	-	-	MLD	-	-	-	84	-	-
1975-Y302	2442694.31	1975 Oct 08 1930:00	M-100	-	-	-	TEMLS-794	-	-	TERLS	-	-	-	86	-	-
1975-Y303	2442700.38	1975 Oct 14 2100:00	M-100	-	-	-	-	-	-	TERLS-4	-	-	-	89	-	-
1975-Y305	2442700.88	1975 Oct 14 2100:00	M-100	-	-	-	-	-	-	TERLS-4	-	-	-	86	-	-
1975-Y306	2442700.88	1975 Oct 15 0900:00	M-100	-	-	-	-	-	-	UK	-	-	-	84	-	-
1975-Y307	2442701.12	1975 Oct 15 1500:00	M-100	-	-	-	-	-	-	MLD	-	-	-	93	-	-
1975-Y308	2442701.12	1975 Oct 15 1500:00	M-100	-	-	-	TEMLS-795	-	-	TERLS	-	-	-	857	-	-
1975-Y310	2442708.01	1975 Oct 22 1230:00	M-100	-	-	-	-	-	-	UK	-	-	-	86	-	-
1975-Y312	2442708.12	1975 Oct 22 1500:00	M-100	-	-	-	-	-	-	MLD	-	-	-	86	-	-
1975-Y313	2442708.12	1975 Oct 22 1500:00	M-100	-	-	-	TEMLS-796	-	-	TERLS	-	-	-	857	-	-
1975-Y314	2442708.21	1975 Oct 22 1700:00	M-100	-	-	-	-	-	-	TERLS-4	-	-	-	86	-	-
1975-Y315	2442714.68	1975 Oct 29 0900:00	M-100	-	-	-	-	-	-	UK	-	-	-	89	-	-
1975-Y316	2442715.12	1975 Oct 29 1500:00	M-100	-	-	-	-	-	-	MLD	-	-	-	84	-	-
1975-Y317	2442715.12	1975 Oct 29 1500:00	M-100	-	-	-	-	-	-	TERLS	-	-	-	83	-	-
1975-Y318	2442715.21	1975 Oct 29 1700:00	M-100	-	-	-	TEMLS-797	-	-	TERLS	-	-	-	89	-	-
1975-Y320	2442721.40	1975 Nov 04 2130:00	M-100	-	-	-	-	-	-	TERLS-4	-	-	-	86	-	-
1975-Y321	2442721.88	1975 Nov 05 0900:00	M-100	-	-	-	-	-	-	UK	-	-	-	89	-	-
1975-Y322	2442722.12	1975 Nov 05 1500:00	M-100	-	-	-	-	-	-	TERLS	-	-	-	83	-	-
1975-Y323	2442722.12	1975 Nov 05 1500:00	M-100	-	-	-	TEMLS-798	-	-	TERLS	-	-	-	85	-	-
1975-Y327	2442728.12	1975 Nov 11 1500:00	M-100	-	-	-	TEMLS-800	-	-	TERLS	-	-	-	83	-	-
1975-Y328	2442728.88	1975 Nov 12 0900:00	M-100	-	-	-	-	-	-	UK	-	-	-	80	-	-
1975-Y329	2442729.12	1975 Nov 12 1500:00	M-100	-	-	-	-	-	-	MLD	-	-	-	93	-	-
1975-Y330	2442729.21	1975 Nov 12 1700:00	M-100	-	-	-	-	-	-	MLD	-	-	-	89	-	-
1975-Y333	2442735.31	1975 Nov 18 1930:00	M-100	-	-	-	-	-	-	TERLS-4	-	-	-	88	-	-
1975-Y334	2442735.40	1975 Nov 18 2130:00	M-100	-	-	-	-	-	-	TERLS-4	-	-	-	86	-	-
1975-Y335	2442735.88	1975 Nov 19 0900:00	M-100	-	-	-	-	-	-	UK	-	-	-	90	-	-
1975-Y336	2442736.12	1975 Nov 19 1500:00	M-100	-	-	-	-	-	-	MLD	-	-	-	84	-	-
1975-Y337	2442736.12	1975 Nov 19 1500:00	M-100	-	-	-	TEMLS-802	-	-	TERLS	-	-	-	91	-	-
1975-Y340	2442738.21	1975 Nov 21 1700:00	M-100	-	-	-	-	-	-	TERLS-4	-	-	-	86	-	-
1975-Y341	2442738.29	1975 Nov 21 1900:00	M-100	-	-	-	-	-	-	TERLS-4	-	-	-	86	-	-
1975-Y342	2442742.92	1975 Nov 26 1000:00	M-100	-	-	-	-	-	-	UK	-	-	-	87	-	-
1975-Y342	2442742.92	1975 Nov 26 1430:00	M-100	-	-	-	TEMLS-803	-	-	TERLS	-	-	-	84	-	-
1975-Y343	2442743.12	1975 Nov 26 1500:00	M-100	-	-	-	-	-	-	TERLS-4	-	-	-	88	-	-
1975-Y344	2442743.21	1975 Nov 26 1700:00	M-100	-	-	-	-	-	-	TERLS-4	-	-	-	87	-	-



Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Launch_Mission	FlightCode	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee_Km	Range_Km	Dest
1976-162	2442820.08	1976 Feb 11 14:00:00	M-100							GTSP-4				92		
1976-163	2442820.10	1976 Feb 11 14:50:00	M-100B			ISR0-5.235				TERLS				83		
1976-164	2442820.12	1976 Feb 11 15:00:00	M-100							MJD				86		
1976-165	2442820.14	1976 Feb 11 15:00:00	M-100						SHIR	GTSP6A	LP20			89		
1976-166	2442821.10	1976 Feb 12 14:50:00	M-100B			ISR0-5.236				TERLS				86		
1976-167	2442821.88	1976 Feb 13 09:00:00	M-100							UK				80		
1976-168	2442822.17	1976 Feb 13 16:00:00	M-100						SHIR	GTSP6A	LP21			89		
1976-171	2442823.17	1976 Feb 14 16:00:00	M-100						SHIR	GTSP6A	LP22			89		
1976-172	2442824.17	1976 Feb 15 16:00:00	M-100						SHIR	GTSP6A	LP23			89		
1976-173	2442825.17	1976 Feb 16 16:00:00	M-100							IOLZ	1070			89		
1976-174	2442825.28	1976 Feb 16 18:43:00	M-100							UK				86		
1976-175	2442826.88	1976 Feb 18 09:00:00	M-100							GTSP-4				92		
1976-176	2442827.08	1976 Feb 18 14:00:00	M-100							TERLS				88		
1976-177	2442827.10	1976 Feb 18 14:50:00	M-100B							KER				91		
1976-178	2442827.12	1976 Feb 18 15:00:00	M-100			ISR0-5.237				GTSP-4				79		
1976-178	2442827.21	1976 Feb 18 17:00:00	M-100						SHOK	GTSP6C	LP1			87		
1976-180	2442828.12	1976 Feb 19 15:00:00	M-100							MJD				85		
1976-184	2442828.12	1976 Feb 19 15:00:00	M-100						SHIR	GTSP6A	LP24			91		
1976-184	2442828.92	1976 Feb 20 10:00:00	M-100						SHOK	GTSP6C	LP2			82		
1976-186	2442829.12	1976 Feb 20 15:00:00	M-100							UK				86		
1976-187	2442830.08	1976 Feb 21 14:00:00	M-100						SHOK	GTSP6C	LP3			83		
1976-188	2442830.12	1976 Feb 21 15:00:00	M-100						SHIR	GTSP6C	LP4			91		
1976-189	2442831.12	1976 Feb 22 15:00:00	M-100						SHIR	GTSP6C	LP5			89		
1976-190	2442831.33	1976 Feb 22 20:00:00	M-100						SHOK	GTSP6C	LP4			88		
1976-191	2442833.12	1976 Feb 24 15:00:00	M-100						SHOK	GTSP6C	LP5			80		
1976-192	2442833.38	1976 Feb 24 21:00:00	M-100						SHOK	GTSP6C	LP5			80		
1976-194	2442834.08	1976 Feb 25 14:00:00	M-100							UK				86		
1976-195	2442834.12	1976 Feb 25 15:00:00	M-100							GTSP-4				86		
1976-196	2442834.17	1976 Feb 25 16:00:00	M-100			ISR0-5.238				MJD				82		
1976-196	2442835.38	1976 Feb 26 21:00:00	M-100B							TERLS				94		
1976-199	2442835.38	1976 Feb 26 21:00:00	M-100						SHOK	GTSP6C	LP6			84		
1976-1101	2442836.12	1976 Feb 29 15:00:00	M-100							UK				87		
1976-1102	2442840.38	1976 Mar 02 21:00:00	M-100							UK				87		
1976-1103	2442841.10	1976 Mar 03 14:50:00	M-100B			ISR0-5.239				TERLS				84		
1976-1104	2442841.12	1976 Mar 03 15:00:00	M-100							UK				88		
1976-1105	2442841.12	1976 Mar 03 15:00:00	M-100						SHOK	GTSP6C	LP7			91		
1976-1106	2442841.12	1976 Mar 03 15:00:00	M-100							MJD				83		
1976-1109	2442842.38	1976 Mar 04 21:00:00	M-100						SHOK	GTSP6C	LP8			86		
1976-1110	2442846.12	1976 Mar 09 15:00:00	M-100							UK				86		
1976-1111	2442847.38	1976 Mar 09 21:00:00	M-100							UK				90		
1976-1112	2442848.08	1976 Mar 10 14:50:00	M-100B							GTSP-4				84		
1976-1113	2442848.10	1976 Mar 10 15:00:00	M-100							TERLS				85		
1976-1114	2442848.12	1976 Mar 10 15:00:00	M-100			ISR0-5.240				UK				88		
1976-1115	2442848.12	1976 Mar 10 15:00:00	M-100							KER				88		
1976-1116	2442848.12	1976 Mar 10 15:00:00	M-100							GTSP-4				84		
1976-1117	2442848.12	1976 Mar 10 15:00:00	M-100							UK				88		
1976-1118	2442849.38	1976 Mar 11 15:00:00	M-100						SHOK	GTSP6C	LP9			79		
1976-1119	2442851.15	1976 Mar 13 15:00:00	M-100						SHOK	GTSP6C	LP10			87		
1976-1120	2442852.17	1976 Mar 14 15:00:00	M-100						SHOK	GTSP6C	LP11			82		
1976-1121	2442853.10	1976 Mar 15 15:00:00	M-100						SHOK	GTSP6C	LP11			94		
1976-1122	2442853.10	1976 Mar 15 15:00:00	M-100						SHOK	GTSP6C	LP11			84		
1976-1123	2442854.10	1976 Mar 15 15:00:00	M-100						SHOK	GTSP6C	LP12			88		
1976-1124	2442854.38	1976 Mar 16 21:00:00	M-100						SHOK	GTSP6C	LP12			85		
1976-1125	2442855.08	1976 Mar 17 14:00:00	M-100							UK				87		
1976-1126	2442855.12	1976 Mar 17 14:00:00	M-100							GTSP-4				86		
1976-1127	2442855.12	1976 Mar 17 14:50:00	M-100B			ISR0-5.241				TERLS				78		
1976-1128	2442855.12	1976 Mar 17 15:00:00	M-100							UK				84		
1976-1129	2442855.12	1976 Mar 17 15:00:00	M-100						SHOK	GTSP6C	LP9			85		
1976-1130	2442861.31	1976 Mar 23 19:00:00	M-100							MJD				83		
1976-1131	2442861.36	1976 Mar 23 20:40:00	M-100							GTSP-4				98		
1976-1132	2442861.38	1976 Mar 23 21:00:00	M-100							UK				83		
1976-1133	2442861.47	1976 Mar 23 23:20:00	M-100							GTSP-4				86		
1976-1134	2442862.18	1976 Mar 24 15:00:00	M-100							TERLS				89		
1976-1135	2442864.17	1976 Mar 26 15:00:00	M-100			ISR0-5.242				UK				85		
1976-1136	2442864.12	1976 Mar 26 16:00:00	M-100							KER				84		
1976-1140	2442866.17	1976 Mar 27 21:00:00	M-100						SHOK	GTSP6C	LP14			86		
1976-1141	2442866.17	1976 Mar 28 16:00:00	M-100							MJD				85		
1976-1142	2442867.12	1976 Mar 30 15:00:00	M-100						SHOK	GTSP6C	LP15			84		
1976-1144	2442869.11	1976 Mar 31 15:00:00	M-100							UK				87		
1976-1145	2442869.11	1976 Mar 31 15:00:00	M-100B							UK				86		
1976-1146	2442869.12	1976 Mar 31 15:00:00	M-100							TERLS				90		
1976-1148	2442869.30	1976 Mar 31 19:10:00	M-100						SHOK	GTSP6C	LP7			86		
1976-1149	2442869.38	1976 Mar 31 21:00:00	M-100							GTSP-4				85		
1976-1151	2442871.46	1976 Apr 02 23:00:00	M-100							MJD				83		
1976-1152	2442872.29	1976 Apr 03 19:00:00	M-100							UK				88		
1976-1153	2442875.38	1976 Apr 06 21:00:00	M-100							MJD				87		
1976-1154	2442875.38	1976 Apr 06 21:00:00	M-100							UK				86		
1976-1155	2442876.10	1976 Apr 07 14:50:00	M-100B			ISR0-5.244				TERLS				85		
1976-1156	2442876.12	1976 Apr 07 15:00:00	M-100							GTSP-4				86		
1976-1157	2442876.12	1976 Apr 07 15:00:00	M-100						SHOK	GTSP-4				87		
1976-1159	2442877.38	1976 Apr 08 21:00:00	M-100							UK				83		
1976-1160	2442878.21	1976 Apr 09 17:00:00	M-100						SHOK	GTSP6C	LP16			86		
1976-1161	2442879.12	1976 Apr 10 15:00:00	M-100							UK				88		
1976-1162	2442879.17	1976 Apr 10 16:00:00	M-100						SHOK	GTSP6C	LP16			88		

Launch_Tag	Launch_ID	Launch_Date	Lv_Type	Variant	Flight_ID	Flight	Launch_Mission	FlightCode	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee Km	Range Km	Dest
1976-Y163	2442880.17	1976 Apr 11 1600:00	M-100	-	-	-	-	-	SHDK	GNS76C	LP3	-	-	83	-	-
1976-Y164	2442881.12	1976 Apr 12 1500:00	M-100	-	-	-	-	-	-	KER	-	-	-	88	-	-
1976-Y165	2442881.17	1976 Apr 12 1600:00	M-100	-	-	-	-	-	SHDK	GNS76C	LP2	-	-	87	-	-
1976-Y166	2442882.21	1976 Apr 13 1700:00	M-100	-	-	-	-	-	SHDK	GNS76C	LP1	-	-	89	-	-
1976-Y167	2442882.38	1976 Apr 13 2100:00	M-100	-	-	-	-	-	-	MLD	-	-	-	90	-	-
1976-Y655	2442882.48	1976 Apr 13 2330:00	M-100	-	-	-	-	-	-	UK	-	-	-	61	-	-
1976-Y168	2442883.10	1976 Apr 14 1430:00	M-100B	-	-	-	-	-	-	TERLS	-	-	-	83	-	-
1976-Y169	2442883.12	1976 Apr 14 1500:00	M-100	-	-	-	-	-	-	G18P-4	-	-	-	89	-	-
1976-Y170	2442883.12	1976 Apr 14 1500:00	M-100	-	-	-	-	-	-	KER	-	-	-	88	-	-
1976-Y173	2442884.38	1976 Apr 15 2100:00	M-100	-	-	-	-	-	-	UK	-	-	-	86	-	-
1976-Y174	2442885.12	1976 Apr 16 1500:00	M-100	-	-	-	-	-	-	KER	-	-	-	85?	-	-
1976-Y176	2442889.38	1976 Apr 20 2100:00	M-100	-	-	-	-	-	-	MLD	-	-	-	84	-	-
1976-Y177	2442889.38	1976 Apr 20 2100:00	M-100	-	-	-	-	-	-	UK	-	-	-	81	-	-
1976-Y178	2442890.10	1976 Apr 21 1430:00	M-100B	-	-	-	-	-	-	TERLS	-	-	-	88	-	-
1976-Y179	2442890.12	1976 Apr 21 1500:00	M-100	-	-	-	-	-	-	G18P-4	-	-	-	82	-	-
1976-Y180	2442890.22	1976 Apr 21 1500:00	M-100	-	-	-	-	-	-	KER	-	-	-	91	-	-
1976-Y181	2442890.22	1976 Apr 21 1720:00	M-100	-	-	-	-	-	-	UK	-	-	-	95	-	-
1976-Y184	2442891.38	1976 Apr 22 2100:00	M-100	-	-	-	-	-	-	MLD	-	-	-	83	-	-
1976-Y187	2442896.38	1976 Apr 27 2100:00	M-100	-	-	-	-	-	-	UK	-	-	-	83	-	-
1976-Y188	2442896.38	1976 Apr 27 2100:00	M-100	-	-	-	-	-	-	TERLS	-	-	-	88	-	-
1976-Y189	2442897.10	1976 Apr 28 1430:00	M-100B	-	-	-	-	-	-	KER	-	-	-	87	-	-
1976-Y191	2442897.12	1976 Apr 28 1500:00	M-100	-	-	-	-	-	-	UK	-	-	-	88	-	-
1976-Y193	2442897.38	1976 Apr 28 2100:00	M-100	-	-	-	-	-	-	G18P-4	-	-	-	82	-	-
1976-Y194	2442897.97	1976 Apr 29 1120:00	M-100	-	-	-	-	-	-	UK	-	-	-	89	-	-
1976-Y196	2442903.38	1976 May 04 2100:00	M-100	-	-	-	-	-	-	MLD	-	-	-	88	-	-
1976-Y197	2442903.38	1976 May 04 2106:00	M-100	-	-	-	-	-	-	UK	-	-	-	82	-	-
1976-Y198	2442904.10	1976 May 05 1430:00	M-100B	-	-	-	-	-	-	TERLS	-	-	-	85	-	-
1976-Y199	2442904.12	1976 May 05 1500:00	M-100	-	-	-	-	-	-	G18P-4	-	-	-	87	-	-
1976-Y200	2442904.12	1976 May 05 1500:00	M-100	-	-	-	-	-	-	UK	-	-	-	88	-	-
1976-Y203	2442906.38	1976 May 06 2106:00	M-100	-	-	-	-	-	-	MLD	-	-	-	85	-	-
1976-Y204	2442910.38	1976 May 11 2100:00	M-100	-	-	-	-	-	-	UK	-	-	-	85	-	-
1976-Y206	2442910.38	1976 May 11 2106:00	M-100	-	-	-	-	-	-	UK	-	-	-	89	-	-
1976-Y207	2442911.10	1976 May 12 1430:00	M-100B	-	-	-	-	-	-	TERLS	-	-	-	88	-	-
1976-Y208	2442911.12	1976 May 12 1500:00	M-100	-	-	-	-	-	-	G18P-4	-	-	-	89	-	-
1976-Y210	2442917.38	1976 May 18 2100:00	M-100	-	-	-	-	-	-	KER	-	-	-	88	-	-
1976-Y214	2442917.68	1976 May 18 2106:00	M-100	-	-	-	-	-	-	UK	-	-	-	88	-	-
1976-Y215	2442918.10	1976 May 19 0900:00	M-100B	-	-	-	-	-	-	TERLS	-	-	-	76	-	-
1976-Y216	2442918.12	1976 May 19 1500:00	M-100	-	-	-	-	-	-	G18P-4	-	-	-	94	-	-
1976-Y218	2442918.17	1976 May 19 1600:00	M-100	-	-	-	-	-	-	UK	-	-	-	75	-	-
1976-Y219	2442918.21	1976 May 19 1600:00	M-100	-	-	-	-	-	-	G18P-4	-	-	-	88	-	-
1976-Y221	2442918.21	1976 May 19 1600:00	M-100	-	-	-	-	-	-	UK	-	-	-	88	-	-
1976-Y222	2442918.21	1976 May 19 1600:00	M-100	-	-	-	-	-	-	G18P-4	-	-	-	88	-	-
1976-Y223	2442918.21	1976 May 19 1600:00	M-100	-	-	-	-	-	-	UK	-	-	-	88	-	-
1976-Y224	2442920.15	1976 May 21 1430:00	M-100	-	-	-	-	-	-	TERLS	-	-	-	86	-	-
1976-Y225	2442920.21	1976 May 21 1500:00	M-100	-	-	-	-	-	-	G18P-4	-	-	-	89	-	-
1976-Y226	2442920.21	1976 May 21 1500:00	M-100	-	-	-	-	-	-	G18P-4	-	-	-	87	-	-
1976-Y227	2442923.49	1976 May 25 2100:00	M-100B	-	-	-	-	-	-	TERLS	-	-	-	84	-	-
1976-Y228	2442924.38	1976 May 25 2106:00	M-100	-	-	-	-	-	-	MLD	-	-	-	90	-	-
1976-Y229	2442924.38	1976 May 25 2106:00	M-100	-	-	-	-	-	-	UK	-	-	-	88	-	-
1976-Y230	2442924.55	1976 May 25 2130:00	M-100	-	-	-	-	-	-	G18P-4	-	-	-	93	-	-
1976-Y231	2442924.55	1976 May 25 2130:00	M-100	-	-	-	-	-	-	G18P-4	-	-	-	95	-	-
1976-Y232	2442925.10	1976 May 26 1430:00	M-100B	-	-	-	-	-	-	TERLS	-	-	-	86	-	-
1976-Y233	2442927.10	1976 May 26 1433:00	M-100B	-	-	-	-	-	-	TERLS	-	-	-	83	-	-
1976-Y234	2442931.38	1976 May 31 1430:00	M-100B	-	-	-	-	-	-	TERLS	-	-	-	87	-	-
1976-Y235	2442931.38	1976 Jun 01 2106:00	M-100	-	-	-	-	-	-	MLD	-	-	-	83	-	-
1976-Y236	2442932.11	1976 Jun 02 1438:00	M-100B	-	-	-	-	-	-	UK	-	-	-	82	-	-
1976-Y237	2442932.12	1976 Jun 02 1500:00	M-100	-	-	-	-	-	-	TERLS	-	-	-	85	-	-
1976-Y240	2442938.38	1976 Jun 08 2100:00	M-100	-	-	-	-	-	-	G18P-4	-	-	-	92	-	-
1976-Y241	2442938.38	1976 Jun 08 2106:00	M-100	-	-	-	-	-	-	MLD	-	-	-	85	-	-
1976-Y242	2442939.13	1976 Jun 09 1512:00	M-100B	-	-	-	-	-	-	UK	-	-	-	53	-	-
1976-Y243	2442939.40	1976 Jun 09 2130:00	M-100	-	-	-	-	-	-	TERLS	-	-	-	85	-	-
1976-Y245	2442945.38	1976 Jun 15 2100:00	M-100	-	-	-	-	-	-	G18P-4	-	-	-	81	-	-
1976-Y246	2442945.38	1976 Jun 15 2106:00	M-100	-	-	-	-	-	-	UK	-	-	-	84	-	-
1976-Y247	2442946.10	1976 Jun 16 1430:00	M-100B	-	-	-	-	-	-	TERLS	-	-	-	56	-	-
1976-Y248	2442946.12	1976 Jun 16 1500:00	M-100	-	-	-	-	-	-	G18P-4	-	-	-	78	-	-
1976-Y250	2442952.25	1976 Jun 22 1800:00	M-100	-	-	-	-	-	-	GNS76E	LP1	-	-	90	-	-
1976-Y251	2442952.38	1976 Jun 22 2106:00	M-100	-	-	-	-	-	-	UK	-	-	-	83	-	-
1976-Y252	2442952.88	1976 Jun 23 0900:00	M-100	-	-	-	-	-	-	MLD	-	-	-	85	-	-
1976-Y253	2442953.11	1976 Jun 23 1435:00	M-100B	-	-	-	-	-	-	TERLS	-	-	-	79	-	-
1976-Y254	2442953.17	1976 Jun 23 1600:00	M-100	-	-	-	-	-	-	GNS76E	LP2	-	-	86	-	-
1976-Y256	2442955.25	1976 Jun 25 1800:00	M-100	-	-	-	-	-	-	GNS76E	LP3	-	-	86	-	-
1976-Y257	2442955.38	1976 Jun 25 2100:00	M-100	-	-	-	-	-	-	MLD	-	-	-	84	-	-
1976-Y258	2442956.25	1976 Jun 26 1800:00	M-100	-	-	-	-	-	-	GNS76E	LP4	-	-	89	-	-
1976-Y259	2442956.25	1976 Jun 26 1800:00	M-100	-	-	-	-	-	-	TERLS	-	-	-	89	-	-
1976-Y261	2442959.42	1976 Jun 28 1700:00	M-100	-	-	-	-	-	-	TOLZ	1070	-	-	82	-	-
1976-Y262	2442959.42	1976 Jun 29 2200:00	M-100	-	-	-	-	-	-	UK	-	-	-	91	-	-
1976-Y263	2442960.11	1976 Jun 30 1434:00	M-100B	-	-	-	-	-	-	TERLS	-	-	-	85	-	-
1976-Y265	2442960.25	1976 Jun 30 1800:00	M-100	-	-	-	-	-	-	TOLZ	1065	-	-	89	-	-
1976-Y266	2442961.21	1976 Jul 01 1700:00	M-100	-	-	-	-	-	-	GNS76E	LP6	-	-	89	-	-
1976-Y268	2442962.38	1976 Jul 02 2100:00	M-100	-	-	-	-	-	-	MLD	-	-	-	87	-	-
1976-Y269	2442966.38	1976 Jul 06 2106:00	M-100	-	-	-	-	-	-	UK	-	-	-	80	-	-
1976-Y270	2442966.38	1976 Jul 06 2106:00	M-100	-	-	-	-	-	-	TERLS	-	-	-	86	-	-
1976-Y271	2442967.12	1976 Jul 07 1500:00	M-100B	-	-	-	-	-	-	G18P-4	-	-	-	94	-	-
1976-Y275	2442967.43	1976 Jul 07 2220:00	M-100	-	-	-	-	-	-	G18P-4	-	-	-	90	-	-
1976-Y276	2442967.56	1976 Jul 08 0130:00	M-100	-	-	-	-	-	-	G18P-4	-	-	-	90	-	-
1976-Y277	2442967.62	1976 Jul 08 0300:00	M-100	-	-	-	-	-	-	G18P-4	-	-	-	90	-	-

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Launch_Mission	FlightCode	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee Km	Range Km	Dest
1976-Y278	2442969.38	1976 Jul 09 21:06:00	M-100							MLD				93		
1976-Y279	2442973.38	1976 Jul 13 21:06:00	M-100							UK				85		
1976-Y280	2442973.38	1976 Jul 13 21:06:00	M-100							UK				86		
1976-Y281	2442974.12	1976 Jul 14 14:50:00	M-100B			ISR0-5.262			SHOK	TERLS				85		
1976-Y282	2442974.25	1976 Jul 14 18:00:00	M-100							TERLS	IOSNR			82		
1976-Y286	2442976.46	1976 Jul 16 23:00:00	M-100							MLD				89		
1976-Y288	2442977.21	1976 Jul 17 17:00:00	M-100						SHOK	GNS76E	LP7			89		
1976-Y289	2442979.21	1976 Jul 19 17:00:00	M-100						SHOK	GNS76E	LP8			92		
1976-Y292	2442980.17	1976 Jul 20 16:00:00	M-100						SHOK	GNS76E	LP9			85		
1976-Y293	2442980.25	1976 Jul 20 18:00:00	M-100						SHOK	GNS76E	LP9			82		
1976-Y294	2442980.38	1976 Jul 20 21:00:00	M-100							MLD				95		
1976-Y295	2442980.38	1976 Jul 20 21:00:00	M-100							UK				82		
1976-Y296	2442981.11	1976 Jul 21 14:45:00	M-100B			ISR0-5.263			SHOK	TERLS				85		
1976-Y297	2442981.21	1976 Jul 21 17:00:00	M-100						SHOK	GNS76E	LP10			85		
1976-Y300	2442983.12	1976 Jul 23 15:00:00	M-100						SHOK	GNS76E	LP11			86		
1976-Y301	2442983.38	1976 Jul 23 21:00:00	M-100						SHOK	MLD				92		
1976-Y302	2442986.17	1976 Jul 26 16:00:00	M-100							UK	IOSNR			86		
1976-Y304	2442987.38	1976 Jul 27 21:06:00	M-100							MLD				52		
1976-Y305	2442988.10	1976 Jul 27 22:00:00	M-100							MLD				72		
1976-Y306	2442988.12	1976 Jul 28 14:50:00	M-100B			ISR0-5.264				TERLS				83		
1976-Y308	2442988.30	1976 Jul 28 19:10:00	M-100							G13P-4				86		
1976-Y309	2442988.38	1976 Jul 28 21:00:00	M-100							G13P-4				88		
1976-Y310	2442988.51	1976 Jul 29 00:20:00	M-100							G13P-4				89		
1976-Y311	2442988.63	1976 Jul 29 03:05:00	M-100							G13P-4				87		
1976-Y312	2442988.76	1976 Jul 29 06:15:00	M-100							G13P-4				85		
1976-Y313	2442988.88	1976 Jul 29 09:00:00	M-100							G13P-4				90		
1976-Y314	2442988.99	1976 Jul 29 11:45:00	M-100							G13P-4				86		
1976-Y315	2442989.15	1976 Jul 29 15:30:00	M-100							G13P-4				87		
1976-Y316	2442989.17	1976 Jul 29 16:00:00	M-100						SHOK	GNS76E	LP13			83		
1976-Y317	2442989.24	1976 Jul 29 17:40:00	M-100							G13P-4				86		
1976-Y318	2442989.35	1976 Jul 29 21:00:00	M-100							G13P-4				88		
1976-Y320	2442989.51	1976 Jul 30 00:20:00	M-100							G13P-4				86		
1976-Y321	2442989.61	1976 Jul 30 02:40:00	M-100							G13P-4				88		
1976-Y322	2442989.68	1976 Jul 30 09:00:00	M-100							G13P-4				86		
1976-Y323	2442989.99	1976 Jul 30 11:50:00	M-100							G13P-4				89		
1976-Y324	2442990.12	1976 Jul 30 14:50:00	M-100							G13P-4				84		
1976-Y325	2442990.15	1976 Jul 30 16:15:00	M-100							G13P-4				85		
1976-Y326	2442990.21	1976 Jul 30 17:06:00	M-100							G13P-4				89		
1976-Y327	2442990.35	1976 Jul 30 21:00:00	M-100							G13P-4				88		
1976-Y328	2442991.17	1976 Aug 01 16:00:00	M-100							MLD				91		
1976-Y329	2442992.17	1976 Aug 01 16:00:00	M-100						SHOK	GNS76E	LP8			76		
1976-Y330	2442992.24	1976 Aug 01 16:00:00	M-100						SHOK	TERLS				85		
1976-Y331	2442994.25	1976 Aug 03 15:00:00	M-100						SHOK	TERLS				86		
1976-Y332	2442994.35	1976 Aug 03 15:00:00	M-100						SHOK	TERLS				85		
1976-Y333	2442994.42	1976 Aug 03 21:06:00	M-100							MLD				89		
1976-Y334	2442994.44	1976 Aug 04 15:30:00	M-100B			ISR0-5.265				TERLS				84		
1976-Y335	2442996.11	1976 Aug 05 15:00:00	M-100							G13P-4				96		
1976-Y336	2442996.17	1976 Aug 05 15:00:00	M-100							G13P-4				94		
1976-Y337	2442997.38	1976 Aug 06 15:00:00	M-100						SHOK	GNS76E	LP11			87		
1976-Y340	2442997.37	1976 Aug 06 15:00:00	M-100						SHOK	GNS76E	LP14			86		
1976-Y343	2442998.37	1976 Aug 08 17:00:00	M-100						SHOK	MLD				93		
1976-Y344	2442998.51	1976 Aug 08 17:00:00	M-100						SHOK	MLD				86		
1976-Y345	2443001.38	1976 Aug 10 21:00:00	M-100							MLD				90		
1976-Y346	2443001.38	1976 Aug 10 21:06:00	M-100							UK				84		
1976-Y347	2443002.10	1976 Aug 11 14:30:00	M-100B			ISR0-5.266				TERLS				85		
1976-Y349	2443002.21	1976 Aug 11 17:00:00	M-100							G13P-4				88		
1976-Y351	2443004.38	1976 Aug 13 21:00:00	M-100							MLD				90		
1976-Y352	2443008.38	1976 Aug 17 21:06:00	M-100							MLD				82		
1976-Y353	2443008.38	1976 Aug 17 21:06:00	M-100							UK				85		
1976-Y354	2443009.10	1976 Aug 18 14:37:00	M-100							G13P-4				85		
1976-Y355	2443009.10	1976 Aug 18 14:30:00	M-100B			ISR0-5.267				TERLS				85		
1976-Y357	2443009.25	1976 Aug 18 18:05:00	M-100							G13P-4				92		
1976-Y358	2443009.35	1976 Aug 18 20:30:00	M-100B			ISR0-5.268				TERLS				83		
1976-Y359	2443009.38	1976 Aug 18 21:00:00	M-100							G13P-4				90		
1976-Y360	2443009.47	1976 Aug 18 23:15:00	M-100							G13P-4				91		
1976-Y361	2443009.58	1976 Aug 19 01:48:00	M-100							TERLS				95		
1976-Y362	2443009.60	1976 Aug 19 02:30:00	M-100B			ISR0-5.269				TERLS				84		
1976-Y363	2443009.76	1976 Aug 19 06:10:00	M-100							G13P-4				93		
1976-Y364	2443009.87	1976 Aug 19 08:47:00	M-100B			ISR0-5.270				TERLS				92		
1976-Y365	2443009.88	1976 Aug 19 09:00:00	M-100							G13P-4				92		
1976-Y366	2443009.99	1976 Aug 19 11:46:00	M-100							G13P-4				87		
1976-Y367	2443010.08	1976 Aug 19 14:00:00	M-100							TERLS				87		
1976-Y368	2443010.10	1976 Aug 19 14:30:00	M-100B			ISR0-5.271				TERLS				68		
1976-Y369	2443010.16	1976 Aug 19 15:48:00	M-100B			ISR0-5.272				TERLS				85		
1976-Y370	2443010.20	1976 Aug 19 16:50:00	M-100							G13P-4				85		
1976-Y371	2443010.23	1976 Aug 19 17:30:00	M-100							G13P-4				87		
1976-Y372	2443010.35	1976 Aug 19 20:30:00	M-100B			ISR0-5.273				TERLS				84		
1976-Y373	2443010.38	1976 Aug 19 21:06:00	M-100							UK				89		
1976-Y374	2443010.42	1976 Aug 19 22:00:00	M-100							G13P-4				82		
1976-Y375	2443010.47	1976 Aug 19 23:15:00	M-100							G13P-4				89		
1976-Y376	2443010.60	1976 Aug 20 02:30:00	M-100B			ISR0-5.274				TERLS				86		
1976-Y377	2443010.65	1976 Aug 20 03:33:00	M-100							G13P-4				86		
1976-Y378	2443010.76	1976 Aug 20 06:12:00	M-100							G13P-4				89		
1976-Y379	2443010.85	1976 Aug 20 08:25:00	M-100B			ISR0-5.275				TERLS				86		
1976-Y379	2443010.88	1976 Aug 20 09:00:00	M-100							G13P-4				90		



Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Launch_Mission	FlightCode	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee_Km	Range_Km	Dest
1976-Y380	2443010.99	1976 Aug 20 1144:00	M-100							GTSP-4				85		
1976-Y381	2443011.11	1976 Aug 20 1442:00	M-100							GTSP-4				92		
1976-Y382	2443011.24	1976 Aug 20 1742:00	M-100							GTSP-4				89		
1976-Y383	2443011.38	1976 Aug 20 2100:00	M-100							MLD				82		
1976-Y385	2443012.24	1976 Aug 21 1750:00	M-100							IOCDR				89		
1976-Y386	2443013.21	1976 Aug 22 1700:00	M-100						SHOK	GTSP-4				94		
1976-Y387	2443014.21	1976 Aug 22 1700:00	M-100						SHOK	GTSP-4				82		
1976-Y388	2443015.17	1976 Aug 24 1600:00	M-100						SHOK	GTSP-4				87		
1976-Y389	2443015.21	1976 Aug 24 1700:00	M-100						SHOK	IOCDR				86		
1976-Y390	2443015.38	1976 Aug 24 2106:00	M-100							MLD				89		
1976-Y391	2443015.38	1976 Aug 24 2106:00	M-100							UK				89		
1976-Y392	2443016.10	1976 Aug 25 1430:00	M-100B			ISR0-5.276				TERLS				80		
1976-Y393	2443016.17	1976 Aug 25 1610:00	M-100						SHOK	GTSP-4				90		
1976-Y394	2443016.21	1976 Aug 25 1700:00	M-100						SHOK	GTSP-4				84		
1976-Y396	2443017.17	1976 Aug 26 1600:00	M-100						SHOK	GTSP-4				89		
1976-Y397	2443017.21	1976 Aug 26 1700:00	M-100						SHOK	GTSP-4				89		
1976-Y398	2443017.38	1976 Aug 26 2106:00	M-100							UK				83		
1976-Y399	2443018.21	1976 Aug 27 1700:00	M-100						SHOK	GTSP-4				85		
1976-Y400	2443019.25	1976 Aug 28 1800:00	M-100						SHOK	GTSP-4				88		
1976-Y401	2443021.17	1976 Aug 30 1600:00	M-100						SHOK	GTSP-4				86		
1976-Y402	2443021.21	1976 Aug 30 1700:00	M-100						SHOK	GTSP-4				89		
1976-Y404	2443022.38	1976 Aug 31 2106:00	M-100							MLD				86		
1976-Y405	2443022.38	1976 Aug 31 2106:00	M-100			ISR0-5.277				UK				81		
1976-Y406	2443023.10	1976 Sep 01 1500:00	M-100							TERLS				81		
1976-Y407	2443023.12	1976 Sep 01 1500:00	M-100							GTSP-4				90		
1976-Y410	2443024.38	1976 Sep 02 2106:00	M-100							MLD				84		
1976-Y412	2443029.38	1976 Sep 07 2100:00	M-100							GTSP-4				89		
1976-Y415	2443030.23	1976 Sep 08 1730:00	M-100							GTSP-4				89		
1976-Y416	2443031.10	1976 Sep 09 1430:00	M-100							UK				84		
1976-Y417	2443031.38	1976 Sep 09 2106:00	M-100							UK				85		
1976-Y418	2443036.42	1976 Sep 14 2106:00	M-100							MLD				80		
1976-Y419	2443036.42	1976 Sep 14 2200:00	M-100							TERLS				80		
1976-Y420	2443037.10	1976 Sep 15 1500:00	M-100							TERLS				84		
1976-Y421	2443037.12	1976 Sep 15 1500:00	M-100							GTSP-4				857		
1976-Y424	2443037.26	1976 Sep 15 1820:00	M-100							GTSP-4				89		
1976-Y425	2443038.60	1976 Sep 17 0220:00	M-100							GTSP-4				90		
1976-Y426	2443043.38	1976 Sep 21 2106:00	M-100							MLD				86		
1976-Y427	2443043.38	1976 Sep 21 2106:00	M-100							UK				89		
1976-Y428	2443044.12	1976 Sep 21 2106:00	M-100							TERLS				86		
1976-Y429	2443044.12	1976 Sep 22 1454:00	M-100							GTSP-4				92		
1976-Y430	2443044.19	1976 Sep 22 1640:00	M-100							TERLS				87		
1976-Y433	2443046.10	1976 Sep 23 1430:00	M-100							TERLS				92		
1976-Y434	2443046.16	1976 Sep 24 1550:00	M-100							GTSP-4				86		
1976-Y435	2443046.22	1976 Sep 24 1510:00	M-100							GTSP-4				83		
1976-Y436	2443046.31	1976 Sep 24 1620:00	M-100							GTSP-4				89		
1976-Y437	2443046.37	1976 Sep 24 1659:00	M-100							TERLS				97		
1976-Y438	2443046.80	1976 Sep 25 0755:00	M-100B			ISR0-5.282	Ozone test			TERLS				807		
1976-Y439	2443047.80	1976 Sep 25 0755:00	M-100B							MLD				97		
1976-Y440	2443050.38	1976 Sep 28 2106:00	M-100							UK				85		
1976-Y441	2443050.38	1976 Sep 28 2106:00	M-100							TERLS				86		
1976-Y442	2443051.11	1976 Sep 29 1730:00	M-100			ISR0-5.283				GTSP-4				79		
1976-Y4301	2443051.40	1976 Sep 29 2140:00	M-100							GTSP-4				8657		
1976-Y445	2443052.66	1976 Oct 01 0130:00	M-100							GTSP-4				86		
1976-Y446	2443052.82	1976 Oct 01 0300:00	M-100							GTSP-4				88		
1976-Y447	2443057.38	1976 Oct 05 2106:00	M-100							UK				86		
1976-Y448	2443057.40	1976 Oct 05 2200:00	M-100							MLD				90		
1976-Y430	2443058.10	1976 Oct 06 1430:00	M-100B			ISR0-5.284				TERLS				66		
1976-Y431	2443058.12	1976 Oct 06 1500:00	M-100							GTSP-4				76		
1976-Y439	2443058.19	1976 Oct 06 1640:00	M-100							GTSP-4				857		
1976-Y451	2443058.27	1976 Oct 08 1830:00	M-100							GTSP-4				857		
1976-Y453	2443060.20	1976 Oct 08 1852:00	M-100							GTSP-4				857		
1976-Y454	2443064.38	1976 Oct 12 2100:00	M-100							MLD				90		
1976-Y455	2443064.64	1976 Oct 12 2106:00	M-100							UK				89		
1976-Y456	2443064.92	1976 Oct 13 1005:00	M-100							TERLS				88		
1976-Y457	2443065.10	1976 Oct 13 1430:00	M-100B			ISR0-5.285				GTSP-4				80		
1976-Y460	2443065.96	1976 Oct 14 1100:00	M-100							GTSP-4				857		
1976-Y461	2443067.18	1976 Oct 15 1615:00	M-100							MLD				81		
1976-Y462	2443071.38	1976 Oct 19 2100:00	M-100							UK				82		
1976-Y463	2443071.38	1976 Oct 19 2106:00	M-100							GTSP-4				89		
1976-Y464	2443071.95	1976 Oct 20 1055:00	M-100							SHTR				78		
1976-Y462	2443071.96	1976 Oct 20 1100:00	M-100							GTSP-4				857		
1976-Y465	2443072.09	1976 Oct 20 1410:00	M-100B			ISR0-5.286				TERLS				82		
1976-Y466	2443072.10	1976 Oct 20 1430:00	M-100B							GTSP-4				857		
1976-Y469	2443073.99	1976 Oct 22 1140:00	M-100							SHTR				857		
1976-Y4516	2443076.04	1976 Oct 24 1300:00	M-100						SHTR	GTSP-4				76		
1976-Y470	2443078.06	1976 Oct 26 1320:00	M-100						SHTR	GTSP-4				857		
1976-Y471	2443078.38	1976 Oct 26 2106:00	M-100							MLD				89		
1976-Y472	2443078.38	1976 Oct 26 2106:00	M-100							UK				82		
1976-Y473	2443078.92	1976 Oct 27 1000:00	M-100							GTSP-4				82		
1976-Y474	2443078.97	1976 Oct 27 1110:00	M-100							OJP				857		
1976-Y475	2443079.00	1976 Oct 27 1200:00	M-100							TERLS				82		
1976-Y477	2443079.10	1976 Oct 27 1430:00	M-100B			ISR0-5.287				SHTR				857		
1976-Y458	2443080.00	1976 Oct 28 1200:00	M-100							SHTR				76		
1976-Y481	2443082.08	1976 Oct 30 1400:00	M-100							SHTR				85		
1976-Y482	2443085.04	1976 Nov 02 1300:00	M-100							SHTR				80		

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Launch_Mission	FlightCode	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee Km	Range Km	Dest
1976-7483	2443085.38	1976 Nov 02 2100:00	M-100							MJD				81		
1976-7484	2443085.38	1976 Nov 02 2106:00	M-100							UK				89		
1976-7485	2443085.91	1976 Nov 03 0950:00	M-100							GRSP-4				85		
1976-7486	2443086.10	1976 Nov 03 1430:00	M-100B			ISR0-5.288				TERLS				83		
1976-7489	2443088.96	1976 Nov 06 1100:00	M-100						SHIR	GRS76J	LP9			83		
1976-7490	2443092.38	1976 Nov 09 2100:00	M-100							UK				85?		
1976-7491	2443092.38	1976 Nov 09 2106:00	M-100							MJD				91		
1976-7492	2443093.54	1976 Nov 10 0100:00	M-100							TERLS				87		
1976-7493	2443093.12	1976 Nov 10 1500:00	M-100A							GRSP-4				83		
1976-7494	2443093.16	1976 Nov 10 1545:00	M-100							GRSP-4				85		
1976-7498	2443098.96	1976 Nov 16 1100:00	M-100						SHIR	GRS76J	LP9			80		
1976-7499	2443099.38	1976 Nov 16 2100:00	M-100							UK				90		
1976-7500	2443099.38	1976 Nov 16 2106:00	M-100							TERLS				88		
1976-7501	2443100.10	1976 Nov 17 1430:00	M-100B							UK				90		
1976-7502	2443100.21	1976 Nov 17 1700:00	M-100							TERLS				85		
1976-7506	2443101.04	1976 Nov 18 1300:00	M-100							GRSP-4				81		
1976-7507	2443105.94	1976 Nov 22 1300:00	M-100						SHIR	GRS76J	LP10			85?		
1976-7508	2443106.38	1976 Nov 23 2100:00	M-100							GRS76J	LP11			83		
1976-7509	2443106.38	1976 Nov 23 2106:00	M-100							UK				83		
1976-7510	2443106.44	1976 Nov 23 2231:00	M-100							UK				89		
1976-7511	2443107.10	1976 Nov 24 1430:00	M-100B			ISR0-5.291				TERLS				82		
1976-7512	2443107.15	1976 Nov 24 1540:00	M-100						SHIR	GRSP-4				94		
1976-7517	2443107.96	1976 Nov 25 1100:00	M-100							UK				77		
1976-7518	2443108.44	1976 Nov 25 2231:00	M-100							GRSP-4				90		
1976-7519	2443109.12	1976 Nov 26 1500:00	M-100							UK				81		
1976-7516	2443110.08	1976 Nov 27 1400:00	M-100							UK				89		
1976-7517	2443110.38	1976 Nov 27 1400:00	M-100							UK				89		
1976-7518	2443113.38	1976 Nov 30 2100:00	M-100							GRSP-4				81		
1976-7519	2443113.38	1976 Nov 30 2106:00	M-100							MJD				87		
1976-7520	2443114.10	1976 Dec 01 1430:00	M-100B			ISR0-5.292				UK				81		
1976-7521	2443114.22	1976 Dec 01 1710:00	M-100							TERLS				91		
1976-7522	2443114.25	1976 Dec 01 1800:00	M-100							GRSP-4	LP1			96		
1976-7524	2443114.25	1976 Dec 01 1900:00	M-100						SHOK	GRS76K	LP1			98		
1976-7525	2443115.21	1976 Dec 02 1700:00	M-100						SHOK	GRS76K	LP2			98		
1976-7526	2443116.21	1976 Dec 02 1700:00	M-100						SHOK	GRS76K	LP3			79		
1976-7527	2443119.04	1976 Dec 03 1700:00	M-100						SHOK	GRS76K	LP4			81		
1976-7528	2443119.65	1976 Dec 06 1600:00	M-100						SHOK	GRS76K	LP4			82		
1976-7529	2443120.38	1976 Dec 07 0630:00	M-100						SHIR	GRS76J	LP12			94		
1976-7530	2443120.38	1976 Dec 07 2100:00	M-100							GRSP-4				84		
1976-7531	2443120.38	1976 Dec 07 2106:00	M-100							UK				96		
1976-7544	2443120.80	1976 Dec 08 0000:00	M-100				Elec conductivity			GRSP-4				85?		
1976-7545	2443120.80	1976 Dec 08 1150:00	M-100							GRSP-4				95		
1976-7546	2443121.10	1976 Dec 08 1430:00	M-100B			ISR0-5.293				GRSP-4				85		
1976-7547	2443121.22	1976 Dec 08 1710:00	M-100							TERLS				85?		
1976-7548	2443122.00	1976 Dec 09 1430:00	M-100						SHIR	GRS76J	LP13			82		
1976-7549	2443123.11	1976 Dec 10 1430:00	M-100							GRSP-4				82		
1976-7550	2443123.51	1976 Dec 10 1930:00	M-100							GRSP-4				81		
1976-7551	2443124.86	1976 Dec 12 1300:00	M-100						SHIR	GRS76J	LP14			90		
1976-7552	2443125.96	1976 Dec 12 1300:00	M-100						SHIR	GRS76J	LP14			90		
1976-7553	2443125.96	1976 Dec 13 1430:00	M-100						SHIR	GRS76J	LP14			82		
1976-7554	2443126.38	1976 Dec 13 1430:00	M-100						SHIR	GRS76J	LP15			74		
1976-7557	2443126.38	1976 Dec 14 1430:00	M-100							GRSP-4				85?		
1976-7558	2443127.38	1976 Dec 14 2106:00	M-100							GRSP-4				85?		
1976-7559	2443127.38	1976 Dec 14 2106:00	M-100							MJD				86		
1976-7560	2443128.08	1976 Dec 15 1400:00	M-100							UK				86		
1976-7561	2443128.21	1976 Dec 15 1700:00	M-100							GRSP-4				87		
1976-7562	2443128.10	1976 Dec 16 1430:00	M-100B						SHOK	GRS76K	LP5			95		
1976-7563	2443128.29	1976 Dec 16 1900:00	M-100							TERLS				87		
1976-7564	2443129.82	1976 Dec 16 1900:00	M-100							GRS76K	LP6			83		
1976-7565	2443129.82	1976 Dec 17 0736:00	M-100							GRS76K				83		
1976-7566	2443129.88	1976 Dec 17 0900:00	M-100							GRSP-4				85		
1976-7567	2443130.17	1976 Dec 17 1600:00	M-100						SHOK	GRS76K	TO5UR			84		
1976-7568	2443130.21	1976 Dec 17 1700:00	M-100						SHOK	GRS76K	TO5UR			87		
1976-7569	2443131.17	1976 Dec 18 1600:00	M-100						SHOK	GRS76K	LP6			87		
1976-7570	2443131.17	1976 Dec 18 1600:00	M-100							TO5UR				84		
1976-7571	2443131.17	1976 Dec 20 1500:00	M-100						SHOK	GRS76K	ROBR			87		
1976-7572	2443133.12	1976 Dec 20 1500:00	M-100							MJD				88		
1976-7573	2443133.38	1976 Dec 21 2100:00	M-100							GRSP-4				93		
1976-7574	2443133.38	1976 Dec 21 2106:00	M-100							TERLS				83		
1976-7575	2443134.38	1976 Dec 22 0830:00	M-100							GRSP-4?				85?		
1976-7576	2443134.85	1976 Dec 22 0935:00	M-100							GRSP-4?				85?		
1976-7577	2443134.90	1976 Dec 22 0935:00	M-100A							GRSP-4?				85?		
1976-7578	2443135.10	1976 Dec 23	M-100							GRSP-4?				85?		
1976-7579	2443135.50	1976 Dec 23	M-100							GRSP-4?				85?		
1976-7580	2443135.50	1976 Dec 23	M-100							TO5UR				87		
1976-7581	2443136.17	1976 Dec 23 1600:00	M-100						SHOK	TO5UR	TO5UR			87		
1976-7582	2443136.25	1976 Dec 23 1800:00	M-100						SHIR	TO5UR	TO5UR			87		
1976-7583	2443138.17	1976 Dec 25 1600:00	M-100						SHIR	TO5UR	TO5UR			87		
1976-7584	2443138.21	1976 Dec 25 1600:00	M-100						SHIR	TO5UR	TO5UR			87		
1976-7585	2443138.21	1976 Dec 25 1700:00	M-100						SHOK	GRS76K	LP8			90		
1976-7586	2443139.17	1976 Dec 26 1600:00	M-100						SHOK	GRS76K	LP8			86		
1976-7587	2443139.21	1976 Dec 26 1600:00	M-100						SHOK	GRS76K	LP9			85		
1976-7588	2443139.21	1976 Dec 26 1700:00	M-100						SHOK	GRS76K	LP9			85		
1976-7589	2443140.17	1976 Dec 27 1600:00	M-100						SHOK	GRS76K	LP9			81		
1976-7590	2443140.25	1976 Dec 27 1800:00	M-100						SHOK	GRS76K	LP9			81		
1976-7591	2443140.25	1976 Dec 27 1800:00	M-100						SHOK	GRS76K	LP9			81		
1976-7592	2443141.04	1976 Dec 28 1300:00	M-100						SHOK	GRS76K	LP10			87		
1976-7593	2443141.04	1976 Dec 28 1300:00	M-100						SHOK	GRS76K	LP10			88		
1976-7594	2443141.08	1976 Dec 28 1400:00	M-100						SHIR	GRS76J	LP11			84		
1976-7595	2443141.38	1976 Dec 28 2106:00	M-100						SHIR	GRS76J	LP11			84		
1976-7596	2443141.54	1976 Dec 29 0100:00	M-100							UK				82		
1976-7597	2443141.54	1976 Dec 29 0100:00	M-100							MJD				84		
1976-7598	2443141.88	1976 Dec 29 0900:00	M-100							GRSP-4				79		
1976-7599	2443142.10	1976 Dec 29 1430:00	M-100B			ISR0 5.296				TERLS				83		

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Launch_Mission	FlightCode	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee_Km	Range_Km	Dest
1976-V585	2443142.96	1976 Dec 30 11:00:00	N-100						SHIR	GNS76J	LP18			84		
1976-V586	2443143.17	1976 Dec 30 16:00:00	N-100						SHOK	GNS76K	LP12			86		
1976-V587	2443143.25	1976 Dec 30 18:00:00	N-100						SHOK	GNS76K	LP12			86		
1977-Y01	2443144.68	1977 Jan 01 09:00:00	N-100						SHIR	GNS76J	LP19			85		
1977-Y02	2443146.17	1977 Jan 02 17:00:00	N-100						SHOK	NER				83		
1977-Y03	2443146.21	1977 Jan 02 17:00:00	N-100						SHOK	NER				83		
1977-Y04	2443146.68	1977 Jan 03 09:00:00	N-100						SHIR	GNS76J	LP20			87		
1977-Y05	2443148.03	1977 Jan 04 12:40:00	N-100						SHIR	GNS76J	LP1			88		
1977-Y06	2443148.38	1977 Jan 04 21:00:00	N-100						KURO	GNS77A				86		
1977-Y07	2443148.38	1977 Jan 04 21:06:00	N-100							MLD				81		
1977-Y08	2443148.68	1977 Jan 05 09:00:00	N-100						SHIR	GNS76J	LP21			86		
1977-Y09	2443148.91	1977 Jan 05 09:50:00	N-100						KURO	GNS77A	LP2			87		
1977-W27	2443148.94	1977 Jan 05 10:30:00	N-100							G18P-4				78		
1977-W28	2443148.99	1977 Jan 05 11:40:00	N-100							G18P-4				78		
1977-Y10	2443149.12	1977 Jan 05 15:00:00	N-100							TERLS				51		
1977-Y11	2443150.86	1977 Jan 07 08:40:00	N-100						KURO	GNS77A	LP3			78		
1977-Y12	2443155.38	1977 Jan 11 21:00:00	N-100							MLD				94		
1977-Y13	2443155.38	1977 Jan 11 21:06:00	N-100							UK				79		
1977-Y14	2443155.73	1977 Jan 12 05:30:00	N-100						KURO	G18P-4				53		
1977-Y15	2443156.68	1977 Jan 12 06:40:00	N-100							GNS77A				79		
1977-Y16	2443156.68	1977 Jan 12 06:40:00	N-100							GNS77A				85		
1977-Y17	2443160.81	1977 Jan 17 07:30:00	N-100							GNS77A				85		
1977-Y18	2443162.38	1977 Jan 18 21:00:00	N-100							MLD				84		
1977-Y19	2443162.38	1977 Jan 18 21:06:00	N-100							UK				84		
1977-Y20	2443163.12	1977 Jan 19 06:00:00	N-100							G18P-4				83		
1977-Y21	2443163.79	1977 Jan 21 09:00:00	N-100							TERLS				81		
1977-W159	2443164.68	1977 Jan 21 09:00:00	N-100						SHIR	GNS76J	LP22			87		
1977-Y22	2443166.94	1977 Jan 23 07:00:00	N-100						KURO	GNS77A	LP6			94		
1977-W157	2443166.94	1977 Jan 23 10:30:00	N-100						SHIR	GNS76J	LP23			84		
1977-Y23	2443167.13	1977 Jan 23 15:10:00	N-100						KURO	GNS77A	LP7			77		
1977-Y24	2443168.12	1977 Jan 24 15:00:00	N-100							G18P-4				62		
1977-Y25	2443169.38	1977 Jan 25 21:00:00	N-100						SHIR	GNS76J	LP24			87		
1977-Y26	2443169.38	1977 Jan 25 21:00:00	N-100							UK				83		
1977-Y27	2443169.63	1977 Jan 26 09:10:00	N-100							MLD				84		
1977-Y28	2443169.68	1977 Jan 26 09:10:00	N-100						KURO	GNS77A	LP8			84		
1977-Y29	2443169.93	1977 Jan 26 10:20:00	N-100							G18P-4				82		
1977-Y30	2443170.94	1977 Jan 27 06:10:00	N-100						KURO	GNS77A	LP9			81		
1977-W20	2443171.12	1977 Jan 27 06:10:00	N-100							TERLS				85		
1977-W202	2443172.12	1977 Jan 28 14:50:00	N-100						KURO	GNS77A	LP10			77		
1977-Y31	2443176.38	1977 Feb 01 21:00:00	N-100							UK				84		
1977-Y32	2443176.42	1977 Feb 01 22:30:00	N-100							MLD				87		
1977-W251	2443176.94	1977 Feb 02 15:30:00	N-100							G18P-4				77		
1977-Y33	2443177.82	1977 Feb 02 15:30:00	N-100						SHIR	GNS76J	LP25			86		
1977-Y34	2443177.82	1977 Feb 02 15:30:00	N-100						SHIR	GNS76J	LP25			84		
1977-Y35	2443177.82	1977 Feb 03 09:00:00	N-100							OK				92		
1977-Y36	2443178.38	1977 Feb 03 21:00:00	N-100							GNS76J				86		
1977-Y37	2443178.38	1977 Feb 03 21:00:00	N-100							OK				92		
1977-Y38	2443178.85	1977 Feb 04 09:00:00	N-100						SHIR	GNS76J	LP1			85		
1977-Y39	2443178.85	1977 Feb 04 09:00:00	N-100						SHIR	GNS76J	LP1			85		
1977-Y40	2443180.86	1977 Feb 06 09:00:00	N-100						SHIR	GNS76J	LP6			84		
1977-Y41	2443180.86	1977 Feb 06 09:00:00	N-100						SHIR	GNS76J	LP6			84		
1977-Y42	2443183.38	1977 Feb 08 21:00:00	N-100							GNS76J				86		
1977-Y43	2443183.38	1977 Feb 08 21:00:00	N-100						SHIR	GNS76J	LP26			83		
1977-Y44	2443183.90	1977 Feb 09 09:30:00	N-100							MLD				88		
1977-Y45	2443184.12	1977 Feb 09 16:00:00	N-100							OK				88		
1977-Y46	2443184.12	1977 Feb 09 16:00:00	N-100							G18P-4				84		
1977-Y47	2443184.17	1977 Feb 09 16:00:00	N-100							TERLS				36		
1977-Y48	2443185.12	1977 Feb 10 15:00:00	N-100							TERLS				79		
1977-Y49	2443185.38	1977 Feb 10 21:06:00	N-100							OK				85?		
1977-Y50	2443190.38	1977 Feb 15 21:06:00	N-100							OK				89		
1977-Y51	2443190.38	1977 Feb 15 21:06:00	N-100							MLD				89		
1977-Y52	2443190.38	1977 Feb 15 21:06:00	N-100							OK				88		
1977-Y53	2443190.94	1977 Feb 16 10:30:00	N-100							OK				82		
1977-Y54	2443191.12	1977 Feb 16 15:00:00	N-100							G18P-4				83		
1977-Y55	2443192.12	1977 Feb 17 15:00:00	N-100							TERLS				84		
1977-Y56	2443192.38	1977 Feb 17 21:12:00	N-100							OK				86		
1977-Y57	2443193.12	1977 Feb 17 21:12:00	N-100							OK				92		
1977-Y58	2443197.38	1977 Feb 22 21:06:00	N-100							MLD				66		
1977-Y59	2443197.38	1977 Feb 22 21:06:00	N-100							MLD				66		
1977-Y60	2443197.38	1977 Feb 22 21:06:00	N-100							OK				84		
1977-Y61	2443198.12	1977 Feb 23 15:00:00	N-100							G18P-4				83		
1977-Y62	2443198.12	1977 Feb 23 15:00:00	N-100							TERLS				83		
1977-Y63	2443199.38	1977 Feb 24 21:06:00	N-100							OK				95		
1977-Y64	2443200.12	1977 Feb 25 15:00:00	N-100							OK				84		
1977-Y65	2443200.48	1977 Feb 25 15:00:00	N-100							OK				85		
1977-Y66	2443200.48	1977 Feb 25 15:00:00	N-100							G18P-4				81		
1977-Y67	2443205.12	1977 Feb 25 15:00:00	N-100							TERLS				81		
1977-Y68	2443205.17	1977 Feb 25 16:00:00	N-100							OK				86		
1977-Y69	2443205.38	1977 Feb 25 16:00:00	N-100							OK				86		
1977-Y70	2443206.38	1977 Feb 25 16:00:00	N-100							MLD				84		
1977-Y71	2443207.40	1977 Feb 25 16:00:00	N-100							OK				88		
1977-Y72	2443211.38	1977 Feb 25 21:06:00	N-100							G18P-4				81		
1977-Y73	2443211.42	1977 Feb 25 21:06:00	N-100							OK				88		
1977-Y74	2443211.42	1977 Feb 25 21:06:00	N-100							MLD				84		
1977-Y75	2443211.94	1977 Feb 25 21:06:00	N-100							G18P-4				78		
1977-Y76	2443212.12	1977 Feb 25 21:06:00	N-100							OK				94		
1977-Y77	2443212.12	1977 Feb 25 21:06:00	N-100							TERLS				84		
1977-Y78	2443213.38	1977 Feb 25 21:06:00	N-100							OK				88		
1977-Y79	2443214.12	1977 Feb 25 21:06:00	N-100							OK				90		
1977-W500	2443214.71	1977 Feb 25 21:06:00	N-100						KURO	GNS77C	LP1			78		

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Launch_Mission	FlightCode	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee_Km	Range_Km	Dest
1977-Y98	2443216.71	1977 Mar 14 0500:00	N-100						KURO	GNS77C	LP2			84		
1977-Y99	2443217.12	1977 Mar 14 1500:00	N-100							KER				92		
1977-Y100	2443218.38	1977 Mar 15 2106:00	N-100							UK				81		
1977-Y101	2443219.06	1977 Mar 16 1320:00	N-100							GTS-P-4				85		
1977-Y102	2443219.08	1977 Mar 16 1400:00	N-100							MLD				85		
1977-Y103	2443219.12	1977 Mar 16 1500:00	N-100							KER				90		
1977-Y104	2443219.15	1977 Mar 16 1530:00	N-100							TERLS				78		
1977-Y107	2443220.38	1977 Mar 17 2106:00	N-100							GTS-P-4				93		
1977-Y108	2443220.75	1977 Mar 18 0600:00	N-100							UK				82		
1977-Y109	2443221.09	1977 Mar 18 1410:00	N-100							GNS77C	LP3			88		
1977-Y110	2443221.14	1977 Mar 18 1520:00	N-100							GTS-P-4				85		
1977-Y111	2443221.19	1977 Mar 18 1640:00	N-100							GTS-P-4				88		
1977-Y113	2443221.75	1977 Mar 19 0600:00	N-100							GNS77C	LP4			84		
1977-Y114	2443222.75	1977 Mar 20 0600:00	N-100							KURO				88		
1977-Y115	2443223.75	1977 Mar 21 0600:00	N-100							KURO	1065			83		
1977-Y116	2443224.12	1977 Mar 21 0600:00	N-100							KER				91		
1977-Y117	2443224.75	1977 Mar 22 0600:00	N-100							GNS77C	LP6			83		
1977-Y118	2443225.38	1977 Mar 22 2100:00	N-100							MLD		10COR		87		
1977-Y119	2443225.75	1977 Mar 23 0600:00	N-100							GTS-P-4				85		
1977-Y120	2443226.06	1977 Mar 23 1320:00	N-100							TERLS				93		
1977-Y121	2443226.12	1977 Mar 23 1500:00	N-100							UK				75		
1977-Y122	2443226.15	1977 Mar 23 1530:00	N-100							UK				83		
1977-Y128	2443228.12	1977 Mar 25 1500:00	N-100							UK				86		
1977-Y129	2443228.75	1977 Mar 26 0600:00	N-100							KER				89		
1977-Y130	2443230.79	1977 Mar 28 0700:00	N-100							GNS77C	LP7			85		
1977-Y131	2443230.88	1977 Mar 28 0900:00	N-100							KURO				82		
1977-Y132	2443233.06	1977 Mar 30 1401:00	N-100							TERLS	10SWR			87		
1977-Y133	2443233.12	1977 Mar 30 1500:00	N-100							MLD				87		
1977-Y134	2443233.12	1977 Mar 30 1500:00	N-100							TERLS				89		
1977-Y135	2443235.12	1977 Apr 01 1400:00	N-100							UK				81		
1977-Y136	2443235.08	1977 Apr 06 0930:00	N-100							UK				86		
1977-Y142	2443239.90	1977 Apr 06 1110:00	N-100							GTS-P-4				87		
1977-Y143	2443239.97	1977 Apr 06 1110:00	N-100							GTS-P-4				86		
1977-Y144	2443240.08	1977 Apr 06 1400:00	N-100							MLD				93		
1977-Y145	2443240.08	1977 Apr 06 1400:00	N-100							UK				87		
1977-Y146	2443240.12	1977 Apr 06 1500:00	N-100							KER				92		
1977-Y147	2443240.12	1977 Apr 06 1500:00	N-100							TERLS				87		
1977-Y149	2443242.05	1977 Apr 08 0700:00	N-100							UK				85		
1977-Y152	2443246.62	1977 Apr 13 0740:00	N-100							GTS-P-4				84		
1977-Y153	2443247.05	1977 Apr 13 1500:00	N-100							UK				85		
1977-Y154	2443247.12	1977 Apr 13 1500:00	N-100							KER				85		
1977-Y155	2443247.14	1977 Apr 14 0500:00	N-100							TERLS				89		
1977-Y156	2443247.14	1977 Apr 14 0500:00	N-100							MLD				77		
1977-Y159	2443249.08	1977 Apr 15 0400:00	N-100							UK				91		
1977-Y160	2443250.17	1977 Apr 15 1500:00	N-100							KER				88		
1977-Y161	2443252.17	1977 Apr 20 1400:00	N-100							KER				74		
1977-Y162	2443254.05	1977 Apr 20 1500:00	N-100							UK				80		
1977-Y163	2443254.12	1977 Apr 20 1500:00	N-100							TERLS				67		
1977-Y170	2443254.21	1977 Apr 20 1704:00	N-100							GTS-P-4				71		
1977-Y176	2443254.33	1977 Apr 22 0930:00	N-100							MLD				85		
1977-Y186	2443255.80	1977 Apr 22 2000:00	N-100							UK				79		
1977-Y171	2443256.08	1977 Apr 22 0930:00	N-100							GTS-P-4				82		
1977-Y168	2443261.00	1977 Apr 27 0930:00	N-100							UK				87		
1977-Y169	2443261.08	1977 Apr 27 1400:00	N-100							MLD				84		
1977-Y170	2443261.08	1977 Apr 27 1400:00	N-100							UK				84		
1977-Y171	2443261.12	1977 Apr 27 1500:00	N-100							TERLS				857		
1977-Y174	2443262.88	1977 Apr 04 0900:00	N-100							GTS-P-4				83		
1977-Y175	2443268.00	1977 Apr 04 1400:00	N-100							UK				84		
1977-Y176	2443268.12	1977 Apr 04 1500:00	N-100							MLD				87		
1977-Y177	2443268.12	1977 Apr 04 1500:00	N-100							TERLS				84		
1977-Y179	2443272.08	1977 Apr 08 1400:00	N-100							SHOK	LP1			87		
1977-Y180	2443274.88	1977 Apr 11 0900:00	N-100							GNS77C				84		
1977-Y181	2443274.88	1977 Apr 11 0900:00	N-100							GTS-P-4				85		
1977-Y183	2443275.12	1977 Apr 11 1400:00	N-100							UK				91		
1977-Y184	2443275.12	1977 Apr 11 1500:00	N-100							TERLS	LP2			85		
1977-Y188	2443278.08	1977 Apr 14 1400:00	N-100							TERLS				84		
1977-Y189	2443280.12	1977 Apr 16 1500:00	N-100							GNS77C	LP3			82		
1977-Y190	2443281.25	1977 Apr 17 1800:00	N-100							MLD				89		
1977-Y192	2443282.08	1977 Apr 18 1400:00	N-100							TERLS				84		
1977-Y193	2443282.12	1977 Apr 18 1500:00	N-100							UK				80		
1977-Y194	2443282.12	1977 Apr 18 1500:00	N-100							GTS-P-4				84		
1977-Y198	2443283.08	1977 Apr 19 1400:00	N-100							SHOK				85		
1977-Y199	2443284.12	1977 Apr 20 1500:00	N-100							TERLS	LP4			84		
1977-Y201	2443285.29	1977 Apr 21 1900:00	N-100							SHOK				857		
1977-Y202	2443285.42	1977 Apr 21 2200:00	N-100							SHOK	LP5			80		
1977-Y203	2443287.12	1977 Apr 23 1500:00	N-100							GNS77C	LP6			81		
1977-Y204	2443289.08	1977 Apr 25 1400:00	N-100							MLD				83		
1977-Y205	2443289.12	1977 Apr 25 1500:00	N-100							UK				86		
1977-Y887	2443289.12	1977 Apr 25 1500:00	N-100							TERLS				64		

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Launch_Mission	FlightCode	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee_Km	Range_Km	Dest
1977-Y207	2443289.23	1977 May 25 1730:00	M-100							GrS-P-4				82		
1977-W901	2443291.12	1977 May 27 1500:00	M-100							TERLS				76		
1977-Y211	2443291.32	1977 May 27 1940:00	M-100							GrS-P-4				84		
1977-Y212	2443291.36	1977 May 27 2045:00	M-100							TERLS				81		
1977-Y214	2443294.12	1977 May 30 1500:00	M-100							TERLS				84		
1977-W1922	2443294.50	1977 Jun	M-100B	Intercomp prep			[Dubious]		KORO	GNS77H				70		
1977-W1923	2443294.50	1977 Jun	M-100B	Intercomp prep			[Dubious]		KORO	GNS77H				70		
1977-S417	2443295.62	1977 Jun 1 0745	M-100				Ozone test			TERLS				80?		
1977-Y215	2443296.08	1977 Jun 01 1400:00	M-100							UK				81		
1977-Y216	2443296.08	1977 Jun 01 1400:00	M-100							GrS-P-4				88		
1977-Y217	2443296.12	1977 Jun 01 1500:00	M-100							TERLS				81		
1977-Y218	2443296.12	1977 Jun 01 1500:00	M-100							TERLS				87		
1977-Y219	2443296.12	1977 Jun 01 1500:00	M-100							TERLS				90		
1977-Y220	2443299.29	1977 Jun 04 1900:00	M-100						SHOK	GNS77G	LP7			80		
1977-Y221	2443299.46	1977 Jun 04 2300:00	M-100						SHOK	GNS77G	LP7			81		
1977-Y222	2443301.46	1977 Jun 06 2300:00	M-100							GrS-P-4				84		
1977-Y225	2443302.90	1977 Jun 08 0930:00	M-100							MLD				82		
1977-Y227	2443303.08	1977 Jun 08 1400:00	M-100							UK				79		
1977-W964	2443303.08	1977 Jun 08 1400:00	M-100							TERLS				83		
1977-Y228	2443303.12	1977 Jun 08 1500:00	M-100							GrS-P-4				80		
1977-Y231	2443310.01	1977 Jun 15 1210:00	M-100							MLD				92		
1977-Y232	2443310.08	1977 Jun 15 1400:00	M-100							UK				86		
1977-Y233	2443310.08	1977 Jun 15 1400:00	M-100							TERLS				83		
1977-Y234	2443310.12	1977 Jun 15 1500:00	M-100							MLD				89		
1977-Y237	2443312.08	1977 Jun 17 1400:00	M-100							UK				91		
1977-Y238	2443317.08	1977 Jun 22 1400:00	M-100							MLD				85		
1977-Y239	2443317.12	1977 Jun 22 1500:00	M-100							TERLS				80		
1977-Y240	2443319.08	1977 Jun 24 1400:00	M-100							MLD				89		
1977-Y241	2443323.94	1977 Jun 29 1040:00	M-100							GrS-P-4				83		
1977-Y246	2443324.08	1977 Jun 29 1400:00	M-100							UK				82		
1977-Y247	2443324.08	1977 Jun 29 1400:00	M-100							TERLS				76		
1977-Y248	2443324.12	1977 Jun 29 1500:00	M-100							MLD				82		
1977-W1095	2443324.12	1977 Jun 29 1500:00	M-100							UK				85		
1977-Y252	2443326.08	1977 Jul 01 1400:00	M-100							TERLS				80		
1977-Y253	2443331.08	1977 Jul 06 1400:00	M-100							MLD				89		
1977-W1126	2443331.12	1977 Jul 06 1500:00	M-100							GrS-P-4				83		
1977-Y254	2443331.15	1977 Jul 06 1530:00	M-100							UK				82		
1977-Y255	2443333.08	1977 Jul 13 1400:00	M-100							TERLS				86		
1977-Y256	2443338.08	1977 Jul 13 1400:00	M-100							MLD				89		
1977-Y259	2443338.12	1977 Jul 13 1500:00	M-100							UK				76		
1977-Y260	2443338.12	1977 Jul 13 1500:00	M-100							MLD				82		
1977-Y261	2443338.12	1977 Jul 13 1500:00	M-100							UK				85		
1977-Y262	2443339.68	1977 Jul 15 0900:00	M-100							TERLS				83		
1977-Y263	2443340.12	1977 Jul 15 0900:00	M-100							UK				90		
1977-Y264	2443340.12	1977 Jul 15 0900:00	M-100							TERLS				81		
1977-Y265	2443342.72	1977 Jul 18 0951	M-100B	Intercomp prep					SHOK	GNS77G	LP8			81		
1977-W1912	2443342.72	1977 Jul 18 0951	M-100B	Intercomp prep					KORO	GNS77H	LP01			70		
1977-W1913	2443342.72	1977 Jul 18 0951	M-100B	Intercomp prep					KORO	GNS77H	LP02			70		
1977-Y269	2443344.68	1977 Jul 20 0900:00	M-100							UK				86		
1977-Y269	2443344.68	1977 Jul 20 0900:00	M-100							MLD				82		
1977-Y269	2443344.68	1977 Jul 20 0900:00	M-100							TERLS				84		
1977-Y269	2443346.25	1977 Jul 21 2030	M-100B	Intercomp prep					KORO	GNS77H	LP03			70		
1977-W1914	2443346.25	1977 Jul 21 2030	M-100B	Intercomp prep					KORO	GNS77H	LP04			70		
1977-W1915	2443346.25	1977 Jul 21 2030	M-100B	Intercomp prep					KORO	GNS77H	LP04			70		
1977-Y270	2443346.48	1977 Jul 21 2330	M-100B	Intercomp prep						MLD				86		
1977-Y271	2443346.48	1977 Jul 21 2330	M-100B	Intercomp prep						MLD				86		
1977-W1917	2443349.71	1977 Jul 25 0559	M-100B	Intercomp prep					KORO	GNS77H	LP06			70		
1977-W1918	2443349.71	1977 Jul 25 0559	M-100B	Intercomp prep					KORO	GNS77H	LP06			70		
1977-W1919	2443349.71	1977 Jul 25 0559	M-100B	Intercomp prep					KORO	GNS77H	LP07			70		
1977-W1919	2443349.71	1977 Jul 25 0559	M-100B	Intercomp prep					KORO	GNS77H	LP07			70		
1977-W1919	2443349.71	1977 Jul 25 0559	M-100B	Intercomp prep					KORO	GNS77H	LP07			70		
1977-W1920	2443351.63	1977 Jul 27 0304	M-100B	Intercomp prep					KORO	GNS77H	LP08			70		
1977-W1920	2443351.63	1977 Jul 27 0304	M-100B	Intercomp prep					KORO	GNS77H	LP08			70		
1977-W1921	2443351.63	1977 Jul 27 0304	M-100B	Intercomp prep					KORO	GNS77H	LP08			70		
1977-Y272	2443351.88	1977 Jul 27 0435	M-100							MLD				87		
1977-Y272	2443351.88	1977 Jul 27 0435	M-100							UK				83		
1977-Y272	2443352.08	1977 Jul 27 1400:00	M-100							TERLS				85		
1977-Y272	2443352.08	1977 Jul 27 1400:00	M-100							MLD				78		
1977-W1269	2443353.88	1977 Jul 29 0900:00	M-100							MLD				87		
1977-Y269	2443353.88	1977 Jul 29 0900:00	M-100							GrS-P-4				86		
1977-Y284	2443358.94	1977 Aug 03 1030:00	M-100							UK				82		
1977-Y285	2443359.08	1977 Aug 03 1400:00	M-100							TERLS				90		
1977-Y286	2443359.08	1977 Aug 03 1400:00	M-100							MLD				85		
1977-Y291	2443360.88	1977 Aug 05 0900:00	M-100							UK				82		
1977-S422	2443366.09	1977 Aug 10 1485	M-100B	US-USSR Intercomp	No. 1				KORO	HI	LP2			72		
1977-W1341	2443366.70	1977 Aug 10 0700:00	M-100							TERLS				90		
1977-Y292	2443366.70	1977 Aug 10 0900:00	M-100							MLD				81		
1977-Y293	2443366.84	1977 Aug 10 1030:00	M-100							GrS-P-4				88		
1977-Y294	2443366.84	1977 Aug 10 1400:00	M-100							UK				82		
1977-S420	2443367.67	1977 Aug 12 0405	M-100B	US-USSR Intercomp	No. 2				KORO	HI	LP2			88		
1977-Y297	2443367.88	1977 Aug 12 0900:00	M-100							MLD				87		
1977-S333	2443367.75	1977 Aug 12 0606	M-100B	US-USSR Intercomp	No. 3				KORO	HI	LP2			82		
1977-S334	2443367.96	1977 Aug 12 1105	M-100B	US-USSR Intercomp	No. 4				KORO	HI	LP2			81		
1977-S335	2443371.23	1977 Aug 15 1735	M-100B	US-USSR Intercomp	No. 5				KORO	HI	LP2			84		
1977-S424	2443371.32	1977 Aug 15 1935	M-100B	US-USSR Intercomp	No. 6				KORO	HI	LP2			80		
1977-W15	2443371.55	1977 Aug 16 0105	M-100B	US-USSR Intercomp	No. 7				KORO	HI	LP2			79		
1977-S425	2443372.28	1977 Aug 16 1840	M-100B	US-USSR Intercomp	No. 8				KORO	HI	LP2			85		
1977-S426	2443372.35	1977 Aug 16 2029	M-100B	US-USSR Intercomp	No. 9				KORO	HI	LP2			84		
1977-S337	2443372.88	1977 Aug 17 0900:00	M-100							MLD				88		
1977-Y300	2443373.08	1977 Aug 17 1400:00	M-100							UK				83		
1977-W1363	2443373.08	1977 Aug 17 1400:00	M-100							TERLS				83		
1977-Y301	2443373.18	1977 Aug 17 1620:00	M-100							GrS-P-4				69		
1977-S336	2443373.34	1977 Aug 17 2015	M-100B	US-USSR Intercomp	No. 10				KORO	HI	LP2			81		
1977-S426	2443374.56	1977 Aug 19 0120	M-100B	US-USSR Intercomp	No. 11				KORO	HI	LP2			84		

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Launch_Mission	FlightCode	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee_Km	Range_Km	Dest
1977-5427	2443374.63	1977 Aug 19 0508	N-100B	-	US-USSR Intercomp	No. 12	-	-	KORO	WI	LP2	-	-	84	-	-
1977-5428	2443374.71	1977 Aug 19 0507	N-100B	-	US-USSR Intercomp	No. 13	-	-	KORO	WI	LP2	-	-	83	-	-
1977-5429	2443374.88	1977 Aug 19 0900-00	N-100	-	-	-	-	-	-	MLD	-	-	-	90	-	-
1977-5430	2443375.94	1977 Aug 19 2005	N-100B	-	US-USSR Intercomp	No. 14	-	-	KORO	WI	LP2	-	-	83	-	-
1977-5431	2443375.42	1977 Aug 19 2205	N-100B	-	US-USSR Intercomp	No. 15	-	-	KORO	WI	LP2	-	-	82	-	-
1977-5432	2443375.55	1977 Aug 20 0105	N-100B	-	US-USSR Intercomp	No. 16	-	-	KORO	WI	LP2	-	-	83	-	-
1977-5433	2443378.47	1977 Aug 22 2312	N-100B	-	US-USSR Intercomp	No. 17	-	-	KORO	WI	LP2	-	-	83	-	-
1977-5434	2443378.55	1977 Aug 23 0105	N-100B	-	US-USSR Intercomp	No. 18	-	-	KORO	WI	LP2	-	-	84	-	-
1977-5435	2443378.65	1977 Aug 23 0343	N-100B	-	US-USSR Intercomp	No. 19	-	-	KORO	WI	LP2	-	-	84	-	-
1977-5436	2443379.46	1977 Aug 23 2300-00	N-100	-	-	-	-	-	-	GISP-4	-	-	-	84	-	-
1977-5437	2443379.55	1977 Aug 24 0107	N-100B	-	US-USSR Intercomp	No. 20	-	-	KORO	WI	LP2	-	-	84	-	-
1977-5438	2443379.63	1977 Aug 24 0308	N-100B	-	US-USSR Intercomp	No. 21	-	-	KORO	WI	LP2	-	-	84	-	-
1977-5439	2443380.08	1977 Aug 24 1400-00	N-100	-	-	-	-	-	-	UK	-	-	-	91	-	-
1977-5440	2443380.08	1977 Aug 24 1400-00	N-100	-	-	-	-	-	-	UK	-	-	-	85	-	-
1977-5441	2443380.08	1977 Aug 24 1400-00	N-100	-	-	-	-	-	-	TERLS	-	-	-	88	-	-
1977-5442	2443382.08	1977 Aug 26 1400-00	N-100	-	-	-	-	-	-	MLD	-	-	-	85	-	-
1977-5443	2443386.98	1977 Aug 31 1130-00	N-100	-	-	-	-	-	-	GISP-4	-	-	-	85	-	-
1977-5444	2443387.08	1977 Aug 31 1400-00	N-100	-	-	-	-	-	-	UK	-	-	-	87	-	-
1977-5445	2443387.12	1977 Aug 31 1400-00	N-100	-	-	-	-	-	-	TERLS	-	-	-	85	-	-
1977-5446	2443387.12	1977 Aug 31 1400-00	N-100	-	-	-	-	-	-	UK	-	-	-	84	-	-
1977-5447	2443387.12	1977 Aug 31 1400-00	N-100	-	-	-	-	-	-	TERLS	-	-	-	85	-	-
1977-5448	2443394.08	1977 Sep 07 1400-00	N-100	-	-	-	-	-	-	MLD	-	-	-	89	-	-
1977-5449	2443394.08	1977 Sep 07 1400-00	N-100	-	-	-	-	-	-	UK	-	-	-	85	-	-
1977-5450	2443394.08	1977 Sep 07 1400-00	N-100	-	-	-	-	-	-	TERLS	-	-	-	84	-	-
1977-5451	2443394.32	1977 Sep 07 1940-00	N-100	-	-	-	-	-	-	GISP-4	-	-	-	84	-	-
1977-5452	2443394.40	1977 Sep 13 2130-00	N-100	-	-	-	-	-	-	GISP-4	-	-	-	94	-	-
1977-5453	2443401.08	1977 Sep 14 1400-00	N-100	-	-	-	-	-	-	MLD	-	-	-	76	-	-
1977-5454	2443401.08	1977 Sep 14 1400-00	N-100	-	-	-	-	-	-	UK	-	-	-	87	-	-
1977-5455	2443401.08	1977 Sep 14 1400-00	N-100	-	-	-	-	-	-	TERLS	-	-	-	83	-	-
1977-5456	2443401.08	1977 Sep 14 1400-00	N-100	-	-	-	-	-	-	MLD	-	-	-	85	-	-
1977-5457	2443406.08	1977 Sep 21 1400-00	N-100	-	-	-	-	-	-	UK	-	-	-	85	-	-
1977-5458	2443406.21	1977 Sep 21 1700-00	N-100	-	-	-	-	-	-	UK	-	-	-	78	-	-
1977-5459	2443409.08	1977 Sep 22 1400-00	N-100	-	-	-	-	-	-	TERLS	-	-	-	88	-	-
1977-5460	2443414.69	1977 Sep 28 0430	N-100	-	-	-	-	-	-	MLD	-	-	-	807	-	-
1977-5461	2443415.08	1977 Sep 28 1400-00	N-100	-	-	-	-	-	-	GISP-4	-	-	-	72	-	-
1977-5462	2443415.08	1977 Sep 28 1400-00	N-100	-	-	-	-	-	-	TERLS	-	-	-	857	-	-
1977-5463	2443415.12	1977 Sep 28 1500-00	N-100	-	-	-	-	-	-	UK	-	-	-	87	-	-
1977-5464	2443415.16	1977 Sep 28 1545-00	N-100	-	-	-	-	-	-	GISP-4	-	-	-	73	-	-
1977-5465	2443416.08	1977 Sep 29 1400-00	N-100	-	-	-	-	-	-	TERLS	-	-	-	87	-	-
1977-5466	2443421.70	1977 Oct 5 0445-00	N-100	-	ISRO 8.345	-	Ozmesonde	-	-	MLD	-	-	-	90	-	-
1977-5467	2443422.08	1977 Oct 5 1400-00	N-100	-	-	-	-	-	-	UK	-	-	-	88	-	-
1977-5468	2443422.08	1977 Oct 5 1400-00	N-100	-	-	-	-	-	-	TERLS	-	-	-	89	-	-
1977-5469	2443422.12	1977 Oct 5 1500-00	N-100	-	ISRO 8.346?	-	-	-	-	GISP-4	-	-	-	85	-	-
1977-5470	2443422.15	1977 Oct 5 1500-00	N-100	-	-	-	-	-	-	TERLS	-	-	-	73	-	-
1977-5471	2443422.23	1977 Oct 5 1700-00	N-100	-	ISRO 8.347?	-	-	-	-	GISP-4	-	-	-	81	-	-
1977-5472	2443422.33	1977 Oct 5 2000-00	N-100	-	-	-	-	-	-	TERLS	-	-	-	94	-	-
1977-5473	2443422.35	1977 Oct 5 2000-00	N-100	-	-	-	-	-	-	GISP-4	-	-	-	93	-	-
1977-5474	2443422.39	1977 Oct 5 2115-00	N-100	-	-	-	-	-	-	TERLS	-	-	-	82	-	-
1977-5475	2443423.08	1977 Oct 11 1300-00	N-100	-	ISRO 8.348?	-	-	-	-	UK	-	-	-	81	-	-
1977-5476	2443423.07	1977 Oct 12 1235-00	N-100	-	-	-	-	-	-	GISP-4	-	-	-	87	-	-
1977-5477	2443423.07	1977 Oct 12 1400-00	N-100	-	-	-	-	-	-	MLD	-	-	-	89	-	-
1977-5478	2443423.08	1977 Oct 12 1400-00	N-100	-	-	-	-	-	-	UK	-	-	-	94	-	-
1977-5479	2443423.08	1977 Oct 12 1400-00	N-100	-	-	-	-	-	-	GISP-4	-	-	-	93	-	-
1977-5480	2443423.08	1977 Oct 12 2000-00	N-100	-	-	-	-	-	-	UK	-	-	-	84	-	-
1977-5481	2443433.30	1977 Oct 19 2138-00	N-100	-	-	-	-	-	-	GISP-4	-	-	-	82	-	-
1977-5482	2443436.36	1977 Oct 19 1400-00	N-100	-	-	-	-	-	-	UK	-	-	-	84	-	-
1977-5483	2443436.36	1977 Oct 19 1400-00	N-100	-	ISRO 8.349?	-	-	-	-	TERLS	-	-	-	82	-	-
1977-5484	2443436.36	1977 Oct 19 1400-00	N-100	-	-	-	-	-	-	MLD	-	-	-	78	-	-
1977-5485	2443436.36	1977 Oct 19 1400-00	N-100	-	-	-	-	-	-	GISP-4	-	-	-	77	-	-
1977-5486	2443436.36	1977 Oct 19 1635-00	N-100	-	-	-	-	-	-	UK	-	-	-	85	-	-
1977-5487	2443437.30	1977 Oct 21 1140-00	N-100	-	-	-	-	-	-	GISP-4	-	-	-	85	-	-
1977-5488	2443437.89	1977 Oct 21 1240-00	N-100	-	-	-	-	-	-	GISP-4	-	-	-	90	-	-
1977-5489	2443438.03	1977 Oct 25 1120-00	N-100	-	-	-	-	-	-	GISP-4	-	-	-	87	-	-
1977-5490	2443441.97	1977 Oct 25 1230-00	N-100	-	-	-	-	-	-	GISP-4	-	-	-	80	-	-
1977-5491	2443442.02	1977 Oct 25 1800-00	N-100	-	-	-	-	-	-	MLD	-	-	-	86	-	-
1977-5492	2443442.25	1977 Oct 25 1800-00	N-100	-	-	-	-	-	-	UK	-	-	-	88	-	-
1977-5493	2443443.08	1977 Oct 26 1400-00	N-100	-	-	-	-	-	-	TERLS	-	-	-	86	-	-
1977-5494	2443443.17	1977 Oct 26 1400-00	N-100	-	-	-	-	-	-	UK	-	-	-	88	-	-
1977-5495	2443443.17	1977 Oct 26 1600-00	N-100	-	ISRO 8.350?	-	-	-	-	TERLS	-	-	-	79	-	-
1977-5496	2443450.08	1977 Nov 02 1400-00	N-100	-	-	-	-	-	-	MLD	-	-	-	89	-	-
1977-5497	2443450.15	1977 Nov 02 1400-00	N-100	-	-	-	-	-	-	UK	-	-	-	89	-	-
1977-5498	2443450.17	1977 Nov 02 1400-00	N-100	-	-	-	-	-	-	GISP-4	-	-	-	78	-	-
1977-5499	2443450.21	1977 Nov 02 1600-00	N-100	-	-	-	-	-	-	TERLS	-	-	-	857	-	-
1977-5500	2443450.21	1977 Nov 02 1700-00	N-100	-	ISRO 8.351?	-	-	-	-	GISP-4	-	-	-	81	-	-
1977-5501	2443450.25	1977 Nov 05 1500-00	N-100	-	-	-	-	-	-	UK	-	-	-	94	-	-
1977-5502	2443453.12	1977 Nov 05 1800-00	N-100	-	-	-	-	-	-	GISP-4	-	-	-	82	-	-
1977-5503	2443455.33	1977 Nov 07 2000-00	N-100	-	-	-	-	-	-	TERLS	-	-	-	75	-	-
1977-5504	2443456.21	1977 Nov 08 1700-00	N-100	-	-	-	-	-	-	UK	-	-	-	84	-	-
1977-5505	2443457.08	1977 Nov 09 1400-00	N-100	-	-	-	-	-	-	MLD	-	-	-	89	-	-
1977-5506	2443457.10	1977 Nov 09 1430-00	N-100	-	-	-	-	-	-	UK	-	-	-	84	-	-
1977-5507	2443457.15	1977 Nov 09 1540-00	N-100	-	-	-	-	-	-	GISP-4	-	-	-	78	-	-
1977-5508	2443457.21	1977 Nov 09 1700-00	N-100	-	-	-	-	-	-	TERLS	-	-	-	82	-	-
1977-5509	2443457.21	1977 Nov 09 1700-00	N-100	-	-	-	-	-	-	UK	-	-	-	86	-	-
1977-5510	2443457.29	1977 Nov 09 1900-00	N-100	-	-	-	-	-	-	MLD	-	-	-	86	-	-
1977-5511	2443457.29	1977 Nov 09 1900-00	N-100	-	-	-	-	-	-	UK	-	-	-	86	-	-
1977-5512	2443458.12	1977 Nov 11 1700-00	N-100	-	-	-	-	-	-	TERLS	-	-	-	86	-	-
1977-5513	2443459.21	1977 Nov 11 1700-00	N-100	-	-	-	-	-	-	GISP-4	-	-	-	81	-	-
1977-5514	2443461.21	1977 Nov 13 1700-00	N-100	-	-	-	-	-	-	TERLS	-	-	-	79	-	-
1977-5515	2443463.12	1977 Nov 15 1500-00	N-100	-	-	-	-	-	-	GISP-4	-	-	-	87	-	-
1977-5516	2443464.08	1977 Nov 16 1400-00	N-100	-	-	-	-	-	-	MLD	-	-	-	89	-	-
1977-5517	2443464.08	197														

Launch_Tag	Launch_ID	Launch_Date	Lv_Type	Variant	Flight_ID	Flight	Launch_Mission	FlightCode	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee_Km	Range_Km	Dest
1977-Y420	2443464.12	1977 Nov 16 15:00:00	N-100		ISR0 8_3537					TERLS				86		
1977-M1728	2443464.15	1977 Nov 16 15:30:00	N-100							GTS-P-4				76		
1977-M1732	2443464.21	1977 Nov 16 17:00:00	N-100							GNS77L	LP7			76		
1977-Y425	2443464.96	1977 Nov 17 11:00:00	N-100							SHOK	LP1			85		
1977-Y426	2443469.17	1977 Nov 21 16:00:00	N-100							GNS77L	LP8			82		
1977-Y427	2443470.12	1977 Nov 22 15:00:00	N-100		ISR0 8_3547					TERLS				82		
1977-Y428	2443470.20	1977 Nov 22 16:50:00	N-100							GNS77L	LP9			84		
1977-Y429	2443470.92	1977 Nov 23 10:00:00	N-100							SHOK	LP2			86		
1977-Y430	2443471.08	1977 Nov 23 14:00:00	N-100							GNS77L				86		
1977-Y431	2443471.08	1977 Nov 23 14:00:00	N-100							UK				82		
1977-Y432	2443471.12	1977 Nov 23 15:00:00	N-100							GTS-P-4				84		
1977-Y433	2443471.21	1977 Nov 23 17:00:00	N-100							GNS77L	LP10			84		
1977-Y438	2443472.00	1977 Nov 24 12:00:00	N-100							SHOK	LP3			86		
1977-Y439	2443472.25	1977 Nov 24 18:00:00	N-100							KURD	IOSWR			74		
1977-M1772	2443473.92	1977 Nov 26 10:00:00	N-100							SHOK	ANTIX			71		
1977-M1773	2443474.21	1977 Nov 26 17:00:00	N-100							KURD	IOSWR			71		
1977-Y440	2443475.92	1977 Nov 28 10:00:00	N-100		ISR0 8_3567					GNS77L	LP6			85		
1977-Y441	2443476.12	1977 Nov 28 15:00:00	N-100							TERLS				77		
1977-M1777	2443476.21	1977 Nov 28 17:00:00	N-100							IOS6540				70		
1977-M1779	2443476.25	1977 Nov 28 18:00:00	N-100							GNS77L	LP11			75		
1977-Y442	2443476.92	1977 Nov 29 10:00:00	N-100							SHOK	LP6			95		
1977-M1784	2443477.21	1977 Nov 29 17:00:00	N-100							KURD	GNS77L			79		
1977-Y443	2443477.29	1977 Nov 29 19:00:00	N-100							KURD	GNS77L	LP12		82		
1977-Y444	2443478.08	1977 Nov 30 14:00:00	N-100											95		
1977-Y445	2443478.08	1977 Nov 30 14:00:00	N-100							UK				79		
1977-Y446	2443478.12	1977 Nov 30 15:00:00	N-100							GNS77L				82		
1977-Y447	2443478.17	1977 Nov 30 16:00:00	N-100							UK				95		
1977-Y448	2443478.17	1977 Nov 30 16:00:00	N-100							GTS-P-4	LP13			82		
1977-Y453	2443478.68	1977 Dec 01 09:00:00	N-100							MJD				87		
1977-Y454	2443479.25	1977 Dec 01 16:00:00	N-100							GTS-P-4				104		
1977-Y455	2443479.96	1977 Dec 02 11:00:00	N-100							GNS77L	LP14			84		
1977-Y456	2443480.38	1977 Dec 02 21:00:00	N-100							SHOK	GNS77L			88		
1977-Y457	2443481.29	1977 Dec 03 19:00:00	N-100							KURD	IOSWR			82		
1977-Y458	2443485.05	1977 Dec 07 14:00:00	N-100											90		
1977-Y459	2443485.12	1977 Dec 07 15:00:00	N-100							UK				91		
1977-Y4626	2443485.12	1977 Dec 07 15:00:00	N-100							GTS-P-4				79		
1977-Y461	2443487.25	1977 Dec 09 18:00:00	N-100							SHOK	LP15			85		
1977-Y462	2443487.92	1977 Dec 10 10:00:00	N-100							SHOK	LP1			93		
1977-Y463	2443489.21	1977 Dec 11 17:00:00	N-100							GNS77L	LP15			82		
1977-Y465	2443491.88	1977 Dec 14 09:00:00	N-100							GTS-P-4				78		
1977-Y464	2443492.00	1977 Dec 14 12:00:00	N-100							GNS77L	LP1			90		
1977-Y465	2443492.05	1977 Dec 14 14:00:00	N-100							MJD				87		
1977-Y469	2443492.17	1977 Dec 14 15:00:00	N-100							UK				86		
1977-Y467	2443492.51	1977 Dec 14 16:00:00	N-100							GTS-P-4				84		
1977-Y468	2443492.51	1977 Dec 14 16:00:00	N-100							GTS-P-4				84		
1977-Y470	2443493.17	1977 Dec 15 16:00:00	N-100							SHOK	LP15			86		
1977-Y471	2443494.56	1977 Dec 16 11:00:00	N-100							GNS77L				85		
1977-Y472	2443495.96	1977 Dec 16 17:00:00	N-100							SHOK	LP15			85		
1977-Y473	2443496.51	1977 Dec 19 17:00:00	N-100							KURD	GNS77L			85		
1977-Y474	2443498.21	1977 Dec 20 17:00:00	N-100							SHOK	LP15			87		
1977-Y475	2443498.60	1977 Dec 21 09:00:00	N-100											90		
1977-Y476	2443498.60	1977 Dec 21 09:00:00	N-100							GTS-P-4				87		
1977-M1986	2443498.60	1977 Dec 21 09:00:00	N-100							MJD				89		
1977-Y477	2443498.99	1977 Dec 21 16:30:00	N-100							UK				78		
1977-Y478	2443498.99	1977 Dec 21 17:00:00	N-100							OK				81		
1977-Y479	2443500.17	1977 Dec 22 16:00:00	N-100							GNS77L	LP15			85		
1977-Y480	2443500.17	1977 Dec 22 16:00:00	N-100							GNS77L	LP15			85		
1977-Y481	2443500.17	1977 Dec 26 15:00:00	N-100							KURD	LP9			84		
1977-Y482	2443500.67	1977 Dec 27 04:00:00	N-100							SHOK	GNS77L			87		
1977-Y483	2443500.82	1977 Dec 27 07:40:00	N-100							GTS-P-4				80		
1977-Y484	2443505.39	1977 Dec 27 21:17:00	N-100							GTS-P-4				90		
1977-Y485	2443505.46	1977 Dec 27 23:00:00	N-100							GTS-P-4				88		
1977-Y486	2443505.94	1977 Dec 28 10:30:00	N-100							GTS-P-4				88		
1977-Y487	2443506.08	1977 Dec 28 14:00:00	N-100							GTS-P-4				83		
1977-Y488	2443506.08	1977 Dec 28 14:00:00	N-100							GTS-P-4				87		
1977-Y489	2443506.21	1977 Dec 28 17:00:00	N-100							OK				85		
1977-Y491	2443507.07	1977 Dec 29 13:40:00	N-100							MJD				88		
1977-Y492	2443507.12	1977 Dec 29 15:00:00	N-100							GTS-P-4				88		
1977-Y493	2443507.18	1977 Dec 29 16:20:00	N-100							GTS-P-4				87		
1977-Y494	2443507.24	1977 Dec 29 17:40:00	N-100							GTS-P-4				90		
1978-Y03	2443512.90	1978 Jan 04 09:30:00	N-100							GTS-P-4				90		
1978-H06	2443513.08	1978 Jan 04 14:00:00	N-100		ISR0 8_3567					OK				79		
1978-Y04	2443513.08	1978 Jan 04 14:00:00	N-100							TERLS				86		
1978-Y05	2443513.12	1978 Jan 04 15:00:00	N-100							MJD				87		
1978-Y09	2443514.12	1978 Jan 05 15:00:00	N-100							GNS77L	LP10			82		
1978-Y10	2443519.00	1978 Jan 10 12:00:00	N-100							SHOK	LP11			81		
1978-Y11	2443519.93	1978 Jan 11 10:15:00	N-100							SHOK	GNS77L			89		
1978-Y12	2443520.00	1978 Jan 11 12:00:00	N-100							GTS-P-4				90		
1978-Y13	2443520.08	1978 Jan 11 14:00:00	N-100							OK				84		
1978-Y14	2443520.08	1978 Jan 11 14:00:00	N-100							TERLS				86		
1978-Y15	2443520.12	1978 Jan 11 15:00:00	N-100							MJD				87		
1978-Y16	2443520.85	1978 Jan 12 08:20:00	N-100							GNS77L	LP17			84		
1978-Y19	2443521.04	1978 Jan 12 13:00:00	N-100							SHOK	OJP			84		
1978-Y20	2443522.08	1978 Jan 13 14:00:00	N-100							SHOK	OJP			84		
1978-Y22	2443523.08	1978 Jan 14 14:00:00	N-100							SHOK	OJP			82		
1978-Y23	2443525.08	1978 Jan 16 14:00:00	N-100							SHOK	OJP			84		
1978-Y24	2443526.96	1978 Jan 18 11:00:00	N-100							KURD	LP18			81		

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Launch_Mission	FlightCode	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee_Km	Range_Km	Dest
1978-Y25	2443527.00	1978 Jan 18 1200:00	M-100	-	-	-	-	-	SHDK	GNS77N	LP12	-	-	82	-	-
1978-Y26	2443527.04	1978 Jan 18 1255:00	M-100	-	-	-	-	-	GTS-P-4	MLD	-	-	-	84	-	-
1978-Y27	2443527.08	1978 Jan 18 1400:00	M-100	-	-	-	-	-	UK	TERLS	-	-	-	86	-	-
1978-Y28	2443527.08	1978 Jan 18 1400:00	M-100	-	ISR0 8.358?	-	-	-	-	GTS-P-4	-	-	-	86	-	-
1978-Y29	2443527.12	1978 Jan 18 1500:00	M-100	-	-	-	-	-	SHDK	GNS77N	LP13	-	-	85	-	-
1978-Y30	2443528.92	1978 Jan 20 1000:00	M-100	-	-	-	-	-	SHDK	GNS77N	LP13	-	-	85	-	-
1978-Y31	2443528.99	1978 Jan 20 1145:00	M-100	-	-	-	-	-	SHDK	GNS77N	LP14	-	-	86	-	-
1978-Y32	2443532.00	1978 Jan 23 1200:00	M-100	-	-	-	-	-	SHDK	GTS-P-4	-	-	-	80	-	-
1978-Y33	2443533.94	1978 Jan 25 1030:00	M-100	-	-	-	-	-	UK	TERLS	-	-	-	78	-	-
1978-Y34	2443534.08	1978 Jan 25 1400:00	M-100	-	ISR0 8.359?	-	-	-	-	MLD	-	-	-	82	-	-
1978-Y35	2443534.12	1978 Jan 25 1500:00	M-100	-	-	-	-	-	SHDK	GNS77N	LP15	-	-	88	-	-
1978-Y36	2443535.00	1978 Jan 26 1200:00	M-100	-	-	-	-	-	SHDK	GNS77L	LP19	-	-	83	-	-
1978-Y37	2443535.12	1978 Jan 26 1500:00	M-100	-	-	-	-	-	KURO	UK	-	-	-	90	-	-
1978-Y38	2443536.00	1978 Jan 27 1200:00	M-100	-	-	-	-	-	KURO	GNS77L	LP20	-	-	81	-	-
1978-Y39	2443540.58	1978 Feb 01 0200:00	M-100	-	-	-	-	-	UK	GTS-P-4	-	-	-	85	-	-
1978-Y40	2443540.90	1978 Feb 01 1400:00	M-100	-	-	-	-	-	UK	TERLS	-	-	-	82	-	-
1978-Y41	2443541.08	1978 Feb 01 1500:00	M-100	-	ISR0 8.360?	-	-	-	-	MLD	-	-	-	85?	-	-
1978-Y42	2443541.12	1978 Feb 01 1600:00	M-100	-	-	-	-	-	KURO	GNS77L	LP21	-	-	82	-	-
1978-Y43	2443541.12	1978 Feb 03 1000:00	M-100	-	-	-	-	-	KURO	GNS77L	LP22	-	-	81	-	-
1978-Y44	2443543.10	1978 Feb 03 1430:00	M-100	-	-	-	-	-	KURO	GTS-P-4	-	-	-	82	-	-
1978-Y45	2443546.88	1978 Feb 07 0900:00	M-100	-	-	-	-	-	-	MLD	-	-	-	85	-	-
1978-Y46	2443547.52	1978 Feb 08 1010:00	M-100	-	-	-	-	-	-	UK	-	-	-	91	-	-
1978-Y47	2443548.08	1978 Feb 08 1400:00	M-100	-	-	-	-	-	-	TERLS	-	-	-	83	-	-
1978-Y48	2443548.08	1978 Feb 08 1400:00	M-100	-	ISR0 8.361?	-	-	-	-	UK	-	-	-	83	-	-
1978-Y49	2443548.08	1978 Feb 08 1400:00	M-100	-	-	-	-	-	-	UK	-	-	-	85	-	-
1978-Y50	2443550.08	1978 Feb 10 1400:00	M-100	-	-	-	-	-	-	GTS-P-4	-	-	-	84	-	-
1978-Y51	2443554.63	1978 Feb 15 0600:00	M-100	-	-	-	-	-	KURO	MLD	-	-	-	84	-	-
1978-Y52	2443554.88	1978 Feb 15 0900:00	M-100	-	-	-	-	-	-	UK	-	-	-	88	-	-
1978-Y53	2443555.08	1978 Feb 15 1400:00	M-100	-	-	-	-	-	-	TERLS	-	-	-	83	-	-
1978-Y54	2443555.08	1978 Feb 15 1400:00	M-100	-	ISR0 8.362?	-	-	-	-	UK	-	-	-	81	-	-
1978-Y55	2443556.88	1978 Feb 17 0900:00	M-100	-	-	-	-	-	KURO	GNS77L	LP24	-	-	94	-	-
1978-Y56	2443557.08	1978 Feb 17 1400:00	M-100	-	-	-	-	-	-	UK	-	-	-	91	-	-
1978-Y57	2443558.89	1978 Feb 19 0920:00	M-100	-	-	-	-	-	-	GTS-P-4	-	-	-	89	-	-
1978-Y58	2443561.88	1978 Feb 22 0900:00	M-100	-	-	-	-	-	-	UK	-	-	-	92	-	-
1978-Y59	2443562.08	1978 Feb 22 1400:00	M-100	-	-	-	-	-	-	TERLS	-	-	-	85	-	-
1978-Y60	2443562.98	1978 Feb 23 0630:00	M-100	-	ISR0 8.363?	-	-	-	-	TERLS	-	-	-	85	-	-
1978-Y61	2443562.98	1978 Feb 23 0930:00	M-100	-	-	-	-	-	KURO	GNS77L	LP26	-	-	85	-	-
1978-Y62	2443563.90	1978 Feb 24 0630:00	M-100	-	-	-	-	-	KURO	GNS77L	LP27	-	-	85	-	-
1978-Y63	2443564.85	1978 Feb 24 0900:00	M-100	-	-	-	-	-	-	UK	-	-	-	82	-	-
1978-Y64	2443566.85	1978 Feb 27 0900:00	M-100	-	-	-	-	-	-	GNS77L	LP28	-	-	91	-	-
1978-Y65	2443568.51	1978 Mar 01 0730:00	M-100	-	-	-	-	-	-	GNS77L	LP29	-	-	97	-	-
1978-Y66	2443569.08	1978 Mar 01 1330:00	M-100	-	-	-	-	-	-	GTS-P-4	-	-	-	90	-	-
1978-Y67	2443569.08	1978 Mar 01 1400:00	M-100	-	-	-	-	-	-	MLD	-	-	-	84	-	-
1978-Y68	2443569.08	1978 Mar 01 1400:00	M-100	-	ISR0 8.364?	-	-	-	-	TERLS	-	-	-	83	-	-
1978-Y69	2443569.08	1978 Mar 01 1500:00	M-100	-	-	-	-	-	-	GTS-P-4	-	-	-	75	-	-
1978-Y70	2443570.30	1978 Mar 03 1100:00	M-100	-	-	-	-	-	-	GTS-P-4	-	-	-	86	-	-
1978-Y71	2443571.06	1978 Mar 03 1330:00	M-100	-	-	-	-	-	-	GTS-P-4	-	-	-	82	-	-
1978-Y72	2443572.88	1978 Mar 05 0900:00	M-100	-	-	-	-	-	-	GTS-P-4	-	-	-	80	-	-
1978-Y73	2443572.88	1978 Mar 05 1015:00	M-100	-	-	-	-	-	-	UK	-	-	-	82	-	-
1978-Y74	2443574.70	1978 Mar 07 0700:00	M-100	-	-	-	-	-	-	MLD	-	-	-	88	-	-
1978-Y75	2443575.08	1978 Mar 07 1400:00	M-100	-	-	-	-	-	-	UK	-	-	-	85	-	-
1978-Y76	2443575.82	1978 Mar 08 0740:00	M-100	-	-	-	-	-	-	GNS77L	LP30	-	-	91	-	-
1978-Y77	2443575.82	1978 Mar 08 0740:00	M-100	-	-	-	-	-	-	GNS77L	LP31	-	-	89	-	-
1978-Y78	2443576.88	1978 Mar 08 0910:00	M-100	-	ISR0 8.365?	-	-	-	-	GNS77L	LP32	-	-	84	-	-
1978-Y79	2443576.88	1978 Mar 08 1400:00	M-100	-	-	-	-	-	-	TERLS	-	-	-	83	-	-
1978-Y80	2443578.15	1978 Mar 10 1540:00	M-100	-	ISR0 8.366?	-	-	-	-	UK	-	-	-	68	-	-
1978-Y81	2443583.08	1978 Mar 15 1400:00	M-100	-	-	-	-	-	-	TERLS	-	-	-	83	-	-
1978-Y82	2443583.17	1978 Mar 15 1600:00	M-100	-	-	-	-	-	-	GTS-P-4	-	-	-	83	-	-
1978-Y83	2443588.70	1978 Mar 16 1900:00	M-100	-	-	-	-	-	-	UK	-	-	-	82	-	-
1978-Y84	2443588.84	1978 Mar 16 1400:00	M-100	-	-	-	-	-	-	MLD	-	-	-	80	-	-
1978-Y85	2443589.04	1978 Mar 19 1300:00	M-100	-	-	-	-	-	-	GNS77L	LP1	-	-	88	-	-
1978-Y86	2443589.04	1978 Mar 22 1350:00	M-100	-	-	-	-	-	-	GTS-P-4	-	-	-	89	-	-
1978-Y87	2443590.08	1978 Mar 22 1400:00	M-100	-	-	-	-	-	-	MLD	-	-	-	70	-	-
1978-Y88	2443590.08	1978 Mar 22 1400:00	M-100	-	ISR0 8.367?	-	-	-	-	TERLS	-	-	-	85?	-	-
1978-Y89	2443590.17	1978 Mar 22 1600:00	M-100	-	-	-	-	-	-	MLD	-	-	-	88	-	-
1978-Y90	2443593.96	1978 Mar 26 1100:00	M-100	-	-	-	-	-	-	GNS77L	LP2	-	-	92	-	-
1978-Y91	2443594.04	1978 Mar 26 1300:00	M-100	-	-	-	-	-	-	GNS77L	LP2	-	-	87	-	-
1978-Y92	2443597.08	1978 Mar 29 1400:00	M-100	-	-	-	-	-	-	GTS-P-4	-	-	-	86	-	-
1978-Y93	2443597.08	1978 Mar 29 1400:00	M-100	-	-	-	-	-	-	MLD	-	-	-	92	-	-
1978-Y94	2443597.08	1978 Mar 29 1400:00	M-100	-	ISR0 8.368?	-	-	-	-	TERLS	-	-	-	85?	-	-
1978-Y95	2443597.10	1978 Mar 29 1420:00	M-100	-	-	-	-	-	-	UK	-	-	-	85	-	-
1978-Y96	2443597.12	1978 Mar 29 1500:00	M-100	-	-	-	-	-	-	UK	-	-	-	87	-	-
1978-Y97	2443598.04	1978 Mar 30 1300:00	M-100	-	-	-	-	-	-	GNS77L	LP4	-	-	88	-	-
1978-Y98	2443598.08	1978 Mar 30 1400:00	M-100	-	-	-	-	-	-	GNS77L	-	-	-	83	-	-
1978-Y99	2443599.09	1978 Mar 31 1410:00	M-100	-	-	-	-	-	-	UK	-	-	-	85	-	-
1978-Y100	2443599.21	1978 Mar 31 1700:00	M-100	-	-	-	-	-	-	GTS-P-4	-	-	-	90	-	-
1978-Y101	2443602.00	1978 Apr 03 1200:00	M-100	-	-	-	-	-	-	GNS77L	LP1	-	-	88	-	-
1978-Y102	2443602.08	1978 Apr 03 1400:00	M-100	-	-	-	-	-	-	GNS77L	LP1	-	-	85	-	-



Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Launch_Mission	FlightCode	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee_Km	Range_Km	Dest
1978-Y141	2443604.08	1978 Apr 05 1400:00	M-100							MLD				85		
1978-Y142	2443604.12	1978 Apr 05 1500:00	M-100							UK				85?		
1978-Y143	2443604.31	1978 Apr 05 1930:00	M-100							GTS-P-4				85		
1978-Y144	2443604.96	1978 Apr 07 1100:00	M-100						KUR0	GNS/8E	LP2			83		
1978-Y147	2443605.96	1978 Apr 07 1100:00	M-100						KUR0	GNS/8E	LP3			87		
1978-Y149	2443606.02	1978 Apr 07 1230:00	M-100						KUR0	GNS/8E	LP3			85		
1978-Y150	2443606.08	1978 Apr 07 1400:00	M-100							UK				83		
1978-Y151	2443606.19	1978 Apr 07 1630:00	M-100							GTS-P-4				87		
1978-Y152	2443611.08	1978 Apr 12 1400:00	M-100							UK				86		
1978-Y153	2443611.18	1978 Apr 12 1620:00	M-100							GTS-P-4				82		
1978-Y154	2443611.18	1978 Apr 19 0400:00	M-100							GTS-P-4				93		
1978-Y157	2443617.67	1978 Apr 19 0400:00	M-100							UK				93		
1978-Y158	2443618.08	1978 Apr 19 0400:00	M-100							UK				85		
1978-Y159	2443618.17	1978 Apr 19 1600:00	M-100							UK				93		
1978-Y163	2443619.21	1978 Apr 20 1700:00	M-100							MLD				85		
1978-Y164	2443619.92	1978 Apr 21 1000:00	M-100		ISRO 8.369?					TERLS				80		
1978-Y165	2443620.86	1978 Apr 22 0835:00	M-100						KUR0	GNS/8E	LP4			84		
1978-Y166	2443620.92	1978 Apr 22 1000:00	M-100						KUR0	GNS/8E	LP5			88		
1978-Y167	2443621.89	1978 Apr 23 0920:00	M-100						KUR0	GNS/8E	LP6			88		
1978-Y168	2443622.87	1978 Apr 24 0850:00	M-100						KUR0	GNS/8E	LP6			83		
1978-Y169	2443623.87	1978 Apr 25 0650:00	M-100						KUR0	GNS/8E	LP7			87		
1978-Y169	2443623.87	1978 Apr 25 0650:00	M-100						KUR0	GNS/8E	LP8			84		
1978-Y170	2443624.69	1978 Apr 26 0430:00	M-100							GTS-P-4				84		
1978-Y171	2443625.08	1978 Apr 26 1400:00	M-100							MLD				86		
1978-Y172	2443625.08	1978 Apr 26 1400:00	M-100						KUR0	GNS/8E	LP8			81		
1978-Y174	2443625.29	1978 Apr 26 1900:00	M-100						KUR0	GNS/8E	LP9			81		
1978-Y175	2443625.88	1978 Apr 27 0900:00	M-100							GTS-P-4				62		
1978-Y491	2443631.67	1978 May 03 0400:00	M-100							UK				85		
1978-Y176	2443632.08	1978 May 03 1400:00	M-100							MLD				81		
1978-Y177	2443632.08	1978 May 03 1400:00	M-100							UK				81		
1978-Y604	2443638.67	1978 May 10 0400:00	M-100							GTS-P-4				54		
1978-Y605	2443638.73	1978 May 10 0530:00	M-100							GTS-P-4				62		
1978-Y179	2443639.08	1978 May 10 1400:00	M-100		ISRO 8.370?					TERLS				81		
1978-Y180	2443639.10	1978 May 10 1417:00	M-100							UK				78		
1978-Y181	2443639.12	1978 May 10 1500:00	M-100							MLD				85		
1978-Y181	2443644.08	1978 May 15 1400:00	M-100		ISRO 8.371?					UK				78		
1978-Y623	2443645.27	1978 May 16 1833:00	M-100B							GTS-P-4				79		
1978-Y187	2443646.67	1978 May 17 0400:00	M-100							GTS-P-4				81		
1978-Y629	2443646.68	1978 May 17 1400:00	M-100							UK				85		
1978-Y188	2443646.68	1978 May 17 1400:00	M-100		ISRO 8.372?					MLD				82		
1978-Y191	2443646.38	1978 May 18 1205:00	M-100B							GTS-P-4				81		
1978-Y191	2443647.08	1978 May 18 1400:00	M-100							MLD				88		
1978-Y193	2443648.08	1978 May 19 1400:00	M-100		ISRO 8.373?					UK				81		
1978-Y194	2443652.98	1978 May 23 1600:00	M-100		ISRO 8.374?					TERLS				81		
1978-Y194	2443652.98	1978 May 23 1600:00	M-100B							TERLS				81		
1978-Y195	2443652.35	1978 May 23 2018:00	M-100							GTS-P-4				78		
1978-Y199	2443652.72	1978 May 24 0510:00	M-100							GTS-P-4				62		
1978-Y199	2443652.72	1978 May 24 0510:00	M-100							GTS-P-4				62		
1978-Y199	2443652.72	1978 May 24 0510:00	M-100							MLD				85		
1978-Y199	2443652.72	1978 May 24 0510:00	M-100							UK				77		
1978-Y203	2443653.08	1978 May 24 1400:00	M-100							GTS-P-4				80		
1978-Y198	2443653.08	1978 May 24 2132:00	M-100B							GTS-P-4				80		
1978-Y199	2443654.50	1978 May 26 0000:00	M-100							GTS-P-4				88		
1978-Y200	2443654.54	1978 May 26 0100:00	M-100							GTS-P-4				85		
1978-Y201	2443654.68	1978 May 29 1400:00	M-100							TERLS				81		
1978-Y202	2443655.00	1978 May 31 1400:00	M-100							TERLS				81		
1978-Y202	2443655.00	1978 May 31 1400:00	M-100							GTS-P-4				80		
1978-Y202	2443655.00	1978 May 31 1400:00	M-100							GTS-P-4				85		
1978-Y202	2443656.08	1978 May 31 1400:00	M-100							MLD				79		
1978-Y204	2443660.08	1978 May 31 1400:00	M-100							UK				79		
1978-Y204	2443660.08	1978 May 31 1400:00	M-100							TERLS				81		
1978-Y208	2443662.08	1978 May 02 1400:00	M-100		ISRO 8.376?					TERLS				81		
1978-Y623	2443666.50	1978 Jun 02 0900:00	M-100B		ISRO 8.377?					TERLS				84		
1978-Y624	2443666.88	1978 Jun 07 0900:00	M-100							GTS-P-4				76		
1978-Y209	2443667.08	1978 Jun 07 1400:00	M-100							MLD				87		
1978-Y210	2443667.08	1978 Jun 07 1400:00	M-100		ISRO 8.378?					UK				88		
1978-Y211	2443667.13	1978 Jun 07 1506:00	M-100							TERLS				82		
1978-Y214	2443669.08	1978 Jun 09 1400:00	M-100							KER				89		
1978-Y215	2443673.44	1978 Jun 13 2240:00	M-100							MLD				90		
1978-Y216	2443674.08	1978 Jun 14 1400:00	M-100							GTS-P-4				89		
1978-Y216	2443674.08	1978 Jun 14 1400:00	M-100							MLD				88		
1978-Y643	2443674.11	1978 Jun 14 1400:00	M-100		ISRO 8.379?					UK				83		
1978-Y644	2443674.13	1978 Jun 14 1433:00	M-100B		ISRO 8.?					TERLS				78		
1978-Y218	2443674.13	1978 Jun 16 1400:00	M-100							KER				87		
1978-Y220	2443676.08	1978 Jun 16 1400:00	M-100							MLD				87		
1978-Y221	2443680.38	1978 Jun 20 2100:00	M-100							GTS-P-4				87		
1978-Y222	2443681.08	1978 Jun 21 1400:00	M-100							MLD				89		
1978-Y223	2443681.08	1978 Jun 21 1400:00	M-100							UK				85		
1978-Y224	2443681.18	1978 Jun 21 1613:00	M-100							KER				91		
1978-Y224	2443681.22	1978 Jun 21 1720:00	M-100							GTS-P-4				84		
1978-Y229	2443682.08	1978 Jun 22 1400:00	M-100		ISRO 8.380?					TERLS				84		
1978-Y230	2443682.09	1978 Jun 22 1412:00	M-100B		ISRO 8.?					TERLS				84		
1978-Y231	2443682.98	1978 Jun 27 1400:00	M-100							MLD				89		
1978-Y232	2443687.38	1978 Jun 27 2105:00	M-100							GTS-P-4				85		
1978-Y233	2443688.08	1978 Jun 28 1400:00	M-100							MLD				86		
1978-Y680	2443688.08	1978 Jun 28 1400:00	M-100							UK				78		
1978-Y234	2443688.08	1978 Jun 28 1400:00	M-100		ISRO 8.381?					TERLS				83		
1978-Y691	2443688.11	1978 Jun 28 1440:00	M-100							KER				77		
1978-Y236	2443688.23	1978 Jun 28 1725:00	M-100							MLD				85		
1978-Y239	2443690.08	1978 Jun 30 1400:00	M-100							MLD				84		
1978-Y240	2443695.08	1978 Jul 05 1400:00	M-100							MLD				88		

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Launch_Mission	FlightCode	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee Km	Range Km	Dest
1978-Y241	2443695.08	1978 Jul 05 14:00:00	M-100	-	-	-	-	-	-	UK	-	-	-	82	-	-
1978-W712	2443695.08	1978 Jul 05 14:00:00	M-100	-	ISRO 8.382?	-	-	-	-	TERLS	-	-	-	76	-	-
1978-Y242	2443695.17	1978 Jul 05 16:00:00	M-100	-	-	-	-	-	-	KER	-	-	-	80	-	-
1978-Y244	2443697.08	1978 Jul 07 14:00:00	M-100	-	-	-	-	-	-	MLD	-	-	-	88	-	-
1978-Y247	2443697.25	1978 Jul 07 18:00:00	M-100	-	-	-	-	-	-	MLD	-	-	-	84	-	-
1978-Y248	2443700.17	1978 Jul 10 16:00:00	M-100	-	-	-	-	-	-	KER	-	-	-	84	-	-
1978-Y249	2443702.08	1978 Jul 12 14:00:00	M-100	-	-	-	-	-	-	MLD	-	-	-	93	-	-
1978-Y250	2443702.08	1978 Jul 12 14:00:00	M-100	-	-	-	-	-	-	UK	-	-	-	87	-	-
1978-Y251	2443702.08	1978 Jul 12 14:00:00	M-100	-	ISRO 8.383?	-	-	-	-	TERLS	-	-	-	85?	-	-
1978-Y252	2443702.17	1978 Jul 12 16:00:00	M-100	-	ISRO 8.?	-	-	-	-	TERLS	-	-	-	85?	-	-
1978-Y253	2443702.08	1978 Jul 13 14:00:00	M-100	-	-	-	-	-	-	KER	-	-	-	84	-	-
1978-Y255	2443703.08	1978 Jul 13 14:00:00	M-100	-	-	-	-	-	-	MLD	-	-	-	88	-	-
1978-Y260	2443704.08	1978 Jul 14 14:00:00	M-100	-	-	-	-	-	-	KER	-	-	-	84	-	-
1978-Y261	2443705.08	1978 Jul 15 14:00:00	M-100	-	-	-	-	-	-	MLD	-	-	-	84	-	-
1978-Y262	2443705.08	1978 Jul 15 14:00:00	M-100	-	-	-	-	-	-	KER	-	-	-	87	-	-
1978-Y263	2443705.08	1978 Jul 15 14:00:00	M-100	-	-	-	-	-	-	MLD	-	-	-	81	-	-
1978-Y264	2443709.11	1978 Jul 19 14:00:00	M-100	-	ISRO 8.385?	-	-	-	-	TERLS	-	-	-	82	-	-
1978-Y265	2443709.12	1978 Jul 19 15:00:00	M-100	-	ISRO 8.?	-	-	-	-	TERLS	-	-	-	82	-	-
1978-W759	2443709.17	1978 Jul 19 16:00:00	M-100	-	-	-	-	-	-	KER	-	-	-	76	-	-
1978-Y266	2443711.08	1978 Jul 21 14:00:00	M-100	-	-	-	-	-	-	MLD	-	-	-	90	-	-
1978-Y269	2443716.08	1978 Jul 26 14:00:00	M-100	-	-	-	-	-	-	MLD	-	-	-	86	-	-
1978-Y270	2443716.08	1978 Jul 26 14:00:00	M-100	-	ISRO 8.386?	-	-	-	-	TERLS	-	-	-	82	-	-
1978-Y271	2443716.17	1978 Jul 26 16:00:00	M-100	-	-	-	-	-	-	KER	-	-	-	85	-	-
1978-Y275	2443723.08	1978 Aug 02 14:00:00	M-100	-	-	-	-	-	-	MLD	-	-	-	84	-	-
1978-Y276	2443723.08	1978 Aug 02 14:00:00	M-100	-	ISRO 8.387?	-	-	-	-	UK	-	-	-	84	-	-
1978-Y277	2443723.12	1978 Aug 02 15:00:00	M-100	-	-	-	-	-	-	TERLS	-	-	-	85	-	-
1978-Y278	2443723.17	1978 Aug 02 16:00:00	M-100	-	-	-	-	-	-	KER	-	-	-	85	-	-
1978-Y283	2443725.08	1978 Aug 04 14:00:00	M-100	-	-	-	-	-	-	MLD	-	-	-	83	-	-
1978-Y284	2443730.08	1978 Aug 09 14:00:00	M-100	-	-	-	-	-	-	MLD	-	-	-	84	-	-
1978-Y285	2443730.08	1978 Aug 09 14:00:00	M-100	-	ISRO 8.388?	-	-	-	-	UK	-	-	-	87	-	-
1978-Y286	2443730.08	1978 Aug 09 14:00:00	M-100	-	ISRO 8.?	-	-	-	-	TERLS	-	-	-	83	-	-
1978-Y287	2443730.12	1978 Aug 09 15:00:00	M-100	-	-	-	-	-	-	TERLS	-	-	-	83	-	-
1978-Y288	2443730.17	1978 Aug 09 16:00:00	M-100	-	-	-	-	-	-	KER	-	-	-	86	-	-
1978-Y291	2443730.29	1978 Aug 09 19:00:00	M-100	-	-	-	-	-	-	UK	-	-	-	85	-	-
1978-Y293	2443731.10	1978 Aug 10 14:20:00	M-100	-	-	-	-	-	-	GTS-P-4	-	-	-	85?	-	-
1978-Y294	2443731.10	1978 Aug 10 14:30:00	M-100	-	-	-	-	-	-	GTS-P-4	-	-	-	85	-	-
1978-Y295	2443732.08	1978 Aug 11 14:00:00	M-100	-	-	-	-	-	-	MLD	-	-	-	83	-	-
1978-Y296	2443735.10	1978 Aug 14 14:20:00	M-100	-	-	-	-	-	-	GTS-P-4	-	-	-	93	-	-
1978-Y297	2443735.10	1978 Aug 14 14:20:00	M-100	-	-	-	-	-	-	GTS-P-4	-	-	-	85?	-	-
1978-Y298	2443735.15	1978 Aug 14 15:30:00	M-100	-	-	-	-	-	-	GTS-P-4	-	-	-	85	-	-
1978-Y299	2443737.04	1978 Aug 16 13:00:00	M-100	-	-	-	-	-	-	KER	-	-	-	91	-	-
1978-Y300	2443737.04	1978 Aug 16 13:00:00	M-100	-	-	-	-	-	-	MLD	-	-	-	83	-	-
1978-Y301	2443737.08	1978 Aug 16 14:00:00	M-100	-	ISRO 8.389?	-	-	-	-	UK	-	-	-	84	-	-
1978-Y302	2443737.08	1978 Aug 16 14:00:00	M-100	-	-	-	-	-	-	TERLS	-	-	-	74	-	-
1978-Y304	2443737.19	1978 Aug 16 15:30:00	M-100	-	-	-	-	-	-	GTS-P-4	-	-	-	04	-	-
1978-Y307	2443737.31	1978 Aug 16 22:30:00	M-100	-	-	-	-	-	-	GTS-P-4	-	-	-	85	-	-
1978-Y308	2443737.44	1978 Aug 16 22:30:00	M-100	-	-	-	-	-	-	GTS-P-4	-	-	-	04	-	-
1978-Y309	2443738.08	1978 Aug 16 15:30:00	M-100	-	-	-	-	-	-	MLD	-	-	-	81	-	-
1978-Y309	2443738.08	1978 Aug 16 15:30:00	M-100	-	-	-	-	-	-	GTS-P-4	-	-	-	89	-	-
1978-Y310	2443740.01	1978 Aug 16 17:00:00	M-100	-	-	-	-	-	-	KER	-	-	-	85	-	-
1978-Y311	2443740.01	1978 Aug 16 17:00:00	M-100	-	-	-	-	-	-	KER	-	-	-	78	-	-
1978-Y311	2443744.08	1978 Aug 23 14:00:00	M-100	-	-	-	-	-	-	UK	-	-	-	84	-	-
1978-Y312	2443744.08	1978 Aug 23 14:12:00	M-100	-	ISRO 8.390?	-	-	-	-	TERLS	-	-	-	84	-	-
1978-Y313	2443744.08	1978 Aug 23 14:12:00	M-100	-	ISRO 8.391?	-	-	-	-	TERLS	-	-	-	85	-	-
1978-Y314	2443744.18	1978 Aug 23 16:35:00	M-100	-	-	-	-	-	-	GTS-P-4	-	-	-	84	-	-
1978-Y316	2443744.21	1978 Aug 23 17:00:00	M-100	-	-	-	-	-	-	KER	-	-	-	89	-	-
1978-Y316	2443744.57	1978 Aug 24 01:35:00	M-100	-	-	-	-	-	-	UK	-	-	-	79	-	-
1978-Y318	2443746.10	1978 Aug 25 14:17:00	M-100	-	-	-	-	-	-	MLD	-	-	-	82	-	-
1978-Y319	2443749.04	1978 Aug 28 13:00:00	M-100	-	-	-	-	-	-	KER	-	-	-	84	-	-
1978-Y320	2443750.17	1978 Aug 29 16:06:00	M-100	-	-	-	-	-	-	MLD	-	-	-	85	-	-
1978-Y321	2443750.68	1978 Aug 30 04:20:00	M-100	-	-	-	-	-	-	GTS-P-4	-	-	-	92	-	-
1978-Y322	2443750.68	1978 Aug 30 04:20:00	M-100	-	-	-	-	-	-	GTS-P-4	-	-	-	85?	-	-
1978-Y323	2443751.04	1978 Aug 30 13:00:00	M-100	-	-	-	-	-	-	KER	-	-	-	92	-	-
1978-Y328	2443751.08	1978 Aug 30 14:00:00	M-100	-	-	-	-	-	-	MLD	-	-	-	79	-	-
1978-Y329	2443751.08	1978 Aug 30 14:00:00	M-100	-	-	-	-	-	-	UK	-	-	-	82	-	-
1978-Y329	2443751.08	1978 Aug 30 14:00:00	M-100	-	ISRO 8.392?	-	-	-	-	TERLS	-	-	-	84	-	-
1978-Y329	2443751.08	1978 Aug 30 14:00:00	M-100	-	-	-	-	-	-	TERLS	-	-	-	84	-	-
1978-Y329	2443752.57	1978 Sep 1 01:40:00	M-100	-	-	-	-	-	-	UK	-	-	-	84	-	-
1978-Y328	2443753.09	1978 Sep 1 14:10:00	M-100	-	-	-	-	-	-	UK	-	-	-	84	-	-
1978-Y329	2443755.69	1978 Sep 4 04:29:00	M-100	-	ISRO 8.393	-	-	-	-	TERLS	-	-	-	89	-	-
1978-Y330	2443756.25	1978 Sep 4 18:00:00	M-100	-	-	-	-	-	-	UK	-	-	-	86	-	-
1978-Y331	2443756.58	1978 Sep 5 02:00:00	M-100	-	-	-	-	-	-	TERLS	-	-	-	84	-	-
1978-Y332	2443757.68	1978 Sep 5 14:00:00	M-100	-	-	-	-	-	-	TERLS	-	-	-	87	-	-
1978-Y333	2443757.68	1978 Sep 6 04:20:00	M-100	-	-	-	-	-	-	GTS-P-4	-	-	-	91	-	-
1978-Y334	2443758.13	1978 Sep 6 14:17:00	M-100	-	-	-	-	-	-	MLD	-	-	-	84	-	-
1978-Y335	2443758.13	1978 Sep 6 15:05:00	M-100	-	-	-	-	-	-	UK	-	-	-	83	-	-
1978-Y336	2443758.17	1978 Sep 6 16:00:00	M-100	-	-	-	-	-	-	KER	-	-	-	85	-	-
1978-Y339	2443760.15	1978 Sep 8 15:36:00	M-100	-	-	-	-	-	-	UK	-	-	-	82	-	-
1978-Y340	2443764.08	1978 Sep 12 14:00:00	M-100	-	-	-	-	-	-	TERLS	-	-	-	85	-	-
1978-Y340	2443764.08	1978 Sep 12 14:00:00	M-100	-	-	-	-	-	-	TERLS	-	-	-	82	-	-
1978-Y341	2443764.60	1978 Sep 13 02:20:00	M-100	-	-	-	-	-	-	GTS-P-4	-	-	-	84	-	-
1978-Y342	2443765.08	1978 Sep 13 14:00:00	M-100	-	-	-	-	-	-	UK	-	-	-	91	-	-
1978-Y343	2443765.08	1978 Sep 13 14:00:00	M-100	-	-	-	-	-	-	MLD	-	-	-	86	-	-
1978-Y346	2443767.19	1978 Sep 15 15:30:00	M-100	-	-	-	-	-	-	UK	-	-	-	81	-	-
1978-Y347	2443767.31	1978 Sep 15 19:30:00	M-100	-	-	-	-	-	-	GTS-P-4	-	-	-	88	-	-
1978-Y349	2443772.08	1978 Sep 20 14:00:00	M-100	-	-	-	-	-	-	GTS-P-4	-	-	-	87	-	-
1978-Y350	2443772.08	1978 Sep 20 14:00:00	M-100	-	-	-	-	-	-	MLD	-	-	-	89	-	-
1978-Y352	2443772.17	1978 Sep 20 16:07:00	M-100	-	-	-	-	-	-	UK	-	-	-	86	-	-

02 profile

Launch_Tag	Launch_ID	Launch_Date	Lv_Type	Variant	Flight_ID	Flight	Launch_Mission	FlightCode	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee_Km	Range_Km	Dest
1978-Y355	2443773.08	1978 Sep 21 1400:00	M-100	-	-	-	-	-	-	TERLS	-	-	-	84	-	-
1978-Y357	2443778.40	1978 Sep 26 2132:00	M-100B	-	-	-	-	-	-	GTS-P-4	-	-	-	85?	-	-
1978-Y358	2443779.08	1978 Sep 27 1400:00	M-100	-	-	-	-	-	-	MLD	-	-	-	82	-	-
1978-Y359	2443779.08	1978 Sep 27 1400:00	M-100	-	-	-	-	-	-	UK	-	-	-	87	-	-
1978-Y360	2443779.08	1978 Sep 27 1400:00	M-100	-	-	-	-	-	-	TERLS	-	-	-	87	-	-
1978-Y365	2443786.08	1978 Oct 04 1400:00	M-100	-	-	-	-	-	-	MLD	-	-	-	85	-	-
1978-Y366	2443786.08	1978 Oct 04 1400:00	M-100	-	-	-	-	-	-	UK	-	-	-	85	-	-
1978-Y367	2443786.08	1978 Oct 04 1400:00	M-100	-	-	-	-	-	-	TERLS	-	-	-	84	-	-
1978-Y370	2443786.39	1978 Oct 04 2125:00	M-100B	-	-	-	-	-	-	GTS-P-4	-	-	-	85?	-	-
1978-Y371	2443786.47	1978 Oct 05 2000:00	M-100B	-	-	-	-	-	-	GTS-P-4	-	-	-	84	-	-
1978-Y372	2443787.33	1978 Oct 11 1330:00	M-100	-	-	-	-	-	-	UK	-	-	-	86	-	-
1978-Y373	2443793.08	1978 Oct 11 1400:00	M-100	-	-	-	-	-	-	TERLS	-	-	-	86	-	-
1978-Y374	2443793.08	1978 Oct 11 1400:00	M-100	-	-	-	-	-	-	GTS-P-4	-	-	-	88	-	-
1978-Y375	2443793.08	1978 Oct 11 1400:00	M-100	-	-	-	-	-	-	GTS-P-4	-	-	-	84	-	-
1978-Y376	2443793.08	1978 Oct 11 1400:00	M-100	-	-	-	-	-	-	MLD	-	-	-	83	-	-
1978-Y379	2443799.67	1978 Oct 18 0400:00	M-100	-	-	-	-	-	-	UK	-	-	-	86	-	-
1978-Y380	2443799.71	1978 Oct 18 0500:00	M-100	-	-	-	-	-	-	GTS-P-4	-	-	-	92	-	-
1978-Y381	2443800.08	1978 Oct 18 1400:00	M-100	-	-	-	-	-	-	MLD	-	-	-	84	-	-
1978-Y382	2443800.08	1978 Oct 18 1400:00	M-100	-	-	-	-	-	-	UK	-	-	-	86	-	-
1978-Y383	2443800.08	1978 Oct 18 1400:00	M-100	-	-	-	-	-	-	TERLS	-	-	-	83	-	-
1978-Y389	2443806.56	1978 Oct 25 0130:00	M-100	-	-	-	-	-	-	GTS-P-4	-	-	-	87	-	-
1978-Y390	2443807.08	1978 Oct 25 1400:00	M-100	-	-	-	-	-	-	UK	-	-	-	90	-	-
1978-Y391	2443807.08	1978 Oct 25 1400:00	M-100	-	-	-	-	-	-	TERLS	-	-	-	83	-	-
1978-Y395	2443806.08	1978 Oct 26 1400:00	M-100	-	-	-	-	-	-	MLD	-	-	-	82	-	-
1978-Y396	2443814.08	1978 Nov 01 1400:00	M-100	-	-	-	-	-	-	UK	-	-	-	86	-	-
1978-Y397	2443814.10	1978 Nov 01 1427:00	M-100	-	-	-	-	-	-	TERLS	-	-	-	81	-	-
1978-Y398	2443814.12	1978 Nov 01 1500:00	M-100	-	-	-	-	-	-	GTS-P-4	-	-	-	85	-	-
1978-Y400	2443814.19	1978 Nov 01 2000:00	M-100	-	-	-	-	-	-	MLD	-	-	-	82	-	-
1978-Y405	2443814.33	1978 Nov 01 2000:00	M-100	-	-	-	-	-	-	GTS-P-4	-	-	-	85	-	-
1978-Y406	2443821.08	1978 Nov 08 1400:00	M-100	-	-	-	-	-	-	UK	-	-	-	86	-	-
1978-Y407	2443821.08	1978 Nov 08 1400:00	M-100	-	-	-	-	-	-	TERLS	-	-	-	86	-	-
1978-Y410	2443821.12	1978 Nov 09 1500:00	M-100	-	-	-	-	-	-	GTS-P-4	-	-	-	83	-	-
1978-Y411	2443827.67	1978 Nov 09 0400:00	M-100	-	-	-	-	-	-	MLD	-	-	-	87	-	-
1978-Y412	2443828.08	1978 Nov 15 1400:00	M-100	-	-	-	-	-	-	UK	-	-	-	82	-	-
1978-Y413	2443828.08	1978 Nov 15 1400:00	M-100	-	-	-	-	-	-	TERLS	-	-	-	87	-	-
1978-Y414	2443828.08	1978 Nov 15 1400:00	M-100	-	-	-	-	-	-	GTS-P-4	-	-	-	86	-	-
1978-Y415	2443828.08	1978 Nov 15 1400:00	M-100	-	-	-	-	-	-	MLD	-	-	-	82	-	-
1978-Y419	2443834.67	1978 Nov 22 0400:00	M-100	-	-	-	-	-	-	GTS-P-4	-	-	-	72	-	-
1978-Y419	2443835.08	1978 Nov 22 1400:00	M-100	-	-	-	-	-	-	MLD	-	-	-	86	-	-
1978-Y420	2443835.08	1978 Nov 22 1500:00	M-100	-	-	-	-	-	-	UK	-	-	-	89	-	-
1978-Y421	2443835.12	1978 Nov 29 1500:00	M-100	-	-	-	-	-	-	TERLS	-	-	-	94	-	-
1978-Y424	2443842.08	1978 Nov 29 1500:00	M-100	-	-	-	-	-	-	MLD	-	-	-	87	-	-
1978-Y425	2443842.54	1978 Nov 29 1520:00	M-100	-	-	-	-	-	-	UK	-	-	-	95	-	-
1978-Y426	2443842.54	1978 Nov 29 1530:00	M-100	-	-	-	-	-	-	GTS-P-4	-	-	-	85	-	-
1978-Y429	2443843.08	1978 Dec 06 1200:00	M-100	-	-	-	-	-	-	TERLS	-	-	-	88	-	-
1978-Y431	2443846.67	1978 Dec 06 1400:00	M-100	-	-	-	-	-	-	GTS-P-4	-	-	-	88	-	-
1978-Y432	2443849.08	1978 Dec 06 1400:00	M-100	-	-	-	-	-	-	MLD	-	-	-	82	-	-
1978-Y433	2443849.08	1978 Dec 06 1400:00	M-100	-	-	-	-	-	-	UK	-	-	-	85	-	-
1978-Y434	2443849.08	1978 Dec 06 1400:00	M-100	-	-	-	-	-	-	TERLS	-	-	-	81	-	-
1978-Y438	2443849.08	1978 Dec 06 1400:00	M-100	-	-	-	-	-	-	GTS-P-4	-	-	-	85	-	-
1978-Y439	2443856.68	1978 Dec 13 1400:00	M-100	-	-	-	-	-	-	ML	-	-	-	91	-	-
1978-Y440	2443856.68	1978 Dec 13 1400:00	M-100	-	-	-	-	-	-	GTS-P-4	-	-	-	85	-	-
1978-Y441	2443856.91	1978 Dec 13 1400:00	M-100	-	-	-	-	-	-	UK	-	-	-	84	-	-
1978-Y444	2443865.67	1978 Dec 20 0400:00	M-100	-	-	-	-	-	-	TERLS	-	-	-	87	-	-
1978-Y445	2443865.67	1978 Dec 20 0400:00	M-100	-	-	-	-	-	-	GTS-P-4	-	-	-	83	-	-
1978-Y446	2443865.68	1978 Dec 20 1400:00	M-100	-	-	-	-	-	-	MLD	-	-	-	80	-	-
1978-Y447	2443865.68	1978 Dec 20 1400:00	M-100	-	-	-	-	-	-	UK	-	-	-	87	-	-
1978-Y451	2443865.68	1978 Dec 27 0500:00	M-100	-	-	-	-	-	-	TERLS	-	-	-	85	-	-
1978-Y452	2443870.08	1978 Dec 27 1400:00	M-100	-	-	-	-	-	-	GTS-P-4	-	-	-	82	-	-
1978-Y453	2443870.08	1978 Dec 27 1400:00	M-100	-	-	-	-	-	-	MLD	-	-	-	82	-	-
1978-Y454	2443870.08	1978 Dec 27 1400:00	M-100	-	-	-	-	-	-	UK	-	-	-	86	-	-
1979-Y01	2443876.08	1979 Jan 03 1400:00	M-100	-	-	-	-	-	-	TERLS	-	-	-	87	-	-
1979-Y02	2443876.67	1979 Jan 03 0400:00	M-100	-	-	-	-	-	-	UK	-	-	-	89	-	-
1979-Y03	2443877.08	1979 Jan 03 1400:00	M-100	-	-	-	-	-	-	GTS-P-4	-	-	-	86	-	-
1979-Y05	2443877.25	1979 Jan 05 1800:00	M-100	-	-	-	-	-	-	TERLS	-	-	-	86	-	-
1979-Y07	2443879.08	1979 Jan 05 1400:00	M-100	-	-	-	-	-	-	MLD	-	-	-	84	-	-
1979-Y09	2443883.67	1979 Jan 10 0400:00	M-100	-	-	-	-	-	-	GTS-P-4	-	-	-	80	-	-
1979-Y10	2443884.08	1979 Jan 10 1400:00	M-100	-	-	-	-	-	-	MLD	-	-	-	85	-	-
1979-Y11	2443884.08	1979 Jan 10 1400:00	M-100	-	-	-	-	-	-	UK	-	-	-	83	-	-
1979-Y12	2443884.08	1979 Jan 10 1400:00	M-100	-	-	-	-	-	-	TERLS	-	-	-	84	-	-
1979-Y14	2443884.15	1979 Jan 12 1530:00	M-100	-	-	-	-	-	-	NER	-	-	-	88	-	-
1979-Y17	2443885.67	1979 Jan 12 0400:00	M-100	-	-	-	-	-	-	GTS-P-4	-	-	-	87	-	-
1979-Y18	2443886.08	1979 Jan 12 1400:00	M-100	-	-	-	-	-	-	UK	-	-	-	84	-	-
1979-Y19	2443886.08	1979 Jan 12 1400:00	M-100	-	-	-	-	-	-	TERLS	-	-	-	86	-	-
1979-Y20	2443887.15	1979 Jan 13 1530:00	M-100	-	-	-	-	-	-	NER	-	-	-	87	-	-
1979-Y21	2443888.15	1979 Jan 14 1530:00	M-100	-	-	-	-	-	-	NER	-	-	-	83	-	-
1979-Y22	2443889.08	1979 Jan 15 1400:00	M-100	-	-	-	-	-	-	UK	-	-	-	92	-	-
1979-Y23	2443890.15	1979 Jan 16 1530:00	M-100	-	-	-	-	-	-	NER	-	-	-	87	-	-
1979-Y24	2443890.67	1979 Jan 17 0400:00	M-100	-	-	-	-	-	-	GTS-P-4	-	-	-	85	-	-
1979-Y25	2443891.08	1979 Jan 17 1400:00	M-100	-	-	-	-	-	-	UK	-	-	-	88	-	-
1979-Y26	2443891.12	1979 Jan 17 1500:00	M-100	-	-	-	-	-	-	MLD	-	-	-	82	-	-
1979-Y27	2443891.17	1979 Jan 17 1600:00	M-100	-	-	-	-	-	-	TERLS	-	-	-	88	-	-
1979-H93	2443891.17	1979 Jan 18 1550:00	M-100	-	-	-	-	-	-	NER	-	-	-	74	-	-
1979-Y32	2443892.16	1979 Jan 18 1550:00	M-100	-	-	-	-	-	-	NER	-	-	-	80	-	-
1979-Y33	2443892.65	1979 Jan 19 0340:00	M-100	-	-	-	-	-	-	GTS-P-4	-	-	-	91	-	-
1979-Y34	2443893.08	1979 Jan 19 1400:00	M-100	-	-	-	-	-	-	TERLS	-	-	-	86	-	-

Launch_Tag	Launch_ID	Launch_Date	Lv_Type	Variant	Flight_ID	Flight	Launch_Mission	FlightCode	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee Km	Range Km	Dest
1979-Y35	2443893.15	1979 Jan 19 1530:00	M-100						KURO	MER				81		
1979-Y36	2443893.15	1979 Jan 19 1540:00	M-100							UK				90		
1979-Y37	2443894.14	1979 Jan 20 1525:00	M-100						KURO	MER				80		
1979-Y38	2443895.15	1979 Jan 21 1530:00	M-100						KURO	MER				82		
1979-Y39	2443896.08	1979 Jan 22 1400:00	M-100							UK				88		
1979-Y41	2443896.15	1979 Jan 22 1530:00	M-100						KURO	MER				88		
1979-Y42	2443897.13	1979 Jan 23 1510:00	M-100							MLD				91		
1979-Y43	2443898.08	1979 Jan 24 1400:00	M-100							UK				85		
1979-Y44	2443898.08	1979 Jan 24 1400:00	M-100							TERLS				85		
1979-Y45	2443898.15	1979 Jan 24 1535:00	M-100						KURO	MER				83		
1979-Y46	2443898.15	1979 Jan 24 1630:00	M-100							G1SP-4				86		
1979-Y47	2443899.12	1979 Jan 25 1455:00	M-100						KURO	MER				80		
1979-Y49	2443900.12	1979 Jan 26 1500:00	M-100						KURO	MER				84		
1979-151	2443900.79	1979 Jan 27 0700:00	M-100							G1SP-4				85		
1979-152	2443901.08	1979 Jan 27 1400:00	M-100							TERLS				83		
1979-154	2443901.12	1979 Jan 27 1455:00	M-100						KURO	MER				81		
1979-155	2443901.14	1979 Jan 27 1525:00	M-100							UK				81		
1979-156	2443902.15	1979 Jan 28 1535:00	M-100						KURO	MER				84		
1979-158	2443902.15	1979 Jan 28 1535:00	M-100							UK				81		
1979-159	2443903.08	1979 Jan 29 1400:00	M-100						KURO	MER				82		
1979-160	2443903.15	1979 Jan 29 1535:00	M-100							UK				82		
1979-161	2443904.25	1979 Jan 30 1755:00	M-100						KURO	MER				83		
1979-162	2443904.67	1979 Jan 31 0400:00	M-100							G1SP-4				82		
1979-163	2443905.08	1979 Jan 31 1400:00	M-100							UK				90		
1979-164	2443905.08	1979 Jan 31 1400:00	M-100							TERLS				86		
1979-165	2443905.08	1979 Jan 31 1400:00	M-100						KURO	MER				85		
1979-166	2443905.12	1979 Jan 31 1500:00	M-100							TERLS				83		
1979-167	2443906.12	1979 Feb 01 1500:00	M-100						KURO	MER				82		
1979-170	2443906.67	1979 Feb 02 0400:00	M-100							G1SP-4				85		
1979-171	2443906.71	1979 Feb 02 0500:00	M-100							G1SP-4				82		
1979-172	2443907.08	1979 Feb 02 1400:00	M-100							TERLS				84		
1979-173	2443907.12	1979 Feb 02 1500:00	M-100							UK				86		
1979-174	2443908.25	1979 Feb 03 1500:00	M-100						KURO	MER				81		
1979-175	2443909.21	1979 Feb 04 1700:00	M-100							TERLS				81		
1979-176	2443909.33	1979 Feb 04 2000:00	M-100						KURO	MER	LP1			86		
1979-177	2443909.33	1979 Feb 04 2000:00	M-100							GMS79A				86		
1979-178	2443910.25	1979 Feb 05 1500:00	M-100							UK				83		
1979-179	2443910.39	1979 Feb 05 2120:00	M-100							TERLS				86		
1979-180	2443911.29	1979 Feb 06 1900:00	M-100							UK				81		
1979-181	2443911.67	1979 Feb 07 0400:00	M-100							G1SP-4				85		
1979-182	2443912.05	1979 Feb 07 1400:00	M-100							UK				82		
1979-183	2443912.12	1979 Feb 07 1500:00	M-100							TERLS				83		
1979-184	2443912.12	1979 Feb 07 1500:00	M-100							TERLS				83		
1979-185	2443912.25	1979 Feb 07 1550:00	M-100							TERLS				79		
1979-186	2443913.64	1979 Feb 09 0320:00	M-100							G1SP-4				87		
1979-187	2443914.05	1979 Feb 09 1400:00	M-100							TERLS				83		
1979-188	2443914.51	1979 Feb 09 1400:00	M-100							GMS79A				87		
1979-189	2443914.51	1979 Feb 09 2020:00	M-100							TERLS				83		
1979-190	2443914.95	1979 Feb 10 1930:00	M-100							GMS79A				85		
1979-191	2443915.33	1979 Feb 11 1930:00	M-100							UK				85		
1979-192	2443915.33	1979 Feb 11 1930:00	M-100							UK				86		
1979-193	2443917.97	1979 Feb 12 2000:00	M-100							TERLS				85		
1979-194	2443918.34	1979 Feb 13 2000:00	M-100							TERLS				83		
1979-195	2443918.34	1979 Feb 13 2010:00	M-100							UK				83		
1979-196	2443918.34	1979 Feb 13 2010:00	M-100							UK				83		
1979-197	2443918.34	1979 Feb 14 1350:00	M-100							MLD				88		
1979-198	2443918.34	1979 Feb 14 1400:00	M-100							UK				83		
1979-199	2443918.34	1979 Feb 14 1400:00	M-100							UK				88		
1979-200	2443918.34	1979 Feb 14 1400:00	M-100							UK				89		
1979-101	2443918.34	1979 Feb 14 1400:00	M-100							TERLS				84		
1979-1101	2443918.34	1979 Feb 14 1400:00	M-100							TERLS				84		
1979-1102	2443918.34	1979 Feb 14 1600:00	M-100							G1SP-4				83		
1979-1105	2443919.79	1979 Feb 14 1900:00	M-100							G1SP-4				84		
1979-1107	2443919.79	1979 Feb 14 1900:00	M-100							TERLS				85		
1979-1108	2443920.29	1979 Feb 15 1900:00	M-100							TERLS				84		
1979-1109	2443921.08	1979 Feb 16 1400:00	M-100							TERLS				84		
1979-1110	2443921.14	1979 Feb 16 1520:00	M-100							UK				84		
1979-1111	2443921.33	1979 Feb 16 2000:00	M-100							G1SP-4				84		
1979-1112	2443921.33	1979 Feb 16 2000:00	M-100							GMS79A				91		
1979-1113	2443923.29	1979 Feb 17 1900:00	M-100							TERLS				83		
1979-1114	2443923.29	1979 Feb 18 1900:00	M-100							TERLS				84		
1979-1115	2443925.56	1979 Feb 21 0130:00	M-100							G1SP-4				87		
1979-1116	2443926.08	1979 Feb 21 1400:00	M-100							MLD				83		
1979-1117	2443926.08	1979 Feb 21 1400:00	M-100							UK				85		
1979-1118	2443926.17	1979 Feb 21 1600:00	M-100							TERLS				86		
1979-1120	2443928.25	1979 Feb 23 1800:00	M-100							GMS79A				86		
1979-1121	2443928.47	1979 Feb 23 2315:00	M-100							UK				85		
1979-1126	2443931.25	1979 Feb 26 1800:00	M-100							GMS79A				84		
1979-1310	2443932.07	1979 Feb 27 1340:00	M-100							G1SP-4				78		
1979-1319	2443932.79	1979 Feb 28 0700:00	M-100							MLD				57		
1979-1318	2443933.08	1979 Feb 28 1400:00	M-100							MLD				66		
1979-1209	2443933.08	1979 Feb 28 1400:00	M-100							TERLS				80		
1979-1130	2443933.08	1979 Feb 28 1400:00	M-100							UK				88		
1979-1133	2443934.21	1979 Mar 01 1700:00	M-100							GMS79A				83		
1979-1134	2443934.21	1979 Mar 01 1900:00	M-100							GMS79A				81		
1979-1136	2443939.57	1979 Mar 07 0145:00	M-100							G1SP-4				87		
1979-1346	2443940.08	1979 Mar 07 1400:00	M-100							MLD				66		
1979-1138	2443940.22	1979 Mar 07 1715:00	M-100							UK				85		
1979-1140	2443941.08	1979 Mar 08 1400:00	M-100							TERLS				83		

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Launch_Mission	FlightCode	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee Km	Range Km	Dest
1979-Y141	2443946.69	1979 Mar 14 0430:00	M-100							GTSP-4				87		
1979-W371	2443946.88	1979 Mar 14 0908:00	M-100							UK				74		
1979-Y142	2443947.00	1979 Mar 14 1200:00	M-100							TERLS				85		
1979-Y143	2443947.04	1979 Mar 14 1300:00	M-100							MJD				83		
1979-Y147	2443947.38	1979 Mar 14 2100:00	M-100						SHOK	GTSP-4	LP8			84		
1979-Y149	2443947.69	1979 Mar 15 0435:00	M-100							UK				88		
1979-Y150	2443947.83	1979 Mar 15 0800:00	M-100							GTSP-4				83		
1979-Y151	2443948.67	1979 Mar 16 0400:00	M-100							GTSP-4				94		
1979-W383	2443948.69	1979 Mar 16 0430:00	M-100							UK				79		
1979-Y152	2443948.83	1979 Mar 16 0750:00	M-100							TERLS				83		
1979-Y154	2443949.00	1979 Mar 16 1200:00	M-100							GTSP-4				88		
1979-Y155	2443949.75	1979 Mar 17 0600:00	M-100							UK				85		
1979-Y165	2443949.83	1979 Mar 17 0750:00	M-100							GTSP-4				87		
1979-Y166	2443950.67	1979 Mar 18 0400:00	M-100							UK				81		
1979-Y167	2443950.86	1979 Mar 18 0845:00	M-100							TERLS				84		
1979-Y168	2443951.00	1979 Mar 18 1200:00	M-100							GTSP-4				88		
1979-Y169	2443951.21	1979 Mar 18 1700:00	M-100						SHOK	TERLS	LP9			84		
1979-Y160	2443951.29	1979 Mar 19 0400:00	M-100						SHOK	GTSP-4	LP9			87		
1979-Y161	2443951.67	1979 Mar 19 1900:00	M-100							UK				84		
1979-Y162	2443951.81	1979 Mar 19 0725:00	M-100							TERLS				88		
1979-Y163	2443951.99	1979 Mar 19 1140:00	M-100							GTSP-4				86		
1979-Y164	2443952.67	1979 Mar 20 0400:00	M-100							UK				89		
1979-Y165	2443952.80	1979 Mar 20 0715:00	M-100							TERLS				86		
1979-Y166	2443952.99	1979 Mar 20 1140:00	M-100							GTSP-4				90		
1979-Y167	2443953.23	1979 Mar 20 1730:00	M-100							TERLS				87		
1979-Y168	2443953.69	1979 Mar 21 0430:00	M-100							UK				87		
1979-Y169	2443953.80	1979 Mar 21 0705:00	M-100							TERLS				85		
1979-Y170	2443953.99	1979 Mar 21 1140:00	M-100							MJD				90		
1979-Y171	2443954.21	1979 Mar 21 1700:00	M-100							GTSP-4				84		
1979-Y176	2443954.67	1979 Mar 22 0400:00	M-100							UK				88		
1979-Y177	2443954.79	1979 Mar 22 0655:00	M-100							TERLS				86		
1979-Y178	2443955.67	1979 Mar 22 1145:00	M-100							GTSP-4				83		
1979-Y179	2443955.78	1979 Mar 23 0645:00	M-100							UK				85		
1979-Y180	2443956.67	1979 Mar 23 0400:00	M-100							GTSP-4				83		
1979-Y181	2443956.78	1979 Mar 24 0645:00	M-100							UK				86		
1979-Y182	2443956.78	1979 Mar 24 0645:00	M-100							TERLS				86		
1979-Y183	2443957.00	1979 Mar 24 1200:00	M-100							GTSP-4				85		
1979-Y184	2443957.08	1979 Mar 24 1400:00	M-100							TERLS				85		
1979-Y185	2443957.67	1979 Mar 25 0400:00	M-100							UK				83		
1979-Y186	2443957.77	1979 Mar 25 0630:00	M-100							TERLS				88		
1979-Y187	2443958.67	1979 Mar 26 0400:00	M-100							UK				90		
1979-Y188	2443958.67	1979 Mar 26 0500:00	M-100							GTSP-4				84		
1979-Y189	2443958.73	1979 Mar 26 0835:00	M-100							TERLS				84		
1979-Y189	2443958.91	1979 Mar 26 0935:00	M-100							GTSP-4				84		
1979-Y189	2443958.99	1979 Mar 26 1140:00	M-100							UK				89		
1979-Y190	2443959.74	1979 Mar 27 0500:00	M-100							TERLS				89		
1979-Y191	2443959.74	1979 Mar 27 0810:00	M-100							UK				86		
1979-Y192	2443959.75	1979 Mar 27 1900:00	M-100							GTSP-4				85		
1979-Y193	2443960.25	1979 Mar 27 1900:00	M-100							TERLS				85		
1979-Y194	2443960.25	1979 Mar 27 1900:00	M-100						SHOK	CNST79A	LP9			86		
1979-Y195	2443960.67	1979 Mar 28 0400:00	M-100						SHOK	CNST79A	LP9			85		
1979-Y196	2443960.75	1979 Mar 28 0600:00	M-100							UK				83		
1979-Y197	2443960.89	1979 Mar 28 1140:00	M-100							TERLS				85		
1979-Y198	2443961.91	1979 Mar 28 1700:00	M-100							MJD				85		
1979-Y199	2443961.75	1979 Mar 29 0555:00	M-100							UK				84		
1979-Y201	2443961.75	1979 Mar 29 0555:00	M-100							GTSP-4				84		
1979-Y202	2443962.67	1979 Mar 30 0400:00	M-100							TERLS				85		
1979-Y203	2443962.74	1979 Mar 30 0545:00	M-100							UK				84		
1979-Y204	2443962.99	1979 Mar 30 1140:00	M-100							GTSP-4				85		
1979-Y205	2443963.71	1979 Mar 31 0500:00	M-100							TERLS				85		
1979-Y206	2443963.73	1979 Mar 31 0535:00	M-100							GTSP-4				87		
1979-Y207	2443964.12	1979 Mar 31 1500:00	M-100							UK				86		
1979-Y208	2443964.17	1979 Mar 31 1600:00	M-100							CNST79A	LP8			84		
1979-Y209	2443964.67	1979 Apr 01 0400:00	M-100						SHOK	CNST79A	LP10			86		
1979-Y210	2443964.73	1979 Apr 01 0525:00	M-100							UK				85		
1979-Y211	2443965.00	1979 Apr 01 1200:00	M-100							GTSP-4				85		
1979-Y211	2443965.00	1979 Apr 02 0400:00	M-100							TERLS				59		
1979-Y442	2443965.67	1979 Apr 02 0515:00	M-100							UK				87		
1979-Y212	2443965.72	1979 Apr 03 0400:00	M-100							GTSP-4				82		
1979-Y213	2443966.67	1979 Apr 03 0400:00	M-100							UK				89		
1979-Y214	2443966.72	1979 Apr 03 0510:00	M-100							TERLS				86		
1979-Y215	2443967.00	1979 Apr 03 1200:00	M-100							UK				89		
1979-Y216	2443967.67	1979 Apr 04 0400:00	M-100							GTSP-4				89		
1979-Y217	2443967.71	1979 Apr 04 0500:00	M-100							UK				88		
1979-Y219	2443968.25	1979 Apr 04 1800:00	M-100							MJD				89		
1979-Y222	2443968.67	1979 Apr 05 0400:00	M-100							UK				83		
1979-Y223	2443968.70	1979 Apr 05 0450:00	M-100							TERLS				85		
1979-Y224	2443969.00	1979 Apr 05 1200:00	M-100							GTSP-4				85		
1979-Y226	2443969.69	1979 Apr 06 0440:00	M-100							UK				85		
1979-Y227	2443969.69	1979 Apr 06 0440:00	M-100							GTSP-4				81		
1979-Y228	2443969.71	1979 Apr 06 0500:00	M-100							UK				81		
1979-Y229	2443970.65	1979 Apr 07 0340:00	M-100							GTSP-4				85		
1979-Y230	2443970.69	1979 Apr 07 0430:00	M-100							TERLS				85		
1979-Y231	2443971.00	1979 Apr 07 1200:00	M-100							UK				84		
1979-Y232	2443971.08	1979 Apr 07 1400:00	M-100							GTSP-4				85		
1979-Y233	2443971.65	1979 Apr 08 0340:00	M-100							TERLS				84		
1979-Y234	2443971.65	1979 Apr 08 0425:00	M-100							UK				86		
1979-Y235	2443972.68	1979 Apr 09 0340:00	M-100							GTSP-4				84		
1979-Y236	2443972.68	1979 Apr 09 0415:00	M-100							UK				86		
1979-Y237	2443972.75	1979 Apr 9 0553	M-100							TERLS				95		

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Launch_Mission	FlightCode	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee_Km	Range_Km	Dest
1979-1238	2443973.00	1979 Apr 09 1200:00	M-100	-	-	-	-	-	-	TERLS	-	-	-	85	-	-
1979-1239	2443973.63	1979 Apr 10 0905:00	M-100	-	-	-	-	-	-	UK	-	-	-	84	-	-
1979-1240	2443973.65	1979 Apr 10 0940:00	M-100	-	-	-	-	-	-	GTSP-4	-	-	-	89	-	-
1979-1241	2443973.70	1979 Apr 10 0450:00	M-100	-	-	-	-	-	-	GTSP-4	-	-	-	85	-	-
1979-1242	2443974.65	1979 Apr 11 0530:00	M-100	-	-	-	-	-	-	GTSP-4	-	-	-	83	-	-
1979-1243	2443974.66	1979 Apr 11 0355:00	M-100	-	-	-	-	-	-	UK	-	-	-	86	-	-
1979-1244	2443974.96	1979 Apr 11 1100:00	M-100	-	-	-	-	-	-	TERLS	-	-	-	85	-	-
1979-1246	2443975.21	1979 Apr 11 1700:00	M-100	-	-	-	-	-	-	MLD	-	-	-	84	-	-
1979-1247	2443975.65	1979 Apr 12 0530:00	M-100	-	-	-	-	-	-	GTSP-4	-	-	-	85	-	-
1979-1248	2443978.00	1979 Apr 14 1201:00	M-100	-	-	-	-	-	-	TERLS	-	-	-	83	-	-
1979-1249	2443980.92	1979 Apr 17 1002:00	M-100	-	-	-	-	-	-	TERLS	-	-	-	807	-	-
1979-1249	2443981.40	1979 Apr 17 2131:00	M-100	-	-	-	Ozoneosonde	-	-	GTSP-4	-	-	-	88	-	-
1979-1250	2443981.58	1979 Apr 18 0200:00	M-100	-	-	-	-	-	-	UK	-	-	-	86	-	-
1979-1251	2443982.08	1979 Apr 18 1400:00	M-100	-	-	-	-	-	-	TERLS	-	-	-	83	-	-
1979-1251	2443982.08	1979 Apr 19 1400:00	M-100	-	-	-	-	-	-	TERLS	-	-	-	82	-	-
1979-1251	2443982.08	1979 Apr 19 1400:00	M-100	-	-	-	-	-	-	TERLS	-	-	-	82	-	-
1979-1255	2443984.29	1979 Apr 20 1900:00	M-100	-	-	-	-	-	-	MLD	-	-	-	90	-	-
1979-1256	2443985.00	1979 Apr 21 1202:00	M-100B	-	-	-	-	-	-	SHIR	LP1	-	-	78	-	-
1979-1256	2443985.38	1979 Apr 21 2100:00	M-100	-	-	-	-	-	-	KURD	LP1	-	-	78	-	-
1979-1256	2443986.33	1979 Apr 22 2000:00	M-100	-	-	-	-	-	-	KURD	LP2	-	-	82	-	-
1979-1257	2443987.99	1979 Apr 24 1139:00	M-100B	-	-	-	-	-	-	SHIR	LP2	-	-	84	-	-
1979-1258	2443988.34	1979 Apr 24 2010:00	M-100	-	-	-	-	-	-	KURD	LP3	-	-	84	-	-
1979-1259	2443988.62	1979 Apr 25 0500:00	M-100	-	-	-	-	-	-	GTSP-4	-	-	-	85	-	-
1979-1259	2443989.08	1979 Apr 25 1400:00	M-100	-	-	-	-	-	-	TERLS	-	-	-	85	-	-
1979-1260	2443989.21	1979 Apr 25 1700:00	M-100	-	-	-	-	-	-	MLD	-	-	-	85	-	-
1979-1261	2443990.46	1979 Apr 26 2300:00	M-100	-	-	-	-	-	-	GTSP-4	LP4	-	-	84	-	-
1979-1261	2443990.46	1979 Apr 26 2300:00	M-100	-	-	-	-	-	-	SHIR	LP3	-	-	84	-	-
1979-1265	2443991.02	1979 Apr 27 1222:00	M-100B	-	-	-	-	-	-	KURD	LP3	-	-	85	-	-
1979-1265	2443991.02	1979 Apr 27 2000:00	M-100	-	-	-	-	-	-	KURD	LP5	-	-	80	-	-
1979-1266	2443993.33	1979 Apr 29 2000:00	M-100	-	-	-	-	-	-	SHIR	LP4	-	-	85	-	-
1979-1267	2443995.33	1979 Apr 01 2000:00	M-100B	-	-	-	-	-	-	SHIR	LP4	-	-	85	-	-
1979-1268	2443995.64	1979 Apr 02 0525:00	M-100	-	-	-	-	-	-	TERLS	-	-	-	82	-	-
1979-1269	2443996.58	1979 Apr 02 1130:00	M-100	-	-	-	-	-	-	MLD	-	-	-	87	-	-
1979-1269	2443996.29	1979 Apr 02 1900:00	M-100	-	-	-	-	-	-	GTSP-4	LP6	-	-	82	-	-
1979-1272	2443996.42	1979 Apr 02 0200:00	M-100	-	-	-	-	-	-	UK	-	-	-	84	-	-
1979-1275	2443996.58	1979 Apr 03 0200:00	M-100	-	-	-	-	-	-	GTSP-4	-	-	-	89	-	-
1979-1276	2443996.62	1979 Apr 03 0500:00	M-100	-	-	-	-	-	-	UK	-	-	-	89	-	-
1979-1276	2444002.58	1979 Apr 09 0200:00	M-100	-	-	-	-	-	-	GTSP-4	-	-	-	84	-	-
1979-1279	2444003.08	1979 Apr 09 1400:00	M-100	-	-	-	-	-	-	UK	-	-	-	85	-	-
1979-1280	2444003.21	1979 Apr 09 1700:00	M-100	-	-	-	-	-	-	TERLS	-	-	-	84	-	-
1979-1283	2444003.94	1979 Apr 10 0100:00	M-100	-	-	-	-	-	-	MLD	-	-	-	89	-	-
1979-1284	2444003.62	1979 Apr 10 0500:00	M-100	-	-	-	-	-	-	GTSP-4	-	-	-	83	-	-
1979-1285	2444007.42	1979 Apr 13 2200:00	M-100	-	-	-	-	-	-	GTSP-4	LP6	-	-	82	-	-
1979-1286	2444008.55	1979 Apr 16 0940:00	M-100	-	-	-	-	-	-	GTSP-4	-	-	-	85	-	-
1979-1286	2444008.55	1979 Apr 16 0220:00	M-100	-	-	-	-	-	-	GT-P-4	-	-	-	83	-	-
1979-1287	2444008.80	1979 Apr 16 0620:00	M-100	-	-	-	-	-	-	GT-P-4	-	-	-	61	-	-
1979-1288	2444009.91	1979 Apr 16 0945:00	M-100	-	-	-	-	-	-	TERLS	-	-	-	94	-	-
1979-1289	2444010.06	1979 Apr 16 1324:00	M-100B	-	-	-	Ozoneosonde	-	-	SHIR	LP5	-	-	82	-	-
1979-1289	2444010.06	1979 Apr 16 1400:00	M-100	-	-	-	-	-	-	MLD	-	-	-	88	-	-
1979-1290	2444010.98	1979 Apr 16 1400:00	M-100	-	-	-	-	-	-	TERLS	-	-	-	88	-	-
1979-1291	2444010.98	1979 Apr 16 1500:00	M-100	-	-	-	-	-	-	GTSP-4	LP7	-	-	95	-	-
1979-1293	2444011.98	1979 Apr 16 0400:00	M-100	-	-	-	-	-	-	GTSP-4	-	-	-	85	-	-
1979-1294	2444011.68	1979 Apr 16 1324:00	M-100B	-	-	-	-	-	-	SHIR	LP6	-	-	83	-	-
1979-1295	2444012.00	1979 Apr 16 1424:00	M-100	-	-	-	-	-	-	TERLS	-	-	-	81	-	-
1979-1296	2444012.40	1979 Apr 16 2200:00	M-100	-	-	-	-	-	-	TOCHR	TOCHR	-	-	84	-	-
1979-1297	2444012.40	1979 Apr 16 2200:00	M-100	-	-	-	-	-	-	KURD	TOCHR	-	-	84	-	-
1979-1298	2444012.40	1979 Apr 19 2200:00	M-100	-	-	-	-	-	-	GTSP-4	LP7	-	-	88	-	-
1979-1299	2444015.06	1979 Apr 21 1335:00	M-100B	-	-	-	-	-	-	GTSP-4	LP7	-	-	84	-	-
1979-1301	2444015.40	1979 Apr 21 2200:00	M-100	-	-	-	-	-	-	KURD	TOCHR	-	-	84	-	-
1979-1302	2444015.40	1979 Apr 21 2200:00	M-100	-	-	-	-	-	-	TOCHR	TOCHR	-	-	84	-	-
1979-1303	2444016.43	1979 Apr 23 2230:00	M-100	-	-	-	-	-	-	GTSP-4	-	-	-	82	-	-
1979-1303	2444016.43	1979 Apr 23 0200:00	M-100	-	-	-	-	-	-	OK	-	-	-	77	-	-
1979-1304	2444016.58	1979 Apr 23 0200:00	M-100	-	-	-	-	-	-	MLD	-	-	-	85	-	-
1979-1305	2444017.08	1979 Apr 23 1400:00	M-100	-	-	-	-	-	-	OK	-	-	-	82	-	-
1979-1306	2444017.08	1979 Apr 23 1400:00	M-100	-	-	-	-	-	-	MLD	-	-	-	85	-	-
1979-1306	2444017.11	1979 Apr 23 1432:00	M-100B	-	-	-	-	-	-	TERLS	-	-	-	83	-	-
1979-1309	2444017.46	1979 Apr 23 2300:00	M-100B	-	-	-	-	-	-	SHIR	LP7	-	-	78	-	-
1979-1310	2444018.42	1979 Apr 24 2200:00	M-100	-	-	-	-	-	-	KURD	TOCHR	-	-	89	-	-
1979-1311	2444019.06	1979 Apr 25 1323:00	M-100	-	-	-	-	-	-	KURD	TOCHR	-	-	85	-	-
1979-1311	2444019.06	1979 Apr 25 1323:00	M-100B	-	-	-	-	-	-	SHIR	LP7	-	-	85	-	-
1979-1312	2444019.53	1979 Apr 26 0040:00	M-100	-	-	-	-	-	-	TERLS	-	-	-	83	-	-
1979-1313	2444020.20	1979 Apr 26 0200:00	M-100	-	-	-	-	-	-	KURD	TOCHR	-	-	84	-	-
1979-1314	2444020.64	1979 Apr 26 0940:00	M-100	-	-	-	-	-	-	TOCHR	TOCHR	-	-	89	-	-
1979-1314	2444020.64	1979 Apr 27 0315:00	M-100	-	-	-	-	-	-	KURD	TOCHR	-	-	84	-	-
1979-1315	2444021.40	1979 Apr 28 0211:00	M-100	-	-	-	-	-	-	SHIR	LP7	-	-	79	-	-
1979-1315	2444021.59	1979 Apr 28 0316:00	M-100B	-	-	-	-	-	-	SHIR	LP7	-	-	83	-	-
1979-1316	2444021.64	1979 Apr 29 2130:00	M-100B	-	-	-	-	-	-	SHIR	LP7	-	-	79	-	-
1979-1316	2444023.40	1979 Apr 29 2130:00	M-100	-	-	-	-	-	-	GTSP-4	-	-	-	84	-	-
1979-1317	2444023.40	1979 Apr 30 1440:00	M-100	-	-	-	-	-	-	TERLS	-	-	-	81	-	-
1979-1319	2444024.11	1979 Apr 30 1700:00	M-100	-	-	-	-	-	-	MLD	-	-	-	86	-	-
1979-1320	2444024.21	1979 Apr 30 1440:00	M-100	-	-	-	-	-	-	TERLS	-	-	-	86	-	-
1979-1322	2444024.29	1979 Apr 02 1500:00	M-100	-	-	-	-	-	-	OK	-	-	-	80	-	-
1979-1324	2444026.08	1979 Apr 02 1500:00	M-100	-	-	-	-	-	-	TERLS	-	-	-	857	-	-
1979-1325	2444027.12	1979 Apr 05 1500:00	M-100	-	-	-	-	-	-	TERLS	-	-	-	86	-	-
1979-1327	2444030.12	1979 Apr 05 2130:00	M-100	-	-	-	-	-	-	OK	-	-	-	82	-	-
1979-1328	2444030.40	1979 Apr 05 2130:00	M-100	-	-	-	-	-	-	GTSP-4	-	-	-	84	-	-
1979-1329	2444030.58	1979 Apr 06 0200:00	M-100	-	-	-	-	-	-	TERLS	-	-	-	807	-	-
1979-1329	2444030.91	1979 Apr 06 0200:00	M-100	-	-	-	-	-	-	MLD	-	-	-	86	-	-
1979-1330	2444031.08	1979 Apr 06 1500:00	M-100	-	-	-	-	-	-	OK	-	-	-	86	-	-
1979-1331	2444031.12	1979 Apr 06 1500:00	M-100	-	-	-	-	-	-	TERLS	-	-	-	82	-	-
1979-1333	2444032.99	1979 Apr 08 1140:00	M-100	-	-	-	-	-	-	TERLS	-</					

Launch_Tag	Launch_ID	Launch_Date	Lv_Type	Variant	Flight_ID	Flight	Launch_Mission	FlightCode	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee Km	Range Km	Dest
1979-Y334	2444033.08	1979 Jun 08 1400:00	M-100	-	-	-	-	-	-	MLD	-	-	-	88	-	-
1979-Y335	2444033.12	1979 Jun 08 1500:00	M-100	-	-	-	-	-	-	KER	-	-	-	86	-	-
1979-Y336	2444034.12	1979 Jun 09 1500:00	M-100	-	-	-	-	-	-	KER	-	-	-	86	-	-
1979-Y748	2444035.07	1979 Jun 10 1340:00	M-100	-	-	-	-	-	SHOK	GNS79F	LP1	-	-	75	-	-
1979-Y737	2444037.94	1979 Jun 13 1030:00	M-100	-	-	-	-	-	-	GNS79F-4	-	-	-	84	-	-
1979-Y758	2444038.07	1979 Jun 13 1340:00	M-100	-	-	-	-	-	SHOK	GNS79F	LP2	-	-	75	-	-
1979-Y338	2444038.08	1979 Jun 13 1400:00	M-100	-	-	-	-	-	-	TERLS	-	-	-	82	-	-
1979-Y340	2444038.12	1979 Jun 13 1500:00	M-100	-	-	-	-	-	-	KER	-	-	-	89	-	-
1979-Y342	2444038.29	1979 Jun 13 1900:00	M-100	-	-	-	-	-	-	MLD	-	-	-	83	-	-
1979-Y344	2444041.12	1979 Jun 16 1500:00	M-100	-	-	-	-	-	-	MLD	-	-	-	86	-	-
1979-Y780	2444043.12	1979 Jun 18 1500:00	M-100	-	-	-	-	-	-	KER	-	-	-	88	-	-
1979-Y345	2444044.59	1979 Jun 20 0210:00	M-100	-	-	-	-	-	-	UK	-	-	-	82	-	-
1979-Y346	2444045.08	1979 Jun 20 1400:00	M-100	-	-	-	-	-	-	MLD	-	-	-	91	-	-
1979-Y347	2444045.08	1979 Jun 20 1400:00	M-100	-	-	-	-	-	-	TERLS	-	-	-	86	-	-
1979-Y348	2444045.11	1979 Jun 20 1440:00	M-100	-	-	-	-	-	SHOK	GNS79F	LP3	-	-	88	-	-
1979-Y349	2444045.12	1979 Jun 20 1500:00	M-100	-	-	-	-	-	-	KER	-	-	-	88	-	-
1979-Y351	2444045.35	1979 Jun 20 2030:00	M-100	-	-	-	-	-	-	GNS79F	-	-	-	87	-	-
1979-Y353	2444047.08	1979 Jun 22 1400:00	M-100	-	-	-	-	-	-	MLD	-	-	-	84	-	-
1979-Y354	2444048.08	1979 Jun 23 1400:00	M-100	-	-	-	-	-	-	GNS79F-4	-	-	-	87	-	-
1979-Y355	2444048.12	1979 Jun 23 1500:00	M-100	-	-	-	-	-	SHOK	GNS79F	LP4	-	-	84	-	-
1979-Y356	2444049.12	1979 Jun 24 1500:00	M-100	-	-	-	-	-	-	KER	-	-	-	87	-	-
1979-Y357	2444049.38	1979 Jun 24 2100:00	M-100	-	-	-	-	-	-	GNS79C	LP8	-	-	82	-	-
1979-Y358	2444050.03	1979 Jun 25 1240:00	M-100	-	-	-	-	-	KORD	GNS79F	LP5	-	-	88	-	-
1979-Y359	2444051.38	1979 Jun 26 2100:00	M-100	-	-	-	-	-	SHOK	GNS79C	LP9	-	-	92	-	-
1979-Y360	2444051.40	1979 Jun 26 2130:00	M-100	-	-	-	-	-	-	GNS79F-4	-	-	-	87	-	-
1979-Y361	2444052.08	1979 Jun 27 1400:00	M-100	-	-	-	-	-	-	TERLS	-	-	-	84	-	-
1979-Y362	2444052.12	1979 Jun 27 1500:00	M-100	-	-	-	-	-	-	KER	-	-	-	89	-	-
1979-Y363	2444052.12	1979 Jun 27 1500:00	M-100	-	-	-	-	-	-	KER	-	-	-	89	-	-
1979-Y364	2444052.12	1979 Jun 27 1500:00	M-100	-	-	-	-	-	-	MLD	-	-	-	85	-	-
1979-Y365	2444052.12	1979 Jun 29 1500:00	M-100	-	-	-	-	-	-	KER	-	-	-	88	-	-
1979-Y366	2444054.12	1979 Jun 29 1500:00	M-100	-	-	-	-	-	-	MLD	-	-	-	82	-	-
1979-Y370	2444054.12	1979 Jun 29 1500:00	M-100	-	-	-	-	-	-	KER	-	-	-	88	-	-
1979-Y371	2444055.12	1979 Jun 30 1500:00	M-100	-	-	-	-	-	-	GNS79F-4	-	-	-	83	-	-
1979-Y372	2444058.40	1979 Jun 31 2130:00	M-100	-	-	-	-	-	-	MLD	-	-	-	81	-	-
1979-Y373	2444058.71	1979 Jun 31 04 0500:00	M-100	-	-	-	-	-	-	UK	-	-	-	87	-	-
1979-Y374	2444058.12	1979 Jun 31 04 0500:00	M-100	-	-	-	-	-	-	KER	-	-	-	89	-	-
1979-Y375	2444059.12	1979 Jun 31 04 0500:00	M-100	-	-	-	-	-	-	KER	-	-	-	89	-	-
1979-Y376	2444060.12	1979 Jun 31 05 1500:00	M-100	-	-	-	-	-	-	KER	-	-	-	88	-	-
1979-Y377	2444061.08	1979 Jun 31 06 1400:00	M-100	-	-	-	-	-	-	MLD	-	-	-	89	-	-
1979-Y378	2444062.08	1979 Jun 31 07 1400:00	M-100	-	-	-	-	-	-	KER	-	-	-	85	-	-
1979-Y380	2444063.08	1979 Jun 31 08 1400:00	M-100	-	-	-	-	-	SHOK	GNS79F	LP6	-	-	94	-	-
1979-Y381	2444063.08	1979 Jun 31 08 1400:00	M-100	-	-	-	-	-	SHOK	GNS79F	LP7	-	-	96	-	-
1979-Y382	2444065.12	1979 Jun 31 11 1200:00	M-100	-	-	-	-	-	-	TERLS	-	-	-	86	-	-
1979-Y383	2444066.00	1979 Jun 31 11 1200:00	M-100	-	-	-	-	-	-	MLD	-	-	-	85	-	-
1979-Y384	2444066.00	1979 Jun 31 11 1200:00	M-100	-	-	-	-	-	-	KER	-	-	-	85	-	-
1979-Y385	2444066.08	1979 Jun 31 11 1500:00	M-100	-	-	-	-	-	-	MLD	-	-	-	86	-	-
1979-Y386	2444066.12	1979 Jun 31 11 1500:00	M-100	-	-	-	-	-	-	GNS79F-4	-	-	-	85	-	-
1979-Y389	2444066.40	1979 Jun 31 13 00:00	M-100	-	-	-	-	-	-	MLD	-	-	-	85	-	-
1979-Y390	2444068.40	1979 Jun 31 13 00:00	M-100	-	-	-	-	-	-	MLD	-	-	-	85	-	-
1979-Y392	2444072.88	1979 Jun 31 18 1330:00	M-100	-	-	-	-	-	-	UK	-	-	-	81	-	-
1979-Y397	2444073.08	1979 Jun 31 18 1330:00	M-100	-	-	-	-	-	-	GNS79F-4	-	-	-	81	-	-
1979-Y398	2444073.08	1979 Jun 31 18 1400:00	M-100	-	-	-	-	-	-	MLD	-	-	-	81	-	-
1979-Y400	2444075.08	1979 Jun 31 18 1400:00	M-100	-	-	-	-	-	-	TERLS	-	-	-	83	-	-
1979-Y402	2444075.08	1979 Jun 31 20 1400:00	M-100	-	-	-	-	-	-	MLD	-	-	-	87	-	-
1979-Y403	2444077.00	1979 Jun 31 22 1200:00	M-100	-	-	-	-	-	-	GNS79F-4	-	-	-	85	-	-
1979-Y404	2444077.00	1979 Jun 31 22 1200:00	M-100	-	-	-	-	-	-	TERLS	-	-	-	81	-	-
1979-Y405	2444077.17	1979 Jun 31 25 1400:00	M-100	-	-	-	-	-	SHOK	GNS79F	LP8	-	-	82	-	-
1979-Y407	2444080.08	1979 Jun 31 25 1400:00	M-100	-	-	-	-	-	SHOK	GNS79F	LP8	-	-	87	-	-
1979-Y408	2444080.08	1979 Jun 31 25 1400:00	M-100	-	-	-	-	-	-	TERLS	-	-	-	86	-	-
1979-Y409	2444080.08	1979 Jun 31 25 1400:00	M-100	-	-	-	-	-	-	MLD	-	-	-	88	-	-
1979-Y410	2444080.17	1979 Jun 31 25 1600:00	M-100	-	-	-	-	-	-	MLD	-	-	-	85	-	-
1979-Y411	2444082.00	1979 Jun 31 27 1200:00	M-100	-	-	-	-	-	-	GNS79F	LP9	-	-	81	-	-
1979-Y413	2444082.00	1979 Jun 31 27 1200:00	M-100	-	-	-	-	-	-	MLD	-	-	-	81	-	-
1979-Y414	2444082.08	1979 Jun 31 27 1400:00	M-100	-	-	-	-	-	-	GNS79F	LP9	-	-	87	-	-
1979-Y415	2444082.08	1979 Jun 31 27 1400:00	M-100	-	-	-	-	-	-	MLD	-	-	-	81	-	-
1979-Y416	2444082.12	1979 Jun 31 27 1500:00	M-100	-	-	-	-	-	-	GNS79F	LP9	-	-	87	-	-
1979-Y417	2444086.58	1979 Aug 01 0200:00	M-100	-	-	-	-	-	-	TERLS	-	-	-	84	-	-
1979-Y418	2444087.08	1979 Aug 01 1400:00	M-100	-	-	-	-	-	-	GNS79F-4	-	-	-	86	-	-
1979-Y419	2444087.12	1979 Aug 01 1500:00	M-100	-	-	-	-	-	-	MLD	-	-	-	85	-	-
1979-Y423	2444089.08	1979 Aug 03 1400:00	M-100	-	-	-	-	-	-	TERLS	-	-	-	83	-	-
1979-Y425	2444089.12	1979 Aug 03 1500:00	M-100	-	-	-	-	-	-	GNS79F-4	-	-	-	85	-	-
1979-Y426	2444093.58	1979 Aug 08 0200:00	M-100	-	-	-	-	-	-	MLD	-	-	-	90	-	-
1979-Y427	2444094.08	1979 Aug 08 1400:00	M-100	-	-	-	-	-	-	GNS79F-4	-	-	-	85	-	-
1979-Y428	2444094.12	1979 Aug 08 1500:00	M-100	-	-	-	-	-	-	TERLS	-	-	-	85	-	-
1979-Y429	2444095.08	1979 Aug 09 1400:00	M-100	-	-	-	-	-	SHOK	GNS79F	LP10	-	-	92	-	-
1979-Y430	2444096.08	1979 Aug 10 1400:00	M-100	-	-	-	-	-	-	MLD	-	-	-	87	-	-
1979-Y431	2444096.08	1979 Aug 10 1400:00	M-100	-	-	-	-	-	-	GNS79F	LP11	-	-	85	-	-
1979-Y432	2444096.08	1979 Aug 10 1400:00	M-100	-	-	-	-	-	-	TERLS	-	-	-	85	-	-
1979-Y433	2444099.08	1979 Aug 13 1400:00	M-100	-	-	-	-	-	-	GNS79F	-	-	-	85	-	-
1979-Y434	2444100.12	1979 Aug 13 1400:00	M-100	-	-	-	-	-	SHOK	GNS79F	LP4	-	-	78	-	-
1979-Y435	2444100.44	1979 Aug 14 1500:00	M-100	-	-	-	-	-	-	TERLS	-	-	-	84	-	-
1979-Y436	2444100.44	1979 Aug 14 2230:00	M-100	-	-	-	-	-	-	GNS79F-4	-	-	-	84	-	-
1979-Y437	2444100.58	1979 Aug 15 0200:00	M-100	-	-	-	-	-	-	OK	-	-	-	81	-	-
1979-Y438	2444101.08	1979 Aug 15 1400:00	M-100	-	-	-	-	-	-	MLD	-	-	-	86	-	-
1979-Y439	2444103.00	1979 Aug 17 1200:00	M-100	-	-	-	-	-	-	TERLS	-	-	-	88	-	-
1979-Y440	2444103.08	1979 Aug 17 1400:00	M-100	-	-	-	-	-	SHOK	GNS79F	LP3	-	-	87	-	-
1979-Y441	2444103.08	1979 Aug 17 1400:00	M-100	-	-	-	-	-	-	KORD	-	-	-	82	-	-
1979-Y442	2444106.08	1979 Aug 20 1400:00	M-100	-	-	-	-	-	SHOK	GNS79F	LP1	-	-	85	-	-
1979-Y443	2444106.08	1979 Aug 20 1400:00	M-100	-	-	-	-	-	-	GNS79F	LP12	-	-	82	-	-
1979-Y444	2444107.58	1979 Aug 22 0200:00	M-100	-	-	-	-	-	-	OK	-	-	-	82	-	-
1979-Y445	2444107.69	1979 Aug 22 0440:00	M-100	-	-	-	-	-</								

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Launch_Mission	FlightCode	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee_Km	Range_Km	Dest
1979-Y446	2444108.08	1979 Aug 22 1400:00	M-100	-	-	-	-	-	-	MLD	-	-	-	87	-	-
1979-Y447	2444108.08	1979 Aug 22 1400:00	M-100	-	-	-	-	-	-	TERLS	-	-	-	84	-	-
1979-Y448	2444109.04	1979 Aug 23 1300:00	M-100	-	-	-	-	-	SHOK	GNS79F	LP13	-	-	87	-	-
1979-Y449	2444109.08	1979 Aug 23 1400:00	M-100	-	-	-	-	-	SHOK	GNS79F	LP13	-	-	84	-	-
1979-Y450	2444110.08	1979 Aug 24 1400:00	M-100	-	-	-	-	-	-	TERLS	-	-	-	85	-	-
1979-Y451	2444111.00	1979 Aug 25 1200:00	M-100	-	-	-	-	-	-	TERLS	-	-	-	86	-	-
1979-Y452	2444111.00	1979 Aug 25 1200:00	M-100	-	-	-	-	-	SHOK	GNS79F	LP14	-	-	86	-	-
1979-Y453	2444114.08	1979 Aug 28 1400:00	M-100	-	-	-	-	-	SHOK	GNS79F	LP2	-	-	85	-	-
1979-Y454	2444114.52	1979 Aug 29 0030:00	M-100	-	-	-	-	-	SHOK	GNS79F	LP2	-	-	85	-	-
1979-Y455	2444114.58	1979 Aug 29 0200:00	M-100	-	-	-	-	-	-	UK	-	-	-	87	-	-
1979-Y456	2444115.08	1979 Aug 29 1400:00	M-100	-	-	-	-	-	-	MLD	-	-	-	86	-	-
1979-Y459	2444115.12	1979 Aug 29 1600:00	M-100	-	-	-	-	-	SHOK	GNS79F	LP15	-	-	87	-	-
1979-Y461	2444121.40	1979 Sep 04 2130:00	M-100	-	-	-	-	-	-	GNS79F	-	-	-	75	-	-
1979-Y462	2444121.58	1979 Sep 04 2130:00	M-100	-	-	-	-	-	-	GNS79F	-	-	-	87	-	-
1979-Y465	2444122.19	1979 Sep 05 0200:00	M-100	-	-	-	-	-	-	MLD	-	-	-	89	-	-
1979-Y466	2444123.00	1979 Sep 06 1200:00	M-100	-	-	-	-	-	-	TERLS	-	-	-	82	-	-
1979-Y468	2444127.22	1979 Sep 11 1720:00	M-100	-	-	-	-	-	-	GNS79F	-	-	-	85	-	-
1979-Y469	2444128.40	1979 Sep 11 2130:00	M-100	-	-	-	-	-	-	GNS79F	-	-	-	85	-	-
1979-Y470	2444128.88	1979 Sep 12 0200:00	M-100	-	-	-	-	-	-	GNS79F	-	-	-	85	-	-
1979-Y471	2444129.08	1979 Sep 12 0200:00	M-100	-	-	-	-	-	-	UK	-	-	-	87	-	-
1979-Y474	2444129.12	1979 Sep 12 1500:00	M-100	-	-	-	-	-	-	TERLS	-	-	-	87	-	-
1979-Y478	2444131.10	1979 Sep 14 1430:00	M-100	-	-	-	-	-	-	MLD	-	-	-	91	-	-
1979-Y479	2444136.08	1979 Sep 19 1400:00	M-100	-	-	-	-	-	-	GNS79F	-	-	-	86	-	-
1979-Y480	2444136.08	1979 Sep 19 1400:00	M-100	-	-	-	-	-	-	MLD	-	-	-	85	-	-
1979-Y481	2444136.17	1979 Sep 19 1600:00	M-100	-	-	-	-	-	-	TERLS	-	-	-	85	-	-
1979-Y484	2444142.48	1979 Sep 25 2250:00	M-100	-	-	-	-	-	-	GNS79F	-	-	-	84	-	-
1979-Y485	2444142.58	1979 Sep 25 2250:00	M-100	-	-	-	-	-	-	UK	-	-	-	79	-	-
1979-Y486	2444143.08	1979 Sep 26 0200:00	M-100	-	-	-	-	-	-	MLD	-	-	-	85	-	-
1979-Y489	2444149.48	1979 Oct 02 2245:00	M-100	-	-	-	-	-	-	GNS79F	-	-	-	87	-	-
1979-Y490	2444149.58	1979 Oct 03 0200:00	M-100	-	-	-	-	-	-	UK	-	-	-	90	-	-
1979-Y492	2444150.21	1979 Oct 03 1700:00	M-100	-	-	-	-	-	-	MLD	-	-	-	86	-	-
1979-Y493	2444156.46	1979 Oct 09 2300:00	M-100	-	-	-	-	-	-	GNS79F	-	-	-	89	-	-
1979-Y494	2444156.58	1979 Oct 10 0200:00	M-100	-	-	-	-	-	-	UK	-	-	-	84	-	-
1979-Y496	2444157.12	1979 Oct 10 1500:00	M-100	-	-	-	-	-	-	MLD	-	-	-	89	-	-
1979-Y497	2444163.58	1979 Oct 17 0200:00	M-100	-	-	-	-	-	-	UK	-	-	-	87	-	-
1979-Y498	2444164.08	1979 Oct 17 1400:00	M-100	-	-	-	-	-	-	MLD	-	-	-	86	-	-
1979-Y499	2444164.31	1979 Oct 17 1930:00	M-100	-	-	-	-	-	-	GNS79F	-	-	-	86	-	-
1979-Y503	2444170.43	1979 Oct 23 2220:00	M-100	-	-	-	-	-	-	UK	-	-	-	90	-	-
1979-Y504	2444170.88	1979 Oct 24 0200:00	M-100	-	-	-	-	-	-	MLD	-	-	-	86	-	-
1979-Y508	2444171.08	1979 Oct 24 1400:00	M-100	-	-	-	-	-	-	GNS79F	-	-	-	86	-	-
1979-Y509	2444177.48	1979 Oct 30 2130:00	M-100	-	-	-	-	-	-	MLD	-	-	-	87	-	-
1979-Y509	2444177.48	1979 Oct 31 0200:00	M-100	-	-	-	-	-	-	UK	-	-	-	84	-	-
1979-Y510	2444178.88	1979 Nov 02 0400:00	M-100	-	-	-	-	-	-	MLD	-	-	-	83	-	-
1979-Y514	2444179.88	1979 Nov 02 0420:00	M-100	-	-	-	-	-	-	UK	-	-	-	87	-	-
1979-Y515	2444179.88	1979 Nov 02 0420:00	M-100	-	-	-	-	-	-	OK	-	-	-	87	-	-
1979-Y517	2444180.17	1979 Nov 02 1500:00	M-100	-	-	-	-	-	-	GNS79H	LP1	-	-	86	-	-
1979-Y520	2444183.17	1979 Nov 05 1500:00	M-100	-	-	-	-	-	-	GNS79H	LP2	-	-	82	-	-
1979-Y521	2444183.17	1979 Nov 05 1500:00	M-100	-	-	-	-	-	-	GNS79H	LP2	-	-	81	-	-
1979-Y522	2444183.17	1979 Nov 05 1500:00	M-100	-	-	-	-	-	-	GNS79H	LP2	-	-	81	-	-
1979-Y523	2444183.40	1979 Nov 05 2130:00	M-100	-	-	-	-	-	-	GNS79H	LP2	-	-	82	-	-
1979-Y524	2444184.68	1979 Nov 07 1400:00	M-100	-	-	-	-	-	-	OK	-	-	-	86	-	-
1979-Y524	2444184.68	1979 Nov 07 1400:00	M-100	-	-	-	-	-	-	MLD	-	-	-	86	-	-
1979-Y526	2444186.21	1979 Nov 08 1700:00	M-100	-	-	-	-	-	-	OK	-	-	-	83	-	-
1979-Y528	2444187.35	1979 Nov 09 2035:00	M-100	-	-	-	-	-	-	GNS79H	LP3	-	-	81	-	-
1979-Y529	2444189.08	1979 Nov 11 1400:00	M-100	-	-	-	-	-	-	OK	-	-	-	84	-	-
1979-Y530	2444189.12	1979 Nov 11 1400:00	M-100	-	-	-	-	-	-	OK	-	-	-	86	-	-
1979-Y531	2444189.21	1979 Nov 11 1630:00	M-100	-	-	-	-	-	-	NER	-	-	-	85	-	-
1979-Y532	2444189.21	1979 Nov 11 1630:00	M-100	-	-	-	-	-	-	NER	-	-	-	86	-	-
1979-Y533	2444190.12	1979 Nov 12 1500:00	M-100	-	-	-	-	-	-	NER	-	-	-	80	-	-
1979-Y534	2444190.17	1979 Nov 12 1500:00	M-100	-	-	-	-	-	-	NER	-	-	-	85	-	-
1979-Y534	2444190.25	1979 Nov 12 1800:00	M-100	-	-	-	-	-	-	NER	-	-	-	77	-	-
1979-Y539	2444191.58	1979 Nov 14 1400:00	M-100	-	-	-	-	-	-	OK	-	-	-	88	-	-
1979-Y539	2444192.08	1979 Nov 14 1400:00	M-100	-	-	-	-	-	-	MLD	-	-	-	79	-	-
1979-Y540	2444192.15	1979 Nov 14 1540:00	M-100	-	-	-	-	-	-	NER	-	-	-	82	-	-
1979-Y541	2444192.21	1979 Nov 14 1700:00	M-100	-	-	-	-	-	-	NER	-	-	-	85	-	-
1979-Y543	2444192.38	1979 Nov 14 1900:00	M-100	-	-	-	-	-	-	GNS79H	LP1	-	-	81	-	-
1979-Y543	2444193.33	1979 Nov 15 2000:00	M-100	-	-	-	-	-	-	GNS79H	LP1	-	-	82	-	-
1979-Y544	2444193.38	1979 Nov 15 2100:00	M-100	-	-	-	-	-	-	OK	-	-	-	74	-	-
1979-Y544	2444193.58	1979 Nov 16 0200:00	M-100	-	-	-	-	-	-	NER	-	-	-	80	-	-
1979-Y545	2444193.58	1979 Nov 16 0200:00	M-100	-	-	-	-	-	-	OK	-	-	-	86	-	-
1979-Y547	2444198.48	1979 Nov 20 2330:00	M-100	-	-	-	-	-	-	OK	-	-	-	88	-	-
1979-Y549	2444199.08	1979 Nov 21 1400:00	M-100	-	-	-	-	-	-	OK	-	-	-	87	-	-
1979-Y549	2444200.58	1979 Nov 21 0200:00	M-100	-	-	-	-	-	-	MLD	-	-	-	89	-	-
1979-Y552	2444206.08	1979 Nov 27 1400:00	M-100	-	-	-	-	-	-	OK	-	-	-	81	-	-
1979-Y553	2444206.12	1979 Nov 27 1500:00	M-100	-	-	-	-	-	-	GNS79J	LP1	-	-	82	-	-
1979-Y554	2444206.58	1979 Nov 28 0200:00	M-100	-	-	-	-	-	-	OK	-	-	-	87	-	-
1979-Y556	2444206.08	1979 Nov 28 1400:00	M-100	-	-	-	-	-	-	MLD	-	-	-	86	-	-
1979-Y557	2444206.08	1979 Nov 28 1400:00	M-100	-	-	-	-	-	-	TERLS	-	-	-	91	-	-
1979-Y568	2444206.19	1979 Nov 28 1630:00	M-100	-	-	-	-	-	-	GNS79J	LP2	-	-	89	-	-
1979-Y569	2444207.08	1979 Nov 29 1400:00	M-100	-	-	-	-	-	-	GNS79J	LP2	-	-	84	-	-
1979-Y569	2444207.12	1979 Nov 29 1500:00	M-100	-	-	-	-	-	-	GNS79J	LP2	-	-	85	-	-



Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Launch_Mission	FlightCode	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee_Km	Range_Km	Dest
1979-Y665	2444207.58	1979 Nov 30 0200:00	M-100	-	-	-	-	-	-	UK	-	-	-	82	-	-
1979-Y666	2444208.08	1979 Nov 30 1400:00	M-100	-	-	-	-	-	KORO	GNS79J	LP3	-	-	82	-	-
1979-Y667	2444212.08	1979 Dec 04 1400:00	M-100	-	-	-	-	-	KORO	GNS79J	LP4	-	-	82	-	-
1979-Y669	2444212.58	1979 Dec 05 0200:00	M-100	-	-	-	-	-	-	UK	-	-	-	85	-	-
1979-Y670	2444213.08	1979 Dec 05 1400:00	M-100	-	-	-	-	-	-	MLD	-	-	-	84	-	-
1979-Y671	2444213.22	1979 Dec 05 1720:00	M-100	-	-	-	-	-	-	GTS-P-4	-	-	-	83	-	-
1979-Y674	2444214.08	1979 Dec 06 1400:00	M-100	-	-	-	-	-	-	TERLS	-	-	-	89	-	-
1979-Y676	2444214.58	1979 Dec 07 0200:00	M-100	-	-	-	-	-	-	UK	-	-	-	84	-	-
1979-Y679	2444219.67	1979 Dec 12 0400:00	M-100	-	-	-	-	-	-	UK	-	-	-	85	-	-
1979-Y680	2444219.99	1979 Dec 12 1140:00	M-100	-	-	-	-	-	-	TERLS	-	-	-	89	-	-
1979-Y681	2444220.10	1979 Dec 12 1430:00	M-100	-	-	-	-	-	-	MLD	-	-	-	87	-	-
1979-Y682	2444220.12	1979 Dec 12 1500:00	M-100	-	-	-	-	-	KORO	GNS79J	LP5	-	-	95	-	-
1979-Y1408	2444220.19	1979 Dec 12 1630:00	M-100	-	-	-	-	-	KORO	GNS79J	LP5	-	-	76	-	-
1979-Y683	2444220.21	1979 Dec 12 1700:00	M-100	-	-	-	-	-	SHUK	QJP	-	-	-	85	-	-
1979-Y684	2444220.33	1979 Dec 12 2000:00	M-100	-	-	-	-	-	-	GTS-P-4	-	-	-	91	-	-
1979-Y686	2444221.58	1979 Dec 14 0200:00	M-100	-	-	-	-	-	-	UK	-	-	-	82	-	-
1979-Y687	2444222.08	1979 Dec 14 1400:00	M-100	-	-	-	-	-	-	UK	-	-	-	83	-	-
1979-Y689	2444226.62	1979 Dec 19 0250:00	M-100	-	-	-	-	-	-	UK	-	-	-	81	-	-
1979-Y690	2444227.08	1979 Dec 19 1400:00	M-100	-	-	-	-	-	-	TERLS	-	-	-	89	-	-
1979-Y691	2444227.12	1979 Dec 19 1500:00	M-100	-	-	-	-	-	-	MLD	-	-	-	82	-	-
1979-Y692	2444227.19	1979 Dec 19 1630:00	M-100	-	-	-	-	-	-	GTS-P-4	-	-	-	83	-	-
1979-Y694	2444227.29	1979 Dec 19 1900:00	M-100	-	-	-	-	-	SHUK	QJP	-	-	-	83	-	-
1979-Y695	2444227.31	1979 Dec 19 1920:00	M-100	-	-	-	-	-	-	UK	-	-	-	82	-	-
1979-Y696	2444228.59	1979 Dec 24 1000:00	M-100	-	-	-	-	-	SHUK	QJP	-	-	-	69	-	-
1979-Y1446	2444231.52	1979 Dec 26 0200:00	M-100	-	-	-	-	-	SHUK	QJP	-	-	-	87	-	-
1979-Y699	2444233.58	1979 Dec 26 1400:00	M-100	-	-	-	-	-	-	UK	-	-	-	89	-	-
1979-Y700	2444234.08	1979 Dec 26 1400:00	M-100	-	-	-	-	-	-	MLD	-	-	-	89	-	-
1979-Y701	2444234.08	1979 Dec 26 1400:00	M-100	-	-	-	-	-	-	TERLS	-	-	-	89	-	-
1979-Y603	2444234.22	1979 Dec 26 1720:00	M-100	-	-	-	-	-	-	GTS-P-4	-	-	-	89	-	-
1979-Y604	2444235.60	1979 Dec 28 0220:00	M-100	-	-	-	-	-	-	UK	-	-	-	85	-	-
1979-Y605	2444236.08	1979 Dec 28 1400:00	M-100	-	-	-	-	-	-	GTS-P-4	-	-	-	94	-	-
1980-Y02	2444240.08	1980 Jan 01 1400:00	M-100	-	-	-	-	-	SHUK	GNS79H	LP4	-	-	84	-	-
1980-Y04	2444240.96	1980 Jan 02 1100:00	M-100	-	-	-	-	-	-	TERLS	-	-	-	85	-	-
1980-Y04	2444241.08	1980 Jan 02 1400:00	M-100	-	-	-	-	-	-	MLD	-	-	-	87	-	-
1980-Y04	2444241.15	1980 Jan 02 1530:00	M-100	-	-	-	-	-	-	GTS-P-4	-	-	-	94	-	-
1980-Y07	2444241.31	1980 Jan 03 1930:00	M-100	-	-	-	-	-	-	UK	-	-	-	94	-	-
1980-Y08	2444241.79	1980 Jan 03 0700:00	M-100	-	-	-	-	-	KORO	GNS79J	LP6	-	-	94	-	-
1980-Y09	2444241.83	1980 Jan 03 0800:00	M-100	-	-	-	-	-	KORO	GNS79J	LP6	-	-	93	-	-
1980-Y10	2444242.60	1980 Jan 04 0230:00	M-100	-	-	-	-	-	-	TERLS	-	-	-	94	-	-
1980-Y11	2444243.08	1980 Jan 04 1400:00	M-100	-	-	-	-	-	-	UK	-	-	-	94	-	-
1980-Y11	2444243.58	1980 Jan 04 1500:00	M-100	-	-	-	-	-	-	TERLS	-	-	-	94	-	-
1980-Y12	2444243.12	1980 Jan 05 1100:00	M-100	-	-	-	-	-	-	GTS-P-4	-	-	-	93	-	-
1980-Y16	2444243.96	1980 Jan 05 1200:00	M-100	-	-	-	-	-	SHUK	GNS79H	LP5	-	-	76	-	-
1980-Y14	2444244.00	1980 Jan 07 0400:00	M-100	-	-	-	-	-	SHUK	GNS79H	LP5	-	-	85	-	-
1980-Y15	2444246.67	1980 Jan 07 1400:00	M-100	-	-	-	-	-	-	UK	-	-	-	83	-	-
1980-Y16	2444246.08	1980 Jan 07 1500:00	M-100	-	-	-	-	-	-	TERLS	-	-	-	86	-	-
1980-Y17	2444246.12	1980 Jan 07 1600:00	M-100	-	-	-	-	-	-	GTS-P-4	-	-	-	86	-	-
1980-Y19	2444247.62	1980 Jan 09 0400:00	M-100	-	-	-	-	-	-	UK	-	-	-	89	-	-
1980-Y20	2444248.08	1980 Jan 09 1400:00	M-100	-	-	-	-	-	-	MLD	-	-	-	89	-	-
1980-Y21	2444248.08	1980 Jan 09 1500:00	M-100	-	-	-	-	-	-	TERLS	-	-	-	89	-	-
1980-Y22	2444248.08	1980 Jan 09 1500:00	M-100	-	-	-	-	-	-	GTS-P-4	-	-	-	85	-	-
1980-Y23	2444248.58	1980 Jan 11 0200:00	M-100	-	-	-	-	-	-	UK	-	-	-	85	-	-
1980-Y24	2444250.00	1980 Jan 11 1400:00	M-100	-	-	-	-	-	-	TERLS	-	-	-	84	-	-
1980-Y25	2444250.58	1980 Jan 14 0200:00	M-100	-	-	-	-	-	-	GTS-P-4	-	-	-	84	-	-
1980-Y26	2444250.58	1980 Jan 14 0200:00	M-100	-	-	-	-	-	-	UK	-	-	-	83	-	-
1980-Y27	2444253.12	1980 Jan 14 1500:00	M-100	-	-	-	-	-	-	GTS-P-4	-	-	-	81	-	-
1980-Y28	2444253.12	1980 Jan 16 1400:00	M-100	-	-	-	-	-	-	TERLS	-	-	-	82	-	-
1980-Y29	2444255.08	1980 Jan 16 1400:00	M-100	-	-	-	-	-	-	MLD	-	-	-	81	-	-
1980-Y30	2444255.10	1980 Jan 16 1430:00	M-100	-	-	-	-	-	-	TERLS	-	-	-	87	-	-
1980-Y58	2444255.17	1980 Jan 16 1600:00	M-100	-	-	-	-	-	-	GTS-P-4	-	-	-	79	-	-
1980-Y32	2444255.29	1980 Jan 16 1900:00	M-100	-	-	-	-	-	-	UK	-	-	-	83	-	-
1980-Y34	2444256.58	1980 Jan 18 0200:00	M-100	-	-	-	-	-	-	UK	-	-	-	82	-	-
1980-Y37	2444257.08	1980 Jan 18 1400:00	M-100	-	-	-	-	-	-	TERLS	-	-	-	83	-	-
1980-Y38	2444257.17	1980 Jan 18 1600:00	M-100	-	-	-	-	-	-	GTS-P-4	-	-	-	79	-	-
1980-Y39	2444259.58	1980 Jan 21 0200:00	M-100	-	-	-	-	-	-	UK	-	-	-	84	-	-
1980-Y40	2444259.79	1980 Jan 21 0700:00	M-100	-	-	-	-	-	KORO	GNS79J	LP7	-	-	84	-	-
1980-Y41	2444260.08	1980 Jan 21 1400:00	M-100	-	-	-	-	-	KORO	GNS79J	LP7	-	-	84	-	-
1980-Y42	2444260.12	1980 Jan 21 1500:00	M-100	-	-	-	-	-	-	TERLS	-	-	-	84	-	-
1980-Y46	2444261.83	1980 Jan 23 0250:00	M-100	-	-	-	-	-	-	GTS-P-4	-	-	-	80	-	-
1980-Y47	2444262.08	1980 Jan 23 1400:00	M-100	-	-	-	-	-	-	UK	-	-	-	85	-	-
1980-Y48	2444262.17	1980 Jan 23 1400:00	M-100	-	-	-	-	-	-	MLD	-	-	-	81	-	-
1980-Y49	2444263.58	1980 Jan 25 0200:00	M-100	-	-	-	-	-	-	TERLS	-	-	-	86	-	-
1980-Y50	2444263.58	1980 Jan 25 0200:00	M-100	-	-	-	-	-	-	GTS-P-4	-	-	-	89	-	-
1980-Y51	2444264.12	1980 Jan 25 1500:00	M-100	-	-	-	-	-	-	UK	-	-	-	84	-	-
1980-Y52	2444264.15	1980 Jan 25 1530:00	M-100	-	-	-	-	-	-	GTS-P-4	-	-	-	80	-	-
1980-Y53	2444266.58	1980 Jan 28 0200:00	M-100	-	-	-	-	-	-	UK	-	-	-	81	-	-
1980-Y54	2444267.08	1980 Jan 28 1400:00	M-100	-	-	-	-	-	-	TERLS	-	-	-	86	-	-
1980-Y55	2444267.12	1980 Jan 28 1500:00	M-100	-	-	-	-	-	-	GTS-P-4	-	-	-	86	-	-
1980-Y57	2444268.58	1980 Jan 30 0200:00	M-100	-	-	-	-	-	-	UK	-	-	-	83	-	-
1980-Y58	2444268.58	1980 Jan 30 1400:00	M-100	-	-	-	-	-	-	MLD	-	-	-	88	-	-
1980-Y59	2444269.08	1980 Jan 30 1400:00	M-100	-	-	-	-	-	-	TERLS	-	-	-	84	-	-
1980-Y61	2444269.21	1980 Jan 30 1700:00	M-100	-	-	-	-	-	-	GTS-P-4	-	-	-	85	-	-
1980-Y62	2444270.58	1980 Feb 01 0200:00	M-100	-	-	-	-	-	-	UK	-	-	-	81	-	-
1980-Y63	2444270.71	1980 Feb 01 0500:00	M-100	-	-	-	-	-	-	UK	-	-	-	81	-	-
1980-Y64	2444273.58	1980 Feb 04 0200:00	M-100	-	-	-	-	-	-	UK	-	-	-	86	-	-

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Launch_Mission	FlightCode	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee_Km	Range_Km	Dest
1980-Y67	2444275.60	1980 Feb 06 0230:00	M-100							UK				84		
1980-Y68	2444276.08	1980 Feb 06 1400:00	M-100							TERLS				85?		
1980-Y69	2444276.10	1980 Feb 06 1430:00	M-100							MLD				80		
1980-Y70	2444276.19	1980 Feb 06 1630:00	M-100							GRSP-4				84		
1980-Y71	2444277.08	1980 Feb 07 1400:00	M-100							TERLS				85		
1980-Y72	2444277.58	1980 Feb 08 0200:00	M-100							UK				86		
1980-Y73	2444280.58	1980 Feb 11 0200:00	M-100							UK				84		
1980-Y74	2444282.58	1980 Feb 13 0200:00	M-100							UK				85		
1980-Y75	2444282.83	1980 Feb 13 0800:00	M-100							MLD				85?		
1980-Y76	2444282.83	1980 Feb 13 0800:00	M-100							GRSP-4				88		
1980-Y77	2444283.08	1980 Feb 13 1400:00	M-100							UK				87		
1980-Y78	2444283.21	1980 Feb 13 1700:00	M-100							UK				87		
1980-Y79	2444284.58	1980 Feb 15 0200:00	M-100							MLD				87		
1980-Y80	2444285.25	1980 Feb 15 1800:00	M-100							TERLS				84		
1980-Y81	2444285.51	1980 Feb 16 0723:00	M-100							TERLS				84		
1980-Y82	2444285.99	1980 Feb 16 1105:00	M-100							UK				86		
1980-Y83	2444289.62	1980 Feb 20 0300:00	M-100							UK				86		
1980-Y84	2444290.08	1980 Feb 20 1400:00	M-100							MLD				90		
1980-Y85	2444290.17	1980 Feb 20 1600:00	M-100							TERLS				88		
1980-Y86	2444290.17	1980 Feb 20 1630:00	M-100							GRSP-4				83		
1980-Y87	2444291.60	1980 Feb 22 0225:00	M-100							UK				80		
1980-Y88	2444295.08	1980 Feb 25 1400:00	M-100							KURO				87		
1980-Y89	2444295.08	1980 Feb 25 1400:00	M-100							SHR				81		
1980-Y90	2444295.12	1980 Feb 25 1500:00	M-100							KURO				83		
1980-Y91	2444295.12	1980 Feb 25 1500:00	M-100							SHR				83		
1980-Y92	2444295.19	1980 Feb 25 1630:00	M-100							SHR				86		
1980-Y93	2444295.19	1980 Feb 25 1630:00	M-100							SHR				83		
1980-Y94	2444295.24	1980 Feb 25 1630:00	M-100							SHR				83		
1980-Y95	2444295.24	1980 Feb 25 1750:00	M-100							SHR				84		
1980-Y96	2444295.28	1980 Feb 25 1800:00	M-100							KURO				89		
1980-Y97	2444296.10	1980 Feb 26 1430:00	M-100							SHR				80		
1980-Y98	2444296.11	1980 Feb 26 1600:00	M-100							SHR				82		
1980-Y99	2444296.17	1980 Feb 26 1600:00	M-100							SHR				87		
1980-Y100	2444296.23	1980 Feb 26 1730:00	M-100							SHR				89		
1980-Y101	2444296.23	1980 Feb 26 1730:00	M-100							SHR				85		
1980-Y102	2444296.28	1980 Feb 26 1830:00	M-100							SHR				86		
1980-Y103	2444296.69	1980 Feb 27 0430:00	M-100							SHR				82		
1980-Y104	2444297.01	1980 Feb 27 1210:00	M-100							SHR				94		
1980-Y105	2444297.08	1980 Feb 27 1400:00	M-100							KURO				85		
1980-Y106	2444297.10	1980 Feb 27 1430:00	M-100											86		
1980-Y107	2444297.11	1980 Feb 27 1540:00	M-100							SHR				86		
1980-Y108	2444297.12	1980 Feb 27 1530:00	M-100							GRSP-4				84		
1980-Y109	2444297.15	1980 Feb 27 1530:00	M-100							SHR				83		
1980-Y110	2444297.23	1980 Feb 27 1730:00	M-100							SHR				82		
1980-Y111	2444298.04	1980 Feb 28 1300:00	M-100							KURO				86		
1980-Y112	2444298.08	1980 Feb 28 1400:00	M-100							KURO				86		
1980-Y113	2444298.15	1980 Feb 28 1430:00	M-100							SHR				83		
1980-Y114	2444298.15	1980 Feb 28 1530:00	M-100							SHR				85		
1980-Y115	2444298.31	1980 Feb 28 1700:00	M-100							SHR				83		
1980-Y116	2444298.55	1980 Feb 28 1700:00	M-100							SHR				84		
1980-Y117	2444298.58	1980 Feb 29 0200:00	M-100							SHR				84		
1980-Y118	2444298.96	1980 Feb 29 1100:00	M-100							SHR				84		
1980-Y119	2444298.96	1980 Feb 29 1100:00	M-100							KURO				78		
1980-Y120	2444298.96	1980 Feb 29 1200:00	M-100							SHR				83		
1980-Y121	2444298.96	1980 Feb 29 1300:00	M-100							SHR				87		
1980-Y122	2444298.96	1980 Feb 29 1330:00	M-100							KURO				87		
1980-Y123	2444298.97	1980 Feb 29 1400:00	M-100							SHR				84		
1980-Y124	2444298.97	1980 Feb 29 1400:00	M-100							SHR				84		
1980-Y125	2444298.98	1980 Feb 29 1500:00	M-100							SHR				84		
1980-Y126	2444298.98	1980 Feb 29 1550:00	M-100							KURO				85		
1980-Y127	2444300.00	1980 Mar 05 0400:00	M-100							UK				86		
1980-Y128	2444300.67	1980 Mar 05 0400:00	M-100							MLD				87		
1980-Y129	2444300.00	1980 Mar 05 1200:00	M-100							TERLS				84		
1980-Y130	2444300.08	1980 Mar 05 1400:00	M-100							GRSP-4				84		
1980-Y131	2444300.17	1980 Mar 05 1600:00	M-100							TERLS				88		
1980-Y132	2444300.58	1980 Mar 06 1400:00	M-100							UK				85		
1980-Y133	2444306.21	1980 Mar 07 0300:00	M-100							CNS80B				84		
1980-Y134	2444310.58	1980 Mar 12 0200:00	M-100							UK				85		
1980-Y135	2444311.08	1980 Mar 12 1400:00	M-100							MLD				66		
1980-Y136	2444311.08	1980 Mar 12 1400:00	M-100							TERLS				85		
1980-Y137	2444317.62	1980 Mar 19 0300:00	M-100							UK				82		
1980-Y138	2444318.08	1980 Mar 19 1400:00	M-100							MLD				87		
1980-Y139	2444318.08	1980 Mar 19 1400:00	M-100							TERLS				87		
1980-Y140	2444318.17	1980 Mar 19 1600:00	M-100							GRSP-4				84		
1980-Y141	2444318.21	1980 Mar 19 1700:00	M-100							GRSP-4				84		
1980-Y142	2444320.08	1980 Mar 21 1400:00	M-100							GRSP-4				86		
1980-Y143	2444320.15	1980 Mar 21 1540:00	M-100							GRSP-4				92		
1980-Y144	2444322.12	1980 Mar 23 1500:00	M-100							UK				83		
1980-Y145	2444324.58	1980 Mar 26 1400:00	M-100							SHR				86		
1980-Y146	2444325.08	1980 Mar 26 1400:00	M-100							UK				83		
1980-Y147	2444325.10	1980 Mar 26 1430:00	M-100							MLD				86		
1980-Y148	2444325.14	1980 Mar 26 1520:00	M-100							CNS80B				83		
1980-Y149	2444325.28	1980 Mar 26 1840:00	M-100							GRSP-4				86		
1980-Y150	2444325.33	1980 Mar 26 1950:00	M-100							GRSP-4				88		

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Launch_Mission	FlightCode	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee Km	Range Km	Dest
1980-Y170	2444325.38	1980 Mar 26 21:00:00	N-100							GTSP-4				86		
1980-Y174	2444328.17	1980 Mar 29 16:00:00	N-100						SHIR	GNSOB	LP3			84		
1980-Y175	2444329.10	1980 Mar 30 14:20:00	N-100						SHIR	GNSOB	LP4			81		
1980-Y178	2444331.58	1980 Apr 02 02:00:00	N-100							UK				86		
1980-Y179	2444332.08	1980 Apr 02 12:00:00	N-100							TERLS				85		
1980-Y180	2444332.08	1980 Apr 02 14:00:00	N-100							MLD				86		
1980-Y181	2444332.21	1980 Apr 02 17:00:00	N-100							GTSP-4				85		
1980-Y183	2444338.58	1980 Apr 09 02:00:00	N-100							UK				84		
1980-Y184	2444338.60	1980 Apr 09 02:20:00	N-100							TERLS				83		
1980-Y185	2444338.75	1980 Apr 09 06:00:00	N-100							TERLS				84		
1980-Y186	2444338.92	1980 Apr 09 10:00:00	N-100							TERLS				85		
1980-Y187	2444339.08	1980 Apr 09 14:00:00	N-100							TERLS				84		
1980-Y188	2444339.10	1980 Apr 09 14:30:00	N-100							MLD				85		
1980-Y189	2444339.21	1980 Apr 09 17:00:00	N-100							TERLS				85		
1980-Y190	2444339.25	1980 Apr 09 18:00:00	N-100							TERLS				82		
1980-Y191	2444339.29	1980 Apr 09 19:00:00	N-100							TERLS				87		
1980-Y192	2444339.38	1980 Apr 09 21:00:00	N-100							TERLS				84		
1980-Y193	2444339.58	1980 Apr 10 02:00:00	N-100							GTSP-4				87		
1980-Y194	2444339.58	1980 Apr 10 02:00:00	N-100							TERLS				84		
1980-Y195	2444339.75	1980 Apr 10 06:00:00	N-100							TERLS				85		
1980-Y196	2444339.92	1980 Apr 10 10:00:00	N-100							TERLS				85		
1980-Y197	2444340.08	1980 Apr 10 14:00:00	N-100							TERLS				84		
1980-Y198	2444340.25	1980 Apr 10 18:00:00	N-100							TERLS				82		
1980-Y199	2444340.38	1980 Apr 10 21:00:00	N-100							TERLS				83		
1980-Y200	2444340.58	1980 Apr 11 02:00:00	N-100							TERLS				84		
1980-Y201	2444340.75	1980 Apr 11 06:00:00	N-100							TERLS				83		
1980-Y202	2444346.60	1980 Apr 16 02:20:00	N-100							UK				84		
1980-Y204	2444346.17	1980 Apr 16 16:00:00	N-100							MLD				85		
1980-Y205	2444346.21	1980 Apr 16 17:00:00	N-100							GTSP-4				91		
1980-Y206	2444352.46	1980 Apr 22 23:00:00	N-100							GTSP-4				86		
1980-Y207	2444352.58	1980 Apr 23 02:00:00	N-100							UK				82		
1980-Y208	2444353.08	1980 Apr 23 14:00:00	N-100							MLD				85		
1980-Y209	2444353.08	1980 Apr 23 14:00:00	N-100							TERLS				84		
1980-Y210	2444356.12	1980 Apr 26 15:00:00	N-100							UK				85		
1980-Y211	2444359.58	1980 Apr 29 16:00:00	N-100							TERLS				85		
1980-Y212	2444359.17	1980 Apr 29 16:00:00	N-100							UK				85		
1980-Y213	2444359.17	1980 Apr 29 16:00:00	N-100						SHIR	UK				89		
1980-Y214	2444359.23	1980 Apr 29 17:30:00	N-100						SHIR	UK				82		
1980-Y215	2444359.23	1980 Apr 29 17:30:00	N-100							UK				86		
1980-Y216	2444359.58	1980 Apr 29 21:00:00	N-100							GTSP-4				90		
1980-Y217	2444359.58	1980 Apr 29 21:00:00	N-100							GTSP-4				88		
1980-Y218	2444359.58	1980 Apr 30 02:00:00	N-100							UK				85		
1980-Y219	2444359.58	1980 Apr 30 04:40:00	N-100							UK				94		
1980-Y219	2444359.58	1980 Apr 30 04:40:00	N-100							UK				90		
1980-Y220	2444360.08	1980 Apr 30 15:00:00	N-100							UK				87		
1980-Y220	2444360.08	1980 Apr 30 15:00:00	N-100							UK				87		
1980-Y221	2444360.12	1980 Apr 30 15:00:00	N-100							UK				87		
1980-Y222	2444361.00	1980 May 01 12:00:00	N-100						KURO	GNSOE	LP1			90		
1980-Y223	2444361.00	1980 May 01 12:00:00	N-100						SHIR	GNSOF	LP2			81		
1980-Y224	2444361.18	1980 May 02 15:00:00	N-100							UK				86		
1980-Y224	2444362.08	1980 May 02 15:00:00	N-100							UK				82		
1980-Y225	2444363.12	1980 May 03 15:00:00	N-100							UK				82		
1980-Y226	2444365.12	1980 May 05 15:00:00	N-100							UK				84		
1980-Y226	2444366.07	1980 May 05 12:00:00	N-100						KURO	GNSOE	LP2			92		
1980-Y227	2444366.07	1980 May 05 15:00:00	N-100							UK				84		
1980-Y228	2444366.35	1980 May 06 15:00:00	N-100							UK				84		
1980-Y229	2444366.35	1980 May 06 21:00:00	N-100							UK				84		
1980-Y230	2444366.45	1980 May 06 21:00:00	N-100							UK				82		
1980-Y231	2444366.45	1980 May 07 02:00:00	N-100							UK				82		
1980-Y232	2444366.58	1980 May 07 02:00:00	N-100							UK				82		
1980-Y233	2444366.58	1980 May 07 11:40:00	N-100							TERLS				82		
1980-Y234	2444366.89	1980 May 07 11:40:00	N-100							TERLS				82		
1980-Y235	2444367.00	1980 May 07 12:00:00	N-100							GNSOE	LP2			89		
1980-Y236	2444367.00	1980 May 07 14:00:00	N-100							MLD				88		
1980-Y237	2444367.08	1980 May 07 14:00:00	N-100							MLD				89		
1980-Y238	2444367.21	1980 May 07 15:00:00	N-100							UK				85		
1980-Y238	2444367.21	1980 May 07 17:00:00	N-100							UK				87		
1980-Y241	2444367.40	1980 May 07 21:40:00	N-100							GTSP-4				84		
1980-Y241	2444368.44	1980 May 08 22:40:00	N-100							GNSOF	LP4			83		
1980-Y243	2444369.17	1980 May 08 22:40:00	N-100							LOCOR				89		
1980-Y243	2444369.42	1980 May 09 16:00:00	N-100							LOCOR				89		
1980-Y246	2444370.12	1980 May 09 22:10:00	N-100							LOCOR				83		
1980-Y247	2444372.12	1980 May 12 15:00:00	N-100							LOCOR				87		
1980-Y248	2444373.12	1980 May 13 15:00:00	N-100							LOCOR				85		
1980-Y248	2444373.58	1980 May 14 02:00:00	N-100							LOCOR				85		
1980-Y249	2444374.08	1980 May 14 14:00:00	N-100							LOCOR				82		
1980-Y250	2444374.08	1980 May 14 14:00:00	N-100							LOCOR				82		
1980-Y251	2444374.08	1980 May 14 14:00:00	N-100							LOCOR				91		
1980-Y252	2444374.12	1980 May 14 15:00:00	N-100							LOCOR				83		
1980-Y253	2444374.21	1980 May 14 17:00:00	N-100							LOCOR				85		
1980-Y257	2444376.12	1980 May 16 15:00:00	N-100							LOCOR				85		
1980-Y258	2444377.12	1980 May 17 15:00:00	N-100							LOCOR				89		
1980-Y259	2444379.12	1980 May 19 15:00:00	N-100							LOCOR				84		
1980-Y260	2444379.40	1980 May 19 21:30:00	N-100							LOCOR				86		
1980-Y261	2444380.00	1980 May 20 12:00:00	N-100							LOCOR				91		
1980-Y263	2444380.12	1980 May 20 15:00:00	N-100							LOCOR				80		
1980-Y264	2444380.12	1980 May 20 15:00:00	N-100							LOCOR				91		
1980-Y265	2444380.40	1980 May 20 21:30:00	N-100							LOCOR				85		
1980-Y266	2444380.60	1980 May 21 02:00:00	N-100							LOCOR				85		
1980-Y267	2444381.08	1980 May 21 14:00:00	N-100							LOCOR				83		
1980-Y268	2444381.12	1980 May 21 15:00:00	N-100							LOCOR				88		
1980-Y269	2444381.17	1980 May 21 16:00:00	N-100							LOCOR				83		
1980-Y270	2444381.40	1980 May 21 17:00:00	N-100							LOCOR				87		
1980-Y271	2444381.40	1980 May 21 21:30:00	N-100							LOCOR				85		
1980-Y272	2444382.44	1980 May 22 22:40:00	N-100							LOCOR				82		
1980-Y273	2444383.12	1980 May 23 15:00:00	N-100							LOCOR				90		

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Launch_Mission	FlightCode	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee_Km	Range_Km	Dest
1980-WS12	2444383.39	1980 May 23 2120:00	N-100						SHIR	GSSOF	LP11			79		
1980-Y274	2444384.35	1980 May 24 2030:00	N-100						SHIR	GSSOF	LP12			82		
1980-Y275	2444385.33	1980 May 25 2000:00	N-100						SHIR	GSSOF	LP13			82		
1980-Y276	2444386.00	1980 May 26 1200:00	N-100						KURO	GSSOE	LP4			85		
1980-Y277	2444386.04	1980 May 26 1300:00	N-100						KURO	GSSOE	LP4			84		
1980-Y278	2444386.31	1980 May 26 1930:00	N-100						SHIR	GSSOF	LP14			83		
1980-Y281	2444387.25	1980 May 27 1800:00	N-100						SHIR	GSSOF	LP14			84		
1980-WS17	2444387.31	1980 May 27 1920:00	N-100						SHIR	GSSOF	LP15			79		
1980-WS20	2444387.61	1980 May 28 0240:00	N-100							UK				75		
1980-Y282	2444388.00	1980 May 28 1200:00	N-100						KURO	GSSOE	LP5			82		
1980-Y283	2444388.04	1980 May 28 1300:00	N-100						KURO	GSSOE	LP5			88		
1980-Y284	2444388.08	1980 May 28 1400:00	N-100							TERLS				88		
1980-Y287	2444388.32	1980 May 28 1940:00	N-100							TERLS				82		
1980-Y290	2444390.29	1980 May 30 1900:00	N-100							G18P-4				83		
1980-Y291	2444392.23	1980 Jun 01 1730:00	N-100						SHIR	GSSOF	LP16			84		
1980-Y293	2444394.04	1980 Jun 03 1300:00	N-100						KURO	GSSOE	LP6			81		
1980-Y294	2444394.08	1980 Jun 03 1400:00	N-100							UK				82		
1980-Y296	2444395.58	1980 Jun 04 0200:00	N-100							TERLS				83		
1980-Y299	2444395.08	1980 Jun 04 1200:00	N-100							TERLS				87		
1980-Y297	2444395.08	1980 Jun 04 1400:00	N-100							TERLS				85		
1980-Y298	2444395.21	1980 Jun 04 1700:00	N-100							G18P-4				85		
1980-Y299	2444395.33	1980 Jun 05 2000:00	N-100						SHIR	GSSOF	LP18			85		
1980-Y300	2444397.08	1980 Jun 06 1400:00	N-100						SHIR	GSSOF	LP19			84		
1980-Y302	2444397.39	1980 Jun 06 2120:00	N-100							TERLS				86		
1980-Y303	2444401.58	1980 Jun 11 0200:00	N-100						SHIR	GSSOF	LP20			85		
1980-Y304	2444402.08	1980 Jun 11 1400:00	N-100							UK				89		
1980-Y306	2444402.33	1980 Jun 11 2000:00	N-100							TERLS				86		
1980-Y310	2444404.08	1980 Jun 12 1400:00	N-100							G18P-4				89		
1980-Y311	2444404.08	1980 Jun 13 1400:00	N-100							TERLS				82		
1980-Y312	2444406.64	1980 Jun 18 0520:00	N-100							UK				91		
1980-Y313	2444409.08	1980 Jun 18 1400:00	N-100							TERLS				82		
1980-Y315	2444409.21	1980 Jun 19 1700:00	N-100							UK				86		
1980-Y316	2444410.08	1980 Jun 19 1400:00	N-100							G18P-4				89		
1980-Y318	2444411.08	1980 Jun 19 1400:00	N-100							TERLS				88		
1980-Y319	2444415.46	1980 Jun 24 2300:00	N-100							G18P-4				87		
1980-Y320	2444415.58	1980 Jun 25 0200:00	N-100							UK				90		
1980-Y321	2444415.59	1980 Jun 25 0210:00	N-100							G18P-4				94		
1980-Y322	2444416.17	1980 Jun 25 1600:00	N-100							TERLS				91		
1980-Y323	2444417.08	1980 Jun 27 1400:00	N-100							TERLS				82		
1980-Y324	2444417.08	1980 Jun 27 1600:00	N-100							UK				88		
1980-Y325	2444418.68	1980 Jun 27 1600:00	N-100							TERLS				83		
1980-Y326	2444422.88	1980 Jun 02 0200:00	N-100							G18P-4				85		
1980-Y328	2444423.95	1980 Jun 02 1800:00	N-100							TERLS				88		
1980-Y329	2444425.51	1980 Jun 04 1500:00	N-100							G18P-4				85		
1980-Y331	2444426.12	1980 Jun 07 0600:00	N-100							UK				86		
1980-Y332	2444426.68	1980 Jun 07 0200:00	N-100							TERLS				87		
1980-Y333	2444429.88	1980 Jun 09 1400:00	N-100							TERLS				86		
1980-Y334	2444430.05	1980 Jun 09 1500:00	N-100							TERLS				86		
1980-Y336	2444430.33	1980 Jun 09 1730:00	N-100							G18P-4				85		
1980-Y337	2444430.51	1980 Jun 09 1730:00	N-100							G18P-4				91		
1980-Y338	2444432.08	1980 Jun 13 1400:00	N-100							G18P-4				85		
1980-Y339	2444432.08	1980 Jun 13 1400:00	N-100							TERLS				82		
1980-Y340	2444432.08	1980 Jun 14 1400:00	N-100							TERLS				85		
1980-Y341	2444432.08	1980 Jun 14 1400:00	N-100							TERLS				85		
1980-Y342	2444437.08	1980 Jun 16 1400:00	N-100							UK				79		
1980-Y343	2444437.08	1980 Jun 16 1400:00	N-100							TERLS				83		
1980-Y345	2444437.35	1980 Jun 16 2030:00	N-100							G18P-4				87		
1980-Y346	2444439.08	1980 Jun 18 1400:00	N-100							G18P-4				84		
1980-Y347	2444439.17	1980 Jun 18 1600:00	N-100							TERLS				81		
1980-Y348	2444443.58	1980 Jun 23 0200:00	N-100							TERLS				84		
1980-Y349	2444444.08	1980 Jun 23 1400:00	N-100							TERLS				87		
1980-Y350	2444444.08	1980 Jun 23 1400:00	N-100							TERLS				84		
1980-Y352	2444444.21	1980 Jun 23 1700:00	N-100							G18P-4				86		
1980-Y355	2444444.35	1980 Jun 23 2020:00	N-100							G18P-4				88		
1980-Y356	2444444.68	1980 Jun 25 1400:00	N-100							UK				91		
1980-Y359	2444450.58	1980 Jun 30 0200:00	N-100							TERLS				67		
1980-Y362	2444451.08	1980 Jun 30 1420:00	N-100							TERLS				83		
1980-Y369	2444451.21	1980 Jun 30 1700:00	N-100							G18P-4				89		
1980-Y383	2444451.31	1980 Jun 30 1930:00	N-100							G18P-4				90		
1980-Y384	2444457.56	1980 Aug 06 0130:00	N-100							UK				78		
1980-Y385	2444457.58	1980 Aug 06 0200:00	N-100							G18P-4				88		
1980-Y387	2444457.82	1980 Aug 06 0300:00	N-100							G18P-4				88		
1980-Y389	2444458.21	1980 Aug 06 1700:00	N-100							G18P-4				87		
1980-Y369	2444464.58	1980 Aug 13 0200:00	N-100							UK				83		
1980-Y370	2444465.08	1980 Aug 13 1400:00	N-100							UK				89		
1980-Y371	2444465.08	1980 Aug 13 1400:00	N-100							TERLS				84		
1980-Y372	2444465.25	1980 Aug 13 1800:00	N-100							G18P-4				88		
1980-Y373	2444465.31	1980 Aug 13 1930:00	N-100							G18P-4				87		
1980-Y377	2444467.99	1980 Aug 16 1150:00	N-100							TERLS				86		
1980-Y378	2444471.40	1980 Aug 19 2130:00	N-100							G18P-4				88		
1980-Y379	2444471.60	1980 Aug 20 0220:00	N-100							UK				88		
1980-Y380	2444472.08	1980 Aug 20 1400:00	N-100							TERLS				90		
1980-Y381	2444472.08	1980 Aug 20 1400:00	N-100							TERLS				82		

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Launch_Mission	FlightCode	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee_Km	Range_Km	Dest
1980-Y384	2444478.33	1980 Aug 26 20:00:00	M-100							GRSP-4				88		
1980-W808	2444478.46	1980 Aug 26 23:00:00	M-100							GRSP-4				79		
1980-Y386	2444478.59	1980 Aug 27 02:10:00	M-100							UK				88		
1980-Y388	2444479.08	1980 Aug 27 14:00:00	M-100							TERLS				87		
1980-Y389	2444479.08	1980 Aug 27 14:00:00	M-100							TERLS				82		
1980-Y391	2444485.72	1980 Sep 03 05:20:00	M-100							UK				88		
1980-Y392	2444486.01	1980 Sep 03 12:15:00	M-100							TERLS				83		
1980-Y394	2444486.08	1980 Sep 03 14:00:00	M-100							UK				87		
1980-Y395	2444486.17	1980 Sep 03 16:00:00	M-100							TERLS				88		
1980-Y398	2444486.33	1980 Sep 03 20:00:00	M-100							GRSP-4				88		
1980-Y399	2444492.38	1980 Sep 09 21:10:00	M-100							GRSP-4				84		
1980-Y400	2444493.60	1980 Sep 10 02:20:00	M-100							UK				88		
1980-Y401	2444493.08	1980 Sep 10 14:00:00	M-100							TERLS				88		
1980-Y402	2444493.08	1980 Sep 10 14:00:00	M-100							TERLS				84		
1980-Y405	2444500.08	1980 Sep 17 14:00:00	M-100							UK				87		
1980-Y406	2444500.08	1980 Sep 17 14:00:00	M-100							TERLS				88		
1980-Y407	2444500.08	1980 Sep 17 14:00:00	M-100							GRSP-4				85		
1980-Y409	2444500.17	1980 Sep 17 16:00:00	M-100							GRSP-4				86		
1980-Y411	2444500.22	1980 Sep 17 17:20:00	M-100							GRSP-4				86		
1980-Y413	2444506.58	1980 Sep 24 02:00:00	M-100							UK				817		
1980-Y415	2444506.90	1980 Sep 24 09:30	M-100	Ozone M-08-554	ISRU-S.554					TERLS				85		
1980-Y416	2444507.08	1980 Sep 24 14:00:00	M-100							UK				83		
1980-Y418	2444507.20	1980 Sep 24 16:50:00	M-100							TERLS				86		
1980-Y419	2444507.40	1980 Sep 24 21:30	M-100							GRSP-4				86		
1980-Y420	2444513.58	1980 Sep 24 21:30	M-100	Ozone M-08-556	ISRU-S.556					TERLS				817		
1980-Y421	2444521.08	1980 Oct 01 02:00:00	M-100							UK				87		
1980-Y422	2444514.08	1980 Oct 01 14:00:00	M-100							TERLS				83		
1980-Y423	2444514.28	1980 Oct 01 16:50:00	M-100							GRSP-4				86		
1980-Y424	2444520.58	1980 Oct 08 02:00:00	M-100							UK				87		
1980-Y425	2444521.08	1980 Oct 08 14:00:00	M-100							TERLS				85		
1980-Y426	2444521.08	1980 Oct 08 14:00:00	M-100							GRSP-4				86		
1980-Y427	2444521.20	1980 Oct 08 16:50:00	M-100							UK				84		
1980-Y428	2444527.58	1980 Oct 15 02:00:00	M-100							TERLS				86		
1980-Y429	2444528.08	1980 Oct 15 14:00:00	M-100							UK				88		
1980-Y430	2444528.08	1980 Oct 15 14:00:00	M-100							TERLS				88		
1980-Y431	2444528.22	1980 Oct 15 17:20:00	M-100							GRSP-4				87		
1980-Y432	2444528.22	1980 Oct 15 17:20:00	M-100							GRSP-4				87		
1980-Y433	2444528.35	1980 Oct 15 20:00:00	M-100							UK				89		
1980-Y434	2444534.61	1980 Oct 22 02:40:00	M-100							TERLS				81		
1980-Y435	2444535.08	1980 Oct 22 14:00:00	M-100							UK				78		
1980-Y436	2444535.12	1980 Oct 22 16:50:00	M-100							TERLS				89		
1980-Y437	2444536.20	1980 Oct 23 02:00:00	M-100							UK				89		
1980-Y438	2444536.29	1980 Oct 23 09:00:00	M-100							GRSP-4				84		
1980-Y439	2444541.98	1980 Oct 29 02:00:00	M-100							TERLS				86		
1980-Y440	2444542.08	1980 Oct 29 14:00:00	M-100							UK				82		
1980-Y441	2444542.91	1980 Oct 29 16:20:00	M-100							TERLS				82		
1980-Y442	2444542.91	1980 Oct 29 16:20:00	M-100							GRSP-4				87		
1980-Y443	2444542.91	1980 Oct 29 16:20:00	M-100							GRSP-4				87		
1980-Y444	2444542.91	1980 Oct 29 16:20:00	M-100							UK				89		
1980-Y445	2444546.98	1980 Nov 04 21:30:00	M-100							GRSP-4				89		
1980-Y446	2444546.98	1980 Nov 04 21:30:00	M-100							UK				87		
1980-Y447	2444548.08	1980 Nov 05 14:00:00	M-100							TERLS				84		
1980-Y448	2444548.08	1980 Nov 05 14:00:00	M-100							UK				84		
1980-Y449	2444552.98	1980 Nov 13 21:00:00	M-100							TERLS				71		
1980-Y450	2444552.98	1980 Nov 13 21:00:00	M-100							UK				80		
1980-Y451	2444556.10	1980 Nov 13 14:00:00	M-100							TERLS				80		
1980-Y452	2444556.10	1980 Nov 13 14:00:00	M-100							GRSP-4				87		
1980-Y453	2444562.38	1980 Nov 18 21:00:00	M-100							UK				80		
1980-Y454	2444562.92	1980 Nov 19 10:00:00	M-100							GRSP-4				86		
1980-Y455	2444563.05	1980 Nov 19 13:10:00	M-100							UK				86		
1980-Y456	2444563.05	1980 Nov 19 13:10:00	M-100							GRSP-4				87		
1980-Y457	2444564.85	1980 Nov 19 14:00:00	M-100							TERLS				86		
1980-Y458	2444564.85	1980 Nov 20 09:20:00	M-100							UK				82		
1980-Y459	2444569.38	1980 Nov 25 09:00:00	M-100							UK				86		
1980-Y460	2444569.38	1980 Nov 25 21:00:00	M-100							UK				89		
1980-Y461	2444570.08	1980 Nov 26 14:00:00	M-100							TERLS				85		
1980-Y462	2444570.08	1980 Nov 26 14:00:00	M-100							UK				85		
1980-Y463	2444570.17	1980 Nov 26 16:00:00	M-100							TERLS				92		
1980-Y464	2444570.17	1980 Nov 26 16:00:00	M-100							GRSP-4				88		
1980-Y465	2444576.58	1980 Dec 03 02:00:00	M-100							UK				88		
1980-Y466	2444577.08	1980 Dec 03 14:00:00	M-100							TERLS				88		
1980-Y467	2444577.08	1980 Dec 03 14:00:00	M-100							UK				86		
1980-Y468	2444577.21	1980 Dec 03 17:00:00	M-100							GRSP-4				87		
1980-Y469	2444578.88	1980 Dec 05 09:00:00	M-100							UK				80		
1980-Y470	2444578.88	1980 Dec 05 21:00:00	M-100							UK				68		
1980-Y471	2444583.38	1980 Dec 09 21:00:00	M-100							TERLS				88		
1980-Y472	2444583.38	1980 Dec 09 21:00:00	M-100							UK				86		
1980-Y473	2444584.04	1980 Dec 10 13:00:00	M-100							TERLS				86		
1980-Y474	2444584.10	1980 Dec 10 14:30:00	M-100							UK				82		
1980-Y475	2444584.26	1980 Dec 10 18:20:00	M-100							GRSP-4				70		
1980-Y476	2444585.60	1980 Dec 12 02:30:00	M-100							UK				92		
1980-Y477	2444585.76	1980 Dec 12 06:20:00	M-100							UK				77		
1980-Y478	2444585.93	1980 Dec 12 10:20:00	M-100							UK				96		
1980-Y479	2444585.93	1980 Dec 16 21:30:00	M-100							UK				92		
1980-Y480	2444590.40	1980 Dec 17 02:10:00	M-100							UK				91		
1980-Y481	2444590.59	1980 Dec 17 04:30:00	M-100							UK				69		
1980-Y482	2444590.69	1980 Dec 17 05:30:00	M-100							GRSP-4				84		
1980-Y483	2444590.73	1980 Dec 17 10:00:00	M-100							GRSP-4				78		
1980-Y484	2444591.08	1980 Dec 17 14:00:00	M-100							UK				85		
1980-Y485	2444591.08	1980 Dec 17 14:00:00	M-100							TERLS				82		
1980-Y486	2444591.08	1980 Dec 17 14:00:00	M-100							TERLS				82		

Launch_Tag	Launch_ID	Launch_Date	Lv_Type	Variant	Flight_ID	Flight	Launch_Mission	FlightCode	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee_Km	Range_Km	Dest
1980-W1130	2444692.48	1980 Dec 18 2330:00	M-100	-	-	-	-	-	-	UK	-	-	-	60	-	-
1980-7501	2444697.33	1980 Dec 23 2000:00	M-100	-	-	-	-	-	-	UK	-	-	-	90	-	-
1980-7502	2444697.67	1980 Dec 24 0400:00	M-100	-	-	-	-	-	-	GISP-4	-	-	-	91	-	-
1980-7503	2444698.08	1980 Dec 24 1400:00	M-100	-	-	-	-	-	-	MJD	-	-	-	93	-	-
1980-7504	2444698.08	1980 Dec 24 1400:00	M-100	-	-	-	-	-	-	TERLS	-	-	-	85	-	-
1980-7506	2444698.29	1980 Dec 24 1900:00	M-100	-	-	-	-	-	-	MJD	-	-	-	88	-	-
1980-7507	2444694.42	1980 Dec 30 2300:00	M-100	-	-	-	-	-	-	UK	-	-	-	91	-	-
1980-7508	2444694.46	1980 Dec 30 2300:00	M-100	-	-	-	-	-	-	GISP-4	-	-	-	87	-	-
1980-7510	2444694.58	1980 Dec 31 0200:00	M-100	-	-	-	-	-	-	MJD	-	-	-	87	-	-
1980-7511	2444695.08	1980 Dec 31 1400:00	M-100	-	-	-	-	-	-	TERLS	-	-	-	83	-	-
1981-Y01	2444696.33	1981 Jan 01 2000:00	M-100	-	-	-	-	-	-	UK	-	-	-	86	-	-
1981-Y02	2444699.33	1981 Jan 04 2000:00	M-100	-	-	-	-	-	-	UK	-	-	-	90	-	-
1981-Y03	2444610.17	1981 Jan 05 1600:00	M-100	-	-	-	-	-	-	GISP-4	-	-	-	89	-	-
1981-Y04	2444611.33	1981 Jan 06 2000:00	M-100	-	-	-	-	-	-	UK	-	-	-	92	-	-
1981-Y05	2444612.08	1981 Jan 07 1400:00	M-100	-	-	-	-	-	-	MJD	-	-	-	88	-	-
1981-Y06	2444612.08	1981 Jan 07 1400:00	M-100	-	-	-	-	-	-	TERLS	-	-	-	87	-	-
1981-Y07	2444612.17	1981 Jan 07 1600:00	M-100	-	-	-	-	-	-	UK	-	-	-	90	-	-
1981-Y08	2444613.33	1981 Jan 08 2000:00	M-100	-	-	-	-	-	-	UK	-	-	-	91	-	-
1981-Y09	2444614.17	1981 Jan 09 1600:00	M-100	-	-	-	-	-	-	UK	-	-	-	88	-	-
1981-Y10	2444616.33	1981 Jan 11 2000:00	M-100	-	-	-	-	-	-	UK	-	-	-	87	-	-
1981-Y11	2444617.17	1981 Jan 12 1600:00	M-100	-	-	-	-	-	-	UK	-	-	-	82	-	-
1981-Y12	2444618.33	1981 Jan 13 2000:00	M-100	-	-	-	-	-	-	UK	-	-	-	89	-	-
1981-Y14	2444618.33	1981 Jan 13 2000:00	M-100	-	-	-	-	-	-	UK	-	-	-	89	-	-
1981-Y15	2444618.58	1981 Jan 14 0400:00	M-100	-	-	-	-	-	-	UK	-	-	-	85	-	-
1981-Y16	2444618.69	1981 Jan 14 0400:00	M-100	-	-	-	-	-	-	MJD	-	-	-	81	-	-
1981-Y17	2444619.08	1981 Jan 14 1400:00	M-100	-	-	-	-	-	-	TERLS	-	-	-	86	-	-
1981-Y18	2444619.12	1981 Jan 14 1400:00	M-100	-	-	-	-	-	-	UK	-	-	-	88	-	-
1981-Y19	2444619.12	1981 Jan 14 1400:00	M-100	-	-	-	-	-	-	UK	-	-	-	86	-	-
1981-Y20	2444620.33	1981 Jan 15 2000:00	M-100	-	-	-	-	-	-	UK	-	-	-	88	-	-
1981-Y21	2444621.12	1981 Jan 16 1450:00	M-100	-	-	-	-	-	-	UK	-	-	-	85	-	-
1981-Y22	2444623.33	1981 Jan 18 2000:00	M-100	-	-	-	-	-	-	UK	-	-	-	88	-	-
1981-Y23	2444624.17	1981 Jan 19 1600:00	M-100	-	-	-	-	-	-	UK	-	-	-	86	-	-
1981-Y24	2444625.39	1981 Jan 20 2120:00	M-100	-	-	-	-	-	-	UK	-	-	-	78	-	-
1981-Y25	2444625.39	1981 Jan 21 0400:00	M-100	-	-	-	-	-	-	UK	-	-	-	79	-	-
1981-Y26	2444626.07	1981 Jan 21 1340:00	M-100	-	-	-	-	-	-	UK	-	-	-	89	-	-
1981-Y28	2444626.08	1981 Jan 21 1400:00	M-100	-	-	-	-	-	-	UK	-	-	-	85	-	-
1981-Y29	2444626.08	1981 Jan 21 1500:00	M-100	-	-	-	-	-	-	TERLS	-	-	-	81	-	-
1981-Y30	2444626.12	1981 Jan 22 2000:00	M-100	-	-	-	-	-	-	MJD	-	-	-	87	-	-
1981-Y31	2444627.33	1981 Jan 22 1500:00	M-100	-	-	-	-	-	-	UK	-	-	-	91	-	-
1981-Y32	2444628.12	1981 Jan 23 1500:00	M-100	-	-	-	-	-	-	UK	-	-	-	74	-	-
1981-Y33	2444629.08	1981 Jan 24 1400:00	M-100	-	-	-	-	-	-	SHIR	LP1	-	-	82	-	-
1981-Y34	2444629.36	1981 Jan 25 2340:00	M-100	-	-	-	-	-	-	SHIR	LP2	-	-	85	-	-
1981-Y35	2444631.04	1981 Jan 26 1500:00	M-100	-	-	-	-	-	-	SHIR	LP3	-	-	82	-	-
1981-Y36	2444631.33	1981 Jan 26 1600:00	M-100	-	-	-	-	-	-	SHIR	LP4	-	-	89	-	-
1981-Y37	2444632.33	1981 Jan 27 0500:00	M-100	-	-	-	-	-	-	UK	-	-	-	86	-	-
1981-Y38	2444632.71	1981 Jan 27 0500:00	M-100	-	-	-	-	-	-	UK	-	-	-	86	-	-
1981-Y39	2444632.71	1981 Jan 28 1340:00	M-100	-	-	-	-	-	-	UK	-	-	-	84	-	-
1981-Y40	2444633.06	1981 Jan 28 1400:00	M-100	-	-	-	-	-	-	UK	-	-	-	92	-	-
1981-Y41	2444633.06	1981 Jan 28 1400:00	M-100	-	-	-	-	-	-	MJD	-	-	-	83	-	-
1981-Y42	2444633.06	1981 Jan 28 1400:00	M-100	-	-	-	-	-	-	TERLS	-	-	-	93	-	-
1981-Y43	2444633.06	1981 Jan 28 1400:00	M-100	-	-	-	-	-	-	UK	-	-	-	85	-	-
1981-Y44	2444633.45	1981 Jan 28 2200:00	M-100	-	-	-	-	-	-	UK	-	-	-	86	-	-
1981-Y45	2444634.45	1981 Jan 30 1500:00	M-100	-	-	-	-	-	-	UK	-	-	-	90	-	-
1981-Y46	2444635.45	1981 Jan 30 1500:00	M-100	-	-	-	-	-	-	UK	-	-	-	90	-	-
1981-Y47	2444635.45	1981 Jan 30 1500:00	M-100	-	-	-	-	-	-	UK	-	-	-	85	-	-
1981-Y48	2444636.03	1981 Feb 02 1300:00	M-100	-	-	-	-	-	-	UK	-	-	-	78	-	-
1981-Y49	2444636.03	1981 Feb 02 1300:00	M-100	-	-	-	-	-	-	UK	-	-	-	88	-	-
1981-Y50	2444636.03	1981 Feb 02 1300:00	M-100	-	-	-	-	-	-	UK	-	-	-	88	-	-
1981-Y51	2444637.06	1981 Feb 06 1600:00	M-100	-	-	-	-	-	-	UK	-	-	-	88	-	-
1981-Y52	2444647.08	1981 Feb 11 1400:00	M-100	-	-	-	-	-	-	UK	-	-	-	84	-	-
1981-Y53	2444647.08	1981 Feb 11 1400:00	M-100	-	-	-	-	-	-	MJD	-	-	-	87	-	-
1981-Y54	2444648.33	1981 Feb 12 2000:00	M-100	-	-	-	-	-	-	TERLS	-	-	-	87	-	-
1981-Y55	2444648.33	1981 Feb 12 2000:00	M-100	-	-	-	-	-	-	UK	-	-	-	84	-	-
1981-Y56	2444649.21	1981 Feb 13 1700:00	M-100	-	-	-	-	-	-	UK	-	-	-	87	-	-
1981-Y57	2444651.06	1981 Feb 15 1330:00	M-100	-	-	-	-	-	-	SHIR	LP6	-	-	84	-	-
1981-Y58	2444653.06	1981 Feb 17 1330:00	M-100	-	-	-	-	-	-	SHIR	LP7	-	-	84	-	-
1981-Y59	2444653.33	1981 Feb 17 1440:00	M-100	-	-	-	-	-	-	SHIR	LP8	-	-	84	-	-
1981-Y60	2444653.33	1981 Feb 17 1440:00	M-100	-	-	-	-	-	-	SHIR	LP9	-	-	84	-	-
1981-Y61	2444654.06	1981 Feb 18 1330:00	M-100	-	-	-	-	-	-	UK	-	-	-	72	-	-
1981-Y62	2444654.06	1981 Feb 18 1400:00	M-100	-	-	-	-	-	-	UK	-	-	-	83	-	-
1981-Y63	2444654.11	1981 Feb 18 1400:00	M-100	-	-	-	-	-	-	MJD	-	-	-	81	-	-
1981-Y64	2444654.29	1981 Feb 18 1900:00	M-100	-	-	-	-	-	-	TERLS	-	-	-	83	-	-
1981-Y65	2444655.33	1981 Feb 19 2000:00	M-100	-	-	-	-	-	-	UK	-	-	-	89	-	-
1981-Y66	2444655.40	1981 Feb 19 2130:00	M-100	-	-	-	-	-	-	UK	-	-	-	87	-	-
1981-Y67	2444655.40	1981 Feb 19 2130:00	M-100	-	-	-	-	-	-	UK	-	-	-	87	-	-
1981-Y69	2444657.12	1981 Feb 21 1500:00	M-100	-	-	-	-	-	-	UK	-	-	-	80	-	-
1981-Y70	2444659.12	1981 Feb 23 1500:00	M-100	-	-	-	-	-	-	UK	-	-	-	81	-	-
1981-Y71	2444660.08	1981 Feb 24 1350:00	M-100	-	-	-	-	-	-	SHIR	LP10	-	-	87	-	-
1981-Y72	2444660.40	1981 Feb 24 2130:00	M-100	-	-	-	-	-	-	SHIR	LP11	-	-	90	-	-
1981-Y73	2444661.08	1981 Feb 25 1400:00	M-100	-	-	-	-	-	-	UK	-	-	-	81	-	-
1981-Y74	2444661.09	1981 Feb 25 1407:00	M-100	-	-	-	-	-	-	UK	-	-	-	87	-	-
1981-Y75	2444661.12	1981 Feb 25 1500:00	M-100	-	-	-	-	-	-	MJD	-	-	-	90	-	-
1981-Y76	2444661.17	1981 Feb 25 1500:00	M-100	-	-	-	-	-	-	UK	-	-	-	87	-	-
1981-Y77	2444661.17	1981 Feb 25 1500:00	M-100	-	-	-	-	-	-	UK	-	-	-	88	-	-
1981-Y78	2444661.21	1981 Feb 25 1700:00	M-100	-	-	-	-	-	-	UK	-	-	-	90	-	-

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Launch_Mission	FlightCode	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee_Km	Range_Km	Dest
1981-Y79	2444662.35	1981 Feb 26 2030:00	M-100							UK				87		
1981-Y82	2444663.17	1981 Feb 27 1600:00	M-100							GRSP-4				80		
1981-Y84	2444665.53	1981 Mar 02 0040:00	M-100							UK				84		
1981-W132	2444665.73	1981 Mar 02 0530:00	M-100						SHIR	GRSSIC				63		
1981-W139	2444667.24	1981 Mar 03 1740:00	M-100							LP12				77		
1981-Y85	2444667.35	1981 Mar 03 2030:00	M-100							UK				89		
1981-Y86	2444668.08	1981 Mar 04 1400:00	M-100							MLD				88		
1981-Y87	2444668.08	1981 Mar 04 1400:00	M-100						SHIR	TERLS				82		
1981-Y88	2444668.19	1981 Mar 04 1640:00	M-100							GRSSIC				89		
1981-Y89	2444668.21	1981 Mar 04 1700:00	M-100						SHIR	GRSP-4				80		
1981-Y90	2444669.33	1981 Mar 05 2000:00	M-100							UK				85		
1981-Y92	2444670.40	1981 Mar 06 2130:00	M-100						SHIR	GRSP-4				88		
1981-Y93	2444671.17	1981 Mar 07 1600:00	M-100							GRSSIC				92		
1981-W151	2444671.21	1981 Mar 07 1700:00	M-100						SHIR	GRSSIC				77		
1981-Y94	2444674.33	1981 Mar 10 2000:00	M-100							UK				80		
1981-Y96	2444675.08	1981 Mar 11 1400:00	M-100							MLD				89		
1981-Y99	2444675.17	1981 Mar 11 1600:00	M-100							TERLS				83		
1981-Y98	2444676.59	1981 Mar 13 0210:00	M-100							GRSP-4				87		
1981-Y99	2444677.17	1981 Mar 13 2000:00	M-100							UK				81		
1981-Y100	2444681.33	1981 Mar 17 2000:00	M-100							GRSP-4				92		
1981-Y101	2444682.08	1981 Mar 18 1400:00	M-100							MLD				72		
1981-W176	2444682.08	1981 Mar 18 1400:00	M-100							TERLS				90		
1981-Y102	2444682.17	1981 Mar 18 1600:00	M-100							GRSP-4				93		
1981-Y103	2444683.33	1981 Mar 19 2000:00	M-100							UK				76		
1981-W181	2444683.33	1981 Mar 19 2000:00	M-100							GRSP-4				63		
1981-Y104	2444683.80	1981 Mar 20 0710:00	M-100							UK				90		
1981-Y105	2444686.35	1981 Mar 24 2020:00	M-100							MLD				86		
1981-Y107	2444689.08	1981 Mar 25 1400:00	M-100							TERLS				90		
1981-Y106	2444689.08	1981 Mar 25 1400:00	M-100							GRSP-4				82		
1981-Y110	2444689.18	1981 Mar 25 1620:00	M-100							UK				72		
1981-W204	2444690.46	1981 Mar 26 2300:00	M-100							GRSP-4				85		
1981-Y112	2444691.17	1981 Mar 27 1600:00	M-100							UK				85		
1981-Y113	2444692.17	1981 Mar 28 1600:00	M-100							GRSP-4				83		
1981-Y114	2444692.22	1981 Mar 28 1720:00	M-100						SHIR	GRSP-4	LP15			83		
1981-Y115	2444692.27	1981 Mar 28 1830:00	M-100						SHIR	GRSSIC	LP15			80		
1981-Y116	2444693.19	1981 Mar 29 1630:00	M-100						SHIR	GRSSIC	LP15			94		
1981-Y117	2444693.24	1981 Mar 29 1740:00	M-100						SHIR	GRSSIC	LP15			97		
1981-Y118	2444693.28	1981 Mar 29 1850:00	M-100						SHIR	GRSSIC	LP15			95		
1981-W120	2444694.18	1981 Mar 29 1620:00	M-100						SHIR	GRSSIC	LP15			97		
1981-Y121	2444694.23	1981 Mar 30 1530:00	M-100						SHIR	GRSSIC	LP15			96		
1981-Y122	2444696.39	1981 Mar 31 2120:00	M-100							MLD				85		
1981-Y123	2444696.08	1981 Apr 01 1400:00	M-100							TERLS				89		
1981-Y124	2444696.09	1981 Apr 01 1410:00	M-100							GRSP-4				82		
1981-Y127	2444696.51	1981 Apr 06 0920:00	M-100							UK				88		
1981-Y130	2444700.85	1981 Apr 06 0920:00	M-100							GRSP-4				87		
1981-Y131	2444701.80	1981 Apr 07 0710:00	M-100							UK				88		
1981-Y132	2444702.95	1981 Apr 07 2030:00	M-100							GRSP-4				84		
1981-W203	2444702.95	1981 Apr 08 1400:00	M-100							TERLS				70		
1981-Y135	2444703.01	1981 Apr 08 1400:00	M-100							MLD				86		
1981-W224	2444703.33	1981 Apr 14 2000:00	M-100							UK				52		
1981-Y147	2444710.08	1981 Apr 15 1400:00	M-100							MLD				85		
1981-Y148	2444710.08	1981 Apr 15 1400:00	M-100							TERLS				84		
1981-Y149	2444710.21	1981 Apr 15 1700:00	M-100							GRSP-4				90		
1981-Y150	2444716.33	1981 Apr 21 2000:00	M-100							UK				80		
1981-Y152	2444716.85	1981 Apr 21 0130:00	M-100							GRSP-4				83		
1981-Y153	2444717.08	1981 Apr 22 1400:00	M-100							MLD				84		
1981-Y154	2444717.08	1981 Apr 22 1400:00	M-100							TERLS				87		
1981-Y155	2444717.08	1981 Apr 24 1400:00	M-100							GRSP-4				84		
1981-Y158	2444719.21	1981 Apr 24 1700:00	M-100							UK				85		
1981-Y159	2444723.33	1981 Apr 28 2000:00	M-100							MLD				85		
1981-Y160	2444724.08	1981 Apr 29 1400:00	M-100							GRSP-4				85		
1981-Y161	2444724.08	1981 Apr 29 1400:00	M-100							TERLS				85		
1981-Y163	2444724.31	1981 Apr 29 1930:00	M-100							GRSP-4				81		
1981-Y164	2444727.27	1981 Apr 02 1830:00	M-100							TERLS				85		
1981-Y165	2444728.08	1981 Apr 03 1400:00	M-100							GRSSIC	LP1			85		
1981-Y166	2444729.33	1981 Apr 04 2000:00	M-100							TERLS	LP2			84		
1981-Y167	2444730.33	1981 Apr 05 2000:00	M-100							UK				83		
1981-Y168	2444731.08	1981 Apr 06 1400:00	M-100							MLD				84		
1981-Y169	2444731.08	1981 Apr 06 1400:00	M-100							TERLS				84		
1981-Y171	2444734.27	1981 Apr 09 1835:00	M-100							GRSSIC	LP3			84		
1981-Y172	2444737.21	1981 Apr 12 1700:00	M-100							KORO	LP4			82		
1981-W336	2444737.26	1981 Apr 12 1810:00	M-100							KORO	LP4			76		
1981-Y173	2444737.33	1981 Apr 12 2000:00	M-100							UK				84		
1981-Y174	2444738.08	1981 Apr 13 1400:00	M-100							MLD				85		
1981-Y175	2444738.08	1981 Apr 13 1400:00	M-100							TERLS				85		
1981-Y177	2444738.21	1981 Apr 13 1700:00	M-100							GRSP-4				84		
1981-Y179	2444739.25	1981 Apr 14 1800:00	M-100							GRSSIC	LP5			88		
1981-Y180	2444739.33	1981 Apr 14 2000:00	M-100							KORO	LP6			90		
1981-Y181	2444740.08	1981 Apr 15 1400:00	M-100							TERLS	LP7			80		
1981-Y182	2444740.29	1981 Apr 15 1900:00	M-100							KORO	LP8			857		
1981-Y183	2444742.12	1981 Apr 17 1500:00	M-100							KORO	LP8			92		
1981-Y184	2444742.17	1981 Apr 17 1600:00	M-100							KORO	LP9			76		
1981-W351	2444743.21	1981 Apr 18 1700:00	M-100							GRSSIC	LP10			79		
1981-W352	2444744.21	1981 Apr 19 1700:00	M-100							GRSSIC	LP10			79		







Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Launch_Mission	FlightCode	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee_Km	Range_Km	Dest
1981-W695	2444905.46	1981 Oct 27 2300:00	M-100											75		
1981-Y379	2444906.08	1981 Oct 28 1400:00	M-100							GTSP-4				83		
1981-Y380	2444906.10	1981 Oct 28 1420:00	M-100							TERLS				85		
1981-Y382	2444911.08	1981 Nov 02 1400:00	M-100							TERLS				84		
1981-Y383	2444912.33	1981 Nov 03 2000:00	M-100							UK				87		
1981-Y384	2444912.51	1981 Nov 04 0010:00	M-100							GTSP-4				82		
1981-Y385	2444913.08	1981 Nov 04 1400:00	M-100							TERLS				85		
1981-Y386	2444913.33	1981 Nov 04 2000:00	M-100							UK				92		
1981-Y387	2444913.62	1981 Nov 05 0300:00	M-100							UK				83		
1981-Y390	2444919.37	1981 Nov 10 2050:00	M-100							UK				94		
1981-Y391	2444919.48	1981 Nov 10 2330:00	M-100							GTSP-4				83		
1981-Y392	2444919.69	1981 Nov 11 0920:00	M-100							TERLS				82		
1981-Y393	2444920.08	1981 Nov 11 1400:00	M-100							TERLS				82		
1981-Y394	2444920.08	1981 Nov 11 1400:00	M-100							TERLS				84		
1981-Y395	2444920.40	1981 Nov 11 2135:00	M-100							TERLS				82		
1981-Y396	2444920.90	1981 Nov 12 0930:00	M-100		Ozone M-08-621	ISRU-S.621				TERLS				84		
1981-Y407	2444925.15	1981 Nov 16 1540:00	M-100		Ozone M-08-622	ISRU-S.622				TERLS				83		
1981-Y408	2444926.40	1981 Nov 17 2130:00	M-100							GTSP-4				86		
1981-Y409	2444926.46	1981 Nov 17 2300:00	M-100							UK				90		
1981-Y410	2444926.46	1981 Nov 18 1400:00	M-100							TERLS				83		
1981-Y411	2444927.08	1981 Nov 18 1400:00	M-100							TERLS				85		
1981-Y412	2444931.94	1981 Nov 23 1040:00	M-100							GTSP-4				86		
1981-Y413	2444932.08	1981 Nov 23 1400:00	M-100							TERLS				83		
1981-Y415	2444933.33	1981 Nov 24 2000:00	M-100							UK				85		
1981-Y416	2444934.08	1981 Nov 25 1400:00	M-100							TERLS				87		
1981-Y417	2444934.15	1981 Nov 25 1540:00	M-100							TERLS				85		
1981-Y419	2444939.08	1981 Nov 30 1400:00	M-100							TERLS				84		
1981-Y450	2444938.50	1981 Dec	M-100							TERLS				807		
1981-Y451	2444938.50	1981 Dec	M-100							TERLS				807		
1981-Y452	2444938.50	1981 Dec	M-100							TERLS				807		
1981-Y453	2444938.50	1981 Dec	M-100							TERLS				807		
1981-Y420	2444940.33	1981 Dec 01 2000:00	M-100							UK				85		
1981-Y421	2444940.76	1981 Dec 02 0620:00	M-100							GTSP-4				88		
1981-Y422	2444941.08	1981 Dec 02 1400:00	M-100							TERLS				81		
1981-Y765	2444942.33	1981 Dec 03 2000:00	M-100							UK				82		
1981-Y424	2444942.71	1981 Dec 04 0500:00	M-100							GTSP-4				95		
1981-Y426	2444947.33	1981 Dec 08 2000:00	M-100							UK				85		
1981-Y429	2444947.36	1981 Dec 09 1100:00	M-100							TERLS				88		
1981-Y438	2444948.08	1981 Dec 09 1400:00	M-100							TERLS				88		
1981-Y439	2444948.08	1981 Dec 09 1400:00	M-100							TERLS				86		
1981-Y451	2444948.37	1981 Dec 10 2000:00	M-100							UK				89		
1981-Y451	2444948.37	1981 Dec 10 2000:00	M-100							UK				89		
1981-Y452	2444950.11	1981 Dec 11 0400:00	M-100							GTSP-4				81		
1981-Y454	2444954.25	1981 Dec 15 2000:00	M-100							GTSP-4				90		
1981-Y455	2444954.88	1981 Dec 16 0150:00	M-100							GTSP-4				90		
1981-Y456	2444955.93	1981 Dec 17 1600:00	M-100							TERLS				76		
1981-Y458	2444955.93	1981 Dec 17 2000:00	M-100							UK				86		
1981-Y459	2444955.93	1981 Dec 17 2000:00	M-100							UK				86		
1981-Y460	2444957.31	1981 Dec 18 1930:00	M-100							GTSP-4				95		
1981-Y460	2444957.31	1981 Dec 18 1930:00	M-100							UK				85		
1981-Y441	2444961.33	1981 Dec 22 2000:00	M-100							TERLS				84		
1981-Y441	2444961.33	1981 Dec 22 2000:00	M-100							UK				84		
1981-Y443	2444962.95	1981 Dec 23 1400:00	M-100							GTSP-4				93		
1981-Y444	2444962.95	1981 Dec 23 2000:00	M-100							UK				89		
1981-Y445	2444962.95	1981 Dec 24 2000:00	M-100							UK				87		
1981-Y446	2444962.95	1981 Dec 25 1900:00	M-100							GTSP-4				857		
1981-Y446	2444962.95	1981 Dec 25 1900:00	M-100							UK				84		
1981-Y447	2444965.08	1981 Dec 29 2000:00	M-100							TERLS				86		
1981-Y448	2444965.08	1981 Dec 29 2000:00	M-100							UK				84		
1981-Y448	2444965.08	1981 Dec 31 0400:00	M-100							GTSP-4				86		
1981-Y448	2444965.08	1981 Dec 31 0400:00	M-100							UK				90		
1982-Y01	2444971.34	1982 Jan 04 1120:00	M-100							GTSP-4				89		
1982-Y02	2444973.97	1982 Jan 04 1120:00	M-100							UK				89		
1982-Y03	2444975.34	1982 Jan 05 2005:00	M-100							GTSP-4				87		
1982-Y04	2444975.34	1982 Jan 05 2005:00	M-100							UK				84		
1982-Y05	2444976.11	1982 Jan 06 0345:00	M-100							TERLS				80		
1982-Y06	2444976.11	1982 Jan 06 1430:00	M-100							UK				88		
1982-Y06	2444976.11	1982 Jan 06 1440:00	M-100							UK				89		
1982-Y11	2444977.34	1982 Jan 07 2005:00	M-100							TERLS				80		
1982-Y10	2444982.34	1982 Jan 12 2005:00	M-100							UK				75		
1982-Y10	2444982.34	1982 Jan 12 2005:00	M-100							UK				88		
1982-Y10	2444983.10	1982 Jan 13 1420:00	M-100							TERLS				82		
1982-Y13	2444983.50	1982 Jan 14 0000:00	M-100							GTSP-4				86		
1982-Y14	2444984.08	1982 Jan 14 1400:00	M-100							TERLS				86		
1982-Y15	2444984.34	1982 Jan 14 2005:00	M-100							UK				90		
1982-Y18	2444989.29	1982 Jan 19 1900:00	M-100							GTSP-4				87		
1982-Y19	2444989.34	1982 Jan 19 2005:00	M-100							UK				91		
1982-Y20	2444989.57	1982 Jan 20 0140:00	M-100							GTSP-4				83		
1982-Y22	2444989.79	1982 Jan 20 0700:00	M-100							GTSP-4				80		
1982-Y23	2444990.08	1982 Jan 20 1400:00	M-100							TERLS				84		
1982-Y42	2444990.10	1982 Jan 20 1420:00	M-100							UK				78		
1982-Y24	2444991.34	1982 Jan 21 2005:00	M-100							TERLS				85		
1982-Y26	2444996.34	1982 Jan 26 2008:00	M-100							UK				82		
1982-Y27	2444997.08	1982 Jan 27 1400:00	M-100							UK				85		
1982-Y27	2444997.10	1982 Jan 27 1420:00	M-100							TERLS				56		
1982-Y29	2444997.15	1982 Jan 27 1530:00	M-100							UK				84		
1982-Y72	2444998.34	1982 Jan 28 2005:00	M-100							TERLS				82		
1982-Y30	2444998.65	1982 Jan 28 0330:00	M-100							UK				84		
1982-Y33	2445003.34	1982 Feb 02 2005:00	M-100							GTSP-4				92		
1982-Y34	2445003.64	1982 Feb 03 0325:00	M-100							UK				85		
1982-Y35	2445004.08	1982 Feb 03 1400:00	M-100							TERLS				83		
1982-Y36	2445004.10	1982 Feb 03 1420:00	M-100							UK				86		

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Launch_Mission	FlightCode	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee_Km	Range_Km	Dest
1982-Y38	2445005.34	1982 Feb 04 2005:00	N-100							UK	LP1			85		
1982-Y39	2445009.00	1982 Feb 08 1200:00	N-100						KURO	GNS2B				85		
1982-Y40	2445010.34	1982 Feb 09 2005:00	N-100							UK				87		
1982-M103	2445011.00	1982 Feb 10 1200:00	N-100						KURO	GNS2B	LP2			79		
1982-Y41	2445011.06	1982 Feb 10 1330:00	N-100							G18P-4				83		
1982-Y42	2445011.08	1982 Feb 10 1400:00	N-100							TERLS				84		
1982-Y43	2445011.10	1982 Feb 10 1420:00	N-100							MLD				88		
1982-Y44	2445011.12	1982 Feb 10 1500:00	N-100							G18P-4				82		
1982-Y45	2445012.34	1982 Feb 11 2005:00	N-100							UK				86		
1982-Y46	2445017.34	1982 Feb 16 2005:00	N-100							UK				87		
1982-Y47	2445017.62	1982 Feb 17 0300:00	N-100							TERLS				87		
1982-Y48	2445018.08	1982 Feb 17 1400:00	N-100							MLD				87		
1982-Y49	2445018.10	1982 Feb 17 1420:00	N-100							GNS2B	LP3			86		
1982-Y50	2445019.00	1982 Feb 18 1200:00	N-100							UK				91		
1982-Y51	2445019.77	1982 Feb 19 0635:00	N-100							UK				83		
1982-Y52	2445019.91	1982 Feb 19 1200:00	N-100							UK				90		
1982-Y53	2445020.00	1982 Feb 19 1200:00	N-100							GNS2B	LP4			83		
1982-Y54	2445024.38	1982 Feb 23 2105:00	N-100							UK				89		
1982-Y55	2445024.62	1982 Feb 24 0300:00	N-100							G18P-4				84		
1982-Y56	2445025.10	1982 Feb 24 1420:00	N-100							MLD				83		
1982-Y57	2445025.12	1982 Feb 24 1500:00	N-100							TERLS				93		
1982-Y147	2445026.34	1982 Feb 25 2005:00	N-100							UK				77		
1982-Y148	2445031.34	1982 Mar 02 2005:00	N-100							UK				91		
1982-Y149	2445032.10	1982 Mar 03 1420:00	N-100							MLD				84		
1982-Y150	2445032.12	1982 Mar 03 1500:00	N-100							TERLS				86		
1982-Y151	2445032.29	1982 Mar 03 1900:00	N-100							G18P-4				90		
1982-Y152	2445033.12	1982 Mar 04 1500:00	N-100							UK				91		
1982-Y153	2445033.34	1982 Mar 04 2005:00	N-100							GNS2B	LP5			85		
1982-Y154	2445036.08	1982 Mar 07 1400:00	N-100						KURO					89		
1982-Y155	2445036.14	1982 Mar 07 1520:00	N-100							GNS2B	LP5			74		
1982-Y156	2445036.34	1982 Mar 09 2005:00	N-100							GNS2B				85		
1982-Y157	2445036.58	1982 Mar 10 0200:00	N-100							UK				91		
1982-Y158	2445039.08	1982 Mar 10 1400:00	N-100							TERLS				87		
1982-Y159	2445039.14	1982 Mar 10 1520:00	N-100							GNS2B	LP6			83		
1982-Y160	2445039.26	1982 Mar 10 1850:00	N-100							MLD				89		
1982-Y161	2445040.34	1982 Mar 11 2005:00	N-100							UK				87		
1982-Y162	2445041.27	1982 Mar 12 1700:00	N-100							GNS2B	LP7			75		
1982-Y163	2445041.29	1982 Mar 12 1825:00	N-100							KURO	LP8			91		
1982-Y164	2445042.86	1982 Mar 14 0640:00	N-100							GNS2B				91		
1982-Y165	2445044.21	1982 Mar 15 1700:00	N-100							GNS2B	LP9			83		
1982-Y166	2445045.21	1982 Mar 16 1700:00	N-100							GNS2B	LP10			83		
1982-Y167	2445046.24	1982 Mar 16 2005:00	N-100							GNS2B	LP11			83		
1982-Y168	2445046.58	1982 Mar 17 0200:00	N-100							UK				83		
1982-Y169	2445046.10	1982 Mar 17 1420:00	N-100							G18P-4				81		
1982-Y170	2445046.21	1982 Mar 17 1700:00	N-100							TERLS				85		
1982-Y171	2445047.21	1982 Mar 18 1700:00	N-100							GNS2B	LP12			89		
1982-Y172	2445047.34	1982 Mar 18 2005:00	N-100							GNS2B	LP13			86		
1982-Y173	2445048.29	1982 Mar 19 1800:00	N-100							UK				91		
1982-Y174	2445048.34	1982 Mar 19 2005:00	N-100							GNS2B	LP14			71		
1982-Y175	2445048.59	1982 Mar 20 1700:00	N-100							GNS2B	LP15			91		
1982-Y176	2445050.22	1982 Mar 21 1720:00	N-100							GNS2B	LP16			83		
1982-Y177	2445050.32	1982 Mar 22 2005:00	N-100							GNS2B	LP17			89		
1982-Y178	2445052.34	1982 Mar 24 0150:00	N-100							UK				83		
1982-Y179	2445052.58	1982 Mar 24 0150:00	N-100							G18P-4				85		
1982-Y180	2445052.79	1982 Mar 24 0700:00	N-100							G18P-4				88		
1982-Y181	2445052.94	1982 Mar 24 1040:00	N-100							G18P-4				87		
1982-Y182	2445052.94	1982 Mar 24 1400:00	N-100							TERLS				82		
1982-Y183	2445052.98	1982 Mar 24 1430:00	N-100							MLD				79		
1982-Y184	2445053.10	1982 Mar 24 1430:00	N-100							GNS2B	LP18			88		
1982-Y185	2445054.23	1982 Mar 25 1735:00	N-100							UK				86		
1982-Y186	2445054.34	1982 Mar 25 2005:00	N-100							GNS2B				85		
1982-Y187	2445056.17	1982 Mar 27 1600:00	N-100							UK				86		
1982-Y188	2445056.21	1982 Mar 27 1700:00	N-100							GNS2B	LP19			85		
1982-Y189	2445057.19	1982 Mar 28 1630:00	N-100							KURO	LP19			85		
1982-Y190	2445057.23	1982 Mar 28 1735:00	N-100							GNS2B				90		
1982-Y191	2445058.17	1982 Mar 29 1600:00	N-100							NER				90		
1982-Y192	2445058.23	1982 Mar 29 1730:00	N-100							GNS2B	LP20			89		
1982-Y193	2445059.34	1982 Mar 30 2005:00	N-100							GNS2B				90		
1982-Y194	2445059.57	1982 Mar 31 0140:00	N-100							UK				82		
1982-Y195	2445060.08	1982 Mar 31 0400:00	N-100							G18P-4				81		
1982-Y196	2445060.10	1982 Mar 31 1430:00	N-100							G18P-4				79		
1982-Y197	2445066.33	1982 Apr 06 2000:00	N-100							TERLS				85		
1982-Y198	2445067.08	1982 Apr 07 1400:00	N-100							MLD				89		
1982-Y199	2445067.19	1982 Apr 07 1640:00	N-100							UK				90		
1982-Y200	2445067.21	1982 Apr 07 1700:00	N-100							GNS2B	LP20			83		
1982-Y201	2445067.30	1982 Apr 07 1940:00	N-100							TERLS				84		
1982-Y202	2445070.81	1982 Apr 11 0730:00	N-100							G18P-4				86		
1982-Y203	2445073.65	1982 Apr 14 0330:00	N-100							MLD				87		
1982-Y204	2445074.08	1982 Apr 14 1400:00	N-100							G18P-4				83		
1982-Y205	2445074.98	1982 Apr 14 1400:00	N-100							TERLS				87		
1982-Y206	2445078.83	1982 Apr 19 0800:00	N-100							UK				82		
1982-Y207	2445078.88	1982 Apr 19 0900:00	N-100							UK				90		
1982-Y208	2445080.38	1982 Apr 20 2100:00	N-100							G18P-4				90		
1982-Y209	2445080.80	1982 Apr 21 0800:00	N-100							G18P-4				84		
1982-Y210	2445081.83	1982 Apr 21 1400:00	N-100							MLD				86		





Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Launch_Mission	FlightCode	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee_Km	Range_Km	Dest
1982-Y401	2445304.33	1982 Nov 30 2000:00	M-100							UK				88		
1982-Y402	2445304.97	1982 Dec 01 1115:00	M-100							G1SP-4				90		
1982-Y403	2445305.03	1982 Dec 01 1245:00	M-100							TERLS				93		
1982-Y404	2445305.08	1982 Dec 01 1400:00	M-100							MLD				85?		
1982-Y405	2445305.10	1982 Dec 01 1420:00	M-100							TERLS				83		
1982-Y406	2445305.29	1982 Dec 01 1900:00	M-100						VUKV	G8S2E	LP3			87		
1982-Y407	2445306.08	1982 Dec 02 1400:00	M-100							TERLS				85?		
1982-Y408	2445306.34	1982 Dec 02 2005:00	M-100							UK				91		
1982-Y409	2445307.18	1982 Dec 03 1620:00	M-100							G1SP-4				93		
1982-Y410	2445309.31	1982 Dec 05 1925:00	M-100							G8S2E	LP4			87		
1982-Y411	2445311.29	1982 Dec 07 1900:00	M-100							UK				85		
1982-Y412	2445311.34	1982 Dec 07 2015:00	M-100							TERLS				88		
1982-Y413	2445311.97	1982 Dec 08 1110:00	M-100							G1SP-4				79		
1982-Y414	2445312.11	1982 Dec 08 1441:00	M-100							G8S2E	LP5			87		
1982-Y415	2445312.29	1982 Dec 09 1900:00	M-100							UK				85		
1982-Y416	2445313.34	1982 Dec 09 2005:00	M-100							TERLS				79		
1982-Y417	2445313.96	1982 Dec 10 1100:00	M-100							G8S2E	LP6			90		
1982-Y418	2445314.06	1982 Dec 10 1330:00	M-100							UK				86		
1982-Y419	2445316.34	1982 Dec 14 2005:00	M-100							G1SP-4				89		
1982-Y420	2445319.08	1982 Dec 15 1400:00	M-100							UK				86		
1982-Y421	2445319.10	1982 Dec 15 1420:00	M-100							TERLS				91		
1982-Y422	2445319.14	1982 Dec 15 1515:00	M-100							MLD				79		
1982-Y423	2445320.34	1982 Dec 16 2005:00	M-100							G1SP-4				84		
1982-Y424	2445320.65	1982 Dec 17 0340:00	M-100							UK				91		
1982-Y425	2445325.34	1982 Dec 21 1400:00	M-100							G1SP-4				86		
1982-Y426	2445326.08	1982 Dec 22 1400:00	M-100							TERLS				82		
1982-Y427	2445326.16	1982 Dec 22 1545:00	M-100							G1SP-4				86		
1982-Y428	2445327.34	1982 Dec 23 2005:00	M-100							UK				86		
1982-Y429	2445328.09	1982 Dec 24 1410:00	M-100							G1SP-4				81		
1982-Y430	2445328.29	1982 Dec 25 1400:00	M-100							UK				86		
1982-Y431	2445332.34	1982 Dec 28 2005:00	M-100							G8S2E	LP7			85		
1982-Y432	2445332.47	1982 Dec 28 2320:00	M-100							TERLS				86		
1982-Y433	2445333.08	1982 Dec 29 1400:00	M-100							G1SP-4				83		
1982-Y434	2445333.10	1982 Dec 29 1420:00	M-100							MLD				83		
1982-Y435	2445333.24	1982 Dec 29 1746:00	M-100							UK				83		
1982-Y436	2445334.34	1982 Dec 30 2005:00	M-100							UK				85		
1982-Y437	2445334.66	1982 Dec 31 0345:00	M-100							G1SP-4				94		
1982-Y438	2445335.25	1982 Dec 31 0545:00	M-100							G8S2E	LP8			90		
1982-Y439	2445335.35	1982 Dec 31 1600:00	M-100							G8S2E	LP9			90		
1983-Y01	2445336.25	1983 Jan 03 1600:00	M-100							G8S2E	LP10			91		
1983-Y02	2445336.29	1983 Jan 03 1800:00	M-100							G8S2E	LP11			88		
1983-Y03	2445339.29	1983 Jan 04 1900:00	M-100							UK				85?		
1983-Y04	2445339.33	1983 Jan 04 2000:00	M-100							TERLS				85?		
1983-Y05	2445340.05	1983 Jan 05 1400:00	M-100							G1SP-4				85		
1983-Y06	2445340.10	1983 Jan 05 1420:00	M-100							G8S2E				85		
1983-Y07	2445340.35	1983 Jan 05 2000:00	M-100							G8S2E				85?		
1983-Y08	2445341.12	1983 Jan 06 1455:00	M-100							TERLS				82		
1983-Y09	2445341.35	1983 Jan 06 2000:00	M-100							UK				82		
1983-Y10	2445341.38	1983 Jan 06 2015:00	M-100							LO7	1070			87		
1983-Y11	2445344.34	1983 Jan 09 1415:00	M-100							G8S2E	LP14			87		
1983-Y12	2445347.10	1983 Jan 12 1450:00	M-100							MLD				84		
1983-Y13	2445347.15	1983 Jan 12 1455:00	M-100							G1SP-4				84		
1983-Y14	2445347.36	1983 Jan 13 1455:00	M-100							TERLS				94		
1983-Y15	2445347.76	1983 Jan 13 1600:00	M-100							MLD				84		
1983-Y16	2445348.37	1983 Jan 13 1600:00	M-100							G1SP-4				92		
1983-Y17	2445353.36	1983 Jan 18 2040:00	M-100							UK				85		
1983-Y18	2445353.84	1983 Jan 19 0100:00	M-100							G1SP-4				86		
1983-Y19	2445355.08	1983 Jan 20 2000:00	M-100							TERLS				90		
1983-Y20	2445355.66	1983 Jan 21 0130:00	M-100							UK				81		
1983-Y21	2445360.33	1983 Jan 25 2000:00	M-100							G1SP-4				82		
1983-Y22	2445361.10	1983 Jan 26 1420:00	M-100							UK				83		
1983-Y23	2445362.11	1983 Jan 26 1440:00	M-100							MLD				79		
1983-Y24	2445367.33	1983 Feb 01 2000:00	M-100							G1SP-4				88		
1983-Y25	2445368.08	1983 Feb 02 1400:00	M-100							TERLS				87		
1983-Y26	2445368.12	1983 Feb 02 1450:00	M-100							UK				89		
1983-Y27	2445371.57	1983 Feb 05 2000:00	M-100							G1SP-4				87		
1983-Y28	2445371.33	1983 Feb 06 0140:00	M-100							UK				83		
1983-Y29	2445373.33	1983 Feb 07 2000:00	M-100							G1SP-4				92		
1983-Y30	2445373.68	1983 Feb 08 0150:00	M-100							UK				83		
1983-Y31	2445375.10	1983 Feb 08 1420:00	M-100							G1SP-4				86		
1983-Y32	2445375.14	1983 Feb 09 1515:00	M-100							TERLS				86?		
1983-Y33	2445376.10	1983 Feb 10 1417:00	M-100							UK				84		
1983-Y34	2445381.68	1983 Feb 16 0200:00	M-100							UK				86		
1983-Y35	2445382.08	1983 Feb 16 1400:00	M-100							TERLS				81		
1983-Y36	2445382.20	1983 Feb 16 1650:00	M-100							G1SP-4				88		
1983-Y37	2445387.29	1983 Feb 21 1900:00	M-100							NER				91		
1983-Y38	2445388.28	1983 Feb 22 1845:00	M-100							NER				71		
1983-Y39	2445388.33	1983 Feb 22 2000:00	M-100							UK				86		
1983-Y40	2445388.39	1983 Feb 22 2120:00	M-100							UK				91		
1983-Y41	2445389.10	1983 Feb 23 1420:00	M-100							MLD				86		
1983-Y42	2445389.18	1983 Feb 23 1620:00	M-100							TERLS				83		
1983-Y43	2445389.19	1983 Feb 23 1630:00	M-100							G1SP-4				86		
1983-Y44	2445389.25	1983 Feb 24 1845:00	M-100							NER				81		
1983-Y45	2445390.38	1983 Feb 24 1845:00	M-100							NER				83		
1983-Y46	2445391.28	1983 Feb 25 1840:00	M-100							NER				87		
1983-Y47	2445392.28	1983 Feb 26 1850:00	M-100							SHTR				83		

Launch_Tag	Launch_ID	Launch_Date	Lv_Type	Variant	Flight_ID	Flight	Launch_Mission	FlightCode	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee_Km	Range_Km	Dest
1983-Y65	2445393.28	1983 Feb 27 1845:00	N-100						SHIR	NER				85		
1983-Y66	2445394.29	1983 Feb 28 1852:00	N-100						SHIR	NER				81		
1983-Y67	2445395.31	1983 Mar 01 1930:00	N-100						SHIR	NER				85		
1983-Y68	2445395.34	1983 Mar 01 2005:00	N-100							UK				87		
1983-Y69	2445396.08	1983 Mar 02 1400:00	N-100							TERLS				74		
1983-Y70	2445396.10	1983 Mar 02 1420:00	N-100							MJD				91		
1983-Y71	2445396.16	1983 Mar 02 1545:00	N-100							GTS-P-4				95		
1983-Y72	2445396.21	1983 Mar 02 1705:00	N-100							GTS-P-4				96		
1983-Y73	2445397.29	1983 Mar 03 1900:00	N-100						SHIR	NER				85		
1983-Y74	2445397.67	1983 Mar 04 0400:00	N-100						SHIR	NER				85		
1983-Y75	2445398.28	1983 Mar 04 1840:00	N-100						SHIR	NER				83		
1983-Y76	2445399.28	1983 Mar 05 1850:00	N-100						SHIR	NER				84		
1983-Y77	2445400.28	1983 Mar 06 1850:00	N-100						SHIR	NER				83		
1983-Y78	2445401.28	1983 Mar 07 1850:00	N-100						SHIR	NER				85		
1983-Y79	2445402.33	1983 Mar 08 2000:00	N-100						SHIR	NER				90		
1983-Y80	2445402.34	1983 Mar 08 2005:00	N-100							UK				87		
1983-Y81	2445402.60	1983 Mar 09 0230:00	N-100							GTS-P-4				88		
1983-Y82	2445403.09	1983 Mar 09 1400:00	N-100						SHIR	NER				83		
1983-Y83	2445403.27	1983 Mar 09 1830:00	N-100							TERLS				80		
1983-Y84	2445403.31	1983 Mar 09 1920:00	N-100						SHIR	NER				82		
1983-Y85	2445404.27	1983 Mar 10 1835:00	N-100						SHIR	NER				85		
1983-Y86	2445406.28	1983 Mar 11 1830:00	N-100						SHIR	NER				85		
1983-Y87	2445407.27	1983 Mar 12 1840:00	N-100						SHIR	NER				63		
1983-Y88	2445408.27	1983 Mar 13 1825:00	N-100						SHIR	NER				85		
1983-Y89	2445409.27	1983 Mar 14 1830:00	N-100						SHIR	NER				87		
1983-Y90	2445409.34	1983 Mar 15 1830:00	N-100						SHIR	NER				84		
1983-Y91	2445409.94	1983 Mar 15 2005:00	N-100							UK				93		
1983-Y92	2445409.94	1983 Mar 16 1040:00	N-100							GTS-P-4				89		
1983-Y93	2445410.08	1983 Mar 16 1350:00	N-100							GTS-P-4				88		
1983-Y94	2445410.08	1983 Mar 16 1400:00	N-100							TERLS				84		
1983-Y95	2445410.10	1983 Mar 16 1420:00	N-100							MJD				88		
1983-Y101	2445410.29	1983 Mar 16 1900:00	N-100						SHIR	NER				83		
1983-Y102	2445411.27	1983 Mar 17 1825:00	N-100						SHIR	NER				90		
1983-Y103	2445412.26	1983 Mar 18 1800:00	N-100						SHIR	NER				86		
1983-Y104	2445413.34	1983 Mar 19 2010:00	N-100						SHIR	NER				88		
1983-Y105	2445414.28	1983 Mar 20 1850:00	N-100						SHIR	NER				85		
1983-Y106	2445415.33	1983 Mar 21 1950:00	N-100						SHIR	NER				88		
1983-Y107	2445416.34	1983 Mar 22 2015:00	N-100							UK				96		
1983-Y108	2445416.39	1983 Mar 22 2115:00	N-100							UK				96		
1983-Y109	2445416.70	1983 Mar 23 0550:00	N-100				Ozone Intercomp.			TERLS				85		
1983-Y110	2445416.84	1983 Mar 23 0645:00	N-100				Ozone Intercomp.			TERLS				85		
1983-Y111	2445416.85	1983 Mar 23 0910:00	N-100				Ozone Intercomp.			TERLS				85		
1983-Y112	2445416.85	1983 Mar 23 1020:00	N-100				Ozone Intercomp.			TERLS				85		
1983-Y113	2445416.89	1983 Mar 23 1150:00	N-100							GTS-P-4				90		
1983-Y114	2445417.05	1983 Mar 23 1355:00	N-100							GTS-P-4				91		
1983-Y115	2445417.10	1983 Mar 23 1420:00	N-100							MJD				88		
1983-Y116	2445417.16	1983 Mar 23 1535:00	N-100				Ozone Intercomp.			TERLS				85		
1983-Y117	2445417.16	1983 Mar 23 1535:00	N-100				Ozone Intercomp.			TERLS				85		
1983-Y118	2445421.80	1983 Mar 28 1103:00	N-100				Ozone Intercomp.			TERLS				85		
1983-Y119	2445421.96	1983 Mar 28 1530:00	N-100				Ozone Intercomp.			TERLS				85		
1983-Y120	2445422.21	1983 Mar 28 1700:00	N-100				Ozone Intercomp.			TERLS				85		
1983-Y121	2445422.21	1983 Mar 28 1805:00	N-100				Ozone Intercomp.			TERLS				85		
1983-Y122	2445422.25	1983 Mar 28 1905:00	N-100				Ozone Intercomp.			TERLS				85		
1983-Y123	2445422.25	1983 Mar 28 1905:00	N-100				Ozone Intercomp.			TERLS				85		
1983-Y124	2445422.27	1983 Mar 29 0850:00	N-100				Ozone Intercomp.			TERLS				85		
1983-Y125	2445422.34	1983 Mar 29 2015:00	N-100							UK				87		
1983-Y126	2445423.34	1983 Mar 29 2015:00	N-100							UK				87		
1983-Y127	2445424.09	1983 Mar 30 1405:00	N-100							GTS-P-4				87		
1983-Y128	2445424.10	1983 Mar 30 1430:00	N-100							MJD				87		
1983-Y129	2445424.94	1983 Mar 31 1030:00	N-100							TERLS				85		
1983-Y130	2445424.99	1983 Mar 31 1150:00	N-100				Ozone Intercomp.			TERLS				85		
1983-Y131	2445425.09	1983 Mar 31 1150:00	N-100				Ozone Intercomp.			TERLS				85		
1983-Y132	2445431.05	1983 Apr 06 1315:00	N-100				Ozone Intercomp.			TERLS				84		
1983-Y133	2445431.08	1983 Apr 06 1400:00	N-100							GTS-P-4				84		
1983-Y134	2445431.31	1983 Apr 06 1420:00	N-100							TERLS				88		
1983-Y135	2445431.31	1983 Apr 06 1920:00	N-100							MJD				81		
1983-Y136	2445433.08	1983 Apr 13 1480:00	N-100							TERLS				83		
1983-Y137	2445433.31	1983 Apr 13 1480:00	N-100							TERLS				84		
1983-Y138	2445438.08	1983 Apr 13 1420:00	N-100							MJD				83		
1983-Y139	2445438.33	1983 Apr 13 2000:00	N-100							TERLS				89		
1983-Y140	2445438.33	1983 Apr 13 2000:00	N-100							TERLS				83		
1983-Y141	2445439.32	1983 Apr 14 1940:00	N-100							UK				80		
1983-Y142	2445445.10	1983 Apr 20 1420:00	N-100				Ozone Intercomp.			GTS-P-4				83		
1983-Y143	2445445.33	1983 Apr 20 2000:00	N-100				Ozone Intercomp.			GTS-P-4				83		
1983-Y144	2445445.33	1983 Apr 20 2005:00	N-100							UK				92		
1983-Y145	2445445.34	1983 Apr 20 2005:00	N-100							UK				92		
1983-Y146	2445446.08	1983 Apr 21 1400:00	N-100							TERLS				83		
1983-Y147	2445446.33	1983 Apr 25 2000:00	N-100							UK				82		
1983-Y148	2445450.33	1983 Apr 25 2000:00	N-100							UK				82		
1983-Y149	2445451.33	1983 Apr 26 2000:00	N-100							UK				83		
1983-Y150	2445452.08	1983 Apr 27 1400:00	N-100							TERLS				83		
1983-Y151	2445452.14	1983 Apr 27 1520:00	N-100							TERLS				84		
1983-Y152	2445453.17	1983 Apr 27 1520:00	N-100							GTS-P-4				84		
1983-Y153	2445453.17	1983 Apr 27 1520:00	N-100							MJD				90		
1983-Y154	2445458.34	1983 May 03 2005:00	N-100							UK				89		
1983-Y155	2445458.34	1983 May 03 2005:00	N-100							UK				84		
1983-Y156	2445458.34	1983 May 04 1400:00	N-100							TERLS				84		
1983-Y157	2445459.08	1983 May 04 1400:00	N-100							MJD				88		
1983-Y158	2445459.10	1983 May 04 1420:00	N-100							UK				86		
1983-Y159	2445465.34	1983 May 10 2005:00	N-100							UK				71		
1983-Y160	2445466.08	1983 May 11 1400:00	N-100							TERLS				82		
1983-Y161	2445466.10	1983 May 11 1420:00	N-100							MJD				82		
1983-Y162	2445473.08	1983 May 18 1400:00	N-100							TERLS				82		
1983-Y163	2445473.10	1983 May 18 1420:00	N-100							MJD				37		

Launch_Tag	Launch_ID	Launch_Date	Lv_Type	Variant	Flight_ID	Flight	Launch_Mission	FlightCode	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee Km	Range Km	Dest
1983-Y174	2445479_33	1983 May 24 2000:00	N-100	-	-	-	-	-	-	UK	-	-	-	84	-	-
1983-W166	2445479_61	1983 May 25 0730:00	N-100	-	-	-	-	-	-	MLD	-	-	-	77	-	-
1983-Y175	2445480_08	1983 May 25 1400:00	N-100	-	-	-	-	-	-	TERLS	-	-	-	82	-	-
1983-Y177	2445485_46	1983 May 30 2300:00	N-100	-	-	-	-	-	-	GTS-P-4	-	-	-	92	-	-
1983-Y178	2445485_58	1983 May 31 0200:00	N-100	-	-	-	-	-	-	GTS-P-4	-	-	-	88	-	-
1983-Y179	2445487_08	1983 Jun 01 1400:00	N-100	-	-	-	-	-	-	TERLS	-	-	-	81	-	-
1983-Y180	2445487_10	1983 Jun 01 1420:00	N-100	-	-	-	-	-	-	MLD	-	-	-	87	-	-
1983-Y182	2445487_61	1983 Jun 02 0240:00	N-100	-	-	-	-	-	-	GTS-P-4	-	-	-	85	-	-
1983-Y183	2445487_68	1983 Jun 02 0425:00	N-100	-	-	-	-	-	-	MLD	-	-	-	80	-	-
1983-Y184	2445489_10	1983 Jun 03 1420:00	N-100	-	-	-	-	-	-	UK	-	-	-	87	-	-
1983-Y185	2445493_34	1983 Jun 07 2005:00	N-100	-	-	-	-	-	-	UK	-	-	-	86	-	-
1983-Y186	2445494_08	1983 Jun 08 1400:00	N-100	-	-	-	-	-	-	TERLS	-	-	-	83	-	-
1983-Y187	2445494_10	1983 Jun 08 1420:00	N-100	-	-	-	-	-	-	MLD	-	-	-	82	-	-
1983-Y188	2445494_15	1983 Jun 08 1540:00	N-100	-	-	-	-	-	-	GTS-P-4	-	-	-	86	-	-
1983-Y190	2445496_10	1983 Jun 10 1420:00	N-100	-	-	-	-	-	-	MLD	-	-	-	86	-	-
1983-Y192	2445501_04	1983 Jun 15 1300:00	N-100	-	-	-	-	-	-	GTS-P-4	-	-	-	85	-	-
1983-Y193	2445501_08	1983 Jun 15 1400:00	N-100	-	-	-	-	-	-	TERLS	LP1	-	-	86	-	-
1983-Y194	2445501_10	1983 Jun 15 1420:00	N-100	-	-	-	-	-	-	MLD	-	-	-	82	-	-
1983-Y199	2445503_10	1983 Jun 17 1420:00	N-100	-	-	-	-	-	-	MLD	-	-	-	72	-	-
1983-Y199	2445505_06	1983 Jun 19 1530:00	N-100	-	-	-	-	-	-	GTS-P-4	LP2	-	-	90	-	-
1983-Y200	2445505_15	1983 Jun 19 1530:00	N-100	-	-	-	-	-	-	GTS-P-4	LP3	-	-	85	-	-
1983-Y202	2445507_04	1983 Jun 21 1500:00	N-100	-	-	-	-	-	-	GTS-P-4	LP4	-	-	83	-	-
1983-Y203	2445507_12	1983 Jun 21 1450:00	N-100	-	-	-	-	-	-	GTS-P-4	LP4	-	-	82	-	-
1983-Y204	2445507_33	1983 Jun 21 2000:00	N-100	-	-	-	-	-	-	UK	-	-	-	92	-	-
1983-Y205	2445507_60	1983 Jun 22 0220:00	N-100	-	-	-	-	-	-	MLD	-	-	-	84	-	-
1983-Y206	2445508_08	1983 Jun 22 1400:00	N-100	-	-	-	-	-	-	TERLS	-	-	-	80	-	-
1983-Y207	2445508_15	1983 Jun 22 1540:00	N-100	-	-	-	-	-	-	GTS-P-4	-	-	-	83	-	-
1983-Y215	2445510_10	1983 Jun 24 1420:00	N-100	-	-	-	-	-	-	MLD	-	-	-	81	-	-
1983-Y216	2445513_91	1983 Jun 28 0945:00	N-100	-	-	-	-	-	-	MLD	LP5	-	-	85	-	-
1983-Y219	2445515_96	1983 Jun 28 1107:00	N-100	-	-	-	-	-	-	GTS-P-4	LP5	-	-	88	-	-
1983-Y220	2445516_10	1983 Jun 29 1422:00	N-100	-	-	-	-	-	-	GTS-P-4	LP5	-	-	86	-	-
1983-Y221	2445516_31	1983 Jun 29 1922:00	N-100	-	-	-	-	-	-	MLD	-	-	-	87	-	-
1983-Y222	2445516_95	1983 Jun 30 1050:00	N-100	-	-	-	-	-	-	GTS-P-4	LP6	-	-	85	-	-
1983-Y224	2445517_14	1983 Jul 01 1520:00	N-100	-	-	-	-	-	-	MLD	-	-	-	83	-	-
1983-Y225	2445519_52	1983 Jul 01 04 1000:00	N-100	-	-	-	-	-	-	GTS-P-4	LP6	-	-	85	-	-
1983-Y226	2445520_90	1983 Jul 05 0930:00	N-100	-	-	-	-	-	-	GTS-P-4	LP7	-	-	87	-	-
1983-Y228	2445521_34	1983 Jul 05 2005:00	N-100	-	-	-	-	-	-	GTS-P-4	LP8	-	-	84	-	-
1983-Y230	2445522_10	1983 Jul 06 1422:00	N-100	-	-	-	-	-	-	UK	-	-	-	98	-	-
1983-Y231	2445522_15	1983 Jul 06 1553:00	N-100	-	-	-	-	-	-	MLD	-	-	-	94	-	-
1983-Y232	2445522_31	1983 Jul 06 1922:00	N-100	-	-	-	-	-	-	MLD	-	-	-	92	-	-
1983-Y233	2445524_10	1983 Jul 08 1422:00	N-100	-	-	-	-	-	-	MLD	-	-	-	87	-	-
1983-Y234	2445524_10	1983 Jul 08 1422:00	N-100	-	-	-	-	-	-	MLD	-	-	-	86	-	-
1983-Y235	2445525_10	1983 Jul 13 1422:00	N-100	-	-	-	-	-	-	MLD	-	-	-	82	-	-
1983-Y236	2445525_10	1983 Jul 15 1422:00	N-100	-	-	-	-	-	-	MLD	-	-	-	89	-	-
1983-Y238	2445525_34	1983 Jul 19 2005:00	N-100	-	-	-	-	-	-	UK	-	-	-	83	-	-
1983-Y239	2445526_34	1983 Jul 19 2005:00	N-100	-	-	-	-	-	-	MLD	-	-	-	89	-	-
1983-Y239	2445526_34	1983 Jul 19 2005:00	N-100	-	-	-	-	-	-	GTS-P-4	-	-	-	83	-	-
1983-Y239	2445526_34	1983 Jul 19 2005:00	N-100	-	-	-	-	-	-	GTS-P-4	-	-	-	89	-	-
1983-Y239	2445526_34	1983 Jul 19 2005:00	N-100	-	-	-	-	-	-	GTS-P-4	-	-	-	83	-	-
1983-Y239	2445526_34	1983 Jul 19 2005:00	N-100	-	-	-	-	-	-	GTS-P-4	-	-	-	89	-	-
1983-Y241	2445528_10	1983 Jul 22 1522:00	N-100	-	-	-	-	-	-	MLD	-	-	-	88	-	-
1983-Y242	2445528_10	1983 Jul 22 1522:00	N-100	-	-	-	-	-	-	GTS-P-4	LP9	-	-	88	-	-
1983-Y243	2445528_10	1983 Jul 22 1522:00	N-100	-	-	-	-	-	-	GTS-P-4	LP9	-	-	85	-	-
1983-Y245	2445528_10	1983 Jul 22 1750:00	N-100	-	-	-	-	-	-	GTS-P-4	LP9	-	-	91	-	-
1983-Y246	2445528_10	1983 Jul 22 1750:00	N-100	-	-	-	-	-	-	MLD	-	-	-	85	-	-
1983-Y247	2445528_10	1983 Jul 29 1422:00	N-100	-	-	-	-	-	-	MLD	-	-	-	85	-	-
1983-Y248	2445528_10	1983 Aug 02 2045:00	N-100	-	-	-	-	-	-	UK	-	-	-	85	-	-
1983-Y249	2445530_19	1983 Aug 04 1632:00	N-100	-	-	-	-	-	-	GTS-P-4	-	-	-	82	-	-
1983-Y250	2445530_26	1983 Aug 05 1911:00	N-100	-	-	-	-	-	-	GTS-P-4	-	-	-	83	-	-
1983-Y251	2445533_24	1983 Aug 06 1746:00	N-100	-	-	-	-	-	-	GTS-P-4	LP10	-	-	86	-	-
1983-Y252	2445533_30	1983 Aug 06 1919:00	N-100	-	-	-	-	-	-	GTS-P-4	LP11	-	-	86	-	-
1983-Y253	2445535_09	1983 Aug 07 1411:00	N-100	-	-	-	-	-	-	GTS-P-4	LP12	-	-	87	-	-
1983-Y254	2445535_27	1983 Aug 08 1935:00	N-100	-	-	-	-	-	-	GTS-P-4	LP13	-	-	86	-	-
1983-Y254	2445535_27	1983 Aug 08 1935:00	N-100	-	-	-	-	-	-	GTS-P-4	LP13	-	-	84	-	-
1983-Y254	2445535_27	1983 Aug 08 1935:00	N-100	-	-	-	-	-	-	GTS-P-4	LP14	-	-	76	-	-
1983-Y255	2445537_10	1983 Aug 10 1422:00	N-100	-	-	-	-	-	-	MLD	-	-	-	87	-	-
1983-Y255	2445537_19	1983 Aug 10 1632:00	N-100	-	-	-	-	-	-	NER	-	-	-	85	-	-
1983-Y256	2445537_25	1983 Aug 10 1756:00	N-100	-	-	-	-	-	-	NER	-	-	-	84	-	-
1983-Y256	2445537_25	1983 Aug 10 1756:00	N-100	-	-	-	-	-	-	NER	-	-	-	87	-	-
1983-Y258	2445564_10	1983 Aug 16 2005:00	N-100	-	-	-	-	-	-	UK	-	-	-	82	-	-
1983-Y259	2445564_10	1983 Aug 17 1422:00	N-100	-	-	-	-	-	-	MLD	-	-	-	89	-	-
1983-Y261	2445564_18	1983 Aug 17 1620:00	N-100	-	-	-	-	-	-	UK	-	-	-	82	-	-
1983-Y262	2445570_34	1983 Aug 23 2010:00	N-100	-	-	-	-	-	-	GTS-P-4	-	-	-	89	-	-
1983-Y263	2445571_10	1983 Aug 24 1422:00	N-100	-	-	-	-	-	-	MLD	-	-	-	87	-	-
1983-Y264	2445571_19	1983 Aug 24 1630:00	N-100	-	-	-	-	-	-	MLD	-	-	-	84	-	-
1983-Y266	2445578_10	1983 Aug 31 1422:00	N-100	-	-	-	-	-	-	GTS-P-4	-	-	-	85	-	-
1983-Y267	2445578_10	1983 Aug 31 1422:00	N-100	-	-	-	-	-	-	GTS-P-4	-	-	-	85	-	-
1983-Y268	2445578_33	1983 Aug 31 2000:00	N-100	-	-	-	-	-	-	GTS-P-4	LP1	-	-	87	-	-
1983-Y273	2445581_29	1983 Sep 03 1855:00	N-100	-	-	-	-	-	-	GTS-P-4	LP2	-	-	61	-	-
1983-Y273	2445581_37	1983 Sep 03 2050:00	N-100	-	-	-	-	-	-	GTS-P-4	LP2	-	-	84	-	-
1983-Y278	2445585_10	1983 Sep 07 1422:00	N-100	-	-	-	-	-	-	MLD	-	-	-	92	-	-
1983-Y279	2445585_21	1983 Sep 07 1705:00	N-100	-	-	-	-	-	-	UK	-	-	-	84	-	-
1983-Y282	2445585_21	1983 Sep 13 2005:00	N-100	-	-	-	-	-	-	UK	-	-	-	91	-	-
1983-Y283	2445591_34	1983 Sep 13 2145:00	N-100	-	-	-	-	-	-	UK	-	-	-	83	-	-
1983-Y284	2445592_08	1983 Sep 14 1354:00	N-100	-	-	-	-	-	-	UK	-	-	-	88	-	-
1983-Y285	2445598_34	1983 Sep 20 2005:00	N-100	-	-	-	-	-	-	UK	-	-	-	88	-	-
1983-Y287	2445599_06	1983 Sep 21 1330:00	N-100	-	-	-	-	-	-	UK	-	-	-	88	-	-
1983-Y288	2445599_10	1983 Sep 21 1430:00	N-100	-	-	-	-	-	-	MLD	-	-	-	76	-	-
1983-Y288	2445605_34	1983 Sep 27 2005:00	N-100	-	-	-	-	-	-	UK	-	-	-	88	-	-
1983-Y283	2445606_06	1983 Sep 28 1330:00	N-100	-	-	-	-	-	-	GTS-P-4	-	-	-	78	-	-
1983-Y324	2445607_50	1983 Oct	N-100	-	-	-	-	-	-	TERLS	-	-	-	807	-	-
1983-Y325	2445607_50	1983 Oct	N-100	-	-	-	-	-								



Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Launch_Mission	FlightCode	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee_Km	Range_Km	Dest
1983-Y327	2445607.50	1983 Oct	M-100							TERLS				807		
1983-Y328	2445638.50	1983 Nov	M-100							TERLS				807		
1983-Y329	2445638.50	1983 Nov	M-100							TERLS				807		
1983-Y330	2445638.50	1983 Nov	M-100							TERLS				807		
1983-Y331	2445638.50	1983 Nov	M-100							TERLS				807		
1983-Y332	2445638.50	1983 Nov	M-100							TERLS				807		
1983-Y333	2445668.50	1983 Dec	M-100							TERLS				807		
1983-Y334	2445668.50	1983 Dec	M-100							TERLS				807		
1983-Y335	2445668.50	1983 Dec	M-100							TERLS				807		
1983-Y336	2445668.50	1983 Dec	M-100							TERLS				807		
1984-Y137	2445699.50	1984 Jan	M-100							TERLS				807		
1984-Y138	2445699.50	1984 Jan	M-100							TERLS				807		
1984-Y139	2445699.50	1984 Jan	M-100							TERLS				807		
1984-Y140	2445699.50	1984 Jan	M-100							TERLS				807		
1984-S143	2445724.50	1984 Jan 25	M-100							TERLS				857		
1984-S144	2445729.50	1984 Jan 30	M-100							TERLS				807		
1984-Y141	2445730.50	1984 Feb	M-100							TERLS				807		
1984-Y142	2445730.50	1984 Feb	M-100							TERLS				807		
1984-Y143	2445730.50	1984 Feb	M-100							TERLS				807		
1984-Y144	2445730.50	1984 Feb	M-100							TERLS				807		
1984-S145	2446731.50	1984 Feb 1	M-100							TERLS				857		
1984-Y146	2446738.94	1984 Feb 6 1039	M-100							TERLS				857		
1984-S146	2446746.50	1984 Feb 16	M-100							TERLS				857		
1984-Y145	2446759.50	1984 Mar	M-100							TERLS				807		
1984-Y146	2446759.50	1984 Mar	M-100							TERLS				807		
1984-Y147	2446759.50	1984 Mar	M-100							TERLS				807		
1984-Y148	2446759.50	1984 Mar	M-100							TERLS				807		
1984-Y149	2446790.50	1984 Apr	M-100							TERLS				807		
1984-Y150	2446790.50	1984 Apr	M-100							TERLS				807		
1984-Y151	2446790.50	1984 Apr	M-100							TERLS				807		
1984-Y152	2446790.50	1984 Apr	M-100							TERLS				807		
1984-Y153	2446820.50	1984 May	M-100							TERLS				807		
1984-Y154	2446820.50	1984 May	M-100							TERLS				807		
1984-Y155	2446820.50	1984 May	M-100							TERLS				807		
1984-Y156	2446820.50	1984 May	M-100							TERLS				807		
1984-Y157	2446820.50	1984 May	M-100							TERLS				807		
1984-Y158	2446861.50	1984 Jun	M-100							TERLS				807		
1984-Y159	2446861.50	1984 Jun	M-100							TERLS				807		
1984-Y160	2446861.50	1984 Jun	M-100							TERLS				807		
1984-Y161	2446861.50	1984 Jun	M-100							TERLS				807		
1984-Y162	2446861.50	1984 Jun	M-100							TERLS				807		
1984-Y163	2446861.50	1984 Jul	M-100							TERLS				807		
1984-Y164	2446861.50	1984 Jul	M-100							TERLS				807		
1984-Y165	2446912.50	1984 Aug	M-100							TERLS				807		
1984-Y166	2446912.50	1984 Aug	M-100							TERLS				807		
1984-Y167	2446912.50	1984 Aug	M-100							TERLS				807		
1984-Y168	2446912.50	1984 Aug	M-100							TERLS				807		
1984-Y169	2446912.50	1984 Aug	M-100							TERLS				807		
1984-Y170	2446912.50	1984 Aug	M-100							TERLS				807		
1984-Y171	2446943.50	1984 Sep	M-100							TERLS				807		
1984-Y172	2446943.50	1984 Sep	M-100							TERLS				807		
1984-Y173	2446943.50	1984 Dec	M-100							TERLS				807		
1984-Y174	2446943.50	1984 Dec	M-100							TERLS				807		
1984-Y175	2446943.50	1984 Dec	M-100							TERLS				807		
1984-Y176	2446965.50	1984 Dec	M-100							TERLS				807		
1985-Y167	2446965.50	1985 Jan	M-100							TERLS				807		
1985-Y168	2446965.50	1985 Jan	M-100							TERLS				807		
1985-Y169	2446965.50	1985 Jan	M-100							TERLS				807		
1985-Y170	2446965.50	1985 Feb	M-100							TERLS				807		
1985-Y171	2446996.50	1985 Feb	M-100							TERLS				807		
1985-Y172	2446996.50	1985 Feb	M-100							TERLS				807		
1985-Y173	2446996.50	1985 Feb	M-100							TERLS				807		
1985-Y174	2446155.50	1985 Apr	M-100							TERLS				807		
1985-Y175	2446155.50	1985 Apr	M-100							TERLS				807		
1985-Y176	2446155.50	1985 Apr	M-100							TERLS				807		
1985-Y177	2446155.50	1985 Apr	M-100							TERLS				807		
1985-Y178	2446185.50	1985 May	M-100							TERLS				807		
1985-Y179	2446185.50	1985 May	M-100							TERLS				807		
1985-Y180	2446185.50	1985 May	M-100							TERLS				807		
1985-Y181	2446185.50	1985 May	M-100							TERLS				807		
1985-Y182	2446216.50	1985 May	M-100							TERLS				807		
1985-Y183	2446216.50	1985 Jun	M-100							TERLS				807		
1985-Y184	2446216.50	1985 Jun	M-100							TERLS				807		
1985-Y185	2446216.50	1985 Jun	M-100							TERLS				807		
1985-Y186	2446216.50	1985 Jun	M-100							TERLS				807		
1985-Y23	2446248.99	1985 Jul 02 1143:00	M-100B							TERLS				87		
1985-Y24	2446249.34	1985 Jul 02 2005:00	M-100B							TERLS				85		
1985-Y25	2446250.10	1985 Jul 03 1422:00	M-100B							TERLS				87		
1985-Y26	2446250.26	1985 Jul 03 1821:00	M-100B							TERLS				83		
1985-H200	2446251.22	1985 Jul 04 1710:00	M-100B							TERLS				79		
1985-H201	2446251.29	1985 Jul 04 1900:00	M-100B							TERLS				77		
1985-Y27	2446252.10	1985 Jul 05 1422:00	M-100B							TERLS				80		
1985-Y28	2446256.34	1985 Jul 09 2007:00	M-100B							TERLS				86		
1985-Y29	2446256.98	1985 Jul 10 1134:00	M-100B							TERLS				88		
1985-Y30	2446257.08	1985 Jul 10 1400:00	M-100B							TERLS				83		
1985-H204	2446257.27	1985 Jul 10 1827:00	M-100B							TERLS				79		

Gardien probe

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Launch_Mission	FlightCode	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee_Km	Range_Km	Dest
1985-W206	2446257.34	1985 Jul 10 2007.00	M-100B	-	-	-	-	-	-	MLD	-	-	-	78	-	-
1985-Y31	2446259.09	1985 Jul 12 1408.00	M-100B	-	-	-	-	-	-	UK	-	-	-	83	-	-
1985-Y33	2446263.34	1985 Jul 16 2005.00	M-100B	-	-	-	-	-	-	TERLS	-	-	-	91	-	-
1985-Y34	2446263.98	1985 Jul 17 1134.00	M-100B	-	-	-	-	-	-	TERLS	-	-	-	85?	-	-
1985-Y35	2446264.09	1985 Jul 17 1409.00	M-100B	-	-	-	-	-	-	TERLS	-	-	-	82	-	-
1985-Y36	2446264.14	1985 Jul 17 1526.00	M-100B	-	-	-	-	-	-	TERLS	-	-	-	82	-	-
1985-Y37	2446265.00	1985 Jul 18 1155.00	M-100B	-	-	-	-	-	-	TERLS	-	-	-	85?	-	-
1985-Y38	2446266.09	1985 Jul 19 1410.00	M-100B	-	-	-	-	-	-	TERLS	-	-	-	82	-	-
1985-Y39	2446268.98	1985 Jul 22 1130.00	M-100B	-	-	-	-	-	-	TERLS	-	-	-	85	-	-
1985-Y40	2446270.34	1985 Jul 23 2005.00	M-100B	-	-	-	-	-	-	TERLS	-	-	-	90	-	-
1985-Y41	2446270.99	1985 Jul 24 1146.00	M-100B	-	-	-	-	-	-	TERLS	-	-	-	81	-	-
1985-Y42	2446272.98	1985 Jul 26 1130.00	M-100B	-	-	-	-	-	-	TERLS	-	-	-	85?	-	-
1985-Y43	2446273.09	1985 Jul 26 1407.00	M-100B	-	-	-	-	-	-	TERLS	-	-	-	80	-	-
1985-Y44	2446275.98	1985 Jul 29 1153.00	M-100B	-	-	-	-	-	-	TERLS	-	-	-	83	-	-
1985-W218	2446277.34	1985 Jul 30 2005.00	M-100B	-	-	-	-	-	-	TERLS	-	-	-	63	-	-
1985-Y46	2446277.99	1985 Jul 31 1141.00	M-100B	-	-	-	-	-	-	TERLS	-	-	-	81	-	-
1985-Y47	2446279.98	1985 Aug 02 1130.00	M-100B	-	-	-	-	-	-	TERLS	-	-	-	84	-	-
1985-Y48	2446284.34	1985 Aug 06 2005.00	M-100B	-	-	-	-	-	-	TERLS	-	-	-	93	-	-
1985-Y49	2446284.99	1985 Aug 07 1141.00	M-100B	-	-	-	-	-	-	TERLS	-	-	-	87	-	-
1985-Y50	2446285.09	1985 Aug 07 1405.00	M-100B	-	-	-	-	-	-	TERLS	-	-	-	82	-	-
1985-Y51	2446285.09	1985 Aug 07 1405.00	M-100B	-	-	-	-	-	-	TERLS	-	-	-	84	-	-
1985-Y52	2446285.13	1985 Aug 07 1506.00	M-100B	-	-	-	-	-	-	TERLS	-	-	-	83	-	-
1985-Y53	2446285.17	1985 Aug 07 1607.00	M-100B	-	-	-	-	-	-	TERLS	-	-	-	83	-	-
1985-Y54	2446287.09	1985 Aug 09 1407.00	M-100B	-	-	-	-	-	-	TERLS	-	-	-	81	-	-
1985-Y55	2446291.34	1985 Aug 13 2005.00	M-100B	-	-	-	-	-	-	TERLS	-	-	-	83	-	-
1985-Y56	2446291.60	1985 Aug 14 0230.00	M-100B	-	-	-	-	-	-	TERLS	-	-	-	81	-	-
1985-Y57	2446291.99	1985 Aug 14 1141.00	M-100B	-	-	-	-	-	-	TERLS	-	-	-	87	-	-
1985-Y58	2446292.09	1985 Aug 14 1407.00	M-100B	-	-	-	-	-	-	TERLS	-	-	-	81	-	-
1985-Y59	2446294.09	1985 Aug 16 1407.00	M-100B	-	-	-	-	-	-	TERLS	-	-	-	86	-	-
1985-Y60	2446296.34	1985 Aug 20 2005.00	M-100B	-	-	-	-	-	-	TERLS	-	-	-	84	-	-
1985-Y61	2446299.10	1985 Aug 21 1422.00	M-100B	-	-	-	-	-	-	TERLS	-	-	-	82	-	-
1985-Y62	2446299.99	1985 Aug 22 1142.00	M-100B	-	-	-	-	-	-	TERLS	-	-	-	85?	-	-
1985-Y63	2446300.25	1985 Aug 22 1800.00	M-100B	-	-	-	-	-	-	TERLS	-	-	-	82	-	-
1985-Y64	2446305.34	1985 Aug 27 2005.00	M-100B	-	-	-	-	-	-	TERLS	-	-	-	86	-	-
1985-Y65	2446306.09	1985 Aug 28 1407.00	M-100B	-	-	-	-	-	-	TERLS	-	-	-	81	-	-
1985-Y66	2446306.10	1985 Aug 28 1417.00	M-100B	-	-	-	-	-	-	TERLS	-	-	-	84	-	-
1985-Y67	2446306.99	1985 Aug 29 1142.00	M-100B	-	-	-	-	-	-	TERLS	-	-	-	94	-	-
1985-W252	2446312.94	1985 Sep 03 2005.00	M-100B	-	-	-	-	-	-	TERLS	-	-	-	78	-	-
1985-W254	2446313.09	1985 Sep 04 1141.00	M-100B	-	-	-	-	-	-	TERLS	-	-	-	61	-	-
1985-Y72	2446313.09	1985 Sep 04 1407.00	M-100B	-	-	-	-	-	-	TERLS	-	-	-	77	-	-
1985-Y73	2446313.09	1985 Sep 04 1414.00	M-100B	-	-	-	-	-	-	TERLS	-	-	-	62	-	-
1985-Y74	2446318.94	1985 Sep 11 1131.00	M-100B	-	-	-	-	-	-	TERLS	-	-	-	94	-	-
1985-Y75	2446319.95	1985 Sep 11 1451.00	M-100B	-	-	-	-	-	-	TERLS	-	-	-	81	-	-
1985-Y76	2446320.10	1985 Sep 11 1615.00	M-100B	-	-	-	-	-	-	TERLS	-	-	-	83	-	-
1985-Y77	2446326.24	1985 Sep 17 0955.00	M-100B	-	-	-	-	-	-	TERLS	-	-	-	85	-	-
1985-Y78	2446326.66	1985 Sep 18 0155.00	M-100B	-	-	-	-	-	-	TERLS	-	-	-	86	-	-
1985-Y79	2446328.86	1985 Sep 19 1467.00	M-100B	-	-	-	-	-	-	TERLS	-	-	-	81	-	-
1985-Y80	2446328.94	1985 Sep 25 0634.00	M-100B	-	-	-	-	-	-	TERLS	-	-	-	84	-	-
1985-Y81	2446333.73	1985 Sep 25 2008.00	M-100B	-	-	-	-	-	-	TERLS	-	-	-	85	-	-
1985-Y82	2446333.84	1985 Sep 25 0634.00	M-100B	-	-	-	-	-	-	TERLS	-	-	-	84	-	-
1985-Y83	2446333.84	1985 Sep 25 0634.00	M-100B	-	-	-	-	-	-	TERLS	-	-	-	85	-	-
1985-Y84	2446340.09	1985 Sep 25 1407.00	M-100B	-	-	-	-	-	-	TERLS	-	-	-	81	-	-
1985-Y85	2446340.38	1985 Sep 25 2105.00	M-100B	-	-	-	-	-	-	TERLS	-	-	-	84	-	-
1985-W258	2446340.81	1985 Oct 02 0730.00	M-100B	-	-	-	-	-	-	TERLS	-	-	-	78	-	-
1985-W259	2446340.92	1985 Oct 02 1000.00	M-100B	-	-	-	-	-	-	TERLS	-	-	-	78	-	-
1985-Y89	2446341.09	1985 Oct 02 1405.00	M-100B	-	-	-	-	-	-	TERLS	-	-	-	86	-	-
1985-Y90	2446341.99	1985 Oct 03 1140.00	M-100B	-	-	-	-	-	-	TERLS	-	-	-	87	-	-
1985-Y91	2446347.38	1985 Oct 03 2105.00	M-100B	-	-	-	-	-	-	TERLS	-	-	-	85	-	-
1985-Y92	2446347.99	1985 Oct 09 1145.00	M-100B	-	-	-	-	-	-	TERLS	-	-	-	83	-	-
1985-Y93	2446348.04	1985 Oct 09 1300.00	M-100B	-	-	-	-	-	-	TERLS	-	-	-	81	-	-
1985-Y94	2446348.04	1985 Oct 09 1407.00	M-100B	-	-	-	-	-	-	TERLS	-	-	-	84	-	-
1985-Y95	2446354.38	1985 Oct 15 2105.00	M-100B	-	-	-	-	-	-	TERLS	-	-	-	89	-	-
1985-Y96	2446355.07	1985 Oct 16 1335.00	M-100B	-	-	-	-	-	-	TERLS	-	-	-	82	-	-
1985-Y98	2446355.07	1985 Oct 16 1507.00	M-100B	-	-	-	-	-	-	TERLS	-	-	-	77	-	-
1985-W266	2446355.13	1985 Oct 17 1407.00	M-100B	-	-	-	-	-	-	TERLS	-	-	-	85	-	-
1985-Y99	2446356.09	1985 Oct 17 1407.00	M-100B	-	-	-	-	-	-	TERLS	-	-	-	83	-	-
1985-Y100	2446356.09	1985 Oct 17 1407.00	M-100B	-	-	-	-	-	-	TERLS	-	-	-	85	-	-
1985-Y101	2446361.38	1985 Oct 22 2105.00	M-100B	-	-	-	-	-	-	TERLS	-	-	-	91	-	-
1985-W269	2446362.09	1985 Oct 23 1407.00	M-100B	-	-	-	-	-	-	TERLS	-	-	-	77	-	-
1985-Y102	2446363.02	1985 Oct 24 1235.00	M-100B	-	-	-	-	-	-	TERLS	-	-	-	80	-	-
1985-W270	2446363.03	1985 Oct 24 1239.00	M-100B	-	-	-	-	-	-	TERLS	-	-	-	78	-	-
1985-Y103	2446363.24	1985 Oct 24 1749.00	M-100B	-	-	-	-	-	-	TERLS	-	-	-	85	-	-
1985-W277	2446369.04	1985 Oct 30 1301.00	M-100B	-	-	-	-	-	-	TERLS	-	-	-	75	-	-
1985-Y104	2446369.10	1985 Oct 30 1426.00	M-100B	-	-	-	-	-	-	TERLS	-	-	-	84	-	-
1985-Y105	2446369.10	1985 Oct 30 1426.00	M-100B	-	-	-	-	-	-	TERLS	-	-	-	86	-	-
1985-Y107	2446372.99	1985 Nov 03 1152.00	M-100B	-	-	-	-	-	-	TERLS	-	-	-	84	-	-
1985-Y108	2446374.11	1985 Nov 04 1438.00	M-100B	-	-	-	-	-	-	TERLS	-	-	-	85	-	-
1985-W285	2446375.11	1985 Nov 05 1433.00	M-100B	-	-	-	-	-	-	TERLS	-	-	-	86	-	-
1985-Y109	2446375.73	1985 Nov 06 0527.00	M-100B	-	-	-	-	-	-	TERLS	-	-	-	79	-	-
1985-Y110	2446375.96	1985 Nov 06 1100.00	M-100B	-	-	-	-	-	-	TERLS	-	-	-	88	-	-
1985-Y112	2446378.10	1985 Nov 08 1421.00	M-100B	-	-	-	-	-	-	TERLS	-	-	-	81	-	-
1985-Y113	2446382.38	1985 Nov 12 2105.00	M-100B	-	-	-	-	-	-	TERLS	-	-	-	87	-	-
1985-Y114	2446382.97	1985 Nov 13 1145.00	M-100B	-	-	-	-	-	-	TERLS	-	-	-	86	-	-
1985-Y115	2446382.99	1985 Nov 13 1144.00	M-100B	-	-	-	-	-	-	TERLS	-	-	-	82	-	-
1985-Y116	2446383.09	1985 Nov 13 1407.00	M-100B	-	-	-	-	-	-	TERLS	-	-	-	86	-	-

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Launch_Mission	FlightCode	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee_Km	Range_Km	Dest
1985-Y117	2446384.94	1985 Nov 15 1030:00	M-100B							GRSP-4				84		
1985-Y118	2446388.23	1985 Nov 18 1730:00	M-100B							GRSP-4				85		
1985-Y119	2446389.04	1985 Nov 19 1300:00	M-100B							GRSP-4				80		
1985-Y120	2446389.38	1985 Nov 19 2105:00	M-100B							UK				87		
1985-Y121	2446390.00	1985 Nov 20 1154:00	M-100B							TERLS				84		
1985-Y122	2446390.02	1985 Nov 20 1230:00	M-100B							GRSP-4				88		
1985-Y123	2446390.09	1985 Nov 20 1407:00	M-100B							MLD				88		
1985-Y124	2446395.14	1985 Nov 25 1400:00	M-100B							GRS56C				87		
1985-Y125	2446395.14	1985 Nov 25 1522:00	M-100B							GRS56C				86		
1985-Y126	2446396.38	1985 Nov 26 2105:00	M-100B							UK				82		
1985-Y127	2446396.98	1985 Nov 27 1130:00	M-100B							TERLS				82		
1985-W306	2446397.09	1985 Nov 27 1408:00	M-100B							GRSP-4				79		
1985-Y128	2446397.19	1985 Nov 27 1632:00	M-100B							MLD				94		
1985-W308	2446398.03	1985 Nov 28 1240:00	M-100B							GRS56C				71		
1985-W309	2446398.61	1985 Nov 29 0730:00	M-100B							GRS56C				79		
1985-Y129	2446399.08	1985 Nov 29 1400:00	M-100B							GRS56C				84		
1985-Y130	2446399.13	1985 Nov 29 1510:00	M-100B							GRS56C				95		
1985-W310	2446400.98	1985 Dec 01 1129:00	M-100B							GRS56C				85		
1985-Y131	2446402.90	1985 Dec 03 0930:00	M-100B							GRS56C				77		
1985-W311	2446403.15	1985 Dec 03 1530:00	M-100B							GRS56C				94		
1985-Y132	2446403.20	1985 Dec 03 1650:00	M-100B							GRS56C				71		
1985-Y133	2446403.96	1985 Dec 04 1100:00	M-100B							TERLS				90		
1985-Y134	2446404.02	1985 Dec 04 1230:00	M-100B							GRSP-4				83		
1985-Y135	2446404.09	1985 Dec 04 1405:00	M-100B							GRSP-4				87		
1985-Y136	2446404.14	1985 Dec 04 1522:00	M-100B							MLD				96		
1985-Y137	2446404.94	1985 Dec 05 1030:00	M-100B							GRS56C				83		
1985-Y138	2446405.08	1985 Dec 05 1400:00	M-100B							GRS56C				87		
1985-Y139	2446405.19	1985 Dec 05 1653:00	M-100B							GRS56C				85		
1985-Y140	2446405.24	1985 Dec 05 1740:00	M-100B							GRS56C				83		
1985-Y141	2446406.07	1985 Dec 06 1340:00	M-100B							GRSP-4				90		
1985-S296	2446407.82	1985 Dec 6 0740	M-100B							GRSP-4				307		
1985-S297	2446407.87	1985 Dec 6 0850	M-100B							GRSP-4				307		
1985-Y142	2446410.10	1985 Dec 10 1430:00	M-100B							GRSP-4				83		
1985-Y143	2446410.18	1985 Dec 10 1615:00	M-100B							GRSP-4				83		
1985-Y144	2446410.38	1985 Dec 10 2105:00	M-100B							UK				96		
1985-Y145	2446410.96	1985 Dec 11 1100:00	M-100B							TERLS				82		
1985-Y146	2446410.97	1985 Dec 11 1110:00	M-100B							GRSP-4				86		
1985-Y147	2446411.08	1985 Dec 11 1400:00	M-100B							GRSP-4				86		
1985-Y148	2446411.09	1985 Dec 11 1407:00	M-100B							MLD				95		
1985-S298	2446413.99	1985 Dec 14 1140	M-100B							GRSP-4				307		
1985-S299	2446414.03	1985 Dec 14 1240	M-100B							GRSP-4				307		
1985-W319	2446414.90	1985 Dec 15 0650:00	M-100B							GRS56C				85		
1985-Y149	2446415.17	1985 Dec 15 1902:00	M-100B							GRS56C				85		
1985-Y150	2446415.17	1985 Dec 15 1902:00	M-100B							GRS56C				85		
1985-Y151	2446415.22	1985 Dec 15 2116:00	M-100B							GRS56C				89		
1985-Y152	2446417.38	1985 Dec 17 2105:00	M-100B							UK				82		
1985-Y153	2446417.96	1985 Dec 18 1100:00	M-100B							GRS56C				82		
1985-Y154	2446417.96	1985 Dec 18 1237:00	M-100B							GRS56C				86		
1985-Y155	2446418.02	1985 Dec 18 1422:00	M-100B							GRSP-4				84		
1985-Y156	2446418.09	1985 Dec 18 1422:00	M-100B							MLD				84		
1985-S300	2446420.10	1985 Dec 20 2105:00	M-100B							GRS56C				75		
1985-Y157	2446420.38	1985 Dec 20 0643:00	M-100B							GRS56C				86		
1985-Y158	2446420.38	1985 Dec 20 0643:00	M-100B							GRS56C				86		
1985-Y159	2446420.38	1985 Dec 20 1119:00	M-100B							GRS56C				84		
1985-Y160	2446420.38	1985 Dec 20 1119:00	M-100B							GRS56C				84		
1985-Y161	2446420.38	1985 Dec 20 1459:00	M-100B							GRS56C				84		
1985-Y162	2446420.38	1985 Dec 20 1530:00	M-100B							GRS56C				83		
1985-Y163	2446420.38	1985 Dec 20 1530:00	M-100B							GRS56C				82		
1985-Y164	2446420.38	1985 Dec 20 1530:00	M-100B							GRS56C				84		
1985-Y165	2446420.38	1985 Dec 20 1530:00	M-100B							GRS56C				84		
1986-Y01	2446431.97	1986 Jan 01 1116:00	M-100B							TERLS				83		
1986-Y02	2446432.10	1986 Jan 01 1422:00	M-100B							MLD				85		
1986-Y03	2446432.10	1986 Jan 04 1030:00	M-100B							GRS56C				86		
1986-Y04	2446432.10	1986 Jan 04 1030:00	M-100B							GRS56C				75		
1986-Y05	2446435.27	1986 Jan 04 1831:00	M-100B							GRS56C				80		
1986-Y06	2446435.34	1986 Jan 04 2015:00	M-100B							GRS56C				80		
1986-Y07	2446435.97	1986 Jan 05 1115:00	M-100B							GRS56C				83		
1986-Y08	2446436.38	1986 Jan 05 2105:00	M-100B							TERLS				78		
1986-Y09	2446436.97	1986 Jan 06 1120:00	M-100B							GRS56C				84		
1986-Y10	2446438.38	1986 Jan 07 2105:00	M-100B							GRS56C				87		
1986-Y11	2446439.00	1986 Jan 08 1207:00	M-100B							GRS56C				85		
1986-Y12	2446439.06	1986 Jan 08 1320:00	M-100B							GRS56C				84		
1986-Y13	2446439.10	1986 Jan 08 1420:00	M-100B							GRS56C				81		
1986-Y14	2446443.38	1986 Jan 12 2105:00	M-100B							MLD				83		
1986-Y15	2446443.38	1986 Jan 13 1130:00	M-100B							GRS56C				88		
1986-Y16	2446443.38	1986 Jan 13 1130:00	M-100B							GRS56C				84		
1986-Y17	2446443.38	1986 Jan 14 2105:00	M-100B							TERLS				76		
1986-Y18	2446443.38	1986 Jan 15 1115:00	M-100B							GRS56C				85		
1986-Y19	2446444.02	1986 Jan 15 1235:00	M-100B							GRS56C				80		
1986-Y20	2446444.12	1986 Jan 15 1446:00	M-100B							MLD				80		
1986-Y21	2446446.15	1986 Jan 15 1530:00	M-100B							GRS56C				83		
1986-Y22	2446450.00	1986 Jan 19 1205:00	M-100B							GRS56C				84		
1986-Y23	2446450.96	1986 Jan 20 1100:00	M-100B							GRS56C				85		
1986-Y24	2446451.00	1986 Jan 20 1205:00	M-100B							GRS56C				85		
1986-Y25	2446451.44	1986 Jan 21 2235:00	M-100B							GRS56C				85		
1986-Y26	2446452.44	1986 Jan 22 1410:00	M-100B							GRS56C				85		
1986-Y27	2446452.96	1986 Jan 22 1100:00	M-100B							GRS56C				83		
1986-Y28	2446454.38	1986 Jan 23 2105:00	M-100B							TERLS				84		
1986-Y29	2446454.46	1986 Jan 23 2305:00	M-100B							GRS56C				81		
1986-Y30	2446455.06	1986 Jan 24 1330	M-100B							GRS56C				85		
1986-Y31	2446457.38	1986 Jan 26 2105:00	M-100B							GRS56C				85		

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Launch_Mission	FlightCode	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee_Km	Range_Km	Dest
1986-Y228	2446457.99	1986 Jan 27 1144	M-100B		STRATWARM	ISRO 8.860				TERLS				85		
1986-Y25	2446459.38	1986 Jan 28 2105.00	M-100B							UK				84		
1986-Y26	2446460.09	1986 Jan 29 1407.00	M-100B							MJD				83		
1986-Y27	2446460.12	1986 Jan 29 1449.00	M-100B		STRATWARM	ISRO 8.862				GRSP-4				84		
1986-Y28	2446460.96	1986 Jan 30 1100.00	M-100B							TERLS				82		
1986-Y23	2446461.38	1986 Jan 30 2105.00	M-100B							UK				79		
1986-Y29	2446464.38	1986 Feb 02 2105.00	M-100B							UK				81		
1986-Y30	2446465.02	1986 Feb 03 1227.00	M-100B							GRSP-4				88		
1986-Y31	2446465.06	1986 Feb 3 1330	M-100B		STRATWARM	ISRO 8.863				TERLS				85		
1986-Y32	2446466.38	1986 Feb 04 2105.00	M-100B							UK				85		
1986-Y33	2446466.96	1986 Feb 05 1106.00	M-100B		STRATWARM	ISRO 8.864				TERLS				85		
1986-Y34	2446467.02	1986 Feb 05 1235.00	M-100B							GRSP-4				85		
1986-Y35	2446467.09	1986 Feb 05 1407.00	M-100B							MJD				84		
1986-Y36	2446472.03	1986 Feb 10 1240.00	M-100B							GRSP-4				85		
1986-Y37	2446473.38	1986 Feb 11 2105.00	M-100B							UK				82		
1986-Y38	2446474.03	1986 Feb 12 1240.00	M-100B							GRSP-4				83		
1986-Y39	2446474.09	1986 Feb 12 1407.00	M-100B		STRATWARM	ISRO 8.865				MJD				81		
1986-Y40	2446475.10	1986 Feb 13 1430.00	M-100B							UK				84		
1986-Y41	2446478.38	1986 Feb 16 2105.00	M-100B							GRSP-4				85		
1986-Y42	2446479.02	1986 Feb 17 1234.00	M-100B		STRATWARM	ISRO 8.866				TERLS				85		
1986-Y43	2446480.38	1986 Feb 18 2105.00	M-100B							UK				78		
1986-Y44	2446480.42	1986 Feb 18 2205.00	M-100B							UK				79		
1986-Y45	2446481.09	1986 Feb 19 1407.00	M-100B		STRATWARM	ISRO 8.868				MJD				81		
1986-Y46	2446482.00	1986 Feb 20 1200	M-100B							TERLS				85		
1986-Y47	2446482.04	1986 Feb 20 1300.00	M-100B		STRATWARM	ISRO 8.869				GRSP-4				86		
1986-Y48	2446483.07	1986 Feb 21 1347.00	M-100B							TERLS				86		
1986-Y49	2446485.38	1986 Feb 23 2105.00	M-100B							UK				86		
1986-Y50	2446486.05	1986 Feb 24 1316.00	M-100B		STRATWARM	ISRO 8.860				GRSP-4				81		
1986-Y51	2446486.07	1986 Feb 24 1347.00	M-100B							TERLS				85		
1986-Y52	2446486.09	1986 Feb 26 1310.00	M-100B							MJD				80		
1986-Y53	2446486.05	1986 Feb 26 1407.00	M-100B							GRSP-4				87		
1986-Y54	2446486.09	1986 Feb 26 1535.00	M-100B							UK				84		
1986-Y55	2446488.27	1986 Feb 26 1835.00	M-100B		STRATWARM	ISRO 8.861				TERLS				82		
1986-Y56	2446492.38	1986 Feb 27 1136.00	M-100B							UK				85		
1986-Y57	2446493.08	1986 Mar 03 1400.00	M-100B							GRSP-4				76		
1986-Y58	2446494.38	1986 Mar 04 2105.00	M-100B							UK				83		
1986-Y59	2446494.38	1986 Mar 04 2105.00	M-100B		STRATWARM	ISRO 8.862				TERLS				83		
1986-Y60	2446494.94	1986 Mar 05 1137.00	M-100B							UK				79		
1986-Y61	2446496.06	1986 Mar 05 1325.00	M-100B							GRSP-4				83		
1986-Y62	2446496.06	1986 Mar 05 1407.00	M-100B							TERLS				84		
1986-Y63	2446496.09	1986 Mar 05 1407.00	M-100B							MJD				84		
1986-Y64	2446499.50	1986 Mar 10 1500.00	M-100B							TERLS				105		
1986-Y65	2446500.12	1986 Mar 11 2105.00	M-100B							GRSP-4				84		
1986-Y66	2446501.38	1986 Mar 11 2105.00	M-100B							UK				86		
1986-Y67	2446502.04	1986 Mar 12 1300.00	M-100B							GRSP-4				85		
1986-Y68	2446502.08	1986 Mar 12 1300.00	M-100B							MJD				85		
1986-Y69	2446502.08	1986 Mar 12 1300.00	M-100B							GRSP-4				80		
1986-Y70	2446503.08	1986 Mar 13 1300.00	M-100B							TERLS				85		
1986-Y71	2446503.98	1986 Mar 17 1305.00	M-100B							UK				85		
1986-Y72	2446507.04	1986 Mar 17 1305.00	M-100B							GRSP-4				85		
1986-Y73	2446508.98	1986 Mar 18 2105.00	M-100B							UK				86		
1986-Y74	2446508.98	1986 Mar 19 1105.00	M-100B							GRSP-4				81		
1986-Y75	2446508.94	1986 Mar 19 1300.00	M-100B							TERLS				89		
1986-Y76	2446509.04	1986 Mar 19 1407.00	M-100B							GRSP-4				89		
1986-Y77	2446509.09	1986 Mar 19 1407.00	M-100B							MJD				78		
1986-Y78	2446513.38	1986 Mar 23 2105.00	M-100B							UK				84		
1986-Y79	2446513.04	1986 Mar 24 1302.00	M-100B							GRSP-4				85		
1986-Y80	2446515.98	1986 Mar 25 2105.00	M-100B							UK				84		
1986-Y81	2446516.04	1986 Mar 26 1300.00	M-100B							GRSP-4				84		
1986-Y82	2446516.12	1986 Mar 26 1447.00	M-100B							MJD				84		
1986-Y83	2446516.16	1986 Mar 26 1447.00	M-100B							TERLS				82		
1986-Y84	2446516.98	1986 Mar 27 1137.00	M-100B							UK				85		
1986-Y85	2446520.38	1986 Mar 30 2105.00	M-100B							GRSP-4				87		
1986-Y86	2446521.08	1986 Mar 31 1400.00	M-100B							UK				74		
1986-Y87	2446522.34	1986 Apr 01 2005.00	M-100B							GRSP-4				83		
1986-Y88	2446522.98	1986 Apr 02 1137.00	M-100B							TERLS				83		
1986-Y89	2446523.08	1986 Apr 02 1400.00	M-100B							GRSP-4				85		
1986-Y90	2446523.17	1986 Apr 02 1607.00	M-100B							GRSP-4				97		
1986-Y91	2446523.17	1986 Apr 02 1607.00	M-100B							MJD				81		
1986-Y92	2446527.34	1986 Apr 06 2005.00	M-100B							UK				86		
1986-Y93	2446528.10	1986 Apr 07 1417.00	M-100B							GRSP-4				85		
1986-Y94	2446529.42	1986 Apr 08 2205.00	M-100B							UK				85		
1986-Y95	2446529.98	1986 Apr 09 1136.00	M-100B							GRSP-4				85		
1986-Y96	2446530.09	1986 Apr 09 1407.00	M-100B							TERLS				82		
1986-Y97	2446530.10	1986 Apr 09 1431.00	M-100B							MJD				81		
1986-Y98	2446530.16	1986 Apr 09 1545.00	M-100B							GRSP-4				90		
1986-Y99	2446534.34	1986 Apr 13 2005.00	M-100B							MJD				97		
1986-Y00	2446535.10	1986 Apr 14 1420.00	M-100B							GRSP-4				85		
1986-Y01	2446536.34	1986 Apr 15 2005.00	M-100B							UK				84		
1986-Y02	2446537.09	1986 Apr 16 1407.00	M-100B							UK				81		
1986-Y03	2446537.10	1986 Apr 16 1430.00	M-100B							MJD				85		
1986-Y04	2446537.98	1986 Apr 17 1135.00	M-100B							GRSP-4				81		
1986-Y05	2446542.09	1986 Apr 21 1423.00	M-100B							TERLS				82		
1986-Y06	2446542.10	1986 Apr 21 1423.00	M-100B							UK				83		
1986-Y07	2446542.10	1986 Apr 22 2005.00	M-100B							GRSP-4				79		
1986-Y08	2446543.34	1986 Apr 22 1435.00	M-100B							UK				86		
1986-Y09	2446544.11	1986 Apr 23 1435.00	M-100B							MJD				89		
1986-Y10	2446544.12	1986 Apr 23 1450.00	M-100B							GRSP-4				81		
1986-Y11	2446544.98	1986 Apr 24 1135.00	M-100B							TERLS				83		

Launch_Tag	Launch_ID	Launch_Date	Lv_Type	Variant	Flight_ID	Flight	Launch_Mission	FlightCode	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee_Km	Range_Km	Dest
1986-W83	2446547.88	1986 Apr 27 0900:00	M-100B	-	-	-	-	-	SHIR	GSS6A	ULP1	-	-	79	-	-
1986-W97	2446548.93	1986 Apr 27 1020:00	M-100B	-	-	-	-	-	SHIR	GSS6A	ULP1	-	-	82	-	-
1986-W98	2446548.94	1986 Apr 27 2005:00	M-100B	-	-	-	-	-	-	UK	-	-	-	85	-	-
1986-W99	2446549.12	1986 Apr 28 1446:00	M-100B	-	-	-	-	-	-	GTS-P-4	-	-	-	81	-	-
1986-Y100	2446549.86	1986 Apr 29 0840:00	M-100B	-	-	-	-	-	SHIR	GSS6A	ULP1	-	-	80	-	-
1986-Y101	2446549.91	1986 Apr 29 0946:00	M-100B	-	-	-	-	-	SHIR	GSS6A	ULP1	-	-	84	-	-
1986-Y102	2446550.34	1986 Apr 29 2005:00	M-100B	-	-	-	-	-	-	UK	-	-	-	89	-	-
1986-W87	2446550.63	1986 Apr 30 0306:00	M-100B	-	-	-	-	-	-	GTS-P-4	-	-	-	79	-	-
1986-Y103	2446550.98	1986 Apr 30 1134:00	M-100B	-	-	-	-	-	-	TERLS	-	-	-	81	-	-
1986-Y104	2446551.30	1986 Apr 30 1907:00	M-100B	-	-	-	-	-	-	MLD	-	-	-	83	-	-
1986-Y105	2446552.63	1986 May 02 0756:00	M-100B	-	-	-	-	-	SHIR	GSS6A	ULP1	-	-	87	-	-
1986-Y106	2446552.88	1986 May 02 0906:00	M-100B	-	-	-	-	-	SHIR	GSS6A	ULP1	-	-	85	-	-
1986-Y107	2446554.63	1986 May 04 0756:00	M-100B	-	-	-	-	-	SHIR	GSS6A	ULP1	-	-	86	-	-
1986-Y108	2446554.68	1986 May 04 0900:00	M-100B	-	-	-	-	-	SHIR	GSS6A	ULP1	-	-	86	-	-
1986-Y109	2446557.38	1986 May 06 2105:00	M-100B	-	-	-	-	-	-	UK	-	-	-	83	-	-
1986-W90	2446557.98	1986 May 07 1136:00	M-100B	-	-	-	-	-	-	TERLS	-	-	-	79	-	-
1986-W91	2446558.12	1986 May 07 1455:00	M-100B	-	-	-	-	-	-	GTS-P-4	-	-	-	77	-	-
1986-W92	2446558.17	1986 May 07 1607:00	M-100B	-	-	-	-	-	-	MLD	-	-	-	79	-	-
1986-Y110	2446564.38	1986 May 13 2105:00	M-100B	-	-	-	-	-	-	UK	-	-	-	84	-	-
1986-Y111	2446564.98	1986 May 13 2105:00	M-100B	-	-	-	-	-	-	TERLS	-	-	-	83	-	-
1986-Y112	2446565.15	1986 May 14 1134:00	M-100B	-	-	-	-	-	-	MLD	-	-	-	83	-	-
1986-Y113	2446565.30	1986 May 14 1530:00	M-100B	-	-	-	-	-	-	GTS-P-4	-	-	-	80	-	-
1986-Y114	2446571.34	1986 May 14 1915:00	M-100B	-	-	-	-	-	-	UK	-	-	-	88	-	-
1986-Y115	2446571.98	1986 May 21 1135:00	M-100B	-	-	-	-	-	-	TERLS	-	-	-	87	-	-
1986-W100	2446572.10	1986 May 21 1431:00	M-100B	-	-	-	-	-	-	MLD	-	-	-	79	-	-
1986-Y116	2446572.17	1986 May 22 0959:00	M-100B	-	-	-	-	-	-	GTS-P-4	-	-	-	86	-	-
1986-Y117	2446572.94	1986 May 22 1036:00	M-100B	-	-	-	-	-	-	GSS6A	ULP1	-	-	85	-	-
1986-Y118	2446573.00	1986 May 22 1154:00	M-100B	-	-	-	-	-	-	GSS6A	ULP1	-	-	84	-	-
1986-Y119	2446575.63	1986 May 25 0800:00	M-100B	-	-	-	-	-	SHIR	TERLS	-	-	-	85	-	-
1986-Y120	2446575.88	1986 May 25 0900:00	M-100B	-	-	-	-	-	SHIR	GSS6A	ULP1	-	-	80	-	-
1986-Y121	2446577.61	1986 May 27 0720:00	M-100B	-	-	-	-	-	SHIR	GSS6A	ULP1	-	-	82	-	-
1986-Y122	2446577.91	1986 May 27 2020:00	M-100B	-	-	-	-	-	-	UK	-	-	-	84	-	-
1986-Y123	2446578.79	1986 May 28 0703:00	M-100B	-	-	-	-	-	-	GSS6A	ULP1	-	-	84	-	-
1986-Y124	2446578.68	1986 May 28 0900:00	M-100B	-	-	-	-	-	SHIR	GSS6A	ULP1	-	-	86	-	-
1986-Y125	2446579.15	1986 May 28 1531:00	M-100B	-	-	-	-	-	-	MLD	-	-	-	84	-	-
1986-W104	2446579.25	1986 May 28 1802:00	M-100B	-	-	-	-	-	-	GTS-P-4	-	-	-	77	-	-
1986-W105	2446579.64	1986 May 29 0606:00	M-100B	-	-	-	-	-	SHIR	GSS6A	ULP1	-	-	81	-	-
1986-Y126	2446579.90	1986 May 29 0935:00	M-100B	-	-	-	-	-	SHIR	GSS6A	ULP1	-	-	82	-	-
1986-Y127	2446579.99	1986 May 29 1152:00	M-100B	-	-	-	-	-	-	TERLS	-	-	-	83	-	-
1986-Y128	2446580.72	1986 May 30 0649:00	M-100B	-	-	-	-	-	-	GSS6A	ULP1	-	-	80	-	-
1986-Y129	2446586.94	1986 Jun 03 2005:00	M-100B	-	-	-	-	-	-	TERLS	-	-	-	86	-	-
1986-Y131	2446586.95	1986 Jun 03 2005:00	M-100B	-	-	-	-	-	-	TERLS	-	-	-	84	-	-
1986-Y132	2446586.09	1986 Jun 04 1137:00	M-100B	-	-	-	-	-	-	UK	-	-	-	83	-	-
1986-Y133	2446586.14	1986 Jun 04 1507:00	M-100B	-	-	-	-	-	-	GTS-P-4	-	-	-	81	-	-
1986-Y134	2446586.20	1986 Jun 09 1655:00	M-100B	-	-	-	-	-	-	GTS-P-4	-	-	-	80	-	-
1986-Y135	2446591.20	1986 Jun 09 1858:00	M-100B	-	-	-	-	-	-	GTS-P-4	-	-	-	87	-	-
1986-Y136	2446591.20	1986 Jun 09 1858:00	M-100B	-	-	-	-	-	-	UK	-	-	-	91	-	-
1986-Y137	2446592.26	1986 Jun 11 1134:00	M-100B	-	-	-	-	-	-	TERLS	-	-	-	83	-	-
1986-Y138	2446592.88	1986 Jun 11 1407:00	M-100B	-	-	-	-	-	-	MLD	-	-	-	82	-	-
1986-Y139	2446593.05	1986 Jun 11 1655:00	M-100B	-	-	-	-	-	-	GTS-P-4	-	-	-	84	-	-
1986-Y140	2446593.20	1986 Jun 11 1965:00	M-100B	-	-	-	-	-	-	GTS-P-4	-	-	-	84	-	-
1986-Y141	2446593.25	1986 Jun 11 2030:00	M-100B	-	-	-	-	-	-	GTS-P-4	-	-	-	80	-	-
1986-Y142	2446598.34	1986 Jun 17 2010:00	M-100B	-	-	-	-	-	-	UK	-	-	-	89	-	-
1986-Y143	2446598.02	1986 Jun 18 1230:00	M-100B	-	-	-	-	-	-	TERLS	-	-	-	82	-	-
1986-Y144	2446600.13	1986 Jun 18 1501:00	M-100B	-	-	-	-	-	-	GTS-P-4	-	-	-	84	-	-
1986-Y145	2446600.23	1986 Jun 18 1730:00	M-100B	-	-	-	-	-	-	GTS-P-4	-	-	-	84	-	-
1986-Y146	2446606.34	1986 Jun 24 2003:00	M-100B	-	-	-	-	-	-	UK	-	-	-	87	-	-
1986-Y147	2446606.90	1986 Jun 25 1150:00	M-100B	-	-	-	-	-	-	TERLS	-	-	-	90	-	-
1986-Y148	2446607.08	1986 Jun 25 1400:00	M-100B	-	-	-	-	-	-	GTS-P-4	-	-	-	84	-	-
1986-Y149	2446607.99	1986 Jun 25 1412:00	M-100B	-	-	-	-	-	-	MLD	-	-	-	80	-	-
1986-Y150	2446609.23	1986 Jun 27 1730:00	M-100B	-	-	-	-	-	-	GTS-P-4	-	-	-	60	-	-
1986-Y151	2446613.34	1986 Jul 01 2005:00	M-100B	-	-	-	-	-	-	UK	-	-	-	90	-	-
1986-Y152	2446614.11	1986 Jul 01 2005:00	M-100B	-	-	-	-	-	-	MLD	-	-	-	83	-	-
1986-Y153	2446614.15	1986 Jul 02 1442:00	M-100B	-	-	-	-	-	-	TERLS	-	-	-	857	-	-
1986-Y154	2446614.15	1986 Jul 02 1529:00	M-100B	-	-	-	-	-	-	GTS-P-4	-	-	-	78	-	-
1986-Y155	2446615.07	1986 Jul 03 1340:00	M-100B	-	-	-	-	-	-	GTS-P-4	-	-	-	60	-	-
1986-Y156	2446620.34	1986 Jul 07 1407:00	M-100B	-	-	-	-	-	-	MLD	-	-	-	85	-	-
1986-Y157	2446620.98	1986 Jul 08 2005:00	M-100B	-	-	-	-	-	-	UK	-	-	-	88	-	-
1986-Y158	2446621.17	1986 Jul 09 1130:00	M-100B	-	-	-	-	-	-	TERLS	-	-	-	85	-	-
1986-Y159	2446621.21	1986 Jul 09 1607:00	M-100B	-	-	-	-	-	-	MLD	-	-	-	82	-	-
1986-Y160	2446627.99	1986 Jul 16 1145:00	M-100B	-	-	-	-	-	-	GTS-P-4	-	-	-	83	-	-
1986-Y161	2446628.09	1986 Jul 16 1410:00	M-100B	-	-	-	-	-	-	MLD	-	-	-	81	-	-
1986-Y162	2446629.15	1986 Jul 17 1530:00	M-100B	-	-	-	-	-	-	MLD	-	-	-	85	-	-
1986-Y163	2446634.34	1986 Jul 22 2005:00	M-100B	-	-	-	-	-	-	UK	-	-	-	89	-	-
1986-Y164	2446634.98	1986 Jul 23 1130:00	M-100B	-	-	-	-	-	-	TERLS	-	-	-	84	-	-
1986-Y165	2446635.09	1986 Jul 23 1407:00	M-100B	-	-	-	-	-	-	MLD	-	-	-	86	-	-
1986-Y166	2446635.14	1986 Jul 23 1522:00	M-100B	-	-	-	-	-	-	MLD	-	-	-	85	-	-
1986-Y167	2446635.21	1986 Jul 25 1130:00	M-100B	-	-	-	-	-	-	GTS-P-4	-	-	-	86	-	-
1986-Y168	2446637.98	1986 Jul 25 1407:00	M-100B	-	-	-	-	-	-	TERLS	-	-	-	857	-	-
1986-Y170	2446640.98	1986 Jul 29 1130:00	M-100B	-	-	-	-	-	-	MLD	-	-	-	84	-	-
1986-Y173	2446641.34	1986 Jul 29 2005:00	M-100B	-	-	-	-	-	-	UK	-	-	-	85	-	-
1986-Y174	2446642.09	1986 Jul 30 1407:00	M-100B	-	-	-	-	-	-	MLD	-	-	-	82	-	-

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Launch_Mission	FlightCode	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee Km	Range Km	Dest
1986-Y175	2446643.98	1986 Aug 01 1130:00	M-100B							TERLS				857		
1986-Y176	2446647.02	1986 Aug 04 1226:00	M-100B							TERLS				80		
1986-Y177	2446648.34	1986 Aug 05 2005:00	M-100B							UK				82		
1986-Y180	2446649.02	1986 Aug 06 1235:00	M-100B							TERLS				83		
1986-Y181	2446649.09	1986 Aug 06 1407:00	M-100B							MLD				85		
1986-Y182	2446649.13	1986 Aug 06 1506:00	M-100B							GTSP-4				85		
1986-Y183	2446651.12	1986 Aug 08 1447:00	M-100B							TERLS				83		
1986-Y184	2446652.02	1986 Aug 09 1225:00	M-100B							UK				857		
1986-Y185	2446655.34	1986 Aug 12 2005:00	M-100B							TERLS				81		
1986-Y186	2446655.98	1986 Aug 13 1130:00	M-100B							TERLS				89		
1986-Y187	2446656.09	1986 Aug 13 1407:00	M-100B							MLD				77		
1986-Y188	2446656.85	1986 Aug 14 0830:00	M-100B						VUKV	GSS9C	ULP1			88		
1986-Y189	2446656.95	1986 Aug 14 1045:00	M-100B						VUKV	GSS9C	ULP1			88		
1986-Y189	2446657.05	1986 Aug 14 1315:00	M-100B						VUKV	GSS9C	ULP1			88		
1986-Y190	2446657.24	1986 Aug 14 1740:00	M-100B							GTSP-4				86		
1986-Y191	2446659.63	1986 Aug 17 0800:00	M-100B						VUKV	GSS9C	ULP1			88		
1986-Y192	2446659.97	1986 Aug 17 1110:00	M-100B						VUKV	GSS9C	ULP1			87		
1986-Y193	2446661.83	1986 Aug 19 0800:00	M-100B						VUKV	GSS9C	ULP1			86		
1986-Y194	2446661.88	1986 Aug 19 0900:00	M-100B						VUKV	GSS9C	ULP1			87		
1986-Y195	2446661.88	1986 Aug 19 0900:00	M-100B						VUKV	GSS9C	ULP1			88		
1986-Y196	2446663.08	1986 Aug 20 1400:00	M-100B							GSS9C				83		
1986-Y197	2446663.12	1986 Aug 20 1453:00	M-100B							MLD				82		
1986-Y198	2446663.14	1986 Aug 20 1515:00	M-100B							GTSP-4				84		
1986-Y199	2446663.17	1986 Aug 20 1600:00	M-100B							TERLS				84		
1986-Y200	2446663.17	1986 Aug 20 1600:00	M-100B							MLD				80		
1986-Y201	2446666.11	1986 Aug 25 1432:00	M-100B							GTSP-4				82		
1986-Y202	2446669.34	1986 Aug 26 2015:00	M-100B							GTSP-4				85		
1986-Y203	2446669.96	1986 Aug 27 1436:00	M-100B							UK				85		
1986-Y204	2446670.11	1986 Aug 27 1130:00	M-100B							TERLS				857		
1986-Y205	2446670.69	1986 Aug 28 0430:00	M-100B							GTSP-4				86		
1986-Y206	2446674.35	1986 Aug 31 2020:00	M-100B							MLD				83		
1986-Y207	2446676.11	1986 Sep 01 1432:00	M-100B							UK				85		
1986-Y208	2446676.50	1986 Sep 03 1407:00	M-100B							GTSP-4				87		
1986-Y209	2446677.09	1986 Sep 03 1407:00	M-100B							MLD				87		
1986-Y210	2446677.10	1986 Sep 03 1417:00	M-100B							GTSP-4				84		
1986-Y211	2446683.35	1986 Sep 09 2020:00	M-100B							UK				91		
1986-Y212	2446683.95	1986 Sep 09 1130:00	M-100B							TERLS				83		
1986-Y213	2446684.09	1986 Sep 10 1407:00	M-100B							MLD				94		
1986-Y214	2446684.94	1986 Sep 10 1407:00	M-100B							GTSP-4				82		
1986-Y215	2446690.34	1986 Sep 16 2035:00	M-100B							UK				79		
1986-Y216	2446691.08	1986 Sep 17 1350:00	M-100B							GTSP-4				87		
1986-Y218	2446691.08	1986 Sep 17 1457:00	M-100B							MLD				82		
1986-Y219	2446691.09	1986 Sep 18 1136:00	M-100B							TERLS				82		
1986-Y219	2446691.95	1986 Sep 23 2035:00	M-100B							UK				86		
1986-Y219	2446697.95	1986 Sep 24 1130:00	M-100B							TERLS				86		
1986-Y220	2446698.09	1986 Sep 24 1407:00	M-100B							MLD				86		
1986-Y220	2446700.36	1986 Sep 24 1430:00	M-100B							GTSP-4				79		
1986-Y220	2446704.26	1986 Sep 29 2035:00	M-100B							UK				79		
1986-Y232	2446704.26	1986 Oct 1	M-100B							TERLS				807		
1986-Y232	2446704.26	1986 Oct 1	M-100B							MLD				807		
1986-Y177	2446704.26	1986 Oct 1	M-100B							UK				807		
1986-Y180	2446710.80	1986 Oct 7	M-100B							MLD				807		
1986-Y189	2446711.50	1986 Oct 8	M-100B							TERLS				807		
1986-Y233	2446711.50	1986 Oct 8	M-100B							MLD				807		
1986-Y199	2446711.50	1986 Oct 8	M-100B							GTSP-4				807		
1986-Y198	2446717.50	1986 Oct 14	M-100B							UK				79		
1986-Y198	2446717.50	1986 Oct 14	M-100B							GTSP-4				807		
1986-Y190	2446718.50	1986 Oct 15	M-100B							UK				79		
1986-Y199	2446718.50	1986 Oct 15	M-100B							GTSP-4				807		
1986-Y141	2446719.50	1986 Oct 16	M-100B							MLD				79		
1986-Y159	2446724.50	1986 Oct 21	M-100B							GTSP-4				807		
1986-Y159	2446724.50	1986 Oct 21	M-100B							UK				807		
1986-Y160	2446724.50	1986 Oct 21	M-100B							UK				807		
1986-Y160	2446725.50	1986 Oct 22	M-100B							MLD				807		
1986-Y142	2446725.50	1986 Oct 22	M-100B							GTSP-4				79		
1986-Y234	2446725.50	1986 Oct 22	M-100B							TERLS				807		
1986-Y181	2446727.50	1986 Oct 24	M-100B							UK				79		
1986-Y181	2446731.50	1986 Oct 28	M-100B							GTSP-4				807		
1986-Y235	2446732.50	1986 Oct 29	M-100B							TERLS				807		
1986-Y152	2446732.50	1986 Oct 29	M-100B							MLD				807		
1986-Y162	2446737.50	1986 Nov 3	M-100B							TERLS				807		
1986-Y236	2446737.50	1986 Nov 3	M-100B							MLD				807		
1986-Y162	2446738.50	1986 Nov 4	M-100B							TERLS				807		
1986-Y144	2446739.50	1986 Nov 4	M-100B							UK				807		
1986-Y163	2446739.50	1986 Nov 5	M-100B							GTSP-4				79		
1986-Y163	2446745.50	1986 Nov 11	M-100B							MLD				807		
1986-Y154	2446746.50	1986 Nov 12	M-100B							UK				807		
1986-Y237	2446746.50	1986 Nov 12	M-100B							TERLS				807		
1986-Y145	2446746.50	1986 Nov 17	M-100B							MLD				79		
1986-Y155	2446751.50	1986 Nov 18	M-100B							GTSP-4				807		
1986-Y164	2446752.50	1986 Nov 18	M-100B							UK				807		
1986-Y166	2446753.50	1986 Nov 19	M-100B							MLD				79		
1986-Y146	2446754.50	1986 Nov 20	M-100B							TERLS				807		
1986-Y238	2446734.50	1986 Nov	M-100B							TERLS				807		
1986-Y239	2446734.50	1986 Nov	M-100							TERLS				807		
1986-Y240	2446764.50	1986 Dec	M-100							TERLS				807		
1986-Y241	2446764.50	1986 Dec	M-100							TERLS				807		
1986-Y242	2446764.50	1986 Dec	M-100							TERLS				807		

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Launch_Mission	FlightCode	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee_Km	Range_Km	Dest
1987-Y01	2446797.00	1987 Jan 01 1200:00	M-100B							TERLS				85		
1987-Y03	2446799.12	1987 Jan 03 1500:00	M-100B						SHIR	MER				77		
1987-Y02	2446799.61	1987 Jan 04 0732:00	M-100B						SHIR	MER				86		
1987-Y04	2446800.12	1987 Jan 04 1468:00	M-100B						SHIR	UK				84		
1987-Y05	2446800.33	1987 Jan 04 2000:00	M-100B							UK				83		
1987-Y06	2446802.12	1987 Jan 06 1500:00	M-100B						SHIR	GSS7B	LP1			84		
1987-Y07	2446802.34	1987 Jan 06 2015:00	M-100B							UK				84		
1987-Y08	2446802.98	1987 Jan 07 1130:00	M-100B							TERLS				85		
1987-Y09	2446803.09	1987 Jan 07 1457:00	M-100B						SHIR	GSS7B	LP2			85		
1987-Y10	2446803.12	1987 Jan 07 1530:00	M-100B							MLD				83		
1987-Y11	2446803.15	1987 Jan 07 1625:00	M-100B						SHIR	GSS7B	LP3			85		
1987-Y12	2446803.18	1987 Jan 11 2005:00	M-100B							UK				78		
1987-Y13	2446806.25	1987 Jan 12 1800:00	M-100B						SHIR	GSS7B	LP4			85		
1987-Y14	2446809.25	1987 Jan 13 1800:00	M-100B						SHIR	GSS7B	LP5			90		
1987-Y15	2446809.34	1987 Jan 13 2005:00	M-100B							UK				81		
1987-Y16	2446809.38	1987 Jan 13 2100:00	M-100B						SHIR	GSS7B	LP6			85		
1987-Y17	2446810.06	1987 Jan 14 1330:00	M-100B							GSS7B-4				78		
1987-Y18	2446810.09	1987 Jan 14 1407:00	M-100B							MLD				86		
1987-Y19	2446810.25	1987 Jan 14 1755:00	M-100B						SHIR	GSS7B	LP7			81		
1987-Y20	2446811.25	1987 Jan 15 1755:00	M-100B						SHIR	GSS7B	LP8			83		
1987-Y21	2446812.25	1987 Jan 16 1750:00	M-100B						SHIR	GSS7B	LP9			81		
1987-Y22	2446813.21	1987 Jan 17 1700:00	M-100B							UK				86		
1987-Y23	2446814.34	1987 Jan 18 2005:00	M-100B							TERLS				84		
1987-Y24	2446816.19	1987 Jan 21 1134:00	M-100B							MLD				84		
1987-Y25	2446817.27	1987 Jan 21 2005:00	M-100B							UK				72		
1987-Y26	2446818.26	1987 Jan 22 1630:00	M-100B							GSS7B-4				76		
1987-Y27	2446818.26	1987 Jan 22 1757:00	M-100B						SHIR	SOMP				85		
1987-Y28	2446818.26	1987 Jan 22 2027:00	M-100B						SHIR	SOMP				85		
1987-Y29	2446820.35	1987 Jan 24 2000:00	M-100B						SHIR	SOMP				83		
1987-Y30	2446821.25	1987 Jan 25 1802:00	M-100B						SHIR	SOMP				85		
1987-Y31	2446821.25	1987 Jan 25 2005:00	M-100B							UK				82		
1987-Y32	2446821.94	1987 Jan 25 2005:00	M-100B							UK				87		
1987-Y33	2446822.25	1987 Jan 26 1800:00	M-100B						KORO	GSS7C	ULP1			87		
1987-Y34	2446822.25	1987 Jan 26 1905:00	M-100B						SHIR	SOMP				85		
1987-Y35	2446822.30	1987 Jan 27 1800:00	M-100B							UK				86		
1987-Y36	2446823.29	1987 Jan 27 1900:00	M-100B						KORO	GSS7C	ULP1			85		
1987-Y37	2446823.36	1987 Jan 27 2035:00	M-100B							UK				85		
1987-Y38	2446823.43	1987 Jan 27 2215:00	M-100B							UK				86		
1987-Y39	2446823.43	1987 Jan 28 1130:00	M-100B							TERLS				82		
1987-Y40	2446823.98	1987 Jan 28 1130:00	M-100B							UK				82		
1987-Y41	2446824.09	1987 Jan 28 1404:00	M-100B							MLD				85		
1987-Y42	2446824.25	1987 Jan 28 1800:00	M-100B						SHIR	SOMP				85		
1987-Y43	2446824.25	1987 Jan 28 1800:00	M-100B						SHIR	SOMP				82		
1987-Y44	2446825.25	1987 Jan 29 1800:00	M-100B							UK				81		
1987-Y45	2446825.25	1987 Jan 29 1800:00	M-100B						SHIR	SOMP				82		
1987-Y46	2446826.25	1987 Jan 29 1805:00	M-100B						SHIR	SOMP				81		
1987-Y47	2446826.25	1987 Jan 30 1800:00	M-100B						SHIR	SOMP				82		
1987-Y48	2446826.25	1987 Jan 31 1800:00	M-100B						SHIR	SOMP				88		
1987-Y49	2446826.25	1987 Feb 01 1800:00	M-100B						KORO	GSS7C	ULP1			85		
1987-Y50	2446826.25	1987 Feb 01 1800:00	M-100B						SHIR	SOMP				83		
1987-Y51	2446826.54	1987 Feb 01 2010:00	M-100B							UK				93		
1987-Y52	2446826.54	1987 Feb 02 1800:00	M-100B						KORO	GSS7C	ULP1			85		
1987-Y53	2446826.54	1987 Feb 02 1800:00	M-100B						SHIR	SOMP				85		
1987-Y54	2446826.54	1987 Feb 03 1800:00	M-100B						SHIR	SOMP				84		
1987-Y55	2446830.36	1987 Feb 03 1917:00	M-100B							GSS7C	ULP1			70		
1987-Y56	2446830.36	1987 Feb 03 2005:00	M-100B							UK				86		
1987-Y57	2446831.08	1987 Feb 04 1159:00	M-100B							TERLS				81		
1987-Y58	2446831.08	1987 Feb 04 1400:00	M-100B							GSS7B-4				84		
1987-Y59	2446831.09	1987 Feb 04 1407:00	M-100B							MLD				77		
1987-Y60	2446831.25	1987 Feb 04 1800:00	M-100B						SHIR	SOMP				82		
1987-Y61	2446832.25	1987 Feb 05 1800:00	M-100B						KORO	GSS7C	ULP1			82		
1987-Y62	2446832.25	1987 Feb 05 1904:00	M-100B						SHIR	GSS7C	ULP1			85		
1987-Y63	2446833.25	1987 Feb 06 1800:00	M-100B						SHIR	SOMP				84		
1987-Y64	2446833.25	1987 Feb 06 1804:00	M-100B						SHIR	SOMP				83		
1987-Y65	2446833.25	1987 Feb 07 1800:00	M-100B						KORO	GSS7C	ULP1			87		
1987-Y66	2446833.25	1987 Feb 07 1800:00	M-100B						KORO	GSS7C	ULP1			88		
1987-Y67	2446835.34	1987 Feb 08 2005:00	M-100B							UK				85		
1987-Y68	2446836.02	1987 Feb 09 1236:00	M-100B						KORO	GSS7C	ULP1			89		
1987-Y69	2446836.25	1987 Feb 09 1800:00	M-100B						KORO	GSS7C	ULP1			82		
1987-Y70	2446837.33	1987 Feb 10 2000:00	M-100B						KORO	GSS7C	ULP1			80		
1987-Y71	2446838.01	1987 Feb 11 1212:00	M-100B							TERLS				84		
1987-Y72	2446838.11	1987 Feb 11 1440:00	M-100B							GSS7B-4				83		
1987-Y73	2446838.14	1987 Feb 11 1523:00	M-100B							MLD				83		
1987-Y74	2446839.25	1987 Feb 11 1805:00	M-100B						KORO	GSS7C	ULP1			83		
1987-Y75	2446839.25	1987 Feb 12 1800:00	M-100B						KORO	GSS7C	ULP1			86		
1987-Y76	2446842.34	1987 Feb 15 2005:00	M-100B							UK				83		
1987-Y77	2446843.04	1987 Feb 16 1251:00	M-100B							UK				80		
1987-Y78	2446844.34	1987 Feb 17 2005:00	M-100B							UK				86		
1987-Y79	2446844.94	1987 Feb 18 1130:00	M-100B							UK				84		
1987-Y80	2446845.04	1987 Feb 18 1254:00	M-100B							TERLS				83		
1987-Y81	2446845.15	1987 Feb 18 1537:00	M-100B							GSS7B-4				81		
1987-Y82	2446849.34	1987 Feb 22 2005:00	M-100B							MLD				82		
1987-Y83	2446850.05	1987 Feb 23 1305:00	M-100B							UK				82		
1987-Y84	2446850.09	1987 Feb 23 1404:00	M-100B							MLD				81		
1987-Y85	2446851.34	1987 Feb 24 2005:00	M-100B							UK				82		

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Launch_Mission	FlightCode	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee_Km	Range_Km	Dest
1987-Y86	2446852.03	1987 Feb 25 1240:00	M-100B							TERLS				83		
1987-W52	2446852.09	1987 Feb 25 1404:00	M-100B							MLD				77		
1987-Y87	2446854.08	1987 Feb 27 1350:00	M-100B							GRSP-4				82		
1987-Y88	2446856.34	1987 Mar 01 2005:00	M-100B							UK				80		
1987-Y89	2446857.06	1987 Mar 02 1320:00	M-100B							GRSP-4				85		
1987-Y90	2446857.09	1987 Mar 02 1407:00	M-100B							MLD				82		
1987-Y91	2446858.34	1987 Mar 03 2005:00	M-100B							UK				86		
1987-Y92	2446858.98	1987 Mar 04 1130:00	M-100B							TERLS				81		
1987-Y93	2446859.09	1987 Mar 04 1407:00	M-100B							GRSP-4				79		
1987-Y94	2446860.02	1987 Mar 05 1226:00	M-100B							MLD				94		
1987-Y95	2446862.98	1987 Mar 08 1124:00	M-100B							KURD				78		
1987-Y96	2446863.38	1987 Mar 08 2105:00	M-100B							KURD				86		
1987-Y97	2446863.52	1987 Mar 09 1000:00	M-100B							GRSP-4				94		
1987-Y98	2446864.09	1987 Mar 09 1407:00	M-100B							UK				76		
1987-Y99	2446864.10	1987 Mar 09 1430:00	M-100B							MLD				80		
1987-Y99	2446865.36	1987 Mar 10 2040:00	M-100B							UK				91		
1987-Y99	2446865.52	1987 Mar 11 1005:00	M-100B							GRSP-4				87		
1987-Y99	2446866.09	1987 Mar 11 1407:00	M-100B							MLD				83		
1987-Y100	2446866.99	1987 Mar 12 1140:00	M-100B							TERLS				87		
1987-Y101	2446867.96	1987 Mar 13 1100:00	M-100B							GRSP-4				80		
1987-Y102	2446870.34	1987 Mar 15 2005:00	M-100B							UK				88		
1987-Y104	2446871.00	1987 Mar 16 1200:00	M-100B							KURD				87		
1987-Y105	2446871.04	1987 Mar 16 1300:00	M-100B							KURD				89		
1987-Y106	2446871.10	1987 Mar 16 1430:00	M-100B							GRSP-4				82		
1987-Y107	2446872.34	1987 Mar 17 2005:00	M-100B							UK				85		
1987-Y108	2446873.00	1987 Mar 18 1201:00	M-100B							TERLS				89		
1987-Y109	2446873.09	1987 Mar 18 1415:00	M-100B							GRSP-4				88		
1987-Y110	2446873.12	1987 Mar 18 1450:00	M-100B							GRSP-4				96		
1987-Y111	2446874.00	1987 Mar 19 1205:00	M-100B							UK				90		
1987-Y112	2446874.05	1987 Mar 19 1311:00	M-100B							KURD				83		
1987-Y113	2446875.00	1987 Mar 20 1203:00	M-100B							GRSP-4				91		
1987-Y114	2446876.12	1987 Mar 23 1450:00	M-100B							GRSP-4				85		
1987-Y115	2446879.94	1987 Mar 24 2005:00	M-100B							UK				85		
1987-Y116	2446879.98	1987 Mar 25 1130:00	M-100B							TERLS				80		
1987-Y19	2446880.12	1987 Mar 25 1500:00	M-100B							MLD				79		
1987-Y117	2446880.31	1987 Mar 25 1930:00	M-100B							GRSP-4				82		
1987-Y118	2446884.34	1987 Mar 29 2005:00	M-100B							UK				94		
1987-Y119	2446885.15	1987 Mar 30 1530:00	M-100B							GRSP-4				91		
1987-Y120	2446886.84	1987 Mar 31 2005:00	M-100B							UK				88		
1987-Y121	2446886.86	1987 Apr 01 1000:00	M-100B							TERLS				74		
1987-Y122	2446886.92	1987 Apr 01 1407:00	M-100B							MLD				81		
1987-Y123	2446887.09	1987 Apr 04 1130:00	M-100B							GRSP-4				82		
1987-Y124	2446889.95	1987 Apr 05 2005:00	M-100B							UK				89		
1987-Y125	2446891.34	1987 Apr 05 2000:00	M-100B							GRSP-4				83		
1987-Y126	2446892.35	1987 Apr 09 0805:00	M-100B							GRSP-4				84		
1987-Y127	2446893.84	1987 Apr 08 0210:00	M-100B							UK				92		
1987-Y128	2446894.94	1987 Apr 09 1210:00	M-100B							GRSP-4				85		
1987-Y129	2446898.94	1987 Apr 12 1435:00	M-100B							UK				92		
1987-Y130	2446899.34	1987 Apr 13 2005:00	M-100B							GRSP-4				85		
1987-Y131	2446900.34	1987 Apr 15 1438:00	M-100B							TERLS				81		
1987-Y132	2446901.89	1987 Apr 16 1130:00	M-100B							UK				83		
1987-Y133	2446905.34	1987 Apr 19 2005:00	M-100B							GRSP-4				85		
1987-Y134	2446906.06	1987 Apr 20 1320:00	M-100B							UK				85		
1987-Y135	2446906.15	1987 Apr 21 2005:00	M-100B							GRSP-4				85		
1987-Y136	2446906.16	1987 Apr 22 1435:00	M-100B							GRSP-4				85		
1987-Y137	2446906.16	1987 Apr 22 1435:00	M-100B							GRSP-4				85		
1987-Y138	2446907.34	1987 Apr 22 1432:00	M-100B							UK				85		
1987-Y139	2446908.00	1987 Apr 22 1202:00	M-100B							GRSP-4				89		
1987-Y139	2446908.09	1987 Apr 22 1432:00	M-100B							TERLS				79		
1987-Y140	2446908.11	1987 Apr 23 1135:00	M-100B							MLD				85		
1987-Y142	2446912.34	1987 Apr 26 2005:00	M-100B							GRSP-4				85		
1987-Y144	2446913.22	1987 Apr 27 1710:00	M-100B							UK				87		
1987-Y145	2446914.34	1987 Apr 28 2005:00	M-100B							GRSP-4				86		
1987-Y147	2446914.44	1987 Apr 29 1040:00	M-100B							UK				83		
1987-Y148	2446915.00	1987 Apr 29 1200:00	M-100B							TERLS				83		
1987-Y149	2446915.11	1987 Apr 29 1435:00	M-100B							MLD				85		
1987-Y150	2446915.12	1987 Apr 29 1447:00	M-100B							GRSP-4				82		
1987-Y152	2446919.34	1987 May 03 2005:00	M-100B							UK				84		
1987-Y153	2446920.12	1987 May 04 1454:00	M-100B							GRSP-4				82		
1987-Y154	2446921.34	1987 May 05 2005:00	M-100B							UK				79		
1987-Y154	2446921.98	1987 May 06 1138:00	M-100B							TERLS				82		
1987-Y155	2446922.09	1987 May 06 1435:00	M-100B							MLD				82		
1987-Y156	2446922.09	1987 May 06 1435:00	M-100B							GRSP-4				83		
1987-Y158	2446926.34	1987 May 10 2005:00	M-100B							UK				91		
1987-Y159	2446927.13	1987 May 11 1501:00	M-100B							GRSP-4				88		
1987-Y160	2446928.34	1987 May 12 2005:00	M-100B							UK				88		
1987-Y160	2446928.34	1987 May 12 2005:00	M-100B							GRSP-4				88		
1987-Y161	2446929.11	1987 May 13 1130:00	M-100B							TERLS				83		
1987-Y162	2446929.11	1987 May 13 1435:00	M-100B							MLD				78		
1987-Y163	2446934.00	1987 May 18 1154:00	M-100B							GRSP-4				81		
1987-Y164	2446934.00	1987 May 19 1130:00	M-100B							KURD				88		
1987-Y165	2446935.34	1987 May 19 2005:00	M-100B							GRSP-4				87		
1987-Y166	2446935.99	1987 May 20 1140:00	M-100B							UK				85		
1987-Y167	2446936.00	1987 May 20 1207:00	M-100B							GRSP-4				86		
1987-Y167	2446936.00	1987 May 20 1207:00	M-100B							TERLS				83		



Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Launch_Mission	FlightCode	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee Km	Range Km	Dest
1987-W136	2446936.09	1987 May 20 1407:00	M-100B	-	-	-	-	-	-	MLD	-	-	-	79	-	-
1987-W168	2446936.13	1987 May 20 1511:00	M-100B	-	-	-	-	-	-	GRSP-4	-	-	-	83	-	-
1987-Y169	2446936.96	1987 May 21 1108:00	M-100B	-	-	-	-	-	VORV	GRSP/D	LP4	-	-	85	-	-
1987-Y170	2446940.01	1987 May 24 1210:00	M-100B	-	-	-	-	-	VORV	GRSP/D	LP5	-	-	88	-	-
1987-Y171	2446940.99	1987 May 25 1142:00	M-100B	-	-	-	-	-	VORV	GRSP/D	LP6	-	-	87	-	-
1987-Y172	2446942.34	1987 May 26 2005:00	M-100B	-	-	-	-	-	-	UK	-	-	-	85	-	-
1987-Y173	2446943.00	1987 May 27 1156:00	M-100B	-	-	-	-	-	-	TERLS	-	-	-	83	-	-
1987-W141	2446943.09	1987 May 27 1407:00	M-100B	-	-	-	-	-	-	GRSP-4	-	-	-	79	-	-
1987-Y174	2446943.14	1987 May 27 1516:00	M-100B	-	-	-	-	-	-	GRSP/D	-	-	-	84	-	-
1987-Y175	2446943.96	1987 May 28 1100:00	M-100B	-	-	-	-	-	VORV	GRSP/D	LP7	-	-	87	-	-
1987-Y176	2446949.46	1987 Jun 02 2105:00	M-100B	-	-	-	-	-	-	UK	-	-	-	78	-	-
1987-Y177	2446949.48	1987 Jun 02 2305:00	M-100B	-	-	-	-	-	-	TERLS	-	-	-	86	-	-
1987-Y178	2446949.98	1987 Jun 03 1125:00	M-100B	-	-	-	-	-	-	GRSP-4	-	-	-	79	-	-
1987-W146	2446950.09	1987 Jun 03 1407:00	M-100B	-	-	-	-	-	-	GRSP/D	-	-	-	83	-	-
1987-Y179	2446950.18	1987 Jun 03 1620:00	M-100B	-	-	-	-	-	-	TERLS	-	-	-	81	-	-
1987-Y179	2446956.99	1987 Jun 10 1145:00	M-100B	-	-	-	-	-	-	GRSP-4	-	-	-	51	-	-
1987-W160	2446957.13	1987 Jun 10 1507:00	M-100B	-	-	-	-	-	-	GRSP/D	-	-	-	79	-	-
1987-W163	2446957.14	1987 Jun 10 1526:00	M-100B	-	-	-	-	-	-	UK	-	-	-	85	-	-
1987-Y182	2446957.30	1987 Jun 10 1905:00	M-100B	-	-	-	-	-	-	GRSP-4	-	-	-	87	-	-
1987-Y183	2446960.30	1987 Jun 13 1905:00	M-100B	-	-	-	-	-	-	TERLS	-	-	-	90	-	-
1987-Y184	2446963.99	1987 Jun 17 1145:00	M-100B	-	-	-	-	-	-	GRSP-4	-	-	-	79	-	-
1987-W164	2446964.09	1987 Jun 17 1407:00	M-100B	-	-	-	-	-	-	GRSP/D	-	-	-	85	-	-
1987-W165	2446964.30	1987 Jun 17 1630:00	M-100B	-	-	-	-	-	-	UK	-	-	-	87	-	-
1987-Y186	2446964.30	1987 Jun 17 1905:00	M-100B	-	-	-	-	-	-	GRSP-4	-	-	-	86	-	-
1987-Y187	2446967.30	1987 Jun 20 1905:00	M-100B	-	-	-	-	-	-	GRSP/D	LP8	-	-	85	-	-
1987-Y188	2446968.01	1987 Jun 21 1209:00	M-100B	-	-	-	-	-	VORV	GRSP/D	LP9	-	-	80	-	-
1987-Y189	2446969.94	1987 Jun 22 1300:00	M-100B	-	-	-	-	-	VORV	GRSP/D	-	-	-	84	-	-
1987-Y190	2446970.96	1987 Jun 24 1130:00	M-100B	-	-	-	-	-	VORV	GRSP/D	LP10	-	-	78	-	-
1987-Y191	2446971.01	1987 Jun 24 1213:00	M-100B	-	-	-	-	-	-	GRSP-4	-	-	-	63	-	-
1987-W171	2446971.09	1987 Jun 24 1407:00	M-100B	-	-	-	-	-	-	GRSP/D	LP10	-	-	61	-	-
1987-Y192	2446971.12	1987 Jun 24 1446:00	M-100B	-	-	-	-	-	-	GRSP-4	-	-	-	85	-	-
1987-Y194	2446972.27	1987 Jun 25 1630:00	M-100B	-	-	-	-	-	-	GRSP-4	-	-	-	84	-	-
1987-Y195	2446972.35	1987 Jun 25 2020:00	M-100B	-	-	-	-	-	-	UK	-	-	-	94	-	-
1987-Y196	2446974.30	1987 Jun 27 1905:00	M-100B	-	-	-	-	-	-	GRSP-4	-	-	-	77	-	-
1987-W176	2446976.09	1987 Jul 01 1407:00	M-100B	-	-	-	-	-	-	GRSP-4	-	-	-	83	-	-
1987-Y198	2446976.15	1987 Jul 01 1534:00	M-100B	-	-	-	-	-	-	GRSP-4	-	-	-	60	-	-
1987-Y199	2446976.30	1987 Jul 01 1905:00	M-100B	-	-	-	-	-	-	TERLS	-	-	-	82	-	-
1987-Y200	2446976.95	1987 Jul 02 1130:00	M-100B	-	-	-	-	-	-	GRSP-4	-	-	-	85	-	-
1987-Y201	2446981.30	1987 Jul 04 1905:00	M-100B	-	-	-	-	-	-	TERLS	-	-	-	86	-	-
1987-Y209	2446984.95	1987 Jul 08 1130:00	M-100B	-	-	-	-	-	-	GRSP-4	-	-	-	82	-	-
1987-Y210	2446986.09	1987 Jul 08 1507:00	M-100B	-	-	-	-	-	-	GRSP-4	-	-	-	81	-	-
1987-Y211	2446986.15	1987 Jul 08 1554:00	M-100B	-	-	-	-	-	-	GRSP-4	-	-	-	78	-	-
1987-Y212	2446986.30	1987 Jul 08 1905:00	M-100B	-	-	-	-	-	-	GRSP-4	-	-	-	88	-	-
1987-Y214	2446986.30	1987 Jul 11 1905:00	M-100B	-	-	-	-	-	-	GRSP-4	-	-	-	85	-	-
1987-Y215	2446990.09	1987 Jul 11 1607:00	M-100B	-	-	-	-	-	-	GRSP-4	-	-	-	84	-	-
1987-Y216	2446991.95	1987 Jul 15 1130:00	M-100B	-	-	-	-	-	-	GRSP-4	-	-	-	78	-	-
1987-Y217	2446992.13	1987 Jul 15 1507:00	M-100B	-	-	-	-	-	-	GRSP-4	-	-	-	82	-	-
1987-Y218	2446992.14	1987 Jul 15 1507:00	M-100B	-	-	-	-	-	-	GRSP-4	-	-	-	84	-	-
1987-Y219	2446992.50	1987 Jul 15 1905:00	M-100B	-	-	-	-	-	-	GRSP-4	-	-	-	91	-	-
1987-Y220	2446995.30	1987 Jul 21 1907:00	M-100B	-	-	-	-	-	-	GRSP-4	-	-	-	86	-	-
1987-Y245	2446995.90	1987 Jul 21 1905:00	M-100B	-	-	-	-	-	-	GRSP-4	-	-	-	91	-	-
1987-Y246	2446996.98	1987 Jul 21 21 0707:00	M-100B	-	-	-	-	-	-	GRSP-4	-	-	-	91	-	-
1987-Y247	2446998.98	1987 Jul 21 21 1130:00	M-100B	-	-	-	-	-	-	GRSP-4	-	-	-	91	-	-
1987-Y248	2446998.99	1987 Jul 21 22 1407:00	M-100B	-	-	-	-	-	-	GRSP-4	-	-	-	86	-	-
1987-Y249	2446998.95	1987 Jul 22 1542:00	M-100B	-	-	-	-	-	-	GRSP-4	-	-	-	81	-	-
1987-Y250	2446998.95	1987 Jul 22 1740:00	M-100B	-	-	-	-	-	-	GRSP-4	-	-	-	84	-	-
1987-Y251	2446999.27	1987 Jul 22 1935:00	M-100B	-	-	-	-	-	-	GRSP-4	-	-	-	86	-	-
1987-Y252	2447000.98	1987 Jul 24 1130:00	M-100B	-	-	-	-	-	-	GRSP-4	-	-	-	81	-	-
1987-Y253	2447003.98	1987 Jul 27 1130:00	M-100B	-	-	-	-	-	-	TERLS	-	-	-	83	-	-
1987-Y254	2447004.09	1987 Jul 27 1407:00	M-100B	-	-	-	-	-	-	GRSP-4	-	-	-	83	-	-
1987-Y255	2447004.99	1987 Jul 27 1407:00	M-100B	-	-	-	-	-	-	GRSP-4	-	-	-	81	-	-
1987-Y256	2447005.30	1987 Jul 28 1905:00	M-100B	-	-	-	-	-	-	GRSP-4	-	-	-	84	-	-
1987-Y256	2447005.98	1987 Jul 29 1130:00	M-100B	-	-	-	-	-	-	GRSP-4	-	-	-	84	-	-
1987-H200	2447006.09	1987 Jul 29 1407:00	M-100B	-	-	-	-	-	-	GRSP-4	-	-	-	77	-	-
1987-Y257	2447007.20	1987 Jul 30 1645:00	M-100B	-	-	-	-	-	-	GRSP-4	-	-	-	82	-	-
1987-Y257	2447007.98	1987 Jul 31 1130:00	M-100B	-	-	-	-	-	-	TERLS	-	-	-	86	-	-
1987-Y258	2447010.98	1987 Aug 03 1130:00	M-100B	-	-	-	-	-	-	GRSP-4	-	-	-	82	-	-
1987-Y259	2447011.09	1987 Aug 03 1407:00	M-100B	-	-	-	-	-	-	GRSP-4	-	-	-	86	-	-
1987-Y260	2447012.30	1987 Aug 04 1905:00	M-100B	-	-	-	-	-	-	GRSP-4	-	-	-	80	-	-
1987-Y261	2447012.98	1987 Aug 05 1130:00	M-100B	-	-	-	-	-	-	TERLS	-	-	-	82	-	-
1987-Y262	2447013.13	1987 Aug 05 1506:00	M-100B	-	-	-	-	-	-	GRSP-4	-	-	-	82	-	-
1987-Y263	2447013.13	1987 Aug 05 1507:00	M-100B	-	-	-	-	-	-	GRSP-4	-	-	-	88	-	-
1987-Y264	2447013.17	1987 Aug 05 1610:00	M-100B	-	-	-	-	-	-	GRSP-4	-	-	-	90	-	-
1987-Y265	2447019.30	1987 Aug 11 1905:00	M-100B	-	-	-	-	-	-	GRSP-4	-	-	-	83	-	-
1987-Y266	2447019.98	1987 Aug 12 1130:00	M-100B	-	-	-	-	-	-	GRSP-4	-	-	-	83	-	-
1987-Y267	2447020.09	1987 Aug 12 1407:00	M-100B	-	-	-	-	-	-	GRSP-4	-	-	-	79	-	-
1987-H207	2447020.19	1987 Aug 12 1630:00	M-100B	-	-	-	-	-	-	GRSP-4	-	-	-	91	-	-
1987-Y268	2447026.30	1987 Aug 18 1905:00	M-100B	-	-	-	-	-	-	GRSP-4	-	-	-	77	-	-
1987-H213	2447027.11	1987 Aug 19 1437:00	M-100B	-	-	-	-	-	-	GRSP-4	-	-	-	85	-	-
1987-Y269	2447027.12	1987 Aug 19 1450:00	M-100B	-	-	-	-	-	-	GRSP-4	-	-	-	86	-	-
1987-Y270	2447031.30	1987 Aug 23 1905:00	M-100B	-	-	-	-	-	-	GRSP-4	-	-	-	81	-	-
1987-Y271	2447032.10	1987 Aug 24 1430:00	M-100B	-	-	-	-	-	-	GRSP-4	-	-	-	86	-	-
1987-Y272	2447033.30	1987 Aug 25 1905:00	M-100B	-	-	-	-	-	-	GRSP-4	-	-	-	84	-	-
1987-Y273	2447033.98	1987 Aug 26 1130:00	M-100B	-	-	-	-	-	-	TERLS	-	-	-	83	-	-
1987-Y274	2447034.09	1987 Aug 26 1407:00	M-100B	-	-	-	-	-	-	GRSP-4	-	-	-	81	-	-
1987-Y275	2447034.10	1987 Aug 26 1430:00	M-100B	-	-	-	-	-	-	GRSP-4	-	-	-	89	-	-
1987-Y276	2447038.30	1987 Aug 30 1905:00	M-100B	-	-	-	-	-	-	GRSP-4	-	-	-	89	-	-

Launch_Tag	Launch_ID	Launch_Date	Lv_Type	Variant	Flight_ID	Flight	Launch_Mission	FlightCode	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee_Km	Range_Km	Dest
1987-Y277	2447039.17	1987 Aug 31 1600:00	M-100B							GRS-P-4				81		
1987-Y278	2447040.30	1987 Sep 01 1905:00	M-100B							UK				81		
1987-Y279	2447040.99	1987 Sep 02 1135:00	M-100B							TERLS				85		
1987-Y280	2447041.11	1987 Sep 02 1437:00	M-100B							MLD				86		
1987-Y281	2447045.30	1987 Sep 06 1905:00	M-100B							UK				84		
1987-Y282	2447046.09	1987 Sep 07 1410:00	M-100B							GRS-P-4				70		
1987-Y283	2447047.30	1987 Sep 08 1905:00	M-100B							UK				87		
1987-Y284	2447048.09	1987 Sep 09 1405:00	M-100B							GRS-P-4				81		
1987-Y285	2447048.09	1987 Sep 09 1405:00	M-100B							MLD				85		
1987-Y286	2447052.30	1987 Sep 13 1905:00	M-100B							UK				87		
1987-Y287	2447052.42	1987 Sep 13 2205:00	M-100B							UK				87		
1987-Y288	2447054.30	1987 Sep 15 1905:00	M-100B							GRS-P-4				84		
1987-Y289	2447055.07	1987 Sep 16 1340:00	M-100B							MLD				81		
1987-Y290	2447055.17	1987 Sep 16 1600:00	M-100B							TERLS				84		
1987-Y291	2447061.99	1987 Sep 23 1132:00	M-100B							GRS-P-4				51		
1987-Y292	2447062.07	1987 Sep 23 1394:00	M-100B							MLD				79		
1987-Y293	2447062.30	1987 Sep 23 1905:00	M-100B							UK				87		
1987-Y294	2447066.30	1987 Sep 29 1905:00	M-100B							GRS-P-4				81		
1987-Y295	2447069.06	1987 Sep 30 1320:00	M-100B							MLD				85		
1987-Y296	2447069.09	1987 Sep 30 1411:00	M-100B							UK				88		
1987-Y297	2447075.30	1987 Oct 06 1905:00	M-100B							TERLS				81		
1987-Y298	2447076.99	1987 Oct 07 1130:00	M-100B							MLD				86		
1987-Y299	2447081.30	1987 Oct 12 1905:00	M-100B							GRS-P-4				85		
1987-Y300	2447083.09	1987 Oct 14 1407:00	M-100B		M-100B					MLD				80		
1987-Y301	2447083.15	1987 Oct 14 1530:00	M-100B							UK				77		
1987-Y302	2447083.30	1987 Oct 14 1905:00	M-100B							GRS-P-4				94		
1987-Y303	2447085.06	1987 Oct 16 1320:00	M-100B		M-100B					UK				79		
1987-Y304	2447085.30	1987 Oct 16 1905:00	M-100B							GRS-P-4				82		
1987-Y305	2447086.30	1987 Oct 16 1905:00	M-100B							UK				82		
1987-Y306	2447088.02	1987 Oct 19 1235:00	M-100B							TERLS				85		
1987-Y307	2447088.30	1987 Oct 19 1905:00	M-100B							MLD				88		
1987-Y308	2447089.99	1987 Oct 21 1130:00	M-100B							UK				79		
1987-Y309	2447090.13	1987 Oct 21 1507:00	M-100B							GRS7F	ULP1			20		
1987-Y310	2447091.00	1987 Oct 22 1200:00	M-100B						SHIR	GRS7F	ULP1			78		
1987-Y311	2447092.02	1987 Oct 23 1230:00	M-100B						SHIR	GRS7F	ULP1			78		
1987-Y312	2447092.02	1987 Oct 23 1230:00	M-100B							GRS-P-4				85		
1987-Y313	2447092.30	1987 Oct 23 1905:00	M-100B						SHIR	GRS7F	ULP1			86		
1987-Y314	2447092.96	1987 Oct 24 1100:00	M-100B						SHIR	GRS7F	ULP1			83		
1987-Y315	2447094.52	1987 Oct 26 1001:00	M-100B							GRS7F	ULP1			84		
1987-Y316	2447095.02	1987 Oct 26 1222:00	M-100B							MLD				86		
1987-Y317	2447095.12	1987 Oct 26 1500:00	M-100B							UK				20		
1987-Y318	2447095.30	1987 Oct 26 1500:00	M-100B							GRS7F	ULP1			80		
1987-Y319	2447096.00	1987 Oct 27 1204:00	M-100B						SHIR	GRS7F	ULP1			77		
1987-Y320	2447096.99	1987 Oct 28 1145:00	M-100B						SHIR	GRS7F	ULP1			80		
1987-Y321	2447096.99	1987 Oct 28 1145:00	M-100B							TERLS				82		
1987-Y322	2447097.17	1987 Oct 28 1510:00	M-100B							GRS-P-4				80		
1987-Y323	2447097.17	1987 Oct 28 1510:00	M-100B							MLD				78		
1987-Y324	2447097.30	1987 Oct 28 1905:00	M-100B							UK				85		
1987-Y325	2447097.50	1987 Oct 28 1905:00	M-100B							GRS-P-4				81		
1987-Y326	2447098.30	1987 Oct 30 1530:00	M-100B							UK				84		
1987-Y327	2447098.30	1987 Oct 30 1905:00	M-100B							GRS-P-4				84		
1987-Y328	2447102.30	1987 Oct 02 1200:00	M-100B							UK				86		
1987-Y329	2447102.30	1987 Oct 02 1905:00	M-100B							GRS-P-4				85		
1987-Y330	2447104.06	1987 Nov 04 1330:00	M-100B							UK				87		
1987-Y331	2447104.09	1987 Nov 04 1407:00	M-100B							MLD				85		
1987-Y332	2447104.30	1987 Nov 04 1905:00	M-100B							UK				85		
1987-Y333	2447105.72	1987 Nov 06 0522:00	M-100B							GRS-P-4				83		
1987-Y334	2447106.30	1987 Nov 06 0905:00	M-100B							UK				85		
1987-Y335	2447106.30	1987 Nov 06 1152:00	M-100B							GRS-P-4				78		
1987-Y336	2447109.99	1987 Nov 09 1416:00	M-100B							MLD				90		
1987-Y337	2447109.99	1987 Nov 09 1416:00	M-100B							UK				86		
1987-Y338	2447111.07	1987 Nov 11 1335:00	M-100B							GRS-P-4				82		
1987-Y339	2447111.07	1987 Nov 11 1407:00	M-100B							MLD				79		
1987-Y340	2447111.12	1987 Nov 11 1448:00	M-100B							TERLS				82		
1987-Y341	2447111.30	1987 Nov 11 1905:00	M-100B							GRS-P-4				86		
1987-Y342	2447113.04	1987 Nov 13 1258:00	M-100B						SHIR	GRS7F	ULP1			81		
1987-Y343	2447113.30	1987 Nov 13 1905:00	M-100B							UK				83		
1987-Y344	2447114.02	1987 Nov 14 1234:00	M-100B						SHIR	GRS7F	ULP1			78		
1987-Y345	2447115.01	1987 Nov 15 1218:00	M-100B						SHIR	GRS7F	ULP1			84		
1987-Y346	2447116.08	1987 Nov 16 1400:00	M-100B							GRS-P-4				77		
1987-Y347	2447116.09	1987 Nov 16 1407:00	M-100B							MLD				87		
1987-Y348	2447116.30	1987 Nov 16 1905:00	M-100B							UK				81		
1987-Y349	2447118.17	1987 Nov 18 1600:00	M-100B							GRS-P-4				84		
1987-Y350	2447118.23	1987 Nov 18 1731:00	M-100B							MLD				86		
1987-Y351	2447118.30	1987 Nov 18 1905:00	M-100B							UK				76		
1987-Y352	2447119.98	1987 Nov 20 1132:00	M-100B							GRS-P-4				87		
1987-Y353	2447120.30	1987 Nov 20 1905:00	M-100B							UK				85		
1987-Y354	2447120.97	1987 Nov 21 1122:00	M-100B							GRS7F	ULP1			74		
1987-Y355	2447122.95	1987 Nov 23 1044:00	M-100B						SHIR	GRS7F	ULP1			85		
1987-Y356	2447124.12	1987 Nov 24 1500:00	M-100B							GRS-P-4				85		
1987-Y357	2447124.30	1987 Nov 24 1905:00	M-100B							UK				86		
1987-Y358	2447128.88	1987 Nov 29 0907:00	M-100B						SHIR	GRS7F	ULP1			83		
1987-Y359	2447129.80	1987 Nov 30 0705:00	M-100B						SHIR	GRS7F	ULP1			82		
1987-Y360	2447130.88	1987 Dec 01 0902:00	M-100B							GRS7F	ULP1			83		
1987-Y361	2447131.30	1987 Dec 01 1905:00	M-100B							UK				82		
1987-Y362	2447131.30	1987 Dec 02 0911:00	M-100B						SHIR	GRS7F	ULP1			79		
1987-Y363	2447131.88	1987 Dec 02 0911:00	M-100B							GRS7F	ULP1			79		

Launch_Tag	Launch_ID	Launch_Date	Lv_Type	Variant	Flight_ID	Flight	Launch_Mission	FlightCode	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee_Km	Range_Km	Dest
1987-W295	2447131.98	1987 Dec 02 1130:00	M-100B	-	-	-	-	-	-	GRS-P-4	-	-	-	78	-	-
1987-W364	2447132.08	1987 Dec 02 1400:00	M-100B	-	-	-	-	-	-	MLD	-	-	-	84	-	-
1987-W365	2447132.64	1987 Dec 03 0320:00	M-100B	-	-	-	-	-	-	TERLS	-	-	-	88	-	-
1987-W366	2447133.08	1987 Dec 03 0320:00	M-100B	-	-	-	-	-	-	TERLS	-	-	-	84	-	-
1987-W367	2447134.64	1987 Dec 05 0320:00	M-100B	-	-	-	-	-	-	TERLS	-	-	-	85?	-	-
1987-W368	2447134.85	1987 Dec 05 0820:00	M-100B	-	-	-	-	-	-	TERLS	-	-	-	80	-	-
1987-W369	2447134.91	1987 Dec 05 0950:00	M-100B	-	-	-	-	-	-	TERLS	-	-	-	85?	-	-
1987-W370	2447135.09	1987 Dec 05 1407:00	M-100B	-	-	-	-	-	-	TERLS	-	-	-	82	-	-
1987-W299	2447135.18	1987 Dec 05 1615:00	M-100B	-	-	-	-	-	-	TERLS	-	-	-	74	-	-
1987-W371	2447135.24	1987 Dec 05 1745:00	M-100B	-	-	-	-	-	-	TERLS	-	-	-	85?	-	-
1987-W372	2447135.29	1987 Dec 05 1853:00	M-100B	-	-	-	-	-	-	TERLS	-	-	-	82	-	-
1987-W373	2447135.44	1987 Dec 05 2230:00	M-100B	-	-	-	-	-	-	TERLS	-	-	-	85?	-	-
1987-W374	2447136.91	1987 Dec 07 0952:00	M-100B	-	-	-	-	-	-	GRS7F	-	-	-	76	-	-
1987-W300	2447136.92	1987 Dec 07 1005:00	M-100B	-	-	-	-	-	SHIR	ULP1	-	-	-	83	-	-
1987-W375	2447137.05	1987 Dec 07 1400:00	M-100B	-	-	-	-	-	-	TERLS	-	-	-	80	-	-
1987-W376	2447137.17	1987 Dec 07 1600:00	M-100B	-	-	-	-	-	-	TERLS	-	-	-	88	-	-
1987-W377	2447137.25	1987 Dec 07 1604:00	M-100B	-	-	-	-	-	-	TERLS	-	-	-	84	-	-
1987-W378	2447137.45	1987 Dec 07 2255:00	M-100B	-	-	-	-	-	-	TERLS	-	-	-	90	-	-
1987-W379	2447138.30	1987 Dec 08 1905:00	M-100B	-	-	-	-	-	-	GRS7F	-	-	-	79	-	-
1987-W380	2447138.93	1987 Dec 09 1017:00	M-100B	-	-	-	-	-	SHIR	ULP1	-	-	-	85	-	-
1987-W381	2447139.08	1987 Dec 09 1355:00	M-100B	-	-	-	-	-	-	GRS-P-4	-	-	-	84	-	-
1987-W382	2447139.12	1987 Dec 09 1500:00	M-100B	-	-	-	-	-	-	MLD	-	-	-	91	-	-
1987-W383	2447146.30	1987 Dec 15 1905:00	M-100B	-	-	-	-	-	-	GRS-P-4	-	-	-	78	-	-
1987-W311	2447146.37	1987 Dec 16 1120:00	M-100B	-	-	-	-	-	-	MLD	-	-	-	82	-	-
1987-W384	2447146.08	1987 Dec 16 1400:00	M-100B	-	-	-	-	-	-	GRS-P-4	-	-	-	86	-	-
1987-W385	2447152.30	1987 Dec 22 1910:00	M-100B	-	-	-	-	-	-	GRS-P-4	-	-	-	85	-	-
1987-W386	2447152.74	1987 Dec 23 0540:00	M-100B	-	-	-	-	-	-	MLD	-	-	-	86	-	-
1987-W387	2447153.09	1987 Dec 23 1407:00	M-100B	-	-	-	-	-	-	GRS-P-4	-	-	-	83	-	-
1987-W388	2447157.30	1987 Dec 27 1905:00	M-100B	-	-	-	-	-	-	GRS-P-4	-	-	-	84	-	-
1987-W389	2447159.30	1987 Dec 29 1905:00	M-100B	-	-	-	-	-	-	MLD	-	-	-	82	-	-
1987-W389	2447159.77	1987 Dec 30 0630:00	M-100B	-	-	-	-	-	-	GRS-P-4	-	-	-	82	-	-
1987-W390	2447160.09	1987 Dec 30 1407:00	M-100B	-	-	-	-	-	-	MLD	-	-	-	84	-	-
1988-W1	2447166.52	1988 Jan 06 1000:00	M-100B	-	-	-	-	-	-	GRS-P-4	-	-	-	85	-	-
1988-W2	2447167.09	1988 Jan 06 1407:00	M-100B	-	-	-	-	-	-	MLD	-	-	-	88	-	-
1988-W3	2447167.30	1988 Jan 06 1905:00	M-100B	-	-	-	-	-	-	GRS-P-4	-	-	-	88	-	-
1988-W4	2447171.96	1988 Jan 11 1137:00	M-100B	-	-	-	-	-	-	GRS-P-4	-	-	-	83	-	-
1988-W5	2447172.30	1988 Jan 11 1905:00	M-100B	-	-	-	-	-	-	GRS-P-4	-	-	-	94	-	-
1988-W6	2447174.04	1988 Jan 13 1300:00	M-100B	-	-	-	-	-	-	GRS-P-4	-	-	-	91	-	-
1988-W7	2447174.09	1988 Jan 13 1407:00	M-100B	-	-	-	-	-	-	MLD	-	-	-	86	-	-
1988-W8	2447174.10	1988 Jan 13 1420:00	M-100B	-	-	-	-	-	-	GRS-P-4	-	-	-	87	-	-
1988-W9	2447174.30	1988 Jan 13 1905:00	M-100B	-	-	-	-	-	-	GRS-P-4	-	-	-	86	-	-
1988-W10	2447174.39	1988 Jan 13 2125:00	M-100B	-	-	-	-	-	-	TERLS	-	-	-	85	-	-
1988-W11	2447174.57	1988 Jan 14 1117:00	M-100B	-	-	-	-	-	-	GRS-P-4	-	-	-	87	-	-
1988-W12	2447179.30	1988 Jan 18 2205:00	M-100B	-	-	-	-	-	-	GRS-P-4	-	-	-	77	-	-
1988-W13	2447179.42	1988 Jan 18 2205:00	M-100B	-	-	-	-	-	-	GRS-P-4	-	-	-	89	-	-
1988-W14	2447179.55	1988 Jan 19 0135:00	M-100B	-	-	-	-	-	-	GRS-P-4	-	-	-	81	-	-
1988-W15	2447179.57	1988 Jan 19 0485:00	M-100B	-	-	-	-	-	-	GRS-P-4	-	-	-	77	-	-
1988-W16	2447179.67	1988 Jan 19 0485:00	M-100B	-	-	-	-	-	-	GRS-P-4	-	-	-	86	-	-
1988-W17	2447179.80	1988 Jan 19 0785:00	M-100B	-	-	-	-	-	-	GRS-P-4	-	-	-	86	-	-
1988-W18	2447179.80	1988 Jan 19 0785:00	M-100B	-	-	-	-	-	-	GRS-P-4	-	-	-	86	-	-
1988-W19	2447179.82	1988 Jan 19 1085:00	M-100B	-	-	-	-	-	-	GRS-P-4	-	-	-	74	-	-
1988-W20	2447179.82	1988 Jan 19 1085:00	M-100B	-	-	-	-	-	-	GRS-P-4	-	-	-	85	-	-
1988-W21	2447180.05	1988 Jan 19 1305:00	M-100B	-	-	-	-	-	-	GRS-P-4	-	-	-	76	-	-
1988-W22	2447180.05	1988 Jan 19 1305:00	M-100B	-	-	-	-	-	-	GRS-P-4	-	-	-	85	-	-
1988-W23	2447180.17	1988 Jan 19 1605:00	M-100B	-	-	-	-	-	-	GRS-P-4	-	-	-	79	-	-
1988-W24	2447180.17	1988 Jan 19 1605:00	M-100B	-	-	-	-	-	-	GRS-P-4	-	-	-	82	-	-
1988-W25	2447180.30	1988 Jan 19 1905:00	M-100B	-	-	-	-	-	-	GRS-P-4	-	-	-	81	-	-
1988-W26	2447180.30	1988 Jan 20 1407:00	M-100B	-	-	-	-	-	-	MLD	-	-	-	88	-	-
1988-W27	2447181.09	1988 Jan 20 1905:00	M-100B	-	-	-	-	-	-	GRS-P-4	-	-	-	89	-	-
1988-W28	2447181.30	1988 Jan 20 2305:00	M-100B	-	-	-	-	-	-	GRS-P-4	-	-	-	83	-	-
1988-W29	2447181.42	1988 Jan 20 2305:00	M-100B	-	-	-	-	-	-	GRS-P-4	-	-	-	83	-	-
1988-W30	2447181.42	1988 Jan 21 0135:00	M-100B	-	-	-	-	-	-	GRS-P-4	-	-	-	86	-	-
1988-W31	2447181.55	1988 Jan 21 0135:00	M-100B	-	-	-	-	-	-	GRS-P-4	-	-	-	82	-	-
1988-W32	2447181.57	1988 Jan 21 0485:00	M-100B	-	-	-	-	-	-	GRS-P-4	-	-	-	77	-	-
1988-W33	2447181.67	1988 Jan 21 0485:00	M-100B	-	-	-	-	-	-	GRS-P-4	-	-	-	85	-	-
1988-W34	2447181.67	1988 Jan 21 0485:00	M-100B	-	-	-	-	-	-	GRS-P-4	-	-	-	79	-	-
1988-W35	2447181.82	1988 Jan 21 0735:00	M-100B	-	-	-	-	-	-	GRS-P-4	-	-	-	85	-	-
1988-W36	2447181.92	1988 Jan 21 1095:00	M-100B	-	-	-	-	-	-	GRS-P-4	-	-	-	82	-	-
1988-W37	2447182.05	1988 Jan 21 1305:00	M-100B	-	-	-	-	-	-	GRS-P-4	-	-	-	79	-	-
1988-W38	2447182.05	1988 Jan 21 1305:00	M-100B	-	-	-	-	-	-	GRS-P-4	-	-	-	81	-	-
1988-W39	2447182.17	1988 Jan 21 1605:00	M-100B	-	-	-	-	-	-	GRS-P-4	-	-	-	79	-	-
1988-W40	2447182.17	1988 Jan 21 1605:00	M-100B	-	-	-	-	-	-	GRS-P-4	-	-	-	86	-	-
1988-W41	2447182.30	1988 Jan 21 1605:00	M-100B	-	-	-	-	-	-	GRS-P-4	-	-	-	82	-	-
1988-W42	2447182.30	1988 Jan 21 1605:00	M-100B	-	-	-	-	-	-	GRS-P-4	-	-	-	86	-	-
1988-W43	2447186.04	1988 Jan 25 1300:00	M-100B	-	-	-	-	-	-	GRS-P-4	-	-	-	79	-	-
1988-W44	2447186.30	1988 Jan 25 1905:00	M-100B	-	-	-	-	-	-	GRS-P-4	-	-	-	83	-	-
1988-W45	2447187.98	1988 Jan 25 1905:00	M-100B	-	-	-	-	-	-	GRS-P-4	-	-	-	88	-	-
1988-W46	2447187.98	1988 Jan 27 1125:00	M-100B	-	-	-	-	-	-	TERLS	-	-	-	83	-	-
1988-W47	2447188.06	1988 Jan 27 1330:00	M-100B	-	-	-	-	-	-	GRS-P-4	-	-	-	74	-	-
1988-W48	2447188.09	1988 Jan 27 1407:00	M-100B	-	-	-	-	-	-	MLD	-	-	-	78	-	-
1988-W49	2447188.30	1988 Jan 27 1905:00	M-100B	-	-	-	-	-	-	GRS-P-4	-	-	-	86	-	-
1988-W50	2447188.42	1988 Jan 27 2205:00	M-100B	-	-	-	-	-	-	GRS-P-4	-	-	-	80	-	-
1988-W51	2447193.01	1988 Feb 01 1220:00	M-100B	-	-	-	-	-	-	GRS-P-4	-	-	-	76	-	-
1988-W52	2447194.30	1988 Feb 02 1905:00	M-100B	-	-	-	-	-	-	GRS-P-4	-	-	-	77	-	-

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Launch_Mission	FlightCode	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee_Km	Range_Km	Dest
1988-Y42	2447195.02	1988 Feb 03 1222:00	M-100B							GRSP-4				87		
1988-Y43	2447195.30	1988 Feb 03 1905:00	M-100B							UK				80		
1988-Y44	2447195.38	1988 Feb 03 2100:00	M-100B							MLD				83		
1988-Y45	2447200.30	1988 Feb 08 1905:00	M-100B							UK				84		
1988-Y46	2447201.99	1988 Feb 10 1138:00	M-100B							TERLS				84		
1988-Y47	2447202.07	1988 Feb 10 1345:00	M-100B							GRSP-4				88		
1988-Y48	2447202.22	1988 Feb 10 1712:00	M-100B							MLD				84		
1988-Y49	2447202.30	1988 Feb 10 1905:00	M-100B							UK				83		
1988-Y50	2447202.30	1988 Feb 15 1330:00	M-100B							UK				87		
1988-Y51	2447207.06	1988 Feb 15 1905:00	M-100B							GRSP-4				85		
1988-Y52	2447207.30	1988 Feb 17 1253:00	M-100B							UK				81		
1988-Y53	2447209.04	1988 Feb 17 1905:00	M-100B							GRSP-4				85		
1988-Y54	2447209.30	1988 Feb 17 2300:00	M-100B							MLD				84		
1988-Y55	2447209.46	1988 Feb 17 2300:00	M-100B							GRSP-4				80		
1988-Y56	2447214.04	1988 Feb 22 1300:00	M-100B							UK				81		
1988-Y57	2447214.30	1988 Feb 22 1905:00	M-100B							GRSP-4				91		
1988-Y58	2447216.04	1988 Feb 24 1300:00	M-100B							UK				79		
1988-Y59	2447216.32	1988 Feb 24 1945:00	M-100B							MLD				82		
1988-Y60	2447216.42	1988 Feb 24 2207:00	M-100B							GRSP-4				87		
1988-Y61	2447221.06	1988 Feb 29 1327:00	M-100B							UK				84		
1988-Y62	2447221.30	1988 Feb 29 1905:00	M-100B							GRSP-4				95		
1988-Y63	2447223.06	1988 Mar 02 1531:00	M-100B							UK				76		
1988-Y64	2447223.30	1988 Mar 02 1905:00	M-100B							MLD				80		
1988-Y65	2447223.38	1988 Mar 02 2100:00	M-100B							TERLS				87		
1988-Y66	2447224.00	1988 Mar 03 1155:00	M-100B							UK				83		
1988-Y67	2447229.30	1988 Mar 08 1910:00	M-100B							TERLS				77		
1988-Y68	2447229.98	1988 Mar 09 1137:00	M-100B							GRSP-4				91		
1988-Y69	2447230.07	1988 Mar 09 1340:00	M-100B							UK				84		
1988-Y70	2447230.38	1988 Mar 09 2100:00	M-100B							MLD				80		
1988-Y71	2447236.30	1988 Mar 15 1905:00	M-100B							GRSP-4				81		
1988-Y72	2447237.07	1988 Mar 16 1340:00	M-100B							MLD				85		
1988-Y73	2447237.99	1988 Mar 16 1407:00	M-100B							TERLS				77		
1988-Y74	2447239.14	1988 Mar 18 1519:00	M-100B						SHIR	GRS88A	ULP1			94		
1988-Y75	2447239.19	1988 Mar 18 1654:00	M-100B						SHIR	GRS88A	ULP1			90		
1988-Y76	2447241.18	1988 Mar 20 1624:00	M-100B						SHIR	GRS88A	ULP1			74		
1988-Y77	2447243.15	1988 Mar 22 1541:00	M-100B						SHIR	GRS88A	ULP1			95		
1988-Y78	2447243.99	1988 Mar 23 1140:00	M-100B							TERLS				91		
1988-Y79	2447244.08	1988 Mar 23 1140:00	M-100B							GRSP-4				92		
1988-Y80	2447244.09	1988 Mar 23 1356:00	M-100B							MLD				91		
1988-Y81	2447244.16	1988 Mar 23 1407:00	M-100B						SHIR	GRS88A	ULP1			95		
1988-Y82	2447244.36	1988 Mar 23 1551:00	M-100B							UK				82		
1988-Y83	2447250.98	1988 Mar 23 2036:00	M-100B							TERLS				92		
1988-Y84	2447251.05	1988 Mar 30 1137:00	M-100B							UK				82		
1988-Y85	2447251.10	1988 Mar 30 1409:00	M-100B							GRSP-4				91		
1988-Y86	2447251.14	1988 Mar 30 1525:00	M-100B							GRSP-4				91		
1988-Y87	2447251.21	1988 Mar 30 0900:00	M-100B							GRSP-4				85		
1988-Y88	2447251.24	1988 Mar 30 2005:00	M-100B							UK				85		
1988-Y89	2447252.28	1988 Mar 31 0551:00	M-100B						SHIR	GRS88A	ULP1			92		
1988-Y90	2447252.78	1988 Apr 05 0920:00	M-100B						SHIR	GRS88A	ULP1			82		
1988-Y91	2447257.86	1988 Apr 06 1137:00	M-100B							GRSP-4				89		
1988-Y92	2447257.99	1988 Apr 06 1407:00	M-100B							TERLS				79		
1988-Y93	2447258.09	1988 Apr 06 1520:00	M-100B							MLD				90		
1988-Y94	2447258.15	1988 Apr 06 1622:00	M-100B							GRSP-4				84		
1988-Y95	2447258.20	1988 Apr 06 1650:00	M-100B							GRS88A	ULP1			80		
1988-Y96	2447258.33	1988 Apr 06 1953:00	M-100B							GRSP-4				86		
1988-Y97	2447259.17	1988 Apr 07 1634:00	M-100B							UK				87		
1988-Y98	2447263.16	1988 Apr 11 1554:00	M-100B						SHIR	GRS88A	ULP1			77		
1988-Y99	2447264.18	1988 Apr 12 1615:00	M-100B						SHIR	GRS88A	ULP1			76		
1988-Y00	2447264.98	1988 Apr 13 1135:00	M-100B							GRS88A	ULP1			81		
1988-Y01	2447265.09	1988 Apr 13 1437:00	M-100B							TERLS				78		
1988-Y02	2447265.10	1988 Apr 13 1487:00	M-100B							MLD				82		
1988-Y03	2447265.30	1988 Apr 20 1407:00	M-100B							GRSP-4				77		
1988-Y04	2447272.09	1988 Apr 20 1435:00	M-100B							UK				85		
1988-Y05	2447272.11	1988 Apr 20 1607:00	M-100B							MLD				82		
1988-Y06	2447272.17	1988 Apr 20 1620:00	M-100B							GRSP-4				78		
1988-Y07	2447272.18	1988 Apr 20 1620:00	M-100B							MLD				85		
1988-Y08	2447272.30	1988 Apr 20 1905:00	M-100B							GRSP-4				89		
1988-Y09	2447272.38	1988 Apr 20 2105:00	M-100B							UK				86		
1988-Y10	2447272.98	1988 Apr 21 1135:00	M-100B							GRS88A	ULP1			81		
1988-Y101	2447274.20	1988 Apr 22 1645:00	M-100B							TERLS				89		
1988-Y102	2447274.98	1988 Apr 27 1134:00	M-100B							GRS88A	ULP1			82		
1988-Y103	2447279.08	1988 Apr 27 1400:00	M-100B							MLD				78		
1988-Y104	2447279.14	1988 Apr 27 1522:00	M-100B							GRS88A	ULP1			82		
1988-Y105	2447279.17	1988 Apr 27 1609:00	M-100B							GRS88A	ULP1			79		
1988-Y106	2447279.20	1988 Apr 27 1650:00	M-100B							GRS88A	ULP1			85		
1988-Y107	2447279.30	1988 Apr 27 1905:00	M-100B							UK				85		
1988-Y108	2447279.30	1988 Apr 30 1200:00	M-100B							GRS88A	ULP1			86		
1988-Y109	2447282.00	1988 May 02 1430:00	M-100B							GRS88A	ULP1			77		
1988-Y110	2447284.10	1988 May 03 1358:00	M-100B							GRS88A	ULP1			78		
1988-Y111	2447285.08	1988 May 04 0842:00	M-100B							UK				85		
1988-Y112	2447285.86	1988 May 04 1134:00	M-100B							TERLS				82		
1988-Y113	2447285.98	1988 May 04 1400:00	M-100B							GRS88A	ULP1			84		
1988-Y114	2447286.08	1988 May 04 1400:00	M-100B							GRS88A	ULP1			77		
1988-Y114	2447286.25	1988 May 04 1803:00	M-100B							MLD				88		

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Launch_Mission	FlightCode	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee_Km	Range_Km	Dest
1988-Y115	2447292.96	1988 May 11 11:09:00	M-100B							UK				82		
1988-Y116	2447292.99	1988 May 11 11:42:00	M-100B							TERLS				82		
1988-Y117	2447293.14	1988 May 11 15:25:00	M-100B							GRSP-4				82		
1988-Y118	2447293.30	1988 May 11 19:15:00	M-100B							MLD				83		
1988-Y107	2447299.66	1988 May 18 08:36:00	M-100B							UK				79		
1988-Y119	2447299.92	1988 May 18 10:00:00	M-100B							UK				81		
1988-Y108	2447300.15	1988 May 18 15:40:00	M-100B							GRSP-4				77		
1988-Y120	2447300.25	1988 May 18 18:07:00	M-100B							MLD				85		
1988-Y121	2447300.99	1988 May 19 11:51:00	M-100B							UK				80		
1988-Y122	2447306.96	1988 May 25 11:04:00	M-100B							UK				84		
1988-Y123	2447306.98	1988 May 25 11:38:00	M-100B							TERLS				82		
1988-Y124	2447307.27	1988 May 25 18:31:00	M-100B							MLD				89		
1988-Y125	2447307.33	1988 May 25 19:50:00	M-100B							GRSP-4				82		
1988-Y126	2447307.35	1988 May 25 20:31:00	M-100B							MLD				84		
1988-Y127	2447313.65	1988 Jun 01 06:31:00	M-100B							UK				83		
1988-Y128	2447313.98	1988 Jun 01 11:36:00	M-100B							TERLS				81		
1988-Y129	2447314.09	1988 Jun 01 13:54:00	M-100B							MLD				82		
1988-Y130	2447314.17	1988 Jun 01 16:01:00	M-100B							GRSP-4				80		
1988-Y131	2447319.09	1988 Jun 06 14:07:00	M-100B							MLD				80		
1988-Y132	2447320.86	1988 Jun 08 06:41:00	M-100B							UK				82		
1988-Y133	2447320.96	1988 Jun 08 10:59:00	M-100B							TERLS				80		
1988-Y134	2447320.98	1988 Jun 08 11:30:00	M-100B							GRSP-4				80		
1988-Y135	2447321.17	1988 Jun 08 16:00:00	M-100B							UK				85		
1988-Y136	2447327.85	1988 Jun 15 06:27:00	M-100B							TERLS				81		
1988-Y137	2447327.99	1988 Jun 15 11:45:00	M-100B							GRSP-4				82		
1988-Y138	2447328.16	1988 Jun 15 16:20:00	M-100B							MLD				80		
1988-Y139	2447328.24	1988 Jun 15 17:49:00	M-100B							UK				82		
1988-Y140	2447330.11	1988 Jun 17 14:37:00	M-100B							MLD				81		
1988-Y141	2447333.09	1988 Jun 20 14:07:00	M-100B							UK				86		
1988-Y142	2447334.95	1988 Jun 22 10:54:00	M-100B							TERLS				84		
1988-Y143	2447334.99	1988 Jun 22 11:46:00	M-100B							GRSP-4				81		
1988-Y144	2447335.23	1988 Jun 22 17:30:00	M-100B							MLD				80		
1988-Y145	2447335.27	1988 Jun 22 18:36:00	M-100B							UK				75		
1988-Y151	2447340.09	1988 Jun 27 14:07:00	M-100B							TERLS				80		
1988-Y146	2447341.96	1988 Jun 29 11:45:00	M-100B							UK				80		
1988-Y147	2447341.99	1988 Jun 29 11:45:00	M-100B							GRSP-4				85		
1988-Y148	2447342.17	1988 Jun 29 16:10:00	M-100B							MLD				80		
1988-Y149	2447342.24	1988 Jun 29 17:44:00	M-100B							UK				79		
1988-Y150	2447347.09	1988 Jul 04 14:07:00	M-100B							MLD				86		
1988-Y159	2447346.57	1988 Jul 06 11:17:00	M-100B							UK				94		
1988-Y160	2447346.96	1988 Jul 06 11:36:00	M-100B							TERLS				81		
1988-Y161	2447346.98	1988 Jul 06 18:53:00	M-100B							GRSP-4				85		
1988-Y162	2447348.15	1988 Jul 06 18:53:00	M-100B							MLD				91		
1988-Y163	2447349.27	1988 Jul 11 14:57:00	M-100B							UK				82		
1988-Y164	2447354.11	1988 Jul 11 14:57:00	M-100B							GRSP-4				81		
1988-Y165	2447354.39	1988 Jul 11 19:05:00	M-100B							UK				81		
1988-Y166	2447354.58	1988 Jul 11 21:00:00	M-100B							GRSP-4				82		
1988-Y167	2447354.60	1988 Jul 12 02:05:00	M-100B							UK				82		
1988-Y168	2447354.88	1988 Jul 12 07:05:00	M-100B							GRSP-4				86		
1988-Y169	2447354.92	1988 Jul 12 09:00:00	M-100B							UK				85		
1988-Y170	2447354.95	1988 Jul 12 10:35:00	M-100B							GRSP-4				81		
1988-Y171	2447355.05	1988 Jul 12 13:20:00	M-100B							UK				71		
1988-Y172	2447355.06	1988 Jul 12 13:20:00	M-100B							GRSP-4				84		
1988-Y173	2447355.09	1988 Jul 12 14:65:00	M-100B							UK				80		
1988-Y174	2447355.17	1988 Jul 12 16:05:00	M-100B							GRSP-4				83		
1988-Y175	2447355.25	1988 Jul 12 18:00:00	M-100B							UK				82		
1988-Y176	2447355.38	1988 Jul 12 21:00:00	M-100B							GRSP-4				83		
1988-Y177	2447355.50	1988 Jul 13 03:00:00	M-100B							UK				81		
1988-Y178	2447355.62	1988 Jul 13 03:00:00	M-100B							GRSP-4				83		
1988-Y179	2447355.71	1988 Jul 13 05:00:00	M-100B							UK				83		
1988-Y180	2447355.88	1988 Jul 13 09:00:00	M-100B							GRSP-4				82		
1988-Y181	2447355.99	1988 Jul 13 11:40:00	M-100B							TERLS				81		
1988-Y182	2447356.00	1988 Jul 13 12:00:00	M-100B							UK				82		
1988-Y183	2447356.12	1988 Jul 13 15:00:00	M-100B							GRSP-4				82		
1988-Y184	2447356.24	1988 Jul 13 17:39:00	M-100B							MLD				82		
1988-Y185	2447356.25	1988 Jul 13 18:00:00	M-100B							UK				83		
1988-Y186	2447356.30	1988 Jul 13 22:05:00	M-100B							GRSP-4				82		
1988-Y187	2447356.42	1988 Jul 14 01:03:00	M-100B							UK				82		
1988-Y188	2447356.54	1988 Jul 14 04:28:00	M-100B							GRSP-4				84		
1988-Y189	2447356.69	1988 Jul 14 07:06:00	M-100B							UK				80		
1988-Y190	2447356.80	1988 Jul 14 10:05:00	M-100B							GRSP-4				82		
1988-Y191	2447357.13	1988 Jul 14 15:07:00	M-100B							UK				84		
1988-Y192	2447357.17	1988 Jul 14 16:07:00	M-100B							MLD				82		
1988-Y193	2447362.99	1988 Jul 20 11:40:00	M-100B							TERLS				81		
1988-Y194	2447363.14	1988 Jul 20 15:20:00	M-100B							UK				82		
1988-Y195	2447363.17	1988 Jul 20 15:24:00	M-100B							GRSP-4				83		
1988-Y196	2447363.17	1988 Jul 20 16:05:00	M-100B							UK				82		
1988-Y197	2447368.09	1988 Jul 25 14:07:00	M-100B							GRSP-4				88		
1988-Y198	2447368.98	1988 Jul 27 11:30:00	M-100B							MLD				80		
1988-Y199	2447370.09	1988 Jul 27 14:05:00	M-100B							TERLS				84		
1988-Y199	2447370.13	1988 Jul 27 15:07:00	M-100B							MLD				82		

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Launch_Mission	FlightCode	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee_Km	Range_Km	Dest
1988-Y196	2447370.14	1988 Jul 27 15:16:00	N-100B							GTSP-4				80		
1988-W139	2447375.09	1988 Aug 01 14:07:00	N-100B							MLD				75		
1988-Y197	2447376.98	1988 Aug 03 11:30:00	N-100B							TERLS				80		
1988-Y198	2447377.09	1988 Aug 03 14:05:00	N-100B							UK				84		
1988-Y199	2447377.09	1988 Aug 03 14:05:00	N-100B							MLD				83		
1988-W140	2447377.33	1988 Aug 03 20:00:00	N-100B							GTSP-4				78		
1988-Y200	2447384.00	1988 Aug 10 11:59:00	N-100B							TERLS				81		
1988-Y201	2447384.09	1988 Aug 10 14:05:00	N-100B							UK				80		
1988-Y202	2447384.09	1988 Aug 10 14:05:00	N-100B							MLD				80		
1988-W143	2447389.10	1988 Aug 15 14:20:00	N-100B							TERLS				78		
1988-Y203	2447390.98	1988 Aug 17 11:30:00	N-100B							UK				80		
1988-Y204	2447391.09	1988 Aug 17 14:05:00	N-100B							MLD				87		
1988-Y205	2447391.09	1988 Aug 17 14:07:00	N-100B							GTSP-4				92		
1988-W145	2447391.29	1988 Aug 17 19:00:00	N-100B							TERLS				75		
1988-Y206	2447398.02	1988 Aug 24 12:25:00	N-100B							UK				83		
1988-Y207	2447398.09	1988 Aug 24 14:05:00	N-100B							MLD				83		
1988-W146	2447398.09	1988 Aug 24 14:05:00	N-100B							TERLS				84		
1988-Y208	2447398.16	1988 Aug 24 15:50:00	N-100B							GTSP-4				81		
1988-Y210	2447404.98	1988 Aug 31 11:30:00	N-100B							UK				80		
1988-Y211	2447405.09	1988 Aug 31 14:05:00	N-100B							MLD				80		
1988-Y212	2447405.09	1988 Aug 31 14:07:00	N-100B							TERLS				81		
1988-Y213	2447405.10	1988 Aug 31 14:21:00	N-100B							GTSP-4				86		
1988-Y214	2447411.99	1988 Sep 07 14:05:00	N-100B							UK				85		
1988-Y215	2447412.09	1988 Sep 07 14:09:00	N-100B							MLD				80		
1988-Y216	2447412.09	1988 Sep 07 14:09:00	N-100B							TERLS				87		
1988-Y217	2447414.60	1988 Sep 10 02:30:00	N-100B							UK				87		
1988-Y218	2447415.01	1988 Sep 10 12:15:00	N-100B							TERLS				83		
1988-Y219	2447415.05	1988 Sep 10 13:15:00	N-100B							MLD				87		
1988-Y220	2447416.98	1988 Sep 14 11:28:00	N-100B							GTSP-4				81		
1988-W160	2447419.08	1988 Sep 14 13:55:00	N-100B							TERLS				78		
1988-Y222	2447419.09	1988 Sep 14 14:05:00	N-100B							UK				88		
1988-Y223	2447419.09	1988 Sep 14 14:07:00	N-100B							MLD				83		
1988-Y225	2447425.98	1988 Sep 21 11:27:00	N-100B							TERLS				84		
1988-Y226	2447426.09	1988 Sep 21 14:05:00	N-100B							UK				88		
1988-Y227	2447426.09	1988 Sep 21 14:07:00	N-100B							MLD				82		
1988-W166	2447426.10	1988 Sep 21 14:30:00	N-100B							GTSP-4				78		
1988-Y228	2447432.99	1988 Sep 28 11:39:00	N-100B							TERLS				80		
1988-W170	2447433.09	1988 Sep 28 14:07:00	N-100B							MLD				78		
1988-Y229	2447433.13	1988 Sep 28 15:14:00	N-100B							UK				88		
1988-Y230	2447433.15	1988 Sep 28 15:36:00	N-100B							GTSP-4				80		
1988-Y231	2447439.97	1988 Oct 05 11:17:00	N-100B							TERLS				86		
1988-Y232	2447440.09	1988 Oct 05 11:17:00	N-100B							UK				85		
1988-Y233	2447440.13	1988 Oct 05 15:10:00	N-100B							GTSP-4				88		
1988-Y234	2447440.35	1988 Oct 12 11:11:00	N-100B							TERLS				83		
1988-Y235	2447446.97	1988 Oct 12 14:37:00	N-100B							MLD				82		
1988-Y236	2447447.04	1988 Oct 12 14:37:00	N-100B							UK				81		
1988-Y237	2447447.11	1988 Oct 12 15:05:00	N-100B							GTSP-4				88		
1988-Y242	2447452.51	1988 Oct 18 17:00:00	N-100B							TERLS				84		
1988-Y243	2447453.20	1988 Oct 18 19:00:00	N-100B							UK				83		
1988-Y244	2447453.66	1988 Oct 19 11:07:00	N-100B							MLD				84		
1988-Y245	2447454.99	1988 Oct 19 14:07:00	N-100B							GTSP-4				82		
1988-Y246	2447454.99	1988 Oct 19 14:07:00	N-100B							TERLS				83		
1988-Y247	2447454.99	1988 Oct 19 15:05:00	N-100B							MLD				82		
1988-Y248	2447460.96	1988 Oct 26 11:03:00	N-100B							UK				83		
1988-Y249	2447461.09	1988 Oct 26 14:07:00	N-100B							TERLS				82		
1988-Y250	2447461.13	1988 Oct 26 15:05:00	N-100B							MLD				84		
1988-Y252	2447467.96	1988 Nov 02 11:01:00	N-100B							TERLS				81		
1988-Y253	2447468.09	1988 Nov 02 14:07:00	N-100B							MLD				83		
1988-Y254	2447468.09	1988 Nov 02 16:35:00	N-100B							UK				82		
1988-Y255	2447475.09	1988 Nov 09 14:07:00	N-100B							GTSP-4				81		
1988-Y256	2447475.13	1988 Nov 09 15:05:00	N-100B							TERLS				80		
1988-Y257	2447475.96	1988 Nov 10 10:59:00	N-100B							MLD				81		
1988-W196	2447480.87	1988 Nov 15 04:10:00	N-100B							GTSP-4				79		
1988-Y258	2447480.73	1988 Nov 15 06:50:00	N-100B							TERLS				86		
1988-Y259	2447480.78	1988 Nov 15 06:50:00	N-100B							GTSP-4				84		
1988-Y260	2447481.96	1988 Nov 16 10:57:00	N-100B							MLD				83		
1988-Y261	2447482.09	1988 Nov 16 14:14:00	N-100B							UK				81		
1988-Y262	2447482.13	1988 Nov 16 15:05:00	N-100B							GTSP-4				87		
1988-Y263	2447483.19	1988 Nov 17 16:30:00	N-100B							TERLS				86		
1988-Y264	2447483.23	1988 Nov 17 17:30:00	N-100B							MLD				86		
1988-Y265	2447488.23	1988 Nov 22 17:30:00	N-100B							GTSP-4				85		
1988-Y266	2447488.29	1988 Nov 22 19:00:00	N-100B							TERLS				78		
1988-H202	2447488.96	1988 Nov 23 11:00:00	N-100B							MLD				84		
1988-Y267	2447489.09	1988 Nov 23 14:07:00	N-100B							UK				85		
1988-Y268	2447489.13	1988 Nov 23 15:05:00	N-100B							GTSP-4				89		
1988-Y269	2447489.35	1988 Nov 30 10:57:00	N-100B							TERLS				81		
1988-Y270	2447495.97	1988 Nov 30 11:15:00	N-100B							MLD				85		
1988-Y271	2447495.97	1988 Nov 30 14:12:00	N-100B							GTSP-4				80		
1988-Y272	2447496.09	1988 Nov 30 15:05:00	N-100B							UK				85		
1988-Y273	2447496.13	1988 Dec 07 10:01:00	N-100B							TERLS				84		
1988-Y281	2447502.92	1988 Dec 07 11:15:00	N-100B							MLD				75		
1988-H215	2447503.13	1988 Dec 07 15:05:00	N-100B							GTSP-4				89		
1988-Y282	2447509.96	1988 Dec 14 11:01:00	N-100B							TERLS				81		
1988-Y283	2447510.09	1988 Dec 14 14:07:00	N-100B							MLD				79		

Launch_Tag	Launch_ID	Launch_Date	Lv_Type	Variant	Flight_ID	Flight	Launch_Mission	FlightCode	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee_Km	Range_Km	Dest
1988-Y284	2447510.13	1988 Dec 14 1505:00	M-100B							UK				86		
1988-Y285	2447516.96	1988 Dec 21 1101:00	M-100B							TERLS				82		
1988-Y286	2447517.09	1988 Dec 21 1407:00	M-100B							MLD				83		
1988-Y287	2447517.13	1988 Dec 21 1505:00	M-100B							UK				88		
1988-Y288	2447522.98	1988 Dec 27 1134:00	M-100B						KURO	GSS9A	ULP1			82		
1988-Y289	2447523.96	1988 Dec 28 1108:00	M-100B							TERLS				82		
1988-Y290	2447524.09	1988 Dec 28 1407:00	M-100B							MLD				82		
1988-Y291	2447524.13	1988 Dec 28 1505:00	M-100B							UK				82		
1988-Y292	2447530.78	1989 Jan 04 0638:00	M-100B							SALW				79		
1989-Y02	2447531.09	1989 Jan 04 1407:00	M-100B							MLD				82		
1989-Y07	2447531.13	1989 Jan 04 1505:00	M-100B							UK				83		
1989-Y03	2447535.98	1989 Jan 09 1125:00	M-100B							TERLS				79		
1989-Y04	2447537.78	1989 Jan 11 0650:00	M-100B							SALW				83		
1989-Y21	2447537.97	1989 Jan 11 1116:00	M-100B							TERLS				96		
1989-Y05	2447538.13	1989 Jan 11 1505:00	M-100B							UK				77		
1989-Y06	2447538.13	1989 Jan 16 1141:00	M-100B							G18P-4				88		
1989-Y07	2447542.99	1989 Jan 16 1152:00	M-100B							TERLS				81		
1989-Y08	2447543.13	1989 Jan 16 1505:00	M-100B							UK				86		
1989-Y09	2447543.13	1989 Jan 17 1400:00	M-100B						KURO	GSS9A	ULP1			80		
1989-Y10	2447544.79	1989 Jan 18 0704:00	M-100B							SALW				84		
1989-Y11	2447544.98	1989 Jan 18 1127:00	M-100B							TERLS				81		
1989-Y12	2447546.11	1989 Jan 18 1330:00	M-100B							G18P-4				84		
1989-Y13	2447546.11	1989 Jan 18 1437:00	M-100B							MLD				84		
1989-Y14	2447546.13	1989 Jan 18 1505:00	M-100B							UK				84		
1989-Y15	2447546.21	1989 Jan 18 1707:00	M-100B							G18P-4				89		
1989-Y16	2447547.06	1989 Jan 20 1330:00	M-100B							MLD				81		
1989-Y17	2447547.67	1989 Jan 23 1100:00	M-100B						KURO	GSS9A	ULP1			81		
1989-Y18	2447549.96	1989 Jan 23 1100:00	M-100B							TERLS				81		
1989-Y19	2447550.03	1989 Jan 23 1238:00	M-100B							UK				81		
1989-Y20	2447550.13	1989 Jan 23 1505:00	M-100B							GSS9A				81		
1989-Y21	2447550.52	1989 Jan 24 1000:00	M-100B						KURO	GSS9A	ULP1			77		
1989-Y22	2447551.80	1989 Jan 25 0719:00	M-100B							SALW				61		
1989-Y23	2447552.05	1989 Jan 25 1146:00	M-100B							TERLS				61		
1989-Y24	2447552.13	1989 Jan 25 1516:00	M-100B							UK				84		
1989-Y40	2447552.96	1989 Jan 26 1100:00	M-100B						KURO	GSS9A	ULP1			79		
1989-Y41	2447552.96	1989 Jan 26 1505:00	M-100B							UK				78		
1989-Y42	2447557.61	1989 Feb 01 0753:00	M-100B							SALW				85		
1989-Y25	2447558.09	1989 Feb 01 1133:00	M-100B							TERLS				83		
1989-Y26	2447559.10	1989 Feb 01 1407:00	M-100B							MLD				91		
1989-Y27	2447559.10	1989 Feb 01 1420:00	M-100B							G18P-4				94		
1989-Y28	2447559.11	1989 Feb 01 1549:00	M-100B							UK				91		
1989-Y29	2447559.13	1989 Feb 01 1505:00	M-100B							GSS9A				81		
1989-Y30	2447559.35	1989 Feb 01 2000:00	M-100B						KURO	GSS9A	ULP1			82		
1989-Y31	2447561.12	1989 Feb 03 1500:00	M-100B							GSS9A				67		
1989-Y32	2447561.12	1989 Feb 03 1500:00	M-100B							TERLS				86		
1989-Y33	2447561.95	1989 Feb 06 1231:00	M-100B							UK				85		
1989-Y34	2447564.02	1989 Feb 06 1525:00	M-100B							G18P-4				87		
1989-Y35	2447564.82	1989 Feb 08 0737:00	M-100B							UK				83		
1989-Y36	2447565.86	1989 Feb 08 1131:00	M-100B							SALW				83		
1989-Y37	2447565.86	1989 Feb 08 1231:00	M-100B							TERLS				83		
1989-Y38	2447566.06	1989 Feb 08 1527:00	M-100B							G18P-4				78		
1989-Y39	2447566.06	1989 Feb 08 1527:00	M-100B							UK				86		
1989-Y40	2447566.23	1989 Feb 08 1735:00	M-100B							G18P-4				86		
1989-Y41	2447566.35	1989 Feb 08 2030:00	M-100B							UK				86		
1989-Y42	2447566.41	1989 Feb 08 2145:00	M-100B							UK				86		
1989-Y43	2447566.96	1989 Feb 09 0840:00	M-100B							UK				86		
1989-Y44	2447568.03	1989 Feb 10 1240:00	M-100B							SALW				77		
1989-Y45	2447568.13	1989 Feb 10 1505:00	M-100B							G18P-4				84		
1989-Y46	2447570.98	1989 Feb 13 1133:00	M-100B							TERLS				79		
1989-Y47	2447571.03	1989 Feb 13 1247:00	M-100B							G18P-4				80		
1989-Y48	2447571.13	1989 Feb 13 1505:00	M-100B							UK				82		
1989-Y49	2447572.99	1989 Feb 15 1141:00	M-100B							G18P-4				82		
1989-Y50	2447573.08	1989 Feb 15 1400:00	M-100B							TERLS				83		
1989-Y51	2447573.09	1989 Feb 15 1407:00	M-100B							G18P-4				80		
1989-Y52	2447573.13	1989 Feb 15 1505:00	M-100B							MLD				91		
1989-Y53	2447573.21	1989 Feb 15 1705:00	M-100B							UK				82		
1989-Y54	2447573.29	1989 Feb 15 1855:00	M-100B							UK				82		
1989-Y55	2447573.84	1989 Feb 16 0810:00	M-100B							SALW				83		
1989-Y56	2447575.04	1989 Feb 17 1254:00	M-100B							G18P-4				84		
1989-Y57	2447575.16	1989 Feb 17 1555:00	M-100B							UK				81		
1989-Y58	2447578.13	1989 Feb 20 1505:00	M-100B							UK				84		
1989-Y59	2447578.14	1989 Feb 20 1523:00	M-100B							G18P-4				81		
1989-Y60	2447578.22	1989 Feb 20 1720:00	M-100B							UK				84		
1989-Y61	2447578.30	1989 Feb 20 1905:00	M-100B							G18P-4				83		
1989-Y62	2447580.13	1989 Feb 22 1505:00	M-100B							UK				87		
1989-Y63	2447580.14	1989 Feb 22 1525:00	M-100B							G18P-4				74		
1989-Y64	2447580.19	1989 Feb 22 1640:00	M-100B							UK				85		
1989-Y65	2447581.91	1989 Feb 24 0945:00	M-100B							UK				90		
1989-Y66	2447582.13	1989 Feb 24 1505:00	M-100B							G18P-4				76		
1989-Y67	2447582.13	1989 Feb 27 1532:00	M-100B							UK				89		
1989-Y68	2447585.15	1989 Feb 27 1605:00	M-100B							G18P-4				86		
1989-Y69	2447585.17	1989 Feb 27 1605:00	M-100B							UK				81		
1989-Y70	2447586.57	1989 Mar 01 0858:00	M-100B							SALW				81		
1989-Y71	2447587.09	1989 Mar 01 1407:00	M-100B							MLD				80		
1989-Y72	2447587.13	1989 Mar 01 1505:00	M-100B							UK				83		
1989-Y73	2447587.20	1989 Mar 01 1650:00	M-100B							G18P-4				85		

Launch_Tag	Launch_ID	Launch_Date	Lv_Type	Variant	Flight_ID	Flight	Launch_Mission	FlightCode	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee_Km	Range_Km	Dest
1989-W72	2447587.26	1989 Mar 01 1820:00	M-100B							GTSP-4				78		
1989-W69	2447588.10	1989 Mar 02 1417:00	M-100B							UK				82		
1989-Y70	2447588.85	1989 Mar 03 0825:00	M-100B							UK				95		
1989-Y71	2447589.29	1989 Mar 03 1903:00	M-100B							UK				86		
1989-Y72	2447593.13	1989 Mar 07 1505:00	M-100B							UK				83		
1989-Y73	2447593.90	1989 Mar 08 0940:00	M-100B							SALIN				83		
1989-Y74	2447595.09	1989 Mar 09 1415:00	M-100B							GTSP-4				81		
1989-W75	2447596.13	1989 Mar 10 1514:00	M-100B						KURO	GSS9A				78		
1989-W79	2447599.17	1989 Mar 13 1605:00	M-100B						KURO	GSS9A	ULP1			78		
1989-W85	2447601.09	1989 Mar 15 1407:00	M-100B							UK				74		
1989-Y77	2447601.13	1989 Mar 15 1505:00	M-100B							UK				80		
1989-W87	2447601.16	1989 Mar 15 1545:00	M-100B							GSS9A	ULP1			79		
1989-Y78	2447601.90	1989 Mar 16 0931:00	M-100B							SALIN				81		
1989-Y80	2447603.07	1989 Mar 17 1340:00	M-100B							GTSP-4				89		
1989-Y84	2447607.91	1989 Mar 22 0946:00	M-100B							SALIN				81		
1989-Y85	2447608.09	1989 Mar 22 1354:00	M-100B							GTSP-4				81		
1989-Y86	2447614.87	1989 Mar 29 0857:00	M-100B							SALIN				85		
1989-Y87	2447615.09	1989 Mar 29 1407:00	M-100B							MJD				87		
1989-Y88	2447615.09	1989 Mar 29 1410:00	M-100B							GTSP-4				88		
1989-Y89	2447615.13	1989 Mar 29 1505:00	M-100B							UK				88		
1989-Y90	2447620.02	1989 Apr 03 1230:00	M-100B							GTSP-4				85		
1989-Y91	2447621.88	1989 Apr 05 0900:00	M-100B							SALIN				94		
1989-Y105	2447622.13	1989 Apr 05 1505:00	M-100B							UK				82		
1989-Y92	2447627.17	1989 Apr 10 1600:00	M-100B							GTSP-4				81		
1989-Y93	2447629.09	1989 Apr 12 1407:00	M-100B							MJD				86		
1989-Y94	2447629.11	1989 Apr 12 1436:00	M-100B							GTSP-4				82		
1989-Y95	2447629.13	1989 Apr 12 1505:00	M-100B							UK				79		
1989-Y96	2447629.97	1989 Apr 13 1123:00	M-100B							SALIN				82		
1989-W110	2447635.88	1989 Apr 19 0914:00	M-100B							SALIN				72		
1989-Y97	2447636.13	1989 Apr 19 1505:00	M-100B							UK				85		
1989-Y98	2447643.09	1989 Apr 26 1407:00	M-100B							MJD				85		
1989-Y99	2447643.13	1989 Apr 26 1505:00	M-100B							UK				85		
1989-Y100	2447644.07	1989 Apr 27 1340:00	M-100B							UK				87		
1989-Y104	2447649.69	1989 Apr 03 0927:00	M-100B							GTSP-4				86		
1989-Y105	2447650.12	1989 Apr 03 1452:00	M-100B							SALIN				82		
1989-Y106	2447650.13	1989 Apr 03 1505:00	M-100B							GTSP-4				82		
1989-Y106	2447650.88	1989 Apr 04 0900:00	M-100B							SALIN				80		
1989-W124	2447650.96	1989 Apr 04 1153:00	M-100B							TERLS				82		
1989-Y116	2447656.97	1989 Apr 10 1120:00	M-100B							TERLS				77		
1989-W157	2447657.09	1989 Apr 10 1407:00	M-100B							MJD				83		
1989-Y117	2447657.12	1989 Apr 10 1500:00	M-100B							GTSP-4				78		
1989-Y118	2447657.15	1989 Apr 10 1505:00	M-100B							UK				81		
1989-Y119	2447657.95	1989 Apr 11 1021:00	M-100B							SALIN				85		
1989-Y120	2447663.96	1989 Apr 17 1000:00	M-100B							SALIN				85		
1989-Y121	2447663.96	1989 Apr 17 1102:00	M-100B							TERLS				83		
1989-Y122	2447664.13	1989 Apr 17 1102:00	M-100B							UK				82		
1989-W143	2447664.21	1989 Apr 17 0945:00	M-100B							GTSP-4				82		
1989-Y124	2447670.81	1989 Apr 24 1152:00	M-100B							SALIN				71		
1989-Y125	2447670.89	1989 Apr 24 1457:00	M-100B							TERLS				81		
1989-Y126	2447671.09	1989 Apr 24 1505:00	M-100B							UK				80		
1989-Y127	2447671.18	1989 Apr 24 1505:00	M-100B							MJD				84		
1989-Y128	2447671.94	1989 Apr 24 1505:00	M-100B							GTSP-4				64		
1989-Y129	2447677.97	1989 Apr 31 1110:00	M-100B							SALIN				83		
1989-Y130	2447677.97	1989 Apr 31 1535:00	M-100B							TERLS				81		
1989-Y131	2447678.18	1989 Apr 31 1631:00	M-100B							UK				86		
1989-Y132	2447678.18	1989 Apr 31 1631:00	M-100B							GTSP-4				76		
1989-Y133	2447678.05	1989 Jun 01 1305:00	M-100B							UK				79		
1989-Y134	2447684.92	1989 Jun 07 0958:00	M-100B							TERLS				85		
1989-Y135	2447684.98	1989 Jun 07 1130:00	M-100B							SALIN				85		
1989-Y136	2447685.09	1989 Jun 07 1407:00	M-100B							TERLS				79		
1989-Y137	2447685.13	1989 Jun 07 1505:00	M-100B							MJD				81		
1989-Y138	2447687.08	1989 Jun 09 1400:00	M-100B							UK				86		
1989-Y139	2447687.92	1989 Jun 09 1400:00	M-100B							GTSP-4				83		
1989-Y140	2447689.12	1989 Jun 14 1005:00	M-100B							SALIN				85		
1989-Y141	2447689.12	1989 Jun 14 1110:00	M-100B							SALIN				85		
1989-Y142	2447692.13	1989 Jun 14 1505:00	M-100B							UK				79		
1989-Y143	2447692.19	1989 Jun 14 1530:00	M-100B							TERLS				77		
1989-Y144	2447698.92	1989 Jun 21 1008:00	M-100B							UK				77		
1989-Y145	2447699.09	1989 Jun 21 1110:00	M-100B							GTSP-4				78		
1989-Y146	2447699.13	1989 Jun 21 1407:00	M-100B							SALIN				79		
1989-Y147	2447699.13	1989 Jun 21 1505:00	M-100B							MJD				87		
1989-Y148	2447699.19	1989 Jun 21 1530:00	M-100B							UK				84		
1989-Y139	2447703.89	1989 Jun 26 0920:00	M-100B							GTSP-4				82		
1989-Y140	2447705.92	1989 Jun 28 1010:00	M-100B							SALIN				82		
1989-Y141	2447706.19	1989 Jun 28 1110:00	M-100B							UK				79		
1989-Y142	2447706.19	1989 Jun 28 1505:00	M-100B							GTSP-4				80		
1989-Y143	2447712.92	1989 Jul 05 1010:00	M-100B							SALIN				80		
1989-Y144	2447712.98	1989 Jul 05 1126:00	M-100B							TERLS				81		
1989-Y145	2447713.09	1989 Jul 05 1467:00	M-100B							MJD				87		
1989-Y146	2447713.20	1989 Jul 05 1655:00	M-100B							UK				87		
1989-Y147	2447713.28	1989 Jul 05 1840:00	M-100B							GTSP-4				83		
1989-Y148	2447718.09	1989 Jul 10 1407:00	M-100B							MJD				90		
1989-Y149	2447718.25	1989 Jul 10 1800:00	M-100B							UK				90		
1989-Y150	2447719.97	1989 Jul 12 1110:00	M-100B							MJD				83		
1989-Y151	2447720.13	1989 Jul 12 1505:00	M-100B							TERLS				86		
										UK				81		



Launch_Tag	Launch_ID	Launch_Date	Lv_Type	Variant	Flight_ID	Flight	Launch_Mission	FlightCode	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee Km	Range Km	Dest
1989-M183	2447720.14	1989 Jul 12 15:15:00	M-100B							MLD				77		
1989-M184	2447720.19	1989 Jul 12 16:28:00	M-100B							GRS-P-4				77		
1989-M185	2447720.92	1989 Jul 13 10:09:00	M-100B							SALIN				86		
1989-M186	2447725.09	1989 Jul 17 14:07:00	M-100B							MLD				80		
1989-M187	2447727.09	1989 Jul 19 14:07:00	M-100B							MLD				84		
1989-M188	2447727.13	1989 Jul 19 15:05:00	M-100B							UK				84		
1989-M189	2447727.19	1989 Jul 19 16:27:00	M-100B							GRS-P-4				83		
1989-M190	2447728.06	1989 Jul 20 13:23:00	M-100B							TERLS				82		
1989-M191	2447733.92	1989 Jul 26 10:02:00	M-100B							SALIN				82		
1989-M192	2447733.98	1989 Jul 26 11:36:00	M-100B							TERLS				81		
1989-M193	2447734.09	1989 Jul 26 14:07:00	M-100B							MLD				83		
1989-M194	2447734.13	1989 Jul 26 15:05:00	M-100B							UK				88		
1989-M195	2447734.19	1989 Jul 26 16:28:00	M-100B							GRS-P-4				72		
1989-M196	2447740.97	1989 Aug 02 11:22:00	M-100B							TERLS				82		
1989-M197	2447741.09	1989 Aug 02 14:07:00	M-100B							MLD				83		
1989-M198	2447741.13	1989 Aug 02 15:05:00	M-100B							UK				80		
1989-M199	2447741.17	1989 Aug 02 16:10:00	M-100B							GRS-P-4				90		
1989-M200	2447741.91	1989 Aug 03 09:49:00	M-100B							SALIN				79		
1989-M201	2447747.90	1989 Aug 09 09:37:00	M-100B							SALIN				84		
1989-M202	2447747.97	1989 Aug 09 11:10:00	M-100B							TERLS				80		
1989-M203	2447748.10	1989 Aug 09 14:25:00	M-100B							MLD				94		
1989-M204	2447748.17	1989 Aug 09 15:05:00	M-100B							UK				76		
1989-M205	2447748.17	1989 Aug 09 16:11:00	M-100B							GRS-P-4				83		
1989-M206	2447754.97	1989 Aug 16 11:10:00	M-100B							TERLS				91		
1989-M207	2447755.13	1989 Aug 16 15:05:00	M-100B							UK				78		
1989-M208	2447755.16	1989 Aug 16 15:05:00	M-100B							GRS-P-4				80		
1989-M209	2447755.21	1989 Aug 16 17:07:00	M-100B							MLD				85		
1989-M210	2447755.36	1989 Aug 16 20:40:00	M-100B							MLD				94		
1989-M211	2447760.09	1989 Aug 21 14:05:00	M-100B							MLD				80		
1989-M212	2447761.95	1989 Aug 23 10:47:00	M-100B							SALIN				81		
1989-M213	2447761.97	1989 Aug 23 11:10:00	M-100B							TERLS				80		
1989-M214	2447762.09	1989 Aug 23 14:05:00	M-100B							MLD				85		
1989-M215	2447762.15	1989 Aug 23 15:37:00	M-100B							UK				85		
1989-M216	2447762.15	1989 Aug 26 17:01:00	M-100B							GRS-P-4	ULP1			83		
1989-M217	2447765.78	1989 Aug 27 06:50:00	M-100B						SHIR	GRS9C	ULP1			85		
1989-M218	2447766.78	1989 Aug 28 14:07:00	M-100B						SHIR	GRS9C	ULP1			83		
1989-M219	2447767.09	1989 Aug 29 16:35:00	M-100B						SHIR	GRS9C	ULP1			83		
1989-M220	2447768.19	1989 Aug 29 18:45:00	M-100B						SHIR	GRS9C	ULP1			69		
1989-M221	2447768.28	1989 Aug 29 18:45:00	M-100B						SHIR	GRS9C	ULP1			97		
1989-M222	2447768.52	1989 Aug 30 10:10:00	M-100B							TERLS				80		
1989-M223	2447769.09	1989 Aug 30 14:07:00	M-100B							MLD				78		
1989-M224	2447769.10	1989 Aug 30 15:30:00	M-100B							SALIN				82		
1989-M225	2447769.14	1989 Aug 30 15:30:00	M-100B							GRS-P-4				85		
1989-M226	2447769.14	1989 Aug 30 15:30:00	M-100B							GRS-P-4				85		
1989-M227	2447769.19	1989 Aug 31 07:00:00	M-100B						SHIR	GRS9C	ULP1			81		
1989-M228	2447770.70	1989 Sep 01 16:07:00	M-100B						SHIR	GRS9C	ULP1			82		
1989-M229	2447771.09	1989 Sep 01 16:07:00	M-100B						SHIR	GRS9C	ULP1			71		
1989-M230	2447771.51	1989 Sep 01 17:37:00	M-100B						SHIR	GRS9C	ULP1			74		
1989-M231	2447771.53	1989 Sep 01 17:37:00	M-100B						SHIR	GRS9C	ULP1			82		
1989-M232	2447771.53	1989 Sep 01 17:37:00	M-100B						SHIR	GRS9C	ULP1			82		
1989-M233	2447771.59	1989 Sep 01 19:30:00	M-100B						SHIR	GRS9C	ULP1			81		
1989-M234	2447771.92	1989 Sep 01 19:30:00	M-100B						SHIR	GRS9C	ULP1			81		
1989-M235	2447771.92	1989 Sep 04 14:07:00	M-100B						SHIR	GRS9C	ULP1			81		
1989-M236	2447771.99	1989 Sep 04 14:07:00	M-100B						SHIR	GRS9C	ULP1			81		
1989-M237	2447775.29	1989 Sep 05 19:51:00	M-100B						SHIR	GRS9C	ULP1			78		
1989-M238	2447775.92	1989 Sep 06 10:35:00	M-100B						SHIR	GRS9C	ULP1			81		
1989-M239	2447775.92	1989 Sep 06 11:10:00	M-100B						SHIR	GRS9C	ULP1			79		
1989-M240	2447776.13	1989 Sep 06 15:11:00	M-100B						SHIR	GRS9C	ULP1			85		
1989-M241	2447776.13	1989 Sep 06 15:11:00	M-100B						SHIR	GRS9C	ULP1			85		
1989-M242	2447776.16	1989 Sep 06 15:53:00	M-100B						SHIR	GRS9C	ULP1			85		
1989-M243	2447778.19	1989 Sep 08 16:30:00	M-100B						SHIR	GRS9C	ULP1			91		
1989-M244	2447780.76	1989 Sep 11 06:20:00	M-100B						SHIR	GRS9C	ULP1			82		
1989-M245	2447781.09	1989 Sep 11 14:07:00	M-100B						SHIR	GRS9C	ULP1			86		
1989-M246	2447781.17	1989 Sep 11 16:00:00	M-100B						SHIR	GRS9C	ULP1			84		
1989-M247	2447781.24	1989 Sep 11 17:45:00	M-100B						SHIR	GRS9C	ULP1			83		
1989-M248	2447781.25	1989 Sep 11 18:00:00	M-100B						SHIR	GRS9C	ULP1			85		
1989-M249	2447781.33	1989 Sep 11 20:00:00	M-100B						SHIR	GRS9C	ULP1			84		
1989-M250	2447781.34	1989 Sep 11 20:15:00	M-100B						SHIR	GRS9C	ULP1			71		
1989-M251	2447782.85	1989 Sep 13 08:24:00	M-100B						SHIR	GRS9C	ULP1			80		
1989-M252	2447782.99	1989 Sep 13 11:45:00	M-100B						SHIR	GRS9C	ULP1			86		
1989-M253	2447783.09	1989 Sep 13 14:07:00	M-100B						SHIR	GRS9C	ULP1			82		
1989-M254	2447783.12	1989 Sep 13 14:57:00	M-100B						SHIR	GRS9C	ULP1			86		
1989-M255	2447783.42	1989 Sep 13 22:05:00	M-100B						SHIR	GRS9C	ULP1			86		
1989-M256	2447788.09	1989 Sep 18 14:15:00	M-100B						SHIR	GRS9C	ULP1			83		
1989-M257	2447789.91	1989 Sep 20 09:55:00	M-100B						SHIR	GRS9C	ULP1			84		
1989-M258	2447789.97	1989 Sep 20 11:20:00	M-100B						SHIR	GRS9C	ULP1			81		
1989-M259	2447790.09	1989 Sep 20 14:07:00	M-100B						SHIR	GRS9C	ULP1			86		
1989-M260	2447790.11	1989 Sep 20 14:43:00	M-100B						SHIR	GRS9C	ULP1			80		
1989-M261	2447790.13	1989 Sep 20 15:05:00	M-100B						SHIR	GRS9C	ULP1			88		
1989-M262	2447795.13	1989 Sep 25 15:07:00	M-100B						SHIR	GRS9C	ULP1			88		
1989-M263	2447796.13	1989 Sep 27 11:15:00	M-100B						SHIR	GRS9C	ULP1			81		
1989-M264	2447797.06	1989 Sep 27 13:25:00	M-100B						SHIR	GRS9C	ULP1			80		
1989-M265	2447797.99	1989 Sep 28 14:07:00	M-100B						SHIR	GRS9C	ULP1			82		
1989-M266	2447798.13	1989 Sep 28 15:05:00	M-100B						SHIR	GRS9C	ULP1			85		
1989-M267	2447802.09	1989 Oct 02 14:07:00	M-100B						SHIR	GRS9C	ULP1			88		
1989-M268	2447803.85	1989 Oct 04 08:30:00	M-100B						SHIR	GRS9C	ULP1			81		
1989-M269	2447803.97	1989 Oct 04 11:10:00	M-100B						SHIR	GRS9C	ULP1			78		

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Launch_Mission	FlightCode	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee Km	Range Km	Dest
1989-Y225	2447804.06	1989 Oct 04 1320:00	M-100B							GRS-P-4				80		
1989-Y226	2447804.09	1989 Oct 04 1407:00	M-100B							MLD				86		
1989-Y227	2447804.13	1989 Oct 04 1505:00	M-100B							UK				82		
1989-Y228	2447805.09	1989 Oct 05 1407:00	M-100B						SHIR	GRS9C	ULP1			85		
1989-Y229	2447805.25	1989 Oct 05 1800:00	M-100B						SHIR	GRS9C	ULP1			85		
1989-Y230	2447805.25	1989 Oct 09 1802:00	M-100B							MLD				83		
1989-Y231	2447809.09	1989 Oct 09 1407:00	M-100B						SHIR	GRS9C	ULP1			64		
1989-Y232	2447809.20	1989 Oct 09 1655:00	M-100B						SHIR	GRS9C	ULP1			64		
1989-Y233	2447809.26	1989 Oct 09 1814:00	M-100B						SHIR	GRS9C	ULP1			64		
1989-Y234	2447810.79	1989 Oct 11 0700:00	M-100B							GRS-P-4				76		
1989-Y235	2447810.79	1989 Oct 11 0701:00	M-100B						SHIR	GRS9C	ULP1			95		
1989-Y236	2447810.90	1989 Oct 11 0934:00	M-100B						SHIR	GRS9C	ULP1			95		
1989-Y237	2447810.97	1989 Oct 11 1110:00	M-100B							TERLS				90		
1989-Y238	2447811.09	1989 Oct 11 1407:00	M-100B							MLD				78		
1989-Y239	2447811.13	1989 Oct 11 1505:00	M-100B							UK				87		
1989-Y240	2447811.21	1989 Oct 11 1700:00	M-100B						SHIR	GRS9C	ULP1			83		
1989-Y241	2447811.33	1989 Oct 11 1700:00	M-100B							MLD				84		
1989-Y242	2447812.09	1989 Oct 12 1405:00	M-100B						SHIR	GRS9C	ULP1			82		
1989-Y243	2447812.21	1989 Oct 12 1405:00	M-100B						SHIR	GRS9C	ULP1			93		
1989-Y244	2447812.21	1989 Oct 12 1705:00	M-100B						SHIR	GRS9C	ULP1			82		
1989-Y245	2447812.25	1989 Oct 12 1807:00	M-100B						SHIR	GRS9C	ULP1			96		
1989-Y246	2447815.20	1989 Oct 15 1655:00	M-100B						SHIR	GRS9C	ULP1			94		
1989-Y247	2447815.27	1989 Oct 15 1836:00	M-100B						SHIR	GRS9C	ULP1			64		
1989-Y248	2447816.09	1989 Oct 16 1407:00	M-100B							MLD				77		
1989-Y249	2447816.03	1989 Oct 18 1237:00	M-100B							GRS-P-4				80		
1989-Y250	2447816.09	1989 Oct 18 1407:00	M-100B							UK				80		
1989-Y251	2447816.23	1989 Oct 18 1505:00	M-100B							UK				85		
1989-Y252	2447816.23	1989 Oct 18 1730:00	M-100B							UK				81		
1989-Y253	2447816.23	1989 Oct 18 1730:00	M-100B						SHIR	GRS9C	ULP1			81		
1989-Y254	2447816.65	1989 Oct 19 0630:00	M-100B							SALIN				81		
1989-Y255	2447820.09	1989 Oct 20 1407:00	M-100B							MLD				85		
1989-Y256	2447820.25	1989 Oct 20 1802:00	M-100B						SHIR	GRS9C	ULP1			83		
1989-Y257	2447820.37	1989 Oct 20 2050:00	M-100B						SHIR	GRS9C	ULP1			88		
1989-Y258	2447820.39	1989 Oct 20 2050:00	M-100B						SHIR	GRS9C	ULP1			88		
1989-Y259	2447821.31	1989 Oct 21 1226:00	M-100B						SHIR	GRS9C	ULP1			83		
1989-Y260	2447821.31	1989 Oct 21 1926:00	M-100B						SHIR	GRS9C	ULP1			87		
1989-Y261	2447822.71	1989 Oct 23 0900:00	M-100B							GRS9C	ULP1			90		
1989-Y262	2447823.09	1989 Oct 23 1407:00	M-100B							MLD				86		
1989-Y263	2447823.25	1989 Oct 23 1852:00	M-100B						SHIR	GRS9C	ULP1			84		
1989-Y264	2447823.25	1989 Oct 23 1852:00	M-100B						SHIR	GRS9C	ULP1			94		
1989-Y265	2447824.65	1989 Oct 25 0900:00	M-100B							SALIN				88		
1989-Y266	2447824.89	1989 Oct 25 0939:00	M-100B							TERLS				83		
1989-Y267	2447824.97	1989 Oct 25 1116:00	M-100B							GRS-P-4				85		
1989-Y268	2447825.01	1989 Oct 25 1535:00	M-100B							UK				87		
1989-Y269	2447825.35	1989 Oct 25 1535:00	M-100B						SHIR	GRS9C	ULP1			78		
1989-Y270	2447831.66	1989 Oct 26 1801:00	M-100B							SALIN				81		
1989-Y271	2447831.80	1989 Oct 26 1801:00	M-100B							GRS-P-4				82		
1989-Y272	2447832.13	1989 Oct 26 1535:00	M-100B							UK				82		
1989-Y273	2447832.21	1989 Oct 26 1709:00	M-100B							MLD				86		
1989-Y274	2447833.58	1989 Oct 26 0900:00	M-100B						SALIN	TERLS				80		
1989-Y275	2447838.98	1989 Oct 28 1118:00	M-100B							GRS9C	ULP1			77		
1989-Y276	2447839.99	1989 Oct 28 1407:00	M-100B							MLD				87		
1989-Y277	2447839.99	1989 Oct 28 1407:00	M-100B							GRS-P-4				82		
1989-Y278	2447840.13	1989 Oct 29 1535:00	M-100B							UK				82		
1989-Y279	2447844.09	1989 Oct 31 1407:00	M-100B							MLD				83		
1989-Y280	2447845.85	1989 Oct 15 0830:00	M-100B							SALIN				81		
1989-Y281	2447845.99	1989 Oct 15 1140:00	M-100B							GRS-P-4				82		
1989-Y282	2447846.09	1989 Oct 15 1407:00	M-100B							UK				86		
1989-Y283	2447846.13	1989 Oct 15 1505:00	M-100B							MLD				80		
1989-Y284	2447851.09	1989 Oct 20 1407:00	M-100B							GRS9C	ULP1			88		
1989-Y285	2447852.88	1989 Oct 22 0900:00	M-100B							MLD				82		
1989-Y286	2447853.07	1989 Oct 22 1337:00	M-100B							SALIN				77		
1989-Y287	2447853.12	1989 Oct 22 1337:00	M-100B							GRS-P-4				86		
1989-Y288	2447853.13	1989 Oct 22 1452:00	M-100B							MLD				90		
1989-Y289	2447853.13	1989 Oct 22 1505:00	M-100B							UK				85		
1989-Y290	2447853.94	1989 Oct 23 1040:00	M-100B							TERLS				82		
1989-Y291	2447858.09	1989 Oct 27 1407:00	M-100B							MLD				83		
1989-Y292	2447858.97	1989 Oct 29 0855:00	M-100B							SALIN				79		
1989-Y293	2447860.09	1989 Oct 29 1407:00	M-100B							MLD				82		
1989-Y294	2447860.09	1989 Oct 29 1408:00	M-100B							GRS-P-4				85		
1989-Y295	2447860.13	1989 Oct 29 1505:00	M-100B							UK				72		
1989-Y300	2447866.97	1989 Dec 06 1145:00	M-100B							TERLS				80		
1989-Y301	2447867.09	1989 Dec 06 1405:00	M-100B							UK				83		
1989-Y302	2447867.13	1989 Dec 06 1505:00	M-100B							GRS-P-4				81		
1989-Y303	2447873.88	1989 Dec 13 0900:00	M-100B							SALIN				82		
1989-Y304	2447874.06	1989 Dec 13 1330:00	M-100B							GRS-P-4				80		
1989-Y305	2447874.06	1989 Dec 13 1407:00	M-100B							MLD				85		
1989-Y307	2447874.13	1989 Dec 13 1505:00	M-100B							UK				82		
1989-Y310	2447880.89	1989 Dec 20 0918:00	M-100B							SALIN				82		
1989-Y311	2447880.97	1989 Dec 20 1118:00	M-100B							TERLS				80		
1989-Y304	2447881.12	1989 Dec 20 1500:00	M-100B							GRS-P-4				79		

Launch_Tag	Launch_ID	Launch_Date	Lv_Type	Variant	Flight_ID	Flight	Launch_Mission	FlightCode	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee_Km	Range_Km	Dest
1989-Y312	2447881.17	1989 Dec 20 1605:00	M-100B							UK				84		
1989-Y313	2447887.92	1989 Dec 27 1005:00	M-100B							SALIN				83		
1989-Y314	2447888.06	1989 Dec 27 1350:00	M-100B							GISP-4				82		
1989-Y315	2447888.09	1989 Dec 27 1407:00	M-100B							UK				83		
1989-Y316	2447888.13	1989 Dec 27 1505:00	M-100B							UK				85		
1990-Y01	2447894.33	1990 Jan 02 1957:00	M-100B							BALKH				84		
1990-Y02	2447894.35	1990 Jan 02 2027:00	M-100B							BALKH				80		
1990-Y03	2447894.46	1990 Jan 02 2300:00	M-100B							AKHT				84		
1990-Y04	2447894.51	1990 Jan 03 0015:00	M-100B							AKHT				84		
1990-Y05	2447894.97	1990 Jan 03 0852:00	M-100B							SALIN				75		
1990-Y06	2447895.05	1990 Jan 03 1316:00	M-100B							TERLS				80		
1990-Y07	2447895.08	1990 Jan 03 1350:00	M-100B							GISP-4				80		
1990-Y08	2447895.09	1990 Jan 03 1407:00	M-100B							GISP-4				83		
1990-Y09	2447895.09	1990 Jan 03 1407:00	M-100B							MJD				80		
1990-Y10	2447895.13	1990 Jan 03 1505:00	M-100B							MJD				84		
1990-Y11	2447895.17	1990 Jan 03 1600:00	M-100B							UK				91		
1990-Y12	2447895.36	1990 Jan 03 2045:00	M-100B							MJD				80		
1990-Y13	2447895.65	1990 Jan 04 0630:00	M-100B							SALIN				82		
1990-Y14	2447901.34	1990 Jan 09 2010:00	M-100B							BALKH				52		
1990-Y15	2447901.35	1990 Jan 09 2030:00	M-100B							BALKH				79		
1990-Y16	2447901.46	1990 Jan 09 2300:00	M-100B							AKHT				94		
1990-Y17	2447901.98	1990 Jan 10 1110:00	M-100B							AKHT				76		
1990-Y18	2447901.98	1990 Jan 10 1130:00	M-100B							TERLS				80		
1990-Y19	2447902.06	1990 Jan 10 1130:00	M-100B							SALIN				84		
1990-Y20	2447902.06	1990 Jan 10 1134:00	M-100B							GISP-4				81		
1990-Y21	2447902.13	1990 Jan 10 1520:00	M-100B							GISP-4				86		
1990-Y22	2447902.63	1990 Jan 11 0600:00	M-100B							MJD				78		
1990-Y23	2447906.97	1990 Jan 11 1110:00	M-100B							UK				85		
1990-Y24	2447907.11	1990 Jan 15 1452:00	M-100B							UK				85		
1990-Y25	2447907.13	1990 Jan 15 1505:00	M-100B							SALIN				70		
1990-Y26	2447908.34	1990 Jan 16 2012:00	M-100B				DYANA DM1			TERLS				60		
1990-Y27	2447908.47	1990 Jan 16 2301:00	M-100B				DYANA DM1			GISP-4				84		
1990-Y28	2447908.47	1990 Jan 16 2315:00	M-100B							UK				80		
1990-Y29	2447908.52	1990 Jan 17 1000:00	M-100B							BALKH				83		
1990-Y30	2447908.57	1990 Jan 17 1100:00	M-100B				DYANA DM2			AKHT				70		
1990-Y31	2447908.89	1990 Jan 17 1135:00	M-100B							SALIN				80		
1990-Y32	2447909.03	1990 Jan 17 1240:00	M-100B							GISP-4				79		
1990-Y33	2447909.09	1990 Jan 17 1407:00	M-100B							MJD				79		
1990-Y34	2447909.38	1990 Jan 17 1505:00	M-100B							UK				80		
1990-Y35	2447909.43	1990 Jan 18 1500:00	M-100B							GISP-4				82		
1990-Y36	2447909.43	1990 Jan 18 2100:00	M-100B				DYANA DM2			BALKH				82		
1990-Y37	2447910.00	1990 Jan 22 1110:00	M-100B							TERLS				80		
1990-Y38	2447910.07	1990 Jan 22 1110:00	M-100B							TERLS				80		
1990-Y39	2447910.37	1990 Jan 22 1332:00	M-100B				DYANA DM3			GISP-4				85		
1990-Y40	2447914.06	1990 Jan 23 1535:00	M-100B							UK				77		
1990-Y41	2447914.06	1990 Jan 23 1535:00	M-100B							BALKH				80		
1990-Y42	2447914.37	1990 Jan 23 2005:00	M-100B							AKHT				80		
1990-Y43	2447914.46	1990 Jan 23 2301:00	M-100B							AKHT				80		
1990-Y44	2447915.46	1990 Jan 23 2310:00	M-100B							UK				80		
1990-Y45	2447915.69	1990 Jan 24 0421:00	M-100B							BALKH				76		
1990-Y46	2447915.83	1990 Jan 24 0800:00	M-100B							MJD				108		
1990-Y47	2447915.97	1990 Jan 24 1110:00	M-100B				DYANA DM5			SALIN				77		
1990-Y48	2447915.98	1990 Jan 24 1135:00	M-100B							TERLS				77		
1990-Y49	2447916.06	1990 Jan 24 1330:00	M-100B							SALIN				83		
1990-Y50	2447916.07	1990 Jan 24 1337:00	M-100B							GISP-4				85		
1990-Y51	2447916.17	1990 Jan 24 1407:00	M-100B				DYANA DM4			GISP-4				80		
1990-Y52	2447916.17	1990 Jan 24 1407:00	M-100B							MJD				82		
1990-Y53	2447916.17	1990 Jan 24 1407:00	M-100B							MJD				88		
1990-Y54	2447917.35	1990 Jan 25 2020:00	M-100B							UK				87		
1990-Y55	2447917.97	1990 Jan 26 1110:00	M-100B				DYANA DM4			UK				65		
1990-Y56	2447921.13	1990 Jan 29 1505:00	M-100B							BALKH				82		
1990-Y57	2447921.07	1990 Jan 29 1505:00	M-100B				DYANA DM6			TERLS				77		
1990-Y58	2447922.46	1990 Jan 29 1505:00	M-100B							GISP-4				85		
1990-Y59	2447922.46	1990 Jan 30 2300:00	M-100B				DYANA DM5			UK				86		
1990-Y60	2447922.70	1990 Jan 30 2350:00	M-100B							AKHT				82		
1990-Y61	2447922.80	1990 Jan 31 0445:00	M-100B							AKHT				86		
1990-Y62	2447922.97	1990 Jan 31 0747:00	M-100B							SHTR	LP1			66		
1990-Y63	2447922.97	1990 Jan 31 0900:00	M-100B							SHTR	LP1			60		
1990-Y64	2447923.07	1990 Jan 31 1115:00	M-100B							SALIN				78		
1990-Y65	2447923.07	1990 Jan 31 1125:00	M-100B							SALIN				60		
1990-Y66	2447923.12	1990 Jan 31 1347:00	M-100B							GISP-4	LP1			83		
1990-Y67	2447923.12	1990 Jan 31 1407:00	M-100B							MJD				84		
1990-Y68	2447923.13	1990 Jan 31 1453:00	M-100B							UK				55		
1990-Y69	2447923.13	1990 Jan 31 1505:00	M-100B				DYANA DM6			UK				80		
1990-Y70	2447923.13	1990 Jan 31 1510:00	M-100B							UK				84		
1990-Y71	2447923.13	1990 Jan 31 1510:00	M-100B							GISP-4				79		
1990-Y72	2447923.29	1990 Jan 31 1853:00	M-100B							SHTR	LP1			76		
1990-Y73	2447923.47	1990 Jan 31 2320:00	M-100B							SHTR	LP1			60		
1990-Y74	2447924.00	1990 Feb 1 1205	M-100B							TERLS				80		
1990-Y75	2447925.05	1990 Feb 02 1305:00	M-100B							TERLS				75		
1990-Y106	2447927.99	1990 Feb 05 1145:00	M-100B				DYANA DM9			TERLS				83		

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Launch_Mission	FlightCode	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee_Km	Range_Km	Dest
1990-Y108	2447928.08	1990 Feb 05 1355:00	M-100B	-	-	DYANA DMW7	-	-	-	GTSP-4	-	-	-	83	-	-
1990-W68	2447928.13	1990 Feb 05 1505:00	M-100B	-	-	DYANA DMW7	-	-	-	UK	-	-	-	78	-	-
1990-Y114	2447929.33	1990 Feb 06 2000:00	M-100B	-	-	-	-	-	-	BALKH	-	-	-	80	-	-
1990-Y115	2447929.46	1990 Feb 06 2300:00	M-100B	-	-	-	-	-	-	AKHT	-	-	-	84	-	-
1990-Y116	2447929.51	1990 Feb 07 0015:00	M-100B	-	-	-	-	-	-	AKHT	-	-	-	89	-	-
1990-W70	2447929.72	1990 Feb 07 0520:00	M-100B	-	-	-	-	-	-	GTSP-4	-	-	-	77	-	-
1990-Y117	2447929.88	1990 Feb 07 0900:00	M-100B	-	-	-	-	-	-	SALIN	-	-	-	76	-	-
1990-Y118	2447930.09	1990 Feb 07 1408:00	M-100B	-	-	-	-	-	-	MLD	-	-	-	82	-	-
1990-W72	2447930.14	1990 Feb 7 1520	M-100B	-	-	DYANA DTH10	-	-	-	TERLS	-	-	-	80	-	-
1990-Y119	2447930.30	1990 Feb 07 1905:00	M-100B	-	-	DYANA DTH8	-	-	-	GTSP-4	-	-	-	78	-	-
1990-Y122	2447930.37	1990 Feb 08 1110:00	M-100B	-	-	DYANA DTH8	-	-	-	UK	-	-	-	82	-	-
1990-Y129	2447931.37	1990 Feb 09 1110:00	M-100B	-	-	DYANA DTH11	-	-	-	TERLS	-	-	-	80	-	-
1990-Y131	2447935.03	1990 Feb 12 1250:00	M-100B	-	-	DYANA DTH12	-	-	-	TERLS	-	-	-	80	-	-
1990-Y132	2447935.13	1990 Feb 12 1505:00	M-100B	-	-	DYANA DTH9	-	-	-	UK	-	-	-	80	-	-
1990-Y133	2447935.13	1990 Feb 12 1510:00	M-100B	-	-	DYANA DTH9	-	-	-	GTSP-4	-	-	-	81	-	-
1990-Y137	2447936.33	1990 Feb 13 2000:00	M-100B	-	-	DYANA DTH11	-	-	-	BALKH	-	-	-	80	-	-
1990-Y138	2447936.47	1990 Feb 13 2310:00	M-100B	-	-	-	-	-	-	AKHT	-	-	-	97	-	-
1990-W78	2447936.68	1990 Feb 14 0900:00	M-100B	-	-	DYANA DTH13	-	-	-	SALIN	-	-	-	95	-	-
1990-Y139	2447936.99	1990 Feb 14 1145:00	M-100B	-	-	-	-	-	-	TERLS	-	-	-	95	-	-
1990-W81	2447937.10	1990 Feb 14 1431:00	M-100B	-	-	DYANA DTH10	-	-	-	MLD	-	-	-	79	-	-
1990-Y140	2447937.13	1990 Feb 14 1505:00	M-100B	-	-	DYANA DTH10	-	-	-	UK	-	-	-	80	-	-
1990-Y141	2447937.13	1990 Feb 14 1512:00	M-100B	-	-	DYANA DTH10	-	-	-	GTSP-4	-	-	-	82	-	-
1990-Y146	2447938.97	1990 Feb 16 1110:00	M-100B	-	-	DYANA DTH14	-	-	-	TERLS	-	-	-	87	-	-
1990-Y151	2447941.99	1990 Feb 19 1140:00	M-100B	-	-	DYANA DTH15	-	-	-	TERLS	-	-	-	81	-	-
1990-Y152	2447942.09	1990 Feb 19 1416:00	M-100B	-	-	DYANA DTH15	-	-	-	GTSP-4	-	-	-	85	-	-
1990-Y153	2447942.13	1990 Feb 19 1505:00	M-100B	-	-	DYANA DTH11	-	-	-	UK	-	-	-	82	-	-
1990-Y165	2447943.34	1990 Feb 20 2016:00	M-100B	-	-	DYANA DTH11	-	-	-	BALKH	-	-	-	77	-	-
1990-W84	2447943.47	1990 Feb 20 2310:00	M-100B	-	-	-	-	-	-	AKHT	-	-	-	80	-	-
1990-W87	2447943.79	1990 Feb 21 0254:00	M-100B	-	-	-	-	-	-	GTSSOC	LP2	-	-	75	-	-
1990-W88	2447943.79	1990 Feb 21 0652:00	M-100B	-	-	-	-	-	-	GTSSOC	LP2	-	-	67	-	-
1990-W90	2447943.95	1990 Feb 21 1053:00	M-100B	-	-	-	-	-	-	GTSSOC	LP2	-	-	70	-	-
1990-W93	2447943.97	1990 Feb 21 1118:00	M-100B	-	-	-	-	-	-	SALIN	-	-	-	75	-	-
1990-Y166	2447943.97	1990 Feb 21 1122:00	M-100B	-	-	DYANA DTH16	-	-	-	TERLS	-	-	-	66	-	-
1990-W92	2447944.09	1990 Feb 21 1407:00	M-100B	-	-	-	-	-	-	MLD	-	-	-	77	-	-
1990-Y167	2447944.10	1990 Feb 21 1420:00	M-100B	-	-	DYANA DTH12	-	-	-	GTSP-4	LP2	-	-	62	-	-
1990-W95	2447944.12	1990 Feb 21 1457:00	M-100B	-	-	DYANA DTH12	-	-	-	UK	-	-	-	60	-	-
1990-Y168	2447944.17	1990 Feb 21 1610:00	M-100B	-	-	DYANA DTH12	-	-	-	GTSSOC	LP2	-	-	72	-	-
1990-W94	2447944.29	1990 Feb 21 1855:00	M-100B	-	-	-	-	-	-	GTSSOC	LP2	-	-	67	-	-
1990-W95	2447945.79	1990 Feb 21 0652:00	M-100B	-	-	-	-	-	-	TERLS	-	-	-	65	-	-
1990-W96	2447946.95	1990 Feb 26 1135:00	M-100B	-	-	DYANA DTH16	-	-	-	TERLS	-	-	-	85	-	-
1990-W97	2447948.11	1990 Feb 26 1505:00	M-100B	-	-	DYANA DTH15	-	-	-	GTSP-4	-	-	-	75	-	-
1990-W98	2447948.13	1990 Feb 26 1505:00	M-100B	-	-	DYANA DTH15	-	-	-	GTSP-4	-	-	-	40	-	-
1990-Y168	2447950.34	1990 Feb 27 0304:00	M-100B	-	-	-	-	-	-	BALKH	-	-	-	81	-	-
1990-Y168	2447950.46	1990 Feb 27 0300:00	M-100B	-	-	-	-	-	-	AKHT	-	-	-	88	-	-
1990-Y169	2447950.67	1990 Feb 28 0125:00	M-100B	-	-	DYANA DTH19	-	-	-	SALIN	-	-	-	80	-	-
1990-Y169	2447950.87	1990 Feb 28 0125:00	M-100B	-	-	-	-	-	-	TERLS	-	-	-	80	-	-
1990-Y169	2447950.97	1990 Feb 28 1459:00	M-100B	-	-	-	-	-	-	MLD	-	-	-	80	-	-
1990-Y169	2447951.09	1990 Feb 28 1459:00	M-100B	-	-	-	-	-	-	UK	-	-	-	77	-	-
1990-Y169	2447951.15	1990 Feb 28 1505:00	M-100B	-	-	DYANA DTH14	-	-	-	GTSP-4	-	-	-	77	-	-
1990-Y169	2447951.15	1990 Feb 28 1505:00	M-100B	-	-	DYANA DTH14	-	-	-	TERLS	-	-	-	85	-	-
1990-Y169	2447951.15	1990 Feb 28 1505:00	M-100B	-	-	DYANA DTH20	-	-	-	TERLS	-	-	-	85	-	-
1990-Y169	2447952.91	1990 Feb 05 1435:00	M-100B	-	-	DYANA DTH15	-	-	-	GTSP-4	-	-	-	73	-	-
1990-Y169	2447956.13	1990 Feb 05 1505:00	M-100B	-	-	DYANA DTH15	-	-	-	UK	-	-	-	73	-	-
1990-Y169	2447957.31	1990 Feb 06 1920:00	M-100B	-	-	-	-	-	-	BALKH	-	-	-	77	-	-
1990-Y213	2447957.46	1990 Feb 06 2300:00	M-100B	-	-	-	-	-	-	AKHT	-	-	-	86	-	-
1990-Y111	2447957.97	1990 Feb 07 1110:00	M-100B	-	-	DYANA DTH21	-	-	-	TERLS	-	-	-	79	-	-
1990-Y112	2447958.09	1990 Feb 07 1437:00	M-100B	-	-	-	-	-	-	MLD	-	-	-	75	-	-
1990-Y113	2447958.11	1990 Feb 07 1437:00	M-100B	-	-	DYANA DTH16	-	-	-	GTSP-4	-	-	-	77	-	-
1990-Y214	2447958.13	1990 Feb 07 1505:00	M-100B	-	-	DYANA DTH16	-	-	-	UK	-	-	-	85	-	-
1990-Y116	2447961.63	1990 Feb 11 0303:00	M-100B	-	-	-	-	-	-	GTSSOC	LP3	-	-	55	-	-
1990-Y117	2447961.67	1990 Feb 11 0409:00	M-100B	-	-	-	-	-	-	GTSSOC	LP3	-	-	60	-	-
1990-Y118	2447961.79	1990 Feb 11 0703:00	M-100B	-	-	-	-	-	-	GTSSOC	LP3	-	-	77	-	-
1990-Y119	2447961.95	1990 Feb 11 1055:00	M-100B	-	-	-	-	-	-	GTSSOC	LP3	-	-	76	-	-
1990-Y121	2447962.12	1990 Feb 11 1455:00	M-100B	-	-	-	-	-	-	GTSSOC	LP3	-	-	72	-	-
1990-Y122	2447962.29	1990 Feb 11 1857:00	M-100B	-	-	-	-	-	-	GTSSOC	LP3	-	-	75	-	-
1990-Y123	2447962.45	1990 Feb 11 2255:00	M-100B	-	-	-	-	-	-	TERLS	-	-	-	80	-	-
1990-Y240	2447963.08	1990 Feb 12 1400:00	M-100B	-	-	DYANA DTH22	-	-	-	GTSP-4	-	-	-	73	-	-
1990-Y124	2447963.12	1990 Feb 12 1452:00	M-100B	-	-	DYANA DTH17	-	-	-	UK	-	-	-	81	-	-
1990-Y241	2447963.13	1990 Feb 12 1505:00	M-100B	-	-	DYANA DTH17	-	-	-	AKHT	-	-	-	77	-	-
1990-Y244	2447963.58	1990 Feb 13 0200:00	M-100B	-	-	-	-	-	-	GTSP-4	-	-	-	84	-	-
1990-Y125	2447965.12	1990 Feb 14 1505:00	M-100B	-	-	DYANA DTH18	-	-	-	BALKH	-	-	-	85	-	-
1990-Y128	2447965.13	1990 Feb 14 1505:00	M-100B	-	-	-	-	-	-	GTSP-4	-	-	-	85	-	-
1990-Y258	2447971.32	1990 Feb 20 2300:00	M-100B	-	-	-	-	-	-	UK	-	-	-	77	-	-
1990-Y259	2447971.46	1990 Feb 21 0925:00	M-100B	-	-	-	-	-	-	BALKH	-	-	-	83	-	-
1990-Y129	2447971.89	1990 Feb 21 1467:00	M-100B	-	-	-	-	-	-	AKHT	-	-	-	69	-	-
1990-Y131	2447972.09	1990 Feb 21 1467:00	M-100B	-	-	-	-	-	-	SALIN	-	-	-	79	-	-
1990-Y132	2447972.10	1990 Feb 21 1430:00	M-100B	-	-	-	-	-	-	MLD	-	-	-	75	-	-
1990-Y260	2447978.33	1990 Feb 27 1955:00	M-100B	-	-	-	-	-	-	GTSP-4	-	-	-	80	-	-
1990-Y261	2447978.46	1990 Feb 27 2300:00	M-100B	-	-	-	-	-	-	BALKH	-	-	-	86	-	-
1990-Y134	2447978.93	1990 Feb 28 1025:00	M-100B	-	-	-	-	-	-	AKHT	-	-	-	60	-	-
1990-Y263	2447979.09	1990 Feb 28 1407:00	M-100B	-	-	-	-	-	-	SALIN	-	-	-	80	-	-
1990-Y264	2447979.13	1990 Feb 28 1505:00	M-100B	-	-	-	-	-	-	MLD	-	-	-	87	-	-
1990-Y265	2447979.15	1990 Feb 28 1530:00	M-100B	-	-	-	-	-	-	GTSP-4	-	-	-	85	-	-
1990-Y271	2448136.00	1990 Sep 01 1205:00	M-100B	-	-	-	-	-	-	TERLS	-	-	-	80	-	-

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Launch_Mission	FlightCode	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee_Km	Range_Km	Dest
1990-Y280	2446198.25	1990 Nov 02 1753:00	M-100B							BALXH				84		
1990-Y281	2446201.97	1990 Nov 06 1115:00	M-100B							GTSP-4				80		
1990-Y282	2446202.10	1990 Nov 06 1425:00	M-100B							MJD				83		
1990-Y283	2446202.46	1990 Nov 06 2300:00	M-100B							AHHT				83		
1990-Y284	2446202.98	1990 Nov 07 1130:00	M-100B							SALIN				81		
1990-Y285	2446203.13	1990 Nov 07 1505:00	M-100B							UK				86		
1990-Y286	2446205.21	1990 Nov 09 1700:00	M-100B							BALXH				82		
1990-Y287	2446209.46	1990 Nov 13 2300:00	M-100B							AHHT				83		
1990-Y288	2446209.98	1990 Nov 14 1130:00	M-100B							SALIN				80		
1990-Y289	2446209.99	1990 Nov 14 1145:00	M-100B							GTSP-4				83		
1990-Y290	2446210.13	1990 Nov 14 1505:00	M-100B							UK				84		
1990-Y291	2446210.17	1990 Nov 14 1610:00	M-100B							BALXH				81		
1990-Y292	2446210.25	1990 Nov 14 1807:00	M-100B							MJD				86		
1990-Y293	2446216.44	1990 Nov 20 2235:00	M-100B							AHHT				87		
1990-Y294	2446216.98	1990 Nov 21 1130:00	M-100B							SALIN				80		
1990-Y295	2446217.10	1990 Nov 21 1430:00	M-100B							GTSP-4				85		
1990-Y296	2446217.13	1990 Nov 21 1505:00	M-100B							UK				86		
1990-Y297	2446217.28	1990 Nov 21 1837:00	M-100B							MJD				82		
1990-Y160	2446217.33	1990 Nov 21 2000:00	M-100B							BALXH				79		
1990-Y298	2446223.46	1990 Nov 27 2300:00	M-100B							AHHT				84		
1990-Y299	2446224.09	1990 Nov 28 1407:00	M-100B							MJD				82		
1990-Y300	2446224.19	1990 Nov 28 1630:00	M-100B							UK				83		
1990-Y301	2446224.28	1990 Nov 28 1846:00	M-100B							UK				84		
1990-Y302	2446224.40	1990 Nov 29 2130:00	M-100B							BALXH				80		
1990-Y303	2446224.98	1990 Nov 29 1130:00	M-100B							SALIN				80		
1990-Y304	2446230.33	1990 Dec 04 1955:00	M-100B							BALXH				83		
1990-Y182	2446230.39	1990 Dec 04 2115:00	M-100B							BALXH				72		
1990-Y165	2446230.43	1990 Dec 04 2220:00	M-100B							AHHT				85		
1990-Y305	2446230.43	1990 Dec 04 2340:00	M-100B							GTSP-4				85		
1990-Y306	2446230.98	1990 Dec 05 1130:00	M-100B							SALIN				81		
1990-Y307	2446230.98	1990 Dec 05 1130:00	M-100B							MJD				82		
1990-Y308	2446231.09	1990 Dec 05 1546:00	M-100B							UK				81		
1990-Y309	2446231.16	1990 Dec 05 1546:00	M-100B							UK				82		
1990-Y310	2446235.98	1990 Dec 10 1130:00	M-100B							SALIN				84		
1990-Y311	2446237.33	1990 Dec 11 1955:00	M-100B							BALXH				85		
1990-Y312	2446237.46	1990 Dec 11 2300:00	M-100B							AHHT				85		
1990-Y313	2446237.98	1990 Dec 12 1130:00	M-100B							GTSP-4				82		
1990-Y314	2446238.09	1990 Dec 12 1407:00	M-100B							MJD				84		
1990-Y315	2446238.13	1990 Dec 12 1505:00	M-100B							UK				91		
1990-Y316	2446240.03	1990 Dec 14 1250:00	M-100B							GTSP-4				82		
1990-Y317	2446244.33	1990 Dec 18 1955:00	M-100B							BALXH				82		
1990-Y318	2446246.08	1990 Dec 19 1400:00	M-100B							SALIN				84		
1990-Y319	2446246.08	1990 Dec 19 1400:00	M-100B							MJD				82		
1990-Y320	2446246.09	1990 Dec 19 1507:00	M-100B							UK				82		
1990-Y321	2446246.45	1990 Dec 20 0805:00	M-100B							GTSP-4				78		
1990-Y322	2446246.58	1990 Dec 20 0905:00	M-100B							BALXH				82		
1990-Y323	2446251.38	1990 Dec 25 0940:00	M-100B							AHHT				82		
1990-Y324	2446251.88	1990 Dec 25 1130:00	M-100B							SALIN				84		
1990-Y325	2446251.98	1990 Dec 26 1437:00	M-100B							MJD				85		
1990-Y326	2446252.09	1990 Dec 26 1437:00	M-100B							GTSP-4				85		
1990-Y327	2446252.19	1990 Dec 26 1505:00	M-100B							UK				84		
1991-Y01	2448252.15	1991	M-100B							TERLS				79		
1991-Y02	2448256.80	1991	M-100B							TERLS				79		
1991-Y03	2448256.80	1991	M-100B							TERLS				79		
1991-Y04	2448256.80	1991	M-100B							TERLS				79		
1991-Y05	2448256.80	1991	M-100B							TERLS				79		
1991-Y06	2448256.80	1991	M-100B							TERLS				79		
1991-Y07	2448256.80	1991	M-100B							TERLS				79		
1991-Y08	2448256.80	1991	M-100B							TERLS				79		
1991-Y09	2448256.80	1991	M-100B							TERLS				79		
1991-Y10	2448256.80	1991	M-100B							TERLS				79		
1991-Y11	2448256.80	1991	M-100B							TERLS				79		
1991-Y12	2448256.80	1991	M-100B							TERLS				79		
1991-Y13	2448256.80	1991	M-100B							TERLS				79		
1991-Y14	2448256.80	1991	M-100B							TERLS				79		
1991-Y15	2448256.80	1991	M-100B							TERLS				79		
1991-Y16	2448256.80	1991	M-100B							TERLS				79		
1991-Y17	2448256.80	1991	M-100B							TERLS				79		
1991-Y18	2448256.80	1991	M-100B							TERLS				79		
1991-Y19	2448256.80	1991	M-100B							TERLS				79		
1991-Y20	2448256.80	1991	M-100B							TERLS				79		
1991-Y21	2448256.80	1991	M-100B							TERLS				79		
1993-Y32	2448987.80	1993	Meteo							TERLS				79		
1993-Y33	2448987.80	1993	Meteo							TERLS				79		
1993-Y34	2448987.80	1993	Meteo							TERLS				79		
1993-Y35	2448987.80	1993	Meteo							TERLS				79		
1993-Y36	2448987.80	1993	Meteo							TERLS				79		
1993-Y37	2448987.80	1993	Meteo							TERLS				79		
1993-Y23	2449230.80	1993 Sep	M-100B							TERLS M100 #1162				807		
2007-S75	2454100.50	2007	M-100B							OK				857		
2008-S64	2454465.50	2008	M-100B							OK				857		
2008-A08	2454720.93	2008 Sep 11 1026	M-100B							OK				107		

TERLS M100 #1162  
[Restart launches]  
[Restart launches]  
[Accidental launch]



Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	OrbPay t	Agency	Launch_Code	Group	Category	LT_Cite	Cite	Notes
1987-Y01	2436030.59	1987 Jul 11 0205	R-100	-	-	0.000	WVS	SS	-	Aeron	IGY36	-	-
1987-Y02	2436046.60	1987 Jul 27 0220	R-100	-	-	0.000	WVS	SS	-	Aeron	IGY36	-	-
1987-Y03	2436064.68	1987 Aug 14 0423	R-100	-	-	0.000	WVS	SS	-	Aeron	IGY36	-	-
1987-Y04	2436089.63	1987 Aug 19 0313	R-100	-	-	0.000	WVS	SS	-	Aeron	IGY36	-	-
1987-Y05	2436096.62	1987 Sep 14 0303	R-100	-	-	0.000	WVS	SS	-	Aeron	IGY36	-	-
1987-Y06	2436098.62	1987 Sep 17 0300	R-100	-	-	0.000	WVS	SS	-	Aeron	IGY36	-	-
1987-Y07	2436101.60	1987 Sep 20 0230	R-100	-	-	0.000	WVS	SS	-	Aeron	IGY36	-	-
1987-Y08	2436146.63	1987 Nov 4 0755	R-100	?	-	0.000	AM	SS	-	Aeron	IGY36	-	-
1987-Y09	2436188.69	1987 Dec 16 0435	R-100	-	-	0.000	AM	SS	-	Aeron	IGY36	-	-
1987-Y10	2436188.69	1987 Dec 16 0435	R-100	?	-	0.000	AM	SS	-	Aeron	IGY36	-	-
1987-Y11	2436193.69	1987 Dec 21 0440	R-100	-	-	0.000	AM	SS	-	Aeron	IGY36	-	-
1987-Y12	2436193.69	1987 Dec 21 0440	R-100	-	-	0.000	AM	SS	-	Aeron	IGY36	-	-
1987-Y13	2436193.69	1987 Dec 21 0440	R-100	-	-	0.000	AM	SS	-	Aeron	IGY36	-	-
1988-Y01	2436213.61	1988 Jan 10 0727	R-100	-	-	0.000	AM	SS	-	Aeron	IGY36	-	-
1988-Y02	2436222.96	1988 Jan 19 0945	R-100	?	-	0.000	AM	SS	-	Aeron	IGY36	-	-
1988-Y03	2436222.91	1988 Jan 19 0945	R-100	-	-	0.000	AM	SS	-	Aeron	IGY36	-	-
1988-Y04	2436223.47	1988 Jan 19 2321	R-100	-	-	0.000	AM	SS	-	Aeron	IGY36	-	-
1988-Y05	2436244.86	1988 Feb 10 0945	R-100	?	-	0.000	AM	SS	-	Aeron	IGY36	-	-
1988-Y06	2436245.91	1988 Feb 11 0944	R-100	-	-	0.000	AM	SS	-	Aeron	IGY36	-	-
1988-Y07	2436253.05	1988 Feb 18 1310	R-100	-	-	0.000	AM	SS	-	Aeron	IGY36	-	-
1988-Y08	2436253.05	1988 Feb 18 1431	R-100	-	-	0.000	AM	SS	-	Aeron	IGY36	-	-
1988-Y09	2436260.65	1988 Feb 26 0335	R-100	-	-	0.000	AM	SS	-	Aeron	IGY36	-	-
1988-Y10	2436260.65	1988 Feb 26 0435	R-100	?	-	0.000	AM	SS	-	Aeron	IGY36	-	-
1988-Y11	2436279.62	1988 Mar 17 0300	R-100	-	-	0.000	AM	SS	-	Aeron	IGY36	-	-
1988-Y12	2436283.41	1988 Mar 20 2145	R-100	-	-	0.000	AM	SS	-	Aeron	IGY36	-	-
1988-Y13	2436283.41	1988 Mar 20 2145	R-100	-	-	0.000	AM	SS	-	Aeron	IGY36	-	-
1988-Y14	2436290.65	1988 Mar 28 0335	R-100	-	-	0.000	AM	SS	-	Aeron	IGY36	-	-
1988-Y15	2436290.65	1988 Mar 28 0335	R-100	?	-	0.000	AM	SS	-	Aeron	IGY36	-	-
1988-Y16	2436295.00	1988 Apr 1 1200	R-100	-	-	0.000	AM	SS	-	Aeron	IGY36	-	-
1988-Y17	2436314.15	1988 Apr 20 1540	R-100	-	-	0.000	AM	SS	-	Aeron	IGY36	-	-
1988-Y18	2436341.53	1988 May 18 0050	R-100	-	-	0.000	AM	SS	-	Aeron	IGY36	-	-
1988-Y19	2436341.53	1988 May 18 0156	R-100	-	-	0.000	AM	SS	-	Aeron	IGY36	-	-
1988-Y20	2436342.95	1988 May 19 0105	R-100	-	-	0.000	AM	SS	-	Aeron	IGY36	-	-
1988-Y21	2436352.94	1988 May 29 0100	R-100	-	-	0.000	AM	SS	-	Aeron	IGY36	-	-
1988-Y22	2436359.57	1988 May 31 0145	R-100	-	-	0.000	AM	SS	-	Aeron	IGY36	-	-
1988-Y23	2436365.53	1988 Jun 9 0050	R-100	-	-	0.000	AM	SS	-	Aeron	IGY36	-	-
1988-Y24	2436376.53	1988 Jun 24 0045	R-100	?	-	0.000	AM	SS	-	Aeron	IGY36	-	-
1988-Y25	2436376.57	1988 Jun 24 0145	R-100	-	-	0.000	AM	SS	-	Aeron	IGY36	-	-
1988-Y26	2436385.96	1988 Jun 29 0130	R-100	-	-	0.000	AM	SS	-	Aeron	IGY36	-	-
1988-Y27	2436400.96	1988 Jul 15 2045	R-100	-	-	0.000	AM	SS	-	Aeron	IGY36	-	-
1988-Y28	2436400.96	1988 Jul 15 2045	R-100	-	-	0.000	AM	SS	-	Aeron	IGY36	-	-
1988-Y29	2436400.96	1988 Jul 19 0200	R-100	-	-	0.000	AM	SS	-	Aeron	IGY36	-	-
1988-Y30	2436441.85	1988 Jul 27 0220	R-100	-	-	0.000	AM	SS	-	Aeron	IGY36	-	-
1988-Y31	2436441.85	1988 Jul 27 0220	R-100	?	-	0.000	AM	SS	-	Aeron	IGY36	-	-
1988-Y32	2436442.15	1988 Jul 27 0220	R-100	-	-	0.000	AM	SS	-	Aeron	IGY36	-	-
1988-Y33	2436445.60	1988 Aug 7 0615	R-100	-	-	0.000	AM	SS	-	Aeron	IGY36	-	-
1988-Y34	2436447.65	1988 Aug 12 0310	R-100	?	-	0.000	AM	SS	-	Aeron	IGY36	-	-
1988-Y35	2436447.65	1988 Aug 12 0310	R-100	-	-	0.000	AM	SS	-	Aeron	IGY36	-	-
1988-Y36	2436447.65	1988 Aug 12 0440	R-100	-	-	0.000	AM	SS	-	Aeron	IGY36	-	-
1988-Y37	2436429.57	1988 Aug 15 0440	R-100	?	-	0.000	AM	SS	-	Aeron	IGY36	-	-
1988-Y38	2436430.60	1988 Aug 15 0440	R-100	-	-	0.000	AM	SS	-	Aeron	IGY36	-	-
1988-Y39	2436452.66	1988 Aug 16 0420	R-100	-	-	0.000	AM	SS	-	Aeron	IGY36	-	-
1988-Y40	2436452.66	1988 Aug 16 0420	R-100	-	-	0.000	AM	SS	-	Aeron	IGY36	-	-
1988-Y41	2436463.70	1988 Aug 17 0230	R-100	-	-	0.000	AM	SS	-	Aeron	IGY36	-	-
1988-Y42	2436463.70	1988 Aug 17 0443	R-100	-	-	0.000	AM	SS	-	Aeron	IGY36	-	-
1988-Y43	2436465.73	1988 Aug 19 0350	R-100	-	-	0.000	AM	SS	-	Aeron	IGY36	-	-
1988-Y44	2436465.73	1988 Aug 19 0350	R-100	-	-	0.000	AM	SS	-	Aeron	IGY36	-	-
1988-Y45	2436465.73	1988 Aug 22 0230	R-100	-	-	0.000	AM	SS	-	Aeron	IGY36	-	-
1988-Y46	2436465.73	1988 Aug 22 0347	R-100	-	-	0.000	AM	SS	-	Aeron	IGY36	-	-
1988-Y47	2436465.73	1988 Aug 22 0347	R-100	-	-	0.000	AM	SS	-	Aeron	IGY36	-	-
1988-Y48	2436477.90	1988 Aug 27 0348	R-100	-	-	0.000	AM	SS	-	Aeron	IGY36	-	-
1988-Y49	2436477.90	1988 Aug 27 0348	R-100	-	-	0.000	AM	SS	-	Aeron	IGY36	-	-
1988-Y50	2436477.90	1988 Aug 31 0941	R-100	(A-1)	-	0.000	AM	SS	-	Aeron	IGY36	-	-
1988-Y51	2436477.90	1988 Aug 31 0941	R-100	(A-1)	-	0.000	AM	SS	-	Aeron	IGY36	-	-
1988-Y52	2436479.85	1988 Oct 1 1045	R-100	(A-1)	-	0.000	AM	SS	-	Aeron	IGY36	-	-
1988-Y53	2436479.85	1988 Oct 3 0332	R-100	(A-1)	-	0.000	AM	SS	-	Aeron	IGY36	-	-
1988-Y54	2436482.94	1988 Oct 6 1030	R-100	(A-1)	-	0.000	AM	SS	-	Aeron	IGY36	-	-
1988-Y55	2436484.66	1988 Oct 8 0350	R-100	(A-1)	-	0.000	AM	SS	-	Aeron	IGY36	-	-
1988-Y56	2436492.67	1988 Oct 16 0400	R-100	(A-1)	-	0.000	AM	SS	-	Aeron	IGY36	-	-
1988-Y57	2436493.67	1988 Oct 17 0405	R-100	(A-1)	-	0.000	AM	SS	-	Aeron	IGY36	-	-
1988-Y58	2436493.67	1988 Oct 23 0220	R-100	(A-1)	-	0.000	AM	SS	-	Aeron	IGY36	-	-
1988-Y59	2436499.60	1988 Oct 23 0220	R-100	(A-1)	-	0.000	AM	SS	-	Aeron	IGY36	-	-
1988-Y60	2436499.60	1988 Oct 25 0800	R-100	?	-	0.000	AM	SS	-	Aeron	IGY36	-	-
1988-Y61	2436501.93	1988 Oct 28 2000	R-100	?	-	0.000	AM	SS	-	Aeron	IGY36	-	-
1988-Y62	2436505.33	1988 Oct 28 2000	R-100	-	-	0.000	AM	SS	-	Aeron	IGY36	-	-
1988-Y63	2436507.93	1988 Oct 31 0800	R-100	-	-	0.000	AM	SS	-	Aeron	IGY36	-	-
1988-Y64	2436512.01	1988 Nov 4 1220	R-100	?	-	0.000	AM	SS	-	Aeron	IGY36	-	-
1988-Y65	2436518.36	1988 Nov 10 2045	R-100	-	-	0.000	AM	SS	-	Aeron	IGY36	-	-
1988-Y66	2436521.93	1988 Nov 14 0800	R-100	-	-	0.000	AM	SS	-	Aeron	IGY36	-	-
1988-Y67	2436525.96	1988 Nov 18 0845	R-100	-	-	0.000	AM	SS	-	Aeron	IGY36	-	-
1988-Y68	2436536.34	1988 Nov 28 2005	R-100	?	-	0.000	AM	SS	-	Aeron	IGY36	-	-
1988-Y69	2436546.29	1988 Dec 8 1900	R-100	?	-	0.000	AM	SS	-	Aeron	IGY36	-	-
1988-Y70	2436547.96	1988 Dec 10 1100	R-100	?	-	0.000	AM	SS	-	Aeron	IGY36	-	-
1988-Y71	2436549.00	1988 Dec 11 1200	R-100	-	-	0.000	AM	SS	-	Aeron	IGY36	-	-
1988-Y72	2436549.96	1988 Dec 12 1100	R-100	-	-	0.000	AM	SS	-	Aeron	IGY36	-	-
1988-Y73	2436549.96	1988 Dec 27 0950	R-100	?	-	0.000	AM	SS	-	Aeron	IGY36	-	-
1988-Y74	2436564.91	1988 Dec 27 0950	R-100	(A-1)	-	0.000	AM	SS	-	Aeron	IGY36	-	-
1988-Y75	2436571.50	1989 Jan 3 0000	R-100	-	-	0.000	AM	SS	-	Aeron	IGY36	-	-
1988-Y76	2436579.00	1989 Jan 10 1200	R-100	?	-	0.000	AM	SS	-	Aeron	IGY36	-	-
1988-Y77	2436611.50	1989 Feb 12 0000	R-100	-	-	0.000	AM	SS	-	Aeron	IGY36	-	-
1988-Y78	2436611.50	1989 Feb 12 0000	R-100	-	-	0.000	AM	SS	-	Aeron	IGY36	-	-
1988-Y79	2436639.96	1989 Mar 12 1109	R-100	-	-	0.000	AM	SS	-	Aeron	IGY36	-	-
1988-Y80	2436640.15	1989 Mar 12 1540	R-100	-	-	0.000	AM	SS	-	Aeron	IGY36	-	-

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	OrbPay	Agency	Launch_Code	Group	Category	LT/Cite	Cite	Notes
1969-706	2436641.13	1969 Mar 13 1510	H-100	-	-	0.000	AM	SS	-	Aeron	IGY36	-	-
1969-707	2436660.83	1969 Apr 2 0800	H-100	-	-	0.000	AM	SS	-	Aeron	IGY36	-	-
1969-708	2436694.00	1969 May 5 1200	H-100	-	-	0.000	AM	SS	-	Aeron	IGY36	-	-
1969-709	2436751.65	1969 Jul 2 0341	H-100	-	-	0.000	AM	SS	-	Aeron	IGY36	-	-
1969-710	2436752.66	1969 Jul 3 0345	H-100	-	-	0.000	AM	SS	-	Aeron	IGY36	-	-
1969-711	2436819.03	1969 Sep 7 1245	H-100	-	-	0.000	AM	SS	-	Aeron	IGY36	-	-
1969-712	2436821.51	1969 Sep 10 0020	H-100	-	-	0.000	AM	SS	-	Aeron	IGY36	-	-
1969-713	2436825.38	1969 Sep 13 2100	H-100	-	-	0.000	AM	SS	-	Aeron	IGY36	-	-
1969-714	2436830.29	1969 Sep 18 1900	H-100	-	-	0.000	AM	SS	-	Aeron	IGY36	-	-
1969-715	2436836.38	1969 Sep 24 2100	H-100	-	-	0.000	AM	SS	-	Aeron	IGY36	-	-
1969-716	2436850.38	1969 Oct 6 2100	H-100	?	-	0.000	AM	SS	-	Aeron	IGY36	-	-
1969-717	2436857.38	1969 Oct 15 2100	H-100	?	-	0.000	AM	SS	-	Aeron	IGY36	-	-
1969-7212	2436856.50	1969 Oct 15	H-100	?	-	0.000	AM	SS	-	Aeron?	JCH	-	-
1969-7213	2436856.50	1969 Oct 15	H-100	?	-	0.000	AM	SS	-	Aeron?	JCH	-	-
1969-718	2436862.05	1969 Oct 20 1315	H-100	-	-	0.000	AM	SS	-	Aeron	IGY36	-	-
1969-719	2436863.65	1969 Oct 22 0556	H-100	-	-	0.000	AM	SS	-	Aeron	IGY36	-	-
1969-720	2436863.77	1969 Oct 22 0629	H-100	-	-	0.000	AM	SS	-	Aeron	IGY36	-	-
1969-721	2436863.91	1969 Oct 22 0955	H-100	-	-	0.000	AM	SS	-	Aeron	IGY36	-	-
1969-722	2436864.38	1969 Oct 22 2100	H-100	-	-	0.000	AM	SS	-	Aeron	IGY36	-	-
1969-723	2436871.38	1969 Oct 29 2100	H-100	-	-	0.000	AM	SS	-	Aeron	IGY36	-	-
1969-724	2436885.38	1969 Nov 12 2100	H-100	-	-	0.000	AM	SS	-	Aeron	IGY36	-	-
1969-725	2436892.38	1969 Nov 19 2100	H-100	-	-	0.000	AM	SS	-	Aeron	IGY36	-	-
1969-5262	2436905.50	1969 Dec 3	H-100	?	-	0.000	AM	SS	-	Aeron?	JCH	-	-
1969-5263	2436905.50	1969 Dec 3	H-100	?	-	0.000	AM	SS	-	Aeron?	JCH	-	-
1969-5265	2436905.53	1969 Dec 3 0800	H-100	-	-	0.000	AM	SS	-	Aeron	IGY36	-	-
1969-726	2436905.52	1969 Dec 3 1004	H-100	-	-	0.000	AM	SS	-	Aeron	IGY36	-	-
1969-727	2436905.52	1969 Dec 3 1228	H-100	-	-	0.000	AM	SS	-	Aeron	IGY36	-	-
1969-728	2436906.02	1969 Dec 3 2100	H-100	-	-	0.000	AM	SS	-	Aeron	IGY36	-	-
1969-729	2436906.36	1969 Dec 4 0507	H-100	?	-	0.000	AM	SS	-	Aeron	IGY36	-	-
1969-730	2436906.71	1969 Dec 4 0700	H-100	-	-	0.000	AM	SS	-	Aeron	IGY36	-	-
1969-731	2436906.79	1969 Dec 4 1025	H-100	-	-	0.000	AM	SS	-	Aeron	IGY36	-	-
1969-732	2436906.93	1969 Dec 4 1025	H-100	-	-	0.000	AM	SS	-	Aeron	IGY36	-	-
1969-733	2436927.35	1969 Dec 24 2100	H-100	-	-	0.000	AM	SS	-	Aeron	IGY36	-	-
1969-503	2436979.00	1969 Jan 10 1200	H-100	?	-	0.000	AM	SS	-	Aeron	IGY36	-	-
1969-419	2436957.79	1969 Jan 24 0659:59	H-100	-	-	0.000	GNST	SS	FTAM/	Ionos/Aeron	IGY36	WDCRF	-
1960-423	2436964.00	1960 Jan 30 1154:00	H-100	-	-	0.000	GNST	SS	-	Meteo	DSI-5650	-	-
1960-425	2436965.94	1960 Feb 1 1030:00	H-100	-	-	0.000	GNST	SS	-	Meteo	DSI-5650	-	-
1960-426	2436965.94	1960 Feb 2 1037:59	H-100	-	-	0.000	GNST	SS	-	Meteo	DSI-5650	-	-
1960-429	2436967.97	1960 Feb 3 1121:00	H-100	-	-	0.000	GNST	SS	-	Meteo	DSI-5650	-	-
1960-430	2436968.96	1960 Feb 4 1100:00	H-100	-	-	0.000	GNST	SS	-	Meteo	DSI-5650	-	-
1960-432	2436968.96	1960 Feb 5 1100:00	H-100	-	-	0.000	GNST	SS	-	Meteo	DSI-5650	-	-
1960-434	2436969.96	1960 Feb 6 1100:00	H-100	-	-	0.000	GNST	SS	-	Meteo	DSI-5650	-	-
1960-435	2436970.96	1960 Feb 7 1103:59	H-100	-	-	0.000	GNST	SS	-	Meteo	DSI-5650	-	-
1960-436	2436971.96	1960 Feb 8 1102:00	H-100	-	-	0.000	GNST	SS	-	Meteo	DSI-5650	-	-
1960-437	2436972.96	1960 Feb 9 1107:00	H-100	-	-	0.000	GNST	SS	-	Meteo	DSI-5650	-	-
1960-440	2436975.96	1960 Feb 10 1200:00	H-100	-	-	0.000	GNST	SS	-	Meteo	DSI-5650	-	-
1960-442	2436975.96	1960 Feb 11 1100:00	H-100	-	-	0.000	GNST	SS	-	Meteo	DSI-5650	-	-
1960-444	2436975.96	1960 Feb 12 1100:00	H-100	-	-	0.000	GNST	SS	-	Meteo	DSI-5650	-	-
1960-445	2436977.96	1960 Feb 13 0655:00	H-100	-	-	0.000	GNST	SS	-	Meteo	DSI-5650	-	-
1960-447	2437005.96	1960 Feb 12 1100:00	H-100	-	-	0.000	GNST	SS	-	Meteo	DSI-5650	-	-
1960-455	2437005.96	1960 Feb 12 1100:00	H-100	-	-	0.000	GNST	SS	-	Meteo	DSI-5650	-	-
1960-471	2437011.96	1960 Feb 13 1100:00	H-100	-	-	0.000	GNST	SS	-	Meteo	DSI-5650	-	-
1960-475	2437011.96	1960 Feb 13 1100:00	H-100	-	-	0.000	GNST	SS	-	Meteo	DSI-5650	-	-
1960-479	2437023.96	1960 Feb 27 1100:00	H-100	-	-	0.000	GNST	SS	-	Meteo	DSI-5650	-	-
1960-489	2437023.96	1960 Feb 31 1100:00	H-100	-	-	0.000	GNST	SS	-	Meteo	DSI-5650	-	-
1960-484	2437147.96	1960 Aug 1 1100:00	H-100	-	-	0.000	GNST	SS	-	Meteo	DSI-5650	-	-
1960-1187	2437148.96	1960 Aug 2 1100:00	H-100	-	-	0.000	GNST	SS	-	Meteo	DSI-5650	-	-
1960-1189	2437148.96	1960 Aug 3 1100:00	H-100	-	-	0.000	GNST	SS	-	Meteo	DSI-5650	-	-
1960-1181	2437151.96	1960 Aug 5 1100:00	H-100	-	-	0.000	GNST	SS	-	Meteo	DSI-5650	-	-
1960-1192	2437152.96	1960 Aug 6 1100:00	H-100	-	-	0.000	GNST	SS	-	Meteo	DSI-5650	-	-
1960-1193	2437155.96	1960 Aug 6 1100:00	H-100	-	-	0.000	GNST	SS	-	Meteo	DSI-5650	-	-
1960-1198	2437158.96	1960 Aug 12 1100:00	H-100	-	-	0.000	GNST	SS	-	Meteo	DSI-5650	-	-
1960-4200	2437159.96	1960 Aug 13 1100:00	H-100	-	-	0.000	GNST	SS	-	Meteo	DSI-5650	-	-
1960-4201	2437160.96	1960 Aug 14 1100:00	H-100	-	-	0.000	GNST	SS	-	Meteo	DSI-5650	-	-
1960-4202	2437162.46	1960 Aug 15 2300:00	H-100	-	-	0.000	GNST	SS	-	Meteo	DSI-5650	-	-
1960-440	2437247.09	1960 Nov 8 1404:59	H-100	-	-	0.000	GNST	SS	-	Meteo	DSI-5650	-	-
1960-4260	2437251.96	1960 Nov 13 1104:59	H-100	-	-	0.000	GNST	SS	-	Meteo	DSI-5650	-	-
1960-4263	2437253.96	1960 Nov 15 1100:00	H-100	-	-	0.000	GNST	SS	-	Meteo	DSI-5650	-	-
1960-4267	2437255.96	1960 Nov 17 1104:59	H-100	-	-	0.000	GNST	SS	-	Meteo	DSI-5650	-	-
1960-4269	2437257.96	1960 Nov 19 1100:00	H-100	-	-	0.000	GNST	SS	-	Meteo	DSI-5650	-	-
1960-4270	2437259.96	1960 Nov 21 1107:00	H-100	-	-	0.000	GNST	SS	-	Meteo	DSI-5650	-	-
1960-4274	2437264.96	1960 Nov 26 1100:00	H-100	-	-	0.000	GNST	SS	-	Meteo	DSI-5650	-	-
1960-4275	2437266.99	1960 Nov 28 1142:00	H-100	-	-	0.000	GNST	SS	-	Meteo	DSI-5650	-	-
1960-4282	2437268.99	1960 Nov 30 1148:00	H-100	-	-	0.000	GNST	SS	-	Meteo	DSI-5650	-	-
1960-4286	2437269.96	1960 Dec 1 1104:59	H-100	-	-	0.000	GNST	SS	-	Meteo	DSI-5650	-	-
1960-4288	2437270.96	1960 Dec 2 1100:00	H-100	-	-	0.000	GNST	SS	-	Meteo	DSI-5650	-	-
1960-443	2437272.96	1960 Dec 4 1100:00	H-100	-	-	0.000	GNST	SS	-	Meteo	DSI-5650	-	-
1960-444	2437273.96	1960 Dec 5 1100:00	H-100	-	-	0.000	GNST	SS	-	Meteo	DSI-5650	-	-
1960-440	2437274.96	1960 Dec 6 1100:00	H-100	-	-	0.000	GNST	SS	-	Meteo	DSI-5650	-	-
1960-445	2437276.96	1960 Dec 8 1100:00	H-100	-	-	0.000	GNST	SS	-	Meteo	DSI-5650	-	-
1960-446	2437277.95	1960 Dec 9 1054:59	H-100	-	-	0.000	GNST	SS	-	Meteo	DSI-5650	-	-
1960-4298	2437279.94	1960 Dec 11 1030:00	H-100	-	-	0.000	GNST	SS	-	Meteo	DSI-5650	-	-
1960-4299	2437280.96	1960 Dec 12 1100:00	H-100	-	-	0.000	GNST	SS	-	Meteo	DSI-5650	-	-
1962-423	2437721.38	1962 Feb 25 2100:00	H-100	-	-	0.000	GNST	SS	-	Meteo	DSI-5650	-	-
1962-451	2437770.71	1962 Apr 16 0500:00	H-100	-	-	0.000	GNST	SS	-	Meteo	DSI-5650	-	-
1962-406	2437771.04	1962 Apr 16 1259:59	H-100	-	-	0.000	GNST	SS	-	Meteo	DSI-5650	-	-



Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	OrbPay t	Agency	Launch_Code	Group	Category	LT_Cite	Cite	Notes
1962-A52	2437772.04	1962 Apr 17 1259:59	H-100	-	-	0.000	GNS?	SS	-	Meteo	DSI-8860	-	-
1962-A79	2437804.38	1962 May 19 2100:00	H-100	-	-	0.000	GNS?	SS	-	Meteo	DSI-8860	-	-
1962-A81	2437807.38	1962 May 22 2100:00	H-100	-	-	0.000	GNS?	SS	-	Meteo	DSI-8860	-	-
1962-A86	2437808.38	1962 May 23 2100:00	H-100	-	-	0.000	GNS?	SS	-	Meteo	DSI-8860	-	-
1962-A89	2437812.38	1962 May 27 2100:00	H-100	-	-	0.000	GNS?	SS	-	Meteo	DSI-8860	-	-
1962-A127	2437878.38	1962 Aug 1 2100:00	H-100	-	-	0.000	GNS?	SS	-	Meteo	DSI-8860	-	-
1962-A129	2437882.38	1962 Aug 5 2100:00	H-100	-	-	0.000	GNS?	SS	-	Meteo	DSI-8860	-	-
1962-A130	2437884.38	1962 Aug 7 2100:00	H-100	-	-	0.000	GNS?	SS	-	Meteo	DSI-8860	-	-
1962-A134	2437886.38	1962 Aug 9 2100:00	H-100	-	-	0.000	GNS?	SS	-	Meteo	DSI-8860	-	-
1962-A137	2437890.38	1962 Aug 13 2100:00	H-100	-	-	0.000	GNS?	SS	-	Meteo	DSI-8860	-	-
1962-A138	2437892.38	1962 Aug 15 2100:00	H-100	-	-	0.000	GNS?	SS	-	Meteo	DSI-8860	-	-
1962-A141	2437896.38	1962 Aug 19 2100:00	H-100	-	-	0.000	GNS?	SS	-	Meteo	DSI-8860	-	-
1962-A143	2437899.38	1962 Aug 22 2100:00	H-100	-	-	0.000	GNS?	SS	-	Meteo	DSI-8860	-	-
1962-A144	2437900.38	1962 Aug 23 2100:00	H-100	-	-	0.000	GNS?	SS	-	Meteo	DSI-8860	-	-
1962-A205	2437998.38	1962 Nov 29 2100:00	H-100	-	-	0.000	GNS?	SS	-	Meteo	DSI-8860	-	-
1962-A210	2438001.38	1962 Dec 2 2100:00	H-100	-	-	0.000	GNS?	SS	-	Meteo	DSI-8860	-	-
1962-A215	2438007.38	1962 Dec 6 2100:00	H-100	-	-	0.000	GNS?	SS	-	Meteo	DSI-8860	-	-
1962-A218	2438009.38	1962 Dec 10 2100:00	H-100	-	-	0.000	GNS?	SS	-	Meteo	DSI-8860	-	-
1962-A221	2438011.38	1962 Dec 12 2100:00	H-100	-	-	0.000	GNS?	SS	-	Meteo	DSI-8860	-	-
1962-A227	2438013.38	1962 Dec 14 2100:00	H-100	-	-	0.000	GNS?	SS	-	Meteo	DSI-8860	-	-
1962-A234	2438019.38	1962 Dec 20 2100:00	H-100	-	-	0.000	GNS?	SS	-	Meteo	DSI-8860	-	-
1962-A237	2438023.38	1962 Dec 24 2100:00	H-100	-	-	0.000	GNS?	SS	-	Meteo	DSI-8860	-	-
1963-S23	2438056.94	1963 Jan 27 0100	H-100	?	-	0.000	AM	SS	AM/	Meteo	DSI-8860	-	-
1963-A19	2438061.38	1963 Jan 31 2100:00	H-100	-	-	0.000	GNS?	SS	-	Meteo	DSI-8860	-	-
1963-A20	2438064.38	1963 Feb 5 2100:00	H-100	-	-	0.000	GNS?	SS	-	Meteo	DSI-8860	-	-
1963-A07	2438073.38	1963 Feb 12 2100:00	H-100	-	-	0.000	GNS?	SS	-	Meteo	DSI-8860	-	-
1963-A36	2438101.38	1963 Mar 12 2100:00	H-100	-	-	0.000	GNS?	SS	-	Meteo	DSI-8860	-	-
1963-A56	2438132.38	1963 Apr 12 2100:00	H-100	-	-	0.000	GNS?	SS	-	Meteo	DSI-8860	-	-
1964-T03	2438400.42	1964 Jan 5 2200	H-100	-	-	0.000	AM	SS	-	Aeron	SSP66	-	-
1964-T04	2438406.38	1964 Jan 15 2100	H-100	-	-	0.000	AM	SS	-	Aeron	SSP66	-	-
1964-T05	2438410.38	1964 Jan 15 2100	H-100	-	-	0.000	AM	SS	-	Aeron	SSP66	-	-
1964-T06	2438412.42	1964 Jan 17 2200	H-100	-	-	0.000	AM	SS	-	Aeron	SSP66	-	-
1964-T12	2438504.42	1964 Apr 18 2200	H-100	-	-	0.000	AM	SS	-	Aeron	SSP66	-	-
1964-T14	2438505.38	1964 Apr 19 2000	H-100	-	-	0.000	AM	SS	-	Aeron	SSP66	-	-
1964-T15	2438506.38	1964 Apr 20 2100	H-100	-	-	0.000	AM	SS	-	Aeron	SSP66	-	-
1964-T16	2438506.44	1964 Apr 22 2230	H-100	-	-	0.000	AM	SS	-	Aeron	SSP66	-	-
1964-T17	2438510.38	1964 Apr 24 2100	H-100	-	-	0.000	AM	SS	-	Aeron	SSP66	-	-
1964-T18	2438512.38	1964 Apr 26 2005	H-100	-	-	0.000	AM	SS	-	Aeron	SSP66	-	-
1964-T19	2438515.23	1964 Apr 27 1732	H-100	-	-	0.000	AM	SS	-	Aeron	SSP66	-	-
1964-T20	2438515.94	1964 Apr 27 2008	H-100	-	-	0.000	AM	SS	-	Aeron	SSP66	-	-
1964-T21	2438514.21	1964 Apr 28 1700	H-100	-	-	0.000	AM	SS	-	Aeron	SSP66	-	-
1964-T22	2438515.23	1964 Apr 29 1753	H-100	-	-	0.000	AM	SS	-	Aeron	SSP66	-	-
1964-T23	2438520.23	1964 May 4 1729	H-100	-	-	0.000	AM	SS	-	Aeron	SSP66	-	-
1964-T24	2438520.94	1964 May 4 2008	H-100	-	-	0.000	AM	SS	-	Aeron	SSP66	-	-
1964-T25	2438522.30	1964 May 7 2008	H-100	-	-	0.000	AM	SS	-	Aeron	SSP66	-	-
1964-T26	2438523.94	1964 May 8 2008	H-100	-	-	0.000	AM	SS	-	Aeron	SSP66	-	-
1964-T27	2438524.94	1964 May 8 2008	H-100	-	-	0.000	AM	SS	-	Aeron	SSP66	-	-
1964-T28	2438526.94	1964 May 12 2008	H-100	-	-	0.000	AM	SS	-	Aeron	SSP66	-	-
1964-T29	2438528.94	1964 May 12 1705	H-100	-	-	0.000	AM	SS	-	Aeron	SSP66	-	-
1964-T30	2438528.21	1964 May 12 2230	H-100	-	-	0.000	AM	SS	-	Aeron	SSP66	-	-
1964-T31	2438528.94	1964 May 13 2008	H-100	-	-	0.000	AM	SS	-	Aeron	SSP66	-	-
1964-T32	2438529.34	1964 May 14 1736	H-100	-	-	0.000	AM	SS	-	Aeron	SSP66	-	-
1964-T33	2438530.94	1964 May 15 2008	H-100	-	-	0.000	AM	SS	-	Aeron	SSP66	-	-
1964-T34	2438531.34	1964 May 17 2008	H-100	-	-	0.000	AM	SS	-	Aeron	SSP66	-	-
1964-T35	2438533.94	1964 May 18 2000	H-100	-	-	0.000	AM	SS	-	Aeron	SSP66	-	-
1964-T36	2438534.94	1964 May 18 2000	H-100	-	-	0.000	AM	SS	-	Aeron	SSP66	-	-
1964-T37	2438535.21	1964 May 19 1702	H-100	-	-	0.000	AM	SS	-	Aeron	SSP66	-	-
1964-T38	2438535.33	1964 May 19 2000	H-100	-	-	0.000	AM	SS	-	Aeron	SSP66	-	-
1964-T39	2438536.21	1964 May 20 1700	H-100	-	-	0.000	AM	SS	-	Aeron	SSP66	-	-
1964-T40	2438536.98	1964 May 20 2100	H-100	-	-	0.000	AM	SS	-	Aeron	SSP66	-	-
1964-T41	2438537.21	1964 May 21 1700	H-100	-	-	0.000	AM	SS	-	Aeron	SSP66	-	-
1964-T42	2438537.95	1964 May 21 1905	H-100	-	-	0.000	AM	SS	-	Aeron	SSP66	-	-
1964-T43	2438537.33	1964 May 21 2000	H-100	-	-	0.000	AM	SS	-	Aeron	SSP66	-	-
1964-T44	2438538.42	1964 May 22 2200	H-100	-	-	0.000	AM	SS	-	Aeron	SSP66	-	-
1964-T45	2438554.33	1964 Jun 7 2000	H-100	-	-	0.000	AM	SS	-	Aeron	SSP66	-	-
1964-T46	2438555.33	1964 Jun 8 2000	H-100	-	-	0.000	AM	SS	-	Aeron	SSP66	-	-
1964-T47	2438557.33	1964 Jun 10 2000	H-100	-	-	0.000	AM	SS	-	Aeron	SSP66	-	-
1964-T48	2438559.33	1964 Jun 12 2000	H-100	-	-	0.000	AM	SS	-	Aeron	SSP66	-	-
1964-T49	2438561.33	1964 Jun 14 2000	H-100	-	-	0.000	AM	SS	-	Aeron	SSP66	-	-
1964-T50	2438563.33	1964 Jun 16 2000	H-100	-	-	0.000	AM	SS	-	Aeron	SSP66	-	-
1964-T51	2438564.33	1964 Jun 17 2000	H-100	-	-	0.000	AM	SS	-	Aeron	SSP66	-	-
1964-T52	2438565.33	1964 Jun 18 2000	H-100	-	-	0.000	AM	SS	-	Aeron	SSP66	-	-
1964-T53	2438565.33	1964 Jun 8 2000	H-100	-	-	0.000	AM	SS	-	Aeron	SSP66	-	-
1964-T54	2438566.33	1964 Jun 9 2000	H-100	-	-	0.000	AM	SS	-	Aeron	SSP66	-	-
1964-T55	2438567.38	1964 Jun 10 2100	H-100	-	-	0.000	AM	SS	-	Aeron	SSP66	-	-
1964-T56	2438569.33	1964 Jun 12 2000	H-100	-	-	0.000	AM	SS	-	Aeron	SSP66	-	-
1964-T57	2438569.33	1964 Jun 13 2000	H-100	-	-	0.000	AM	SS	-	Aeron	SSP66	-	-
1964-T58	2438569.33	1964 Jun 14 2000	H-100	-	-	0.000	AM	SS	-	Aeron	SSP66	-	-
1964-T59	2438569.33	1964 Jun 15 2000	H-100	-	-	0.000	AM	SS	-	Aeron	SSP66	-	-
1964-T60	2438569.33	1964 Jun 16 2000	H-100	-	-	0.000	AM	SS	-	Aeron	SSP66	-	-
1964-T61	2438569.33	1964 Jun 17 2000	H-100	-	-	0.000	AM	SS	-	Aeron	SSP66	-	-
1964-T62	2438569.33	1964 Jun 17 2000	H-100	-	-	0.000	AM	SS	-	Aeron	SSP66	-	-
1964-T63	2438569.33	1964 Jun 22 2000	H-100	-	-	0.000	AM	SS	-	Aeron	SSP66	-	-
1964-T64	2438601.33	1964 Jun 24 2000	H-100	-	-	0.000	AM	SS	-	Aeron	SSP66	-	-
1964-T65	2438618.33	1964 Aug 10 2000	H-100	-	-	0.000	AM	SS	-	Aeron	SSP66	-	-

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	OrbPay t	Agency	Launch_Code	Group	Category	LT/Cite	Cite	Notes
1964-166	2438620.33	1964 Aug 12 2000	H-100	-	-	0.000	AM	SS	-	Aeron	SSP65	-	-
1964-167	2438622.33	1964 Aug 14 2000	H-100	-	-	0.000	AM	SS	-	Aeron	SSP65	-	-
1964-168	2438624.33	1964 Aug 16 2000	H-100	-	-	0.000	AM	SS	-	Aeron	SSP65	-	-
1964-169	2438626.17	1964 Aug 18 1600	H-100	-	-	0.000	AM	SS	-	Aeron	SSP65	-	-
1964-170	2438628.33	1964 Aug 18 2000	H-100	-	-	0.000	AM	SS	-	Aeron	SSP65	-	-
1964-171	2438627.08	1964 Aug 19 1400	H-100	-	-	0.000	AM	SS	-	Aeron	SSP65	-	-
1964-172	2438627.38	1964 Aug 19 2100	H-100	-	-	0.000	AM	SS	-	Aeron	SSP65	-	-
1964-173	2438628.22	1964 Aug 20 1711	H-100	-	-	0.000	AM	SS	-	Aeron	SSP65	-	-
1964-174	2438628.38	1964 Aug 20 2100	H-100	-	-	0.000	AM	SS	-	Aeron	SSP65	-	-
1964-175	2438630.33	1964 Aug 22 2000	H-100	-	-	0.000	AM	SS	-	Aeron	SSP65	-	-
1964-176	2438632.33	1964 Aug 24 1736	H-100	-	-	0.000	AM	SS	-	Aeron	SSP65	-	-
1964-177	2438632.38	1964 Aug 24 2100	H-100	-	-	0.000	AM	SS	-	Aeron	SSP65	-	-
1964-178	2438634.26	1964 Aug 26 1808	H-100	-	-	0.000	AM	SS	-	Aeron	SSP65	-	-
1964-179	2438634.33	1964 Aug 26 2000	H-100	-	-	0.000	AM	SS	-	Aeron	SSP65	-	-
1964-180	2438639.23	1964 Aug 31 1731	H-100	-	-	0.000	AM	SS	-	Aeron	SSP65	-	-
1964-181	2438640.22	1964 Sep 1 1715	H-100	-	-	0.000	AM	SS	-	Aeron	SSP65	-	-
1964-182	2438641.26	1964 Sep 2 1753	H-100	-	-	0.000	AM	SS	-	Aeron	SSP65	-	-
1964-183	2438648.21	1964 Sep 9 1705	H-100	-	-	0.000	AM	SS	-	Aeron	SSP65	-	-
1964-184	2438648.33	1964 Sep 9 2000	H-100	-	-	0.000	AM	SS	-	Aeron	SSP65	-	-
1964-185	2438649.38	1964 Sep 10 2100	H-100	-	-	0.000	AM	SS	-	Aeron	SSP65	-	-
1964-186	2438651.33	1964 Sep 12 2000	H-100	-	-	0.000	AM	SS	-	Aeron	SSP65	-	-
1964-187	2438653.33	1964 Sep 14 2000	H-100	-	-	0.000	AM	SS	-	Aeron	SSP65	-	-
1964-188	2438653.33	1964 Sep 24 2000	H-100	-	-	0.000	AM	SS	-	Aeron	SSP65	-	-
1964-189	2438661.33	1964 Oct 12 2000	H-100	-	-	0.000	AM	SS	-	Aeron	SSP65	-	-
1964-192	2438663.33	1964 Oct 14 2000	H-100	-	-	0.000	AM	SS	-	Aeron	SSP65	-	-
1964-195	2438665.33	1964 Oct 16 2000	H-100	-	-	0.000	AM	SS	-	Aeron	SSP65	-	-
1964-194	2438665.33	1964 Oct 17 2000	H-100	-	-	0.000	AM	SS	-	Aeron	SSP65	-	-
1964-196	2438665.33	1964 Oct 19 2000	H-100	-	-	0.000	AM	SS	-	Aeron	SSP65	-	-
1964-199	2438665.38	1964 Oct 19 2100	H-100	-	-	0.000	AM	SS	-	Aeron	SSP65	-	-
1964-197	2438669.35	1964 Oct 20 2000	H-100	-	-	0.000	AM	SS	-	Aeron	SSP65	-	-
1964-198	2438690.35	1964 Oct 21 2030	H-100	-	-	0.000	AM	SS	-	Aeron	SSP65	-	-
1964-199	2438690.40	1964 Oct 21 2140	H-100	-	-	0.000	AM	SS	-	Aeron	SSP65	-	-
1964-1100	2438691.33	1964 Oct 22 2000	H-100	-	-	0.000	AM	SS	-	Aeron	SSP65	-	-
1964-1101	2438692.33	1964 Oct 23 2000	H-100	-	-	0.000	AM	SS	-	Aeron	SSP65	-	-
1964-1102	2438692.38	1964 Oct 23 2100	H-100	-	-	0.000	AM	SS	-	Aeron	SSP65	-	-
1964-1103	2438695.33	1964 Oct 26 2000	H-100	-	-	0.000	AM	SS	-	Aeron	SSP65	-	-
1964-1104	2438695.33	1964 Oct 27 2000	H-100	-	-	0.000	AM	SS	-	Aeron	SSP65	-	-
1964-1105	2438697.42	1964 Oct 28 2200	H-100	-	-	0.000	AM	SS	-	Aeron	SSP65	-	-
1964-1106	2438698.33	1964 Oct 29 2000	H-100	-	-	0.000	AM	SS	-	Aeron	SSP65	-	-
1964-1107	2438699.33	1964 Oct 30 2000	H-100	-	-	0.000	AM	SS	-	Aeron	SSP65	-	-
1964-1108	2438715.33	1964 Nov 15 2000	H-100	-	-	0.000	AM	SS	-	Aeron	SSP65	-	-
1964-1109	2438716.33	1964 Nov 19 2005	H-100	-	-	0.000	AM	SS	-	Aeron	SSP65	-	-
1965-102	2438772.01	1965 Jan 11 1215	H-100	-	-	0.000	AM	SS	-	Aeron	SSP65	-	-
1965-103	2438774.04	1965 Jan 13 1300	H-100	-	-	0.000	AM	SS	-	Aeron	SSP65	-	-
1965-104	2438776.00	1965 Jan 15 1200	H-100	-	-	0.000	AM	SS	-	Aeron	SSP65	-	-
1965-105	2438777.00	1965 Jan 18 1200	H-100	-	-	0.000	AM	SS	-	Aeron	SSP65	-	-
1965-106	2438778.00	1965 Jan 20 1200	H-100	-	-	0.000	AM	SS	-	Aeron	SSP65	-	-
1965-107	2438781.00	1965 Jan 20 1205	H-100	-	-	0.000	AM	SS	-	Aeron	SSP65	-	-
1965-108	2438783.20	1965 Jan 22 1230	H-100	-	-	0.000	AM	SS	-	Aeron	SSP65	-	-
1965-109	2438783.34	1965 Jan 22 1720	H-100	-	-	0.000	AM	SS	-	Aeron	SSP65	-	-
1965-110	2438783.58	1965 Jan 22 1840	H-100	-	-	0.000	AM	SS	-	Aeron	SSP65	-	-
1965-111	2438785.28	1965 Feb 12 1200	H-100	-	-	0.000	AM	SS	-	Aeron	SSP65	-	-
1965-112	2438802.00	1965 Feb 16 1200	H-100	-	-	0.000	AM	SS	-	Aeron	SSP65	-	-
1965-113	2438806.00	1965 Feb 16 1200	H-100	-	-	0.000	AM	SS	-	Aeron	SSP65	-	-
1965-114	2438811.00	1965 Feb 19 1200	H-100	-	-	0.000	AM	SS	-	Aeron	SSP65	-	-
1965-117	2438821.00	1965 Feb 19 1200	H-100	-	-	0.000	AM	SS	-	Aeron	SSP65	-	-
1965-118	2438825.14	1965 Feb 8 1200	H-100	-	-	0.000	AM	SS	-	Aeron	SSP65	-	-
1965-119	2438825.52	1965 Mar 8 1517	H-100	-	-	0.000	AM	SS	-	Aeron	SSP65	-	-
1965-120	2438825.52	1965 Mar 10 0745	H-100	-	-	0.000	AM	SS	-	Aeron	SSP65	-	-
1965-121	2438830.14	1965 Mar 10 1205	H-100	-	-	0.000	AM	SS	-	Aeron	SSP65	-	-
1965-122	2438830.22	1965 Mar 10 1515	H-100	-	-	0.000	AM	SS	-	Aeron	SSP65	-	-
1965-123	2438830.22	1965 Mar 10 1715	H-100	-	-	0.000	AM	SS	-	Aeron	SSP65	-	-
1965-124	2438832.00	1965 Mar 12 1200	H-100	-	-	0.000	AM	SS	-	Aeron	SSP65	-	-
1965-125	2438834.82	1965 Mar 15 0745	H-100	-	-	0.000	AM	SS	-	Aeron	SSP65	-	-
1965-126	2438835.00	1965 Mar 15 1205	H-100	-	-	0.000	AM	SS	-	Aeron	SSP65	-	-
1965-127	2438837.00	1965 Mar 17 1200	H-100	-	-	0.000	AM	SS	-	Aeron	SSP65	-	-
1965-128	2438837.08	1965 Mar 17 1400	H-100	-	-	0.000	AM	SS	-	Aeron	SSP65	-	-
1965-129	2438838.00	1965 Mar 18 1205	H-100	-	-	0.000	AM	SS	-	Aeron	SSP65	-	-
1965-130	2438838.02	1965 Mar 18 1230	H-100	-	-	0.000	AM	SS	-	Aeron	SSP65	-	-
1965-131	2438839.11	1965 Mar 19 1441	H-100	-	-	0.000	AM	SS	-	Aeron	SSP65	-	-
1965-132	2438865.01	1965 Apr 14 1215	H-100	-	-	0.000	AM	SS	-	Aeron	SSP65	-	-
1965-133	2438867.91	1965 Apr 17 0944	H-100	-	-	0.000	AM	SS	-	Aeron	SSP65	-	-
1965-134	2438869.09	1965 Apr 18 1416	H-100	-	-	0.000	AM	SS	-	Aeron	SSP65	-	-
1965-135	2438871.01	1965 Apr 20 1215	H-100	-	-	0.000	AM	SS	-	Aeron	SSP65	-	-
1965-136	2438873.01	1965 Apr 22 1210	H-100	-	-	0.000	AM	SS	-	Aeron	SSP65	-	-
1965-137	2438879.04	1965 Apr 28 1303	H-100	-	-	0.000	AM	SS	-	Aeron	SSP65	-	-
1965-138	2438880.94	1965 Apr 30 1030	H-100	-	-	0.000	AM	SS	-	Aeron	SSP65	-	-
1965-139	2438881.00	1965 Apr 30 1200	H-100	-	-	0.000	AM	SS	-	Aeron	SSP65	-	-
1965-140	2438881.10	1965 Apr 30 1417.30	H-100	-	-	0.000	AM	SS	-	Aeron	SSP65	-	-
1965-141	2438881.98	1965 May 1 1124	H-100	-	-	0.000	AM	SS	-	Aeron	SSP65	-	-
1965-142	2438882.01	1965 May 1 1159	H-100	-	-	0.000	AM	SS	-	Aeron	SSP65	-	-
1965-143	2438883.01	1965 May 2 1209	H-100	-	-	0.000	AM	SS	-	Aeron	SSP65	-	-
1965-144	2438884.01	1965 May 3 1211	H-100	-	-	0.000	AM	SS	-	Aeron	SSP65	-	-
1965-145	2438884.90	1965 May 4 0941	H-100	-	-	0.000	AM	SS	-	Aeron	SSP65	-	-
1965-146	2438885.01	1965 May 4 1211	H-100	-	-	0.000	AM	SS	-	Aeron	SSP65	-	-
1965-147	2438885.13	1965 May 4 1507.00	H-100	-	-	0.000	AM	SS	-	Aeron	SSP65	-	-

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Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	OrbPay t	Agency	Launch_Code	Group	Category	LT/Cite	Cite	Notes
1965-Y48	2438886.13	1965 May 5 1507	R-100	-	-	0.000	AM	SS	-	Aeron	SSP65	-	-
1965-Y47	2438886.05	1965 May 5 1305	R-100	-	-	0.000	AM	SS	-	Aeron	SSP65	-	-
1965-Y49	2438886.37	1965 May 6 0858	R-100	-	-	0.000	AM	SS	-	Aeron	SSP65	-	-
1965-Y50	2438887.01	1965 May 6 1158	R-100	-	-	0.000	AM	SS	-	Aeron	SSP65	-	-
1965-Y51	2438887.91	1965 May 7 0957	R-100	-	-	0.000	AM	SS	-	Aeron	SSP65	-	-
1965-Y52	2438888.02	1965 May 7 1222	R-100	-	-	0.000	AM	SS	-	Aeron	SSP65	-	-
1965-Y53	2438889.02	1965 May 8 1200	R-100	-	-	0.000	AM	SS	-	Aeron	SSP65	-	-
1965-Y54	2438889.08	1965 May 8 1351:00	R-100	-	-	0.000	AM	SS	-	Aeron	DS1-5850	-	-
1965-Y55	2438889.37	1965 May 9 0859	R-100	-	-	0.000	AM	SS	-	Aeron	SSP65	-	-
1965-Y56	2438890.00	1965 May 9 1200	R-100	-	-	0.000	AM	SS	-	Aeron	SSP65	-	-
1965-Y57	2438890.08	1965 May 9 1351	R-100	-	-	0.000	AM	SS	-	Aeron	SSP65	-	-
1965-Y58	2438890.90	1965 May 10 0943	R-100	-	-	0.000	AM	SS	-	Aeron	SSP65	-	-
1965-Y59	2438891.03	1965 May 10 1242	R-100	-	-	0.000	AM	SS	-	Aeron	SSP65	-	-
1965-Y60	2438891.52	1965 May 11 0959	R-100	-	-	0.000	AM	SS	-	Aeron	SSP65	-	-
1965-Y61	2438891.96	1965 May 11 1100	R-100	-	-	0.000	AM	SS	-	Aeron	SSP65	-	-
1965-Y62	2438892.88	1965 May 12 0905	R-100	-	-	0.000	AM	SS	-	Aeron	SSP65	-	-
1965-Y63	2438892.98	1965 May 12 1132	R-100	-	-	0.000	AM	SS	-	Aeron	SSP65	-	-
1965-Y64	2438893.01	1965 May 12 1215	R-100	-	-	0.000	AM	SS	-	Aeron	SSP65	-	-
1965-Y65	2438893.52	1965 May 13 1000	R-100	-	-	0.000	AM	SS	-	Aeron	SSP65	-	-
1965-Y66	2438894.37	1965 May 14 0859	R-100	-	-	0.000	AM	SS	-	Aeron	SSP65	-	-
1965-Y67	2438895.88	1965 May 15 0913	R-100	-	-	0.000	AM	SS	-	Aeron	SSP65	-	-
1965-Y68	2438895.95	1965 May 15 1041	R-100	-	-	0.000	AM	SS	-	Aeron	SSP65	-	-
1965-Y69	2438896.52	1965 May 16 1000	R-100	-	-	0.000	AM	SS	-	Aeron	SSP65	-	-
1965-Y70	2438897.92	1965 May 17 1000	R-100	-	-	0.000	AM	SS	-	Aeron	SSP65	-	-
1965-Y71	2438899.01	1965 May 18 1215	R-100	-	-	0.000	AM	SS	-	Aeron	SSP65	-	-
1965-Y72	2438900.01	1965 May 19 1215	R-100	-	-	0.000	AM	SS	-	Aeron	SSP65	-	-
1965-Y73	2438901.00	1965 May 20 1205	R-100	-	-	0.000	AM	SS	-	Aeron	SSP65	-	-
1965-Y74	2438906.96	1965 May 26 1058	R-100	-	-	0.000	AM	SS	-	Aeron	SSP65	-	-
1965-Y75	2438907.96	1965 May 27 1053	R-100	-	-	0.000	AM	SS	-	Aeron	SSP65	-	-
1965-Y76	2438906.95	1965 May 28 1042	R-100	-	-	0.000	AM	SS	-	Aeron	SSP65	-	-
1965-Y77	2438905.42	1965 May 28 2203	R-100	-	-	0.000	AM	SS	-	Aeron	SSP65	-	-
1965-Y78	2438905.96	1965 May 29 1058	R-100	-	-	0.000	AM	SS	-	Aeron	SSP65	-	-
1965-Y79	2438910.42	1965 May 29 2206	R-100	-	-	0.000	AM	SS	-	Aeron	SSP65	-	-
1965-Y80	2438911.42	1965 May 30 2201	R-100	-	-	0.000	AM	SS	-	Aeron	SSP65	-	-
1965-Y81	2438911.46	1965 May 30 2309	R-100	-	-	0.000	AM	SS	-	Aeron	SSP65	-	-
1965-Y82	2438914.11	1965 Jun 2 1445	R-100	-	-	0.000	AM	SS	-	Aeron	SSP65	-	-
1965-Y83	2438914.96	1965 Jun 3 1100	R-100	-	-	0.000	AM	SS	-	Aeron	SSP65	-	-
1965-Y84	2438915.02	1965 Jun 3 1232	R-100	-	-	0.000	AM	SS	-	Aeron	SSP65	-	-
1965-Y85	2438916.00	1965 Jun 4 1206	R-100	-	-	0.000	AM	SS	-	Aeron	SSP65	-	-
1965-Y86	2438916.96	1965 Jun 5 1102	R-100	-	-	0.000	AM	SS	-	Aeron	SSP65	-	-
1965-Y87	2438917.00	1965 Jun 5 1155	R-100	-	-	0.000	AM	SS	-	Aeron	SSP65	-	-
1965-Y88	2438918.00	1965 Jun 6 1100	R-100	-	-	0.000	AM	SS	-	Aeron	SSP65	-	-
1965-Y89	2438918.96	1965 Jun 6 1230	R-100	-	-	0.000	AM	SS	-	Aeron	SSP65	-	-
1965-Y90	2438919.00	1965 Jun 7 1150	R-100	-	-	0.000	AM	SS	-	Aeron	SSP65	-	-
1965-Y91	2438920.02	1965 Jun 8 1235	R-100	-	-	0.000	AM	SS	-	Aeron	SSP65	-	-
1965-Y92	2438920.96	1965 Jun 9 1172	R-100	-	-	0.000	AM	SS	-	Aeron	SSP65	-	-
1965-Y93	2438921.04	1965 Jun 9 1100	R-100	-	-	0.000	AM	SS	-	Aeron	SSP65	-	-
1965-Y94	2438921.96	1965 Jun 10 1201	R-100	-	-	0.000	AM	SS	-	Aeron	SSP65	-	-
1965-Y95	2438922.96	1965 Jun 10 1201	R-100	-	-	0.000	AM	SS	-	Aeron	SSP65	-	-
1965-Y96	2438923.00	1965 Jun 11 1200	R-100	-	-	0.000	AM	SS	-	Aeron	SSP65	-	-
1965-Y97	2438924.00	1965 Jun 12 1204:59	R-100	-	-	0.000	AM	SS	-	Aeron	SSP65	-	-
1965-Y98	2438925.00	1965 Jun 13 1205	R-100	-	-	0.000	AM	SS	-	Aeron	SSP65	-	-
1965-Y99	2438925.01	1965 Jun 13 1221	R-100	-	-	0.000	AM	SS	-	Aeron	SSP65	-	-
1965-Y100	2438925.04	1965 Jun 13 1525	R-100	-	-	0.000	AM	SS	-	Aeron	SSP65	-	-
1965-Y101	2438925.96	1965 Jun 14 1100	R-100	-	-	0.000	AM	SS	-	Aeron	SSP65	-	-
1965-Y102	2438926.00	1965 Jun 14 1205	R-100	-	-	0.000	AM	SS	-	Aeron	SSP65	-	-
1965-Y103	2438926.01	1965 Jun 14 1205	R-100	-	-	0.000	AM	SS	-	Aeron	SSP65	-	-
1965-Y104	2438926.01	1965 Jun 14 1217	R-100	-	-	0.000	AM	SS	-	Aeron	SSP65	-	-
1965-Y105	2438926.98	1965 Jun 15 1127	R-100	-	-	0.000	AM	SS	-	Aeron	SSP65	-	-
1965-Y106	2438926.99	1965 Jun 15 1151	R-100	-	-	0.000	AM	SS	-	Aeron	SSP65	-	-
1965-Y107	2438927.03	1965 Jun 15 1225	R-100	-	-	0.000	AM	SS	-	Aeron	SSP65	-	-
1965-Y108	2438927.13	1965 Jun 15 1509	R-100	-	-	0.000	AM	SS	-	Aeron	SSP65	-	-
1965-Y109	2438928.00	1965 Jun 16 1153	R-100	-	-	0.000	AM	SS	-	Aeron	SSP65	-	-
1965-Y110	2438928.00	1965 Jun 16 1200	R-100	-	-	0.000	AM	SS	-	Aeron	SSP65	-	-
1965-Y111	2438930.01	1965 Jun 18 1210	R-100	-	-	0.000	AM	SS	-	Aeron	SSP65	-	-
1965-Y112	2438930.21	1965 Jun 18 1705	R-100	-	-	0.000	AM	SS	-	Aeron	SSP65	-	-
1965-Y113	2438931.04	1965 Jun 19 1251	R-100	-	-	0.000	AM	SS	-	Aeron	SSP65	-	-
1965-Y114	2438933.12	1965 Jun 21 2115	R-100	-	-	0.000	AM	SS	-	Aeron	SSP65	-	-
1965-Y115	2438933.30	1965 Jun 21 2115	R-100	-	-	0.000	AM	SS	-	Aeron	SSP65	-	-
1965-Y116	2438935.00	1965 Jun 23 1210	R-100	-	-	0.000	AM	SS	-	Aeron	SSP65	-	-
1965-Y117	2438935.00	1965 Jun 23 1153	R-100	-	-	0.000	AM	SS	-	Aeron	SSP65	-	-
1965-Y118	2438947.90	1965 Jul 6 0830	R-100	-	-	0.000	AM	SS	-	Aeron	SSP65	-	-
1965-Y119	2438950.84	1965 Jul 9 0815	R-100	-	-	0.000	AM	SS	-	Aeron	SSP65	-	-
1965-Y120	2438962.83	1965 Jul 13 0815	R-100	-	-	0.000	AM	SS	-	Aeron	SSP65	-	-
1965-Y121	2438962.83	1965 Jul 13 0815	R-100	-	-	0.000	AM	SS	-	Aeron	SSP65	-	-
1965-Y122	2438963.85	1965 Jul 22 0817	R-100	-	-	0.000	AM	SS	-	Aeron	SSP65	-	-
1965-Y123	2438963.85	1965 Jul 22 1315	R-100	-	-	0.000	AM	SS	-	Aeron	SSP65	-	-
1965-Y124	2438964.84	1965 Jul 23 0816	R-100	-	-	0.000	AM	SS	-	Aeron	SSP65	-	-
1965-Y125	2438964.84	1965 Jul 26 1215	R-100	-	-	0.000	AM	SS	-	Aeron	SSP65	-	-
1965-Y126	2438966.01	1965 Jul 27 0817	R-100	-	-	0.000	AM	SS	-	Aeron	SSP65	-	-
1965-Y127	2438966.85	1965 Jul 27 0817	R-100	-	-	0.000	AM	SS	-	Aeron	SSP65	-	-
1965-Y128	2438970.01	1965 Jul 28 1215	R-100	-	-	0.000	AM	SS	-	Aeron	SSP65	-	-
1965-Y129	2438984.84	1965 Aug 12 0816	R-100	-	-	0.000	AM	SS	-	Aeron	SSP65	-	-
1965-Y130	2438986.01	1965 Aug 13 1215	R-100	-	-	0.000	AM	SS	-	Aeron	SSP65	-	-

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	OrbPay_t	Agency	Launch_Code	Group	Category	LT/Cite	Cite	Notes
1965-1139	2438990.00	1965 Aug 17 1200	R-100	-	-	0.000	AM	SS	-	Aeron	SSP65	-	-
1965-1140	2438991.01	1965 Aug 18 1215	R-100	-	-	0.000	AM	SS	-	Aeron	SSP65	-	-
1965-1141	2439011.85	1965 Sep 6 0817	R-100	-	-	0.000	AM	SS	-	Aeron	SSP65	-	-
1965-1142	2439018.85	1965 Sep 15 0817	R-100	-	-	0.000	AM	SS	-	Aeron	SSP65	-	-
1965-1143	2439023.02	1965 Sep 19 1235	R-100	-	-	0.000	AM	SS	-	Aeron	SSP65	-	-
1965-1144	2439024.03	1965 Sep 20 1240	R-100	-	-	0.000	AM	SS	-	Aeron	SSP65	-	-
1965-1145	2439025.93	1965 Sep 22 1013	R-100	-	-	0.000	AM	SS	-	Aeron	SSP65	-	-
1965-1146	2439026.02	1965 Sep 22 1225	R-100	-	-	0.000	AM	SS	-	Aeron	SSP65	-	-
1965-1147	2439026.89	1965 Sep 23 0916	R-100	-	-	0.000	AM	SS	-	Aeron	SSP65	-	-
1965-1148	2439028.00	1965 Sep 24 1205	R-100	-	-	0.000	AM	SS	-	Aeron	SSP65	-	-
1965-1149	2439039.37	1965 Oct 6 1116	R-100	-	-	0.000	AM	SS	-	Aeron	SSP65	-	-
1965-1150	2439053.01	1965 Oct 19 1211	R-100	-	-	0.000	AM	SS	-	Aeron	SSP65	-	-
1965-1151	2439054.00	1965 Oct 20 1200	R-100	-	-	0.000	AM	SS	-	Aeron	SSP65	-	-
1965-1152	2439061.00	1965 Oct 27 1206	R-100	-	-	0.000	AM	SS	-	Aeron	SSP65	-	-
1965-1153	2439061.96	1965 Oct 28 1107	R-100	-	-	0.000	AM	SS	-	Aeron	SSP65	-	-
1965-1154	2439062.86	1965 Oct 29 0836	R-100	-	-	0.000	AM	SS	-	Aeron	SSP65	-	-
1965-1155	24390681.00	1965 Nov 16 1203	R-100	-	-	0.000	AM	SS	-	Aeron	SSP65	-	-
1965-1156	24390682.00	1965 Nov 17 1200	R-100	-	-	0.000	AM	SS	-	Aeron	SSP65	-	-
1965-1157	24390683.07	1965 Nov 18 1344	R-100	-	-	0.000	AM	SS	-	Aeron	SSP65	-	-
1965-1158	2439069.00	1965 Nov 24 1202	R-100	-	-	0.000	AM	SS	-	Aeron	SSP65	-	-
1965-1161	2439106.02	1965 Dec 13 1235	R-100	-	-	0.000	AM	SS	-	Aeron	SSP65	-	-
1965-1162	2439110.01	1965 Dec 15 1210	R-100	-	-	0.000	AM	SS	-	Aeron	SSP65	-	-
1965-1163	2439112.00	1965 Dec 17 1200	R-100	-	-	0.000	AM	SS	-	Aeron	SSP65	-	-
1966-408	2439130.01	1966 Jan 4 1214:59	R-100	-	-	0.000	GNSF	SS	-	Meteco	DSI-5850	-	-
1966-410	2439134.01	1966 Jan 6 1214:59	R-100	-	-	0.000	GNSF	SS	-	Meteco	DSI-5850	-	-
1966-415	2439135.01	1966 Jan 12 1221:00	R-100	-	-	0.000	GNSF	SS	-	Meteco	DSI-5850	-	-
1966-416	2439143.02	1966 Jan 17 1222:59	R-100	-	-	0.000	GNSF	SS	-	Meteco	DSI-5850	-	-
1966-423	2439145.02	1966 Jan 19 1230:00	R-100	-	-	0.000	GNSF	SS	-	Meteco	DSI-5850	-	-
1966-419	2439147.02	1966 Jan 21 1222:00	R-100	-	-	0.000	GNSF	SS	-	Meteco	DSI-5850	-	-
1966-420	2439146.00	1966 Jan 22 1200:00	R-100	-	-	0.000	GNSF	SS	-	Meteco	DSI-5850	-	-
1966-421	2439145.04	1966 Jan 23 1257:59	R-100	-	-	0.000	GNSF	SS	-	Meteco	DSI-5850	-	-
1966-701	2439150.02	1966 Jan 24 1233:59	R-100	-	-	0.000	GNSF	SS	-	Meteco	DSI-5850	-	-
1966-725	2439151.00	1966 Jan 25 1200:00	R-100	-	-	0.000	GNSF	SS	-	Meteco	DSI-5850	-	-
1966-728	2439153.00	1966 Jan 27 1200:00	R-100	-	-	0.000	GNSF	SS	-	Meteco	DSI-5850	-	-
1966-702	2439154.00	1966 Jan 28 1204:59	R-100	-	-	0.000	GNSF	SS	-	Meteco	DSI-5850	-	-
1966-430	2439155.02	1966 Jan 29 1228:59	R-100	-	-	0.000	GNSF	SS	-	Meteco	DSI-5850	-	-
1966-703	2439157.00	1966 Jan 31 1200:00	R-100	-	-	0.000	GNSF	SS	-	Meteco	DSI-5850	-	-
1966-732	2439158.02	1966 Feb 1 1225:59	R-100	-	-	0.000	GNSF	SS	-	Meteco	DSI-5850	-	-
1966-737	2439160.03	1966 Feb 2 1225:59	R-100	-	-	0.000	GNSF	SS	-	Meteco	DSI-5850	-	-
1966-466	2439161.00	1966 Feb 7 1201:59	R-100	-	-	0.000	GNSF	SS	-	Meteco	DSI-5850	-	-
1966-704	2439164.00	1966 Feb 8 1200:00	R-100	-	-	0.000	GNSF	SS	-	Meteco	DSI-5850	-	-
1966-705	2439165.00	1966 Feb 8 1201:00	R-100	-	-	0.000	GNSF	SS	-	Meteco	DSI-5850	-	-
1966-779	2439166.00	1966 Feb 8 1204:59	R-100	-	-	0.000	GNSF	SS	-	Meteco	DSI-5850	-	-
1966-472	2439166.26	1966 Feb 8 1620:00	R-100	-	-	0.000	GNSF	SS	-	Meteco	DSI-5850	-	-
1966-482	2439183.00	1966 Feb 8 1207:00	R-100	-	-	0.000	GNSF	SS	-	Meteco	DSI-5850	-	-
1966-474	2439185.00	1966 Feb 10 1200:00	R-100	-	-	0.000	GNSF	SS	-	Meteco	DSI-5850	-	-
1966-476	2439186.00	1966 Feb 11 1200:00	R-100	-	-	0.000	GNSF	SS	-	Meteco	DSI-5850	-	-
1966-445	2439195.00	1966 Feb 16 1200:00	R-100	-	-	0.000	GNSF	SS	-	Meteco	DSI-5850	-	-
1966-707	2439195.00	1966 Feb 16 1200:00	R-100	-	-	0.000	GNSF	SS	-	Meteco	DSI-5850	-	-
1966-473	2439201.01	1966 Feb 16 1200:00	R-100	-	-	0.000	GNSF	SS	-	Meteco	DSI-5850	-	-
1966-452	2439203.00	1966 Feb 20 1213:59	R-100	-	-	0.000	GNSF	SS	-	Meteco	DSI-5850	-	-
1966-475	2439203.01	1966 Feb 20 1213:59	R-100	-	-	0.000	GNSF	SS	-	Meteco	DSI-5850	-	-
1966-476	2439203.02	1966 Feb 20 1204:59	R-100	-	-	0.000	GNSF	SS	-	Meteco	DSI-5850	-	-
1966-708	2439203.00	1966 Feb 22 1200:00	R-100	-	-	0.000	GNSF	SS	-	Meteco	DSI-5850	-	-
1966-710	2439203.00	1966 Feb 25 1207:00	R-100	-	-	0.000	GNSF	SS	-	Meteco	DSI-5850	-	-
1966-456	2439241.01	1966 Feb 27 1208:00	R-100	-	-	0.000	GNSF	SS	-	Meteco	DSI-5850	-	-
1966-4237	2439243.01	1966 Feb 27 1208:00	R-100	-	-	0.000	GNSF	SS	-	Meteco	DSI-5850	-	-
1966-4256	2439262.00	1966 Feb 16 1200:00	R-100	-	-	0.000	GNSF	SS	-	Meteco	DSI-5850	-	-
1966-723	2439265.00	1966 Feb 19 1200:00	R-100	-	-	0.000	GNSF	SS	-	Meteco	DSI-5850	-	-
1966-470	2439270.01	1966 Feb 20 1204:59	R-100	-	-	0.000	GNSF	SS	-	Meteco	DSI-5850	-	-
1966-471	2439270.01	1966 Feb 24 1208:00	R-100	-	-	0.000	GNSF	SS	-	Meteco	DSI-5850	-	-
1966-4273	2439290.00	1966 Feb 13 1207:00	R-100	-	-	0.000	GNSF	SS	-	Meteco	DSI-5850	-	-
1966-4274	2439291.00	1966 Feb 14 1206:00	R-100	-	-	0.000	GNSF	SS	-	Meteco	DSI-5850	-	-
1966-477	2439292.00	1966 Feb 15 1201:59	R-100	-	-	0.000	GNSF	SS	-	Meteco	DSI-5850	-	-
1966-726	2439293.01	1966 Feb 16 1212:59	R-100	-	-	0.000	GNSF	SS	-	Meteco	DSI-5850	-	-
1966-728	2439318.00	1966 Jul 11 1200:00	R-100	-	-	0.000	GNSF	SS	-	Meteco	DSI-5850	-	-
1966-729	2439319.00	1966 Jul 12 1200:00	R-100	-	-	0.000	GNSF	SS	-	Meteco	DSI-5850	-	-
1966-730	2439321.00	1966 Jul 14 1200:00	R-100	-	-	0.000	GNSF	SS	-	Meteco	DSI-5850	-	-
1966-4294	2439321.72	1966 Jul 15 0514:00	R-100	-	-	0.000	GNSF	SS	-	Meteco	DSI-5850	-	-
1966-731	2439322.00	1966 Jul 15 1200:00	R-100	-	-	0.000	GNSF	SS	-	Meteco	DSI-5850	-	-
1966-733	2439355.00	1966 Aug 17 1201:59	R-100	-	-	0.000	GNSF	SS	-	Meteco	DSI-5850	-	-
1966-735	2439357.00	1966 Aug 19 1200:00	R-100	-	-	0.000	GNSF	SS	-	Meteco	DSI-5850	-	-
1966-736	2439358.00	1966 Aug 20 1200:00	R-100	-	-	0.000	GNSF	SS	-	Meteco	DSI-5850	-	-
1966-4310	2439363.79	1966 Aug 26 0659:59	R-100	-	-	0.000	GNSF	SS	-	Meteco	DSI-5850	-	-
1966-739	2439369.00	1966 Aug 31 1200:00	R-100	-	-	0.000	GNSF	SS	-	Meteco	DSI-5850	-	-
1966-4104	2439382.00	1966 Sep 13 1200:00	R-100	-	-	0.000	GNSF	SS	-	Meteco	DSI-5850	-	-
1966-741	2439384.00	1966 Sep 16 1200:00	R-100	-	-	0.000	GNSF	SS	-	Meteco	DSI-5850	-	-
1966-742	2439385.00	1966 Sep 16 1200:00	R-100	-	-	0.000	GNSF	SS	-	Meteco	DSI-5850	-	-
1966-743	2439393.00	1966 Sep 24 1200:00	R-100	-	-	0.000	GNSF	SS	-	Meteco	DSI-5850	-	-
1966-744	2439404.00	1966 Oct 5 1200:00	R-100	-	-	0.000	GNSF	SS	-	Meteco	DSI-5850	-	-
1966-4122	2439415.79	1966 Oct 17 0702:59	R-100	-	-	0.000	GNSF	SS	-	Meteco	DSI-5850	-	-
1966-4353	2439422.82	1966 Oct 24 0736:59	R-100	-	-	0.000	GNSF	SS	-	Meteco	DSI-5850	-	-
1966-4362	2439429.80	1966 Oct 31 0712:59	R-100	-	-	0.000	GNSF	SS	-	Meteco	DSI-5850	-	-
1966-757	2439443.79	1966 Nov 14 0659:59	R-100	-	-	0.000	GNSF	SS	-	Meteco	DSI-5850	-	-
1966-4141	2439450.79	1966 Nov 21 0659:59	R-100	-	-	0.000	GNSF	SS	-	Meteco	DSI-5850	-	-
1966-758	2439459.92	1966 Nov 30 1007:00	R-100	-	-	0.000	GNSF	SS	-	Meteco	DSI-5850	-	-
1966-4393	2439473.77	1966 Dec 14 0630:00	R-100	-	-	0.000	GNSF	SS	-	Meteco	DSI-5850	-	-

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	OrbPay t	Agency	Launch_Code	Group	Category	LT/Cite	Cite	Notes
1966-W396	2439474.79	1966 Dec 15 0659:59	M-100	-	-	0.000	GNS?	SS	-	Meteo	DSI-5850	-	-
1966-A154	2439475.79	1966 Dec 19 0659:59	M-100	-	-	0.000	GNS?	SS	-	Meteo	DSI-5850	-	-
1966-A155	2439479.00	1966 Dec 19 1200:00	M-100	-	-	0.000	GNS?	SS	-	Meteo	DSI-5850	-	-
1966-W397	2439479.13	1966 Dec 19 1501:59	M-100	-	-	0.000	GNS?	SS	-	Meteo	DSI-5850	-	-
1966-W398	2439480.37	1966 Dec 21 1121:00	M-100	-	-	0.000	GNS?	SS	-	Meteo	DSI-5850	-	-
1966-A156	2439481.09	1966 Dec 21 1200:00	M-100	-	-	0.000	GNS?	SS	-	Meteo	DSI-5850	-	-
1966-A157	2439481.99	1966 Dec 21 1410:00	M-100	-	-	0.000	GNS?	SS	-	Meteo	DSI-5850	-	-
1966-W399	2439481.96	1966 Dec 22 1100:00	M-100	-	-	0.000	GNS?	SS	-	Meteo	DSI-5850	-	-
1966-W400	2439482.92	1966 Dec 23 0959:59	M-100	-	-	0.000	GNS?	SS	-	Meteo	DSI-5850	-	-
1966-W401	2439483.79	1966 Dec 24 0659:59	M-100	-	-	0.000	GNS?	SS	-	Meteo	DSI-5850	-	-
1966-W402	2439484.57	1966 Dec 25 0857:00	M-100	-	-	0.000	GNS?	SS	-	Meteo	DSI-5850	-	-
1966-W403	2439485.88	1966 Dec 26 0959:59	M-100	-	-	0.000	GNS?	SS	-	Meteo	DSI-5850	-	-
1966-W404	2439485.88	1966 Dec 26 0959:59	M-100	-	-	0.000	GNS?	SS	-	Meteo	DSI-5850	-	-
1966-W405	2439487.37	1966 Dec 27 2046:00	M-100	-	-	0.000	GNS?	SS	-	Meteo	DSI-5850	-	-
1966-W406	2439487.79	1966 Dec 28 0659:59	M-100	-	-	0.000	GNS?	SS	-	Meteo	DSI-5850	-	-
1966-W407	2439488.55	1966 Dec 29 0859:59	M-100	-	-	0.000	GNS?	SS	-	Meteo	DSI-5850	-	-
1966-A160	2439488.52	1966 Dec 29 0859:59	M-100	-	-	0.000	GNS?	SS	-	Meteo	DSI-5850	-	-
1966-W408	2439489.85	1966 Dec 30 0830:00	M-100	-	-	0.000	GNS?	SS	-	Meteo	DSI-5850	-	-
1966-W409	2439490.92	1966 Dec 31 0959:59	M-100	-	-	0.000	GNS?	SS	-	Meteo	DSI-5850	-	-
1967-A14	2439491.51	1967 Jan 1 0722:59	M-100	-	-	0.000	GNS?	SS	-	Meteo	DSI-5850	-	-
1967-W10	2439492.92	1967 Jan 2 0959:59	M-100	-	-	0.000	GNS?	SS	-	Meteo	DSI-5850	-	-
1967-W11	2439493.53	1967 Jan 3 0800:00	M-100	-	-	0.000	GNS?	SS	-	Meteo	DSI-5850	-	-
1967-W12	2439493.93	1967 Jan 3 1028:59	M-100	-	-	0.000	GNS?	SS	-	Meteo	DSI-5850	-	-
1967-W13	2439494.88	1967 Jan 4 0906:00	M-100	-	-	0.000	GNS?	SS	-	Meteo	DSI-5850	-	-
1967-W14	2439494.88	1967 Jan 4 0912:59	M-100	-	-	0.000	GNS?	SS	-	Meteo	DSI-5850	-	-
1967-W15	2439494.92	1967 Jan 4 0959:59	M-100	-	-	0.000	GNS?	SS	-	Meteo	DSI-5850	-	-
1967-W16	2439495.86	1967 Jan 5 0634:00	M-100	-	-	0.000	GNS?	SS	-	Meteo	DSI-5850	-	-
1967-W17	2439496.94	1967 Jan 6 0803:00	M-100	-	-	0.000	GNS?	SS	-	Meteo	DSI-5850	-	-
1967-W18	2439496.92	1967 Jan 6 0959:59	M-100	-	-	0.000	GNS?	SS	-	Meteo	DSI-5850	-	-
1967-W19	2439497.41	1967 Jan 6 2155:00	M-100	-	-	0.000	GNS?	SS	-	Meteo	DSI-5850	-	-
1967-W20	2439497.87	1967 Jan 7 0655:00	M-100	-	-	0.000	GNS?	SS	-	Meteo	DSI-5850	-	-
1967-W21	2439498.52	1967 Jan 7 1002:59	M-100	-	-	0.000	GNS?	SS	-	Meteo	DSI-5850	-	-
1967-W22	2439500.88	1967 Jan 10 0904:59	M-100	-	-	0.000	GNS?	SS	-	Meteo	DSI-5850	-	-
1967-W23	2439500.92	1967 Jan 10 1009:59	M-100	-	-	0.000	GNS?	SS	-	Meteo	DSI-5850	-	-
1967-W24	2439501.89	1967 Jan 11 0920:00	M-100	-	-	0.000	GNS?	SS	-	Meteo	DSI-5850	-	-
1967-W25	2439505.30	1967 Jan 14 1911:59	M-100	-	-	0.000	GNS?	SS	-	Meteo	DSI-5850	-	-
1967-W26	2439506.92	1967 Jan 16 0959:59	M-100	-	-	0.000	GNS?	SS	-	Meteo	DSI-5850	-	-
1967-W27	2439507.91	1967 Jan 17 0944:00	M-100	-	-	0.000	GNS?	SS	-	Meteo	DSI-5850	-	-
1967-W28	2439507.92	1967 Jan 17 0959:59	M-100	-	-	0.000	GNS?	SS	-	Meteo	DSI-5850	-	-
1967-W29	2439508.89	1967 Jan 18 0922:59	M-100	-	-	0.000	GNS?	SS	-	Meteo	DSI-5850	-	-
1967-W30	2439508.90	1967 Jan 18 0959:59	M-100	-	-	0.000	GNS?	SS	-	Meteo	DSI-5850	-	-
1967-W31	2439508.92	1967 Jan 18 0959:59	M-100	-	-	0.000	GNS?	SS	-	Meteo	DSI-5850	-	-
1967-W32	2439509.96	1967 Jan 20 1134:00	M-100	-	-	0.000	GNS?	SS	-	Meteo	DSI-5850	-	-
1967-W33	2439510.96	1967 Jan 21 1104:59	M-100	-	-	0.000	GNS?	SS	-	Meteo	DSI-5850	-	-
1967-W34	2439511.96	1967 Jan 21 1109:00	M-100	-	-	0.000	GNS?	SS	-	Meteo	DSI-5850	-	-
1967-W35	2439511.96	1967 Jan 21 104:59	M-100	-	-	0.000	GNS?	SS	-	Meteo	DSI-5850	-	-
1967-W36	2439513.94	1967 Jan 22 1030:00	M-100	-	-	0.000	GNS?	SS	-	Meteo	DSI-5850	-	-
1967-W37	2439513.94	1967 Jan 23 1200:00	M-100	-	-	0.000	GNS?	SS	-	Meteo	DSI-5850	-	-
1967-W38	2439514.95	1967 Jan 23 1048:59	M-100	-	-	0.000	GNS?	SS	-	Meteo	DSI-5850	-	-
1967-W39	2439514.95	1967 Jan 25 0406:59	M-100	-	-	0.000	GNS?	SS	-	Meteo	DSI-5850	-	-
1967-W40	2439515.97	1967 Jan 26 1100:00	M-100	-	-	0.000	GNS?	SS	-	Meteo	DSI-5850	-	-
1967-W41	2439515.96	1967 Jan 27 1108:00	M-100	-	-	0.000	GNS?	SS	-	Meteo	DSI-5850	-	-
1967-W42	2439516.97	1967 Jan 28 1113:00	M-100	-	-	0.000	GNS?	SS	-	Meteo	DSI-5850	-	-
1967-W43	2439520.97	1967 Jan 30 1113:00	M-100	-	-	0.000	GNS?	SS	-	Meteo	DSI-5850	-	-
1967-W44	2439520.98	1967 Feb 1 1133:00	M-100	-	-	0.000	GNS?	SS	-	Meteo	DSI-5850	-	-
1967-W45	2439520.98	1967 Feb 4 1055:59	M-100	-	-	0.000	GNS?	SS	-	Meteo	DSI-5850	-	-
1967-W46	2439527.94	1967 Feb 6 1026:59	M-100	-	-	0.000	GNS?	SS	-	Meteo	DSI-5850	-	-
1967-W47	2439528.92	1967 Feb 7 0957:59	M-100	-	-	0.000	GNS?	SS	-	Meteo	DSI-5850	-	-
1967-W48	2439529.88	1967 Feb 8 0903:59	M-100	-	-	0.000	GNS?	SS	-	Meteo	DSI-5850	-	-
1967-W49	2439531.91	1967 Feb 10 0953:00	M-100	-	-	0.000	GNS?	SS	-	Meteo	DSI-5850	-	-
1967-W50	2439536.63	1967 Feb 15 0310:00	M-100	-	-	0.000	GNS?	SS	-	Meteo	DSI-5850	-	-
1967-W51	2439536.68	1967 Feb 15 0900:00	M-100	-	-	0.000	GNS?	SS	-	Meteo	DSI-5850	-	-
1967-W52	2439538.01	1967 Feb 16 1212:59	M-100	-	-	0.000	GNS?	SS	-	Meteo	DSI-5850	-	-
1967-W53	2439539.91	1967 Feb 18 0953:00	M-100	-	-	0.000	GNS?	SS	-	Meteo	DSI-5850	-	-
1967-W54	2439541.91	1967 Feb 20 1019:59	M-100	-	-	0.000	GNS?	SS	-	Meteo	DSI-5850	-	-
1967-W55	2439571.93	1967 Mar 22 1100:00	M-100	-	-	0.000	GNS?	SS	-	Meteo	DSI-5850	-	-
1967-W56	2439578.92	1967 Mar 29 1008:59	M-100	-	-	0.000	GNS?	SS	-	Meteo	DSI-5850	-	-
1967-W57	2439579.92	1967 Mar 29 1100:00	M-100	-	-	0.000	GNS?	SS	-	Meteo	DSI-5850	-	-
1967-W58	2439590.92	1967 Apr 10 1002:59	M-100	-	-	0.000	GNS?	SS	-	Meteo	DSI-5850	-	-
1967-W59	2439593.94	1967 Apr 12 1256:59	M-100	-	-	0.000	GNS?	SS	-	Meteo	DSI-5850	-	-
1967-W60	2439596.00	1967 Apr 15 1204:59	M-100	-	-	0.000	GNS?	SS	-	Meteo	DSI-5850	-	-
1967-W61	2439598.00	1967 Apr 17 1200:00	M-100	-	-	0.000	GNS?	SS	-	Meteo	DSI-5850	-	-
1967-W62	2439599.92	1967 Apr 19 1002:59	M-100	-	-	0.000	GNS?	SS	-	Meteo	DSI-5850	-	-
1967-W63	2439603.00	1967 Apr 22 1202:59	M-100	-	-	0.000	GNS?	SS	-	Meteo	DSI-5850	-	-
1967-W64	2439604.92	1967 Apr 22 1002:59	M-100	-	-	0.000	GNS?	SS	-	Meteo	DSI-5850	-	-
1967-W65	2439607.71	1967 Apr 27 0503:00	M-100	-	-	0.000	GNS?	SS	-	Meteo	DSI-5850	-	-
1967-W66	2439616.92	1967 May 6 1000:59	M-100	-	-	0.000	GNS?	SS	-	Meteo	DSI-5850	-	-
1967-W67	2439617.92	1967 May 7 1002:59	M-100	-	-	0.000	GNS?	SS	-	Meteo	DSI-5850	-	-
1967-W68	2439618.14	1967 May 7 1526	M-100	-	-	0.000	AI?	SS	-	Meteo	DSI-5850	-	-
1967-W69	2439618.14	1967 May 7 1004:59	M-100	-	-	0.000	GNS?	SS	-	Meteo	DSI-5850	-	-
1967-W70	2439620.92	1967 May 10 1200:00	M-100	-	-	0.000	GNS?	SS	-	Meteo	DSI-5850	-	-
1967-W71	2439621.00	1967 May 10 1200:00	M-100	-	-	0.000	GNS?	SS	-	Meteo	DSI-5850	-	-
1967-W72	2439623.67	1967 May 13 0404:59	M-100	-	-	0.000	GNS?	SS	-	Meteo	DSI-5850	-	-

SR9, 231  
WD,CRF



Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	OrbPay	Agency	Launch_Code	Group	Category	LT/Cite	Cite	Notes
1968-120	2439950.62	1968 Mar 15 0300:00	H-100	-	-	0.000	CNS?	SS	-	Meteo	DSI-5850	-	-
1968-484	2439951.88	1968 Apr 5 0901:59	H-100	-	-	0.000	CNS?	SS	-	Meteo	DSI-5850	-	-
1968-490	2439955.88	1968 Apr 19 0900:00	H-100	-	-	0.000	CNS?	SS	-	Meteo	DSI-5850	-	-
1968-498	2439960.88	1968 May 4 0900:00	H-100	-	-	0.000	CNS?	SS	-	Meteo	DSI-5850	-	-
1968-126	2439982.92	1968 May 6 1006:00	H-100	-	-	0.000	CNS?	SS	-	Meteo	DSI-5850	-	-
1968-1101	2439984.88	1968 May 8 0912:59	H-100	-	-	0.000	CNS?	SS	-	Meteo	DSI-5850	-	-
1968-1102	2439991.88	1968 May 15 0904:59	H-100	-	-	0.000	CNS?	SS	-	Meteo	DSI-5850	-	-
1968-1104	2439992.92	1968 May 16 1007:59	H-100	-	-	0.000	CNS?	SS	-	Meteo	DSI-5850	-	-
1968-131	2439999.90	1968 May 23 0954:59	H-100	-	-	0.000	CNS?	SS	-	Meteo	DSI-5850	-	-
1968-132	2440005.63	1968 May 29 0301:59	H-100	-	-	0.000	CNS?	SS	-	Meteo	DSI-5850	-	-
1968-133	2440005.88	1968 May 29 0900:00	H-100	-	-	0.000	CNS?	SS	-	Meteo	DSI-5850	-	-
1968-134	2440012.63	1968 Jun 5 0301:59	H-100	-	-	0.000	CNS?	SS	-	Meteo	DSI-5850	-	-
1968-1123	2440019.63	1968 Jun 12 0301:59	H-100	-	-	0.000	CNS?	SS	-	Meteo	DSI-5850	-	-
1968-1124	2440019.69	1968 Jun 12 0927:59	H-100	-	-	0.000	CNS?	SS	-	Meteo	DSI-5850	-	-
1968-136	2440026.63	1968 Jun 19 0300:59	H-100	-	-	0.000	CNS?	SS	-	Meteo	DSI-5850	-	-
1968-1126	2440026.96	1968 Jun 19 1102:00	H-100	-	-	0.000	CNS?	SS	-	Meteo	DSI-5850	-	-
1968-138	2440033.63	1968 Jun 26 0303:59	H-100	-	-	0.000	CNS?	SS	-	Meteo	DSI-5850	-	-
1968-1127	2440033.68	1968 Jun 26 0900:00	H-100	-	-	0.000	CNS?	SS	-	Meteo	DSI-5850	-	-
1968-139	2440038.88	1968 Jul 1 0900:00	H-100	-	-	0.000	CNS?	SS	-	Meteo	DSI-5850	-	-
1968-146	2440040.35	1968 Jul 2 2027:59	H-100	-	-	0.000	CNS?	SS	-	Meteo	DSI-5850	-	-
1968-141	2440040.52	1968 Jul 3 0227:59	H-100	-	-	0.000	CNS?	SS	-	Meteo	DSI-5850	-	-
1968-1147	2440040.54	1968 Jul 3 0859:59	H-100	-	-	0.000	CNS?	SS	-	Meteo	DSI-5850	-	-
1968-142	2440040.69	1968 Jul 3 0832:59	H-100	-	-	0.000	CNS?	SS	-	Meteo	DSI-5850	-	-
1968-1148	2440040.71	1968 Jul 3 0603:59	H-100	-	-	0.000	CNS?	SS	-	Meteo	DSI-5850	-	-
1968-143	2440040.85	1968 Jul 3 0827:59	H-100	-	-	0.000	CNS?	SS	-	Meteo	DSI-5850	-	-
1968-1149	2440040.88	1968 Jul 3 0900:00	H-100	-	-	0.000	CNS?	SS	-	Meteo	DSI-5850	-	-
1968-144	2440041.02	1968 Jul 3 1227:59	H-100	-	-	0.000	CNS?	SS	-	Meteo	DSI-5850	-	-
1968-145	2440041.11	1968 Jul 3 1437:59	H-100	-	-	0.000	CNS?	SS	-	Meteo	DSI-5850	-	-
1968-146	2440041.21	1968 Jul 3 1700:00	H-100	-	-	0.000	CNS?	SS	-	Meteo	DSI-5850	-	-
1968-1150	2440043.92	1968 Jul 6 1006:00	H-100	-	-	0.000	AI	SU	SU/Tullinow	Aeron/Jomros	DSI-5850	-	-
1968-148	2440047.21	1968 Jul 9 1700:00	H-100	-	-	0.000	AI	SU	SU/Tullinow	Aeron/Jomros	DSI-5850	-	-
1968-149	2440047.62	1968 Jul 10 0300:00	H-100	-	-	0.000	AI	SU	SU/Tullinow	Aeron/Jomros	DSI-5850	-	-
1968-150	2440047.65	1968 Jul 10 0332:00	H-100	-	-	0.000	AI	SU	SU/Tullinow	Aeron/Jomros	DSI-5850	-	-
1968-1151	2440047.68	1968 Jul 10 0900:00	H-100	-	-	0.000	CNS?	SS	-	Meteo	DSI-5850	-	-
1968-1155	2440054.59	1968 Jul 17 0203:59	H-100	-	-	0.000	CNS?	SS	-	Meteo	DSI-5850	-	-
1968-151	2440055.88	1968 Jul 17 0938:00	H-100	-	-	0.000	CNS?	SS	-	Meteo	DSI-5850	-	-
1968-152	2440062.69	1968 Jul 25 0432:59	H-100	-	-	0.000	CNS?	SS	-	Meteo	DSI-5850	-	-
1968-153	2440065.88	1968 Jul 28 0900:00	H-100	-	-	0.000	CNS?	SS	-	Meteo	DSI-5850	-	-
1968-1152	2440065.88	1968 Jul 31 0900:00	H-100	-	-	0.000	CNS?	SS	-	Meteo	DSI-5850	-	-
1968-154	2440077.92	1968 Aug 9 0959:59	H-100	-	-	0.000	CNS?	SS	-	Meteo	DSI-5850	-	-
1968-156	2440082.28	1968 Aug 13 1839:59	H-100	-	-	0.000	CNS?	SS	-	Meteo	DSI-5850	-	-
1968-159	2440082.95	1968 Aug 14 0900:00	H-100	-	-	0.000	CNS?	SS	-	Meteo	DSI-5850	-	-
1968-160	2440083.57	1968 Aug 14 1600:00	H-100	-	-	0.000	CNS?	SS	-	Meteo	DSI-5850	-	-
1968-161	2440083.57	1968 Aug 14 1600:00	H-100	-	-	0.000	CNS?	SS	-	Meteo	DSI-5850	-	-
1968-162	2440083.25	1968 Aug 15 1600:00	H-100	-	-	0.000	CNS?	SS	-	Meteo	DSI-5850	-	-
1968-1165	2440084.21	1968 Aug 16 1839:59	H-100	-	-	0.000	CNS?	SS	-	Meteo	DSI-5850	-	-
1968-165	2440085.29	1968 Aug 16 1839:59	H-100	-	-	0.000	CNS?	SS	-	Meteo	DSI-5850	-	-
1968-1166	2440085.28	1968 Aug 19 0900:00	H-100	-	-	0.000	CNS?	SS	-	Meteo	DSI-5850	-	-
1968-1167	2440085.88	1968 Aug 20 0907:00	H-100	-	-	0.000	CNS?	SS	-	Meteo	DSI-5850	-	-
1968-1168	2440089.01	1968 Aug 21 1700:00	H-100	-	-	0.000	CNS?	SS	-	Meteo	DSI-5850	-	-
1968-168	2440091.71	1968 Aug 22 1600:00	H-100	-	-	0.000	AI	SU	SU	Aeron	WD/CRF	DSI-5850	-
1968-169	2440091.70	1968 Aug 22 1859:59	H-100	-	-	0.000	AI	SU	SU	Aeron	WD/CRF	DSI-5850	-
1968-166	2440093.51	1968 Aug 23 1700:00	H-100	-	-	0.000	CNS?	SS	-	Meteo	DSI-5850	-	-
1968-169	2440093.99	1968 Aug 23 1859:59	H-100	-	-	0.000	CNS?	SS	-	Meteo	DSI-5850	-	-
1968-167	2440093.17	1968 Aug 24 1559:59	H-100	-	-	0.000	CNS?	SS	-	Meteo	DSI-5850	-	-
1968-168	2440093.51	1968 Aug 24 1700:00	H-100	-	-	0.000	CNS?	SS	-	Meteo	DSI-5850	-	-
1968-170	2440096.88	1968 Aug 28 0900:59	H-100	-	-	0.000	CNS?	SS	-	Meteo	DSI-5850	-	-
1968-171	2440101.17	1968 Aug 28 0900:00	H-100	-	-	0.000	CNS?	SS	-	Meteo	DSI-5850	-	-
1968-172	2440101.29	1968 Aug 31 1900:00	H-100	-	-	0.000	AI	SU	SU	Aeron	WD/CRF	DSI-5850	-
1968-173	2440102.21	1968 Sep 2 1700:00	H-100	-	-	0.000	AI	SU	SU	Aeron	WD/CRF	DSI-5850	-
1968-1179	2440102.25	1968 Sep 2 1800:00	H-100	-	-	0.000	CNS?	SS	-	Meteo	DSI-5850	-	-
1968-1180	2440103.25	1968 Sep 3 1800:00	H-100	-	-	0.000	CNS?	SS	-	Meteo	DSI-5850	-	-
1968-1181	2440104.29	1968 Sep 4 1859:59	H-100	-	-	0.000	CNS?	SS	-	Meteo	DSI-5850	-	-
1968-174	2440105.21	1968 Sep 5 1700:00	H-100	-	-	0.000	CNS?	SS	-	Meteo	DSI-5850	-	-
1968-175	2440107.21	1968 Sep 7 1700:00	H-100	-	-	0.000	CNS?	SS	-	Meteo	DSI-5850	-	-
1968-1182	2440110.38	1968 Sep 10 2100:00	H-100	-	-	0.000	CNS?	SS	-	Meteo	DSI-5850	-	-
1968-1183	2440110.46	1968 Sep 10 2300:00	H-100	-	-	0.000	CNS?	SS	-	Meteo	DSI-5850	-	-
1968-176	2440110.88	1968 Sep 11 0900:00	H-100	-	-	0.000	AI	SU	SU	Aeron	WD/CRF	DSI-5850	-
1968-177	2440112.33	1968 Sep 12 2000:00	H-100	-	-	0.000	AI	SU	SU	Aeron	WD/CRF	DSI-5850	-
1968-1186	2440115.17	1968 Sep 15 1559:59	H-100	-	-	0.000	CNS?	SS	-	Meteo	DSI-5850	-	-
1968-179	2440117.88	1968 Sep 18 0900:00	H-100	-	-	0.000	CNS?	SS	-	Meteo	DSI-5850	-	-
1968-178	2440118.21	1968 Sep 18 1002:59	H-100	-	-	0.000	CNS?	SS	-	Meteo	DSI-5850	-	-
1968-180	2440118.21	1968 Sep 18 1700:00	H-100	-	-	0.000	AI	SU	SU	Aeron	WD/CRF	DSI-5850	-
1968-181	2440121.08	1968 Sep 21 1400:00	H-100	-	-	0.000	AI	SU	SU	Aeron	WD/CRF	DSI-5850	-
1968-182	2440121.17	1968 Sep 21 1600:00	H-100	-	-	0.000	AI	SU	SU	Aeron	WD/CRF	DSI-5850	-
1968-1188	2440121.21	1968 Sep 21 1700:00	H-100	-	-	0.000	AI	SU	SU	Aeron	WD/CRF	DSI-5850	-
1968-183	2440121.29	1968 Sep 21 1900:00	H-100	-	-	0.000	AI	SU	SU	Aeron	WD/CRF	DSI-5850	-
1968-184	2440121.89	1968 Sep 22 0914:59	H-100	-	-	0.000	CNS?	SS	-	Meteo	DSI-5850	-	-
1968-185	2440124.88	1968 Sep 25 0900:00	H-100	-	-	0.000	CNS?	SS	-	Meteo	DSI-5850	-	-
1968-186	2440127.00	1968 Sep 25 2000:00	H-100	-	-	0.000	CNS?	SS	-	Meteo	DSI-5850	-	-
1968-4226	2440131.88	1968 Oct 2 0915:59	H-100	-	-	0.000	CNS?	SS	-	Meteo	DSI-5850	-	-
1968-5530	2440138.88	1968 Oct 9 0906	H-100	-	-	0.000	CNS?	SS	-	Meteo	DSI-5850	-	-
1968-187	2440139.09	1968 Oct 9 1403:00	H-100	-	-	0.000	CNS?	SS	-	Meteo	DSI-5850	-	-
1968-4229	2440145.92	1968 Oct 16 1001:59	H-100	-	-	0.000	CNS?	SS	-	Meteo	DSI-5850	-	-
1968-188	2440152.88	1968 Oct 23 0908:00	H-100	-	-	0.000	CNS?	SS	-	Meteo	DSI-5850	-	-
1968-190	2440159.88	1968 Oct 30 0908:00	H-100	-	-	0.000	CNS?	SS	-	Meteo	DSI-5850	-	-

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	OrbPay t	Agency	Launch_Code	Group	Category	LT/Cite	Cite	Notes
1968-W230	2440160.00	1968 Dec 30 1202:59	M-100	-	-	0.000	ONS?	SS	-	Meteo	DSI-8860	-	-
1968-W243	2440164.84	1968 Nov 4 0803:00	M-100	-	-	0.000	ONS?	SS	-	Meteo	DSI-8860	-	-
1968-W194	2440173.89	1968 Nov 13 0914:59	M-100	-	-	0.000	ONS?	SS	AM/Tullinow	Meteo	DSI-8860	SR12,1469	-
1968-W244	2440176.75	1968 Nov 15 0602:59	M-100	-	-	0.000	ONS?	SS	-	Meteo	DSI-8860	-	-
1968-W196	2440180.89	1968 Nov 20 0924:59	M-100	-	-	0.000	ONS?	SS	-	Meteo	DSI-8860	-	-
1968-W247	2440183.04	1968 Nov 22 1302:59	M-100	-	-	0.000	ONS?	SS	-	Meteo	DSI-8860	-	-
1968-W248	2440187.63	1968 Nov 27 0302:59	M-100	-	-	0.000	ONS?	SS	-	Meteo	DSI-8860	-	-
1968-W198	2440187.88	1968 Nov 27 0901:59	M-100	-	-	0.000	ONS?	SS	AM/Tullinow	Meteo	DSI-8860	SR12,1469	-
1968-W249	2440189.85	1968 Nov 29 0820:00	M-100	-	-	0.000	ONS?	SS	-	Meteo	DSI-8860	-	-
1968-W264	2440194.88	1968 Dec 4 0904:59	M-100	-	-	0.000	ONS?	SS	-	Meteo	DSI-8860	-	-
1968-W101	2440201.67	1968 Dec 11 0402:59	M-100	-	-	0.000	ONS?	SS	-	Meteo	DSI-8860	-	-
1968-W102	2440201.88	1968 Dec 11 0900:00	M-100	-	-	0.000	ONS?	SS	AM/Tullinow	Meteo	DSI-8860	SR12,1469	-
1968-W280	2440208.88	1968 Dec 18 0912	M-100	-	-	0.000	ONS?	SS	-	Meteo	DSI-8860	-	-
1968-W105	2440210.96	1968 Dec 20 1100:00	M-100	-	-	0.000	ONS?	SS	AM/Tullinow	Meteo	DSI-8860	SR12,1469	-
1968-W274	2440213.55	1968 Dec 23 0830:00	M-100	-	-	0.000	ONS?	SS	-	Meteo	DSI-8860	-	-
1968-W116	2440215.71	1968 Dec 25 0500:00	M-100	-	-	0.000	ONS?	SS	-	Meteo	DSI-8860	-	-
1968-W291	2440217.17	1968 Dec 25 0911	M-100	-	-	0.000	ONS?	SS	AM/Tullinow	Meteo	DSI-8860	SR12,1469	-
1968-W275	2440217.48	1968 Dec 26 1559:59	M-100	-	-	0.000	ONS?	SS	-	Meteo	DSI-8860	-	-
1968-W276	2440217.72	1968 Dec 26 2330:00	M-100	-	-	0.000	ONS?	SS	-	Meteo	DSI-8860	-	-
1968-W107	2440220.71	1968 Dec 27 0511:00	M-100	-	-	0.000	ONS?	SS	-	Meteo	DSI-8860	-	-
1968-W108	2440220.96	1968 Dec 30 1100:00	M-100	-	-	0.000	ONS?	SS	-	Meteo	DSI-8860	-	-
1968-W109	2440221.16	1968 Dec 30 1549:59	M-100	-	-	0.000	ONS?	SS	-	Meteo	DSI-8860	-	-
1968-W277	2440221.25	1968 Dec 30 1753:00	M-100	-	-	0.000	ONS?	SS	-	Meteo	DSI-8860	-	-
1968-W110	2440221.49	1968 Dec 30 2351:00	M-100	-	-	0.000	ONS?	SS	-	Meteo	DSI-8860	-	-
1969-W102	2440223.86	1969 Jan 2 0350	M-100	-	-	0.000	AM	SS	-	Aeron	WDGRF	-	-
1969-W103	2440223.90	1969 Jan 2 0942	M-100	-	-	0.000	AM	SS	-	Aeron	WDGRF	-	-
1969-W104	2440224.19	1969 Jan 2 1640	M-100	-	-	0.000	AM	SS	-	Aeron	WDGRF	-	-
1969-W105	2440224.20	1969 Jan 2 1645	M-100	-	-	0.000	AM	SS	-	Aeron	WDGRF	-	-
1969-W106	2440224.42	1969 Jan 2 2205	M-100	-	-	0.000	AM	SS	-	Aeron	WDGRF	-	-
1969-W107	2440224.60	1969 Jan 3 0000	M-100	-	-	0.000	AM	SS	-	Aeron	WDGRF	-	-
1969-W108	2440225.62	1969 Jan 7 0300	M-100	-	-	0.000	AM	SS	-	Aeron	WDGRF	-	-
1969-W109	2440225.66	1969 Jan 7 0352	M-100	-	-	0.000	AM	SS	-	Aeron	WDGRF	-	-
1969-W110	2440225.91	1969 Jan 7 0950	M-100	-	-	0.000	AM	SS	-	Aeron	WDGRF	-	-
1969-W111	2440225.92	1969 Jan 7 1000	M-100	-	-	0.000	AM	SS	-	Aeron	WDGRF	-	-
1969-W112	2440225.92	1969 Jan 7 1011	M-100	-	-	0.000	AM	SS	-	Aeron	WDGRF	-	-
1969-W114	2440225.41	1969 Jan 7 2047	M-100	-	-	0.000	AM	SS	-	Aeron	WDGRF	-	-
1969-W115	2440225.88	1969 Jan 8 0900	M-100	-	-	0.000	AM	SS	-	Aeron	WDGRF	-	-
1969-W117	2440225.66	1969 Jan 11 0351	M-100	-	-	0.000	AM	SS	-	Aeron	WDGRF	-	-
1969-W118	2440232.91	1969 Jan 11 0945	M-100	-	-	0.000	AM	SS	-	Aeron	WDGRF	-	-
1969-W119	2440232.92	1969 Jan 11 1000	M-100	-	-	0.000	AM	SS	-	Aeron	WDGRF	-	-
1969-W120	2440233.16	1969 Jan 11 1556	M-100	-	-	0.000	AM	SS	-	Aeron	WDGRF	-	-
1969-W121	2440233.41	1969 Jan 11 1558	M-100	-	-	0.000	AM	SS	-	Aeron	WDGRF	-	-
1969-W122	2440233.41	1969 Jan 11 2145	M-100	-	-	0.000	AM	SS	-	Aeron	WDGRF	-	-
1969-W123	2440233.46	1969 Jan 13 0900	M-100	-	-	0.000	AM	SS	-	Aeron	WDGRF	-	-
1969-W124	2440236.86	1969 Jan 13 0900	M-100	-	-	0.000	AM	SS	-	Aeron	WDGRF	-	-
1969-W125	2440236.86	1969 Jan 13 0908	M-100	-	-	0.000	AM	SS	-	Aeron	WDGRF	-	-
1969-W126	2440236.94	1969 Jan 13 0958	M-100	-	-	0.000	AM	SS	-	Aeron	WDGRF	-	-
1969-W127	2440237.88	1969 Jan 17 0905	M-100	-	-	0.000	AM	SS	-	Aeron	WDGRF	-	-
1969-W129	2440238.88	1969 Jan 18 0905	M-100	-	-	0.000	AM	SS	-	Aeron	WDGRF	-	-
1969-W130	2440238.88	1969 Jan 18 0900	M-100	-	-	0.000	AM	SS	-	Aeron	WDGRF	-	-
1969-W131	2440240.88	1969 Jan 19 0900	M-100	-	-	0.000	AM	SS	-	Aeron	WDGRF	-	-
1969-W132	2440240.88	1969 Jan 22 0903	M-100	-	-	0.000	AM	SS	-	Aeron	WDGRF	-	-
1969-W136	2440243.86	1969 Jan 23 0350	M-100	-	-	0.000	AM	SS	AM/Tullinow	Meteo	DSI-8860	SR12,1469	-
1969-W139	2440244.87	1969 Jan 23 0400	M-100	-	-	0.000	AM	SS	-	Aeron	WDGRF	-	-
1969-W141	2440244.88	1969 Jan 23 0900	M-100	-	-	0.000	AM	SS	-	Aeron	WDGRF	-	-
1969-W142	2440244.91	1969 Jan 23 0948	M-100	-	-	0.000	AM	SS	-	Aeron	WDGRF	-	-
1969-W143	2440244.92	1969 Jan 23 1000	M-100	-	-	0.000	AM	SS	-	Aeron	WDGRF	-	-
1969-W144	2440245.18	1969 Jan 23 1620	M-100	-	-	0.000	AM	SS	-	Aeron	WDGRF	-	-
1969-W145	2440245.41	1969 Jan 23 2149	M-100	-	-	0.000	AM	SS	-	Aeron	WDGRF	-	-
1969-W146	2440245.88	1969 Jan 24 0900	M-100	-	-	0.000	AM	SS	-	Aeron	WDGRF	-	-
1969-W147	2440246.17	1969 Jan 24 1558	M-100	-	-	0.000	AM	SS	-	Aeron	WDGRF	-	-
1969-W148	2440246.88	1969 Jan 24 1650	M-100	-	-	0.000	AM	SS	-	Aeron	WDGRF	-	-
1969-W151	2440246.88	1969 Jan 25 0900	M-100	-	-	0.000	AM	SS	AM/Tullinow	Meteo	DSI-8860	SR12,1469	-
1969-W152	2440247.88	1969 Jan 26 0900	M-100	-	-	0.000	AM	SS	-	Aeron	WDGRF	-	-
1969-W153	2440248.86	1969 Jan 27 0353	M-100	-	-	0.000	AM	SS	-	Aeron	WDGRF	-	-
1969-W154	2440248.87	1969 Jan 27 0400	M-100	-	-	0.000	AM	SS	-	Aeron	WDGRF	-	-
1969-W155	2440248.90	1969 Jan 27 0943	M-100	-	-	0.000	AM	SS	-	Aeron	WDGRF	-	-
1969-W156	2440248.91	1969 Jan 27 0945	M-100	-	-	0.000	AM	SS	AM/Tullinow	Meteo	DSI-8860	SR12,1469	-
1969-W157	2440249.19	1969 Jan 27 1545	M-100	-	-	0.000	AM	SS	-	Aeron	WDGRF	-	-
1969-W159	2440249.16	1969 Jan 27 1640	M-100	-	-	0.000	AM	SS	-	Aeron	WDGRF	-	-
1969-W161	2440249.41	1969 Jan 27 2145	M-100	-	-	0.000	AM	SS	-	Aeron	WDGRF	-	-
1969-W162	2440249.42	1969 Jan 28 0907:00	M-100	-	-	0.000	AM	SS	-	Aeron	WDGRF	-	-
1969-W163	2440249.88	1969 Jan 28 1852:00	M-100	-	-	0.000	AM	SS	-	Aeron	WDGRF	-	-
1969-W164	2440250.29	1969 Jan 29 0900:00	M-100	-	-	0.000	AM	SS	-	Aeron	WDGRF	-	-
1969-W165	2440250.88	1969 Jan 29 0900:00	M-100	-	-	0.000	AM	SS	-	Aeron	WDGRF	-	-
1969-W166	2440250.92	1969 Jan 29 1002:00	M-100	-	-	0.000	AM	SS	-	Aeron	WDGRF	-	-
1969-W167	2440251.88	1969 Jan 30 0902:00	M-100	-	-	0.000	AM	SS	-	Aeron	WDGRF	-	-
1969-W168	2440251.92	1969 Jan 30 1003:00	M-100	-	-	0.000	AM	SS	-	Aeron	WDGRF	-	-
1969-W169	2440252.34	1969 Jan 31 0904:00	M-100	-	-	0.000	AM	SS	-	Aeron	WDGRF	-	-
1969-W170	2440252.88	1969 Jan 31 0904:00	M-100	-	-	0.000	AM	SS	-	Aeron	WDGRF	-	-
1969-W171	2440253.29	1969 Feb 01 1900:00	M-100	-	-	0.000	AM	SS	-	Aeron	WDGRF	-	-
1969-W172	2440254.29	1969 Feb 01 1900:00	M-100	-	-	0.000	AM	SS	-	Aeron	WDGRF	-	-
1969-W173	2440254.88	1969 Feb 02 0900:00	M-100	-	-	0.000	AM	SS	-	Aeron	WDGRF	-	-
1969-W174	2440254.88	1969 Feb 02 1805:00	M-100	-	-	0.000	AM	SS	AM/Tullinow	Meteo	DSI-8860	SR12,1469	-
1969-W175	2440255.29	1969 Feb 02 1900:00	M-100	-	-	0.000	AM	SS	-	Aeron	WDGRF	-	-
1969-W176	2440255.29	1969 Feb 03 1806:00	M-100	-	-	0.000	AM	SS	-	Aeron	WDGRF	-	-
1969-W177	2440256.25	1969 Feb 03 1806:00	M-100	-	-	0.000	AM	SS	-	Aeron	WDGRF	-	-





Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	OrbPay t	Agency	Launch_Code	Group	Category	LT/Cite	Cite	Notes
1969-Y168	2440379.42	1969 Jun 06 2200:00	H-100	-	H-100	0.000	AM	SU	-	Aeron	WDGRF	-	-
1969-Y169	2440379.67	1969 Jun 07 0400:00	H-100	-	H-100	0.000	AM	SU	-	Aeron	WDGRF	-	-
1969-Y170	2440379.92	1969 Jun 07 1000:00	H-100	-	H-100	0.000	AM	SU	-	Aeron	WDGRF	-	-
1969-Y171	2440380.17	1969 Jun 07 1600:00	H-100	-	H-100	0.000	AM	SU	-	Aeron	WDGRF	-	-
1969-Y172	2440381.42	1969 Jun 08 2200:00	H-100	-	H-100	0.000	AM	SU	-	Aeron	WDGRF	-	-
1969-Y173	2440382.42	1969 Jun 09 2200:00	H-100	-	H-100	0.000	AM	SU	-	Aeron	WDGRF	-	-
1969-Y174	2440382.67	1969 Jun 10 0400:00	H-100	-	H-100	0.000	AM	SU	-	Aeron	WDGRF	-	-
1969-Y175	2440383.43	1969 Jun 10 2214:00	H-100	-	H-100	0.000	AM	SU	-	Aeron	WDGRF	-	-
1969-Y176	2440383.68	1969 Jun 11 0200:00	H-100	-	H-100	0.000	AM	SU	-	Aeron	WDGRF	-	-
1969-Y177	2440383.94	1969 Jun 11 0805:00	H-100	-	H-100	0.000	AM	SU	-	Aeron	WDGRF	-	-
1969-Y178	2440384.42	1969 Jun 11 2200:00	H-100	-	H-100	0.000	AM	SU	-	Aeron	WDGRF	-	-
1969-Y180	2440385.42	1969 Jun 12 2200:00	H-100	-	H-100	0.000	AM	SU	-	Aeron	WDGRF	-	-
1969-Y181	2440385.67	1969 Jun 13 0400:00	H-100	-	H-100	0.000	AM	SU	-	Aeron	WDGRF	-	-
1969-Y182	2440386.17	1969 Jun 13 1600:00	H-100	-	H-100	0.000	AM	SU	-	Aeron	WDGRF	-	-
1969-Y183	2440390.86	1969 Jun 18 0837:00	H-100	-	H-100	0.000	AM	SS	AM/Tullinow	Plasma	SR12,1469	KI13,957	-
1969-Y184	2440397.63	1969 Jun 25 0800:00	H-100	-	H-100	0.000	AM	SU	-	Aeron	WDGRF	-	-
1969-Y185	2440397.92	1969 Jun 25 1001:00	H-100	-	H-100	0.000	AM	SU	-	Aeron	WDGRF	-	-
1969-Y187	2440404.88	1969 Jul 01 02 0900:00	H-100	-	H-100	0.000	AM	SU	-	Aeron	WDGRF	-	-
1969-Y188	2440404.92	1969 Jul 01 02 1001:00	H-100	-	H-100	0.000	AM	SU	-	Aeron	WDGRF	-	-
1969-Y190	2440411.88	1969 Jul 01 09 0900:00	H-100	-	H-100	0.000	AM	SU	-	Aeron	WDGRF	-	-
1969-Y192	2440418.68	1969 Jul 16 1004:00	H-100	-	H-100	0.000	AM	SU	-	Aeron	WDGRF	-	-
1969-Y193	2440418.92	1969 Jul 23 0903:00	H-100	-	H-100	0.000	AM	SU	-	Aeron	WDGRF	-	-
1969-Y195	2440425.52	1969 Jul 23 1001:00	H-100	-	H-100	0.000	AM	SU	-	Aeron	WDGRF	-	-
1969-Y196	2440425.52	1969 Jul 23 2100:00	H-100	-	H-100	0.000	AM	SU	-	Aeron	WDGRF	-	-
1969-Y197	2440426.38	1969 Jul 24 2102:00	H-100	-	H-100	0.000	AM	SU	-	Aeron	WDGRF	-	-
1969-Y198	2440427.38	1969 Jul 30 0301:00	H-100	-	H-100	0.000	AM	SU	-	Aeron	WDGRF	-	-
1969-Y202	2440432.63	1969 Jul 30 0900:00	H-100	-	H-100	0.000	AM	SU	-	Aeron	WDGRF	-	-
1969-Y205	2440439.68	1969 Aug 06 0900:00	H-100	-	H-100	0.000	AM	SU	-	Aeron	WDGRF	-	-
1969-Y209	2440453.68	1969 Aug 20 0900:00	H-100	-	H-100	0.000	AM	SU	-	Aeron	WDGRF	-	-
1969-Y211	2440460.94	1969 Aug 27 1037:00	H-100	-	H-100	0.000	AM	SU	-	Aeron	WDGRF	-	-
1969-Y212	2440467.68	1969 Sep 03 0200:00	H-100	-	H-100	0.000	AM	SU	-	Aeron	WDGRF	-	-
1969-Y213	2440467.88	1969 Sep 03 1003:00	H-100	-	H-100	0.000	AM	SU	-	Aeron	WDGRF	-	-
1969-Y214	2440467.92	1969 Sep 03 1003:00	H-100	-	H-100	0.000	AM	SU	-	Aeron	WDGRF	-	-
1969-Y215	2440474.88	1969 Sep 10 0200:00	H-100	-	H-100	0.000	AM	SU	-	Aeron	WDGRF	-	-
1969-Y216	2440474.88	1969 Sep 16 1900:00	H-100	-	H-100	0.000	AM	SU	-	Aeron	WDGRF	-	-
1969-Y217	2440481.33	1969 Sep 16 2143:00	H-100	-	H-100	0.000	AM	SU	-	Aeron	WDGRF	-	-
1969-Y218	2440481.40	1969 Sep 17 0200:00	H-100	-	H-100	0.000	AM	SU	-	Aeron	WDGRF	-	-
1969-Y219	2440481.88	1969 Sep 17 0910:00	H-100	-	H-100	0.000	AM	SU	-	Aeron	WDGRF	-	-
1969-Y220	2440481.92	1969 Sep 17 1022:00	H-100	-	H-100	0.000	AM	SU	-	Aeron	WDGRF	-	-
1969-Y222	2440482.35	1969 Sep 17 1900:00	H-100	-	H-100	0.000	AM	SU	-	Aeron	WDGRF	-	-
1969-Y223	2440482.40	1969 Sep 18 1145:00	H-100	-	H-100	0.000	AM	SU	-	Aeron	WDGRF	-	-
1969-Y224	2440483.29	1969 Sep 18 1145:00	H-100	-	H-100	0.000	AM	SU	-	Aeron	WDGRF	-	-
1969-Y225	2440483.42	1969 Sep 18 2305:00	H-100	-	H-100	0.000	AM	SU	-	Aeron	WDGRF	-	-
1969-Y226	2440483.46	1969 Sep 19 0200:00	H-100	-	H-100	0.000	AM	SU	-	Aeron	WDGRF	-	-
1969-Y227	2440484.34	1969 Sep 19 2230:00	H-100	-	H-100	0.000	AM	SU	-	Aeron	WDGRF	-	-
1969-Y228	2440484.44	1969 Sep 20 1007:00	H-100	-	H-100	0.000	AM	SU	-	Aeron	WDGRF	-	-
1969-Y1276	2440484.92	1969 Sep 20 2008:00	H-100	-	H-100	0.000	AM	SU	-	Aeron	WDGRF	-	-
1969-Y229	2440485.34	1969 Sep 20 0200:00	H-100	-	H-100	0.000	AM	SU	-	Aeron	WDGRF	-	-
1969-Y230	2440485.68	1969 Sep 24 0200:00	H-100	-	H-100	0.000	AM	SU	-	Aeron	WDGRF	-	-
1969-Y231	2440485.87	1969 Sep 24 0208:00	H-100	-	H-100	0.000	AM	SU	-	Aeron	WDGRF	-	-
1969-Y232	2440485.89	1969 Sep 24 0930:00	H-100	-	H-100	0.000	AM	SU	-	Aeron	WDGRF	-	-
1969-Y233	2440490.67	1969 Sep 25 2315:00	H-100	-	H-100	0.000	AM	SU	-	Aeron	WDGRF	-	-
1969-Y234	2440493.34	1969 Sep 26 2005:00	H-100	-	H-100	0.000	AM	SU	-	Aeron	WDGRF	-	-
1969-Y235	2440493.42	1969 Sep 26 2200:00	H-100	-	H-100	0.000	AM	SU	-	Aeron	WDGRF	-	-
1969-Y236	2440493.39	1969 Sep 27 1900	H-100	-	H-100	0.000	AM	SU	-	Aeron	WDGRF	-	-
1969-Y237	2440493.34	1969 Sep 28 2003	H-100	-	H-100	0.000	AM	SU	-	Aeron	WDGRF	-	-
1969-Y238	2440493.42	1969 Sep 28 2200	H-100	-	H-100	0.000	AM	SU	-	Aeron	WDGRF	-	-
1969-Y239	2440493.39	1969 Sep 29 2123:00	H-100	-	H-100	0.000	AM	SU	-	Aeron	WDGRF	-	-
1969-Y240	2440493.44	1969 Sep 29 2231:00	H-100	-	H-100	0.000	AM	SU	-	Aeron	WDGRF	-	-
1969-Y241	2440493.88	1969 Oct 01 0900:00	H-100	-	H-100	0.000	AM	SU	-	Aeron	WDGRF	-	-
1969-Y242	2440497.87	1969 Oct 02 1401:00	H-100	-	H-100	0.000	AM	SU	-	Aeron	WDGRF	-	-
1969-Y244	2440497.96	1969 Oct 03 0841:00	H-100	-	H-100	0.000	AM	SU	-	Aeron	WDGRF	-	-
1969-Y245	2440502.58	1969 Oct 08 0200:00	H-100	-	H-100	0.000	AM	SU	-	Aeron	WDGRF	-	-
1969-Y246	2440502.87	1969 Oct 08 0405:00	H-100	-	H-100	0.000	AM	SU	-	Aeron	WDGRF	-	-
1969-Y247	2440502.88	1969 Oct 08 0900:00	H-100	-	H-100	0.000	AM	SU	-	Aeron	WDGRF	-	-
1969-Y249	2440506.33	1969 Oct 11 2000:00	H-100	-	H-100	0.000	AM	SU	-	Aeron	WDGRF	-	-
1969-Y250	2440506.41	1969 Oct 11 2154:00	H-100	-	H-100	0.000	AM	SF	-	Aeron	WDGRF	-	-
1969-Y252	2440507.33	1969 Oct 12 1950:00	H-100	-	H-100	0.000	AM	SU	-	Aeron	WDGRF	-	-
1969-Y253	2440507.41	1969 Oct 12 2144:00	H-100	-	H-100	0.000	AM	SU	-	Aeron	WDGRF	-	-
1969-Y254	2440508.33	1969 Oct 13 1955:00	H-100	-	H-100	0.000	AM	SU	-	Aeron	WDGRF	-	-
1969-Y255	2440508.41	1969 Oct 14 2145:00	H-100	-	H-100	0.000	AM	SU	-	Aeron	WDGRF	-	-
1969-Y256	2440509.88	1969 Oct 15 0200:00	H-100	-	H-100	0.000	AM	SU	-	Aeron	WDGRF	-	-
1969-Y257	2440509.88	1969 Oct 15 0900:00	H-100	-	H-100	0.000	AM	SU	-	Aeron	WDGRF	-	-
1969-Y258	2440510.33	1969 Oct 15 1957:00	H-100	-	H-100	0.000	AM	SU	-	Aeron	WDGRF	-	-
1969-Y259	2440510.41	1969 Oct 15 2145:00	H-100	-	H-100	0.000	AM	SU	-	Aeron	WDGRF	-	-
1969-Y260	2440510.58	1969 Oct 16 0200:00	H-100	-	H-100	0.000	AM	SU	-	Aeron	WDGRF	-	-
1969-Y261	2440510.92	1969 Oct 16 1002:00	H-100	-	H-100	0.000	AM	SU	-	Aeron	WDGRF	-	-
1969-Y262	2440513.40	1969 Oct 18 2136:00	H-100	-	H-100	0.000	AM	SU	-	Aeron	WDGRF	-	-
1969-Y263	2440513.44	1969 Oct 18 2236:00	H-100	-	H-100	0.000	AM	SU	-	Aeron	WDGRF	-	-
1969-Y264	2440514.40	1969 Oct 19 1906:00	H-100	-	H-100	0.000	AM	SU	-	Aeron	WDGRF	-	-
1969-Y265	2440514.42	1969 Oct 19 2200:00	H-100	-	H-100	0.000	AM	SU	-	Aeron	WDGRF	-	-
1969-Y266	2440514.31	1969 Oct 20 1920:00	H-100	-	H-100	0.000	AM	SU	-	Aeron	WDGRF	-	-
1969-Y267	2440515.43	1969 Oct 20 2217:00	H-100	-	H-100	0.000	AM	SU	-	Aeron	WDGRF	-	-
1969-Y268	2440515.43	1969 Oct 20 2217:00	H-100	-	H-100	0.000	AM	SU	-	Aeron	WDGRF	-	-

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	OrbPay t	Agency	Launch_Code	Group	Category	LT Cite	Cite	Notes
1969-1269	2440515.91	1969 Dec 21 0949:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1969-1270	2440516.29	1969 Dec 21 1854:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1969-1271	2440516.37	1969 Dec 21 2058:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1969-1272	2440516.62	1969 Dec 22 0300:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1969-1273	2440516.88	1969 Dec 22 0900:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1969-1274	2440523.59	1969 Dec 29 0207:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1969-1275	2440523.88	1969 Dec 29 0900:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1969-1276	2440530.59	1969 Nov 05 0207:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1969-1277	2440537.60	1969 Nov 05 0900:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1969-1278	2440537.60	1969 Nov 12 0219:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1969-1279	2440537.60	1969 Nov 12 0900:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1969-1280	2440544.58	1969 Nov 19 0155:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1969-1281	2440544.58	1969 Nov 19 0903:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1969-1282	2440544.58	1969 Nov 26 0155:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1969-1283	2440551.58	1969 Nov 26 0900:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1969-1284	2440551.58	1969 Nov 26 0900:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1969-1285	2440552.52	1969 Nov 27 1003:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1969-1286	2440555.58	1969 Dec 10 0155:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1969-1287	2440555.58	1969 Dec 11 1001:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1969-1288	2440572.58	1969 Dec 17 0200:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1969-1289	2440572.58	1969 Dec 17 0915:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1969-1290	2440572.58	1969 Dec 18 0407:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1969-1291	2440573.67	1969 Dec 24 0430:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1969-1292	2440579.70	1969 Dec 29 1740:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1969-1293	2440579.70	1969 Dec 31 0200:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1969-1294	2440585.22	1969 Dec 31 0900:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1969-1295	2440585.22	1969 Dec 31 0900:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1969-1296	2440585.22	1969 Dec 31 0900:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1969-1297	2440593.42	1970 Jan 06 2200:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1969-1298	2440593.42	1970 Jan 07 0001:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1970-101	2440593.50	1970 Jan 07 0200:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1970-102	2440593.58	1970 Jan 07 2028:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1970-103	2440594.35	1970 Jan 07 2248:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1970-104	2440594.43	1970 Jan 08 2034:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1970-105	2440595.36	1970 Jan 08 2239:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1970-106	2440595.44	1970 Jan 09 2020:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1970-110	2440596.35	1970 Jan 09 2020:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1970-111	2440596.42	1970 Jan 10 2000:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1970-112	2440597.33	1970 Jan 11 2000:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1970-113	2440596.33	1970 Jan 14 0200:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1970-115	2440600.88	1970 Jan 14 0417:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1970-117	2440600.88	1970 Jan 14 0917:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1970-118	2440600.89	1970 Jan 14 1035:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1970-119	2440600.94	1970 Jan 16 2000:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1970-121	2440604.33	1970 Jan 18 2000:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1970-122	2440605.94	1970 Jan 18 2200:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1970-123	2440605.32	1970 Jan 19 2000:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1970-124	2440606.35	1970 Jan 19 2200:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1970-125	2440606.34	1970 Jan 20 0200:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1970-126	2440607.37	1970 Jan 20 0200:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1970-127	2440607.37	1970 Jan 20 0237:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1970-128	2440607.44	1970 Jan 21 0115:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1970-129	2440607.58	1970 Jan 21 0115:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1970-131	2440611.88	1970 Jan 25 0940:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1970-132	2440611.88	1970 Jan 28 0900:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1970-133	2440614.88	1970 Jan 28 0900:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1970-134	2440614.88	1970 Jan 28 1015:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1970-135	2440614.88	1970 Jan 30 0900:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1970-137	2440616.88	1970 Feb 01 0900:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1970-138	2440621.88	1970 Feb 04 0200:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1970-139	2440621.88	1970 Feb 04 0200:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1970-140	2440621.88	1970 Feb 04 0900:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1970-141	2440621.88	1970 Feb 04 0900:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1970-142	2440622.33	1970 Feb 04 2001:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1970-143	2440622.42	1970 Feb 04 2201:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1970-144	2440623.92	1970 Feb 05 1005:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1970-145	2440623.96	1970 Feb 05 2045:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1970-146	2440623.86	1970 Feb 06 0123:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1970-147	2440623.86	1970 Feb 06 0919:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1970-148	2440624.33	1970 Feb 06 2001:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1970-149	2440624.42	1970 Feb 06 2200:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1970-150	2440625.37	1970 Feb 07 2332:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1970-151	2440625.44	1970 Feb 08 0900:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1970-152	2440625.88	1970 Feb 11 0210:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1970-153	2440628.59	1970 Feb 11 0441:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1970-154	2440628.88	1970 Feb 11 0900:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1970-155	2440628.92	1970 Feb 11 1010:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1970-156	2440629.42	1970 Feb 11 2200:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1970-157	2440629.42	1970 Feb 12 2000:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1970-158	2440630.33	1970 Feb 13 2000:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1970-159	2440631.33	1970 Feb 13 2200:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1970-160	2440631.42	1970 Feb 13 0910:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1970-161	2440631.88	1970 Feb 14 2200:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1970-162	2440632.33	1970 Feb 14 2200:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1970-163	2440632.42	1970 Feb 14 2200:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1970-164	2440633.88	1970 Feb 16 0900:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1970-165	2440635.36	1970 Feb 17 2043:00	H-100	-	-	0.000	AM	SS	-	Aeron	WDGRF	-	-
1970-166	2440635.38	1970 Feb 17 2100:00	H-100	-	-	0.000	AM	SS	-	Aeron	WDGRF	-	-
1970-166	2440635.45	1970 Feb 17 2245:00	H-100	-	-	0.000	AM	SS	-	Aeron	WDGRF	-	-

Note002

SS15\_237

WDGRF

Note001

WDGRF



Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	OrbPay t	Agency	Launch_Code	Group	Category	LT_Cite	Cite	Notes
1970-Y171	2440733.59	1970 May 27 0205:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1970-Y172	2440733.88	1970 May 27 0900:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1970-Y173	2440741.92	1970 Jun 04 1001:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1970-Y175	2440747.59	1970 Jun 10 0210:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1970-Y176	2440747.88	1970 Jun 10 0900:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1970-Y177	2440749.57	1970 Jun 12 0359:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1970-Y178	2440754.58	1970 Jun 17 0900:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1970-Y180	2440754.88	1970 Jun 17 0900:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1970-Y181	2440755.46	1970 Jun 17 2300:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1970-Y182	2440756.33	1970 Jun 18 2000:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1970-Y183	2440759.38	1970 Jun 21 2100:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1970-Y184	2440761.88	1970 Jun 24 0905:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1970-Y186	2440768.59	1970 Jul 01 0205:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1970-Y187	2440768.88	1970 Jul 01 0900:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1970-Y189	2440769.94	1970 Jul 01 2010:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1970-Y190	2440769.42	1970 Jul 01 2200:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1970-Y191	2440773.94	1970 Jul 05 2005:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1970-Y192	2440774.27	1970 Jul 06 1824:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1970-Y193	2440774.54	1970 Jul 06 2015:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1970-Y194	2440774.50	1970 Jul 07 0005:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1970-Y195	2440775.50	1970 Jul 08 0005:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1970-Y196	2440775.88	1970 Jul 08 0900:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1970-Y197	2440776.52	1970 Jul 08 1000:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1970-Y198	2440776.53	1970 Jul 08 1985:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1970-Y199	2440776.27	1970 Jul 10 1830:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1970-Y200	2440781.33	1970 Jul 13 2000:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1970-Y201	2440781.44	1970 Jul 13 2230:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1970-Y202	2440782.51	1970 Jul 15 0720:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1970-Y203	2440782.88	1970 Jul 15 0900:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1970-Y204	2440783.25	1970 Jul 15 1800:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1970-Y205	2440783.53	1970 Jul 15 2000:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1970-Y206	2440785.35	1970 Jul 17 2024:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1970-Y207	2440785.43	1970 Jul 17 2222:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1970-Y208	2440786.94	1970 Jul 18 2015:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1970-Y209	2440786.42	1970 Jul 18 2205:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1970-Y210	2440786.95	1970 Jul 20 2000:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1970-Y211	2440786.41	1970 Jul 21 1800:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1970-Y212	2440786.53	1970 Jul 21 2100:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1970-Y213	2440785.88	1970 Jul 22 0900:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1970-Y214	2440790.07	1970 Jul 22 1535:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1970-Y215	2440790.57	1970 Jul 22 2054:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1970-Y217	2440796.88	1970 Jul 29 0155:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1970-Y218	2440796.86	1970 Jul 29 0900:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1970-Y219	2440803.90	1970 Aug 05 0220:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1970-Y220	2440804.24	1970 Aug 05 1000:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1970-Y221	2440806.88	1970 Aug 09 0900:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1970-Y222	2440810.88	1970 Aug 12 0900:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1970-Y223	2440811.95	1970 Aug 12 0600:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1970-Y224	2440811.58	1970 Aug 13 0122:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1970-Y225	2440811.88	1970 Aug 13 0900:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1970-Y226	2440811.96	1970 Aug 19 1100:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1970-Y227	2440820.88	1970 Aug 22 0900:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1970-Y228	2440824.88	1970 Aug 26 0900:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1970-Y229	2440824.98	1970 Aug 26 0900:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1970-Y230	2440825.88	1970 Aug 27 0900:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1970-Y231	2440825.92	1970 Aug 27 1002:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1970-Y232	2440831.88	1970 Aug 02 0900:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1970-Y233	2440832.07	1970 Aug 02 1335:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1970-Y234	2440832.71	1970 Aug 03 0501:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1970-Y237	2440838.58	1970 Aug 09 0200:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1970-Y238	2440838.98	1970 Aug 09 0900:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1970-Y240	2440839.92	1970 Aug 10 1002:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1970-Y241	2440844.92	1970 Aug 15 1000:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1970-Y242	2440845.59	1970 Aug 16 0205:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1970-Y244	2440852.88	1970 Aug 23 0900:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1970-Y247	2440859.58	1970 Aug 30 0155:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1970-Y248	2440859.88	1970 Aug 30 0900:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1970-Y250	2440860.30	1970 Aug 30 1910:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1970-Y251	2440866.58	1970 Oct 07 0150:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1970-Y252	2440866.67	1970 Oct 07 0400:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1970-Y253	2440873.58	1970 Oct 14 0200:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1970-Y259	2440873.67	1970 Oct 14 0403:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1970-Y260	2440873.91	1970 Oct 14 0955:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1970-Y261	2440880.59	1970 Oct 21 0215:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1970-Y262	2440880.67	1970 Oct 21 0400:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1970-Y263	2440880.88	1970 Oct 21 0910:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1970-Y266	2440887.58	1970 Oct 28 0200:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1970-Y267	2440887.88	1970 Oct 28 0900:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1970-Y270	2440888.29	1970 Nov 01 1900:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1970-Y271	2440892.42	1970 Nov 01 2200:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1970-Y272	2440894.58	1970 Nov 04 0200:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1970-Y273	2440894.67	1970 Nov 04 0401:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1970-Y274	2440894.89	1970 Nov 04 0920:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1970-Y277	2440897.17	1970 Nov 06 1600:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	OrbPay t	Agency	Launch_Code	Group	Category	LT_Cite	Cite	Notes
1970-1278	2440897.54	1970 Nov 07 0100:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1970-1279	2440901.88	1970 Nov 11 0900:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1970-1280	2440902.88	1970 Nov 12 0901:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1970-1281	2440905.12	1970 Nov 14 1500:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1970-1282	2440906.12	1970 Nov 17 1500:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1970-1283	2440908.12	1970 Nov 17 1500:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1970-1284	2440908.64	1970 Nov 18 0320:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1970-1285	2440908.68	1970 Nov 18 0900:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1970-1286	2440908.88	1970 Nov 18 0900:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1970-1287	2440910.12	1970 Nov 18 1500:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1970-1288	2440910.12	1970 Nov 19 1500:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1970-1291	2440910.50	1970 Nov 20 0000:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1970-1292	2440910.57	1970 Nov 20 0401:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1970-1293	2440911.17	1970 Nov 20 1500:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1970-1294	2440911.12	1970 Nov 21 1500:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1970-1295	2440912.50	1970 Nov 22 0000:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1970-1296	2440913.54	1970 Nov 23 0100:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1970-1297	2440914.12	1970 Nov 23 1500:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1970-1298	2440915.12	1970 Nov 24 1500:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1970-1299	2440915.29	1970 Nov 24 1900:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1970-1301	2440915.83	1970 Nov 26 0801:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1970-1302	2440917.21	1970 Nov 26 1700:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1970-1303	2440917.73	1970 Nov 27 0528:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1970-1304	2440920.12	1970 Nov 29 1500:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1970-1305	2440920.62	1970 Nov 30 0300:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1970-1306	2440922.88	1970 Dec 02 0900:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1970-1308	2440923.29	1970 Dec 02 1900:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1970-1309	2440923.38	1970 Dec 02 2100:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1970-1310	2440923.79	1970 Dec 03 0703:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1970-1311	2440923.92	1970 Dec 03 1000:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1970-1313	2440926.29	1970 Dec 05 1900:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1970-1314	2440926.92	1970 Dec 06 1000:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1970-1315	2440926.17	1970 Dec 07 1600:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1970-1316	2440925.12	1970 Dec 08 1500:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1970-1317	2440925.88	1970 Dec 09 0200:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1970-1318	2440925.88	1970 Dec 09 0900:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1970-1319	2440925.92	1970 Dec 09 1000:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1970-1321	2440930.24	1970 Dec 09 1745:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1970-1322	2440931.65	1970 Dec 11 0541:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1970-1323	2440934.12	1970 Dec 11 1000:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1970-1324	2440934.12	1970 Dec 13 1500:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1970-1326	2440935.12	1970 Dec 14 1500:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1970-1327	2440936.88	1970 Dec 16 0200:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1970-1328	2440936.88	1970 Dec 16 0900:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1970-1329	2440937.12	1970 Dec 16 1500:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1970-1331	2440937.45	1970 Dec 19 1385:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1970-1332	2440938.28	1970 Dec 17 1800:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1970-1333	2440940.88	1970 Dec 19 0900:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1970-1334	2440942.99	1970 Dec 22 0321:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1970-1335	2440942.99	1970 Dec 22 0700:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1970-1336	2440943.68	1970 Dec 23 0300:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1970-1337	2440943.68	1970 Dec 23 0906:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1970-1338	2440944.98	1970 Dec 23 1906:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1970-1339	2440944.98	1970 Dec 24 1103:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1970-1341	2440947.12	1970 Dec 26 1500:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1970-1342	2440947.12	1970 Dec 27 1400:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1970-1343	2440948.08	1970 Dec 28 1400:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1970-1344	2440948.08	1970 Dec 28 2000:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1970-1345	2440948.33	1970 Dec 29 1100:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1970-1346	2440948.98	1970 Dec 29 1100:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1970-1347	2440950.89	1970 Dec 30 0200:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1970-1348	2440950.89	1970 Dec 30 0431:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1970-1349	2440950.87	1970 Dec 30 0855:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1970-1350	2440951.12	1970 Dec 30 1500:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1970-1351	2440951.23	1970 Dec 30 1735:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1970-1352	2440951.79	1970 Dec 31 0700:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1971-101	2440953.34	1971 Jan 01 2003:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1971-102	2440957.58	1971 Jan 06 0200:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1971-103	2440957.88	1971 Jan 06 0901:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1971-105	2440958.23	1971 Jan 06 1730:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1971-106	2440958.88	1971 Jan 07 0900:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1971-107	2440959.88	1971 Jan 08 0900:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1971-109	2440962.96	1971 Jan 11 1100:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1971-110	2440963.42	1971 Jan 11 2206:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1971-111	2440963.75	1971 Jan 12 0555:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1971-112	2440963.98	1971 Jan 12 1130:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1971-113	2440964.21	1971 Jan 12 1657:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1971-114	2440964.35	1971 Jan 12 2030:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1971-115	2440964.58	1971 Jan 13 0200:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1971-116	2440964.88	1971 Jan 13 0901:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1971-117	2440965.12	1971 Jan 13 1500:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1971-119	2440965.21	1971 Jan 13 1700:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1971-120	2440965.23	1971 Jan 13 1735:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1971-121	2440965.75	1971 Jan 14 0600:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1971-122	2440966.00	1971 Jan 14 1200:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1971-123	2440966.12	1971 Jan 14 1500:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1971-124	2440967.96	1971 Jan 16 1100:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1971-125	2440968.12	1971 Jan 16 1500:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-

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Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	OrbPay	Agency	Launch_Code	Group	Category	LT_Cite	Cite	Notes
1971-Y148	2441090.58	1971 May 19 0200:00	M-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1971-Y149	2441090.88	1971 May 19 0914:00	M-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1971-Y151	2441091.11	1971 May 19 1435:00	M-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1971-Y152	2441091.35	1971 May 19 1445:00	M-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1971-Y156	2441092.42	1971 May 20 2022:00	M-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1971-Y157	2441092.42	1971 May 20 2022:00	M-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1971-Y159	2441094.35	1971 May 22 2030:00	M-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1971-Y160	2441096.38	1971 May 24 2100:00	M-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1971-Y161	2441097.90	1971 May 26 0931:00	M-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1971-Y162	2441098.10	1971 May 26 1430:00	M-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1971-Y163	2441098.11	1971 May 26 1440:00	M-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1971-Y166	2441099.40	1971 May 27 2130:00	M-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1971-Y168	2441099.58	1971 May 28 0200:00	M-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1971-Y167	2441101.23	1971 May 29 1734:00	M-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1971-Y168	2441104.10	1971 Jun 01 1427:00	M-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1971-Y169	2441104.91	1971 Jun 02 0956:00	M-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1971-Y170	2441105.11	1971 Jun 02 1440:00	M-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1971-Y173	2441109.33	1971 Jun 06 1957:00	M-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1971-Y174	2441111.58	1971 Jun 09 0200:00	M-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1971-Y176	2441112.11	1971 Jun 09 1440:00	M-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1971-Y178	2441112.30	1971 Jun 09 1905:00	M-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1971-Y179	2441113.33	1971 Jun 10 2000:00	M-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1971-Y180	2441115.29	1971 Jun 12 1889:00	M-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1971-Y181	2441116.29	1971 Jun 13 1889:00	M-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1971-Y182	2441117.29	1971 Jun 14 1853:00	M-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1971-Y183	2441118.58	1971 Jun 16 0940:00	M-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1971-Y184	2441119.10	1971 Jun 16 1430:00	M-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1971-Y186	2441119.11	1971 Jun 16 1440:00	M-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1971-Y188	2441119.29	1971 Jun 16 1656:00	M-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1971-Y189	2441126.11	1971 Jun 23 1445:00	M-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1971-Y191	2441127.53	1971 Jun 24 2000:00	M-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1971-Y193	2441129.21	1971 Jun 26 1707:00	M-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1971-Y194	2441131.33	1971 Jun 29 1043:00	M-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1971-Y195	2441131.95	1971 Jun 29 1043:00	M-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1971-Y196	2441132.58	1971 Jun 30 0200:00	M-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1971-Y197	2441132.68	1971 Jun 30 0901:00	M-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1971-Y198	2441133.17	1971 Jun 30 1606:00	M-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1971-Y199	2441133.94	1971 Jun 30 2003:00	M-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1971-Y202	2441134.33	1971 Jul 01 01 2000:00	M-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1971-Y204	2441136.38	1971 Jul 01 02 2100:00	M-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1971-Y206	2441139.58	1971 Jul 01 03 2000:00	M-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1971-Y208	2441139.68	1971 Jul 01 07 0900:00	M-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1971-Y210	2441140.10	1971 Jul 01 07 1430:00	M-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1971-Y212	2441142.29	1971 Jul 01 08 1700:00	M-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1971-Y213	2441142.68	1971 Jul 01 09 1500:00	M-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1971-Y214	2441146.98	1971 Jul 01 14 0200:00	M-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1971-Y215	2441146.98	1971 Jul 01 14 1434:00	M-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1971-Y218	2441147.11	1971 Jul 01 14 1500:00	M-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1971-Y222	2441153.68	1971 Jul 01 21 0900:00	M-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1971-Y224	2441154.10	1971 Jul 01 21 1430:00	M-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1971-Y225	2441154.10	1971 Jul 01 21 1500:00	M-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1971-Y227	2441160.88	1971 Jul 01 28 0900:00	M-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1971-Y229	2441161.11	1971 Jul 01 28 1437:00	M-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1971-Y232	2441167.58	1971 Aug 04 0200:00	M-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1971-Y233	2441167.88	1971 Aug 04 0900:00	M-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1971-Y235	2441168.10	1971 Aug 04 1430:00	M-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1971-Y236	2441168.12	1971 Aug 04 1500:00	M-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1971-Y237	2441168.12	1971 Aug 04 1500:00	M-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1971-Y241	2441174.88	1971 Aug 11 0900:00	M-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1971-Y243	2441175.11	1971 Aug 11 1433:00	M-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1971-Y244	2441175.12	1971 Aug 11 1500:00	M-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1971-Y245	2441175.12	1971 Aug 11 1500:00	M-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1971-Y248	2441175.54	1971 Aug 12 0100:00	M-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1971-Y249	2441181.58	1971 Aug 12 0200:00	M-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1971-Y250	2441181.88	1971 Aug 18 0900:00	M-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1971-Y251	2441182.10	1971 Aug 18 1430:00	M-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1971-Y252	2441182.12	1971 Aug 18 1500:00	M-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1971-Y255	2441188.12	1971 Aug 24 1500:00	M-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1971-Y256	2441188.58	1971 Aug 25 0200:00	M-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1971-Y257	2441188.92	1971 Aug 25 1000:00	M-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1971-Y259	2441189.10	1971 Aug 25 1430:00	M-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1971-Y261	2441194.58	1971 Aug 31 0200:00	M-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1971-Y263	2441195.58	1971 Aug 31 0900:00	M-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1971-Y264	2441195.88	1971 Sep 01 0200:00	M-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1971-Y266	2441196.10	1971 Sep 01 1430:00	M-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1971-Y268	2441196.12	1971 Sep 01 1500:00	M-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1971-Y269	2441197.58	1971 Sep 03 0200:00	M-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1971-Y271	2441197.88	1971 Sep 03 0900:00	M-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1971-Y272	2441203.00	1971 Sep 08 1206:00	M-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1971-Y273	2441203.10	1971 Sep 08 1430:00	M-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1971-Y274	2441207.12	1971 Sep 14 2300:00	M-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1971-Y275	2441209.88	1971 Sep 15 0900:00	M-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-



Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	OrbitPay	Agency	Launch_Code	Group	Category	LT_Cite	Cite	Notes
1971-Y277	2441210.09	1971 Sep 15 1405:00	M-100	-	TEHLS-347	0.000	AM	SU	-	Aeron	WDGRF	-	-
1971-Y278	2441210.12	1971 Sep 15 1500:00	M-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1971-Y279	2441210.25	1971 Sep 15 1800:00	M-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1971-Y280	2441210.33	1971 Sep 15 2000:00	M-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1971-Y281	2441216.89	1971 Sep 22 0920:00	M-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1971-Y282	2441217.10	1971 Sep 22 1430:00	M-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1971-Y283	2441217.17	1971 Sep 22 1600:00	M-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1971-Y284	2441219.11	1971 Sep 24 1440:00	M-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1971-Y285	2441223.62	1971 Sep 29 0300:00	M-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1971-Y286	2441223.88	1971 Sep 29 0900:00	M-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1971-Y287	2441224.10	1971 Sep 29 1430:00	M-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1971-Y288	2441226.17	1971 Oct 01 1600:00	M-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1971-Y289	2441226.65	1971 Oct 02 0330:00	M-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1971-Y290	2441227.65	1971 Oct 03 0530:00	M-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1971-Y291	2441228.15	1971 Oct 03 0530:00	M-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1971-Y292	2441228.65	1971 Oct 04 0530:00	M-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1971-Y293	2441229.15	1971 Oct 04 0530:00	M-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1971-Y294	2441229.65	1971 Oct 05 0530:00	M-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1971-Y295	2441230.12	1971 Oct 05 1455:00	M-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1971-Y296	2441230.58	1971 Oct 06 0200:00	M-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1971-Y297	2441230.88	1971 Oct 06 0900:00	M-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1971-Y298	2441231.10	1971 Oct 06 1430:00	M-100	-	TEHLS-363	0.000	AM	SU	-	Aeron	WDGRF	-	-
1971-Y299	2441231.11	1971 Oct 06 1440:00	M-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1971-Y300	2441231.12	1971 Oct 06 1500:00	M-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1971-Y301	2441231.65	1971 Oct 07 0530:00	M-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1971-Y302	2441231.73	1971 Oct 07 0535:00	M-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1971-Y303	2441232.11	1971 Oct 07 1440:00	M-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1971-Y304	2441232.65	1971 Oct 08 0530:00	M-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1971-Y305	2441232.65	1971 Oct 08 0530:00	M-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1971-Y306	2441233.12	1971 Oct 08 1500:00	M-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1971-Y307	2441233.48	1971 Oct 09 1400:00	M-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1971-Y308	2441234.08	1971 Oct 13 0200:00	M-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1971-Y309	2441237.88	1971 Oct 13 0900:00	M-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1971-Y310	2441237.88	1971 Oct 13 0900:00	M-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1971-Y311	2441238.10	1971 Oct 13 1431:00	M-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1971-Y312	2441238.12	1971 Oct 13 1500:00	M-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1971-Y313	2441244.88	1971 Oct 20 0900:00	M-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1971-Y314	2441244.88	1971 Oct 20 0900:00	M-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1971-Y315	2441245.10	1971 Oct 20 1430:00	M-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1971-Y316	2441245.12	1971 Oct 20 1500:00	M-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1971-Y317	2441251.98	1971 Oct 27 0150:00	M-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1971-Y318	2441251.98	1971 Oct 27 0150:00	M-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1971-Y319	2441252.12	1971 Oct 27 1500:00	M-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1971-Y320	2441252.48	1971 Oct 27 1500:00	M-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1971-Y321	2441255.88	1971 Nov 03 0200:00	M-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1971-Y322	2441255.88	1971 Nov 03 0200:00	M-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1971-Y323	2441259.10	1971 Nov 03 1500:00	M-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1971-Y324	2441259.10	1971 Nov 03 1500:00	M-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1971-Y325	2441265.10	1971 Nov 10 1430:00	M-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1971-Y326	2441265.10	1971 Nov 10 1430:00	M-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1971-Y327	2441272.65	1971 Nov 17 0200:00	M-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1971-Y328	2441272.65	1971 Nov 17 0200:00	M-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1971-Y329	2441273.10	1971 Nov 17 1430:00	M-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1971-Y330	2441273.10	1971 Nov 17 1430:00	M-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1971-Y331	2441275.12	1971 Nov 17 1500:00	M-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1971-Y332	2441275.12	1971 Nov 17 1500:00	M-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1971-Y333	2441276.88	1971 Nov 24 0900:00	M-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1971-Y334	2441276.88	1971 Nov 24 0900:00	M-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1971-Y335	2441280.10	1971 Nov 24 1430:00	M-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1971-Y336	2441280.10	1971 Nov 24 1430:00	M-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1971-Y337	2441280.68	1971 Nov 25 0200:00	M-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1971-Y338	2441286.88	1971 Dec 01 0200:00	M-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1971-Y339	2441286.88	1971 Dec 01 0200:00	M-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1971-Y340	2441287.33	1971 Dec 01 1430:00	M-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1971-Y341	2441287.33	1971 Dec 01 1430:00	M-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1971-Y342	2441293.62	1971 Dec 08 0300:00	M-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1971-Y343	2441293.62	1971 Dec 08 0300:00	M-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1971-Y344	2441294.10	1971 Dec 08 0900:00	M-100	-	TEHLS-390	0.000	AM	SU	-	Aeron	WDGRF	-	-
1971-Y345	2441294.10	1971 Dec 08 0900:00	M-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1971-Y346	2441294.17	1971 Dec 08 1430:00	M-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1971-Y347	2441300.25	1971 Dec 14 1800:00	M-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1971-Y348	2441300.68	1971 Dec 15 0200:00	M-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1971-Y349	2441300.89	1971 Dec 15 0920:00	M-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1971-Y350	2441301.12	1971 Dec 15 0920:00	M-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1971-Y351	2441301.12	1971 Dec 15 1500:00	M-100	-	TEHLS-391	0.000	AM	SU	-	Aeron	WDGRF	-	-
1971-Y352	2441307.29	1971 Dec 22 0200:00	M-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1971-Y353	2441307.88	1971 Dec 22 0200:00	M-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1971-Y354	2441308.12	1971 Dec 22 0900:00	M-100	-	TEHLS-396	0.000	AM	SU	-	Aeron	WDGRF	-	-
1971-Y355	2441308.12	1971 Dec 22 0900:00	M-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1971-Y356	2441314.38	1971 Dec 28 2100:00	M-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1971-Y357	2441314.38	1971 Dec 28 2100:00	M-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1971-Y358	2441314.88	1971 Dec 29 0900:00	M-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1971-Y359	2441314.88	1971 Dec 29 0900:00	M-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1971-Y360	2441315.10	1971 Dec 29 1430:00	M-100	-	TEHLS-397	0.000	AM	SU	-	Aeron	WDGRF	-	-
1971-Y361	2441315.10	1971 Dec 29 1430:00	M-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1971-Y362	2441320.04	1972 Jan 03 1300:00	M-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1971-Y363	2441320.04	1972 Jan 03 1300:00	M-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1971-Y364	2441321.58	1972 Jan 05 0200:00	M-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1971-Y365	2441321.58	1972 Jan 05 0200:00	M-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1971-Y366	2441321.91	1972 Jan 05 0950:00	M-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-





Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	OrbPay t	Agency	Launch_Code	Group	Category	LT/Cite	Cite	Notes
1972-Y211	2441568.42	1972 Sep 07 2200:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1972-Y212	2441568.88	1972 Sep 08 0900:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1972-Y213	2441571.88	1972 Sep 11 0900:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1972-Y214	2441573.46	1972 Sep 12 2300:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1972-Y215	2441573.88	1972 Sep 13 0900:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1972-Y216	2441574.08	1972 Sep 13 1400:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1972-Y218	2441574.21	1972 Sep 13 1657:00	H-100	-	TEHLS-475	0.000	AM	SU	-	Aeron	WDGRF	-	-
1972-Y219	2441575.42	1972 Sep 14 2200:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1972-Y220	2441578.46	1972 Sep 17 2300:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1972-Y221	2441590.50	1972 Sep 20 0000:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1972-Y222	2441590.58	1972 Sep 20 0200:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1972-Y223	2441590.88	1972 Sep 20 0900:00	H-100	-	-	0.000	AM	SS	AM/ISRO/	Aeron	Nature252,683	-	-
1972-Y224	2441591.09	1972 Sep 20 1405:00	H-100	-	-	0.000	AM	SS	-	Aeron	WDGRF	-	-
1972-Y225	2441591.11	1972 Sep 20 1435:00	H-100	-	TEHLS-484	0.000	AM	SU	-	Aeron	WDGRF	-	-
1972-Y226	2441597.44	1972 Sep 26 2240:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1972-Y229	2441597.90	1972 Sep 27 0940:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1972-Y230	2441598.08	1972 Sep 27 1400:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1972-Y231	2441598.10	1972 Sep 27 1430:00	H-100	-	TEHLS-485	0.000	AM	SU	-	Aeron	WDGRF	-	-
1972-Y232	2441599.42	1972 Oct 03 2200:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1972-Y233	2441599.42	1972 Oct 04 0900:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1972-Y234	2441599.10	1972 Oct 04 1430:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1972-Y235	2441599.08	1972 Oct 04 1583:00	H-100	-	TEHLS-486	0.000	AM	SS	AM/ISRO/	Aeron	Nature252,683	-	-
1972-Y237	2441601.42	1972 Oct 10 2200:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1972-Y238	2441601.88	1972 Oct 11 0900:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1972-Y239	2441602.08	1972 Oct 11 1430:00	H-100	-	TEHLS-487	0.000	AM	SU	-	Aeron	WDGRF	-	-
1972-Y240	2441602.10	1972 Oct 11 1720:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1972-Y242	2441606.42	1972 Oct 18 0900:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1972-Y243	2441609.08	1972 Oct 18 1400:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1972-Y245	2441609.13	1972 Oct 18 1506:00	H-100	-	TEHLS-490	0.000	AM	SU	-	Aeron	WDGRF	-	-
1972-Y246	2441615.38	1972 Oct 24 2140:00	H-100	?	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1972-Y249	2441615.68	1972 Oct 25 0900:00	H-100	-	TEHLS-497	0.000	AM	SU	-	Aeron	WDGRF	-	-
1972-Y250	2441616.10	1972 Oct 25 1430:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1972-Y252	2441616.12	1972 Oct 25 1700:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1972-Y253	2441623.11	1972 Nov 01 1444:00	H-100	-	TEHLS-498	0.000	AM	SU	-	Aeron	WDGRF	-	-
1972-Y254	2441623.12	1972 Nov 01 1500:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1972-Y256	2441630.89	1972 Nov 09 0946:00	H-100	-	TEHLS-499	0.000	AM	SS	GMS/Perov	Aeron	SR15,237	KL19, 641	-
1972-Y259	2441631.10	1972 Nov 09 1430:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1972-Y260	2441631.12	1972 Nov 09 1500:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1972-Y261	2441636.94	1972 Nov 15 0300:00	H-100	-	-	0.000	AM	SS	GMS/Perov	Aeron	SR15,237	WDGRF	-
1972-Y262	2441636.89	1972 Nov 15 0928:00	H-100	-	-	0.000	AM	SS	-	Aeron	WDGRF	-	-
1972-Y263	2441637.08	1972 Nov 15 1400:00	H-100	-	TEHLS-500	0.000	AM	SU	-	Aeron	WDGRF	-	-
1972-Y264	2441637.48	1972 Nov 15 1430:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1972-Y266	2441643.88	1972 Nov 22 0900:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1972-Y268	2441643.08	1972 Nov 22 1430:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1972-Y269	2441644.08	1972 Nov 22 1430:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1972-Y270	2441644.48	1972 Nov 22 1430:00	H-100	-	TEHLS-501	0.000	AM	SU	-	Aeron	WDGRF	-	-
1972-Y272	2441644.88	1972 Nov 23 0200:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1972-Y273	2441648.88	1972 Nov 23 0900:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1972-Y274	2441650.88	1972 Nov 23 0900:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1972-Y275	2441651.08	1972 Nov 23 1400:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1972-Y276	2441651.08	1972 Nov 23 1400:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1972-Y277	2441651.08	1972 Nov 29 1400:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1972-Y278	2441651.10	1972 Nov 29 1430:00	H-100	-	TEHLS-502	0.000	AM	SU	-	Aeron	WDGRF	-	-
1972-Y279	2441651.17	1972 Nov 29 1600:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1972-Y281	2441652.83	1972 Dec 01 0900:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1972-Y284	2441657.88	1972 Dec 06 0900:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1972-Y285	2441658.08	1972 Dec 06 1400:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1972-Y286	2441658.11	1972 Dec 06 1433:00	H-100	-	TEHLS-503	0.000	AM	SU	-	Aeron	WDGRF	-	-
1972-Y287	2441658.17	1972 Dec 06 1600:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1972-Y288	2441664.88	1972 Dec 13 0900:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1972-Y289	2441665.08	1972 Dec 13 1400:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1972-Y290	2441665.08	1972 Dec 13 1400:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1972-Y291	2441665.10	1972 Dec 13 1430:00	H-100	-	TEHLS-504	0.000	AM	SU	-	Aeron	WDGRF	-	-
1972-Y292	2441671.88	1972 Dec 20 0200:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1972-Y293	2441672.10	1972 Dec 20 1430:00	H-100	-	TEHLS-509	0.000	AM	SS	AM/ISRO/	Aeron	Nature252,683	WDGRF	-
1972-Y294	2441672.10	1972 Dec 20 1430:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1972-Y296	2441673.82	1972 Dec 22 0300:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1972-Y297	2441677.04	1972 Dec 25 1300:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1972-Y298	2441678.82	1972 Dec 27 0300:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1972-Y299	2441679.08	1972 Dec 27 1200:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1972-Y300	2441679.08	1972 Dec 27 1430:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1972-Y301	2441679.10	1972 Dec 27 1430:00	H-100	-	TEHLS-510	0.000	AM	SU	-	Aeron	WDGRF	-	-
1972-Y304	2441680.00	1972 Dec 28 1200:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1972-Y305	2441681.00	1972 Dec 29 1200:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1972-Y306	2441682.00	1972 Dec 30 1200:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1973-Y13	2441684.04	1973 Jan 01 1300:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1973-Y14	2441685.04	1973 Jan 02 1300:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1973-Y16	2441686.10	1973 Jan 03 1430:00	H-100	-	TEHLS-511	0.000	AM	SU	-	Aeron	WDGRF	-	-
1973-Y17	2441686.12	1973 Jan 03 1500:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1973-Y18	2441686.16	1973 Jan 03 1550:00	H-100	-	TEHLS-512	0.000	AM	SU	-	Aeron	WDGRF	-	-
1973-Y19	2441687.04	1973 Jan 04 1300:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1973-Y20	2441687.21	1973 Jan 04 1700:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1973-Y21	2441688.12	1973 Jan 05 1500:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1973-Y22	2441689.08	1973 Jan 06 1400:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	OrbPay t	Agency	Launch_Code	Group	Category	LT/Cite	Cite	Notes
1973-Y23	2441689.12	1973 Jan 06 15:00:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1973-Y24	2441689.17	1973 Jan 06 16:00:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1973-Y25	2441692.89	1973 Jan 10 09:20:00	H-100	-	TEML-S-517	0.000	AM	SU	-	Aeron	WDGRF	-	-
1973-Y26	2441693.10	1973 Jan 10 14:30:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1973-Y27	2441693.12	1973 Jan 10 15:00:00	H-100	-	TEML-S-518	0.000	AM	SU	-	Aeron	WDGRF	-	-
1973-Y28	2441694.17	1973 Jan 11 16:10:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1973-Y29	2441695.88	1973 Jan 13 09:00:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1973-Y30	2441699.88	1973 Jan 17 09:00:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1973-Y31	2441700.08	1973 Jan 17 14:00:00	H-100	-	TEML-S-519	0.000	AM	SU	-	Aeron	WDGRF	-	-
1973-Y32	2441700.10	1973 Jan 17 14:30:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1973-Y33	2441701.59	1973 Jan 19 02:10:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1973-Y34	2441706.74	1973 Jan 24 05:40:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1973-Y35	2441706.88	1973 Jan 24 09:00:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1973-Y36	2441707.00	1973 Jan 24 12:00:00	H-100	-	TEML-S-521	0.000	AM	SU	-	Aeron	WDGRF	-	-
1973-Y37	2441707.10	1973 Jan 24 14:30:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1973-Y38	2441707.12	1973 Jan 24 15:00:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1973-Y39	2441709.00	1973 Jan 26 12:00:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1973-Y40	2441709.04	1973 Jan 26 13:00:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1973-Y41	2441709.88	1973 Jan 27 09:00:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1973-Y42	2441711.00	1973 Jan 28 12:00:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1973-Y43	2441711.08	1973 Jan 28 14:00:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1973-Y44	2441712.62	1973 Jan 30 09:00:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1973-Y45	2441713.88	1973 Jan 31 09:00:00	H-100	-	TEML-S-522	0.000	AM	SU	-	Aeron	WDGRF	-	-
1973-Y46	2441714.04	1973 Jan 31 13:00:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1973-Y47	2441714.08	1973 Jan 31 14:00:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1973-Y48	2441714.11	1973 Jan 31 14:37:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1973-Y49	2441714.12	1973 Feb 01 20:00:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1973-Y50	2441715.33	1973 Feb 03 09:00:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1973-Y51	2441716.88	1973 Feb 03 15:00:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1973-Y52	2441717.12	1973 Feb 03 20:00:00	H-100	-	TEML-S-524	0.000	AM	SU	-	Aeron	WDGRF	-	-
1973-Y53	2441723.88	1973 Feb 10 09:00:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1973-Y54	2441723.92	1973 Feb 10 10:00:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1973-Y55	2441727.42	1973 Feb 13 22:00:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1973-Y56	2441727.88	1973 Feb 14 14:00:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1973-Y57	2441728.08	1973 Feb 14 15:00:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1973-Y58	2441728.88	1973 Feb 17 09:00:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1973-Y59	2441729.46	1973 Feb 20 23:00:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1973-Y60	2441729.89	1973 Feb 21 14:00:00	H-100	-	TEML-S-529	0.000	AM	SU	-	Aeron	WDGRF	-	-
1973-Y61	2441735.08	1973 Feb 21 14:00:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1973-Y62	2441735.10	1973 Feb 22 14:30:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1973-Y63	2441737.33	1973 Feb 23 15:00:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1973-Y64	2441737.45	1973 Feb 23 20:00:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1973-Y65	2441737.46	1973 Feb 23 20:00:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1973-Y66	2441737.88	1973 Feb 24 09:00:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1973-Y67	2441740.39	1973 Feb 26 19:00:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1973-Y68	2441740.39	1973 Feb 26 20:00:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1973-Y69	2441740.38	1973 Feb 27 09:00:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1973-Y70	2441740.83	1973 Feb 27 15:00:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1973-Y71	2441741.12	1973 Feb 27 15:00:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1973-Y72	2441741.54	1973 Feb 28 01:00:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1973-Y73	2441741.88	1973 Feb 28 09:00:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1973-Y74	2441742.00	1973 Feb 28 12:00:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1973-Y75	2441742.10	1973 Feb 28 14:30:00	H-100	-	TEML-S-530	0.000	AM	SU	-	Aeron	WDGRF	-	-
1973-Y76	2441743.12	1973 Mar 01 14:50:00	H-100	-	TEML-S-531	0.000	AM	SU	-	Aeron	WDGRF	-	-
1973-Y77	2441743.29	1973 Mar 01 21:00:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1973-Y78	2441743.38	1973 Mar 01 21:00:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1973-Y79	2441746.25	1973 Mar 04 18:00:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1973-Y80	2441746.33	1973 Mar 04 20:00:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1973-Y81	2441748.00	1973 Mar 06 12:00:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1973-Y82	2441748.42	1973 Mar 06 22:00:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1973-Y83	2441748.88	1973 Mar 07 09:00:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1973-Y84	2441749.00	1973 Mar 07 12:00:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1973-Y85	2441749.08	1973 Mar 07 14:00:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1973-Y86	2441749.10	1973 Mar 07 14:30:00	H-100	-	TEML-S-534	0.000	AM	SU	-	Aeron	WDGRF	-	-
1973-Y87	2441749.38	1973 Mar 07 21:00:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1973-Y88	2441749.42	1973 Mar 07 22:00:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1973-Y89	2441750.12	1973 Mar 08 15:00:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1973-Y90	2441750.14	1973 Mar 08 15:00:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1973-Y91	2441751.12	1973 Mar 09 13:00:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1973-Y92	2441751.24	1973 Mar 09 15:00:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1973-Y93	2441752.08	1973 Mar 10 14:00:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1973-Y94	2441752.33	1973 Mar 10 20:00:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1973-Y95	2441753.33	1973 Mar 11 20:00:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1973-Y96	2441754.17	1973 Mar 11 20:00:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1973-Y97	2441754.33	1973 Mar 12 09:00:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1973-Y98	2441755.88	1973 Mar 14 09:00:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-

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Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	OrbPay t	Agency	Launch_Code	Group	Category	LT/Cite	Cite	Notes
1973-Y129	2441756.00	1973 Mar 14 1200:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1973-Y130	2441756.08	1973 Mar 14 1400:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1973-Y131	2441756.12	1973 Mar 14 1450:00	H-100	-	TEHLS-545	0.000	AM	SU	-	Aeron	WDGRF	-	-
1973-Y132	2441756.16	1973 Mar 14 1500:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1973-Y133	2441756.58	1973 Mar 15 0200:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1973-Y136	2441757.00	1973 Mar 15 1200:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1973-Y137	2441761.00	1973 Mar 15 1200:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1973-Y138	2441761.29	1973 Mar 19 0900:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1973-Y139	2441761.88	1973 Mar 20 0900:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1973-Y140	2441762.29	1973 Mar 20 0900:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1973-Y141	2441762.33	1973 Mar 20 2000:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1973-Y142	2441762.42	1973 Mar 20 2200:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1973-Y143	2441762.88	1973 Mar 21 0900:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1973-Y144	2441763.08	1973 Mar 21 1400:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1973-Y145	2441763.10	1973 Mar 21 1430:00	H-100	-	TEHLS-548	0.000	AM	SU	-	Aeron	WDGRF	-	-
1973-Y146	2441763.12	1973 Mar 21 1500:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1973-Y148	2441763.29	1973 Mar 21 1900:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1973-Y149	2441764.29	1973 Mar 22 1900:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1973-Y151	2441765.88	1973 Mar 24 0900:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1973-Y152	2441766.12	1973 Mar 24 1500:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1973-Y153	2441766.29	1973 Mar 24 1900:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1973-Y154	2441769.54	1973 Mar 28 0100:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1973-Y155	2441769.88	1973 Mar 28 0900:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1973-Y156	2441770.08	1973 Mar 28 1430:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1973-Y157	2441770.10	1973 Mar 28 1430:00	H-100	-	TEHLS-549	0.000	AM	SU	-	Aeron	WDGRF	-	-
1973-Y158	2441772.12	1973 Mar 28 1500:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1973-Y159	2441772.12	1973 Mar 30 1500:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1973-Y160	2441776.54	1973 Apr 04 0100:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1973-Y161	2441776.88	1973 Apr 04 0900:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1973-Y162	2441777.08	1973 Apr 04 1400:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1973-Y163	2441777.10	1973 Apr 04 1430:00	H-100	-	TEHLS-550	0.000	AM	SU	-	Aeron	WDGRF	-	-
1973-Y165	2441777.21	1973 Apr 04 1700:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1973-Y166	2441778.00	1973 Apr 05 1200:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1973-Y167	2441778.88	1973 Apr 07 0900:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1973-Y168	2441782.94	1973 Apr 10 0100:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1973-Y169	2441784.08	1973 Apr 11 1400:00	H-100	-	TEHLS-551	0.000	AM	SU	-	Aeron	WDGRF	-	-
1973-Y170	2441784.12	1973 Apr 11 1500:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1973-Y174	2441786.12	1973 Apr 13 1500:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1973-Y175	2441790.88	1973 Apr 18 0900:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1973-Y176	2441790.88	1973 Apr 18 0900:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1973-Y177	2441791.08	1973 Apr 18 1400:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1973-Y178	2441791.10	1973 Apr 18 1430:00	H-100	-	TEHLS-553	0.000	AM	SS	GMS/Perov	Aeron	WDGRF	WDGRF	-
1973-Y179	2441791.12	1973 Apr 18 1500:00	H-100	-	-	0.000	AM	SS	-	Aeron	WDGRF	-	-
1973-Y183	2441793.56	1973 Apr 21 0900:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1973-Y184	2441793.88	1973 Apr 21 0900:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1973-Y185	2441797.88	1973 Apr 25 0200:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1973-Y186	2441797.88	1973 Apr 25 0900:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1973-Y187	2441798.08	1973 Apr 25 1430:00	H-100	-	TEHLS-554	0.000	AM	SS	GMS/Perov	Aeron	WDGRF	WDGRF	-
1973-Y188	2441798.10	1973 Apr 25 1430:00	H-100	-	-	0.000	AM	SS	-	Aeron	WDGRF	-	-
1973-Y189	2441798.12	1973 Apr 25 1430:00	H-100	-	-	0.000	AM	SS	-	Aeron	WDGRF	-	-
1973-Y190	2441800.10	1973 Apr 27 1430:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1973-Y191	2441800.12	1973 Apr 27 0900:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1973-Y192	2441802.10	1973 May 02 1430:00	H-100	-	TEHLS-555	0.000	AM	SU	-	Aeron	WDGRF	-	-
1973-Y195	2441805.10	1973 May 02 1500:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1973-Y196	2441805.58	1973 May 03 0200:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1973-Y197	2441810.10	1973 May 07 1500:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1973-Y198	2441811.88	1973 May 09 0900:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1973-Y199	2441811.10	1973 May 09 1430:00	H-100	-	TEHLS-556	0.000	AM	SU	-	Aeron	WDGRF	-	-
1973-Y200	2441812.12	1973 May 09 1500:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1973-Y201	2441812.12	1973 May 09 1500:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1973-Y202	2441812.58	1973 May 10 0200:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1973-Y204	2441817.10	1973 May 14 1430:00	H-100	-	TEHLS-557	0.000	AM	SU	-	Aeron	WDGRF	-	-
1973-Y205	2441819.08	1973 May 16 1400:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1973-Y206	2441819.10	1973 May 16 1430:00	H-100	-	TEHLS-558	0.000	AM	SU	-	Aeron	WDGRF	-	-
1973-Y208	2441819.42	1973 May 16 2200:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1973-Y209	2441821.10	1973 May 18 1430:00	H-100	-	TEHLS-559	0.000	AM	SU	-	Aeron	WDGRF	-	-
1973-Y210	2441822.17	1973 May 19 1600:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1973-Y211	2441824.10	1973 May 21 1430:00	H-100	-	TEHLS-562	0.000	AM	SU	-	Aeron	WDGRF	-	-
1973-Y212	2441825.88	1973 May 23 0900:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1973-Y213	2441826.08	1973 May 23 1400:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1973-Y214	2441826.10	1973 May 23 1430:00	H-100	-	TEHLS-566	0.000	AM	SU	-	Aeron	WDGRF	-	-
1973-Y215	2441826.10	1973 May 23 1430:00	H-100	-	TEHLS-567	0.000	AM	SU	-	Aeron	WDGRF	-	-
1973-Y218	2441828.10	1973 May 25 1430:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1973-Y219	2441828.29	1973 May 25 1900:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1973-Y220	2441829.08	1973 May 26 1400:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1973-Y221	2441832.33	1973 May 29 2000:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1973-Y222	2441832.54	1973 May 30 0100:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1973-Y223	2441832.88	1973 May 30 0900:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1973-Y224	2441833.10	1973 May 30 1400:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1973-Y225	2441833.08	1973 May 30 1430:00	H-100	-	TEHLS-568	0.000	AM	SU	-	Aeron	WDGRF	-	-
1973-Y226	2441835.33	1973 Jun 01 2000:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1973-Y227	2441835.33	1973 Jun 01 2000:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1973-Y228	2441839.79	1973 Jun 06 0700:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1973-Y229	2441839.88	1973 Jun 06 0900:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1973-Y230	2441839.88	1973 Jun 06 0900:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1973-Y232	2441840.08	1973 Jun 06 1400:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1973-Y233	2441840.10	1973 Jun 06 1430:00	H-100	-	TEHLS-570	0.000	AM	SU	-	Aeron	WDGRF	-	-
1973-Y234	2441840.33	1973 Jun 06 2000:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1973-Y236	2441842.33	1973 Jun 08 2000:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	OrbPay	Agency	Launch_Code	Group	Category	LT/Cite	Cite	Notes
1973-Y239	2441843.08	1973 Jun 09 14:00:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1973-Y240	2441845.69	1973 Jun 12 04:30:00	H-100	-	Diurnal Variation	0.000	AM	SS	GNS/Buiko	Aeron	SR16.327	KI14.147	WDGRF
1973-Y241	2441846.75	1973 Jun 12 06:00:00	H-100	-	Diurnal Variation	0.000	AM	SS	GNS/Buiko	Aeron	SR16.327	KI14.147	WDGRF
1973-Y242	2441846.94	1973 Jun 12 10:40:00	H-100	-	Diurnal Variation	0.000	AM	SS	GNS/Buiko	Aeron	SR16.327	KI14.147	WDGRF
1973-Y243	2441846.03	1973 Jun 12 12:50:00	H-100	-	Diurnal Variation	0.000	AM	SS	GNS/Buiko	Aeron	SR16.327	KI14.147	WDGRF
1973-Y244	2441846.28	1973 Jun 12 18:50:00	H-100	-	Diurnal Variation	0.000	AM	SS	GNS/Buiko	Aeron	SR16.327	KI14.147	WDGRF
1973-Y245	2441846.46	1973 Jun 12 23:00:00	H-100	-	Diurnal Variation	0.000	AM	SS	GNS/Buiko	Aeron	SR16.327	KI14.147	WDGRF
1973-Y246	2441847.08	1973 Jun 13 14:00:00	H-100	-	Diurnal Variation	0.000	AM	SS	GNS/Shibaveva	Aeron	SR16.327	KI14.147	WDGRF
1973-Y247	2441847.12	1973 Jun 13 15:00:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1973-Y251	2441848.08	1973 Jun 14 14:00:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1973-Y252	2441848.10	1973 Jun 14 14:30:00	H-100	-	TEML-S-573	0.000	AM	SU	-	Aeron	WDGRF	-	-
1973-Y254	2441853.58	1973 Jun 20 02:00:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1973-Y255	2441853.88	1973 Jun 20 09:00:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1973-Y256	2441854.08	1973 Jun 20 14:00:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1973-Y257	2441854.10	1973 Jun 20 14:30:00	H-100	-	TEML-S-574	0.000	AM	SU	-	Aeron	WDGRF	-	-
1973-Y262	2441857.58	1973 Jun 24 02:00:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1973-Y263	2441858.33	1973 Jun 24 20:00:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1973-Y264	2441860.54	1973 Jun 27 01:00:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1973-Y265	2441861.08	1973 Jun 27 14:00:00	H-100	-	TEML-S-577	0.000	AM	SU	-	Aeron	WDGRF	-	-
1973-Y266	2441861.10	1973 Jun 27 14:30:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1973-Y267	2441861.29	1973 Jun 27 19:00:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1973-Y269	2441864.33	1973 Jun 30 20:00:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1973-Y270	2441865.12	1973 Jul 01 15:00:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1973-Y271	2441866.29	1973 Jul 02 19:00:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1973-Y272	2441866.52	1973 Jul 03 02:50:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1973-Y273	2441866.62	1973 Jul 03 02:50:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1973-Y274	2441866.79	1973 Jul 03 07:00:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1973-Y275	2441867.68	1973 Jul 04 09:40:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1973-Y276	2441868.10	1973 Jul 04 14:30:00	H-100	-	TEML-S-579	0.000	AM	SU	-	Aeron	WDGRF	-	-
1973-Y277	2441868.29	1973 Jul 04 19:00:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1973-Y278	2441869.96	1973 Jul 06 11:00:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1973-Y280	2441871.04	1973 Jul 07 13:00:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1973-Y281	2441871.68	1973 Jul 11 09:00:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1973-Y283	2441875.08	1973 Jul 11 14:00:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1973-Y284	2441875.10	1973 Jul 11 14:30:00	H-100	-	TEML-S-580	0.000	AM	SU	-	Aeron	WDGRF	-	-
1973-Y285	2441876.17	1973 Jul 14 16:00:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1973-Y289	2441879.17	1973 Jul 15 16:00:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1973-Y291	2441881.12	1973 Jul 17 15:00:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1973-Y300	2441881.68	1973 Jul 18 09:00:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1973-Y301	2441882.08	1973 Jul 18 14:30:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1973-Y302	2441882.10	1973 Jul 18 14:30:00	H-100	-	TEML-S-583	0.000	AM	SU	-	Aeron	WDGRF	-	-
1973-Y303	2441882.21	1973 Jul 18 17:00:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1973-Y304	2441883.00	1973 Jul 19 12:00:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1973-Y309	2441885.08	1973 Jul 21 14:00:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1973-Y310	2441885.08	1973 Jul 21 14:00:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1973-Y311	2441885.10	1973 Jul 25 14:30:00	H-100	-	TEML-S-584	0.000	AM	SU	-	Aeron	WDGRF	-	-
1973-Y312	2441885.10	1973 Jul 25 14:30:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1973-Y313	2441885.68	1973 Aug 01 02:50:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1973-Y314	2441885.68	1973 Aug 01 02:50:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1973-Y315	2441885.68	1973 Aug 01 02:50:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1973-Y316	2441886.08	1973 Aug 01 14:30:00	H-100	-	TEML-S-587	0.000	AM	SU	-	Aeron	WDGRF	-	-
1973-Y317	2441886.08	1973 Aug 01 14:30:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1973-Y323	2441892.68	1973 Aug 08 09:00:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1973-Y324	2441892.68	1973 Aug 08 09:00:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1973-Y325	2441893.10	1973 Aug 09 14:30:00	H-100	-	TEML-S-588	0.000	AM	SU	-	Aeron	WDGRF	-	-
1973-Y326	2441893.10	1973 Aug 09 14:30:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1973-Y329	2441895.58	1973 Aug 09 02:00:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1973-Y330	2441895.58	1973 Aug 11 05:00:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1973-Y332	2441895.68	1973 Aug 11 05:00:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1973-Y333	2441895.68	1973 Aug 11 05:00:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1973-Y334	2441895.68	1973 Aug 15 14:30:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1973-Y337	2441891.08	1973 Aug 16 14:30:00	H-100	-	TEML-S-589	0.000	AM	SU	-	Aeron	WDGRF	-	-
1973-Y338	2441891.67	1973 Aug 19 04:00:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1973-Y339	2441891.62	1973 Aug 19 04:00:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1973-Y340	2441891.68	1973 Aug 22 09:00:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1973-Y341	2441891.70	1973 Aug 22 09:00:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1973-Y342	2441891.70	1973 Aug 22 14:30:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1973-Y343	2441891.62	1973 Aug 23 03:00:00	H-100	-	TEML-S-590	0.000	AM	SU	-	Aeron	WDGRF	-	-
1973-Y344	2441891.68	1973 Aug 24 09:00:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1973-Y346	2441891.46	1973 Aug 24 09:00:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1973-Y347	2441891.52	1973 Aug 26 23:00:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1973-Y348	2441892.71	1973 Aug 27 03:30:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1973-Y349	2441892.71	1973 Aug 28 05:00:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1973-Y350	2441892.34	1973 Aug 29 01:00:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1973-Y351	2441892.34	1973 Aug 29 02:00:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1973-Y352	2441892.38	1973 Aug 29 09:00:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1973-Y353	2441892.40	1973 Aug 29 14:00:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1973-Y354	2441892.40	1973 Aug 29 14:00:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1973-Y355	2441892.40	1973 Aug 30 01:00:00	H-100	-	TEML-S-593	0.000	AM	SU	-	Aeron	WDGRF	-	-
1973-Y356	2441892.40	1973 Aug 30 14:30:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1973-Y357	2441895.46	1973 Aug 30 23:00:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1973-Y358	2441895.68	1973 Aug 31 02:00:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1973-Y359	2441895.73	1973 Aug 31 05:30:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1973-Y360	2441895.88	1973 Aug 31 09:00:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1973-Y361	2441896.42	1973 Aug 31 22:00:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1973-Y362	2441896.50	1973 Sep 01 00:00:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1973-Y363	2441897.50	1973 Sep 02 00:00:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1973-Y364	2441897.42	1973 Sep 02 00:00:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1973-Y365	2441897.42	1973 Sep 02 00:00:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1973-Y366	2441897.46	1973 Sep 03 23:00:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1973-Y367	2441897.46	1973 Sep 03 23:00:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1973-Y368	2441899.57	1973 Sep 05 01:40:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1973-Y369	2441899.57	1973 Sep 05 01:40:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1973-Y370	2441899.89	1973 Sep 05 09:20:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1973-Y371	2441893.108	1973 Sep 05 14:00:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	OrbPay	Agency	Launch_Code	Group	Category	LT Cite	Cite	Notes
1973-1372	2441931.10	1973 Sep 05 1430:00	M-100	-	TEMLS-594	0.000	AM	SU	-	Aeron	WDGRF	-	-
1973-1375	2441935.42	1973 Sep 09 2200:00	M-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1973-1376	2441935.46	1973 Sep 09 2300:00	M-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1973-1377	2441937.08	1973 Sep 11 1400:00	M-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1973-1378	2441937.90	1973 Sep 12 0940:00	M-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1973-1379	2441938.08	1973 Sep 12 1400:00	M-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1973-1380	2441938.10	1973 Sep 12 1430:00	M-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1973-1381	2441939.54	1973 Sep 14 0100:00	M-100	-	TEMLS-595	0.000	AM	SU	-	Aeron	WDGRF	-	-
1973-1382	2441940.33	1973 Sep 14 2000:00	M-100	-	Pre CIMO	0.000	AM	SU	-	Aeron	WDGRF	-	-
1973-1383	2441944.21	1973 Sep 18 1700:00	M-100	-	Pre CIMO	0.000	AM	SU	-	Aeron	WDGRF	-	-
1973-1384	2441944.54	1973 Sep 19 0100:00	M-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1973-1385	2441944.88	1973 Sep 19 0900:00	M-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1973-1386	2441945.08	1973 Sep 19 1400:00	M-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1973-1387	2441945.11	1973 Sep 19 1430:00	M-100	-	TEMLS-596	0.000	AM	SU	-	Aeron	WDGRF	-	-
1973-1613	2441946.11	1973 Sep 20 1440:00	M-100	-	CIMO	0.000	AM	SS	GNS/	Meteo	SR15-143	-	-
1973-1614	2441947.14	1973 Sep 21 0420:00	M-100	-	CIMO	0.000	AM	SS	GNS/	Meteo	SR15-143	-	-
1973-1615	2441947.67	1973 Sep 22 0410:00	M-100	-	CIMO	0.000	AM	SS	GNS/	Meteo	SR15-143	-	-
1973-1616	2441950.22	1973 Sep 26 1720:00	M-100	-	CIMO	0.000	AM	SS	GNS/	Meteo	SR15-143	-	-
1973-1617	2441950.52	1973 Sep 26 1740:00	M-100	-	CIMO	0.000	AM	SS	GNS/	Meteo	SR15-143	-	-
1973-1618	2441951.08	1973 Sep 25 0030:00	M-100	-	CIMO	0.000	AM	SS	GNS/	Meteo	SR15-143	-	-
1973-1619	2441951.26	1973 Sep 25 1810:00	M-100	-	CIMO	0.000	AM	SS	GNS/	Meteo	SR15-143	-	-
1973-1397	2441951.51	1973 Sep 26 0020:00	M-100	-	CIMO	0.000	AM	SS	GNS/	Meteo	SR15-143	-	-
1973-1397	2441951.51	1973 Sep 26 0900:00	M-100	-	CIMO	0.000	AM	SS	GNS/	Meteo	SR15-143	-	-
1973-1622	2441952.09	1973 Sep 26 1410:00	M-100	-	CIMO	0.000	AM	SS	GNS/	Meteo	SR15-143	-	-
1973-1623	2441953.09	1973 Sep 27 1410:00	M-100	-	CIMO	0.000	AM	SS	GNS/	Meteo	SR15-143	-	-
1973-1399	2441953.10	1973 Sep 27 1430:00	M-100	-	TEMLS-597	0.000	AM	SS	GNS/	Meteo	SR15-143	-	-
1973-1624	2441954.62	1973 Sep 28 0240:00	M-100	-	CIMO	0.000	AM	SS	GNS/	Meteo	SR15-143	-	-
1973-1402	2441954.62	1973 Sep 29 0500:00	M-100	-	CIMO	0.000	AM	SS	GNS/	Meteo	SR15-143	-	-
1973-1625	2441956.65	1973 Oct 1 0940:00	M-100	-	CIMO	0.000	AM	SS	GNS/	Meteo	SR15-143	-	-
1973-1404	2441956.65	1973 Oct 03 0100:00	M-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1973-1405	2441956.65	1973 Oct 03 1316:00	M-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1973-1406	2441959.05	1973 Oct 03 1430:00	M-100	-	TEMLS-598	0.000	AM	SU	-	Aeron	WDGRF	-	-
1973-1407	2441959.12	1973 Oct 03 1500:00	M-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1973-1419	2441961.88	1973 Oct 06 0900:00	M-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1973-1420	2441963.88	1973 Oct 08 0900:00	M-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1973-1421	2441965.94	1973 Oct 10 0100:00	M-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1973-1422	2441965.98	1973 Oct 10 0900:00	M-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1973-1423	2441966.10	1973 Oct 10 1430:00	M-100	-	TEMLS-599	0.000	AM	SU	-	Aeron	WDGRF	-	-
1973-1424	2441966.12	1973 Oct 10 1500:00	M-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1973-1426	2441969.88	1973 Oct 14 0900:00	M-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1973-1429	2441971.88	1973 Oct 17 0900:00	M-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1973-1431	2441972.88	1973 Oct 17 0900:00	M-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1973-1432	2441973.10	1973 Oct 17 0900:00	M-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1973-1433	2441973.32	1973 Oct 17 1530:00	M-100	-	TEMLS-600	0.000	AM	SU	-	Aeron	WDGRF	-	-
1973-1434	2441973.36	1973 Oct 18 0900:00	M-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1973-1437	2441973.56	1973 Oct 18 1500:00	M-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1973-1439	2441973.56	1973 Oct 19 0900:00	M-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1973-1440	2441973.56	1973 Oct 21 1430:00	M-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1973-1441	2441973.56	1973 Oct 21 1430:00	M-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1973-1443	2441980.12	1973 Oct 24 1430:00	M-100	-	TEMLS-601	0.000	AM	SU	-	Aeron	WDGRF	-	-
1973-1448	2441980.12	1973 Oct 24 1500:00	M-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1973-1449	2441980.12	1973 Oct 30 1200:00	M-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1973-1450	2441987.10	1973 Oct 31 1430:00	M-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1973-1451	2441987.12	1973 Oct 31 1430:00	M-100	-	TEMLS-602	0.000	AM	SU	-	Aeron	WDGRF	-	-
1973-1452	2441987.12	1973 Oct 31 1500:00	M-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1973-1454	2441987.46	1973 Oct 31 2300:00	M-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1973-1454	2441987.84	1973 Nov 01 0100:00	M-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1973-1456	2441988.92	1973 Nov 02 1000:00	M-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1973-1457	2441988.92	1973 Nov 06 1400:00	M-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1973-1458	2441993.11	1973 Nov 06 1400:00	M-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1973-1459	2441993.11	1973 Nov 06 1500:00	M-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1973-1460	2441994.08	1973 Nov 07 1400:00	M-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1973-1465	2441994.10	1973 Nov 07 1430:00	M-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1973-1466	2441998.00	1973 Nov 11 1200:00	M-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1973-1466	2441998.00	1973 Nov 13 0900:00	M-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1973-1467	2442000.88	1973 Nov 14 0900:00	M-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1973-1468	2442001.10	1973 Nov 14 1430:00	M-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1973-1469	2442001.12	1973 Nov 14 1500:00	M-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1973-1471	2442002.88	1973 Nov 16 0900:00	M-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1973-1472	2442004.10	1973 Nov 17 1430:00	M-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1973-1473	2442004.92	1973 Nov 18 1000:00	M-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1973-1474	2442007.88	1973 Nov 21 0900:00	M-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1973-1475	2442008.12	1973 Nov 21 1500:00	M-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1973-1476	2442008.14	1973 Nov 21 1515:00	M-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1973-1479	2442008.14	1973 Nov 24 0910:00	M-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1973-1480	2442011.10	1973 Nov 24 1430:00	M-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1973-1481	2442012.10	1973 Nov 25 1430:00	M-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1973-1482	2442013.88	1973 Nov 27 0900:00	M-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1973-1483	2442014.30	1973 Nov 27 1910:00	M-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1973-1484	2442015.11	1973 Nov 28 1438:00	M-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1973-1485	2442015.12	1973 Nov 28 1500:00	M-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1973-1486	2442015.43	1973 Nov 28 2215:00	M-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1973-1488	2442018.10	1973 Dec 01 1430:00	M-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1973-1489	2442020.56	1973 Dec 04 0120:00	M-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1973-1490	2442020.88	1973 Dec 04 0900:00	M-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1973-1491	2442022.10	1973 Dec 05 1430:00	M-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1973-1492	2442022.12	1973 Dec 05 1500:00	M-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1973-1493	2442022.88	1973 Dec 06 0900:00	M-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-









Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	OrbPay t	Agency	Launch_Code	Group	Category	LT/Cite	Cite	Notes
1974-Y300	2442310.63	1974 Sep 20 0310:00	H-100	-	-	0.000	AM	SS	GNS/Shibaeva	Aeron	SR16_503	WDGRF	-
1974-Y301	2442310.62	1974 Sep 20 0740:00	H-100	-	-	0.000	AM	SS	GNS/Shibaeva	Aeron	SR16_503	WDGRF	-
1974-Y302	2442311.10	1974 Sep 20 1430:00	H-100	-	-	0.000	AM	SS	-	Aeron	WDGRF	-	-
1974-Y303	2442311.21	1974 Sep 20 1700:00	H-100	-	-	0.000	AM	SS	-	Aeron	WDGRF	-	-
1974-Y304	2442311.28	1974 Sep 20 1840:00	H-100	-	-	0.000	AM	SS	GNS/Shibaeva	Aeron	SR16_503	WDGRF	-
1974-Y305	2442311.29	1974 Sep 20 1900:00	H-100	-	-	0.000	AM	SS	-	Aeron	WDGRF	-	-
1974-Y306	2442311.69	1974 Sep 21 0440:00	H-100	-	-	0.000	AM	SS	GNS/Shibaeva	Aeron	SR16_503	WDGRF	-
1974-Y307	2442311.98	1974 Sep 21 1130:00	H-100	-	-	0.000	AM	SS	-	Aeron	WDGRF	-	-
1974-Y308	2442311.98	1974 Sep 21 1130:00	H-100	-	-	0.000	AM	SS	GNS/Shibaeva	Aeron	SR16_503	WDGRF	-
1974-Y309	2442315.42	1974 Sep 24 2200:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1974-Y310	2442315.68	1974 Sep 25 0910:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1974-Y311	2442316.12	1974 Sep 25 1500:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1974-Y312	2442322.27	1974 Oct 01 1825:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1974-Y313	2442322.33	1974 Oct 01 2000:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1974-Y314	2442322.47	1974 Oct 01 2320:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1974-Y315	2442322.68	1974 Oct 02 0500:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1974-Y316	2442323.12	1974 Oct 02 1500:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1974-Y317	2442323.52	1974 Oct 08 1940:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1974-Y1290	2442329.42	1974 Oct 08 2210:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1974-Y323	2442329.47	1974 Oct 08 2320:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1974-Y324	2442329.50	1974 Oct 09 0000:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1974-Y325	2442329.68	1974 Oct 09 0900:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1974-Y326	2442330.08	1974 Oct 09 1400:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1974-Y327	2442331.31	1974 Oct 10 1930:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1974-Y329	2442336.46	1974 Oct 15 2300:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1974-Y330	2442337.00	1974 Oct 16 1200:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1974-Y334	2442342.62	1974 Oct 22 0500:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1974-Y335	2442345.42	1974 Oct 23 0920:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1974-Y336	2442345.69	1974 Oct 23 1400:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1974-Y337	2442344.08	1974 Oct 27 0400:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1974-Y339	2442350.67	1974 Oct 30 0400:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1974-Y340	2442350.68	1974 Oct 30 0900:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1974-Y341	2442351.12	1974 Oct 30 1500:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1974-Y342	2442351.42	1974 Oct 30 2200:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1974-Y344	2442353.79	1974 Nov 02 0700:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1974-Y346	2442356.65	1974 Nov 05 0800:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1974-Y347	2442357.25	1974 Nov 05 1800:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1974-Y348	2442357.42	1974 Nov 05 2200:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1974-Y349	2442357.82	1974 Nov 06 1000:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1974-Y350	2442364.68	1974 Nov 13 0900:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1974-Y351	2442365.98	1974 Nov 13 1400:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1974-Y353	2442371.95	1974 Nov 19 2000:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1974-Y354	2442371.75	1974 Nov 20 0600:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1974-Y355	2442372.12	1974 Nov 20 1500:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1974-Y356	2442377.94	1974 Nov 26 1030:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1974-Y357	2442378.50	1974 Nov 29 0400:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1974-Y358	2442378.88	1974 Nov 27 2100:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1974-Y359	2442379.24	1974 Nov 30 0700:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1974-Y360	2442381.17	1974 Dec 02 1600:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1974-Y361	2442381.70	1974 Dec 03 1930:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1974-Y362	2442385.51	1974 Dec 03 1930:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1974-Y367	2442386.00	1974 Dec 04 1200:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1974-Y368	2442386.10	1974 Dec 04 1500:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1974-Y371	2442395.54	1974 Dec 11 0100:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1974-Y372	2442395.08	1974 Dec 11 1400:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1974-Y373	2442395.10	1974 Dec 11 1430:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1974-Y375	2442395.88	1974 Dec 14 0910:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1974-Y376	2442395.88	1974 Dec 18 0200:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1974-Y377	2442399.88	1974 Dec 18 0900:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1974-Y378	2442400.08	1974 Dec 18 1400:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1974-Y380	2442404.46	1974 Dec 22 2300:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1974-Y381	2442406.28	1974 Dec 24 1850:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1974-Y382	2442406.50	1974 Dec 25 0000:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1974-Y383	2442407.12	1974 Dec 25 0140:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1974-Y384	2442409.50	1974 Dec 28 0000:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1974-Y387	2442413.12	1974 Dec 31 1500:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1975-Y01	2442415.06	1975 Jan 02 1320:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1975-Y02	2442415.21	1975 Jan 02 1700:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1975-Y05	2442417.06	1975 Jan 04 1320:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1975-Y06	2442417.29	1975 Jan 04 1900:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1975-Y07	2442418.68	1975 Jan 06 0200:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1975-Y08	2442418.88	1975 Jan 06 0900:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1975-Y09	2442420.42	1975 Jan 07 2200:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1975-Y10	2442423.17	1975 Jan 08 1400:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1975-Y11	2442423.17	1975 Jan 08 1600:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1975-Y13	2442422.42	1975 Jan 09 2200:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1975-Y14	2442422.88	1975 Jan 10 0900:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1975-Y16	2442423.31	1975 Jan 11 1930:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1975-Y17	2442424.31	1975 Jan 11 1930:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1975-Y18	2442426.33	1975 Jan 12 2000:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1975-Y19	2442426.37	1975 Jan 12 2050:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1975-Y20	2442427.33	1975 Jan 14 2000:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1975-Y21	2442427.88	1975 Jan 15 0900:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-

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Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	OrbPay t	Agency	Launch_Code	Group	Category	LT/Cite	Cite	Notes
1975-Y22	2442427.90	1975 Jan 15 0930:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1975-Y23	2442428.12	1975 Jan 15 1500:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1975-Y24	2442429.33	1975 Jan 15 1950:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1975-Y25	2442429.33	1975 Jan 16 2000:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1975-Y26	2442429.88	1975 Jan 17 0900:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1975-Y27	2442434.89	1975 Jan 22 0920:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1975-Y28	2442435.12	1975 Jan 22 1500:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1975-Y29	2442435.47	1975 Jan 22 2310:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1975-Y30	2442442.08	1975 Jan 29 1400:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1975-Y31	2442442.25	1975 Jan 29 1800:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1975-Y32	2442443.90	1975 Jan 31 0930:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1975-Y33	2442447.40	1975 Feb 03 2140:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1975-Y34	2442448.42	1975 Feb 04 2200:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1975-Y35	2442449.25	1975 Feb 05 1800:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1975-Y36	2442450.99	1975 Feb 07 1130:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1975-Y37	2442455.67	1975 Feb 12 0400:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1975-Y38	2442455.88	1975 Feb 12 0900:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1975-Y39	2442457.88	1975 Feb 14 0900:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1975-Y40	2442462.30	1975 Feb 18 1915:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1975-Y41	2442462.36	1975 Feb 18 2035:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1975-Y42	2442462.67	1975 Feb 19 0400:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1975-Y43	2442463.12	1975 Feb 19 0900:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1975-Y44	2442465.17	1975 Feb 21 1600:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1975-Y45	2442469.42	1975 Feb 25 2200:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1975-Y46	2442469.68	1975 Feb 26 0900:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1975-Y47	2442470.12	1975 Feb 26 1500:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1975-Y48	2442471.88	1975 Feb 28 0900:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1975-Y49	2442473.17	1975 Mar 01 1600:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1975-Y50	2442475.17	1975 Mar 03 1600:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1975-Y51	2442475.22	1975 Mar 03 1720:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1975-Y52	2442476.42	1975 Mar 04 2200:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1975-Y53	2442476.88	1975 Mar 05 0900:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1975-Y54	2442477.53	1975 Mar 05 2000:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1975-Y55	2442478.26	1975 Mar 06 1820:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1975-Y56	2442479.25	1975 Mar 07 1800:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1975-Y57	2442479.52	1975 Mar 07 1940:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1975-Y58	2442481.19	1975 Mar 09 1630:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1975-Y59	2442483.20	1975 Mar 11 2200:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1975-Y60	2442483.42	1975 Mar 12 1500:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1975-Y61	2442483.97	1975 Mar 13 1600:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1975-Y62	2442484.12	1975 Mar 13 1900:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1975-Y63	2442485.56	1975 Mar 14 1520:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1975-Y64	2442487.16	1975 Mar 15 1530:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1975-Y65	2442488.05	1975 Mar 16 1700:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1975-Y66	2442489.58	1975 Mar 18 1700:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1975-Y67	2442490.24	1975 Mar 18 1840:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1975-Y68	2442490.49	1975 Mar 18 2000:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1975-Y69	2442490.88	1975 Mar 19 0900:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1975-Y70	2442491.15	1975 Mar 19 1500:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1975-Y71	2442491.15	1975 Mar 19 1700:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1975-Y72	2442493.21	1975 Mar 20 1700:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1975-Y73	2442493.51	1975 Mar 22 1700:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1975-Y74	2442497.40	1975 Mar 25 2200:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1975-Y75	2442497.96	1975 Mar 26 1105:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1975-Y76	2442498.12	1975 Mar 26 1500:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1975-Y77	2442498.12	1975 Mar 26 1500:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1975-Y78	2442504.88	1975 Apr 02 0900:00	H-100	-	-	0.000	AM	SS	GNS/Perov	Aeron	WDGRF	SRL7_261	-
1975-Y79	2442505.12	1975 Apr 02 1500:00	H-100	-	-	0.000	AM	SS	GNS/Perov	Aeron	WDGRF	-	-
1975-Y80	2442505.12	1975 Apr 03 0500:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1975-Y81	2442511.42	1975 Apr 08 2200:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1975-Y82	2442511.96	1975 Apr 09 1100:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1975-Y83	2442512.12	1975 Apr 09 1500:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1975-Y84	2442513.88	1975 Apr 11 0900:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1975-Y85	2442515.12	1975 Apr 12 1500:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1975-Y86	2442515.12	1975 Apr 12 1500:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1975-Y87	2442517.12	1975 Apr 14 1500:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1975-Y88	2442518.88	1975 Apr 16 0900:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1975-Y89	2442519.12	1975 Apr 16 1500:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1975-Y90	2442521.02	1975 Apr 18 1230:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1975-Y91	2442521.12	1975 Apr 18 1500:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1975-Y92	2442525.57	1975 Apr 23 0140:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1975-Y93	2442526.12	1975 Apr 23 0900:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1975-Y94	2442526.12	1975 Apr 23 1500:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1975-Y95	2442527.83	1975 Apr 25 0900:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1975-Y96	2442527.88	1975 Apr 25 0900:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1975-Y97	2442528.12	1975 Apr 28 1500:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1975-Y98	2442528.12	1975 Apr 28 1500:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1975-Y99	2442530.54	1975 Apr 28 0900:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1975-Y100	2442531.12	1975 Apr 28 1500:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	OrbPay	Agency	Launch_Code	Group	Category	LT/Cite	Cite	Notes
1975-Y126	2442553.12	1975 Apr. 30 1500:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1975-Y129	2442556.12	1975 May 03 1500:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1975-Y130	2442558.17	1975 May 05 1600:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1975-Y131	2442559.04	1975 May 06 1300:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1975-Y132	2442559.58	1975 May 07 0200:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1975-Y133	2442559.88	1975 May 07 0900:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1975-Y134	2442540.00	1975 May 07 1200:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1975-Y135	2442540.12	1975 May 07 1500:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1975-Y136	2442540.42	1975 May 08 1200:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1975-Y138	2442541.06	1975 May 08 1330:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1975-Y140	2442541.33	1975 May 08 2000:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1975-Y141	2442541.92	1975 May 09 1000:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1975-Y142	2442542.12	1975 May 09 1500:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1975-Y144	2442543.53	1975 May 11 0800:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1975-Y145	2442546.17	1975 May 13 1600:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1975-Y146	2442546.58	1975 May 14 0900:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1975-Y147	2442547.12	1975 May 14 1500:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1975-Y148	2442547.35	1975 May 14 2030:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1975-Y150	2442550.27	1975 May 17 1630:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1975-Y152	2442550.36	1975 May 17 2040:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1975-Y153	2442552.12	1975 May 19 1500:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1975-Y154	2442553.42	1975 May 20 2200:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1975-Y155	2442553.68	1975 May 21 0900:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1975-Y156	2442553.92	1975 May 21 1000:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1975-Y159	2442554.12	1975 May 21 1500:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1975-Y157	2442554.12	1975 May 21 1500:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1975-Y158	2442555.17	1975 May 22 1600:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1975-Y159	2442556.12	1975 May 23 1500:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1975-Y160	2442556.94	1975 May 24 1030:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1975-Y161	2442556.96	1975 May 25 2040:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1975-Y162	2442559.12	1975 May 26 1500:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1975-Y163	2442560.98	1975 May 28 0200:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1975-Y167	2442560.68	1975 May 28 0900:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1975-Y168	2442561.11	1975 May 28 1440:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1975-Y169	2442561.12	1975 May 28 1500:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1975-Y170	2442561.21	1975 May 28 1700:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1975-Y171	2442562.26	1975 May 29 1820:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1975-Y173	2442565.17	1975 May 30 1600:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1975-Y176	2442567.46	1975 Jun 03 2300:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1975-Y177	2442567.65	1975 Jun 04 0900:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1975-Y178	2442568.12	1975 Jun 04 1500:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1975-Y179	2442568.12	1975 Jun 04 1500:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1975-Y180	2442568.12	1975 Jun 04 1500:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1975-Y181	2442568.12	1975 Jun 04 1500:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1975-Y182	2442570.12	1975 Jun 06 1500:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1975-Y184	2442570.12	1975 Jun 07 2130:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1975-Y185	2442571.98	1975 Jun 08 1710:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1975-Y186	2442572.93	1975 Jun 08 1710:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1975-Y187	2442573.66	1975 Jun 10 0900:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1975-Y188	2442574.88	1975 Jun 11 0900:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1975-Y189	2442574.92	1975 Jun 11 1500:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1975-Y190	2442575.12	1975 Jun 11 1500:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1975-Y191	2442575.12	1975 Jun 11 1500:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1975-Y192	2442575.37	1975 Jun 11 1830:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1975-Y193	2442576.12	1975 Jun 12 1500:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1975-Y194	2442576.35	1975 Jun 13 1800:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1975-Y195	2442577.25	1975 Jun 14 1800:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1975-Y196	2442578.25	1975 Jun 14 1800:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1975-Y197	2442581.12	1975 Jun 17 1500:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1975-Y198	2442581.29	1975 Jun 17 1900:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1975-Y199	2442581.49	1975 Jun 17 2340:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1975-Y200	2442581.81	1975 Jun 18 0730:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1975-Y201	2442581.88	1975 Jun 18 0900:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1975-Y202	2442581.92	1975 Jun 18 1000:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1975-Y203	2442582.12	1975 Jun 18 1500:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1975-Y204	2442584.17	1975 Jun 20 1600:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1975-Y207	2442585.12	1975 Jun 21 1500:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1975-Y208	2442588.25	1975 Jun 24 1800:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1975-Y209	2442588.92	1975 Jun 25 1000:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1975-Y210	2442589.12	1975 Jun 25 1500:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1975-Y211	2442589.12	1975 Jun 25 1500:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1975-Y214	2442590.17	1975 Jun 26 1700:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1975-Y215	2442592.15	1975 Jun 28 1540:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1975-Y216	2442595.88	1975 Jul 02 0900:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1975-Y217	2442596.12	1975 Jul 02 1500:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1975-Y219	2442597.12	1975 Jul 03 1500:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1975-Y220	2442602.88	1975 Jul 09 0900:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1975-Y221	2442603.12	1975 Jul 09 1500:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1975-Y222	2442603.12	1975 Jul 16 0900:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1975-Y226	2442609.88	1975 Jul 16 1500:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1975-Y227	2442610.12	1975 Jul 16 1500:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1975-Y228	2442610.12	1975 Jul 16 1500:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	OrbPay t	Agency	Launch_Code	Group	Category	LT/Cite	Cite	Notes
1975-Y230	2442616.90	1975 Jul. 23 0930:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1975-Y231	2442617.12	1975 Jul. 23 1500:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1975-Y232	2442617.12	1975 Jul. 23 1500:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1975-Y233	2442623.96	1975 Jul. 30 1100:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1975-Y234	2442624.12	1975 Jul. 30 1500:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1975-Y235	2442624.12	1975 Jul. 30 1500:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1975-Y236	2442630.46	1975 Aug. 05 2300:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1975-Y237	2442630.88	1975 Aug. 06 0900:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1975-Y238	2442631.12	1975 Aug. 06 1500:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1975-Y239	2442631.21	1975 Aug. 06 1700:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1975-Y240	2442638.00	1975 Aug. 13 1200:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1975-Y241	2442638.12	1975 Aug. 13 1500:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1975-Y242	2442638.12	1975 Aug. 13 1500:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1975-Y243	2442638.12	1975 Aug. 13 1500:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1975-Y244	2442638.12	1975 Aug. 13 1500:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1975-Y245	2442644.53	1975 Aug. 19 1500:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1975-Y246	2442644.53	1975 Aug. 20 0040:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1975-Y247	2442645.12	1975 Aug. 20 1500:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1975-Y248	2442645.88	1975 Aug. 22 0900:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1975-Y249	2442651.85	1975 Aug. 27 0830:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1975-Y250	2442652.12	1975 Aug. 27 1500:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1975-Y251	2442653.58	1975 Aug. 29 0900:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1975-Y252	2442655.89	1975 Sep. 02 0500:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1975-Y253	2442655.89	1975 Sep. 03 0800:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1975-Y254	2442655.89	1975 Sep. 03 0900:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1975-Y255	2442655.89	1975 Sep. 03 1500:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1975-Y256	2442659.22	1975 Sep. 03 1740:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1975-Y257	2442659.33	1975 Sep. 03 2000:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1975-Y258	2442659.44	1975 Sep. 09 2230:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1975-Y259	2442665.63	1975 Sep. 10 0800:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1975-Y260	2442665.68	1975 Sep. 10 0900:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1975-Y261	2442665.68	1975 Sep. 10 1500:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1975-Y262	2442666.12	1975 Sep. 11 0400:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1975-Y263	2442666.67	1975 Sep. 11 0900:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1975-Y264	2442672.48	1975 Sep. 16 2330:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1975-Y265	2442673.12	1975 Sep. 17 0900:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1975-Y266	2442673.12	1975 Sep. 17 1500:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1975-Y267	2442674.67	1975 Sep. 19 0400:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1975-Y268	2442677.82	1975 Sep. 22 0800:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1975-Y269	2442677.82	1975 Sep. 22 1500:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1975-Y270	2442679.48	1975 Sep. 24 0900:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1975-Y271	2442680.12	1975 Sep. 24 1500:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1975-Y272	2442680.12	1975 Sep. 24 1500:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1975-Y273	2442686.88	1975 Sep. 20 10:00:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1975-Y274	2442686.88	1975 Oct. 01 0900:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1975-Y275	2442687.15	1975 Oct. 01 1500:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1975-Y276	2442687.33	1975 Oct. 01 1730:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1975-Y277	2442689.99	1975 Oct. 08 0900:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1975-Y278	2442689.99	1975 Oct. 08 1500:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1975-Y279	2442689.99	1975 Oct. 08 1500:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1975-Y280	2442694.12	1975 Oct. 08 1500:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1975-Y281	2442694.12	1975 Oct. 08 1500:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1975-Y282	2442700.38	1975 Oct. 14 2100:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1975-Y283	2442700.38	1975 Oct. 14 2100:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1975-Y284	2442700.88	1975 Oct. 15 0900:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1975-Y285	2442701.12	1975 Oct. 15 1500:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1975-Y286	2442701.12	1975 Oct. 15 1500:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1975-Y287	2442703.01	1975 Oct. 22 1200:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1975-Y288	2442703.01	1975 Oct. 22 1500:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1975-Y289	2442708.12	1975 Oct. 22 1500:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1975-Y290	2442708.12	1975 Oct. 22 1500:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1975-Y291	2442708.21	1975 Oct. 22 1700:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1975-Y292	2442714.88	1975 Oct. 29 0900:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1975-Y293	2442715.12	1975 Oct. 29 1500:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1975-Y294	2442715.12	1975 Oct. 29 1500:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1975-Y295	2442715.21	1975 Oct. 29 1700:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1975-Y296	2442721.40	1975 Nov. 04 2130:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1975-Y297	2442721.88	1975 Nov. 05 0900:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1975-Y298	2442722.12	1975 Nov. 05 1500:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1975-Y299	2442722.12	1975 Nov. 05 1500:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1975-Y300	2442728.12	1975 Nov. 11 1500:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1975-Y301	2442728.88	1975 Nov. 12 0900:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1975-Y302	2442729.21	1975 Nov. 12 1500:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1975-Y303	2442735.31	1975 Nov. 18 1930:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1975-Y304	2442735.88	1975 Nov. 19 0900:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1975-Y305	2442736.12	1975 Nov. 19 1500:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1975-Y306	2442736.12	1975 Nov. 19 1500:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1975-Y307	2442738.21	1975 Nov. 21 1900:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1975-Y308	2442738.29	1975 Nov. 21 1900:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1975-Y309	2442743.10	1975 Nov. 26 1430:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1975-Y310	2442743.12	1975 Nov. 26 1500:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1975-Y311	2442743.21	1975 Nov. 26 1700:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-

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TSMO/Breagin

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	OrbPay t	Agency	Launch_Code	Group	Category	LT/Cite	Cite	Notes
1975-1346	2442745.12	1975 Nov 28 15:00:00	M-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1975-1347	2442746.21	1975 Nov 29 17:00:00	M-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1975-1348	2442749.88	1975 Dec 03 09:00:00	M-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1975-1349	2442750.12	1975 Dec 03 15:00:00	M-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1975-1350	2442750.12	1975 Dec 03 15:00:00	M-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1975-1351	2442750.33	1975 Dec 03 15:00:00	M-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1975-1352	2442752.73	1975 Dec 06 05:34	M-100	-	-	0.000	AM	SU	PRL/Prakash	Aeron	WDGRF	-	-
1975-1353	2442756.88	1975 Dec 10 09:00:00	M-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1975-1354	2442757.12	1975 Dec 10 15:00:00	M-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1975-1355	2442757.12	1975 Dec 10 15:00:00	M-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1975-1356	2442757.17	1975 Dec 10 15:00:00	M-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1975-1357	2442757.17	1975 Dec 11 16:50:00	M-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1975-1358	2442758.20	1975 Dec 17 09:00:00	M-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1975-1359	2442763.88	1975 Dec 17 09:00:00	M-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1975-1367	2442764.12	1975 Dec 17 15:00:00	M-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1975-1368	2442764.17	1975 Dec 17 15:00:00	M-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1975-1369	2442764.42	1975 Dec 17 22:00:00	M-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1975-1371	2442764.46	1975 Dec 17 23:00:00	M-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1975-1372	2442765.12	1975 Dec 18 15:00:00	M-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1975-1373	2442766.36	1975 Dec 19 20:35:00	M-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1975-1374	2442766.42	1975 Dec 19 22:00:00	M-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1975-1375	2442770.27	1975 Dec 23 15:00:00	M-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1975-1376	2442770.27	1975 Dec 23 15:00:00	M-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1975-1380	2442770.38	1975 Dec 24 09:00:00	M-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1975-1381	2442770.58	1975 Dec 24 15:00:00	M-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1975-1382	2442771.12	1975 Dec 24 17:00:00	M-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1975-1384	2442771.21	1975 Dec 27 23:45:00	M-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1975-1385	2442774.57	1975 Dec 28 09:35:00	M-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1975-1386	2442774.90	1975 Dec 28 09:35:00	M-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1975-1388	2442777.39	1975 Dec 30 21:00:00	M-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1975-1389	2442777.75	1975 Dec 31 06:00:00	M-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1975-1390	2442777.68	1975 Dec 31 09:00:00	M-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1975-1391	2442776.12	1975 Dec 31 15:00:00	M-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1976-102	2442781.68	1976 Jan 04 09:00:00	M-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1976-104	2442783.12	1976 Jan 05 15:00:00	M-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1976-105	2442785.10	1976 Jan 07 14:30:00	M-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1976-106	2442785.12	1976 Jan 07 15:00:00	M-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1976-108	2442785.17	1976 Jan 07 16:00:00	M-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1976-109	2442786.68	1976 Jan 09 09:00:00	M-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1976-110	2442787.10	1976 Jan 09 16:00:00	M-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1976-111	2442787.17	1976 Jan 09 16:00:00	M-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1976-112	2442788.21	1976 Jan 10 17:00:00	M-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1976-113	2442788.58	1976 Jan 11 07:00:00	M-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1976-114	2442789.88	1976 Jan 11 16:00:00	M-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1976-115	2442791.68	1976 Jan 14 09:00:00	M-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1976-116	2442792.10	1976 Jan 14 14:30:00	M-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1976-118	2442792.33	1976 Jan 14 17:00:00	M-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1976-119	2442792.33	1976 Jan 14 17:00:00	M-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1976-122	2442794.95	1976 Jan 16 18:00:00	M-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1976-123	2442794.97	1976 Jan 16 18:00:00	M-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1976-124	2442795.55	1976 Jan 18 18:00:00	M-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1976-125	2442795.57	1976 Jan 18 18:00:00	M-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1976-126	2442796.47	1976 Jan 19 15:00:00	M-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1976-128	2442798.88	1976 Jan 21 09:00:00	M-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1976-129	2442798.10	1976 Jan 21 14:30:00	M-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1976-130	2442798.12	1976 Jan 21 15:00:00	M-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1976-132	2442799.17	1976 Jan 23 09:00:00	M-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1976-133	2442800.88	1976 Jan 23 09:00:00	M-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1976-134	2442805.88	1976 Jan 24 16:00:00	M-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1976-135	2442805.88	1976 Jan 28 09:00:00	M-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1976-136	2442806.08	1976 Jan 28 14:00:00	M-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1976-137	2442806.12	1976 Jan 28 15:00:00	M-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1976-138	2442806.19	1976 Jan 28 16:30:00	M-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1976-139	2442807.17	1976 Jan 29 16:00:00	M-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1976-140	2442807.92	1976 Jan 30 10:00:00	M-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1976-141	2442809.17	1976 Jan 31 16:00:00	M-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1976-142	2442809.25	1976 Jan 31 18:00:00	M-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1976-143	2442810.21	1976 Feb 01 17:00:00	M-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1976-144	2442811.17	1976 Feb 02 16:00:00	M-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1976-145	2442811.25	1976 Feb 02 18:00:00	M-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1976-146	2442812.29	1976 Feb 03 19:00:00	M-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1976-147	2442812.88	1976 Feb 04 09:00:00	M-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1976-148	2442813.08	1976 Feb 04 14:00:00	M-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1976-149	2442813.10	1976 Feb 04 14:30:00	M-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1976-150	2442813.12	1976 Feb 04 15:00:00	M-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1976-151	2442813.15	1976 Feb 04 15:30:00	M-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1976-152	2442814.44	1976 Feb 05 21:00:00	M-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1976-153	2442814.44	1976 Feb 06 09:00:00	M-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1976-154	2442814.88	1976 Feb 06 09:00:00	M-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1976-155	2442815.17	1976 Feb 06 16:00:00	M-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1976-156	2442816.12	1976 Feb 07 15:00:00	M-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1976-157	2442816.21	1976 Feb 07 17:00:00	M-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1976-158	2442817.17	1976 Feb 08 16:00:00	M-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1976-159	2442818.12	1976 Feb 09 15:00:00	M-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1976-160	2442818.21	1976 Feb 09 17:00:00	M-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1976-161	2442819.94	1976 Feb 11 10:40:00	M-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-







Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	OrbPay t	Agency	Launch_Code	Group	Category	LT_Cite	Cite	Notes
1976-1278	2442969_38	1976 Jul 09 21:06:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1976-1279	2442973_38	1976 Jul 13 21:00:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1976-1280	2442973_38	1976 Jul 13 21:06:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1976-1281	2442974_12	1976 Jul 14 14:50:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1976-1282	2442974_25	1976 Jul 14 14:50:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1976-1286	2442976_46	1976 Jul 16 23:00:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1976-1288	2442977_21	1976 Jul 17 17:00:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1976-1289	2442979_21	1976 Jul 19 17:00:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1976-1292	2442980_17	1976 Jul 20 16:00:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1976-1293	2442980_25	1976 Jul 20 16:00:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1976-1294	2442980_38	1976 Jul 20 21:00:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1976-1295	2442980_38	1976 Jul 20 21:06:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1976-1296	2442981_11	1976 Jul 21 14:45:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1976-1297	2442981_21	1976 Jul 21 17:00:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1976-1300	2442983_12	1976 Jul 23 21:00:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1976-1301	2442983_38	1976 Jul 23 21:00:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1976-1302	2442986_17	1976 Jul 26 16:00:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1976-1304	2442987_38	1976 Jul 27 21:06:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1976-11050	2442987_42	1976 Jul 28 14:50:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1976-1305	2442988_10	1976 Jul 28 14:50:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1976-1306	2442988_12	1976 Jul 28 14:50:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1976-1308	2442988_30	1976 Jul 28 19:40:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1976-1309	2442988_38	1976 Jul 28 21:00:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1976-1310	2442988_51	1976 Jul 29 00:20:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1976-1311	2442988_63	1976 Jul 29 03:05:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1976-1312	2442988_76	1976 Jul 29 06:45:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1976-1313	2442988_68	1976 Jul 29 09:00:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1976-1314	2442988_99	1976 Jul 29 11:45:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1976-1315	2442989_15	1976 Jul 29 15:30:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1976-1316	2442989_17	1976 Jul 29 16:00:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1976-1317	2442989_24	1976 Jul 29 17:40:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1976-1326	2442990_21	1976 Jul 30 17:06:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1976-1327	2442990_38	1976 Jul 30 21:00:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1976-1061	2442991_17	1976 Jul 31 16:00:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1976-1328	2442992_17	1976 Aug 01 16:00:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1976-1329	2442992_51	1976 Aug 01 16:00:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1976-1330	2442994_48	1976 Aug 03 16:00:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1976-1331	2442994_44	1976 Aug 03 21:06:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1976-1332	2442995_11	1976 Aug 04 16:35:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1976-1333	2442995_11	1976 Aug 04 16:35:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1976-1334	2442995_17	1976 Aug 05 16:00:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1976-1334	2442997_17	1976 Aug 05 16:00:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1976-1342	2442997_38	1976 Aug 08 15:00:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1976-1343	2442998_21	1976 Aug 08 17:00:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1976-1344	2442998_51	1976 Aug 08 17:00:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1976-1345	2443001_38	1976 Aug 10 21:00:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1976-1346	2443001_38	1976 Aug 10 21:06:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1976-1347	2443003_10	1976 Aug 11 14:30:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1976-1349	2443003_21	1976 Aug 11 17:00:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1976-1351	2443004_38	1976 Aug 13 21:00:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1976-1352	2443008_38	1976 Aug 17 21:00:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1976-1353	2443008_38	1976 Aug 17 21:06:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1976-1354	2443009_10	1976 Aug 18 14:27:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1976-1355	2443009_10	1976 Aug 18 14:30:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1976-1356	2443009_25	1976 Aug 18 19:05:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1976-1358	2443009_35	1976 Aug 18 20:30:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1976-1359	2443009_38	1976 Aug 18 21:00:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1976-1360	2443009_47	1976 Aug 18 23:15:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1976-1361	2443009_58	1976 Aug 19 01:48:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1976-1362	2443009_60	1976 Aug 19 02:30:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1976-1363	2443009_76	1976 Aug 19 06:10:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1976-1364	2443009_87	1976 Aug 19 08:47:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1976-1365	2443009_88	1976 Aug 19 09:00:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1976-1366	2443009_99	1976 Aug 19 11:46:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1976-1367	2443010_08	1976 Aug 19 14:00:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1976-11161	2443010_10	1976 Aug 19 14:30:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1976-1369	2443010_16	1976 Aug 19 15:48:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1976-1369	2443010_20	1976 Aug 19 16:50:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1976-1370	2443010_23	1976 Aug 19 17:30:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1976-1371	2443010_35	1976 Aug 19 20:30:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1976-1372	2443010_38	1976 Aug 19 21:06:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1976-1373	2443010_42	1976 Aug 19 22:00:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1976-1374	2443010_47	1976 Aug 19 23:15:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1976-1375	2443010_60	1976 Aug 20 02:30:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1976-1376	2443010_65	1976 Aug 20 03:33:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1976-1377	2443010_76	1976 Aug 20 06:12:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1976-1378	2443010_85	1976 Aug 20 08:25:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1976-1379	2443010_88	1976 Aug 20 09:00:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-





Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	OrbPay t	Agency	Launch_Code	Group	Category	LT/Cite	Cite	Notes
1976-1685	2443142.96	1976 Dec 30 11:00:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1976-1686	2443143.17	1976 Dec 30 16:00:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1976-1687	2443143.25	1976 Dec 30 18:00:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1977-101	2443144.88	1977 Jan 01 09:00:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1977-102	2443146.17	1977 Jan 02 16:00:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1977-103	2443146.21	1977 Jan 02 17:00:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1977-104	2443146.88	1977 Jan 03 09:00:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1977-105	2443148.03	1977 Jan 04 12:40:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1977-106	2443148.38	1977 Jan 04 21:00:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1977-107	2443148.88	1977 Jan 04 21:06:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1977-108	2443148.88	1977 Jan 05 09:00:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1977-109	2443148.91	1977 Jan 05 09:50:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1977-122	2443148.94	1977 Jan 05 10:30:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1977-128	2443148.99	1977 Jan 05 11:40:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1977-110	2443149.12	1977 Jan 05 15:00:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1977-113	2443150.86	1977 Jan 07 08:40:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1977-114	2443155.38	1977 Jan 11 21:00:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1977-115	2443155.73	1977 Jan 12 05:30:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1977-116	2443156.12	1977 Jan 12 08:40:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1977-119	2443160.81	1977 Jan 17 07:30:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1977-121	2443162.38	1977 Jan 18 21:00:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1977-122	2443162.38	1977 Jan 18 21:06:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1977-125	2443162.63	1977 Jan 19 08:00:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1977-126	2443163.12	1977 Jan 19 15:00:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1977-130	2443163.79	1977 Jan 20 07:00:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1977-139	2443164.88	1977 Jan 21 09:00:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1977-131	2443166.79	1977 Jan 23 07:00:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1977-1167	2443166.94	1977 Jan 23 10:36:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1977-132	2443167.13	1977 Jan 23 15:10:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1977-134	2443168.12	1977 Jan 24 15:00:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1977-135	2443169.63	1977 Jan 26 08:00:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1977-136	2443169.63	1977 Jan 26 09:10:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1977-137	2443169.93	1977 Jan 26 10:20:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1977-139	2443170.94	1977 Jan 27 08:10:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1977-140	2443172.12	1977 Jan 27 15:00:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1977-142	2443176.42	1977 Feb 01 22:00:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1977-141	2443176.42	1977 Feb 02 15:00:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1977-143	2443176.94	1977 Feb 02 15:00:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1977-145	2443177.66	1977 Feb 03 09:00:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1977-146	2443177.86	1977 Feb 03 10:00:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1977-147	2443177.86	1977 Feb 03 21:00:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1977-148	2443178.86	1977 Feb 04 09:00:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1977-149	2443178.86	1977 Feb 04 09:00:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1977-150	2443180.86	1977 Feb 06 09:00:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1977-151	2443180.86	1977 Feb 06 09:00:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1977-152	2443183.38	1977 Feb 08 11:00:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1977-153	2443183.38	1977 Feb 08 21:00:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1977-154	2443183.90	1977 Feb 09 09:30:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1977-110	2443184.12	1977 Feb 09 15:00:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1977-1313	2443184.12	1977 Feb 09 16:00:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1977-155	2443185.12	1977 Feb 10 15:00:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1977-156	2443185.38	1977 Feb 10 21:06:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1977-157	2443190.38	1977 Feb 15 21:00:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1977-158	2443190.38	1977 Feb 15 21:06:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1977-165	2443190.94	1977 Feb 16 10:30:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1977-167	2443191.12	1977 Feb 16 15:00:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1977-168	2443191.12	1977 Feb 17 15:00:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1977-169	2443192.38	1977 Feb 17 21:12:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1977-170	2443193.12	1977 Feb 18 15:00:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1977-1387	2443197.38	1977 Feb 22 21:00:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1977-172	2443197.38	1977 Feb 22 21:06:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1977-173	2443197.40	1977 Feb 22 21:30:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1977-174	2443198.12	1977 Feb 23 15:00:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1977-175	2443198.12	1977 Feb 23 15:00:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1977-177	2443199.38	1977 Feb 24 21:06:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1977-178	2443200.38	1977 Feb 25 15:00:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1977-179	2443200.12	1977 Feb 25 15:00:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1977-181	2443204.38	1977 Feb 25 15:00:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1977-182	2443205.12	1977 Feb 25 15:00:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1977-183	2443205.12	1977 Feb 25 15:00:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1977-184	2443205.17	1977 Feb 25 15:00:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1977-187	2443206.38	1977 Feb 26 21:00:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1977-188	2443206.38	1977 Feb 26 21:06:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1977-190	2443207.40	1977 Feb 27 09:00:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1977-191	2443211.38	1977 Feb 27 09:00:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1977-192	2443211.42	1977 Feb 28 22:00:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1977-1476	2443211.94	1977 Feb 28 22:00:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1977-193	2443212.12	1977 Feb 29 15:00:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1977-194	2443212.12	1977 Feb 29 15:00:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1977-196	2443213.38	1977 Feb 29 15:00:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1977-197	2443214.12	1977 Feb 29 15:00:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1977-14500	2443214.71	1977 Feb 29 15:00:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-



Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	OrbPay t	Agency	Launch_Code	Group	Category	LT/Cite	Cite	Notes
1977-Y207	2443289.23	1977 May 25 1730:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1977-H901	2443291.12	1977 May 27 1500:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1977-Y211	2443291.32	1977 May 27 1940:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1977-Y212	2443291.36	1977 May 27 2045:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1977-Y214	2443294.12	1977 May 30 1500:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1977-H1922	2443294.50	1977 Jun	H-100B	-	Intercomp prep	0.000	AM	SS	GMS/Tvanovskiy	Meteo	SR19,127	-	-
1977-H1923	2443294.50	1977 Jun	H-100B	-	Intercomp prep	0.000	AM	SS	GMS/Tvanovskiy	Meteo	SR19,127	-	-
1977-S417	2443295.62	1977 Jun 1 0745	H-100	-	-	0.000	ISRO/AN	SS	-	Aeron	ProclAS90,173	-	-
1977-Y215	2443296.08	1977 Jun 01 1400:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1977-Y216	2443296.08	1977 Jun 01 1400:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1977-Y217	2443296.12	1977 Jun 01 1500:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1977-Y218	2443296.12	1977 Jun 01 1500:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1977-Y219	2443296.12	1977 Jun 01 1500:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1977-Y223	2443299.23	1977 Jun 04 1900:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1977-Y224	2443299.46	1977 Jun 04 2300:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1977-Y225	2443301.46	1977 Jun 06 2300:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1977-Y226	2443302.90	1977 Jun 08 0930:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1977-H964	2443303.08	1977 Jun 08 1400:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1977-Y227	2443303.08	1977 Jun 08 1400:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1977-Y228	2443303.12	1977 Jun 08 1500:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1977-Y231	2443310.01	1977 Jun 15 1210:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1977-Y232	2443310.08	1977 Jun 15 1400:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1977-Y233	2443310.08	1977 Jun 15 1400:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1977-Y234	2443310.12	1977 Jun 15 1500:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1977-Y237	2443312.08	1977 Jun 17 1400:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1977-Y238	2443317.08	1977 Jun 22 1400:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1977-Y239	2443317.08	1977 Jun 22 1400:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1977-Y240	2443317.12	1977 Jun 22 1500:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1977-Y244	2443319.08	1977 Jun 24 1400:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1977-Y246	2443323.94	1977 Jun 29 1040:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1977-Y247	2443324.08	1977 Jun 29 1400:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1977-Y248	2443324.08	1977 Jun 29 1400:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1977-H1096	2443324.12	1977 Jun 29 1500:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1977-Y252	2443326.08	1977 Jul 01 1400:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1977-Y253	2443331.08	1977 Jul 01 1400:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1977-H1226	2443331.12	1977 Jul 06 1500:00	H-100B	-	Intercomp prep	0.000	AM	SS	GMS/Tvanovskiy	Meteo	RP-1063	SR19,127	-
1977-Y254	2443331.15	1977 Jul 06 1530:00	H-100	-	Intercomp prep	0.000	AM	SS	GMS/Tvanovskiy	Meteo	RP-1063	SR19,127	-
1977-Y256	2443335.08	1977 Jul 08 1400:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1977-Y259	2443335.08	1977 Jul 08 1400:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1977-Y260	2443335.12	1977 Jul 13 1500:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1977-Y261	2443335.22	1977 Jul 13 1500:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1977-Y263	2443335.65	1977 Jul 15 0900:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1977-H1264	2443340.77	1977 Jul 15 1500:00	H-100	-	Intercomp prep	0.000	AM	SS	GMS/Tvanovskiy	Meteo	RP-1063	SR19,127	-
1977-H1912	2443342.67	1977 Jul 18 0651	H-100B	-	Intercomp prep	0.000	AM	SS	GMS/Tvanovskiy	Meteo	RP-1063	SR19,127	-
1977-H1913	2443342.67	1977 Jul 18 0751	H-100B	-	Intercomp prep	0.000	AM	SS	GMS/Tvanovskiy	Meteo	RP-1063	SR19,127	-
1977-Y266	2443344.68	1977 Jul 20 0900:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1977-Y269	2443345.08	1977 Jul 20 1400:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1977-Y270	2443345.08	1977 Jul 20 1400:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1977-Y271	2443345.08	1977 Jul 21 0300	H-100B	-	Intercomp prep	0.000	AM	SS	GMS/Tvanovskiy	Meteo	RP-1063	SR19,127	-
1977-H1894	2443346.95	1977 Jul 21 2030	H-100B	-	Intercomp prep	0.000	AM	SS	GMS/Tvanovskiy	Meteo	RP-1063	SR19,127	-
1977-H1915	2443346.95	1977 Jul 21 2030	H-100B	-	Intercomp prep	0.000	AM	SS	GMS/Tvanovskiy	Meteo	RP-1063	SR19,127	-
1977-H1916	2443346.95	1977 Jul 21 2030	H-100B	-	Intercomp prep	0.000	AM	SS	GMS/Tvanovskiy	Meteo	RP-1063	SR19,127	-
1977-Y276	2443346.95	1977 Jul 21 2330	H-100B	-	Intercomp prep	0.000	AM	SS	GMS/Tvanovskiy	Meteo	RP-1063	SR19,127	-
1977-H1917	2443347.17	1977 Jul 25 0400:00	H-100B	-	Intercomp prep	0.000	AM	SS	GMS/Tvanovskiy	Meteo	RP-1063	SR19,127	-
1977-H1918	2443348.76	1977 Jul 25 0649	H-100B	-	Intercomp prep	0.000	AM	SS	GMS/Tvanovskiy	Meteo	RP-1063	SR19,127	-
1977-H1919	2443348.84	1977 Jul 25 0810	H-100B	-	Intercomp prep	0.000	AM	SS	GMS/Tvanovskiy	Meteo	RP-1063	SR19,127	-
1977-H1920	2443351.63	1977 Jul 27 0304	H-100B	-	Intercomp prep	0.000	AM	SS	GMS/Tvanovskiy	Meteo	RP-1063	SR19,127	-
1977-H1921	2443351.69	1977 Jul 27 0435	H-100B	-	Intercomp prep	0.000	AM	SS	GMS/Tvanovskiy	Meteo	RP-1063	SR19,127	-
1977-Y275	2443351.88	1977 Jul 27 0900:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1977-Y276	2443352.08	1977 Jul 27 1400:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1977-Y277	2443352.08	1977 Jul 27 1400:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1977-H1929	2443353.88	1977 Jul 29 0900:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1977-Y283	2443353.88	1977 Jul 29 0900:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1977-Y284	2443355.94	1977 Aug 03 1030:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1977-Y285	2443355.94	1977 Aug 03 1030:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1977-Y286	2443355.98	1977 Aug 03 1400:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1977-Y288	2443359.08	1977 Aug 05 0900:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1977-Y281	2443360.77	1977 Aug 05 0900:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1977-S422	2443366.09	1977 Aug 10 0700:00	H-100B	-	US-USSR Intercomp	0.000	AM	SS	GMS/Tvanovskiy	Meteo	RP-1063	-	-
1977-H1341	2443365.70	1977 Aug 10 0700:00	H-100B	-	US-USSR Intercomp	0.000	AM	SS	GMS/Tvanovskiy	Meteo	RP-1063	-	-
1977-Y292	2443365.88	1977 Aug 10 0900:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1977-Y293	2443365.94	1977 Aug 10 1030:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1977-Y294	2443366.08	1977 Aug 10 1400:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1977-S420	2443366.67	1977 Aug 12 0405	H-100B	-	US-USSR Intercomp	0.000	AM	SS	GMS/Tvanovskiy	Meteo	RP-1063	-	-
1977-Y297	2443367.67	1977 Aug 12 0900:00	H-100B	-	US-USSR Intercomp	0.000	AM	SS	GMS/Tvanovskiy	Meteo	RP-1063	-	-
1977-S333	2443367.75	1977 Aug 12 0606	H-100B	-	US-USSR Intercomp	0.000	AM	SS	GMS/Tvanovskiy	Meteo	RP-1063	-	-
1977-S334	2443367.75	1977 Aug 12 1105	H-100B	-	US-USSR Intercomp	0.000	AM	SS	GMS/Tvanovskiy	Meteo	RP-1063	-	-
1977-S335	2443371.23	1977 Aug 15 1735	H-100B	-	US-USSR Intercomp	0.000	AM	SS	GMS/Tvanovskiy	Meteo	RP-1063	-	-
1977-S424	2443371.32	1977 Aug 15 1935	H-100B	-	US-USSR Intercomp	0.000	AM	SS	GMS/Tvanovskiy	Meteo	RP-1063	-	-
1977-H15	2443371.55	1977 Aug 16 0105	H-100B	-	US-USSR Intercomp	0.000	AM	SS	GMS/Tvanovskiy	Meteo	RP-1063	-	-
1977-S425	2443372.28	1977 Aug 16 1840	H-100B	-	US-USSR Intercomp	0.000	AM	SS	GMS/Tvanovskiy	Meteo	RP-1063	-	-
1977-S337	2443372.35	1977 Aug 16 2029	H-100B	-	US-USSR Intercomp	0.000	AM	SS	GMS/Tvanovskiy	Meteo	RP-1063	-	-
1977-Y299	2443373.88	1977 Aug 17 0900:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1977-Y300	2443373.88	1977 Aug 17 1400:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1977-H1363	2443373.08	1977 Aug 17 1400:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1977-Y301	2443373.18	1977 Aug 17 1620:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1977-S336	2443373.34	1977 Aug 17 2015	H-100B	-	US-USSR Intercomp	0.000	AM	SS	GMS/Tvanovskiy	Meteo	RP-1063	-	-
1977-S426	2443374.56	1977 Aug 19 0120	H-100B	-	US-USSR Intercomp	0.000	AM	SS	GMS/Tvanovskiy	Meteo	RP-1063	-	-











Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	OrbPay t	Agency	Launch_Code	Group	Category	LT/Cite	Cite	Notes
1978-12341	2443695.08	1978 Jul 05 14:00:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1978-4712	2443695.08	1978 Jul 05 14:00:00	H-100	-	ISRD 8.382?	0.000	AM	SU	-	Aeron	WDGRF	-	-
1978-12342	2443695.17	1978 Jul 05 16:00:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1978-12346	2443697.08	1978 Jul 07 14:00:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1978-12347	2443697.25	1978 Jul 07 16:00:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1978-12348	2443700.17	1978 Jul 10 16:00:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1978-12349	2443702.08	1978 Jul 12 14:00:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1978-12350	2443702.08	1978 Jul 12 14:00:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1978-12351	2443702.08	1978 Jul 12 14:00:00	H-100	-	ISRD 8.383?	0.000	AM	SU	-	Aeron	WDGRF	-	-
1978-12352	2443702.09	1978 Jul 12 14:07:00	H-100B	-	ISRD 8.1?	0.000	AM	SU	-	Aeron	WDGRF	-	-
1978-12353	2443702.17	1978 Jul 12 16:00:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1978-12356	2443703.08	1978 Jul 13 14:00:00	H-100	-	ISRD 8.384?	0.000	AM	SU	-	Aeron	WDGRF	-	-
1978-12360	2443704.08	1978 Jul 14 14:00:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1978-12361	2443705.08	1978 Jul 15 14:00:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1978-12362	2443705.08	1978 Jul 15 14:00:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1978-12363	2443705.08	1978 Jul 19 14:00:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1978-12364	2443709.11	1978 Jul 19 14:54:00	H-100B	-	ISRD 8.385?	0.000	AM	SU	-	Aeron	WDGRF	-	-
1978-47159	2443709.12	1978 Jul 19 15:00:00	H-100	-	ISRD 8.1?	0.000	AM	SU	-	Aeron	WDGRF	-	-
1978-12368	2443711.08	1978 Jul 19 16:00:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1978-12369	2443716.08	1978 Jul 26 14:00:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1978-12370	2443716.08	1978 Jul 26 14:00:00	H-100	-	ISRD 8.386?	0.000	AM	SU	-	Aeron	WDGRF	-	-
1978-12371	2443716.17	1978 Jul 26 16:00:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1978-12375	2443723.08	1978 Aug 02 14:00:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1978-12376	2443723.08	1978 Aug 02 14:00:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1978-12377	2443723.12	1978 Aug 02 15:00:00	H-100	-	ISRD 8.387?	0.000	AM	SU	-	Aeron	WDGRF	-	-
1978-12378	2443723.17	1978 Aug 02 16:00:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1978-12383	2443725.08	1978 Aug 04 14:00:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1978-12384	2443730.08	1978 Aug 09 14:00:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1978-12385	2443730.08	1978 Aug 09 14:00:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1978-12386	2443730.08	1978 Aug 09 14:00:00	H-100B	-	ISRD 8.388?	0.000	AM	SU	-	Aeron	WDGRF	-	-
1978-12387	2443730.12	1978 Aug 09 16:00:00	H-100	-	ISRD 8.1?	0.000	AM	SU	-	Aeron	WDGRF	-	-
1978-12388	2443730.17	1978 Aug 09 16:00:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1978-12391	2443730.28	1978 Aug 09 19:00:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1978-12393	2443731.10	1978 Aug 10 14:20:00	H-100B	-	-	0.000	AM	SU	-	Aeron/Tomos	WDGRF	-	-
1978-12394	2443731.10	1978 Aug 10 14:30:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1978-12395	2443732.08	1978 Aug 11 14:00:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1978-12396	2443735.10	1978 Aug 14 14:20:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1978-12397	2443735.10	1978 Aug 14 14:20:00	H-100B	-	-	0.000	AM	SU	-	Aeron/Tomos	WDGRF	-	-
1978-12398	2443735.15	1978 Aug 14 15:30:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1978-12399	2443737.04	1978 Aug 16 13:00:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1978-12400	2443737.08	1978 Aug 16 14:00:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1978-1801	2443737.08	1978 Aug 16 14:00:00	H-100	-	ISRD 8.389?	0.000	AM	SU	-	Aeron	WDGRF	-	-
1978-1805	2443737.08	1978 Aug 16 16:00:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1978-1802	2443737.11	1978 Aug 16 16:30:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1978-1804	2443737.11	1978 Aug 16 22:30:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1978-1807	2443737.44	1978 Aug 16 22:30:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1978-1808	2443738.08	1978 Aug 16 15:30:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1978-1809	2443740.11	1978 Aug 16 17:00:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1978-1810	2443740.11	1978 Aug 16 17:00:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1978-1811	2443744.08	1978 Aug 23 14:00:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1978-1812	2443744.08	1978 Aug 23 14:00:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1978-1813	2443744.08	1978 Aug 23 14:12:00	H-100	-	ISRD 8.390?	0.000	AM	SU	-	Aeron	WDGRF	-	-
1978-1814	2443744.08	1978 Aug 23 14:12:00	H-100B	-	ISRD 8.391?	0.000	AM	SU	-	Aeron	WDGRF	-	-
1978-1815	2443744.18	1978 Aug 23 16:35:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1978-1816	2443744.21	1978 Aug 23 17:00:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1978-1817	2443744.57	1978 Aug 24 01:45:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1978-1818	2443746.10	1978 Aug 25 14:17:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1978-1819	2443746.10	1978 Aug 28 13:00:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1978-1820	2443746.04	1978 Aug 29 16:06:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1978-1821	2443750.17	1978 Aug 29 16:06:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1978-1822	2443750.68	1978 Aug 30 04:20:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1978-1823	2443750.68	1978 Aug 30 04:20:00	H-100B	-	-	0.000	AM	SU	-	Aeron/Tomos	WDGRF	-	-
1978-1824	2443751.04	1978 Aug 30 13:00:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1978-1825	2443751.08	1978 Aug 30 14:00:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1978-1826	2443751.08	1978 Aug 30 14:00:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1978-1827	2443751.08	1978 Aug 30 14:00:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1978-1828	2443751.08	1978 Aug 30 14:00:00	H-100	-	ISRD 8.392?	0.000	AM	SU	-	Aeron	WDGRF	-	-
1978-1829	2443752.57	1978 Sep 1 01:40:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1978-1830	2443753.09	1978 Sep 1 14:10:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1978-1831	2443755.89	1978 Sep 4 04:29:00	H-100	-	ISRD 8.393	0.000	AM	SS	PRL/Subbaraya	Aeron	WDGRF	SR20,75	-
1978-1832	2443755.89	1978 Sep 4 18:00:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1978-1833	2443756.25	1978 Sep 5 02:00:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1978-1834	2443756.68	1978 Sep 5 14:00:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1978-1835	2443757.88	1978 Sep 6 04:20:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1978-1836	2443758.10	1978 Sep 6 14:17:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1978-1837	2443758.13	1978 Sep 6 16:00:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1978-1838	2443758.17	1978 Sep 6 18:00:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1978-1839	2443760.15	1978 Sep 8 15:36:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1978-1840	2443764.08	1978 Sep 12 14:00:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1978-1841	2443764.08	1978 Sep 13 02:20:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1978-1842	2443765.08	1978 Sep 13 14:00:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1978-1843	2443765.08	1978 Sep 13 14:00:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1978-1844	2443765.19	1978 Sep 15 16:30:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1978-1845	2443767.31	1978 Sep 15 19:30:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1978-1846	2443772.08	1978 Sep 20 14:00:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1978-1847	2443772.08	1978 Sep 20 14:00:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1978-1848	2443772.17	1978 Sep 20 16:07:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-





Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	OrbPay	Agency	Launch_Code	Group	Category	LT/Cite	Cite	Notes
1979-Y141	2443946.69	1979 Mar 14 0430:00	M-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1979-W371	2443946.88	1979 Mar 14 0908:00	M-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1979-Y142	2443947.00	1979 Mar 14 1200:00	M-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1979-Y143	2443947.04	1979 Mar 14 1300:00	M-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1979-Y147	2443947.38	1979 Mar 14 2100:00	M-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1979-Y149	2443947.69	1979 Mar 15 0435:00	M-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1979-Y150	2443947.83	1979 Mar 15 0800:00	M-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1979-Y151	2443948.67	1979 Mar 16 0400:00	M-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1979-W383	2443948.69	1979 Mar 16 0430:00	M-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1979-Y152	2443948.83	1979 Mar 16 0750:00	M-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1979-Y153	2443949.00	1979 Mar 16 1200:00	M-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1979-Y154	2443949.75	1979 Mar 17 0500:00	M-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1979-Y155	2443949.83	1979 Mar 17 0750:00	M-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1979-Y156	2443950.67	1979 Mar 18 0400:00	M-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1979-Y157	2443950.86	1979 Mar 18 0845:00	M-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1979-Y158	2443951.00	1979 Mar 18 1200:00	M-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1979-Y159	2443951.21	1979 Mar 18 1700:00	M-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1979-Y160	2443951.29	1979 Mar 18 1900:00	M-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1979-Y161	2443951.67	1979 Mar 19 0400:00	M-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1979-Y162	2443951.81	1979 Mar 19 0725:00	M-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1979-Y163	2443951.99	1979 Mar 19 1140:00	M-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1979-Y164	2443952.67	1979 Mar 20 0400:00	M-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1979-Y165	2443952.80	1979 Mar 20 0715:00	M-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1979-Y166	2443952.99	1979 Mar 20 1140:00	M-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1979-Y167	2443953.23	1979 Mar 20 1730:00	M-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1979-Y168	2443953.69	1979 Mar 21 0430:00	M-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1979-Y169	2443953.80	1979 Mar 21 0705:00	M-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1979-Y170	2443953.99	1979 Mar 21 1140:00	M-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1979-Y171	2443954.21	1979 Mar 21 1700:00	M-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1979-Y176	2443954.67	1979 Mar 22 0400:00	M-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1979-Y177	2443954.79	1979 Mar 22 0655:00	M-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1979-Y178	2443954.99	1979 Mar 22 1145:00	M-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1979-Y179	2443955.67	1979 Mar 23 0400:00	M-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1979-Y180	2443955.78	1979 Mar 23 0645:00	M-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1979-Y181	2443956.67	1979 Mar 24 0400:00	M-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1979-Y182	2443956.78	1979 Mar 24 0645:00	M-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1979-Y183	2443957.00	1979 Mar 24 1200:00	M-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1979-Y184	2443957.08	1979 Mar 24 1400:00	M-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1979-Y185	2443957.67	1979 Mar 25 0400:00	M-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1979-Y186	2443957.77	1979 Mar 25 0630:00	M-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1979-Y187	2443958.67	1979 Mar 26 0400:00	M-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1979-Y188	2443958.73	1979 Mar 26 0555:00	M-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1979-Y189	2443958.91	1979 Mar 26 0955:00	M-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1979-Y190	2443958.99	1979 Mar 27 0400:00	M-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1979-Y191	2443959.74	1979 Mar 27 0610:00	M-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1979-Y192	2443959.85	1979 Mar 27 1000:00	M-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1979-Y193	2443960.25	1979 Mar 27 1400:00	M-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1979-Y194	2443960.40	1979 Mar 28 0400:00	M-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1979-Y195	2443960.67	1979 Mar 28 0600:00	M-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1979-Y196	2443960.75	1979 Mar 28 1100:00	M-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1979-Y197	2443960.89	1979 Mar 28 1700:00	M-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1979-Y201	2443961.75	1979 Mar 29 0555:00	M-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1979-Y202	2443961.87	1979 Mar 29 0400:00	M-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1979-Y203	2443962.74	1979 Mar 30 0545:00	M-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1979-Y204	2443963.69	1979 Mar 30 1140:00	M-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1979-Y205	2443963.71	1979 Mar 31 0500:00	M-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1979-Y206	2443963.73	1979 Mar 31 0535:00	M-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1979-Y207	2443964.12	1979 Mar 31 1500:00	M-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1979-Y208	2443964.17	1979 Mar 31 1600:00	M-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1979-Y209	2443964.67	1979 Apr 01 0400:00	M-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1979-Y210	2443964.73	1979 Apr 01 0525:00	M-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1979-Y211	2443965.00	1979 Apr 01 1200:00	M-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1979-Y212	2443965.67	1979 Apr 02 0400:00	M-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1979-Y213	2443965.72	1979 Apr 02 0515:00	M-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1979-Y214	2443965.67	1979 Apr 03 0400:00	M-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1979-Y215	2443966.72	1979 Apr 03 0510:00	M-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1979-Y216	2443967.87	1979 Apr 03 1200:00	M-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1979-Y217	2443967.71	1979 Apr 04 0500:00	M-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1979-Y219	2443968.25	1979 Apr 04 1800:00	M-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1979-Y222	2443968.67	1979 Apr 05 0400:00	M-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1979-Y223	2443968.70	1979 Apr 05 0450:00	M-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1979-Y224	2443969.00	1979 Apr 05 1200:00	M-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1979-Y226	2443969.69	1979 Apr 06 0440:00	M-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1979-Y227	2443969.89	1979 Apr 06 0440:00	M-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1979-Y228	2443969.71	1979 Apr 06 0500:00	M-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1979-Y229	2443970.65	1979 Apr 07 0340:00	M-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1979-Y230	2443970.69	1979 Apr 07 0430:00	M-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1979-Y231	2443971.00	1979 Apr 07 1200:00	M-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1979-Y232	2443971.08	1979 Apr 07 1400:00	M-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1979-Y233	2443971.65	1979 Apr 08 0340:00	M-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1979-Y234	2443971.88	1979 Apr 08 0425:00	M-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1979-Y235	2443972.65	1979 Apr 09 0340:00	M-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1979-Y236	2443972.88	1979 Apr 09 0415:00	M-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1979-Y237	2443972.75	1979 Apr 9 0553	M-100	-	-	0.000	TSR0/AN	SS	-	Aeron	WDGRF	-	-



Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	OrbPay t	Agency	Launch_Code	Group	Category	LT Cite	Cite	Notes
1979-1238	2443973.00	1979 Apr 09 1200:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1979-1239	2443973.63	1979 Apr 10 0305:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1979-1240	2443973.65	1979 Apr 10 0340:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1979-1241	2443973.70	1979 Apr 10 0450:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1979-1242	2443974.65	1979 Apr 11 0350:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1979-1243	2443974.66	1979 Apr 11 0355:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1979-1244	2443974.96	1979 Apr 11 1105:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1979-1246	2443975.21	1979 Apr 11 1700:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1979-1247	2443975.65	1979 Apr 12 0300:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1979-1248	2443978.00	1979 Apr 14 1201:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1979-5293	2443980.52	1979 Apr 17 1002:00	H-100	-	-	0.000	TSRO/AN	SS	-	Aeron	PreCLASS90,173	WDGRF	-
1979-1249	2443981.40	1979 Apr 17 2131:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1979-1250	2443981.58	1979 Apr 18 0200:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1979-1251	2443982.08	1979 Apr 18 1400:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1979-1254	2443983.08	1979 Apr 19 1400:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1979-1255	2443984.29	1979 Apr 20 1900:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1979-1256	2443985.00	1979 Apr 21 1202:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1979-1256	2443985.38	1979 Apr 21 2100:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1979-1257	2443986.33	1979 Apr 22 2000:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1979-1258	2443986.54	1979 Apr 24 1139:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1979-1259	2443987.99	1979 Apr 24 2010:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1979-1260	2443988.62	1979 Apr 25 0300:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1979-1261	2443989.08	1979 Apr 25 1400:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1979-1262	2443990.46	1979 Apr 25 1700:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1979-1263	2443991.21	1979 Apr 26 2300:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1979-1265	2443993.33	1979 Apr 27 1222:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1979-1267	2443995.33	1979 Apr 29 2000:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1979-1268	2443995.64	1979 Apr 01 2000:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1979-1269	2443995.98	1979 Apr 02 0325:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1979-1270	2443996.29	1979 Apr 02 1130:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1979-1272	2443996.42	1979 Apr 02 1900:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1979-1274	2443996.42	1979 Apr 02 2200:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1979-1275	2443996.58	1979 Apr 03 0200:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1979-1276	2443996.62	1979 Apr 03 0300:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1979-1277	2444002.58	1979 Apr 09 0200:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1979-1279	2444003.05	1979 Apr 09 1400:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1979-1280	2444003.21	1979 Apr 09 1700:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1979-1283	2444003.94	1979 Apr 10 0100:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1979-1284	2444003.62	1979 Apr 10 0300:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1979-1285	2444007.42	1979 Apr 13 2200:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1979-1286	2444009.55	1979 Apr 16 0940:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1979-1637	2444009.58	1979 Apr 16 0200:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1979-1638	2444009.60	1979 Apr 16 0245:00	H-100	-	-	0.000	TSRO/AN	SS	-	Aeron	PreCLASS90,173	WDGRF	-
1979-1288	2444009.91	1979 Apr 16 0945:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1979-1289	2444010.06	1979 Apr 16 1324:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1979-1290	2444010.08	1979 Apr 16 1400:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1979-1291	2444010.08	1979 Apr 16 1600:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1979-1292	2444010.98	1979 Apr 16 2100:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1979-1293	2444011.98	1979 Apr 18 0100:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1979-1294	2444011.58	1979 Apr 18 0300:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1979-1295	2444011.68	1979 Apr 18 1324:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1979-1296	2444012.10	1979 Apr 18 1445:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1979-1297	2444012.40	1979 Apr 18 2200:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1979-1298	2444012.40	1979 Apr 19 2200:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1979-1299	2444012.40	1979 Apr 21 1325:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1979-1301	2444012.40	1979 Apr 21 2200:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1979-1302	2444012.40	1979 Apr 21 2200:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1979-1303	2444012.43	1979 Apr 22 2200:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1979-1304	2444012.43	1979 Apr 23 0200:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1979-1305	2444016.58	1979 Apr 23 0200:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1979-1306	2444017.08	1979 Apr 23 1400:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1979-1307	2444017.08	1979 Apr 23 1400:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1979-1308	2444017.11	1979 Apr 23 1432:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1979-1309	2444017.46	1979 Apr 23 2300:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1979-1310	2444018.42	1979 Apr 24 2300:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1979-1311	2444019.06	1979 Apr 25 1323:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1979-1312	2444019.53	1979 Apr 25 1400:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1979-1313	2444020.42	1979 Apr 26 0040:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1979-1314	2444020.42	1979 Apr 26 2200:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1979-1315	2444020.64	1979 Apr 27 0315:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1979-1693	2444021.59	1979 Apr 28 0211:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1979-1316	2444021.64	1979 Apr 28 0316:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1979-1317	2444023.40	1979 Apr 29 2130:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1979-1318	2444023.40	1979 Apr 29 2130:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1979-1319	2444024.11	1979 Apr 30 1440:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1979-1320	2444024.21	1979 Apr 30 1700:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1979-1322	2444024.29	1979 Apr 30 1900:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1979-1324	2444026.08	1979 Jun 01 1400:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1979-1325	2444027.12	1979 Jun 02 1500:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1979-1327	2444030.12	1979 Jun 05 1500:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1979-1328	2444030.40	1979 Jun 05 2130:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1979-1329	2444030.58	1979 Jun 06 0200:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1979-5294	2444030.91	1979 Jun 6 0949	H-100	-	-	0.000	TSRO/AN	SS	-	Aeron	PreCLASS90,173	WDGRF	-
1979-1330	2444031.08	1979 Jun 06 1400:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1979-1331	2444031.12	1979 Jun 06 1500:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1979-1333	2444032.99	1979 Jun 08 1140:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-



Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	OrbPay	Agency	Launch_Code	Group	Category	LT_Cite	Cite	Notes
1979-7446	2444108.08	1979 Aug 22 14:00:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1979-7447	2444109.04	1979 Aug 23 13:00:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1979-7448	2444109.08	1979 Aug 23 13:00:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1979-7449	2444109.08	1979 Aug 23 14:00:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1979-7450	2444110.08	1979 Aug 24 14:00:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1979-7451	2444111.00	1979 Aug 25 12:00:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1979-7452	2444114.00	1979 Aug 28 12:00:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1979-7453	2444114.08	1979 Aug 28 14:00:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1979-7454	2444114.52	1979 Aug 29 00:00:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1979-7455	2444114.58	1979 Aug 29 02:00:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1979-7456	2444115.08	1979 Aug 29 14:00:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1979-7457	2444115.12	1979 Aug 29 15:00:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1979-7458	2444116.00	1979 Aug 30 12:00:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1979-7459	2444121.40	1979 Sep 04 21:30:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1979-7460	2444121.58	1979 Sep 05 02:00:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1979-7461	2444122.19	1979 Sep 05 16:30:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1979-7462	2444122.00	1979 Sep 06 12:00:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1979-7463	2444127.22	1979 Sep 10 17:20:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1979-7464	2444128.40	1979 Sep 11 21:30:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1979-7465	2444128.58	1979 Sep 12 02:00:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1979-7466	2444128.58	1979 Sep 12 14:00:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1979-7467	2444129.12	1979 Sep 12 15:00:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1979-7468	2444131.10	1979 Sep 14 14:30:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1979-7469	2444136.08	1979 Sep 19 14:00:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1979-7470	2444136.08	1979 Sep 19 14:00:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1979-7471	2444136.17	1979 Sep 19 16:00:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1979-7472	2444142.45	1979 Sep 25 22:50:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1979-7473	2444142.58	1979 Sep 26 02:00:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1979-7474	2444143.08	1979 Sep 26 14:00:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1979-7475	2444149.45	1979 Oct 02 22:45:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1979-7476	2444149.56	1979 Oct 03 02:00:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1979-7477	2444150.21	1979 Oct 03 17:00:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1979-7478	2444156.46	1979 Oct 09 23:00:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1979-7479	2444156.58	1979 Oct 10 02:00:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1979-7480	2444157.12	1979 Oct 10 15:00:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1979-7481	2444163.58	1979 Oct 17 02:00:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1979-7482	2444164.05	1979 Oct 17 14:00:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1979-7483	2444164.31	1979 Oct 17 19:30:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1979-7484	2444170.43	1979 Oct 23 22:20:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1979-7485	2444170.58	1979 Oct 24 02:00:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1979-7486	2444171.08	1979 Oct 24 14:00:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1979-7487	2444177.46	1979 Oct 31 02:00:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1979-7488	2444178.58	1979 Oct 31 15:00:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1979-7489	2444179.88	1979 Nov 02 02:00:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1979-7490	2444179.98	1979 Nov 02 04:30:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1979-7491	2444180.17	1979 Nov 02 16:00:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1979-7492	2444183.17	1979 Nov 05 15:00:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1979-7493	2444183.40	1979 Nov 05 15:30:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1979-7494	2444184.60	1979 Nov 07 04:30:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1979-7495	2444184.68	1979 Nov 07 14:40:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1979-7496	2444185.21	1979 Nov 08 17:00:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1979-7497	2444187.35	1979 Nov 09 20:35:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1979-7498	2444189.08	1979 Nov 11 14:00:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1979-7499	2444189.12	1979 Nov 11 15:00:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1979-7500	2444189.19	1979 Nov 11 16:30:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1979-7501	2444189.21	1979 Nov 11 17:00:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1979-7502	2444190.12	1979 Nov 12 15:00:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1979-7503	2444190.17	1979 Nov 12 16:00:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1979-7504	2444190.25	1979 Nov 12 18:00:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1979-7505	2444191.08	1979 Nov 13 14:00:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1979-7506	2444191.19	1979 Nov 13 16:30:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1979-7507	2444191.24	1979 Nov 13 17:40:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1979-7508	2444191.58	1979 Nov 14 02:00:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1979-7509	2444192.08	1979 Nov 14 14:00:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1979-7510	2444192.08	1979 Nov 14 14:00:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1979-7511	2444192.15	1979 Nov 14 15:40:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1979-7512	2444192.21	1979 Nov 14 17:00:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1979-7513	2444192.29	1979 Nov 14 19:00:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1979-7514	2444193.33	1979 Nov 15 20:00:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1979-7515	2444193.38	1979 Nov 15 21:00:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1979-7516	2444193.58	1979 Nov 16 02:00:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1979-7517	2444198.48	1979 Nov 20 23:30:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1979-7518	2444199.08	1979 Nov 21 02:00:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1979-7519	2444199.08	1979 Nov 21 14:00:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1979-7520	2444200.58	1979 Nov 23 02:00:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1979-7521	2444205.08	1979 Nov 27 14:00:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1979-7522	2444205.12	1979 Nov 27 15:00:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1979-7523	2444205.58	1979 Nov 28 02:00:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1979-7524	2444206.08	1979 Nov 28 14:00:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1979-7525	2444206.08	1979 Nov 28 14:00:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1979-7526	2444206.19	1979 Nov 28 16:30:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1979-7527	2444207.08	1979 Nov 29 14:00:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1979-7528	2444207.12	1979 Nov 29 15:00:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-













Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	OrbPay t	Agency	Launch_Code	Group	Category	LT/Cite	Cite	Notes
1980-H130	2444592.48	1980 Dec 18 2330:00	H-100	-	-	0.000	GMS	SS	GMS/Danilov	Aeron	WDGRF	-	-
1980-7501	2444597.33	1980 Dec 23 2000:00	H-100	-	-	0.000	GMS	SS	GMS/Danilov	Aeron	WDGRF	-	-
1980-7502	2444597.67	1980 Dec 24 0400:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1980-7503	2444598.08	1980 Dec 24 1400:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1980-7504	2444598.08	1980 Dec 24 1400:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1980-7506	2444598.29	1980 Dec 24 1900:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1980-7507	2444604.42	1980 Dec 30 2200:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1980-7508	2444604.46	1980 Dec 30 2300:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1980-7510	2444604.58	1980 Dec 31 0200:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1980-7511	2444605.08	1980 Dec 31 1400:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1981-701	2444606.33	1981 Jan 01 2000:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1981-702	2444609.33	1981 Jan 04 2000:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1981-703	2444610.17	1981 Jan 05 1600:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1981-704	2444611.33	1981 Jan 06 2000:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1981-705	2444612.08	1981 Jan 07 1400:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1981-706	2444612.08	1981 Jan 07 1400:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1981-707	2444612.17	1981 Jan 07 1600:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1981-708	2444613.33	1981 Jan 08 2000:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1981-709	2444614.17	1981 Jan 09 1600:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1981-710	2444615.33	1981 Jan 11 2000:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1981-711	2444617.17	1981 Jan 12 1600:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1981-712	2444618.33	1981 Jan 13 2000:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1981-714	2444618.58	1981 Jan 14 0200:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1981-715	2444618.69	1981 Jan 14 0400:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1981-716	2444619.08	1981 Jan 14 1400:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1981-717	2444619.08	1981 Jan 14 1400:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1981-718	2444619.12	1981 Jan 14 1400:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1981-720	2444620.33	1981 Jan 15 2000:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1981-721	2444621.12	1981 Jan 16 1400:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1981-722	2444623.33	1981 Jan 18 2000:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1981-723	2444624.17	1981 Jan 19 1600:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1981-725	2444625.39	1981 Jan 20 2120:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1981-726	2444625.69	1981 Jan 21 0400:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1981-728	2444626.07	1981 Jan 21 1340:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1981-724	2444626.08	1981 Jan 21 1400:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1981-725	2444626.08	1981 Jan 21 1400:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1981-726	2444626.12	1981 Jan 21 1500:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1981-727	2444626.12	1981 Jan 22 2000:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1981-728	2444626.12	1981 Jan 23 1500:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1981-728	2444626.12	1981 Jan 24 1400:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1981-728	2444626.12	1981 Jan 25 2040:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1981-729	2444630.36	1981 Jan 26 1300:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1981-727	2444631.04	1981 Jan 26 1600:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1981-730	2444631.33	1981 Jan 27 0600:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1981-731	2444632.33	1981 Jan 28 0900:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1981-732	2444632.71	1981 Jan 28 1340:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1981-733	2444633.06	1981 Jan 28 1400:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1981-734	2444633.06	1981 Jan 28 1400:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1981-735	2444633.06	1981 Jan 28 1400:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1981-736	2444633.06	1981 Jan 28 1400:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1981-737	2444633.06	1981 Jan 28 1400:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1981-738	2444633.45	1981 Jan 30 2500:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1981-739	2444635.45	1981 Jan 30 2500:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1981-740	2444635.03	1981 Feb 03 1500:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1981-741	2444639.04	1981 Feb 03 1300:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1981-742	2444639.33	1981 Feb 03 2000:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1981-743	2444640.08	1981 Feb 04 1400:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1981-744	2444640.08	1981 Feb 04 1400:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1981-745	2444641.33	1981 Feb 04 1600:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1981-746	2444641.33	1981 Feb 05 2000:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1981-747	2444645.17	1981 Feb 06 1600:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1981-748	2444646.04	1981 Feb 10 1300:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1981-749	2444646.33	1981 Feb 11 1330:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1981-750	2444647.06	1981 Feb 11 1330:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1981-751	2444647.08	1981 Feb 11 1400:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1981-752	2444647.08	1981 Feb 11 1400:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1981-753	2444648.33	1981 Feb 12 2000:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1981-754	2444649.21	1981 Feb 13 1700:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1981-755	2444651.06	1981 Feb 15 1330:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1981-757	2444653.11	1981 Feb 17 1330:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1981-758	2444653.33	1981 Feb 17 1440:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1981-759	2444653.33	1981 Feb 17 2000:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1981-760	2444654.06	1981 Feb 18 1330:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1981-761	2444654.08	1981 Feb 18 1400:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1981-762	2444654.11	1981 Feb 18 1440:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1981-763	2444654.11	1981 Feb 18 1440:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1981-764	2444654.29	1981 Feb 18 1900:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1981-765	2444655.33	1981 Feb 19 2000:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1981-766	2444655.40	1981 Feb 19 2130:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1981-769	2444657.12	1981 Feb 21 1500:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1981-770	2444659.12	1981 Feb 23 1500:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1981-771	2444660.08	1981 Feb 24 1350:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1981-772	2444660.40	1981 Feb 24 2130:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1981-773	2444661.08	1981 Feb 25 1400:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1981-774	2444661.09	1981 Feb 25 1407:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1981-776	2444661.12	1981 Feb 25 1500:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1981-777	2444661.17	1981 Feb 25 1600:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1981-778	2444661.21	1981 Feb 25 1700:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	OrbPay	Agency	Launch_Code	Group	Category	LT/Cite	Cite	Notes
1981-1779	2444652.35	1981 Feb 26 2030:00	M-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1981-1782	2444653.17	1981 Feb 27 1600:00	M-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1981-1784	2444655.53	1981 Mar 02 0040:00	M-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1981-1785	2444655.73	1981 Mar 02 0530:00	M-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1981-1789	2444657.24	1981 Mar 03 1740:00	M-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1981-1785	2444657.35	1981 Mar 03 2030:00	M-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1981-1786	2444658.08	1981 Mar 04 1400:00	M-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1981-1787	2444658.08	1981 Mar 04 1540:00	M-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1981-1788	2444658.08	1981 Mar 04 1640:00	M-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1981-1789	2444658.21	1981 Mar 04 1700:00	M-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1981-1790	2444659.33	1981 Mar 05 2000:00	M-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1981-1792	2444670.40	1981 Mar 06 2130:00	M-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1981-1793	2444671.17	1981 Mar 07 1600:00	M-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1981-1794	2444671.21	1981 Mar 07 1700:00	M-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1981-1794	2444671.33	1981 Mar 10 2000:00	M-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1981-1795	2444675.08	1981 Mar 11 1400:00	M-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1981-1796	2444675.08	1981 Mar 11 1400:00	M-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1981-1797	2444675.17	1981 Mar 11 1600:00	M-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1981-1798	2444675.59	1981 Mar 13 0210:00	M-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1981-1799	2444677.17	1981 Mar 13 1600:00	M-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1981-1100	2444681.33	1981 Mar 17 2000:00	M-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1981-1101	2444682.08	1981 Mar 18 1400:00	M-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1981-1176	2444682.08	1981 Mar 18 1400:00	M-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1981-1102	2444682.17	1981 Mar 18 1600:00	M-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1981-1103	2444683.17	1981 Mar 19 1600:00	M-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1981-1161	2444683.33	1981 Mar 19 2000:00	M-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1981-1104	2444683.80	1981 Mar 20 0710:00	M-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1981-1105	2444685.35	1981 Mar 24 2020:00	M-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1981-1107	2444685.08	1981 Mar 25 1400:00	M-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1981-1108	2444685.08	1981 Mar 25 1400:00	M-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1981-1110	2444685.18	1981 Mar 25 1620:00	M-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1981-1204	2444690.46	1981 Mar 26 2300:00	M-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1981-1112	2444691.17	1981 Mar 27 1600:00	M-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1981-1113	2444692.17	1981 Mar 28 1600:00	M-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1981-1114	2444692.22	1981 Mar 28 1720:00	M-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1981-1115	2444692.27	1981 Mar 28 1830:00	M-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1981-1116	2444693.19	1981 Mar 29 1630:00	M-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1981-1117	2444693.24	1981 Mar 29 1740:00	M-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1981-1118	2444693.28	1981 Mar 29 1850:00	M-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1981-1120	2444694.18	1981 Mar 29 1920:00	M-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1981-1121	2444694.23	1981 Mar 30 1530:00	M-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1981-1122	2444694.27	1981 Mar 30 1535:00	M-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1981-1123	2444695.39	1981 Mar 31 2120:00	M-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1981-1125	2444696.08	1981 Apr 01 1400:00	M-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1981-1126	2444696.09	1981 Apr 01 1400:00	M-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1981-1127	2444696.55	1981 Apr 01 1410:00	M-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1981-1130	2444696.85	1981 Apr 06 0620:00	M-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1981-1131	2444700.84	1981 Apr 07 0710:00	M-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1981-1132	2444702.95	1981 Apr 07 2030:00	M-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1981-1233	2444703.91	1981 Apr 08 1400:00	M-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1981-1135	2444703.91	1981 Apr 14 2000:00	M-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1981-1224	2444703.91	1981 Apr 14 2000:00	M-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1981-1147	2444703.93	1981 Apr 15 1400:00	M-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1981-1148	2444710.08	1981 Apr 15 1400:00	M-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1981-1149	2444710.08	1981 Apr 15 1400:00	M-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1981-1150	2444710.21	1981 Apr 15 1700:00	M-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1981-1152	2444716.33	1981 Apr 21 2000:00	M-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1981-1153	2444716.33	1981 Apr 21 2000:00	M-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1981-1154	2444717.06	1981 Apr 22 0130:00	M-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1981-1155	2444717.06	1981 Apr 22 1400:00	M-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1981-1156	2444717.08	1981 Apr 22 1400:00	M-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1981-1162	2444724.31	1981 Apr 02 1830:00	M-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1981-1168	2444727.27	1981 Apr 02 1830:00	M-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1981-1169	2444728.08	1981 Apr 03 1400:00	M-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1981-1166	2444729.33	1981 Apr 04 2000:00	M-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1981-1167	2444730.33	1981 Apr 05 2000:00	M-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1981-1168	2444731.08	1981 Apr 06 1400:00	M-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1981-1169	2444731.08	1981 Apr 06 1400:00	M-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1981-1171	2444734.27	1981 Apr 09 1835:00	M-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1981-1172	2444737.21	1981 Apr 12 1700:00	M-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1981-1173	2444737.26	1981 Apr 12 1810:00	M-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1981-1174	2444737.33	1981 Apr 13 1400:00	M-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1981-1175	2444738.08	1981 Apr 13 1400:00	M-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1981-1176	2444738.08	1981 Apr 13 1400:00	M-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1981-1177	2444738.21	1981 Apr 13 1700:00	M-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1981-1179	2444739.25	1981 Apr 14 1800:00	M-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1981-1180	2444739.33	1981 Apr 14 2000:00	M-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1981-1181	2444740.08	1981 Apr 15 1400:00	M-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1981-1182	2444740.29	1981 Apr 15 1900:00	M-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1981-1183	2444742.12	1981 Apr 17 1500:00	M-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1981-1184	2444742.17	1981 Apr 17 1600:00	M-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1981-1351	2444743.21	1981 Apr 18 1700:00	M-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1981-1352	2444744.21	1981 Apr 19 1700:00	M-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-







Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	OrbPay	Agency	Launch_Code	Group	Category	LT/Cite	Cite	Notes
1982-Y38	2445005.34	1982 Feb 04 2005:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1982-Y39	2445009.00	1982 Feb 08 1200:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1982-Y40	2445010.34	1982 Feb 09 2005:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1982-H103	2445011.06	1982 Feb 10 1200:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1982-Y41	2445011.06	1982 Feb 10 1330:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1982-Y42	2445011.08	1982 Feb 10 1400:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1982-Y43	2445011.10	1982 Feb 10 1420:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1982-Y44	2445011.12	1982 Feb 10 1500:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1982-Y45	2445012.34	1982 Feb 11 2005:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1982-Y46	2445017.62	1982 Feb 16 2005:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1982-Y47	2445017.62	1982 Feb 17 0300:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1982-Y48	2445018.08	1982 Feb 17 1400:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1982-Y49	2445018.10	1982 Feb 17 1420:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1982-Y50	2445019.00	1982 Feb 18 1200:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1982-Y51	2445019.77	1982 Feb 19 0635:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1982-Y52	2445019.91	1982 Feb 19 0945:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1982-Y53	2445020.00	1982 Feb 19 1200:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1982-Y54	2445024.38	1982 Feb 23 2105:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1982-Y55	2445024.62	1982 Feb 24 0300:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1982-Y56	2445024.62	1982 Feb 24 1420:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1982-Y57	2445025.12	1982 Feb 24 1500:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1982-H147	2445026.34	1982 Feb 25 2005:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1982-Y63	2445031.34	1982 Mar 02 2005:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1982-Y64	2445032.10	1982 Mar 03 1420:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1982-Y65	2445032.12	1982 Mar 03 1500:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1982-Y66	2445032.29	1982 Mar 03 1900:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1982-Y67	2445033.12	1982 Mar 04 1500:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1982-Y68	2445033.34	1982 Mar 04 2005:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1982-Y69	2445036.08	1982 Mar 07 1400:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1982-Y71	2445036.08	1982 Mar 07 1520:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1982-H164	2445036.14	1982 Mar 09 2005:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1982-Y73	2445036.34	1982 Mar 10 0200:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1982-Y74	2445036.68	1982 Mar 10 1400:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1982-Y75	2445039.08	1982 Mar 10 1520:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1982-Y76	2445039.14	1982 Mar 10 1650:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1982-Y77	2445039.28	1982 Mar 10 1800:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1982-Y78	2445040.34	1982 Mar 11 2005:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1982-H174	2445041.21	1982 Mar 12 1700:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1982-Y80	2445041.27	1982 Mar 12 1825:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1982-Y81	2445042.86	1982 Mar 14 0940:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1982-Y82	2445044.21	1982 Mar 15 1700:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1982-Y84	2445046.21	1982 Mar 16 1700:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1982-Y85	2445046.24	1982 Mar 16 2005:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1982-Y86	2445046.98	1982 Mar 17 0200:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1982-Y87	2445046.10	1982 Mar 17 1420:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1982-Y88	2445046.10	1982 Mar 17 1700:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1982-Y89	2445047.34	1982 Mar 18 1700:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1982-Y90	2445047.34	1982 Mar 18 2005:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1982-Y92	2445048.29	1982 Mar 19 1800:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1982-H189	2445049.22	1982 Mar 21 1730:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1982-Y93	2445051.34	1982 Mar 22 2005:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1982-Y99	2445051.34	1982 Mar 23 2005:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1982-Y100	2445051.34	1982 Mar 23 2005:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1982-Y101	2445052.79	1982 Mar 24 0700:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1982-Y102	2445052.84	1982 Mar 24 1040:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1982-Y103	2445053.08	1982 Mar 24 1400:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1982-H201	2445053.10	1982 Mar 24 1420:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1982-Y108	2445054.23	1982 Mar 25 1735:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1982-Y109	2445054.34	1982 Mar 25 2005:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1982-Y110	2445056.17	1982 Mar 27 1600:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1982-Y111	2445056.21	1982 Mar 27 1700:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1982-Y112	2445057.19	1982 Mar 28 1630:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1982-Y114	2445057.23	1982 Mar 28 1735:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1982-Y116	2445058.17	1982 Mar 29 1600:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1982-Y118	2445058.23	1982 Mar 29 1730:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1982-Y119	2445059.34	1982 Mar 30 2005:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1982-Y128	2445059.57	1982 Mar 31 0400:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1982-H230	2445060.07	1982 Mar 31 0400:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1982-Y129	2445060.08	1982 Mar 31 1430:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1982-Y130	2445060.10	1982 Mar 31 1430:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1982-Y132	2445066.33	1982 Apr 06 2000:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1982-Y133	2445067.08	1982 Apr 07 1400:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1982-Y134	2445067.08	1982 Apr 07 1640:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1982-Y136	2445067.19	1982 Apr 07 1700:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1982-Y138	2445067.21	1982 Apr 07 1700:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1982-Y137	2445067.30	1982 Apr 07 1940:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1982-H242	2445070.81	1982 Apr 11 0730:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1982-Y139	2445070.85	1982 Apr 14 0330:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1982-Y139	2445070.98	1982 Apr 14 1400:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1982-Y140	2445070.83	1982 Apr 19 0800:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1982-Y142	2445070.83	1982 Apr 19 0800:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1982-Y143	2445070.88	1982 Apr 20 2100:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1982-Y145	2445080.38	1982 Apr 21 0900:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1982-Y146	2445080.83	1982 Apr 21 0900:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1982-Y147	2445081.08	1982 Apr 21 1400:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	OrbPay t	Agency	Launch_Code	Group	Category	LT/Cite	Cite	Notes
1982-Y148	2445081.08	1982 Apr. 21 14:00:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1982-Y151	2445087.33	1982 Apr. 27 20:00:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1982-Y152	2445087.92	1982 Apr. 28 10:00:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1982-Y153	2445088.08	1982 Apr. 28 14:00:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1982-Y154	2445088.08	1982 Apr. 28 14:00:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1982-Y156	2445088.23	1982 Apr. 28 17:30:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1982-Y158	2445088.28	1982 Apr. 28 19:40:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1982-Y159	2445088.40	1982 Apr. 28 21:40:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1982-Y160	2445092.82	1982 May 03 07:40:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1982-Y161	2445094.62	1982 May 05 02:50:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1982-Y162	2445095.08	1982 May 05 14:00:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1982-Y163	2445095.08	1982 May 05 14:00:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1982-Y165	2445096.73	1982 May 07 05:30:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1982-Y166	2445096.83	1982 May 07 08:00:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1982-Y167	2445101.33	1982 May 11 20:00:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1982-Y168	2445102.08	1982 May 12 14:00:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1982-Y169	2445102.08	1982 May 12 14:00:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1982-Y171	2445102.96	1982 May 13 11:00:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1982-Y173	2445106.33	1982 May 18 20:00:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1982-Y174	2445109.10	1982 May 19 14:20:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1982-Y176	2445109.21	1982 May 19 17:00:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1982-Y177	2445109.33	1982 May 19 20:00:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1982-Y178	2445110.08	1982 May 20 14:00:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1982-Y179	2445116.08	1982 May 26 14:00:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1982-Y180	2445116.08	1982 May 26 14:00:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1982-Y632	2445120.31	1982 May 30 19:30:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1982-Y182	2445120.36	1982 May 30 20:45:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1982-Y184	2445121.35	1982 May 31 20:30:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1982-Y186	2445122.00	1982 Jun 01 12:00:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1982-Y188	2445123.33	1982 Jun 01 20:00:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1982-Y189	2445123.08	1982 Jun 02 14:00:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1982-Y187	2445123.08	1982 Jun 02 21:25:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1982-Y189	2445123.39	1982 Jun 02 21:25:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1982-Y191	2445125.08	1982 Jun 04 14:00:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1982-Y193	2445125.08	1982 Jun 04 14:00:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1982-Y194	2445125.67	1982 Jun 09 04:00:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1982-Y195	2445125.63	1982 Jun 09 06:00:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1982-Y196	2445130.08	1982 Jun 09 14:00:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1982-Y197	2445130.08	1982 Jun 09 14:00:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1982-Y200	2445132.08	1982 Jun 11 14:00:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1982-Y201	2445135.95	1982 Jun 14 15:00:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1982-Y202	2445136.53	1982 Jun 15 20:00:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1982-Y203	2445136.94	1982 Jun 16 06:15:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1982-Y204	2445137.24	1982 Jun 16 17:30:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1982-Y205	2445137.24	1982 Jun 17 13:30:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1982-Y206	2445138.04	1982 Jun 17 13:30:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1982-Y207	2445138.93	1982 Jun 18 20:00:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1982-Y208	2445144.05	1982 Jun 23 14:00:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1982-Y209	2445144.16	1982 Jun 25 15:00:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1982-Y210	2445146.38	1982 Jun 25 21:00:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1982-Y211	2445146.38	1982 Jun 26 21:00:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1982-Y220	2445150.33	1982 Jun 29 20:00:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1982-Y221	2445150.84	1982 Jun 30 10:30:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1982-Y222	2445151.10	1982 Jun 30 17:00:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1982-Y223	2445151.21	1982 Jun 30 21:00:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1982-Y225	2445151.38	1982 Jun 30 21:00:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1982-Y226	2445152.08	1982 Jul 01 14:00:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1982-Y227	2445152.15	1982 Jul 01 15:30:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1982-Y229	2445152.44	1982 Jul 01 23:30:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1982-Y230	2445153.10	1982 Jul 02 14:20:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1982-Y231	2445153.42	1982 Jul 02 22:07:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1982-Y236	2445154.42	1982 Jul 03 23:00:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1982-Y246	2445155.42	1982 Jul 04 23:00:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1982-Y247	2445156.42	1982 Jul 05 23:10:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1982-Y248	2445157.42	1982 Jul 06 23:00:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1982-Y249	2445158.08	1982 Jul 07 14:00:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1982-Y250	2445158.10	1982 Jul 07 14:20:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1982-Y252	2445158.42	1982 Jul 07 22:00:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1982-Y263	2445159.42	1982 Jul 08 23:00:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1982-Y264	2445160.10	1982 Jul 08 23:00:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1982-Y265	2445160.42	1982 Jul 09 22:00:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1982-Y267	2445161.41	1982 Jul 10 21:50:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1982-Y268	2445162.33	1982 Jul 11 20:00:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1982-Y269	2445163.29	1982 Jul 12 19:00:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1982-Y281	2445164.22	1982 Jul 13 17:20:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1982-Y282	2445164.31	1982 Jul 13 19:30:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1982-Y283	2445164.33	1982 Jul 13 19:30:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1982-Y284	2445164.34	1982 Jul 13 20:05:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1982-Y286	2445164.60	1982 Jul 14 02:30:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1982-Y285	2445165.08	1982 Jul 14 14:00:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1982-Y287	2445165.10	1982 Jul 14 14:30:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1982-Y268	2445165.31	1982 Jul 14 19:30:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1982-Y269	2445167.10	1982 Jul 16 14:20:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1982-Y273	2445172.08	1982 Jul 21 14:00:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	OrbPay t	Agency	Launch_Code	Group	Category	LT Cite	Cite	Notes
1982-Y274	2445172.10	1982 Jul 21 1420:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1982-Y276	2445174.10	1982 Jul 23 1420:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1982-Y278	2445176.34	1982 Jul 27 2005:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1982-Y279	2445178.42	1982 Jul 27 2205:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1982-Y280	2445179.08	1982 Jul 28 1400:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1982-Y281	2445179.12	1982 Jul 28 1420:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1982-Y282	2445179.12	1982 Jul 28 1500:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1982-Y283	2445181.12	1982 Jul 30 1500:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1982-Y284	2445186.08	1982 Aug 04 1400:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1982-Y285	2445186.10	1982 Aug 04 1420:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1982-Y286	2445188.10	1982 Aug 06 1420:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1982-Y291	2445192.34	1982 Aug 11 0300:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1982-Y292	2445192.62	1982 Aug 11 0300:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1982-Y293	2445193.08	1982 Aug 11 1400:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1982-Y294	2445193.10	1982 Aug 11 1420:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1982-Y296	2445193.29	1982 Aug 11 1900:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1982-Y297	2445199.34	1982 Aug 17 2005:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1982-Y298	2445200.08	1982 Aug 18 1400:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1982-Y299	2445200.10	1982 Aug 18 1420:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1982-Y300	2445200.17	1982 Aug 18 1610:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1982-Y302	2445201.19	1982 Aug 19 1630:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1982-Y304	2445206.34	1982 Aug 24 2005:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1982-Y305	2445207.08	1982 Aug 25 1400:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1982-Y306	2445207.10	1982 Aug 25 1420:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1982-Y307	2445207.20	1982 Aug 25 1655:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1982-Y311	2445213.56	1982 Sep 01 0130:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1982-Y312	2445213.59	1982 Sep 01 0205:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1982-Y313	2445213.59	1982 Sep 01 0205:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1982-Y314	2445214.10	1982 Sep 01 1420:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1982-Y315	2445214.29	1982 Sep 01 1900:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1982-Y316	2445215.06	1982 Sep 02 1400:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1982-Y317	2445220.34	1982 Sep 07 2005:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1982-Y319	2445220.66	1982 Sep 08 0350:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1982-Y320	2445221.08	1982 Sep 08 1400:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1982-Y321	2445221.10	1982 Sep 08 1420:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1982-Y322	2445221.15	1982 Sep 08 1530:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1982-Y324	2445222.15	1982 Sep 09 1540:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1982-Y326	2445227.34	1982 Sep 14 2005:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1982-Y327	2445228.08	1982 Sep 15 1400:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1982-Y328	2445228.08	1982 Sep 15 1400:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1982-Y329	2445228.11	1982 Sep 15 1440:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1982-Y330	2445234.94	1982 Sep 21 2005:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1982-Y332	2445234.67	1982 Sep 22 0400:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1982-Y333	2445235.08	1982 Sep 22 1400:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1982-Y334	2445235.10	1982 Sep 22 1400:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1982-Y339	2445241.34	1982 Sep 28 2005:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1982-Y340	2445241.39	1982 Sep 28 2005:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1982-Y338	2445241.79	1982 Sep 29 1430:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1982-Y339	2445242.08	1982 Sep 29 1430:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1982-Y341	2445242.08	1982 Sep 29 1430:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1982-Y343	2445246.34	1982 Oct 05 2005:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1982-Y344	2445246.34	1982 Oct 06 1130:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1982-Y345	2445246.54	1982 Oct 06 1100:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1982-Y346	2445246.08	1982 Oct 06 1400:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1982-Y347	2445246.10	1982 Oct 06 1420:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1982-Y350	2445255.33	1982 Oct 12 2000:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1982-Y351	2445255.69	1982 Oct 13 0400:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1982-Y352	2445255.69	1982 Oct 13 1400:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1982-Y355	2445265.33	1982 Oct 19 2000:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1982-Y356	2445265.70	1982 Oct 20 0450:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1982-Y357	2445265.08	1982 Oct 20 1400:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1982-Y358	2445265.10	1982 Oct 20 1420:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1982-Y359	2445269.34	1982 Oct 26 2005:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1982-Y360	2445269.71	1982 Oct 27 0500:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1982-Y361	2445270.08	1982 Oct 27 1400:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1982-Y363	2445276.36	1982 Nov 02 2040:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1982-Y364	2445277.08	1982 Nov 03 1200:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1982-Y366	2445277.10	1982 Nov 03 1400:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1982-Y365	2445283.33	1982 Nov 03 1420:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1982-Y366	2445283.73	1982 Nov 09 2000:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1982-Y367	2445284.08	1982 Nov 10 0530:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1982-Y451	2445284.29	1982 Nov 10 1400:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1982-Y368	2445289.94	1982 Nov 16 1030:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1982-Y384	2445290.06	1982 Nov 16 1330:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1982-Y386	2445290.34	1982 Nov 16 2005:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1982-Y389	2445291.02	1982 Nov 17 1450:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1982-Y390	2445291.12	1982 Nov 17 1450:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1982-Y391	2445297.33	1982 Nov 23 2000:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1982-Y392	2445297.38	1982 Nov 23 2100:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1982-Y396	2445297.97	1982 Nov 24 1120:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1982-Y397	2445298.08	1982 Nov 24 1400:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1982-Y398	2445299.08	1982 Nov 25 1400:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1982-Y399	2445299.24	1982 Nov 25 1751:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1982-Y400	2445303.29	1982 Nov 29 1900:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1982-Y440	2445302.72	1982 Nov 29 0521	H-100	-	-	0.000	TSRO	SS	VSSC/	Aeron	WDGRF	-	-



Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	OrbPay t	Agency	Launch_Code	Group	Category	LT/Cite	Cite	Notes
1982-7401	2445304.33	1982 Nov. 30 2000:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1982-7402	2445304.97	1982 Dec. 01 1115:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1982-7403	2445305.03	1982 Dec. 01 1245:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1982-7404	2445305.08	1982 Dec. 01 1400:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1982-7405	2445305.10	1982 Dec. 01 1420:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1982-7406	2445305.29	1982 Dec. 01 1900:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1982-7407	2445306.08	1982 Dec. 02 1400:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1982-7408	2445306.94	1982 Dec. 02 2005:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1982-7409	2445307.18	1982 Dec. 03 1620:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1982-7410	2445309.31	1982 Dec. 05 1925:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1982-7411	2445311.29	1982 Dec. 07 1900:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1982-7412	2445311.94	1982 Dec. 07 2015:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1982-7413	2445311.97	1982 Dec. 08 1110:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1982-7496	2445312.11	1982 Dec. 08 1441:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1982-7415	2445313.29	1982 Dec. 09 1900:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1982-7416	2445313.94	1982 Dec. 09 2005:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1982-7417	2445313.96	1982 Dec. 10 1100:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1982-7418	2445314.06	1982 Dec. 10 1330:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1982-7419	2445315.94	1982 Dec. 14 2005:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1982-7420	2445315.98	1982 Dec. 15 1400:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1982-7421	2445319.10	1982 Dec. 15 1420:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1982-7422	2445319.14	1982 Dec. 15 1515:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1982-7423	2445320.94	1982 Dec. 16 2005:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1982-7424	2445320.65	1982 Dec. 17 0340:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1982-7425	2445325.94	1982 Dec. 21 2005:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1982-7427	2445326.08	1982 Dec. 22 1400:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1982-7428	2445326.16	1982 Dec. 22 1545:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1982-7429	2445327.94	1982 Dec. 23 2005:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1982-7430	2445328.09	1982 Dec. 24 1410:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1982-7431	2445332.94	1982 Dec. 28 2005:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1982-7432	2445332.97	1982 Dec. 28 2320:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1982-7433	2445335.08	1982 Dec. 29 1400:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1982-7434	2445335.10	1982 Dec. 29 1420:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1982-7435	2445335.24	1982 Dec. 29 1746:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1982-7436	2445334.94	1982 Dec. 30 2005:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1982-7437	2445334.66	1982 Dec. 31 0345:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1982-7438	2445335.28	1982 Dec. 31 1800:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1982-7439	2445335.35	1982 Dec. 31 2000:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1983-701	2445336.28	1983 Jan. 03 1800:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1983-702	2445336.29	1983 Jan. 04 1900:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1983-703	2445336.33	1983 Jan. 04 2000:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1983-704	2445340.06	1983 Jan. 05 1400:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1983-705	2445340.40	1983 Jan. 05 1520:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1983-706	2445340.95	1983 Jan. 05 2032:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1983-707	2445341.32	1983 Jan. 06 1485:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1983-708	2445343.98	1983 Jan. 08 2000:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1983-709	2445344.94	1983 Jan. 09 2105:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1983-710	2445345.94	1983 Jan. 11 1415:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1983-711	2445347.10	1983 Jan. 12 1430:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1983-712	2445347.10	1983 Jan. 12 1485:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1983-713	2445347.06	1983 Jan. 12 1955:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1983-714	2445347.77	1983 Jan. 13 1600:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1983-715	2445346.77	1983 Jan. 13 1600:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1983-716	2445345.96	1983 Jan. 18 2040:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1983-717	2445345.84	1983 Jan. 19 0100:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1983-718	2445345.08	1983 Jan. 19 1400:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1983-719	2445345.93	1983 Jan. 20 2000:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1983-720	2445345.66	1983 Jan. 21 0130:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1983-721	2445346.93	1983 Jan. 25 2000:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1983-722	2445346.10	1983 Jan. 26 1420:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1983-723	2445346.11	1983 Jan. 26 1440:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1983-724	2445346.21	1983 Jan. 27 1440:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1983-725	2445346.08	1983 Feb. 01 2000:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1983-726	2445346.12	1983 Feb. 02 1400:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1983-727	2445346.12	1983 Feb. 02 1450:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1983-728	2445371.33	1983 Feb. 05 2000:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1983-729	2445371.57	1983 Feb. 06 0140:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1983-730	2445373.33	1983 Feb. 07 2000:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1983-731	2445373.68	1983 Feb. 08 0150:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1983-732	2445375.10	1983 Feb. 09 1420:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1983-733	2445375.14	1983 Feb. 09 1515:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1983-734	2445376.10	1983 Feb. 10 1417:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1983-735	2445376.10	1983 Feb. 10 1417:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1983-736	2445376.10	1983 Feb. 10 1417:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1983-737	2445376.10	1983 Feb. 10 1417:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1983-738	2445381.68	1983 Feb. 16 0200:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1983-739	2445382.08	1983 Feb. 16 1400:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1983-740	2445382.20	1983 Feb. 16 1650:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1983-741	2445387.29	1983 Feb. 21 1900:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1983-742	2445388.28	1983 Feb. 22 1845:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1983-743	2445388.33	1983 Feb. 22 2000:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1983-744	2445388.39	1983 Feb. 22 2120:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1983-745	2445389.10	1983 Feb. 22 1420:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1983-746	2445389.18	1983 Feb. 23 1620:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1983-747	2445389.19	1983 Feb. 23 1630:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1983-748	2445389.19	1983 Feb. 23 1630:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1983-749	2445389.28	1983 Feb. 24 0300:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1983-750	2445389.35	1983 Feb. 24 1845:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1983-751	2445390.28	1983 Feb. 25 1840:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1983-752	2445391.28	1983 Feb. 25 1840:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1983-753	2445392.28	1983 Feb. 26 1850:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1983-754	2445392.28	1983 Feb. 26 1850:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	OrbPay t	Agency	Launch_Code	Group	Category	LT/Cite	Cite	Notes
1983-165	2445393.28	1983 Feb 27 1845:00	M-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1983-166	2445394.29	1983 Feb 28 1852:00	M-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1983-167	2445395.31	1983 Mar 01 1930:00	M-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1983-168	2445396.34	1983 Mar 01 2005:00	M-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1983-169	2445396.08	1983 Mar 02 1400:00	M-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1983-170	2445396.16	1983 Mar 02 1420:00	M-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1983-171	2445396.21	1983 Mar 02 1545:00	M-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1983-172	2445396.29	1983 Mar 02 1705:00	M-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1983-173	2445397.29	1983 Mar 02 1900:00	M-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1983-174	2445397.67	1983 Mar 03 1900:00	M-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1983-175	2445398.28	1983 Mar 04 1840:00	M-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1983-176	2445399.28	1983 Mar 05 1850:00	M-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1983-177	2445400.28	1983 Mar 06 1850:00	M-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1983-178	2445401.28	1983 Mar 07 1850:00	M-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1983-179	2445402.33	1983 Mar 08 2000:00	M-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1983-180	2445402.94	1983 Mar 08 2005:00	M-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1983-181	2445403.09	1983 Mar 09 0230:00	M-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1983-182	2445403.27	1983 Mar 09 1400:00	M-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1983-183	2445403.31	1983 Mar 09 1830:00	M-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1983-184	2445404.27	1983 Mar 09 1920:00	M-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1983-185	2445405.27	1983 Mar 10 1830:00	M-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1983-186	2445406.28	1983 Mar 12 1840:00	M-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1983-187	2445407.27	1983 Mar 13 1825:00	M-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1983-188	2445408.27	1983 Mar 14 1830:00	M-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1983-189	2445409.27	1983 Mar 15 1830:00	M-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1983-190	2445409.94	1983 Mar 15 2005:00	M-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1983-191	2445409.94	1983 Mar 16 1040:00	M-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1983-192	2445410.08	1983 Mar 16 1350:00	M-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1983-193	2445410.08	1983 Mar 16 1400:00	M-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1983-194	2445410.10	1983 Mar 16 1420:00	M-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1983-195	2445410.29	1983 Mar 16 1900:00	M-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1983-196	2445411.27	1983 Mar 17 1825:00	M-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1983-197	2445412.26	1983 Mar 18 1800:00	M-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1983-198	2445413.26	1983 Mar 19 1800:00	M-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1983-199	2445414.28	1983 Mar 19 2010:00	M-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1983-200	2445415.33	1983 Mar 21 1850:00	M-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1983-201	2445416.34	1983 Mar 22 2015:00	M-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1983-202	2445416.39	1983 Mar 22 2115:00	M-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1983-203	2445416.74	1983 Mar 23 0450:00	M-100	-	-	0.000	AM	SS	PRL/	Aeron	WDGRF	-	-
1983-204	2445416.74	1983 Mar 23 0545:00	M-100	-	-	0.000	AM	SS	PRL/	Aeron	WDGRF	-	-
1983-205	2445416.88	1983 Mar 23 0945:00	M-100	-	-	0.000	AM	SS	PRL/	Aeron	WDGRF	-	-
1983-206	2445416.99	1983 Mar 23 0910:00	M-100	-	-	0.000	AM	SS	PRL/	Aeron	WDGRF	-	-
1983-207	2445416.99	1983 Mar 23 1020:00	M-100	-	-	0.000	AM	SS	PRL/	Aeron	WDGRF	-	-
1983-208	2445417.08	1983 Mar 23 1355:00	M-100	-	-	0.000	AM	SS	PRL/	Aeron	WDGRF	-	-
1983-209	2445417.10	1983 Mar 23 1420:00	M-100	-	-	0.000	AM	SS	PRL/	Aeron	WDGRF	-	-
1983-210	2445417.16	1983 Mar 23 1545:00	M-100	-	-	0.000	AM	SS	PRL/	Aeron	WDGRF	-	-
1983-211	2445421.96	1983 Mar 23 1103:00	M-100	-	-	0.000	AM	SS	PRL/	Aeron	WDGRF	-	-
1983-212	2445422.31	1983 Mar 28 1700:00	M-100	-	-	0.000	AM	SS	PRL/	Aeron	WDGRF	-	-
1983-213	2445423.34	1983 Mar 28 1905:00	M-100	-	-	0.000	AM	SS	PRL/	Aeron	WDGRF	-	-
1983-214	2445423.87	1983 Mar 29 0850:00	M-100	-	-	0.000	AM	SS	PRL/	Aeron	WDGRF	-	-
1983-215	2445423.94	1983 Mar 29 2015:00	M-100	-	-	0.000	AM	SS	PRL/	Aeron	WDGRF	-	-
1983-216	2445424.10	1983 Mar 30 1405:00	M-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1983-217	2445424.94	1983 Mar 30 1420:00	M-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1983-218	2445424.94	1983 Mar 31 1030:00	M-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1983-219	2445425.09	1983 Mar 31 1150:00	M-100	-	-	0.000	AM	SS	PRL/	Aeron	WDGRF	-	-
1983-220	2445431.31	1983 Apr 06 1315:00	M-100	-	-	0.000	AM	SS	PRL/	Aeron	WDGRF	-	-
1983-221	2445431.05	1983 Apr 06 1400:00	M-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1983-222	2445431.08	1983 Apr 06 1420:00	M-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1983-223	2445431.10	1983 Apr 06 1420:00	M-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1983-224	2445431.31	1983 Apr 06 1920:00	M-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1983-225	2445438.08	1983 Apr 13 1400:00	M-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1983-226	2445438.10	1983 Apr 13 1420:00	M-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1983-227	2445438.33	1983 Apr 13 2000:00	M-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1983-228	2445439.32	1983 Apr 14 1940:00	M-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1983-229	2445445.10	1983 Apr 20 1420:00	M-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1983-230	2445445.33	1983 Apr 20 2000:00	M-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1983-231	2445445.34	1983 Apr 20 2005:00	M-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1983-232	2445446.08	1983 Apr 21 1400:00	M-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1983-233	2445450.33	1983 Apr 25 2000:00	M-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1983-234	2445451.33	1983 Apr 26 2000:00	M-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1983-235	2445452.08	1983 Apr 27 1400:00	M-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1983-236	2445452.14	1983 Apr 27 1520:00	M-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1983-237	2445453.17	1983 Apr 28 1600:00	M-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1983-238	2445453.34	1983 May 03 2005:00	M-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1983-239	2445459.34	1983 May 04 1400:00	M-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1983-240	2445459.10	1983 May 04 1420:00	M-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1983-241	2445465.34	1983 May 10 2005:00	M-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1983-242	2445466.08	1983 May 11 1420:00	M-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1983-243	2445466.10	1983 May 11 1420:00	M-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1983-244	2445473.08	1983 May 18 1400:00	M-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1983-245	2445473.10	1983 May 18 1420:00	M-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	OrbPay	Agency	Launch_Code	Group	Category	LT_Cite	Cite	Notes
1983-1174	2445479.33	1983 May 24 2000:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1983-1166	2445479.61	1983 May 25 0730:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1983-1175	2445480.08	1983 May 25 1400:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1983-1177	2445485.46	1983 May 30 2300:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1983-1178	2445485.58	1983 May 31 0200:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1983-1179	2445487.08	1983 Jun 01 1400:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1983-1180	2445487.10	1983 Jun 01 1420:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1983-1182	2445487.61	1983 Jun 02 0245:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1983-1183	2445487.68	1983 Jun 02 0425:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1983-1184	2445489.34	1983 Jun 03 1420:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1983-1185	2445493.34	1983 Jun 07 2005:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1983-1186	2445494.08	1983 Jun 08 1400:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1983-1187	2445494.10	1983 Jun 08 1420:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1983-1188	2445494.15	1983 Jun 08 1540:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1983-1190	2445496.10	1983 Jun 10 1420:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1983-1192	2445501.04	1983 Jun 15 1300:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1983-1193	2445501.08	1983 Jun 15 1400:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1983-1194	2445501.10	1983 Jun 15 1420:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1983-1190	2445503.10	1983 Jun 17 1420:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1983-1199	2445505.06	1983 Jun 19 1530:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1983-1200	2445505.15	1983 Jun 19 1530:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1983-1202	2445507.04	1983 Jun 21 1300:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1983-1203	2445507.12	1983 Jun 21 1450:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1983-1204	2445507.33	1983 Jun 21 2000:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1983-1205	2445507.60	1983 Jun 22 0220:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1983-1206	2445506.08	1983 Jun 22 1400:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1983-1207	2445506.15	1983 Jun 22 1540:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1983-1215	2445510.10	1983 Jun 24 1420:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1983-1216	2445513.91	1983 Jun 28 0945:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1983-1219	2445513.96	1983 Jun 28 1107:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1983-1220	2445515.10	1983 Jun 29 1422:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1983-1221	2445515.51	1983 Jun 29 1922:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1983-1222	2445515.95	1983 Jun 30 1050:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1983-1224	2445517.14	1983 Jul 01 1520:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1983-1225	2445519.52	1983 Jul 01 04 1000:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1983-1226	2445520.90	1983 Jul 05 0930:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1983-1228	2445521.94	1983 Jul 05 2005:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1983-1229	2445522.10	1983 Jul 06 1422:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1983-1231	2445522.35	1983 Jul 06 1535:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1983-1232	2445522.51	1983 Jul 06 1922:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1983-1233	2445524.10	1983 Jul 08 1422:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1983-1234	2445525.10	1983 Jul 13 1422:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1983-1235	2445531.40	1983 Jul 15 1422:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1983-1236	2445535.94	1983 Jul 19 2005:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1983-1238	2445536.10	1983 Jul 20 1305:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1983-1239	2445536.51	1983 Jul 22 1425:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1983-1241	2445538.10	1983 Jul 22 1545:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1983-1242	2445538.54	1983 Jul 27 1420:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1983-1243	2445545.24	1983 Jul 29 1422:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1983-1245	2445545.36	1983 Aug 02 2045:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1983-1246	2445550.19	1983 Aug 03 1511:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1983-1249	2445550.26	1983 Aug 04 1632:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1983-1251	2445555.24	1983 Aug 05 1811:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1983-1252	2445555.30	1983 Aug 06 1746:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1983-1253	2445555.09	1983 Aug 06 1919:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1983-1254	2445555.27	1983 Aug 07 1411:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1983-1256	2445557.10	1983 Aug 08 1925:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1983-1254	2445557.10	1983 Aug 10 1422:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1983-1255	2445557.19	1983 Aug 10 1632:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1983-1256	2445557.25	1983 Aug 10 1756:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1983-1258	2445563.34	1983 Aug 16 2005:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1983-1259	2445564.10	1983 Aug 17 1422:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1983-1261	2445564.18	1983 Aug 17 1620:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1983-1262	2445570.34	1983 Aug 23 2010:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1983-1263	2445571.10	1983 Aug 24 1422:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1983-1264	2445571.19	1983 Aug 24 1630:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1983-1266	2445578.10	1983 Aug 31 1422:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1983-1267	2445578.10	1983 Aug 31 1424:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1983-1268	2445578.33	1983 Aug 31 2000:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1983-1273	2445581.29	1983 Sep 03 1855:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1983-1278	2445581.37	1983 Sep 03 2050:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1983-1278	2445585.10	1983 Sep 07 1422:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1983-1279	2445585.21	1983 Sep 07 1705:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1983-1282	2445589.14	1983 Sep 13 2005:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1983-1283	2445591.41	1983 Sep 13 2145:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1983-1284	2445592.08	1983 Sep 14 1354:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1983-1285	2445598.34	1983 Sep 20 2005:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1983-1287	2445599.06	1983 Sep 21 1330:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1983-1288	2445599.10	1983 Sep 21 1430:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1983-1282	2445605.34	1983 Sep 27 2005:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1983-1283	2445606.06	1983 Sep 28 1330:00	H-100	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1983-1324	2445607.50	1983 Oct	H-100	-	-	0.000	AM	SU	-	Aeron	LJRSF18_224	-	-
1983-1325	2445607.50	1983 Oct	H-100	-	-	0.000	AM	SU	-	Aeron	LJRSF18_224	-	-
1983-1326	2445607.50	1983 Oct	H-100	-	-	0.000	AM	SU	-	Aeron	LJRSF18_224	-	-





Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	OrbPay t	Agency	Launch_Code	Group	Category	LT/Cite	Cite	Notes
1985-1117	2446394.94	1985 Nov 15 1030:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1985-1118	2446388.23	1985 Nov 18 1730:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1985-1119	2446389.04	1985 Nov 19 1300:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1985-1120	2446389.38	1985 Nov 19 2105:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1985-1121	2446390.00	1985 Nov 20 1154:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1985-1122	2446390.02	1985 Nov 20 1230:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1985-1123	2446390.09	1985 Nov 20 1407:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1985-1124	2446395.08	1985 Nov 25 1400:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1985-1125	2446395.14	1985 Nov 25 1522:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1985-1126	2446396.38	1985 Nov 26 2105:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1985-1127	2446396.98	1985 Nov 27 1130:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1985-1128	2446397.09	1985 Nov 27 1408:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1985-1129	2446397.19	1985 Nov 27 1632:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1985-1130	2446398.03	1985 Nov 28 1240:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1985-1131	2446398.51	1985 Nov 29 0730:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1985-1132	2446399.08	1985 Nov 29 1400:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1985-1133	2446399.13	1985 Nov 29 1510:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1985-1134	2446400.98	1985 Dec 01 1129:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1985-1135	2446402.90	1985 Dec 03 0930:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1985-1136	2446403.15	1985 Dec 03 1530:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1985-1137	2446403.20	1985 Dec 03 1650:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1985-1138	2446403.96	1985 Dec 04 1100:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1985-1139	2446404.02	1985 Dec 04 1230:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1985-1140	2446404.14	1985 Dec 04 1405:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1985-1141	2446404.94	1985 Dec 05 1030:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1985-1142	2446405.08	1985 Dec 05 1030:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1985-1143	2446405.19	1985 Dec 05 1633:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1985-1144	2446405.24	1985 Dec 05 1740:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1985-1145	2446406.07	1985 Dec 06 1340:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1985-1146	2446407.57	1985 Dec 6 0740	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1985-1147	2446410.10	1985 Dec 10 1430:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1985-1148	2446410.18	1985 Dec 10 1615:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1985-1149	2446410.38	1985 Dec 11 1100:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1985-1150	2446410.96	1985 Dec 11 1110:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1985-1151	2446411.08	1985 Dec 11 1400:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1985-1152	2446411.09	1985 Dec 11 1407:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1985-1153	2446413.99	1985 Dec 14 1140	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1985-1154	2446414.03	1985 Dec 14 1230	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1985-1155	2446414.90	1985 Dec 15 0930:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1985-1156	2446415.17	1985 Dec 15 1602:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1985-1157	2446415.22	1985 Dec 15 1745:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1985-1158	2446417.98	1985 Dec 17 2105:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1985-1159	2446417.96	1985 Dec 18 1200:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1985-1160	2446418.02	1985 Dec 18 1200:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1985-1161	2446418.09	1985 Dec 18 1422:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1985-1162	2446420.10	1985 Dec 20 1110:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1985-1163	2446420.97	1985 Dec 20 1409:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1985-1164	2446420.15	1985 Dec 20 1530:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1985-1165	2446420.78	1985 Dec 26 1119:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1985-1166	2446420.97	1985 Dec 30 0643:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1986-1001	2446430.38	1986 Jan 01 1116:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1986-1002	2446431.10	1986 Jan 01 1422:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1986-1003	2446431.94	1986 Jan 04 1030:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1986-1004	2446435.20	1986 Jan 04 1655:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1986-1005	2446435.27	1986 Jan 04 1831:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1986-1006	2446435.34	1986 Jan 04 2015:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1986-1007	2446435.97	1986 Jan 05 1115:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1986-1008	2446436.38	1986 Jan 05 2105:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1986-1009	2446436.97	1986 Jan 06 1120:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1986-1010	2446436.98	1986 Jan 07 2105:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1986-1011	2446439.00	1986 Jan 08 1207:00	H-100B	-	-	0.000	AM	SS	LITM/VSSC/Mukherjee	Aeron	LJRSF 19, 29	-	-
1986-1012	2446439.06	1986 Jan 08 1320:00	H-100B	-	-	0.000	AM	SS	LITM/VSSC/Mukherjee	Aeron	LJRSF 19, 29	-	-
1986-1013	2446439.10	1986 Jan 08 1420:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1986-1014	2446443.38	1986 Jan 12 2105:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1986-1015	2446443.98	1986 Jan 13 1130:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1986-1016	2446445.38	1986 Jan 14 2105:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1986-1017	2446445.97	1986 Jan 15 1115	H-100B	-	-	0.000	AM	SS	LITM/VSSC/Mukherjee	Aeron	LJRSF 19, 29	-	-
1986-1018	2446446.02	1986 Jan 15 1235:00	H-100B	-	-	0.000	AM	SS	LITM/VSSC/Mukherjee	Aeron	LJRSF 19, 29	-	-
1986-1019	2446446.12	1986 Jan 15 1446:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1986-1020	2446446.15	1986 Jan 15 1530:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1986-1021	2446450.00	1986 Jan 19 1205:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1986-1022	2446450.96	1986 Jan 20 1100	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1986-1023	2446451.44	1986 Jan 21 2235:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1986-1024	2446451.99	1986 Jan 22 1410:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1986-1025	2446452.96	1986 Jan 22 1100:00	H-100B	-	-	0.000	AM	SS	LITM/VSSC/Mukherjee	Aeron	LJRSF 19, 29	-	-
1986-1026	2446454.38	1986 Jan 23 2105:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1986-1027	2446454.46	1986 Jan 23 2305:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1986-1028	2446455.06	1986 Jan 24 1330	H-100B	-	-	0.000	AM	SU	-	Aeron	LJRSF 19, 29	-	-
1986-1029	2446457.38	1986 Jan 26 2105:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	OrbPay_t	Agency	Launch_Code	Group	Category	LT_Cite	Cite	Notes
1986-Y228	2446457.99	1986 Jan 27 1144	H-100B	-	STRATWARN	0.000	AM	SU	IITM/VSSC/Kukherjee	Aeron	LJRSF19,29	-	-
1986-Y25	2446459.38	1986 Jan 28 2105:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1986-Y26	2446460.09	1986 Jan 29 1407:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1986-Y27	2446460.12	1986 Jan 29 1407:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1986-Y28	2446460.96	1986 Jan 29 1449:00	H-100B	-	STRATWARN	0.000	AM	SU	IITM/VSSC/Kukherjee	Aeron	LJRSF19,29	-	-
1986-Y29	2446461.38	1986 Jan 30 2105:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1986-Y30	2446461.38	1986 Feb 02 2105:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1986-Y31	2446465.06	1986 Feb 03 1227:00	H-100B	-	STRATWARN	0.000	AM	SU	IITM/VSSC/Kukherjee	Aeron	LJRSF19,29	-	-
1986-Y32	2446466.38	1986 Feb 04 2105:00	H-100B	-	STRATWARN	0.000	AM	SU	IITM/VSSC/Kukherjee	Aeron	LJRSF19,29	-	-
1986-Y33	2446466.96	1986 Feb 05 1105:00	H-100B	-	STRATWARN	0.000	AM	SU	IITM/VSSC/Kukherjee	Aeron	LJRSF19,29	-	-
1986-Y34	2446467.02	1986 Feb 05 1235:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1986-Y35	2446467.09	1986 Feb 05 1407:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1986-Y36	2446472.03	1986 Feb 10 1240:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1986-Y37	2446473.38	1986 Feb 11 2105:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1986-Y38	2446474.03	1986 Feb 12 1240:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1986-Y39	2446474.09	1986 Feb 12 1407:00	H-100B	-	STRATWARN	0.000	AM	SU	IITM/VSSC/Kukherjee	Aeron	LJRSF19,29	-	-
1986-Y40	2446475.10	1986 Feb 13 1430:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1986-Y41	2446475.38	1986 Feb 16 2105:00	H-100B	-	STRATWARN	0.000	AM	SU	IITM/VSSC/Kukherjee	Aeron	LJRSF19,29	-	-
1986-Y42	2446475.98	1986 Feb 17 1134:00	H-100B	-	STRATWARN	0.000	AM	SU	IITM/VSSC/Kukherjee	Aeron	LJRSF19,29	-	-
1986-Y43	2446480.38	1986 Feb 18 2105:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1986-Y44	2446480.42	1986 Feb 18 2205:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1986-Y45	2446481.09	1986 Feb 19 1407:00	H-100B	-	STRATWARN	0.000	AM	SU	IITM/VSSC/Kukherjee	Aeron	LJRSF19,29	-	-
1986-Y46	2446482.04	1986 Feb 20 1200:00	H-100B	-	STRATWARN	0.000	AM	SU	IITM/VSSC/Kukherjee	Aeron	LJRSF19,29	-	-
1986-Y47	2446483.07	1986 Feb 21 1300:00	H-100B	-	STRATWARN	0.000	AM	SU	IITM/VSSC/Kukherjee	Aeron	LJRSF19,29	-	-
1986-Y48	2446485.38	1986 Feb 23 2105:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1986-Y49	2446486.05	1986 Feb 24 1347:00	H-100B	-	STRATWARN	0.000	AM	SU	IITM/VSSC/Kukherjee	Aeron	LJRSF19,29	-	-
1986-Y50	2446486.09	1986 Feb 24 1407:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1986-Y51	2446486.27	1986 Feb 26 1310:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1986-Y52	2446486.59	1986 Feb 26 1407:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1986-Y53	2446488.09	1986 Feb 26 1535:00	H-100B	-	STRATWARN	0.000	AM	SU	IITM/VSSC/Kukherjee	Aeron	LJRSF19,29	-	-
1986-Y54	2446492.38	1986 Feb 27 1138:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1986-Y55	2446493.08	1986 Feb 03 1400:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1986-Y56	2446493.08	1986 Feb 04 2105:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1986-Y57	2446494.38	1986 Feb 04 2105:00	H-100B	-	STRATWARN	0.000	AM	SU	IITM/VSSC/Kukherjee	Aeron	LJRSF19,29	-	-
1986-Y58	2446494.98	1986 Feb 05 1137:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1986-Y59	2446495.09	1986 Feb 05 1325:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1986-Y60	2446495.09	1986 Feb 05 1407:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1986-Y61	2446500.12	1986 Feb 10 1500:00	H-100B	-	-	0.000	ISRO	SS	PRL/NPL/Chakrabarty	Aeron	RC29	-	-
1986-Y62	2446500.12	1986 Feb 11 1500:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1986-Y63	2446501.38	1986 Feb 11 2105:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1986-Y64	2446501.38	1986 Feb 12 1300:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1986-Y65	2446502.04	1986 Feb 12 1300:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1986-Y66	2446502.04	1986 Feb 12 1300:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1986-Y67	2446503.08	1986 Feb 13 1305:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1986-Y68	2446503.08	1986 Feb 13 1305:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1986-Y69	2446507.94	1986 Feb 17 1305:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1986-Y70	2446508.98	1986 Feb 18 1105:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1986-Y71	2446508.98	1986 Feb 19 1105:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1986-Y72	2446508.98	1986 Feb 19 1300:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1986-Y73	2446509.94	1986 Feb 19 1407:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1986-Y74	2446509.94	1986 Feb 19 1407:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1986-Y75	2446513.38	1986 Feb 23 2105:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1986-Y76	2446514.04	1986 Feb 24 1302:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1986-Y77	2446514.38	1986 Feb 25 2105:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1986-Y78	2446514.38	1986 Feb 26 1300:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1986-Y79	2446515.04	1986 Feb 26 1300:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1986-Y80	2446516.12	1986 Feb 26 1417:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1986-Y81	2446516.12	1986 Feb 27 1137:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1986-Y82	2446520.38	1986 Feb 30 2105:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1986-Y83	2446521.08	1986 Feb 31 1400:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1986-Y84	2446521.08	1986 Feb 01 2005:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1986-Y85	2446522.34	1986 Feb 02 1137:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1986-Y86	2446522.34	1986 Feb 02 1137:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1986-Y87	2446523.08	1986 Feb 02 1400:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1986-Y88	2446523.17	1986 Feb 02 1607:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1986-Y89	2446527.34	1986 Feb 06 2005:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1986-Y90	2446528.10	1986 Feb 07 1417:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1986-Y91	2446529.42	1986 Feb 08 2205:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1986-Y92	2446529.98	1986 Feb 09 1136:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1986-Y93	2446530.16	1986 Feb 09 1407:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1986-Y94	2446530.16	1986 Feb 09 1431:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1986-Y95	2446534.34	1986 Feb 13 2005:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1986-Y96	2446535.10	1986 Feb 14 1420:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1986-Y97	2446536.34	1986 Feb 15 2005:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1986-Y98	2446537.09	1986 Feb 16 1407:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1986-Y99	2446537.09	1986 Feb 16 1430:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1986-Y100	2446537.98	1986 Feb 17 1135:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1986-Y101	2446542.09	1986 Feb 21 1405:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1986-Y102	2446542.09	1986 Feb 21 1423:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1986-Y103	2446543.34	1986 Feb 22 2005:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1986-Y104	2446544.11	1986 Feb 23 1435:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1986-Y105	2446544.12	1986 Feb 23 1450:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1986-Y106	2446544.98	1986 Feb 24 1135:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	OrbPay t	Agency	Launch_Code	Group	Category	LT/Cite	Cite	Notes
1986-W83	2446547.88	1986 Apr. 27 0900:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1986-197	2446547.93	1986 Apr. 27 1020:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1986-198	2446548.34	1986 Apr. 27 2005:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1986-199	2446549.12	1986 Apr. 28 1446:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1986-1100	2446549.96	1986 Apr. 29 0940:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1986-1101	2446549.91	1986 Apr. 29 0946:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1986-1102	2446550.34	1986 Apr. 29 2005:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1986-W87	2446550.63	1986 Apr. 30 0306:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1986-1103	2446550.98	1986 Apr. 30 1134:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1986-1104	2446551.30	1986 Apr. 30 1907:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1986-1105	2446552.83	1986 May. 02 0756:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1986-1106	2446552.88	1986 May. 02 0906:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1986-1107	2446554.83	1986 May. 04 0756:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1986-1108	2446554.88	1986 May. 04 0900:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1986-1109	2446557.38	1986 May. 06 2105:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1986-W90	2446557.98	1986 May. 07 1136:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1986-W91	2446558.12	1986 May. 07 1455:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1986-W92	2446558.17	1986 May. 07 1607:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1986-1110	2446564.38	1986 May. 13 2105:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1986-1111	2446564.98	1986 May. 14 1134:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1986-1112	2446565.15	1986 May. 14 1530:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1986-1113	2446565.30	1986 May. 14 1945:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1986-1114	2446571.34	1986 May. 20 2005:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1986-1115	2446571.98	1986 May. 21 1135:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1986-W99	2446572.10	1986 May. 21 1431:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1986-1116	2446572.17	1986 May. 21 1600:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1986-1117	2446572.88	1986 May. 22 0909:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1986-1118	2446572.94	1986 May. 22 1036:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1986-1119	2446573.00	1986 May. 22 1154:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1986-1120	2446575.83	1986 May. 25 0800:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1986-1121	2446575.96	1986 May. 25 0900:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1986-1122	2446577.61	1986 May. 27 0720:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1986-1123	2446576.35	1986 May. 27 2020:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1986-1124	2446576.79	1986 May. 28 0703:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1986-1125	2446576.98	1986 May. 28 0900:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1986-1126	2446575.15	1986 May. 28 1531:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1986-1127	2446575.25	1986 May. 28 1802:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1986-1128	2446575.94	1986 May. 29 0806:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1986-1129	2446575.90	1986 May. 29 0905:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1986-1130	2446575.99	1986 May. 29 1132:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1986-1131	2446580.72	1986 May. 30 0649:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1986-1132	2446585.94	1986 Jun. 03 2035:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1986-1133	2446586.09	1986 Jun. 04 1137:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1986-1134	2446586.14	1986 Jun. 04 1557:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1986-1135	2446591.20	1986 Jun. 09 1685:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1986-1136	2446591.26	1986 Jun. 09 2038:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1986-1137	2446592.86	1986 Jun. 10 1134:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1986-1138	2446592.98	1986 Jun. 11 1407:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1986-1139	2446593.09	1986 Jun. 11 1555:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1986-1140	2446593.20	1986 Jun. 11 1905:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1986-1141	2446593.35	1986 Jun. 11 2030:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1986-1142	2446593.34	1986 Jun. 17 2010:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1986-1143	2446593.02	1986 Jun. 18 1230:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1986-1144	2446590.13	1986 Jun. 18 1501:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1986-1145	2446590.33	1986 Jun. 18 1730:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1986-1146	2446590.34	1986 Jun. 24 2003:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1986-1147	2446590.99	1986 Jun. 25 1150:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1986-1148	2446597.98	1986 Jun. 25 1400:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1986-1149	2446597.09	1986 Jun. 25 1412:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1986-1150	2446597.23	1986 Jun. 27 1730:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1986-1151	2446591.34	1986 Jul. 01 2005:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1986-1152	2446591.09	1986 Jul. 02 1407:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1986-1153	2446591.15	1986 Jul. 02 1529:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1986-1154	2446591.21	1986 Jul. 03 1700:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1986-1155	2446591.07	1986 Jul. 03 1940:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1986-1156	2446592.34	1986 Jul. 07 1407:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1986-1157	2446592.98	1986 Jul. 08 2005:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1986-1158	2446592.17	1986 Jul. 09 1130:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1986-1159	2446592.17	1986 Jul. 09 1607:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1986-1160	2446592.99	1986 Jul. 09 1700:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1986-1161	2446592.09	1986 Jul. 16 1410:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1986-1162	2446592.15	1986 Jul. 16 1530:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1986-1163	2446593.34	1986 Jul. 22 2005:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1986-1164	2446593.98	1986 Jul. 23 1130:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1986-1165	2446593.14	1986 Jul. 23 1407:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1986-1166	2446593.21	1986 Jul. 23 1522:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1986-1167	2446593.98	1986 Jul. 25 1130:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1986-1168	2446593.98	1986 Jul. 25 1407:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1986-1169	2446594.98	1986 Jul. 29 1130:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1986-1170	2446594.98	1986 Jul. 29 2005:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1986-1171	2446594.34	1986 Jul. 30 1407:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1986-1174	2446594.09	1986 Jul. 30 1407:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-





Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	OrbPay t	Agency	Launch_Code	Group	Category	LT/Cite	Cite	Notes
1987-Y01	2446797.00	1987 Jan 01 1200:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1987-Y03	2446799.12	1987 Jan 03 1500:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1987-Y02	2446799.61	1987 Jan 04 0732:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1987-Y03	2446800.12	1987 Jan 04 1458:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1987-Y04	2446800.33	1987 Jan 04 2000:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1987-Y05	2446802.12	1987 Jan 06 1500:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1987-Y06	2446802.34	1987 Jan 06 2015:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1987-Y07	2446802.98	1987 Jan 07 1130:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1987-Y08	2446803.09	1987 Jan 07 1407:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1987-Y09	2446803.12	1987 Jan 07 1530:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1987-Y10	2446803.15	1987 Jan 07 1625:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1987-Y11	2446807.34	1987 Jan 11 2005:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1987-Y12	2446808.25	1987 Jan 12 1800:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1987-Y13	2446809.25	1987 Jan 13 1800:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1987-Y14	2446809.34	1987 Jan 13 2005:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1987-Y15	2446809.38	1987 Jan 13 2100:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1987-Y24	2446810.06	1987 Jan 14 1530:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1987-Y16	2446810.09	1987 Jan 14 1407:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1987-Y17	2446810.25	1987 Jan 14 1755:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1987-Y19	2446812.25	1987 Jan 16 1759:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1987-Y21	2446813.21	1987 Jan 17 1700:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1987-Y23	2446814.34	1987 Jan 18 2005:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1987-Y26	2446816.98	1987 Jan 21 1134:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1987-Y27	2446817.27	1987 Jan 21 1831:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1987-Y28	2446817.34	1987 Jan 21 2005:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1987-Y33	2446816.19	1987 Jan 22 1630:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1987-Y39	2446816.25	1987 Jan 22 1757:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1987-Y30	2446816.35	1987 Jan 22 2027:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1987-Y31	2446820.53	1987 Jan 24 2000:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1987-Y32	2446821.25	1987 Jan 25 1802:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1987-Y34	2446821.94	1987 Jan 25 2005:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1987-Y35	2446822.25	1987 Jan 26 1800:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1987-Y36	2446823.25	1987 Jan 26 1905:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1987-Y37	2446823.29	1987 Jan 27 1800:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1987-Y38	2446823.36	1987 Jan 27 2035:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1987-Y39	2446823.43	1987 Jan 27 2215:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1987-Y40	2446823.98	1987 Jan 28 1130:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1987-Y41	2446824.09	1987 Jan 28 1404:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1987-Y42	2446824.25	1987 Jan 28 1800:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1987-Y43	2446824.25	1987 Jan 28 1800:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1987-Y44	2446825.25	1987 Jan 29 1800:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1987-Y45	2446825.25	1987 Jan 29 1800:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1987-Y46	2446826.25	1987 Jan 30 1800:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1987-Y47	2446826.25	1987 Jan 30 1800:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1987-Y48	2446827.25	1987 Jan 31 1800:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1987-Y49	2446828.25	1987 Feb 01 1800:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1987-Y50	2446828.25	1987 Feb 01 1800:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1987-Y51	2446828.34	1987 Feb 01 2010:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1987-Y52	2446828.35	1987 Feb 02 1800:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1987-Y54	2446828.35	1987 Feb 03 1800:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1987-Y55	2446830.36	1987 Feb 03 1817:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1987-Y56	2446830.34	1987 Feb 03 2005:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1987-Y57	2446831.08	1987 Feb 04 1159:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1987-Y58	2446831.08	1987 Feb 04 1400:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1987-Y59	2446831.09	1987 Feb 04 1407:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1987-Y59	2446831.25	1987 Feb 04 1900:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1987-Y60	2446832.25	1987 Feb 05 1800:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1987-Y61	2446832.29	1987 Feb 05 1904:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1987-Y62	2446833.25	1987 Feb 06 1800:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1987-Y63	2446833.25	1987 Feb 06 1804:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1987-Y64	2446834.25	1987 Feb 07 1800:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1987-Y65	2446835.25	1987 Feb 08 2005:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1987-Y66	2446835.34	1987 Feb 08 1800:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1987-Y67	2446836.02	1987 Feb 09 1236:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1987-Y68	2446836.25	1987 Feb 09 1800:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1987-Y69	2446837.33	1987 Feb 10 2000:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1987-Y70	2446838.01	1987 Feb 11 1212:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1987-Y71	2446838.11	1987 Feb 11 1440:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1987-Y72	2446838.14	1987 Feb 11 1523:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1987-Y73	2446838.25	1987 Feb 11 1805:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1987-Y74	2446839.25	1987 Feb 12 1800:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1987-Y76	2446842.34	1987 Feb 15 2005:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1987-Y77	2446843.04	1987 Feb 16 1251:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1987-Y78	2446844.34	1987 Feb 17 2005:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1987-Y79	2446844.98	1987 Feb 18 1130:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1987-Y80	2446845.04	1987 Feb 18 1254:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1987-Y81	2446845.15	1987 Feb 18 1537:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1987-Y82	2446849.34	1987 Feb 22 2005:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1987-Y83	2446850.05	1987 Feb 23 1305:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1987-Y84	2446850.09	1987 Feb 23 1404:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1987-Y85	2446851.34	1987 Feb 24 2005:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	OrbPay t	Agency	Launch_Code	Group	Category	LT/Cite	Cite	Notes
1987-786	2446852.03	1987 Feb 25 1240:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1987-787	2446852.09	1987 Feb 25 1404:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1987-788	2446854.08	1987 Feb 27 1350:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1987-789	2446856.34	1987 Mar 01 2005:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1987-790	2446857.06	1987 Mar 02 1320:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1987-791	2446857.09	1987 Mar 02 1407:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1987-792	2446858.34	1987 Mar 03 2005:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1987-793	2446858.98	1987 Mar 04 1130:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1987-794	2446859.06	1987 Mar 04 1330:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1987-795	2446859.09	1987 Mar 04 1407:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1987-796	2446860.02	1987 Mar 05 1226:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1987-797	2446862.98	1987 Mar 08 1124:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1987-798	2446863.38	1987 Mar 08 2105:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1987-799	2446863.52	1987 Mar 09 1000:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1987-800	2446863.52	1987 Mar 09 1407:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1987-801	2446864.09	1987 Mar 09 1407:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1987-802	2446864.10	1987 Mar 09 1430:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1987-803	2446865.36	1987 Mar 10 2040:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1987-804	2446865.52	1987 Mar 11 1005:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1987-805	2446866.09	1987 Mar 11 1407:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1987-806	2446866.99	1987 Mar 12 1140:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1987-807	2446867.96	1987 Mar 13 1100:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1987-808	2446870.34	1987 Mar 15 2005:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1987-809	2446871.04	1987 Mar 16 1200:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1987-810	2446871.04	1987 Mar 16 1300:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1987-811	2446871.10	1987 Mar 16 1430:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1987-812	2446872.34	1987 Mar 17 2005:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1987-813	2446873.09	1987 Mar 18 1415:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1987-814	2446873.12	1987 Mar 18 1450:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1987-815	2446874.00	1987 Mar 19 1205:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1987-816	2446874.05	1987 Mar 19 1511:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1987-817	2446875.00	1987 Mar 20 1203:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1987-818	2446875.12	1987 Mar 20 1450:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1987-819	2446875.94	1987 Mar 24 2005:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1987-820	2446875.98	1987 Mar 25 1130:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1987-821	2446880.12	1987 Mar 25 1500:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1987-822	2446880.31	1987 Mar 25 1930:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1987-823	2446884.34	1987 Mar 29 2005:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1987-824	2446884.34	1987 Mar 30 2005:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1987-825	2446885.15	1987 Mar 31 2005:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1987-826	2446886.94	1987 Apr 01 1000:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1987-827	2446886.94	1987 Apr 01 1407:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1987-828	2446889.09	1987 Apr 04 1130:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1987-829	2446889.96	1987 Apr 04 1330:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1987-830	2446891.34	1987 Apr 05 2005:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1987-831	2446891.34	1987 Apr 07 2005:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1987-832	2446892.33	1987 Apr 08 0910:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1987-833	2446893.64	1987 Apr 09 0510:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1987-834	2446894.34	1987 Apr 09 2005:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1987-835	2446895.94	1987 Apr 12 1407:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1987-836	2446896.06	1987 Apr 20 1320:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1987-837	2446896.16	1987 Apr 20 1435:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1987-838	2446897.34	1987 Apr 21 2005:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1987-839	2446898.00	1987 Apr 22 1203:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1987-840	2446898.09	1987 Apr 22 1407:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1987-841	2446898.11	1987 Apr 22 1440:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1987-842	2446898.98	1987 Apr 23 1135:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1987-843	2446891.34	1987 Apr 26 2005:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1987-844	2446891.34	1987 Apr 27 1710:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1987-845	2446891.34	1987 Apr 28 2005:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1987-846	2446891.34	1987 Apr 29 1040:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1987-847	2446891.00	1987 Apr 29 1200:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1987-848	2446891.12	1987 Apr 29 1435:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1987-849	2446891.12	1987 Apr 29 1447:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1987-850	2446892.12	1987 May 03 2005:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1987-851	2446892.12	1987 May 04 1454:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1987-852	2446892.12	1987 May 05 2005:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1987-853	2446892.98	1987 May 06 1138:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1987-854	2446892.98	1987 May 06 1407:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1987-855	2446892.98	1987 May 06 1415:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1987-856	2446892.98	1987 May 10 2005:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1987-857	2446892.98	1987 May 11 1501:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1987-858	2446892.98	1987 May 12 2005:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1987-859	2446892.98	1987 May 13 1130:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1987-860	2446892.98	1987 May 13 1435:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1987-861	2446892.98	1987 May 13 1507:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1987-862	2446892.98	1987 May 18 1154:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1987-863	2446893.00	1987 May 18 1154:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1987-864	2446893.98	1987 May 19 1130:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1987-865	2446893.98	1987 May 19 2005:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1987-866	2446893.98	1987 May 20 1140:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1987-867	2446893.98	1987 May 20 1207:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-

JATF53,875

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Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	OrbPay	Agency	Launch_Code	Group	Category	LT_Cite	Cite	Notes
1987-1136	2446956.09	1987 May 20 14:07:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1987-1168	2446956.13	1987 May 20 15:11:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1987-1169	2446956.96	1987 May 21 11:08:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1987-1170	2446940.01	1987 May 24 12:10:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1987-1171	2446940.99	1987 May 25 11:42:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1987-1172	2446942.34	1987 May 26 20:05:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1987-1173	2446943.00	1987 May 27 11:56:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1987-1174	2446943.09	1987 May 27 14:07:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1987-1175	2446943.14	1987 May 27 15:16:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1987-1176	2446943.96	1987 May 28 11:00:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1987-1177	2446949.38	1987 Jun 02 21:05:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1987-1178	2446949.46	1987 Jun 02 23:05:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1987-1179	2446950.98	1987 Jun 03 11:25:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1987-1180	2446950.09	1987 Jun 03 14:07:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1987-1181	2446950.18	1987 Jun 03 16:20:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1987-1182	2446956.99	1987 Jun 10 11:45:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1987-1183	2446957.13	1987 Jun 10 15:07:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1987-1184	2446957.14	1987 Jun 10 15:26:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1987-1185	2446957.30	1987 Jun 10 19:05:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1987-1186	2446960.30	1987 Jun 13 19:05:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1987-1187	2446963.99	1987 Jun 17 11:45:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1987-1188	2446964.09	1987 Jun 17 14:07:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1987-1189	2446964.19	1987 Jun 17 16:30:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1987-1190	2446964.30	1987 Jun 17 19:05:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1987-1191	2446965.01	1987 Jun 20 19:05:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1987-1192	2446965.04	1987 Jun 21 12:09:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1987-1193	2446970.98	1987 Jun 24 11:30:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1987-1194	2446971.01	1987 Jun 24 12:13:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1987-1195	2446971.09	1987 Jun 24 14:07:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1987-1196	2446971.12	1987 Jun 24 14:46:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1987-1197	2446972.27	1987 Jun 25 18:30:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1987-1198	2446972.35	1987 Jun 25 20:20:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1987-1199	2446974.30	1987 Jun 27 19:05:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1987-1200	2446975.09	1987 Jul 01 14:07:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1987-1201	2446975.15	1987 Jul 01 15:54:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1987-1202	2446976.30	1987 Jul 01 19:05:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1987-1203	2446976.98	1987 Jul 02 11:30:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1987-1204	2446981.30	1987 Jul 04 19:05:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1987-1205	2446984.98	1987 Jul 08 11:30:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1987-1206	2446985.09	1987 Jul 08 16:07:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1987-1207	2446985.15	1987 Jul 08 15:54:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1987-1208	2446985.30	1987 Jul 09 19:05:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1987-1209	2446985.30	1987 Jul 11 19:05:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1987-1210	2446986.30	1987 Jul 13 16:07:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1987-1211	2446990.09	1987 Jul 15 15:30:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1987-1212	2446992.14	1987 Jul 15 15:26:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1987-1213	2446992.14	1987 Jul 15 15:26:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1987-1214	2446992.30	1987 Jul 15 19:05:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1987-1215	2446995.30	1987 Jul 19 09:05:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1987-1216	2446995.30	1987 Jul 21 07:07:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1987-1217	2446995.30	1987 Jul 21 11:30:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1987-1218	2446995.30	1987 Jul 22 14:07:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1987-1219	2446995.30	1987 Jul 22 15:42:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1987-1220	2446995.30	1987 Jul 22 17:40:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1987-1221	2446995.30	1987 Jul 22 19:35:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1987-1222	2447000.98	1987 Jul 24 11:30:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1987-1223	2447003.98	1987 Jul 27 11:30:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1987-1224	2447004.98	1987 Jul 27 14:07:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1987-1225	2447005.30	1987 Jul 28 19:05:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1987-1226	2447005.98	1987 Jul 29 11:30:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1987-1227	2447006.09	1987 Jul 29 14:07:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1987-1228	2447007.20	1987 Jul 31 16:45:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1987-1229	2447007.98	1987 Jul 31 11:30:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1987-1230	2447010.98	1987 Aug 03 11:30:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1987-1231	2447011.09	1987 Aug 03 14:07:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1987-1232	2447011.30	1987 Aug 04 19:05:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1987-1233	2447012.98	1987 Aug 05 11:30:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1987-1234	2447013.13	1987 Aug 05 15:06:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1987-1235	2447013.13	1987 Aug 05 15:06:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1987-1236	2447013.17	1987 Aug 05 16:10:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1987-1237	2447019.98	1987 Aug 11 19:05:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1987-1238	2447019.98	1987 Aug 12 11:30:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1987-1239	2447020.09	1987 Aug 12 14:07:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1987-1240	2447020.19	1987 Aug 12 16:30:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1987-1241	2447026.30	1987 Aug 18 19:05:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1987-1242	2447027.11	1987 Aug 19 14:37:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1987-1243	2447027.12	1987 Aug 19 14:50:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1987-1244	2447031.30	1987 Aug 23 19:05:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1987-1245	2447032.10	1987 Aug 24 14:30:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1987-1246	2447033.98	1987 Aug 25 19:05:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1987-1247	2447034.98	1987 Aug 26 11:30:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1987-1248	2447034.98	1987 Aug 26 14:07:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1987-1249	2447034.10	1987 Aug 26 14:30:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1987-1250	2447038.30	1987 Aug 30 19:05:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	OrbPay t	Agency	Launch_Code	Group	Category	LT/Cite	Cite	Notes
1987-1277	2447039.17	1987 Aug 31 1600:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1987-1278	2447040.30	1987 Sep 01 1905:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1987-1279	2447040.98	1987 Sep 02 1135:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1987-1280	2447041.11	1987 Sep 02 1437:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1987-1281	2447045.30	1987 Sep 06 1905:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1987-1282	2447046.09	1987 Sep 07 1410:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1987-1283	2447047.30	1987 Sep 08 1905:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1987-1284	2447048.09	1987 Sep 09 1405:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1987-1285	2447048.09	1987 Sep 09 1407:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1987-1286	2447052.30	1987 Sep 13 1905:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1987-1287	2447052.42	1987 Sep 13 2205:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1987-1288	2447054.30	1987 Sep 15 1905:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1987-1289	2447055.07	1987 Sep 16 1340:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1987-1290	2447055.17	1987 Sep 16 1600:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1987-1291	2447061.98	1987 Sep 23 1132:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1987-1292	2447062.07	1987 Sep 23 1534:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1987-1293	2447062.30	1987 Sep 23 1905:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1987-1294	2447066.30	1987 Sep 29 1905:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1987-1295	2447069.06	1987 Sep 30 1320:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1987-1296	2447069.09	1987 Sep 30 1411:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1987-1297	2447075.30	1987 Oct 06 1905:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1987-1298	2447075.98	1987 Oct 07 1130:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1987-1299	2447076.09	1987 Oct 07 1407:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1987-1300	2447083.09	1987 Oct 12 1905:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1987-1301	2447083.15	1987 Oct 14 1407:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1987-1302	2447083.30	1987 Oct 14 1530:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1987-1303	2447085.06	1987 Oct 16 1320:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1987-1304	2447085.30	1987 Oct 16 1905:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1987-1305	2447086.02	1987 Oct 19 1235:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1987-1306	2447086.30	1987 Oct 19 1905:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1987-1307	2447089.98	1987 Oct 21 1130:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1987-1308	2447090.13	1987 Oct 21 1507:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1987-1309	2447090.30	1987 Oct 21 1905:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1987-1310	2447091.00	1987 Oct 22 1200:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1987-1311	2447092.00	1987 Oct 23 1200:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1987-1312	2447092.02	1987 Oct 23 1230:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1987-1313	2447092.30	1987 Oct 23 1905:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1987-1314	2447092.96	1987 Oct 24 1100:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1987-1315	2447094.52	1987 Oct 26 1001:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1987-1316	2447095.02	1987 Oct 26 1222:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1987-1317	2447095.12	1987 Oct 26 1500:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1987-1318	2447095.30	1987 Oct 29 1905:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1987-1319	2447096.00	1987 Oct 27 1204:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1987-1320	2447096.99	1987 Oct 28 1145:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1987-1321	2447096.99	1987 Oct 28 1445:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1987-1322	2447097.10	1987 Oct 28 1513:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1987-1323	2447097.30	1987 Oct 28 1905:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1987-1324	2447097.50	1987 Oct 28 1905:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1987-1325	2447098.30	1987 Oct 30 1630:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1987-1326	2447098.30	1987 Oct 30 1905:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1987-1327	2447102.30	1987 Oct 02 1205:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1987-1328	2447102.30	1987 Oct 02 1905:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1987-1329	2447104.06	1987 Nov 04 1330:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1987-1330	2447104.09	1987 Nov 04 1407:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1987-1331	2447104.09	1987 Nov 04 1905:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1987-1332	2447105.70	1987 Nov 06 0522:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1987-1333	2447105.70	1987 Nov 06 0652:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1987-1334	2447106.30	1987 Nov 06 1905:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1987-1335	2447108.99	1987 Nov 09 1152:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1987-1336	2447109.38	1987 Nov 09 1416:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1987-1337	2447111.07	1987 Nov 09 2105:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1987-1338	2447111.07	1987 Nov 11 1335:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1987-1339	2447111.07	1987 Nov 11 1407:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1987-1340	2447111.07	1987 Nov 11 1448:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1987-1341	2447111.07	1987 Nov 11 1448:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1987-1342	2447111.07	1987 Nov 11 1448:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1987-1343	2447113.04	1987 Nov 13 1258:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1987-1344	2447113.04	1987 Nov 13 1905:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1987-1345	2447114.02	1987 Nov 14 1234:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1987-1346	2447115.01	1987 Nov 15 1218:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1987-1347	2447116.08	1987 Nov 16 1400:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1987-1348	2447116.30	1987 Nov 16 1407:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1987-1349	2447116.30	1987 Nov 16 1905:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1987-1350	2447118.17	1987 Nov 18 1600:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1987-1351	2447118.17	1987 Nov 18 1731:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1987-1352	2447118.23	1987 Nov 18 1905:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1987-1353	2447119.30	1987 Nov 20 1132:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1987-1354	2447120.30	1987 Nov 20 1905:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1987-1355	2447120.97	1987 Nov 21 1122:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1987-1356	2447122.95	1987 Nov 23 1044:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1987-1357	2447124.12	1987 Nov 24 1500:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1987-1358	2447124.30	1987 Nov 24 1905:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1987-1359	2447128.88	1987 Nov 29 0907:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1987-1360	2447129.80	1987 Nov 30 0705:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1987-1361	2447130.88	1987 Dec 01 0902:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1987-1362	2447131.30	1987 Dec 01 1905:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1987-1363	2447131.30	1987 Dec 02 0911:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1987-1364	2447131.88	1987 Dec 02 0911:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	OrbPay t	Agency	Launch_Code	Group	Category	LT/Cite	Cite	Notes
1987-4295	2447131.98	1987 Dec 02 1130:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1987-4364	2447132.08	1987 Dec 02 1400:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1987-4365	2447132.64	1987 Dec 03 0320:00	H-100B	-	-	0.000	AM	SS	PRL/	Aeron	WDGRF	-	-
1987-4366	2447133.08	1987 Dec 03 1400:00	H-100B	-	-	0.000	AM	SS	PRL/	Aeron	WDGRF	-	-
1987-4367	2447134.64	1987 Dec 05 0320:00	H-100B	-	-	0.000	AM	SS	PRL/	Aeron	WDGRF	-	-
1987-4368	2447134.95	1987 Dec 05 0820:00	H-100B	-	-	0.000	AM	SS	PRL/	Aeron	WDGRF	-	-
1987-4369	2447134.91	1987 Dec 05 0950:00	H-100B	-	-	0.000	AM	SS	PRL/	Aeron	WDGRF	-	-
1987-4370	2447135.09	1987 Dec 05 1407:00	H-100B	-	-	0.000	AM	SS	PRL/	Aeron	WDGRF	-	-
1987-4299	2447135.18	1987 Dec 05 1615:00	H-100B	-	-	0.000	AM	SS	PRL/	Aeron	WDGRF	-	-
1987-4371	2447135.24	1987 Dec 05 1745:00	H-100B	-	-	0.000	AM	SS	PRL/	Aeron	WDGRF	-	-
1987-4372	2447135.29	1987 Dec 05 1853:00	H-100B	-	-	0.000	AM	SS	PRL/	Aeron	WDGRF	-	-
1987-4373	2447135.44	1987 Dec 05 2230:00	H-100B	-	-	0.000	AM	SS	PRL/	Aeron	WDGRF	-	-
1987-4374	2447136.91	1987 Dec 07 0952:00	H-100B	-	-	0.000	AM	SS	PRL/	Aeron	WDGRF	-	-
1987-4300	2447136.92	1987 Dec 07 1005:00	H-100B	-	-	0.000	AM	SS	PRL/	Aeron	WDGRF	-	-
1987-4375	2447137.08	1987 Dec 07 1400:00	H-100B	-	-	0.000	AM	SS	PRL/	Aeron	WDGRF	-	-
1987-4376	2447137.17	1987 Dec 07 1600:00	H-100B	-	-	0.000	AM	SS	PRL/	Aeron	WDGRF	-	-
1987-4377	2447137.25	1987 Dec 07 1804:00	H-100B	-	-	0.000	AM	SS	PRL/	Aeron	WDGRF	-	-
1987-4378	2447137.45	1987 Dec 07 2285:00	H-100B	-	-	0.000	AM	SS	PRL/	Aeron	WDGRF	-	-
1987-4379	2447138.30	1987 Dec 08 1905:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1987-4304	2447138.93	1987 Dec 09 1017:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1987-4380	2447139.08	1987 Dec 09 1386:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1987-4381	2447139.12	1987 Dec 09 1500:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1987-4382	2447145.30	1987 Dec 15 1905:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1987-4311	2447145.97	1987 Dec 16 1120:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1987-4383	2447146.08	1987 Dec 16 1400:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1987-4384	2447152.30	1987 Dec 22 1940:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1987-4385	2447152.74	1987 Dec 23 0540:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1987-4386	2447153.09	1987 Dec 23 1407:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1987-4387	2447157.30	1987 Dec 27 1905:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1987-4388	2447159.30	1987 Dec 29 1905:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1987-4389	2447159.77	1987 Dec 30 0630:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1987-4390	2447160.09	1987 Dec 30 1007:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1988-101	2447166.52	1988 Jan 06 1000:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1988-102	2447167.09	1988 Jan 06 1407:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1988-103	2447167.30	1988 Jan 06 1905:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1988-104	2447171.96	1988 Jan 11 1137:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1988-105	2447172.30	1988 Jan 11 1905:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1988-106	2447174.04	1988 Jan 13 1300:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1988-107	2447174.09	1988 Jan 13 1407:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1988-108	2447174.10	1988 Jan 13 1420:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1988-109	2447174.30	1988 Jan 13 1905:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1988-110	2447174.39	1988 Jan 13 2125:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1988-111	2447174.57	1988 Jan 14 1017:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1988-112	2447175.30	1988 Jan 18 1905:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1988-104	2447175.42	1988 Jan 18 2205:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1988-113	2447175.55	1988 Jan 19 0135:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1988-114	2447175.57	1988 Jan 19 0485:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1988-105	2447175.97	1988 Jan 19 0485:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1988-115	2447175.97	1988 Jan 19 0705:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1988-116	2447175.90	1988 Jan 19 0705:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1988-118	2447175.90	1988 Jan 19 1005:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1988-106	2447175.92	1988 Jan 19 1005:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1988-119	2447175.92	1988 Jan 19 1005:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1988-107	2447180.05	1988 Jan 19 1305:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1988-120	2447180.05	1988 Jan 19 1305:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1988-108	2447180.17	1988 Jan 19 1605:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1988-121	2447180.17	1988 Jan 19 1605:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1988-122	2447180.30	1988 Jan 19 1905:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1988-123	2447180.30	1988 Jan 19 1905:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1988-124	2447181.09	1988 Jan 20 1407:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1988-125	2447181.30	1988 Jan 20 1905:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1988-126	2447181.42	1988 Jan 20 2305:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1988-127	2447181.42	1988 Jan 21 0105:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1988-128	2447181.55	1988 Jan 21 0135:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1988-129	2447181.57	1988 Jan 21 0135:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1988-111	2447181.67	1988 Jan 21 0405:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1988-130	2447181.67	1988 Jan 21 0405:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1988-112	2447181.82	1988 Jan 21 0735:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1988-131	2447181.82	1988 Jan 21 0735:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1988-132	2447181.92	1988 Jan 21 1005:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1988-115	2447182.05	1988 Jan 21 1305:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1988-133	2447182.05	1988 Jan 21 1305:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1988-134	2447182.17	1988 Jan 21 1605:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1988-135	2447182.17	1988 Jan 21 1605:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1988-136	2447182.30	1988 Jan 21 1905:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1988-137	2447182.30	1988 Jan 21 1905:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1988-118	2447186.04	1988 Jan 25 1300:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1988-137	2447186.98	1988 Jan 25 1905:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1988-138	2447187.98	1988 Jan 27 1125:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1988-119	2447188.06	1988 Jan 27 1330:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1988-120	2447188.06	1988 Jan 27 1407:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1988-139	2447188.30	1988 Jan 27 1905:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1988-140	2447188.42	1988 Jan 27 2205:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1988-141	2447193.01	1988 Feb 01 1220:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1988-142	2447194.30	1988 Feb 02 1905:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	OrbPay t	Agency	Launch_Code	Group	Category	LT/Cite	Cite	Notes
1988-142	2447195.02	1988 Feb 03 1222:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1988-143	2447195.30	1988 Feb 03 1905:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1988-144	2447195.38	1988 Feb 03 2100:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1988-146	2447200.30	1988 Feb 08 1905:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1988-147	2447201.99	1988 Feb 10 1138:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1988-148	2447202.07	1988 Feb 10 1345:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1988-149	2447202.22	1988 Feb 10 1712:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1988-150	2447202.30	1988 Feb 10 1905:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1988-151	2447207.06	1988 Feb 15 1330:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1988-152	2447207.30	1988 Feb 15 1905:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1988-153	2447209.04	1988 Feb 17 1253:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1988-154	2447209.30	1988 Feb 17 1905:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1988-155	2447209.46	1988 Feb 17 2300:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1988-156	2447214.04	1988 Feb 22 1300:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1988-157	2447214.30	1988 Feb 22 1905:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1988-158	2447216.04	1988 Feb 24 1300:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1988-140	2447216.32	1988 Feb 24 1945:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1988-159	2447216.42	1988 Feb 24 2207:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1988-162	2447221.06	1988 Feb 29 1327:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1988-163	2447221.30	1988 Feb 29 1905:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1988-164	2447223.06	1988 Mar 02 1531:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1988-165	2447223.30	1988 Mar 02 1905:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1988-166	2447223.38	1988 Mar 02 2100:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1988-167	2447224.00	1988 Mar 03 1156:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1988-168	2447229.30	1988 Mar 08 1940:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1988-166	2447229.96	1988 Mar 09 1137:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1988-164	2447230.07	1988 Mar 09 1340:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1988-169	2447230.38	1988 Mar 09 2100:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1988-170	2447236.30	1988 Mar 15 1905:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1988-171	2447237.07	1988 Mar 16 1340:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1988-172	2447237.09	1988 Mar 16 1407:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1988-169	2447237.96	1988 Mar 17 1137:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1988-173	2447239.14	1988 Mar 18 1549:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1988-174	2447239.19	1988 Mar 18 1634:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1988-162	2447241.18	1988 Mar 18 1549:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1988-175	2447243.15	1988 Mar 22 1541:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1988-176	2447243.99	1988 Mar 23 1140:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1988-177	2447244.08	1988 Mar 23 1306:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1988-178	2447244.09	1988 Mar 23 1407:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1988-179	2447244.16	1988 Mar 23 1551:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1988-180	2447244.36	1988 Mar 23 2036:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1988-181	2447250.96	1988 Mar 30 1137:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1988-182	2447251.05	1988 Mar 30 1400:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1988-183	2447251.14	1988 Mar 30 1525:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1988-184	2447251.21	1988 Mar 30 2009:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1988-185	2447251.24	1988 Mar 31 0425:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1988-186	2447251.94	1988 Mar 31 0551:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1988-187	2447252.18	1988 Apr 01 1651:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1988-188	2447252.18	1988 Apr 05 0930:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1988-189	2447257.16	1988 Apr 06 0930:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1988-173	2447257.96	1988 Apr 06 1137:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1988-190	2447258.89	1988 Apr 06 1407:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1988-191	2447258.99	1988 Apr 06 1620:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1988-192	2447258.15	1988 Apr 06 1620:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1988-193	2447258.17	1988 Apr 06 1620:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1988-194	2447258.20	1988 Apr 06 1650:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1988-195	2447258.33	1988 Apr 06 1953:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1988-175	2447263.16	1988 Apr 11 1554:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1988-179	2447263.18	1988 Apr 11 1554:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1988-196	2447264.18	1988 Apr 13 1135:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1988-182	2447264.98	1988 Apr 13 1407:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1988-197	2447265.09	1988 Apr 13 1427:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1988-184	2447265.10	1988 Apr 13 1905:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1988-198	2447265.30	1988 Apr 13 1905:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1988-199	2447272.09	1988 Apr 20 1407:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1988-100	2447272.11	1988 Apr 20 1435:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1988-195	2447272.17	1988 Apr 20 1607:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1988-101	2447272.18	1988 Apr 20 1620:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1988-102	2447272.30	1988 Apr 20 1905:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1988-103	2447272.38	1988 Apr 20 2105:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1988-104	2447272.98	1988 Apr 21 1135:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1988-105	2447274.20	1988 Apr 22 1645:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1988-106	2447274.20	1988 Apr 27 1134:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1988-106	2447279.08	1988 Apr 27 1400:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1988-107	2447279.14	1988 Apr 27 1522:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1988-100	2447279.17	1988 Apr 27 1609:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1988-108	2447279.20	1988 Apr 27 1650:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1988-109	2447279.30	1988 Apr 27 1905:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1988-110	2447282.00	1988 Apr 30 1200:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1988-110	2447284.10	1988 May 02 1430:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1988-101	2447285.08	1988 May 03 1358:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1988-102	2447285.86	1988 May 04 0842:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1988-111	2447285.98	1988 May 04 1134:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1988-112	2447286.08	1988 May 04 1400:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1988-103	2447286.08	1988 May 04 1400:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1988-114	2447286.25	1988 May 04 1803:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	OrbPay t	Agency	Launch_Code	Group	Category	LT/Cite	Cite	Notes
1988-1115	2447292.96	1988 May 11 11:09:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1988-1116	2447292.99	1988 May 11 11:42:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1988-1117	2447293.14	1988 May 11 15:25:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1988-1118	2447293.30	1988 May 11 19:15:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1988-1107	2447299.86	1988 May 18 08:56:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1988-1119	2447299.92	1988 May 18 10:00:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1988-1108	2447300.15	1988 May 18 15:40:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1988-1120	2447300.25	1988 May 18 18:07:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1988-1121	2447300.99	1988 May 19 11:51:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1988-1122	2447306.96	1988 May 25 11:04:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1988-1123	2447306.98	1988 May 25 11:38:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1988-1124	2447307.27	1988 May 25 18:31:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1988-1125	2447307.33	1988 May 25 19:50:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1988-1126	2447307.35	1988 May 25 20:31:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1988-1127	2447313.65	1988 Jun 01 08:31:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1988-1128	2447313.98	1988 Jun 01 11:36:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1988-1129	2447314.08	1988 Jun 01 13:54:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1988-1130	2447314.17	1988 Jun 01 16:01:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1988-1131	2447319.09	1988 Jun 06 14:07:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1988-1132	2447320.86	1988 Jun 08 08:41:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1988-1133	2447320.96	1988 Jun 08 10:59:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1988-1134	2447320.98	1988 Jun 08 11:30:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1988-1135	2447321.17	1988 Jun 08 16:00:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1988-1136	2447327.85	1988 Jun 15 08:27:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1988-1137	2447327.99	1988 Jun 15 11:45:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1988-1138	2447328.16	1988 Jun 15 16:20:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1988-1139	2447328.24	1988 Jun 15 17:49:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1988-1140	2447330.11	1988 Jun 17 14:37:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1988-1141	2447333.09	1988 Jun 20 14:07:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1988-1142	2447334.95	1988 Jun 22 10:54:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1988-1143	2447334.99	1988 Jun 22 11:48:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1988-1144	2447335.23	1988 Jun 22 17:30:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1988-1145	2447335.27	1988 Jun 22 18:36:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1988-1131	2447340.09	1988 Jun 27 14:07:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1988-1146	2447341.96	1988 Jun 29 11:35:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1988-1147	2447341.99	1988 Jun 29 11:45:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1988-1148	2447342.17	1988 Jun 29 16:10:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1988-1153	2447342.24	1988 Jun 29 17:44:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1988-1149	2447347.09	1988 Jun 04 14:07:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1988-1150	2447346.97	1988 Jun 06 11:17:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1988-1151	2447346.98	1988 Jun 06 15:30:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1988-1152	2447346.15	1988 Jun 06 18:55:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1988-1153	2447346.21	1988 Jun 09 18:32:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1988-1154	2447354.11	1988 Jun 11 14:57:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1988-1155	2447354.38	1988 Jun 11 19:05:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1988-1156	2447354.39	1988 Jun 11 21:09:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1988-1157	2447354.42	1988 Jun 11 22:05:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1988-1158	2447354.46	1988 Jun 12 00:05:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1988-1159	2447354.47	1988 Jun 12 01:05:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1988-1160	2447354.55	1988 Jun 12 03:05:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1988-1161	2447354.75	1988 Jun 12 06:00:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1988-1162	2447354.80	1988 Jun 12 07:05:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1988-1163	2447354.88	1988 Jun 12 09:00:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1988-1164	2447354.92	1988 Jun 12 10:05:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1988-1165	2447355.05	1988 Jun 12 13:05:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1988-1166	2447355.06	1988 Jun 12 13:20:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1988-1167	2447355.09	1988 Jun 12 14:05:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1988-1168	2447355.12	1988 Jun 12 15:00:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1988-1169	2447355.17	1988 Jun 12 16:05:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1988-1170	2447355.25	1988 Jun 12 18:00:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1988-1171	2447355.38	1988 Jun 12 21:00:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1988-1172	2447355.50	1988 Jun 13 00:00:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1988-1173	2447355.62	1988 Jun 13 03:00:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1988-1174	2447355.71	1988 Jun 13 05:00:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1988-1175	2447355.88	1988 Jun 13 09:00:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1988-1176	2447355.99	1988 Jun 13 11:40:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1988-1177	2447356.12	1988 Jun 13 12:00:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1988-1178	2447356.24	1988 Jun 13 13:00:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1988-1179	2447356.25	1988 Jun 13 18:00:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1988-1180	2447356.30	1988 Jun 13 19:05:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1988-1181	2447356.42	1988 Jun 13 22:05:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1988-1182	2447356.54	1988 Jun 14 01:03:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1988-1183	2447356.69	1988 Jun 14 04:28:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1988-1184	2447356.80	1988 Jun 14 07:06:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1988-1185	2447356.92	1988 Jun 14 10:05:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1988-1186	2447357.13	1988 Jun 14 15:07:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1988-1187	2447361.09	1988 Jun 18 14:07:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1988-1188	2447362.99	1988 Jun 20 11:40:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1988-1189	2447363.14	1988 Jun 20 15:20:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1988-1190	2447363.14	1988 Jun 20 15:24:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1988-1191	2447363.17	1988 Jun 20 16:05:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1988-1192	2447368.09	1988 Jun 25 14:07:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1988-1193	2447369.98	1988 Jun 27 11:30:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1988-1194	2447370.09	1988 Jun 27 14:05:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1988-1195	2447370.13	1988 Jun 27 15:07:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-



Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	OrbPay t	Agency	Launch_Code	Group	Category	LT/Cite	Cite	Notes
1988-1196	2447370.14	1988 Jul 27 1516:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1988-1197	2447375.09	1988 Aug 01 1407:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1988-1198	2447376.98	1988 Aug 03 1130:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1988-1199	2447377.09	1988 Aug 03 1405:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1988-1199	2447377.09	1988 Aug 03 1407:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1988-1199	2447377.33	1988 Aug 03 2000:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1988-1200	2447384.00	1988 Aug 10 1159:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1988-1200	2447384.09	1988 Aug 10 1405:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1988-1201	2447384.09	1988 Aug 10 1407:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1988-1201	2447389.10	1988 Aug 15 1420:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1988-1203	2447390.98	1988 Aug 17 1130:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1988-1203	2447391.09	1988 Aug 17 1405:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1988-1205	2447391.09	1988 Aug 17 1407:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1988-1145	2447391.23	1988 Aug 17 1900:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1988-1206	2447398.02	1988 Aug 24 1225:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1988-1207	2447398.09	1988 Aug 24 1405:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1988-1148	2447398.09	1988 Aug 24 1407:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1988-1208	2447398.16	1988 Aug 24 1550:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1988-1210	2447404.98	1988 Aug 31 1130:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1988-1211	2447405.09	1988 Aug 31 1405:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1988-1212	2447405.09	1988 Aug 31 1407:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1988-1213	2447405.10	1988 Aug 31 1421:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1988-1214	2447411.99	1988 Sep 07 1141:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1988-1215	2447412.09	1988 Sep 07 1405:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1988-1216	2447412.09	1988 Sep 07 1409:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1988-1217	2447412.10	1988 Sep 07 1420:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1988-1218	2447414.60	1988 Sep 10 0230:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1988-1219	2447415.01	1988 Sep 10 1215:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1988-1220	2447415.05	1988 Sep 10 1315:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1988-1221	2447415.98	1988 Sep 14 1128:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1988-1160	2447415.08	1988 Sep 14 1355:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1988-1222	2447415.09	1988 Sep 14 1405:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1988-1223	2447419.09	1988 Sep 14 1407:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1988-1225	2447425.98	1988 Sep 21 1127:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1988-1226	2447426.09	1988 Sep 21 1405:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1988-1227	2447426.09	1988 Sep 21 1407:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1988-1166	2447426.10	1988 Sep 21 1430:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1988-1228	2447432.99	1988 Sep 28 1139:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1988-1170	2447433.09	1988 Sep 28 1407:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1988-1229	2447433.13	1988 Sep 28 1514:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1988-1230	2447433.15	1988 Sep 28 1535:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1988-1235	2447433.97	1988 Oct 05 1117:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1988-1236	2447440.09	1988 Oct 05 1510:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1988-1238	2447440.13	1988 Oct 05 2000:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1988-1239	2447446.97	1988 Oct 12 1111:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1988-1240	2447447.04	1988 Oct 12 1437:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1988-1241	2447447.11	1988 Oct 12 1505:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1988-1242	2447453.31	1988 Oct 12 1700:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1988-1244	2447453.50	1988 Oct 19 1600:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1988-1245	2447453.66	1988 Oct 19 1707:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1988-1246	2447453.69	1988 Oct 19 1407:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1988-1247	2447454.19	1988 Oct 19 1505:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1988-1248	2447461.96	1988 Oct 26 1103:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1988-1249	2447461.99	1988 Oct 26 1407:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1988-1250	2447461.13	1988 Oct 26 1505:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1988-1252	2447467.96	1988 Oct 02 1101:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1988-1253	2447468.09	1988 Oct 02 1407:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1988-1254	2447468.19	1988 Oct 02 1635:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1988-1255	2447475.09	1988 Oct 09 1407:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1988-1256	2447475.13	1988 Oct 09 1505:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1988-1257	2447475.96	1988 Oct 10 1059:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1988-1196	2447480.87	1988 Oct 15 0410:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1988-1259	2447480.73	1988 Oct 15 0630:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1988-1260	2447480.78	1988 Oct 15 0650:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1988-1261	2447483.19	1988 Oct 16 1057:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1988-1262	2447483.13	1988 Oct 16 1414:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1988-1263	2447483.13	1988 Oct 16 1505:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1988-1264	2447483.23	1988 Oct 17 1630:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1988-1265	2447483.23	1988 Oct 17 1730:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1988-1266	2447488.29	1988 Oct 22 1900:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1988-1202	2447488.96	1988 Oct 23 1100:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1988-1267	2447489.09	1988 Oct 23 1407:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1988-1268	2447489.13	1988 Oct 23 1505:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1988-1269	2447489.35	1988 Oct 23 2030:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1988-1270	2447489.96	1988 Oct 30 1057:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1988-1271	2447495.97	1988 Oct 30 1115:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1988-1272	2447496.09	1988 Oct 30 1412:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1988-1273	2447496.13	1988 Oct 30 1505:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1988-1281	2447502.92	1988 Dec 07 1001:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1988-1215	2447502.97	1988 Dec 07 1115:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1988-1282	2447503.13	1988 Dec 07 1505:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1988-1283	2447509.96	1988 Dec 14 1101:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1988-1217	2447510.09	1988 Dec 14 1407:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	OrbPay t	Agency	Launch_Code	Group	Category	LT_Cite	Cite	Notes
1988-1284	2447510.13	1988 Dec 14 1505:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1988-1285	2447516.96	1988 Dec 21 1101:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1988-1286	2447517.09	1988 Dec 21 1407:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1988-1287	2447517.13	1988 Dec 21 1505:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1988-1288	2447522.98	1988 Dec 27 1134:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1988-1289	2447523.96	1988 Dec 28 1108:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1988-1290	2447524.09	1988 Dec 28 1407:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1988-1291	2447524.13	1988 Dec 28 1505:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1988-1292	2447524.78	1989 Jan 04 0638:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1989-101	2447531.09	1989 Jan 04 1407:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1989-102	2447531.13	1989 Jan 04 1505:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1989-103	2447535.98	1989 Jan 09 1125:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1989-104	2447537.78	1989 Jan 11 0650:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1989-105	2447537.97	1989 Jan 11 1116:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1989-106	2447538.13	1989 Jan 11 1505:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1989-107	2447542.99	1989 Jan 16 1141:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1989-108	2447542.99	1989 Jan 16 1152:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1989-109	2447543.13	1989 Jan 16 1505:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1989-110	2447544.08	1989 Jan 17 1400:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1989-111	2447544.79	1989 Jan 18 0704:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1989-112	2447544.98	1989 Jan 18 1127:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1989-113	2447545.06	1989 Jan 18 1330:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1989-114	2447545.11	1989 Jan 18 1437:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1989-115	2447545.13	1989 Jan 18 1505:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1989-116	2447545.21	1989 Jan 18 1707:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1989-117	2447547.06	1989 Jan 20 1330:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1989-118	2447547.07	1989 Jan 21 0400:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1989-119	2447549.96	1989 Jan 23 1100:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1989-120	2447550.03	1989 Jan 23 1238:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1989-121	2447550.13	1989 Jan 23 1505:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1989-122	2447550.52	1989 Jan 24 1000:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1989-123	2447551.80	1989 Jan 25 0719:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1989-124	2447551.99	1989 Jan 25 1146:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1989-125	2447552.05	1989 Jan 25 1316:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1989-126	2447552.13	1989 Jan 25 1505:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1989-127	2447552.96	1989 Jan 26 1100:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1989-128	2447557.16	1989 Jan 30 0585:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1989-129	2447556.98	1989 Feb 01 1133:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1989-130	2447559.09	1989 Feb 01 1407:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1989-131	2447559.10	1989 Feb 01 1420:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1989-132	2447559.11	1989 Feb 01 1446:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1989-133	2447559.33	1989 Feb 01 1505:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1989-134	2447559.35	1989 Feb 01 2000:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1989-135	2447561.12	1989 Feb 03 1500:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1989-136	2447561.43	1989 Feb 06 1531:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1989-137	2447563.95	1989 Feb 06 1200:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1989-138	2447564.02	1989 Feb 06 1505:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1989-139	2447565.82	1989 Feb 08 0737:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1989-140	2447565.86	1989 Feb 08 1131:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1989-141	2447565.86	1989 Feb 08 1234:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1989-142	2447565.94	1989 Feb 08 1527:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1989-143	2447566.33	1989 Feb 08 1735:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1989-144	2447566.35	1989 Feb 08 2020:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1989-145	2447566.41	1989 Feb 08 2145:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1989-146	2447566.96	1989 Feb 09 0840:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1989-147	2447568.03	1989 Feb 10 1240:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1989-148	2447568.13	1989 Feb 10 1505:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1989-149	2447570.98	1989 Feb 13 1133:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1989-150	2447570.98	1989 Feb 13 1237:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1989-151	2447571.03	1989 Feb 13 1505:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1989-152	2447571.13	1989 Feb 15 1141:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1989-153	2447572.99	1989 Feb 15 1400:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1989-154	2447573.03	1989 Feb 15 1407:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1989-155	2447573.19	1989 Feb 15 1505:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1989-156	2447573.21	1989 Feb 15 1705:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1989-157	2447573.99	1989 Feb 15 1855:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1989-158	2447573.84	1989 Feb 16 0830:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1989-159	2447575.04	1989 Feb 17 1254:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1989-160	2447575.16	1989 Feb 17 1555:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1989-161	2447578.13	1989 Feb 20 1505:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1989-162	2447578.14	1989 Feb 20 1523:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1989-163	2447578.22	1989 Feb 20 1720:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1989-164	2447578.30	1989 Feb 20 1905:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1989-165	2447580.13	1989 Feb 22 1505:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1989-166	2447580.14	1989 Feb 22 1525:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1989-167	2447580.19	1989 Feb 22 1640:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1989-168	2447581.91	1989 Feb 24 0945:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1989-169	2447582.13	1989 Feb 24 1505:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1989-170	2447585.15	1989 Feb 27 1532:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1989-171	2447585.17	1989 Feb 27 1605:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1989-172	2447586.87	1989 Mar 01 0858:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1989-173	2447587.09	1989 Mar 01 1407:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1989-174	2447587.13	1989 Mar 01 1505:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1989-175	2447587.20	1989 Mar 01 1650:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	OrbPay t	Agency	Launch_Code	Group	Category	LT_Cite	Cite	Notes
1989-W72	2447567.26	1989 Mar 01 1820:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1989-W69	2447568.10	1989 Mar 02 1417:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1989-W70	2447568.85	1989 Mar 03 0825:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1989-W71	2447569.29	1989 Mar 03 1903:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1989-W72	2447593.13	1989 Mar 07 1505:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1989-W73	2447593.90	1989 Mar 08 0940:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1989-W74	2447593.99	1989 Mar 09 1415:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1989-W75	2447596.13	1989 Mar 10 1514:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1989-W79	2447599.17	1989 Mar 13 1605:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1989-W85	2447601.09	1989 Mar 15 1407:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1989-W77	2447601.13	1989 Mar 15 1505:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1989-W87	2447601.16	1989 Mar 15 1545:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1989-W78	2447601.90	1989 Mar 16 0931:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1989-W80	2447603.07	1989 Mar 17 1340:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1989-W84	2447607.91	1989 Mar 22 0946:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1989-W85	2447608.08	1989 Mar 22 1364:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1989-W86	2447614.87	1989 Mar 29 0857:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1989-W87	2447615.09	1989 Mar 29 1407:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1989-W88	2447615.09	1989 Mar 29 1410:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1989-W89	2447615.13	1989 Mar 29 1505:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1989-W90	2447620.02	1989 Apr 03 1230:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1989-W91	2447621.88	1989 Apr 05 0900:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1989-W105	2447622.13	1989 Apr 05 1505:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1989-W92	2447623.09	1989 Apr 12 1407:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1989-W93	2447623.11	1989 Apr 12 1436:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1989-W94	2447623.13	1989 Apr 12 1505:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1989-W95	2447623.13	1989 Apr 13 1123:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1989-W96	2447635.88	1989 Apr 19 0914:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1989-W97	2447636.13	1989 Apr 19 1505:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1989-W98	2447643.09	1989 Apr 26 1407:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1989-W99	2447643.13	1989 Apr 26 1505:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1989-W100	2447644.07	1989 Apr 27 1340:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1989-W101	2447649.89	1989 Apr 03 0927:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1989-W102	2447650.12	1989 Apr 03 1462:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1989-W103	2447650.13	1989 Apr 03 1505:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1989-W106	2447650.88	1989 Apr 04 0900:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1989-W124	2447650.98	1989 Apr 04 1133:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1989-W116	2447656.97	1989 Apr 10 1120:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1989-W157	2447657.09	1989 Apr 10 1407:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1989-W118	2447657.12	1989 Apr 10 1500:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1989-W119	2447657.13	1989 Apr 10 1505:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1989-W120	2447657.95	1989 Apr 11 1021:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1989-W121	2447655.92	1989 Apr 17 1000:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1989-W122	2447654.13	1989 Apr 17 1102:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1989-W123	2447654.51	1989 Apr 17 1705:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1989-W124	2447654.51	1989 Apr 17 1705:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1989-W125	2447670.89	1989 Apr 24 1152:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1989-W126	2447671.09	1989 Apr 24 1407:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1989-W127	2447671.18	1989 Apr 24 1505:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1989-W128	2447671.84	1989 Apr 31 1027:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1989-W129	2447677.97	1989 Apr 31 1110:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1989-W130	2447678.18	1989 Apr 31 1521:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1989-W131	2447678.92	1989 Apr 01 1306:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1989-W132	2447678.92	1989 Apr 01 1306:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1989-W133	2447684.90	1989 Apr 07 0958:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1989-W134	2447684.98	1989 Apr 07 1130:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1989-W135	2447685.09	1989 Apr 07 1407:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1989-W136	2447685.13	1989 Apr 07 1505:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1989-W137	2447685.19	1989 Apr 14 1630:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1989-W138	2447689.13	1989 Apr 21 1008:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1989-W139	2447689.97	1989 Apr 21 1110:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1989-W140	2447689.09	1989 Apr 21 1407:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1989-W141	2447693.13	1989 Apr 21 1505:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1989-W142	2447703.89	1989 Apr 26 0920:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1989-W143	2447705.92	1989 Apr 28 1010:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1989-W144	2447706.13	1989 Apr 28 1505:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1989-W145	2447706.19	1989 Apr 28 1633:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1989-W146	2447712.92	1989 Jul 05 1010:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1989-W147	2447712.98	1989 Jul 05 1126:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1989-W148	2447713.09	1989 Jul 05 1407:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1989-W149	2447713.20	1989 Jul 05 1655:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1989-W150	2447713.28	1989 Jul 05 1840:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1989-W151	2447718.09	1989 Jul 10 1407:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1989-W152	2447718.25	1989 Jul 10 1800:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1989-W153	2447718.29	1989 Jul 10 1900:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1989-W154	2447719.97	1989 Jul 12 1110:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1989-W155	2447720.13	1989 Jul 12 1505:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	OrbPay t	Agency	Launch_Code	Group	Category	LT/Cite	Cite	Notes
1989-M183	2447720.14	1989 Jul 12 1515:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1989-M184	2447720.19	1989 Jul 12 1628:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1989-M185	2447720.92	1989 Jul 13 1009:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1989-M186	2447725.09	1989 Jul 17 1407:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1989-M187	2447727.13	1989 Jul 19 1505:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1989-M188	2447727.19	1989 Jul 19 1627:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1989-M189	2447728.06	1989 Jul 20 1323:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1989-M190	2447733.92	1989 Jul 26 1002:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1989-M191	2447734.09	1989 Jul 26 1136:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1989-M192	2447734.13	1989 Jul 26 1505:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1989-M193	2447734.19	1989 Jul 26 1628:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1989-M194	2447740.97	1989 Aug 02 1122:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1989-M195	2447741.09	1989 Aug 02 1407:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1989-M196	2447741.13	1989 Aug 02 1505:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1989-M197	2447741.17	1989 Aug 02 1640:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1989-M198	2447741.91	1989 Aug 03 0949:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1989-M199	2447747.90	1989 Aug 09 0937:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1989-M200	2447747.97	1989 Aug 09 1140:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1989-M201	2447748.10	1989 Aug 09 1425:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1989-M202	2447748.13	1989 Aug 09 1505:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1989-M203	2447748.17	1989 Aug 09 1611:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1989-M204	2447754.97	1989 Aug 16 1140:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1989-M205	2447755.13	1989 Aug 16 1505:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1989-M206	2447755.16	1989 Aug 16 1550:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1989-M207	2447755.21	1989 Aug 16 1707:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1989-M208	2447755.36	1989 Aug 16 2040:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1989-M209	2447760.09	1989 Aug 21 1405:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1989-M210	2447761.95	1989 Aug 23 1140:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1989-M211	2447761.97	1989 Aug 23 1047:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1989-M212	2447762.09	1989 Aug 23 1405:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1989-M213	2447762.13	1989 Aug 23 1537:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1989-M214	2447765.15	1989 Aug 26 1701:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1989-M215	2447765.21	1989 Aug 27 0650:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1989-M216	2447765.78	1989 Aug 28 1407:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1989-M217	2447767.09	1989 Aug 29 1635:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1989-M218	2447768.19	1989 Aug 29 1845:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1989-M219	2447768.28	1989 Aug 29 1845:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1989-M220	2447768.52	1989 Aug 30 1040:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1989-M221	2447769.09	1989 Aug 30 1407:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1989-M222	2447769.10	1989 Aug 30 1535:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1989-M223	2447769.14	1989 Aug 30 1525:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1989-M224	2447769.15	1989 Aug 30 1553:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1989-M225	2447770.70	1989 Aug 31 0700:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1989-M226	2447770.79	1989 Aug 31 1607:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1989-M227	2447771.09	1989 Aug 31 1607:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1989-M228	2447771.51	1989 Aug 31 1707:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1989-M229	2447771.53	1989 Aug 31 1707:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1989-M230	2447771.59	1989 Aug 31 1900:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1989-M231	2447771.92	1989 Aug 31 1900:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1989-M232	2447771.99	1989 Aug 31 1900:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1989-M233	2447775.99	1989 Aug 05 1951:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1989-M234	2447775.99	1989 Aug 06 1005:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1989-M235	2447775.99	1989 Aug 06 1005:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1989-M236	2447775.99	1989 Aug 06 1110:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1989-M237	2447775.99	1989 Aug 06 1407:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1989-M238	2447775.99	1989 Aug 06 1511:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1989-M239	2447775.99	1989 Aug 08 1630:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1989-M240	2447775.99	1989 Aug 11 0620:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1989-M241	2447780.76	1989 Aug 11 1407:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1989-M242	2447781.09	1989 Aug 11 1600:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1989-M243	2447781.17	1989 Aug 11 1745:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1989-M244	2447781.24	1989 Aug 11 1745:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1989-M245	2447781.25	1989 Aug 11 1800:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1989-M246	2447781.33	1989 Aug 11 2000:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1989-M247	2447781.34	1989 Aug 11 2015:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1989-M248	2447782.85	1989 Aug 13 0824:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1989-M249	2447783.09	1989 Aug 13 1145:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1989-M250	2447783.09	1989 Aug 13 1407:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1989-M251	2447783.12	1989 Aug 13 1457:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1989-M252	2447783.42	1989 Aug 13 2205:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1989-M253	2447788.09	1989 Aug 18 1415:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1989-M254	2447789.91	1989 Aug 20 0955:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1989-M255	2447789.97	1989 Aug 20 1120:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1989-M256	2447790.09	1989 Aug 20 1407:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1989-M257	2447790.13	1989 Aug 20 1443:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1989-M258	2447795.13	1989 Aug 25 1507:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1989-M259	2447796.97	1989 Aug 27 1115:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1989-M260	2447797.06	1989 Aug 27 1325:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1989-M261	2447797.09	1989 Aug 27 1407:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1989-M262	2447798.13	1989 Aug 28 1505:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1989-M263	2447802.09	1989 Oct 02 1407:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1989-M264	2447803.85	1989 Oct 04 0830:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1989-M265	2447803.97	1989 Oct 04 1110:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	OrbPay t	Agency	Launch_Code	Group	Category	LT_Cite	Cite	Notes
1989-1225	2447804.06	1989 Dec 04 1320:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1989-1226	2447804.09	1989 Dec 04 1407:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1989-1227	2447804.13	1989 Dec 04 1505:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1989-1228	2447805.09	1989 Dec 05 1407:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1989-1229	2447805.25	1989 Dec 05 1800:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1989-1230	2447805.25	1989 Dec 05 1802:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1989-1231	2447809.09	1989 Dec 09 1407:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1989-1232	2447809.20	1989 Dec 09 1655:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1989-1233	2447809.26	1989 Dec 09 1814:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1989-1234	2447810.79	1989 Dec 11 0700:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1989-1235	2447810.79	1989 Dec 11 0701:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1989-1236	2447810.90	1989 Dec 11 0934:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1989-1237	2447810.97	1989 Dec 11 1110:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1989-1238	2447811.09	1989 Dec 11 1407:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1989-1239	2447811.13	1989 Dec 11 1505:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1989-1240	2447811.21	1989 Dec 11 1700:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1989-1241	2447811.33	1989 Dec 11 2000:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1989-1242	2447812.09	1989 Dec 12 1405:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1989-1243	2447812.21	1989 Dec 12 1705:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1989-1244	2447812.25	1989 Dec 12 1807:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1989-1245	2447815.20	1989 Dec 15 1655:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1989-1246	2447815.27	1989 Dec 15 1836:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1989-1247	2447815.09	1989 Dec 16 1407:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1989-1248	2447815.03	1989 Dec 16 1237:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1989-1249	2447815.09	1989 Dec 18 1407:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1989-1250	2447815.13	1989 Dec 18 1505:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1989-1251	2447815.23	1989 Dec 18 1730:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1989-1252	2447815.23	1989 Dec 18 1730:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1989-1253	2447815.65	1989 Dec 19 0530:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1989-1254	2447820.09	1989 Dec 20 1407:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1989-1255	2447820.25	1989 Dec 20 1802:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1989-1256	2447820.37	1989 Dec 20 2050:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1989-1257	2447820.37	1989 Dec 20 2126:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1989-1258	2447820.39	1989 Dec 21 1928:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1989-1259	2447821.51	1989 Dec 21 1928:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1989-1260	2447821.71	1989 Dec 23 0500:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1989-1261	2447822.71	1989 Dec 23 1407:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1989-1262	2447823.09	1989 Dec 23 1407:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1989-1263	2447823.25	1989 Dec 23 1652:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1989-1264	2447823.25	1989 Dec 23 1800:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1989-1265	2447824.65	1989 Dec 25 0930:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1989-1266	2447824.90	1989 Dec 25 1218:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1989-1267	2447824.97	1989 Dec 25 1505:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1989-1268	2447825.01	1989 Dec 25 1505:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1989-1269	2447825.35	1989 Dec 25 1800:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1989-1270	2447826.45	1989 Dec 26 1100:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1989-1271	2447831.90	1989 Dec 31 1201:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1989-1272	2447832.13	1989 Dec 01 1505:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1989-1273	2447832.51	1989 Dec 01 1709:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1989-1274	2447833.58	1989 Dec 08 0900:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1989-1275	2447833.97	1989 Dec 08 1118:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1989-1276	2447833.99	1989 Dec 08 1407:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1989-1277	2447833.99	1989 Dec 09 1149:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1989-1278	2447844.13	1989 Dec 09 1505:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1989-1279	2447844.09	1989 Dec 13 1407:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1989-1280	2447845.95	1989 Dec 15 0830:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1989-1281	2447845.99	1989 Dec 15 1140:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1989-1282	2447846.09	1989 Dec 15 1407:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1989-1283	2447846.13	1989 Dec 15 1505:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1989-1284	2447851.88	1989 Dec 22 0900:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1989-1285	2447852.88	1989 Dec 22 0900:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1989-1286	2447853.04	1989 Dec 22 1337:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1989-1287	2447853.12	1989 Dec 22 1452:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1989-1288	2447853.13	1989 Dec 22 1505:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1989-1289	2447853.94	1989 Dec 23 1040:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1989-1290	2447853.94	1989 Dec 23 1040:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1989-1291	2447853.97	1989 Dec 29 0855:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1989-1292	2447860.09	1989 Dec 29 1408:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1989-1293	2447860.13	1989 Dec 29 1505:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1989-1294	2447866.97	1989 Dec 06 1118:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1989-1295	2447867.09	1989 Dec 06 1405:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1989-1296	2447867.13	1989 Dec 06 1505:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1989-1297	2447873.88	1989 Dec 13 0900:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1989-1298	2447874.06	1989 Dec 13 1330:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1989-1299	2447874.09	1989 Dec 13 1407:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1989-1300	2447874.13	1989 Dec 13 1505:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1989-1301	2447874.13	1989 Dec 13 1505:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1989-1302	2447880.89	1989 Dec 20 0918:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1989-1303	2447880.97	1989 Dec 20 1118:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1989-1304	2447881.12	1989 Dec 20 1500:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	OrbPay t	Agency	Launch_Code	Group	Category	LT/Cite	Cite	Notes
1989-1312	2447881.17	1989 Dec 20 1605:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1989-1313	2447887.92	1989 Dec 27 1005:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1989-1314	2447888.06	1989 Dec 27 1330:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1989-1315	2447888.09	1989 Dec 27 1407:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1989-1316	2447888.13	1989 Dec 27 1505:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1990-101	2447894.33	1990 Jan 02 1957:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1990-102	2447894.35	1990 Jan 02 2027:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1990-103	2447894.46	1990 Jan 02 2300:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1990-104	2447894.51	1990 Jan 03 0015:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1990-105	2447894.57	1990 Jan 03 0852:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1990-106	2447894.97	1990 Jan 03 1110:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1990-107	2447895.05	1990 Jan 03 1316:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1990-108	2447895.08	1990 Jan 03 1350:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1990-109	2447895.09	1990 Jan 03 1407:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1990-110	2447895.09	1990 Jan 03 1407:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1990-111	2447895.13	1990 Jan 03 1505:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1990-112	2447895.17	1990 Jan 03 1600:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1990-113	2447895.36	1990 Jan 03 2045:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1990-114	2447895.85	1990 Jan 04 0530:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1990-115	2447901.34	1990 Jan 09 2010:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1990-116	2447901.35	1990 Jan 09 2030:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1990-117	2447901.46	1990 Jan 09 2300:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1990-118	2447901.47	1990 Jan 09 2310:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1990-119	2447901.98	1990 Jan 10 1130:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1990-120	2447902.06	1990 Jan 10 1134:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1990-121	2447902.06	1990 Jan 10 1320:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1990-122	2447902.09	1990 Jan 10 1407:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1990-123	2447902.13	1990 Jan 10 1505:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1990-124	2447902.14	1990 Jan 10 1522:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1990-125	2447902.63	1990 Jan 11 0600:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1990-126	2447906.57	1990 Jan 15 1110:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1990-127	2447907.11	1990 Jan 15 1142:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1990-128	2447907.13	1990 Jan 15 1505:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1990-129	2447906.34	1990 Jan 16 2012:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1990-130	2447906.46	1990 Jan 16 2301:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1990-131	2447906.47	1990 Jan 16 2315:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1990-132	2447906.52	1990 Jan 17 1000:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1990-133	2447906.57	1990 Jan 17 1110:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1990-134	2447906.98	1990 Jan 17 1335:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1990-135	2447905.03	1990 Jan 17 1240:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1990-136	2447905.09	1990 Jan 17 1407:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1990-137	2447905.09	1990 Jan 17 1505:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1990-138	2447905.13	1990 Jan 17 1505:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1990-139	2447905.38	1990 Jan 18 2100:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1990-140	2447905.48	1990 Jan 18 2100:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1990-141	2447910.00	1990 Jan 19 1110:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1990-142	2447910.97	1990 Jan 22 1110:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1990-143	2447913.57	1990 Jan 22 1332:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1990-144	2447914.09	1990 Jan 22 1505:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1990-145	2447914.37	1990 Jan 22 2052:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1990-146	2447915.46	1990 Jan 23 0201:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1990-147	2447915.47	1990 Jan 23 0310:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1990-148	2447915.69	1990 Jan 24 0421:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1990-149	2447915.83	1990 Jan 24 0900:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1990-150	2447915.97	1990 Jan 24 1110:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1990-151	2447915.98	1990 Jan 24 1135:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1990-152	2447915.98	1990 Jan 24 1330:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1990-153	2447916.07	1990 Jan 24 1337:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1990-154	2447916.09	1990 Jan 24 1407:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1990-155	2447916.09	1990 Jan 24 1407:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1990-156	2447916.13	1990 Jan 24 1505:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1990-157	2447916.17	1990 Jan 24 1605:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1990-158	2447917.35	1990 Jan 25 2020:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1990-159	2447917.97	1990 Jan 26 1110:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1990-160	2447921.07	1990 Jan 29 1342:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1990-161	2447921.13	1990 Jan 29 1505:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1990-162	2447922.46	1990 Jan 30 2300:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1990-163	2447922.49	1990 Jan 30 2300:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1990-164	2447922.70	1990 Jan 31 0445:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1990-165	2447922.88	1990 Jan 31 0707:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1990-166	2447922.97	1990 Jan 31 0900:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1990-167	2447922.98	1990 Jan 31 1115:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1990-168	2447922.98	1990 Jan 31 1125:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1990-169	2447923.07	1990 Jan 31 1347:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1990-170	2447923.09	1990 Jan 31 1453:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1990-171	2447923.12	1990 Jan 31 1505:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1990-172	2447923.13	1990 Jan 31 1505:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1990-173	2447923.13	1990 Jan 31 1510:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1990-174	2447923.13	1990 Jan 31 1510:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1990-175	2447923.29	1990 Jan 31 1853:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1990-176	2447923.47	1990 Jan 31 2320:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1990-177	2447924.00	1990 Feb 1 1205	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1990-178	2447925.05	1990 Feb 02 1305:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1990-179	2447927.99	1990 Feb 05 1145:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-

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Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	OrbPay	Agency	Launch_Code	Group	Category	LT/Cite	Cite	Notes
1990-1280	2448198.25	1990 Nov 02 1753:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1990-1281	2448201.97	1990 Nov 06 1115:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1990-1282	2448202.10	1990 Nov 06 1425:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1990-1283	2448202.46	1990 Nov 06 2300:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1990-1284	2448202.98	1990 Nov 07 1130:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1990-1285	2448203.13	1990 Nov 07 1505:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1990-1286	2448205.21	1990 Nov 09 1700:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1990-1287	2448209.46	1990 Nov 13 2300:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1990-1288	2448209.98	1990 Nov 14 1130:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1990-1289	2448209.99	1990 Nov 14 1145:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1990-1290	2448210.13	1990 Nov 14 1505:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1990-1291	2448210.17	1990 Nov 14 1610:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1990-1292	2448210.25	1990 Nov 14 1807:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1990-1293	2448210.44	1990 Nov 14 2235:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1990-1294	2448216.98	1990 Nov 20 1130:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1990-1295	2448217.10	1990 Nov 21 1430:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1990-1296	2448217.13	1990 Nov 21 1505:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1990-1297	2448217.28	1990 Nov 21 1837:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1990-1298	2448217.33	1990 Nov 21 2000:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1990-1299	2448223.46	1990 Nov 27 2300:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1990-1299	2448224.09	1990 Nov 28 1407:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1990-1300	2448224.19	1990 Nov 28 1630:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1990-1301	2448224.28	1990 Nov 28 1946:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1990-1302	2448224.40	1990 Nov 29 1130:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1990-1303	2448224.98	1990 Nov 29 1130:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1990-1304	2448230.33	1990 Dec 04 1955:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1990-1304	2448230.39	1990 Dec 04 2115:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1990-1305	2448230.43	1990 Dec 04 2220:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1990-1306	2448230.49	1990 Dec 04 2340:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1990-1307	2448230.98	1990 Dec 05 1130:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1990-1308	2448231.09	1990 Dec 05 1130:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1990-1309	2448231.16	1990 Dec 05 1545:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1990-1310	2448235.98	1990 Dec 10 1130:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1990-1311	2448237.33	1990 Dec 11 1955:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1990-1312	2448237.46	1990 Dec 11 2300:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1990-1313	2448237.98	1990 Dec 12 1130:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1990-1314	2448238.09	1990 Dec 12 1407:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1990-1315	2448238.13	1990 Dec 12 1505:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1990-1316	2448240.03	1990 Dec 14 1250:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1990-1317	2448244.33	1990 Dec 18 1365:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1990-1318	2448245.08	1990 Dec 19 1400:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1990-1319	2448245.09	1990 Dec 19 1507:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1990-1320	2448245.43	1990 Dec 22 0945:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1990-1321	2448245.98	1990 Dec 25 2040:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1990-1322	2448251.38	1990 Dec 25 1130:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1990-1323	2448251.98	1990 Dec 26 1407:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1990-1324	2448252.06	1990 Dec 26 1407:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1990-1325	2448252.13	1990 Dec 26 1505:00	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1990-1326	2448252.19	1991	H-100B	-	-	0.000	AM	SU	-	Aeron	WDGRF	-	-
1991-101	2448256.40	1991	H-100B	-	-	0.000	AM	SU	-	Aeron	James94-95	James94-95	-
1991-102	2448256.50	1991	H-100B	-	-	0.000	AM	SU	-	Aeron	James94-95	James94-95	-
1991-103	2448256.60	1991	H-100B	-	-	0.000	AM	SU	-	Aeron	James94-95	James94-95	-
1991-104	2448256.80	1991	H-100B	-	-	0.000	AM	SU	-	Aeron	James94-95	James94-95	-
1991-105	2448256.80	1991	H-100B	-	-	0.000	AM	SU	-	Aeron	James94-95	James94-95	-
1991-106	2448256.80	1991	H-100B	-	-	0.000	AM	SU	-	Aeron	James94-95	James94-95	-
1991-107	2448256.80	1991	H-100B	-	-	0.000	AM	SU	-	Aeron	James94-95	James94-95	-
1991-108	2448256.80	1991	H-100B	-	-	0.000	AM	SU	-	Aeron	James94-95	James94-95	-
1991-109	2448256.80	1991	H-100B	-	-	0.000	AM	SU	-	Aeron	James94-95	James94-95	-
1991-110	2448256.80	1991	H-100B	-	-	0.000	AM	SU	-	Aeron	James94-95	James94-95	-
1991-111	2448256.80	1991	H-100B	-	-	0.000	AM	SU	-	Aeron	James94-95	James94-95	-
1991-112	2448256.80	1991	H-100B	-	-	0.000	AM	SU	-	Aeron	James94-95	James94-95	-
1991-113	2448256.80	1991	H-100B	-	-	0.000	AM	SU	-	Aeron	James94-95	James94-95	-
1991-114	2448256.80	1991	H-100B	-	-	0.000	AM	SU	-	Aeron	James94-95	James94-95	-
1991-115	2448256.80	1991	H-100B	-	-	0.000	AM	SU	-	Aeron	James94-95	James94-95	-
1991-116	2448256.80	1991	H-100B	-	-	0.000	AM	SU	-	Aeron	James94-95	James94-95	-
1991-117	2448256.80	1991	H-100B	-	-	0.000	AM	SU	-	Aeron	James94-95	James94-95	-
1991-118	2448256.80	1991	H-100B	-	-	0.000	AM	SU	-	Aeron	James94-95	James94-95	-
1991-119	2448256.80	1991	H-100B	-	-	0.000	AM	SU	-	Aeron	James94-95	James94-95	-
1991-120	2448256.80	1991	H-100B	-	-	0.000	AM	SU	-	Aeron	James94-95	James94-95	-
1991-121	2448256.80	1991	H-100B	-	-	0.000	AM	SU	-	Aeron	James94-95	James94-95	-
1993-132	2448987.50	1993	H-100B	-	Meteo	0.000	AM	SU	-	Aeron	TSB093-94	TSB093-94	-
1993-133	2448987.50	1993	H-100B	-	Meteo	0.000	AM	SU	-	Aeron	TSB093-94	TSB093-94	-
1993-134	2448987.50	1993	H-100B	-	Meteo	0.000	AM	SU	-	Aeron	TSB093-94	TSB093-94	-
1993-135	2448987.50	1993	H-100B	-	Meteo	0.000	AM	SU	-	Aeron	TSB093-94	TSB093-94	-
1993-136	2448987.50	1993	H-100B	-	Meteo	0.000	AM	SU	-	Aeron	TSB093-94	TSB093-94	-
1993-137	2448987.50	1993	H-100B	-	Meteo	0.000	AM	SU	-	Aeron	TSB093-94	TSB093-94	-
1993-138	2448987.50	1993	H-100B	-	Meteo	0.000	AM	SU	-	Aeron	TSB093-94	TSB093-94	-
2007-575	2454100.50	2007	H-100B	-	Ionos	0.000	TSAD	SS	TSAD/	Aerch/Ionos	ITR-TASS	-	-
2008-564	2454465.50	2008	H-100B	-	Ionos	0.000	TSAD	SS	TSAD/	Aerch/Ionos	SevernyValled060917	-	-
2008-408	2454720.93	2008 Sep 11 1026	H-100B	-	Ionos	0.000	TSAD	SF	TSAD/	Aerch/Ionos	SevernyValled060917	-	-





Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Mission	Launch_FlightCode	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee km	Range km	Dest
2006-S60	2454048.87	2006 Nov 9 0851	MSBS M51	-	1	-	-	-	-	CEL	-	-	-	1000?	-	-
2007-S26	2454273.13	2007 Jun 21 1514	MSBS M51	-	2	-	-	-	-	CEL	-	-	-	1000?	-	-
2008-S62	2454763.88	2008 Nov 13 0906	MSBS M51	-	3	-	-	-	-	CEL	BLB	-	-	1000?	-	-
2010-S11	2455223.86	2010 Jan 27 0825	MSBS M51	-	4	N Atlantic	-	-	S619	BRETA	LPI	-	-	1000?	-	N At1
2010-S47	2455387.81	2010 Jul 10 0732	MSBS M51	-	5	N Atlantic	-	-	S619	BRETA	LPI	-	-	1000?	-	N At1
2013-A09	2456417.81	2013 May 5 0730	MSBS M51	-	6	MS1.2	-	-	S618	BRETA	LPI	-	-	1?	-	-
2015-S51	2457295.85	2015 Sep 30 0628	MSBS M51	-	7	-	-	-	-	CEL	-	-	-	1000?	-	N At1
2016-S42	2457570.80	2016 Jul 1 0718	MSBS M51	-	8	-	-	-	S616	BRETA	LPI	-	-	1000?	-	N At1
2020-S22	2459012.50	2020 Jun 12	MSBS M51	-	9	-	-	-	S617	BRETA	LP2	-	-	1200?	-	66.1W 24.4N
2021-S23	2459332.83	2021 Apr 28 0800?	MSBS M51	-	10	-	-	-	-	CEL	-	-	-	1000?	-	68W 35W?
2023-S20	2460063.50	2023 Apr 19	MSBS M51	-	11	-	-	-	-	BRETA	LPI	-	-	1000?	-	46.7N 37.6N
2023-S63	2460267.26	2023 Nov 18 1819	MSBS M51	-	12	MS1.3	-	-	-	CEL	-	-	-	1000?	-	57.7N 39.4N



Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	DrPay	Agency	Launch_Code	Group	Category	LfCite	Cite	Notes
2006-S60	2454048.87	2006 Nov 9 0851	RSSS M61	-	1	0.000	DMA	MS	-	Test	defense.gouv.fr	-	-
2007-S25	2454273.13	2007 Jun 21 1514	RSSS M61	-	2	0.000	DMA	MS	-	Test	defense.gouv.fr	-	-
2008-S62	2454783.88	2008 Nov 13 0906	RSSS M61	-	3	0.000	DMA	MS	-	Test	Wire	-	-
2010-S11	2455223.85	2010 Jan 27 0825	RSSS M61	-	4	0.000	DMA	MS	-	Test	Wire	-	-
2010-S47	2455387.81	2010 Jul 10 0752	RSSS M61	-	5	0.000	DMA	MS	-	Test	Wire	-	-
2013-A09	2456417.81	2013 May 5 0730	RSSS M61	-	6	0.000	RF	RF	-	Test	Wire	-	-
2015-S51	2457296.85	2015 Sep 30 0828	RSSS M61	-	7	0.000	DMA	MS	-	Test	defense.gouv.fr	-	-
2016-S42	2457570.80	2016 Jul 1 0718	RSSS M61	-	8	0.000	DMA	MS	-	Test	Wire	-	-
2020-S22	2459012.50	2020 Jun 12	RSSS M61	-	9	0.000	DMA	MS	-	Test	Wire	-	-
2021-S23	2459332.83	2021 Apr 28 0800?	RSSS M61	-	10	0.000	DMA	MS	-	Test	air-cosmos.com	-	-
2023-S20	2460053.50	2023 Apr 19	RSSS M61	-	11	0.000	DMA	MS	-	Test	air-cosmos.com	-	-
2023-S63	2460287.26	2023 Nov 18 1819	RSSS M61	-	12	0.000	DMA	MS	-	Test	Wire	-	-



Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Mission	FlightCode	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee km	Range km	Dest
2022-589	2459854_23	2022 Oct 1 1730:58	MESUS	-	-	MESUS	-	-	-	BROCK	LP1	-	-	89	-	-



Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Agency	Launch_Code	Group	Category	LTCite	Cite	Notes
2022-889	2459854_23	2022 Oct 1 1730:58	MESUS	-	-	MESUS	SS	MESUS/	Test	rocketryforum.com	-	-





Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Launch			Ascent_Site	Ascent_Pad	Apogee km	Range km	Dest
							Mission	FlightCode	Platform					
2008-520	2454593.26	2008 May 6 1808	Mesquitto	-	MASA 12.066GT	-	-	WI	LA2	-	85?	-	-	
2008-401	2454594.30	2008 May 7 1918	Mesquitto	-	MASA 12.066GT	-	-	WI	LA2	-	15?	-	-	
2009-569	2455182.07	2009 Dec 16 1346:00	Mesquitto	-	MASA 12.066GT	-	-	WI	LA2	-	90?	-	-	



Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	OrbPay	Agency	Launch_Code	Group	Category	LTCite	Cite	Notes
2008-S20	2454693.26	2008 May 6 1808	Mesquito	-	MSA 12 066GT	0.000	WFF	SS	WFF/	Test	Wire	-	-
2008-A01	2454694.30	2008 May 7 1918	Mesquito	-	MSA 12 066GT	0.000	WFF	SF	WFF/	Test	Wire	-	-
2009-S69	2455182.07	2009 Dec 16 1346:00	Mesquito	-	MSA 12 068GT	0.000	WFF	SS	WFF/Hall,Hickman	Test	WFF.nasa.gov	-	-







Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Launch_Mission	FlightCode	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee_Km	Range_Km	Dest
1978-M1152	2443822.83	1978 Nov 10 0800:00	MHR-06						MOSSON	MINIA				62	-	-
1978-M1163	2443827.83	1978 Nov 15 0800:00	MHR-06						MOSSON	MINIA				63	-	-
1978-M1174	2443829.79	1978 Nov 17 0700:00	MHR-06						MOSSON	MINIA				60	-	-
1979-4226	2443876.88	1979 Jan 23 0900:00	MHR-06		MHR-06				AREN	MINIA				60	-	-
1979-M144	2443899.83	1979 Jan 26 0800:00	MHR-06						AREN	MINIA				57	-	-
1979-M167	2443904.83	1979 Jan 31 0800:00	MHR-06						AREN	MINIA				58	-	-
1979-M183	2443906.83	1979 Feb 02 0800:00	MHR-06						MOSSON	MINIA				61	-	-
1979-4202	2443911.79	1979 Feb 09 0700:00	MHR-06						MOSSON	MINIA				61	-	-
1979-4219	2443913.79	1979 Feb 09 0700:00	MHR-06						MOSSON	MINIA				60	-	-
1979-4237	2443918.79	1979 Feb 14 0700:00	MHR-06						MOSSON	MINIA				57	-	-
1979-4316	2443932.79	1979 Feb 28 0700:00	MHR-06						PRILLY	GMS79D	LP1			60	-	-
1979-4631	2443987.21	1979 Apr 23 1700:00	MHR-06						AREN	MINIA				60	-	-
1979-4636	2443988.83	1979 Apr 25 0800:00	MHR-06						AREN	GMS79D	LP2			55	-	-
1979-4638	2443990.83	1979 Apr 27 0800:00	MHR-06						PRILLY	GMS79D	LP2			58	-	-
1979-4639	2444010.38	1979 May 16 2100:00	MHR-06						PRILLY	GMS79D	LP2			58	-	-
1979-4651	2444012.33	1979 May 18 2000:00	MHR-06						PRILLY	GMS79D	LP2			59	-	-
1979-4659	2444015.33	1979 May 21 2000:00	MHR-06						PRILLY	GMS79D	LP2			58	-	-
1979-4673	2444017.33	1979 May 23 2000:00	MHR-06						PRILLY	GMS79D	LP2			60	-	-
1979-4677	2444018.33	1979 May 24 2000:00	MHR-06						PRILLY	GMS79D	LP2			58	-	-
1979-4691	2444021.33	1979 May 27 2000:00	MHR-06						PRILLY	GMS79D	LP2			59	-	-
1979-4692	2444021.33	1979 May 27 2000:00	MHR-06						MOSSON	GMS79E	LP1			58	-	-
1979-4696	2444022.33	1979 May 28 2000:00	MHR-06						PRILLY	GMS79D	LP2			58	-	-
1979-4700	2444023.33	1979 May 29 2000:00	MHR-06						PRILLY	GMS79D	LP2			59	-	-
1979-4714	2444026.83	1979 Jun 01 0800:00	MHR-06						MOSSON	MINIA				59	-	-
1979-4730	2444030.83	1979 Jun 06 0800:00	MHR-06						MOSSON	MINIA				59	-	-
1979-4743	2444032.79	1979 Jun 08 0700:00	MHR-06						MOSSON	MINIA				58	-	-
1979-4756	2444037.83	1979 Jun 13 0800:00	MHR-06						MOSSON	MINIA				60	-	-
1979-4768	2444039.79	1979 Jun 15 0700:00	MHR-06						MOSSON	MINIA				59	-	-
1979-4786	2444044.83	1979 Jun 20 0800:00	MHR-06						MOSSON	MINIA				60	-	-
1979-4794	2444046.79	1979 Jun 22 0700:00	MHR-06						MOSSON	MINIA				59	-	-
1979-4814	2444051.79	1979 Jun 27 0700:00	MHR-06						MOSSON	MINIA				61	-	-
1979-4846	2444058.83	1979 Jul 04 0800:00	MHR-06						AREN	MINIA				58	-	-
1979-4865	2444066.83	1979 Jul 11 0800:00	MHR-06						AREN	MINIA				58	-	-
1979-4876	2444067.08	1979 Jul 12 1400:00	MHR-06						AREN	GMS79D	LP4			57	-	-
1979-4877	2444067.12	1979 Jul 12 1500:00	MHR-06						PRILLY	GMS79D	LP4			58	-	-
1979-4878	2444067.17	1979 Jul 12 1600:00	MHR-06						AREN	GMS79D	LP4			58	-	-
1979-4903	2444072.83	1979 Jul 18 0800:00	MHR-06						AREN	MINIA				57	-	-
1979-41291	2444179.40	1979 Nov 01 2140:00	MHR-06						USHAKOV	GMS79G	LP1			59	-	-
1979-41311	2444184.83	1979 Nov 07 0800:00	MHR-06						AREN	MINIA				57	-	-
1979-4138	2444188.88	1979 Nov 07 0800:00	MHR-06						AREN	MINIA				59	-	-
1979-4139	2444188.88	1979 Nov 07 0800:00	MHR-06						AREN	MINIA				57	-	-
1979-41394	2444188.88	1979 Nov 07 0800:00	MHR-06						AREN	MINIA				59	-	-
1979-41395	2444188.88	1979 Nov 07 0800:00	MHR-06						AREN	MINIA				57	-	-
1979-41396	2444188.88	1979 Nov 07 0800:00	MHR-06						AREN	MINIA				59	-	-
1979-41397	2444188.88	1979 Nov 07 0800:00	MHR-06						AREN	MINIA				57	-	-
1979-41398	2444188.88	1979 Nov 07 0800:00	MHR-06						AREN	MINIA				59	-	-
1979-41399	2444188.88	1979 Nov 07 0800:00	MHR-06						AREN	MINIA				57	-	-
1979-41400	2444188.88	1979 Nov 07 0800:00	MHR-06						AREN	MINIA				59	-	-
1979-41401	2444188.88	1979 Nov 07 0800:00	MHR-06						AREN	MINIA				57	-	-
1979-41402	2444188.88	1979 Nov 07 0800:00	MHR-06						AREN	MINIA				59	-	-
1979-41403	2444188.88	1979 Nov 07 0800:00	MHR-06						AREN	MINIA				57	-	-
1979-41404	2444188.88	1979 Nov 07 0800:00	MHR-06						AREN	MINIA				59	-	-
1979-41405	2444188.88	1979 Nov 07 0800:00	MHR-06						AREN	MINIA				57	-	-
1980-4463	2444353.84	1980 Dec 26 0715:00	MHR-06						USHAKOV	CTF-4				72	-	-
1980-4464	2444353.84	1980 Jan 14 1000:00	MHR-06						USHAKOV	CTF-4				72	-	-
1980-4465	2444353.84	1980 Jan 14 1300:00	MHR-06						USHAKOV	CTF-4				76	-	-
1980-4466	2444353.84	1980 Jan 16 1200:00	MHR-06						USHAKOV	CTF-4				68	-	-
1980-4467	2444353.84	1980 Jan 16 1300:00	MHR-06						USHAKOV	CTF-4				72	-	-
1980-4468	2444353.84	1980 Jan 18 1030:00	MHR-06						USHAKOV	CTF-4				64	-	-
1980-4469	2444357.12	1980 Jan 18 1500:00	MHR-06						USHAKOV	CTF-4				64	-	-
1980-4470	2444357.12	1980 Jan 19 1500:00	MHR-06						USHAKOV	CTF-4				64	-	-
1980-4126	2444373.17	1980 Feb 08 0700:00	MHR-06						PASSAT	GMS80A	LP1			56	-	-
1980-4128	2444373.17	1980 Feb 08 1600:00	MHR-06						PASSAT	GMS78K	LP2			56	-	-
1980-4129	2444373.17	1980 Feb 09 1540:00	MHR-06						PASSAT	GMS78K	LP2			59	-	-
1980-4149	2444384.85	1980 Feb 15 0830:00	MHR-06						PASSAT	GMS80A	LP1			60	-	-
1980-4165	2444389.83	1980 Feb 20 0800:00	MHR-06						PASSAT	GMS80A	LP1			59	-	-
1980-4180	2444395.08	1980 Feb 25 1400:00	MHR-06						PASSAT	GMS80A	LP1			59	-	-
1980-4183	2444395.19	1980 Feb 25 1630:00	MHR-06						PASSAT	GMS80A	LP1			59	-	-
1980-4184	2444395.27	1980 Feb 25 1830:00	MHR-06						PASSAT	GMS80A	LP1			59	-	-
1980-4186	2444396.10	1980 Feb 26 1430:00	MHR-06						PASSAT	GMS80A	LP1			59	-	-
1980-4187	2444396.28	1980 Feb 26 1840:00	MHR-06						PASSAT	GMS80A	LP1			59	-	-
1980-4189	2444397.08	1980 Feb 27 1300:00	MHR-06						PASSAT	GMS80A	LP1			59	-	-
1980-4192	2444397.23	1980 Feb 27 1700:00	MHR-06						PASSAT	GMS80A	LP1			59	-	-
1980-4188	2444398.06	1980 Feb 27 0800:00	MHR-06						PASSAT	GMS80A	LP1			52	-	-
1980-4194	2444398.06	1980 Feb 28 1300:00	MHR-06						PASSAT	GMS80A	LP1			59	-	-
1980-4195	2444398.10	1980 Feb 28 1420:00	MHR-06						PASSAT	GMS80A	LP1			60	-	-
1980-4196	2444398.15	1980 Feb 28 1530:00	MHR-06						PASSAT	GMS80A	LP1			60	-	-
1980-4197	2444398.21	1980 Feb 28 1700:00	MHR-06						PASSAT	GMS80A	LP1			60	-	-
1980-4198	2444398.25	1980 Feb 28 1800:00	MHR-06						PASSAT	GMS80A	LP1			60	-	-
1980-4204	2444398.88	1980 Feb 29 1220:00	MHR-06						PASSAT	GMS80A	LP1			59	-	-
1980-4205	2444398.88	1980 Feb 29 0900:00	MHR-06						PASSAT	GMS80A	LP1			57	-	-
1980-4215	2444301.87	1980 Mar 03 0400:00	MHR-06						PASSAT	GMS80A	LP1			57	-	-
1980-4224	2444303.88	1980 Mar 03 0900:00	MHR-06						PASSAT	GMS80A	LP1			57	-	-
1980-4247	2444310.88	1980 Mar 12 0800:00	MHR-06						PASSAT	GMS80A	LP1			56	-	-
1980-4260	2444312.83	1980 Mar 14 0800:00	MHR-06						PASSAT	GMS80A	LP1			57	-	-
1980-4279	2444317.79	1980 Mar 19 0700:00	MHR-06						PASSAT	GMS80A	LP1			57	-	-
1980-4288	2444319.79	1980 Mar 21 0700:00	MHR-06						PASSAT	GMS80A	LP1			57	-	-
1980-4306	2444324.83	1980 Mar 26 0800:00	MHR-06						PASSAT	GMS80A	LP1			58	-	-









Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Launch_Mission	FlightCode	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee_Km	Range_Km	Dest
1987-409	2446802.99	1987 Jan 07 11:39:00	MHR-06						PRLLIV	GNS7A	ULP1			62		
1987-410	2446803.96	1987 Jan 08 11:05:00	MHR-06						PRLLIV	GNS7A	ULP1			59		
1987-411	2446804.84	1987 Jan 09 08:03:00	MHR-06						BOGAEV	MINIA				61		
1987-412	2446804.92	1987 Jan 09 10:01:00	MHR-06						PRLLIV	GNS7A	ULP1			59		
1987-413	2446805.03	1987 Jan 11 12:27:00	MHR-06						PRLLIV	GNS7A	ULP1			57		
1987-414	2446807.07	1987 Jan 11 13:47:00	MHR-06						PRLLIV	GNS7A	ULP1			57		
1987-420	2446808.82	1987 Jan 14 07:41:00	MHR-06						BOGAEV	MINIA				62		
1987-429	2446811.82	1987 Jan 16 07:40:00	MHR-06						BOGAEV	MINIA				60		
1987-431	2446816.84	1987 Jan 21 08:10:00	MHR-06						BOGAEV	MINIA				58		
1987-455	2446856.82	1987 Mar 02 07:45:00	MHR-06						AREN	MINIA				61		
1987-457	2446858.85	1987 Mar 04 08:19:00	MHR-06						AREN	MINIA				60		
1987-462	2446860.79	1987 Mar 06 07:04:00	MHR-06						AREN	MINIA				60		
1987-469	2446872.79	1987 Mar 18 07:01:00	MHR-06						AREN	MINIA				59		
1987-472	2446874.81	1987 Mar 20 07:23:00	MHR-06						AREN	MINIA				58		
1987-478	2446879.80	1987 Mar 25 07:17:00	MHR-06						AREN	MINIA				61		
1987-481	2446881.80	1987 Mar 27 07:05:00	MHR-06						AREN	MINIA				58		
1987-482	2446886.85	1987 Apr 01 08:22:00	MHR-06						BOGAEV	MINIA				59		
1987-486	2446888.83	1987 Apr 03 08:00:00	MHR-06						BOGAEV	MINIA				60		
1987-491	2446893.84	1987 Apr 08 08:11:00	MHR-06						BOGAEV	MINIA				54		
1987-495	2446896.85	1987 Apr 10 08:50:00	MHR-06						BOGAEV	MINIA				59		
1987-497	2446900.83	1987 Apr 15 07:58:00	MHR-06						BOGAEV	MINIA				57		
1987-4104	2446905.83	1987 Apr 20 07:50:00	MHR-06						BOGAEV	MINIA				59		
1987-4105	2446907.81	1987 Apr 22 07:32:00	MHR-06						BOGAEV	MINIA				59		
1987-4112	2446909.84	1987 Apr 24 08:07:00	MHR-06						BOGAEV	MINIA				60		
1987-4115	2446912.83	1987 Apr 27 07:53:00	MHR-06						BOGAEV	MINIA				59		
1987-4149	2446951.80	1987 Jun 05 07:05:00	MHR-06						AREN	MINIA				59		
1987-4152	2446956.79	1987 Jun 10 07:01:00	MHR-06						AREN	MINIA				57		
1987-4156	2446958.79	1987 Jun 12 07:01:00	MHR-06						AREN	MINIA				58		
1987-4158	2446961.80	1987 Jun 15 07:05:00	MHR-06						AREN	MINIA				58		
1987-4162	2446963.79	1987 Jun 17 07:01:00	MHR-06						AREN	MINIA				60		
1987-4165	2446965.79	1987 Jun 19 07:01:00	MHR-06						AREN	MINIA				59		
1987-4170	2446970.79	1987 Jun 24 07:03:00	MHR-06						AREN	MINIA				60		
1987-4174	2446972.79	1987 Jun 26 07:01:00	MHR-06						AREN	MINIA				59		
1987-4175	2446977.80	1987 Jul 01 07:06:00	MHR-06						AREN	MINIA				60		
1987-4180	2446984.87	1987 Jul 08 08:47:00	MHR-06						WUSSON	MINIA				60		
1987-4183	2446986.84	1987 Jul 10 08:06:00	MHR-06						WUSSON	MINIA				61		
1987-4184	2446988.82	1987 Jul 12 07:41:00	MHR-06						WUSSON	MINIA				60		
1987-4189	2446993.80	1987 Jul 17 07:15:00	MHR-06						WUSSON	MINIA				58		
1987-4191	2446995.81	1987 Jul 19 07:23:00	MHR-06						WUSSON	MINIA				57		
1987-4195	2446998.82	1987 Jul 22 07:46:00	MHR-06						WUSSON	MINIA				56		
1987-4198	2447000.82	1987 Jul 24 07:47:00	MHR-06						WUSSON	MINIA				56		
1987-4197	2447002.81	1987 Jul 26 07:27:00	MHR-06						WUSSON	MINIA				58		
1987-4200	2447003.80	1987 Jul 29 07:06:00	MHR-06						AREN	MINIA				64		
1987-4203	2447043.83	1987 Sep 04 20:00:00	MHR-06						AREN	MINIA				60?		
1987-4206	2447049.30	1987 Sep 11 19:18:00	MHR-06						AREN	MINIA				60?		
1987-4209	2447059.30	1987 Sep 16 19:15:00	MHR-06						AREN	MINIA				60?		
1987-4223	2447069.30	1987 Sep 18 19:17:00	MHR-06						AREN	MINIA				60?		
1987-4238	2447084.30	1987 Sep 23 18:01:00	MHR-06						AREN	MINIA				60?		
1987-4239	2447084.30	1987 Sep 23 18:01:00	MHR-06						AREN	MINIA				60?		
1987-4242	2447084.30	1987 Sep 25 18:05:00	MHR-06						AREN	MINIA				60?		
1987-4244	2447091.30	1987 Sep 30 18:18:00	MHR-06						AREN	MINIA				58		
1987-4275	2447113.80	1987 Oct 02 18:18:00	MHR-06						USHAKOV	MINIA				61		
1987-4279	2447117.87	1987 Nov 13 08:56:00	MHR-06						USHAKOV	MINIA				61		
1987-4286	2447126.81	1987 Nov 27 07:29:00	MHR-06						USHAKOV	MINIA				57		
1987-4289	2447128.91	1987 Nov 29 08:51:00	MHR-06						PRLLIV	GNS7C	LP1			57		
1987-4290	2447130.88	1987 Dec 01 08:06:00	MHR-06						PRLLIV	GNS7C	LP2			58		
1987-4293	2447131.80	1987 Dec 02 07:17:00	MHR-06						USHAKOV	MINIA				60		
1987-4296	2447133.82	1987 Dec 03 10:00:00	MHR-06						PRLLIV	GNS7C	LP3			62		
1987-4298	2447133.82	1987 Dec 04 07:40:00	MHR-06						USHAKOV	MINIA				56		
1987-4301	2447137.09	1987 Dec 07 14:05:00	MHR-06						PRLLIV	GNS7C	LP4			60		
1987-4303	2447137.09	1987 Dec 09 07:00:00	MHR-06						USHAKOV	MINIA				63		
1987-4306	2447140.79	1987 Dec 11 07:00:00	MHR-06						USHAKOV	MINIA				60		
1988-4306	2447206.80	1988 Feb 15 07:10:00	MHR-06						USHAKOV	MINIA				63		
1988-433	2447208.79	1988 Feb 17 07:02:00	MHR-06						USHAKOV	MINIA				60		
1988-434	2447210.79	1988 Feb 19 07:00:00	MHR-06						USHAKOV	MINIA				57		
1988-435	2447214.93	1988 Feb 23 10:18:00	MHR-06						PRLLIV	GNS7C	LP5			59		
1988-437	2447215.79	1988 Feb 24 07:00:00	MHR-06						USHAKOV	MINIA				60		
1988-438	2447215.96	1988 Feb 24 11:05:00	MHR-06						PRLLIV	GNS7C	LP6			56		
1988-441	2447217.02	1988 Feb 25 12:31:00	MHR-06						PRLLIV	GNS7C	LP7			58		
1988-443	2447217.79	1988 Feb 26 07:00:00	MHR-06						USHAKOV	MINIA				60		
1988-444	2447217.96	1988 Feb 26 11:08:00	MHR-06						PRLLIV	GNS7C	LP8			57		
1988-445	2447218.96	1988 Feb 27 11:05:00	MHR-06						PRLLIV	GNS7C	LP9			59		
1988-447	2447219.97	1988 Feb 28 11:13:00	MHR-06						PRLLIV	GNS7C	LP10			60		
1988-448	2447220.79	1988 Feb 29 07:00:00	MHR-06						USHAKOV	MINIA				60		
1988-449	2447222.79	1988 Mar 02 07:00:00	MHR-06						USHAKOV	MINIA				59		
1988-451	2447224.79	1988 Mar 04 07:00:00	MHR-06						USHAKOV	MINIA				60		
1988-453	2447229.79	1988 Mar 09 07:00:00	MHR-06						USHAKOV	MINIA				61		
1988-455	2447231.79	1988 Mar 11 07:00:00	MHR-06						USHAKOV	MINIA				63		
1988-460	2447236.82	1988 Mar 18 07:42:00	MHR-06						PASSAT	MINIA				62		
1988-464	2447243.79	1988 Mar 23 07:00:00	MHR-06						PASSAT	MINIA				61		
1988-465	2447245.80	1988 Mar 25 07:16:00	MHR-06						PASSAT	MINIA				59		
1988-468	2447250.76	1988 Mar 30 06:09:00	MHR-06						PASSAT	MINIA				60		
1988-470	2447252.78	1988 Apr 01 06:48:00	MHR-06						PASSAT	MINIA				60		
1988-471	2447255.75	1988 Apr 04 06:03:00	MHR-06						PASSAT	MINIA				60		
1988-472	2447257.75	1988 Apr 06 06:05:00	MHR-06						PASSAT	MINIA				59		
1988-474	2447259.01	1988 Apr 07 12:10:00	MHR-06						PRLLIV	GNS8B	LP1			59		

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Launch_Mission	FlightCode	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee_Km	Range_Km	Dest
1988-477	2447261.92	1988 Apr 10 10:06:00	MHR-06						PRILIV	GNS88B	LP2			57		
1988-478	2447262.11	1988 Apr 10 14:45:00	MHR-06						PRILIV	GNS88B	LP3			58		
1988-481	2447264.79	1988 Apr 13 07:02:00	MHR-06						PASSAT	MINIA	-			61		
1988-490	2447267.92	1988 Apr 16 10:00:00	MHR-06						PRILIV	GNS88B	LP4			58		
1988-491	2447268.93	1988 Apr 17 10:25:00	MHR-06						PRILIV	GNS88B	LP5			59		
1988-492	2447269.93	1988 Apr 18 10:25:00	MHR-06						PRILIV	GNS88B	LP6			55		
1988-493	2447270.05	1988 Apr 18 13:12:00	MHR-06						PRILIV	GNS88B	LP7			60?		
1988-4112	2447308.79	1988 May 25 07:00:00	MHR-06						USHAKOV	MINIA	-			60		
1988-4113	2447308.79	1988 May 27 07:00:00	MHR-06						USHAKOV	MINIA	-			60		
1988-4114	2447310.79	1988 May 29 07:00:00	MHR-06						USHAKOV	MINIA	-			60		
1988-4116	2447313.79	1988 Jun 01 07:00:00	MHR-06						USHAKOV	MINIA	-			60		
1988-4117	2447315.79	1988 Jun 03 07:01:00	MHR-06						USHAKOV	MINIA	-			60		
1988-4122	2447320.79	1988 Jun 08 07:00:00	MHR-06						USHAKOV	MINIA	-			58		
1988-4123	2447322.79	1988 Jun 10 07:00:00	MHR-06						USHAKOV	MINIA	-			59		
1988-4126	2447329.79	1988 Jun 17 07:00:00	MHR-06						USHAKOV	MINIA	-			58		
1988-4128	2447334.79	1988 Jun 22 07:00:00	MHR-06						USHAKOV	MINIA	-			59		
1988-4130	2447336.79	1988 Jun 24 07:00:00	MHR-06						USHAKOV	MINIA	-			59		
1988-4151	2447401.75	1988 Aug 28 09:06:00	MHR-06						USHAKOV	MINIA	-			58		
1988-4153	2447404.79	1988 Aug 31 07:01:00	MHR-06						USHAKOV	MINIA	-			59		
1988-4155	2447408.79	1988 Sep 02 07:01:00	MHR-06						USHAKOV	MINIA	-			60		
1988-4157	2447413.79	1988 Sep 09 07:01:00	MHR-06						USHAKOV	MINIA	-			59		
1988-4158	2447418.79	1988 Sep 11 07:00:00	MHR-06						USHAKOV	MINIA	-			58		
1988-4159	2447418.79	1988 Sep 14 07:02:00	MHR-06						USHAKOV	MINIA	-			58		
1988-4163	2447420.80	1988 Sep 16 07:05:00	MHR-06						USHAKOV	MINIA	-			59		
1988-4164	2447425.80	1988 Sep 21 07:07:00	MHR-06						USHAKOV	MINIA	-			58		
1988-4168	2447427.80	1988 Sep 23 07:07:00	MHR-06						USHAKOV	MINIA	-			58		
1988-408	2447456.07	1988 Oct 21 13:35	MHR-06						USHAKOV	MINIA	-			1		
1988-4185	2447461.19	1988 Oct 26 16:30:00	MHR-06						ZINOST	ZINOST	-			61		
1988-4187	2447467.04	1988 Nov 1 13:01	MHR-06						ZINOST	ZINOST	-			67		
1988-4188	2447467.80	1988 Nov 02 07:07:00	MHR-06						PASSAT	MINIA	-			62		
1988-4169	2447467.87	1988 Nov 02 11:10:00	MHR-06						GRF-4	GRF-4	-			63		
1988-409	2447470.06	1988 Nov 4 13:20	MHR-06						ZINOST	ZINOST	-			43		
1988-4190	2447474.05	1988 Nov 6 13:11	MHR-06						ZINOST	ZINOST	-			78		
1988-4192	2447474.80	1988 Nov 09 07:07:00	MHR-06						PASSAT	MINIA	-			63		
1988-4193	2447474.88	1988 Nov 09 09:00:00	MHR-06						GRF-4	GRF-4	-			63		
1988-4194	2447476.79	1988 Nov 11 07:03:00	MHR-06						PASSAT	MINIA	-			62		
1988-4195	2447479.79	1988 Nov 14 07:00:00	MHR-06						PASSAT	MINIA	-			62		
1988-4196	2447481.79	1988 Nov 16 07:01:00	MHR-06						PASSAT	MINIA	-			60		
1988-4199	2447483.79	1988 Nov 18 07:02:00	MHR-06						PASSAT	MINIA	-			62		
1988-4200	2447485.06	1988 Nov 22 13:20	MHR-06						PASSAT	ZINOST	-			53		
1988-4201	2447485.80	1988 Nov 23 07:16:00	MHR-06						PASSAT	ZINOST	-			62		
1988-4203	2447488.04	1988 Nov 23 13:06	MHR-06						PASSAT	ZINOST	-			76		
1988-4204	2447489.80	1988 Nov 23 13:06	MHR-06						PASSAT	MINIA	-			63		
1988-4219	2447510.88	1988 Nov 28 01:35:00	MHR-06						PASSAT	MINIA	-			61		
1988-4220	2447515.83	1988 Dec 18 16:30:00	MHR-06						PRILIV	GNS88B	LP1			59		
1988-4221	2447515.85	1988 Dec 20 08:00:00	MHR-06						PRILIV	GNS88B	LP2			58		
1988-4222	2447516.92	1988 Dec 21 10:00:00	MHR-06						PRILIV	GNS88B	LP3			58		
1988-4223	2447516.92	1988 Dec 21 10:00:00	MHR-06						PRILIV	GNS88B	LP4			57		
1988-4225	2447520.86	1988 Dec 25 10:59:00	MHR-06						PRILIV	GNS88B	LP5			57		
1988-4226	2447520.86	1988 Dec 25 13:52:00	MHR-06						CTF-4	CTF-4	-			59		
1988-4227	2447523.10	1988 Dec 27 15:00:00	MHR-06						CTF-4	CTF-4	-			60		
1988-4229	2447523.06	1988 Dec 28 11:09:00	MHR-06						PRILIV	GNS88B	LP6			60		
1988-4230	2447524.13	1988 Dec 28 15:10:00	MHR-06						CTF-4	CTF-4	-			60		
1988-4231	2447524.13	1988 Dec 28 15:10:00	MHR-06						PRILIV	GNS88B	LP7			60		
1989-401	2447528.22	1989 Jan 01 17:11:00	MHR-06						PRILIV	GNS88B	LP8			60		
1989-402	2447528.89	1989 Jan 02 09:24:00	MHR-06						PRILIV	GNS88B	LP9			55		
1989-403	2447529.97	1989 Jan 03 11:44:00	MHR-06						PRILIV	GNS88B	-			55		
1989-404	2447530.84	1989 Jan 04 08:31:00	MHR-06						BUGAEV	MINIA	-			60		
1989-405	2447530.94	1989 Jan 04 10:30:00	MHR-06						BUGAEV	MINIA	-			62		
1989-410	2447531.95	1989 Jan 05 10:46:00	MHR-06						PRILIV	GNS88B	LP10			58		
1989-411	2447532.79	1989 Jan 06 07:04:00	MHR-06						BUGAEV	MINIA	-			56		
1989-411	2447532.95	1989 Jan 06 10:49:00	MHR-06						PRILIV	GNS88B	-			58		
1989-412	2447533.93	1989 Jan 07 10:13:00	MHR-06						PRILIV	GNS88B	LP11			62		
1989-413	2447534.04	1989 Jan 07 12:51:00	MHR-06						PRILIV	GNS88B	LP12			62		
1989-415	2447536.80	1989 Jan 09 07:05:00	MHR-06						BUGAEV	MINIA	-			60		
1989-418	2447536.04	1989 Jan 09 12:52:00	MHR-06						PRILIV	GNS88B	LP14			55		
1989-420	2447537.85	1989 Jan 11 08:30:00	MHR-06						BUGAEV	MINIA	-			60		
1989-422	2447538.11	1989 Jan 11 14:44:00	MHR-06						PRILIV	GNS88B	LP15			57		
1989-424	2447538.94	1989 Jan 12 10:30:00	MHR-06						CTF-4	CTF-4	-			61		
1989-425	2447539.87	1989 Jan 13 08:57:00	MHR-06						BUGAEV	MINIA	-			60		
1989-426	2447539.99	1989 Jan 13 11:51:00	MHR-06						PRILIV	GNS88B	LP16			56		
1989-427	2447541.79	1989 Jan 15 07:02:00	MHR-06						BUGAEV	MINIA	-			65		
1989-428	2447544.79	1989 Jan 18 07:01:00	MHR-06						BUGAEV	MINIA	-			63		
1989-431	2447546.79	1989 Jan 20 07:02:00	MHR-06						BUGAEV	MINIA	-			61		
1989-434	2447546.81	1989 Jan 25 07:21:00	MHR-06						BUGAEV	MINIA	-			61		
1989-435	2447552.04	1989 Jan 25 13:00:00	MHR-06						CTF-4	CTF-4	-			63		
1989-441	2447552.22	1989 Jan 26 17:20:00	MHR-06						CTF-4	CTF-4	-			60		
1989-443	2447553.86	1989 Jan 27 08:39:00	MHR-06						BUGAEV	MINIA	-			63		
1989-444	2447557.04	1989 Jan 30 13:00:00	MHR-06						CTF-4	CTF-4	-			63		
1989-445	2447558.81	1989 Feb 01 07:22:00	MHR-06						CTF-4	CTF-4	-			59		
1989-447	2447560.80	1989 Feb 03 07:09:00	MHR-06						PASSAT	MINIA	-			53		
1989-449	2447562.80	1989 Feb 05 07:06:00	MHR-06						PASSAT	MINIA	-			57		
1989-450	2447565.79	1989 Feb 08 07:04:00	MHR-06						PASSAT	MINIA	-			61		
1989-457	2447569.79	1989 Feb 12 07:04:00	MHR-06						PASSAT	MINIA	-			60		
1989-459	2447574.79	1989 Feb 17 07:03:00	MHR-06						PASSAT	MINIA	-			67		
1989-460	2447579.79	1989 Feb 22 07:01:00	MHR-06						PASSAT	MINIA	-			60		
1989-462	2447580.08	1989 Feb 22 14:00:00	MHR-06						CTF-4	CTF-4	-			76		

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Launch_Mission	FlightCode	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee_Km	Range_Km	Dest
1989-466	2447562.08	1989 Feb 24 14:00:00	MHR-06							GTSF-4				76		
1989-468	2447602.03	1989 Mar 16 12:47:00	MHR-06						PRILLV	GSS8D	LP17			57		
1989-490	2447603.00	1989 Mar 17 11:55:00	MHR-06						PRILLV	GSS8D	LP18			59		
1989-498	2447604.94	1989 Mar 19 10:30:00	MHR-06						PRILLV	GSS8D	LP19			62		
1989-4106	2447624.04	1989 Apr 7 13:00	MHR-06							ZINGST				63		
1989-4103	2447620.06	1989 Apr 03 13:30:00	MHR-06							ZINGST				63		
1989-4109	2447629.04	1989 Apr 12 13:00	MHR-06							ZINGST				57		
1989-4112	2447636.04	1989 Apr 19 12:00:00	MHR-06							ZINGST				60		
1989-4113	2447638.04	1989 Apr 19 13:00:00	MHR-06							ZINGST				75		
1989-4116	2447643.03	1989 Apr 26 12:40	MHR-06							ZINGST				63		
1989-4121	2447649.80	1989 May 03 07:15:00	MHR-06						PASSAT	MINIA				62		
1989-4136	2447656.80	1989 May 10 07:11:00	MHR-06						PASSAT	MINIA				74		
1989-4136	2447657.01	1989 May 10 12:10	MHR-06						PASSAT	MINIA				65		
1989-4139	2447658.79	1989 May 12 07:03:00	MHR-06						PASSAT	MINIA				63		
1989-4141	2447663.79	1989 May 17 07:01:00	MHR-06						PASSAT	MINIA				65		
1989-4144	2447665.79	1989 May 19 07:01:00	MHR-06						PASSAT	MINIA				62		
1989-4147	2447670.80	1989 May 24 07:15:00	MHR-06						PASSAT	MINIA				55		
1989-4149	2447671.01	1989 May 24 12:10	MHR-06						PASSAT	MINIA				63		
1989-4152	2447672.79	1989 May 26 07:03:00	MHR-06						MOUSSON	MINIA				57		
1989-4155	2447679.79	1989 Jun 02 07:03:00	MHR-06						MOUSSON	MINIA				60		
1989-4156	2447681.79	1989 Jun 04 07:02:00	MHR-06						MOUSSON	MINIA				61		
1989-4158	2447684.80	1989 Jun 07 07:08:00	MHR-06						MOUSSON	MINIA				62		
1989-4161	2447686.80	1989 Jun 09 07:05:00	MHR-06						MOUSSON	MINIA				61		
1989-4167	2447693.79	1989 Jun 16 07:03:00	MHR-06						MOUSSON	MINIA				61		
1989-4171	2447698.79	1989 Jun 21 07:04:00	MHR-06						MOUSSON	MINIA				77		
1989-4174	2447699.02	1989 Jun 21 12:30	MHR-06						MOUSSON	MINIA				61		
1989-4177	2447700.80	1989 Jun 23 07:17:00	MHR-06						MOUSSON	MINIA				62		
1989-4179	2447705.80	1989 Jun 26 07:14:00	MHR-06						MOUSSON	MINIA				62		
1989-4216	2447711.25	1989 Sep 01 18:00:00	MHR-06							GTSF-4				74		
1989-4216	2447712.03	1989 Sep 06 14:00:00	MHR-06							GTSF-4				73		
1989-4220	2447778.08	1989 Sep 6 12:35	MHR-06							GTSF-4				74		
1989-4232	2447810.05	1989 Oct 10 13:10	MHR-06							GTSF-4				74		
1989-4237	2447815.80	1989 Oct 16 07:17:00	MHR-06							GTSF-4				65		
1989-4240	2447817.85	1989 Oct 18 09:20:00	MHR-06							GTSF-4				66		
1989-4242	2447819.04	1989 Oct 18 13:00	MHR-06							GTSF-4				64		
1989-4247	2447821.79	1989 Oct 22 07:00:00	MHR-06						USHAKOV	MINIA?				74		
1989-4248	2447821.94	1989 Oct 22 09:09:00	MHR-06						USHAKOV	MINIA?				64		
1989-4249	2447822.79	1989 Oct 23 07:00:00	MHR-06						USHAKOV	MINIA?				62		
1989-4250	2447822.86	1989 Oct 23 08:52:00	MHR-06						USHAKOV	MINIA?				56		
1989-4254	2447824.80	1989 Oct 25 07:15:00	MHR-06						USHAKOV	MINIA?				64		
1989-4110	2447832.04	1989 Nov 01 13:00	MHR-06						ZINGST					55		
1989-4262	2447834.79	1989 Nov 04 07:00:00	MHR-06						KREN	MINIA				60		
1989-4264	2447838.72	1989 Nov 05 07:00:00	MHR-06						KREN	MINIA				65		
1989-4266	2447839.05	1989 Nov 08 13:10:00	MHR-06						KREN	ZINGST				73		
1989-4268	2447840.80	1989 Nov 08 15:07:00	MHR-06						KREN	MINIA				69		
1989-4269	2447845.79	1989 Nov 10 07:00:00	MHR-06						KREN	MINIA				64		
1989-4271	2447847.80	1989 Nov 10 17:16:00	MHR-06						KREN	MINIA				64		
1989-4274	2447852.79	1989 Nov 22 07:04:00	MHR-06						KREN	MINIA				64		
1989-4282	2447857.79	1989 Nov 27 07:02:00	MHR-06						KREN	MINIA				75		
1989-4284	2447869.04	1989 Dec 01 13:00	MHR-06						ZINGST					78		
1989-4303	2447881.07	1989 Dec 20 13:40	MHR-06						ZINGST					72		
1989-4304	2447893.04	1990 Jan 03 13:00:00	MHR-06						PRILLV	GSS8A	LP1			55		
1989-401	2447894.92	1990 Jan 03 10:00:00	MHR-06						PRILLV	GSS8A	LP2			55		
1989-402	2447894.84	1990 Jan 03 08:15:00	MHR-06						PASSAT	MINIA				62		
1989-406	2447896.81	1990 Jan 02 07:25:00	MHR-06						USHAKOV	MINIA?				60		
1989-407	2447897.10	1990 Jan 05 04:30:00	MHR-06						USHAKOV	MINIA?				60		
1989-405	2447896.80	1990 Jan 05 07:10:00	MHR-06						PASSAT	GSS8B	LP3			65		
1989-408	2447898.05	1990 Jan 06 13:17:00	MHR-06						PASSAT	GSS8B	LP4			55		
1989-409	2447899.81	1990 Jan 08 07:29:00	MHR-06						PASSAT	GSS8B	LP3			60		
1989-414	2447901.80	1990 Jan 10 07:19:00	MHR-06						USHAKOV	MINIA?				60		
1989-415	2447902.04	1990 Jan 10 13:00	MHR-06						ZINGST					75		
1989-420	2447902.97	1990 Jan 11 11:15:00	MHR-06						PRILLV	GSS8A	LP5			55		
1989-421	2447903.80	1990 Jan 12 07:05:00	MHR-06						USHAKOV	MINIA?				57		
1989-422	2447903.85	1990 Jan 12 08:24:00	MHR-06						PASSAT	GSS8B	LP4			61		
1989-423	2447904.92	1990 Jan 13 10:10:00	MHR-06						PRILLV	GSS8A	LP5			58		
1989-425	2447908.79	1990 Jan 17 07:04:00	MHR-06						USHAKOV	MINIA?				55		
1989-426	2447908.88	1990 Jan 17 09:08:00	MHR-06						PRILLV	GSS8A	LP5			55		
1989-433	2447910.79	1990 Jan 19 07:04:00	MHR-06						USHAKOV	MINIA?				60		
1989-436	2447911.04	1990 Jan 19 13:00	MHR-06						ZINGST					55		
1989-438	2447912.95	1990 Jan 21 10:50:00	MHR-06						PRILLV	GSS8A	LP6			55		
1989-439	2447913.92	1990 Jan 23 10:00:00	MHR-06						PRILLV	GSS8A	LP7			57		
1989-441	2447914.92	1990 Jan 23 10:09:00	MHR-06						PRILLV	GSS8A	LP8			55		
1989-444	2447915.79	1990 Jan 24 07:00:00	MHR-06						USHAKOV	MINIA?				60		
1989-446	2447915.93	1990 Jan 24 10:23:00	MHR-06						PRILLV	GSS8A	LP9			55		
1989-450	2447916.95	1990 Jan 25 10:44:00	MHR-06						PRILLV	GSS8A	LP10			60		
1989-453	2447918.05	1990 Jan 26 07:00:00	MHR-06						USHAKOV	MINIA?				60		
1989-454	2447920.82	1990 Jan 29 07:29:00	MHR-06						PRILLV	GSS8A	LP11			50		
1989-458	2447922.80	1990 Jan 31 07:11:00	MHR-06						PASSAT	GSS8B	LP5			60		
1989-459	2447922.80	1990 Feb 03 07:09:00	MHR-06						PASSAT	GSS8B	LP6			60		
1989-474	2447934.80	1990 Feb 12 07:06:00	MHR-06						KREN	MINIA?				62		
1989-475	2447936.79	1990 Feb 14 07:03:00	MHR-06						KREN	MINIA?				55		
1989-477	2447937.04	1990 Feb 14 13:00	MHR-06						ZINGST					79		
1989-480	2447936.79	1990 Feb 16 07:03:00	MHR-06						KREN	MINIA?				60		
1989-483	2447943.79	1990 Feb 21 07:03:00	MHR-06						KREN	MINIA?				60		
1989-489	2447943.79	1990 Feb 21 07:03:00	MHR-06						KREN	MINIA?				60		

[H-100B in R.File]

DYANA DDD1

DYANA DDD2

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Mission	FlightCode	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee km	Range km	Dest
1990-#96	2447945_79	1990 Feb 23 0703:00	MHR-06	-	-	-	-	-	KREN	MINIK?	-	-	-	60	-	-
1990-#99	2447950_80	1990 Feb 28 0705:00	MHR-06	-	-	-	-	-	KREN	MINIK?	-	-	-	56	-	-
1990-#103	2447952_82	1990 Mar 02 0740:00	MHR-06	-	-	-	-	-	KREN	MINIK?	-	-	-	60	-	-
1990-#110	2447957_79	1990 Mar 07 0702:00	MHR-06	-	-	-	-	-	KREN	MINIK?	-	-	-	60	-	-
1990-#115	2447959_83	1990 Mar 09 0754:00	MHR-06	-	-	-	-	-	KREN	MINIK?	-	-	-	60	-	-
1990-#120	2447961_96	1990 Mar 11 1058:00	MHR-06	-	-	-	-	-	PRILLV	GHS90A	LP12	-	-	55	-	-
1990-#127	2447965_04	1990 Mar 14 1256:00	MHR-06	-	-	-	-	-	PRILLV	GHS90A	LP13	-	-	55	-	-
1990-#130	2447972_06	1990 Mar 21 1320:00	MHR-06	-	-	-	-	-	-	ZINGST	-	-	-	65	-	-
1990-#133	2447972_14	1990 Mar 21 1525:00	MHR-06	-	-	-	-	-	-	GHS90A	-	-	-	75	-	-
1990-#135	2447979_08	1990 Mar 28 1400:00	MHR-06	-	-	-	-	-	-	ZINGST	-	-	-	74	-	-
1990-#140	2448021_00	1990 May 9 1200:00	MHR-06	-	-	-	-	-	-	ZINGST	-	-	-	74	-	-
1990-#141	2448023_00	1990 May 11 1200:00	MHR-06	-	-	-	-	-	-	ZINGST	-	-	-	74	-	-
1990-#142	2448042_00	1990 May 30 1200:00	MHR-06	-	-	-	-	-	-	ZINGST	-	-	-	66	-	-
1990-#143	2448051_00	1990 Jun 8 1200:00	MHR-06	-	-	-	-	-	-	ZINGST	-	-	-	76	-	-
1990-#144	2448056_00	1990 Jun 13 1200:00	MHR-06	-	-	-	-	-	-	ZINGST	-	-	-	77	-	-
1990-#145	2448063_01	1990 Jun 20 1210:00	MHR-06	-	-	-	-	-	-	ZINGST	-	-	-	77	-	-
1990-#157	2448147_00	1990 Sep 12 1200:00	MHR-06	-	-	-	-	-	-	ZINGST	-	-	-	77	-	-
1990-#161	2448161_00	1990 Sep 26 1200:00	MHR-06	-	-	-	-	-	-	ZINGST	-	-	-	79	-	-
1990-#171	2448170_04	1990 Oct 5 1300:00	MHR-06	-	-	-	-	-	-	ZINGST	-	-	-	38	-	-
1990-#172	2448177_04	1990 Oct 12 1300:00	MHR-06	-	-	-	-	-	-	ZINGST	-	-	-	53	-	-
1990-#174	2448182_04	1990 Oct 17 1300:00	MHR-06	-	-	-	-	-	-	ZINGST	-	-	-	77	-	-
1990-#176	2448197_83	1990 Oct 17 1340:00	MHR-06	-	-	-	-	-	-	ZINGST	-	-	-	79	-	-
1990-#177	2448198_04	1990 Nov 2 1300:00	MHR-06	-	-	-	-	-	PASSAT	GHS90E	LP1	-	-	42	-	-
1990-#178	2448198_07	1990 Nov 2 1340:00	MHR-06	-	-	-	-	-	PASSAT	ZINGST	-	-	-	74	-	-
1990-#179	2448200_84	1990 Nov 05 0914:00	MHR-06	-	-	-	-	-	PASSAT	ZINGST	-	-	-	64	-	-
1990-#179	2448202_81	1990 Nov 07 0726:00	MHR-06	-	-	-	-	-	PASSAT	GHS90E	-	-	-	64	-	-
1990-#181	2448219_04	1990 Nov 23 1300:00	MHR-06	-	-	-	-	-	-	ZINGST	-	-	-	68	-	-
1990-#184	2448231_06	1990 Dec 5 1330:00	MHR-06	-	-	-	-	-	-	ZINGST	-	-	-	72	-	-
1990-#185	2448240_04	1990 Dec 14 1300:00	MHR-06	-	-	-	-	-	-	ZINGST	-	-	-	66	-	-
1990-#186	2448245_04	1990 Dec 19 1300:00	MHR-06	-	-	-	-	-	-	ZINGST	-	-	-	70	-	-
1990-#187	2448245_06	1990 Dec 19 1350:00	MHR-06	-	-	-	-	-	-	ZINGST	-	-	-	71	-	-
1990-#189	2448266_80	1990 Dec 31 0706:00	MHR-06	-	-	-	-	-	BUGAEV	GHS90F	LP1	-	-	62	-	-
1992-#11	2448666_80	1992 Feb 14 0750:00	MHR-06	-	-	-	-	-	-	ZINGST	-	-	-	70	-	-
1992-#15	2448671_82	1992 Feb 19 0745:00	MHR-06	-	-	-	-	-	-	ZINGST	-	-	-	70	-	-
1992-#16	2448673_81	1992 Feb 21 0730:00	MHR-06	-	-	-	-	-	-	ZINGST	-	-	-	73	-	-
1992-#20	2448675_81	1992 Feb 21 0730:00	MHR-06	-	-	-	-	-	-	ZINGST	-	-	-	77	-	-
1992-#21	2448676_87	1992 Feb 26 0850:00	MHR-06	-	-	-	-	-	-	ZINGST	-	-	-	59	-	-
1992-#22	2448680_81	1992 Feb 28 0751:00	MHR-06	-	-	-	-	-	-	ZINGST	-	-	-	54	-	-
1992-#23	2448687_81	1992 Mar 6 0752:00	MHR-06	-	-	-	-	-	-	ZINGST	-	-	-	70	-	-
1992-#24	2448690_85	1992 Mar 6 0752:00	MHR-06	-	-	-	-	-	-	ZINGST	-	-	-	49	-	-
1992-#25	2448692_85	1992 Mar 11 0827:00	MHR-06	-	-	-	-	-	-	ZINGST	-	-	-	78	-	-
1992-#25	2448701_82	1992 Mar 11 0827:00	MHR-06	-	-	-	-	-	-	ZINGST	-	-	-	70	-	-
1992-#30	2448701_82	1992 Mar 20 0740:00	MHR-06	-	-	-	-	-	-	ZINGST	-	-	-	74	-	-
1992-#33	2448704_81	1992 Mar 20 0858:00	MHR-06	-	-	-	-	-	-	ZINGST	-	-	-	76	-	-
1992-#34	2448708_81	1992 Mar 25 0752:00	MHR-06	-	-	-	-	-	-	ZINGST	-	-	-	76	-	-
1992-#34	2448708_81	1992 Mar 25 0825:00	MHR-06	-	-	-	-	-	-	ZINGST	-	-	-	51	-	-
1992-#36	2448713_77	1992 Mar 27 0723:00	MHR-06	-	-	-	-	-	-	ZINGST	-	-	-	51?	-	-
1992-#37	2448715_77	1992 Apr 1 0633:00	MHR-06	-	-	-	-	-	-	ZINGST	-	-	-	52	-	-
1992-#39	2448715_77	1992 Apr 3 0630:00	MHR-06	-	-	-	-	-	-	ZINGST	-	-	-	20?	-	-
1992-#40	2448715_81	1992 Apr 3 0720:00	MHR-06	-	-	-	-	-	-	ZINGST	-	-	-	75	-	-
1992-#43	2448722_77	1992 Apr 10 0650:00	MHR-06	-	-	-	-	-	-	ZINGST	-	-	-	67	-	-





Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	OrbPay	Agency	Launch_Code	Group	Category	LTCite	Cite	Notes
1969-K39	2440507.50	1969 Oct 13	MIR-06	-	MIR-06	0.000	TSAD	SS	TSAD/kokin	Aeron	TT-F-17507	-	-
1969-K40	2440506.50	1969 Oct 14	MIR-06	-	MIR-06	0.000	TSAD	SS	TSAD/kokin	Aeron	TT-F-17507	-	-
1976-K208	2442818.79	1976 Feb 10 07:00:00	MIR-06	-	MIR-06	0.000	GNS/?	SU	GNS/?	Aeron	WDICF	-	-
1976-K220	2442820.79	1976 Feb 13 07:00:00	MIR-06	-	MIR-06	0.000	GNS/?	SU	GNS/?	Aeron	WDICF	-	-
1976-K230	2442821.88	1976 Feb 13 07:00:00	MIR-06	-	MIR-06	0.000	GNS/?	SU	GNS/?	Aeron	WDICF	-	-
1976-K244	2442824.79	1976 Feb 16 07:00:00	MIR-06	-	MIR-06	0.000	GNS/?	SU	GNS/?	Aeron	WDICF	-	-
1976-K244	2442825.88	1976 Feb 17 09:00:00	MIR-06	-	MIR-06	0.000	GNS/?	SU	GNS/?	Aeron	WDICF	-	-
1976-K303	2442835.79	1976 Feb 27 07:00:00	MIR-06	-	MIR-06	0.000	GNS/?	SU	GNS/?	Aeron	WDICF	-	-
1976-K338	2442840.88	1976 Mar 03 09:00:00	MIR-06	-	MIR-06	0.000	GNS/?	SU	GNS/?	Aeron	WDICF	-	-
1976-K359	2442842.92	1976 Mar 05 10:00:00	MIR-06	-	MIR-06	0.000	GNS/?	SU	GNS/?	Aeron	WDICF	-	-
1976-K367	2442844.83	1976 Mar 07 08:00:00	MIR-06	-	MIR-06	0.000	GNS/?	SU	GNS/?	Aeron	WDICF	-	-
1976-K368	2442844.83	1976 Mar 08 08:00:00	MIR-06	-	MIR-06	0.000	GNS/?	SU	GNS/?	Aeron	WDICF	-	-
1976-K381	2442846.88	1976 Mar 11 09:00:00	MIR-06	-	MIR-06	0.000	GNS/?	SU	GNS/?	Aeron	WDICF	-	-
1976-K382	2442846.92	1976 Mar 11 09:00:00	MIR-06	-	MIR-06	0.000	GNS/?	SU	GNS/?	Aeron	WDICF	-	-
1976-K405	2442852.88	1976 Mar 15 09:00:00	MIR-06	-	MIR-06	0.000	GNS/?	SU	GNS/?	Aeron	WDICF	-	-
1976-K406	2442852.92	1976 Mar 15 10:00:00	MIR-06	-	MIR-06	0.000	GNS/?	SU	GNS/?	Aeron	WDICF	-	-
1976-K459	2442858.62	1976 Apr 21 03:00:00	MIR-06	-	MIR-06	0.000	GNS/?	SU	GNS/?	Aeron	WDICF	-	-
1976-K462	2442856.58	1976 Apr 28 02:00:00	MIR-06	-	MIR-06	0.000	GNS/?	SU	GNS/?	Aeron	WDICF	-	-
1976-K468	2442901.58	1976 May 03 02:00:00	MIR-06	-	MIR-06	0.000	GNS/?	SU	GNS/?	Aeron	WDICF	-	-
1976-K470	2442910.62	1976 May 12 03:00:00	MIR-06	-	MIR-06	0.000	GNS/?	SU	GNS/?	Aeron	WDICF	-	-
1976-K471	2442917.58	1976 May 19 02:00:00	MIR-06	-	MIR-06	0.000	GNS/?	SU	GNS/?	Aeron	WDICF	-	-
1976-K478	2442923.62	1976 May 25 03:00:00	MIR-06	-	MIR-06	0.000	GNS/?	SU	GNS/?	Aeron	WDICF	-	-
1976-K480	2442925.62	1976 Jun 09 03:00:00	MIR-06	-	MIR-06	0.000	GNS/?	SU	GNS/?	Aeron	WDICF	-	-
1976-K485	2442938.62	1976 Jun 09 03:00:00	MIR-06	-	MIR-06	0.000	GNS/?	SU	GNS/?	Aeron	WDICF	-	-
1976-K487	2442944.71	1976 Jun 17 06:00:00	MIR-06	-	MIR-06	0.000	GNS/?	SU	GNS/?	Aeron	WDICF	-	-
1976-K487	2442946.75	1976 Jun 17 06:00:00	MIR-06	-	MIR-06	0.000	GNS/?	SU	GNS/?	Aeron	WDICF	-	-
1976-K487	2443002.58	1976 Aug 12 02:00:00	MIR-06	-	MIR-06	0.000	GNS/?	SU	GNS/?	Aeron	WDICF	-	-
1976-K487	2443016.58	1976 Aug 26 02:00:00	MIR-06	-	MIR-06	0.000	GNS/?	SU	GNS/?	Aeron	WDICF	-	-
1976-K1208	2443025.62	1976 Sep 04 03:00:00	MIR-06	-	MIR-06	0.000	GNS/?	SU	GNS/?	Aeron	WDICF	-	-
1976-K1264	2443029.62	1976 Sep 09 03:00:00	MIR-06	-	MIR-06	0.000	GNS/?	SU	GNS/?	Aeron	WDICF	-	-
1976-K1274	2443030.58	1976 Sep 09 02:00:00	MIR-06	-	MIR-06	0.000	GNS/?	SU	GNS/?	Aeron	WDICF	-	-
1976-K1286	2443036.58	1976 Sep 15 02:00:00	MIR-06	-	MIR-06	0.000	GNS/?	SU	GNS/?	Aeron	WDICF	-	-
1976-K1330	2443042.58	1976 Sep 21 02:00:00	MIR-06	-	MIR-06	0.000	GNS/?	SU	GNS/?	Aeron	WDICF	-	-
1976-K1353	2443050.62	1976 Sep 29 03:00:00	MIR-06	-	MIR-06	0.000	GNS/?	SU	GNS/?	Aeron	WDICF	-	-
1976-K1426	2443056.62	1976 Oct 5 02:00	MIR-06	-	MIR-06	0.000	GNS/?	SU	GNS/?	Aeron	WDICF	-	-
1976-K1457	2443064.58	1976 Oct 13 02:00:00	MIR-06	-	MIR-06	0.000	GNS/?	SU	GNS/?	Aeron	WDICF	-	-
1976-K1463	2443067.83	1976 Oct 16 06:00:00	MIR-06	-	MIR-06	0.000	GNS/?	SU	GNS/?	Aeron	WDICF	-	-
1976-K1490	2443070.92	1976 Oct 19 10:00:00	MIR-06	-	MIR-06	0.000	GNS/?	SU	GNS/?	Aeron	WDICF	-	-
1976-K1641	2443096.92	1976 Nov 14 10:00:00	MIR-06	-	MIR-06	0.000	GNS/?	SU	GNS/?	Aeron	WDICF	-	-
1976-K1666	2443100.79	1976 Nov 16 07:00:00	MIR-06	-	MIR-06	0.000	GNS/?	SU	GNS/?	Aeron	WDICF	-	-
1976-K1684	2443133.88	1976 Dec 21 09:00:00	MIR-06	-	MIR-06	0.000	GNS/?	SU	GNS/?	Aeron	WDICF	-	-
1976-K1896	2443143.88	1976 Dec 31 10:00:00	MIR-06	-	MIR-06	0.000	GNS/?	SU	GNS/?	Aeron	WDICF	-	-
1976-K1937	2443142.92	1976 Dec 31 10:00:00	MIR-06	-	MIR-06	0.000	GNS/?	SU	GNS/?	Aeron	WDICF	-	-
1977-K2	2443148.96	1977 Jan 03 11:00:00	MIR-06	-	MIR-06	0.000	GNS/?	SU	GNS/?	Aeron	WDICF	-	-
1977-K266	2443149.82	1977 Jan 05 10:00:00	MIR-06	-	MIR-06	0.000	GNS/?	SU	GNS/?	Aeron	WDICF	-	-
1977-K311	2443187.52	1977 Feb 16 02:00:00	MIR-06	-	MIR-06	0.000	GNS/?	SU	GNS/?	Aeron	WDICF	-	-
1977-K311	2443187.52	1977 Feb 17 02:00:00	MIR-06	-	MIR-06	0.000	GNS/?	SU	GNS/?	Aeron	WDICF	-	-
1977-K434	2443204.58	1977 Mar 02 02:00:00	MIR-06	-	MIR-06	0.000	GNS/?	SU	GNS/?	Aeron	WDICF	-	-
1977-K454	2443204.58	1977 Mar 04 02:00:00	MIR-06	-	MIR-06	0.000	GNS/?	SU	GNS/?	Aeron	WDICF	-	-
1977-K476	2443211.62	1977 Mar 09 03:00:00	MIR-06	-	MIR-06	0.000	GNS/?	SU	GNS/?	Aeron	WDICF	-	-
1977-K489	2443213.62	1977 Mar 11 03:00:00	MIR-06	-	MIR-06	0.000	GNS/?	SU	GNS/?	Aeron	WDICF	-	-
1977-K526	2443219.92	1977 Mar 17 03:00:00	MIR-06	-	MIR-06	0.000	GNS/?	SU	GNS/?	Aeron	WDICF	-	-
1977-K526	2443219.92	1977 Mar 17 10:00:00	MIR-06	-	MIR-06	0.000	GNS/?	SU	GNS/?	Aeron	WDICF	-	-
1977-K531	2443220.88	1977 Mar 18 09:00:00	MIR-06	-	MIR-06	0.000	GNS/?	SU	GNS/?	Aeron	WDICF	-	-
1977-K550	2443226.67	1977 Mar 23 04:00:00	MIR-06	-	MIR-06	0.000	GNS/?	SU	GNS/?	Aeron	WDICF	-	-
1977-K551	2443226.96	1977 Mar 23 11:00:00	MIR-06	-	MIR-06	0.000	GNS/?	SU	GNS/?	Aeron	WDICF	-	-
1977-K565	2443227.58	1977 Mar 25 02:00:00	MIR-06	-	MIR-06	0.000	GNS/?	SU	GNS/?	Aeron	WDICF	-	-
1977-K568	2443227.92	1977 Mar 26 10:00:00	MIR-06	-	MIR-06	0.000	GNS/?	SU	GNS/?	Aeron	WDICF	-	-
1977-K591	2443232.92	1977 Mar 30 10:00:00	MIR-06	-	MIR-06	0.000	GNS/?	SU	GNS/?	Aeron	WDICF	-	-
1977-K602	2443233.67	1977 Mar 31 04:00:00	MIR-06	-	MIR-06	0.000	GNS/?	SU	GNS/?	Aeron	WDICF	-	-
1977-K603	2443233.75	1977 Mar 31 06:00:00	MIR-06	-	MIR-06	0.000	GNS/?	SU	GNS/?	Aeron	WDICF	-	-
1977-K619	2443236.62	1977 Apr 03 03:00:00	MIR-06	-	MIR-06	0.000	GNS/?	SU	GNS/?	Aeron	WDICF	-	-
1977-K619	2443237.67	1977 Apr 04 04:00:00	MIR-06	-	MIR-06	0.000	GNS/?	SU	GNS/?	Aeron	WDICF	-	-
1977-K657	2443246.62	1977 Apr 13 03:00:00	MIR-06	-	MIR-06	0.000	GNS/?	SU	GNS/?	Aeron	WDICF	-	-
1977-K672	2443247.92	1977 Apr 14 10:00:00	MIR-06	-	MIR-06	0.000	GNS/?	SU	GNS/?	Aeron	WDICF	-	-
1977-K691	2443252.92	1977 Apr 19 10:00:00	MIR-06	-	MIR-06	0.000	GNS/?	SU	GNS/?	Aeron	WDICF	-	-
1977-K693	2443253.88	1977 Apr 20 09:00:00	MIR-06	-	MIR-06	0.000	GNS/?	SU	GNS/?	Aeron	WDICF	-	-
1977-K708	2443254.88	1977 Apr 21 09:00:00	MIR-06	-	MIR-06	0.000	GNS/?	SU	GNS/?	Aeron	WDICF	-	-
1977-K720	2443256.88	1977 Apr 23 09:00:00	MIR-06	-	MIR-06	0.000	GNS/?	SU	GNS/?	Aeron	WDICF	-	-
1977-K728	2443259.88	1977 Apr 26 09:00:00	MIR-06	-	MIR-06	0.000	GNS/?	SU	GNS/?	Aeron	WDICF	-	-
1977-K745	2443262.71	1977 Apr 29 05:00:00	MIR-06	-	MIR-06	0.000	GNS/?	SU	GNS/?	Aeron	WDICF	-	-
1977-K758	2443263.96	1977 May 03 11:00:00	MIR-06	-	MIR-06	0.000	GNS/?	SU	GNS/?	Aeron	WDICF	-	-
1977-K770	2443266.96	1977 May 03 11:00:00	MIR-06	-	MIR-06	0.000	GNS/?	SU	GNS/?	Aeron	WDICF	-	-
1977-K773	2443267.58	1977 May 04 02:00:00	MIR-06	-	MIR-06	0.000	GNS/?	SU	GNS/?	Aeron	WDICF	-	-
1977-K788	2443269.71	1977 May 06 05:00:00	MIR-06	-	MIR-06	0.000	GNS/?	SU	GNS/?	Aeron	WDICF	-	-
1977-K812	2443274.58	1977 May 11 02:00:00	MIR-06	-	MIR-06	0.000	GNS/?	SU	GNS/?	Aeron	WDICF	-	-
1977-K846	2443281.58	1977 May 18 02:00:00	MIR-06	-	MIR-06	0.000	GNS/?	SU	GNS/?	Aeron	WDICF	-	-
1977-K883	2443288.64	1977 May 25 03:00:00	MIR-06	-	MIR-06	0.000	GNS/?	SU	GNS/?	Aeron	WDICF	-	-
1977-K928	2443295.58	1977 Jun 01 02:00:00	MIR-06	-	MIR-06	0.000	GNS/?	SU	GNS/?	Aeron	WDICF	-	-
1977-K945	2443297.67	1977 Jun 02 02:00:00	MIR-06	-	MIR-06	0.000	GNS/?	SU	GNS/?	Aeron	WDICF	-	-
1977-K945	2443298.67	1977 Jun 04 04:00:00	MIR-06	-	MIR-06	0.000	GNS/?	SU	GNS/?	Aeron	WDICF	-	-
1977-K963	2443302.58	1977 Jun 08 02:00:00	MIR-06	-	MIR-06	0.000	GNS/?	SU	GNS/?	Aeron	WDICF	-	-
1977-K962	2443302.62	1977 Jun 08 03:00:00	MIR-06	-	MIR-06	0.000	GNS/?	SU	GNS/?	Aeron	WDICF	-	-
1977-K999	2443309.62	1977 Jun 15 03:00:00	MIR-06	-	MIR-06	0.000	GNS/?	SU	GNS/?	Aeron	WDICF	-	-



Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	OrbPay	Agency	Launch_Code	Group	Category	LTCite	Cite	Notes
1978-W1152	2443822.83	1978 Nov 10 08:00:00	MIR-06	-	-	0.000	GMS?	SU	GMS/?	Aeron	WDICRF	-	-
1978-W1163	2443827.83	1978 Nov 15 08:00:00	MIR-06	-	-	0.000	GMS?	SU	GMS/?	Aeron	WDICRF	-	-
1978-W1174	2443829.79	1978 Nov 17 07:00:00	MIR-06	-	-	0.000	GMS?	SU	GMS/?	Aeron	WDICRF	-	-
1979-W26	2443876.88	1979 Jan 23 08:00:00	MIR-06	-	MIR-06	0.000	GMS?	SU	GMS/?	Aeron	WDICRF	-	-
1979-W144	2443899.83	1979 Jan 26 08:00:00	MIR-06	-	-	0.000	GMS?	SU	GMS/?	Aeron	WDICRF	-	-
1979-W167	2443904.83	1979 Jan 31 08:00:00	MIR-06	-	-	0.000	GMS?	SU	GMS/?	Aeron	WDICRF	-	-
1979-W163	2443906.83	1979 Feb 02 08:00:00	MIR-06	-	-	0.000	GMS?	SU	GMS/?	Aeron	WDICRF	-	-
1979-W202	2443911.79	1979 Feb 09 07:00:00	MIR-06	-	-	0.000	GMS?	SU	GMS/?	Aeron	WDICRF	-	-
1979-W219	2443913.79	1979 Feb 09 07:00:00	MIR-06	-	-	0.000	GMS?	SU	GMS/?	Aeron	WDICRF	-	-
1979-W237	2443918.79	1979 Feb 14 07:00:00	MIR-06	-	-	0.000	GMS?	SU	GMS/?	Aeron	WDICRF	-	-
1979-W316	2443932.79	1979 Feb 28 07:00:00	MIR-06	-	-	0.000	AM	SU	-	Aeron	WDICRF	-	-
1979-W531	2443987.21	1979 Apr 23 17:00:00	MIR-06	-	-	0.000	GMS?	SU	GMS/?	Aeron	WDICRF	-	-
1979-W536	2443988.83	1979 Apr 25 08:00:00	MIR-06	-	-	0.000	GMS?	SU	GMS/?	Aeron	WDICRF	-	-
1979-W568	2443990.83	1979 Apr 27 08:00:00	MIR-06	-	-	0.000	GMS?	SU	GMS/?	Aeron	WDICRF	-	-
1979-W639	2444010.38	1979 May 16 21:00:00	MIR-06	-	-	0.000	GMS?	SU	GMS/?	Aeron	WDICRF	-	-
1979-W651	2444012.33	1979 May 18 20:00:00	MIR-06	-	-	0.000	GMS?	SU	GMS/?	Aeron	WDICRF	-	-
1979-W659	2444015.33	1979 May 21 20:00:00	MIR-06	-	-	0.000	GMS?	SU	GMS/?	Aeron	WDICRF	-	-
1979-W673	2444017.33	1979 May 23 20:00:00	MIR-06	-	-	0.000	GMS?	SU	GMS/?	Aeron	WDICRF	-	-
1979-W682	2444021.33	1979 May 27 08:00:00	MIR-06	-	-	0.000	GMS?	SU	GMS/?	Aeron	WDICRF	-	-
1979-W691	2444026.83	1979 May 28 20:00:00	MIR-06	-	-	0.000	GMS?	SU	GMS/?	Aeron	WDICRF	-	-
1979-W696	2444028.33	1979 May 29 20:00:00	MIR-06	-	-	0.000	GMS?	SU	GMS/?	Aeron	WDICRF	-	-
1979-W700	2444025.33	1979 May 29 20:00:00	MIR-06	-	-	0.000	GMS?	SU	GMS/?	Aeron	WDICRF	-	-
1979-W714	2444028.83	1979 Jun 06 08:00:00	MIR-06	-	-	0.000	GMS?	SU	GMS/?	Aeron	WDICRF	-	-
1979-W730	2444030.83	1979 Jun 06 08:00:00	MIR-06	-	-	0.000	GMS?	SU	GMS/?	Aeron	WDICRF	-	-
1979-W743	2444032.79	1979 Jun 08 07:00:00	MIR-06	-	-	0.000	GMS?	SU	GMS/?	Aeron	WDICRF	-	-
1979-W756	2444037.83	1979 Jun 15 07:00:00	MIR-06	-	-	0.000	GMS?	SU	GMS/?	Aeron	WDICRF	-	-
1979-W768	2444039.79	1979 Jun 15 07:00:00	MIR-06	-	-	0.000	GMS?	SU	GMS/?	Aeron	WDICRF	-	-
1979-W786	2444044.83	1979 Jun 20 08:00:00	MIR-06	-	-	0.000	GMS?	SU	GMS/?	Aeron	WDICRF	-	-
1979-W794	2444046.79	1979 Jun 22 07:00:00	MIR-06	-	-	0.000	GMS?	SU	GMS/?	Aeron	WDICRF	-	-
1979-W814	2444051.79	1979 Jun 27 07:00:00	MIR-06	-	-	0.000	GMS?	SU	GMS/?	Aeron	WDICRF	-	-
1979-W845	2444056.83	1979 Jul 04 08:00:00	MIR-06	-	-	0.000	GMS?	SU	GMS/?	Aeron	WDICRF	-	-
1979-W865	2444058.83	1979 Jul 11 08:00:00	MIR-06	-	-	0.000	GMS?	SU	GMS/?	Aeron	WDICRF	-	-
1979-W876	2444067.08	1979 Jul 12 14:00:00	MIR-06	-	-	0.000	GMS?	SU	GMS/?	Aeron	WDICRF	-	-
1979-W877	2444067.12	1979 Jul 11 08:00:00	MIR-06	-	-	0.000	GMS?	SU	GMS/?	Aeron	WDICRF	-	-
1979-W878	2444067.17	1979 Jul 12 16:00:00	MIR-06	-	-	0.000	GMS?	SU	GMS/?	Aeron	WDICRF	-	-
1979-W903	2444072.83	1979 Jul 15 08:00:00	MIR-06	-	-	0.000	GMS?	SU	GMS/?	Aeron	WDICRF	-	-
1979-W1231	2444179.40	1979 Nov 07 08:00:00	MIR-06	-	-	0.000	GMS?	SU	GMS/?	Aeron	WDICRF	-	-
1979-W1311	2444184.83	1979 Nov 07 08:00:00	MIR-06	-	-	0.000	GMS?	SU	GMS/?	Aeron	WDICRF	-	-
1979-W1312	2444184.88	1979 Nov 07 08:00:00	MIR-06	-	-	0.000	GMS?	SU	GMS/?	Aeron	WDICRF	-	-
1979-W1366	2444198.83	1979 Nov 16 09:00:00	MIR-06	-	-	0.000	GMS?	SU	GMS/?	Aeron	WDICRF	-	-
1979-W1354	2444198.82	1979 Nov 30 07:00:00	MIR-06	-	-	0.000	GMS?	SU	GMS/?	Aeron	WDICRF	-	-
1979-W1379	2444209.81	1979 Nov 30 07:00:00	MIR-06	-	-	0.000	GMS?	SU	GMS/?	Aeron	WDICRF	-	-
1979-W1505	2444219.86	1979 Dec 11 00:00:00	MIR-06	-	-	0.000	GMS?	SU	GMS/?	Aeron	WDICRF	-	-
1979-W1405	2444219.81	1979 Dec 12 07:00:00	MIR-06	-	-	0.000	GMS?	SU	GMS/?	Aeron	WDICRF	-	-
1979-W1430	2444228.83	1979 Dec 24 07:00:00	MIR-06	-	-	0.000	GMS?	SU	GMS/?	Aeron	WDICRF	-	-
1979-W1447	2444231.81	1979 Dec 24 07:00:00	MIR-06	-	-	0.000	GMS?	SU	GMS/?	Aeron	WDICRF	-	-
1979-W1449	2444231.82	1979 Dec 24 15:45:00	MIR-06	-	-	0.000	GMS?	SU	GMS/?	Aeron	WDICRF	-	-
1979-W1451	2444232.16	1979 Dec 24 07:15:00	MIR-06	-	-	0.000	GMS?	SU	GMS/?	Aeron	WDICRF	-	-
1979-W1453	2444233.84	1979 Dec 26 07:15:00	MIR-06	-	-	0.000	GMS?	SU	GMS/?	Aeron	WDICRF	-	-
1980-W43	2444252.94	1980 Jan 14 10:00:00	MIR-06	-	-	0.000	GMS?	SU	GMS/?	Aeron	WDICRF	-	-
1980-W44	2444252.06	1980 Jan 14 13:00:00	MIR-06	-	-	0.000	GMS?	SU	GMS/?	Aeron	WDICRF	-	-
1980-W45	2444252.06	1980 Jan 16 12:00:00	MIR-06	-	-	0.000	GMS?	SU	GMS/?	Aeron	WDICRF	-	-
1980-W46	2444255.94	1980 Jan 16 13:00:00	MIR-06	-	-	0.000	GMS?	SU	GMS/?	Aeron	WDICRF	-	-
1980-W47	2444255.06	1980 Jan 18 13:00:00	MIR-06	-	-	0.000	GMS?	SU	GMS/?	Aeron	WDICRF	-	-
1980-W48	2444257.06	1980 Jan 18 15:00:00	MIR-06	-	-	0.000	GMS?	SU	GMS/?	Aeron	WDICRF	-	-
1980-W49	2444257.12	1980 Jan 18 15:00:00	MIR-06	-	-	0.000	GMS?	SU	GMS/?	Aeron	WDICRF	-	-
1980-W128	2444275.79	1980 Feb 08 07:00:00	MIR-06	-	-	0.000	GMS?	SU	GMS/?	Aeron	WDICRF	-	-
1980-W126	2444275.17	1980 Feb 08 16:00:00	MIR-06	-	-	0.000	GMS?	SU	GMS/?	Aeron	WDICRF	-	-
1980-W128	2444275.17	1980 Feb 09 15:40:00	MIR-06	-	-	0.000	GMS?	SU	GMS/?	Aeron	WDICRF	-	-
1980-W149	2444294.85	1980 Feb 15 08:00:00	MIR-06	-	-	0.000	GMS?	SU	GMS/?	Aeron	WDICRF	-	-
1980-W165	2444298.83	1980 Feb 20 08:00:00	MIR-06	-	-	0.000	GMS?	SU	GMS/?	Aeron	WDICRF	-	-
1980-W180	2444298.08	1980 Feb 25 14:00:00	MIR-06	-	-	0.000	GMS?	SU	GMS/?	Aeron	WDICRF	-	-
1980-W183	2444298.19	1980 Feb 25 16:30:00	MIR-06	-	-	0.000	GMS?	SU	GMS/?	Aeron	WDICRF	-	-
1980-W184	2444298.27	1980 Feb 25 18:30:00	MIR-06	-	-	0.000	GMS?	SU	GMS/?	Aeron	WDICRF	-	-
1980-W186	2444298.10	1980 Feb 26 14:30:00	MIR-06	-	-	0.000	GMS?	SU	GMS/?	Aeron	WDICRF	-	-
1980-W187	2444298.28	1980 Feb 26 18:40:00	MIR-06	-	-	0.000	GMS?	SU	GMS/?	Aeron	WDICRF	-	-
1980-W189	2444297.06	1980 Feb 27 13:00:00	MIR-06	-	-	0.000	GMS?	SU	GMS/?	Aeron	WDICRF	-	-
1980-W192	2444297.23	1980 Feb 27 17:00:00	MIR-06	-	-	0.000	GMS?	SU	GMS/?	Aeron	WDICRF	-	-
1980-W188	2444296.83	1980 Feb 27 08:00:00	MIR-06	-	-	0.000	GMS?	SU	GMS/?	Aeron	WDICRF	-	-
1980-W194	2444298.06	1980 Feb 28 13:00:00	MIR-06	-	-	0.000	GMS?	SU	GMS/?	Aeron	WDICRF	-	-
1980-W196	2444298.10	1980 Feb 28 14:20:00	MIR-06	-	-	0.000	GMS?	SU	GMS/?	Aeron	WDICRF	-	-
1980-W198	2444298.15	1980 Feb 28 15:30:00	MIR-06	-	-	0.000	GMS?	SU	GMS/?	Aeron	WDICRF	-	-
1980-W197	2444298.21	1980 Feb 28 17:00:00	MIR-06	-	-	0.000	GMS?	SU	GMS/?	Aeron	WDICRF	-	-
1980-W206	2444298.01	1980 Feb 29 12:00:00	MIR-06	-	-	0.000	GMS?	SU	GMS/?	Aeron	WDICRF	-	-
1980-W205	2444298.88	1980 Feb 29 07:00:00	MIR-06	-	-	0.000	GMS?	SU	GMS/?	Aeron	WDICRF	-	-
1980-W204	2444298.81	1980 Feb 29 07:00:00	MIR-06	-	-	0.000	GMS?	SU	GMS/?	Aeron	WDICRF	-	-
1980-W215	2444301.67	1980 Mar 03 04:00:00	MIR-06	-	-	0.000	GMS?	SU	GMS/?	Aeron	WDICRF	-	-
1980-W224	2444303.88	1980 Mar 05 09:00:00	MIR-06	-	-	0.000	GMS?	SU	GMS/?	Aeron	WDICRF	-	-
1980-W247	2444310.83	1980 Mar 12 08:00:00	MIR-06	-	-	0.000	GMS?	SU	GMS/?	Aeron	WDICRF	-	-
1980-W260	2444312.83	1980 Mar 14 08:00:00	MIR-06	-	-	0.000	GMS?	SU	GMS/?	Aeron	WDICRF	-	-
1980-W279	2444317.79	1980 Mar 19 07:00:00	MIR-06	-	-	0.000	GMS?	SU	GMS/?	Aeron	WDICRF	-	-
1980-W288	2444319.79	1980 Mar 21 07:00:00	MIR-06	-	-	0.000	GMS?	SU	GMS/?	Aeron	WDICRF	-	-
1980-W306	2444324.83	1980 Mar 26 08:00:00	MIR-06	-	-	0.000	GMS?	SU	GMS/?	Aeron	WDICRF	-	-

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	OrbPay	Agency	Launch_Code	Group	Category	LTCite	Cite	Notes
1980-W315	2444526.83	1980 Mar 28 0800:00	MIR-06	-	-	0.000	GMS/?	SU	GMS/?	Aeron	WDICRF	-	-
1980-W390	2444545.88	1980 Apr 19 0900:00	MIR-06	-	-	0.000	GMS/?	SU	GMS/?	Aeron	WDICRF	-	-
1980-W402	2444552.88	1980 Apr 23 0900:00	MIR-06	-	-	0.000	GMS/?	SU	GMS/?	Aeron	WDICRF	-	-
1980-W413	2444554.88	1980 Apr 25 0900:00	MIR-06	-	-	0.000	GMS/?	SU	GMS/?	Aeron	WDICRF	-	-
1980-W487	2444576.96	1980 May 17 1100:00	MIR-06	-	-	0.000	GMS/?	SU	GMS/?	Aeron	WDICRF	-	-
1980-W529	2444586.92	1980 May 29 1000:00	MIR-06	-	-	0.000	GMS/?	SU	GMS/?	Aeron	WDICRF	-	-
1980-W535	2444590.88	1980 May 31 0900:00	MIR-06	-	-	0.000	GMS/?	SU	GMS/?	Aeron	WDICRF	-	-
1980-W536	2444590.92	1980 May 31 1000:00	MIR-06	-	-	0.000	GMS/?	SU	GMS/?	Aeron	WDICRF	-	-
1980-W538	2444592.96	1980 Jun 02 1100:00	MIR-06	-	-	0.000	GMS/?	SU	GMS/?	Aeron	WDICRF	-	-
1980-W606	2444409.27	1980 Jun 18 1830:00	MIR-06	-	-	0.000	GMS/?	SU	GMS/?	Aeron	WDICRF	-	-
1980-W652	2444417.54	1980 Jun 27 0100:00	MIR-06	-	-	0.000	GMS/?	SU	GMS/?	Aeron	WDICRF	-	-
1980-W638	2444418.50	1980 Jun 28 0000:00	MIR-06	-	-	0.000	GMS/?	SU	GMS/?	Aeron	WDICRF	-	-
1980-W385	2444478.39	1980 Aug 26 2120:00	MIR-06	-	-	0.000	GMS/?	SU	GMS/?	Aeron	WDICRF	-	-
1980-W825	2444486.10	1980 Sep 03 1430:00	MIR-06	-	-	0.000	GMS/?	SU	GMS/?	Aeron	WDICRF	-	-
1980-W396	2444486.23	1980 Sep 03 1730:00	MIR-06	-	-	0.000	GMS/?	SU	GMS/?	Aeron	WDICRF	-	-
1980-W829	2444486.29	1980 Sep 03 1900:00	MIR-06	-	-	0.000	GMS/?	SU	GMS/?	Aeron	WDICRF	-	-
1980-W853	2444487.85	1980 Sep 05 0920:00	MIR-06	-	-	0.000	GMS/?	SU	GMS/?	Aeron	WDICRF	-	-
1980-W335	2444492.12	1980 Sep 09 1500:00	MIR-06	-	-	0.000	GMS/?	SU	GMS/?	Aeron	WDICRF	-	-
1980-W846	2444492.19	1980 Sep 09 1630:00	MIR-06	-	-	0.000	GMS/?	SU	GMS/?	Aeron	WDICRF	-	-
1980-W647	2444492.25	1980 Sep 09 1800:00	MIR-06	-	-	0.000	GMS/?	SU	GMS/?	Aeron	WDICRF	-	-
1980-W850	2444492.82	1980 Sep 10 0735:00	MIR-06	-	-	0.000	GMS/?	SU	GMS/?	Aeron	WDICRF	-	-
1980-W858	2444494.82	1980 Sep 12 0735:00	MIR-06	-	-	0.000	GMS/?	SU	GMS/?	Aeron	WDICRF	-	-
1980-W852	2444501.81	1980 Sep 24 0700:00	MIR-06	-	-	0.000	GMS/?	SU	GMS/?	Aeron	WDICRF	-	-
1980-W896	2444506.79	1980 Oct 01 0700:00	MIR-06	-	-	0.000	GMS/?	SU	GMS/?	Aeron	WDICRF	-	-
1980-W921	2444513.79	1980 Oct 01 0700:00	MIR-06	-	-	0.000	GMS/?	SU	GMS/?	Aeron	WDICRF	-	-
1980-W931	2444515.68	1980 Oct 03 0700:00	MIR-06	-	-	0.000	GMS/?	SU	GMS/?	Aeron	WDICRF	-	-
1980-W945	2444520.79	1980 Oct 06 0700:00	MIR-06	-	-	0.000	GMS/?	SU	GMS/?	Aeron	WDICRF	-	-
1980-W958	2444527.53	1980 Oct 15 0800:00	MIR-06	-	-	0.000	GMS/?	SU	GMS/?	Aeron	WDICRF	-	-
1980-W972	2444529.79	1980 Oct 17 0700:00	MIR-06	-	-	0.000	GMS/?	SU	GMS/?	Aeron	WDICRF	-	-
1980-W964	2444534.53	1980 Oct 22 0800:00	MIR-06	-	-	0.000	GMS/?	SU	GMS/?	Aeron	WDICRF	-	-
1980-W982	2444536.53	1980 Oct 24 0800:00	MIR-06	-	-	0.000	GMS/?	SU	GMS/?	Aeron	WDICRF	-	-
1980-W992	2444541.88	1980 Oct 29 0900:00	MIR-06	-	-	0.000	GMS/?	SU	GMS/?	Aeron	WDICRF	-	-
1980-W1040	2444557.81	1980 Nov 14 0720:00	MIR-06	-	-	0.000	GMS/?	SU	GMS/?	Aeron	WDICRF	-	-
1980-W1041	2444557.89	1980 Nov 14 0920:00	MIR-06	-	-	0.000	GMS/?	SU	GMS/?	Aeron	WDICRF	-	-
1980-W1042	2444558.01	1980 Nov 14 1220:00	MIR-06	-	-	0.000	GMS/?	SU	GMS/?	Aeron	WDICRF	-	-
1980-W1050	2444561.93	1980 Nov 18 1020:00	MIR-06	-	-	0.000	GMS/?	SU	GMS/?	Aeron	WDICRF	-	-
1980-W1061	2444561.96	1980 Nov 18 1130:00	MIR-06	-	-	0.000	GMS/?	SU	GMS/?	Aeron	WDICRF	-	-
1981-W115	2444613.12	1981 Jan 14 1500:00	MIR-06	-	-	0.000	GMS/?	SU	GMS/?	Aeron	WDICRF	-	-
1981-W116	2444613.04	1981 Jan 14 1500:00	MIR-06	-	-	0.000	GMS/?	SU	GMS/?	Aeron	WDICRF	-	-
1981-W119	2444620.04	1981 Jan 15 1300:00	MIR-06	-	-	0.000	GMS/?	SU	GMS/?	Aeron	WDICRF	-	-
1981-W23	2444622.08	1981 Jan 17 1300:00	MIR-06	-	-	0.000	GMS/?	SU	GMS/?	Aeron	WDICRF	-	-
1981-W24	2444626.04	1981 Jan 20 1300:00	MIR-06	-	-	0.000	GMS/?	SU	GMS/?	Aeron	WDICRF	-	-
1981-W26	2444628.06	1981 Jan 21 1300:00	MIR-06	-	-	0.000	GMS/?	SU	GMS/?	Aeron	WDICRF	-	-
1981-W62	2444639.79	1981 Feb 04 0700:00	MIR-06	-	-	0.000	GMS/?	SU	GMS/?	Aeron	WDICRF	-	-
1981-W62	2444641.79	1981 Feb 06 0700:00	MIR-06	-	-	0.000	GMS/?	SU	GMS/?	Aeron	WDICRF	-	-
1981-W62	2444644.08	1981 Feb 06 0846:00	MIR-06	-	-	0.000	GMS/?	SU	GMS/?	Aeron	WDICRF	-	-
1981-W72	2444646.08	1981 Feb 10 0430:00	MIR-06	-	-	0.000	GMS/?	SU	GMS/?	Aeron	WDICRF	-	-
1981-W82	2444648.85	1981 Feb 13 0830:00	MIR-06	-	-	0.000	GMS/?	SU	GMS/?	Aeron	WDICRF	-	-
1981-W91	2444653.85	1981 Feb 18 0730:00	MIR-06	-	-	0.000	GMS/?	SU	GMS/?	Aeron	WDICRF	-	-
1981-W91	2444653.86	1981 Feb 18 0840:00	MIR-06	-	-	0.000	GMS/?	SU	GMS/?	Aeron	WDICRF	-	-
1981-W91	2444654.12	1981 Feb 20 1500:00	MIR-06	-	-	0.000	GMS/?	SU	GMS/?	Aeron	WDICRF	-	-
1981-W100	2444856.21	1981 Feb 20 1700:00	MIR-06	-	-	0.000	GMS/?	SU	GMS/?	Aeron	WDICRF	-	-
1981-W105	2444859.06	1981 Feb 23 1320:00	MIR-06	-	-	0.000	GMS/?	SU	GMS/?	Aeron	WDICRF	-	-
1981-W107	2444859.12	1981 Feb 23 1500:00	MIR-06	-	-	0.000	GMS/?	SU	GMS/?	Aeron	WDICRF	-	-
1981-W113	2444863.07	1981 Feb 24 1340:00	MIR-06	-	-	0.000	GMS/?	SU	GMS/?	Aeron	WDICRF	-	-
1981-W113	2444861.02	1981 Feb 25 1230:00	MIR-06	-	-	0.000	GMS/?	SU	GMS/?	Aeron	WDICRF	-	-
1981-W188	2444887.12	1981 Mar 23 1500:00	MIR-06	-	-	0.000	GMS/?	SU	GMS/?	Aeron	WDICRF	-	-
1981-W189	2444890.12	1981 Mar 26 1500:00	MIR-06	-	-	0.000	GMS/?	SU	GMS/?	Aeron	WDICRF	-	-
1981-W201	2444890.17	1981 Mar 26 1600:00	MIR-06	-	-	0.000	GMS/?	SU	GMS/?	Aeron	WDICRF	-	-
1981-W128	2444896.17	1981 Apr 01 1600:00	MIR-06	-	-	0.000	GMS/?	SU	GMS/?	Aeron	WDICRF	-	-
1981-W219	2444897.12	1981 Apr 02 1500:00	MIR-06	-	-	0.000	GMS/?	SU	GMS/?	Aeron	WDICRF	-	-
1981-W225	2444700.17	1981 Apr 05 1600:00	MIR-06	-	-	0.000	GMS/?	SU	GMS/?	Aeron	WDICRF	-	-
1981-W134	2444703.10	1981 Apr 08 1430:00	MIR-06	-	-	0.000	GMS/?	SU	GMS/?	Aeron	WDICRF	-	-
1981-W235	2444716.62	1981 Apr 08 1630:00	MIR-06	-	-	0.000	GMS/?	SU	GMS/?	Aeron	WDICRF	-	-
1981-W289	2444716.67	1981 Apr 22 0300:00	MIR-06	-	-	0.000	GMS/?	SU	GMS/?	Aeron	WDICRF	-	-
1981-W300	2444722.04	1981 Apr 27 1300:00	MIR-06	-	-	0.000	GMS/?	SU	GMS/?	Aeron	WDICRF	-	-
1981-W303	2444722.10	1981 Apr 27 1420:00	MIR-06	-	-	0.000	GMS/?	SU	GMS/?	Aeron	WDICRF	-	-
1981-W306	2444722.23	1981 Apr 27 1635:00	MIR-06	-	-	0.000	GMS/?	SU	GMS/?	Aeron	WDICRF	-	-
1981-W316	2444725.83	1981 Apr 27 1730:00	MIR-06	-	-	0.000	GMS/?	SU	GMS/?	Aeron	WDICRF	-	-
1981-W323	2444730.85	1981 May 06 0830:00	MIR-06	-	-	0.000	GMS/?	SU	GMS/?	Aeron	WDICRF	-	-
1981-W327	2444732.79	1981 May 08 0700:00	MIR-06	-	-	0.000	GMS/?	SU	GMS/?	Aeron	WDICRF	-	-
1981-W365	2444746.83	1981 May 20 0800:00	MIR-06	-	-	0.000	GMS/?	SU	GMS/?	Aeron	WDICRF	-	-
1981-W366	2444746.85	1981 May 24 0830:00	MIR-06	-	-	0.000	GMS/?	SU	GMS/?	Aeron	WDICRF	-	-
1981-W373	2444751.81	1981 May 27 0730:00	MIR-06	-	-	0.000	GMS/?	SU	GMS/?	Aeron	WDICRF	-	-
1981-W383	2444753.86	1981 May 29 0840:00	MIR-06	-	-	0.000	GMS/?	SU	GMS/?	Aeron	WDICRF	-	-
1981-W403	2444758.81	1981 Jun 03 0730:00	MIR-06	-	-	0.000	GMS/?	SU	GMS/?	Aeron	WDICRF	-	-
1981-W413	2444760.79	1981 Jun 05 0700:00	MIR-06	-	-	0.000	GMS/?	SU	GMS/?	Aeron	WDICRF	-	-
1981-W419	2444767.79	1981 Jun 12 0700:00	MIR-06	-	-	0.000	GMS/?	SU	GMS/?	Aeron	WDICRF	-	-
1981-W423	2444772.79	1981 Jun 17 0700:00	MIR-06	-	-	0.000	GMS/?	SU	GMS/?	Aeron	WDICRF	-	-

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Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	OrbPay	Agency	Launch_Code	Group	Category	LTCite	Cite	Notes
1981-W429	2444774.79	1981 Jun 19 0700:00	MIR-06	-	-	0.000	GMS?	SU	GMS/?	Aeron	WDICF	-	-
1981-W246	2444777.58	1981 Jun 22 0200:00	MIR-06	-	-	0.000	GMS?	SU	GMS/?	Aeron	WDICF	-	-
1981-W451	2444777.67	1981 Jun 22 0400:00	MIR-06	-	-	0.000	GMS?	SU	GMS/?	Aeron	WDICF	-	-
1981-W452	2444777.75	1981 Jun 22 0600:00	MIR-06	-	-	0.000	GMS?	SU	GMS/?	Aeron	WDICF	-	-
1981-W453	2444777.83	1981 Jun 22 0800:00	MIR-06	-	-	0.000	GMS?	SU	GMS/?	Aeron	WDICF	-	-
1981-W454	2444777.92	1981 Jun 22 1000:00	MIR-06	-	-	0.000	GMS?	SU	GMS/?	Aeron	WDICF	-	-
1981-W459	2444778.71	1981 Jun 23 0500:00	MIR-06	-	-	0.000	GMS?	SU	GMS/?	Aeron	WDICF	-	-
1981-W440	2444778.75	1981 Jun 23 0600:00	MIR-06	-	-	0.000	GMS?	SU	GMS/?	Aeron	WDICF	-	-
1981-A15	2444778.79	1981 Jun 23 0700:00	MIR-06	-	-	0.000	GMS?	SU	GMS/?	Aeron	WDICF	-	-
1981-A16	2444778.83	1981 Jun 23 0800:00	MIR-06	-	-	0.000	GMS?	SU	GMS/?	Aeron	WDICF	-	-
1981-W443	2444779.83	1981 Jun 24 0800:00	MIR-06	-	-	0.000	GMS?	SU	GMS/?	Aeron	WDICF	-	-
1981-W451	2444781.79	1981 Jun 26 0700:00	MIR-06	-	-	0.000	GMS?	SU	GMS/?	Aeron	WDICF	-	-
1981-W455	2444783.79	1981 Jun 28 0700:00	MIR-06	-	-	0.000	GMS?	SU	GMS/?	Aeron	WDICF	-	-
1981-W694	2444851.88	1981 Sep 04 0900:00	MIR-06	-	-	0.000	GMS?	SU	GMS/?	Aeron	WDICF	-	-
1981-W695	2444856.88	1981 Sep 09 0900:00	MIR-06	-	-	0.000	GMS?	SU	GMS/?	Aeron	WDICF	-	-
1981-W601	2444858.82	1981 Sep 11 0740:00	MIR-06	-	-	0.000	GMS?	SU	GMS/?	Aeron	WDICF	-	-
1981-W615	2444865.88	1981 Sep 16 0900:00	MIR-06	-	-	0.000	GMS?	SU	GMS/?	Aeron	WDICF	-	-
1981-W652	2444872.83	1981 Sep 25 0800:00	MIR-06	-	-	0.000	GMS?	SU	GMS/?	Aeron	WDICF	-	-
1981-W652	2444877.83	1981 Sep 30 0800:00	MIR-06	-	-	0.000	GMS?	SU	GMS/?	Aeron	WDICF	-	-
1981-W659	2444879.83	1981 Oct 02 0800:00	MIR-06	-	-	0.000	GMS?	SU	GMS/?	Aeron	WDICF	-	-
1981-W664	2444884.83	1981 Oct 07 0800:00	MIR-06	-	-	0.000	GMS?	SU	GMS/?	Aeron	WDICF	-	-
1981-W664	2444884.83	1981 Oct 21 0700:00	MIR-06	-	-	0.000	GMS?	SU	GMS/?	Aeron	WDICF	-	-
1981-W694	2444898.79	1981 Oct 28 0800:00	MIR-06	-	-	0.000	GMS?	SU	GMS/?	Aeron	WDICF	-	-
1981-W716	2444905.83	1981 Nov 06 0700:00	MIR-06	-	-	0.000	GMS?	SU	GMS/?	Aeron	WDICF	-	-
1981-W724	2444919.82	1981 Nov 11 0740:00	MIR-06	-	-	0.000	GMS?	SU	GMS/?	Aeron	WDICF	-	-
1981-W750	2444926.79	1981 Nov 16 0700:00	MIR-06	-	-	0.000	GMS?	SU	GMS/?	Aeron	WDICF	-	-
1981-W767	2444933.79	1981 Nov 25 0700:00	MIR-06	-	-	0.000	GMS?	SU	GMS/?	Aeron	WDICF	-	-
1982-W01	2444970.83	1982 Jan 01 0800:00	MIR-06	-	-	0.000	GMS?	SU	GMS/?	Aeron	WDICF	-	-
1982-W07	2444975.81	1982 Jan 06 0730:00	MIR-06	-	-	0.000	GMS?	SU	GMS/?	Aeron	WDICF	-	-
1982-W12	2444977.83	1982 Jan 08 0800:00	MIR-06	-	-	0.000	GMS?	SU	GMS/?	Aeron	WDICF	-	-
1982-W21	2444982.79	1982 Jan 13 0700:00	MIR-06	-	-	0.000	GMS?	SU	GMS/?	Aeron	WDICF	-	-
1982-W29	2444984.83	1982 Jan 15 0800:00	MIR-06	-	-	0.000	GMS?	SU	GMS/?	Aeron	WDICF	-	-
1982-W49	2444991.81	1982 Jan 22 0730:00	MIR-06	-	-	0.000	GMS?	SU	GMS/?	Aeron	WDICF	-	-
1982-W66	2444997.00	1982 Jan 27 0800:00	MIR-06	-	-	0.000	GMS?	SU	GMS/?	Aeron	WDICF	-	-
1982-W66	2444998.83	1982 Jan 27 0800:00	MIR-06	-	-	0.000	GMS?	SU	GMS/?	Aeron	WDICF	-	-
1982-W73	2444999.79	1982 Jan 29 0700:00	MIR-06	-	-	0.000	GMS?	SU	GMS/?	Aeron	WDICF	-	-
1982-W109	2445012.81	1982 Feb 12 0730:00	MIR-06	-	-	0.000	GMS?	SU	GMS/?	Aeron	WDICF	-	-
1982-W122	2445017.81	1982 Feb 12 0730:00	MIR-06	-	-	0.000	GMS?	SU	GMS/?	Aeron	WDICF	-	-
1982-W123	2445019.88	1982 Feb 15 0900:00	MIR-06	-	-	0.000	GMS?	SU	GMS/?	Aeron	WDICF	-	-
1982-W134	2445021.79	1982 Feb 21 0700:00	MIR-06	-	-	0.000	GMS?	SU	GMS/?	Aeron	WDICF	-	-
1982-W136	2445022.79	1982 Feb 24 0700:00	MIR-06	-	-	0.000	GMS?	SU	GMS/?	Aeron	WDICF	-	-
1982-W141	2445024.79	1982 Feb 24 0700:00	MIR-06	-	-	0.000	GMS?	SU	GMS/?	Aeron	WDICF	-	-
1982-W149	2445028.87	1982 Feb 25 0800:00	MIR-06	-	-	0.000	GMS?	SU	GMS/?	Aeron	WDICF	-	-
1982-W237	2445028.87	1982 Mar 07 0800:00	MIR-06	-	-	0.000	GMS?	SU	GMS/?	Aeron	WDICF	-	-
1982-W240	2445036.83	1982 Mar 16 0900:00	MIR-06	-	-	0.000	GMS?	SU	GMS/?	Aeron	WDICF	-	-
1982-W249	2445036.79	1982 Mar 16 0900:00	MIR-06	-	-	0.000	GMS?	SU	GMS/?	Aeron	WDICF	-	-
1982-W259	2445039.79	1982 Mar 21 0700:00	MIR-06	-	-	0.000	GMS?	SU	GMS/?	Aeron	WDICF	-	-
1982-W264	2445089.79	1982 Mar 30 0700:00	MIR-06	-	-	0.000	GMS?	SU	GMS/?	Aeron	WDICF	-	-
1982-W275	2445093.79	1982 Mar 30 0700:00	MIR-06	-	-	0.000	GMS?	SU	GMS/?	Aeron	WDICF	-	-
1982-W274	2445093.75	1982 Mar 05 0600:00	MIR-06	-	-	0.000	GMS?	SU	GMS/?	Aeron	WDICF	-	-
1982-W277	2445094.75	1982 Mar 07 0600:00	MIR-06	-	-	0.000	GMS?	SU	GMS/?	Aeron	WDICF	-	-
1982-W280	2445096.79	1982 Mar 07 0700:00	MIR-06	-	-	0.000	GMS?	SU	GMS/?	Aeron	WDICF	-	-
1982-W282	2445098.79	1982 Mar 10 0700:00	MIR-06	-	-	0.000	GMS?	SU	GMS/?	Aeron	WDICF	-	-
1982-W286	2445101.79	1982 Mar 12 0700:00	MIR-06	-	-	0.000	GMS?	SU	GMS/?	Aeron	WDICF	-	-
1982-W289	2445103.79	1982 Mar 14 0700:00	MIR-06	-	-	0.000	GMS?	SU	GMS/?	Aeron	WDICF	-	-
1982-W291	2445108.79	1982 Mar 17 0700:00	MIR-06	-	-	0.000	GMS?	SU	GMS/?	Aeron	WDICF	-	-
1982-W297	2445110.79	1982 Mar 21 0700:00	MIR-06	-	-	0.000	GMS?	SU	GMS/?	Aeron	WDICF	-	-
1982-W299	2445113.79	1982 Mar 24 0700:00	MIR-06	-	-	0.000	GMS?	SU	GMS/?	Aeron	WDICF	-	-
1982-W402	2445115.79	1982 Mar 26 0700:00	MIR-06	-	-	0.000	GMS?	SU	GMS/?	Aeron	WDICF	-	-
1982-W403	2445274.81	1982 Nov 01 0730:00	MIR-06	-	-	0.000	GMS?	SU	GMS/?	Aeron	WDICF	-	-
1982-W404	2445274.80	1982 Nov 03 0710:00	MIR-06	-	-	0.000	GMS?	SU	GMS/?	Aeron	WDICF	-	-
1982-W408	2445278.80	1982 Nov 05 0700:00	MIR-06	-	-	0.000	GMS?	SU	GMS/?	Aeron	WDICF	-	-
1982-W450	2445283.79	1982 Nov 07 0700:00	MIR-06	-	-	0.000	GMS?	SU	GMS/?	Aeron	WDICF	-	-
1982-W456	2445288.80	1982 Nov 12 0700:00	MIR-06	-	-	0.000	GMS?	SU	GMS/?	Aeron	WDICF	-	-
1982-W460	2445292.79	1982 Nov 15 0700:00	MIR-06	-	-	0.000	GMS?	SU	GMS/?	Aeron	WDICF	-	-
1982-W474	2445292.79	1982 Nov 19 0700:00	MIR-06	-	-	0.000	GMS?	SU	GMS/?	Aeron	WDICF	-	-
1982-W476	2445295.79	1982 Nov 22 0700:00	MIR-06	-	-	0.000	GMS?	SU	GMS/?	Aeron	WDICF	-	-
1982-W481	2445297.79	1982 Nov 24 0700:00	MIR-06	-	-	0.000	GMS?	SU	GMS/?	Aeron	WDICF	-	-
1982-W483	2445299.79	1982 Nov 26 0700:00	MIR-06	-	-	0.000	GMS?	SU	GMS/?	Aeron	WDICF	-	-
1982-W485	2445301.83	1982 Nov 29 0700:00	MIR-06	-	-	0.000	GMS?	SU	GMS/?	Aeron	WDICF	-	-
1982-W490	2445304.83	1982 Dec 03 0800:00	MIR-06	-	-	0.000	GMS?	SU	GMS/?	Aeron	WDICF	-	-
1982-W492	2445309.85	1982 Dec 08 0820:00	MIR-06	-	-	0.000	GMS?	SU	GMS/?	Aeron	WDICF	-	-
1982-W495	2445311.86	1982 Dec 08 0840:00	MIR-06	-	-	0.000	GMS?	SU	GMS/?	Aeron	WDICF	-	-
1982-W509	2445325.83	1982 Dec 22 0800:00	MIR-06	-	-	0.000	GMS?	SU	GMS/?	Aeron	WDICF	-	-
1982-W511	2445329.81	1982 Dec 29 0720:00	MIR-06	-	-	0.000	GMS?	SU	GMS/?	Aeron	WDICF	-	-
1982-W512	2445332.81	1982 Dec 29 0845:00	MIR-06	-	-	0.000	GMS?	SU	GMS/?	Aeron	WDICF	-	-
1983-W28	2445374.80	1983 Feb 09 0710:00	MIR-06	-	-	0.000	GMS?	SU	GMS/?	Aeron	WDICF	-	-
1983-W32	2445378.79	1983 Feb 13 0700:00	MIR-06	-	-	0.000	GMS?	SU	GMS/?	Aeron	WDICF	-	-
1983-W33	2445379.79	1983 Feb 14 0700:00	MIR-06	-	-	0.000	GMS?	SU	GMS/?	Aeron	WDICF	-	-
1983-W37	2445381.79	1983 Feb 16 0700:00	MIR-06	-	-	0.000	GMS?	SU	GMS/?	Aeron	WDICF	-	-
1983-W40	2445383.79	1983 Feb 18 0700:00	MIR-06	-	-	0.000	GMS?	SU	GMS/?	Aeron	WDICF	-	-
1983-W42	2445386.79	1983 Feb 21 0700:00	MIR-06	-	-	0.000	GMS?	SU	GMS/?	Aeron	WDICF	-	-

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	OrbPay	Agency	Launch_Code	Group	Category	LTCite	Cite	Notes
1983-W46	2445386.83	1983 Feb 23 0750:00	MIR-06	-	-	0.000	GMS?	SU	GMS/?	Aeron	WDICRF	-	-
1983-W52	2445392.79	1983 Feb 27 0700:00	MIR-06	-	-	0.000	GMS?	SU	GMS/?	Aeron	WDICRF	-	-
1983-W55	2445395.87	1983 Mar 02 0885:00	MIR-06	-	-	0.000	GDIG?	SU	GMS/?	Aeron	WDICRF	-	-
1983-W61	2445397.86	1983 Mar 04 0840:00	MIR-06	-	-	0.000	GDIG?	SU	GMS/?	Aeron	WDICRF	-	-
1983-W62	2445400.84	1983 Mar 07 0815:00	MIR-06	-	-	0.000	GDIG?	SU	GMS/?	Aeron	WDICRF	-	-
1983-W67	2445402.85	1983 Mar 09 0820:00	MIR-06	-	-	0.000	GDIG?	SU	GMS/?	Aeron	WDICRF	-	-
1983-W70	2445404.85	1983 Mar 11 0820:00	MIR-06	-	-	0.000	GDIG?	SU	GMS/?	Aeron	WDICRF	-	-
1983-W75	2445407.82	1983 Mar 14 0735:00	MIR-06	-	-	0.000	GDIG?	SU	GMS/?	Aeron	WDICRF	-	-
1983-W81	2445409.86	1983 Mar 16 0840:00	MIR-06	-	-	0.000	GDIG?	SU	GMS/?	Aeron	WDICRF	-	-
1983-W84	2445411.82	1983 Mar 18 0745:00	MIR-06	-	-	0.000	GDIG?	SU	GMS/?	Aeron	WDICRF	-	-
1983-W91	2445416.82	1983 Mar 23 0740:00	MIR-06	-	-	0.000	GDIG?	SU	GMS/?	Aeron	WDICRF	-	-
1983-W96	2445421.82	1983 Mar 28 0735:00	MIR-06	-	-	0.000	GDIG?	SU	GMS/?	Aeron	WDICRF	-	-
1983-W136	2445459.18	1983 May 04 1625:00	MIR-06	-	-	0.000	GMS?	SU	GMS/?	Aeron	WDICRF	-	-
1983-W134	2445458.80	1983 May 04 0710:00	MIR-06	-	-	0.000	GMS?	SU	GMS/?	Aeron	WDICRF	-	-
1983-W151	2445460.81	1983 May 06 0720:00	MIR-06	-	-	0.000	GMS?	SU	GMS/?	Aeron	WDICRF	-	-
1983-W150	2445466.13	1983 May 11 1514:00	MIR-06	-	-	0.000	GMS?	SU	GMS/?	Aeron	WDICRF	-	-
1983-W157	2445465.79	1983 May 11 0700:00	MIR-06	-	-	0.000	GMS?	SU	GMS/?	Aeron	WDICRF	-	-
1983-W153	2445467.79	1983 May 13 0700:00	MIR-06	-	-	0.000	GMS?	SU	GMS/?	Aeron	WDICRF	-	-
1983-W156	2445470.84	1983 May 16 0810:00	MIR-06	-	-	0.000	GMS?	SU	GMS/?	Aeron	WDICRF	-	-
1983-W160	2445472.79	1983 May 18 0700:00	MIR-06	-	-	0.000	GMS?	SU	GMS/?	Aeron	WDICRF	-	-
1983-W162	2445474.82	1983 May 20 0740:00	MIR-06	-	-	0.000	GMS?	SU	GMS/?	Aeron	WDICRF	-	-
1983-W165	2445479.74	1983 May 25 0540:00	MIR-06	-	-	0.000	GMS?	SU	GMS/?	Aeron	WDICRF	-	-
1983-W167	2445479.81	1983 May 25 0730:00	MIR-06	-	-	0.000	GMS?	SU	GMS/?	Aeron	WDICRF	-	-
1983-W173	2445481.81	1983 Jun 01 0715:00	MIR-06	-	-	0.000	GMS?	SU	GMS/?	Aeron	WDICRF	-	-
1983-W179	2445494.22	1983 Jun 06 1715:00	MIR-06	-	-	0.000	GMS?	SU	GMS/?	Aeron	WDICRF	-	-
1983-W181	2445494.33	1983 Jun 06 1830:00	MIR-06	-	-	0.000	GMS?	SU	GMS/?	Aeron	WDICRF	-	-
1983-W182	2445494.33	1983 Jun 06 2000:00	MIR-06	-	-	0.000	GMS?	SU	GMS/?	Aeron	WDICRF	-	-
1983-W227	2445499.83	1983 Aug 05 0750:00	MIR-06	-	-	0.000	GMS?	SU	GMS/?	Aeron	WDICRF	-	-
1983-W230	2445551.82	1983 Aug 05 0740:00	MIR-06	-	-	0.000	GMS?	SU	GMS/?	Aeron	WDICRF	-	-
1983-W233	2445556.81	1983 Aug 10 0720:00	MIR-06	-	-	0.000	GMS?	SU	GMS/?	Aeron	WDICRF	-	-
1983-W236	2445556.82	1983 Aug 12 0740:00	MIR-06	-	-	0.000	GMS?	SU	GMS/?	Aeron	WDICRF	-	-
1983-W239	2445564.84	1983 Aug 16 0803:00	MIR-06	-	-	0.000	GMS?	SU	GMS/?	Aeron	WDICRF	-	-
1983-W241	2445570.80	1983 Aug 24 0706:00	MIR-06	-	-	0.000	GMS?	SU	GMS/?	Aeron	WDICRF	-	-
1983-W244	2445572.81	1983 Aug 26 0723:00	MIR-06	-	-	0.000	GMS?	SU	GMS/?	Aeron	WDICRF	-	-
1983-W245	2445575.79	1983 Aug 29 0704:00	MIR-06	-	-	0.000	GMS?	SU	GMS/?	Aeron	WDICRF	-	-
1985-W221	2446231.85	1985 Aug 16 0820:00	MIR-06	-	-	0.000	GMS?	SU	GMS/?	Aeron	WDICRF	-	-
1985-W222	2446235.81	1985 Aug 16 0720:00	MIR-06	-	-	0.000	GMS?	SU	GMS/?	Aeron	WDICRF	-	-
1985-W223	2446236.82	1985 Aug 16 0745:00	MIR-06	-	-	0.000	GMS?	SU	GMS/?	Aeron	WDICRF	-	-
1985-W224	2446300.80	1985 Aug 23 0713:00	MIR-06	-	-	0.000	GMS?	SU	GMS/?	Aeron	WDICRF	-	-
1985-W225	2446305.79	1985 Aug 26 0700:00	MIR-06	-	-	0.000	GMS?	SU	GMS/?	Aeron	WDICRF	-	-
1985-W226	2446309.79	1985 Aug 30 0700:00	MIR-06	-	-	0.000	GMS?	SU	GMS/?	Aeron	WDICRF	-	-
1985-W246	2446314.79	1985 Sep 04 0700:00	MIR-06	-	-	0.000	GMS?	SU	GMS/?	Aeron	WDICRF	-	-
1985-W246	2446324.79	1985 Sep 06 0700:00	MIR-06	-	-	0.000	GMS?	SU	GMS/?	Aeron	WDICRF	-	-
1985-W272	2446366.82	1985 Oct 28 0741:00	MIR-06	-	-	0.000	GMS?	SU	GMS/?	Aeron	WDICRF	-	-
1985-W273	2446366.85	1985 Oct 29 1530:00	MIR-06	-	-	0.000	GMS?	SU	GMS/?	Aeron	WDICRF	-	-
1985-W284	2446366.81	1985 Oct 30 0711:00	MIR-06	-	-	0.000	GMS?	SU	GMS/?	Aeron	WDICRF	-	-
1985-W287	2446375.81	1985 Nov 01 0723:00	MIR-06	-	-	0.000	GMS?	SU	GMS/?	Aeron	WDICRF	-	-
1985-W286	2446375.79	1985 Nov 06 0700:00	MIR-06	-	-	0.000	GMS?	SU	GMS/?	Aeron	WDICRF	-	-
1985-W286	2446385.79	1985 Nov 06 0730:00	MIR-06	-	-	0.000	GMS?	SU	GMS/?	Aeron	WDICRF	-	-
1985-W289	2446386.83	1985 Nov 20 0800:00	MIR-06	-	-	0.000	GMS?	SU	GMS/?	Aeron	WDICRF	-	-
1985-W289	2446391.83	1985 Nov 20 0730:00	MIR-06	-	-	0.000	GMS?	SU	GMS/?	Aeron	WDICRF	-	-
1986-W20	2446469.08	1986 Feb 07 1350:00	MIR-06	-	-	0.000	GMS?	SU	GMS/?	Aeron	WDICRF	-	-
1986-W20	2446469.23	1986 Feb 07 1730:00	MIR-06	-	-	0.000	GMS?	SU	GMS/?	Aeron	WDICRF	-	-
1986-W31	2446473.81	1986 Feb 12 0723:00	MIR-06	-	-	0.000	GMS?	SU	GMS/?	Aeron	WDICRF	-	-
1986-W34	2446475.86	1986 Feb 14 0842:00	MIR-06	-	-	0.000	GMS?	SU	GMS/?	Aeron	WDICRF	-	-
1986-W35	2446478.79	1986 Feb 17 0703:00	MIR-06	-	-	0.000	GMS?	SU	GMS/?	Aeron	WDICRF	-	-
1986-W38	2446480.79	1986 Feb 19 0703:00	MIR-06	-	-	0.000	GMS?	SU	GMS/?	Aeron	WDICRF	-	-
1986-W42	2446483.79	1986 Feb 21 0700:00	MIR-06	-	-	0.000	GMS?	SU	GMS/?	Aeron	WDICRF	-	-
1986-W44	2446487.79	1986 Feb 26 0700:00	MIR-06	-	-	0.000	GMS?	SU	GMS/?	Aeron	WDICRF	-	-
1986-W46	2446488.80	1986 Feb 26 0710:00	MIR-06	-	-	0.000	GMS?	SU	GMS/?	Aeron	WDICRF	-	-
1986-W47	2446489.79	1986 Mar 03 0701:00	MIR-06	-	-	0.000	GMS?	SU	GMS/?	Aeron	WDICRF	-	-
1986-W50	2446494.79	1986 Mar 05 0702:00	MIR-06	-	-	0.000	GMS?	SU	GMS/?	Aeron	WDICRF	-	-
1986-W53	2446503.82	1986 Mar 07 0718:00	MIR-06	-	-	0.000	GMS?	SU	GMS/?	Aeron	WDICRF	-	-
1986-W58	2446506.81	1986 Mar 14 0739:00	MIR-06	-	-	0.000	GMS?	SU	GMS/?	Aeron	WDICRF	-	-
1986-W59	2446508.79	1986 Mar 17 0739:00	MIR-06	-	-	0.000	GMS?	SU	GMS/?	Aeron	WDICRF	-	-
1986-W65	2446510.80	1986 Mar 19 0704:00	MIR-06	-	-	0.000	GMS?	SU	GMS/?	Aeron	WDICRF	-	-
1986-W67	2446511.80	1986 Mar 21 0706:00	MIR-06	-	-	0.000	GMS?	SU	GMS/?	Aeron	WDICRF	-	-
1986-W71	2446517.80	1986 Mar 28 0713:00	MIR-06	-	-	0.000	GMS?	SU	GMS/?	Aeron	WDICRF	-	-
1986-W74	2446522.80	1986 Mar 28 0712:00	MIR-06	-	-	0.000	GMS?	SU	GMS/?	Aeron	WDICRF	-	-
1986-W74	2446529.79	1986 Mar 09 0701:00	MIR-06	-	-	0.000	GMS?	SU	GMS/?	Aeron	WDICRF	-	-
1986-W75	2446531.81	1986 Mar 11 0726:00	MIR-06	-	-	0.000	GMS?	SU	GMS/?	Aeron	WDICRF	-	-
1986-W153	2446580.83	1986 Sep 07 0748:00	MIR-06	-	-	0.000	GMS?	SU	GMS/?	Aeron	WDICRF	-	-
1986-W159	2446592.83	1986 Sep 19 0800:00	MIR-06	-	-	0.000	GMS?	SU	GMS/?	Aeron	WDICRF	-	-
1986-W162	2446594.84	1986 Sep 21 0804:00	MIR-06	-	-	0.000	GMS?	SU	GMS/?	Aeron	WDICRF	-	-
1986-W163	2446595.85	1986 Sep 22 0817:00	MIR-06	-	-	0.000	GMS?	SU	GMS/?	Aeron	WDICRF	-	-
1986-W167	2446597.83	1986 Sep 24 0759:00	MIR-06	-	-	0.000	GMS?	SU	GMS/?	Aeron	WDICRF	-	-
1987-W172	2446701.82	1986 Sep 28 0742:00	MIR-06	-	-	0.000	GMS?	SU	GMS/?	Aeron	WDICRF	-	-
1987-W172	2446798.01	1986 Sep 28 0742:00	MIR-06	-	-	0.000	GMS?	SU	GMS/?	Aeron	WDICRF	-	-
1987-W172	2446798.01	1987 Jan 02 1220:00	MIR-06	-	-	0.000	GMS?	SU	GMS/?	Aeron	WDICRF	-	-
1987-W172	2446798.11	1987 Jan 02 1444:00	MIR-06	-	-	0.000	GMS?	SU	GMS/?	Aeron	WDICRF	-	-
1987-W404	2446801.18	1987 Jan 05 1624:00	MIR-06	-	-	0.000	GMS?	SU	GMS/?	Aeron	WDICRF	-	-
1987-W405	2446801.24	1987 Jan 05 1741:00	MIR-06	-	-	0.000	GMS?	SU	GMS/?	Aeron	WDICRF	-	-
1987-W406	2446802.09	1987 Jan 06 1406:00	MIR-06	-	-	0.000	GMS?	SU	GMS/?	Aeron	WDICRF	-	-
1987-W407	2446802.14	1987 Jan 06 1525:00	MIR-06	-	-	0.000	GMS?	SU	GMS/?	Aeron	WDICRF	-	-
1987-W408	2446802.81	1987 Jan 07 0731:00	MIR-06	-	-	0.000	GMS?	SU	GMS/?	Aeron	WDICRF	-	-

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	OrbPay	Agency	Launch_Code	Group	Category	LTCite	Cite	Notes
1987-W09	2446802.99	1987 Jan 07 11:39:00	MIR-06	-	-	0.000	GMS?	SU	GMS/?	Aeron	WDICRF	-	-
1987-W14	2446803.96	1987 Jan 08 11:05:00	MIR-06	-	-	0.000	GMS?	SU	GMS/?	Aeron	WDICRF	-	-
1987-W17	2446804.84	1987 Jan 09 08:03:00	MIR-06	-	-	0.000	GMS?	SU	GMS/?	Aeron	WDICRF	-	-
1987-W18	2446804.92	1987 Jan 09 10:01:00	MIR-06	-	-	0.000	GMS?	SU	GMS/?	Aeron	WDICRF	-	-
1987-W19	2446807.03	1987 Jan 11 12:27:00	MIR-06	-	-	0.000	GMS?	SU	GMS/?	Aeron	WDICRF	-	-
1987-W20	2446807.07	1987 Jan 11 13:47:00	MIR-06	-	-	0.000	GMS?	SU	GMS/?	Aeron	WDICRF	-	-
1987-W23	2446809.82	1987 Jan 14 07:41:00	MIR-06	-	-	0.000	GMS?	SU	GMS/?	Aeron	WDICRF	-	-
1987-W29	2446811.82	1987 Jan 16 07:40:00	MIR-06	-	-	0.000	GMS?	SU	GMS/?	Aeron	WDICRF	-	-
1987-W31	2446816.84	1987 Jan 21 08:10:00	MIR-06	-	-	0.000	GMS?	SU	GMS/?	Aeron	WDICRF	-	-
1987-W35	2446856.82	1987 Mar 02 07:45:00	MIR-06	-	-	0.000	GMS?	SU	GMS/?	Aeron	WDICRF	-	-
1987-W37	2446858.85	1987 Mar 04 08:19:00	MIR-06	-	-	0.000	GMS?	SU	GMS/?	Aeron	WDICRF	-	-
1987-W42	2446860.79	1987 Mar 06 07:04:00	MIR-06	-	-	0.000	GMS?	SU	GMS/?	Aeron	WDICRF	-	-
1987-W49	2446872.79	1987 Mar 18 07:01:00	MIR-06	-	-	0.000	GMS?	SU	GMS/?	Aeron	WDICRF	-	-
1987-W72	2446874.81	1987 Mar 20 07:23:00	MIR-06	-	-	0.000	GMS?	SU	GMS/?	Aeron	WDICRF	-	-
1987-W78	2446879.80	1987 Mar 25 07:17:00	MIR-06	-	-	0.000	GMS?	SU	GMS/?	Aeron	WDICRF	-	-
1987-W81	2446881.80	1987 Mar 27 07:05:00	MIR-06	-	-	0.000	GMS?	SU	GMS/?	Aeron	WDICRF	-	-
1987-W82	2446886.85	1987 Apr 01 08:22:00	MIR-06	-	-	0.000	GMS?	SU	GMS/?	Aeron	WDICRF	-	-
1987-W88	2446898.83	1987 Apr 03 08:00:00	MIR-06	-	-	0.000	GMS?	SU	GMS/?	Aeron	WDICRF	-	-
1987-W91	2446893.84	1987 Apr 08 08:11:00	MIR-06	-	-	0.000	GMS?	SU	GMS/?	Aeron	WDICRF	-	-
1987-W95	2446936.85	1987 Apr 15 07:58:00	MIR-06	-	-	0.000	GMS?	SU	GMS/?	Aeron	WDICRF	-	-
1987-W97	2446930.83	1987 Apr 15 07:50:00	MIR-06	-	-	0.000	GMS?	SU	GMS/?	Aeron	WDICRF	-	-
1987-W104	2446935.83	1987 Apr 20 07:52:00	MIR-06	-	-	0.000	GMS?	SU	GMS/?	Aeron	WDICRF	-	-
1987-W105	2446937.81	1987 Apr 24 08:07:00	MIR-06	-	-	0.000	GMS?	SU	GMS/?	Aeron	WDICRF	-	-
1987-W112	2446937.83	1987 Apr 27 07:53:00	MIR-06	-	-	0.000	GMS?	SU	GMS/?	Aeron	WDICRF	-	-
1987-W149	2446951.80	1987 Jun 05 07:05:00	MIR-06	-	-	0.000	GMS?	SU	GMS/?	Aeron	WDICRF	-	-
1987-W152	2446956.79	1987 Jun 10 07:01:00	MIR-06	-	-	0.000	GMS?	SU	GMS/?	Aeron	WDICRF	-	-
1987-W156	2446958.79	1987 Jun 12 07:01:00	MIR-06	-	-	0.000	GMS?	SU	GMS/?	Aeron	WDICRF	-	-
1987-W158	2446961.80	1987 Jun 15 07:05:00	MIR-06	-	-	0.000	GMS?	SU	GMS/?	Aeron	WDICRF	-	-
1987-W162	2446963.79	1987 Jun 17 07:01:00	MIR-06	-	-	0.000	GMS?	SU	GMS/?	Aeron	WDICRF	-	-
1987-W165	2446965.79	1987 Jun 19 07:01:00	MIR-06	-	-	0.000	GMS?	SU	GMS/?	Aeron	WDICRF	-	-
1987-W170	2446970.79	1987 Jun 24 07:03:00	MIR-06	-	-	0.000	GMS?	SU	GMS/?	Aeron	WDICRF	-	-
1987-W174	2446972.79	1987 Jun 26 07:01:00	MIR-06	-	-	0.000	GMS?	SU	GMS/?	Aeron	WDICRF	-	-
1987-W175	2446977.80	1987 Jul 01 07:06:00	MIR-06	-	-	0.000	GMS?	SU	GMS/?	Aeron	WDICRF	-	-
1987-W180	2446984.87	1987 Jul 06 08:47:00	MIR-06	-	-	0.000	GMS?	SU	GMS/?	Aeron	WDICRF	-	-
1987-W183	2446986.84	1987 Jul 10 08:06:00	MIR-06	-	-	0.000	GMS?	SU	GMS/?	Aeron	WDICRF	-	-
1987-W184	2446986.82	1987 Jul 12 07:41:00	MIR-06	-	-	0.000	GMS?	SU	GMS/?	Aeron	WDICRF	-	-
1987-W189	2446995.80	1987 Jul 17 07:15:00	MIR-06	-	-	0.000	GMS?	SU	GMS/?	Aeron	WDICRF	-	-
1987-W191	2446996.81	1987 Jul 19 07:23:00	MIR-06	-	-	0.000	GMS?	SU	GMS/?	Aeron	WDICRF	-	-
1987-W195	2447000.82	1987 Jul 22 07:26:00	MIR-06	-	-	0.000	GMS?	SU	GMS/?	Aeron	WDICRF	-	-
1987-W197	2447002.81	1987 Jul 24 07:47:00	MIR-06	-	-	0.000	GMS?	SU	GMS/?	Aeron	WDICRF	-	-
1987-W199	2447006.80	1987 Jul 26 07:27:00	MIR-06	-	-	0.000	GMS?	SU	GMS/?	Aeron	WDICRF	-	-
1987-W200	2447043.33	1987 Sep 11 20:00:00	MIR-06	-	-	0.000	GMS?	SU	GMS/?	Aeron	WDICRF	-	-
1987-W206	2447054.30	1987 Sep 11 19:18:00	MIR-06	-	-	0.000	GMS?	SU	GMS/?	Aeron	WDICRF	-	-
1987-W209	2447059.30	1987 Sep 16 19:15:00	MIR-06	-	-	0.000	GMS?	SU	GMS/?	Aeron	WDICRF	-	-
1987-W238	2447063.30	1987 Sep 18 19:17:00	MIR-06	-	-	0.000	GMS?	SU	GMS/?	Aeron	WDICRF	-	-
1987-W239	2447064.30	1987 Sep 23 19:05:00	MIR-06	-	-	0.000	GMS?	SU	GMS/?	Aeron	WDICRF	-	-
1987-W242	2447069.30	1987 Sep 25 19:05:00	MIR-06	-	-	0.000	GMS?	SU	GMS/?	Aeron	WDICRF	-	-
1987-W244	2447071.30	1987 Sep 30 19:16:00	MIR-06	-	-	0.000	GMS?	SU	GMS/?	Aeron	WDICRF	-	-
1987-W275	2447111.80	1987 Oct 02 07:18:00	MIR-06	-	-	0.000	GMS?	SU	GMS/?	Aeron	WDICRF	-	-
1987-W279	2447117.87	1987 Nov 13 08:56:00	MIR-06	-	-	0.000	GMS?	SU	GMS/?	Aeron	WDICRF	-	-
1987-W286	2447126.81	1987 Nov 27 07:22:00	MIR-06	-	-	0.000	GMS?	SU	GMS/?	Aeron	WDICRF	-	-
1987-W289	2447128.91	1987 Nov 29 08:51:00	MIR-06	-	-	0.000	GMS?	SU	GMS/?	Aeron	WDICRF	-	-
1987-W290	2447130.88	1987 Dec 01 08:06:00	MIR-06	-	-	0.000	GMS?	SU	GMS/?	Aeron	WDICRF	-	-
1987-W293	2447131.80	1987 Dec 02 07:17:00	MIR-06	-	-	0.000	GMS?	SU	GMS/?	Aeron	WDICRF	-	-
1987-W298	2447133.82	1987 Dec 03 10:00:00	MIR-06	-	-	0.000	GMS?	SU	GMS/?	Aeron	WDICRF	-	-
1987-W298	2447133.82	1987 Dec 04 07:40:00	MIR-06	-	-	0.000	GMS?	SU	GMS/?	Aeron	WDICRF	-	-
1987-W301	2447137.09	1987 Dec 07 14:05:00	MIR-06	-	-	0.000	GMS?	SU	GMS/?	Aeron	WDICRF	-	-
1987-W306	2447138.79	1987 Dec 09 07:00:00	MIR-06	-	-	0.000	GMS?	SU	GMS/?	Aeron	WDICRF	-	-
1987-W306	2447140.79	1987 Dec 11 07:00:00	MIR-06	-	-	0.000	GMS?	SU	GMS/?	Aeron	WDICRF	-	-
1989-W33	2447206.80	1989 Feb 15 07:10:00	MIR-06	-	-	0.000	GMS?	SU	GMS/?	Aeron	WDICRF	-	-
1989-W35	2447210.79	1989 Feb 23 10:18:00	MIR-06	-	-	0.000	GMS?	SU	GMS/?	Aeron	WDICRF	-	-
1989-W36	2447214.93	1989 Feb 23 10:18:00	MIR-06	-	-	0.000	GMS?	SU	GMS/?	Aeron	WDICRF	-	-
1989-W37	2447215.79	1989 Feb 24 07:00:00	MIR-06	-	-	0.000	GMS?	SU	GMS/?	Aeron	WDICRF	-	-
1989-W38	2447215.96	1989 Feb 24 11:05:00	MIR-06	-	-	0.000	GMS?	SU	GMS/?	Aeron	WDICRF	-	-
1989-W41	2447217.02	1989 Feb 25 12:31:00	MIR-06	-	-	0.000	GMS?	SU	GMS/?	Aeron	WDICRF	-	-
1989-W43	2447217.79	1989 Feb 26 07:00:00	MIR-06	-	-	0.000	GMS?	SU	GMS/?	Aeron	WDICRF	-	-
1989-W45	2447217.96	1989 Feb 26 11:08:00	MIR-06	-	-	0.000	GMS?	SU	GMS/?	Aeron	WDICRF	-	-
1989-W48	2447218.96	1989 Feb 27 11:05:00	MIR-06	-	-	0.000	GMS?	SU	GMS/?	Aeron	WDICRF	-	-
1989-W48	2447220.79	1989 Feb 28 11:13:00	MIR-06	-	-	0.000	GMS?	SU	GMS/?	Aeron	WDICRF	-	-
1989-W49	2447222.79	1989 Mar 02 07:00:00	MIR-06	-	-	0.000	GMS?	SU	GMS/?	Aeron	WDICRF	-	-
1989-W51	2447224.79	1989 Mar 04 07:00:00	MIR-06	-	-	0.000	GMS?	SU	GMS/?	Aeron	WDICRF	-	-
1989-W53	2447229.79	1989 Mar 09 07:00:00	MIR-06	-	-	0.000	GMS?	SU	GMS/?	Aeron	WDICRF	-	-
1989-W56	2447231.79	1989 Mar 11 07:00:00	MIR-06	-	-	0.000	GMS?	SU	GMS/?	Aeron	WDICRF	-	-
1989-W60	2447238.82	1989 Mar 18 07:42:00	MIR-06	-	-	0.000	GMS?	SU	GMS/?	Aeron	WDICRF	-	-
1989-W64	2447243.79	1989 Mar 23 07:00:00	MIR-06	-	-	0.000	GMS?	SU	GMS/?	Aeron	WDICRF	-	-
1989-W65	2447245.80	1989 Mar 25 07:16:00	MIR-06	-	-	0.000	GMS?	SU	GMS/?	Aeron	WDICRF	-	-
1989-W68	2447250.76	1989 Mar 30 06:09:00	MIR-06	-	-	0.000	GMS?	SU	GMS/?	Aeron	WDICRF	-	-
1989-W70	2447252.78	1989 Apr 01 06:48:00	MIR-06	-	-	0.000	GMS?	SU	GMS/?	Aeron	WDICRF	-	-
1989-W71	2447255.75	1989 Apr 04 06:03:00	MIR-06	-	-	0.000	GMS?	SU	GMS/?	Aeron	WDICRF	-	-
1989-W72	2447257.75	1989 Apr 06 06:05:00	MIR-06	-	-	0.000	GMS?	SU	GMS/?	Aeron	WDICRF	-	-
1989-W74	2447259.01	1989 Apr 07 12:10:00	MIR-06	-	-	0.000	GMS?	SU	GMS/?	Aeron	WDICRF	-	-

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	OrbPay	Agency	Launch_Code	Group	Category	LTCite	Cite	Notes
1988-W77	2447261.92	1988 Apr 10 10:06:00	MIR-06	-	-	0.000	GMS/?	SU	GMS/?	Aeron	WDORF	-	-
1988-W78	2447262.11	1988 Apr 10 14:45:00	MIR-06	-	-	0.000	GMS/?	SU	GMS/?	Aeron	WDORF	-	-
1988-W81	2447264.79	1988 Apr 13 07:02:00	MIR-06	-	-	0.000	GMS/?	SU	GMS/?	Aeron	WDORF	-	-
1988-W90	2447267.92	1988 Apr 16 10:00:00	MIR-06	-	-	0.000	GMS/?	SU	GMS/?	Aeron	WDORF	-	-
1988-W91	2447268.93	1988 Apr 17 10:25:00	MIR-06	-	-	0.000	GMS/?	SU	GMS/?	Aeron	WDORF	-	-
1988-W92	2447269.93	1988 Apr 18 10:25:00	MIR-06	-	-	0.000	GMS/?	SU	GMS/?	Aeron	WDORF	-	-
1988-W93	2447270.95	1988 Apr 18 13:12:00	MIR-06	-	-	0.000	GMS/?	SU	GMS/?	Aeron	WDORF	-	-
1988-W112	2447306.79	1988 May 25 07:00:00	MIR-06	-	-	0.000	GMS/?	SU	GMS/?	Aeron	WDORF	-	-
1988-W113	2447307.79	1988 May 29 07:00:00	MIR-06	-	-	0.000	GMS/?	SU	GMS/?	Aeron	WDORF	-	-
1988-W114	2447310.79	1988 Jun 01 07:00:00	MIR-06	-	-	0.000	GMS/?	SU	GMS/?	Aeron	WDORF	-	-
1988-W116	2447313.79	1988 Jun 03 07:01:00	MIR-06	-	-	0.000	GMS/?	SU	GMS/?	Aeron	WDORF	-	-
1988-W117	2447315.79	1988 Jun 08 07:00:00	MIR-06	-	-	0.000	GMS/?	SU	GMS/?	Aeron	WDORF	-	-
1988-W122	2447320.79	1988 Jun 10 07:00:00	MIR-06	-	-	0.000	GMS/?	SU	GMS/?	Aeron	WDORF	-	-
1988-W123	2447322.79	1988 Jun 10 07:00:00	MIR-06	-	-	0.000	GMS/?	SU	GMS/?	Aeron	WDORF	-	-
1988-W126	2447329.79	1988 Jun 17 07:00:00	MIR-06	-	-	0.000	GMS/?	SU	GMS/?	Aeron	WDORF	-	-
1988-W128	2447334.79	1988 Jun 22 07:00:00	MIR-06	-	-	0.000	GMS/?	SU	GMS/?	Aeron	WDORF	-	-
1988-W130	2447336.79	1988 Jun 24 07:00:00	MIR-06	-	-	0.000	GMS/?	SU	GMS/?	Aeron	WDORF	-	-
1988-W151	2447401.75	1988 Aug 28 06:06:00	MIR-06	-	-	0.000	GMS/?	SU	GMS/?	Aeron	WDORF	-	-
1988-W153	2447404.79	1988 Aug 31 07:01:00	MIR-06	-	-	0.000	GMS/?	SU	GMS/?	Aeron	WDORF	-	-
1988-W155	2447406.79	1988 Sep 02 07:01:00	MIR-06	-	-	0.000	GMS/?	SU	GMS/?	Aeron	WDORF	-	-
1988-W157	2447413.79	1988 Sep 09 07:01:00	MIR-06	-	-	0.000	GMS/?	SU	GMS/?	Aeron	WDORF	-	-
1988-W158	2447415.79	1988 Sep 11 07:00:00	MIR-06	-	-	0.000	GMS/?	SU	GMS/?	Aeron	WDORF	-	-
1988-W159	2447418.79	1988 Sep 14 07:02:00	MIR-06	-	-	0.000	GMS/?	SU	GMS/?	Aeron	WDORF	-	-
1988-W163	2447420.80	1988 Sep 16 07:05:00	MIR-06	-	-	0.000	GMS/?	SU	GMS/?	Aeron	WDORF	-	-
1988-W164	2447425.80	1988 Sep 21 07:07:00	MIR-06	-	-	0.000	GMS/?	SU	GMS/?	Aeron	WDORF	-	-
1988-W168	2447427.80	1988 Sep 23 07:07:00	MIR-06	-	-	0.000	GMS/?	SU	GMS/?	Aeron	WDORF	-	-
1988-W185	2447456.07	1988 Oct 21 13:35	MIR-06	-	-	0.000	GMS/?	SU	GMS/?	Aeron	WDORF	-	-
1988-W186	2447461.19	1988 Oct 26 16:30:00	MIR-06	-	-	0.000	GMS/?	SU	GMS/?	Aeron	WDORF	-	-
1988-W187	2447467.04	1988 Nov 1 13:01	MIR-06	-	-	0.000	GMS/?	SU	GMS/?	Aeron	WDORF	-	-
1988-W188	2447467.80	1988 Nov 02 07:07:00	MIR-06	-	-	0.000	GMS/?	SU	GMS/?	Aeron	WDORF	-	-
1988-W189	2447467.97	1988 Nov 02 11:10:00	MIR-06	-	-	0.000	GMS/?	SU	GMS/?	Aeron	WDORF	-	-
1988-W199	2447470.06	1988 Nov 8 13:20	MIR-06	-	-	0.000	GMS/?	SU	GMS/?	Aeron	WDORF	-	-
1988-W190	2447474.05	1988 Nov 8 13:11	MIR-06	-	-	0.000	GMS/?	SU	GMS/?	Aeron	WDORF	-	-
1988-W192	2447474.80	1988 Nov 09 07:07:00	MIR-06	-	-	0.000	GMS/?	SU	GMS/?	Aeron	WDORF	-	-
1988-W193	2447474.88	1988 Nov 09 09:00:00	MIR-06	-	-	0.000	GMS/?	SU	GMS/?	Aeron	WDORF	-	-
1988-W194	2447476.79	1988 Nov 11 07:03:00	MIR-06	-	-	0.000	GMS/?	SU	GMS/?	Aeron	WDORF	-	-
1988-W195	2447479.79	1988 Nov 14 07:00:00	MIR-06	-	-	0.000	GMS/?	SU	GMS/?	Aeron	WDORF	-	-
1988-W196	2447481.79	1988 Nov 16 07:01:00	MIR-06	-	-	0.000	GMS/?	SU	GMS/?	Aeron	WDORF	-	-
1988-W199	2447483.79	1988 Nov 18 07:02:00	MIR-06	-	-	0.000	GMS/?	SU	GMS/?	Aeron	WDORF	-	-
1988-W200	2447486.06	1988 Nov 18 13:20	MIR-06	-	-	0.000	GMS/?	SU	GMS/?	Aeron	WDORF	-	-
1988-W201	2447486.50	1988 Nov 23 07:16:00	MIR-06	-	-	0.000	GMS/?	SU	GMS/?	Aeron	WDORF	-	-
1988-W203	2447488.80	1988 Nov 25 13:06	MIR-06	-	-	0.000	GMS/?	SU	GMS/?	Aeron	WDORF	-	-
1988-W204	2447489.84	1988 Nov 28 10:38:00	MIR-06	-	-	0.000	GMS/?	SU	GMS/?	Aeron	WDORF	-	-
1988-W219	2447513.83	1988 Dec 15 16:30:00	MIR-06	-	-	0.000	GMS/?	SU	GMS/?	Aeron	WDORF	-	-
1988-W220	2447515.83	1988 Dec 16 08:00:00	MIR-06	-	-	0.000	GMS/?	SU	GMS/?	Aeron	WDORF	-	-
1988-W221	2447516.83	1988 Dec 21 10:00:00	MIR-06	-	-	0.000	GMS/?	SU	GMS/?	Aeron	WDORF	-	-
1988-W223	2447517.82	1988 Dec 22 10:00:00	MIR-06	-	-	0.000	GMS/?	SU	GMS/?	Aeron	WDORF	-	-
1988-W224	2447519.82	1988 Dec 22 10:59:00	MIR-06	-	-	0.000	GMS/?	SU	GMS/?	Aeron	WDORF	-	-
1988-W225	2447520.82	1988 Dec 25 13:32:00	MIR-06	-	-	0.000	GMS/?	SU	GMS/?	Aeron	WDORF	-	-
1988-W226	2447523.06	1988 Dec 27 15:00:00	MIR-06	-	-	0.000	GMS/?	SU	GMS/?	Aeron	WDORF	-	-
1988-W227	2447523.12	1988 Dec 27 15:00:00	MIR-06	-	-	0.000	GMS/?	SU	GMS/?	Aeron	WDORF	-	-
1988-W229	2447523.92	1988 Dec 28 11:09:00	MIR-06	-	-	0.000	GMS/?	SU	GMS/?	Aeron	WDORF	-	-
1988-W230	2447524.13	1988 Dec 28 15:10:00	MIR-06	-	-	0.000	GMS/?	SU	GMS/?	Aeron	WDORF	-	-
1988-W231	2447528.22	1989 Jan 01 17:11:00	MIR-06	-	-	0.000	GMS/?	SU	GMS/?	Aeron	WDORF	-	-
1989-W01	2447528.97	1989 Jan 02 09:24:00	MIR-06	-	-	0.000	GMS/?	SU	GMS/?	Aeron	WDORF	-	-
1989-W02	2447529.89	1989 Jan 02 11:14:00	MIR-06	-	-	0.000	GMS/?	SU	GMS/?	Aeron	WDORF	-	-
1989-W03	2447529.97	1989 Jan 03 09:10:00	MIR-06	-	-	0.000	GMS/?	SU	GMS/?	Aeron	WDORF	-	-
1989-W04	2447530.84	1989 Jan 04 03:20:00	MIR-06	-	-	0.000	GMS/?	SU	GMS/?	Aeron	WDORF	-	-
1989-W09	2447531.95	1989 Jan 05 10:46:00	MIR-06	-	-	0.000	GMS/?	SU	GMS/?	Aeron	WDORF	-	-
1989-W10	2447532.79	1989 Jan 06 07:04:00	MIR-06	-	-	0.000	GMS/?	SU	GMS/?	Aeron	WDORF	-	-
1989-W11	2447532.95	1989 Jan 06 10:49:00	MIR-06	-	-	0.000	GMS/?	SU	GMS/?	Aeron	WDORF	-	-
1989-W12	2447533.93	1989 Jan 07 10:13:00	MIR-06	-	-	0.000	GMS/?	SU	GMS/?	Aeron	WDORF	-	-
1989-W13	2447534.04	1989 Jan 07 12:51:00	MIR-06	-	-	0.000	GMS/?	SU	GMS/?	Aeron	WDORF	-	-
1989-W15	2447536.80	1989 Jan 09 07:05:00	MIR-06	-	-	0.000	GMS/?	SU	GMS/?	Aeron	WDORF	-	-
1989-W18	2447536.04	1989 Jan 09 12:52:00	MIR-06	-	-	0.000	GMS/?	SU	GMS/?	Aeron	WDORF	-	-
1989-W20	2447537.85	1989 Jan 11 08:30:00	MIR-06	-	-	0.000	GMS/?	SU	GMS/?	Aeron	WDORF	-	-
1989-W22	2447538.11	1989 Jan 11 08:30:00	MIR-06	-	-	0.000	GMS/?	SU	GMS/?	Aeron	WDORF	-	-
1989-W24	2447538.94	1989 Jan 12 10:30:00	MIR-06	-	-	0.000	GMS/?	SU	GMS/?	Aeron	WDORF	-	-
1989-W25	2447539.87	1989 Jan 13 08:57:00	MIR-06	-	-	0.000	GMS/?	SU	GMS/?	Aeron	WDORF	-	-
1989-W26	2447539.97	1989 Jan 13 11:51:00	MIR-06	-	-	0.000	GMS/?	SU	GMS/?	Aeron	WDORF	-	-
1989-W28	2447541.79	1989 Jan 15 07:02:00	MIR-06	-	-	0.000	GMS/?	SU	GMS/?	Aeron	WDORF	-	-
1989-W29	2447544.79	1989 Jan 18 07:01:00	MIR-06	-	-	0.000	GMS/?	SU	GMS/?	Aeron	WDORF	-	-
1989-W31	2447546.79	1989 Jan 20 07:02:00	MIR-06	-	-	0.000	GMS/?	SU	GMS/?	Aeron	WDORF	-	-
1989-W34	2447551.81	1989 Jan 25 07:21:00	MIR-06	-	-	0.000	GMS/?	SU	GMS/?	Aeron	WDORF	-	-
1989-W35	2447552.04	1989 Jan 26 13:00:00	MIR-06	-	-	0.000	GMS/?	SU	GMS/?	Aeron	WDORF	-	-
1989-W41	2447553.22	1989 Jan 26 17:20:00	MIR-06	-	-	0.000	GMS/?	SU	GMS/?	Aeron	WDORF	-	-
1989-W43	2447553.86	1989 Jan 27 08:39:00	MIR-06	-	-	0.000	GMS/?	SU	GMS/?	Aeron	WDORF	-	-
1989-W45	2447557.04	1989 Feb 01 07:22:00	MIR-06	-	-	0.000	GMS/?	SU	GMS/?	Aeron	WDORF	-	-
1989-W47	2447558.81	1989 Feb 03 07:09:00	MIR-06	-	-	0.000	GMS/?	SU	GMS/?	Aeron	WDORF	-	-
1989-W49	2447562.80	1989 Feb 05 07:06:00	MIR-06	-	-	0.000	GMS/?	SU	GMS/?	Aeron	WDORF	-	-
1989-W50	2447565.79	1989 Feb 08 07:04:00	MIR-06	-	-	0.000	GMS/?	SU	GMS/?	Aeron	WDORF	-	-
1989-W57	2447574.79	1989 Feb 17 07:03:00	MIR-06	-	-	0.000	GMS/?	SU	GMS/?	Aeron	WDORF	-	-
1989-W59	2447579.79	1989 Feb 22 07:01:00	MIR-06	-	-	0.000	GMS/?	SU	GMS/?	Aeron	WDORF	-	-
1989-W60	2447580.08	1989 Feb 22 14:00:00	MIR-06	-	-	0.000	GMS/?	SU	GMS/?	Aeron	WDORF	-	-





Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	OrbPay	Agency	Launch_Code	Group	Category	LTCite	Cite	Notes
1990-W96	2447945.79	1990 Feb 23 0703:00	MIR-06	-	-	0.000	GMS/?	SU	GMS/?	Aeron	WDRNF	-	-
1990-W99	2447950.80	1990 Feb 28 0705:00	MIR-06	-	-	0.000	GMS/?	SU	GMS/?	Aeron	WDRNF	-	-
1990-W103	2447952.82	1990 Mar 02 0740:00	MIR-06	-	-	0.000	GMS/?	SU	GMS/?	Aeron	WDRNF	-	-
1990-W110	2447957.79	1990 Mar 07 0702:00	MIR-06	-	-	0.000	GMS/?	SU	GMS/?	Aeron	WDRNF	-	-
1990-W115	2447959.83	1990 Mar 09 0754:00	MIR-06	-	-	0.000	GMS/?	SU	GMS/?	Aeron	WDRNF	-	-
1990-W120	2447961.96	1990 Mar 11 1058:00	MIR-06	-	-	0.000	GMS/?	SU	GMS/?	Aeron	WDRNF	-	-
1990-W127	2447965.04	1990 Mar 14 1256:00	MIR-06	-	-	0.000	GMS/?	SU	LAP/GIcode	Aeron	r.keremmedellbau.de	-	-
1990-W130	2447972.06	1990 Mar 21 1320:00	MIR-06	-	-	0.000	GMS/?	SU	GMS/?	Aeron	WDRNF	-	-
1990-W133	2447972.14	1990 Mar 21 1525:00	MIR-06	-	-	0.000	GMS/?	SU	GMS/?	Aeron	WDRNF	-	-
1990-W135	2447979.08	1990 Mar 28 1400	MIR-06	-	-	0.000	GMS/?	SU	LAP/GIcode	Aeron	r.keremmedellbau.de	-	-
1990-W140	2448021.00	1990 May 9 1200	MIR-06	-	-	0.000	GMS/?	SS	LAP/GIcode	Aeron	r.keremmedellbau.de	-	-
1990-W141	2448023.00	1990 May 11 1200	MIR-06	-	-	0.000	GMS/?	SS	LAP/GIcode	Aeron	r.keremmedellbau.de	-	-
1990-W142	2448042.00	1990 May 30 1200	MIR-06	-	-	0.000	GMS/?	SS	LAP/GIcode	Aeron	r.keremmedellbau.de	-	-
1990-W143	2448051.00	1990 Jun 8 1200	MIR-06	-	-	0.000	GMS/?	SS	LAP/GIcode	Aeron	r.keremmedellbau.de	-	-
1990-W144	2448055.00	1990 Jun 13 1200	MIR-06	-	-	0.000	GMS/?	SS	LAP/GIcode	Aeron	r.keremmedellbau.de	-	-
1990-W145	2448065.01	1990 Jun 20 1210	MIR-06	-	-	0.000	GMS/?	SS	LAP/GIcode	Aeron	r.keremmedellbau.de	-	-
1990-W157	2448147.00	1990 Sep 12 1200	MIR-06	-	-	0.000	GMS/?	SS	LAP/GIcode	Aeron	r.keremmedellbau.de	-	-
1990-W151	2448151.00	1990 Sep 26 1200	MIR-06	-	-	0.000	GMS/?	SS	LAP/GIcode	Aeron	r.keremmedellbau.de	-	-
1990-W171	2448177.04	1990 Oct 5 1300	MIR-06	-	-	0.000	GMS/?	SS	LAP/GIcode	Aeron	r.keremmedellbau.de	-	-
1990-W172	2448182.04	1990 Oct 12 1300	MIR-06	-	-	0.000	GMS/?	SS	LAP/GIcode	Aeron	r.keremmedellbau.de	-	-
1990-W174	2448182.07	1990 Oct 17 1340	MIR-06	-	-	0.000	GMS/?	SS	LAP/GIcode	Aeron	r.keremmedellbau.de	-	-
1990-W176	2448197.83	1990 Nov 02 0801:00	MIR-06	-	-	0.000	GMS/?	SU	GMS/?	Aeron	WDRNF	-	-
1990-W179	2448198.04	1990 Nov 2 1300	MIR-06	-	-	0.000	GMS/?	SS	LAP/GIcode	Aeron	r.keremmedellbau.de	-	-
1990-W180	2448198.07	1990 Nov 2 1340	MIR-06	-	-	0.000	GMS/?	SU	LAP/GIcode	Aeron	r.keremmedellbau.de	-	-
1990-W178	2448200.84	1990 Nov 05 0914:00	MIR-06	-	-	0.000	GMS/?	SU	GMS/?	Aeron	WDRNF	-	-
1990-W179	2448202.81	1990 Nov 07 0726:00	MIR-06	-	-	0.000	GMS/?	SU	GMS/?	Aeron	WDRNF	-	-
1990-W181	2448219.04	1990 Nov 23 1300	MIR-06	-	-	0.000	GMS/?	SS	LAP/GIcode	Aeron	r.keremmedellbau.de	-	-
1990-W184	2448231.06	1990 Dec 5 1330	MIR-06	-	-	0.000	GMS/?	SS	LAP/GIcode	Aeron	r.keremmedellbau.de	-	-
1990-W185	2448240.04	1990 Dec 14 1300	MIR-06	-	-	0.000	GMS/?	SS	LAP/GIcode	Aeron	r.keremmedellbau.de	-	-
1990-W186	2448245.04	1990 Dec 19 1300	MIR-06	-	-	0.000	GMS/?	SS	LAP/GIcode	Aeron	r.keremmedellbau.de	-	-
1990-W187	2448245.06	1990 Dec 19 1330	MIR-06	-	-	0.000	GMS/?	SS	LAP/GIcode	Aeron	r.keremmedellbau.de	-	-
1990-W189	2448256.80	1990 Dec 31 0706:00	MIR-06	-	-	0.000	GMS/?	SU	GMS/?	Aeron	WDRNF	-	-
1992-W11	2448666.83	1992 Feb 14 0750	MIR-06	-	-	0.000	GMS/?	SS	LAP/GIcode	Aeron	r.keremmedellbau.de	-	-
1992-W15	2448671.82	1992 Feb 19 0745	MIR-06	-	-	0.000	GMS/?	SS	LAP/GIcode	Aeron	r.keremmedellbau.de	-	-
1992-W16	2448673.81	1992 Feb 21 0730	MIR-06	-	-	0.000	GMS/?	SS	LAP/GIcode	Aeron	r.keremmedellbau.de	-	-
1992-W20	2448676.81	1992 Feb 26 0730	MIR-06	-	-	0.000	GMS/?	SS	LAP/GIcode	Aeron	r.keremmedellbau.de	-	-
1992-W21	2448676.87	1992 Feb 26 0850	MIR-06	-	-	0.000	GMS/?	SS	LAP/GIcode	Aeron	r.keremmedellbau.de	-	-
1992-W22	2448680.81	1992 Feb 28 0731	MIR-06	-	-	0.000	GMS/?	SS	LAP/GIcode	Aeron	r.keremmedellbau.de	-	-
1992-W23	2448680.81	1992 Mar 6 0732	MIR-06	-	-	0.000	GMS/?	SF	LAP/GIcode	Aeron	r.keremmedellbau.de	-	-
1992-W24	2448680.85	1992 Mar 11 0820	MIR-06	-	-	0.000	GMS/?	SS	LAP/GIcode	Aeron	r.keremmedellbau.de	-	-
1992-W25	2448692.81	1992 Mar 11 0827	MIR-06	-	-	0.000	GMS/?	SS	LAP/GIcode	Aeron	r.keremmedellbau.de	-	-
1992-W26	2448701.82	1992 Mar 20 0747	MIR-06	-	-	0.000	GMS/?	SF	LAP/GIcode	Aeron	r.keremmedellbau.de	-	-
1992-W30	2448704.87	1992 Mar 20 0858	MIR-06	-	-	0.000	GMS/?	SS	LAP/GIcode	Aeron	r.keremmedellbau.de	-	-
1992-W33	2448708.81	1992 Mar 25 0735	MIR-06	-	-	0.000	GMS/?	SS	LAP/GIcode	Aeron	r.keremmedellbau.de	-	-
1992-W34	2448708.85	1992 Mar 25 0822	MIR-06	-	-	0.000	GMS/?	SF	LAP/GIcode	Aeron	r.keremmedellbau.de	-	-
1992-W36	2448713.77	1992 Apr 1 0633	MIR-06	-	-	0.000	GMS/?	SS	LAP/GIcode	Aeron	r.keremmedellbau.de	-	-
1992-W37	2448715.77	1992 Apr 3 0630	MIR-06	-	-	0.000	GMS/?	SF	LAP/GIcode	Aeron	r.keremmedellbau.de	-	-
1992-W39	2448715.81	1992 Apr 3 0720	MIR-06	-	-	0.000	GMS/?	SS	LAP/GIcode	Aeron	r.keremmedellbau.de	-	-
1992-W43	2448722.77	1992 Apr 10 0630	MIR-06	-	-	0.000	GMS/?	SS	LAP/GIcode	Aeron	r.keremmedellbau.de	-	-





Launch Mission

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	FlightCode	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee_Km	Range_Km	Dest
1968-5423	2440065.50	1968 Jul 26 0000	WR-12						GrSP-4				147		
1968-5427	2440065.23	1968 Jul 27 1726	WR-12						GrSP-4				1507		
1968-5434	2440065.04	1968 Jul 31 1300	WR-12			Electron fluxes			GrSP-4				178		
1968-5435	2440065.29	1968 Jul 31 1854	WR-12			Electron fluxes			GrSP-4				173		
1968-5437	2440065.50	1968 Aug 1 0000	WR-12			Electron fluxes			GrSP-4				168		
1968-5438	2440065.58	1968 Aug 1 0200	WR-12			Electron fluxes			GrSP-4				176		
1968-5439	2440113.21	1968 Sep 13 1658	WR-12						GrSP-4				155		
1968-5501	2440120.19	1968 Sep 20 1650	WR-12						GrSP-4				180		
1968-5510	2440125.42	1968 Sep 25 2202	WR-12						GrSP-4				174		
1968-5519	2440131.60	1968 Oct 2 0217	WR-12						GrSP-4				125		
1968-5524	2440137.60	1968 Oct 8 0226	WR-12						GrSP-4				130		
1968-5528	2440138.65	1968 Oct 9 0332	WR-12						GrSP-4				171		
1968-5539	2440145.83	1968 Oct 16 0802	WR-12						GrSP-4				168		
1968-5547	2440151.84	1968 Oct 22 0803	WR-12			Ion composition			GrSP-4				164		
1968-5548	2440151.92	1968 Oct 22 1002	WR-12						GrSP-4				130		
1968-5553	2440154.92	1968 Oct 25 1004	WR-12						GrSP-4				168		
1968-5555	2440156.92	1968 Oct 27 1003:00	WR-12	MP-12					GrSP-4				171		
1968-5558	2440159.84	1968 Oct 30 0806	WR-12			Thermosphere comp 4			GrSP-4				176		
1968-5577	2440236.34	1969 Jan 14 2014	WR-12			Thermosphere comp 5			GrSP-4				170		
1968-5577	2440242.84	1969 Jan 21 0803	WR-12			He-Te 2			GrSP-4				174		
1968-5581	2440245.00	1969 Jan 23 1202	WR-12			He-Te 3			GrSP-4				173		
1968-5581	2440245.00	1969 Mar 1 0900	WR-12						GrSP-4				173		
1968-5172	2440281.88	1969 Mar 8 0900	WR-12						GrSP-4				173		
1968-5172	2440286.88	1969 Mar 8 0900	WR-12			Release?			GrSP-4				173		
1968-5173	2440289.15	1969 Mar 8 1635	WR-12			Release?			GrSP-4				172		
1968-5175	2440290.19	1969 Mar 9 1635	WR-12			Release?			GrSP-4				168		
1968-5177	2440291.17	1969 Mar 10 1610	WR-12			Release?			GrSP-4				175		
1968-5178	2440291.46	1969 Mar 10 2300	WR-12			Release?			GrSP-4				174		
1968-5184	2440294.20	1969 Mar 13 1645	WR-12			Release?			GrSP-4				170		
1968-5185	2440294.26	1969 Mar 13 1645	WR-12			Release?			GrSP-4				170		
1968-5187	2440294.42	1969 Mar 15 2223	WR-12						GrSP-4				161		
1968-5191	2440295.43	1969 Mar 14 2220	WR-12						GrSP-4				169		
1968-5202	2440296.27	1969 Mar 17 1835	WR-12						GrSP-4				97		
1968-5205	2440299.68	1969 Mar 19 0900	WR-12						GrSP-4				181		
1968-5206	2440300.40	1969 Mar 19 2130	WR-12						GrSP-4				169		
1968-5209	2440301.24	1969 Mar 20 1750	WR-12						GrSP-4				181		
1968-5210	2440301.27	1969 Mar 20 1830	WR-12			Composition			GrSP-4				169		
1968-5211	2440301.35	1969 Mar 20 2050	WR-12						GrSP-4				169		
1968-5213	2440302.34	1969 Mar 21 2006	WR-12			E-region 1			GrSP-4				175		
1968-5215	2440302.62	1969 Mar 22 0250	WR-12						GrSP-4				184		
1968-5217	2440304.92	1969 Mar 24 1001	WR-12						GrSP-4				181		
1968-5221	2440305.09	1969 Mar 26 1402	WR-12						GrSP-4				181		
1968-5225	2440308.07	1969 Mar 27 1535	WR-12						GrSP-4				181		
1968-5225	2440308.15	1969 Mar 27 1535	WR-12			Mass spectrometer			GrSP-4				191		
1968-5228	2440310.04	1969 Mar 29 0900	WR-12			Sun-Acm 69 Manometer			GrSP-4				175		
1968-5228	2440320.90	1969 Apr 1 0930	WR-12			Sun-Acm 69 E-reg 2			GrSP-4				170		
1968-5253	2440330.04	1969 Apr 16 1500	WR-12			Sun-Acm 69 E-reg 1			GrSP-4				174		
1968-5254	2440330.15	1969 Apr 16 1500	WR-12			Sun-Acm 69 E-reg 2			GrSP-4				176		
1968-5256	2440331.14	1969 Apr 18 1620	WR-12			Sun-Acm 69 E-reg 3			GrSP-4				174		
1968-5296	2440332.03	1969 Apr 20 1304	WR-12			Sun-Acm 69 E-reg 3			GrSP-4				175		
1968-5297	2440332.04	1969 Apr 20 1524	WR-12			Sun-Acm 69 E-reg 3			GrSP-4				171		
1968-5298	2440333.05	1969 Apr 21 1506	WR-12			Sun-Acm 69 E-reg 3			GrSP-4				173		
1968-5298	2440333.14	1969 Apr 21 1506	WR-12			Sun-Acm 69 E-reg 3			GrSP-4				175		
1968-5298	2440335.05	1969 Apr 21 1310	WR-12			Sun-Acm 69 E-reg 4			GrSP-4				176		
1968-5296	2440335.15	1969 Apr 23 1520	WR-12			Sun-Acm 69 E-reg 4			GrSP-4				178		
1968-5296	2440335.15	1969 Apr 23 1520	WR-12			Sun-Acm 69 E-reg 4			GrSP-4				167		
1968-5361	2440384.25	1969 Apr 11 1805	WR-12			Density/He			GrSP-4				166		
1968-5372	2440390.64	1969 Apr 24 0915	WR-12						GrSP-4				170		
1968-5372	2440397.29	1969 Apr 24 1902	WR-12						GrSP-4				141		
1968-5398	2440404.26	1969 Jul 1 1915	WR-12			N2 density			GrSP-4				165		
1968-5398	2440404.26	1969 Jul 1 1915	WR-12			Density/He			GrSP-4				148		
1968-5391	2440405.65	1969 Jul 3 0920	WR-12			N2 density			GrSP-4				150		
1968-5395	2440411.26	1969 Jul 9 1755	WR-12						GrSP-4				162		
1968-5397	2440412.25	1969 Jul 9 1755	WR-12						GrSP-4				148		
1968-5400	2440412.84	1969 Jul 10 0807	WR-12			He-Te 4			GrSP-4				145		
1968-5404	2440414.25	1969 Jul 11 1755	WR-12						GrSP-4				166		
1968-5416	2440427.50	1969 Jul 24 2355	WR-12						GrSP-4				172		
1968-5419	2440427.55	1969 Jul 25 0119:00	WR-12	WR-12		Thermosphere comp 6		ZUB	GMS600	LP1			166		
1968-5420	2440427.56	1969 Jul 25 0130:00	WR-12	WR-12					GrSP-4				89		
1968-5421	2440427.58	1969 Jul 25 0200:00	WR-12	WR-100?					GrSP-4				94		
1968-5423	2440427.58	1969 Jul 25 0200:00	WR-12	WR-100?					GrSP-4				170		
1968-5424	2440428.42	1969 Jul 25 2203:00	WR-12	WR-12					GrSP-4				145		
1968-5425	2440428.49	1969 Jul 25 2350:00	WR-12	WR-12					GrSP-4				168		
1968-5426	2440430.44	1969 Jul 27 2147:00	WR-12	WR-12				ZUB	GMS600	LP2			164		
1968-5426	2440430.44	1969 Jul 27 2147:00	WR-12	WR-12				ZUB	GMS600	LP4			170		
1968-5427	2440430.44	1969 Jul 27 2327:00	WR-12	WR-12				ZUB	GMS600	LP5			167		
1968-5428	2440430.51	1969 Jul 28 0017:00	WR-12	WR-100?				ZUB	GMS600	LP6			171		
1968-5428	2440430.51	1969 Jul 28 0017:00	WR-12	WR-100?				ZUB	GMS600	LP7			164		
1968-5433	2440433.34	1969 Jul 30 2007:00	WR-12	WR-12				ZUB	GMS600	LP7			168		
1968-5436	2440436.64	1969 Aug 03 0325:00	WR-12	WR-12				ZUB	GMS600	LP7			165		
1968-5437	2440436.68	1969 Aug 03 0415:00	WR-12	WR-12				ZUB	GMS600	LP8			169		
1968-5438	2440436.71	1969 Aug 03 0505:00	WR-12	WR-12				ZUB	GMS600	LP9			172		
1968-5439	2440436.79	1969 Aug 03 0700:00	WR-12	WR-12				ZUB	GMS600	LP10			94		
1968-5440	2440436.79	1969 Aug 06 0200:00	WR-12	WR-100?					GrSP-4				91		
1968-5204	2440439.58	1969 Aug 13 0200:00	WR-12	WR-100?					GrSP-4				88		
1968-5207	2440445.58	1969 Aug 13 0200:00	WR-12	WR-100?					GrSP-4				90		
1968-5208	2440446.58	1969 Aug 13 0200:00	WR-12	WR-100?					GrSP-4				1507		
1968-5210	2440460.58	1969 Aug 27 0200:00	WR-12	WR-100?				ZUB	GMS600	LP1			90		
1968-5524	2440503.50	1969 Oct 9?	WR-12	WR-100?				ZUB	GMS600	LP1			1507		

Launch Mission

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Mission	FlightCode	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee_Km	Range_Km	Dest
1969-8538	2440505.96	1969 Oct 11 1105	MR-12	-	-	-	-	-	Z0B	GMS99E	LP2	-	-	158	-	-
1969-8543	2440508.85	1969 Oct 14 0922	MR-12	-	-	-	-	-	-	GrSP-4	-	-	-	120	-	-
1969-8543	2440512.42	1969 Oct 17 2209	MR-12	-	-	-	-	-	-	GrSP-4	-	-	-	166	-	-
1969-8555	2440512.96	1969 Oct 18 1107	MR-12	-	-	-	-	-	Z0B	GMS99E	LP3	-	-	166	-	-
1969-8555	2440513.24	1969 Oct 18 1747	MR-12	-	-	-	-	-	Z0B	GMS99E	LP4	-	-	160	-	-
1969-8566	2440516.02	1969 Oct 21 1232	MR-12	-	-	-	-	-	-	GrSP-4	-	-	-	164	-	-
1969-8569	2440516.85	1969 Oct 22 0831	MR-12	-	-	-	-	-	-	GrSP-4	-	-	-	116	-	-
1969-8574	2440518.69	1969 Oct 24 0433:00	MR-12	-	-	-	-	-	-	GrSP-4	-	-	-	160	-	-
1969-8574	2440530.84	1969 Nov 5 0811	MR-12	-	-	-	-	-	Z0B	GMS99E	LP5	-	-	160	-	-
1969-8574	2440530.97	1969 Nov 5 1112	MR-12	-	-	-	-	-	Z0B	GMS99E	LP6	-	-	162	-	-
1969-8575	2440535.20	1969 Nov 9 1647	MR-12	-	-	-	-	-	-	GrSP-4	-	-	-	166	-	-
1969-8587	2440565.83	1969 Dec 10 0800	MR-12	-	-	-	-	-	-	GrSP-4	-	-	-	165	-	-
1969-8587	2440566.37	1969 Dec 10 2059	MR-12	-	-	-	-	-	-	GrSP-4	-	-	-	165	-	-
1969-8561	2440566.43	1969 Dec 10 2213	MR-12	-	-	-	-	-	-	GrSP-4	-	-	-	162	-	-
1969-8563	2440571.83	1969 Dec 16 0800:00	MR-12	-	-	-	-	-	-	GrSP-4	-	-	-	166	-	-
1969-8563	2440573.51	1969 Dec 18 0015:00	MR-12	-	-	-	-	-	-	GrSP-4	-	-	-	163	-	-
1969-8568	2440573.75	1969 Dec 18 0600:00	MR-12	-	-	-	-	-	-	GrSP-4	-	-	-	162	-	-
1969-8568	2440574.97	1969 Dec 19 0830:00	MR-12	-	-	-	-	-	-	GrSP-4	-	-	-	90	-	-
1969-8569	2440579.80	1969 Dec 24 0705:00	MR-12	-	-	-	-	-	-	GrSP-4	-	-	-	162	-	-
1969-8569	2440629.63	1970 Feb 12 2240:00	MR-12	-	-	-	-	-	-	GrSP-4	-	-	-	166	-	-
1970-5115	2440630.44	1970 Feb 12 2240:00	MR-12	-	-	-	-	-	-	GrSP-4	-	-	-	171	-	-
1970-5135	2440641.06	1970 Feb 23 1320:00	MR-12	-	-	-	-	-	-	OK	-	-	-	163	-	-
1970-5147	2440642.85	1970 Feb 25 0105:00	MR-12	-	-	-	-	-	-	OK	-	-	-	164	-	-
1970-5160	2440644.06	1970 Feb 26 1330:00	MR-12	-	-	-	-	-	-	OK	-	-	-	150?	-	-
1970-5161	2440644.09	1970 Feb 26 1415:00	MR-12	-	-	-	-	-	-	OK	-	-	-	181	-	-
1970-5178	2440646.08	1970 Feb 26 1331:00	MR-12	-	-	-	-	-	-	OK	-	-	-	166	-	-
1970-5179	2440646.11	1970 Feb 26 1436:00	MR-12	-	-	-	-	-	-	OK	-	-	-	162	-	-
1970-5170	2440646.50	1970 Mar?	MR-25	-	-	-	-	-	-	EMBA	-	-	-	260?	-	-
1970-5171	2440645.50	1970 Mar?	MR-25	-	-	-	-	-	-	EMBA	-	-	-	260?	-	-
1970-5181	2440647.52	1970 Mar 02 0025:00	MR-12	-	-	-	-	-	-	EMBA	-	-	-	150?	-	-
1970-5182	2440647.57	1970 Mar 02 0140:00	MR-12	-	-	-	-	-	-	OK	-	-	-	179	-	-
1970-5185	2440649.11	1970 Mar 02 1437:00	MR-12	-	-	-	-	-	-	OK	-	-	-	150?	-	-
1970-5194	2440651.49	1970 Mar 05 2330:00	MR-12	-	-	-	-	-	-	OK	-	-	-	162	-	-
1970-5200	2440652.46	1970 Mar 06 2335:00	MR-12	-	-	-	-	-	-	OK	-	-	-	150?	-	-
1970-5202	2440655.12	1970 Mar 07 1450:00	MR-12	-	-	-	-	-	-	OK	-	-	-	161	-	-
1970-5305	2440655.80	1970 Apr 16 0736:00	MR-12	-	-	-	-	-	-	GrSP-4	-	-	-	170	-	-
1970-5306	2440659.81	1970 Apr 16 0736:00	MR-12	-	-	-	-	-	-	GrSP-4	-	-	-	170	-	-
1970-5309	2440692.96	1970 Apr 16 1102:00	MR-12	-	-	-	-	-	-	GrSP-4	-	-	-	175	-	-
1970-5320	2440699.75	1970 Apr 21 0601:00	MR-12	-	-	-	-	-	-	GrSP-4?	-	-	-	175	-	-
1970-5322	2440698.50	1970 Apr 22 0700:00	MR-12	-	-	-	-	-	-	OK	-	-	-	170	-	-
1970-5325	2440698.79	1970 Apr 23 0730:00	MR-12	-	-	-	-	-	-	OK	-	-	-	175	-	-
1970-5326	2440698.81	1970 Apr 23 0732:00	MR-12	-	-	-	-	-	-	GrSP-4	-	-	-	170	-	-
1970-5327	2440698.86	1970 Apr 23 0731:00	MR-12	-	-	-	-	-	-	GrSP-4	-	-	-	170	-	-
1970-5329	2440703.81	1970 Apr 24 0736:00	MR-12	-	-	-	-	-	-	GrSP-4	-	-	-	175	-	-
1970-5330	2440703.81	1970 Apr 24 0736:00	MR-12	-	-	-	-	-	-	GrSP-4	-	-	-	175	-	-
1970-5337	2440764.26	1970 Apr 26 1505:00	MR-12	-	-	-	-	-	-	GrSP-4	-	-	-	145	-	-
1970-5413	2440764.26	1970 Apr 26 1505:00	MR-12	-	-	-	-	-	-	GrSP-4	-	-	-	145	-	-
1970-5414	2440769.21	1970 Apr 01 1547:00	MR-12	-	-	-	-	-	-	GrSP-4	-	-	-	167	-	-
1970-5414	2440771.16	1970 Apr 03 1644:00	MR-12	-	-	-	-	-	-	GrSP-4	-	-	-	149	-	-
1970-5414	2440771.24	1970 Apr 06 1644:00	MR-12	-	-	-	-	-	-	GrSP-4	-	-	-	171	-	-
1970-5416	2440774.44	1970 Apr 06 2044:00	MR-12	-	-	-	-	-	-	GrSP-4	-	-	-	150	-	-
1970-5416	2440774.45	1970 Apr 06 2044:00	MR-12	-	-	-	-	-	-	GrSP-4	-	-	-	150	-	-
1970-5420	2440774.58	1970 Apr 07 0148:00	MR-12	-	-	-	-	-	-	GrSP-4	-	-	-	168	-	-
1970-5422	2440776.49	1970 Apr 08 2348:00	MR-12	-	-	-	-	-	-	GrSP-4	-	-	-	140	-	-
1970-5424	2440777.24	1970 Apr 08 1752:00	MR-12	-	-	-	-	-	-	GrSP-4	-	-	-	140	-	-
1970-5424	2440781.79	1970 Apr 14 0704:00	MR-12	-	-	-	-	-	-	GrSP-4	-	-	-	171	-	-
1970-5429	2440781.02	1970 Apr 14 0704:00	MR-12	-	-	-	-	-	-	GrSP-4	-	-	-	171	-	-
1970-5429	2440784.02	1970 Apr 14 0704:00	MR-12	-	-	-	-	-	-	GrSP-4	-	-	-	167	-	-
1970-5429	2440784.19	1970 Apr 14 0704:00	MR-12	-	-	-	-	-	-	GrSP-4	-	-	-	180	-	-
1970-5444	2440784.09	1970 Apr 14 0704:00	MR-12	-	-	-	-	-	-	GrSP-4	-	-	-	150	-	-
1970-5444	2440784.09	1970 Apr 14 0704:00	MR-12	-	-	-	-	-	-	GrSP-4	-	-	-	158	-	-
1970-5446	2440784.04	1970 Apr 14 0704:00	MR-12	-	-	-	-	-	-	GrSP-4	-	-	-	158	-	-
1970-5446	2440784.22	1970 Apr 14 0704:00	MR-12	-	-	-	-	-	-	GrSP-4	-	-	-	158	-	-
1970-5447	2440784.33	1970 Apr 14 0704:00	MR-12	-	-	-	-	-	-	GrSP-4	-	-	-	180	-	-
1970-5454	2440787.85	1970 Apr 16 1949:00	MR-12	-	-	-	-	-	-	GrSP-4	-	-	-	160	-	-
1970-5454	2440788.10	1970 Apr 16 1949:00	MR-12	-	-	-	-	-	-	GrSP-4	-	-	-	160	-	-
1970-5464	2440803.22	1970 Apr 04 0431:00	MR-12	-	-	-	-	-	-	GrSP-4	-	-	-	159	-	-
1970-5464	2440803.22	1970 Apr 04 1718:00	MR-12	-	-	-	-	-	-	GrSP-4	-	-	-	159	-	-
1970-5466	2440803.85	1970 Apr 05 0820:00	MR-12	-	-	-	-	-	-	GrSP-4	-	-	-	165	-	-
1970-5469	2440804.19	1970 Apr 05 0820:00	MR-12	-	-	-	-	-	-	GrSP-4	-	-	-	158	-	-
1970-5470	2440804.19	1970 Apr 05 0820:00	MR-12	-	-	-	-	-	-	GrSP-4	-	-	-	149	-	-
1970-5478	2440808.76	1970 Apr 10 0612:00	MR-12	-	-	-	-	-	-	GrSP-4	-	-	-	149	-	-
1970-5479	2440809.19	1970 Apr 10 0612:00	MR-12	-	-	-	-	-	-	GrSP-4	-	-	-	158	-	-
1970-5479	2440809.19	1970 Apr 10 0612:00	MR-12	-	-	-	-	-	-	GrSP-4	-	-	-	150	-	-
1970-5571	2440880.05	1970 Oct 20 1305:00	MR-12	-	-	-	-	-	-	GrSP-4	-	-	-	150	-	-
1970-5571	2440881.06	1970 Oct 21 1305:00	MR-12	-	-	-	-	-	-	GrSP-4	-	-	-	176	-	-
1970-5574	2440881.10	1970 Oct 21 1430:00	MR-12	-	-	-	-	-	-	GrSP-4	-	-	-	150?	-	-
1970-5574	2440881.13	1970 Oct 21 1503:00	MR-12	-	-	-	-	-	-	GrSP-4	-	-	-	168	-	-
1970-5627	2440916.34	1970 Nov 27 2015:00	MR-12	-	-	-	-	-	-	OK	-	-	-	160	-	-
1970-5660	2440936.88	1970 Dec 16 0903:00	MR-12	-	-	-	-	-	-	GrSP-4	-	-	-	165	-	-
1970-5664	2440936.73	1970 Dec 18 0530:00	MR-12	-	-	-	-	-	-	GrSP-4	-	-	-	160	-	-
1970-5668	2440942.92	1970 Dec 22 1000:00	MR-12	-	-	-	-	-	-	GrSP-4	-	-	-	170	-	-
1970-5668	2440943.27	1970 Dec 22 1825:00	MR-12	-	-	-	-	-	-	OK	-	-	-	165	-	-
1970-5668	2440943.48	1970 Dec 22 2330:00	MR-12	-	-	-	-	-	-	GrSP-4	-	-	-	185	-	-
1970-5660	2440949.08	1970 Dec 28 1400:00	MR-12	-	-	-	-	-	-	GrSP-4	-	-	-	150	-	-
1970-5663	2440950.34	1970 Dec 29 2008:00	MR-12	-	-	-	-	-	-	OK	-	-	-	160	-	-
1971-583	2440975.34	1971 Mar 23 2008:00	MR-12	-	-	-	-	-	-	OK	-	-	-	150	-	-
1971-5142	2441012.94	1971 Mar 02 1033:00	MR-12	-	-	-	-	-	-	GrSP-4	-	-	-	150	-	-
1971-5161	2441024.18	1971 Mar 13 1615:00	MR-12	-	-	-	-	-	-	OK	-	-	-	150	-	-
1971-5162	2441024.45	1971 Mar 13 2255:00	MR-12	-	-	-	-	-	-	OK	-	-	-	150	-	-

Launch

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Mission	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee_Km	Range_Km	Dest
1971-5163	2441025.18	1971. Mar 14 1625:00	WR-12	-	WR-12	ne/Te 71-1	-	OK	-	-	-	158	-	-
1971-5168	2441026.26	1971. Mar 15 1817:00	WR-12	-	WR-12	Mass spectrometer	-	OK	-	-	-	150	-	-
1971-5174	2441028.20	1971. Mar 17 1685:00	WR-12	-	WR-12	Wind trail	-	OK	-	-	-	150	-	-
1971-5176	2441029.22	1971. Mar 18 1710:00	WR-12	-	WR-12	Wind trail	-	OK	-	-	-	150	-	-
1971-5207	2441037.13	1971. Mar 26 1506:00	WR-12	-	WR-12	ne/Te 71-2	-	GRSP-4	-	-	-	183	-	-
1971-5210	2441039.32	1971. Mar 28 1946:00	WR-12	-	WR-12	ne/Te 71-3	-	OK	-	-	-	183	-	-
1971-5211	2441039.86	1971. Mar 29 0945:00	WR-12	-	WR-12	ne/Te 71-3	-	OK	-	-	-	150	-	-
1971-5212	2441040.34	1971. Mar 29 2010:00	WR-12	-	WR-12	ne/Te 71-4	-	OK	-	-	-	150	-	-
1971-5223	2441043.44	1971. Apr 1 2240:00	WR-12	-	WR-12	ne/Te 71-4	-	OK	-	-	-	150	-	-
1971-5243	2441064.04	1971. Apr 22 1300:00	WR-12	-	WR-12	-	-	GRSP-4	-	-	-	150	-	-
1971-5244	2441064.09	1971. Apr 22 1415:00	WR-12	-	WR-12	-	-	GRSP-4	-	-	-	150	-	-
1971-5625	2441136.91	1971. Sep 1 0945	WR-12	-	-	Magnetic	-	GRSP-4?	-	-	-	177	-	-
1971-5626	2441136.03	1971. Sep 1 1245	WR-12	-	-	Magnetic	-	GRSP-4?	-	-	-	177	-	-
1971-5644	2441209.30	1971. Sep 14 1910:00	WR-12	-	WR-12	-	-	GRSP-4	-	-	-	166	-	-
1971-5645	2441209.44	1971. Sep 14 2240:00	WR-12	-	WR-12	-	-	GRSP-4	-	-	-	166	-	-
1971-5646	2441210.21	1971. Sep 15 1700:00	WR-12	-	WR-12	-	-	GRSP-4	-	-	-	166	-	-
1971-5647	2441210.30	1971. Sep 15 1918:00	WR-12	-	WR-12	-	-	GRSP-4	-	-	-	166	-	-
1971-5670	2441218.91	1971. Sep 24 0945:00	WR-12	-	WR-12	Sun-Atom 71	-	GRSP-4	-	-	-	166	-	-
1971-5671	2441218.97	1971. Sep 24 1115:00	WR-12	-	WR-12	Sun-Atom 71	-	GRSP-4	-	-	-	166	-	-
1971-5672	2441219.03	1971. Sep 24 1245:00	WR-12	-	WR-12	Sun-Atom 71	-	GRSP-4	-	-	-	166	-	-
1971-5675	2441219.62	1971. Sep 25 0253:00	WR-12	-	WR-12	Sun-Atom 71	-	GRSP-4	-	-	-	166	-	-
1971-5676	2441220.05	1971. Sep 25 1317:00	WR-12	-	WR-12	Sun-Atom 71	-	GRSP-4	-	-	-	166	-	-
1971-5679	2441222.05	1971. Sep 27 1317:00	WR-12	-	-	-	-	GRSP-4	-	-	-	150?	-	-
1971-5685	2441225.91	1971. Oct 01 0945:00	WR-12	-	WR-12	Sun-Atom 71 MK-6407P	-	GRSP-4	-	-	-	150	-	-
1971-5686	2441225.97	1971. Oct 01 1113:00	WR-12	-	WR-12	Sun-Atom 71	-	GRSP-4	-	-	-	150	-	-
1971-5687	2441225.97	1971. Oct 01 1113:00	WR-12	-	WR-12	Sun-Atom 71	-	GRSP-4	-	-	-	150	-	-
1971-5688	2441226.03	1971. Oct 01 1243:00	WR-12	-	WR-12	Sun-Atom 71	-	GRSP-4	-	-	-	150	-	-
1971-5689	2441226.05	1971. Oct 01 1317:00	WR-12	-	WR-12	Sun-Atom 71	-	GRSP-4	-	-	-	171	-	-
1971-5690	2441226.63	1971. Oct 02 0306:00	WR-12	-	WR-12	Sun-Atom 71	-	GRSP-4	-	-	-	150	-	-
1971-5698	2441230.91	1971. Oct 06 0954:00	WR-12	-	WR-12	Sun-Atom 71 Magnetic	-	GRSP-4	-	-	-	173	-	-
1971-5699	2441231.02	1971. Oct 06 1233:00	WR-12	-	WR-12	Sun-Atom 71	-	GRSP-4	-	-	-	150	-	-
1971-5501	2441231.02	1971. Oct 06 1408:00	WR-12	-	WR-12	Sun-Atom 71	-	GRSP-4	-	-	-	150	-	-
1971-5504	2441231.65	1971. Oct 07 0336:00	WR-12	-	WR-12	Sun-Atom 71	-	GRSP-4	-	-	-	150	-	-
1971-5506	2441231.65	1971. Oct 07 0536:00	WR-12	-	WR-12	Sun-Atom 71	-	GRSP-4	-	-	-	186	-	-
1971-5507	2441231.96	1971. Oct 07 0930:00	WR-12	-	WR-12	Sun-Atom 71	-	GRSP-4	-	-	-	150	-	-
1971-5509	2441231.96	1971. Oct 07 1101:00	WR-12	-	WR-12	Sun-Atom 71	-	GRSP-4	-	-	-	150	-	-
1971-5510	2441231.96	1971. Oct 07 1101:00	WR-12	-	WR-12	Sun-Atom 71	-	GRSP-4	-	-	-	150	-	-
1971-5511	2441232.05	1971. Oct 07 1306:00	WR-12	-	WR-12	Sun-Atom 71	-	GRSP-4	-	-	-	150?	-	-
1971-5514	2441232.96	1971. Oct 08 1100:00	WR-12	-	WR-12	Sun-Atom 71 MassSp	-	GRSP-4	-	-	-	150	-	-
1971-5515	2441233.02	1971. Oct 08 1230:00	WR-12	-	WR-12	Sun-Atom 71	-	GRSP-4	-	-	-	150	-	-
1971-5514	2441233.09	1971. Oct 08 1405:00	WR-12	-	WR-12	Sun-Atom 71	-	GRSP-4	-	-	-	150	-	-
1971-5518	2441233.96	1971. Oct 09 1100:00	WR-12	-	WR-12	Sun-Atom 71	-	GRSP-4	-	-	-	150	-	-
1971-5519	2441234.02	1971. Oct 09 1225:00	WR-12	-	WR-12	Sun-Atom 71 Magnetic	-	GRSP-4	-	-	-	150?	-	-
1971-5524	2441240.31	1971. Oct 15 1928	WR-12	-	WR-12	Sun-Atom 71 Thk rel	-	GRSP-4	-	-	-	150	-	-
1971-5526	2441240.31	1971. Oct 15 1928	WR-12	-	WR-12	Sun-Atom 71 Thk rel	-	GRSP-4	-	-	-	150?	-	-
1971-5547	2441259.92	1971. Nov 03 1016:00	WR-12	-	WR-12	-	-	OK	-	-	-	150?	-	-
1971-5551	2441259.89	1971. Nov 03 0918:00	WR-12	-	WR-180	-	-	OK	-	-	-	150?	-	-
1971-5551	2441259.89	1971. Nov 03 0918:00	WR-12	-	WR-180	-	-	OK	-	-	-	150?	-	-
1971-5574	2441286.53	1971. Nov 24 1243:00	WR-12	-	WR-12	-	-	GRSP-4	-	-	-	150?	-	-
1971-5574	2441286.53	1971. Nov 24 1243:00	WR-12	-	WR-12	-	-	GRSP-4	-	-	-	150?	-	-
1971-5576	2441292.03	1971. Nov 24 1243:00	WR-12	-	WR-12	-	-	GRSP-4	-	-	-	150?	-	-
1971-5590	2441292.03	1971. Dec 01 1250:00	WR-12	-	WR-12	-	-	GRSP-4	-	-	-	150?	-	-
1971-5590	2441292.15	1971. Dec 06 1330:00	WR-12	-	WR-12	-	-	GRSP-4	-	-	-	150?	-	-
1971-5593	2441292.15	1971. Dec 06 1530:00	WR-12	-	WR-12	-	-	GRSP-4	-	-	-	150?	-	-
1971-5604	2441292.19	1971. Dec 06 1530:00	WR-12	-	WR-12	-	-	GRSP-4	-	-	-	150?	-	-
1971-5604	2441292.19	1971. Dec 06 1530:00	WR-12	-	WR-12	-	-	GRSP-4	-	-	-	150?	-	-
1971-5611	2441300.15	1971. Dec 11 1650:00	WR-12	-	WR-12	-	-	GRSP-4	-	-	-	150?	-	-
1971-5611	2441300.15	1971. Dec 11 1650:00	WR-12	-	WR-12	-	-	GRSP-4	-	-	-	150?	-	-
1971-5614	2441301.75	1971. Dec 14 1541:00	WR-12	-	WR-12	st CS?	-	ZUB	-	-	-	150	-	-
1971-5614	2441301.75	1971. Dec 14 1541:00	WR-12	-	WR-12	st CS?	-	ZUB	-	-	-	150	-	-
1971-5614	2441301.75	1971. Dec 14 1541:00	WR-12	-	WR-12	st CS?	-	ZUB	-	-	-	150	-	-
1971-5616	2441311.67	1971. Dec 16 0559:00	WR-12	-	WR-12	-	-	GRSP-4	-	-	-	150	-	-
1971-5616	2441311.67	1971. Dec 16 0559:00	WR-12	-	WR-12	-	-	GRSP-4	-	-	-	150?	-	-
1971-5616	2441311.67	1971. Dec 16 0559:00	WR-12	-	WR-12	-	-	GRSP-4	-	-	-	150?	-	-
1971-5617	2441312.02	1971. Dec 26 0400:00	WR-12	-	WR-12	MX-6407P Mass spec	-	GRSP-4	-	-	-	150?	-	-
1971-5617	2441312.02	1971. Dec 26 0400:00	WR-12	-	WR-12	MX-6407P Mass spec	-	GRSP-4	-	-	-	150?	-	-
1971-5619	2441312.16	1971. Dec 26 1320:00	WR-12	-	WR-12	-	-	GRSP-4	-	-	-	175	-	-
1971-5619	2441312.24	1971. Dec 26 1746:00	WR-12	-	WR-12	-	-	GRSP-4	-	-	-	150?	-	-
1971-5620	2441312.58	1971. Dec 27 0200:00	WR-12	-	WR-12	-	-	GRSP-4	-	-	-	175	-	-
1971-5621	2441317.33	1971. Dec 31 1949:00	WR-12	-	WR-12	-	-	GRSP-4	-	-	-	177	-	-
1971-5622	2441317.33	1971. Dec 31 1949:00	WR-12	-	WR-12	-	-	GRSP-4	-	-	-	158	-	-
1971-5623	2441317.41	1971. Dec 31 2157:00	WR-12	-	WR-12	-	-	GRSP-4	-	-	-	179	-	-
1971-5624	2441317.46	1971. Dec 31 2300:00	WR-12	-	WR-12	-	-	GRSP-4	-	-	-	183	-	-
1971-5624	2441317.46	1971. Dec 31 2300:00	WR-12	-	WR-12	-	-	GRSP-4	-	-	-	180	-	-
1972-5304	2441317.80	1972. Jan 01 0705:00	WR-12	-	WR-12	-	-	GRSP-4	-	-	-	150?	-	-
1972-5304	2441316.50	1972. Jan 01 0705:00	WR-12	-	WR-12	-	-	GRSP-4	-	-	-	150?	-	-
1972-531	2441317.83	1972. Jan 01 0802:00	WR-12	-	WR-12	-	-	GRSP-4	-	-	-	150?	-	-
1972-531	2441317.83	1972. Jan 01 0802:00	WR-12	-	WR-12	-	-	GRSP-4	-	-	-	150?	-	-
1972-533	2441321.99	1972. Jan 05 1141:00	WR-12	-	WR-12	-	-	GRSP-4	-	-	-	186	-	-
1972-573	2441358.64	1972. Feb 11 0320:00	WR-12	-	WR-12	-	-	GRSP-4	-	-	-	177	-	-
1972-574	2441359.04	1972. Feb 11 1200:00	WR-12	-	WR-12	-	-	GRSP-4	-	-	-	173	-	-
1972-583	2441365.61	1972. Feb 18 0233:00	WR-12	-	WR-12	-	-	GRSP-4	-	-	-	168	-	-
1972-583	2441365.61	1972. Feb 18 0233:00	WR-12	-	WR-12	-	-	GRSP-4	-	-	-	168	-	-
1972-587	2441369.04	1972. Feb 21 1255:00	WR-12	-	WR-12	-	-	GRSP-4	-	-	-	187	-	-
1972-588	2441369.07	1972. Feb 21 1335:00	WR-12	-	WR-12	Tones	-	GRSP-4	-	-	-	170	-	-
1972-594	2441378.55	1972. Mar 2 0117:00	WR-12	-	WR-12	-	-	GRSP-4	-	-	-	170?	-	-
1972-5449	2441380.50	1972. Mar 4 0003	WR-12	-	WR-12	-	-	GRSP-4	-	-	-	174	-	-
1972-597	2441380.99	1972. Mar 4 1152:00	WR-12	-	WR-12	-	-	GRSP-4	-	-	-	184	-	-
1972-598	2441381.06	1972. Mar 4 1322:00	WR-12	-	WR-12	-	-	GRSP-4	-	-	-	173	-	-
1972-599	2441381.28	1972. Mar 4 1848	WR-12	-	WR-12	-	-	GRSP-4	-	-	-	150?	-	-
1972-5451	2441381.49	1972. Mar 4 2352	WR-12	-	WR-12	-	-	GRSP-4	-	-	-	169	-	-
1972-5106	2441385.42	1972. Mar 8 2210:00	WR-12	-	WR-12	-								





Launch Mission

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Mission	FlightCode	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee_Km	Range_Km	Dest
1974-5382	2442371_91	1974 Nov 20 0946:00	MR-12	-	MR-12	-	-	-	-	OK	-	-	-	150?	-	-
1974-5424	2442402_89	1974 Dec 21 0926:00	MR-12	-	MR-12	-	-	-	-	OK	-	-	-	150?	-	-
1974-5426	2442406_26	1974 Dec 24 1813:00	MR-12	-	MR-12	-	-	-	-	OK	-	-	-	150?	-	-
1975-5140	2442532_50	1975 May?	MR-12	-	MR-12	-	Composition	-	-	OK	-	-	-	150?	-	-
1975-5141	2442532_50	1975 May?	MR-12	-	MR-12	-	Composition	-	-	OK	-	-	-	150?	-	-
1975-5171	2442563_50	1975 Jun?	MR-12	-	MR-12	-	-	-	ZOB	GMS7SD	ULP1	-	-	150?	-	-
1975-5172	2442563_50	1975 Jun?	MR-12	-	MR-12	-	-	-	ZOB	GMS7SD	ULP1	-	-	150?	-	-
1975-5173	2442563_50	1975 Jun?	MR-12	-	MR-12	-	-	-	ZOB	GMS7SD	ULP1	-	-	150?	-	-
1975-5174	2442563_50	1975 Jun?	MR-12	-	MR-12	-	-	-	ZOB	GMS7SD	ULP1	-	-	150?	-	-
1975-5175	2442563_50	1975 Jun?	MR-12	-	MR-12	-	-	-	ZOB	GMS7SD	ULP1	-	-	150?	-	-
1975-5176	2442563_50	1975 Jun?	MR-12	-	MR-12	-	-	-	ZOB	GMS7SD	ULP1	-	-	150?	-	-
1975-5177	2442563_50	1975 Jun?	MR-12	-	MR-12	-	-	-	ZOB	GMS7SD	ULP1	-	-	150?	-	-
1975-5178	2442563_50	1975 Jun?	MR-12	-	MR-12	-	-	-	ZOB	GMS7SD	ULP1	-	-	150?	-	-
1975-5179	2442563_50	1975 Jun?	MR-12	-	MR-12	-	-	-	ZOB	GMS7SD	ULP1	-	-	150?	-	-
1975-5180	2442563_50	1975 Jun?	MR-12	-	MR-12	-	-	-	ZOB	GMS7SD	ULP1	-	-	150?	-	-
1975-5181	2442563_50	1975 Jun?	MR-12	-	MR-12	-	-	-	ZOB	GMS7SD	ULP1	-	-	150?	-	-
1975-5183	2442563_50	1975 Jun?	MR-12	-	MR-12	-	-	-	ZOB	GMS7SD	ULP1	-	-	150?	-	-
1975-5194	2442563_50	1975 Jun?	MR-12	-	MR-12	-	-	-	ZOB	GMS7SD	ULP1	-	-	150?	-	-
1975-5217	2442593_50	1975 Jul?	MR-12	-	MR-12	-	-	-	ZOB	GMS7SD	ULP1	-	-	150?	-	-
1975-5218	2442593_50	1975 Jul?	MR-12	-	MR-12	-	-	-	ZOB	GMS7SD	ULP1	-	-	150?	-	-
1975-5266	2442600_19	1975 Sep 04 1635:00	MR-12	-	MR-12	-	Spoloh-1	-	-	GMS7SD	ULP1	-	-	170	-	-
1975-5273	2442607_36	1975 Sep 11 2040:00	MR-12	-	MR-12	-	Zarnitsa-2	-	-	GMS7SD	ULP1	-	-	154	-	-
1975-5282	2442697_15	1975 Oct 01 1535:00	MR-12	-	MR-12	-	-	-	-	GMS7SD	ULP1	-	-	162	-	-
1975-5284	2442697_68	1975 Oct 02 0900:00	MR-12	-	MR-12	-	-	-	-	GMS7SD	ULP1	-	-	166	-	-
1975-5285	2442698_15	1975 Oct 02 1535:00	MR-12	-	MR-12	-	-	-	-	GMS7SD	ULP1	-	-	164	-	-
1975-5286	2442698_38	1975 Oct 02 2105:00	MR-12	-	MR-12	-	-	-	-	GMS7SD	ULP1	-	-	166	-	-
1975-5303	2442701_59	1975 Oct 16 0210:00	MR-12	-	MR-12	-	-	-	-	GMS7SD	ULP1	-	-	164	-	-
1975-5313	2442716_97	1975 Oct 29 1428:00	MR-12	-	MR-12	-	-	-	-	GMS7SD	ULP1	-	-	152	-	-
1975-5311	2442716_50	1975 Nov?	MR-12	-	MR-12	-	-	-	-	GMS7SD	ULP1	-	-	150?	-	-
1975-5312	2442716_50	1975 Nov?	MR-12	-	MR-12	-	-	-	-	GMS7SD	ULP1	-	-	150?	-	-
1975-5351	2442746_50	1975 Dec?	MR-12	-	MR-12	-	-	-	-	GMS7SD	ULP1	-	-	150?	-	-
1975-5352	2442746_50	1975 Dec?	MR-12	-	MR-12	-	-	-	-	GMS7SD	ULP1	-	-	150?	-	-
1975-5353	2442746_50	1975 Dec?	MR-12	-	MR-12	-	-	-	-	GMS7SD	ULP1	-	-	150?	-	-
1975-5354	2442746_50	1975 Dec?	MR-12	-	MR-12	-	-	-	-	GMS7SD	ULP1	-	-	150?	-	-
1976-502	2442777_50	1976 Jan?	MR-12	-	MR-12	-	-	-	-	GMS7SD	ULP1	-	-	150?	-	-
1976-504	2442777_50	1976 Jan?	MR-12	-	MR-12	-	-	-	-	GMS7SD	ULP1	-	-	150?	-	-
1976-506	2442777_50	1976 Jan?	MR-12	-	MR-12	-	-	-	-	GMS7SD	ULP1	-	-	150?	-	-
1976-506	2442777_50	1976 Jan?	MR-12	-	MR-12	-	-	-	-	GMS7SD	ULP1	-	-	150?	-	-
1976-506	2442808_50	1976 Feb?	MR-12	-	MR-12	-	-	-	-	GMS7SD	ULP1	-	-	150?	-	-
1976-506	2442808_50	1976 Feb?	MR-12	-	MR-12	-	-	-	-	GMS7SD	ULP1	-	-	150?	-	-
1976-506	2442808_50	1976 Feb?	MR-12	-	MR-12	-	-	-	-	GMS7SD	ULP1	-	-	150?	-	-
1976-5113	2442836_54	1976 Feb 28 0055:00	MR-12	-	MR-12	-	Composition	-	-	GMS7SD	ULP1	-	-	165	-	-
1976-5116	2442837_10	1976 Feb 28 1422:00	MR-12	-	MR-12	-	E Field	-	-	GMS7SD	ULP1	-	-	176	-	-
1976-5117	2442837_38	1976 Feb 28 2101:00	MR-12	-	MR-12	-	-	-	-	GMS7SD	ULP1	-	-	180	-	-
1976-5116	2442837_55	1976 Feb 29 0115:00	MR-12	-	MR-12	-	-	-	-	GMS7SD	ULP1	-	-	180	-	-
1976-5121	2442839_51	1976 Mar 03 0010:00	MR-12	-	MR-12	-	Composition	-	-	GMS7SD	ULP1	-	-	174	-	-
1976-5121	2442839_51	1976 Mar 03 0010:00	MR-12	-	MR-12	-	Composition	-	-	GMS7SD	ULP1	-	-	175	-	-
1976-5129	2442843_49	1976 Mar 05 0345:00	MR-12	-	MR-12	-	Composition	-	-	GMS7SD	ULP1	-	-	176	-	-
1976-5127	2442844_28	1976 Mar 05 1848:00	MR-12	-	MR-12	-	Composition	-	-	GMS7SD	ULP1	-	-	180	-	-
1976-5130	2442844_48	1976 Mar 06 0326:00	MR-12	-	MR-12	-	Composition	-	-	GMS7SD	ULP1	-	-	142	-	-
1976-5130	2442844_48	1976 Mar 06 0326:00	MR-12	-	MR-12	-	Composition	-	-	GMS7SD	ULP1	-	-	150	-	-
1976-5126	2442855_36	1976 Mar 11 2035:00	MR-12	-	MR-12	-	-	-	-	GMS7SD	ULP1	-	-	150	-	-
1976-5127	2442855_52	1976 Mar 11 2035:00	MR-12	-	MR-12	-	-	-	-	GMS7SD	ULP1	-	-	150	-	-
1976-5128	2442855_84	1976 Mar 18 0028:00	MR-12	-	MR-12	-	-	-	-	GMS7SD	ULP1	-	-	150	-	-
1976-5251	2443009_21	1976 Mar 18 0808:00	MR-12	-	MR-12	-	-	-	-	GMS7SD	ULP1	-	-	150	-	-
1976-5252	2443009_36	1976 Mar 18 1659:00	MR-12	-	MR-12	-	-	-	-	GMS7SD	ULP1	-	-	160	-	-
1976-5258	2443010_20	1976 Mar 18 2040:00	MR-12	-	MR-12	-	-	-	-	GMS7SD	ULP1	-	-	160	-	-
1976-5258	2443010_20	1976 Mar 18 2040:00	MR-12	-	MR-12	-	-	-	-	GMS7SD	ULP1	-	-	160	-	-
1976-5259	2443010_36	1976 Mar 19 1652:00	MR-12	-	MR-12	-	-	-	-	GMS7SD	ULP1	-	-	160	-	-
1976-5254	2443009_53	1976 Mar 19 2035:00	MR-12	-	MR-12	-	-	-	-	GMS7SD	ULP1	-	-	160	-	-
1976-5255	2443009_72	1976 Mar 19 0043:00	MR-12	-	MR-12	-	-	-	-	GMS7SD	ULP1	-	-	160	-	-
1976-5256	2443009_88	1976 Mar 19 0515:00	MR-12	-	MR-12	-	-	-	-	GMS7SD	ULP1	-	-	160	-	-
1976-5256	2443009_88	1976 Mar 19 0900:00	MR-12	-	MR-12	-	-	-	-	GMS7SD	ULP1	-	-	160	-	-
1976-5257	2443009_95	1976 Mar 19 1045:00	MR-12	-	MR-12	-	-	-	-	GMS7SD	ULP1	-	-	160	-	-
1976-5260	2443010_53	1976 Mar 20 0042:00	MR-12	-	MR-12	-	-	-	-	GMS7SD	ULP1	-	-	160	-	-
1976-5261	2443010_59	1976 Mar 20 0215:00	MR-12	-	MR-12	-	-	-	-	GMS7SD	ULP1	-	-	160	-	-
1976-5262	2443010_72	1976 Mar 20 0515:00	MR-12	-	MR-12	-	-	-	-	GMS7SD	ULP1	-	-	160	-	-
1976-5263	2443010_88	1976 Mar 20 0900:00	MR-12	-	MR-12	-	-	-	-	GMS7SD	ULP1	-	-	160	-	-
1976-5264	2443011_07	1976 Mar 20 1345:00	MR-12	-	MR-12	-	-	-	-	GMS7SD	ULP1	-	-	160	-	-
1976-5264	2443011_53	1976 Mar 21 0047:00	MR-12	-	MR-12	-	-	-	-	GMS7SD	ULP1	-	-	160	-	-
1976-5294	2442990_50	1976 Aug?	MR-12	-	MR-12	-	-	-	-	GMS7SD	ULP1	-	-	150?	-	-
1976-5295	2442990_50	1976 Aug?	MR-12	-	MR-12	-	-	-	-	GMS7SD	ULP1	-	-	150?	-	-
1976-5296	2442990_50	1976 Aug?	MR-12	-	MR-12	-	-	-	-	GMS7SD	ULP1	-	-	150?	-	-
1976-5297	2442990_50	1976 Aug?	MR-12	-	MR-12	-	-	-	-	GMS7SD	ULP1	-	-	150?	-	-
1976-5298	2442990_50	1976 Aug?	MR-12	-	MR-12	-	-	-	-	GMS7SD	ULP1	-	-	150?	-	-
1976-5299	2442990_50	1976 Aug?	MR-12	-	MR-12	-	-	-	-	GMS7SD	ULP1	-	-	150?	-	-
1976-5240	2442990_50	1976 Aug?	MR-12	-	MR-12	-	-	-	-	GMS7SD	ULP1	-	-	150?	-	-
1976-5241	2442990_50	1976 Aug?	MR-12	-	MR-12	-	-	-	-	GMS7SD	ULP1	-	-	150?	-	-
1976-5242	2442990_50	1976 Aug?	MR-12	-	MR-12	-	-	-	-	GMS7SD	ULP1	-	-	150?	-	-
1976-5275	2443021_50	1976 Sep?	MR-12	-	MR-12	-	-	-	-	GMS7SD	ULP1	-	-	150?	-	-
1976-5276	2443021_50	1976 Sep?	MR-12	-	MR-12	-	-	-	-	GMS7SD	ULP1	-	-	150?	-	-
1976-5277	2443021_50	1976 Sep?	MR-12	-	MR-12	-	-	-	-	GMS7SD	ULP1	-	-	150?	-	-
1976-5278	2443021_50	1976 Sep?	MR-12	-	MR-12	-	-	-	-	GMS7SD	ULP1	-	-	150?	-	-
1976-5279	2443021_50	1976 Sep?	MR-12	-	MR-12	-	-	-	-	GMS7SD	ULP1	-	-	150?	-	-
1976-5280	2443021_50	1976 Sep?	MR-12	-	MR-12	-	-	-	-	GMS7SD	ULP1	-	-	150?	-	-
1976-5281	2443021_50	1976 Sep?	MR-12	-	MR-12	-	-	-	-	GMS7SD	ULP1	-	-	150?	-	-
1976-5282	2443021_50	1976 Sep?	MR-12	-	MR-12	-	-	-	-	GMS7SD	ULP1	-	-	150?	-	-
1976-5282	2443021_50	1976 Sep?	MR-12	-	MR-12	-	-	-	-	GMS7SD	ULP1	-	-	150?	-	-



Launch Mission

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Mission	FlightCode	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee_Km	Range_Km	Dest
1979-S105	2443955.62	1979 Mar 26 02:33:00	MR-12	-	MR-12	-	-	-	-	OK	-	-	-	166	-	-
1979-S108	2443963.61	1979 Mar 31 02:45:00	MR-12	-	MR-12	-	-	-	-	OK	-	-	-	166	-	-
1979-S115	2443965.52	1979 Apr 05 00:34:00	MR-12	-	MR-12	-	-	-	-	OK	-	-	-	175	-	-
1979-S116	2443970.58	1979 Apr 07 01:48:00	MR-12	-	MR-12	-	-	-	-	OK	-	-	-	170	-	-
1979-S120	2443974.96	1979 Apr 11 10:45:00	MR-12	-	MR-12	-	-	-	-	OK	-	-	-	180	-	-
1979-S122	2443975.28	1979 Apr 14 18:44:00	MR-12	-	MR-12	-	-	-	-	OK	-	-	-	175	-	-
1979-S148	2444040.27	1979 Jun 15 18:50:00	MR-12	-	MR-12	-	-	-	-	GRSP-4	-	-	-	160	-	-
1979-S161	2444093.22	1979 Aug 07 17:14:00	MR-12	-	MR-12	-	-	-	-	GRSP-4	-	-	-	160	-	-
1979-S163	2444096.22	1979 Aug 10 17:12:00	MR-12	-	MR-12	-	-	-	-	GRSP-4	-	-	-	155	-	-
1979-S191	2444104.20	1979 Aug 22 16:42:00	MR-12	-	MR-12	-	-	-	-	GRSP-4	-	-	-	160	-	-
1979-S221	2444164.12	1979 Oct 17 14:50:00	MR-12	-	MR-12	-	-	-	-	GRSP-4	-	-	-	166	-	-
1979-S222	2444164.54	1979 Oct 18 00:55:00	MR-12	-	MR-12	-	-	-	-	GRSP-4	-	-	-	170	-	-
1979-S227	2444168.88	1979 Oct 22 09:00:00	MR-12	-	MR-12	-	-	-	-	GRSP-4	-	-	-	150?	-	-
1979-S251	2444172.34	1979 Oct 25 20:05:00	MR-12	-	MR-12	-	-	-	-	GRSP-4	-	-	-	166	-	-
1979-S263	2444226.58	1979 Dec 19 01:57:00	MR-12	-	MR-12	-	-	-	-	GRSP-4	-	-	-	166	-	-
1979-S265	2444228.00	1979 Dec 20 11:58:00	MR-12	-	MR-12	-	-	-	-	GRSP-4	-	-	-	170	-	-
1979-S267	2444234.09	1979 Dec 26 14:05:00	MR-12	-	MR-12	-	-	-	-	GRSP-4	-	-	-	166	-	-
1979-S268	2444235.09	1979 Dec 27 14:07:00	MR-12	-	MR-12	-	-	-	-	GRSP-4	-	-	-	166	-	-
1980-S98	2444357.59	1980 Apr 28 15:00:00	MR-12	-	MR-12	-	-	-	-	OK	-	-	-	155	-	-
1980-S96	2444357.59	1980 Apr 28 02:09:00	MR-12	-	MR-12	-	-	-	-	OK	-	-	-	155	-	-
1980-S74	2444329.50	1980 Apr	MR-12	-	MR-12	-	-	-	-	GRS80C	ULP1	-	-	150?	-	-
1980-S76	2444329.50	1980 Apr?	MR-12	-	MR-12	-	-	-	-	GRS80C	ULP1	-	-	150?	-	-
1980-S75	2444329.50	1980 Apr?	MR-12	-	MR-12	-	-	-	-	GRS80C	ULP1	-	-	150?	-	-
1980-S77	2444329.50	1980 Apr?	MR-12	-	MR-12	-	-	-	-	GRS80C	ULP1	-	-	150?	-	-
1980-S78	2444329.50	1980 Apr?	MR-12	-	MR-12	-	-	-	-	GRS80C	ULP1	-	-	150?	-	-
1980-S79	2444329.50	1980 Apr?	MR-12	-	MR-12	-	-	-	-	GRS80C	ULP1	-	-	150?	-	-
1980-S99	2444359.50	1980 May?	MR-12	-	MR-12	-	-	-	-	GRS80C	ULP1	-	-	150?	-	-
1980-S100	2444359.50	1980 May?	MR-12	-	MR-12	-	-	-	-	GRS80C	ULP1	-	-	150?	-	-
1980-S101	2444359.50	1980 May?	MR-12	-	MR-12	-	-	-	-	GRS80C	ULP1	-	-	150?	-	-
1980-S102	2444359.50	1980 May?	MR-12	-	MR-12	-	-	-	-	GRS80C	ULP1	-	-	150?	-	-
1980-S103	2444359.50	1980 May?	MR-12	-	MR-12	-	-	-	-	GRS80C	ULP1	-	-	150?	-	-
1980-S118	2444390.50	1980 Jun?	MR-12	-	MR-12	-	-	-	-	GRS80C	ULP1	-	-	150?	-	-
1980-S119	2444390.50	1980 Jun?	MR-12	-	MR-12	-	-	-	-	GRS80C	ULP1	-	-	150?	-	-
1980-S120	2444390.50	1980 Jun?	MR-12	-	MR-12	-	-	-	-	GRS80C	ULP1	-	-	150?	-	-
1980-S121	2444390.50	1980 Jun?	MR-12	-	MR-12	-	-	-	-	GRS80C	ULP1	-	-	150?	-	-
1980-S122	2444390.50	1980 Jun?	MR-12	-	MR-12	-	-	-	-	GRS80C	ULP1	-	-	150?	-	-
1980-S132	2444420.50	1980 Jul?	MR-12	-	MR-12	-	-	-	-	GRS80C	ULP1	-	-	150?	-	-
1980-S133	2444420.50	1980 Jul?	MR-12	-	MR-12	-	-	-	-	GRS80C	ULP1	-	-	150?	-	-
1980-S134	2444420.50	1980 Jul?	MR-12	-	MR-12	-	-	-	-	GRS80C	ULP1	-	-	150?	-	-
1980-S135	2444420.50	1980 Jul?	MR-12	-	MR-12	-	-	-	-	GRS80C	ULP1	-	-	150?	-	-
1980-S136	2444420.50	1980 Jul?	MR-12	-	MR-12	-	-	-	-	GRS80C	ULP1	-	-	150?	-	-
1980-S137	2444420.50	1980 Jul?	MR-12	-	MR-12	-	-	-	-	GRS80C	ULP1	-	-	150?	-	-
1980-S211	2444564.83	1980 Nov 21 07:52:00	MR-12	-	MR-12	-	-	-	-	OK	-	-	-	166	-	-
1980-S211	2444564.83	1980 Nov 21 07:52:00	MR-12	-	MR-12	-	-	-	-	OK	-	-	-	166	-	-
1980-S212	2444565.84	1980 Nov 25 09:10:00	MR-12	-	MR-12	-	-	-	-	OK	-	-	-	166	-	-
1980-S223	2444576.85	1980 Dec 05 09:20:00	MR-12	-	MR-12	-	-	-	-	OK	-	-	-	166	-	-
1980-S230	2444586.55	1980 Dec 12 01:05:00	MR-12	-	MR-12	-	-	-	-	OK	-	-	-	166	-	-
1980-S231	2444586.55	1980 Dec 12 01:05:00	MR-12	-	MR-12	-	-	-	-	OK	-	-	-	166	-	-
1980-S232	2444586.55	1980 Dec 12 01:05:00	MR-12	-	MR-12	-	-	-	-	OK	-	-	-	166	-	-
1980-S233	2444586.55	1980 Dec 12 01:05:00	MR-12	-	MR-12	-	-	-	-	OK	-	-	-	166	-	-
1980-S237	2444590.56	1980 Dec 17 01:20:00	MR-12	-	MR-12	-	-	-	-	OK	-	-	-	166	-	-
1980-S238	2444590.56	1980 Dec 17 01:20:00	MR-12	-	MR-12	-	-	-	-	OK	-	-	-	166	-	-
1980-S239	2444590.56	1980 Dec 18 23:00:00	MR-12	-	MR-12	-	-	-	-	OK	-	-	-	166	-	-
1981-S109	2444724.46	1981 May?	MR-12	-	MR-12	-	-	-	-	GRS81D	LP1	-	-	150?	-	-
1981-S103	2444724.50	1981 May?	MR-12	-	MR-12	-	-	-	-	GRS81D	LP1	-	-	150?	-	-
1981-S104	2444724.50	1981 May?	MR-12	-	MR-12	-	-	-	-	GRS81D	LP2	-	-	150?	-	-
1981-S105	2444724.50	1981 May?	MR-12	-	MR-12	-	-	-	-	GRS81D	ULP1	-	-	150?	-	-
1981-S111	2444755.50	1981 Jun?	MR-12	-	MR-12	-	-	-	-	GRS81D	LP3	-	-	150?	-	-
1981-S112	2444755.50	1981 Jun?	MR-12	-	MR-12	-	-	-	-	GRS81D	LP4	-	-	150?	-	-
1981-S113	2444755.50	1981 Jun?	MR-12	-	MR-12	-	-	-	-	GRS81D	ULP1	-	-	150?	-	-
1981-S114	2444755.50	1981 Jun?	MR-12	-	MR-12	-	-	-	-	GRS81D	ULP1	-	-	150?	-	-
1981-S124	2444785.50	1981 Jul?	MR-12	-	MR-12	-	-	-	-	GRS81D	ULP1	-	-	150?	-	-
1981-S125	2444785.50	1981 Jul?	MR-12	-	MR-12	-	-	-	-	GRS81D	LP6	-	-	150?	-	-
1981-S126	2444785.50	1981 Jul?	MR-12	-	MR-12	-	-	-	-	GRS81D	ULP1	-	-	150?	-	-
1981-S127	2444816.50	1981 Aug?	MR-12	-	MR-12	-	-	-	-	GRS81D	ULP1	-	-	150?	-	-
1981-S128	2444816.50	1981 Aug?	MR-12	-	MR-12	-	-	-	-	GRS81D	ULP1	-	-	150?	-	-
1981-S129	2444816.50	1981 Aug?	MR-12	-	MR-12	-	-	-	-	GRS81D	ULP1	-	-	150?	-	-
1981-S134	2444816.50	1981 Aug?	MR-12	-	MR-12	-	-	-	-	GRS81D	ULP1	-	-	150?	-	-
1981-S135	2444816.50	1981 Aug?	MR-12	-	MR-12	-	-	-	-	GRS81D	ULP1	-	-	150?	-	-
1982-S50	2445000.50	1982 Feb	MR-12	-	MR-12	-	-	-	-	GRS82A	LP1	-	-	150?	-	-
1982-S51	2445000.50	1982 Feb?	MR-12	-	MR-12	-	-	-	-	GRS82A	LP1	-	-	150?	-	-
1982-S63	2445028.50	1982 Mar?	MR-12	-	MR-12	-	-	-	-	GRS82A	LP1	-	-	150?	-	-
1982-S64	2445028.50	1982 Mar?	MR-12	-	MR-12	-	-	-	-	GRS82A	LP1	-	-	150?	-	-
1982-S65	2445028.50	1982 Mar?	MR-12	-	MR-12	-	-	-	-	GRS82A	LP1	-	-	150?	-	-
1982-S66	2445028.50	1982 Mar?	MR-12	-	MR-12	-	-	-	-	GRS82A	LP1	-	-	150?	-	-
1982-S67	2445028.50	1982 Mar?	MR-12	-	MR-12	-	-	-	-	GRS82A	LP1	-	-	150?	-	-
1982-S68	2445028.50	1982 Mar?	MR-12	-	MR-12	-	-	-	-	GRS82A	LP1	-	-	150?	-	-
1982-S69	2445028.50	1982 Mar?	MR-12	-	MR-12	-	-	-	-	GRS82A	LP1	-	-	150?	-	-
1982-S70	2445028.50	1982 Mar?	MR-12	-	MR-12	-	-	-	-	GRS82A	LP1	-	-	150?	-	-
1982-S95	2445059.50	1982 Apr?	MR-12	-	MR-12	-	-	-	-	GRS82A	ULP1	-	-	150?	-	-
1982-S96	2445059.50	1982 Apr?	MR-12	-	MR-12	-	-	-	-	GRS82A	ULP1	-	-	150?	-	-
1982-S97	2445059.50	1982 Apr?	MR-12	-	MR-12	-	-	-	-	GRS82A	ULP1	-	-	150?	-	-
1982-S98	2445059.50	1982 Apr?	MR-12	-	MR-12	-	-	-	-	GRS82A	ULP1	-	-	150?	-	-
1982-S99	2445059.50	1982 Apr?	MR-12	-	MR-12	-	-	-	-	GRS82A	ULP1	-	-	150?	-	-
1982-S100	2445059.50	1982 Apr?	MR-12	-	MR-12	-	-	-	-	GRS82A	ULP1	-	-	150?	-	-
1982-S101	2445059.50	1982 Apr?	MR-12	-	MR-12	-	-	-	-	GRS82A	ULP1	-	-	150?	-	-
1982-S102	2445059.50	1982 Apr?	MR-12	-	MR-12	-	-	-	-	GRS82A	ULP1	-	-	150?	-	-
1982-S103	2445059.50	1982 Apr?	MR-12	-	MR-12	-	-	-	-	GRS82A	ULP1	-	-	150?	-	-
1982-S113	2445089.50	1982 May?	MR-12	-	MR-12	-	-	-	-	GRS82A	ULP1	-	-	150?	-	-
1982-S114	2445089.50	1982 May?	MR-12	-	MR-12	-	-	-	-	GRS82A	ULP1	-	-	150?	-	-



Launch

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Mission	FlightCode	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee km	Range km	Dest
1987-5137	2447038.50	1987 Sep?	MR-20	-	-	-	-	-	Z0B	GMS7E	ULP1	-	-	250?	-	-
1987-5138	2447038.50	1987 Sep?	MR-20	-	-	-	-	-	Z0B	GMS7E	ULP1	-	-	250?	-	-
1987-5139	2447038.50	1987 Sep	MR-20	-	-	-	-	-	Z0B	GMS7E	ULP1	-	-	250?	-	-
1987-5238	2447041.50	1987 Sep 9	MR-20	-	Start	-	Plasma engine test	-	-	GrisP-4?	-	-	-	250?	-	-
1988-573	2447251.50	1988 Apr?	MR-20	-	MR-20	-	-	-	-	GrisP-4	-	-	-	250?	-	-
1988-585	2447281.50	1988 May?	MR-20	-	MR-20	-	-	-	-	GrisP-4	-	-	-	250?	-	-
1988-586	2447281.50	1988 May?	MR-20	-	MR-20	-	-	-	-	GrisP-4	-	-	-	250?	-	-
1988-587	2447281.50	1988 May?	MR-20	-	MR-20	-	-	-	-	GrisP-4	-	-	-	250?	-	-
1988-588	2447281.50	1988 May?	MR-20	-	MR-20	-	-	-	-	GrisP-4	-	-	-	250?	-	-
1988-589	2447281.50	1988 May?	MR-20	-	MR-20	-	-	-	-	GrisP-4	-	-	-	250?	-	-
1988-597	2447312.50	1988 Jun?	MR-20	-	MR-20	-	-	-	-	GrisP-4	-	-	-	250?	-	-
1988-5101	2447342.50	1988 Jul?	MR-20	-	-	-	-	-	VIZE	GMS8C	ULP1	-	-	250?	-	-
1988-5102	2447342.50	1988 Jul?	MR-20	-	-	-	-	-	VIZE	GMS8C	ULP1	-	-	250?	-	-
1988-5108	2447342.50	1988 Jul?	MR-20	-	-	-	-	-	VIZE	GMS8C	ULP1	-	-	250?	-	-
1988-5109	2447373.50	1988 Aug?	MR-20	-	-	-	-	-	VIZE	GMS8C	ULP1	-	-	250?	-	-
1988-5110	2447373.50	1988 Aug?	MR-20	-	-	-	-	-	VIZE	GMS8C	ULP1	-	-	250?	-	-
1988-5112	2447404.50	1988 Sep?	MR-20	-	-	-	-	-	VIZE	GMS8C	ULP1	-	-	250?	-	-
1988-5113	2447404.50	1988 Sep?	MR-20	-	-	-	-	-	VIZE	GMS8C	ULP1	-	-	250?	-	-
1988-5114	2447404.50	1988 Sep?	MR-20	-	-	-	-	-	VIZE	GMS8C	ULP1	-	-	250?	-	-
1988-5122	2447434.50	1988 Oct?	MR-20	-	-	-	-	-	VIZE	GMS8C	ULP1	-	-	250?	-	-
1988-5123	2447434.50	1988 Oct?	MR-20	-	-	-	-	-	VIZE	GMS8C	ULP1	-	-	250?	-	-
1988-5124	2447434.50	1988 Oct?	MR-20	-	-	-	-	-	VIZE	GMS8C	ULP1	-	-	250?	-	-
1988-5131	2447465.50	1988 Nov?	MR-20	-	-	-	-	-	VIZE	GMS8C	ULP1	-	-	250?	-	-
1988-5132	2447465.50	1988 Nov?	MR-20	-	-	-	-	-	VIZE	GMS8C	ULP1	-	-	250?	-	-
1988-5140	2447495.50	1988 Dec?	MR-20	-	-	-	-	-	VIZE	GMS8C	ULP1	-	-	250?	-	-
1988-5141	2447495.50	1988 Dec?	MR-20	-	-	-	-	-	VIZE	GMS8C	ULP1	-	-	250?	-	-
1989-564	2447707.50	1989 Jul	MR-20	-	-	-	-	-	Z0B	GMS99	ULP1	-	-	250?	-	-
1989-565	2447707.50	1989 Jul?	MR-20	-	-	-	-	-	Z0B	GMS99	ULP1	-	-	250?	-	-
1989-566	2447707.50	1989 Jul?	MR-20	-	-	-	-	-	Z0B	GMS99	ULP1	-	-	250?	-	-
1989-567	2447707.50	1989 Jul?	MR-20	-	-	-	-	-	Z0B	GMS99	ULP1	-	-	250?	-	-
1989-575	2447738.50	1989 Aug?	MR-20	-	-	-	-	-	Z0B	GMS99	ULP1	-	-	250?	-	-
1989-576	2447738.50	1989 Aug?	MR-20	-	-	-	-	-	Z0B	GMS99	ULP1	-	-	250?	-	-
1989-577	2447738.50	1989 Aug?	MR-20	-	-	-	-	-	Z0B	GMS99	ULP1	-	-	250?	-	-
1989-578	2447738.50	1989 Aug?	MR-20	-	-	-	-	-	Z0B	GMS99	ULP1	-	-	250?	-	-
1989-584	2447769.50	1989 Sep?	MR-20	-	-	-	-	-	Z0B	GMS99	ULP1	-	-	250?	-	-
1989-585	2447769.50	1989 Sep?	MR-20	-	-	-	-	-	Z0B	GMS99	ULP1	-	-	250?	-	-
1989-586	2447769.50	1989 Sep?	MR-20	-	-	-	-	-	Z0B	GMS99	ULP1	-	-	250?	-	-
1989-587	2447769.50	1989 Sep?	MR-20	-	-	-	-	-	Z0B	GMS99	ULP1	-	-	250?	-	-
1989-588	2447769.50	1989 Sep?	MR-20	-	-	-	-	-	Z0B	GMS99	ULP1	-	-	250?	-	-
1989-589	2447799.50	1989 Oct?	MR-20	-	-	-	-	-	Z0B	GMS99	ULP1	-	-	250?	-	-
1989-590	2447799.50	1989 Oct?	MR-20	-	-	-	-	-	Z0B	GMS99	ULP1	-	-	250?	-	-
1989-5100	2447799.50	1989 Oct?	MR-20	-	-	-	-	-	Z0B	GMS99	ULP1	-	-	250?	-	-
1989-5101	2447799.50	1989 Oct?	MR-20	-	-	-	-	-	Z0B	GMS99	ULP1	-	-	250?	-	-
1989-5102	2447827.50	1989 Oct?	MR-20	-	-	-	-	-	Z0B	GMS99	ULP1	-	-	250?	-	-
1989-5106	2447827.50	1989 Oct 28	MR-12	-	-	-	-	-	Z0B	GMS99	ULP1	-	-	100?	-	-
1989-5108	2447830.50	1989 Nov?	MR-20	-	-	-	-	-	Z0B	GMS99	ULP1	-	-	250?	-	-
1989-5109	2447830.50	1989 Nov?	MR-20	-	-	-	-	-	Z0B	GMS99	ULP1	-	-	250?	-	-
1989-5104	2447830.50	1989 Nov?	MR-20	-	-	-	-	-	Z0B	GMS99	ULP1	-	-	250?	-	-
1989-5105	2447830.50	1989 Nov?	MR-20	-	-	-	-	-	Z0B	GMS99	ULP1	-	-	250?	-	-
1989-5106	2447830.50	1989 Nov?	MR-20	-	-	-	-	-	Z0B	GMS99	ULP1	-	-	250?	-	-
1990-501	2447861.50	1990 Nov	MR-12	?	-	-	-	-	-	CTP-B-4?	-	-	-	150?	-	-
1990-502	2447861.50	1990	MR-12	?	-	-	-	-	-	CTP-B-4?	-	-	-	150?	-	-
1990-503	2447861.50	1990	MR-12	?	-	-	-	-	-	CTP-B-4?	-	-	-	150?	-	-
1990-504	2447861.50	1990	MR-12	?	-	-	-	-	-	CTP-B-4?	-	-	-	150?	-	-
1990-507	2447861.50	1990	MR-12	?	-	-	-	-	-	CTP-B-4?	-	-	-	150?	-	-
1990-5108	2448103.50	1990 Aug	MR-20	-	-	-	-	-	Z0B	GMS00	LP1	-	-	250?	-	-
1990-5109	2448103.50	1990 Aug?	MR-20	-	-	-	-	-	Z0B	GMS00	ULP1	-	-	250?	-	-
1990-5108	2448103.50	1990 Aug?	MR-20	-	-	-	-	-	Z0B	GMS00	ULP1	-	-	250?	-	-
1990-5110	2448103.50	1990 Aug?	MR-20	-	-	-	-	-	Z0B	GMS00	ULP1	-	-	250?	-	-
1990-5111	2448103.50	1990 Aug?	MR-20	-	-	-	-	-	Z0B	GMS00	ULP1	-	-	250?	-	-
1990-5112	2448103.50	1990 Aug?	MR-20	-	-	-	-	-	Z0B	GMS00	ULP1	-	-	250?	-	-
1990-5127	2448134.50	1990 Sep?	MR-20	-	-	-	-	-	Z0B	GMS00	LP3	-	-	250?	-	-
1990-5128	2448134.50	1990 Sep?	MR-20	-	-	-	-	-	Z0B	GMS00	ULP1	-	-	250?	-	-
1990-5129	2448134.50	1990 Sep?	MR-20	-	-	-	-	-	Z0B	GMS00	ULP1	-	-	250?	-	-
1990-5130	2448134.50	1990 Sep?	MR-20	-	-	-	-	-	Z0B	GMS00	ULP1	-	-	250?	-	-
1990-5135	2448164.50	1990 Oct?	MR-20	-	-	-	-	-	Z0B	GMS00	LP4	-	-	250?	-	-
1990-5136	2448164.50	1990 Oct?	MR-20	-	-	-	-	-	Z0B	GMS00	LP5	-	-	250?	-	-
1990-5137	2448164.50	1990 Oct?	MR-20	-	-	-	-	-	Z0B	GMS00	ULP1	-	-	250?	-	-
1990-5138	2448164.50	1990 Oct?	MR-20	-	-	-	-	-	Z0B	GMS00	ULP1	-	-	250?	-	-
1990-5143	2448195.50	1990 Nov?	MR-20	-	-	-	-	-	Z0B	GMS00	LP6	-	-	250?	-	-
1990-5144	2448195.50	1990 Nov?	MR-20	-	-	-	-	-	Z0B	GMS00	LP7	-	-	250?	-	-
1990-5145	2448195.50	1990 Nov?	MR-20	-	-	-	-	-	Z0B	GMS00	ULP1	-	-	250?	-	-
1990-5146	2448195.50	1990 Nov?	MR-20	-	-	-	-	-	Z0B	GMS00	ULP1	-	-	250?	-	-
1990-5162	2448225.50	1990 Dec?	MR-20	-	-	-	-	-	Z0B	GMS00	LP8	-	-	250?	-	-
1990-5163	2448225.50	1990 Dec?	MR-20	-	-	-	-	-	Z0B	GMS00	ULP1	-	-	250?	-	-
1990-5164	2448225.50	1990 Dec?	MR-20	-	-	-	-	-	Z0B	GMS00	ULP1	-	-	250?	-	-
1991-501	2448256.50	1991	MR-20	?	-	-	-	-	-	CTP-B-4?	-	-	-	250?	-	-
1991-502	2448256.50	1991	MR-20	?	-	-	-	-	-	CTP-B-4?	-	-	-	250?	-	-
1991-503	2448256.50	1991	MR-20	?	-	-	-	-	-	CTP-B-4?	-	-	-	250?	-	-
1991-561	2448294.23	1991 Feb 6 1730	MR-12	-	MR-12	-	E field	-	-	CTP-B-4?	-	-	-	150	-	-
1991-5117	2448437.50	1991 Jul	MR-20	-	-	-	-	-	Z0B	GMS1A	ULP1	-	-	250?	-	-
1991-5118	2448437.50	1991 Jul?	MR-20	-	-	-	-	-	Z0B	GMS1A	ULP1	-	-	250?	-	-
1991-5119	2448437.50	1991 Jul?	MR-20	-	-	-	-	-	Z0B	GMS1A	ULP1	-	-	250?	-	-
1991-5120	2448437.50	1991 Jul?	MR-20	-	-	-	-	-	Z0B	GMS1A	ULP1	-	-	250?	-	-
1991-5128	2448468.50	1991 Aug?	MR-20	-	-	-	-	-	Z0B	GMS1A	ULP1	-	-	250?	-	-
1991-5129	2448468.50	1991 Aug?	MR-20	-	-	-	-	-	Z0B	GMS1A	ULP1	-	-	250?	-	-
1991-5130	2448468.50	1991 Aug?	MR-20	-	-	-	-	-	Z0B	GMS1A	ULP1	-	-	250?	-	-
1991-5131	2448468.50	1991 Aug?	MR-20	-	-	-	-	-	Z0B	GMS1A	ULP1	-	-	250?	-	-
1991-5139	2448468.50	1991 Sep?	MR-20	-	-	-	-	-	Z0B	GMS1A	ULP1	-	-	250?	-	-

Launch_Tag	Launch_JD	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Mission	FlightCode	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee km	Range km	Dest
1991-S140	2448495.50	1991 Sep?	MR-20	-	-	-	-	-	Z0B	GRS91A	ULP1	-	-	250?	-	-
1991-S141	2448495.50	1991 Sep?	MR-20	-	-	-	-	-	Z0B	GRS91A	ULP1	-	-	250?	-	-
1991-S142	2448495.50	1991 Sep?	MR-20	-	-	-	-	-	Z0B	GRS91A	ULP1	-	-	250?	-	-
1991-S154	2448525.50	1991 Oct?	MR-20	-	-	-	-	-	Z0B	GRS91A	ULP1	-	-	250?	-	-
1991-S155	2448525.50	1991 Oct?	MR-20	-	-	-	-	-	Z0B	GRS91A	ULP1	-	-	250?	-	-
1991-S156	2448525.50	1991 Oct?	MR-20	-	-	-	-	-	Z0B	GRS91A	ULP1	-	-	250?	-	-
1991-S157	2448525.50	1991 Oct?	MR-20	-	-	-	-	-	Z0B	GRS91A	ULP1	-	-	250?	-	-
1992-S02	2448621.50	1992	MR-12	?	-	-	-	-	-	GrSP-4	-	-	-	150?	-	-
1997-S07	2450473.58	1997 Jan 31 01:55:08	MR-12	-	AGRE (D75MG)	Flakus-1 (Fluxus)	-	-	-	GrSP-4	-	-	-	160	-	-
1997-S08	2450484.59	1997 Feb 5 02:16:07	MR-12	-	AGRE (D75MG)	Flakus-2	-	-	-	GrSP-4	-	-	-	160	-	-
2011-S65	2455914.50	2011 Dec 19?	MR-30	-	-	R4D	-	-	-	GrSP-4	-	-	-	150?	-	-
2012-S90	2456075.50	2012 May 31	MR-30	-	-	R4D	-	-	-	GrSP-4	-	-	-	300?	-	-
2014-S18	2456743.43	2014 Mar 26 22:25	MR-300	-	MR-300	-	-	-	-	GrSP-4	-	-	-	300?	-	-
2015-S96	2457265.06	2015 Sep 3 13:23	MR-300	-	MR-300	-	-	-	-	TIKSI	-	-	-	300?	-	-



Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Orbit	Agency	Launch_Code	Group	Category	LTCite	Cite	Notes
1962-5115	2437794.50	1962 May	MR-12	-	D-75K LKI	-	AN	SS	-	Aeron	MRKS	-	-
1962-5350	2437937.50	1962 Oct?	MR-12	-	D-75K	-	AN	SS	-	nuc test	MRKS	-	-
1962-5351	2437937.50	1962 Oct?	MR-12	-	D-75K	-	AN	SS	-	nuc test	MRKS	-	-
1962-5352	2437937.50	1962 Oct?	MR-12	-	D-75K	-	AN	SS	-	nuc test	MRKS	-	-
1962-5353	2437937.50	1962 Oct?	MR-12	-	D-75K	-	AN	SS	-	nuc test	MRKS	-	-
1962-5354	2437937.50	1962 Oct?	MR-12	-	D-75K	-	AN	SS	-	nuc test	MRKS	-	-
1962-5355	2437937.50	1962 Oct?	MR-12	-	D-75K	-	AN	SS	-	nuc test	MRKS	-	-
1962-5356	2437937.50	1962 Oct?	MR-12	-	D-75K	-	AN	SS	-	nuc test	MRKS	-	-
1962-5357	2437937.50	1962 Oct?	MR-12	-	D-75K	-	AN	SS	-	nuc test	MRKS	-	-
1964-505	2438394.50	1964	MR-12	-	-	-	AN	SS	-	Aeron	MRKS	-	-
1964-506	2438394.50	1964	MR-12	-	-	-	AN	SS	-	Aeron	MRKS	-	-
1964-507	2438394.50	1964	MR-12	-	-	-	AN	SS	-	Aeron	MRKS	-	-
1964-508	2438394.50	1964	MR-12	-	-	-	AN	SS	-	Aeron	MRKS	-	-
1965-505	2438760.50	1965	MR-12	-	-	-	AN	SS	-	Aeron	MRKS	-	-
1965-5489	2439007.31	1965 Sep 3 1930	MR-12	-	-	-	AN	SS	-	Aeron	MRKS	-	-
1965-5490	2439012.68	1965 Sep 9 0415	MR-12	-	-	-	AN	SS	-	Aeron	MRKS	-	-
1965-5491	2439021.29	1965 Sep 17 1900	MR-12	-	-	-	AN	SS	-	Aeron	MRKS	-	-
1965-5576	2439060.00	1965 Oct 26 1203	MR-12	-	-	-	AN	SS	-	Aeron/Tonos	MRKS	-	-
1966-576	2439149.50	1966 Jan 24	MR-12	-	D-75K	-	AN	SS	-	Aeron	MRKS	-	-
1966-5804	2439383.32	1966 Sep 24 1947	MR-12	-	-	-	AN	SS	-	Aeron	MRKS	-	-
1966-5814	2439388.88	1966 Sep 30 0907	MR-12	-	-	-	AN	SS	-	Aeron	MRKS	-	-
1966-5820	2439399.88	1966 Oct 1 0907	MR-12	-	-	-	AN	SS	-	Aeron	MRKS	-	-
1966-5836	2439408.80	1966 Oct 10 0715	MR-12	-	-	-	AN	SS	-	Aeron/Tonos	MRKS	-	-
1966-5851	2439419.03	1966 Oct 20 1238	MR-12	-	-	-	AN	SS	-	Aeron	MRKS	-	-
1966-5854	2439426.09	1966 Oct 26 1416	MR-12	-	-	-	AN	SS	-	Aeron	MRKS	-	-
1966-5856	2439434.14	1966 Nov 4 1516	MR-12	-	-	-	AN	SS	-	Aeron	MRKS	-	-
1966-5860	2439463.41	1966 Nov 23 2144	MR-12	-	-	-	AN	SS	-	Aeron	MRKS	-	-
1966-5866	2439461.36	1966 Dec 1 2040	MR-12	-	-	-	AN	SS	-	Aeron	MRKS	-	-
1966-5870	2439465.86	1966 Dec 6 0839	MR-12	-	-	-	AN	SS	-	Aeron	MRKS	-	-
1966-5878	2439472.24	1966 Dec 12 1739	MR-12	-	-	-	AN	SS	-	Aeron/Tonos	MRKS	-	-
1966-5890	2439473.81	1966 Dec 14 0730:00	MR-12	-	-	-	AN	SS	-	Aeron	MRKS	-	-
1966-5894	2439475.34	1966 Dec 15 2012:00	MR-12	-	-	-	AN	SS	-	Aeron	MRKS	-	-
1966-5899	2439480.17	1966 Dec 20 1600	MR-12	-	-	-	AN	SS	-	Aeron/Tonos	MRKS	-	-
1966-5896	2439481.02	1966 Dec 21 1230	MR-12	-	-	-	AN	SS	-	Aeron	MRKS	-	-
1966-5896	2439481.02	1966 Dec 21 1230	MR-12	-	-	-	AN	SS	-	Aeron	MRKS	-	-
1967-5113	2439522.46	1967 Feb 3 2100?	MR-12	-	-	-	AN	SS	-	Solar X	MRKS	-	-
1967-5271	2439635.88	1967 Feb 9 2100?	MR-12	-	MR 12	-	AN	SS	-	Solar/Aeron	MRKS	SR9, 501	-
1967-5306	2439662.90	1967 Jun 21	MR-12	-	MR 12	-	AN	SS	-	Aeron	MRKS	MRKS	-
1967-5312	2439663.90	1967 Jun 21	MR-12	-	MR 12	-	AN	SS	-	Aeron	MRKS	MRKS	-
1967-5312	2439673.19	1967 Oct 9 1530	MR-12	-	MR 12	-	AN	SS	-	Aeron	MRKS	MRKS	-
1967-5463	243974.43	1967 Oct 10 0455	MR-12	-	MR 12	-	AN	SS	-	Aeron	MRKS	MRKS	-
1967-5520	2439796.38	1967 Nov 1 1905?	MR-12	-	MR 12	-	AN	SS	-	Aeron	MRKS	MRKS	-
1968-5154	2439843.68	1968 Feb 27 0900?	MR-12	-	MR 12	-	AN	SS	-	Aeron	MRKS	MRKS	-
1968-5154	2439843.68	1968 Feb 28 0430	MR-12	-	MR 12	-	AN	SS	-	Aeron	MRKS	MRKS	-
1968-5180	2439851.22	1968 Feb 29 1715:00	MR-12	-	MR 12	-	AN	SS	-	Aeron	MRKS	MRKS	-
1968-5180	2439851.22	1968 Mar 19 2130	MR-12	-	MR 12	-	AN	SS	-	Aeron	MRKS	MRKS	-
1968-5189	2439854.40	1968 Mar 19 2130	MR-12	-	MR 12	-	AN	SS	-	Aeron	MRKS	MRKS	-
1968-5189	2439854.40	1968 Mar 19 2130	MR-12	-	MR 12	-	AN	SS	-	Aeron	MRKS	MRKS	-
1968-5192	2439856.26	1968 Mar 19 1920	MR-12	-	MR 12	-	AN	SS	-	Aeron	MRKS	MRKS	-
1968-5192	2439856.26	1968 Mar 19 1920	MR-12	-	MR 12	-	AN	SS	-	Aeron	MRKS	MRKS	-
1968-5197	2439836.36	1968 Mar 20 2109	MR-12	-	MR 12	-	AN	SS	-	Aeron	MRKS	MRKS	-
1968-5199	2439836.40	1968 Mar 20 2109	MR-12	-	MR 12	-	AN	SS	-	Aeron	MRKS	MRKS	-
1968-5202	2439837.54	1968 Mar 20 2126	MR-12	-	MR 12	-	AN	SS	-	Aeron	MRKS	MRKS	-
1968-5202	2439837.54	1968 Mar 22 0057	MR-12	-	MR 12	-	AN	SS	-	Aeron	MRKS	MRKS	-
1968-5206	2439839.31	1968 Mar 23 1927	MR-12	-	MR 12	-	AN	SS	-	Aeron	MRKS	MRKS	-
1968-5208	2439840.67	1968 Mar 25 0402	MR-12	-	MR 12	-	AN	SS	-	Aeron	MRKS	MRKS	-
1968-5209	2439840.72	1968 Mar 25 0510	MR-12	-	MR 12	-	AN	SS	-	Aeron	MRKS	MRKS	-
1968-5211	2439841.31	1968 Mar 25 1920	MR-12	-	MR 12	-	AN	SS	-	Aeron	MRKS	MRKS	-
1968-5214	2439841.44	1968 Mar 25 2240	MR-12	-	MR 12	-	AN	SS	-	Aeron	MRKS	MRKS	-
1968-5218	2439842.99	1968 Mar 27 1150	MR-12	-	MR 12	-	AN	SS	-	Aeron	MRKS	MRKS	-
1968-5231	2439845.83	1968 Mar 30 0800	MR-12	-	MR 12	-	AN	SS	-	Aeron	MRKS	MRKS	-
1968-5233	2439846.10	1968 Mar 30 1430	MR-12	-	MR 12	-	AN	SS	-	Aeron	MRKS	MRKS	-
1968-5310	2439856.81	1968 May 9 0730	MR-12	-	MR 12	-	AN	SS	-	Aeron	MRKS	MRKS	-
1968-5311	2439857.54	1968 May 11 0100	MR-12	-	MR 12	-	AN	SS	-	Aeron	MRKS	MRKS	-
1968-5312	2439868.04	1968 May 11 1300	MR-12	-	MR 12	-	AN	SS	-	Aeron	MRKS	MRKS	-
1968-5315	2439869.05	1968 May 12 1315	MR-12	-	MR 12	-	AN	SS	-	Aeron	MRKS	MRKS	-
1968-5321	2439893.27	1968 May 16 1833	MR-12	-	MR 12	-	AN	SS	-	Aeron	MRKS	MRKS	-
1968-5326	2439894.27	1968 May 17 1825	MR-12	-	MR 12	-	AN	SS	-	Aeron	MRKS	MRKS	-
1968-5330	2439895.25	1968 May 18 1805	MR-12	-	MR 12	-	AN	SS	-	Aeron	MRKS	MRKS	-
1968-5334	2439898.08	1968 May 21 1400	MR-12	-	MR 12	-	AN	SS	-	Aeron	MRKS	MRKS	-
1968-5335	2439898.34	1968 May 21 2009	MR-12	-	MR 12	-	AN	SS	-	Aeron	MRKS	MRKS	-
1968-5338	2439898.63	1968 May 22 0050	MR-12	-	MR 12	-	AN	SS	-	Aeron	MRKS	MRKS	-
1968-5352	2440007.06	1968 May 30 1330	MR-12	-	MR 12	-	AN	SS	-	Aeron	MRKS	MRKS	-
1968-5353	2440007.38	1968 May 30 2100	MR-12	-	MR 12	-	AN	SS	-	Aeron	MRKS	MRKS	-
1968-5361	2440014.06	1968 Jun 6 1331	MR-12	-	MR 12	-	AN	SS	-	Aeron	MRKS	MRKS	-
1968-5362	2440014.25	1968 Jun 6 1800	MR-12	-	MR 12	-	AN	SS	-	Aeron	MRKS	MRKS	-
1968-5378	2440022.12	1968 Jun 14 1455	MR-12	-	MR 12	-	AN	SS	-	Aeron	MRKS	MRKS	-
1968-5384	2440033.69	1968 Jun 26 0430	MR-12	-	MR 12	-	AN	SS	-	Aeron	MRKS	MRKS	-
1968-5385	2440033.89	1968 Jun 26 0921	MR-12	-	MR 12	-	AN	SS	-	Aeron	MRKS	MRKS	-
1968-5386	2440035.69	1968 Jun 28 0437	MR-12	-	MR 12	-	AN	SS	-	Aeron	MRKS	MRKS	-
1968-5390	2440040.50	1968 Jul 3	MR-12	-	MR 12	-	AN	SS	-	Aeron	MRKS	MRKS	-
1968-5398	2440054.24	1968 Jul 16 1740	MR-12	-	MR 12	-	AN	SS	-	Aeron	MRKS	MRKS	-
1968-5401	2440057.21	1968 Jul 19 1700	MR-12	-	MR 12	-	AN	SS	-	Aeron	MRKS	MRKS	-
1968-5422	2440063.23	1968 Jul 25 1730	MR-12	-	MR 12	-	AN	SS	-	Aeron	MRKS	MRKS	-







Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	OrbitPay	Agency	Launch_Code	Group	Category	LTCite	Cite	Notes
1971-5163	2441026-18	1971 Mar 14 1625:00	MR-12	-	MR-12	0.000	AN	SS	AI/Kiyueva	Ionos	WDRF	SR13, 535	-
1971-5168	2441026-26	1971 Mar 15 1817:00	MR-12	-	MR-12	0.000	AN	SS	AI/Martynkevich, Byuro	Aeron	WDRF	SR13, 261	-
1971-5174	2441028-20	1971 Mar 17 1655:00	MR-12	-	MR-12	0.000	AN	SS	GIS/Andreeva	Aeron	WDRF	SR14, 111	-
1971-5176	2441029-22	1971 Mar 18 1710:00	MR-12	-	MR-12	0.000	AN	SS	GIS/Andreeva	Aeron	WDRF	SR14, 111	-
1971-5207	2441037-13	1971 Mar 26 1906:00	MR-12	-	MR-12	0.000	AN	SS	-	Aeron	WDRF	-	-
1971-5211	2441039-32	1971 Mar 28 1946:00	MR-12	-	MR-12	0.000	AN	SS	AI/Kiyueva	Ionos	SR19, 173	SR13, 535	-
1971-5212	2441040-34	1971 Mar 29 2010:00	MR-12	-	MR-12	0.000	AN	SS	AI/Kiyueva	Ionos	WDRF	SR13, 535	-
1971-5223	2441043-44	1971 Apr 1 2280:00	MR-12	-	MR-12	0.000	AN	SS	AI/Kiyueva	Ionos	WDRF	SR13, 535	-
1971-5243	2441064-04	1971 Apr 22 1300:00	MR-12	-	MR-12	0.000	AN	SS	-	Ionos	WDRF	-	-
1971-5244	2441064-09	1971 Apr 22 1415:00	MR-12	-	MR-12	0.000	AN	SS	-	Ionos	WDRF	-	-
1971-5245	2441195-91	1971 Sep 1 0945	MR-12	-	-	0.000	AN	SS	-	Ionos	RRKS	-	-
1971-5246	2441196-03	1971 Sep 1 1245	MR-12	-	-	0.000	AN	SS	-	Ionos	RRKS	-	-
1971-5247	2441209-30	1971 Sep 14 1910:00	MR-12	-	MR-12	0.000	AN	SS	-	Aeron	WDRF	SR13, 493	-
1971-5248	2441209-44	1971 Sep 14 2240:00	MR-12	-	MR-12	0.000	AN	SS	-	Aeron	WDRF	-	-
1971-5249	2441209-30	1971 Sep 15 1700:00	MR-12	-	MR-12	0.000	AN	SS	-	Aeron	WDRF	-	-
1971-5249	2441210-21	1971 Sep 15 1700:00	MR-12	-	MR-12	0.000	AN	SS	-	Aeron	WDRF	-	-
1971-5249	2441210-30	1971 Sep 15 1918:00	MR-12	-	MR-12	0.000	AN	SS	AI/Butko	Ionos	WDRF	SR14, 117	-
1971-5249	2441218-91	1971 Sep 24 0945:00	MR-12	-	MR-12	0.000	AN	SS	-	Ionos	WDRF	-	-
1971-5249	2441218-97	1971 Sep 24 1115:00	MR-12	-	MR-12	0.000	AN	SS	-	Ionos	WDRF	-	-
1971-5249	2441219-62	1971 Sep 24 1245:00	MR-12	-	MR-12	0.000	AN	SS	-	Ionos	WDRF	-	-
1971-5249	2441219-63	1971 Sep 25 0253:00	MR-12	-	MR-12	0.000	AN	SS	-	Ionos	WDRF	-	-
1971-5249	2441220-05	1971 Sep 25 1317:00	MR-12	-	MR-12	0.000	AN	SS	-	Ionos	WDRF	-	-
1971-5249	2441222-05	1971 Sep 27 1317:00	MR-12	-	MR-12	0.000	AN	SS	-	Ionos	WDRF	-	-
1971-5249	2441225-91	1971 Oct 01 0945:00	MR-12	-	MR-12	0.000	AN	SS	AI/Daniilov	Ionos	WDRF	SR13, 493	-
1971-5248	2441225-97	1971 Oct 01 1115:00	MR-12	-	MR-12	0.000	AN	SS	-	Ionos	WDRF	-	-
1971-5248	2441225-37	1971 Oct 01 1245:00	MR-12	-	MR-12	0.000	AN	SS	-	Ionos	WDRF	-	-
1971-5248	2441226-03	1971 Oct 01 1317:00	MR-12	-	MR-12	0.000	AN	SS	-	Ionos	WDRF	-	-
1971-5248	2441226-05	1971 Oct 01 1317:00	MR-12	-	MR-12	0.000	AN	SS	-	Ionos	WDRF	-	-
1971-5248	2441226-63	1971 Oct 02 0906:00	MR-12	-	MR-12	0.000	AN	SS	-	Ionos	WDRF	-	-
1971-5249	2441230-31	1971 Oct 06 0945:00	MR-12	-	MR-12	0.000	AN	SS	-	Ionos	WDRF	-	-
1971-5249	2441231-02	1971 Oct 06 1235:00	MR-12	-	MR-12	0.000	AN	SS	-	Ionos	WDRF	-	-
1971-5249	2441231-09	1971 Oct 06 1408:00	MR-12	-	MR-12	0.000	AN	SS	-	Ionos	WDRF	-	-
1971-5249	2441231-65	1971 Oct 07 0936:00	MR-12	-	MR-12	0.000	AN	SS	-	Ionos	WDRF	-	-
1971-5249	2441231-90	1971 Oct 07 0936:00	MR-12	-	MR-12	0.000	AN	SS	AI/Daniilov	Ionos	WDRF	SR13, 493	-
1971-5249	2441231-96	1971 Oct 07 1101:00	MR-12	-	MR-12	0.000	AN	SS	-	Ionos	WDRF	-	-
1971-5249	2441231-96	1971 Oct 07 1101:00	MR-12	-	MR-12	0.000	AN	SS	-	Ionos	WDRF	-	-
1971-5249	2441232-08	1971 Oct 07 1306:00	MR-12	-	MR-12	0.000	AN	SS	-	Ionos	WDRF	-	-
1971-5249	2441232-96	1971 Oct 08 0305:00	MR-12	-	MR-12	0.000	AN	SS	AI/Martynkevich, Byuro	Plasma	WDRF	SR13, 261	-
1971-5249	2441233-02	1971 Oct 08 1230:00	MR-12	-	MR-12	0.000	AN	SS	-	Ionos	WDRF	-	-
1971-5249	2441233-08	1971 Oct 08 1405:00	MR-12	-	MR-12	0.000	AN	SS	-	Ionos	WDRF	-	-
1971-5249	2441233-96	1971 Oct 08 1605:00	MR-12	-	MR-12	0.000	AN	SS	-	Ionos	WDRF	-	-
1971-5249	2441233-96	1971 Oct 09 1005:00	MR-12	-	MR-12	0.000	AN	SS	-	Ionos	WDRF	-	-
1971-5249	2441234-02	1971 Oct 09 1228:00	MR-12	-	MR-12	0.000	AN	SS	-	Ionos	WDRF	-	-
1971-5249	2441240-21	1971 Oct 15 0406:00	MR-12	-	MR-12	0.000	AN	SS	-	Ionos	WDRF	-	-
1971-5249	2441240-21	1971 Oct 20 0405:00	MR-12	-	MR-12	0.000	AN	SS	-	Ionos	WDRF	-	-
1971-5249	2441255-02	1971 Nov 03 0010:00	MR-12	-	MR-12	0.000	AN	SS	-	Ionos	WDRF	-	-
1971-5249	2441255-02	1971 Nov 03 0918:00	MR-12	-	MR-12	0.000	AN	SS	-	Ionos	WDRF	-	-
1971-5249	2441255-02	1971 Nov 07 0918:00	MR-12	-	MR-12	0.000	AN	SS	-	Ionos	WDRF	-	-
1971-5249	2441255-02	1971 Nov 24 1245:00	MR-12	-	MR-12	0.000	AN	SS	-	Ionos	WDRF	-	-
1971-5274	2441257-03	1971 Nov? 24 1245:00	MR-12	-	MR-12	0.000	AN	SS	-	Ionos	WDRF	-	-
1971-5274	2441257-03	1971 Dec 01 1250:00	MR-12	-	MR-12	0.000	AN	SS	-	Ionos	WDRF	-	-
1971-5260	2441259-15	1971 Dec 06 1330:00	MR-12	-	MR-12	0.000	AN	SS	-	Ionos	WDRF	-	-
1971-5260	2441259-19	1971 Dec 06 1530:00	MR-12	-	MR-12	0.000	AN	SS	-	Ionos	WDRF	-	-
1971-5260	2441259-19	1971 Dec 06 1530:00	MR-12	-	MR-12	0.000	AN	SS	-	Ionos	WDRF	-	-
1971-5260	2441259-19	1971 Dec 06 1530:00	MR-12	-	MR-12	0.000	AN	SS	-	Ionos	WDRF	-	-
1971-5260	2441300-15	1971 Dec 14 1541:00	MR-12	-	MR-12	0.000	AN	SS	-	Ionos	WDRF	-	-
1971-5260	2441301-75	1971 Dec 16 0559:00	MR-12	-	MR-12	0.000	AN	SS	-	Ionos	WDRF	-	-
1971-5261	2441311-67	1971 Dec 26 0400:00	MR-12	-	MR-12	0.000	AN	SS	AI/Daniilov	Aeron	WDRF	SR13, 493	-
1971-5261	2441312-02	1971 Dec 26 1230:00	MR-12	-	MR-12	0.000	AN	SS	-	Ionos	WDRF	-	-
1971-5261	2441312-10	1971 Dec 26 1430:00	MR-12	-	MR-12	0.000	AN	SS	-	Ionos	WDRF	-	-
1971-5261	2441312-24	1971 Dec 26 1740:00	MR-12	-	MR-12	0.000	AN	SS	-	Ionos	WDRF	-	-
1971-5261	2441312-24	1971 Dec 26 1740:00	MR-12	-	MR-12	0.000	AN	SS	-	Ionos	WDRF	-	-
1971-5261	2441312-68	1971 Dec 27 0200:00	MR-12	-	MR-12	0.000	AN	SS	-	Ionos	WDRF	-	-
1971-5261	2441317-33	1971 Dec 31 1949:00	MR-12	-	MR-12	0.000	AN	SS	-	Ionos	WDRF	-	-
1971-5262	2441317-37	1971 Dec 31 2049:00	MR-12	-	MR-12	0.000	AN	SS	-	Ionos	WDRF	-	-
1971-5262	2441317-41	1971 Dec 31 2157:00	MR-12	-	MR-12	0.000	AN	SS	-	Ionos	WDRF	-	-
1971-5262	2441317-46	1971 Dec 31 2300:00	MR-12	-	MR-12	0.000	AN	SS	-	Ionos	WDRF	-	-
1971-5262	2441317-80	1972 Jan 01 0705:00	MR-12	-	MR-12	0.000	AN	SS	-	Ionos	WDRF	-	-
1972-5300	2441316-50	1972 Jan? 01 0802:00	MR-12	-	MR-12	0.000	AN	SS	-	Ionos	WDRF	-	-
1972-5301	2441317-83	1972 Jan 01 0802:00	MR-12	-	MR-12	0.000	AN	SS	-	Ionos	WDRF	-	-
1972-5331	2441321-99	1972 Jan 05 1441:00	MR-12	-	MR-12	0.000	AN	SS	-	Ionos	WDRF	-	-
1972-5333	2441321-99	1972 Feb 05 1441:00	MR-12	-	MR-12	0.000	AN	SS	-	Ionos	WDRF	-	-
1972-5373	2441358-64	1972 Feb 11 0320:00	MR-12	-	MR-12	0.000	AN	SS	-	Ionos	WDRF	-	-
1972-5374	2441359-00	1972 Feb 11 1200:00	MR-12	-	MR-12	0.000	AN	SS	-	Ionos	WDRF	-	-
1972-5374	2441359-00	1972 Feb 11 1200:00	MR-12	-	MR-12	0.000	AN	SS	-	Ionos	WDRF	-	-
1972-5374	2441359-61	1972 Feb 18 0233:00	MR-12	-	MR-12	0.000	AN	SS	-	Ionos	WDRF	-	-
1972-5387	2441369-04	1972 Feb 21 1255:00	MR-12	-	MR-12	0.000	AN	SS	-	Ionos	WDRF	-	-
1972-5387	2441369-07	1972 Feb 21 1355:00	MR-12	-	MR-12	0.000	AN	SS	-	Ionos	WDRF	-	-
1972-5394	2441378-55	1972 Mar 2 0117:00	MR-12	-	MR-12	0.000	AN	SS	-	Ionos	WDRF	-	-
1972-5449	2441380-50	1972 Mar 4 0003	MR-12	-	MR-12	0.000	AN	SS	-	Ionos	WDRF	-	-
1972-5449	2441380-99	1972 Mar 4 1152:00	MR-12	-	MR-12	0.000	AN	SS	-	Ionos	WDRF	-	-
1972-5449	2441381-06	1972 Mar 4 1322:00	MR-12	-	MR-12	0.000	AN	SS	-	Ionos	WDRF	-	-
1972-5449	2441381-28	1972 Mar 4 1848	MR-12	-	MR-12	0.000	AN	SS	-	Ionos	WDRF	-	-
1972-5451	2441381-49	1972 Mar 4 2352	MR-12	-	MR-12	0.000	AN	SS	-	Ionos	WDRF	-	-
1972-5451	2441385-42	1972 Mar 8 2210:00	MR-12	-	MR-12	0.000	AN	SS	-	Ionos	WDRF	-	-
1972-5106	2441394-21	1972 Mar 17 1656:00	MR-12	-	MR-12	0.000	AN	SS	-	Ionos	WDRF	-	-
1972-5123	2441394-21	1972 Mar 17 1704:00	MR-12	-	MR-12	0.000	AN	SS	-	Ionos	WDRF	-	-
1972-5124	2441394-29	1972 Mar 17 1901:00	MR-12	-	MR-12	0.000	AN	SS	-	Ionos	WDRF	-	-
1972-5125	2441394-34	1972 Mar 17 2003:00	MR-12	-	MR-12	0.000	AN	SS	-	Ionos	WDRF	-	-
1972-5126	2441396-91	1972 Mar 20 0945:00	MR-12	-	MR-12	0.000	AN	SS	-	Ionos	WDRF	-	-
1972-5129	2441412-85	1972 Apr 05 0831:00	MR-12	-	MR-12	0.000	AN	SS	-	Ionos	WDRF	-	-
1972-5150	2441412-85	1972 Apr 05 0831:00	MR-12	-	MR-12	0.000	AN	SS	-	Ionos	WDRF	-	-
1972-5450	2441422-86	1972 Apr 15 0838	MR-12	-	MR-12	0.000	AN	SS	-	Ionos	WDRF	-	-



Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	DrpPay	Agency	Launch_Code	Group	Category	LTCite	Cite	Notes
1974-5882	2442371.91	1974 Nov 20 0946:00	MR-12	-	MR-12	0.000	AN	SU	-	Aeron/CR/Plasma	WDCRF	-	-
1974-5824	2442402.89	1974 Dec 21 0928:00	MR-12	-	MR-12	0.000	AN	SU	-	Aeron/CR/Plasma	WDCRF	-	-
1974-5826	2442406.26	1974 Dec 24 1813:00	MR-12	-	MR-12	0.000	AN	SS	GMS/Danilov	Aeron/CR/Plasma	WDCRF	SR19, 173	-
1975-5140	2442532.50	1975 May	MR-12	-	-	0.000	AN	SS	-	Aeron	RRKS	-	-
1975-5141	2442532.50	1975 May?	MR-12	-	-	0.000	AN	SS	-	Aeron	RRKS	-	-
1975-5171	2442563.50	1975 Jun?	MR-12	-	-	0.000	AN	SS	-	Aeron	RRKS	-	-
1975-5172	2442563.50	1975 Jun?	MR-12	-	-	0.000	AN	SS	-	Aeron	RRKS	-	-
1975-5173	2442563.50	1975 Jun?	MR-12	-	-	0.000	AN	SS	-	Aeron	RRKS	-	-
1975-5174	2442563.50	1975 Jun?	MR-12	-	-	0.000	AN	SS	-	Aeron	RRKS	-	-
1975-5175	2442563.50	1975 Jun?	MR-12	-	-	0.000	AN	SS	-	Aeron	RRKS	-	-
1975-5176	2442563.50	1975 Jun?	MR-12	-	-	0.000	AN	SS	-	Aeron	RRKS	-	-
1975-5177	2442563.50	1975 Jun?	MR-12	-	-	0.000	AN	SS	-	Aeron	RRKS	-	-
1975-5178	2442563.50	1975 Jun?	MR-12	-	-	0.000	AN	SS	-	Aeron	RRKS	-	-
1975-5179	2442563.50	1975 Jun?	MR-12	-	-	0.000	AN	SS	-	Aeron	RRKS	-	-
1975-5180	2442563.50	1975 Jun?	MR-12	-	-	0.000	AN	SS	-	Aeron	RRKS	-	-
1975-5181	2442563.50	1975 Jun?	MR-12	-	-	0.000	AN	SS	-	Aeron	RRKS	-	-
1975-5182	2442563.50	1975 Jun?	MR-12	-	-	0.000	AN	SS	-	Aeron	RRKS	-	-
1975-5183	2442563.50	1975 Jun?	MR-12	-	-	0.000	AN	SS	-	Aeron	RRKS	-	-
1975-5184	2442563.50	1975 Jun?	MR-12	-	-	0.000	AN	SS	-	Aeron	RRKS	-	-
1975-5217	2442593.50	1975 Jul	MR-12	-	-	0.000	AN	SS	-	Aeron	RRKS	-	-
1975-5266	2442660.19	1975 Sep 04 1835:00	MR-12	-	MR-12	0.000	AN	SU	IZH/Dzyubenko, Ivchenko	Plasma, Ba release	WDCRF	PlasmaSpec131, 949	-
1975-5273	2442667.36	1975 Sep 11 2040:00	MR-12	-	MR-12	0.000	AN	SS	-	Plasma	KI18, 290	WDCRF	-
1975-5292	2442687.18	1975 Oct 01 1838:00	MR-12	-	MR-12	0.000	AN	SU	-	Aeron/lonos/CR/Plas	WDCRF	-	-
1975-5294	2442687.36	1975 Oct 02 0900:00	MR-12	-	MR-12	0.000	AN	SU	-	Aeron/lonos/CR/Plas	WDCRF	-	-
1975-5295	2442688.18	1975 Oct 02 1838:00	MR-12	-	MR-12	0.000	AN	SU	-	Aeron/lonos/CR/Plas	WDCRF	-	-
1975-5296	2442688.36	1975 Oct 02 2105:00	MR-12	-	MR-12	0.000	AN	SU	-	Aeron/lonos/CR/Plas	WDCRF	-	-
1975-5303	2442701.59	1975 Oct 16 0210:00	MR-12	-	MR-12	0.000	AN	SU	-	Aeron/lonos/CR/Plas	WDCRF	-	-
1975-5309	2442715.10	1975 Oct 29 1428:00	MR-12	-	MR-12	0.000	AN	SU	-	Aeron/lonos	RRKS	-	-
1975-5313	2442716.97	1975 Oct 31 1117:00	MR-12	-	-	0.000	AN	SS	-	Aeron	RRKS	-	-
1975-5314	2442716.50	1975 Nov	MR-12	-	-	0.000	AN	SS	-	Aeron	RRKS	-	-
1975-5317	2442716.50	1975 Nov?	MR-12	-	-	0.000	AN	SS	-	Aeron	RRKS	-	-
1975-5331	2442746.50	1975 Dec?	MR-12	-	-	0.000	AN	SS	-	Aeron	RRKS	-	-
1975-5332	2442746.50	1975 Dec?	MR-12	-	-	0.000	AN	SS	-	Aeron	RRKS	-	-
1975-5333	2442746.50	1975 Dec?	MR-12	-	-	0.000	AN	SS	-	Aeron	RRKS	-	-
1975-5334	2442746.50	1975 Dec?	MR-12	-	-	0.000	AN	SS	-	Aeron	RRKS	-	-
1976-502	2442777.50	1976 Jan?	MR-12	-	-	0.000	AN	SS	-	Aeron	RRKS	-	-
1976-503	2442777.50	1976 Jan?	MR-12	-	-	0.000	AN	SS	-	Aeron	RRKS	-	-
1976-504	2442777.50	1976 Jan?	MR-12	-	-	0.000	AN	SS	-	Aeron	RRKS	-	-
1976-505	2442777.50	1976 Jan?	MR-12	-	-	0.000	AN	SS	-	Aeron	RRKS	-	-
1976-506	2442777.50	1976 Feb?	MR-12	-	-	0.000	AN	SS	-	Aeron	RRKS	-	-
1976-507	2442868.50	1976 Feb	MR-12	-	-	0.000	AN	SS	-	Aeron	RRKS	-	-
1976-5113	2442868.50	1976 Feb 28 0855:00	MR-12	-	MR-12	0.000	AN	SS	GMS/Danilov	Aeron/lonos/CR/Plas	WDCRF	SR19, 173	-
1976-5116	2442869.54	1976 Feb 28 1422:00	MR-12	-	MR-12	0.000	AN	SS	Al/Vnuchin'	Aeron/CR/Plasma	WDCRF	WDCRF	-
1976-5117	2442869.38	1976 Feb 28 2111:00	MR-12	-	MR-12	0.000	AN	SS	-	Aurora	KI165, 310	WDCRF	-
1976-5118	2442869.54	1976 Feb 29 0415:00	MR-12	-	MR-12	0.000	AN	SS	GMS/Danilov	Aeron/lonos/CR/Plas	WDCRF	SR19, 173	-
1976-5121	2442870.51	1976 Mar 03 0011:00	MR-12	-	MR-12	0.000	AN	SS	GMS/Danilov	Aeron/lonos/CR/Plas	WDCRF	WDCRF	-
1976-5124	2442884.40	1976 Mar 05 2345:00	MR-12	-	MR-12	0.000	AN	SS	GMS/Danilov	Aeron/lonos/CR/Plas	WDCRF	WDCRF	-
1976-5127	2442884.28	1976 Mar 06 1948:00	MR-12	-	MR-12	0.000	AN	SS	-	Auroras	SR19, 173	WDCRF	-
1976-5130	2442884.48	1976 Mar 06 2330:00	MR-12	-	MR-12	0.000	AN	SU	GMS/Danilov	Aeron/lonos/CR/Plas	WDCRF	SR19, 173	-
1976-5133	2442885.46	1976 Mar 06 2355:00	MR-12	-	MR-12	0.000	AN	SU	-	Aeron/lonos/CR/Plas	WDCRF	WDCRF	-
1976-5137	2442885.92	1976 Mar 07 2035:00	MR-12	-	MR-12	0.000	AN	SU	-	Aeron/lonos/CR/Plas	WDCRF	WDCRF	-
1976-5139	2442885.92	1976 Mar 07 2035:00	MR-12	-	MR-12	0.000	AN	SU	-	CR/Plas/Fisilds	WDCRF	-	-
1976-5138	2442885.84	1976 Mar 18 0908:00	MR-12	-	MR-12	0.000	AN	SU	-	Aeron/CR/Plasma	WDCRF	-	-
1976-5254	2443089.21	1976 Aug 18 1659:00	MR-12	-	MR-12	0.000	AN	SS	GMS/Andreeva	Aeron/lonos/CR/Plas	WDCRF	SR20, 69	-
1976-5255	2443089.36	1976 Aug 18 2043:00	MR-12	-	MR-12	0.000	AN	SU	-	Aeron/lonos/CR/Plas	WDCRF	-	-
1976-5256	2443090.20	1976 Aug 19 1652:00	MR-12	-	MR-12	0.000	AN	SU	-	Aeron/lonos/CR/Plas	WDCRF	-	-
1976-5257	2443090.36	1976 Aug 19 2035:00	MR-12	-	MR-12	0.000	AN	SU	-	Aeron/lonos/CR/Plas	WDCRF	-	-
1976-5258	2443090.50	1976 Aug 19 2035:00	MR-12	-	MR-12	0.000	AN	SU	-	Aeron/lonos/CR/Plas	WDCRF	-	-
1976-5259	2443090.63	1976 Aug 19 2043:00	MR-12	-	MR-12	0.000	AN	SU	-	Aeron/lonos	WDCRF	-	-
1976-5261	2443089.72	1976 Aug 19 0815:00	MR-12	-	MR-12	0.000	AN	SU	-	Aeron/lonos	WDCRF	-	-
1976-5262	2443089.88	1976 Aug 19 0900:00	MR-12	-	MR-12	0.000	AN	SU	-	Aeron/lonos	WDCRF	-	-
1976-5263	2443089.96	1976 Aug 19 1045:00	MR-12	-	MR-12	0.000	AN	SU	-	Aeron/lonos	WDCRF	-	-
1976-5264	2443090.13	1976 Aug 20 0215:00	MR-12	-	MR-12	0.000	AN	SU	-	Aeron/lonos/CR/Plasma	WDCRF	-	-
1976-5265	2443090.19	1976 Aug 20 0900:00	MR-12	-	MR-12	0.000	AN	SU	-	Aeron/lonos/CR/Plasma	WDCRF	-	-
1976-5266	2443090.27	1976 Aug 20 0515:00	MR-12	-	MR-12	0.000	AN	SU	-	Aeron/lonos/CR/Plasma	WDCRF	-	-
1976-5267	2443091.07	1976 Aug 20 1345:00	MR-12	-	MR-12	0.000	AN	SU	-	Aeron/lonos/CR/Plasma	WDCRF	-	-
1976-5268	2443091.13	1976 Aug 21 0047:00	MR-12	-	MR-12	0.000	AN	SU	-	Aeron/lonos	WDCRF	-	-
1976-5269	2442990.50	1976 Aug?	MR-12	-	MR-12	0.000	AN	SS	-	Aeron	RRKS	-	-
1976-5270	2442990.50	1976 Aug?	MR-12	-	MR-12	0.000	AN	SS	-	Aeron	RRKS	-	-
1976-5271	2442990.50	1976 Aug?	MR-12	-	MR-12	0.000	AN	SS	-	Aeron	RRKS	-	-
1976-5272	2442990.50	1976 Aug?	MR-12	-	MR-12	0.000	AN	SS	-	Aeron	RRKS	-	-
1976-5273	2442990.50	1976 Aug?	MR-12	-	MR-12	0.000	AN	SS	-	Aeron	RRKS	-	-
1976-5274	2442990.50	1976 Aug?	MR-12	-	MR-12	0.000	AN	SS	-	Aeron	RRKS	-	-
1976-5275	2442990.50	1976 Aug?	MR-12	-	MR-12	0.000	AN	SS	-	Aeron	RRKS	-	-
1976-5276	2442990.50	1976 Aug?	MR-12	-	MR-12	0.000	AN	SS	-	Aeron	RRKS	-	-
1976-5277	2443021.50	1976 Sep?	MR-12	-	MR-12	0.000	AN	SS	-	Aeron	RRKS	-	-
1976-5278	2443021.50	1976 Sep?	MR-12	-	MR-12	0.000	AN	SS	-	Aeron	RRKS	-	-
1976-5279	2443021.50	1976 Sep?	MR-12	-	MR-12	0.000	AN	SS	-	Aeron	RRKS	-	-
1976-5280	2443021.50	1976 Sep?	MR-12	-	MR-12	0.000	AN	SS	-	Aeron	RRKS	-	-
1976-5281	2443021.50	1976 Sep?	MR-12	-	MR-12	0.000	AN	SS	-	Aeron	RRKS	-	-
1976-5282	2443021.50	1976 Sep?	MR-12	-	MR-12	0.000	AN	SS	-	Aeron	RRKS	-	-









Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	DrbPay	Agency	Launch_Code	Group	Category	LTCite	Cite	Notes
1987-5137	2447038-50	1987 Sep?	MR-20	-	-	0.000	AN	SU	-	Aeron	HRKS	-	-
1987-5138	2447038-50	1987 Sep?	MR-20	-	-	0.000	AN	SU	-	Aeron	HRKS	-	-
1987-5139	2447038-50	1987 Sep	MR-20	-	-	0.000	AN	SU	-	Aeron	HRKS	-	-
1987-5238	2447047-50	1987 Sep 9	MR-20	-	Start	0.000	AN	SS	-	Tech	HRKS	-	-
1988-573	2447251-50	1988 Apr?	MR-20	-	MR-20	0.000	AN	SS	-	Aeron	HRKS	-	-
1988-585	2447281-50	1988 May?	MR-20	-	MR-20	0.000	AN	SS	-	Aeron	HRKS	-	-
1988-586	2447281-50	1988 May?	MR-20	-	MR-20	0.000	AN	SS	-	Aeron	HRKS	-	-
1988-587	2447281-50	1988 May?	MR-20	-	MR-20	0.000	AN	SS	-	Aeron	HRKS	-	-
1988-588	2447281-50	1988 May?	MR-20	-	MR-20	0.000	AN	SS	-	Aeron	HRKS	-	-
1988-589	2447281-50	1988 May?	MR-20	-	MR-20	0.000	AN	SS	-	Aeron	HRKS	-	-
1988-597	2447312-50	1988 Jun?	MR-20	-	MR-20	0.000	AN	SS	-	Aeron	HRKS	-	-
1988-5101	2447342-50	1988 Jul?	MR-20	-	-	0.000	AN	SS	-	Aeron	HRKS	-	-
1988-5102	2447342-50	1988 Jul?	MR-20	-	-	0.000	AN	SS	-	Aeron	HRKS	-	-
1988-5108	2447373-50	1988 Aug?	MR-20	-	-	0.000	AN	SS	-	Aeron	HRKS	-	-
1988-5109	2447373-50	1988 Aug?	MR-20	-	-	0.000	AN	SS	-	Aeron	HRKS	-	-
1988-5110	2447373-50	1988 Aug?	MR-20	-	-	0.000	AN	SS	-	Aeron	HRKS	-	-
1988-5112	2447404-50	1988 Sep?	MR-20	-	-	0.000	AN	SS	-	Aeron	HRKS	-	-
1988-5113	2447404-50	1988 Sep?	MR-20	-	-	0.000	AN	SS	-	Aeron	HRKS	-	-
1988-5114	2447404-50	1988 Sep?	MR-20	-	-	0.000	AN	SS	-	Aeron	HRKS	-	-
1988-5121	2447434-50	1988 Oct?	MR-20	-	-	0.000	AN	SS	-	Aeron	HRKS	-	-
1988-5122	2447434-50	1988 Oct?	MR-20	-	-	0.000	AN	SS	-	Aeron	HRKS	-	-
1988-5123	2447434-50	1988 Oct?	MR-20	-	-	0.000	AN	SS	-	Aeron	HRKS	-	-
1988-5124	2447434-50	1988 Oct?	MR-20	-	-	0.000	AN	SS	-	Aeron	HRKS	-	-
1988-5131	2447465-50	1988 Nov?	MR-20	-	-	0.000	AN	SS	-	Aeron	HRKS	-	-
1988-5132	2447465-50	1988 Nov?	MR-20	-	-	0.000	AN	SS	-	Aeron	HRKS	-	-
1988-5140	2447485-50	1988 Dec?	MR-20	-	-	0.000	AN	SS	-	Aeron	HRKS	-	-
1988-5141	2447485-50	1988 Dec?	MR-20	-	-	0.000	AN	SS	-	Aeron	HRKS	-	-
1989-564	2447707-50	1989 Dec	MR-20	-	-	0.000	AN	SS	-	Aeron	HRKS	-	-
1989-565	2447707-50	1989 Jul?	MR-20	-	-	0.000	AN	SS	-	Aeron	HRKS	-	-
1989-566	2447707-50	1989 Jul?	MR-20	-	-	0.000	AN	SS	-	Aeron	HRKS	-	-
1989-567	2447707-50	1989 Jul?	MR-20	-	-	0.000	AN	SS	-	Aeron	HRKS	-	-
1989-575	2447735-50	1989 Aug?	MR-20	-	-	0.000	AN	SS	-	Aeron	HRKS	-	-
1989-576	2447735-50	1989 Aug?	MR-20	-	-	0.000	AN	SS	-	Aeron	HRKS	-	-
1989-577	2447735-50	1989 Aug?	MR-20	-	-	0.000	AN	SS	-	Aeron	HRKS	-	-
1989-578	2447735-50	1989 Aug?	MR-20	-	-	0.000	AN	SS	-	Aeron	HRKS	-	-
1989-584	2447769-50	1989 Sep?	MR-20	-	-	0.000	AN	SS	-	Aeron	HRKS	-	-
1989-585	2447769-50	1989 Sep?	MR-20	-	-	0.000	AN	SS	-	Aeron	HRKS	-	-
1989-586	2447769-50	1989 Sep?	MR-20	-	-	0.000	AN	SS	-	Aeron	HRKS	-	-
1989-587	2447769-50	1989 Sep?	MR-20	-	-	0.000	AN	SS	-	Aeron	HRKS	-	-
1989-588	2447769-50	1989 Sep?	MR-20	-	-	0.000	AN	SS	-	Aeron	HRKS	-	-
1989-589	2447769-50	1989 Oct?	MR-20	-	-	0.000	AN	SS	-	Aeron	HRKS	-	-
1989-599	2447799-50	1989 Oct?	MR-20	-	-	0.000	AN	SS	-	Aeron	HRKS	-	-
1989-600	2447799-50	1989 Oct?	MR-20	-	-	0.000	AN	SS	-	Aeron	HRKS	-	-
1989-6101	2447799-50	1989 Oct?	MR-20	-	-	0.000	AN	SS	-	Aeron	HRKS	-	-
1989-6102	2447799-50	1989 Oct?	MR-20	-	-	0.000	AN	SS	-	Aeron	HRKS	-	-
1989-6103	2447799-50	1989 Oct?	MR-20	-	-	0.000	AN	SS	-	Aeron	HRKS	-	-
1989-6104	2447830-50	1989 Nov?	MR-20	-	-	0.000	AN	SS	-	Aeron	HRKS	-	-
1989-6105	2447830-50	1989 Nov?	MR-20	-	-	0.000	AN	SS	-	Aeron	HRKS	-	-
1989-6106	2447830-50	1989 Nov?	MR-20	-	-	0.000	AN	SS	-	Aeron	HRKS	-	-
1990-501	2447891-50	1990 Nov	MR-12	?	?	0.000	AN	SS	-	Aeron	HRKS	-	-
1990-502	2447891-50	1990	MR-12	?	?	0.000	AN	SS	-	Aeron	HRKS	-	-
1990-503	2447891-50	1990	MR-12	?	?	0.000	AN	SS	-	Aeron	HRKS	-	-
1990-504	2447891-50	1990	MR-12	?	?	0.000	AN	SS	-	Aeron	HRKS	-	-
1990-505	2447891-50	1990	MR-12	?	?	0.000	AN	SS	-	Aeron	HRKS	-	-
1990-5107	2448103-50	1990 Aug	MR-20	-	-	0.000	AN	SS	-	Aeron	HRKS	-	-
1990-5108	2448103-50	1990 Aug?	MR-20	-	-	0.000	AN	SS	-	Aeron	HRKS	-	-
1990-5109	2448103-50	1990 Aug?	MR-20	-	-	0.000	AN	SS	-	Aeron	HRKS	-	-
1990-5110	2448103-50	1990 Aug?	MR-20	-	-	0.000	AN	SS	-	Aeron	HRKS	-	-
1990-5111	2448103-50	1990 Aug?	MR-20	-	-	0.000	AN	SS	-	Aeron	HRKS	-	-
1990-5124	2448194-50	1990 Sep?	MR-20	-	-	0.000	AN	SS	-	Aeron	HRKS	-	-
1990-5127	2448194-50	1990 Sep?	MR-20	-	-	0.000	AN	SS	-	Aeron	HRKS	-	-
1990-5128	2448194-50	1990 Sep?	MR-20	-	-	0.000	AN	SS	-	Aeron	HRKS	-	-
1990-5129	2448194-50	1990 Sep?	MR-20	-	-	0.000	AN	SS	-	Aeron	HRKS	-	-
1990-5130	2448194-50	1990 Sep?	MR-20	-	-	0.000	AN	SS	-	Aeron	HRKS	-	-
1990-5135	2448164-50	1990 Oct?	MR-20	-	-	0.000	AN	SS	-	Aeron	HRKS	-	-
1990-5136	2448164-50	1990 Oct?	MR-20	-	-	0.000	AN	SS	-	Aeron	HRKS	-	-
1990-5137	2448164-50	1990 Oct?	MR-20	-	-	0.000	AN	SS	-	Aeron	HRKS	-	-
1990-5138	2448164-50	1990 Oct?	MR-20	-	-	0.000	AN	SS	-	Aeron	HRKS	-	-
1990-5143	2448195-50	1990 Nov?	MR-20	-	-	0.000	AN	SS	-	Aeron	HRKS	-	-
1990-5144	2448195-50	1990 Nov?	MR-20	-	-	0.000	AN	SS	-	Aeron	HRKS	-	-
1990-5145	2448195-50	1990 Nov?	MR-20	-	-	0.000	AN	SS	-	Aeron	HRKS	-	-
1990-5146	2448195-50	1990 Nov?	MR-20	-	-	0.000	AN	SS	-	Aeron	HRKS	-	-
1990-5162	2448225-50	1990 Dec?	MR-20	-	-	0.000	AN	SS	-	Aeron	HRKS	-	-
1990-5163	2448225-50	1990 Dec?	MR-20	-	-	0.000	AN	SS	-	Aeron	HRKS	-	-
1990-5164	2448225-50	1990 Dec?	MR-20	-	-	0.000	AN	SS	-	Aeron	HRKS	-	-
1991-501	2448266-50	1991	MR-20	?	?	0.000	AN	SS	-	Aeron	HRKS	-	-
1991-502	2448266-50	1991	MR-20	?	?	0.000	AN	SS	-	Aeron	HRKS	-	-
1991-561	2448294-23	1991 Feb 6 1730	MR-12	-	MR-12	0.000	AN	SS	-	Plasma/Active	HRKS	-	-
1991-5117	2448437-50	1991 Jul	MR-20	-	-	0.000	AN	SS	-	Aeron	HRKS	-	-
1991-5118	2448437-50	1991 Jul?	MR-20	-	-	0.000	AN	SS	-	Aeron	HRKS	-	-
1991-5119	2448437-50	1991 Jul?	MR-20	-	-	0.000	AN	SS	-	Aeron	HRKS	-	-
1991-5120	2448437-50	1991 Jul?	MR-20	-	-	0.000	AN	SS	-	Aeron	HRKS	-	-
1991-5128	2448468-50	1991 Aug?	MR-20	-	-	0.000	AN	SS	-	Aeron	HRKS	-	-
1991-5129	2448468-50	1991 Aug?	MR-20	-	-	0.000	AN	SS	-	Aeron	HRKS	-	-
1991-5130	2448468-50	1991 Aug?	MR-20	-	-	0.000	AN	SS	-	Aeron	HRKS	-	-
1991-5131	2448468-50	1991 Aug?	MR-20	-	-	0.000	AN	SS	-	Aeron	HRKS	-	-
1991-5139	2448499-50	1991 Sep?	MR-20	-	-	0.000	AN	SS	-	Aeron	HRKS	-	-

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	DrbPay	Agency	Launch_Code	Group	Category	LTCite	Cite	Notes
1991-S140	2448499.50	1991 Sep?	MR-20	-	-	0.000	AN	SS	-	Aeron	MRKS	-	-
1991-S141	2448499.50	1991 Sep?	MR-20	-	-	0.000	AN	SS	-	Aeron	MRKS	-	-
1991-S142	2448499.50	1991 Sep?	MR-20	-	-	0.000	AN	SS	-	Aeron	MRKS	-	-
1991-S154	2448529.50	1991 Oct?	MR-20	-	-	0.000	AN	SS	-	Aeron	MRKS	-	-
1991-S155	2448529.50	1991 Oct?	MR-20	-	-	0.000	AN	SS	-	Aeron	MRKS	-	-
1991-S156	2448529.50	1991 Oct?	MR-20	-	-	0.000	AN	SS	-	Aeron	MRKS	-	-
1991-S157	2448529.50	1991 Oct	MR-20	-	-	0.000	AN	SS	-	Aeron	MRKS	-	-
1992-S02	2448621.50	1992	MR-20	-	-	0.000	AN	SS	-	Aeron	MRKS	-	-
1997-S07	2450479.58	1997 Jan 31 01:55:08	MR-12	?	AGRE (D75MG)	0.000	IDG/APL	SS	IDG/APL/Partridge	Plasma/Active	KL38-244	-	-
1997-S08	2450494.59	1997 Feb 5 02:16:07	MR-12	-	AGRE (D75MG)	0.000	IDG/APL	SS	IDG/APL/Partridge	Plasma/Active	KL38-244	-	-
2011-S85	2455944.50	2011 Dec 19?	MR-30	-	-	0.000	RCHS	SS	RCHS/	Test	Wire	-	-
2012-S90	2456078.50	2012 May 31	MR-30	-	-	0.000	RCHS	SS	RCHS/	Test	Wire	-	-
2014-S18	2456743.43	2014 Mar 26 22:25	MR-300	-	MR-300	0.000	RCHS	SF	RCHS/	Test	Wire	-	-
2015-S96	2457269.06	2015 Sep 3 13:23	MR-300	-	MR-300	0.000	RCHS	SF	RCHS/	Test	Krebs	-	-











Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Agency	Launch_Code	Group	Category	LTCite	Cite	Notes
1975-S269	2443840-06	1978 Nov 27 1520	MR-UR-1000 15A16	-	67065-508(11L)	RVSN	MF	-	OT	BML	Kosmodrom0105	St210Sep
1975-467	2443873-50	1979	MR-UR-100	-	-	RVSN	MF	-	OT	RML	-	-
1975-468	2443968-50	1979 Mar 26	MR-UR-100	-	-	RVSN	MF	-	OT	RPCA	-	-
1975-S266	2443968-05	1979 May 21 1315	MR-UR-1000 15A16	-	45065-509(12L)	RVSN	MS	-	OT	BML	Kosmodrom0105	PP
1975-S138	2444015-05	1979 May 31 1245	MR-UR-1000 15A16	-	51065-510(13L)	RVSN	MS	-	OT	BML	Kosmodrom0105	PP
1975-S142	2444025-03	1979 Jun 26 0400	MR-UR-1000 15A16	-	67087-401(14L)	RVSN	MS	-	OT	BML	Kosmodrom0105	PP
1975-S152	2444054-04	1979 Jun 29 1255	MR-UR-1000 15A16	-	67087-514-20T	RVSN	MS	-	OT	BML	Kosmodrom0105	PP
1975-S163	2444075-01	1979 Jul 20 1220	MR-UR-1000 15A16	-	51087-507(10L)	RVSN	MS	-	OT	BML	Kosmodrom0105	PP
1975-S177	2444089-28	1979 Aug 2 1130	MR-UR-1000 15A16	-	51087-403(16L)	RVSN	MS	-	OT	BML	Kosmodrom0105	PP
1975-S178	2444089-98	1979 Aug 3 1854	MR-UR-1000 15A16	-	67087-404(17L)	RVSN	MS	-	OT	BML	Kosmodrom0105	PP
1975-S195	2444116-21	1979 Aug 30 1700	MR-UR-1000 15A16	-	45087-405(18L)	RVSN	MS	-	OT	BML	Kosmodrom0105	PP
1975-461	2444131-31	1979 Sep 14 1920	MR-UR-1000 15A16	-	45087-402(16L)	RVSN	MS	-	OT	BML	Kosmodrom0105	PP
1975-S201	2444131-31	1979 Sep 14 1920	MR-UR-1000 15A16	-	45067-524-14T	RVSN	MS	-	OT	BML	Kosmodrom0105	PP
1975-S241	2444193-04	1979 Nov 15 1255	Perimetr 15A11	-	67067-401(1L)	RVSN	MS	-	Test	RPCA	-	-
1975-S202	2444233-50	1979 Dec 27T	Perimetr 15A11	-	-	RVSN	MS	-	OT	RML	-	-
1980-S263	2444234-50	1979 Dec 27T	Perimetr 15A11	-	-	RVSN	MS	-	OT	RML	-	-
1980-S263	2444305-00	1980 Mar 6 1200	MR-UR-1000 15A16	-	45033-416-45	RVSN	MS	-	OT	BML	Kosmodrom0105	-
1980-S263	2444347-67	1980 Apr 18 0400	MR-UR-1000 15A16	-	45067-524-13T	RVSN	MS	-	OT	BML	Kosmodrom0105	-
1980-S263	2444471-50	1980 Aug 20	MR-UR-100	-	-	RVSN	MS	-	OT	RPCA	-	-
1981-S229	2444771-50	1981 Jun 16	MR-UR-100	-	-	RVSN	MS	-	OT	RPCA	-	-
1981-S229	2444794-50	1981 Jul 9	MR-UR-100	-	-	RVSN	MS	-	OT	RPCA	-	-
1981-S230	2444800-50	1981 Jul 15	MR-UR-100	-	-	RVSN	MS	-	OT	RPCA	-	-
1981-S231	2444806-50	1981 Jul 23	MR-UR-100	-	-	RVSN	MS	-	OT	RPCA	-	-
1981-S232	2444861-50	1981 Sep 14	MR-UR-100	-	-	RVSN	MS	-	OT	RPCA	-	-
1981-S233	2444865-31	1981 Sep 17 1920	MR-UR-1000 15A16	-	45067-524-11	RVSN	MS	-	OT	BML	RPCA	-
1981-S234	2444865-50	1981 Sep 16	MR-UR-100	-	-	RVSN	MS	-	OT	RPCA	-	-
1981-S234	2444929-67	1981 Nov 21 0649:23	Perimetr 15A11	-	51033-625(7L)	RVSN	MS	-	Test	RPCA	RPCA	-
1982-S01	2444996-14	1982 Jan 28 1515	Perimetr 15A11	-	45033-621(2L)	RVSN	MF	-	Test	BML	RPCA	-
1982-S268	2445016-50	1982 Feb 16	MR-UR-1000 15A16	-	-	RVSN	MS	-	OT	RPCA	-	-
1982-S268	2445020-50	1982 Feb 20	MR-UR-100	-	-	RVSN	MS	-	OT	RPCA	-	-
1982-S268	2445050-50	1982 Mar 22	MR-UR-100	-	-	RVSN	MS	-	OT	RPCA	-	-
1982-S267	2445051-50	1982 Mar 23	MR-UR-100	-	-	RVSN	MS	-	OT	RPCA	-	-
1982-S01	2445066-14	1982 Apr 26 1519:59	Perimetr 15A11	-	67033-623(4L)	RVSN	MS	-	Test	BML	RPCA	-
1982-S02	2445150-15	1982 Jun 29 1550:07	Perimetr 15A11	-	45033-624(6L)	RVSN	MS	-	Test	BML	RPCA	-
1982-S03	2445264-97	1982 Oct 22 1114:55	Perimetr 15A11	-	45067-402(6L)	RVSN	MS	-	Test	BML	RPCA	-
1982-S04	2445297-50	1982 Nov 24	Perimetr 15A11	-	51033-622(3L)	RVSN	MS	-	Test	BML	RPCA	-
1983-S01	2445410-99	1983 Mar 17 1140	Perimetr 15A11	-	67065-626(6L)	RVSN	MS	-	Test	RPCA	-	-
1983-S272	2445611-50	1983 Oct 27 1425	MR-UR-1000 15A16	-	51099-601(9L)	RVSN	MS	-	Test	RPCA	-	BML1238 or 1140
1984-S01	2445727-16	1984 Jan 27 1625	Perimetr 15A11	-	51099-601(9L)	RVSN	MS	-	Test	BML	RPCA	-
1984-S128	2445808-24	1984 Apr 17 1742	Perimetr 15A11	-	45095-601(10L)	RVSN	MS	-	Test	BML	Zaloga	-
1984-S128	2445808-27	1984 Oct 31 1655	MR-UR-100	-	45095-601(10L)	RVSN	MS	-	OT	BML	RPCA	-
1987-S226	2446938-50	1987 May 30	MR-UR-100	-	51034-41-503	RVSN	MS	-	OT	RPCA	-	-
1987-S227	2446938-50	1987 May 23	MR-UR-100	-	51035-41-502	RVSN	MS	-	OT	RPCA	-	-
1988-S202	2447272-13	1988 Apr 20 1510	Perimetr 15A11	-	51029-604	RVSN	MS	-	Test	BML	RPCA	-





Launch

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Mission	FlightCode	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee_Km	Range_Km	Dest
1980-S213	2444571.50	1980 Nov 28	MSBS M4	-	1	-	-	-	-	CEL	BLB	-	-	800?	-	-
1981-S02	2444604.50	1981?	MSBS M4	-	2	-	-	-	-	CEL	BLB	-	-	800?	-	-
1981-A01	2444604.50	1981	MSBS M4	-	3	-	-	-	-	CEL	BLB	-	-	0?	-	-
1981-S03	2444604.50	1981	MSBS M4	-	4	-	-	-	-	CEL	BLB	-	-	800?	-	-
1981-S04	2444604.50	1981?	MSBS M4	-	5	-	-	-	-	CEL	BLB	-	-	800?	-	-
1982-S05	2444969.50	1982?	MSBS M4	-	6	-	-	-	-	CEL	BLB	-	-	800?	-	-
1982-S06	2444969.50	1982?	MSBS M4	-	7	-	-	-	-	CEL	BLB	-	-	800?	-	-
1982-S74	2445038.50	1982 Mar 10	MSBS M4	-	8	-	-	-	-	CEL	-	-	-	800?	-	-
1982-S07	2444969.50	1982?	MSBS M4	-	-	-	-	-	-	CEL	-	-	-	800?	-	-
1982-S08	2444969.50	1982?	MSBS M4	-	-	-	-	-	-	CEL	-	-	-	800?	-	-
1983-S124	2445334.50	1983 Jul 12	MSBS M4	-	-	-	-	-	-	CEL	-	-	-	800?	-	-
1983-S02	2445527.50	1983	MSBS M4	-	-	-	-	-	-	CEL	-	-	-	800?	-	-
1983-S207	2445661.50	1983 Nov 23	MSBS M4	-	13	-	-	-	-	BRET	-	-	-	800?	-	-
1984-S62	2445759.50	1984 Feb 29	MSBS M4	-	14	-	-	-	-	CEL	-	-	-	800?	-	-
1984-S100	2445693.50	1984 Jul 12	MSBS M4	-	-	-	-	-	-	CEL	-	-	-	800?	-	-
1986-S26	2446499.50	1986 Mar	MSBS M4	-	-	-	M45 development?	-	-	CEL	-	-	-	800?	-	-
1987-S271	2447053.50	1987 Sep 15	MSBS M4	-	-	Long range test	-	-	-	BRET?	-	-	-	800?	6000	-
1988-S13	2449762.50	1988 Feb 14	MSBS M45	-	1	-	-	-	-	BRET?	-	-	-	800?	-	-
1988-A13	2450345.50	1988 Sep 19	MSBS M45	-	2	-	-	-	-	BRET	-	-	-	40?	-	-
1989-S29	2451302.50	1989 May 4	MSBS M45	-	3	-	-	-	-	BRET?	-	-	-	800?	-	-
1989-S30	2451302.50	1989 May 4	MSBS M4	?	-	Venglaire	-	-	-	BRET?	-	-	-	800?	-	-
2001-S17	2452017.42	2001 Apr 17 2200	MSBS M45	-	4	M51 RMD (Co CSG)	-	-	-	BRET	-	-	-	800?	-	-
2004-S20	2453156.42	2004 Jun 1 2201	MSBS M45	-	5	ME-54 Teutates	-	-	-	BRET	-	-	-	800?	-	-
2005-S04	2453402.50	2005 Feb 1	MSBS M45	-	6?	-	-	-	-	BRET	-	-	-	800?	-	-



Launch

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	OrbPay	Agency	Launch_Code	Group	Category	LT/Cite	Cite	Notes
1980-5213	2444571.50	1980 Nov 28	MSBS M4	-	1	0.000	DMA	MS	-	Test	deCordemoy	-	-
1981-502	2444604.50	1981?	MSBS M4	-	2	0.000	DMA	MS	-	Test	JCI	-	-
1981-401	2444604.50	1981?	MSBS M4	-	3	0.000	DMA	MF	-	Test	Villain	-	-
1981-503	2444604.50	1981	MSBS M4	-	4	0.000	DMA	MS	-	Test	Villain	-	-
1981-504	2444604.50	1981?	MSBS M4	-	5	0.000	DMA	MS	-	Test	Villain	-	-
1982-505	2444995.50	1982?	MSBS M4	-	6	0.000	DMA	MS	-	Test	Villain	-	-
1982-506	2444995.50	1982?	MSBS M4	-	7	0.000	DMA	MS	-	Test	Villain	-	-
1982-574	2445038.50	1982 Mar 10	MSBS M4	-	8	0.000	DMA	MS	-	Test	deCordemoy	-	-
1982-507	2444995.50	1982?	MSBS M4	-	-	0.000	DMA	MS	-	Test	Villain	-	-
1982-508	2444995.50	1982?	MSBS M4	-	-	0.000	DMA	MS	-	Test	Villain	-	-
1983-5124	244534.50	1983 Jul 12	MSBS M4	-	-	0.000	DMA	MS	-	Test	JCI	-	-
1983-502	244534.50	1983	MSBS M4	-	-	0.000	DMA	MS	-	Test	Villain	-	-
1983-5207	2445661.50	1983 Nov 23	MSBS M4	-	13	0.000	DMA	MS	-	Test	JCI	-	-
1984-562	2445759.50	1984 Feb 29	MSBS M4	-	14	0.000	DMA	MS	-	Test	JCI	-	-
1984-5100	2445693.50	1984 Jul 12	MSBS M4	-	-	0.000	DMA	MS	-	Test	fas.org	-	-
1986-526	2446489.50	1986 Mar	MSBS M4	-	-	0.000	DMA	MS	-	Test	deCordemoy	-	-
1987-5271	2447053.50	1987 Sep 15	MSBS M4	-	-	0.000	DMA	MS	-	Test	www.fas.org	-	-
1986-513	2449762.50	1986 Feb 14	MSBS M45	-	-	0.000	DMA	MS	-	Test	Aerospatiale-WWJ	-	-
1996-413	2450345.50	1996 Sep 19	MSBS M45	-	1	0.000	DMA	MS	-	Test	www.fas.org	-	-
1999-529	2451302.50	1999 May 4	MSBS M45	-	2	0.000	DMA	MF	-	Test	obsarm.org	-	-
1999-530	2451302.50	1999 May 4	MSBS M45	-	3	0.000	DMA	MS	-	Test	www.netmarine.net	-	-
2001-517	2452017.42	2001 Apr 17 2200	MSBS M45	?	-	0.000	DMA	MS	-	Test	www.netmarine.net	-	-
2004-520	2453158.42	2004 Jun 1 2201	MSBS M45	-	4	0.000	DMA	MS	-	Test	www.crbireport.com	-	-
2005-504	2453402.50	2005 Feb 1	MSBS M45	-	5	0.000	DMA	MS	-	Test	www.crbireport.com	-	-
				-	6?	0.000	DMA	MS	-	Test	defense.gouv.fr	-	-



Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Launch_Mission	FlightCode	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee_Km	Range_Km	Dest
1964-H16	2439483.59	1964 Mar 29 0212	MT-135	-	PT-135-1	Propellant Test	-	-	-	MASC	-	-	-	51	-	-
1964-A108	2439600.59	1964 Jul 24 0207:00	MT-135	-	MT-135-001	-	-	-	-	MASC	-	-	-	49	-	-
1964-A106	2438713.59	1964 Nov 14 0210:00	MT-135	-	MT-135-002	-	-	-	-	MASC	-	-	-	55	-	-
1964-H107	2438714.80	1964 Nov 19 0710:00	MT-135	-	MT-135-003	-	-	-	-	MASC	-	-	-	55	-	-
1965-H35	2438828.59	1965 Mar 09 0210:00	MT-135	-	MT-135-004	-	-	-	-	MASC	-	-	-	53	-	-
1965-H39	2438830.59	1965 Mar 11 0207:00	MT-135	-	MT-135-005	-	-	-	-	MASC	-	-	-	60	-	-
1965-H40	2438830.80	1965 Mar 11 0707:00	MT-135	-	MT-135-006	-	-	-	-	MASC	-	-	-	50	-	-
1965-H94	2438943.60	1965 Jul 08 0226:00	MT-135	-	MT-135-007	-	-	-	-	MASC	-	-	-	50	-	-
1965-H95	2438943.97	1965 Jul 09 1110:00	MT-135	-	MT-135-008	-	-	-	-	MASC	-	-	-	50?	-	-
1965-H96	2438953.59	1965 Jul 12 0207:00	MT-135	-	MT-135-009	-	-	-	-	MASC	-	-	-	48	-	-
1965-H137	2439032.58	1965 Sep 29 0700:00	MT-135	-	MT-135-010	-	-	-	-	MASC	-	-	-	51	-	-
1965-H136	2439032.79	1965 Sep 29 0700:00	MT-135	-	MT-135-011	-	-	-	-	MASC	-	-	-	54	-	-
1965-H139	2439143.59	1966 Jan 18 0210:00	MT-135	-	MT-135-012	-	-	-	-	MASC	-	-	-	59	-	-
1966-H17	2439144.94	1966 Jan 19 1030:00	MT-135	-	MT-135-014	-	-	-	-	MASC	-	-	-	53	-	-
1966-H21	2439144.58	1966 Jan 19 0200:00	MT-135	-	MT-135-013	-	-	-	-	MASC	-	-	-	54	-	-
1966-H246	2439245.60	1966 Apr 30 0220:00	MT-135	-	MT-135-015	-	-	-	-	MASC	-	-	-	55	-	-
1966-H247	2439245.94	1966 Apr 30 1040:00	MT-135	-	MT-135-016	-	-	-	-	MASC	-	-	-	55	-	-
1966-H249	2439247.58	1966 May 02 0200:00	MT-135	-	MT-135-017	-	-	-	-	MASC	-	-	-	45	-	-
1966-H56	2439346.73	1966 Aug 11 0630	MT-135	-	MT-135-018	-	-	-	-	MASC	-	-	-	52	-	-
1966-H307	2439355.56	1966 Aug 18 0200:00	MT-135	-	MT-135-019	-	-	-	-	MASC	-	-	-	44	-	-
1966-H356	2439359.59	1966 Sep 21 0210:00	MT-135	-	MT-135-A -020	-	-	-	-	MASC	-	-	-	65	-	-
1966-H120	2439411.60	1966 Oct 13 0226:00	MT-135	-	MT-135-021	-	-	-	-	MASC	-	-	-	60	-	-
1967-H26	2439509.56	1967 Jan 19 0200:00	MT-135	-	MT-135-022	-	-	-	-	MASC	-	-	-	63	-	-
1967-H29	2439512.56	1967 Jan 22 0600:00	MT-135	-	MT-135-023	-	-	-	-	MASC	-	-	-	62	-	-
1967-H30	2439512.71	1967 Jan 22 0600:00	MT-135	-	MT-135-024	-	-	-	-	MASC	-	-	-	59	-	-
1967-H31	2439512.63	1967 Jan 22 0600:00	MT-135	-	MT-135-025	-	-	-	-	MASC	-	-	-	59	-	-
1967-H33	2439514.56	1967 Jan 24 0200:00	MT-135	-	MT-135-026	-	-	-	-	VI	-	-	-	54	-	-
1967-H74	2439581.27	1967 Mar 31 1626	MT-135	-	MT-135-027	-	-	-	-	VI	-	-	-	54	-	-
1967-H76	2439584.66	1967 Apr 4 0910	MT-135	-	MT-135-028	-	-	-	-	VI	-	-	-	57	-	-
1967-H78	2439584.91	1967 Apr 4 1107	MT-135	-	MT-135-029	-	-	-	-	VI	-	-	-	54	-	-
1967-H80	2439585.00	1967 Apr 4 1107	MT-135	-	MT-135-030	-	-	-	-	VI	-	-	-	56	-	-
1967-H82	2439585.19	1967 Apr 4 1156	MT-135	-	MT-135-031	-	-	-	-	VI	-	-	-	56	-	-
1967-H83	2439585.45	1967 Apr 4 2244	MT-135	-	MT-135-032	-	-	-	-	VI	-	-	-	56	-	-
1967-H86	2439585.51	1967 Apr 5 0015	MT-135	-	MT-135-033	-	-	-	-	VI	-	-	-	54	-	-
1967-H90	2439585.54	1967 Apr 5 0101	MT-135	-	MT-135-034	-	-	-	-	VI	-	-	-	56	-	-
1967-H92	2439585.66	1967 Apr 5 0333	MT-135	-	MT-135-035	-	-	-	-	VI	-	-	-	56	-	-
1968-H184	2440114.56	1968 Sep 19 0200:00	MT-135	-	MT-135-036	-	-	-	-	MASC	-	-	-	56	-	-
1968-H186	2440114.72	1968 Sep 19 0518:00	MT-135	-	MT-135-037	-	-	-	-	MASC	-	-	-	56	-	-
1968-H16	2440226.76	1968 Jan 04 0200:00	MT-135	-	MT-135-038	-	-	-	-	MASC	-	-	-	57	-	-
1968-H19	2440226.71	1968 Jan 04 0200:00	MT-135	-	MT-135-039	-	-	-	-	MASC	-	-	-	59	-	-
1968-H20	2440226.51	1968 Jan 04 0200:00	MT-135	-	MT-135-040	-	-	-	-	MASC	-	-	-	44	-	-
1968-H60	2440226.71	1968 Jan 05 0500	MT-135P	-	MT-135P-01	-	-	-	-	MASC	-	-	-	44	-	-
1968-H102	2440470.56	1968 Sep 09 0200:00	MT-135	-	MT-135P-04	-	-	-	-	MASC	-	-	-	47	-	-
1968-H118	2440470.71	1968 Sep 09 0500:00	MT-135	-	MT-135P-042	-	-	-	-	MASC	-	-	-	49	-	-
1968-H136	2440471.56	1968 Sep 07 0200:00	MT-135P	-	MT-135P-002	-	-	-	-	MASC	-	-	-	53	-	-
1968-H135	2440471.56	1968 Sep 07 0200:00	MT-135P	-	MT-135P-003	-	-	-	-	MASC	-	-	-	52	-	-
1968-H1315	2440491.59	1968 Sep 27 0500:00	MT-135P	-	MT-135P-043	-	-	-	-	MASC	-	-	-	46	-	-
1968-H165	2440508.71	1968 Sep 27 0500:00	MT-135P	-	MT-135P-004	-	-	-	-	MASC	-	-	-	43	-	-
1970-H145	2440509.60	1970 Jan 22 0500:00	MT-135P	-	MT-135P-R1	Range Test	-	-	-	MASC	-	-	-	44	-	-
1970-H142	2440792.56	1970 Jul 15 0200	MT-135P	-	MT-135P-R2	Range Test	-	-	-	MASC	-	-	-	50	-	-
1970-H144	2440933.58	1970 Aug 19 0200	MT-135P	-	MT-135P-R3	-	-	-	-	MASC	-	-	-	47	-	-
1970-H143	2440931.55	1970 Aug 19 0210	MT-135P	-	MT-135P-R4	-	-	-	-	MASC	-	-	-	47	-	-
1970-H144	2440931.60	1970 Sep 2 0200	MT-135P	-	MT-135P-R4	-	-	-	-	MASC	-	-	-	49	-	-
1970-H145	2440930.58	1970 Oct 14 0200	MT-135P	-	MT-135P-R7	-	-	-	-	MASC	-	-	-	47	-	-
1970-H146	2440932.58	1970 Oct 14 0200	MT-135P	-	MT-135P-R6	-	-	-	-	MASC	-	-	-	50	-	-
1970-H188	2440987.58	1970 Nov 12 0200	MT-135P	-	MT-135P-R9	-	-	-	-	MASC	-	-	-	48	-	-
1970-H189	2440992.58	1970 Nov 25 0200	MT-135P	-	MT-135P-R9	-	-	-	-	MASC	-	-	-	49	-	-
1970-H147	2440931.58	1970 Nov 25 0200	MT-135P	-	MT-135P-R10	-	-	-	-	MASC	-	-	-	49	-	-
1970-H148	2440930.58	1970 Dec 10 0200	MT-135P	-	MT-135P-R11	-	-	-	-	MASC	-	-	-	54	-	-
1970-H190	2440943.60	1970 Dec 23 0200	MT-135P	-	MT-135P-R12	-	-	-	-	MASC	-	-	-	51	-	-
1971-H1692	2440967.58	1971 Jan 6 0201	MT-135P	-	MT-135P-R13	-	-	-	-	MASC	-	-	-	43	-	-
1971-H113	2440964.58	1971 Jan 13 0200	MT-135P	-	MT-135P-R14	-	-	-	-	MASC	-	-	-	50	-	-
1971-H114	2440971.58	1971 Jan 20 0200	MT-135P	-	MT-135P-R15	-	-	-	-	MASC	-	-	-	48	-	-
1971-H114	2440978.58	1971 Jan 27 0200	MT-135P	-	MT-135P-R16	-	-	-	-	MASC	-	-	-	57	-	-
1971-H1694	2440986.58	1971 Feb 3 0200	MT-135P	-	MT-135P-R17	-	-	-	-	MASC	-	-	-	53	-	-
1971-H1695	2440983.58	1971 Feb 11 0200	MT-135P	-	MT-135P-R18	-	-	-	-	MASC	-	-	-	51	-	-
1971-H1696	2441000.58	1971 Feb 18 0200	MT-135P	-	MT-135P-R19	-	-	-	-	MASC	-	-	-	50	-	-
1971-H1115	2441014.58	1971 Feb 18 0200	MT-135P	-	MT-135P-R20	-	-	-	-	MASC	-	-	-	51	-	-
1971-H1697	2441021.58	1971 Mar 11 0200	MT-135P	-	MT-135P-R21	-	-	-	-	MASC	-	-	-	56	-	-
1971-H1698	2441034.58	1971 Mar 14 0200	MT-135P	-	MT-135P-R22	-	-	-	-	MASC	-	-	-	54	-	-
1971-H1699	2441048.58	1971 Mar 21 0200	MT-135P	-	MT-135P-R23	-	-	-	-	MASC	-	-	-	54	-	-
1971-H1700	2441062.58	1971 Apr 7 0200	MT-135P	-	MT-135P-R24	-	-	-	-	MASC	-	-	-	55	-	-
1971-H1701	2441077.58	1971 May 6 0200	MT-135P	-	MT-135P-R25	-	-	-	-	MASC	-	-	-	49	-	-
1971-H1702	2441083.58	1971 May 12 0200	MT-135P	-	MT-135P-T1	-	-	-	-	MASC	-	-	-	50?	-	-
1972-H170	2441349.79	1972 Feb 7 0656	MT-135P	-	MT-135P-T2	-	-	-	-	THISSC	T	-	-	50?	-	-
1972-H190	2441354.78	1972 Feb 7 0645	MT-135P	-	-	-	-	-	-	THISSC	T	-	-	50?	-	-
1972-H26	2441354.78	1972 Feb 7 0645	MT-135P	-	-	-	-	-	-	VI	-	-	-	50?	-	-
1972-H25	2441397.14	1972 Mar 16 1516	MT-135P	-	-	-	-	-	-	VI	-	-	-	50?	-	-
1972-H25	2441397.36	1972 Mar 20 2032	MT-135P	-	-	-	-	-	-	VI	-	-	-	50?	-	-
1972-H1088	2441569.56	1972 Aug 30 0130	MT-135P	-	MT-135P-T3	-	-	-	-	THISSC	T	-	-	52	-	-
1972-H1089	2441569.76	1972 Aug 30 0615	MT-135P	-	MT-135P-T4	-	-	-	-	THISSC	T	-	-	58	-	-
1973-H181	2441718.58	1973 Feb 5 0152	MT-135P	-	MT-135P-T5	-	-	-	-	THISSC	T	-	-	50?	-	-
1973-H203	2441721.56	1973 Feb 8 0130	MT-135P	-	MT-135P-T6	-	-	-	-	THISSC	T	-	-	57	-	-
1973-H1122	2441930.58	1973 Sep 5 0157	MT-135P	-	MT-135P-T7	-	-	-	-	THISSC	T	-	-	50?	-	-
1973-H1123	2441930.77	1973 Sep 5 0630	MT-135P	-	MT-135P-T8	-	-	-	-	THISSC	T	-	-	50?	-	-

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Launch_Mission	FlightCode	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee_Km	Range_Km	Dest
1974-H1626	2442076-58	1974 Jan 29 0200	MT-138P	-	MT138P-R139	-	-	-	RYD	-	-	-	60	-	-
1974-H1627	2442066-58	1974 Jan 9 0200	MT-138P	-	MT138P-R144	-	-	-	RYD	-	-	-	60	-	-
1974-H1628	2442070-58	1974 Jan 23 0200	MT-138P	-	MT138P-R145	-	-	-	RYD	-	-	-	60	-	-
1974-H1629	2442078-58	1974 Jan 31 0200	MT-138P	-	MT138P-R146	-	-	-	RYD	-	-	-	60	-	-
1974-H1630	2442080-56	1974 Feb 2 0130	MT-138P	-	MT138P-T9	-	-	-	THSC	T	-	-	50?	-	-
1974-H1631	2442084-55	1974 Feb 6 0205	MT-138P	-	MT138P-R147	-	-	-	RYD	-	-	-	50?	-	-
1974-H1632	2442088-77	1974 Feb 10 0630	MT-138P	-	MT138P-T10	-	-	-	THSC	T	-	-	50?	-	-
1974-H1633	2442098-58	1974 Feb 20 0200	MT-138P	-	MT138P-R148	-	-	-	RYD	-	-	-	60	-	-
1974-H1634	2442119-59	1974 Feb 27 0200	MT-138P	-	MT138P-R149	-	-	-	RYD	-	-	-	60	-	-
1974-H1635	2442126-58	1974 Mar 13 0204	MT-138P	-	MT138P-R150	-	-	-	RYD	-	-	-	60	-	-
1974-H1636	2442133-58	1974 Mar 27 0200	MT-138P	-	MT138P-R151	-	-	-	RYD	-	-	-	60	-	-
1974-H1637	2442147-59	1974 Apr 4 0200	MT-138P	-	MT138P-R152	-	-	-	RYD	-	-	-	60	-	-
1974-H1638	2442154-59	1974 Apr 17 0205	MT-138P	-	MT138P-R153	-	-	-	RYD	-	-	-	60	-	-
1974-H1639	2442161-58	1974 Apr 24 0200	MT-138P	-	MT138P-R154	-	-	-	RYD	-	-	-	60	-	-
1974-H1640	2442168-58	1974 May 1 0200	MT-138P	-	MT138P-R155	-	-	-	RYD	-	-	-	60	-	-
1974-H1641	2442175-58	1974 May 8 0200	MT-138P	-	MT138P-R156	-	-	-	RYD	-	-	-	60	-	-
1974-H1642	2442183-58	1974 May 16 0200	MT-138P	-	MT138P-R157	-	-	-	RYD	-	-	-	60	-	-
1974-H1643	2442189-59	1974 May 22 0210	MT-138P	-	MT138P-R158	-	-	-	RYD	-	-	-	60	-	-
1974-H1644	2442211-60	1974 Jun 13 0230	MT-138P	-	MT138P-R161	-	-	-	RYD	-	-	-	60	-	-
1974-H1645	2442224-56	1974 Jun 25 0200	MT-138P	-	MT138P-R162	-	-	-	RYD	-	-	-	60	-	-
1974-H1646	2442246-59	1974 Jul 17 0205	MT-138P	-	MT138P-R163	-	-	-	RYD	-	-	-	60	-	-
1974-H1647	2442252-60	1974 Jul 24 0220	MT-138P	-	MT138P-R164	-	-	-	RYD	-	-	-	60	-	-
1974-H1648	2442266-56	1974 Aug 7 0200	MT-138P	-	MT138P-R165	-	-	-	RYD	-	-	-	60	-	-
1974-H1649	2442280-59	1974 Aug 21 0200	MT-138P	-	MT138P-R166	-	-	-	RYD	-	-	-	60	-	-
1974-H1650	2442297-59	1974 Aug 28 0205	MT-138P	-	MT138P-R167	-	-	-	RYD	-	-	-	60	-	-
1974-H1651	2442295-56	1974 Sep 3 0130	MT-138P	-	MT138P-T11	-	-	-	THSC	T	-	-	50?	-	-
1974-H1652	2442295-75	1974 Sep 3 0600	MT-138P	-	MT138P-T12	-	-	-	THSC	T	-	-	50?	-	-
1974-H1653	2442294-59	1974 Sep 4 0210	MT-138P	-	MT138P-R169	-	-	-	RYD	-	-	-	60	-	-
1974-H1654	2442301-56	1974 Sep 11 0200	MT-138P	-	MT138P-R170	-	-	-	RYD	-	-	-	60	-	-
1974-H1655	2442306-60	1974 Sep 16 0230	MT-138P	-	MT138P-R168	-	-	-	RYD	-	-	-	60	-	-
1974-H1656	2442322-56	1974 Oct 2 0200	MT-138P	-	MT138P-R171	-	-	-	RYD	-	-	-	60	-	-
1974-H1657	2442329-56	1974 Oct 9 0200	MT-138P	-	MT138P-R172	-	-	-	RYD	-	-	-	60	-	-
1974-H1658	2442336-56	1974 Oct 16 0200	MT-138P	-	MT138P-R173	-	-	-	RYD	-	-	-	60	-	-
1974-H1659	2442350-56	1974 Oct 30 0200	MT-138P	-	MT138P-R174	-	-	-	RYD	-	-	-	60	-	-
1974-H1660	2442357-56	1974 Nov 13 0200	MT-138P	-	MT138P-R175	-	-	-	RYD	-	-	-	60	-	-
1974-H1661	2442364-56	1974 Nov 19 0200	MT-138P	-	MT138P-R176	-	-	-	RYD	-	-	-	60	-	-
1974-H1662	2442371-56	1974 Nov 27 0202	MT-138P	-	MT138P-R177	-	-	-	RYD	-	-	-	60	-	-
1974-H1663	2442376-56	1974 Dec 1 0200	MT-138P	-	MT138P-R178	-	-	-	RYD	-	-	-	60	-	-
1974-H1664	2442385-56	1974 Dec 8 0200	MT-138P	-	MT138P-R179	-	-	-	RYD	-	-	-	60	-	-
1974-H1665	2442392-56	1974 Dec 21 0200	MT-138P	-	MT138P-R180	-	-	-	RYD	-	-	-	60	-	-
1975-H11	2442400-56	1975 Jan 20 0130	MT-138P	-	MT138P-R181	-	-	-	THSC	T	-	-	50?	-	-
1975-H111	2442426-56	1975 Feb 10 0130	MT-138P	-	MT138P-T13	-	-	-	THSC	T	-	-	50?	-	-
1975-H1109	2442466-54	1975 Sep 10 0130	MT-138P	-	MT138P-T14	-	-	-	THSC	T	-	-	50?	-	-
1975-H1306	2443061-56	1976 Sep 19 0130	MT-138P	-	MT138P-T15	-	-	-	THSC	T	-	-	50?	-	-
1975-H1362	2443046-56	1976 Sep 23 0130	MT-138P	-	MT138P-T16	-	-	-	THSC	T	-	-	50?	-	-
1975-H1362	2443088-56	1977 Sep 24 0130	MT-138P	-	MT138P-T18	-	-	-	THSC	T	-	-	50?	-	-
1977-H1302	2443278-56	1977 Feb 23 0130	MT-138P	-	MT138P-T19	-	-	-	THSC	T	-	-	55?	-	-
1977-H1402	2443381-56	1977 Aug 26 0130	MT-138P	-	MT138P-T20	-	-	-	THSC	T	-	-	50?	-	-
1978-H1902	2443564-56	1978 Feb 19 0130	MT-138P	-	MT138P-T21	-	-	-	THSC	T	-	-	50?	-	-
1978-H881	2443744-57	1978 Feb 24 0145	MT-138P	-	MT138P-T22	-	-	-	THSC	T	-	-	50?	-	-
1978-H889	2443746-56	1978 Aug 26 0130	MT-138P	-	MT138P-T23	-	-	-	THSC	T	-	-	50?	-	-
1979-H1665	2443983-56	1979 Jan 17 0200	MT-138P	-	MT138P-R236	-	-	-	RYD	-	-	-	64	-	-
1979-H1666	2443980-55	1979 Jan 17 0210	MT-138P	-	MT138P-R237	-	-	-	RYD	-	-	-	64	-	-
1979-H1667	2443987-55	1979 Jan 24 0204	MT-138P	-	MT138P-R238	-	-	-	RYD	-	-	-	63	-	-
1979-H1669	2443904-55	1979 Jan 31 0207	MT-138P	-	MT138P-R239	-	-	-	RYD	-	-	-	63	-	-
1979-H1670	2443911-56	1979 Feb 7 0200	MT-138P	-	MT138P-T24	-	-	-	THSC	T	-	-	50?	-	-
1979-H1671	2443918-58	1979 Feb 14 0202	MT-138P	-	MT138P-R240	-	-	-	RYD	-	-	-	60	-	-
1979-H171	2443925-58	1979 Feb 21 0200	MT-138P	-	MT138P-R241	-	-	-	RYD	-	-	-	60	-	-
1979-H172	2443939-58	1979 Feb 28 0200	MT-138P	-	MT138P-R242	-	-	-	RYD	-	-	-	63	-	-
1979-H173	2443946-58	1979 Mar 7 0200	MT-138P	-	MT138P-R243	-	-	-	RYD	-	-	-	61	-	-
1979-H174	2443946-58	1979 Mar 14 0200	MT-138P	-	MT138P-R244	-	-	-	RYD	-	-	-	64	-	-
1979-H1745	2443974-59	1979 Mar 28 0200	MT-138P	-	MT138P-R245	-	-	-	RYD	-	-	-	59	-	-
1979-H1746	2443974-59	1979 Apr 11 0204	MT-138P	-	MT138P-R246	-	-	-	RYD	-	-	-	64	-	-
1979-H1747	2443988-58	1979 Apr 18 0211	MT-138P	-	MT138P-R247	-	-	-	RYD	-	-	-	65	-	-
1979-H1748	2444002-58	1979 Apr 25 0200	MT-138P	-	MT138P-R248	-	-	-	RYD	-	-	-	61	-	-
1979-H1749	2444009-59	1979 May 9 0200	MT-138P	-	MT138P-R249	-	-	-	RYD	-	-	-	60	-	-
1979-H1780	2444016-58	1979 May 16 0215	MT-138P	-	MT138P-R250	-	-	-	RYD	-	-	-	65	-	-
1979-H1481	2444023-58	1979 May 30 0200	MT-138P	-	MT138P-R251	-	-	-	RYD	-	-	-	61	-	-
1979-H1482	2444030-58	1979 Jun 6 0200	MT-138P	-	MT138P-R252	-	-	-	RYD	-	-	-	62	-	-
1979-H1483	2444044-58	1979 Jun 20 0200	MT-138P	-	MT138P-R253	-	-	-	RYD	-	-	-	64	-	-
1979-H843	2444064-58	1979 Jun 20 0200	MT-138P	-	MT138P-R254	-	-	-	RYD	-	-	-	64	-	-
1979-H902	2444072-58	1979 Jul 18 0200	MT-138P	-	MT138P-R255	-	-	-	RYD	-	-	-	59	-	-
1979-H952	2444086-58	1979 Aug 1 0200	MT-138P	-	MT138P-R257	-	-	-	RYD	-	-	-	62	-	-
1979-H997	2444100-58	1979 Aug 15 0200	MT-138P	-	MT138P-R258	-	-	-	RYD	-	-	-	61	-	-
1979-H1032	2444112-56	1979 Aug 27 0130	MT-138P	-	MT138P-T25	-	-	-	THSC	T	-	-	50?	-	-
1979-H1033	2444112-75	1979 Aug 27 0600	MT-138P	-	MT138P-T26	-	-	-	THSC	T	-	-	50?	-	-
1979-H1484	2444122-58	1979 Sep 6 0200	MT-138P	-	MT138P-R259	-	-	-	RYD	-	-	-	64	-	-
1979-H1086	2444128-59	1979 Sep 12 0203	MT-138P	-	MT138P-R260	-	-	-	RYD	-	-	-	59	-	-
1979-H1143	2444142-58	1979 Sep 26 0200:00	MT-138P	-	MT138P-R261	-	-	-	RYD	-	-	-	57	-	-
1979-H1172	2444149-58	1979 Oct 3 0200:00	MT-138P	-	MT138P-R262	-	-	-	RYD	-	-	-	57	-	-
1979-H1217	2444163-58	1979 Oct 17 0200:00	MT-138P	-	MT138P-R263	-	-	-	RYD	-	-	-	57	-	-
1979-H1249	2444170-58	1979 Oct 24 0200:00	MT-138P	-	MT138P-R264	-	-	-	RYD	-	-	-	58	-	-

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Launch_Mission	FlightCode	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee_Km	Range_Km	Dest
1979-11.310	2444184.59	1979 Nov 7 02:14:00	MT-135P	-	MT135P-R365	-	-	-	-	RYD	-	-	-	59	-	-
1979-11.332	2444191.58	1979 Nov 14 02:00:00	MT-135P	-	MT135P-R366	-	-	-	-	RYD	-	-	-	58	-	-
1979-11.468	2444205.58	1979 Nov 28 02:00:00	MT-135P	-	MT135P-R367	-	-	-	-	RYD	-	-	-	57	-	-
1979-11.389	2444212.58	1979 Dec 5 02:00:00	MT-135P	-	MT135P-R368	-	-	-	-	RYD	-	-	-	55	-	-
1979-11.404	2444219.58	1979 Dec 12 02:00:00	MT-135P	-	MT135P-R369	-	-	-	-	RYD	-	-	-	57	-	-
1979-11.427	2444226.58	1979 Dec 19 02:00:00	MT-135P	-	MT135P-R370	-	-	-	-	RYD	-	-	-	54	-	-
1979-11.462	2444233.58	1979 Dec 26 02:01:00	MT-135P	-	MT135P-R371	-	-	-	-	RYD	-	-	-	54	-	-
1980-1.258	2444247.58	1980 Jan 9 02:00:00	MT-135P	-	MT135P-R372	-	-	-	-	RYD	-	-	-	54	-	-
1980-1.652	2444254.58	1980 Jan 16 02:00:00	MT-135P	-	MT135P-R373	-	-	-	-	RYD	-	-	-	53	-	-
1980-1.137	2444262.58	1980 Jan 23 02:00:00	MT-135P	-	MT135P-R374	-	-	-	-	RYD	-	-	-	55	-	-
1980-1.164	2444269.58	1980 Feb 6 02:00:00	MT-135P	-	MT135P-R375	-	-	-	-	RYD	-	-	-	55	-	-
1980-1.176	2444292.58	1980 Feb 20 02:00:00	MT-135P	-	MT135P-R376	-	-	-	-	RYD	-	-	-	55?	-	-
1980-1.149	2444296.58	1980 Feb 27 02:00:00	MT-135P	-	MT135P-T27	-	-	-	-	THSC	-	-	-	60	-	-
1980-1.150	2444303.58	1980 Mar 5 02:02:00	MT-135P	-	MT135P-R377	-	-	-	-	RYD	-	-	-	60	-	-
1980-1.151	2444311.60	1980 Mar 13 02:20:00	MT-135P	-	MT135P-R378	-	-	-	-	RYD	-	-	-	53	-	-
1980-1.277	2444317.58	1980 Mar 19 02:00:00	MT-135P	-	MT135P-R379	-	-	-	-	RYD	-	-	-	55	-	-
1980-1.305	2444324.58	1980 Mar 26 02:00:00	MT-135P	-	MT135P-R380	-	-	-	-	RYD	-	-	-	57	-	-
1980-1.346	2444338.58	1980 Mar 26 02:04:59	MT-135P	-	MT135P-R381	-	-	-	-	RYD	-	-	-	56	-	-
1980-1.356	2444346.59	1980 Apr 9 02:04:59	MT-135P	-	MT135P-R382	-	-	-	-	RYD	-	-	-	56	-	-
1980-1.375	2444359.59	1980 Apr 16 02:10:00	MT-135P	-	MT135P-R383	-	-	-	-	RYD	-	-	-	57	-	-
1980-1.424	2444359.59	1980 Apr 30 02:10:00	MT-135P	-	MT135P-R384	-	-	-	-	RYD	-	-	-	56	-	-
1980-1.454	2444367.58	1980 May 8 02:01:00	MT-135P	-	MT135P-R385	-	-	-	-	RYD	-	-	-	57	-	-
1980-1.472	2444373.58	1980 May 14 02:00:00	MT-135P	-	MT135P-R386	-	-	-	-	RYD	-	-	-	56	-	-
1980-1.497	2444380.58	1980 May 21 02:00:00	MT-135P	-	MT135P-R387	-	-	-	-	RYD	-	-	-	57	-	-
1980-1.619	2444387.59	1980 May 28 02:10:00	MT-135P	-	MT135P-R388	-	-	-	-	RYD	-	-	-	56	-	-
1980-1.645	2444394.58	1980 Jun 4 02:00:00	MT-135P	-	MT135P-R389	-	-	-	-	RYD	-	-	-	56	-	-
1980-1.674	2444401.58	1980 Jun 11 02:01:00	MT-135P	-	MT135P-R390	-	-	-	-	RYD	-	-	-	57	-	-
1980-1.624	2444416.59	1980 Jun 25 02:03:00	MT-135P	-	MT135P-R391	-	-	-	-	RYD	-	-	-	60	-	-
1980-1.151	2444429.60	1980 Jul 9 02:28	MT-135P	-	MT135P-R392	-	-	-	-	RYD	-	-	-	53	-	-
1980-1.701	2444443.58	1980 Jul 23 02:00:00	MT-135P	-	MT135P-R393	-	-	-	-	RYD	-	-	-	58	-	-
1980-1.744	2444457.58	1980 Aug 6 02:00:00	MT-135P	-	MT135P-R394	-	-	-	-	RYD	-	-	-	58	-	-
1980-1.756	2444471.58	1980 Aug 20 02:01:00	MT-135P	-	MT135P-R395	-	-	-	-	RYD	-	-	-	58	-	-
1980-1.821	2444485.58	1980 Sep 3 02:00:00	MT-135P	-	MT135P-R396	-	-	-	-	RYD	-	-	-	58	-	-
1980-1.862	2444495.58	1980 Sep 13 01:30	MT-135P	-	MT135P-T28	-	-	-	-	THSC	-	-	-	50?	-	-
1980-1.874	2444497.56	1980 Sep 15 01:30	MT-135P	-	MT135P-T28	-	-	-	-	THSC	-	-	-	50?	-	-
1980-1.894	2444499.58	1980 Sep 17 02:00:00	MT-135P	-	MT135P-R397	-	-	-	-	RYD	-	-	-	56	-	-
1980-1.874	2444499.58	1980 Sep 17 02:00:00	MT-135P	-	MT135P-R397	-	-	-	-	RYD	-	-	-	56	-	-
1980-1.920	2444513.59	1980 Oct 1 02:13:00	MT-135P	-	MT135P-R398	-	-	-	-	RYD	-	-	-	58	-	-
1980-1.943	2444520.59	1980 Oct 8 02:04:59	MT-135P	-	MT135P-R399	-	-	-	-	RYD	-	-	-	58	-	-
1980-1.963	2444534.59	1980 Oct 22 02:10:00	MT-135P	-	MT135P-R400	-	-	-	-	RYD	-	-	-	58	-	-
1980-1.1068	2444541.58	1980 Oct 29 02:00:00	MT-135P	-	MT135P-R401	-	-	-	-	RYD	-	-	-	57	-	-
1980-1.1084	2444562.58	1980 Nov 12 02:00:00	MT-135P	-	MT135P-R402	-	-	-	-	RYD	-	-	-	60	-	-
1980-1.1282	2444562.58	1980 Nov 12 02:00:00	MT-135P	-	MT135P-R403	-	-	-	-	RYD	-	-	-	59	-	-
1980-1.1068	2444572.58	1980 Nov 26 02:00:00	MT-135P	-	MT135P-R404	-	-	-	-	RYD	-	-	-	59	-	-
1980-1.1068	2444583.58	1980 Dec 5 02:02:00	MT-135P	-	MT135P-R405	-	-	-	-	RYD	-	-	-	52	-	-
1980-1.1104	2444583.58	1980 Dec 10 02:00:00	MT-135P	-	MT135P-R405	-	-	-	-	RYD	-	-	-	52	-	-
1980-1.1121	2444591.59	1980 Dec 17 02:03:59	MT-135P	-	MT135P-R406	-	-	-	-	RYD	-	-	-	57	-	-
1981-1.114	2444591.59	1981 Jan 7 02:03:59	MT-135P	-	MT135P-R407	-	-	-	-	RYD	-	-	-	53	-	-
1981-1.111	2444591.59	1981 Jan 14 02:00:00	MT-135P	-	MT135P-R408	-	-	-	-	RYD	-	-	-	57	-	-
1981-1.141	2444596.58	1981 Jan 22 02:00:00	MT-135P	-	MT135P-R409	-	-	-	-	RYD	-	-	-	57	-	-
1981-1.141	2444596.58	1981 Jan 22 02:00:00	MT-135P	-	MT135P-R410	-	-	-	-	RYD	-	-	-	58	-	-
1981-1.150	2444620.58	1981 Jan 26 02:20:00	MT-135P	-	MT135P-R411	-	-	-	-	RYD	-	-	-	59	-	-
1981-1.150	2444620.58	1981 Jan 26 02:20:00	MT-135P	-	MT135P-R412	-	-	-	-	RYD	-	-	-	59	-	-
1981-1.160	2444627.58	1981 Feb 6 02:04:59	MT-135P	-	MT135P-T30	-	-	-	-	THSC	-	-	-	60?	-	-
1981-1.160	2444627.58	1981 Feb 6 02:04:59	MT-135P	-	MT135P-T30	-	-	-	-	THSC	-	-	-	60?	-	-
1981-1.160	2444633.58	1981 Feb 16 02:00:00	MT-135P	-	MT135P-R413	-	-	-	-	RYD	-	-	-	61	-	-
1981-1.120	2444674.58	1981 Feb 26 02:00:00	MT-135P	-	MT135P-R414	-	-	-	-	RYD	-	-	-	56	-	-
1981-1.115	2444681.58	1981 Mar 11 02:01:59	MT-135P	-	MT135P-R415	-	-	-	-	RYD	-	-	-	58	-	-
1981-1.175	2444681.58	1981 Mar 18 02:03:59	MT-135P	-	MT135P-R416	-	-	-	-	RYD	-	-	-	52	-	-
1981-1.198	2444689.59	1981 Mar 26 02:03:59	MT-135P	-	MT135P-R417	-	-	-	-	RYD	-	-	-	55	-	-
1981-1.232	2444703.58	1981 Apr 8 02:00:00	MT-135P	-	MT135P-R418	-	-	-	-	RYD	-	-	-	56	-	-
1981-1.277	2444709.58	1981 Apr 15 02:00:00	MT-135P	-	MT135P-R419	-	-	-	-	RYD	-	-	-	56	-	-
1981-1.268	2444716.58	1981 Apr 22 02:03:59	MT-135P	-	MT135P-R420	-	-	-	-	RYD	-	-	-	55	-	-
1981-1.308	2444723.58	1981 Apr 29 02:00:00	MT-135P	-	MT135P-R421	-	-	-	-	RYD	-	-	-	58	-	-
1981-1.327	2444737.58	1981 Apr 29 02:00:00	MT-135P	-	MT135P-R422	-	-	-	-	RYD	-	-	-	58	-	-
1981-1.354	2444744.58	1981 May 13 02:15:59	MT-135P	-	MT135P-R423	-	-	-	-	RYD	-	-	-	57	-	-
1981-1.372	2444754.58	1981 May 20 02:00:00	MT-135P	-	MT135P-R424	-	-	-	-	RYD	-	-	-	58	-	-
1981-1.372	2444754.58	1981 May 27 02:03:00	MT-135P	-	MT135P-R425	-	-	-	-	RYD	-	-	-	55	-	-
1981-1.412	2444765.58	1981 Jun 10 02:00:00	MT-135P	-	MT135P-R426	-	-	-	-	RYD	-	-	-	54	-	-
1981-1.442	2444779.58	1981 Jun 24 02:00:00	MT-135P	-	MT135P-R427	-	-	-	-	RYD	-	-	-	54	-	-
1981-1.474	2444783.58	1981 Jul 8 02:00:00	MT-135P	-	MT135P-R428	-	-	-	-	RYD	-	-	-	53	-	-
1981-1.503	2444808.58	1981 Jul 23 02:00:00	MT-135P	-	MT135P-R429	-	-	-	-	RYD	-	-	-	53	-	-
1981-1.534	2444822.59	1981 Aug 6 02:07:00	MT-135P	-	MT135P-R430	-	-	-	-	RYD	-	-	-	54	-	-
1981-1.558	2444836.58	1981 Aug 20 02:00:00	MT-135P	-	MT135P-R431	-	-	-	-	RYD	-	-	-	54	-	-
1981-1.579	2444849.60	1981 Sep 2 02:20:00	MT-135P	-	MT135P-R432	-	-	-	-	RYD	-	-	-	60	-	-
1981-1.628	2444864.58	1981 Sep 17 02:00	MT-135P	-	MT135P-R433	-	-	-	-	RYD	-	-	-	51	-	-
1981-1.641	2444877.58	1981 Sep 30 02:00:00	MT-135P	-	MT135P-R434	-	-	-	-	RYD	-	-	-	51	-	-
1981-1.663	2444884.58	1981 Oct 7 02:00:00	MT-135P	-	MT135P-R435	-	-	-	-	RYD	-	-	-	60	-	-
1981-1.629	2444908.58	1981 Oct 21 02:00	MT-135P	-	MT135P-R436	-	-	-	-	RYD	-	-	-	54	-	-
1981-1.696	2444905.58	1981 Oct 28 02:00:00	MT-135P	-	MT135P-R437	-	-	-	-	RYD	-	-	-	52	-	-
1981-1.723	2444919.58	1981 Oct 28 02:00:00	MT-135P	-	MT135P-R438	-	-	-	-	RYD	-	-	-	55	-	-
1981-1.756	2444927.58	1981 Nov 11 02:02:00	MT-135P	-	MT135P-R439	-	-	-	-	RYD	-	-	-	58	-	-
1981-1.766	2444933.59	1981 Nov 19 02:00:00	MT-135P	-	MT135P-R440	-	-	-	-	RYD	-	-	-	58	-	-
1981-1.782	2444941.58	1981 Nov 25 02:04:59	MT-135P	-	MT135P-R441	-	-	-								



Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Launch_Mission	FlightCode	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee_Km	Range_Km	Dest
1982-1064	2444986-58	1982 Jan 27 0200:00	MT-135P	-	MT135P-R447	-	-	-	-	RYD	-	-	-	55	-	-
1982-1065	2445002-56	1982 Feb 2 0130	MT-135P	-	MT135P T31	-	-	-	-	THSC	-	-	-	507	-	-
1982-1066	2445003-56	1982 Feb 3 0130	MT-135P	-	MT135P T32	-	-	-	-	THSC	-	-	-	507	-	-
1982-1067	2445004-56	1982 Feb 3 0215:59	MT-135P	-	MT135P-R448	-	-	-	-	RYD	-	-	-	56	-	-
1982-1068	2445005-58	1982 Feb 17 0200:00	MT-135P	-	MT135P-R449	-	-	-	-	RYD	-	-	-	55	-	-
1982-1069	2445006-58	1982 Feb 24 0200:00	MT-135P	-	MT135P-R450	-	-	-	-	RYD	-	-	-	55	-	-
1982-1070	2445007-58	1982 Mar 10 0201:00	MT-135P	-	MT135P-R451	-	-	-	-	RYD	-	-	-	24	-	-
1982-1071	2445008-58	1982 Mar 17 0220:00	MT-135P	-	MT135P-R452	-	-	-	-	RYD	-	-	-	48	-	-
1982-1072	2445009-60	1982 Mar 24 0201:00	MT-135P	-	MT135P-R453	-	-	-	-	RYD	-	-	-	58	-	-
1982-1073	2445010-58	1982 Apr 7 0200:00	MT-135P	-	MT135P-R454	-	-	-	-	RYD	-	-	-	53	-	-
1982-1074	2445011-58	1982 Apr 14 0202:00	MT-135P	-	MT135P-R455	-	-	-	-	RYD	-	-	-	55	-	-
1982-1075	2445012-58	1982 Apr 21 0200:00	MT-135P	-	MT135P-R456	-	-	-	-	RYD	-	-	-	55	-	-
1982-1076	2445013-58	1982 Apr 28 0200:00	MT-135P	-	MT135P-R457	-	-	-	-	RYD	-	-	-	60	-	-
1982-1077	2445014-58	1982 May 5 0200:00	MT-135P	-	MT135P-R458	-	-	-	-	RYD	-	-	-	54	-	-
1982-1078	2445015-58	1982 May 12 0200:00	MT-135P	-	MT135P-R459	-	-	-	-	RYD	-	-	-	43	-	-
1982-1079	2445016-58	1982 May 19 0200:00	MT-135P	-	MT135P-R460	-	-	-	-	RYD	-	-	-	53	-	-
1982-1080	2445017-58	1982 May 26 0200:00	MT-135P	-	MT135P-R461	-	-	-	-	RYD	-	-	-	57	-	-
1982-1081	2445018-58	1982 Jun 2 0202:00	MT-135P	-	MT135P-R462	-	-	-	-	RYD	-	-	-	56	-	-
1982-1082	2445019-58	1982 Jun 9 0202:00	MT-135P	-	MT135P-R463	-	-	-	-	RYD	-	-	-	56	-	-
1982-1083	2445020-56	1982 Jun 16 0200:00	MT-135P	-	MT135P-R464	-	-	-	-	RYD	-	-	-	56	-	-
1982-1084	2445021-56	1982 Jun 23 0200:00	MT-135P	-	MT135P-R465	-	-	-	-	RYD	-	-	-	53	-	-
1982-1085	2445022-56	1982 Jul 7 0200:00	MT-135P	-	MT135P-R466	-	-	-	-	RYD	-	-	-	56	-	-
1982-1086	2445023-56	1982 Jul 14 0200:00	MT-135P	-	MT135P-R467	-	-	-	-	RYD	-	-	-	53	-	-
1982-1087	2445024-56	1982 Jul 21 0225:00	MT-135P	-	MT135P-R468	-	-	-	-	RYD	-	-	-	55	-	-
1982-1088	2445025-56	1982 Aug 5 0200:00	MT-135P	-	MT135P-R469	-	-	-	-	RYD	-	-	-	55	-	-
1982-1089	2445026-56	1982 Aug 12 0200:00	MT-135P	-	MT135P-R470	-	-	-	-	RYD	-	-	-	54	-	-
1982-1090	2445027-56	1982 Aug 19 0212:00	MT-135P	-	MT135P-R471	-	-	-	-	RYD	-	-	-	54	-	-
1982-1091	2445028-56	1982 Sep 5 0130	MT-135P	-	MT135P-R472	-	-	-	-	RYD	-	-	-	57	-	-
1982-1092	2445029-56	1982 Sep 12 0200:00	MT-135P	-	MT135P-R473	-	-	-	-	RYD	-	-	-	56	-	-
1982-1093	2445030-56	1982 Sep 19 0200:00	MT-135P	-	MT135P-R474	-	-	-	-	RYD	-	-	-	56	-	-
1982-1094	2445031-56	1982 Sep 26 0200:00	MT-135P	-	MT135P-R475	-	-	-	-	RYD	-	-	-	57	-	-
1982-1095	2445032-56	1982 Oct 3 0200:00	MT-135P	-	MT135P-R476	-	-	-	-	RYD	-	-	-	54	-	-
1982-1096	2445033-56	1982 Oct 10 0200:00	MT-135P	-	MT135P-R477	-	-	-	-	RYD	-	-	-	55	-	-
1982-1097	2445034-56	1982 Oct 17 0200:00	MT-135P	-	MT135P-R478	-	-	-	-	RYD	-	-	-	56	-	-
1982-1098	2445035-56	1982 Oct 24 0200:00	MT-135P	-	MT135P-R479	-	-	-	-	RYD	-	-	-	56	-	-
1982-1099	2445036-56	1982 Oct 31 0200:00	MT-135P	-	MT135P-R480	-	-	-	-	RYD	-	-	-	56	-	-
1982-1100	2445037-56	1982 Nov 7 0200:00	MT-135P	-	MT135P-R481	-	-	-	-	RYD	-	-	-	57	-	-
1982-1101	2445038-56	1982 Nov 14 0200:00	MT-135P	-	MT135P-R482	-	-	-	-	RYD	-	-	-	57	-	-
1982-1102	2445039-56	1982 Nov 21 0200:00	MT-135P	-	MT135P-R483	-	-	-	-	RYD	-	-	-	55	-	-
1982-1103	2445040-56	1982 Nov 28 0200:00	MT-135P	-	MT135P-R484	-	-	-	-	RYD	-	-	-	57	-	-
1982-1104	2445041-56	1982 Dec 5 0200:00	MT-135P	-	MT135P-R485	-	-	-	-	RYD	-	-	-	57	-	-
1982-1105	2445042-56	1982 Dec 12 0200:00	MT-135P	-	MT135P-R486	-	-	-	-	RYD	-	-	-	57	-	-
1982-1106	2445043-56	1982 Dec 19 0200:00	MT-135P	-	MT135P-R487	-	-	-	-	RYD	-	-	-	57	-	-
1982-1107	2445044-56	1982 Dec 26 0200:00	MT-135P	-	MT135P-R488	-	-	-	-	RYD	-	-	-	54	-	-
1982-1108	2445045-56	1982 Jan 2 0200:00	MT-135P	-	MT135P-R489	-	-	-	-	RYD	-	-	-	54	-	-
1982-1109	2445046-56	1982 Jan 9 0200:00	MT-135P	-	MT135P-R490	-	-	-	-	RYD	-	-	-	56	-	-
1982-1110	2445047-56	1982 Jan 16 0200:00	MT-135P	-	MT135P-R491	-	-	-	-	RYD	-	-	-	56	-	-
1982-1111	2445048-56	1982 Jan 23 0200:00	MT-135P	-	MT135P-R492	-	-	-	-	RYD	-	-	-	59	-	-
1982-1112	2445049-56	1982 Jan 30 0200:00	MT-135P	-	MT135P-R493	-	-	-	-	RYD	-	-	-	55	-	-
1982-1113	2445050-56	1982 Feb 6 0200:00	MT-135P	-	MT135P-R494	-	-	-	-	RYD	-	-	-	57	-	-
1982-1114	2445051-56	1982 Feb 13 0200:00	MT-135P	-	MT135P-R495	-	-	-	-	RYD	-	-	-	57	-	-
1982-1115	2445052-56	1982 Feb 20 0200:00	MT-135P	-	MT135P-R496	-	-	-	-	RYD	-	-	-	55	-	-
1982-1116	2445053-56	1982 Feb 27 0200:00	MT-135P	-	MT135P-R497	-	-	-	-	RYD	-	-	-	57	-	-
1982-1117	2445054-56	1982 Mar 6 0200:00	MT-135P	-	MT135P-R498	-	-	-	-	RYD	-	-	-	57	-	-
1982-1118	2445055-56	1982 Mar 13 0200:00	MT-135P	-	MT135P-R499	-	-	-	-	RYD	-	-	-	55	-	-
1982-1119	2445056-56	1982 Mar 20 0200:00	MT-135P	-	MT135P-R500	-	-	-	-	RYD	-	-	-	57	-	-
1982-1120	2445057-56	1982 Mar 27 0200:00	MT-135P	-	MT135P-R501	-	-	-	-	RYD	-	-	-	59	-	-
1982-1121	2445058-56	1982 Apr 3 0200:00	MT-135P	-	MT135P-R502	-	-	-	-	RYD	-	-	-	55	-	-
1982-1122	2445059-56	1982 Apr 10 0200:00	MT-135P	-	MT135P-R503	-	-	-	-	RYD	-	-	-	55	-	-
1982-1123	2445060-56	1982 Apr 17 0200:00	MT-135P	-	MT135P-R504	-	-	-	-	RYD	-	-	-	56	-	-
1982-1124	2445061-56	1982 Apr 24 0200:00	MT-135P	-	MT135P-R505	-	-	-	-	RYD	-	-	-	56	-	-
1982-1125	2445062-56	1982 May 1 0200:00	MT-135P	-	MT135P-R506	-	-	-	-	RYD	-	-	-	50	-	-
1982-1126	2445063-56	1982 May 8 0200:00	MT-135P	-	MT135P-R507	-	-	-	-	RYD	-	-	-	51	-	-
1982-1127	2445064-56	1982 May 15 0200:00	MT-135P	-	MT135P-R508	-	-	-	-	RYD	-	-	-	52	-	-
1982-1128	2445065-56	1982 May 22 0200:00	MT-135P	-	MT135P-R509	-	-	-	-	RYD	-	-	-	56	-	-
1982-1129	2445066-56	1982 May 29 0200:00	MT-135P	-	MT135P-R510	-	-	-	-	RYD	-	-	-	56	-	-
1982-1130	2445067-56	1982 Jun 5 0200:00	MT-135P	-	MT135P-R511	-	-	-	-	RYD	-	-	-	53	-	-
1982-1131	2445068-56	1982 Jun 12 0200:00	MT-135P	-	MT135P-R512	-	-	-	-	RYD	-	-	-	53	-	-
1982-1132	2445069-56	1982 Jun 19 0200:00	MT-135P	-	MT135P-R513	-	-	-	-	RYD	-	-	-	56	-	-
1982-1133	2445070-56	1982 Jun 26 0200:00	MT-135P	-	MT135P-R514	-	-	-	-	RYD	-	-	-	56	-	-
1982-1134	2445071-56	1982 Jul 3 0200:00	MT-135P	-	MT135P-R515	-	-	-	-	RYD	-	-	-	56	-	-
1982-1135	2445072-56	1982 Jul 10 0200:00	MT-135P	-	MT135P-R516	-	-	-	-	RYD	-	-	-	56	-	-
1982-1136	2445073-56	1982 Jul 17 0200:00	MT-135P	-	MT135P-R517	-	-	-	-	RYD	-	-	-	56	-	-
1982-1137	2445074-56	1982 Jul 24 0200:00	MT-135P	-	MT135P-R518	-	-	-	-	RYD	-	-	-	55	-	-
1982-1138	2445075-56	1982 Jul 31 0200:00	MT-135P	-	MT135P-R519	-	-	-	-	RYD	-	-	-	57	-	-
1982-1139	2445076-56	1982 Aug 7 0200:00	MT-135P	-	MT135P-R520	-	-	-	-	RYD	-	-	-	55	-	-
1982-1140	2445077-56	1982 Aug 14 0200:00	MT-135P	-	MT135P-R521	-	-	-	-	RYD	-	-	-	54	-	-
1982-1141	2445078-56	1982 Aug 21 0200:00	MT-135P	-	MT135P-R522	-	-	-	-	RYD	-	-	-	54	-	-
1982-1142	2445079-56	1982 Aug 28 0200:00	MT-135P	-	MT135P-R523	-	-	-	-	RYD	-	-	-	56	-	-
1982-1143	2445080-56	1982 Sep 4 0200:00	MT-135P	-	MT135P-R524	-	-	-	-	RYD	-	-	-	56	-	-
1982-1144	2445081-56	1982 Sep 11 0200:00	MT-135P	-	MT135P-R525	-	-	-	-	RYD	-	-	-	56	-	-
1982-1145	2445082-56	1982 Sep 18 0200:00	MT-135P	-	MT135P-R526	-	-	-	-	RYD	-	-	-	49	-	-
1982-1146	2445083-56	1982 Sep 25 0200:00	MT-135P	-	MT135P-R527	-	-	-	-	RYD	-	-	-	55	-	-
1982-1147	2445084-56	1982 Oct 2 0200:00	MT-135P	-	MT135P-R528	-	-	-	-	RYD	-	-	-	55	-	-
1982-1148	2445085-56	1982 Oct 9 0202:00	MT-135P	-	MT135P-R529	-	-	-	-	RYD	-	-	-	5		

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Launch_Mission	FlightCode	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee_Km	Range_Km	Dest
1984-W181	2445536-58	1984 May 16 02:00:00	MT-135P	-	MT135P-R650	-	-	-	RYD	-	-	-	52	-	-
1984-W186	2445543-58	1984 May 23 02:00:00	MT-135P	-	MT135P-R651	-	-	-	RYD	-	-	-	51	-	-
1984-W190	2445550-58	1984 May 30 02:03:00	MT-135P	-	MT135P-R652	-	-	-	RYD	-	-	-	51	-	-
1984-W200	2445564-58	1984 Jun 13 02:00:00	MT-135P	-	MT135P-R653	-	-	-	RYD	-	-	-	53	-	-
1984-W207	2445571-58	1984 Jun 20 02:00:00	MT-135P	-	MT135P-R654	-	-	-	RYD	-	-	-	55	-	-
1984-W221	2445585-58	1984 Jul 4 02:00:00	MT-135P	-	MT135P-R655	-	-	-	RYD	-	-	-	54	-	-
1984-W233	2445599-58	1984 Jul 18 02:00:00	MT-135P	-	MT135P-R656	-	-	-	RYD	-	-	-	53	-	-
1984-W242	2445613-58	1984 Aug 1 02:00:00	MT-135P	-	MT135P-R657	-	-	-	RYD	-	-	-	60	-	-
1984-W447	2445927-60	1984 Aug 15 02:20:00	MT-135P	-	MT135P-R658	-	-	-	RYD	-	-	-	52	-	-
1984-W268	2445941-58	1984 Aug 29 02:00:00	MT-135P	-	MT135P-R659	-	-	-	RYD	-	-	-	53	-	-
1984-W293	2445962-58	1984 Sep 19 02:00:00	MT-135P	-	MT135P-R660	-	-	-	RYD	-	-	-	54	-	-
1984-W304	2445983-58	1984 Oct 10 02:00:00	MT-135P	-	MT135P-R661	-	-	-	RYD	-	-	-	55	-	-
1984-W329	2445997-58	1984 Oct 18 02:00:00	MT-135P	-	MT135P-R662	-	-	-	RYD	-	-	-	55	-	-
1984-W347	2445991-58	1984 Oct 24 02:01:00	MT-135P	-	MT135P-R663	-	-	-	RYD	-	-	-	56	-	-
1984-W351	2445997-58	1984 Oct 31 02:01:00	MT-135P	-	MT135P-R664	-	-	-	RYD	-	-	-	56	-	-
1984-W360	2446004-58	1984 Nov 7 02:00:00	MT-135P	-	MT135P-R665	-	-	-	RYD	-	-	-	56	-	-
1984-W369	2446018-58	1984 Nov 14 02:00:00	MT-135P	-	MT135P-R666	-	-	-	RYD	-	-	-	55	-	-
1984-W386	2446025-59	1984 Nov 21 02:04:59	MT-135P	-	MT135P-R667	-	-	-	RYD	-	-	-	52	-	-
1984-W406	2446039-59	1984 Dec 5 02:04:59	MT-135P	-	MT135P-R668	-	-	-	RYD	-	-	-	54	-	-
1984-W420	2446046-60	1984 Dec 12 02:00:00	MT-135P	-	MT135P-R669	-	-	-	RYD	-	-	-	56	-	-
1984-W428	2446053-58	1984 Dec 19 02:00:00	MT-135P	-	MT135P-R670	-	-	-	RYD	-	-	-	54	-	-
1984-W438	2446074-59	1985 Jan 9 02:04:59	MT-135P	-	MT135P-R671	-	-	-	RYD	-	-	-	53	-	-
1985-W06	2446081-58	1985 Jan 16 02:00:00	MT-135P	-	MT135P-R672	-	-	-	RYD	-	-	-	57	-	-
1985-W113	2446088-58	1985 Jan 23 02:02:00	MT-135P	-	MT135P-R673	-	-	-	RYD	-	-	-	56	-	-
1985-W354	2446096-06	1985 Jan 30 14:00	MT-135JA	-	MT135JA-1	-	-	SYM	-	-	-	-	60?	-	-
1985-W443	2446102-58	1985 Feb 6 02:00:00	MT-135P	-	MT135P-R675	-	-	-	RYD	-	-	-	56	-	-
1985-W64	2446109-58	1985 Feb 13 02:00:00	MT-135P	-	MT135P-R676	-	-	-	RYD	-	-	-	54	-	-
1985-W66	2446117-58	1985 Feb 21 02:00:00	MT-135P	-	MT135P-R677	-	-	-	RYD	-	-	-	56	-	-
1985-W69	2446123-58	1985 Feb 27 02:00:00	MT-135P	-	MT135P-R678	-	-	-	RYD	-	-	-	60	-	-
1985-W69	2446130-59	1985 Mar 6 02:05	MT-135P	-	MT135P-R679	-	-	-	RYD	-	-	-	55	-	-
1985-W80	2446136-58	1985 Mar 14 02:00:00	MT-135P	-	MT135P-R680	-	-	-	RYD	-	-	-	55	-	-
1985-W80	2446151-10	1985 Mar 20 14:30	MT-135JA	-	MT135JA-2	-	-	SYM	-	-	-	-	60	-	-
1985-W85	2446151-58	1985 Mar 27 02:00:00	MT-135P	-	MT135P-R681	-	-	-	RYD	-	-	-	57	-	-
1985-W89	2446165-58	1985 Apr 10 02:00:00	MT-135P	-	MT135P-R682	-	-	-	RYD	-	-	-	60	-	-
1985-W110	2446172-58	1985 Apr 17 02:00:00	MT-135P	-	MT135P-R683	-	-	-	RYD	-	-	-	56	-	-
1985-W125	2446179-58	1985 Apr 24 02:00:00	MT-135P	-	MT135P-R684	-	-	-	RYD	-	-	-	56	-	-
1985-W161	2446183-58	1985 May 8 02:00:00	MT-135P	-	MT135P-R685	-	-	-	RYD	-	-	-	56	-	-
1985-W163	2446200-58	1985 May 15 02:00:00	MT-135P	-	MT135P-R686	-	-	-	RYD	-	-	-	56	-	-
1985-W165	2446217-58	1985 May 22 02:00:00	MT-135P	-	MT135P-R687	-	-	-	RYD	-	-	-	59	-	-
1985-W170	2446228-59	1985 May 30 02:03:00	MT-135P	-	MT135P-R688	-	-	-	RYD	-	-	-	58	-	-
1985-W190	2446246-58	1985 Jun 12 02:00:00	MT-135P	-	MT135P-R689	-	-	-	RYD	-	-	-	58	-	-
1985-W190	2446251-58	1985 Jun 20 02:00:00	MT-135P	-	MT135P-R690	-	-	-	RYD	-	-	-	91	-	-
1985-W190	2446256-07	1985 Jun 28 13:35	MT-135JA	-	MT135JA-3	-	-	SYM	-	-	-	-	71	-	-
1985-W190	2446261-16	1985 Jun 28 16:16	MT-135JA	-	MT135JA-4	-	-	SYM	-	-	-	-	71	-	-
1985-W190	2446264-26	1985 Jun 29 16:10	MT-135JA	-	MT135JA-5	-	-	SYM	-	-	-	-	73	-	-
1985-W190	2446271-26	1985 Jun 29 16:10	MT-135JA	-	MT135JA-6	-	-	SYM	-	-	-	-	69	-	-
1985-W190	2446284-23	1985 Jun 29 21:52	MT-135JA	-	MT135JA-7	-	-	SYM	-	-	-	-	69	-	-
1985-W198	2446293-58	1985 Jul 3 02:00:00	MT-135P	-	MT135P-R671	-	-	-	RYD	-	-	-	57	-	-
1985-W209	2446299-58	1985 Jul 17 02:00:00	MT-135P	-	MT135P-R672	-	-	-	RYD	-	-	-	57	-	-
1985-W219	2446277-58	1985 Jul 31 02:00:00	MT-135P	-	MT135P-R673	-	-	-	RYD	-	-	-	57	-	-
1985-W241	2446291-58	1985 Aug 14 02:00:00	MT-135P	-	MT135P-R674	-	-	-	RYD	-	-	-	60	-	-
1985-W252	2446298-58	1985 Aug 21 02:00:00	MT-135P	-	MT135P-R675	-	-	-	RYD	-	-	-	60	-	-
1985-W263	2446305-58	1985 Aug 28 02:00	MT-135P	-	MT135P-R676	-	-	-	RYD	-	-	-	57	-	-
1985-W269	2446319-58	1985 Sep 11 02:01:00	MT-135P	-	MT135P-R677	-	-	-	RYD	-	-	-	57	-	-
1985-W285	2446327-58	1985 Sep 19 02:00:00	MT-135P	-	MT-135-4	-	-	KLASC	-	-	-	-	63	-	-
1985-W288	2446334-07	1985 Sep 28 14:00	MT-135JA	-	MT135JA-8	-	-	SYM	-	-	-	-	59	-	-
1985-W288	2446334-17	1985 Sep 28 14:00	MT-135JA	-	MT135JA-9	-	-	SYM	-	-	-	-	71	-	-
1985-W288	2446334-25	1985 Sep 28 16:00	MT-135JA	-	MT135JA-10	-	-	SYM	-	-	-	-	71	-	-
1985-W288	2446334-33	1985 Sep 28 18:00	MT-135JA	-	MT135JA-11	-	-	SYM	-	-	-	-	73	-	-
1985-W288	2446340-58	1985 Sep 28 20:00	MT-135JA	-	MT135JA-12	-	-	SYM	-	-	-	-	73	-	-
1985-W285	2446354-58	1985 Oct 16 02:00:00	MT-135P	-	MT135P-R679	-	-	-	RYD	-	-	-	51	-	-
1985-W285	2446354-58	1985 Oct 16 02:00:00	MT-135P	-	MT135P-R680	-	-	-	RYD	-	-	-	54	-	-
1985-W285	2446369-58	1985 Oct 31 02:00:00	MT-135P	-	MT135P-R681	-	-	-	RYD	-	-	-	54	-	-
1985-W110	2446375-59	1985 Nov 6 02:03:00	MT-135P	-	MT135P-R682	-	-	-	RYD	-	-	-	46	-	-
1985-W295	2446382-58	1985 Nov 13 02:00:00	MT-135P	-	MT135P-R683	-	-	-	RYD	-	-	-	58	-	-
1985-W298	2446389-58	1985 Nov 20 02:00:00	MT-135P	-	MT135P-R684	-	-	-	RYD	-	-	-	54	-	-
1985-W320	2446404-58	1985 Dec 5 02:01:00	MT-135P	-	MT135P-R685	-	-	-	RYD	-	-	-	55	-	-
1985-W330	2446410-59	1985 Dec 11 02:04:59	MT-135P	-	MT135P-R686	-	-	-	RYD	-	-	-	57	-	-
1985-W341	2446417-59	1985 Dec 18 02:04:59	MT-135P	-	MT135P-R687	-	-	-	RYD	-	-	-	57	-	-
1985-W347	2446424-58	1985 Dec 25 02:00:00	MT-135P	-	MT135P-R688	-	-	-	RYD	-	-	-	57	-	-
1986-W05	2446438-58	1986 Jan 8 02:00:00	MT-135P	-	MT135P-R689	-	-	-	RYD	-	-	-	57	-	-
1986-W113	2446446-58	1986 Jan 16 02:00:00	MT-135P	-	MT135P-R690	-	-	-	RYD	-	-	-	57	-	-
1986-W117	2446452-58	1986 Jan 22 02:00:00	MT-135P	-	MT135P-R691	-	-	-	RYD	-	-	-	57	-	-
1986-W25	2446466-58	1986 Feb 5 02:00:00	MT-135P	-	MT135P-R692	-	-	-	RYD	-	-	-	57	-	-
1986-W300	2446473-58	1986 Feb 12 02:00:00	MT-135P	-	MT135P-R693	-	-	-	RYD	-	-	-	53	-	-
1986-W220	2446481-58	1986 Feb 20 02:00	MT-135P	-	MT135P-R694	-	-	-	RYD	-	-	-	60	-	-
1986-W449	2446494-58	1986 Mar 5 02:00:00	MT-135P	-	MT135P-R695	-	-	-	RYD	-	-	-	52	-	-
1986-W166	2446501-58	1986 Mar 12 02:00:00	MT-135P	-	MT135P-R696	-	-	-	RYD	-	-	-	56	-	-
1986-W231	2446515-58	1986 Mar 26 02:00:00	MT-135P	-	MT135P-R697	-	-	-	RYD	-	-	-	56	-	-
1986-W776	2446530-58	1986 Apr 10 02:00	MT-135P	-	MT135P-R698	-	-	-	RYD	-	-	-	60	-	-
1986-W776	2446537-59	1986 Apr 17 02:04:59	MT-135P	-	MT135P-R699	-	-	-	RYD	-	-	-	57	-	-
1986-W80	2446544-58	1986 Apr 24 02:00:00	MT-135P	-	MT135P-R700	-	-	-	RYD	-	-	-	57	-	-
1986-W93	2446558-58	1986 May 8 02:00:00	MT-135P	-	MT135P-R701	-	-	-	RYD	-	-	-	59	-	-
1986-W97	2446564-58	1986 May 14 02:00:00	MT-135P	-	MT135P-R702	-	-	-	RYD	-	-	-	54	-	-
1986-W98	2446571-58	1986 May 21 02:00:00	MT-135P	-	MT135P-R703	-	-	-	RYD	-	-	-	58	-	-

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Launch_Mission	FlightCode	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee_Km	Range_Km	Dest
1986-H103	2446578-58	1986 May 28 02:00:00	MT-135P	-	MT-135P-R604	-	-	-	RYD	-	-	-	56	-	-
1986-H106	2446592-58	1986 Jun 11 02:00:00	MT-135P	-	MT-135P-R605	-	-	-	RYD	-	-	-	56	-	-
1986-H114	2446606-58	1986 Jun 25 02:00:00	MT-135P	-	MT-135P-R606	-	-	-	RYD	-	-	-	52	-	-
1986-H118	2446613-58	1986 Jul 2 02:00:00	MT-135P	-	MT-135P-R607	-	-	-	RYD	-	-	-	56	-	-
1986-H124	2446627-58	1986 Jul 16 02:01:00	MT-135P	-	MT-135P-R608	-	-	-	RYD	-	-	-	58	-	-
1986-H127	2446635-58	1986 Jul 24 02:00:00	MT-135P	-	MT-135P-R609	-	-	-	RYD	-	-	-	56	-	-
1986-H136	2446648-58	1986 Aug 6 02:00:00	MT-135P	-	MT-135P-R610	-	-	-	RYD	-	-	-	56	-	-
1986-H140	2446662-58	1986 Aug 20 02:00:00	MT-135P	-	MT-135P-R611	-	-	-	RYD	-	-	-	54	-	-
1986-H228	2446662-67	1986 Aug 20 02:20	MT-135	-	MT-135-45	SONDE	-	-	KASC	-	-	-	58	-	-
1986-H229	2446662-67	1986 Aug 27 04:00	MT-135	-	MT-135-46	SONDE	-	-	KASC	-	-	-	60?	-	-
1986-H148	2446669-58	1986 Aug 27 02:00:00	MT-135P	-	MT-135P-R612	-	-	-	RYD	-	-	-	52	-	-
1986-H154	2446683-58	1986 Sep 10 02:00:00	MT-135P	-	MT-135P-R613	-	-	-	RYD	-	-	-	54	-	-
1986-H166	2446697-58	1986 Sep 24 02:02:00	MT-135P	-	MT-135P-R614	-	-	-	RYD	-	-	-	54	-	-
1986-H232	2446711-58	1986 Oct 8 02:00	MT-135P	-	MT-135P-R615	-	-	-	RYD	-	-	-	54	-	-
1986-H186	2446718-58	1986 Oct 15 02:00:00	MT-135P	-	MT-135P-R616	-	-	-	RYD	-	-	-	54	-	-
1986-H193	2446726-58	1986 Oct 23 02:00:00	MT-135P	-	MT-135P-R617	-	-	-	RYD	-	-	-	54	-	-
1986-H202	2446732-59	1986 Oct 29 02:00:00	MT-135P	-	MT-135P-R618	-	-	-	RYD	-	-	-	54	-	-
1986-H148	2446746-58	1986 Nov 12 02:00:00	MT-135P	-	MT-135P-R619	-	-	-	RYD	-	-	-	53	-	-
1986-H213	2446753-58	1986 Nov 19 02:00:00	MT-135P	-	MT-135P-R620	-	-	-	RYD	-	-	-	54	-	-
1986-H218	2446767-58	1986 Dec 3 02:00:00	MT-135P	-	MT-135P-R621	-	-	-	RYD	-	-	-	55	-	-
1986-H222	2446774-58	1986 Dec 10 02:00:00	MT-135P	-	MT-135P-R622	-	-	-	RYD	-	-	-	56	-	-
1986-H225	2446781-58	1986 Dec 17 02:00:00	MT-135P	-	MT-135P-R623	-	-	-	RYD	-	-	-	55	-	-
1986-H225	2446788-58	1986 Dec 24 02:00:00	MT-135P	-	MT-135P-R624	-	-	-	RYD	-	-	-	55	-	-
1987-H314	2446802-58	1987 Jan 7 02:00	MT-135P	-	MT-135P-R625	-	-	-	RYD	-	-	-	60	-	-
1987-H22	2446816-58	1987 Jan 14 02:00:00	MT-135P	-	MT-135P-R626	-	-	-	RYD	-	-	-	51	-	-
1987-H30	2446831-58	1987 Feb 5 02:00:00	MT-135P	-	MT-135P-R627	-	-	-	RYD	-	-	-	55	-	-
1987-H42	2446844-58	1987 Feb 18 02:00:00	MT-135P	-	MT-135P-R628	-	-	-	RYD	-	-	-	57	-	-
1987-H61	2446851-58	1987 Feb 25 02:00:00	MT-135P	-	MT-135P-R629	-	-	-	RYD	-	-	-	56	-	-
1987-H65	2446865-58	1987 Mar 11 02:00:00	MT-135P	-	MT-135P-R630	-	-	-	RYD	-	-	-	56	-	-
1987-H65	2446872-58	1987 Mar 18 02:00:00	MT-135P	-	MT-135P-R631	-	-	-	RYD	-	-	-	56	-	-
1987-H77	2446879-58	1987 Mar 25 02:00:00	MT-135P	-	MT-135P-R632	-	-	-	RYD	-	-	-	56	-	-
1987-H90	2446893-58	1987 Apr 8 02:00:00	MT-135P	-	MT-135P-R633	-	-	-	RYD	-	-	-	56	-	-
1987-H109	2446906-58	1987 Apr 23 02:00:00	MT-135P	-	MT-135P-R634	-	-	-	RYD	-	-	-	57	-	-
1987-H117	2446914-58	1987 Apr 29 02:00:00	MT-135P	-	MT-135P-R635	-	-	-	RYD	-	-	-	56	-	-
1987-H129	2446928-58	1987 May 13 02:00:00	MT-135P	-	MT-135P-R636	-	-	-	RYD	-	-	-	59	-	-
1987-H135	2446935-58	1987 May 20 02:00:00	MT-135P	-	MT-135P-R637	-	-	-	RYD	-	-	-	57	-	-
1987-H140	2446942-58	1987 May 27 02:16:00	MT-135P	-	MT-135P-R638	-	-	-	RYD	-	-	-	57	-	-
1987-H151	2446956-60	1987 Jun 10 02:00:00	MT-135P	-	MT-135P-R639	-	-	-	RYD	-	-	-	56	-	-
1987-H161	2446963-58	1987 Jun 24 02:00:00	MT-135P	-	MT-135P-R640	-	-	-	RYD	-	-	-	56	-	-
1987-H169	2446970-58	1987 Jun 31 02:00:00	MT-135P	-	MT-135P-R641	-	-	-	RYD	-	-	-	56	-	-
1987-H178	2446984-58	1987 Jul 14 02:00:00	MT-135P	-	MT-135P-R642	-	-	-	RYD	-	-	-	56	-	-
1987-H194	2446998-58	1987 Jul 29 02:00:00	MT-135P	-	MT-135P-R643	-	-	-	RYD	-	-	-	58	-	-
1987-H203	2447033-58	1987 Aug 12 02:00:00	MT-135P	-	MT-135P-R644	-	-	-	RYD	-	-	-	58	-	-
1987-H212	2447026-58	1987 Aug 19 02:00:00	MT-135P	-	MT-135P-R645	-	-	-	RYD	-	-	-	58	-	-
1987-H216	2447036-58	1987 Aug 26 02:00:00	MT-135P	-	MT-135P-R646	-	-	-	RYD	-	-	-	58	-	-
1987-H219	2447047-58	1987 Sep 9 02:00:00	MT-135P	-	MT-135P-R647	SONDE	-	-	RYD	-	-	-	58	-	-
1987-H222	2447047-58	1987 Sep 9 02:12:00	MT-135P	-	MT-135P-R648	SONDE	-	-	RYD	-	-	-	58	-	-
1987-H313	2447047-58	1987 Sep 9 04:00	MT-135P	-	MT-135P-R648	-	-	-	RYD	-	-	-	58	-	-
1987-H315	2447061-58	1987 Sep 23 02:00	MT-135P	-	MT-135P-R649	-	-	-	RYD	-	-	-	58	-	-
1987-H316	2447068-58	1987 Sep 30 02:00	MT-135P	-	MT-135P-R649	-	-	-	RYD	-	-	-	58	-	-
1987-H318	2447076-58	1987 Sep 30 02:00	MT-135P	-	MT-135P-R650	-	-	-	RYD	-	-	-	60	-	-
1987-H248	2447092-58	1987 Oct 7 02:00:00	MT-135P	-	MT-135P-R651	-	-	-	RYD	-	-	-	60	-	-
1987-H256	2447099-60	1987 Oct 21 02:17:00	MT-135P	-	MT-135P-R652	-	-	-	RYD	-	-	-	57	-	-
1987-H263	2447098-58	1987 Oct 28 02:00:00	MT-135P	-	MT-135P-R653	-	-	-	RYD	-	-	-	57	-	-
1987-H272	2447110-58	1987 Nov 11 02:00:00	MT-135P	-	MT-135P-R654	-	-	-	RYD	-	-	-	55	-	-
1987-H278	2447117-58	1987 Nov 18 02:00:00	MT-135P	-	MT-135P-R654	-	-	-	RYD	-	-	-	55	-	-
1987-H285	2447125-58	1987 Nov 26 02:00:00	MT-135P	-	MT-135P-R655	-	-	-	RYD	-	-	-	55	-	-
1987-H302	2447138-58	1987 Dec 9 02:00:00	MT-135P	-	MT-135P-R656	-	-	-	RYD	-	-	-	55	-	-
1987-H310	2447148-58	1987 Dec 9 02:00:00	MT-135P	-	MT-135P-R657	-	-	-	RYD	-	-	-	52	-	-
1987-H317	2447155-58	1987 Dec 16 02:13:00	MT-135P	-	MT-135P-R658	-	-	-	RYD	-	-	-	54	-	-
1989-H01	2447163-58	1987 Dec 23 02:00	MT-135P	-	MT-135P-R659	-	-	-	RYD	-	-	-	60	-	-
1989-H01	2447166-60	1988 Jan 6 02:24:00	MT-135P	-	MT-135P-R660	-	-	-	RYD	-	-	-	60	-	-
1989-H233	2447173-58	1988 Jan 13 02:00	MT-135P	-	MT-135P-R661	-	-	-	RYD	-	-	-	57	-	-
1989-H09	2447180-58	1988 Jan 20 02:00:00	MT-135P	-	MT-135P-R662	-	-	-	RYD	-	-	-	57	-	-
1989-H28	2447201-58	1988 Feb 10 02:01:00	MT-135P	-	MT-135P-R663	-	-	-	RYD	-	-	-	56	-	-
1989-H28	2447208-58	1988 Feb 17 02:00:00	MT-135P	-	MT-135P-R664	-	-	-	RYD	-	-	-	55	-	-
1989-H36	2447215-58	1988 Feb 24 02:00:00	MT-135P	-	MT-135P-R665	-	-	-	RYD	-	-	-	55	-	-
1989-H234	2447229-58	1988 Mar 3 02:00	MT-135P	-	MT-135P-R666	-	-	-	RYD	-	-	-	55	-	-
1989-H234	2447229-58	1988 Mar 9 02:05	MT-135P	-	MT-135P-R667	-	-	-	RYD	-	-	-	60	-	-
1989-H69	2447237-58	1988 Mar 17 02:00:00	MT-135P	-	MT-135P-R668	-	-	-	RYD	-	-	-	57	-	-
1989-H67	2447260-58	1988 Mar 30 02:00:00	MT-135P	-	MT-135P-R669	-	-	-	RYD	-	-	-	55	-	-
1989-H66	2447265-58	1988 Apr 14 02:00:00	MT-135P	-	MT-135P-R670	-	-	-	RYD	-	-	-	55	-	-
1989-H94	2447271-58	1988 Apr 20 02:00:00	MT-135P	-	MT-135P-R671	-	-	-	RYD	-	-	-	54	-	-
1989-H07	2447278-58	1988 Apr 27 02:02:00	MT-135P	-	MT-135P-R672	-	-	-	RYD	-	-	-	58	-	-
1989-H105	2447292-59	1988 May 11 02:03:00	MT-135P	-	MT-135P-R673	-	-	-	RYD	-	-	-	53	-	-
1989-H111	2447306-58	1988 May 25 02:00:00	MT-135P	-	MT-135P-R674	-	-	-	RYD	-	-	-	52	-	-
1989-H115	2447313-58	1988 Jun 1 02:00:00	MT-135P	-	MT-135P-R675	-	-	-	RYD	-	-	-	52	-	-
1989-H121	2447320-58	1988 Jun 8 02:00:00	MT-135P	-	MT-135P-R676	-	-	-	RYD	-	-	-	55	-	-
1989-H236	2447327-58	1988 Jun 15 02:00	MT-135P	-	MT-135P-R677	-	-	-	RYD	-	-	-	60	-	-
1989-H132	2447341-58	1988 Jun 29 02:00:00	MT-135P	-	MT-135P-R678	-	-	-	RYD	-	-	-	57	-	-
1989-H136	2447355-59	1988 Jul 13 02:14:00	MT-135P	-	MT-135P-R679	-	-	-	RYD	-	-	-	56	-	-
1989-H138	2447369-58	1988 Jul 27 02:00:00	MT-135P	-	MT-135P-R680	-	-	-	RYD	-	-	-	56	-	-
1989-H141	2447377-58	1988 Aug 4 02:00:00	MT-135P	-	MT-135P-R681	-	-	-	RYD	-	-	-	53	-	-
1989-H146	2447391-58	1988 Aug 18 02:00:00	MT-135P	-	MT-135P-R682	-	-	-	RYD	-	-	-	55	-	-
1989-H152	2447404-58	1988 Aug 31 02:00:00	MT-135P	-	MT-135P-R683	-	-	-	RYD	-	-	-	54	-	-
1989-H232	2447415-60	1988 Sep 11 02:25	MT-135	-	MT-135-49	DMIP	-	-	KASC	-	-	-	58	-	-
1989-H237	2447418-58	1988 Sep 14 02:00	MT-135P	-	MT-135P-R684	-	-	-	RYD	-	-	-	60	-	-

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Launch_Mission	FlightCode	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee_Km	Range_Km	Dest
1986-H172	2447433-58	1986 Sep 29 02:00:00	MT-135P	-	MT-135P-R685	-	-	-	-	RYD	-	-	-	55	-	-
1986-H182	2447446-58	1986 Oct 12 02:02:00	MT-135P	-	MT-135P-R686	-	-	-	-	RYD	-	-	-	55	-	-
1986-H184	2447460-58	1986 Oct 26 02:00:00	MT-135P	-	MT-135P-R687	-	-	-	-	RYD	-	-	-	56	-	-
1986-H191	2447474-58	1986 Nov 9 02:00:00	MT-135P	-	MT-135P-R688	-	-	-	-	RYD	-	-	-	58	-	-
1986-H197	2447481-58	1986 Nov 16 02:00:00	MT-135P	-	MT-135P-R689	-	-	-	-	RYD	-	-	-	54	-	-
1986-H238	2447488-58	1986 Nov 23 02:00	MT-135P	-	MT-135P-R690	-	-	-	-	RYD	-	-	-	60	-	-
1986-H238	2447488-58	1986 Nov 30 02:02:00	MT-135P	-	MT-135P-R691	-	-	-	-	RYD	-	-	-	54	-	-
1986-H214	2447502-58	1986 Dec 7 02:00:00	MT-135P	-	MT-135P-R692	-	-	-	-	RYD	-	-	-	52	-	-
1986-H216	2447509-58	1986 Dec 14 02:00:00	MT-135P	-	MT-135P-R693	-	-	-	-	RYD	-	-	-	56	-	-
1986-H222	2447516-58	1986 Dec 21 02:00:00	MT-135P	-	MT-135P-R694	-	-	-	-	RYD	-	-	-	59	-	-
1986-H228	2447523-58	1986 Dec 28 02:12:00	MT-135P	-	MT-135P-R695	-	-	-	-	RYD	-	-	-	55	-	-
1989-H19	2447537-58	1989 Jan 11 02:02:00	MT-135P	-	MT-135P-R696	-	-	-	-	RYD	-	-	-	55	-	-
1989-H307	2447544-58	1989 Jan 18 01:50	MT-135P	-	MT-135P-R697	-	-	-	-	RYD	-	-	-	60	-	-
1989-H309	2447551-58	1989 Jan 25 02:00	MT-135P	-	MT-135P-R698	-	-	-	-	RYD	-	-	-	60	-	-
1989-H309	2447556-58	1989 Feb 1 02:00	MT-135P	-	MT-135P-R699	-	-	-	-	RYD	-	-	-	60	-	-
1989-H310	2447572-58	1989 Feb 15 02:00	MT-135P	-	MT-135P-R700	-	-	-	-	RYD	-	-	-	60	-	-
1989-H311	2447579-58	1989 Feb 22 02:06	MT-135P	-	MT-135P-R701	-	-	-	-	RYD	-	-	-	60	-	-
1989-H312	2447587-58	1989 Mar 8 02:00	MT-135P	-	MT-135P-R702	-	-	-	-	RYD	-	-	-	60	-	-
1989-H313	2447593-58	1989 Mar 8 02:00	MT-135P	-	MT-135P-R703	-	-	-	-	RYD	-	-	-	60	-	-
1989-H314	2447600-58	1989 Mar 15 02:00	MT-135P	-	MT-135P-R704	-	-	-	-	RYD	-	-	-	60	-	-
1989-H315	2447614-58	1989 Mar 29 02:00	MT-135P	-	MT-135P-R705	-	-	-	-	RYD	-	-	-	60	-	-
1989-H316	2447629-58	1989 Apr 13 02:02	MT-135P	-	MT-135P-R706	-	-	-	-	RYD	-	-	-	60	-	-
1989-H317	2447635-58	1989 Apr 19 02:00	MT-135P	-	MT-135P-R707	-	-	-	-	RYD	-	-	-	60	-	-
1989-H318	2447642-58	1989 Apr 26 02:04	MT-135P	-	MT-135P-R708	-	-	-	-	RYD	-	-	-	60	-	-
1989-H319	2447656-58	1989 May 10 02:00	MT-135P	-	MT-135P-R709	-	-	-	-	RYD	-	-	-	60	-	-
1989-H320	2447663-58	1989 May 17 02:00	MT-135P	-	MT-135P-R710	-	-	-	-	RYD	-	-	-	60	-	-
1989-H321	2447677-58	1989 May 31 02:03	MT-135P	-	MT-135P-R711	-	-	-	-	RYD	-	-	-	60	-	-
1989-H322	2447691-58	1989 Jun 14 02:00	MT-135P	-	MT-135P-R712	-	-	-	-	RYD	-	-	-	60	-	-
1989-H323	2447696-58	1989 Jun 21 02:00	MT-135P	-	MT-135P-R713	-	-	-	-	RYD	-	-	-	60	-	-
1989-H324	2447705-58	1989 Jun 28 02:00	MT-135P	-	MT-135P-R714	-	-	-	-	RYD	-	-	-	60	-	-
1989-H325	2447720-58	1989 Jul 13 02:00	MT-135P	-	MT-135P-R715	-	-	-	-	RYD	-	-	-	60	-	-
1989-H326	2447740-58	1989 Aug 2 02:00	MT-135P	-	MT-135P-R716	-	-	-	-	RYD	-	-	-	60	-	-
1989-H327	2447754-58	1989 Aug 16 02:00	MT-135P	-	MT-135P-R717	-	-	-	-	RYD	-	-	-	60	-	-
1989-H328	2447768-58	1989 Aug 30 02:00	MT-135P	-	MT-135P-R718	-	-	-	-	RYD	-	-	-	60	-	-
1989-H329	2447782-58	1989 Sep 13 02:00	MT-135P	-	MT-135P-R719	-	-	-	-	RYD	-	-	-	60	-	-
1989-H330	2447798-58	1989 Sep 20 02:01	MT-135P	-	MT-135P-R720	-	-	-	-	RYD	-	-	-	60	-	-
1989-H331	2447803-58	1989 Oct 4 02:00	MT-135P	-	MT-135P-R721	-	-	-	-	RYD	-	-	-	60	-	-
1989-H332	2447817-58	1989 Oct 16 02:04	MT-135P	-	MT-135P-R722	-	-	-	-	RYD	-	-	-	60	-	-
1989-H333	2447831-58	1989 Oct 16 02:00	MT-135P	-	MT-135P-R723	-	-	-	-	RYD	-	-	-	60	-	-
1989-H334	2447845-58	1989 Nov 5 02:00	MT-135P	-	MT-135P-R724	-	-	-	-	RYD	-	-	-	60	-	-
1989-H335	2447852-58	1989 Nov 24 02:00	MT-135P	-	MT-135P-R725	-	-	-	-	RYD	-	-	-	60	-	-
1989-H336	2447862-58	1989 Dec 8 02:00	MT-135P	-	MT-135P-R726	-	-	-	-	RYD	-	-	-	60	-	-
1989-H337	2447873-58	1989 Dec 13 02:12	MT-135P	-	MT-135P-R727	-	-	-	-	RYD	-	-	-	60	-	-
1989-H338	2447882-58	1989 Dec 28 02:00	MT-135P	-	MT-135P-R728	-	-	-	-	RYD	-	-	-	60	-	-
1989-H339	2447898-58	1989 Dec 28 02:00	MT-135P	-	MT-135P-R729	-	-	-	-	RYD	-	-	-	60	-	-
1989-H340	2447914-58	1989 Sep 6 02:00	MT-135P	-	MT-135P-R730	-	-	-	-	RYD	-	-	-	60	-	-
1989-H341	2447927-58	1989 Jan 17 02:00:00	MT-135P	-	MT-135P-R731	-	-	-	-	KASC	-	-	-	54	-	-
1989-H342	2447938-58	1989 Jan 24 02:00:00	MT-135P	-	MT-135P-R732	-	-	-	-	RYD	-	-	-	59	-	-
1989-H343	2447951-58	1989 Jan 31 02:00:00	MT-135P	-	MT-135P-R733	-	-	-	-	RYD	-	-	-	58	-	-
1989-H344	2447962-58	1989 Jan 31 02:00:00	MT-135P	-	MT-135P-R734	-	-	-	-	RYD	-	-	-	58	-	-
1989-H345	2447979-58	1989 Feb 7 02:00	MT-135P	-	MT-135P-R735	-	-	-	-	RYD	-	-	-	58	-	-
1989-H346	2447984-58	1989 Feb 14 02:00	MT-135P	-	MT-135P-R736	-	-	-	-	RYD	-	-	-	58	-	-
1989-H347	2447993-58	1989 Feb 21 02:00	MT-135P	-	MT-135P-R737	-	-	-	-	RYD	-	-	-	58	-	-
1989-H348	2447998-58	1989 Feb 28 02:00	MT-135P	-	MT-135P-R738	-	-	-	-	RYD	-	-	-	58	-	-
1989-H349	2447999-58	1989 Mar 7 02:00	MT-135P	-	MT-135P-R739	-	-	-	-	RYD	-	-	-	55	-	-
1989-H350	2447999-58	1989 Mar 14 02:00	MT-135P	-	MT-135P-R740	-	-	-	-	RYD	-	-	-	55	-	-
1989-H351	2447999-58	1989 Mar 21 02:00	MT-135P	-	MT-135P-R741	-	-	-	-	RYD	-	-	-	60	-	-
1989-H352	2447999-58	1989 Mar 28 02:00	MT-135P	-	MT-135P-R742	-	-	-	-	RYD	-	-	-	60	-	-
1989-H353	2447999-58	1989 Apr 4 02:00	MT-135P	-	MT-135P-R743	-	-	-	-	RYD	-	-	-	60	-	-
1989-H354	2447999-58	1989 Apr 11 02:00	MT-135P	-	MT-135P-R744	-	-	-	-	RYD	-	-	-	60	-	-
1989-H355	2447999-58	1989 Apr 18 02:00	MT-135P	-	MT-135P-R745	-	-	-	-	RYD	-	-	-	60	-	-
1989-H356	2448006-58	1989 Apr 25 02:00	MT-135P	-	MT-135P-R746	-	-	-	-	RYD	-	-	-	60	-	-
1989-H357	2448021-58	1989 May 10 02:00	MT-135P	-	MT-135P-R747	-	-	-	-	RYD	-	-	-	60	-	-
1989-H358	2448027-58	1989 May 16 02:00	MT-135P	-	MT-135P-R748	-	-	-	-	RYD	-	-	-	60	-	-
1989-H359	2448034-58	1989 May 23 02:00	MT-135P	-	MT-135P-R749	-	-	-	-	RYD	-	-	-	60	-	-
1989-H360	2448048-58	1989 Jun 6 02:00	MT-135P	-	MT-135P-R750	-	-	-	-	RYD	-	-	-	60	-	-
1989-H361	2448062-58	1989 Jun 20 02:00	MT-135P	-	MT-135P-R751	-	-	-	-	RYD	-	-	-	60	-	-
1989-H362	2448070-58	1989 Jun 28 02:00	MT-135P	-	MT-135P-R752	-	-	-	-	RYD	-	-	-	60	-	-
1989-H363	2448083-58	1989 Jul 11 02:00	MT-135P	-	MT-135P-R753	-	-	-	-	RYD	-	-	-	60	-	-
1989-H364	2448097-58	1989 Jul 25 02:05	MT-135P	-	MT-135P-R754	-	-	-	-	RYD	-	-	-	60	-	-
1989-H365	2448111-58	1989 Aug 8 02:00	MT-135P	-	MT-135P-R755	-	-	-	-	RYD	-	-	-	60	-	-
1989-H366	2448126-58	1989 Aug 23 02:00	MT-135P	-	MT-135P-R756	-	-	-	-	RYD	-	-	-	57	-	-
1989-H367	2448130-58	1989 Aug 27 02:10:00	MT-135	-	MT-135-E2	-	-	-	-	KASC	-	-	-	60	-	-
1989-H368	2448139-58	1989 Sep 5 02:01	MT-135P	-	MT-135P-R757	-	-	-	-	RYD	-	-	-	60	-	-
1989-H369	2448153-58	1989 Sep 19 02:01	MT-135P	-	MT-135P-R758	-	-	-	-	RYD	-	-	-	60	-	-
1989-H370	2448167-58	1989 Oct 3 02:00	MT-135P	-	MT-135P-R759	-	-	-	-	RYD	-	-	-	60	-	-
1989-H371	2448181-58	1989 Oct 17 02:05	MT-135P	-	MT-135P-R760	-	-	-	-	RYD	-	-	-	60	-	-
1989-H372	2448196-58	1989 Nov 1 02:00	MT-135P	-	MT-135P-R761	-	-	-	-	RYD	-	-	-	60	-	-
1989-H373	2448202-58	1989 Nov 7 02:00	MT-135P	-	MT-135P-R762	-	-	-	-	RYD	-	-	-	60	-	-
1989-H374	2448209-58	1989 Nov 14 02:01	MT-135P	-	MT-135P-R763	-	-	-	-	RYD	-	-	-	60	-	-
1989-H375	2448223-58	1989 Nov 28 02:00	MT-135P	-	MT-135P-R764	-	-	-	-	RYD	-	-	-	60	-	-
1989-H376	2448230-58	1989 Dec 5 02:00	MT-135P	-	MT-135P-R765	-	-	-	-	RYD	-	-	-	60	-	-
1989-H377	2448233-58	1989 Dec 12 02:00	MT-135P	-	MT-135P-R766	-	-	-	-	RYD	-	-	-	60	-	-
1989-H378	2448244-58	1989 Dec 19 02:02	MT-135P	-	MT-135P-R767	-	-	-	-	RYD	-	-	-	60	-	-
1989-H379	2448252-58	1989 Dec 27 02:01	MT-135P	-	MT-135P-R768	-	-	-	-	RYD	-	-	-	60	-	-
1991-H132	2448265-58	1991 Jan 9 02:05	MT-135P	-	MT-135P-R769	-	-	-	-</							

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Launch_Mission	FlightCode	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee_Km	Range_Km	Dest
1991-W133	2448272-59	1991 Jan 16 0203	MT-135P	-	MT-135P-R766	-	-	-	RYD	-	-	-	60	-	-
1991-W134	2448279-58	1991 Jan 23 0201	MT-135P	-	MT-135P-R769	-	-	-	RYD	-	-	-	60	-	-
1991-W135	2448286-58	1991 Jan 30 0208	MT-135P	-	MT-135P-R770	-	-	-	RYD	-	-	-	60	-	-
1991-W136	2448293-58	1991 Feb 6 0225	MT-135P	-	MT-135P-R771	-	-	-	RYD	-	-	-	60	-	-
1991-W137	2448296-58	1991 Feb 9 0200	MT-135	-	MT-135-53	NMP-03	-	-	MASC	-	-	-	57	-	-
1991-W138	2448298-58	1991 Feb 11 0210	MT-135	-	MT-135-54	NMP-03	-	-	MASC	-	-	-	62	-	-
1991-W139	2448300-58	1991 Feb 13 0202	MT-135P	-	MT-135P-R772	-	-	-	RYD	-	-	-	60	-	-
1991-W140	2448307-60	1991 Feb 20 0220	MT-135P	-	MT-135P-R773	-	-	-	RYD	-	-	-	60	-	-
1991-W141	2448314-59	1991 Feb 27 0204	MT-135P	-	MT-135P-R774	-	-	-	RYD	-	-	-	60	-	-
1991-W142	2448328-58	1991 Mar 20 0200	MT-135P	-	MT-135P-R775	-	-	-	RYD	-	-	-	60	-	-
1991-W143	2448342-58	1991 Mar 27 0203	MT-135P	-	MT-135P-R776	-	-	-	RYD	-	-	-	60	-	-
1991-W144	2448356-58	1991 Apr 10 0200	MT-135P	-	MT-135P-R777	-	-	-	RYD	-	-	-	60	-	-
1991-W145	2448365-58	1991 Apr 17 0205	MT-135P	-	MT-135P-R778	-	-	-	RYD	-	-	-	60	-	-
1991-W146	2448370-58	1991 Apr 24 0200	MT-135P	-	MT-135P-R779	-	-	-	RYD	-	-	-	60	-	-
1991-W147	2448384-58	1991 May 8 0202	MT-135P	-	MT-135P-R781	-	-	-	RYD	-	-	-	60	-	-
1991-W148	2448398-58	1991 May 15 0200	MT-135P	-	MT-135P-R782	-	-	-	RYD	-	-	-	60	-	-
1991-W149	2448412-60	1991 May 22 0200	MT-135P	-	MT-135P-R783	-	-	-	RYD	-	-	-	60	-	-
1991-W150	2448426-58	1991 Jun 5 0225	MT-135P	-	MT-135P-R784	-	-	-	RYD	-	-	-	60	-	-
1991-W151	2448433-58	1991 Jun 19 0210	MT-135P	-	MT-135P-R785	-	-	-	RYD	-	-	-	60	-	-
1991-W152	2448446-58	1991 Jun 26 0200	MT-135P	-	MT-135P-R786	-	-	-	RYD	-	-	-	60	-	-
1991-W153	2448454-58	1991 Jul 11 0200	MT-135P	-	MT-135P-R787	-	-	-	RYD	-	-	-	60	-	-
1991-W154	2448469-58	1991 Jul 17 0200	MT-135P	-	MT-135P-R788	-	-	-	RYD	-	-	-	60	-	-
1991-W155	2448482-58	1991 Aug 1 0200	MT-135P	-	MT-135P-R789	-	-	-	RYD	-	-	-	60	-	-
1991-W156	2448496-58	1991 Aug 14 0200	MT-135P	-	MT-135P-R790	-	-	-	RYD	-	-	-	60	-	-
1991-W157	2448506-58	1991 Aug 28 0205	MT-135P	-	MT-135P-R791	-	-	-	RYD	-	-	-	60	-	-
1991-W158	2448503-58	1991 Sep 4 0200	MT-135P	-	MT-135P-R792	-	-	-	RYD	-	-	-	60	-	-
1991-W159	2448511-58	1991 Sep 11 0200:00	MT-135	-	MT-135-56	NMP-03	-	-	MASC	-	-	-	56	-	-
1991-W160	2448511-58	1991 Sep 12 0200:00	MT-135	-	MT-135-56	NMP-03	-	-	MASC	-	-	-	57	-	-
1991-W161	2448524-58	1991 Sep 12 0210	MT-135P	-	MT-135P-R793	-	-	-	RYD	-	-	-	60	-	-
1991-W162	2448532-58	1991 Sep 25 0210	MT-135P	-	MT-135P-R794	-	-	-	RYD	-	-	-	60	-	-
1991-W163	2448542-58	1991 Oct 3 0200	MT-135P	-	MT-135P-R795	-	-	-	RYD	-	-	-	60	-	-
1991-W164	2448552-58	1991 Oct 16 0200	MT-135P	-	MT-135P-R796	-	-	-	RYD	-	-	-	60	-	-
1991-W165	2448562-58	1991 Oct 23 0203	MT-135P	-	MT-135P-R797	-	-	-	RYD	-	-	-	60	-	-
1991-W166	2448573-58	1991 Nov 6 0214	MT-135P	-	MT-135P-R798	-	-	-	RYD	-	-	-	60	-	-
1991-W167	2448587-58	1991 Nov 13 0200	MT-135P	-	MT-135P-R799	-	-	-	RYD	-	-	-	60	-	-
1991-W168	2448594-58	1991 Nov 21 0200	MT-135P	-	MT-135P-R800	-	-	-	RYD	-	-	-	60	-	-
1991-W169	2448601-58	1991 Dec 4 0200	MT-135P	-	MT-135P-R801	-	-	-	RYD	-	-	-	60	-	-
1991-W170	2448606-58	1991 Dec 18 0203	MT-135P	-	MT-135P-R802	-	-	-	RYD	-	-	-	60	-	-
1991-W171	2448613-58	1991 Dec 25 0200	MT-135P	-	MT-135P-R803	-	-	-	RYD	-	-	-	60	-	-
1991-W172	2448621-58	1991 Dec 28 0200	MT-135P	-	MT-135P-R804	-	-	-	RYD	-	-	-	60	-	-
1991-W173	2448634-58	1992 Jan 15 0200:00	MT-135P	-	MT-135P-R805	-	-	-	RYD	-	-	-	60	-	-
1991-W174	2448643-58	1992 Jan 22 0200:00	MT-135P	-	MT-135P-R806	-	-	-	RYD	-	-	-	60	-	-
1991-W175	2448651-58	1992 Feb 5 0203:00	MT-135P	-	MT-135P-R807	-	-	-	RYD	-	-	-	60	-	-
1991-W176	2448661-58	1992 Feb 19 0211:00	MT-135P	-	MT-135P-R808	-	-	-	RYD	-	-	-	60	-	-
1991-W177	2448671-58	1992 Feb 26 0208:00	MT-135P	-	MT-135P-R809	-	-	-	RYD	-	-	-	60	-	-
1991-W178	2448682-58	1992 Feb 28 0200:00	MT-135P	-	MT-135P-R810	-	-	-	RYD	-	-	-	60	-	-
1991-W179	2448692-58	1992 Mar 5 0200:00	MT-135P	-	MT-135P-R811	-	-	-	RYD	-	-	-	60	-	-
1991-W180	2448706-58	1992 Mar 18 0200:00	MT-135P	-	MT-135P-R812	-	-	-	RYD	-	-	-	60	-	-
1991-W181	2448720-58	1992 Mar 25 0200:00	MT-135P	-	MT-135P-R813	-	-	-	RYD	-	-	-	60	-	-
1991-W182	2448737-58	1992 Apr 8 0204:59	MT-135P	-	MT-135P-R814	-	-	-	RYD	-	-	-	60	-	-
1991-W183	2448744-58	1992 Apr 22 0200:00	MT-135P	-	MT-135P-R815	-	-	-	RYD	-	-	-	60	-	-
1991-W184	2448754-58	1992 Apr 30 0200:00	MT-135P	-	MT-135P-R816	-	-	-	RYD	-	-	-	60	-	-
1991-W185	2448765-58	1992 Apr 30 0200:00	MT-135P	-	MT-135P-R816	-	-	-	RYD	-	-	-	60	-	-
1991-W186	2448775-58	1992 May 13 0200:00	MT-135P	-	MT-135P-R817	-	-	-	RYD	-	-	-	60	-	-
1991-W187	2448783-58	1992 May 20 0200	MT-135P	-	MT-135P-R818	-	-	-	RYD	-	-	-	60	-	-
1991-W188	2448793-58	1992 May 27 0200:00	MT-135P	-	MT-135P-R819	-	-	-	RYD	-	-	-	60	-	-
1991-W189	2448808-58	1992 Jun 10 0200:00	MT-135P	-	MT-135P-R820	-	-	-	RYD	-	-	-	60	-	-
1991-W190	2448817-58	1992 Jun 17 0210:00	MT-135P	-	MT-135P-R821	-	-	-	RYD	-	-	-	60	-	-
1991-W191	2448826-58	1992 Jun 24 0200:00	MT-135P	-	MT-135P-R822	-	-	-	RYD	-	-	-	60	-	-
1991-W192	2448831-58	1992 Jun 24 0200:00	MT-135P	-	MT-135P-R823	-	-	-	RYD	-	-	-	60	-	-
1991-W193	2448842-58	1992 Jul 9 0200:00	MT-135P	-	MT-135P-R824	-	-	-	RYD	-	-	-	60	-	-
1991-W194	2448852-58	1992 Jul 22 0200:00	MT-135P	-	MT-135P-R825	-	-	-	RYD	-	-	-	60	-	-
1991-W195	2448863-58	1992 Aug 5 0200:00	MT-135P	-	MT-135P-R826	-	-	-	RYD	-	-	-	60	-	-
1991-W196	2448873-58	1992 Aug 19 0230:00	MT-135P	-	MT-135P-R827	-	-	-	RYD	-	-	-	60	-	-
1991-W197	2448887-58	1992 Sep 2 0200	MT-135P	-	MT-135P-R828	-	-	-	RYD	-	-	-	60	-	-
1991-W198	2448874-58	1992 Sep 9 0200:00	MT-135P	-	MT-135P-R829	-	-	-	RYD	-	-	-	60	-	-
1991-W199	2448874-58	1992 Sep 9 0200	MT-135	-	MT-135-57	NMP-03	-	-	MASC	-	-	-	57	-	-
1991-W200	2448888-58	1992 Sep 23 0200	MT-135P	-	MT-135P-R830	-	-	-	RYD	-	-	-	60	-	-
1991-W201	2448902-58	1992 Oct 7 0210:00	MT-135P	-	MT-135P-R831	-	-	-	RYD	-	-	-	60	-	-
1991-W202	2448917-58	1992 Oct 22 0200	MT-135P	-	MT-135P-R832	-	-	-	RYD	-	-	-	60	-	-
1991-W203	2448923-58	1992 Oct 28 0200:00	MT-135P	-	MT-135P-R833	-	-	-	RYD	-	-	-	60	-	-
1991-W204	2448931-58	1992 Nov 5 0200:00	MT-135P	-	MT-135P-R834	-	-	-	RYD	-	-	-	60	-	-
1991-W205	2448944-58	1992 Nov 18 0200:00	MT-135P	-	MT-135P-R835	-	-	-	RYD	-	-	-	60	-	-
1991-W206	2448951-58	1992 Nov 25 0200:00	MT-135P	-	MT-135P-R836	-	-	-	RYD	-	-	-	60	-	-
1991-W207	2448968-60	1992 Dec 2 0220:00	MT-135P	-	MT-135P-R837	-	-	-	RYD	-	-	-	60	-	-
1991-W208	2448972-58	1992 Dec 16 0209:00	MT-135P	-	MT-135P-R838	-	-	-	RYD	-	-	-	60	-	-
1991-W209	2448979-58	1992 Dec 23 0200	MT-135P	-	MT-135P-R839	-	-	-	RYD	-	-	-	60	-	-
1991-W210	2448987-58	1992 Dec 31 0203:00	MT-135P	-	MT-135P-R840	-	-	-	RYD	-	-	-	60	-	-
1991-W211	2448993-58	1993 Jan 6 0204:59	MT-135P	-	MT-135P-R841	-	-	-	RYD	-	-	-	60	-	-
1991-W212	2449007-58	1993 Jan 20 0201:00	MT-135P	-	MT-135P-R842	-	-	-	RYD	-	-	-	60	-	-
1991-W213	2449014-58	1993 Jan 27 0200:00	MT-135P	-	MT-135P-R843	-	-	-	RYD	-	-	-	60	-	-
1991-W214	2449021-58	1993 Feb 3 0200:00	MT-135P	-	MT-135P-R844	-	-	-	RYD	-	-	-	60	-	-
1991-W215	2449036-58	1993 Feb 18 0200:00	MT-135P	-	MT-135P-R845	-	-	-	RYD	-	-	-	60	-	-
1991-W216	2449042-58	1993 Feb 24 0200	MT-135P	-	MT-135P-R846	-	-	-	RYD	-	-	-	60	-	-
1991-W217	2449049-58	1993 Mar 3 0200:00	MT-135P	-	MT-135P-R847	-	-	-	RYD	-	-	-	60	-	-
1991-W218	2449063-58	1993 Mar 17 0200:00	MT-135P	-	MT-135P-R848	-	-	-	RYD	-	-	-	60	-	-

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Launch_Mission	FlightCode	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee_Km	Range_Km	Dest
1993-H12	2449070-59	1993 Mar 24 0207:00	MT-136P	-	MT-136P-R649	-	-	-	-	RVD	-	-	-	56	-	-
1993-H17	2449084-59	1993 Apr 7 0207:00	MT-136P	-	MT-136P-R650	-	-	-	-	RVD	-	-	-	56	-	-
1993-H18	2449098-59	1993 Apr 21 0204:59	MT-136P	-	MT-136P-R651	-	-	-	-	RVD	-	-	-	56	-	-
1993-H19	2449105-58	1993 Apr 28 0202:00	MT-136P	-	MT-136P-R652	-	-	-	-	RVD	-	-	-	57	-	-
1993-H21	2449119-58	1993 May 12 0202:00	MT-136P	-	MT-136P-R653	-	-	-	-	RVD	-	-	-	58	-	-
1993-H23	2449126-59	1993 May 19 0204:59	MT-136P	-	MT-136P-R654	-	-	-	-	RVD	-	-	-	59	-	-
1993-H25	2449133-59	1993 May 26 0210:00	MT-136P	-	MT-136P-R655	-	-	-	-	RVD	-	-	-	59	-	-
1993-H28	2449147-60	1993 Jun 9 0226:59	MT-136P	-	MT-136P-R656	-	-	-	-	RVD	-	-	-	57	-	-
1993-H29	2449154-59	1993 Jun 16 0204:59	MT-136P	-	MT-136P-R657	-	-	-	-	RVD	-	-	-	57	-	-
1993-H32	2449168-60	1993 Jun 30 0221:00	MT-136P	-	MT-136P-R658	-	-	-	-	RVD	-	-	-	56	-	-
1993-H35	2449183-58	1993 Jul 15 0200:00	MT-136P	-	MT-136P-R659	-	-	-	-	RVD	-	-	-	56	-	-
1993-H38	2449189-58	1993 Jul 21 0200	MT-136P	-	MT-136P-R660	-	-	-	-	RVD	-	-	-	60	-	-
1993-H38	2449203-59	1993 Aug 4 0210:00	MT-136P	-	MT-136P-R661	-	-	-	-	RVD	-	-	-	56	-	-
1993-H40	2449217-58	1993 Aug 18 0200:00	MT-136P	-	MT-136P-R662	-	-	-	-	RVD	-	-	-	57	-	-
1993-H42	2449231-59	1993 Sep 1 0203:00	MT-136P	-	MT-136P-R663	-	-	-	-	RVD	-	-	-	57	-	-
1993-H45	2449245-58	1993 Sep 15 0200:00	MT-136P	-	MT-136P-R664	-	-	-	-	RVD	-	-	-	56	-	-
1993-H46	2449252-58	1993 Sep 22 0200:00	MT-136P	-	MT-136P-R665	-	-	-	-	RVD	-	-	-	54	-	-
1993-H61	2449254-58	1993 Sep 23 0200	MT-135	-	MT-135-58	WMP-03	-	-	-	KASC	-	-	-	57	-	-
1993-H47	2449254-58	1993 Sep 24 0200	MT-135	-	MT-135-59	WMP-03	-	-	-	KASC	-	-	-	56	-	-
1993-H64	2449259-58	1993 Sep 29 0200	MT-136P	-	MT-136P-R666	-	-	-	-	RVD	-	-	-	60	-	-
1993-H64	2449274-56	1993 Oct 14 0200:00	MT-136P	-	MT-136P-R667	-	-	-	-	RVD	-	-	-	53	-	-
1993-H49	2449280-59	1993 Oct 20 0210:00	MT-136P	-	MT-136P-R668	-	-	-	-	RVD	-	-	-	57	-	-
1993-H62	2449287-56	1993 Oct 27 0200:00	MT-136P	-	MT-136P-R669	-	-	-	-	RVD	-	-	-	54	-	-
1993-H63	2449301-56	1993 Nov 10 0200:00	MT-136P	-	MT-136P-R670	-	-	-	-	RVD	-	-	-	54	-	-
1993-H64	2449306-56	1993 Nov 17 0200:00	MT-136P	-	MT-136P-R671	-	-	-	-	RVD	-	-	-	52	-	-
1993-H67	2449323-56	1993 Dec 8 0200:00	MT-136P	-	MT-136P-R672	-	-	-	-	RVD	-	-	-	54	-	-
1993-H68	2449328-56	1993 Dec 8 0200:00	MT-136P	-	MT-136P-R673	-	-	-	-	RVD	-	-	-	55	-	-
1993-H69	2449336-59	1993 Dec 15 0216:00	MT-136P	-	MT-136P-R674	-	-	-	-	RVD	-	-	-	53	-	-
1993-H60	2449343-59	1993 Dec 22 0203:00	MT-136P	-	MT-136P-R675	-	-	-	-	RVD	-	-	-	56	-	-
1994-H02	2449356-56	1994 Jan 6 0200:00	MT-136P	-	MT-136P-R676	-	-	-	-	RVD	-	-	-	49	-	-
1994-H01	2449365-56	1994 Jan 13 0200:00	MT-136P	-	MT-136P-R677	-	-	-	-	RVD	-	-	-	50	-	-
1994-H06	2449376-56	1994 Jan 26 0200	MT-136P	-	MT-136P-R678	-	-	-	-	RVD	-	-	-	60	-	-
1994-H07	2449386-56	1994 Feb 3 0200	MT-136P	-	MT-136P-R679	-	-	-	-	RVD	-	-	-	60	-	-
1994-H08	2449399-59	1994 Feb 16 0207	MT-136P	-	MT-136P-R680	-	-	-	-	RVD	-	-	-	60	-	-
1994-H09	2449413-60	1994 Mar 2 0220	MT-136P	-	MT-136P-R681	-	-	-	-	RVD	-	-	-	60	-	-
1994-H10	2449420-56	1994 Mar 9 0200	MT-136P	-	MT-136P-R682	-	-	-	-	RVD	-	-	-	60	-	-
1994-H11	2449427-56	1994 Mar 16 0200	MT-136P	-	MT-136P-R683	-	-	-	-	RVD	-	-	-	60	-	-
1994-H12	2449435-59	1994 Mar 24 0210	MT-136P	-	MT-136P-R684	-	-	-	-	RVD	-	-	-	60	-	-
1994-H13	2449441-59	1994 Mar 30 0203	MT-136P	-	MT-136P-R685	-	-	-	-	RVD	-	-	-	60	-	-
1994-H14	2449455-60	1994 Apr 13 0228	MT-136P	-	MT-136P-R686	-	-	-	-	RVD	-	-	-	60	-	-
1994-H15	2449462-59	1994 Apr 20 0210	MT-136P	-	MT-136P-R687	-	-	-	-	RVD	-	-	-	60	-	-
1994-H16	2449468-59	1994 Apr 27 0210	MT-136P	-	MT-136P-R688	-	-	-	-	RVD	-	-	-	60	-	-
1994-H17	2449483-59	1994 May 25 0213	MT-136P	-	MT-136P-R689	-	-	-	-	RVD	-	-	-	60	-	-
1994-H18	2449511-59	1994 May 25 0215	MT-136P	-	MT-136P-R690	-	-	-	-	RVD	-	-	-	60	-	-
1994-H19	2449511-59	1994 Jun 15 0200	MT-136P	-	MT-136P-R691	-	-	-	-	RVD	-	-	-	60	-	-
1994-H20	2449533-60	1994 Jun 29 0220	MT-136P	-	MT-136P-R692	-	-	-	-	RVD	-	-	-	60	-	-
1994-H21	2449533-60	1994 Jun 29 0220	MT-136P	-	MT-136P-R693	-	-	-	-	RVD	-	-	-	60	-	-
1994-H22	2449563-59	1994 Jul 13 0200	MT-136P	-	MT-136P-R694	-	-	-	-	RVD	-	-	-	60	-	-
1994-H23	2449567-59	1994 Jul 20 0208	MT-136P	-	MT-136P-R695	-	-	-	-	RVD	-	-	-	60	-	-
1994-H24	2449581-59	1994 Aug 3 0205	MT-136P	-	MT-136P-R696	-	-	-	-	RVD	-	-	-	60	-	-
1994-H25	2449588-59	1994 Aug 24 0205	MT-136P	-	MT-136P-R697	-	-	-	-	RVD	-	-	-	60	-	-
1994-H26	2449598-59	1994 Aug 24 0205	MT-136P	-	MT-136P-R698	-	-	-	-	RVD	-	-	-	60	-	-
1994-H02	2449601-55	1994 Sep 7 0200	MT-136P	-	MT-136-60	WMP-03	-	-	-	KASC	-	-	-	56	-	-
1994-H02	2449601-55	1994 Sep 7 0200	MT-136P	-	MT-136-60	WMP-03	-	-	-	KASC	-	-	-	56	-	-
1994-H27	2449603-58	1994 Sep 8 0203	MT-135	-	MT-135	WMP-03	-	-	-	KASC	-	-	-	56	-	-
1994-H04	2449610-58	1994 Sep 15 0200	MT-135	-	MT-135P-R699	WMP-03	-	-	-	KASC	-	-	-	55	-	-
1994-H04	2449610-58	1994 Sep 15 0200	MT-135	-	MT-135-62	WMP-03	-	-	-	KASC	-	-	-	55	-	-
1994-H05	2449613-58	1994 Sep 19 0200	MT-135	-	MT-135-63	WMP-03	-	-	-	KASC	-	-	-	53	-	-
1994-H29	2449616-58	1994 Sep 21 0200	MT-136P	-	MT-136P-R900	-	-	-	-	RVD	-	-	-	60	-	-
1994-H29	2449623-58	1994 Sep 28 0210	MT-136P	-	MT-136P-R901	-	-	-	-	RVD	-	-	-	60	-	-
1994-H30	2449630-59	1994 Oct 5 0203	MT-136P	-	MT-136P-R902	-	-	-	-	RVD	-	-	-	60	-	-
1994-H31	2449637-58	1994 Oct 12 0200	MT-136P	-	MT-136P-R903	-	-	-	-	RVD	-	-	-	60	-	-
1994-H32	2449644-59	1994 Oct 19 0203	MT-136P	-	MT-136P-R904	-	-	-	-	RVD	-	-	-	60	-	-
1994-H33	2449651-58	1994 Oct 26 0200	MT-136P	-	MT-136P-R905	-	-	-	-	RVD	-	-	-	60	-	-
1994-H34	2449665-58	1994 Nov 9 0200	MT-136P	-	MT-136P-R906	-	-	-	-	RVD	-	-	-	60	-	-
1994-H36	2449672-59	1994 Nov 16 0215	MT-136P	-	MT-136P-R907	-	-	-	-	RVD	-	-	-	60	-	-
1994-H36	2449672-59	1994 Nov 23 0200	MT-136P	-	MT-136P-R908	-	-	-	-	RVD	-	-	-	60	-	-
1994-H37	2449683-58	1994 Dec 7 0200	MT-136P	-	MT-136P-R909	-	-	-	-	RVD	-	-	-	60	-	-
1994-H38	2449701-58	1994 Dec 15 0200	MT-136P	-	MT-136P-R910	-	-	-	-	RVD	-	-	-	60	-	-
1994-H39	2449708-58	1994 Dec 22 0200	MT-136P	-	MT-136P-R911	-	-	-	-	RVD	-	-	-	60	-	-
1994-H40	2449714-58	1994 Dec 28 0200	MT-136P	-	MT-136P-R912	-	-	-	-	RVD	-	-	-	60	-	-
1995-H01	2449729-59	1995 Jan 12 0203	MT-136P	-	MT-136P-R913	-	-	-	-	RVD	-	-	-	60	-	-
1995-H02	2449735-58	1995 Jan 18 0200	MT-136P	-	MT-136P-R914	-	-	-	-	RVD	-	-	-	60	-	-
1995-H03	2449742-59	1995 Jan 25 0210	MT-136P	-	MT-136P-R915	-	-	-	-	RVD	-	-	-	60	-	-
1995-H10	2449763-59	1995 Feb 9 0203	MT-136P	-	MT-136P-R916	-	-	-	-	RVD	-	-	-	60	-	-
1995-H10	2449770-58	1995 Feb 15 0203	MT-136P	-	MT-136P-R917	-	-	-	-	RVD	-	-	-	60	-	-
1995-H20	2449770-58	1995 Feb 22 0200	MT-136P	-	MT-136P-R918	-	-	-	-	RVD	-	-	-	60	-	-
1995-H21	2449784-58	1995 Mar 8 0200	MT-136P	-	MT-136P-R919	-	-	-	-	RVD	-	-	-	60	-	-
1995-H15	2449798-58	1995 Mar 22 0200	MT-135P	-	MT-135P-R920	-	-	-	-	RVD	-	-	-	60	-	-
1995-H16	2449805-58	1995 Mar 29 0200	MT-135P	-	MT-135P-R921	-	-	-	-	RVD	-	-	-	60	-	-
1995-H17	2449833-60	1995 Apr 26 0220	MT-135P	-	MT-135P-R922	-	-	-	-	RVD	-	-	-	60	-	-
1995-H22	2449847-58	1995 May 10 0200	MT-135P	-	MT-135P-R923	-	-	-	-	RVD	-	-	-	60	-	-
1995-H23	2449864-59	1995 May 17 0208	MT-135P	-	MT-135P-R924	-	-	-	-	RVD	-	-	-	60	-	-
1995-H24	2449861-60	1995 May 24 0217	MT-135P	-	MT-135P-R925	-	-	-	-	RVD	-	-	-	60	-	-
1995-H25	2449868-59	1995 May 31 0205	MT-135P	-	MT-135P-R926	-	-	-	-	RVD	-	-	-	60	-	-
1995-H26	2449875-59	1995 Jun 7 0203	MT-135P	-	MT-135P-R927	-	-	-	-	RVD	-	-	-	60	-	-
1995-H27	2449889-59	1995 Jun 21 0207	MT-135P	-	MT-135P-R928	-	-	-	-	RVD	-	-	-	60	-	-

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Launch_Mission	FlightCode	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee_Km	Range_Km	Dest
1995-128	2449896-58	1995 Jun 28 0200	MT-138P	-	MT-138P-R029	-	-	-	-	RVO	-	-	-	60	-	-
1995-129	2449903-58	1995 Jul 5 0200	MT-138P	-	MT-138P-R030	-	-	-	-	RVO	-	-	-	60	-	-
1995-130	2449910-58	1995 Jul 12 0200	MT-138P	-	MT-138P-R031	-	-	-	-	RVO	-	-	-	60	-	-
1995-131	2449917-58	1995 Jul 19 0200	MT-138P	-	MT-138P-R032	-	-	-	-	RVO	-	-	-	60	-	-
1995-132	2449924-58	1995 Aug 2 0200	MT-138P	-	MT-138P-R033	-	-	-	-	RVO	-	-	-	60	-	-
1995-133	2449931-58	1995 Aug 9 0203	MT-138P	-	MT-138P-R034	-	-	-	-	RVO	-	-	-	60	-	-
1995-134	2449938-59	1995 Aug 23 0205	MT-138P	-	MT-138P-R035	-	-	-	-	RVO	-	-	-	60	-	-
1995-135	2449945-59	1995 Aug 30 0200	MT-138P	-	MT-138P-R036	-	-	-	-	RVO	-	-	-	60	-	-
1995-136	2449952-59	1995 Sep 20 0203	MT-138P	-	MT-138P-R037	-	-	-	-	RVO	-	-	-	60	-	-
1995-137	2449959-59	1995 Oct 4 0203	MT-138P	-	MT-138P-R038	-	-	-	-	RVO	-	-	-	60	-	-
1995-138	2450001-58	1995 Oct 11 0200	MT-138P	-	MT-138P-R039	-	-	-	-	RVO	-	-	-	60	-	-
1995-139	2450008-58	1995 Oct 18 0200	MT-138P	-	MT-138P-R040	-	-	-	-	RVO	-	-	-	60	-	-
1995-140	2450016-58	1995 Oct 26 0200	MT-138P	-	MT-138P-R041	-	-	-	-	RVO	-	-	-	60	-	-
1995-141	2450030-59	1995 Nov 9 0216	MT-138P	-	MT-138P-R042	-	-	-	-	RVO	-	-	-	60	-	-
1995-142	2450037-58	1995 Nov 16 0200	MT-138P	-	MT-138P-R043	-	-	-	-	RVO	-	-	-	60	-	-
1995-143	2450043-59	1995 Nov 29 0203	MT-138P	-	MT-138P-R044	-	-	-	-	RVO	-	-	-	60	-	-
1995-144	2450050-59	1995 Nov 29 0205	MT-138P	-	MT-138P-R045	-	-	-	-	RVO	-	-	-	60	-	-
1995-145	2450065-58	1995 Dec 14 0200:00	MT-138P	-	MT-138P-R046	-	-	-	-	RVO	-	-	-	51	-	-
1995-146	2450071-58	1995 Dec 20 0200:00	MT-138P	-	MT-138P-R047	-	-	-	-	RVO	-	-	-	53	-	-
1995-147	2450078-58	1995 Dec 27 0200:00	MT-138P	-	MT-138P-R048	-	-	-	-	RVO	-	-	-	52	-	-
1995-148	2450085-59	1996 Jan 11 0216:00	MT-138P	-	MT-138P-R049	-	-	-	-	RVO	-	-	-	56	-	-
1995-149	2450093-59	1996 Jan 17 0200:00	MT-138P	-	MT-138P-R050	-	-	-	-	RVO	-	-	-	55	-	-
1995-150	2450099-58	1996 Jan 24 0200:00	MT-138P	-	MT-138P-R051	-	-	-	-	RVO	-	-	-	54	-	-
1995-151	2450106-58	1996 Jan 31 0204:59	MT-138P	-	MT-138P-R052	-	-	-	-	RVO	-	-	-	60	-	-
1995-152	2450127-58	1996 Feb 14 0200	MT-138P	-	MT-138P-R053	-	-	-	-	RVO	-	-	-	56	-	-
1995-153	2450341-60	1996 Sep 15 0230	MT-135	-	MT-135-64	-	-	-	-	MASC	-	-	-	52	-	-
1995-154	2450421-59	1996 Dec 4 0203:00	MT-138P	-	-	-	-	-	-	RVO	-	-	-	56	-	-
1995-155	2450428-58	1996 Dec 11 0200:00	MT-138P	-	-	-	-	-	-	RVO	-	-	-	56	-	-
1995-156	2450435-58	1996 Dec 18 0200:00	MT-138P	-	-	-	-	-	-	RVO	-	-	-	56	-	-
1995-157	2450442-58	1996 Dec 25 0200:00	MT-138P	-	-	-	-	-	-	RVO	-	-	-	56	-	-
1995-158	2450456-59	1997 Jan 6 0204:59	MT-138P	-	-	-	-	-	-	RVO	-	-	-	56	-	-
1995-159	2450461-58	1997 Jan 13 0200	MT-135	-	MT-135-65	-	-	-	-	MASC	-	-	-	56	-	-
1995-160	2450463-58	1997 Jan 15 0200:00	MT-138P	-	-	-	-	-	-	RVO	-	-	-	56	-	-
1995-161	2450470-58	1997 Jan 22 0200:00	MT-138P	-	-	-	-	-	-	RVO	-	-	-	56	-	-
1995-162	2450477-59	1997 Jan 29 0204:59	MT-138P	-	-	-	-	-	-	RVO	-	-	-	56	-	-
1995-163	2450481-58	1997 Feb 12 0200:00	MT-138P	-	-	-	-	-	-	RVO	-	-	-	54	-	-
1995-164	2450486-59	1997 Feb 19 0210:00	MT-138P	-	-	-	-	-	-	RVO	-	-	-	56	-	-
1995-165	2450512-58	1997 Mar 5 0200:00	MT-138P	-	-	-	-	-	-	RVO	-	-	-	56	-	-
1995-166	2450526-58	1997 Mar 19 0200:00	MT-138P	-	-	-	-	-	-	RVO	-	-	-	56	-	-
1995-167	2450533-58	1997 Apr 2 0200:00	MT-138P	-	-	-	-	-	-	RVO	-	-	-	54	-	-
1995-168	2450541-58	1997 Apr 9 0200:00	MT-138P	-	-	-	-	-	-	RVO	-	-	-	56	-	-
1995-169	2450554-58	1997 Apr 23 0200:00	MT-138P	-	-	-	-	-	-	RVO	-	-	-	57	-	-
1995-170	2450566-58	1997 Apr 30 0200:00	MT-138P	-	-	-	-	-	-	RVO	-	-	-	56	-	-
1995-171	2450586-59	1997 May 20 0200:00	MT-138P	-	-	-	-	-	-	RVO	-	-	-	56	-	-
1995-172	2450596-58	1997 May 29 0200:00	MT-138P	-	-	-	-	-	-	RVO	-	-	-	56	-	-
1995-173	2450611-58	1997 Jun 18 0200:00	MT-138P	-	-	-	-	-	-	RVO	-	-	-	54	-	-
1995-174	2450617-58	1997 Jun 25 0200:00	MT-138P	-	-	-	-	-	-	RVO	-	-	-	54	-	-
1995-175	2450624-58	1997 Jun 30 0200:00	MT-138P	-	-	-	-	-	-	RVO	-	-	-	53	-	-
1995-176	2450630-58	1997 Jul 10 0200:00	MT-138P	-	-	-	-	-	-	RVO	-	-	-	57	-	-
1995-177	2450638-58	1997 Jul 17 0200:00	MT-138P	-	-	-	-	-	-	RVO	-	-	-	54	-	-
1995-178	2450643-58	1997 Jul 23 0200:00	MT-138P	-	-	-	-	-	-	RVO	-	-	-	53	-	-
1995-179	2450649-58	1997 Jul 31 0200:00	MT-138P	-	-	-	-	-	-	RVO	-	-	-	52	-	-
1995-180	2450654-58	1997 Aug 6 0200:00	MT-138P	-	-	-	-	-	-	RVO	-	-	-	54	-	-
1995-181	2450666-58	1997 Aug 13 0200:00	MT-138P	-	-	-	-	-	-	RVO	-	-	-	52	-	-
1995-182	2450673-58	1997 Aug 21 0200:00	MT-138P	-	-	-	-	-	-	RVO	-	-	-	54	-	-
1995-183	2450687-58	1997 Aug 27 0200:00	MT-138P	-	-	-	-	-	-	RVO	-	-	-	50	-	-
1995-184	2450699-58	1997 Sep 9 0200	MT-135	-	MT-135-66	-	-	-	-	KASC	-	-	-	52	-	-
1995-185	2450700-58	1997 Sep 9 0200	MT-135	-	MT-135-67	-	-	-	-	KASC	-	-	-	54	-	-
1995-186	2450700-58	1997 Sep 10 0210:00	MT-138P	-	-	-	-	-	-	RVO	-	-	-	52	-	-
1995-187	2450701-58	1997 Sep 10 0210:00	MT-138P	-	-	-	-	-	-	RVO	-	-	-	54	-	-
1995-188	2450709-58	1997 Sep 19 0200:00	MT-138P	-	-	-	-	-	-	RVO	-	-	-	55	-	-
1995-189	2450722-58	1997 Oct 1 0200:00	MT-138P	-	-	-	-	-	-	RVO	-	-	-	52	-	-
1995-190	2450729-58	1997 Oct 8 0200:00	MT-138P	-	-	-	-	-	-	RVO	-	-	-	54	-	-
1995-191	2450743-58	1997 Oct 22 0200:00	MT-138P	-	-	-	-	-	-	RVO	-	-	-	54	-	-
1995-192	2450757-58	1997 Nov 5 0200:00	MT-138P	-	-	-	-	-	-	RVO	-	-	-	54	-	-
1995-193	2450764-58	1997 Nov 12 0200:00	MT-138P	-	-	-	-	-	-	RVO	-	-	-	42	-	-
1995-194	2450771-58	1997 Nov 19 0200:00	MT-138P	-	-	-	-	-	-	RVO	-	-	-	53	-	-
1995-195	2450786-58	1997 Dec 3 0200:00	MT-138P	-	-	-	-	-	-	RVO	-	-	-	55	-	-
1995-196	2450792-58	1997 Dec 10 0200:00	MT-138P	-	-	-	-	-	-	RVO	-	-	-	56	-	-
1995-197	2450799-58	1997 Dec 17 0200:00	MT-138P	-	-	-	-	-	-	RVO	-	-	-	55	-	-
1995-198	2450806-58	1997 Dec 24 0200:00	MT-138P	-	-	-	-	-	-	RVO	-	-	-	54	-	-
1995-199	2450821-58	1998 Jan 8 0200:00	MT-138P	-	-	-	-	-	-	RVO	-	-	-	55	-	-
1995-200	2450827-58	1998 Jan 14 0200:00	MT-138P	-	-	-	-	-	-	RVO	-	-	-	55	-	-
1995-201	2450834-58	1998 Jan 21 0200:00	MT-138P	-	-	-	-	-	-	RVO	-	-	-	54	-	-
1995-202	2450848-58	1998 Feb 4 0200:00	MT-138P	-	-	-	-	-	-	RVO	-	-	-	54	-	-
1995-203	2450854-58	1998 Feb 11 0200:00	MT-138P	-	-	-	-	-	-	RVO	-	-	-	51	-	-
1995-204	2450865-58	1998 Feb 18 0200:00	MT-138P	-	-	-	-	-	-	RVO	-	-	-	56	-	-
1995-205	2450876-58	1998 Feb 25 0200:00	MT-138P	-	-	-	-	-	-	RVO	-	-	-	56	-	-
1995-206	2450890-58	1998 Mar 4 0200:00	MT-138P	-	-	-	-	-	-	RVO	-	-	-	54	-	-
1995-207	2450897-58	1998 Mar 11 0200:00	MT-138P	-	-	-	-	-	-	RVO	-	-	-	54	-	-
1995-208	2450911-59	1998 Mar 25 0200:00	MT-135P	-	-	-	-	-	-	RVO	-	-	-	55	-	-
1995-209	2450919-58	1998 Apr 8 0207:00	MT-138P	-	-	-	-	-	-	RVO	-	-	-	56	-	-
1995-210	2450932-58	1998 Apr 16 0200:00	MT-138P	-	-	-	-	-	-	RVO	-	-	-	54	-	-
1995-211	2450939-58	1998 Apr 29 0200:00	MT-138P	-	-	-	-	-	-	RVO	-	-	-	51	-	-
1995-212	2450963-58	1998 May 20 0200:00	MT-135P	-	-	-	-	-	-	RVO	-	-	-	57	-	-
1995-213	2450960-58	1998 May 27 0200:00	MT-138P	-	-	-	-	-	-	RVO	-	-	-	54	-	-
1995-214	2450975-59	1998 Jun 11 0204:59	MT-135P	-	-	-	-	-	-	RVO	-	-	-	57	-	-
1995-215	2450981-58	1998 Jun 17 0200:00	MT-138P	-	-	-	-	-	-	RVO	-	-	-	54	-	-
1995-216	2450988-58	1998 Jun 24 0200:00	MT-135P	-	-	-	-	-	-	RVO	-	-	-	57	-	-
1995-217	2451003-58	1998 Jul 9 0200:00	MT-135P	-	-	-	-	-	-	RVO	-	-	-	55	-	-

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Launch_Mission	FlightCode	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee_Km	Range_Km	Dest
1998-024	2451009-59	1998 Jul 15 0200:00	MT-138P	-	-	-	-	-	-	RVD	-	-	-	55	-	-
1998-025	2451033-58	1998 Jul 29 0200:00	MT-138P	-	-	-	-	-	-	RVD	-	-	-	54	-	-
1998-026	2451030-58	1998 Aug 5 0200:00	MT-138P	-	-	-	-	-	-	RVD	-	-	-	53	-	-
1998-027	2451045-58	1998 Aug 20 0200:00	MT-138P	-	-	-	-	-	-	RVD	-	-	-	56	-	-
1998-028	2451063-58	1998 Sep 7 0200	MT-135	-	MT-135-68	Ozone	-	-	-	MASC	-	-	-	57	-	-
1998-029	2451065-58	1998 Sep 9 0200	MT-135	-	MT-135-69	-	-	-	-	MASC	-	-	-	57	-	-
1998-030	2451065-58	1998 Sep 9 0200:00	MT-138P	-	-	-	-	-	-	RVD	-	-	-	56	-	-
1998-031	2451073-58	1998 Sep 17 0200:00	MT-138P	-	-	-	-	-	-	RVD	-	-	-	56	-	-
1998-032	2451079-59	1998 Sep 23 0200:00	MT-138P	-	-	-	-	-	-	RVD	-	-	-	56	-	-
1998-033	2451093-58	1998 Oct 7 0200:00	MT-138P	-	-	-	-	-	-	RVD	-	-	-	54	-	-
1998-034	2451100-58	1998 Oct 14 0200:00	MT-138P	-	-	-	-	-	-	RVD	-	-	-	55	-	-
1998-036	2451107-58	1998 Oct 21 0200:00	MT-138P	-	-	-	-	-	-	RVD	-	-	-	56	-	-
1998-037	2451121-58	1998 Nov 4 0200:00	MT-138P	-	-	-	-	-	-	RVD	-	-	-	56	-	-
1998-038	2451128-58	1998 Nov 11 0200:00	MT-138P	-	-	-	-	-	-	RVD	-	-	-	55	-	-
1998-039	2451135-58	1998 Nov 18 0200:00	MT-138P	-	-	-	-	-	-	RVD	-	-	-	55	-	-
1998-040	2451149-58	1998 Dec 2 0200:00	MT-138P	-	-	-	-	-	-	RVD	-	-	-	54	-	-
1998-041	2451170-58	1998 Dec 23 0200:00	MT-138P	-	-	-	-	-	-	RVD	-	-	-	57	-	-
1999-031	2451428-58	1999 Sep 7 0200	MT-135	-	MT-135-70	-	-	-	-	MASC	-	-	-	55	-	-
1999-033	2451432-58	1999 Sep 11 0200	MT-135	-	MT-135-71	-	-	-	-	MASC	-	-	-	55	-	-
2000-001	2451555-58	2000 Jan 12 0200:00	MT-135	-	-	-	-	-	-	RVD	-	-	-	53	-	-
2000-002	2451562-58	2000 Jan 19 0200:00	MT-138P	-	-	-	-	-	-	RVD	-	-	-	54	-	-
2000-004	2451569-58	2000 Jan 26 0200:00	MT-138P	-	-	-	-	-	-	RVD	-	-	-	54	-	-
2000-005	2451583-58	2000 Feb 9 0200:00	MT-138P	-	-	-	-	-	-	RVD	-	-	-	57	-	-
2000-006	2451596-58	2000 Feb 24 0200:00	MT-138P	-	-	-	-	-	-	RVD	-	-	-	55	-	-
2000-007	2451618-58	2000 Mar 15 0200:00	MT-138P	-	-	-	-	-	-	RVD	-	-	-	55	-	-
2000-008	2451646-58	2000 Apr 12 0200:00	MT-138P	-	-	-	-	-	-	RVD	-	-	-	54	-	-
2000-009	2451653-59	2000 Apr 19 0210:00	MT-138P	-	-	-	-	-	-	RVD	-	-	-	56	-	-
2000-014	2451659-58	2000 May 25 0200:00	MT-138P	-	-	-	-	-	-	RVD	-	-	-	56	-	-
2000-015	2451696-58	2000 May 31 0200:00	MT-138P	-	-	-	-	-	-	RVD	-	-	-	56	-	-
2000-016	2451716-58	2000 May 25 0200:00	MT-138P	-	-	-	-	-	-	RVD	-	-	-	56	-	-
2000-017	2451724-58	2000 Jun 21 0200:00	MT-138P	-	-	-	-	-	-	RVD	-	-	-	56	-	-
2000-018	2451731-58	2000 Jul 6 0200:00	MT-138P	-	-	-	-	-	-	RVD	-	-	-	56	-	-
2000-019	2451744-58	2000 Jul 19 0200:00	MT-138P	-	-	-	-	-	-	RVD	-	-	-	56	-	-
2000-020	2451759-58	2000 Aug 5 0200:00	MT-138P	-	-	-	-	-	-	RVD	-	-	-	56	-	-
2000-021	2451779-58	2000 Aug 23 0200:00	MT-138P	-	-	-	-	-	-	RVD	-	-	-	59	-	-
2000-022	2451794-58	2000 Sep 6 0200:00	MT-138P	-	-	-	-	-	-	RVD	-	-	-	58	-	-
2000-023	2451806-58	2000 Sep 18 0200:00	MT-135	-	MT-135-72	Ozone	-	-	-	MASC	-	-	-	59	-	-
2000-024	2451806-58	2000 Sep 19 0200:00	MT-135	-	MT-135-73	Ozone	-	-	-	MASC	-	-	-	59	-	-
2000-025	2451807-58	2000 Sep 20 0200:00	MT-138P	-	-	-	-	-	-	RVD	-	-	-	53	-	-
2000-026	2451821-58	2000 Oct 4 0200:00	MT-138P	-	-	-	-	-	-	RVD	-	-	-	54	-	-
2000-027	2451821-58	2000 Oct 19 0200:00	MT-138P	-	-	-	-	-	-	RVD	-	-	-	55	-	-
2000-028	2451821-58	2000 Oct 19 0215:00	MT-138P	-	-	-	-	-	-	RVD	-	-	-	51	-	-
2000-029	2451821-58	2000 Nov 15 0215:00	MT-138P	-	-	-	-	-	-	RVD	-	-	-	53	-	-
2000-030	2451821-58	2000 Nov 15 0215:00	MT-138P	-	-	-	-	-	-	RVD	-	-	-	52	-	-
2000-031	2451821-58	2000 Nov 22 0215:00	MT-138P	-	-	-	-	-	-	RVD	-	-	-	52	-	-
2000-032	2451821-58	2000 Dec 7 0200:00	MT-138P	-	-	-	-	-	-	RVD	-	-	-	52	-	-
2000-033	2451821-58	2000 Dec 7 0200:00	MT-138P	-	-	-	-	-	-	RVD	-	-	-	52	-	-
2000-034	2451821-58	2000 Dec 20 0200:00	MT-138P	-	-	-	-	-	-	RVD	-	-	-	52	-	-
2001-001	2451989-50	2001 Mar 21	MT-135	-	MT-135 R1119	Last flight	-	-	-	MASC	-	-	-	55?	-	-





Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	OrbPay t	Agency	Launch_Code	Group	Category	LTCite	Cite	Notes
1964-W16	2438483.59	1964 Mar 29 0212	MT-135	-	PT-135-1	0.000	ISAS	SS	ISAS/	Test	ISTS-8	-	-
1964-W16	2438600.59	1964 Jul 24 0207:00	MT-135	-	MT-135-001	0.000	ISAS	SS	JMA/	Aeron	WDGR	-	-
1964-W16	2438713.59	1964 Nov 14 0210:00	MT-135	-	MT-135-002	0.000	ISAS	SS	JMA/	Aeron	WDGR	SR6-1121	-
1964-W17	2438714.80	1964 Nov 15 0710:00	MT-135	-	MT-135-003	0.000	ISAS	SS	JMA/	Aeron	WDGR	SR6-1121	-
1965-W35	2438828.59	1965 Mar 09 0210:00	MT-135	-	MT-135-004	0.000	ISAS	SS	JMA/	Aeron	WDGR	-	-
1965-W39	2438830.59	1965 Mar 11 0207:00	MT-135	-	MT-135-005	0.000	ISAS	SS	JMA/Arizumi	Aeron	WDGR	SR6-1121	-
1965-W40	2438830.80	1965 Mar 11 0707:00	MT-135	-	MT-135-006	0.000	ISAS	SS	JMA/Arizumi	Aeron	WDGR	-	-
1965-W49	2438949.60	1965 Jul 08 0226:00	MT-135	-	MT-135-007	0.000	ISAS	SS	JMA/Arizumi	Aeron	WDGR	-	-
1965-W49	2438949.97	1965 Jul 08 1110:00	MT-135	-	MT-135-008	0.000	ISAS	SS	JMA/Arizumi	Aeron	WDGR	-	-
1965-W49	2438953.59	1965 Jul 12 0207:00	MT-135	-	MT-135-009	0.000	ISAS	SF	JMA/Arizumi	Aeron	WDGR	-	-
1965-W137	2439032.58	1965 Sep 29 0700:00	MT-135	-	MT-135-010	0.000	ISAS	SS	JMA/Arizumi	Aeron	WDGR	-	-
1965-W136	2439032.79	1965 Sep 29 0700:00	MT-135	-	MT-135-011	0.000	ISAS	SS	JMA/Arizumi	Aeron	WDGR	-	-
1965-W19	2439143.59	1966 Jan 18 0210:00	MT-135	-	MT-135-012	0.000	ISAS	SU	JMA/Arizumi	Aeron	WDGR	-	-
1965-W17	2439144.94	1966 Jan 19 1030:00	MT-135	-	MT-135-014	0.000	ISAS	SU	JMA/Arizumi	Aeron	WDGR	-	-
1965-W21	2439144.58	1966 Jan 19 0200:00	MT-135	-	MT-135-015	0.000	ISAS	SU	JMA/Toshitake	Aeron	WDGR	-	-
1965-W246	2439245.60	1966 Apr 30 1040:00	MT-135	-	MT-135-016	0.000	ISAS	SU	JMA/Arizumi	Aeron	WDGR	-	-
1965-W247	2439245.94	1966 Apr 30 0200:00	MT-135	-	MT-135-017	0.000	ISAS	SU	JMA/Arizumi	Aeron	WDGR	-	-
1965-W249	2439247.58	1966 May 02 0200:00	MT-135	-	MT-135-1	0.000	ISAS	SU	ISAS/	Test	ISTS7	-	-
1965-W48	2439348.73	1966 Aug 18 0200:00	MT-135	-	MT-135-018	0.000	ISAS	SU	JMA/Arizumi	Aeron	WDGR	-	-
1965-W307	2439355.58	1966 Aug 18 0200:00	MT-135	-	MT-135-018	0.000	ISAS	SU	JMA/Arizumi	Aeron	WDGR	-	-
1965-W336	2439359.59	1966 Sep 21 0210	MT-135	-	MT-135-019	0.000	ISAS	SU	JMA/Arizumi	Aeron	WDGR	-	-
1965-W120	2439411.60	1966 Oct 13 0225:00	MT-135	-	MT-135-A -020	0.000	ISAS	SU	JMA/Arizumi	Aeron	WDGR	-	-
1965-W351	2439509.58	1967 Jan 19 0200:00	MT-135	-	MT-135-021	0.000	ISAS	SS	JMA/Arizumi	Aeron	WDGR	-	-
1967-W26	2439512.58	1967 Jan 22 0200:00	MT-135	-	MT-135-022	0.000	ISAS	SS	JMA/Arizumi	Aeron	WDGR	-	-
1967-W429	2439512.71	1967 Jan 22 0600:00	MT-135	-	MT-135-023	0.000	ISAS	SS	JMA/Arizumi	Aeron	WDGR	-	-
1967-W430	2439512.83	1967 Jan 22 0600:00	MT-135	-	MT-135-024	0.000	ISAS	SS	JMA/Arizumi	Aeron	WDGR	-	-
1967-W431	2439514.58	1967 Jan 24 0200:00	MT-135	-	MT-135-025	0.000	ISAS	SS	JMA/Arizumi	Aeron	WDGR	-	-
1967-W433	2439514.58	1967 Jan 24 0200:00	MT-135	-	MT-135-025	0.000	ISAS	SS	JMA/Arizumi	Aeron	WDGR	-	-
1967-W474	2439581.27	1967 Mar 31 1628	MT-135	-	MT-135-026	0.000	ISAS/JMA	SS	JMA/	Aeron	WDGR	Japheteo7, 390	-
1967-W475	2439584.86	1967 Apr 4 0910	MT-135	-	MT-135-026	0.000	ISAS/JMA	SS	JMA/	Aeron	WDGR	Japheteo7, 390	-
1967-W476	2439584.91	1967 Apr 4 0955	MT-135	-	MT-135-027	0.000	ISAS/JMA	SS	JMA/	Aeron	WDGR	Japheteo7, 390	-
1967-W477	2439584.96	1967 Apr 4 1107	MT-135	-	MT-135-028	0.000	ISAS/JMA	SS	JMA/	Aeron	WDGR	Japheteo7, 390	-
1967-W462	2439585.00	1967 Apr 4 1156	MT-135	-	MT-135-029	0.000	ISAS/JMA	SS	JMA/	Aeron	WDGR	Japheteo7, 390	-
1967-W463	2439585.19	1967 Apr 4 1628	MT-135	-	MT-135-031	0.000	ISAS/JMA	SS	JMA/	Aeron	WDGR	Japheteo7, 390	-
1967-W466	2439585.45	1967 Apr 4 2244	MT-135	-	MT-135-032	0.000	ISAS/JMA	SS	JMA/	Aeron	WDGR	Japheteo7, 390	-
1967-W468	2439585.51	1967 Apr 5 0015	MT-135	-	MT-135-033	0.000	ISAS/JMA	SS	JMA/	Aeron	WDGR	Japheteo7, 390	-
1967-W490	2439585.94	1967 Apr 5 0101	MT-135	-	MT-135-034	0.000	ISAS/JMA	SS	JMA/	Aeron	WDGR	Japheteo7, 390	-
1967-W492	2439585.95	1967 Apr 5 0333	MT-135	-	MT-135-035	0.000	ISAS/JMA	SS	JMA/	Aeron	WDGR	Japheteo7, 390	-
1968-W184	2440114.58	1968 Sep 15 0200:00	MT-135	-	MT-135-036	0.000	ISAS	SS	JMA/Sakai	Aeron	WDGR	-	-
1968-W188	2440114.72	1968 Sep 15 0518:00	MT-135	-	MT-135-037	0.000	ISAS	SS	JMA/Sakai	Aeron	WDGR	-	-
1968-W178	2440225.95	1969 Jan 04 0200:00	MT-135	-	MT-135-038	0.000	ISAS	SS	JMA/Arizumi	Aeron	WDGR	-	-
1968-W179	2440225.71	1969 Jan 04 0200:00	MT-135	-	MT-135-039	0.000	ISAS	SS	JMA/Arizumi	Aeron	WDGR	-	-
1968-W406	2440226.95	1969 Jan 5 0200	MT-135	-	MT-135-40	0.000	ISAS	SS	JMA/Arizumi	Aeron	WDGR	-	-
1968-W407	2440226.71	1969 Jan 5 0200	MT-135P	-	MT-135-41	0.000	ISAS	SS	JMA/Arizumi	Aeron	WDGR	-	-
1969-W192	2440471.95	1969 Sep 09 0500:00	MT-135	-	MT-135P-041	0.000	ISAS	SS	JMA/Shimizu	Aeron	WDGR	-	-
1969-W196	2440471.11	1969 Sep 07 0200:00	MT-135	-	MT-135P-042	0.000	ISAS	SS	JMA/Shimizu	Aeron	WDGR	-	-
1969-W198	2440471.58	1969 Sep 07 0205:00	MT-135P	-	MT-135P-043	0.000	ISAS	SS	JMA/Shimizu	Aeron	WDGR	-	-
1969-W199	2440491.97	1969 Sep 27 0500:00	MT-135P	-	MT-135P-044	0.000	ISAS	SS	JMA/Shimizu	Aeron	WDGR	-	-
1970-W142	2440608.71	1970 Jan 25 0500:00	MT-135P	-	MT-135P-045	0.000	ISAS	SS	JMA/Shimizu	Aeron	WDGR	-	-
1970-W143	2440608.58	1970 Jan 25 0200:00	MT-135P	-	MT-135P-046	0.000	ISAS	SS	JMA/Shimizu	Aeron	WDGR	-	-
1970-W144	2440603.58	1970 Jul 15 0200	MT-135P	-	MT-135P-047	0.000	JMA	SF	JMA/	Aeron	RISBJ	-	-
1970-W144	2440603.58	1970 Aug 19 0210	MT-135P	-	MT-135P-048	0.000	JMA	SS	JMA/	Aeron	RISBJ	-	-
1970-W144	2440681.59	1970 Sep 3 0230	MT-135P	-	MT-135P-049	0.000	JMA	SS	JMA/	Aeron	RISBJ	-	-
1970-W145	2440683.59	1970 Oct 1 0205	MT-135P	-	MT-135P-050	0.000	JMA	SS	JMA/	Aeron	RISBJ	-	-
1970-W146	2440687.58	1970 Oct 14 0200	MT-135P	-	MT-135P-051	0.000	JMA	SS	JMA/	Aeron	RISBJ	-	-
1970-W1698	2440687.58	1970 Oct 28 0200	MT-135P	-	MT-135P-052	0.000	JMA	SS	JMA/	Aeron	RISBJ	-	-
1970-W1699	2440690.58	1970 Nov 12 0200	MT-135P	-	MT-135P-053	0.000	JMA	SS	JMA/	Aeron	RISBJ	-	-
1970-W147	2440914.58	1970 Nov 25 0200	MT-135P	-	MT-135P-054	0.000	JMA	SS	JMA/	Aeron	RISBJ	-	-
1970-W148	2440930.58	1970 Dec 10 0200	MT-135P	-	MT-135P-055	0.000	JMA	SS	JMA/	Aeron	RISBJ	-	-
1970-W1900	2440943.80	1970 Dec 23 0220	MT-135P	-	MT-135P-056	0.000	JMA	SS	JMA/	Aeron	RISBJ	-	-
1971-W1692	2440954.58	1971 Jan 6 0201	MT-135P	-	MT-135P-057	0.000	JMA	SS	JMA/	Aeron	RISBJ	-	-
1971-W1113	2440954.58	1971 Jan 13 0201	MT-135P	-	MT-135P-058	0.000	JMA	SS	JMA/	Aeron	RISBJ	-	-
1971-W1693	2440971.58	1971 Jan 20 0200	MT-135P	-	MT-135P-059	0.000	JMA	SS	JMA/	Aeron	RISBJ	-	-
1971-W1114	2440978.58	1971 Feb 3 0200	MT-135P	-	MT-135P-060	0.000	JMA	SS	JMA/	Aeron	RISBJ	-	-
1971-W1694	2440985.58	1971 Feb 11 0200	MT-135P	-	MT-135P-061	0.000	JMA	SS	JMA/	Aeron	RISBJ	-	-
1971-W1695	2440993.58	1971 Feb 18 0200	MT-135P	-	MT-135P-062	0.000	JMA	SS	JMA/	Aeron	RISBJ	-	-
1971-W1696	2441014.58	1971 Feb 18 0200	MT-135P	-	MT-135P-063	0.000	JMA	SS	JMA/	Aeron	RISBJ	-	-
1971-W1697	2441021.58	1971 Mar 11 0200	MT-135P	-	MT-135P-064	0.000	JMA	SF	JMA/	Aeron	RISBJ	-	-
1971-W1698	2441034.58	1971 Mar 24 0200	MT-135P	-	MT-135P-065	0.000	JMA	SS	JMA/	Aeron	RISBJ	-	-
1971-W1699	2441048.58	1971 Apr 7 0200	MT-135P	-	MT-135P-066	0.000	JMA	SS	JMA/	Aeron	RISBJ	-	-
1971-W1700	2441062.58	1971 Apr 21 0200	MT-135P	-	MT-135P-067	0.000	JMA	SS	JMA/	Aeron	RISBJ	-	-
1971-W1701	2441077.58	1971 May 6 0200	MT-135P	-	MT-135P-068	0.000	JMA	SS	JMA/	Aeron	RISBJ	-	-
1971-W1702	2441107.58	1971 May 12 0200	MT-135P	-	MT-135P-069	0.000	JMA	SS	JMA/	Aeron	RISBJ	-	-
1972-W170	2441349.79	1972 Feb 7 0645	MT-135P	-	MT-135P T1	0.000	NASDA	SS	NASDA/	Aeron?	SR12, 607	-	-
1972-W190	2441354.78	1972 Feb 7 0645	MT-135P	-	MT-135P T2	0.000	NASDA	SS	NASDA/	Aeron?	NASDA-HH	-	-
1972-W25	2441397.14	1972 Mar 16 1516	MT-135P	-	-	0.000	JMA	SS	JMA/	Aeron	FDC	-	-
1972-W26	2441397.36	1972 Mar 20 2032	MT-135P	-	-	0.000	JMA	SS	JMA/	Aeron	FDC	-	-
1972-W1098	2441559.56	1972 Aug 30 0130	MT-135P	-	MT-135P T3	0.000	NASDA	SS	NASDA/	Aeron?	NASDA-HH	-	-
1972-W1099	2441559.76	1972 Aug 30 0615	MT-135P	-	MT-135P T4	0.000	NASDA	SS	NASDA/	Aeron?	NASDA-HH	-	-
1973-W183	2441718.58	1973 Feb 5 0152	MT-135P	-	MT-135P T5	0.000	NASDA	SS	NASDA/	Aeron?	NASDA-HH	-	-
1973-W203	2441721.56	1973 Feb 8 0130	MT-135P	-	MT-135P T6	0.000	NASDA	SS	NASDA/	Aeron?	NASDA-HH	-	-
1973-W122	2441930.58	1973 Sep 5 0157	MT-135P	-	MT-135P T7	0.000	NASDA	SS	NASDA/	Aeron?	NASDA-HH	-	-
1973-W1123	2441930.77	1973 Sep 5 0630	MT-135P	-	MT-135P T8	0.000	NASDA	SS	NASDA/	Aeron?	NASDA-HH	-	-





Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Agency	Launch_Code	Group	Category	LTCite	Cite	Notes
1982-W64	2444996.58	1982 Jan 27 02:00:00	MT-135P	-	MT135P-R447	JMA	SS	JMA/	Meteo	DST-5850	-	-
1982-W66	2445002.56	1982 Feb 2 01:30	MT-135P	-	MT135P T31	IMASDA	SS	IMASDA/	Aeronaut?	MASDA-MW	-	-
1982-W68	2445003.56	1982 Feb 3 01:30	MT-135P	-	MT135P T32	IMASDA	SS	IMASDA/	Aeronaut?	MASDA-MW	-	-
1982-W69	2445003.59	1982 Feb 3 02:15:59	MT-135P	-	MT135P-R449	JMA/	SS	JMA/	Meteo	DST-5850	-	-
1982-W121	2445017.58	1982 Feb 17 02:00:00	MT-135P	-	MT135P-R449	JMA/	SS	JMA/	Meteo	DST-5850	-	-
1982-A04	2445024.58	1982 Feb 24 02:00:00	MT-135P	-	MT135P-R450	JMA/	SS	JMA/	Meteo	DST-5850	-	-
1982-A06	2445038.58	1982 Mar 10 02:01:00	MT-135P	-	MT135P-R451	JMA/	SS	JMA/	Meteo	DST-5850	-	-
1982-A08	2445045.60	1982 Mar 17 02:20:00	MT-135P	-	MT135P-R452	JMA/	SS	JMA/	Meteo	DST-5850	-	-
1982-W200	2445052.58	1982 Mar 24 02:01:00	MT-135P	-	MT135P-R453	JMA/	SS	JMA/	Meteo	DST-5850	-	-
1982-W236	2445066.58	1982 Apr 7 02:00:00	MT-135P	-	MT135P-R454	JMA/	SS	JMA/	Meteo	DST-5850	-	-
1982-W243	2445073.58	1982 Apr 14 02:02:00	MT-135P	-	MT135P-R455	JMA/	SS	JMA/	Meteo	DST-5850	-	-
1982-W258	2445080.58	1982 Apr 21 02:00:00	MT-135P	-	MT135P-R456	JMA/	SS	JMA/	Meteo	DST-5850	-	-
1982-W515	2445097.58	1982 Apr 28 02:00:00	MT-135P	-	MT135P-R457	JMA/	SS	JMA/	Meteo	DST-5850	-	-
1982-W225	2445101.58	1982 May 19 02:00:00	MT-135P	-	MT135P-R458	JMA/	SS	JMA/	Meteo	DST-5850	-	-
1982-A12	2445115.58	1982 May 26 02:00:00	MT-135P	-	MT135P-R459	JMA/	SS	JMA/	Meteo	DST-5850	-	-
1982-W302	2445122.58	1982 Jun 2 02:02:00	MT-135P	-	MT135P-R460	JMA/	SS	JMA/	Meteo	DST-5850	-	-
1982-W322	2445129.58	1982 Jun 9 02:02:00	MT-135P	-	MT135P-R461	JMA/	SS	JMA/	Meteo	DST-5850	-	-
1982-W331	2445143.58	1982 Jun 23 02:00:00	MT-135P	-	MT135P-R462	JMA/	SS	JMA/	Meteo	DST-5850	-	-
1982-W355	2445157.58	1982 Jul 1 02:00:00	MT-135P	-	MT135P-R463	JMA/	SS	JMA/	Meteo	DST-5850	-	-
1982-W371	2445171.60	1982 Jul 21 02:26:00	MT-135P	-	MT135P-R464	JMA/	SS	JMA/	Meteo	DST-5850	-	-
1982-W378	2445186.58	1982 Aug 5 02:00:00	MT-135P	-	MT135P-R465	JMA/	SS	JMA/	Meteo	DST-5850	-	-
1982-W384	2445199.59	1982 Aug 18 02:12:00	MT-135P	-	MT135P-R466	JMA/	SS	JMA/	Meteo	DST-5850	-	-
1982-W396	2445213.58	1982 Sep 1 02:00:00	MT-135P	-	MT135P-R467	JMA/	SS	JMA/	Meteo	DST-5850	-	-
1982-W401	2445217.58	1982 Sep 5 01:30	MT-135P	-	MT135P T33	IMASDA	SS	IMASDA/	Aeronaut?	MASDA-MW	-	-
1982-W403	2445220.58	1982 Sep 8 02:00:00	MT-135P	-	MT135P-R468	JMA/	SS	JMA/	Meteo	DST-5850	-	-
1982-W406	2445227.58	1982 Sep 15 02:00:00	MT-135P	-	MT135P-R469	JMA/	SS	JMA/	Meteo	DST-5850	-	-
1982-W416	2445241.58	1982 Sep 29 02:00:00	MT-135P	-	MT135P-R470	JMA/	SS	JMA/	Meteo	DST-5850	-	-
1982-W427	2445249.58	1982 Oct 7 02:00:00	MT-135P	-	MT135P-R471	JMA/	SS	JMA/	Meteo	DST-5850	-	-
1982-W435	2445263.58	1982 Oct 21 02:00:00	MT-135P	-	MT135P-R472	JMA/	SS	JMA/	Meteo	DST-5850	-	-
1982-W438	2445269.58	1982 Oct 27 02:00:00	MT-135P	-	MT135P-R473	JMA/	SS	JMA/	Meteo	DST-5850	-	-
1982-W449	2445283.58	1982 Nov 10 02:00:00	MT-135P	-	MT135P-R474	JMA/	SS	JMA/	Meteo	DST-5850	-	-
1982-W473	2445291.58	1982 Nov 18 02:00:00	MT-135P	-	MT135P-R475	JMA/	SS	JMA/	Meteo	DST-5850	-	-
1982-W488	2445305.58	1982 Dec 2 02:00:00	MT-135P	-	MT135P-R476	JMA/	SS	JMA/	Meteo	DST-5850	-	-
1982-W494	2445311.58	1982 Dec 6 02:00:00	MT-135P	-	MT135P-R477	JMA/	SS	JMA/	Meteo	DST-5850	-	-
1982-W500	2445318.58	1982 Dec 15 02:00:00	MT-135P	-	MT135P-R478	JMA/	SS	JMA/	Meteo	DST-5850	-	-
1982-W510	2445332.58	1982 Dec 29 02:00:00	MT-135P	-	MT135P-R479	JMA/	SS	JMA/	Meteo	DST-5850	-	-
1983-W07	2445346.58	1983 Jan 19 02:00:00	MT-135P	-	MT135P-R481	JMA/	SS	JMA/	Meteo	DST-5850	-	-
1983-W14	2445353.58	1983 Jan 26 02:16:00	MT-135P	-	MT135P-R482	JMA/	SS	JMA/	Meteo	DST-5850	-	-
1983-W21	2445360.60	1983 Feb 5 02:00:00	MT-135P	-	MT135P-R483	JMA/	SS	JMA/	Meteo	DST-5850	-	-
1983-W26	2445368.58	1983 Feb 16 02:01:00	MT-135P	-	MT135P-R484	JMA/	SS	JMA/	Meteo	DST-5850	-	-
1983-W35	2445388.58	1983 Feb 25 02:00:00	MT-135P	-	MT135P-R486	JMA/	SS	JMA/	Meteo	DST-5850	-	-
1983-W36	2445398.58	1983 Mar 5 02:00:00	MT-135P	-	MT135P-R489	JMA/	SS	JMA/	Meteo	DST-5850	-	-
1983-W50	2445409.58	1983 Mar 16 02:00:00	MT-135P	-	MT135P-R488	JMA/	SS	JMA/	Meteo	DST-5850	-	-
1983-W106	2445416.58	1983 Mar 25 02:00:00	MT-135P	-	MT135P-R489	JMA/	SS	JMA/	Meteo	DST-5850	-	-
1983-W120	2445430.58	1983 Apr 6 02:00:00	MT-135P	-	MT135P-R491	JMA/	SS	JMA/	Meteo	DST-5850	-	-
1983-W125	2445441.58	1983 Apr 15 02:00:00	MT-135P	-	MT135P-R492	JMA/	SS	JMA/	Meteo	DST-5850	-	-
1983-W131	2445454.58	1983 Apr 27 02:00:00	MT-135P	-	MT135P-R493	JMA/	SS	JMA/	Meteo	DST-5850	-	-
1983-W145	2445461.58	1983 Apr 31 02:00:00	MT-135P	-	MT135P-R494	JMA/	SS	JMA/	Meteo	DST-5850	-	-
1983-W149	2445472.58	1983 May 15 02:00:00	MT-135P	-	MT135P-R495	JMA/	SS	JMA/	Meteo	DST-5850	-	-
1983-W171	2445488.58	1983 May 26 02:00:00	MT-135P	-	MT135P-R496	JMA/	SS	JMA/	Meteo	DST-5850	-	-
1983-W174	2445494.59	1983 May 30 02:15:00	MT-135P	-	MT135P-R497	JMA/	SS	JMA/	Meteo	DST-5850	-	-
1983-W187	2445500.00	1983 Jun 15 02:03:59	MT-135P	-	MT135P-R498	JMA/	SS	JMA/	Meteo	DST-5850	-	-
1983-W204	2445514.59	1983 Jun 29 02:04:59	MT-135P	-	MT135P-R499	JMA/	SS	JMA/	Meteo	DST-5850	-	-
1983-W213	2445529.58	1983 Jul 14 02:00:00	MT-135P	-	MT135P-R500	JMA/	SS	JMA/	Meteo	DST-5850	-	-
1983-W222	2445542.58	1983 Jul 27 02:00:00	MT-135P	-	MT135P-R501	JMA/	SS	JMA/	Meteo	DST-5850	-	-
1983-W232	2445556.58	1983 Aug 10 02:00:00	MT-135P	-	MT135P-R502	JMA/	SS	JMA/	Meteo	DST-5850	-	-
1983-W243	2445571.60	1983 Aug 25 02:30:00	MT-135P	-	MT135P-R503	JMA/	SS	JMA/	Meteo	DST-5850	-	-
1983-W261	2445584.59	1983 Sep 7 02:15:00	MT-135P	-	MT135P-R504	JMA/	SS	JMA/	Meteo	DST-5850	-	-
1983-W266	2445591.58	1983 Sep 14 02:00:00	MT-135P	-	MT135P-R505	JMA/	SS	JMA/	Meteo	DST-5850	-	-
1983-W284	2445605.58	1983 Sep 28 02:00:00	MT-135P	-	MT135P-R506	JMA/	SS	JMA/	Meteo	DST-5850	-	-
1983-W290	2445619.58	1983 Oct 12 02:00:00	MT-135P	-	MT135P-R507	JMA/	SS	JMA/	Meteo	DST-5850	-	-
1983-W294	2445626.58	1983 Oct 19 02:00:00	MT-135P	-	MT135P-R508	JMA/	SS	JMA/	Meteo	DST-5850	-	-
1983-W299	2445633.58	1983 Oct 26 02:00:00	MT-135P	-	MT135P-R509	JMA/	SS	JMA/	Meteo	DST-5850	-	-
1983-W306	2445640.58	1983 Nov 2 02:00:00	MT-135P	-	MT135P-R510	JMA/	SS	JMA/	Meteo	DST-5850	-	-
1983-W317	2445654.58	1983 Nov 16 02:00:00	MT-135P	-	MT135P-R511	JMA/	SS	JMA/	Meteo	DST-5850	-	-
1983-W330	2445668.58	1983 Nov 30 02:00:00	MT-135P	-	MT135P-R512	JMA/	SS	JMA/	Meteo	DST-5850	-	-
1983-W343	2445675.58	1983 Dec 14 02:03:59	MT-135P	-	MT135P-R513	JMA/	SS	JMA/	Meteo	DST-5850	-	-
1983-W364	2445682.59	1983 Dec 21 02:00:00	MT-135P	-	MT135P-R514	JMA/	SS	JMA/	Meteo	DST-5850	-	-
1983-W372	2445689.59	1983 Dec 28 02:00:00	MT-135P	-	MT135P-R515	JMA/	SS	JMA/	Meteo	DST-5850	-	-
1984-W11	2445701.59	1984 Jan 11 02:03:59	MT-135P	-	MT135P-R516	JMA/	SS	JMA/	Meteo	DST-5850	-	-
1984-W26	2445718.58	1984 Jan 19 02:00:00	MT-135P	-	MT135P-R517	JMA/	SS	JMA/	Meteo	DST-5850	-	-
1984-W35	2445724.58	1984 Jan 25 02:00:00	MT-135P	-	MT135P-R518	JMA/	SS	JMA/	Meteo	DST-5850	-	-
1984-W54	2445738.58	1984 Feb 8 02:01:00	MT-135P	-	MT135P-R519	JMA/	SS	JMA/	Meteo	DST-5850	-	-
1984-W75	2445745.58	1984 Feb 15 02:00:00	MT-135P	-	MT135P-R520	JMA/	SS	JMA/	Meteo	DST-5850	-	-
1984-W82	2445762.58	1984 Feb 22 02:02:00	MT-135P	-	MT135P-R521	JMA/	SS	JMA/	Meteo	DST-5850	-	-
1984-W101	2445766.58	1984 Mar 7 02:00:00	MT-135P	-	MT135P-R522	JMA/	SS	JMA/	Meteo	DST-5850	-	-
1984-W105	2445773.58	1984 Mar 14 02:00:00	MT-135P	-	MT135P-R523	JMA/	SS	JMA/	Meteo	DST-5850	-	-
1984-W120	2445787.58	1984 Mar 28 02:00:00	MT-135P	-	MT135P-R524	JMA/	SS	JMA/	Meteo	DST-5850	-	-
1984-W142	2445801.58	1984 Apr 11 02:02:00	MT-135P	-	MT135P-R525	JMA/	SS	JMA/	Meteo	DST-5850	-	-
1984-W146	2445808.59	1984 Apr 18 02:10:00	MT-135P	-	MT135P-R526	JMA/	SS	JMA/	Meteo	DST-5850	-	-
1984-W162	2445815.58	1984 Apr 25 02:00:00	MT-135P	-	MT135P-R527	JMA/	SS	JMA/	Meteo	DST-5850	-	-
1984-W177	2445829.58	1984 May 9 02:02:00	MT-135P	-	MT135P-R529	JMA/	SS	JMA/	Meteo	DST-5850	-	-



Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	OrbPay_t	Agency	Launch_Code	Group	Category	LTCite	Cite	Notes
1986-W103	2446578.58	1986 May 28 02:00:00	MT-135P	-	MT135P-R604	0.000	JMA	SS	JMA/	Meteo	DST-5850	-	-
1986-W106	2446592.58	1986 Jun 11 02:00:00	MT-135P	-	MT135P-R605	0.000	JMA	SS	JMA/	Meteo	DST-5850	-	-
1986-W114	2446606.58	1986 Jun 25 02:00:00	MT-135P	-	MT135P-R606	0.000	JMA	SS	JMA/	Meteo	DST-5850	-	-
1986-W124	2446613.58	1986 Jul 2 02:00:00	MT-135P	-	MT135P-R607	0.000	JMA	SS	JMA/	Meteo	DST-5850	-	-
1986-W127	2446627.58	1986 Jul 16 02:01:00	MT-135P	-	MT135P-R608	0.000	JMA	SS	JMA/	Meteo	DST-5850	-	-
1986-W136	2446638.58	1986 Jul 24 02:00:00	MT-135P	-	MT135P-R609	0.000	JMA	SS	JMA/	Meteo	DST-5850	-	-
1986-W140	2446648.58	1986 Aug 6 02:00:00	MT-135P	-	MT135P-R610	0.000	JMA	SS	JMA/	Meteo	DST-5850	-	-
1986-W140	2446662.58	1986 Aug 20 02:00:00	MT-135P	-	MT135P-R611	0.000	JMA	SS	JMA/	Meteo	DST-5850	-	-
1986-W229	2446662.60	1986 Aug 20 02:20	MT-135	-	MT-135-45	0.000	ISAS	SS	ISAS/	Meteo	SRJ	-	-
1986-W148	2446662.67	1986 Aug 20 04:00	MT-135	-	MT-135-46	0.000	ISAS	SU	ISAS/	Meteo	SRJ	-	-
1986-W148	2446669.58	1986 Aug 27 02:00:00	MT-135P	-	MT135P-R612	0.000	JMA	SS	JMA/	Meteo	DST-5850	-	-
1986-W154	2446683.58	1986 Sep 10 02:00:00	MT-135P	-	MT135P-R613	0.000	JMA	SS	JMA/	Meteo	DST-5850	-	-
1986-W166	2446697.58	1986 Sep 24 02:02:00	MT-135P	-	MT135P-R614	0.000	JMA	SS	JMA/	Meteo	DST-5850	-	-
1986-W232	2446711.58	1986 Oct 8 02:00	MT-135P	-	MT135P-R615	0.000	JMA	SS	JMA/	Meteo	SRJ	-	-
1986-W166	2446718.58	1986 Oct 15 02:00:00	MT-135P	-	MT135P-R616	0.000	JMA	SS	JMA/	Meteo	DST-5850	-	-
1986-W193	2446726.58	1986 Oct 23 02:00:00	MT-135P	-	MT135P-R617	0.000	JMA	SS	JMA/	Meteo	DST-5850	-	-
1986-W202	2446732.59	1986 Oct 29 02:10:00	MT-135P	-	MT135P-R618	0.000	JMA	SS	JMA/	Meteo	DST-5850	-	-
1986-W206	2446746.58	1986 Nov 12 02:00:00	MT-135P	-	MT135P-R619	0.000	JMA	SS	JMA/	Meteo	DST-5850	-	-
1986-W213	2446753.58	1986 Nov 19 02:00:00	MT-135P	-	MT135P-R620	0.000	JMA	SS	JMA/	Meteo	DST-5850	-	-
1986-W218	2446774.58	1986 Dec 3 02:00:00	MT-135P	-	MT135P-R621	0.000	JMA	SS	JMA/	Meteo	DST-5850	-	-
1986-W222	2446781.58	1986 Dec 10 02:00:00	MT-135P	-	MT135P-R622	0.000	JMA	SS	JMA/	Meteo	DST-5850	-	-
1986-W225	2446788.58	1986 Dec 17 02:00:00	MT-135P	-	MT135P-R623	0.000	JMA	SS	JMA/	Meteo	DST-5850	-	-
1986-W434	2446802.58	1986 Dec 24 02:00:00	MT-135P	-	MT135P-R624	0.000	JMA	SS	JMA/	Meteo	DST-5850	-	-
1987-W422	2446802.58	1987 Jan 7 02:00	MT-135P	-	MT135P-R625	0.000	JMA	SS	JMA/	Meteo	SRJ	-	-
1987-W430	2446809.58	1987 Jan 14 02:00:00	MT-135P	-	MT135P-R626	0.000	JMA	SS	JMA/	Meteo	DST-5850	-	-
1987-W442	2446816.58	1987 Jan 21 02:00:00	MT-135P	-	MT135P-R627	0.000	JMA	SS	JMA/	Meteo	DST-5850	-	-
1987-W447	2446831.58	1987 Feb 5 02:00:00	MT-135P	-	MT135P-R628	0.000	JMA	SS	JMA/	Meteo	DST-5850	-	-
1987-W461	2446844.58	1987 Feb 12 02:00:00	MT-135P	-	MT135P-R629	0.000	JMA	SS	JMA/	Meteo	DST-5850	-	-
1987-W465	2446855.58	1987 Feb 18 02:00:00	MT-135P	-	MT135P-R630	0.000	JMA	SS	JMA/	Meteo	DST-5850	-	-
1987-W468	2446865.58	1987 Feb 25 02:00:00	MT-135P	-	MT135P-R631	0.000	JMA	SS	JMA/	Meteo	DST-5850	-	-
1987-W477	2446872.58	1987 Mar 11 02:00:00	MT-135P	-	MT135P-R632	0.000	JMA	SS	JMA/	Meteo	DST-5850	-	-
1987-W490	2446879.58	1987 Mar 25 02:00:00	MT-135P	-	MT135P-R633	0.000	JMA	SS	JMA/	Meteo	DST-5850	-	-
1987-W109	2446883.58	1987 Apr 8 02:00:00	MT-135P	-	MT135P-R634	0.000	JMA	SS	JMA/	Meteo	DST-5850	-	-
1987-W117	2446890.58	1987 Apr 23 02:00:00	MT-135P	-	MT135P-R635	0.000	JMA	SS	JMA/	Meteo	DST-5850	-	-
1987-W129	2446914.58	1987 Apr 29 02:00:00	MT-135P	-	MT135P-R636	0.000	JMA	SS	JMA/	Meteo	DST-5850	-	-
1987-W135	2446928.58	1987 May 13 02:00:00	MT-135P	-	MT135P-R637	0.000	JMA	SS	JMA/	Meteo	DST-5850	-	-
1987-W140	2446935.58	1987 May 20 02:00:00	MT-135P	-	MT135P-R638	0.000	JMA	SS	JMA/	Meteo	DST-5850	-	-
1987-W140	2446942.59	1987 May 27 02:15:00	MT-135P	-	MT135P-R639	0.000	JMA	SS	JMA/	Meteo	DST-5850	-	-
1987-W151	2446956.60	1987 Jun 10 02:30:00	MT-135P	-	MT135P-R640	0.000	JMA	SS	JMA/	Meteo	DST-5850	-	-
1987-W161	2446963.58	1987 Jun 17 02:00:00	MT-135P	-	MT135P-R641	0.000	JMA	SS	JMA/	Meteo	DST-5850	-	-
1987-W169	2446970.58	1987 Jun 24 02:00:00	MT-135P	-	MT135P-R642	0.000	JMA	SS	JMA/	Meteo	DST-5850	-	-
1987-W178	2446984.58	1987 Jul 6 02:00:00	MT-135P	-	MT135P-R643	0.000	JMA	SS	JMA/	Meteo	DST-5850	-	-
1987-W184	2446999.58	1987 Jul 15 02:00:00	MT-135P	-	MT135P-R644	0.000	JMA	SS	JMA/	Meteo	DST-5850	-	-
1987-W203	2447023.58	1987 Aug 6 02:00:00	MT-135P	-	MT135P-R646	0.000	JMA	SS	JMA/	Meteo	DST-5850	-	-
1987-W212	2447040.58	1987 Aug 19 02:00:00	MT-135P	-	MT135P-R646	0.000	JMA	SS	JMA/	Meteo	DST-5850	-	-
1987-W215	2447047.58	1987 Sep 2 02:00:00	MT-135P	-	MT135P-R647	0.000	JMA	SS	JMA/	Meteo	DST-5850	-	-
1987-W225	2447047.58	1987 Sep 9 02:12:00	MT-135P	-	MT135P-R648	0.000	ISAS	SS	ISAS/	Meteo	DST-5850	-	-
1987-W233	2447047.87	1987 Sep 9 04:00	MT-135P	-	MT-135-48	0.000	ISAS	SS	ISAS/	Meteo	SRJ	-	-
1987-W235	2447051.58	1987 Sep 23 02:00	MT-135P	-	MT135P-R649	0.000	JMA	SS	JMA/	Meteo	SRJ	-	-
1987-W235	2447058.58	1987 Sep 23 02:00	MT-135P	-	MT135P-R650	0.000	JMA	SS	JMA/	Meteo	SRJ	-	-
1987-W238	2447075.58	1987 Oct 7 02:00:00	MT-135P	-	MT135P-R651	0.000	JMA	SS	JMA/	Meteo	DST-5850	-	-
1987-W256	2447089.58	1987 Oct 21 02:17:00	MT-135P	-	MT135P-R652	0.000	JMA	SS	JMA/	Meteo	DST-5850	-	-
1987-W263	2447098.60	1987 Oct 28 02:00:00	MT-135P	-	MT135P-R653	0.000	JMA	SS	JMA/	Meteo	DST-5850	-	-
1987-W272	2447110.58	1987 Nov 11 02:00:00	MT-135P	-	MT135P-R654	0.000	JMA	SS	JMA/	Meteo	DST-5850	-	-
1987-W278	2447117.58	1987 Nov 18 02:00:00	MT-135P	-	MT135P-R655	0.000	JMA	SS	JMA/	Meteo	DST-5850	-	-
1987-W295	2447126.58	1987 Nov 26 02:00:00	MT-135P	-	MT135P-R656	0.000	JMA	SS	JMA/	Meteo	DST-5850	-	-
1987-W302	2447138.58	1987 Dec 6 02:00:00	MT-135P	-	MT135P-R657	0.000	JMA	SS	JMA/	Meteo	DST-5850	-	-
1987-W310	2447145.58	1987 Dec 16 02:13:00	MT-135P	-	MT135P-R658	0.000	JMA	SS	JMA/	Meteo	DST-5850	-	-
1987-W317	2447152.58	1987 Dec 23 02:00	MT-135P	-	MT135P-R659	0.000	JMA	SS	JMA/	Meteo	DST-5850	-	-
1988-W011	2447166.60	1988 Jan 6 02:24:00	MT-135P	-	MT135P-R660	0.000	JMA	SS	JMA/	Meteo	DST-5850	-	-
1988-W203	2447173.58	1988 Jan 13 02:00	MT-135P	-	MT135P-R661	0.000	JMA	SS	JMA/	Meteo	DST-5850	-	-
1988-W029	2447180.58	1988 Jan 20 02:00:00	MT-135P	-	MT135P-R662	0.000	JMA	SS	JMA/	Meteo	DST-5850	-	-
1988-W029	2447201.58	1988 Feb 10 02:01:00	MT-135P	-	MT135P-R663	0.000	JMA	SS	JMA/	Meteo	DST-5850	-	-
1988-W132	2447208.58	1988 Feb 17 02:00:00	MT-135P	-	MT135P-R664	0.000	JMA	SS	JMA/	Meteo	DST-5850	-	-
1988-W234	2447215.58	1988 Feb 24 02:00:00	MT-135P	-	MT135P-R665	0.000	JMA	SS	JMA/	Meteo	DST-5850	-	-
1988-W295	2447223.58	1988 Mar 3 02:00	MT-135P	-	MT135P-R666	0.000	JMA	SS	JMA/	Meteo	DST-5850	-	-
1988-W295	2447229.58	1988 Mar 9 02:05	MT-135P	-	MT135P-R667	0.000	JMA	SS	JMA/	Meteo	DST-5850	-	-
1988-W326	2447237.58	1988 Mar 15 02:00:00	MT-135P	-	MT135P-R668	0.000	JMA	SS	JMA/	Meteo	DST-5850	-	-
1988-W365	2447250.58	1988 Mar 30 02:00:00	MT-135P	-	MT135P-R669	0.000	JMA	SS	JMA/	Meteo	DST-5850	-	-
1988-W457	2447265.58	1988 Apr 14 02:00:00	MT-135P	-	MT135P-R670	0.000	JMA	SS	JMA/	Meteo	DST-5850	-	-
1988-W494	2447271.58	1988 Apr 20 02:00:00	MT-135P	-	MT135P-R671	0.000	JMA	SS	JMA/	Meteo	DST-5850	-	-
1988-W494	2447278.58	1988 Apr 27 02:02:00	MT-135P	-	MT135P-R672	0.000	JMA	SS	JMA/	Meteo	DST-5850	-	-
1988-W105	2447292.59	1988 May 11 02:03:00	MT-135P	-	MT135P-R673	0.000	JMA	SS	JMA/	Meteo	DST-5850	-	-
1988-W111	2447306.58	1988 May 15 02:00:00	MT-135P	-	MT135P-R674	0.000	JMA	SS	JMA/	Meteo	DST-5850	-	-
1988-W115	2447313.58	1988 May 25 02:00:00	MT-135P	-	MT135P-R675	0.000	JMA	SS	JMA/	Meteo	DST-5850	-	-
1988-W121	2447320.58	1988 Jun 1 02:00:00	MT-135P	-	MT135P-R676	0.000	JMA	SS	JMA/	Meteo	DST-5850	-	-
1988-W236	2447327.58	1988 Jun 8 02:00:00	MT-135P	-	MT135P-R677	0.000	JMA	SS	JMA/	Meteo	DST-5850	-	-
1988-W132	2447341.58	1988 Jun 15 02:00:00	MT-135P	-	MT135P-R678	0.000	JMA	SS	JMA/	Meteo	DST-5850	-	-
1988-W136	2447355.59	1988 Jun 29 02:00:00	MT-135P	-	MT135P-R679	0.000	JMA	SS	JMA/	Meteo	DST-5850	-	-
1988-W138	2447369.58	1988 Jul 13 02:14:00	MT-135P	-	MT135P-R680	0.000	JMA	SS	JMA/	Meteo	DST-5850	-	-
1988-W141	2447377.58	1988 Jul 27 02:00:00	MT-135P	-	MT135P-R681	0.000	JMA	SS	JMA/	Meteo	DST-5850	-	-
1988-W146	2447391.58	1988 Aug 4 02:00:00	MT-135P	-	MT135P-R682	0.000	JMA	SS	JMA/	Meteo	DST-5850	-	-
1988-W152	2447404.58	1988 Aug 18 02:00:00	MT-135P	-	MT135P-R683	0.000	JMA	SS	JMA/	Meteo	DST-5850	-	-
1988-W232	2447415.60	1988 Sep 11 02:25	MT-135	-	MT-135-49	0.000	ISAS	SS	ISAS/TSUKI/	Meteo	SRJ	-	-
1988-W237	2447418.58	1988 Sep 14 02:00	MT-135P	-	MT135P-R684	0.000	JMA	SS	JMA/	Meteo	SRJ	-	-

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	OrbPay	Agency	Launch_Code	Group	Category	LTCite	Cite	Notes
1988-W172	2447433.58	1988 Sep 29 02:00:00	MT-135P	-	MT135P-R685	0.000	JMA	SS	JMA/	Meteo	DSI-5850	-	-
1988-W182	2447446.58	1988 Oct 12 02:02:00	MT-135P	-	MT135P-R686	0.000	JMA	SS	JMA/	Meteo	DSI-5850	-	-
1988-W184	2447460.58	1988 Oct 26 02:00:00	MT-135P	-	MT135P-R687	0.000	JMA	SS	JMA/	Meteo	DSI-5850	-	-
1988-W191	2447474.58	1988 Nov 9 02:00:00	MT-135P	-	MT135P-R688	0.000	JMA	SS	JMA/	Meteo	DSI-5850	-	-
1988-W197	2447481.58	1988 Nov 16 02:00:00	MT-135P	-	MT135P-R689	0.000	JMA	SS	JMA/	Meteo	DSI-5850	-	-
1988-W238	2447488.58	1988 Nov 23 02:00	MT-135P	-	MT135P-R690	0.000	JMA	SS	JMA/	Meteo	DSI-5850	-	-
1988-W268	2447495.58	1988 Nov 30 02:02:00	MT-135P	-	MT135P-R691	0.000	JMA	SS	JMA/	Meteo	DSI-5850	-	-
1988-W214	2447502.58	1988 Dec 7 02:00:00	MT-135P	-	MT135P-R692	0.000	JMA	SS	JMA/	Meteo	DSI-5850	-	-
1988-W216	2447509.58	1988 Dec 14 02:00:00	MT-135P	-	MT135P-R693	0.000	JMA	SS	JMA/	Meteo	DSI-5850	-	-
1988-W222	2447516.58	1988 Dec 21 02:00:00	MT-135P	-	MT135P-R694	0.000	JMA	SS	JMA/	Meteo	DSI-5850	-	-
1988-W228	2447523.59	1988 Dec 28 02:12:00	MT-135P	-	MT135P-R695	0.000	JMA	SS	JMA/	Meteo	DSI-5850	-	-
1989-W19	2447537.58	1989 Jan 11 02:02:00	MT-135P	-	MT135P-R696	0.000	JMA	SS	JMA/	Meteo	DSI-5850	-	-
1989-W307	2447544.58	1989 Jan 18 01:50	MT-135P	-	MT135P-R697	0.000	JMA	SS	JMA/	Meteo	SRJ	-	-
1989-W308	2447551.58	1989 Jan 25 02:00	MT-135P	-	MT135P-R698	0.000	JMA	SS	JMA/	Meteo	SRJ	-	-
1989-W309	2447558.58	1989 Feb 1 02:00	MT-135P	-	MT135P-R699	0.000	JMA	SS	JMA/	Meteo	SRJ	-	-
1989-W310	2447572.58	1989 Feb 22 02:06	MT-135P	-	MT135P-R700	0.000	JMA	SS	JMA/	Meteo	SRJ	-	-
1989-W311	2447579.59	1989 Feb 25 02:00	MT-135P	-	MT135P-R701	0.000	JMA	SS	JMA/	Meteo	SRJ	-	-
1989-W312	2447587.58	1989 Mar 2 02:00	MT-135P	-	MT135P-R702	0.000	JMA	SS	JMA/	Meteo	SRJ	-	-
1989-W313	2447593.58	1989 Mar 8 02:00	MT-135P	-	MT135P-R703	0.000	JMA	SS	JMA/	Meteo	SRJ	-	-
1989-W314	2447600.58	1989 Mar 15 02:00	MT-135P	-	MT135P-R704	0.000	JMA	SS	JMA/	Meteo	SRJ	-	-
1989-W315	2447614.58	1989 Mar 29 02:00	MT-135P	-	MT135P-R705	0.000	JMA	SS	JMA/	Meteo	SRJ	-	-
1989-W316	2447629.58	1989 Apr 13 02:02	MT-135P	-	MT135P-R706	0.000	JMA	SS	JMA/	Meteo	SRJ	-	-
1989-W317	2447635.58	1989 Apr 19 02:00	MT-135P	-	MT135P-R707	0.000	JMA	SS	JMA/	Meteo	SRJ	-	-
1989-W318	2447642.59	1989 Apr 26 02:04	MT-135P	-	MT135P-R708	0.000	JMA	SS	JMA/	Meteo	SRJ	-	-
1989-W319	2447656.58	1989 May 10 02:00	MT-135P	-	MT135P-R709	0.000	JMA	SS	JMA/	Meteo	SRJ	-	-
1989-W320	2447663.58	1989 May 17 02:00	MT-135P	-	MT135P-R710	0.000	JMA	SS	JMA/	Meteo	SRJ	-	-
1989-W321	2447677.59	1989 May 31 02:03	MT-135P	-	MT135P-R711	0.000	JMA	SS	JMA/	Meteo	SRJ	-	-
1989-W322	2447681.58	1989 Jun 14 02:00	MT-135P	-	MT135P-R712	0.000	JMA	SS	JMA/	Meteo	SRJ	-	-
1989-W323	2447688.58	1989 Jun 21 02:00	MT-135P	-	MT135P-R713	0.000	JMA	SS	JMA/	Meteo	SRJ	-	-
1989-W324	2447705.58	1989 Jun 28 02:00	MT-135P	-	MT135P-R714	0.000	JMA	SS	JMA/	Meteo	SRJ	-	-
1989-W325	2447720.58	1989 Jul 13 02:00	MT-135P	-	MT135P-R715	0.000	JMA	SS	JMA/	Meteo	SRJ	-	-
1989-W326	2447740.58	1989 Aug 2 02:00	MT-135P	-	MT135P-R716	0.000	JMA	SS	JMA/	Meteo	SRJ	-	-
1989-W327	2447794.58	1989 Aug 16 02:00	MT-135P	-	MT135P-R717	0.000	JMA	SS	JMA/	Meteo	SRJ	-	-
1989-W328	2447798.58	1989 Aug 30 02:00	MT-135P	-	MT135P-R718	0.000	JMA	SS	JMA/	Meteo	SRJ	-	-
1989-W329	2447792.58	1989 Sep 13 02:00	MT-135P	-	MT135P-R719	0.000	JMA	SS	JMA/	Meteo	SRJ	-	-
1989-W330	2447789.58	1989 Sep 20 02:01	MT-135P	-	MT135P-R720	0.000	JMA	SS	JMA/	Meteo	SRJ	-	-
1989-W331	2447803.58	1989 Oct 4 02:00	MT-135P	-	MT135P-R721	0.000	JMA	SS	JMA/	Meteo	SRJ	-	-
1989-W332	2447817.59	1989 Oct 18 02:04	MT-135P	-	MT135P-R722	0.000	JMA	SS	JMA/	Meteo	SRJ	-	-
1989-W333	2447831.58	1989 Nov 1 02:00	MT-135P	-	MT135P-R723	0.000	JMA	SS	JMA/	Meteo	SRJ	-	-
1989-W334	2447845.58	1989 Nov 15 02:00	MT-135P	-	MT135P-R724	0.000	JMA	SS	JMA/	Meteo	SRJ	-	-
1989-W335	2447862.58	1989 Nov 22 02:00	MT-135P	-	MT135P-R725	0.000	JMA	SS	JMA/	Meteo	SRJ	-	-
1989-W336	2447876.58	1989 Dec 6 02:00	MT-135P	-	MT135P-R726	0.000	JMA	SS	JMA/	Meteo	SRJ	-	-
1989-W337	2447893.58	1989 Dec 13 02:02	MT-135P	-	MT135P-R727	0.000	JMA	SS	JMA/	Meteo	SRJ	-	-
1989-W338	2447891.59	1989 Dec 21 02:10	MT-135P	-	MT135P-R728	0.000	JMA	SS	JMA/	Meteo	SRJ	-	-
1989-W339	2447898.58	1989 Dec 28 02:00	MT-135P	-	MT135P-R729	0.000	JMA	SS	JMA/	Meteo	SRJ	-	-
1989-W340	2447975.58	1989 Sep 6 02:00	MT-135P	-	MT135P-R730	0.000	TSAS	SS	TSAS/	Meteo	SRJ	-	-
1989-W341	2447998.58	1990 Jan 6 02:00	MT-135P	-	MT135P-R731	0.000	JMA	SS	JMA/	Meteo	SRJ	-	-
1989-W342	2447996.58	1990 Jan 24 02:00:00	MT-135P	-	MT135P-R732	0.000	JMA	SS	JMA/	Meteo	SRJ/ESA-SR317-381	-	-
1989-W343	2447915.58	1990 Jan 31 02:00:00	MT-135P	-	MT135P-R733	0.000	JMA	SS	JMA/	Meteo	ESA-SR317-381	-	-
1989-W344	2447922.58	1990 Jan 31 02:00:00	MT-135P	-	MT135P-R734	0.000	JMA	SS	JMA/	Meteo	ESA-SR317-381	-	-
1989-W345	2447928.58	1990 Feb 7 02:00	MT-135P	-	MT135P-R735	0.000	JMA	SS	JMA/	Meteo	ESA-SR317-381	-	-
1989-W346	2447932.58	1990 Feb 14 02:00	MT-135P	-	MT135P-R736	0.000	JMA	SS	JMA/	Meteo	ESA-SR317-381	-	-
1989-W347	2447943.58	1990 Feb 21 02:00	MT-135P	-	MT135P-R737	0.000	JMA	SS	JMA/	Meteo	ESA-SR317-381	-	-
1989-W348	2447943.58	1990 Feb 28 02:00	MT-135P	-	MT135P-R738	0.000	JMA	SS	JMA/	Meteo	ESA-SR317-381	-	-
1989-W349	2447950.58	1990 Feb 28 02:00	MT-135P	-	MT135P-R739	0.000	JMA	SS	JMA/	Meteo	ESA-SR317-381	-	-
1989-W350	2447961.58	1990 Mar 7 02:00	MT-135P	-	MT135P-R740	0.000	JMA	SS	JMA/	Meteo	ESA-SR317-381	-	-
1989-W351	2447971.58	1990 Mar 14 02:00	MT-135P	-	MT135P-R741	0.000	JMA	SS	JMA/	Meteo	ESA-SR317-381	-	-
1989-W352	2447978.58	1990 Mar 21 02:00	MT-135P	-	MT135P-R742	0.000	JMA	SS	JMA/	Meteo	ESA-SR317-381	-	-
1989-W353	2447982.58	1990 Mar 28 02:00	MT-135P	-	MT135P-R743	0.000	JMA	SS	JMA/	Meteo	ESA-SR317-381	-	-
1989-W354	2447989.58	1990 Apr 11 02:00	MT-135P	-	MT135P-R744	0.000	JMA	SS	JMA/	Meteo	ESA-SR317-381	-	-
1989-W355	2448006.58	1990 Apr 25 02:00	MT-135P	-	MT135P-R745	0.000	JMA	SS	JMA/	Meteo	ESA-SR317-381	-	-
1989-W356	2448021.58	1990 May 10 02:00	MT-135P	-	MT135P-R746	0.000	JMA	SS	JMA/	Meteo	ESA-SR317-381	-	-
1989-W357	2448027.58	1990 May 16 02:00	MT-135P	-	MT135P-R747	0.000	JMA	SS	JMA/	Meteo	ESA-SR317-381	-	-
1989-W358	2448034.58	1990 May 23 02:00	MT-135P	-	MT135P-R748	0.000	JMA	SS	JMA/	Meteo	ESA-SR317-381	-	-
1989-W359	2448048.58	1990 May 30 02:00	MT-135P	-	MT135P-R749	0.000	JMA	SS	JMA/	Meteo	ESA-SR317-381	-	-
1989-W360	2448062.58	1990 Jun 20 02:00	MT-135P	-	MT135P-R750	0.000	JMA	SS	JMA/	Meteo	ESA-SR317-381	-	-
1989-W361	2448070.58	1990 Jun 28 02:00	MT-135P	-	MT135P-R751	0.000	JMA	SS	JMA/	Meteo	ESA-SR317-381	-	-
1989-W362	2448083.58	1990 Jul 11 02:00	MT-135P	-	MT135P-R752	0.000	JMA	SS	JMA/	Meteo	ESA-SR317-381	-	-
1989-W363	2448097.59	1990 Jul 25 02:05	MT-135P	-	MT135P-R753	0.000	JMA	SS	JMA/	Meteo	ESA-SR317-381	-	-
1989-W364	2448111.58	1990 Aug 8 02:00	MT-135P	-	MT135P-R754	0.000	JMA	SS	JMA/	Meteo	ESA-SR317-381	-	-
1989-W365	2448126.58	1990 Aug 23 02:00	MT-135P	-	MT135P-R755	0.000	JMA	SS	JMA/	Meteo	ESA-SR317-381	-	-
1989-W366	2448130.59	1990 Aug 27 02:10:00	MT-135P	-	MT135P-R756	0.000	JMA	SS	JMA/	Meteo	ESA-SR317-381	-	-
1989-W367	2448139.58	1990 Sep 5 02:01	MT-135P	-	MT135P-R757	0.000	JMA	SS	JMA/	Meteo	ESA-SR317-381	-	-
1989-W368	2448153.58	1990 Sep 19 02:01	MT-135P	-	MT135P-R758	0.000	JMA	SS	JMA/	Meteo	ESA-SR317-381	-	-
1989-W369	2448167.58	1990 Oct 3 02:00	MT-135P	-	MT135P-R759	0.000	JMA	SS	JMA/	Meteo	ESA-SR317-381	-	-
1989-W370	2448181.59	1990 Oct 17 02:05	MT-135P	-	MT135P-R760	0.000	JMA	SS	JMA/	Meteo	ESA-SR317-381	-	-
1989-W371	2448196.58	1990 Nov 7 02:00	MT-135P	-	MT135P-R761	0.000	JMA	SS	JMA/	Meteo	ESA-SR317-381	-	-
1989-W372	2448202.58	1990 Nov 14 02:01	MT-135P	-	MT135P-R762	0.000	JMA	SS	JMA/	Meteo	ESA-SR317-381	-	-
1989-W373	2448209.58	1990 Nov 28 02:00	MT-135P	-	MT135P-R763	0.000	JMA	SS	JMA/	Meteo	ESA-SR317-381	-	-
1989-W374	2448230.58	1990 Dec 5 02:00	MT-135P	-	MT135P-R764	0.000	JMA	SS	JMA/	Meteo	ESA-SR317-381	-	-
1989-W375	2448237.58	1990 Dec 12 02:00	MT-135P	-	MT135P-R765	0.000	JMA	SS	JMA/	Meteo	ESA-SR317-381	-	-
1989-W376	2448244.58	1990 Dec 19 02:02	MT-135P	-	MT135P-R766	0.000	JMA	SS	JMA/	Meteo	ESA-SR317-381	-	-
1989-W377	2448252.58	1990 Dec 27 02:01	MT-135P	-	MT135P-R767	0.000	JMA	SS	JMA/	Meteo	ESA-SR317-381	-	-
1989-W378	2448265.59	1991 Jan 9 02:05	MT-135P	-	MT135P-R768	0.000	JMA	SS	JMA/	Meteo	ESA-SR317-381	-	-



Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	OrbPay	Agency	Launch_Code	Group	Category	LTCite	Cite	Notes
1991-W133	2448272.59	1991 Jan 16 0203	MT-135P	-	MT135P-R768	0.000	JMA	SS	JMA/	Meteo	SRJ	-	-
1991-W134	2448279.58	1991 Jan 23 0201	MT-135P	-	MT135P-R769	0.000	JMA	SS	JMA/	Meteo	SRJ	-	-
1991-W135	2448286.59	1991 Jan 30 0208	MT-135P	-	MT135P-R770	0.000	JMA	SS	JMA/	Meteo	SRJ	-	-
1991-W136	2448293.60	1991 Feb 6 0225	MT-135P	-	MT135P-R771	0.000	JMA	SS	JMA/	Meteo	SRJ	-	-
1991-W137	2448298.58	1991 Feb 9 0200	MT-135P	-	MT-135S-53	0.000	ISAS	SS	ISAS/TSUK/	Aeron	ISASRpt679	-	-
1991-W138	2448298.58	1991 Feb 11 0210	MT-135P	-	MT-135S-54	0.000	ISAS	SS	ISAS/TSUK/	Aeron	ISASRpt679	-	-
1991-W139	2448300.58	1991 Feb 13 0202	MT-135P	-	MT135P-R772	0.000	JMA	SS	JMA/	Meteo	SRJ	-	-
1991-W139	2448307.60	1991 Feb 20 0220	MT-135P	-	MT135P-R773	0.000	JMA	SS	JMA/	Meteo	SRJ	-	-
1991-W139	2448314.59	1991 Feb 27 0204	MT-135P	-	MT135P-R774	0.000	JMA	SS	JMA/	Meteo	SRJ	-	-
1991-W140	2448328.59	1991 Mar 13 0213	MT-135P	-	MT135P-R775	0.000	JMA	SS	JMA/	Meteo	SRJ	-	-
1991-W141	2448335.58	1991 Mar 20 0200	MT-135P	-	MT135P-R776	0.000	JMA	SS	JMA/	Meteo	SRJ	-	-
1991-W142	2448342.58	1991 Mar 27 0203	MT-135P	-	MT135P-R777	0.000	JMA	SS	JMA/	Meteo	SRJ	-	-
1991-W143	2448346.59	1991 Apr 10 0203	MT-135P	-	MT135P-R778	0.000	JMA	SS	JMA/	Meteo	SRJ	-	-
1991-W144	2448353.59	1991 Apr 17 0205	MT-135P	-	MT135P-R779	0.000	JMA	SS	JMA/	Meteo	SRJ	-	-
1991-W144	2448370.58	1991 Apr 24 0200	MT-135P	-	MT135P-R780	0.000	JMA	SS	JMA/	Meteo	SRJ	-	-
1991-W146	2448384.58	1991 May 8 0202	MT-135P	-	MT135P-R781	0.000	JMA	SS	JMA/	Meteo	SRJ	-	-
1991-W147	2448391.58	1991 May 15 0200	MT-135P	-	MT135P-R782	0.000	JMA	SS	JMA/	Meteo	SRJ	-	-
1991-W148	2448398.58	1991 May 22 0200	MT-135P	-	MT135P-R783	0.000	JMA	SS	JMA/	Meteo	SRJ	-	-
1991-W149	2448412.60	1991 Jun 5 0225	MT-135P	-	MT135P-R784	0.000	JMA	SS	JMA/	Meteo	SRJ	-	-
1991-W150	2448426.59	1991 Jun 19 0210	MT-135P	-	MT135P-R785	0.000	JMA	SS	JMA/	Meteo	SRJ	-	-
1991-W151	2448433.58	1991 Jun 26 0200	MT-135P	-	MT135P-R786	0.000	JMA	SS	JMA/	Meteo	SRJ	-	-
1991-W152	2448448.58	1991 Jul 11 0200	MT-135P	-	MT135P-R787	0.000	JMA	SS	JMA/	Meteo	SRJ	-	-
1991-W153	2448454.58	1991 Jul 17 0200	MT-135P	-	MT135P-R788	0.000	JMA	SS	JMA/	Meteo	SRJ	-	-
1991-W154	2448469.58	1991 Aug 14 0200	MT-135P	-	MT135P-R789	0.000	JMA	SS	JMA/	Meteo	SRJ	-	-
1991-W155	2448462.58	1991 Aug 28 0205	MT-135P	-	MT135P-R790	0.000	JMA	SS	JMA/	Meteo	SRJ	-	-
1991-W156	2448466.59	1991 Sep 4 0200	MT-135P	-	MT135P-R791	0.000	JMA	SS	JMA/	Meteo	SRJ	-	-
1991-W157	2448503.58	1991 Sep 11 0200:00	MT-135P	-	MT135P-R792	0.000	JMA	SS	JMA/	Meteo	SRJ	-	-
1991-W158	2448510.58	1991 Sep 12 0200:00	MT-135P	-	MT-135S-56	0.000	ISAS	SS	ISAS/TSUK/	Aeron	ISASRpt679	-	-
1991-W158	2448511.58	1991 Sep 12 0200:00	MT-135P	-	MT135P-R793	0.000	JMA	SS	JMA/	Meteo	SRJ	-	-
1991-W158	2448511.58	1991 Sep 12 0200:00	MT-135P	-	MT135P-R794	0.000	JMA	SS	JMA/	Meteo	SRJ	-	-
1991-W158	2448524.59	1991 Sep 25 0210	MT-135P	-	MT135P-R795	0.000	JMA	SS	JMA/	Meteo	SRJ	-	-
1991-W160	2448532.58	1991 Oct 5 0200	MT-135P	-	MT135P-R796	0.000	JMA	SS	JMA/	Meteo	SRJ	-	-
1991-W161	2448545.58	1991 Oct 16 0200	MT-135P	-	MT135P-R797	0.000	JMA	SS	JMA/	Meteo	SRJ	-	-
1991-W162	2448552.58	1991 Oct 23 0203	MT-135P	-	MT135P-R798	0.000	JMA	SS	JMA/	Meteo	SRJ	-	-
1991-W163	2448566.59	1991 Nov 6 0214	MT-135P	-	MT135P-R799	0.000	JMA	SS	JMA/	Meteo	SRJ	-	-
1991-W164	2448573.58	1991 Nov 13 0200	MT-135P	-	MT135P-R800	0.000	JMA	SS	JMA/	Meteo	SRJ	-	-
1991-W165	2448587.58	1991 Nov 27 0200	MT-135P	-	MT135P-R801	0.000	JMA	SS	JMA/	Meteo	SRJ	-	-
1991-W166	2448594.58	1991 Dec 4 0200	MT-135P	-	MT135P-R802	0.000	JMA	SS	JMA/	Meteo	SRJ	-	-
1991-W167	2448601.59	1991 Dec 11 0203	MT-135P	-	MT135P-R803	0.000	JMA	SS	JMA/	Meteo	SRJ	-	-
1991-W168	2448608.58	1991 Dec 18 0200	MT-135P	-	MT135P-R804	0.000	JMA	SS	JMA/	Meteo	SRJ	-	-
1991-W169	2448615.58	1991 Dec 25 0200	MT-135P	-	MT135P-R805	0.000	JMA	SS	JMA/	Meteo	SRJ	-	-
1991-W170	2448620.58	1992 Jan 8 0200	MT-135P	-	MT135P-R806	0.000	JMA	SS	JMA/	Meteo	SRJ	-	-
1992-W02	2448630.58	1992 Jan 15 0200:00	MT-135P	-	MT135P-R807	0.000	JMA	SS	JMA/	Meteo	SRJ	-	-
1992-W04	2448636.58	1992 Jan 22 0200:00	MT-135P	-	MT135P-R808	0.000	JMA	SS	JMA/	Meteo	SRJ	-	-
1992-W04	2448643.58	1992 Jan 22 0200:00	MT-135P	-	MT135P-R809	0.000	JMA	SS	JMA/	Meteo	SRJ	-	-
1992-W06	2448657.59	1992 Feb 5 0203:00	MT-135P	-	MT135P-R808	0.000	JMA	SS	JMA/	Meteo	SRJ	-	-
1992-W14	2448671.59	1992 Feb 19 0211:00	MT-135P	-	MT135P-R809	0.000	JMA	SS	JMA/	Meteo	SRJ	-	-
1992-W14	2448678.59	1992 Feb 26 0206:00	MT-135P	-	MT135P-R810	0.000	JMA	SS	JMA/	Meteo	SRJ	-	-
1992-W16	2448692.58	1992 Mar 18 0200:00	MT-135P	-	MT135P-R811	0.000	JMA	SS	JMA/	Meteo	SRJ	-	-
1992-W23	2448698.58	1992 Mar 25 0200:00	MT-135P	-	MT135P-R812	0.000	JMA	SS	JMA/	Meteo	SRJ	-	-
1992-W23	2448708.58	1992 Mar 25 0200:00	MT-135P	-	MT135P-R813	0.000	JMA	SS	JMA/	Meteo	SRJ	-	-
1992-W41	2448727.58	1992 Apr 5 0204:59	MT-135P	-	MT135P-R814	0.000	JMA	SS	JMA/	Meteo	SRJ	-	-
1992-W45	2448734.58	1992 Apr 20 0202:00	MT-135P	-	MT135P-R815	0.000	JMA	SS	JMA/	Meteo	SRJ	-	-
1992-W45	2448742.58	1992 Apr 30 0200:00	MT-135P	-	MT135P-R816	0.000	JMA	SS	JMA/	Meteo	SRJ	-	-
1992-W47	2448742.58	1992 Apr 30 0200:00	MT-135P	-	MT135P-R817	0.000	JMA	SS	JMA/	Meteo	SRJ	-	-
1992-W48	2448755.58	1992 May 13 0200	MT-135P	-	MT135P-R819	0.000	JMA	SS	JMA/	Meteo	SRJ	-	-
1992-W48	2448763.58	1992 May 20 0200:00	MT-135P	-	MT135P-R819	0.000	JMA	SS	JMA/	Meteo	SRJ	-	-
1992-W49	2448769.58	1992 May 27 0200:00	MT-135P	-	MT135P-R820	0.000	JMA	SS	JMA/	Meteo	SRJ	-	-
1992-W52	2448783.58	1992 Jun 10 0200:00	MT-135P	-	MT135P-R821	0.000	JMA	SS	JMA/	Meteo	SRJ	-	-
1992-W57	2448790.59	1992 Jun 17 0210:00	MT-135P	-	MT135P-R822	0.000	JMA	SS	JMA/	Meteo	SRJ	-	-
1992-W58	2448790.59	1992 Jun 24 0200:00	MT-135P	-	MT135P-R823	0.000	JMA	SS	JMA/	Meteo	SRJ	-	-
1992-W63	2448812.58	1992 Jun 8 0200:00	MT-135P	-	MT135P-R824	0.000	JMA	SS	JMA/	Meteo	SRJ	-	-
1992-W73	2448826.58	1992 Jul 19 0200:00	MT-135P	-	MT135P-R825	0.000	JMA	SS	JMA/	Meteo	SRJ	-	-
1992-W76	2448826.58	1992 Aug 5 0200:00	MT-135P	-	MT135P-R826	0.000	JMA	SS	JMA/	Meteo	SRJ	-	-
1992-W83	2448853.60	1992 Aug 19 0230:00	MT-135P	-	MT135P-R827	0.000	JMA	SS	JMA/	Meteo	SRJ	-	-
1992-W85	2448853.60	1992 Sep 2 0200	MT-135P	-	MT135P-R828	0.000	JMA	SS	JMA/	Meteo	SRJ	-	-
1992-W90	2448874.58	1992 Sep 9 0200:00	MT-135P	-	MT135P-R829	0.000	JMA	SS	JMA/	Meteo	SRJ	-	-
1992-W91	2448874.58	1992 Sep 9 0200:00	MT-135P	-	MT-135S-57	0.000	TSUK	SS	TSUK/	Aeron	ISASRpt679	-	-
1992-W103	2448898.58	1992 Sep 23 0200	MT-135P	-	MT135P-R830	0.000	JMA	SS	JMA/	Meteo	SRJ	-	-
1992-W95	2448902.59	1992 Oct 7 0210:00	MT-135P	-	MT135P-R831	0.000	JMA	SS	JMA/	Meteo	SRJ	-	-
1992-W121	2448917.58	1992 Oct 22 0200	MT-135P	-	MT135P-R832	0.000	JMA	SS	JMA/	Meteo	SRJ	-	-
1992-W103	2448923.58	1992 Oct 28 0200:00	MT-135P	-	MT135P-R833	0.000	JMA	SS	JMA/	Meteo	SRJ	-	-
1992-W103	2448931.58	1992 Nov 5 0200:00	MT-135P	-	MT135P-R834	0.000	JMA	SS	JMA/	Meteo	SRJ	-	-
1992-W108	2448944.58	1992 Nov 18 0200:00	MT-135P	-	MT135P-R835	0.000	JMA	SS	JMA/	Meteo	SRJ	-	-
1992-W108	2448951.58	1992 Nov 25 0200:00	MT-135P	-	MT135P-R836	0.000	JMA	SS	JMA/	Meteo	SRJ	-	-
1992-W110	2448958.60	1992 Dec 2 0200:00	MT-135P	-	MT135P-R837	0.000	JMA	SS	JMA/	Meteo	SRJ	-	-
1992-W122	2448972.59	1992 Dec 16 0209:00	MT-135P	-	MT135P-R838	0.000	JMA	SS	JMA/	Meteo	SRJ	-	-
1992-W114	2448979.58	1992 Dec 23 0200:00	MT-135P	-	MT135P-R839	0.000	JMA	SS	JMA/	Meteo	SRJ	-	-
1993-W01	2448987.59	1992 Dec 31 0203:00	MT-135P	-	MT135P-R840	0.000	JMA	SS	JMA/	Meteo	SRJ	-	-
1993-W03	2448993.59	1993 Jan 6 0204:59	MT-135P	-	MT135P-R841	0.000	JMA	SS	JMA/	Meteo	SRJ	-	-
1993-W04	2449007.58	1993 Jan 20 0201:00	MT-135P	-	MT135P-R842	0.000	JMA	SS	JMA/	Meteo	SRJ	-	-
1993-W04	2449014.58	1993 Jan 27 0200:00	MT-135P	-	MT135P-R843	0.000	JMA	SS	JMA/	Meteo	SRJ	-	-
1993-W06	2449021.58	1993 Feb 3 0200:00	MT-135P	-	MT135P-R844	0.000	JMA	SS	JMA/	Meteo	SRJ	-	-
1993-W07	2449036.58	1993 Feb 18 0200:00	MT-135P	-	MT135P-R845	0.000	JMA	SS	JMA/	Meteo	SRJ	-	-
1993-W62	2449042.58	1993 Feb 24 0200	MT-135P	-	MT135P-R846	0.000	JMA	SS	JMA/	Meteo	SRJ	-	-
1993-W08	2449049.58	1993 Mar 3 0200:00	MT-135P	-	MT135P-R847	0.000	JMA	SS	JMA/	Meteo	SRJ	-	-
1993-W09	2449063.58	1993 Mar 17 0200:00	MT-135P	-	MT135P-R848	0.000	JMA	SS	JMA/	Meteo	SRJ	-	-

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	OrbPay_t	Agency	Launch_Code	Group	Category	LTCite	Cite	Notes
1993-W12	2448070.59	1993 Mar 24 0207:00	MT-135P	-	MT135P-R869	0.000	JMA	SS	JMA/	Meteo	DSI-5850	-	-
1993-W17	2448084.59	1993 Apr 7 0207:00	MT-135P	-	MT135P-R860	0.000	JMA	SS	JMA/	Meteo	DSI-5850	-	-
1993-W18	2448098.59	1993 Apr 21 0204:59	MT-135P	-	MT135P-R861	0.000	JMA	SS	JMA/	Meteo	DSI-5850	-	-
1993-W19	2449106.58	1993 Apr 28 0202:00	MT-135P	-	MT135P-R862	0.000	JMA	SS	JMA/	Meteo	DSI-5850	-	-
1993-W21	2449119.58	1993 May 12 0202:00	MT-135P	-	MT135P-R863	0.000	JMA	SS	JMA/	Meteo	DSI-5850	-	-
1993-W23	2449126.59	1993 May 19 0204:59	MT-135P	-	MT135P-R864	0.000	JMA	SS	JMA/	Meteo	DSI-5850	-	-
1993-W25	2449133.59	1993 May 26 0210:00	MT-135P	-	MT135P-R865	0.000	JMA	SS	JMA/	Meteo	DSI-5850	-	-
1993-W28	2449147.60	1993 Jun 9 0226:59	MT-135P	-	MT135P-R866	0.000	JMA	SS	JMA/	Meteo	DSI-5850	-	-
1993-W32	2449154.59	1993 Jun 16 0204:59	MT-135P	-	MT135P-R867	0.000	JMA	SS	JMA/	Meteo	DSI-5850	-	-
1993-W35	2449168.60	1993 Jun 30 0221:00	MT-135P	-	MT135P-R868	0.000	JMA	SS	JMA/	Meteo	DSI-5850	-	-
1993-W36	2449183.58	1993 Jul 15 0200:00	MT-135P	-	MT135P-R869	0.000	JMA	SS	JMA/	Meteo	DSI-5850	-	-
1993-W38	2449203.59	1993 Aug 4 0210:00	MT-135P	-	MT135P-R870	0.000	JMA	SS	JMA/	Meteo	DSI-5850	-	-
1993-W40	2449217.58	1993 Aug 18 0200:00	MT-135P	-	MT135P-R862	0.000	JMA	SS	JMA/	Meteo	DSI-5850	-	-
1993-W42	2449231.59	1993 Sep 1 0203:00	MT-135P	-	MT135P-R863	0.000	JMA	SS	JMA/	Meteo	DSI-5850	-	-
1993-W45	2449246.58	1993 Sep 15 0200:00	MT-135P	-	MT135P-R864	0.000	JMA	SS	JMA/	Meteo	DSI-5850	-	-
1993-W46	2449262.58	1993 Sep 22 0200:00	MT-135P	-	MT135P-R865	0.000	JMA	SS	JMA/	Meteo	DSI-5850	-	-
1993-W47	2449283.58	1993 Sep 23 0200	MT-135	-	MT-135S-59	0.000	TSUK/	SS	TSUK/	Aeron	ISASRpt679	-	-
1993-W47	2449284.58	1993 Sep 24 0200	MT-135	-	MT-135S-59	0.000	TSUK/	SS	TSUK/	Aeron	ISASRpt679	-	-
1993-W47	2449285.58	1993 Sep 25 0200	MT-135P	-	MT135P-R866	0.000	JMA	SS	JMA/	Meteo	DSI-5850	-	-
1993-W49	2449299.58	1993 Sep 29 0200:00	MT-135P	-	MT135P-R867	0.000	JMA	SS	JMA/	Meteo	DSI-5850	-	-
1993-W49	2449274.58	1993 Oct 14 0200:00	MT-135P	-	MT135P-R868	0.000	JMA	SS	JMA/	Meteo	DSI-5850	-	-
1993-W61	2449280.59	1993 Oct 20 0210:00	MT-135P	-	MT135P-R869	0.000	JMA	SS	JMA/	Meteo	DSI-5850	-	-
1993-W62	2449287.58	1993 Oct 27 0200:00	MT-135P	-	MT135P-R870	0.000	JMA	SS	JMA/	Meteo	DSI-5850	-	-
1993-W63	2449301.58	1993 Nov 10 0200:00	MT-135P	-	MT135P-R871	0.000	JMA	SS	JMA/	Meteo	DSI-5850	-	-
1993-W64	2449308.58	1993 Nov 17 0200:00	MT-135P	-	MT135P-R872	0.000	JMA	SS	JMA/	Meteo	DSI-5850	-	-
1993-W65	2449323.58	1993 Dec 6 0200:00	MT-135P	-	MT135P-R873	0.000	JMA	SS	JMA/	Meteo	DSI-5850	-	-
1993-W66	2449329.58	1993 Dec 15 0215:00	MT-135P	-	MT135P-R874	0.000	JMA	SS	JMA/	Meteo	DSI-5850	-	-
1993-W69	2449336.59	1993 Dec 22 0203:00	MT-135P	-	MT135P-R875	0.000	JMA	SS	JMA/	Meteo	DSI-5850	-	-
1993-W60	2449343.59	1994 Jan 6 0200:00	MT-135P	-	MT135P-R876	0.000	JMA	SS	JMA/	Meteo	DSI-5850	-	-
1994-W02	2449358.58	1994 Jan 13 0200:00	MT-135P	-	MT135P-R877	0.000	JMA	SS	JMA/	Meteo	DSI-5850	-	-
1994-W01	2449378.58	1994 Jan 26 0200:00	MT-135P	-	MT135P-R878	0.000	JMA	SS	JMA/	Meteo	DSI-5850	-	-
1994-W07	2449386.58	1994 Feb 5 0200	MT-135P	-	MT135P-R879	0.000	JMA	SS	JMA/	Meteo	DSI-5850	-	-
1994-W08	2449399.59	1994 Feb 16 0207	MT-135P	-	MT135P-R880	0.000	JMA	SS	JMA/	Meteo	DSI-5850	-	-
1994-W09	2449413.60	1994 Feb 23 0220	MT-135P	-	MT135P-R881	0.000	JMA	SS	JMA/	Meteo	DSI-5850	-	-
1994-W10	2449420.58	1994 Mar 9 0200	MT-135P	-	MT135P-R882	0.000	JMA	SS	JMA/	Meteo	DSI-5850	-	-
1994-W11	2449427.58	1994 Mar 16 0200	MT-135P	-	MT135P-R883	0.000	JMA	SS	JMA/	Meteo	DSI-5850	-	-
1994-W12	2449436.59	1994 Mar 24 0210	MT-135P	-	MT135P-R884	0.000	JMA	SS	JMA/	Meteo	DSI-5850	-	-
1994-W13	2449441.59	1994 Mar 30 0203	MT-135P	-	MT135P-R885	0.000	JMA	SS	JMA/	Meteo	DSI-5850	-	-
1994-W14	2449456.60	1994 Apr 13 0228	MT-135P	-	MT135P-R886	0.000	JMA	SS	JMA/	Meteo	DSI-5850	-	-
1994-W15	2449469.59	1994 Apr 20 0210	MT-135P	-	MT135P-R887	0.000	JMA	SS	JMA/	Meteo	DSI-5850	-	-
1994-W16	2449483.59	1994 Apr 27 0210	MT-135P	-	MT135P-R888	0.000	JMA	SS	JMA/	Meteo	DSI-5850	-	-
1994-W17	2449497.59	1994 May 11 0216	MT-135P	-	MT135P-R889	0.000	JMA	SS	JMA/	Meteo	DSI-5850	-	-
1994-W19	2449511.59	1994 Jun 6 0203	MT-135P	-	MT135P-R890	0.000	JMA	SS	JMA/	Meteo	DSI-5850	-	-
1994-W20	2449518.60	1994 Jun 15 0220	MT-135P	-	MT135P-R891	0.000	JMA	SS	JMA/	Meteo	DSI-5850	-	-
1994-W21	2449522.58	1994 Jun 29 0200	MT-135P	-	MT135P-R892	0.000	JMA	SS	JMA/	Meteo	DSI-5850	-	-
1994-W22	2449529.59	1994 Jul 13 0200	MT-135P	-	MT135P-R893	0.000	JMA	SS	JMA/	Meteo	DSI-5850	-	-
1994-W23	2449533.58	1994 Jul 30 0208	MT-135P	-	MT135P-R894	0.000	JMA	SS	JMA/	Meteo	DSI-5850	-	-
1994-W24	2449559.59	1994 Aug 13 0215	MT-135P	-	MT135P-R895	0.000	JMA	SS	JMA/	Meteo	DSI-5850	-	-
1994-W25	2449567.58	1994 Aug 27 0205	MT-135P	-	MT135P-R896	0.000	JMA	SS	JMA/	Meteo	DSI-5850	-	-
1994-W26	2449589.58	1994 Aug 31 0203	MT-135P	-	MT135P-R897	0.000	JMA	SS	JMA/	Meteo	DSI-5850	-	-
1994-W29	2449601.58	1994 Sep 6 0200	MT-135P	-	MT135P-R898	0.000	JMA	SS	JMA/	Meteo	DSI-5850	-	-
1994-W30	2449603.58	1994 Sep 7 0200	MT-135	-	MT-135S-61	0.000	TSUK/	SS	TSUK/	Aeron	ISASRpt679	-	-
1994-W32	2449603.58	1994 Sep 8 0203	MT-135P	-	MT135P-R899	0.000	JMA	SS	JMA/	Meteo	DSI-5850	-	-
1994-W34	2449610.58	1994 Sep 15 0200	MT-135P	-	MT135P-R900	0.000	JMA	SS	JMA/	Meteo	DSI-5850	-	-
1994-W35	2449613.58	1994 Sep 18 0200	MT-135P	-	MT135P-R901	0.000	JMA	SS	JMA/	Meteo	DSI-5850	-	-
1994-W36	2449616.58	1994 Sep 21 0200	MT-135P	-	MT135P-R902	0.000	JMA	SS	JMA/	Meteo	DSI-5850	-	-
1994-W39	2449623.59	1994 Sep 28 0210	MT-135P	-	MT135P-R903	0.000	JMA	SS	JMA/	Meteo	DSI-5850	-	-
1994-W40	2449630.58	1994 Oct 5 0203	MT-135P	-	MT135P-R904	0.000	JMA	SS	JMA/	Meteo	DSI-5850	-	-
1994-W41	2449637.58	1994 Oct 12 0200	MT-135P	-	MT135P-R905	0.000	JMA	SS	JMA/	Meteo	DSI-5850	-	-
1994-W42	2449644.59	1994 Oct 19 0203	MT-135P	-	MT135P-R906	0.000	JMA	SS	JMA/	Meteo	DSI-5850	-	-
1994-W43	2449651.58	1994 Oct 26 0200	MT-135P	-	MT135P-R907	0.000	JMA	SS	JMA/	Meteo	DSI-5850	-	-
1994-W44	2449679.58	1994 Nov 16 0215	MT-135P	-	MT135P-R908	0.000	JMA	SS	JMA/	Meteo	DSI-5850	-	-
1994-W45	2449679.58	1994 Nov 23 0200	MT-135P	-	MT135P-R909	0.000	JMA	SS	JMA/	Meteo	DSI-5850	-	-
1994-W46	2449693.58	1994 Dec 7 0200	MT-135P	-	MT135P-R910	0.000	JMA	SS	JMA/	Meteo	DSI-5850	-	-
1994-W47	2449701.58	1994 Dec 15 0200	MT-135P	-	MT135P-R911	0.000	JMA	SS	JMA/	Meteo	DSI-5850	-	-
1994-W48	2449708.58	1994 Dec 22 0200	MT-135P	-	MT135P-R912	0.000	JMA	SS	JMA/	Meteo	DSI-5850	-	-
1994-W49	2449714.58	1994 Dec 28 0200	MT-135P	-	MT135P-R913	0.000	JMA	SS	JMA/	Meteo	DSI-5850	-	-
1995-W01	2449729.58	1995 Jan 12 0203	MT-135P	-	MT135P-R914	0.000	JMA	SS	JMA/	Meteo	DSI-5850	-	-
1995-W02	2449735.58	1995 Jan 18 0200	MT-135P	-	MT135P-R915	0.000	JMA	SS	JMA/	Meteo	DSI-5850	-	-
1995-W03	2449742.59	1995 Jan 25 0210	MT-135P	-	MT135P-R916	0.000	JMA	SS	JMA/	Meteo	DSI-5850	-	-
1995-W04	2449757.59	1995 Feb 9 0203	MT-135P	-	MT135P-R917	0.000	JMA	SS	JMA/	Meteo	DSI-5850	-	-
1995-W10	2449770.58	1995 Feb 22 0200	MT-135P	-	MT135P-R918	0.000	JMA	SS	JMA/	Meteo	DSI-5850	-	-
1995-W11	2449779.58	1995 Mar 8 0200	MT-135P	-	MT135P-R919	0.000	JMA	SS	JMA/	Meteo	DSI-5850	-	-
1995-W12	2449798.58	1995 Mar 22 0200	MT-135P	-	MT135P-R920	0.000	JMA	SS	JMA/	Meteo	DSI-5850	-	-
1995-W15	2449805.58	1995 Mar 29 0200	MT-135P	-	MT135P-R921	0.000	JMA	SS	JMA/	Meteo	DSI-5850	-	-
1995-W16	2449833.60	1995 Apr 26 0220	MT-135P	-	MT135P-R922	0.000	JMA	SS	JMA/	Meteo	DSI-5850	-	-
1995-W22	2449847.58	1995 May 10 0200	MT-135P	-	MT135P-R923	0.000	JMA	SS	JMA/	Meteo	DSI-5850	-	-
1995-W24	2449854.59	1995 May 17 0208	MT-135P	-	MT135P-R924	0.000	JMA	SS	JMA/	Meteo	DSI-5850	-	-
1995-W24	2449861.60	1995 May 24 0217	MT-135P	-	MT135P-R925	0.000	JMA	SS	JMA/	Meteo	DSI-5850	-	-
1995-W25	2449868.59	1995 May 31 0205	MT-135P	-	MT135P-R926	0.000	JMA	SS	JMA/	Meteo	DSI-5850	-	-
1995-W26	2449875.59	1995 Jun 7 0203	MT-135P	-	MT135P-R927	0.000	JMA	SS	JMA/	Meteo	DSI-5850	-	-
1995-W27	2449889.59	1995 Jun 21 0207	MT-135P	-	MT135P-R928	0.000	JMA	SS	JMA/	Meteo	DSI-5850	-	-

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	OrbPay_t	Agency	Launch_Code	Group	Category	LTCite	Cite	Notes
1995-W28	2448986.58	1995 Jun 28 0200	MT-135P	-	MT135P-R929	0.000	JMA	SS	JMA/	Meteo	SRJ	-	-
1995-W29	2448903.58	1995 Jul 5 0200	MT-135P	-	MT135P-R930	0.000	JMA	SS	JMA/	Meteo	SRJ	-	-
1995-W30	2448910.58	1995 Jul 12 0200	MT-135P	-	MT135P-R931	0.000	JMA	SS	JMA/	Meteo	SRJ	-	-
1995-W31	2448917.58	1995 Jul 19 0200	MT-135P	-	MT135P-R932	0.000	JMA	SS	JMA/	Meteo	SRJ	-	-
1995-W32	2448924.58	1995 Aug 2 0200	MT-135P	-	MT135P-R933	0.000	JMA	SS	JMA/	Meteo	SRJ	-	-
1995-W33	2448931.58	1995 Aug 9 0203	MT-135P	-	MT135P-R934	0.000	JMA	SS	JMA/	Meteo	SRJ	-	-
1995-W34	2448938.59	1995 Aug 23 0205	MT-135P	-	MT135P-R935	0.000	JMA	SS	JMA/	Meteo	SRJ	-	-
1995-W35	2448945.59	1995 Sep 6 0200	MT-135P	-	MT135P-R936	0.000	JMA	SS	JMA/	Meteo	SRJ	-	-
1995-W36	2448952.59	1995 Sep 20 0203	MT-135P	-	MT135P-R937	0.000	JMA	SS	JMA/	Meteo	SRJ	-	-
1995-W37	2448959.59	1995 Oct 4 0203	MT-135P	-	MT135P-R938	0.000	JMA	SS	JMA/	Meteo	SRJ	-	-
1995-W38	2450001.58	1995 Oct 11 0200	MT-135P	-	MT135P-R939	0.000	JMA	SS	JMA/	Meteo	SRJ	-	-
1995-W39	2450008.58	1995 Oct 18 0200	MT-135P	-	MT135P-R940	0.000	JMA	SS	JMA/	Meteo	SRJ	-	-
1995-W40	2450016.58	1995 Oct 26 0200	MT-135P	-	MT135P-R941	0.000	JMA	SS	JMA/	Meteo	SRJ	-	-
1995-W41	2450024.58	1995 Nov 9 0215	MT-135P	-	MT135P-R942	0.000	JMA	SS	JMA/	Meteo	SRJ	-	-
1995-W42	2450032.58	1995 Nov 16 0200	MT-135P	-	MT135P-R943	0.000	JMA	SS	JMA/	Meteo	SRJ	-	-
1995-W43	2450040.58	1995 Nov 23 0203	MT-135P	-	MT135P-R944	0.000	JMA	SS	JMA/	Meteo	SRJ	-	-
1995-W44	2450048.59	1995 Nov 29 0205	MT-135P	-	MT135P-R945	0.000	JMA	SS	JMA/	Meteo	SRJ	-	-
1995-W45	2450056.58	1995 Dec 14 0200:00	MT-135P	-	MT135P-R946	0.000	JMA	SS	JMA/	Meteo	DSI-5850	-	-
1995-W46	2450064.58	1995 Dec 20 0200:00	MT-135P	-	MT135P-R947	0.000	JMA	SS	JMA/	Meteo	DSI-5850	-	-
1995-W47	2450072.58	1995 Dec 27 0200:00	MT-135P	-	MT135P-R948	0.000	JMA	SS	JMA/	Meteo	DSI-5850	-	-
1995-W48	2450080.58	1996 Jan 11 0215:00	MT-135P	-	MT135P-R949	0.000	JMA	SS	JMA/	Meteo	DSI-5850	-	-
1995-W49	2450088.58	1996 Jan 17 0200:00	MT-135P	-	MT135P-R950	0.000	JMA	SS	JMA/	Meteo	DSI-5850	-	-
1995-W50	2450096.58	1996 Jan 24 0200:00	MT-135P	-	MT135P-R951	0.000	JMA	SS	JMA/	Meteo	DSI-5850	-	-
1996-W01	2450104.58	1996 Jan 31 0204:59	MT-135P	-	MT135P-R952	0.000	JMA	SS	JMA/	Meteo	DSI-5850	-	-
1996-W02	2450112.58	1996 Feb 14 0200	MT-135P	-	MT135P-R953	0.000	JMA	SS	JMA/	Meteo	DSI-5850	-	-
1996-W03	2450120.58	1996 Sep 15 0230	MT-135	-	MT-135-64	0.000	ISAS	SS	TSUK/	Aeron	ISASRpt 679	-	-
1996-W04	2450421.59	1996 Dec 4 0203:00	MT-135P	-	-	0.000	JMA	SS	JMA/	Meteo	DSI-5850	-	-
1996-W05	2450428.58	1996 Dec 11 0200:00	MT-135P	-	-	0.000	JMA	SS	JMA/	Meteo	DSI-5850	-	-
1996-W06	2450435.58	1996 Dec 18 0200:00	MT-135P	-	-	0.000	JMA	SS	JMA/	Meteo	DSI-5850	-	-
1996-W07	2450442.58	1996 Dec 25 0200:00	MT-135P	-	-	0.000	JMA	SS	JMA/	Meteo	DSI-5850	-	-
1996-W08	2450449.58	1997 Jan 6 0204:59	MT-135P	-	-	0.000	JMA	SS	JMA/	Meteo	DSI-5850	-	-
1997-W01	2450456.58	1997 Jan 13 0200	MT-135	-	MT-135-65	0.000	ISAS	SS	TSUK/	Aeron	ISASRpt 679	-	-
1997-W02	2450463.58	1997 Jan 20 0200:00	MT-135P	-	-	0.000	JMA	SS	JMA/	Meteo	DSI-5850	-	-
1997-W03	2450470.58	1997 Jan 27 0200:00	MT-135P	-	-	0.000	JMA	SS	JMA/	Meteo	DSI-5850	-	-
1997-W04	2450477.58	1997 Jan 31 0204:59	MT-135P	-	-	0.000	JMA	SS	JMA/	Meteo	DSI-5850	-	-
1997-W05	2450484.58	1997 Feb 12 0200:00	MT-135P	-	-	0.000	JMA	SS	JMA/	Meteo	DSI-5850	-	-
1997-W06	2450491.58	1997 Feb 19 0200:00	MT-135P	-	-	0.000	JMA	SS	JMA/	Meteo	DSI-5850	-	-
1997-W07	2450498.58	1997 Feb 26 0200:00	MT-135P	-	-	0.000	JMA	SS	JMA/	Meteo	DSI-5850	-	-
1997-W08	2450505.58	1997 Mar 5 0200:00	MT-135P	-	-	0.000	JMA	SS	JMA/	Meteo	DSI-5850	-	-
1997-W09	2450512.58	1997 Mar 12 0200:00	MT-135P	-	-	0.000	JMA	SS	JMA/	Meteo	DSI-5850	-	-
1997-W10	2450519.58	1997 Mar 19 0200:00	MT-135P	-	-	0.000	JMA	SS	JMA/	Meteo	DSI-5850	-	-
1997-W11	2450526.58	1997 Mar 26 0200:00	MT-135P	-	-	0.000	JMA	SS	JMA/	Meteo	DSI-5850	-	-
1997-W12	2450533.58	1997 Apr 2 0200:00	MT-135P	-	-	0.000	JMA	SS	JMA/	Meteo	DSI-5850	-	-
1997-W13	2450540.58	1997 Apr 9 0200:00	MT-135P	-	-	0.000	JMA	SS	JMA/	Meteo	DSI-5850	-	-
1997-W14	2450547.58	1997 Apr 16 0200:00	MT-135P	-	-	0.000	JMA	SS	JMA/	Meteo	DSI-5850	-	-
1997-W15	2450554.58	1997 Apr 23 0200:00	MT-135P	-	-	0.000	JMA	SS	JMA/	Meteo	DSI-5850	-	-
1997-W16	2450561.58	1997 Apr 30 0200:00	MT-135P	-	-	0.000	JMA	SS	JMA/	Meteo	DSI-5850	-	-
1997-W17	2450568.58	1997 May 7 0200:00	MT-135P	-	-	0.000	JMA	SS	JMA/	Meteo	DSI-5850	-	-
1997-W18	2450575.58	1997 May 14 0200:00	MT-135P	-	-	0.000	JMA	SS	JMA/	Meteo	DSI-5850	-	-
1997-W19	2450582.58	1997 May 21 0200:00	MT-135P	-	-	0.000	JMA	SS	JMA/	Meteo	DSI-5850	-	-
1997-W20	2450589.58	1997 May 28 0200:00	MT-135P	-	-	0.000	JMA	SS	JMA/	Meteo	DSI-5850	-	-
1997-W21	2450596.58	1997 Jun 4 0200:00	MT-135P	-	-	0.000	JMA	SS	JMA/	Meteo	DSI-5850	-	-
1997-W22	2450603.58	1997 Jun 11 0200:00	MT-135P	-	-	0.000	JMA	SS	JMA/	Meteo	DSI-5850	-	-
1997-W23	2450610.58	1997 Jun 18 0200:00	MT-135P	-	-	0.000	JMA	SS	JMA/	Meteo	DSI-5850	-	-
1997-W24	2450617.58	1997 Jun 25 0200:00	MT-135P	-	-	0.000	JMA	SS	JMA/	Meteo	DSI-5850	-	-
1997-W25	2450624.58	1997 Jul 2 0200:00	MT-135P	-	-	0.000	JMA	SS	JMA/	Meteo	DSI-5850	-	-
1997-W26	2450631.58	1997 Jul 9 0200:00	MT-135P	-	-	0.000	JMA	SS	JMA/	Meteo	DSI-5850	-	-
1997-W27	2450638.58	1997 Jul 16 0200:00	MT-135P	-	-	0.000	JMA	SS	JMA/	Meteo	DSI-5850	-	-
1997-W28	2450645.58	1997 Jul 23 0200:00	MT-135P	-	-	0.000	JMA	SS	JMA/	Meteo	DSI-5850	-	-
1997-W29	2450652.58	1997 Jul 30 0200:00	MT-135P	-	-	0.000	JMA	SS	JMA/	Meteo	DSI-5850	-	-
1997-W30	2450659.58	1997 Aug 6 0200:00	MT-135P	-	-	0.000	JMA	SS	JMA/	Meteo	DSI-5850	-	-
1997-W31	2450666.58	1997 Aug 13 0200:00	MT-135P	-	-	0.000	JMA	SS	JMA/	Meteo	DSI-5850	-	-
1997-W32	2450673.58	1997 Aug 20 0200:00	MT-135P	-	-	0.000	JMA	SS	JMA/	Meteo	DSI-5850	-	-
1997-W33	2450680.58	1997 Aug 27 0200:00	MT-135P	-	-	0.000	JMA	SS	JMA/	Meteo	DSI-5850	-	-
1997-W34	2450687.58	1997 Sep 3 0200:00	MT-135P	-	-	0.000	JMA	SS	JMA/	Meteo	DSI-5850	-	-
1997-W35	2450694.58	1997 Sep 10 0200:00	MT-135P	-	-	0.000	JMA	SS	JMA/	Meteo	DSI-5850	-	-
1997-W36	2450701.58	1997 Sep 17 0200:00	MT-135P	-	-	0.000	JMA	SS	JMA/	Meteo	DSI-5850	-	-
1997-W37	2450708.58	1997 Sep 24 0200:00	MT-135P	-	-	0.000	JMA	SS	JMA/	Meteo	DSI-5850	-	-
1997-W38	2450715.58	1997 Oct 1 0200:00	MT-135P	-	-	0.000	JMA	SS	JMA/	Meteo	DSI-5850	-	-
1997-W39	2450722.58	1997 Oct 8 0200:00	MT-135P	-	-	0.000	JMA	SS	JMA/	Meteo	DSI-5850	-	-
1997-W40	2450729.58	1997 Oct 15 0200:00	MT-135P	-	-	0.000	JMA	SS	JMA/	Meteo	DSI-5850	-	-
1997-W41	2450736.58	1997 Oct 22 0200:00	MT-135P	-	-	0.000	JMA	SS	JMA/	Meteo	DSI-5850	-	-
1997-W42	2450743.58	1997 Oct 29 0200:00	MT-135P	-	-	0.000	JMA	SS	JMA/	Meteo	DSI-5850	-	-
1997-W43	2450750.58	1997 Nov 5 0200:00	MT-135P	-	-	0.000	JMA	SS	JMA/	Meteo	DSI-5850	-	-
1997-W44	2450757.58	1997 Nov 12 0200:00	MT-135P	-	-	0.000	JMA	SS	JMA/	Meteo	DSI-5850	-	-
1997-W45	2450764.58	1997 Nov 19 0200:00	MT-135P	-	-	0.000	JMA	SS	JMA/	Meteo	DSI-5850	-	-
1997-W46	2450771.58	1997 Nov 26 0200:00	MT-135P	-	-	0.000	JMA	SS	JMA/	Meteo	DSI-5850	-	-
1997-W47	2450778.58	1997 Dec 3 0200:00	MT-135P	-	-	0.000	JMA	SS	JMA/	Meteo	DSI-5850	-	-
1997-W48	2450785.58	1997 Dec 10 0200:00	MT-135P	-	-	0.000	JMA	SS	JMA/	Meteo	DSI-5850	-	-
1997-W49	2450792.58	1997 Dec 17 0200:00	MT-135P	-	-	0.000	JMA	SS	JMA/	Meteo	DSI-5850	-	-
1997-W50	2450799.58	1997 Dec 24 0200:00	MT-135P	-	-	0.000	JMA	SS	JMA/	Meteo	DSI-5850	-	-
1998-W01	2450806.58	1997 Dec 31 0200:00	MT-135P	-	-	0.000	JMA	SS	JMA/	Meteo	DSI-5850	-	-
1998-W02	2450813.58	1998 Jan 7 0200:00	MT-135P	-	-	0.000	JMA	SS	JMA/	Meteo	DSI-5850	-	-
1998-W03	2450820.58	1998 Jan 14 0200:00	MT-135P	-	-	0.000	JMA	SS	JMA/	Meteo	DSI-5850	-	-
1998-W04	2450827.58	1998 Jan 21 0200:00	MT-135P	-	-	0.000	JMA	SS	JMA/	Meteo	DSI-5850	-	-
1998-W05	2450834.58	1998 Jan 28 0200:00	MT-135P	-	-	0.000	JMA	SS	JMA/	Meteo	DSI-5850	-	-
1998-W06	2450841.58	1998 Feb 4 0200:00	MT-135P	-	-	0.000	JMA	SS	JMA/	Meteo	DSI-5850	-	-
1998-W07	2450848.58	1998 Feb 11 0200:00	MT-135P	-	-	0.000	JMA	SS	JMA/	Meteo	DSI-5850	-	-
1998-W08	2450855.58	1998 Feb 18 0200:00	MT-135P	-	-	0.000	JMA	SS	JMA/	Meteo	DSI-5850	-	-
1998-W09	2450862.58	1998 Feb 25 0200:00	MT-135P	-	-	0.000	JMA	SS	JMA/	Meteo	DSI-5850	-	-
1998-W10	2450869.58	1998 Mar 4 0200:00	MT-135P	-	-	0.000	JMA	SS	JMA/	Meteo	DSI-5850	-	-
1998-W11	2450876.58	1998 Mar 11 0200:00	MT-135P	-	-	0.000	JMA	SS	JMA/	Meteo	DSI-5850	-	-
1													

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	OrbPay t	Agency	Launch_Code	Group	Category	LTCite	Cite	Notes
1998-W24	2451009.59	1998 Jul 15 0203:00	MT-135P	-	-	0.000	JMA	SS	JMA/	Meteo	DSI-5850	-	-
1998-W25	2451023.58	1998 Jul 29 0200:00	MT-135P	-	-	0.000	JMA	SS	JMA/	Meteo	DSI-5850	-	-
1998-W26	2451030.58	1998 Aug 5 0200:00	MT-135P	-	-	0.000	JMA	SS	JMA/	Meteo	DSI-5850	-	-
1998-W27	2451045.58	1998 Aug 20 0200:00	MT-135P	-	-	0.000	JMA	SS	JMA/	Meteo	DSI-5850	-	-
1998-W28	2451063.58	1998 Sep 7 0200	MT-135	-	MT-135-68	0.000	ISAS	SS	ISAS/	Aeron	ISASRpt679	-	-
1998-W29	2451085.58	1998 Sep 9 0200	MT-135	-	MT-135-69	0.000	ISAS	SS	ISAS/	Meteo	ISASRpt679	-	-
1998-W30	2451085.58	1998 Sep 9 0200:00	MT-135P	-	-	0.000	JMA	SS	JMA/	Meteo	DSI-5850	-	-
1998-W31	2451073.58	1998 Sep 17 0200:00	MT-135P	-	-	0.000	JMA	SS	JMA/	Meteo	DSI-5850	-	-
1998-W32	2451079.59	1998 Sep 23 0203:00	MT-135P	-	-	0.000	JMA	SS	JMA/	Meteo	DSI-5850	-	-
1998-W33	2451093.58	1998 Oct 7 0200:00	MT-135P	-	-	0.000	JMA	SS	JMA/	Meteo	DSI-5850	-	-
1998-W34	2451100.58	1998 Oct 14 0200:00	MT-135P	-	-	0.000	JMA	SS	JMA/	Meteo	DSI-5850	-	-
1998-W35	2451121.58	1998 Oct 21 0200:00	MT-135P	-	-	0.000	JMA	SS	JMA/	Meteo	DSI-5850	-	-
1998-W36	2451128.58	1998 Nov 4 0200:00	MT-135P	-	-	0.000	JMA	SS	JMA/	Meteo	DSI-5850	-	-
1998-W37	2451135.58	1998 Nov 11 0200:00	MT-135P	-	-	0.000	JMA	SS	JMA/	Meteo	DSI-5850	-	-
1998-W38	2451135.58	1998 Nov 18 0200:00	MT-135P	-	-	0.000	JMA	SS	JMA/	Meteo	DSI-5850	-	-
1998-W39	2451149.58	1998 Dec 2 0200:00	MT-135P	-	-	0.000	JMA	SS	JMA/	Meteo	DSI-5850	-	-
1998-W40	2451170.58	1998 Dec 23 0200:00	MT-135P	-	-	0.000	JMA	SS	JMA/	Meteo	DSI-5850	-	-
1999-W31	2451428.58	1999 Sep 7 0200	MT-135	-	MT-135-70	0.000	ISAS	SS	ISAS/	Aeron	ISASRpt679	-	-
1999-W32	2451432.58	1999 Sep 11 0200	MT-135	-	MT-135-71	0.000	ISAS	SS	ISAS/	Aeron	ISASRpt679	-	-
2000-W01	2451585.58	2000 Jan 12 0200:00	MT-135P	-	-	0.000	JMA	SS	JMA/	Meteo	DSI-5850	-	-
2000-W02	2451562.58	2000 Jan 19 0200:00	MT-135P	-	-	0.000	JMA	SS	JMA/	Meteo	DSI-5850	-	-
2000-W03	2451569.58	2000 Jan 26 0200:00	MT-135P	-	-	0.000	JMA	SS	JMA/	Meteo	DSI-5850	-	-
2000-W04	2451583.58	2000 Feb 9 0200:00	MT-135P	-	-	0.000	JMA	SS	JMA/	Meteo	DSI-5850	-	-
2000-W05	2451588.58	2000 Feb 24 0200:00	MT-135P	-	-	0.000	JMA	SS	JMA/	Meteo	DSI-5850	-	-
2000-W06	2451618.58	2000 Mar 15 0200:00	MT-135P	-	-	0.000	JMA	SS	JMA/	Meteo	DSI-5850	-	-
2000-W07	2451618.58	2000 Mar 15 0200:00	MT-135P	-	-	0.000	JMA	SS	JMA/	Meteo	DSI-5850	-	-
2000-W08	2451646.58	2000 Apr 12 0200:00	MT-135P	-	-	0.000	JMA	SS	JMA/	Meteo	DSI-5850	-	-
2000-W09	2451653.59	2000 Apr 19 0210:00	MT-135P	-	-	0.000	JMA	SS	JMA/	Meteo	DSI-5850	-	-
2000-W10	2451689.58	2000 May 25 0200:00	MT-135P	-	-	0.000	JMA	SS	JMA/	Meteo	DSI-5850	-	-
2000-W11	2451695.58	2000 May 25 0200:00	MT-135P	-	-	0.000	JMA	SS	JMA/	Meteo	DSI-5850	-	-
2000-W12	2451716.58	2000 May 31 0200:00	MT-135P	-	-	0.000	JMA	SS	JMA/	Meteo	DSI-5850	-	-
2000-W13	2451716.58	2000 Jun 21 0200:00	MT-135P	-	-	0.000	JMA	SS	JMA/	Meteo	DSI-5850	-	-
2000-W14	2451724.58	2000 Jun 29 0200:00	MT-135P	-	-	0.000	JMA	SS	JMA/	Meteo	DSI-5850	-	-
2000-W15	2451731.58	2000 Jul 6 0200:00	MT-135P	-	-	0.000	JMA	SS	JMA/	Meteo	DSI-5850	-	-
2000-W16	2451744.58	2000 Jul 19 0200:00	MT-135P	-	-	0.000	JMA	SS	JMA/	Meteo	DSI-5850	-	-
2000-W17	2451759.58	2000 Aug 3 0200:00	MT-135P	-	-	0.000	JMA	SS	JMA/	Meteo	DSI-5850	-	-
2000-W18	2451759.58	2000 Aug 3 0200:00	MT-135P	-	-	0.000	JMA	SS	JMA/	Meteo	DSI-5850	-	-
2000-W19	2451779.58	2000 Aug 5 0200:00	MT-135P	-	-	0.000	JMA	SS	JMA/	Meteo	DSI-5850	-	-
2000-W20	2451794.58	2000 Aug 23 0200:00	MT-135P	-	-	0.000	JMA	SS	JMA/	Meteo	DSI-5850	-	-
2000-W21	2451794.58	2000 Sep 7 0200:00	MT-135P	-	MT-135-72	0.000	ISAS	SS	ISAS/	Aeron	isas.go.jp	-	-
2000-W22	2451805.58	2000 Sep 18 0200:00	MT-135	-	MT-135-73	0.000	ISAS	SS	ISAS/	Aeron	isas.go.jp	-	-
2000-W23	2451806.58	2000 Sep 19 0200:00	MT-135	-	-	0.000	JMA	SS	JMA/	Meteo	DSI-5850	-	-
2000-W24	2451807.58	2000 Sep 20 0200:00	MT-135P	-	-	0.000	JMA	SS	JMA/	Meteo	DSI-5850	-	-
2000-W25	2451821.58	2000 Oct 4 0200:00	MT-135P	-	-	0.000	JMA	SS	JMA/	Meteo	DSI-5850	-	-
2000-W26	2451821.58	2000 Oct 4 0200:00	MT-135P	-	-	0.000	JMA	SS	JMA/	Meteo	DSI-5850	-	-
2000-W27	2451836.58	2000 Oct 19 0215:00	MT-135P	-	-	0.000	JMA	SS	JMA/	Meteo	DSI-5850	-	-
2000-W28	2451843.59	2000 Nov 15 0215:00	MT-135P	-	-	0.000	JMA	SS	JMA/	Meteo	DSI-5850	-	-
2000-W29	2451843.58	2000 Nov 15 0215:00	MT-135P	-	-	0.000	JMA	SS	JMA/	Meteo	DSI-5850	-	-
2000-W30	2451873.58	2000 Nov 27 0215:00	MT-135P	-	-	0.000	JMA	SS	JMA/	Meteo	DSI-5850	-	-
2000-W31	2451883.58	2000 Nov 27 0215:00	MT-135P	-	-	0.000	JMA	SS	JMA/	Meteo	DSI-5850	-	-
2000-W32	2451883.58	2000 Dec 7 0200:00	MT-135P	-	-	0.000	JMA	SS	JMA/	Meteo	DSI-5850	-	-
2000-W33	2451883.58	2000 Dec 20 0200:00	MT-135P	-	-	0.000	JMA	SS	JMA/	Meteo	DSI-5850	-	-
2000-W34	2451888.58	2000 Dec 20 0200:00	MT-135P	-	-	0.000	JMA	SS	JMA/	Meteo	DSI-5850	-	-
2001-W01	2451889.59	2001 Mar 21	MT-135	-	MT-135 R1119	0.000	ISAS	SS	ISAS/	Aeron	www.ihl.co.jp	-	-



Launch

Launch_Tag	Launch_JD	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Mission	FlightCode	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee Km	Range Km	Dest
1997-005	2450491.70	1997 Feb 12 0450	H-V	-	H-V-1	VSEP/RH	MUSES-B	-	-	KASC	M-V	-	-	21527	-	-
1998-041	2450998.26	1998 JUL 3 1812	H-V	-	H-V-3	PLANET B/KH	Planet B	-	-	KASC	M-V	-	-	150000	-	-
2000-001	2451584.56	2000 Feb 10 0130	H-V	-	H-V-4	ASTRO E	ASTRO E	-	-	KASC	M-V	-	-	200	-	-
2003-019	2452768.69	2003 May 9 0429:25	H-V	1	H-V-5	MUSES C/RH	MUSES C	-	-	KASC	M-V	-	-	150000	-	-
2005-025	2453561.65	2005 JUL 10 0330	H-V	1	H-V-6	ASTRO E2	ASTRO-E2	-	-	KASC	M-V	-	-	574	-	-
2006-005	2453788.39	2006 Feb 21 2128:00	H-V	1	H-V-8	ASTRO F	ASTRO-F	-	-	KASC	M-V	-	-	741	-	-
2006-041	2454001.40	2006 Sep 22 2136:00	H-V	1	H-V-7	SOLAR B	SOLAR-B	-	-	KASC	M-V	-	-	697	-	-



Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	OrbPay	Agency	Launch_Code	Group	Category	LTCite	Cite	Notes
1997-005	2450491.70	1997 Feb 12 0450	H-V	-	H-V-1	0.966	ISMS	DS	G	Sat MED 00	Wire	-	-
1998-041	2450998.26	1998 Jul 3 1812	H-V	-	H-V-3	0.664	ISMS	DS	G	Sat LSD 00	Wire	-	-
2000-001	2451584.56	2000 Feb 10 0130	H-V	-	H-V-4	1.660	ISMS	DF	G	Sat LED 0	Wire	-	-
2003-019	2452768.69	2003 May 9 0429:25	H-V	1	H-V-5	0.511	ISMS	DS	G	Sat EEO SE	Wire	-	-
2005-025	2453561.65	2005 Jul 10 0330	H-V	1	H-V-6	1.700	ISMS	DS	G	Sat LED 0	Wire	-	-
2006-005	2453788.39	2006 Feb 21 2128: 00	H-V	1	H-V-8	0.966	ISMS	DS	G	Sat SSD 0	Wire	-	-
2006-041	2454001.40	2006 Sep 22 2136: 00	H-V	1	H-V-7	0.910	ISMS	DS	G	Sat SSD 0	Wire	-	-





Launch

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Mission	Flightcode	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee Km	Range Km	Dest
1948-A15	2432747.65	1948 Jul 15 0105	RTV-A-2	-	MX-774	-	-	-	-	WS	LC33	-	-	2	-	-
1948-A33	2432822.38	1948 Sep 27 2105	RTV-A-2	-	MX-774	-	-	-	-	WS	LC33	-	-	39	-	-
1948-M03	2432888.42	1948 Dec 2 2201	RTV-A-2	-	MX-774	-	-	-	-	WS	LC33	-	-	50	-	-



Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Drbby	Agency	Launch_Code	Group	Category	LTCite	Cite	Notes
1948-A15	2432747.65	1948 Jul 15 0105	RTV-A-2	-	MX-774	0.000	WRIGHT	MF	-	Test	Mitchell-Bossart	-	-
1948-A33	2432822.38	1948 Sep 27 2105	RTV-A-2	-	MX-774	0.000	WRIGHT	MF	-	Test	Mitchell-Bossart	-	-
1948-N03	2432888.42	1948 Dec 2 2201	RTV-A-2	-	MX-774	0.000	WRIGHT	MS	-	Test	Chapman	-	-



Launch

Launch

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Mission	FlightCode	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee km	Range km	Dest
1983-S115	2445503.59	1983 Jun 18 0210	Peacekeeper	-	FTH-1	Mk 12A RV7 x 6	-	-	-	V	TP-01	-	-	1000?	6704	KRR BDA-N
1983-S194	2445622.20	1983 Dec 20 1655	Peacekeeper	-	FTH-2	Mk 12A RV7 x 6	-	-	-	V	TP-01	-	-	1000?	-	KRR BDA-N
1983-S214	2445689.21	1983 Dec 20 1655	Peacekeeper	-	FTH-3	Mk 12A RV7 x 6	-	-	-	V	TP-01	-	-	1000?	-	GUAM BDA-1
1984-S71	2445790.15	1984 Mar 30 1530	Peacekeeper	-	FTH-4	Mk 12A RV7 x 10	-	-	-	V	TP-01	-	-	1000?	-	KRR BDA-N
1984-S94	2445867.20	1984 Jun 15 1650	Peacekeeper	-	FTH-5	Mk 12A RV x 5, Mk 21 RV	-	-	-	V	TP-01	-	-	1000?	-	KRR BDA-N
1984-S119	2445975.11	1984 Jun 1 1434	Peacekeeper	-	FTH-6	Mk 12A/21? RV x 6	-	-	-	V	TP-01	-	-	1000?	-	KRR BDA-N
1985-S33	2446098.43	1985 Feb 1 2215	Peacekeeper	-	FTH-7	Mk 21 RV x 6	-	-	-	V	TP-01	-	-	1000?	-	KRR BDA-N
1985-S80	2446220.22	1985 Jun 3 1722	Peacekeeper	-	FTH-8	Mk 21 RV x 6?	-	-	-	V	TP-01	-	-	1000?	-	KRR BDA-N
1985-S105	2446301.19	1985 Nov 13 1703	Peacekeeper	-	FTH-9	Mk 21 RV x 6	-	-	-	V	TP-01	-	-	1000?	-	KRR BDA-N
1985-S137	2446383.21	1985 Nov 13 1703	Peacekeeper	-	FTH-10	Mk 21 RV x 4	-	-	-	V	TP-01	-	-	1000?	-	KRR BDA-N
1986-S27	2446497.40	1986 Mar 7 2140	Peacekeeper	-	FTH-11	Mk 21 RV x 8	-	-	-	V	LF08	-	-	1000?	-	GUAM BDA
1986-S49	2446572.17	1986 May 21 1600	Peacekeeper	-	FTH-12	Mk 21 RV x 10	-	-	-	V	LF08	-	-	1000?	-	KRR BDA-N
1986-S81	2446666.27	1986 Aug 23 1825	Peacekeeper	-	FTH-13	Mk 21 RV x 10	-	-	-	V	LF02	-	-	1000?	-	KRR BDA-N,E
1986-S93	2446692.02	1986 Sep 18 1230	Peacekeeper	-	FTH-14	Mk 21 RV x 6	-	-	-	V	LF02	-	-	1000?	-	KRR BDA-N
1986-S115	2446770.17	1986 Dec 6 1600	Peacekeeper	-	FTH-15	Mk 21 RV x 10 (3 ft dep)	-	-	-	V	LF02	-	-	1000?	-	KRR BDA-N
1987-S51	2446876.14	1987 Feb 13 1515	Peacekeeper	-	FTH-16	Mk 21 RV x 7	-	-	-	V	LF08	-	-	1000?	-	KRR BDA-N
1987-S63	2446876.14	1987 Mar 21 1515	Peacekeeper	-	FTH-17	Mk 21 RV x 6	-	-	-	V	LF08	-	-	1000?	-	KRR BDA-N
1989-S46	2447605.24	1989 Mar 19 1745	Peacekeeper	-	FTH-18	Mk 21 RV x 6	-	-	-	V	LF08	-	-	1000?	-	KRR BDA-N
1989-S93	2447794.29	1989 Sep 14 1900	Peacekeeper	-	FTH-19	Mk 21 RV x 9	-	-	-	V	LF02	-	-	200?	-	KRR BDA-N
1990-S57	2448025.50	1990 Mar 6	Peacekeeper	-	O2PA (85-161)	-	-	-	-	V	LF05	-	-	1000?	-	KRR ILL
1990-S93	2448025.25	1990 May 16 1801	Peacekeeper	-	O3PA (85-460)	-	-	-	-	V	LF08	-	-	1000?	-	KRR ILL
1991-S132	2448147.60	1990 Sep 13	Peacekeeper	-	O4PA (85-163)	-	-	-	-	V	LF05	-	-	1000?	-	KRR ILL
1991-S86	2448327.93	1991 Mar 12 1023	Peacekeeper	-	O5PA (85-176)	-	-	-	-	V	LF02	-	-	1000?	-	KRR ILL
1991-S112	2448419.24	1991 Jun 11 1747	Peacekeeper	-	O6PA (84-546)	-	-	-	-	V	LF02	-	-	1000?	-	KRR ILL
1991-S149	2448516.92	1991 Sep 17 1008	Peacekeeper	-	O7PA (88-442)	-	-	-	-	V	LF02	-	-	1000?	-	KRR ILL
1992-S26	2448666.11	1992 Mar 4 1445	Peacekeeper	-	O8PA (85-173)	-	-	-	-	V	LF05	-	-	1000?	-	KRR ILL
1992-S60	2448694.60	1992 Jul 1 0220	Peacekeeper	-	O9PA (84-549)	-	-	-	-	V	LF02	-	-	1000?	-	KRR ILL
1992-S85	2448681.64	1992 Sep 16 0315	Peacekeeper	-	10PA (87-146)	-	-	-	-	V	LF05	-	-	1000?	-	KRR ILL
1993-S19	2449050.85	1993 Mar 4 0819	Peacekeeper	-	11PA (87-147)	Mk 21 RV x 3?	-	-	-	V	LF02	-	-	1000?	-	KRR ILL
1993-S47	2449162.64	1993 Jul 14 0319	Peacekeeper	-	12PA (84-542)	Mk 21 RV x 6	-	-	-	V	LF05	-	-	1000?	-	KRR BDA-1?
1993-S60	2449245.60	1993 Sep 15	Peacekeeper	-	13PA (88-336)	Mk 21 RV x 3?	-	-	-	V	LF02	-	-	1000?	-	KRR ILL
1994-S22	2449419.44	1994 Mar 6 0339	Peacekeeper	-	14PA (84-559)	Mk 21 RV x 6	-	-	-	V	LF05	-	-	1000?	-	KRR ILL
1994-S34	2449425.44	1994 Mar 13 2252	Peacekeeper	-	DLI 1110	STEP 0	-	-	-	V	LF05	-	-	643	-	KRR ILL
1994-S54	2449469.90	1994 May 7	Peacekeeper	-	15PA (84-550)	Mk 21 RV x 8	-	-	-	V	LF02	-	-	1000?	-	KRR ILL
1994-S62	2449603.11	1994 Sep 7 1441	Peacekeeper	-	16PA (84-551)	Mk 21 RV x 8	-	-	-	V	LF05	-	-	1000?	-	KRR ILL
1995-S04	2449736.63	1995 Jun 19 0801	Peacekeeper	-	17PA (84-546)	Mk 21 RV x 3?	-	-	-	V	LF02	-	-	1000?	-	KRR ILL
1995-S84	2449862.00	1995 Jun 14	Peacekeeper	-	18PA (84-544)	Mk 21 RV x 3?	-	-	-	V	LF05	-	-	1000?	-	KRR ILL
1995-F04	2449895.44	1995 Aug 30 2230	Peacekeeper	-	DLI 1110	Gemstat 1	-	-	-	V	LF05	-	-	147	-	KRR ILL
1996-S20	2450211.63	1996 Aug 30	Peacekeeper	-	19PA (90-0394)	Mk 21 RV x 3?	-	-	-	V	LF02	-	-	1000?	-	KRR ILL
1996-S25	2450233.63	1996 May 6 0801	Peacekeeper	-	20PA (87-0144)	Mk 21 RV x 6?	-	-	-	V	LF05	-	-	1000?	-	KRR ILL
1996-S85	2450337.65	1996 Sep 1 1801	Peacekeeper	-	21PA (88-166)	Mk 21 RV x 5?	-	-	-	V	LF02	-	-	1000?	-	KRR ILL
1996-S88	2450374.05	1996 Nov 8 1306	Peacekeeper	-	22PA (88-166)	Mk 21 RV x 7?	-	-	-	V	LF02	-	-	1000?	-	KRR ILL
1997-S36	2450574.05	1997 Nov 8 1306	Peacekeeper	-	23PA (84-558)	Mk 21 RV x 7?	-	-	-	V	LF02	-	-	1000?	-	KRR ILL
1997-S60	2450683.73	1997 Aug 23 0651.01	Peacekeeper	-	24PA (86-448)	Mk 21 RV x 9	-	-	-	V	SL06	-	-	321	-	KRR ILL
1997-S73	2450726.36	1997 Sep 5 0801	Peacekeeper	-	25PA (86-448)	Mk 21 RV x 7	-	-	-	V	SL06	-	-	1000?	-	KRR ILL
1998-S07	2450920.06	1998 Nov 5 0226.44	Peacekeeper	-	26PA (86-443)	Mk 21 RV x 8	-	-	-	V	LF05	-	-	1000?	-	KRR ILL
1998-S07	2450920.06	1998 Jun 10 0226.44	Peacekeeper	-	LM-004	GFU/DFComm	-	-	-	V	SL06	-	-	150000	-	KRR ILL
1998-S42	2450940.04	1998 Feb 7 1320	Peacekeeper	-	27PA (87-0049)	Mk 21 RV x 8	-	-	-	V	LF05	-	-	895	-	KRR ILL
1998-S65	2451099.92	1998 Oct 3 1034.49	Peacekeeper	-	73 1110	Prospecter	-	-	-	V	SL06	-	-	1000?	-	KRR ILL
1998-S02	2451099.92	1998 Dec 27 0034.02	Peacekeeper	-	LM-005	Mk 21 RV x 8	-	-	-	V	SL06	-	-	655	-	KRR ILL
1999-S11	2451247.93	1999 Jun 10 0801	Peacekeeper	-	28PA (88-0335)	ROCSAT-1	-	-	-	V	SL06	-	-	766	-	KRR ILL
1999-F01	2451247.93	1999 Mar 27 1822.01	Peacekeeper	-	29PA (88-0335)	ROCSAT-1	-	-	-	V	SL06	-	-	682	-	KRR ILL
1999-S61	2451247.93	1999 Sep 24 1821.08	Peacekeeper	-	LM-005	Mk 21 RV x 8	-	-	-	V	SL06	-	-	200?	-	KRR ILL
1999-S70	2451446.56	1999 Sep 24 1821.08	Peacekeeper	-	LM-007	Thomas 2	-	-	-	V	SL06	-	-	799	-	KRR ILL
1999-S13	2451539.90	1999 Dec 8 0940.30	Peacekeeper	-	29PA (84-0553)	KOMPSAT/ACRIMSAT	-	-	-	V	LF05	-	-	1000	-	KRR ILL
2000-S14	2451611.90	2000 Dec 8 0940.30	Peacekeeper	-	75	Mk 21 RV x 8	-	-	-	V	LF05	-	-	614	-	KRR ILL
2000-S14	2451611.90	2000 Mar 12 0939	Peacekeeper	-	76	Mk 21 RV x 8	-	-	-	V	LF05	-	-	427	-	KRR ILL
2001-S38	2452117.93	2001 Jul 27 0801	Peacekeeper	-	30PA (85-0162)	Mk 21 RV x 9	-	-	-	V	LF02	-	-	100	-	KRR ILL
2001-S43	2452174.93	2001 Sep 21 1849.30	Peacekeeper	-	76	Mk 21 RV x 9	-	-	-	V	LF02	-	-	802	-	KRR ILL
2002-S36	2452428.61	2002 Jul 3 0801	Peacekeeper	-	LM-001	Obviter-4/DuIKTDMS	-	-	-	V	LF02	-	-	1000?	-	KRR ILL
2003-S07	2452928.93	2002 Jul 3 0801	Peacekeeper	-	31PA (84-0543)	Kodiak Star 3	-	-	-	V	LF02	-	-	1000?	-	KRR ILL
2004-S18	2453146.24	2004 Mar 20 1747.03	Peacekeeper	-	32PA (85-0174)	Mk 21 RV x 8	-	-	-	V	LF02	-	-	903	-	KRR ILL
2004-S26	2453207.93	2004 Jul 21 0801	Peacekeeper	-	77 (XL)	ROCSAT-2	-	-	-	V	LF05	-	-	1000?	-	KRR ILL
2009-F01	2454886.91	2009 Feb 24 0955.30	Peacekeeper	-	33PA (84-0564)	Mk 21 RV x 8	-	-	-	V	LF05	-	-	500?	-	KRR ILL
2010-S30	2455930.46	2010 Apr 22 2300	Minotaur IV Lite	-	78 (XL)	OCO	-	-	-	V	LF05	-	-	100?	-	KRR ILL
2010-S48	2455465.70	2010 Sep 26 0441.00	Minotaur IV	-	2	HTV-2a	-	-	-	V	SL08	-	-	638	-	KRR ILL
2011-F02	2455920.92	2010 Sep 20 0125.00	Minotaur IV	H	3	STP-SIV	-	-	-	V	SL08	-	-	1432	-	KRR ILL
2011-F01	2455624.96	2011 Mar 4 1009.43	Minotaur IV	-	4	Glory	-	-	-	V	SL08	-	-	550?	-	KRR ILL
2011-S36	2455785.11	2011 Aug 11 1445	Minotaur IV	-	5	HTV-2b	-	-	-	V	SL08	-	-	100?	-	KRR ILL
2013-S07	2455932.16	2011 Sep 27 1549	Minotaur IV+	-	6	TacSat-4	-	-	-	V	SL08	-	-	1233?	-	KRR ILL
2017-S050	2457091.75	2017 Sep 26 0604	Minotaur IV	-	1	LADEE	-	-	-	V	SL08	-	-	160000	-	KRR ILL
2017-S068	2458058.40	2017 Oct 31 2137	Minotaur IV	2	ORIS-5	ORIS-5	-	-	-	V	SL06	-	-	605	-	KRR ILL
2019-S496	2458666.96	2019 Jul 2 1100	ATB	-	TL10 (XL)	SkySat-8+13/Flock 3m	-	-	-	V	SL06	-	-	533	-	KRR ILL
2020-S046	2459046.07	2020 Jul 15 1346:00	Minotaur IV	-	1	Orion AA-2	-	-	-	V	SL06	-	-	10	-	KRR ILL
				-	7	NRDL-129	-	-	-	V	SL06	-	-	593	-	KRR ILL



Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	OrbPay	Agency	Launch_Code	Group	Category	LTCite	Cite	Notes
1993-3115	244503.59	1993 Jun 18 0210	Peacekeeper	-	FTH-1	0.000	AFSMC	MS	-	Test	VAFB/Wire	-	-
1993-3194	244502.20	1993 Oct 14 1655	Peacekeeper	-	FTH-2	0.000	AFSMC	MS	-	Test	Ulrich/Wire	VAFB	-
1993-3214	244508.21	1993 Dec 20 1700	Peacekeeper	-	FTH-3	0.000	AFSMC	MS	-	Test	Ulrich/Wire	VAFB	-
1994-3791	244590.15	1994 Mar 30 1530	Peacekeeper	-	FTH-4	0.000	AFSMC	MS	-	Test	Ulrich/Wire	VAFB	-
1994-3874	244587.20	1994 Jun 15 1650	Peacekeeper	-	FTH-5	0.000	AFSMC	MS	-	Test	BythevilleOH/Ulrich	-	-
1994-3119	244576.11	1994 Oct 1 1434	Peacekeeper	-	FTH-6	0.000	AFSMC	MS	-	Test	Ulrich/SHT	VAFB	-
1995-3333	244608.43	1995 Feb 1 2215	Peacekeeper	-	FTH-7	0.000	AFSMC	MS	-	Test	Ulrich/Wire	VAFB	-
1995-380	244620.22	1995 Jun 3 1722	Peacekeeper	-	FTH-8	0.000	AFSMC	MS	-	Test	SFChron851114	VAFB	-
1995-3105	244630.19	1995 Aug 23 1639	Peacekeeper	-	FTH-9	0.000	AFSMC	MS	-	Test	AF/Ulrich	VAFB	-
1995-3137	244638.21	1995 Nov 13 1703	Peacekeeper	-	FTH-10	0.000	AFSMC	MS	-	Test	AF/Ulrich	VAFB	-
1996-327	244637.40	1996 Mar 7 2140	Peacekeeper	-	FTH-11	0.000	AFSMC	MS	-	Test	AF/Ulrich	VAFB	-
1996-349	244672.17	1996 May 21 1600	Peacekeeper	-	FTH-12	0.000	AFSMC/SAC	MS	-	Test (SAC Crew)	VAFB/Wire	SanJoseMH60824	-
1996-381	244666.27	1996 Aug 23 1825	Peacekeeper	-	FTH-15	0.000	AFSMC/SAC	MS	-	Test	VAFB/Wire	-	-
1996-393	244632.02	1996 Sep 16 1230	Peacekeeper	-	FTH-13	0.000	AFSMC	MS	-	Test	VAFB/Wire	-	-
1996-3115	244570.17	1996 Dec 5 1600	Peacekeeper	-	FTH-14	0.000	AFSMC	MS	-	Test	VAFB	-	-
1997-351	244586.14	1997 Feb 13 1615	Peacekeeper	-	FTH-16	0.000	AFSMC	MS	-	Test	HF-mesletter	-	-
1998-346	244576.14	1997 Mar 21 1515	Peacekeeper	-	FTH-17	0.000	AFSMC	MS	-	Test	VAFB/Wire	-	-
1998-359	244778.29	1989 Mar 19 1745	Peacekeeper	-	FTH-18	0.000	AFSMC	MS	-	Test	VAFB/Wire	-	-
1998-357	244798.50	1989 Sep 14 1900	Peacekeeper	-	FTH-19	0.000	SAC	MS	-	OT	-	-	-
1998-393	244796.50	1990 May 16 1801	Peacekeeper	-	O1PA 75/46/58/76	0.000	SAC	MS	90M/	OT	-	-	-
1999-3132	244828.25	1990 May 16 1801	Peacekeeper	-	O2PA (85-161)	0.000	SAC	MS	90M/	OT	VAFB	AMST900312	-
1999-3186	244817.50	1991 Mar 13	Peacekeeper	-	O3PA (85-160)	0.000	SAC	MS	90M/	OT	VAFB	-	-
1999-3112	244837.93	1991 Mar 13 1023	Peacekeeper	-	O4PA (85-163)	0.000	SAC	MS	90M/	OT	VAFB	-	-
1991-3119	244819.24	1991 Jun 11 1747	Peacekeeper	-	O5PA (85-176)	0.000	SAC	MS	90M/	OT	PressCourier910313	VAFB	-
1991-3149	244816.92	1991 Sep 17 1006	Peacekeeper	-	O7PA (84-546)	0.000	SAC	MS	90M/	OT	JCH	-	-
1992-326	244866.11	1992 Mar 4 1445	Peacekeeper	-	O7PA (85-173)	0.000	SAC	MS	90M/	OT	VAFB	-	-
1992-380	244864.60	1992 Jul 1 0220	Peacekeeper	-	O8PA (84-545)	0.000	SAC	MS	90M/	OT	Ulrich/Wire	VAFB	-
1992-385	244881.64	1992 Sep 16 0315	Peacekeeper	-	O9PA (87-146)	0.000	ACC	MS	90M/	OT	JCH	-	-
1993-319	244900.85	1993 Mar 4 0619	Peacekeeper	-	O1PA (87-147)	0.000	ACC	MS	90M/	OT	JCH	-	-
1993-347	244932.64	1993 Jul 14 0319	Peacekeeper	-	O2PA (84-550)	0.000	AFSPC	MS	90M/	OT	AP/Ulrich	VAFB	-
1993-380	244924.50	1993 Sep 15	Peacekeeper	-	O3PA (85-235)	0.000	AFSPC	MS	90M/	OT	DailynewsLA930715	RiGG	-
1994-022	244942.44	1994 Mar 5 0339	Peacekeeper	-	O4PA (84-559)	0.000	AFSPC	MS	90M/	OT	Wire/Ulrich	VAFB	-
1994-354	244946.65	1994 Mar 13 2232	Peacekeeper	-	TI 1110	0.700	OSG	MS	CG/G	OT	NSL	AMST940321-26	-
1994-382	244948.50	1994 May 17 1441	Peacekeeper	-	19PA (84-550)	0.000	AFSMC	MS	90M/	OT	VAFB	SanJoseMer920916	-
1995-304	244936.85	1995 Jun 19 0801	Peacekeeper	-	19PA (84-551)	0.000	AFSMC	MS	90M/	OT	VAFB	-	-
1995-344	244952.50	1995 Jun 14	Peacekeeper	-	17PA (84-545)	0.000	AFSMC	MS	90M/	OT	VAFB	-	-
1995-304	244956.44	1995 Aug 15 2230	Peacekeeper	-	18PA (84-0544)	0.000	AFSMC	MS	90M/	OT	VAFB	-	-
1995-380	244959.50	1995 Aug 30 0801	Peacekeeper	-	DLV (80-0394)	0.138	LMA	MS	C	Sat LED SO	-	-	-
1996-320	245021.83	1996 May 8 0801	Peacekeeper	-	20PA (87-0144)	0.000	AFSMC	MS	90M/	OT	VAFB	-	-
1996-325	245035.83	1996 May 30 0801	Peacekeeper	-	21PA (86-146)	0.000	AFSMC	MS	90M/	OT	VAFB	-	-
1996-383	245034.85	1996 Sep 11 0801	Peacekeeper	-	22PA (86-165)	0.000	AFSMC	MS	90M/	OT	RiGG	-	-
1996-388	245034.85	1997 Nov 6 0306	Peacekeeper	-	23PA (85-165)	0.000	AFSMC	MS	90M/	OT	RiGG	LMA-WW	-
1997-343	245034.95	1997 Nov 6 0306	Peacekeeper	-	24PA (84-555)	0.000	AFSMC	MS	90M/	OT	RiGG	LMA-WW	-
1997-343	245034.95	1997 Aug 23 0651.01	Peacekeeper	-	LM-005	0.463	LMA	MS	C	Sat SSD SO	-	-	-
1997-350	245078.83	1997 Sep 17 0801	Peacekeeper	-	LM-004	0.000	OSW	MS	90M/	OT	Wire	AMST970901-28	-
1997-373	245078.36	1997 Nov 5 2109.44	Peacekeeper	-	25PA (86-148)	0.000	OSW	MS	90M/	OT	Wire	-	-
1998-007	245095.06	1998 Jan 7 0208.44	Peacekeeper	-	26PA (86-443)	0.000	OSW	MS	90M/	OT	Wire	-	-
1998-042	245090.94	1998 Feb 10 1320	Peacekeeper	-	27PA (87-0049)	0.154	LMA	MS	C	Sat LED SO	-	-	-
1998-055	245108.92	1998 May 3 1034.49	Peacekeeper	-	TI 1110	0.150	OSG	MS	CG/G	OT	Wire	-	-
1999-002	245108.52	1999 Oct 3 1034.02	Peacekeeper	-	TM 006	0.160	OSG	MS	90M/	OT	VAFB-WW	-	-
1999-011	245127.82	1999 Jan 10 0801	Peacekeeper	-	LM-006	0.700	LMA	MS	CG/G	OT	RiGG	-	-
1999-051	245126.27	1999 Apr 27 1822.01	Peacekeeper	-	28PA (88-0335)	0.403	LMA	MS	C	Sat LED SO	-	-	-
1999-051	245126.26	1999 Apr 27 1821.08	Peacekeeper	-	LM-005	0.728	LMA	MS	90M/	OT	VAFB-WW	-	-
1999-070	245133.26	1999 Sep 24 1821.08	Peacekeeper	-	LM-007	0.728	LMA	MS	C	Sat SSD SO	Wire-spaceimaging.com	-	-
2000-013	245151.90	2000 Mar 8 0940.30	Peacekeeper	-	TL	0.655	OSG	MS	CG/G	OT	Wire	-	-
2000-014	245151.90	2000 Mar 8 0940.30	Peacekeeper	-	29PA (84-0553)	0.000	OSG	MS	90M/	OT	VAFB-WW	-	-
2001-001	245217.83	2001 Jul 27 0801	Peacekeeper	-	TE	0.597	OSG	MS	CG/G	OT	VAFB-WW	-	-
2001-001	245217.28	2001 Sep 21 1849.30	Peacekeeper	-	30PA (85-0162)	0.610	OSG	MS	CG/G	OT	VAFB-WW	-	-
2001-043	245282.61	2001 Sep 30 0240	Peacekeeper	-	T6	0.610	OSG	MS	CG/G	OT	VAFB-WW	-	-
2002-336	245298.83	2002 Sep 3 0801	Peacekeeper	-	LM-001	0.184	LMA	MS	CG/G	OT	VAFB-P10	-	-
2003-336	245270.90	2003 Mar 12 0929	Peacekeeper	-	31PA (84-0543)	0.000	AFSMC	MS	90M/	OT	VAFB-P10	-	-
2004-018	245346.24	2004 May 20 1747.03	Peacekeeper	-	32PA (85-0174)	0.000	AFSMC	MS	90M/	OT	Wire	vandenbergef.af.mil	-
2004-528	245320.83	2004 Feb 24 0955.30	Peacekeeper	-	T7 (XL)	0.764	OSG	MS	CG/G	OT	Wire	vandenbergef.af.mil	-
2009-701	245486.91	2009 Feb 24 0955.30	Peacekeeper	-	33PA (84-0554)	0.000	AFSMC	MS	90M/	OT	Wire	vandenbergef.af.mil	-
2010-330	245509.46	2010 Apr 20 0441.00	Peacekeeper	-	T8 (XL)	0.441	OSG	MS	CG/G	OT	Wire	-	-
2010-048	245565.70	2010 Sep 26 0441.00	Peacekeeper	-	1	1.031	RSLP	MS	CG/G	OT	Wire	-	-
2010-060	245520.56	2010 Mar 20 0125.00	Peacekeeper	H	3	0.893	RSLP	MS	CG/G	OT	Wire	-	-
2011-001	245562.92	2011 Mar 4 1009.43	Peacekeeper	-	T9 (XL)	0.528	OSG	MS	CG/G	OT	Wire	-	-
2011-052	245578.11	2011 Aug 11 1445	Peacekeeper	-	4	0.000	OSG/RSLP	MS	CG/G	OT	Wire	-	-
2013-047	245642.64	2013 Sep 7 0327.00	Peacekeeper	-	5	0.460	OSG/RSLP	MS	CG/G	OT	Wire	-	-
2017-050	245791.75	2017 Aug 26 0604	Peacekeeper	-	6	0.383	OSG	MS	CG/G	OT	Wire	-	-
2019-068	245806.48	2019 Oct 31 2137	Peacekeeper	2	T10 (XL)	0.119	ONTK	MS	CG/G	OT	Wire	-	-
2019-096	245866.96	2019 Jul 2 1100	Peacekeeper	-	1	0.000	LARGN	MS	CG/C	OT	Wire	-	-
2020-046	245904.07	2020 Jul 15 1346:00	Peacekeeper	-	7	1.000	NETS	MS	CG/G	OT	Wire	-	-





Launch

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Mission	FlightCode	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee km	Range km	Dest
1976-5228	2442981.50	1976 Jul 22	Malemute	-	Sandia 497-006	-	-	-	-	TRR	UL3	-	-	146	-	-
1976-483	2442983.50	1976 Jul 24	Malemute	-	Sandia 497-007	-	-	-	-	TRR	UL3	-	-	17	-	-
1979-5127	2443982.50	1979 Apr 19	Malemute	-	Sandia 497-009	-	-	-	-	TRR	-	-	-	165	-	-
1999-542	2451360.62	1999 Jul 1 0300	Malemute	-	THBD Target	Malemute II	-	-	-	RAU	-	-	-	120	-	-
2008-407	2454727.08	2008 Sep 17 1355	PAAT	?	TR Target	Japan PAC-3 target	-	-	-	WS	-	-	-	40?	-	-
2013-416	2456519.50	2013 Aug 15	PAAT	?	PAAT?	PAC-3 Target	-	-	-	WS	-	-	-	40?	-	-
2016-541	2457569.91	2016 Jun 30 0943:18	Improved Malemute	-	MaxiDuty 1	ASC MaxiDuty 1	-	-	-	ADD	03	-	-	115	-	-
2016-560	2457578.04	2016 Jul 8 1301:00	Improved Malemute	-	MaxiDuty 1b	ASC MaxiDuty 1b	-	-	-	ADD	03	-	-	117	-	-
2020-562	2458981.50	2020 Feb 2	Improved Malemute	-	SPIDER 2	-	-	-	-	ESR	-	-	-	120?	-	-
2021-527	2459368.73	2021 May 24 0658:00	IM/JH	-	MAPHEUS 11	DLR MAPHEUS 11	-	-	-	ESR	S	-	-	216	-	-
2021-566	2459438.50	2021 Aug 12	Improved Malemute	-	ET-2	Economical Target 2	-	-	-	WS	-	-	-	100?	-	-
2021-578	2459468.50	2021 Oct 17	Improved Malemute	-	-	PWME	-	-	-	ADD	-	-	-	90?	-	-
2021-579	2459469.50	2021 Oct 27	Improved Malemute	?	-	PWME	-	-	-	ADD	-	-	-	90?	-	-
2021-588	2459554.84	2021 Dec 6 0807:00	IM/JH	-	MAPHEUS 10	DLR MAPHEUS 10	-	-	-	ESR	S	-	-	284	-	-
2022-512	2459608.79	2022 Jan 29 0700	IM/JH	-	MAPHEUS 9	DLR MAPHEUS 9	-	-	-	ESR	S	-	-	284	-	-
2022-5105	2459673.81	2022 Oct 21 0728:00	IM/JH	-	MAPHEUS 12	DLR MAPHEUS 12	-	-	-	ESR	S	-	-	284	-	-
2023-510	2460027.27	2023 Mar 23 1623	IM/ID	-	BRUR	BRUR	-	-	-	ESR	S	-	-	240	-	-
2023-528	2460086.71	2023 May 22 0500:32	IM/JH	-	MAPHEUS 13	DLR MAPHEUS 13	-	-	-	ESR	S	-	-	225	-	-



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Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Agency	Launch_Code	Group	Category	LTCite	Cite	Notes
1976-S228	2442981.50	1976 Jul 22	Malemute	-	Sandia 497-006	SAMD	SS	SAMD/Millard	Test	SbctCon6	CR-157116	-
1976-483	2442983.50	1976 Jul 24	Malemute	-	Sandia 497-007	SAMD	SF	SAMD/Millard	Test	SbctCon6	-	-
1979-S127	2442982.50	1979 Apr 19	Malemute	-	Sandia 497-009	SAMD	SS	SAMD/Millard	Test	SbctCon6	-	-
1989-342	2451360.62	1989 Jul 1 0300	Malemute	-	TBED Target	SAMD/USNTB	SS	USNTB/	Target	SandiaASER99	Wire	-
2008-A07	2459727.08	2008 Sep 17 1355	PAAT	?	TBD Target	MDA	MS	-	Target	Wire	-	-
2013-A16	2459519.50	2013 Aug 15	PAAT	?	PAAT7	MDA	MS	-	Target	Lockheedmartin.com	-	-
2016-S41	2457669.91	2016 Jun 30 0943:18	Improved Malemute	-	MaxiDusty 1	DLR/ARHS	SS	ARHS/TRON/Havnes	Aeron	andoyaspace.no	-	-
2016-S50	2457578.04	2016 Jul 8 1301:00	Improved Malemute	-	MaxiDusty 1b	DLR/ARHS	SS	ARHS/TRON/Havnes	Aeron	andoyaspace.no	-	-
2020-S52	2458681.50	2020 Feb 2	Improved Malemute	-	SPIDER 2	DLR	SS	DLR/	Aeron	andoyaspace.no	-	-
2021-S27	2459358.73	2021 May 24 0535:00	Improved Malemute	-	MPHEUS 11	DLR	SS	DLR/	Aeron	andoyaspace.no	-	-
2021-S36	2459438.50	2021 Aug 12	Improved Malemute	-	ET-2	SMDC/	SS	SMDC/	Micrograv	www.sscspace.com	-	-
2021-S37	2459488.50	2021 Oct 17	Improved Malemute	?	-	ARHS	SS	ARHS/	Test	army.mil	-	-
2021-S39	2459489.50	2021 Oct 27	Improved Malemute	?	-	ARHS	SS	ARHS/	Test	army.mil	-	-
2021-S68	2459554.94	2021 Dec 6 0807:00	HW/IN	-	MPHEUS 10	DLR	SS	DLR/	Test	nasaspaceflight.com	-	-
2022-S12	2459608.79	2022 Jan 29 0700	HW/IN	-	MPHEUS 9	DLR	SS	DLR/	Test	nasaspaceflight.com	-	-
2022-S106	2459873.81	2022 Dec 21 0725:00	HW/IN	-	MPHEUS 12	DLR	SS	DLR/	Micrograv	www.sscspace.com	-	-
2023-S10	2460027.27	2023 Mar 23 1823	HW/ID	-	BROR	DLR	SS	DLR/	Micrograv	www.sscspace.com	-	-
2023-S28	2460086.71	2023 May 22 0500:32	HW/IN	-	MPHEUS 13	SNSB/TRF/DLR/	SS	SNSB/TRF/DLR/	Auroral	www.sscspace.com	-	-



Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Mission	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee km	Range km	Dest
1948-A44	2422885-50	1948 Dec	Matador	-	-	-	-	-	HADC	ZEL	-	-	12?	-	-
1951-A31	2433818-15	1951 Jun 20	Matador	-	GH-544	-	-	-	CC	LA	-	-	12?	-	-
1951-A38	2433826-50	1951 Jun 29	Matador	-	GH-545	-	-	-	CC	LA?	-	-	12?	-	-
1951-A45	2433845-50	1951 Jul 18	Matador	-	GH-546	-	-	-	CC	LA?	-	-	12?	-	-
1951-A53	2433868-50	1951 Aug 10	Matador	-	GH-548	-	-	-	CC	LA?	-	-	12?	-	-
1951-A63	2433889-50	1951 Aug 31	Matador	-	GH-549	-	-	-	CC	LA?	-	-	12?	-	-
1951-A68	2433895-50	1951 Sep 6	Matador	-	GH-550	-	-	-	CC	LA?	-	-	12?	-	-
1951-A78	2433945-50	1951 Oct 26	Matador	-	GH-551	-	-	-	CC	LA?	-	-	12?	-	-
1951-A91	2433987-50	1951 Dec 7	Matador	-	GH-547	-	-	-	CC	LA?	-	-	12?	-	-
1951-A95	2433993-50	1951 Dec 13	Matador	-	GH-552	-	-	-	CC	LA?	-	-	12?	-	-
1951-A96	2434026-50	1952 Jan 15	Matador	-	GH-554	-	-	-	CC	LA?	-	-	12?	-	-
1952-A30	2434055-50	1952 Jan 13	Matador	-	GH-555	-	-	-	CC	LA?	-	-	12	-	-
1952-A42	2434081-50	1952 Feb 10	Matador	-	GH-556	-	-	-	CC	LA?	-	-	12?	-	-
1952-A49	2434091-50	1952 Mar 20	Matador	-	GH-558	-	-	-	CC	LA?	-	-	12?	-	-
1952-A63	2434106-50	1952 Mar 4	Matador	-	GH-561	-	-	-	CC	LA?	-	-	12?	-	-
1952-A64	2434111-50	1952 Apr 9	Matador	-	GH-559	-	-	-	CC	LA?	-	-	12?	-	-
1952-A72	2434134-50	1952 May 2	Matador	-	GH-560	-	-	-	CC	LA?	-	-	12?	-	-
1952-A75	2434147-50	1952 May 16	Matador	-	GH-563	-	-	-	CC	LA?	-	-	12?	-	-
1952-A87	2434164-50	1952 May 22	Matador	-	GH-562	-	-	-	CC	LA?	-	-	12?	-	-
1952-A110	2434202-50	1952 Jul 9	Matador	-	GH-565	-	-	-	CC	LA?	-	-	12?	-	-
1952-A115	2434212-50	1952 Jul 19	Matador	-	GH-566	-	-	-	CC	LA?	-	-	12?	-	-
1952-A152	2434265-50	1952 Sep 10	Matador	-	GH-568	-	-	-	CC	LA?	-	-	12?	-	-
1952-A156	2434271-50	1952 Sep 16	Matador	-	GH-569	-	-	-	CC	LA?	-	-	12?	-	-
1952-A180	2434294-50	1952 Oct 9	Matador	-	GH-570	-	-	-	CC	LA?	-	-	12?	-	-
1952-A204	2434320-50	1952 Nov 4	Matador	-	GH-2353	-	-	-	CC	LA?	-	-	12?	-	-
1952-A212	2434323-50	1952 Nov 4	Matador	-	GH-2353	-	-	-	CC	LA?	-	-	12?	-	-
1952-A225	2434333-50	1952 Nov 7	Matador	-	GH-567	-	-	-	CC	LA?	-	-	12?	-	-
1952-A226	2434335-50	1952 Nov 17	Matador	-	GH-2354	-	-	-	CC	LA?	-	-	12?	-	-
1952-A255	2434350-50	1952 Nov 17	Matador	-	GH-11042	-	-	-	CC	LA?	-	-	12?	-	-
1952-A256	2434350-50	1952 Dec 4	Matador	-	GH-553	-	-	-	CC	LA?	-	-	12?	-	-
1952-A259	2434361-50	1952 Dec 16	Matador	-	GH-2356	-	-	-	CC	LA?	-	-	12?	-	-
1952-A279	2434365-50	1952 Dec 19	Matador	-	GH-11043	-	-	-	CC	LA?	-	-	12?	-	-
1953-A11	2434369-50	1953 Jan 12	Matador	-	GH-557	-	-	-	CC	LA?	-	-	12?	-	-
1953-A17	2434391-50	1953 Jan 14	Matador	-	GH-11046	-	-	-	CC	LA?	-	-	12?	-	-
1953-A41	2434407-50	1953 Jan 30	Matador	-	GH-11050	-	-	-	CC	LA?	-	-	12?	-	-
1953-A44	2434413-50	1953 Jan 5	Matador	-	GH-11048	-	-	-	CC	LA?	-	-	12?	-	-
1953-A64	2434426-50	1953 Feb 17	Matador	-	GH-2357	-	-	-	CC	LA?	-	-	12?	-	-
1953-A93	2434440-50	1953 Mar 4	Matador	-	GH-2358	-	-	-	CC	LA?	-	-	12?	-	-
1953-A124	2434464-50	1953 Mar 16	Matador	-	GH-11062	-	-	-	CC	LA?	-	-	12?	-	-
1953-A156	2434467-50	1953 Mar 31	Matador	-	GH-11044	-	-	-	CC	LA?	-	-	12?	-	-
1953-A158	2434468-50	1953 Apr 1	Matador	-	GH-11049	-	-	-	CC	LA?	-	-	12?	-	-
1953-A167	2434481-50	1953 Apr 24	Matador	-	GH-11049	-	-	-	CC	LA?	-	-	12?	-	-
1953-A192	2434491-50	1953 Apr 29	Matador	-	GH-2359	-	-	-	CC	LA?	-	-	12?	-	-
1953-A200	2434501-50	1953 May	Matador	-	GH-11063	-	-	-	CC	LA?	-	-	12?	-	-
1953-A204	2434509-50	1953 Jun 12	Matador	-	GH-11066	-	-	-	CC	LA?	-	-	12?	-	-
1953-A290	2434567-50	1953 Jul 4	Matador	-	GH-11089	-	-	-	CC	LA?	-	-	12?	-	-
1953-A374	2434593-50	1953 Jul 4	Matador	-	GH-11087	-	-	-	CC	LA?	-	-	12?	-	-
1953-A382	2434613-50	1953 Aug 24	Matador	-	GH-11085	-	-	-	CC	LA?	-	-	12?	-	-
1953-A385	2434643-50	1953 Sep 23	Matador	-	GH-11082	-	-	-	CC	LA?	-	-	12?	-	-
1953-A410	2434671-50	1953 Oct 21	Matador	-	GH-2368	-	-	-	CC	LA?	-	-	12?	-	-
1953-A412	2434672-50	1953 Oct 22	Matador	-	GH-11072	-	-	-	CC	LA?	-	-	12?	-	-
1953-A423	2434683-50	1953 Oct 22	Matador	-	GH-11097	-	-	-	CC	LA?	-	-	12?	-	-
1953-A443	2434688-50	1953 Nov 17	Matador	-	GH-11107	-	-	-	CC	LA?	-	-	12?	-	-
1953-A445	2434689-50	1953 Nov 18	Matador	-	GH-11107	-	-	-	CC	LA?	-	-	12?	-	-
1953-A448	2434700-50	1953 Nov 19	Matador	-	GH-11104	-	-	-	CC	LA?	-	-	12?	-	-
1953-A449	2434700-50	1953 Nov 19	Matador	-	GH-11098	-	-	-	CC	LA?	-	-	12?	-	-
1953-A465	2434708-50	1953 Nov 27	Matador	-	GH-2359	-	-	-	CC	LA?	-	-	12?	-	-
1953-A467	2434713-50	1953 Dec 2	Matador	-	GH-11101	-	-	-	CC	LA?	-	-	12?	-	-
1953-A476	2434722-50	1953 Dec 11	Matador	-	GH-11080	-	-	-	CC	LA?	-	-	12?	-	-
1953-A478	2434726-50	1953 Dec 15	Matador	-	GH-11106	-	-	-	CC	LA?	-	-	12?	-	-
1953-A479	2434726-50	1953 Dec 15	Matador	-	GH-11106	-	-	-	CC	LA?	-	-	12?	-	-
1953-A480	2434726-50	1953 Dec 15	Matador	-	GH-11110	-	-	-	CC	LA?	-	-	12?	-	-
1953-A481	2434726-50	1953 Dec 15	Matador	-	GH-12418	-	-	-	CC	LA?	-	-	12?	-	-
1953-A484	2434727-50	1953 Dec 16	Matador	-	GH-12419	-	-	-	CC	LA?	-	-	12?	-	-
1953-A485	2434727-50	1953 Dec 16	Matador	-	GH-11103	-	-	-	CC	LA?	-	-	12?	-	-
1953-A489	2434728-50	1953 Dec 17	Matador	-	GH-11102	-	-	-	CC	LA?	-	-	12?	-	-
1954-A106	2434749-50	1954 Jan 7	Matador	-	GH-12427	-	-	-	CC	LA?	-	-	12?	-	-
1954-A108	2434750-50	1954 Jan 8	Matador	-	GH-12421	-	-	-	CC	LA?	-	-	12?	-	-
1954-A109	2434750-50	1954 Jan 8	Matador	-	GH-12420	-	-	-	CC	LA?	-	-	12?	-	-
1954-A110	2434750-50	1954 Jan 8	Matador	-	GH-11109	-	-	-	CC	LA?	-	-	12?	-	-
1954-A130	2434763-50	1954 Jan 21	Matador	-	GH-12422	-	-	-	CC	LA?	-	-	12?	-	-
1954-A136	2434771-50	1954 Jan 29	Matador	-	GH-12423	-	-	-	CC	LA?	-	-	12?	-	-
1954-A143	2434777-50	1954 Feb 4	Matador	-	GH-12425	-	-	-	CC	LA?	-	-	12?	-	-
1954-A169	2434792-50	1954 Feb 19	Matador	-	GH-12424	-	-	-	CC	LA?	-	-	12?	-	-
1954-A180	2434798-50	1954 Feb 25	Matador	-	GH-12447	-	-	-	CC	LA?	-	-	12?	-	-
1954-A199	2434806-50	1954 Mar 5	Matador	-	GH-2360	-	-	-	CC	LA?	-	-	12?	-	-
1954-A100	2434806-50	1954 Mar 5	Matador	-	GH-12437	-	-	-	CC	LA?	-	-	12?	-	-
1954-A121	2434824-50	1954 Mar 23	Matador	-	GH-12445	-	-	-	CC	LA?	-	-	12?	-	-
1954-A122	2434824-50	1954 Mar 23	Matador	-	GH-12444	-	-	-	CC	LA?	-	-	12?	-	-
1954-A129	2434827-50	1954 Mar 26	Matador	-	GH-12446	-	-	-	CC	LA?	-	-	12?	-	-
1954-A134	2434831-50	1954 Mar 30	Matador	-	GH-12436	-	-	-	CC	LA?	-	-	12?	-	-
1954-A135	2434831-50	1954 Mar 30	Matador	-	GH-12432	-	-	-	CC	LA?	-	-	12?	-	-
1954-A156	2434841-50	1954 Apr 9	Matador	-	GH-12468	-	-	-	CC	LA?	-	-	12?	-	-
1954-A157	2434841-50	1954 Apr 9	Matador	-	GH-12429	-	-	-	CC	LA?	-	-	12?	-	-
1954-A158	2434841-50	1954 Apr 9	Matador	-	GH-12436	-	-	-	CC	LA?	-	-	12?	-	-



Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Mission	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee_Km	Range_Km	Dest
1956-1221	2435499-50	1956 Jan 26	Matador	-	54-3095	-	-	-	HADC	-	-	-	12?	-	-
1956-108	2435499-50	1956 Jan 27	Matador	-	OH-54-16	-	-	-	CC	LA?	-	-	12?	-	-
1956-113	2435509-50	1956 Feb 6	Matador	-	OH-54-12	-	-	-	CC	LA?	-	-	12?	-	-
1956-114	2435509-50	1956 Feb 6	Matador	-	OH-54-11	-	-	-	CC	LA?	-	-	12?	-	-
1956-1222	2435513-50	1956 Feb 10	Matador	-	OH-53-190	-	-	-	HADC	-	-	-	12?	-	-
1956-1224	2435533-50	1956 Mar 1	Matador	-	53192	-	-	-	HADC	-	-	-	12?	-	-
1956-1225	2435547-50	1956 Mar 15	Matador	-	6	-	-	-	HADC	-	-	-	12?	-	-
1956-134	2435555-50	1956 Mar 23	Matador	-	OH-54-22	-	-	-	CC	LA?	-	-	12?	-	-
1956-135	2435555-50	1956 Mar 23	Matador	-	OH-54-26	-	-	-	CC	LA?	-	-	12?	-	-
1956-136	2435555-50	1956 Mar 23	Matador	-	OH-54-31	-	-	-	CC	LA?	-	-	12?	-	-
1956-137	2435559-50	1956 Mar 26	Matador	-	OH-54-19	-	-	-	CC	LA?	-	-	12?	-	-
1956-138	2435559-50	1956 Mar 26	Matador	-	OH-54-35	-	-	-	CC	LA?	-	-	12?	-	-
1956-139	2435560-50	1956 Mar 28	Matador	-	OH-54-21	-	-	-	CC	LA?	-	-	12?	-	-
1956-140	2435560-50	1956 Mar 28	Matador	-	OH-54-30	-	-	-	CC	LA?	-	-	12?	-	-
1956-141	2435560-50	1956 Mar 28	Matador	-	OH-54-25	-	-	-	CC	LA?	-	-	12?	-	-
1956-142	2435560-50	1956 Mar 28	Matador	-	OH-54-36	-	-	-	CC	LA?	-	-	12?	-	-
1956-143	2435567-50	1956 Apr 4	Matador	-	54-3098	-	-	-	HADC	-	-	-	12?	-	-
1956-144	2435569-50	1956 Apr 6	Matador	-	OH-54-28	-	-	-	CC	LA?	-	-	12?	-	-
1956-145	2435569-50	1956 Apr 6	Matador	-	OH-54-34	-	-	-	CC	LA?	-	-	12?	-	-
1956-1227	2435579-50	1956 Apr 16	Matador	-	221	-	-	-	HADC	-	-	-	12?	-	-
1956-1228	2435585-50	1956 Apr 25	Matador	-	OH-53-195	-	-	-	HADC	-	-	-	12?	-	-
1956-151	2435595-50	1956 May 2	Matador	-	OH-11065	RTV	-	-	CC	LA?	-	-	12?	-	-
1956-1229	2435607-50	1956 May 14	Matador	-	OH-11091	RTV	-	-	HADC	PAEB/800	-	-	12?	-	-
1956-1230	2435614-38	1956 May 20	2100	-	OH-11091	RTV	-	-	CC	-	-	-	12?	-	-
1956-1231	2435617-50	1956 May 24	Matador	-	543099	RTV	-	-	HADC	-	-	-	12?	-	-
1956-1232	2435635-50	1956 Jun 11	Matador	-	53-191	RTV	-	-	HADC	-	-	-	12?	-	-
1956-181	2435714-50	1956 Aug 29	Matador	-	OH-53-194	RTV	-	-	CC	LA?	-	-	12?	-	-
1956-182	2435715-50	1956 Aug 30	Matador	-	OH-55-528	-	-	-	CC	LA?	-	-	12?	-	-
1956-185	2435728-50	1956 Sep 12	Matador	-	OH-55-529	-	-	-	CC	LA?	-	-	12?	-	-
1956-186	2435728-50	1956 Sep 12	Matador	-	OH-55-527	-	-	-	CC	LA?	-	-	12?	-	-
1956-188	2435735-50	1956 Sep 20	Matador	-	OH-54-132	-	-	-	CC	LA?	-	-	12?	-	-
1956-189	2435742-50	1956 Sep 26	Matador	-	OH-54-13	-	-	-	CC	LA?	-	-	12?	-	-
1956-192	2435742-50	1956 Sep 26	Matador	-	OH-54-133	-	-	-	CC	LA?	-	-	12?	-	-
1956-1233	2435749-50	1956 Oct 3	Matador	-	OH-54-230	-	-	-	HADC	-	-	-	12?	-	-
1956-189	2435750-50	1956 Oct 3	Matador	-	OH-54-14	-	-	-	CC	LA?	-	-	12?	-	-
1956-1103	2435750-50	1956 Oct 12	Matador	-	OH-54-15	-	-	-	CC	LA?	-	-	12?	-	-
1956-1234	2435775-50	1956 Nov 1	Matador	-	OH-54-127	-	-	-	HADC	-	-	-	12?	-	-
1956-1110	2435780-50	1956 Nov 9	Matador	-	OH-54-127	-	-	-	CC	LA?	-	-	12?	-	-
1956-1235	2435781-50	1956 Nov 14	Matador	-	OH-54-128	-	-	-	HADC	-	-	-	12?	-	-
1956-1112	2435781-50	1956 Nov 21	Matador	-	OH-54-128	-	-	-	CC	LA?	-	-	12?	-	-
1956-1115	2435800-50	1957 Nov 30	Matador	-	OH-54-129	-	-	-	CC	LA?	-	-	12?	-	-
1957-117	2435893-22	1957 Feb 21	1712	-	2096	Mace?	-	-	HADC	-	-	-	12?	-	-
1957-123	2435938-50	1957 Apr 10	Matador	-	-	-	-	-	CC	LA?	-	-	12?	-	-
1957-124	2435939-50	1957 Apr 11	Matador	-	-	-	-	-	CC	LA?	-	-	12?	-	-
1957-125	2435939-50	1957 Apr 11	Matador	-	-	-	-	-	CC	LA?	-	-	12?	-	-
1957-126	2435939-50	1957 May 16	Matador	-	-	-	-	-	CC	LA?	-	-	12?	-	-
1957-127	2435975-50	1957 May 17	Matador	-	-	-	-	-	CC	LA?	-	-	12?	-	-
1957-188	2436070-50	1957 Aug 29	Matador	-	OH-54-137	-	-	-	CC	LA?	-	-	12?	-	-
1957-189	2436084-50	1957 Sep 2	Matador	-	OH-54-20	-	-	-	CC	LA?	-	-	12?	-	-
1957-183	2436084-50	1957 Sep 5	Matador	-	OH-54-139	-	-	-	CC	LA?	-	-	12?	-	-
1957-184	2436088-50	1957 Sep 5	Matador	-	OH-54-139	-	-	-	CC	LA?	-	-	12?	-	-
1957-185	2436088-50	1957 Sep 5	Matador	-	OH-54-21	-	-	-	CC	LA?	-	-	12?	-	-
1957-1104	2436108-50	1957 Sep 25	Matador	-	OH-54-177	-	-	-	CC	LA?	-	-	12?	-	-
1957-1108	2436108-50	1957 Sep 25	Matador	-	OH-54-177	-	-	-	HADC	-	-	-	12?	-	-
1957-1109	2436107-50	1957 Sep 26	Matador	-	OH-54-27	-	-	-	CC	LA?	-	-	12?	-	-
1957-1113	2436112-50	1957 Oct 1	Matador	-	OH-54-140	-	-	-	CC	LA?	-	-	12?	-	-
1957-1114	2436112-50	1957 Oct 1	Matador	-	OH-54-140	-	-	-	CC	LA?	-	-	12?	-	-
1957-1130	2436168-50	1957 Nov 14	Matador	-	OH-54-38	-	-	-	CC	LA?	-	-	12?	-	-
1958-1223	2436240-50	1958 Feb 6	Matador	-	OH-54-138	-	-	-	CC	LA?	-	-	12?	-	-
1958-1221	2436250-50	1958 Feb 18	Mace	-	-	-	-	-	HADC	-	-	-	12?	-	Wendover
1958-1222	2436263-27	1958 Feb 28	Mace	-	-	-	-	-	HADC	-	-	-	12?	-	-
1958-115	2436275-50	1958 Mar 13	Matador	-	OH-56-1963	-	-	-	CC	LA?	-	-	12?	-	-
1958-116	2436275-50	1958 Mar 13	Matador	-	OH-54-24	-	-	-	CC	LA?	-	-	12?	-	-
1958-117	2436275-50	1958 Mar 13	Matador	-	OH-54-142	-	-	-	CC	LA?	-	-	12?	-	-
1958-118	2436275-50	1958 Mar 13	Matador	-	OH-56-1962	-	-	-	CC	LA?	-	-	12?	-	-
1958-1219	2436331-50	1958 May 8	Mace	-	-	-	-	-	HADC	-	-	-	12?	-	-
1958-1220	2436365-22	1958 Jul 10	Mace	-	-	-	-	-	HADC	-	-	-	12?	-	-
1958-1142	2436520-18	1958 Nov 12	Matador	-	Training #1	-	-	-	CC	LA?	-	-	12?	-	-
1958-1143	2436520-18	1958 Nov 12	Matador	-	Training #2	-	-	-	CC	LA?	-	-	12?	-	-
1958-1224	2436525-23	1958 Nov 17	Matador	-	Training #2	-	-	-	HADC	-	-	-	12?	-	-
1958-1225	2436525-42	1958 Nov 17	Matador	-	Training #2	-	-	-	HADC	-	-	-	12?	-	-
1958-1157	2436539-50	1958 Dec 2	Matador	-	Training #3	-	-	-	CC	LA?	-	-	12?	-	-
1958-1158	2436540-50	1958 Dec 3	Matador	-	Training #4	-	-	-	CC	LA?	-	-	12?	-	-
1958-1159	2436541-50	1958 Dec 3	Matador	-	Training #5	-	-	-	CC	LA?	-	-	12?	-	-
1958-1160	2436541-50	1958 Dec 4	Matador	-	Training #6	-	-	-	CC	LA?	-	-	12?	-	-
1959-109	2436576-13	1959 Jan 7	Matador	-	Training #7	-	-	-	CC	LA?	-	-	12?	-	-
1959-110	2436576-13	1959 Jan 8	Matador	-	Training #8	-	-	-	CC	LA?	-	-	12?	-	-
1959-1276	2436593-50	1959 Jan 25	Mace	-	-	-	-	-	HADC	-	-	-	12?	-	Wendover
1959-1269	2436598-50	1959 Jan 30	Mace	-	-	-	-	-	HADC	-	-	-	12?	-	Wendover
1959-1270	2436609-50	1959 Jan 30	Mace	-	-	-	-	-	HADC	-	-	-	12?	-	-
1959-133	2436624-50	1959 Feb 25	Matador	-	Training #9	-	-	-	CC	LA?	-	-	12?	-	-
1959-134	2436624-50	1959 Feb 25	Matador	-	Training #10	-	-	-	CC	LA?	-	-	12?	-	-
1959-135	2436624-50	1959 Feb 25	Matador	-	Training #11	-	-	-	CC	LA?	-	-	12?	-	-
1959-136	2436625-50	1959 Feb 26	Matador	-	Training #12	-	-	-	CC	LA?	-	-	12?	-	-
1959-1271	2436653-50	1959 Mar 26	Mace	-	-	-	-	-	HADC	-	-	-	12?	-	-
1959-1272	2436675-50	1959 Apr 17	Mace	-	-	-	-	-	HADC	-	-	-	12?	-	-





Launch

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Mission	FlightCode	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee_Km	Range_Km	Dest
1961-A125	2437450-50	1961 May 11	Matador	-	GH-56-1946	-	-	-	-	CC	LA?	-	-	12?	-	-
1961-A141	2437452-04	1961 Jun 1 1300	Matador	-	GH-56-1948	-	-	-	-	CC	LA?	-	-	12?	-	-
1961-A142	2437452-17	1961 Jun 1 1600	Matador	-	GH-56-1948	-	-	-	-	CC	LA?	-	-	12?	-	-
1961-A143	2437452-30	1961 Jun 1 1915	Matador	-	GH-56-1947	-	-	-	-	CC	LA?	-	-	12?	-	-
1961-A144	2437452-42	1961 Jun 1 2201	Matador	-	GH-56-1944	-	-	-	-	CC	LA?	-	-	12?	-	-
1961-A145	2437452-50	1961 Jun 2	Mace	-	59-4876 (48)	-	-	-	-	CC	LC21	-	-	12?	-	-
1961-A155	2437466-50	1961 Jun 16	Mace	-	59-4879 (51)	-	-	-	-	CC	LC21	-	-	12?	-	-
1961-A156	2437472-19	1961 Jun 21 1630	Mace	-	59-4883 (55)	Mace-B	-	-	-	CC	LC21	-	-	12?	-	-
1961-A169	2437498-50	1961 Jul 18	Mace	-	60-5397	-	-	-	-	CC	LC21	-	-	12?	-	-
1961-A185	2437516-28	1961 Aug 4 1840	Mace	-	60-5399	-	-	-	-	CC	LC21	-	-	12?	-	-
1961-A196	2437543-50	1961 Sep 1	Mace	-	60-5398	-	-	-	-	CC	LC21	-	-	12?	-	-
1961-A204	2437564-50	1961 Sep 22	Mace	-	60-5400	-	-	-	-	CC	LC21	-	-	12?	-	-
1961-A380	2437572-50	1961 Oct 1	Mace	-	-	-	-	-	-	HADC	-	-	-	12?	-	-
1961-A236	2437617-50	1961 Nov 14	Mace	-	60-5396	-	-	-	-	CC	LC21	-	-	12?	-	-
1961-A236	2437639-56	1961 Dec 6 0124	Mace	-	59-4887	-	-	-	-	CC	LC21	-	-	12?	-	-
1962-A06	2437676-50	1962 Jan 12	Mace	-	60-5401	-	-	-	-	CC	LC21	-	-	12?	-	-
1962-A07	2437677-30	1962 Jan 12	Mace	-	60-5405	-	-	-	-	CC	LC21	-	-	12?	-	-
1962-A12	2437689-21	1962 Jan 24 1702:36	Mace	-	59-4888	-	-	-	-	CC	LC21	-	-	12?	-	-
1962-A13	2437691-08	1962 Jan 26 1402:04	Mace	-	59-4888	-	-	-	-	CC	LC21	-	-	12?	-	-
1962-A15	2437697-17	1962 Feb 8 1609	Mace	-	60-5403	-	-	-	-	CC	LC21	-	-	12?	-	-
1962-A19	2437704-25	1962 Feb 8 1800:01	Mace	-	60-5406	-	-	-	-	CC	LC21	-	-	12?	-	-
1962-A21	2437711-38	1962 Feb 15 2113:47	Mace	-	59-4886	-	-	-	-	CC	LC21	-	-	12?	-	-
1962-A22	2437717-35	1962 Feb 21 2023:54	Mace	-	59-4889	-	-	-	-	CC	LC21	-	-	12?	-	-
1962-A29	2437725-17	1962 Mar 1 1600:05	Mace	-	58-1425	-	-	-	-	CC	LC21	-	-	12?	-	-
1962-A31	2437726-17	1962 Mar 2 1600:05	Mace	-	59-4888	-	-	-	-	CC	LC21	-	-	12?	-	-
1962-A184	2437969-21	1962 Oct 31 1705:07	Mace	-	58-1443	-	-	-	-	CC	LC21/1	-	-	12?	-	-
1962-A192	2437977-54	1962 Nov 9 0055:01	Mace	-	59-4891	-	-	-	-	CC	LC21/1	-	-	12?	-	-
1962-A211	2438003-41	1962 Dec 4 2147:59	Mace	-	59-4892	-	-	-	-	CC	LC21/1	-	-	12?	-	-
1962-A219	2438010-32	1962 Dec 11 1946:54	Mace	-	59-4890	-	-	-	-	CC	LC21/2	-	-	12?	-	-
1963-A67	2438166-17	1963 Jun 5 1610:00	Mace	-	58-1423	-	-	-	-	CC	LC21/1	-	-	12?	-	-
1963-A69	2438195-22	1963 Jun 12 1723:26	Mace	-	58-1435	-	-	-	-	CC	LC21/1	-	-	12?	-	-
1963-A96	2438209-10	1963 Jun 26 1520:40	Mace	-	59-2484	-	-	-	-	CC	LC21/1	-	-	12?	-	-
1963-A105	2438228-08	1963 Jul 17 1559:59	Mace	-	59-4981	-	-	-	-	CC	LC21/2	-	-	12?	-	-
1967-A166	2439495-12	1967 Jan 4 1500	Mace	-	-	-	-	-	-	EGL	-	-	-	12?	-	-
1967-A167	2439630-50	1967 Dec 6 2200	Mace	-	-	-	-	-	-	EGL	-	-	-	12?	-	-
1969-A226	2440376-42	1969 Jun 26 2200	Mace	-	-	-	-	-	-	EGL	-	-	-	12?	-	-
1969-A227	2440460-27	1969 Aug 26 5227	Mace	-	-	-	-	-	-	EGL	-	-	-	12?	-	-
1969-A228	2440505-14	1969 Oct 9 1520	Mace	-	-	-	-	-	-	EGL	-	-	-	12?	-	-
1969-A229	2440582-25	1969 Nov 26 1730	Mace	-	-	-	-	-	-	EGL	-	-	-	12?	-	-
1970-A180	2440683-20	1970 Apr 9 1624	Mace	-	-	-	-	-	-	EGL	-	-	-	12?	-	-
1970-A181	2440683-20	1970 May 1 1650	Mace	-	-	-	-	-	-	EGL	-	-	-	12?	-	-
1970-A182	2440683-20	1970 Apr 9 1624	Mace	-	-	-	-	-	-	EGL	-	-	-	12?	-	-
1970-A183	2440683-20	1970 May 1 1650	Mace	-	-	-	-	-	-	EGL	-	-	-	12?	-	-
1970-A184	2440683-20	1970 Aug 19 2930	Mace	-	-	-	-	-	-	EGL	-	-	-	12?	-	-
1970-A185	2440683-20	1970 Aug 19 2930	Mace	-	-	-	-	-	-	EGL	-	-	-	12?	-	-
1970-A186	2440683-20	1970 Sep 29 1805	Mace	-	-	-	-	-	-	EGL	-	-	-	12?	-	-
1970-A187	2440683-20	1970 Oct 22 1610	Mace	-	-	-	-	-	-	EGL	-	-	-	12?	-	-
1970-A188	2440683-20	1970 Nov 2 1513	Mace	-	-	-	-	-	-	EGL	-	-	-	12?	-	-
1970-A189	2440683-20	1970 Nov 23 1936	Mace	-	-	-	-	-	-	EGL	-	-	-	12?	-	-
1971-A216	2440970-32	1970 Dec 3 1938	Mace	-	-	-	-	-	-	EGL	-	-	-	12?	-	-
1971-A217	2440970-21	1971 Jan 18 1730	Mace	-	-	-	-	-	-	EGL	-	-	-	12?	-	-
1971-A218	2441018-28	1971 Feb 5 1835	Mace	-	-	-	-	-	-	EGL	-	-	-	12?	-	-
1971-A219	2441204-38	1971 Mar 9 2005	Mace	-	-	-	-	-	-	EGL	-	-	-	12?	-	-
1971-A220	2441204-38	1971 Mar 9 2005	Mace	-	-	-	-	-	-	EGL	-	-	-	12?	-	-
1971-A221	2441209-28	1971 Sep 14 1840	Mace	-	-	-	-	-	-	EGL	-	-	-	12?	-	-
1971-A222	2441209-27	1971 Oct 14 1835	Mace	-	-	-	-	-	-	EGL	-	-	-	12?	-	-
1971-A223	2441234-27	1971 Oct 14 1835	Mace	-	-	-	-	-	-	EGL	-	-	-	12?	-	-
1974-A78	2442063-50	1974 Jan 16 1832	Mace	-	-	-	-	-	-	EGL	-	-	-	12?	-	-
1974-A79	2442167-25	1974 Jan 16 1759	Mace	-	-	-	-	-	-	EGL	-	-	-	12?	-	-
1974-A80	2442196-50	1974 May 29	Mace	-	-	-	-	-	-	EGL	-	-	-	12?	-	-
1974-A81	2442228-27	1974 Jun 29 1822	Mace	-	-	-	-	-	-	EGL	-	-	-	12?	-	-



Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	DrPay	Agency	Launch_Code	Group	Category	LTCite	Cite	Notes
1948-A44	2432885-50	1948 Dec	Matador	-	-	0.000	WADD	MS	-	Test	uxb.cso.uiuc.edu	-	-
1951-A31	2433818-15	1951 Jun 20 1543	Matador	-	GR-544	0.000	WADD	MS	-	Test	Ulrich/Wire	MT60-2544	-
1951-A38	2433826-50	1951 Jun 29	Matador	-	GR-545	0.000	WADD	MS	-	Test	MT60-2544	-	-
1951-A45	2433845-50	1951 Jul 18	Matador	-	GR-546	0.000	WADD	MS	-	Test	MT60-2544	-	-
1951-A63	2433868-50	1951 Aug 10	Matador	-	GR-548	0.000	WADD	MS	-	Test	MT60-2544	-	-
1951-A68	2433889-50	1951 Aug 31	Matador	-	GR-549	0.000	WADD	MS	-	Test	MT60-2544	-	-
1951-A60	2433895-50	1951 Sep 6	Matador	-	GR-550	0.000	WADD	MF	-	Test	MT60-2544	-	-
1951-A78	2433945-50	1951 Oct 26	Matador	-	GR-551	0.000	WADD	MS	-	Test	MT60-2544	-	-
1951-A91	2433987-50	1951 Dec 7	Matador	-	GR-547	0.000	6555GRS	MS	-	Test	MT60-2544	-	-
1951-A95	2433993-50	1951 Dec 13	Matador	-	GR-552	0.000	WADD	MS	-	Test	MT60-2544	-	-
1952-A06	2434026-50	1952 Jan 15	Matador	-	GR-554	0.000	WADD	MS	-	Test	MT60-2544	-	-
1952-A30	2434055-50	1952 Feb 13	Matador	-	GR-555	0.000	WADD	MS	-	Test	MT60-2544	-	-
1952-A42	2434081-50	1952 Mar 10	Matador	-	GR-556	0.000	WADD	MS	-	Test	MT60-2544	-	-
1952-A49	2434091-50	1952 Mar 20	Matador	-	GR-558	0.000	WADD	MS	-	Test	MT60-2544	-	-
1952-A63	2434106-50	1952 Apr 4	Matador	-	GR-561	0.000	WADD	MS	-	Test	MT60-2544	-	-
1952-A64	2434111-50	1952 Apr 9	Matador	-	GR-560	0.000	WADD	MS	-	Test	MT60-2544	-	-
1952-A72	2434134-50	1952 May 2	Matador	-	GR-559	0.000	WADD	MS	-	Test	MT60-2544	-	-
1952-A75	2434147-50	1952 May 15	Matador	-	GR-562	0.000	WADD	MS	-	Test	MT60-2544	-	-
1952-A87	2434154-50	1952 May 22	Matador	-	GR-563	0.000	WADD	MS	-	Test	MT60-2544	-	-
1952-A110	2434202-50	1952 Jul 9	Matador	-	GR-565	0.000	WADD	MS	-	Test	MT60-2544	-	-
1952-A115	2434212-50	1952 Jul 19	Matador	-	GR-566	0.000	WADD	MS	-	Test	MT60-2544	-	-
1952-A152	2434285-50	1952 Sep 10	Matador	-	GR-568	0.000	WADD	MS	-	Test	MT60-2544	-	-
1952-A166	2434271-50	1952 Sep 16	Matador	-	GR-569	0.000	WADD	MS	-	Test	MT60-2544	-	-
1952-A180	2434294-50	1952 Oct 9	Matador	-	GR-570	0.000	WADD	MS	-	Test	MT60-2544	-	-
1952-A204	2434320-50	1952 Oct 9	Matador	-	GR-2353	0.000	WADD	MS	-	Test	MT60-2544	-	-
1952-A222	2434323-50	1952 Nov 4	Matador	-	GR-567	0.000	WADD	MS	-	Test	MT60-2544	-	-
1952-A225	2434333-50	1952 Nov 7	Matador	-	GR-2354	0.000	WADD	MS	-	Test	MT60-2544	-	-
1952-A226	2434333-50	1952 Nov 17	Matador	-	GR-11042	0.000	WADD	MS	-	Test	MT60-2544	-	-
1952-A255	2434350-50	1952 Dec 4	Matador	-	GR-553	0.000	WADD	MS	-	Test	MT60-2544	-	-
1952-A269	2434361-50	1952 Dec 15	Matador	-	GR-2356	0.000	WADD	MS	-	Test	MT60-2544	-	-
1952-A279	2434365-50	1952 Dec 19	Matador	-	GR-11043	0.000	WADD	MS	-	Test	MT60-2544	-	-
1955-A11	2434389-50	1955 Jan 12	Matador	-	GR-557	0.000	WADD	MS	-	Test	MT60-2544	-	-
1955-A17	2434391-50	1955 Jan 14	Matador	-	GR-11046	0.000	WADD	MF	-	Test	MT60-2544	-	-
1955-A41	2434407-50	1955 Jan 30	Matador	-	GR-11050	0.000	WADD	MS	-	Test	MT60-2544	-	-
1955-A44	2434413-50	1955 Feb 5	Matador	-	GR-2357	0.000	WADD	MS	-	Test	MT60-2544	-	-
1955-A64	2434426-50	1955 Feb 17	Matador	-	GR-11048	0.000	WADD	MS	-	Test	MT60-2544	-	-
1955-A93	2434440-50	1955 Mar 4	Matador	-	GR-2358	0.000	WADD	MS	-	Test	MT60-2544	-	-
1955-A124	2434464-50	1955 Mar 18	Matador	-	GR-2359	0.000	WADD	MS	-	Test	MT60-2544	-	-
1955-A151	2434467-50	1955 Mar 31	Matador	-	GR-11062	0.000	1P8S	MS	-	Test	MT60-2544	-	-
1955-A185	2434486-50	1955 Apr 1	Matador	-	GR-11044	0.000	WADD	MS	-	Test	MT60-2544	-	-
1955-A187	2434491-50	1955 Apr 24	Matador	-	GR-11049	0.000	WADD	MS	-	Test	MT60-2544	-	-
1955-A192	2434491-50	1955 Apr 29	Matador	-	GR-2357	0.000	WADD	MS	-	Test	MT60-2544	-	-
1955-A200	2434501-50	1955 May 4	Matador	-	GR-11063	0.000	WADD	MS	-	Test	MT60-2544	-	-
1955-A254	2434560-50	1955 Jun 12	Matador	-	GR-11064	0.000	WADD	MS	-	Test	MT60-2544	-	-
1955-A280	2434607-50	1955 Jun 12	Matador	-	GR-11065	0.000	WADD	MS	-	Test	MT60-2544	-	-
1955-A294	2434667-50	1955 Jul 9	Matador	-	GR-11067	0.000	WADD	MS	-	Test	MT60-2544	-	-
1955-A324	2434677-50	1955 Aug 24	Matador	-	GR-11081	0.000	WADD	MS	-	Test	MT60-2544	-	-
1955-A325	2434683-50	1955 Sep 24	Matador	-	GR-11083	0.000	WADD	MS	-	Test	MT60-2544	-	-
1955-A367	2434671-50	1955 Sep 23	Matador	-	GR-11082	0.000	WADD	MS	-	Test	MT60-2544	-	-
1955-A410	2434672-50	1955 Oct 21	Matador	-	GR-2368	0.000	WADD	MS	-	Test	MT60-2544	-	-
1955-A423	2434653-50	1955 Oct 22	Matador	-	GR-11072	0.000	WADD	MS	-	Test	MT60-2544	-	-
1955-A443	2434688-50	1955 Nov 17	Matador	-	GR-11107	0.000	WADD	MS	-	Test	MT60-2544	-	-
1955-A446	2434689-50	1955 Nov 19	Matador	-	GR-11104	0.000	WADD	MS	-	Test	MT60-2544	-	-
1955-A448	2434689-50	1955 Nov 19	Matador	-	GR-11107	0.000	WADD	MS	-	Test	MT60-2544	-	-
1955-A448	2434700-50	1955 Nov 19	Matador	-	GR-11104	0.000	WADD	MS	-	Test	MT60-2544	-	-
1955-A465	2434708-50	1955 Nov 19	Matador	-	GR-2369	0.000	WADD	MS	-	Test	MT60-2544	-	-
1955-A467	2434713-50	1955 Nov 27	Matador	-	GR-11101	0.000	WADD	MS	-	Test	MT60-2544	-	-
1955-A476	2434722-50	1955 Dec 2	Matador	-	GR-11080	0.000	WADD	MS	-	Test	MT60-2544	-	-
1955-A478	2434726-50	1955 Dec 11	Matador	-	GR-11105	0.000	1P8S	MS	-	Test	MT60-2544	-	-
1955-A479	2434726-50	1955 Dec 15	Matador	-	GR-11106	0.000	1P8S	MS	-	Test	MT60-2544	-	-
1955-A480	2434726-50	1955 Dec 15	Matador	-	GR-11110	0.000	1P8S	MS	-	Test	MT60-2544	-	-
1955-A481	2434726-50	1955 Dec 15	Matador	-	GR-12418	0.000	1P8S	MS	-	Test	MT60-2544	-	-
1955-A484	2434727-50	1955 Dec 16	Matador	-	GR-12419	0.000	1P8S	MS	-	Test	MT60-2544	-	-
1955-A485	2434727-50	1955 Dec 16	Matador	-	GR-11103	0.000	1P8S?	MS	-	Test	MT60-2544	-	-
1955-A489	2434728-50	1955 Dec 17	Matador	-	GR-11102	0.000	WADD	MS	-	Test	MT60-2544	-	-
1955-A496	2434749-50	1954 Jan 7	Matador	-	GR-12427	0.000	WADD	MS	-	Test	MT60-2544	-	-
1955-A498	2434750-50	1954 Jan 8	Matador	-	GR-12421	0.000	WADD	MS	-	Test	MT60-2544	-	-
1955-A499	2434750-50	1954 Jan 8	Matador	-	GR-12420	0.000	WADD	MS	-	Test	MT60-2544	-	-
1955-A510	2434750-50	1954 Jan 8	Matador	-	GR-11109	0.000	WADD	MS	-	Test	MT60-2544	-	-
1955-A530	2434763-50	1954 Jan 21	Matador	-	GR-12422	0.000	WADD	MS	-	Test	MT60-2544	-	-
1955-A536	2434771-50	1954 Jan 29	Matador	-	GR-12423	0.000	WADD	MS	-	Test	MT60-2544	-	-
1955-A543	2434777-50	1954 Feb 4	Matador	-	GR-12425	0.000	WADD	MS	-	Test	MT60-2544	-	-
1955-A569	2434792-50	1954 Feb 19	Matador	-	GR-12424	0.000	WADD	MS	-	Test	MT60-2544	-	-
1955-A580	2434798-50	1954 Feb 25	Matador	-	GR-12447	0.000	WADD	MS	-	Test	MT60-2544	-	-
1955-A599	2434806-50	1954 Mar 5	Matador	-	GR-2360	0.000	WADD	MS	-	Test	MT60-2544	-	-
1955-A1100	2434806-50	1954 Mar 5	Matador	-	GR-12437	0.000	WADD	MS	-	Test	MT60-2544	-	-
1955-A1121	2434824-50	1954 Mar 23	Matador	-	GR-12445	0.000	WADD	MS	-	Test	MT60-2544	-	-
1955-A1122	2434824-50	1954 Mar 23	Matador	-	GR-12444	0.000	WADD	MS	-	Test	MT60-2544	-	-
1955-A1129	2434827-50	1954 Mar 26	Matador	-	GR-12446	0.000	WADD	MS	-	Test	MT60-2544	-	-
1955-A1134	2434831-50	1954 Mar 30	Matador	-	GR-12436	0.000	WADD	MS	-	Test	MT60-2544	-	-
1955-A1135	2434831-50	1954 Mar 30	Matador	-	GR-12432	0.000	WADD	MS	-	Test	MT60-2544	-	-
1955-A1156	2434841-50	1954 Apr 9	Matador	-	GR-12468	0.000	WADD	MS	-	Test	MT60-2544	-	-
1955-A1157	2434841-50	1954 Apr 9	Matador	-	GR-12429	0.000	WADD	MS	-	Test	MT60-2544	-	-
1955-A1158	2434841-50	1954 Apr 9	Matador	-	GR-12436	0.000	WADD	MS	-	Test	MT60-2544	-	-

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	DrPay	Agency	Launch_Code	Group	Category	LTCite	Cite	Notes
1964-A159	2434841-50	1964 Apr 9	Matador	-	GM-12426	0.000	WADD	MS	-	Test	MT60-2544	-	-
1964-A160	2434841-50	1964 Apr 9	Matador	-	GM-12452	0.000	WADD	MS	-	Test	MT60-2544	-	-
1964-A166	2434845-50	1964 Apr 13	Matador	-	GM-12453	0.000	WADD	MS	-	Test	MT60-2544	-	-
1964-A167	2434845-50	1964 Apr 13	Matador	-	GM-12439	0.000	WADD	MS	-	Test	MT60-2544	-	-
1964-A174	2434847-50	1964 Apr 15	Matador	-	GM-12428	0.000	WADD	MS	-	Test	MT60-2544	-	-
1964-A189	2434855-50	1964 Apr 23	Matador	-	GM-12470	0.000	WADD	MS	-	Test	MT60-2544	-	-
1964-A190	2434855-50	1964 Apr 23	Matador	-	GM-12469	0.000	WADD	MS	-	Test	MT60-2544	-	-
1964-A191	2434855-50	1964 Apr 23	Matador	-	GM-12462	0.000	WADD	MS	-	Test	MT60-2544	-	-
1964-A192	2434855-50	1964 Apr 23	Matador	-	GM-12479	0.000	WADD	MS	-	Test	MT60-2544	-	-
1964-A200	2434859-50	1964 Apr 27	Matador	-	GM-12440	0.000	WADD	MS	-	Test	MT60-2544	-	-
1964-A222	2434862-50	1964 Apr 30	Matador	-	GM-12477	0.000	WADD	MS	-	Test	MT60-2544	-	-
1964-A223	2434862-50	1964 Apr 30	Matador	-	GM-12476	0.000	WADD	MS	-	Test	MT60-2544	-	-
1964-A224	2434862-50	1964 Apr 30	Matador	-	GM-12482	0.000	WADD	MS	-	Test	MT60-2544	-	-
1964-A225	2434862-50	1964 Apr 30	Matador	-	GM-12480	0.000	WADD	MS	-	Test	MT60-2544	-	-
1964-A225	2434862-50	1964 Apr 30	Matador	-	GM-12481	0.000	WADD	MS	-	Test	MT60-2544	-	-
1964-A272	2434876-50	1964 May 14	Matador	-	GM-12478	0.000	WADD	MS	-	Test	MT60-2544	-	-
1964-A273	2434876-50	1964 May 14	Matador	-	GM-12487	0.000	WADD	MS	-	Test	MT60-2544	-	-
1964-A282	2434880-50	1964 May 18	Matador	-	GM-12441	0.000	WADD	MS	-	Test	MT60-2544	-	-
1964-A284	2434881-50	1964 May 19	Matador	-	GM-12473	0.000	WADD	MS	-	Test	MT60-2544	-	-
1964-A285	2434881-50	1964 May 19	Matador	-	GM-12484	0.000	WADD	MS	-	Test	MT60-2544	-	-
1964-A289	2434882-50	1964 May 20	Matador	-	GM-12458	0.000	WADD	MS	-	Test	MT60-2544	-	-
1964-A316	2434896-50	1964 Jun 3	Matador	-	GM-12472	0.000	WADD	MS	-	Test	MT60-2544	-	-
1964-A320	2434897-50	1964 Jun 4	Matador	-	GM-12454	0.000	WADD	MS	-	Test	MT60-2544	-	-
1964-A321	2434897-50	1964 Jun 4	Matador	-	GM-12471	0.000	WADD	MS	-	Test	MT60-2544	-	-
1964-A332	2434902-50	1964 Jun 9	Matador	-	GM-12431	0.000	WADD	MS	-	Test	MT60-2544	-	-
1964-A340	2434903-50	1964 Jun 10	Matador	-	GM-12460	0.000	WADD	MS	-	Test	MT60-2544	-	-
1964-A341	2434903-50	1964 Jun 10	Matador	-	GM-12459	0.000	WADD	MS	-	Test	MT60-2544	-	-
1964-A361	2434911-50	1964 Jun 16	Matador	-	GM-52-1624	0.000	WADD	MS	-	Test	MT60-2544	-	-
1964-A374	2434917-50	1964 Jun 24	Matador	-	GM-12442	0.000	WADD	MS	-	Test	MT60-2544	-	-
1964-A385	2434922-50	1964 Jun 29	Matador	-	GM-12435	0.000	WADD	MS	-	Test	MT60-2544	-	-
1964-A386	2434923-50	1964 Jun 30	Matador	-	GM-11067	0.000	WADD	MS	-	Test	MT60-2544	-	-
1964-A395	2434930-50	1964 Jul 7	Matador	-	GM-12459	0.000	WADD	MS	-	Test	MT60-2544	-	-
1964-A432	2434943-50	1964 Jul 20	Matador	-	GM-11070	0.000	WADD	MS	-	Test	MT60-2544	-	-
1964-A450	2434945-50	1964 Jul 22	Matador	-	GM-11074	0.000	WADD	MS	-	Test	MT60-2544	-	-
1964-A512	2434995-50	1964 Sep 10	Matador	-	GM-12443	0.000	WADD	MS	-	Test	MT60-2544	-	-
1964-A550	2435014-50	1964 Sep 29	Matador	-	GM-12467	0.000	WADD	MS	-	Test	MT60-2544	-	-
1964-A562	2435035-50	1964 Oct 20	Matador	-	GM-12465	0.000	WADD	MS	-	Test	MT60-2544	-	-
1964-A563	2435035-50	1964 Oct 20	Matador	-	GM-12456	0.000	WADD	MS	-	Test	MT60-2544	-	-
1964-A564	2435035-50	1964 Oct 20	Matador	-	GM-12430	0.000	WADD	MS	-	Test	MT60-2544	-	-
1964-A708	2435092-50	1964 Dec 16	Matador	-	GM-12430	0.000	WADD	MS	-	Test	MT60-2544	-	-
1965-A18	2435121-50	1965 Jan 14	Matador	-	GM-52-1849	0.000	WADD	MS	-	Test	MT60-2544	-	-
1965-A22	2435125-50	1965 Jan 18	Matador	-	GM-52-1865	0.000	WADD	MS	-	Test	MT60-2544	-	-
1965-A23	2435125-50	1965 Jan 18	Matador	-	GM-52-1849	0.000	WADD	MS	-	Test	MT60-2544	-	-
1965-A101	2435164-50	1965 Feb 01	Matador	-	GM-12488	0.000	WADD	MS	-	Test	MT60-2544	-	-
1965-A133	2435162-50	1965 Feb 21	Matador	-	GM-12449	0.000	WADD	MS	-	Test	MT60-2544	-	-
1965-A133	2435162-50	1965 Feb 21	Matador	-	GM-12448	0.000	WADD	MS	-	Test	MT60-2544	-	-
1965-A133	2435168-50	1965 Mar 2	Matador	-	GM-12443	0.000	WADD	MS	-	Test	MT60-2544	-	-
1965-A145	2435175-50	1965 Mar 6	Matador	-	GM-12463	0.000	WADD	MS	-	Test	MT60-2544	-	-
1965-A162	2435175-50	1965 Mar 6	Matador	-	GM-52-1899	0.000	WADD	MS	-	Test	MT60-2544	-	-
1965-A192	2435183-50	1965 Mar 17	Matador	-	GM-12483	0.000	WADD	MS	-	Test	MT60-2544	-	-
1965-A193	2435183-50	1965 Mar 17	Matador	-	GM-12481	0.000	WADD	MS	-	Test	MT60-2544	-	-
1965-A238	2435188-50	1965 Apr 1	Matador	-	GM-52-1900	0.000	WADD	MS	-	Test	MT60-2544	-	-
1965-A300	2435217-50	1965 Apr 20	Matador	-	GM-53-92	0.000	WADD	MS	-	Test	MT60-2544	-	-
1965-A300	2435218-50	1965 Apr 21	Matador	-	GM-11725	0.000	WADD	MS	-	Test	MT60-2544	-	-
1965-A326	2435235-50	1965 Apr 28	Matador	-	GM-53-205	0.000	WADD	MS	-	Test	MT60-2544	-	-
1965-A326	2435236-50	1965 Apr 29	Matador	-	GM-52-1895	0.000	WADD	MS	-	Test	MT60-2544	-	-
1965-A330	2435237-50	1965 May 6	Matador	-	GM-52-203	0.000	WADD	MS	-	Test	MT60-2544	-	-
1965-A351	2435244-50	1965 May 10	Matador	-	GM-52-1902	0.000	WADD	MS	-	Test	MT60-2544	-	-
1965-A351	2435244-50	1965 May 10	Matador	-	GM-53-98	0.000	WADD	MS	-	Test	MT60-2544	-	-
1965-A370	2435244-50	1965 May 17	Matador	-	GM-52-1892	0.000	WADD	MS	-	Test	MT60-2544	-	-
1965-A405	2435246-50	1965 May 19	Matador	-	GM-12463	0.000	WADD	MS	-	Test	MT60-2544	-	-
1965-A405	2435246-50	1965 May 19	Matador	-	GM-52-1857	0.000	WADD	MS	-	Test	MT60-2544	-	-
1965-A406	2435269-50	1965 Jun 1	Matador	-	GM-54-1	0.000	WADD	MS	-	Test	MT60-2544	-	-
1965-A406	2435269-50	1965 Jun 1	Matador	-	GM-54-1	0.000	WADD	MS	-	Test	MT60-2544	-	-
1965-A428	2435267-50	1965 Jun 9	Matador	-	GM-54-3	0.000	WADD	MS	-	Test	MT60-2544	-	-
1965-A433	2435268-50	1965 Jun 10	Matador	-	GM-54-2	0.000	WADD	MS	-	Test	MT60-2544	-	-
1965-A434	2435268-50	1965 Jun 10	Matador	-	GM-54-8	0.000	WADD	MS	-	Test	MT60-2544	-	-
1965-A454	2435296-50	1965 Jun 8	Matador	-	GM-54-5	0.000	WADD	MS	-	Test	MT60-2544	-	-
1965-A455	2435296-50	1965 Jun 8	Matador	-	GM-54-5	0.000	WADD	MS	-	Test	MT60-2544	-	-
1965-A458	2435306-50	1965 Jun 18	Matador	-	GM-54-6	0.000	WADD	MS	-	Test	MT60-2544	-	-
1965-A459	2435306-50	1965 Jun 18	Matador	-	GM-54-6	0.000	WADD	MS	-	Test	MT60-2544	-	-
1965-A460	2435310-50	1965 Jun 22	Matador	-	GM-54-7	0.000	WADD	MS	-	Test	MT60-2544	-	-
1965-A462	2435317-50	1965 Jun 22	Matador	-	GM-54-4	0.000	WADD	MS	-	Test	MT60-2544	-	-
1965-A463	2435317-50	1965 Jun 29	Matador	-	GM-54-9	0.000	WADD	MS	-	Test	MT60-2544	-	-
1965-A465	2435345-50	1965 Aug 26	Matador	-	5	0.000	WADD	MS	-	Test	MT60-2544	-	-
1965-A470	2435351-50	1965 Sep 1	Matador	-	GM-11089	0.000	WADD	MS	-	Test	MT60-2544	-	-
1965-A470	2435351-50	1965 Sep 1	Matador	-	214	0.000	WADD	MS	-	Test	MT60-2544	-	-
1965-A567	2435372-50	1965 Sep 22	Matador	-	215	0.000	WADD	MS	-	Test	MT60-2544	-	-
1965-A568	2435386-50	1965 Oct 6	Matador	-	3090	0.000	WADD	MS	-	Test	MT60-2544	-	-
1965-A569	2435392-50	1965 Oct 12	Matador	-	GM-11051	0.000	WADD	MS	-	Test	MT60-2544	-	-
1965-A487	2435401-50	1965 Oct 27	Matador	-	2	0.000	WADD	MS	-	Test	MT60-2544	-	-
1965-A488	2435418-50	1965 Nov 7	Matador	-	GM-11055	0.000	WADD	MS	-	Test	MT60-2544	-	-
1965-A488	2435421-50	1965 Nov 10	Matador	-	5A-3092	0.000	WADD	MS	-	Test	MT60-2544	-	-
1965-A571	2435442-50	1965 Dec 1	Matador	-	53-189	0.000	WADD	MS	-	Test	MT60-2544	-	-
1965-A572	2435448-50	1965 Dec 7	Matador	-	5	0.000	WADD	MS	-	Test	MT60-2544	-	-
1966-A129	2435477-50	1966 Jan 5	Matador	-	RTV 9	0.000	WADD	MS	-	Test	MT60-2544	-	-
1966-A210	2435484-50	1966 Jan 12	Matador	-	RTV 9	0.000	WADD	MS	-	Test	MT60-2544	-	-
1966-A404	2435491-50	1966 Jan 19	Matador	-	GM-54-17	0.000	WADD	MS	-	Test	MT60-2544	-	-
1966-A406	2435497-50	1966 Jan 25	Matador	-	GM-54-18	0.000	WADD	MS	-	Test	MT60-2544	-	-

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Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	DrPay	Agency	Launch_Code	Group	Category	LTCite	Cite	Notes
1956-A221	2435498-50	1956 Jan 26	Matador	-	54-3095	0.000	WADD	MS	-	Test	vsm-history.org	-	-
1956-A08	2435499-50	1956 Jan 27	Matador	-	GR-54-16	0.000	WADD	MS	-	Test	MT60-2544	-	-
1956-A13	2435500-50	1956 Feb 6	Matador	-	GR-54-12	0.000	WADD	MS	-	Test	MT60-2544	-	-
1956-A14	2435501-50	1956 Feb 6	Matador	-	GR-54-11	0.000	WADD	MS	-	Test	MT60-2544	-	-
1956-A222	2435503-50	1956 Feb 10	Matador	-	GR-53-190	0.000	WADD	MS	-	Test	vsm-history.org	-	-
1956-A224	2435533-50	1956 Mar 1	Matador	-	53192	0.000	WADD	MS	-	Test	vsm-history.org	-	-
1956-A225	2435537-50	1956 Mar 15	Matador	-	6	0.000	WADD	MS	-	Test	MT60-2544	-	-
1956-A34	2435555-50	1956 Mar 23	Matador	-	GR-54-22	0.000	WADD	MS	-	Test	MT60-2544	-	-
1956-A35	2435555-50	1956 Mar 23	Matador	-	GR-54-26	0.000	WADD	MS	-	Test	MT60-2544	-	-
1956-A36	2435555-50	1956 Mar 26	Matador	-	GR-54-31	0.000	WADD	MS	-	Test	MT60-2544	-	-
1956-A37	2435558-50	1956 Mar 26	Matador	-	GR-54-19	0.000	WADD	MS	-	Test	MT60-2544	-	-
1956-A38	2435558-50	1956 Mar 26	Matador	-	GR-54-21	0.000	WADD	MS	-	Test	MT60-2544	-	-
1956-A39	2435560-50	1956 Mar 28	Matador	-	GR-54-30	0.000	WADD	MS	-	Test	MT60-2544	-	-
1956-A41	2435560-50	1956 Mar 28	Matador	-	GR-54-25	0.000	WADD	MS	-	Test	MT60-2544	-	-
1956-A42	2435560-50	1956 Mar 28	Matador	-	GR-54-36	0.000	WADD	MS	-	Test	MT60-2544	-	-
1956-A226	2435561-50	1956 Mar 29	Matador	-	54-3098	0.000	WADD	MS	-	Test	vsm-history.org	-	-
1956-A43	2435567-50	1956 Apr 4	Matador	-	GR-54-28	0.000	WADD	MS	-	Test	MT60-2544	-	-
1956-A44	2435569-50	1956 Apr 6	Matador	-	GR-54-34	0.000	WADD	MS	-	Test	MT60-2544	-	-
1956-A45	2435569-50	1956 Apr 6	Matador	-	GR-54-23	0.000	WADD	MS	-	Test	MT60-2544	-	-
1956-A227	2435579-50	1956 Apr 16	Matador	-	221	0.000	LITPS	MS	-	Test	vsm-history.org	-	-
1956-A228	2435588-50	1956 Apr 25	Matador	-	GR-53-195	0.000	WADD	MS	-	Test	vsm-history.org	-	-
1956-A51	2435595-50	1956 May 2	Matador	-	GR-11065	0.000	WADD	MS	-	Test	MT60-2544	-	-
1956-A229	2435607-50	1956 May 14	Matador	-	GR-11091	0.000	WADD	MS	-	Test	vsm-history.org	-	-
1956-A230	2435614-38	1956 May 20	2100	-	GR-11091	0.000	6555GMS	MS	-	Test	Ulrich/Wire	MT60-2544	Clery
1956-A231	2435617-50	1956 May 24	Matador	-	543099	0.000	WADD	MS	-	Test	vsm-history.org	-	-
1956-A232	2435618-50	1956 May 25	Matador	-	53-19	0.000	WADD	MS	-	Test	vsm-history.org	-	-
1956-A233	2435635-50	1956 Jun 11	Matador	-	GR-53-194	0.000	WADD	MS	-	Test	vsm-history.org	-	-
1956-A61	2435714-50	1956 Aug 29	Matador	-	GR-53-528	0.000	WADD	MS	-	Test	MT60-2544	-	-
1956-A62	2435715-50	1956 Aug 30	Matador	-	GR-55-529	0.000	WADD	MS	-	Test	MT60-2544	-	-
1956-A65	2435728-50	1956 Sep 12	Matador	-	GR-55-527	0.000	WADD	MS	-	Test	MT60-2544	-	-
1956-A66	2435728-50	1956 Sep 12	Matador	-	GR-54-152	0.000	WADD	MS	-	Test	MT60-2544	-	-
1956-A68	2435735-50	1956 Sep 20	Matador	-	GR-54-153	0.000	WADD	MS	-	Test	MT60-2544	-	-
1956-A69	2435742-50	1956 Sep 26	Matador	-	GR-54-153	0.000	WADD	MS	-	Test	MT60-2544	-	-
1956-A233	2435749-50	1956 Oct 3	Matador	-	GR-54-230	0.000	WADD	MS	-	Test	vsm-history.org	-	-
1956-A234	2435750-50	1956 Oct 4	Matador	-	GR-54-14	0.000	WADD	MS	-	Test	vsm-history.org	-	-
1956-A103	2435755-50	1956 Oct 12	Matador	-	GR-54-15	0.000	WADD	MS	-	Test	MT60-2544	-	-
1956-A110	2435778-50	1956 Nov 1	Matador	-	GR-54-127	0.000	WADD	MS	-	Test	vsm-history.org	-	-
1956-A235	2435786-50	1956 Nov 9	Matador	-	GR-54-128	0.000	WADD	MS	-	Test	vsm-history.org	-	-
1956-A235	2435791-50	1956 Nov 14	Matador	-	GR-54-128	0.000	WADD	MS	-	Test	vsm-history.org	-	-
1956-A112	2435795-15	1956 Nov 21	1530	-	GR-54-129	0.000	WADD	MS	-	Test	Ulrich/Wire	MT60-2544	-
1956-A115	2435863-22	1957 Feb 21	1712	-	2096	0.000	WADD	MS	-	Test	vsm-history.org	-	-
1957-A17	2435893-50	1957 Apr 10	Matador	-	-	0.000	WADD	MS	-	Test	MT60-2544	-	-
1957-A23	2435895-50	1957 Apr 11	Matador	-	-	0.000	WADD	MS	-	Test	MT60-2544	-	-
1957-A24	2435899-50	1957 Apr 11	Matador	-	-	0.000	WADD	MS	-	Test	MT60-2544	-	-
1957-A29	2435939-50	1957 May 17	Matador	-	-	0.000	WADD	MS	-	Test	MT60-2544	-	-
1957-A38	2436079-50	1957 Aug 29	Matador	-	-	0.000	WADD	MS	-	Test	MT60-2544	-	-
1957-A83	2436084-50	1957 Sep 5	Matador	-	GM-54-137	0.000	WADD	MS	-	Test	MT60-2544	-	-
1957-A84	2436086-50	1957 Sep 5	Matador	-	GM-54-20	0.000	WADD	MS	-	Test	MT60-2544	-	-
1957-A85	2436086-50	1957 Sep 5	Matador	-	GM-54-139	0.000	WADD	MS	-	Test	MT60-2544	-	-
1957-A104	2436106-50	1957 Sep 25	Matador	-	GM-54-32	0.000	WADD	MS	-	Test	MT60-2544	-	-
1957-A176	2436106-50	1957 Sep 25	Matador	-	GM-54-177	0.000	WADD	MS	-	Test	Ulrich/White	-	-
1957-A108	2436107-50	1957 Sep 26	Matador	-	GM-54-27	0.000	WADD	MS	-	Test	MT60-2544	-	-
1957-A113	2436112-50	1957 Oct 1	Matador	-	GM-54-140	0.000	WADD	MS	-	Test	MT60-2544	-	-
1957-A114	2436112-50	1957 Oct 1	Matador	-	GM-54-38	0.000	WADD	MS	-	Test	MT60-2544	-	-
1957-A115	2436116-50	1957 Nov 14	Matador	-	GM-54-138	0.000	WADD	MS	-	Test	MT60-2544	-	-
1958-A223	2436240-50	1958 Feb 6	Matador	-	-	0.000	WADD	MS	-	Test	Ulrich/White	-	-
1958-A221	2436252-50	1958 Feb 18	Mace	-	-	0.000	WADD	MS	-	Test	Ulrich/White	MT60-2544	-
1958-A222	2436263-27	1958 Feb 28	1830	-	-	0.000	WADD	MS	-	Test	MT60-2544	MT60-2544	-
1958-A115	2436275-50	1958 Mar 13	Matador	-	GM-56-1963	0.000	WADD	MS	-	Test	MT60-2544	-	-
1958-A116	2436275-50	1958 Mar 13	Matador	-	GM-54-24	0.000	WADD	MS	-	Test	MT60-2544	-	-
1958-A117	2436275-50	1958 Mar 13	Matador	-	GM-54-142	0.000	WADD	MS	-	Test	MT60-2544	-	-
1958-A118	2436275-50	1958 Mar 13	Matador	-	GM-56-1962	0.000	WADD	MS	-	Test	MT60-2544	-	-
1958-A121	2436331-50	1958 May 8	Mace	-	-	0.000	WADD	MS	-	Test	MT60-2544	-	-
1958-A220	2436365-22	1958 Jun 10	1720	-	-	0.000	WADD	MS	-	Test	MT60-2544	-	-
1958-A142	2436520-18	1958 Jun 12	1615	-	Training #1	0.000	WADD	MS	-	Test	Ulrich/White	MT60-2544	-
1958-A143	2436520-50	1958 Nov 17	1730	-	Training #2	0.000	WADD	MS	-	Test	Ulrich/White	MT60-2544	-
1958-A224	2436525-23	1958 Nov 17	2200?	-	-	0.000	WADD	MS	-	Test	Ulrich/White	-	-
1958-A225	2436525-42	1958 Nov 17	2200?	-	-	0.000	WADD	MS	-	Test	Ulrich/White	-	-
1958-A1157	2436539-50	1958 Dec 2	Matador	-	Training #3	0.000	WADD	MS	-	Test	MT60-2544	-	-
1958-A1158	2436540-50	1958 Dec 3	Matador	-	Training #4	0.000	WADD	MS	-	Test	MT60-2544	-	-
1958-A1159	2436541-50	1958 Dec 4	Matador	-	Training #5	0.000	WADD	MS	-	Test	MT60-2544	-	-
1958-A1160	2436541-50	1958 Dec 4	Matador	-	Training #6	0.000	WADD	MS	-	Test	MT60-2544	-	-
1959-A09	2436576-13	1959 Jan 7	1503	-	Training #7	0.000	WADD	MS	-	Test	Ulrich	MT60-2544	-
1959-A10	2436576-50	1959 Jan 8	Matador	-	Training #8	0.000	WADD	MS	-	Test	Ulrich	MT60-2544	-
1959-A126	2436593-50	1959 Jan 25	Mace	-	-	0.000	WADD	MS	-	Test	Ulrich/White	MT60-2544	-
1959-A269	2436598-50	1959 Jan 30	Mace	-	-	0.000	WADD	MS	-	Test	Ulrich/White	MT60-2544	-
1959-A270	2436609-50	1959 Feb 10	Mace	-	-	0.000	WADD	MS	-	Test	Ulrich/White	MT60-2544	-
1959-A330	2436624-50	1959 Feb 25	Matador	-	Training #9	0.000	WADD	MS	-	Test	MT60-2544	-	-
1959-A33	2436624-50	1959 Feb 25	Matador	-	Training #10	0.000	WADD	MS	-	Test	MT60-2544	-	-
1959-A34	2436624-50	1959 Feb 25	Matador	-	Training #11	0.000	WADD	MS	-	Test	MT60-2544	-	-
1959-A35	2436625-50	1959 Feb 26	Matador	-	Training #12	0.000	WADD	MS	-	Test	MT60-2544	-	-
1959-A1271	2436653-50	1959 Mar 26	Mace	-	-	0.000	WADD	MS	-	Test	Ulrich/White	MT60-2544	-
1959-A272	2436675-50	1959 Apr 17	Mace	-	-	0.000	WADD	MS	-	Test	Ulrich/White	MT60-2544	-

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	DrPay	Agency	Launch_Code	Group	Category	LTCite	Cite	Notes
1959-A65	2436680.50	1959 Apr 22	Matador	-	Training #13	0.000	WADD	MS	-	Test	MT60-2544	-	-
1959-A66	2436680.50	1959 Apr 22	Matador	-	Training #14	0.000	WADD	MS	-	Test	MT60-2544	-	-
1959-A67	2436681.50	1959 Apr 23	Matador	-	Training #15	0.000	WADD	MS	-	Test	MT60-2544	-	-
1959-A68	2436681.50	1959 Apr 23	Matador	-	Training #16	0.000	WADD	MS	-	Test	MT60-2544	-	-
1959-A273	2436700.50	1959 May 12	Mace	-	-	0.000	WADD	MS	-	Test	Ulrich/Wire	MT60-2544	-
1959-A95	2436729.50	1959 Jun 10	Matador	-	Training #17	0.000	WADD	MS	-	Test	MT60-2544	-	-
1959-A96	2436729.50	1959 Jun 10	Matador	-	Training #18	0.000	WADD	MS	-	Test	MT60-2544	-	-
1959-A97	2436730.50	1959 Jun 11	Matador	-	Training #19	0.000	WADD	MS	-	Test	MT60-2544	-	-
1959-A98	2436730.50	1959 Jun 11	Matador	-	Training #20	0.000	WADD	MS	-	Test	MT60-2544	-	-
1959-A274	2436744.50	1959 Jun 26	Mace	-	GH-54-46	0.000	WADD	MS	-	Test	Ulrich/Wire	MT60-2544	-
1959-A142	2436805.50	1959 Aug 26	Matador	-	GH-54-47	0.000	WADD	MS	-	Test	MT60-2544	-	-
1959-A143	2436805.50	1959 Aug 26	Matador	-	GH-54-48	0.000	WADD	MS	-	Test	Ulrich/Wire	MT60-2544	-
1959-A275	2436814.50	1959 Sep 3	Mace	-	GH-54-43	0.000	WADD	MS	-	Test	MT60-2544	-	-
1959-A162	2436833.50	1959 Sep 22	Matador	-	GH-54-43	0.000	WADD	MS	-	Test	MT60-2544	-	-
1959-A163	2436833.50	1959 Sep 22	Matador	-	GH-54-45	0.000	WADD	MS	-	Test	MT60-2544	-	-
1959-A181	2436868.50	1959 Oct 27	Matador	-	GH-54-49	0.000	WADD	MS	-	Test	MT60-2544	-	-
1959-A182	2436868.50	1959 Oct 27	Matador	-	SE-2884	0.000	WADD	MS	-	Test	MT60-2544	-	Cleary
1959-A186	2436870.50	1959 Oct 29	Mace	-	GH-54-52	0.000	WADD	MS	-	Test	MT60-2544	-	-
1959-A190	2436882.50	1959 Nov 10	Matador	-	GH-54-50	0.000	WADD	MS	-	Test	MT60-2544	-	-
1959-A193	2436896.50	1959 Nov 24	Matador	-	GH-54-51	0.000	WADD	MS	-	Test	MT60-2544	-	-
1959-A194	2436896.50	1959 Nov 24	Matador	-	GH-54-51	0.000	WADD	MS	-	Test	MT60-2544	-	-
1959-A196	2436896.50	1959 Nov 24	Matador	-	GH-54-44	0.000	WADD	MS	-	Test	MT60-2544	-	-
1959-A201	2436907.44	1959 Dec 4 2227	Mace	-	SE-2893	0.000	WADD	MS	-	Test	Ulrich/Wire	MT60-2544	Cleary
1959-A202	2436911.50	1959 Dec 9	Matador	-	GH-54-53	0.000	WADD	MS	-	Test	MT60-2544	-	-
1960-A15	2436946.50	1960 Jan 13	Matador	-	GH-54-54	0.000	WADD	MS	-	Test	MT60-2544	-	-
1960-A16	2436946.50	1960 Jan 13	Matador	-	GH-54-55	0.000	WADD	MS	-	Test	MT60-2544	-	-
1960-A373	2436970.21	1960 Feb 5 1700	Mace	-	GH-54-55	0.000	WADD	MS	-	Test	Ulrich/Wire	MT60-2544	-
1960-A39	2436974.50	1960 Feb 10	Matador	-	GH-54-56	0.000	WADD	MS	-	Test	MT60-2544	-	-
1960-A41	2436976.37	1960 Feb 11 2049	Mace	-	57-2445	0.000	WADD	MS	-	Test	Ulrich/Wire	MT60-2544	Cleary
1960-A64	2437002.50	1960 Mar 9	Matador	-	GH-54-58	0.000	WADD	MS	-	Test	MT60-2544	-	-
1960-A68	2437025.35	1960 Mar 31 2025?	Mace	-	57-2422	0.000	WADD	MS	-	Test	Ulrich/Wire	MT60-2544	Cleary
1960-A96	2437037.50	1960 Apr 13	Matador	-	GH-54-57	0.000	WADD	MS	-	Test	MT60-2544	-	-
1960-A98	2437037.50	1960 Apr 13	Matador	-	GH-54-57	0.000	WADD	MS	-	Test	MT60-2544	-	-
1960-A103	2437051.50	1960 Apr 27	Mace	-	58-1408	0.000	WADD	MS	-	Test	MT60-2544	-	Cleary
1960-A374	2437065.50	1960 May 11	Mace	-	GH-54-62	0.000	WADD	MS	-	Test	Ulrich/Wire	MT60-2544	-
1960-A119	2437066.50	1960 May 12	Matador	-	GH-54-60	0.000	WADD	MS	-	Test	MT60-2544	-	-
1960-A120	2437066.50	1960 May 12	Matador	-	GH-54-60	0.000	WADD	MS	-	Test	MT60-2544	-	-
1960-A381	2437068.50	1960 May 14	Matador	-	GH-54-61	0.000	WADD	MS	-	Test	Ulrich/Wire	MT60-2544	-
1960-A125	2437078.50	1960 May 24	Matador	-	GH-56-1928	0.000	WADD	MS	-	Test	Ulrich/Wire	MT60-2544	-
1960-A126	2437078.50	1960 May 24	Matador	-	GH-54-67	0.000	WADD	MS	-	Test	MT60-2544	-	-
1960-A375	2437080.50	1960 May 26	Mace	-	58-1391	0.000	WADD	MS	-	Test	Ulrich/Wire	MT60-2544	Cleary
1960-A140	2437085.50	1960 Jun 3	Mace	-	GH-56-1927	0.000	WADD	MS	-	Test	MT60-2544	-	-
1960-A142	2437093.50	1960 Jun 8	Matador	-	GH-56-427	0.000	WADD	MS	-	Test	MT60-2544	-	-
1960-A143	2437093.50	1960 Jun 8	Matador	-	GH-56-427	0.000	WADD	MS	-	Test	MT60-2544	-	-
1960-A144	2437093.50	1960 Jun 8	Matador	-	GH-54-63	0.000	WADD	MS	-	Test	MT60-2544	-	-
1960-A146	2437094.50	1960 Jun 9	Matador	-	GH-54-63	0.000	WADD	MS	-	Test	MT60-2544	-	-
1960-A147	2437094.50	1960 Jun 10	Matador	-	GH-54-66	0.000	WADD	MS	-	Test	MT60-2544	-	-
1960-A148	2437095.50	1960 Jun 10	Matador	-	GH-54-125	0.000	WADD	MS	-	Test	MT60-2544	-	-
1960-A149	2437095.50	1960 Jun 10	Matador	-	GH-54-125	0.000	WADD	MS	-	Test	MT60-2544	-	-
1960-A148	2437098.50	1960 Jun 13	Matador	-	GH-54-61	0.000	WADD	MS	-	Test	MT60-2544	-	-
1960-A150	2437098.50	1960 Jun 13	Matador	-	GH-56-1918	0.000	WADD	MS	-	Test	MT60-2544	-	-
1960-A151	2437098.50	1960 Jun 15	Matador	-	GH-56-1919	0.000	WADD	MS	-	Test	MT60-2544	-	-
1960-A154	2437100.50	1960 Jun 24	Mace	-	5E-2908	0.000	WADD	MS	-	Test	MT60-2544	-	-
1960-A156	2437113.50	1960 Jun 28	Matador	-	GH-56-1915	0.000	WADD	MS	-	Test	MT60-2544	-	Cleary
1960-A164	2437136.50	1960 Jun 28	Matador	-	GH-56-1915	0.000	WADD	MS	-	Test	MT60-2544	-	-
1960-A166	2437136.50	1960 Jul 11	Mace	-	59-1417 (20)	0.000	WADD	MS	-	Test	MT60-2544	-	Cleary
1960-A167	2437138.50	1960 Jul 11	Matador	-	GH-54-68	0.000	WADD	MS	-	Test	MT60-2544	-	-
1960-A167	2437139.50	1960 Jul 14	Matador	-	GH-54-68	0.000	WADD	MS	-	Test	MT60-2544	-	-
1960-A195	2437166.50	1960 Aug 10	Matador	-	GH-54-90	0.000	WADD	MS	-	Test	MT60-2544	-	-
1960-A207	2437169.50	1960 Aug 23	Matador	-	GH-54-64	0.000	WADD	MS	-	Test	MT60-2544	-	-
1960-A208	2437169.50	1960 Aug 23	Matador	-	GH-54-64	0.000	WADD	MS	-	Test	MT60-2544	-	-
1960-A216	2437184.50	1960 Sep 7	Matador	-	GH-56-1909	0.000	WADD	MS	-	Test	MT60-2544	-	-
1960-A224	2437198.50	1960 Sep 21	Matador	-	59-1226 (21)	0.000	WADD	MS	-	Test	MT60-2544	-	-
1960-A231	2437205.50	1960 Sep 28	Matador	-	GH-56-1937	0.000	WADD	MS	-	Test	MT60-2544	-	-
1960-A232	2437205.50	1960 Sep 28	Matador	-	GH-56-1937	0.000	WADD	MS	-	Test	MT60-2544	-	-
1960-A239	2437215.40	1960 Oct 7 2131	Matador	-	59-1427 (22)	0.000	WADD	MS	-	Test	MT60-2544	-	Cleary
1960-A242	2437219.50	1960 Oct 12	Matador	-	59-1427 (23)	0.000	WADD	MS	-	Test	MT60-2544	-	-
1960-A248	2437229.34	1960 Oct 21 2006	Mace	-	59-4976 (26)	0.000	WADD	MS	-	Test	Ulrich/Wire	MT60-2544	Cleary
1960-A382	2437232.50	1960 Oct 25	Mace	-	59-1400	0.000	WADD	MS	-	Test	Ulrich/Wire	MT60-2544	-
1960-A251	2437233.50	1960 Oct 26	Matador	-	GH-56-1935	0.000	WADD	MS	-	Test	MT60-2544	-	-
1960-A252	2437233.50	1960 Oct 26	Matador	-	GH-56-1939	0.000	WADD	MS	-	Test	MT60-2544	-	-
1960-A255	2437240.50	1960 Oct 26	Matador	-	GH-55-40	0.000	WADD	MS	-	Test	MT60-2544	-	-
1960-A259	2437240.50	1960 Nov 9	Matador	-	GH-56-1938	0.000	WADD	MS	-	Test	MT60-2544	-	-
1960-A262	2437253.50	1960 Nov 15	Matador	-	59-4960 (27)	0.000	WADD	MS	-	Test	MT60-2544	-	-
1960-A292	2437275.50	1960 Dec 7	Mace	-	GH-56-1930	0.000	WADD	MS	-	Test	MT60-2544	-	-
1960-A293	2437275.50	1960 Dec 7	Matador	-	GH-54-89	0.000	WADD	MS	-	Test	MT60-2544	-	-
1960-A303	2437285.58	1960 Dec 17 0200	Mace	-	56-2889 (8)	0.000	WADD	MS	-	Test	Ulrich/Wire	MT60-2544	Cleary
1961-A24	2437317.50	1961 Jan 18	Matador	-	GH-56-1936	0.000	WADD	MS	-	Test	MT60-2544	-	-
1961-A25	2437317.50	1961 Jan 18	Matador	-	GH-56-1943	0.000	WADD	MS	-	Test	MT60-2544	-	-
1961-A46	2437338.50	1961 Feb 8	Matador	-	GH-56-1941	0.000	WADD	MS	-	Test	MT60-2544	-	-
1961-A72	2437365.50	1961 Mar 7	Matador	-	59-4979 (26)	0.000	WADD	MS	-	Test	MT60-2544	-	Cleary
1961-A74	2437366.50	1961 Mar 8	Mace	-	59-4977 (24)	0.000	WADD	MS	-	Test	MT60-2544	-	-
1961-A75	2437374.50	1961 Mar 16	Matador	-	59-4978 (25)	0.000	WADD	MS	-	Test	Ulrich/Wire	MT60-2544	Cleary
1961-A83	2437387.30	1961 Mar 28 1906	Mace	-	59-4978 (25)	0.000	WADD	MS	-	Test	Ulrich/Wire	MT60-2544	-
1961-A101	2437402.50	1961 Apr 13	Matador	-	GH-56-1931	0.000	WADD	MS	-	Test	MT60-2544	-	-
1961-A112	2437418.19	1961 Apr 28 1630	Mace	-	59-4874 (46)	0.000	WADD	MS	-	Test	Ulrich/Wire	MT60-2544	-
1961-A124	2437430.50	1961 May 11	Matador	-	GH-56-1942	0.000	WADD	MS	-	Test	MT60-2544	-	-

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	DrPay	Agency	Launch_Code	Group	Category	LTCite	Cite	Notes
1961-A125	2437450.50	1961 May 11	Matador	-	GM-56-1946	0.000	WADD	MS	-	Test	MT60-2544	-	-
1961-A141	2437452.04	1961 Jun 1 1300	Matador	-	GM-56-1948	0.000	WADD	MS	-	Test	Ulrich/Wire	MT60-2544	-
1961-A142	2437452.17	1961 Jun 1 1600	Matador	-	GM-56-1948	0.000	WADD	MS	-	Test	Ulrich/Wire	MT60-2544	-
1961-A143	2437452.30	1961 Jun 1 1915	Matador	-	GM-56-1947	0.000	WADD	MS	-	Test	Ulrich/Wire	MT60-2544	-
1961-A144	2437452.42	1961 Jun 1 2201	Matador	-	4508HTW	0.000	WADD	MS	-	Test	Ulrich/Wire	MT60-2544	-
1961-A145	2437452.50	1961 Jun 2	Mace	-	59-4876 (48)	0.000	WADD	MS	-	Test	MT60-2544	Cleary	-
1961-A152	2437466.50	1961 Jun 16	Mace	-	59-4879 (51)	0.000	WADD	MS	-	Test	Ulrich/Wire	MT60-2544	Cleary
1961-A155	2437472.19	1961 Jun 21 1630	Mace	-	59-4883 (56)	0.000	WADD	MS	-	Test	Ulrich/Wire	MT60-2544	Cleary
1961-A169	2437498.50	1961 Jul 18	Mace	-	60-5389	0.000	WADD	MS	-	Test	Ulrich/Wire	MT60-2544	EST
1961-A186	2437516.28	1961 Aug 4 1840	Mace	-	60-5388	0.000	WADD	MS	-	Test	Ulrich/Wire	MT60-2544	-
1961-A196	2437543.50	1961 Sep 1	Mace	-	60-5400	0.000	WADD	MS	-	Test	Ulrich/Wire	MT60-2544	-
1961-A204	2437564.50	1961 Sep 22	Mace	-	-	0.000	WADD	MS	-	Test	Ulrich/Wire	MT60-2544	-
1961-A380	2437572.50	1961 Oct 1	Mace	-	60-5386	0.000	WADD	MS	-	Test	Ulrich/Wire	MT60-2544	-
1961-A236	2437617.50	1961 Nov 14	Mace	-	59-4887	0.000	WADD	MS	-	Test	Ulrich/Wire	MT60-2544	-
1961-A246	2437639.56	1961 Dec 6 0124	Mace	-	60-5401	0.000	TAC	MS	-	Test	MT60-2544	Cleary	-
1962-A07	2437677.30	1962 Jan 12	Mace	-	60-5405	0.000	TAC	MS	-	Test	MT60-2544/nsf-koenn	Cleary	-
1962-A12	2437689.21	1962 Jan 24 1908:02	Mace	-	59-4885	0.000	TAC	MS	-	Test	MT60-2544/nsf-koenn	Cleary	-
1962-A13	2437691.08	1962 Jan 26 1402:04	Mace	-	59-4888	0.000	TAC	MS	-	Test	MT60-2544/nsf-koenn	Cleary	-
1962-A15	2437697.17	1962 Feb 1 1609	Mace	-	60-5403	0.000	TAC	MS	-	Test	MT60-2544/nsf-koenn	Cleary	-
1962-A19	2437704.28	1962 Feb 8 1600:01	Mace	-	60-5406	0.000	TAC	MS	-	Test	MT60-2544/nsf-koenn	Cleary	-
1962-A21	2437711.38	1962 Feb 15 2113:47	Mace	-	59-4886	0.000	TAC	MS	-	Test	MT60-2544/nsf-koenn	Cleary	-
1962-A22	2437717.38	1962 Feb 21 2023:34	Mace	-	58-1425	0.000	TAC	MS	-	Test	MT60-2544/nsf-koenn	Cleary	-
1962-A29	2437726.17	1962 Mar 1 1600:06	Mace	-	59-4889	0.000	TAC	MS	-	Test	MT60-2544/nsf-koenn	Cleary	-
1962-A31	2437726.17	1962 Mar 2 1600:06	Mace	-	58-1425	0.000	TAC	MS	-	Test	MT60-2544/nsf-koenn	Cleary	-
1962-A164	2437969.21	1962 Oct 31 1706:07	Mace	-	59-4888	0.000	TAC	MS	-	Test	nsf-koenn	ER-10X	-
1962-A184	2437977.54	1962 Nov 9 0028:01	Mace	-	58-1443	0.000	TAC	MS	-	Test	nsf-koenn	ER-10X	-
1962-A192	2437977.54	1962 Nov 11 1946:34	Mace	-	59-4881	0.000	TAC	MS	-	Test	nsf-koenn	ER-10X	-
1962-A211	2438010.32	1962 Dec 4 2147:37	Mace	-	59-4882	0.000	TAC	MS	-	Test	nsf-koenn	ER-10X	-
1963-A67	2438186.17	1963 Jun 5 1610:00	Mace	-	58-1423	0.000	TAC	MS	-	Test	nsf-koenn	ER-10X	-
1963-A69	2438185.22	1963 Jun 12 1725:26	Mace	-	58-1423	0.000	TAC	MS	-	Test	nsf-koenn	ER-10X	-
1963-A96	2438209.10	1963 Jun 28 1420:40	Mace	-	59-2464	0.000	TAC	MS	-	Test	nsf-koenn	ER-10X	-
1963-A105	2438228.08	1963 Jul 17 1559:59	Mace	-	59-4961	0.000	4508H	MS	-	Test	nsf-koenn	ER-10X	-
1967-A166	2439495.12	1967 Jun 4 1500	Mace	-	-	0.000	TAC	MS	-	Test	Ulrich/Wire	MT60-2544	-
1967-A167	2439530.50	1967 Dec 6	Mace	-	-	0.000	TAC	MS	-	Test	Ulrich/Wire	MT60-2544	-
1969-A226	2440376.42	1969 Jun 3 2200	Mace	-	-	0.000	TAC	MS	-	Test	Ulrich/Wire	MT60-2544	-
1969-A227	2440460.27	1969 Aug 26 1527	Mace	-	-	0.000	TAC	MS	-	Test	Ulrich/Wire	MT60-2544	-
1969-A228	2440665.14	1969 Oct 6 1520	Mace	-	-	0.000	TAC	MS	-	Test	Ulrich/Wire	MT60-2544	-
1969-A229	2440665.23	1969 Nov 26 1730	Mace	-	-	0.000	TAC	MS	-	Test	Ulrich/Wire	MT60-2544	-
1970-A180	2440662.23	1970 Apr 6 1642	Mace	-	-	0.000	TAC	MS	-	Test	Ulrich/Wire	MT60-2544	-
1970-A181	2440663.20	1970 May 12 1550	Mace	-	-	0.000	TAC	MS	-	Test	Ulrich/Wire	MT60-2544	-
1970-A182	2440619.50	1970 Aug 10 2230	Mace	-	-	0.000	TAC	MS	-	Test	Ulrich/Wire	MT60-2544	-
1970-A183	2440618.44	1970 Aug 29 1905	Mace	-	-	0.000	TAC	MS	-	Test	Ulrich/Wire	MT60-2544	-
1970-A184	2440689.75	1970 Sep 29 1610	Mace	-	-	0.000	TAC	MS	-	Test	Ulrich/Wire	MT60-2544	-
1970-A188	2440689.14	1970 Oct 22 1510	Mace	-	-	0.000	TAC	MS	-	Test	Ulrich/Wire	MT60-2544	-
1970-A186	2440695.14	1970 Nov 29 1935	Mace	-	-	0.000	TAC	MS	-	Test	Ulrich/Wire	MT60-2544	-
1970-A187	2440692.32	1970 Dec 19 1938	Mace	-	-	0.000	TAC	MS	-	Test	Ulrich/Wire	MT60-2544	-
1970-A188	2440692.32	1970 Dec 23 1938	Mace	-	-	0.000	TAC	MS	-	Test	Ulrich/Wire	MT60-2544	-
1971-A216	2440970.21	1971 Jun 19 1700	Mace	-	-	0.000	TAC	MS	-	Test	Ulrich/Wire	MT60-2544	-
1971-A217	2440988.27	1971 Feb 5 1836	Mace	-	-	0.000	TAC	MS	-	Test	Ulrich/Wire	MT60-2544	-
1971-A220	2441036.28	1971 Mar 9 0005	Mace	-	-	0.000	TAC	MS	-	Test	Ulrich/Wire	MT60-2544	-
1971-A218	2441204.34	1971 Sep 5 2005	Mace	-	-	0.000	TAC	MS	-	Test	Ulrich/Wire	MT60-2544	-
1971-A219	2441209.28	1971 Sep 14 1940	Mace	-	-	0.000	TAC	MS	-	Test	Ulrich/Wire	MT60-2544	-
1971-A221	2441209.28	1971 Oct 14 1935	Mace	-	-	0.000	TAC	MS	-	Test	Ulrich/Wire	MT60-2544	-
1971-A222	2441244.27	1971 Oct 19 1832	Mace	-	-	0.000	TAC	MS	-	Test	Ulrich/Wire	MT60-2544	-
1974-A79	2442063.60	1974 Jun 18	Mace	-	-	0.000	TAC	MS	-	Test	Ulrich/Wire	MT60-2544	-
1974-A79	2442167.26	1974 Apr 29 1759	Mace	-	-	0.000	TAC	MS	-	Test	Ulrich/Wire	MT60-2544	-
1974-A80	2442196.60	1974 May 29	Mace	-	-	0.000	TAC	MS	-	Test	Ulrich/Wire	MT60-2544	-
1974-A81	2442228.27	1974 Jun 29 1822	Mace	-	-	0.000	TAC	MS	-	Test	Ulrich/Wire	MT60-2544	-





Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Mission	LaunchCode	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee km	Range km	Dest
1992-Y38	2448956.50	1992_Dec	HERA	-	-	-	-	-	-	CTS-P-4	-	-	-	85	-	-
1992-Y39	2448956.50	1992_Dec	HERA	-	-	-	-	-	-	CTS-P-4	-	-	-	85	-	-



Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Orbit	Agency	Launch_Code	Group	Category	LTCite	Cite	Notes
1992-738	2448956.50	1992 Dec	MEKA	-	-	0.000	TSAD	SS	TSAD/	Test	crista.umi-wup	-	-
1992-739	2448956.50	1992 Dec	MEKA	-	-	0.000	TSAD	SS	TSAD/	Test	crista.umi-wup	-	-



Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Mission	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee km	Range km	Dest
1962-W51	2438005-50	1962 Dec 7	MD-01	-	MD-01/5 (108)	-	-	HMG	-	-	-	21	-	-
1962-W52	2438005-50	1962 Dec 7	MD-01	-	MD-01/6 (108)	-	-	HMG	-	-	-	17	-	-
1963-W20	2438173-50	1963 May 24	MD-01	-	MD-01/8 (108)	-	-	HMG	-	-	-	20?	-	-
1963-W21	2438178-50	1963 May 29	MD-01	-	Meteo MIA 01	-	-	HMG	-	-	-	20?	-	-



Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	OrbPay	Agency	Launch_Code	Group	Category	LTCite	Cite	Notes
1962-#51	2438005.50	1962 Dec 7	MD-01	-	MD-01/5 (105)	0.000	CNES	SF	SUD/	Aeron	CNES	AMSR36-355	-
1962-#52	2438006.50	1962 Dec 7	MD-01	-	MD-01/6 (106)	0.000	CNES	SF	SUD/	Aeron	CNES	AMSR36-355	-
1963-#20	2438173.50	1963 May 24	MD-01	-	MD-01/8 (108)	0.000	CNES	SS	SUD/	Aeron	CNES	AMSR36-355	-
1963-#21	2438178.50	1963 May 29	MD-01	-	Meteo H1A 01	0.000	CNES	SS	SUD/Blamont	Aeron	CNES	AMSR36-355	-







Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Mission	Launch_FlightCode	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee km	Range km	Dest
1968-A27	2439855-50	1968	Meteor-1	-	-	-	-	-	-	LEBA	-	-	-	36	-	-
1968-A28	2439855-50	1968	Meteor-1	-	-	-	-	-	-	LEBA	-	-	-	36	-	-
1968-A29	2439855-50	1968	Meteor-1	-	-	-	-	-	-	LEBA	-	-	-	36	-	-
1968-A30	2439855-50	1968	Meteor-1	-	-	-	-	-	-	LEBA	-	-	-	36	-	-
1968-A31	2439855-50	1968	Meteor-1	-	-	-	-	-	-	LEBA	-	-	-	36	-	-
1968-A32	2439855-50	1968	Meteor-1	-	-	-	-	-	-	LEBA	-	-	-	36	-	-
1968-A33	2439855-50	1968	Meteor-1	-	-	-	-	-	-	LEBA	-	-	-	36	-	-
1968-A34	2439855-50	1968	Meteor-1	-	-	-	-	-	-	LEBA	-	-	-	36	-	-
1968-A35	2439855-50	1968	Meteor-1	-	-	-	-	-	-	LEBA	-	-	-	36	-	-
1968-A36	2439855-50	1968	Meteor-1	-	-	-	-	-	-	LEBA	-	-	-	36	-	-
1968-A37	2439855-50	1968	Meteor-1	-	-	-	-	-	-	LEBA	-	-	-	36	-	-
1968-A38	2439855-50	1968	Meteor-1	-	-	-	-	-	-	LEBA	-	-	-	36	-	-
1968-A39	2439855-50	1968	Meteor-1	-	-	-	-	-	-	LEBA	-	-	-	36	-	-
1968-A40	2439855-50	1968	Meteor-1	-	-	-	-	-	-	LEBA	-	-	-	36	-	-
1968-A41	2439855-50	1968	Meteor-1	-	-	-	-	-	-	LEBA	-	-	-	36	-	-
1968-A42	2439855-50	1968	Meteor-1	-	-	-	-	-	-	LEBA	-	-	-	36	-	-
1968-A43	2439855-50	1968	Meteor-1	-	-	-	-	-	-	LEBA	-	-	-	36	-	-
1968-A44	2439855-50	1968	Meteor-1	-	-	-	-	-	-	LEBA	-	-	-	36	-	-
1968-A45	2439855-50	1968	Meteor-1	-	-	-	-	-	-	LEBA	-	-	-	36	-	-
1968-A46	2439855-50	1968	Meteor-1	-	-	-	-	-	-	LEBA	-	-	-	36	-	-
1968-W225	2440129-50	1968 Oct	Meteor-1	-	-	-	-	-	-	LEBA	-	-	-	65	-	-
1969-A168	2440498-35	1969 Oct 3 2030	Meteor-3	-	-	-	-	-	-	LEBA	-	-	-	45	-	-
1969-A169	2440498-40	1969 Oct 3 2133	Meteor-3	-	-	-	-	-	-	LEBA	-	-	-	48	-	-
1969-A170	2440498-44	1969 Oct 3 2230	Meteor-3	-	-	-	-	-	-	LEBA	-	-	-	49	-	-
1970-W1285	2440520-51	1970 Aug 22 0016:00	Meteor-3	-	-	-	-	-	-	LEBA	-	-	-	57	-	-
1970-W1282	2440522-34	1970 Sep 02 2016:00	Meteor-3	-	-	-	-	-	-	LEBA	-	-	-	63	-	-
1970-W1305	2440537-34	1970 Sep 07 2016:00	Meteor-3	-	-	-	-	-	-	LEBA	-	-	-	62	-	-
1970-W1322	2440539-34	1970 Sep 09 2016:00	Meteor-3	-	-	-	-	-	-	LEBA	-	-	-	61	-	-
1973-A26	2441846-15	1973 Jun 11 1540	Meteor-1	-	-	-	-	-	-	LEBA	-	-	-	22	-	-
1973-A27	2441846-15	1973 Jun 12 1530	Meteor-1	-	-	-	-	-	-	LEBA	-	-	-	23	-	-
1973-A28	2441846-15	1973 Jun 14 1530	Meteor-1	-	-	-	-	-	-	LEBA	-	-	-	40f	-	-
1973-A29	2441849-15	1973 Jun 15 1530	Meteor-3	-	-	-	-	-	-	LEBA	-	-	-	22	-	-
1973-A30	2441849-15	1973 Jun 15 1520	Meteor-1	-	-	-	-	-	-	LEBA	-	-	-	40	-	-
1973-A49	2441941-15	1973 Sep 15 1530	Meteor-1	-	-	-	-	-	-	LEBA	-	-	-	36	-	-
1973-A60	2441942-15	1973 Sep 16 1530:00	Meteor-1	-	-	-	-	-	-	LEBA	-	-	-	44	-	-
1973-A61	2441943-16	1973 Sep 17 1500:00	Meteor-3	-	-	-	-	-	-	LEBA	-	-	-	45	-	-
1973-A63	2441944-15	1973 Sep 18 1535:00	Meteor-3	-	-	-	-	-	-	LEBA	-	-	-	44	-	-
1974-W751	2442204-50	1974 Jun 6	Meteor-3	-	-	-	-	-	-	LEBA	-	-	-	65	-	-





Launch

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	DrpPay	Agency	Launch_Code	Group	Category	LTCite	Cite	Notes
1968-427	2439855.50	1968	Retror-1	-	-	0.000	PIHH	SS	PIHH/	Aeron	IMRH	-	-
1968-428	2439855.50	1968	Retror-1	-	-	0.000	PIHH	SS	PIHH/	Aeron	IMRH	-	-
1968-429	2439855.50	1968	Retror-1	-	-	0.000	PIHH	SS	PIHH/	Aeron	IMRH	-	-
1968-430	2439855.50	1968	Retror-1	-	-	0.000	PIHH	SS	PIHH/	Aeron	IMRH	-	-
1968-431	2439855.50	1968	Retror-1	-	-	0.000	PIHH	SS	PIHH/	Aeron	IMRH	-	-
1968-432	2439855.50	1968	Retror-1	-	-	0.000	PIHH	SS	PIHH/	Aeron	IMRH	-	-
1968-433	2439855.50	1968	Retror-1	-	-	0.000	PIHH	SS	PIHH/	Aeron	IMRH	-	-
1968-434	2439855.50	1968	Retror-1	-	-	0.000	PIHH	SS	PIHH/	Aeron	IMRH	-	-
1968-435	2439855.50	1968	Retror-1	-	-	0.000	PIHH	SS	PIHH/	Aeron	IMRH	-	-
1968-436	2439855.50	1968	Retror-1	-	-	0.000	PIHH	SS	PIHH/	Aeron	IMRH	-	-
1968-437	2439855.50	1968	Retror-1	-	-	0.000	PIHH	SS	PIHH/	Aeron	IMRH	-	-
1968-438	2439855.50	1968	Retror-1	-	-	0.000	PIHH	SS	PIHH/	Aeron	IMRH	-	-
1968-439	2439855.50	1968	Retror-1	-	-	0.000	PIHH	SS	PIHH/	Aeron	IMRH	-	-
1968-440	2439855.50	1968	Retror-1	-	-	0.000	PIHH	SS	PIHH/	Aeron	IMRH	-	-
1968-441	2439855.50	1968	Retror-1	-	-	0.000	PIHH	SS	PIHH/	Aeron	IMRH	-	-
1968-442	2439855.50	1968	Retror-1	-	-	0.000	PIHH	SS	PIHH/	Aeron	IMRH	-	-
1968-443	2439855.50	1968	Retror-1	-	-	0.000	PIHH	SS	PIHH/	Aeron	IMRH	-	-
1968-444	2439855.50	1968	Retror-1	-	-	0.000	PIHH	SS	PIHH/	Aeron	IMRH	-	-
1968-445	2439855.50	1968	Retror-1	-	-	0.000	PIHH	SS	PIHH/	Aeron	IMRH	-	-
1968-446	2439855.50	1968	Retror-1	-	-	0.000	PIHH	SS	PIHH/	Aeron	IMRH	-	-
1968-4228	2440129.50	1968 Oct	Retror-3	-	-	0.000	PIHH	SS	PIHH/	Aeron	Alway	-	-
1969-4168	2440498.35	1969 Oct 3 2030	Retror-3	-	-	0.000	PIHH	SS	PIHH/	Aeron	WDCRF	-	-
1969-4169	2440498.40	1969 Oct 3 2133	Retror-3	-	-	0.000	PIHH	SS	PIHH/	Aeron	WDCRF	-	-
1969-4170	2440498.44	1969 Oct 3 2230	Retror-3	-	-	0.000	PIHH	SS	PIHH/	Aeron	WDCRF	-	-
1970-41245	2440820.51	1970 Aug 22 0015:00	Retror-3	-	-	0.000	PIHH	SS	PIHH/	Aeron	WDCRF	-	-
1970-41292	2440852.34	1970 Sep 02 2015:00	Retror-3	-	-	0.000	PIHH	SS	PIHH/	Aeron	WDCRF	-	-
1970-41305	2440857.34	1970 Sep 07 2015:00	Retror-3	-	-	0.000	PIHH	SS	PIHH/	Aeron	WDCRF	-	-
1970-41322	2440859.34	1970 Sep 09 2015:00	Retror-3	-	-	0.000	PIHH	SS	PIHH/	Aeron	WDCRF	-	-
1973-426	2441846.15	1973 Jun 11 1540	Retror-1	-	Grot-Somit	0.000	PIHH	SS	PIHH/	Aeron	WDCRF	Alway	-
1973-427	2441846.15	1973 Jun 12 1550	Retror-1	-	Grot-Somit	0.000	PIHH	SS	PIHH/	Aeron	WDCRF	-	-
1973-428	2441846.15	1973 Jun 14 1550	Retror-3	-	Grot-Somit	0.000	PIHH	SS	PIHH/	Aeron	WDCRF	-	-
1973-429	2441846.15	1973 Jun 15 1550	Retror-3	-	Grot-Somit	0.000	PIHH	SS	PIHH/	Aeron	WDCRF	-	-
1973-430	2441849.18	1973 Jun 15 1620	Retror-1	-	Grot-Somit	0.000	PIHH	SS	PIHH/	Aeron	WDCRF	-	-
1973-469	2441941.15	1973 Sep 15 1550	Retror-1	-	Grot-Somit	0.000	PIHH	SS	PIHH/	Aeron	WDCRF	Alway	-
1973-469	2441942.15	1973 Sep 16 1550:00	Retror-1	-	Grot-Somit	0.000	PIHH	SS	PIHH/	Aeron	WDCRF	-	-
1973-461	2441943.16	1973 Sep 17 1550:00	Retror-3	-	Grot-Somit	0.000	PIHH	SS	PIHH/	Aeron	WDCRF	-	-
1973-463	2441944.15	1973 Sep 18 1535:00	Retror-3	-	Grot-Somit	0.000	PIHH	SS	PIHH/	Aeron	WDCRF	-	-
1974-4751	2442204.50	1974 Jun 6	Retror-3	-	-	0.000	PIHH	SS	PIHH/	Aeron	Alway	-	-



Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Mission	FlightCode	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee km	Range km	Dest
1968-W23	2439855.50	1968?	Meteor-2H	-	1	-	-	-	-	LEBA?	-	-	-	68	-	-
1968-W24	2439855.50	1968?	Meteor-2H	-	2	-	-	-	-	LEBA?	-	-	-	68	-	-
1969-W05	2440221.50	1969?	Meteor-2H	-	3	-	-	-	-	LEBA?	-	-	-	68	-	-
1969-W06	2440221.50	1969?	Meteor-2H	-	4	-	-	-	-	LEBA?	-	-	-	68	-	-
1969-W07	2440221.50	1969?	Meteor-2H	-	5	-	-	-	-	LEBA?	-	-	-	68	-	-
1970-W13	2440586.50	1970?	Meteor-2H	-	6	-	-	-	-	LEBA?	-	-	-	68	-	-
1970-S426	2440777.70	1970 Jul 10 0445:00	Meteor-2K	-	-	-	-	-	-	LEBA	-	-	-	85	-	-
1970-S437	2440786.50	1970 Jul 19	Meteor-2K	-	8	-	-	-	-	LEBA?	-	-	-	90	-	-
1970-M25	2440866.90	1970 Oct 07 0830:00	Meteor-2K	-	-	-	-	-	-	LEBA?	-	-	-	75	-	-
1970-S558	2440866.95	1970 Oct 07 1055:00	Meteor-2K	-	-	-	-	-	-	LEBA	-	-	-	89	-	-





Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Orbit	Agency	Launch_Code	Group	Category	LTCite	Cite	Notes
1965-W23	2439855.50	1965?	Meteor-2H	-	1	0.000	PIHM	SS	PIHM/	Test	Alway	-	-
1965-W24	2439855.50	1965?	Meteor-2H	-	2	0.000	PIHM	SS	PIHM/	Test	Alway	-	-
1965-W5	2440221.50	1969?	Meteor-2H	-	3	0.000	PIHM	SS	PIHM/	Test	Alway	-	-
1965-W6	2440221.50	1969?	Meteor-2H	-	4	0.000	PIHM	SS	PIHM/	Test	Alway	-	-
1965-W7	2440221.50	1969?	Meteor-2H	-	5	0.000	PIHM	SS	PIHM/	Test	Alway	-	-
1970-W13	2440586.50	1970?	Meteor-2H	-	6	0.000	PIHM	SS	PIHM/	Test	Alway	-	-
1970-S426	2440777.70	1970 Jul 10 0445: 00	Meteor-2K	-	-	0.000	PIHM	SU	PIHM/	Aeron	WDCRF	-	-
1970-S437	2440786.50	1970 Jul 19	Meteor-2K	-	8	0.000	PIHM	SS	PIHM/	Test	Alway	-	-
1970-M25	2440866.90	1970 Oct 07 0930: 00	Meteor-2K	-	-	0.000	PIHM	SU	PIHM/	Aeron	WDCRF	-	-
1970-S558	2440866.95	1970 Oct 07 1055: 00	Meteor-2K	-	-	0.000	PIHM	SU	PIHM/	Aeron	WDCRF	-	-



Launch

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Mission	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee_Km	Range_Km	Dest
1959-A159	2436826.50	1959 Sep 15	Minuteman 1A	T	-	-	-	EMFF	TL1	-	-	0	-	-
1959-A168	2436843.50	1959 Oct 2	Minuteman 1A	T	-	-	-	EMFF	TL1	-	-	0	-	-
1959-A177	2436863.50	1959 Oct 22	Minuteman 1A	T	-	-	-	EMFF	TL1	-	-	0	-	-
1959-A209	2436924.50	1959 Dec 22	Minuteman 1A	T	-	-	-	EMFF	TL1	-	-	0	-	-
1960-A21	2436960.50	1960 Jan 27	Minuteman 1A	T	-	-	-	EMFF	TL1	-	-	0	-	-
1960-A61	2436997.50	1960 Mar 4	Minuteman 1A	T	-	-	-	EMFF	TL2?	-	-	0	-	-
1960-A91	2437029.50	1960 Apr 5	Minuteman 1A	T	-	-	-	EMFF	TL1	-	-	0	-	-
1960-A118	2437061.61	1960 May 7 0233	Minuteman 1A	T	-	-	-	EMFF	TL1	-	-	0	-	-
1961-S33	2437332.17	1961 Feb 1 1559	Minuteman 1A	-	401	RAD	-	CC	LC31A	-	-	1300?	7800	ASC BMA? (ASC BUA)
1961-S154	2437439.10	1961 May 19 1418	Minuteman 1A	-	402	RAD	-	CC	LC31A	-	-	100	-	ASC
1961-S222	2437508.13	1961 Jul 27 1509	Minuteman 1A	-	403	RAD	-	CC	LC31A	-	-	1300?	-	ASC
1961-A192	2437542.23	1961 Aug 30 1730	Minuteman 1A	-	404	RAD	-	CC	LC32B	-	-	900?	5500	ETR-H
1961-S379	2437621.14	1961 Nov 17 1515	Minuteman 1A	-	405	RAD	-	CC	LC32B	-	-	900?	6700	ETR-H
1961-S429	2437652.04	1961 Dec 18 1304	Minuteman 1A	-	406	RAD	-	CC	LC31B	-	-	900?	5900	-
1962-S24	2437670.13	1962 Jan 5 1500:02	Minuteman 1A	-	407	RAD	-	CC	LC31B	-	-	900?	5900	-
1962-S38	2437711.15	1962 Feb 15 1459:48	Minuteman 1A	-	408	RAD	-	CC	LC31B	-	-	900?	7200	-
1962-S64	2437732.14	1962 Mar 8 1523:51	Minuteman 1A	-	409	RAD	-	CC	LC32B	-	-	900?	7400?	-
1962-A68	2437779.58	1962 Apr 25 1559:02	Minuteman 1A	-	411	RAD	-	CC	LC32B	-	-	20	5?	-
1962-S128	2437796.13	1962 May 11 1509:45	Minuteman 1A	-	412	RAD	-	CC	LC32B	-	-	900?	6700	-
1962-S134	2437803.58	1962 May 19 0159:02	Minuteman 1A	-	413	RAD	-	CC	LC32B	-	-	900?	6700	-
1962-S178	2437824.23	1962 Jun 5 1735:01	Minuteman 1A	-	414	RAD	-	CC	LC32B	-	-	900?	6700	-
1962-S207	2437844.74	1962 Jun 29 0540:00	Minuteman 1A	-	415	RAD	-	CC	LC32B	-	-	900?	5100	-
1962-A110	2437866.63	1962 Jul 13 0305:10	Minuteman 1A	-	416	RAD	-	CC	LC31B	-	-	1	10?	-
1962-A158	2437886.63	1962 Aug 9 1505:02	Minuteman 1A	-	417	RAD	-	CC	LC31B	-	-	1	10?	-
1962-S536	2437926.63	1962 Sep 19 0306:22	Minuteman 1A	-	421	RAD	-	CC	LC31B	-	-	900?	5500?	-
1962-S537	2437927.66	1962 Sep 20 0345:41	Minuteman 1A	-	421	RAD	-	CC	LC31B	-	-	900?	5500?	-
1962-M23	2437936.36	1962 Sep 28 2101	Minuteman 1A	-	420	RAD	-	CC	LC31B	-	-	50	-	-
1962-A172	2437965.94	1962 Oct 18 0051:54	Minuteman 1A	-	503	RAD	-	CC	39443	-	-	1	6500?	-
1962-S462	2437986.21	1962 Nov 19 1700:11	Minuteman 1A	-	422	RAD	-	CC	LC31B	-	-	900?	6500?	-
1962-S541	2438006.13	1962 Dec 7 1500:01	Minuteman 1B	-	424	RAD	-	CC	LC32B	-	-	20	-	-
1962-S426	2438009.33	1962 Dec 10 2000?	Minuteman 1B	-	502	RAD	-	CC	39444	-	-	20	-	-
1962-S563	2438013.63	1962 Dec 15 0300:10	Minuteman 1B	-	423	RAD	-	CC	LC31B	-	-	50	-	ASC
1963-S09	2438019.52	1962 Dec 21 0035:15	Minuteman 1B	-	425	RAD	-	CC	LC32B	-	-	100	-	-
1963-S19	2438037.44	1963 Jan 7 2230:10	Minuteman 1B	-	425A	RAD	-	CC	LC31B	-	-	900?	7400?	-
1963-S19	2438053.26	1963 Jan 23 1610:13	Minuteman 1B	-	419	RAD	-	CC	LC32B	-	-	900?	5500?	-
1963-S103	2438061.94	1963 Feb 21 0100:04	Minuteman 1B	-	421B	RAD	-	CC	LC32B	-	-	900?	5500?	-
1963-S168	2438107.96	1963 Mar 19 0429:59	Minuteman 1B	-	425	RAD	-	CC	LC31B	-	-	100?	7400?	-
1963-S114	2438116.96	1963 Mar 28 0130:00	Minuteman 1B	-	419A	RAD	-	CC	LC32B	-	-	900?	7400?	-
1963-S145	2438131.25	1963 Apr 11 0206:59	Minuteman 1B	-	524	RAD	-	CC	LC31B	-	-	900?	9300?	-
1963-S168	2438148	1963 Apr 11 2030	Minuteman 1A	-	594	RAD	-	CC	39445	-	-	900?	-	-
1963-S168	2438149	1963 Apr 25	Minuteman 1A	-	595	RAD	-	CC	39445	-	-	900?	-	-
1963-S168	2438150.59	1963 Apr 25	Minuteman 1A	-	595	RAD	-	CC	39445	-	-	900?	-	-
1963-S168	2438151.20	1963 Apr 25	Minuteman 1A	-	595	RAD	-	CC	39445	-	-	900?	-	-
1963-S168	2438152.90	1963 Apr 25	Minuteman 1A	-	595	RAD	-	CC	39445	-	-	900?	-	-
1963-S168	2438153.55	1963 Apr 25	Minuteman 1A	-	595	RAD	-	CC	39445	-	-	900?	-	-
1963-S168	2438154.55	1963 Apr 25	Minuteman 1A	-	595	RAD	-	CC	39445	-	-	900?	-	-
1963-S168	2438155.55	1963 Apr 25	Minuteman 1A	-	595	RAD	-	CC	39445	-	-	900?	-	-
1963-S168	2438156.55	1963 Apr 25	Minuteman 1A	-	595	RAD	-	CC	39445	-	-	900?	-	-
1963-S168	2438157.55	1963 Apr 25	Minuteman 1A	-	595	RAD	-	CC	39445	-	-	900?	-	-
1963-S168	2438158.55	1963 Apr 25	Minuteman 1A	-	595	RAD	-	CC	39445	-	-	900?	-	-
1963-S168	2438159.55	1963 Apr 25	Minuteman 1A	-	595	RAD	-	CC	39445	-	-	900?	-	-
1963-S168	2438160.55	1963 Apr 25	Minuteman 1A	-	595	RAD	-	CC	39445	-	-	900?	-	-
1963-S168	2438161.55	1963 Apr 25	Minuteman 1A	-	595	RAD	-	CC	39445	-	-	900?	-	-
1963-S168	2438162.55	1963 Apr 25	Minuteman 1A	-	595	RAD	-	CC	39445	-	-	900?	-	-
1963-S168	2438163.55	1963 Apr 25	Minuteman 1A	-	595	RAD	-	CC	39445	-	-	900?	-	-
1963-S168	2438164.55	1963 Apr 25	Minuteman 1A	-	595	RAD	-	CC	39445	-	-	900?	-	-
1963-S168	2438165.55	1963 Apr 25	Minuteman 1A	-	595	RAD	-	CC	39445	-	-	900?	-	-
1963-S168	2438166.55	1963 Apr 25	Minuteman 1A	-	595	RAD	-	CC	39445	-	-	900?	-	-
1963-S168	2438167.55	1963 Apr 25	Minuteman 1A	-	595	RAD	-	CC	39445	-	-	900?	-	-
1963-S168	2438168.55	1963 Apr 25	Minuteman 1A	-	595	RAD	-	CC	39445	-	-	900?	-	-
1963-S168	2438169.55	1963 Apr 25	Minuteman 1A	-	595	RAD	-	CC	39445	-	-	900?	-	-
1963-S168	2438170.55	1963 Apr 25	Minuteman 1A	-	595	RAD	-	CC	39445	-	-	900?	-	-
1963-S168	2438171.55	1963 Apr 25	Minuteman 1A	-	595	RAD	-	CC	39445	-	-	900?	-	-
1963-S168	2438172.55	1963 Apr 25	Minuteman 1A	-	595	RAD	-	CC	39445	-	-	900?	-	-
1963-S168	2438173.55	1963 Apr 25	Minuteman 1A	-	595	RAD	-	CC	39445	-	-	900?	-	-
1963-S168	2438174.55	1963 Apr 25	Minuteman 1A	-	595	RAD	-	CC	39445	-	-	900?	-	-
1963-S168	2438175.55	1963 Apr 25	Minuteman 1A	-	595	RAD	-	CC	39445	-	-	900?	-	-
1963-S168	2438176.55	1963 Apr 25	Minuteman 1A	-	595	RAD	-	CC	39445	-	-	900?	-	-
1963-S168	2438177.55	1963 Apr 25	Minuteman 1A	-	595	RAD	-	CC	39445	-	-	900?	-	-
1963-S168	2438178.55	1963 Apr 25	Minuteman 1A	-	595	RAD	-	CC	39445	-	-	900?	-	-
1963-S168	2438179.55	1963 Apr 25	Minuteman 1A	-	595	RAD	-	CC	39445	-	-	900?	-	-
1963-S168	2438180.55	1963 Apr 25	Minuteman 1A	-	595	RAD	-	CC	39445	-	-	900?	-	-
1963-S168	2438181.55	1963 Apr 25	Minuteman 1A	-	595	RAD	-	CC	39445	-	-	900?	-	-
1963-S168	2438182.55	1963 Apr 25	Minuteman 1A	-	595	RAD	-	CC	39445	-	-	900?	-	-
1963-S168	2438183.55	1963 Apr 25	Minuteman 1A	-	595	RAD	-	CC	39445	-	-	900?	-	-
1963-S168	2438184.55	1963 Apr 25	Minuteman 1A	-	595	RAD	-	CC	39445	-	-	900?	-	-
1963-S168	2438185.55	1963 Apr 25	Minuteman 1A	-	595	RAD	-	CC	39445	-	-	900?	-	-
1963-S168	2438186.55	1963 Apr 25	Minuteman 1A	-	595	RAD	-	CC	39445	-	-	900?	-	-
1963-S168	2438187.55	1963 Apr 25	Minuteman 1A	-	595	RAD	-	CC	39445	-	-	900?	-	-
1963-S168	2438188.55	1963 Apr 25	Minuteman 1A	-	595	RAD	-	CC	39445	-	-	900?	-	-
1963-S168	2438189.55	1963 Apr 25	Minuteman 1A	-	595	RAD	-	CC	39445	-	-	900?	-	-
1963-S168	2438190.55	1963 Apr 25	Minuteman 1A	-	595	RAD	-	CC	39445	-	-	900?	-	-
1963-S168	2438191.55	1963 Apr 25	Minuteman 1A	-	595	RAD	-	CC	39445	-	-	900?	-	-
1963-S168	2438192.55	1963 Apr 25	Minuteman 1A	-	595	RAD	-	CC	39445	-	-	900?	-	-
1963-S168	2438193.55</													



Launch

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Mission	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee_Km	Range_Km	Dest
1965-8477	2438998.19	1965 Aug 25 1628:07	Minuteman 1A	-	509	Mk 5 RV	FUT-2	V	LF04	-	-	500?	-	-
1965-8510	2439028.60	1965 Sep 25 0220:13	Minuteman 2	-	458	Mk 11 RV	RAD	CC	LC32B	-	-	900?	-	-
1965-8532	2439036.64	1965 Oct 2 0059:59	Minuteman 2	-	469	Mk 11 RV	RAD	CC	LC31B	-	-	900?	-	-
1965-8544	2439039.50	1965 Oct 6	Minuteman 2	-	2002	Mk 11 RV	RAD	V	LF22	-	-	900?	8300?	ENH
1965-8603	2439073.50	1965 Nov 9	Minuteman 2	-	2009	Mk 11A RV	RAD	V	LF21	-	-	900?	8300?	ENH
1965-8681	2439109.22	1965 Dec 14 1723	Minuteman 1A	-	516	Mk 5 RV	FUT-3	V	LF04	-	-	900?	-	-
1965-8682	2439110.59	1965 Dec 16 0210	Minuteman 2	-	2017	Mk 11 RV	RAD	V	LF24	-	-	900?	-	-
1966-858	2439130.52	1966 Jan 5 0300:01	Minuteman 2	-	461	Mk 11A RV	RAD	CC	LC32B	-	-	900?	-	-
1966-874	2439147.50	1966 Jan 18	Minuteman 2	-	2053	Mk 11A RV	RAD	V	LF26	-	-	900?	8300?	ENH
1966-882	2439152.50	1966 Jan 27	Minuteman 2	-	2022	Mk 5 RV	Force Mod	V	LF05	-	-	900?	8300?	ENH
1966-896	2439167.54	1966 Feb 11 0100:04	Minuteman 1B	-	1243	Mk 5 RV	FUT-1	CC	LC31B	-	-	900?	-	-
1966-9108	2439167.54	1966 Feb 11 0100:04	Minuteman 1B	-	480	Mk 11 RV?	RAD	V	LF07	-	-	900?	-	-
1966-9109	2439168.53	1966 Feb 12 0039	Minuteman 1B	-	1387	Mk 11 RV	RAD	V	LF07	-	-	900?	-	-
1966-9112	2439172.50	1966 Feb 15	Minuteman 2	-	2033	Mk 11A RV	RAD	V	LF26	-	-	900?	8300?	ENH
1966-9129	2439181.32	1966 Feb 24 1940	Minuteman 1A	-	523 (63-006)	Mk 5 RV	FUT-4 Salvo	V	LF06	-	-	900?	8300?	ENH
1966-9130	2439181.32	1966 Feb 24 1940	Minuteman 1A	-	629 (63-112)	Mk 5 RV	FUT-5 Salvo	V	LF04	-	-	900?	8300?	ENH
1966-9152	2439192.50	1966 Mar 6	Minuteman 1B	-	1362	Mk 11 RV	FUT-3	V	LF02	-	-	900?	-	-
1966-9160	2439196.50	1966 Mar 11	Minuteman 1B	-	1211	Mk 12 RV	Force Mod/WTPP KK-80	V	LF03	-	-	900?	-	-
1966-9170	2439201.50	1966 Mar 17	Minuteman 2	-	2049	Mk 5 RV	FUT-6	V	LF06	-	-	900?	-	-
1966-9178	2439206.50	1966 Mar 21	Minuteman 1A	-	569 (63-061)	Mk 5 RV	FUT-7	V	LF04	-	-	900?	-	-
1966-9205	2439210.42	1966 Apr 1 0129:55	Minuteman 1A	-	649 (63-130)	Mk 11 RV?	RAD	CC	LC31B	-	-	900?	-	-
1966-9207	2439220.10	1966 Apr 1 0129:55	Minuteman 2	-	462	Mk 11 RV?	RAD	V	LF02	-	-	900?	9300?	-
1966-9221	2439220.40	1966 Apr 4 2130:7	Minuteman 1B	-	1288	Mk 11 RV	FUT-5	V	LF09	-	-	900?	9300?	-
1966-9232	2439237.50	1966 Apr 15	Minuteman 1B	-	1347	Mk 11 RV	FUT-6 /+7	V	LF09	-	-	900?	9300?	-
1966-9246	2439246.36	1966 Apr 22	Minuteman 1B	-	1312	Mk 11 RV	FUT-7	V	LF07	-	-	900?	9300?	-
1966-9264	2439246.36	1966 Apr 22 2035	Minuteman 1A	-	1282	Mk 11 RV	FUT-8	V	LF03	-	-	900?	-	-
1966-9266	2439262.27	1966 May 16 1410	Minuteman 1B	-	1388	Mk 11 RV	FUT-9	V	LF02	-	-	900?	8300?	ENH
1966-9266	2439262.50	1966 May 16 1830	Minuteman 1B	-	1191	Mk 5 RV	FUT-10	V	LF06	-	-	900?	9300?	-
1966-9266	2439262.50	1966 May 17 2010	Minuteman 1B	-	1314	Mk 11 RV	FUT-11	V	LF07	-	-	900?	9300?	-
1966-9267	2439277.34	1966 May 31 2285	Minuteman 1B	-	1270	Mk 11 RV	FUT-12	V	LF03	-	-	900?	9300?	ENH
1966-9267	2439279.46	1966 Jun 2 2241	Minuteman 1A	-	622 (63-109)	Mk 5 RV	FUT-9	V	LF04	-	-	900?	-	-
1966-9306	2439287.24	1966 Jun 10 1739	Minuteman 1B	-	1240	Mk 11 RV	FUT-13	V	LF02	-	-	900?	-	-
1966-9306	2439287.24	1966 Jun 10 1739	Minuteman 1B	-	1281	Mk 12 RV	FUT-14	V	LF08	-	-	900?	-	-
1966-9306	2439301.47	1966 Jun 24 2310	Minuteman 2	-	2053	Mk 11 RV	Force Mod	V	LF09	-	-	900?	-	-
1966-9362	2439315.60	1966 Jul 1 0230:15	Minuteman 1B	-	465	Mk 12 RV	RAD	CC	LC32B	-	-	900?	-	-
1966-9363	2439318.51	1966 Jul 11 1922	Minuteman 2	-	1250	Mk 11 RV	FUT	V	LF03	-	-	10?	-	-
1966-9366	2439319.62	1966 Jul 12 0746	Minuteman 1B	-	653	Mk 11 RV	FUT	V	LF09	-	-	900?	9300?	-
1966-9366	2439319.62	1966 Jul 12 0845	Minuteman 1B	-	764	Mk 11 RV?	LOR-308 FUT-17	V	LF08	-	-	900?	-	-
1966-9369	2439332.50	1966 Jul 26	Minuteman 2	-	2045	Mk 11 RV?	Force Mod	V	LF08	-	-	900?	-	-
1966-9370	2439332.50	1966 Aug 1	Minuteman 1B	-	1219	Mk 11 RV?	FUT	V	LF08	-	-	900?	-	-
1966-9417	2439338.50	1966 Aug 1	Minuteman 2	-	1371	Mk 11 RV?	FUT	V	LF07	-	-	900?	-	-
1966-9442	2439342.50	1966 Aug 6	Minuteman 1A	-	527 (63-021)	Mk 11 RV	FUT	V	LF03	-	-	900?	-	-
1966-9445	2439343.50	1966 Aug 6	Minuteman 1A	-	1342	Mk 5 RV	FUT-3h	V	LF06	-	-	900?	-	-
1966-9445	2439343.50	1966 Aug 16 2052	Minuteman 1A	-	621	Mk 9 RV	FUT	V	LF02	-	-	900?	-	-
1966-9446	2439346.50	1966 Aug 22 2156	Minuteman 1A	-	2056	Mk 9 RV	FUT	V	LF04	-	-	900?	-	-
1966-9446	2439347.50	1966 Aug 26 2156	Minuteman 2	-	1197	Mk 11 RV	DASO	V	LF02	-	-	900?	-	-
1966-9446	2439347.50	1966 Aug 29 1905	Minuteman 1B	-	1391	Mk 11 RV	FUT	V	LF07	-	-	900?	-	-
1966-9485	2439388.50	1966 Sep 16	Minuteman 1B	-	571 (63-068)	Mk 5 RV	FUT	V	LF03	-	-	900?	-	-
1966-9500	2439401.40	1966 Sep 20 1430	Minuteman 1A	-	1262	Mk 5 RV	FUT/WTPP KK-66	V	LF04	-	-	900?	-	-
1966-9526	2439411.40	1966 Oct 13 2210	Minuteman 1A	-	579	Mk 11 RV	FUT	V	LF09	-	-	900?	-	-
1966-9540	2439412.92	1966 Oct 13 2210	Minuteman 1A	-	1247	Mk 11 RV	FUT	V	LF03	-	-	900?	-	-
1966-9552	2439420.36	1966 Oct 21 2035	Minuteman 1B	-	914	Mk 11 RV?	FUT	V	LF07	-	-	900?	-	-
1966-9581	2439431.50	1966 Nov 16	Minuteman 2	-	2068	Mk 11 RV?	DASO	V	LF22	-	-	10?	-	-
1966-9623	2439445.50	1966 Nov 22 2140	Minuteman 1B	-	1183	Mk 11 RV	FUT/WTPP KK-69	V	LF09	-	-	900?	-	-
1966-9649	2439452.50	1966 Dec 13 2185	Minuteman 1B	-	2036	Mk 11 RV	FUT	V	LF03	-	-	900?	-	-
1966-9681	2439473.41	1966 Dec 13 2185	Minuteman 2	-	2036	Mk 11 RV	EGCS 1	V	LF05	-	-	900?	-	-
1966-9683	2439479.41	1966 Dec 22 2150	Minuteman 1B	-	1227	Mk 11 RV	494L (WATER TEST)	V	LF03	-	-	900?	-	-
1966-9687	2439482.41	1966 Dec 22 2150	Minuteman 1B	-	923	Mk 11 RV	FUT	V	LF03	-	-	900?	-	-
1966-9688	2439482.41	1966 Dec 22 2150	Minuteman 1B	-	1138	Mk 12 RV	FUT Salvo	V	LF08	-	-	900?	9300?	-
1966-9688	2439482.41	1966 Dec 22 2150	Minuteman 1B	-	2073 [21137]	Mk 12 RV	RAD/Force Mod/WTPP KK-82	V	LF08	-	-	900?	9300?	-
1966-9688	2439482.41	1966 Dec 22 2150	Minuteman 1B	-	464	Mk 12 RV	RAD	CC	LC32B	-	-	900?	-	-
1967-873	2439515.44	1967 Jan 17 0059:59	Minuteman 2	-	828	Mk 11 RV	FUT	V	LF09	-	-	900?	-	-
1967-890	2439521.66	1967 Jan 30 2135	Minuteman 1B	-	1206	Mk 11 RV	FUT	V	LF09	-	-	900?	-	-
1967-9112	2439524.66	1967 Feb 3 0345	Minuteman 2	-	2087	Mk 11 RV	EGCS 2	V	LF05	-	-	900?	-	-
1967-9118	2439528.50	1967 Feb 7 2100	Minuteman 2	-	893	Mk 11 RV	494L (SYCAMORE TREES)	V	LF05	-	-	900?	-	-
1967-9123	2439543.44	1967 Feb 21 2240	Minuteman 1B	-	700	Mk 11 RV	FUT Ripple	V	LF07	-	-	900?	-	-
1967-9124	2439543.44	1967 Feb 21 2240	Minuteman 1B	-	1263	Mk 11 RV	FUT Ripple	V	LF03	-	-	900?	-	-
1967-9128	2439546.59	1967 Feb 25 0205:02	Minuteman 2	-	465	Mk 12 RV	RAD	CC	LC32B	-	-	900?	-	-
1967-9144	2439556.50	1967 Mar 7 2200	Minuteman 1B	-	1253	Mk 11 RV	FUT	V	LF07	-	-	900?	-	-
1967-9167	2439572.35	1967 Mar 22 2030	Minuteman 1B	-	1426	Mk 11 RV	FUT	V	LF03	-	-	900?	-	-
1967-9196	2439588.38	1967 Apr 7 2100	Minuteman 2	-	2143	Mk 11 RV	FUT	V	LF08	-	-	900?	-	-
1967-9217	2439607.50	1967 Apr 17	Minuteman 2	-	1296	Mk 11 RV	EGCS 3	V	LF03	-	-	900?	-	-
1967-9228	2439601.50	1967 Apr 21	Minuteman 2	-	2137	Mk 11A RV	ST OLYMPIC TRIALS 1	V	LF22	-	-	900?	9300?	-
1967-9229	2439607.50	1967 Apr 21	Minuteman 1B	-	1193	Mk 11 RV	FUT	V	LF07	-	-	900?	9300?	-
1967-9236	2439608.50	1967 Apr 28 0930	Minuteman 1B	-	1019	Mk 11 RV	RAD	V	LF02	-	-	900?	-	-
1967-9255	2439622.10	1967 May 17 1423	Minuteman 2	-	2095	Mk 11 RV	Force Mod	V	LF21	-	-	900?	-	-
1967-9261	2439627.50	1967 May 11 1423	Minuteman 2	-	774	Mk 11 RV	FUT	V	LF09	-	-	900?	-	-
1967-9264	2439629.50	1967 May 19	Minuteman 1B	-	667	Mk 11 RV	ST OLYMPIC TRIALS 2	V	LF24	-	-	900?	-	-
1967-9265	2439629.50	1967 May 19	Minuteman 2	-	1188	Mk 11 RV	FUT	V	LF03	-	-	900?	-	-
1967-9268	2439632.50	1967 May 22	Minuteman 1B	-	726	Mk 11 RV	FUT	V						

Launch

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Mission	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee_Km	Range_Km	Dest
1967-3526	2439669.90	1967 Jun 28 0937	Minuteman 1B	-	751	Mk 11B RV	RAD GB40	V	LF02	-	-	9007	-	-
1967-3534	2439676.50	1967 Jul 5	Minuteman 1B	-	1126	Mk 11 RV	FOT GB42	V	LF07	-	-	9007	-	-
1967-3543	2439683.30	1967 Jul 12	Minuteman 1B	-	900	Mk 11 RV	ST Cold/Heat Soak 2?	V	LF09	-	-	9007	-	-
1967-3546	2439684.50	1967 Jul 13	Minuteman 1B	-	779	Mk 11B RV	RAD GIN BABY I	V	LF06	-	-	9007	-	-
1967-3549	2439686.37	1967 Jul 15 1118	Minuteman 1B	-	755	Mk 12 RV	RAD GIN BABY I	V	LF21	-	-	9007	-	-
1967-3548	2439686.50	1967 Jul 15	Minuteman 2	-	2370 (20987)	Mk 12 RV	ST OLYMPIC TRIALS 3	V	LF22	-	-	9007	-	-
1967-3550	2439691.88	1967 Jul 20 0900	Minuteman 2	-	2370	Mk 12 RV	FOT GB45	V	LF09	-	-	9007	-	-
1967-3573	2439710.50	1967 Aug 6	Minuteman 1B	-	1212	Mk 12 RV	RAD GB45	CC	LC52B	-	-	9007	-	ASC
1967-3589	2439720.39	1967 Aug 17 2118:59	Minuteman 1B	-	466	Mk 12 RV	RAD GB47	V	LF03	-	-	9007	-	-
1967-3419	2439740.36	1967 Sep 6 2035	Minuteman 1B	-	1222	Mk 11 RV	FOT GB47	V	LF07	-	-	9007	-	-
1967-3442	2439755.60	1967 Sep 22 0228	Minuteman 1B	-	831	Mk 11 RV	FOT GB48	V	LF09	-	-	9007	-	-
1967-3451	2439760.58	1967 Sep 27 0200	Minuteman 1B	-	2445	Mk 11 RV	FOT GB48	V	LF24	-	-	9007	-	-
1967-3499	2439774.50	1967 Oct 21	Minuteman 1B	-	2445	Mk 11B RV	ST OLYMPIC TRIALS 4	V	LF02	-	-	9007	-	-
1967-3521	2439797.85	1967 Nov 5 0830	Minuteman 1B	-	820	Mk 12 RV	RAD GIN BABY II	CC	LC52B	-	-	9007	-	-
1967-3525	2439801.54	1967 Nov 7 0056:08	Minuteman 2	-	467	Mk 12 RV	RAD GB51	V	LF07	-	-	9007	-	-
1967-3531	2439809.14	1967 Nov 14 1420	Minuteman 1B	-	1215	Mk 11 RV	FOT GB52	V	LF09	-	-	9007	-	-
1967-3532	2439809.14	1967 Nov 14 1522	Minuteman 1B	-	1028	Mk 11 RV	RAD GIN BABY III	V	LF09	-	-	9007	-	-
1967-3540	2439811.50	1967 Nov 17	Minuteman 2	-	2386	Mk 11 RV	RAD/MBD	V	LF08	-	-	9007	-	-
1967-3543	2439816.09	1967 Nov 21 1412	Minuteman 2	-	2071	Mk 11 RV?	FOT GB50	V	LF08	-	-	9007	-	-
1967-3546	2439823.38	1967 Dec 1	Minuteman 1B	-	1183	Mk 11 RV	RAD GIN BABY IV	V	LF03	-	-	9007	-	-
1967-3549	2439833.58	1967 Dec 8 2103	Minuteman 1B	-	946	Mk 11 RV	RAD GIN BABY IV (GLORY TRIP)	V	LF02	-	-	9007	-	-
1967-3557	2439842.50	1967 Dec 15	Minuteman 1B	-	1114	Mk 11 RV	FOT GB50B	V	LF03	-	-	9007	-	-
1967-3562	2439846.52	1967 Dec 22 0035	Minuteman 1B	-	1437	Mk 11 RV	FOT GB50B	V	LF03	-	-	9007	-	-
1967-3593	2439847.57	1967 Dec 23 0145	Minuteman 1B	-	1288	Mk 11 RV	GLORY TRIP 01B	V	LF09	-	-	9007	-	-
1967-3596	2439847.50	1967 Dec 23	Minuteman 2	-	2457	Mk 11 RV	GLORY TRIP 03B	V	LF24	-	-	9007	-	-
1967-3596	2439852.95	1967 Dec 28 1055	Minuteman 2	-	2435	Mk 11 RV?	ST OLYMPIC TRIALS 5	V	LF25	-	-	9007	-	-
1968-376	2439865.52	1968 Jan 10 0958	Minuteman 2	-	2437	Mk 11 RV?	ST OLYMPIC TRIALS 6	V	LF26	-	-	9007	-	KHR
1968-363	2439871.50	1968 Jan 16	Minuteman 1B	-	654-011	Mk 11 RV?	ST OLYMPIC TRIALS 6	V	LF26	-	-	9007	-	KHR
1968-3100	2439880.50	1968 Jan 26	Minuteman 1B	-	2448F	Mk 11 RV	ST Cold/Heat Soak 3?	V	LF06	-	-	9007	-	KHR
1968-3112	2439888.93	1968 Feb 2 1017	Minuteman 2	-	2464	Mk 11 RV	ST OLYMPIC TRIALS 7	V	LF22	-	-	9007	-	KHR
1968-3125	2439889.04	1968 Feb 2 1235	Minuteman 1B	-	2464	Mk 11 RV	ST OLYMPIC TRIALS 8	V	LF24	-	-	9007	-	KHR
1968-3128	2439893.64	1968 Feb 7 0320:21	Minuteman 1B	-	1274	Mk 11 RV	ST OLYMPIC TRIALS 6	V	LF09	-	-	107	-	(GRM)
1968-3129	2439896.99	1968 Feb 10 1142	Minuteman 2	-	466	Mk 12 RV	ST PACEN KITE 1	CC	LC52B	-	-	9007	-	ASC
1968-3226	2439944.40	1968 Mar 29	Minuteman 2	-	2522	Mk 12 RV	RAD/MBD	V	LF06	-	-	9007	-	-
1968-3261	2439956.86	1968 Apr 29 0839	Minuteman 1B	-	2522	Mk 11B RV	ST OLYMPIC TRIALS 9	V	LF26	-	-	9007	-	KHR
1968-3273	2439970.50	1968 Apr 24 0305	Minuteman 1B	-	1411	Mk 11A RV	ST PACEN KITE 2	V	LF03	-	-	9007	-	KHR
1968-3279	2439976.50	1968 Apr 30	Minuteman 1B	-	892	Mk 11 RV?	ST PACEN KITE 2	V	LF03	-	-	9007	-	KHR
1968-3536	2439986.55	1968 May 22 1020	Minuteman 1B	-	1389	Mk 11 RV?	ST Cold/Heat Soak 4?	V	LF06	-	-	9007	-	KHR
1968-3540	2439999.92	1968 May 23 0610	Minuteman 1B	-	1015	Mk 11A RV	ST PACEN KITE 3	V	LF22	-	-	9007	-	KHR
1968-3549	2440004.26	1968 May 23 0610	Minuteman 1B	-	1015	Mk 11A RV	ST Cold/Heat Soak 5?	V	LF06	-	-	9007	-	KHR
1968-3596	2440046.26	1968 Jun 1 1819	Minuteman 2	-	FTM-2659	Mk 11 RV?	ST PACEN KITE 1	V	LF04	-	-	9007	-	KHR
1968-3596	2440046.26	1968 Jun 12 0900	Minuteman 1B	-	1084 (G437)	Mk 11A RV	ST OLYMPIC TRIALS B-4	V	LF04	-	-	9007	-	KHR
1968-3618	2440065.56	1968 Aug 16 2030:02	Minuteman 3	-	FTM-201	Mk 12 RV x 3	ST OLYMPIC TRIALS B-4	CC	LC52B	-	-	9007	-	ASC
1968-3626	244011.35	1968 Sep 1 1600	Minuteman 3	-	1442	Mk 12 RV?	ST GIANT BOOST	CC	LC52B	-	-	9007	-	ASC
1968-3650	244014.35	1968 Oct 24 2000:03	Minuteman 3	-	FTM-202	Mk 12 RV?	DASO GIANT BOOST	CC	LC52B	-	-	9007	-	ASC
1968-3652	244014.35	1968 Oct 24 2000:03	Minuteman 3	-	FTM-2191	Mk 11 RV?	DASO GIANT FIST 2A	CC	LC52B	-	-	9007	-	ASC
1968-3657	2440154.21	1968 Oct 24 1700?	Minuteman 3	-	1139	Mk 11 RV?	ST OLYMPIC TRIALS B-5	CC	LC52B	-	-	9007	-	KHR
1968-3657	2440159.85	1968 Oct 30 0823	Minuteman 2	-	2250	Mk 11 RV?	ST OLYMPIC TRIALS B-5	V	LF09	-	-	9007	-	KHR
1968-3657	2440174.01	1968 Nov 13 1210	Minuteman 2	-	2556	Mk 11 RV?	DASO GIANT FIST 1	V	LF06	-	-	9007	-	KHR
1968-3660	2440182.01	1968 Nov 21 1826	Minuteman 2	-	2556	Mk 11 RV?	DASO GIANT ELADE 2	V	LF06	-	-	9007	-	KHR
1968-3632	2440182.01	1968 Dec 1	Minuteman 1B	-	1375	Mk 11A RV	ST OLYMPIC TRIALS B-6	V	LF09	-	-	9007	-	KHR
1968-3638	2440200.50	1968 Dec 10	Minuteman 1B	-	943	Mk 11 RV	ST Cold/Heat Soak 6	V	LF06	-	-	9007	-	KHR
1968-3655	2440211.50	1968 Dec 20 1430	Minuteman 1B	-	2418	Mk 11B RV	ST Cold/Heat Soak 6	V	LF06	-	-	9007	-	KHR
1968-3719	2440241.50	1968 Dec 20 1430	Minuteman 1B	-	1089	Mk 11 RV	ST OLYMPIC TRIALS B-7	V	LF08	-	-	1300?	-	-
1968-380	2440251.84	1968 Jan 21 0940	Minuteman 2	-	2504	Mk 11 RV?	ST OLYMPIC TRIALS B-7	V	LF02	-	-	1300?	-	-
1968-391	2440251.84	1968 Jan 29 1034	Minuteman 2	-	2240	Mk 11 RV?	ST SANSO Stage 3 Test 2?	V	LF08	-	-	1300?	-	-
1968-391	2440251.84	1968 Jan 29 1352	Minuteman 2	-	2240	Mk 11 RV?	ST SANSO Stage 3 Test 2?	V	LF08	-	-	1300?	-	-
1968-392	2440251.84	1968 Jan 30 0825	Minuteman 2	-	674	Mk 11 RV	ST SANSO Stage 3 Test 2?	V	LF08	-	-	1300?	-	-
1968-3104	2440254.95	1968 Feb 2 0825	Minuteman 1B	-	FTM-2208	Mk 11C RV	DASO GIANT FIST 5	V	LF03	-	-	1300?	-	-
1968-3146	2440272.93	1968 Feb 20 1015	Minuteman 1B	-	1230	Mk 11C RV	DASO GIANT FIST 5	V	LF04	-	-	1300?	-	-
1968-3167	2440287.95	1968 Feb 27 0820	Minuteman 1B	-	2252	Mk 11C RV	ST SANSO Stage 3 Test?	V	LF06	-	-	1300?	-	-
1968-3182	2440292.97	1968 Mar 12 1120	Minuteman 2	-	2415	Mk 11C RV	DASO GIANT FIST 3	V	LF04	-	-	1300?	-	-
1968-3214	2440303.50	1968 Mar 22 1350	Minuteman 2	-	2415	Mk 11B RV	ST SANSO Stage 3 Test?	V	LF21	-	-	1300?	-	-
1968-3216	2440306.29	1968 Mar 24	Minuteman 1B	-	791	Mk 11 RV	FOT GB38B	V	LF03	-	-	1300?	-	-
1968-3218	2440306.29	1968 Mar 26 2046:21	Minuteman 1B	-	1308	Mk 11 RV	FOT GB38B	V	LF03	-	-	1300?	-	-
1968-3219	2440307.37	1968 Mar 26 2046:21	Minuteman 1B	-	FTM-203	Mk 12 RV x3	RAD	CC	LC51B	-	-	1300?	-	ASC
1968-3260	2440322.97	1968 Apr 11 0855	Minuteman 3	-	FTM-301	Mk 12 RV x3	RAD	V	LF02	-	-	1300?	-	KHR
1968-3271	2440327.90	1968 Apr 16 0935	Minuteman 2	-	2287	Mk 11 RV?	OT GT19M	V	LF05	-	-	1300?	-	-
1968-3279	2440330.34	1968 Apr 18 1851	Minuteman 2	-	2329	SST M-3	OT GT19M	V	LF05	-	-	1300?	-	-
1968-3290	2440334.34	1968 Apr 22 2015:01	Minuteman 3	-	FTM-204	Mk 12 RV x 3	RAD	V	LF05	-	-	1300?	-	ASC
1968-3292	2440335.68	1968 Apr 23 2330	Minuteman 1B	-	1090	Mk 11 RV	RAD	V	LF02	-	-	1300?	-	-
1968-3297	2440337.21	1968 Apr 25 1700	Minuteman 1B	-	2096	Mk 11 RV?	OT GT35B	V	LF07	-	-	1300?	-	-
1968-3315	2440343.86	1968 Apr 25 0842	Minuteman 2	-	2505	Mk 11 RV?	OT GT35B	V	LF21	-	-	1300?	-	-
1968-3334	2440343.86	1968 May 27 2055:13	Minuteman 2	-	FTM-205	Mk 12 RV x 3	OT GT35B	CC	LC52B	-	-	1300?	-	ASC?
1968-3347	2440369.37	1968 May 28 2000	Minuteman 3	-	2131	Mk 12 RV? x 2	OT GT35B	V	LF05	-	-	1300?	-	-
1968-3349	2440370.98	1968 May 29 1135	Minuteman 3	-	FTM-302	Mk 12 RV? x 2	OT GT35B	V	LF24	-	-	1300?	-	-
1968-3360	2440384.94	1968 Jun 11 1315	Minuteman 2	-	1285	Mk 11 RV?	OT GT35B	V	LF07	-	-	1300?	-	-
1968-3367	2440390.94													

Launch

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Mission	Launch_Site	Platform	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee_Km	Range_Km	Dest
1969-3458	2440455.68	1969 Aug 22 0420	Minuteman 2	-	2108	Mk 11B RV	OT GT17F	V	-	LF24	-	-	1300?	-	-
1969-3468	2440460.61	1969 Aug 27 0235	Minuteman 2	-	2065	Mk 11B RV	OT GT15F	V	-	LF22	-	-	1300?	-	-
1969-3469	2440461.50	1969 Aug 28	Minuteman 1B	-	1388	Mk 11 RV	FOT GT42B	V	-	LF03	-	-	1300?	-	-
1969-3479	2440467.60	1969 Sep 3 0220	Minuteman 2	-	2145	Mk 11 RV?	OT GT20F	V	-	LF26	-	-	1300?	-	-
1969-3488	2440475.55	1969 Sep 11 0105	Minuteman 1B	-	1137	Mk 11 RV?	OT GT36B	V	-	LF07	-	-	1300?	-	-
1969-3499	2440477.50	1969 Sep 13	Minuteman 3	-	FTH-303	Mk 12 RV x 3	ST ULMPIC TR. B-10	V	-	LF02	-	-	1300?	-	-
1969-3509	2440484.55	1969 Sep 20 0830	Minuteman 1B	-	1276	Mk 11 RV	RD MR CLEAN	V	-	LF09	-	-	1300?	-	(KMR)
1969-3513	2440487.50	1969 Sep 23 2010:26	Minuteman 1B	-	FTH-1	SSSTP 1	RD MR CLEAN	V	-	LF06	-	-	100?	-	-
1969-3516	2440488.34	1969 Sep 23 2010:26	Minuteman 1B	-	FTH-208	SSSTP 1	RD MR CLEAN	V	-	LC31B	-	-	1300?	-	-
1969-3524	2440488.50	1969 Sep 24	Minuteman 2	-	2129	Mk 12 RV x 3	OT GT21F	V	-	LF25	-	-	1300?	-	-
1969-3527	2440495.50	1969 Oct 1	Minuteman 2	-	2510	Mk 11 RV?	ST	V	-	LF21	-	-	1300?	-	-
1969-3530	2440497.54	1969 Oct 3 0100	Minuteman 1B	-	1173	Mk 11 RV?	FOT GT44B	V	-	LF03	-	-	1300?	-	-
1969-3540	2440508.42	1969 Oct 13 2305	Minuteman 2	-	2054	Mk 11 RV?	OT GT22F	V	-	LF24	-	-	1300?	-	-
1969-3545	2440509.97	1969 Oct 15 1116	Minuteman 1B	-	FTH-305	Mk 12 RV x 3	RD MR CLEAN	V	-	LF02	-	-	1300?	-	-
1969-3548	2440515.50	1969 Oct 21	Minuteman 1B	-	1184	Mk 11 RV	FOT GT45B	V	-	LF07	-	-	1300?	-	KMR
1969-3565	2440525.50	1969 Oct 31	Minuteman 3	-	FTH-504	Mk 12 RV x 3	RD MR CLEAN	V	-	LF02	-	-	1300?	-	-
1969-3587	2440532.33	1969 Nov 6 2000:02	Minuteman 3	-	FTH-509	Mk 12 RV x 3	RD MR CLEAN	V	-	LC52B	-	-	1300?	-	-
1969-3621	2440532.79	1969 Nov 7 0700	Minuteman 1B	-	1225	Mk 11 RV	ST ULMPIC TR. B-11	V	-	LF09	-	-	1300?	-	-
1969-3620	2440534.50	1969 Nov 7 0700	Minuteman 1B	-	2508	Mk 11 RV	ST	V	-	LF21	-	-	1300?	-	-
1969-3631	2440544.50	1969 Nov 19	Minuteman 2	-	2063	Mk 12 RV x 3	RD MR CLEAN	V	-	LF03	-	-	1300?	-	-
1969-3634	2440551.73	1969 Nov 26 0527	Minuteman 1B	-	FTH-210	Mk 11 RV	RD MR CLEAN	V	-	LC52B	-	-	1300?	-	-
1969-4202	2440560.33	1969 Dec 4 2000:02	Minuteman 3	-	1088	Mk 11 RV x 3	FOT GT50B	V	-	LF07	-	-	1300?	-	-
1969-3647	2440561.44	1969 Dec 5 2240	Minuteman 1B	-	SIF-2	SSSTP 2 (Mod Mk 11)	RD MR CLEAN	V	-	LF06	-	-	0?	-	-
1969-3677	2440571.50	1969 Dec 16	Minuteman 1B	-	955	Mk 11 RV	FOT GT53B	V	-	LF07	-	-	1300?	-	-
1970-3146	2440643.56	1970 Feb 26 0125	Minuteman 1B	-	762	Mk 11 RV	FOT GT54B	V	-	LF09	-	-	1300?	-	-
1970-3168	2440650.50	1970 Mar 6 0305	Minuteman 1B	-	1180	Mk 11 RV	FOT GT62B	V	-	LF03	-	-	1300?	-	-
1970-3239	2440655.50	1970 Mar 10	Minuteman 1B	-	2424	Mk 11 RV	OT GT24F	V	-	LF22	-	-	1300?	-	-
1970-3241	2440657.46	1970 Mar 11 2300	Minuteman 2	-	FTH-212	Mk 12 RV x 3	RD MR CLEAN	V	-	LC52B	-	-	0?	-	-
1970-430	2440659.35	1970 Mar 13 2030:02	Minuteman 3	-	FTH-214	Mk 12 RV x 3	RD MR CLEAN	V	-	CC	-	-	1	-	-
1970-431	2440660.26	1970 Mar 14 1600:10	Minuteman 2	-	1094	Mk 11 RV	RD MR CLEAN	V	-	CC	-	-	1	-	-
1970-3269	2440666.50	1970 Mar 23	Minuteman 1B	-	2656	Mk 11C RV	FOT GT63B	V	-	LF07	-	-	1300?	-	-
1970-3275	2440671.50	1970 Mar 26 0900	Minuteman 2	-	2656	Mk 11C RV	OT GT23F	V	-	LF06	-	-	1300?	-	-
1970-3277	2440676.50	1970 Mar 31	Minuteman 2	-	2694	Mk 11 RV?	RD MR CLEAN	V	-	LF26	-	-	1300?	-	-
1970-3282	2440678.50	1970 Apr 2 0330:07	Minuteman 3	-	FTH-309	Mk 12 RV x 3	RD MR CLEAN	V	-	LF08	-	-	1300?	-	-
1970-3312	2440680.54	1970 Apr 22 0101	Minuteman 3	-	2474	Mk 11 RV?	RD MR CLEAN	V	-	LC52B	-	-	1300?	-	-
1970-3323	2440689.07	1970 Apr 22 1345	Minuteman 2	-	2685	Mk 11 RV?	RD MR CLEAN	V	-	CC	-	-	1300?	-	-
1970-3324	2440701.50	1970 Apr 25	Minuteman 3	-	2685	Mk 11 RV?	RD MR CLEAN	V	-	CC	-	-	1300?	-	-
1970-3337	2440706.17	1970 Apr 29 1602:06	Minuteman 3	-	FTH-214	Mk 12 RV x 3	RD MR CLEAN	V	-	CC	-	-	1300?	-	-
1970-3342	2440711.66	1970 May 9 0350	Minuteman 1B	-	1336	Mk 11A RV	RD MR CLEAN	V	-	LF07	-	-	1300?	-	-
1970-3347	2440714.55	1970 May 9 0749	Minuteman 3	-	2486	Mk 11 RV?	RD MR CLEAN	V	-	LF02	-	-	1300?	-	-
1970-3359	2440728.26	1970 May 27 0850	Minuteman 2	-	1446	Mk 11A RV	OT GT55F	V	-	LF28	-	-	1300?	-	-
1970-3373	2440733.93	1970 May 27 0850	Minuteman 1B	-	FTH-215	Mk 12 RV x 3	RD MR CLEAN	V	-	LF28	-	-	1300?	-	-
1970-3374	2440734.14	1970 May 27 0850	Minuteman 3	-	FTH-215	Mk 12 RV x 3	RD MR CLEAN	V	-	CC	-	-	1300?	-	-
1970-3381	2440736.46	1970 Jun 6 2300	Minuteman 1B	-	1244	Mk 12 RV x 3	RD MR CLEAN	V	-	LF07	-	-	1300?	-	-
1970-3386	2440745.65	1970 Jun 17 0900	Minuteman 3	-	FTH-312	Mk 12 RV x 3	RD MR CLEAN	V	-	LF02	-	-	1300?	-	-
1970-3396	2440757.05	1970 Jun 19 1315	Minuteman 3	-	2478	Mk 11C RV	OT GT23M	V	-	LF06	-	-	1300?	-	-
1970-3402	2440767.50	1970 Jun 20 0433	Minuteman 2	-	2338	Mk 11 RV	OT GT27M	V	-	LF04	-	-	1300?	-	-
1970-3404	2440763.97	1970 Jun 25 2310	Minuteman 1B	-	1413	Mk 11A RV?	RD MR CLEAN	V	-	LF03	-	-	1300?	-	-
1970-3406	2440763.50	1970 Jun 26	Minuteman 2	-	2559	Mk 11 RV?	FOT GT73B	V	-	LF03	-	-	1300?	-	-
1970-3423	2440777.50	1970 Jun 11	Minuteman 2	-	2478	Mk 11 RV?	OT GT56F	V	-	LF02	-	-	1300?	-	-
1970-3428	2440781.50	1970 Jun 18	Minuteman 1B	-	2338	Mk 11 RV?	FOT GT71B-2	V	-	LF24	-	-	1300?	-	-
1970-3436	2440785.50	1970 Jun 18	Minuteman 2	-	2559	Mk 11 RV?	OT GT56F	V	-	LF24	-	-	1300?	-	-
1970-3438	2440785.50	1970 Jun 18	Minuteman 1B	-	2559	Mk 11 RV?	OT GT56F	V	-	LF24	-	-	1300?	-	-
1970-3439	2440785.50	1970 Jun 18	Minuteman 2	-	2559	Mk 11 RV?	OT GT56F	V	-	LF24	-	-	1300?	-	-
1970-3439	2440785.50	1970 Jun 18	Minuteman 1B	-	2559	Mk 11 RV?	OT GT56F	V	-	LF24	-	-	1300?	-	-
1970-3439	2440785.50	1970 Jun 18	Minuteman 2	-	2559	Mk 11 RV?	OT GT56F	V	-	LF24	-	-	1300?	-	-
1970-3439	2440785.50	1970 Jun 18	Minuteman 1B	-	2559	Mk 11 RV?	OT GT56F	V	-	LF24	-	-	1300?	-	-
1970-3439	2440785.50	1970 Jun 18	Minuteman 2	-	2559	Mk 11 RV?	OT GT56F	V	-	LF24	-	-	1300?	-	-
1970-3439	2440785.50	1970 Jun 18	Minuteman 1B	-	2559	Mk 11 RV?	OT GT56F	V	-	LF24	-	-	1300?	-	-
1970-3439	2440785.50	1970 Jun 18	Minuteman 2	-	2559	Mk 11 RV?	OT GT56F	V	-	LF24	-	-	1300?	-	-
1970-3439	2440785.50	1970 Jun 18	Minuteman 1B	-	2559	Mk 11 RV?	OT GT56F	V	-	LF24	-	-	1300?	-	-
1970-3439	2440785.50	1970 Jun 18	Minuteman 2	-	2559	Mk 11 RV?	OT GT56F	V	-	LF24	-	-	1300?	-	-
1970-3439	2440785.50	1970 Jun 18	Minuteman 1B	-	2559	Mk 11 RV?	OT GT56F	V	-	LF24	-	-	1300?	-	-
1970-3439	2440785.50	1970 Jun 18	Minuteman 2	-	2559	Mk 11 RV?	OT GT56F	V	-	LF24	-	-	1300?	-	-
1970-3439	2440785.50	1970 Jun 18	Minuteman 1B	-	2559	Mk 11 RV?	OT GT56F	V	-	LF24	-	-	1300?	-	-
1970-3439	2440785.50	1970 Jun 18	Minuteman 2	-	2559	Mk 11 RV?	OT GT56F	V	-	LF24	-	-	1300?	-	-
1970-3439	2440785.50	1970 Jun 18	Minuteman 1B	-	2559	Mk 11 RV?	OT GT56F	V	-	LF24	-	-	1300?	-	-
1970-3439	2440785.50	1970 Jun 18	Minuteman 2	-	2559	Mk 11 RV?	OT GT56F	V	-	LF24	-	-	1300?	-	-
1970-3439	2440785.50	1970 Jun 18	Minuteman 1B	-	2559	Mk 11 RV?	OT GT56F	V	-	LF24	-	-	1300?	-	-
1970-3439	2440785.50	1970 Jun 18	Minuteman 2	-	2559	Mk 11 RV?	OT GT56F	V	-	LF24	-	-	1300?	-	-
1970-3439	2440785.50	1970 Jun 18	Minuteman 1B	-	2559	Mk 11 RV?	OT GT56F	V	-	LF24	-	-	1300?	-	-
1970-3439	2440785.50	1970 Jun 18	Minuteman 2	-	2559	Mk 11 RV?	OT GT56F	V	-	LF24	-	-	1300?	-	-
1970-3439	2440785.50	1970 Jun 18	Minuteman 1B	-	2559	Mk 11 RV?	OT GT56F	V	-	LF24	-	-	1300?	-	-
1970-3439	2440785.50	1970 Jun 18	Minuteman 2	-	2559	Mk 11 RV?	OT GT56F	V	-	LF24	-	-	1300?	-	-
1970-3439	2440785.50	1970 Jun 18	Minuteman 1B	-	2559	Mk 11 RV?	OT GT56F	V	-	LF24	-	-	1300?	-	-
1970-3439	2440785.50	1970 Jun 18	Minuteman 2	-	2559	Mk 11 RV?	OT GT56F	V	-	LF24	-	-	1300?	-	-
1970-3439	2440785.50	1970 Jun 18	Minuteman 1B	-	2559	Mk 11 RV?	OT GT56F	V	-	LF24	-	-	1300?	-	-
1970-3439	2440785.50	1970 Jun 18	Minuteman 2	-	2559	Mk 11 RV?	OT GT56F	V	-	LF24	-	-	1300?	-	-
1970-3439	2440785.50	1970 Jun 18	Minuteman 1B	-	2559	Mk 11 RV?	OT GT56F	V	-	LF24	-	-	1300?	-	-
1970-3439	2440785.50	1970 Jun 18	Minuteman 2	-	2559	Mk 11 RV?	OT GT56F	V	-	LF24	-	-	1300?	-	-
1970-3439	2440785.50	1970 Jun 18	Minuteman 1B	-	2559	Mk 11 RV?	OT GT56F	V	-	LF24	-	-	1300?	-	-
1970-3439	2440785.50	1970 Jun 18	Minuteman 2	-	2559	Mk 11 RV?	OT GT56F	V	-	LF24	-	-	1300?	-	-
1970-3439	2440785.50	1970 Jun 18	Minuteman 1B	-	2559	Mk 11 RV?	OT GT56F	V	-	LF24	-	-	1300?	-	-
1970-3439	2440785.50	1970 Jun 18	Minuteman 2	-	2559	Mk 11 RV?	OT GT56F	V	-	LF24	-	-	1300?	-	-
1970-3439	2440785.50	1970 Jun 18	Minuteman 1B	-	2559	Mk 11 RV?	OT GT56F	V	-	LF24	-	-	1300?	-	-
1970-3439	2440785.50	1970 Jun 18	Minuteman 2	-	2559	Mk 11 RV?	OT GT56F	V	-	LF24	-	-	1300?	-	-
1970-3439	2440785.50	1970 Jun 18	Minuteman 1B	-											



Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Mission	Launch	FlightCode	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee_Km	Range_Km	Dest
1971-356	2440962.50	1971 Jan 11	Minuteman 1B	-	-	SSTP Mk 12 RV x 3	SSTP M1-30	-	-	-	LF06	LF06	-	-	13007	-	KHR
1971-395	2440978.91	1971 Jan 27 0945	Minuteman 3	-	-	Mk 5 RV	DASO OLD FOX 04H	-	OLD FOX 04H	-	LF08	LF08	-	-	13007	-	-
1971-397	2440980.59	1971 Jan 29 0210	Minuteman 1B	-	-	Mk 11 RV?	FOT G1908	-	GLORY TRIP 90B	-	LF09	LF09	-	-	13007	-	-
1971-3112	2440985.50	1971 Feb 3	Minuteman 2	-	-	Mk 11 RV?	FOT G1101F	-	GLORY TRIP 101F	-	LF24	LF24	-	-	13007	-	-
1971-3113	2440987.72	1971 Feb 5 0820	Minuteman 2	-	-	Mk 11 RV?	OT G180M	-	GLORY TRIP 60M	-	LF04	LF04	-	-	13007	-	-
1971-3119	2440991.46	1971 Feb 6 2300	Minuteman 1B	-	-	Mk 11 RV	FOT G191B	-	GLORY TRIP 91B	-	LF07	LF07	-	-	13007	-	-
1971-3123	2440999.81	1971 Feb 17 0725	Minuteman 1B	-	-	Mk 12 RV x 3	DASO OLD FOX 05H	-	OLD FOX 05H	-	LF02	LF02	-	-	13007	-	-
1971-3128	2441005.50	1971 Feb 23	Minuteman 1B	-	-	SSTP Mk 11 RV?	SSTP M1-28	-	GLORY TRIP 102F	-	LF06	LF06	-	-	13007	-	KHR
1971-3130	2441007.58	1971 Feb 25 0200	Minuteman 2	-	-	Mk 11 RV?	FOT G1102F	-	GLORY TRIP 60M	-	LF25	LF25	-	-	13007	-	-
1971-3134	2441009.50	1971 Feb 27	Minuteman 2	-	-	Mk 11 RV?	OT G180M	-	GLORY TRIP 60M	-	LF04	LF04	-	-	13007	-	-
1971-3140	2441012.50	1971 Mar 2	Minuteman 1B	-	-	Mk 11 RV?	OT G180M	-	GLORY TRIP 92B-3	-	LF03	LF03	-	-	13007	-	-
1971-3172	2441027.50	1971 Mar 17	Minuteman 1B	-	-	Mk 12 RV x 3	OT G180M	-	GLORY TRIP 010H	-	LF06	LF06	-	-	13007	-	KHR
1971-3197	2441034.81	1971 Mar 24 0725	Minuteman 1B	-	-	Mk 11 RV?	OT G180M	-	GLORY TRIP 62M	-	LF21	LF21	-	-	13007	-	-
1971-3221	2441042.96	1971 Apr 1 0840	Minuteman 3	-	-	Mk 12 RV x 3	OT G180M	-	GLORY TRIP 82M	-	LF21	LF21	-	-	13007	-	-
1971-3231	2441049.94	1971 Apr 6 1040	Minuteman 3	-	-	Mk 11 RV?	OT G180M	-	GLORY TRIP 82M	-	LF21	LF21	-	-	13007	-	-
1971-3245	2441064.89	1971 Apr 23 0925	Minuteman 3	-	-	Mk 12 RV x 3	OT G180M	-	GLORY TRIP 82M	-	LF21	LF21	-	-	13007	-	-
1971-3251	2441067.50	1971 Apr 26	Minuteman 1B	-	-	Mk 11 RV?	DASO OLD FOX 06F	-	OLD FOX 06F	-	LF26	LF26	-	-	13007	-	-
1971-3268	2441090.76	1971 Apr 19 0620	Minuteman 2	-	-	Mk 12 RV	FOT G193B	-	GLORY TRIP 93B	-	LF07	LF07	-	-	13007	-	-
1971-3297	2441092.50	1971 May 21	Minuteman 2	-	-	Mk 11 RV?	FOT G1105F	-	GLORY TRIP 105F	-	LF24	LF24	-	-	13007	-	-
1971-3300	2441096.50	1971 May 24	Minuteman 2	-	-	Mk 11 RV?	OT G183M	-	GLORY TRIP 63M	-	LF05	LF05	-	-	13007	-	-
1971-3302	2441098.79	1971 May 27 0656	Minuteman 3	-	-	Mk 12 RV x 3	FOT G1103F	-	GLORY TRIP 103F	-	LF22	LF22	-	-	13007	-	-
1971-3307	2441099.76	1971 May 28 0620	Minuteman 3	-	-	Mk 11 RV?	OT G180M	-	GLORY TRIP 020H	-	LF08	LF08	-	-	13007	-	-
1971-3321	2441106.50	1971 Jun 4	Minuteman 3	-	-	Mk 12 RV x 3	OT G180M	-	GLORY TRIP 030H	-	LF02	LF02	-	-	13007	-	-
1971-3327	2441110.12	1971 Jun 11 1455	Minuteman 3	-	-	Mk 11 RV?	OT G181H	-	GLORY TRIP 61H	-	LF04	LF04	-	-	13007	-	KHR
1971-3332	2441120.50	1971 Jun 18	Minuteman 1B	-	-	Mk 12 RV x 3	OT G181H	-	GLORY TRIP 61H	-	LF04	LF04	-	-	13007	-	-
1971-3336	2441125.50	1971 Jun 23	Minuteman 1B	-	-	Mk 11 RV?	OT G181H	-	GLORY TRIP 94B	-	LF21	LF21	-	-	13007	-	-
1971-3343	2441129.64	1971 Jun 27 0318	Minuteman 1B	-	-	Mk 12 RV?	OT G181H	-	GLORY TRIP 94B	-	LF21	LF21	-	-	13007	-	-
1971-3348	2441140.50	1971 Jul 6	Minuteman 1B	-	-	SSTP Mk 12 RV x 3	SSTP M1-14	-	GLORY TRIP 64H	-	LF06	LF06	-	-	13007	-	KHR
1971-3361	2441144.96	1971 Jul 12 1100?	Minuteman 1B	-	-	Mk 11 RV	OT G194H	-	GLORY TRIP 64H	-	LF06	LF06	-	-	13007	-	-
1971-3381	2441166.50	1971 Aug 3	Minuteman 1B	-	-	Mk 12 RV	OT G194H	-	GLORY TRIP 64H	-	LF06	LF06	-	-	13007	-	-
1971-3382	2441167.52	1971 Aug 4 1000	Minuteman 1B	-	-	Mk 11 RV?	FOT G196B	-	GLORY TRIP 96B	-	LF09	LF09	-	-	13007	-	-
1971-3384	2441170.05	1971 Aug 6 1250	Minuteman 2	-	-	Mk 11 RV?	FOT G1104F-1	-	GLORY TRIP 96B	-	LF09	LF09	-	-	13007	-	-
1971-3390	2441176.50	1971 Aug 13	Minuteman 2	-	-	Mk 11 RV?	OT G183M	-	GLORY TRIP 65M	-	LF04	LF04	-	-	13007	-	-
1971-3427	2441196.50	1971 Sep 3	Minuteman 2	-	-	Mk 12 RV?	OT G183M	-	GLORY TRIP 65M	-	LF04	LF04	-	-	13007	-	-
1971-3431	2441197.50	1971 Sep 6	Minuteman 2	-	-	Mk 11 RV?	OT G183M	-	GLORY TRIP 67M	-	LF05	LF05	-	-	13007	-	-
1971-3436	2441202.50	1971 Sep 10 1100	Minuteman 1B	-	-	Mk 12 RV x 3	OT G183M	-	GLORY TRIP 67M	-	LF05	LF05	-	-	13007	-	-
1971-3439	2441204.96	1971 Oct 6 0156	Minuteman 1B	-	-	Mk 11 RV?	OT G183M	-	GLORY TRIP 67M	-	LF05	LF05	-	-	13007	-	-
1971-3452	2441232.58	1971 Oct 6 0156	Minuteman 1B	-	-	Mk 11 RV?	OT G183M	-	GLORY TRIP 67M	-	LF05	LF05	-	-	13007	-	-
1971-3524	2441239.58	1971 Oct 6 0156	Minuteman 1B	-	-	Mk 12 RV x 3	OT G183M	-	GLORY TRIP 67M	-	LF05	LF05	-	-	13007	-	-
1971-3527	2441242.50	1971 Oct 18 1616	Minuteman 3	-	-	Mk 11 RV?	OT G183M	-	GLORY TRIP 67M	-	LF05	LF05	-	-	13007	-	-
1971-3538	2441246.15	1971 Oct 22 0740	Minuteman 3	-	-	Mk 12 RV x 3	OT G183M	-	GLORY TRIP 67M	-	LF05	LF05	-	-	13007	-	-
1971-3543	2441273.79	1971 Nov 18 0700	Minuteman 3	-	-	Mk 12 RV x 3	OT G183M	-	GLORY TRIP 67M	-	LF05	LF05	-	-	13007	-	-
1971-3567	2441278.79	1971 Nov 23 0658	Minuteman 3	-	-	Mk 12 RV x 3	OT G183M	-	GLORY TRIP 67M	-	LF05	LF05	-	-	13007	-	-
1971-3579	2441279.76	1971 Nov 24 0415	Minuteman 3	-	-	Mk 11 RV?	OT G183M	-	GLORY TRIP 67M	-	LF05	LF05	-	-	13007	-	-
1971-3578	2441282.50	1971 Dec 3 0846	Minuteman 1B	-	-	Mk 12 RV x 3	OT G183M	-	GLORY TRIP 67M	-	LF05	LF05	-	-	13007	-	-
1971-3578	2441282.50	1971 Dec 3 0846	Minuteman 1B	-	-	Mk 11 RV?	OT G183M	-	GLORY TRIP 67M	-	LF05	LF05	-	-	13007	-	-
1971-3607	2441300.50	1971 Dec 17 0100	Minuteman 3	-	-	SSTP Mk 12 RV x 3	SSTP M2-2	-	GLORY TRIP 68F	-	LF28	LF28	-	-	13007	-	KHR
1971-3613	2441302.50	1971 Dec 17 0945	Minuteman 3	-	-	Mk 12 RV x 3	OT G183M	-	GLORY TRIP 68F	-	LF28	LF28	-	-	13007	-	-
1972-361	2441342.96	1972 Jan 26 1195	Minuteman 3	-	-	Mk 11 RV?	OT G183M	-	GLORY TRIP 68F	-	LF28	LF28	-	-	13007	-	-
1972-364	2441356.50	1972 Feb 5 0800?	Minuteman 3	-	-	Mk 12 RV x 3	OT G183M	-	GLORY TRIP 68F	-	LF28	LF28	-	-	13007	-	-
1972-371	2441356.50	1972 Feb 5 0800?	Minuteman 3	-	-	Mk 11 RV?	OT G183M	-	GLORY TRIP 68F	-	LF28	LF28	-	-	13007	-	-
1972-371	2441356.50	1972 Feb 5 0800?	Minuteman 3	-	-	Mk 12 RV x 3	OT G183M	-	GLORY TRIP 68F	-	LF28	LF28	-	-	13007	-	-
1972-371	2441356.50	1972 Feb 5 0800?	Minuteman 3	-	-	Mk 11 RV?	OT G183M	-	GLORY TRIP 68F	-	LF28	LF28	-	-	13007	-	-
1972-371	2441356.50	1972 Feb 5 0800?	Minuteman 3	-	-	Mk 12 RV x 3	OT G183M	-	GLORY TRIP 68F	-	LF28	LF28	-	-	13007	-	-
1972-371	2441356.50	1972 Feb 5 0800?	Minuteman 3	-	-	Mk 11 RV?	OT G183M	-	GLORY TRIP 68F	-	LF28	LF28	-	-	13007	-	-
1972-371	2441356.50	1972 Feb 5 0800?	Minuteman 3	-	-	Mk 12 RV x 3	OT G183M	-	GLORY TRIP 68F	-	LF28	LF28	-	-	13007	-	-
1972-371	2441356.50	1972 Feb 5 0800?	Minuteman 3	-	-	Mk 11 RV?	OT G183M	-	GLORY TRIP 68F	-	LF28	LF28	-	-	13007	-	-
1972-371	2441356.50	1972 Feb 5 0800?	Minuteman 3	-	-	Mk 12 RV x 3	OT G183M	-	GLORY TRIP 68F	-	LF28	LF28	-	-	13007	-	-
1972-371	2441356.50	1972 Feb 5 0800?	Minuteman 3	-	-	Mk 11 RV?	OT G183M	-	GLORY TRIP 68F	-	LF28	LF28	-	-	13007	-	-
1972-371	2441356.50	1972 Feb 5 0800?	Minuteman 3	-	-	Mk 12 RV x 3	OT G183M	-	GLORY TRIP 68F	-	LF28	LF28	-	-	13007	-	-
1972-371	2441356.50	1972 Feb 5 0800?	Minuteman 3	-	-	Mk 11 RV?	OT G183M	-	GLORY TRIP 68F	-	LF28	LF28	-	-	13007	-	-
1972-371	2441356.50	1972 Feb 5 0800?	Minuteman 3	-	-	Mk 12 RV x 3	OT G183M	-	GLORY TRIP 68F	-	LF28	LF28	-	-	13007	-	-
1972-371	2441356.50	1972 Feb 5 0800?	Minuteman 3	-	-	Mk 11 RV?	OT G183M	-	GLORY TRIP 68F	-	LF28	LF28	-	-	13007	-	-
1972-371	2441356.50	1972 Feb 5 0800?	Minuteman 3	-	-	Mk 12 RV x 3	OT G183M	-	GLORY TRIP 68F	-	LF28	LF28	-	-	13007	-	-
1972-371	2441356.50	1972 Feb 5 0800?	Minuteman 3	-	-	Mk 11 RV?	OT G183M	-	GLORY TRIP 68F	-	LF28	LF28	-	-	13007	-	-
1972-371	2441356.50	1972 Feb 5 0800?	Minuteman 3	-	-	Mk 12 RV x 3	OT G183M	-	GLORY TRIP 68F	-	LF28	LF28	-	-	13007	-	-
1972-371	2441356.50	1972 Feb 5 0800?	Minuteman 3	-	-	Mk 11 RV?	OT G183M	-	GLORY TRIP 68F	-	LF28	LF28	-	-	13007	-	-
1972																	

Launch

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Mission	Launch	FlightCode	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee_Km	Range_Km	Dest
1973-S165	2441806.50	1973 May 4	Minuteman 1B	-	-	SSTP Mk 12 RV x 3	SSTP M2-24	V	-	-	LF06	LF06	-	-	13007	-	KHR
1973-S178	2441834.63	1973 Jun 1 0310	Minuteman 3	-	FTM-5376	SSTP Mk 12 RV x 3	PWM-4	V	-	-	LF09	LF09	-	-	13007	-	KHR
1973-S196	2441841.63	1973 Jun 8 0308	Minuteman 1B	-	-	SSTP Mk 11 RV	SSTP M2-22	V	-	-	LF06	LF06	-	-	13007	-	KHR
1973-S211	2441860.38	1973 Jun 27 0830	Minuteman 3	-	FTM-2644	Mk 11C RV	OT GT134H	V	-	-	LF07	LF07	-	-	13007	-	-
1973-S230	2441870.38	1973 Jul 6 2100	Minuteman 3	-	-	Mk 12 RV x 3	GLORY TRIP 236B	V	-	-	LF25	LF25	-	-	13007	-	-
1973-S243	2441884.54	1973 Jul 21 0100	Minuteman 1B	-	-	SSTP	SSTP M2-18	V	-	-	LF06	LF06	-	-	13007	-	KHR
1973-S249	2441890.39	1973 Jul 26 2125	Minuteman 2	-	-	Mk 11 RV?	ERCS GIANT MOON 4	V	-	-	LF05	LF05	-	-	13007	-	BOA
1973-S264	2441896.50	1973 Aug 2	Minuteman 2	-	-	Mk 12 RV x 3	FOT GT113H	V	-	-	LF04	LF04	-	-	13007	-	-
1973-S271	2441918.57	1973 Aug 9	Minuteman 1B	-	-	Mk 12 RV x 3	FOT GT113H	V	-	-	LF08	LF08	-	-	13007	-	KHR
1973-S296	2441930.50	1973 Aug 24 0135	Minuteman 3	-	PVM-3	Mk 12 RV x 3	RAD	V	-	-	LF02	LF02	-	-	13007	-	-
1973-S298	2441932.50	1973 Sep 7	Minuteman 1B	-	-	Mk 12 RV x 3	GLORY TRIP 430H	V	-	-	LF06	LF06	-	-	13007	-	-
1973-S304	2441940.73	1973 Sep 15 0525	Minuteman 3	-	-	Mk 12 RV x 3	SSTP M2-44	V	-	-	LF06	LF06	-	-	13007	-	KHR
1973-S314	2441951.65	1973 Sep 26 0335	Minuteman 2	-	-	Mk 11 RV?	OT GT256B	V	-	-	LF26	LF26	-	-	13007	-	-
1973-S337	2441968.77	1973 Oct 3 0630	Minuteman 2	-	-	Mk 11 RV?	FOT GT116H-1	V	-	-	LF04	LF04	-	-	13007	-	-
1973-S379	2442068.52	1973 Nov 3 0030	Minuteman 1B	-	-	Mk 12 RV x 3	FOT GT116H	V	-	-	LF07	LF07	-	-	13007	-	-
1973-S400	2442089.58	1973 Nov 22 0900	Minuteman 3	-	-	Mk 12 RV x 3	SSTP M2-38	V	-	-	LF06	LF06	-	-	13007	-	KHR
1973-S411	2442016.54	1973 Nov 30 0100	Minuteman 1B	-	-	SSTP	FOT GT420H-1	V	-	-	LF04	LF04	-	-	13007	-	-
1973-S438	2442027.50	1973 Dec 11	Minuteman 1B	-	-	HR-4	XX-4	V	-	-	LF06	LF06	-	-	13007	-	KHR
1973-S439	2442030.50	1973 Dec 14	Minuteman 1B	-	-	Mk 12 RV x 3	Army STP HR-4	V	-	-	LF03	LF03	-	-	13007	-	KHR?
1973-S446	2442038.94	1973 Dec 22 0805	Minuteman 1B	-	STM-6W	Mk 12 RV x 3	SSTP M2-20A	V	-	-	LF06	LF06	-	-	13007	-	KHR?
1974-S370	2442070.60	1974 Jan 23 0230	Minuteman 1B	-	-	Mk 12 RV x 3	RAD	V	-	-	LF08	LF08	-	-	13007	-	-
1974-S378	2442074.08	1974 Jan 26 1400?	Minuteman 1B	-	-	Mk 12 RV x 3	SSTP M2-28	V	-	-	LF06	LF06	-	-	13007	-	-
1974-S380	2442119.71	1974 Mar 13 0505	Minuteman 2	-	-	Mk 12 RV x 3	OT GT240B-1/SL Targ	V	-	-	LF25	LF25	-	-	13007	-	BOA
1974-S381	2442134.87	1974 Mar 28 0400	Minuteman 2	-	-	Mk 11 RV?	ERCS GIANT MOON 5	V	-	-	LF05	LF05	-	-	13007	-	-
1974-S388	2442139.68	1974 Apr 2 0418	Minuteman 2	-	-	Mk 12 RV x 3	FOT GT117H-1	V	-	-	LF07	LF07	-	-	13007	-	-
1974-S389	2442142.56	1974 Apr 5 0125	Minuteman 2	-	-	Mk 12 RV x 3	GLORY TRIP 119H	V	-	-	LF02	LF02	-	-	13007	-	KHR
1974-S389	2442142.56	1974 Apr 5 0125	Minuteman 2	-	PVM-5	Mk 12 RV x 3	RAD	V	-	-	LF21	LF21	-	-	13007	-	-
1974-S389	2442142.56	1974 Apr 5 0125	Minuteman 2	-	-	Mk 12 RV x 3	SSTP M2-135	V	-	-	LF06	LF06	-	-	13007	-	KHR
1974-S389	2442164.94	1974 Apr 27 0810?	Minuteman 1B	-	-	SSTP	-	V	-	-	LF03	LF03	-	-	13007	-	KHR
1974-S389	2442170.42	1974 May 2 2200	Minuteman 3	-	-	Mk 12 RV x 3	SSTP M2-35	V	-	-	LF02	LF02	-	-	13007	-	-
1974-S389	2442207.50	1974 Jul 9	Minuteman 2	-	-	Mk 11C RV	FOT GT120H	V	-	-	LF04	LF04	-	-	13007	-	-
1974-S389	2442240.15	1974 Jul 11 1540	Minuteman 1B	-	-	SMART-GZ/MIIT	ABRES SMART	V	-	-	LF03	LF03	-	-	13007	-	KHR?
1974-S389	2442247.94	1974 Jul 11 0088	Minuteman 1B	-	-	SSTP	SSTP M2-146	V	-	-	LF06	LF06	-	-	13007	-	KHR
1974-S389	2442260.50	1974 Aug 1	Minuteman 1B	-	-	Mk 12 RV x 3	SSTP M2-46	V	-	-	LF03	LF03	-	-	13007	-	-
1974-S389	2442277.18	1974 Aug 17 1620?	Minuteman 3	-	SAC OT-45	Mk 12 RV x 3	FOT GT450H	V	-	-	LF02	LF02	-	-	13007	-	-
1974-S389	2442319.15	1974 Sep 28 1534	Minuteman 3	-	-	Mk 12 RV x 3	FOT GT460B	V	-	-	LF22	LF22	-	-	13007	-	KHR?
1974-S389	2442326.76	1974 Oct 6 0610?	Minuteman 3	-	-	Mk 11 RV?	RAD	V	-	-	LF04	LF04	-	-	13007	-	KHR
1974-S389	2442328.56	1974 Oct 6 0335	Minuteman 3	-	-	Mk 12 RV x 3	RAD	V	-	-	LF02	LF02	-	-	13007	-	-
1974-S389	2442332.75	1974 Oct 12 0634	Minuteman 3	-	-	Mk 12 RV x 3	GLORY TRIP 1166H	V	-	-	LF21	LF21	-	-	13007	-	KHR
1974-S389	2442332.75	1974 Oct 12 0634	Minuteman 3	-	-	Mk 12 RV x 3	RAD	V	-	-	LF28	LF28	-	-	13007	-	-
1974-S389	2442343.12	1974 Oct 22 1485	Minuteman 2	-	-	ERCS	GLIANT MOON 6	V	-	-	LF06	LF06	-	-	13007	-	BOA
1974-S389	2442344.94	1974 Oct 25 1485	Minuteman 1B	-	-	Mk 9 RV?	GLORY TRIP 280H	V	-	-	EMFB	EMFB	-	LP12	13007	-	WTR LP3
1974-S389	2442367.12	1974 Oct 25 1485	Minuteman 1B	-	-	Mk 12 RV x 3	OT GT280H	V	-	-	EMFB	EMFB	-	-	13007	-	-
1974-S389	2442377.90	1974 Nov 26 0720	Minuteman 3	-	-	Mk 12 RV x 3	RAD	V	-	-	LF08	LF08	-	-	13007	-	-
1974-S389	2442386.81	1974 Dec 4 0720	Minuteman 3	-	-	Mk 12 RV x 3	GLORY TRIP 470B	V	-	-	LF06	LF06	-	-	13007	-	-
1974-S410	2442389.61	1974 Dec 18 0725	Minuteman 2	-	-	Mk 12 RV?	FOT GT121H	V	-	-	LF04	LF04	-	-	13007	-	-
1974-S410	2442391.50	1974 Dec 18 0725	Minuteman 2	-	-	USM Mk 14 RV	Mk 4 SFT-14	V	-	-	LF04	LF04	-	-	13007	-	-
1974-S410	2442391.50	1974 Dec 18 0725	Minuteman 2	-	-	Mk 12 RV x 3	GLORY TRIP 480H	V	-	-	LF04	LF04	-	-	13007	-	-
1974-S410	2442441.11	1975 Jan 29 1520	Minuteman 3	-	-	Mk 12 RV x 3	OT GT240H-1	V	-	-	LF09	LF09	-	-	13007	-	-
1974-S410	2442441.11	1975 Feb 5 4420	Minuteman 3	-	-	Mk 12 RV x 3	OT GT240H-1	V	-	-	LF09	LF09	-	-	13007	-	-
1974-S410	2442441.11	1975 Feb 5 4420	Minuteman 3	-	-	Mk 500 BB 101	SFT-101	V	-	-	LF06	LF06	-	-	13007	-	1600
1974-S410	2442441.11	1975 Feb 5 4420	Minuteman 3	-	-	Mk 500 BB 102	Exadex SFT-101	V	-	-	LF06	LF06	-	-	13007	-	-
1974-S410	2442441.11	1975 Feb 5 4420	Minuteman 3	-	-	Mk 500 BB 102	Exadex SFT-102	V	-	-	LF06	LF06	-	-	13007	-	-
1974-S410	2442441.11	1975 Feb 5 4420	Minuteman 3	-	-	Mk 12A RV x 3?	PANE PEPPER	V	-	-	LF02	LF02	-	-	13007	-	-
1974-S410	2442441.11	1975 Feb 5 4420	Minuteman 3	-	FTM 1406	FTM 1406	ABRES MTH-3	V	-	-	LF03	LF03	-	-	13007	-	-
1974-S410	2442441.11	1975 Feb 5 4420	Minuteman 3	-	-	Mk 12 RV x 3	OT GT310H	V	-	-	LF08	LF08	-	-	13007	-	-
1974-S410	2442441.11	1975 Feb 5 4420	Minuteman 3	-	-	Mk 12 RV x 3	OT GT310H	V	-	-	LF09	LF09	-	-	13007	-	-
1974-S410	2442441.11	1975 Feb 5 4420	Minuteman 3	-	-	Mk 12 RV x 3	RAD	V	-	-	LF06	LF06	-	-	13007	-	-
1974-S410	2442441.11	1975 Feb 5 4420	Minuteman 3	-	-	Mk 12A RV x 3?	PANE PEPPER	V	-	-	LF02	LF02	-	-	13007	-	-
1974-S410	2442441.11	1975 Feb 5 4420	Minuteman 3	-	-	Mk 12 RV x 3	OT GT310H	V	-	-	LF08	LF08	-	-	13007	-	-
1974-S410	2442441.11	1975 Feb 5 4420	Minuteman 3	-	-	Mk 12 RV x 3	RAD	V	-	-	LF06	LF06	-	-	13007	-	-
1974-S410	2442441.11	1975 Feb 5 4420	Minuteman 3	-	-	Mk 12A RV x 3?	PANE PEPPER	V	-	-	LF02	LF02	-	-	13007	-	-
1974-S410	2442441.11	1975 Feb 5 4420	Minuteman 3	-	-	Mk 12 RV x 3	OT GT310H	V	-	-	LF08	LF08	-	-	13007	-	-
1974-S410	2442441.11	1975 Feb 5 4420	Minuteman 3	-	-	Mk 12 RV x 3	RAD	V	-	-	LF06	LF06	-	-	13007	-	-
1974-S410	2442441.11	1975 Feb 5 4420	Minuteman 3	-	-	Mk 12A RV x 3?	PANE PEPPER	V	-	-	LF02	LF02	-	-	13007	-	-
1974-S410	2442441.11	1975 Feb 5 4420	Minuteman 3	-	-	Mk 12 RV x 3	OT GT310H	V	-	-	LF08	LF08	-	-	13007	-	-
1974-S410	2442441.11	1975 Feb 5 4420	Minuteman 3	-	-	Mk 12 RV x 3	RAD	V	-	-	LF06	LF06	-	-	13007	-	-
1974-S410	2442441.11	1975 Feb 5 4420	Minuteman 3	-	-	Mk 12A RV x 3?	PANE PEPPER	V	-	-	LF02	LF02	-	-	13007	-	-
1974-S410	2442441.11	1975 Feb 5 4420	Minuteman 3	-	-	Mk 12 RV x 3	OT GT310H	V	-	-	LF08	LF08	-	-	13007	-	-
1974-S410	2442441.11	1975 Feb 5 4420	Minuteman 3	-	-	Mk 12 RV x 3	RAD	V	-	-	LF06	LF06	-	-	13007	-	-
1974-S410	2442441.11	1975 Feb 5 4420	Minuteman 3	-	-	Mk 12A RV x 3?	PANE PEPPER	V	-	-	LF02	LF02	-	-	13007	-	-
1974-S410	2442441.11	1975 Feb 5 4420	Minuteman 3	-	-	Mk 12 RV x 3	OT GT310H	V	-	-	LF08	LF08	-	-	13007	-	-
1974-S410	2442441.11	1975 Feb 5 4420	Minuteman 3	-	-	Mk 12 RV x 3	RAD	V	-	-	LF06	LF06	-	-	13007	-	-
1974-S410	2442441.11	1975 Feb 5 4420	Minuteman 3	-	-	Mk 12A RV x 3?	PANE PEPPER	V	-	-	LF02	LF02	-	-	13007	-	-
1974-S410	2442441.11	1975 Feb 5 4420	Minuteman 3	-	-	Mk 12 RV x 3	OT GT310H	V	-	-	LF08	LF08	-	-	13007	-	-
1974-S410	2442441.11	1975 Feb 5 4420	Minuteman 3	-	-	Mk 12 RV x 3	RAD	V	-	-	LF06	LF06	-	-	13007	-	-
1974-S410	2442441.11	1975 Feb 5 4420	Minuteman 3	-	-	Mk 12A RV x 3?	PANE PEPPER	V	-	-	LF02	LF02	-	-	13007	-	-
1974-S410	2442441.11	1975 Feb 5 4420	Minuteman 3	-	-	Mk 12 RV x 3	OT GT310H	V	-	-	LF08	LF08	-	-	13007	-	-
1974-S410	2442441.11	1975 Feb 5 4420	Minuteman 3	-	-	Mk 12 RV											

Launch

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Mission	FlightCode	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee_Km	Range_Km	Dest
1976-S319	2443087.85	1976 Nov 5 0820	Minuteman 3	-	-	Mk 12 RV x 3	FOT GT556M	GLORY TRIP 550H	-	LF08	LF08	-	-	1300?	-	-
1976-S320	2443090.94	1976 Nov 6 1054	Minuteman 3	-	-	Mk 12 RV x 3	FOT GT566B	GLORY TRIP 566B	-	LF26	LF26	-	-	1300?	-	-
1976-S322	2443094.50	1976 Nov 12	Minuteman 3	-	STM-12M	Mk 12 RV x 3	RAD	STM-12M	-	LF21	LF21	-	-	1300?	-	-
1976-S340	2443113.77	1976 Dec 1 0630	Minuteman 3	-	-	Mk 12 RV x 3	UT GT326H-1	GLORY TRIP 326H-1	-	LF08	LF08	-	-	1300?	-	-
1977-S345	2443164.94	1977 Jan 21 0804	Minuteman 3	-	-	Mk 12 RV x 3	UT GT350H-1	GLORY TRIP 350H-1	-	LF08	LF08	-	-	1300?	-	-
1977-S355	2443174.71	1977 Jan 31 0505:00	Minuteman 3	-	STM-13M/5729	Mk 12A RV x 3?	RAD	STM-13M	-	LF21	LF21	-	-	1300?	-	-
1977-S356	2443175.50	1977 Feb 1	Minuteman 2	-	-	Mk 11 RV?	FOT GT132M	GLORY TRIP 132M	-	LF07	LF07	-	-	1300?	-	-
1977-S380	2443190.85	1977 Feb 16 0826	Minuteman 3	-	-	Mk 12 RV x 3	UT GT770H-2	GLORY TRIP 270H-2	-	LF09	LF09	-	-	1300?	-	-
1977-S396	2443204.85	1977 Feb 2 0817	Minuteman 3	-	-	Mk 12 RV x 3	FOT GT570B	GLORY TRIP 570B	-	LF26	LF26	-	-	1300?	-	-
1977-S166	2443281.84	1977 May 18	Minuteman 1B	-	-	TDV-1	ABRES TDV-1	GLORY TRIP 568B	-	LF06	LF06	-	-	1300?	-	-
1977-S173	2443291.84	1977 May 28 0810	Minuteman 3	-	-	Mk 12 RV x 3	UT GT340H-1	GLORY TRIP 340H-1	-	LF09	LF09	-	-	1300?	-	-
1977-S191	2443296.80	1977 Jun 17 0708	Minuteman 3	-	-	Mk 12 RV x 3	RAD	STM-14M	-	LF21	LF21	-	-	1300?	-	-
1977-S198	2443311.55	1977 Jun 17 0200:00	Minuteman 3	-	STM-14M/5747	Mk 12A RV x 3?	FOT GT134M	GLORY TRIP 134M	-	LF04	LF04	-	-	1300?	-	-
1977-S206	2443323.77	1977 Jun 29 0622	Minuteman 2	-	-	Mk 11 RV?	FOT GT606B	GLORY TRIP 606B	-	LF26	LF26	-	-	1300?	-	-
1977-S224	2443358.83	1977 Aug 3 0800	Minuteman 3	-	-	Mk 12 RV x 3	FOT GT590H-1	GLORY TRIP 590H-1	-	LF08	LF08	-	-	1300?	-	-
1977-S227	2443365.80	1977 Aug 10 0710	Minuteman 3	-	-	Mk 12 RV x 3	RAD	PYW-14	-	LF21	LF21	-	-	1300?	-	-
1977-S234	2443375.58	1977 Aug 20 0200	Minuteman 3	-	-	TDV-2	ABRES TDV-2	GLORY TRIP 560H	-	LF06	LF06	-	-	1300?	-	-
1977-S238	2443389.50	1977 Sep 3	Minuteman 1B	-	-	Mk 12 RV x 3	UT GT356H	GLORY TRIP 356H	-	LF09	LF09	-	-	1300?	-	-
1977-S248	2443400.50	1977 Sep 14 0710	Minuteman 3	-	-	Mk 12 RV x 3	RAD	PYW-15	-	LF21	LF21	-	-	1300?	-	-
1977-S277	2443460.50	1977 Nov 3	Minuteman 3	-	-	Mk 12 RV x 3	RAD	PYW-15	-	LF21	LF21	-	-	1300?	-	-
1977-S280	2443464.78	1977 Nov 13	Minuteman 1B	-	-	Mk 11 RV?	ABRES TDV-3	GLORY TRIP 138H	-	LF07	LF07	-	-	1300?	-	-
1977-S286	2443476.82	1977 Dec 1 0250	Minuteman 3	-	-	Mk 12 RV x 3	FOT GT138H	GLORY TRIP 360H	-	LF06	LF06	-	-	1300?	-	-
1977-S296	2443478.52	1977 Dec 7 0650	Minuteman 2	-	-	Mk 11 RV?	UT GT356H	GLORY TRIP 360H	-	LF09	LF09	-	-	1300?	-	-
1978-S42	2443514.50	1978 Jan 6	Minuteman 3	-	STM-16M	Mk 12A RV x 3?	RAD	STM-16M	-	LF21	LF21	-	-	1300?	-	-
1978-S42	2443514.50	1978 Jan 6	Minuteman 3	-	-	Mk 12 RV x 3	RAD	STM-15M	-	LF21	LF21	-	-	1300?	-	-
1978-S45	2443547.50	1978 Feb 5	Minuteman 3	-	-	Mk 12 RV x 3	RAD	GLORY TRIP 626B	-	LF26	LF26	-	-	1300?	-	-
1978-S47	2443584.50	1978 Feb 15	Minuteman 3	-	-	Mk 12 RV x 3	FOT GT610H	GLORY TRIP 610H	-	LF08	LF08	-	-	1300?	-	-
1978-S371	2443584.50	1978 Mar 9 0441	Minuteman 3	-	-	Mk 12 RV x 3	UT GT376H	GLORY TRIP 376H	-	LF09	LF09	-	-	1300?	-	-
1978-S371	2443584.50	1978 Mar 9 0441	Minuteman 3	-	-	Mk 12 RV x 3	ABRES TRIP-1	TRIP-1	-	LF06	LF06	-	-	1300?	-	-
1978-S100	2443603.97	1978 Apr 5 1115	Minuteman 1B	-	-	Mk 11 RV?	FOT GT136H	GLORY TRIP 136H	-	LF04	LF04	-	-	1300?	-	-
1978-S146	2443662.50	1978 Jun 3	Minuteman 3	-	-	Mk 12 RV x 3	FOT GT656B	GLORY TRIP 656B	-	LF26	LF26	-	-	1300?	-	-
1978-S152	2443667.50	1978 Jun 6	Minuteman 3	-	-	Mk 12 RV x 3	FOT GT656B	GLORY TRIP 656B	-	LF26	LF26	-	-	1300?	-	-
1978-S152	2443675.50	1978 Jun 16	Minuteman 1B	-	-	ANT-3	ABRES ANT-3	GLORY TRIP 640H	-	LF21	LF21	-	-	1300?	-	-
1978-S162	2443682.52	1978 Jun 23 0030	Minuteman 3	-	-	Mk 12A RV x 2	RAD	STM-16M	-	LF21	LF21	-	-	1300?	-	-
1978-S167	2443686.50	1978 Jun 27	Minuteman 3	-	-	Mk 12 RV x 3	RAD	GLORY TRIP 640H	-	LF08	LF08	-	-	1300?	-	-
1978-S174	2443714.50	1978 Jul 4	Minuteman 1B	-	-	ANT-2	ABRES ANT-2	GLORY TRIP 138H-1	-	LF06	LF06	-	-	1300?	-	-
1978-S184	2443714.50	1978 Jul 25	Minuteman 2	-	-	Mk 11 RV?	FOT GT138H-1	GLORY TRIP 138H-1	-	LF09	LF09	-	-	1300?	-	-
1978-S205	2443757.50	1978 Sep 6	Minuteman 3	-	-	Mk 12 RV x 3	FOT GT656B	GLORY TRIP 656B	-	LF26	LF26	-	-	1300?	-	-
1978-S231	2443828.50	1978 Nov 16	Minuteman 2	-	-	Mk 12 RV x 3	FOT GT130H-2	GLORY TRIP 130H-2	-	LF06	LF06	-	-	1300?	-	-
1978-S237	2443840.40	1978 Nov 28 0230	Minuteman 1B	-	-	ANT-3A	ABRES ANT-3A	GLORY TRIP 360H	-	LF06	LF06	-	-	1300?	-	-
1978-S246	2443847.50	1978 Dec 5	Minuteman 3	-	-	Mk 12 RV x 3	UT GT356H	GLORY TRIP 360H	-	LF09	LF09	-	-	1300?	-	-
1978-S251	2443850.50	1978 Dec 6	Minuteman 3	-	-	Mk 12A RV x 3	RAD	STM-17M	-	LF21	LF21	-	-	1300?	-	-
1979-S358	2443880.50	1979 Jan 19	Minuteman 1B	-	STM-17M	STREP-1	ABRES STREP-1	STREP-1	-	LF06	LF06	-	-	1300?	-	-
1979-S358	2443880.50	1979 Jan 19	Minuteman 3	-	-	ABRV-1	ABRES ABRV-1	GLORY TRIP 660H	-	LF06	LF06	-	-	1300?	-	-
1979-S43	2443897.50	1979 Jan 24	Minuteman 1B	-	-	Mk 12 RV x 3	FOT GT660H	GLORY TRIP 660H	-	LF06	LF06	-	-	1300?	-	-
1979-S43	2443897.50	1979 Jan 24	Minuteman 3	-	-	Mk 12 RV x 3	FOT GT660H	GLORY TRIP 660H	-	LF06	LF06	-	-	1300?	-	-
1979-S53	2443903.50	1979 Jan 26	Minuteman 3	-	-	Mk 12 RV x 3	RAD	PYW-16	-	LF26	LF26	-	-	1300?	-	-
1979-S60	2443910.50	1979 Feb 5	Minuteman 3	-	-	Mk 12A RV x 3	RAD	PYW-16	-	LF26	LF26	-	-	1300?	-	-
1979-S102	2443951.50	1979 Feb 23	Minuteman 3	-	-	Mk 12 RV x 3	RAD	GLORY TRIP 137M	-	LF07	LF07	-	-	1300?	-	-
1979-S106	2443951.50	1979 Mar 23	Minuteman 3	-	-	Mk 12 RV x 3	UT GT390H	GLORY TRIP 390H	-	LF09	LF09	-	-	1300?	-	-
1979-S128	2443983.50	1979 Mar 28 0100	Minuteman 3	-	-	Mk 12 RV x 3	RAD	PYW-17	-	LF21	LF21	-	-	1300?	-	-
1979-S157	2443983.50	1979 Apr 20 0100	Minuteman 3	-	-	Mk 12A RV x 2	RAD	PYW-17	-	LF21	LF21	-	-	1300?	-	-
1979-S157	2443983.50	1979 Apr 20 0100	Minuteman 3	-	-	Mk 12A RV x 2	RAD	PYW-17	-	LF21	LF21	-	-	1300?	-	-
1979-S159	2444065.50	1979 Jun 6 1739:00	Minuteman 1B	-	-	Mk 12A RV x 1	ABRES LRVV-1	LRVV-1	-	LF03	LF03	-	-	1300?	-	-
1979-S160	2444065.50	1979 Jun 10 1739:12	Minuteman 3	-	-	Mk 12 RV x 3	UT GT400M	GLORY TRIP 400M	-	LF09	LF09	-	-	1300?	-	-
1979-S160	2444065.50	1979 Jun 10 1739:12	Minuteman 3	-	-	Mk 12 RV x 3	UT GT400M	GLORY TRIP 400M	-	LF09	LF09	-	-	1300?	-	-
1979-S169	2444076.50	1979 Jun 10 1739:12	Minuteman 2	-	-	ESCS	ESCS GLANT M00N 9	GLANT M00N 9	-	LF04	LF04	-	-	1300?	-	-
1979-S170	2444076.50	1979 Jun 10 1739:12	Minuteman 2	-	-	ESCS	ESCS GLANT M00N 9	GLANT M00N 9	-	LF04	LF04	-	-	1300?	-	-
1979-S172	2444080.50	1979 Jun 26	Minuteman 3	-	-	Mk 12 RV x 3	FOT GT696B	GLORY TRIP 696B	-	LF06	LF06	-	-	1300?	-	-
1979-S179	2444089.50	1979 Jul 1	Minuteman 3	-	-	Mk 12 RV x 3	ABRES STREP-2	STREP-2	-	LF06	LF06	-	-	1300?	-	-
1979-S186	2444089.50	1979 Aug 20	Minuteman 1B	-	-	Mk 12A RV x 3	RAD	STM-18M	-	LF21	LF21	-	-	1300?	-	-
1979-S206	2444115.50	1979 Aug 20	Minuteman 3	-	-	Mk 12 RV x 3	ABRES ABRV-2	ABRV-2	-	LF03	LF03	-	-	1300?	-	-
1979-S209	2444138.50	1979 Sep 22	Minuteman 1B	-	-	Mk 11 RV?	ABRES ABRV-2	ABRV-2	-	LF03	LF03	-	-	1300?	-	-
1979-S214	2444144.50	1979 Sep 25	Minuteman 2	-	-	Mk 12 RV x 3	FOT GT138M	GLORY TRIP 138M	-	LF04	LF04	-	-	1300?	-	-
1979-S214	2444144.50	1979 Sep 25	Minuteman 2	-	-	Mk 12 RV x 3	FOT GT138M	GLORY TRIP 138M	-	LF04	LF04	-	-	1300?	-	-
1979-S244	2444220.50	1979 Sep 28	Minuteman 2	-	-	Mk 11 RV?	FOT GT139H	GLORY TRIP 139H	-	LF03	LF03	-	-	1300?	-	-
1979-S254	2444227.50	1979 Dec 20	Minuteman 1B	-	-	Mk 12 RV x 3	ABRES AMRV-1	AMRV-1	-	LF03	LF03	-	-	1300?	-	-
1980-S32	2444227.50	1979 Dec 20	Minuteman 1B	-	-	Mk 12 RV x 3	ABRES AMRV-1	AMRV-1	-	LF03	LF03	-	-	1300?	-	-
1980-S38	2444274.50	1980 Feb 5	Minuteman 3	-	-	Mk 12 RV x 3	RAD	PYW-18	-	LF21	LF21	-	-	1300?	-	-
1980-S54	2444290.50	1980 Feb 21	Minuteman 3	-	-	Mk 12 RV x 3	FOT GT710H	GLORY TRIP 710H	-	LF09	LF09	-	-	1300?	-	-
1980-S54	2444293.50	1980 Feb 24	Minuteman 3	-	-	Mk 12 RV x 3	FOT GT726B									

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Mission	Launch	FlightCode	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee_Km	Range_Km	Dest
1981-S172	2444932.50	1981 Nov 24	Minuteman 3	-	-	FOT GT5940H-1	-	GLORY TRIP 840H-1	-	LF09	LF09	-	-	1300?	-	KHR
1981-S180	2444947.50	1981 Dec 9	Minuteman 3	-	-	FOT GT5940H-1	-	GLORY TRIP 850B	-	LF26	LF26	-	-	1300?	-	KHR
1982-S48	2444999.07	1982 Jan 29 1343	Minuteman 3	-	-	FOT GT5968G	-	GLORY TRIP 860H	-	LF08	LF08	-	-	1300?	-	KHR
1982-S386	2445046.50	1982 Mar 18	Minuteman 2	-	-	FOT GT141NS	-	GLORY TRIP 141NS	-	LF04	LF04	-	-	1300?	-	KHR
1982-S104	2445060.07	1982 Mar 31 1335	Minuteman 3	-	-	FOT GT5968G	-	GLORY TRIP 870B	-	LF26	LF26	-	-	1300?	-	KHR
1982-S129	2445143.10	1982 Jun 22 1427	Minuteman 3	-	-	FOT GT5968G	-	GLORY TRIP 890H	-	LF08	LF08	-	-	1300?	-	KHR
1982-S139	2445169.50	1982 Jul 19	Minuteman 3	-	-	FOT GT142H	-	GLORY TRIP 142H	-	LF04	LF04	-	-	1300?	-	KHR
1982-S148	2445186.59	1982 Aug 5 0205	Minuteman 3	-	-	FOT GT5968G	-	GLORY TRIP 890H	-	LF09	LF09	-	-	1300?	-	KHR
1982-S170	2445236.50	1982 Sep 24	Minuteman 3	-	-	FOT GT5968G	-	GLORY TRIP 900B	-	LF26	LF26	-	-	1300?	-	KHR
1982-S173	2445250.50	1982 Oct 6	Minuteman 1B	-	-	RSLP STRP-21	-	-	-	LF03	LF03	-	-	1300?	-	KHR
1982-S175	2445257.50	1982 Oct 15 0225	Minuteman 3	-	-	RSLP STRP-21	-	GLORY TRIP 143NS-1	-	LF08	LF08	-	-	1300?	-	KHR
1982-S196	2445306.07	1982 Dec 2 1345	Minuteman 3	-	-	FOT GT591G	-	GLORY TRIP 910H	-	LF09	LF09	-	-	1300?	-	KHR
1983-S41	2445342.50	1983 Jan 5 0000	Minuteman 1B	-	-	RSLP LRV-2	-	GLORY TRIP 930G	-	LF03	LF03	-	-	1300?	-	KHR
1983-S52	2445372.98	1983 Feb 7 0944	Minuteman 1B	-	-	RSLP STRP-11 (HOE)	-	-	-	LF06	LF06	-	-	1300?	-	KHR
1983-S53	2445372.98	1983 Feb 7 09107	HOE	-	-	HOE 1	-	-	-	Meck	Meck	-	-	200?	-	KHR BOM?
1983-S54	2445390.16	1983 Feb 24 1567	Minuteman 3	-	-	FOT GT592GB	-	GLORY TRIP 92GB	-	LF26	LF26	-	-	100?	-	KHR
1983-S55	2445404.50	1983 Mar 11	Minuteman 3	-	-	FOT GT593GB	-	GLORY TRIP 93GB	-	LF04	LF04	-	-	1300?	-	KHR
1983-S72	2445409.50	1983 Mar 16	Minuteman 1B	-	-	FOT GT144NS	-	GLORY TRIP 144NS	-	LF03	LF03	-	-	1300?	-	KHR
1983-S77	2445409.50	1983 Mar 5	Minuteman 1B	-	-	RSLP STRP-22	-	-	-	LF03	LF03	-	-	1300?	-	KHR
1983-S95	2445469.50	1983 May 5	Minuteman 1B	-	-	HOE 2	-	-	-	Meck	Meck	-	-	1300?	-	KHR
1983-S104	2445462.50	1983 May 28	Minuteman 3	-	-	HOE 2	-	GLORY TRIP 940H	-	LF09	LF09	-	-	1300?	-	KHR
1983-S121	2445510.96	1983 Jun 25 1100	Minuteman 3	-	-	HOE 2	-	GLORY TRIP 950B	-	LF26	LF26	-	-	1300?	-	KHR
1983-S122	2445511.06	1983 Jun 25 1400	Minuteman 3	-	-	FOT GT5940H	-	GLORY TRIP 940H	-	LF09	LF09	-	-	1300?	-	KHR
1983-S167	2445599.50	1983 Sep 21 1355	Minuteman 3	-	-	FOT GT5968G	-	GLORY TRIP 960H	-	LF08	LF08	-	-	1300?	-	KHR
1983-S168	2445599.50	1983 Sep 21 1355	Minuteman 3	-	-	FOT GT5968G	-	GLORY TRIP 970H	-	LF09	LF09	-	-	1300?	-	KHR
1983-S176	2445606.58	1983 Sep 29 0200	Minuteman 2	-	-	FOT GT146NS	-	GLORY TRIP 146NS	-	LF04	LF04	-	-	1300?	-	KHR
1983-S205	2445660.50	1983 Nov 22	Minuteman 3	-	-	FOT GT5968G	-	GLORY TRIP 960B	-	LF26	LF26	-	-	1300?	-	KHR
1983-S211	2445663.50	1983 Dec 15	Minuteman 1B	-	-	HOE Target	-	-	-	LF05	LF05	-	-	1300?	-	KHR BOM?
1983-S212	2445663.50	1983 Dec 15	HOE	-	-	HOE 3	-	-	-	Meck	Meck	-	-	200?	-	KHR
1984-S45	2447224.97	1984 Jan 25 1115	Minuteman 3	-	-	FOT GT5968G	-	GLORY TRIP 960H	-	LF09	LF09	-	-	1300?	-	KHR
1984-S46	2447225.04	1984 Jan 25 1300	Minuteman 3	-	-	FOT GT100GH	-	GLORY TRIP 100GH	-	LF06	LF06	-	-	1300?	-	KHR
1984-S67	2447599.50	1984 Feb 29	Minuteman 2	-	-	FOT GT146NS	-	GLORY TRIP 146NS	-	LF04	LF04	-	-	1300?	-	KHR
1984-S80	2447598.50	1984 Apr 6	Minuteman 3	-	-	FOT GT101GB	-	GLORY TRIP 101GB	-	LF26	LF26	-	-	1300?	-	KHR
1984-S81	2447598.50	1984 Apr 6	Minuteman 3	-	-	FOT GT102GB	-	GLORY TRIP 102GB	-	LF09	LF09	-	-	1300?	-	KHR
1984-S82	2447598.50	1984 Apr 6	Minuteman 1B	-	-	RSLP STRP-13 (HOE)	-	-	-	LF05	LF05	-	-	1300?	-	KHR
1984-S83	2448661.50	1984 Jun 10	Minuteman 1B	-	-	HOE 4	-	-	-	Meck	Meck	-	-	1300?	-	KHR
1984-S84	2448661.50	1984 Jun 10	Minuteman 3	-	-	HOE 4	-	GLORY TRIP 103GH	-	LF09	LF09	-	-	1300?	-	KHR
1984-S114	2448666.96	1984 Sep 13 1100	Minuteman 3	-	-	HOE 4	-	GLORY TRIP 106GH	-	LF26	LF26	-	-	1300?	-	KHR
1984-S116	2448662.50	1984 Sep 19	Minuteman 3	-	-	FOT GT104GB	-	GLORY TRIP 104GB	-	LF26	LF26	-	-	1300?	-	KHR
1984-S121	2448697.99	1984 Oct 4 1145	Minuteman 3	-	-	FOT GT106GH	-	GLORY TRIP 106GH	-	LF04	LF04	-	-	1300?	-	KHR
1984-S124	2448691.50	1984 Oct 4 1145	Minuteman 1B	-	-	RSLP STRP-1	-	-	-	LF03	LF03	-	-	1300?	-	KHR
1985-S34	2448703.50	1985 Feb 5 1318	Minuteman 3	-	-	TPA-1	-	GLORY TRIP 106GH	-	LF04	LF04	-	-	100?	-	(KMR)
1985-S77	2448707.04	1985 Feb 20 1300	Minuteman 3	-	-	RSLP STRP-1	-	GLORY TRIP 107GB	-	LF26	LF26	-	-	1300?	-	KHR
1985-S78	2448707.04	1985 Feb 20 1300	Minuteman 3	-	-	RSLP STRP-1	-	GLORY TRIP 107GB	-	LF03	LF03	-	-	1300?	-	KHR
1985-S86	2448722.25	1985 Jun 16 0822	Minuteman 1B	-	-	TPA-2	-	-	-	LF03	LF03	-	-	1300?	-	KHR
1985-S88	2448722.25	1985 Jun 16 0822	Minuteman 3	-	-	TPA-2	-	GLORY TRIP 108GH	-	LF04	LF04	-	-	1300?	-	KHR
1985-S90	2448732.25	1985 Jun 16 1015	Minuteman 3	-	-	FOT GT109GB	-	GLORY TRIP 109GB	-	LF26	LF26	-	-	1300?	-	KHR
1985-S101	2448741.85	1985 Jul 15 0915	Minuteman 3	-	-	FOT GT109GB	-	GLORY TRIP 110GH	-	LF09	LF09	-	-	1300?	-	KHR
1985-S121	2448741.85	1985 Sep 28 0825	Minuteman 3	-	-	FOT GT110GH	-	GLORY TRIP 110GH	-	LF04	LF04	-	-	1300?	-	KHR
1985-S22	2448741.85	1986 Feb 15 1200	Minuteman 3	-	-	FOT GT112GB	-	GLORY TRIP 112GB	-	LF04	LF04	-	-	1300?	-	KHR
1986-S32	2448741.85	1986 Feb 15 1200	Minuteman 3	-	-	FOT GT112GB	-	GLORY TRIP 112GB	-	LF09	LF09	-	-	1300?	-	KHR
1986-S32	2448741.85	1986 Feb 15 1200	Minuteman 3	-	-	FOT GT112GB	-	GLORY TRIP 112GB	-	LF04	LF04	-	-	1300?	-	KHR
1986-S34	2448741.85	1986 Mar 15 1633	Minuteman 3	-	-	TPA-3	-	GLORY TRIP 114GH	-	LF03	LF03	-	-	1300?	-	KHR
1986-S34	2448741.85	1986 Mar 15 1633	Minuteman 1B	-	-	TPA-3	-	GLORY TRIP 115GB	-	LF06	LF06	-	-	1300?	-	KHR
1986-S56	2448741.85	1986 Jun 15 0800	Minuteman 3	-	-	FOT GT115GB	-	GLORY TRIP 115GB	-	LF06	LF06	-	-	1300?	-	KHR
1986-S76	2448741.85	1986 Jun 31 1240	Minuteman 3	-	-	FOT GT116GH-1	-	GLORY TRIP 116GH-1	-	LF04	LF04	-	-	1300?	-	KHR
1986-S82	2448741.85	1986 Jul 28 1404	Minuteman 3	-	-	FOT GT117GH	-	GLORY TRIP 117GH	-	LF04	LF04	-	-	1300?	-	KHR
1986-S82	2448741.85	1986 Jul 28 1404	Minuteman 3	-	-	FOT GT117GH	-	GLORY TRIP 117GH	-	LF06	LF06	-	-	1300?	-	KHR
1986-S94	2448698.83	1986 Sep 25 0800	Minuteman 3	-	-	SEMT-1	-	GLORY TRIP 110GB	-	LF03	LF03	-	-	90?	-	(KMR)
1987-S44	2448741.85	1987 Jan 28 0800?	Minuteman 1B	-	-	SEMT-1	-	-	-	LF03	LF03	-	-	1300?	-	KHR
1987-S45	2448741.85	1987 Jan 28 0800?	Minuteman 3	-	-	SEMT-1	-	GLORY TRIP 119GH	-	LF09	LF09	-	-	1300?	-	KHR
1987-S49	2448830.90	1987 Feb 4 0830	Minuteman 3	-	-	FOT GT120GB	-	GLORY TRIP 120GB	-	LF26	LF26	-	-	1300?	-	KHR
1987-S60	2448870.85	1987 Feb 16 0822	Minuteman 3	-	-	FOT GT121GH	-	GLORY TRIP 121GH	-	LF04	LF04	-	-	1300?	-	KHR
1987-S77	2448887.84	1987 Mar 2 0805?	Minuteman 3	-	-	TPA-3	-	GLORY TRIP 120GB	-	LF06	LF06	-	-	1300?	-	KHR
1987-S100	2448972.06	1987 Jul 25 1320	Minuteman 3	-	-	FOT GT122GB-1	-	GLORY TRIP 122GB-1	-	LF06	LF06	-	-	1300?	-	KHR
1987-S108	2448984.69	1987 Jul 31 1335	Minuteman 2	-	-	FOT GT148H	-	GLORY TRIP 148H	-	LF04	LF04	-	-	1300?	-	KHR
1987-S140	2447039.93	1987 Sep 12 0758	Minuteman 3	-	-	TPA-3	-	GLORY TRIP 123GH-1	-	LF06	LF06	-	-	1300?	-	KHR
1987-S146	2447059.50	1987 Sep 21	Minuteman 3	-	-	SEMT-2	-	-	-	LF03	LF03	-	-	1300?	-	KHR
1987-S164	2447097.58	1987 Oct 29 0148	Minuteman 1B	-	-	SEMT-2	-	-	-	LF04	LF04	-	-	1300?	-	KHR
1987-S166	2447102.95	1987 Nov 3 0825	Minuteman 2	-	-	FOT GT124GH	-	GLORY TRIP 124GH	-	LF09	LF09	-	-	1300?	-	KHR
1987-S168	2447109.20	1987 Nov 10 0210	Minuteman 2	-	-	FOT GT149H	-	GLORY TRIP 149H	-	LF07	LF07	-	-	1300?	-	KHR
1988-S44	2447179.12	1988 Jan 29 0240	Minuteman 1B	-	-	RSLP STRP-1	-	-	-	LF03	LF03	-	-	1300?	-	KHR
1988-S49	2447190.12	1988 Jan 29 1500	Minuteman 3	-	-	RSLP STRP-1	-	GLORY TRIP 126GB-1	-	LF26	LF26	-	-	1300?	-	KHR
1988-S98	2447316.06	1988 Jun 3 1328	Minuteman 3	-	-	FOT GT127GB	-	GLORY TRIP 127GB	-	LF26	LF26	-	-	1300?	-	KHR
1988-S103	2447354.94	1988 Jun 3 1328	Minuteman 3	-	-	FOT GT126GH	-	GLORY TRIP 126GH	-	LF09	LF09	-	-	1300?	-	KHR
1988-S104	2447355.04	1988 Jun 3 1328	Minuteman 3	-	-	FOT GT126GH	-	GLORY TRIP 126GH	-	LF04	LF04	-	-	1300?	-	KHR
1988-S130	2447355.04	1988 Oct 27 1528	Minuteman 3	-	-	FOT GT130GH	-	GLORY TRIP 130GH	-	LF04	LF04	-	-	1300?	-	KHR
1988-S30	2447352.03	1989 Feb 22 1357	Minuteman 3	-	-	FOT GT131GB	-	GLORY TRIP 131GB	-	LF26	LF26	-	-	1300?	-	KHR
1988-S38	2447579.50	1989 Feb 25 1357	Minuteman 3	-	-	FOT GT132GH-1	-	GLORY TRIP 132GH-1	-	LF04	LF04	-	-	1300?	-	KHR
1988-S41	2447592.95	1989 Mar 7 0826	Minuteman 3	-	-	FOT GT133GH	-	GLORY TRIP 133GH	-	LF04	LF04	-	-	1300?	-	KHR
1988-S69	2447714.05	1989 Jul 6 1316	Minuteman 3	-	-	FOT GT129GB-2	-	GLORY TRIP 129GB-2	-	LF26	LF26	-	-	1300?	-	KHR
1988-S70	2447719.10	1989 Jul 11 1651	Minuteman 3	-	-	FOT GT134GH	-	GLORY TRIP 134GH	-	LF09	LF09	-	-	1300?	-	KHR
1988-S95	2447796.05	19														

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Mission	Launch	FlightCode	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee_Km	Range_Km	Dest
1990-S133	2445153.86	1990 Sep 19 0840	Minotaur 3	-	-	Mk 12A RV x 3	FOT GT141GM/AUN Target		GLORY TRIP 141GM	-	LF09	LF09	-	-	1300?	-	KHR
1990-S152	2446201.50	1990 Nov 6	Minotaur 3	-	-	Mk 12A RV x 3	FOT GT142GM		GLORY TRIP 142GM	-	LF04	LF04	-	-	1300?	-	KHR
1991-S51	2446286.25	1991 Jan 29 1803:00	Minotaur 1B	-	-	ERIS Target	GB1-1 ERIS Target		GLORY TRIP 145GM	-	LF03	LF03	-	-	1300?	-	KHR BDA?
1991-S108	2446388.36	1991 May 11 2040	Minotaur 1B	-	-	ERIS Target	GB1-2 ERIS Target		-	-	LF03	LF03	-	-	1300?	-	KHR
1991-S113	2446428.63	1991 Jun 21 0301	Minotaur 1B	-	-	AST	RSLP AST		-	-	LF03	LF03	-	-	1300?	-	KHR
1991-S116	2446433.61	1991 Jun 26 0239	Minotaur 3	-	-	Mk 12 RV x 3	FOT GT144GB		GLORY TRIP 144GB	-	LF03	LF03	-	-	1300?	-	KHR
1991-S122	2446439.33	1991 Jul 2 1017	Minotaur 3	-	-	Mk 12 RV x 3?	FOT GT143GM		GLORY TRIP 143GM	-	LF10	LF10	-	-	1300?	-	KHR
1991-S143	2446503.52	1991 Sep 4 0032	Minotaur 3	-	-	Mk 12 RV x 3?	FOT GT145GM		GLORY TRIP 145GM	-	LF04	LF04	-	-	1300?	-	KHR
1991-S166	2446571.93	1991 Nov 11 1019	Minotaur 3	-	-	Mk 12 RV x 3	FOT GT146GM		GLORY TRIP 146GM	-	LF09	LF09	-	-	1300?	-	KHR
1992-S259	2446695.26	1992 Mar 13 1815:00	Minotaur 1B	-	-	ERIS Target	GB1-2B ERIS Target		-	-	LF10	LF10	-	-	1300?	-	KHR
1992-S329	2446747.50	1992 May 5	Minotaur 3	-	-	Mk 12/12A RV x 3?	FOT GT147GM-1		GLORY TRIP 147GM-1	-	LF03	LF03	-	-	1300?	-	KHR
1992-S48	2446775.96	1992 Jun 2 1100	Minotaur 3	-	-	Mk 12 RV x 3	FOT GT148GB		GLORY TRIP 148GB	-	LF26	LF26	-	-	1300?	-	KHR
1992-S48	2446894.52	1992 Sep 29 0022	Minotaur 3	-	-	Mk 12 RV x 3	FOT GT149GB		GLORY TRIP 149GB	-	LF26	LF26	-	-	1300?	-	KHR
1992-S89	2446920.58	1992 Oct 25 0106	Minotaur 1B	-	-	AST-DT 2	RSLP AST-DT 2		-	-	LF03	LF03	-	-	100?	-	(GHR)
1992-S91	2446930.58	1992 Nov 4 0200	Minotaur 3	-	-	Mk 12A RV x 3	FOT GT150GM		GLORY TRIP 150GM	-	LF04	LF04	-	-	100?	-	(GHR)
1993-S21	2446956.58	1993 Mar 10 0164	Minotaur 3	-	-	Mk 12 RV x 3	FOT GT151GB		GLORY TRIP 151GB	-	LF03	LF03	-	-	1300?	-	KHR
1993-S21	2446956.58	1993 Jun 15 1730	Minotaur 1B	-	-	DT-1	RSLP DT-1		-	-	LF03	LF03	-	-	1?	-	(GHR)
1993-S44	2446971.50	1993 Jul 3 0001	Minotaur 3	-	-	Mk 12A RV x 3?	FOT GT152GM		GLORY TRIP 152GM	-	LF09	LF09	-	-	1300?	-	KHR
1993-S57	2449231.51	1993 Sep 1 0009	Minotaur 3	-	-	Mk 12/12A RV x 3?	FOT GT153GB		GLORY TRIP 153GB	-	LF26	LF26	-	-	1300?	-	KHR
1994-S09	2449365.50	1994 Feb 2	Minotaur 3	-	-	Mk 12 RV x 3?	FOT GT154GB		GLORY TRIP 154GB	-	LF26	LF26	-	-	1300?	-	KHR
1994-S38	2449511.50	1994 Jun 6	Minotaur 3	-	-	Mk 12/12A RV x 3?	FOT GT155GM		GLORY TRIP 155GM	-	LF04	LF04	-	-	1300?	-	KHR
1994-S45	2449540.40	1994 Jul 6 1415	Minotaur 3	-	-	Mk 12A RV x 3?	FOT GT156GM		GLORY TRIP 156GM	-	LF09	LF09	-	-	1300?	-	KHR
1994-S45	2449540.40	1994 Oct 5 0800	Minotaur 3	-	-	Mk 12/12A RV x 3?	FOT GT157GM		GLORY TRIP 157GM	-	LF04	LF04	-	-	1300?	-	KHR
1995-S08	2449749.50	1995 Feb 1	Minotaur 3	-	-	Mk 12A RV x 3?	FOT GT158GM		GLORY TRIP 158GM	-	LF09	LF09	-	-	1300?	-	KHR
1995-S22	2449793.50	1995 Mar 17	Minotaur 3	-	-	Mk 12 RV x 3?	FOT GT159GM		GLORY TRIP 159GM	-	LF04	LF04	-	-	1300?	-	KHR
1996-S12	2450261.01	1996 Jun 26 1217	Minotaur 3	-	-	Mk 12A RV x 3?	FOT GT160GM		GLORY TRIP 160GM	-	LF10	LF10	-	-	1300?	-	KHR
1996-S32	2450261.01	1996 Jun 26 1217	Minotaur 3	-	-	Mk 12A RV x 3?	FOT GT160GM-1		GLORY TRIP 160GM-1	-	LF04	LF04	-	-	1300?	-	KHR
1996-S57	2450384.20	1996 Sep 27 1651	Minotaur 3	-	-	MSLS IFT-Demo	MSLS IFT-Demo		-	-	LF03	LF03	-	-	1600	-	KHR
1997-S04	2450465.58	1997 Jan 30 0842	Minotaur 2	-	-	MSLS IFT-1	IFT-1 EVI Target		GLORY TRIP 163GB	-	LF03	LF03	-	-	1300?	-	KHR
1997-S06	2450465.58	1997 Jan 30 0842	Minotaur 2	-	-	Mk 12 RV x 3?	FOT GT163GB		GLORY TRIP 163GB	-	LF26	LF26	-	-	1300?	-	KHR
1997-S40	2450669.85	1997 May 17 0627	Minotaur 3	-	-	Mk 12A RV x 3?	FOT GT164GM/SHARP		GLORY TRIP 164GM	-	LF04	LF04	-	-	1300?	-	KHR/BDA
1997-S46	2450671.82	1997 Jun 18 1001	Minotaur 3	-	-	MSLS IFT-1A	FOT GT165GM		GLORY TRIP 165GM	-	LF10	LF10	-	-	1300?	-	KHR/BDA
1997-S47	2450623.94	1997 Jun 24 0359	Minotaur 2	-	-	MSLS IFT-2	MSLS IFT-2		-	-	LF03	LF03	-	-	1600	-	KHR
1998-S02	2450623.94	1998 Jun 26 0616	Minotaur 2	-	-	Mk 12A RV x 2	FOT GT166GM		GLORY TRIP 166GM	-	LF04	LF04	-	-	1000?	-	KHR
1998-S19	2450684.53	1998 Feb 20 0616	Minotaur 3	-	-	Mk 12/12A RV x 3?	FOT GT166GM		GLORY TRIP 167GB	-	LF26	LF26	-	-	1000?	-	(GHR)
1998-S46	2450688.53	1998 Jun 23 1957	Minotaur 3	-	-	Mk 12A RV x 3	FOT GT167GB		GLORY TRIP 167GB	-	LF09	LF09	-	-	1300?	-	KHR
1998-S46	2450688.53	1998 Jun 24 1246	Minotaur 3	-	-	Mk 12/12A RV x 3	GRP-IDP-1		GLORY TRIP 168GM	-	LF10	LF10	-	-	1300?	-	KHR
1998-S49	2450689.03	1998 Jun 24 1246	Minotaur 3	-	-	Mk 12/12A RV x 3?	GRP-IDP-2		GLORY TRIP 168GM	-	LF10	LF10	-	-	1300?	-	KHR
1998-S53	2451074.83	1998 Sep 18 0801	Minotaur 3	-	-	Mk 12/12A RV x 3?	GRP-IDP-2		GLORY TRIP 168GM	-	LF10	LF10	-	-	1300?	-	KHR
1999-S08	2451219.84	1999 Feb 10 0806	Minotaur 3	-	-	Mk 12/12A RV x 3?	DEP GT169GM		GLORY TRIP 169GM	-	LF04	LF04	-	-	1300?	-	KHR
1999-S54	2451410.56	1999 Aug 20 0945:59	Minotaur 3	-	-	Mk 12A RV x 3	FCT-GT170GM-1/RNF-6		GLORY TRIP 170GM-1	-	LF09	LF09	-	-	1300?	-	KHR/BDA
1999-S55	2451454.58	1999 Aug 20 0945:59	Minotaur 3	-	-	Mk 12A RV x 3	FCT-GT170GM		GLORY TRIP 171GM	-	LF09	LF09	-	-	1300?	-	KHR
1999-S77	2451454.58	1999 Oct 5 0201	Minotaur 2	-	-	MSLS IFT-3	MSLS IFT-3		PRP FTH-01	-	LF26	LF26	-	-	1300?	-	KHR
1999-S77	2451454.58	1999 Oct 5 0201	Minotaur 2	-	-	SPU/576FTS	MSLS IFT-3		PRP FTH-01	-	LF26	LF26	-	-	1300?	-	KHR
2000-S02	2451622.60	2000 Jan 13 0819	Minotaur 2	-	-	MSLS IFT-4	MSLS IFT-4		PRP FTH-02	-	LF06	LF06	-	-	1300?	-	(KMR)
2000-S02	2451622.60	2000 Jan 29 0243	Minotaur 2	-	-	MSLS IFT-4	MSLS IFT-4		PRP FTH-02	-	LF06	LF06	-	-	1300?	-	(KMR)
2000-S31	2451688.93	2000 Jun 27 0801	Minotaur 3	-	-	MSLS IFT-4	JANSAT		GLORY TRIP 172GM	-	LF06	LF06	-	-	1300?	-	KHR
2000-S32	2451700.83	2000 Aug 28 2000	Minotaur II	-	-	TLV Demo	TLV Demo		GLORY TRIP 172GM	-	LF06	LF06	-	-	1300?	-	KHR
2000-S32	2451700.83	2000 Aug 28 2000	Minotaur II	-	-	TLV Demo	TLV Demo		GLORY TRIP 172GM	-	LF06	LF06	-	-	1300?	-	KHR
2000-S41	2451723.88	2000 Jun 8 0410	Minotaur 2	-	-	MSLS IFT-5	MSLS IFT-5		GLORY TRIP 172GM	-	LF03	LF03	-	-	1300?	-	KHR
2000-S42	2451745.94	2000 Jun 19 2009:00	Minotaur 2	-	-	MSLS IFT-5	MSLS IFT-5		GLORY TRIP 172GM	-	LF03	LF03	-	-	1300?	-	KHR
2000-S42	2451745.94	2000 Jun 19 2009:00	Minotaur 2	-	-	MSLS IFT-5	MSLS IFT-5		GLORY TRIP 172GM	-	LF03	LF03	-	-	1300?	-	KHR
2000-S42	2451745.94	2000 Jun 19 2009:00	Minotaur 2	-	-	MSLS IFT-5	MSLS IFT-5		GLORY TRIP 172GM	-	LF03	LF03	-	-	1300?	-	KHR
2000-S42	2451745.94	2000 Jun 19 2009:00	Minotaur 2	-	-	MSLS IFT-5	MSLS IFT-5		GLORY TRIP 172GM	-	LF03	LF03	-	-	1300?	-	KHR
2000-S56	2451815.93	2000 Sep 28 0801	Minotaur 3	-	-	MSLS IFT-5	MSLS IFT-5		GLORY TRIP 172GM	-	LF03	LF03	-	-	1300?	-	KHR
2000-S57	2451815.93	2000 Sep 28 1001	Minotaur 3	-	-	MSLS IFT-5	MSLS IFT-5		GLORY TRIP 172GM	-	LF03	LF03	-	-	1300?	-	KHR
2001-S06	2451947.86	2001 Feb 7 0928	Minotaur 3	-	-	MSLS IFT-5	MSLS IFT-5		GLORY TRIP 172GM	-	LF03	LF03	-	-	1300?	-	KHR
2001-S35	2451947.86	2001 Feb 7 0928	Minotaur 3	-	-	MSLS IFT-5	MSLS IFT-5		GLORY TRIP 172GM	-	LF03	LF03	-	-	1300?	-	KHR
2001-S50	2452015.81	2001 Jun 15 0240	Minotaur 3	-	-	MSLS IFT-5	MSLS IFT-5		GLORY TRIP 172GM	-	LF03	LF03	-	-	1300?	-	KHR
2001-S51	2452015.81	2001 Jun 15 0240	Minotaur 3	-	-	MSLS IFT-5	MSLS IFT-5		GLORY TRIP 172GM	-	LF03	LF03	-	-	1300?	-	KHR
2001-S51	2452015.81	2001 Jun 15 0240	Minotaur 3	-	-	MSLS IFT-5	MSLS IFT-5		GLORY TRIP 172GM	-	LF03	LF03	-	-	1300?	-	KHR
2001-S51	2452015.81	2001 Jun 15 0240	Minotaur 3	-	-	MSLS IFT-5	MSLS IFT-5		GLORY TRIP 172GM	-	LF03	LF03	-	-	1300?	-	KHR
2001-S51	2452015.81	2001 Jun 15 0240	Minotaur 3	-	-	MSLS IFT-5	MSLS IFT-5		GLORY TRIP 172GM	-	LF03	LF03	-	-	1300?	-	KHR
2001-S51	2452015.81	2001 Jun 15 0240	Minotaur 3	-	-	MSLS IFT-5	MSLS IFT-5		GLORY TRIP 172GM	-	LF03	LF03	-	-	1300?	-	KHR
2001-S51	2452015.81	2001 Jun 15 0240	Minotaur 3	-	-	MSLS IFT-5	MSLS IFT-5		GLORY TRIP 172GM	-	LF03	LF03	-	-	1300?	-	KHR
2001-S51	2452015.81	2001 Jun 15 0240	Minotaur 3	-	-	MSLS IFT-5	MSLS IFT-5		GLORY TRIP 172GM	-	LF03	LF03	-	-	1300?	-	KHR
2001-S51	2452015.81	2001 Jun 15 0240	Minotaur 3	-	-	MSLS IFT-5	MSLS IFT-5		GLORY TRIP 172GM	-	LF03	LF03	-	-	1300?	-	KHR
2001-S51	245201																

Launch

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Mission	FlightCode	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee_Km	Range_Km	Dest
2007-354	2454335_85	2007 Aug 23 0831	Mino'taur II+	-	TLV-7	TLV Target	MFIRE 2a	-	LF06	LF06	-	-	1300?	-	-
2008-313	2454658_83	2008 Apr 2 0801	Mintecman 3	-	-	Mk 21 RV?	GL1960H	-	LF09	LF09	-	-	1300?	-	KHR
2008-324	2454608_92	2008 May 22 1004	Mintecman 3	-	-	Mk 21 RV?	GL1970H	-	LF10	LF10	-	-	9750	-	GUAM
2008-338	2454691_83	2008 Aug 13 0801	Mintecman 3	-	-	2 x Mk12A, 1 x Mk 21?	GL1940H-1	-	LF04	LF04	-	-	1300?	-	KHR
2008-345	2454733_79	2008 Sep 24 0657	Mino'taur II+	-	TLV-8 Chimera	TLV Target	MFIRE 2b	-	LF06	LF06	-	-	1300?	-	KHR
2008-359	2454775_88	2008 Sep 25 0900	Mintecman 3	-	-	Mk 21 RV?	GL1980H	-	LF09	LF09	-	-	1300?	-	KHR
2009-028	2454971_50	2009 May 19 2355	Mino'taur I	8	-	Tacsat 3	GL1980H	-	Pad OB	Pad OB	-	-	467	-	-
2009-331	2455011_92	2009 Jun 29 1001	Mintecman 3	-	-	Mk 12A RV x 3	GL1990H	-	LF04	LF04	-	-	1300?	-	KHR
2009-343	2455067_17	2009 Aug 23 1601	Mintecman 3	-	-	Mk 12/21 RV?	GL1990H-2	-	LF09	LF09	-	-	1300?	-	KHR
2010-342	2455363_92	2010 Jun 16 1001	Mintecman 3	-	-	Mk 21 RV	GL2000H-1	-	LF10	LF10	-	-	1300?	-	KHR
2010-344	2455377_94	2010 Jun 30 1040:01	Mintecman 3	-	-	Mk 21 RV	GL2010H	-	LF04	LF04	-	-	1300?	-	KHR
2010-356	2455456_92	2010 Sep 17 1003	Mintecman 3	-	-	Mk 21 RV	GL2020H	-	VS	SLS	-	-	1230	-	GUAM
2011-006	2455599_02	2011 Feb 6 1226	Mino'taur I	9	-	RPP	HRGL-66	-	LF09	LF09	-	-	1300?	-	-
2011-023	2455742_63	2011 Jun 22 1335	Mintecman 3	-	-	Mk 12/21 RV?	GL2040H	-	LF10	LF10	-	-	1300?	-	KHR
2011-333	2455769_92	2011 Jun 20 0309:00	Mino'taur I	10	-	ORS-1	GL2040H	-	Pad OB	Pad OB	-	-	444	-	-
2012-307	2455862_92	2011 Jul 27 1001	Mintecman 3	-	-	Mk 12/21 RV?	GL2050H	-	LF04	LF04	-	-	500?	-	(KHR)
2012-366	2456245_96	2012 Feb 25 1046	Mintecman 3	-	-	Mk 12/21 RV?	GL2030H	-	LF09	LF09	-	-	1300?	-	KHR
2013-337	2456435_06	2013 May 27 1053:59	Mintecman 3	-	-	Mk 12/21 RV?	GL2060H	-	LF10	LF10	-	-	1300?	-	KHR
2013-379	2456577_92	2013 Sep 22 1001:00	Mintecman 3	-	-	Mk 12/21 RV?	GL2070H	-	LF04	LF04	-	-	1300?	-	KHR
2013-386	2456661_94	2013 Sep 26 1033	Mintecman 3	-	-	Mk 12/21 RV?	GL2090H	-	LF10	LF10	-	-	1300?	-	KHR
2013-064	2456616_55	2013 Nov 20 0115	Mino'taur I	11	-	ORS-3/STP5M1-3	GL2090H-1	-	LF09	LF09	-	-	522	-	KHR
2014-357	2456924_11	2014 Dec 17 1236	Mintecman 3	-	-	Mk 12/21 RV?	GL2100H	-	Pad OB	Pad OB	-	-	1300?	-	KHR
2015-319	2457104_94	2015 Mar 23 1036:00	Mintecman 3	-	-	Mk 12/21 RV?	GL2110H	-	LF04	LF04	-	-	1300?	-	KHR
2015-323	2457106_95	2015 Mar 27 1053:59	Mintecman 3	-	-	Mk 12/21 RV?	GL2140H	-	LF10	LF10	-	-	1300?	-	GUAM
2015-331	2457162_94	2015 May 20 1037:00	Mintecman 3	-	-	Mk 12/21 RV?	GL2150H	-	LF04	LF04	-	-	1300?	-	GUAM
2015-344	2457253_52	2015 Aug 19 1005:00	Mintecman 3	-	-	Mk 12/21 RV?	GL2120H	-	LF09	LF09	-	-	1300?	-	KHR
2015-355	2457317_03	2015 Oct 21 1245:00	Mintecman 3	-	-	Mk 12/21 RV?	GL2130H	-	LF10	LF10	-	-	1300?	-	KHR
2016-307	2457439_52	2016 Feb 21 0734:00	Mintecman 3	-	-	Mk 12/21 RV?	GL2160H	-	LF04	LF04	-	-	1300?	-	KHR BDA
2016-308	2457444_79	2016 Feb 26 0701:00	Mintecman 3	-	-	Mk 12/21 RV?	GL2170H	-	LF09	LF09	-	-	1300?	-	KHR
2016-355	2457636_85	2016 Sep 5 0910	Mintecman 3	-	-	Mk 12/21 RV?	GL2180H	-	LF10	LF10	-	-	1300?	-	KHR
2017-328	2457893_52	2017 Feb 9 0738:59	Mintecman 3	-	-	Mk 12/21 RV?	GL2190H	-	LF04	LF04	-	-	1300?	-	KHR
2017-328	2457869_79	2017 Apr 26 0703:06	Mintecman 3	-	-	Mk 12/21 RV?	GL2200H	-	LF09	LF09	-	-	1300?	-	KHR
2017-352	2457976_79	2017 May 5 0701:59	Mintecman 3	-	-	Mk 12/21 RV?	GL2220H	-	LF04	LF04	-	-	1300?	-	KHR
2018-323	2458234_02	2018 Aug 5 0910:00	Mintecman 3	-	-	Mk 12/21 RV?	GL2230H	-	LF04	LF04	-	-	1300?	-	KHR
2018-325	2458252_85	2018 Apr 25 1228	Mintecman 3	-	-	Mk 12A RV x 3	GL2250H	-	LF10	LF10	-	-	1300?	-	KHR
2018-343	2458350_95	2018 May 14 0623	Mintecman 3	-	-	Mk 12/21 RV?	GL2260H	-	LF10	LF10	-	-	1300?	-	KHR
2018-368	2458425_79	2018 Jul 21 1138	Mintecman 3	-	-	Mk 12/21 RV?	GL2290H	-	LF04	LF04	-	-	200?	-	KHR
2019-316	2458620_79	2019 Feb 6 0701	Mintecman 3	-	-	Mk 12/21 RV?	GL2280H	-	LF10	LF10	-	-	1300?	-	KHR
2019-319	2458644_90	2019 May 4 0740	Mintecman 3	-	-	Mk 12/21 RV?	GL2300H	-	LF04	LF04	-	-	1300?	-	KHR BDA2
2019-351	2458756_84	2019 Oct 4 0813	Mintecman 3	-	-	Mk 12/21 RV?	GL2320H	-	LF09	LF09	-	-	1300?	-	KHR?
2020-313	2459084_86	2020 Feb 5 0933	Mintecman 3	-	-	Mk 12/21 RV?	GL2330H	-	LF10	LF10	-	-	1300?	-	KHR
2020-327	2459094_51	2020 Aug 2 0721	Mintecman 3	-	-	Mk 12/21 RV?	GL23450H	-	LF04	LF04	-	-	1300?	-	KHR BDA
2020-336	2459094_51	2020 Sep 29 09:07	Mintecman 3	-	-	Mk 12/21 RV?	GL2330H	-	LF04	LF04	-	-	1300?	-	KHR BDA
2021-052	2459269_83	2021 Feb 24 0740	Mintecman 3	-	-	Mk 12/21 RV?	GL2360H-1	-	LF09	LF09	-	-	1300?	-	KHR
2021-052	2459269_83	2021 Feb 24 0740	Mintecman 3	-	-	Mk 12/21 RV?	GL2370H	-	LF10	LF10	-	-	1300?	-	KHR
2021-052	2459377_93	2021 Jun 15 1335	Mino'taur I	12	-	USA 316/317/318	HRGL-111	-	Pad OB	Pad OB	-	-	608	-	-
2021-052	2459377_93	2021 Aug 1 0750	Mintecman 3	-	-	Mk 12/21 RV?	GL2380H	-	LF06	LF06	-	-	1300?	-	KHR
2021-052	2459377_93	2021 Jul 16 0749	Mino'taur II+	-	-	Mk 21A RV	GL2380H	-	TF09	TF09	-	-	1300?	-	KHR
2022-380	2459820_83	2022 Aug 7 0813	Mintecman 3	-	-	Mk 12/21 RV?	GL2430H	-	LF09	LF09	-	-	1300?	-	KHR
2022-384	2459854_01	2022 Sep 10 0701	Mintecman 3	-	-	Mk 12A RV x 3	GL2440H	-	LF10	LF10	-	-	1300?	-	KHR
2023-301	2460054_01	2023 Feb 19 1211	Mintecman 3	-	-	Mk 12/21 RV?	GL2450H	-	LF10	LF10	-	-	1300?	-	KHR
2023-319	2460193_95	2023 Apr 6 0826	Mintecman 3	-	-	Mk 12A RV x 3	GL2460H	-	LF09	LF09	-	-	1300?	-	KHR
2023-353	2460249_79	2023 Sep 6 0701	Mintecman 3	-	-	Mk 12/21 RV?	GL247	-	LF10	LF10	-	-	1300?	-	KHR
2024-336	2460465_83	2024 Jun 4 0756	Mintecman 3	-	-	Mk 12/21 RV?	GL248	-	LF09?	LF09?	-	-	1300?	-	KHR
2024-336	2460467_87	2024 Jun 6 0846	Mintecman 3	-	-	Mk 12/21 RV?	GL249	-	LF10	LF10	-	-	1300?	-	KHR
2024-339	2460479_79	2024 Jun 18 0701	Mino'taur I Lite	?	-	-	GL250	-	TF09	TF09	-	-	1000?	-	KHR
2024-366	2460620_79	2024 Nov 6 0701	Mintecman 3	-	-	Mk 12/21 RV?	GL251	-	LF10	LF10	-	-	1300?	-	KHR 168E 9H



Launch_Tag	Launch_JD	Launch_Date	LV_Type	Variant	Flight_ID	DrbPay	Agency	Launch_Code	Group	Category	LTCite	Cite	Notes
1959-A159	2436265.50	1959 Sep 15	Minuteman IA	T	-	0.000	AFBMD	MS	-	Test	CBMO	-	-
1959-A168	2436643.50	1959 Oct 2	Minuteman IA	T	-	0.000	AFBMD	MS	-	Test	CBMO	-	-
1959-A177	2436663.50	1959 Oct 22	Minuteman IA	T	-	0.000	AFBMD	MS	-	Test	CBMO	-	-
1959-A209	2436824.50	1959 Dec 22	Minuteman IA	T	-	0.000	AFBMD	MS	-	Test	CBMO	-	-
1960-A221	2436924.50	1960 Jan 27	Minuteman IA	T	-	0.000	AFBMD	MS	-	Test	CBMO	-	-
1960-A61	2436997.50	1960 Mar 4	Minuteman IA	T	-	0.000	AFBMD	MS	-	Test	CBMO	-	-
1960-A91	2437029.50	1960 Mar 5	Minuteman IA	T	-	0.000	AFBMD	MS	-	Test	CBMO	-	-
1960-A118	2437061.61	1960 May 7 0233	Minuteman IA	T	-	0.000	AFBMD	MS	-	Test	R.L.GG	-	CBMO
1961-S33	2437332.17	1961 Feb 1 1659	Minuteman IA	T	-	0.000	AFBMD	MS	-	Test	CBMO	-	-
1961-S154	2437439.10	1961 May 19 1418	Minuteman IA	-	401	0.000	AFBMD	MS	-	Test	CBMO	-	-
1961-S222	2437508.13	1961 Jul 27 1509	Minuteman IA	-	402	0.000	AFBMD	MS	-	Test	CBMO	-	-
1961-A192	2437542.23	1961 Aug 30 1730	Minuteman IA	-	403	0.000	AFBMD	MS	-	Test	CBMO	-	-
1961-S379	2437621.14	1961 Nov 17 1515	Minuteman IA	-	404	0.000	AFBMD	MS	-	Test	CBMO	-	-
1961-S429	2437652.04	1961 Dec 16 1304	Minuteman IA	-	405	0.000	AFBMD	MS	-	Test	CBMO	-	-
1962-S09	2437670.13	1962 Jan 5 1600:02	Minuteman IA	-	406	0.000	AFBMD	MS	-	Test	CBMO	-	-
1962-S28	2437690.12	1962 Jan 25 1489:48	Minuteman IA	-	408	0.000	AFBMD	MS	-	Test	CBMO	-	-
1962-S36	2437711.15	1962 Feb 15 1536:53	Minuteman IA	-	410	0.000	AFBMD	MS	-	Test	CBMO	-	-
1962-S64	2437732.14	1962 Mar 8 1523:51	Minuteman IA	-	409	0.000	AFBMD	MS	-	Test	CBMO	-	-
1962-S74	2437746.56	1962 Mar 23 0130:02	Minuteman IA	-	411	0.000	AFBMD	MS	-	Test	CBMO	-	-
1962-S68	2437779.58	1962 Apr 25 0159:45	Minuteman IA	-	412	0.000	AFBMD	MS	-	Test	CBMO	-	-
1962-S128	2437796.13	1962 May 11 1500:02	Minuteman IA	-	413	0.000	AFBMD	MS	-	Test	CBMO	-	-
1962-S174	2437803.58	1962 May 19 0159:59	Minuteman IA	-	414	0.000	AFBMD	MS	-	Test	CBMO	-	-
1962-S178	2437824.23	1962 Jun 8 1735:01	Minuteman IA	-	415	0.000	AFBMD	MS	-	Test	CBMO	-	-
1962-S207	2437844.74	1962 Jun 29 0540:00	Minuteman IA	-	416	0.000	AFBMD	MS	-	Test	CBMO	-	-
1962-S110	2437858.63	1962 Jul 13 0303:10	Minuteman IA	-	417	0.000	AFBMD	MS	-	Test	CBMO	-	-
1962-A133	2437866.13	1962 Aug 9 1605:02	Minuteman IA	-	418	0.000	AFBMD	MS	-	Test	CBMO	-	-
1962-S336	2437826.63	1962 Sep 19 0306:22	Minuteman IA	-	420	0.000	AFBMD	MS	-	Test	CBMO	-	-
1962-S337	2437827.66	1962 Sep 20 0346:41	Minuteman IA	-	421	0.000	AFBMD	MS	-	Test	CBMO	-	-
1962-S356	2437856.54	1962 Sep 28 2101	Minuteman IA	-	503	0.000	AFBMD	MS	-	Test	CBMO	-	-
1962-A172	2437865.21	1962 Oct 16 0851:54	Minuteman IA	-	422	0.000	AFBMD	MS	-	Test	CBMO	-	-
1962-S641	2437868.21	1962 Nov 19 1700:11	Minuteman IA	-	424	0.000	AFBMD	MS	-	Test	CBMO	-	-
1962-A216	2438009.33	1962 Dec 7 1900:01	Minuteman IA	-	424	0.000	AFBMD	MS	-	Test	CBMO	-	-
1962-S653	2438013.63	1962 Dec 10 2000:07	Minuteman IA	-	502	0.000	AFBMD	MS	-	Test	CBMO	-	-
1962-S653	2438013.63	1962 Dec 15 0300:10	Minuteman IA	-	423	0.000	AFBMD	MS	-	Test	CBMO	-	-
1962-S653	2438013.63	1962 Dec 21 0035:15	Minuteman IA	-	426	0.000	AFBMD	MS	-	Test	CBMO	-	-
1963-S09	2438037.44	1963 Jan 23 0230:10	Minuteman IA	-	423A	0.000	AFBMD	MS	-	Test	CBMO	-	-
1963-S19	2438053.26	1963 Jan 23 0130:13	Minuteman IA	-	419	0.000	AFBMD	MS	-	Test	CBMO	-	-
1963-S103	2438061.54	1963 Feb 24 0100:04	Minuteman IA	-	421B	0.000	AFBMD	MS	-	Test	CBMO	-	-
1963-S103	2438107.56	1963 Mar 19 0129:59	Minuteman IA	-	425	0.000	AFBMD	MS	-	Test	CBMO	-	-
1963-S114	2438116.56	1963 Mar 28 0130:00	Minuteman IA	-	419A	0.000	AFBMD	MS	-	Test	CBMO	-	-
1963-S145	2438130.59	1963 Apr 11 0208:59	Minuteman IA	-	420A	0.000	AFBMD	MS	-	Test	CBMO	-	-
1963-S145	2438131.55	1963 Apr 11 2030	Minuteman IA	-	554	0.000	AFBMD	MS	-	Test	CBMO	-	-
1963-S146	2438141.50	1963 Apr 12	Minuteman IA	-	555	0.000	AFBMD	MS	-	Test	CBMO	-	-
1963-S146	2438141.50	1963 Apr 12	Minuteman IA	-	556	0.000	AFBMD	MS	-	Test	CBMO	-	-
1963-S146	2438141.50	1963 Apr 12	Minuteman IA	-	557	0.000	AFBMD	MS	-	Test	CBMO	-	-
1963-S146	2438141.50	1963 Apr 12	Minuteman IA	-	558	0.000	AFBMD	MS	-	Test	CBMO	-	-
1963-S146	2438141.50	1963 Apr 12	Minuteman IA	-	559	0.000	AFBMD	MS	-	Test	CBMO	-	-
1963-S146	2438141.50	1963 Apr 12	Minuteman IA	-	560	0.000	AFBMD	MS	-	Test	CBMO	-	-
1963-S146	2438141.50	1963 Apr 12	Minuteman IA	-	561	0.000	AFBMD	MS	-	Test	CBMO	-	-
1963-S146	2438141.50	1963 Apr 12	Minuteman IA	-	562	0.000	AFBMD	MS	-	Test	CBMO	-	-
1963-S146	2438141.50	1963 Apr 12	Minuteman IA	-	563	0.000	AFBMD	MS	-	Test	CBMO	-	-
1963-S146	2438141.50	1963 Apr 12	Minuteman IA	-	564	0.000	AFBMD	MS	-	Test	CBMO	-	-
1963-S146	2438141.50	1963 Apr 12	Minuteman IA	-	565	0.000	AFBMD	MS	-	Test	CBMO	-	-
1963-S146	2438141.50	1963 Apr 12	Minuteman IA	-	566	0.000	AFBMD	MS	-	Test	CBMO	-	-
1963-S146	2438141.50	1963 Apr 12	Minuteman IA	-	567	0.000	AFBMD	MS	-	Test	CBMO	-	-
1963-S146	2438141.50	1963 Apr 12	Minuteman IA	-	568	0.000	AFBMD	MS	-	Test	CBMO	-	-
1963-S146	2438141.50	1963 Apr 12	Minuteman IA	-	569	0.000	AFBMD	MS	-	Test	CBMO	-	-
1963-S146	2438141.50	1963 Apr 12	Minuteman IA	-	570	0.000	AFBMD	MS	-	Test	CBMO	-	-
1963-S146	2438141.50	1963 Apr 12	Minuteman IA	-	571	0.000	AFBMD	MS	-	Test	CBMO	-	-
1963-S146	2438141.50	1963 Apr 12	Minuteman IA	-	572	0.000	AFBMD	MS	-	Test	CBMO	-	-
1963-S146	2438141.50	1963 Apr 12	Minuteman IA	-	573	0.000	AFBMD	MS	-	Test	CBMO	-	-
1963-S146	2438141.50	1963 Apr 12	Minuteman IA	-	574	0.000	AFBMD	MS	-	Test	CBMO	-	-
1963-S146	2438141.50	1963 Apr 12	Minuteman IA	-	575	0.000	AFBMD	MS	-	Test	CBMO	-	-
1963-S146	2438141.50	1963 Apr 12	Minuteman IA	-	576	0.000	AFBMD	MS	-	Test	CBMO	-	-
1963-S146	2438141.50	1963 Apr 12	Minuteman IA	-	577	0.000	AFBMD	MS	-	Test	CBMO	-	-
1963-S146	2438141.50	1963 Apr 12	Minuteman IA	-	578	0.000	AFBMD	MS	-	Test	CBMO	-	-
1963-S146	2438141.50	1963 Apr 12	Minuteman IA	-	579	0.000	AFBMD	MS	-	Test	CBMO	-	-
1963-S146	2438141.50	1963 Apr 12	Minuteman IA	-	580	0.000	AFBMD	MS	-	Test	CBMO	-	-
1963-S146	2438141.50	1963 Apr 12	Minuteman IA	-	581	0.000	AFBMD	MS	-	Test	CBMO	-	-
1963-S146	2438141.50	1963 Apr 12	Minuteman IA	-	582	0.000	AFBMD	MS	-	Test	CBMO	-	-
1963-S146	2438141.50	1963 Apr 12	Minuteman IA	-	583	0.000	AFBMD	MS	-	Test	CBMO	-	-
1963-S146	2438141.50	1963 Apr 12	Minuteman IA	-	584	0.000	AFBMD	MS	-	Test	CBMO	-	-
1963-S146	2438141.50	1963 Apr 12	Minuteman IA	-	585	0.000	AFBMD	MS	-	Test	CBMO	-	-
1963-S146	2438141.50	1963 Apr 12	Minuteman IA	-	586	0.000	AFBMD	MS	-	Test	CBMO	-	-
1963-S146	2438141.50	1963 Apr 12	Minuteman IA	-	587	0.000	AFBMD	MS	-	Test	CBMO	-	-
1963-S146	2438141.50	1963 Apr 12	Minuteman IA	-	588	0.000	AFBMD	MS	-	Test	CBMO	-	-
1963-S146	2438141.50	1963 Apr 12	Minuteman IA	-	589	0.000	AFBMD	MS	-	Test	CBMO	-	-
1963-S146	2438141.50	1963 Apr 12	Minuteman IA	-	590	0.000	AFBMD	MS	-	Test	CBMO	-	-
1963-S146	2438141.50	1963 Apr 12	Minuteman IA	-	591	0.000	AFBMD	MS	-	Test	CBMO	-	-
1963-S146	2438141.50	1963 Apr 12	Minuteman IA	-	592	0.000	AFBMD	MS	-	Test	CBMO	-	-
1963-S146	2438141.50	1963 Apr 12	Minuteman IA	-	593	0.000	AFBMD	MS	-	Test	CBMO	-	-
1963-S146	2438141.50	1963 Apr 12	Minuteman IA	-	594	0.000	AFBMD	MS	-	Test	CBMO	-	-
1963-S146	2438141.50	1963 Apr 12	Minuteman IA	-	595	0.000	AFBMD	MS	-	Test	CBMO	-	-
1963-S146	2438141.50	1963 Apr 12	Minuteman IA	-	596	0.000	AFBMD	MS	-	Test	CBMO	-	-
1963-S146	2438141.50	1963 Apr 12	Minuteman IA	-	597	0.000	AFBMD	MS	-	Test	CBMO	-	-
1963-S146	2438141.50	1963 Apr 12	Minuteman IA	-	598	0.000	AFBMD	MS	-	Test	CBMO	-	-
1963-S146	2438141.50	1963 Apr 12	Minuteman IA	-	599	0.000	AFBMD	MS	-	Test	CBMO	-	-
1963-S146	2438141.50	1963 Apr 12	Minuteman IA	-	600	0.000	AFBMD	MS	-	Test	CBMO	-	-
1963-S146	2438141.50	1963 Apr 12	Minuteman IA	-	601	0.000	AFBMD	MS	-	Test	CBMO	-	-
1963-S146	2438141.50	1963 Apr 12	Minuteman IA	-	602	0.000	AFBMD	MS	-	Test	CBMO	-	-
1963-S146	2438141.50	1963 Apr 12	Minuteman IA	-	603	0.000	AFBMD	MS	-	Test	CBMO	-	-
1963-S146	2438141.50	1963 Apr 12	Minuteman IA	-	604	0.000	AFBMD	MS	-	Test	CBMO	-	-
1963-S146	2438141.50	1963 Apr 12	Minuteman IA	-	605	0.000	AFBMD	MS	-	Test	CBMO	-	-
1963-S146	2438141.50	1963 Apr 12	Minuteman IA	-	606	0.000	AFBMD	MS	-	Test	CBMO	-	-
1963-S146	2438141.50	1963 Apr 12	Minuteman IA	-	607	0.000	AFBMD	MS	-	Test	CBMO	-	-
1963-S146	2438141.50	1963 Apr 12	Minuteman IA	-	608	0.000	AFBMD	MS	-	Test	CBMO	-	-
1963-S146	2438141.50	1963 Apr 12	Minuteman IA	-	609	0.000	AFBMD	MS	-	Test	CBMO	-	-
1963-S146	2438141.50	1963 Apr 12	Minuteman IA	-	610	0.000	AFBMD	MS	-	Test	CBMO	-	-
1963-S146	2438141.50	1963 Apr 12	Minuteman IA	-	611	0.000	AFBMD	MS	-	Test	CBMO	-	-
1963-S146	2438141.50	1963 Apr 12	Minuteman IA	-	612	0.000	AFBMD	MS	-	Test	CBMO	-	-
1963-S146													



Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	DrPay	Agency	Launch_Code	Group	Category	LTCite	Cite	Notes
1964-5117	2438451.56	1964 Feb 26 0129:58	Minuteman 1B	-	437	0.000	AFSSD	MS	-	Test	nsf-koenn	ETR	-
1964-5121	2438453.59	1964 Feb 28 0204:14	Minuteman 1B	-	439	0.000	AFSSD	MS	-	Test	ETR/Wire	-	-
1964-5122	2438454.50	1964 Feb 29	Minuteman 1A	-	581	0.000	ISTRAD	MS	-	OT	VAFB	-	-
1964-5123	2438454.50	1964 Feb 29	Minuteman 1A	-	636	0.000	ISTRAD	MS	-	OT	VAFB	-	-
1964-5145	2438465.21	1964 Mar 13 1704:47	Minuteman 1B	-	686	0.000	ISTRAD	MS	-	OT	VAFB	-	-
1964-5149	2438475.22	1964 Mar 20 1720:11	Minuteman 1B	-	440	0.000	AFSSD	MS	-	Test	ETR,Wire	ETR	-
1964-5151	2438478.50	1964 Mar 24	Minuteman 1B	-	812	0.000	ISTRAD	MS	-	OT	nsf-koenn	-	-
1964-441	2438479.50	1964 Mar 25	Minuteman 1B	-	738	0.000	ISTRAD	MF	-	OT	VAFB/Wire	SP-4005	-
1964-5170	2438480.50	1964 Mar 26	Minuteman 1A	-	597	0.000	ISTRAD	MS	-	OT	VAFB	-	-
1964-5174	2438485.61	1964 Mar 31 0238:11	Minuteman 1A	-	441	0.000	AFSSD	MS	-	Test	ETR/Wire	-	-
1964-5178	2438485.55	1964 Mar 31	Minuteman 1A	-	557	0.000	ISTRAD	MS	-	OT	VAFB	-	-
1964-5190	2438493.55	1964 Apr 8 0112:56	Minuteman 1A	-	443	0.000	AFSSD	MS	-	Test	nsf-koenn	ETR	-
1964-5202	2438498.29	1964 Apr 13 1900?	Minuteman 1B	-	734	0.000	ISTRAD	MS	-	OT	VAFB/Wire	-	-
1964-5223	2438505.96	1964 Apr 23 1100	Minuteman 1B	-	917	0.000	ISTRAD	MS	-	OT	VAFB/Wire	-	-
1964-5225	2438510.34	1964 Apr 24 2014:17	Minuteman 1A	-	444	0.000	AFSSD	MS	-	Test	nsf-koenn	ETR	-
1964-5227	2438512.50	1964 Apr 27	Minuteman 1B	-	605	0.000	ISTRAD	MS	-	OT	VAFB	-	-
1964-5233	2438522.50	1964 May 7	Minuteman 1A	-	1002	0.000	ISTRAD	MS	-	OT	VAFB	-	-
1964-5238	2438526.50	1964 May 11	Minuteman 1A	-	718	0.000	ISTRAD	MS	-	OT	VAFB	-	-
1964-5249	2438533.50	1964 May 18	Minuteman 1B	-	997	0.000	ISTRAD	MS	-	OT	VAFB	-	-
1964-5262	2438540.50	1964 May 25	Minuteman 1B	-	859	0.000	ISTRAD	MS	-	OT	VAFB	-	-
1964-5285	2438555.50	1964 Jun 9	Minuteman 1A	-	532	0.000	ISTRAD	MS	-	OT	VAFB	-	-
1964-5289	2438557.50	1964 Jun 9	Minuteman 1A	-	715	0.000	ISTRAD	MS	-	OT	VAFB	-	-
1964-5295	2438562.03	1964 Jun 15 1240	Minuteman 1A	-	910	0.000	ISTRAD	MS	-	OT	VAFB/Wire	-	-
1964-5312	2438576.38	1964 Jun 28 2100	Minuteman 1B	-	1141	0.000	AFSSD	MS	-	Test	VAFB/Wire	-	-
1964-5313	2438576.50	1964 Jun 30 0000	Minuteman 1A	-	631	0.000	ISTRAD	MS	-	OT	VAFB/Wire	-	-
1964-5327	2438584.29	1964 Jul 7 1900?	Minuteman 1A	-	1007	0.000	ISTRAD	MS	-	OT	VAFB/Wire	-	-
1964-4103	2438584.31	1964 Jul 7 1900?	Minuteman 1A	-	663	0.000	ISTRAD	MF	-	OT	VAFB/Wire	-	-
1964-5336	2438586.29	1964 Jul 9 1900?	Minuteman 1A	-	861	0.000	ISTRAD	MS	-	OT	VAFB/Wire	-	-
1964-5343	2438593.50	1964 Jul 13	Minuteman 1B	-	617	0.000	ISTRAD	MS	-	OT	VAFB	-	-
1964-5347	2438603.50	1964 Jul 27	Minuteman 1A	-	996	0.000	ISTRAD	MS	-	OT	VAFB	-	-
1964-5407	2438614.50	1964 Aug 7	Minuteman 1B	-	556	0.000	ISTRAD	MS	-	OT	VAFB	-	-
1964-5430	2438624.50	1964 Aug 17	Minuteman 1A	-	617	0.000	ISTRAD	MS	-	OT	VAFB	-	-
1964-5440	2438626.50	1964 Aug 21	Minuteman 1A	-	1072	0.000	ISTRAD	MS	-	OT	VAFB	-	-
1964-5442	2438632.50	1964 Aug 25	Minuteman 1B	-	969	0.000	ISTRAD	MS	-	OT	VAFB	-	-
1964-5455	2438640.41	1964 Sep 1 2151	Minuteman 1A	-	668	0.000	ISTRAD	MS	-	OT	Orthon	VAFB	-
1964-5460	2438647.49	1964 Sep 8 2340	Minuteman 1A	-	576	0.000	ISTRAD	MS	-	OT	Orthon	VAFB	-
1964-5462	2438649.53	1964 Sep 11 0650	Minuteman 1B	-	1024	0.000	ISTRAD	MS	-	OT	Orthon	VAFB	-
1964-5466	2438654.30	1964 Sep 15 1910	Minuteman 1B	-	1024	0.000	ISTRAD	MS	-	OT	Orthon	VAFB	-
1964-5475	2438660.30	1964 Sep 21 1916	Minuteman 1B	-	1108	0.000	ISTRAD	MS	-	OT	Orthon	VAFB	-
1964-5478	2438662.66	1964 Sep 24 0950	Minuteman 1B	-	406	0.000	ISTRAD	MS	-	OT	Orthon	VAFB	-
1964-5479	2438666.17	1964 Sep 28 104:15	Minuteman 2	-	949	0.000	AFSSD	MS	-	Test	ETR/Wire	-	-
1964-5481	2438669.31	1964 Sep 28 1202:49	Minuteman 1B	-	445	0.000	AFSSD	MF	-	Test	Orthon	VAFB	-
1964-5489	2438669.39	1964 Sep 29 2122:49	Minuteman 1B	-	456	0.000	AFSSD	MS	-	Test	nsf-koenn	ETR	-
1964-5543	2438703.50	1964 Oct 29 1628:13	Minuteman 2	-	853	0.000	ISTRAD	MS	-	OT	nsf-koenn	ETR	-
1964-5543	2438703.50	1964 Nov 3 0035?	Minuteman 2	-	853	0.000	ISTRAD	MS	-	OT	VAFB/Wire	-	-
1964-5574	2438704.52	1964 Nov 3 0035?	Minuteman 1A	-	537	0.000	ISTRAD	MS	-	OT	AF	-	-
1964-5574	2438704.52	1964 Nov 3 0035?	Minuteman 1A	-	644	0.000	ISTRAD	MS	-	OT	AF	-	-
1964-5574	2438704.52	1964 Nov 3 0035?	Minuteman 1A	-	873	0.000	ISTRAD	MS	-	OT	VAFB	-	-
1964-5597	2438705.50	1964 Nov 6	Minuteman 1B	-	960	0.000	ISTRAD	MF	-	OT	VAFB	-	-
1964-5598	2438705.50	1964 Nov 6	Minuteman 1B	-	868	0.000	ISTRAD	MS	-	OT	VAFB	-	-
1964-5603	2438708.50	1964 Nov 9	Minuteman 1A	-	681	0.000	ISTRAD	MS	-	OT	VAFB	-	-
1964-5676	2438728.83	1964 Dec 9 0800?	Minuteman 1A	-	1101	0.000	ISTRAD	MS	-	OT	VAFB	-	-
1964-5676	2438728.83	1964 Dec 9 2000?	Minuteman 1B	-	1163	0.000	ISTRAD	MS	-	OT	VAFB	-	-
1964-5679	2438745.25	1964 Dec 15 1759:59	Minuteman 2	-	451	0.000	AFSSD	MS	-	Test	nsf-koenn	ETR	-
1964-5693	2438747.55	1964 Dec 19 0106:12	Minuteman 1B	-	1093	0.000	ISTRAD	MS	-	OT	VAFB	-	-
1964-5692	2438748.33	1964 Dec 20 1950	Minuteman 2	-	452	0.000	AFSSD	MS	-	Test	nsf-koenn	ETR	-
1965-540	2438781.33	1965 Jan 20 0111:15	Minuteman 1B	-	777	0.000	ISTRAD	MS	-	OT	UR-ich/AP	VAFB	-
1965-556	2438789.56	1965 Feb 2	Minuteman 2	-	453	0.000	AFSSD	MS	-	Test	nsf-koenn	ETR	-
1965-567	2438793.50	1965 Feb 2	Minuteman 1B	-	714	0.000	ISTRAD	MS	-	OT	VAFB	-	-
1965-569	2438793.50	1965 Feb 2	Minuteman 1B	-	1041	0.000	ISTRAD	MS	-	OT	UR-ich/AP	-	-
1965-584	2438800.35	1965 Feb 8 2021	Minuteman 1B	-	1142	0.000	44SHW	MS	-	Test	UR-ich/AP	MR650301	-
1965-584	2438800.35	1965 Feb 8 2021	Minuteman 1B	-	1093	0.000	44SHW	MS	-	Test	UR-ich/AP	MR650309-10/Wire	-
1965-584	2438800.35	1965 Feb 8 2021	Minuteman 1B	-	1142	0.000	44SHW	MS	-	Test	VAFB/Wire	-	-
1965-584	2438800.35	1965 Feb 8 2021	Minuteman 1B	-	1093	0.000	44SHW	MS	-	Test	VAFB/Wire	-	-
1965-584	2438800.35	1965 Feb 8 2021	Minuteman 1B	-	1142	0.000	44SHW	MS	-	Test	VAFB/Wire	-	-
1965-584	2438800.35	1965 Feb 8 2021	Minuteman 1B	-	1093	0.000	44SHW	MS	-	Test	VAFB/Wire	-	-
1965-584	2438800.35	1965 Feb 8 2021	Minuteman 1B	-	1142	0.000	44SHW	MS	-	Test	VAFB/Wire	-	-
1965-584	2438800.35	1965 Feb 8 2021	Minuteman 1B	-	1093	0.000	44SHW	MS	-	Test	VAFB/Wire	-	-
1965-584	2438800.35	1965 Feb 8 2021	Minuteman 1B	-	1142	0.000	44SHW	MS	-	Test	VAFB/Wire	-	-
1965-584	2438800.35	1965 Feb 8 2021	Minuteman 1B	-	1093	0.000	44SHW	MS	-	Test	VAFB/Wire	-	-
1965-584	2438800.35	1965 Feb 8 2021	Minuteman 1B	-	1142	0.000	44SHW	MS	-	Test	VAFB/Wire	-	-
1965-584	2438800.35	1965 Feb 8 2021	Minuteman 1B	-	1093	0.000	44SHW	MS	-	Test	VAFB/Wire	-	-
1965-584	2438800.35	1965 Feb 8 2021	Minuteman 1B	-	1142	0.000	44SHW	MS	-	Test	VAFB/Wire	-	-
1965-584	2438800.35	1965 Feb 8 2021	Minuteman 1B	-	1093	0.000	44SHW	MS	-	Test	VAFB/Wire	-	-
1965-584	2438800.35	1965 Feb 8 2021	Minuteman 1B	-	1142	0.000	44SHW	MS	-	Test	VAFB/Wire	-	-
1965-584	2438800.35	1965 Feb 8 2021	Minuteman 1B	-	1093	0.000	44SHW	MS	-	Test	VAFB/Wire	-	-
1965-584	2438800.35	1965 Feb 8 2021	Minuteman 1B	-	1142	0.000	44SHW	MS	-	Test	VAFB/Wire	-	-
1965-584	2438800.35	1965 Feb 8 2021	Minuteman 1B	-	1093	0.000	44SHW	MS	-	Test	VAFB/Wire	-	-
1965-584	2438800.35	1965 Feb 8 2021	Minuteman 1B	-	1142	0.000	44SHW	MS	-	Test	VAFB/Wire	-	-
1965-584	2438800.35	1965 Feb 8 2021	Minuteman 1B	-	1093	0.000	44SHW	MS	-	Test	VAFB/Wire	-	-
1965-584	2438800.35	1965 Feb 8 2021	Minuteman 1B	-	1142	0.000	44SHW	MS	-	Test	VAFB/Wire	-	-
1965-584	2438800.35	1965 Feb 8 2021	Minuteman 1B	-	1093	0.000	44SHW	MS	-	Test	VAFB/Wire	-	-
1965-584	2438800.35	1965 Feb 8 2021	Minuteman 1B	-	1142	0.000	44SHW	MS	-	Test	VAFB/Wire	-	-
1965-584	2438800.35	1965 Feb 8 2021	Minuteman 1B	-	1093	0.000	44SHW	MS	-	Test	VAFB/Wire	-	-
1965-584	2438800.35	1965 Feb 8 2021	Minuteman 1B	-	1142	0.000	44SHW	MS	-	Test	VAFB/Wire	-	-
1965-584	2438800.35	1965 Feb 8 2021	Minuteman 1B	-	1093	0.000	44SHW	MS	-	Test	VAFB/Wire	-	-
1965-584	2438800.35	1965 Feb 8 2021	Minuteman 1B	-	1142	0.000	44SHW	MS	-	Test	VAFB/Wire	-	-
1965-584	2438800.35	1965 Feb 8 2021	Minuteman 1B	-	1093	0.000	44SHW	MS	-	Test	VAFB/Wire	-	-
1965-584	2438800.35	1965 Feb 8 2021	Minuteman 1B	-	1142	0.000	44SHW	MS	-	Test	VAFB/Wire	-	-
1965-584	2438800.35	1965 Feb 8 2021	Minuteman 1B	-	1093	0.000	44SHW	MS	-	Test	VAFB/Wire	-	-
1965-584	2438800.35	1965 Feb 8 2021	Minuteman 1B	-	1142	0.000	44SHW	MS	-	Test	VAFB/Wire	-	-
1965-584	2438800.35	1965 Feb 8 2021	Minuteman 1B	-	1093	0.000	44SHW	MS	-	Test	VAFB/Wire	-	-
1965-584	2438800.35	1965 Feb 8 2021	Minuteman 1B	-	1142	0.000	44SHW	MS	-	Test	VAFB/Wire	-	-
1965-584	2438800.35	1965 Feb 8 2021	Minuteman 1B	-	1093	0.000	44SHW	MS	-	Test	VAFB/Wire	-	-
1965-584	2438800.35	1965 Feb 8 2021	Minuteman 1B	-	1142	0.000	44SHW	MS	-	Test	VAFB/Wire	-	-
1965-584	2438800.35	1965 Feb 8 2021											

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	DrbPay	Agency	Launch_Code	Group	Category	LTCite	Cite	Notes
1965-5477	2438985.19	1965 Aug 25 1628:07	Minuteman 1A	-	509	0.000	ISTRAD	MF	-	OT	GTS-TEC	-	S63.f.tlg
1965-5510	2439028.60	1965 Sep 25 0220:13	Minuteman 2	-	468	0.000	AFSSD	MS	-	Test	nsf-koenn	ETR	-
1965-5532	2439056.54	1965 Oct 2 0659:59	Minuteman 2	-	469	0.000	AFSSD	MS	-	Test	nsf-koenn	ETR	-
1965-5544	2439039.50	1965 Oct 6	Minuteman 2	-	2009	0.000	AFSSD	MS	-	Test	VAFB	-	-
1965-5603	2439073.50	1965 Nov 9	Minuteman 2	-	2002	0.000	AFSSD	MS	-	Test	VAFB	-	-
1965-5681	2439099.22	1965 Dec 14 1723	Minuteman 1A	-	516	0.000	ISTRAD	MS	-	OT	AP	GTT-TEC	-
1965-5682	2439110.59	1965 Dec 16 0210	Minuteman 2	-	2017	0.000	AFSSD	MS	-	Test	Ulrich/Wire	VAFB	-
1966-558	2439130.52	1966 Jan 5 0030:01	Minuteman 2	-	461	0.000	AFSSD	MS	-	Test	nsf-koenn	ETR	-
1966-565	2439143.50	1966 Jan 18	Minuteman 2	-	2053	0.000	AFSSD	MS	-	Test	VAFB	-	-
1966-574	2439147.50	1966 Jan 22	Minuteman 2	-	2022	0.000	AFSSD	MS	-	Test	VAFB	-	-
1966-582	2439152.50	1966 Jan 27	Minuteman 1B	-	1243	0.000	ISTRAD	MS	-	OT	VAFB	-	-
1966-5108	2439167.54	1966 Feb 11 0100:04	Minuteman 2	-	460	0.000	AFSSD	MS	-	Test	ETR/Wire	-	-
1966-5109	2439168.53	1966 Feb 12 0039	Minuteman 1B	-	1387	0.000	ISTRAD	MS	-	OT	Ulrich/Wire	VAFB	-
1966-5112	2439172.50	1966 Feb 16	Minuteman 2	-	2038	0.000	AFSSD	MS	-	Test	VAFB	-	-
1966-5129	2439181.32	1966 Feb 24 1940	Minuteman 1A	-	529 (G3-005)	0.000	ISTRAD	MS	-	OT	VAFB/Wire	-	-
1966-5130	2439181.32	1966 Feb 24 1940	Minuteman 1A	-	629 (G3-112)	0.000	ISTRAD	MS	-	OT	VAFB/Wire	-	-
1966-5152	2439192.50	1966 Mar 8	Minuteman 1B	-	1362	0.000	ISTRAD	MS	-	OT	VAFB	-	-
1966-5160	2439196.50	1966 Mar 11	Minuteman 1B	-	1211	0.000	ISTRAD	MS	-	OT	VAFB	-	-
1966-5170	2439201.50	1966 Mar 17	Minuteman 2	-	2049	0.000	AFSSD	MS	-	Test	VAFB	-	-
1966-5178	2439205.50	1966 Mar 21	Minuteman 1A	-	569 (G3-061)	0.000	ISTRAD	MS	-	OT	VAFB/Wire	-	-
1966-5168	2439210.42	1966 Mar 25 2200?7	Minuteman 1A	-	649 (G3-130)	0.000	ISTRAD	MS	-	OT	Ulrich/Wire	-	-
1966-5205	2439216.56	1966 Apr 1 0129:55	Minuteman 2	-	462	0.000	AFSSD	MS	-	Test	nsf-koenn	ETR	-
1966-5207	2439220.10	1966 Apr 4 1420	Minuteman 1B	-	1268	0.000	ISTRAD	MS	-	OT	Ulrich/Wire	VAFB	-
1966-5208	2439230.50	1966 Apr 4 2130?7	Minuteman 1B	-	1347	0.000	ISTRAD	MS	-	OT	Ulrich/Wire	VAFB	-
1966-5221	2439230.50	1966 Apr 15	Minuteman 1B	-	1312	0.000	ISTRAD	MS	-	OT	VAFB	-	-
1966-5232	2439237.50	1966 Apr 22	Minuteman 1B	-	1262	0.000	ISTRAD	MS	-	OT	VAFB	-	-
1966-5246	2439246.36	1966 May 2 2035	Minuteman 1B	-	1586	0.000	ISTRAD	MS	-	OT	VAFB/Wire	-	-
1966-5264	2439262.09	1966 May 16 1410	Minuteman 1A	-	710 (G3-175)	0.000	ISTRAD	MS	-	OT	VAFB/Wire	-	-
1966-5265	2439262.27	1966 May 16 1830	Minuteman 1B	-	1191	0.000	ISTRAD	MS	-	OT	VAFB/Wire	-	-
1966-5266	2439262.50	1966 May 17	Minuteman 1B	-	1314	0.000	ISTRAD	MS	-	OT	VAFB/Wire	-	-
1966-5266	2439277.34	1966 May 31 2010	Minuteman 1B	-	1270	0.000	ISTRAD	MS	-	OT	VAFB/Wire	-	-
1966-5267	2439277.45	1966 May 31 2285	Minuteman 1B	-	622 (G3-109)	0.000	ISTRAD	MS	-	OT	Ulrich/Wire	VAFB	-
1966-5287	2439279.45	1966 Jun 2 2241	Minuteman 1A	-	1240	0.000	ISTRAD	MS	-	OT	Ulrich/Wire	VAFB	-
1966-5305	2439287.24	1966 Jun 10 1739	Minuteman 1B	-	1261	0.000	ISTRAD	MS	-	OT	Ulrich/Wire	VAFB	-
1966-5336	2439301.47	1966 Jun 24 2310	Minuteman 2	-	2083	0.000	AFSSD	MS	-	Test	VAFB	-	-
1966-5352	2439315.60	1966 Jul 9 0230:15	Minuteman 2	-	463	0.000	AFSSD	MS	-	Test	VAFB	-	-
1966-5353	2439316.31	1966 Jul 9 0230:15	Minuteman 1B	-	1280	0.000	ISTRAD	MS	-	OT	ETR/Wire	-	-
1966-5356	2439316.82	1966 Jul 12 1322	Minuteman 1B	-	963	0.000	ISTRAD	MS	-	OT	VAFB/Wire	-	-
1966-5358	2439319.86	1966 Jul 12 0745	Minuteman 1B	-	964	0.000	ISTRAD	MS	-	OT	VAFB/Wire	-	-
1966-5359	2439332.50	1966 Jul 13 0845	Minuteman 1B	-	945	0.000	ISTRAD	MS	-	OT	VAFB	-	-
1966-5359	2439332.50	1966 Jul 26	Minuteman 2	-	2045	0.000	AFSSD	MS	-	Test	VAFB	-	-
1966-5377	2439332.50	1966 Aug 1	Minuteman 1B	-	1219	0.000	ISTRAD	MS	-	OT	VAFB	-	-
1966-5417	2439332.50	1966 Aug 1	Minuteman 2	-	2091	0.000	ISTRAD	MS	-	OT	VAFB	-	-
1966-5442	2439343.50	1966 Aug 16	Minuteman 1B	-	1371	0.000	ISTRAD	MS	-	OT	VAFB	-	-
1966-5445	2439353.50	1966 Aug 16	Minuteman 1A	-	522 (G3-021)	0.000	ISTRAD	MS	-	OT	VAFB/Wire	-	-
1966-5445	2439363.50	1966 Aug 22 2052	Minuteman 1A	-	1342	0.000	ISTRAD	MS	-	OT	VAFB/Wire	-	-
1966-5450	2439363.37	1966 Aug 26 2136	Minuteman 1A	-	636 (G3-103)	0.000	ISTRAD	MS	-	OT	VAFB/Wire	-	-
1966-5456	2439364.30	1966 Aug 26 2136	Minuteman 1B	-	2056	0.000	AFSSD	MS	-	Test	VAFB/Wire	-	-
1966-5456	2439367.30	1966 Aug 29 1905	Minuteman 1B	-	1197	0.000	ISTRAD	MS	-	OT	VAFB/Wire	-	-
1966-5457	2439384.50	1966 Aug 16	Minuteman 1B	-	1294	0.000	ISTRAD	MS	-	OT	VAFB	-	-
1966-5495	2439389.50	1966 Sep 20	Minuteman 1B	-	1362	0.000	ISTRAD	MS	-	OT	VAFB	-	-
1966-5500	2439391.10	1966 Sep 22 1430	Minuteman 1A	-	1362	0.000	ISTRAD	MS	-	OT	Ulrich/Wire	VAFB	-
1966-5526	2439391.50	1966 Oct 1	Minuteman 1B	-	1379	0.000	ISTRAD	MS	-	OT	VAFB/Wire	-	-
1966-5540	2439412.40	1966 Oct 13 2310	Minuteman 1B	-	1347	0.000	ISTRAD	MS	-	OT	VAFB/Wire	-	-
1966-5552	2439420.36	1966 Oct 21 2035	Minuteman 1B	-	914	0.000	ISTRAD	MS	-	OT	VAFB/Wire	-	-
1966-5551	2439431.50	1966 Nov 1	Minuteman 2	-	2068	0.000	AFSSD	MS	-	Test	VAFB	-	-
1966-5623	2439445.50	1966 Nov 16	Minuteman 1B	-	1307	0.000	ISTRAD	MS	-	OT	VAFB/Wire	-	-
1966-5629	2439450.40	1966 Nov 22 2140	Minuteman 1B	-	1183	0.000	ISTRAD	MS	-	OT	VAFB/Wire	-	-
1966-5631	2439473.41	1966 Dec 13 2155	Minuteman 2	-	2036	0.000	AFSSD	MS	-	Test	Comms	VAFB	-
1966-5693	2439479.50	1966 Dec 20 2150	Minuteman 1B	-	1227	0.000	ISTRAD	MS	-	OT	Ulrich/Wire	VAFB	-
1966-5697	2439482.41	1966 Dec 22 2150	Minuteman 1B	-	993	0.000	ISTRAD	MS	-	OT	Ulrich/Wire	VAFB	-
1966-5698	2439482.41	1966 Dec 22 2150	Minuteman 1B	-	1128	0.000	ISTRAD	MS	-	OT	Ulrich/Wire	VAFB	-
1967-5653	2439501.90	1967 Jan 11 0835	Minuteman 2	-	2073 (2113?7)	0.000	AFSSD	MS	-	Test	AP	-	-
1967-5653	2439501.90	1967 Jan 11 0835	Minuteman 1B	-	464	0.000	AFSSD	MS	-	Test	Ulrich/Wire	VAFB	-
1967-573	2439507.54	1967 Jan 24 2235	Minuteman 2	-	838	0.000	ISTRAD	MS	-	OT	nsf-koenn	ETR	-
1967-573	2439515.44	1967 Jan 30 2135	Minuteman 1B	-	1206	0.000	ISTRAD	MS	-	OT	Ulrich/Wire	VAFB	-
1967-590	2439521.40	1967 Feb 3 0345	Minuteman 2	-	2087	0.000	AFSSD	MS	-	Test	Ulrich/Wire	VAFB	-
1967-5112	2439524.66	1967 Feb 7 0345	Minuteman 1B	-	893	0.000	ISTRAD	MS	-	OT	VAFB	-	-
1967-5118	2439528.50	1967 Feb 21 2240	Minuteman 1B	-	700	0.000	ISTRAD	MS	-	OT	VAFB/Wire	-	-
1967-5123	2439543.44	1967 Feb 24 2240	Minuteman 1B	-	1263	0.000	ISTRAD	MS	-	OT	VAFB/Wire	-	-
1967-5124	2439543.44	1967 Feb 25 2025:02	Minuteman 2	-	465	0.000	AFSSD	MS	-	Test	nsf-koenn	ETR	-
1967-5128	2439546.59	1967 Feb 26 2025:02	Minuteman 2	-	465	0.000	AFSSD	MS	-	Test	nsf-koenn	ETR	-
1967-5144	2439556.50	1967 Mar 7	Minuteman 1B	-	1253	0.000	ISTRAD	MS	-	OT	VAFB	-	-
1967-5147	2439572.35	1967 Mar 22 2030	Minuteman 1B	-	1426	0.000	ISTRAD	MS	-	OT	Ulrich/Wire	VAFB	-
1967-5196	2439588.38	1967 Apr 7 2100	Minuteman 1B	-	2143	0.000	AFSSD/ALCS	MS	-	OT	VAFB/Wire	-	-
1967-5217	2439597.50	1967 Apr 17	Minuteman 2	-	2143	0.000	AFSSD/ALCS	MS	-	OT	VAFB/Wire	-	-
1967-5229	2439601.50	1967 Apr 21	Minuteman 2	-	1296	0.000	ISTRAD	MS	-	OT	VAFB	-	-
1967-5229	2439601.50	1967 Apr 21	Minuteman 1B	-	2137	0.000	ISTRAD	MS	-	OT	VAFB	-	-
1967-5232	2439607.50	1967 Apr 27	Minuteman 1B	-	1193	0.000	ISTRAD	MS	-	OT	VAFB	-	-
1967-5236	2439608.90	1967 Apr 28 0930	Minuteman 1B	-	1019	0.000	AFSSD/ALCS	MS	-	Test	Ulrich/Wire	VAFB	-
1967-5255	2439622.10	1967 May 11 1423	Minuteman 2	-	2095	0.000	AFSSD/ALCS	MS	-	Test	VAFB/Wire	-	-
1967-5261	2439627.50	1967 May 19	Minuteman 1B	-	667	0.000	AFSSD	MS	-	OT	VAFB	-	-
1967-5264	2439629.50	1967 May 19	Minuteman 1B	-	667	0.000	AFSSD	MS	-	OT	VAFB	-	-
1967-5265	2439629.50	1967 May 19	Minuteman 2	-	2122	0.000	ISTRAD	MS	-	OT	VAFB	-	-
1967-5268	2439633.50	1967 May 22	Minuteman 1B	-	1188	0.000	ISTRAD	MS	-	OT	VAFB	-	-
1967-5274	2439641.50	1967 May 31	Minuteman 1B	-	726	0.000	ISTRAD	MS	-	OT	VAFB	-	-
1967-5279	2439642.50	1967 Jun 1	Minuteman 1B	-	757	0.000	ISTRAD	MS	-	OT	VAFB	-	-
1967-5309	2439662.50	1967 Jun 21	Minuteman 1B	-	1357	0.000	ISTRAD	MS	-	OT	VAFB	-	-

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	DrbPay	Agency	Launch_Code	Group	Category	LTCite	Cite	Notes
1967-5326	2439669.90	1967 Jun 28 0937	Minuteman 1B	-	751	0.000	AFBSD	MS	-	Test	Ulrich/UPI	VAFB	-
1967-5334	2439676.50	1967 Jul 5	Minuteman 1B	-	1126	0.000	ISTRAD	MS	-	OT	VAFB	VAFB	-
1967-5343	2439683.50	1967 Jul 12	Minuteman 1B	-	800	0.000	ISTRAD	MS	-	OT	VAFB	VAFB	-
1967-5346	2439684.50	1967 Jul 13	Minuteman 1B	-	779	0.000	ISTRAD	MS	-	OT	VAFB	VAFB	-
1967-5348	2439686.97	1967 Jul 15 1118	Minuteman 1B	-	765	0.000	SANSS	MS	-	Test	Ulrich/UPI	VAFB	-
1967-5348	2439686.50	1967 Jul 15 1118	Minuteman 1B	-	2337 (20957)	0.000	SANSS	MS	-	Test	Ulrich/AP	VAFB	-
1967-5350	2439691.88	1967 Jul 20 0900	Minuteman 2	-	2370	0.000	ISTRAD	MS	-	OT	VAFB	VAFB	-
1967-5373	2439710.50	1967 Aug 8	Minuteman 1B	-	1212	0.000	ISTRAD	MS	-	OT	VAFB	VAFB	-
1967-5389	2439740.39	1967 Aug 17 2118:59	Minuteman 2	-	466	0.000	SANSS	MS	-	Test	nsf-koenn	ETR	-
1967-5419	2439756.60	1967 Sep 6 2035	Minuteman 1B	-	1222	0.000	ISTRAD	MS	-	OT	Ulrich/UPI	VAFB	-
1967-5442	2439760.58	1967 Sep 22 0228	Minuteman 1B	-	831	0.000	ISTRAD	MS	-	OT	VAFB/Mire	VAFB	-
1967-5449	2439764.50	1967 Sep 27 0200	Minuteman 1B	-	1151	0.000	ISTRAD	MS	-	OT	VAFB/Mire	VAFB	-
1967-5451	2439768.50	1967 Oct 21	Minuteman 1B	-	2445	0.000	ISTRAD	MS	-	OT	VAFB	VAFB	-
1967-5521	2439797.85	1967 Nov 3 0830	Minuteman 1B	-	820	0.000	SANSS	MS	-	Test	Ulrich/Mire	VAFB	-
1967-5525	2439801.54	1967 Nov 7 0056:08	Minuteman 2	-	467	0.000	SANSS	MS	-	Test	ETR/OK	VAFB	-
1967-5531	2439809.10	1967 Nov 14 1420	Minuteman 1B	-	1218	0.000	ISTRAD	MS	-	OT	VAFB/Mire	VAFB	-
1967-5532	2439811.50	1967 Nov 17	Minuteman 1B	-	1225	0.000	ISTRAD	MS	-	OT	VAFB/Mire	VAFB	-
1967-5540	2439816.09	1967 Nov 21 1412	Minuteman 2	-	2071	0.000	SANSS	MS	-	Test	VAFB	VAFB	-
1967-5556	2439825.50	1967 Dec 1 1183	Minuteman 1B	-	948	0.000	ISTRAD	MS	-	OT	VAFB	VAFB	-
1967-5574	2439833.38	1967 Dec 8 2103	Minuteman 1B	-	1114	0.000	ISTRAD	MS	-	OT	VAFB	VAFB	-
1967-5592	2439842.50	1967 Dec 18	Minuteman 1B	-	1437	0.000	ISTRAD	MS	-	OT	VAFB/Mire	VAFB	-
1967-5593	2439846.52	1967 Dec 22 0035	Minuteman 1B	-	1286	0.000	ISTRAD	MS	-	OT	VAFB/Mire	VAFB	-
1967-5595	2439846.57	1967 Dec 22 0145	Minuteman 1B	-	2457	0.000	ISTRAD	MS	-	OT	VAFB	VAFB	-
1967-5596	2439852.95	1967 Dec 28 1055	Minuteman 2	-	2435	0.000	SANSS	MS	-	Test	Mire/ULrich	VAFB	-
1968-576	2439865.92	1968 Jan 10 0958	Minuteman 2	-	2437	0.000	ISTRAD	MS	-	OT	VAFB/Mire	VAFB	-
1968-583	2439871.50	1968 Jan 16	Minuteman 1B	-	(64-011)	0.000	ISTRAD	MS	-	OT	VAFB	VAFB	-
1968-5100	2439880.50	1968 Jan 25	Minuteman 1B	-	2446F	0.000	ISTRAD/ALCS	MS	-	OT	VAFB	VAFB	-
1968-5112	2439886.90	1968 Feb 2 1017	Minuteman 2	-	2464	0.000	ISTRAD	MS	-	OT	VAFB/Mire	VAFB	-
1968-5113	2439889.04	1968 Feb 2 1255	Minuteman 1B	-	1274	0.000	ISTRAD	MS	-	OT	VAFB/Mire	VAFB	-
1968-5125	2439893.64	1968 Feb 7 0320:21	Minuteman 2	-	468	0.000	SANSS	MS	-	Test	nsf-koenn	ETR	-
1968-5129	2439896.99	1968 Feb 10 1142	Minuteman 2	-	2307	0.000	SANSS	MS	-	Test	VAFB/Mire	VAFB	-
1968-5225	2439944.50	1968 Mar 29	Minuteman 2	-	2322	0.000	ISTRAD	MS	-	OT	VAFB	VAFB	-
1968-5261	2439956.86	1968 Apr 10 0839	Minuteman 1B	-	1411	0.000	ISTRAD	MS	-	OT	PRHnt68	VAFB	-
1968-5273	2439970.63	1968 Apr 24 0305	Minuteman 1B	-	892	0.000	ISTRAD	MS	-	OT	VAFB/Mire	VAFB	-
1968-5287	2439976.50	1968 Apr 30	Minuteman 1B	-	2503	0.000	ISTRAD	MS	-	OT	VAFB	VAFB	-
1968-5306	2439986.93	1968 May 22 1020	Minuteman 1B	-	1359	0.000	ISTRAD	MS	-	OT	VAFB	VAFB	-
1968-5330	2439994.72	1968 May 23 0510	Minuteman 1B	-	1012	0.000	ISTRAD	MS	-	OT	VAFB/Mire	VAFB	-
1968-5338	2440046.26	1968 Jul 12 0900	Minuteman 1B	-	1034 (3487)	0.000	ISTRAD	MS	-	Test	PRHnt68	VAFB	-
1968-5356	2440065.35	1968 Sep 14 0300:02	Minuteman 3	-	1442-201	0.000	SANSS	MS	-	Test	STR/Mire	VAFB	-
1968-5438	2440121.25	1968 Oct 24 2030:03	Minuteman 3	-	FTM-2089	0.000	SANSS	MS	-	Test	VAFB/Mire	VAFB	-
1968-5450	2440141.35	1968 Oct 24 2030:03	Minuteman 3	-	FTM-202	0.000	SANSS	MS	-	Test	ETR	VAFB	-
1968-5452	2440154.35	1968 Oct 24 2030:03	Minuteman 3	-	FTM-2191	0.000	ISTRAD	MS	-	OT	Janikus-Landis	VAFB	-
1968-5452	2440154.35	1968 Oct 24 2030:03	Minuteman 3	-	1136	0.000	ISTRAD	MS	-	OT	VAFB/Mire	VAFB	-
1968-5470	2440192.85	1968 Nov 13 0923	Minuteman 1B	-	2157	0.000	ISTRAD	MS	-	OT	Janikus-Landis	VAFB	-
1968-5470	2440192.85	1968 Nov 13 0923	Minuteman 1B	-	2157	0.000	ISTRAD	MS	-	OT	Janikus-Landis	VAFB	-
1968-5470	2440192.85	1968 Nov 13 0923	Minuteman 1B	-	1375	0.000	ISTRAD	MS	-	OT	VAFB	VAFB	-
1968-5470	2440192.85	1968 Nov 21 1828	Minuteman 1B	-	943	0.000	ISTRAD	MS	-	OT	VAFB	VAFB	-
1968-5470	2440192.85	1968 Dec 1	Minuteman 1B	-	2418	0.000	SANSS	MS	-	Test	VAFB/Mire	VAFB	-
1968-5470	2440192.85	1968 Dec 10 1430	Minuteman 1B	-	1989	0.000	ISTRAD	MS	-	OT	Ulrich/AP	VAFB	-
1968-5470	2440192.85	1968 Dec 20 1040	Minuteman 1B	-	2604	0.000	SANSS	MS	-	Test	VAFB/Mire	VAFB	-
1968-5470	2440192.85	1968 Jan 29 1034	Minuteman 1B	-	2340	0.000	SANSS	MS	-	Test	VAFB/Mire	VAFB	-
1968-5470	2440192.85	1968 Jan 29 1352	Minuteman 1B	-	874	0.000	ISTRAD	MS	-	OT	VAFB	VAFB	-
1968-5470	2440192.85	1968 Jan 30	Minuteman 1B	-	FTM-2208	0.000	ISTRAD	MS	-	OT	VAFB/Mire	VAFB	-
1968-5104	2440264.85	1968 Feb 2 0825	Minuteman 1B	-	1220	0.000	ISTRAD	MS	-	OT	VAFB/Mire	VAFB	-
1968-5146	2440273.95	1968 Feb 20 1015	Minuteman 1B	-	2350	0.000	SANSS	MS	-	Test	VAFB/Mire	VAFB	-
1968-5167	2440287.85	1968 Mar 7 0820	Minuteman 1B	-	2350	0.000	SANSS	MS	-	Test	VAFB/Mire	VAFB	-
1968-5182	2440292.97	1968 Mar 12 1120	Minuteman 2	-	FTM-2642	0.000	ISTRAD	MS	-	Test	Ulrich/UPI	VAFB	-
1968-5214	2440303.08	1968 Mar 22 1350	Minuteman 2	-	2415	0.000	SANSS	MS	-	Test	VAFB	VAFB	-
1968-5216	2440304.50	1968 Mar 24 1350	Minuteman 2	-	791	0.000	ISTRAD	MS	-	OT	VAFB/UP	VAFB	-
1968-5218	2440306.29	1968 Mar 25 1900	Minuteman 1B	-	1308	0.000	ISTRAD	MS	-	OT	VAFB/Mire	VAFB	-
1968-5219	2440307.37	1968 Mar 26 2046:21	Minuteman 1B	-	FTM-203	0.000	SANSS	MS	-	Test	ETR/Mire	VAFB	-
1968-5260	2440322.87	1968 Apr 11 0855	Minuteman 3	-	FTM-301	0.000	SANSS	MS	-	Test	VAFB/Mire	VAFB	-
1968-5271	2440327.90	1968 Apr 16 0935	Minuteman 3	-	2339	0.000	ISTRAD	MS	-	OT	VAFB/Mire	VAFB	-
1968-5279	2440330.29	1968 Apr 19 1851	Minuteman 2	-	2387	0.000	AFSC/ALCS	MS	-	Test	Ulrich/LompocR	VAFB	-
1968-5290	2440334.34	1968 Apr 22 2015:01	Minuteman 3	-	FTM-204	0.000	SANSS	MS	-	Test	nsf-koenn	ETR	-
1968-5292	2440335.48	1968 Apr 23 2330	Minuteman 1B	-	1090	0.000	ISTRAD	MS	-	OT	Ulrich/LompocR	VAFB	-
1968-5315	2440337.21	1968 Apr 25 1700	Minuteman 1B	-	2096	0.000	ISTRAD	MS	-	OT	Ulrich/LompocR	VAFB	-
1968-5315	2440343.86	1968 May 2 0842	Minuteman 2	-	2505	0.000	SANSS	MS	-	Test	VAFB/Mire	VAFB	-
1968-5334	2440361.50	1968 May 20	Minuteman 3	-	(64-1562E)	0.000	ISTRAD	MS	-	Test	321LSM/	VAFB	Dr Apr267
1968-5343	2440369.37	1968 May 27 2055:13	Minuteman 2	-	FTM-205	0.000	ISTRAD	MS	-	OT	VAFB	VAFB	-
1968-5347	2440370.33	1968 May 28 2100	Minuteman 2	-	2131	0.000	ISTRAD	MS	-	Test	ETR/Mire	VAFB	-
1968-5349	2440370.98	1968 May 29 1135	Minuteman 3	-	FTM-302	0.000	SANSS	MS	-	Test	Ulrich/LompocR	VAFB	-
1968-5360	2440384.05	1968 Jun 11 1315	Minuteman 2	-	2059	0.000	ISTRAD	MS	-	OT	VAFB/Mire (Jus10?)	VAFB	-
1968-5367	2440390.94	1968 Jun 18 1030	Minuteman 1B	-	1285	0.000	ISTRAD/ALCS	MS	-	OT	Ulrich/LompocR	VAFB	-
1968-5371	2440392.50	1968 Jun 20	Minuteman 2	-	2320	0.000	SANSS	MS	-	Test	VAFB	VAFB	-
1968-5380	2440398.35	1968 Jun 25 2030:00	Minuteman 3	-	FTM-206	0.000	SANSS	MS	-	Test	ETR/Mire	VAFB	-
1968-5385	2440403.69	1968 Jul 1 0436	Minuteman 1B	-	1282	0.000	ISTRAD	MS	-	OT	VAFB/Mire (PDT)	VAFB	-
1968-5390	2440404.88	1968 Jul 1 0900	Minuteman 1B	-	1279	0.000	ISTRAD	MS	-	OT	VAFB/Mire	VAFB	-
1968-5394	2440411.09	1968 Jul 8 1405	Minuteman 2	-	2062	0.000	ISTRAD	MS	-	OT	Ulrich/LompocR	VAFB	-
1968-5408	2440418.08	1968 Jul 15 1400	Minuteman 2	-	2012	0.000	ISTRAD	MS	-	OT	Ulrich/UP	VAFB	-
1968-5409	2440418.13	1968 Jul 15 1503	Minuteman 2	-	(64-1563E)	0.000	ISTRAD/ALCS	MS	-	OT	Ulrich/AP	VAFB	-
1968-5413	2440426.33	1968 Jul 23 1950	Minuteman 1B	-	1140	0.000	ISTRAD	MS	-	OT	Ulrich/LompocR	VAFB	-
1968-5417	2440427.87	1968 Jul 25 0855	Minuteman 2	-	2357	0.000	SANSS	MS	-	Test	Ulrich/LompocR	VAFB	-
1968-5434	2440434.38	1968 Jul 31 2109:18	Minuteman 3	-	FTM-207	0.000	SANSS	MS	-	Test	CCMPS	VAFB	-

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	DrbPay	Agency	Launch_Code	Group	Category	LTCite	Cite	Notes
1969-5458	2440455.68	1969 Aug 22 0420	Minuteman 2	-	2108	0.000	ISTRAD	MS	-	OT	Ulrich/Lompock	VAFB	-
1969-5468	2440460.61	1969 Aug 27 0235	Minuteman 2	-	2065	0.000	ISTRAD/ALCS	MS	-	OT	VAFB/Hire	-	-
1969-5469	2440461.50	1969 Aug 28	Minuteman 1B	-	1358	0.000	ISTRAD	MS	-	OT	VAFB	-	-
1969-5479	2440467.60	1969 Sep 3 0220	Minuteman 1B	-	2145	0.000	ISTRAD	MS	-	OT	VAFB/Hire	-	-
1969-5488	2440475.55	1969 Sep 11 0105	Minuteman 1B	-	1137	0.000	ISTRAD	MS	-	OT	VAFB/Hire	-	-
1969-5499	2440477.50	1969 Sep 13	Minuteman 3	-	FTN-303	0.000	SANBS	MS	-	Test	VAFB	-	-
1969-5509	2440484.85	1969 Sep 20 0830	Minuteman 1B	-	1276	0.000	ISTRAD	MS	-	OT	AF/Ulrich	VAFB	-
1969-5513	2440487.50	1969 Sep 23	Minuteman 1B	-	FTN-208	0.000	SANBS	MS	-	Target	VAFB	-	-
1969-5515	2440488.34	1969 Sep 23 20:10:26	Minuteman 3	-	FTN-208	0.000	SANBS	MS	-	Test	CNDPS	-	-
1969-5516	2440488.50	1969 Sep 24	Minuteman 2	-	2129	0.000	ISTRAD	MS	-	OT	VAFB	-	-
1969-5527	2440495.50	1969 Oct 1	Minuteman 2	-	2510	0.000	SANBS	MS	-	Test	VAFB	-	-
1969-5530	2440497.54	1969 Oct 3 0100	Minuteman 1B	-	1173	0.000	ISTRAD	MS	-	OT	Wife/Hire (PDT)	VAFB	-
1969-5540	2440505.42	1969 Oct 13 2205	Minuteman 2	-	2054	0.000	ISTRAD/ALCS	MS	-	OT	Wife/Hire (PDT)	VAFB	-
1969-5545	2440509.97	1969 Oct 15 1116	Minuteman 3	-	FTN-305	0.000	SANBS	MS	-	Test	VAFB/Hire (PDT)	-	-
1969-5565	2440515.50	1969 Oct 21	Minuteman 1B	-	1134	0.000	ISTRAD/ALCS	MS	-	OT	VAFB	-	-
1969-5567	2440521.33	1969 Oct 31	Minuteman 3	-	FTN-304	0.000	SANBS	MS	-	Test	VAFB	-	-
1969-5621	2440532.33	1969 Nov 6 20:00:02	Minuteman 3	-	FTN-309	0.000	SANBS	MS	-	Test	CNDPS	-	-
1969-5620	2440532.79	1969 Nov 7 0700	Minuteman 1B	-	1225	0.000	ISTRAD	MS	-	OT	VAFB/Hire	-	-
1969-5631	2440544.50	1969 Nov 19	Minuteman 2	-	2508	0.000	SANBS	MS	-	Test	VAFB	-	-
1969-5634	2440551.73	1969 Nov 26 0527	Minuteman 1B	-	2063	0.000	ISTRAD	MS	-	OT	VAFB/Hire	-	-
1969-5639	2440560.33	1969 Dec 4 20:00:02	Minuteman 3	-	FTN-210	0.000	SANBS	MS	-	Test	CNDPS	-	-
1969-5647	2440561.44	1969 Dec 5 2240	Minuteman 1B	-	1066	0.000	ISTRAD/ALCS	MS	-	OT	VAFB/Hire	-	-
1969-5677	2440571.50	1969 Dec 16	Minuteman 1B	-	SIF-2	0.000	ISTRAD	MS	-	Target	Ulrich/UPI	VAFB	-
1970-5145	2440583.56	1970 Feb 26 0125	Minuteman 1B	-	855	0.000	ISTRAD	MS	-	OT	VAFB	-	-
1970-5168	2440650.63	1970 Mar 5 0305	Minuteman 1B	-	782	0.000	ISTRAD	MS	-	OT	VAFB	-	-
1970-5229	2440655.50	1970 Mar 10	Minuteman 1B	-	1180	0.000	ISTRAD	MS	-	OT	VAFB	-	-
1970-5241	2440657.46	1970 Mar 11 2300	Minuteman 2	-	2424	0.000	ISTRAD	MS	-	OT	VAFB	-	-
1970-530	2440659.35	1970 Mar 13 20:30:02	Minuteman 3	-	FTN-212	0.000	SANBS	MS	-	Test	UPI/Ulrich	VAFB	-
1970-531	2440660.25	1970 Mar 14 18:00:15	Minuteman 2	-	1094	0.000	SANBS	MS	-	Test	ER-IDX-FT70	-	-
1970-5289	2440665.50	1970 Mar 28 0900	Minuteman 1B	-	1694	0.000	SAC/ALCS	MS	-	OT	Ulrich/Lompock	VAFB	-
1970-5294	2440671.68	1970 Mar 28	Minuteman 2	-	2656	0.000	SAC	MS	-	OT	VAFB	-	-
1970-5275	2440676.50	1970 Mar 31	Minuteman 2	-	2594	0.000	SAC	MS	-	OT	VAFB	-	-
1970-5277	2440676.50	1970 Apr 2	Minuteman 3	-	FTN-309	0.000	SANBS	MS	-	Test	CNDPS	-	-
1970-5282	2440680.35	1970 Apr 5 20:30:07	Minuteman 3	-	FTN-213	0.000	SANBS	MS	-	Test	Ulrich/Lompock	VAFB	-
1970-5312	2440695.54	1970 Apr 22 0101	Minuteman 3	-	2474	0.000	SAC	MS	-	OT	Ulrich/Lompock	VAFB	-
1970-5323	2440699.07	1970 Apr 22 1345	Minuteman 3	-	FTN-508	0.000	SANBS	MS	-	Test	VAFB	-	-
1970-5352	2440701.50	1970 Apr 25	Minuteman 2	-	2585	0.000	SAC	MS	-	OT	ER-IDX-FT70	-	-
1970-5357	2440706.17	1970 Apr 29 16:02:06	Minuteman 3	-	FTN-214	0.000	SANBS	MS	-	Test	VAFB/Hire (PDT)	VAFB	-
1970-5342	2440711.66	1970 May 5 0350	Minuteman 1B	-	1530	0.000	SANBS	MS	-	Test	Ulrich/UPI	VAFB	-
1970-5387	2440714.83	1970 May 9 0749	Minuteman 2	-	2486	0.000	SAC/ALCS	MS	-	OT	ER-IDX-FT70	-	-
1970-5390	2440728.26	1970 May 9 0749	Minuteman 3	-	FTN-310	0.000	SANBS	MS	-	Test	VAFB/Hire	-	-
1970-5392	2440733.96	1970 May 27 1816	Minuteman 2	-	2466	0.000	SAC	MS	-	OT	Ulrich/UPI	VAFB	-
1970-5374	2440734.17	1970 May 27 15:59:42	Minuteman 1B	-	FTN-215	0.000	SANBS	MS	-	Test	ER-IDX-FT70	-	-
1970-5391	2440744.16	1970 Jun 1 0800	Minuteman 3	-	1540	0.000	SANBS	MS	-	Test	VAFB/Hire (PDT)	VAFB	-
1970-5395	2440754.83	1970 Jun 17	Minuteman 1B	-	FTN-312	0.000	SANBS	MS	-	Test	Ulrich	-	-
1970-5396	2440757.55	1970 Jun 19 1315	Minuteman 3	-	2438	0.000	SAC	MS	-	OT	VAFB/Hire	-	-
1970-5402	2440761.50	1970 Jun 20 0433	Minuteman 2	-	FTN-313	0.000	SANBS	MS	-	Test	Ulrich/AP	-	-
1970-5428	2440761.50	1970 Jul 14	Minuteman 1B	-	2476	0.000	SAC	MS	-	OT	VAFB	-	-
1970-5436	2440765.50	1970 Jul 19	Minuteman 2	-	2476	0.000	SAC	MS	-	OT	VAFB	-	-
1970-5438	2440769.50	1970 Jul 23	Minuteman 1B	-	1413	0.000	SAC/ALCS	MS	-	OT	VAFB	-	-
1970-5452	2440766.47	1970 Jul 28 2317	Minuteman 3	-	2559	0.000	SAC	MS	-	OT	VAFB	-	-
1970-5460	2440981.50	1970 Aug 3	Minuteman 1B	-	970	0.000	SANBS	MS	-	Target	VAFB	-	-
1970-5463	2440983.29	1970 Aug 4 1900	Minuteman 2	-	FTN-6008	0.000	SANBS	MS	-	Test	VAFB	-	-
1970-5490	24409810.46	1970 Aug 11 2300	Minuteman 2	-	-	0.000	SAC/ALCS	MS	-	OT	Lompock/Record700805	VAFB	-
1970-5495	24409812.86	1970 Aug 14 0835	Minuteman 2	-	-	0.000	SAC/ALCS	MS	-	OT	VAFB/Hire	VAFB	-
1970-5490	24409819.77	1970 Aug 21 0625	Minuteman 1B	-	-	0.000	SAC	MS	-	OT	Ulrich/Lompock	VAFB	-
1970-5492	24409824.84	1970 Aug 26 0805	Minuteman 2	-	-	0.000	SAC	MS	-	OT	Ulrich/UPI	VAFB	-
1970-5493	2440984.75	1970 Aug 28 0600	Minuteman 3	-	-	0.000	SAC/ALCS	MS	-	OT	Ulrich/Hire	VAFB/Hire	-
1970-5494	2440987.64	1970 Aug 29 0315	Minuteman 1B	-	-	0.000	SAC	MS	-	OT	Ulrich/Lompock	VAFB	-
1970-5502	2440982.59	1970 Sep 3 0205	Minuteman 1B	-	-	0.000	SANBS	MS	-	Target	Ulrich/Hire	VAFB	-
1970-5518	2440984.48	1970 Sep 14 2330	Minuteman 2	-	-	0.000	SAC	MS	-	OT	Ulrich/Lompock	VAFB	-
1970-5520	2440986.31	1970 Sep 16 1930:00	Minuteman 3	-	STH-1	0.000	SANBS	MS	-	Test	ref-kean	CNDPS	-
1970-5521	2440987.25	1970 Sep 25	Minuteman 2	-	-	0.000	SAC/ALCS	MS	-	OT	VAFB/Hire	-	-
1970-5533	2440984.50	1970 Sep 25	Minuteman 1B	-	-	0.000	SAC/ALCS	MS	-	OT	VAFB/Hire	-	-
1970-5547	2440982.50	1970 Sep 26 0720	Minuteman 3	-	-	0.000	SAC	MS	-	OT	VAFB/Hire	-	-
1970-5548	2440982.50	1970 Oct 3	Minuteman 1B	-	-	0.000	SANBS	MS	-	Target	VAFB	-	-
1970-5551	2440985.46	1970 Oct 5 2300	Minuteman 2	-	-	0.000	SAC	MS	-	OT	VAFB/Hire	-	-
1970-5556	2440986.97	1970 Oct 7 1115	Minuteman 1B	-	-	0.000	SAC	MS	-	OT	UPI/Ulrich	VAFB	-
1970-5576	2440982.44	1970 Oct 22 2235	Minuteman 2	-	-	0.000	SAC	MS	-	OT	VAFB/Hire	-	-
1970-5577	2440982.44	1970 Oct 22 2235	Minuteman 2	-	-	0.000	SAC	MS	-	OT	VAFB/Hire	-	-
1970-5582	2440985.46	1970 Oct 26	Minuteman 1B	-	-	0.000	SAC	MS	-	OT	VAFB	-	-
1970-5590	2440983.46	1970 Nov 2 2305	Minuteman 2	-	-	0.000	SANBS	MS	-	OT	VAFB/Hire	-	-
1970-5591	2440984.88	1970 Nov 4 0905	Minuteman 3	-	STH-1W	0.000	SANBS	MS	-	Test	VAFB/Hire	-	-
1970-5592	2440986.58	1970 Nov 6 0200	Minuteman 2	-	-	0.000	SAC	MS	-	OT	VAFB/Hire	-	-
1970-5598	2440988.83	1970 Nov 8 0750	Minuteman 1B	-	-	0.000	SAC/ALCS	MS	-	OT	VAFB/Hire (light)	-	-
1970-5604	2440994.50	1970 Nov 14	Minuteman 3	-	-	0.000	SAC	MS	-	OT	CNDPS	-	-
1970-5623	2440993.25	1970 Dec 2 1802	Minuteman 3	-	STH-3	0.000	SANBS	MS	-	Test	Ulrich/Hire	VAFB	-
1970-5635	2440997.91	1970 Dec 7 0950	Minuteman 2	-	-	0.000	SAC	MS	-	OT	CNDPS	-	-
1970-5644	2440995.15	1970 Dec 14 1530:38	Minuteman 3	-	STH-2	0.000	SANBS	MS	-	Test	Ulrich/Hire	VAFB	-
1970-5652	2440998.54	1970 Dec 18 0100	Minuteman 2	-	-	0.000	SAC/ALCS	MS	-	OT	VAFB/Hire	-	-
1970-5661	2440944.58	1970 Dec 24 0155	Minuteman 1B	-	-	0.000	SANBS	MS	-	Target	VAFB/Hire	-	-

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	DrbPay	Agency	Launch_Code	Group	Category	LTCite	Cite	Notes
1971-856	2440962.50	1971, Jan 11	Maintenan 1B	-	-	0.000	SMSB	MS	-	Target	VAFB	-	-
1971-895	2440978.91	1971, Jan 27 0945	Maintenan 3	-	-	0.000	SAC/ALCS	MS	-	OT	Dirich/UPJ	-	-
1971-897	2440980.59	1971, Jan 29 0210	Maintenan 1B	-	-	0.000	SAC	MS	-	OT	VAFB/Wire	-	-
1971-8112	2440985.50	1971, Feb 3	Maintenan 2	-	-	0.000	SAC	MS	-	OT	VAFB	-	-
1971-8113	2440987.72	1971, Feb 5 0520	Maintenan 2	-	-	0.000	SAC	MS	-	OT	VAFB/Wire	-	-
1971-8119	2440991.46	1971, Feb 8 2300	Maintenan 1B	-	-	0.000	SAC/ALCS	MS	-	OT	Dirich/Wire	-	-
1971-8123	2440999.81	1971, Feb 17 0725	Maintenan 3	-	-	0.000	SAC	MS	-	OT	VAFB/Wire	-	-
1971-8128	2441005.50	1971, Feb 23	Maintenan 1B	-	-	0.000	SMSB	MS	-	OT	VAFB	-	-
1971-8130	2441007.58	1971, Feb 25 0200	Maintenan 2	-	-	0.000	SAC/ALCS	MS	-	OT	VAFB/Wire	-	-
1971-8134	2441009.50	1971, Feb 27	Maintenan 2	-	-	0.000	SAC	MS	-	OT	VAFB	-	-
1971-8140	2441012.50	1971, Mar 2	Maintenan 1B	-	-	0.000	SAC	MS	-	OT	VAFB	-	-
1971-8172	2441027.50	1971, Mar 17	Maintenan 1B	-	-	0.000	SMSB	MS	-	OT	VAFB/Wire	-	-
1971-8197	2441034.81	1971, Mar 24 0725	Maintenan 3	-	-	0.000	SAC	MS	-	OT	VAFB/Wire	-	-
1971-8221	2441042.86	1971, Apr 1 0840	Maintenan 2	-	-	0.000	SAC	MS	-	OT	VAFB/Wire	-	-
1971-8221	2441049.94	1971, Apr 8 1040	Maintenan 3	-	STH-2W	0.000	SMSB	MS	-	Test	Dirich/Lompock	VAFB	-
1971-8245	2441064.89	1971, Apr 23 0925	Maintenan 3	-	-	0.000	SAC	MS	-	OT	VAFB/Wire	-	-
1971-8261	2441067.50	1971, Apr 26	Maintenan 1B	-	-	0.000	SAC	MS	-	OT	VAFB	-	-
1971-8285	2441090.76	1971, May 19 0620	Maintenan 2	-	-	0.000	SAC	MS	-	OT	VAFB/Wire	-	-
1971-8297	2441092.50	1971, May 21	Maintenan 2	-	-	0.000	SAC	MS	-	OT	VAFB	-	-
1971-8300	2441095.50	1971, May 24	Maintenan 2	-	-	0.000	SAC	MS	-	OT	VAFB	-	-
1971-8302	2441098.79	1971, May 27 0656	Maintenan 3	-	-	0.000	SAC	MS	-	OT	VAFB/Wire	-	-
1971-8307	2441099.76	1971, May 28 0620	Maintenan 3	-	-	0.000	SAC	MS	-	OT	Dirich/UPJ	VAFB	-
1971-8321	2441106.50	1971, Jun 4	Maintenan 3	-	-	0.000	SAC	MS	-	OT	VAFB/Wire	-	-
1971-8327	2441114.12	1971, Jun 11 1455	Maintenan 3	-	STH-6W	0.000	SMSB	MS	-	Test	VAFB/Wire	-	-
1971-8332	2441120.50	1971, Jun 18	Maintenan 1B	-	-	0.000	SAC/ALCS	MS	-	OT	VAFB	-	-
1971-8336	2441128.50	1971, Jun 23	Maintenan 2	-	-	0.000	SAC	MS	-	OT	VAFB	-	-
1971-8343	2441128.64	1971, Jun 23 0318	Maintenan 1B	-	-	0.000	SMSB	MS	-	Target	VAFB/Wire	-	-
1971-8349	2441140.50	1971, Jul 6	Maintenan 3	-	-	0.000	SAC/ALCS	MS	-	OT	VAFB/Wire	-	-
1971-8361	2441144.96	1971, Jul 12 1100?	Maintenan 1B	-	-	0.000	SAC	MS	-	OT	VAFB/Wire	-	-
1971-8381	2441166.50	1971, Aug 3	Maintenan 1B	-	-	0.000	SAC/ALCS	MS	-	OT	VAFB/Wire	-	-
1971-8382	2441167.92	1971, Aug 4 1000	Maintenan 2	-	-	0.000	SAC/ALCS	MS	-	OT	Dirich/Wire	VAFB	-
1971-8384	2441170.03	1971, Aug 6 1250	Maintenan 2	-	-	0.000	SAC	MS	-	OT	VAFB/Wire	-	-
1971-8390	2441176.50	1971, Aug 13	Maintenan 2	-	-	0.000	SAC	MS	-	OT	VAFB	-	-
1971-8427	2441196.50	1971, Sep 2	Maintenan 2	-	-	0.000	SAC	MS	-	OT	VAFB	-	-
1971-8431	2441197.50	1971, Sep 3	Maintenan 3	-	-	0.000	SAC	MS	-	OT	VAFB	-	-
1971-8436	2441202.50	1971, Sep 6	Maintenan 1B	-	-	0.000	SAC/ALCS	MS	-	OT	VAFB/Wire	-	-
1971-8439	2441204.96	1971, Sep 10 1100	Maintenan 2	-	-	0.000	SAC	MS	-	OT	VAFB/Wire	-	-
1971-8462	2441230.50	1971, Oct 6 0156	Maintenan 2	-	-	0.000	SMSB	MS	-	Target	VAFB/Wire	-	-
1971-8505	2441232.58	1971, Oct 19 0905	Maintenan 1B	-	-	0.000	SAC/ALCS	MS	-	OT	VAFB/Wire	-	-
1971-8524	2441236.88	1971, Oct 26 1616	Maintenan 3	-	-	0.000	SAC/ALCS	MS	-	OT	VAFB/Wire	-	-
1971-8524	2441242.50	1971, Oct 26 1616	Maintenan 3	-	STH-3W	0.000	SMSB	MS	-	Test	VAFB/Wire	-	-
1971-8525	2441246.16	1971, Oct 29 0140	Maintenan 3	-	-	0.000	SAC	MS	-	Comms	VAFB/Wire	-	-
1971-8527	2441273.77	1971, Oct 29 0140	Maintenan 2	-	-	0.000	SAC	MS	-	OT	VAFB/Wire	-	-
1971-8551	2441276.79	1971, Nov 23 0650	Maintenan 3	-	-	0.000	SAC/ALCS	MS	-	OT	VAFB/Wire	-	-
1971-8559	2441278.76	1971, Nov 23 0655	Maintenan 3	-	-	0.000	SAC	MS	-	OT	VAFB/Wire	-	-
1971-8579	2441288.66	1971, Dec 10 0345	Maintenan 1B	-	(Cheer targ)	0.000	SAC	MS	-	OT	VAFB/Wire	-	-
1971-8598	2441298.54	1971, Dec 10 0100	Maintenan 1B	-	-	0.000	SMSB	MS	-	Test	VAFB/Wire	-	-
1971-8607	2441300.50	1971, Dec 15	Maintenan 3	-	STH-4W	0.000	SAC/ALCS	MS	-	OT	VAFB/Wire	-	-
1971-8613	2441302.91	1971, Dec 17 0945	Maintenan 3	-	-	0.000	SAC/ALCS	MS	-	OT	Dirich/UPJ	VAFB	-
1972-8613	2441343.98	1972, Jan 26 1125	Maintenan 3	-	-	0.000	SAC	MS	-	OT	Lompockcord706805	VAFB	-
1972-864	2441351.83	1972, Feb 9 0800?	Maintenan 3	-	-	0.000	SAC	MS	-	OT	VAFB	-	-
1972-871	2441366.50	1972, Feb 9	Maintenan 3	-	-	0.000	SAC/ALCS	MS	-	Target	VAFB/WirePST	-	-
1972-8114	2441392.50	1972, Mar 16	Maintenan 1B	-	-	0.000	SMSB	MS	-	Target	VAFB	-	-
1972-8130	2441398.62	1972, Mar 22 0300	Maintenan 2	-	-	0.000	SAC/ALCS	MS	-	Comms	VAFB/WirePST	-	-
1972-8158	2441420.50	1972, Apr 13	Maintenan 2	-	-	0.000	SAC	MS	-	OT	VAFB	-	-
1972-8189	2441442.50	1972, Apr 13	Maintenan 1B	-	-	0.000	SAC	MS	-	OT	VAFB	-	-
1972-8192	2441449.50	1972, May 5	Maintenan 2	-	-	0.000	SAC	MS	-	OT	VAFB	-	-
1972-8212	2441469.10	1972, May 31 1420	Maintenan 3	-	PWH-1/FTH-5255	0.000	SAC	MS	-	Target	VAFB/WirePDT	-	-
1972-8232	2441474.50	1972, Jun 6	Maintenan 3	-	-	0.000	SAC/ALCS	MS	-	OT	VAFB	-	-
1972-8237	2441480.36	1972, Jun 11 2035	Maintenan 3	-	-	0.000	SAC	MS	-	OT	VAFB/WirePDT	-	-
1972-8238	2441482.24	1972, Jun 13 1745	Maintenan 2	-	-	0.000	SMSB	MS	-	Test	Dirich/Wire	VAFB	-
1972-8243	2441486.50	1972, Jun 18 0000	Maintenan 2	-	-	0.000	SMSB	MS	-	Test	VAFB/WirePDT	-	-
1972-8244	2441489.20	1972, Jun 20 1645?	Maintenan 2	-	STH-5W	0.000	SAC/ALCS	MS	-	OT	VAFB/WirePDT	-	-
1972-8270	2441513.50	1972, Jul 15	Maintenan 1B	-	-	0.000	SMSB	MS	-	Target	VAFB	-	-
1972-8272	2441524.72	1972, Jul 26 0510	Maintenan 2	-	-	0.000	SMSB	MS	-	Test	VAFB/WirePDT	-	-
1972-8276	2441531.50	1972, Aug 2	Maintenan 3	-	Destruct test	0.000	SMSB	MS	-	Test	VAFB	-	-
1972-8310	2441579.50	1972, Sep 19	Maintenan 3	-	-	0.000	SAC	MS	-	OT	VAFB	-	-
1972-8314	2441586.48	1972, Sep 25 2330	Maintenan 2	-	-	0.000	SAC	MS	-	OT	VAFB/WirePDT	-	-
1972-8329	2441593.85	1972, Oct 3 0830	Maintenan 2	-	-	0.000	SAC	MS	-	OT	Dirich/Wire	VAFB	-
1972-8353	2441606.50	1972, Oct 16	Maintenan 3	-	-	0.000	SAC	MS	-	OT	VAFB	-	-
1972-8369	2441610.88	1972, Oct 20 0905	Maintenan 2	-	-	0.000	SAC/ALCS	MS	-	OT	VAFB/Wire	-	-
1972-8403	2441618.64	1972, Oct 28 0323	Maintenan 1B	-	-	0.000	SMSB	MS	-	Reentry Test?	VAFB/WirePST	-	-
1972-8413	2441646.58	1972, Nov 25 0200	Maintenan 3	-	-	0.000	SAC/ALCS	MS	-	OT	VAFB/Wire	-	-
1972-8413	2441656.61	1972, Dec 5 0235	Maintenan 3	-	First phase 2 OT	0.000	SAC	MS	-	OT	VAFB/Wire	-	-
1972-8420	2441659.50	1972, Dec 8	Maintenan 1B	-	-	0.000	SMSB	MS	-	Target	VAFB	-	-
1972-8432	2441663.50	1972, Dec 12	Maintenan 3	-	-	0.000	SAC/ALCS	MS	-	OT	VAFB	-	-
1972-8432	2441663.50	1972, Dec 12	Maintenan 3	-	-	0.000	SAC	MS	-	OT	VAFB	-	-
1972-8444	2441671.54	1972, Dec 20 0100	Maintenan 1B	-	-	0.000	SMSB	MS	-	Reentry Test?	Dirich/Wire	VAFB	-
1972-8444	2441673.70	1972, Dec 22 0455	Maintenan 2	-	-	0.000	SAC	MS	-	OT	VAFB/Wire	-	-
1972-8339	2441713.58	1973, Jan 31 0150?	Maintenan 3	-	PWH-2	0.000	SAC	MS	-	OT	VAFB/Wire	-	-
1972-8100	2441750.94	1973, Mar 9 1035	Maintenan 1B	-	FTH-1221	0.000	SMSB	MS	-	Reentry Test	Dirich/Wire	VAFB	-
1972-8155	2441790.68	1973, Apr 18 0425	Maintenan 2	-	-	0.000	SAC/ALCS	MS	-	OT	VAFB	-	-
1972-8165	2441797.86	1973, Apr 25 0836	Maintenan 1B	-	FTH-1373	0.000	SMSB	MS	-	Reentry Test?	Dirich/WirePST	VAFB	-
1972-8167	2441799.64	1973, Apr 27 0323	Maintenan 3	-	-	0.000	SAC/ALCS	MS	-	OT	VAFB/Wire	-	-
1972-8164	2441806.46	1973, May 3 2300	Maintenan 3	-	-	0.000	SAC	MS	-	OT	VAFB/Wire(PST)	-	-

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	DrbPay	Agency	Launch_Code	Group	Category	LTCite	Cite	Notes
1973-5165	2441806.50	1973 May 4	Minuteman 1B	-	-	0.000	SMSB	MS	-	Target	VAFB	-	-
1973-5178	2441834.63	1973 Jun 1 0310	Minuteman 3	-	FTM-5376	0.000	SMSB	MS	-	Test	OPI/Ulrich	-	-
1973-5195	2441941.63	1973 Jun 8 0308	Minuteman 1B	-	-	0.000	SAC	MS	-	Target	OPI/Ulrich	-	-
1973-5211	2441960.86	1973 Jun 27 0830	Minuteman 2	-	FTM-2844	0.000	SAC/ALCS	MS	-	OT	Ulrich/Lompock	-	-
1973-5220	2441970.38	1973 Jul 6 2100	Minuteman 3	-	-	0.000	SAC/ALCS	MS	-	OT	Ulrich/SMT	-	-
1973-5243	2441984.54	1973 Jul 21 0100	Minuteman 1B	-	-	0.000	SMSB	MS	351SMW/	Target	Ulrich/AP	-	-
1973-5249	2441990.39	1973 Jul 26 2125	Minuteman 2	-	-	0.000	SAC	MS	-	Comms	Ulrich/Lompock	-	-
1973-5264	2441996.50	1973 Aug 2	Minuteman 1B	-	-	0.000	SAC/ALCS	MS	-	OT	VAFB	-	-
1973-5271	2441993.50	1973 Aug 9	Minuteman 2	-	-	0.000	SMSB	MS	-	Target	OPI/Ulrich	-	-
1973-5283	2441918.57	1973 Aug 24 0135	Minuteman 3	-	PWH-3	0.000	SMSB	MS	-	Test	VAFB	-	-
1973-5286	2441930.50	1973 Sep 5	Minuteman 1B	-	-	0.000	SAC	MS	-	OT	VAFB	-	-
1973-5298	2441932.50	1973 Sep 7	Minuteman 1B	-	-	0.000	SMSB	MS	-	Target	VAFB	-	-
1973-5304	2441940.73	1973 Sep 15 0525	Minuteman 3	-	-	0.000	SAC	MS	-	OT	VAFB/Aire	-	-
1973-5309	2441951.65	1973 Sep 26 0335	Minuteman 2	-	-	0.000	SAC/ALCS	MS	-	OT	Ulrich/Lompock	-	-
1973-5337	2441956.77	1973 Oct 3 0630	Minuteman 2	-	-	0.000	SAC	MS	-	OT	VAFB/Aire (PST)	-	-
1973-5379	2441989.52	1973 Nov 3 0030	Minuteman 1B	-	-	0.000	SAC	MS	-	Target	VAFB/Aire	-	-
1973-5400	2442006.88	1973 Nov 22 0900	Minuteman 3	-	-	0.000	SAC/ALCS	MS	-	OT	Ulrich/OPI	-	-
1973-5411	2442016.54	1973 Nov 30 0100	Minuteman 1B	-	-	0.000	SMSB	MS	-	Target	VAFB	-	-
1973-5435	2442027.50	1973 Dec 11	Minuteman 1B	-	-	0.000	SMSB	MS	-	Target	VAFB	-	-
1973-5438	2442030.50	1973 Dec 14	Minuteman 1B	-	-	0.000	SMSB	MS	-	Target	VAFB	-	-
1973-5446	2442036.84	1973 Dec 22 0805	Minuteman 3	-	STM-8W	0.000	SMSB	MS	-	Target	VAFB/Aire	-	-
1974-570	2442070.60	1974 Jan 23 0230	Minuteman 1B	-	-	0.000	SMSB	MS	-	Target	VAFB/Aire	-	-
1974-576	2442074.08	1974 Jan 26 1400?	Minuteman 3	-	-	0.000	SAC	MS	-	OT	VAFB/Aire (sunrise)	-	-
1974-5150	2442119.71	1974 Mar 13 0505	Minuteman 2	-	-	0.000	SAC/ALCS	MS	-	OT	Ulrich	-	-
1974-5161	2442134.67	1974 Mar 28 0400	Minuteman 2	-	-	0.000	SAC/ALCS	MS	-	Test	VAFB/Aire	-	-
1974-5168	2442139.68	1974 Apr 2 0418	Minuteman 3	-	-	0.000	SMSB	MS	-	Target	VAFB/Aire	-	-
1974-5169	2442142.56	1974 Apr 5 0125	Minuteman 2	-	PWH-5	0.000	SMSB	MS	-	Target	VAFB/Aire	-	-
1974-5173	2442153.50	1974 Apr 16	Minuteman 1B	-	-	0.000	SAC	MS	-	OT	VAFB/Aire	-	-
1974-5161	2442164.84	1974 Apr 27 0810?	Minuteman 1B	-	-	0.000	SMSB	MS	-	Target	VAFB/Aire	-	-
1974-5167	2442170.42	1974 May 2 2200	Minuteman 3	-	-	0.000	SAC	MS	-	OT	VAFB/Aire	-	-
1974-5268	2442240.15	1974 Jul 11 1540	Minuteman 1B	-	-	0.000	SMSB	MS	-	Reentry Test	Ulrich/Lompock	-	-
1974-5270	2442247.54	1974 Jul 19 0058	Minuteman 1B	-	-	0.000	SMSB	MS	-	Target	VAFB	-	-
1974-5277	2442260.50	1974 Aug 1	Minuteman 1B	-	-	0.000	SMSB	MS	-	Target	VAFB	-	-
1974-5280	2442277.18	1974 Aug 17 1620?	Minuteman 3	-	SAC OT-45	0.000	SAC	MS	-	OT	VAFB	-	-
1974-5329	2442319.15	1974 Sep 28 6354	Minuteman 3	-	-	0.000	SAC	MS	-	OT	VAFB/Aire	-	-
1974-5356	2442326.76	1974 Oct 5 0610?	Minuteman 3	-	PWH-8	0.000	SMSB	MS	-	Test	VAFB/Aire	-	-
1974-5369	2442328.65	1974 Oct 12 0358	Minuteman 2	-	-	0.000	SAC	MS	-	OT	VAFB/Aire	-	-
1974-5345	2442332.75	1974 Oct 12 0854	Minuteman 3	-	PWH-6	0.000	SMSB	MS	-	Test	VAFB/Aire (PST)	-	-
1974-5366	2442332.85	1974 Oct 22 0850	Minuteman 3	-	PWH-7	0.000	SMSB	MS	-	Test	VAFB/Aire (PST)	-	-
1974-5360	2442343.12	1974 Oct 22 1455	Minuteman 2	-	-	0.000	SAC/ALCS	MS	-	Comms	VAFB/Aire (ordcc237)	-	-
1974-5367	2442344.50	1974 Oct 25	Minuteman 1	-	-	0.000	SMSB	MS	-	Test	VAFB/Aire	-	-
1974-5371	2442347.52	1974 Oct 25 1455	Minuteman 1	-	-	0.000	SAC/ALCS	MS	-	OT	Ulrich	-	-
1974-5390	2442367.50	1974 Nov 20 0720	Minuteman 3	-	PWH-9	0.000	SMSB	MS	-	Test	VAFB	-	-
1974-5400	2442369.81	1974 Dec 18 0220	Minuteman 3	-	-	0.000	SAC/ALCS	MS	-	OT	Ulrich/Lompock	-	-
1974-5416	2442381.61	1974 Dec 19 1235	Minuteman 2	-	-	0.000	SAC/ALCS	MS	-	OT	VAFB/Aire	-	-
1975-542	2442432.77	1975 Jan 19 1250	Minuteman 1B	-	-	0.000	SMSB	MS	-	Reentry Test	VAFB/Aire	-	-
1975-561	2442443.14	1975 Feb 5 1440	Minuteman 3	-	-	0.000	SAC	MS	-	OT	VAFB/Aire	-	-
1975-569	2442477.86	1975 Feb 6 0936	Minuteman 3	-	-	0.000	SAC	MS	-	OT	VAFB/Aire	-	-
1975-5145	2442509.86	1975 Mar 6 0936	Minuteman 1B	-	-	0.000	SMSB	MS	-	Reentry Test	Ulrich/Lompock	-	-
1975-5148	2442541.50	1975 May 9	Minuteman 1B	-	PWH-10	0.000	SMSB	MS	-	Test	VAFB/Aire	-	-
1975-5157	2442548.50	1975 May 9	Minuteman 1B	-	FTM 1308	0.000	SMSB	MS	-	Reentry Test	VAFB/Aire	-	-
1975-5158	2442555.50	1975 May 23	Minuteman 3	-	STM-6W/FTM 5647	0.000	SMSB	MS	-	Reentry Test	VAFB	-	-
1975-5197	2442575.10	1975 Jun 11 1430	Minuteman 1B	-	FTM 1466	0.000	SAC	MS	-	OT	Ulrich/Lompock	-	-
1975-5206	2442583.50	1975 Jun 20	Minuteman 3	-	-	0.000	SAC	MS	-	OT	VAFB/Aire	-	-
1975-5222	2442586.62	1975 Jul 2 0300?	Minuteman 3	-	-	0.000	SMSB	MS	-	Test	VAFB/Aire	-	-
1975-5232	2442519.52	1975 Jul 26	Minuteman 3	-	STM-10W	0.000	SMSB	MS	-	Test	VAFB/Aire	-	-
1975-5243	2442530.68	1975 Aug 15 0425	Minuteman 2	-	FTM 2396	0.000	SAC	MS	-	OT	VAFB/Aire	-	-
1975-5249	2442546.50	1975 Aug 22	Minuteman 1B	-	-	0.000	SMSB	MS	-	Reentry Test	VAFB	-	-
1975-5259	2442564.10	1975 Aug 29 1430	Minuteman 3	-	-	0.000	SAC	MS	-	OT	VAFB/Aire	-	-
1975-5267	2442566.68	1975 Sep 5 0425	Minuteman 2	-	-	0.000	SAC/ALCS	MS	-	Comms	VAFB/Aire	-	-
1975-5274	2442571.50	1975 Sep 16	Minuteman 1B	-	-	0.000	SAC	MS	-	OT	VAFB/Aire	-	-
1975-5272	2442571.50	1975 Sep 16	Minuteman 2	-	-	0.000	SAC	MS	-	OT	VAFB/Aire	-	-
1975-5279	2442579.57	1975 Sep 24 0144	Minuteman 2	-	OSL	0.000	SAC	MS	-	OT	VAFB/Aire	-	-
1975-5286	2442585.92	1975 Sep 30 1002	Minuteman 1B	-	-	0.000	SMSB	MS	-	Reentry Test	Ulrich/Lompock	-	-
1975-5318	2442729.50	1975 Nov 13	Minuteman 1B	-	FTM 1349	0.000	SMSB	MS	-	Reentry Test	VAFB/Aire	-	-
1975-5320	2442731.22	1975 Nov 14 1710	Minuteman 3	-	-	0.000	SAC/ALCS	MS	-	OT	Ulrich/Lompock	-	-
1975-5353	2442763.50	1975 Dec 17	Minuteman 3	-	-	0.000	SAC	MS	-	OT	VAFB	-	-
1975-5354	2442765.50	1975 Dec 17	Minuteman 3	-	-	0.000	SAC	MS	-	OT	VAFB	-	-
1975-5373	2442900.70	1975 Jan 23	Minuteman 1B	-	PWH-12	0.000	SAC	MS	-	Test	VAFB	-	-
1975-5383	2442907.70	1975 Jan 30 0450	Minuteman 1B	-	FTM 1313	0.000	SAC	MS	-	OT	Ulrich/Lompock	-	-
1975-5396	2442914.50	1975 Feb 6	Minuteman 3	-	-	0.000	SAC	MS	-	OT	VAFB/Aire	-	-
1975-5105	2442928.64	1975 Feb 20 0320	Minuteman 2	-	-	0.000	SAC	MS	-	OT	VAFB/Aire	-	-
1975-5109	2442933.72	1975 Feb 26 0515	Minuteman 2	-	-	0.000	SAC	MS	-	OT	VAFB/Aire	-	-
1975-5112	2442936.58	1975 Feb 28 0200	Minuteman 1B	-	-	0.000	SAC	MS	-	OT	VAFB/Aire	-	-
1975-5123	2442941.50	1975 Mar 4	Minuteman 3	-	-	0.000	SMSB	MS	-	Reentry Test	Ulrich/UPI	-	-
1975-5135	2442951.50	1975 Mar 14	Minuteman 3	-	-	0.000	SAC/ALCS	MS	-	OT	VAFB	-	-
1975-5198	2442958.80	1975 Jun 9 0719	Minuteman 2	-	PWH-13	0.000	SMSB	MS	-	Test	VAFB	-	-
1975-5205	2442960.79	1975 Jun 24 0701	Minuteman 3	-	-	0.000	SAC	MS	-	OT	Ulrich/UPI	-	-
1975-5206	2442962.75	1975 Jun 23 0600?	Minuteman 2	-	-	0.000	SAC	MS	-	OT	VAFB/Aire	-	-
1975-5221	2442969.89	1975 Jun 30 0919	Minuteman 3	-	-	0.000	SAC	MS	-	OT	Ulrich/Lompock	-	-
1975-5254	2442974.50	1975 Jul 15	Minuteman 3	-	-	0.000	SMSB	MS	-	Test	VAFB/Aire	-	-
1975-5253	2443009.50	1975 Aug 19	Minuteman 1B	-	STM-11W	0.000	SMSB	MS	-	Reentry Test	VAFB	-	-
1975-5270	2443016.50	1975 Aug 26	Minuteman 2	-	-	0.000	SAC/ALCS	MS	-	OT	VAFB	-	-
1975-5307	2443078.62	1975 Oct 27 0300	Minuteman 2	-	-	0.000	SAC	MS	-	Comms	Ulrich/Aire	-	-









Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	DrbPay	Agency	Launch_Code	Group	Category	LTCite	Cite	Notes
2007-534	245435.85	2007 Aug 25 0831	Minotaur II+	-	TLV-7	0.000	576FTS	MS	-	Target	vandenberg.af.mil	www.mda.mil	-
2008-513	245455.83	2008 Apr 2 0801	Minuteman 3	-	-	0.000	576FTS	MS	905HW/91HW/341HW/	Up Test	vandenberg.af.mil	-	-
2008-524	245468.92	2008 May 22 1004	Minuteman 3	-	-	0.000	576FTS	MS	341HW/	Up Test (Guam)	vandenberg.af.mil	-	-
2008-538	245491.83	2008 Aug 13 0801	Minuteman 3	-	-	0.000	576FTS	MS	-	Target	Wire	Rigg	-
2008-545	245493.79	2008 Sep 24 0657	Minotaur II+	-	TLV-8 Chimera	0.000	576FTS	MS	-	Target	www.mda.mil	-	-
2008-559	245476.88	2008 Nov 5 0900	Minuteman 3	-	-	0.000	RSLP	MS	905HW/	Up Test	vandenberg.af.mil	-	-
2009-528	245497.19	2009 May 19 2355	Minotaur 1	-	8	0.407	AFSSC/ALCS	MS	CG/G	Sat LED 0	vandenberg.af.mil	-	-
2009-531	245501.92	2009 Jun 29 1001	Minuteman 3	-	-	0.000	AFSSC/ALCS	MS	91HW/	Up Test	vandenberg.af.mil	-	-
2009-543	245506.17	2009 Aug 23 1601	Minuteman 3	-	-	0.000	AFSSC	MS	341HW/	Up Test	vandenberg.af.mil	-	-
2010-542	245583.92	2010 Jun 16 1001	Minuteman 3	-	-	0.000	AFSSC	MS	905HW/	Up Test	vandenberg.af.mil	-	-
2010-544	245577.94	2010 Jun 30 1040:01	Minuteman 3	-	-	0.000	AFSSC	MS	341HW/	Up Test	vandenberg.af.mil	-	-
2010-566	245586.92	2010 Sep 17 1003	Minuteman 3	-	9	0.235	RSLP	MS	91HW/	Up Test (Guam)	vandenberg.af.mil	[320 km SW Guam]	-
2011-006	245599.02	2011 Feb 6 1228	Minotaur 1	-	-	0.000	RSLP	MS	CG/G	Sat LED 0	spaceflightnow.com	-	-
2011-523	245576.07	2011 Jun 22 1335	Minuteman 3	-	-	0.000	AFSSC	MS	91HW/	Up Test	vandenberg.af.mil	-	-
2011-529	245574.63	2011 Jun 30 0309:00	Minotaur 1	-	10	0.475	RSLP	MS	CG/G	Sat LED 0	Wire	-	-
2011-533	245569.92	2011 Jul 27 1001	Minuteman 3	-	-	0.000	AFSSC	MS	341HW/	Up Test	vandenberg.af.mil	-	-
2012-507	245582.96	2012 Feb 25 1046	Minuteman 3	-	-	0.000	AFSSC	MS	905HW/	Up Test	vandenberg.af.mil	-	-
2012-566	245624.96	2012 Nov 14 1107:01	Minuteman 3	-	-	0.000	AFSSC	MS	341HW/	Up Test	vandenberg.af.mil	-	-
2013-537	245635.06	2013 May 22 1327	Minuteman 3	-	-	0.000	AFSSC	MS	91HW/	Up Test	vandenberg.af.mil	-	-
2013-579	245657.92	2013 Sep 22 1001:00	Minuteman 3	-	-	0.000	AFSSC	MS	91HW/	Up Test	vandenberg.af.mil	-	-
2013-586	245661.94	2013 Sep 26 1033	Minuteman 3	-	-	0.000	AFSSC	MS	905HW/	Up Test	vandenberg.af.mil	-	-
2013-064	245661.55	2013 Nov 20 0115	Minotaur 1	-	11	0.852	RSLP	MS	CG/G	Sat LED 0	Wire	-	-
2013-5103	245664.02	2013 Dec 17 1236	Minuteman 3	-	-	0.000	AFSSC	MS	341HW/	Up Test	vandenberg.af.mil	-	-
2014-557	245624.11	2014 Sep 23 1446:00	Minuteman 3	-	-	0.000	AFSSC	MS	91HW/	Up Test	vandenberg.af.mil	-	-
2015-519	245704.94	2015 Mar 23 1036:00	Minuteman 3	-	-	0.000	AFSSC	MS	905HW/	Up Test	vandenberg.af.mil	-	-
2015-523	2457106.96	2015 Mar 27 1053:59	Minuteman 3	-	-	0.000	AFSSC	MS	341HW/	Up Test	vandenberg.af.mil	-	-
2015-531	2457162.94	2015 May 20 1037:00	Minuteman 3	-	-	0.000	AFSSC	MS	905HW/	Up Test	vandenberg.af.mil	-	-
2015-544	2457253.92	2015 Aug 19 1003:00	Minuteman 3	-	-	0.000	AFSSC	MS	91HW/	Up Test	vandenberg.af.mil	-	-
2015-555	2457317.03	2015 Oct 21 1246:00	Minuteman 3	-	-	0.000	AFSSC	MS	905HW/	Up Test	vandenberg.af.mil	-	-
2016-507	2457443.82	2016 Feb 21 0734:02	Minuteman 3	-	-	0.000	AFSSC	MS	91HW/	Up Test	vandenberg.af.mil	-	-
2016-508	2457444.79	2016 Feb 26 0701:00	Minuteman 3	-	-	0.000	AFSSC	MS	91HW/	Up Test	vandenberg.af.mil	-	-
2016-555	2457636.88	2016 Sep 5 0910	Minuteman 3	-	-	0.000	AFSSC	MS	341HW/	Up Test	vandenberg.af.mil	-	-
2017-509	2457753.82	2017 Feb 9 0736:59	Minuteman 3	-	-	0.000	AFSSC	MS	91HW/	Up Test	vandenberg.af.mil	-	-
2017-525	2457693.79	2017 Apr 26 0703:06	Minuteman 3	-	-	0.000	AFSSC	MS	341HW/	Up Test	vandenberg.af.mil	-	-
2017-532	2457767.79	2017 May 3 0701:59	Minuteman 3	-	-	0.000	AFSSC	MS	905HW/	Up Test	vandenberg.af.mil	-	-
2017-567	2457967.88	2017 Aug 25 0910:00	Minuteman 3	-	-	0.000	AFSSC	MS	341HW/	Up Test	vandenberg.af.mil	-	-
2018-523	2458254.02	2018 Apr 25 1226	Minuteman 3	-	-	0.000	AFSSC	MS	905HW/	Up Test	vandenberg.af.mil	-	-
2018-525	2458252.86	2018 May 14 0823	Minuteman 3	-	-	0.000	AFSSC	MS	91HW/	Up Test	vandenberg.af.mil	-	-
2018-543	2458330.98	2018 Jul 31 1138	Minuteman 3	-	-	0.000	AFSSC	MS	-	Up Test	vandenberg.af.mil	-	-
2018-568	2458423.79	2018 Nov 7 0701	Minuteman 3	-	-	0.000	AFSSC	MS	905HW/	Up Test	vandenberg.af.mil	-	-
2018-510	2458520.79	2018 Feb 6 0701	Minuteman 3	-	-	0.000	AFSSC?	MS	90HW/	Rad	vandenberg.af.mil	-	-
2018-516	2458520.00	2018 May 5 0942	Minuteman 3	-	-	0.000	AFSSC	MS	90HW/	Up Test	vandenberg.af.mil	-	-
2018-551	2458743.82	2018 May 5 0746	Minuteman 3	-	-	0.000	AFSSC	MS	341HW/	Up Test	vandenberg.af.mil	-	-
2018-513	2458763.84	2018 Oct 2 0913	Minuteman 3	-	-	0.000	AFSSC?	MS	341HW/90HW/91HW/	Up Test	vandenberg.af.mil	-	-
2018-513	2458684.86	2018 Feb 5 0933	Minuteman 3	-	-	0.000	AFSSC?	MS	-	Up Test	vandenberg.af.mil	-	-
2020-523	2459065.81	2020 Aug 2 0731	Minuteman 3	-	-	0.000	AFSSC	MS	-	Up Test	vandenberg.af.mil	-	-
2020-527	2459151.81	2020 Sep 2 0733	Minuteman 3	-	-	0.000	AFSSC	MS	-	Up Test	vandenberg.af.mil	-	-
2020-526	2459151.81	2020 Sep 29 0727	Minuteman 3	-	-	0.000	AFSSC	MS	-	Up Test	vandenberg.af.mil	-	-
2021-517	2459269.81	2021 Feb 24 0749	Minuteman 3	-	-	0.450	W1TSC	MS	CG/G	Sat LED 0	spaceflightnow.com	-	-
2021-552	2459281.07	2021 Jun 15 1335	Minotaur 1	-	12	0.000	AFSSC	MS	-	Up Test	Wire	-	-
2021-562	2459287.82	2021 Aug 11 0753	Minuteman 3	-	-	0.000	AFSSC?	MS	-	Up Test	Wire	-	-
2022-560	2459267.75	2022 Jul 7 0651	Minotaur II+	-	-	0.000	AFSSC?	MS	-	Up Test	Wire	-	-
2022-584	2459267.84	2022 Aug 16 0749	Minuteman 3	-	-	0.000	AFSSC	MS	-	Up Test	vandenberg.af.mil	-	-
2022-584	2459269.84	2022 Sep 7 0819	Minuteman 3	-	-	0.000	AFSSC	MS	-	Up Test	vandenberg.af.mil	-	-
2022-519	2459264.01	2022 Feb 10 0701	Minuteman 3	-	-	0.000	AFSSC	MS	-	Up Test	vandenberg.af.mil	-	-
2022-537	2459264.01	2022 Apr 19 1211	Minuteman 3	-	-	0.000	AFSSC	MS	-	Up Test	vandenberg.af.mil	-	-
2022-537	2459264.01	2022 Sep 6 0826	Minuteman 3	-	-	0.000	AFSSC	MS	-	Up Test	twitter/afsp4war	-	-
2024-535	2459264.83	2024 Nov 1 0701	Minuteman 3	-	-	0.000	AFSSC	MS	-	Up Test	vandenberg.af.mil	-	-
2024-536	2459265.83	2024 Jun 4 0756	Minuteman 3	-	-	0.000	AFSSC	MS	-	Up Test	vandenberg.af.mil	-	-
2024-536	2459267.87	2024 Jun 6 0846	Minuteman 3	-	-	0.000	AFSSC	MS	-	Up Test	vandenberg.af.mil	-	-
2024-539	2459279.79	2024 Jun 18 0701	Minotaur I Lite	?	13	0.000	USAF	MS	-	Up Test	spaceforce.mil	upatb.af.mil	-
2024-566	2459260.79	2024 Nov 6 0701	Minuteman 3	-	-	0.000	AFSSC	MS	-	Up Test	vandenberg.af.mil	-	-



Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Mission	FlightCode	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee km	Range km	Dest
2023-A16	2460224.51	2023 Oct 7 0019:04?	Miura 1	-	SH1	-	-	-	-	ELAR	-	-	-	47	-	-



Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	OrbPay	Agency	Launch_Code	Group	Category	LTCite	Cite	Notes
2023-A16	2460224.51	2023 Oct 7 0019:04?	Mtura 1	-	SH1	0.000	PLDS	SF	-	Test	youtube.com	-	-







Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Launch_Mission	FlightCode	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee km	Range km	Deat
2021-S30	2459960.50	2021 May 26	SR-3	-	-	ASD/FS-21	Formidable Shield	-	DDG-117	SUISF	D701D?	-	-	300?	-	-
2021-A08	2459963.50	2021 May 29	SR-6	-	Aegis FTM-31E1	-	-	-	DDG-09K	KAU	POA	-	-	20?	-	-
2021-A09	2459963.50	2021 May 29	SR-6	-	Aegis FTM-31E1	-	-	-	DDG-09K	KAU	POA	-	-	20?	-	-
2021-S33	2459964.50	2021 May 30	SR-3	-	-	ASD/FS-21	Formidable Shield	-	DDG-117	SUISF	D701D?	-	-	300?	-	-
2021-A12	2459419.50	2021 Jul 24	SR-6	-	Aegis FTM-33	-	-	-	DDG-114	KAU	POA	-	-	20?	-	-
2021-A13	2459419.50	2021 Jul 24	SR-6	-	Aegis FTM-33	-	-	-	DDG-114	KAU	POA	-	-	20?	-	-
2021-A14	2459419.50	2021 Jul 24	SR-6	-	Aegis FTM-33	-	-	-	DDG-114	KAU	POA	-	-	20?	-	-
2021-A15	2459419.50	2021 Jul 24	SR-6	-	Aegis FTM-33	-	-	-	DDG-114	KAU	POA	-	-	20?	-	-
2022-S100	2459900.50	2022 Aug 9	SR-3	-	PD22	-	-	-	DDG-62	KAU	POA	-	-	20?	-	-
2022-S104	2459900.50	2022 Nov 9	SR-3-III	-	Aegis JFTW-07	Pacific Dragon 22	-	-	DDG-179	KAU	POA	-	-	200?	-	-
2022-S126	2459902.50	2022 Nov 16	SR-3-III	-	Aegis JFTW-07	-	-	-	DDG-180	KAU	POA	-	-	150?	-	-
2023-A09	2460033.50	2023 Mar 30	SR-6	-	Aegis FTM-31E1a	Stellar Hydra	-	-	DDG-118	KAU	POA	-	-	20?	-	-
2023-A10	2460033.50	2023 Mar 30	SR-6	-	Aegis FTM-31E1a	Stellar Hydra	-	-	DDG-118	KAU	POA	-	-	20?	-	-
2023-S49	2460242.50	2023 Oct 25	SR-3	-	Aegis FTM-48	Vigilant Wyvern	-	-	DDG-120	KAU	POA	-	-	150?	-	-
2023-S50	2460242.50	2023 Oct 25	SR-3	-	Aegis FTM-48	Vigilant Wyvern	-	-	DDG-120	KAU	POA	-	-	150?	-	-
2024-S03	2460346.50	2024 Feb 8	SR-3-III	-	Aegis FTX-23	Stellar Sisyphus	-	-	DDG-85	KAU	LP7	-	-	150?	-	-
2024-A03	2460397.50	2024 Mar 28	SR-6	-	Aegis FTM-32	Stellar Laclaps	-	-	DDG-68	KAU	POA	-	-	20?	-	-
2024-A04	2460397.50	2024 Mar 28	SR-6	-	Aegis FTM-32	Stellar Laclaps	-	-	DDG-68	KAU	POA	-	-	20?	-	-
2024-S26	2460414.48	2024 Apr 13 2330?	SR-3	-	-	-	-	-	ERED	ERED	-	-	-	100?	-	-
2024-S26	2460414.48	2024 Apr 13 2330?	SR-3	-	-	-	-	-	DDG-51	ERED	-	-	-	100?	-	-
2024-S27	2460414.48	2024 Apr 13 2330?	SR-3	-	-	-	-	-	DDG-51	ERED	-	-	-	100?	-	-
2024-S28	2460414.48	2024 Apr 13 2330?	SR-3	-	-	-	-	-	DDG-64	ERED	-	-	-	100?	-	-
2024-S29	2460414.48	2024 Apr 13 2330?	SR-3	-	-	-	-	-	DDG-64	ERED	-	-	-	100?	-	-
2024-S30	2460414.48	2024 Apr 13 2330?	SR-3	-	-	-	-	-	DDG-64	ERED	-	-	-	100?	-	-



Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	OrbPay	Agency	Launch_Code	Group	Category	LTCite	Cite	Notes
1992-A17	2448956.50	1992 Dec	SM-2-IV	-	-	0.000	USNAEG	MS	-	Test	designations-systems	-	-
1994-A01	2449352.50	1994	SM-2-IV	-	Aegis ETR-1A	0.000	USNAEG	MS	-	Test	designations-systems	-	-
1996-A01	2450297.50	1996 Aug 2	SM-2-IV	-	Aegis DIR-1A	0.000	USNAEG	MS	-	Test	www.dote.osd.mil	-	-
1997-A03	2450473.15	1997 Jan 24 1532	SM-2-IV	-	Aegis SM-2-IV RRF	0.000	USNAEG	MS	-	Test	www.chinfo.navy.mil	-	-
1997-A33	2450717.50	1997 Sep 26	SM-2-IV	-	-	0.000	USNAEG	MS	-	Test	www.mda.mil	-	-
1999-A02	2451396.08	1999 Aug 5 1359	SM-2-IV	-	-	0.000	USNAEG	MS	-	Test	defensebriefing.com	-	-
1999-A62	2451445.50	1999 Sep 24	SM-3	-	Aegis CTV-1A	0.000	USNAEG	MS	-	Test	www.acq.osd.mil	-	-
2000-A01	2451739.50	2000 Jul 14	SM-3	-	Aegis FTR-1	0.000	USNAEG	MS	-	Test	cdi.org	AMST001127-36	-
2000-A05	2451781.12	2000 Aug 24 1450	SM-2-IV	-	Aegis CTV-2	0.000	USNAEG	MS	-	Test	www.mda.mil	AMST001127-36	-
2001-A05	2451935.67	2001 Jan 26 0208	SM-3	-	Aegis FTR-1A	0.000	USNAEG	MS	-	Test	AMST010205-39	www.acq.osd.mil	-
2002-A02	2452300.59	2002 Jan 24 15307	SM-2-IV	-	Aegis FH-2	0.000	USNAEG	MS	-	Interceptor	Wire	-	-
2002-A42	2452399.15	2002 Jan 26 0208	SM-3	-	Aegis FH-3	0.000	USNAEG	MS	-	Interceptor	www.dcmilitary.com	-	-
2002-944	2452439.56	2002 Jan 14 0129	SM-3	-	Aegis FH-4	0.000	USNAEG	MS	-	Test	Wire	-	-
2002-572	2452600.52	2002 Nov 22 0032	SM-3	-	Aegis FH-5	0.000	USNAEG	MS	-	Test	SM030623-4	-	-
2003-526	2452609.47	2003 Jun 18 2317	SM-3	-	Aegis FH-6	0.000	USNAEG	MS	-	Interceptor	www.dod.mil	AMST031215-18	-
2003-951	2452985.26	2003 Dec 11 1812	SM-3	-	Aegis FTR-04-1 (RFV)	0.000	USNAEG	MS	-	Interceptor	www.spaceref.com	-	-
2005-308	2453426.38	2005 Feb 24 2104	SM-3	-	Aegis FTR-04-2 (FRM)	0.000	USNAEG	MS	-	Interceptor	Wire	-	-
2005-352	2453692.26	2005 Nov 17 1816	SM-3	-	Aegis JCTV-1	0.000	USNAEG	MS	-	Test	www.mda.mil	AMST060313-18	-
2006-306	2453803.36	2006 Mar 6 2046	SM-3	-	Aegis SBT	0.000	USNAEG	MS	-	Test	raytheon.mediaroom	-	-
2006-A10	2453782.50	2006 Feb 16	SM-2-IV	-	Aegis SBT	0.000	USNAEG	MS	-	Test	www.mda.mil	-	-
2006-A02	2453860.36	2006 May 24 2036	SM-2-IV	-	Aegis FTR-10	0.000	USNAEG	MS	-	Test	www.boeing.com	-	-
2006-530	2453909.42	2006 Jun 22 22047	SM-3	-	Aegis FTR-11E4	0.000	USNAEG	MS	-	Test	www.mda.mil	-	-
2007-521	2454217.40	2007 Apr 26 2132	SM-3	-	Aegis FTR-12	0.000	USNAEG	MS	-	Test	www.mda.mil	-	-
2007-528	2454274.61	2007 Jun 23 0244	SM-3	-	Aegis FTR-11a	0.000	USNAEG	MS	-	Test	www.mda.mil	-	-
2007-579	2454343.50	2007 Aug 31	SM-3	-	Aegis FTR-13a	0.000	USNAEG	MS	-	Test	www.mda.mil	-	-
2007-587	2454411.68	2007 Nov 7 0414	SM-3	-	Aegis FTR-13b	0.000	USNAEG	MS	-	Test	www.mda.mil	-	-
2007-588	2454411.68	2007 Nov 7 0414	SM-3	-	Aegis JFTW-1	0.000	JMSDF	MS	-	Test	www.mda.mil	-	-
2007-589	2454452.42	2007 Dec 17 2208	SM-3	-	Op. Burnt Frost	0.000	JMSDF	MS	-	Test	Wire	-	-
2008-510	2454517.64	2008 Feb 21 0526	SM-3	-	Test Sea-Based Terminal	0.000	USNAEG	MS	-	Test Sea-Based Terminal	www.mda.mil	-	-
2008-A04	2454623.26	2008 Jun 5 1817	SM-2-IV	-	Aegis FTR-14	0.000	USNAEG	MS	-	Interceptor	www.mda.mil	-	-
2008-A05	2454623.26	2008 Jun 5 1817	SM-2-IV	-	Aegis FTR-14	0.000	USNAEG	MS	-	Interceptor	www.mda.mil	-	-
2008-586	2454771.50	2008 Nov 1	SM-3	-	Aegis	0.000	MDA	MS	-	Interceptor	mda.mil	-	-
2008-588	2454771.50	2008 Nov 1	SM-3	-	Aegis	0.000	MDA	MS	-	Interceptor	mda.mil	-	-
2008-586	2454790.60	2008 Nov 20 0224	SM-3	-	Aegis JFTW-2	0.000	JMSDF	MS	-	Interceptor	www.navy.mil	-	-
2009-A02	2454917.31	2009 Mar 26 19207	SM-2-IV	-	Aegis BFI	0.000	USNAEG	MS	-	Interceptor	mda.mil	-	-
2009-536	2455045.65	2009 Jul 31 0342	SM-3	-	Aegis FTR-17	0.000	USNAEG	MS	-	Interceptor	mda.mil	-	-
2009-556	2455132.67	2009 Oct 28 0404	SM-3	-	Aegis JFTW-3	0.000	JMSDF	MS	-	Interceptor	mda.mil	-	-
2009-567	2455496.63	2010 Oct 29 0309	SM-3	-	Aegis JFTW-4	0.000	JMSDF	MS	-	Interceptor	mda.mil	-	-
2011-513	2455666.79	2011 Apr 15 0703	SM-3	-	Aegis FTR-15	0.000	USNAEG	MS	-	Test	www.mda.mil	-	-
2011-539	2455696.08	2011 Sep 1 1359	SM-3-IB	-	Aegis FTR-16 E2	0.000	USNAEG	MS	-	Interceptor	www.mda.mil	-	-
2012-521	2456067.76	2012 Jun 10 06207	SM-3-IB	-	Aegis FTR-16 E2A	0.000	USNAEG	MS	-	Interceptor	mda.mil	-	-
2012-583	2456095.89	2012 Jun 20 09207	SM-3-IB	-	Aegis FTR-16	0.000	USNAEG	MS	-	Interceptor	mda.mil	-	-
2012-582	2456235.90	2012 Oct 257 09157	SM-3	-	Aegis FTR-16	0.000	MDA	MS	-	ABN test	www.mda.mil	-	-
2013-509	2456356.89	2013 Feb 13 09157	SM-3-IB	-	Aegis FTR-20	0.000	USNAEG	MS	-	Interceptor	mda.mil	-	-
2013-506	2456445.89	2013 May 16 03307	SM-3-IB	-	Aegis FTR-19	0.000	USNAEG	MS	-	Interceptor	mda.mil	-	-
2013-569	2456445.89	2013 Sep 10 03027	SM-3-IB	-	Aegis FTR-21	0.000	USNAEG	MS	-	Interceptor	mda.mil	-	-
2013-566	2456454.82	2013 Sep 19 03027	SM-3-IB	-	Aegis FTR-21	0.000	USNAEG	MS	-	Interceptor	mda.mil	-	-
2013-586	2456564.72	2013 Sep 19 03027	SM-3-IB	-	Aegis FTR-22	0.000	USNAEG	MS	-	Interceptor	mda.mil	-	-
2013-526	2456798.72	2013 Oct 4 03377	SM-3-IB	-	Aegis AA CTV-01	0.000	USNAEG	MS	-	Interceptor	mda.mil	-	-
2014-A44	2456826.50	2014 Jun 18	SM-6	-	Test	0.000	USNAEG	MS	-	Test	Wire	-	-
2014-A44	2456826.50	2014 Jun 187	SM-6	-	Test	0.000	USNAEG	MS	-	Test	Wire	-	-
2014-A46	2456826.50	2014 Jun 207	SM-6	-	Test	0.000	USNAEG	MS	-	Test	Wire	-	-
2014-A47	2456826.50	2014 Jun 207	SM-6	-	Test	0.000	USNAEG	MS	-	Test	Wire	-	-
2014-A48	2456883.50	2014 Jun 14	SM-6	-	Test	0.000	USNAEG	MS	-	Test	Wire	-	-
2014-570	2456965.40	2014 Nov 6 22087	SM-3-IB	-	Test FTR6	0.000	USNAEG	MS	-	Test	Wire	-	-
2015-534	2457175.50	2015 Nov 6 08927	SM-3-11A	-	Aegis FTR-25	0.000	USNAEG	MS	-	Interceptor	mda.mil	-	-
2015-A10	2457233.86	2015 Jul 29 08927	SM-6	-	Aegis SCD CTV-01	0.000	MDA/JMSDF	MS	-	Test	mda.mil	-	-
2015-A11	2457233.76	2015 Jul 30 06177	SM-2-IV	-	Aegis MWH E1	0.000	USNAEG	MS	-	Interceptor	mda.mil	-	-
2015-A12	2457235.92	2015 Aug 1 03227	SM-2-IV	-	Aegis MWH E3	0.000	USNAEG	MS	-	Interceptor	mda.mil	-	-
2015-A13	2457236.57	2015 Aug 2 01477	SM-6	-	Aegis MWH E4	0.000	USNAEG	MS	-	Interceptor	mda.mil	-	-
2015-568	2457315.50	2015 Oct 20	SM-3	-	NTMD Fcwm ASD15	0.000	USNAEG	MS	-	Interceptor	navy.mil	-	-
2015-A20	2457315.50	2015 Oct 20	SM-2-IV	-	NTMD Fcwm ASD15	0.000	USNAEG	MS	-	Interceptor	navy.mil	-	-
2015-110	2457327.83	2015 Nov 1 03127	SM-3-IB	-	Aegis FTR-02 E2a	0.000	USNAEG	MS	-	Interceptor	www.mda.mil	-	-
2015-584	2457364.50	2015 Dec 8	SM-3-11A	-	Aegis SCD CTV-02	0.000	MDA/JMSDF	MS	-	Test	mda.mil	-	-
2015-588	2457364.50	2015 Dec 10	SM-3-11B	-	Aegis FTR-02 E1a	0.000	USNAEG	MS	-	Interceptor	mda.mil	-	-
2016-A01	2457387.50	2016 Jan	SM-6	-	FTR6E	0.000	USNAEG	MS	-	Test	Wire	-	-
2016-A02	2457387.50	2016 Jan	SM-6	-	FTR6E	0.000	USNAEG	MS	-	Test	Wire	-	-
2016-A03	2457387.50	2016 Jan	SM-6	-	FTR6E	0.000	USNAEG	MS	-	Test	Wire	-	-
2016-A04	2457387.50	2016 Jan	SM-6	-	FTR6E	0.000	USNAEG	MS	-	Test	Wire	-	-
2016-532	2457533.50	2016 May 25	SM-3-IB	-	FTR6E	0.000	USNAEG	MS	-	Test	Wire	-	-
2016-533	2457533.50	2016 May 25	SM-3-IB	-	Aegis TU CTV-01a	0.000	USNAEG	MS	-	Test	www.mda.mil	-	-
2016-447	2457534.50	2016 May 26	SM-3-IB	-	Aegis TU CTV-02	0.000	USNAEG	MS	-	Test	www.mda.mil	-	-
2016-447	2457737.50	2016 Dec 15	SM-6	-	Aegis FTR-27	0.000	USNAEG	MS	-	Test	www.mda.mil	-	-
2016-448	2457737.50	2016 Dec 15	SM-6	-	Aegis FTR-27	0.000	USNAEG	MS	-	Test	www.mda.mil	-	-
2017-S08	2457768.86	2017 Feb 4 08337	SM-3-11A	-	Aegis SFTW-01	0.000	MDA	MS	-	Test	mda.mil	-	-
2017-S48	2457926.72	2017 Jun 22 05237	SM-3-11A	-	Aegis SFTW-027	0.000	MDA	MS	-	Target	mda.mil	-	-
2017-A11	2457994.50	2017 Aug 29	SM-3-IB	-	Aegis FTR-27E2	0.000	USNAEG	MS	-	Test	www.mda.mil	-	-
2017-S89	2458041.50	2017 Oct 15	SM-3-IB	-	Aegis	0.000	USNAEG	MS	-	Test	www.mda.mil	-	-
2017-A13	2458041.50	2017 Oct 15	SM-6	-	Aegis SM CTV-03	0.000	USNAEG	MS	-	Test	www.mda.mil	-	-
2018-S07	2458149.50	2018 Jan 31	SM-3-11A	-	Aegis FTR-29	0.000	USNAEG	MS	-	Interceptor	mda.mil	-	-
2018-S51	2458373.86	2018 Sep 12 08407	SM-3-11B	-	Aegis JFTW-05	0.000	JMSDF	MS	-	Interceptor	mda.mil	-	-
2018-S67	2458417.50	2018 Oct 26	SM-3-11A	-	Aegis FTR-45	0.000	JMSDF	MS	-	Interceptor	mda.mil	-	-
2018-S77	2458462.50	2018 Dec 10	SM-3-11A	-	Aegis FTR-45	0.000	JMSDF	MS	-	Interceptor	mda.mil	-	-
2019-S23	2458613.50	2019 May 10	SM-3-IB	-	Aegis	0.000	USNAEG	MS	-	Interceptor	mda.mil	-	-
2020-S41	2459170.75	2020 Nov 17 06057	SM-3-11A	-	Aegis FTR-44	0.000	USNAEG	MS	-	Interceptor	mda.mil	-	-

1800m off KAU

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Launch

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	OrbPay	Agency	Launch_Code	Group	Category	LTCite	Cite	Notes
2021-S30	2459360.50	2021 May 26	SR-3	-	-	0.000	USNAEG	MS	-	Target	Wire	-	-
2021-A08	2459363.50	2021 May 29	SR-6	-	Aegis FTH-31E1	0.000	USNAEG	MS	-	Test	Wire	-	Uncertain
2021-A09	2459363.50	2021 May 29	SR-6	-	Aegis FTH-31E1	0.000	USNAEG	MS	-	Test	Wire	-	Uncertain
2021-S33	2459364.50	2021 May 30	SR-3	-	-	0.000	USNAEG	MS	-	Target	Wire	-	-
2021-A12	2459419.50	2021 Jul 24	SR-6	-	Aegis FTH-33	0.000	USNAEG	MS	-	Target	Wire	-	Uncertain
2021-A13	2459419.50	2021 Jul 24	SR-6	-	Aegis FTH-33	0.000	USNAEG	MS	-	Test	Wire	-	Uncertain
2021-A14	2459419.50	2021 Jul 24	SR-6	-	Aegis FTH-33	0.000	USNAEG	MS	-	Test	Wire	-	Uncertain
2021-A15	2459419.50	2021 Jul 24	SR-6	-	Aegis FTH-33	0.000	USNAEG	MS	-	Test	Wire	-	Uncertain
2022-S100	2459600.50	2022 Jul 24	SR-3	-	PDZ2	0.000	USNAEG	MS	-	Test	Wire	-	-
2022-S124	2459699.50	2022 Aug 9	SR-3	-	Aegis JFTH-07	0.000	USNAEG	MS	-	Test	Wire	-	-
2022-S126	2459902.50	2022 Nov 16	SR-3-IIA	-	Aegis JFTH-07	0.000	USNAEG	MS	-	Test	Wire	-	-
2023-A09	2460033.50	2022 Nov 19	SR-3-IB	-	Aegis FTH-31E1a	0.000	USNAEG	MS	-	Test	Wire	-	-
2023-A10	2460033.50	2023 Mar 30	SR-6	-	Aegis FTH-31E1a	0.000	USNAEG	MS	-	Test	Wire	-	-
2023-A11	2460242.50	2023 Mar 30	SR-6	-	Aegis FTH-31E1a	0.000	USNAEG	MS	-	Test	Wire	-	-
2023-S49	2460242.50	2023 Oct 25	SR-3	-	Aegis FTH-48	0.000	USNAEG	MS	-	Test	Wire	-	-
2023-S60	2460242.50	2023 Oct 25	SR-3	-	Aegis FTH-48	0.000	USNAEG	MS	-	Test	Wire	-	-
2024-S03	2460346.50	2024 Feb 6	SR-3-IIA	-	Aegis FIX-23	0.000	USNAEG	MS	-	Interceptor	Wire	-	-
2024-A03	2460397.50	2024 Feb 28	SR-6	-	Aegis FTH-32	0.000	USNAEG	MS	-	Interceptor	Wire	-	-
2024-A04	2460397.50	2024 Mar 28	SR-6	-	Aegis FTH-32	0.000	USNAEG	MS	-	Interceptor	Wire	-	-
2024-S25	2460414.48	2024 Mar 28	SR-6	-	-	0.000	USNAEG	MS	-	Interceptor Weapon	Wire	-	-
2024-S26	2460414.48	2024 Apr 13 23307	SR-3	-	-	0.000	USNAEG	MS	-	Interceptor Weapon	Wire	-	-
2024-S27	2460414.48	2024 Apr 13 23307	SR-3	-	-	0.000	USNAEG	MS	-	Interceptor Weapon	Wire	-	-
2024-S28	2460414.48	2024 Apr 13 23307	SR-3	-	-	0.000	USNAEG	MS	-	Interceptor Weapon	Wire	-	-
2024-S29	2460414.48	2024 Apr 13 23307	SR-3	-	-	0.000	USNAEG	MS	-	Interceptor Weapon	Wire	-	-
2024-S30	2460414.48	2024 Apr 13 23307	SR-3	-	-	0.000	USNAEG	MS	-	Interceptor Weapon	Wire	-	-



Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Mission	FlightCode	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee km	Range km	Dest
2017-408	2457964.81	2017 Jul 30 0732	Momo	-	-	TF-1	-	-	-	TAIKI	-	-	-	407	-	-
2018-490	2458299.36	2018 Jun 29 2030	Momo	-	-	TF-2	-	-	-	TAIKI	-	-	-	0	-	-
2019-520	2458607.36	2019 May 3 2045	Momo	-	-	TF-3	-	-	-	TAIKI	-	-	-	118	-	-
2019-499	2458691.81	2019 Jul 27 0720	Momo	-	-	TF-4	-	-	-	TAIKI	-	-	-	13	-	-
2020-A13	2459014.34	2020 Jun 13 2016:00	Momo	-	-	TF-5	-	-	-	TAIKI	-	-	-	12	4	-
2021-S39	2459398.86	2021 Jul 3 0845	Momo	-	-	TF-7	-	-	-	TAIKI	-	-	-	99	-	-
2021-S51	2459428.83	2021 Jul 31 0800	Momo	6	-	TF-6	Tonga	-	-	TAIKI	-	-	-	92	-	-



Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	OrbPay	Agency	Launch_Code	Group	Category	LTCite	Cite	Notes
2017-408	2457964.81	2017 Jul 30 0732	Momo	-	-	0.000	IST	SF	-	-	youtube.com	-	-
2018-490	2458295.35	2018 Jun 29 2030	Momo	-	-	0.000	IST	SF	-	-	youtube.com	-	-
2019-520	2458607.36	2019 May 3 2045	Momo	-	-	0.000	IST	SS	-	-	twitter.com	-	-
2019-499	2458691.81	2019 Jul 27 0720	Momo	-	-	0.000	IST	SF	-	-	twitter.com	-	-
2020-A13	2459014.34	2020 Jun 13 2015:00	Momo	-	-	0.000	IST	SF	-	-	twitter.com	-	-
2021-S39	2459395.86	2021 Jul 3 0845	Momo	-	-	0.000	IST	SS	-	-	twitter.com	-	-
2021-S51	2459426.83	2021 Jul 31 0800	Momo	6	-	0.000	IST	SS	-	-	twitter.com	-	-





Launch

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Mission	FlightCode	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee Km	Range Km	Dest
1965-A400	2435163.50	1965 Feb 25?	Monica I	-	I	Camp. 1 to Mar 7	-	-	-	HMG	Bechar	-	-	40?	-	-
1965-A401	2435209.50	1965 Apr 12?	Monica I	-	I	Camp. 2 to Apr 19	-	-	-	HMG	Bechar	-	-	40?	-	-
1965-A402	2435260.50	1965 Jun 27	Monica I	-	I	Camp. 3 to Jun 11	-	-	-	HMG	Bechar	-	-	40?	-	-
1965-A501	2435362.50	1965 Oct 27	Monica I	-	I	Camp. 4 to Oct 11	-	-	-	HMG	Bechar	-	-	40?	-	-
1966-A03	2435489.50	1966 Jan 17?	Monica I	-	I	Camp. 5 to Feb 2	-	-	-	HMG	Bechar	-	-	90?	-	-
1966-S26	2435615.50	1966 May 22?	Monica I	-	I	Camp. 6 to Jun 13	-	-	-	CERES	-	-	-	90?	-	-
1967-S10	2435593.50	1966 May	Monica I	-	I	-	-	-	-	CERES	-	-	-	90?	-	-
1967-S11	2435588.50	1967 Jan	Monica I	?	-	-	-	-	-	CERES	-	-	-	90	-	-
1967-S28	2435669.50	1967 Feb	Monica I	?	-	-	-	-	-	CERES	-	-	-	90	-	-
1967-S29	2435966.50	1967 May 28	Monica I	?	-	-	-	-	-	CERES	-	-	-	90	-	-
1969-S189	2436641.50	1967 May	Monica I	?	-	-	-	-	-	CERES	-	-	-	90	-	-
1969-S190	2436641.50	1969 Oct	Monica IV	?	-	-	-	-	-	CERES	-	-	-	90	-	-
1969-S285	2436672.50	1969 Oct	Monica IV	?	-	-	-	-	-	CERES	-	-	-	90	-	-
1969-S286	2436672.50	1969 Nov	Monica IV	?	-	-	-	-	-	HMG	-	-	-	90?	-	-
1969-S287	2436672.50	1969 Nov?	Monica IV	?	-	-	-	-	-	HMG	-	-	-	90?	-	-
1969-S288	2436902.50	1969 Nov?	Monica IV	?	-	-	-	-	-	HMG	-	-	-	90?	-	-
1969-S289	2436902.50	1969 Dec?	Monica IV	?	-	-	-	-	-	HMG	-	-	-	90?	-	-
1960-S27	2436964.50	1960 Feb	Monica IV	?	-	-	-	-	-	HMG	-	-	-	90?	-	-



Launch													
Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	OrbPay	Agency	Launch_Code	Group	Category	LICite	Cite	Notes
1965-A400	2435163.50	1965 Feb 26?	Monica I	-	I	0.000	CASDW	SS	CMS/PARIS/Vassy	Test	Moulin/Serra	-	-
1965-A401	2435209.50	1965 Apr 12?	Monica I	-	I	0.000	CASDW	SS	CMS/PARIS/Vassy	Test/Aeron	univ-perp.fr	-	-
1965-A402	2435260.50	1965 Jun 2?	Monica I	-	I	0.000	CASDW	SS	CMS/PARIS/Vassy	Test/Aeron	univ-perp.fr	-	-
1965-A501	2435352.50	1965 Oct 2?	Monica I	-	I	0.000	CASDW	SS	CMS/PARIS/Vassy	Test/Aeron	univ-perp.fr	-	-
1966-A03	2435459.50	1966 Jan 17?	Monica I	-	I	0.000	CASDW	SS	CMS/PARIS/Vassy	Test/Release	univ-perp.fr	-	-
1966-S25	2435615.50	1966 May 22?	Monica I	-	I	0.000	ATEF	SS	CMS/PARIS/Vassy	Test	univ-perp.fr	-	-
1966-S26	2435593.50	1966 May	Monica I	-	I	0.000	ATEF	SS	CMS/PARIS/Vassy	Test	univ-perp.fr	-	-
1967-S10	2435638.50	1967 Jan	Monica I	-	I	0.000	ATEF	SS	CMS/PARIS/Vassy	Test	IAA-00-IAA.2.203	-	-
1967-S11	2435669.50	1967 Feb	Monica I	?	-	0.000	ATEF	SS	CMS/PARIS/Vassy	Test	IAA-00-IAA.2.203	-	-
1967-S28	2435986.50	1967 May 28	Monica I	?	-	0.000	ATEF	SS	CMS/PARIS/Vassy	Test	IAC-02-IAA.2.3.01	-	-
1967-S29	2435986.50	1967 May	Monica I	?	-	0.000	ATEF	SS	CMS/PARIS/Vassy	Test	univ-perp.fr	-	-
1969-S189	2436841.50	1969 Oct	Monica IV	?	-	0.000	ATEF	SS	CMS/PARIS/Vassy	Test	IAA-00-IAA.2.203	-	-
1969-S190	2436841.50	1969 Oct	Monica IV	?	-	0.000	ATEF	SS	CMS/PARIS/Vassy	Test	univ-perp.fr	-	-
1969-S286	2436872.50	1969 Nov	Monica IV	?	-	0.000	ATEF	SS	CMS/PARIS/Vassy	Test	univ-perp.fr	-	-
1969-S287	2436872.50	1969 Nov?	Monica IV	?	-	0.000	ATEF	SS	CMS/PARIS/Vassy	Test	Moulin/Serra	-	-
1969-S288	2436872.50	1969 Nov?	Monica IV	?	-	0.000	ATEF	SS	CMS/PARIS/Vassy	Test	Moulin/Serra	-	-
1969-S289	2436902.50	1969 Dec?	Monica IV	?	-	0.000	ATEF	SS	CMS/PARIS/Vassy	Test	Moulin/Serra	-	-
1960-S27	2436964.50	1960 Feb	Monica IV	?	-	0.000	ATEF	SS	CMS/PARIS/Vassy	Test	IAA-00-IAA.2.203	-	-



Launch_Tag	Launch_JD	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Mission	FlightCode	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee_Km	Range_Km	Dest
1966-A132	2439423.71	1966 Oct 31 0604	Mu-1	-	M-1-1	-	-	-	-	KASC	M	-	-	34	-	-
1969-8465	2440450.75	1969 Aug 17 0600	Mu-3D	-	M-3D-1	-	-	-	-	KASC	M	-	-	160	-	-
1970-F08	2440854.71	1970 Sep 25 0600:00	Mu-4S	-	M-4S-1	MS-F1	MS-F1	-	-	KASC	M	-	-	712	-	-
1971-011	2440995.67	1971 Feb 16 0400:00	Mu-4S	-	M-4S-2	Tansel	MS-T1	-	-	KASC	M	-	-	1234	-	-
1971-080	2441222.67	1971 Sep 28 0400:00	Mu-4S	-	M-4S-3	Shinsei	MS-F2	-	-	KASC	M	-	-	1868	-	-
1972-064	2441544.61	1972 Aug 19 0240:00	Mu-4S	-	M-4S-4	Dempa	REXS	-	-	KASC	M	-	-	6360	-	-
1974-008	2442094.71	1974 Feb 16 0600:00	Mu-3C	-	M-3C-1	Tansel-2	MS-T2	-	-	KASC	M	-	-	3266	-	-
1974-S280	2442292.75	1974 Sep 2 0600	ETV	-	ETV-1	-	-	-	-	TWSC	Q	-	-	128	-	-
1975-861	2442444.75	1975 Feb 5 0600	ETV	-	ETV-2	-	-	-	-	TWSC	Q	-	-	167	-	-
1975-014	2442467.73	1975 Feb 24 0525	Mu-3C	-	M-3C-2	Taiyo	SRATS	-	-	KASC	M	-	-	3132	-	-
1976-F01	2442812.75	1976 Feb 4 0600	Mu-3C	-	M-3C-3	CORSA	CORSA	-	-	KASC	M	-	-	84	-	-
1977-012	2443193.72	1977 Feb 19 0515	Mu-3H	-	M-3H-1	Tansel-3/RH-A	MS-T3	-	-	KASC	M	-	-	3820	-	-
1978-014	2443543.79	1978 Feb 4 0700	Mu-3H	-	M-3H-2	Kyoko/RM -A	EXOS-A	-	-	KASC	M	-	-	4062	-	-
1978-087	2443767.71	1978 Sep 16 0600	Mu-3H	-	M-3H-3	Jikken/RM -B	EXOS-B	-	-	KASC	M	-	-	30064	-	-
1979-014	2443825.71	1979 Feb 21 0600	Mu-3C	-	M-3C-4	Hakicho	CORSA-b	-	-	KASC	M	-	-	573	-	-
1980-015	2444286.53	1980 Feb 17 0040	Mu-3S	-	M-3S-1	Tansel-4	MS-T4	-	-	KASC	M	-	-	606	-	-
1981-017	2444656.52	1981 Feb 21 0030	Mu-3S	-	M-3S-2	Hinetori	ASTRO-A	-	-	KASC	M	-	-	703	-	-
1983-011	2445385.72	1983 Feb 20 0510	Mu-3S	-	M-3S-3	Omura	ASTRO-B	-	-	KASC	M1	-	-	658	-	-
1984-015	2445744.83	1984 Feb 14 0800	Mu-3S	-	M-3S-4	Tama	EXOS-C	-	-	KASC	M1	-	-	869	-	-
1985-001	2446073.31	1985 Jan 7 1926	Mu-3S-II	-	M-3S2-1	Sakigake/RH-P	MS-T5	-	-	KASC	M1	-	-	150000	-	-
1985-073	2446296.46	1985 Aug 18 2333	Mu-3S-II	-	M-3S2-2	Suisel/RH-P	PLANET-A	-	-	KASC	M1	-	-	150000	-	-
1987-012	2446831.77	1987 Feb 5 0630	Mu-3S-II	-	M-3S2-3	Ginga	ASTRO-C	-	-	KASC	M1	-	-	706	-	-
1989-016	2447579.46	1989 Jan 21 2330:00	Mu-3S-II	-	M-3S2-4	Aetono/RH-D	EXOS-D	-	-	KASC	M1	-	-	10474	-	-
1990-007	2447915.99	1990 Jan 24 1146:00	Mu-3S-II	-	M-3S2-5	Hiten/RH-H	ROSES-A	-	-	KASC	M1	-	-	150000	-	-
1991-062	2448695.60	1991 Aug 30 0230	Mu-3S-II	-	M-3S2-6	Yonoh	SOLAR-A	-	-	KASC	M1	-	-	791	-	-
1993-011	2449035.60	1993 Feb 20 0220	Mu-3S-II	-	M-3S2-7	Anaka	ASTRO-D	-	-	KASC	M1	-	-	647	-	-
1995-001	2449733.07	1995 Jan 15 1345	Mu-3S-II	-	M-3S2-8	EXPRESS/RH-H	EXPRESS	-	-	KASC	M1	-	-	-	-	-



Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Dr/PrPay	Agency	Launch_Code	Group	Category	LTCite	Cite	Notes
1966-A132	2439429.71	1966 Oct 31 0504	Mu-1	-	M-1-1	0.000	ISAS	TS	-	Test	ISTS	SP-4007	-
1969-S455	2440450.75	1969 Aug 17 0500	Mu-3D	-	M-3D-1	0.000	ISAS	TS	-	Sat LE0 0	MU45-304	WDCRF	-
1970-F08	2440854.71	1970 Sep 25 0500:00	Mu-4S	-	M-4S-1	0.062	ISAS	DF	G	Sat LE0 0	ISAS-Doc320	Asahi700925	-
1971-011	2440988.67	1971 Feb 16 0400:00	Mu-4S	-	M-4S-2	0.063	ISAS	US	G	Sat LE0 0	ISAS-Doc320	ISS19	-
1971-080	2441222.67	1971 Sep 28 0400:00	Mu-4S	-	M-4S-3	0.066	ISAS	US	G	Sat LE0 0	ISAS-Doc320	-	-
1972-064	2441598.61	1972 Aug 19 0240:00	Mu-4S	-	M-4S-4	0.075	ISAS	US	G	Sat MED 0	ISAS-Doc320	SP-4017	-
1974-008	2442094.71	1974 Feb 16 0500:00	Mu-3C	-	M-3C-1	0.056	ISAS	US	G	Sat MED 0	ISAS-Doc312	-	-
1974-S290	2442282.75	1974 Sep 2 0600	ETV	-	ETV-1	0.000	MASDA	TS	-	Test	MASDA-MMM	-	-
1975-S61	2442448.75	1975 Feb 5 0600	ETV	-	ETV-2	0.000	MASDA	TS	-	Test	MASDA-MMM	-	-
1976-014	2442467.73	1976 Feb 24 0525	Mu-3C	-	M-3C-2	0.086	ISAS	DF	G	Sat MED 0	ISR729.3.99	-	-
1976-F01	2442812.75	1976 Feb 4 0600	Mu-3C	-	M-3C-3	0.085	ISAS	US	G	Sat LE0 0	Asahi760204	SRJ	-
1977-012	2443193.72	1977 Feb 19 0515	Mu-3H	-	M-3H-1	0.187	ISAS	US	G	Sat MED 00 1	Asahi770220	ISAS-Doc312	-
1978-014	2443593.79	1978 Feb 4 0700	Mu-3H	-	M-3H-2	0.184	ISAS	US	G	Sat MED 00	ISAS-Doc456	-	-
1978-087	2443757.71	1978 Sep 16 0500	Mu-3H	-	M-3H-3	0.374	ISAS	US	G	Sat MED 50	Asahi780917	-	-
1979-014	2443925.71	1979 Feb 21 0500	Mu-3C	-	M-3C-4	0.095	ISAS	US	G	Sat LE0 0	ISAS-Doc464	-	-
1980-015	2444286.53	1980 Feb 17 0040	Mu-3S	-	M-3S-1	0.187	ISAS	US	G	Sat LE0 0	ISAS-Doc464	-	-
1981-017	2444656.52	1981 Feb 21 0030	Mu-3S	-	M-3S-2	0.188	ISAS	US	G	Sat LE0 0	ISAS-Doc464	-	-
1983-011	2445355.72	1983 Feb 20 0510	Mu-3S	-	M-3S-3	0.218	ISAS	US	G	Sat LE0 0	ISAS-Doc464	-	-
1984-015	2445744.83	1984 Feb 14 0500	Mu-3S	-	M-3S-4	0.207	ISAS	US90	G	Sat LE0 0	ISAS-Doc464	-	-
1985-001	2446073.31	1985 Jan 7 1926	Mu-3S-II	-	M-3S2-1	0.601	ISAS	DS	G	Sat EEO DE	SRJ	-	-
1985-073	2446256.48	1985 Aug 18 2333	Mu-3S-II	-	M-3S2-2	0.596	ISAS	DS	G	Sat EEO DE	SRJ	-	-
1987-012	2446851.77	1987 Feb 5 0630	Mu-3S-II	-	M-3S2-3	0.420	ISAS	DS	G	Sat EEO DE	SRJ	-	-
1989-016	2447579.48	1989 Feb 21 2330:00	Mu-3S-II	-	M-3S2-4	0.518	ISAS	US	G	Sat LE0 0	SRJ	-	-
1990-007	2447915.99	1990 Jan 24 1146:00	Mu-3S-II	-	M-3S2-5	0.722	ISAS	US	G	Sat DS0 00	ISASNews2007.1	-	-
1991-062	2448498.60	1991 Aug 30 0230	Mu-3S-II	-	M-3S2-6	0.390	ISAS	DS	G	Sat LE0 0	ISASNews2007.1	-	-
1993-011	2449038.60	1993 Feb 20 0220	Mu-3S-II	-	M-3S2-7	0.420	ISAS	US	G	Sat LE0 0	M322-p-Brochure	-	-
1995-001	2449733.07	1995 Jan 15 1345	Mu-3S-II	-	M-3S2-8	0.765	ISAS	US	G	Sat LE0 0	JCH	-	-
								DF40			WSL		





Launch

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Mission	FlightCode	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee km	Range km	Dest
1969-F05	2440273.89	1969 Feb 21 0918:07	R-1 11A52	-	3L	-	L-IS No. 3	11F52	-	NIP-5	LC110R	-	-	30	-	-
1969-F10	2440406.35	1969 Jul 3 2018:32	R-1 11A52	-	5L/V15005	-	L-IS No. 5	-	-	NIP-5	LC110R	-	-	0	-	-
1971-F06	2441129.47	1971 Jun 26 2315:08	R-1 11A52	-	6L/RB15006	-	LK	-	-	NIP-5	LC110L	-	-	2	-	-
1972-F07	2441644.76	1972 Nov 23 0611:55	R-1 11A52	-	7L/RB15007	-	Mockup LK	-	-	NIP-5	LC110L	-	-	40	-	-



Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Launch	Agency	Launch_Code	Group	Category	LTCite	Cite	Notes
1969-F05	2440273.89	1969 Feb 21 09:18:07	H-1 11A52	-	3L	8.550	RWSH	OF	G	Sat LBD 0	JCH	-	-
1969-F10	2440406.35	1969 Jul 3 20:18:32	H-1 11A52	-	5L/V15005	8.550	RWSH	OF	G	Sat LBD 0	JCH	-	-
1971-F06	2441129.47	1971 Jun 26 23:15:08	H-1 11A52	-	6L/K315006	9.350	RWSH	OF	G	Sat LBD 0	JCH	-	-
1972-F07	2441644.76	1972 Nov 23 06:11:55	H-1 11A52	-	7L/K315007	9.350	RWSH	OF	G	Sat LBD 0	JCH	-	-



Launch

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Mission	FlightCode	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee km	Range km	Dest
1965-M21	2438928 81	1965 Jun 17 0730	MAL-16	-	HR-16-D	-	-	-	-	MLJ	-	-	-	527	-	-
1965-A86	2438929 82	1965 Jun 18 0743	MAL-16	-	HR-16-IT	-	-	-	-	MLJ	-	-	-	387	-	-
1965-A162	2439081 77	1965 Nov 17 0634	MAL-16	-	MAL-16TR	-	-	-	-	MLJ	-	-	-	457	-	-
1967-A43	2439490 50	1967	MAL-16	-	MAL-16TR	-	-	-	-	TMSC	T	-	-	457	-	-
1968-S500	2440118 79	1968 Sep 19 0701	MAL-16	-	MAL-16H F1	-	-	-	-	TMSC	T	-	-	100?	-	-
1969-M02	2440251 56	1969 Jan 30 0131	MAL-16	-	MAL-16 31D	-	-	-	-	TMSC	T	-	-	50?	-	-
1969-M03	2440253 57	1969 Feb 1 0140	MAL-16	-	MAL-25 31	-	-	-	-	TMSC	T	-	-	50?	-	-
1969-S510	2440484 58	1969 Sep 20 0155	MAL-16	-	MAL-16H F2	-	-	-	-	TMSC	T	-	-	100?	-	-
1969-A156	2440484 77	1969 Sep 20 0630	MAL-7	-	MAL-7 F7	-	-	-	-	TMSC	T	-	-	20?	-	-
1970-A99	2440836 77	1970 Sep 7 0630	MAL-7	-	MAL-7 B99	-	-	-	-	TMSC	T	-	-	20?	-	-



**Launch**

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	OrbPay	Agency	Launch_Code	Group	Category	LTCite	Cite	Notes
1965-M21	2438928.81	1965 Jun 17 0730	MML-16	-	HM-16-D	0.000	STA	SS	STA/	Test	MASDA-WW	ISTS7	-
1965-A86	2438929.82	1965 Jun 18 0743	MML-16	-	HM-16-IT	0.000	STA	SS	STA/	Test	MASDA-WW	ISTS7	-
1965-A162	2439061.77	1965 Nov 17 0634	MML-16	-	MML-16TR	0.000	STA	SS	STA/	Test	MASDA-WW	ISTS7	-
1967-A43	2439490.50	1967	MML-16	-	MML-16TR	0.000	STA	SS	STA/	Test	MASDA-WW	ISTS7	-
1968-S500	2440118.79	1968 Sep 19 0701	MML-16	-	MML-16H F1	0.000	STA	SS	STA/	Test	MASDA-WW	ISTS7	-
1969-M02	2440251.56	1969 Jan 30 0131	MML-16	-	MML-16 31D	0.000	STA	SS	STA/	Test	MASDA-WW	-	-
1969-M03	2440253.57	1969 Feb 1 0140	MML-25	-	MML-25 31	0.000	STA	SS	STA/	Test	MASDA-WW	-	-
1969-S510	2440484.58	1969 Sep 20 0155	MML-16	-	MML-16H F2	0.000	STA	SS	STA/	Test	MASDA-WW	-	-
1969-A156	2440484.77	1969 Sep 20 0630	MML-7	-	MML-7 F7	0.000	STA	SS	STA/	Test	MASDA-WW	-	-
1970-A89	2440836.77	1970 Sep 7 0630	MML-7	-	MML-7 B59	0.000	STA	SS	STA/	Test	MASDA-WW	-	-





Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Mission	FlightCode	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee km	Range km	Dest
1971-S864	2441273-80	1971 Nov 18 0704:52	Hydra Sandhawk	-	-	LRL BOX-17	-	-	AVM1 T-AGM-8	HYD	LP6	-	-	287	-	-
1973-S158	2441788-76	1973 Apr 26 0620:00	Hydra Sandhawk	-	-	LRL BOX-18	-	-		HYD	LP6	-	-	262	-	-



Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Drbby	Agency	Launch_Code	Group	Category	LTCite	Cite	Notes
1971-S564	2441273.50	1971 Nov 18 0704:52	Hydra Sandhavi	-	-	0.000	MHC	SS	LRL/Seward	Test/AR Astron	FDS	LRL-EMV3-172	-
1973-S1E8	2441798.76	1973 Apr 26 0620:00	Hydra Sandhavi	-	-	0.000	MHC	SS	LRL/Seward	AR Astron	FDS	-	-



Launch

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Mission	FlightCode	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee km	Range km	Dest
1960-A172	2437143.50	1960 Jul 28	NOTS EV2	-	NOTS EV-II	Galeb TV-1	TV-1	-	F-4D-747	NOTS	RM03/21?	WTR	LP7	20	-	-
1960-A249	2437231.50	1960 Oct 24	NOTS EV2	-	NOTS EV-II	Galeb TV-2	TV-2	-	F-4D-747	NOTS	RM03/21?	WTR	LP7	20	-	-
1961-A214	2437573.50	1961 Oct 1	NOTS EV2	-	SIP	-	EARLY SPRING 1	-	-	SHI	-	-	-	20?	-	-
1961-A216	2437578.30	1961 Oct 5 1910	NOTS EV2	-	NC17.116	Galeb	HI-HOE 1	-	F4H-389?	NOTS	RM03/21?	WTR	LP7	10	-	-
1962-A272	2437664.50	1962?	GFV	1	GFV	Guided Flight Vehicle	-	-	-	SHI	-	-	-	1?	-	-
1962-A37	2437750.29	1962 Mar 26 1903	NOTS EV2	-	NC17.121	Galeb	HI-HOE 2	-	F4H-389?	NOTS	RM03/21?	WTR	LP7	21	-	-
1962-A69	2437789.50	1962 May 5	GFV	2	GFV	Guided Flight Vehicle	-	-	-	SHI	-	-	-	20?	-	-
1962-S262	2437871.15	1962 Jul 25 1541	NOTS EV2	-	NC17.117	Galeb	HI-HOE 3	-	F4H-389	NOTS	RM03/21?	WTR	LP7	1166	-	-
1962-S676	2437999.08	1962 Nov 30 1400?	GFV	2	GFV	-	-	-	-	SHI	-	-	-	320	-	-



Launch

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	OrbPay	Agency	Launch_Code	Group	Category	LTCite	Cite	Notes
1960-A172	2437143.50	1960 Jul 28	MDTS EV2	-	MDTS EV-II	0.000	MDTS	AS	MDTS/	Test	MDTS	-	-
1960-4249	2437231.50	1960 Oct 24	MDTS EV2	-	MDTS EV-II	0.000	MDTS	AF	MDTS/	Test	MDTS	-	-
1961-4214	2437573.50	1961 Oct 1	MDTS EV2	-	SIP	0.000	MDTS	MF	MDTS/	Test	SFLT38-243	-	-
1961-4216	2437578.30	1961 Oct 5 1910	MDTS EV2	-	MC17.116	0.000	MDTS	SF	MDTS/NRL/Hoffman,Holmes	Test/Aeron	MDQRF	-	-
1962-4272	2437664.50	1962?	GFV	1	GFV	0.000	MDTS	MF	MDTS/	Test	MDTS4	-	-
1962-437	2437750.29	1962 Mar 26 1903	MDTS EV2	-	MC17.121	0.000	MDTS	SF	MDTS/NRL/Hoffman,Holmes	Test/Aeron	MDQRF	-	-
1962-469	2437789.50	1962 May 5	GFV	2	GFV	0.000	MDTS	MF	MDTS/	Test	SFLT38-243	-	-
1962-S262	2437871.15	1962 Jul 25 1541	MDTS EV2	-	MC17.117	0.000	MDTS	SS	MDTS/NRL/Hoffman,Holmes	Test/Aeron	MDQRF	-	-
1962-S676	2437999.08	1962 Nov 30 1400?	GFV	2	GFV	0.000	MDTS	MS	MDTS/	Test	Rocketeers21221-7	-	-





Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Launch_Mission	FlightCode	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee km	Range km	Dest
1996-570	2451162.50	1998 Dec 15	Sounding Rocket	-	1	Test flight	TK-2 Mod?	-	-	JP	-	-	-	2507	-	-
2001-A02	2452207.17	2001 Oct 24 1600	Sounding Rocket	-	2	TMA	-	-	-	JP	-	-	-	27	-	-
2003-553	2452998.14	2003 Dec 24 1525	Sounding Rocket	-	3	TMA	-	-	-	JP	-	-	-	265	-	-
2004-570	2453564.10	2004 Dec 14 1430	Sounding Rocket	-	4	Space science	-	-	-	JPF	-	-	-	285	-	-
2006-501	2453753.99	2006 Jan 18 1148	Sounding Rocket	-	5	Space science	-	-	-	JP	-	-	-	282	-	-
2007-573	2454356.74	2007 Sep 13 0550	Sounding Rocket	-	6	Materials/Recovery	-	-	-	JPF	-	-	-	280	-	-
2010-533	2455321.99	2010 May 5 1150	Sounding Rocket	-	7	-	-	-	-	JP	-	-	-	287	-	-
2013-5109	2456448.79	2013 Jun 5 0700	Sounding Rocket	-	8	R202 test/Recovery	-	-	-	JP	-	-	-	279	-	-
2014-561	2456743.07	2014 Mar 26 1334	Sounding Rocket	-	9	-	-	-	-	JP	-	-	-	286	-	-
2014-562	2456937.63	2014 Oct 7 0310	Sounding Rocket	-	10	-	-	-	-	JP	-	-	-	286	-	-



Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Agency	Launch_Code	Group	Category	LTCite	Cite	Notes
1998-S70	2451162.50	1998 Dec 15	Sounding Rocket	-	1	NSPO	SS	NSPO/	Test	NSPO-WW	-	-
2001-A02	2452207.17	2001 Oct 24 1600	Sounding Rocket	-	2	NSPO	SF	NSPO/CLEM/Chu, Larsen	Aeron	NSPO-WW	-	-
2003-S53	2452998.14	2003 Dec 24 1525	Sounding Rocket	-	3	NSPO	SS	NSPO/CLEM/Chu, Larsen	Aeron	NSPO-WW	-	-
2004-S70	2453354.10	2004 Dec 14 1430	Sounding Rocket	-	4	NSPO	SS	NSPO/Hao	Ionos/Aeron	NSPO-WW	-	-
2006-S01	2453753.99	2006 Jan 18 1148	Sounding Rocket	-	5	NSPO	SS	NSPO/	Ionos/Aeron	NSPO-WW	-	-
2007-S73	2454366.74	2007 Sep 13 0650	Sounding Rocket	-	6	NSPO	SS	NSPO/	Micrograv/Aeron	NSPO-WW	-	-
2010-S33	2455321.99	2010 May 5 1150	Sounding Rocket	-	7	NSPO	SS	NSPO/Chu	Ionos	NSPO-WW	-	-
2013-S109	2456448.79	2013 Jun 5 0700	Sounding Rocket	-	8	NSPO	SS	NSPO/	Tech	NSPO-WW	-	-
2014-S61	2456743.07	2014 Mar 26 1334	Sounding Rocket	-	9	NSPO	SS	NSPO/	Ionos	NSPO-WW	-	-
2014-S62	2456937.63	2014 Oct 7 0310	Sounding Rocket	-	10	NSPO	SS	NSPO/	Ionos	NSPO-WW	-	-



Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Mission	FlightCode	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee km	Range km	Dest
1986-A108	2435783.50	1956 Nov 6	Navaho II SR-64	-	03	G-26 No. 1	-	-	-	CC	LC9	-	-	2?	-	-
1987-A21	2435919.50	1957 Mar 22	Navaho II SR-64	-	06	G-26 No. 2	-	-	-	CC	LC9	-	-	9	-	-
1987-A29	2435953.50	1957 Apr 25	Navaho II SR-64	-	07	G-26 No. 5	-	-	-	CC	LC9	-	-	0	-	-
1987-A56	2436016.25	1957 Jun 26 1800	Navaho II SR-64	-	08	G-26 No. 3	-	-	-	CC	LC9	-	-	12	-	-
1987-A77	2436063.36	1957 Aug 12 2045	Navaho II SR-64	-	09	G-26 No. 4	-	-	-	CC	LC9	-	-	26	-	-
1987-A99	2436100.39	1957 Sep 18 2115	Navaho II SR-64	-	10	G-26 No. 6	-	-	-	CC	LC9	-	-	23	-	-
1987-A128	2436156.23	1957 Nov 13 1728	Navaho II SR-64	-	11	G-26 No. 7	-	-	-	CC	LC9	-	-	20	-	-
1988-A02	2436214.32	1958 Jan 10 1938	Navaho II SR-64	-	13	G-26 No. 8	-	-	-	CC	LC9	-	-	22	-	-
1988-A10	2436260.22	1958 Feb 25 1722	Navaho II SR-64	-	12	G-26 No. 9	-	-	-	CC	LC9	-	-	2?	-	-
1988-A113	2436467.50	1958 Sep 11	Navaho II SR-64	-	04	G-26 No. 13/HISE 1	-	-	-	CC	LC9	-	-	26?	-	-
1988-A145	2436526.38	1958 Nov 18 2103	Navaho II SR-64	-	14	G-26 No. 14/HISE 2	-	-	-	CC	LC9	-	-	23	-	-



Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	OrbPay	Agency	Launch_Code	Group	Category	LTCite	Cite	Notes
1956-A108	2435783.50	1956 Nov 6	Navaho II S4-64	-	03	0.000	WADD	MS	-	Test	MT60-2544	-	-
1957-A21	2435819.50	1957 Mar 22	Navaho II S4-64	-	06	0.000	WADD	MF	-	Test	MT60-2544	-	-
1957-A29	2435953.50	1957 Apr 25	Navaho II S4-64	-	07	0.000	WADD	MF	-	Test	MT60-2544	-	-
1957-A56	2436016.25	1957 Jun 26 1800	Navaho II S4-64	-	08	0.000	WADD	MS	-	Test	PalmbeachPost570627	MT60-2544	-
1957-A77	2436063.36	1957 Aug 12 2045	Navaho II S4-64	-	09	0.000	WADD	MS	-	Test [Not LC10]	Ulrich	MT60-2544	-
1957-A99	2436000.39	1957 Sep 18 2115	Navaho II S4-64	-	10	0.000	WADD	MS	-	Test	Billingdaz570919	MT60-2544	-
1957-A128	2436156.23	1957 Nov 13 1728	Navaho II S4-64	-	11	0.000	WADD	MS	-	Test	UPI	MT60-2544	-
1958-A02	2436214.32	1958 Jan 10 1938	Navaho II S4-64	-	13	0.000	WADD	MS	-	Test	AP	Powell/MT60-2544	-
1958-A10	2436260.22	1958 Feb 25 1722	Navaho II S4-64	-	12	0.000	WADD	MS	-	Test	UPI	MT60-2544	-
1958-A113	2436457.50	1958 Sep 11	Navaho II S4-64	-	04	0.000	WADD	MS	-	Test	MT60-2544	-	-
1958-A145	2436526.38	1958 Nov 18 2103	Navaho II S4-64	-	14	0.000	WADD	MF	-	Test	AP	MT60-2544	-





Launch

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Mission	FlightCode	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee km	Range km	Dest
2015-829	2457142.12	2015 Apr 29 1500?7	New Shepard	-	PM4-1 F1	New Shepard M1	New Shepard CCL3?7	-	-	WTEX	-	-	-	93	-	-
2015-876	2457350.22	2015 Nov 23 1721	New Shepard	-	PM4-2 F1	New Shepard M2	New Shepard CCL3?7	-	-	WTEX	-	-	-	101	-	-
2016-802	2457410.04	2015 Jan 22 1300?7	New Shepard	-	PM4-2 F2	New Shepard M3	New Shepard CCL3	-	-	WTEX	-	-	-	101	-	-
2016-823	2457481.14	2016 Apr 2 1518	New Shepard	-	PM4-2 F3	New Shepard M4	New Shepard CCL3	-	-	WTEX	-	-	-	101	-	-
2016-837	2457559.11	2016 Jun 19 1436	New Shepard	-	PM4-2 F4	New Shepard M5	New Shepard CCL3	-	-	WTEX	-	-	-	101	-	-
2016-860	2457667.15	2016 Oct 5 1536	New Shepard	-	PM4-2 F5	New Shepard M6	New Shepard CCL3 Abort	-	-	WTEX	-	-	-	94	-	-
2017-5104	2458100.21	2017 Dec 12 1659	New Shepard	-	PM4-3 F1	New Shepard M7	New Shepard CCL3	RSS H.G. Wells	-	WTEX	-	-	-	99	-	-
2018-824	2458238.21	2018 Apr 29 1706	New Shepard	-	PM4-3 F2	New Shepard M8	New Shepard CCL3	RSS H.G. Wells	-	WTEX	-	-	-	107	-	-
2018-841	2458315.13	2018 Jul 18 1511	New Shepard	-	PM4-3 F3	New Shepard M9	New Shepard CCL3	RSS H.G. Wells	-	WTEX	-	-	-	119	-	-
2019-803	2458507.13	2019 Jan 23 1505	New Shepard	-	PM4-3 F4	New Shepard M10	New Shepard CCL3	RSS H.G. Wells	-	WTEX	-	-	-	107	-	-
2019-818	2458606.06	2019 May 2 1332	New Shepard	-	PM4-3 F5	New Shepard M11	New Shepard CCL3	RSS H.G. Wells	-	WTEX	-	-	-	106	-	-
2019-879	2458625.25	2019 Dec 11 1753	New Shepard	-	PM4-3 F6	New Shepard M12	New Shepard CCL3	RSS H.G. Wells	-	WTEX	-	-	-	106	-	-
2020-835	2459136.07	2020 Oct 13 1336	New Shepard	-	PM4-3 F7	New Shepard M13	New Shepard CCL3	RSS First Step	-	WTEX	-	-	-	106	-	-
2021-801	2459225.22	2021 Jan 14 1719	New Shepard	-	PM4-4 F1	New Shepard M14	New Shepard CCL3	RSS First Step	-	WTEX	-	-	-	106	-	-
2021-821	2459313.20	2021 Apr 14 1651	New Shepard	-	PM4-4 F2	New Shepard M15	New Shepard CCL3	RSS First Step	-	WTEX	-	-	-	107	-	-
2021-845	2459416.05	2021 Jul 20 1311:00?7	New Shepard	-	PM4-4 F3	New Shepard M16	New Shepard CCL3	RSS First Step	-	WTEX	-	-	-	106	-	-
2021-855	2459453.11	2021 Aug 26 1431:20	New Shepard	-	PM4-4 F4	New Shepard M17	New Shepard CCL3	RSS H.G. Wells	-	WTEX	-	-	-	107	-	-
2021-869	2459501.12	2021 Oct 13 1449	New Shepard	-	PM4-4 F4	New Shepard M18	New Shepard CCL3	RSS First Step	-	WTEX	-	-	-	107	-	-
2021-889	2459560.13	2021 Dec 11 1500:49	New Shepard	-	PM4-4 F5	New Shepard M19	New Shepard CCL3	RSS First Step	-	WTEX	-	-	-	107	-	-
2022-822	2459670.08	2022 Mar 31 1358:02	New Shepard	-	PM4-4 F6	New Shepard M20	New Shepard CCL3	RSS First Step	-	WTEX	-	-	-	107	-	-
2022-837	2459735.06	2022 Jun 4 1325:09	New Shepard	-	PM4-4 F7	New Shepard M21	New Shepard CCL3	RSS First Step	-	WTEX	-	-	-	107	-	-
2022-877	2459796.08	2022 Aug 4 1356:14	New Shepard	-	PM4-4 F8	New Shepard M22	New Shepard CCL3	RSS First Step	-	WTEX	-	-	-	107	-	-
2022-820	2459835.10	2022 Sep 12 1427	New Shepard	-	PM4-3 F9	New Shepard M23	New Shepard CCL3	RSS H.G. Wells	-	WTEX	-	-	-	11	-	-
2023-872	2460295.20	2023 May 19 1642:35	New Shepard	-	PM4-4 F9	New Shepard M24	New Shepard CCL3	RSS H.G. Wells	-	WTEX	-	-	-	107	-	-
2024-534	2460450.11	2024 May 19 1436:16	New Shepard	-	PM4-4 F10	New Shepard M25	New Shepard CCL3	RSS First Step	-	WTEX	-	-	-	107	-	-
2024-549	2460552.05	2024 Aug 29 1307:11	New Shepard	-	PM4-4 F11	New Shepard M26	New Shepard CCL3	RSS First Step	-	WTEX	-	-	-	107	-	-
2024-564	2460607.14	2024 Oct 23 1525:36?7	New Shepard	-	PM4-5 F1	New Shepard M27	New Shepard CCL3	RSS Farman Line	-	WTEX	-	-	-	101?	-	-
2024-575	2460637.15	2024 Nov 23 1530:09	New Shepard	-	PM4-5 F2	New Shepard M28	New Shepard CCL3	RSS Farman Line	-	WTEX	-	-	-	107	-	-



Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	OrbPay	Agency	Launch_Code	Group	Category	LTCite	Cite	Notes
2015-S29	2457142.12	2015 Apr 29 1500?	New Shepard	-	PM4-1 F1	0.000	BLDR	SS	BLDR/	Test	Wire	-	-
2015-S76	2457350.22	2015 Nov 23 1721	New Shepard	-	PM4-2 F1	0.000	BLDR	SS	BLDR/	Test	naspaceflight.com	-	-
2015-S02	2457410.04	2016 Jan 22 1300?	New Shepard	-	PM4-2 F2	0.000	BLDR	SS	BLDR/	Test	naspaceflight.com	-	-
2016-S23	2457481.14	2016 Apr 2 1518	New Shepard	-	PM4-2 F3	0.000	BLDR	SS	BLDR/	Test	naspaceflight.com	-	-
2016-S37	2457569.11	2016 Jun 19 1436	New Shepard	-	PM4-2 F4	0.000	BLDR	SS	BLDR/	Test	naspaceflight.com	-	-
2016-S60	2457667.15	2016 Oct 5 1536	New Shepard	-	PM4-2 F5	0.000	BLDR	SS	BLDR/	Test	naspaceflight.com	-	-
2017-S104	2458100.21	2017 Dec 12 1659	New Shepard	-	PM4-3 F1	0.000	BLDR	SS	BLDR/	Test	naspaceflight.com	-	-
2018-S24	2458238.21	2018 Apr 29 1706	New Shepard	-	PM4-3 F2	0.000	BLDR	SS	BLDR/	Test	naspaceflight.com	-	-
2018-S41	2458318.13	2018 Jul 18 1511	New Shepard	-	PM4-3 F3	0.000	BLDR	SS	BLDR/	Test	naspaceflight.com	-	-
2019-S03	2458507.13	2019 Jan 23 1505	New Shepard	-	PM4-3 F4	0.000	BLDR	SS	BLDR/	Test	naspaceflight.com	-	-
2019-S18	2458606.06	2019 May 2 1332	New Shepard	-	PM4-3 F5	0.000	BLDR	SS	BLDR/	Test	naspaceflight.com	-	-
2019-S79	2458629.25	2019 Dec 11 1753	New Shepard	-	PM4-3 F6	0.000	BLDR	SS	BLDR/	Test	naspaceflight.com	-	-
2020-S35	2459136.07	2020 Oct 13 1336	New Shepard	-	PM4-3 F7	0.000	BLDR	SS	BLDR/	Test	naspaceflight.com	-	-
2021-S01	2459229.22	2021 Jan 14 1719	New Shepard	-	PM4-4 F1	0.000	BLDR	SS	BLDR/	Test	naspaceflight.com	-	-
2021-S45	2459319.20	2021 Apr 14 1651	New Shepard	-	PM4-4 F2	0.000	BLDR	SS	BLDR/	Test	naspaceflight.com	-	-
2021-S46	2459416.06	2021 Jul 20 1311:00?	New Shepard	-	PM4-4 F3	0.000	BLDR	SS	BLDR/	Tourist Flight	naspaceflight.com	-	-
2021-S55	2459453.11	2021 Aug 26 1431:20	New Shepard	-	PM4-4 F4	0.000	BLDR	SS	BLDR/	Tourist Flight	naspaceflight.com	-	-
2021-S69	2459501.12	2021 Oct 13 1449	New Shepard	-	PM4-4 F5	0.000	BLDR	SS	BLDR/	Tourist Flight	naspaceflight.com	-	-
2021-S69	2459560.13	2021 Dec 11 1500:49	New Shepard	-	PM4-4 F6	0.000	BLDR	SS	BLDR/	Tourist Flight	naspaceflight.com	-	-
2022-S22	245970.08	2022 Mar 31 1358:02	New Shepard	-	PM4-4 F7	0.000	BLDR	SS	BLDR/	Tourist Flight	naspaceflight.com	-	-
2022-S37	2459735.06	2022 Jun 4 1325:09	New Shepard	-	PM4-4 F8	0.000	BLDR	SS	BLDR/	Tourist Flight	naspaceflight.com	-	-
2022-S77	2459796.08	2022 Aug 4 1366:14	New Shepard	-	PM4-4 F9	0.000	BLDR	SS	BLDR/	Tourist Flight	naspaceflight.com	-	-
2022-S20	2459935.10	2022 Sep 12 1427	New Shepard	-	PM4-4 F10	0.000	BLDR	SF	BLDR/	Science Flight	naspaceflight.com	-	-
2023-S72	2460286.20	2023 Dec 19 1642:35	New Shepard	-	PM4-4 F11	0.000	BLDR	SS	BLDR/	Science Flight	naspaceflight.com	-	-
2024-S34	2460450.11	2024 May 19 1435:18	New Shepard	-	PM4-5 F1	0.000	BLDR	SS	BLDR/	Tourist Flight	naspaceflight.com	-	-
2024-S49	2460552.05	2024 Aug 29 1307:11	New Shepard	-	PM4-5 F1	0.000	BLDR	SS	BLDR/	Tourist Flight	naspaceflight.com	-	-
2024-S64	2460607.14	2024 Oct 23 1525:38?	New Shepard	-	PM4-5 F1	0.000	BLDR	SS	BLDR/	Test	naspaceflight.com	-	-
2024-S75	2460637.15	2024 Nov 22 1530:09	New Shepard	-	PM4-5 F2	0.000	BLDR	SS	BLDR/	Tourist Flight	naspaceflight.com	-	-



Launch

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Mission	FlightCode	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee_Km	Range_Km	Dest
1946-A12	2452085.22	1946 Sep 24 1715	Mike-46	-	46-A	Dummy Sustainer	-	-	-	WS	LC33	-	-	9	-	-
1946-A13	2452091.21	1946 Sep 27 1700	Mike-46	-	46-B	Dummy Sustainer	-	-	-	WS	LC33	-	-	13	-	-
1946-A14	2452095.23	1946 Oct 1 1729	Mike-46	-	46-C	Dummy Sustainer	-	-	-	WS	LC33	-	-	13	-	-
1946-A15	2452102.29	1946 Oct 8 1853	Mike-46	-	46-2	Mike-46 1R	-	-	-	WS	LC33	-	-	42	-	-
1946-A16	2452105.20	1946 Oct 11 1650	Mike-46	-	46-3	Mike-46 2R	-	-	-	WS	LC33	-	-	33	-	-
1946-A17	2452109.39	1946 Oct 15 2123	Mike-46	-	46-5	Mike-46 3R	-	-	-	WS	LC33	-	-	18	-	-
1946-A18	2452112.24	1946 Oct 18 1750	Mike-46	-	46-1	Mike-46 4R	-	-	-	WS	LC33	-	-	11	-	-
1946-A19	2452137.40	1946 Nov 12 2134	Mike-46	-	46-6	Mike-46 5R	-	-	-	WS	LC33	-	-	10	-	-
1946-A20	2452140.40	1946 Nov 15 2134	Mike-46	-	46-7	Mike-46 6R	-	-	-	WS	LC33	-	-	0	-	-
1947-A01	2452196.44	1947 Jan 10 2230	Mike-46	-	46-8	Mike-46 7R	-	-	-	WS	LC33	-	-	31	-	-
1947-A02	2452210.46	1947 Jan 24 2307	Mike-46	-	46-9	Mike-46 8R	-	-	-	WS	LC33	-	-	0	-	-
1947-A03	2452214.38	1947 Jan 28 2105	Mike-46	-	46-4	Mike-46 9R	-	-	-	WS	LC33	-	-	10	-	-
1947-A17	2452450.50	1947 Sep 22	Mike-47	-	47-E	Mike-47 Round D	-	-	-	WS	LC33	-	-	10	-	-
1947-A19	2452454.50	1947 Sep 26	Mike-47	-	47-F	Mike-47 Round E	-	-	-	WS	LC33	-	-	10	-	-
1947-A21	2452465.50	1947 Oct 7	Mike-47	-	47-G	Mike-47 Round F	-	-	-	WS	LC33	-	-	10	-	-
1947-A22	2452474.50	1947 Oct 16	Mike-47	-	47-H	Mike-47 Round G	-	-	-	WS	LC33	-	-	10	-	-
1947-A23	2452481.50	1947 Oct 23	Mike-47	-	47-I	Mike-47 Round H	-	-	-	WS	LC33	-	-	10	-	-
1947-A25	2452486.50	1947 Oct 28	Mike-47	-	47-L	Mike-47 10R	-	-	-	WS	LC33	-	-	367	-	-
1947-A26	2452488.50	1947 Oct 30	Mike-47	-	47-13	Mike-47 11R	-	-	-	WS	LC33	-	-	367	-	-
1947-A35	2452525.50	1947 Dec 9	Mike-47	-	47-15	Mike-47 12R	-	-	-	WS	LC33	-	-	367	-	-
1947-A39	2452528.50	1947 Dec 9	Mike-47	-	47-16	Mike-47 13R	-	-	-	WS	LC33	-	-	107	-	-
1948-A05	2452715.44	1948 Dec 15 2230	Mike-481	-	47-J	Mike 48-1 I dummy	-	-	-	WS	LC33	-	-	107	-	-
1948-A07	2452727.19	1948 Jun 24 1636	Mike-481	-	47-K	Mike 48-1 K dummy	-	-	-	WS	LC33	-	-	107	-	-
1948-A11	2452734.42	1948 Jul 1 2200	Mike-481	-	47-H	Mike 48-1 L dummy	-	-	-	WS	LC33	-	-	107	-	-
1948-A16	2452749.24	1948 Jul 16 1740	Mike-481	-	48-20	Mike 48-1 16R	-	-	-	WS	LC33	-	-	107	-	-
1948-A17	2452762.26	1948 Jul 29 1310	Mike-481	-	48-21	Mike 48-1 19R	-	-	-	WS	LC33	-	-	107	-	-
1948-A18	2452763.47	1948 Jul 30 2310	Mike-481	-	48-22	Mike 48-1 20R	-	-	-	WS	LC33	-	-	107	-	-
1948-A20	2452781.36	1948 Aug 17 2100	Mike-481	-	48-23	Mike 48-1 21R	-	-	-	WS	LC33	-	-	107	-	-
1948-A25	2452804.45	1948 Sep 9 2235	Mike-481	-	48-24	Mike 48-1 22R	-	-	-	WS	LC33	-	-	107	-	-
1948-A27	2452809.23	1948 Sep 14 1736	Mike-481	-	47-L	Mike 48-1 Q dummy	-	-	-	WS	LC33	-	-	107	-	-
1948-A28	2452809.50	1948 Sep 15 0000	Mike-481	-	48-26	Mike 48-1 23R	-	-	-	WS	LC33	-	-	36	-	-
1948-A29	2452812.19	1948 Sep 17 1632	Mike-481	-	48-25	Mike 48-1 24R	-	-	-	WS	LC33	-	-	107	-	-
1948-A31	2452816.43	1948 Sep 21 2215	Mike-481	-	48-29	Mike 48-1 26R	-	-	-	WS	LC33	-	-	15	-	-
1948-A35	2452825.43	1948 Sep 30 2215	Mike-481	-	48-28	Mike 48-1 25R	-	-	-	WS	LC33	-	-	15	-	-
1948-A37	2452840.26	1948 Oct 15 1321	Mike-481	-	48-30	Mike 48-1 27R	-	-	-	WS	LC33	-	-	22	-	-
1948-A42	2452847.20	1948 Oct 22 1644	Mike-481	-	48-33	Mike 48-1 28R	-	-	-	WS	LC33	-	-	16	-	-
1948-A43	2452865.21	1948 Nov 12 1703	Mike-481	-	48-27	Mike 48-1 29R	-	-	-	WS	LC33	-	-	20	-	-
1948-A45	2452865.21	1948 Nov 12 1700	Mike-481	-	48-31	Mike 48-1 30R	-	-	-	WS	LC33	-	-	20	-	-
1949-A17	2453060.23	1949 May 13 1735	Mike-481	-	48-39	Mike 48-1 31R	-	-	-	WS	LC33	-	-	11	-	-
1949-A18	2453064.23	1949 May 17 1733	Mike-481	-	48-32	Mike 48-1 32R	-	-	-	WS	LC33	-	-	20	-	-
1949-A19	2453067.23	1949 May 20 1736	Mike-481	-	48-34	Mike 48-1 33R	-	-	-	WS	LC33	-	-	20	-	-



Launch

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Orbpay	Agency	Launch_Code	Group	Category	LTCite	Cite	Notes
1946-A12	2432068.22	1946 Sep 24 1715	Nike-46	-	46-A	0.000	ORD	AS	-	Test	MKeafjxhist	-	-
1946-A13	2432091.21	1946 Sep 27 1700	Nike-46	-	46-B	0.000	ORD	AS	-	Test	MKeafjxhist	-	-
1946-A14	2432095.23	1946 Oct 1 1729	Nike-46	-	46-C	0.000	ORD	AS	-	Test	MKeafjxhist	-	-
1946-A15	2432102.29	1946 Oct 8 1853	Nike-46	-	46-2	0.000	ORD	AS	-	Test	MKeafjxhist	-	-
1946-A16	2432105.20	1946 Oct 11 1650	Nike-46	-	46-3	0.000	ORD	AS	-	Test	MKeafjxhist	-	-
1946-A17	2432109.39	1946 Oct 15 2123	Nike-46	-	46-5	0.000	ORD	AF	-	Test	MKeafjxhist	-	-
1946-A18	2432112.24	1946 Oct 18 1750	Nike-46	-	46-6	0.000	ORD	AF	-	Test	MKeafjxhist	-	-
1946-A19	2432137.40	1946 Nov 12 2133	Nike-46	-	46-6	0.000	ORD	AF	-	Test	MKeafjxhist	-	-
1946-A20	2432140.40	1946 Nov 15 2134	Nike-46	-	46-7	0.000	ORD	AF	-	Test	MKeafjxhist	-	-
1947-A01	2432196.44	1947 Jan 10 2230	Nike-46	-	46-8	0.000	ORD	AF	-	Test	MKeafjxhist	-	-
1947-A02	2432210.46	1947 Jan 24 2307	Nike-46	-	46-9	0.000	ORD	AS	-	Test	MKeafjxhist	-	-
1947-A03	2432214.38	1947 Jan 28 2105	Nike-46	-	46-4	0.000	ORD	AF	-	Test	MKeafjxhist	-	-
1947-A17	2432450.50	1947 Sep 22	Nike-47	-	47-E	0.000	ORD	AS	-	Test	MKeafjxhist	-	-
1947-A19	2432454.50	1947 Sep 26	Nike-47	-	47-F	0.000	ORD	AS	-	Test	MKeafjxhist	-	-
1947-A22	2432474.50	1947 Oct 7	Nike-47	-	47-G	0.000	ORD	AS	-	Test	MKeafjxhist	-	-
1947-A23	2432481.50	1947 Oct 16	Nike-47	-	47-H	0.000	ORD	AS	-	Test	MKeafjxhist	-	-
1947-A25	2432486.50	1947 Oct 23	Nike-47	-	47-I	0.000	ORD	AS	-	Test	MKeafjxhist	-	-
1947-A26	2432488.50	1947 Oct 28	Nike-47	-	47-L	0.000	ORD	AS	-	Test	MKeafjxhist	-	-
1947-A35	2432528.50	1947 Dec 9	Nike-47	-	47-13	0.000	ORD	AS	-	Test	MKeafjxhist	-	-
1947-A34	2432528.50	1947 Dec 9	Nike-47	-	47-15	0.000	ORD	AS	-	Test	MKeafjxhist	-	-
1948-A05	2432715.44	1948 Jun 15 2230	Nike-481	-	47-16	0.000	ORD	AS	-	Test	MKeafjxhist	-	-
1948-A07	2432727.19	1948 Jun 24 1636	Nike-481	-	47-J	0.000	ORD	AS	-	Test	MKeafjxhist	-	-
1948-A11	2432734.42	1948 Jul 1 2200	Nike-481	-	47-K	0.000	ORD	AS	-	Test	MKeafjxhist	-	-
1948-A16	2432749.24	1948 Jul 16 1740	Nike-481	-	47-H	0.000	ORD	AS	-	Test	MKeafjxhist	-	-
1948-A17	2432762.26	1948 Jul 29 1810	Nike-481	-	48-20	0.000	ORD	AS	-	Test	MKeafjxhist	-	-
1948-A18	2432763.47	1948 Jul 30 2310	Nike-481	-	48-21	0.000	ORD	AS	-	Test	MKeafjxhist	-	-
1948-A20	2432761.38	1948 Aug 17 2100	Nike-481	-	48-22	0.000	ORD	AS	-	Test	MKeafjxhist	-	-
1948-A26	2432804.48	1948 Sep 9 2255	Nike-481	-	48-23	0.000	ORD	AS	-	Test	MKeafjxhist	-	-
1948-A27	2432809.23	1948 Sep 14 1736	Nike-481	-	48-24	0.000	ORD	AS	-	Test	MKeafjxhist	-	-
1948-A29	2432812.19	1948 Sep 15 0000	Nike-481	-	47-L	0.000	ORD	AS	-	Test	MKeafjxhist	-	-
1948-A31	2432816.43	1948 Sep 17 1632	Nike-481	-	48-26	0.000	ORD	AS	-	Test	MKeafjxhist	-	-
1948-A36	2432825.43	1948 Sep 21 2215	Nike-481	-	48-25	0.000	ORD	AS	-	Test	MKeafjxhist	-	-
1948-A37	2432840.26	1948 Sep 30 2215	Nike-481	-	48-28	0.000	ORD	AS	-	Test	MKeafjxhist	-	-
1948-A42	2432847.20	1948 Oct 15 1821	Nike-481	-	48-29	0.000	ORD	AS	-	Test	MKeafjxhist	-	-
1948-A44	2432865.21	1948 Oct 22 1644	Nike-481	-	48-30	0.000	ORD	AS	-	Test	MKeafjxhist	-	-
1948-A45	2432865.21	1948 Nov 9 1705	Nike-481	-	48-33	0.000	ORD	AS	-	Test	MKeafjxhist	-	-
1949-A17	2433050.23	1949 May 12 1758	Nike-481	-	48-27	0.000	ORD	AS	-	Test	MKeafjxhist	-	-
1949-A18	2433054.23	1949 May 17 1753	Nike-481	-	48-31	0.000	ORD	AS	-	Test	MKeafjxhist	-	-
1949-A19	2433057.23	1949 May 20 1736	Nike-481	-	48-19	0.000	ORD	AS	-	Test	MKeafjxhist	-	-
				-	48-34	0.000	ORD	AS	-	Test	MKeafjxhist	-	-





Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Launch_Mission	FlightCode	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee_Km	Range_Km	Dest
1948-A06	2432720-45	1948 Jun 17 2244	Nike-480	-	47-N	Nike 48-0 J dummy	-	-	-	WS	LC33	-	-	1	-	-
1948-A08	2432732-19	1948 Jun 29 1630	Nike-480	-	47-17	Nike 48-0 14k	-	-	-	WS	LC33	-	-	29	-	-
1948-A10	2432734-19	1948 Jul 1 1639	Nike-480	-	47-18	Nike 48-0 15k	-	-	-	WS	LC33	-	-	10?	-	-
1948-A13	2432741-19	1948 Jul 8 1630	Nike-480	-	47-11	Nike 48-0 16k	-	-	-	WS	LC33	-	-	27	-	-
1948-A14	2432746-19	1948 Jul 13 1631	Nike-480	-	47-14	Nike 48-0 17k	-	-	-	WS	LC33	-	-	7	-	-
1948-A19	2432774-19	1948 Jul 13 1631	Nike-482	-	482-P	Nike 48-2 H dummy	-	-	-	WS	LC33	-	-	11	-	-
1948-A22	2432783-40	1948 Aug 10 1635	Nike-482	-	482-Q	Nike 48-2 P dummy	-	-	-	WS	LC33	-	-	11	-	-
1948-A24	2432784-20	1948 Aug 20 1645	Nike-482	-	482-R	Nike 48-2 R dummy	-	-	-	WS	LC33	-	-	11	-	-
1948-A34	2432822-47	1948 Sep 27 2315	Nike-484	-	484-S	Nike 484 34R	-	-	-	WS	LC33	-	-	10?	-	-
1950-A03	2433304-50	1950 Jun 23	Nike-484	-	484-35	Nike 484 36R	-	-	-	WS	LC33	-	-	10?	-	-
1950-A04	2433312-50	1950 Jun 31	Nike-484	-	484-38	Nike 484 37R	-	-	-	WS	LC33	-	-	10?	-	-
1950-A05	2433314-50	1950 Feb 9	Nike-484	-	484-37	Nike 484 38R	-	-	-	WS	LC33	-	-	10?	-	-
1950-A06	2433321-50	1950 Feb 2	Nike-484	-	484-39	Nike 484 39R	-	-	-	WS	LC33	-	-	10?	-	-
1950-A08	2433326-50	1950 Feb 14	Nike-484	-	484-40	Nike 484 38R	-	-	-	WS	LC33	-	-	10?	-	-
1950-A09	2433335-50	1950 Feb 23	Nike-484	-	484-41	Nike 484 39R	-	-	-	WS	LC33	-	-	10?	-	-
1950-A10	2433342-50	1950 Mar 2	Nike-484	-	484-42	Nike 484 40R	-	-	-	WS	LC33	-	-	10?	-	-
1950-A11	2433354-50	1950 Mar 14	Nike-484	-	484-43	Nike 484 41R	-	-	-	WS	LC33	-	-	10?	-	-
1950-A12	2433361-50	1950 Mar 21	Nike-484	-	484-45	Nike 484 42R	-	-	-	WS	LC33	-	-	10?	-	-
1950-A13	2433365-50	1950 Mar 23	Nike-484	-	484-44	Nike 484 43R	-	-	-	WS	LC33	-	-	10?	-	-
1950-A15	2433368-50	1950 Mar 28	Nike-484	-	484-47	Nike 484 44R	-	-	-	WS	LC33	-	-	10?	-	-
1950-A16	2433371-50	1950 Mar 31	Nike-484	-	484-46	Nike 484 45R	-	-	-	WS	LC33	-	-	10?	-	-
1950-A17	2433378-50	1950 Apr 7	Nike-484	-	484-48	Nike 484 46R	-	-	-	WS	LC33	-	-	10?	-	-
1950-A18	2433382-50	1950 Apr 11	Nike-484	-	484-48	Nike 484 47R	-	-	-	WS	LC33	-	-	10?	-	-
1950-A19	2433385-50	1950 Apr 14	Nike-484	-	484-49	Nike 484 48R	-	-	-	WS	LC33	-	-	10?	-	-
1950-A20	2433391-50	1950 Apr 20	Nike-484	-	484-50	Nike 484 49R	-	-	-	WS	LC33	-	-	10?	-	-
1950-A42	2433571-50	1950 Oct 17	Nike X201 Ajax	-	490-57	Nike 490A 50R	-	-	-	WS	LC33	-	-	10?	-	-
1950-A43	2433576-50	1950 Oct 24	Nike X201 Ajax	-	490-59	Nike 490A 51R	-	-	-	WS	LC33	-	-	10?	-	-
1950-A47	2433581-50	1950 Oct 27	Nike X201 Ajax	-	490-60	Nike 490A 52R	-	-	-	WS	LC33	-	-	10?	-	-
1950-A49	2433587-50	1950 Nov 02	Nike X201 Ajax	-	490-61	Nike 490A 53R	-	-	-	WS	LC33	-	-	10?	-	-
1950-A50	2433592-50	1950 Nov 07	Nike X201 Ajax	-	490-56	Nike 490A 54R	-	-	-	WS	LC33	-	-	10?	-	-
1950-A54	2433601-50	1950 Nov 16	Nike X201 Ajax	-	490-67	Nike 490A 55R	-	-	-	WS	LC33	-	-	10?	-	-
1950-A55	2433605-50	1950 Nov 20	Nike X201 Ajax	-	490-62	Nike 490A 56R	-	-	-	WS	LC33	-	-	10?	-	-
1950-A58	2433619-50	1950 Dec 04	Nike X201 Ajax	-	490-69	Nike 490A 57R	-	-	-	WS	LC33	-	-	10?	-	-
1950-A60	2433622-50	1950 Dec 07	Nike X201 Ajax	-	490-63	Nike 490A 58R	-	-	-	WS	LC33	-	-	10?	-	-
1950-A61	2433626-50	1950 Dec 11	Nike X201 Ajax	-	490-64	Nike 490A 59R	-	-	-	WS	LC33	-	-	10?	-	-
1951-A11	2433746-50	1951 Apr 12	Nike X201 Ajax	-	490-66	Nike 490A 60R	-	-	-	WS	LC33	-	-	10?	-	-
1951-A19	2433776-50	1951 May 10	Nike X201 Ajax	-	490-70	Nike 490A 61R	-	-	-	WS	LC33	-	-	10?	-	-
1951-A27	2433804-50	1951 Jun 07	Nike X201 Ajax	-	490-70	Nike 490A 62R	-	-	-	WS	LC33	-	-	10?	-	-
1951-A30	2433812-50	1951 Jun 08	Nike X201 Ajax	-	490-69	Nike 490A 63R	-	-	-	WS	LC33	-	-	10?	-	-
1951-A35	2433825-50	1951 Jun 28	Nike X201 Ajax	-	490-71	Nike 490A 64R	-	-	-	WS	LC33	-	-	10?	-	-
1951-A41	2433851-50	1951 Jul 14	Nike X201 Ajax	-	490-72	Nike 490A 65R	-	-	-	WS	LC33	-	-	10?	-	-
1951-A42	2433855-50	1951 Oct 16	Nike X201 Ajax	-	490-71	Nike 490A 66R	-	-	-	WS	LC33	-	-	10?	-	-
1951-A82	2433969-50	1951 Nov 16	Nike X201 Ajax	-	490-8	System Test 67R	-	-	-	WS	LC33	-	-	10?	-	-
1951-A84	2433969-50	1951 Nov 16	Nike X201 Ajax	-	490-8	System Test 68R	-	-	-	WS	LC33	-	-	10?	-	-
1951-A85	2433974-50	1951 Nov 27	Nike X201 Ajax	-	490-9	System Test 69R	-	-	-	WS	LC33	-	-	10?	-	-
1951-A89	2433984-50	1951 Dec 01	Nike X201 Ajax	-	490-9	System Test 70R	-	-	-	WS	LC33	-	-	10?	-	-
1951-A93	2433991-50	1951 Dec 11	Nike X201 Ajax	-	490-9	System Test 71R	-	-	-	WS	LC33	-	-	10?	-	-
1951-A94	2433991-50	1951 Dec 11	Nike X201 Ajax	-	490-9	System Test 72R	-	-	-	WS	LC33	-	-	10?	-	-
1951-A99	2433998-50	1951 Dec 18	Nike X201 Ajax	-	490-9	System Test 73R	-	-	-	WS	LC33	-	-	10?	-	-
1952-A17	2434033-50	1952 Dec 22	Nike X201 Ajax	-	490-9	System Test 74R	-	-	-	WS	LC33	-	-	10?	-	-
1952-A18	2434033-50	1952 Dec 22	Nike X201 Ajax	-	490-9	System Test 75R	-	-	-	WS	LC33	-	-	10?	-	-
1952-A19	2434040-50	1952 Jan 29	Nike X201 Ajax	-	490-9	System Test 76R	-	-	-	WS	LC33	-	-	10?	-	-
1952-A22	2434040-50	1952 Jan 29	Nike X201 Ajax	-	490-9	System Test 77R	-	-	-	WS	LC33	-	-	10?	-	-
1952-A23	2434047-50	1952 Feb 06	Nike X201 Ajax	-	490-9	System Test 78R	-	-	-	WS	LC33	-	-	10?	-	-
1952-A32	2434049-50	1952 Feb 07	Nike X201 Ajax	-	490-9	System Test 79R	-	-	-	WS	LC33	-	-	10?	-	-
1952-A34	2434049-50	1952 Feb 07	Nike X201 Ajax	-	490-9	System Test 80R	-	-	-	WS	LC33	-	-	10?	-	-
1952-A31	2434061-50	1952 Feb 25	Nike X201 Ajax	-	490-9	System Test 81R	-	-	-	WS	LC33	-	-	10?	-	-
1952-A34	2434071-50	1952 Feb 25	Nike X201 Ajax	-	490-9	System Test 82R	-	-	-	WS	LC33	-	-	10?	-	-
1952-A38	2434075-50	1952 Feb 29	Nike X201 Ajax	-	490-9	System Test 83R	-	-	-	WS	LC33	-	-	10?	-	-
1952-A39	2434075-50	1952 Mar 04	Nike X201 Ajax	-	490-9	System Test 84R	-	-	-	WS	LC33	-	-	10?	-	-
1952-A41	2434076-50	1952 Mar 05	Nike X201 Ajax	-	490-9	System Test 85R	-	-	-	WS	LC33	-	-	10?	-	-
1952-A45	2434085-50	1952 Mar 14	Nike X201 Ajax	-	490-9	Nike 1249 RD 81R	-	-	-	WS	LC33	-	-	10?	-	-
1952-A46	2434089-50	1952 Mar 14	Nike X201 Ajax	-	490-9	System Test 86R	-	-	-	WS	LC33	-	-	10?	-	-
1952-A52	2434099-50	1952 Mar 28	Nike X201 Ajax	-	490-9	System Test 87R	-	-	-	WS	LC33	-	-	10?	-	-
1952-A53	2434099-50	1952 Mar 28	Nike X201 Ajax	-	490-9	System Test 88R	-	-	-	WS	LC33	-	-	10?	-	-
1952-A63	2434104-50	1952 Apr 02	Nike X201 Ajax	-	491	Warhead Test 88R	-	-	-	WS	LC33	-	-	10?	-	-
1952-A62	2434104-50	1952 Apr 02	Nike X201 Ajax	-	491	Warhead Test 89R	-	-	-	WS	LC33	-	-	10?	-	-
1952-A61	2434104-50	1952 Apr 02	Nike X201 Ajax	-	491	Warhead Test 90R	-	-	-	WS	LC33	-	-	10?	-	-
1952-A69	2434126-50	1952 Apr 24	Nike X201 Ajax	-	491	Warhead Test 91R	-	-	-	WS	LC33	-	-	10?	-	-
1952-A70	2434126-50	1952 Apr 24	Nike X201 Ajax	-	491	Warhead Test 92R	-	-	-	WS	LC33	-	-	10?	-	-
1952-A73	2434134-50	1952 Apr 02	Nike X201 Ajax	-	491	Warhead Test 93R	-	-	-	WS	LC33	-	-	10?	-	-
1952-A80	2434148-50	1952 May 16	Nike X201 Ajax	-	1249-102	Nike 1249 RD 93R	-	-	-	WS	LC33	-	-	10?	-	-
1952-A90	2434168-50	1952 May 16	Nike X201 Ajax	-	1249-103	Nike 1249 RD 94R	-	-	-	WS	LC33	-	-	10?	-	-
1952-A94	2434175-50	1952 May 28	Nike X201 Ajax	-	1249-104	Nike 1249 RD 95R	-	-	-	WS	LC33	-	-	10?	-	-
1952-A99	2434181-50	1952 Jun 12	Nike X201 Ajax	-	1249-105	Nike 1249 RD 96R	-	-	-	WS	LC33	-	-	10?	-	-
1952-A102	2434181-50	1952 Jun 12	Nike X201 Ajax	-	1249-106	Nike 1249 RD 97R	-	-	-	WS	LC33	-	-	10?	-	-
1952-A109	2434188-50	1952 Jun 25	Nike X201 Ajax	-	1249-107	Nike 1249 RD 98R	-	-	-	WS	LC33	-	-	10?	-	-
1952-A114	2434215-50	1952 Jul 17	Nike X201 Ajax	-	1249-111	Nike 1249 RD 99R	-	-	-	WS	LC33	-	-	10?	-	-
1952-A284	2434215-50	1952 Jul 22	Nike X201 Ajax	-	1249-108	Nike 1249 RD 100R	-	-	-	WS	LC33	-	-	10?	-	-
1952-A122	2434222-50	1952 Jul 29	Nike X201 Ajax	-	1249-102	Nike 1249 RD 101R	-	-	-	WS	LC33	-	-	10?	-	-
1952-A123	2434222-50	1952 Jul 29	Nike X201 Ajax	-	1249-102	Nike 1249 RD 102R	-	-	-	WS	LC33	-	-	10?	-	-
1952-A131	2434232-50	1952 Jul 31	Nike X201 Ajax	-	1249-109	Nike 1249 RD 103R	-	-	-	WS	LC33	-	-	10?	-	-
1952-A133	2434232-50	1952 Aug 08	Nike X201 Ajax	-	1249-112	Nike 1249 RD 104R	-	-	-	WS	LC33	-	-	10?	-	-
1952-A136	2434232-50	1952 Aug 15	Nike X201 Ajax	-	1249-113	Nike 1249 RD 105R	-	-	-	WS	LC33	-	-	10?	-	-
1952-A137	2434239-50	1952 Aug 15	Nike X201 Ajax	-	1249-114	Nike 1249 RD 106R	-	-	-	WS	LC33	-	-	10?	-	-
1952-A137	2434239-50	1952 Aug 15	Nike X201 Ajax	-	1249-115	Nike 1249 RD 107R</										



Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Launch_Mission	FlightCode	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee_Km	Range_Km	Dest
1955-A77	2434433-50	1955 Feb 26	Mike Ajax	-	1249A-195	Mike 1249 RMD 179R	-	-	-	WS	-	-	-	107	-	-
1955-A78	2434433-50	1955 Feb 26	Mike Ajax	-	1042E	-	-	-	-	WS	-	-	-	107	-	-
1955-A79	2434433-50	1955 Feb 26	Mike Ajax	-	1038E	-	-	-	-	WS	-	-	-	107	-	-
1955-A81	2434434-50	1955 Feb 26	Mike Ajax	-	310P	Mike CET 10	-	-	-	WS	-	-	-	107	-	-
1955-A82	2434434-50	1955 Feb 26	Mike Ajax	-	311P	Mike CET 11	-	-	-	WS	-	-	-	107	-	-
1955-A83	2434434-50	1955 Feb 26	Mike Ajax	-	1021E	-	-	-	-	WS	-	-	-	107	-	-
1955-A85	2434435-50	1955 Feb 27	Mike Ajax	-	1249A-165	Mike 1249 RMD 168R	-	-	-	WS	-	-	-	107	-	-
1955-A86	2434435-50	1955 Feb 27	Mike Ajax	-	1249A-162	Mike 1249 RMD 181R	-	-	-	WS	-	-	-	107	-	-
1955-A87	2434435-50	1955 Feb 27	Mike Ajax	-	1249A-186	Mike 1249 RMD 182R	-	-	-	WS	-	-	-	107	-	-
1955-A90	2434439-50	1955 Mar 03	Mike Ajax	-	1013E	-	-	-	-	WS	-	-	-	107	-	-
1955-A91	2434439-50	1955 Mar 03	Mike Ajax	-	1249A-169	Mike 1249 RMD 163R	-	-	-	WS	-	-	-	107	-	-
1955-A92	2434439-50	1955 Mar 03	Mike Ajax	-	1249A-168	Mike 1249 RMD 164R	-	-	-	WS	-	-	-	107	-	-
1955-A96	2434441-50	1955 Mar 06	Mike Ajax	-	312P	Mike CET 12	-	-	-	WS	-	-	-	107	-	-
1955-A97	2434441-50	1955 Mar 06	Mike Ajax	-	1249A-192	Mike CET 13	-	-	-	WS	-	-	-	107	-	-
1955-A98	2434441-50	1955 Mar 06	Mike Ajax	-	1249A-175	Mike 1249 RMD 165R	-	-	-	WS	-	-	-	107	-	-
1955-A99	2434441-50	1955 Mar 06	Mike Ajax	-	1050E	Mike 1249 RMD 166R	-	-	-	WS	-	-	-	107	-	-
1955-A100	2434441-50	1955 Mar 06	Mike Ajax	-	1052E	-	-	-	-	WS	-	-	-	107	-	-
1955-A999	2434442-50	1955 Mar 06	Mike Ajax	-	1249A-188	Mike 1249 RMD 167R	-	-	-	WS	-	-	-	107	-	-
1955-A102	2434446-50	1955 Mar 10	Mike Ajax	-	1249A-169	Mike 1249 RMD 168R	-	-	-	WS	-	-	-	107	-	-
1955-A106	2434448-50	1955 Mar 12	Mike Ajax	-	314P	Mike CET 14	-	-	-	WS	-	-	-	107	-	-
1955-A109	2434448-50	1955 Mar 12	Mike Ajax	-	315P	Mike CET 15	-	-	-	WS	-	-	-	107	-	-
1955-A110	2434448-50	1955 Mar 12	Mike Ajax	-	316P	Mike CET 16	-	-	-	WS	-	-	-	107	-	-
1955-A111	2434448-50	1955 Mar 12	Mike Ajax	-	1076E	-	-	-	-	WS	-	-	-	107	-	-
1955-A112	2434448-50	1955 Mar 12	Mike Ajax	-	1249A-200	Mike 1249 RMD 169R	-	-	-	WS	-	-	-	107	-	-
1955-A113	2434448-50	1955 Mar 12	Mike Ajax	-	1249A-172	Mike 1249 RMD 190R	-	-	-	WS	-	-	-	107	-	-
1955-A115	2434465-50	1955 Mar 17	Mike Ajax	-	1249A-201	Mike 1249 RMD 191R	-	-	-	WS	-	-	-	107	-	-
1955-A120	2434465-50	1955 Mar 17	Mike Ajax	-	1249A-178	Mike 1249 RMD 192R	-	-	-	WS	-	-	-	107	-	-
1955-A121	2434465-50	1955 Mar 17	Mike Ajax	-	1034E	-	-	-	-	WS	-	-	-	107	-	-
1955-A122	2434465-50	1955 Mar 17	Mike Ajax	-	1080E	-	-	-	-	WS	-	-	-	107	-	-
1955-A126	2434465-50	1955 Mar 19	Mike Ajax	-	1078E	Mike CET 17	-	-	-	WS	-	-	-	107	-	-
1955-A127	2434465-50	1955 Mar 19	Mike Ajax	-	317P	Mike CET 16	-	-	-	WS	-	-	-	107	-	-
1955-A132	2434465-50	1955 Mar 19	Mike Ajax	-	318P	Mike CET 19	-	-	-	WS	-	-	-	107	-	-
1955-A133	2434465-50	1955 Mar 19	Mike Ajax	-	319P	Mike CET 20	-	-	-	WS	-	-	-	107	-	-
1955-A135	2434465-50	1955 Mar 19	Mike Ajax	-	320P	Mike CET 21	-	-	-	WS	-	-	-	107	-	-
1955-A131	2434465-50	1955 Mar 19	Mike Ajax	-	321P	Mike CET 22	-	-	-	WS	-	-	-	107	-	-
1955-A130	2434465-50	1955 Mar 19	Mike Ajax	-	322P	Mike CET 23	-	-	-	WS	-	-	-	107	-	-
1955-A129	2434465-50	1955 Mar 19	Mike Ajax	-	323P	-	-	-	-	WS	-	-	-	107	-	-
1955-A142	2434469-50	1955 Mar 24	Mike Ajax	-	1088E	-	-	-	-	WS	-	-	-	107	-	-
1955-A144	2434482-50	1955 Mar 26	Mike Ajax	-	1046E	-	-	-	-	WS	-	-	-	107	-	-
1955-A146	2434482-50	1955 Mar 26	Mike Ajax	-	1074E	Mike CET 23	-	-	-	WS	-	-	-	107	-	-
1955-A147	2434482-50	1955 Mar 26	Mike Ajax	-	323P	Mike CET 24	-	-	-	WS	-	-	-	107	-	-
1955-A148	2434482-50	1955 Mar 26	Mike Ajax	-	324P	Mike CET 25	-	-	-	WS	-	-	-	107	-	-
1955-A17	2434482-50	1955 Mar 26	Mike Ajax	-	325P	Mike CET 26	-	-	-	WS	-	-	-	107	-	-
1955-A16	2434482-50	1955 Mar 26	Mike Ajax	-	326P	Mike CET 27	-	-	-	WS	-	-	-	107	-	-
1955-A14	2434482-50	1955 Mar 26	Mike Ajax	-	327P	Mike CET 28	-	-	-	WS	-	-	-	107	-	-
1955-A13	2434482-50	1955 Mar 26	Mike Ajax	-	328P	Mike 1249 RMD 193R	-	-	-	WS	-	-	-	107	-	-
1955-A15	2434482-50	1955 Mar 26	Mike Ajax	-	329P	Mike 1249 RMD 194R	-	-	-	WS	-	-	-	107	-	-
1955-A14	2434482-50	1955 Mar 31	Mike Ajax	-	1249A-1104	Mike 1249 RMD 195R	-	-	-	WS	-	-	-	107	-	-
1955-A152	2434487-50	1955 Mar 31	Mike Ajax	-	1099E	-	-	-	-	WS	-	-	-	107	-	-
1955-A157	2434487-50	1955 Mar 31	Mike Ajax	-	329E	Mike CET 26	-	-	-	WS	-	-	-	107	-	-
1955-A155	2434489-50	1955 Apr 02	Mike Ajax	-	327E	Mike CET 27	-	-	-	WS	-	-	-	107	-	-
1955-A157	2434489-50	1955 Apr 02	Mike Ajax	-	327E	Mike CET 27	-	-	-	WS	-	-	-	107	-	-
1955-A160	2434489-50	1955 Apr 02	Mike Ajax	-	1249A-1181	Mike 1249 RMD 196R	-	-	-	WS	-	-	-	107	-	-
1955-A160	2434489-50	1955 Apr 02	Mike Ajax	-	1249A-1183	Mike 1249 RMD 197R	-	-	-	WS	-	-	-	107	-	-
1955-A160	2434489-50	1955 Apr 02	Mike Ajax	-	1249A-197	Mike 1249 RMD 198R	-	-	-	WS	-	-	-	107	-	-
1955-A160	2434489-50	1955 Apr 02	Mike Ajax	-	1249A-196	Mike 1249 RMD 199R	-	-	-	WS	-	-	-	107	-	-
1955-A164	2434476-50	1955 Apr 09	Mike Ajax	-	329P	Mike CET 28	-	-	-	WS	-	-	-	107	-	-
1955-A166	2434481-50	1955 Apr 14	Mike Ajax	-	1249A-198	Mike 1249 RMD 200R	-	-	-	WS	-	-	-	107	-	-
1955-A166	2434481-50	1955 Apr 14	Mike Ajax	-	1249A-199	Mike 1249 RMD 201R	-	-	-	WS	-	-	-	107	-	-
1955-A167	2434481-50	1955 Apr 14	Mike Ajax	-	1086E	-	-	-	-	WS	-	-	-	107	-	-
1955-A168	2434481-50	1955 Apr 14	Mike Ajax	-	1089E	-	-	-	-	WS	-	-	-	107	-	-
1955-A170	2434483-50	1955 Apr 16	Mike Ajax	-	1249A-203	Mike 1249 RMD 202R	-	-	-	WS	-	-	-	107	-	-
1955-A171	2434483-50	1955 Apr 16	Mike Ajax	-	1249A-202	Mike 1249 RMD 203R	-	-	-	WS	-	-	-	107	-	-
1955-A172	2434483-50	1955 Apr 16	Mike Ajax	-	1084E	-	-	-	-	WS	-	-	-	107	-	-
1955-A172	2434483-50	1955 Apr 16	Mike Ajax	-	330P	Mike CET 30	-	-	-	WS	-	-	-	107	-	-
1955-A175	2434483-50	1955 Apr 16	Mike Ajax	-	331P	Mike CET 31	-	-	-	WS	-	-	-	107	-	-
1955-A174	2434483-50	1955 Apr 16	Mike Ajax	-	332P	Mike CET 32	-	-	-	WS	-	-	-	107	-	-
1955-A173	2434483-50	1955 Apr 16	Mike Ajax	-	333P	Mike CET 33	-	-	-	WS	-	-	-	107	-	-
1955-A181	2434487-50	1955 Apr 20	Mike Ajax	-	334P	Mike CET 34	-	-	-	WS	-	-	-	107	-	-
1955-A179	2434487-50	1955 Apr 20	Mike Ajax	-	335P	Mike CET 35	-	-	-	WS	-	-	-	107	-	-
1955-A178	2434487-50	1955 Apr 20	Mike Ajax	-	336P	Mike CET 36	-	-	-	WS	-	-	-	107	-	-
1955-A180	2434487-50	1955 Apr 20	Mike Ajax	-	337P	Mike CET 37	-	-	-	WS	-	-	-	107	-	-
1955-A185	2434497-50	1955 Apr 30	Mike Ajax	-	338P	Mike CET 38	-	-	-	WS	-	-	-	107	-	-
1955-A189	2434497-50	1955 Apr 30	Mike Ajax	-	339P	Mike CET 39	-	-	-	WS	-	-	-	107	-	-
1955-A193	2434497-50	1955 Apr 30	Mike Ajax	-	340P	Mike CET 40	-	-	-	WS	-	-	-	107	-	-
1955-A197	2434497-50	1955 Apr 30	Mike Ajax	-	1249A-204	Mike 1249 RMD 204R	-	-	-	WS	-	-	-	107	-	-
1955-A196	2434497-50	1955 Apr 30	Mike Ajax	-	1249A-205	Mike 1249 RMD 205R	-	-	-	WS	-	-	-	107	-	-
1955-A203	2434502-50	1955 May 05	Mike Ajax	-	1092E	-	-	-	-	WS	-	-	-	107	-	-
1955-A203	2434502-50	1955 May 05	Mike Ajax	-	1249B-1178	Mike 1249 RMD 206R	-	-	-	WS	-	-	-	107	-	-
1955-A205	2434504-50	1955 May 07	Mike Ajax	-	341P	Mike CET 41	-	-	-	WS	-	-	-	107	-	-
1955-A209	2434504-50	1955 May 07	Mike Ajax	-	342P	Mike CET 42	-	-	-	WS	-	-	-	107	-	-
1955-A206	2434504-50	1955 May 07	Mike Ajax	-	343P	Mike CET 43	-	-	-	WS	-	-	-	107	-	-
1955-A207	2434504-50	1955 May 07	Mike Ajax	-	344P	Mike CET 44	-	-	-	WS	-	-	-	107	-	-
1955-A208	2434504-50	1955 May 07	Mike Ajax	-	1103E	Mike CET 45	-	-	-	WS	-	-	-	107	-	-
1955-A213	2434509-50	1955 May 12	Mike Ajax	-	345P	Mike CET 46	-	-	-	WS	-	-	-	107	-	-
1955-A214	2434509-50	1955 May 12	Mike Ajax	-	346P	Mike CET 46	-	-	-	WS	-	-	-	107	-	-
1955-A215	2434509-50	1955 May 12	Mike Ajax	-	347P	Mike CET 47	-	-	-	WS	-	-	-	107	-	-

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Launch_Mission	FlightCode	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee_Km	Range_Km	Dest
1955-A216	2434509-50	1955 May 12	Mike Ajax	-	348P	Mike CET 48	-	-	-	WS	-	-	-	107	-	-
1955-A212	2434509-50	1955 May 12	Mike Ajax	-	349P	Mike CET 49	-	-	-	WS	-	-	-	107	-	-
1955-A219	2434511-50	1955 May 14	Mike Ajax	-	1249B-1179	Mike 1249 RMD 207R	-	-	-	WS	-	-	-	107	-	-
1955-A220	2434516-50	1955 May 19	Mike Ajax	-	1249A-161	Mike 1249 RMD 208R	-	-	-	WS	-	-	-	107	-	-
1955-A221	2434516-50	1955 May 19	Mike Ajax	-	1249B-1180	Mike 1249 RMD 209R	-	-	-	WS	-	-	-	107	-	-
1955-A228	2434526-50	1955 May 28	Mike Ajax	-	1249B-1151	Mike 1249 RMD 210R	-	-	-	WS	-	-	-	107	-	-
1955-A230	2434530-50	1955 Jun 02	Mike Ajax	-	1249B-1153	Mike 1249 RMD 211R	-	-	-	WS	-	-	-	107	-	-
1955-A231	2434530-50	1955 Jun 02	Mike Ajax	-	1249B-1168	Mike 1249 RMD 212R	-	-	-	WS	-	-	-	107	-	-
1955-A232	2434532-50	1955 Jun 04	Mike Ajax	-	1249B-1192	Mike 1249 RMD 213R	-	-	-	WS	-	-	-	107	-	-
1955-A233	2434532-50	1955 Jun 04	Mike Ajax	-	1249B-1098	Mike 1249 RMD 214R	-	-	-	WS	-	-	-	107	-	-
1955-A234	2434533-50	1955 Jun 06	Mike Ajax	-	1188E	-	-	-	-	WS	-	-	-	107	-	-
1955-A237	2434537-50	1955 Jun 09	Mike Ajax	-	1187E	-	-	-	-	WS	-	-	-	107	-	-
1955-A240	2434539-50	1955 Jun 11	Mike Ajax	-	1249B-1124	Mike 1249 RMD 215R	-	-	-	WS	-	-	-	107	-	-
1955-A241	2434539-50	1955 Jun 11	Mike Ajax	-	1249A-164	Mike 1249 RMD 216R	-	-	-	WS	-	-	-	107	-	-
1955-A245	2434544-50	1955 Jun 16	Mike Ajax	-	1249B-1134	Mike 1249 RMD 217R	-	-	-	WS	-	-	-	107	-	-
1955-A246	2434544-50	1955 Jun 16	Mike Ajax	-	1249B-1135	Mike 1249 RMD 218R	-	-	-	WS	-	-	-	107	-	-
1955-A256	2434551-50	1955 Jun 23	Mike Ajax	-	1249B-1122	Mike 1249 RMD 219R	-	-	-	WS	-	-	-	107	-	-
1955-A257	2434551-50	1955 Jun 23	Mike Ajax	-	1249B-1213	Mike 1249 RMD 220R	-	-	-	WS	-	-	-	107	-	-
1955-A258	2434551-50	1955 Jun 23	Mike Ajax	-	1146E	-	-	-	-	WS	-	-	-	107	-	-
1955-A259	2434555-50	1955 Jun 26	Mike Ajax	-	1249B-1123	490E Booster/221R	-	-	-	WS	-	-	-	107	-	-
1955-A276	2434558-50	1955 Jun 30	Mike Ajax	-	1249B-1205	Mike 1249 RMD 223R	-	-	-	WS	-	-	-	107	-	-
1955-A277	2434558-50	1955 Jun 30	Mike Ajax	-	1249B-1207	Mike 1249 RMD 224R	-	-	-	WS	-	-	-	107	-	-
1955-A278	2434559-50	1955 Jul 01	Mike Ajax	-	1160E	-	-	-	-	WS	-	-	-	107	-	-
1955-A281	2434564-50	1955 Jul 06	Mike Ajax	-	1137A	-	-	-	-	WS	-	-	-	107	-	-
1955-A286	2434567-50	1955 Jul 09	Mike Ajax	-	1204A	-	-	-	-	WS	-	-	-	107	-	-
1955-A287	2434567-50	1955 Jul 09	Mike Ajax	-	161A	-	-	-	-	WS	-	-	-	107	-	-
1955-A288	2434567-50	1955 Jul 09	Mike Ajax	-	1249B-1203	Radford Booster/226R	-	-	-	WS	-	-	-	107	-	-
1955-A289	2434567-50	1955 Jul 09	Mike Ajax	-	1249B-1219	Mike 1249 RMD 226R	-	-	-	WS	-	-	-	107	-	-
1955-A289	2434568-50	1955 Jul 10	Mike Ajax	-	1249B-1211	Mike 227R	-	-	-	WS	-	-	-	107	-	-
1955-A291	2434572-50	1955 Jul 14	Mike Ajax	-	162E	Mike 228R	-	-	-	WS	-	-	-	107	-	-
1955-A292	2434572-50	1955 Jul 14	Mike Ajax	-	1249B-1231	Mike 230R	-	-	-	WS	-	-	-	107	-	-
1955-A295	2434581-50	1955 Jul 23	Mike Ajax	-	1296K	Mike 231R	-	-	-	WS	-	-	-	107	-	-
1955-A300	2434581-50	1955 Jul 23	Mike Ajax	-	1249B-1277	Mike 232R	-	-	-	WS	-	-	-	107	-	-
1955-A306	2434586-50	1955 Jul 28	Mike Ajax	-	1249B-1221	Mike 233R	-	-	-	WS	-	-	-	107	-	-
1955-A315	2434586-50	1955 Aug 04	Mike Ajax	-	1249B-1201	Mike 235R	-	-	-	WS	-	-	-	107	-	-
1955-A319	2434600-50	1955 Aug 11	Mike Ajax	-	1249B-1215	Mike 234R	-	-	-	WS	-	-	-	107	-	-
1955-A320	2434600-50	1955 Aug 11	Mike Ajax	-	1206E	Mike 235R	-	-	-	WS	-	-	-	107	-	-
1955-A325	2434602-50	1955 Aug 13	Mike Ajax	-	1229K	Mike 236R	-	-	-	WS	-	-	-	107	-	-
1955-A327	2434602-50	1955 Aug 13	Mike Ajax	-	1237R	Mike 237R	-	-	-	WS	-	-	-	107	-	-
1955-A326	2434602-50	1955 Aug 13	Mike Ajax	-	1268K	Mike 238R	-	-	-	WS	-	-	-	107	-	-
1955-A335	2434609-50	1955 Aug 20	Mike Ajax	-	1269A	Mike 239R	-	-	-	WS	-	-	-	107	-	-
1955-A342	2434623-50	1955 Sep 03	Mike Ajax	-	1232K	Mike 240R	-	-	-	WS	-	-	-	107	-	-
1955-A344	2434623-50	1955 Sep 03	Mike Ajax	-	1225K	Mike 241R	-	-	-	WS	-	-	-	107	-	-
1955-A345	2434623-50	1955 Sep 03	Mike Ajax	-	1225K	Mike 241R	-	-	-	WS	-	-	-	107	-	-
1955-A349	2434625-50	1955 Sep 09	Mike Ajax	-	1224A	-	-	-	-	WS	-	-	-	107	-	-
1955-A350	2434625-50	1955 Sep 09	Mike Ajax	-	1214A	-	-	-	-	WS	-	-	-	107	-	-
1955-A355	2434629-50	1955 Sep 09	Mike Ajax	-	1253K	Mike 242R	-	-	-	WS	-	-	-	107	-	-
1955-A355	2434630-50	1955 Sep 09	Mike Ajax	-	1253K	Mike 242R	-	-	-	WS	-	-	-	107	-	-
1955-A355	2434631-50	1955 Sep 11	Mike Ajax	-	1135A	-	-	-	-	WS	-	-	-	107	-	-
1955-A355	2434631-50	1955 Sep 11	Mike Ajax	-	1185A	-	-	-	-	WS	-	-	-	107	-	-
1955-A361	2434637-50	1955 Sep 17	Mike Ajax	-	1256E	Mike 243R	-	-	-	WS	-	-	-	107	-	-
1955-A362	2434637-50	1955 Sep 17	Mike Ajax	-	1249R	Mike 244R	-	-	-	WS	-	-	-	107	-	-
1955-A365	2434640-50	1955 Sep 22	Mike Ajax	-	1146E	Mike 245R	-	-	-	WS	-	-	-	107	-	-
1955-A365	2434640-50	1955 Sep 22	Mike Ajax	-	1265E	-	-	-	-	WS	-	-	-	107	-	-
1955-A371	2434645-50	1955 Sep 26	Mike Ajax	-	1298E	-	-	-	-	WS	-	-	-	107	-	-
1955-A372	2434645-50	1955 Sep 26	Mike Ajax	-	1259E	-	-	-	-	WS	-	-	-	107	-	-
1955-A372	2434645-50	1955 Sep 26	Mike Ajax	-	1269E	-	-	-	-	WS	-	-	-	107	-	-
1955-A372	2434645-50	1955 Sep 26	Mike Ajax	-	1269E	-	-	-	-	WS	-	-	-	107	-	-
1955-A374	2434651-50	1955 Sep 26	Mike Ajax	-	1263E	-	-	-	-	WS	-	-	-	107	-	-
1955-A374	2434651-50	1955 Sep 26	Mike Ajax	-	1257E	Mike 246E	-	-	-	WS	-	-	-	107	-	-
1955-A380	2434651-50	1955 Oct 01	Mike Ajax	-	1267E	Mike 247R	-	-	-	WS	-	-	-	107	-	-
1955-A381	2434651-50	1955 Oct 01	Mike Ajax	-	1269R	Mike 248R	-	-	-	WS	-	-	-	107	-	-
1955-A387	2434656-50	1955 Oct 06	Mike Ajax	-	1234A	-	-	-	-	WS	-	-	-	107	-	-
1955-A388	2434656-50	1955 Oct 06	Mike Ajax	-	1236A	-	-	-	-	WS	-	-	-	107	-	-
1955-A389	2434656-50	1955 Oct 06	Mike Ajax	-	1149A	-	-	-	-	WS	-	-	-	107	-	-
1955-A393	2434663-50	1955 Oct 08	Mike Ajax	-	1276E	Mike 249R	-	-	-	WS	-	-	-	107	-	-
1955-A396	2434663-50	1955 Oct 13	Mike Ajax	-	1194A	-	-	-	-	WS	-	-	-	107	-	-
1955-A397	2434663-50	1955 Oct 13	Mike Ajax	-	1218A	-	-	-	-	WS	-	-	-	107	-	-
1955-A398	2434663-50	1955 Oct 14	Mike Ajax	-	1138E	-	-	-	-	WS	-	-	-	107	-	-
1955-A399	2434664-50	1955 Oct 14	Mike Ajax	-	1154E	-	-	-	-	WS	-	-	-	107	-	-
1955-A405	2434665-50	1955 Oct 15	Mike Ajax	-	1271R	Mike 250R	-	-	-	WS	-	-	-	107	-	-
1955-A403	2434665-50	1955 Oct 15	Mike Ajax	-	1281R	Mike 251R	-	-	-	WS	-	-	-	107	-	-
1955-A404	2434665-50	1955 Oct 15	Mike Ajax	-	1279R	Mike 252R	-	-	-	WS	-	-	-	107	-	-
1955-A402	2434665-50	1955 Oct 15	Mike Ajax	-	1263R	Mike 253R	-	-	-	WS	-	-	-	107	-	-
1955-A407	2434670-50	1955 Oct 20	Mike Ajax	-	1293R	Mike 254R	-	-	-	WS	-	-	-	107	-	-
1955-A408	2434670-50	1955 Oct 20	Mike Ajax	-	1277R	Mike 255R	-	-	-	WS	-	-	-	107	-	-
1955-A413	2434672-50	1955 Oct 22	Mike Ajax	-	1289R	Mike 256R	-	-	-	WS	-	-	-	107	-	-
1955-A414	2434672-50	1955 Oct 22	Mike Ajax	-	1251R	Mike 257R	-	-	-	WS	-	-	-	107	-	-
1955-A417	2434673-50	1955 Oct 23	Mike Ajax	-	-	Navaho Model	-	-	-	WT	-	-	-	17	-	-
1955-A420	2434677-50	1955 Oct 27	Mike Ajax	-	1287E	Mike 258R	-	-	-	WS	-	-	-	107	-	-
1955-A421	2434677-50	1955 Oct 28	Mike Ajax	-	1222A	-	-	-	-	WS	-	-	-	107	-	-
1955-A428	2434684-50	1955 Nov 03	Mike Ajax	-	1241R	Mike 259R	-	-	-	WS	-	-	-	107	-	-
1955-A430	2434684-50	1955 Nov 03	Mike Ajax	-	1273R	Mike 261R	-	-	-	WS	-	-	-	107	-	-
1955-A427	2434684-50	1955 Nov 03	Mike Ajax	-	1259R	Mike 262R	-	-	-	WS	-	-	-	107	-	-
1955-A429	2434684-50	1955 Nov 03	Mike Ajax	-	1293R	Mike 263R	-	-	-	WS	-	-	-	107	-	-

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Launch_Mission	FlightCode	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee km	Range km	Dest
1955-A438	2434693-50	1955 Nov 12	Mike Ajax	-	1136A	-	-	-	-	WS	-	-	-	107	-	-
1955-A440	2434694-50	1955 Nov 13	Mike Ajax	-	1210A	-	-	-	-	WS	-	-	-	107	-	-
1955-A441	2434694-50	1955 Nov 13	Mike Ajax	-	1225A	-	-	-	-	WS	-	-	-	107	-	-
1955-A450	2434700-50	1955 Nov 19	Mike Ajax	-	1282E	-	-	-	-	WS	-	-	-	107	-	-
1955-A451	2434700-50	1955 Nov 19	Mike Ajax	-	1278E	-	-	-	-	WS	-	-	-	107	-	-
1955-A452	2434700-50	1955 Nov 19	Mike Ajax	-	1262E	-	-	-	-	WS	-	-	-	107	-	-
1955-A453	2434700-50	1955 Nov 19	Mike Ajax	-	1276E	-	-	-	-	WS	-	-	-	107	-	-
1955-A454	2434700-50	1955 Nov 19	Mike Deacon	-	-	-	-	-	-	WS	-	-	-	107	-	-
1955-A460	2434706-50	1955 Nov 25	Mike Ajax	-	1212A	-	-	-	-	WS	-	-	-	107	-	-
1955-A461	2434706-50	1955 Nov 25	Mike Ajax	-	? T	-	-	-	-	WS	-	-	-	107	-	-
1955-A462	2434706-50	1955 Nov 25	Mike Ajax	-	1238A	-	-	-	-	WS	-	-	-	107	-	-
1955-A463	2434706-50	1955 Nov 25	Mike Ajax	-	1286A	-	-	-	-	WS	-	-	-	107	-	-
1955-A464	2434706-50	1955 Nov 25	Mike Ajax	-	? T	-	-	-	-	WS	-	-	-	107	-	-
1955-A465	2434706-50	1955 Nov 25	Mike Ajax	-	1266E	-	-	-	-	WS	-	-	-	107	-	-
1955-A470	2434719-50	1955 Dec 08	Mike Ajax	-	1266E	-	-	-	-	WS	-	-	-	107	-	-
1955-A471	2434719-50	1955 Dec 08	Mike Ajax	-	? T	-	-	-	-	WS	-	-	-	107	-	-
1955-A472	2434720-50	1955 Dec 09	Mike Ajax	-	1196A	-	-	-	-	WS	-	-	-	107	-	-
1955-A482	2434726-50	1955 Dec 15	Mike Ajax	-	1216A	-	-	-	-	WS	-	-	-	107	-	-
1955-A486	2434727-50	1955 Dec 17	Mike Ajax	-	1230A	-	-	-	-	WS	-	-	-	107	-	-
1955-A490	2434728-50	1955 Dec 17	Mike Ajax	-	1285I	-	-	-	-	WS	-	-	-	107	-	-
1954-A104	2434748-50	1964 Jan 06	Mike Ajax	-	1197A	-	-	-	-	WS	-	-	-	107	-	-
1954-A107	2434749-50	1964 Jan 07	Mike Ajax	-	1298I	-	-	-	-	WS	-	-	-	107	-	-
1954-A111	2434753-50	1964 Jan 11	Mike Ajax	-	1200A	-	-	-	-	WS	-	-	-	107	-	-
1954-A112	2434753-50	1964 Jan 11	Mike Ajax	-	1202E	-	-	-	-	WS	-	-	-	107	-	-
1954-A115	2434754-50	1964 Jan 12	Mike Ajax	-	1166A	-	-	-	-	WS	-	-	-	107	-	-
1954-A116	2434755-50	1964 Jan 13	Mike Ajax	-	1696E	-	-	-	-	WS	-	-	-	107	-	-
1954-A121	2434757-50	1964 Jan 15	Mike Ajax	-	1435E	-	-	-	-	WS	-	-	-	107	-	-
1954-A122	2434757-50	1964 Jan 15	Mike Ajax	-	1697E	-	-	-	-	WS	-	-	-	107	-	-
1954-A123	2434757-50	1964 Jan 15	Mike Ajax	-	1723E	-	-	-	-	WS	-	-	-	107	-	-
1954-A124	2434760-50	1964 Jan 16	Mike Ajax	-	1617E	-	-	-	-	WS	-	-	-	107	-	-
1954-A125	2434760-50	1964 Jan 16	Mike Ajax	-	1280I	-	-	-	-	WS	-	-	-	107	-	-
1954-A132	2434767-50	1964 Jan 25	Mike Ajax	-	1653A	-	-	-	-	WS	-	-	-	107	-	-
1954-A137	2434771-50	1964 Jan 29	Mike Ajax	-	-	-	-	-	-	WS	-	-	-	107	-	-
1954-A142	2434776-50	1964 Feb 3	Mike Ajax	-	1264I	-	-	-	-	WS	-	-	-	107	-	-
1954-A144	2434779-50	1964 Feb 06	Mike Ajax	-	1307R	-	-	-	-	WS	-	-	-	107	-	-
1954-A145	2434781-50	1964 Feb 06	Mike Ajax	-	1509R	-	-	-	-	WS	-	-	-	107	-	-
1954-A146	2434783-50	1964 Feb 10	Mike Ajax	-	1585A	-	-	-	-	WS	-	-	-	107	-	-
1954-A151	2434790-50	1964 Feb 17	Mike Ajax	-	1232A	-	-	-	-	WS	-	-	-	107	-	-
1954-A152	2434790-50	1964 Feb 17	Mike Ajax	-	1316A	-	-	-	-	WS	-	-	-	107	-	-
1954-A161	2434799-50	1964 Feb 25	Mike Ajax	-	1260I	-	-	-	-	WS	-	-	-	107	-	-
1954-A164	2434799-50	1964 Feb 26	Mike Ajax	-	-	-	-	-	-	WS	-	-	-	107	-	-
1954-A166	2434801-50	1964 Mar	Mike Ajax	-	1311R	-	-	-	-	WS	-	-	-	107	-	-
1954-A168	2434804-50	1964 Mar 03	Mike Ajax	-	1315R	-	-	-	-	WS	-	-	-	107	-	-
1954-A172	2434806-50	1964 Mar 06	Mike Ajax	-	1274A	-	-	-	-	WS	-	-	-	107	-	-
1954-A101	2434806-50	1964 Mar 06	Mike Ajax	-	1582E	-	-	-	-	WS	-	-	-	107	-	-
1954-A102	2434806-50	1964 Mar 06	Mike Ajax	-	1583E	-	-	-	-	WS	-	-	-	107	-	-
1954-A103	2434806-50	1964 Mar 06	Mike Ajax	-	1584E	-	-	-	-	WS	-	-	-	107	-	-
1954-A104	2434806-50	1964 Mar 06	Mike Ajax	-	1585E	-	-	-	-	WS	-	-	-	107	-	-
1954-A105	2434806-50	1964 Mar 06	Mike Ajax	-	1586E	-	-	-	-	WS	-	-	-	107	-	-
1954-A106	2434806-50	1964 Mar 06	Mike Ajax	-	1587E	-	-	-	-	WS	-	-	-	107	-	-
1954-A109	2434815-50	1964 Mar 14	Mike Ajax	-	1131I	-	-	-	-	WS	-	-	-	107	-	-
1954-A110	2434818-50	1964 Mar 17	Mike Ajax	-	1295E	-	-	-	-	WS	-	-	-	107	-	-
1954-A111	2434819-50	1964 Mar 17	Mike Ajax	-	1610E	-	-	-	-	WS	-	-	-	107	-	-
1954-A114	2434819-50	1964 Mar 19	Mike Ajax	-	1374I	-	-	-	-	WS	-	-	-	107	-	-
1954-A115	2434820-50	1964 Mar 19	Mike Ajax	-	1300I	-	-	-	-	WS	-	-	-	107	-	-
1954-A116	2434820-50	1964 Mar 20	Mike Ajax	-	2245A	-	-	-	-	WS	-	-	-	107	-	-
1954-A118	2434821-50	1964 Mar 20	Mike Ajax	-	2859E	-	-	-	-	WS	-	-	-	107	-	-
1954-A120	2434823-50	1964 Mar 22	Mike Ajax	-	1372I	-	-	-	-	WS	-	-	-	107	-	-
1954-A130	2434827-50	1964 Mar 26	Mike Ajax	-	1346E	-	-	-	-	WS	-	-	-	107	-	-
1954-A131	2434827-50	1964 Mar 26	Mike Ajax	-	1346E	-	-	-	-	WS	-	-	-	107	-	-
1954-A132	2434827-50	1964 Mar 26	Mike Ajax	-	1346E	-	-	-	-	WS	-	-	-	107	-	-
1954-A133	2434827-50	1964 Mar 26	Mike Ajax	-	1346E	-	-	-	-	WS	-	-	-	107	-	-
1954-A136	2434831-50	1964 Mar 30	Mike Ajax	-	1295E	-	-	-	-	WS	-	-	-	107	-	-
1954-A137	2434832-50	1964 Mar 31	Mike Ajax	-	1623E	-	-	-	-	WS	-	-	-	107	-	-
1954-A138	2434832-50	1964 Mar 31	Mike Ajax	-	1703E	-	-	-	-	WS	-	-	-	107	-	-
1954-A141	2434834-50	1964 Apr 02	Mike Ajax	-	1139I	-	-	-	-	WS	-	-	-	107	-	-
1954-A142	2434834-50	1964 Apr 02	Mike Ajax	-	1489E	-	-	-	-	WS	-	-	-	107	-	-
1954-A143	2434834-50	1964 Apr 02	Mike Ajax	-	1734E	-	-	-	-	WS	-	-	-	107	-	-
1954-A146	2434838-50	1964 Apr 06	Mike Ajax	-	1316A	-	-	-	-	WS	-	-	-	107	-	-
1954-A147	2434839-50	1964 Apr 07	Mike Ajax	-	1559E	-	-	-	-	WS	-	-	-	107	-	-
1954-A148	2434839-50	1964 Apr 07	Mike Ajax	-	1477E	-	-	-	-	WS	-	-	-	107	-	-
1954-A149	2434839-50	1964 Apr 07	Mike Ajax	-	1319R	-	-	-	-	WS	-	-	-	107	-	-
1954-A150	2434839-50	1964 Apr 07	Mike Ajax	-	1430E	-	-	-	-	WS	-	-	-	107	-	-
1954-A153	2434840-50	1964 Apr 08	Mike Ajax	-	1369I	-	-	-	-	WS	-	-	-	107	-	-
1954-A161	2434842-50	1964 Apr 10	Mike Ajax	-	1270I	-	-	-	-	WS	-	-	-	107	-	-
1954-A162	2434842-50	1964 Apr 10	Mike Ajax	-	1379I	-	-	-	-	WS	-	-	-	107	-	-
1954-A164	2434843-50	1964 Apr 11	Mike Ajax	-	1380I	-	-	-	-	WS	-	-	-	107	-	-
1954-A165	2434844-50	1964 Apr 12	Mike Ajax	-	2294A	-	-	-	-	WS	-	-	-	107	-	-
1954-A168	2434845-50	1964 Apr 13	Mike Ajax	-	1299R	-	-	-	-	WS	-	-	-	107	-	-
1954-A170	2434846-50	1964 Apr 14	Mike Ajax	-	1315R	-	-	-	-	WS	-	-	-	107	-	-
1954-A171	2434846-50	1964 Apr 14	Mike Ajax	-	1317R	-	-	-	-	WS	-	-	-	107	-	-
1954-A172	2434846-50	1964 Apr 14	Mike Ajax	-	1629E	-	-	-	-	WS	-	-	-	107	-	-
1954-A175	2434847-50	1964 Apr 15	Mike Ajax	-	1663E	-	-	-	-	WS	-	-	-	107	-	-
1954-A176	2434847-50	1964 Apr 15	Mike Ajax	-	1398E	-	-	-	-	WS	-	-	-	107	-	-
1954-A177	2434847-50	1964 Apr 15	Mike Ajax	-	1383I	-	-	-	-	WS	-	-	-	107	-	-
1954-A178	2434847-50	1964 Apr 15	Mike Ajax	-	1367I	-	-	-	-	WS	-	-	-	107	-	-
1954-A179	2434848-50	1964 Apr 16	Mike Ajax	-	1319R	-	-	-	-	WS	-	-	-	107	-	-
1954-A180	2434848-50	1964 Apr 17	Mike Ajax	-	2265A	-	-	-	-	WS	-	-	-	107	-	-
1954-A181	2434852-50	1964 Apr 20	Mike Ajax	-	1375I	-	-	-	-	WS	-	-	-	107	-	-
1954-A182	2434852-50	1964 Apr 20	Mike Ajax	-	1375I	-	-	-	-	WS	-	-	-	107	-	-

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Launch_Mission	FlightCode	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee_km	Range_km	Dest
1954-A187	2434854-50	1954 Apr 22	Mike Ajax	-	1955T	-	-	-	-	WS	-	-	-	107	-	-
1954-A188	2434854-50	1954 Apr 22	Mike Ajax	-	1698E	-	-	-	-	WS	-	-	-	107	-	-
1954-A189	2434855-50	1954 Apr 23	Mike Ajax	-	1401T	-	-	-	-	WS	-	-	-	107	-	-
1954-A194	2434856-50	1954 Apr 24	Mike Ajax	-	1384T	-	-	-	-	WS	-	-	-	107	-	-
1954-A195	2434856-50	1954 Apr 26	Mike Ajax	-	2220A	-	-	-	-	WS	-	-	-	107	-	-
1954-A201	2434859-50	1954 Apr 27	Mike Ajax	-	2256T	-	-	-	-	WS	-	-	-	107	-	-
1954-A202	2434859-50	1954 Apr 27	Mike Ajax	-	2320A	-	-	-	-	WS	-	-	-	107	-	-
1954-A203	2434859-50	1954 Apr 27	Mike Ajax	-	1404E	-	-	-	-	WS	-	-	-	107	-	-
1954-A204	2434859-50	1954 Apr 27	Mike Ajax	-	1452E	-	-	-	-	WS	-	-	-	107	-	-
1954-A205	2434859-50	1954 Apr 27	Mike Ajax	-	1552E	-	-	-	-	WS	-	-	-	107	-	-
1954-A206	2434859-50	1954 Apr 27	Mike Ajax	-	1724E	-	-	-	-	WS	-	-	-	107	-	-
1954-A207	2434860-50	1954 Apr 28	Mike Ajax	-	1358A	-	-	-	-	WS	-	-	-	107	-	-
1954-A209	2434860-50	1954 Apr 28	Mike Ajax	-	1321R	-	-	-	-	WS	-	-	-	107	-	-
1954-A210	2434860-50	1954 Apr 28	Mike Ajax	-	1605E	-	-	-	-	WS	-	-	-	107	-	-
1954-A211	2434860-50	1954 Apr 28	Mike Ajax	-	1323K Bell motor	-	-	-	-	WS	-	-	-	107	-	-
1954-A208	2434860-50	1954 Apr 28	Mike Ajax	-	2163K	-	-	-	-	WS	-	-	-	107	-	-
1954-A212	2434860-50	1954 Apr 28	Mike Ajax	-	1465T	-	-	-	-	WS	-	-	-	107	-	-
1954-A213	2434860-50	1954 Apr 28	Mike Ajax	-	1676E	-	-	-	-	WS	-	-	-	107	-	-
1954-A217	2434861-50	1954 Apr 29	Mike Mike Deacon	-	2289T	-	-	-	-	WI	-	-	-	13	-	-
1954-A218	2434861-50	1954 Apr 29	Mike Ajax	-	2264T	-	-	-	-	WS	-	-	-	107	-	-
1954-A219	2434861-50	1954 Apr 29	Mike Ajax	-	1397T	-	-	-	-	WS	-	-	-	107	-	-
1954-A220	2434862-50	1954 Apr 30	Mike Ajax	-	1774E	-	-	-	-	WS	-	-	-	107	-	-
1954-A228	2434865-50	1954 May 03	Mike Ajax	-	1683E	-	-	-	-	WS	-	-	-	107	-	-
1954-A229	2434865-50	1954 May 03	Mike Ajax	-	1400T	-	-	-	-	WS	-	-	-	107	-	-
1954-A231	2434865-50	1954 May 04	Mike Ajax	-	1297R	-	-	-	-	WS	-	-	-	107	-	-
1954-A236	2434867-50	1954 May 05	Mike Ajax	-	167A	-	-	-	-	WS	-	-	-	107	-	-
1954-A237	2434867-50	1954 May 05	Mike Ajax	-	1325K Bell motor	-	-	-	-	WS	-	-	-	107	-	-
1954-A235	2434867-50	1954 May 05	Mike Ajax	-	1666E	-	-	-	-	WS	-	-	-	107	-	-
1954-A238	2434867-50	1954 May 05	Mike Ajax	-	1603E	-	-	-	-	WS	-	-	-	107	-	-
1954-A239	2434867-50	1954 May 05	Mike Ajax	-	1359T	-	-	-	-	WS	-	-	-	107	-	-
1954-A240	2434867-50	1954 May 05	Mike Ajax	-	1412T	-	-	-	-	WS	-	-	-	107	-	-
1954-A241	2434867-50	1954 May 05	Mike Ajax	-	2389T	-	-	-	-	WS	-	-	-	107	-	-
1954-A244	2434869-50	1954 May 07	Mike Ajax	-	2101E	-	-	-	-	WS	-	-	-	107	-	-
1954-A245	2434869-50	1954 May 07	Mike Ajax	-	1541E	-	-	-	-	WS	-	-	-	107	-	-
1954-A246	2434869-50	1954 May 07	Mike Ajax	-	1394T	-	-	-	-	WS	-	-	-	107	-	-
1954-A247	2434867-50	1954 May 08	Mike Ajax	-	1437T	-	-	-	-	WS	-	-	-	107	-	-
1954-A248	2434867-50	1954 May 08	Mike Ajax	-	1353T	-	-	-	-	WS	-	-	-	107	-	-
1954-A249	2434867-50	1954 May 09	Mike Ajax	-	1342T	-	-	-	-	WS	-	-	-	107	-	-
1954-A250	2434867-50	1954 May 10	Mike Ajax	-	1389E	-	-	-	-	WS	-	-	-	107	-	-
1954-A257	2434874-50	1954 May 12	Mike Ajax	-	1344E	-	-	-	-	WS	-	-	-	107	-	-
1954-A260	2434874-50	1954 May 12	Mike Ajax	-	1334E	-	-	-	-	WS	-	-	-	107	-	-
1954-A262	2434874-50	1954 May 12	Mike Ajax	-	2207R	-	-	-	-	WS	-	-	-	107	-	-
1954-A263	2434874-50	1954 May 12	Mike Ajax	-	1409E	-	-	-	-	WS	-	-	-	107	-	-
1954-A264	2434874-50	1954 May 12	Mike Ajax	-	1495E	-	-	-	-	WS	-	-	-	107	-	-
1954-A265	2434874-50	1954 May 12	Mike Ajax	-	1307E	-	-	-	-	WS	-	-	-	107	-	-
1954-A266	2434874-50	1954 May 12	Mike Ajax	-	2177E	-	-	-	-	WS	-	-	-	107	-	-
1954-A268	2434874-50	1954 May 12	Mike Ajax	-	2246R	-	-	-	-	WS	-	-	-	107	-	-
1954-A269	2434874-50	1954 May 12	Mike Ajax	-	1346R	-	-	-	-	WS	-	-	-	107	-	-
1954-A291	2434875-50	1954 May 13	Mike Ajax	-	1345T	-	-	-	-	WS	-	-	-	107	-	-
1954-A292	2434875-50	1954 May 13	Mike Ajax	-	1409T	-	-	-	-	WS	-	-	-	107	-	-
1954-A275	2434876-50	1954 May 14	Mike Ajax	-	1699E	-	-	-	-	WS	-	-	-	107	-	-
1954-A277	2434876-50	1954 May 14	Mike Ajax	-	1511E	-	-	-	-	WS	-	-	-	107	-	-
1954-A280	2434876-50	1954 May 14	Mike Ajax	-	1716E	-	-	-	-	WS	-	-	-	107	-	-
1954-A283	2434880-50	1954 May 17	Mike Ajax	-	1459T	-	-	-	-	WS	-	-	-	107	-	-
1954-A286	2434881-50	1954 May 19	Mike Ajax	-	1419R	-	-	-	-	WS	-	-	-	107	-	-
1954-A287	2434881-50	1954 May 19	Mike Ajax	-	1394T	-	-	-	-	WS	-	-	-	107	-	-
1954-A288	2434881-50	1954 May 19	Mike Ajax	-	1377E	-	-	-	-	WS	-	-	-	107	-	-
1954-A290	2434882-50	1954 May 20	Mike Ajax	-	1390T	-	-	-	-	WS	-	-	-	107	-	-
1954-A291	2434882-50	1954 May 20	Mike Ajax	-	141E	-	-	-	-	WS	-	-	-	107	-	-
1954-A295	2434886-50	1954 May 24	Mike Ajax	-	1389T	-	-	-	-	WS	-	-	-	107	-	-
1954-A297	2434887-50	1954 May 26	Mike Ajax	-	1414TT	-	-	-	-	WS	-	-	-	107	-	-
1954-A300	2434888-50	1954 May 26	Mike Ajax	-	1301B Bell motor	-	-	-	-	WS	-	-	-	107	-	-
1954-A302	2434888-50	1954 May 27	Mike Ajax	-	1393T	-	-	-	-	WS	-	-	-	107	-	-
1954-A304	2434890-50	1954 May 28	Mike Ajax	-	1475T	-	-	-	-	WS	-	-	-	107	-	-
1954-A305	2434890-50	1954 May 28	Mike Ajax	-	1335T	-	-	-	-	WS	-	-	-	107	-	-
1954-A306	2434890-50	1954 May 28	Mike Ajax	-	1409T	-	-	-	-	WS	-	-	-	107	-	-
1954-A308	2434895-50	1954 Jun 02	Mike Ajax	-	1348T	-	-	-	-	WS	-	-	-	107	-	-
1954-A311	2434895-50	1954 Jun 02	Mike Ajax	-	1465T	-	-	-	-	WS	-	-	-	107	-	-
1954-A309	2434895-50	1954 Jun 02	Mike Ajax	-	1249B-1423	-	-	-	-	WS	-	-	-	107	-	-
1954-A310	2434895-50	1954 Jun 02	Mike Ajax	-	1249B-1913	-	-	-	-	WS	-	-	-	107	-	-
1954-A322	2434897-50	1954 Jun 04	Mike Ajax	-	1344T	-	-	-	-	WS	-	-	-	107	-	-
1954-A325	2434900-50	1954 Jun 07	Mike Ajax	-	2266A	-	-	-	-	WS	-	-	-	107	-	-
1954-A326	2434900-50	1954 Jun 07	Mike Ajax	-	1356A	-	-	-	-	WS	-	-	-	107	-	-
1954-A328	2434900-50	1954 Jun 07	Mike Ajax	-	2166A	-	-	-	-	WS	-	-	-	107	-	-
1954-A331	2434900-50	1954 Jun 07	Mike Ajax	-	1340A	-	-	-	-	WS	-	-	-	107	-	-
1954-A333	2434902-50	1954 Jun 08	Mike Ajax	-	1332T	-	-	-	-	WS	-	-	-	107	-	-
1954-A334	2434902-50	1954 Jun 08	Mike Ajax	-	1337T	-	-	-	-	WS	-	-	-	107	-	-
1954-A335	2434902-50	1954 Jun 09	Mike Ajax	-	1348E	-	-	-	-	WS	-	-	-	107	-	-
1954-A336	2434902-50	1954 Jun 09	Mike Ajax	-	1249B-2291	-	-	-	-	WS	-	-	-	107	-	-
1954-A337	2434902-50	1954 Jun 09	Mike Ajax	-	1421R	-	-	-	-	WS	-	-	-	107	-	-
1954-A342	2434903-50	1954 Jun 10	Mike Ajax	-	1243R	-	-	-	-	WS	-	-	-	107	-	-
1954-A343	2434904-50	1954 Jun 11	Mike Ajax	-	1434A	-	-	-	-	WS	-	-	-	107	-	-
1954-A344	2434904-50	1954 Jun 11	Mike Ajax	-	1808E	-	-	-	-	WS	-	-	-	107	-	-

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Launch_Mission	FlightCode	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee_Km	Range_Km	Dest
1954-A344	2434904.50	1954 Jun 11	Mike Ajax	-	1519E	-	-	-	WS	-	-	-	107	-	-
1954-A347	2434907.50	1954 Jun 14	Mike Ajax	-	1389T	-	-	-	WS	-	-	-	107	-	-
1954-A348	2434908.50	1954 Jun 15	Mike Ajax	-	1424E	-	-	-	WS	-	-	-	107	-	-
1954-A349	2434909.50	1954 Jun 16	Mike Ajax	-	1420E	-	-	-	WS	-	-	-	107	-	-
1954-A350	2434909.50	1954 Jun 16	Mike Ajax	-	2341R	-	-	-	WS	-	-	-	107	-	-
1954-A352	2434909.50	1954 Jun 16	Mike Ajax	-	1385E	-	-	-	WS	-	-	-	107	-	-
1954-A353	2434909.50	1954 Jun 16	Mike Ajax	-	2363RR	-	-	-	WS	-	-	-	107	-	-
1954-A354	2434909.50	1954 Jun 16	Mike Ajax	-	2311R	-	-	-	WS	-	-	-	107	-	-
1954-A355	2434909.50	1954 Jun 16	Mike Ajax	-	2481T	-	-	-	WS	-	-	-	107	-	-
1954-A356	2434909.50	1954 Jun 16	Mike Ajax	-	1324E	-	-	-	WS	-	-	-	107	-	-
1954-A360	2434910.50	1954 Jun 17	Mike Ajax	-	1347T	-	-	-	WS	-	-	-	107	-	-
1954-A363	2434914.50	1954 Jun 21	Mike Ajax	-	1402T	-	-	-	WS	-	-	-	107	-	-
1954-A365	2434915.50	1954 Jun 22	Mike Ajax	-	2477T	-	-	-	WS	-	-	-	107	-	-
1954-A369	2434916.50	1954 Jun 23	Mike Ajax	-	1436A	-	-	-	WS	-	-	-	107	-	-
1954-A372	2434916.50	1954 Jun 23	Mike Ajax	-	1495E	-	-	-	WS	-	-	-	107	-	-
1954-A370	2434916.50	1954 Jun 23	Mike Ajax	-	2387R	-	-	-	WS	-	-	-	107	-	-
1954-A368	2434916.50	1954 Jun 23	Mike Ajax	-	2299R	-	-	-	WS	-	-	-	107	-	-
1954-A373	2434916.50	1954 Jun 23	Mike Ajax	-	2415R	-	-	-	WS	-	-	-	107	-	-
1954-A375	2434917.50	1954 Jun 24	Mike Ajax	-	1337E	-	-	-	WS	-	-	-	107	-	-
1954-A376	2434918.50	1954 Jun 25	Mike Ajax	-	2379T	-	-	-	WS	-	-	-	107	-	-
1954-A377	2434918.50	1954 Jun 25	Mike Ajax	-	1403T	-	-	-	WS	-	-	-	107	-	-
1954-A378	2434918.50	1954 Jun 25	Mike Ajax	-	1351T	-	-	-	WS	-	-	-	107	-	-
1954-A380	2434921.50	1954 Jun 26	Mike Ajax	-	1391E	-	-	-	WS	-	-	-	107	-	-
1954-A384	2434922.50	1954 Jun 29	Mike Ajax	-	2376A	-	-	-	WS	-	-	-	107	-	-
1954-A385	2434922.50	1954 Jun 29	Mike Ajax	-	1355E	-	-	-	WS	-	-	-	107	-	-
1954-A389	2434923.50	1954 Jun 30	Mike Ajax	-	2475T	-	-	-	WS	-	-	-	107	-	-
1954-A390	2434923.50	1954 Jun 30	Mike Ajax	-	2405R	-	-	-	WS	-	-	-	107	-	-
1954-A392	2434924.50	1954 Jun 30	Mike Ajax	-	2398R	-	-	-	WS	-	-	-	107	-	-
1954-A394	2434925.50	1954 Jul 01	Mike Ajax	-	1599T	-	-	-	WS	-	-	-	107	-	-
1954-A396	2434925.50	1954 Jul 01	Mike Ajax	-	2795T	-	-	-	WS	-	-	-	107	-	-
1954-A397	2434930.50	1954 Jul 07	Mike Ajax	-	2782T	-	-	-	WS	-	-	-	107	-	-
1954-A398	2434930.50	1954 Jul 07	Mike Ajax	-	1549R	-	-	-	WS	-	-	-	107	-	-
1954-A399	2434930.50	1954 Jul 09	Mike Ajax	-	2437R	-	-	-	WS	-	-	-	107	-	-
1954-A400	2434932.50	1954 Jul 09	Mike Ajax	-	2794T	-	-	-	WS	-	-	-	107	-	-
1954-A401	2434932.50	1954 Jul 09	Mike Ajax	-	1795E	-	-	-	WS	-	-	-	107	-	-
1954-A402	2434932.50	1954 Jul 09	Mike Ajax	-	1331E	-	-	-	WS	-	-	-	107	-	-
1954-A403	2434932.50	1954 Jul 09	Mike Ajax	-	1407E	-	-	-	WS	-	-	-	107	-	-
1954-A404	2434932.50	1954 Jul 09	Mike Ajax	-	1589E	-	-	-	WS	-	-	-	107	-	-
1954-A405	2434932.50	1954 Jul 09	Mike Ajax	-	1496E	-	-	-	WS	-	-	-	107	-	-
1954-A406	2434932.50	1954 Jul 09	Mike Ajax	-	1527E	-	-	-	WS	-	-	-	107	-	-
1954-A407	2434932.50	1954 Jul 09	Mike Ajax	-	1740E	-	-	-	WS	-	-	-	107	-	-
1954-A410	2434935.50	1954 Jul 13	Mike Ajax	-	2795T	-	-	-	WS	-	-	-	107	-	-
1954-A411	2434937.50	1954 Jul 14	Mike Ajax	-	2795T	-	-	-	WS	-	-	-	107	-	-
1954-A412	2434937.50	1954 Jul 14	Mike Ajax	-	2753T	-	-	-	WS	-	-	-	107	-	-
1954-A415	2434940.50	1954 Jul 19	Mike Ajax	-	1765E	-	-	-	WS	-	-	-	107	-	-
1954-A423	2434940.50	1954 Jul 20	Mike Ajax	-	1440E	-	-	-	WS	-	-	-	107	-	-
1954-A424	2434943.50	1954 Jul 20	Mike Ajax	-	1408E	-	-	-	WS	-	-	-	107	-	-
1954-A426	2434944.50	1954 Jul 21	Mike Ajax	-	1429E	-	-	-	WS	-	-	-	107	-	-
1954-A431	2434944.50	1954 Jul 21	Mike Ajax	-	2761T	-	-	-	WS	-	-	-	107	-	-
1954-A432	2434945.50	1954 Jul 22	Mike Ajax	-	1426E	-	-	-	WS	-	-	-	107	-	-
1954-A433	2434945.50	1954 Jul 22	Mike Ajax	-	2779T	-	-	-	WS	-	-	-	107	-	-
1954-A436	2434949.50	1954 Jul 26	Mike Ajax	-	1410A	-	-	-	WS	-	-	-	107	-	-
1954-A437	2434949.50	1954 Jul 26	Mike Ajax	-	1952E	-	-	-	WS	-	-	-	107	-	-
1954-A438	2434949.50	1954 Jul 26	Mike Ajax	-	1819E	-	-	-	WS	-	-	-	107	-	-
1954-A439	2434949.50	1954 Jul 26	Mike Ajax	-	1448E	-	-	-	WS	-	-	-	107	-	-
1954-A440	2434949.50	1954 Jul 26	Mike Ajax	-	1411E	-	-	-	WS	-	-	-	107	-	-
1954-A441	2434949.50	1954 Jul 26	Mike Ajax	-	1417E	-	-	-	WS	-	-	-	107	-	-
1954-A445	2434950.50	1954 Jul 27	Mike Ajax	-	1457E	-	-	-	WS	-	-	-	107	-	-
1954-A446	2434950.50	1954 Jul 27	Mike Ajax	-	1450A	-	-	-	WS	-	-	-	107	-	-
1954-A450	2434950.50	1954 Jul 27	Mike Ajax	-	1827E	-	-	-	WS	-	-	-	107	-	-
1954-A451	2434951.50	1954 Jul 28	Mike Ajax	-	1341E	-	-	-	WS	-	-	-	107	-	-
1954-A452	2434951.50	1954 Jul 28	Mike Ajax	-	1447E	-	-	-	WS	-	-	-	107	-	-
1954-A453	2434951.50	1954 Jul 28	Mike Ajax	-	2482A	-	-	-	WS	-	-	-	107	-	-
1954-A454	2434951.50	1954 Jul 28	Mike Ajax	-	1420E	-	-	-	WS	-	-	-	107	-	-
1954-A455	2434951.50	1954 Jul 28	Mike Ajax	-	2770T	-	-	-	WS	-	-	-	107	-	-
1954-A456	2434956.50	1954 Aug 02	Mike Ajax	-	1249B-2439	-	-	-	WS	-	-	-	107	-	-
1954-A458	2434956.50	1954 Aug 02	Mike Ajax	-	1432E	-	-	-	WS	-	-	-	107	-	-
1954-A461	2434958.50	1954 Aug 04	Mike Ajax	-	2667R	-	-	-	WS	-	-	-	107	-	-
1954-A462	2434958.50	1954 Aug 04	Mike Ajax	-	2773T	-	-	-	WS	-	-	-	107	-	-
1954-A463	2434958.50	1954 Aug 04	Mike Ajax	-	2759T	-	-	-	WS	-	-	-	107	-	-
1954-A464	2434958.50	1954 Aug 04	Mike Ajax	-	2445R	-	-	-	WS	-	-	-	107	-	-
1954-A465	2434958.50	1954 Aug 04	Mike Ajax	-	2449R	-	-	-	WS	-	-	-	107	-	-
1954-A466	2434960.50	1954 Aug 06	Mike Ajax	-	2455R	-	-	-	WS	-	-	-	107	-	-
1954-A467	2434960.50	1954 Aug 06	Mike Ajax	-	2822T	-	-	-	WS	-	-	-	107	-	-
1954-A468	2434960.50	1954 Aug 06	Mike Ajax	-	2756T	-	-	-	WS	-	-	-	107	-	-
1954-A470	2434965.50	1954 Aug 11	Mike Ajax	-	2775T	-	-	-	WS	-	-	-	107	-	-
1954-A471	2434965.50	1954 Aug 11	Mike Ajax	-	2540A	-	-	-	WS	-	-	-	107	-	-
1954-A472	2434965.50	1954 Aug 11	Mike Ajax	-	2627R	-	-	-	WS	-	-	-	107	-	-
1954-A473	2434967.50	1954 Aug 13	Mike Ajax	-	2776T	-	-	-	WS	-	-	-	107	-	-
1954-A474	2434967.50	1954 Aug 13	Mike Ajax	-	1156E	-	-	-	WS	-	-	-	107	-	-
1954-A477	2434971.50	1954 Aug 17	Mike Ajax	-	2564T	-	-	-	WS	-	-	-	107	-	-
1954-A479	2434972.50	1954 Aug 18	Mike Ajax	-	2825T	-	-	-	WS	-	-	-	107	-	-



Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Launch_Mission	FlightCode	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee_km	Range_km	Dest
1954-A480	2434972-50	1954 Aug 18	Mike Ajax	-	2469R	Mike 362R	-	-	-	WS	-	-	-	107	-	-
1954-A478	2434972-50	1954 Aug 18	Mike Ajax	-	2447R	Mike 363R	-	-	-	WS	-	-	-	107	-	-
1954-A482	2434977-50	1954 Aug 23	Mike Ajax	-	2827I	-	-	-	-	WS	-	-	-	107	-	-
1954-A483	2434978-50	1954 Aug 24	Mike Ajax	-	2789I	-	-	-	-	WS	-	-	-	107	-	-
1954-A485	2434979-50	1954 Aug 25	Mike Ajax	-	2510E	-	-	-	-	WS	-	-	-	107	-	-
1954-A486	2434979-50	1954 Aug 25	Mike Ajax	-	2759I	-	-	-	-	WS	-	-	-	107	-	-
1954-A487	2434979-50	1954 Aug 25	Mike Ajax	-	2350E	-	-	-	-	WS	-	-	-	107	-	-
1954-A488	2434979-50	1954 Aug 25	Mike Ajax	-	2805I	-	-	-	-	WS	-	-	-	107	-	-
1954-A489	2434980-50	1954 Aug 26	Mike Ajax	-	2833I	-	-	-	-	WS	-	-	-	107	-	-
1954-A493	2434981-50	1954 Aug 27	Mike Ajax	-	2699I	-	-	-	-	WS	-	-	-	107	-	-
1954-A494	2434985-50	1954 Aug 31	Mike Ajax	-	2762I	-	-	-	-	WS	-	-	-	107	-	-
1954-A497	2434986-50	1954 Sep 01	Mike Ajax	-	2726R	-	-	-	-	WS	-	-	-	107	-	-
1954-A500	2434987-50	1954 Sep 02	Mike Ajax	-	2691I	-	-	-	-	WS	-	-	-	107	-	-
1954-A501	2434987-50	1954 Sep 02	Mike Ajax	-	2513R	-	-	-	-	WS	-	-	-	107	-	-
1954-A504	2434993-50	1954 Sep 08	Mike Ajax	-	2695I	-	-	-	-	WS	-	-	-	107	-	-
1954-A505	2434993-50	1954 Sep 08	Mike Ajax	-	2456A	-	-	-	-	WS	-	-	-	107	-	-
1954-A507	2434993-50	1954 Sep 08	Mike Ajax	-	2512A	-	-	-	-	WS	-	-	-	107	-	-
1954-A508	2434993-50	1954 Sep 08	Mike Ajax	-	2625R	-	-	-	-	WS	-	-	-	107	-	-
1954-A503	2434993-50	1954 Sep 08	Mike Ajax	-	2757R	-	-	-	-	WS	-	-	-	107	-	-
1954-A506	2434993-50	1954 Sep 08	Mike Ajax	-	2653R	-	-	-	-	WS	-	-	-	107	-	-
1954-A509	2434993-50	1954 Sep 08	Mike Ajax	-	2617R	-	-	-	-	WS	-	-	-	107	-	-
1954-A513	2434995-50	1954 Sep 10	Mike Ajax	-	2465A	-	-	-	-	WS	-	-	-	107	-	-
1954-A514	2434995-50	1954 Sep 10	Mike Ajax	-	2807I	-	-	-	-	WS	-	-	-	107	-	-
1954-A515	2434995-50	1954 Sep 10	Mike Ajax	-	2695A	-	-	-	-	WS	-	-	-	107	-	-
1954-A516	2434996-50	1954 Sep 13	Mike Ajax	-	2831I	-	-	-	-	WS	-	-	-	107	-	-
1954-A517	2434996-50	1954 Sep 13	Mike Ajax	-	2609I	-	-	-	-	WS	-	-	-	107	-	-
1954-A518	2434996-50	1954 Sep 13	Mike Ajax	-	2662E	-	-	-	-	WS	-	-	-	107	-	-
1954-A519	2434996-50	1954 Sep 13	Mike Ajax	-	2446E	-	-	-	-	WS	-	-	-	107	-	-
1954-A520	2434996-50	1954 Sep 13	Mike Ajax	-	2793I	-	-	-	-	WS	-	-	-	107	-	-
1954-A521	2434999-50	1954 Sep 14	Mike Ajax	-	2603I	-	-	-	-	WS	-	-	-	107	-	-
1954-A523	2435000-50	1954 Sep 15	Mike Ajax	-	2656A	-	-	-	-	WS	-	-	-	107	-	-
1954-A527	2435000-50	1954 Sep 15	Mike Ajax	-	2823I	-	-	-	-	WS	-	-	-	107	-	-
1954-A528	2435000-50	1954 Sep 15	Mike Ajax	-	2495B-2531	Mike 377R	-	-	-	WS	-	-	-	107	-	-
1954-A526	2435005-50	1954 Sep 20	Mike Ajax	-	2802I	-	-	-	-	WS	-	-	-	107	-	-
1954-A534	2435007-50	1954 Sep 22	Mike Ajax	-	2797R	Mike 380R	-	-	-	WS	-	-	-	107	-	-
1954-A535	2435007-50	1954 Sep 22	Mike Ajax	-	2718R	Mike 381R	-	-	-	WS	-	-	-	107	-	-
1954-A541	2435008-50	1954 Sep 23	Mike Ajax	-	2826I	F-101A Model F23 Ramjet	-	-	-	WS	-	-	-	107	-	-
1954-A542	2435008-50	1954 Sep 23	Mike Ajax	-	-	-	-	-	-	WS	-	-	-	107	-	-
1954-A543	2435009-50	1954 Sep 24	Mike Ajax	-	3644A	Mike 384R	-	-	-	WS	-	-	-	107	-	-
1954-A544	2435012-50	1954 Sep 27	Mike Ajax	-	2787R	-	-	-	-	WS	-	-	-	107	-	-
1954-A554	2435014-50	1954 Sep 29	Mike Ajax	-	1589I	-	-	-	-	WS	-	-	-	107	-	-
1954-A555	2435014-50	1954 Sep 29	Mike Ajax	-	3365I	-	-	-	-	WS	-	-	-	107	-	-
1954-A556	2435016-50	1954 Oct 01	Mike Ajax	-	3305I	-	-	-	-	WS	-	-	-	107	-	-
1954-A566	2435019-50	1954 Oct 04	Mike Ajax	-	2780I	-	-	-	-	WS	-	-	-	107	-	-
1954-A561	2435022-50	1954 Oct 07	Mike Ajax	-	3317I	-	-	-	-	WS	-	-	-	107	-	-
1954-A563	2435023-50	1954 Oct 08	Mike Ajax	-	3304I	-	-	-	-	WS	-	-	-	107	-	-
1954-A565	2435023-50	1954 Oct 08	Mike Ajax	-	3304I	-	-	-	-	WS	-	-	-	107	-	-
1954-A571	2435028-50	1954 Oct 13	Mike Ajax	-	3101R	Mike 385R	-	-	-	WS	-	-	-	107	-	-
1954-A572	2435028-50	1954 Oct 13	Mike Ajax	-	2785R	Mike 386R	-	-	-	WS	-	-	-	107	-	-
1954-A577	2435030-35	1954 Oct 14	Mike Ajax	-	2834I	-	-	-	-	WS	-	-	-	107	-	-
1954-A578	2435030-35	1954 Oct 14	Mike Ajax	-	-	Stability Test Hypersonic Test F40 Heat Transfer	-	-	-	WS	-	-	-	107	-	-
1954-A579	2435030-42	1954 Oct 14	Mike T40 T55	-	-	-	-	-	-	WS	-	-	-	607	-	-
1954-A575	2435039-50	1954 Oct 14	Mike Ajax	-	2798I	-	-	-	-	WS	-	-	-	107	-	-
1954-A576	2435039-50	1954 Oct 14	Mike Ajax	-	3292I	-	-	-	-	WS	-	-	-	107	-	-
1954-A577	2435039-50	1954 Oct 14	Mike Ajax	-	3296I	-	-	-	-	WS	-	-	-	107	-	-
1954-A585	2435035-50	1954 Oct 19	Mike Ajax	-	2987R	-	-	-	-	WS	-	-	-	107	-	-
1954-A586	2435035-50	1954 Oct 20	Mike Ajax	-	3337I	Mike 387R	-	-	-	WS	-	-	-	107	-	-
1954-A587	2435035-50	1954 Oct 20	Mike Ajax	-	2443R	-	-	-	-	WS	-	-	-	107	-	-
1954-A592	2435040-50	1954 Oct 25	Mike Ajax	-	3292I	Mike 388R	-	-	-	WS	-	-	-	107	-	-
1954-A595	2435042-50	1954 Oct 27	Mike Ajax	-	2657R	Mike 389R	-	-	-	WS	-	-	-	107	-	-
1954-A596	2435042-50	1954 Oct 27	Mike Ajax	-	2798R	Mike 390R	-	-	-	WS	-	-	-	107	-	-
1954-A594	2435043-50	1954 Oct 27	Mike Ajax	-	2906R	Mike 391R	-	-	-	WS	-	-	-	107	-	-
1954-A599	2435047-50	1954 Nov 01	Mike Ajax	-	2821I	-	-	-	-	WS	-	-	-	107	-	-
1954-A601	2435049-50	1954 Nov 01	Mike Ajax	-	3316I	-	-	-	-	WS	-	-	-	107	-	-
1954-A605	2435050-50	1954 Nov 03	Mike Ajax	-	2785R	Mike 392R	-	-	-	WS	-	-	-	107	-	-
1954-A609	2435050-50	1954 Nov 04	Mike Ajax	-	2835I	-	-	-	-	WS	-	-	-	107	-	-
1954-A611	2435051-50	1954 Nov 04	Mike Ajax	-	3255I	-	-	-	-	WS	-	-	-	107	-	-
1954-A612	2435051-50	1954 Nov 05	Mike Ajax	-	2603A	-	-	-	-	WS	-	-	-	107	-	-
1954-A613	2435054-50	1954 Nov 08	Mike Ajax	-	2766A	-	-	-	-	WS	-	-	-	107	-	-
1954-A614	2435054-50	1954 Nov 08	Mike Ajax	-	2786E	-	-	-	-	WS	-	-	-	107	-	-
1954-A615	2435054-50	1954 Nov 08	Mike Ajax	-	2813A	-	-	-	-	WS	-	-	-	107	-	-
1954-A618	2435055-50	1954 Nov 09	Mike Ajax	-	1470E	-	-	-	-	WS	-	-	-	107	-	-
1954-A620	2435055-50	1954 Nov 09	Mike Ajax	-	1670E	-	-	-	-	WS	-	-	-	107	-	-
1954-A622	2435055-50	1954 Nov 09	Mike Ajax	-	3331I	-	-	-	-	WS	-	-	-	107	-	-
1954-A624	2435056-50	1954 Nov 10	Mike Ajax	-	2817R	Mike 393R	-	-	-	WS	-	-	-	107	-	-
1954-A625	2435056-50	1954 Nov 10	Mike Ajax	-	2801I	-	-	-	-	WS	-	-	-	107	-	-
1954-A627	2435056-50	1954 Nov 10	Mike Ajax	-	2750A	-	-	-	-	WS	-	-	-	107	-	-
1954-A628	2435056-50	1954 Nov 10	Mike Ajax	-	2811R	Mike 394R	-	-	-	WS	-	-	-	107	-	-
1954-A629	2435056-50	1954 Nov 10	Mike Ajax	-	2969R	Mike 395R	-	-	-	WS	-	-	-	107	-	-
1954-A623	2435057-50	1954 Nov 11	Mike Ajax	-	2535R	Mike 396R	-	-	-	WS	-	-	-	107	-	-
1954-A629	2435058-50	1954 Nov 12	Mike Ajax	-	3320I	-	-	-	-	WS	-	-	-	107	-	-
1954-A634	2435062-50	1954 Nov 16	Mike Ajax	-	2786A	-	-	-	-	WS	-	-	-	107	-	-

Launch Mission

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Launch_Mission	FlightCode	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee_km	Range_km	Dest
1954-A638	2435063-50	1954 Nov 17	Mike Ajax	-	3492T	-	-	-	-	WS	-	-	-	107	-	-
1954-A639	2435063-50	1954 Nov 17	Mike Ajax	-	1327R	Mike 397R	-	-	-	WS	-	-	-	107	-	-
1954-A640	2435063-50	1954 Nov 17	Mike Ajax	-	2996R	Mike 398R	-	-	-	WS	-	-	-	107	-	-
1954-A637	2435063-50	1954 Nov 17	Mike Ajax	-	3001R	Mike 399R	-	-	-	WS	-	-	-	107	-	-
1954-A636	2435063-50	1954 Nov 17	Mike Ajax	-	2939R	Mike 400R	-	-	-	WS	-	-	-	107	-	-
1954-A645	2435065-50	1954 Nov 19	Mike Ajax	-	3249T	-	-	-	-	WS	-	-	-	107	-	-
1954-A646	2435065-50	1954 Nov 19	Mike Ajax	-	3329T	-	-	-	-	WS	-	-	-	107	-	-
1954-A647	2435065-50	1954 Nov 19	Mike Ajax	-	3310T	-	-	-	-	WS	-	-	-	107	-	-
1954-A648	2435065-50	1954 Nov 19	Mike Ajax	-	2800E	-	-	-	-	WS	-	-	-	107	-	-
1954-A651	2435069-50	1954 Nov 22	Mike Ajax	-	3270T	-	-	-	-	WS	-	-	-	107	-	-
1954-A655	2435069-50	1954 Nov 23	Mike Ajax	-	2816E	-	-	-	-	WS	-	-	-	107	-	-
1954-A656	2435069-50	1954 Nov 23	Mike Ajax	-	1242E	-	-	-	-	WS	-	-	-	107	-	-
1954-A661	2435070-50	1954 Nov 24	Mike Ajax	-	3019R	Mike 401R	-	-	-	WS	-	-	-	107	-	-
1954-A662	2435070-50	1954 Nov 24	Mike Ajax	-	2998R	Mike 402R	-	-	-	WS	-	-	-	107	-	-
1954-A659	2435070-50	1954 Nov 24	Mike Ajax	-	2819R	Mike 403R	-	-	-	WS	-	-	-	107	-	-
1954-A660	2435070-50	1954 Nov 24	Mike Ajax	-	3075R	Mike 404R	-	-	-	WS	-	-	-	107	-	-
1954-A666	2435077-50	1954 Dec 01	Mike Ajax	-	3089R	Mike 405R	-	-	-	WS	-	-	-	107	-	-
1954-A668	2435077-50	1954 Dec 01	Mike Ajax	-	3109R	Mike 406R	-	-	-	WS	-	-	-	107	-	-
1954-A667	2435077-50	1954 Dec 01	Mike Ajax	-	2525R	Mike 407R	-	-	-	WS	-	-	-	107	-	-
1954-A669	2435077-50	1954 Dec 01	Mike Ajax	-	2799A	Mike 408R	-	-	-	WS	-	-	-	107	-	-
1954-A670	2435078-50	1954 Dec 02	Mike Ajax	-	2779A	-	-	-	-	WS	-	-	-	107	-	-
1954-A671	2435078-50	1954 Dec 02	Mike Ajax	-	3321T	-	-	-	-	WS	-	-	-	107	-	-
1954-A672	2435079-50	1954 Dec 03	Mike Ajax	-	3314T	-	-	-	-	WS	-	-	-	107	-	-
1954-A675	2435082-50	1954 Dec 06	Mike Ajax	-	2574E	-	-	-	-	WS	-	-	-	107	-	-
1954-A676	2435082-50	1954 Dec 06	Mike Ajax	-	1240E	-	-	-	-	WS	-	-	-	107	-	-
1954-A677	2435082-50	1954 Dec 06	Mike Ajax	-	2820A	-	-	-	-	WS	-	-	-	107	-	-
1954-A678	2435082-50	1954 Dec 06	Mike Ajax	-	3519T	-	-	-	-	WS	-	-	-	107	-	-
1954-A679	2435083-50	1954 Dec 07	Mike Ajax	-	3317T	-	-	-	-	WS	-	-	-	107	-	-
1954-A681	2435084-50	1954 Dec 08	Mike Ajax	-	3315T	Mike 409R	-	-	-	WS	-	-	-	107	-	-
1954-A682	2435084-50	1954 Dec 08	Mike Ajax	-	2999R	Mike 410R	-	-	-	WS	-	-	-	107	-	-
1954-A683	2435084-50	1954 Dec 08	Mike Ajax	-	2772T	-	-	-	-	WS	-	-	-	107	-	-
1954-A684	2435085-50	1954 Dec 09	Mike Ajax	-	3535T	-	-	-	-	WS	-	-	-	107	-	-
1954-A685	2435086-50	1954 Dec 10	Mike Ajax	-	5824T	-	-	-	-	WS	-	-	-	107	-	-
1954-A686	2435086-50	1954 Dec 10	Mike Ajax	-	2810E	-	-	-	-	WS	-	-	-	107	-	-
1954-A687	2435086-50	1954 Dec 10	Mike Ajax	-	2818E	-	-	-	-	WS	-	-	-	107	-	-
1954-A688	2435087-50	1954 Dec 10	Mike Ajax	-	1499T	-	-	-	-	WS	-	-	-	107	-	-
1954-A690	2435088-50	1954 Dec 11	Mike Ajax	-	1509T	-	-	-	-	WS	-	-	-	107	-	-
1954-A691	2435088-50	1954 Dec 12	Mike Ajax	-	3272T	-	-	-	-	WS	-	-	-	107	-	-
1954-A692	2435088-50	1954 Dec 12	Mike Ajax	-	1515T	-	-	-	-	WS	-	-	-	107	-	-
1954-A696	2435089-50	1954 Dec 13	Mike Ajax	-	1517T	-	-	-	-	WS	-	-	-	107	-	-
1954-A697	2435089-50	1954 Dec 13	Mike Ajax	-	1514T	-	-	-	-	WS	-	-	-	107	-	-
1954-A700	2435090-50	1954 Dec 14	Mike Ajax	-	1516T	-	-	-	-	WS	-	-	-	107	-	-
1954-A701	2435090-50	1954 Dec 14	Mike Ajax	-	1515T	1959-3897	-	-	-	WS	-	-	-	107	-	-
1954-A703	2435091-50	1954 Dec 15	Mike Ajax	-	3030R	Mike 411R	-	-	-	WS	-	-	-	107	-	-
1954-A704	2435091-50	1954 Dec 15	Mike Ajax	-	2792R	Mike 412R	-	-	-	WS	-	-	-	107	-	-
1954-A705	2435091-50	1954 Dec 15	Mike Ajax	-	2804E	-	-	-	-	WS	-	-	-	107	-	-
1954-A706	2435091-50	1954 Dec 15	Mike Ajax	-	2804E	-	-	-	-	WS	-	-	-	107	-	-
1954-A708	2435092-50	1954 Dec 15	Mike Deacon	1	2814A	-	-	-	-	WT	-	-	-	107	-	-
1955-A03	2435112-50	1955 Jan 05	Mike Ajax	-	2814A	-	-	-	-	WT	-	-	-	107	-	-
1955-A04	2435112-50	1955 Jan 5	Mike Ajax	-	3090R	F23 Ramjet	-	-	-	WT	-	-	-	107	-	-
1955-A05	2435113-50	1955 Jan 06	Mike Ajax	-	3091R	Mike 413R	-	-	-	WS	-	-	-	107	-	-
1955-A06	2435113-50	1955 Jan 06	Mike Ajax	-	2606A	-	-	-	-	WS	-	-	-	107	-	-
1955-A07	2435113-50	1955 Jan 06	Mike Ajax	-	2796A	-	-	-	-	WS	-	-	-	107	-	-
1955-A08	2435113-50	1955 Jan 06	Mike Ajax	-	3089R	-	-	-	-	WS	-	-	-	107	-	-
1955-A10	2435113-50	1955 Jan 06	Mike Ajax	-	3090R	Mike 414R	-	-	-	WS	-	-	-	107	-	-
1955-A09	2435113-50	1955 Jan 06	Mike Ajax	-	3090R	Mike 415R	-	-	-	WT	-	-	-	107	-	-
1955-A11	2435119-50	1955 Jan 12	Mike Ajax	-	-	Wing drag model	-	-	-	-	-	-	-	107	-	-
1955-A12	2435120-50	1955 Jan 12	Mike Ajax	-	2771T	-	-	-	-	WS	-	-	-	107	-	-
1955-A13	2435120-50	1955 Jan 12	Mike Ajax	-	3077T	-	-	-	-	WS	-	-	-	107	-	-
1955-A14	2435124-50	1955 Jan 17	Mike Ajax	-	3096R	Mike 416R	-	-	-	WS	-	-	-	107	-	-
1955-A19	2435125-50	1955 Jan 18	Mike Ajax	-	3103R	Mike 417R	-	-	-	WS	-	-	-	107	-	-
1955-A25	2435125-50	1955 Jan 18	Mike Ajax	-	3046R	Mike 418R	-	-	-	WS	-	-	-	107	-	-
1955-A26	2435125-50	1955 Jan 18	Mike Ajax	-	3105R	-	-	-	-	WS	-	-	-	107	-	-
1955-A27	2435125-50	1955 Jan 18	Mike Ajax	-	1526T	-	-	-	-	WS	-	-	-	107	-	-
1955-A31	2435126-50	1955 Jan 19	Mike Ajax	-	1673E	-	-	-	-	WS	-	-	-	107	-	-
1955-A32	2435126-50	1955 Jan 19	Mike Ajax	-	1650E	-	-	-	-	WS	-	-	-	107	-	-
1955-A33	2435126-50	1955 Jan 19	Mike Ajax	-	1518T	-	-	-	-	WS	-	-	-	107	-	-
1955-A34	2435127-50	1955 Jan 20	Mike Ajax	-	1488T	-	-	-	-	WS	-	-	-	107	-	-
1955-A39	2435128-50	1955 Jan 21	Mike Ajax	-	1252E	-	-	-	-	WS	-	-	-	107	-	-
1955-A40	2435128-50	1955 Jan 21	Mike Ajax	-	2828E	-	-	-	-	WS	-	-	-	107	-	-
1955-A41	2435128-50	1955 Jan 21	Mike Ajax	-	1530T	-	-	-	-	WS	-	-	-	107	-	-
1955-A42	2435132-50	1955 Jan 24	Mike Ajax	-	3957T	-	-	-	-	WS	-	-	-	107	-	-
1955-A44	2435132-50	1955 Jan 24	Mike Ajax	-	2892E	-	-	-	-	WS	-	-	-	107	-	-
1955-A48	2435132-50	1955 Jan 25	Mike Ajax	-	2892E	-	-	-	-	WS	-	-	-	107	-	-
1955-A49	2435133-50	1955 Jan 26	Mike Ajax	-	T 1532	-	-	-	-	WS	-	-	-	107	-	-
1955-A53	2435134-50	1955 Jan 27	Mike Ajax	-	1416A	-	-	-	-	WS	-	-	-	107	-	-
1955-A54	2435134-50	1955 Jan 27	Mike Ajax	-	1947T	-	-	-	-	WS	-	-	-	107	-	-
1955-A56	2435135-50	1955 Jan 28	Mike Ajax	-	1960T	-	-	-	-	WS	-	-	-	107	-	-
1955-A59	2435135-50	1955 Jan 28	Mike Ajax	-	1481T	-	-	-	-	WS	-	-	-	107	-	-
1955-A60	2435135-50	1955 Jan 28	Mike Ajax	-	2838A	-	-	-	-	WS	-	-	-	107	-	-
1955-A61	2435135-50	1955 Jan 28	Mike Ajax	-	2790A	-	-	-	-	WS	-	-	-	107	-	-
1955-A64	2435139-50	1955 Feb 01	Mike Ajax	-	2812E	-	-	-	-	WS	-	-	-	107	-	-
1955-A65	2435139-50	1955 Feb 01	Mike Ajax	-	2866E	-	-	-	-	WS	-	-	-	107	-	-
1955-A66	2435140-50	1955 Feb 02	Mike Ajax	-	3328T	-	-	-	-	WS	-	-	-	107	-	-
1955-A68	2435141-50	1955 Feb 03	Mike Ajax	-	1483T	-	-	-	-	WS	-	-	-	107	-	-

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Launch_Mission	FlightCode	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee	Range	Dest
1955-A69	2435141.50	1955 Feb 03	Mike Ajax	-	1887T	-	-	-	-	WS	-	-	-	107	-	-
1955-A70	2435142.50	1955 Feb 04	Mike Ajax	-	1849T	-	-	-	-	WS	-	-	-	107	-	-
1955-A71	2435142.50	1955 Feb 04	Mike Ajax	-	1643T	-	-	-	-	WS	-	-	-	107	-	-
1955-A72	2435142.50	1955 Feb 04	Mike Ajax	-	3640T	-	-	-	-	WS	-	-	-	107	-	-
1955-A73	2435142.50	1955 Feb 04	Mike Ajax	-	1822T	-	-	-	-	WS	-	-	-	107	-	-
1955-A74	2435143.50	1955 Feb 05	Mike Ajax	-	1833T	-	-	-	-	WS	-	-	-	107	-	-
1955-A75	2435144.50	1955 Feb 06	Mike Ajax	-	1894T	-	-	-	-	WS	-	-	-	107	-	-
1955-A76	2435144.50	1955 Feb 06	Mike Ajax	-	1506T	-	-	-	-	WS	-	-	-	107	-	-
1955-A77	2435144.50	1955 Feb 06	Mike Ajax	-	1933T	-	-	-	-	WS	-	-	-	107	-	-
1955-A78	2435146.50	1955 Feb 07	Mike Ajax	-	1823T	-	-	-	-	WS	-	-	-	107	-	-
1955-A79	2435146.50	1955 Feb 07	Mike Ajax	-	1577T	-	-	-	-	WS	-	-	-	107	-	-
1955-A83	2435146.50	1955 Feb 08	Mike Ajax	-	1945T	-	-	-	-	WS	-	-	-	107	-	-
1955-A84	2435146.50	1955 Feb 08	Mike Ajax	-	2932E	-	-	-	-	WS	-	-	-	107	-	-
1955-A86	2435147.50	1955 Feb 09	Mike Ajax	-	1953T	-	-	-	-	WS	-	-	-	107	-	-
1955-A88	2435148.38	1955 Feb 9 21:06	Mike Ajax	-	3098T	-	Mike 419R Cold Weather Test	-	-	WS	-	-	-	107	-	-
1955-A89	2435148.50	1955 Feb 9 21:19	Mike Ajax	-	-	-	Cold Weather Test	-	-	FC	-	-	-	107	-	-
1955-A90	2435148.50	1955 Feb 10	Mike Ajax	-	1602T	-	-	-	-	WS	-	-	-	107	-	-
1955-A94	2435149.50	1955 Feb 11	Mike Ajax	-	1942T	-	-	-	-	WS	-	-	-	107	-	-
1955-A95	2435150.50	1955 Feb 12	Mike Ajax	-	1739T	-	-	-	-	WS	-	-	-	107	-	-
1955-A96	2435151.50	1955 Feb 13	Mike Ajax	-	1892T	-	-	-	-	WS	-	-	-	107	-	-
1955-A97	2435151.50	1955 Feb 13	Mike Ajax	-	1618T	-	-	-	-	WS	-	-	-	107	-	-
1955-A98	2435152.50	1955 Feb 14	Mike Ajax	-	1791T	-	-	-	-	WS	-	-	-	107	-	-
1955-A99	2435153.50	1955 Feb 15	Mike Ajax	-	1722T	-	-	-	-	WS	-	-	-	107	-	-
1955-A100	2435153.50	1955 Feb 15	Mike Ajax	-	4249E	-	-	-	-	WS	-	-	-	107	-	-
1955-A103	2435154.50	1955 Feb 16	Mike Ajax	-	2950R	-	Mike 420R	-	-	WS	-	-	-	107	-	-
1955-A106	2435154.50	1955 Feb 16	Mike Ajax	-	3078R	-	Mike 421R	-	-	WS	-	-	-	107	-	-
1955-A102	2435154.50	1955 Feb 16	Mike Ajax	-	4209R	-	Mike 422R	-	-	WS	-	-	-	107	-	-
1955-A105	2435154.50	1955 Feb 16	Mike Ajax	-	4197R	-	Mike 423R	-	-	WS	-	-	-	107	-	-
1955-A104	2435154.50	1955 Feb 16	Mike Ajax	-	3108R	-	Mike 424R	-	-	WS	-	-	-	107	-	-
1955-A107	2435154.50	1955 Feb 16	Mike Ajax	-	1539T	-	-	-	-	WS	-	-	-	107	-	-
1955-A109	2435154.50	1955 Feb 16	Mike Ajax	-	1604T	-	-	-	-	WS	-	-	-	107	-	-
1955-A110	2435154.50	1955 Feb 16	Mike Ajax	-	4231E	-	-	-	-	WS	-	-	-	107	-	-
1955-A112	2435156.50	1955 Feb 18	Mike Ajax	-	1752T	-	-	-	-	WS	-	-	-	107	-	-
1955-A113	2435157.50	1955 Feb 19	Mike Ajax	-	1743T	-	-	-	-	WS	-	-	-	107	-	-
1955-A114	2435158.50	1955 Feb 20	Mike Ajax	-	1823T	-	-	-	-	WS	-	-	-	107	-	-
1955-A116	2435160.50	1955 Feb 22	Mike Ajax	-	1696T	-	-	-	-	WS	-	-	-	107	-	-
1955-A117	2435160.50	1955 Feb 22	Mike Ajax	-	1715T	-	-	-	-	WS	-	-	-	107	-	-
1955-A118	2435160.50	1955 Feb 22	Mike Ajax	-	1737T	-	-	-	-	WS	-	-	-	107	-	-
1955-A119	2435161.50	1955 Feb 23	Mike Ajax	-	1953T	-	-	-	-	WS	-	-	-	107	-	-
1955-A120	2435161.50	1955 Feb 23	Mike Ajax	-	1708E	-	-	-	-	WS	-	-	-	107	-	-
1955-A122	2435161.50	1955 Feb 23	Mike Ajax	-	4198E	-	-	-	-	WS	-	-	-	107	-	-
1955-A125	2435161.50	1955 Feb 23	Mike Ajax	-	1761E	-	-	-	-	WS	-	-	-	107	-	-
1955-A126	2435161.50	1955 Feb 23	Mike Ajax	-	4218R	-	Mike 425R	-	-	WS	-	-	-	107	-	-
1955-A124	2435161.50	1955 Feb 23	Mike Ajax	-	2980R	-	Mike 426R	-	-	WS	-	-	-	107	-	-
1955-A123	2435161.50	1955 Feb 23	Mike Ajax	-	2995R	-	Mike 427R	-	-	WS	-	-	-	107	-	-
1955-A127	2435161.50	1955 Feb 23	Mike Ajax	-	1847R	-	Mike 428R	-	-	WS	-	-	-	107	-	-
1955-A121	2435161.50	1955 Feb 23	Mike Ajax	-	4223E	-	-	-	-	WS	-	-	-	107	-	-
1955-A130	2435163.50	1955 Feb 25	Mike Ajax	-	1810T	-	-	-	-	WS	-	-	-	107	-	-
1955-A135	2435163.50	1955 Feb 25	Mike Ajax	-	1831T	-	-	-	-	WS	-	-	-	107	-	-
1955-A136	2435166.50	1955 Feb 26	Mike Ajax	-	3313T	-	-	-	-	WS	-	-	-	107	-	-
1955-A137	2435167.50	1955 Feb 28	Mike Ajax	-	1693T	-	-	-	-	WS	-	-	-	107	-	-
1955-A138	2435167.50	1955 Mar 01	Mike Ajax	-	1607T	-	-	-	-	WS	-	-	-	107	-	-
1955-A139	2435167.50	1955 Mar 01	Mike Ajax	-	1956T	-	-	-	-	WS	-	-	-	107	-	-
1955-A140	2435167.50	1955 Mar 01	Mike Ajax	-	1844T	-	-	-	-	WS	-	-	-	107	-	-
1955-A144	2435168.50	1955 Mar 02	Mike Ajax	-	1955T	-	-	-	-	WS	-	-	-	107	-	-
1955-A145	2435169.42	1955 Mar 2 22:09	Mike Ajax	-	-	-	Cold Weather Test	-	-	FC	-	-	-	107	-	-
1955-A147	2435169.50	1955 Mar 03	Mike Ajax	-	1751T	-	-	-	-	WS	-	-	-	107	-	-
1955-A148	2435169.50	1955 Mar 03	Mike Ajax	-	1711T	-	-	-	-	WS	-	-	-	107	-	-
1955-A149	2435169.50	1955 Mar 03	Mike Ajax	-	1726T	-	-	-	-	WS	-	-	-	107	-	-
1955-A150	2435169.50	1955 Mar 03	Mike Ajax	-	1613T	-	-	-	-	WS	-	-	-	107	-	-
1955-A151	2435170.50	1955 Mar 04	Mike Ajax	-	2763T	-	-	-	-	WS	-	-	-	107	-	-
1955-A152	2435170.50	1955 Mar 04	Mike Ajax	-	1517T	-	-	-	-	WS	-	-	-	107	-	-
1955-A153	2435170.50	1955 Mar 04	Mike Ajax	-	1904T	-	-	-	-	WS	-	-	-	107	-	-
1955-A154	2435170.50	1955 Mar 04	Mike Ajax	-	3309T	-	-	-	-	WS	-	-	-	107	-	-
1955-A155	2435170.50	1955 Mar 04	Mike Ajax	-	4211E	-	-	-	-	WS	-	-	-	107	-	-
1955-A156	2435170.50	1955 Mar 04	Mike Ajax	-	1644T	-	-	-	-	WS	-	-	-	107	-	-
1955-A157	2435171.50	1955 Mar 05	Mike Ajax	-	1764T	-	-	-	-	WS	-	-	-	107	-	-
1955-A158	2435171.50	1955 Mar 05	Mike Ajax	-	1976T	-	-	-	-	WS	-	-	-	107	-	-
1955-A159	2435174.50	1955 Mar 08	Mike Ajax	-	1899T	-	-	-	-	WS	-	-	-	107	-	-
1955-A160	2435174.50	1955 Mar 08	Mike Ajax	-	1741T	-	Mike 429R	-	-	WS	-	-	-	107	-	-
1955-A163	2435175.50	1955 Mar 09	Mike Ajax	-	3097R	-	-	-	-	WS	-	-	-	107	-	-
1955-A164	2435175.50	1955 Mar 09	Mike Ajax	-	1702T	-	-	-	-	WS	-	-	-	107	-	-
1955-A165	2435175.50	1955 Mar 09	Mike Ajax	-	1866T	-	-	-	-	WS	-	-	-	107	-	-
1955-A166	2435175.50	1955 Mar 09	Mike Ajax	-	3014R	-	-	-	-	WS	-	-	-	107	-	-
1955-A167	2435175.50	1955 Mar 09	Mike Ajax	-	1927T	-	Mike 430R	-	-	WS	-	-	-	107	-	-
1955-A168	2435175.50	1955 Mar 09	Mike Ajax	-	4351E	-	-	-	-	WS	-	-	-	107	-	-
1955-A169	2435176.50	1955 Mar 10	Mike Ajax	-	1975T	-	-	-	-	WS	-	-	-	107	-	-
1955-A170	2435176.50	1955 Mar 10	Mike Ajax	-	1753T	-	-	-	-	WS	-	-	-	107	-	-
1955-A171	2435176.50	1955 Mar 10	Mike Ajax	-	1949T	-	-	-	-	WS	-	-	-	107	-	-
1955-A172	2435176.50	1955 Mar 10	Mike Ajax	-	-	-	F-101A Model	-	-	WT	-	-	-	107	-	-
1955-A173	2435177.32	1955 Mar 10 1942	Mike Ajax	-	-	-	Cold Weather Test	-	-	FC	-	-	-	107	-	-
1955-A174	2435177.41	1955 Mar 10 2146	Mike Ajax	-	-	-	Cold Weather Test	-	-	FC	-	-	-	107	-	-
1955-A175	2435177.50	1955 Mar 11	Mike Ajax	-	4199E	-	-	-	-	WS	-	-	-	107	-	-

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Launch_Mission	FlightCode	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee_km	Range_km	Dest
1955-A178	2435177-50	1955 Mar 11	Mike Ajax	-	3529T	-	-	-	-	WS	-	-	-	107	-	-
1955-A179	2435177-50	1955 Mar 11	Mike Ajax	-	1994T	-	-	-	-	WS	-	-	-	107	-	-
1955-A180	2435177-50	1955 Mar 11	Mike Ajax	-	1787T	-	-	-	-	WS	-	-	-	107	-	-
1955-A181	2435177-50	1955 Mar 11	Mike Ajax	-	1766T	-	-	-	-	WS	-	-	-	107	-	-
1955-A184	2435180-50	1955 Mar 14	Mike Ajax	-	1962T	-	-	-	-	WS	-	-	-	107	-	-
1955-A186	2435181-50	1955 Mar 15	Mike Ajax	-	1851T	-	-	-	-	WS	-	-	-	107	-	-
1955-A188	2435182-50	1955 Mar 16	Mike Ajax	-	1248E	-	-	-	-	WS	-	-	-	107	-	-
1955-A189	2435182-50	1955 Mar 16	Mike Ajax	-	1945T	-	-	-	-	WS	-	-	-	107	-	-
1955-A190	2435182-50	1955 Mar 16	Mike Ajax	-	2996R	-	-	-	-	WS	-	-	-	107	-	-
1955-A191	2435182-50	1955 Mar 16	Mike Ajax	-	3030R	-	-	-	-	WS	-	-	-	107	-	-
1955-A194	2435183-50	1955 Mar 17	Mike Ajax	-	1951T	-	-	-	-	WS	-	-	-	107	-	-
1955-A196	2435184-50	1955 Mar 18	Mike Ajax	-	1646T	-	-	-	-	WS	-	-	-	107	-	-
1955-A198	2435184-50	1955 Mar 18	Mike Ajax	-	1660T	-	-	-	-	WS	-	-	-	107	-	-
1955-A197	2435184-50	1955 Mar 18	Mike Ajax	-	1996T	-	-	-	-	WS	-	-	-	107	-	-
1955-A198	2435184-50	1955 Mar 18	Mike Ajax	-	1924T	-	-	-	-	WS	-	-	-	107	-	-
1955-A199	2435185-50	1955 Mar 19	Mike Ajax	-	1891T	-	-	-	-	WS	-	-	-	107	-	-
1955-A200	2435186-50	1955 Mar 20	Mike Ajax	-	1991T	-	-	-	-	WS	-	-	-	107	-	-
1955-A201	2435186-50	1955 Mar 20	Mike Ajax	-	1989T	-	-	-	-	WS	-	-	-	107	-	-
1955-A202	2435186-50	1955 Mar 20	Mike Ajax	-	1825T	-	-	-	-	WS	-	-	-	107	-	-
1955-A203	2435187-50	1955 Mar 21	Mike Ajax	-	1540T	-	-	-	-	WS	-	-	-	107	-	-
1955-A206	2435188-50	1955 Mar 22	Mike Ajax	-	1653T	-	-	-	-	WS	-	-	-	107	-	-
1955-A209	2435189-50	1955 Mar 23	Mike Ajax	-	3026R	-	-	-	-	WS	-	-	-	107	-	-
1955-A210	2435189-50	1955 Mar 23	Mike Ajax	-	4213R	-	-	-	-	WS	-	-	-	107	-	-
1955-A211	2435189-50	1955 Mar 23	Mike Ajax	-	2824	-	-	-	-	WS	-	-	-	107	-	-
1955-A215	2435190-50	1955 Mar 24	Mike Ajax	-	1709T	-	-	-	-	WS	-	-	-	107	-	-
1955-A221	2435191-50	1955 Mar 25	Mike Ajax	-	1717T	-	-	-	-	WS	-	-	-	107	-	-
1955-A222	2435191-50	1955 Mar 25	Mike Ajax	-	1600T	-	-	-	-	WS	-	-	-	107	-	-
1955-A223	2435191-50	1955 Mar 25	Mike Ajax	-	1874T	-	-	-	-	WS	-	-	-	107	-	-
1955-A224	2435192-50	1955 Mar 26	Mike Ajax	-	1954T	-	-	-	-	WS	-	-	-	107	-	-
1955-A225	2435192-50	1955 Mar 26	Mike Ajax	-	1831T	-	-	-	-	WS	-	-	-	107	-	-
1955-A226	2435193-50	1955 Mar 27	Mike Ajax	-	1879T	-	-	-	-	WS	-	-	-	107	-	-
1955-A230	2435194-50	1955 Mar 28	Mike Ajax	-	1994T	-	-	-	-	WS	-	-	-	107	-	-
1955-A232	2435195-50	1955 Mar 29	Mike Ajax	-	1683T	-	-	-	-	WS	-	-	-	107	-	-
1955-A234	2435196-50	1955 Mar 30	Mike Ajax	-	4233	-	-	-	-	WS	-	-	-	107	-	-
1955-A235	2435197-50	1955 Mar 31	Mike Ajax	-	1894T	-	-	-	-	WS	-	-	-	107	-	-
1955-A236	2435197-50	1955 Mar 31	Mike Ajax	-	1779T	-	-	-	-	WS	-	-	-	107	-	-
1955-A241	2435201-50	1955 Apr 04	Mike Ajax	-	1721T	-	-	-	-	WS	-	-	-	107	-	-
1955-A242	2435201-50	1955 Apr 04	Mike Ajax	-	1879T	-	-	-	-	WS	-	-	-	107	-	-
1955-A243	2435201-50	1955 Apr 04	Mike Ajax	-	1699T	-	-	-	-	WS	-	-	-	107	-	-
1955-A244	2435201-50	1955 Apr 04	Mike Ajax	-	1997T	-	-	-	-	WS	-	-	-	107	-	-
1955-A246	2435202-50	1955 Apr 05	Mike Ajax	-	1789T	-	-	-	-	WS	-	-	-	107	-	-
1955-A249	2435203-50	1955 Apr 06	Mike Ajax	-	1509T	-	-	-	-	WS	-	-	-	107	-	-
1955-A250	2435203-50	1955 Apr 06	Mike Ajax	-	1495T	-	-	-	-	WS	-	-	-	107	-	-
1955-A256	2435203-50	1955 Apr 06	Mike Ajax	-	4252R	-	-	-	-	WS	-	-	-	107	-	-
1955-A256	2435203-50	1955 Apr 06	Mike Ajax	-	4422R	-	-	-	-	WS	-	-	-	107	-	-
1955-A257	2435203-50	1955 Apr 06	Mike Ajax	-	4956R	-	-	-	-	WS	-	-	-	107	-	-
1955-A258	2435203-50	1955 Apr 06	Mike Ajax	-	4925R	-	-	-	-	WS	-	-	-	107	-	-
1955-A261	2435203-50	1955 Apr 06	Mike Ajax	-	1857T	-	-	-	-	WS	-	-	-	107	-	-
1955-A266	2435204-50	1955 Apr 07	Mike Ajax	-	1797T	-	-	-	-	WS	-	-	-	107	-	-
1955-A266	2435204-50	1955 Apr 07	Mike Ajax	-	-	-	-	-	-	WS	-	-	-	107	-	-
1955-A267	2435206-14	1955 Apr 08	Mike Tri-Deacon T40	-	-	-	-	-	-	WS	-	-	-	107	-	-
1955-A267	2435206-14	1955 Apr 08	Mike Tri-Deacon T40	-	-	-	-	-	-	WS	-	-	-	107	-	-
1955-A267	2435207-50	1955 Apr 10	Mike Ajax	-	1549T	-	-	-	-	WS	-	-	-	107	-	-
1955-A268	2435207-50	1955 Apr 10	Mike Ajax	-	1620T	-	-	-	-	WS	-	-	-	107	-	-
1955-A269	2435207-50	1955 Apr 10	Mike Ajax	-	1670T	-	-	-	-	WS	-	-	-	107	-	-
1955-A270	2435208-50	1955 Apr 11	Mike Ajax	-	1659T	-	-	-	-	WS	-	-	-	107	-	-
1955-A271	2435208-50	1955 Apr 11	Mike Ajax	-	1694T	-	-	-	-	WS	-	-	-	107	-	-
1955-A272	2435209-50	1955 Apr 12	Mike Ajax	-	1921T	-	-	-	-	WS	-	-	-	107	-	-
1955-A274	2435210-50	1955 Apr 13	Mike Ajax	-	1941T	-	-	-	-	WS	-	-	-	107	-	-
1955-A280	2435210-50	1955 Apr 13	Mike Ajax	-	4723R	-	-	-	-	WS	-	-	-	107	-	-
1955-A280	2435210-50	1955 Apr 13	Mike Ajax	-	4191R	-	-	-	-	WS	-	-	-	107	-	-
1955-A284	2435210-50	1955 Apr 13	Mike Ajax	-	4451R	-	-	-	-	WS	-	-	-	107	-	-
1955-A284	2435210-50	1955 Apr 13	Mike Ajax	-	4335R	-	-	-	-	WS	-	-	-	107	-	-
1955-A278	2435210-50	1955 Apr 13	Mike Ajax	-	4180R	-	-	-	-	WS	-	-	-	107	-	-
1955-A273	2435210-50	1955 Apr 13	Mike Ajax	-	4190R	-	-	-	-	WS	-	-	-	107	-	-
1955-A283	2435210-50	1955 Apr 13	Mike Ajax	-	4214R	-	-	-	-	WS	-	-	-	107	-	-
1955-A276	2435210-50	1955 Apr 13	Mike Ajax	-	4743R	-	-	-	-	WS	-	-	-	107	-	-
1955-A275	2435210-50	1955 Apr 13	Mike Ajax	-	4347R	-	-	-	-	WS	-	-	-	107	-	-
1955-A282	2435210-50	1955 Apr 13	Mike Ajax	-	4770R	-	-	-	-	WS	-	-	-	107	-	-
1955-A281	2435211-50	1955 Apr 14	Mike Ajax	-	4754R	-	-	-	-	WS	-	-	-	107	-	-
1955-A286	2435211-50	1955 Apr 14	Mike Ajax	-	1839T	-	-	-	-	WS	-	-	-	107	-	-
1955-A287	2435211-50	1955 Apr 14	Mike Ajax	-	1829T	-	-	-	-	WS	-	-	-	107	-	-
1955-A288	2435211-50	1955 Apr 14	Mike Ajax	-	1896T	-	-	-	-	WS	-	-	-	107	-	-
1955-A289	2435211-50	1955 Apr 14	Mike Ajax	-	1881T	-	-	-	-	WS	-	-	-	107	-	-
1955-A290	2435212-50	1955 Apr 15	Mike Ajax	-	1863T	-	-	-	-	WS	-	-	-	107	-	-
1955-A291	2435212-50	1955 Apr 15	Mike Ajax	-	1895T	-	-	-	-	WS	-	-	-	107	-	-
1955-A294	2435216-50	1955 Apr 19	Mike Ajax	-	1915T	-	-	-	-	WS	-	-	-	107	-	-
1955-A296	2435216-50	1955 Apr 19	Mike Ajax	-	4202R	-	-	-	-	WS	-	-	-	107	-	-
1955-A296	2435216-50	1955 Apr 19	Mike Ajax	-	4192R	-	-	-	-	WS	-	-	-	107	-	-
1955-A297	2435216-50	1955 Apr 20	Mike Ajax	-	1870T	-	-	-	-	WS	-	-	-	107	-	-
1955-A301	2435217-50	1955 Apr 20	Mike Ajax	-	1840T	-	-	-	-	WS	-	-	-	107	-	-
1955-A302	2435217-50	1955 Apr 20	Mike Ajax	-	4446A	-	-	-	-	WS	-	-	-	107	-	-
1955-A303	2435218-50	1955 Apr 21	Mike Ajax	-	1930T	-	-	-	-	WS	-	-	-	107	-	-
1955-A306	2435218-50	1955 Apr 21	Mike Ajax	-	1869T	-	-	-	-	WS	-	-	-	107	-	-

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Launch_Mission	FlightCode	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee km	Range km	Dest
1955-A308	2435218-50	1955 Apr 21	Nike Ajax	-	1841T	-	-	-	-	WS	-	-	-	107	-	-
1955-A310	2435218-50	1955 Apr 21	Nike Ajax	-	1855T	-	-	-	-	WS	-	-	-	107	-	-
1955-A311	2435219-50	1955 Apr 22	Nike Ajax	-	1883T	-	-	-	-	WS	-	-	-	107	-	-
1955-A312	2435219-50	1955 Apr 22	Nike Ajax	-	1794T	-	-	-	-	WS	-	-	-	107	-	-
1955-A313	2435223-50	1955 Apr 26	Nike Ajax	-	1762T	-	-	-	-	WS	-	-	-	107	-	-
1955-A314	2435223-50	1955 Apr 26	Nike Ajax	-	1794T	-	-	-	-	WS	-	-	-	107	-	-
1955-A315	2435223-50	1955 Apr 26	Nike Ajax	-	4204E	-	-	-	-	WS	-	-	-	107	-	-
1955-A317	2435224-50	1955 Apr 27	Nike Ajax	-	1597T	-	-	-	-	WS	-	-	-	107	-	-
1955-A318	2435224-50	1955 Apr 27	Nike Ajax	-	1919T	-	-	-	-	WS	-	-	-	107	-	-
1955-A319	2435224-50	1955 Apr 27	Nike Ajax	-	1800E	-	-	-	-	WS	-	-	-	107	-	-
1955-A321	2435225-50	1955 Apr 28	Nike Ajax	-	1834T	-	-	-	-	WS	-	-	-	107	-	-
1955-A322	2435225-50	1955 Apr 28	Nike Ajax	-	1694T	-	-	-	-	WS	-	-	-	107	-	-
1955-A323	2435225-50	1955 Apr 28	Nike Ajax	-	1694T	-	-	-	-	WS	-	-	-	107	-	-
1955-A324	2435225-50	1955 Apr 28	Nike Ajax	-	1874T	-	-	-	-	WS	-	-	-	107	-	-
1955-A325	2435225-50	1955 Apr 28	Nike Ajax	-	1893T	-	-	-	-	WS	-	-	-	107	-	-
1955-A327	2435226-50	1955 Apr 29	Nike Ajax	-	1837T	-	-	-	-	WS	-	-	-	107	-	-
1955-A328	2435226-50	1955 Apr 29	Nike Ajax	-	1905T	-	-	-	-	WS	-	-	-	107	-	-
1955-A329	2435229-50	1955 May 02	Nike Ajax	-	1860T	-	-	-	-	WS	-	-	-	107	-	-
1955-A332	2435230-50	1955 May 03	Nike Ajax	-	1918E	-	-	-	-	WS	-	-	-	107	-	-
1955-A333	2435230-50	1955 May 03	Nike Ajax	-	1761T	-	-	-	-	WS	-	-	-	107	-	-
1955-A334	2435231-50	1955 May 04	Nike Ajax	-	1533T	-	-	-	-	WS	-	-	-	107	-	-
1955-A336	2435231-50	1955 May 04	Nike Ajax	-	1922T	-	-	-	-	WS	-	-	-	107	-	-
1955-A338	2435231-50	1955 May 04	Nike Ajax	-	1735T	-	-	-	-	WS	-	-	-	107	-	-
1955-A339	2435232-50	1955 May 05	Nike Ajax	-	4445A	-	-	-	-	WS	-	-	-	107	-	-
1955-A339	2435232-50	1955 May 05	Nike Ajax	-	1885T	-	-	-	-	WS	-	-	-	107	-	-
1955-A341	2435233-50	1955 May 06	Nike Ajax	-	1920T	-	-	-	-	WS	-	-	-	107	-	-
1955-A342	2435233-50	1955 May 06	Nike Ajax	-	4782A	-	-	-	-	WS	-	-	-	107	-	-
1955-A343	2435233-50	1955 May 06	Nike Ajax	-	1625T	-	-	-	-	WS	-	-	-	107	-	-
1955-A344	2435235-50	1955 May 07	Nike Ajax	-	1615T	-	-	-	-	WS	-	-	-	107	-	-
1955-A344	2435235-50	1955 May 08	Nike Ajax	-	1615T	-	-	-	-	WS	-	-	-	107	-	-
1955-A346	2435235-50	1955 May 08	Nike Ajax	-	1630T	-	-	-	-	WS	-	-	-	107	-	-
1955-A346	2435235-50	1955 May 08	Nike Ajax	-	1601T	-	-	-	-	WS	-	-	-	107	-	-
1955-A347	2435235-50	1955 May 08	Nike Ajax	-	1601T	-	-	-	-	WS	-	-	-	107	-	-
1955-A348	2435235-50	1955 May 09	Nike Ajax	-	1875T	-	-	-	-	WS	-	-	-	107	-	-
1955-A352	2435236-50	1955 May 11	Nike Ajax	-	1895T	-	-	-	-	WS	-	-	-	107	-	-
1955-A353	2435236-50	1955 May 11	Nike Ajax	-	1744T	-	-	-	-	WS	-	-	-	107	-	-
1955-A354	2435236-50	1955 May 11	Nike Ajax	-	1757T	-	-	-	-	WS	-	-	-	107	-	-
1955-A356	2435239-50	1955 May 12	Nike Ajax	-	4826A	-	-	-	-	WS	-	-	-	107	-	-
1955-A357	2435239-50	1955 May 12	Nike Ajax	-	1906T	-	-	-	-	WS	-	-	-	107	-	-
1955-A358	2435240-50	1955 May 13	Nike Ajax	-	1695T	-	-	-	-	WS	-	-	-	107	-	-
1955-A360	2435241-50	1955 May 14	Nike Ajax	-	1705T	-	-	-	-	WS	-	-	-	107	-	-
1955-A361	2435241-50	1955 May 14	Nike Ajax	-	1621T	-	-	-	-	WS	-	-	-	107	-	-
1955-A362	2435242-50	1955 May 15	Nike Ajax	-	1592T	-	-	-	-	WS	-	-	-	107	-	-
1955-A363	2435242-50	1955 May 15	Nike Ajax	-	1592T	-	-	-	-	WS	-	-	-	107	-	-
1955-A366	2435244-50	1955 May 17	Nike Ajax	-	1538T	-	-	-	-	WS	-	-	-	107	-	-
1955-A367	2435244-50	1955 May 17	Nike Ajax	-	1559T	-	-	-	-	WS	-	-	-	107	-	-
1955-A379	2435244-50	1955 May 19	Nike Ajax	-	1815T	-	-	-	-	WS	-	-	-	107	-	-
1955-A379	2435246-50	1955 May 19	Nike Ajax	-	1790T	-	-	-	-	WS	-	-	-	107	-	-
1955-A379	2435246-50	1955 May 24	Nike Ajax	-	1790T	-	-	-	-	WS	-	-	-	107	-	-
1955-A379	2435246-50	1955 May 24	Nike Ajax	-	1619T	-	-	-	-	WS	-	-	-	107	-	-
1955-A380	2435246-50	1955 May 24	Nike Ajax	-	1632T	-	-	-	-	WS	-	-	-	107	-	-
1955-A380	2435246-50	1955 May 24	Nike Ajax	-	5951A	-	-	-	-	WS	-	-	-	107	-	-
1955-A381	2435246-50	1955 May 24	Nike Ajax	-	1677T	-	-	-	-	WS	-	-	-	107	-	-
1955-A381	2435246-50	1955 May 24	Nike Ajax	-	1640T	-	-	-	-	WS	-	-	-	107	-	-
1955-A384	2435252-50	1955 May 25	Nike Ajax	-	1569T	-	-	-	-	WS	-	-	-	107	-	-
1955-A384	2435252-50	1955 May 25	Nike Ajax	-	1630T	-	-	-	-	WS	-	-	-	107	-	-
1955-A386	2435252-50	1955 May 25	Nike Ajax	-	1637T	-	-	-	-	WS	-	-	-	107	-	-
1955-A387	2435252-50	1955 May 25	Nike Ajax	-	4437B	-	-	-	-	WS	-	-	-	107	-	-
1955-A388	2435252-50	1955 May 25	Nike Ajax	-	4436B	-	-	-	-	WS	-	-	-	107	-	-
1955-A388	2435252-50	1955 May 25	Nike Ajax	-	4898B	-	-	-	-	WS	-	-	-	107	-	-
1955-A388	2435252-50	1955 May 25	Nike Ajax	-	1817T	-	-	-	-	WS	-	-	-	107	-	-
1955-A390	2435252-50	1955 May 25	Nike Ajax	-	-	-	-	-	-	WS	-	-	-	107	-	-
1955-A391	2435253-50	1955 May 26	Nike Ajax	-	4852A	-	-	-	-	WS	-	-	-	107	-	-
1955-A392	2435253-50	1955 May 26	Nike Ajax	-	1820T	-	-	-	-	WS	-	-	-	107	-	-
1955-A393	2435253-50	1955 May 26	Nike Ajax	-	5953A	-	-	-	-	WS	-	-	-	107	-	-
1955-A394	2435253-50	1955 May 26	Nike Ajax	-	2789E	-	-	-	-	WS	-	-	-	107	-	-
1955-A395	2435253-50	1955 May 26	Nike Ajax	-	2742E	-	-	-	-	WS	-	-	-	107	-	-
1955-A396	2435253-50	1955 May 26	Nike Ajax	-	1890T	-	-	-	-	WS	-	-	-	107	-	-
1955-A396	2435253-50	1955 May 27	Nike Ajax	-	2213T	-	-	-	-	WS	-	-	-	107	-	-
1955-A403	2435258-50	1955 May 31	Nike Ajax	-	2249T	-	-	-	-	WS	-	-	-	107	-	-
1955-A404	2435258-50	1955 May 31	Nike Ajax	-	1592T	-	-	-	-	WS	-	-	-	107	-	-
1955-A407	2435259-50	1955 Jun 01	Nike Ajax	-	2317T	-	-	-	-	WS	-	-	-	107	-	-
1955-A408	2435259-50	1955 Jun 01	Nike Ajax	-	1439E	-	-	-	-	WS	-	-	-	107	-	-
1955-A409	2435259-50	1955 Jun 01	Nike Ajax	-	2295E	-	-	-	-	WS	-	-	-	107	-	-
1955-A410	2435259-50	1955 Jun 01	Nike Ajax	-	1681T	-	-	-	-	WS	-	-	-	107	-	-
1955-A411	2435259-50	1955 Jun 01	Nike Ajax	-	2271T	-	-	-	-	WS	-	-	-	107	-	-
1955-A412	2435260-50	1955 Jun 02	Nike Ajax	-	1917T	-	-	-	-	WS	-	-	-	107	-	-
1955-A414	2435260-50	1955 Jun 02	Nike Ajax	-	1815T	-	-	-	-	WS	-	-	-	107	-	-
1955-A415	2435260-50	1955 Jun 02	Nike Ajax	-	2314T	-	-	-	-	WS	-	-	-	107	-	-
1955-A416	2435260-50	1955 Jun 02	Nike Ajax	-	2295T	-	-	-	-	WS	-	-	-	107	-	-
1955-A417	2435260-50	1955 Jun 02	Nike Ajax	-	4436E	-	-	-	-	WS	-	-	-	107	-	-
1955-A420	2435261-50	1955 Jun 03	Nike Ajax	-	4436E	-	-	-	-	WS	-	-	-	107	-	-
1955-A421	2435261-50	1955 Jun 03	Nike Ajax	-	3866E	-	-	-	-	WS	-	-	-	107	-	-
1955-A422	2435261-50	1955 Jun 03	Nike Ajax	-	2239E	-	-	-	-	WS	-	-	-	107	-	-
1955-A423	2435261-50	1955 Jun 03	Nike Ajax	-	1407E	-	-	-	-	WS	-	-	-	107	-	-



Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Launch_Mission	FlightCode	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee_Km	Range_Km	Dest
1956-A23	2435526-37	1956 Feb 22 2054	Mike Ajax	-	-	-	-	-	-	FC	-	-	-	107	-	-
1956-A149	2435526-50	1956 Feb 23	Mike Ajax	-	12499-6188	Cold Weather Test	-	-	-	WS	-	-	-	107	-	-
1956-A150	2435526-50	1956 Feb 23	Mike Ajax	-	12499-6162	Mike 519R	-	-	-	WS	-	-	-	107	-	-
1956-A151	2435526-50	1956 Feb 23	Mike Ajax	-	12499-5687	Mike 520R	-	-	-	WS	-	-	-	107	-	-
1956-A152	2435530-50	1956 Feb 27	Mike Ajax	-	12499-6966	Mike 521R	-	-	-	WS	-	-	-	107	-	-
1956-A153	2435530-50	1956 Feb 27	Mike Ajax	-	12499-6158	Mike 522R	-	-	-	WS	-	-	-	107	-	-
1956-A154	2435530-50	1956 Feb 27	Mike Ajax	-	12499-6970	Mike 523R	-	-	-	WS	-	-	-	107	-	-
1956-A155	2435530-50	1956 Feb 28	Mike Ajax	-	12499-6971	Mike 524R	-	-	-	WS	-	-	-	107	-	-
1956-A156	2435531-50	1956 Feb 28	Mike Ajax	-	12499-5221	Mike 525R	-	-	-	WS	-	-	-	107	-	-
1956-A157	2435531-50	1956 Feb 28	Mike Ajax	-	12499-5743	Mike 526R	-	-	-	WS	-	-	-	107	-	-
1956-A158	2435531-50	1956 Feb 28	Mike Ajax	-	12499-6970	Mike 527R	-	-	-	WS	-	-	-	107	-	-
1956-A24	2435532-43	1956 Feb 28 2216	Mike Ajax	-	-	Cold Weather Test	-	-	-	FC	-	-	-	107	-	-
1956-A25	2435532-44	1956 Feb 28 2227	Mike Ajax	-	12499-5773	Cold Weather Test	-	-	-	FC	-	-	-	107	-	-
1956-A159	2435532-50	1956 Feb 29	Mike Ajax	-	12499-6710	Mike 528R	-	-	-	WS	-	-	-	107	-	-
1956-A160	2435532-50	1956 Feb 29	Mike Ajax	-	12499-5725	Mike 529R	-	-	-	WS	-	-	-	107	-	-
1956-A161	2435532-50	1956 Feb 29	Mike Ajax	-	-	Mike 530R	-	-	-	WS	-	-	-	107	-	-
1956-A162	2435537-08	1956 Mar 4 1358	Mike Ajax	-	-	Cold Weather Test	-	-	-	FC	-	-	-	107	-	-
1956-A127	2435537-09	1956 Mar 4 1406	Mike Ajax	-	-	Cold Weather Test	-	-	-	FC	-	-	-	107	-	-
1956-A128	2435537-12	1956 Mar 4 1448	Mike Ajax	-	-	Cold Weather Test	-	-	-	FC	-	-	-	107	-	-
1956-A129	2435537-12	1956 Mar 4 1448	Mike Ajax	-	-	Cold Weather Test	-	-	-	FC	-	-	-	107	-	-
1956-A130	2435537-15	1956 Mar 4 1543	Mike Ajax	-	-	Cold Weather Test	-	-	-	FC	-	-	-	107	-	-
1956-A131	2435537-16	1956 Mar 4 1543	Mike Ajax	-	-	Cold Weather Test	-	-	-	FC	-	-	-	107	-	-
1956-A163	2435595-50	1956 May 2	Mike Ajax	-	12499-5765	Mike 531R	-	-	-	WS	-	-	-	107	-	-
1956-A164	2435602-50	1956 May 9	Mike Ajax	-	-	Avro Arrow Model	-	-	-	WT	-	-	-	107	-	-
1956-A165	2435608-50	1956 May 15	Mike Ajax	-	-	Avro Arrow Model	-	-	-	WT	-	-	-	107	-	-
1956-A166	2435608-50	1956 May 15	Mike Ajax	-	-	F4H-1 Model	-	-	-	WT	-	-	-	107	-	-
1956-A167	2435631-50	1956 Jun 7	Mike Ajax	-	-	F4H-1 Model	-	-	-	WT	-	-	-	107	-	-
1956-A168	2435631-50	1956 Jun 7	Mike Ajax	-	-	Heat Transfer	-	-	-	WT	-	-	-	1007	-	-
1956-A169	2435638-50	1956 Jun 14	Mike Ajax	-	12499-8951	Mike 532R	-	-	-	WS	-	-	-	107	-	-
1956-A170	2435646-50	1956 Jun 22	Mike Ajax	-	12499-7946	Mike 533R	-	-	-	WS	-	-	-	107	-	-
1956-A171	2435661-25	1956 Jul 6 1600	Mike Ajax	-	ICV AM6 01	UM AM6.01 Sphere	ICV AM6 01	-	-	WS	-	-	-	129	-	-
1956-A172	2435678-50	1956 Jul 24	Mike Ajax	-	IC-C 1 (0009-1)	Hurricane Photo	-	-	-	WT	-	-	-	112	-	-
1956-A173	2435679-50	1956 Jul 24	Mike Ajax	-	12499-5238	Mike 534R	-	-	-	WT	-	-	-	107	-	-
1956-A174	2435679-50	1956 Jul 25	Mike Ajax	-	12499-5711	Mike 535R	-	-	-	WS	-	-	-	107	-	-
1956-A175	2435686-50	1956 Aug 1	Mike Ajax	-	12499-5313	Mike 536R	-	-	-	WS	-	-	-	107	-	-
1956-A176	2435693-50	1956 Aug 6	Mike Ajax	-	IC-C 2 (670M/5666)	UM AM6.30	ICV AM6.30	-	-	WS	-	-	-	1007	-	-
1956-A177	2435694-46	1956 Aug 8 2300	Mike Ajax	-	12499-9500	Mike 537R	-	-	-	WS	-	-	-	107	-	-
1956-A178	2435694-50	1956 Aug 9	Mike Ajax	-	12499-7531	Mike 538R	-	-	-	WS	-	-	-	107	-	-
1956-A179	2435694-50	1956 Aug 9	Mike Ajax	-	12499-9500	Mike 539R	-	-	-	WS	-	-	-	107	-	-
1956-A180	2435694-50	1956 Aug 9 2247	Mike Ajax	-	IC-C 3 (5661/BRL)	BRL DB6.00	ICV DB6.00	-	-	WS	-	-	-	164	-	-
1956-A181	2435701-50	1956 Aug 16	Mike Ajax	-	12499-5778	Mike 540R	-	-	-	WS	-	-	-	107	-	-
1956-A182	2435701-50	1956 Aug 16	Mike Ajax	-	12499-6978	Mike 541R	-	-	-	WS	-	-	-	107	-	-
1956-A183	2435701-50	1956 Aug 16	Mike Ajax	-	12499-6978	Mike 542R	-	-	-	WS	-	-	-	107	-	-
1956-A184	2435709-50	1956 Aug 24	Mike Ajax	-	12499-5254	Mike 543R	-	-	-	WS	-	-	-	107	-	-
1956-A185	2435721-50	1956 Sep 6	Mike Ajax	-	12499-7966	Mike 544R	-	-	-	WS	-	-	-	107	-	-
1956-A186	2435726-50	1956 Sep 10	Mike Ajax	-	12499-7918	Heat Transfer	-	-	-	WT	-	-	-	107	-	-
1956-A187	2435726-50	1956 Sep 10	Mike Ajax	-	12499-5773	Mike 545R	-	-	-	WS	-	-	-	107	-	-
1956-A188	2435726-50	1956 Sep 10	Mike Ajax	-	12499-5773	Mike 546R	-	-	-	WS	-	-	-	107	-	-
1956-A189	2435740-50	1956 Sep 26	Mike Ajax	-	12499-7787	Mike 547R	-	-	-	WS	-	-	-	107	-	-
1956-A190	2435740-50	1956 Sep 26	Mike Ajax	-	12499-7025	Mike 548R	-	-	-	WS	-	-	-	107	-	-
1956-A191	2435748-50	1956 Oct 2	Mike Ajax	-	-	F4H-1 Model	-	-	-	WT	-	-	-	107	-	-
1956-A192	2435748-50	1956 Oct 2	Mike Ajax	-	12499-9481	Mike 550R	-	-	-	WT	-	-	-	107	-	-
1956-A193	2435749-50	1956 Oct 3	Mike Ajax	-	-	P-59 Model	-	-	-	WT	-	-	-	107	-	-
1956-A194	2435751-50	1956 Oct 3	Mike Ajax	-	-	Heat Transfer	-	-	-	WT	-	-	-	4	-	-
1956-A195	2435755-50	1956 Oct 9	Mike Ajax	-	-	Heat Transfer	-	-	-	WT	-	-	-	107	-	-
1956-A196	2435755-50	1956 Oct 9	Mike Ajax	-	-	F73 Bar-Loc	-	-	-	WT	-	-	-	107	-	-
1956-A197	2435756-50	1956 Oct 11	Mike Ajax	-	-	F7L P1T	-	-	-	WT	-	-	-	107	-	-
1956-A198	2435767-43	1956 Oct 11	Mike Ajax	-	12499-7509	Mike 551R	-	-	-	WS	-	-	-	107	-	-
1956-A199	2435767-43	1956 Oct 20 2201	Mike Ajax	-	IC-C 13	UM AM6.31	ICV AM6.31	-	-	FC	-	-	-	113	-	-
1956-A200	2435774-36	1956 Oct 27 2124	Mike Ajax	-	IC-C 8	UM AM6.08 Sphere	ICV AM6.08	-	-	FC	-	-	-	161	-	-
1956-A182	2435774-36	1956 Oct 31	Mike Ajax	-	12499-9946	Mike 552R	-	-	-	LSD-14	-	-	-	107	-	-
1956-A183	2435777-50	1956 Oct 31	Mike Ajax	-	12499-7460	Mike 553R	-	-	-	WS	-	-	-	107	-	-
1956-A184	2435777-50	1956 Oct 31	Mike Ajax	-	12499-6601	Mike 554R	-	-	-	WS	-	-	-	107	-	-
1956-A185	2435777-50	1956 Oct 31	Mike Ajax	-	-	Mike 555R	-	-	-	WS	-	-	-	107	-	-
1956-A186	2435777-50	1956 Oct 31	Mike Ajax	-	IC-C 9	UM AM6.09 Sphere	ICV AM6.09	-	-	LSD-14	-	-	-	131	-	-
1956-A187	2435780-28	1956 Nov 2 1840	Mike Ajax	-	IC-C 10	UM AM6.10 Sphere	ICV AM6.10	-	-	LSD-14	-	-	-	162	-	-
1956-A188	2435782-29	1956 Nov 4 1864	Mike Ajax	-	12499-7467	Mike 556R	-	-	-	LSD-14	-	-	-	107	-	-
1956-A189	2435782-29	1956 Nov 7 1502	Mike Ajax	-	IC-C 11	UM AM6.11 Sphere	ICV AM6.11	-	-	LSD-14	-	-	-	169	-	-
1956-A190	2435788-14	1956 Nov 10 1517	Mike Ajax	-	IC-C 12	UM AM6.12 Sphere	ICV AM6.12	-	-	LSD-14	-	-	-	161	-	-
1956-A191	2435798-50	1956 Nov 21	Mike Ajax	-	12499-7534	Mike 560R	-	-	-	LSD-14	-	-	-	107	-	-
1956-A192	2435806-50	1956 Nov 29	Mike Ajax	-	12499-6947	Mike 561R	-	-	-	WS	-	-	-	107	-	-
1956-A193	2435814-50	1956 Dec 7	Mike Ajax	-	-	Hemi-Cyl RV	-	-	-	WT	-	-	-	307	-	-
1956-A194	2435819-50	1956 Dec 12	Mike Ajax	-	12499-9201	Mike 562R	-	-	-	WS	-	-	-	107	-	-
1956-A195	2435821-50	1956 Dec 14	Mike Ajax	-	12499-50003	Mike 564R	-	-	-	WS	-	-	-	107	-	-
1956-A196	2435821-50	1956 Dec 14	Mike Ajax	-	12499-50004	Mike 565R	-	-	-	WS	-	-	-	107	-	-
1956-A197	2435826-50	1956 Dec 19	Mike Ajax	-	12499-5170	Mike 566R	-	-	-	WS	-	-	-	107	-	-
1956-A198	2435854-50	1957 Jan 16	Mike Ajax	-	12499-7970	Mike 567R	-	-	-	WS	-	-	-	107	-	-
1957-A146	2435875-50	1957 Feb 6	Mike Ajax	-	12499-5775	Mike 572R	-	-	-	WS	-	-	-	107	-	-
1957-A147	2435875-50	1957 Feb 20	Mike Ajax	-	12499-7035	Mike 574R	-	-	-	WS	-	-	-	107	-	-
1957-A148	2435889-50	1957 Mar 13	Mike Ajax	-	-	PTL P1T 100	-	-	-	RC	-	-	-	107	-	-
1957-A149	2435910-50	1957 Mar 13	Mike Ajax	-	12499-50041	Mike 594R	-	-	-	WS	-	-	-	107	-	-
1957-A150	2435980-50	1957 May 22	Mike Ajax	-	12499-50042	Mike 595R	-	-	-	WS	-	-	-	107	-	-
1957-A151	2435980-50	1957 May 22	Mike Ajax	-	-	Slender missile	-	-	-	WT	-	-	-	107	-	-
1957-A35	2436008-50	1957 May 2	Mike Ajax	-	-	F4H-1 Model	-	-	-	WT	-	-	-	107	-	-
1957-A52	2436021-29	1957 Jun 19	Mike Deacon	-	NM7_37F	NM7_37F	ICV NM7_37F	-	-	WT	-	-	-	107	-	-
1957-S52	2436021-29	1957 Jul 1 1900	Mike Deacon	-	NM7_38F	NM7_38F	ICV NM7_38F	-	-	SNI	-	-	-	83	-	-
1957-S53	2436023-19	1957 Jul 3 1629	Mike Deacon	-	NM7_39F	NM7_39F	ICV NM7_39F	-	-	SNI	-	-	-	113	-	-
1957-A63	2436035-39	1957 Jul 15 2123	Mike Deacon	-	NM7_39F	NM7_39F	ICV NM7_39F	-	-	SNI	-	-	-	28	-	-

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Launch	FlightCode	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee	Range	Dest
							Mission							km	km	
1957-585	2436043-48	1957 Jul 23 2331:52	Mike Deacon	-	MN7-40F	NRL MN7-40F	ICV MN7-40F	-	-	SHI	-	-	-	129	-	-
1957-467	2436050-26	1957 Jul 30 1910:02	Nike Cajun	-	AM6-32	UM AM6-32	ICV AM6-32	-	-	FC	-	-	-	26	-	-
1957-472	2436056-30	1957 Aug 5 1910	Nike Deacon	-	MN7-41F	NRL MN7-41F	ICV MN7-41F	-	-	SHI	-	-	-	14	-	-
1957-A151	2436071-50	1957 Aug 21	Nike Ajax	-	M1499-7956	Mike 600R	-	-	-	WS	-	-	-	107	-	-
1957-591	2436063-50	1957 Aug 13	Nike Deacon	-	-	Heat Transfer	-	-	-	WI	-	-	-	107	-	-
1957-591	2436071-20	1957 Aug 20 1650:04	Nike Deacon	-	MN7-42F/DNM-20	RP6-X1 Igniter test	ICV MN7-42F	-	-	SHI	-	-	-	96	-	-
1957-593	2436074-41	1957 Aug 23 2154:05	Nike Cajun	-	RP6-X1	Grenade test	ICV RP6-X1	-	-	FC	-	-	-	114	-	-
1957-484	2436074-75	1957 Aug 24 0600	Nike Cajun	-	MN7-43F	NRL MN7-43F	ICV MN7-43F	-	-	SHI	-	-	-	17	-	-
1957-486	2436078-16	1957 Aug 27 1554	Nike Deacon	-	I16-22F	Auroral particles	ICV I16-22F	-	-	SHI	-	-	-	16	-	-
1957-598	2436079-38	1957 Aug 28 0415:03	Nike Cajun	-	MN7-44F	NRL MN7-44F	ICV MN7-44F	-	-	SHI	-	-	-	80?	-	-
1957-5100	2436080-38	1957 Aug 28 2021:40	Nike Deacon	-	MN7-45F/DNM-23	NRL MN7-45F	ICV MN7-45F	-	-	SHI	-	-	-	96	-	-
1957-5102	2436081-71	1957 Aug 29 2112:25	Nike Deacon	-	I16-23F	Auroral particles	ICV I16-23F	-	-	FC	-	-	-	113	-	-
1957-A152	2436092-50	1957 Aug 31 0457	Nike Deacon	-	Mike 602R	Mike 602R	ICV I16-23F	-	-	WS	-	-	-	107	-	-
1957-486	2436094-14	1957 Sep 12 1519:30	Nike Deacon	-	MN7-46F	NRL MN7-46F	ICV MN7-46F	-	-	SHI	-	-	-	3	-	-
1957-497	2436097-26	1957 Sep 15 2043	Nike Deacon	-	MN7-47F	NRL MN7-47F	ICV MN7-47F	-	-	SHI	-	-	-	90?	-	-
1957-A100	2436100-28	1957 Sep 18 1742	Nike Deacon	-	MN7-48F	NRL MN7-48F	ICV MN7-48F	-	-	SHI	-	-	-	21	-	-
1957-H13	2436100-25	1957 Sep 18 1754	Nike Deacon	-	MN7-49F	NRL MN7-49F	ICV MN7-49F	-	-	SHI	-	-	-	77	-	-
1957-A109	2436108-33	1957 Sep 26 2000	Nike Asp	-	MN8-50F	MN8-50F	ICV MN8-50F	-	-	SHI	-	-	-	16	-	-
1957-A118	2436121-50	1957 Oct 10 1735	Nike Deacon	-	OB6-02F	Heat Transfer	ICV OB6-02F	-	-	WS	-	-	-	107	-	-
1957-5174	2436163-23	1957 Dec 10 1912	Nike Cajun	-	MN8-51F	NRL MN8-51F	ICV MN8-51F	-	-	SHI	-	-	-	146	-	-
1957-5175	2436163-40	1957 Dec 10 1912	Nike Asp	-	S56-39	Heat Transfer	ICV S56-39	-	-	SHI	-	-	-	169	-	-
1957-A137	2436165-50	1957 Dec 10 2136	Nike Deacon	-	AM6-34	Heat Transfer	ICV AM6-34	-	-	FC	-	-	-	27	-	-
1957-A138	2436187-53	1957 Dec 15 0038	Nike Cajun	-	HUGO 2	Hurricane photo	-	-	WI	-	-	-	-	107	-	-
1957-A141	2436195-50	1957 Dec 15 0038	Nike Cajun	-	I18-35	-	-	-	-	WI	-	-	-	9	-	-
1957-A144	2436211-50	1957 Dec 23	Nike Asp	-	I18-10	-	-	-	-	WI	-	-	-	107	-	-
1958-506	2436211-50	1958 Jan 6	Nike Asp	-	I18-10	-	-	-	-	WI	-	-	-	146	-	-
1958-A01	2436213-15	1958 Jan 9 1535	Nike Asp	-	AM6-02	Sphere	ICV I18-10	-	-	WS	-	-	-	15	-	-
1958-S11	2436229-30	1958 Jan 25 1911:05	Nike Cajun	-	AM6-02	Pressure/Temp	ICV AM6-02	-	-	FC	-	-	-	157	-	-
1958-S14	2436231-30	1958 Jan 27 1917:45	Nike Cajun	-	AM6-03	Sphere	ICV AM6-03	-	-	FC	-	-	-	129	-	-
1958-516	2436233-30	1958 Jan 29 1909:17	Nike Cajun	-	AM6-03	Sphere	ICV AM6-03	-	-	FC	-	-	-	170	-	-
1958-523	2436247-76	1958 Feb 13 0657:04	Nike Cajun	-	I16-24F	Auroral particles	ICV I16-24F	-	-	FC	-	-	-	129	-	-
1958-524	2436250-76	1958 Feb 16 0616:38	Nike Cajun	-	I16-28F	Auroral particles	ICV I16-28F	-	-	FC	-	-	-	121	-	-
1958-532	2436256-75	1958 Feb 22 0534:31	Nike Cajun	-	I16-26F	Auroral particles	ICV I16-26F	-	-	FC	-	-	-	129	-	-
1958-534	2436256-92	1958 Feb 24 0734:42	Nike Cajun	-	AM6-37	Auroral particles	ICV AM6-37	-	-	FC	-	-	-	146	-	-
1958-536	2436259-74	1958 Feb 26 0946:32	Nike Cajun	-	I16-27F	Auroral particles	ICV I16-27F	-	-	FC	-	-	-	129	-	-
1958-A11	2436261-45	1958 Feb 26 2217:40	Nike Cajun	-	RP6-X2	Long nose cone test	ICV RP6-X2	-	-	FC	-	-	-	37	-	-
1958-539	2436266-75	1958 Mar 4 0601:36	Nike Cajun	-	AM6-04	Sphere	ICV AM6-04	-	-	FC	-	-	-	100?	-	-
1958-540	2436267-31	1958 Mar 4 1930:09	Nike Cajun	-	AM6-05	Sphere	ICV AM6-05	-	-	FC	-	-	-	181	-	-
1958-542	2436280-50	1958 Mar 18	Nike Apache	-	AM6-02b	-	-	-	-	WS	-	-	-	107	-	-
1958-544	2436286-50	1958 Mar 24	Nike Apache	-	AM6-08	F4H-1 Model	-	-	-	WI	-	-	-	107	-	-
1958-547	2436287-27	1958 Mar 24 1830:25	Nike Cajun	-	AM6-38	Horizon Imaging	ICV OB6-08	-	-	FC	-	-	-	109	-	-
1958-548	2436287-27	1958 Mar 24 2200	Nike Cajun	-	AM6-38	Horizon Imaging	ICV AM6-38	-	-	FC	-	-	-	137	-	-
1958-549	2436290-50	1958 Mar 24 2200	Nike Cajun	-	NC AF-1	H1 Ball 1	-	-	-	FC	-	-	-	244	-	-
1958-549	2436300-50	1958 Apr 24 1644	Nike Cajun	-	NC AF-2	Beacon Test IR	-	-	-	HADC?	-	-	-	157	-	-
1958-567	2436319-50	1958 Apr 24	Nike Cajun	-	-	Beacon Test IR	-	-	-	WI	-	-	-	72	-	-
1958-M03	2436321-50	1958 Apr 24	Nike Cajun	-	-	Beacon Test IR	-	-	-	WI	-	-	-	107	-	-
1958-568	2436323-02	1958 Apr 26 14233	Nike Cajun	-	NC AF-2	Beacon Test IR	-	-	-	HADC	-	-	-	137	-	-
1958-569	2436343-91	1958 May 20 0843:35	Nike Cajun	-	-	Release 2 Cr/Na	-	-	-	HADC	-	-	-	101	-	-
1958-567	2436343-96	1958 May 21 1131:59	Nike Cajun	-	-	Release 3 Cr/Na	-	-	-	HADC	-	-	-	128	-	-
1958-569	2436345-54	1958 May 22 0857	Nike Cajun	-	-	H1 Ball 2	-	-	-	HADC	-	-	-	244	-	-
1958-569	2436345-98	1958 May 22 1129:59	Nike Cajun	-	-	Release 4 (Ils)	-	-	-	HADC	-	-	-	116	-	-
1958-571	2436348-50	1958 May 26	Nike Cajun	-	-	Beacon Test 2	-	-	-	WI	-	-	-	122	-	-
1958-575	2436353-60	1958 May 30 0231	Nike Cajun	-	S56-49	Cremades	ICV S56-49	-	-	HADC	-	-	-	100	-	-
1958-580	2436359-50	1958 Jun 5	Nike Cajun	-	-	Control test	-	-	-	WI	-	-	-	121	-	-
1958-584	2436362-20	1958 Jun 7 1850:28	Nike Ajax	-	OB6-09	Horizon Imaging	ICV OB6-09	-	-	FC	-	-	-	200?	-	-
1958-584	2436362-20	1958 Jun 7 2318	Nike Cajun	-	MN8-52F	Horizon Imaging	ICV MN8-52F	-	-	FC	-	-	-	226?	-	-
1958-596	2436382-47	1958 Jul 1 8 2318	Nike Asp	-	MN8-53F	-	ICV MN8-53F	-	-	SHI	-	-	-	235	-	-
1958-596	2436383-47	1958 Jul 8 2315	Nike Asp	-	OB6-10	-	ICV OB6-10	-	-	FC	-	-	-	114	-	-
1958-599	2436397-35	1958 Jul 12 2030:00	Nike Cajun	-	AM6-39	Horizon Imaging	ICV AM6-39	-	-	FC	-	-	-	136	-	-
1958-S101	2436400-34	1958 Jul 15 2007:31	Nike Cajun	-	OB6-04	B/w probe	ICV OB6-04	-	-	FC	-	-	-	142	-	-
1958-S102	2436401-44	1958 Jul 16 2240:28	Nike Cajun	-	AM6-15	-	ICV AM6-15	-	-	FC	-	-	-	225	-	-
1958-S103	2436401-81	1958 Jul 17 0721:41	Nike Cajun	-	MN8-54F	-	ICV MN8-54F	-	-	SHI	-	-	-	200?	-	-
1958-S109	2436402-24	1958 Jul 17 1748	Nike Asp	-	MN8-55F	-	ICV MN8-55F	-	-	SHI	-	-	-	200?	-	-
1958-S110	2436409-71	1958 Jul 29 0503	Nike Asp	-	MN8-56F	-	ICV MN8-56F	-	-	SHI	-	-	-	90?	-	-
1958-S388	2436413-71	1958 Aug 1	Nike Asp	-	-	TEAM Falling Sphere	HARTACK Project 9.1d	-	-	JI	-	-	-	90?	-	-
1958-S388	2436416-50	1958 Aug 1	Nike Asp	-	-	TEAM Falling Sphere	HARTACK Project 9.1d	-	-	JI	-	-	-	90?	-	-
1958-S390	2436416-50	1958 Aug 1	Nike Asp	-	-	TEAM Falling Sphere	HARTACK Project 9.1d	-	-	JI	-	-	-	90?	-	-
1958-S391	2436416-50	1958 Aug 1	Nike Asp	-	-	TEAM Falling Sphere	HARTACK Project 9.1d	-	-	JI	-	-	-	90?	-	-
1958-S391	2436416-50	1958 Aug 1	Nike Asp	-	-	TEAM Falling Sphere	HARTACK Project 9.1d	-	-	JI	-	-	-	90?	-	-
1958-S391	2436416-50	1958 Aug 1	Nike Asp	-	-	TEAM Falling Sphere	HARTACK Project 9.1d	-	-	JI	-	-	-	90?	-	-
1958-S391	2436416-50	1958 Aug 1	Nike Asp	-	-	TEAM Falling Sphere	HARTACK Project 9.1d	-	-	JI	-	-	-	90?	-	-
1958-S391	2436416-50	1958 Aug 1	Nike Asp	-	-	TEAM Falling Sphere	HARTACK Project 9.1d	-	-	JI	-	-	-	90?	-	-
1958-S391	2436416-50	1958 Aug 1	Nike Asp	-	-	TEAM Falling Sphere	HARTACK Project 9.1d	-	-	JI	-	-	-	90?	-	-
1958-S391	2436416-50	1958 Aug 1	Nike Asp	-	-	TEAM Falling Sphere	HARTACK Project 9.1d	-	-	JI	-	-	-	90?	-	-
1958-S391	2436416-50	1958 Aug 1	Nike Asp	-	-	TEAM Falling Sphere	HARTACK Project 9.1d	-	-	JI	-	-	-	90?	-	-
1958-S391	2436416-50	1958 Aug 1	Nike Asp	-	-	TEAM Falling Sphere	HARTACK Project 9.1d	-	-	JI	-	-	-	90?	-	-
1958-S391	2436416-50	1958 Aug 1	Nike Asp	-	-	TEAM Falling Sphere	HARTACK Project 9.1d	-	-	JI	-	-	-	90?	-	-
1958-S391	2436416-50	1958 Aug 1	Nike Asp	-	-	TEAM Falling Sphere	HARTACK Project 9.1d	-	-	JI	-	-	-	90?	-	-
1958-S391	2436416-50	1958 Aug 1	Nike Asp	-	-	TEAM Falling Sphere	HARTACK Project 9.1d	-	-	JI	-	-	-	90?	-	-
1958-S391	2436416-50	1958 Aug 1	Nike Asp	-	-	TEAM Falling Sphere	HARTACK Project 9.1d	-	-	JI	-	-	-	90?	-	-
1958-S391	2436416-50	1958 Aug 1	Nike Asp	-	-	TEAM Falling Sphere	HARTACK Project 9.1d	-	-	JI	-	-	-	90?	-	-
1958-S391	2436416-50	1958 Aug 1	Nike Asp	-	-	TEAM Falling Sphere	HARTACK Project 9.1d	-	-	JI	-	-	-	90?	-	-
1958-S391	2436416-50	1958 Aug 1	Nike Asp	-	-	TEAM Falling Sphere	HARTACK Project 9.1d	-	-	JI	-	-	-	90?	-	-
1958-S391	2436416-50	1958 Aug 1	Nike Asp	-	-	TEAM Falling Sphere	HARTACK Project 9.1d	-	-	JI	-	-	-	90?	-	-
1958-S391	2436416-50	1958 Aug 1	Nike Asp	-	-	TEAM Falling Sphere	HARTACK Project 9.1d	-	-	JI	-	-	-	90?	-	-
1958-S391	2436416-50	1958 Aug 1	Nike Asp	-	-	TEAM Falling Sphere	HARTACK Project 9.1d	-	-	JI	-	-	-	90?	-	-
1958-S391	2436416-50	1958 Aug 1	Nike Asp	-	-	TEAM Falling Sphere	HARTACK Project 9.1d	-	-	JI	-	-	-	90?	-	-



Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Launch	FlightCode	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee_Km	Range_Km	Dest
1958-S229	2436491-67	1958 Oct 15 0400:01	Mike Cajun	-	AM6-203	-	IGV AM6-203	-	-	FC	-	-	-	151	-	-
1958-S232	2436494-64	1958 Oct 18 0325:06	Mike Cajun	-	AM6-205	-	IGV AM6-205	-	-	FC	-	-	-	143	-	-
1958-S233	2436497-42	1958 Oct 20 2201:01	Mike Cajun	-	AM6-207	-	IGV AM6-207	-	-	FC	-	-	-	130	-	-
1958-S234	2436498-66	1958 Oct 22 0345:00	Mike Cajun	-	AM6-206	-	IGV AM6-206	-	-	FC	-	-	-	158	-	-
1958-S235	2436499-10	1958 Oct 22 1422	Mike Asp	-	118-11	-	IGV 118-11	-	-	WS	-	-	-	107	-	-
1958-S236	2436500-36	1958 Oct 31 2036:19	Mike Cajun	-	086-11	-	Arctic cloud cover	-	-	FC	-	-	-	119	-	-
1958-S243	2436502-20	1958 Nov 4 1650:24	Mike Cajun	-	086-12	-	Arctic cloud cover	-	-	FC	-	-	-	122	-	-
1958-S254	2436515-58	1958 Nov 8 0153:19	Mike Cajun	-	C06-01	-	IR airglow	-	-	FC	-	-	-	139	-	-
1958-M18	2436519-99	1958 Nov 12 1140	Mike Cajun	-	S86-52	-	Grenades	-	-	GMNH	-	-	-	74	-	-
1958-S256	2436520-87	1958 Nov 13 0859:05	Mike Cajun	-	C06-02	-	IR airglow	-	-	FC	-	-	-	142	-	-
1958-S257	2436521-23	1958 Nov 13 1734:06	Mike Cajun	-	086-13	-	Arctic cloud cover	-	-	FC	-	-	-	119	-	-
1958-M19	2436521-97	1958 Nov 14 1108:43	Mike Cajun	-	S86-53	-	Grenades	-	-	GMNH	-	-	-	76	-	-
1958-S260	2436526-20	1958 Nov 18 1646:51	Mike Cajun	-	086-14	-	Arctic cloud cover	-	-	FC	-	-	-	116	-	-
1958-M20	2436527-25	1958 Nov 19 1501:40	Mike Cajun	-	S86-54	-	Grenades	-	-	GMNH	-	-	-	71	-	-
1958-S262	2436527-41	1958 Nov 19 2150:54	Mike Cajun	-	086-06	-	E/ne probe	-	-	FC	-	-	-	140	-	-
1958-M23	2436528-11	1958 Nov 20 1438:40	Mike Cajun	-	S86-55	-	Grenades	-	-	GMNH	-	-	-	69	-	-
1958-S266	2436529-92	1958 Nov 22 0957:59	Mike Cajun	-	S86-56	-	Grenades	-	-	GMNH	-	-	-	68	-	-
1958-S267	2436531-42	1958 Nov 23 2202	Mike Cajun	-	AM6-16	-	Atm. P.rho, Sphere	-	-	FC	-	-	-	131	-	-
1958-A151	2436531-83	1958 Nov 24 0900	Mike Cajun	-	S86-58	-	Grenades	-	-	FC	-	-	-	79	-	-
1958-M25	2436532-23	1958 Nov 24 1727:18	Mike Cajun	-	IGV 086-15	-	E/ne probe	-	-	GMNH	-	-	-	1007	-	-
1958-S275	2436533-44	1958 Nov 30 2227:01	Mike Cajun	-	R000 3	-	Weather photo	-	-	FC	-	-	-	152	-	-
1958-S282	2436542-50	1958 Dec 5	Mike Cajun	-	R000 4	-	Weather photo	-	-	WI	-	-	-	1007	-	-
1959-A268	2436568-50	1959 Jan 28	Mike Asp	-	Beacon Test 4	-	Beacon Test 4	-	-	ITR	-	-	-	16	-	-
1959-S10	2436569-50	1959 Jan 28	Mike Cajun	-	-	-	-	-	-	-	-	-	-	122	-	-
1959-A213	2436568-29	1959 Mar 10 1900	Mike Mike Cajun	-	F40	-	F40 Heat transfer	-	-	A-11	-	-	-	46?	-	-
1959-A266	2436568-29	1959 Apr 22 1929	Mike Mike	-	AM6-182C	-	Cree Test 28-1	-	-	HDCC	-	-	-	1007	-	-
1959-S54	2436661-31	1959 Apr 23 1728	Mike Mike	-	-	-	Cree Test 29-2	-	-	HDCC	-	-	-	46?	-	-
1959-A214	2436709-54	1959 Apr 23 1728	Mike Mike	-	116-20F	-	Cree Test 30-3	-	-	HDCC	-	-	-	1007	-	-
1959-M15	2436709-54	1959 May 21 0100	Mike Cajun	-	116-21F	-	Cree Test 31-4	-	-	WI	-	-	-	21	-	-
1959-M16	2436712-10	1959 May 23 1450	Mike Cajun	-	AM6-161C	-	NRL Sunflare 1	-	-	WI	-	-	-	73	-	-
1959-S76	2436715-70	1959 May 27 0461	Mike Cajun	-	AM6-162C	-	NRL Sunflare 2	-	-	WS	-	-	-	169	-	-
1959-S77	2436716-35	1959 May 27 1955	Mike Cajun	-	-	-	NRL Sunflare 3	-	-	WS	-	-	-	177	-	-
1959-A101	2436737-50	1959 Jun 18	Mike Recruit	-	AM6-162C	-	Mercury model	-	-	WI	-	-	-	107	-	-
1959-A215	2436738-50	1959 Jun 18	Mike Recruit	-	-	-	Mercury model	-	-	WI	-	-	-	20	-	-
1959-S20	2436747-05	1959 Jun 27 1308	Mike Cajun	-	116-31F	-	Cree Test 30-3	-	-	EWL	-	-	-	61	-	-
1959-S201	2436747-05	1959 Jun 27 1308	Mike Cajun	-	ABM6-208	-	Dumbbell probe	-	-	WI	-	-	-	83	-	-
1959-S102	2436749-50	1959 Jun 30	Mike Cajun	-	ABM6-209	-	Tetrahedron probe	-	-	WI	-	-	-	99	-	-
1959-S102	2436750-50	1959 Jul 1	Mike Cajun	-	-	-	Cree Test 31-4	-	-	EWL	-	-	-	20	-	-
1959-A216	2436760-03	1959 Jul 10 1245	Mike Mike	-	NM8-65	-	Cree Test 31-4	-	-	A-11	-	-	-	200?	-	-
1959-S109	2436764-24	1959 Jul 14 1745	Mike Asp	-	NM8-66	-	NRL Sunflare 1	-	-	PA	-	-	-	107	-	-
1959-S116	2436767-24	1959 Jul 17 1740	Mike Asp	-	NM8-66	-	NRL Sunflare 2	-	-	LC-A	-	-	-	227	-	-
1959-S125	2436774-59	1959 Jul 24 1654	Mike Asp	-	NM8-67	-	NRL Sunflare 3	-	-	LC-A	-	-	-	207	-	-
1959-S137	2436784-50	1959 Aug 7 1705	Mike Recruit	-	-	-	Mercury model	-	-	WI	-	-	-	205	-	-
1959-A147	2436786-21	1959 Aug 7 1705	Mike Asp	-	NM8-68CF	-	NRL Sunflare 4	-	-	LC-A	-	-	-	237	-	-
1959-S143	2436795-57	1959 Aug 14 1800	Mike Asp	-	NM8-68CF	-	NRL Sunflare 5	-	-	LC-A	-	-	-	236	-	-
1959-A143	2436797-59	1959 Aug 17 0938	Mike Asp	-	NASA 03-13CA	-	CCA Release 1, Na	-	-	WI	-	-	-	200?	-	-
1959-S146	2436797-59	1959 Aug 17 0938	Mike Asp	-	NASA 03-14CA	-	CCA Release 2, Na	-	-	WI	-	-	-	200?	-	-
1959-S146	2436800-52	1959 Aug 19 0334	Mike Asp	-	NM8-70CF	-	NRL Sunflare 6	-	-	PA	-	-	-	214	-	-
1959-S146	2436805-45	1959 Aug 24 2320	Mike Asp	-	NM8-70CF	-	NRL Sunflare 7	-	-	LC-A	-	-	-	214	-	-
1959-S146	2436805-45	1959 Aug 24 2320	Mike Asp	-	NM8-72CF	-	NRL Sunflare 8	-	-	LC-A	-	-	-	200?	-	-
1959-S146	2436805-45	1959 Aug 24 2320	Mike Asp	-	NM8-72CF	-	NRL Sunflare 9	-	-	LC-A	-	-	-	200?	-	-
1959-S146	2436805-45	1959 Aug 24 2320	Mike Asp	-	NM8-72CF	-	NRL Sunflare 10	-	-	LC-A	-	-	-	200?	-	-
1959-S146	2436805-45	1959 Aug 24 2320	Mike Asp	-	NM8-72CF	-	NRL Sunflare 11	-	-	LC-A	-	-	-	210	-	-
1959-S146	2436805-45	1959 Aug 24 2320	Mike Asp	-	NM8-72CF	-	NRL Sunflare 12	-	-	LC-A	-	-	-	23	-	-
1959-S146	2436805-45	1959 Aug 24 2320	Mike Asp	-	NM8-75CF	-	Cree Test 32-5	-	-	EWL	-	-	-	200?	-	-
1959-S146	2436805-45	1959 Aug 24 2320	Mike Asp	-	NM8-75CF	-	NRL Sunflare 12	-	-	LC-A	-	-	-	100?	-	-
1959-S146	2436805-45	1959 Aug 24 2320	Mike Asp	-	AM6-300C	-	Weather photo	-	-	EWL	-	-	-	12	-	-
1959-S146	2436805-45	1959 Aug 24 2320	Mike Asp	-	SM8-002	-	Weather photo	-	-	WI	-	-	-	100?	-	-
1959-S146	2436805-45	1959 Aug 24 2320	Mike Asp	-	H000 6	-	Weather photo	-	-	CC	-	-	-	124	-	-
1959-S146	2436805-45	1959 Aug 24 2320	Mike Asp	-	AM6-203C	-	Weather photo	-	-	EWL	-	-	-	122	-	-
1959-S146	2436805-45	1959 Aug 24 2320	Mike Asp	-	AM6-204C	-	Weather photo	-	-	EWL	-	-	-	138	-	-
1959-S146	2436805-45	1959 Aug 24 2320	Mike Asp	-	AM6-210C	-	Weather photo	-	-	EWL	-	-	-	143	-	-
1959-S146	2436805-45	1959 Aug 24 2320	Mike Asp	-	AM6-211C	-	Weather photo	-	-	EWL	-	-	-	127	-	-
1959-S146	2436805-45	1959 Aug 24 2320	Mike Asp	-	AM6-212C	-	Weather photo	-	-	EWL	-	-	-	143	-	-
1959-S146	2436805-45	1959 Aug 24 2320	Mike Asp	-	AM6-209C	-	Weather photo	-	-	EWL	-	-	-	127	-	-
1959-S146	2436805-45	1959 Aug 24 2320	Mike Asp	-	AM6-213C	-	Weather photo	-	-	EWL	-	-	-	143	-	-
1959-S146	2436805-45	1959 Aug 24 2320	Mike Asp	-	AM6-208C	-	Weather photo	-	-	EWL	-	-	-	123	-	-
1959-S146	2436805-45	1959 Aug 24 2320	Mike Asp	-	AM6-216C	-	Weather photo	-	-	EWL	-	-	-	116	-	-
1959-S146	2436805-45	1959 Aug 24 2320	Mike Asp	-	AM6-214C	-	Weather photo	-	-	EWL	-	-	-	122	-	-
1959-S146	2436805-45	1959 Aug 24 2320	Mike Asp	-	AM6-215C	-	Weather photo	-	-	EWL	-	-	-	139	-	-
1959-S146	2436805-45	1959 Aug 24 2320	Mike Asp	-	AM6-188C	-	Weather photo	-	-	FC	-	-	-	07	-	-
1959-S146	2436805-45	1959 Aug 24 2320	Mike Asp	-	AM8-241C	-	Weather photo	-	-	EWL	-	-	-	206	-	-
1959-S146	2436805-45	1959 Aug 24 2320	Mike Asp	-	NASA 03-15CA	-	GCA Release 3, Na	-	-	WI	-	-	-	250	-	-
1959-S146	2436805-45	1959 Aug 24 2320	Mike Asp	-	AM6-163C	-	Diurnal density	-	-	FC	-	-	-	119	-	-
1959-S146	2436805-45	1959 Aug 24 2320	Mike Asp	-	NASA 03-16CA	-	GCA Release 4, Na	-	-	FC	-	-	-	255	-	-
1959-S146	2436805-45	1959 Aug 24 2320	Mike Asp	-	NASA 03-17CA	-	GCA Release 5, Na	-	-	WI	-	-	-	236	-	-
1959-S146	2436805-45	1959 Aug 24 2320	Mike Asp	-	AM6-164C	-	Diurnal density	-	-	FC	-	-	-	119	-	-
1959-S146	2436805-45	1959 Aug 24 2320	Mike Asp	-	-	-	Paraglider test	-	-	WI	-	-	-	45	-	-
1959-S146	2436805-45	1959 Aug 24 2320	Mike Asp	-	-	-	Teflon nose	-	-	WI	-	-	-	120	-	-
1959-S146	2436805-45	1959 Aug 24 2320	Mike Asp	-	-	-	-	-	-	WI	-	-	-	100?	-	-
1959-S146	2436805-45	1959 Aug 24 2320	Mike Asp	-	-	-	-	-	-	NS	-	-	-	400	-	-
1959-S146	2436805-45	1959 Aug 24 2320	Mike Asp	-	Sandia	-	Sandia Sampler	-	-	PA	-	-	-	1200?	-	-
1959-S146	2436805-45	1959 Aug 24 2320	Mike Asp	-	AM6-103C	-	-	-	-	EWL	-	-	-	212	-	-
1959-S146	2436805-45	1959 Aug 24 2320	Mike Asp	-	NASA 03-016S	-	-	-	-	WI	-	-	-	212	-	-
1959-S146	2436805-45	1959 Aug 24 2320	Mike Asp	-	NASA 03-026S	-	-	-	-	NS	-	-	-	107	-	-
1959-S146	2437001-50	1960 Mar 8	Mike Ajax	-	660	-	-	-	-	ZDRF	-	-	-	-	-	-

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee_Rm	Range_Rm	Dest
Launch Mission													
Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee_Rm	Range_Rm	Dest
1960-A88	2437010-56	1960 Mar 17 0152	Nike Asp		MASA 03-100I	Dumbbell/Ion sphere	FC				0		
1960-A89	2437032-39	1960 Apr 7 2125	Nike Cajun		Flight 7914	Launcher test	FC				27		
1960-S73	2437033-00	1960 Apr 8 1204	Nike Cajun		086-03		FC				100		
1960-A104	2437052-41	1960 Apr 27 2156	Nike Asp		MASA 03-03GS		WI				24		
1960-S440	2437053-50	1960 Apr 29	Nike Viper I		Sandia		PA	LC-B			3007		
1960-A343	2437075-50	1960 May 21	Nike Ajax				WS				107		
1960-A127	2437078-87	1960 May 24 0857	Nike Asp		MASA 03-23CA	GCA Release 6 Na	WI				24		
1960-S106	2437079-55	1960 May 25 0048	Nike Asp		MASA 03-24CA	GCA Release 7 Na	WI				193		
1960-S106	2437080-42	1960 May 25 2200	Nike Asp		MASA 03-04GS		WI				199		
1960-S120	2437092-22	1960 Jun 6 1710	Nike Cajun		MASA 10-17GE	SBE Solar Beam Expt	FC				122		
1960-A153	2437101-73	1960 Jun 16 0529	Nike Cajun		MASA 10-03GA	GSFC Grenade 1	WI				10		
1960-S147	2437112-50	1960 Jun 27	Nike Asp				CC				1507		
1960-S441	2437112-50	1960 Jun 27	Nike Viper I		Sandia	Sandia Sampler	PA	LC-B			3007		
1960-S150	2437113-30	1960 Jun 27 1910	Nike Asp		A48-243	Masp-III [Not ASE!]	EGE				170		
1960-S148	2437113-72	1960 Jun 28 0510	Nike Asp		A48-242		EGE				196		
1960-S168	2437124-67	1960 Jul 9 0400	Nike Cajun		MASA 10-04GA	GSFC Grenade 2	WI				105		
1960-S172	2437128-52	1960 Jul 13 0023	Nike Cajun		A46-403		EGE				170		
1960-A169	2437129-32	1960 Jul 14 0044	Nike Cajun		MASA 10-01GA	Firefly FRANCES	WI				148		
1960-S175	2437129-32	1960 Jul 14 1005	Nike Cajun		A46-409	Firefly FRANCES	EGE				307		
1960-A368	2437129-50	1960 Jul 14	Nike Nike			Crete Test 33-6	EGE				1207		
1960-S178	2437130-32	1960 Jul 15 1002	Nike Cajun		A46-401	Firefly CHERRY	EGE				130		
1960-S180	2437133-32	1960 Jul 16 1001	Nike Cajun		A46-405		EGE				1207		
1960-S182	2437135-50	1960 Jul 20	Nike Cajun		AEC probe		PA				130		
1960-S186	2437136-56	1960 Jul 21 0132	Nike Cajun		A46-413	Firefly JDA	EGE				130		
1960-S187	2437136-56	1960 Jul 21 1002	Nike Cajun		A46-406	Firefly LILY	EGE				151		
1960-S188	2437137-70	1960 Jul 22 0453	Nike Cajun		MASA 10-18GE	Firefly HEDY	FC				129		
1960-S189	2437137-92	1960 Jul 22 1011	Nike Cajun		A46-402		EGE				108		
1960-S193	2437140-35	1960 Jul 25 0650	Nike Cajun		A46-420		EGE				1207		
1960-S196	2437141-35	1960 Jul 26 1017	Nike Cajun		A46-421	Firefly JAMIE	EGE				119		
1960-S196	2437142-35	1960 Jul 27 1019	Nike Cajun		A46-428	Firefly DOLLY	EGE				115		
1960-S201	2437143-35	1960 Jul 28 0650:00	Nike Cajun		A46-419	Firefly AMY	EGE				111		
1960-S204	2437144-35	1960 Jul 29 0650	Nike Cajun		A46-407	Firefly GARY	EGE				94		
1960-S205	2437144-35	1960 Jul 29 1014	Nike Cajun		A46-408	Firefly HAVIS	EGE				94		
1960-S214	2437147-35	1960 Aug 1 0650	Nike Cajun		A46-410	Firefly HILDA	EGE				113		
1960-S215	2437147-35	1960 Aug 1 1023	Nike Cajun		A46-411	Firefly HILDA	EGE				126		
1960-S222	2437152-35	1960 Aug 6 0900	Nike Cajun		A46-412	Firefly BERNA	EGE				138		
1960-S224	2437154-35	1960 Aug 6 1015	Nike Cajun		A46-412	Firefly BERNA	EGE				109		
1960-S225	2437155-34	1960 Aug 9 1037	Nike Cajun		A46-414	Firefly MARIE	EGE				81		
1960-A194	2437156-34	1960 Aug 9 2010	Nike Asp		MASA 03-28GT		WI				28		
1960-S231	2437156-34	1960 Aug 10 1055	Nike Asp		A46-418	Firefly JEANIE	EGE				104		
1960-S239	2437162-57	1960 Aug 16 0142	Nike Asp		A46-404	Firefly ARLINE	EGE				104		
1960-S240	2437162-57	1960 Aug 19 1041	Nike Cajun		A46-426	Firefly PEGGY	EGE				103		
1960-S241	2437163-35	1960 Aug 16 0132	Nike Cajun		A46-427	Firefly SUSAN	EGE				1507		
1960-S243	2437164-57	1960 Aug 18 0335	Nike Asp		A46-415		EGE				1507		
1960-S244	2437164-57	1960 Aug 18 0242	Nike Cajun		A46-428	Firefly LINDA	EGE				1507		
1960-S246	2437164-35	1960 Aug 18 1015	Nike Asp		A46-416		EGE				1507		
1960-S246	2437164-35	1960 Aug 19 1050	Nike Cajun		A46-429	Firefly OLIVE	EGE				106		
1960-S247	2437165-35	1960 Aug 19 1950	Nike Cajun		A46-429	Firefly OLIVE	EGE				106		
1960-A319	2437169-25	1960 Aug 22 1806	Nike Nike		CAC-430	Firefly REBA (SFG)	EGE				106		
1960-A319	2437169-25	1960 Aug 22 1700:57	Nike Nike		MASA 03-12CI	Crete Test 34-7	EGE				48		
1960-S251	2437169-24	1960 Aug 26 0104	Nike Asp		A48-244	GCA Ionos 1	EGE				9		
1960-S251	2437170-54	1960 Aug 26 0104	Nike Asp		A48-244	Firefly	EGE				200		
1960-S257	2437176-50	1960 Aug 26 0103	Nike Asp		A46-417	Firefly	EGE				1507		
1960-S264	2437186-27	1960 Aug 30	Nike Asp			SBE 3 flare part.	FC				122		
1960-S264	2437186-27	1960 Aug 30	Nike Asp			SBE 4	FC				9		
1960-A317	2437181-23	1960 Sep 3 1729	Nike Cajun		MASA 10-19GE		MI				67		
1960-A317	2437182-57	1960 Sep 8 1830	Nike Cajun		MASA 10-20GE		MI				1007		
1960-A323	2437187-51	1960 Sep 20 0016	Nike Cajun		A46-86	Sphere	FC				9		
1960-A323	2437188-35	1960 Sep 20 2018	Nike Cajun		MASA 10-05GA	GSFC Grenade 4	MI				17		
1960-A325	2437189-47	1960 Sep 21 2320	Nike Cajun		086-015	H2O/He	FC				13		
1960-A328	2437201-17	1960 Sep 23 1610	Nike Cajun		086-016		MI				13		
1960-S298	2437205-11	1960 Sep 27 1444	Nike Cajun		SMB-006		FC				129		
1960-S298	2437205-42	1960 Sep 27 2210	Nike Asp		MASA 10-21GE	SBE 5	FC				233		
1960-S294	2437206-45	1960 Sep 28 2245	Nike Asp		A48-350	ASAF-1 Lunar X-ray	EGE				105		
1960-A369	2437206-50	1960 Sep 28	Nike Cajun		086-07	H2O/He	FC				487		
1960-S324	2437207-50	1960 Sep 30	Nike Viper I			Crete Test 35-8	EGE				807		
1960-S343	2437205-38	1960 Oct 17 2104	Nike Cajun		A46-340	UM density/pressure	PA	LC-B			132		
1960-S344	2437241-33	1960 Nov 2 2225	Nike Cajun		MASA 10-09UA	Composition	FC				109		
1960-S348	2437242-39	1960 Nov 3 2119	Nike Asp		MASA 03-29GT		MI				193		
1960-S356	2437243-97	1960 Nov 4 2052	Nike Cajun		A46-800	Antenna Breakdown Ex	EGE				1007		
1960-S357	2437249-97	1960 Nov 11 1122	Nike Cajun		MASA 10-23GE	SBE 6	FC				129		
1960-S359	2437250-01	1960 Nov 11 1211	Nike Cajun		MASA 10-23GE	SBE 7	FC				129		
1960-S360	2437251-48	1960 Nov 12 1840	Nike Cajun		MASA 10-14GE	SBE 8 (LE SCR)	FC				129		
1960-S361	2437252-17	1960 Nov 12 2332	Nike Cajun		MASA 10-15GE	SBE 9 (LE SCR)	FC				129		
1960-S365	2437255-23	1960 Nov 13 1603	Nike Cajun		MASA 10-10UA	SBE 10 (LE SCR)	FC				129		
1960-S365	2437255-33	1960 Nov 16 1737	Nike Cajun		MASA 10-13GE	Composition	MI				152		
1960-S369	2437255-75	1960 Nov 16 1951	Nike Cajun		MASA 10-14GE	SBE 11	FC				129		
1960-S370	2437255-92	1960 Nov 17 0600	Nike Cajun		MASA 10-14GE	SBE 12	FC				129		
1960-S374	2437255-92	1960 Nov 17 1006	Nike Cajun				US				152		
1960-S374	2437256-65	1960 Nov 18 0339	Nike Cajun		MASA 10-26GE	SBE 13	FC				128		
1960-A320	2437257-49	1960 Nov 18 2338-37	Nike Cajun		MASA 10-27GE	SBE 14	FC				129		
1960-A370	2437260-21	1960 Nov 21 1700	Nike Nike		CAC-2	Crete Test 36-9	EGE				34		
1960-S375	2437269-50	1960 Nov 21	Nike Nike			Crete Test 37-10	EGE				337		
1960-S376	2437269-50	1960 Nov 21	Nike Cajun				PA	LC-B			1007		
1960-S384	2437268-50	1960 Dec 7	Nike Nike	Recruit			MI				1207		
1960-S396	2437277-20	1960 Dec 8 1652:09	Nike Cajun		MASA 10-25CI	Teflon nose	MI				152		
1960-S396	2437277-20	1960 Dec 8 1652:09	Nike Nike			GCA Ionos 2	MI				152		

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Mission	FlightCode	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee km	Range km	Dest
1960-5397	2437277-97	1960 Dec 9 1120	Nike Cajun	-	MASA 10.12CA	GCA Release 8 Ha	-	-	-	WI	-	-	-	146	-	-
1960-A296	2437278-43	1960 Dec 9 2215	Nike Cajun	-	MASA 10.11CA	GCA Release 9 Ha	-	-	-	WI	-	-	-	24	-	-
1960-5407	2437283-20	1960 Dec 14 1652	Nike Cajun	-	MASA 10.06CA	GSFC Grenade 5	-	-	-	WI	-	-	-	110	-	-
1961-1686	2437303-25	1961 Jan 3 1800	Nike Cree	-	-	Cree Test 38-11	-	-	-	A-11	-	-	-	51	-	-
1961-515	2437312-20	1961 Jan 12 1654	Nike Cajun	-	-	-	-	-	-	SDQ	-	-	-	160	-	-
1961-521	2437317-39	1961 Jan 17 2125	Nike Asp	-	ISRC-RS-01	-	-	-	-	WI	-	-	-	209	-	-
1961-A274	2437332-50	1961 Feb 2	Nike Cree	-	MASA 03.36GT	Cree Test 39-12	-	-	-	WI	-	-	-	407	-	-
1961-546	2437345-49	1961 Feb 14 2350	Nike Cajun	-	MASA 10.07GA	GSFC Grenade 6	-	-	-	WI	-	-	-	130	-	-
1961-A48	2437346-25	1961 Feb 15 1900	Nike Cajun	-	Smoke 007	Smoke	-	-	-	WI	-	-	-	10	-	-
1961-550	2437347-60	1961 Feb 17 0226	Nike Apache	-	MASA 10.08CA	GSFC Grenade 7	-	-	-	WI	-	-	-	85	-	-
1961-551	2437347-80	1961 Feb 17 0717	Nike Apache	-	A48-391	-	-	-	-	WI	-	-	-	200?	-	-
1961-559	2437354-51	1961 Feb 24 0019	Nike Apache	-	A46-170	Sphere	-	-	-	EGE	-	-	-	133	-	-
1961-562	2437358-50	1961 Mar 1 1542	Nike Asp	-	A48-820	SPEEDBALL	-	-	-	WS	-	-	-	160?	-	-
1961-568	2437360-15	1961 Mar 3 0539	Nike Cajun	-	A46-189	VLF Propagation	-	-	-	EGE	-	-	-	200?	-	-
1961-581	2437373-41	1961 Mar 14 2152	Nike Cajun	-	A46-801	Electron density	-	-	-	EGE	-	-	-	100?	-	-
1961-583	2437374-24	1961 Mar 15 1747	Nike Cajun	-	MASA 10.49GT	Antenna Breakdown Ex	-	-	-	EGE	-	-	-	118	-	-
1961-588	2437385-30	1961 Mar 24 1917	Nike Cajun	-	MASA 10.49GT	Cajun fin test	-	-	-	WI	-	-	-	130	-	-
1961-S104	2437395-04	1961 Apr 5 1257	Nike Cajun	-	MASA 10.35GA	Antenna Breakdown Ex	-	-	-	EGE	-	-	-	100?	-	-
1961-A89	2437396-32	1961 Apr 6 1935	Nike Cajun	-	Smoke 009	GSFC Grenade 8	-	-	-	WI	-	-	-	116	-	-
1961-A100	2437396-32	1961 Apr 7	Nike Recruit	-	-	Smoke 010	-	-	-	WI	-	-	-	10?	-	-
1961-A103	2437404-15	1961 Apr 14 1550	Nike	-	Smoke 010	Smoke	-	-	-	WI	-	-	-	10	-	-
1961-A104	2437404-32	1961 Apr 14 1935	Nike Asp	-	MASA 03.05CA	Smoke 012	-	-	-	WI	-	-	-	12	-	-
1961-S115	2437408-90	1961 Apr 19 0936	Nike Asp	-	ISRC-RS-02CA	GCA Release 10 Ha	-	-	-	WI	-	-	-	164	-	-
1961-S116	2437409-28	1961 Apr 19 1657	Nike Asp	-	ISRC-RS-02	-	-	-	-	SDQ	-	-	-	200	-	-
1961-S117	2437409-66	1961 Apr 20 0946	Nike Asp	-	ISRC-RS-03	-	-	-	-	SDQ	-	-	-	190	-	-
1961-S118	2437410-28	1961 Apr 20 1639	Nike Asp	-	ISRC-RS-04	-	-	-	-	SDQ	-	-	-	188	-	-
1961-S119	2437410-28	1961 Apr 20 1643	Nike Asp	-	ISRC-RS-05	-	-	-	-	SDQ	-	-	-	160	-	-
1961-S120	2437410-25	1961 Apr 21 0012	Nike Asp	-	MASA 03.06CA	GCA Release 11 Ha	-	-	-	WI	-	-	-	180	-	-
1961-S122	2437410-90	1961 Apr 21 0934	Nike Asp	-	MASA 03.07CA	GCA Release 12 Ha	-	-	-	WI	-	-	-	200?	-	-
1961-S123	2437410-90	1961 Apr 21 0939	Nike Asp	-	MASA 03.06CA	GCA Release 13 Ha	-	-	-	WI	-	-	-	165	-	-
1961-A111	2437417-44	1961 Apr 27 2232	Nike Cajun	-	MASA 10.34GA	GSFC Grenade 9	-	-	-	WI	-	-	-	18	-	-
1961-A122	2437422-39	1961 May 2 2115	Nike Apache	-	MASA 12.01GT	Conc test	-	-	-	WI	-	-	-	14	-	-
1961-S136	2437425-46	1961 May 5 2300	Nike Cajun	-	MASA 10.02GA	GSFC Grenade 10	-	-	-	WI	-	-	-	117	-	-
1961-S137	2437425-70	1961 May 6 0454	Nike Cajun	-	MASA 10.28GA	GSFC Grenade 11	-	-	-	WI	-	-	-	117	-	-
1961-S139	2437429-00	1961 May 9 1153	Nike Cajun	-	MASA 10.28GA	GSFC Grenade 12	-	-	-	WI	-	-	-	116	-	-
1961-S159	2437445-21	1961 May 25 1703	Nike Apache	-	MASA 14.01GT	GSFC Grenade 12	-	-	-	WI	-	-	-	10?	-	-
1961-A282	2437451-41	1961 Jun 1	Nike Terbird	-	Test Flight 1	Sphere	-	-	-	WI	-	-	-	150	-	-
1961-S166	2437457-41	1961 Jun 6 2148	Nike Cajun	-	MASA 10.50GA	Sphere/Inf Sphere 1	-	-	-	WI	-	-	-	142	-	-
1961-S174	2437460-25	1961 Jun 9 1802	Nike Cajun	-	MASA 10.50GA	Composition	-	-	-	WI	-	-	-	157	-	-
1961-S185	2437474-22	1961 Jun 23 1500	Nike Cajun	-	046-101	Micrometeors	-	-	-	EGE	-	-	-	142	-	-
1961-S186	2437481-52	1961 Jun 23 1720	Astrobee 200	-	07-A15-303	-	-	-	-	EGE	-	-	-	29	-	-
1961-S205	2437484-42	1961 Jul 13 2257	Nike Apache	-	MASA 10.30GA	GSFC Grenade 13	-	-	-	WI	-	-	-	119	-	-
1961-S206	2437484-62	1961 Jul 14 0257	Nike Apache	-	MASA 14.03UE	Magnetic Fields	-	-	-	WI	-	-	-	396	-	-
1961-S207	2437485-12	1961 Jul 14 1500	Nike Apache	-	MASA 14.04UE	Magnetic Fields	-	-	-	WI	-	-	-	200	-	-
1961-S166	2437486-17	1961 Jul 14 1600	Nike	-	Smoke 014	Smoke 014	-	-	-	WI	-	-	-	14	-	-
1961-S169	2437486-17	1961 Jul 14 1602	Nike Cajun	-	MASA 10.31GA	GSFC Grenade 14	-	-	-	WI	-	-	-	101	-	-
1961-A168	2437486-39	1961 Jul 14 2120	Nike	-	Smoke 016	Smoke 016	-	-	-	WI	-	-	-	14	-	-
1961-S213	2437500-94	1961 Jul 20 1030	Nike Cajun	-	MASA 10.32GA	GSFC Grenade 15	-	-	-	WI	-	-	-	124	-	-
1961-S214	2437501-05	1961 Jul 20 1332	Nike Apache	-	MASA 14.05UE	Magnetic Fields	-	-	-	WI	-	-	-	193	-	-
1961-A169	2437501-66	1961 Jul 21 0950	Nike Cajun	-	MASA 14.36GA	GSFC Grenade 16	-	-	-	WI	-	-	-	68	-	-
1961-A263	2437506-50	1961 Jul 26 0950	Nike Terbird	-	Test Flight 2	Sphere	-	-	-	WI	-	-	-	107	-	-
1961-S221	2437507-31	1961 Jul 26 1922	Nike Cajun	-	MASA 10.57UA	Composition	-	-	-	WI	-	-	-	143	-	-
1961-S245	2437508-35	1961 Aug 16 2027	Nike Apache	-	MASA 14.02GT	CCA Ionos 3	-	-	-	WI	-	-	-	182	-	-
1961-S248	2437509-63	1961 Aug 19 0906	Nike Apache	-	MASA 14.02GT	ELF D-region	-	-	-	WI	-	-	-	141	-	-
1961-S257	2437510-24	1961 Sep 7 1817	Nike Asp	-	ISRC-RS-06	-	-	-	-	EGE	-	-	-	200?	-	-
1961-S271	2437510-26	1961 Sep 7 1817	Nike Asp	-	ISRC-RS-07	-	-	-	-	SDQ	-	-	-	100	-	-
1961-S272	2437510-67	1961 Sep 8 0411	Nike Cajun	-	ISRC-RS-08	-	-	-	-	SDQ	-	-	-	145	-	-
1961-S273	2437510-67	1961 Sep 8 0411	Nike Cajun	-	ISRC-RS-09	-	-	-	-	SDQ	-	-	-	97	-	-
1961-A202	2437518-92	1961 Sep 16 1002	Nike Asp	-	MASA 03.09CA	CCA Release 14 Ha	-	-	-	WI	-	-	-	88	-	-
1961-S297	2437519-53	1961 Sep 16 2355	Nike Cajun	-	MASA 10.36GA	GSFC Green-Sphere 1	-	-	-	WI	-	-	-	208	-	-
1961-S298	2437519-53	1961 Sep 17 0039	Nike Asp	-	MASA 03.18CA	CCA Release 15 Ha	-	-	-	WI	-	-	-	273	-	-
1961-S290	2437519-92	1961 Sep 17 1033	Nike Asp	-	MASA 03.19CA	CCA Release 16 Ha	-	-	-	WI	-	-	-	92	-	-
1961-S291	2437519-93	1961 Sep 17 1013	Nike Cajun	-	MASA 10.37GA	GSFC Green-Sphere 2	-	-	-	WI	-	-	-	128	-	-
1961-S299	2437519-93	1961 Sep 26 2156	Nike Cajun	-	086-16	-	-	-	-	WI	-	-	-	38	-	-
1961-A375	2437522-50	1961 Oct 10 1610	Nike	-	Smoke 018	Cree Test 40-13	-	-	-	EGE	-	-	-	12	-	-
1961-A222	2437527-17	1961 Oct 24 1610	Nike	-	MASA 10.53CT	CCA Ionos 4	-	-	-	WI	-	-	-	148	-	-
1961-S256	2437529-90	1961 Oct 27 0935	Nike Cajun	-	MASA 10.53CT	Cree Test 41-14	-	-	-	EGE	-	-	-	45	-	-
1961-A273	2437604-50	1961 Nov 1	Nike Cree	-	-	Speedball	-	-	-	KMR	-	-	-	100?	-	-
1961-S373	2437621-77	1961 Nov 15	Nike Apache	-	Smoke 019	Airglow	-	-	-	WI	-	-	-	142	-	-
1961-A238	2437626-15	1961 Nov 18 0630	Nike	-	MASA 10.72MA	Anticoral radiation	-	-	-	WI	-	-	-	12	-	-
1961-S419	2437644-21	1961 Dec 10 1701	Nike Cajun	-	Smoke 019	Structure	-	-	-	FC	-	-	-	132	-	-
1961-A432	2437655-33	1961 Dec 21 1954	Nike Cajun	-	MASA 10.64GT	-	-	-	-	WI	-	-	-	132	-	-
1961-S433	2437655-40	1961 Dec 21 2131	Nike Cajun	-	Smoke 020	-	-	-	-	WI	-	-	-	99	-	-
1962-A08	2437681-38	1962 Jan 16 2110	Nike	-	CRL A415.109	Day Airglow	-	-	-	WI	-	-	-	250	-	-
1962-S30	2437694-33	1962 Jan 29 2000	Astrobee 200	-	Smoke 021	-	-	-	-	EGE	-	-	-	17	-	-
1962-A17	2437702-29	1962 Feb 6 1900	Nike Apache	-	Smoke 021	-	-	-	-	WI	-	-	-	150?	-	-
1962-S627	2437696-50	1962 Feb 6	Nike Apache	-	MASA 10.90UA	Composition	-	-	-	KMR	-	-	-	150?	-	-
1962-S628	2437701-50	1962 Feb 6	Nike Apache	-	A46-167	7-inch Sphere	-	-	-	WI	-	-	-	132	-	-
1962-S44	2437716-06	1962 Feb 20 1328	Nike Cajun	-	MASA 10.100CA	GCA Release 17 Ha	-	-	-	EGE	-	-	-	144	-	-
1962-S52	2437725-21	1962 Mar 1 2303	Nike Cajun	-	MASA 10.69GT	Water test	-	-	-	WI	-	-	-	16	-	-
1962-S53	2437725-47	1962 Mar 1 2323	Nike Cajun	-	-	-	-	-	-	WI	-	-	-	150?	-	-
1962-A30	2437725-48	1962 Mar 1 2330	Nike Cajun	-	-	-	-	-	-	KMR	-	-	-	16	-	-
1962-S629	2437725-50	1962 Mar 2	Nike Apache	-	-	-	-	-	-	KMR	-	-	-	150?	-	-

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Mission	FlightCode	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee km	Range km	Dest
1962-564	2437725-50	1962 Mar 2 0001	Nike Cajun	-	MASA 10-386A	GSFC Grenade 17	-	-	-	WI	-	-	-	113	-	-
1962-565	2437725-96	1962 Mar 2 1047	Nike Cajun	-	MASA 10-70GT	Water test	-	-	-	WI	-	-	-	146	-	-
1962-566	2437725-96	1962 Mar 2 1054	Nike Cajun	-	MASA 10-101CA	GCA Release 18 Ha	-	-	-	WI	-	-	-	134	-	-
1962-567	2437725-97	1962 Mar 2 1115	Nike Cajun	-	MASA 10-396A	GSFC Grenade 18	-	-	-	WI	-	-	-	116	-	-
1962-5630	2437735-50	1962 Mar 12	Nike Apache	-	-	SPEEDBALL SR-8	-	-	-	KMR	RU	-	-	1507	-	-
1962-5631	2437735-50	1962 Mar 12	Nike Apache	-	-	SPEEDBALL SR-9	-	-	-	KMR	RU	-	-	1507	-	-
1962-5632	2437735-50	1962 Mar 15	Nike Apache	-	-	SPEEDBALL SR-10	-	-	-	KMR	RU	-	-	1507	-	-
1962-5633	2437735-50	1962 Mar 16	Nike Apache	-	-	IR atmosphere	-	-	-	EGL	RU	-	-	1007	-	-
1962-5634	2437735-50	1962 Mar 20	Nike Apache	-	-	SPEEDBALL SR-11	-	-	-	KMR	RU	-	-	1507	-	-
1962-5635	2437744-20	1962 Mar 21	Nike Apache	-	-	SPEEDBALL SR-12	-	-	-	KMR	RU	-	-	1507	-	-
1962-575	2437747-49	1962 Mar 23 2344	Nike Cajun	-	MASA 10-102CA	GCA Release 19 Ha	-	-	-	WI	-	-	-	142	-	-
1962-576	2437747-49	1962 Mar 23 2354	Nike Cajun	-	MASA 10-40GA	GSFC Gren-Sphere 3	-	-	-	WI	-	-	-	121	-	-
1962-578	2437751-49	1962 Mar 27 2348	Nike Cajun	-	MASA 10-103CA	GCA Release 20 Ha	-	-	-	WI	-	-	-	117	-	-
1962-580	2437751-50	1962 Mar 28 0003	Nike Cajun	-	MASA 10-41GA	GSFC Grenade 19	-	-	-	WI	-	-	-	123	-	-
1962-582	2437764-50	1962 Apr	Nike Cajun	-	-	-	-	-	-	WS	-	-	-	1007	-	-
1962-583	2437764-50	1962 Apr	Nike Cajun	-	-	-	-	-	-	WS	-	-	-	1007	-	-
1962-584	2437764-50	1962 Apr	Nike Cajun	-	-	-	-	-	-	WS	-	-	-	11	-	-
1962-586	2437759-37	1962 Apr 4 2050	Nike Apache	-	Smoke 022	-	-	-	-	WI	-	-	-	70	-	-
1962-587	2437759-69	1962 Apr 5 0431	Nike Apache	-	MASA 10-79MA	Ozone release	-	-	-	WI	-	-	-	119	-	-
1962-590	2437759-69	1962 Apr 17 0928	Nike Apache	-	MASA 10-42GA	GSFC Grenade 20	-	-	-	WI	-	-	-	201	-	-
1962-5100	2437771-39	1962 Apr 17 0943	Nike Asp	-	MASA 03-20CA	GCA Release 21 Ha	-	-	-	WI	-	-	-	221	-	-
1962-5105	2437773-31	1962 Apr 18 1352	Astrosbee 200	-	CAL AA15-285	Mid-latitude B field	-	-	-	EGL	-	-	-	128	-	-
1962-5110	2437781-17	1962 Apr 26 1600	Nike Cajun	-	MASA 10-110GT	Japan/US Ionos-1	-	-	-	WI	-	-	-	265	-	-
1962-5117	2437785-27	1962 Apr 30 1536	Astrosbee 200	-	CAL AA15-196	-	-	-	-	EGL	-	-	-	9	-	-
1962-566	2437789-35	1962 May 4 2030	Nike	-	Smoke 023	-	-	-	-	WI	-	-	-	12	-	-
1962-567	2437789-35	1962 May 4 2030	Nike	-	Smoke 024	-	-	-	-	WI	-	-	-	18	-	-
1962-568	2437789-35	1962 May 4 2030	Nike	-	Smoke 025	-	-	-	-	WI	-	-	-	15	-	-
1962-569	2437790-28	1962 May 5 1640	Nike	-	Smoke 026	-	-	-	-	WI	-	-	-	121	-	-
1962-5131	2437801-21	1962 May 16 1703	Nike Cajun	-	MASA 10-112GT	Japan/US Ionos-2	-	-	-	WI	-	-	-	127	-	-
1962-5133	2437801-59	1962 May 17 0204	Nike Cajun	-	MASA 10-111GT	Japan/US Ionos-3	-	-	-	WI	-	-	-	136	-	-
1962-5136	2437805-25	1962 May 18 1501	Nike Cajun	-	MASA 10-910A	Composition	-	-	-	WI	-	-	-	15	-	-
1962-565	2437810-24	1962 May 25 1740	Nike	-	Smoke 027	-	-	-	-	WI	-	-	-	1007	-	-
1962-5153	2437816-50	1962 Jun 1	Nike Cajun	-	FB-1	UH Pilot 1	-	-	-	WI	-	-	-	125	-	-
1962-5171	2437822-49	1962 Jun 6 2340-00	Nike Apache	-	MASA 14-190A	GSFC Gren-Sphere 4	-	-	-	WI	-	-	-	120	-	-
1962-5175	2437822-50	1962 Jun 7 0095	Nike Cajun	-	MASA 10-45GA	GCA Release 22 Ha	-	-	-	WI	-	-	-	162	-	-
1962-5176	2437822-50	1962 Jun 7 0095	Nike Asp	-	MASA 03-21CA	GCA Release 23 Ha	-	-	-	WI	-	-	-	94	-	-
1962-5177	2437822-51	1962 Jun 7 0652	Nike Asp	-	MASA 03-22CA	Ha release	-	-	-	SDM	-	-	-	126	-	-
1962-5178	2437823-11	1962 Jun 7 1445	Nike Cajun	-	Neobar 1	-	-	-	-	SDM	-	-	-	117	-	-
1962-5180	2437823-54	1962 Jun 8 0095	Nike Cajun	-	MASA 10-46GA	GSFC Grenade 21	-	-	-	WI	-	-	-	116	-	-
1962-5182	2437827-12	1962 Jun 11 1450	Nike Cajun	-	Nebar 2	Ha release	-	-	-	WI	-	-	-	146	-	-
1962-5186	2437831-50	1962 Jun 15 1648	Nike Apache	-	MASA 14-12GT	-	-	-	-	WI?	-	-	-	200?	-	-
1962-5190	2437834-50	1962 Jun 17	Nike Cajun	-	FB-2	-	-	-	-	WI?	-	-	-	200?	-	-
1962-5204	2437845-51	1962 Jun 26 1410-00	Nike Asp	-	-	-	-	-	-	WI?	-	-	-	100?	-	-
1962-5206	2437845-51	1962 Jun 26 0010-00	Nike Asp	-	-	-	-	-	-	WI?	-	-	-	100?	-	-
1962-5217	2437846-50	1962 Jul 1	Nike Cajun	-	7-inch Sphere	-	-	-	-	WI	-	-	-	137?	-	-
1962-5227	2437855-50	1962 Jul 6 0615?	Nike Cajun	-	7-inch Sphere	-	-	-	-	WI	-	-	-	137?	-	-
1962-5230	2437854-76	1962 Jul 9 0807?	Nike Cajun	-	Project 9.1 Ha	-	-	-	-	WI	Pad 21	-	-	137?	-	-
1962-5231	2437854-85	1962 Jul 9 0807?	Nike Cajun	-	Project 9.1 Ha	-	-	-	-	WI	Pad 20	-	-	172	-	-
1962-5232	2437854-87	1962 Jul 9 0856-34	Nike Apache	-	Project 9.1 Ha	-	-	-	-	WI	Pad 14	-	-	159	-	-
1962-5233	2437854-87	1962 Jul 9 0856-39	Nike Apache	-	Project 9.1 Ha	-	-	-	-	WI	Pad 10	-	-	159	-	-
1962-5234	2437854-87	1962 Jul 9 0856-40	Nike Apache	-	SJ1-12	STARFISH X-ray/Beata	-	-	-	WI	Pad 6	-	-	159	-	-
1962-5235	2437854-87	1962 Jul 9 0856-41	Nike Apache	-	SJ1-11	STARFISH X-ray/RCS	-	-	-	WI	Pad 8	-	-	159	-	-
1962-5236	2437854-87	1962 Jul 9 0856-42	Nike Apache	-	SJ1-10	STARFISH X-ray/RCS	-	-	-	WI	Pad 9	-	-	176	-	-
1962-5237	2437854-87	1962 Jul 9 0857-48	Nike Apache	-	SJ3-151	STARFISH RCS	-	-	-	WI	Pad 13	-	-	167	-	-
1962-5238	2437854-87	1962 Jul 9 0857-48	Nike Apache	-	SJ1-153	STARFISH X-ray	-	-	-	KAU	-	-	-	157	-	-
1962-5239	2437854-87	1962 Jul 9 0856-44	Nike Apache	-	SKL-111	STARFISH Neutron	-	-	-	KAU	-	-	-	157	-	-
1962-5240	2437854-87	1962 Jul 9 0856-44	Nike Apache	-	SKL-111	STARFISH Neutron	-	-	-	KAU	-	-	-	157	-	-
1962-5241	2437854-87	1962 Jul 9 0856-44	Nike Apache	-	SKL-115	STARFISH Neutron	-	-	-	KAU	-	-	-	156	-	-
1962-5242	2437854-87	1962 Jul 9 0856-44	Nike Apache	-	SKL-115	STARFISH Alpha	-	-	-	KAU	-	-	-	157	-	-
1962-5243	2437854-87	1962 Jul 9 0856-44	Nike Apache	-	SKL-131	STARFISH Neutron	-	-	-	KAU	-	-	-	156	-	-
1962-5244	2437854-87	1962 Jul 9 0856-44	Nike Apache	-	SKL-137	STARFISH Neutron	-	-	-	KAU	-	-	-	155	-	-
1962-5245	2437854-87	1962 Jul 9 0856-44	Nike Apache	-	SKL-151	STARFISH T-tail	-	-	-	KAU	-	-	-	159	-	-
1962-5246	2437854-87	1962 Jul 9 0856-44	Nike Apache	-	SKL-154	STARFISH Maint-Gamma	-	-	-	KAU	-	-	-	159	-	-
1962-5247	2437854-87	1962 Jul 9 0856-54	Nike Apache	-	SKL-113	STARFISH X-gamma	-	-	-	KAU	-	-	-	159	-	-
1962-5248	2437854-87	1962 Jul 9 0856-54	Nike Apache	-	SKL-114	STARFISH X-gamma	-	-	-	KAU	-	-	-	155	-	-
1962-5249	2437854-87	1962 Jul 9 0856-54	Nike Apache	-	SKL-133	STARFISH X-ray	-	-	-	KAU	-	-	-	155	-	-
1962-5250	2437854-87	1962 Jul 9 0856-54	Nike Apache	-	SKL-138	STARFISH X-ray	-	-	-	KAU	-	-	-	157	-	-
1962-5251	2437854-87	1962 Jul 9 0857-00	Nike Apache	-	SKL-136	STARFISH Alpha	-	-	-	KAU	-	-	-	144	-	-
1962-5252	2437854-87	1962 Jul 9 0857-00	Nike Apache	-	SKL-124	STARFISH T-tail	-	-	-	KAU	-	-	-	157	-	-
1962-5253	2437854-87	1962 Jul 9 0857-05	Nike Apache	-	SKL-152	STARFISH T-tail	-	-	-	KAU	-	-	-	143	-	-
1962-5254	2437854-87	1962 Jul 9 0857-05	Nike Apache	-	SKL-155	STARFISH Maint-Gamma	-	-	-	KAU	-	-	-	139	-	-
1962-5255	2437854-87	1962 Jul 9 0857-14	Nike Apache	-	SKL-157	STARFISH X-ray	-	-	-	KAU	-	-	-	143	-	-
1962-5256	2437854-87	1962 Jul 9 0857-14	Nike Apache	-	SKL-156	STARFISH Gamma	-	-	-	KAU	-	-	-	118?	-	-
1962-5257	2437854-87	1962 Jul 9 0859-20	Nike Cajun	-	Project 9.1 Sphere	STARFISH Mass spec	-	-	-	WI	Pad 16	-	-	157	-	-
1962-5258	2437854-87	1962 Jul 9 0859-20	Nike Apache	-	SKL-132	STARFISH Neutron	-	-	-	KAU	-	-	-	159	-	-
1962-5259	2437854-87	1962 Jul 9 0859-20	Nike Apache	-	SKL-135	STARFISH Gamma	-	-	-	KAU	-	-	-	159	-	-
1962-5260	2437854-87	1962 Jul 9 0859-20	Nike Apache	-	SKL-136	STARFISH Gamma	-	-	-	KAU	-	-	-	159	-	-
1962-5261	2437854-88	1962 Jul 9 0903-40?	Nike Apache	-	Project 6.13	STARFISH Speedball	-	-	-	WI	Pad 3	-	-	230?	-	-
1962-5262	2437854-88	1962 Jul 9 0911-10?	Nike Apache	-	Project 6.13	STARFISH Speedball	-	-	-	WI	Pad 26	-	-	230?	-	-
1962-5263	2437854-88	1962 Jul 9 0909?	Nike Cajun	-	Project 9.1 Sphere	STARFISH Mass spec	-	-	-	WI	Pad 15	-	-	118?	-	-
1962-5264	2437854-92	1962 Jul 9 0931?	Nike Apache	-	Project 6.13	STARFISH Speedball	-	-	-	WI	Pad 27	-	-	230?	-	-
1962-5265	2437854-92	1962 Jul 9 0959	Nike Apache	-	SJ3-152	STARFISH RCS	-	-	-	WI	Pad 11	-	-	137	-	-
1962-5266	2437856-16	1962 Jul 10 1549?	Nike Cajun	-	Project 9.1 Ha	STARFISH Ns	-	-	-	WI	Pad 21	-	-	137?	-	-
1962-5246	2437864-86	1962 Jul 19 0840	Nike Cajun	-	FB-4	7-inch Sphere	-	-	-	WI	-	-	-	100?	-	-
1962-5249	2437868-50	1962 Jul 23	Nike Cajun	-	FB-4	Sphere/Mass spec	-	-	-	WI	-	-	-	105	-	-
1962-5281	2437883-53	1962 Aug 7 0047-08	Nike Cajun	-	RTG K62-1	-	-	-	-	KROD	-	-	-	16	-	-
1962-5132	2437885-30	1962 Aug 8 1915	Nike	-	Smoke 303	-	-	-	-	CC	-	-	-	-	-	-

Launch_Tag	Launch_Tag	Launch_ID	Variant	Flight_ID	Flight	Mission	FlightCode	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee km	Range km	Dest	
Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Mission	FlightCode	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee km	Range km	Dest
1962-S293	2437887-56	1962 Aug 11 0148:11	Nike Cajun	-	RTG K62-3	Air sample	-	-	KRDN	-	-	-	105	-	-	-
1962-S297	2437894-80	1962 Aug 18 0709	Nike Cajun	-	Ferdinand 1	Ferdinand 1	-	-	AND	-	-	-	100	-	-	-
1962-S298	2437895-54	1962 Aug 19 0057:39	Nike Cajun	-	RTG K62-4	Air sample	-	-	KRDN	-	-	-	109	-	-	-
1962-S309	2437900-22	1962 Aug 23 1710	Nike Apache	-	MASA 14-30CA	Structure	-	-	WI	-	-	-	129	-	-	-
1962-S64	2437905-32	1962 Aug 27 0653	Nike Cajun	-	-	Mariner Exhaust Expt.	-	-	VNC	-	-	-	61	-	-	-
1962-S315	2437905-32	1962 Aug 28 1934	Nike Cajun	-	AC6-829	EM Absorption	-	-	EGL	-	-	-	148	-	-	-
1962-S317	2437907-54	1962 Aug 29 1900	Nike Cajun	-	AC6-830	EM Absorption	-	-	EGL	-	-	-	100?	-	-	-
1962-S520	2437907-54	1962 Aug 31 0056:07	Nike Cajun	-	RTG K62-5	Air sample	-	-	KRDN	-	-	-	111	-	-	-
1962-A158	2437933-35	1962 Sep 25 2028	Nike	-	Smoke 304	-	-	-	CC	-	-	-	11	-	-	-
1962-A160	2437934-84	1962 Sep 27 0808:00	Nike	-	-	-	-	-	CC	-	-	-	10?	-	-	-
1962-A164	2437941-35	1962 Oct 3 2030	Nike Cajun	-	Smoke 302	-	-	-	CC	-	-	-	15	-	-	-
1962-S382	2437944-50	1962 Oct 7	Nike	-	-	-	-	-	EGL	-	-	-	100?	-	-	-
1962-A167	2437946-29	1962 Oct 8 1900	Nike	-	Smoke 305	-	-	-	CC	-	-	-	15	-	-	-
1962-A169	2437948-35	1962 Oct 10 2030	Nike	-	Smoke 306	-	-	-	CC	-	-	-	16	-	-	-
1962-S386	2437948-52	1962 Oct 11 0030	Nike Cajun	-	-	-	-	-	EGL	-	-	-	100?	-	-	-
1962-S391	2437949-36	1962 Oct 11 2033:00	Nike Cajun	-	-	-	-	-	EGL	-	-	-	67	-	-	-
1962-S394	2437952-97	1962 Oct 15 1115	Nike Cajun	-	AC6-441	Firefly III BONNIE	-	-	EGL	Pad 2	-	-	91	-	-	-
1962-S395	2437953-17	1962 Oct 16 1115	Nike Apache	-	AC6-494	Firefly III ALICE	-	-	EGL	Pad 2	-	-	90	-	-	-
1962-S396	2437954-13	1962 Oct 16 1506	Nike Cajun	-	MASA 14-31GI	GCA Ionos 5/CPPE	-	-	WI	-	-	-	166	-	-	-
1962-S397	2437954-53	1962 Oct 17 0040	Nike Cajun	-	AC6-443	Firefly III DGMNR	-	-	EGL	Pad 2	-	-	89	-	-	-
1962-S398	2437954-97	1962 Oct 17 1116	Nike Cajun	-	AC6-442	Firefly III CHNDT	-	-	EGL	Pad 2	-	-	86	-	-	-
1962-S399	2437955-16	1962 Oct 17 1552	Nike Cajun	-	AC6-552	VLF Propagation	-	-	WI	-	-	-	141	-	-	-
1962-S402	2437955-54	1962 Oct 18 0100	Nike Cajun	-	AC6-435	Firefly III RHEDA	-	-	EGL	Pad 2	-	-	86	-	-	-
1962-S404	2437956-97	1962 Oct 19 1117	Nike Cajun	-	AC6-438	Firefly III QUEENIE	-	-	EGL	Pad 2	-	-	91	-	-	-
1962-A174	2437957-33	1962 Oct 19 1953	Nike	-	Smoke 307	-	-	-	CC	-	-	-	16	-	-	-
1962-S407	2437957-88	1962 Oct 20 0900	Nike Cajun	-	FB-7	Sphere	-	-	J1	-	-	-	100?	-	-	-
1962-S414	2437959-97	1962 Oct 22 1119:00	Nike	-	AC6-448	Firefly III LOUISE	-	-	EGL	Pad 2	-	-	100?	-	-	-
1962-S415	2437960-97	1962 Oct 22 1119:00	Nike	-	AC6-448	Firefly III KITTY	-	-	EGL	Pad 3	-	-	100?	-	-	-
1962-S419	2437962-50	1962 Oct 25 0630	Nike Cajun	-	AC6-446	Mass spectrometer	-	-	EGL	Pad 3	-	-	100?	-	-	-
1962-S421	2437962-77	1962 Oct 25 0630	Nike Cajun	-	AC6-444	Firefly III BHD	-	-	EGL	Pad 3	-	-	137	-	-	-
1962-S423	2437962-95	1962 Oct 26 1015	Nike Cajun	-	AC6-457	Firefly III PAULA	-	-	EGL	Pad 3	-	-	96	-	-	-
1962-S426	2437963-50	1962 Oct 26	Nike Cajun	-	FB-6	Mass spectrometer	-	-	EGL	-	-	-	100?	-	-	-
1962-S427	2437963-50	1962 Oct 26	Nike Cajun	-	-	Ionos winds	-	-	J1	-	-	-	100?	-	-	-
1962-S436	2437964-50	1962 Oct 27	Nike Cajun	-	-	Sphere	-	-	J1	-	-	-	100?	-	-	-
1962-A180	2437967-34	1962 Oct 29 2013	Nike	-	Smoke 308	-	-	-	J1	-	-	-	13	-	-	-
1962-S462	2437969-96	1962 Nov 1 1125	Nike Cajun	-	AC6-459	Firefly III RUBY	-	-	CC	-	-	-	100?	-	-	-
1962-S466	2437970-01	1962 Nov 1 1220	Nike Cajun	-	FB-5	Sphere	-	-	EGL	Pad 2	-	-	100?	-	-	-
1962-A186	2437970-35	1962 Nov 1 2002	Nike	-	Smoke 309	-	-	-	J1	-	-	-	13	-	-	-
1962-S460	2437970-82	1962 Nov 2 0754	Nike Cajun	-	FB-9	Ionos winds	-	-	EGL	Pad 2	-	-	100?	-	-	-
1962-S461	2437971-50	1962 Nov 3	Nike Cajun	-	AC6-436	Firefly III CAROL	-	-	J1	-	-	-	100?	-	-	-
1962-S462	2437971-50	1962 Nov 3	Nike Cajun	-	-	Ionos winds	-	-	J1	-	-	-	100?	-	-	-
1962-S464	2437972-50	1962 Nov 4	Nike	-	-	Ionos winds	-	-	J1	-	-	-	100?	-	-	-
1962-S465	2437972-50	1962 Nov 5 1129	Nike	-	-	Ionos winds	-	-	EGL	Pad 2	-	-	97	-	-	-
1962-S466	2437973-98	1962 Nov 5 2129	Nike	-	AC6-440	Firefly III SMALLY	-	-	EGL	-	-	-	91	-	-	-
1962-S471	2437974-38	1962 Nov 5 6603	Nike	-	Smoke 310	-	-	-	EGL	-	-	-	68	-	-	-
1962-S477	2437975-37	1962 Nov 6 0900	Nike	-	AC6-445	Firefly III BEVERLY	-	-	CC	-	-	-	99	-	-	-
1962-A191	2437975-93	1962 Nov 7 1035	Nike	-	Smoke 311	-	-	-	EGL	Pad 2	-	-	91	-	-	-
1962-S479	2437975-93	1962 Nov 7 1035	Nike	-	MASA 10-19RCI	GCA Ionos 6	-	-	WI	-	-	-	132	-	-	-
1962-S480	2437975-95	1962 Nov 7 1035	Nike	-	MASA 10-16CA	GCA Release 24 ha	-	-	WI	-	-	-	165	-	-	-
1962-A194	2437976-31	1962 Nov 13 1930	Nike Apache	-	MASA 10-15CA	GCA Release 24 ha	-	-	CC	-	-	-	15	-	-	-
1962-A197	2437976-71	1962 Nov 16 0859	Nike	-	MASA 10-15CA	GCA Release 24 ha	-	-	CC	-	-	-	16	-	-	-
1962-A198	2437976-24	1962 Nov 16 1745	Nike	-	Smoke 308	-	-	-	CC	-	-	-	18	-	-	-
1962-S485	2437985-24	1962 Nov 16 2023	Nike	-	Smoke 313	-	-	-	CC	-	-	-	19	-	-	-
1962-S486	2437985-24	1962 Nov 16 2023	Nike	-	Smoke 313	-	-	-	CC	-	-	-	18	-	-	-
1962-S516	2437988-96	1962 Nov 30 1057	Nike	-	MASA 10-10RCI	GCA Ionos 7	-	-	WI	-	-	-	170	-	-	-
1962-S504	2437988-97	1962 Nov 30 1115	Nike Apache	-	MASA 14-17CA	GCA Ionos 6/real ha	-	-	NS	-	-	-	100?	-	-	-
1962-S504	2437988-50	1962 Dec	Nike Apache	-	PHRS	-	-	-	NS	-	-	-	100?	-	-	-
1962-S505	2437988-50	1962 Dec	Nike Apache	-	PHRS	-	-	-	NS	-	-	-	100?	-	-	-
1962-S517	2438000-25	1962 Dec 1 1806	Nike	-	PHRS	-	-	-	NS	-	-	-	169	-	-	-
1962-S518	2438000-36	1962 Dec 1 2034:00	Nike Apache	-	MASA 14-32GT	MASA 14-32GT	-	-	WI	-	-	-	131	-	-	-
1962-S519	2438000-39	1962 Dec 1 2125	Nike	-	MASA 14-20UA	UM Pitot 2	-	-	WI	-	-	-	126	-	-	-
1962-S520	2438000-40	1962 Dec 1 2134	Nike	-	MASA 10-45GA	CSFC Grenade 23	-	-	WI	-	-	-	108	-	-	-
1962-S521	2438000-47	1962 Dec 1 2320	Nike Apache	-	MASA 10-68GA	CSFC Grenade 24	-	-	FC	-	-	-	222	-	-	-
1962-S522	2438002-47	1962 Dec 3 2320	Nike Apache	-	MASA 14-45AA/AC5-465	Firefly III TERRY	-	-	EGL	Pad 2	-	-	222	-	-	-
1962-S524	2438002-47	1962 Dec 4 0001	Nike Apache	-	MASA 14-46AA/AC5-468	Firefly III SHARON	-	-	EGL	Pad 3	-	-	150?	-	-	-
1962-S525	2438002-60	1962 Dec 4 0345	Nike Apache	-	AC5-466	Firefly III ILY	-	-	EGL	Pad 3	-	-	135	-	-	-
1962-S527	2438002-60	1962 Dec 4 0706	Nike Apache	-	AC5-467	Firefly III ESTHER	-	-	EGL	Pad 3	-	-	114	-	-	-
1962-S527	2438002-80	1962 Dec 4 0719	Nike	-	MASA 10-67GA	CSFC Grenade 25	-	-	FC	-	-	-	60	-	-	-
1962-S528	2438002-80	1962 Dec 4 0719	Nike	-	MASA 10-46GA	CSFC Grenade 26	-	-	WI	-	-	-	50	-	-	-
1962-A212	2438003-34	1962 Dec 4 2007	Nike	-	Smoke 314	-	-	-	CC	-	-	-	128	-	-	-
1962-S534	2438004-42	1962 Dec 5 2200	Nike	-	MASA 10-10RCI	GCA Ionos 9	-	-	WI	-	-	-	100?	-	-	-
1962-S536	2438004-43	1962 Dec 5 2216	Nike	-	MASA 14-18CA	GCA Ionos 10/real ha	-	-	WI	-	-	-	119	-	-	-
1962-S537	2438004-73	1962 Dec 6 0532	Nike	-	MASA 10-47CA	CSFC Grenade 27	-	-	FC	-	-	-	122	-	-	-
1962-S538	2438004-74	1962 Dec 6 0543	Nike	-	MASA 10-66GA	CSFC Grenade 28	-	-	FC	-	-	-	14	-	-	-
1962-A214	2438005-39	1962 Dec 6 2120	Nike	-	Smoke 315	-	-	-	CC	-	-	-	16	-	-	-
1962-A217	2438009-23	1962 Dec 10 1730	Nike	-	Smoke 316	-	-	-	CC	-	-	-	16	-	-	-
1962-S549	2438009-50	1962 Dec 11 0130	Nike	-	ISRC-BS-?	-	-	-	AND	Pad 3	-	-	100?	-	-	-
1962-S551	2438009-56	1962 Dec 11 0130	Nike	-	AC6-447	Firefly III DANIA	-	-	EGL	-	-	-	108	-	-	-
196																

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Launch_Mission	FlightCode	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee km	Range km	Dest
1962-A233	2438019.32	1962 Dec 20 1947	Mike	-	Smoke 323	-	-	-	-	CC	-	-	-	16	-	-
1962-A235	2438020.23	1962 Dec 21 1726	Mike	-	Smoke 324	-	-	-	-	CC	-	-	-	15	-	-
1962-A238	2438027.25	1962 Dec 28 1507	Mike	-	Smoke 325	-	-	-	-	CC	-	-	-	21	-	-
1963-S02	2438029.50	1963 Jan	Mike Apache	?	BRRS	-	-	-	-	WS	-	-	-	1000?	-	-
1963-S03	2438033.33	1963 Jan 3 1958	Mike Apache	?	BRRS	-	-	-	-	WS	-	-	-	1000?	-	-
1963-A05	2438033.33	1963 Jan 3 1958	Mike	-	Smoke 326	-	-	-	-	CC	-	-	-	14	-	-
1963-A06	2438033.38	1963 Jan 3 2100	Mike	-	Smoke 327	-	-	-	-	CC	-	-	-	12	-	-
1963-A07	2438034.33	1963 Jan 4 2000	Mike	-	Smoke 328	-	-	-	-	CC	-	-	-	15	-	-
1963-A09	2438039.25	1963 Jan 9 1800	Mike	-	Smoke 330	-	-	-	-	CC	-	-	-	15	-	-
1963-A10	2438040.31	1963 Jan 10 1930	Mike	-	Smoke 331	-	-	-	-	CC	-	-	-	21	-	-
1963-A11	2438041.32	1963 Jan 11 1942	Mike	-	Smoke 332	-	-	-	-	CC	-	-	-	16	-	-
1963-A08	2438046.57	1963 Jan 17 0144	Mike Cajun	-	MASA 10.800IA	-	Ozone release	-	-	WI	-	-	-	74	-	-
1963-A12	2438047.39	1963 Jan 17 2117	Mike	-	Smoke 333	-	-	-	-	CC	-	-	-	15	-	-
1963-A13	2438048.43	1963 Jan 18 2217	Mike	-	Smoke 334	-	-	-	-	CC	-	-	-	15	-	-
1963-A14	2438052.32	1963 Jan 22 1946	Mike	-	Smoke 335	-	-	-	-	CC	-	-	-	15	-	-
1963-A15	2438055.25	1963 Jan 26 1500	Mike	-	Smoke 336	-	-	-	-	CC	-	-	-	16	-	-
1963-A18	2438061.33	1963 Jan 31 2000	Mike Apache	?	BRRS	-	-	-	-	WS	-	-	-	1000?	-	-
1963-S28	2438060.50	1963 Feb 7 1745	Mike Apache	-	Smoke 338	-	-	-	-	CC	-	-	-	22	-	-
1963-A21	2438065.24	1963 Feb 12?	Mike Cajun	-	TROOP	-	-	-	-	CC	-	-	-	1000?	-	-
1963-S639	2438072.50	1963 Feb 13 1815	Mike	-	Smoke 339	-	-	-	-	CC	-	-	-	16	-	-
1963-A22	2438074.26	1963 Feb 13 1815	Mike	-	Smoke 340	-	-	-	-	CC	-	-	-	28	-	-
1963-A26	2438079.47	1963 Feb 16 2314	Mike Asp	-	MASA 03.11CA	-	GCA Release 25 Ila	-	-	WI	-	-	-	18	-	-
1963-A27	2438081.31	1963 Feb 20 1930	Mike Apache	-	Smoke 340	-	-	-	-	CC	-	-	-	18	-	-
1963-S69	2438081.47	1963 Feb 20 2318	Mike Apache	-	MASA 14.35CA	-	GCA Grenade 1/Rel. Ila	-	-	WI	-	-	-	164	-	-
1963-S80	2438081.46	1963 Feb 20 2334	Mike Cajun	-	MASA 10.56GA	-	GSFC Grenade 29	-	-	FC	-	-	-	113	-	-
1963-S81	2438081.49	1963 Feb 20 2347	Mike Cajun	-	MASA 10.46GA	-	GSFC Grenade 30	-	-	WI	-	-	-	113	-	-
1963-S83	2438082.47	1963 Feb 21 2316	Mike Apache	-	MASA 14.39CA	-	GCA Grenade 2	-	-	WI	-	-	-	172	-	-
1963-S87	2438088.31	1963 Feb 27 1930:00	Mike Apache	-	MASA 14.36CI	-	GCA Ionos 11	-	-	WI	-	-	-	151	-	-
1963-A28	2438088.31	1963 Feb 27 1930	Mike	-	Smoke 341	-	-	-	-	CC	-	-	-	14	-	-
1963-S74	2438089.41	1963 Feb 28 2146	Mike Cajun	-	MASA 10.59GA	-	GSFC Grenade 31	-	-	FC	-	-	-	113	-	-
1963-S75	2438089.42	1963 Feb 28 2146	Mike Cajun	-	MASA 10.53GA	-	GSFC Grenade 32	-	-	WI	-	-	-	103	-	-
1963-S70	2438088.50	1963 Mar	Mike Apache	?	BRRS	-	-	-	-	WS	-	-	-	1000?	-	-
1963-S71	2438088.50	1963 Mar	Mike Apache	?	BRRS	-	-	-	-	WS	-	-	-	1000?	-	-
1963-A237	2438097.04	1963 Mar 8 1300	Mike Cree	-	Smoke 342	-	-	-	-	EOL	-	-	-	68	-	-
1963-A53	2438097.31	1963 Mar 8 1920	Mike Cree	-	Smoke 342	-	-	-	-	EOL	-	-	-	20	-	-
1963-S84	2438097.31	1963 Mar 8 1930	Mike Apache	-	MASA 14.107GI	-	-	-	-	WI	-	-	-	155	-	-
1963-S88	2438097.50	1963 Mar 9 0001	Mike Apache	-	MASA 10.60GA	-	GSFC Grenade 33	-	-	FC	-	-	-	117	-	-
1963-S86	2438097.50	1963 Mar 9 0001	Mike Cajun	-	MASA 10.54GA	-	GSFC Grenade 34	-	-	WI	-	-	-	119	-	-
1963-A36	2438100.40	1963 Mar 11 2130	Mike	-	Smoke 343	-	-	-	-	CC	-	-	-	14	-	-
1963-A37	2438101.31	1963 Mar 12 1925	Mike	-	Smoke 344	-	-	-	-	CC	-	-	-	14	-	-
1963-S89	2438107.51	1963 Mar 18 1930	Mike	-	Smoke 345	-	-	-	-	CC	-	-	-	15	-	-
1963-S89	2438107.51	1963 Mar 18 1930	Mike Cajun	-	TROOP	-	-	-	-	CC	-	-	-	18	-	-
1963-A41	2438110.50	1963 Mar 21 1930	Mike	-	Smoke 346	-	-	-	-	CC	-	-	-	18	-	-
1963-S12	2438111.57	1963 Mar 26 1930	Mike	-	Smoke 347	-	-	-	-	CC	-	-	-	18	-	-
1963-S17	2438114.85	1963 Mar 26 0734:59	Mike Cajun	-	Falling Sphere 1	-	Three-sphere payload	-	-	NR	-	-	-	99	-	-
1963-S17	2438114.85	1963 Mar 26 0734:59	Mike Apache	-	MASA 14.06UA	-	UI composition 1	-	-	EOL	-	-	-	190	-	-
1963-S28	2438117.30	1963 Mar 28 1946	Mike Cree	-	Smoke 348	-	UI composition 1	-	-	EOL	-	-	-	99	-	-
1963-S28	2438117.30	1963 Mar 28 1946	Mike Apache	-	Smoke 348	-	UI composition 2	-	-	EOL	-	-	-	99	-	-
1963-A49	2438117.30	1963 Mar 28 1930	Mike	-	Smoke 348	-	-	-	-	CC	-	-	-	21	-	-
1963-S120	2438117.34	1963 Mar 28 2006:00	Mike Apache	-	MASA 14.09UA	-	GCA Ionos 12	-	-	WI	-	-	-	161	-	-
1963-A48	2438117.34	1963 Mar 28 2006:00	Mike Apache	-	MASA 14.87CI	-	-	-	-	CC	-	-	-	177	-	-
1963-S123	2438117.62	1963 Mar 28 2000	Mike	-	Smoke 349	-	-	-	-	CC	-	-	-	19	-	-
1963-A50	2438120.31	1963 Mar 29 0357	Mike Cajun	-	Falling Sphere 2	-	-	-	-	NR	-	-	-	177	-	-
1963-A50	2438120.31	1963 Mar 29 0357	Mike	-	Smoke 350	-	-	-	-	CC	-	-	-	13	-	-
1963-A50	2438120.31	1963 Mar 29 0357	Mike	-	Smoke 350	-	-	-	-	CC	-	-	-	13	-	-
1963-A51	2438125.25	1963 Apr 5 1963	Mike	-	Smoke 351	-	-	-	-	CC	-	-	-	15	-	-
1963-S140	2438129.32	1963 Apr 9 2038	Mike Apache	-	MASA 14.108CI	-	D-region	-	-	WI	-	-	-	163	-	-
1963-A54	2438131.36	1963 Apr 11 2035	Mike	-	Smoke 352	-	-	-	-	CC	-	-	-	15	-	-
1963-A54	2438131.36	1963 Apr 11 2035	Mike	-	Smoke 352	-	-	-	-	CC	-	-	-	12	-	-
1963-A55	2438132.31	1963 Apr 12 1925	Mike	-	Smoke 353	-	-	-	-	CC	-	-	-	16	-	-
1963-A57	2438136.31	1963 Apr 15 1930	Mike	-	Smoke 354	-	-	-	-	CC	-	-	-	21	-	-
1963-A58	2438136.31	1963 Apr 16 1930	Mike	-	Smoke 355	-	-	-	-	CC	-	-	-	21	-	-
1963-A59	2438137.31	1963 Apr 17 1930	Mike	-	Smoke 356	-	-	-	-	CC	-	-	-	16	-	-
1963-A61	2438140.31	1963 Apr 22 1930	Mike	-	Smoke 357	-	-	-	-	CC	-	-	-	12	-	-
1963-A63	2438145.33	1963 Apr 25 1958	Mike	-	Smoke 029	-	-	-	-	WI	-	-	-	20	-	-
1963-A64	2438145.33	1963 Apr 25 1958	Mike	-	Smoke 029	-	-	-	-	WI	-	-	-	11	-	-
1963-A65	2438145.33	1963 Apr 25 1958	Mike	-	Smoke 030	-	-	-	-	WI	-	-	-	17	-	-
1963-A69	2438157.35	1963 Apr 25 1958	Mike	-	Smoke 358	-	-	-	-	CC	-	-	-	15	-	-
1963-S192	2438158.22	1963 May 7 2030	Mike Apache	-	MASA 14.110CA	-	-	-	-	WI	-	-	-	166	-	-
1963-A70	2438158.31	1963 May 8 1723	Mike	-	Smoke 359	-	-	-	-	CC	-	-	-	14	-	-
1963-A70	2438158.31	1963 May 8 1930	Mike	-	Smoke 360	-	-	-	-	CC	-	-	-	17	-	-
1963-S203	2438165.67	1963 May 14 2135	Mike Cajun	-	ACS-472	-	Firefly IV CLAIRE	-	-	CC	-	-	-	156	-	-
1963-S205	2438166.11	1963 May 16 0400	Mike Cajun	-	ACS-472	-	Firefly IV STELLA	-	-	CC	-	-	-	146	-	-
1963-S640	2438167.72	1963 May 18 1438	Mike Cajun	-	MASA 10.77IA	-	Bahbar 37 (Ila)	-	-	SNQ	-	-	-	1000?	-	-
1963-S212	2438167.72	1963 May 18 0514?	Mike Apache	-	TROOP	-	-	-	-	CC	-	-	-	1000?	-	-
1963-S214	2438167.55	1963 May 18 0106	Mike Apache	-	MASA 14.14IDA	-	ACS-469	-	-	EOL	-	-	-	185	-	-
1963-S214	2438167.68	1963 May 18 0418	Mike Apache	-	ACS-470	-	ACS-470	-	-	EOL	-	-	-	94	-	-
1963-S215	2438167.82	1963 May 18 0855	Mike Cajun	-	ACS-473	-	ACS-473	-	-	EOL	-	-	-	187	-	-
1963-S215	2438167.82	1963 May 18 0855	Mike Apache	-	ACS-473	-	ACS-473	-	-	EOL	-	-	-	187	-	-
1963-S216	2438169.50	1963 May 18 1006	Mike Apache	-	MASA 14.137IA	-	ACS-471	-	-	EOL	-	-	-	187	-	-
1963-S219	2438170.50	1963 May 20	Mike Apache	-	MASA 14.139IA	-	-	-	-	SNQ	-	-	-	2000?	-	-
1963-S220	2438170.50	1963 May 21	Mike Apache	-	MASA 14.139IA	-	-	-	-	SNQ	-	-	-	2000?	-	-
1963-S225	2438171.55	1963 May 22 0110	Mike Cajun	-	MASA 10.130DA	-	Firefly IV IRENE	-	-	EOL	-	-	-	135	-	-
1963-S227	2438171.72	1963 May 22 0510	Mike Apache	-	MASA 14.13CA	-	GCA-CNRS Na-Li 1	-	-	FC	-	-	-	186	-	-
1963-S228	2438171.87	1963 May 22 0851	Mike Apache	-	MASA 14.14CA	-	GCA-CNRS Na-Li 2	-	-	FC	-	-	-	184	-	-
1963-S230	2438172.72	1963 May 23 0513	Mike Apache	-	MASA 14.15CA	-	GCA-CNRS Na-Li 3	-	-	FC	-	-	-	200	-	-
1963-S235	2438173.53	1963 May 24 0045	Mike Apache	-	MASA 14.40CA	-	GCA Release 26 Na	-	-	WI	-	-	-	205	-	-
1963-S236	2438173.88	1963 May 24 0900	Mike Apache	-	MASA 14.41CA	-	GCA Release 27 Na	-	-	WI	-	-	-	204	-	-
1963-S239	2438174.53	1963 May 25 0047	Mike Apache	-	MASA 14.42CA	-	GCA Release 28 Na	-	-	WI	-	-	-	197	-	-

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Launch_Mission	FlightCode	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee km	Range km	Dest
1965-S243	2438178-50	1965 May 29	Mike Javelin	-	TRUMP 1	TRUMP 1	-	-	-	EGL	-	-	-	131	-	-
1965-S654	2438149-50	1965 May	Nike Apache	-	Sandia	Sandia Ma 1	-	-	-	KAU	-	-	-	1607	-	-
1965-S655	2438150-50	1965 Jun	Nike Apache	-	Sandia	Sandia Ma 2	-	-	-	KAU	-	-	-	1607	-	-
1965-S247	2438180-50	1965 Jun	Nike Apache	?	BMR5	-	-	-	-	WS	-	-	-	1007	-	-
1965-S248	2438180-50	1965 Jun	Nike Apache	?	Cepache	-	-	-	-	WS	-	-	-	1007	-	-
1965-S249	2438180-50	1965 Jun	Nike Apache	?	Cepache	-	-	-	-	WS	-	-	-	1007	-	-
1965-S250	2438180-50	1965 Jun	Nike Apache	?	Cepache	-	-	-	-	CC	-	-	-	13	-	-
1965-A88	2438188-29	1965 Jun 7 1900	Nike Cajun	-	Smoke 361	-	-	-	-	KMR	-	-	-	177	-	-
1965-S284	2438198-64	1965 Jun 18 0328	Nike Cajun	-	Falling Sphere 3	-	-	-	-	CC	-	-	-	16	-	-
1965-A93	2438200-62	1965 Jun 19 2045	Nike Cajun	-	Smoke 362	-	-	-	-	CC	-	-	-	180	-	-
1965-S299	2438200-62	1965 Jun 20 0300	Nike Tomahawk	-	Falling Sphere 4	-	-	-	-	KAU	-	-	-	250	-	-
1965-S312	2438210-50	1965 Jun 25	Nike Apache	9a	Sandia 152-2	Mitehawk-9	-	-	-	WS	-	-	-	1007	-	-
1965-S313	2438210-50	1965 Jul	Nike Apache	?	Cepache	-	-	-	-	WS	-	-	-	1007	-	-
1965-S317	2438211-50	1965 Jul 1	Nike Tomahawk	-	Cepache	-	-	-	-	KAU	-	-	-	250	-	-
1965-A101	2438212-25	1965 Jul 1 1800	Nike Tomahawk	9a	Sandia 152-3	Mitehawk-9	-	-	-	CC	-	-	-	17	-	-
1965-A102	2438213-50	1965 Jul 3	Nike Tomahawk	-	Smoke 363	-	-	-	-	KAU	-	-	-	20	-	-
1965-S539	2438225-38	1965 Jul 14 2103:28	Nike Apache	-	Sandia 152-4	Mitehawk-9	-	-	-	FC	-	-	-	172	-	-
1965-A107	2438226-31	1965 Jul 17 1930	Nike Apache	-	Smoke 364	-	-	-	-	CC	-	-	-	14	-	-
1965-A110	2438231-33	1965 Jul 20 2000:02	Nike Apache	-	MASA 14,98CI	GCA Probe High 2	-	-	-	FC	-	-	-	87	-	-
1965-A111	2438231-38	1965 Jul 20 2030:00	Nike Apache	-	MASA 14,90CI	GCA Probe High 3	-	-	-	FC	-	-	-	87	-	-
1965-S546	2438231-38	1965 Jul 20 2103:00	Nike Apache	-	MASA 14,91CI	GCA Probe High 4	-	-	-	FC	-	-	-	196	-	-
1965-S548	2438231-38	1965 Jul 20 2113:00	Nike Apache	-	MASA 14,92CI	GCA Probe High 5	-	-	-	FC	-	-	-	199	-	-
1965-S549	2438231-42	1965 Jul 20 2140:00	Nike Apache	-	MASA 14,94CI	GCA Probe High 6	-	-	-	FC	-	-	-	200	-	-
1965-S551	2438231-42	1965 Jul 20 2210:00	Nike Apache	-	MASA 14,94CI	GCA Probe High 7	-	-	-	FC	-	-	-	192	-	-
1965-A114	2438237-31	1965 Jul 26 1930	Nike Cajun	-	Smoke 365	-	-	-	-	CC	-	-	-	20	-	-
1965-S566	2438237-51	1965 Jul 27 0010	Nike Cajun	-	RTG K63-1	MISU Grenades 1	-	-	-	RNOJ	-	-	-	126	-	-
1965-S568	2438240-46	1965 Jul 29 2328	Nike Cajun	-	RTG K63-2	MISU Grenades 2	-	-	-	RNOJ	-	-	-	128	-	-
1965-A115	2438242-31	1965 Jul 31 1930	Nike Apache	-	Smoke 366	-	-	-	-	CC	-	-	-	17	-	-
1965-S570	2438241-50	1965 Aug	Nike Apache	-	BHTS	-	-	-	-	WS	-	-	-	1007	-	-
1965-S571	2438241-50	1965 Aug 1	Nike Apache	-	BHTS	-	-	-	-	WS	-	-	-	1007	-	-
1965-S574	2438243-46	1965 Aug 1 2327	Nike Cajun	-	RTG K63-3	MISU Grenades 3	-	-	-	RNOJ	-	-	-	126	-	-
1965-S577	2438244-46	1965 Aug 2 2353	Nike Cajun	-	MASA 10,790A	Density (SH Support)	-	-	-	WT	-	-	-	151	-	-
1965-A116	2438249-31	1965 Aug 7 1930	Nike Apache	-	Smoke 367	-	-	-	-	CC	-	-	-	19	-	-
1965-S580	2438249-44	1965 Aug 7 2229	Nike Cajun	-	RTG K63-4	MISU Grenades 4	-	-	-	RNOJ	-	-	-	130	-	-
1965-A121	2438257-47	1965 Aug 15 2311	Nike Apache	-	Smoke 031	-	-	-	-	WT	-	-	-	20	-	-
1965-S417	2438272-50	1965 Sep	Nike Apache	-	BHTS	-	-	-	-	WS	-	-	-	1007	-	-
1965-S418	2438272-50	1965 Sep 1 0803	Nike Apache	-	BHTS	-	-	-	-	WS	-	-	-	1007	-	-
1965-S420	2438273-94	1965 Sep 1 1622	Nike Cajun	-	Ferdinand 5	Ferdinand 5	-	-	-	AND	-	-	-	1007	-	-
1965-S456	2438282-17	1965 Sep 9 1622	Nike Apache	-	MASA 14,100E	Electrojet	-	-	-	WT	-	-	-	169	-	-
1965-S452	2438284-76	1965 Sep 12 0620	Nike Apache	-	Ferdinand 4	Ferdinand 4	-	-	-	AND	-	-	-	136	-	-
1965-A125	2438282-34	1965 Sep 19 2014	Nike	-	Smoke 032	-	-	-	-	WT	-	-	-	20	-	-
1965-A126	2438282-34	1965 Sep 19 2014	Nike	-	Smoke 032	-	-	-	-	WT	-	-	-	20	-	-
1965-A127	2438282-34	1965 Sep 19 2014	Nike	-	Smoke 032	-	-	-	-	WT	-	-	-	20	-	-
1965-A128	2438282-34	1965 Sep 19 2014	Nike	-	Smoke 032	-	-	-	-	WT	-	-	-	20	-	-
1965-A129	2438282-34	1965 Sep 19 2014	Nike	-	Smoke 032	-	-	-	-	WT	-	-	-	20	-	-
1965-S455	2438296-25	1965 Sep 23 0800	Nike Apache	-	Smoke 034	-	-	-	-	EGL	-	-	-	158	-	-
1965-S455	2438296-25	1965 Sep 23 0800	Nike Apache	-	Smoke 034	-	-	-	-	EGL	-	-	-	158	-	-
1965-S465	2438296-66	1965 Sep 24 0357	Nike Cajun	-	MASA 10,92MA	Firefly IV IMMA	-	-	-	WT	-	-	-	143	-	-
1965-S466	2438297-66	1965 Sep 24 0357	Nike Cajun	-	MASA 10,92MA	Release	-	-	-	WT	-	-	-	151	-	-
1965-S467	2438297-66	1965 Sep 24 0357	Nike Apache	-	MASA 10,93MA	Release	-	-	-	EGL	-	-	-	170	-	-
1965-S462	2438298-73	1965 Sep 26 0437	Nike Apache	-	ACS-478	Firefly IV MAIDA	-	-	-	EGL	-	-	-	170	-	-
1965-S463	2438298-73	1965 Sep 26 0530	Nike Apache	-	ACS-478	Firefly IV VIOLET	-	-	-	EGL	-	-	-	20	-	-
1965-A134	2438303-31	1965 Sep 30 1930	Nike Apache	-	Smoke 369	-	-	-	-	CC	-	-	-	1007	-	-
1965-S468	2438303-50	1965 Oct 1 1047	Nike Apache	-	BHTS	-	-	-	-	WS	-	-	-	182	-	-
1965-S475	2438303-95	1965 Oct 1 1047	Nike Apache	-	ACS-477	Firefly IV BECKY	-	-	-	CC	-	-	-	20	-	-
1965-A135	2438304-34	1965 Oct 1 2012	Nike	-	Smoke 370	-	-	-	-	WT	-	-	-	20	-	-
1965-A136	2438304-34	1965 Oct 1 2012	Nike	-	Smoke 370	-	-	-	-	WT	-	-	-	20	-	-
1965-A137	2438304-40	1965 Oct 1 2134	Nike Tomahawk	-	Smoke 035	-	-	-	-	WT	-	-	-	20	-	-
1965-A137	2438304-50	1965 Oct 2 1814	Nike Tomahawk	9a	Smoke 036	-	-	-	-	KAU	-	-	-	20	-	-
1965-S490	2438310-33	1965 Oct 4 1814	Nike Apache	-	Sandia 152-6	Ballistic	-	-	-	FC	-	-	-	165	-	-
1965-A143	2438312-35	1965 Oct 7 2000	Nike Apache	-	MASA 14,96DI	B field probe	-	-	-	CC	-	-	-	13	-	-
1965-A143	2438312-35	1965 Oct 9 2030	Nike Apache	-	Smoke 371	-	-	-	-	WT	-	-	-	158	-	-
1965-S481	2438313-47	1965 Oct 9 2314	Nike Apache	-	MASA 14,102MA	Release	-	-	-	WT	-	-	-	158	-	-
1965-S483	2438313-47	1965 Oct 10 2313	Nike Apache	-	MASA 14,103MA	Release	-	-	-	WT	-	-	-	22	-	-
1965-A145	2438314-26	1965 Oct 11 1903	Nike	-	Smoke 037	-	-	-	-	WT	-	-	-	16	-	-
1965-A147	2438314-26	1965 Oct 15 1938	Nike	-	Smoke 038	-	-	-	-	WT	-	-	-	16	-	-
1965-A149	2438315-30	1965 Oct 22 1917	Nike	-	Smoke 372	-	-	-	-	CC	-	-	-	18	-	-
1965-S634	2438325-30	1965 Oct 28 0315	Nike Javelin	-	Smoke 372	-	-	-	-	CC	-	-	-	1307	-	-
1965-S634	2438330-64	1965 Oct 28 0315	Nike Javelin	-	Smoke 372	-	-	-	-	CC	-	-	-	18	-	-
1965-A153	2438333-64	1965 Oct 30 1930	Nike Cajun	-	Smoke 374	-	-	-	-	EGL	-	-	-	112	-	-
1965-S628	2438334-25	1965 Oct 31 1800	Nike Cajun	-	ACS 341	D-region composition	-	-	-	CC	-	-	-	19	-	-
1965-A161	2438334-39	1965 Oct 31 2030	Nike Apache	-	Smoke 373	-	-	-	-	CC	-	-	-	134	-	-
1965-S629	2438334-39	1965 Oct 31 2117	Nike Apache	-	MASA 14,111CT	Vibration test	-	-	-	WT	-	-	-	215	-	-
1965-S636	2438337-92	1965 Nov 4 1000	Nike Apache	-	Sphere	-	-	-	-	NS	-	-	-	1507	-	-
1965-S637	2438337-92	1965 Nov 4 1031	Nike Cajun	-	Falling Sphere 5	-	-	-	-	KMR	-	-	-	1507	-	-
1965-S638	2438338-02	1965 Nov 4 1226	Nike Cajun	-	Falling Sphere 6	-	-	-	-	KMR	-	-	-	164	-	-
1965-S640	2438338-02	1965 Nov 4 1226	Nike Cajun	-	Sphere	-	-	-	-	NS	-	-	-	1007	-	-
1965-S643	2438339-50	1965 Nov 6 0000	Nike Cajun	-	Maser spectrometer	-	-	-	-	EGL	-	-	-	19	-	-
1965-A163	2438340-31	1965 Nov 6 1930	Nike	-	Smoke 375	-	-	-	-	CC	-	-	-	141	-	-
1965-S646	2438343-18	1965 Nov 9 1626	Nike	-	Falling Sphere 7	-	-	-	-	KMR	-	-	-	19	-	-
1965-A167	2438346-35	1965 Nov 12 2020	Nike	-	Smoke 039	-	-	-	-	CC	-	-	-	20	-	-
1965-A168	2438347-34	1965 Nov 13 2011	Nike	-	Smoke 376	-	-	-	-	CC	-	-	-	20	-	-
1965-S655	2438348-12	1965 Nov 14 1458	Nike Cajun	-	Smoke 376	-	-	-	-	CC	-	-	-	127	-	-
1965-A170	2438349-31	1965 Nov 15 1933	Nike	-	Smoke 377	-	-	-	-	CC	-	-	-	20	-	-
1965-S662	2438354-50	1965 Nov 21 1255	Nike Tomahawk	-	Smoke 377	-	-	-	-	CC	-	-	-	292	-	-
1965-S663	2438355-04	1965 Nov 21 1255	Nike Apache	9a	Sandia 152-7	Ballistic	-	-	-	KAU	-	-	-	208	-	-
1965-A175	2438355-04	1965 Nov 21 1930	Nike Apache	-	MASA 14,128TA	ISRO 10.01 (Na)	-	-	-	CC	-	-	-	19	-	-
1965-S665	2438356-36	1965 Nov 22 2100	Nike Tomahawk	-	Smoke 378	-	-	-	-	WT	-	-	-	292	-	-
1965-S668	2438360-28	1965 Nov 26 1816	Nike Apache	-	HRT	-	-	-	-	KAU	-	-	-	172	-	-
1965-S669	2438360-28	1965 Nov 26 1844	Nike Cajun	-	MASA 14,101A	UM Composition 3/Den	-	-	-	WT	-	-	-	151	-	-
1965-S677	2438363-50	1965 Dec	Nike Apache	-	MASA 10,131UA	Sphere/Structure	-	-	-	NS	-	-	-	1007	-	-

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Launch	FlightCode	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee	Range	Dest
1965-A182	2438389-35	1965 Dec 5 2025	Mike Cajun	-	Smoke 379	-	-	-	-	CC	-	-	-	15	-	-
1965-S587	2438371-05	1965 Dec 7 1311	Mike Apache	-	MASA 10.556A	GSFC Grenade 35	-	-	-	WI	-	-	-	103	-	-
1965-S588	2438371-07	1965 Dec 7 1343:00	Mike Apache	-	MASA 14.210UA	UM Pilot 3	-	-	-	WI	-	-	-	141	-	-
1965-S590	2438372-73	1965 Dec 9 0524	Astrobee 200	-	ACA-610	Ionization detector	-	-	-	FC	-	-	-	242	-	-
1965-M63	2438377-44	1965 Dec 13 2232	Mike Apache	-	MASA 14.376I	-	-	-	-	WS	-	-	-	73	-	-
1965-S607	2438381-50	1965 Dec 18	Mike Cajun	-	Falling Sphere 9	-	-	-	-	KWR	-	-	-	1007	-	-
1965-S608	2438381-50	1965 Dec 18	Mike Cajun	-	Falling Sphere 10	-	-	-	-	KWR	-	-	-	1007	-	-
1965-A187	2438384-23	1965 Dec 20 1730	Mike Apache	-	Smoke 380	-	-	-	-	CC	-	-	-	16	-	-
1964-S109	2438394-50	1964 Jan	Mike Apache	-	BMS	-	-	-	-	WS	-	-	-	1007	-	-
1964-S110	2438394-50	1964 Jan	Mike Apache	-	BMS	-	-	-	-	WS	-	-	-	1007	-	-
1964-S119	2438403-05	1964 Jan 8 1315	Mike Apache	-	MASA 14.1291A	ISRD 10.02	TELS-002	-	-	TERLS	-	-	-	187	-	-
1964-S125	2438405-52	1964 Jan 12 0026	Mike Apache	-	MASA 14.1301A	ISRD 10.03	TELS-003	-	-	TERLS	-	-	-	187	-	-
1964-S128	2438408-50	1964 Jan 14	Mike Tomahawk	9a	Sandia 152-21	Ballistic	-	-	-	KAU	-	-	-	292	-	-
1964-S132	2438409-60	1964 Jan 15 0231	Mike Apache	-	MASA 14.1500E Sammy	Rice Airglow/Aur. 1	-	-	-	WI	-	-	-	90	-	-
1964-A04	2438410-44	1964 Jan 15 2234	Mike Apache	-	MASA 14.386CA	GCA Release 29 Ha	-	-	-	WI	-	-	-	46	-	-
1964-S133	2438410-44	1964 Jan 15 2240	Mike Apache	-	MASA 14.106CA	GCA Release 30 Ha	-	-	-	WI	-	-	-	114	-	-
1964-S137	2438410-71	1964 Jan 16 0500	Mike Apache	-	MASA 14.126CA	GCA Release 31 Ha	-	-	-	WI	-	-	-	170	-	-
1964-S138	2438410-98	1964 Jan 16 1134	Mike Apache	-	MASA 14.126CA	GCA Release 32 Ha	-	-	-	WI	-	-	-	200	-	-
1964-A07	2438417-35	1964 Jan 22 1852	Mike	-	Smoke 381	-	-	-	-	CC	-	-	-	18	-	-
1964-A08	2438417-35	1964 Jan 22 2027	Mike	-	Smoke 040	-	-	-	-	WI	-	-	-	22	-	-
1964-S148	2438418-27	1964 Jan 23 1925	Mike Cajun	-	Falling Sphere 11	-	-	-	-	KWR	-	-	-	172	-	-
1964-A09	2438417-50	1964 Jan 24 0016	Mike Tomahawk	12	LBL 12" Payload Test	-	-	-	-	KAU	-	-	-	5	-	-
1964-S149	2438418-51	1964 Jan 24 0116	Mike Cajun	-	Sandia 152-11	GSFC Grenade 36 (14)	-	-	-	WI	-	-	-	119	-	-
1964-A10	2438418-52	1964 Jan 24 0336	Mike Cajun	-	MASA 10.61GA	GSFC Grenade 36 (14)	-	-	-	WI	-	-	-	21	-	-
1964-A11	2438419-29	1964 Jan 24 1900	Mike Cajun	-	MASA 10.86GA	GSFC Grenade 37 (1C)	-	-	-	FC	-	-	-	18	-	-
1964-S151	2438419-72	1964 Jan 25 0514	Mike Apache	-	Smoke 382	-	-	-	-	CC	-	-	-	164	-	-
1964-S154	2438421-69	1964 Jan 27 0430	Mike Apache	-	MASA 14.790E UHM64-1	ISRD 20.01	TELS-004	-	-	TERLS	-	-	-	164	-	-
1964-S156	2438422-50	1964 Jan 28 0411	Mike Tomahawk	9a	Sandia 152-8	ISRD 20.02	TELS-005	-	-	TERLS	-	-	-	164	-	-
1964-S160	2438423-67	1964 Jan 28 0411	Mike Cajun	-	MASA 10.71GA	Density	-	-	-	KAU	-	-	-	290	-	-
1964-S163	2438423-68	1964 Jan 28 0417	Mike Apache	-	MASA 10.89GA	GSFC Grenade 38 (24)	-	-	-	WI	-	-	-	284	-	-
1964-S161	2438423-68	1964 Jan 28 0418	Mike Cajun	-	MASA 10.81GA	GSFC Grenade 39 (2C)	-	-	-	FC	-	-	-	122	-	-
1964-S162	2438423-92	1964 Jan 29 1000	Mike Apache	-	MASA 14.810E UHM64-3	GSFC Grenade 40 (2A)	-	-	-	ASC	-	-	-	124	-	-
1964-A15	2438424-30	1964 Jan 29 1919	Mike Apache	-	Smoke 041	ISRD 20.03	TELS-006	-	-	TERLS	-	-	-	167	-	-
1964-S167	2438426-06	1964 Jan 31 1530	Mike Apache	-	MASA 14.820E UHM64-4	ISRD 20.04	TELS-007	-	-	TERLS	-	-	-	20	-	-
1964-S122	2438427-50	1964 Feb 2	Mike Apache	-	Sandia	ISRD 20.04	-	-	-	TERLS	-	-	-	167	-	-
1964-S123	2438429-50	1964 Feb 4 0135:00	Mike Apache	-	Sandia	Sandia TPA	-	-	-	KAU	-	-	-	1007	-	-
1964-S126	2438429-57	1964 Feb 4 0146	Mike Apache	-	MASA 14.220UA	Sandia TPA	-	-	-	KAU	-	-	-	1007	-	-
1964-S173	2438429-57	1964 Feb 4 0146	Mike Cajun	-	MASA 10.62GA	UM Pilot 4	-	-	-	ASC	-	-	-	188	-	-
1964-A17	2438430-25	1964 Feb 4 1820	Mike Cajun	-	Smoke 042	GSFC Grenade 41 (3U)	-	-	-	WI	-	-	-	116	-	-
1964-S176	2438430-53	1964 Feb 5 0039	Mike Cajun	-	MASA 10.87GA	GSFC Grenade 42 (4C)	-	-	-	WI	-	-	-	126	-	-
1964-S177	2438430-64	1964 Feb 5 0059	Mike Apache	-	MASA 10.63GA	GSFC Grenade 43 (4W)	-	-	-	FC	-	-	-	116	-	-
1964-S182	2438431-50	1964 Feb 9	Mike Apache	-	Sandia	Sandia TPA	-	-	-	WI	-	-	-	110	-	-
1964-S185	2438432-50	1964 Feb 9	Mike Apache	-	Sandia	Sandia TPA	-	-	-	KAU	-	-	-	1007	-	-
1964-S189	2438436-35	1964 Feb 12 2030	Mike Apache	-	MASA 14.288T	Sandia TPA	-	-	-	KAU	-	-	-	1007	-	-
1964-S193	2438438-69	1964 Feb 13 0429	Mike Apache	-	MASA 10.880A	Rest	-	-	-	WI	-	-	-	146	-	-
1964-S195	2438438-69	1964 Feb 13 0429	Mike Cajun	-	MASA 10.880A	GSFC Grenade 44 (5C)	-	-	-	FC	-	-	-	119	-	-
1964-S196	2438438-69	1964 Feb 13 0450	Mike Cajun	-	MASA 10.136GA	GSFC Grenade 45 (5W)	-	-	-	WI	-	-	-	119	-	-
1964-S197	2438438-70	1964 Feb 13 0455	Mike Cajun	-	ERDA 00.82GA	GSFC Grenade 46 (5A)	-	-	-	ASC	-	-	-	119	-	-
1964-S14	2438441-11	1964 Feb 18 2150	Mike Apache	-	ERDA 00.82GA	Sphere	-	-	-	ASC	-	-	-	205	-	-
1964-A106	2438445-38	1964 Feb 19 2130	Mike Apache	-	Smoke 383	-	-	-	-	CC	-	-	-	44	-	-
1964-S106	2438445-40	1964 Feb 19 2130	Mike Cajun	-	ERDA 00.82GA	Sphere	-	-	-	US	-	-	-	154	-	-
1964-S112	2438445-81	1964 Feb 20 0723	Mike Apache	-	MASA 14.430E	Auroral particles	-	-	-	FC	-	-	-	204	-	-
1964-A127	2438445-81	1964 Feb 20 1530	Mike	-	Smoke 384	-	-	-	-	CC	-	-	-	15	-	-
1964-A129	2438445-37	1964 Feb 26 2055	Mike	-	Smoke 385	-	-	-	-	CC	-	-	-	15	-	-
1964-S126	2438454-73	1964 Feb 29 0532	Mike Apache	-	MASA 14.440E	Auroral particles	-	-	-	FC	-	-	-	204	-	-
1964-S124	2438454-73	1964 Mar 7 0245	Mike Apache	?	PHRS	Auroral particles	-	-	-	US	-	-	-	1007	-	-
1964-S134	2438461-61	1964 Mar 7 1800	Mike Cajun	-	MASA 10.137GA	GSFC Grenade 47	-	-	-	WI	-	-	-	114	-	-
1964-S144	2438466-25	1964 Mar 11 1800	Mike Cajun	-	ACS-342	Ion composition	-	-	-	EGL	-	-	-	110	-	-
1964-A101	2438466-65	1964 Mar 12 0417	Mike Cajun	-	Ferdinand 2/3	-	-	-	-	WI	-	-	-	110	-	-
1964-S144	2438466-65	1964 Mar 12 0958:40	Mike Apache	-	Ferdinand 6	-	-	-	-	AND	-	-	-	146	-	-
1964-S148	2438468-26	1964 Mar 13 1820	Mike Cajun	-	Falling Sphere 12	Ferdinand 6	-	-	-	KWR	-	-	-	174	-	-
1964-A136	2438468-27	1964 Mar 13 1830	Mike	-	Smoke 386	-	-	-	-	CC	-	-	-	21	-	-
1964-S151	2438468-27	1964 Mar 13 1836	Mike	-	Smoke 043	-	-	-	-	WI	-	-	-	21	-	-
1964-S151	2438469-61	1964 Mar 15 0244	Mike Apache	-	Ferdinand 7	-	-	-	-	AND	-	-	-	134	-	-
1964-A138	2438472-32	1964 Mar 17 1940	Mike	-	Smoke 044	-	-	-	-	WI	-	-	-	17	-	-
1964-S156	2438472-50	1964 Mar 18 0611	Mike Tomahawk	9	Sandia 152-45	Ballistic	-	-	-	KAU	-	-	-	315	-	-
1964-S157	2438472-76	1964 Mar 18 1830	Mike Apache	-	MASA 14.1510E	Rice Airglow/Aur. 2	-	-	-	FC	-	-	-	151	-	-
1964-A139	2438473-27	1964 Mar 18 1830	Mike Apache	-	Smoke 387	-	-	-	-	CC	-	-	-	17	-	-
1964-S158	2438474-15	1964 Mar 19 1542	Mike Apache	-	Ferdinand 8	-	-	-	-	AND	-	-	-	139	-	-
1964-A160	2438474-72	1964 Mar 20 0523	Mike Apache	-	MASA 14.1520E	Rice Airglow/Aur. 3	-	-	-	FC	-	-	-	151	-	-
1964-A160	2438475-34	1964 Mar 20 2005	Mike	-	Smoke 388	-	-	-	-	CC	-	-	-	151	-	-
1964-A162	2438477-50	1964 Mar 23 1037	Mike Tomahawk	12	Sandia 152-12	LBL 12" Payload Test	-	-	-	KAU	-	-	-	20	-	-
1964-S163	2438477-94	1964 Mar 23 1037	Mike Apache	-	MASA 14.1530E	Rice Airglow/Aur. 4	-	-	-	FC	-	-	-	153	-	-
1964-S166	2438478-68	1964 Mar 24 0422:54	Mike Apache	-	MASA 14.1186E	Auroral Electrons	-	-	-	FC	-	-	-	184	-	-
1964-S167	2438479-50	1964 Mar 25	Mike Apache	-	Smoke 046	-	-	-	-	SMLC	-	-	-	2007	-	-
1964-S169	2438480-65	1964 Mar 26 0330	Mike Apache	-	-	-	-	-	-	FC	-	-	-	179	-	-
1964-S172	2438480-65	1964 Mar 26 0330	Mike Apache	-	-	-	-	-	-	FC	-	-	-	193	-	-
1964-A45	2438482-29	1964 Mar 27 1904	Mike Apache	-	-	-	-	-	-	WI	-	-	-	14	-	-
1964-S176	2438484-50	1964 Mar 30	Mike Apache	-	-	-	-	-	-	SMLC	-	-	-	2007	-	-
1964-S175	2438485-61	1964 Mar 31 0233:30	Mike Javelin	-	-	-	-	-	-	WI	-	-	-	131	-	-
1964-A47	2438486-27	1964 Mar 31 1830	Mike Javelin	-	TRUMP (MH-30C)	-	-	-	-	CC	-	-	-	15	-	-
1964-S179	2438485-50	1964 Apr 1 1830	Mike Javelin	?	DASA HRE	-	-	-	-	CC	-	-	-	1007	-	-
1964-A48	2438487-27	1964 Apr 1 1830	Mike Javelin	-	Smoke 390	-	-	-	-	NS	-	-	-	14	-	-
1964-S185	2438487-50	1964 Apr 2 1800	Mike Apache	-	-	-	-	-	-	CC	-	-	-	2007	-	-
1964-A49	2438489-25	1964 Apr 3 1800	Mike Apache	-	-	-	-	-	-	SMLC	-	-	-	18	-	-
1964-S196	2438495-10	1964 Apr 9 1422	Mike Apache	-	Smoke 391	-	-	-	-	CC	-	-	-	18	-	-
1964-A51	2438495-40	1964 Apr 9 1429	Mike	-	Smoke 047	Bohbar 47 (No)	-	-	-	SOM	-	-	-	160	-	-



Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Mission	FlightCode	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee km	Range km	Dest
1964-S198	2438496-77	1964 Apr 11 0629	Nike Apache	-	MASA 14.1210E	Auroral emissions	-	-	-	FC	-	-	-	172	-	-
1964-A63	2438499-32	1964 Apr 13 1945	Nike Apache	-	Smoke 392	-	-	-	-	CC	-	-	-	19	-	-
1964-S208	2438500-56	1964 Apr 15 0121:42	Nike Apache	-	UM Pitot 5/Fire cal	-	-	-	-	ASC	-	-	-	158	-	-
1964-S209	2438501-16	1964 Apr 15 1556:00	Nike Apache	-	MASA 14.240A	UM Pitot 6/Fire cal	-	-	-	ASC	-	-	-	158	-	-
1964-S206	2438501-78	1964 Apr 16 0639	Nike Apache	-	MASA 14.230A	Auroral emissions	-	-	-	FC	-	-	-	157	-	-
1964-S212	2438502-38	1964 Apr 16 2105:00	Nike Apache	-	MASA 14.1430I	UIUC-GCA Ionos 1	-	-	-	WI	-	-	-	168	-	-
1964-A65	2438503-28	1964 Apr 17 1944	Nike Apache	-	Smoke 048	-	-	-	-	WI	-	-	-	17	-	-
1964-S214	2438503-47	1964 Apr 17 2315	Nike Cajun	-	MASA 10.1426A	Sphere	-	-	-	WI	-	-	-	149	-	-
1964-S215	2438503-53	1964 Apr 18 0038	Nike Cajun	-	MASA 10.736A	GSFC Grenade 48	-	-	-	FC	-	-	-	119	-	-
1964-S216	2438503-54	1964 Apr 18 0059	Nike Cajun	-	MASA 10.836A	GSFC Grenade 49	-	-	-	WI	-	-	-	119	-	-
1964-S787	2438507-50	1964 Apr 22 0654	Nike Apache	-	-	SPEEDBALL 048 SH16	-	-	-	WS	-	-	-	150?	-	-
1964-S222	2438507-79	1964 Apr 22 0654	Nike Apache	-	MASA 14.1236E	Auroral emissions	-	-	-	FC	-	-	-	166	-	-
1964-A68	2438508-33	1964 May 4 1815	Nike Javelin	?	Smoke 393	-	-	-	-	WS	-	-	-	100?	-	-
1964-S230	2438515-50	1964 May 4 1815	Nike Javelin	?	DASA HAR	-	-	-	-	WS	-	-	-	100?	-	-
1964-A62	2438520-26	1964 May 4 1815	Nike	-	Smoke 049	-	-	-	-	WI	-	-	-	18	-	-
1964-A64	2438521-23	1964 May 6 1818	Nike	-	Smoke 050	-	-	-	-	WI	-	-	-	19	-	-
1964-A66	2438522-28	1964 May 6 1818	Nike	-	Smoke 051	-	-	-	-	WI	-	-	-	19	-	-
1964-S234	2438522-60	1964 May 07 0231:00	Nike Cajun	?	Smoke 052	-	-	-	-	WI	-	-	-	14	-	-
1964-S239	2438527-50	1964 May 12 1125	Nike Tomahawk	9	Sandia 152-52	Ballistic	-	-	-	KAU	-	-	-	110	-	-
1964-S240	2438527-98	1964 May 12 1125	Nike Cajun	-	Falling Sphere 13	-	-	-	-	KMR	-	-	-	313	-	-
1964-S242	2438529-50	1964 May 14	Nike Tomahawk	-	-	-	-	-	-	WI	-	-	-	144	-	-
1964-S244	2438529-50	1964 May 14	Nike Tomahawk	-	-	-	-	-	-	WI	-	-	-	150?	-	-
1964-S246	2438530-50	1964 May 15	Nike Tomahawk	9	Sandia 152-50	SPEEDBALL 060 SH17	-	-	-	WI	-	-	-	313	-	-
1964-S260	2438530-50	1964 May 15	Nike Tomahawk	9	Falling sphere	Ballistic	-	-	-	KMR	-	-	-	325	-	-
1964-S261	2438533-50	1964 May 15	Nike Tomahawk	9	Sandia 152-51	Ballistic	-	-	-	KAU	-	-	-	110	-	-
1964-S262	2438533-76	1964 May 16 0620	Nike Apache	-	Sandia 152-46	Ballistic HRT	-	-	-	KAU	-	-	-	300	-	-
1964-S263	2438533-76	1964 May 16 0620	Nike Apache	-	AES-479	-	-	-	-	EGL	-	-	-	208	-	-
1964-S264	2438534-27	1964 May 16 1535	Nike Apache	-	-	REDLAMP TMA	-	-	-	CC	-	-	-	152	-	-
1964-S264	2438534-27	1964 May 16 1535	Nike Apache	-	AES-481 -	REDLAMP SF6	-	-	-	CC	-	-	-	190	-	-
1964-S264	2438534-76	1964 May 19 0645	Nike Apache	-	AES-482 -	REDLAMP TMA	-	-	-	CC	-	-	-	150	-	-
1964-S265	2438535-25	1964 May 19 1800	Nike Apache	-	AES-482 -	REDLAMP SF6	-	-	-	CC	-	-	-	267	-	-
1964-A70	2438535-27	1964 May 19 1822	Nike Apache	-	Smoke 053	-	-	-	-	WI	-	-	-	13	-	-
1964-S266	2438535-50	1964 May 20	Nike Tomahawk	12	Sandia 152-22	Noctilucent clouds	-	-	-	WS	-	-	-	200?	-	-
1964-A71	2438535-50	1964 May 20 1830	Nike Tomahawk	-	Smoke 394	-	-	-	-	KAU	-	-	-	142	-	-
1964-S280	2438536-27	1964 May 21 1930	Nike Tomahawk	9a	Sandia 152-10	Density	-	-	-	CC	-	-	-	17	-	-
1964-A73	2438537-27	1964 May 21 1930	Nike	-	Smoke 395	-	-	-	-	CC	-	-	-	329	-	-
1964-A74	2438538-32	1964 May 22 1943	Nike Tomahawk	-	Smoke 045	-	-	-	-	WI	-	-	-	14	-	-
1964-S283	2438540-50	1964 May 25 2005	Nike Tomahawk	9	Sandia 152-28	LASL Sun	-	-	-	KAU	-	-	-	280	-	-
1964-A75	2438541-54	1964 May 25	Nike Tomahawk	-	Smoke 396	-	-	-	-	CC	-	-	-	16	-	-
1964-S286	2438542-30	1964 May 27 1930	Nike Tomahawk	9	Sandia 152-30	LASL Sun	-	-	-	CCU	-	-	-	290	-	-
1964-A76	2438543-51	1964 May 27 1930	Nike Apache	-	Smoke 397	-	-	-	-	US	-	-	-	16	-	-
1964-S287	2438543-59	1964 Jun 02 0215	Nike Apache	?	MASA 14-90DA	Air sampling	-	-	-	US	-	-	-	46	-	-
1964-S288	2438546-50	1964 Jun 04	Nike Javelin	-	Capacitors	-	-	-	-	NS	-	-	-	100?	-	-
1964-S289	2438546-50	1964 Jun 04	Nike Apache	-	DAR HRS	-	-	-	-	NS	-	-	-	100?	-	-
1964-S290	2438546-50	1964 Jun 04	Nike Apache	-	ARPA PRESS	Mass Spec	-	-	-	KMR	-	-	-	100?	-	-
1964-S291	2438546-50	1964 Jun 04	Nike Apache	-	ARPA PRESS	Mass Spec	-	-	-	KMR	-	-	-	100?	-	-
1964-S292	2438547-50	1964 Jun 4	Nike Apache	-	-	Propagation study	-	-	-	NS	-	-	-	189	-	-
1964-S293	2438547-50	1964 Jun 5	Nike Apache	-	-	Propagation study	-	-	-	NS	-	-	-	189	-	-
1964-S294	2438547-50	1964 Jun 5	Nike Apache	-	-	Mass Spec	-	-	-	NS	-	-	-	43	-	-
1964-S295	2438547-50	1964 Jun 5	Nike Apache	-	-	Mass Spec	-	-	-	NS	-	-	-	140	-	-
1964-S296	2438547-50	1964 Jun 9 1940	Nike Apache	-	MASA 14.380I	-	-	-	-	WI	-	-	-	16	-	-
1964-A81	2438548-25	1964 Jun 9 1940	Nike Apache	-	Smoke 398	-	-	-	-	CC	-	-	-	16	-	-
1964-S297	2438548-71	1964 Jun 10 0603	Astrbee 200	-	CBL 4 C15 373	Sphere	-	-	-	PA	-	-	-	343	-	-
1964-S298	2438547-13	1964 Jun 10 1510:00	Nike Apache	-	MASA 14.1565E	B Field 1	-	-	-	WI	-	-	-	146	-	-
1964-A82	2438548-26	1964 Jun 10 1815	Nike	-	Smoke 399	-	-	-	-	CC	-	-	-	16	-	-
1964-A84	2438549-27	1964 Jun 11 1934	Nike	-	Smoke 055	-	-	-	-	WI	-	-	-	15	-	-
1964-A85	2438549-27	1964 Jun 11 1934	Nike	-	Smoke 400	-	-	-	-	WI	-	-	-	15	-	-
1964-A88	2438552-29	1964 Jun 15 1900	Nike	-	Smoke 401	-	-	-	-	CC	-	-	-	17	-	-
1964-S297	2438553-54	1964 Jun 17 0101	Nike Cajun	-	Falling Sphere 14	-	-	-	-	KMR	-	-	-	140	-	-
1964-A90	2438554-29	1964 Jun 17 1900	Nike Cajun	-	Smoke 402	-	-	-	-	CC	-	-	-	15	-	-
1964-S299	2438554-60	1964 Jun 18 0219	Nike Cajun	-	Falling Sphere 15	-	-	-	-	KMR	-	-	-	149	-	-
1964-S301	2438555-19	1964 Jun 18 1630	Nike Cajun	-	Falling Sphere 16	-	-	-	-	KMR	-	-	-	148	-	-
1964-S302	2438555-56	1964 Jun 19 0129	Nike Cajun	-	PWR-16	-	-	-	-	KMR	-	-	-	100?	-	-
1964-S304	2438556-16	1964 Jun 19 1540	Nike Cajun	-	PWR-16	-	-	-	-	KMR	-	-	-	100?	-	-
1964-S310	2438572-12	1964 Jun 25 1457:39	Nike Apache	-	MASA 14.1566E	B Field 2	-	-	-	WI	-	-	-	150	-	-
1964-S311	2438575-54	1964 Jun 26 0652:30	Nike Apache	-	MASA 14.1579E	B Field 3	-	-	-	WI	-	-	-	156	-	-
1964-S314	2438575-50	1964 Jun 29	Nike Tomahawk	9	Sandia 152-57	Ballistic	-	-	-	KAU	-	-	-	0	-	-
1964-S324	2438581-50	1964 Jul 2	Nike Tomahawk	9	Sandia 152-58	Ballistic	-	-	-	KAU	-	-	-	298	-	-
1964-S325	2438582-50	1964 Jul 6	Nike Tomahawk	9	Sandia 152-62	Ballistic (Sun)	-	-	-	NS	-	-	-	200?	-	-
1964-A102	2438583-32	1964 Jul 6 1945	Nike Tomahawk	-	Smoke 403	-	-	-	-	CC	-	-	-	288	-	-
1964-S338	2438585-66	1964 Jul 9 0413	Nike Apache	-	MASA 14.1540E	Rice Airglow/Aur. 5	-	-	-	WI	-	-	-	167	-	-
1964-S366	2438592-23	1964 Jul 15 1730	Nike Tomahawk	9	Sandia 152-18	LRL SAP Camera	-	-	-	KAU	-	-	-	270?	-	-
1964-S348	2438591-54	1964 Jul 15 0058	Nike Apache	-	MASA 14.490CA	GCA Release 33 Na	-	-	-	WI	-	-	-	191	-	-
1964-S350	2438591-67	1964 Jul 15 0409	Nike Apache	-	MASA 14.500CA	GCA Release 34 Na	-	-	-	WI	-	-	-	192	-	-
1964-S351	2438591-83	1964 Jul 15 0800	Nike Apache	-	MASA 14.1440I	UIUC-GCA Ionos 2/2a	-	-	-	WI	-	-	-	154	-	-
1964-S352	2438591-84	1964 Jul 15 0805	Nike Apache	-	MASA 14.510CA	GCA Release 35 Na	-	-	-	WI	-	-	-	190	-	-
1964-S353	2438591-88	1964 Jul 15 0906	Nike Apache	-	MASA 14.520CA	GCA Release 36 Na	-	-	-	WI	-	-	-	191	-	-
1964-S354	2438591-89	1964 Jul 15 0920	Nike Apache	-	MASA 14.1450I	UIUC-GCA Ionos 3/2b	-	-	-	WI	-	-	-	161	-	-
1964-S355	2438591-93	1964 Jul 15 1025	Nike Apache	-	MASA 14.1460I	UIUC-GCA Ionos 4/2c	-	-	-	WI	-	-	-	171	-	-
1964-A106	2438592-26	1964 Jul 15 1820	Nike Apache	-	Smoke 404	-	-	-	-	CC	-	-	-	16	-	-
1964-S361	2438593-18	1964 Jul 16 1622	Nike Apache	-	MASA 14.1276I	Antenna impedance	-	-	-	WI	-	-	-	137	-	-
1964-S368	2438593-85	1964 Jul 17 0824	Nike Apache	-	Missile compression	REDLAMP	-	-	-	CC	-	-	-	105	-	-
1964-S370	2438595-02	1964 Jul 18 1222	Astrbee 200	-	Dayglow spectra	-	-	-	-	FC	-	-	-	207	-	-
1964-S372	2438597-23	1964 Jul 20 1730	Nike Tomahawk	9	Sandia 152-20	LRL SAP Camera	-	-	-	KAU	-	-	-	287	-	-

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Launch_Mission	FlightCode	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee_Km	Range_Km	Dest
1964-S373	2438597-50	1964 Jul 21	Mike Tomahawk	9	Sandia 152-31	LASL Sun	-	-	-	KAU	-	-	-	2707	-	-
1964-S375	2438598-50	1964 Jul 22	Mike Tomahawk	9	Sandia 152-33	LASL Sun	-	-	-	KAU	-	-	-	321	-	-
1964-A112	2438605-25	1964 Jul 28 1800	Nike Apache	9	Smoke 405	-	-	-	-	CC	-	-	-	14	-	-
1964-S388	2438605-34	1964 Jul 28 2006	Nike Apache	-	-	Sphere	-	-	-	WS	LC33	-	-	2007	-	-
1964-S386	2438605-90	1964 Jul 29 0930	Nike Apache	-	-	Sphere	-	-	-	WS	-	-	-	2007	-	-
1964-A113	2438606-25	1964 Jul 29 1900	Nike Tomahawk	9	Smoke 406	-	-	-	-	CC	-	-	-	19	-	-
1964-S390	2438606-50	1964 Jul 30	Nike Tomahawk	9	Sandia 152-48	Density	-	-	-	WS	-	-	-	311	-	-
1964-A115	2438607-39	1964 Jul 30 2117	Nike Apache	-	Smoke 056	-	-	-	-	WI	-	-	-	16	-	-
1964-S394	2438607-50	1964 Aug	Nike Apache	-	BRTS	-	-	-	-	WS	-	-	-	1507	-	-
1964-S395	2438607-50	1964 Aug	Nike Tomahawk	-	BRTS	-	-	-	-	WS	-	-	-	300	-	-
1964-S401	2438612-50	1964 Aug 5	Nike Tomahawk	9	Sandia 152-43	SPREDBALL II 55 SN24	-	-	-	KAU	-	-	-	300	-	-
1964-A117	2438612-59	1964 Aug 5 0207	Nike Cajun	-	MASA 10.114GA	LASL Sun	-	-	-	WS	-	-	-	28	-	-
1964-S406	2438614-48	1964 Aug 6 2329	Nike Apache	-	GSFC Grenade 50	RTG K64-S-1 Air stmp	-	-	-	ASC	-	-	-	125	-	-
1964-S410	2438614-51	1964 Aug 7 0016	Nike Cajun	-	MASA 14.156DA	RTG K64-S-1 Air stmp	-	-	-	RNDN	-	-	-	130	-	-
1964-S411	2438614-54	1964 Aug 7 0100	Nike Cajun	-	MASA 10.136GA	RTG K64-G-1 Cremates	-	-	-	RNDN	-	-	-	119	-	-
1964-S413	2438615-50	1964 Aug 8	Nike Tomahawk	9	Sandia 152-42	GSFC Grenade 51 (W)	-	-	-	WI	-	-	-	307	-	-
1964-S414	2438615-67	1964 Aug 8 0400	Nike Cajun	-	MASA 10.106GA	LASL Sun	-	-	-	KAU	-	-	-	139	-	-
1964-S420	2438619-53	1964 Aug 12 0043	Nike Apache	-	MASA 14.56DA	GSFC Grenade 52 (C)	-	-	-	FC	-	-	-	121	-	-
1964-S421	2438619-55	1964 Aug 12 0111	Nike Cajun	-	MASA 10.139GA	RTG K64-S-2 Air stmp	-	-	-	RNDN	-	-	-	130	-	-
1964-S422	2438619-58	1964 Aug 12 0149	Nike Cajun	-	MASA 10.184GA	RTG K64-G-2 Cremates	-	-	-	RNDN	-	-	-	114	-	-
1964-S423	2438619-58	1964 Aug 12 0215	Nike Cajun	-	MASA 10.184GA	GSFC Grenade 53 (W)	-	-	-	WI	-	-	-	126	-	-
1964-A122	2438622-45	1964 Aug 14 2254	Nike Cajun	-	MASA 10.105DA	GSFC Grenade 54 (C)	-	-	-	FC	-	-	-	17	-	-
1964-S426	2438623-54	1964 Aug 16 0053	Nike Apache	-	Smoke 057	-	-	-	-	WI	-	-	-	119	-	-
1964-S427	2438623-54	1964 Aug 16 0053	Nike Cajun	-	MASA 14.57DA	RTG K64-S-3 Air stmp	-	-	-	RNDN	-	-	-	135	-	-
1964-S428	2438623-54	1964 Aug 16 0113	Nike Cajun	-	MASA 10.140GA	RTG K64-G-3 Cremates	-	-	-	RNDN	-	-	-	122	-	-
1964-S429	2438623-75	1964 Aug 16 0253	Nike Cajun	-	MASA 10.86GA	GSFC Grenade 55 (W)	-	-	-	WI	-	-	-	123	-	-
1964-S431	2438624-52	1964 Aug 17 0059	Nike Apache	-	MASA 10.115GA	GSFC Grenade 56 (A)	-	-	-	ASC	-	-	-	124	-	-
1964-S432	2438624-53	1964 Aug 17 0949	Nike Cajun	-	MASA 14.56DA	RTG K64-S-4 Air stmp	-	-	-	RNDN	-	-	-	132	-	-
1964-S434	2438625-04	1964 Aug 17 1255	Nike Cajun	-	MASA 10.141GA	RTG K64-G-4 Cremates	-	-	-	RNDN	-	-	-	122	-	-
1964-S435	2438625-56	1964 Aug 18 0115	Nike Cajun	-	MASA 10.116GA	GSFC Grenade 57 (A)	-	-	-	ASC	-	-	-	124	-	-
1964-S438	2438625-56	1964 Aug 18 0125	Nike Cajun	-	MASA 10.106GA	GSFC Grenade 58 (C)	-	-	-	FC	-	-	-	120	-	-
1964-A123	2438627-26	1964 Aug 19 1511	Nike Cajun	-	MASA 10.113GA	GSFC Grenade 59 (W)	-	-	-	WI	-	-	-	17	-	-
1964-S443	2438633-50	1964 Aug 26	Nike Cajun	-	Smoke 058	-	-	-	-	EPL	-	-	-	1007	-	-
1964-S445	2438634-21	1964 Aug 26 1701	Nike Apache	-	MASA 14.34GI	EM Absorption	-	-	-	WI	-	-	-	154	-	-
1964-S449	2438635-21	1964 Sep	Nike Apache	-	BRTS	-	-	-	-	WS	-	-	-	1007	-	-
1964-S460	2438635-50	1964 Sep	Nike Apache	?	BRTS	-	-	-	-	WS	-	-	-	1007	-	-
1964-S461	2438635-50	1964 Sep	Nike Javelin	?	DASA HAR	-	-	-	-	WS	-	-	-	1007	-	-
1964-S462	2438635-50	1964 Sep	Nike Javelin	?	DASA HAR	-	-	-	-	WS	-	-	-	1007	-	-
1964-A129	2438642-27	1964 Sep 3 1836	Nike	-	Smoke 059	-	-	-	-	WI	-	-	-	16	-	-
1964-A130	2438643-21	1964 Sep 4 1701	Nike Javelin	?	Smoke 060	-	-	-	-	WS	-	-	-	16	-	-
1964-S453	2438643-25	1964 Sep 5 1735	Nike	-	Smoke 061	-	-	-	-	WI	-	-	-	15	-	-
1964-A132	2438644-25	1964 Sep 15 1758	Nike	-	Smoke 062	-	-	-	-	WI	-	-	-	15	-	-
1964-S474	2438667-23	1964 Sep 18 1725	Nike Apache	-	REDLAMP/no particles	-	-	-	-	CC	-	-	-	1507	-	-
1964-S477	2438667-23	1964 Sep 18 1725	Nike Apache	-	SPREDBALL II 59 SN26	-	-	-	-	US	-	-	-	1507	-	-
1964-S478	2438667-54	1964 Sep 25 2012	Nike Apache	-	Smoke 063	-	-	-	-	WI	-	-	-	1507	-	-
1964-S495	2438668-54	1964 Sep 26 2012	Nike Apache	-	BRTS	-	-	-	-	US	-	-	-	1507	-	-
1964-S498	2438669-50	1964 Oct 7 2304	Nike Apache	-	MASA 14.19ECA	SPREDBALL II 60 SN27	-	-	-	NS	-	-	-	1507	-	-
1964-S499	2438669-50	1964 Oct 7 2304	Nike Apache	-	MASA 14.19ECA	SPREDBALL II 61 SN28	-	-	-	NS	-	-	-	1507	-	-
1964-S497	2438671-46	1964 Oct 7 2319	Nike Apache	-	MASA 14.159CE	CCA Release 37 THA	-	-	-	NS	-	-	-	172	-	-
1964-S496	2438671-93	1964 Oct 8 0033	Nike Apache	-	MASA 14.194CA	B Field 4	-	-	-	WI	-	-	-	140	-	-
1964-S510	2438671-94	1964 Oct 8 1034	Nike Apache	-	MASA 14.194CA	CCA Release 38 Ila	-	-	-	WI	-	-	-	140	-	-
1964-A151	2438682-31	1964 Oct 13 1926	Nike Apache	-	MASA 10.1590E	B Field 5	-	-	-	WI	-	-	-	141	-	-
1964-S525	2438685-98	1964 Oct 17 1043	Nike Apache	-	AE5-487	Ionos wind.T (IQSY)	-	-	-	EGL	-	-	-	156	-	-
1964-S526	2438685-98	1964 Oct 17 1043	Nike Javelin	-	ELCSDOM wind.T	-	-	-	-	EGL	-	-	-	177	-	-
1964-A157	2438681-21	1964 Oct 22 1556	Nike Apache	-	Smoke 065	-	-	-	-	WI	-	-	-	19	-	-
1964-S528	2438682-69	1964 Oct 22 1656	Nike Cajun	-	Smoke 066	-	-	-	-	KAU	-	-	-	160	-	-
1964-S543	2438686-21	1964 Oct 24 0433	Nike Apache	-	AB6-197	Sandia 154-30	TMA	-	-	FC	-	-	-	136	-	-
1964-S544	2438686-81	1964 Oct 27 1657	Nike Apache	-	AB6-197	Sandia 154-31	TMA	-	-	FC	-	-	-	160	-	-
1964-A160	2438689-27	1964 Oct 30 1828	Nike Apache	-	Smoke 066	-	-	-	-	KAU	-	-	-	15	-	-
1964-S555	2438689-50	1964 Nov	Nike Javelin	?	DASA HAR	-	-	-	-	NS	-	-	-	1007	-	-
1964-S556	2438689-50	1964 Nov	Nike Javelin	?	DASA HAR	-	-	-	-	NS	-	-	-	1007	-	-
1964-S557	2438689-50	1964 Nov	Nike Javelin	?	DASA HAR	-	-	-	-	NS	-	-	-	1007	-	-
1964-S558	2438689-50	1964 Nov	Nike Javelin	?	DASA HAR	-	-	-	-	NS	-	-	-	1007	-	-
1964-S561	2438700-72	1964 Nov 1 0510	Nike Cajun	-	MASA 14.197CA	Sandia 154-32	Balloon	-	-	KAU	-	-	-	140	-	-
1964-S560	2438700-72	1964 Nov 1 0620	Nike Apache	-	MASA 10.132CA	CCA Tomos 13/Reel Ila	-	-	-	FC	-	-	-	182	-	-
1964-S562	2438700-76	1964 Nov 1 0618	Nike Apache	-	MASA 10.132CA	Sandia 154-34	TMA	-	-	KAU	-	-	-	160	-	-
1964-S569	2438702-69	1964 Nov 3 0432	Nike Apache	-	MASA 10.136GA	Sandia 154-36	TMA	-	-	KAU	-	-	-	160	-	-
1964-S568	2438702-92	1964 Nov 3 1002	Nike Apache	-	AE5-550	IONOS Tomos Sphere	-	-	-	EGL	-	-	-	209	-	-
1964-S570	2438703-23	1964 Nov 3 1738	Nike Cajun	-	MASA 10.107GA	GSFC Grenade 60	-	-	-	WI	-	-	-	122	-	-
1964-S584	2438705-21	1964 Nov 5 1700	Nike Apache	-	MASA 14.104DI	GSFC Grenade 61	-	-	-	FC	-	-	-	145	-	-
1964-S582	2438705-36	1964 Nov 5 2038	Nike Apache	-	MASA 14.104DI	Ionos/B field	-	-	-	FC	-	-	-	289	-	-
1964-S592	2438705-50	1964 Nov 6 0002	Nike Cajun	9	Sandia 152-59	Ballistic HRT	-	-	-	KAU	-	-	-	120	-	-
1964-S593	2438705-50	1964 Nov 6 0008	Nike Cajun	-	MASA 10.133CA	GSFC Grenade 62	-	-	-	WI	-	-	-	192	-	-
1964-S594	2438705-51	1964 Nov 6 0008	Nike Apache	-	MASA 14.1311A	ISRO 10.04	TELELS-012	-	-	TERLS	-	-	-	120	-	-
1964-S595	2438705-72	1964 Nov 6 0520	Nike Cajun	-	MASA 10.134GA	GSFC Grenade 63	-	-	-	WI	-	-	-	120	-	-
1964-S596	2438705-92	1964 Nov 6 1000	Nike Cajun	-	MASA 10.135GA	GSFC Grenade 64	-	-	-	FC	-	-	-	125	-	-
1964-S599	2438706-72	1964 Nov 7 0513	Nike Apache	-	MASA 14.105DI	Ionos/B field	-	-	-	FC	-	-	-	149	-	-
1964-S604	2438706-57	1964 Nov 7 0138	Nike Cajun	9	Meteor 4/5	Meteor 4	-	-	-	WI	-	-	-	110	-	-
1964-S605	2438708-50	1964 Nov 9 1254	Nike Tomahawk	-	Sandia 152-67	Ballistic HRT	-	-	-	KAU	-	-	-	289	-	-
1964-S606	2438709-04	1964 Nov 9 1005	Nike Apache	-	MASA 14.2041A	ISRO 10.05	TELELS-013	-	-	TERLS	-	-	-	192	-	-
1964-S607	2438709-50	1964 Nov 10	Nike Apache	-	MASA 14.2041A	ISRO 10.06	TELELS-014	-	-	EGL	-	-	-	2007	-	-
1964-S608	2438709-50	1964 Nov 10 0005	Nike Apache	-	MASA 14.147UII	UTUC-GCA Ionos 5/3a	-	-	-	TERLS	-	-	-	2007	-	-
1964-S610	2438709-96	1964 Nov 10 1107	Nike Apache	-	MASA 14.114CA	GCA Release 39 Ila	-	-	-	WI	-	-	-	251	-	-
1964-S611	2438710-43	1964 Nov 10 2225	Nike Apache	-	MASA 14.114CA	GCA Release 39 Ila	-	-	-	MAS64	LP1	-	-	198	-	-



Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Mission	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee	Range	Dest
												km	km	
1965-A41	2438819-98	1965 Feb 28 1130	Nike Apache	-	AES-554	TIMA (TMA/Gren)	-	EGL	-	-	-	28	-	-
1965-S119	2438820-98	1965 Feb 28 1130	Nike Apache	-	AES-497	Neutral/Ion/ImpProbe	-	EGL	-	-	-	139	-	-
1965-M07	2438821-01	1965 Feb 28 1211	Nike Apache	-	MASA 14.200CA	GCA Ions-TMA 4	-	FC	-	-	-	55	-	-
1965-A42	2438820-05	1965 Feb 28 1315	Nike Apache	-	AES-585	Neutral/Ion/ImpProbe	-	EGL	-	-	-	28	-	-
1965-S111	2438819-50	1965 Mar	Nike Apache	-	BMTS	-	-	WS	-	-	-	100?	-	-
1965-S112	2438819-36	1965 Mar 1 2043	Nike Apache	-	BMTS	-	-	WS	-	-	-	100?	-	-
1965-S122	2438821-36	1965 Mar 1 2043	Nike Apache	-	MASA 14.2631A	UJ0-6	-	AND	-	-	-	185	-	-
1965-S123	2438821-50	1965 Mar 2	Nike Tomahawk	9	Sandia 152-49	ACS	-	KMU	-	-	-	270?	-	-
1965-S124	2438821-50	1965 Mar 2	Nike Tomahawk	12	Sandia 152-53	Ballistic	-	KMU	-	-	-	175	-	-
1965-A44	2438823-47	1965 Mar 3 2228	Nike Apache	-	Ferdinand 9	Ferdinand 9	-	AND	-	-	-	22	-	-
1965-S137	2438823-37	1965 Mar 5 2057:50	Nike Apache	-	MASA 14.2641A	UJ0-8	-	AND	-	-	-	180	-	-
1965-S138	2438825-81	1965 Mar 6 0730	Nike Tomahawk	9	Sandia 152-73	Caribou I	-	FC	-	-	-	184	-	-
1965-S143	2438828-15	1965 Mar 8 1535	Nike Apache	-	MASA 14.1600E	B field	-	MANS65	LP2	-	-	151	-	-
1965-S144	2438828-24	1965 Mar 8 1748:08	Nike Apache	-	MASA 14.604A	UM Pilot 8	-	MANS65	LP2	-	-	141	-	-
1965-S145	2438828-77	1965 Mar 9 0626:28	Nike Apache	-	MASA 14.650A	UM Pilot 9	-	MANS65	LP3	-	-	143	-	-
1965-S146	2438829-18	1965 Mar 9 1625	Nike Apache	-	MASA 14.850E	UMH 65-2	-	MANS65	LP4	-	-	200?	-	-
1965-S148	2438830-17	1965 Mar 10 1600	Nike Apache	-	MASA 14.950E	UMH 65-3	-	MANS65	LP5	-	-	197	-	-
1965-S149	2438830-90	1965 Mar 11 0958:14	Nike Apache	-	MASA 14.960A	Composition(Tropics)	-	MANS65	LP6	-	-	100?	-	-
1965-S150	2438830-94	1965 Mar 11 1058	Nike Cajun	-	MASA 10.1560A	-	-	MANS65	LP7	-	-	16	-	-
1965-A45	2438831-26	1965 Mar 11 1511	Nike Apache	-	Smoke 078	-	-	MANS65	LP8	-	-	200?	-	-
1965-S151	2438831-34	1965 Mar 11 2007	Nike Tomahawk	9	MASA 14.990A	ACS	-	KMU	-	-	-	280	-	-
1965-S152	2438831-50	1965 Mar 12	Nike Apache	-	Sandia 152-79	UMH 65-4	-	MANS65	LP9	-	-	178	-	-
1965-S153	2438832-06	1965 Mar 12 1330	Nike Apache	-	MASA 14.070E	UMH 65-5	-	MANS65	LP9	-	-	175	-	-
1965-S154	2438832-17	1965 Mar 12 1600	Nike Apache	-	MASA 14.940E	Ferdinand 10	-	MANS65	LP9	-	-	35	-	-
1965-A46	2438835-36	1965 Mar 15 2041	Nike Apache	-	Ferdinand 10	B field	-	AND	-	-	-	172	-	-
1965-S164	2438836-16	1965 Mar 16 1651	Nike Apache	-	MASA 14.1710E	-	-	MANS65	LP10	-	-	200?	-	-
1965-S165	2438836-20	1965 Mar 16 1651	Nike Apache	-	MASA 14.1770E	-	-	MANS65	LP10	-	-	150	-	-
1965-S166	2438837-75	1965 Mar 16 1651	Nike Apache	-	MASA 14.1780E	B field	-	MANS65	LP12	-	-	200?	-	-
1965-S169	2438837-75	1965 Mar 16 0604	Nike Apache	-	MASA 14.1760E	-	-	MANS65	LP12	-	-	149	-	-
1965-S171	2438838-17	1965 Mar 18 1601	Nike Apache	-	MASA 14.1790E	B field	-	MANS65	LP14	-	-	200?	-	-
1965-S172	2438838-17	1965 Mar 18 1658	Nike Apache	-	MASA 14.1790E	-	-	MANS65	LP15	-	-	149	-	-
1965-S173	2438838-36	1965 Mar 18 2043	Nike Tomahawk	-	MASA 12.0578.01CA	Composition	-	WI	-	-	-	158	-	-
1965-S176	2438839-26	1965 Mar 19 1509	Nike Apache	-	MASA 14.2280I	UM Thermosphere 1	-	WI	-	-	-	174	-	-
1965-S178	2438840-06	1965 Mar 20 1520:09	Nike Apache	-	AES-283	B field	-	MANS65	LP16	-	-	201	-	-
1965-S179	2438840-16	1965 Mar 20 1628	Nike Apache	-	AES-283	Electron density	-	MANS65	LP17	-	-	122	-	-
1965-S180	2438840-21	1965 Mar 20 1704:13	Nike Cajun	-	Ferdinand 11	Ferdinand 11	-	AND	-	-	-	206	-	-
1965-A48	2438842-45	1965 Mar 22 0744	Nike Apache	-	AES-284	B field	-	MANS65	LP19	-	-	120	-	-
1965-S183	2438841-82	1965 Mar 22 0949:10	Nike Apache	-	AES-285	Electron density	-	MANS65	LP20	-	-	165	-	-
1965-S185	2438842-90	1965 Mar 23 0931:09	Nike Apache	-	MASA 14.2290II	B field	-	MANS65	LP20	-	-	200?	-	-
1965-S187	2438844-19	1965 Mar 24 1654	Nike Apache	-	MASA 14.2740E	-	-	MANS65	LP22	-	-	150	-	-
1965-S188	2438845-21	1965 Mar 24 1707	Nike Apache	-	AES-44.100G1	B field	-	MANS65	LP22	-	-	150	-	-
1965-S189	2438845-17	1965 Mar 24 1800	Nike Apache	-	MASA 14.1793E	B field	-	MANS65	LP24	-	-	150	-	-
1965-S190	2438846-16	1965 Mar 26 1541	Nike Apache	-	MASA 14.1801I	-	-	MANS65	LP26	-	-	200?	-	-
1965-S191	2438847-52	1965 Mar 27 0300	Nike Apache	-	MASA 14.1920I	B field	-	MANS65	LP26	-	-	200?	-	-
1965-S201	2438849-26	1965 Mar 28 1506	Nike Apache	-	AES-286.1760E	B field	-	MANS65	LP26	-	-	129	-	-
1965-S205	2438849-16	1965 Mar 29 1517	Nike Apache	-	MASA 14.700E	B field	-	MANS65	LP29	-	-	172	-	-
1965-S206	2438849-16	1965 Mar 29 1517	Nike Cajun	-	MASA 14.1435E	B field	-	MANS65	LP30	-	-	172	-	-
1965-A51	2438849-27	1965 Mar 31 1931	Nike Apache	-	Smoke 079	-	-	WI	-	-	-	139	-	-
1965-S211	2438851-59	1965 Apr 1 1026:7	Nike Apache	-	MASA 14.1307A	Airglow	-	WI	-	-	-	200?	-	-
1965-S212	2438851-59	1965 Apr 2 1320	Nike Apache	-	MASA 14.1481E	UMH Particles	-	FC	LP31	-	-	205	-	-
1965-S214	2438854-42	1965 Apr 2 2159	Nike Apache	-	MASA 14.2070E	Aer-Ch1 Flares	-	FC	LP31	-	-	177	-	-
1965-S215	2438855-07	1965 Apr 4 1606:35	Nike Apache	-	MASA 14.2600I	UM Pilot 10	-	MANS65	LP32	-	-	199	-	-
1965-S217	2438856-32	1965 Apr 5 1942	Nike Apache	-	MASA 14.2300II	-	-	MANS65	LP33	-	-	200?	-	-
1965-S218	2438857-19	1965 Apr 5 1345:53	Nike Apache	-	MASA 14.1801E	UMH Particles	-	MANS65	LP34	-	-	142	-	-
1965-S219	2438857-19	1965 Apr 5 1634:05	Nike Apache	-	MASA 14.260A	-	-	MANS65	LP36	-	-	191	-	-
1965-S220	2438860-30	1965 Apr 9 1918:15	Nike Apache	-	MASA 14.2300II	UM Pilot 11	-	MANS65	LP37	-	-	147	-	-
1965-S223	2438860-38	1965 Apr 9 2026:10	Nike Apache	-	MASA 14.6300A	UM Pilot 12	-	MANS65	LP38	-	-	187	-	-
1965-S227	2438863-25	1965 Apr 12 1714:02	Nike Apache	-	AEO7 913	UTUC-GCA Ions 7	-	EGL	LP38	-	-	143	-	-
1965-S228	2438863-26	1965 Apr 12 1937	Nike Tomahawk	?	MASA 14.2320II	Vehicle Test	-	MANS65	LP39	-	-	150	-	-
1965-S231	2438864-17	1965 Apr 13 0405:06	Nike Apache	-	MASA 14.6700A	UM Pilot 13	-	MANS65	LP39	-	-	146	-	-
1965-S232	2438864-17	1965 Apr 13 1600:09	Nike Apache	-	MASA 14.2700A	UM Pilot 14	-	MANS65	LP39	-	-	200?	-	-
1965-S233	2438864-22	1965 Apr 13 1710	Nike Apache	-	MASA 14.1861E	UMH Particles	-	MANS65	LP39	-	-	200?	-	-
1965-S234	2438864-30	1965 Apr 13 1906	Nike Apache	-	MASA 14.1000A	Composition	-	MANS65	LP40	-	-	140	-	-
1965-S237	2438866-15	1965 Apr 15 1600:04	Nike Apache	-	MASA 14.2500A	UM Pilot 15	-	MANS65	LP41	-	-	200?	-	-
1965-S238	2438866-25	1965 Apr 15 1802	Nike Apache	-	MASA 14.1000A	Composition	-	MANS65	LP42	-	-	80	-	-
1965-M09	2438871-43	1965 Apr 20 2204	Nike Cajun	-	ADS-841	Aerbus breakdown	-	WI	-	-	-	128	-	-
1965-S246	2438873-67	1965 Apr 23 0301	Nike Apache	-	MASA 10.1710A	Release	-	WI	-	-	-	145	-	-
1965-S247	2438873-67	1965 Apr 23 0402	Nike Apache	-	MASA 14.2550A	Release	-	WI	-	-	-	100?	-	-
1965-S210	2438878-50	1965 Apr 28 2227	Nike Apache	-	BMTS	-	-	WI	-	-	-	145	-	-
1965-S257	2438879-44	1965 Apr 28 2227	Nike Cajun	-	MASA 10.1500A	GSFC Grenade 75	-	NS	-	-	-	100?	-	-
1965-S264	2438880-23	1965 Apr 29 1732	Nike Apache	-	MASA 10.941A	Behbar 7 (Grenade)	-	PRA	-	-	-	100?	-	-
1965-A61	2438881-33	1965 Apr 30 1837	Nike Cajun	-	MASA 10.951A	Behbar 8 (Grenade)	-	SOM	-	-	-	23	-	-
1965-A62	2438881-33	1965 Apr 30 1953	Nike Cajun	-	Smoke 080	-	-	SOM	-	-	-	40	-	-
1965-S268	2438880-50	1965 May 3 1823	Nike Javelin	?	MASA HAF	-	-	NS	-	-	-	100?	-	-
1965-S273	2438880-27	1965 May 3 1823	Nike Cajun	-	MASA 10.1276A	GSFC Grenade 76	-	WI	-	-	-	110	-	-
1965-I03	2438884-74	1965 May 4 0550	Nike Cajun	-	Meteor 6/7	Reentry physics	-	WI	-	-	-	11	-	-
1965-A63	2438894-26	1965 May 13 1813	Nike	-	Smoke 081	-	-	WI	-	-	-	15	-	-
1965-A70	2438895-15	1965 May 14 1541	Nike	-	Smoke 082	-	-	WI	-	-	-	14	-	-
1965-A72	2438899-27	1965 May 18 1830	Nike	-	Smoke 083	-	-	WI	-	-	-	14	-	-
1965-S303	2438902-58	1965 May 22 0202:01	Nike Apache	-	MASA 14.4700A	UM Pilot 16/FIRE cal	-	ASC	-	-	-	147	-	-
1965-S305	2438903-08	1965 May 22 1400:00	Nike Apache	-	MASA 14.4800A	UM Pilot 17/FIRE cal	-	ASC	-	-	-	158	-	-
1965-S319	2438911-33	1965 May 30 2000?	Nike Tomahawk	9	Sandia 152-74	LAST Eclipse	-	RABO	-	-	-	270?	-	-</



Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Launch_Mission	FlightCode	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee_Km	Range_Km	Dest
1965-5569	243905-85	1965 Oct 22 0754:28	Mike Iroquois	-	CRL AE07.619D	Auroral I/O	-	-	-	FMKK	-	-	-	137	-	-
1965-5572	243906-15	1965 Oct 23 1538	Nike Cajun	-	MASA 10.1768M	GSFC Grenade 92 PB	-	-	-	PBA	-	-	-	1007	-	-
1965-5573	243906-18	1965 Oct 23 1614	Nike Cajun	-	MASA 10.1768M	GSFC Grenade 93/0M Sph	-	-	-	WI	-	-	-	118	-	-
1965-5574	243906-19	1965 Oct 23 1638	Nike Cajun	-	MASA 10.1720M	GSFC Grenade 94 C	-	-	-	FC	-	-	-	114	-	-
1965-5776	243906-50	1965 Oct 27	Nike Apache	-	-	SPEEDBALL II 78 S834	-	-	-	WS	-	-	-	1507	-	-
1965-5578	243906-49	1965 Oct 27 2348	Nike Cajun	-	MASA 10.1730M	GSFC Grenade 96 C	-	-	-	PBA	-	-	-	118	-	-
1965-5579	243906-48	1965 Oct 27 2348	Nike Cajun	-	MASA 10.1790M	GSFC Grenade 96 C	-	-	-	PBA	-	-	-	1007	-	-
1965-5580	243906-51	1965 Oct 28 0010	Nike Cajun	-	MASA 10.1760M	GSFC Grenade 96 PB	-	-	-	WI	-	-	-	117	-	-
1965-A149	243906-27	1965 Oct 29 1923	Nike Javelin	-	Smoke 091	-	-	-	-	WI	-	-	-	13	-	-
1965-5587	243906-50	1965 Nov	Nike Javelin	?	DASA HAR	-	-	-	-	WS	-	-	-	1007	-	-
1965-5588	243906-50	1965 Nov 2 1531	Nike Javelin	-	DASA HAR	-	-	-	-	WS	-	-	-	1007	-	-
1965-A153	243906-15	1965 Nov 3 0917	Nike Cajun	-	Smoke 092	-	-	-	-	WI	-	-	-	12	-	-
1965-5593	243906-87	1965 Nov 3 0917	Nike Apache	-	CRL AE6.557	IQSY 7-inch Sphere	-	-	-	EGL	-	-	-	137	-	-
1965-5605	243907-28	1965 Nov 9 1840:00	Nike Tomahawk	-	MASA 14.1680A	UM Thermosphere 2	-	-	-	UM Pilot 18	-	-	-	144	-	-
1965-5607	243907-4	1965 Nov 9 1916	Nike Tomahawk	-	MASA 18.036A	UM Thermosphere 2	-	-	-	FC	-	-	-	328	-	-
1965-5608	243907-5	1965 Nov 10	Nike Apache	-	BMS	SPEEDBALL II 79 S832	-	-	-	WS	-	-	-	1507	-	-
1965-5609	243907-7	1965 Nov 10 0630	Nike Apache	-	MASA 14.1690M	UM Thermosphere 3	-	-	-	FC	-	-	-	328	-	-
1965-5611	243907-67	1965 Nov 10 0700	Nike Tomahawk	-	MASA 18.026A	UM Thermosphere 3	-	-	-	EGL	-	-	-	113	-	-
1965-5613	243907-50	1965 Nov 11 0410	Nike Tomahawk	9	CRL AE6.378	AEC SNOL	-	-	-	KAU	-	-	-	300	-	-
1965-5616	243908-1	1965 Nov 16 1822	Nike Tomahawk	-	Sandia 152-94	AEC SNOL wind/density	-	-	-	EGL	-	-	-	114	-	-
1965-5618	243908-43	1965 Nov 16 2215:00	Nike Tomahawk	-	Sandia 152-94	AEC SNOL	-	-	-	EGL	-	-	-	130	-	-
1965-A230	243908-50	1965 Nov 22	Nike Tomahawk	-	Sandia?	-	-	-	-	KAU	-	-	-	27	-	-
1965-A231	243908-50	1965 Nov 24	Nike Tomahawk	-	Sandia?	-	-	-	-	KAU	-	-	-	27	-	-
1965-5793	243908-50	1965 Nov 24	Nike Tomahawk	-	Sandia?	-	-	-	-	KAU	-	-	-	27	-	-
1965-5820	243908-50	1965 Nov 24	Nike Tomahawk	-	Sandia?	-	-	-	-	KAU	-	-	-	27	-	-
1965-A163	243908-50	1965 Nov 24	Nike Tomahawk	-	Sandia?	-	-	-	-	KAU	-	-	-	27	-	-
1965-5821	243908-46	1965 Nov 17 2042	Nike Apache	-	MASA 14.2380E	Auroral emissions	-	-	-	FC	-	-	-	807	-	-
1965-5822	243908-46	1965 Nov 17 2536	Nike Apache	-	Smoke 093	-	-	-	-	WI	-	-	-	16	-	-
1965-5823	243908-50	1965 Nov 18	Nike Javelin	-	CRL AE6.464	EDMA	-	-	-	EGL	-	-	-	165	-	-
1965-5824	243908-72	1965 Nov 18 0520	Nike Tomahawk	-	CRL AE6.382	IQSY I <sub>h</sub> , TMA	-	-	-	EGL	-	-	-	1307	-	-
1965-5825	243908-72	1965 Nov 18 0520	Nike Tomahawk	-	CRL AE6.382	IQSY D-region comp.	-	-	-	EGL	-	-	-	116	-	-
1965-5826	243908-97	1965 Nov 18 1121	Nike Tomahawk	-	CRL AE6.383	IQSY Ion composition	-	-	-	EGL	-	-	-	107	-	-
1965-5829	243908-50	1965 Nov 18 1431	Nike Apache	-	CRL AE6.499	PULLY	-	-	-	EGL	-	-	-	185	-	-
1965-A164	243908-26	1965 Nov 18 1618	Nike Apache	-	MASA 14.780A	Pandora 1 (Leontide)	-	-	-	WS	-	-	-	149	-	-
1965-5856	243908-50	1965 Nov 19	Nike Apache	-	BMS	Smoke 094	-	-	-	WI	-	-	-	14	-	-
1965-5858	243908-50	1965 Nov 19 0037:53	Nike Apache	-	Ferdinand 12	SR-019	-	-	-	WS	-	-	-	1007	-	-
1965-5859	243908-50	1965 Nov 20 0037:53	Nike Apache	-	Ferdinand 12	SR-019	-	-	-	AND	-	-	-	122	-	-
1965-5864	243908-72	1965 Nov 20 0520	Nike Tomahawk	12	MASA 14.2390E	Auroral emissions	-	-	-	FC	-	-	-	176	-	-
1965-A166	243908-45	1965 Nov 22 2215	Nike Tomahawk	9	Sandia 152-85	LAL BOX-3	-	-	-	KAU	-	-	-	200	-	-
1965-5857	243908-50	1965 Nov 22	Nike Tomahawk	9	Sandia 152-27	Sampler	-	-	-	KAU	-	-	-	2707	-	-
1965-5858	243908-50	1965 Nov 22	Nike Tomahawk	9	Sandia 152-27	Sampler	-	-	-	KAU	-	-	-	2707	-	-
1965-5861	243908-50	1965 Nov 22 0030:00	Nike Tomahawk	9	MEDMANS PD11T	-	-	-	-	EGL	-	-	-	1007	-	-
1965-5862	243908-50	1965 Nov 22 0030:00	Nike Tomahawk	9	Smoke 095	-	-	-	-	EGL	-	-	-	1007	-	-
1965-5863	243908-50	1965 Nov 23 1524	Nike Apache	-	Smoke 095	-	-	-	-	WI	-	-	-	14	-	-
1965-5864	243908-50	1965 Nov 23 1524	Nike Apache	-	Smoke 095	-	-	-	-	WI	-	-	-	14	-	-
1965-5865	243908-50	1965 Nov 24 1857	Nike Apache	-	Smoke 096	-	-	-	-	WI	-	-	-	169	-	-
1965-5867	243908-50	1965 Nov 24 1857	Nike Apache	-	Smoke 096	-	-	-	-	WI	-	-	-	169	-	-
1965-A171	243909-17	1965 Dec 7 1812	Nike Apache	-	Smoke 097	-	-	-	-	WI	-	-	-	14	-	-
1965-5855	243910-25	1965 Dec 8	Nike Apache	-	Smoke 097	-	-	-	-	WI	-	-	-	14	-	-
1965-5856	243910-25	1965 Dec 8	Nike Apache	-	Smoke 097	-	-	-	-	WI	-	-	-	14	-	-
1965-5857	243910-36	1965 Dec 9 2033	Nike Apache	-	BMS	SR-020	-	-	-	WS	-	-	-	1007	-	-
1965-5870	243910-36	1965 Dec 9 2033	Nike Apache	-	BMS	SR-021	-	-	-	WS	-	-	-	1007	-	-
1965-5871	243910-36	1965 Dec 9 2033	Nike Apache	-	BMS	SR-021	-	-	-	WS	-	-	-	1007	-	-
1965-5872	243910-50	1965 Dec 10 0500	Nike Tomahawk	-	CRL A46.174	SPEEDBALL II 81 S836	-	-	-	FC	-	-	-	139	-	-
1965-5873	243910-50	1965 Dec 10 0500	Nike Tomahawk	-	CRL A46.174	SPEEDBALL II 81 S836	-	-	-	FC	-	-	-	139	-	-
1965-5874	243910-50	1965 Dec 10 0500	Nike Tomahawk	-	CRL A46.174	SPEEDBALL II 81 S836	-	-	-	FC	-	-	-	139	-	-
1965-5875	243910-50	1965 Dec 10 0500	Nike Tomahawk	-	CRL A46.174	SPEEDBALL II 81 S836	-	-	-	FC	-	-	-	139	-	-
1965-5876	243910-50	1965 Dec 11 1955	Nike Apache	-	CRL A46.173	Sphere	-	-	-	EGL	-	-	-	1307	-	-
1965-5877	243910-50	1965 Dec 11 1955	Nike Apache	-	CRL A46.173	Sphere	-	-	-	EGL	-	-	-	1307	-	-
1965-5878	243910-50	1965 Dec 12 0451	Nike Apache	-	CRL A46.172	Sphere	-	-	-	EGL	-	-	-	155	-	-
1965-5879	243910-50	1965 Dec 12 0451	Nike Apache	-	CRL A46.172	Sphere	-	-	-	EGL	-	-	-	155	-	-
1965-5880	243910-50	1965 Dec 12 0451	Nike Apache	-	CRL A46.172	Sphere	-	-	-	EGL	-	-	-	155	-	-
1965-5881	243910-50	1965 Dec 12 0451	Nike Apache	-	CRL A46.172	Sphere	-	-	-	EGL	-	-	-	155	-	-
1965-5882	243910-50	1965 Dec 12 0451	Nike Apache	-	CRL A46.172	Sphere	-	-	-	EGL	-	-	-	155	-	-
1965-5883	243910-50	1965 Dec 12 0451	Nike Apache	-	CRL A46.172	Sphere	-	-	-	EGL	-	-	-	155	-	-
1965-5884	243910-50	1965 Dec 12 0451	Nike Apache	-	CRL A46.172	Sphere	-	-	-	EGL	-	-	-	155	-	-
1965-5885	243910-50	1965 Dec 12 0451	Nike Apache	-	CRL A46.172	Sphere	-	-	-	EGL	-	-	-	155	-	-
1965-5886	243910-50	1965 Dec 12 0451	Nike Apache	-	CRL A46.172	Sphere	-	-	-	EGL	-	-	-	155	-	-
1965-5887	243910-50	1965 Dec 12 0451	Nike Apache	-	CRL A46.172	Sphere	-	-	-	EGL	-	-	-	155	-	-
1965-5888	243910-50	1965 Dec 12 0451	Nike Apache	-	CRL A46.172	Sphere	-	-	-	EGL	-	-	-	155	-	-
1965-5889	243910-50	1965 Dec 12 0451	Nike Apache	-	CRL A46.172	Sphere	-	-	-	EGL	-	-	-	155	-	-
1965-5890	243910-50	1965 Dec 12 0451	Nike Apache	-	CRL A46.172	Sphere	-	-	-	EGL	-	-	-	155	-	-
1965-5891	243910-50	1965 Dec 12 0451	Nike Apache	-	CRL A46.172	Sphere	-	-	-	EGL	-	-	-	155	-	-
1965-5892	243910-50	1965 Dec 12 0451	Nike Apache	-	CRL A46.172	Sphere	-	-	-	EGL	-	-	-	155	-	-
1965-5893	243910-50	1965 Dec 12 0451	Nike Apache	-	CRL A46.172	Sphere	-	-	-	EGL	-	-	-	155	-	-
1965-5894	243910-50	1965 Dec 12 0451	Nike Apache	-	CRL A46.172	Sphere	-	-	-	EGL	-	-	-	155	-	-
1965-5895	243910-50	1965 Dec 12 0451	Nike Apache	-	CRL A46.172	Sphere	-	-	-	EGL	-	-	-	155	-	-
1965-5896	243910-50	1965 Dec 12 0451	Nike Apache	-	CRL A46.172	Sphere	-	-	-	EGL	-	-	-	155	-	-
1965-5897	243910-50	1965 Dec 12 0451	Nike Apache	-	CRL A46.172	Sphere	-	-	-	EGL	-	-	-	155	-	-
1965-5898	243910-50	1965 Dec 12 0451	Nike Apache	-	CRL A46.172	Sphere	-	-	-	EGL	-	-	-	155	-	-
1965-5899	243910-50	1965 Dec 12 0451	Nike Apache	-	CRL A46.172	Sphere	-	-	-	EGL	-	-	-	155	-	-
1966-S100	2439166-74	1966 Feb 10 0551	Nike Apache	-	MASA 14.1886E	Auroral electrons 1	-	-	-	FC	-	-	-	178	-	-



Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Mission	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee_Km	Range_Km	Dest
1966-5739	2439307.50	1966 Jul 1	Nike Cajun	-	-	MICAP/1 66-02	-	WS	-	-	-	1207	-	-
1966-5360	2439313.84	1966 Jul 7 0815	Nike Apache	-	MASA 14.591E	ISRU 20.05	TERLS-044	TERLS	-	-	-	178	-	-
1966-5742	2439313.94	1966 Jul 7 1038	Nike Cajun	-	-	MICAP/1 66-03	-	WS	-	-	-	1207	-	-
1966-5365	2439318.30	1966 Jul 11 1918	Nike Apache	-	MASA 14.960A	Density profile	-	FC	-	-	-	202	-	-
1966-5372	2439321.14	1966 Jul 14 1515	Nike Apache	-	MASA 14.1661I	-	-	WI	-	-	-	196	-	-
1966-5743	2439322.30	1966 Jul 15 1909	Nike Cajun	-	-	MICAP/1 66-04	-	WS	-	-	-	1207	-	-
1966-5354	2439322.50	1966 Jul 16	Nike Apache	-	BMTS	Target	-	FW	-	-	-	1207	-	-
1966-5374	2439323.54	1966 Jul 17 0056	Nike Apache	-	MASA 14.291CM	CCA Release 53 ha	-	WI	-	-	-	192	-	-
1966-5376	2439323.71	1966 Jul 17 0500:00	Nike Apache	-	MASA 14.292CM	CCA Release 54 TMA	-	WI	-	-	-	211	-	-
1966-5377	2439323.78	1966 Jul 17 0645	Nike Apache	-	MASA 14.293CM	CCA Release 55 TMA	-	WI	-	-	-	199	-	-
1966-5378	2439323.86	1966 Jul 17 0908	Nike Apache	-	MASA 14.294CM	CCA Release 56 TMA	-	WI	-	-	-	200	-	-
1966-5379	2439323.88	1966 Jul 17 0908	Nike Apache	-	MASA 14.295CM	CCA Release 57 ha	-	WI	-	-	-	208	-	-
1966-5744	2439325.48	1966 Jul 18 2340	Nike Cajun	-	MASA 14.2186E	MICAP/1 66-09	-	WS	-	-	-	1207	-	-
1966-5383	2439327.33	1966 Jul 20 1950	Nike Apache	-	BMTS	SPICE 1 (PCA)	-	FC	-	-	-	161	-	-
1966-5349	2439327.50	1966 Jul 21	Nike Apache	-	-	STV SR-033	-	WS	-	-	-	1007	-	-
1966-5351	2439329.30	1966 Jul 22 1919	Nike Cajun	-	Smoke 103	-	-	WI	-	-	-	17	-	-
1966-5351	2439330.75	1966 Jul 24 0605	Nike Cajun	-	-	MICAP/1 66-16	-	WS	-	-	-	1207	-	-
1966-5352	2439330.81	1966 Jul 24 0730	Nike Cajun	-	-	MICAP/1 66-17	-	WS	-	-	-	1207	-	-
1966-5353	2439330.88	1966 Jul 24 0900	Nike Cajun	-	-	MICAP/1 66-18	-	WS	-	-	-	1207	-	-
1966-5738	2439330.93	1966 Jul 24 1015	Nike Cajun	-	-	MICAP/1 66-19	-	WS	-	-	-	1207	-	-
1966-5740	2439330.99	1966 Jul 24 1145	Nike Cajun	-	-	MICAP/1 66-20	-	WS	-	-	-	1207	-	-
1966-5741	2439331.04	1966 Jul 24 1300	Nike Cajun	-	-	MICAP/1 66-21	-	WS	-	-	-	1207	-	-
1966-5350	2439335.21	1966 Jul 28 1700	Nike Apache	-	BMTS	STV SR-034	-	WS	-	-	-	1007	-	-
1966-5401	2439334.61	1966 Jul 28 0236:00	Nike Tomahawk	12	Sandia 152-54	Target	-	RAMU	-	-	-	173	-	-
1966-5406	2439337.50	1966 Aug 1 0700	Nike Apache	-	BMTS	Target	-	FW	-	-	-	1207	-	-
1966-5418	2439338.79	1966 Aug 1 0906	Nike Apache	-	EDA 66-24	Sphere	-	WS	-	-	-	2007	-	-
1966-5420	2439338.88	1966 Aug 1 0906	Nike Apache	-	EDA 66-25	Sphere	-	WS	-	-	-	2007	-	-
1966-5421	2439339.00	1966 Aug 1 1200	Nike Apache	-	EDA 66-26	Sphere	-	WS	-	-	-	2007	-	-
1966-5408	2439339.28	1966 Aug 1 1611	Nike Apache	-	EDA 66-22	Sphere	-	WS	-	-	-	2007	-	-
1966-5409	2439339.38	1966 Aug 1 2105	Nike Apache	-	EDA 66-23	Sphere	-	WS	-	-	-	2007	-	-
1966-5410	2439339.50	1966 Aug 2	Nike Tomahawk	9	Sandia 152-29	Scan Converter	-	RAMU	-	-	-	303	-	-
1966-5411	2439339.50	1966 Aug 2	Nike Tomahawk	9	Sandia 152-102	ACS	-	RAMU	-	-	-	306	-	-
1966-5752	2439341.21	1966 Aug 3 1700	Nike Apache	-	BMTS	SPENDBALL II 87 SN33	-	WS	-	-	-	1507	-	-
1966-5404	2439341.90	1966 Aug 4 0950	Nike Apache	-	-	STV SR-035	-	FW	-	-	-	1207	-	-
1966-5414	2439341.50	1966 Aug 4	Nike Tomahawk	12	Sandia 152-19	Airglow	-	RAMU	-	-	-	159	-	-
1966-5415	2439341.50	1966 Aug 4	Nike Tomahawk	9	Sandia 152-32	Scan Converter	-	RAMU	-	-	-	300	-	-
1966-5416	2439341.50	1966 Aug 4	Nike Tomahawk	9	Sandia 152-85	ACS	-	RAMU	-	-	-	300	-	-
1966-5422	2439344.79	1966 Aug 7 0700	Nike Apache	-	MASA 14.2866H	GSFC Grenade M1	-	WI	-	-	-	2007	-	-
1966-5423	2439344.80	1966 Aug 7 0705	Nike Cajun	-	MASA 10.2046H	GSFC Grenade 120 N	-	WI	-	-	-	1007	-	-
1966-5424	2439344.86	1966 Aug 7 0845	Nike Apache	-	-	ISRU 20.05 TERLS-46?	-	FC	-	-	-	123	-	-
1966-5425	2439344.86	1966 Aug 7 0845	Nike Cajun	-	MASA 10.202CM	GSFC Grenade 121 C	-	FC	-	-	-	152	-	-
1966-5426	2439344.86	1966 Aug 7 0845	Nike Apache	-	MASA 14.2860H	GPFC Grenade 122 C	-	FC	-	-	-	152	-	-
1966-5427	2439345.25	1966 Aug 7 1735	Nike Cajun	-	MASA 10.203CM	GPFC Grenade 123 W	-	FC	-	-	-	1007	-	-
1966-5428	2439345.35	1966 Aug 7 1735	Nike Cajun	-	MASA 10.204CM	GPFC Grenade 124 H	-	FC	-	-	-	1007	-	-
1966-5429	2439345.37	1966 Aug 7 2346	Nike Cajun	-	MASA 10.205CM	ACS	-	WI	-	-	-	300	-	-
1966-5430	2439345.38	1966 Aug 7 2326	Nike Tomahawk	9	Sandia 152-96	ACS	-	RAMU	-	-	-	300	-	-
1966-5431	2439345.50	1966 Aug 11 2035	Nike Cajun	-	MASA 10.206CM	ACS Grenade 125 PB	-	PBA	-	-	-	1007	-	-
1966-5432	2439345.50	1966 Aug 15 0935	Nike Cajun	-	MASA 10.207CM	ACS Grenade 126 PB	-	PBA	-	-	-	1007	-	-
1966-5433	2439345.84	1966 Aug 15 2135	Nike Cajun	-	MASA 10.208CM	Pandora 21	-	PBA	-	-	-	168	-	-
1966-5434	2439345.84	1966 Aug 17 1950	Nike Apache	-	MASA 17.0207-01-05	UNH neutrons	-	WI	-	-	-	355	-	-
1966-5446	2439350.33	1966 Aug 24 2110	Nike Apache	-	MASA 14.1830E	-	-	FC	-	-	-	154	-	-
1966-5452	2439350.47	1966 Aug 24 2310	Nike Apache	-	MASA 14.1830E	-	-	FC	-	-	-	154	-	-
1966-5453	2439350.52	1966 Aug 26 0045	Nike Apache	-	MASA 14.1830E	-	-	FC	-	-	-	154	-	-
1966-5455	2439350.52	1966 Aug 26 1931	Nike Apache	-	MASA 14.1830E	-	-	FC	-	-	-	154	-	-
1966-5456	2439350.52	1966 Aug 26 1951	Nike Apache	-	MASA 14.1830E	-	-	FC	-	-	-	154	-	-
1966-5459	2439350.52	1966 Aug 26 1951:00	Nike Tomahawk	-	MASA 18.056A	UM Thermosphere 4	-	WI	-	-	-	297	-	-
1966-5460	2439350.52	1966 Aug 26 1951:00	Nike Apache	-	MASA 18.062A	UM Thermosphere 5	-	WI	-	-	-	308	-	-
1966-5461	2439350.52	1966 Aug 26 1951:00	Nike Apache	-	MASA 18.068A	UM Thermosphere 6	-	WI	-	-	-	149	-	-
1966-5463	2439350.52	1966 Aug 28 0423:00	Nike Tomahawk	-	MASA 18.226A	UM Thermosphere 7	-	WI	-	-	-	323	-	-
1966-5465	2439350.52	1966 Aug 28 0423:00	Nike Apache	-	MASA 14.2860H	BMTS	-	FW	-	-	-	151	-	-
1966-5405	2439368.65	1966 Aug 30 1440	Nike Apache	-	BMTS	STV SR-036	-	WS	-	-	-	1007	-	-
1966-5471	2439368.50	1966 Sep	Nike Apache	-	BMTS	-	-	WS	-	-	-	1007	-	-
1966-5472	2439368.50	1966 Sep	Nike Apache	-	BMTS	-	-	WS	-	-	-	1007	-	-
1966-5473	2439368.50	1966 Sep	Nike Apache	-	BMTS	-	-	WS	-	-	-	1007	-	-
1966-5474	2439368.50	1966 Sep	Nike Apache	-	BMTS	-	-	WS	-	-	-	1007	-	-
1966-5477	2439370.20	1966 Sep 1 1859	Nike Tomahawk	-	MASA 18.181UE	Auroral radiation	-	FC	-	-	-	242	-	-
1966-5479	2439371.11	1966 Sep 2 1437	Nike Apache	-	MASA 14.2190E	SPICE 2A?	-	FC	-	-	-	164	-	-
1966-5480	2439371.44	1966 Sep 2 2227	Nike Apache	-	MASA 14.2200E	SPICE 2	-	FC	-	-	-	159	-	-
1966-5482	2439372.23	1966 Sep 3 1724	Nike Apache	-	MASA 14.2210E	SPICE 3	-	FC	-	-	-	160	-	-
1966-5483	2439375.02	1966 Sep 6 1227	Nike Tomahawk	-	MASA 18.201UE	Auroral radiation	-	FC	-	-	-	238	-	-
1966-5484	2439375.25	1966 Sep 6 1802	Nike Tomahawk	-	MASA 18.210UE	Auroral radiation	-	FC	-	-	-	243	-	-
1966-5469	2439378.12	1966 Sep 9 1500	Nike Apache	-	BMTS	Auroral radiation	-	FC	-	-	-	1507	-	-
1966-5485	2439382.57	1966 Sep 14 0136:22	Nike Apache	-	MASA 14.278CA	SPENDBALL II 88 SN34	-	FC	-	-	-	157	-	-
1966-5486	2439382.68	1966 Sep 14 0423:00	Nike Apache	-	MASA 14.279CA	CCA Ionos-TMA 9	-	FC	-	-	-	186	-	-
1966-5489	2439384.56	1966 Sep 16 0122:00	Nike Apache	-	MASA 14.280CA-CI	CCA Ionos-TMA 10	-	FC	-	-	-	185	-	-
1966-5490	2439384.62	1966 Sep 16 0300:00	Nike Apache	-	MASA 14.281CA-CI	CCA Ionos-TMA 11	-	FC	-	-	-	185	-	-
1966-5491	2439384.66	1966 Sep 16 0417	Nike Apache	-	MASA 14.282CA-CI	CCA Ionos-TMA 12	-	FC	-	-	-	206	-	-
1966-5492	2439384.66	1966 Sep 16 1554	Nike Apache	-	MASA 14.283CA-CI	CCA Ionos-TMA 13	-	FC	-	-	-	206	-	-
1966-1007	2439385.16	1966 Sep 16 1554	Nike Apache	-	MASA 14.1640U	-	-	WI	-	-	-	166	-	-
1966-1007	2439385.58	1966 Sep 17 0157	Nike Cajun	-	Meteor 9	-	-	WI	-	-	-	110	-	-
1966-5493	2439385.62	1966 Sep 17 0253	Nike Tomahawk	-	MASA 18.191UE	Auroral radiation	-	FC	-	-	-	243	-	-
1966-5494	2439387.50	1966 Sep 19 0253	Nike Tomahawk	9	Sandia 152-25	Sampler (Camera)	-	JI	-	-	-	300	-	-
1966-5731	2439389.18	1966 Sep 20 1613	Nike Hydrac	-	STV SR-38	Mk 12 STV	-	WS	-	-	-	1007	-	-
1966-5499	2439389.15	1966 Sep 20 1534:00	Nike Tomahawk	12	Sandia 152-99	LRL BODY-7	-	JI	-	-	-	168	-	-
1966-5502	2439391.22	1966 Sep 22 1710:00	Nike Tomahawk	-	Sandia 152-98	LRL AXE-1	-	JI	-	-	-	160	-	-
1966-5503	2439392.33	1966 Sep 23 1951	Nike Tomahawk	-	Smoke 104	-	-	JI	-	-	-	16	-	-
1966-5505	2439393.91	1966 Sep 25 0951	Nike Tomahawk	-	MASA 18.261A	MPE Ba	-	WI	-	-	-	280	-	-
1966-5733	2439396.11	1966 Sep 27 1435	Nike Hydrac	-	STV SR-39	Mk 12 STV	-	WS	-	-	-	1007	-	-
1966-5470	2439395.50	1966 Sep 27 1435	Nike Apache	-	BMTS	Target	-	WS	-	-	-	1007	-	-
1966-5753	2439397.22	1966 Sep 28 1720	Nike Apache	-	BMTS	SPENDBALL II 89 SN35	-	WS	-	-	-	1507	-	-





Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Launch_Mission	FlightCode	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee_Km	Range_Km	Dest
1967-S102	2439522-66	1967 Feb 1 0418	Nike Cajun	-	MASA 10-2186M	GSFC Grenade 138 PB	-	-	-	PBA	-	-	-	126	-	-
1967-S103	2439522-73	1967 Feb 1 0538-00	Nike Apache	-	MASA 14-3180M	UM Pilot 29/Hel?	-	-	-	FC	-	-	-	164	-	-
1967-S104	2439522-74	1967 Feb 1 0541	Nike Apache	-	MASA 14-3130M	GCA Release C2 THA?	-	-	-	FC	-	-	-	194	-	-
1967-S105	2439522-82	1967 Feb 1 0741	Nike Cajun	-	MASA 10-2196M	GSFC Grenade 139 PB	-	-	-	PBA	-	-	-	126	-	-
1967-S106	2439522-85	1967 Feb 1 0825-59	Nike Apache	-	MASA 14-3160M	UM Pilot 29/Hel?	-	-	-	FC	-	-	-	160	-	-
1967-S107	2439522-86	1967 Feb 1 0829	Nike Apache	-	MASA 14-3230M	GCA Release C3 THA?	-	-	-	FC	-	-	-	193	-	-
1967-S108	2439522-91	1967 Feb 1 0956	Nike Cajun	-	MASA 10-2200M	GSFC Grenade 140 PB	-	-	-	PBA	-	-	-	126	-	-
1967-S109	2439522-98	1967 Feb 1 1124	Nike Apache	-	MASA 14-3140M	GCA Release 64 THA?	-	-	-	FC	-	-	-	138	-	-
1967-S110	2439523-00	1967 Feb 1 1158-00	Nike Apache	-	MASA 14-3220M	UM Pilot 30/Hel?	-	-	-	FC	-	-	-	153	-	-
1967-S111	2439523-10	1967 Feb 1 1426	Nike Cajun	-	MASA 10-2210M	GSFC Grenade 141 PB	-	-	-	PBA	-	-	-	126	-	-
1967-S114	2439526-24	1967 Feb 3 1752	Nike Mike	-	MASA 10-2220M	GSFC Grenade 142 W	-	-	-	WI	-	-	-	4	-	-
1967-S151	2439536-50	1967 Feb 15	Nike Apache	-	Sandia 158-11	Parachute test	-	-	-	TTR	-	-	-	150?	-	-
1967-S664	2439543-38	1967 Feb 21 2104	Nike Apache	-	Sandia 152-100	Aurora	-	-	-	FC	-	-	-	167	-	-
1967-S132	2439549-66	1967 Feb 28 0347	Nike Tomahawk	?	STV	-	-	-	-	WS	-	-	-	100?	-	-
1967-S130	2439553-50	1967 Mar 3	Nike Hydrac	-	Ferdinand 14	-	-	-	-	AND	-	-	-	190	-	-
1967-S137	2439553-38	1967 Mar 3 2358	Nike Apache	-	CEL AF07-562	Ferdinand 14	-	-	-	EGL	-	-	-	196	-	-
1967-S140	2439554-38	1967 Mar 4 2105	Nike Iroquois	-	CEL AF07-563	Sphere	-	-	-	EGL	-	-	-	175	-	-
1967-S142	2439555-63	1967 Mar 6 0305	Nike Iroquois	-	MASA 14-1611A	TERLS-046	-	-	-	TERLS	-	-	-	178	-	-
1967-S143	2439556-63	1967 Mar 6 1327	Nike Apache	-	MASA 18-2406E	Auroral electrons	-	-	-	FC	-	-	-	227	-	-
1967-S147	2439557-01	1967 Mar 9 0507	Nike Tomahawk	-	MASA 14-1621A	TERLS-047	-	-	-	TERLS	-	-	-	184	-	-
1967-S148	2439559-06	1967 Mar 9 1327	Nike Apache	-	MASA 14-1631A-II	TERLS-048	-	-	-	TERLS	-	-	-	165	-	-
1967-S149	2439562-06	1967 Mar 12 1327	Nike Apache	-	MASA 14-2061A	TERLS-049	-	-	-	TERLS	-	-	-	165	-	-
1967-S150	2439562-21	1967 Mar 12 1700	Nike Apache	-	MASA 14-2671A	TERLS-050	-	-	-	AND	-	-	-	168	-	-
1967-S154	2439562-51	1967 Mar 13 0014	Nike Apache	-	Ferdinand 15	-	-	-	-	WI	-	-	-	141	-	-
1967-S157	2439564-48	1967 Mar 14 2346:10	Nike Apache	-	MASA 14-2806I	UMH neutrons	-	-	-	CLEI	-	-	-	220?	-	-
1967-S160	2439565-30	1967 Mar 16 1905	Nike Tomahawk	-	MASA 18-2806E	STV SR-46	-	-	-	WS	-	-	-	100?	-	-
1967-S170	2439577-27	1967 Mar 27 1655	Nike Hydrac	-	MASA 18-2806E	GCA Ion Probe	-	-	-	WI	-	-	-	321	-	-
1967-S628	2439578-19	1967 Mar 28 1653	Nike Tomahawk	-	MASA 18-120UI	Ba Release	-	-	-	WI	-	-	-	176	-	-
1967-S179	2439580-30	1967 Mar 30 1909	Nike Tomahawk	-	MASA 18-098E	GCA Release 65 Teb	-	-	-	WI	-	-	-	115	-	-
1967-S184	2439580-50	1967 Mar 31 0001	Nike Tomahawk	-	MASA 14-283CA	GSFC Grenade 143 W	-	-	-	PBA	-	-	-	120?	-	-
1967-S185	2439580-65	1967 Mar 31 0503	Nike Apache	-	MASA 10-2266M	DLR K-MA-1 Ba	-	-	-	ESR	-	-	-	231	-	-
1967-S187	2439581-22	1967 Mar 31 1719	Nike Cajun	-	MASA 10-2266M	DLR K-MA-2 Ba	-	-	-	ESR	-	-	-	242	-	-
1967-S189	2439584-51	1967 Apr 4 0010	Nike Apache	-	MASA 14-3281E	DLR K-MA-4 Ba	-	-	-	ESR	-	-	-	230	-	-
1967-S199	2439585-35	1967 Apr 7 1957-00	Nike Apache	-	MASA 14-3291E	DLR K-MA-5 Ba	-	-	-	PBA	-	-	-	120?	-	-
1967-S200	2439589-34	1967 Apr 8 2003-00	Nike Apache	-	MASA 14-3501E	GSFC Grenade 145 PB	-	-	-	ESR	-	-	-	236	-	-
1967-S201	2439589-54	1967 Apr 9 0100-00	Nike Apache	-	MASA 10-2259M	Masa spectrometer	-	-	-	EGL	-	-	-	144	-	-
1967-S203	2439591-34	1967 Apr 10 2014:00	Nike Apache	-	MASA 14-3501E	Masa spectrometer	-	-	-	EGL	-	-	-	146	-	-
1967-S204	2439591-58	1967 Apr 10 2100	Nike Cajun	-	MASA 10-2259M	Miro THA E5	-	-	-	EGL	-	-	-	167	-	-
1967-S205	2439592-22	1967 Apr 11 1715	Nike Cajun	-	MASA 10-2259M	Miro THA E6	-	-	-	CSB	-	-	-	169	-	-
1967-S206	2439592-35	1967 Apr 11 2021:00	Nike Apache	-	MASA 14-3521E	son trap	-	-	-	EGL	-	-	-	166	-	-
1967-S211	2439593-50	1967 Apr 13 0001	Nike Iroquois	-	CEL AF07-168	Mass spectrometer	-	-	-	EGL	-	-	-	144	-	-
1967-S212	2439593-53	1967 Apr 13 0649	Nike Iroquois	-	CEL AF07-365	Masa spectrometer	-	-	-	EGL	-	-	-	146	-	-
1967-S213	2439593-55	1967 Apr 13 0656	Nike Iroquois	-	CEL AF07-622	Miro THA E5	-	-	-	EGL	-	-	-	167	-	-
1967-S214	2439593-54	1967 Apr 13 0856	Nike Iroquois	-	CEL AF07-623	Miro THA E6	-	-	-	CSB	-	-	-	169	-	-
1967-S216	2439593-81	1967 Apr 13 0722	Nike Cajun	-	CEL AF08-647	Son trap	-	-	-	EGL	-	-	-	166	-	-
1967-S218	2439593-81	1967 Apr 13 0724	Nike Tomahawk	-	CEL AF08-647	Sphere/THA	-	-	-	EGL	-	-	-	175	-	-
1967-S219	2439593-81	1967 Apr 13 0724	Nike Iroquois	-	CEL AF07-684	Mass spectrometer	-	-	-	EGL	-	-	-	136	-	-
1967-S220	2439598-93	1967 Apr 18 1025	Nike Iroquois	-	CEL AF07-684	Miro THA E7/Langf	-	-	-	EGL	-	-	-	136	-	-
1967-S221	2439598-93	1967 Apr 18 1025	Nike Iroquois	-	CEL AF07-685	Miro THA E5	-	-	-	EGL	-	-	-	90	-	-
1967-S226	2439598-93	1967 Apr 18 1121	Nike Iroquois	-	CEL AF07-685	Masa spectrometer	-	-	-	CSB	-	-	-	138	-	-
1967-S229	2439598-99	1967 Apr 18 1141	Nike Iroquois	-	CEL AF07-686	Masa spectrometer	-	-	-	EGL	-	-	-	169	-	-
1967-S230	2439598-99	1967 Apr 18 1141	Nike Iroquois	-	CEL AF07-686	Sphere/son trap	-	-	-	EGL	-	-	-	120?	-	-
1967-S231	2439598-99	1967 Apr 18 2006	Nike Iroquois	-	MASA 10-2280M	GSFC Grenade 147 PB	-	-	-	PBA	-	-	-	120?	-	-
1967-S232	2439600-34	1967 Apr 20 0040	Nike Cajun	-	CEL AF08-650	Ba	-	-	-	EGL	-	-	-	266?	-	-
1967-S234	2439601-23	1967 Apr 20 1729	Nike Tomahawk	-	MASA 10-2240M	GSFC Grenade 148 W	-	-	-	WI	-	-	-	107	-	-
1967-S236	2439606-20	1967 Apr 25 0636:00	Nike Tomahawk	-	MUPP-5	-	-	-	-	CC	-	-	-	297	-	-
1967-S237	2439606-20	1967 Apr 25 1900:00	Nike Tomahawk	-	CEL AF08-651	-	-	-	-	CC	-	-	-	334	-	-
1967-S238	2439610-45	1967 Apr 28 0112	Nike Tomahawk	-	MASA 10-2250M	Ba	-	-	-	EGL	-	-	-	954	-	-
1967-S241	2439610-49	1967 Apr 29 2332	Nike Cajun	-	MASA 10-2250M	GSFC Grenade 149 W	-	-	-	EGL	-	-	-	123	-	-
1967-S243	2439613-24	1967 May 2 0140	Nike Cajun	-	MASA 10-2290M	GSFC Grenade 150 PB	-	-	-	PBA	-	-	-	120?	-	-
1967-S243	2439613-24	1967 May 2 1745	Nike Apache	-	MASA 10-2290M	SPENDBALL II 99 SH46	-	-	-	NS	-	-	-	150?	-	-
1967-S245	2439615-34	1967 May 4 2007	Nike Cajun	-	MASA 10-2320M	GSFC Grenade 151 W	-	-	-	NS	-	-	-	115	-	-
1967-S250	2439616-21	1967 May 5 1700	Nike Apache	-	MASA 14-2681I	Auroral	-	-	-	FC	-	-	-	136	-	-
1967-S251	2439619-81	1967 May 9 0720	Nike Apache	-	MASA 10-2300M	GSFC Grenade 152 PB	-	-	-	PBA	-	-	-	120?	-	-
1967-S258	2439621-85	1967 May 11 0825	Nike Cajun	-	MASA 10-2300M	GSFC Grenade 153 W	-	-	-	WI	-	-	-	129	-	-
1967-M10	2439621-87	1967 May 11 0855	Nike Cajun	-	MASA 10-1610M	GSFC Ozonae 2	-	-	-	WI	-	-	-	70	-	-
1967-S259	2439625-99	1967 May 15 1140	Nike Cajun	-	MASA 10-2310M	GSFC Grenade 154 PB	-	-	-	PBA	-	-	-	120?	-	-
1967-S263	2439628-16	1967 May 17 1500	Nike Apache	-	MASA 10-2310M	SPENDBALL II 100SH46	-	-	-	NS	-	-	-	150?	-	-
1967-S264	2439628-72	1967 May 18 0616	Nike Tomahawk	12	Sandia 152-56	LBL BDX-10	-	-	-	KAU	-	-	-	172	-	-
1967-S265	2439630-50	1967 May 20 0700	Nike Tomahawk	12	Sandia 152-97	LBL BDX-9	-	-	-	KAU	-	-	-	221	-	-
1967-S267	2439631-79	1967 May 21 0700	Nike Tomahawk	-	STV SR-066	Sandia 154-100	-	-	-	KAU	-	-	-	100	-	-
1967-S240	2439635-06	1967 May 24 1321	Nike Hydrac	-	SPENDBALL II 101SH47	SRE-19	-	-	-	NS	-	-	-	100?	-	-
1967-S235	2439635-22	1967 May 24 1710	Nike Apache	-	-	SPENDBALL II 101SH47	-	-	-	NS	-	-	-	150?	-	-
1967-S254	2439640-50	1967 May 30	Nike Apache	-	-	AEC SKOL	-	-	-	KAU	-	-	-	150?	-	-
1967-S255	2439640-50	1967 May 30	Nike Apache	-	-	AEC SKOL	-	-	-	KAU	-	-	-	150?	-	-
1967-S256	2439641-50	1967 May 30	Nike Cajun	-	-	AEC SKOL	-	-	-	KAU	-	-	-	100?	-	-
1967-S257	2439641-50	1967 May 31	Nike Apache	-	-	AEC SKOL	-	-	-	KAU	-	-	-	150?	-	-
1967-S258	2439641-50	1967 May 31	Nike Apache	-	-	AEC SKOL	-	-	-	KAU	-	-	-	150?	-	-
1967-S275	2439642-04	1967 May 31 1300	Nike Hydrac	?	MASA 14-3000IA	Pandora B?	-	-	-	NS	-	-	-	42	-	-
1967-S276	2439641-50	1967 Jun 1	Nike Hydrac	-	STV	-	-	-	-	NS	-	-	-	100?	-	-
1967-S275	2439642-50	1967 Jun 1?	Nike Apache	-	-	AEC SKOL	-	-	-	KAU	-	-	-	150?	-	-
1967-S269	2439642-50	1967 Jun 1?	Nike Apache	-	-	AEC SKOL	-	-	-	KAU	-	-	-	150?	-	-
1967-S281	2439642-75	1967 Jun 1 0554	Nike Apache	-	-	Sandia 154-97	-	-	-	KAU	-	-	-	165	-	-
1967-S282	2439642-78	1967 Jun 1 0645	Nike Cajun	-	-	Sandia 154-99	-	-	-	KAU	-	-	-	100	-	-
1967-S283	2439642-84	1967 Jun 1 0815	Nike Apache	-	-	Sandia 154-92	-	-	-	KAU	-	-	-	160	-	-
1967-S284	2439642-92	1967 Jun 1 1000	Nike Apache	-	-	Sandia 154-95	-	-	-	KAU	-	-	-	160	-	-
1967-S285	2439642-94	1967 Jun 1 1030	Nike Cajun	-	-	Sandia 154-101	-									

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Mission	FlightCode	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee	Range	Dest
														km	km	
1967-5286	2439643-02	1967 Jun 1 1225	Nike Apache	-	-	Sandia 154-94	-	-	-	KAU	-	-	-	160	-	-
1967-5861	2439643-50	1967 Jun 27	Nike Apache	-	-	AEC SKOL	-	-	-	KAU	-	-	-	1507	-	-
1967-5862	2439643-50	1967 Jun 27	Nike Apache	-	-	AEC SKOL	-	-	-	KAU	-	-	-	1507	-	-
1967-5863	2439643-50	1967 Jun 27	Nike Apache	-	-	AEC SKOL	-	-	-	KAU	-	-	-	1007	-	-
1967-5290	2439643-90	1967 Jun 2 0934	Nike Apache	?	-	Sandia 154-93	-	-	-	KAU	-	-	-	160	-	-
1967-5291	2439644-74	1967 Jun 3 0547	Nike Apache	-	-	Sandia 154-98	-	-	-	KAU	-	-	-	170	-	-
1967-5294	2439648-43	1967 Jun 6 2219	Nike Tomahawk	-	-	MASA 18-290E	-	-	-	FC	-	-	-	369	-	-
1967-5295	2439649-06	1967 Jun 7 1320	Nike Tomahawk	-	-	UHF neutron flux	-	-	-	UHF	-	-	-	154	-	-
1967-5301	2439655-46	1967 Jun 13 2308	Nike Ironquois	-	-	Meteor dust	-	-	-	EGL	-	-	-	179	-	-
1967-5320	2439665-86	1967 Jun 24 0826	Nike Apache	-	-	000-E ASRE detector	-	-	-	WI	-	-	-	1007	-	-
1967-5321	2439665-86	1967 Jun 24 2035	Nike Apache	-	-	MASA 10-2360M	-	-	-	WI	-	-	-	1007	-	-
1967-5322	2439665-86	1967 Jun 24 0834	Nike Apache	-	-	MASA 10-2370M	-	-	-	WI	-	-	-	1007	-	-
1967-5327	2439679-12	1967 Jul 5 2133	Nike Apache	-	-	MASA 10-2390M	-	-	-	WI	-	-	-	1007	-	-
1967-5329	2439679-12	1967 Jul 7 1453	Nike Apache	-	-	BITS	-	-	-	WI	-	-	-	120	-	-
1967-5355	2439694-54	1967 Jul 23 0053	Nike Apache	-	-	STV SR-057	-	-	-	WI	-	-	-	204	-	-
1967-5358	2439698-17	1967 Jul 26 1610	Nike Apache	-	-	MASA 14-357CM	-	-	-	WI	-	-	-	120	-	-
1967-5359	2439698-25	1967 Jul 26 1500	Nike Apache	-	-	BITS	-	-	-	WI	-	-	-	120	-	-
1967-5360	2439701-52	1967 Jul 30 0030	Nike Apache	-	-	BITS	-	-	-	WI	-	-	-	1007	-	-
1967-5361	2439704-31	1967 Aug 1 1925	Nike Apache	-	-	DBE.OSC?	-	-	-	EGL	-	-	-	1507	-	-
1967-5366	2439705-36	1967 Aug 2 2034	Nike Apache	-	-	BITS	-	-	-	WI	-	-	-	57	-	-
1967-5367	2439705-36	1967 Aug 2 2034	Nike Apache	-	-	BITS	-	-	-	WI	-	-	-	1507	-	-
1967-5369	2439707-56	1967 Aug 5 0159	Nike Apache	-	-	MASA 14-3435T-UA	-	-	-	PBA	-	-	-	155	-	-
1967-5370	2439707-56	1967 Aug 5 0955-00	Nike Apache	-	-	MASA 14-3435T-UA	-	-	-	PBA	-	-	-	150	-	-
1967-5378	2439711-50	1967 Aug 8 2355	Nike Apache	-	-	MASA 14-2900M	-	-	-	PBA	-	-	-	141	-	-
1967-5379	2439711-50	1967 Aug 9 0243	Nike Apache	-	-	MASA 14-3360M	-	-	-	WI	-	-	-	214	-	-
1967-5380	2439711-50	1967 Aug 9 0758	Nike Apache	-	-	MASA 14-3400M	-	-	-	WI	-	-	-	211	-	-
1967-5381	2439711-50	1967 Aug 9 0847	Nike Apache	-	-	MASA 14-3590M	-	-	-	WI	-	-	-	204	-	-
1967-5382	2439711-50	1967 Aug 9 0847	Nike Apache	-	-	MASA 14-3420M	-	-	-	WI	-	-	-	158	-	-
1967-5383	2439711-50	1967 Aug 9 0928	Nike Apache	-	-	MASA 14-3410M	-	-	-	WI	-	-	-	199	-	-
1967-5386	2439712-34	1967 Aug 9 2006	Nike Apache	-	-	BITS	-	-	-	WI	-	-	-	1507	-	-
1967-5387	2439723-85	1967 Aug 21 0620	Nike Apache	-	-	MASA 10-2400M	-	-	-	WI	-	-	-	107	-	-
1967-5406	2439725-32	1967 Aug 22 1937	Nike Apache	-	-	BITS	-	-	-	CLEI	-	-	-	1007	-	-
1967-5361	2439727-52	1967 Aug 26 0735	Nike Apache	-	-	MASA 10-2400M	-	-	-	WI	-	-	-	1007	-	-
1967-5397	2439728-77	1967 Aug 26 0655	Nike Apache	-	-	STV SR-068	-	-	-	WI	-	-	-	1007	-	-
1967-5398	2439728-99	1967 Aug 26 1139	Nike Ironquois	-	-	CRF AF07.328	-	-	-	EGL	-	-	-	177	-	-
1967-5399	2439729-49	1967 Aug 26 2359	Nike Apache	-	-	MASA 10-2410M	-	-	-	CLEI	-	-	-	92	-	-
1967-5399	2439729-49	1967 Aug 26 2359	Nike Apache	-	-	MASA 10-2410M	-	-	-	CLEI	-	-	-	95	-	-
1967-5400	2439730-52	1967 Aug 26 0930	Nike Apache	-	-	MASA 10-2420M	-	-	-	CLEI	-	-	-	92	-	-
1967-5400	2439730-52	1967 Aug 26 0930	Nike Apache	-	-	MASA 10-2420M	-	-	-	CLEI	-	-	-	225	-	-
1967-5413	2439733-25	1967 Aug 30 1735	Nike Apache	-	-	MASA 18-430E	-	-	-	WI	-	-	-	321	-	-
1967-5414	2439734-42	1967 Aug 31 2205-00	Nike Tomahawk	-	-	MASA 18-460E	-	-	-	AUD	-	-	-	228	-	-
1967-5415	2439734-42	1967 Aug 31 2205-00	Nike Tomahawk	-	-	MASA 18-460E	-	-	-	AUD	-	-	-	321	-	-
1967-5416	2439736-25	1967 Sep 2 1737	Nike Apache	-	-	Douglas probe	-	-	-	CLEPA	-	-	-	228	-	-
1967-5416	2439736-25	1967 Sep 2 1737	Nike Apache	-	-	MASA 18-440E	-	-	-	AUD	-	-	-	228	-	-
1967-5416	2439736-25	1967 Sep 2 1737	Nike Apache	-	-	MASA 18-440E	-	-	-	AUD	-	-	-	321	-	-
1967-5416	2439736-25	1967 Sep 2 1737	Nike Apache	-	-	MASA 18-440E	-	-	-	AUD	-	-	-	228	-	-
1967-5416	2439736-25	1967 Sep 2 1737	Nike Apache	-	-	MASA 18-440E	-	-	-	AUD	-	-	-	321	-	-
1967-5416	2439736-25	1967 Sep 2 1737	Nike Apache	-	-	MASA 18-440E	-	-	-	AUD	-	-	-	228	-	-
1967-5416	2439736-25	1967 Sep 2 1737	Nike Apache	-	-	MASA 18-440E	-	-	-	AUD	-	-	-	321	-	-
1967-5416	2439736-25	1967 Sep 2 1737	Nike Apache	-	-	MASA 18-440E	-	-	-	AUD	-	-	-	228	-	-
1967-5416	2439736-25	1967 Sep 2 1737	Nike Apache	-	-	MASA 18-440E	-	-	-	AUD	-	-	-	321	-	-
1967-5416	2439736-25	1967 Sep 2 1737	Nike Apache	-	-	MASA 18-440E	-	-	-	AUD	-	-	-	228	-	-
1967-5416	2439736-25	1967 Sep 2 1737	Nike Apache	-	-	MASA 18-440E	-	-	-	AUD	-	-	-	321	-	-
1967-5416	2439736-25	1967 Sep 2 1737	Nike Apache	-	-	MASA 18-440E	-	-	-	AUD	-	-	-	228	-	-
1967-5416	2439736-25	1967 Sep 2 1737	Nike Apache	-	-	MASA 18-440E	-	-	-	AUD	-	-	-	321	-	-
1967-5416	2439736-25	1967 Sep 2 1737	Nike Apache	-	-	MASA 18-440E	-	-	-	AUD	-	-	-	228	-	-
1967-5416	2439736-25	1967 Sep 2 1737	Nike Apache	-	-	MASA 18-440E	-	-	-	AUD	-	-	-	321	-	-
1967-5416	2439736-25	1967 Sep 2 1737	Nike Apache	-	-	MASA 18-440E	-	-	-	AUD	-	-	-	228	-	-
1967-5416	2439736-25	1967 Sep 2 1737	Nike Apache	-	-	MASA 18-440E	-	-	-	AUD	-	-	-	321	-	-
1967-5416	2439736-25	1967 Sep 2 1737	Nike Apache	-	-	MASA 18-440E	-	-	-	AUD	-	-	-	228	-	-
1967-5416	2439736-25	1967 Sep 2 1737	Nike Apache	-	-	MASA 18-440E	-	-	-	AUD	-	-	-	321	-	-
1967-5416	2439736-25	1967 Sep 2 1737	Nike Apache	-	-	MASA 18-440E	-	-	-	AUD	-	-	-	228	-	-
1967-5416	2439736-25	1967 Sep 2 1737	Nike Apache	-	-	MASA 18-440E	-	-	-	AUD	-	-	-	321	-	-
1967-5416	2439736-25	1967 Sep 2 1737	Nike Apache	-	-	MASA 18-440E	-	-	-	AUD	-	-	-	228	-	-
1967-5416	2439736-25	1967 Sep 2 1737	Nike Apache	-	-	MASA 18-440E	-	-	-	AUD	-	-	-	321	-	-
1967-5416	2439736-25	1967 Sep 2 1737	Nike Apache	-	-	MASA 18-440E	-	-	-	AUD	-	-	-	228	-	-
1967-5416	2439736-25	1967 Sep 2 1737	Nike Apache	-	-	MASA 18-440E	-	-	-	AUD	-	-	-	321	-	-
1967-5416	2439736-25	1967 Sep 2 1737	Nike Apache	-	-	MASA 18-440E	-	-	-	AUD	-	-	-	228	-	-
1967-5416	2439736-25	1967 Sep 2 1737	Nike Apache	-	-	MASA 18-440E	-	-	-	AUD	-	-	-	321	-	-
1967-5416	2439736-25	1967 Sep 2 1737	Nike Apache	-	-	MASA 18-440E	-	-	-	AUD	-	-	-	228	-	-
1967-5416	2439736-25	1967 Sep 2 1737	Nike Apache	-	-	MASA 18-440E	-	-	-	AUD	-	-	-	321	-	-
1967-5416	2439736-25	1967 Sep 2 1737	Nike Apache	-	-	MASA 18-440E	-	-	-	AUD	-	-	-	228	-	-
1967-5416	2439736-25	1967 Sep 2 1737	Nike Apache	-	-	MASA 18-440E	-	-	-	AUD	-	-	-	321	-	-
1967-5416	2439736-25	1967 Sep 2 1737	Nike Apache	-	-	MASA 18-440E	-	-	-	AUD	-	-	-	228	-	-
1967-5416	2439736-25	1967 Sep 2 1737	Nike Apache	-	-	MASA 18-440E	-	-	-	AUD	-	-	-	321	-	-
1967-5416	2439736-25	1967 Sep 2 1737	Nike Apache	-	-	MASA 18-440E	-	-	-	AUD	-	-	-	228	-	-
1967-5416	2439736-25	1967 Sep 2 1737	Nike Apache	-	-	MASA 18-440E	-	-	-	AUD	-	-	-	321	-	-
1967-5416	2439736-25	1967 Sep 2 1737	Nike Apache	-	-	MASA 18-440E	-	-	-	AUD	-	-	-	228	-	-
1967-5416	2439736-25	1967 Sep 2 1737	Nike Apache	-	-	MASA 18-440E	-	-	-	AUD	-	-	-	321	-	-
1967-5416	2439736-25	1967 Sep 2 1737	Nike Apache	-	-	MASA 18-440E	-	-	-	AUD	-	-	-	228	-	-
1967-5416	2439736-25	1967 Sep 2 1737	Nike Apache	-	-	MASA 18-440E	-	-	-	AUD	-	-	-	321	-	-
1967-5416	2439736-25	1967 Sep 2 1737	Nike Apache	-	-	MASA 18-440E	-	-	-	AUD	-	-	-	228	-	-
1967-5416	2439736-25	1967 Sep 2 1737	Nike Apache	-	-	MASA 18-440E	-	-	-	AUD	-	-	-	321	-	-
1967-5416	2439736-25	1967 Sep 2 1737	Nike Apache	-	-	MASA 18-440E	-	-	-	AUD	-	-	-	228	-	-
1967-5416	2439736-25	1967 Sep 2 1737	Nike Apache	-	-	MASA 18-440E	-	-	-	AUD	-	-	-	321	-	-
1967-5416	2439736-25	1967 Sep 2 1737	Nike Apache	-	-	MASA 18-440E	-	-	-	AUD	-	-	-	228	-	-
1967-5416	2439736-25	1967 Sep 2 1737	Nike Apache	-	-	MASA 18-440E	-	-	-	AUD	-	-	-	321	-	-
1967-5416	2439736-25	1967 Sep 2 1737	Nike Apache	-	-	MASA 18-440E	-	-	-	AUD	-	-	-	228	-	-
1967-5416	2439736-25	1967 Sep 2 1737	Nike Apache	-	-	MASA 18-440E	-	-	-	AUD	-	-	-	321	-	-
1967-5416	2439736-25	19														

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Launch_Mission	FlightCode	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee_Km	Range_Km	Dest
1967-A152	2439811.50	1967 Nov 17	Mike Mike	-	Sandia 158-12	Parachute test	-	-	-	TTR	-	-	-	4	-	-
1967-5641	2439813.92	1967 Nov 19 1008	Nike Iroquois	-	CRL AG07.314	Recovery test	-	-	-	CLEI	-	-	-	119	-	-
1967-5644	2439816.92	1967 Nov 22 1007	Nike Iroquois	-	CRL AG07.319	Recovery test	-	-	-	CLEI	-	-	-	119	-	-
1967-5645	2439817.74	1967 Nov 23 0539	Nike Tomahawk	-	MASA 18-340E	Auroral particles	-	-	-	FC	-	-	-	164	-	-
1967-5652	2439823.55	1967 Nov 29 0106	Nike Apache	-	MASA 14-2401M	Rehbar 14 (Gren.)	-	-	-	SDM	-	-	-	175	-	-
1967-5653	2439824.45	1967 Nov 29 2251	Nike Iroquois	-	CRL AF07.668	Smoke	-	-	-	EGL	-	-	-	121	-	-
1967-5654	2439824.45	1967 Nov 29 2251	Nike Iroquois	-	CRL AF07.661	Smoke	-	-	-	CSB	-	-	-	122	-	-
1967-5655	2439828.45	1967 Dec 3 2253	Nike Iroquois	-	CRL AF07.657	Smoke	-	-	-	EGL	-	-	-	119	-	-
1967-5658	2439828.45	1967 Dec 3 2253	Nike Iroquois	-	CRL AF07.662	Smoke	-	-	-	CSB	-	-	-	124	-	-
1967-5662	2439829.43	1967 Dec 4 2220	Nike Iroquois	-	CRL AF07.880	D/E ions	-	-	-	FC	-	-	-	148	-	-
1967-5663	2439829.64	1967 Dec 4 2244	Nike Iroquois	-	CRL AF07.387	D/E ions	-	-	-	FC	-	-	-	122	-	-
1967-5664	2439829.64	1967 Dec 5 0324	Nike Tomahawk	-	MASA 18-660A	Auroral profile	-	-	-	FC	-	-	-	270?	-	-
1967-5667	2439830.36	1967 Dec 5 2034:50	Nike Apache	-	MASA 14-2881E	DLR K-1A-6	-	-	-	ESR	-	-	-	206	-	-
1967-5671	2439831.27	1967 Dec 6 1825	Nike Iroquois	-	CRL AF07.388	D/E ions	-	-	-	FC	-	-	-	132	-	-
1967-5677	2439836.41	1967 Dec 11 2156	Nike Hydrac	-	STV SR-069	-	-	-	-	WS	-	-	-	150?	-	-
1967-5678	2439837.41	1967 Dec 12 2148	Nike Apache	-	MASA 14-3470A	NO profile	-	-	-	WI	-	-	-	94	-	-
1967-5679	2439837.42	1967 Dec 12 2159	Nike Cajun	-	MASA 10-2495M	GSFC Grenade 165 W	-	-	-	WI	-	-	-	110	-	-
1967-5680	2439837.86	1967 Dec 13 0943	Nike Iroquois	-	CRL AG07.627	Miro THA E9	-	-	-	EGL	-	-	-	187	-	-
1967-5681	2439837.89	1967 Dec 13 0943	Nike Iroquois	-	CRL AG07.630	Miro THA E10/Grenad	-	-	-	EGL	-	-	-	164	-	-
1967-5743	2439837.86	1967 Dec 13 0943	Nike Iroquois	-	AP0C-943	Sphere/THA	-	-	-	EGL	-	-	-	200?	-	-
1967-5683	2439838.90	1967 Dec 14 0957	Nike Tomahawk	-	CRL AH08.665	Release/Grenade	-	-	-	EGL	-	-	-	106	-	-
1967-5684	2439838.92	1967 Dec 14 0958	Nike Iroquois	-	CRL AG07.631	-	-	-	-	EGL	-	-	-	161	-	-
1967-5686	2439841.46	1967 Dec 16 2258	Nike Iroquois	-	CRL AG07.669	Smoke	-	-	-	CSB	-	-	-	127	-	-
1967-5688	2439843.04	1967 Dec 16 1300	Nike Iroquois	-	CRL AG07.669	Smoke	-	-	-	EGL	-	-	-	96	-	-
1967-5689	2439843.54	1967 Dec 19 0100	Nike Cajun	-	MASA 10-2470M	GSFC Grenade 166 N	-	-	-	CLEI	-	-	-	127	-	-
1967-5690	2439844.05	1967 Dec 19 1310	Nike Cajun	-	MASA 10-2500M	GSFC Grenade 167 N	-	-	-	CLEI	-	-	-	96	-	-
1968-584	2439847.30	1968 Jan 16 1914	Nike Cajun	-	MASA 10-2735I	GSFC Grenade 168 N	-	-	-	CLEI	-	-	-	92	-	-
1968-585	2439872.31	1968 Jan 16 1914	Nike Cajun	-	MASA 10-2735I	-	-	-	-	WI	-	-	-	137	-	-
1968-586	2439872.31	1968 Jan 17 2308	Nike Iroquois	-	CRL AG07.634	Miro THA 1	-	-	-	WI	-	-	-	141	-	-
1968-587	2439873.46	1968 Jan 17 2308	Nike Iroquois	-	CRL AG07.634	Miro THA 2	-	-	-	FC	-	-	-	193	-	-
1968-589	2439875.47	1968 Jan 19 2310	Nike Iroquois	-	CRL AG07.633	ALGlow	-	-	-	FC	-	-	-	191	-	-
1968-591	2439877.69	1968 Jan 22 0450	Nike Tomahawk	-	MASA 18-620M	-	-	-	-	WI	-	-	-	296	-	-
1968-592	2439877.01	1968 Jan 22 1215	Nike Tomahawk	-	CRL AG05.648	-	-	-	-	FC	-	-	-	169	-	-
1968-593	2439878.06	1968 Jan 22 1320	Nike Iroquois	-	CRL AG07.635	Miro THA 3/02	-	-	-	FC	-	-	-	188	-	-
1968-596	2439878.75	1968 Jan 23 0953	Nike Tomahawk	-	MASA 18-130E	Ions currents	-	-	-	FC	-	-	-	270?	-	-
1968-A66	2439887.50	1968 Feb 1	Nike Cajun	-	MASA 18-130E	Ions currents	-	-	-	PBA	-	-	-	0?	-	-
1968-B107	2439888.28	1968 Feb 1 1853	Nike Cajun	-	MASA 10-2850M	GSFC Grenade 169 PB	-	-	-	FC	-	-	-	104	-	-
1968-B108	2439888.28	1968 Feb 1 1900	Nike Cajun	-	MASA 10-2850M	GSFC Grenade 170/0H Sph	-	-	-	WI	-	-	-	126	-	-
1968-B109	2439888.31	1968 Feb 1 1900	Nike Cajun	-	MASA 10-2850M	GSFC Grenade 171 C	-	-	-	FC	-	-	-	127	-	-
1968-B110	2439888.35	1968 Feb 1 2450	Nike Cajun	-	MASA 10-2850M	GSFC Grenade 172 C	-	-	-	FC	-	-	-	137	-	-
1968-B111	2439889.50	1968 Feb 1 2415	Nike Cajun	-	MASA 10-2810M	GSFC Grenade 173 C	-	-	-	FC	-	-	-	130	-	-
1968-B112	2439889.50	1968 Feb 2 7457	Nike Apache	-	MASA 10-2610M	GSFC Grenade 174 C	-	-	-	FC	-	-	-	200?	-	-
1968-B117	2439892.43	1968 Feb 2 1526	Nike Apache	-	MASA 14-2601A	Speddall II S/R S5	TELS-064	-	-	NERLS	-	-	-	191	-	-
1968-B123	2439892.41	1968 Feb 6 0707	Nike Cajun	-	MASA 10-302M	GSFC Grenade 175 C	-	-	-	FC	-	-	-	270?	-	-
1968-B124	2439892.91	1968 Feb 6 0721	Nike Tomahawk	-	MASA 18-390E	UHR Aurora/Fields	-	-	-	FC	-	-	-	470	-	-
1968-B127	2439895.55	1968 Feb 9 0120	Nike Tomahawk	-	Sandia 159:06	Aurora	-	-	-	US	-	-	-	150?	-	-
1968-B141	2439908.66	1968 Feb 21 2517	Nike Apache	-	MASA 14-284CA	Ozone/Parachute test	-	-	-	FC	-	-	-	150?	-	-
1968-B142	2439908.66	1968 Feb 22 0345	Nike Apache	-	MASA 14-284CA	CCA Release 72 Teb	-	-	-	MI	-	-	-	150?	-	-
1968-B143	2439908.72	1968 Feb 22 0510	Nike Apache	-	MASA 14-284CA	Auroral Flares	-	-	-	FC	-	-	-	200?	-	-
1968-B144	2439908.72	1968 Feb 22 0510	Nike Tomahawk	-	MASA 18-616E	CCA Ionos-THA 14	-	-	-	MI	-	-	-	156	-	-
1968-B145	2439908.83	1968 Feb 22 0830:00	Nike Apache	-	MASA 18-616E	CCA Ionos-THA 15	-	-	-	FC	-	-	-	175	-	-
1968-B146	2439908.83	1968 Feb 22 0830:00	Nike Apache	-	MASA 14-266CM	CCA Ionos-THA 16	-	-	-	MI	-	-	-	181	-	-
1968-B147	2439908.96	1968 Feb 22 0920:00	Nike Apache	-	MASA 14-267CM	CCA Ionos-THA 17	-	-	-	MI	-	-	-	190	-	-
1968-B148	2439908.96	1968 Feb 22 1102:00	Nike Apache	-	MASA 14-268CA	CCA Ionos 14/Re1 Ila	-	-	-	MI	-	-	-	188	-	-
1968-B149	2439909.72	1968 Feb 23 0510	Nike Tomahawk	-	MASA 18-390E	Aurora	-	-	-	FC	-	-	-	293	-	-
1968-B150	2439914.25	1968 Feb 23 1754	Nike Apache	-	MASA 18-390E	CCA Release 73	-	-	-	US	-	-	-	200?	-	-
1968-B152	2439914.25	1968 Feb 27 0110	Nike Apache	-	STV 070 SRH-02	-	-	-	-	FC	-	-	-	154	-	-
1968-B153	2439914.75	1968 Feb 28 0601	Nike Tomahawk	-	MASA 18-680A	Auroral P/F	-	-	-	FC	-	-	-	295	-	-
1968-B154	2439914.75	1968 Feb 28 0601	Nike Tomahawk	-	MASA 18-390E	Auroral P/F	-	-	-	FC	-	-	-	260	-	-
1968-B156	2439914.75	1968 Feb 28 0601	Nike Tomahawk	-	MASA 18-390E	Auroral P/F	-	-	-	FC	-	-	-	160	-	-
1968-B177	2439920.80	1968 Mar 15 0710	Nike Iroquois	-	CRL AB07.290	Auroral P/F	-	-	-	MI	-	-	-	290	-	-
1968-B179	2439921.30	1968 Mar 15 1911	Nike Tomahawk	-	MASA 18-10UT	UM Pitot 34	-	-	-	MI	-	-	-	148	-	-
1968-B183	2439932.79	1968 Mar 17 0659:01	Nike Apache	-	MASA 14-344UM	UM Thermosphere 8	-	-	-	TDRT	-	-	-	295	-	-
1968-B184	2439932.81	1968 Mar 17 0730:01	Nike Tomahawk	-	MASA 18-49CA	UM Thermosphere 9	-	-	-	TDRT	-	-	-	311	-	-
1968-B182	2439932.89	1968 Mar 17 0928:00	Nike Tomahawk	-	MASA 14-345UM	UM Pitot 36	-	-	-	TDRT	-	-	-	136	-	-
1968-B185	2439933.28	1968 Mar 17 1845:01	Nike Apache	-	MASA 18-533UM	UM Thermosphere 10	-	-	-	TDRT	-	-	-	270?	-	-
1968-B186	2439933.30	1968 Mar 17 1918	Nike Tomahawk	-	MASA 14-333UM	UM Pitot 36	-	-	-	TDRT	-	-	-	148	-	-
1968-B187	2439934.24	1968 Mar 18 0700:05	Nike Apache	-	MASA 18-360E	Auroral P/F	-	-	-	FC	-	-	-	270?	-	-
1968-B188	2439936.27	1968 Mar 18 1751	Nike Tomahawk	-	K-1A-8	MPE Ba Exp-34	-	-	-	ESR	-	-	-	216	-	-
1968-B189	2439936.27	1968 Mar 20 1823	Nike Apache	-	MASA 18-630E	Auroral emissions	-	-	-	FC	-	-	-	242	-	-
1968-B204	2439939.27	1968 Mar 21 0601:33	Nike Tomahawk	-	MASA 18-630E	Auroral emissions	-	-	-	FC	-	-	-	200	-	-
1968-B210	2439940.75	1968 Mar 24 1245	Nike Cajun	-	MASA 10-2710M	DLR K-1A-9	-	-	-	ESR	-	-	-	120	-	-
1968-B217	2439941.04	1968 Mar 25 0600	Nike Tomahawk	-	GSFC Grenade 177 N	GSFC Grenade 177 N	-	-	-	CLEI	-	-	-	120	-	-
1968-B211	2439941.04	1968 Mar 25 1258	Nike Cajun	-	GSFC Grenade 178 N	GSFC Grenade 178 N	-	-	-	CLEI	-	-	-	120	-	-
1968-B223	2439943.56	1968 Mar 28 1631	Nike Apache	-	MASA 14-3751E-II	ISRO 10.15	TELS-071	-	-	TERLS	-	-	-	211	-	-
1968-B224	2439944.19	1968 Mar 28 1631	Nike Apache	-	MASA 14-3466R	ISRO 10.16	TELS-072	-	-	TERLS	-	-	-	211	-	-
1968-B232	2439946.06	1968 Mar 30 1325	Nike Apache	-	MASA 14-3761E-II	ISRO 10.18	TELS-073	-	-	TERLS	-	-	-	211	-	-
1968-B247	2439946.50	1968 Mar 31 0007	Nike Apache	-	MASA 14-3781E	ISRO 10.17	TELS-074	-	-	TERLS	-	-	-	169	-	-
1968-B248	2439947.01	1968 Mar 31 1215	Nike Apache	-	BNTS	-	-	-	-	US	-	-	-	100?	-	-
1968-B236	2439946.50	1968 Apr	Nike Apache	-	BNTS	-	-	-	-	US	-	-	-	100?	-	-
1968-B237	2439946.50	1968 Apr	Nike Apache	-	BNTS	-	-	-	-	US	-	-	-	100?	-	-
1968-B238	2439946.50	1968 Apr	Nike Apache	-	BNTS	-	-	-	-	US	-	-	-	100?	-	-
1968-B239	2439946.50	1968 Apr	Nike Apache	-	BNTS	-	-	-	-	US	-	-	-	100?	-	-

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Launch_Mission	FlightCode	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee_Km	Range_Km	Dest
1968-S240	2439946.50	1968 Apr	Nike Apache	?	BMTS	-	-	-	-	WS	-	-	-	1007	-	-
1968-S241	2439946.50	1968 Apr 4	Nike Apache	?	BMTS	-	-	-	-	WS	-	-	-	1007	-	-
1968-S253	2439960.67	1968 Apr 4 0359	Nike Apache	-	MASA 14.277GE	Auroral	-	-	-	FC	-	-	-	129	-	-
1968-S254	2439960.81	1968 Apr 4 0732	Nike Tomahawk	-	MASA 18-60GE	Auroral	-	-	-	FC	-	-	-	2707	-	-
1968-S255	2439962.55	1968 Apr 6 0115:46	Nike Apache	?	K-WA-10	DLR K-WA-10	-	-	-	ESR	N	-	-	17	-	-
1968-S242	2439966.50	1968 Apr 10	Nike Apache	?	BMTS	-	-	-	-	FTB	-	-	-	1007	-	-
1968-S272	2439969.16	1968 Apr 22 1553	Nike Apache	-	MASA 14.2411G	ISRO 40.01	TERLS-076	-	-	TERLS	-	-	-	159	-	-
1968-S275	2439969.75	1968 Apr 23 0453	Nike Tomahawk	-	MASA 18-410E	-	-	-	-	FC	-	-	-	268	-	-
1968-A75	2439969.80	1968 Apr 23 0554	Nike Apache	-	MASA 14.3560M	UM Pilot 37	-	-	-	FC	-	-	-	10	-	-
1968-S280	2439971.16	1968 Apr 24 1544	Nike Apache	-	MASA 14.2601G	ISRO 40.02	TERLS-078	-	-	TERLS	-	-	-	159	-	-
1968-S282	2439971.21	1968 Apr 25 0601	Nike Tomahawk	-	MASA 18-33CE	P/e flux	-	-	-	FC	-	-	-	120	-	-
1968-S283	2439971.77	1968 Apr 25 0623	Nike Apache	-	Round 121	Speedball II S/N 54	-	-	-	WS	-	-	-	2007	-	-
1968-S243	2439973.50	1968 Apr 27	Nike Apache	?	MASA 18-420E	-	-	-	-	FC	-	-	-	262	-	-
1968-S298	2439976.83	1968 Apr 30 0749	Nike Tomahawk	-	BMTS	-	-	-	-	WS	-	-	-	1007	-	-
1968-S299	2439978.35	1968 May 1 2025	Nike Iroquois	-	CL AH07.177	Sphere	-	-	-	FC	-	-	-	109	-	-
1968-S300	2439978.73	1968 May 2 0525	Nike Iroquois	-	CL AH07.178	Sphere	-	-	-	EGL	-	-	-	217	-	-
1968-S301	2439978.75	1968 May 2 0600	Nike Iroquois	-	CL AE07.325	Elec backscatter	-	-	-	EGL	-	-	-	216	-	-
1968-S302	2439978.80	1968 May 2 0715	Nike Iroquois	-	CL AG07.644	Release	-	-	-	TURT	-	-	-	218	-	-
1968-S304	2439979.72	1968 May 3 0511	Nike Tomahawk	-	MASA 18-390E	-	-	-	-	FC	-	-	-	258	-	-
1968-S307	2439983.79	1968 May 7 0700	Nike Iroquois	-	CL AG07.643	-	-	-	-	TURT	-	-	-	142	-	-
1968-S308	2439985.18	1968 May 8 1625	Nike Apache	-	Round 122	Release	-	-	-	WS	-	-	-	2007	-	-
1968-S309	2439985.76	1968 May 9 0615	Nike Tomahawk	12	Sandia 152-114	Speedball II S/N 55	-	-	-	RAU	-	-	-	178	-	-
1968-S314	2439988.88	1968 May 12 0906	Nike Tomahawk	-	CL AH08.670	LAL BOX-14	-	-	-	TURT	-	-	-	198	-	-
1968-S316	2439989.88	1968 May 13 0906	Nike Tomahawk	-	CL AH08.666	Ba release	-	-	-	TURT	-	-	-	198	-	-
1968-S320	2439991.78	1968 May 15 0558:00	Nike Tomahawk	12	Sandia 152-111	LAL BOX-8b	-	-	-	TURT	-	-	-	162	-	-
1968-S324	2439993.83	1968 May 17 0900	Nike CaJun	-	Sandia 154-106	APOL Instr. Sphere	-	-	-	RAU	-	-	-	110	-	-
1968-S327	2439993.88	1968 May 17 0900	Nike Iroquois	-	CL AH07.671	Sphere	-	-	-	RAU	-	-	-	202	-	-
1968-S325	2439993.89	1968 May 17 0915	Nike CaJun	-	Sandia 154-110	Falling sphere	-	-	-	RAU	-	-	-	144	-	-
1968-S328	2439994.52	1968 May 18 0030	Nike CaJun	-	Sandia 154-111	Falling sphere	-	-	-	RAU	-	-	-	162	-	-
1968-S329	2439994.56	1968 May 18 0133	Nike Tomahawk	-	Sandia 152-112	Ion gages	-	-	-	RAU	-	-	-	3007	-	-
1968-S331	2439995.76	1968 May 19 0016	Nike Tomahawk	-	Sandia 154-113	Ion gages	-	-	-	RAU	-	-	-	147	-	-
1968-S342	2440000.38	1968 May 23 2100	Nike Iroquois	12	Sandia 152-115	LAL ACS-1	-	-	-	RAU	-	-	-	201	-	-
1968-S343	2440000.29	1968 May 23 1900	Nike CaJun	-	SECDEE V1	Sphere	-	-	-	TURT	-	-	-	196	-	-
1968-S344	2440000.35	1968 May 23 2000	Nike CaJun	-	MASA 14.363GT	Recovery cest	-	-	-	WS	-	-	-	130	-	-
1968-S346	2440000.36	1968 May 23 2100	Nike Apache	-	MASA 14.322GE	SECDEE I APPLE	-	-	-	ESR	-	-	-	188	-	-
1968-S348	2440000.51	1968 May 24 0010	Nike CaJun	-	MASA 14.322GE	SPICE (p/n)	-	-	-	FC	-	-	-	1507	-	-
1968-S347	2440000.61	1968 May 24 0245	Nike Tomahawk	-	MASA 14.3250E	SPICE (p/n)	-	-	-	ES	-	-	-	182	-	-
1968-S349	2440000.81	1968 May 24 0245	Nike Tomahawk	-	MASA 14.3550A	Pandora C7	-	-	-	ESR	-	-	-	183	-	-
1968-S351	2440009.39	1968 Jun 02 0915	Nike Apache	?	MASA 14.3551A	Pandora R-1A-13	-	-	-	ESR	N	-	-	183	-	-
1968-S352	2440012.59	1968 Jun 04 1637	Nike Apache	-	MASA 14.3551A	Structure cest	-	-	-	TURT	-	-	-	188	-	-
1968-S353	2440015.22	1968 Jun 10 0625	Nike Apache	-	MASA 14.3551A	SECDEE I B5-13	-	-	-	TURT	-	-	-	188	-	-
1968-S357	2440015.72	1968 Jun 11 1721:02	Nike Apache	-	MASA 14.3551A	SECDEE I B5-13	-	-	-	TURT	-	-	-	188	-	-
1968-S358	2440019.88	1968 Jun 12 0908	Nike Apache	?	SECDEE I B5-13	Structure cest	-	-	-	TURT	-	-	-	188	-	-
1968-S375	2440019.88	1968 Jun 12 2359	Nike Iroquois	-	MASA 14.3551A	DLR K-WA-13	-	-	-	ESR	N	-	-	188	-	-
1968-S376	2440021.46	1968 Jun 12 0925	Nike Apache	-	MASA 14.3551A	SECDEE I B5-13	-	-	-	ESR	-	-	-	188	-	-
1968-S377	2440021.46	1968 Jun 12 0925	Nike Apache	-	MASA 14.3551A	SECDEE I B5-13	-	-	-	ESR	-	-	-	188	-	-
1968-S384	2440024.85	1968 Jul 17 0925	Nike CaJun	-	MASA 10.294GM	DLR K-WA-12	-	-	-	ESR	-	-	-	1207	-	-
1968-S385	2440024.85	1968 Jul 17 0925	Nike CaJun	-	MASA 10.294GM	DLR K-WA-12	-	-	-	ESR	-	-	-	1207	-	-
1968-S399	2440025.55	1968 Jul 18 1930	Nike Iroquois	-	MASA 10.294GM	CSFC Grenade 179 W	-	-	-	MT	-	-	-	1207	-	-
1968-S392	2440025.55	1968 Jul 19 1930	Nike Iroquois	-	MASA 10.294GM	CSFC Grenade 180 W	-	-	-	MT	-	-	-	1207	-	-
1968-S402	2440027.27	1968 Jul 19 0423	Nike Iroquois	-	CL AG07.881	Mass spectrometer	-	-	-	EGL	-	-	-	125	-	-
1968-S405	2440029.69	1968 Jul 22 0423	Nike Iroquois	-	CL AG07.882	Accidental launch	-	-	-	EGL	-	-	-	17	-	-
1968-S406	2440029.69	1968 Jul 22 0423	Nike Iroquois	-	CL AG07.889	Mass spectrometer	-	-	-	EGL	-	-	-	144	-	-
1968-S408	2440030.68	1968 Jul 23 0419	Nike Iroquois	-	CL AG07.629	ThMA	-	-	-	EGL	-	-	-	161	-	-
1968-S409	2440030.68	1968 Jul 23 0419	Nike Iroquois	-	CL AG07.629	ThMA	-	-	-	EGL	-	-	-	202	-	-
1968-S408	2440030.69	1968 Jul 23 0428	Nike Iroquois	-	CL AG07.632A	ThMA	-	-	-	EGL	-	-	-	150	-	-
1968-S409	2440030.69	1968 Jul 23 0428	Nike Apache	-	CL AG07.632	ThMA	-	-	-	EGL	-	-	-	106	-	-
1968-S410	2440031.51	1968 Jul 24 0019	Nike CaJun	-	MASA 14.3491A	NO Composition	-	-	-	MT	-	-	-	126	-	-
1968-S412	2440031.51	1968 Jul 24 0046	Nike CaJun	-	MASA 10.2953M	CSFC Grenade 181a W	-	-	-	MT	-	-	-	155	-	-
1968-S413	2440031.72	1968 Jul 24 0520	Nike CaJun	-	MASA 10.2953M	UM Spheros 1/2	-	-	-	MT	-	-	-	105	-	-
1968-S414	2440031.92	1968 Jul 24 0954	Nike Apache	-	MASA 14.3491A	UM Spheros 1/2	-	-	-	MT	-	-	-	206	-	-
1968-S415	2440031.92	1968 Jul 24 1019	Nike Apache	-	MASA 14.3591T	NO Composition	-	-	-	MT	-	-	-	117	-	-
1968-S416	2440031.94	1968 Jul 24 1036	Nike CaJun	-	MASA 10.2959M	CSFC Grenade 181b W	-	-	-	MT	-	-	-	211	-	-
1968-S417	2440032.24	1968 Jul 24 1700	Nike Apache	-	MASA 14.3591T	UM Spheros 1/2	-	-	-	MT	-	-	-	214	-	-
1968-S418	2440032.24	1968 Jul 24 1845	Nike CaJun	-	MASA 14.3601I	UM Spheros 1/2	-	-	-	MT	-	-	-	159	-	-
1968-S419	2440032.40	1968 Jul 24 2136	Nike Apache	-	MASA 10.2954I	UM Spheros 1/2	-	-	-	MT	-	-	-	206	-	-
1968-S420	2440032.40	1968 Jul 24 2155	Nike Apache	-	MASA 14.361UI	UM Spheros 1/2	-	-	-	MT	-	-	-	84	-	-
1968-S436	2440039.39	1968 Aug 7 1205	Nike Tomahawk	-	MASA 18.310UA	JRU Airglow 9	-	-	-	MT	-	-	-	300	-	-
1968-S444	2440076.00	1968 Aug 7 1205	Nike Apache	-	MASA 18.310UA	JRU Airglow 9	-	-	-	MT	-	-	-	196	-	-
1968-S446	2440076.88	1968 Aug 8 0900	Nike Iroquois	-	CL AG07.273	Rice particles	-	-	-	CLBT	-	-	-	158	-	-
1968-S447	2440077.30	1968 Aug 8 1910:00	Nike Tomahawk	-	CL AG07.273	Meteor dust	-	-	-	CLBT	-	-	-	286	-	-
1968-S448	2440077.32	1968 Aug 8 1935:00	Nike Apache	-	MASA 18.516A	UM Thermosphere 11	-	-	-	MT	-	-	-	152	-	-
1968-S449	2440077.39	1968 Aug 9 0702	Nike Tomahawk	-	MASA 18.187UM	UM Pitot 36	-	-	-	MT	-	-	-	320	-	-
1968-S450	2440077.88	1968 Aug 9 0724:00	Nike Apache	-	MASA 18.187UM	UM Thermosphere 12	-	-	-	MT	-	-	-	146	-	-
1968-S451	2440079.88	1968 Aug 11 0904	Nike Iroquois	-	MASA 14.357UM	UM Pitot 36	-	-	-	MT	-	-	-	98	-	-
1968-S452	2440081.01	1968 Aug 12 1214	Nike Iroquois	-	CL AG07.274	Meteorites	-	-	-	CLBT	-	-	-	2187	-	-
1968-S453	2440080.88	1968 Aug 12 1214	Nike Iroquois	-	STV SR-071	Meteorites	-	-	-	NS	-	-	-	153	-	-
1968-S454	2440080.88	1968 Aug 12 0900	Nike Iroquois	-	CL AG07.275	Meteorites	-	-	-	CLBT	-	-	-	155	-	-
1968-S455	2440080.86	1968 Aug 12 0838	Nike Apache	-	MASA 14.336UIA	Pandora D	-	-	-	NS	-	-	-	95	-	-
1968-S457	2440083.88	1968 Aug 15 0900	Nike Iroquois	-	CL AG07.276	Meteorites	-	-	-	CLBT	-	-	-	177	-	-
1968-S463	2440087.89	1968 Aug 19 0917	Nike Iroquois	-	CL AG07.636	Nitro ThMA 4	-	-	-	FC	-	-	-	194	-	-
1968-S464	2440088.88	1968 Aug 20 0900	Nike Tomahawk	-	CL AH08.649	NO Jet payload 1	-	-	-	FC	-	-	-	175	-	-
1968-S465	2440088.92	1968 Aug 20 1010	Nike Iroquois	-	CL AG07.685	Nitro ThMA 5/NO	-	-	-	FC	-	-	-	154	-	-
1968-S466	2440089.31	1968 Aug 20 1932	Nike Apache	-	CL AG07.685	Pandora E	-	-	-	NS	-	-	-	154	-	-
1968-S468	2440090.32	1968 Aug 21 1940	Nike Apache	-	MASA 14.301UA	-	-	-	-	MT	-	-	-	193	-	-
1968-S469	2440090.33	1968 Aug 21 1953	Nike Apache	-	MASA 14.368GI	-	-	-	-	MT	-	-	-	189	-	-

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Mission	FlightCode	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee km	Range km	Dest
1966-5470	2440090-34	1968 Aug 21 2004	Mike Apache		MASA 14-37001	-	-	-	-	WI	-	-	-	192	-	-
1966-5471	2440090-40	1968 Aug 21 2130	Nike Tomahawk		MASA 18-3001	-	-	-	-	WI	-	-	-	262	-	-
1966-5472	2440091-44	1968 Aug 22 2230	Nike Tomahawk		-	-	-	-	-	FC	LC7	-	-	1	-	-
1966-5473	2440095-65	1968 Aug 27 0334	Nike Iroquois		CRL AH07-667	Launcher test	-	-	-	FC	-	-	-	201	-	-
1966-5474	2440095-70	1968 Aug 27 0444	Nike Tomahawk		CRL AH05-668	MD Jet payload 2	-	-	-	FC	-	-	-	201	-	-
1966-5481	2440097-76	1968 Aug 29 0538	Nike Apache		MASA 14-191	ISRO 20.06	TEELS-061	-	-	TERLS	-	-	-	170	-	-
1966-5482	2440097-86	1968 Aug 29 0545	Nike Apache		MASA 14-192	ISRO 20.07	TEELS-062	-	-	TERLS	-	-	-	170	-	-
1966-5483	2440098-23	1968 Aug 29 1730	Nike Apache		MASA 14-193	ISRO 20.08	TEELS-063	-	-	TERLS	-	-	-	168	-	-
1966-5487	2440103-54	1968 Sep 4 0104	Nike Iroquois		CRL A07-913-1	Sphere	-	-	-	EGL	-	-	-	232	-	-
1966-5488	2440103-56	1968 Sep 4 0129	Nike Iroquois		CRL A07-913-2	Sphere	-	-	-	EGL	-	-	-	1507	-	-
1966-5486	2440104-09	1968 Sep 4 1405	Nike Hydac		STV SR-072	-	-	-	-	WS	-	-	-	1507	-	-
1966-5490	2440105-00	1968 Sep 5 1200	Nike Hydac		STV SR-074	-	-	-	-	WS	-	-	-	1507	-	-
1966-5491	2440105-08	1968 Sep 5 1400	Nike Hydac		STV SR-075	-	-	-	-	WS	-	-	-	1507	-	-
1966-M22	2440116-17	1968 Sep 16 1558	Nike Hydac		MASA 10-2356M	GSFC Ozone 3	-	-	-	WS	-	-	-	69	-	-
1966-A97	2440116-20	1968 Sep 16 1712	Aerobee 170		CRL AT3-170	Dummy Stetaler	-	-	-	WS	-	-	-	112	-	-
1966-5498	2440117-34	1968 Sep 17 2003	Nike Cajun		MASA 10-2690M	GSFC Grenade 183 W	-	-	-	WS	-	-	-	118	-	-
1966-5499	2440117-81	1968 Sep 18 0730	Nike Cajun		MASA 10-2690M	GSFC Grenade 184 PB	-	-	-	PBA	-	-	-	1007	-	-
1966-A89	2440120-31	1968 Sep 20 1931:00	Nike Tomahawk		MASA 10-2820M	GSFC Grenade 185 C	-	-	-	FC	-	-	-	19	-	-
1966-5502	2440120-31	1968 Sep 20 1932:00	Nike Tomahawk		MASA 18-750E	B field	-	-	-	AND	-	-	-	321.7	-	-
1966-5503	2440120-31	1968 Sep 20 1936:00	Nike Tomahawk		MASA 18-750E	Ferdinand 18	-	-	-	AND	-	-	-	239	-	-
1966-5505	2440121-32	1968 Sep 21 1936:00	Nike Tomahawk		MASA 18-750E	B field	-	-	-	AND	-	-	-	321.7	-	-
1966-5507	2440123-31	1968 Sep 23 1929:00	Nike Tomahawk		MASA 18-770E	B field	-	-	-	AND	-	-	-	321.7	-	-
1966-5514	2440127-49	1968 Sep 27 2345	Nike Cajun		MASA 10-2810M	GSFC Grenade 186 C	-	-	-	FC	LC33	-	-	1007	-	-
1966-5518	2440131-41	1968 Oct 1 2144:16	Nike Tomahawk		MASA 18-591E	Ferdinand 19	-	-	-	AND	-	-	-	228	-	-
1966-5685	2440140-02	1968 Oct 10 1230	Nike Hydac		STV SR-076	-	-	-	-	WS	-	-	-	1507	-	-
1966-5686	2440144-54	1968 Oct 15 0100	Nike Hydac		MASA 10-2870M	GSFC Grenade 187 PB	-	-	-	AND	-	-	-	1507	-	-
1966-5688	2440144-54	1968 Oct 15 0300	Nike Cajun		MASA 10-2866M	GSFC Grenade 188 PB	-	-	-	PBA	-	-	-	129	-	-
1966-5684	2440144-62	1968 Oct 15 2212	Nike Cajun		MASA 10-2810M	GSFC Grenade 189 C	-	-	-	PBA	-	-	-	179	-	-
1966-5686	2440145-42	1968 Oct 15 2212	Nike Cajun		MASA 18-690A	Composition	-	-	-	FC	-	-	-	127	-	-
1966-5687	2440145-51	1968 Oct 16 0011	Nike Tomahawk		MASA 10-2820M	GSFC Grenade 190 C	-	-	-	WI	-	-	-	340	-	-
1966-5688	2440147-40	1968 Oct 17 0012	Nike Cajun		MASA 10-2820M	GSFC Grenade 190 C	-	-	-	FC	LC33	-	-	123	-	-
1966-5694	2440152-12	1968 Oct 22 1450	Nike Hydac		9-5-68-4-604	-	-	-	-	WS	-	-	-	1507	-	-
1966-5691	2440154-04	1968 Oct 22 1450	Nike Hydac		9-5-68-5-604	-	-	-	-	WS	-	-	-	1507	-	-
1966-5695	2440154-04	1968 Oct 24 1503	Nike Hydac		STV SR-077	-	-	-	-	WS	-	-	-	1507	-	-
1966-5701	2440153-50	1968 Oct 24	Nike Cajun		-	-	-	-	-	RAMU	-	-	-	1007	-	-
1966-5702	2440153-50	1968 Oct 24	Nike Cajun		-	-	-	-	-	RAMU	-	-	-	1007	-	-
1966-5703	2440153-50	1968 Oct 26 0911	Aerobee 170		MASA 12-130T-UG	KP3-23	-	-	-	WS	LC36	-	-	1007	-	-
1966-5694	2440155-38	1968 Oct 26 0911	Aerobee 170		MASA 14-2611G	ISRO 40.03	TEELS-089	-	-	TERLS	-	-	-	150	-	-
1966-5694	2440155-38	1968 Oct 26 0911	Aerobee 170		MASA 14-37961	Ion concentration	-	-	-	TERLS	-	-	-	150	-	-
1966-5671	2440167-63	1968 Nov 7 0395	Nike Apache		Sandia 14-1951-121	Rocket EMP test 1	-	-	-	WI	-	-	-	104	-	-
1966-5673	2440168-27	1968 Nov 7 1827	Nike Tomahawk		CRL AF07-232	B field/Particles	-	-	-	J1	-	-	-	1507	-	-
1966-5703	2440168-50	1968 Nov 8	Nike Tomahawk		CRL AF07-232	GSFC Grenade 191 W	-	-	-	FC	LC7	-	-	16	-	-
1966-A109	2440169-97	1968 Nov 9 0689	Nike Iroquois		MASA 10-2930M	UP-Radiometer	-	-	-	WI	-	-	-	123	-	-
1966-5695	2440180-27	1968 Nov 19 1800	Nike Apache		MASA 14-3841H	UP-Radiometer	-	-	-	WI	-	-	-	200	-	-
1966-5694	2440180-27	1968 Nov 19 1830	Nike Apache		MASA 14-3841H	UP-Radiometer	-	-	-	WI	-	-	-	156	-	-
1966-5695	2440180-54	1968 Nov 19 2004:59	Nike Apache		MASA 10-2920M	GSFC Grenade 192 C	-	-	-	FC	-	-	-	120	-	-
1966-5696	2440180-58	1968 Nov 20 1234	Nike Apache		MASA 10-2920M	GSFC Grenade 192 C	-	-	-	FC	-	-	-	144	-	-
1966-5696	2440181-36	1968 Nov 20 1234	Nike Apache		MASA 10-2920M	GSFC Grenade 193 C	-	-	-	FC	-	-	-	144	-	-
1966-5696	2440182-82	1968 Nov 20 1234	Nike Apache		MASA 10-2920M	GSFC Grenade 194 PB	-	-	-	PBA	-	-	-	179	-	-
1966-5694	2440182-85	1968 Nov 22 0921	Nike Cajun		MASA 10-2920M	GSFC Grenade 194 PB	-	-	-	PBA	-	-	-	179	-	-
1966-5694	2440182-85	1968 Nov 22 0921	Nike Cajun		MASA 10-2920M	GSFC Grenade 194 PB	-	-	-	PBA	-	-	-	179	-	-
1966-A113	2440187-87	1968 Nov 27 0142:00	Nike Apache		Ferdinand 17	-	-	-	-	AND	-	-	-	107	-	-
1966-5693	2440193-84	1968 Nov 27 0810	Nike Apache		MASA 14-3510A	Ferdinand 17	-	-	-	AND	-	-	-	153	-	-
1966-5693	2440193-84	1968 Nov 27 0810	Nike Apache		Ferdinand 16	-	-	-	-	AND	-	-	-	135	-	-
1966-5692	2440194-83	1968 Dec 3 0754:17	Nike Apache		CRL AH07-669	Smoke	-	-	-	EGL	-	-	-	123	-	-
1966-5693	2440200-41	1968 Dec 9 0154:17	Nike Iroquois		CRL AH07-669	Smoke	-	-	-	EGL	-	-	-	123	-	-
1966-5697	2440200-41	1968 Dec 9 0155	Nike Iroquois		CRL AH07-664	Smoke	-	-	-	EGL	-	-	-	115	-	-
1966-5697	2440201-27	1968 Dec 10 1932	Nike Iroquois		CRL AH07-664	Smoke	-	-	-	EGL	-	-	-	123	-	-
1966-5644	2440201-27	1968 Dec 10 1932	Nike Iroquois		CRL AH07-887	Mass spectrometer	-	-	-	WI	-	-	-	113	-	-
1966-5644	2440201-27	1968 Dec 10 1932	Nike Iroquois		CRL AH07-887	Mass spectrometer	-	-	-	WI	-	-	-	113	-	-
1966-5644	2440202-61	1968 Dec 12 0242	Nike Iroquois		MASA 10-2850M	GSFC Grenade 196 C	-	-	-	FC	-	-	-	121	-	-
1966-5647	2440203-71	1968 Dec 13 0311	Nike Cajun		MASA 10-2850M	GSFC Grenade 196 C	-	-	-	FC	-	-	-	121	-	-
1966-5647	2440203-71	1968 Dec 13 0451	Nike Cajun		MASA 10-2850M	GSFC Grenade 197 PB	-	-	-	PBA	-	-	-	1007	-	-
1966-5648	2440203-72	1968 Dec 13 0511	Nike Cajun		MASA 10-2860M	GSFC Grenade 198 C	-	-	-	FC	-	-	-	124	-	-
1966-5648	2440203-72	1968 Dec 13 0651	Nike Cajun		MASA 10-2860M	GSFC Grenade 199 PB	-	-	-	PBA	-	-	-	83	-	-
1966-5648	2440205-13	1968 Dec 14 1508	Nike Iroquois		MASA 14-3520A	Pulsar	-	-	-	NS	-	-	-	159	-	-
1966-5754	2440228-49	1969 Jan 6 2341	Nike Iroquois		CRL AH07-671	AFCL Bk release	-	-	-	EGL	-	-	-	2007	-	-
1966-5693	2440228-49	1969 Jan 7 0035	Nike Iroquois		CRL AH07-671	AFCL Bk release	-	-	-	EGL	-	-	-	2007	-	-
1966-5693	2440228-49	1969 Jan 7 0035	Nike Iroquois		CRL AH07-671	AFCL Bk release	-	-	-	EGL	-	-	-	2007	-	-
1966-5693	2440228-49	1969 Jan 7 0035	Nike Iroquois		CRL AH07-671	AFCL Bk release	-	-	-	EGL	-	-	-	2007	-	-
1966-5693	2440228-49	1969 Jan 7 0035	Nike Iroquois		CRL AH07-671	AFCL Bk release	-	-	-	EGL	-	-	-	2007	-	-
1966-5693	2440228-49	1969 Jan 7 0035	Nike Iroquois		CRL AH07-671	AFCL Bk release	-	-	-	EGL	-	-	-	2007	-	-
1966-5693	2440228-49	1969 Jan 7 0035	Nike Iroquois		CRL AH07-671	AFCL Bk release	-	-	-	EGL	-	-	-	2007	-	-
1966-5693	2440228-49	1969 Jan 7 0035	Nike Iroquois		CRL AH07-671	AFCL Bk release	-	-	-	EGL	-	-	-	2007	-	-
1966-5693	2440228-49	1969 Jan 7 0035	Nike Iroquois		CRL AH07-671	AFCL Bk release	-	-	-	EGL	-	-	-	2007	-	-
1966-5693	2440228-49	1969 Jan 7 0035	Nike Iroquois		CRL AH07-671	AFCL Bk release	-	-	-	EGL	-	-	-	2007	-	-
1966-5693	2440228-49	1969 Jan 7 0035	Nike Iroquois		CRL AH07-671	AFCL Bk release	-	-	-	EGL	-	-	-	2007	-	-
1966-5693	2440228-49	1969 Jan 7 0035	Nike Iroquois		CRL AH07-671	AFCL Bk release	-	-	-	EGL	-	-	-	2007	-	-
1966-5693	2440228-49	1969 Jan 7 0035	Nike Iroquois		CRL AH07-671	AFCL Bk release	-	-	-	EGL	-	-	-	2007	-	-
1966-5693	2440228-49	1969 Jan 7 0035	Nike Iroquois		CRL AH07-671	AFCL Bk release	-	-	-	EGL	-	-	-	2007	-	-
1966-5693	2440228-49	1969 Jan 7 0035	Nike Iroquois		CRL AH07-671	AFCL Bk release	-	-	-	EGL	-	-	-	2007	-	-
1966-5693	2440228-49	1969 Jan 7 0035	Nike Iroquois		CRL AH07-671	AFCL Bk release	-	-	-	EGL	-	-	-	2007	-	-
1966-5693	2440228-49	1969 Jan 7 0035	Nike Iroquois		CRL AH07-671	AFCL Bk release	-	-	-	EGL	-	-	-	2007	-	-
1966-5693	2440228-49	1969 Jan 7 0035	Nike Iroquois		CRL AH07-671	AFCL Bk release	-	-	-	EGL	-	-	-	2007	-	-
1966-5693	2440228-49	1969 Jan 7 0035	Nike Iroquois		CRL AH07-671	AFCL Bk release	-	-	-	EGL	-	-	-	2007	-	-
1966-5693	2440228-4															



Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Mission	FlightCode	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee_Km	Range_Km	Dest
1969-5445	2440440-65	1969 Aug 7 0336	Nike Iroquois	-	CRL AT07-179	Sphere	-	-	-	FC	-	-	-	196	-	-
1969-5446	2440440-69	1969 Aug 7 0430	Nike Iroquois	-	CRL A07-902-1	Mass spectrometer	-	-	-	FC	-	-	-	84	-	-
1969-5447	2440440-66	1969 Aug 13 0423	Nike Iroquois	-	CRL A07-902-2	Mass spectrometer	-	-	-	FC	-	-	-	114	-	-
1969-5448	2440446-77	1969 Aug 13 0630	Nike Apache	-	MASA 14-4220A	Pandora K (Perseids)	-	-	-	WS	-	-	-	1437	-	-
1969-5460	2440445-09	1969 Aug 21 1409	Nike Tomahawk	-	MASA 18-786A	Planetary Mass Spec	-	-	-	WI	-	-	-	227	-	-
1969-5461	2440445-13	1969 Aug 21 1509	Nike Tomahawk	-	MASA 18-1029A	UM Thermosphere 13	-	-	-	WI	-	-	-	318	-	-
1969-5465	2440445-94	1969 Aug 22 1036	Nike Apache	-	MASA 14-4230G	Pandora L (Backgr.)	-	-	-	WS	-	-	-	158	-	-
1969-5708	2440462-25	1969 Aug 28 1903	Nike Cajun	-	-	MRL Coslum?	-	-	-	WI	-	-	-	102	-	-
1969-5709	2440462-92	1969 Aug 29 1000	Nike Cajun	-	-	MRL Coslum?	-	-	-	WI	-	-	-	102	-	-
1969-A149	2440469-50	1969 Sep 5	Aerobee 170	-	MRL ME4-234	-	-	-	-	WS	-	-	-	20	-	-
1969-5481	2440470-58	1969 Sep 6 0155	Nike Javelin	-	-	Pre-Secede 1	-	-	-	WS	-	-	-	1007	-	-
1969-5484	2440471-58	1969 Sep 7 0152	Nike Javelin	-	-	Pre-Secede 2	-	-	-	WS	-	-	-	1007	-	-
1969-5492	2440475-37	1969 Sep 10 2046	Nike Apache	-	MASA 14-395UI	-	-	-	-	WI	-	-	-	205	-	-
1969-5495	2440476-49	1969 Sep 11 2344-14	Nike Tomahawk	12	Sandia 152-109	LRL RCS-3 (Daisy III)	-	-	-	HAD4	-	-	-	165	-	-
1969-5497	2440476-67	1969 Sep 12 0406	Nike Apache	-	MASA 14-394UI	-	-	-	-	WI	-	-	-	189	-	-
1969-5500	2440478-57	1969 Sep 14 0142	Nike Javelin	-	-	Pre-Secede 3	-	-	-	WS	-	-	-	1007	-	-
1969-5501	2440489-55	1969 Sep 26 0111	Nike Hydac	-	STV 90	-	-	-	-	WS	-	-	-	196	-	-
1969-5552	2440498-72	1969 Oct 4 0515	Nike Tomahawk	-	MASA 18-710U	-	-	-	-	FC	-	-	-	235	-	-
1969-5557	2440498-58	1969 Oct 11 0200	Nike Tomahawk	-	CRL AH07-893?	[AH7-890 in CRL]	-	-	-	FC	-	-	-	118	-	-
1969-5567	2440517-22	1969 Oct 22 1712	Nike Hydac	-	STV 91	-	-	-	-	WS	-	-	-	196	-	-
1969-5590	2440528-38	1969 Nov 2 2110	Nike Javelin	-	CRL AH07-902-3	PCAG9 BRL 4	-	-	-	FC	-	-	-	119	-	-
1969-5593	2440528-77	1969 Nov 3 0629	Nike Iroquois	-	CRL AH07-902-4	PCAG9 BRL 5	-	-	-	FC	-	-	-	117	-	-
1969-5594	2440528-78	1969 Nov 3 0642	Nike Iroquois	-	CRL AT07-396	PCAG9 C-1	-	-	-	FC	-	-	-	210	-	-
1969-5595	2440528-81	1969 Nov 3 0730	Nike Iroquois	-	CRL AH07-882	PCAG9 C-1	-	-	-	FC	-	-	-	138	-	-
1969-5597	2440529-02	1969 Nov 3 1232	Nike Iroquois	-	CRL AT07-397	PCAG9 C-2	-	-	-	FC	-	-	-	167	-	-
1969-5598	2440529-04	1969 Nov 3 1257-00	Nike Javelin	-	-	PCAG9 BRL 2	-	-	-	FC	-	-	-	116	-	-
1969-5599	2440529-06	1969 Nov 3 1330	Nike Javelin	-	-	PCAG9 BRL 3	-	-	-	FC	-	-	-	90	-	-
1969-5600	2440529-23	1969 Nov 3 1730	Nike Iroquois	-	CRL AH07-886	PCAG9 BRL 3	-	-	-	FC	-	-	-	144	-	-
1969-5604	2440529-24	1969 Nov 3 1747	Nike Iroquois	-	CRL AH07-902-4	PCAG9 M-4	-	-	-	FC	-	-	-	122	-	-
1969-A186	2440529-28	1969 Nov 3 1840	Nike Iroquois	-	CRL AH07-902-4	PCAG9 C-3 Sphere	-	-	-	FC	-	-	-	47	-	-
1969-5605	2440529-28	1969 Nov 3 1854	Nike Iroquois	-	CRL AT07-395	PCAG9 C-3 Sphere	-	-	-	FC	-	-	-	126	-	-
1969-5607	2440529-46	1969 Nov 3 2308	Nike Iroquois	-	CRL AT07-396	PCAG9 C-4 Sphere	-	-	-	FC	-	-	-	192	-	-
1969-5611	2440530-44	1969 Nov 4 2130	Nike Javelin	-	-	PCAG9 BRL 6	-	-	-	FC	-	-	-	124	-	-
1969-5613	2440530-45	1969 Nov 4 2235-00	Nike Javelin	-	-	PCAG9 BRL 7	-	-	-	FC	-	-	-	125	-	-
1969-5614	2440530-45	1969 Nov 4 2250	Nike Iroquois	-	CRL AH07-893	PCAG9 M-5	-	-	-	FC	-	-	-	143	-	-
1969-5619	2440531-37	1969 Nov 5 2049	Nike Iroquois	-	CRL AH07-889	PCAG9 M-5	-	-	-	FC	-	-	-	122	-	-
1969-5622	2440532-62	1969 Nov 7 0251	Nike Iroquois	-	CRL AH07-892	PCAG9 M-6	-	-	-	FC	-	-	-	122	-	-
1969-5630	2440544-40	1969 Nov 18 2132-42	Nike Tomahawk	12	Sandia 152-155	PCAG9 M-6	-	-	-	FC	-	-	-	174	-	-
1969-5723	2440546-35	1969 Nov 20 2019	Nike Cajun	-	-	S-sphere ejection	-	-	-	LTR	-	-	-	1007	-	-
1969-5658	2440581-53	1969 Nov 26 0036:37	Nike Cajun	-	Ferdinand 21	Ferdinand 21	-	-	-	AND	-	-	-	1007	-	-
1969-5765	2440585-50	1969 Dec 1	Nike Hydac	-	MASA 14-353UM	HAVE HORN 1	-	-	-	NRROD	-	-	-	1007	-	-
1969-5646	2440590-56	1969 Dec 5 0131	Nike Apache	-	CRL AH07-880	Release	-	-	-	BSL	-	-	-	188	-	-
1969-5649	2440590-50	1969 Dec 5 0950	Nike Iroquois	-	CRL AH07-881	Release	-	-	-	EGL	-	-	-	185	-	-
1969-5650	2440590-32	1969 Dec 5 1009	Nike Iroquois	-	CRL AH07-881	Release	-	-	-	EGL	-	-	-	181	-	-
1969-5651	2440591-00	1969 Dec 5 1159	Nike Iroquois	-	CRL AH07-881	Polar disturbance	-	-	-	EGL	-	-	-	168	-	-
1969-5656	2440595-89	1969 Dec 10 0451	Nike Iroquois	-	CRL AH07-901	Release	-	-	-	EGL	-	-	-	185	-	-
1969-5666	2440598-43	1969 Dec 12 2230	Nike Iroquois	-	CRL AH07-882	Release	-	-	-	NS	-	-	-	195	-	-
1969-5666	2440598-43	1969 Dec 12 2230	Aerobee 170	-	KF3-26	-	-	-	-	NS	-	-	-	195	-	-
1969-5664	2440598-55	1969 Dec 13 0200	Nike Cajun	-	MASA 14-444EM	S-sphere ejection	-	-	-	NS	-	-	-	1007	-	-
1969-5671	2440598-43	1969 Dec 13 2222	Nike Apache	-	MASA 14-446CM	CCA Release MA	-	-	-	MI	-	-	-	2007	-	-
1969-5672	2440598-52	1970 Jan 7 0642	Nike Apache	-	MASA 14-446CM	CCA Release TMA	-	-	-	MI	-	-	-	2177	-	-
1970-5746	2440598-50	1970 Jan 7 14 0030	Nike Hydac	-	MASA 14-446CM	HAVE HORN 2	-	-	-	MI	-	-	-	1007	-	-
1970-5800	2440598-78	1970 Jan 7 0642	Nike Apache	-	MASA 14-240TI	TSRG 30:01	-	-	-	MI	-	-	-	126	-	-
1970-5810	2440598-78	1970 Jan 7 0642	Nike Apache	-	MASA 14-240TI	TSRG 30:01	-	-	-	MI	-	-	-	100	-	-
1970-5811	2440598-50	1970 Jan 5 2130	Nike Cajun	-	MASA 10-329CM	CSFC Grenade 222 H	-	-	-	FC	-	-	-	95	-	-
1970-582	2440598-50	1970 Jan 5 2130	Nike Cajun	-	MASA 10-329CM	CSFC Grenade 223 C	-	-	-	MI	-	-	-	103	-	-
1970-583	2440598-50	1970 Jan 5 2130	Nike Cajun	-	MASA 10-329CM	CSFC Grenade 224 V	-	-	-	MI	-	-	-	103	-	-
1970-585	2440598-50	1970 Jan 5 2130	Nike Cajun	-	MASA 10-329CM	CSFC Grenade 224 V	-	-	-	MI	-	-	-	103	-	-
1970-586	2440598-73	1970 Jan 13 0532	Nike Tomahawk	-	Sandia 152-137	LRL MUX-3	-	-	-	PRA	-	-	-	180	-	-
1970-587	2440600-43	1970 Jan 13 2223	Nike Cajun	-	MASA 10-326CM	CCA Release MA?	-	-	-	TTR	-	-	-	126	-	-
1970-587	2440600-44	1970 Jan 13 2236	Nike Apache	-	MASA 10-326CM	CCA Release MA?	-	-	-	FC	-	-	-	24	-	-
1970-587	2440600-44	1970 Jan 13 2236	Nike Apache	-	MASA 10-326CM	CCA Release MA?	-	-	-	FC	-	-	-	24	-	-
1970-588	2440601-07	1970 Jan 14 1347	Nike Apache	-	MASA 14-452CM	UM Pit-lat 42	-	-	-	FC	-	-	-	171	-	-
1970-588	2440601-07	1970 Jan 14 1347	Nike Apache	-	MASA 14-452CM	UM Pit-lat 42	-	-	-	FC	-	-	-	171	-	-
1970-581	2440600-57	1970 Jan 14 0110	Nike Cajun	-	MASA 10-345CM	CSFC Grenade MA3	-	-	-	MI	-	-	-	2007	-	-
1970-582	2440600-57	1970 Jan 14 0135	Nike Cajun	-	MASA 10-345CM	CSFC Grenade MA3	-	-	-	MI	-	-	-	160	-	-
1970-583	2440600-57	1970 Jan 14 0135	Nike Cajun	-	MASA 10-345CM	CSFC Grenade 227 C	-	-	-	FC	-	-	-	113	-	-
1970-584	2440600-62	1970 Jan 14 0300	Nike Apache	-	MASA 14-447CM	CCA Release TMA	-	-	-	FC	-	-	-	197	-	-
1970-586	2440600-67	1970 Jan 14 0405-30	Nike Tomahawk	-	MASA 18-64UE	UMd Aurora3	-	-	-	FC	-	-	-	259	-	-
1970-586	2440600-71	1970 Jan 14 0500	Nike Apache	-	MASA 14-448CM	CCA Release TMA	-	-	-	FC	-	-	-	204	-	-
1970-587	2440600-80	1970 Jan 14 0717	Nike Apache	-	MASA 14-448CM	CCA Release TMA	-	-	-	FC	-	-	-	204	-	-
1970-588	2440600-89	1970 Jan 14 0915	Nike Apache	-	MASA 14-450CM	CCA Release TMA	-	-	-	MI	-	-	-	201	-	-
1970-589	2440600-98	1970 Jan 14 1135	Nike Apache	-	MASA 14-451CM	CCA Release TMA	-	-	-	MI	-	-	-	207	-	-
1970-589	2440600-98	1970 Jan 14 1135	Nike Apache	-	MASA 14-451CM	CCA Release TMA	-	-	-	MI	-	-	-	207	-	-
1970-589	2440601-25	1970 Jan 14 1723	Nike Apache	-	MASA 14-452CM	CSFC Grenade MA4	-	-	-	MI	-	-	-	2007	-	-
1970-589	2440601-25	1970 Jan 14 1755	Nike Cajun	-	MASA 10-329CM	CSFC Grenade 228 H	-	-	-	MI	-	-	-	1007	-	-
1970-571	2440602-74	1970 Jan 16 0540	Nike Tomahawk	-	MASA 18-79CM	Auroral EIV	-	-	-	FC	-	-	-	210	-	-
1970-575	2440603-63	1970 Jan 17 0303-20	Nike Tomahawk	-	MASA 18-65UE	-	-	-	-	FC	-	-	-	252	-	-
1970-587	2440616-22	1970 Jan 29 1719	Nike Cajun	-	MASA 10-336CM	GSFC Grenade 229 PB	-	-	-	PRA	-	-	-	91	-	-
1970-587	2440616-22	1970 Jan 29 1721	Nike Cajun	-	MASA 10-336CM	GSFC Grenade 230 PB	-	-	-	PRA	-	-	-	74	-	-
1970-594	2440621-07	1970 Feb 3 1344	Nike Cajun	-	MASA 10-340CM	GSFC Grenade 231 PB	-	-	-	PRA	-	-	-	91	-	-
1970-595	2440621-08	1970 Feb 3 1355	Nike Cajun	-	MASA 10-340CM	GSFC Grenade 232 PB	-	-	-	PRA	-	-	-	87	-	-
1970-597	2440621-43	1970 Feb 3 2224-33	Nike Tomahawk	-	MASA 18-1131E	Ferdinand 25/Polar 1	-	-	-	AND	-	-	-	283	-	-
1970-599	2440621-43	1970 Feb 4 0441	Nike Apache	-	MASA 14-444UI	-	-	-	-	FC	-	-	-	141	-	-
1970-5101	2440621-76	1970 Feb 4 0619	Nike Tomahawk	-	MASA 18-1001A	-	-	-	-	FC	-	-	-	310	-	-
1970-5103	2440623-16	1970 Feb 5 1551	Nike Tomahawk	-	MASA 13-136T	-	-	-	-	MI	-	-	-	2007	-	-



Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Launch_Mission	FlightCode	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee_Km	Range_Km	Dest
1970-S128	2440656-73	1970 Feb 19 0529	Nike Apache	-	MASA 14-3810E	Auroral particles	-	-	-	FC	-	-	-	2007	-	-
1970-S174	2440654-64	1970 Feb 28 0315	Nike Apache	-	MASA 14-3820E	Auroral particles	-	-	-	FC	-	-	-	2007	-	-
1970-S183	2440647-69	1970 Mar 2 0430	Nike Tomahawk	-	MASA 18-870E	Dual Ba 1A	-	-	-	BART	-	-	-	2707	-	-
1970-S184	2440647-69	1970 Mar 2 0430	Nike Tomahawk	-	MASA 18-900E	Dual Ba 1B	-	-	-	PF	-	-	-	2707	-	-
1970-S186	2440649-12	1970 Mar 3 1453	Nike Tomahawk	-	MASA 18-1080E	Dual Ba 2B	-	-	-	PF	LC1	-	-	2707	-	-
1970-S189	2440650-10	1970 Mar 4 1430	Nike Tomahawk	-	MASA 18-880E	Dual Ba 2A	-	-	-	BART	-	-	-	2707	-	-
1970-S190	2440650-11	1970 Mar 4 1441	Nike Tomahawk	-	MASA 18-1090E	Dual Ba 3B	-	-	-	PF	LC1	-	-	2707	-	-
1970-S193	2440651-09	1970 Mar 5 1410	Nike Tomahawk	-	MASA 18-890E	Dual Ba 3A	-	-	-	BART	-	-	-	2707	-	-
1970-S196	2440651-89	1970 Mar 6 0927	Nike Cajun	-	MASA 10-3440M	Ozone/H2O	-	-	-	WI	-	-	-	1007	-	-
1970-S199	2440652-27	1970 Mar 6 1826-30	Nike Apache	-	MASA 14-4260M	UM Pilot 43	-	-	-	LA6	-	-	-	162	-	-
1970-S203	2440653-16	1970 Mar 7 1545	Nike Apache	-	MASA 14-4560C1	Ionospheric/SX	-	-	-	WI	-	-	-	2007	-	-
1970-M05	2440653-17	1970 Mar 7 1600	Nike Cajun	-	MASA 14-4380U1	Ionospheric	-	-	-	WI	LA2	-	-	188	-	-
1970-S206	2440653-25	1970 Mar 7 1651	Nike Apache	-	MASA 10-3460M	Ozone/H2O	-	-	-	WI	LA6	-	-	67	-	-
1970-S207	2440653-25	1970 Mar 7 1759-00	Nike Apache	-	CRL A07-015-1	Sphere	-	-	-	GSB	-	-	-	105	-	-
1970-S208	2440653-26	1970 Mar 7 1800-00	Nike Apache	-	MASA 14-4270M	UM Pilot 44	-	-	-	WI	LA5	-	-	289	-	-
1970-M06	2440653-26	1970 Mar 7 1809	Nike Apache	-	MASA 18-1040A	UM Thermosphere 14	-	-	-	WI	LA4	-	-	97	-	-
1970-S209	2440653-26	1970 Mar 7 1810	Nike Apache	-	CRL A07-024-1	UM Thermosphere 14	-	-	-	GSB	-	-	-	69	-	-
1970-S209	2440653-27	1970 Mar 7 1825-00	Nike Apache	-	CRL A07-016-1	Sphere	-	-	-	WI	LA5	-	-	176	-	-
1970-S210	2440653-27	1970 Mar 7 1827-00	Nike Apache	-	MASA 14-4280M	UM Pilot 45	-	-	-	WI	LA4	-	-	290	-	-
1970-S211	2440653-27	1970 Mar 7 1835-58	Nike Tomahawk	-	MASA 18-1050A	UM Thermosphere 15	-	-	-	WI	LA1	-	-	165	-	-
1970-S212	2440653-28	1970 Mar 7 1835-58	Aerobee 170	-	MASA 13-030S	NRL ME4_238	-	-	-	WI	LA3	-	-	2007	-	-
1970-S214	2440653-28	1970 Mar 7 1837-10	Nike Apache	-	MASA 14-4570C1	-	-	-	-	WI	LA2	-	-	178	-	-
1970-S214	2440653-28	1970 Mar 7 1837-30	Nike Tomahawk	-	MASA 18-1060A	-	-	-	-	WI	LA2	-	-	2807	-	-
1970-M07	2440653-28	1970 Mar 7 1837-25	Nike Apache	-	MASA 14-4560U1	-	-	-	-	WI	LA4	-	-	76	-	-
1970-S216	2440653-28	1970 Mar 7 1837-30	Nike Apache	-	MASA 18-1060A	Mass spectrometer	-	-	-	WI	LA3	-	-	175	-	-
1970-S217	2440653-28	1970 Mar 7 1839-00	Nike Apache	-	CRL A07-302-9	Mass spectrometer	-	-	-	WI	LA2	-	-	113	-	-
1970-M08	2440653-28	1970 Mar 7 1839-30	Nike Apache	-	CRL A07-302-5	Mass spectrometer	-	-	-	WI	LA5	-	-	192	-	-
1970-S218	2440653-28	1970 Mar 7 1840-30	Nike Apache	-	MASA 10-3460M	GSFC Ozone?	-	-	-	WI	LA2	-	-	68	-	-
1970-S218	2440653-28	1970 Mar 7 1840-40	Nike Apache	-	MASA 14-4580U1	UM Pilot 46	-	-	-	WI	LA6	-	-	1507	-	-
1970-S201	2440653-28	1970 Mar 7 1841-00	Nike Apache	-	MASA 14-4290M	UM Pilot 46	-	-	-	WI	LA5	-	-	1007	-	-
1970-S219	2440653-28	1970 Mar 7 1846	Nike Apache	-	MASA 14-4500M	UM Pilot 47	-	-	-	WI	LA3	-	-	167	-	-
1970-S226	2440653-31	1970 Mar 7 1925	Nike Apache	-	CRL A07-016-2	MACS Mass spec	-	-	-	GSB	-	-	-	152	-	-
1970-S228	2440653-32	1970 Mar 7 1944	Nike Apache	-	CRL A07-024-2	Composition/Soft X	-	-	-	GSB	-	-	-	99	-	-
1970-S230	2440653-32	1970 Mar 7 1944	Nike Apache	-	MASA 10-3510M	GSFC Grenade 233 W	-	-	-	WI	LA5	-	-	1007	-	-
1970-S230	2440654-25	1970 Mar 8 1725-00	Nike Apache	-	MASA 14-4500M	UM Pilot 47	-	-	-	WI	-	-	-	167	-	-
1970-S231	2440654-25	1970 Mar 8 1725-00	Nike Apache	-	MASA 18-9601	UM Pilot 48	-	-	-	WI	-	-	-	1007	-	-
1970-S234	2440654-51	1970 Mar 8 0017-36	Nike Tomahawk	-	MASA 38-9961	3-Sphere Ejection	-	-	-	AND	-	-	-	215	-	-
1970-S235	2440654-51	1970 Mar 8 0314	Nike Tomahawk	-	MASA 14-4380U1	UM Thermosphere 15	-	-	-	AND	-	-	-	215	-	-
1970-S235	2440654-51	1970 Mar 8 0314	Nike Tomahawk	-	MASA 18-1141E	Ferdinand 24	-	-	-	FC	-	-	-	298	-	-
1970-S237	2440654-64	1970 Mar 9 0521	Nike Apache	-	CRL A07-302-9	B field/particles	-	-	-	FC	-	-	-	158	-	-
1970-S238	2440654-64	1970 Mar 9 0521	Nike Apache	-	MASA 18-9601	E field	-	-	-	TERLS	-	-	-	298	-	-
1970-S238	2440654-64	1970 Mar 9 1450	Nike Tomahawk	-	MASA 18-9601	E field	-	-	-	TERLS	-	-	-	298	-	-
1970-S239	2440655-32	1970 Mar 9 1938	Nike Tomahawk	-	MASA 18-9601	ISRO 17-01	-	-	-	TERLS	-	-	-	294	-	-
1970-S239	2440655-32	1970 Mar 9 1938	Nike Tomahawk	-	MASA 18-9601	ISRO 17-02	-	-	-	TERLS	-	-	-	294	-	-
1970-S236	2440655-36	1970 Mar 9 1946	Nike Tomahawk	-	3-Sphere Ejection	ISRO 17-03	-	-	-	NS	-	-	-	1007	-	-
1970-S236	2440655-36	1970 Mar 9 1946	Nike Tomahawk	-	3-Sphere Ejection	ISRO 17-03	-	-	-	NS	-	-	-	1007	-	-
1970-S236	2440655-36	1970 Mar 9 1946	Nike Tomahawk	-	3-Sphere Ejection	ISRO 17-03	-	-	-	NS	-	-	-	1007	-	-
1970-S236	2440655-36	1970 Mar 9 1946	Nike Tomahawk	-	3-Sphere Ejection	ISRO 17-03	-	-	-	NS	-	-	-	1007	-	-
1970-S236	2440655-36	1970 Mar 9 1946	Nike Tomahawk	-	3-Sphere Ejection	ISRO 17-03	-	-	-	NS	-	-	-	1007	-	-
1970-S236	2440655-36	1970 Mar 9 1946	Nike Tomahawk	-	3-Sphere Ejection	ISRO 17-03	-	-	-	NS	-	-	-	1007	-	-
1970-S236	2440655-36	1970 Mar 9 1946	Nike Tomahawk	-	3-Sphere Ejection	ISRO 17-03	-	-	-	NS	-	-	-	1007	-	-
1970-S236	2440655-36	1970 Mar 9 1946	Nike Tomahawk	-	3-Sphere Ejection	ISRO 17-03	-	-	-	NS	-	-	-	1007	-	-
1970-S236	2440655-36	1970 Mar 9 1946	Nike Tomahawk	-	3-Sphere Ejection	ISRO 17-03	-	-	-	NS	-	-	-	1007	-	-
1970-S236	2440655-36	1970 Mar 9 1946	Nike Tomahawk	-	3-Sphere Ejection	ISRO 17-03	-	-	-	NS	-	-	-	1007	-	-
1970-S236	2440655-36	1970 Mar 9 1946	Nike Tomahawk	-	3-Sphere Ejection	ISRO 17-03	-	-	-	NS	-	-	-	1007	-	-
1970-S236	2440655-36	1970 Mar 9 1946	Nike Tomahawk	-	3-Sphere Ejection	ISRO 17-03	-	-	-	NS	-	-	-	1007	-	-
1970-S236	2440655-36	1970 Mar 9 1946	Nike Tomahawk	-	3-Sphere Ejection	ISRO 17-03	-	-	-	NS	-	-	-	1007	-	-
1970-S236	2440655-36	1970 Mar 9 1946	Nike Tomahawk	-	3-Sphere Ejection	ISRO 17-03	-	-	-	NS	-	-	-	1007	-	-
1970-S236	2440655-36	1970 Mar 9 1946	Nike Tomahawk	-	3-Sphere Ejection	ISRO 17-03	-	-	-	NS	-	-	-	1007	-	-
1970-S236	2440655-36	1970 Mar 9 1946	Nike Tomahawk	-	3-Sphere Ejection	ISRO 17-03	-	-	-	NS	-	-	-	1007	-	-
1970-S236	2440655-36	1970 Mar 9 1946	Nike Tomahawk	-	3-Sphere Ejection	ISRO 17-03	-	-	-	NS	-	-	-	1007	-	-
1970-S236	2440655-36	1970 Mar 9 1946	Nike Tomahawk	-	3-Sphere Ejection	ISRO 17-03	-	-	-	NS	-	-	-	1007	-	-
1970-S236	2440655-36	1970 Mar 9 1946	Nike Tomahawk	-	3-Sphere Ejection	ISRO 17-03	-	-	-	NS	-	-	-	1007	-	-
1970-S236	2440655-36	1970 Mar 9 1946	Nike Tomahawk	-	3-Sphere Ejection	ISRO 17-03	-	-	-	NS	-	-	-	1007	-	-
1970-S236	2440655-36	1970 Mar 9 1946	Nike Tomahawk	-	3-Sphere Ejection	ISRO 17-03	-	-	-	NS	-	-	-	1007	-	-
1970-S236	2440655-36	1970 Mar 9 1946	Nike Tomahawk	-	3-Sphere Ejection	ISRO 17-03	-	-	-	NS	-	-	-	1007	-	-
1970-S236	2440655-36	1970 Mar 9 1946	Nike Tomahawk	-	3-Sphere Ejection	ISRO 17-03	-	-	-	NS	-	-	-	1007	-	-
1970-S236	2440655-36	1970 Mar 9 1946	Nike Tomahawk	-	3-Sphere Ejection	ISRO 17-03	-	-	-	NS	-	-	-	1007	-	-
1970-S236	2440655-36	1970 Mar 9 1946	Nike Tomahawk	-	3-Sphere Ejection	ISRO 17-03	-	-	-	NS	-	-	-	1007	-	-
1970-S236	2440655-36	1970 Mar 9 1946	Nike Tomahawk	-	3-Sphere Ejection	ISRO 17-03	-	-	-	NS	-	-	-	1007	-	-
1970-S236	2440655-36	1970 Mar 9 1946	Nike Tomahawk	-	3-Sphere Ejection	ISRO 17-03	-	-	-	NS	-	-	-	1007	-	-
1970-S236	2440655-36	1970 Mar 9 1946	Nike Tomahawk	-	3-Sphere Ejection	ISRO 17-03	-	-	-	NS	-	-	-	1007	-	-
1970-S236	2440655-36	1970 Mar 9 1946	Nike Tomahawk	-	3-Sphere Ejection	ISRO 17-03	-	-	-	NS	-	-	-	1007	-	-
1970-S236	2440655-36	1970 Mar 9 1946	Nike Tomahawk	-	3-Sphere Ejection	ISRO 17-03	-	-	-	NS	-	-	-	1007	-	-
1970-S236	2440655-36	1970 Mar 9 1946	Nike Tomahawk	-	3-Sphere Ejection	ISRO 17-03	-	-	-	NS	-	-	-	1007	-	-
1970-S236	2440655-36	1970 Mar 9 1946	Nike Tomahawk	-	3-Sphere Ejection	ISRO 17-03	-	-	-	NS	-	-	-	1007	-	-
1970-S236	2440655-36	1970 Mar 9 1946	Nike Tomahawk	-	3-Sphere Ejection	ISRO 17-03	-	-	-	NS	-	-	-	1007	-	-
1970-S236	2440655-36	1970 Mar 9 1946	Nike Tomahawk	-	3-Sphere Ejection	ISRO 17-03	-	-	-	NS	-	-	-	1007	-	-
1970-S236	2440655-36	1970 Mar 9 1946	Nike Tomahawk	-	3-Sphere Ejection	ISRO 17-03	-	-	-	NS	-	-	-	1007	-	-
1970-S236	2440655-36	1970 Mar 9 1946	Nike Tomahawk	-	3-Sphere Ejection	ISRO 17-03	-	-	-	NS	-	-	-	1007	-	-
1970-S236	2440655-36	1970 Mar 9 1946	Nike Tomahawk	-	3-Sphere Ejection	ISRO 17-03	-	-	-	NS	-	-	-	1007	-	-
1970-S236	2440655-36	1970 Mar 9 1946	Nike Tomahawk	-	3-Sphere Ejection	ISRO 17-03	-	-	-	NS	-	-	-	1007	-	-
1970-S236	2440655-36	1970 Mar 9 1946	Nike Tomahawk	-	3-Sphere Ejection	ISRO 17-03	-	-	-	NS	-	-	-	1007	-	-
1970-S236	2440655-36	1970 Mar 9 1946	Nike Tomahawk	-	3-Sphere Ejection	ISRO 17-03	-	-	-	NS	-	-	-	1007	-	-
1970-S236	2440655-36	1970 Mar 9 1946	Nike Tomahawk	-	3-Sphere Ejection	ISRO 17-03	-	-	-	NS	-	-	-	1007	-	-
1970-S236	2440655-36	1970 Mar 9 19														



Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Mission	FlightCode	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee km	Range km	Dest
1971-5150	2441021-27	1971 Mar 10 1826:00	Nike Apache	-	MASA 14-4790M	UM Pilot 54	-	-	-	WI	-	-	-	181	-	-
1971-5151	2441021-28	1971 Mar 10 1941:00	Nike Apache	-	MASA 14-4800M	UM Pilot 55	-	-	-	WI	-	-	-	171	-	-
1971-5152	2441021-30	1971 Mar 10 1911	Nike Cajun	-	MASA 10-3830M	GSFC Grenade 244 W	-	-	-	WI	-	-	-	113	-	-
1971-5153	2441021-94	1971 Mar 11 1037	Nike Tomahawk	-	Caribou V	-	-	-	-	PF	-	-	-	2707	-	-
1971-5154	2441022-68	1971 Mar 12 0413	Nike Iroquois	-	CRL A07-015-3	Sphere	-	-	-	NS	-	-	-	280	-	-
1971-5155	2441022-79	1971 Mar 12 0655	Nike Iroquois	-	CRL A07-913-3	Sphere	-	-	-	NS	-	-	-	283	-	-
1971-5156	2441023-53	1971 Mar 13 0050	Nike Apache	-	MASA 14-3880A	-	-	-	-	NS	-	-	-	2007	-	-
1971-5157	2441023-59	1971 Mar 13 0050	Nike Apache	-	MASA 14-3880A	-	-	-	-	FXH	RAG	-	-	315	-	-
1971-5158	2441026-22	1971 Mar 15 1719	Nike Tomahawk	-	MASA 18-1266E	-	-	-	-	CP	RAG	-	-	2707	-	-
1971-5159	2441026-50	1971 Mar 15	Nike Tomahawk	-	MASA 18-1226E	-	-	-	-	CSG	ALFS	-	-	73	-	-
1971-5160	2441026-75	1971 Mar 15 0601	Nike Cajun	-	MASA 10-3765M	-	-	-	-	PF	-	-	-	2707	-	-
1971-5161	2441026-88	1971 Mar 16 0905	Nike Tomahawk	-	MASA 18-1406E	-	-	-	-	CSG	ALFS	-	-	76	-	-
1971-5162	2441027-05	1971 Mar 16 1316	Aerobee 170	-	MASA 10-3766M	-	-	-	-	WS	-	-	-	270	-	-
1971-5163	2441027-28	1971 Mar 16 1300	Nike Tomahawk	-	CRL A04-002-2	EUV	-	-	-	PF	-	-	-	2707	-	-
1971-5164	2441027-96	1971 Mar 17 1057	Nike Tomahawk	-	MASA 18-1270E	-	-	-	-	FXH	RAG	-	-	318	-	-
1971-5165	2441029-21	1971 Mar 18 1700	Nike Tomahawk	-	MASA 10-3860M	-	-	-	-	CSG	ALFS	-	-	125	-	-
1971-5166	2441029-32	1971 Mar 18 1939	Nike Tomahawk	-	MASA 18-1296E	-	-	-	-	FXH	RAG	-	-	250	-	-
1971-5167	2441029-32	1971 Mar 18 1939	Nike Tomahawk	-	MASA 18-1235E	-	-	-	-	FXH	RAG	-	-	2707	-	-
1971-5168	2441029-50	1971 Mar 19	Nike Tomahawk	-	MASA 18-1246E	-	-	-	-	PF	-	-	-	2707	-	-
1971-5169	2441030-03	1971 Mar 19 1205	Nike Tomahawk	-	MASA 18-1246E	-	-	-	-	FXH	RAG	-	-	2707	-	-
1971-5170	2441030-03	1971 Mar 19 1238	Nike Tomahawk	-	MASA 18-1246E	-	-	-	-	PF	-	-	-	2707	-	-
1971-5171	2441030-73	1971 Mar 20 0550	Aerobee 170	-	MASA 13-2106	-	-	-	-	WS	-	-	-	2007	-	-
1971-5172	2441030-74	1971 Mar 20 0542:41	Nike Tomahawk	-	MASA 13-2106	-	-	-	-	FC	-	-	-	336	-	-
1971-5173	2441030-74	1971 Mar 20 0544:01	Nike Iroquois	-	CRL A08-019-1	-	-	-	-	FC	-	-	-	164	-	-
1971-5174	2441030-84	1971 Mar 20 0915	Nike Tomahawk	-	CRL A07-019-2	-	-	-	-	PF	-	-	-	2707	-	-
1971-5175	2441031-50	1971 Mar 21	Nike Tomahawk	-	MASA 18-1706E	-	-	-	-	FXH	RAG	-	-	2707	-	-
1971-5176	2441033-20	1971 Mar 22 1650	Nike Tomahawk	-	MASA 18-1266E	-	-	-	-	FXH	RAG	-	-	265	-	-
1971-5177	2441036-20	1971 Mar 25 1647	Nike Tomahawk	-	MASA 18-1266E	-	-	-	-	WS	-	-	-	1007	-	-
1971-5178	2441036-20	1971 Mar 27 1226	Nike Tomahawk	-	Sphere Ejection	-	-	-	-	PF	-	-	-	2707	-	-
1971-5179	2441041-83	1971 Mar 31 0751	Nike Tomahawk	-	MASA 18-1300E	-	-	-	-	FC	-	-	-	2987	-	-
1971-5180	2441044-91	1971 Apr 3 0950	Aerobee 170	-	CRL A04-004-2	HI STAR 1	TELS-303	-	-	WS	LCS6	-	-	158	-	-
1971-5181	2441061-05	1971 Apr 19 1325	Nike Apache	-	MASA 14-4661A	-	-	-	-	NS	-	-	-	198	-	-
1971-5182	2441064-55	1971 Apr 23 0115	Nike Apache	-	MASA 14-4660A	-	-	-	-	NS	-	-	-	2007	-	-
1971-5183	2441066-75	1971 Apr 23 0147:35	Nike Apache	-	MASA 14-4670A	MPYA Dust	-	-	-	WS	-	-	-	124	-	-
1971-5184	2441067-06	1971 Apr 25 0600	Nike Apache	-	MASA 14-4671A/TE	-	-	-	-	TELS	-	-	-	160	-	-
1971-5185	2441067-50	1971 Apr 26	Nike Cajun	-	MASA 10-3871A	-	-	-	-	TELS	-	-	-	1007	-	-
1971-5186	2441067-50	1971 Apr 26	Nike Cajun	-	MASA 10-3861A	-	-	-	-	ELAR	-	-	-	1007	-	-
1971-5187	2441068-32	1971 Apr 26 1934	Nike Cajun	-	MASA 10-3861A	-	-	-	-	ELAR	-	-	-	154	-	-
1971-5188	2441068-43	1971 Apr 26 2215	Nike Cajun	-	MASA 10-3191A	-	-	-	-	ELAR	-	-	-	213	-	-
1971-5189	2441071-19	1971 Apr 29 0652	Aerobee 170	-	MASA 13-1465	-	-	-	-	NS	-	-	-	2007	-	-
1971-5190	2441071-06	1971 May 1 0858	Aerobee 170	-	MASA 13-3601	-	-	-	-	NS	-	-	-	2007	-	-
1971-5191	2441072-00	1971 May 6 0116	Nike Iroquois	-	MASA 13-3601	-	-	-	-	NS	-	-	-	120	-	-
1971-5192	2441076-58	1971 May 6 0116	Nike Iroquois	-	CRL A07-902-7	MASA spectrometer	TELS-306	-	-	EGL	-	-	-	136	-	-
1971-5193	2441076-58	1971 May 6 0116	Nike Iroquois	-	CRL A07-902-6	Masa spectrometer	-	-	-	EGL	-	-	-	1007	-	-
1971-5194	2441080-16	1971 May 6 0116	Nike Cajun	-	MASA 10-2906A	-	-	-	-	NS	-	-	-	1007	-	-
1971-5195	2441080-55	1971 May 15 2100	Nike Iroquois	-	MASA 10-2788A	-	-	-	-	EGL	-	-	-	1507	-	-
1971-5196	2441087-38	1971 May 17 0802:00	Nike Iroquois	-	-	TMA release	[dup of KAY?]	-	-	EGL	-	-	-	152	-	-
1971-5197	2441088-83	1971 May 17 0802:00	Nike Iroquois	-	-	-	-	-	-	EGL	-	-	-	117	-	-
1971-5198	2441088-83	1971 May 17 0802:00	Nike Iroquois	-	-	-	-	-	-	EGL	-	-	-	145	-	-
1971-5199	2441088-83	1971 May 17 0802:00	Nike Iroquois	-	-	-	-	-	-	EGL	-	-	-	145	-	-
1971-5200	2441088-83	1971 May 17 0802:00	Nike Iroquois	-	-	-	-	-	-	EGL	-	-	-	145	-	-
1971-5201	2441088-83	1971 May 17 0802:00	Nike Iroquois	-	-	-	-	-	-	EGL	-	-	-	145	-	-
1971-5202	2441088-83	1971 May 17 0802:00	Nike Iroquois	-	-	-	-	-	-	EGL	-	-	-	145	-	-
1971-5203	2441088-83	1971 May 17 0802:00	Nike Iroquois	-	-	-	-	-	-	EGL	-	-	-	145	-	-
1971-5204	2441088-83	1971 May 17 0802:00	Nike Iroquois	-	-	-	-	-	-	EGL	-	-	-	145	-	-
1971-5205	2441088-83	1971 May 17 0802:00	Nike Iroquois	-	-	-	-	-	-	EGL	-	-	-	145	-	-
1971-5206	2441088-83	1971 May 17 0802:00	Nike Iroquois	-	-	-	-	-	-	EGL	-	-	-	145	-	-
1971-5207	2441088-83	1971 May 17 0802:00	Nike Iroquois	-	-	-	-	-	-	EGL	-	-	-	145	-	-
1971-5208	2441088-83	1971 May 17 0802:00	Nike Iroquois	-	-	-	-	-	-	EGL	-	-	-	145	-	-
1971-5209	2441088-83	1971 May 17 0802:00	Nike Iroquois	-	-	-	-	-	-	EGL	-	-	-	145	-	-
1971-5210	2441088-83	1971 May 17 0802:00	Nike Iroquois	-	-	-	-	-	-	EGL	-	-	-	145	-	-
1971-5211	2441088-83	1971 May 17 0802:00	Nike Iroquois	-	-	-	-	-	-	EGL	-	-	-	145	-	-
1971-5212	2441088-83	1971 May 17 0802:00	Nike Iroquois	-	-	-	-	-	-	EGL	-	-	-	145	-	-
1971-5213	2441088-83	1971 May 17 0802:00	Nike Iroquois	-	-	-	-	-	-	EGL	-	-	-	145	-	-
1971-5214	2441088-83	1971 May 17 0802:00	Nike Iroquois	-	-	-	-	-	-	EGL	-	-	-	145	-	-
1971-5215	2441088-83	1971 May 17 0802:00	Nike Iroquois	-	-	-	-	-	-	EGL	-	-	-	145	-	-
1971-5216	2441088-83	1971 May 17 0802:00	Nike Iroquois	-	-	-	-	-	-	EGL	-	-	-	145	-	-
1971-5217	2441088-83	1971 May 17 0802:00	Nike Iroquois	-	-	-	-	-	-	EGL	-	-	-	145	-	-
1971-5218	2441088-83	1971 May 17 0802:00	Nike Iroquois	-	-	-	-	-	-	EGL	-	-	-	145	-	-
1971-5219	2441088-83	1971 May 17 0802:00	Nike Iroquois	-	-	-	-	-	-	EGL	-	-	-	145	-	-
1971-5220	2441088-83	1971 May 17 0802:00	Nike Iroquois	-	-	-	-	-	-	EGL	-	-	-	145	-	-
1971-5221	2441088-83	1971 May 17 0802:00	Nike Iroquois	-	-	-	-	-	-	EGL	-	-	-	145	-	-
1971-5222	2441088-83	1971 May 17 0802:00	Nike Iroquois	-	-	-	-	-	-	EGL	-	-	-	145	-	-
1971-5223	2441088-83	1971 May 17 0802:00	Nike Iroquois	-	-	-	-	-	-	EGL	-	-	-	145	-	-
1971-5224	2441088-83	1971 May 17 0802:00	Nike Iroquois	-	-	-	-	-	-	EGL	-	-	-	145	-	-
1971-5225	2441088-83	1971 May 17 0802:00	Nike Iroquois	-	-	-	-	-	-	EGL	-	-	-	145	-	-
1971-5226	2441088-83	1971 May 17 0802:00	Nike Iroquois	-	-	-	-	-	-	EGL	-	-	-	145	-	-
1971-5227	2441088-83	1971 May 17 0802:00	Nike Iroquois	-	-	-	-	-	-	EGL	-	-	-	145	-	-
1971-5228	2441088-83	1971 May 17 0802:00	Nike Iroquois	-	-	-	-	-	-	EGL	-	-	-	145	-	-
1971-5229	2441088-83	1971 May 17 0802:00	Nike Iroquois	-	-	-	-	-	-	EGL	-	-	-	145	-	-
1971-5230	2441088-83	1971 May 17 0802:00	Nike Iroquois	-	-	-	-	-	-	EGL	-	-	-	145	-	-
1971-5231	2441088-83	1971 May 17 0802:00	Nike Iroquois	-	-	-	-	-	-	EGL	-	-	-	145	-	-
1971-5232	2441088-83	1971 May 17 0802:00	Nike Iroquois	-	-	-	-	-	-	EGL	-	-	-	145	-	-
1971-5233	2441088-83	1971 May 17 0802:00	Nike Iroquois	-	-	-	-	-	-	EGL	-	-	-	145	-	-
1971-5234	2441088-83	1971 May 17 0802:00	Nike Iroquois	-	-	-	-	-	-	EGL	-	-	-	145	-	-
1971-5235	2441088-83	1971 May 17 0802:00	Nike Iroquois	-	-	-	-	-	-	EGL	-	-	-	145	-	-
1971-5236	2441088-83	1971 May 17 0802:00	Nike Iroquois	-	-	-	-	-	-	EGL	-	-	-	145	-	-
1971-5237	2441088-83	1971 May 17 0802:00	Nike Iroquois	-	-	-	-	-	-	EGL	-	-	-	145	-	-
1971-5238	2441088-83	1971 May 17 0802														

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Mission	FlightCode	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee_Km	Range_Km	Dest
1971-8561	2441154-24	1971 Jul 21 1745	Nike Cajun	-	3-Sphere Ejection 6	-	-	-	-	WS	-	-	-	1007	-	-
1971-8374	2441160-05	1971 Jul 21 1318	Aerobee 170	-	MASA 13.520A	-	-	-	-	WS	-	-	-	2007	-	-
1971-8378	2441163-53	1971 Jul 31 0044:54	Nike Apache	-	MASA 14.4680A	RTG IMA1 (Pandora P)	-	-	-	ESR	-	-	-	114	-	-
1971-8379	2441164-48	1971 Jul 31 2334:00	Nike Apache	-	MASA 14.4690A	RTG IMA2 (Pandora Q)	-	-	-	ESR	-	-	-	106	-	-
1971-8376	2441163-50	-	Nike Apache	?	Capache	-	-	-	-	WS	-	-	-	1007	-	-
1971-8385	2441172-01	1971 Aug 8 1211:46	Nike Cajun	-	Ferdinand 27	-	-	-	-	AND	-	-	-	99	-	-
1971-8387	2441173-69	1971 Aug 10 0440	Aerobee 170	-	MASA 13.180D	-	-	-	-	WS	-	-	-	2007	-	-
1971-8388	2441173-73	1971 Aug 10 0530	Aerobee 170A	-	MASA 13.086G	-	-	-	-	WS	-	-	-	2007	-	-
1971-8389	2441176-38	1971 Aug 12 2114	Aerobee 170	-	MASA 13.620S	-	-	-	-	WS	-	-	-	2007	-	-
1971-8394	2441183-34	1971 Aug 19 2011	Nike Cajun	-	MASA 14.4910M	-	-	-	-	WI	-	-	-	171	-	-
1971-8398	2441183-81	1971 Aug 20 0730	Nike Apache	-	MASA 10.3900M	-	-	-	-	WI	-	-	-	132	-	-
1971-8399	2441183-82	1971 Aug 20 0745	Nike Apache	-	MASA 14.4920M	-	-	-	-	WI	-	-	-	180	-	-
1971-8400	2441183-88	1971 Aug 20 0919	Nike Apache	-	MASA 14.4920M	-	-	-	-	WI	-	-	-	193	-	-
1971-8401	2441183-91	1971 Aug 20 0944	Nike Apache	-	MASA 14.4760I	-	-	-	-	WI	-	-	-	198	-	-
1971-8402	2441183-93	1971 Aug 20 1014	Nike Apache	-	MASA 14.4770I	-	-	-	-	WI	-	-	-	200	-	-
1971-8404	2441184-33	1971 Aug 20 1956	Nike Cajun	-	MASA 10.3890M	-	-	-	-	WI	-	-	-	125	-	-
1971-8405	2441185-61	1971 Aug 22 0234	Nike Apache	-	-	-	-	-	-	SSG	-	-	-	223	-	-
1971-8409	2441187-60	1971 Aug 24 0224	Nike Apache	-	Capache	-	-	-	-	WS	-	-	-	1007	-	-
1971-8414	2441194-50	1971 Sep	Nike Apache	?	Capache	-	-	-	-	WS	-	-	-	1007	-	-
1971-8415	2441194-50	1971 Sep	Nike Apache	?	Capache	-	-	-	-	WS	-	-	-	1007	-	-
1971-8430	2441196-83	1971 Sep 2 0758	Nike Apache	-	MASA 14.4840E	PCA particles	-	-	-	FC	-	-	-	160	-	-
1971-8452	2441202-33	1971 Sep 7 2000	Nike Cajun	-	3-Sphere Ejection 7	-	-	-	-	WS	-	-	-	1007	-	-
1971-8458	2441202-33	1971 Sep 7 2357	Nike Apache	-	MASA 14.4930A	-	-	-	-	WI	-	-	-	176	-	-
1971-8459	2441210-91	1971 Sep 16 0956	Nike Apache	-	MASA 14.4930A	GCA Release Ba-Li	-	-	-	WI	-	-	-	175	-	-
1971-8461	2441214-41	1971 Sep 19 2156	Nike Cajun	-	MASA 10.3460M	GCA Release Ba-Li	-	-	-	ALFS	-	-	-	125	-	-
1971-8464	2441214-65	1971 Sep 19 0350	Nike Cajun	-	MASA 10.3460M	GSFC Grenade 266 GSG	-	-	-	CSG	-	-	-	122	-	-
1971-8465	2441214-76	1971 Sep 20 0615	Nike Cajun	-	MASA 10.3540M	GSFC Grenade 267 GSG	-	-	-	CSG	-	-	-	115	-	-
1971-8466	2441214-76	1971 Sep 20 0615	Nike Cajun	-	MASA 10.3520M	GSFC Grenade 268 GSG	-	-	-	CSG	-	-	-	117	-	-
1971-8467	2441214-90	1971 Sep 20 0950	Nike Cajun	-	MASA 10.3500M	GSFC Grenade 269 GSG	-	-	-	CSG	-	-	-	118	-	-
1971-8468	2441215-11	1971 Sep 20 1446	Nike Cajun	-	MASA 10.3500M	GSFC Grenade 261 GSG	-	-	-	CSG	-	-	-	116	-	-
1971-8469	2441215-29	1971 Sep 20 1900	Nike Cajun	-	MASA 10.3560M	GSFC Grenade 262 GSG	-	-	-	CSG	-	-	-	117	-	-
1971-8470	2441215-50	1971 Sep 21 0005	Nike Cajun	-	MASA 10.3560M	GSFC Grenade 263 GSG	-	-	-	CSG	-	-	-	114	-	-
1971-8471	2441215-70	1971 Sep 21 0650	Nike Cajun	-	MASA 10.3560M	GSFC Grenade 264 GSG	-	-	-	CSG	-	-	-	116	-	-
1971-8472	2441215-86	1971 Sep 21 0914	Nike Cajun	-	MASA 10.3570M	GSFC Grenade 265 GSG	-	-	-	WS	-	-	-	167	-	-
1971-8473	2441215-86	1971 Sep 21 0914	Nike Iroquois	-	CRL A07-017-1	Density	-	-	-	WS	-	-	-	170	-	-
1971-8474	2441215-86	1971 Sep 21 0950	Nike Iroquois	-	MASA 10.3580M	GSFC Grenade 265 GSG	-	-	-	CSG	-	-	-	118	-	-
1971-8475	2441216-08	1971 Sep 21 1400	Nike Cajun	-	MASA 10.3590M	GSFC Grenade 266 GSG	-	-	-	CSG	-	-	-	116	-	-
1971-8476	2441216-28	1971 Sep 21 1940	Nike Cajun	-	MASA 10.3590M	GSFC Grenade 267 GSG	-	-	-	ALFS	-	-	-	116	-	-
1971-8477	2441216-48	1971 Sep 21 2340	Nike Cajun	-	MASA 10.3600M	GSFC Grenade 268 GSG	-	-	-	ALFS	-	-	-	118	-	-
1971-8478	2441216-66	1971 Sep 22 0850	Nike Cajun	-	MASA 10.3600M	GSFC Grenade 269 GSG	-	-	-	ALFS	-	-	-	118	-	-
1971-8479	2441217-19	1971 Sep 22 1650	Nike Cajun	-	3-Sphere Ejection 8	-	-	-	-	WS	-	-	-	1007	-	-
1971-8480	2441217-19	1971 Sep 22 1650	Nike Iroquois	-	CRL A07-314-1	Density	-	-	-	WS	-	-	-	170	-	-
1971-8481	2441221-85	1971 Sep 27 0850	Nike Apache	?	Capache	-	-	-	-	WS	-	-	-	7007	-	-
1971-8482	2441224-50	1971 Oct 5 1830	Nike Iroquois	-	CRL A05-103-2	Photometers	-	-	-	WI	-	-	-	272	-	-
1971-8483	2441230-57	1971 Oct 5 1830	Nike Iroquois	-	CRL A07-919-6A	Density	-	-	-	WI	-	-	-	189	-	-
1971-8484	2441230-52	1971 Oct 6 0032	Nike Iroquois	-	CRL A07-101-5	SACS mass spec	-	-	-	WI	-	-	-	232	-	-
1971-8485	2441230-52	1971 Oct 6 0035	Nike Iroquois	-	CRL A07-102-4	Sphere	-	-	-	WI	-	-	-	232	-	-
1971-8486	2441230-54	1971 Oct 6 0042	Nike Iroquois	-	CRL A07-919-6	Sphere	-	-	-	WI	-	-	-	222	-	-
1971-8487	2441230-54	1971 Oct 6 0163	Nike Iroquois	-	CRL A07-101-6	Neutral Atmosphere	-	-	-	WI	-	-	-	129	-	-
1971-8489	2441230-61	1971 Oct 6 0246	Nike Iroquois	-	CRL A07-902-5	Mass Spectrometer	-	-	-	WI	-	-	-	129	-	-
1971-8500	2441231-01	1971 Oct 6 1200	Nike Iroquois	-	CRL A07-101-5	Mass Spectrometer	-	-	-	WI	-	-	-	118	-	-
1971-8501	2441231-03	1971 Oct 6 1211	Nike Iroquois	-	CRL A07-101-4	Mass Spectrometer	-	-	-	WI	-	-	-	117	-	-
1971-8502	2441231-03	1971 Oct 6 1211	Nike Iroquois	-	CRL A07-101-4	Mass Spectrometer	-	-	-	WI	-	-	-	117	-	-
1971-8503	2441231-03	1971 Oct 6 1305	Nike Iroquois	-	NRL M04-253	FUV Stellar Phot.	-	-	-	NS	-	-	-	2007	-	-
1971-8504	2441232-84	1971 Oct 9 0830	Aerobee 170	-	MASA 10.3780I	-	-	-	-	NS	-	-	-	81	-	-
1971-8521	2441238-30	1971 Oct 13 1916	Nike Cajun	-	MASA 10.3790I	-	-	-	-	NS	-	-	-	81	-	-
1971-8522	2441238-31	1971 Oct 13 1928	Nike Cajun	-	MASA 10.3790I	-	-	-	-	NS	-	-	-	81	-	-
1971-8523	2441238-31	1971 Oct 13 1928	Nike Cajun	-	MASA 13.1130T	-	-	-	-	NS	-	-	-	181	-	-
1971-8524	2441234-23	1971 Oct 19 1720	Aerobee 170A	-	MASA 13.6300	-	-	-	-	NS	-	-	-	2007	-	-
1971-8527	2441247-66	1971 Oct 23 0345:00	Aerobee 170A	-	MASA 13.5602	-	-	-	-	NS	-	-	-	158	-	-
1971-8543	2441251-92	1971 Oct 27 1004	Aerobee 170	-	CRL A04-004-5	HI STAR 3	-	-	-	NS	-	-	-	2007	-	-
1971-8544	2441251-92	1971 Oct 29 1004	Aerobee 170	-	CRL A04-004-5	Beckitt Exp Test 3	-	-	-	NS	-	-	-	2007	-	-
1971-8545	2441256-15	1971 Oct 30 1616:00	Nike Tomabank	-	Sabatini ES2-133	OH/Radiance	-	-	-	KAU	-	-	-	272	-	-
1971-8548	2441256-02	1971 Oct 30 1616:00	Nike Tomabank	-	CRL A04-012-1	-	-	-	-	NS	-	-	-	251	-	-
1971-8557	2441266-75	1971 Nov 11 0800	Nike Tomabank	-	NRL M04-244	-	-	-	-	NS	-	-	-	2707	-	-
1971-8562	2441272-73	1971 Nov 17 0533:54	Nike Tomabank	-	MASA 18.1030A	-	-	-	-	NS	-	-	-	2007	-	-
1971-8565	2441275-81	1971 Nov 20 0721	Aerobee 170	-	MASA 13.5702	-	-	-	-	NS	-	-	-	2007	-	-
1971-8566	2441275-85	1971 Nov 20 0830	Aerobee 170	-	MASA 13.5802	-	-	-	-	NS	-	-	-	2007	-	-
1971-8570	2441279-76	1971 Nov 24 0615	Aerobee 170	-	CRL A04-116-3	-	-	-	-	NS	-	-	-	145	-	-
1971-8572	2441281-62	1971 Dec 6 0300	Nike Apache	-	CRL A04-116-3	CHASER 2	-	-	-	PBA	-	-	-	1007	-	-
1971-8583	2441281-63	1971 Dec 6 0300	Nike Apache	-	MASA 14.4950M	UM Pitot	-	-	-	PBA	-	-	-	1007	-	-
1971-8584	2441281-69	1971 Dec 6 0430	Nike Cajun	-	MASA 10.3840M	GSFC Grenade 269 PB	-	-	-	PBA	-	-	-	2007	-	-
1971-8585	2441281-70	1971 Dec 6 0430	Nike Apache	-	MASA 14.4960M	UM Pitot	-	-	-	PBA	-	-	-	2007	-	-
1971-8586	2441281-83	1971 Dec 6 0442	Nike Apache	-	MASA 14.4970M	UM Pitot	-	-	-	PBA	-	-	-	2007	-	-
1971-8587	2441281-83	1971 Dec 6 0752	Nike Apache	-	MASA 14.4980M	UM Pitot	-	-	-	PBA	-	-	-	2007	-	-
1971-8588	2441281-83	1971 Dec 6 0802	Nike Cajun	-	MASA 10.3850M	GSFC Grenade 270 PB	-	-	-	PBA	-	-	-	1007	-	-
1971-8589	2441281-98	1971 Dec 6 1041	Nike Cajun	-	MASA 10.3920M	Langmuir Probe	-	-	-	PBA	-	-	-	1007	-	-
1971-8589	2441281-98	1971 Dec 6 1130	Nike Cajun	-	MASA 10.3940M	Langmuir Probe	-	-	-	PBA	-	-	-	1007	-	-
1971-8601	2441296-12	1971 Dec 10 1446	Nike Iroquois	-	CRL A07-102-3	7-in Density Sphere	-	-	-	FC	-	-	-	253	-	-
1971-8602	2441296-18	1971 Dec 10 1624	Nike Tomabank	-	CRL A08-102-2	7-in Density Sphere	-	-	-	FC	-	-	-	292	-	-
1971-8603	2441296-25	1971 Dec 10 1624	Nike Iroquois	-	CRL A07-216-1	7-in Density Sphere	-	-	-	FC	-	-	-	248	-	-
1972-800	2441316-50	1972 Jan	Nike Apache	?	Capache	-	-	-	-	NS	-	-	-	1007	-	-
1972-803	2441316-50	1972 Jan	Nike Apache	?	Capache	-	-	-	-	NS	-	-	-	1007	-	-
1972-836	2441329-39	1972 Jan 12 2116:35	Nike Apache	-	MASA 14.3834E	-	-	-	-	AND	-	-	-	197	-	-
1972-837	2441330-34	1972 Jan 13 2004:35	Nike Tomabank	-	MASA 18.1351E	Ferdinand 29/Electra	-	-	-	AND	-	-	-	192	-	-
1972-843	2441334-59	1972 Jan 18 0207	Aerobee 170	-	CRL A04-004-5	HI STAR 4	-	-	-	NS	-	-	-	161</		

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Launch_Mission	FlightCode	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee_Km	Range_Km	Dest
1972-861	2441394-96	1972 Feb 2 11:25:00	Nike Tomahawk	-	MASA 18-1110E	-	-	-	-	PF	-	-	-	173	-	-
1972-862	2441394-22	1972 Feb 6 17:15	Nike Iroquois	-	CRL A07-001-1	-	-	-	-	WI	-	-	-	95	-	-
1972-869	2441395-48	1972 Feb 7 23:33:34	Nike Tomahawk	-	MASA 18-1311A	Mass spectrometer	-	-	-	ESR	MI	-	-	180	-	-
1972-871	2441361-47	1972 Feb 13 23:20:11	Nike Tomahawk	-	MASA 18-1371E	Ferdinand 31/Proton 1	-	-	-	AND	-	-	-	242	-	-
1972-878	2441362-66	1972 Feb 15 04:21	Nike Apache	-	MASA 14-4860A	Auroral NO	-	-	-	FC	-	-	-	141	-	-
1972-885	2441366-72	1972 Feb 19 05:12	Aerobee 170	-	MASA 13-0820G	-	-	-	-	WS	-	-	-	200	-	-
1972-891	2441372-81	1972 Feb 26 07:23	Nike Tomahawk	-	MASA 18-1120E	Propellant dynamics	-	-	-	PF	-	-	-	270?	-	-
1972-820	2441377-28	1972 Feb 29 19:45	Nike Tomahawk	-	-	-	-	-	-	WI	-	-	-	11	-	-
1972-8102	2441383-72	1972 Mar 7 05:16:00	Nike Tomahawk	-	MASA 18-1414E	-	-	-	-	PF	-	-	-	270?	-	-
1972-8104	2441384-10	1972 Mar 7 14:26:00	Nike Tomahawk	-	MASA 18-1420E	-	-	-	-	PF	-	-	-	270?	-	-
1972-8108	2441386-00	1972 Mar 9 12:00	Nike Tomahawk	-	MASA 18-730E	-	-	-	-	WI	-	-	-	243	-	-
1972-8109	2441386-09	1972 Mar 9 14:08:00	Nike Tomahawk	-	MASA 18-1430E	-	-	-	-	PF	-	-	-	270?	-	-
1972-8110	2441390-17	1972 Mar 9 16:00	Nike Apache	-	ISRC-FU-4	-	-	-	-	SHLC	-	-	-	185	-	-
1972-8111	2441390-17	1972 Mar 9 16:00	Nike Apache	-	ISRC-FU-5	-	-	-	-	SHLC	-	-	-	185	-	-
1972-8112	2441392-17	1972 Mar 15 16:00	Nike Apache	-	ISRC-FU-6	-	-	-	-	SHLC	-	-	-	185	-	-
1972-8118	2441395-15	1972 Mar 16 15:43	Nike Apache	-	ISRC-FU-7	-	-	-	-	WS	LC36	-	-	200?	-	-
1972-8132	2441398-07	1972 Mar 21 13:55:02	Aerobee 170	-	KF3-38	CAL XR 7	-	-	-	AND	-	-	-	24	-	-
1972-826	2441398-56	1972 Mar 22 01:21:38	Nike Cajun	-	Ferdinand 28	Ferdinand 28	-	-	-	SHLC	-	-	-	200?	-	-
1972-833	2441398-86	1972 Mar 22 02:22	Nike Apache	-	ISRC-FU-9	-	-	-	-	SHLC	-	-	-	100	-	-
1972-837	2441401-93	1972 Mar 25 10:15	Nike Javelin	-	NRL (Unknown)	NRL Cs Release 1	-	-	-	WI	-	-	-	100	-	-
1972-839	2441403-92	1972 Mar 27 10:08	Nike Javelin	-	NRL (Unknown)	NRL Cs Release 2	-	-	-	WI	-	-	-	100	-	-
1972-840	2441405-92	1972 Mar 29 10:07	Nike Javelin	-	NRL (Unknown)	NRL Cs Release 3	-	-	-	WI	-	-	-	100	-	-
1972-846	2441408-71	1972 Apr 1 05:05	Aerobee 170	-	MASA 13-027CG	-	-	-	-	WS	-	-	-	193	-	-
1972-847	2441410-92	1972 Apr 3 10:04	Nike Javelin	-	NRL (Unknown)	NRL Cs Release 4	-	-	-	WI	-	-	-	100	-	-
1972-848	2441410-92	1972 Apr 3 10:06	Nike Javelin	-	NRL (Unknown)	NRL Cs Release 5	-	-	-	WI	-	-	-	100	-	-
1972-851	2441414-79	1972 Apr 5 23:45	Nike Iroquois	-	CRL A07-321-5	Release	TELE-430	-	-	TERLS	-	-	-	147	-	-
1972-852	2441414-79	1972 Apr 7 07:00	Nike Iroquois	-	CRL A07-106-4	ISRO 10.43	Release	-	-	EGL	-	-	-	156	-	-
1972-855	2441416-53	1972 Apr 11 00:58	Nike Iroquois	-	CRL A07-106-4	-	-	-	-	EGL	-	-	-	177	-	-
1972-857	2441420-53	1972 Apr 13 09:43	Nike Iroquois	-	CRL A07-107-1	ALADDIN II Release	-	-	-	EGL	-	-	-	120	-	-
1972-859	2441420-58	1972 Apr 13 02:00	Nike Iroquois	-	CRL A07-107-1	ALADDIN II WACS Hsp.	-	-	-	EGL	-	-	-	128	-	-
1972-860	2441420-59	1972 Apr 13 02:16	Nike Iroquois	-	CRL A08-013-1	ALADDIN II WACS Hsp.	-	-	-	EGL	-	-	-	214	-	-
1972-861	2441420-61	1972 Apr 13 02:30	Nike Tomahawk	-	CRL A07-217-2	ALADDIN II Sphere	-	-	-	EGL	-	-	-	190	-	-
1972-862	2441420-61	1972 Apr 13 02:45	Nike Iroquois	-	CRL A07-321-4	ALADDIN II Sphere	-	-	-	EGL	-	-	-	219	-	-
1972-863	2441420-72	1972 Apr 13 05:15	Nike Iroquois	-	CRL A07-321-4	ALADDIN II Release	-	-	-	EGL	-	-	-	164	-	-
1972-864	2441420-72	1972 Apr 13 05:50	Nike Iroquois	-	CRL A07-321-2	ALADDIN II TMA/Gren	-	-	-	EGL	-	-	-	160	-	-
1972-866	2441420-94	1972 Apr 13 10:30	Nike Iroquois	-	CRL A07-321-6	ALADDIN II TMA	-	-	-	EGL	-	-	-	175	-	-
1972-868	2441422-53	1972 Apr 15 09:45	Nike Iroquois	-	CRL A07-106-2	Release	-	-	-	EGL	-	-	-	146	-	-
1972-870	2441422-77	1972 Apr 15 06:22	Aerobee 170	-	CRL A04-007	HI STAR 5	-	-	-	WS	LC36	-	-	177	-	-
1972-879	2441432-37	1972 Apr 24 20:57	Aerobee 170	-	MASA 13-195G	-	-	-	-	WS	-	-	-	203	-	-
1972-886	2441436-85	1972 May 1 08:23	Nike Tomahawk	-	CRL A08-113-1	Auroral B	-	-	-	FC	-	-	-	231	-	-
1972-887	2441436-85	1972 May 1 08:23	Nike Tomahawk	-	CRL A08-113-1	Auroral B	-	-	-	FC	-	-	-	231	-	-
1972-888	2441436-85	1972 May 1 08:23	Nike Tomahawk	-	CRL A08-113-1	Auroral B	-	-	-	FC	-	-	-	231	-	-
1972-893	2441438-86	1972 May 12 09:24	Nike Tomahawk	-	MASA 13-190C	FUV Schmidt	-	-	-	WS	-	-	-	200?	-	-
1972-894	2441439-84	1972 May 12 10:30	Nike Tomahawk	-	MASA 13-190C	-	-	-	-	WS	-	-	-	200?	-	-
1972-896	2441441-82	1972 May 17 11:30	Nike Cajun	-	MASA 10-397GM	CSFC Grenade 271 PB	-	-	-	PBA	-	-	-	80	-	-
1972-898	2441454-96	1972 May 17 11:30	Nike Cajun	-	MASA 10-397GM	CSFC Grenade 271 PB	-	-	-	PBA	-	-	-	80	-	-
1972-900	2441454-96	1972 May 17 11:30	Nike Cajun	-	MASA 10-397GM	CSFC Grenade 271 PB	-	-	-	PBA	-	-	-	80	-	-
1972-901	2441455-04	1972 May 17 13:00	Nike Cajun	-	MASA 10-397GM	CSFC Grenade 272 PB	-	-	-	PBA	-	-	-	80	-	-
1972-902	2441455-04	1972 May 17 13:00	Nike Cajun	-	MASA 10-397GM	CSFC Grenade 272 PB	-	-	-	PBA	-	-	-	80	-	-
1972-904	2441456-80	1972 May 19 08:35	Nike Iroquois	-	MASA 13-370G	MIT-10	-	-	-	WS	-	-	-	200?	-	-
1972-905	2441456-80	1972 May 19 08:35	Nike Iroquois	-	MASA 13-370G	MIT-10	-	-	-	WS	-	-	-	200?	-	-
1972-906	2441456-80	1972 May 19 08:35	Nike Iroquois	-	MASA 13-370G	MIT-10	-	-	-	WS	-	-	-	200?	-	-
1972-907	2441456-80	1972 May 19 08:35	Nike Iroquois	-	MASA 13-370G	MIT-10	-	-	-	WS	-	-	-	200?	-	-
1972-908	2441456-80	1972 May 19 08:35	Nike Iroquois	-	MASA 13-370G	MIT-10	-	-	-	WS	-	-	-	200?	-	-
1972-909	2441456-80	1972 May 19 08:35	Nike Iroquois	-	MASA 13-370G	MIT-10	-	-	-	WS	-	-	-	200?	-	-
1972-927	2441468-76	1972 May 31 06:10:11	Nike Apache	-	LEIMAN II	-	-	-	-	KAU	-	-	-	270?	-	-
1972-928	2441468-76	1972 May 31 06:10:11	Nike Apache	-	MASA 14-48EUI	Ferdinand 34	-	-	-	AND	-	-	-	151	-	-
1972-929	2441468-76	1972 May 31 06:10:11	Nike Apache	-	MASA 14-48EUI	Ferdinand 34	-	-	-	AND	-	-	-	151	-	-
1972-931	2441468-76	1972 May 31 06:10:11	Nike Apache	-	MASA 14-48EUI	Ferdinand 34	-	-	-	AND	-	-	-	151	-	-
1972-932	2441468-76	1972 May 31 06:10:11	Nike Apache	-	MASA 14-48EUI	Ferdinand 34	-	-	-	AND	-	-	-	151	-	-
1972-933	2441470-70	1972 Jun 2 06:16:00	Nike Tomahawk	-	HARSES 10-391UI	-	-	-	-	AND	-	-	-	151	-	-
1972-934	2441470-70	1972 Jun 2 06:16:00	Nike Tomahawk	-	HARSES 10-391UI	-	-	-	-	AND	-	-	-	151	-	-
1972-935	2441470-70	1972 Jun 2 06:16:00	Nike Tomahawk	-	HARSES 10-391UI	-	-	-	-	AND	-	-	-	151	-	-
1972-936	2441470-70	1972 Jun 2 06:16:00	Nike Tomahawk	-	HARSES 10-391UI	-	-	-	-	AND	-	-	-	151	-	-
1972-937	2441470-70	1972 Jun 2 06:16:00	Nike Tomahawk	-	HARSES 10-391UI	-	-	-	-	AND	-	-	-	151	-	-
1972-938	2441470-70	1972 Jun 2 06:16:00	Nike Tomahawk	-	HARSES 10-391UI	-	-	-	-	AND	-	-	-	151	-	-
1972-939	2441470-70	1972 Jun 2 06:16:00	Nike Tomahawk	-	HARSES 10-391UI	-	-	-	-	AND	-	-	-	151	-	-
1972-940	2441470-70	1972 Jun 2 06:16:00	Nike Tomahawk	-	HARSES 10-391UI	-	-	-	-	AND	-	-	-	151	-	-
1972-941	2441470-70	1972 Jun 2 06:16:00	Nike Tomahawk	-	HARSES 10-391UI	-	-	-	-	AND	-	-	-	151	-	-
1972-942	2441470-70	1972 Jun 2 06:16:00	Nike Tomahawk	-	HARSES 10-391UI	-	-	-	-	AND	-	-	-	151	-	-
1972-943	2441470-70	1972 Jun 2 06:16:00	Nike Tomahawk	-	HARSES 10-391UI	-	-	-	-	AND	-	-	-	151	-	-
1972-944	2441470-70	1972 Jun 2 06:16:00	Nike Tomahawk	-	HARSES 10-391UI	-	-	-	-	AND	-	-	-	151	-	-
1972-945	2441470-70	1972 Jun 2 06:16:00	Nike Tomahawk	-	HARSES 10-391UI	-	-	-	-	AND	-	-	-	151	-	-
1972-946	2441470-70	1972 Jun 2 06:16:00	Nike Tomahawk	-	HARSES 10-391UI	-	-	-	-	AND	-	-	-	151	-	-
1972-947	2441470-70	1972 Jun 2 06:16:00	Nike Tomahawk	-	HARSES 10-391UI	-	-	-	-	AND	-	-	-	151	-	-
1972-948	2441470-70	1972 Jun 2 06:16:00	Nike Tomahawk	-	HARSES 10-391UI	-	-	-	-	AND	-	-	-	151	-	-
1972-949	2441470-70	1972 Jun 2 06:16:00	Nike Tomahawk	-	HARSES 10-391UI	-	-	-	-	AND	-	-	-	151	-	-
1972-950	2441470-70	1972 Jun 2 06:16:00	Nike Tomahawk	-	HARSES 10-391UI	-	-	-	-	AND	-	-	-	151	-	-
1972-951	2441470-70	1972 Jun 2 06:16:00	Nike Tomahawk	-	HARSES 10-391UI	-	-	-	-	AND	-	-	-	151	-	-
1972-952	2441470-70	1972 Jun 2 06:16:00	Nike Tomahawk	-	HARSES 10-391UI	-	-	-	-	AND	-	-	-	151	-	-
1972-953	2441470-70	1972 Jun 2 06:16:00	Nike Tomahawk	-	HARSES 10-391UI	-	-	-	-	AND	-	-	-	151	-	-
1972-954	2441470-70	1972 Jun 2 06:16:00	Nike Tomahawk	-	HARSES 10-391UI	-	-	-	-	AND	-	-	-	151	-	-
1972-955	2441470-70	1972 Jun 2 06:16:00	Nike Tomahawk	-	HARSES 10-391UI	-	-	-	-	AND	-	-	-	151	-	-
1972-956	2441470-70	1972 Jun 2 06:16:00	Nike Tomahawk	-	HARSES 10-391UI	-	-	-	-	AND	-	-	-	151	-	-
1972-957	2441470-70	1972 Jun 2 06:16:00	Nike Tomahawk	-	HARSES 10-391UI	-	-	-	-	AND	-	-	-	151	-	-
1972-958	2441470-70	1972 Jun 2 06:16:00	Nike Tomahawk	-	HARSES 10-391											



Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Mission	FlightCode	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee km	Range km	Dest
1973-5317	2441952-17	1973 Sep 26 1600	Nike Iroquois	-	CRL A07-306-2	Sphere	-	-	-	CEBI	-	-	-	225	-	-
1973-5319	2441952-69	1973 Sep 27 0427	Nike Iroquois	-	CRL A07-306-3	Sphere	-	-	-	CEBI	-	-	-	232	-	-
1973-5323	2441955-50	1973 Oct	Nike Hydac	?	HARSES	-	-	-	-	NS	-	-	-	1507	-	-
1973-5324	2441955-50	1973 Oct	Nike Apache	?	Cepache	-	-	-	-	NS	-	-	-	1007	-	-
1973-5325	2441955-50	1973 Oct	Nike Apache	?	Cepache	-	-	-	-	NS	-	-	-	1007	-	-
1973-5326	2441955-51	1973 Oct 4 0010	Nike Apache	?	Cepache	-	-	-	-	NS	-	-	-	1207	-	-
1973-5341	2441959-51	1973 Oct 4 0054	Nike Apache	?	AFCLR 73-1	ML-TwD	-	-	-	NS	-	-	-	1207	-	-
1973-5342	2441959-55	1973 Oct 4 0340	Aerobee 170A	-	AFCLR 71-B2	ML-TwD	-	-	-	NS	-	-	-	152	-	-
1973-5354	2441974-49	1973 Oct 18 2345	Nike Iroquois	-	MASA 13-106G	GFSC MRPC	-	-	-	NS	-	-	-	167	-	-
1973-5355	2441974-50	1973 Oct 19 0000	Nike Tomahawk	-	CRL A07-106-1	HAVE MERLIN II	Release	-	-	EGL	-	-	-	206	-	-
1973-5357	2441974-53	1973 Oct 19 0050	Nike Iroquois	-	CRL A08-106-11	HAVE MERLIN II	Release	-	-	EGL	-	-	-	173	-	-
1973-5358	2441974-96	1973 Oct 19 1125	Nike Tomahawk	-	CRL A07-106-2	HAVE MERLIN II	Release	-	-	EGL	-	-	-	146	-	-
1973-5361	2441975-50	1973 Oct 19 2353	Nike Tomahawk	-	CRL A08-106-12	HAVE MERLIN II	Release	-	-	EGL	-	-	-	160	-	-
1973-5362	2441976-49	1973 Oct 20 2343	Nike Iroquois	-	CRL A07-106-3	HAVE MERLIN II	Release	-	-	EGL	-	-	-	184	-	-
1973-5366	2441979-84	1973 Oct 24 0615	Aerobee 200A	-	MASA 26-060G	JHU UVT F7	-	-	-	NS	-	-	-	183	-	-
1973-5377	2441988-15	1973 Nov 1 1530	Aerobee 170	-	MASA 13-1030G	Wisc. Aerobee IV	-	-	-	WDD	LA8	-	-	185	-	-
1973-5378	2441988-23	1973 Nov 1 1730	Aerobee 170	-	MASA 13-650G	Wisc. Aerobee IV	-	-	-	WDD	LA8	-	-	165	-	-
1973-5380	2441989-19	1973 Nov 2 1630	Aerobee 170	-	CRL A04-104-2	EVJ	-	-	-	WDD	LA8	-	-	233	-	-
1973-5383	2441989-25	1973 Nov 6 1540	Aerobee 170	-	MASA 13-1040G	MIT BCP 2	-	-	-	WDD	LA8	-	-	167	-	-
1973-5384	2441995-22	1973 Nov 9 1715	Aerobee 170	-	MASA 13-1060G	MIT LAMP 3	-	-	-	WDD	LA8	-	-	169	-	-
1973-5385	2441996-25	1973 Nov 9 1800	Aerobee 170	-	MASA 13-1050G	Wisc. Aerobee III	-	-	-	WDD	LA8	-	-	175	-	-
1973-5387	2441999-08	1973 Nov 12 1400	Aerobee 170	-	MASA 13-1020G	-	-	-	-	WDD	LA8	-	-	154	-	-
1973-5388	2442009-50	1973 Nov 12 1450	Aerobee 170	-	MASA 13-1005S	-	-	-	-	WDD	LA8	-	-	2507	-	-
1973-5405	2442009-50	1973 Nov 23	Aerobee 200A	-	MASA 26-090S	-	-	-	-	NS	-	-	-	220	-	-
1973-5443	2442036-42	1973 Dec 19 2205	Aerobee 200A	-	MASA 26-035CS	JHU UVS Kobontek	-	-	-	NS	-	-	-	233	-	-
1974-5351	2442032-57	1974 Jan 5 0145	Aerobee 200A	-	MASA 26-230G-UP	MRL MB12.271	-	-	-	NS	-	-	-	193	-	-
1974-5352	2442032-57	1974 Jan 8 0140	Aerobee 200A	-	MASA 26-220G-UP	-	-	-	-	NS	-	-	-	82	-	-
1974-5357	2442060-59	1974 Jan 13 0210	Aerobee 200A	-	MASA 26-240G-UP	-	-	-	-	NS	-	-	-	2607	-	-
1974-5360	2442063-50	1974 Jan 16 1740	Nike Apache	-	MASA 26-14CS	-	-	-	-	NS	-	-	-	205	-	-
1974-5363	2442064-24	1974 Jan 16 1740	Nike Apache	-	MASA 14-5110A	-	-	-	-	NS	-	-	-	298	-	-
1974-5364	2442064-61	1974 Jan 17 0237	Nike Tomahawk	-	MASA 18-1600E	-	-	-	-	NS	-	-	-	298	-	-
1974-5368	2442068-61	1974 Jan 21 0239	Nike Tomahawk	-	MASA 18-1610E	-	-	-	-	NS	-	-	-	298	-	-
1974-5371	2442069-61	1974 Jan 22 0241	Nike Tomahawk	-	MASA 18-1629E	-	-	-	-	NS	-	-	-	298	-	-
1974-5373	2442070-20	1974 Jan 22 1645	Aerobee 200A	-	MASA 26-07CS	-	-	-	-	NS	-	-	-	238	-	-
1974-5380	2442075-30	1974 Jan 27 1503:46	Nike Tomahawk	-	MASA 18-1391E	Ferdinand 35/Polar 3	-	-	-	AND	-	-	-	166	-	-
1974-5386	2442087-59	1974 Feb 7 0210	Aerobee 200A	-	MASA 26-210G	CRL XN 9	-	-	-	NS	-	-	-	227	-	-
1974-5397	2442090-67	1974 Feb 12 0400	Aerobee 200A	-	MASA 26-310G	HI HI STAR	-	-	-	NS	-	-	-	111	-	-
1974-5403	2442094-85	1974 Feb 16 0933	Aerobee 350	-	CRL AS5-191-2	ICECAP P4A	-	-	-	NS	-	-	-	1507	-	-
1974-5406	2442097-52	1974 Feb 19 0745	Nike Hydac	-	MIR74-1	ICECAP P4A	-	-	-	NS	-	-	-	235	-	-
1974-5408	2442099-25	1974 Feb 20 1807:00	Nike Tomahawk	-	MASA 18-1341E	SSC 310/2 (Substorm)	-	-	-	ESR	N	-	-	157	-	-
1974-5410	2442099-70	1974 Feb 20 1807:00	Nike Tomahawk	-	MASA 18-1531E	SSC 310/1 (Substorm)	-	-	-	ESR	N	-	-	137	-	-
1974-5411	2442100-77	1974 Feb 22 0631	Nike Apache	-	MASA 14-5200A	Auroral zone NU	-	-	-	EC	-	-	-	0	-	-
1974-5412	2442103-65	1974 Mar 1 0654	Nike Apache	-	MASA 14-5200A	-	-	-	-	EC	-	-	-	0	-	-
1974-5424	2442108-75	1974 Mar 1 0954	Nike Apache	-	MASA 14-5200A	-	-	-	-	EC	-	-	-	185	-	-
1974-5426	2442112-45	1974 Mar 2 0956	Nike Apache	-	MASA 14-5200A	-	-	-	-	EC	-	-	-	186	-	-
1974-5428	2442112-45	1974 Mar 2 0956	Nike Apache	-	MASA 14-5200A	-	-	-	-	EC	-	-	-	186	-	-
1974-5436	2442120-89	1974 Mar 14 0925	Nike Tomahawk	-	MASA 18-1591E	-	-	-	-	NS	-	-	-	199	-	-
1974-5437	2442121-65	1974 Mar 14 0925	Nike Tomahawk	-	MASA 18-1591E	-	-	-	-	NS	-	-	-	2707	-	-
1974-5438	2442121-65	1974 Mar 14 0925	Nike Tomahawk	-	MASA 18-1591E	-	-	-	-	NS	-	-	-	251	-	-
1974-5442	2442133-08	1974 Mar 16 1345	Nike Tomahawk	-	MASA 26-1163	Auroral	-	-	-	NS	-	-	-	83	-	-
1974-5443	2442137-75	1974 Mar 21 0413	Aerobee 200A	-	MASA 26-20UE	CSFC Ozone	-	-	-	CSG	ALFS	-	-	86	-	-
1974-5444	2442137-75	1974 Mar 21 0413	Nike CaJin	-	MASA 10-411GM	CSFC Ozone	-	-	-	CSG	ALFS	-	-	119	-	-
1974-5445	2442137-90	1974 Mar 21 0931	Nike CaJin	-	MASA 10-420GM	CSFC Grenade 277 CSG	-	-	-	CSG	ALFS	-	-	121	-	-
1974-5446	2442138-70	1974 Mar 22 0640	Nike CaJin	-	MASA 10-421GM	CSFC Grenade 278 CSG	-	-	-	CSG	ALFS	-	-	237	-	-
1974-5447	2442138-90	1974 Mar 22 0931	Nike CaJin	-	MASA 10-422GM	CSFC Grenade 278 CSG	-	-	-	NS	-	-	-	1307	-	-
1974-5469	2442143-67	1974 Apr 6 0410	Aerobee 350	-	MASA 17-126CS	ICECAP 74B	-	-	-	PF	-	-	-	199	-	-
1974-5477	2442148-85	1974 Apr 11 0800	Nike Jaeslin	-	MASA 14-5200I	EVJ	-	-	-	NS	-	-	-	212	-	-
1974-5478	2442148-85	1974 Apr 11 0800	Nike Jaeslin	-	MASA 14-5200I	EVJ	-	-	-	NS	-	-	-	1507	-	-
1974-5479	2442150-25	1974 Apr 19 0430	Aerobee 170	-	CRL A04-208-2	-	-	-	-	NS	-	-	-	500	-	-
1974-5484	2442167-50	1974 Apr 22 1802	Nike Hydac	?	HARSES	-	-	-	-	NS	-	-	-	222	-	-
1974-5488	2442182-28	1974 May 14 1943	Nike Hydac	-	MASA 28-01GT	-	-	-	-	NS	-	-	-	184	-	-
1974-5495	2442183-43	1974 May 15 2137	Nike Apache	-	MASA 14-4820II	-	-	-	-	NS	-	-	-	211	-	-
1974-5496	2442183-43	1974 May 15 2137	Nike Apache	-	MASA 26-180S	-	-	-	-	NS	-	-	-	189	-	-
1974-5507	2442198-50	1974 May 15 2211	Aerobee 200A	-	HARSES	-	-	-	-	NS	-	-	-	186	-	-
1974-5520	2442216-50	1974 Jun 18	Nike Hydac	?	HARSES	-	-	-	-	NS	-	-	-	1007	-	-
1974-5524	2442218-21	1974 Jun 19 1700	Aerobee 200A	-	MASA 26-361S	-	-	-	-	NS	-	-	-	200	-	-
1974-5531	2442220-21	1974 Jun 22 0730	Aerobee 200A	-	MASA 26-26G5	13-in RC Flight 2	-	-	-	NS	-	-	-	2507	-	-
1974-5534	2442226-26	1974 Jun 27 1845	Aerobee 200A	-	MASA 26-15CS	-	-	-	-	NS	-	-	-	222	-	-
1974-5536	2442227-55	1974 Jun 29 0110	Nike Iroquois	-	CRL A07-105-7	ALADDIN 7A Pre-Altid	-	-	-	NS	-	-	-	184	-	-
1974-5538	2442228-36	1974 Jun 29 1945	Aerobee 170	-	CRL A04-208-1	ALADDIN 7A EUV A1rg-	-	-	-	NS	-	-	-	204	-	-
1974-5541	2442228-36	1974 Jun 29 2033	Nike Tomahawk	-	CRL A08-306-4	ALADDIN 7A Sphera	-	-	-	NS	-	-	-	186	-	-
1974-5542	2442228-38	1974 Jun 29 2105	Nike Tomahawk	-	CRL A08-207-2	ALADDIN 7A NO/Photom	-	-	-	NS	-	-	-	1007	-	-
1974-5544	2442228-51	1974 Jun 30 0010	Nike CaJin	-	EP-7313	ALADDIN 7A	-	-	-	NS	-	-	-	196	-	-
1974-5547	2442228-60	1974 Jun 30 0220	Nike Apache	-	MASA 14-521UI	ALADDIN 7A	-	-	-	NS	-	-	-	191	-	-
1974-5549	2442228-69	1974 Jun 30 0440	Nike Apache	-	MASA 14-521UI	ALADDIN 7A	-	-	-	NS	-	-	-	134	-	-
1974-5552	2442228-73	1974 Jun 30 0530	Nike Tomahawk	-	MASA 14-5200A	ALADDIN 7A	-	-	-	NS	-	-	-	185	-	-
1974-5555	2442228-88	1974 Jun 30 0710	Nike Tomahawk	-	CRL A08-207-1	ALADDIN 7A NO/Photom	-	-	-	NS	-	-	-	204	-	-
1974-5556	2442228-88	1974 Jun 30 0900	Nike Apache	-	MASA 14-5200A	ALADDIN 7A	-	-	-	NS	-	-	-	199	-	-
1974-5562	2442231-01	1974 Jul 2 1216	Nike Tomahawk	-	MASA 14-5300I	ALADDIN 7A	-	-	-	NS	-	-	-	236	-	-
1974-5564	2442232-52	1974 Jul 4 0030	Nike Apache	-	MASA 18-1561E-JE	-	-	-	-	SSG	-	-	-	140	-	-
1974-5565	2442234-15	1974 Jul 5 1532	Nike Apache	-	MASA 14-4336E	Solar CR	-	-	-	NS	-	-	-	141	-	-
1974-5566	2442237-14	1974 Jul 8 1519	Nike Tomahawk	-	MASA 18-1571E-JE	-	-	-	-	SSG	-	-	-	237	-	-
1974-5572	2442247-50	1974 Jul 19	Nike Hydac	-	-	Low Light TV	-	-	-	NS	-	-	-	1507	-	-
1974-5573	2442248-76	1974 Jul 20 0610	Nike Apache	-	MASA 13-084UG	Wisc. Aerobee IV	-	-	-	NS	-	-	-	195	-	-
1974-5579	2442274-26	1974 Aug 14 1808	Nike Apache	-	MASA 14-4170A	-	-	-	-	NS	-	-	-	133	-	-
1974-5582	244															

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Launch_Mission	FlightCode	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee_Km	Range_Km	Dest
1974-S292	2442294-93	1974 Sep 4 1024	Aerobee 200	-	CRL A05-391-1	HI STAR SOUTH 1	-	-	-	W00	LAB	-	-	193	-	-
1974-S294	2442297-69	1974 Sep 7 0435	Aerobee 200A	-	MASA 26-250D	-	-	-	-	WS	-	-	-	2507	-	-
1974-S298	2442302-45	1974 Sep 11 2255	Aerobee 200	-	CRL A05-391-2	HI STAR SOUTH 2	-	-	-	W00	LAB	-	-	200	-	-
1974-S304	2442308-15	1974 Sep 17 1533	Aerobee 200	-	CRL A05-391-3	HI STAR SOUTH 3	-	-	-	W00	LAB	-	-	193	-	-
1974-S305	2442309-24	1974 Sep 18 1743	Aerobee 170	-	MASA 13-350S	-	-	-	-	W00	-	-	-	252	-	-
1974-S325	2442315-22	1974 Sep 24 1820	Nike Halonette	-	MASA 28-002ET	-	-	-	-	W1	-	-	-	465	-	-
1974-S335	2442323-76	1974 Oct 3 0510	Aerobee 200A	-	MASA 26-376G	-	-	-	-	WS	-	-	-	2507	-	-
1974-S357	2442337-91	1974 Oct 17 1020	Nike Hydac	-	EX 407-41-1	PRECEDE (HARSEES?)	-	-	-	WS	-	-	-	120	-	-
1974-S358	2442340-17	1974 Oct 19 1600	Aerobee 200A	-	MASA 26-164S	-	-	-	-	WS	-	-	-	201	-	-
1974-S373	2442355-00	1974 Nov 3 1157:53	Aerobee 170	-	MASA 13-1070G	-	-	-	-	KAU	-	-	-	169	-	-
1974-S379	2442367-91	1974 Nov 16 0949	Aerobee 170A	-	MASA 13-920D	CAL XR 10	-	-	-	WS	-	-	-	181	-	-
1974-S380	2442367-94	1974 Nov 16 1035	Aerobee 170A	-	MIL MB4-274	ML MB4-274	-	-	-	WS	-	-	-	166	-	-
1974-S387	2442376-81	1974 Nov 25 0722	Nike Tomahawk	-	MASA 18-1540A	MIT UBP 1	-	-	-	WS	-	-	-	133	-	-
1974-S389	2442376-89	1974 Nov 25 0915	Aerobee 200A	-	MASA 26-420G	-	-	-	-	WS	-	-	-	207	-	-
1974-S391	2442379-25	1974 Nov 27 1500	Aerobee 200A	-	MASA 26-410S	-	-	-	-	W1	-	-	-	306	-	-
1974-S401	2442385-35	1974 Dec 6 2020	Nike Tomahawk	-	MASA 18-1401E	-	-	-	-	AND	-	-	-	228	-	-
1974-S412	2442385-31	1974 Dec 13 1927:11	Nike Tomahawk	-	MASA 18-1401E	Ferdinand 37/Polar 4	-	-	-	WS	-	-	-	197	-	-
1974-S428	2442409-76	1974 Dec 28 0514:30	Aerobee 200A	-	MASA 26-300G	CAL XR 11	-	-	-	WS	-	-	-	185	-	-
1974-S450	2442440-50	1975 Jan 26	Nike Tomahawk	-	Bartum cloud	-	-	-	-	KMR	-	-	-	220	-	-
1974-S455	2442443-50	1975 Jan 31	Nike Tomahawk	-	MASA 26-276G	-	-	-	-	KMR	-	-	-	185	-	-
1974-S456	2442444-62	1975 Feb 1 0300	Aerobee 200A	-	MASA 17-130G	-	-	-	-	WS	-	-	-	263	-	-
1974-S457	2442446-89	1975 Feb 3 0916	Aerobee 350	-	Bartum cloud	-	-	-	-	KMR	-	-	-	165	-	-
1974-S460	2442448-50	1975 Feb 5	Nike Tomahawk	-	Bartum cloud	-	-	-	-	KMR	-	-	-	142	-	-
1974-S469	2442453-73	1975 Feb 10 0528:10	Nike Apache	-	MASA 14-5560A	-	-	-	-	FC	-	-	-	136	-	-
1974-S473	2442463-71	1975 Feb 13 0443	Nike Apache	-	MASA 14-5550A	EUV airglow	-	-	-	FC	-	-	-	295	-	-
1974-S477	2442465-08	1975 Feb 13 1350	Aerobee 200A	-	MASA 26-400E	Auroral NO	-	-	-	WS	-	-	-	138	-	-
1974-S478	2442467-08	1975 Feb 25 0552	Nike Apache	-	MASA 14-5570A	Auroral NO	-	-	-	FC	-	-	-	190	-	-
1974-S480	2442468-75	1975 Feb 25 0652	Nike Apache	-	MASA 18-1590E	-	-	-	-	PP	-	-	-	1307	-	-
1974-S487	2442472-79	1975 Mar 1 0655	Nike Javelin	-	DNA ICS06-14-2	ICECAP 75A	-	-	-	PP	-	-	-	102	-	-
1974-S488	2442475-62	1975 Mar 4 0739:30	Nike Javelin	-	SSC S16/2 WDX	SSC S16/2 WDX	-	-	-	PP	-	-	-	1507	-	-
1974-S489	2442477-15	1975 Mar 5 1635:16	Nike Hydac	-	SSC S16/2 WDX	ICECAP 75A	-	-	-	PP	-	-	-	1507	-	-
1974-S491	2442477-65	1975 Mar 6 0343	Nike Hydac	-	DNA ICS07-11-1A	ICECAP 75A	-	-	-	PP	-	-	-	2507	-	-
1974-S492	2442477-76	1975 Mar 6 0616:30	Nike Hydac	-	DNA ICS07-11-3	ICECAP 75A	-	-	-	PP	-	-	-	107	-	-
1974-S494	2442479-50	1975 Mar 8	Aerobee 200A	-	MASA 26-320G	-	-	-	-	WS	-	-	-	152	-	-
1974-S495	2442481-55	1975 Mar 10 0912:20	Nike Hydac	-	MASA 18-1600E	-	-	-	-	WS	-	-	-	138	-	-
1974-S496	2442481-58	1975 Mar 11 0654:11	Nike Hydac	-	DNA ICS07-11-2A	ICECAP 75A	-	-	-	PP	-	-	-	1307	-	-
1974-S497	2442482-77	1975 Mar 12 0232	Nike Javelin	-	DNA ICS06-36-1	ICECAP 75A	-	-	-	FC	-	-	-	106	-	-
1974-S500	2442483-61	1975 Mar 13 1702:00	Nike Apache	-	MASA 14-166A	-	-	-	-	FC	-	-	-	214	-	-
1974-S502	2442485-21	1975 Mar 15 0700:57	Aerobee 350	-	MASA 17-150G	SHO XRT 1	-	-	-	WS	-	-	-	2707	-	-
1974-S504	2442486-79	1975 Mar 15 0700:57	Aerobee 200A	-	MASA 28-390G	-	-	-	-	WS	-	-	-	280	-	-
1974-S505	2442489-85	1975 Mar 18 0822	Nike Tomahawk	-	MASA 18-1600E	-	-	-	-	PP	-	-	-	230	-	-
1974-S509	2442494-97	1975 Mar 23 1116:20	Nike Tomahawk	-	MASA 18-1600E	JHU UVT F6 (Saturn)	-	-	-	PP	-	-	-	107	-	-
1974-S511	2442494-97	1975 Mar 23 1116:20	Nike Tomahawk	-	MASA 18-1600E	-	-	-	-	PP	-	-	-	107	-	-
1974-S516	2442507-30	1975 Apr 6 1300	Nike Tomahawk	-	MASA 18-1703E	-	-	-	-	PP	-	-	-	107	-	-
1974-S517	2442507-30	1975 Apr 6 1300	Nike Hydac	-	MASA 18-1703E	-	-	-	-	PP	-	-	-	107	-	-
1974-S518	2442507-30	1975 Apr 6 1300	Nike Hydac	-	MASA 18-1703E	-	-	-	-	PP	-	-	-	107	-	-
1974-S519	2442511-30	1975 Apr 6 1905	Nike Cajun	-	MASA 10-3770H	-	-	-	-	W1	-	-	-	176	-	-
1974-S516	2442512-89	1975 Apr 10 0440	Aerobee 170A	-	MASA 13-880G	-	-	-	-	WS	-	-	-	209	-	-
1974-S517	2442515-84	1975 Apr 13 0635	Nike Tomahawk	-	MASA 18-1743E	-	-	-	-	PP	-	-	-	209	-	-
1974-S518	2442515-84	1975 Apr 13 0635	Nike Tomahawk	-	MASA 18-1743E	-	-	-	-	PP	-	-	-	209	-	-
1974-S519	2442515-84	1975 Apr 13 0635	Nike Tomahawk	-	MASA 18-1743E	-	-	-	-	PP	-	-	-	209	-	-
1974-S520	2442515-84	1975 Apr 13 0635	Nike Tomahawk	-	MASA 18-1743E	-	-	-	-	PP	-	-	-	209	-	-
1974-S521	2442518-89	1975 Apr 18 0915	Nike Tomahawk	-	MASA 18-1760E	-	-	-	-	PP	-	-	-	67	-	-
1974-S522	2442520-50	1975 Apr 24 0100	Nike Tomahawk	-	MASA 18-1760E	-	-	-	-	TTR	-	-	-	338	-	-
1974-S523	2442520-50	1975 Apr 24 0100	Nike Tomahawk	-	MASA 18-1760E	-	-	-	-	TTR	-	-	-	338	-	-
1974-S524	2442520-50	1975 Apr 24 0100	Nike Tomahawk	-	MASA 18-1760E	-	-	-	-	TTR	-	-	-	324	-	-
1974-S525	2442520-50	1975 Apr 24 0100	Nike Tomahawk	-	MASA 18-1760E	-	-	-	-	TTR	-	-	-	127	-	-
1974-S526	2442520-50	1975 Apr 24 0100	Nike Tomahawk	-	MASA 18-1760E	-	-	-	-	TTR	-	-	-	127	-	-
1974-S527	2442520-50	1975 Apr 24 0100	Nike Tomahawk	-	MASA 18-1760E	-	-	-	-	TTR	-	-	-	127	-	-
1974-S528	2442520-50	1975 Apr 24 0100	Nike Tomahawk	-	MASA 18-1760E	-	-	-	-	TTR	-	-	-	127	-	-
1974-S529	2442520-50	1975 Apr 24 0100	Nike Tomahawk	-	MASA 18-1760E	-	-	-	-	TTR	-	-	-	127	-	-
1974-S530	2442520-50	1975 Apr 24 0100	Nike Tomahawk	-	MASA 18-1760E	-	-	-	-	TTR	-	-	-	127	-	-
1974-S531	2442520-50	1975 Apr 24 0100	Nike Tomahawk	-	MASA 18-1760E	-	-	-	-	TTR	-	-	-	127	-	-
1974-S532	2442520-50	1975 Apr 24 0100	Nike Tomahawk	-	MASA 18-1760E	-	-	-	-	TTR	-	-	-	127	-	-
1974-S533	2442520-50	1975 Apr 24 0100	Nike Tomahawk	-	MASA 18-1760E	-	-	-	-	TTR	-	-	-	127	-	-
1974-S534	2442520-50	1975 Apr 24 0100	Nike Tomahawk	-	MASA 18-1760E	-	-	-	-	TTR	-	-	-	127	-	-
1974-S535	2442520-50	1975 Apr 24 0100	Nike Tomahawk	-	MASA 18-1760E	-	-	-	-	TTR	-	-	-	127	-	-
1974-S536	2442520-50	1975 Apr 24 0100	Nike Tomahawk	-	MASA 18-1760E	-	-	-	-	TTR	-	-	-	127	-	-
1974-S537	2442520-50	1975 Apr 24 0100	Nike Tomahawk	-	MASA 18-1760E	-	-	-	-	TTR	-	-	-	127	-	-
1974-S538	2442520-50	1975 Apr 24 0100	Nike Tomahawk	-	MASA 18-1760E	-	-	-	-	TTR	-	-	-	127	-	-
1974-S539	2442520-50	1975 Apr 24 0100	Nike Tomahawk	-	MASA 18-1760E	-	-	-	-	TTR	-	-	-	127	-	-
1974-S540	2442520-50	1975 Apr 24 0100	Nike Tomahawk	-	MASA 18-1760E	-	-	-	-	TTR	-	-	-	127	-	-
1974-S541	2442520-50	1975 Apr 24 0100	Nike Tomahawk	-	MASA 18-1760E	-	-	-	-	TTR	-	-	-	127	-	-
1974-S542	2442520-50	1975 Apr 24 0100	Nike Tomahawk	-	MASA 18-1760E	-	-	-	-	TTR	-	-	-	127	-	-
1974-S543	2442520-50	1975 Apr 24 0100	Nike Tomahawk	-	MASA 18-1760E	-	-	-	-	TTR	-	-	-	127	-	-
1974-S544	2442520-50	1975 Apr 24 0100	Nike Tomahawk	-	MASA 18-1760E	-	-	-	-	TTR	-	-	-	127	-	-
1974-S545	2442520-50	1975 Apr 24 0100	Nike Tomahawk	-	MASA 18-1760E	-	-	-	-	TTR	-	-	-	127	-	-
1974-S546	2442520-50	1975 Apr 24 0100	Nike Tomahawk	-	MASA 18-1760E	-	-	-	-	TTR	-	-	-	127	-	-
1974-S547	2442520-50	1975 Apr 24 0100	Nike Tomahawk	-	MASA 18-1760E	-	-	-	-	TTR	-	-	-	127	-	-
1974-S548	2442520-50	1975 Apr 24 0100	Nike Tomahawk	-	MASA 18-1760E	-	-	-	-	TTR	-	-	-	127	-	-
1974-S549	2442520-50	1975 Apr 24 0100	Nike Tomahawk	-	MASA 18-1760E	-	-	-	-	TTR	-	-	-	127	-	-
1974-S550	2442520-50	1975 Apr 24 0100	Nike Tomahawk	-	MASA 18-1760E	-	-	-	-	TTR	-	-	-	127	-	-
1974-S551	2442520-50	1975 Apr 24 0100	Nike Tomahawk	-	MASA 18-1760E	-	-	-	-	TTR	-	-	-	127	-	-
1974-S552	2442520-50	1975 Apr 24 0100	Nike Tomahawk	-	MASA 18-1760E	-	-	-	-	TTR	-	-	-	127	-	-
1974-S553	2442520-50	1975 Apr 24 0100	Nike Tomahawk	-	MASA 18-1760E	-	-	-	-	TTR	-	-	-	127	-	-
1974-S554	2442520-50	1975 Apr 24 0100	Nike Tomahawk	-	MASA 18-1760E	-	-	-	-	TTR	-	-	-	127	-	-
1974-S555	2442520-50	1975 Apr 24 0100	Nike Tomahawk	-	MASA 18											



Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Launch_Mission	FlightCode	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee_Km	Range_Km	Dest
1975-5323	2442737-67	1975 Nov 21 0411	Nike Cajun	-	MASA 10-4236H	GSFC Grenade 283 W	-	-	-	WI	-	-	-	121	-	-
1975-5324	2442738-19	1975 Nov 21 1637:36	Nike Apache	-	SSC S01 (T1)	SSC Range Test	-	-	-	ESR	-	-	-	131	-	-
1975-5341	2442750-21	1975 Dec 3 1657	Nike Cajun	-	MASA 10-4246H	GSFC Grenade 284 W	-	-	-	WI	-	-	-	122	-	-
1975-5342	2442750-64	1975 Dec 4	Black Brant 8B	-	ARF-INVB-01	-	-	-	-	FC	-	-	-	340	-	-
1975-5345	2442750-69	1975 Dec 4 0322	Aerobee 350	-	CRJ-AS-191-1	Super HI STAR	-	-	-	WS	-	-	-	286	-	-
1975-5346	2442752-73	1975 Dec 4 0525	Nike Cajun	-	MASA 10-4100H	GSFC Grenade 285 W	-	-	-	WI	-	-	-	120	-	-
1975-5348	2442752-75	1975 Dec 6 0605	Aerobee 350	-	MASA 17-160H	SAO XRT 2	-	-	-	WS	-	-	-	186	-	-
1975-5349	2442752-82	1975 Dec 6 0742	Nike Tomahawk	-	MASA 13-1180G	-	-	-	-	WS	-	-	-	241	-	-
1975-5352	2442753-17	1975 Dec 16 1600	Nike Tomahawk	-	MASA 12-310T	-	-	-	-	WS	-	-	-	129	-	-
1976-5346	2442762-10	1976 Jan 4 1430	Nike Apache	-	DIR H-IM-70	Winter Anom B-IV-1	INTA WMAE-7601	-	-	ELAR	-	-	-	270?	-	-
1976-5360	2442796-22	1976 Jan 18 1712	Nike Tomahawk	-	MASA 18-1007UE	Winter Anom B-IV-2	INTA WMAE-7602	-	-	ELAR	-	-	-	120	-	-
1976-5366	2442799-11	1976 Jan 21 1432:09	Nike Apache	-	DIR H-IM-72/Ferd 43	Winter Anom B-IV-2	-	-	-	ELAR	-	-	-	208	-	-
1976-5372	2442800-29	1976 Jan 22 1858:36	Nike Tomahawk	-	SSC S17-1 (EFS)	Winter Anomaly	-	-	-	SSC S17/1 W/Dtr	-	-	-	117	-	-
1976-5376	2442801-45	1976 Jan 23 2245	Nike Tomahawk	-	GL A06-008-1	Ferdinand 45/Polar 5	-	-	-	AND	-	-	-	221	-	-
1976-5389	2442810-31	1976 Feb 1 1928:56	Nike Tomahawk	-	MASA 18-2080E	GI-PPRR Launcher T.	-	-	-	PF	-	-	-	17	-	-
1976-5389	2442815-50	1976 Feb 7 0005:10	Nike Tomahawk	-	MASA 18-1001UE	-	-	-	-	PF	-	-	-	237	-	-
1976-5389	2442826-30	1976 Feb 16 0705:59	Nike Tomahawk	-	SSC S18-2	SSC S18/2 D-Layer	-	-	-	ESR	C	-	-	105	-	-
1976-5389	2442830-32	1976 Feb 21 1942:32	Nike Apache	-	GL A04-305-1	UD FERRET II/18-1003UE	-	-	-	WS	-	-	-	221	-	-
1976-5389	2442833-31	1976 Feb 24 1942:32	Nike Tomahawk	-	MASA 18-1640E	-	-	-	-	WS	-	-	-	246	-	-
1976-5389	2442837-01	1976 Feb 28 1212:80	Nike Tomahawk	-	MASA 18-1002UE	-	-	-	-	PF	-	-	-	07	-	-
1976-5389	2442838-95	1976 Mar 1 1045:46	Nike Tomahawk	-	MASA 14-4610E	Auroral NO	-	-	-	FC	-	-	-	160	-	-
1976-5389	2442839-64	1976 Mar 2 0324:30	Nike Apache	-	SSC S21-1	Comet West	-	-	-	WS	-	-	-	209	-	-
1976-5389	2442840-48	1976 Mar 2 2349:30	Nike Apache	-	MASA 13-1280C	JRU UVS Comet West	-	-	-	ESR	-	-	-	210	-	-
1976-5389	2442842-98	1976 Mar 5 1136	Aerobee 170	-	SSC S17-2	Comet West	-	-	-	WS	-	-	-	189	-	-
1976-5389	2442847-96	1976 Mar 6 2100:16	Nike Tomahawk	-	MASA 10-4256H	-	-	-	-	WI	-	-	-	96	-	-
1976-5389	2442848-38	1976 Mar 10 1058	Nike Tomahawk	-	MASA 13-1296C	Auroral UV/particles	-	-	-	FC	-	-	-	162	-	-
1976-5389	2442851-22	1976 Mar 19 1715	Nike Cajun	-	MASA 10-4256H	GSFC MGC 4151	-	-	-	WS	-	-	-	216	-	-
1976-5389	2442852-98	1976 Mar 22 0645:40	Aerobee 170A	-	MASA 13-1160E	JRU Aurora 11	-	-	-	FC	-	-	-	175	-	-
1976-5389	2442853-31	1976 Mar 23 0600	Aerobee 200A	-	MASA 26-556G	-	-	-	-	FC	-	-	-	150?	-	-
1976-5389	2442855-62	1976 Mar 26 0258:26	Aerobee 170	-	MASA 13-0770A	-	-	-	-	FC	-	-	-	203	-	-
1976-5389	2442861-07	1976 Mar 26 1540	Nike Hydac	-	DNA 10607-11-2C	-	-	-	-	PF	-	-	-	230?	-	-
1976-5389	2442864-38	1976 Mar 26 2100	Aerobee 200A	-	MASA 26-017AS	-	-	-	-	WS	-	-	-	230?	-	-
1976-5389	2442864-38	1976 Mar 27 0645	Nike Tomahawk	-	MASA 18-1766E	-	-	-	-	PF	-	-	-	230?	-	-
1976-5389	2442865-03	1976 Mar 27 1250	Nike Tomahawk	-	MASA 18-1794E	-	-	-	-	PF	-	-	-	230?	-	-
1976-5389	2442865-03	1976 Mar 27 1250	Nike Tomahawk	-	MASA 18-1940E	-	-	-	-	PF	-	-	-	230?	-	-
1976-5389	2442866-02	1976 Mar 28 1500	Nike Tomahawk	-	MASA 18-1950E	-	-	-	-	PF	-	-	-	150?	-	-
1976-5389	2442868-02	1976 Mar 30 1250	Nike Tomahawk	-	MASA 18-1770E	-	-	-	-	PF	-	-	-	170	-	-
1976-5389	2442868-04	1976 Mar 30 1256	Nike Hydac	-	NS	-	-	-	-	WS	-	-	-	202	-	-
1976-5389	2442868-04	1976 Apr 21 0515	Aerobee 200A	-	MASA 26-040PH	NRL XR	-	-	-	WS	-	-	-	175	-	-
1976-5389	2442869-87	1976 Apr 21 0515	Aerobee 200A	-	MASA 26-0366H	CIT Cyg X-1	-	-	-	WS	-	-	-	248	-	-
1976-5389	2442910-21	1976 May 11 0955	Aerobee 200A	-	MASA 26-046CS	Smoke Payload No. 023	-	-	-	WS	-	-	-	60?	-	-
1976-5389	2442915-20	1976 May 20 1800	Nike Nike	-	MARS58	-	-	-	-	WS	-	-	-	20?	-	-
1976-5389	2442939-25	1976 Jun 9 1800	Nike Nike	-	CS285	-	-	-	-	WI	-	-	-	30?	-	-
1976-5389	2442941-29	1976 Jun 11 1858	Nike Jaegerlin	-	MASA 32-004HT	T2-7036	-	-	-	WS	-	-	-	130?	-	-
1976-5389	2442941-29	1976 Jun 11 1858	Nike Nike	-	MASA 32-010TH	-	-	-	-	WS	-	-	-	270?	-	-
1976-5389	2442946-73	1976 Jun 17 0950	Aerobee 350	-	MASA 17-010H	SAO XRT 3	-	-	-	WS	-	-	-	20?	-	-
1976-5389	2442959-26	1976 Jun 20 0820	Nike Tomahawk	-	MASA 18-1810A	-	-	-	-	WS	-	-	-	148	-	-
1976-5389	2442959-26	1976 Jun 20 0820	Nike Tomahawk	-	MASA 18-1810A	-	-	-	-	WS	-	-	-	148	-	-
1976-5389	2442959-26	1976 Jun 20 0820	Nike Tomahawk	-	MASA 18-1810A	-	-	-	-	WS	-	-	-	148	-	-
1976-5389	2442959-26	1976 Jun 20 0820	Nike Tomahawk	-	MASA 18-1810A	-	-	-	-	WS	-	-	-	148	-	-
1976-5389	2442959-26	1976 Jun 20 0820	Nike Tomahawk	-	MASA 18-1810A	-	-	-	-	WS	-	-	-	148	-	-
1976-5389	2442959-26	1976 Jun 20 0820	Nike Tomahawk	-	MASA 18-1810A	-	-	-	-	WS	-	-	-	148	-	-
1976-5389	2442959-26	1976 Jun 20 0820	Nike Tomahawk	-	MASA 18-1810A	-	-	-	-	WS	-	-	-	148	-	-
1976-5389	2442959-26	1976 Jun 20 0820	Nike Tomahawk	-	MASA 18-1810A	-	-	-	-	WS	-	-	-	148	-	-
1976-5389	2442959-26	1976 Jun 20 0820	Nike Tomahawk	-	MASA 18-1810A	-	-	-	-	WS	-	-	-	148	-	-
1976-5389	2442959-26	1976 Jun 20 0820	Nike Tomahawk	-	MASA 18-1810A	-	-	-	-	WS	-	-	-	148	-	-
1976-5389	2442959-26	1976 Jun 20 0820	Nike Tomahawk	-	MASA 18-1810A	-	-	-	-	WS	-	-	-	148	-	-
1976-5389	2442959-26	1976 Jun 20 0820	Nike Tomahawk	-	MASA 18-1810A	-	-	-	-	WS	-	-	-	148	-	-
1976-5389	2442959-26	1976 Jun 20 0820	Nike Tomahawk	-	MASA 18-1810A	-	-	-	-	WS	-	-	-	148	-	-
1976-5389	2442959-26	1976 Jun 20 0820	Nike Tomahawk	-	MASA 18-1810A	-	-	-	-	WS	-	-	-	148	-	-
1976-5389	2442959-26	1976 Jun 20 0820	Nike Tomahawk	-	MASA 18-1810A	-	-	-	-	WS	-	-	-	148	-	-
1976-5389	2442959-26	1976 Jun 20 0820	Nike Tomahawk	-	MASA 18-1810A	-	-	-	-	WS	-	-	-	148	-	-
1976-5389	2442959-26	1976 Jun 20 0820	Nike Tomahawk	-	MASA 18-1810A	-	-	-	-	WS	-	-	-	148	-	-
1976-5389	2442959-26	1976 Jun 20 0820	Nike Tomahawk	-	MASA 18-1810A	-	-	-	-	WS	-	-	-	148	-	-
1976-5389	2442959-26	1976 Jun 20 0820	Nike Tomahawk	-	MASA 18-1810A	-	-	-	-	WS	-	-	-	148	-	-
1976-5389	2442959-26	1976 Jun 20 0820	Nike Tomahawk	-	MASA 18-1810A	-	-	-	-	WS	-	-	-	148	-	-
1976-5389	2442959-26	1976 Jun 20 0820	Nike Tomahawk	-	MASA 18-1810A	-	-	-	-	WS	-	-	-	148	-	-
1976-5389	2442959-26	1976 Jun 20 0820	Nike Tomahawk	-	MASA 18-1810A	-	-	-	-	WS	-	-	-	148	-	-
1976-5389	2442959-26	1976 Jun 20 0820	Nike Tomahawk	-	MASA 18-1810A	-	-	-	-	WS	-	-	-	148	-	-
1976-5389	2442959-26	1976 Jun 20 0820	Nike Tomahawk	-	MASA 18-1810A	-	-	-	-	WS	-	-	-	148	-	-
1976-5389	2442959-26	1976 Jun 20 0820	Nike Tomahawk	-	MASA 18-1810A	-	-	-	-	WS	-	-	-	148	-	-
1976-5389	2442959-26	1976 Jun 20 0820	Nike Tomahawk	-	MASA 18-1810A	-	-	-	-	WS	-	-	-	148	-	-
1976-5389	2442959-26	1976 Jun 20 0820	Nike Tomahawk	-	MASA 18-1810A	-	-	-	-	WS	-	-	-	148	-	-
1976-5389	2442959-26	1976 Jun 20 0820	Nike Tomahawk	-	MASA 18-1810A	-	-	-	-	WS	-	-	-	148	-	-
1976-5389	2442959-26	1976 Jun 20 0820	Nike Tomahawk	-	MASA 18-1810A	-	-	-	-	WS	-	-	-	148	-	-
1976-5389	2442959-26	1976 Jun 20 0820	Nike Tomahawk	-												

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Mission	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee	Range	Dest
												km	km	
1977-5899	2443207.70	1977 Mar 5 0447	Black Brant 8B	-	AAF-IVB-02	Auroral	-	FC	-	-	-	327	-	-
1977-5824	2443210.51	1977 Mar 8 0014:05	Nike Hydac	-	DMA S7707.51-1	STRESS DIAMNE Probe	-	EGL	A-15A Pad 2	-	-	213	-	-
1977-5825	2443210.52	1977 Mar 8 0032:04	Nike Hydac	-	DMA S7707.51-2	STRESS DIAMNE Probe	-	EGL	A-15A Pad 2	-	-	203	-	-
1977-5104	2443211.50	1977 Mar 9	Nike Orion	-	MASA 31.020A	Auroral NU	-	FC	-	-	-	138	-	-
1977-5826	2443216.48	1977 Mar 13 2327:00	Nike Hydac	-	DMA S7707.51-3	STRESS ESTHER Probe	-	EGL	A-15A Pad 2	-	-	220	-	-
1977-5827	2443216.49	1977 Mar 13 2344:50	Nike Hydac	-	DMA S7707.51-4	STRESS ESTHER Probe	-	EGL	A-15A Pad 3	-	-	199	-	-
1977-5110	2443217.23	1977 Mar 14 1738	Nike Apache	-	DFVLR Firefly	DLR K-WA-83	-	ESR	-	-	-	250	-	-
1977-5828	2443217.48	1977 Mar 14 2325:20	Nike Hydac	-	DMA S7707.51-5	STRESS FERN Probe	-	EGL	A-15A Pad 2	-	-	249	-	-
1977-5829	2443217.50	1977 Mar 15 0003:10	Nike Hydac	-	DMA S7707.51-6	STRESS FERN Probe	-	EGL	A-15A Pad 2	-	-	222	-	-
1977-5128	2443224.77	1977 Mar 22 0650	Aerobee 200A	-	MASA 26.590U	-	-	WS	-	-	-	189	-	-
1977-5139	2443233.50	1977 Apr	Nike Hydac	?	HARSES	-	-	WS	-	-	-	1507	-	-
1977-5140	2443233.50	1977 Apr 8 0623:50	Nike Hydac	?	HARSES	-	-	WS	-	-	-	1507	-	-
1977-5144	2443241.77	1977 Apr 8 0623:50	Nike Tomahawk	-	MASA 18.10136A	Auroral EIV	-	FC	-	-	-	157	-	-
1977-5149	2443255.21	1977 Apr 21 1700:00	Aerobee 170	-	GL A04.410-02	-	-	WS	-	-	-	237	-	-
1977-5154	2443265.50	1977 May	Nike Hydac	?	HARSES	-	-	WS	-	-	-	1507	-	-
1977-5167	2443262.07	1977 May 18 1343	Nike Hydac	-	GL A11.712-1	ABRES Density/TDV-1	Spheres (10in)	KMR	RN1	-	-	188	-	-
1977-430	2443264.46	1977 May 20 2309	Nike Hydac	-	MASA 13.131DA	-	-	WS	-	-	-	23	-	-
1977-5169	2443268.44	1977 May 26 0725	Aerobee 170A	-	MASA 26.0610H	Misc. Aerobee IV	-	WS	-	-	-	192	-	-
1977-5196	2443303.74	1977 Jun 9 0540	Aerobee 200A	-	MASA 27.080H	SAD XRT 4	-	WS	-	-	-	205	-	-
1977-5213	2443356.74	1977 Jul 12 0545	Nike Orion	-	MASA 31.050A	-	-	WS	-	-	-	113	-	-
1977-5219	2443351.69	1977 Jul 27 0440	Black Brant 8C	-	MASA 27.310H	-	-	WS	-	-	-	203	-	-
1977-5228	2443365.71	1977 Aug 10 0501	Nike Apache	-	MASA 14.5540E	SAD XRT 5	-	WI	-	-	-	200	-	-
1977-5231	2443373.22	1977 Aug 17 1710	Nike Tomahawk	-	MASA 18.1820A	-	-	WS	-	-	-	198	-	-
1977-5233	2443374.48	1977 Aug 18 2355	Nike Tomahawk	-	MASA 18.10090E	-	-	WS	-	-	-	267	-	-
1977-5237	2443386.50	1977 Sep 24 1155	Nike Hydac	?	HARSES	DMSP CHEM	-	WS	-	-	-	1507	-	-
1977-5262	2443411.00	1977 Oct 2 0300	Nike Iroquois	-	GL A07.707-1	SAD XRT/Italy XR	-	WS	-	-	-	189	-	-
1977-5266	2443416.62	1977 Oct 2 0300	Aerobee 200A	-	MASA 26.65H-UH	S19 Guidance Test	-	WS	-	-	-	196	-	-
1977-5264	2443437.87	1977 Oct 21 0949:00	Black Brant 8C	-	SSC S19B	-	-	ESR	MRL	-	-	374	-	-
1977-846	2443467.49	1977 Nov 19 2352	Nike	-	MEND	Dayside Cup	-	PF	-	-	-	17	-	-
1977-5297	2443468.50	1977 Dec 6 0005	Black Brant 8B	-	AAF-IVB-03	-	-	CP	-	-	-	300	-	-
1977-5298	2443468.75	1977 Dec 11 0600	Aerobee 200A	-	MASA 26.60GG	-	-	WS	-	-	-	177	-	-
1977-5300	2443469.19	1977 Dec 11 1650	Nike Tomahawk	-	MASA 18.1830A	-	-	WS	-	-	-	196	-	-
1977-460	2443480.46	1977 Dec 12 2300	Black Brant 8B	-	AAF-IVB-04	Dayside Cup	-	CP	-	-	-	10	-	-
1977-5302	2443490.74	1977 Dec 13 0550	Aerobee 170	-	GL A04.002	PRECEDE	-	WS	-	-	-	102	-	-
1977-5304	2443491.71	1977 Dec 14 0500	Nike Orion	-	MASA 31.050A	-	-	WS	-	-	-	1407	-	-
1976-541	2443513.71	1978 Jan 5 0501	Nike Apache	-	MASA 14.5530E	-	-	WI	-	-	-	197	-	-
1976-552	2443539.37	1978 Jan 30 2852:10	Nike Tomahawk	-	MASA 18.2111E/OE	-	-	AUD	-	-	-	220	-	-
1976-565	2443540.27	1978 Jan 31 1655	Black Brant 8C	-	MASA 27.0295C	-	-	WS	-	-	-	273	-	-
1976-408	2443545.35	1978 Feb 27 0943:36	Aerobee 200A	-	MASA 28.0630H	Misc. Aerobee IV?	-	WS	-	-	-	270?	-	-
1976-566	2443566.74	1978 Feb 27 0943:36	Nike Tomahawk	-	MASA 18.10170E	-	-	WS	-	-	-	29	-	-
1976-569	2443567.66	1978 Feb 28 1747	Nike Tomahawk	-	MASA 18.10150E	-	-	WS	-	-	-	270?	-	-
1976-583	2443568.55	1978 Feb 28 1752	Nike Tomahawk	-	MASA 13.130DA	Ferdinand 4	-	WS	-	-	-	223	-	-
1976-584	2443568.55	1978 Feb 28 1752	Nike Apache	-	MASA 14.5530E	Ferdinand 4	-	AUD	-	-	-	128	-	-
1976-586	2443569.55	1978 Mar 1 0113:01	Nike Apache	-	MASA 18.1016UE	Ferdinand 4	-	AUD	-	-	-	270?	-	-
1976-588	2443569.55	1978 Mar 1 0113:01	Nike Tomahawk	-	MASA 18.1016UE	Ferdinand 4	-	AUD	-	-	-	270?	-	-
1976-591	2443576.05	1978 Mar 2 0443:30	Nike Tomahawk	-	MASA 18.2150E	-	-	WS	-	-	-	270?	-	-
1976-594	2443578.05	1978 Mar 2 0443:30	Nike Tomahawk	-	MASA 18.2150E	-	-	WS	-	-	-	270?	-	-
1976-598	2443587.04	1978 Mar 29 1650	Nike Tomahawk	-	MASA 18.2140H	-	-	FF	-	-	-	219	-	-
1976-814	2443604.00	1978 Mar 29 1650	Nike Tomahawk	-	CL A11.712-3	DENSITY sphere	-	KMR	-	-	-	231	-	-
1976-8102	2443604.02	1978 Apr 5 1255	Nike Hydac	-	CL A11.712-4	DENSITY sphere	-	KMR	-	-	-	26	-	-
1976-8104	2443604.02	1978 Apr 9 0420	Nike Hydac	-	MASA 27.104E	E // B	-	KMR	-	-	-	175	-	-
1976-8105	2443607.70	1978 Apr 11 0300	Black Brant 8B	-	MASA 27.104E	-	-	EC	-	-	-	247	-	-
1976-8113	2443613.51	1978 Apr 13 1922:56	Black Brant 8C	-	MASA 31.080E	-	-	WS	-	-	-	303	-	-
1976-8115	2443614.70	1978 Apr 13 1922:56	Nike Orion	-	MASA 31.080E	-	-	WS	-	-	-	153	-	-
1976-8131	2443624.70	1978 Apr 13 0700	Aerobee 170A	-	MASA 13.1370H	Misc. Aerobee IV	-	ESR	MRL	-	-	200	-	-
1976-8136	2443636.99	1978 May 9 1139	Nike Tomahawk	-	GL A04.606-1	-	-	TTR	-	-	-	192	-	-
1976-8138	2443645.38	1978 May 16 2030	Aerobee 170	-	GL A45.710-1	-	-	WS	-	-	-	191	-	-
1976-8147	2443646.99	1978 May 19 1145?	Nike Tomahawk	-	GL A45.710-2	-	-	WS	-	-	-	192	-	-
1976-802	2443648.90	1978 May 20 0929	Nike Hydac	-	GL A45.710-2	-	-	WS	-	-	-	192	-	-
1976-803	2443650.89	1978 May 22 0927	Nike Hydac	-	GL A45.710-2	-	-	WS	-	-	-	192	-	-
1976-8153	2443670.77	1978 Jun 11 0632	Nike Apache	-	MASA 14.5491E	JASPTC Re1 TMA	-	WS	-	-	-	53	-	-
1976-8157	2443670.77	1978 Jun 15 0632	Nike Tomahawk	-	MASA 14.5491E	-	-	WS	-	-	-	54	-	-
1976-8160	2443670.68	1978 Jun 20 0415	Nike Tomahawk	-	MASA 18.10230E	-	-	WS	-	-	-	220	-	-
1976-8165	2443685.59	1978 Jun 26 0208	Nike Apache	-	MASA 14.5491E	-	-	WS	-	-	-	265	-	-
1976-8191	2443720.47	1978 Jul 30 2313:00	Nike Orion	-	MASA 18.1019E	JASPTC	-	WS	-	-	-	315	-	-
1976-8197	2443735.51	1978 Aug 14 1445	Black Brant 8C	-	MASA 18.1019E	JASPTC	-	WS	-	-	-	134	-	-
1976-846	2443764.54	1978 Sep 13 0053	Nike Hydac	-	GL A45.709-1	MASA 27.34DS	-	WS	-	-	-	220	-	-
1976-447	2443764.97	1978 Sep 13 1113	Nike Hydac	-	GL A45.709-2	HFC3-3	-	WS	-	-	-	45	-	-
1976-8210	2443767.38	1978 Sep 15 2100	Nike Tomahawk	-	GL A03.708-2	SNOWE	-	FC	-	-	-	45	-	-
1976-8215	2443771.27	1978 Sep 19 1830	Aerobee 170	-	GL A04.711-1	CLUSTER ION	-	WS	-	-	-	114	-	-
1976-8216	2443773.73	1978 Sep 27 0530	Nike Apache	-	MASA 14.5420E	SOLAR ION	-	WS	-	-	-	192	-	-
1976-8219	2443807.89	1978 Oct 26 0916:31	Nike Hydac	-	DMA T8007.57-1	SHR DYNAMICS	-	WS	-	-	-	183	-	-
1976-8221	2443807.89	1978 Oct 26 0920:20	Nike Hydac	-	DMA T8007.57-1	SHR DYNAMICS	-	WS	-	-	-	122	-	-
1976-8224	2443815.56	1978 Nov 3 0120	Nike Hydac	-	MASA 13.1350E	ENERGY	-	WS	-	-	-	160	-	-
1976-8233	2443815.56	1978 Nov 3 0120	Aerobee 170A	-	MASA 13.1350E	UM Airglow Pay.	-	WS	-	-	-	151	-	-
1976-8236	2443829.26	1978 Nov 16 1815	Black Brant 8B	-	AAF-IVB-05	Solar Constant 2	-	WS	-	-	-	182	-	-
1976-8238	2443840.29	1978 Nov 25 0444:10	Nike Tomahawk	-	MASA 18.2071E	Gush CMB 4	-	FC	-	-	-	366	-	-
1976-8239	2443840.29	1978 Nov 27 1855:00	Nike Tomahawk	-	MASA 18.2161E	Ferdinand 41 (Elec 3)	-	WS	-	-	-	202	-	-
1976-8239	2443840.29	1978 Nov 27 1855:35	Nike Tomahawk	-	MASA 18.10240A	Ferdinand 40 (Elec 2)	-	AND	-	-	-	193	-	-
1976-8252	2443853.50	1978 Dec 11	Nike Tomahawk	-	SSC S23H	-	-	AND	-	-	-	228	-	-
1976-849	2443901.38	1979 Jan 27 2101:59	Black Brant 8C	-	SSC S23H	Substorm-GEOS	-	ESR	MRL	-	-	414	-	-

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Launch_Mission	FlightCode	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee_Km	Range_Km	Dest
1979-576	2443931-49	1979 Feb 26 2348	Nike Iroquois	-	GL A07-712-2	Eclipse DEH Sphere	-	-	-	RLAKE	CHK	-	-	215	-	-
1979-577	2443977-42	1979 Apr 13 2205	Black Brant 8C	-	MASA 27-33AS-US	CFA/RMO Rocket Coron. 1	-	-	-	WS	-	-	-	268	-	-
1979-578	2443978-89	1979 Apr 15 0925	Nike Tomahawk	-	MASA 18-2186E	-	-	-	-	PF	-	-	-	2707	-	-
1979-579	2443981-89	1979 Apr 18 0915	Nike Tomahawk	-	MASA 18-2170E	-	-	-	-	PF	-	-	-	2707	-	-
1979-580	2443984-92	1979 Apr 21 1010	Black Brant 8C	-	MASA 27-380E	-	-	-	-	WS	-	-	-	317	-	-
1979-581	2444030-22	1979 Jun 5 1715	Black Brant 8C	-	MASA 27-280S	-	-	-	-	WS	-	-	-	325	-	-
1979-582	2444045-73	1979 Jun 21 0525	Black Brant 8C	-	MASA 27-0400G	-	-	-	-	WS	-	-	-	215	-	-
1979-583	2444058-19	1979 Jun 3 1630	Black Brant 8C	-	MASA 27-32CS	-	-	-	-	WS	-	-	-	300	-	-
1979-584	2444075-21	1979 Jul 20 1700?	Nike Tomahawk	-	MASA 18-10260U	-	-	-	-	WS	-	-	-	2707	-	-
1979-585	2444100-20	1979 Aug 14 1650	Nike Tomahawk	-	GL A08-705-2	DMSF MS	-	-	-	WS	-	-	-	190	-	-
1979-586	2444100-26	1979 Aug 14 1810:00	Nike Tomahawk	-	SSC T3 test	Dummy Dr-on	-	-	-	ESR	-	-	-	11	-	-
1979-587	2444100-32	1979 Aug 14 1940	Nike Tomahawk	-	GL A08-706-2	DMSF DENIS	-	-	-	WS	-	-	-	18	-	-
1979-588	2444100-35	1979 Aug 14 2020	Aerobee 170	-	GL A04-703	DMSF DENIS	-	-	-	WS	-	-	-	178	-	-
1979-589	2444106-55	1979 Aug 21 0114:16	Nike Orion	-	MASA 31-160E	SSC S27B Twilight B	-	-	-	ESR	MRL?	-	-	149	-	-
1979-590	2444127-50	1979 Sep 11	Black Brant 8C	-	MASA 31-041U	Ozone payload test	-	-	-	WI	-	-	-	63	-	-
1979-591	2444141-35	1979 Sep 24 2020:10	Black Brant 8C	-	MASA 27-390E	SSC S29 Barium-GBDS	-	-	-	ESR	-	-	-	397	-	-
1979-592	2444164-03	1979 Oct 17 1240:00	Black Brant 8C	-	MASA 27-160P	SPAR 6	-	-	-	WS	MRL	-	-	185	-	-
1979-593	2444165-18	1979 Oct 21 1625	Nike Orion	-	MASA 31-101U	WI T2-9915	-	-	-	WS	LC56	-	-	1407	-	-
1979-594	2444165-24	1979 Oct 21 1748	Nike Orion	-	MASA 31-081U	-	-	-	-	WI	-	-	-	1407	-	-
1979-595	2444165-28	1979 Oct 21 1650	Nike Orion	-	MASA 31-081U	-	-	-	-	WI	-	-	-	1407	-	-
1979-596	2444167-50	1979 Oct 22 2145	Nike Orion	-	DLR JP-100-96	Matel 6	-	-	-	CLBI	-	-	-	1407	-	-
1979-597	2444173-41	1979 Oct 23 2104	Nike Orion	-	DLR JP-100-99	Matel 6	-	-	-	CLBI	-	-	-	1407	-	-
1979-598	2444170-46	1979 Oct 25 2304	Nike Nike	-	GL A46-503-1	SMOKE	-	-	-	CHI	-	-	-	50	-	-
1979-599	2444171-48	1979 Oct 24 2324	Nike Nike	-	GL A46-503-2	SMOKE	-	-	-	CHI	-	-	-	50	-	-
1979-600	2444176-46	1979 Oct 29 2304	Nike Nike	-	GL A46-503-3	SMOKE	-	-	-	CHI	-	-	-	50	-	-
1979-601	2444178-50	1979 Nov 1	Nike Orion	-	MASA 31-131U	Ozone Intercomp	-	-	-	WI	-	-	-	1407	-	-
1979-602	2444178-50	1979 Nov 1	Nike Orion	-	MASA 31-121U	Ozone Intercomp	-	-	-	WI	-	-	-	1407	-	-
1979-603	2444178-50	1979 Nov 1	Nike Orion	-	MASA 31-111U	Ozone Intercomp	-	-	-	WI	-	-	-	1407	-	-
1979-604	2444185-37	1979 Nov 7 2050	Black Brant 8C	-	MASA 27-30CS	-	-	-	-	WS	-	-	-	271	-	-
1979-605	2444210-75	1979 Dec 3 0532:47	Black Brant 8C	-	AAF-JW9-06	Auroral substorm	-	-	-	FC	-	-	-	344	-	-
1979-606	2444210-75	1980 Jan 24 1721:59	Nike Tomahawk	-	Ferdinand 60	Ferd. 50/CONUPERA	-	-	-	AND	-	-	-	202	-	-
1980-544	2444285-22	1980 Feb 16 0623:17	Black Brant 8C	-	MASA 27-43AS	LASL Eclipse La	-	-	-	AND	-	-	-	319	-	-
1980-545	2444285-35	1980 Feb 16 0623:30	Black Brant 8C	-	MASA 27-42AS	LASL Eclipse La	-	-	-	SHLC	-	-	-	298	-	-
1980-546	2444286-19	1980 Feb 16 1652	Black Brant 8C	-	MASA 27-370S	CFA/RMO Rocket Coron. 2	-	-	-	SHLC	-	-	-	288	-	-
1980-547	2444290-54	1980 Feb 21 0953:49	Nike Tomahawk	-	Ferdinand 49	PULSAOR 1	-	-	-	WS	-	-	-	196	-	-
1980-548	2444335-65	1980 Apr 6 0333:01	Black Brant 8B	-	AAF-JW9-07P	MATERNOLE 1	-	-	-	FC	-	-	-	307	-	-
1980-549	2444374-23	1980 May 14 1730	Black Brant 8C	-	MASA 27-180P	-	-	-	-	WS	-	-	-	204	-	-
1980-550	2444400-99	1980 Jun 10 1145	Black Brant 8C	-	MASA 27-46AS	-	-	-	-	WS	-	-	-	298	-	-
1980-551	2444414-73	1980 Jun 24 0930	Black Brant 8C	-	MASA 27-41AS	-	-	-	-	WS	-	-	-	213	-	-
1980-552	2444436-21	1980 Jul 15 1700	Black Brant 8C	-	MASA 27-40US	-	-	-	-	WS	-	-	-	322	-	-
1980-553	2444465-61	1980 Aug 14 0240	Nike Orion	-	GL A04-705-1	UV	-	-	-	WI	-	-	-	397	-	-
1980-554	2444501-35	1980 Sep 15 0650	Aerobee 170	-	MASA 31-210E	-	-	-	-	WS	-	-	-	197	-	-
1980-555	2444506-35	1980 Sep 23 2025	Black Brant 8C	-	MASA 27-36CS	XSSST/TRC 2	-	-	-	WS	-	-	-	286	-	-
1980-556	2444509-54	1980 Sep 26 2235	Black Brant 8C	-	MASA 27-35BH	-	-	-	-	WS	-	-	-	300	-	-
1980-557	2444594-51	1980 Nov 11 0012:00	Nike Apache	-	Ferdinand 61	EBC-C EA Bugatti II	-	-	-	AND	-	-	-	123	-	-
1980-558	2444594-51	1980 Nov 11 0012:12	Nike Orion	-	DLR K-100-105	EBC-C Fd-57/Trinom	-	-	-	AND	-	-	-	196	-	-
1980-559	2444594-52	1980 Nov 11 0027:00	Nike Orion	-	DLR K-100-105	EBC-C Fd-57/Trinom	-	-	-	ESR	-	-	-	106	-	-
1980-560	2444594-52	1980 Nov 16 0331:00	Nike Apache	-	Ferdinand 63	EBC-B EA Bugatti II	-	-	-	AND	-	-	-	124	-	-
1980-561	2444594-65	1980 Nov 16 0331:12	Nike Orion	-	DLR K-100-106	EBC-B Fd-57/Trinom	-	-	-	AND	-	-	-	144	-	-
1980-562	2444594-70	1980 Nov 16 0441:12	Nike Orion	-	DLR K-100-106	EBC-B Fd-57/Trinom	-	-	-	ESR	-	-	-	165	-	-
1980-563	2444592-53	1980 Nov 19 0950	Black Brant 8C	-	MASA 27-190P	SPAR 8 (P-49)	-	-	-	AND	-	-	-	198	-	-
1980-564	2444592-53	1980 Nov 28 0324:36	Black Brant 8C	-	Ferdinand 65	EBC-A EA Bugatti II	-	-	-	AND	-	-	-	87	-	-
1980-565	2444571-64	1980 Nov 28 0324:48	Nike Apache	-	DLR K-100-107	EBC-A Fd-38 Trinom	-	-	-	AND	-	-	-	146	-	-
1980-566	2444571-64	1980 Dec 1 0009:00	Nike Orion	-	DLR K-100-107	EBC-A Fd-38 Trinom	-	-	-	ESR	-	-	-	146	-	-
1980-567	2444571-56	1980 Dec 1 0123:40	Nike Orion	-	MASA 27-47CS	EBC-M2 E6B	-	-	-	ESR	-	-	-	172	-	-
1980-568	2444586-22	1980 Dec 9 0630	Black Brant 8C	-	MASA 19-2050E	-	-	-	-	WS	-	-	-	301	-	-
1980-569	2444586-22	1980 Dec 12 1719	Nike Tomahawk	-	TUTA WJ-FL-8001	-	-	-	-	STP	RAG	-	-	211	-	-
1980-570	2444586-22	1980 Dec 16 1249	Nike Apache	-	TUTA WJ-FL-8002	-	-	-	-	ELAR	-	-	-	1507	-	-
1980-571	2444581-99	1980 Dec 18 1144	Nike Tomahawk	-	MASA 19-2040E	-	-	-	-	ELAR	-	-	-	1507	-	-
1980-572	2444584-23	1980 Dec 20 1732	Nike Tomahawk	-	MASA 19-2050E	-	-	-	-	STP	-	-	-	200	-	-
1980-573	2444615-27	1981 Jan 10 1822	Nike Tomahawk	-	MASA 19-2050E	-	-	-	-	STP	RAG	-	-	198	-	-
1981-549	2444615-27	1981 Jan 21 0925	Black Brant 8C	-	MASA 27-170P	SPAR 9	-	-	-	STP	RAG	-	-	209	-	-
1981-553	2444643-35	1981 Feb 7 0930:40	Nike Orion	-	MASA 27-50CS	OXYGEN	-	-	-	ESR	S	-	-	145	-	-
1981-564	2444649-22	1981 Mar 8 1600	Black Brant 8C	-	MASA 31-071U	CHAS 1	-	-	-	FC	-	-	-	265	-	-
1981-583	2444672-17	1981 Mar 13 1600	Nike Orion	-	MASA 31-170U	CHAS 2	-	-	-	FC	-	-	-	1407	-	-
1981-584	2444677-17	1981 Mar 13 1600	Nike Orion	-	MASA 27-550H	XUV Telescope	-	-	-	CHAS 2	-	-	-	261	-	-
1981-585	2444687-62	1981 Mar 24 0300	Black Brant 8C	-	MASA 27-550H	LADY LOU Ba	-	-	-	PF	-	-	-	1407	-	-
1981-586	2444687-62	1981 Mar 24 0300	Black Brant 8C	-	MASA 27-550H	KLONDIKE KATE Ba	-	-	-	PF	-	-	-	1407	-	-
1981-589	2444693-75	1981 Mar 30 0552:55	Nike Orion	-	-	-	-	-	-	WS	-	-	-	294	-	-
1981-592	2444697-76	1981 Apr 3 0620:55	Black Brant 8C	-	-	-	-	-	-	Soft XRB 2	-	-	-	322	-	-
1981-595	2444728-83	1981 May 4 0755	Black Brant 8C	-	MASA 31-220E	-	-	-	-	WT	-	-	-	92	-	-
1981-598	2444730-83	1981 May 6 0800	Black Brant 8C	-	MASA 31-220E	-	-	-	-	WT	-	-	-	82	-	-
1981-600	2444820-50	1981 Aug 9	Nike Orion	-	MASA 31-141U	PIRAT	-	-	-	ESR	MRL	-	-	270	-	-
1981-601	2444820-50	1981 Aug 9	Black Brant 8C	-	MASA 31-141U	PIRAT	-	-	-	ESR	MRL	-	-	270	-	-
1981-602	2444891-74	1981 Oct 14 0547	Nike Orion	-	MASA 31-141U	UTUC TR	-	-	-	WT	-	-	-	197	-	-
1981-603	2444893-29	1981 Oct 16	Nike Tomahawk	-	MASA 18-10270U	UTUC TR	-	-								

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Mission	FlightCode	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee_Km	Range_Km	Dest
1982-S105	2445074-81	1982 Apr 15 0720	Nike Tomahawk	-	MASA 18-10286E	-	-	-	-	PF	-	-	-	2707	-	-
1982-S108	2445075-81	1982 Apr 16 0732	Nike Tomahawk	-	MASA 18-10296E	-	-	-	-	PF	-	-	-	2707	-	-
1982-S106	2445076-76	1982 Apr 17 0615	Black Brant 8C	-	MASA 27-596F	-	-	-	-	NS	-	-	-	279	-	-
1982-S130	2445142-50	1982 Jun 22	Black Brant 8C	-	MASA 27-68AH	-	-	-	-	NS	-	-	-	245	-	-
1982-M05	2445144-15	1982 Jun 23 1540	Nike Orion	-	MASA 31-306E	-	-	-	-	WI	-	-	-	86	-	-
1982-M06	2445157-88	1982 Jul 7 0901	Nike Orion	-	MASA 31-310E	-	-	-	-	WI	-	-	-	80	-	-
1982-S136	2445164-19	1982 Jul 13 1630	Black Brant 8C	-	MASA 27-54CS	-	-	-	-	NS	-	-	-	302	-	-
1982-S137	2445170-50	1982 Jul 15	Nike Orion	-	MASA 31-150E	-	-	-	-	WI	-	-	-	1407	-	-
1982-S140	2445175-50	1982 Jul 20	Black Brant 8C	-	MASA 27-53US	-	-	-	-	NS	-	-	-	264	-	-
1982-S145	2445185-46	1982 Aug 3 2302:00	Nike Orion	-	SEC S37 CNMP-N	-	-	-	-	ESR	-	-	-	114	-	-
1982-S144	2445185-47	1982 Aug 3 2319:10	Nike Orion	-	DIR K-10-115	-	-	-	-	ESR	-	-	-	119	-	-
1982-S146	2445185-48	1982 Aug 3 2332:00	Nike Orion	-	SEC S37 CNMP-P	-	-	-	-	ESR	-	-	-	134	-	-
1982-S147	2445185-49	1982 Aug 3 2348:30	Nike Orion	-	SEC S37 CNMP-P	-	-	-	-	ESR	-	-	-	153	-	-
1982-S148	2445185-51	1982 Aug 4 0016:00	Nike Orion	-	SEC S37 SOAP/1	-	-	-	-	ESR	-	-	-	163	-	-
1982-S150	2445191-12	1982 Aug 9 1500	Nike Orion	-	MASA 31-340U	-	-	-	-	NS	-	-	-	323	-	-
1982-S151	2445192-22	1982 Aug 10 1716	Black Brant 8C	-	MASA 27-760U	-	-	-	-	ESR	-	-	-	135	-	-
1982-S152	2445193-52	1982 Aug 12 0300:15	Nike Orion	-	SEC S37 SOAP/2	-	-	-	-	ESR	-	-	-	321	-	-
1982-S159	2445221-31	1982 Sep 8 2142	Black Brant 8B	-	GL A19-124-1	-	-	-	-	CLB1	-	-	-	353	-	-
1982-S164	2445226-38	1982 Sep 13 2105	Black Brant 8B	-	GL A19-124-2	-	-	-	-	CLB1	-	-	-	296	-	-
1982-S172	2445246-13	1982 Oct 5 1510:24	Nike Tomahawk	-	Ferdinand 61	-	-	-	-	AND	-	-	-	297	-	-
1982-S180	2445265-76	1982 Oct 23 0617:08	Nike Tomahawk	-	Ferdinand 60	-	-	-	-	AND	-	-	-	262	-	-
1982-S181	2445265-83	1982 Oct 23 0800	Black Brant 8C	-	MASA 27-480U	-	-	-	-	NS	-	-	-	3007	-	-
1982-S190	2445288-85	1982 Nov 15 0800	Aerobee 350	-	MASA 17-190U	-	-	-	-	NS	-	-	-	107	-	-
1982-S191	2445290-27	1982 Nov 16 1530	Black Brant 8C	-	MASA 27-730U	-	-	-	-	NS	-	-	-	295	-	-
1982-A34	2445305-15	1982 Dec 1 1530:24	Nike Tomahawk	-	Ferdinand 59	-	-	-	-	AND	-	-	-	296	-	-
1982-S195	2445316-10	1982 Dec 14 1422:09	Nike Tomahawk	-	MASA 31-280E	-	-	-	-	CHI	-	-	-	206	-	-
1982-S199	2445335-19	1983 Feb 27 1633	Nike Orion	-	MASA 31-266E	-	-	-	-	CHI	-	-	-	1087	-	-
1983-S88	2445402-19	1983 Mar 6 1635	Nike Orion	-	MASA 31-270E	-	-	-	-	CHI	-	-	-	1087	-	-
1983-S89	2445402-63	1983 Mar 9 0306	Nike Orion	-	CONDUR GSFC-F50	-	-	-	-	PLDB	-	-	-	1407	-	-
1983-S70	2445402-64	1983 Mar 9 0327	Nike Orion	-	CONDUR GSFC E	-	-	-	-	PLDB	-	-	-	1407	-	-
1983-S71	2445402-87	1983 Mar 9 0657	Nike Orion	-	MASA 31-320E	-	-	-	-	CHI	-	-	-	205	-	-
1983-S74	2445406-21	1983 Mar 12 1709	Nike Orion	-	MASA 31-290E	-	-	-	-	CHI	-	-	-	204	-	-
1983-S80	2445444-33	1983 Apr 19 2000	Aerobee 170	-	GL 404-302	-	-	-	-	NS	-	-	-	350	-	-
1983-S86	2445466-74	1983 May 12 0946:56	Black Brant 8B	-	MAF-VIIIB-8	-	-	-	-	FC	-	-	-	246	-	-
1983-S100	2445466-79	1983 May 14 0655	Black Brant 8C	-	MASA 27-670H	-	-	-	-	NS	-	-	-	134	-	-
1983-S114	2445501-78	1983 Jun 16 0651	Nike Hydac	-	GL A11-074	-	-	-	-	FF	-	-	-	212	-	-
1983-S116	2445502-86	1983 Jun 17 0900	Black Brant 8C	-	MASA 27-72HP	-	-	-	-	NS	-	-	-	289	-	-
1983-S123	2445514-69	1983 Jun 29 0435	Black Brant 8C	-	MASA 27-27UH	-	-	-	-	NS	-	-	-	318	-	-
1983-S130	2445541-05	1983 Jul 26 1515	Black Brant 8C	-	MASA 27-81US	-	-	-	-	NS	-	-	-	239	-	-
1983-S145	2445594-72	1983 Aug 6 0600	Black Brant 8C	-	MASA 27-610E	-	-	-	-	NS	-	-	-	314	-	-
1983-S152	2445653-22	1983 Aug 16 1721	Nike Orion	-	MASA 31-350U	-	-	-	-	NS	-	-	-	148?	-	-
1983-S161	2445656-12	1983 Aug 30 1500	Nike Orion	-	MASA 31-350U	-	-	-	-	NS	-	-	-	306	-	-
1983-S186	2445698-20	1983 Sep 20 0651	Black Brant 8C	-	MASA 31-56GS	-	-	-	-	NS	-	-	-	308	-	-
1983-S188	2445694-84	1983 Oct 7 0805	Black Brant 8B	-	MASA 27-680U	-	-	-	-	NS	-	-	-	311	-	-
1983-S186	2445694-84	1983 Oct 7 0805	Black Brant 8B	-	MASA 27-680U	-	-	-	-	NS	-	-	-	311	-	-
1983-S186	2445694-84	1983 Oct 7 0805	Black Brant 8B	-	MASA 27-680U	-	-	-	-	NS	-	-	-	311	-	-
1983-S200	2445672-72	1983 Nov 9 0513	Nike Orion	-	CL 4081-709-2	-	-	-	-	MT	-	-	-	140?	-	-
1983-S202	2445665-95	1983 Nov 9 1011	Nike Orion	-	MASA 31-370E	-	-	-	-	MT	-	-	-	140?	-	-
1983-S203	2445667-95	1983 Nov 9 1011	Nike Orion	-	MASA 31-370E	-	-	-	-	MT	-	-	-	140?	-	-
1983-S204	2445667-95	1983 Nov 9 1011	Nike Orion	-	MASA 31-370E	-	-	-	-	MT	-	-	-	140?	-	-
1983-S209	2445676-25	1983 Dec 7 1832:00	Black Brant 8C	-	MASA 27-77UU	-	-	-	-	NS	-	-	-	357	-	-
1983-M03	2445676-25	1983 Dec 7 1832:00	Black Brant 8C	-	MASA 27-77UU	-	-	-	-	NS	-	-	-	357	-	-
1984-S02	2445708-41	1984 Jan 6 2155	Nike Orion	-	DIR A-100-121	-	-	-	-	AND	-	-	-	127	-	-
1984-S04	2445713-31	1984 Jan 13 2000	Nike Orion	-	DIR A-100-122	-	-	-	-	AND	-	-	-	122	-	-
1984-S07	2445726-19	1984 Jan 26 1839	Nike Orion	-	DIR A-100-123	-	-	-	-	AND	-	-	-	118	-	-
1984-S08	2445731-27	1984 Jan 31 1831	Nike Orion	-	DIR A-100-124	-	-	-	-	AND	-	-	-	115	-	-
1984-S01	2445741-20	1984 Jan 31 1853	Nike Orion	-	DIR A-100-125	-	-	-	-	AND	-	-	-	113	-	-
1984-S06	2445740-61	1984 Jan 31 1915:00	Nike Orion	-	MADAME 1	-	-	-	-	AND	-	-	-	149	-	-
1984-S07	2445740-62	1984 Feb 10 0340	Nike Orion	-	SEC S39/1	-	-	-	-	ESR	-	-	-	117	-	-
1984-S08	2445740-63	1984 Feb 10 0300:00	Nike Orion	-	DIR A-100-126	-	-	-	-	AND	-	-	-	148	-	-
1984-S09	2445746-56	1984 Feb 16 0120	Nike Orion	-	SEC S39/2	-	-	-	-	ESR	-	-	-	115	-	-
1984-S60	2445748-59	1984 Feb 16 0022	Nike Orion	-	MADAME 2	-	-	-	-	AND	-	-	-	117	-	-
1984-S61	2445749-19	1984 Feb 18 1629:30	Nike Orion	-	DIR A-100-128	-	-	-	-	AND	-	-	-	113	-	-
1984-S62	2445764-01	1984 Feb 23 1210	Nike Orion	-	MASA 31-440U	-	-	-	-	AND	-	-	-	99	-	-
1984-M02	2445768-17	1984 Feb 27 1600:01	Nike Orion	-	MASA 31-380E	-	-	-	-	FC	-	-	-	140?	-	-
1984-S65	2445768-66	1984 Feb 28 0353:44	Black Brant 8C	-	CSFC 8	-	-	-	-	FC	-	-	-	73	-	-
1984-S68	2445768-63	1984 Mar 3 0306:24	Black Brant 8C	-	MADAME 3	-	-	-	-	FC	-	-	-	204	-	-
1984-S66	2445829-77	1984 Mar 9 0630	Aerobee 350	-	ADD-VIIIC-9	-	-	-	-	FC	-	-	-	206	-	-
1984-S67	2445830-87	1984 May 10 0857	Nike Orion	-	ARIES B	-	-	-	-	FC	-	-	-	191	-	-
1984-S95	2445875-76	1984 Jun 19 1305	Black Brant 8C	-	MASA 31-410E	-	-	-	-	MT	-	-	-	89	-	-
1984-S96	2445875-76	1984 Jun 19 1305	Black Brant 8C	-	MASA 31-410E	-	-	-	-	MT	-	-	-	316	-	-
1984-S108	2445935-88	1984 Jun 24 0615	Black Brant 8B	-	MASA 27-89US	-	-	-	-	NS	-	-	-	248	-	-
1984-S115	2445962-24	1984 Aug 23 0911	Nike Orion	-	MASA 31-420E	-	-	-	-	NS	-	-	-	1407	-	-
1984-S117	2445962-66	1984 Sep 18 1745	Nike Orion	-	MASA 31-460U	-	-	-	-	NS	-	-	-	1407	-	-
1984-S122	2445979-79	1984 Oct 6 0700	Black Brant 8B	-	MASA 27-91U	-	-	-	-	NS	-	-	-	308	-	-
1984-S133	2446045-31	1984 Dec 10 1920	Black Brant 8C	-	MASA 27-710U	-	-	-	-	NS	-	-	-	273	-	-
1985-M01	2446140-23	1985 Mar 15 1737:59	Nike Orion	-	TMAPS 1	-	-	-	-	NS	-	-	-	312	-	-
1985-S61	2446145-45	1985 Mar 20 2244	Nike Tomahawk	-	GSFC Solar UVI 1	-	-	-	-	FC	-	-	-	75	-	-
1985-S62	2446147-23	1985 Mar 22 1733	Nike Orion	-	MASA 31-500U	-	-	-	-	FC	-	-	-	270?	-	-
1985-S63	2446151-75	1985 Mar 27 1733	Nike Orion	-	COPE	-	-	-	-	FC	-	-	-	91	-	-
1985-S64	2446154-21	1985 Mar 27 0607:11	Black Brant 8C	-	MASA 31-480E	-	-	-	-	FC	-	-	-	230	-	-
1985-S67	2446157-21	1985 Apr 1 1457	Nike Orion	-	MASA 27-98U	-	-	-	-	PP	-	-	-	1407	-	-
1985-S70	2446175-83	1985 Apr 20 0750	Black Brant 8C	-	MASA 31-470E	-	-	-	-	PP	-	-	-	1407	-	-
1985-S86	2446230-76	1985 Jun 14 0620	Black Brant 8C	-	MASA 27-820U	-	-	-	-	NS	-	-	-	244	-	-
1985-S96	2446241-24	1985 Jun 24 1746	Nike Orion	-	GL A19-260	-	-	-	-	MT	-	-	-	140?	-	-

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Mission	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee_Km	Range_Km	Dest
1985-5897	2446234-24	1985 Jun 26 1746	Nike Orion		MASA 31-540E	UJOC Ionos		WI				1407		
1985-5898	2446315-12	1985 Sep 6 1500	Nike Orion		MASA 31-550E	CMAS 11		WS				1407		
1985-5899	2446315-10	1985 Sep 10 0003:07	Nike Orion		MASA 31-510E			WS				1407		
1985-5900	2446321-12	1985 Sep 12 1450	Nike Orion		MASA 31-5600	CMAS 12		WS				290		
1985-5901	2446364-22	1985 Oct 26 1720	Black Brant 8C		XSST/TRC 4			WS				228		
1985-5902	2446462-74	1986 Feb 1 0540	Black Brant 8C		MASA 27-1030H	UKT 2		WS				319		
1985-5903	2446497-26	1986 Mar 7 1812:39	Black Brant 8C		MASA 27-1040H	GSFC Solar UVI 2		WS				1407		
1985-5904	2446539-15	1986 Apr 18 1535	Nike Orion		MASA 31-5900	CMAS 13		WS				304		
1985-5905	2446542-80	1986 Apr 22 0711	Nike Orion		MASA 27-0860G	EDV Spectrometer		WS				1407		
1985-5906	2446546-06	1986 Apr 26 1330	Nike Orion		MASA 31-5800	CMAS 14		WS				101		
1985-5907	2446538-44	1986 Jul 26 2303	Nike Orion		MASA 31-570E	MED		ESR				99		
1985-5908	2446538-46	1986 Jul 26 2344:40	Nike Orion		MASA 31-600E	MED		ESR				1007		
1985-5909	2446571-22	1986 Oct 15 1710	Nike Orion		MASA 31-610E	MED		ESR				304		
1985-5910	2446719-22	1986 Oct 15 2200	Black Brant 8C		MASA 27-756S	SERTS-2		WS				270		
1985-5911	2446726-32	1986 Oct 22 2200	Black Brant 8C		MASA 27-990S	COIS OVS		SSG				354		
1985-5912	2446875-81	1987 Mar 21 0656	Nike Tomahawk		GL A19-427	COPE II/POPULAR ARCS		SSG				270		
1985-5913	2446875-81	1987 Mar 21 0721	Nike Tomahawk		MASA 18-2200E	UJOC Thrb		SSG				177		
1985-5914	2447004-23	1987 Jul 27 1727:13	Nike Orion		MASA 31-620E	UJOC Thrb		WS				3407		
1985-5915	2447015-13	1987 Aug 7 1502:09	Black Brant 8C		MASA 27-1070S	ERIC 1		WS				268		
1985-5916	2447022-12	1987 Aug 14 1629	Black Brant 8C		GL A12-029	CULDR		WS				86		
1985-5917	2447067-92	1987 Sep 29 1000	Black Brant 8B		MASA 27-1060G	UCB EUV Tel		WS				3407		
1985-5918	2447063-96	1987 Oct 15 1052:00	Nike Orion		DLR A-10-148	MAC/E-T1 Bugatti IV		AND				127		
1985-5919	2447063-96	1987 Oct 15 1052:40	Nike Orion		MASA 31-630E	MAC/Epsilon MERS		AND				181		
1985-5920	2447090-40	1987 Oct 21 2133:20	Nike Orion		DLR A-10-149 F-75	MAC/E-T2 IDMS II		AND				126		
1985-5921	2447090-40	1987 Oct 21 2133:20	Nike Orion		DLR A-10-150 F-77	MAC/E-T3 Bugatti IV		AND				122		
1985-5922	2447090-40	1987 Oct 21 2133:40	Nike Orion		MASA 31-660E	MAC/Epsilon EXERT		AND				122		
1985-5923	2447090-40	1987 Oct 21 2134:20	Nike Orion		MASA 31-640E	MAC/Epsilon MERS		AND				179		
1985-5924	2447092-25	1987 Oct 23 1605:00	Black Brant 8C		MASA 27-320S	MSSTA 0		WS				3407		
1985-5925	2447096-51	1987 Oct 28 0221:00	Nike Orion		MASA 31-670E	MAC/Epsilon EXERT		AND				119		
1985-5926	2447111-51	1987 Nov 12 0221:00	Nike Orion		DLR A-10-151	MAC/E-T4 Ferdinand74		AND				126		
1985-5927	2447111-51	1987 Nov 12 0221:00	Nike Orion		DLR A-10-152	MAC/E-T5 F76/Potal11		AND				124		
1985-5928	2447111-52	1987 Nov 12 0222:00	Nike Orion		MASA 31-680E	MAC/Epsilon MERS		AND				181		
1985-5929	2447285-67	1988 May 2 0400	Black Brant 8B		DLR K-nub5-165	TEXUS 17		ESR				285		
1985-5930	2447285-67	1988 May 3 1500	Nike Orion		MASA 31-6900	CMAS 15		WS				1407		
1985-5931	2447287-69	1988 May 6 0430	Black Brant 8B		DLR K-nub5-156	TEXUS 16		ESR				285		
1985-5932	2447287-10	1988 May 10 1630	Nike Orion		MASA 31-6600	CMAS 16		WS				1407		
1985-5933	2447369-74	1988 Jul 27 0947:43	Black Brant 8C		MASA 27-1120E	TR 2		WS				3407		
1985-5934	2447419-94	1988 Sep 15 1040	Black Brant 8C		MASA 27-1100L			WS				3407		
1985-5935	2447502-69	1988 Dec 6 0440	Black Brant 8C		MASA 31-7100H	UIT 3		WS				3407		
1985-5936	2447604-17	1989 Mar 18 1600	Nike Orion		MASA 31-7300	CMAS 17		FC				1407		
1985-5937	2447706-17	1989 Mar 22 1601:31	Nike Orion		MASA 31-7400	CMAS 18		FS				3407		
1985-5938	2447731-86	1989 Jul 24 0924:26	Black Brant 8C		MASA 27-1200E			FS				3407		
1985-5939	2447781-88	1989 Aug 13 0900	Black Brant 8C		SUD Black Star 1	SP-4 DRG-0401	CHEER					3407		
1985-5940	2447781-88	1989 Aug 13 0900	Black Brant 8C		SUD Black Star 2	SP-4 DRG-0402	CHEER					3407		
1985-5941	2447781-88	1989 Aug 13 0900	Black Brant 8C		FLUG 5			FS				3407		
1985-5942	2447781-88	1989 Aug 13 0900	Black Brant 8C		Ferdinand 81			AND				950		
1985-5943	2447781-88	1989 Aug 13 0900	Black Brant 8C		Ferdinand 82			AND				132		
1985-5944	2447781-88	1989 Aug 13 0900	Black Brant 8C		Ferdinand 83			AND				132		
1985-5945	2447781-88	1989 Aug 13 0900	Black Brant 8C		Ferdinand 84			AND				132		
1985-5946	2447781-88	1989 Aug 13 0900	Black Brant 8C		Ferdinand 85			AND				132		
1985-5947	2447781-88	1989 Aug 13 0900	Black Brant 8C		Ferdinand 86			AND				132		
1985-5948	2447781-88	1989 Aug 13 0900	Black Brant 8C		Ferdinand 87			AND				132		
1985-5949	2447781-88	1989 Aug 13 0900	Black Brant 8C		Ferdinand 88			AND				132		
1985-5950	2447781-88	1989 Aug 13 0900	Black Brant 8C		Ferdinand 89			AND				132		
1985-5951	2447781-88	1989 Aug 13 0900	Black Brant 8C		Ferdinand 90			AND				132		
1985-5952	2447781-88	1989 Aug 13 0900	Black Brant 8C		Ferdinand 91			AND				132		
1985-5953	2447781-88	1989 Aug 13 0900	Black Brant 8C		Ferdinand 92			AND				132		
1985-5954	2447781-88	1989 Aug 13 0900	Black Brant 8C		Ferdinand 93			AND				132		
1985-5955	2447781-88	1989 Aug 13 0900	Black Brant 8C		Ferdinand 94			AND				132		
1985-5956	2447781-88	1989 Aug 13 0900	Black Brant 8C		Ferdinand 95			AND				132		
1985-5957	2447781-88	1989 Aug 13 0900	Black Brant 8C		Ferdinand 96			AND				132		
1985-5958	2447781-88	1989 Aug 13 0900	Black Brant 8C		Ferdinand 97			AND				132		
1985-5959	2447781-88	1989 Aug 13 0900	Black Brant 8C		Ferdinand 98			AND				132		
1985-5960	2447781-88	1989 Aug 13 0900	Black Brant 8C		Ferdinand 99			AND				132		
1985-5961	2447781-88	1989 Aug 13 0900	Black Brant 8C		Ferdinand 100			AND				132		
1985-5962	2447781-88	1989 Aug 13 0900	Black Brant 8C		Ferdinand 101			AND				132		
1985-5963	2447781-88	1989 Aug 13 0900	Black Brant 8C		Ferdinand 102			AND				132		
1985-5964	2447781-88	1989 Aug 13 0900	Black Brant 8C		Ferdinand 103			AND				132		
1985-5965	2447781-88	1989 Aug 13 0900	Black Brant 8C		Ferdinand 104			AND				132		
1985-5966	2447781-88	1989 Aug 13 0900	Black Brant 8C		Ferdinand 105			AND				132		
1985-5967	2447781-88	1989 Aug 13 0900	Black Brant 8C		Ferdinand 106			AND				132		
1985-5968	2447781-88	1989 Aug 13 0900	Black Brant 8C		Ferdinand 107			AND				132		
1985-5969	2447781-88	1989 Aug 13 0900	Black Brant 8C		Ferdinand 108			AND				132		
1985-5970	2447781-88	1989 Aug 13 0900	Black Brant 8C		Ferdinand 109			AND				132		
1985-5971	2447781-88	1989 Aug 13 0900	Black Brant 8C		Ferdinand 110			AND				132		
1985-5972	2447781-88	1989 Aug 13 0900	Black Brant 8C		Ferdinand 111			AND				132		
1985-5973	2447781-88	1989 Aug 13 0900	Black Brant 8C		Ferdinand 112			AND				132		
1985-5974	2447781-88	1989 Aug 13 0900	Black Brant 8C		Ferdinand 113			AND				132		
1985-5975	2447781-88	1989 Aug 13 0900	Black Brant 8C		Ferdinand 114			AND				132		
1985-5976	2447781-88	1989 Aug 13 0900	Black Brant 8C		Ferdinand 115			AND				132		
1985-5977	2447781-88	1989 Aug 13 0900	Black Brant 8C		Ferdinand 116			AND				132		
1985-5978	2447781-88	1989 Aug 13 0900	Black Brant 8C		Ferdinand 117			AND				132		
1985-5979	2447781-88	1989 Aug 13 0900	Black Brant 8C		Ferdinand 118			AND				132		
1985-5980	2447781-88	1989 Aug 13 0900	Black Brant 8C		Ferdinand 119			AND				132		
1985-5981	2447781-88	1989 Aug 13 0900	Black Brant 8C		Ferdinand 120			AND				132		
1985-5982	2447781-88	1989 Aug 13 0900	Black Brant 8C		Ferdinand 121			AND				132		
1985-5983	2447781-88	1989 Aug 13 0900	Black Brant 8C		Ferdinand 122			AND				132		
1985-5984	2447781-88	1989 Aug 13 0900	Black Brant 8C		Ferdinand 123			AND				132		
1985-5985	2447781-88	1989 Aug 13 0900	Black Brant 8C		Ferdinand 124			AND				132		
1985-5986	2447781-88	1989 Aug 13 0900	Black Brant 8C		Ferdinand 125			AND				132		
1985-5987	2447781-88	1989 Aug 13 0900	Black Brant 8C		Ferdinand 126			AND				132		
1985-5988	2447781-88	1989 Aug 13 0900	Black Brant 8C		Ferdinand 127			AND				132		
1985-5989	2447781-88	1989 Aug 13 0900	Black Brant 8C		Ferdinand 128			AND				132		
1985-5990	2447781-88	1989 Aug 13 0900	Black Brant 8C		Ferdinand 129			AND				132		
1985-5991	2447781-88	1989 Aug 13 0900	Black Brant 8C		Ferdinand 130			AND				132		
1985-5992	2447781-88	1989 Aug 13 0900	Black Brant 8C		Ferdinand 131			AND				132		
1985-5993	2447781-88	1989 Aug 13 0900	Black Brant 8C		Ferdinand 132			AND				132		
1985-5994	2447781-88	1989 Aug 13 0900	Black Brant 8C		Ferdinand 133			AND				132		
1985-5995	2447781-88	1989 Aug 13 0900	Black Brant 8C		Ferdinand 134			AND				132		



Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Mission	FlightCode	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee km	Range km	Dest
2011-S41	2455763.79	2011 Jul 21 0701:00	Mike Improved Orion	-	-	SSC PHOCUS	-	-	-	ESR	MRL?	-	-	107	-	-
2012-S70	2456266.97	2012 Nov 26 1120	Mike Improved Orion	-	-	DLR MAPHEUS-3	-	-	-	ESR	-	-	-	146	-	-





Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	OrbPay	Agency	Launch_Code	Group	Category	LTCite	Cite	Notes
1948-406	2432720.45	1948 Jun 17 2244	Nike-480	-	47-N	0.000	ORD/MELEC	AS	-	Test	wsm-history.org	-	-
1948-408	2432732.19	1948 Jun 29 1630	Nike-480	-	47-17	0.000	ORD/MELEC	AS	-	Test	wsm-history.org	-	-
1948-410	2432734.19	1948 Jul 1 1630	Nike-480	-	47-18	0.000	ORD/MELEC	AS	-	Test	wsm-history.org	-	-
1948-411	2432741.19	1948 Jul 8 1630	Nike-480	-	47-11	0.000	ORD/MELEC	AS	-	Test	wsm-history.org	-	-
1948-413	2432746.19	1948 Jul 13 1631	Nike-480	-	47-14	0.000	ORD/MELEC	AS	-	Test	wsm-history.org	-	-
1948-414	2432774.19	1948 Aug 10 1635	Nike-482	-	482-P	0.000	ORD/MELEC	AS	-	Test	wsm-history.org	-	-
1948-419	2432763.40	1948 Aug 19 2130	Nike-482	-	482-Q	0.000	ORD/MELEC	AS	-	Test	wsm-history.org	-	-
1948-422	2432764.20	1948 Aug 20 1648	Nike-482	-	482-R	0.000	ORD/MELEC	AS	-	Test	wsm-history.org	-	-
1948-424	2432622.47	1948 Sep 27 2315	Nike-482	-	482-S	0.000	ORD/MELEC	AS	-	Test	wsm-history.org	-	-
1948-465	2433304.50	1950 Jan 23	Nike-484	-	484-35	0.000	ORD/MELEC	AS	-	Test	file:///jxhist	-	-
1950-403	2433312.50	1950 Jan 31	Nike-484	-	484-38	0.000	ORD/MELEC	AS	-	Test	wsm-history.org	-	-
1950-404	2433314.50	1950 Feb 2	Nike-484	-	484-37	0.000	ORD/MELEC	AS	-	Test	wsm-history.org	-	-
1950-405	2433321.50	1950 Feb 9	Nike-484	-	484-39	0.000	ORD/MELEC	AS	-	Test	wsm-history.org	-	-
1950-406	2433326.50	1950 Feb 14	Nike-484	-	484-40	0.000	ORD/MELEC	AS	-	Test	wsm-history.org	-	-
1950-408	2433335.50	1950 Feb 23	Nike-484	-	484-41	0.000	ORD/MELEC	AS	-	Test	wsm-history.org	-	-
1950-409	2433342.50	1950 Feb 28	Nike-484	-	484-42	0.000	ORD/MELEC	AS	-	Test	wsm-history.org	-	-
1950-410	2433354.50	1950 Mar 14	Nike-484	-	484-43	0.000	ORD/MELEC	AS	-	Test	wsm-history.org	-	-
1950-412	2433361.50	1950 Mar 21	Nike-484	-	484-44	0.000	ORD/MELEC	AS	-	Test	wsm-history.org	-	-
1950-413	2433363.50	1950 Mar 23	Nike-484	-	484-45	0.000	ORD/MELEC	AS	-	Test	wsm-history.org	-	-
1950-419	2433365.50	1950 Mar 28	Nike-484	-	484-46	0.000	ORD/MELEC	AS	-	Test	wsm-history.org	-	-
1950-416	2433371.50	1950 Mar 5	Nike-484	-	484-47	0.000	ORD/MELEC	AS	-	Test	wsm-history.org	-	-
1950-417	2433375.50	1950 Apr 7	Nike-484	-	484-48	0.000	ORD/MELEC	AS	-	Test	file:///jxhist	-	-
1950-418	2433382.50	1950 Apr 11	Nike-484	-	484-46	0.000	ORD/MELEC	AS	-	Test	wsm-history.org	-	-
1950-419	2433385.50	1950 Apr 14	Nike-484	-	484-48	0.000	ORD/MELEC	AS	-	Test	wsm-history.org	-	-
1950-420	2433391.50	1950 Apr 20	Nike-484	-	484-49	0.000	ORD/MELEC	AS	-	Test	wsm-history.org	-	-
1950-442	2433571.50	1950 Oct 17	Nike X201 Ajax	-	490-57	0.000	ORD/MELEC	AS	-	Test	wsm-history.org	-	-
1950-443	2433575.50	1950 Oct 24	Nike X201 Ajax	-	490-59	0.000	ORD/MELEC	AS	-	Test	wsm-history.org	-	-
1950-449	2433581.50	1950 Oct 27	Nike X201 Ajax	-	490-60	0.000	ORD/MELEC	AS	-	Test	wsm-history.org	-	-
1950-450	2433582.50	1950 Nov 02	Nike X201 Ajax	-	490-61	0.000	ORD/MELEC	AS	-	Test	wsm-history.org	-	-
1950-450	2433582.50	1950 Nov 07	Nike X201 Ajax	-	490-58	0.000	ORD/MELEC	AS	-	Test	wsm-history.org	-	-
1950-454	2433601.50	1950 Nov 16	Nike X201 Ajax	-	490-57	0.000	ORD/MELEC	AS	-	Test	wsm-history.org	-	-
1950-455	2433605.50	1950 Nov 20	Nike X201 Ajax	-	490-62	0.000	ORD/MELEC	AS	-	Test	wsm-history.org	-	-
1950-458	2433615.50	1950 Nov 24	Nike X201 Ajax	-	490-69	0.000	ORD/MELEC	AS	-	Test	wsm-history.org	-	-
1950-460	2433622.50	1950 Dec 07	Nike X201 Ajax	-	490-63	0.000	ORD/MELEC	AS	-	Test	wsm-history.org	-	-
1950-461	2433626.50	1950 Dec 11	Nike X201 Ajax	-	490-64	0.000	ORD/MELEC	AS	-	Test	wsm-history.org	-	-
1951-411	2433746.50	1951 Apr 12	Nike X201 Ajax	-	490-65	0.000	ORD/MELEC	AS	-	Test	wsm-history.org	-	-
1951-419	2433776.50	1951 Apr 10	Nike X201 Ajax	-	490-66	0.000	ORD/MELEC	AS	-	Test	wsm-history.org	-	-
1951-427	2433804.50	1951 Jun 07	Nike X201 Ajax	-	490-70	0.000	ORD/MELEC	AS	-	Test	wsm-history.org	-	-
1951-430	2433812.50	1951 Jun 15	Nike X201 Ajax	-	490-70	0.000	ORD/MELEC	AS	-	Test	wsm-history.org	-	-
1951-435	2433825.50	1951 Jun 28	Nike X201 Ajax	-	490-71	0.000	ORD/MELEC	AS	-	Test	wsm-history.org	-	-
1951-441	2433831.50	1951 Jul 14	Nike X201 Ajax	-	490-72	0.000	ORD/MELEC	AS	-	Test	wsm-history.org	-	-
1951-471	2433951.50	1951 Oct 16	Nike X201 Ajax	-	4908	0.000	ORD/MELEC	AS	-	Test	wsm-history.org	-	-
1951-482	2433955.50	1951 Nov 15	Nike X201 Ajax	-	4908	0.000	ORD/MELEC	AS	-	Test	wsm-history.org	-	-
1951-484	2433956.50	1951 Nov 19	Nike X201 Ajax	-	4908	0.000	ORD/MELEC	AS	-	Test	wsm-history.org	-	-
1951-485	2433977.50	1951 Nov 27	Nike X201 Ajax	-	4908	0.000	ORD/MELEC	AS	-	Test	wsm-history.org	-	-
1951-489	2433984.50	1951 Dec 04	Nike X201 Ajax	-	4908	0.000	ORD/MELEC	AS	-	Test	wsm-history.org	-	-
1951-493	2433991.50	1951 Dec 11	Nike X201 Ajax	-	4908	0.000	ORD/MELEC	AS	-	Test	wsm-history.org	-	-
1951-494	2433991.50	1951 Dec 11	Nike X201 Ajax	-	4908	0.000	ORD/MELEC	AS	-	Test	wsm-history.org	-	-
1951-499	2433995.50	1951 Dec 18	Nike X201 Ajax	-	4908	0.000	ORD/MELEC	AS	-	Test	wsm-history.org	-	-
1952-409	2434035.50	1952 Jan 22	Nike X201 Ajax	-	4908	0.000	ORD/MELEC	AS	-	Test	wsm-history.org	-	-
1952-418	2434040.50	1952 Jan 29	Nike X201 Ajax	-	4908	0.000	ORD/MELEC	AS	-	Test	wsm-history.org	-	-
1952-422	2434040.50	1952 Jan 29	Nike X201 Ajax	-	4908	0.000	ORD/MELEC	AS	-	Test	wsm-history.org	-	-
1952-427	2434045.50	1952 Feb 07	Nike X201 Ajax	-	4908	0.000	ORD/MELEC	AS	-	Test	wsm-history.org	-	-
1952-434	2434048.50	1952 Feb 07	Nike X201 Ajax	-	4908	0.000	ORD/MELEC	AS	-	Test	wsm-history.org	-	-
1952-434	2434061.50	1952 Feb 19	Nike X201 Ajax	?	1249-100	0.000	ORD/MELEC	AS	-	Test	wsm-history.org	-	-
1952-434	2434067.50	1952 Feb 25	Nike X201 Ajax	?	4908	0.000	ORD/MELEC	AS	-	Test	wsm-history.org	-	-
1952-438	2434071.50	1952 Feb 28	Nike X201 Ajax	?	4908	0.000	ORD/MELEC	AS	-	Test	wsm-history.org	-	-
1952-439	2434075.50	1952 Feb 28	Nike X201 Ajax	?	4908	0.000	ORD/MELEC	AS	-	Test	wsm-history.org	-	-
1952-441	2434075.50	1952 Mar 05	Nike X201 Ajax	-	1249-98	0.000	ORD/MELEC	AS	-	Test	wsm-history.org	-	-
1952-445	2434085.50	1952 Mar 14	Nike X201 Ajax	-	1249-101	0.000	ORD/MELEC	AS	-	Test	wsm-history.org	-	-
1952-452	2434099.50	1952 Mar 28	Nike X201 Ajax	?	4908	0.000	ORD/MELEC	AS	-	Test	wsm-history.org	-	-
1952-453	2434099.50	1952 Mar 28	Nike X201 Ajax	?	4908	0.000	ORD/MELEC	AS	-	Test	wsm-history.org	-	-
1952-460	2434104.50	1952 Apr 02	Nike X201 Ajax	?	491	0.000	ORD/MELEC	AS	-	Test	wsm-history.org	-	-
1952-462	2434104.50	1952 Apr 02	Nike X201 Ajax	?	491	0.000	ORD/MELEC	AS	-	Test	wsm-history.org	-	-
1952-461	2434104.50	1952 Apr 02	Nike X201 Ajax	?	491	0.000	ORD/MELEC	AS	-	Test	wsm-history.org	-	-
1952-469	2434126.50	1952 Apr 24	Nike X201 Ajax	?	491	0.000	ORD/MELEC	AS	-	Test	wsm-history.org	-	-
1952-470	2434126.50	1952 Apr 24	Nike X201 Ajax	?	491	0.000	ORD/MELEC	AS	-	Test	wsm-history.org	-	-
1952-473	2434134.50	1952 May 02	Nike X201 Ajax	-	1249-102	0.000	ORD/MELEC	AS	-	Test	wsm-history.org	-	-
1952-480	2434148.50	1952 May 16	Nike X201 Ajax	-	1249-103	0.000	ORD/MELEC	AS	-	Test	wsm-history.org	-	-
1952-490	2434160.50	1952 May 28	Nike X201 Ajax	-	1249-104	0.000	ORD/MELEC	AS	-	Test	wsm-history.org	-	-
1952-494	2434175.50	1952 Jun 12	Nike X201 Ajax	-	1249-105	0.000	ORD/MELEC	AS	-	Test	wsm-history.org	-	-
1952-499	2434181.50	1952 Jun 25	Nike X201 Ajax	-	1249-106	0.000	ORD/MELEC	AS	-	Test	wsm-history.org	-	-
1952-4102	2434188.50	1952 Jun 18	Nike X201 Ajax	-	1249-107	0.000	ORD/MELEC	AS	-	Test	wsm-history.org	-	-
1952-4114	2434210.50	1952 Jul 17	Nike X201 Ajax	-	1249-111	0.000	ORD/MELEC	AS	-	Test	wsm-history.org	-	-
1952-4122	2434215.50	1952 Jul 22	Nike X201 Ajax	-	1249-111	0.000	ORD/MELEC	AS	-	Test	wsm-history.org	-	-
1952-4116	2434215.50	1952 Jul 22	Nike X201 Ajax	-	1249-111	0.000	ORD/MELEC	AS	-	Test	wsm-history.org	-	-
1952-4122	2434222.50	1952 Jul 29	Nike X201 Ajax	-	12498-1001	0.000	ORD/MELEC	AS	-	Test	wsm-history.org	-	-
1952-4123	2434222.50	1952 Jul 31	Nike X201 Ajax	-	12498-1002	0.000	ORD/MELEC	AS	-	Test	wsm-history.org	-	-
1952-4130	2434232.50	1952 Aug 08	Nike X201 Ajax	-	1249-109	0.000	ORD/MELEC	AS	-	Test	wsm-history.org	-	-
1952-4131	2434232.50	1952 Aug 08	Nike X201 Ajax	-	1249-112	0.000	ORD/MELEC	AS	-	Test	wsm-history.org	-	-
1952-4136	2434239.50	1952 Aug 15	Nike X201 Ajax	-	12498-1003	0.000	ORD/MELEC	AS	-	Test	wsm-history.org	-	-
1952-4136	2434239.50	1952 Aug 15	Nike X201 Ajax	-	1249-113	0.000	ORD/MELEC	AS	-	Test	wsm-history.org	-	-
1952-4137	2434243.50	1952 Aug 19	Nike X201 Ajax	-	12498-1004	0.000	ORD/MELEC	AS	-	Test	wsm-history.org	-	-
1952-4140	2434245.50	1952 Aug 21	Nike X201 Ajax	-	1249-115	0.000	ORD/MELEC	AS	-	Test	wsm-history.org	-	-
1952-4154	2434266.50	1952 Sep 11	Nike X201 Ajax	-	1249-110	0.000	ORD/MELEC	AS	-	Test	wsm-history.org	-	-
1952-4154	2434266.50	1952 Sep 11	Nike X201 Ajax	-	1249-114	0.000	ORD/MELEC	AS	-	Test	wsm-history.org	-	-



Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	OrbPay	Agency	Launch_Code	Group	Category	LTCite	Cite	Notes
1953-477	2434433-50	1953 Feb 25	Nike Ajax	-	1249A-195	0.000	ORD	AS	-	Test	wsmr-history.org	-	-
1953-478	2434433-50	1953 Feb 25	Nike Ajax	-	1042E	0.000	ARAA	AS	-	Test	wsmr-history.org	-	-
1953-479	2434433-50	1953 Feb 25	Nike Ajax	-	1038E	0.000	ARAA	AS	-	Test	wsmr-history.org	-	-
1953-481	2434434-50	1953 Feb 26	Nike Ajax	-	310P	0.000	ORD	AS	-	Test	wsmr-history.org	-	-
1953-482	2434434-50	1953 Feb 26	Nike Ajax	-	311P	0.000	ARAA	AS	-	Test	wsmr-history.org	-	-
1953-483	2434434-50	1953 Feb 26	Nike Ajax	-	1021E	0.000	ARAA	AS	-	Test	wsmr-history.org	-	-
1953-485	2434435-50	1953 Feb 27	Nike Ajax	-	1249A-165	0.000	ORD	AS	-	Test	wsmr-history.org	-	-
1953-486	2434435-50	1953 Feb 27	Nike Ajax	-	1249A-162	0.000	ORD	AS	-	Test	wsmr-history.org	-	-
1953-487	2434435-50	1953 Feb 27	Nike Ajax	-	1249A-186	0.000	ORD	AS	-	Test	wsmr-history.org	-	-
1953-490	2434439-50	1953 Mar 03	Nike Ajax	-	1013E	0.000	ARAA	AS	-	Test	wsmr-history.org	-	-
1953-491	2434439-50	1953 Mar 03	Nike Ajax	-	1249A-169	0.000	ORD	AS	-	Test	wsmr-history.org	-	-
1953-492	2434439-50	1953 Mar 05	Nike Ajax	-	1249A-168	0.000	ORD	AS	-	Test	wsmr-history.org	-	-
1953-496	2434441-50	1953 Mar 05	Nike Ajax	-	312P	0.000	ORD	AS	-	Test	wsmr-history.org	-	-
1953-497	2434441-50	1953 Mar 05	Nike Ajax	-	313P	0.000	ORD	AS	-	Test	wsmr-history.org	-	-
1953-498	2434441-50	1953 Mar 05	Nike Ajax	-	1249A-192	0.000	ORD	AS	-	Test	wsmr-history.org	-	-
1953-499	2434441-50	1953 Mar 05	Nike Ajax	-	1249A-175	0.000	ORD	AS	-	Test	wsmr-history.org	-	-
1953-500	2434441-50	1953 Mar 05	Nike Ajax	-	1065E	0.000	ARAA	AS	-	Test	wsmr-history.org	-	-
1953-509	2434442-50	1953 Mar 06	Nike Ajax	-	1052E	0.000	ORD	AS	-	Test	wsmr-history.org	-	-
1953-509	2434442-50	1953 Mar 06	Nike Ajax	-	1249A-188	0.000	ORD	AS	-	Test	wsmr-history.org	-	-
1953-5102	2434446-50	1953 Mar 10	Nike Ajax	-	1249A-189	0.000	ORD	AS	-	Test	wsmr-history.org	-	-
1953-5108	2434446-50	1953 Mar 12	Nike Ajax	-	314P	0.000	ORD	AS	-	Test	wsmr-history.org	-	-
1953-5109	2434446-50	1953 Mar 12	Nike Ajax	-	316P	0.000	ORD	AS	-	Test	wsmr-history.org	-	-
1953-5110	2434446-50	1953 Mar 12	Nike Ajax	-	1076E	0.000	ARAA	AS	-	Test	wsmr-history.org	-	-
1953-5111	2434446-50	1953 Mar 12	Nike Ajax	-	1249A-200	0.000	ORD	AS	-	Test	wsmr-history.org	-	-
1953-5112	2434446-50	1953 Mar 12	Nike Ajax	-	1249A-172	0.000	ORD	AS	-	Test	wsmr-history.org	-	-
1953-5113	2434446-50	1953 Mar 12	Nike Ajax	-	1249A-201	0.000	ORD	AS	-	Test	wsmr-history.org	-	-
1953-5123	2434463-50	1953 Mar 17	Nike Ajax	-	1249A-176	0.000	ORD	AS	-	Test	wsmr-history.org	-	-
1953-5120	2434463-50	1953 Mar 17	Nike Ajax	-	1034E	0.000	ARAA	AS	-	Test	wsmr-history.org	-	-
1953-5121	2434463-50	1953 Mar 17	Nike Ajax	-	1069E	0.000	ARAA	AS	-	Test	wsmr-history.org	-	-
1953-5122	2434463-50	1953 Mar 17	Nike Ajax	-	1078E	0.000	ARAA	AS	-	Test	wsmr-history.org	-	-
1953-5128	2434465-50	1953 Mar 19	Nike Ajax	-	317P	0.000	ORD	AS	-	Test	wsmr-history.org	-	-
1953-5132	2434465-50	1953 Mar 19	Nike Ajax	-	318P	0.000	ORD	AS	-	Test	wsmr-history.org	-	-
1953-5135	2434465-50	1953 Mar 19	Nike Ajax	-	319P	0.000	ORD	AS	-	Test	wsmr-history.org	-	-
1953-5136	2434465-50	1953 Mar 19	Nike Ajax	-	320P	0.000	ORD	AS	-	Test	wsmr-history.org	-	-
1953-5131	2434465-50	1953 Mar 19	Nike Ajax	-	321P	0.000	ORD	AS	-	Test	wsmr-history.org	-	-
1953-5130	2434465-50	1953 Mar 19	Nike Ajax	-	322P	0.000	ORD	AS	-	Test	wsmr-history.org	-	-
1953-5129	2434465-50	1953 Mar 19	Nike Ajax	-	323E	0.000	ORD	AS	-	Test	wsmr-history.org	-	-
1953-5124	2434466-50	1953 Mar 24	Nike Ajax	-	1088E	0.000	ARAA	AS	-	Test	wsmr-history.org	-	-
1953-5144	2434462-50	1953 Mar 26	Nike Ajax	-	1046E	0.000	ARAA	AS	-	Test	wsmr-history.org	-	-
1953-5146	2434462-50	1953 Mar 26	Nike Ajax	-	1079E	0.000	ARAA	AS	-	Test	wsmr-history.org	-	-
1953-5149	2434462-50	1953 Mar 26	Nike Ajax	-	324P	0.000	ORD	AS	-	Test	wsmr-history.org	-	-
1953-5145	2434462-50	1953 Mar 26	Nike Ajax	-	325P	0.000	ORD	AS	-	Test	wsmr-history.org	-	-
1953-5148	2434462-50	1953 Mar 26	Nike Ajax	-	326P	0.000	ORD	AS	-	Test	wsmr-history.org	-	-
1953-5146	2434462-50	1953 Mar 26	Nike Ajax	-	1249A-194	0.000	ORD	AS	-	Test	wsmr-history.org	-	-
1953-5154	2434467-50	1953 Mar 31	Nike Ajax	-	1249B-1104	0.000	ORD	AS	-	Test	wsmr-history.org	-	-
1953-5152	2434467-50	1953 Mar 31	Nike Ajax	-	1249B-1102	0.000	ORD	AS	-	Test	wsmr-history.org	-	-
1953-5158	2434468-50	1953 Apr 01	Nike Ajax	-	1099E	0.000	ARAA	AS	-	Test	wsmr-history.org	-	-
1953-5157	2434468-50	1953 Apr 02	Nike Ajax	-	327P	0.000	ORD	AS	-	Test	wsmr-history.org	-	-
1953-5160	2434468-50	1953 Apr 02	Nike Ajax	-	1249B-1181	0.000	ORD	AS	-	Test	wsmr-history.org	-	-
1953-5159	2434468-50	1953 Apr 02	Nike Ajax	-	1249B-1183	0.000	ORD	AS	-	Test	wsmr-history.org	-	-
1953-5150	2434468-50	1953 Apr 02	Nike Ajax	-	1249A-137	0.000	ORD	AS	-	Test	wsmr-history.org	-	-
1953-5138	2434470-50	1953 Apr 2	Nike Ajax	-	1249A-136	0.000	ORD	AS	-	Test	wsmr-history.org	-	-
1953-5164	2434476-50	1953 Apr 09	Nike Ajax	-	328P	0.000	ORD	AS	-	Test	wsmr-history.org	-	-
1953-5163	2434476-50	1953 Apr 09	Nike Ajax	-	329P	0.000	ORD	AS	-	Test	wsmr-history.org	-	-
1953-5166	2434481-50	1953 Apr 14	Nike Ajax	-	1249A-198	0.000	ORD	AS	-	Test	wsmr-history.org	-	-
1953-5165	2434481-50	1953 Apr 14	Nike Ajax	-	1249A-199	0.000	ORD	AS	-	Test	wsmr-history.org	-	-
1953-5167	2434481-50	1953 Apr 14	Nike Ajax	-	1082E	0.000	ARAA	AS	-	Test	wsmr-history.org	-	-
1953-5168	2434481-50	1953 Apr 14	Nike Ajax	-	1083E	0.000	ARAA	AS	-	Test	wsmr-history.org	-	-
1953-5170	2434483-50	1953 Apr 16	Nike Ajax	-	1249A-203	0.000	ORD	AS	-	Test	wsmr-history.org	-	-
1953-5172	2434483-50	1953 Apr 16	Nike Ajax	-	1249A-202	0.000	ORD	AS	-	Test	wsmr-history.org	-	-
1953-5176	2434483-50	1953 Apr 16	Nike Ajax	-	1084E	0.000	ARAA	AS	-	Test	wsmr-history.org	-	-
1953-5175	2434483-50	1953 Apr 16	Nike Ajax	-	330P	0.000	ORD	AS	-	Test	wsmr-history.org	-	-
1953-5174	2434483-50	1953 Apr 16	Nike Ajax	-	331P	0.000	ORD	AS	-	Test	wsmr-history.org	-	-
1953-5173	2434483-50	1953 Apr 16	Nike Ajax	-	332P	0.000	ORD	AS	-	Test	wsmr-history.org	-	-
1953-5181	2434487-50	1953 Apr 20	Nike Ajax	-	333P	0.000	ORD	AS	-	Test	wsmr-history.org	-	-
1953-5179	2434487-50	1953 Apr 20	Nike Ajax	-	335P	0.000	ORD	AS	-	Test	wsmr-history.org	-	-
1953-5178	2434487-50	1953 Apr 20	Nike Ajax	-	336P	0.000	ORD	AS	-	Test	wsmr-history.org	-	-
1953-5180	2434487-50	1953 Apr 20	Nike Ajax	-	337P	0.000	ORD	AS	-	Test	wsmr-history.org	-	-
1953-5195	2434497-50	1953 Apr 30	Nike Ajax	-	338P	0.000	ORD	AS	-	Test	wsmr-history.org	-	-
1953-5194	2434497-50	1953 Apr 30	Nike Ajax	-	339P	0.000	ORD	AS	-	Test	wsmr-history.org	-	-
1953-5193	2434497-50	1953 Apr 30	Nike Ajax	-	340P	0.000	ORD	AS	-	Test	wsmr-history.org	-	-
1953-5197	2434497-50	1953 Apr 30	Nike Ajax	-	1249A-204	0.000	ORD	AS	-	Test	wsmr-history.org	-	-
1953-5196	2434497-50	1953 Apr 30	Nike Ajax	-	1249A-205	0.000	ORD	AS	-	Test	wsmr-history.org	-	-
1953-5203	2434502-50	1953 May 05	Nike Ajax	-	1092E	0.000	ARAA	AS	-	Test	wsmr-history.org	-	-
1953-5209	2434502-50	1953 May 05	Nike Ajax	-	1249B-1178	0.000	ORD	AS	-	Test	wsmr-history.org	-	-
1953-5205	2434504-50	1953 May 07	Nike Ajax	-	341P	0.000	ORD	AS	-	Test	wsmr-history.org	-	-
1953-5206	2434504-50	1953 May 07	Nike Ajax	-	342P	0.000	ORD	AS	-	Test	wsmr-history.org	-	-
1953-5207	2434504-50	1953 May 07	Nike Ajax	-	343P	0.000	ORD	AS	-	Test	wsmr-history.org	-	-
1953-5208	2434504-50	1953 May 07	Nike Ajax	-	344P	0.000	ORD	AS	-	Test	wsmr-history.org	-	-
1953-5213	2434509-50	1953 May 12	Nike Ajax	-	1103E	0.000	ARAA	AS	-	Test	wsmr-history.org	-	-
1953-5214	2434509-50	1953 May 12	Nike Ajax	-	346P	0.000	ORD	AS	-	Test	wsmr-history.org	-	-
1953-5215	2434509-50	1953 May 12	Nike Ajax	-	347P	0.000	ORD	AS	-	Test	wsmr-history.org	-	-



Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	OrbPay	Agency	Launch_Code	Group	Category	LTCite	Cite	Notes
1953-4438	2434693.50	1953 Nov 12	Nike Ajax	-	1136A	0.000	ARAA	AS	-	Test	wsmr-history.org	-	-
1953-4440	2434694.50	1953 Nov 13	Nike Ajax	-	1210A	0.000	ARAA	AS	-	Test	wsmr-history.org	-	-
1953-4441	2434694.50	1953 Nov 13	Nike Ajax	-	1225A	0.000	ARAA	AS	-	Test	wsmr-history.org	-	-
1953-4450	2434700.50	1953 Nov 19	Nike Ajax	-	1282E	0.000	ARAA	AS	-	Test	wsmr-history.org	-	-
1953-4451	2434700.50	1953 Nov 19	Nike Ajax	-	1278E	0.000	ARAA	AS	-	Test	wsmr-history.org	-	-
1953-4452	2434700.50	1953 Nov 19	Nike Ajax	-	1262E	0.000	ARAA	AS	-	Test	wsmr-history.org	-	-
1953-4453	2434700.50	1953 Nov 19	Nike Ajax	-	1276E	0.000	ARAA	AS	-	Test	wsmr-history.org	-	-
1953-4454	2434700.50	1953 Nov 19	Nike Deacon	-	-	0.000	PARA	AS	-	Test	MDCRF	RP-1028	-
1953-4460	2434706.50	1953 Nov 25	Nike Ajax	-	1212A	0.000	ARAA	AS	-	Test	wsmr-history.org	-	-
1953-4461	2434706.50	1953 Nov 25	Nike Ajax	-	71	0.000	ARAA	AS	-	Test	wsmr-history.org	-	-
1953-4462	2434706.50	1953 Nov 25	Nike Ajax	-	1238A	0.000	ARAA	AS	-	Test	wsmr-history.org	-	-
1953-4463	2434706.50	1953 Nov 25	Nike Ajax	-	1286A	0.000	ARAA	AS	-	Test	wsmr-history.org	-	-
1953-4464	2434706.50	1953 Nov 25	Nike Ajax	-	71	0.000	ARAA	AS	-	Test	wsmr-history.org	-	-
1953-4470	2434719.50	1953 Dec 08	Nike Ajax	-	1266E	0.000	ARAA	AS	-	Test	wsmr-history.org	-	-
1953-4471	2434719.50	1953 Dec 08	Nike Ajax	-	1266E	0.000	ARAA	AS	-	Test	wsmr-history.org	-	-
1953-4473	2434720.50	1953 Dec 09	Nike Ajax	-	71	0.000	ARAA	AS	-	Test	wsmr-history.org	-	-
1953-4462	2434720.50	1953 Dec 09	Nike Ajax	-	1198A	0.000	ARAA	AS	-	Test	wsmr-history.org	-	-
1953-4466	2434728.50	1953 Dec 16	Nike Ajax	-	1216A	0.000	ARAA	AS	-	Test	wsmr-history.org	-	-
1953-4490	2434728.50	1953 Dec 17	Nike Ajax	-	1230A	0.000	ARAA	AS	-	Test	wsmr-history.org	-	-
1954-404	2434748.50	1954 Jan 06	Nike Ajax	-	1288T	0.000	ARAA	AS	-	Test	wsmr-history.org	-	-
1954-407	2434749.50	1954 Jan 07	Nike Ajax	-	1197A	0.000	ARAA	AS	-	Test	wsmr-history.org	-	-
1954-411	2434753.50	1954 Jan 11	Nike Ajax	-	1298T	0.000	ARAA	AS	-	Test	wsmr-history.org	-	-
1954-412	2434753.50	1954 Jan 11	Nike Ajax	-	1200A	0.000	ARAA	AS	-	Test	wsmr-history.org	-	-
1954-415	2434754.50	1954 Jan 12	Nike Ajax	-	1202E	0.000	ARAA	AS	-	Test	wsmr-history.org	-	-
1954-416	2434755.50	1954 Jan 13	Nike Ajax	-	1168A	0.000	ARAA	AS	-	Test	wsmr-history.org	-	-
1954-421	2434757.50	1954 Jan 15	Nike Ajax	-	1596E	0.000	ARAA	AS	-	Test	wsmr-history.org	-	-
1954-422	2434757.50	1954 Jan 15	Nike Ajax	-	1435E	0.000	ARAA	AS	-	Test	wsmr-history.org	-	-
1954-423	2434757.50	1954 Jan 15	Nike Ajax	-	1507E	0.000	ARAA	AS	-	Test	wsmr-history.org	-	-
1954-424	2434760.50	1954 Jan 18	Nike Ajax	-	1723E	0.000	ARAA	AS	-	Test	wsmr-history.org	-	-
1954-425	2434760.50	1954 Jan 18	Nike Ajax	-	1617E	0.000	ARAA	AS	-	Test	wsmr-history.org	-	-
1954-432	2434767.50	1954 Jan 25	Nike Ajax	-	1260T	0.000	ARAA	AS	-	Test	wsmr-history.org	-	-
1954-437	2434771.50	1954 Jan 29	Nike Ajax	-	1635A	0.000	ARAA	AS	-	Test	RP-1025	-	-
1954-442	2434776.50	1954 Feb 5	Nike	-	1635A	0.000	PARA	AS	-	Test	RP-1025	-	-
1954-444	2434779.50	1954 Feb 06	Nike Ajax	-	1264T	0.000	ARAA	AS	-	Test	wsmr-history.org	-	-
1954-445	2434781.50	1954 Feb 06	Nike Ajax	-	1307A	0.000	ARAA	AS	-	Test	wsmr-history.org	-	-
1954-446	2434781.50	1954 Feb 06	Nike Ajax	-	1307A	0.000	ARAA	AS	-	Test	wsmr-history.org	-	-
1954-461	2434783.50	1954 Feb 10	Nike Ajax	-	1509A	0.000	ARAA	AS	-	Test	wsmr-history.org	-	-
1954-462	2434790.50	1954 Feb 17	Nike Ajax	-	1589A	0.000	ARAA	AS	-	Test	wsmr-history.org	-	-
1954-463	2434790.50	1954 Feb 17	Nike Ajax	-	1232A	0.000	ARAA	AS	-	Test	wsmr-history.org	-	-
1954-465	2434798.50	1954 Feb 25	Nike Ajax	-	1318A	0.000	ARAA	AS	-	Test	wsmr-history.org	-	-
1954-469	2434799.50	1954 Feb 26	Nike Ajax	-	1260T	0.000	ARAA	AS	-	Test	wsmr-history.org	-	-
1954-466	2434801.50	1954 Mar	Nike	-	1311R	0.000	PARA	AS	-	Test	RP-1025	-	-
1954-492	2434804.50	1954 Mar	Nike Ajax	-	1311R	0.000	ARAA	AS	-	Test	wsmr-history.org	-	-
1954-4101	2434806.50	1954 Mar 03	Nike Ajax	-	1313R	0.000	ARAA	AS	-	Test	wsmr-history.org	-	-
1954-4102	2434806.50	1954 Mar 05	Nike Ajax	-	1624A	0.000	ARAA	AS	-	Test	wsmr-history.org	-	-
1954-4103	2434806.50	1954 Mar 05	Nike Ajax	-	1430E	0.000	ARAA	AS	-	Test	wsmr-history.org	-	-
1954-4104	2434806.50	1954 Mar 05	Nike Ajax	-	1585E	0.000	ARAA	AS	-	Test	wsmr-history.org	-	-
1954-4106	2434806.50	1954 Mar 05	Nike Ajax	-	1365E	0.000	ARAA	AS	-	Test	wsmr-history.org	-	-
1954-4109	2434813.50	1954 Mar 12	Nike Ajax	-	1294T	0.000	ARAA	AS	-	Test	wsmr-history.org	-	-
1954-4110	2434815.50	1954 Mar 17	Nike Ajax	-	1131T	0.000	ARAA	AS	-	Test	wsmr-history.org	-	-
1954-4111	2434815.50	1954 Mar 17	Nike Ajax	-	1288R Ball motor	0.000	ARAA	AS	-	Test	wsmr-history.org	-	-
1954-4114	2434815.50	1954 Mar 18	Nike Ajax	-	1610E	0.000	ARAA	AS	-	Test	wsmr-history.org	-	-
1954-4115	2434815.50	1954 Mar 18	Nike Ajax	-	1785E	0.000	ARAA	AS	-	Test	wsmr-history.org	-	-
1954-4119	2434821.50	1954 Mar 20	Nike Ajax	-	1374T	0.000	ARAA	AS	-	Test	wsmr-history.org	-	-
1954-4119	2434821.50	1954 Mar 20	Nike Ajax	-	1300T	0.000	ARAA	AS	-	Test	wsmr-history.org	-	-
1954-4120	2434823.50	1954 Mar 22	Nike Ajax	-	2245A	0.000	ARAA	AS	-	Test	wsmr-history.org	-	-
1954-4130	2434827.50	1954 Mar 26	Nike Ajax	-	2369E	0.000	ARAA	AS	-	Test	wsmr-history.org	-	-
1954-4131	2434827.50	1954 Mar 26	Nike Ajax	-	1372T	0.000	ARAA	AS	-	Test	wsmr-history.org	-	-
1954-4132	2434827.50	1954 Mar 26	Nike Ajax	-	1326E	0.000	ARAA	AS	-	Test	wsmr-history.org	-	-
1954-4136	2434832.50	1954 Mar 31	Nike Ajax	-	1623E	0.000	ARAA	AS	-	Test	wsmr-history.org	-	-
1954-4138	2434833.50	1954 Mar 31	Nike Ajax	-	1708E	0.000	ARAA	AS	-	Test	wsmr-history.org	-	-
1954-4141	2434834.50	1954 Apr 02	Nike Ajax	-	1139T	0.000	ARAA	AS	-	Test	wsmr-history.org	-	-
1954-4142	2434834.50	1954 Apr 02	Nike Ajax	-	1489E	0.000	ARAA	AS	-	Test	wsmr-history.org	-	-
1954-4143	2434834.50	1954 Apr 02	Nike Ajax	-	1734E	0.000	ARAA	AS	-	Test	wsmr-history.org	-	-
1954-4146	2434838.50	1954 Apr 06	Nike Ajax	-	1316A	0.000	ARAA	AS	-	Test	wsmr-history.org	-	-
1954-4147	2434839.50	1954 Apr 07	Nike Ajax	-	1559E	0.000	ARAA	AS	-	Test	wsmr-history.org	-	-
1954-4148	2434839.50	1954 Apr 07	Nike Ajax	-	1477E	0.000	ARAA	AS	-	Test	wsmr-history.org	-	-
1954-4149	2434839.50	1954 Apr 07	Nike Ajax	-	1319R Ball motor	0.000	ARAA	AS	-	Test	wsmr-history.org	-	-
1954-4150	2434839.50	1954 Apr 07	Nike Ajax	-	1430E	0.000	ARAA	AS	-	Test	wsmr-history.org	-	-
1954-4153	2434840.50	1954 Apr 08	Nike Ajax	-	1369T	0.000	ARAA	AS	-	Test	wsmr-history.org	-	-
1954-4161	2434842.50	1954 Apr 10	Nike Ajax	-	1270T	0.000	ARAA	AS	-	Test	wsmr-history.org	-	-
1954-4162	2434842.50	1954 Apr 10	Nike Ajax	-	1378T	0.000	ARAA	AS	-	Test	wsmr-history.org	-	-
1954-4164	2434843.50	1954 Apr 11	Nike Ajax	-	1380T	0.000	ARAA	AS	-	Test	wsmr-history.org	-	-
1954-4165	2434844.50	1954 Apr 12	Nike Ajax	-	1381T	0.000	ARAA	AS	-	Test	wsmr-history.org	-	-
1954-4170	2434846.50	1954 Apr 14	Nike Ajax	-	2294A	0.000	ARAA	AS	-	Test	wsmr-history.org	-	-
1954-4171	2434846.50	1954 Apr 14	Nike Ajax	-	1315R	0.000	ARAA	AS	-	Test	wsmr-history.org	-	-
1954-4172	2434846.50	1954 Apr 14	Nike Ajax	-	1317R	0.000	ARAA	AS	-	Test	wsmr-history.org	-	-
1954-4175	2434847.50	1954 Apr 15	Nike Ajax	-	1629E	0.000	ARAA	AS	-	Test	wsmr-history.org	-	-
1954-4176	2434847.50	1954 Apr 15	Nike Ajax	-	1663E	0.000	ARAA	AS	-	Test	wsmr-history.org	-	-
1954-4177	2434847.50	1954 Apr 15	Nike Ajax	-	1398E	0.000	ARAA	AS	-	Test	wsmr-history.org	-	-
1954-4178	2434847.50	1954 Apr 15	Nike Ajax	-	1383T	0.000	ARAA	AS	-	Test	wsmr-history.org	-	-
1954-4179	2434848.50	1954 Apr 16	Nike Ajax	-	1367T	0.000	ARAA	AS	-	Test	wsmr-history.org	-	-
1954-4180	2434848.50	1954 Apr 17	Nike Ajax	-	1319R	0.000	ARAA	AS	-	Test	wsmr-history.org	-	-
1954-4181	2434852.50	1954 Apr 20	Nike Ajax	-	2263A	0.000	ARAA	AS	-	Test	wsmr-history.org	-	-
1954-4182	2434852.50	1954 Apr 20	Nike Ajax	-	1375T	0.000	ARAA	AS	-	Test	wsmr-history.org	-	-

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Group	Category	LTCite	Cite	Notes
1954-A187	2434854.50	1954 Apr 22	Nike Ajax	-	1395T	-	Test	wsmr-history.org	-	-
1954-A188	2434854.50	1954 Apr 22	Nike Ajax	-	1638E	-	Test	wsmr-history.org	-	-
1954-A189	2434855.50	1954 Apr 23	Nike Ajax	-	1401T	-	Test	wsmr-history.org	-	-
1954-A190	2434856.50	1954 Apr 24	Nike Ajax	-	1384T	-	Test	wsmr-history.org	-	-
1954-A191	2434856.50	1954 Apr 26	Nike Ajax	-	2220A	-	Test	wsmr-history.org	-	-
1954-A201	2434859.50	1954 Apr 27	Nike Ajax	-	2266T	-	Test	wsmr-history.org	-	-
1954-A202	2434859.50	1954 Apr 27	Nike Ajax	-	2320A	-	Test	wsmr-history.org	-	-
1954-A203	2434859.50	1954 Apr 27	Nike Ajax	-	1404E	-	Test	wsmr-history.org	-	-
1954-A204	2434859.50	1954 Apr 27	Nike Ajax	-	1452E	-	Test	wsmr-history.org	-	-
1954-A205	2434859.50	1954 Apr 27	Nike Ajax	-	1522E	-	Test	wsmr-history.org	-	-
1954-A206	2434859.50	1954 Apr 27	Nike Ajax	-	1724E	-	Test	wsmr-history.org	-	-
1954-A207	2434860.50	1954 Apr 28	Nike Ajax	-	1369A	-	Test	wsmr-history.org	-	-
1954-A209	2434860.50	1954 Apr 28	Nike Ajax	-	1321R	-	Test	wsmr-history.org	-	-
1954-A210	2434860.50	1954 Apr 28	Nike Ajax	-	1605E	-	Test	wsmr-history.org	-	-
1954-A211	2434860.50	1954 Apr 28	Nike Ajax	-	1323R Bell motor	-	Test	wsmr-history.org	-	-
1954-A208	2434860.50	1954 Apr 28	Nike Ajax	-	1465R	-	Test	wsmr-history.org	-	-
1954-A212	2434860.50	1954 Apr 28	Nike Ajax	-	1676E	-	Test	wsmr-history.org	-	-
1954-A213	2434861.50	1954 Apr 29	Nike Nike Deacon	-	2288T	-	Test	RP-1028	-	TU-D-745
1954-A218	2434861.50	1954 Apr 29	Nike Ajax	-	2264T	-	Test	wsmr-history.org	-	-
1954-A219	2434862.50	1954 Apr 30	Nike Ajax	-	1397T	-	Test	wsmr-history.org	-	-
1954-A222	2434865.50	1954 May 03	Nike Ajax	-	1774E	-	Test	wsmr-history.org	-	-
1954-A223	2434865.50	1954 May 03	Nike Ajax	-	1563E	-	Test	wsmr-history.org	-	-
1954-A231	2434866.50	1954 May 04	Nike Ajax	-	1400T	-	Test	wsmr-history.org	-	-
1954-A236	2434867.50	1954 May 05	Nike Ajax	-	1297A	-	Test	wsmr-history.org	-	-
1954-A237	2434867.50	1954 May 05	Nike Ajax	-	167R	-	Test	wsmr-history.org	-	-
1954-A235	2434867.50	1954 May 05	Nike Ajax	-	1328R	-	Test	wsmr-history.org	-	-
1954-A234	2434867.50	1954 May 05	Nike Ajax	-	2199R Bell motor	-	Test	wsmr-history.org	-	-
1954-A238	2434867.50	1954 May 05	Nike Ajax	-	1666E	-	Test	wsmr-history.org	-	-
1954-A239	2434867.50	1954 May 05	Nike Ajax	-	1335T	-	Test	wsmr-history.org	-	-
1954-A240	2434867.50	1954 May 05	Nike Ajax	-	1412T	-	Test	wsmr-history.org	-	-
1954-A243	2434869.50	1954 May 07	Nike Ajax	-	1386T	-	Test	wsmr-history.org	-	-
1954-A244	2434869.50	1954 May 07	Nike Ajax	-	2101E	-	Test	wsmr-history.org	-	-
1954-A246	2434869.50	1954 May 07	Nike Ajax	-	1541E	-	Test	wsmr-history.org	-	-
1954-A245	2434869.50	1954 May 07	Nike Ajax	-	1354T	-	Test	wsmr-history.org	-	-
1954-A247	2434870.50	1954 May 08	Nike Ajax	-	1437T	-	Test	wsmr-history.org	-	-
1954-A248	2434870.50	1954 May 08	Nike Ajax	-	1333T	-	Test	wsmr-history.org	-	-
1954-A249	2434871.50	1954 May 09	Nike Ajax	-	1382E	-	Test	wsmr-history.org	-	-
1954-A250	2434872.50	1954 May 10	Nike Ajax	-	1342E	-	Test	wsmr-history.org	-	-
1954-A257	2434874.50	1954 May 12	Nike Ajax	-	2537T	-	Test	wsmr-history.org	-	-
1954-A252	2434874.50	1954 May 12	Nike Ajax	-	4707A	-	Test	wsmr-history.org	-	-
1954-A253	2434874.50	1954 May 12	Nike Ajax	-	1643E	-	Test	wsmr-history.org	-	-
1954-A254	2434874.50	1954 May 12	Nike Ajax	-	1497E	-	Test	wsmr-history.org	-	-
1954-A256	2434874.50	1954 May 12	Nike Ajax	-	1305R	-	Test	wsmr-history.org	-	-
1954-A258	2434874.50	1954 May 12	Nike Ajax	-	2177R	-	Test	wsmr-history.org	-	-
1954-A259	2434874.50	1954 May 12	Nike Ajax	-	2249R	-	Test	wsmr-history.org	-	-
1954-A261	2434874.50	1954 May 12	Nike Ajax	-	1345T	-	Test	wsmr-history.org	-	-
1954-A260	2434874.50	1954 May 12	Nike Ajax	-	1350T	-	Test	wsmr-history.org	-	-
1954-A262	2434874.50	1954 May 12	Nike Ajax	-	1405T	-	Test	wsmr-history.org	-	-
1954-A276	2434876.50	1954 May 14	Nike Ajax	-	1692E	-	Test	wsmr-history.org	-	-
1954-A277	2434876.50	1954 May 14	Nike Ajax	-	1511E	-	Test	wsmr-history.org	-	-
1954-A280	2434876.50	1954 May 17	Nike Ajax	-	1716E	-	Test	wsmr-history.org	-	-
1954-A283	2434880.50	1954 May 18	Nike Ajax	-	1465T	-	Test	wsmr-history.org	-	-
1954-A286	2434880.50	1954 May 19	Nike Ajax	-	1419R	-	Test	wsmr-history.org	-	-
1954-A287	2434881.50	1954 May 19	Nike Ajax	-	1394T	-	Test	wsmr-history.org	-	-
1954-A288	2434881.50	1954 May 19	Nike Ajax	-	1377E	-	Test	wsmr-history.org	-	-
1954-A290	2434882.50	1954 May 20	Nike Ajax	-	1390T	-	Test	wsmr-history.org	-	-
1954-A291	2434886.50	1954 May 20	Nike Ajax	-	1415	-	Test	wsmr-history.org	-	-
1954-A292	2434886.50	1954 May 24	Nike Ajax	-	1389T	-	Test	wsmr-history.org	-	-
1954-A293	2434887.50	1954 May 25	Nike Ajax	-	1415	-	Test	wsmr-history.org	-	-
1954-A300	2434889.50	1954 May 26	Nike Ajax	-	1414TT	-	Test	wsmr-history.org	-	-
1954-A302	2434889.50	1954 May 27	Nike Ajax	-	1393T	-	Test	wsmr-history.org	-	-
1954-A303	2434890.50	1954 May 28	Nike Ajax	-	1475T	-	Test	wsmr-history.org	-	-
1954-A304	2434890.50	1954 May 28	Nike Ajax	-	1335T	-	Test	wsmr-history.org	-	-
1954-A305	2434890.50	1954 May 28	Nike Ajax	-	1408T	-	Test	wsmr-history.org	-	-
1954-A308	2434895.50	1954 Jun 02	Nike Ajax	-	1346T	-	Test	wsmr-history.org	-	-
1954-A311	2434895.50	1954 Jun 02	Nike Ajax	-	1465T	-	Test	wsmr-history.org	-	-
1954-A309	2434895.50	1954 Jun 02	Nike Ajax	-	12498-1423	-	Test	wsmr-history.org	-	-
1954-A310	2434895.50	1954 Jun 02	Nike Ajax	-	12498-1913	-	Test	wsmr-history.org	-	-
1954-A322	2434897.50	1954 Jun 04	Nike Ajax	-	1344T	-	Test	wsmr-history.org	-	-
1954-A325	2434900.50	1954 Jun 07	Nike Ajax	-	2266A	-	Test	wsmr-history.org	-	-
1954-A326	2434900.50	1954 Jun 07	Nike Ajax	-	1356A	-	Test	wsmr-history.org	-	-
1954-A327	2434900.50	1954 Jun 07	Nike Ajax	-	2166A	-	Test	wsmr-history.org	-	-
1954-A328	2434900.50	1954 Jun 07	Nike Ajax	-	1340A	-	Test	wsmr-history.org	-	-
1954-A331	2434902.50	1954 Jun 08	Nike Ajax	-	1332T	-	Test	wsmr-history.org	-	-
1954-A333	2434902.50	1954 Jun 08	Nike Ajax	-	1387T	-	Test	wsmr-history.org	-	-
1954-A334	2434902.50	1954 Jun 09	Nike Ajax	-	1348E	-	Test	wsmr-history.org	-	-
1954-A335	2434902.50	1954 Jun 09	Nike Ajax	-	12498-2291	-	Test	wsmr-history.org	-	-
1954-A336	2434902.50	1954 Jun 09	Nike Ajax	-	1421R	-	Test	wsmr-history.org	-	-
1954-A337	2434902.50	1954 Jun 09	Nike Ajax	-	1243R	-	Test	wsmr-history.org	-	-
1954-A342	2434903.50	1954 Jun 10	Nike Ajax	-	1434A	-	Test	wsmr-history.org	-	-
1954-A343	2434904.50	1954 Jun 11	Nike Ajax	-	1808E	-	Test	wsmr-history.org	-	-







Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	OrbPay	Agency	Launch_Code	Group	Category	LTCite	Cite	Notes
1954-4638	2435063.50	1954 Nov 17	Nike Ajax	-	3492T	0.000	ARAA	AS	-	Test	wsmr-history.org	-	-
1954-4639	2435063.50	1954 Nov 17	Nike Ajax	-	1327R	0.000	ARAA	AS	-	Test	wsmr-history.org	-	-
1954-4640	2435063.50	1954 Nov 17	Nike Ajax	-	2995R	0.000	ARAA	AS	-	Test	wsmr-history.org	-	-
1954-4637	2435063.50	1954 Nov 17	Nike Ajax	-	3001R	0.000	ARAA	AS	-	Test	wsmr-history.org	-	-
1954-4636	2435063.50	1954 Nov 17	Nike Ajax	-	2939R	0.000	ARAA	AS	-	Test	wsmr-history.org	-	-
1954-4645	2435065.50	1954 Nov 19	Nike Ajax	-	3249T	0.000	ARAA	AS	-	Test	wsmr-history.org	-	-
1954-4646	2435065.50	1954 Nov 19	Nike Ajax	-	3329T	0.000	ARAA	AS	-	Test	wsmr-history.org	-	-
1954-4647	2435065.50	1954 Nov 19	Nike Ajax	-	3310T	0.000	ARAA	AS	-	Test	wsmr-history.org	-	-
1954-4648	2435065.50	1954 Nov 19	Nike Ajax	-	2800E	0.000	ARAA	AS	-	Test	wsmr-history.org	-	-
1954-4651	2435068.50	1954 Nov 22	Nike Ajax	-	3270T	0.000	ARAA	AS	-	Test	wsmr-history.org	-	-
1954-4654	2435069.50	1954 Nov 23	Nike Ajax	-	2816E	0.000	ARAA	AS	-	Test	wsmr-history.org	-	-
1954-4655	2435069.50	1954 Nov 23	Nike Ajax	-	3536T	0.000	ARAA	AS	-	Test	wsmr-history.org	-	-
1954-4656	2435069.50	1954 Nov 23	Nike Ajax	-	1242E	0.000	ARAA	AS	-	Test	wsmr-history.org	-	-
1954-4661	2435070.50	1954 Nov 24	Nike Ajax	-	3095R	0.000	ARAA	AS	-	Test	wsmr-history.org	-	-
1954-4662	2435070.50	1954 Nov 24	Nike Ajax	-	3019R	0.000	ARAA	AS	-	Test	wsmr-history.org	-	-
1954-4659	2435070.50	1954 Nov 24	Nike Ajax	-	2999R	0.000	ARAA	AS	-	Test	wsmr-history.org	-	-
1954-4660	2435070.50	1954 Nov 24	Nike Ajax	-	2819R	0.000	ARAA	AS	-	Test	wsmr-history.org	-	-
1954-4666	2435077.50	1954 Dec 01	Nike Ajax	-	3075R	0.000	ARAA	AS	-	Test	wsmr-history.org	-	-
1954-4668	2435077.50	1954 Dec 01	Nike Ajax	-	3069R	0.000	ARAA	AS	-	Test	wsmr-history.org	-	-
1954-4718	2435077.50	1954 Dec 1	Nike Ajax	-	3109R	0.000	ARAA	AS	-	Test	wsmr-history.org	-	-
1954-4667	2435077.50	1954 Dec 01	Nike Ajax	-	2525R	0.000	ARAA	AS	-	Test	wsmr-history.org	-	-
1954-4669	2435077.50	1954 Dec 01	Nike Ajax	-	2794A	0.000	ARAA	AS	-	Test	wsmr-history.org	-	-
1954-4670	2435078.50	1954 Dec 02	Nike Ajax	-	2774A	0.000	ARAA	AS	-	Test	wsmr-history.org	-	-
1954-4671	2435079.50	1954 Dec 02	Nike Ajax	-	3521T	0.000	ARAA	AS	-	Test	wsmr-history.org	-	-
1954-4672	2435079.50	1954 Dec 02	Nike Ajax	-	3514T	0.000	ARAA	AS	-	Test	wsmr-history.org	-	-
1954-4675	2435082.50	1954 Dec 06	Nike Ajax	-	2874E	0.000	ARAA	AS	-	Test	wsmr-history.org	-	-
1954-4676	2435082.50	1954 Dec 06	Nike Ajax	-	1240E	0.000	ARAA	AS	-	Test	wsmr-history.org	-	-
1954-4677	2435082.50	1954 Dec 06	Nike Ajax	-	2820A	0.000	ARAA	AS	-	Test	wsmr-history.org	-	-
1954-4678	2435082.50	1954 Dec 06	Nike Ajax	-	3516T	0.000	ARAA	AS	-	Test	wsmr-history.org	-	-
1954-4679	2435083.50	1954 Dec 07	Nike Ajax	-	3517T	0.000	ARAA	AS	-	Test	wsmr-history.org	-	-
1954-4681	2435084.50	1954 Dec 08	Nike Ajax	-	3317T	0.000	ARAA	AS	-	Test	wsmr-history.org	-	-
1954-4682	2435084.50	1954 Dec 08	Nike Ajax	-	2869R	0.000	ARAA	AS	-	Test	wsmr-history.org	-	-
1954-4683	2435084.50	1954 Dec 08	Nike Ajax	-	3099R	0.000	ARAA	AS	-	Test	wsmr-history.org	-	-
1954-4684	2435085.50	1954 Dec 09	Nike Ajax	-	2772T	0.000	ARAA	AS	-	Test	wsmr-history.org	-	-
1954-4685	2435085.50	1954 Dec 09	Nike Ajax	-	3535T	0.000	ARAA	AS	-	Test	wsmr-history.org	-	-
1954-4686	2435086.50	1954 Dec 10	Nike Ajax	-	3524T	0.000	ARAA	AS	-	Test	wsmr-history.org	-	-
1954-4687	2435086.50	1954 Dec 10	Nike Ajax	-	2810E	0.000	ARAA	AS	-	Test	wsmr-history.org	-	-
1954-4688	2435086.50	1954 Dec 10	Nike Ajax	-	2618E	0.000	ARAA	AS	-	Test	wsmr-history.org	-	-
1954-4689	2435087.50	1954 Dec 11	Nike Ajax	-	1498T	0.000	ARAA	AS	-	Test	wsmr-history.org	-	-
1954-4691	2435088.50	1954 Dec 12	Nike Ajax	-	1505T	0.000	ARAA	AS	-	Test	wsmr-history.org	-	-
1954-4692	2435088.50	1954 Dec 12	Nike Ajax	-	3272T	0.000	ARAA	AS	-	Test	wsmr-history.org	-	-
1954-4696	2435089.50	1954 Dec 13	Nike Ajax	-	1507T	0.000	ARAA	AS	-	Test	wsmr-history.org	-	-
1954-4697	2435089.50	1954 Dec 13	Nike Ajax	-	1511T	0.000	ARAA	AS	-	Test	wsmr-history.org	-	-
1954-4700	2435090.50	1954 Dec 14	Nike Ajax	-	1516T	0.000	ARAA	AS	-	Test	wsmr-history.org	-	-
1954-4703	2435090.50	1954 Dec 14	Nike Ajax	-	1249B-3897	0.000	ARAA	AS	-	Test	wsmr-history.org	-	-
1954-4704	2435091.50	1954 Dec 15	Nike Ajax	-	3031R	0.000	ARAA	AS	-	Test	wsmr-history.org	-	-
1954-4705	2435091.50	1954 Dec 15	Nike Ajax	-	2792E	0.000	ARAA	AS	-	Test	wsmr-history.org	-	-
1954-4706	2435091.50	1954 Dec 15	Nike Ajax	-	2804E	0.000	ARAA	AS	-	Test	wsmr-history.org	-	-
1954-402	2434742.50	1954?	Nike Deacon	1		0.000	ARAA	SS	PARD/	Test	TH-D-216	-	-
1955-403	2435112.50	1955 Jan 05	Nike Ajax	-	2814A	0.000	ARAA	AS	-	Test	wsmr-history.org	-	-
1955-404	2435112.50	1955 Jan 06	Nike Ajax	-	3090R	0.000	PARD	AS	-	Test	RP-102B	-	-
1955-405	2435113.50	1955 Jan 06	Nike Ajax	-	3091R	0.000	ARAA	AS	-	Test	wsmr-history.org	-	-
1955-406	2435113.50	1955 Jan 06	Nike Ajax	-	2608A	0.000	ARAA	AS	-	Test	wsmr-history.org	-	-
1955-407	2435113.50	1955 Jan 06	Nike Ajax	-	2796A	0.000	ARAA	AS	-	Test	wsmr-history.org	-	-
1955-408	2435113.50	1955 Jan 06	Nike Ajax	-	3088R	0.000	ARAA	AS	-	Test	wsmr-history.org	-	-
1955-410	2435113.50	1955 Jan 06	Nike Ajax	-	3090R	0.000	ARAA	AS	-	Test	wsmr-history.org	-	-
1955-409	2435119.50	1955 Jan 06	Nike Ajax	-	-	0.000	ARAA	AS	-	Test	RP-102B	-	-
1955-413	2435119.50	1955 Jan 12	Nike Ajax	-	2771T	0.000	PARD	AS	-	Test	wsmr-history.org	-	-
1955-416	2435120.50	1955 Jan 13	Nike Ajax	-	3307T	0.000	ARAA	AS	-	Test	wsmr-history.org	-	-
1955-419	2435124.50	1955 Jan 17	Nike Ajax	-	3096R	0.000	ARAA	AS	-	Test	wsmr-history.org	-	-
1955-424	2435125.50	1955 Jan 18	Nike Ajax	-	3102R	0.000	ARAA	AS	-	Test	wsmr-history.org	-	-
1955-426	2435125.50	1955 Jan 18	Nike Ajax	-	3044R	0.000	ARAA	AS	-	Test	wsmr-history.org	-	-
1955-425	2435125.50	1955 Jan 18	Nike Ajax	-	3105R	0.000	ARAA	AS	-	Test	wsmr-history.org	-	-
1955-427	2435125.50	1955 Jan 18	Nike Ajax	-	1526T	0.000	ARAA	AS	-	Test	wsmr-history.org	-	-
1955-431	2435126.50	1955 Jan 19	Nike Ajax	-	1673E	0.000	ARAA	AS	-	Test	wsmr-history.org	-	-
1955-432	2435126.50	1955 Jan 19	Nike Ajax	-	1650E	0.000	ARAA	AS	-	Test	wsmr-history.org	-	-
1955-433	2435126.50	1955 Jan 19	Nike Ajax	-	1518T	0.000	ARAA	AS	-	Test	wsmr-history.org	-	-
1955-434	2435127.50	1955 Jan 20	Nike Ajax	-	1486T	0.000	ARAA	AS	-	Test	wsmr-history.org	-	-
1955-439	2435128.50	1955 Jan 21	Nike Ajax	-	1252E	0.000	ARAA	AS	-	Test	wsmr-history.org	-	-
1955-440	2435128.50	1955 Jan 21	Nike Ajax	-	2828E	0.000	ARAA	AS	-	Test	wsmr-history.org	-	-
1955-441	2435131.50	1955 Jan 21	Nike Ajax	-	1530T	0.000	ARAA	AS	-	Test	wsmr-history.org	-	-
1955-442	2435132.50	1955 Jan 24	Nike Ajax	-	3267T	0.000	ARAA	AS	-	Test	wsmr-history.org	-	-
1955-448	2435132.50	1955 Jan 25	Nike Ajax	-	2882E	0.000	ARAA	AS	-	Test	wsmr-history.org	-	-
1955-449	2435133.50	1955 Jan 26	Nike Ajax	-	1530T	0.000	ARAA	AS	-	Test	wsmr-history.org	-	-
1955-453	2435134.50	1955 Jan 27	Nike Ajax	-	T 11532	0.000	ARAA	AS	-	Test	wsmr-history.org	-	-
1955-454	2435134.50	1955 Jan 27	Nike Ajax	-	1947T	0.000	ARAA	AS	-	Test	wsmr-history.org	-	-
1955-459	2435135.50	1955 Jan 28	Nike Ajax	-	1960T	0.000	ARAA	AS	-	Test	wsmr-history.org	-	-
1955-458	2435135.50	1955 Jan 28	Nike Ajax	-	1481T	0.000	ARAA	AS	-	Test	wsmr-history.org	-	-
1955-460	2435135.50	1955 Jan 28	Nike Ajax	-	2780A	0.000	ARAA	AS	-	Test	wsmr-history.org	-	-
1955-461	2435135.50	1955 Jan 28	Nike Ajax	-	2812E	0.000	ARAA	AS	-	Test	wsmr-history.org	-	-
1955-464	2435139.50	1955 Feb 01	Nike Ajax	-	2866E	0.000	ARAA	AS	-	Test	wsmr-history.org	-	-
1955-465	2435139.50	1955 Feb 01	Nike Ajax	-	3328T	0.000	ARAA	AS	-	Test	wsmr-history.org	-	-
1955-466	2435140.50	1955 Feb 02	Nike Ajax	-	1483T	0.000	ARAA	AS	-	Test	wsmr-history.org	-	-
1955-468	2435141.50	1955 Feb 03	Nike Ajax	-		0.000	ARAA	AS	-	Test	wsmr-history.org	-	-

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	OrbPay	Agency	Launch_Code	Group	Category	LTCite	Cite	Notes
1955-469	2435141.50	1955 Feb 03	Nike Ajax	-	1887T	0.000	ARAA	AS	-	Test	wsmr-history.org	-	-
1955-470	2435142.50	1955 Feb 04	Nike Ajax	-	1488T	0.000	ARAA	AS	-	Test	wsmr-history.org	-	-
1955-471	2435142.50	1955 Feb 04	Nike Ajax	-	1543T	0.000	ARAA	AS	-	Test	wsmr-history.org	-	-
1955-472	2435142.50	1955 Feb 04	Nike Ajax	-	3640T	0.000	ARAA	AS	-	Test	wsmr-history.org	-	-
1955-473	2435142.50	1955 Feb 04	Nike Ajax	-	1822T	0.000	ARAA	AS	-	Test	wsmr-history.org	-	-
1955-474	2435143.50	1955 Feb 05	Nike Ajax	-	1835T	0.000	ARAA	AS	-	Test	wsmr-history.org	-	-
1955-475	2435143.50	1955 Feb 06	Nike Ajax	-	1834T	0.000	ARAA	AS	-	Test	wsmr-history.org	-	-
1955-476	2435144.50	1955 Feb 06	Nike Ajax	-	1506T	0.000	ARAA	AS	-	Test	wsmr-history.org	-	-
1955-477	2435144.50	1955 Feb 06	Nike Ajax	-	1335T	0.000	ARAA	AS	-	Test	wsmr-history.org	-	-
1955-478	2435145.50	1955 Feb 07	Nike Ajax	-	1823T	0.000	ARAA	AS	-	Test	wsmr-history.org	-	-
1955-479	2435145.50	1955 Feb 07	Nike Ajax	-	1537T	0.000	ARAA	AS	-	Test	wsmr-history.org	-	-
1955-483	2435146.50	1955 Feb 08	Nike Ajax	-	1945T	0.000	ARAA	AS	-	Test	wsmr-history.org	-	-
1955-484	2435146.50	1955 Feb 08	Nike Ajax	-	2932E	0.000	ARAA	AS	-	Test	wsmr-history.org	-	-
1955-485	2435147.50	1955 Feb 09	Nike Ajax	-	1953T	0.000	ARAA	AS	-	Test	wsmr-history.org	-	-
1955-486	2435147.50	1955 Feb 09	Nike Ajax	-	3098R	0.000	ARAA	AS	-	Test	wsmr-history.org	-	-
1955-488	2435148.38	1955 Feb 9 2106	Nike Ajax	-	-	0.000	RCRR	AS	-	Test	FC	-	-
1955-489	2435148.50	1955 Feb 9 2119	Nike Ajax	-	-	0.000	RCRR	AS	-	Test	FC	-	-
1955-490	2435148.50	1955 Feb 10	Nike Ajax	-	1502T	0.000	ARAA	AS	-	Test	wsmr-history.org	-	-
1955-494	2435149.50	1955 Feb 11	Nike Ajax	-	1942T	0.000	ARAA	AS	-	Test	wsmr-history.org	-	-
1955-495	2435150.50	1955 Feb 12	Nike Ajax	-	1739T	0.000	ARAA	AS	-	Test	wsmr-history.org	-	-
1955-496	2435151.50	1955 Feb 13	Nike Ajax	-	1892T	0.000	ARAA	AS	-	Test	wsmr-history.org	-	-
1955-497	2435151.50	1955 Feb 13	Nike Ajax	-	1618T	0.000	ARAA	AS	-	Test	wsmr-history.org	-	-
1955-498	2435152.50	1955 Feb 14	Nike Ajax	-	1578T	0.000	ARAA	AS	-	Test	wsmr-history.org	-	-
1955-499	2435152.50	1955 Feb 14	Nike Ajax	-	1795T	0.000	ARAA	AS	-	Test	wsmr-history.org	-	-
1955-4100	2435153.50	1955 Feb 15	Nike Ajax	-	1722T	0.000	ARAA	AS	-	Test	wsmr-history.org	-	-
1955-4101	2435154.50	1955 Feb 16	Nike Ajax	-	4249E	0.000	ARAA	AS	-	Test	wsmr-history.org	-	-
1955-4102	2435154.50	1955 Feb 16	Nike Ajax	-	3078R	0.000	ARAA	AS	-	Test	wsmr-history.org	-	-
1955-4105	2435154.50	1955 Feb 16	Nike Ajax	-	4409R	0.000	ARAA	AS	-	Test	wsmr-history.org	-	-
1955-4107	2435154.50	1955 Feb 16	Nike Ajax	-	4197R	0.000	ARAA	AS	-	Test	wsmr-history.org	-	-
1955-4104	2435154.50	1955 Feb 16	Nike Ajax	-	3105R	0.000	ARAA	AS	-	Test	wsmr-history.org	-	-
1955-4108	2435154.50	1955 Feb 16	Nike Ajax	-	1539T	0.000	ARAA	AS	-	Test	wsmr-history.org	-	-
1955-4109	2435154.50	1955 Feb 16	Nike Ajax	-	1594T	0.000	ARAA	AS	-	Test	wsmr-history.org	-	-
1955-4110	2435154.50	1955 Feb 16	Nike Ajax	-	4231E	0.000	ARAA	AS	-	Test	wsmr-history.org	-	-
1955-4111	2435154.50	1955 Feb 16	Nike Ajax	-	1752T	0.000	ARAA	AS	-	Test	wsmr-history.org	-	-
1955-4112	2435155.50	1955 Feb 18	Nike Ajax	-	1731T	0.000	ARAA	AS	-	Test	wsmr-history.org	-	-
1955-4113	2435157.50	1955 Feb 19	Nike Ajax	-	1923T	0.000	ARAA	AS	-	Test	wsmr-history.org	-	-
1955-4114	2435158.50	1955 Feb 20	Nike Ajax	-	1966T	0.000	ARAA	AS	-	Test	wsmr-history.org	-	-
1955-4116	2435160.50	1955 Feb 22	Nike Ajax	-	1715T	0.000	ARAA	AS	-	Test	wsmr-history.org	-	-
1955-4117	2435160.50	1955 Feb 22	Nike Ajax	-	1937T	0.000	ARAA	AS	-	Test	wsmr-history.org	-	-
1955-4118	2435160.50	1955 Feb 22	Nike Ajax	-	1965T	0.000	ARAA	AS	-	Test	wsmr-history.org	-	-
1955-4119	2435161.50	1955 Feb 23	Nike Ajax	-	4198E	0.000	ARAA	AS	-	Test	wsmr-history.org	-	-
1955-4120	2435161.50	1955 Feb 23	Nike Ajax	-	1711T	0.000	ARAA	AS	-	Test	wsmr-history.org	-	-
1955-4122	2435161.50	1955 Feb 23	Nike Ajax	-	1796T	0.000	ARAA	AS	-	Test	wsmr-history.org	-	-
1955-4125	2435161.50	1955 Feb 23	Nike Ajax	-	2987R	0.000	ARAA	AS	-	Test	wsmr-history.org	-	-
1955-4124	2435161.50	1955 Feb 23	Nike Ajax	-	2987R	0.000	ARAA	AS	-	Test	wsmr-history.org	-	-
1955-4123	2435161.50	1955 Feb 23	Nike Ajax	-	2467R	0.000	ARAA	AS	-	Test	wsmr-history.org	-	-
1955-4127	2435161.50	1955 Feb 23	Nike Ajax	-	4293E	0.000	ARAA	AS	-	Test	wsmr-history.org	-	-
1955-4134	2435163.50	1955 Feb 25	Nike Ajax	-	1910T	0.000	ARAA	AS	-	Test	wsmr-history.org	-	-
1955-4135	2435163.50	1955 Feb 25	Nike Ajax	-	1931T	0.000	ARAA	AS	-	Test	wsmr-history.org	-	-
1955-4136	2435163.50	1955 Feb 25	Nike Ajax	-	3313T	0.000	ARAA	AS	-	Test	wsmr-history.org	-	-
1955-4137	2435165.50	1955 Feb 28	Nike Ajax	-	1691T	0.000	ARAA	AS	-	Test	wsmr-history.org	-	-
1955-4138	2435167.50	1955 Mar 01	Nike Ajax	-	1597T	0.000	ARAA	AS	-	Test	wsmr-history.org	-	-
1955-4139	2435167.50	1955 Mar 01	Nike Ajax	-	1964T	0.000	ARAA	AS	-	Test	wsmr-history.org	-	-
1955-4140	2435167.50	1955 Mar 01	Nike Ajax	-	1844T	0.000	ARAA	AS	-	Test	wsmr-history.org	-	-
1955-4144	2435168.50	1955 Mar 02	Nike Ajax	-	1985T	0.000	RCRR	AS	-	Test	FC	-	-
1955-4145	2435168.50	1955 Mar 02	Nike Ajax	-	-	0.000	RCRR	AS	-	Test	FC	-	-
1955-4147	2435169.50	1955 Mar 03	Nike Ajax	-	1751T	0.000	ARAA	AS	-	Test	wsmr-history.org	-	-
1955-4148	2435169.50	1955 Mar 03	Nike Ajax	-	1711T	0.000	ARAA	AS	-	Test	wsmr-history.org	-	-
1955-4149	2435169.50	1955 Mar 03	Nike Ajax	-	1726T	0.000	ARAA	AS	-	Test	wsmr-history.org	-	-
1955-4150	2435169.50	1955 Mar 03	Nike Ajax	-	1613T	0.000	ARAA	AS	-	Test	wsmr-history.org	-	-
1955-4151	2435170.50	1955 Mar 04	Nike Ajax	-	2763T	0.000	ARAA	AS	-	Test	wsmr-history.org	-	-
1955-4152	2435170.50	1955 Mar 04	Nike Ajax	-	1517T	0.000	ARAA	AS	-	Test	wsmr-history.org	-	-
1955-4153	2435170.50	1955 Mar 04	Nike Ajax	-	1904T	0.000	ARAA	AS	-	Test	wsmr-history.org	-	-
1955-4154	2435170.50	1955 Mar 04	Nike Ajax	-	3309T	0.000	ARAA	AS	-	Test	wsmr-history.org	-	-
1955-4155	2435170.50	1955 Mar 04	Nike Ajax	-	4211E	0.000	ARAA	AS	-	Test	wsmr-history.org	-	-
1955-4156	2435170.50	1955 Mar 04	Nike Ajax	-	1644T	0.000	ARAA	AS	-	Test	wsmr-history.org	-	-
1955-4157	2435171.50	1955 Mar 05	Nike Ajax	-	1764T	0.000	ARAA	AS	-	Test	wsmr-history.org	-	-
1955-4158	2435174.50	1955 Mar 08	Nike Ajax	-	1976T	0.000	ARAA	AS	-	Test	wsmr-history.org	-	-
1955-4159	2435174.50	1955 Mar 08	Nike Ajax	-	1899T	0.000	ARAA	AS	-	Test	wsmr-history.org	-	-
1955-4160	2435174.50	1955 Mar 08	Nike Ajax	-	1741T	0.000	ARAA	AS	-	Test	wsmr-history.org	-	-
1955-4161	2435175.50	1955 Mar 09	Nike Ajax	-	3097R	0.000	ARAA	AS	-	Test	wsmr-history.org	-	-
1955-4162	2435175.50	1955 Mar 09	Nike Ajax	-	1702T	0.000	ARAA	AS	-	Test	wsmr-history.org	-	-
1955-4163	2435175.50	1955 Mar 09	Nike Ajax	-	1727T	0.000	ARAA	AS	-	Test	wsmr-history.org	-	-
1955-4165	2435175.50	1955 Mar 09	Nike Ajax	-	1866T	0.000	ARAA	AS	-	Test	wsmr-history.org	-	-
1955-4166	2435175.50	1955 Mar 09	Nike Ajax	-	1886T	0.000	ARAA	AS	-	Test	wsmr-history.org	-	-
1955-4167	2435175.50	1955 Mar 09	Nike Ajax	-	3014R	0.000	ARAA	AS	-	Test	wsmr-history.org	-	-
1955-4168	2435175.50	1955 Mar 09	Nike Ajax	-	1927T	0.000	ARAA	AS	-	Test	wsmr-history.org	-	-
1955-4169	2435175.50	1955 Mar 10	Nike Ajax	-	4351E	0.000	ARAA	AS	-	Test	wsmr-history.org	-	-
1955-4170	2435176.50	1955 Mar 10	Nike Ajax	-	1975T	0.000	ARAA	AS	-	Test	wsmr-history.org	-	-
1955-4171	2435176.50	1955 Mar 10	Nike Ajax	-	1763T	0.000	ARAA	AS	-	Test	wsmr-history.org	-	-
1955-4172	2435176.50	1955 Mar 10	Nike Ajax	-	1949T	0.000	ARAA	AS	-	Test	wsmr-history.org	-	-
1955-4173	2435176.50	1955 Mar 10	Nike Ajax	-	-	0.000	PARC	AS	-	Test	RP-1028	-	MACA-BW-SL55F24
1955-4174	2435177.32	1955 Mar 10 1942	Nike Ajax	-	-	0.000	RCRR	AS	-	Test	FC	-	-
1955-4175	2435177.41	1955 Mar 10 2146	Nike Ajax	-	-	0.000	RCRR	AS	-	Test	FC	-	-
1955-4176	2435177.50	1955 Mar 11	Nike Ajax	-	4199E	0.000	ARAA	AS	-	Test	wsmr-history.org	-	-





Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	OrbPay	Agency	Launch_Code	Group	Category	LTCite	Cite	Notes
1955-4426	2435265.50	1955 Jun 07	Nike Ajax	-	1781T	0.000	ARAA	AS	-	Test	wsm-history.org	-	-
1955-4427	2435265.50	1955 Jun 07	Nike Ajax	-	1822T	0.000	ARAA	AS	-	Test	wsm-history.org	-	-
1955-4429	2435267.50	1955 Jun 09	Nike Ajax	-	1872T	0.000	ARAA	AS	-	Test	wsm-history.org	-	-
1955-4430	2435267.50	1955 Jun 09	Nike Ajax	-	1801T	0.000	ARAA	AS	-	Test	wsm-history.org	-	-
1955-4431	2435267.50	1955 Jun 09	Nike Ajax	-	1926T	0.000	ARAA	AS	-	Test	wsm-history.org	-	-
1955-4432	2435268.50	1955 Jun 09	Nike Ajax	-	1966T	0.000	ARAA	AS	-	Test	wsm-history.org	-	-
1955-4433	2435268.50	1955 Jun 10	Nike Ajax	-	2246T	0.000	ARAA	AS	-	Test	wsm-history.org	-	-
1955-4436	2435269.50	1955 Jun 11	Nike Ajax	-	3255T	0.000	ARAA	AS	-	Test	wsm-history.org	-	-
1955-4437	2435269.50	1955 Jun 11	Nike Ajax	-	2256T	0.000	ARAA	AS	-	Test	wsm-history.org	-	-
1955-4438	2435270.50	1955 Jun 12	Nike Ajax	-	2295T	0.000	ARAA	AS	-	Test	wsm-history.org	-	-
1955-4439	2435270.50	1955 Jun 12	Nike Ajax	-	2254T	0.000	ARAA	AS	-	Test	wsm-history.org	-	-
1955-4440	2435270.50	1955 Jun 12	Nike Ajax	-	2257T	0.000	ARAA	AS	-	Test	wsm-history.org	-	-
1955-4441	2435272.40	1955 Jun 13 2131	X-17 HTV	1	Q-4	0.000	6555A	AF	-	Test	X-17FR	X-Planes	-
1955-4443	2435272.50	1955 Jun 14	Nike Ajax	-	4435E	0.000	ARAA	AS	-	Test	wsm-history.org	-	-
1955-4446	2435273.50	1955 Jun 15	Nike Ajax	-	4648R	0.000	ARAA	AS	-	Test	wsm-history.org	-	-
1955-4447	2435273.50	1955 Jun 15	Nike Ajax	-	4667R	0.000	ARAA	AS	-	Test	wsm-history.org	-	-
1955-4448	2435273.50	1955 Jun 15	Nike Ajax	-	4704R	0.000	ARAA	AS	-	Test	wsm-history.org	-	-
1955-4448	2435273.50	1955 Jun 15	Nike Ajax	-	3025R	0.000	ARAA	AS	-	Test	wsm-history.org	-	-
1955-4504	2435280.50	1955 Jun 22	Nike Ajax	-	12498-4695	0.000	ARAA	AS	-	Test	wsm-history.org	-	-
1955-4505	2435280.50	1955 Jun 22	Nike Ajax	-	12498-5243	0.000	ARAA	AS	-	Test	wsm-history.org	-	-
1955-4450	2435282.32	1955 Jun 23 1957	X-17 HTV	-	H-1	0.000	6555A	NS	-	Test	Nike-History	X-Planes	-
1955-4461	2435281.50	1955 Jun 23	Nike Nike T40 T55	-	-	0.000	PARO	AF	-	Reentry Test	X-17FR	X-Planes	-
1955-549	2435283.25	1955 Jun 24 1804	Nike Deacon	-	-	0.000	AFORL/UMI	SS	UMI/Jones L	Acron	NoneLL	UH-FS	-
1955-4506	2435287.50	1955 Jun 29	Nike Ajax	-	12498-4443	0.000	ARAA	AS	-	Test	Nike-History	-	-
1955-4507	2435287.50	1955 Jun 29	Nike Ajax	-	12498-5211	0.000	ARAA	AS	-	Test	Nike-History	-	-
1955-4508	2435287.50	1955 Jun 29	Nike Ajax	-	12498-5285	0.000	ARAA	AS	-	Test	Nike-History	-	-
1955-4509	2435287.50	1955 Jun 29	Nike Ajax	-	12498-4440	0.000	ARAA	AS	-	Test	Nike-History	-	-
1955-4463	2435289.32	1955 Jun 30 1941	X-17 HTV	-	H-3	0.000	6555A	NS	-	Test	X-17FR	X-Planes	-
1955-4510	2435301.50	1955 Jun 13	Nike Ajax	-	12498-1586	0.000	ARAA	AS	-	Test	Nike-History	-	-
1955-4511	2435301.50	1955 Jun 13	Nike Ajax	-	12498-1974	0.000	ARAA	AS	-	Test	Nike-History	-	-
1955-4512	2435301.50	1955 Jun 13	Nike Ajax	-	12498-1714	0.000	ARAA	AS	-	Test	Nike-History	-	-
1955-4513	2435301.50	1955 Jun 13	Nike Ajax	-	12498-1972	0.000	ARAA	AS	-	Test	Nike-History	-	-
1955-4514	2435301.50	1955 Jun 13	Nike Ajax	-	12498-1898	0.000	ARAA	AS	-	Test	Nike-History	-	-
1955-4467	2435303.40	1955 Jun 14 2194	X-17 HTV	-	H-2	0.000	6555A	NS	-	Test	X-17FR	X-Planes	-
1955-4515	2435310.50	1955 Jun 12	Nike Ajax	-	12498-1982	0.000	ARAA	AS	-	Test	Nike-History	-	-
1955-4516	2435310.50	1955 Jun 12	Nike Ajax	-	12498-1894	0.000	ARAA	AS	-	Test	Nike-History	-	-
1955-4517	2435315.50	1955 Jun 17 27	Nike Ajax	-	12498-1931	0.000	ARAA	AS	-	Test	Nike-History	-	-
1955-4518	2435322.50	1955 Aug 3	Nike Ajax	-	12498-5121	0.000	ARAA	AS	-	Test	Nike-History	-	-
1955-4519	2435322.50	1955 Aug 3	Nike Ajax	-	12498-5251	0.000	ARAA	AS	-	Test	Nike-History	-	-
1955-4520	2435322.50	1955 Aug 3	Nike Ajax	-	12498-4752	0.000	ARAA	AS	-	Test	Nike-History	-	-
1955-4521	2435325.50	1955 Aug 10	Nike Ajax	-	12498-5123	0.000	ARAA	AS	-	Test	Nike-History	-	-
1955-4522	2435350.50	1955 Aug 31	Nike Ajax	-	12498-5124	0.000	PARO	AS	-	Test	PR-1028	-	-
1955-4569	2435380.50	1955 Sep 14	Nike Nike T40 T55	-	12498-5126	0.000	ARAA	AS	-	Test	PR-1028	-	-
1955-4572	2435397.50	1955 Sep 27	Nike Deacon	-	-	0.000	PARO	AS	-	Reentry Test	PR-1028	-	-
1955-4573	2435397.50	1955 Sep 27	Nike Ajax	-	12498-5136	0.000	ARAA	AS	-	Test	Nike-History	-	-
1955-4574	2435398.50	1955 Sep 28	Nike Ajax	-	12498-5131	0.000	ARAA	AS	-	Test	Nike-History	-	-
1955-4575	2435398.50	1955 Oct 1	Nike Ajax	-	12498-5234	0.000	ARAA	AS	-	Test	Nike-History	-	-
1955-4581	2435398.50	1955 Oct 7	Nike Nike T40 T55	-	-	0.000	PARO	AS	-	Reentry Test	PR-1028	-	-
1955-4582	2435398.50	1955 Oct 7	Nike Nike T40 T55	-	-	0.000	PARO	AS	-	Reentry Test	PR-1028	-	-
1955-4597	2435398.50	1955 Oct 19	Nike Ajax	-	12498-5237	0.000	ARAA	AS	-	Test	Nike-History	-	-
1955-4598	2435398.50	1955 Oct 19	Nike Ajax	-	12498-5217	0.000	ARAA	AS	-	Test	Nike-History	-	-
1955-4599	2435398.50	1955 Oct 19	Nike Ajax	-	12498-5174	0.000	ARAA	AS	-	Test	Nike-History	-	-
1955-4520	2435400.50	1955 Oct 26	Nike Ajax	-	12498-5208	0.000	ARAA	AS	-	Test	Nike-History	-	-
1955-4531	2435415.50	1955 Nov 2	Nike Ajax	-	12498-6651	0.000	ARAA	AS	-	Test	Nike-History	-	-
1955-4532	2435420.50	1955 Nov 9	Nike Ajax	-	12498-5141	0.000	ARAA	AS	-	Test	Nike-History	-	-
1955-4533	2435427.50	1955 Nov 16	Nike Ajax	-	12498-6652	0.000	ARAA	AS	-	Test	Nike-History	-	-
1955-4534	2435427.50	1955 Nov 16	Nike Ajax	-	12498-5133	0.000	ARAA	AS	-	Test	Nike-History	-	-
1955-4535	2435429.50	1955 Nov 18	Nike Ajax	-	12498-7024	0.000	ARAA	AS	-	Test	Nike-History	-	-
1955-4536	2435434.50	1955 Nov 23	Nike Ajax	-	12498-1688	0.000	ARAA	AS	-	Test	Nike-History	-	-
1955-4537	2435442.50	1955 Dec 1	Nike Ajax	-	12498-5151	0.000	ARAA	AS	-	Test	Nike-History	-	-
1955-4538	2435448.50	1955 Dec 7	Nike Ajax	-	12498-5184	0.000	ARAA	AS	-	Test	Nike-History	-	-
1955-4539	2435455.50	1955 Dec 14	Nike Ajax	-	12498-5660	0.000	ARAA	AS	-	Test	Nike-History	-	-
1955-4540	2435455.50	1955 Dec 14	Nike Ajax	-	12498-	0.000	PARO	AS	-	Test	Nike-History	-	-
1955-4497	2435455.50	1955 Dec 14	Nike Nike T40 T55	-	-	0.000	PARO	AS	-	Test	PR-1028	-	-
1955-4541	2435457.50	1955 Dec 16	Nike Ajax	-	12498-7139	0.000	ARAA	AS	-	Test	Nike-History	-	-
1955-4129	2435483.50	1956 Jan 11	Nike Nike T40 T55	-	12498-7033	0.000	ARAA	AS	-	Test	Nike-History	-	-
1956-1130	2435483.50	1956 Jan 11	Nike Nike T40 T55	-	12498-7027	0.000	ARAA	AS	-	Test	Nike-History	-	-
1956-1131	2435483.50	1956 Jan 11	Nike Nike T40 T55	-	12498-5840	0.000	ARAA	AS	-	Test	Nike-History	-	-
1956-1132	2435483.50	1956 Jan 11	Nike Nike T40 T55	-	12498-6204	0.000	ARAA	AS	-	Test	Nike-History	-	-
1956-1133	2435483.50	1956 Jan 11	Nike Nike T40 T55	-	12498-5154	0.000	ARAA	AS	-	Test	Nike-History	-	-
1956-1134	2435490.50	1956 Jan 18	Nike Nike T40 T55	-	12498-5179	0.000	ARAA	AS	-	Test	Nike-History	-	-
1956-1136	2435490.50	1956 Jan 18	Nike Nike T40 T55	-	12498-6961	0.000	ARAA	AS	-	Test	Nike-History	-	-
1956-1137	2435497.50	1956 Jan 25	Nike Nike T40 T55	-	12498-6972	0.000	ARAA	AS	-	Test	Nike-History	-	-
1956-1138	2435497.50	1956 Jan 25	Nike Nike T40 T55	-	12498-5155	0.000	ARAA	AS	-	Test	Nike-History	-	-
1956-1139	2435497.50	1956 Jan 25	Nike Nike T40 T55	-	12498-6962	0.000	ARAA	AS	-	Test	Nike-History	-	-
1956-1139	2435497.50	1956 Jan 25	Nike Nike T40 T55	-	12498-5250	0.000	ARAA	AS	-	Test	Nike-History	-	-
1956-1140	2435504.50	1956 Feb 1	Nike Nike T40 T55	-	12498-5244	0.000	ARAA	AS	-	Test	Nike-History	-	-
1956-1141	2435504.50	1956 Feb 1	Nike Nike T40 T55	-	12498-5252	0.000	ARAA	AS	-	Test	Nike-History	-	-
1956-1142	2435504.50	1956 Feb 1	Nike Nike T40 T55	-	12498-5156	0.000	ARAA	AS	-	Test	Nike-History	-	-
1956-1143	2435511.50	1956 Feb 8	Nike Nike T40 T55	-	12498-6390	0.000	ARAA	AS	-	Test	Nike-History	-	-
1956-4143	2435518.25	1956 Feb 14 1807	Nike Nike T40 T55	-	-	0.000	RCR	AS	-	Test	FC	-	-
1956-4144	2435518.25	1956 Feb 15	Nike Nike T40 T55	-	12498-5160	0.000	ARAA	AS	-	Test	Nike-History	-	-
1956-4145	2435518.50	1956 Feb 15	Nike Nike T40 T55	-	12498-5224	0.000	ARAA	AS	-	Test	Nike-History	-	-
1956-4146	2435518.50	1956 Feb 15	Nike Nike T40 T55	-	12498-6717	0.000	ARAA	AS	-	Test	Nike-History	-	-
1956-4147	2435523.50	1956 Feb 20	Nike Nike T40 T55	-	12498-6964	0.000	ARAA	AS	-	Test	Nike-History	-	-
1956-4148	2435523.50	1956 Feb 20	Nike Nike T40 T55	-	12498-7022	0.000	ARAA	AS	-	Test	Nike-History	-	-

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	OrbPay	Agency	Launch_Code	Group	Category	LTCite	Cite	Notes
1956-423	2435526.37	1956 Feb 22 2054	Mike Ajax			0.000	RCHR	AS		Test	FC		
1956-4149	2435526.50	1956 Feb 23	Mike Ajax		12498-6188	0.000	ARAA	AS		Test	Mike-History		
1956-4150	2435526.50	1956 Feb 23	Mike Ajax		12498-6162	0.000	ARAA	AS		Test	Mike-History		
1956-4151	2435526.50	1956 Feb 23	Mike Ajax		12498-6687	0.000	ARAA	AS		Test	Mike-History		
1956-4152	2435526.50	1956 Feb 27	Mike Ajax		12498-6966	0.000	ARAA	AS		Test	Mike-History		
1956-4153	2435526.50	1956 Feb 27	Mike Ajax		12498-6158	0.000	ARAA	AS		Test	Mike-History		
1956-4154	2435526.50	1956 Feb 27	Mike Ajax		12498-6970	0.000	ARAA	AS		Test	Mike-History		
1956-4155	2435526.50	1956 Feb 27	Mike Ajax		12498-6971	0.000	ARAA	AS		Test	Mike-History		
1956-4156	2435531.50	1956 Feb 28	Mike Ajax		12498-5221	0.000	ARAA	AS		Test	Mike-History		
1956-4157	2435531.50	1956 Feb 28	Mike Ajax		12498-5743	0.000	ARAA	AS		Test	Mike-History		
1956-4158	2435531.50	1956 Feb 28	Mike Ajax		12498-6470	0.000	ARAA	AS		Test	Mike-History		
1956-424	2435532.43	1956 Feb 28 2216	Mike Ajax			0.000	RCHR	AS		Test	FC		
1956-425	2435532.44	1956 Feb 28 2227	Mike Ajax			0.000	RCHR	AS		Test	FC		
1956-4159	2435532.50	1956 Feb 29	Mike Ajax		12498-5273	0.000	ARAA	AS		Test	Mike-History		
1956-4160	2435532.50	1956 Feb 29	Mike Ajax		12498-6710	0.000	ARAA	AS		Test	Mike-History		
1956-4161	2435532.50	1956 Feb 29	Mike Ajax		12498-5725	0.000	ARAA	AS		Test	Mike-History		
1956-4162	2435532.50	1956 Feb 29	Mike Ajax			0.000	RCHR	AS		Test	FC		
1956-426	2435537.08	1956 Mar 4 1558	Mike Ajax			0.000	RCHR	AS		Test	FC		
1956-427	2435537.09	1956 Mar 4 1406	Mike Ajax			0.000	RCHR	AS		Test	FC		
1956-428	2435537.12	1956 Mar 4 1448	Mike Ajax			0.000	RCHR	AS		Test	FC		
1956-429	2435537.12	1956 Mar 4 1459	Mike Ajax			0.000	RCHR	AS		Test	FC		
1956-430	2435537.15	1956 Mar 4 1543	Mike Ajax			0.000	RCHR	AS		Test	FC		
1956-431	2435537.16	1956 Mar 4 1553	Mike Ajax			0.000	RCHR	AS		Test	FC		
1956-4162	2435537.50	1956 May 2	Mike Ajax		12498-5765	0.000	PARA	AS		Test	Mike-History		
1956-452	2435602.50	1956 May 9	Mike			0.000	PARA	AS		Test	RP-1028		
1956-463	2435606.50	1956 May 15	Mike			0.000	PARA	AS		Test	RP-1028		
1956-464	2435606.50	1956 May 15	Mike			0.000	PARA	AS		Test	RP-1028		
1956-460	2435631.50	1956 Jun 7	Mike			0.000	PARA	AS		Test	RP-1028		
1956-537	2435631.50	1956 Jun 7	Mike			0.000	PARA	SS	PARA/	Reentry Test	RP-1028		
1956-4163	2435638.50	1956 Jun 14	Mike Mike T40 T55			0.000	ARAA	AS		Test	Mike-History		
1956-4164	2435646.50	1956 Jun 22	Mike Ajax		12498-8951	0.000	ARAA	AS		Test	Mike-History		
1956-551	2435661.25	1956 Jul 6 1800	Mike Cajun		12498-7946	0.000	UMI/AFCHL	SS	UMI/Jones L	Test	Mike-History		
1956-561	2435676.50	1956 Jul 24	Mike Cajun		11-C 4 (UNDP-1)	0.000	UMI/AFCHL	SS	IMRS/Hoore	Test	Mike-History		
1956-4165	2435679.50	1956 Jul 25	Mike Ajax		12498-5220	0.000	ARAA	AS		Test	News11		
1956-4166	2435679.50	1956 Jul 25	Mike Ajax		12498-5228	0.000	ARAA	AS		Test	Mike-History		
1956-4167	2435686.50	1956 Aug 1	Mike Ajax		12498-5771	0.000	ARAA	AS		Test	Mike-History		
1956-4168	2435689.46	1956 Aug 6 2300	Mike Ajax		12498-9013	0.000	UMI/AFCHL	SS	UMI/	Test	Mike-History		
1956-572	2435694.50	1956 Aug 8	Mike Cajun		11-C 2 (770N/5656)	0.000	ARAA	AS		Test	News11		
1956-4169	2435694.50	1956 Aug 9	Mike Ajax		12498-9600	0.000	ARAA	AS		Test	Mike-History		
1956-4170	2435699.50	1956 Aug 9	Mike Cajun		12498-9601	0.000	BRL/UMI	SS	BRL/	Test	Mike-History		
1956-574	2435699.45	1956 Aug 9 2247	Mike Cajun		11-C 3 (6581/BRL)	0.000	ARAA	AS		Test	News11		
1956-4171	2435701.50	1956 Aug 16	Mike Ajax		12498-5778	0.000	ARAA	AS		Test	Mike-History		
1956-4172	2435701.50	1956 Aug 16	Mike Ajax		12498-6949	0.000	ARAA	AS		Test	Mike-History		
1956-4173	2435701.50	1956 Aug 16	Mike Ajax		12498-6949	0.000	ARAA	AS		Test	Mike-History		
1956-4174	2435709.50	1956 Aug 24	Mike Ajax		12498-5254	0.000	ARAA	AS		Test	Mike-History		
1956-4175	2435721.50	1956 Sep 5	Mike T40 T55		12498-7966	0.000	PARA	AS		Test	RP-1028		
1956-489	2435726.50	1956 Sep 10	Mike T40 T55			0.000	ARAA	AS		Test	Mike-History		
1956-4176	2435726.50	1956 Sep 12	Mike Ajax		12498-7918	0.000	ARAA	AS		Test	Mike-History		
1956-4177	2435742.50	1956 Sep 26	Mike Ajax		12498-5773	0.000	ARAA	AS		Test	Mike-History		
1956-4178	2435742.50	1956 Sep 26	Mike Ajax		12498-7767	0.000	ARAA	AS		Test	Mike-History		
1956-4179	2435742.50	1956 Sep 26	Mike Ajax		12498-7025	0.000	PARA	AS		Test	RP-1028		
1956-490	2435746.50	1956 Oct 2	Mike Ajax		12498-9481	0.000	ARAA	AS		Test	Mike-Hist		
1956-4180	2435751.50	1956 Oct 3	Mike			0.000	PARA	AS		Test	RP-1028		
1956-4181	2435751.50	1956 Oct 5	Mike			0.000	PARA	AS		Test	RP-1028		
1956-4182	2435751.50	1956 Oct 9	Mike			0.000	PARA	AS		Test	RP-1028		
1956-4183	2435751.50	1956 Oct 9	Mike			0.000	PARA	AS		Test	RP-1028		
1956-4184	2435751.50	1956 Oct 10	Mike			0.000	PARA	AS		Test	RP-1028		
1956-4185	2435751.50	1956 Oct 10	Mike			0.000	PARA	AS		Test	RP-1028		
1956-4186	2435751.50	1956 Oct 10	Mike			0.000	PARA	AS		Test	RP-1028		
1956-4187	2435751.50	1956 Oct 10	Mike			0.000	PARA	AS		Test	RP-1028		
1956-4188	2435751.50	1956 Oct 10	Mike			0.000	PARA	AS		Test	RP-1028		
1956-4189	2435751.50	1956 Oct 10	Mike			0.000	PARA	AS		Test	RP-1028		
1956-4190	2435751.50	1956 Oct 10	Mike			0.000	PARA	AS		Test	RP-1028		
1956-4191	2435751.50	1956 Oct 10	Mike			0.000	PARA	AS		Test	RP-1028		
1956-4192	2435751.50	1956 Oct 10	Mike			0.000	PARA	AS		Test	RP-1028		
1956-4193	2435751.50	1956 Oct 10	Mike			0.000	PARA	AS		Test	RP-1028		
1956-4194	2435751.50	1956 Oct 10	Mike			0.000	PARA	AS		Test	RP-1028		
1956-4195	2435751.50	1956 Oct 10	Mike			0.000	PARA	AS		Test	RP-1028		
1956-4196	2435751.50	1956 Oct 10	Mike			0.000	PARA	AS		Test	RP-1028		
1956-4197	2435751.50	1956 Oct 10	Mike			0.000	PARA	AS		Test	RP-1028		
1956-4198	2435751.50	1956 Oct 10	Mike			0.000	PARA	AS		Test	RP-1028		
1956-4199	2435751.50	1956 Oct 10	Mike			0.000	PARA	AS		Test	RP-1028		
1956-4200	2435751.50	1956 Oct 10	Mike			0.000	PARA	AS		Test	RP-1028		
1956-4201	2435751.50	1956 Oct 10	Mike			0.000	PARA	AS		Test	RP-1028		
1956-4202	2435751.50	1956 Oct 10	Mike			0.000	PARA	AS		Test	RP-1028		
1956-4203	2435751.50	1956 Oct 10	Mike			0.000	PARA	AS		Test	RP-1028		
1956-4204	2435751.50	1956 Oct 10	Mike			0.000	PARA	AS		Test	RP-1028		
1956-4205	2435751.50	1956 Oct 10	Mike			0.000	PARA	AS		Test	RP-1028		
1956-4206	2435751.50	1956 Oct 10	Mike			0.000	PARA	AS		Test	RP-1028		
1956-4207	2435751.50	1956 Oct 10	Mike			0.000	PARA	AS		Test	RP-1028		
1956-4208	2435751.50	1956 Oct 10	Mike			0.000	PARA	AS		Test	RP-1028		
1956-4209	2435751.50	1956 Oct 10	Mike			0.000	PARA	AS		Test	RP-1028		
1956-4210	2435751.50	1956 Oct 10	Mike			0.000	PARA	AS		Test	RP-1028		
1956-4211	2435751.50	1956 Oct 10	Mike			0.000	PARA	AS		Test	RP-1028		
1956-4212	2435751.50	1956 Oct 10	Mike			0.000	PARA	AS		Test	RP-1028		
1956-4213	2435751.50	1956 Oct 10	Mike			0.000	PARA	AS		Test	RP-1028		
1956-4214	2435751.50	1956 Oct 10	Mike			0.000	PARA	AS		Test	RP-1028		
1956-4215	2435751.50	1956 Oct 10	Mike			0.000	PARA	AS		Test	RP-1028		
1956-4216	2435751.50	1956 Oct 10	Mike			0.000	PARA	AS		Test	RP-1028		
1956-4217	2435751.50	1956 Oct 10	Mike			0.000	PARA	AS		Test	RP-1028		
1956-4218	2435751.50	1956 Oct 10	Mike			0.000	PARA	AS		Test	RP-1028		
1956-4219	2435751.50	1956 Oct 10	Mike			0.000	PARA	AS		Test	RP-1028		
1956-4220	2435751.50	1956 Oct 10	Mike			0.000	PARA	AS		Test	RP-1028		
1956-4221	2435751.50	1956 Oct 10	Mike			0.000	PARA	AS		Test	RP-1028		
1956-4222	2435751.50	1956 Oct 10	Mike			0.000	PARA	AS		Test	RP-1028		
1956-4223	2435751.50	1956 Oct 10	Mike			0.000	PARA	AS		Test	RP-1028		
1956-4224	2435751.50	1956 Oct 10	Mike			0.000	PARA	AS		Test	RP-1028		
1956-4225	2435751.50	1956 Oct 10	Mike			0.000	PARA	AS		Test	RP-1028		
1956-4226	2435751.50	1956 Oct 10	Mike			0.000	PARA	AS		Test	RP-1028		
1956-4227	2435751.50	1956 Oct 10	Mike			0.000	PARA	AS		Test	RP-1028		
1956-4228	2435751.50	1956 Oct 10	Mike			0.000	PARA	AS		Test	RP-1028		
1956-4229	2435751.50	1956 Oct 10	Mike			0.000	PARA	AS		Test	RP-1028		
1956-4230	2435751.50	1956 Oct 10	Mike			0.000	PARA	AS		Test	RP-1028		
1956-4231	2435751.50	1956 Oct 10	Mike			0.000	PARA	AS		Test	RP-1028		
1956-4232	2435751.50	1956 Oct 10	Mike			0.000	PARA	AS		Test	RP-1028		

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	OrbitPay	Agency	Launch_Code	Group	Category	LTCite	Cite	Notes
1957-365	2436043.48	1957 Jul 23 2331:52	Mike Deacon	-	NW7-40F	0.000	NRL	SS	NRL/	Solar UVX	IGY	-	-
1957-467	2436050.26	1957 Jul 30 1810:02	Mike Cajun	-	AM6-32	0.000	UMI/BRL	SF	UMI/	Aeron	FC	Newell	-
1957-472	2436056.30	1957 Aug 5 1910	Mike Deacon	-	NW7-41F	0.000	NRL	SF	UMI/	Solar UVX	IGY	-	-
1957-4151	2436071.50	1957 Aug 21	Mike Ajax	-	12498-7956	0.000	ARAA	AS	-	Test	Mike-History	-	-
1957-479	2436063.50	1957 Aug 13	Mike Recruit	-	-	0.000	PARA	AS	-	Test	RP-1028	-	-
1957-591	2436071.41	1957 Aug 20 1650:04	Mike Deacon	-	RP6-X1 Igniter test	0.000	NRL	SS	BRL/	Solar UVX	FC	Newell	-
1957-593	2436074.41	1957 Aug 23 2154:05	Mike Cajun	-	-	0.000	UMI/BRL	SS	NRL/	Solar UVX	IGY	WDCRF	-
1957-484	2436074.75	1957 Aug 24 0600	Mike Cajun	-	NW7-43F	0.000	NRL	SF	UMI/BRL	Test	WDCRF	-	-
1957-486	2436078.16	1957 Aug 27 1554	Mike Deacon	-	NW7-43F	0.000	NRL	SF	UMI/BRL	Test	WDCRF	-	-
1957-597	2436078.68	1957 Aug 28 0415:03	Mike Deacon	-	NW7-44F	0.000	UMI	SS	UMI/	Solar UVX	WDCRF	-	-
1957-598	2436080.38	1957 Aug 28 2021:40	Mike Deacon	-	NW7-44F	0.000	NRL	SS	NRL/	Solar UVX	Newell	-	-
1957-5102	2436081.71	1957 Aug 29 2112:25	Mike Deacon	-	I16-23F	0.000	NRL	SS	NRL/	Solar UVX	WDCRF	-	-
1957-4152	2436092.50	1957 Aug 31 0457	Mike Cajun	-	12498-5685	0.000	ARAA	AS	SUI/	Auroral	WDCRF	-	-
1957-496	2436094.14	1957 Sep 12 1519:30	Mike Deacon	-	NW7-46F	0.000	NRL	AS	NRL/	Solar UVX	Mike-History	-	-
1957-497	2436097.36	1957 Sep 15 2043	Mike Deacon	-	NW7-46F	0.000	NRL	SF	NRL/	Solar UVX	Newell	-	-
1957-4100	2436100.24	1957 Sep 18 1742	Mike Deacon	-	NW7-48F	0.000	NRL	SF	NRL/	Solar UV/Solar X	WDCRF	-	-
1957-4109	2436106.33	1957 Sep 18 1754	Mike Deacon	-	NW7-49F	0.000	NRL	SS	NRL/	Solar UV/Solar X	WDCRF	-	-
1957-4118	2436112.50	1957 Sep 26 2000	Mike Asp	-	NW8-50F	0.000	NRL	SF	NRL/	Test	Newell	-	-
1957-3174	2436183.23	1957 Oct 10 1735	Mike Recruit	-	DB6-02F	0.000	PARA	AS	BRL/	Reentry Test	RP-1028	-	-
1957-3175	2436183.26	1957 Dec 10 1812	Mike Cajun	-	NW8-51F	0.000	NRL	SS	NRL/	Icons/Fields	WDCRF	-	-
1957-4137	2436185.50	1957 Dec 13	Mike Cajun	-	SS6-39	0.000	PARA	AS	UMI/AFCR/	Test	WDCRF	-	-
1957-4144	2436195.50	1957 Dec 23	Mike Cajun	-	AM6-34	0.000	PARA	AS	NW8/Aoore	Aeron	FC	WDCRF	-
1958-306	2436211.50	1958 Jan 6	Mike Asp	-	HUGD 2	0.000	PARA	SF	SUI/	Test	RP-1028	-	-
1958-401	2436213.15	1958 Jan 9 1655	Mike Asp	-	I16-35	0.000	UMI/AFCR/	SS	UMI/	Test/Solar UV/Solar	JCH	-	-
1958-511	2436229.30	1958 Jan 25 1911:05	Mike Cajun	-	I16-35	0.000	UMI/AFCR/	SS	SUI/	Test	RP-1028	-	-
1958-516	2436231.30	1958 Jan 27 1917:45	Mike Cajun	-	AM6-02	0.000	UMI/AFCR/	SS	UMI/Jones	Aeron	WDCRF	-	-
1958-516	2436233.30	1958 Jan 29 1906:17	Mike Cajun	-	AM6-03	0.000	UMI/AFCR/	SS	UMI/Jones	Aeron	WDCRF	-	-
1958-523	2436247.78	1958 Feb 13 0637:04	Mike Cajun	-	I16-24F	0.000	UMI/AFCR/	SS	SUI/Neilwain	Auroral	WDCRF	-	-
1958-524	2436250.76	1958 Feb 16 0646:36	Mike Cajun	-	I16-25F	0.000	UMI/AFCR/	SS	SUI/Neilwain	Auroral	WDCRF	-	-
1958-532	2436256.73	1958 Feb 22 0534:31	Mike Cajun	-	I16-26F	0.000	UMI/AFCR/	SS	UMI/	Auroral	WDCRF	-	-
1958-534	2436256.52	1958 Feb 24 0734:42	Mike Cajun	-	AM6-37	0.000	UMI/AFCR/	SS	SUI/Neilwain	Auroral	WDCRF	-	-
1958-536	2436259.74	1958 Feb 25 0548:32	Mike Cajun	-	I16-27F	0.000	UMI/AFCR/	SS	BRL/	Test	FC	SRL, 715	-
1958-411	2436261.45	1958 Feb 26 2217:40	Mike Cajun	-	AM6-04	0.000	UMI/AFCR/	SS	UMI/Jones	Aeron	WDCRF	-	-
1958-539	2436266.75	1958 Mar 4 0601:36	Mike Cajun	-	AM6-05	0.000	UMI/AFCR/	SS	UMI/Jones	Aeron	WDCRF	-	-
1958-540	2436267.31	1958 Mar 4 1950:19	Mike Cajun	-	AM6-05	0.000	UMI/AFCR/	SS	UMI/Jones	Aeron	WDCRF	-	-
1958-542	2436280.50	1958 Mar 8	Mike Apache	-	AM6-025	0.000	PARA	AS	AFCR/	Solar UV	WDCRF	-	-
1958-544	2436286.50	1958 Mar 24 1830:25	Mike Cajun	-	DB6-08	0.000	PARA	AS	BRL/Berning	Aeron/Imaging	WDCRF	-	-
1958-546	2436287.72	1958 Mar 24 2200	Mike Cajun	-	AM6-08	0.000	UMI/AFCR/	SS	UMI/Spencer	Test	RP-1028	-	-
1958-550	2436300.50	1958 Apr 7 241644	Mike Cajun	-	NC AF-1	0.000	LARC/	SS	LARC/	Aeron	WDCRF	-	-
1958-552	2436316.20	1958 Apr 24	Mike Cajun	-	NC AF-2	0.000	UMI/AFCR/	SS	LARC/	Balloons test	RP-1028	-	-
1958-403	2436317.50	1958 Apr 24	Mike Cajun	-	NC AF-2	0.000	LARC	SS	LARC/	Balloons test	RP-1028	-	-
1958-407	2436318.50	1958 Apr 25	Mike Cajun	-	NC AF-2	0.000	LARC	SS	LARC/	Balloons test	RP-1028	-	-
1958-493	2436325.50	1958 May 1 1933	Mike Cajun	-	NC AF-2	0.000	AFCR/	SS	AFCR/7	Meteorites	SC1534-12	-	-
1958-565	2436343.91	1958 May 20 1643:35	Mike Cajun	-	NC AF-2	0.000	AFCR/	SS	AFCR/Malno	Balloons test	RP-1028	-	-
1958-565	2436344.98	1958 May 21 1131:59	Mike Cajun	-	NC AF-2	0.000	AFCR/	SS	AFCR/Malno	Balloons test	RP-1028	-	-
1958-569	2436345.84	1958 May 22 0057	Mike Cajun	-	NC AF-2	0.000	LARC	SS	LARC/Malno	Meteorites	SC1534-12	-	-
1958-568	2436345.98	1958 May 22 0057	Mike Cajun	-	NC AF-2	0.000	AFCR/	SS	AFCR/Malno	Balloons test	RP-1028	-	-
1958-571	2436345.90	1958 May 22 1129:59	Mike Cajun	-	SS6-49	0.000	LARC	SS	LARC/	Balloons test	RP-1028	-	-
1958-5395	2436345.60	1958 May 25 0231	Mike Cajun	-	SS6-49	0.000	SCEL/	SS	SCEL/	Aeron	WDCRF	-	-
1958-453	2436355.50	1958 May 5	Mike Ajax	-	DB6-09	0.000	PARA	AS	BRL/Berning	Test	RP-1028	-	-
1958-594	2436392.29	1958 Jul 7 1850:28	Mike Cajun	-	NW8-52F	0.000	UMI/BRL	SS	UMI/Berning	Aeron/Imaging	WDCRF	-	-
1958-595	2436395.47	1958 Jul 7 2819	Mike Asp	-	NW8-53F	0.000	NRL	SS	NRL/	Test/Solar UV/Solar	WDCRF	-	-
1958-596	2436397.35	1958 Jul 8 2915	Mike Asp	-	DB6-10	0.000	NRL	SS	NRL/	Test/Solar UV/Solar	WDCRF	-	-
1958-599	2436397.35	1958 Jul 12 2030:00	Mike Cajun	-	AM6-30	0.000	UMI/AFCR/	SS	UMI/	Aeron/Imaging	WDCRF	-	-
1958-5101	2436401.44	1958 Jul 15 2037:31	Mike Cajun	-	DB6-04	0.000	UMI/AFCR/	SS	UMI/	Fields	WDCRF	-	-
1958-5103	2436401.81	1958 Jul 16 2240:28	Mike Cajun	-	AM6-15	0.000	AFCR/	SS	AFCR/	Fields	WDCRF	-	-
1958-5109	2436402.24	1958 Jul 17 0721:41	Mike Cajun	-	NW8-54F	0.000	NRL	SS	NRL/	Test/Solar UV/Solar	WDCRF	-	-
1958-5109	2436402.71	1958 Jul 17 1748	Mike Asp	-	NW8-55F	0.000	NRL	SS	NRL/	Test/Solar UV/Solar	WDCRF	-	-
1958-5110	2436413.71	1958 Jul 25 0521	Mike Asp	-	NW8-56F	0.000	NRL	SS	NRL/	Test/Solar UV/Solar	WDCRF	-	-
1958-5110	2436413.71	1958 Jul 29 0503	Mike Asp	-	NW8-56F	0.000	NRL	SS	NRL/	Test/Solar UV/Solar	WDCRF	-	-
1958-5389	2436416.50	1958 Aug 1	Mike Asp	-	DB6-01F	0.000	COOP/	SS	COOP/	Atm	HT7.1	-	-
1958-5390	2436416.50	1958 Aug 1	Mike Asp	-	DB6-01F	0.000	COOP/	SS	COOP/	Atm	HT7.1	-	-
1958-5391	2436416.50	1958 Aug 1	Mike Asp	-	DB6-01F	0.000	COOP/	SS	COOP/	Atm	HT7.1	-	-
1958-5391	2436416.50	1958 Aug 1	Mike Asp	-	DB6-01F	0.000	COOP/	SS	COOP/	Atm	HT7.1	-	-
1958-5161	2436430.06	1958 Aug 14 1328	Mike Cajun	-	DB6-01F	0.000	SCEL/	SS	SCEL/	Test	WDCRF	-	-
1958-4111	2436454.50	1958 Sep 8	Mike Cajun	-	DB6-01F	0.000	PARA	AF	-	Test	WDCRF	-	-
1958-5196	2436458.49	1958 Sep 11 2352	Mike Cajun	-	DB6-01F	0.000	PARA	AF	-	Test	WDCRF	-	-
1958-5198	2436462.19	1958 Sep 15 1632:00	Mike Cajun	-	DB6-01F	0.000	AFCR/	SS	AFCR/	Balloons Test	JB1534-12	-	-
1958-5199	2436463.19	1958 Sep 16 1631:00	Mike Cajun	-	DB6-01F	0.000	AFCR/	SS	AFCR/	Balloons Test	JB1534-12	-	-
1958-4119	2436464.50	1958 Sep 18 1631:00	Mike Cajun	-	DB6-01F	0.000	PARA/USN	AS	AFCR/	Reentry Test	WDCRF	-	-
1958-5201	2436465.20	1958 Sep 18 1649:58	Mike Cajun	-	DB6-01F	0.000	AFCR/	SS	AFCR/	Reentry Test	WDCRF	-	-
1958-5208	2436475.32	1958 Sep 28 1942	Mike Asp	-	NW8-57F	0.000	NRL	SS	NRL/	Test/Solar UV/Solar	WDCRF	-	-
1958-5208	2436475.32	1958 Oct 1 1942	Mike Asp	-	NW8-58F	0.000	NRL	SS	NRL/	Test/Solar UV/Solar	WDCRF	-	-
1958-5215	2436483.30	1958 Oct 7 1932:06	Mike Asp	-	NW8-59F	0.000	LARC	SS	LARC/	Balloons Test	JB1534-12	-	-
1958-5220	2436489.31	1958 Oct 12 1942:03	Mike Asp	-	NW8-60F	0.000	NRL	SS	NRL/	Solar ENU/Solar X	WDCRF	-	-
1958-5221	2436489.32	1958 Oct 12 1942:03	Mike Asp	-	NW8-61F	0.000	NRL	SS	NRL/	Solar ENU/Solar X	WDCRF	-	-
1958-5222	2436489.32	1958 Oct 12 1942:03	Mike Asp	-	NW8-62F	0.000	NRL	SS	NRL/	Solar ENU/Solar X	WDCRF	-	-
1958-5223	2436489.33	1958 Oct 12 1952:49	Mike Asp	-	NW8-63F	0.000	NRL	SS	NRL/	Solar ENU/Solar X	WDCRF	-	-
1958-5224	2436489.34	1958 Oct 12 2010:09	Mike Asp	-	NW8-64F	0.000	NRL	SS	NRL/	Solar ENU/Solar X	WDCRF	-	-
1958-5225	2436490.32	1958 Oct 13 1939:56	Mike Asp	-	NW8-64F	0.000	NRL	SS	NRL/	Test	WDCRF	-	-
1958-5226	2436491.00	1958 Oct 14 1200:42	Mike Cajun	-	AM6-204	0.000	AFCR/	SS	AFCR/	Meteorites	WDCRF	-	-

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	OrbitPay	Agency	Launch_Code	Group	Category	LTCite	Cite	Notes
1988-8229	2436491.67	1988 Oct 15 0400:01	Mike Cajun	-	AM6.203	0.000	AFORL	SS	AFORL/OKSU/	Meteorites	FC	WDORF	[Dr- Oct 16]
1988-8232	2436494.64	1988 Oct 18 0325:06	Mike Cajun	-	AM6.205	0.000	AFORL	SS	UMI/Boggs	Meteorites	FC	WDORF	-
1988-8233	2436497.42	1988 Oct 20 2201:01	Mike Cajun	-	AM6.206	0.000	AFORL	SS	UMI/Boggs	Meteorites	FC	WDORF	-
1988-8234	2436499.10	1988 Oct 22 0345:00	Mike Cajun	-	AM6.206	0.000	AFORL	SS	UMI/Boggs	Meteorites	FC	WDORF	-
1988-8235	2436499.10	1988 Oct 22 1422	Mike Asp	-	I18.11	0.000	SUI	SF	SUI/	Test/Meteorites	WDORF	-	-
1988-8236	2436506.36	1988 Oct 31 2036:19	Mike Cajun	-	DB6.11	0.000	BRL	SS	BRL/Berning	Meteo/Imaging	FC	WDORF	-
1988-8239	2436512.20	1988 Oct 4 1650:24	Mike Cajun	-	DB6.12	0.000	BRL	SS	BRL/Berning	Meteo/Imaging	FC	WDORF	-
1988-8254	2436515.59	1988 Nov 6 0153:19	Mike Cajun	-	CC6.01	0.000	CARDE	SS	CARDE/	Aeron	FC	WDORF	-
1988-818	2436519.99	1988 Nov 12 1140	Mike Cajun	-	SS6.52	0.000	UMI/SCEL	SS	UMI/Allen	Aeron	WDORF	-	-
1988-8255	2436520.87	1988 Nov 13 0859:06	Mike Cajun	-	CC6.02	0.000	CARDE	SS	CARDE/	Aeron	WDORF	-	-
1988-8256	2436521.23	1988 Nov 13 1734:06	Mike Cajun	-	DB6.13	0.000	BRL	SS	BRL/Berning	Meteo/Imaging	FC	WDORF	-
1988-819	2436521.97	1988 Nov 14 1109:43	Mike Cajun	-	SS6.53	0.000	UMI/SCEL	SS	UMI/Allen	Aeron	WDORF	-	-
1988-8260	2436526.20	1988 Nov 18 1646:51	Mike Cajun	-	DB6.14	0.000	BRL	SS	BRL/Berning	Meteo/Imaging	FC	WDORF	-
1988-8261	2436527.25	1988 Nov 19 1801:40	Mike Cajun	-	SS6.54	0.000	UMI/SCEL	SS	UMI/Allen	Aeron	WDORF	-	-
1988-8262	2436527.41	1988 Nov 19 2150:54	Mike Cajun	-	DB6.06	0.000	BRL	SS	BRL/Berning	Fields	AFORL2	-	-
1988-8263	2436528.11	1988 Nov 20 1438:40	Mike Cajun	-	SS6.55	0.000	UMI/SCEL	SS	UMI/Allen	Aeron	WDORF	-	-
1988-8266	2436528.52	1988 Nov 22 0957:59	Mike Cajun	-	SS6.56	0.000	UMI/SCEL	SS	UMI/Allen	Aeron	WDORF	-	-
1988-8267	2436531.42	1988 Nov 23 2202	Mike Cajun	-	AM6.16	0.000	AFORL	SF	AFORL/	Aeron	AFORL2	-	-
1988-8151	2436531.83	1988 Nov 24 0800	Mike Cajun	-	AM6.17	0.000	AFORL	SF	AFORL/	Aeron	AFORL2	-	-
1988-8152	2436532.23	1988 Nov 24 1727:18	Mike Cajun	-	SS6.58	0.000	UMI/SCEL	SS	UMI/Allen	Aeron	WDORF	-	-
1988-8268	2436538.44	1988 Nov 29 2227:01	Mike Cajun	-	I0Y DB6.15	0.000	BRL	SS	BRL/Conley	Fields	WDORF	-	-
1988-8275	2436542.50	1988 Dec 5	Mike Cajun	-	RUGD 3	0.000	PARD	SS	MRSU/foore	Aeron	WDORF	-	-
1988-8281	2436542.50	1988 Dec 5	Mike Cajun	-	RUGD 4	0.000	PARD	SS	MRSU/foore	Aeron	WDORF	-	-
1988-8286	2436568.50	1989 Jan 28	Mach 5 TV	-	-	0.000	SAND	AS	SAND/	Test	WDORF	-	JRM65,1074
1989-810	2436596.50	1989 Mar 10 1900	Mike Cajun	-	-	0.000	SAND	AS	SAND/	Test	WDORF	-	-
1989-4213	2436636.29	1989 Apr 10	Mike	-	F40	0.000	WADD	SS	WADD/	Payload Test	WDORF	-	-
1989-456	2436636.29	1989 Apr 10	Mike	-	AM6.162C	0.000	LARC	AS	LARC/	Parachute test	WDORF	-	-
1989-354	2436661.31	1989 Apr 22 1929	Mike Nike Cajun	-	AM6.162C	0.000	LARC	AS	LARC/	Parachute test	WDORF	-	-
1989-4214	2436662.23	1989 Apr 23 1728	Mike Nike	-	I16.20F	0.000	WADD	SS	WADD/	Parachute test	WDORF	-	-
1989-4215	2436709.54	1989 May 21 0100	Mike Nike	-	I16.21F	0.000	SUI	SS	SUI/	Fields	WDORF	-	-
1989-4216	2436712.10	1989 May 23 1430	Mike Nike	-	AM6.161C	0.000	SUI	SS	SUI/	Fields	WDORF	-	-
1989-4217	2436715.70	1989 May 27 0451	Mike Nike	-	AM6.161C	0.000	AFORL	SS	AFORL/	Aeronomy	AFORL2	-	-
1989-376	2436716.33	1989 May 27 1985	Mike Nike	-	AM6.162C	0.000	AFORL	SS	AFORL/	Aeronomy	AFORL2	-	-
1989-4101	2436737.50	1989 Jun 18	Nike Recruit	-	-	0.000	MI	AS	MI/	Test	WDORF	-	-
1989-4215	2436738.50	1989 Jun 19	Nike Nike	-	I16.31F	0.000	SUI	SS	WADD/	Parachute test	WDORF	-	-
1989-820	2436747.05	1989 Jun 27 1308	Mike Asp	-	ABRE6.208	0.000	SUI	SS	SUI/	Fields	WDORF	-	-
1989-8101	2436748.50	1989 Jun 30	Mike Nike	-	ABRE6.209	0.000	UMI	SS	UMI/	Ions	WDORF	-	-
1989-8102	2436750.50	1989 Jun 30	Mike Nike	-	ABRE6.209	0.000	UMI	SS	UMI/	Ions	WDORF	-	-
1989-4216	2436760.03	1989 Jul 1	Mike Nike	-	AM6.162C	0.000	WADD	SS	WADD/	Parachute test	WDORF	-	-
1989-8109	2436764.24	1989 Jul 14 1745	Mike Asp	-	NH8.65	0.000	NRL	SS	NRL/Kreplin,Kellett	Solar	WDORF	-	-
1989-4118	2436767.24	1989 Jul 17 1740	Mike Asp	-	NH8.66	0.000	NRL	SS	NRL/Chubb,Kreplin	Solar	WDORF	-	-
1989-8123	2436768.49	1989 Jul 24 1694	Mike Asp	-	NH8.67	0.000	NRL	SS	NRL/Kellett	Solar	WDORF	-	-
1989-4131	2436768.50	1989 Aug 4 1705	Nike Recruit	-	NH8.686F	0.000	NRL	SS	NRL/Kellett	Solar	WDORF	-	-
1989-8127	2436768.71	1989 Aug 7 1655	Mike Asp	-	NH8.690F	0.000	NRL	SS	NRL/Kellett	Solar	WDORF	-	-
1989-8142	2436768.71	1989 Aug 14 1600	Mike Asp	-	NH8.690F	0.000	NRL	SS	NRL/Kellett	Solar	WDORF	-	-
1989-8143	2436768.71	1989 Aug 17 0933	Mike Asp	-	NASA 03.14CA	0.000	GSFC	SS	GCM/Hanning,Bedinger	Aeronomy	WDORF	-	-
1989-8144	2436768.71	1989 Aug 17 0933	Mike Asp	-	NASA 03.14CA	0.000	GSFC	SS	GCM/Hanning,Bedinger	Aeronomy	WDORF	-	-
1989-8146	2436768.71	1989 Aug 22 0930	Mike Asp	-	NH8.700F	0.000	NRL	SS	NRL/Kellett	Solar	WDORF	-	-
1989-8148	2436800.06	1989 Aug 22 2237	Mike Asp	-	NH8.710F	0.000	NRL	SS	NRL/Kellett	Solar	WDORF	-	-
1989-8149	2436800.06	1989 Aug 22 2237	Mike Asp	-	NH8.720F	0.000	NRL	SS	NRL/Kellett	Solar	WDORF	-	-
1989-8145	2436800.06	1989 Aug 28 1610	Mike Asp	-	NH8.730F	0.000	NRL	SS	NRL/Kellett	Solar	WDORF	-	-
1989-8157	2436812.45	1989 Aug 28 1253	Mike Asp	-	NH8.740F	0.000	NRL	SS	NRL/Kellett	Solar	WDORF	-	-
1989-8159	2436812.45	1989 Aug 28 1253	Mike Asp	-	NH8.750F	0.000	NRL	SS	NRL/Kellett	Solar	WDORF	-	-
1989-8160	2436812.45	1989 Aug 28 1253	Mike Asp	-	NH8.750F	0.000	NRL	SS	NRL/Kellett	Solar	WDORF	-	-
1989-8161	2436812.45	1989 Aug 28 1253	Mike Asp	-	NH8.750F	0.000	NRL	SS	NRL/Kellett	Solar	WDORF	-	-
1989-8162	2436812.45	1989 Aug 28 1253	Mike Asp	-	NH8.750F	0.000	NRL	SS	NRL/Kellett	Solar	WDORF	-	-
1989-8163	2436812.45	1989 Aug 28 1253	Mike Asp	-	NH8.750F	0.000	NRL	SS	NRL/Kellett	Solar	WDORF	-	-
1989-8164	2436812.45	1989 Aug 28 1253	Mike Asp	-	NH8.750F	0.000	NRL	SS	NRL/Kellett	Solar	WDORF	-	-
1989-8165	2436812.45	1989 Aug 28 1253	Mike Asp	-	NH8.750F	0.000	NRL	SS	NRL/Kellett	Solar	WDORF	-	-
1989-8166	2436812.45	1989 Aug 28 1253	Mike Asp	-	NH8.750F	0.000	NRL	SS	NRL/Kellett	Solar	WDORF	-	-
1989-8167	2436812.45	1989 Aug 28 1253	Mike Asp	-	NH8.750F	0.000	NRL	SS	NRL/Kellett	Solar	WDORF	-	-
1989-8168	2436812.45	1989 Aug 28 1253	Mike Asp	-	NH8.750F	0.000	NRL	SS	NRL/Kellett	Solar	WDORF	-	-
1989-8169	2436812.45	1989 Aug 28 1253	Mike Asp	-	NH8.750F	0.000	NRL	SS	NRL/Kellett	Solar	WDORF	-	-
1989-8170	2436812.45	1989 Aug 28 1253	Mike Asp	-	NH8.750F	0.000	NRL	SS	NRL/Kellett	Solar	WDORF	-	-
1989-8171	2436812.45	1989 Aug 28 1253	Mike Asp	-	NH8.750F	0.000	NRL	SS	NRL/Kellett	Solar	WDORF	-	-
1989-8172	2436812.45	1989 Aug 28 1253	Mike Asp	-	NH8.750F	0.000	NRL	SS	NRL/Kellett	Solar	WDORF	-	-
1989-8173	2436812.45	1989 Aug 28 1253	Mike Asp	-	NH8.750F	0.000	NRL	SS	NRL/Kellett	Solar	WDORF	-	-
1989-8174	2436812.45	1989 Aug 28 1253	Mike Asp	-	NH8.750F	0.000	NRL	SS	NRL/Kellett	Solar	WDORF	-	-
1989-8175	2436812.45	1989 Aug 28 1253	Mike Asp	-	NH8.750F	0.000	NRL	SS	NRL/Kellett	Solar	WDORF	-	-
1989-8176	2436812.45	1989 Aug 28 1253	Mike Asp	-	NH8.750F	0.000	NRL	SS	NRL/Kellett	Solar	WDORF	-	-
1989-8177	2436812.45	1989 Aug 28 1253	Mike Asp	-	NH8.750F	0.000	NRL	SS	NRL/Kellett	Solar	WDORF	-	-
1989-8178	2436812.45	1989 Aug 28 1253	Mike Asp	-	NH8.750F	0.000	NRL	SS	NRL/Kellett	Solar	WDORF	-	-
1989-8179	2436812.45	1989 Aug 28 1253	Mike Asp	-	NH8.750F	0.000	NRL	SS	NRL/Kellett	Solar	WDORF	-	-
1989-8180	2436812.45	1989 Aug 28 1253	Mike Asp	-	NH8.750F	0.000	NRL	SS	NRL/Kellett	Solar	WDORF	-	-
1989-8181	2436812.45	1989 Aug 28 1253	Mike Asp	-	NH8.750F	0.000	NRL	SS	NRL/Kellett	Solar	WDORF	-	-
1989-8182	2436812.45	1989 Aug 28 1253	Mike Asp	-	NH8.750F	0.000	NRL	SS	NRL/Kellett	Solar	WDORF	-	-
1989-8183	2436812.45	1989 Aug 28 1253	Mike Asp	-	NH8.750F	0.000	NRL	SS	NRL/Kellett	Solar	WDORF	-	-
1989-8184	2436812.45	1989 Aug 28 1253	Mike Asp	-	NH8.750F	0.000	NRL	SS	NRL/Kellett	Solar	WDORF	-	-
1989-8185	2436812.45	1989 Aug 28 1253	Mike Asp	-	NH8.750F	0.000	NRL	SS	NRL/Kellett	Solar	WDORF	-	-
1989-8186	2436812.45	1989 Aug 28 1253	Mike Asp	-	NH8.750F	0.000	NRL	SS	NRL/Kellett	Solar	WDORF	-	-
1989-8187	2436812.45	1989 Aug 28 1253	Mike Asp	-	NH8.750F	0.000	NRL	SS	NRL/Kellett	Solar	WDORF	-	-
1989-8188	2436812.45	1989 Aug 28 1253	Mike Asp	-	NH8.750F	0.000	NRL	SS	NRL/Kellett	Solar	WDORF	-	-
1989-8189	2436812.45	1989 Aug 28 1253	Mike Asp	-	NH8.750F	0.000	NRL	SS	NRL/Kellett	Solar			



Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Orbit	Agency	Launch_Code	Group	Category	LTCite	Cite	Notes
1960-468	2437010.58	1960 Mar 17 0152	Nike Asp	-	MSA 05_1001	0.000	GSFC	SF	UMI/	Ions	FC	SF4401	-
1960-493	2437032.39	1960 Apr 7 2125	Nike Cajun	-	Flight 7914	0.000	RRL	SS	BRL/Spencer	Test	FC	-	-
1960-573	2437033.00	1960 Apr 8 1204	Nike Cajun	-	DB6-03	0.000	RRL	SS	BRL/Spencer	Aeron/Ionos	WDCRF	-	-
1960-A104	2437052.41	1960 Apr 27 2156	Nike Asp	-	MSA 05_0365	0.000	GSFC	SF	GSFC/Hallam	Solar UV?	WDCRF	-	-
1960-5440	2437053.50	1960 Apr 29	Nike Viper I	-	Sandia	0.000	SAND	SS	SAND/AEC/	Aeron?	WDCRF	-	-
1960-4343	2437075.50	1960 May 21	Nike Ajax	-	-	0.000	WSR	SS	USA/	Test	RH-Ball	-	-
1960-A127	2437078.57	1960 May 24 0857	Nike Asp	-	MSA 05_23CA	0.000	GSFC	SF	GCM/Bedinger	Aeronomy	WDCRF	-	-
1960-S105	2437079.53	1960 May 25 0048	Nike Asp	-	MSA 05_2048	0.000	GSFC	SS	GCM/Bedinger	Aeronomy	WDCRF	-	-
1960-S106	2437080.42	1960 May 25 2200	Nike Asp	-	MSA 05_0463	0.000	GSFC	SS	GSFC/Hallam	Solar UV?	WDCRF	-	-
1960-S120	2437092.22	1960 Jun 6 1710	Nike Cajun	-	MSA 10_17GE	0.000	GSFC	SF	GSFC/Fichtel,Davis	Magnetospheric	WDCRF	-	-
1960-A153	2437101.73	1960 Jun 16 0529	Nike Cajun	-	MSA 10_03GA	0.000	GSFC	SF	GSFC/forberg	Aeronomy	WDCRF	-	-
1960-S147	2437112.50	1960 Jun 27	Nike Asp	-	-	0.000	AFCLRL?	SS	SAND/AEC/	Ionos	WDCRF	-	-
1960-S441	2437112.50	1960 Jun 27	Nike Viper I	-	Sandia	0.000	SAND	SS	SAND/AEC/	Aeron?	VAFB	SRA_371	-
1960-S150	2437113.30	1960 Jun 27 1910	Nike Asp	-	AM6-243	0.000	AFCLRL	SF	AFCLRL/SagaLyn	Ionos	WDCRF	SRA_371	-
1960-S148	2437113.72	1960 Jun 28 0510	Nike Asp	-	AM6-242	0.000	AFCLRL	SS	AFCLRL/SagaLyn	Ionos	WDCRF	-	-
1960-S162	2437124.67	1960 Jul 13 0023	Nike Cajun	-	MSA 10_04GA	0.000	GSFC	SS	GSFC/forberg	Aeronomy	WDCRF	-	-
1960-S172	2437128.52	1960 Jul 13 0023	Nike Cajun	-	AM6-403	0.000	AFCLRL	SS	AFCLRL/Rosenberg	Aeronomy	WDCRF	-	-
1960-A169	2437129.53	1960 Jul 14 0044	Nike Cajun	-	MSA 10_01GA	0.000	GSFC	SF	AFCLRL/Rosenberg	Aeronomy	WDCRF	-	-
1960-S175	2437129.52	1960 Jul 14 1005	Nike Cajun	-	AM6-409	0.000	AFCLRL	SS	AFCLRL/Rosenberg	Aeronomy	WDCRF	SRA_1143	-
1960-A368	2437129.50	1960 Jul 14	Nike Nike	-	-	0.000	WADD	AS	WADD/	Parachute Test	Ulrich	-	-
1960-S178	2437130.52	1960 Jul 15 1002	Nike Nike	-	AM6-401	0.000	AFCLRL	SS	AFCLRL/Rosenberg	Aeronomy	WDCRF	-	-
1960-S160	2437133.52	1960 Jul 18 1001	Nike Cajun	-	AM6-405	0.000	AFCLRL	SS	AFCLRL/Rosenberg	Aeronomy	WDCRF	SRA_1143	-
1960-S162	2437135.50	1960 Jul 20	Nike Cajun	-	AM6-408	0.000	AEC	SS	AEC/	Aeronomy	VAFB	-	-
1960-S186	2437136.56	1960 Jul 21 0132	Nike Cajun	-	AEC probe	0.000	AFCLRL	SS	AFCLRL/Rosenberg	Aeronomy	WDCRF	-	-
1960-S187	2437136.52	1960 Jul 21 1002	Nike Cajun	-	AM6-413	0.000	AFCLRL	SS	AFCLRL/Rosenberg	Aeronomy	WDCRF	-	-
1960-S188	2437137.70	1960 Jul 22 0453	Nike Cajun	-	AM6-406	0.000	AFCLRL	SS	AFCLRL/Rosenberg	Aeronomy	WDCRF	SRA_1143	-
1960-S169	2437137.52	1960 Jul 22 1011	Nike Cajun	-	MSA 10_18GE	0.000	GSFC	SS	GSFC/Fichtel	Auroral	WDCRF	-	-
1960-S193	2437140.85	1960 Jul 22 1011	Nike Cajun	-	AM6-402	0.000	AFCLRL	SS	AFCLRL/Rosenberg	Aeronomy	WDCRF	SRA_1143	-
1960-S195	2437141.93	1960 Jul 25 0830	Nike Cajun	-	AM6-420	0.000	AFCLRL	SS	AFCLRL/Rosenberg	Aeronomy	WDCRF	-	-
1960-S196	2437141.93	1960 Jul 26 1017	Nike Cajun	-	AM6-421	0.000	AFCLRL	SS	AFCLRL/Rosenberg	Aeronomy	WDCRF	-	-
1960-S201	2437142.85	1960 Jul 28 0830:00	Nike Cajun	-	AM6-425	0.000	AFCLRL	SS	AFCLRL/Rosenberg	Aeronomy	WDCRF	SRA_1143	-
1960-S204	2437145.85	1960 Aug 6 0900	Nike Cajun	-	AM6-411	0.000	AFCLRL	SU	AFCLRL/Rosenberg	Aeronomy	WDCRF	-	-
1960-S224	2437154.35	1960 Aug 6 1015	Nike Cajun	-	AM6-412	0.000	AFCLRL	SS	AFCLRL/Rosenberg	Aeronomy	WDCRF	SRA_1143	-
1960-S225	2437155.34	1960 Aug 9 1037	Nike Cajun	-	AM6-413	0.000	AFCLRL	SS	AFCLRL/Rosenberg	Aeronomy	WDCRF	SRA_1143	-
1960-A194	2437156.34	1960 Aug 9 2017	Nike Asp	-	MSA 05_28CT	0.000	GSFC	SS	GSFC/Sorgitt	Test	WDCRF	-	-
1960-S231	2437156.34	1960 Aug 10 1035	Nike Cajun	-	AM6-415	0.000	AFCLRL	SS	AFCLRL/Rosenberg	Aeronomy	WDCRF	SRA_1143	-
1960-S233	2437162.57	1960 Aug 16 0142	Nike Asp	-	AM6-404	0.000	AFCLRL	SS	AFCLRL/Rosenberg	Aeronomy	WDCRF	SRA_1143	-
1960-S240	2437162.57	1960 Aug 19 1041	Nike Asp	-	AM6-425	0.000	AFCLRL	SS	AFCLRL/Rosenberg	Aeronomy	WDCRF	SRA_1143	-
1960-S244	2437162.56	1960 Aug 17 0142	Nike Cajun	-	AM6-427	0.000	AFCLRL	SS	AFCLRL/Rosenberg	Aeronomy	WDCRF	SRA_1143	-
1960-S243	2437163.26	1960 Aug 17 0142	Nike Asp	-	AM6-427	0.000	AFCLRL	SS	AFCLRL/Rosenberg	Aeronomy	WDCRF	SRA_1143	-
1960-S245	2437164.57	1960 Aug 18 0135	Nike Asp	-	AM6-428	0.000	AFCLRL	SS	AFCLRL/Rosenberg	Aeronomy	WDCRF	-	-
1960-S246	2437164.57	1960 Aug 18 0242	Nike Asp	-	AM6-428	0.000	AFCLRL	SS	AFCLRL/Rosenberg	Aeronomy	WDCRF	SRA_1143	-
1960-S247	2437165.33	1960 Aug 19 1965	Nike Cajun	-	AM6-429	0.000	AFCLRL	SS	AFCLRL/Rosenberg	Aeronomy	WDCRF	SRA_1143	-
1960-S248	2437165.33	1960 Aug 19 1965	Nike Cajun	-	AM6-430	0.000	AFCLRL	SS	AFCLRL/Rosenberg	Aeronomy	WDCRF	SRA_1143	-
1960-A319	2437165.24	1960 Aug 22 1700:57	Nike Nike	-	MSA 05_12CI	0.000	GSFC	SF	GCM/SatI L	Parachute test	AD727E4	-	-
1960-A306	2437165.24	1960 Aug 22 1700:57	Nike Asp	-	MSA 05_12CI	0.000	GSFC	SF	GCM/SatI L	Parachute test	AD727E4	-	-
1960-S251	2437171.54	1960 Aug 23 0104	Nike Asp	-	AM6-244	0.000	AFCLRL	SS	AFCLRL/Rosenberg	Aeronomy	WDCRF	GCA-63-23N	-
1960-S253	2437171.54	1960 Aug 23 0105	Nike Asp	-	AM6-417	0.000	AFCLRL	SS	AFCLRL/SagaLyn	Aeronomy	WDCRF	-	-
1960-S254	2437172.50	1960 Aug 3 1408	Nike Asp	-	MSA 10_19GE	0.000	GSFC	SS	GSFC/Hittenger	Ions	WDCRF	TH-D-1061	-
1960-S264	2437181.23	1960 Sep 3 1729	Nike Cajun	-	MSA 10_20GE	0.000	GSFC	SS	GSFC/Fichtel	Magnetospheric	WDCRF	TH-D-1061	-
1960-S265	2437186.27	1960 Sep 3 1820	Nike Cajun	-	Snake 005	0.000	LARC	SS	LARC/Fichtel	Magnetospheric	WDCRF	-	-
1960-S267	2437197.51	1960 Sep 20 0016	Nike Cajun	-	AM6-466	0.000	AFCLRL	SF	AFCLRL/Faire	Aeronomy	WDCRF	TH-D-0937	-
1960-S268	2437198.35	1960 Sep 20 2018	Nike Cajun	-	MSA 10_05GA	0.000	GSFC	SS	LARC/	Aeronomy	WDCRF	-	-
1960-S269	2437198.47	1960 Sep 21 2320	Nike Cajun	-	DB6-05	0.000	AFCLRL	SF	BRL/Leader	Aeronomy	WDCRF	-	-
1960-S270	2437201.17	1960 Sep 23 1610	Nike Nike	-	Snake 006	0.000	LARC	SS	LARC/	Aeronomy	WDCRF	-	-
1960-S288	2437205.11	1960 Sep 27 1444	Nike Cajun	-	MSA 10_21GE	0.000	GSFC	SS	GSFC/Fichtel	Magnetospheric	WDCRF	-	-
1960-S290	2437205.42	1960 Sep 27 2210	Nike Asp	-	AM6-350	0.000	AFCLRL	SS	ASE/AFCLRL/Giacconi	XR-Astron	WDCRF	AFCLRL	-
1960-S294	2437206.45	1960 Sep 28 2245	Nike Cajun	-	DB6-07	0.000	RRL	SS	BRL/Leader	Aeronomy	WDCRF	-	-
1960-S369	2437207.50	1960 Sep 28	Nike Nike	-	-	0.000	WADD	AS	WADD/	Parachute Test	Ulrich	-	-
1960-S30	2437207.50	1960 Sep 30	Nike Viper I	-	-	0.000	AEC	SS	UMI/	Aeronomy	WDCRF	-	-
1960-S324	2437225.38	1960 Oct 17 2104	Nike Nike	-	AM6-340	0.000	AFCLRL	SS	UMI/AFCLRL/Faucher	Aeronomy	WDCRF	-	-
1960-S343	2437241.43	1960 Nov 3 2225	Nike Cajun	-	MSA 10_09UA	0.000	GSFC	SS	UMI/Dubin	Aeronomy	WDCRF	-	-
1960-S344	2437242.39	1960 Nov 3 2119	Nike Cajun	-	MSA 03_29CT	0.000	GSFC	SS	GSFC/Straitt	Aeronomy	WDCRF	-	-
1960-S366	2437243.37	1960 Nov 4 2052	Nike Cajun	-	AM6-800	0.000	AFCLRL	SS	AFCLRL/Fellis	Test	WDCRF	-	-
1960-S367	2437249.97	1960 Nov 11 1122	Nike Cajun	-	MSA 10_23GE	0.000	GSFC	SS	GSFC/Fichtel	Magnetospheric	WDCRF	-	-
1960-S369	2437250.01	1960 Nov 11 1211	Nike Cajun	-	MSA 10_23GE	0.000	GSFC	SS	GSFC/Fichtel	Magnetospheric	WDCRF	-	-
1960-S369	2437251.28	1960 Nov 12 1840	Nike Cajun	-	MSA 10_16GE	0.000	GSFC	SS	GSFC/Fichtel	Magnetospheric	WDCRF	TH-D-1764	-
1960-S360	2437251.47	1960 Nov 12 2332	Nike Cajun	-	MSA 10_16GE	0.000	GSFC	SS	GSFC/Fichtel	Magnetospheric	WDCRF	TH-D-1764	-
1960-S361	2437251.47	1960 Nov 13 1603	Nike Cajun	-	MSA 10_10UA	0.000	GSFC	SS	UMI/Dubin	Aeronomy	WDCRF	-	-
1960-S365	2437255.23	1960 Nov 16 1737	Nike Cajun	-	MSA 10_13GE	0.000	GSFC	SS	GSFC/Fichtel	Magnetospheric	WDCRF	-	-
1960-S367	2437255.33	1960 Nov 16 1951	Nike Cajun	-	MSA 10_14GE	0.000	GSFC	SS	GSFC/Fichtel	Magnetospheric	WDCRF	-	-
1960-S369	2437255.75	1960 Nov 17 0600	Nike Cajun	-	MSA 10_14GE	0.000	GSFC	SS	GSFC/Fichtel	Magnetospheric	WDCRF	-	-
1960-S370	2437255.92	1960 Nov 17 1006	Nike Cajun	-	MSA 10_26GE	0.000	GSFC	SS	GSFC/Fichtel	Magnetospheric	WDCRF	-	-
1960-S373	2437256.65	1960 Nov 18 0339	Nike Cajun	-	MSA 10_27GE	0.000	GSFC	SS	GSFC/Fichtel	Magnetospheric	WDCRF	-	-
1960-S374	2437257.49	1960 Nov 18 2338:37	Nike Cajun	-	MSA 10_27GE	0.000	GSFC	SS	GSFC/Fichtel	Magnetospheric	WDCRF	-	-
1960-A370	2437260.21	1960 Nov 21 1700	Nike Nike	-	GAC-2	0.000	WADD	AS	WADD/GDYR/	Parachute test	Ulrich	AD727E4	-
1960-S370	2437269.50	1960 Nov 21	Nike Nike	-	-	0.000	WADD	AS	WADD/GDYR/	Parachute test	Ulrich	-	-
1960-S375	2437269.50	1960 Nov 21	Nike Nike	-	-	0.000	AEC	SU	AEC/	Aeronomy	VAFB	-	-
1960-S376	2437269.50	1960 Nov 22	Nike Cajun	-	-	0.000	AEC	SU	AEC/	Aeronomy	VAFB	-	-
1960-S384	2437268.50	1960 Dec?	Nike Nike	-	-	0.000	LARC	SS	LARC/	Reentry Test	Ulrich	-	-
1960-S396	2437277.20	1960 Dec 8 1652:09	Nike Nike	-	MSA 10_26CI	0.000	GSFC	SS	GCM/Bordeau	Ionos	WDCRF	GCA-63-23N	-





Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	OrbPay	Agency	Launch_Code	Group	Category	LTCite	Cite	Notes
1962-5293	2437887.58	1962 Aug 11 0148:11	Mike Cajun	-	RTG M62-3	0.000	RTG/AFRL	SS	STU/AFRL/Whitt	Aeronomy	TR-X-56174	WDRF	-
1962-5297	2437894.50	1962 Aug 18 0709	Mike Cajun	-	Ferdinand 1	0.000	NTNF	SS	LLC/Rymer,Petersen	Ions	WDRF	AND	-
1962-5298	2437896.54	1962 Aug 19 0057:39	Mike Cajun	-	RTG M62-4	0.000	RTG/AFRL	SS	STU/AFRL/Whitt	Aeronomy	TR-X-56174	WDRF	-
1962-5309	2437900.22	1962 Aug 23 1710	Mike Apache	-	MMSA 14. 30CA	0.000	GSFC	SS	LPAHL/Sharp,Depew	Aeronomy	WDRF	-	-
1962-5654	2437900.79	1962 Aug 27 0653	Mike Apache	-	-	0.000	AFRL	SS	AFRL/?	Tech	TampaBayTimes/Uirlich	-	-
1962-5315	2437906.29	1962 Aug 28 1934	Mike Cajun	-	AC6-829	0.000	AFRL	SS	AFRL/Harvey	Ions	WDRF	-	-
1962-5317	2437906.32	1962 Aug 29 1900	Mike Cajun	-	AC6-830	0.000	AFRL	SS	AFRL/Harvey	Ions	WDRF	-	-
1962-5320	2437907.54	1962 Aug 31 0056:07	Mike Cajun	-	RTG M62-5	0.000	RTG/AFRL	SS	STU/AFRL/Whitt	Aeronomy	TR-X-56174	WDRF	-
1962-5321	2437933.35	1962 Sep 25 2028	Mike Cajun	-	Smoke 304	0.000	LARL	AS	LARL/	Aeronomy	TR-D-3289	-	-
1962-5322	2437934.84	1962 Sep 27 0808:00	Mike	-	Smoke 302	0.000	LARL	AS	AFRL/Sagalym?	Aeronomy	TR-D-3289	-	-
1962-5323	2437944.50	1962 Oct 7	Mike Cajun	-	Smoke 305	0.000	LARL	AS	LARL/	Aeronomy	TR-D-3289	-	-
1962-5324	2437946.29	1962 Oct 10 1900	Mike	-	Smoke 306	0.000	LARL	AS	LARL/	Aeronomy	TR-D-3289	-	-
1962-5325	2437948.52	1962 Oct 10 2030	Mike	-	Smoke 306	0.000	LARL	AS	LARL/	Aeronomy	TR-D-3289	-	-
1962-5326	2437948.52	1962 Oct 11 0030	Mike Cajun	-	-	0.000	AFRL	SS	AFRL/Rosenberg	Aeronomy	TR-D-3289	-	-
1962-5327	2437949.36	1962 Oct 11 2033:00	Mike Cajun	?	-	0.000	AFRL	SS	AFRL/Rosenberg	Aeronomy	TR-D-3289	-	-
1962-5328	2437952.97	1962 Oct 16 1115	Mike Cajun	-	AC6-441	0.000	AFRL	SS	AFRL/Rosenberg	Aeronomy	TR-D-3289	-	-
1962-5329	2437953.97	1962 Oct 16 1115	Mike Cajun	-	AC6-434	0.000	AFRL	SS	AFRL/Rosenberg	Aeronomy	TR-D-3289	-	-
1962-5334	2437954.13	1962 Oct 16 1506	Mike Apache	-	MMSA 14. 31GI	0.000	GSFC	SS	GSFC/Bauer	Ions	WDRF	GCA-63-23N	-
1962-5335	2437954.43	1962 Oct 17 0040	Mike Cajun	-	AC6-443	0.000	AFRL	SS	AFRL/Rosenberg	Aeronomy	WDRF	-	-
1962-5336	2437954.53	1962 Oct 17 1116	Mike Cajun	-	AC6-442	0.000	AFRL	SS	AFRL/Rosenberg	Aeronomy	WDRF	-	-
1962-5337	2437954.57	1962 Oct 17 1116	Mike Cajun	-	AC6-443	0.000	AFRL	SS	AFRL/Rosenberg	Aeronomy	WDRF	-	-
1962-5338	2437954.57	1962 Oct 17 1116	Mike Cajun	-	AC6-442	0.000	AFRL	SS	AFRL/Rosenberg	Aeronomy	WDRF	-	-
1962-5339	2437955.14	1962 Oct 17 1552	Mike Cajun	-	AC6-435	0.000	AFRL	SF	AFRL/Ecklund	Ions	WDRF	-	-
1962-5340	2437955.54	1962 Oct 18 0100	Mike Cajun	-	AC6-438	0.000	AFRL	SF	AFRL/Rosenberg	Aeronomy	WDRF	-	-
1962-5404	2437956.97	1962 Oct 19 1117	Mike Cajun	-	Smoke 307	0.000	LARL	AS	LARL/	Aeronomy	TR-D-3289	-	-
1962-5407	2437957.33	1962 Oct 19 1953	Mike	-	AC6-448	0.000	LARL	AS	AFRL/Faire	Aeronomy	AFRL2	-	-
1962-5410	2437957.68	1962 Oct 20 0900	Mike Cajun	-	AC6-448	0.000	AFRL	SS	AFRL/Faire	Aeronomy	TR-D-3289	-	-
1962-5411	2437959.97	1962 Oct 22 1119:00	Mike Cajun	-	AC6-446	0.000	AFRL	SS	AFRL/Rosenberg	Aeronomy	WDRF	-	-
1962-5414	2437960.97	1962 Oct 23 1119:00	Mike Cajun	-	AC6-446	0.000	AFRL	SS	AFRL/Rosenberg	Aeronomy	WDRF	-	-
1962-5415	2437962.50	1962 Oct 25 0630	Mike Cajun	-	AC6-444	0.000	AFRL	SS	AFRL/Rosenberg	Aeronomy	WDRF	-	-
1962-5419	2437962.77	1962 Oct 25 0630	Mike Cajun	-	AC6-444	0.000	AFRL	SS	AFRL/Rosenberg	Aeronomy	WDRF	-	-
1962-5423	2437962.97	1962 Oct 25 1121:00	Mike Cajun	-	AC6-457	0.000	AFRL	SU	AFRL/Rosenberg	Aeronomy	AFRL2	-	-
1962-5424	2437963.53	1962 Oct 26 1015	Mike Cajun	-	FB-6	0.000	AFRL	SS	AFRL/Harcisi	Aeronomy	WDRF	-	-
1962-5426	2437963.50	1962 Oct 26	Mike Cajun	-	-	0.000	AFRL	SS	AFRL/Champion	Ions	WDRF	-	-
1962-5427	2437963.50	1962 Oct 26	Mike Cajun	-	-	0.000	AFRL	SS	AFRL/Champion	Ions	WDRF	-	-
1962-5428	2437963.50	1962 Oct 27	Mike Cajun	-	-	0.000	AFRL	SS	AFRL/Faire	Aeronomy	WDRF	-	-
1962-5436	2437964.50	1962 Oct 27	Mike Cajun	-	-	0.000	AFRL	SS	AFRL/Faire	Aeronomy	WDRF	-	-
1962-5460	2437967.34	1962 Oct 29 2013	Mike Cajun	-	Smoke 308	0.000	LARL	AS	LARL/	Aeronomy	TR-D-3289	-	-
1962-5462	2437969.36	1962 Nov 1 1125	Mike Cajun	-	AC6-439	0.000	AFRL	SS	AFRL/Rosenberg	Aeronomy	WDRF	-	-
1962-5466	2437970.01	1962 Nov 1 1220	Mike Cajun	-	FB-6	0.000	AFRL	SS	AFRL/Faire	Aeronomy	TR-D-3289	-	-
1962-5468	2437970.33	1962 Nov 1 2002	Mike	-	Smoke 309	0.000	LARL	AS	LARL/	Aeronomy	TR-D-3289	-	-
1962-5469	2437970.52	1962 Nov 2 0734	Mike Cajun	-	AC6-436	0.000	AFRL	SF	AFRL/Champion	Aeronomy	AFRL2	-	-
1962-5461	2437970.96	1962 Nov 2 1125	Mike Cajun	-	-	0.000	AFRL	SS	AFRL/Champion	Aeronomy	WDRF	-	-
1962-5462	2437971.50	1962 Nov 3	Mike Cajun	-	-	0.000	AFRL	SS	AFRL/Champion	Aeronomy	WDRF	-	-
1962-5464	2437972.50	1962 Nov 4	Mike Cajun	-	-	0.000	AFRL	SS	AFRL/Champion	Aeronomy	WDRF	-	-
1962-5466	2437972.58	1962 Nov 5 1129	Mike Cajun	-	AC6-440	0.000	LARL	AS	AFRL/Rosenberg	Aeronomy	TR-D-3289	-	-
1962-5469	2437973.36	1962 Nov 5 2103	Mike	-	Smoke 310	0.000	LARL	AS	AFRL/Rosenberg	Aeronomy	TR-D-3289	-	-
1962-5479	2437974.38	1962 Nov 6 2000	Mike Apache	-	AC6-449	0.000	AFRL	SS	LARL/	Aeronomy	TR-D-3289	-	-
1962-5480	2437974.38	1962 Nov 6 2000	Mike Apache	-	AC6-449	0.000	AFRL	SS	LARL/	Aeronomy	TR-D-3289	-	-
1962-5481	2437974.38	1962 Nov 7 1029	Mike Apache	-	Smoke 311	0.000	LARL	AS	LARL/	Aeronomy	TR-D-3289	-	-
1962-5486	2437975.93	1962 Nov 7 1029	Mike Apache	-	MMSA 10. 9BCT	0.000	GSFC	SS	GCM/Smith.L	Ions	GCA63-22-N	-	-
1962-5487	2437975.95	1962 Nov 7 1029	Mike Apache	-	MMSA 10. 16CA	0.000	GSFC	SS	GCM/Warring	Ions	GCA63-22-N	-	-
1962-5489	2437975.95	1962 Nov 7 1029	Mike Apache	-	MMSA 31.2	0.000	LARL	AS	LARL/	Aeronomy	TR-D-3289	-	-
1962-5490	2437981.31	1962 Nov 13 0930	Mike Apache	-	Smoke 312	0.000	GSFC	SF	GSFC/Smith	Aeronomy	WDRF	-	-
1962-5491	2437982.75	1962 Nov 13 0930	Mike Apache	-	Smoke 313	0.000	LARL	AS	LARL/	Aeronomy	TR-D-3289	-	-
1962-5492	2437984.71	1962 Nov 16 0559	Mike Apache	-	Smoke 313	0.000	LARL	AS	LARL/	Aeronomy	TR-D-3289	-	-
1962-5493	2437985.24	1962 Nov 16 0705	Mike Apache	-	Smoke 313	0.000	LARL	AS	LARL/	Aeronomy	TR-D-3289	-	-
1962-5497	2437985.25	1962 Nov 16 2033	Mike Apache	-	Smoke 313	0.000	LARL	AS	LARL/	Aeronomy	TR-D-3289	-	-
1962-5516	2437998.96	1962 Nov 30 1057	Mike Apache	-	MMSA 10. 10BCT	0.000	GSFC	SS	GCM/Smith	Ions	GCA63-22-N	-	-
1962-5518	2437998.97	1962 Nov 30 1115	Mike Apache	-	MMSA 14. 17CA	0.000	GSFC	SS	GCM/Smith	Ions	GCA63-22-N	-	-
1962-5519	2437998.97	1962 Nov 30 1115	Mike Apache	-	BMS	0.000	AFRL	MS	-	Reentry test	WDRF	-	-
1962-5520	2437998.97	1962 Nov 30 1115	Mike Apache	-	BMS	0.000	AFRL	MS	-	Reentry test	WDRF	-	-
1962-5521	2437998.97	1962 Nov 30 1115	Mike Apache	-	BMS	0.000	AFRL	MS	-	Reentry test	WDRF	-	-
1962-5522	2437998.97	1962 Nov 30 1115	Mike Apache	-	BMS	0.000	AFRL	MS	-	Reentry test	WDRF	-	-
1962-5523	2437998.97	1962 Nov 30 1115	Mike Apache	-	BMS	0.000	AFRL	MS	-	Reentry test	WDRF	-	-
1962-5524	2437998.97	1962 Nov 30 1115	Mike Apache	-	BMS	0.000	AFRL	MS	-	Reentry test	WDRF	-	-
1962-5525	2437998.97	1962 Nov 30 1115	Mike Apache	-	BMS	0.000	AFRL	MS	-	Reentry test	WDRF	-	-
1962-5526	2437998.97	1962 Nov 30 1115	Mike Apache	-	BMS	0.000	AFRL	MS	-	Reentry test	WDRF	-	-
1962-5527	2437998.97	1962 Nov 30 1115	Mike Apache	-	BMS	0.000	AFRL	MS	-	Reentry test	WDRF	-	-
1962-5528	2437998.97	1962 Nov 30 1115	Mike Apache	-	BMS	0.000	AFRL	MS	-	Reentry test	WDRF	-	-
1962-5529	2437998.97	1962 Nov 30 1115	Mike Apache	-	BMS	0.000	AFRL	MS	-	Reentry test	WDRF	-	-
1962-5530	2437998.97	1962 Nov 30 1115	Mike Apache	-	BMS	0.000	AFRL	MS	-	Reentry test	WDRF	-	-
1962-5531	2437998.97	1962 Nov 30 1115	Mike Apache	-	BMS	0.000	AFRL	MS	-	Reentry test	WDRF	-	-
1962-5532	2437998.97	1962 Nov 30 1115	Mike Apache	-	BMS	0.000	AFRL	MS	-	Reentry test	WDRF	-	-
1962-5533	2437998.97	1962 Nov 30 1115	Mike Apache	-	BMS	0.000	AFRL	MS	-	Reentry test	WDRF	-	-
1962-5534	2437998.97	1962 Nov 30 1115	Mike Apache	-	BMS	0.000	AFRL	MS	-	Reentry test	WDRF	-	-
1962-5535	2437998.97	1962 Nov 30 1115	Mike Apache	-	BMS	0.000	AFRL	MS	-	Reentry test	WDRF	-	-
1962-5536	2437998.97	1962 Nov 30 1115	Mike Apache	-	BMS	0.000	AFRL	MS	-	Reentry test	WDRF	-	-
1962-5537	2437998.97	1962 Nov 30 1115	Mike Apache	-	BMS	0.000	AFRL	MS	-	Reentry test	WDRF	-	-
1962-5538	2437998.97	1962 Nov 30 1115	Mike Apache	-	BMS	0.000	AFRL	MS	-	Reentry test	WDRF	-	-
1962-5539	2437998.97	1962 Nov 30 1115	Mike Apache	-	BMS	0.000	AFRL	MS	-	Reentry test	WDRF	-	-
1962-5540	2437998.97	1962 Nov 30 1115	Mike Apache	-	BMS	0.000	AFRL	MS	-	Reentry test	WDRF	-	-
1962-5541	2437998.97	1962 Nov 30 1115	Mike Apache	-	BMS	0.000	AFRL	MS	-	Reentry test	WDRF	-	-



Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	OrbPay	Agency	Launch_Code	Group	Category	LTCite	Cite	Notes
1963-5243	2438178.50	1963 May 29	Mike Javelin	-	TRUMP 1	0.000	APCC	SS	APCC/	Test	MR630701-10	-	-
1963-5654	2438149.50	1963 May	Mike Apache	-	Sandia	0.000	SAND	SS	SAND/Smith	Aeron	SandIve631220	-	-
1963-5655	2438160.50	1963 Jun	Mike Apache	-	Sandia	0.000	SAND	SS	SAND/Smith	Aeron	SandIve631220	-	-
1963-5247	2438160.50	1963 Jun	Mike Apache	?	BMS	0.000	AFSD	MS	-	Reentry test	WSNR	-	-
1963-5248	2438160.50	1963 Jun	Mike Apache	?	Capache	0.000	WSR	MS	-	-	WSNR	-	-
1963-5249	2438160.50	1963 Jun	Mike Apache	?	Capache	0.000	WSR	MS	-	-	WSNR	-	-
1963-5250	2438160.50	1963 Jun	Mike Apache	?	Capache	0.000	WSR	MS	-	-	WSNR	-	-
1963-488	2438188.29	1963 Jun 7 1900	Mike	-	Smoke 361	0.000	LARCH	AS	LARCH	-	TI-D-4880	-	-
1963-5284	2438198.64	1963 Jun 18 0328	Mike CjJun	-	Falling Sphere 3	0.000	PHR	AS	UMI/Peterson	Aeronomy	CR-218	WDCRF	-
1963-493	2438200.36	1963 Jun 19 2045	Mike	-	Smoke 362	0.000	LARCH	AS	LARCH	-	TI-D-4880	-	-
1963-5287	2438200.62	1963 Jun 20 0500	Mike Tomahawk	-	Falling Sphere 4	0.000	PHR	AS	UMI/Peterson	Aeronomy	CR-218	WDCRF	-
1963-5289	2438205.50	1963 Jun 25	Mike Tomahawk	9a	Sandia 152-2	0.000	SAND	SS	SAND/	Test	FDS	-	-
1963-5312	2438210.50	1963 Jun 1	Mike Apache	-	Capache	0.000	WSR	MS	-	-	WSNR	-	-
1963-5313	2438210.50	1963 Jun 1	Mike Apache	-	Capache	0.000	WSR	MS	-	-	WSNR	-	-
1963-5317	2438211.50	1963 Jun 1	Mike Tomahawk	9a	Sandia 152-3	0.000	SAND	SS	SAND/	Test	FDS	-	-
1963-4101	2438212.25	1963 Jun 1 1800	Mike	-	Smoke 363	0.000	LARCH	AS	LARCH	-	TI-D-4880	-	-
1963-4102	2438213.50	1963 Jun 1 3	Mike Tomahawk	9a	Sandia 152-4	0.000	SAND	SS	SAND/	Test	FDS	-	-
1963-5359	2438225.38	1963 Jun 14 2103:28	Mike Apache	-	Smoke 364	0.000	GSFC	AS	GCM/Smith	Ions/Eclipse test	CR-70324	-	-
1963-4107	2438226.31	1963 Jun 17 1930	Mike	-	Smoke 364	0.000	LARCH	AS	LARCH	-	TI-D-4880	-	-
1963-4110	2438231.33	1963 Jun 20 2000:02	Mike Apache	-	MMSA 14.96CI	0.000	GSFC	AS	GCM/Smith	Ions/Eclipse	CR-70324	-	-
1963-4111	2438231.35	1963 Jun 20 2030:00	Mike Apache	-	MMSA 14.96CI	0.000	GSFC	AS	GCM/Smith	Ions/Eclipse	CR-70324	-	-
1963-5346	2438231.38	1963 Jun 20 2103:00	Mike Apache	-	MMSA 14.96CI	0.000	GSFC	AS	GCM/Smith	Ions/Eclipse	CR-70324	-	-
1963-5348	2438231.38	1963 Jun 20 2113:00	Mike Apache	-	MMSA 14.96CI	0.000	GSFC	AS	GCM/Smith	Ions/Eclipse/Solar X	CR-70324	CR-74090	-
1963-5349	2438231.40	1963 Jun 20 2140:00	Mike Apache	-	MMSA 14.96CI	0.000	GSFC	AS	GCM/Smith	Ions/Eclipse/Solar X	CR-70324	CR-74090	-
1963-5351	2438231.42	1963 Jun 20 2240:00	Mike Apache	-	MMSA 14.96CI	0.000	GSFC	AS	GCM/Smith	Ions/Eclipse/Solar X	CR-70324	CR-74090	-
1963-4114	2438237.31	1963 Jun 26 1930	Mike	-	Smoke 365	0.000	LARCH	AS	LARCH	-	TI-D-4880	-	-
1963-5366	2438237.51	1963 Jun 27 0010	Mike CjJun	-	RIG 165-1	0.000	RTG	AS	STU/GSFC/Htt	Aeronomy	WDCRF	-	-
1963-5368	2438240.46	1963 Jun 29 2328	Mike CjJun	-	RIG 165-2	0.000	RTG	AS	STU/GSFC/Htt	Aeronomy	WDCRF	-	-
1963-4115	2438242.31	1963 Jun 31 1930	Mike	-	Smoke 366	0.000	LARCH	AS	LARCH	-	TI-D-4880	-	-
1963-5370	2438241.50	1963 Aug	Mike Apache	-	BMS	0.000	PHOH	MS	-	Target	WSNR	-	-
1963-5371	2438241.50	1963 Aug	Mike Apache	-	BMS	0.000	PHOH	MS	-	Target	WSNR	-	-
1963-5374	2438243.46	1963 Aug 1 2327	Mike CjJun	-	RIG 165-3	0.000	RTG	AS	STU/GSFC/Htt	Aeronomy	WDCRF	-	-
1963-5375	2438244.46	1963 Aug 2 2333	Mike CjJun	-	MMSA 10.750A	0.000	GSFC	AS	UMI/Holz/Hansen	Aeronomy	WDCRF	-	-
1963-4116	2438249.31	1963 Aug 7 1930	Mike	-	Smoke 367	0.000	LARCH	AS	LARCH	-	TI-D-4880	-	-
1963-5380	2438249.44	1963 Aug 7 2229	Mike CjJun	-	RIG 165-4	0.000	RTG	AS	STU/GSFC/Htt	Aeronomy	WDCRF	-	-
1963-4121	2438257.47	1963 Aug 15 2311	Mike	-	Smoke 031	0.000	LARCH	AS	LARCH	-	TI-D-4365	-	-
1963-5417	2438272.50	1963 Sep	Mike Apache	-	BMS	0.000	PHOH	MS	-	Target	WSNR	-	-
1963-5418	2438272.50	1963 Sep	Mike Apache	-	BMS	0.000	PHOH	MS	-	Target	WSNR	-	-
1963-5420	2438273.54	1963 Sep 1 0803	Mike CjJun	-	Ferdinand 5	0.000	NDRE	MS	ILC/NDRE/Jespersen	Target	WSNR	AND	-
1963-5436	2438282.17	1963 Sep 9 1602	Mike Apache	-	MMSA 14.060E	0.000	GSFC	SS	UMI/Schardt,Gahill	Magnetospheric	WDCRF	-	-
1963-5437	2438282.17	1963 Sep 12 0620	Mike Apache	-	Ferdinand 4	0.000	NDRE	MS	ILC/NDRE/Jespersen	Target	WSNR	-	-
1963-4128	2438282.34	1963 Sep 19 2014	Mike	-	Smoke 032	0.000	LARCH	AS	LARCH	-	TI-D-4365	-	-
1963-4129	2438282.34	1963 Sep 19 2146	Mike	-	Smoke 033	0.000	LARCH	AS	LARCH	-	TI-D-4365	-	-
1963-4126	2438282.51	1963 Sep 23 1000	Mike	-	Smoke 034	0.000	LARCH	AS	LARCH	-	TI-D-4365	-	-
1963-4145	2438296.26	1963 Sep 23 1000	Mike Apache	-	Smoke 034	0.000	LARCH	AS	LARCH	-	TI-D-4365	-	-
1963-5455	2438297.66	1963 Sep 24 0345	Mike CjJun	-	AGS-1475	0.000	AFSCL	SS	AFSCL/Rosenberg	Aeronomy/Ionos	WDCRF	-	-
1963-5456	2438297.66	1963 Sep 25 0357	Mike CjJun	-	MMSA 10.931A	0.000	GSFC	SS	LARC/Tolson	Aeronomy	WDCRF	-	-
1963-5459	2438297.69	1963 Sep 25 0437	Mike CjJun	-	MMSA 10.931A	0.000	GSFC	SS	LARC/Tolson	Aeronomy	WDCRF	-	-
1963-5460	2438298.72	1963 Sep 26 0437	Mike Apache	-	ACE-476	0.000	AFSCL	SS	AFSCL/Rosenberg	Aeronomy	WDCRF	-	-
1963-5463	2438298.72	1963 Sep 26 0530	Mike Apache	-	ACE-476	0.000	AFSCL	SS	AFSCL/Rosenberg	Aeronomy	WDCRF	-	-
1963-4134	2438303.51	1963 Sep 28 1930	Mike	-	Smoke 035	0.000	LARCH	AS	LARCH	-	TI-D-4880	-	-
1963-5470	2438302.50	1963 Oct 1 1047	Mike Apache	-	BMS	0.000	PHOH	MS	LARCH/	Target	WSNR	-	-
1963-5472	2438302.50	1963 Oct 1 1047	Mike Apache	-	BMS	0.000	PHOH	MS	LARCH/	Target	WSNR	-	-
1963-4136	2438303.95	1963 Oct 1 2012	Mike	-	ACE-477	0.000	AFSCL	SS	AFSCL/Rosenberg	Aeronomy	WDCRF	-	-
1963-4137	2438304.40	1963 Oct 1 2134	Mike	-	Smoke 035	0.000	LARCH	AS	LARCH	-	TI-D-4880	-	-
1963-4137	2438304.40	1963 Oct 1 2134	Mike	-	Smoke 035	0.000	LARCH	AS	LARCH	-	TI-D-4365	-	-
1963-4137	2438307.26	1963 Oct 4 1814	Mike Tomahawk	9a	Sandia 152-6	0.000	SAND	SS	SAND/	Test	FNS	-	-
1963-5480	2438310.33	1963 Oct 7 2000	Mike Apache	-	Smoke 036	0.000	LARCH	AS	LARCH	-	TI-D-4365	-	-
1963-4143	2438312.35	1963 Oct 9 2030	Mike Apache	-	Sandia 152-6	0.000	GSFC	AS	LARCH	Magnetospheric	WDCRF	-	-
1963-5481	2438313.47	1963 Oct 9 2314	Mike Apache	-	Smoke 036	0.000	LARCH	AS	LARCH	-	TI-D-4365	-	-
1963-5483	2438313.47	1963 Oct 10 2313	Mike Apache	-	Smoke 036	0.000	LARCH	AS	LARCH	-	TI-D-4365	-	-
1963-4145	2438314.26	1963 Oct 11 1809	Mike	-	Smoke 037	0.000	LARCH	AS	LARCH	-	TI-D-4365	-	-
1963-4147	2438318.22	1963 Oct 15 1938	Mike	-	Smoke 038	0.000	LARCH	AS	LARCH	-	TI-D-4880	-	-
1963-4149	2438325.30	1963 Oct 22 1917	Mike	-	Smoke 038	0.000	LARCH	AS	LARCH	-	TI-D-4880	-	-
1963-5634	2438329.64	1963 Oct 28 0315	Mike Javelin	-	Smoke 072	0.000	APCC	SS	APCC/	Test	AFRTM0609	-	-
1963-4163	2438330.50	1963 Nov 6 1930	Mike	-	Smoke 374	0.000	LARCH	AS	LARCH/	Ions	AmalGeo22,225	WDCRF	-
1963-5528	2438333.25	1963 Oct 31 1800	Mike CjJun	-	Smoke 374	0.000	AFSCL	SS	AFSCL/Marcisi	Ions	AmalGeo22,225	WDCRF	-
1963-4161	2438334.39	1963 Oct 31 2030	Mike	-	Smoke 073	0.000	LARCH	AS	LARCH/	Ions	AmalGeo22,225	WDCRF	-
1963-5529	2438334.39	1963 Oct 31 2117	Mike Apache	-	Smoke 073	0.000	LARCH	AS	LARCH/	Ions	AmalGeo22,225	WDCRF	-
1963-5536	2438337.92	1963 Nov 4 1000	Mike Apache	-	MMSA 14.111GT	0.000	GSFC	SS	GSFC/Hilliams	Test	TI-X-55494	-	-
1963-5537	2438337.94	1963 Nov 4 1031	Mike CjJun	-	Sphere	0.000	AFSCL	SS	AFSCL/Fsike	Aeronomy	CR-218	SRS, 1039	-
1963-5538	2438338.02	1963 Nov 4 1226	Mike CjJun	-	Falling Sphere 5	0.000	PHR	AS	UMI/Peterson	Aeronomy	CR-218	WDCRF	-
1963-5540	2438338.50	1963 Nov 5 0000	Mike CjJun	-	Falling Sphere 6	0.000	PHR	AS	UMI/Peterson	Aeronomy	CR-218	WDCRF	-
1963-5543	2438339.50	1963 Nov 5 0000	Mike CjJun	-	Mass spectrometer	0.000	AFSCL	SS	AFSCL/Fsike	Aeronomy	WDCRF	-	-
1963-4163	2438340.31	1963 Nov 6 1930	Mike	-	Smoke 375	0.000	LARCH	AS	LARCH/	Aeronomy	TI-D-4880	-	-
1963-5546	2438343.18	1963 Nov 9 1626	Mike CjJun	-	Falling Sphere 7	0.000	PHR	AS	UMI/Peterson	Aeronomy	CR-218	WDCRF	-
1963-4167	2438346.35	1963 Nov 12 2020	Mike	-	Smoke 039	0.000	LARCH	AS	LARCH	-	TI-D-4365	-	-
1963-4168	2438347.34	1963 Nov 13 2011	Mike	-	Smoke 376	0.000	LARCH	AS	LARCH	-	TI-D-4880	-	-
1963-5555	2438348.12	1963 Nov 14 1458	Mike CjJun	-	Falling Sphere 8	0.000	PHR	AS	UMI/Peterson	Aeronomy	TI-D-4880	-	-
1963-4170	2438349.31	1963 Nov 15 1933	Mike Tomahawk	-	Smoke 377	0.000	LARCH	AS	LARCH	-	TI-D-4880	-	-
1963-5562	2438354.50	1963 Nov 21 1255	Mike Tomahawk	9a	Sandia 152-7	0.000	SAND	SS	SAND/	Test	FNS	-	-
1963-5563	2438355.04	1963 Nov 21 1930	Mike Apache	-	Smoke 378	0.000	LARCH	AS	LARCH	-	TI-D-4365	-	-
1963-4175	2438355.31	1963 Nov 21 1930	Mike	-	Smoke 378	0.000	LARCH	AS	LARCH	-	TI-D-4365	-	-
1963-5565	2438356.38	1963 Nov 22 2100	Mike Tomahawk										



Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Orbit	Agency	Launch_Code	Group	Category	LTCite	Cite	Notes
1964-S198	2438496.77	1964 Apr 11 0629	Mike Apache	-	MASA 14. 1210E	0.000	GSFC	SS	UAF/Murray	Auroral	FC	WDORF	FC:0410.0630
1964-A83	2438499.32	1964 Apr 13 1945	Mike	-	Smoke 392	0.000	LARCN	AS	UML/Smith,Horvath	Aeronomy	TH-D-6746	-	-
1964-S208	2438500.56	1964 Apr 15 0121.42	Mike Apache	-	MASA 14. 240A	0.000	GSFC	AS	UML/Smith,Horvath	Aeronomy	Horvath72	-	-
1964-S209	2438501.16	1964 Apr 15 1556.00	Mike Apache	-	MASA 14. 230A	0.000	GSFC	SS	UAF/Murray	Auroral	FC	WDORF	FC:0414.0640
1964-S206	2438501.78	1964 Apr 16 0639	Mike Apache	-	MASA 14. 1220E	0.000	GSFC	SS	UAF/Murray	Auroral	FC	WDORF	-
1964-S212	2438502.38	1964 Apr 16 2105.00	Mike Apache	-	MASA 14. 1430U	0.000	GSFC	AS	UUC/Boothill,Smith	Ions	CR-68050	WDORF	-
1964-A85	2438503.28	1964 Apr 17 1944	Mike	-	Smoke 048	0.000	LARCN	AS	UUC/Boothill,Smith	Ions	CR-68050	WDORF	-
1964-S214	2438503.47	1964 Apr 17 2315	Mike CjJun	-	MASA 10. 1420A	0.000	GSFC	SS	UML/Dubin	Aeronomy	WDORF	-	-
1964-S215	2438503.53	1964 Apr 18 0038	Mike CjJun	-	MASA 10. 730A	0.000	GSFC	SS	UML/Dubin	Aeronomy	WDORF	-	-
1964-S216	2438503.54	1964 Apr 18 0059	Mike CjJun	-	MASA 10. 830A	0.000	GSFC	SS	UML/Dubin	Aeronomy	WDORF	-	-
1964-S787	2438507.79	1964 Apr 22 0654	Mike Apache	-	-	0.000	HICDH	MS	MNSI/	Target	DTIC	-	-
1964-S222	2438507.99	1964 Apr 22 2000	Mike Apache	-	MASA 14. 1230E	0.000	GSFC	SS	UAF/Murray	Auroral	WDORF	-	-
1964-A88	2438508.33	1964 Apr 22 2000	Mike	-	Smoke 393	0.000	LARCN	AS	UAF/Murray	Aeronomy	TH-D-6746	-	-
1964-S229	2438515.50	1964 May	Mike Javelin	?	DMSA HR	0.000	DASA	SS	DASA/	Aeronomy	WSHR	-	-
1964-S230	2438520.26	1964 May 4 1815	Mike	-	Smoke 049	0.000	LARCN	AS	DASA/	Aeronomy	WSHR	-	-
1964-A62	2438521.23	1964 May 5 1734	Mike	-	Smoke 050	0.000	LARCN	AS	DASA/	Aeronomy	TH-D-4365	-	-
1964-A64	2438522.26	1964 May 6 1818	Mike	-	Smoke 051	0.000	LARCN	AS	LARC/	Aeronomy	TH-D-4365	-	-
1964-A65	2438522.28	1964 May 6 1843	Mike	-	Smoke 052	0.000	LARCN	AS	LARC/	Aeronomy	TH-D-4365	-	-
1964-S234	2438522.60	1964 May 07 0231.00	Mike CjJun	-	Sandia 152-52	0.000	PHR	SU	PHR/	Aeron?	WDORF	-	-
1964-S239	2438527.80	1964 May 12	Mike Tomahawk	9	Sandia 152-52	0.000	SAND	SS	UML/Peterson	Aeronomy	CR-218	WDORF	-
1964-S240	2438527.98	1964 May 12 1125	Mike Apache	-	Falling Sphere 13	0.000	PHR	MS	MNSI/	Target	DTIC	-	-
1964-S789	2438529.50	1964 May 14	Mike Apache	-	-	0.000	HICDH	MS	MNSI/	Target	DTIC	-	-
1964-S242	2438529.50	1964 May 14	Mike Tomahawk	9	Sandia 152-50	0.000	SAND	SS	SAND/	Aeronomy	FDS	-	-
1964-S801	2438530.50	1964 May 15	Mike Tomahawk	9	Falling sphere	0.000	PHR	SS	PHR/	Aeron?	PHR1st64	-	-
1964-S246	2438530.50	1964 May 15	Mike Tomahawk	9	Sandia 152-51	0.000	SAND	SS	SAND/	Aeronomy	FDS	-	-
1964-S250	2438533.50	1964 May 18	Mike Tomahawk	9	Sandia 152-46	0.000	SAND	SS	SAND/	Aeronomy	FDS	-	-
1964-S251	2438533.76	1964 May 18 0620	Mike Apache	-	AE5-479	0.000	AFORL	SS	AFORL/Rosenberg	Test	WDORF	-	-
1964-S252	2438533.76	1964 May 18 0620	Mike Apache	-	-	0.000	AFORL	SS	AFORL/Rosenberg	Aeron	WDORF	-	-
1964-S253	2438534.27	1964 May 18 1835	Mike Apache	-	AE5-481 -	0.000	AFORL	SS	AFORL/Rosenberg	Aeron/Test	WDORF	-	-
1964-S254	2438534.78	1964 May 19 0645	Mike Apache	-	AE5-482 -	0.000	AFORL	SS	AFORL/Rosenberg	Aeron/Test	WDORF	-	-
1964-S255	2438535.25	1964 May 19 1800	Mike Apache	-	Smoke 053	0.000	LARCN	AS	AFORL/Rosenberg	Aeronomy/Test	WDORF	-	-
1964-A70	2438535.27	1964 May 19 1822	Mike	-	-	0.000	LARCN	AS	AFORL/Rosenberg	Aeronomy	TH-D-4365	-	-
1964-S256	2438535.50	1964 May 20	Mike Apache	-	Smoke 053	0.000	AFORL	SS	AFORL/Soberman	Test?	WDORF	-	-
1964-S257	2438535.50	1964 May 20	Mike Tomahawk	12	Sandia 152-22	0.000	SAND	SS	SAND/	Test?	WDORF	-	-
1964-A71	2438536.27	1964 May 20 1830	Mike	-	Smoke 394	0.000	LARCN	AS	LARC/	Aeronomy	TH-D-6746	-	-
1964-S260	2438536.50	1964 May 21 1830	Mike Tomahawk	9a	Sandia 152-10	0.000	SAND	AS	SAND/	Aeronomy	FDS	-	-
1964-A73	2438537.27	1964 May 21 1843	Mike	-	Smoke 395	0.000	LARCN	AS	LARC/	Aeronomy	TH-D-6746	-	-
1964-S265	2438538.32	1964 May 22 1943	Mike	-	Smoke 095	0.000	LARCN	AS	LARC/	Aeronomy	TH-D-4365	-	-
1964-S268	2438540.50	1964 May 25 2005	Mike Tomahawk	9	Sandia 152-28	0.000	SAND	SS	LARC/	Solar	FDS	-	-
1964-A75	2438541.54	1964 May 25 2005	Mike Tomahawk	9	Sandia 152-28	0.000	SAND	SS	LARC/	Solar	FDS	-	-
1964-S266	2438542.50	1964 May 27 1930	Mike Tomahawk	9	Sandia 152-30	0.000	SAND	SS	LARC/	Solar	FDS	-	-
1964-A76	2438543.51	1964 May 27 1930	Mike	-	Smoke 387	0.000	GSFC	SS	LARC/	Solar	TH-D-6746	-	-
1964-S272	2438543.59	1964 May 28 0215	Mike Apache	-	MASA 14. 54DA	0.000	USNR	SR	AFORL/Soberman	Aeronomy	WDORF	-	-
1964-S273	2438546.50	1964 Jun	Mike Apache	-	Capacitor	0.000	DASA	SS	DASA/	Aeronomy	WSHR	-	-
1964-S275	2438546.50	1964 Jun	Mike Javelin	?	MASA HR	0.000	DASA	SS	DASA/	Aeronomy	WSHR	-	-
1964-S276	2438546.50	1964 Jun	Mike Apache	-	AFPA PRESS	0.000	PHR	SS	PHR/	Aeronomy	PHR1st65	-	-
1964-S808	2438546.50	1964 Jun	Mike Apache	-	AFPA PRESS	0.000	PHR	SS	PHR/	Aeronomy	PHR1st65	-	-
1964-S274	2438550.50	1964 Jun 4	Mike Apache	-	-	0.000	AFORL	SS	AFORL7/	Ions	ULICD/AP	-	-
1964-S804	2438551.50	1964 Jun 5	Mike Apache	-	-	0.000	AFORL	SS	AFORL7/	Ions	ULICD/AP	-	-
1964-S805	2438551.50	1964 Jun 5	Mike Apache	-	-	0.000	AFORL	SS	AFORL7/	Ions	ULICD/AP	-	-
1964-A210	2438551.50	1964 Jun 5	Mike Apache	-	ARPA PRESS	0.000	GSFC	SS	GSFC/Bauer	Ions	ULICD/AP	-	-
1964-S276	2438551.50	1964 Jun 9 1900	Mike Apache	-	MASA 14. 330I	0.000	GSFC	SS	GSFC/Bauer	Ions	ULICD/AP	-	-
1964-A81	2438551.50	1964 Jun 9 1900	Mike Apache	-	SAE 389	0.000	LARCN	AS	GSFC/	Ions	ULICD/AP	-	-
1964-S297	2438556.71	1964 Jun 10 0503	Microprobe 200	-	CR1 AC15.373	0.000	AFORL	SS	AFORL/Faucher	Aeronomy	TH-D-6746	-	-
1964-S298	2438557.13	1964 Jun 10 0503	Microprobe 200	-	MASA 14. 1550E	0.000	GSFC	SS	GSFC/Davis	Magnetospheric	TH-X-56564	S86, 463	-
1964-A82	2438557.26	1964 Jun 10 1815	Mike	-	Smoke 399	0.000	LARCN	AS	LARC/	Aeronomy	TH-D-6746	-	-
1964-A84	2438559.29	1964 Jun 12 1900	Mike	-	Smoke 055	0.000	LARCN	AS	LARC/	Aeronomy	TH-D-4365	-	-
1964-A85	2438559.29	1964 Jun 12 1900	Mike	-	Smoke 060	0.000	LARCN	AS	LARC/	Aeronomy	TH-D-6746	-	-
1964-A88	2438562.29	1964 Jun 17 0101	Mike	-	Smoke 401	0.000	LARCN	AS	LARC/	Aeronomy	TH-D-6746	-	-
1964-S297	2438563.54	1964 Jun 17 1900	Mike CjJun	-	Falling Sphere 14	0.000	PHR	SS	UML/Peterson	Aeronomy	CR-218	WDORF	-
1964-A90	2438564.29	1964 Jun 17 1900	Mike CjJun	-	Smoke 402	0.000	LARCN	AS	UML/Peterson	Aeronomy	TH-D-6746	-	-
1964-S299	2438564.60	1964 Jun 18 0219	Mike CjJun	-	Falling Sphere 15	0.000	PHR	SS	UML/Peterson	Aeronomy	CR-218	WDORF	-
1964-S301	2438565.19	1964 Jun 18 1630	Mike CjJun	-	Falling Sphere 16	0.000	PHR	SS	UML/Peterson	Aeronomy	CR-218	WDORF	-
1964-S302	2438565.56	1964 Jun 19 0129	Mike CjJun	-	PHR-15	0.000	PHR	SS	PHR/	Aeronomy	WDORF	-	-
1964-S304	2438566.15	1964 Jun 19 1540	Mike CjJun	-	PHR-16	0.000	PHR	SS	PHR/	Aeronomy	WDORF	-	-
1964-S303	2438567.12	1964 Jun 25 1457.39	Mike Apache	-	MASA 14. 1569E	0.000	GSFC	SS	GSFC/Davis	Magnetospheric	TH-X-56564	WDORF	-
1964-S311	2438572.54	1964 Jun 26 0052.30	Mike Apache	-	MASA 14. 1570E	0.000	GSFC	SS	GSFC/Davis	Magnetospheric	TH-X-56564	WDORF	-
1964-S314	2438575.80	1964 Jun 29	Mike Tomahawk	9	Sandia 152-57	0.000	SAND	SS	SAND/	Aeronomy	FDS	-	-
1964-S321	2438578.50	1964 Jul 2	Mike Tomahawk	9	Sandia 152-58	0.000	SAND	SS	SAND/	Aeronomy	FDS	-	-
1964-S324	2438581.80	1964 Jul 2	Mike Apache	-	-	0.000	AFORL	SU	AFORL/Faire	Aeron?	WDORF	-	-
1964-S325	2438582.50	1964 Jul 6	Mike Tomahawk	9	Sandia 152-62	0.000	SAND	SS	SAND/	Aeronomy	FDS	-	-
1964-A102	2438583.32	1964 Jul 6 1945	Mike Tomahawk	9	Smoke 403	0.000	LARCN	AS	LARC/	Aeronomy	TH-D-6746	-	-
1964-S338	2438583.68	1964 Jul 9 0413	Mike Tomahawk	9	MASA 14. 1540E	0.000	GSFC	SS	RICE/O'Brien	Aeronomy	WDORF	-	-
1964-S366	2438589.23	1964 Jul 15 1730	Mike Tomahawk	9	Sandia 152-18	0.000	SAND	SS	PHR/	Test/Tech	FDS	-	-
1964-S348	2438589.67	1964 Jul 15 0058	Mike Apache	-	MASA 14. 49CA	0.000	GSFC	SS	GCM/Smith,Redinger	Aeronomy	WDORF	-	-
1964-S360	2438591.54	1964 Jul 15 0409	Mike Apache	-	MASA 14. 50CA	0.000	GSFC	SS	GCM/Smith,Redinger	Aeronomy	WDORF	-	-
1964-S361	2438591.83	1964 Jul 15 0409	Mike Apache	-	MASA 14. 1440U	0.000	GSFC	SS	UUC/Boothill	Ions	CR-68050	S86, 511	-
1964-S352	2438591.84	1964 Jul 15 0805	Mike Apache	-	MASA 14. 51CA	0.000	GSFC	SS	GCM/Smith,Redinger	Aeronomy	WDORF	-	-
1964-S353	2438591.86	1964 Jul 15 0805	Mike Apache	-	MASA 14. 52CA	0.000	GSFC	SS	GCM/Smith,Redinger	Aeronomy	WDORF	-	-
1964-S354	2438591.89	1964 Jul 15 0920	Mike Apache	-	MASA 14. 1450U	0.000	GSFC	SS	UUC/Boothill	Ions	CR-68050	-	-
1964-S355	2438591.93	1964 Jul 15 1025	Mike Apache	-	MASA 14. 1460U	0.000	GSFC	SS	UUC/Boothill	Ions	CR-68050	-	-
1964-A106	2438592.26	1964 Jul 15 1820	Mike	-	Smoke 404	0.000	LARCN	AS	LARC/	Aeronomy	TH-D-6746	-	-
1964-S361	2438593.18	1964 Jul 16 1622	Mike Apache	-	MASA 14. 127GI								





Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	OrbitPay	Agency	Launch_Code	Group	Category	LTCite	Cite	Notes
1964-5612	2438710.44	1964 Nov 10 2228	Nike Apache	-	MMSA 14.153CA	0.000	GSFC	SS	GCA/Smith	Aeronomy	WDCRF	-	-
1964-4127	2438710.48	1964 Nov 10 2326	Nike Apache	-	AE5-551 IQSY	0.000	AFCLRL	SS	AFCLRL/Faire, Sagalya	Aeron	WDCRF	-	-
1964-5613	2438710.55	1964 Nov 11 0119	Nike Apache	-	AE5-552 IQSY	0.000	AFCLRL	SS	AFCLRL/Faire, Sagalya	Aeron	WDCRF	-	-
1964-5615	2438711.43	1964 Nov 11 2227	Nike Apache	-	MMSA 14.115CA	0.000	GSFC	SS	GCA/Smith	Aeronomy	WDCRF	-	-
1964-5616	2438711.44	1964 Nov 11 2227	Nike Apache	-	MMSA 14.112CA	0.000	GSFC	SS	GCA/Smith	Aeronomy	WDCRF	-	-
1964-5653	2438711.50	1964 Nov 12	Nike Javelin	?	DMSA HR	0.000	DASA	SS	DASA/	Aeronomy	WDCRF	-	-
1964-5619	2438711.95	1964 Nov 12 1053	Nike Apache	-	MMSA 14.116CA	0.000	GSFC	SS	GCA/Smith, Bedinger	Aeronomy	WDCRF	-	-
1964-5620	2438711.96	1964 Nov 12 1056	Nike Apache	-	MMSA 14.113CA	0.000	GSFC	SS	GCA/Smith, Bedinger	Aeronomy	WDCRF	-	-
1964-5622	2438712.50	1964 Nov 13	Nike Tomahawk	9	Sandia 152-65	0.000	SAND	SS	SAND/	Aeronomy	FDS	-	-
1964-4171	2438713.34	1964 Nov 13 2010	Nike	-	Smoke 068	0.000	LARCN	AS	UMI/Hansen	Aeronomy	TI-D-4365	-	-
1964-5629	2438713.34	1964 Nov 13 1749	Nike Apache	-	MMSA 14.2330A	0.000	GSFC	SS	UMI/Hansen	Aeronomy	WDCRF	-	-
1964-5630	2438717.38	1964 Nov 17 2110	Nike Tomahawk	9	MMSA 10.153GA	0.000	GSFC	SS	SAND/	Aeronomy	WDCRF	-	-
1964-5631	2438717.50	1964 Nov 18	Nike Tomahawk	9	Sandia 152-66	0.000	SAND	SS	SAND/	Aeronomy	FDS	-	-
1964-5634	2438717.97	1964 Nov 18 1123.00	Nike Apache	-	-	0.000	AFCLRL	SS	AFCLRL/Rosenberg	Aeron	WDCRF	-	-
1964-5638	2438718.73	1964 Nov 19 0534	Nike Apache	-	AE5-490	0.000	AFCLRL	SS	AFCLRL/Rosenberg	Aeron	WDCRF	-	-
1964-5640	2438719.27	1964 Nov 19 1834	Nike Apache	-	MMSA 14.296A	0.000	GSFC	SS	UMI/Horvath	Aeronomy	WDCRF	-	-
1964-5641	2438719.29	1964 Nov 19 1902	Nike Apache	-	MMSA 10.1176A	0.000	GSFC	SS	GSFC/Smith, Donley	Aeronomy	WDCRF	-	-
1964-5642	2438719.35	1964 Nov 19 2020	Nike Apache	-	MMSA 14.1490U	0.000	GSFC	SS	UTUC/Boonhill, Smith, L	Ions	WDCRF	-	-
1964-5643	2438719.42	1964 Nov 19 2202	Nike Apache	-	MMSA 14.1480U	0.000	GSFC	SS	UTUC/Boonhill, Smith, L	Ions	WDCRF	-	-
1964-5644	2438719.49	1964 Nov 19 2343	Nike Apache	-	AE5-494 IQSY	0.000	AFCLRL	SS	AFCLRL/Rosenberg	Aeron	WDCRF	-	-
1964-5645	2438720.50	1964 Nov 21	Nike Tomahawk	9	Sandia 115-5	0.000	SAND	SS	SAND/	Aeron	FDS	-	-
1964-5646	2438720.60	1964 Nov 21 1630	Nike Apache	-	AD6-911	0.000	AFCLRL	SS	AFCLRL/Harvey	Ions	WDCRF	-	WDCRF
1964-5648	2438722.19	1964 Nov 23 1707	Nike Apache	-	MMSA 14.1176I	0.000	AFCLRL	SS	GSFC/Bauer	Ions	TI-X-55318	-	-
1964-4174	2438723.50	1964 Nov 24	Nike Javelin	-	-	0.000	AFPC	SS	AFPC/	Aeron?	TI-X-55549	-	-
1964-5647	2438723.50	1964 Nov 24	Nike Tomahawk	9	Sandia 115-6	0.000	SAND	SS	SAND/	Aeron	FDS	-	-
1964-4175	2438724.26	1964 Nov 24 1610	Nike	-	Smoke 069	0.000	LARCN	AS	LARCN/	Aeronomy	WDCRF	-	-
1964-5654	2438724.26	1964 Nov 25	Nike Javelin	?	DMSA HR	0.000	DASA	SS	DASA/	Aeronomy	WDCRF	-	-
1964-5659	2438725.50	1964 Nov 27 1331	Nike Tomahawk	9	Sandia 152-71	0.000	AFCLRL	SS	AFCLRL/Hoult	Test	WDCRF	-	-
1964-5664	2438725.50	1964 Nov 30 1311	Nike Apache	-	AE5-497 IQSY	0.000	GSFC	SS	SUPA/Helmud	Aeronomy	SRT-962	-	-
1964-5665	2438725.50	1964 Dec	Nike Apache	-	BMS	0.000	AFCLRL	SS	AFCLRL/Hoult	Test	WDCRF	-	-
1964-5666	2438725.50	1964 Dec	Nike Javelin	?	DMSA HR	0.000	AFCLRL	SS	DASA/	Aeronomy	WDCRF	-	-
1964-5667	2438725.50	1964 Dec	Nike Javelin	?	DMSA HR	0.000	DASA	SS	DASA/	Aeronomy	WDCRF	-	-
1964-5668	2438725.50	1964 Dec	Nike Tomahawk	9	Sandia 152-85	0.000	SAND	SS	SUPA/Helmud	Aeronomy	WDCRF	-	-
1964-5662	2438730.56	1964 Dec 1 0120	Nike Apache	-	MMSA 14.1361A	0.000	GSFC	SS	SUPA/Helmud	Aeronomy	WDCRF	-	-
1964-5663	2438730.56	1964 Dec 1 0820	Nike Apache	-	Smoke 070	0.000	CHIE	AS	TUC/Radicella	Ions	TI-D-4365	-	-
1964-4176	2438731.37	1964 Dec 1 2053	Nike Tomahawk	-	JDR 64-1	0.000	AFCLRL	SS	LARCN/	Aeronomy	WDCRF	-	-
1964-5669	2438731.37	1964 Dec 1 1956	Nike Apache	-	MMSA 14.600E	0.000	AFCLRL	SS	UMI/Loxwood	Ions	TI-D-4365	-	-
1964-5671	2438737.25	1964 Dec 6 1796	Nike Apache	-	Smoke 071	0.000	CHIE	AS	UMI/Loxwood	Ions	TI-D-4365	-	-
1964-5672	2438737.25	1964 Dec 6 1796	Nike Apache	-	Smoke 072	0.000	CHIE	AS	UMI/Loxwood	Ions	TI-D-4365	-	-
1964-4181	2438741.25	1964 Dec 11 1800	Nike Apache	-	MMSA 12.026T	0.000	LARCN	AS	LARCN/	Aeronomy	WDCRF	-	-
1964-4185	2438741.25	1964 Dec 19 1457	Nike Apache	-	MMSA 14.2096I	0.000	GSFC	SS	GSFC/Lane	Aeronomy	SRCC0667-54	-	-
1964-5686	2438746.12	1964 Dec 19 1457	Nike Apache	-	GSFC/Aikin	0.000	GSFC	SS	GSFC/Aikin	Test	WDCRF	-	-
1964-5690	2438747.25	1964 Dec 17 1394.00	Nike Tomahawk	9	Sandia 276-1	0.000	PARC	SS	PARC/	Ions	TI-X-55549	-	-
1965-506	2438760.50	1965 Jan	Nike Tomahawk	-	BMS	0.000	WNR	SS	SAND/Pepper	Parachute test	WDCRF	-	-
1965-507	2438760.50	1965 Jan	Nike Apache	-	BMS	0.000	WNR	SS	SAND/Pepper	Parachute test	WDCRF	-	-
1965-508	2438760.50	1965 Jan 5 2000	Nike Apache	-	Smoke 073	0.000	LARCN	AS	LARCN/	Aeronomy	WDCRF	-	-
1965-509	2438760.56	1965 Jan 7 0350	Nike Apache	-	MMSA 14.1423A	0.000	LARCN	AS	LARCN/	Aeronomy	TI-D-6861	-	-
1965-429	2438771.96	1965 Jan 7 0350	Nike Apache	-	Smoke 074	0.000	GSFC	SS	LARCN/Porter	Aeronomy	TI-D-6861	-	-
1965-410	2438775.26	1965 Jan 14 1819	Nike	-	Smoke 075	0.000	LARCN	AS	LARCN/	Aeronomy	TI-D-6861	-	-
1965-411	2438775.26	1965 Jan 21 1511	Nike	-	Smoke 076	0.000	LARCN	AS	LARCN/	Aeronomy	TI-D-6861	-	-
1965-850	2438787.50	1965 Jan 27 2132	Nike Tomahawk	9a	MMSA 14.152-23	0.000	SAND	SS	SAND/	Test	FDS	-	-
1965-851	2438787.50	1965 Jan 27 2132	Nike Tomahawk	9a	MMSA 14.154GA	0.000	SAND	SS	SAND/	Test	TI-PR-65-4	-	-
1965-852	2438787.50	1965 Jan 27 2224	Nike Tomahawk	9a	MMSA 10.1190A	0.000	GSFC	SS	GSFC/Smith, Theon	Aeronomy	TI-PR-65-4	-	-
1965-853	2438788.43	1965 Jan 27 2224	Nike Tomahawk	9a	MMSA 10.1210A	0.000	GSFC	SS	GSFC/Smith	Aeronomy	TI-PR-65-4	-	-
1965-854	2438788.43	1965 Jan 27 2224	Nike Tomahawk	9a	MMSA 10.1210A	0.000	GSFC	SS	GSFC/Smith	Aeronomy	TI-PR-65-4	-	-
1965-856	2438791.50	1965 Feb	Nike Apache	-	BMS	0.000	MITCOM	WS	-	Target	WDCRF	-	-
1965-861	2438791.50	1965 Feb	Nike Apache	-	BMS	0.000	MITCOM	WS	-	Target	WDCRF	-	-
1965-862	2438791.50	1965 Feb	Nike Apache	-	DMSA HR	0.000	DASA	SS	DASA/	Target	WDCRF	-	-
1965-863	2438791.50	1965 Feb	Nike Apache	-	DMSA HR	0.000	DASA	SS	DASA/	Target	WDCRF	-	-
1965-864	2438791.50	1965 Feb	Nike Apache	-	DMSA HR	0.000	DASA	SS	DASA/	Target	WDCRF	-	-
1965-865	2438791.50	1965 Feb	Nike Apache	-	DMSA HR	0.000	DASA	SS	DASA/	Target	WDCRF	-	-
1965-421	2438793.33	1965 Feb 2 1953	Nike Javelin	?	Smoke 076	0.000	LARCN	AS	LARCN/	Aeronomy	TI-D-6861	-	-
1965-573	2438795.26	1965 Feb 3 1808	Nike Apache	-	MMSA 14.61UE	0.000	GSFC	SS	UMI/Loxwood	Plasma	WDCRF	-	-
1965-574	2438795.26	1965 Feb 3 1808	Nike Apache	-	MMSA 10.1295A	0.000	GSFC	SS	GSFC/Smith, Theon	Aeronomy	WDCRF	-	-
1965-575	2438795.26	1965 Feb 3 1808	Nike Apache	-	MMSA 10.1190A	0.000	GSFC	SS	GSFC/Smith	Aeronomy	WDCRF	-	-
1965-576	2438796.72	1965 Feb 4 0445	Nike Tomahawk	9	MMSA 10.1220A	0.000	GSFC	SS	GSFC/Smith	Aeronomy	WDCRF	-	-
1965-576	2438796.72	1965 Feb 4 0445	Nike Tomahawk	9	MMSA 10.1190A	0.000	GSFC	SS	GSFC/Smith	Aeronomy	WDCRF	-	-
1965-423	2438797.35	1965 Feb 5 2029	Nike Tomahawk	9	Smoke 077	0.000	LARCN	AS	LARCN/	Aeronomy	TI-D-6861	-	-
1965-583	2438797.35	1965 Feb 6 1019	Nike Tomahawk	9	AP6 850	0.000	AFCLRL	SS	AFCLRL/Rosenberg	Aeronomy	WDCRF	-	-
1965-586	2438800.43	1965 Feb 6 1019	Nike Tomahawk	9	MMSA 10.1265A	0.000	AFCLRL	SS	AFCLRL/Rosenberg	Aeronomy	WDCRF	-	-
1965-586	2438800.43	1965 Feb 6 1019	Nike Tomahawk	9	MMSA 10.1265A	0.000	AFCLRL	SS	AFCLRL/Rosenberg	Aeronomy	WDCRF	-	-
1965-587	2438800.45	1965 Feb 8 2253	Nike Tomahawk	9	MMSA 10.1206A	0.000	GSFC	SS	GSFC/Smith	Aeronomy	WDCRF	-	-
1965-588	2438800.46	1965 Feb 8 2253	Nike Tomahawk	9	MMSA 10.1236A	0.000	GSFC	SS	GSFC/Smith	Aeronomy	WDCRF	-	-
1965-589	2438800.46	1965 Feb 8 2253	Nike Tomahawk	9	MMSA 14.1110A	0.000	GSFC	SS	UMI/Schaefer	Aeronomy	WDCRF	-	-
1965-597	2438810.34	1965 Feb 19 0025	Nike Tomahawk	9	AE5 492	0.000	AFCLRL	SS	UMI/Schaefer	Aeronomy	WDCRF	-	-
1965-598	2438810.34	1965 Feb 19 0025	Nike Tomahawk	9	AE5 492	0.000	AFCLRL	SS	UMI/Schaefer	Aeronomy	WDCRF	-	-
1965-599	2438810.34	1965 Feb 19 0025	Nike Tomahawk	9	Sandia 152-72	0.000	SAND	SS	LASI/SAND/Peck	Aeronomy	WDCRF	-	-
1965-S100	2438810.89	1965 Feb 19 0451.42	Nike Tomahawk	9	MMSA 14.96UA	0.000	GSFC	SS	AFCLRL/Rosenberg	Aeronomy	10873, 3353	-	-
1965-S101	2438810.89	1965 Feb 19 0917.31	Nike Tomahawk	9	Sandia 14	0.000	AFCLRL	SS	AFCLRL/Rosenberg	Aeronomy	WDCRF	-	-
1965-S102	2438816.50	1965 Feb 23 1715	Nike Tomahawk	9	Sphere 14	0.000	AFCLRL	SS	AFCLRL/Rosenberg	Aeronomy	WDCRF	-	-
1965-S103	2438816.50	1965 Feb 23 1715	Nike Tomahawk	9	Sphere 14	0.000	AFCLRL	SS	AFCLRL/Rosenberg	Aeronomy	WDCRF	-	-
1965-S104	2438817.97	1965 Feb 26 1110	Nike Tomahawk	9	Sphere 24	0.000	AFCLRL	SS	AFCLRL/Rosenberg				

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	OrbitPay	Agency	Launch_Code	Group	Category	LTCite	Cite	Notes
1965-441	2438819.98	1965 Feb 28 1130	Nike Apache	-	AES-554	0.000	AFCLM	SF	AFCLM/Rosenberg	Ions	WDCRF	SRE-909	-
1965-5119	2438819.98	1965 Feb 28 1130	Nike Apache	-	AES-497	0.000	AFCLM	SF	AFCLM/Smiddy,Ulwick	Aeron	WDCRF	-	-
1965-407	2438820.01	1965 Feb 28 1211	Nike Apache	-	MSA 14.200CA	0.000	GSFC	SF	GCA/Tr-67-11-N	Aeron	WDCRF	-	-
1965-442	2438820.05	1965 Feb 28 1315	Nike Apache	-	AES-555	0.000	AFCLM	SF	AFCLM/Smiddy,Ulwick	Ions	WDCRF	-	-
1965-5111	2438819.50	1965 Mar	Nike Apache	-	BMS	0.000	HICOM	MS	-	Target	WSRR	-	-
1965-5112	2438819.50	1965 Mar	Nike Apache	-	BMS	0.000	HICOM	MS	-	Target	WSRR	-	-
1965-5122	2438821.36	1965 Mar 1 2043	Nike Apache	-	MSA 14.2631A	0.000	GSFC/UID	MS	UTU/Stoffregen	Aeron	AND	SP-4401	-
1965-5123	2438821.50	1965 Mar 2	Nike Tomahawk	12	Sandia 152-49	0.000	SAND	SS	LASL/	Test?	FDS	-	-
1965-5124	2438821.50	1965 Mar 2	Nike Tomahawk	9	Sandia 152-53	0.000	SAND	SS	GSFC/MDRE/Kane,Mahlum	Aeron?	FDS	SP-4401	-
1965-444	2438823.44	1965 Mar 5 2228	Nike Apache	-	Ferdinand 9	0.000	GSFC/HTNF	SF	UTU/Stoffregen	Aeron	AND	SP-4401	-
1965-5138	2438825.61	1965 Mar 6 0730	Nike Tomahawk	9	Sandia 152-73	0.000	SAND	SS	LASL/Peak	Aeron	AND	SP-4401	-
1965-5143	2438826.15	1965 Mar 8 1536	Nike Apache	-	MSA 14.1600E	0.000	GSFC	SS	GSFC/Davis	Plasma	WDCRF	-	SandWeve60312
1965-5144	2438826.24	1965 Mar 8 1748:08	Nike Apache	-	MSA 14.1600A	0.000	GSFC	SS	UMI/Horvath	Aeron	WDCRF	-	-
1965-5145	2438826.77	1965 Mar 9 0628:26	Nike Apache	-	MSA 14.1600A	0.000	GSFC	SS	UMI/Horvath	Aeron	WDCRF	-	-
1965-5146	2438829.19	1965 Mar 9 1625	Nike Apache	-	MSA 14.1600E	0.000	GSFC	SS	UMI/Horvath	Plasma	WDCRF	-	CR-78234
1965-5148	2438830.17	1965 Mar 10 1600	Nike Apache	-	MSA 14.1600E	0.000	GSFC	SS	UMI/Horvath	Plasma	WDCRF	-	CR-78234
1965-5150	2438830.94	1965 Mar 11 0958:14	Nike Apache	-	MSA 14.1600A	0.000	GSFC	SS	UMI/PHR/Schaefer	Aeron	WDCRF	-	-
1965-446	2438830.94	1965 Mar 11 1038	Nike Apache	-	MSA 14.1600A	0.000	LARC	AS	UMI/Hansen	Aeron	WDCRF	-	-
1965-5151	2438831.26	1965 Mar 11 1811	Nike Apache	-	Smoke 076	0.000	LARC	AS	UMI/PHR/Schaefer	Aeron	WDCRF	-	-
1965-5152	2438831.50	1965 Mar 11 2007	Nike Apache	-	MSA 14.990A	0.000	GSFC	SS	SAND/	Aeron?	FDS	-	-
1965-5153	2438832.06	1965 Mar 12	Nike Tomahawk	9	Sandia 152-79	0.000	SAND	SS	SAND/	Aeron?	FDS	-	-
1965-5154	2438832.17	1965 Mar 12 1330	Nike Apache	-	MSA 14.070E	0.000	GSFC	SS	UMI/Cahill	Plasma	WDCRF	-	CR-78234
1965-446	2438835.36	1965 Mar 15 2041	Nike Apache	-	MSA 14.040E	0.000	GSFC	SS	UMI/Cahill	Plasma	WDCRF	-	CR-78234
1965-5164	2438835.36	1965 Mar 15 2041	Nike Apache	-	Ferdinand 10	0.000	HTNF/GSFC	SF	GSFC/LIC/Kane,Jepsersen	Ions/Auroral	WDCRF	-	WDCRF
1965-5165	2438835.20	1965 Mar 16 1615	Nike Apache	-	MSA 14.1770E	0.000	GSFC	SS	GSFC/Davis	Plasma	WDCRF	-	-
1965-5166	2438835.20	1965 Mar 16 1615	Nike Apache	-	MSA 14.1770E	0.000	GSFC	SS	GSFC/Flume	Ions	WDCRF	-	-
1965-5169	2438837.75	1965 Mar 18 0604	Nike Apache	-	MSA 14.1720E	0.000	GSFC	SS	GSFC/Davis	Plasma	WDCRF	-	-
1965-5171	2438838.19	1965 Mar 18 0641	Nike Apache	-	MSA 14.1760E	0.000	GSFC	SS	GSFC/Davis	Ions	WDCRF	-	-
1965-5172	2438838.19	1965 Mar 18 1603	Nike Apache	-	MSA 14.1790E	0.000	GSFC	SS	GSFC/Davis	Ions	WDCRF	-	-
1965-5173	2438838.26	1965 Mar 18 1603	Nike Apache	-	MSA 14.1790E	0.000	GSFC	SS	GSFC/Davis	Ions	WDCRF	-	-
1965-5176	2438838.26	1965 Mar 18 1603	Nike Apache	-	MSA 12.09/18.01GA	0.000	GSFC	SS	UTU/Horvath,Flowerday	Aeron	WDCRF	-	-
1965-5178	2438840.06	1965 Mar 20 1520:09	Nike Apache	-	MSA 14.2280E	0.000	GSFC	SS	UTU/Cahill	Ions	WDCRF	-	WDCRF
1965-5180	2438840.19	1965 Mar 20 1628	Nike Apache	-	AES-253	0.000	AFCLM	SS	AFCLM/Shuman	Ions	WDCRF	-	-
1965-446	2438842.43	1965 Mar 22 0749:10	Nike Apache	-	AES-252	0.000	AFCLM	SS	AFCLM/Shuman	Ions	WDCRF	-	-
1965-5184	2438841.57	1965 Mar 22 0849:10	Nike Apache	-	Ferdinand 11	0.000	GSFC/HTNF	SF	HTNF/MSA,Sagala,Yn	Aeron	AND	SP-4401	-
1965-5185	2438841.57	1965 Mar 22 0849:10	Nike Apache	-	AES-254	0.000	AFCLM	SS	AFCLM/Shuman	Ions	WDCRF	-	-
1965-5186	2438842.30	1965 Mar 22 2219	Nike Apache	-	AES-254	0.000	AFCLM	SS	AFCLM/Shuman	Ions	WDCRF	-	-
1965-5187	2438844.19	1965 Mar 24 1707	Nike Apache	-	MSA 14.1740E	0.000	GSFC	SS	AFCLM/Shuman	Ions	WDCRF	-	SR-LI-428
1965-5188	2438844.21	1965 Mar 24 1707	Nike Apache	-	MSA 14.1800E	0.000	GSFC	SS	AFCLM/Shuman	Ions	WDCRF	-	CR-79096
1965-5194	2438845.17	1965 Mar 25 1600	Nike Apache	-	AES-290	0.000	GSFC	SS	GSFC/Davis	Plasma	WDCRF	-	-
1965-5196	2438846.15	1965 Mar 26 1541	Nike Apache	-	MSA 14.1730E	0.000	GSFC	SS	AFCLM/Flume	Ions	WDCRF	-	-
1965-5198	2438846.15	1965 Mar 26 1541	Nike Apache	-	MSA 14.1730E	0.000	GSFC	SS	AFCLM/Flume	Ions	WDCRF	-	-
1965-5199	2438846.15	1965 Mar 26 1541	Nike Apache	-	MSA 14.1730E	0.000	GSFC	SS	AFCLM/Flume	Ions	WDCRF	-	-
1965-5200	2438846.15	1965 Mar 26 1541	Nike Apache	-	MSA 14.1730E	0.000	GSFC	SS	AFCLM/Flume	Ions	WDCRF	-	-
1965-5201	2438847.26	1965 Mar 27 0809	Nike Apache	-	AES-294	0.000	AFCLM	SS	AFCLM/Davis	Ions	WDCRF	-	-
1965-5203	2438847.26	1965 Mar 27 0809	Nike Apache	-	AES-294	0.000	AFCLM	SS	AFCLM/Davis	Ions	WDCRF	-	-
1965-5205	2438848.16	1965 Mar 28 1537	Nike Apache	-	MSA 10.700E	0.000	AFCLM	SS	AFCLM/Shuman	Ions	WDCRF	-	-
1965-5206	2438848.16	1965 Mar 28 1537	Nike Apache	-	MSA 10.700E	0.000	AFCLM	SS	AFCLM/Shuman	Ions	WDCRF	-	-
1965-451	2438849.77	1965 Mar 29 1547	Nike Apache	-	MSA 10.1430E	0.000	GSFC	SS	GSFC/Davis	Plasma	WDCRF	-	-
1965-5211	2438851.50	1965 Mar 31 0831	Nike Apache	-	MSA 10.1430E	0.000	LARC	AS	GSFC/Davis,Heppner	Aeron	TIU-D-6861	-	-
1965-5212	2438851.50	1965 Mar 31 0831	Nike Apache	-	MSA 10.1430E	0.000	LARC	AS	GSFC/Davis,Heppner	Aeron	TIU-D-6861	-	-
1965-5214	2438853.06	1965 Apr 2 2159	Nike Apache	-	MSA 14.1820E	0.000	GSFC	SS	LEMC/Potter	Aeron	WDCRF	-	-
1965-5215	2438853.06	1965 Apr 2 2159	Nike Apache	-	MSA 14.1820E	0.000	GSFC	SS	LEMC/Potter	Aeron	WDCRF	-	-
1965-5216	2438853.06	1965 Apr 2 2159	Nike Apache	-	MSA 14.1820E	0.000	GSFC	SS	LEMC/Potter	Aeron	WDCRF	-	-
1965-5217	2438853.06	1965 Apr 2 2159	Nike Apache	-	MSA 14.1820E	0.000	GSFC	SS	LEMC/Potter	Aeron	WDCRF	-	-
1965-5218	2438853.06	1965 Apr 2 2159	Nike Apache	-	MSA 14.1820E	0.000	GSFC	SS	LEMC/Potter	Aeron	WDCRF	-	-
1965-5219	2438853.06	1965 Apr 2 2159	Nike Apache	-	MSA 14.1820E	0.000	GSFC	SS	LEMC/Potter	Aeron	WDCRF	-	-
1965-5220	2438853.06	1965 Apr 2 2159	Nike Apache	-	MSA 14.1820E	0.000	GSFC	SS	LEMC/Potter	Aeron	WDCRF	-	-
1965-5221	2438853.06	1965 Apr 2 2159	Nike Apache	-	MSA 14.1820E	0.000	GSFC	SS	LEMC/Potter	Aeron	WDCRF	-	-
1965-5222	2438853.06	1965 Apr 2 2159	Nike Apache	-	MSA 14.1820E	0.000	GSFC	SS	LEMC/Potter	Aeron	WDCRF	-	-
1965-5223	2438853.06	1965 Apr 2 2159	Nike Apache	-	MSA 14.1820E	0.000	GSFC	SS	LEMC/Potter	Aeron	WDCRF	-	-
1965-5224	2438853.06	1965 Apr 2 2159	Nike Apache	-	MSA 14.1820E	0.000	GSFC	SS	LEMC/Potter	Aeron	WDCRF	-	-
1965-5225	2438853.06	1965 Apr 2 2159	Nike Apache	-	MSA 14.1820E	0.000	GSFC	SS	LEMC/Potter	Aeron	WDCRF	-	-
1965-5226	2438853.06	1965 Apr 2 2159	Nike Apache	-	MSA 14.1820E	0.000	GSFC	SS	LEMC/Potter	Aeron	WDCRF	-	-
1965-5227	2438853.06	1965 Apr 2 2159	Nike Apache	-	MSA 14.1820E	0.000	GSFC	SS	LEMC/Potter	Aeron	WDCRF	-	-
1965-5228	2438853.06	1965 Apr 2 2159	Nike Apache	-	MSA 14.1820E	0.000	GSFC	SS	LEMC/Potter	Aeron	WDCRF	-	-
1965-5229	2438853.06	1965 Apr 2 2159	Nike Apache	-	MSA 14.1820E	0.000	GSFC	SS	LEMC/Potter	Aeron	WDCRF	-	-
1965-5230	2438853.06	1965 Apr 2 2159	Nike Apache	-	MSA 14.1820E	0.000	GSFC	SS	LEMC/Potter	Aeron	WDCRF	-	-
1965-5231	2438853.06	1965 Apr 2 2159	Nike Apache	-	MSA 14.1820E	0.000	GSFC	SS	LEMC/Potter	Aeron	WDCRF	-	-
1965-5232	2438853.06	1965 Apr 2 2159	Nike Apache	-	MSA 14.1820E	0.000	GSFC	SS	LEMC/Potter	Aeron	WDCRF	-	-
1965-5233	2438853.06	1965 Apr 2 2159	Nike Apache	-	MSA 14.1820E	0.000	GSFC	SS	LEMC/Potter	Aeron	WDCRF	-	-
1965-5234	2438853.06	1965 Apr 2 2159	Nike Apache	-	MSA 14.1820E	0.000	GSFC	SS	LEMC/Potter	Aeron	WDCRF	-	-
1965-5235	2438853.06	1965 Apr 2 2159	Nike Apache	-	MSA 14.1820E	0.000	GSFC	SS	LEMC/Potter	Aeron	WDCRF	-	-
1965-5236	2438853.06	1965 Apr 2 2159	Nike Apache	-	MSA 14.1820E	0.000	GSFC	SS	LEMC/Potter	Aeron	WDCRF	-	-
1965-5237	2438853.06	1965 Apr 2 2159	Nike Apache	-	MSA 14.1820E	0.000	GSFC	SS	LEMC/Potter	Aeron	WDCRF	-	-
1965-5238	2438853.06	1965 Apr 2 2159	Nike Apache	-	MSA 14.1820E	0.000	GSFC	SS	LEMC/Potter	Aeron	WDCRF	-	-
1965-5239	2438853.06	1965 Apr 2 2159	Nike Apache	-	MSA 14.1820E	0.000	GSFC	SS	LEMC/Potter	Aeron	WDCRF	-	-
1965-5240	2438853.06	1965 Apr 2 2159	Nike Apache	-	MSA 14.1820E	0.000	GSFC	SS	LEMC/Potter	Aeron	WDCRF	-	-
1965-5241	2438853.06	1965 Apr 2 2159	Nike Apache	-	MSA 14.1820E	0.000	GSFC	SS	LEMC/Potter	Aeron	WDCRF	-	-
1965-5242	2438853.06	1965 Apr 2 2159	Nike Apache	-	MSA 14.1820E	0.000	GSFC	SS	LEMC/Potter	Aeron	WDCRF	-	-
1965-52													

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	OrbPay	Agency	Launch_Code	Group	Category	LTCite	Cite	Notes
1965-5321	2438911.33	1965 May 30 2000?	Nike Tomahawk	9	Sandia 152-76	0.000	SAND	SS	LASL/	Solar X	FDS	MR650607-27	-
1965-5322	2438911.33	1965 May 30 2000?	Nike Tomahawk	9	Sandia 152-77	0.000	SAND	SS	LASL/	Solar X	FDS	MR650607-27	-
1965-5323	2438911.50	1965 May 30 2000?	Nike Tomahawk	9	Sandia 152-78	0.000	SAND	SS	LASL/	Solar X	FDS	MR650607-27	-
1965-5324	2438911.50	1965 Jun	Nike Apache	?	Capache	0.000	HCDD	MS	-	Aeron?	WSRR	-	-
1965-5327	2438911.50	1965 Jun	Nike Apache	?	Smoke 084	0.000	LARCN	MS	-	Aeron?	WSRR	-	-
1965-479	2438913.28	1965 Jun 1 1844	Nike	-	Smoke 084	0.000	LARCN	AS	AFCLC/Rosenberg	Aeron	WDICRF	TI-D-6861	-
1965-5336	2438913.94	1965 Jun 2 1019	Nike Cajun	-	AD6-498	0.000	AFCLR	AS	AFCLC/Rosenberg	Aeron	WDICRF	TI-D-6861	-
1965-5337	2438913.94	1965 Jun 2 1030	Nike Cajun	-	AD6-498	0.000	AFCLR	AS	AFCLC/Rosenberg	Aeron	WDICRF	TI-D-6861	-
1965-5338	2438914.50	1965 Jun 3	Nike Javelin	?	DNM HR	0.000	DASA	SS	DASA/	Aeron?	WDICRF	CR-79096	-
1965-5355	2438925.88	1965 Jun 14 0913:30	Nike Apache	-	MMSA 14-2460U	0.000	GSFC	SS	GSFC/Lane	Ions	WDICRF	MR650621-12	-
1965-5356	2438925.88	1965 Jun 18 1756	Nike Apache	-	MMSA 14-2460U	0.000	GSFC	SS	GSFC/Lane	Ions	WDICRF	MR650621-12	-
1965-5367	2438930.47	1965 Jun 18 2311	Nike Apache	-	MMSA 14-2158A1	0.000	GSFC	SS	GSFC/Lane	Ions	WDICRF	MR650621-12	-
1965-5378	2438934.58	1965 Jun 23 0149	Nike Apache	-	MMSA 14-712CH	0.000	GSFC	SS	GSFC/Lane	Ions	WDICRF	MR650621-12	-
1965-5379	2438934.58	1965 Jun 23 0203	Nike Apache	-	MMSA 14-712CH	0.000	GSFC	SS	GSFC/Lane	Ions	WDICRF	MR650621-12	-
1965-5379	2438934.58	1965 Jun 23 0400	Nike Apache	-	MMSA 14-201CA	0.000	GSFC	SS	GSFC/Lane	Ions	WDICRF	MR650621-12	-
1965-5380	2438934.58	1965 Jun 23 0847	Nike Apache	-	MMSA 14-740CH	0.000	GSFC	SS	GSFC/Lane	Ions	WDICRF	MR650621-12	-
1965-5381	2438940.58	1965 Jun 23 0852	Nike Apache	-	MMSA 14-740CH	0.000	GSFC	SS	GSFC/Lane	Ions	WDICRF	MR650621-12	-
1965-5390	2438940.58	1965 Jun 29	Nike Javelin	-	Smoke 085	0.000	AFCLR	SS	AFCLC/Harcisi	Aeron	WDICRF	-	-
1965-494	2438943.24	1965 Jul 1 1740	Nike	-	Smoke 085	0.000	LARCN	AS	LARCN/	Aeron	WDICRF	-	-
1965-4101	2438956.26	1965 Jul 14 1809	Nike	-	Smoke 086	0.000	LARCN	AS	LARCN/	Aeron	WDICRF	-	-
1965-5396	2438956.50	1965 Jul 14	Nike Cajun	-	Capache	0.000	HCDD	MS	-	Aeron?	WSRR	-	-
1965-5399	2438956.50	1965 Jul 15	Nike Cajun	-	Capache	0.000	HCDD	MS	-	Aeron?	WSRR	-	-
1965-5400	2438956.50	1965 Jul 15	Nike Cajun	-	Capache	0.000	HCDD	MS	-	Aeron?	WSRR	-	-
1965-5401	2438956.50	1965 Jul 15	Nike Cajun	-	Capache	0.000	HCDD	MS	-	Aeron?	WSRR	-	-
1965-5402	2438957.50	1965 Jul 16	Nike Cajun	-	Capache	0.000	HCDD	MS	-	Aeron?	WSRR	-	-
1965-5403	2438957.50	1965 Jul 16	Nike Cajun	-	Capache	0.000	HCDD	MS	-	Aeron?	WSRR	-	-
1965-5404	2438957.50	1965 Jul 17	Nike Cajun	-	Capache	0.000	HCDD	MS	-	Aeron?	WSRR	-	-
1965-4103	2438959.15	1965 Jul 17 1505	Nike Apache	-	A65-914	0.000	AFCLR	SS	AFCLC/Harvey	Ions	WDICRF	-	-
1965-5406	2438961.50	1965 Jul 20	Nike Cajun	-	Capache	0.000	HCDD	MS	-	Aeron?	WSRR	-	-
1965-5409	2438961.50	1965 Jul 20	Nike Cajun	-	Capache	0.000	HCDD	MS	-	Aeron?	WSRR	-	-
1965-5405	2438962.94	1965 Jul 21	Nike Cajun	-	Capache	0.000	HCDD	MS	-	Aeron?	WSRR	-	-
1965-4108	2438963.21	1965 Jul 21 1033:00	Nike	-	AE07-367	0.000	AFCLR	SS	AFCLC/Faucher,Hoult	Test/Aeron	WDICRF	JCR73,299	-
1965-5395	2438963.50	1965 Jul 21 1708	Nike Apache	-	Smoke 087	0.000	LARCN	AS	LARCN/	Aeron	WDICRF	TI-D-6861	-
1965-5396	2438963.50	1965 Jul 22	Nike Apache	-	Capache	0.000	HCDD	MS	-	Aeron?	WSRR	-	-
1965-5397	2438963.50	1965 Jul 22	Nike Apache	-	Capache	0.000	HCDD	MS	-	Aeron?	WSRR	-	-
1965-5406	2438964.50	1965 Jul 23	Nike Cajun	-	Capache	0.000	HCDD	MS	-	Aeron?	WSRR	-	-
1965-5407	2438964.50	1965 Jul 23	Nike Cajun	-	Capache	0.000	HCDD	MS	-	Aeron?	WSRR	-	-
1965-5431	2438965.21	1965 Jul 23 1705	Nike Cajun	-	Capache	0.000	HCDD	MS	-	Aeron?	WSRR	-	-
1965-5446	2438965.57	1965 Aug 7 1113	Nike Cajun	-	MMSA 10-1282H	0.000	GSFC	SS	GSFC/Smith	Aeron	WDICRF	-	-
1965-5449	2438965.57	1965 Aug 7 1200	Nike Cajun	-	MMSA 10-1510H	0.000	GSFC	SS	GSFC/Smith	Aeron	WDICRF	-	-
1965-5449	2438965.57	1965 Aug 7 1850	Nike Cajun	-	MMSA 10-1540H	0.000	GSFC	SS	GSFC/Smith	Aeron	WDICRF	-	-
1965-5450	2438965.57	1965 Aug 7 1859	Nike Cajun	-	MMSA 10-1620H	0.000	GSFC	SS	GSFC/Smith	Aeron	WDICRF	-	-
1965-5451	2438965.57	1965 Aug 7 1959	Nike Cajun	-	MMSA 10-1690H	0.000	GSFC	SS	GSFC/Smith	Aeron	WDICRF	-	-
1965-5452	2438965.57	1965 Aug 7 1945	Nike Cajun	-	MMSA 10-1690H	0.000	GSFC	SS	GSFC/Smith	Aeron	WDICRF	-	-
1965-5453	2438965.57	1965 Aug 8 0340	Nike Cajun	-	MMSA 10-1690H	0.000	GSFC	SS	GSFC/Smith	Aeron	WDICRF	-	-
1965-5454	2438965.57	1965 Aug 8 0415	Nike Cajun	-	MMSA 10-1662H	0.000	GSFC	SS	GSFC/Smith	Aeron	WDICRF	-	-
1965-5455	2438965.57	1965 Aug 8 0415	Nike Cajun	-	MMSA 10-1670H	0.000	GSFC	SS	GSFC/Smith	Aeron	WDICRF	-	-
1965-5457	2438965.57	1965 Aug 8 0452	Nike Cajun	-	MMSA 10-1670H	0.000	GSFC	SS	GSFC/Smith	Aeron	WDICRF	-	-
1965-5459	2438965.57	1965 Aug 8 1002	Nike Cajun	-	MMSA 10-1670H	0.000	GSFC	SS	GSFC/Smith	Aeron	WDICRF	-	-
1965-5460	2438965.57	1965 Aug 9 1010	Nike Cajun	-	MMSA 10-1642H	0.000	GSFC	SS	GSFC/Smith	Aeron	WDICRF	-	-
1965-5465	2438965.57	1965 Aug 9 1149	Nike Cajun	-	MMSA 10-1446H	0.000	GSFC	SS	GSFC/Smith	Aeron	WDICRF	-	-
1965-4120	2438965.73	1965 Aug 12 1957	Nike Javelin	-	Smoke 088	0.000	LARCN	AS	LARCN/Hemenway	Aeron	WDICRF	TI-D-6861	-
1965-5438	2438965.80	1965 Aug 12 0140	Nike Apache	-	Smoke 088	0.000	LARCN	AS	LARCN/Hemenway	Aeron	WDICRF	TI-D-6861	-
1965-5471	2438965.87	1965 Aug 13 0150	Nike Apache	-	Smoke 088	0.000	LARCN	AS	LARCN/Hemenway	Aeron	WDICRF	TI-D-6861	-
1965-5476	2438967.50	1965 Aug 24 2159	Nike Apache	-	MMSA 14-133MA	0.000	GSFC	SS	GSFC/IMSE/Bourdeau	Aeron	WDICRF	-	-
1965-5486	2439004.97	1965 Aug 3 1117	Nike Apache	-	MMSA 14-2100T	0.000	GSFC	SS	GSFC/IMSE/Bourdeau	Aeron	WDICRF	-	-
1965-5488	2439004.97	1965 Aug 3 0517	Nike Apache	-	MMSA 14-2140T	0.000	GSFC	SS	GSFC/IMSE/Bourdeau	Aeron	WDICRF	-	-
1965-5492	2439013.50	1965 Sep 9 2358	Nike Apache	-	MMSA 14-2140T	0.000	GSFC	SS	GSFC/IMSE/Bourdeau	Aeron	WDICRF	-	-
1965-5495	2439013.50	1965 Sep 15 2038:00	Nike Apache	-	MMSA 14-2569	0.000	GSFC	SS	GSFC/IMSE/Bourdeau	Aeron	WDICRF	-	-
1965-4131	2439020.09	1965 Sep 16 1404	Nike Apache	-	MMSA 14-234UE	0.000	GSFC	SS	GSFC/IMSE/Bourdeau	Aeron	WDICRF	-	-
1965-5497	2439020.16	1965 Sep 17 1544	Nike Apache	-	MMSA 14-238UE	0.000	GSFC	SS	GSFC/IMSE/Bourdeau	Aeron	WDICRF	-	-
1965-5501	2439022.40	1965 Sep 18 2202	Nike Apache	-	MMSA 14-224TA	0.000	GSFC	SS	GSFC/IMSE/Bourdeau	Aeron	WDICRF	-	-
1965-5504	2439022.40	1965 Sep 20 1410	Nike Apache	-	MMSA 14-237UE	0.000	GSFC	SS	GSFC/IMSE/Bourdeau	Aeron	WDICRF	-	-
1965-5506	2439024.17	1965 Sep 20 1608	Nike Apache	-	MMSA 14-238UE	0.000	GSFC	SS	GSFC/IMSE/Bourdeau	Aeron	WDICRF	-	-
1965-4135	2439025.40	1965 Sep 21 2200	Nike Apache	-	MMSA 14-225TA	0.000	GSFC	SS	GSFC/IMSE/Bourdeau	Aeron	WDICRF	-	-
1965-5511	2439027.31	1965 Sep 23 1931	Nike Apache	-	Smoke 089	0.000	LARCN	AS	LARCN/	Aeron	WDICRF	TI-D-6861	-
1965-5516	2439030.87	1965 Sep 24 0852	Nike Apache	-	Smoke 089	0.000	LARCN	AS	LARCN/	Aeron	WDICRF	TI-D-6861	-
1965-5573	2439032.50	1965 Sep 27 0854	Nike Apache	-	MMSA 14-227TA	0.000	GSFC	SS	GSFC/IMSE/Bourdeau	Aeron	WDICRF	-	-
1965-5774	2439038.50	1965 Oct 5	Nike Apache	-	MMSA 14-227TA	0.000	GSFC	SS	GSFC/IMSE/Bourdeau	Aeron	WDICRF	-	-
1965-5774	2439038.50	1965 Oct 5 1752	Nike Apache	-	Smoke 090	0.000	LARCN	AS	LARCN/	Aeron	WDICRF	TI-D-6861	-
1965-5843	2439039.47	1965 Oct 5 2321	Nike Apache	-	MMSA 14-202CA	0.000	GSFC	SS	GSFC/GCM/Dobbin	Aeron	WDICRF	-	-
1965-4141	2439039.62	1965 Oct 6 0300	Nike Apache	-	MMSA 14-203CA	0.000	GSFC	SS	GSFC/GCM/Dobbin	Aeron	WDICRF	-	-
1965-5523	2439043.50	1965 Oct 13	Nike Apache	-	BMTS	0.000	HCDD	MS	-	Target	WSRR	-	-
1965-5551	2439047.17	1965 Oct 13 1601	Nike Cajun	-	MMSA 10-1522H	0.000	GSFC	SS	GSFC/Smith	Aeron	WDICRF	-	-
1965-5552	2439047.17	1965 Oct 13 1611	Nike Cajun	-	MMSA 10-972H	0.000	GSFC	SS	GSFC/Smith	Aeron	WDICRF	-	-
1965-5553	2439047.20	1965 Oct 13 1651	Nike Cajun	-	MMSA 10-1292H	0.000	GSFC	SS	GSFC/Smith	Aeron	WDICRF	-	-
1965-5775	2439047.50	1965 Oct 14	Nike Apache	-	MMSA 10-1292H	0.000	GSFC	SS	GSFC/Smith	Aeron	WDICRF	-	-
1965-5557	2439051.85	1965 Oct 18 0830:11	Nike Apache	-	CRL AE07-618D	0.000	AFCLR	SS	AFCLC/Thiwick	Aeron	WDICRF	AFCLC66-738	-
1965-5559	2439053.23	1965 Oct 19 1730	Nike Cajun	-	MMSA 10-1772H	0.000	GSFC	SS	GSFC/Smith	Aeron	WDICRF	-	-
1965-5560	2439053.23	1965 Oct 19 1730	Nike Cajun	-	MMSA 10-982H	0.000	GSFC	SS	GSFC/Smith	Aeron	WDICRF	-	-
1965-5562	2439053.47	1965 Oct 19 2310	Nike Cajun	-	MMSA 10-1742H	0.000	GSFC	SS	GSFC/Smith	Aeron	WDICRF	-	-
1965-5567	2439054.50	1965 Oct 21	Nike Apache	-	BMTS	0.000							



Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	OrbPay	Agency	Launch_Code	Group	Category	LTCite	Cite	Notes
1966-S101	2439166.90	1966 Feb 10 0709	Nike Cajun	-	MMSA 10.187GH	0.000	GSFC	SS	GSFC/Smith	Aeronomy	WDCRF	-	-
1966-S102	2439166.83	1966 Feb 10 0748	Nike Cajun	-	MMSA 10.148GH	0.000	GSFC	SS	GSFC/Smith	Aeronomy	WDCRF	-	-
1966-S103	2439166.53	1966 Feb 10 0800	Nike Cajun	-	MMSA 10.183GH	0.000	GSFC	SS	GSFC/Smith	Aeronomy	WDCRF	-	-
1966-S106	2439167.28	1966 Feb 10 1800	Nike Cajun	-	MMSA 10.148GH	0.000	GSFC	SS	GSFC/Smith	Aeronomy	WDCRF	-	-
1966-S107	2439167.40	1966 Feb 10 1841	Nike Cajun	-	MMSA 10.148GH	0.000	GSFC	SS	GSFC/Smith	Aeronomy	WDCRF	-	-
1966-S110	2439167.18	1966 Feb 10 2130	Nike Apache	-	MMSA 14.2430E	0.000	GSFC	SS	RICE/Haymes	Plasma	WDCRF	-	-
1966-S117	2439174.71	1966 Feb 18 0456	Nike Apache	-	MMSA 14.1890E	0.000	GSFC	SS	GSFC/Evans	Auroral	FC	SP-4007	GSFC-X-611-67-216
1966-S118	2439175.50	1966 Feb 19 0005	Nike Javelin	-	CHL AFS 502	0.000	AFRL	SS	AFCL/Rosenberg	Ions/Aeron	S9, 363	AFRL	-
1966-S120	2439176.51	1966 Feb 19 0055	Nike Javelin	-	CHL AFS 504	0.000	AFRL	SS	AFCL/Rosenberg	Ions/Aeron	WDCRF	AFRL	-
1966-S122	2439176.74	1966 Feb 20 0045	Nike Javelin	-	CHL AFS 508	0.000	AFRL	SS	AFCL/Rosenberg	Ions/Aeron	WDCRF	AFRL	-
1966-S123	2439176.96	1966 Feb 20 1108	Nike Javelin	-	CHL AFS 508	0.000	AFRL	SS	AFCL/Rosenberg	Ions/Aeron	WDCRF	AFRL	-
1966-S124	2439177.29	1966 Feb 20 1854	Nike	-	Smoke 100	0.000	LARC	AS	LARC/	Aeronomy	TI-D-6861	-	-
1966-S134	2439182.08	1966 Feb 25 1359	Nike Apache	-	MMSA 14.2111A	0.000	GSFC	SS	SUPA/Rahmatullah	Aeronomy	WDCRF	SP-4007	-
1966-S136	2439183.08	1966 Feb 26 1359	Nike Apache	-	MMSA 14.2121A	0.000	GSFC	SS	SUPA/Rahmatullah	Aeronomy	WDCRF	SP-4007	-
1966-S137	2439184.20	1966 Feb 27 1651.99	Nike Apache	-	MMSA 14.2520H	0.000	GSFC	SS	UML/Horvath	Aeronomy	WDCRF	SP-4007	-
1966-S138	2439184.50	1966 Feb 28 0458	Nike Apache	-	BMS	0.000	AFRL	SS	UML/Horvath	Aeronomy	WDCRF	SP-4007	-
1966-S139	2439184.60	1966 Mar	Nike Apache	-	BMS	0.000	AFRL	SS	UML/Horvath	Aeronomy	WDCRF	SP-4007	-
1966-S158	2439194.86	1966 Mar 10 0845	Nike Javelin	-	CHL AF07.327	0.000	AFRL	MS	AFCL/NCIsaac	Target	WDCRF	-	-
1966-S159	2439194.86	1966 Mar 10 0845	Nike Javelin	-	CHL AF07.327	0.000	AFRL	MS	AFCL/NCIsaac	Target	WDCRF	-	-
1966-S166	2439194.50	1966 Mar 10	Nike Javelin	-	-	0.000	DASA	SU	DASA/	Ions	www.wmmr-history.org	-	-
1966-S168	2439194.50	1966 Mar 10	Nike Javelin	-	-	0.000	DASA	SU	DASA/	Ions	www.wmmr-history.org	-	-
1966-S140	2439196.29	1966 Mar 11 1900	Nike Apache	-	MMSA 14.1900E	0.000	SMSD	WF	-	Target	AD738848	DTIC	-
1966-S165	2439196.38	1966 Mar 11 2102	Nike Apache	-	Smoke 101	0.000	LARC	AS	LARC/	Aeronomy	AD738848	DTIC	-
1966-S168	2439197.72	1966 Mar 13 0513	Nike Apache	-	Smoke 102	0.000	LARC	AS	LARC/	Aeronomy	AD738848	DTIC	-
1966-S169	2439201.36	1966 Mar 16 2035	Nike Apache	-	Smoke 102	0.000	LARC	AS	LARC/	Aeronomy	AD738848	DTIC	-
1966-S176	2439202.25	1966 Mar 17 1802	Nike	-	Smoke 102	0.000	LARC	AS	LARC/	Aeronomy	AD738848	DTIC	-
1966-S177	2439202.01	1966 Mar 17 1802	Nike	-	Smoke 102	0.000	LARC	AS	LARC/	Aeronomy	AD738848	DTIC	-
1966-S181	2439206.46	1966 Mar 19 1220.30	Nike Javelin	-	MMSA 14.1906I	0.000	NOTS	SS	NOTS/	Ions	AD738848	DTIC	-
1966-S182	2439206.46	1966 Mar 19 1220.30	Nike Javelin	-	MMSA 14.1906I	0.000	NOTS	SS	NOTS/	Ions	AD738848	DTIC	-
1966-S189	2439207.67	1966 Mar 23 0407	Nike Apache	-	MMSA 14.076E	0.000	GSFC	SS	GSFC/Evans,Burrows	Auroral	WDCRF	SP-4007	-
1966-S183	2439209.06	1966 Mar 24 1530	Nike Apache	-	MMSA 14.2571A	0.000	ISRO	SS	PUL/Bhavsar	Aeronomy	WDCRF	SP-4007	-
1966-S184	2439209.15	1966 Mar 24 1531	Nike Apache	-	MMSA 10.1801H	0.000	ISRO	SS	PUL/Bhavsar	Aeronomy	WDCRF	SP-4007	-
1966-S189	2439209.90	1966 Mar 25 0942.107	Nike Javelin	-	MMSA 14.2681A	0.000	NOTS	SS	NOTS/	Ions	AD738848	DTIC	-
1966-S193	2439212.22	1966 Mar 27 1712	Nike Apache	-	MMSA 14.1651H	0.000	GSFC	SS	SUPA/UCL/Groves	Aeronomy	WDCRF	SP-4007	-
1966-S194	2439214.30	1966 Mar 29 1914	Nike Apache	-	BMS	0.000	AFRSD	MS	-	Target	WDCRF	SP-4007	-
1966-S201	2439216.50	1966 Apr 1	Nike Javelin	-	Min 2 plume study	0.000	AFRSD	MS	-	Target	WDCRF	SP-4007	-
1966-S209	2439222.20	1966 Apr 6 1652	Nike Apache	-	MMSA 14.2161A	0.000	GSFC	SS	MESC/Calvert	Tech	WI-PR-66-16	WDCRF	CR-70658
1966-S215	2439225.67	1966 Apr 6 0401	Nike Apache	-	MMSA 14.7601I	0.000	GSFC	SS	UTD/Heikilla	Ions	WDCRF	SP-4007	-
1966-S218	2439225.78	1966 Apr 14 0585	Nike Romanawak	-	MMSA 19.086E	0.000	GSFC	SS	GSFC/Evans,Burrows	Auroral	WDCRF	SP-4007	-
1966-S200	2439237.28	1966 Apr 21 1345	Nike Apache	-	BMS	0.000	AFRSD	MS	-	Target	WDCRF	SP-4007	-
1966-S201	2439237.28	1966 Apr 21 1345	Nike Apache	-	BMS	0.000	AFRSD	MS	-	Target	WDCRF	SP-4007	-
1966-S259	2439236.29	1966 Apr 21 2105	Nike Apache	-	BMS	0.000	AFRSD	MS	-	Target	WDCRF	SP-4007	-
1966-S260	2439236.29	1966 Apr 21 2105	Nike Apache	-	BMS	0.000	AFRSD	MS	-	Target	WDCRF	SP-4007	-
1966-S261	2439236.29	1966 Apr 21 2105	Nike Apache	-	BMS	0.000	AFRSD	MS	-	Target	WDCRF	SP-4007	-
1966-S262	2439236.29	1966 Apr 21 2105	Nike Apache	-	BMS	0.000	AFRSD	MS	-	Target	WDCRF	SP-4007	-
1966-S263	2439236.29	1966 Apr 21 2105	Nike Apache	-	BMS	0.000	AFRSD	MS	-	Target	WDCRF	SP-4007	-
1966-S264	2439236.29	1966 Apr 21 2105	Nike Apache	-	BMS	0.000	AFRSD	MS	-	Target	WDCRF	SP-4007	-
1966-S265	2439236.29	1966 Apr 21 2105	Nike Apache	-	BMS	0.000	AFRSD	MS	-	Target	WDCRF	SP-4007	-
1966-S266	2439236.29	1966 Apr 21 2105	Nike Apache	-	BMS	0.000	AFRSD	MS	-	Target	WDCRF	SP-4007	-
1966-S267	2439236.29	1966 Apr 21 2105	Nike Apache	-	BMS	0.000	AFRSD	MS	-	Target	WDCRF	SP-4007	-
1966-S268	2439236.29	1966 Apr 21 2105	Nike Apache	-	BMS	0.000	AFRSD	MS	-	Target	WDCRF	SP-4007	-
1966-S269	2439236.29	1966 Apr 21 2105	Nike Apache	-	BMS	0.000	AFRSD	MS	-	Target	WDCRF	SP-4007	-
1966-S270	2439236.29	1966 Apr 21 2105	Nike Apache	-	BMS	0.000	AFRSD	MS	-	Target	WDCRF	SP-4007	-
1966-S271	2439236.29	1966 Apr 21 2105	Nike Apache	-	BMS	0.000	AFRSD	MS	-	Target	WDCRF	SP-4007	-
1966-S272	2439236.29	1966 Apr 21 2105	Nike Apache	-	BMS	0.000	AFRSD	MS	-	Target	WDCRF	SP-4007	-
1966-S273	2439236.29	1966 Apr 21 2105	Nike Apache	-	BMS	0.000	AFRSD	MS	-	Target	WDCRF	SP-4007	-
1966-S274	2439236.29	1966 Apr 21 2105	Nike Apache	-	BMS	0.000	AFRSD	MS	-	Target	WDCRF	SP-4007	-
1966-S275	2439236.29	1966 Apr 21 2105	Nike Apache	-	BMS	0.000	AFRSD	MS	-	Target	WDCRF	SP-4007	-
1966-S276	2439236.29	1966 Apr 21 2105	Nike Apache	-	BMS	0.000	AFRSD	MS	-	Target	WDCRF	SP-4007	-
1966-S277	2439236.29	1966 Apr 21 2105	Nike Apache	-	BMS	0.000	AFRSD	MS	-	Target	WDCRF	SP-4007	-
1966-S278	2439236.29	1966 Apr 21 2105	Nike Apache	-	BMS	0.000	AFRSD	MS	-	Target	WDCRF	SP-4007	-
1966-S279	2439236.29	1966 Apr 21 2105	Nike Apache	-	BMS	0.000	AFRSD	MS	-	Target	WDCRF	SP-4007	-
1966-S280	2439236.29	1966 Apr 21 2105	Nike Apache	-	BMS	0.000	AFRSD	MS	-	Target	WDCRF	SP-4007	-
1966-S281	2439236.29	1966 Apr 21 2105	Nike Apache	-	BMS	0.000	AFRSD	MS	-	Target	WDCRF	SP-4007	-
1966-S282	2439236.29	1966 Apr 21 2105	Nike Apache	-	BMS	0.000	AFRSD	MS	-	Target	WDCRF	SP-4007	-
1966-S283	2439236.29	1966 Apr 21 2105	Nike Apache	-	BMS	0.000	AFRSD	MS	-	Target	WDCRF	SP-4007	-
1966-S284	2439236.29	1966 Apr 21 2105	Nike Apache	-	BMS	0.000	AFRSD	MS	-	Target	WDCRF	SP-4007	-
1966-S285	2439236.29	1966 Apr 21 2105	Nike Apache	-	BMS	0.000	AFRSD	MS	-	Target	WDCRF	SP-4007	-
1966-S286	2439236.29	1966 Apr 21 2105	Nike Apache	-	BMS	0.000	AFRSD	MS	-	Target	WDCRF	SP-4007	-
1966-S287	2439236.29	1966 Apr 21 2105	Nike Apache	-	BMS	0.000	AFRSD	MS	-	Target	WDCRF	SP-4007	-
1966-S288	2439236.29	1966 Apr 21 2105	Nike Apache	-	BMS	0.000	AFRSD	MS	-	Target	WDCRF	SP-4007	-
1966-S289	2439236.29	1966 Apr 21 2105	Nike Apache	-	BMS	0.000	AFRSD	MS	-	Target	WDCRF	SP-4007	-
1966-S290	2439236.29	1966 Apr 21 2105	Nike Apache	-	BMS	0.000	AFRSD	MS	-	Target	WDCRF	SP-4007	-
1966-S291	2439236.29	1966 Apr 21 2105	Nike Apache	-	BMS	0.000	AFRSD	MS	-	Target	WDCRF	SP-4007	-
1966-S292	2439236.29	1966 Apr 21 2105	Nike Apache	-	BMS	0.000	AFRSD	MS	-	Target	WDCRF	SP-4007	-
1966-S293	2439236.29	1966 Apr 21 2105	Nike Apache	-	BMS	0.000	AFRSD	MS	-	Target	WDCRF	SP-4007	-
1966-S294	2439236.29	1966 Apr 21 2105	Nike Apache	-	BMS	0.000	AFRSD	MS	-	Target	WDCRF	SP-4007	-
1966-S295	2439236.29	1966 Apr 21 2105	Nike Apache	-	BMS	0.000	AFRSD	MS	-	Target	WDCRF	SP-4007	-
1966-S296	2439236.29	1966 Apr 21 2105	Nike Apache	-	BMS	0.000	AFRSD	MS	-	Target	WDCRF	SP-4007	-
1966-S297	2439236.29	1966 Apr 21 2105	Nike Apache	-	BMS	0.000	AFRSD	MS	-	Target	WDCRF	SP-4007	-
1966-S298	2439236.29	1966 Apr 21 2105	Nike Apache	-	BMS	0.000	AFRSD	MS	-	Target	WDCRF	SP-4007	-
1966-S299	2439236.29	1966 Apr 21 2105	Nike Apache	-	BMS	0.000	AFRSD	MS	-	Target	WDCRF	SP-4007	-
1966-S300	2439236.29												

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	OrbPay	Agency	Launch_Code	Group	Category	LTCite	Cite	Notes
1966-5739	2439307.50	1966 Jul 1	Nike Cajun	-	-	0.000	MICOM	MS	-	Target	WSMR	-	-
1966-5740	2439313.94	1966 Jul 7 0815	Nike Apache	-	IMSA 14_591E	0.000	GSFC	SS	PRL/Sastry,Prakash	Plasma	WSMR	PlanSpaSc120,47	-
1966-5741	2439313.94	1966 Jul 7 1038	Nike Cajun	-	IMSA 14_960A	0.000	MICOM	SS	UML/Schaefer	Target	WSMR	-	-
1966-5742	2439318.30	1966 Jul 11 1918	Nike Apache	-	IMSA 14_1661H	0.000	GSFC	SS	BREI/Hawer	Aeronomy	WSMR	-	-
1966-5743	2439321.14	1966 Jul 14 1515	Nike Apache	-	-	0.000	GSFC	SS	-	Ions	WSMR	-	-
1966-5744	2439322.30	1966 Jul 15 1909	Nike Cajun	-	BMTS	0.000	MICOM	MS	-	Target	WSMR	-	-
1966-5745	2439322.50	1966 Jul 16	Nike Apache	-	-	0.000	MICOM	MS	-	Target	WSMR	-	-
1966-5746	2439323.54	1966 Jul 17 0500:00	Nike Apache	-	IMSA 14_291CH	0.000	GSFC	SS	GCM/Bedinger	Aeronomy	WSMR	-	-
1966-5747	2439323.71	1966 Jul 17 0645	Nike Apache	-	IMSA 14_292CH	0.000	GSFC	SS	GCM/Bedinger	Aeronomy	WSMR	-	-
1966-5748	2439323.85	1966 Jul 17 0825	Nike Apache	-	IMSA 14_293CH	0.000	GSFC	SS	GCM/Bedinger	Aeronomy	WSMR	-	-
1966-5749	2439323.88	1966 Jul 17 0908	Nike Apache	-	IMSA 14_294CH	0.000	GSFC	SS	GCM/Bedinger	Aeronomy	WSMR	-	-
1966-5750	2439323.88	1966 Jul 17 0908	Nike Apache	-	IMSA 14_295CH	0.000	GSFC	SS	GCM/Bedinger	Aeronomy	WSMR	-	-
1966-5751	2439327.33	1966 Jul 20 1950	Nike Apache	-	-	0.000	MICOM	MS	GSFC/Fichtel	Target	WSMR	APLTD-6809	-
1966-5752	2439327.50	1966 Jul 21	Nike Apache	-	IMSA 14_2180E	0.000	GSFC	SS	-	Solar particles	WSMR	-	-
1966-5753	2439329.30	1966 Jul 22 1919	Nike Apache	-	Smoke 103	0.000	AFRSD	AS	LARC/	Target	WSMR	-	-
1966-5754	2439329.30	1966 Jul 24 0605	Nike Cajun	-	-	0.000	MICOM	MS	-	Target	WSMR	-	-
1966-5755	2439330.61	1966 Jul 24 0730	Nike Cajun	-	-	0.000	MICOM	MS	-	Target	WSMR	-	-
1966-5756	2439330.88	1966 Jul 24 0900	Nike Cajun	-	-	0.000	MICOM	MS	-	Target	WSMR	-	-
1966-5757	2439330.93	1966 Jul 24 1015	Nike Cajun	-	-	0.000	MICOM	MS	-	Target	WSMR	-	-
1966-5758	2439330.99	1966 Jul 24 1145	Nike Cajun	-	-	0.000	MICOM	MS	-	Target	WSMR	-	-
1966-5759	2439331.04	1966 Jul 24 1300	Nike Apache	-	-	0.000	MICOM	MS	-	Target	WSMR	-	-
1966-5760	2439335.21	1966 Jul 28 1700	Nike Apache	-	BMTS	0.000	AFRSD	SS	LRL/	XR Astron	WSMR	UCRL-50667	-
1966-5761	2439334.61	1966 Jul 28 0236:00	Nike Tomahawk	12	Sandia 152-54	0.000	SAND	SS	AFCL/Faire	Target	WSMR	-	-
1966-5762	2439337.50	1966 Aug	Nike Apache	-	BMTS	0.000	MICOM	SS	AFCL/Faire	Aeron	WSMR	AFCLRL	-
1966-5763	2439335.79	1966 Aug 1 0700	Nike Apache	-	END 66-24	0.000	AFCLRL	SS	AFCL/Faire	Aeron	WSMR	AD738848	-
1966-5764	2439335.88	1966 Aug 1 0906	Nike Apache	-	END 66-25	0.000	AFCLRL	SS	AFCL/Faire	Aeron	WSMR	AD738848	-
1966-5765	2439339.00	1966 Aug 1 1200	Nike Apache	-	END 66-26	0.000	AFCLRL	SS	AFCL/Faire	Aeron	WSMR	AD738848	-
1966-5766	2439339.26	1966 Aug 1 1611	Nike Apache	-	END 66-27	0.000	AFCLRL	SS	AFCL/Faire	Aeron	WSMR	AD738848	-
1966-5767	2439339.38	1966 Aug 1 2105	Nike Apache	-	END 66-23	0.000	AFCLRL	SS	AFCL/Faire	Aeron	WSMR	AD738848	-
1966-5768	2439339.50	1966 Aug 2	Nike Tomahawk	9	Sandia 152-29	0.000	SAND	SS	SAND/	Tech	FDS	-	-
1966-5769	2439339.50	1966 Aug 2	Nike Tomahawk	9	Sandia 152-102	0.000	SAND	SS	IRMSU/	Tech	FDS	-	-
1966-5770	2439341.21	1966 Aug 3 1700	Nike Apache	-	BMTS	0.000	MICOM	MS	-	Target	WSMR	-	-
1966-5771	2439341.50	1966 Aug 4 0950	Nike Tomahawk	12	Sandia 152-19	0.000	SAND	SS	SAND/USI/Baker	Target	WSMR	SandNew660325	-
1966-5772	2439341.50	1966 Aug 4	Nike Tomahawk	9	Sandia 152-82	0.000	SAND	SS	SAND/	Tech	FDS	-	-
1966-5773	2439341.50	1966 Aug 4	Nike Tomahawk	9	Sandia 152-56	0.000	SAND	SS	SAND/	Tech	FDS	-	-
1966-5774	2439344.79	1966 Aug 4 0700	Nike Apache	-	MSA 10_2046H	0.000	GSFC	SS	GSFC/Smith	Aeronomy	WSMR	-	-
1966-5775	2439344.80	1966 Aug 7 0705	Nike Cajun	-	MSA 10_2046H	0.000	GSFC	SS	GSFC/Smith	Aeronomy	WSMR	-	-
1966-5776	2439344.86	1966 Aug 7 0845	Nike Apache	-	MSA 10_2022H	0.000	GSFC	SS	IRSD/	Ions	WSMR	-	-
1966-5777	2439344.86	1966 Aug 7 0945	Nike Apache	-	MSA 10_2022H	0.000	GSFC	SS	GSFC/Smith	Aeronomy	WSMR	-	-
1966-5778	2439344.86	1966 Aug 7 0945	Nike Apache	-	MSA 10_2039H	0.000	GSFC	SS	GSFC/Smith	Aeronomy	WSMR	-	-
1966-5779	2439344.86	1966 Aug 7 0945	Nike Apache	-	MSA 10_2039H	0.000	GSFC	SS	GSFC/Smith	Aeronomy	WSMR	-	-
1966-5780	2439344.86	1966 Aug 7 0945	Nike Apache	-	MSA 10_2039H	0.000	GSFC	SS	GSFC/Smith	Aeronomy	WSMR	-	-
1966-5781	2439345.23	1966 Aug 7 1735	Nike Cajun	-	MSA 10_2058H	0.000	GSFC	SS	GSFC/Smith	Aeronomy	WSMR	-	-
1966-5782	2439345.23	1966 Aug 7 2046	Nike Cajun	-	MSA 10_2058H	0.000	GSFC	SS	GSFC/Smith	Aeronomy	WSMR	-	-
1966-5783	2439345.46	1966 Aug 7 2326	Nike Tomahawk	9	Sandia 152-36	0.000	SND	SS	GSFC/Smith	Tech	FDS	-	-
1966-5784	2439345.50	1966 Aug 11 2035	Nike Tomahawk	9	Sandia 152-36	0.000	SND	SS	GSFC/Smith	Tech	FDS	-	-
1966-5785	2439352.94	1966 Aug 15 0808	Nike Cajun	-	MSA 10_2010H	0.000	GSFC	SS	GSFC/Smith	Aeronomy	WSMR	-	-
1966-5786	2439352.94	1966 Aug 15 0935	Nike Cajun	-	MSA 10_2010H	0.000	GSFC	SS	GSFC/Smith	Aeronomy	WSMR	-	-
1966-5787	2439352.94	1966 Aug 15 0935	Nike Cajun	-	MSA 10_2010H	0.000	GSFC	SS	GSFC/Smith	Aeronomy	WSMR	-	-
1966-5788	2439352.94	1966 Aug 15 0935	Nike Cajun	-	MSA 10_2010H	0.000	GSFC	SS	GSFC/Smith	Aeronomy	WSMR	-	-
1966-5789	2439352.94	1966 Aug 15 0935	Nike Cajun	-	MSA 10_2010H	0.000	GSFC	SS	GSFC/Smith	Aeronomy	WSMR	-	-
1966-5790	2439352.94	1966 Aug 15 0935	Nike Cajun	-	MSA 10_2010H	0.000	GSFC	SS	GSFC/Smith	Aeronomy	WSMR	-	-
1966-5791	2439352.94	1966 Aug 15 0935	Nike Cajun	-	MSA 10_2010H	0.000	GSFC	SS	GSFC/Smith	Aeronomy	WSMR	-	-
1966-5792	2439352.94	1966 Aug 15 0935	Nike Cajun	-	MSA 10_2010H	0.000	GSFC	SS	GSFC/Smith	Aeronomy	WSMR	-	-
1966-5793	2439352.94	1966 Aug 15 0935	Nike Cajun	-	MSA 10_2010H	0.000	GSFC	SS	GSFC/Smith	Aeronomy	WSMR	-	-
1966-5794	2439352.94	1966 Aug 15 0935	Nike Cajun	-	MSA 10_2010H	0.000	GSFC	SS	GSFC/Smith	Aeronomy	WSMR	-	-
1966-5795	2439352.94	1966 Aug 15 0935	Nike Cajun	-	MSA 10_2010H	0.000	GSFC	SS	GSFC/Smith	Aeronomy	WSMR	-	-
1966-5796	2439352.94	1966 Aug 15 0935	Nike Cajun	-	MSA 10_2010H	0.000	GSFC	SS	GSFC/Smith	Aeronomy	WSMR	-	-
1966-5797	2439352.94	1966 Aug 15 0935	Nike Cajun	-	MSA 10_2010H	0.000	GSFC	SS	GSFC/Smith	Aeronomy	WSMR	-	-
1966-5798	2439352.94	1966 Aug 15 0935	Nike Cajun	-	MSA 10_2010H	0.000	GSFC	SS	GSFC/Smith	Aeronomy	WSMR	-	-
1966-5799	2439352.94	1966 Aug 15 0935	Nike Cajun	-	MSA 10_2010H	0.000	GSFC	SS	GSFC/Smith	Aeronomy	WSMR	-	-
1966-5800	2439352.94	1966 Aug 15 0935	Nike Cajun	-	MSA 10_2010H	0.000	GSFC	SS	GSFC/Smith	Aeronomy	WSMR	-	-
1966-5801	2439352.94	1966 Aug 15 0935	Nike Cajun	-	MSA 10_2010H	0.000	GSFC	SS	GSFC/Smith	Aeronomy	WSMR	-	-
1966-5802	2439352.94	1966 Aug 15 0935	Nike Cajun	-	MSA 10_2010H	0.000	GSFC	SS	GSFC/Smith	Aeronomy	WSMR	-	-
1966-5803	2439352.94	1966 Aug 15 0935	Nike Cajun	-	MSA 10_2010H	0.000	GSFC	SS	GSFC/Smith	Aeronomy	WSMR	-	-
1966-5804	2439352.94	1966 Aug 15 0935	Nike Cajun	-	MSA 10_2010H	0.000	GSFC	SS	GSFC/Smith	Aeronomy	WSMR	-	-
1966-5805	2439352.94	1966 Aug 15 0935	Nike Cajun	-	MSA 10_2010H	0.000	GSFC	SS	GSFC/Smith	Aeronomy	WSMR	-	-
1966-5806	2439352.94	1966 Aug 15 0935	Nike Cajun	-	MSA 10_2010H	0.000	GSFC	SS	GSFC/Smith	Aeronomy	WSMR	-	-
1966-5807	2439352.94	1966 Aug 15 0935	Nike Cajun	-	MSA 10_2010H	0.000	GSFC	SS	GSFC/Smith	Aeronomy	WSMR	-	-
1966-5808	2439352.94	1966 Aug 15 0935	Nike Cajun	-	MSA 10_2010H	0.000	GSFC	SS	GSFC/Smith	Aeronomy	WSMR	-	-
1966-5809	2439352.94	1966 Aug 15 0935	Nike Cajun	-	MSA 10_2010H	0.000	GSFC	SS	GSFC/Smith	Aeronomy	WSMR	-	-
1966-5810	2439352.94	1966 Aug 15 0935	Nike Cajun	-	MSA 10_2010H	0.000	GSFC	SS	GSFC/Smith	Aeronomy	WSMR	-	-
1966-5811	2439352.94	1966 Aug 15 0935	Nike Cajun	-	MSA 10_2010H	0.000	GSFC	SS	GSFC/Smith	Aeronomy	WSMR	-	-
1966-5812	2439352.94	1966 Aug 15 0935	Nike Cajun	-	MSA 10_2010H	0.000	GSFC	SS	GSFC/Smith	Aeronomy	WSMR	-	-
1966-5813	2439352.94	1966 Aug 15 0935	Nike Cajun	-	MSA 10_2010H	0.000	GSFC	SS	GSFC/Smith	Aeronomy	WSMR	-	-
1966-5814	2439352.94	1966 Aug 15 0935	Nike Cajun	-	MSA 10_2010H	0.000	GSFC	SS	GSFC/Smith	Aeronomy	WSMR	-	-
1966-5815	2439352.94	1966 Aug 15 0935	Nike Cajun	-	MSA 10_2010H	0.000	GSFC	SS	GSFC/Smith	Aeronomy	WSMR	-	-
1966-5816	2439352.94	1966 Aug 15 0935	Nike Cajun	-	MSA 10_2010H	0.000	GSFC	SS	GSFC/Smith	Aeronomy	WSMR	-	-
1966-5817	2439352.94	1966 Aug 15 0935	Nike Cajun	-	MSA 10_2010H	0.000	GSFC	SS	GSFC/Smith	Aeronomy	WSMR	-	-
1966-5818	2439352.94	1966 Aug 15 0935	Nike Cajun	-	MSA 10_2010H	0.000	GSFC	SS	GSFC/Smith	Aeronomy	WSMR	-	-
1966-5819	2439352.94	1966 Aug 15 0935	Nike Cajun	-	MSA 10_2010H	0.000	GSFC	SS	GSFC/Smith	Aeronomy	WSMR	-	-
1966-5820	2439352.94	1966 Aug 15 0935	Nike Cajun	-	MSA 10_2010H	0.000	GSFC	SS	GSFC/				

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Orbit	Agency	Launch_Code	Group	Category	LTCite	Cite	Notes
1966-3515	2439399.23	1966 Sep 30 1735	Mike Cajun	-	MASA 10.146GH	0.000	GSFC	SS	GSFC/Smith	Aeronomy	WDCRF	-	-
1966-3516	2439399.49	1966 Sep 30 2350	Mike Apache	-	MASA 14.217GH	0.000	GSFC	SS	GSFC/Smith	Aeronomy	WDCRF	-	-
1966-3517	2439399.73	1966 Oct 1 0530	Mike Apache	-	MASA 10.209GH	0.000	GSFC	SS	GSFC/Smith	Aeronomy	WDCRF	-	-
1966-3518	2439399.95	1966 Oct 1 0623	Mike Cajun	-	MASA 10.211GH	0.000	GSFC	SS	GSFC/Smith	Aeronomy	WDCRF	-	-
1966-3519	2439399.98	1966 Oct 1 1127	Mike Cajun	-	MASA 10.210GH	0.000	GSFC	SS	GSFC/Smith	Aeronomy	WDCRF	-	-
1966-3520	2439400.36	1966 Oct 1 2039	Mike Cajun	-	MASA 10.212GH	0.000	GSFC	SS	GSFC/Smith	Aeronomy	WDCRF	-	-
1966-3521	2439400.39	1966 Oct 2 0220	Mike Cajun	-	MASA 10.213GH	0.000	GSFC	SS	GSFC/Smith	Aeronomy	WDCRF	-	-
1966-3522	2439400.85	1966 Oct 2 0820	Mike Cajun	-	MASA 10.214GH	0.000	GSFC	SS	GSFC/Smith	Aeronomy	WDCRF	-	-
1966-3523	2439401.09	1966 Oct 2 1409	Mike Cajun	-	MASA 10.215GH	0.000	GSFC	SS	GSFC/Smith	Aeronomy	WDCRF	-	-
1966-3524	2439403.08	1966 Oct 4 1402	Mike Apache	-	STV SR-40	0.000	SMSD	MS	MSRU/	Aeronomy	www.dtic.mil	-	-
1966-3525	2439404.34	1966 Oct 5 2004	Mike Apache	-	BMS	0.000	HCOD	MS	MSRU/	Target	www.dtic.mil	-	-
1966-3526	2439406.30	1966 Oct 7 1912	Mike Apache	-	Smoke 105	0.000	LARCN	AS	LARC/	Aeronomy	www.dtic.mil	-	-
1966-3527	2439409.21	1966 Oct 10 1657	Nike Iroquois	-	CHL AF07.348	0.000	AFCLR	AS	AFCLR/Faucher	Aeronomy	TU-D-6861	-	-
1966-3528	2439409.22	1966 Oct 10 1820	Nike Iroquois	-	CHL AF07.349	0.000	AFCLR	SF	AFCLR/Faucher	Aeronomy	AFCLR	-	-
1966-3529	2439410.26	1966 Oct 11 1817	Nike	-	Smoke 106	0.000	LARCN	AS	LARC/	Aeronomy	TU-D-6861	-	-
1966-3530	2439411.32	1966 Oct 12 1648	Nike Apache	-	BMS	0.000	HCOD	MS	MSRU/	Target	WDR	-	-
1966-3531	2439411.52	1966 Oct 12 1941	Nike Apache	-	CHL AE07.813	0.000	AFCLR	MS	AFCLR/Harrison	Ions	AFCLR	-	-
1966-3532	2439424.31	1966 Oct 14 1720	Nike Iroquois	-	STV SR-41	0.000	SMSD	SS	ESSA/Whipple	Ions	www.dtic.mil	-	-
1966-3533	2439424.26	1966 Oct 25 1810	Nike Hydac	-	MASA 10.181AI	0.000	GSFC	AS	ESMA/Whipple	Ions	WDCRF	-	-
1966-3534	2439427.26	1966 Oct 25 1810	Nike Cajun	-	Smoke 107	0.000	LARCN	AS	LARC/	Aeronomy	TU-D-6861	-	-
1966-3535	2439429.09	1966 Oct 30 1406	Nike Cajun	-	CHL AC6.710	0.000	AFCLR	AS	AFCLR/Toolin	Aeronomy	AFCLR	-	-
1966-3536	2439429.50	1966 Oct 30 1406	Nike Apache	-	BMS	0.000	SMSD	MS	AFCLR/Toolin	Target	WDR	-	-
1966-3537	2439435.12	1966 Nov 5 1455:21	Nike Hydac	-	Cert. Round	0.000	AFCLR	SS	AFCLR/OUT/Marcisi	Target	WDR	-	-
1966-3538	2439435.15	1966 Nov 05 1535:00	Nike Hydac	-	CHL AF07.348	0.000	AFCLR	SS	AFCLR/OUT/Marcisi	Target	WDR	-	-
1966-3539	2439435.23	1966 Nov 6 1732	Nike Hydac	-	MASA 14.277CA	0.000	DASM/BRL	SS	AFCLR/OUT/Marcisi	Target	AFCLR2	-	-
1966-3540	2439440.69	1966 Nov 11 0433	Nike Apache	-	MASA 14.287IE	0.000	GSFC	SS	AFCLR/OUT/Marcisi	Target	AFCLR2	-	-
1966-3541	2439442.00	1966 Nov 12 1200	Nike Apache	-	Sanda 152-95	0.000	GSFC	SS	AFCLR/OUT/Marcisi	Target	AFCLR2	-	-
1966-3542	2439442.07	1966 Nov 12 1385:00	Nike Apache	-	D-003C	0.000	SAND	SS	AFCLR/OUT/Marcisi	Target	AFCLR2	-	-
1966-3543	2439442.07	1966 Nov 12 1385:00	Nike Hydac	-	D-015C	0.000	AFCLR	SS	AFCLR/OUT/Marcisi	Target	AFCLR2	-	-
1966-3544	2439442.08	1966 Nov 12 1385:00	Nike Hydac	-	D-4	0.000	DASM/BRL	SS	AFCLR/OUT/Marcisi	Target	AFCLR2	-	-
1966-3545	2439442.08	1966 Nov 12 1385:19	Nike Hydac	-	MASA 14.277CA	0.000	AFCLR	SS	AFCLR/OUT/Marcisi	Target	AFCLR2	-	-
1966-3546	2439442.08	1966 Nov 12 1401:59	Nike Apache	-	MASA 14.277CA	0.000	AFCLR	SS	AFCLR/OUT/Marcisi	Target	AFCLR2	-	-
1966-3547	2439442.08	1966 Nov 12 1401:59	Nike Apache	-	MASA 14.277CA	0.000	AFCLR	SS	AFCLR/OUT/Marcisi	Target	AFCLR2	-	-
1966-3548	2439442.09	1966 Nov 12 1405	Nike Apache	-	MASA 14.277CA	0.000	AFCLR	SS	AFCLR/OUT/Marcisi	Target	AFCLR2	-	-
1966-3549	2439442.09	1966 Nov 12 1407	Nike Apache	-	MASA 14.277CA	0.000	AFCLR	SS	AFCLR/OUT/Marcisi	Target	AFCLR2	-	-
1966-3550	2439442.09	1966 Nov 12 1407	Nike Apache	-	MASA 14.277CA	0.000	AFCLR	SS	AFCLR/OUT/Marcisi	Target	AFCLR2	-	-
1966-3551	2439442.09	1966 Nov 12 1407	Nike Apache	-	MASA 14.277CA	0.000	AFCLR	SS	AFCLR/OUT/Marcisi	Target	AFCLR2	-	-
1966-3552	2439442.09	1966 Nov 12 1407	Nike Apache	-	MASA 14.277CA	0.000	AFCLR	SS	AFCLR/OUT/Marcisi	Target	AFCLR2	-	-
1966-3553	2439442.09	1966 Nov 12 1407	Nike Apache	-	MASA 14.277CA	0.000	AFCLR	SS	AFCLR/OUT/Marcisi	Target	AFCLR2	-	-
1966-3554	2439442.09	1966 Nov 12 1407	Nike Apache	-	MASA 14.277CA	0.000	AFCLR	SS	AFCLR/OUT/Marcisi	Target	AFCLR2	-	-
1966-3555	2439442.09	1966 Nov 12 1407	Nike Apache	-	MASA 14.277CA	0.000	AFCLR	SS	AFCLR/OUT/Marcisi	Target	AFCLR2	-	-
1966-3556	2439442.09	1966 Nov 12 1407	Nike Apache	-	MASA 14.277CA	0.000	AFCLR	SS	AFCLR/OUT/Marcisi	Target	AFCLR2	-	-
1966-3557	2439442.09	1966 Nov 12 1407	Nike Apache	-	MASA 14.277CA	0.000	AFCLR	SS	AFCLR/OUT/Marcisi	Target	AFCLR2	-	-
1966-3558	2439442.09	1966 Nov 12 1407	Nike Apache	-	MASA 14.277CA	0.000	AFCLR	SS	AFCLR/OUT/Marcisi	Target	AFCLR2	-	-
1966-3559	2439442.09	1966 Nov 12 1407	Nike Apache	-	MASA 14.277CA	0.000	AFCLR	SS	AFCLR/OUT/Marcisi	Target	AFCLR2	-	-
1966-3560	2439442.09	1966 Nov 12 1407	Nike Apache	-	MASA 14.277CA	0.000	AFCLR	SS	AFCLR/OUT/Marcisi	Target	AFCLR2	-	-
1966-3561	2439442.09	1966 Nov 12 1407	Nike Apache	-	MASA 14.277CA	0.000	AFCLR	SS	AFCLR/OUT/Marcisi	Target	AFCLR2	-	-
1966-3562	2439442.09	1966 Nov 12 1407	Nike Apache	-	MASA 14.277CA	0.000	AFCLR	SS	AFCLR/OUT/Marcisi	Target	AFCLR2	-	-
1966-3563	2439442.09	1966 Nov 12 1407	Nike Apache	-	MASA 14.277CA	0.000	AFCLR	SS	AFCLR/OUT/Marcisi	Target	AFCLR2	-	-
1966-3564	2439442.09	1966 Nov 12 1407	Nike Apache	-	MASA 14.277CA	0.000	AFCLR	SS	AFCLR/OUT/Marcisi	Target	AFCLR2	-	-
1966-3565	2439442.09	1966 Nov 12 1407	Nike Apache	-	MASA 14.277CA	0.000	AFCLR	SS	AFCLR/OUT/Marcisi	Target	AFCLR2	-	-
1966-3566	2439442.09	1966 Nov 12 1407	Nike Apache	-	MASA 14.277CA	0.000	AFCLR	SS	AFCLR/OUT/Marcisi	Target	AFCLR2	-	-
1966-3567	2439442.09	1966 Nov 12 1407	Nike Apache	-	MASA 14.277CA	0.000	AFCLR	SS	AFCLR/OUT/Marcisi	Target	AFCLR2	-	-
1966-3568	2439442.09	1966 Nov 12 1407	Nike Apache	-	MASA 14.277CA	0.000	AFCLR	SS	AFCLR/OUT/Marcisi	Target	AFCLR2	-	-
1966-3569	2439442.09	1966 Nov 12 1407	Nike Apache	-	MASA 14.277CA	0.000	AFCLR	SS	AFCLR/OUT/Marcisi	Target	AFCLR2	-	-
1966-3570	2439442.09	1966 Nov 12 1407	Nike Apache	-	MASA 14.277CA	0.000	AFCLR	SS	AFCLR/OUT/Marcisi	Target	AFCLR2	-	-
1966-3571	2439442.09	1966 Nov 12 1407	Nike Apache	-	MASA 14.277CA	0.000	AFCLR	SS	AFCLR/OUT/Marcisi	Target	AFCLR2	-	-
1966-3572	2439442.09	1966 Nov 12 1407	Nike Apache	-	MASA 14.277CA	0.000	AFCLR	SS	AFCLR/OUT/Marcisi	Target	AFCLR2	-	-
1966-3573	2439442.09	1966 Nov 12 1407	Nike Apache	-	MASA 14.277CA	0.000	AFCLR	SS	AFCLR/OUT/Marcisi	Target	AFCLR2	-	-
1966-3574	2439442.09	1966 Nov 12 1407	Nike Apache	-	MASA 14.277CA	0.000	AFCLR	SS	AFCLR/OUT/Marcisi	Target	AFCLR2	-	-
1966-3575	2439442.09	1966 Nov 12 1407	Nike Apache	-	MASA 14.277CA	0.000	AFCLR	SS	AFCLR/OUT/Marcisi	Target	AFCLR2	-	-
1966-3576	2439442.09	1966 Nov 12 1407	Nike Apache	-	MASA 14.277CA	0.000	AFCLR	SS	AFCLR/OUT/Marcisi	Target	AFCLR2	-	-
1966-3577	2439442.09	1966 Nov 12 1407	Nike Apache	-	MASA 14.277CA	0.000	AFCLR	SS	AFCLR/OUT/Marcisi	Target	AFCLR2	-	-
1966-3578	2439442.09	1966 Nov 12 1407	Nike Apache	-	MASA 14.277CA	0.000	AFCLR	SS	AFCLR/OUT/Marcisi	Target	AFCLR2	-	-
1966-3579	2439442.09	1966 Nov 12 1407	Nike Apache	-	MASA 14.277CA	0.000	AFCLR	SS	AFCLR/OUT/Marcisi	Target	AFCLR2	-	-
1966-3580	2439442.09	1966 Nov 12 1407	Nike Apache	-	MASA 14.277CA	0.000	AFCLR	SS	AFCLR/OUT/Marcisi	Target	AFCLR2	-	-
1966-3581	2439442.09	1966 Nov 12 1407	Nike Apache	-	MASA 14.277CA	0.000	AFCLR	SS	AFCLR/OUT/Marcisi	Target	AFCLR2	-	-
1966-3582	2439442.09	1966 Nov 12 1407	Nike Apache	-	MASA 14.277CA	0.000	AFCLR	SS	AFCLR/OUT/Marcisi	Target	AFCLR2	-	-
1966-3583	2439442.09	1966 Nov 12 1407	Nike Apache	-	MASA 14.277CA	0.000	AFCLR	SS	AFCLR/OUT/Marcisi	Target	AFCLR2	-	-
1966-3584	2439442.09	1966 Nov 12 1407	Nike Apache	-	MASA 14.277CA	0.000	AFCLR	SS	AFCLR/OUT/Marcisi	Target	AFCLR2	-	-
1966-3585	2439442.09	1966 Nov 12 1407	Nike Apache	-	MASA 14.277CA	0.000	AFCLR	SS	AFCLR/OUT/Marcisi	Target	AFCLR2	-	-
1966-3586	2439442.09	1966 Nov 12 1407	Nike Apache	-	MASA 14.277CA	0.000	AFCLR	SS	AFCLR/OUT/Marcisi	Target	AFCLR2	-	-
1966-3587	2439442.09	1966 Nov 12 1407	Nike Apache	-	MASA 14.277CA	0.000	AFCLR	SS	AFCLR/OUT/Marcisi	Target	AFCLR2	-	-
1966-3588	2439442.09	1966 Nov 12 1407	Nike Apache	-	MASA 14.277CA	0.000	AFCLR	SS	AFCLR/OUT/Marcisi	Target	AFCLR2	-	-
1966-3589	2439442.09	1966 Nov 12 1407	Nike Apache	-	MASA 14.277CA	0.000	AFCLR	SS	AFCLR/OUT/Marcisi	Target	AFCLR2	-	-
1966-3590	2439442.09	1966 Nov 12 1407	Nike Apache	-	MASA 14.277CA	0.000	AFCLR	SS	AFCLR/OUT/Marcisi	Target	AFCLR2	-	-
1966-3591	2439442.09	1966 Nov 12 1407	Nike Apache	-	MASA 14.277CA	0.000	AFCLR	SS	AFCLR/OUT/Marcisi	Target	AFCLR2	-	-
1966-3592	2439442.09	1966 Nov 12 1407	Nike Apache	-	MASA 14.277CA	0.000	AFCLR	SS	AFCLR/OUT/Marcisi	Target	AFCLR2	-	-
1966-3593	2439442.09	1966 Nov 12 1407	Nike Apache	-	MASA 14.277CA	0.000	AFCLR	SS	AFCLR/OUT/Marcisi	Target	AFCLR2	-	-
1966-3594	2439442.09	1966 Nov 12 1407	Nike Apache	-	MASA 14.277CA	0.000	AFCLR	SS	AFCLR/OUT/Marcisi	Target	AFCLR2	-	-
1966-3595	2439442.09	1966 Nov 12 1407											



Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Orbit	Agency	Launch_Code	Group	Category	LTCite	Cite	Notes
1967-S102	2439522.08	1967 Feb 1 0418	Nike Cajun	-	MMSA 10. 2180H	0.000	GSFC	SS	GSFC/Smith	Aeronomy	WDCRF	-	-
1967-S103	2439522.73	1967 Feb 1 0538:00	Nike Apache	-	MMSA 14. 3180H	0.000	GSFC	SS	UML/Horvath	Aeronomy	WDCRF	-	-
1967-S104	2439522.74	1967 Feb 1 0641	Nike Apache	-	MMSA 14. 3130H	0.000	GSFC	SS	UML/Smith	Aeronomy	WDCRF	-	-
1967-S105	2439522.82	1967 Feb 1 0741	Nike Cajun	-	MMSA 10. 2190H	0.000	GSFC	SS	GSFC/Smith	Aeronomy	WDCRF	-	-
1967-S106	2439522.85	1967 Feb 1 0828:59	Nike Apache	-	MMSA 14. 3160H	0.000	GSFC	SS	UML/Horvath	Aeronomy	WDCRF	-	-
1967-S107	2439522.95	1967 Feb 1 0829	Nike Apache	-	MMSA 14. 3220H	0.000	GSFC	SS	UML/Smith	Aeronomy	WDCRF	-	-
1967-S108	2439522.98	1967 Feb 1 0956	Nike Cajun	-	MMSA 14. 3140H	0.000	GSFC	SS	GSFC/Smith	Aeronomy	WDCRF	-	-
1967-S109	2439522.99	1967 Feb 1 1124	Nike Apache	-	MMSA 14. 3220H	0.000	GSFC	SS	UML/Horvath	Aeronomy	WDCRF	-	-
1967-S110	2439523.00	1967 Feb 1 1158:00	Nike Apache	-	MMSA 10. 2220H	0.000	GSFC	SS	GSFC/Smith	Aeronomy	WDCRF	-	-
1967-S111	2439525.24	1967 Feb 3 1752	Nike Cajun	-	MMSA 10. 2220H	0.000	GSFC	SS	SAND/Pepper	Aeronomy	WDCRF	-	-
1967-S112	2439525.24	1967 Feb 3 1752	Nike Cajun	-	Sandia 158-11	0.000	SAND	AS	SAND/Pepper	Test	J Aircraft6901-74	-	-
1967-S113	2439525.30	1967 Feb 15	Nike Nike	-	-	0.000	RIICND	AS	MMSI/	Target	AD738848	-	-
1967-S114	2439525.30	1967 Feb 21 2104	Nike Apache	-	Sandia 152-100	0.000	SAND	SS	LASL/Theobald	Aerocal	NSMR	-	-
1967-S115	2439543.38	1967 Feb 28 0547	Nike Tomahawk	?	STV	0.000	RIICND	SS	NSMR/LASL/Theobald	Aerocal	NSMR	-	-
1967-S116	2439549.50	1967 Mar 3 2558	Nike Hydrac	-	Ferdinand 14	0.000	NDRE	SS	GSFC/NDRE/Kane,Folkestead	Ions/Plasma	AND	-	-
1967-S117	2439553.50	1967 Mar 4 2105	Nike Proquois	-	CHL AF07.582	0.000	AFCLR	SS	AFCLR/Faucher	Aerocal	AFCLR	-	-
1967-S118	2439555.63	1967 Mar 6 0305	Nike Proquois	-	CHL AF07.583	0.000	AFCLR	SS	AFCLR/Faucher	Aerocal	AFCLR	-	-
1967-S119	2439556.06	1967 Mar 6 1327	Nike Apache	-	MMSA 14. 1611A	0.000	AFCLR	SS	AFCLR/Faucher	Aerocal	AFCLR	-	-
1967-S120	2439556.71	1967 Mar 9 0507	Nike Tomahawk	-	MMSA 14. 240E	0.000	GSFC	SS	GSFC/Evans	Aerocal	WDCRF	-	-
1967-S121	2439559.06	1967 Mar 9 1327	Nike Apache	-	MMSA 14. 1621A	0.000	GSFC	SS	GSFC/Evans	Aerocal	WDCRF	-	-
1967-S122	2439562.06	1967 Mar 12 1327	Nike Apache	-	MMSA 14. 1631A-II	0.000	GSFC/JNCO	SS	GSFC/JNCO	Ions	WDCRF	-	-
1967-S123	2439562.51	1967 Mar 12 1700	Nike Apache	-	MMSA 14. 2061A	0.000	GSFC/JNCO	SS	GSFC/JNCO	Ions	WDCRF	-	-
1967-S124	2439562.51	1967 Mar 13 0014	Nike Apache	-	MMSA 14. 2061A	0.000	GSFC/JNCO	SS	GSFC/JNCO	Ions	WDCRF	-	-
1967-S125	2439562.51	1967 Mar 14 2346:10	Nike Apache	-	Ferdinand 15	0.000	NDRE	SS	PRU/Prakash?	Ions/Aeronomy	WDCRF	-	-
1967-S126	2439565.30	1967 Mar 16 1905	Nike Apache	-	MMSA 14. 2661I	0.000	GSFC	SS	PRU/Prakash?	Ions/Aeronomy	WDCRF	-	-
1967-S127	2439577.27	1967 Mar 27 1835	Nike Tomahawk	-	MMSA 14. 2661I	0.000	GSFC	SS	PRU/Somayajulu	Ions	AND	-	-
1967-S128	2439576.19	1967 Mar 28 1633	Nike Hydrac	-	MMSA 14. 280E	0.000	GSFC	SS	UML/Lockwood	Plasma	WDCRF	-	-
1967-S129	2439576.19	1967 Mar 28 1633	Nike Hydrac	-	MMSA 14. 280E	0.000	GSFC	SS	UML/Lockwood	Plasma	WDCRF	-	-
1967-S130	2439580.30	1967 Mar 30 1909	Nike Tomahawk	-	MMSA 18. 120I	0.000	SMSD	SS	NSMR/	Aerocal	www.atcvc.mil	-	-
1967-S131	2439580.30	1967 Mar 31 0001	Nike Tomahawk	-	MMSA 18. 120I	0.000	GSFC	SS	NSMR/	Aerocal	www.atcvc.mil	-	-
1967-S132	2439580.63	1967 Mar 31 0303	Nike Apache	-	MMSA 14. 283CA	0.000	GSFC	SS	GCA/OMP/Bettinger	Ions	SP-4008	-	-
1967-S133	2439581.22	1967 Mar 31 1719	Nike Cajun	-	MMSA 10. 2060H	0.000	GSFC	SS	GCA/Pressman	Aeronomy	WDCRF	-	-
1967-S134	2439581.22	1967 Mar 31 1719	Nike Cajun	-	MMSA 10. 2060H	0.000	GSFC	SS	GCA/Pressman	Aeronomy	WDCRF	-	-
1967-S135	2439584.51	1967 Apr 4 0010	Nike Apache	-	MMSA 10. 2260H	0.000	GSFC	SS	GSFC/Smith	Aeronomy	WDCRF	-	-
1967-S136	2439585.33	1967 Apr 6 1957:00	Nike Apache	-	MMSA 14. 3281E	0.000	GSFC	SS	GSFC/Smith	Aeronomy	WDCRF	-	-
1967-S137	2439585.33	1967 Apr 6 2003:00	Nike Apache	-	MMSA 14. 3291E	0.000	GSFC	SS	GSFC/Smith	Aeronomy	WDCRF	-	-
1967-S138	2439589.54	1967 Apr 9 0100:00	Nike Apache	-	MMSA 14. 3310E	0.000	GSFC	SS	GSFC/Smith	Aeronomy	WDCRF	-	-
1967-S139	2439591.36	1967 Apr 10 2014:00	Nike Apache	-	MMSA 10. 2270H	0.000	GSFC	SS	GSFC/Smith	Aeronomy	WDCRF	-	-
1967-S140	2439592.22	1967 Apr 11 1715	Nike Cajun	-	MMSA 10. 2270H	0.000	GSFC	SS	GSFC/Smith	Aeronomy	WDCRF	-	-
1967-S141	2439592.22	1967 Apr 11 1715	Nike Cajun	-	MMSA 14. 3321E	0.000	GSFC	SS	GSFC/Smith	Aeronomy	WDCRF	-	-
1967-S142	2439592.22	1967 Apr 13 0001	Nike Proquois	-	CHL AF07.186	0.000	AFCLR	SS	AFCLR/Sagaly	Aerocal	AFCLR	-	-
1967-S143	2439593.25	1967 Apr 13 0049	Nike Proquois	-	CHL AF07.385	0.000	AFCLR	SS	AFCLR/Sagaly	Aerocal	AFCLR	-	-
1967-S144	2439593.25	1967 Apr 13 0049	Nike Proquois	-	CHL AF07.385	0.000	AFCLR	SS	AFCLR/Sagaly	Aerocal	AFCLR	-	-
1967-S145	2439593.54	1967 Apr 13 0059	Nike Proquois	-	CHL AF07.622	0.000	AFCLR	SS	AFCLR/Sagaly	Aerocal	AFCLR	-	-
1967-S146	2439593.54	1967 Apr 13 0059	Nike Proquois	-	CHL AF07.622	0.000	AFCLR	SS	AFCLR/Sagaly	Aerocal	AFCLR	-	-
1967-S147	2439593.54	1967 Apr 13 0059	Nike Proquois	-	CHL AF07.623	0.000	AFCLR	SS	AFCLR/Sagaly	Aerocal	AFCLR	-	-
1967-S148	2439593.54	1967 Apr 13 0059	Nike Proquois	-	CHL AF07.623	0.000	AFCLR	SS	AFCLR/Sagaly	Aerocal	AFCLR	-	-
1967-S149	2439593.54	1967 Apr 13 0059	Nike Proquois	-	CHL AF07.623	0.000	AFCLR	SS	AFCLR/Sagaly	Aerocal	AFCLR	-	-
1967-S150	2439593.54	1967 Apr 13 0059	Nike Proquois	-	CHL AF07.623	0.000	AFCLR	SS	AFCLR/Sagaly	Aerocal	AFCLR	-	-
1967-S151	2439593.54	1967 Apr 13 0059	Nike Proquois	-	CHL AF07.623	0.000	AFCLR	SS	AFCLR/Sagaly	Aerocal	AFCLR	-	-
1967-S152	2439593.54	1967 Apr 13 0059	Nike Proquois	-	CHL AF07.623	0.000	AFCLR	SS	AFCLR/Sagaly	Aerocal	AFCLR	-	-
1967-S153	2439593.54	1967 Apr 13 0059	Nike Proquois	-	CHL AF07.623	0.000	AFCLR	SS	AFCLR/Sagaly	Aerocal	AFCLR	-	-
1967-S154	2439593.54	1967 Apr 13 0059	Nike Proquois	-	CHL AF07.623	0.000	AFCLR	SS	AFCLR/Sagaly	Aerocal	AFCLR	-	-
1967-S155	2439593.54	1967 Apr 13 0059	Nike Proquois	-	CHL AF07.623	0.000	AFCLR	SS	AFCLR/Sagaly	Aerocal	AFCLR	-	-
1967-S156	2439593.54	1967 Apr 13 0059	Nike Proquois	-	CHL AF07.623	0.000	AFCLR	SS	AFCLR/Sagaly	Aerocal	AFCLR	-	-
1967-S157	2439593.54	1967 Apr 13 0059	Nike Proquois	-	CHL AF07.623	0.000	AFCLR	SS	AFCLR/Sagaly	Aerocal	AFCLR	-	-
1967-S158	2439593.54	1967 Apr 13 0059	Nike Proquois	-	CHL AF07.623	0.000	AFCLR	SS	AFCLR/Sagaly	Aerocal	AFCLR	-	-
1967-S159	2439593.54	1967 Apr 13 0059	Nike Proquois	-	CHL AF07.623	0.000	AFCLR	SS	AFCLR/Sagaly	Aerocal	AFCLR	-	-
1967-S160	2439593.54	1967 Apr 13 0059	Nike Proquois	-	CHL AF07.623	0.000	AFCLR	SS	AFCLR/Sagaly	Aerocal	AFCLR	-	-
1967-S161	2439593.54	1967 Apr 13 0059	Nike Proquois	-	CHL AF07.623	0.000	AFCLR	SS	AFCLR/Sagaly	Aerocal	AFCLR	-	-
1967-S162	2439593.54	1967 Apr 13 0059	Nike Proquois	-	CHL AF07.623	0.000	AFCLR	SS	AFCLR/Sagaly	Aerocal	AFCLR	-	-
1967-S163	2439593.54	1967 Apr 13 0059	Nike Proquois	-	CHL AF07.623	0.000	AFCLR	SS	AFCLR/Sagaly	Aerocal	AFCLR	-	-
1967-S164	2439593.54	1967 Apr 13 0059	Nike Proquois	-	CHL AF07.623	0.000	AFCLR	SS	AFCLR/Sagaly	Aerocal	AFCLR	-	-
1967-S165	2439593.54	1967 Apr 13 0059	Nike Proquois	-	CHL AF07.623	0.000	AFCLR	SS	AFCLR/Sagaly	Aerocal	AFCLR	-	-
1967-S166	2439593.54	1967 Apr 13 0059	Nike Proquois	-	CHL AF07.623	0.000	AFCLR	SS	AFCLR/Sagaly	Aerocal	AFCLR	-	-
1967-S167	2439593.54	1967 Apr 13 0059	Nike Proquois	-	CHL AF07.623	0.000	AFCLR	SS	AFCLR/Sagaly	Aerocal	AFCLR	-	-
1967-S168	2439593.54	1967 Apr 13 0059	Nike Proquois	-	CHL AF07.623	0.000	AFCLR	SS	AFCLR/Sagaly	Aerocal	AFCLR	-	-
1967-S169	2439593.54	1967 Apr 13 0059	Nike Proquois	-	CHL AF07.623	0.000	AFCLR	SS	AFCLR/Sagaly	Aerocal	AFCLR	-	-
1967-S170	2439593.54	1967 Apr 13 0059	Nike Proquois	-	CHL AF07.623	0.000	AFCLR	SS	AFCLR/Sagaly	Aerocal	AFCLR	-	-
1967-S171	2439593.54	1967 Apr 13 0059	Nike Proquois	-	CHL AF07.623	0.000	AFCLR	SS	AFCLR/Sagaly	Aerocal	AFCLR	-	-
1967-S172	2439593.54	1967 Apr 13 0059	Nike Proquois	-	CHL AF07.623	0.000	AFCLR	SS	AFCLR/Sagaly	Aerocal	AFCLR	-	-
1967-S173	2439593.54	1967 Apr 13 0059	Nike Proquois	-	CHL AF07.623	0.000	AFCLR	SS	AFCLR/Sagaly	Aerocal	AFCLR	-	-
1967-S174	2439593.54	1967 Apr 13 0059	Nike Proquois	-	CHL AF07.623	0.000	AFCLR	SS	AFCLR/Sagaly	Aerocal	AFCLR	-	-
1967-S175	2439593.54	1967 Apr 13 0059	Nike Proquois	-	CHL AF07.623	0.000	AFCLR	SS	AFCLR/Sagaly	Aerocal	AFCLR	-	-
1967-S176	2439593.54	1967 Apr 13 0059	Nike Proquois	-	CHL AF07.623	0.000	AFCLR	SS	AFCLR/Sagaly	Aerocal	AFCLR	-	-
1967-S177	2439593.54	1967 Apr 13 0059	Nike Proquois	-	CHL AF07.623	0.000	AFCLR	SS	AFCLR/Sagaly	Aerocal	AFCLR	-	-
1967-S178	2439593.54	1967 Apr 13 0059	Nike Proquois	-	CHL AF07.623	0.000	AFCLR	SS	AFCLR/Sagaly	Aerocal	AFCLR	-	-
1967-S179	2439593.54	1967 Apr 13 0059	Nike Proquois	-	CHL AF07.623	0.000	AFCLR	SS	AFCLR/Sagaly	Aerocal	AFCLR	-	-
1967-S180	2439593.54	1967 Apr 13 0059	Nike Proquois	-	CHL AF07.623	0.000	AFCLR	SS	AFCLR/Sagaly	Aerocal	AFCLR	-	-
1967-S181	2439593.54	1967 Apr 13 0059	Nike Proquois	-	CHL AF07.623	0.000	AFCLR	SS	AFCLR/Sagaly	Aerocal	AFCLR	-	-

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	OrbPay	Agency	Launch_Code	Group	Category	LTCite	Cite	Notes
1967-5286	2439643.02	1967 Jun 1 1225	Nike Apache	-	-	0.000	SAND	SS	SAND/Smith, LB	Aeron	WDCRF	-	-
1967-5861	2439643.50	1967 Jun 27	Nike Apache	-	-	0.000	SAND	SS	SAND/ABC/	Aeron	PHRlist67	-	-
1967-5862	2439643.50	1967 Jun 27	Nike Apache	-	-	0.000	SAND	SS	SAND/ABC/	Aeron	PHRlist67	-	-
1967-5863	2439643.50	1967 Jun 27	Nike Cajun	-	-	0.000	SAND	SS	SAND/ABC/	Aeron	PHRlist67	-	-
1967-5290	2439643.90	1967 Jun 2 0934	Nike Apache	?	-	0.000	SAND	SS	SAND/Smith, LB	Aeron/Solar	WDCRF	-	-
1967-5291	2439644.74	1967 Jun 3 0547	Nike Apache	-	-	0.000	SAND	SS	SAND/Smith, LB	Aeron	WDCRF	-	-
1967-5294	2439644.43	1967 Jun 6 2219	Nike Tomahawk	-	-	0.000	SAND	SS	UNH/Lockwood	Plasma	WDCRF	SP-4008	-
1967-5295	2439645.43	1967 Jun 7 1320	Nike Tomahawk	-	-	0.000	AFCLR	SS	ASE/LOCKWOOD	Plasma	AFCLR	SP-4008	-
1967-5301	2439655.46	1967 Jun 13 2308	Nike Tomahawk	-	-	0.000	AFCLR	SS	AFCLR/SKRVANEK	Plasma	AFCLR	-	-
1967-5320	2439665.85	1967 Jun 24 0826	Nike Apache	-	-	0.000	GSFC	SS	GSFC/Smith	Aeronomy Fall Equinox	WDCRF	-	-
1967-5321	2439666.36	1967 Jun 24 2035	Nike Cajun	-	-	0.000	GSFC	SS	GSFC/Smith	Aeronomy	WDCRF	-	-
1967-5322	2439666.98	1967 Jun 25 0594	Nike Cajun	-	-	0.000	GSFC	SS	GSFC/Smith	Aeronomy	WDCRF	-	-
1967-5327	2439677.40	1967 Jul 1 2133	Nike Apache	-	-	0.000	HCCH	MS	-	Target	WSHR	-	-
1967-5329	2439679.12	1967 Jul 7 1453	Nike Apache	-	-	0.000	SAND	SS	SAND/	Aeronomy	WSHR	SP-4008	-
1967-5355	2439694.94	1967 Jul 23 0053	Nike Apache	-	-	0.000	HCCH	MS	GCN/Bedinger	Aeronomy	WDCRF	-	-
1967-5328	2439698.17	1967 Jul 26 1610	Nike Apache	-	-	0.000	HCCH	MS	MSU/	Target	WSHR	-	-
1967-5636	2439701.52	1967 Jul 31 0030	Nike Apache	-	-	0.000	HCCH	MS	MSU/	Target	WSHR	-	-
1967-5665	2439704.31	1967 Aug 1 1925	Nike Apache	-	-	0.000	HCCH	MS	MSU/	Target	WSHR	-	-
1967-5367	2439705.36	1967 Aug 9 0159	Nike Apache	-	-	0.000	GSFC	SS	UNH/Smith	Aeronomy	WDCRF	-	-
1967-5366	2439705.97	1967 Aug 9 0243	Nike Apache	-	-	0.000	GSFC	SS	UNH/Horvath	Test	WDCRF/SP-4401	-	-
1967-5370	2439707.91	1967 Aug 9 0956:00	Nike Apache	-	-	0.000	GSFC	SS	UNH/Smith	Aeronomy	WDCRF	-	-
1967-5371	2439711.60	1967 Aug 9 2356	Nike Apache	-	-	0.000	GSFC	SS	UNH/Smith	Aeronomy	WDCRF	-	-
1967-5372	2439711.61	1967 Aug 9 2356	Nike Apache	-	-	0.000	GSFC	SS	UNH/Smith	Aeronomy	WDCRF	-	-
1967-5379	2439711.61	1967 Aug 9 0755	Nike Apache	-	-	0.000	GSFC	SS	UNH/Smith	Aeronomy	WDCRF	-	-
1967-5380	2439711.61	1967 Aug 9 0755	Nike Apache	-	-	0.000	GSFC	SS	UNH/Smith	Aeronomy	WDCRF	-	-
1967-5381	2439711.67	1967 Aug 9 0847	Nike Apache	-	-	0.000	GSFC	SS	UNH/Smith	Aeronomy	WDCRF	-	-
1967-5382	2439711.67	1967 Aug 9 0847	Nike Apache	-	-	0.000	GSFC	SS	UNH/Smith	Aeronomy	WDCRF	-	-
1967-5383	2439711.69	1967 Aug 9 0928	Nike Apache	-	-	0.000	GSFC	SS	UNH/Smith	Aeronomy	WDCRF	-	-
1967-5638	2439712.34	1967 Aug 9 2006	Nike Apache	-	-	0.000	HCCH	MS	GCN/Bedinger	Target	WSHR	SP-4008	-
1967-4108	2439723.95	1967 Aug 21 0520	Nike Apache	-	-	0.000	GSFC	SS	MSU/	Aeronomy	WDCRF	-	-
1967-5639	2439725.52	1967 Aug 22 1937	Nike Apache	-	-	0.000	HCCH	MS	MSU/	Target	WSHR	-	-
1967-5381	2439727.52	1967 Aug 25 0735	Nike Apache	-	-	0.000	HCCH	MS	MSU/	Target	WSHR	-	-
1967-5397	2439728.77	1967 Aug 26 0535	Nike Apache	-	-	0.000	HCCH	MS	MSU/	Target	WSHR	-	-
1967-5398	2439728.77	1967 Aug 26 0535	Nike Apache	-	-	0.000	HCCH	MS	MSU/	Target	WSHR	-	-
1967-5399	2439728.99	1967 Aug 26 1139	Nike Apache	-	-	0.000	HCCH	MS	MSU/	Target	WSHR	-	-
1967-5400	2439729.49	1967 Aug 26 2339	Nike Apache	-	-	0.000	HCCH	MS	MSU/	Target	WSHR	-	-
1967-5401	2439730.52	1967 Aug 28 0030	Nike Apache	-	-	0.000	HCCH	MS	MSU/	Target	WSHR	-	-
1967-5402	2439733.23	1967 Aug 31 2206:00	Nike Apache	-	-	0.000	HCCH	MS	MSU/	Target	WSHR	-	-
1967-5403	2439733.23	1967 Aug 31 2206:00	Nike Apache	-	-	0.000	HCCH	MS	MSU/	Target	WSHR	-	-
1967-5413	2439734.45	1967 Sep 2 1731	Nike Apache	-	-	0.000	HCCH	MS	MSU/	Target	WSHR	-	-
1967-5414	2439736.23	1967 Sep 2 1731	Nike Apache	-	-	0.000	HCCH	MS	MSU/	Target	WSHR	-	-
1967-5415	2439736.23	1967 Sep 2 1731	Nike Apache	-	-	0.000	HCCH	MS	MSU/	Target	WSHR	-	-
1967-5416	2439736.23	1967 Sep 2 1731	Nike Apache	-	-	0.000	HCCH	MS	MSU/	Target	WSHR	-	-
1967-5417	2439736.26	1967 Sep 2 2034:35	Nike Apache	-	-	0.000	HCCH	MS	MSU/	Target	WSHR	-	-
1967-5418	2439736.78	1967 Sep 2 2034:35	Nike Apache	-	-	0.000	HCCH	MS	MSU/	Target	WSHR	-	-
1967-5419	2439736.78	1967 Sep 2 2034:35	Nike Apache	-	-	0.000	HCCH	MS	MSU/	Target	WSHR	-	-
1967-5420	2439736.78	1967 Sep 2 2034:35	Nike Apache	-	-	0.000	HCCH	MS	MSU/	Target	WSHR	-	-
1967-5421	2439736.78	1967 Sep 2 2034:35	Nike Apache	-	-	0.000	HCCH	MS	MSU/	Target	WSHR	-	-
1967-5422	2439736.78	1967 Sep 2 2034:35	Nike Apache	-	-	0.000	HCCH	MS	MSU/	Target	WSHR	-	-
1967-5423	2439736.78	1967 Sep 2 2034:35	Nike Apache	-	-	0.000	HCCH	MS	MSU/	Target	WSHR	-	-
1967-5424	2439736.78	1967 Sep 2 2034:35	Nike Apache	-	-	0.000	HCCH	MS	MSU/	Target	WSHR	-	-
1967-5425	2439736.78	1967 Sep 2 2034:35	Nike Apache	-	-	0.000	HCCH	MS	MSU/	Target	WSHR	-	-
1967-5426	2439736.78	1967 Sep 2 2034:35	Nike Apache	-	-	0.000	HCCH	MS	MSU/	Target	WSHR	-	-
1967-5427	2439736.78	1967 Sep 2 2034:35	Nike Apache	-	-	0.000	HCCH	MS	MSU/	Target	WSHR	-	-
1967-5428	2439736.78	1967 Sep 2 2034:35	Nike Apache	-	-	0.000	HCCH	MS	MSU/	Target	WSHR	-	-
1967-5429	2439736.78	1967 Sep 2 2034:35	Nike Apache	-	-	0.000	HCCH	MS	MSU/	Target	WSHR	-	-
1967-5430	2439736.78	1967 Sep 2 2034:35	Nike Apache	-	-	0.000	HCCH	MS	MSU/	Target	WSHR	-	-
1967-5431	2439736.78	1967 Sep 2 2034:35	Nike Apache	-	-	0.000	HCCH	MS	MSU/	Target	WSHR	-	-
1967-5432	2439736.78	1967 Sep 2 2034:35	Nike Apache	-	-	0.000	HCCH	MS	MSU/	Target	WSHR	-	-
1967-5433	2439736.78	1967 Sep 2 2034:35	Nike Apache	-	-	0.000	HCCH	MS	MSU/	Target	WSHR	-	-
1967-5434	2439736.78	1967 Sep 2 2034:35	Nike Apache	-	-	0.000	HCCH	MS	MSU/	Target	WSHR	-	-
1967-5435	2439736.78	1967 Sep 2 2034:35	Nike Apache	-	-	0.000	HCCH	MS	MSU/	Target	WSHR	-	-
1967-5436	2439736.78	1967 Sep 2 2034:35	Nike Apache	-	-	0.000	HCCH	MS	MSU/	Target	WSHR	-	-
1967-5437	2439736.78	1967 Sep 2 2034:35	Nike Apache	-	-	0.000	HCCH	MS	MSU/	Target	WSHR	-	-
1967-5438	2439736.78	1967 Sep 2 2034:35	Nike Apache	-	-	0.000	HCCH	MS	MSU/	Target	WSHR	-	-
1967-5439	2439736.78	1967 Sep 2 2034:35	Nike Apache	-	-	0.000	HCCH	MS	MSU/	Target	WSHR	-	-
1967-5440	2439736.78	1967 Sep 2 2034:35	Nike Apache	-	-	0.000	HCCH	MS	MSU/	Target	WSHR	-	-
1967-5441	2439736.78	1967 Sep 2 2034:35	Nike Apache	-	-	0.000	HCCH	MS	MSU/	Target	WSHR	-	-
1967-5442	2439736.78	1967 Sep 2 2034:35	Nike Apache	-	-	0.000	HCCH	MS	MSU/	Target	WSHR	-	-
1967-5443	2439736.78	1967 Sep 2 2034:35	Nike Apache	-	-	0.000	HCCH	MS	MSU/	Target	WSHR	-	-
1967-5444	2439736.78	1967 Sep 2 2034:35	Nike Apache	-	-	0.000	HCCH	MS	MSU/	Target	WSHR	-	-
1967-5445	2439736.78	1967 Sep 2 2034:35	Nike Apache	-	-	0.000	HCCH	MS	MSU/	Target	WSHR	-	-
1967-5446	2439736.78	1967 Sep 2 2034:35	Nike Apache	-	-	0.000	HCCH	MS	MSU/	Target	WSHR	-	-
1967-5447	2439736.78	1967 Sep 2 2034:35	Nike Apache	-	-	0.000	HCCH	MS	MSU/	Target	WSHR	-	-
1967-5448	2439736.78	1967 Sep 2 2034:35	Nike Apache	-	-	0.000	HCCH	MS	MSU/	Target	WSHR	-	-
1967-5449	2439736.78	1967 Sep 2 2034:35	Nike Apache	-	-	0.000	HCCH	MS	MSU/	Target	WSHR	-	-
1967-5450	2439736.78	1967 Sep 2 2034:35	Nike Apache	-	-	0.000	HCCH	MS	MSU/	Target	WSHR	-	-
1967-5451	2439736.78	1967 Sep 2 2034:35	Nike Apache	-	-	0.000	HCCH	MS	MSU/	Target	WSHR	-	-
1967-5452	2439736.78	1967 Sep 2 2034:35	Nike Apache	-	-	0.000	HCCH	MS	MSU/	Target	WSHR	-	-
1967-5453	2439736.78	1967 Sep 2 2034:35	Nike Apache	-	-	0.000	HCCH	MS	MSU/	Target	WSHR	-	-
1967-5454	2439736.78	1967 Sep 2 2034:35	Nike Apache	-	-	0.000	HCCH	MS	MSU/	Target	WSHR	-	-
1967-5455	2439736.78	1967 Sep 2 2034:35	Nike Apache	-	-	0.000	HCCH	MS	MSU/	Target	WSHR	-	-
1967-5456	2439736.78	1967 Sep 2 2034:35	Nike Apache	-	-	0.000	HCCH	MS	MSU/	Target	WSHR	-	-
1967-5457	2439736.78	1967 Sep 2 2034:35	Nike Apache	-	-	0.000	HCCH	MS	MSU/	Target	WSHR	-	-
1967-5458	2439736.78	1967 Sep 2 2034:35	Nike Apache	-	-	0.000	HCCH	MS	MSU/	Target	WSHR	-	-
1967-5459	2439736.78	1967 Sep 2 2034:35	Nike Apache	-	-	0.000	HCCH	MS	MSU/	Target	WSHR	-	-
1967-5460	2439736.78	1967 Sep 2 2034:35	Nike Apache	-	-	0.000	HCCH	MS					

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	OrbPay	Agency	Launch_Code	Group	Category	LTCite	Cite	Notes
1967-4152	2439811.50	1967 Nov 17	Nike Nike	-	Sandia 158-12	0.000	SAND	AS	SAND/Pepper	Test	JAircraft6901-74	-	-
1967-5841	2439813.92	1967 Nov 19 1008	Nike Iroquois	-	CHL AG07-314	0.000	AFCLR	SS	AFCLR/Hoult	Test	AFCLR	-	-
1967-5844	2439816.92	1967 Nov 22 1007	Nike Iroquois	-	CHL AG07-319	0.000	AFCLR	SS	AFCLR/	Test	AFCLR	-	-
1967-5846	2439817.74	1967 Nov 23 0539	Nike Tomahawk	-	IMSA 19.340E	0.000	GSFC	SS	UCR/Anderson	Plasma	SP-4008	-	-
1967-5852	2439823.55	1967 Nov 29 0106	Nike Apache	-	IMSA 14.260JH	0.000	GSFC	SS	SOPA/Hamutallah,Rees	Aeronomy	CR-139401	SR10,167	-
1967-5853	2439824.45	1967 Nov 29 2251	Nike Iroquois	-	CHL AF07-658	0.000	AFCLR	SS	AFCLR/Sissenwine	Aeron	WDORF	AFCLR	-
1967-5854	2439824.45	1967 Nov 29 2251	Nike Iroquois	-	CHL AF07-661	0.000	AFCLR	SS	AFCLR/Sissenwine	Aeron	WDORF	AFCLR	-
1967-5858	2439828.45	1967 Dec 3 2253	Nike Iroquois	-	CHL AF07-657	0.000	AFCLR	SS	AFCLR/Lemhard	Aeron	WDORF	AFCLR	-
1967-5859	2439828.45	1967 Dec 3 2253	Nike Iroquois	-	CHL AF07-662	0.000	AFCLR	SS	AFCLR/Lemhard	Aeron	WDORF	AFCLR	-
1967-5862	2439829.43	1967 Dec 4 2220	Nike Iroquois	-	CHL AF07-387	0.000	AFCLR	SS	AFCLR/Marcisi	Aeron	AFCLR	-	-
1967-5863	2439829.43	1967 Dec 4 2224	Nike Iroquois	-	CHL AF07-387	0.000	AFCLR	SS	AFCLR/Marcisi	Aeron	AFCLR	-	-
1967-5864	2439829.64	1967 Dec 5 0324	Nike Tomahawk	-	IMSA 19.660A	0.000	GSFC	SS	UAF/Murray	Aeronomy	WDORF	SP-4008	-
1967-5867	2439830.36	1967 Dec 5 2034:10	Nike Apache	-	IMSA 14.260E	0.000	AFCLR	SS	BRMS/Pepper,Kepp.	Aeron/Plasma	Noraba	WDORF	-
1967-5871	2439831.27	1967 Dec 6 1625	Nike Iroquois	-	CHL AF07-388	0.000	AFCLR	SS	AFCLR/Marcisi	Aeron	AFCLR	WDORF	-
1967-5877	2439836.41	1967 Dec 11 2156	Nike Hydrac	-	STV SR-069	0.000	SMSD	SS	USAF/	Aeron?	DTIC	-	-
1967-5878	2439837.41	1967 Dec 12 2148	Nike Apache	-	IMSA 14.3470A	0.000	GSFC	SS	UCU/Pearce	Aeronomy	WDORF	SP-4008	-
1967-5879	2439837.42	1967 Dec 12 2159	Nike CaJun	-	IMSA 10.2490H	0.000	GSFC	SS	GSFC/Smith	Aeronomy	WDORF	-	-
1967-5880	2439837.86	1967 Dec 13 0923	Nike Iroquois	-	CHL AG07-630	0.000	AFCLR	SS	AFCLR/Rosenberg	Aeron	AFCLR	-	-
1967-5881	2439837.89	1967 Dec 13 0923	Nike Iroquois	-	CHL AG07-631	0.000	AFCLR	SS	AFCLR/Rosenberg	Aeron	AFCLR	-	-
1967-5883	2439838.90	1967 Dec 14 0937	Nike Tomahawk	?	AFPC-943	0.000	AFPC	SS	AFCLR/Rosenberg	Aeron	ULrich	-	-
1967-5884	2439838.90	1967 Dec 14 0937	Nike Iroquois	-	CHL AH08-665	0.000	AFCLR	SS	AFCLR/Rosenberg	Aeron	AFCLR	-	-
1967-5885	2439841.46	1967 Dec 16 0258	Nike Iroquois	-	CHL AG07-653	0.000	AFCLR	SS	AFCLR/Sissenwine	Aeron	AFCLR	-	-
1967-5886	2439841.46	1967 Dec 16 2258	Nike Iroquois	-	CHL AG07-663	0.000	AFCLR	SS	AFCLR/Sissenwine	Aeron	WDORF	AFCLR	-
1967-5888	2439843.04	1967 Dec 18 1300	Nike Iroquois	-	CHL AG07-659	0.000	AFCLR	SS	AFCLR/Lemhard	Aeron	WDORF	AFCLR	-
1967-5889	2439843.04	1967 Dec 18 1300	Nike CaJun	-	IMSA 10.2470H	0.000	GSFC	SS	GSFC/Smith	Aeronomy	WDORF	AFCLR	-
1968-584	2439843.05	1967 Dec 19 1310	Nike CaJun	-	IMSA 10.2500H	0.000	GSFC	SS	GSFC/Smith	Aeronomy	WDORF	AFCLR	-
1968-584	2439843.05	1967 Dec 19 1310	Nike CaJun	-	IMSA 10.2500H	0.000	GSFC	SS	GSFC/Smith	Aeronomy	WDORF	AFCLR	-
1968-585	2439843.05	1968 Jan 16 1914	Nike CaJun	-	IMSA 10.2791	0.000	GSFC	SS	GSFC/Somyajulu	Ionos	WDORF/corr	-	-
1968-585	2439843.05	1968 Jan 16 1914	Nike CaJun	-	IMSA 10.2791	0.000	GSFC	SS	GSFC/Somyajulu	Ionos	WDORF	SR12,733	-
1968-586	2439843.05	1968 Jan 17 2308	Nike Iroquois	-	IMSA 10.2791	0.000	AFCLR	SS	AFCLR/Somyajulu	Aeron	AFCLR	SR12,733,AFCLR	-
1968-589	2439845.47	1968 Jan 17 2310	Nike Iroquois	-	CHL AG07-634	0.000	AFCLR	SS	AFCLR/Gotomb	Aeron	AFCLR	-	-
1968-591	2439847.01	1968 Jan 22 1215	Nike Tomahawk	-	IMSA 19.620H	0.000	GSFC	SS	AFCLR/Gotomb	Aeron	WDORF	-	-
1968-593	2439847.01	1968 Jan 22 1215	Nike Tomahawk	-	CHL AG07-635	0.000	AFCLR	SS	AFCLR/Gotomb	Aeron	WDORF	-	-
1968-595	2439847.06	1968 Jan 22 1320	Nike Iroquois	-	CHL AG07-635	0.000	AFCLR	SS	AFCLR/Gotomb	Aeron	WDORF	-	-
1968-596	2439847.75	1968 Jan 23 0553	Nike Tomahawk	-	IMSA 19.130E	0.000	GSFC	SS	AFCLR/Gotomb	Aeron	WDORF	SR12,733	-
1968-596	2439847.75	1968 Jan 23 0553	Nike Tomahawk	-	IMSA 19.130E	0.000	GSFC	SS	AFCLR/Gotomb	Aeron	WDORF	SR12,733	-
1968-596	2439847.75	1968 Jan 23 0553	Nike Tomahawk	-	IMSA 19.130E	0.000	GSFC	SS	AFCLR/Gotomb	Aeron	WDORF	SR12,733	-
1968-596	2439847.75	1968 Jan 23 0553	Nike Tomahawk	-	IMSA 19.130E	0.000	GSFC	SS	AFCLR/Gotomb	Aeron	WDORF	SR12,733	-
1968-596	2439847.75	1968 Jan 23 0553	Nike Tomahawk	-	IMSA 19.130E	0.000	GSFC	SS	AFCLR/Gotomb	Aeron	WDORF	SR12,733	-
1968-596	2439847.75	1968 Jan 23 0553	Nike Tomahawk	-	IMSA 19.130E	0.000	GSFC	SS	AFCLR/Gotomb	Aeron	WDORF	SR12,733	-
1968-596	2439847.75	1968 Jan 23 0553	Nike Tomahawk	-	IMSA 19.130E	0.000	GSFC	SS	AFCLR/Gotomb	Aeron	WDORF	SR12,733	-
1968-596	2439847.75	1968 Jan 23 0553	Nike Tomahawk	-	IMSA 19.130E	0.000	GSFC	SS	AFCLR/Gotomb	Aeron	WDORF	SR12,733	-
1968-596	2439847.75	1968 Jan 23 0553	Nike Tomahawk	-	IMSA 19.130E	0.000	GSFC	SS	AFCLR/Gotomb	Aeron	WDORF	SR12,733	-
1968-596	2439847.75	1968 Jan 23 0553	Nike Tomahawk	-	IMSA 19.130E	0.000	GSFC	SS	AFCLR/Gotomb	Aeron	WDORF	SR12,733	-
1968-596	2439847.75	1968 Jan 23 0553	Nike Tomahawk	-	IMSA 19.130E	0.000	GSFC	SS	AFCLR/Gotomb	Aeron	WDORF	SR12,733	-
1968-596	2439847.75	1968 Jan 23 0553	Nike Tomahawk	-	IMSA 19.130E	0.000	GSFC	SS	AFCLR/Gotomb	Aeron	WDORF	SR12,733	-
1968-596	2439847.75	1968 Jan 23 0553	Nike Tomahawk	-	IMSA 19.130E	0.000	GSFC	SS	AFCLR/Gotomb	Aeron	WDORF	SR12,733	-
1968-596	2439847.75	1968 Jan 23 0553	Nike Tomahawk	-	IMSA 19.130E	0.000	GSFC	SS	AFCLR/Gotomb	Aeron	WDORF	SR12,733	-
1968-596	2439847.75	1968 Jan 23 0553	Nike Tomahawk	-	IMSA 19.130E	0.000	GSFC	SS	AFCLR/Gotomb	Aeron	WDORF	SR12,733	-
1968-596	2439847.75	1968 Jan 23 0553	Nike Tomahawk	-	IMSA 19.130E	0.000	GSFC	SS	AFCLR/Gotomb	Aeron	WDORF	SR12,733	-
1968-596	2439847.75	1968 Jan 23 0553	Nike Tomahawk	-	IMSA 19.130E	0.000	GSFC	SS	AFCLR/Gotomb	Aeron	WDORF	SR12,733	-
1968-596	2439847.75	1968 Jan 23 0553	Nike Tomahawk	-	IMSA 19.130E	0.000	GSFC	SS	AFCLR/Gotomb	Aeron	WDORF	SR12,733	-
1968-596	2439847.75	1968 Jan 23 0553	Nike Tomahawk	-	IMSA 19.130E	0.000	GSFC	SS	AFCLR/Gotomb	Aeron	WDORF	SR12,733	-
1968-596	2439847.75	1968 Jan 23 0553	Nike Tomahawk	-	IMSA 19.130E	0.000	GSFC	SS	AFCLR/Gotomb	Aeron	WDORF	SR12,733	-
1968-596	2439847.75	1968 Jan 23 0553	Nike Tomahawk	-	IMSA 19.130E	0.000	GSFC	SS	AFCLR/Gotomb	Aeron	WDORF	SR12,733	-
1968-596	2439847.75	1968 Jan 23 0553	Nike Tomahawk	-	IMSA 19.130E	0.000	GSFC	SS	AFCLR/Gotomb	Aeron	WDORF	SR12,733	-
1968-596	2439847.75	1968 Jan 23 0553	Nike Tomahawk	-	IMSA 19.130E	0.000	GSFC	SS	AFCLR/Gotomb	Aeron	WDORF	SR12,733	-
1968-596	2439847.75	1968 Jan 23 0553	Nike Tomahawk	-	IMSA 19.130E	0.000	GSFC	SS	AFCLR/Gotomb	Aeron	WDORF	SR12,733	-
1968-596	2439847.75	1968 Jan 23 0553	Nike Tomahawk	-	IMSA 19.130E	0.000	GSFC	SS	AFCLR/Gotomb	Aeron	WDORF	SR12,733	-
1968-596	2439847.75	1968 Jan 23 0553	Nike Tomahawk	-	IMSA 19.130E	0.000	GSFC	SS	AFCLR/Gotomb	Aeron	WDORF	SR12,733	-
1968-596	2439847.75	1968 Jan 23 0553	Nike Tomahawk	-	IMSA 19.130E	0.000	GSFC	SS	AFCLR/Gotomb	Aeron	WDORF	SR12,733	-
1968-596	2439847.75	1968 Jan 23 0553	Nike Tomahawk	-	IMSA 19.130E	0.000	GSFC	SS	AFCLR/Gotomb	Aeron	WDORF	SR12,733	-
1968-596	2439847.75	1968 Jan 23 0553	Nike Tomahawk	-	IMSA 19.130E	0.000	GSFC	SS	AFCLR/Gotomb	Aeron	WDORF	SR12,733	-
1968-596	2439847.75	1968 Jan 23 0553	Nike Tomahawk	-	IMSA 19.130E	0.000	GSFC	SS	AFCLR/Gotomb	Aeron	WDORF	SR12,733	-
1968-596	2439847.75	1968 Jan 23 0553	Nike Tomahawk	-	IMSA 19.130E	0.000	GSFC	SS	AFCLR/Gotomb	Aeron	WDORF	SR12,733	-
1968-596	2439847.75	1968 Jan 23 0553	Nike Tomahawk	-	IMSA 19.130E	0.000	GSFC	SS	AFCLR/Gotomb	Aeron	WDORF	SR12,733	-
1968-596	2439847.75	1968 Jan 23 0553	Nike Tomahawk	-	IMSA 19.130E	0.000	GSFC	SS	AFCLR/Gotomb	Aeron	WDORF	SR12,733	-
1968-596	2439847.75	1968 Jan 23 0553	Nike Tomahawk	-	IMSA 19.130E	0.000	GSFC	SS	AFCLR/Gotomb	Aeron	WDORF	SR12,733	-
1968-596	2439847.75	1968 Jan 23 0553	Nike Tomahawk	-	IMSA 19.130E	0.000	GSFC	SS	AFCLR/Gotomb	Aeron	WDORF	SR12,733	-
1968-596	2439847.75	1968 Jan 23 0553	Nike Tomahawk	-	IMSA 19.130E	0.000	GSFC	SS	AFCLR/Gotomb	Aeron	WDORF	SR12,733	-
1968-596	2439847.75	1968 Jan 23 0553	Nike Tomahawk	-	IMSA 19.130E	0.000	GSFC	SS	AFCLR/Gotomb	Aeron	WDORF	SR12,733	-
1968-596	2439847.75	1968 Jan 23 0553	Nike Tomahawk	-	IMSA 19.130E	0.000	GSFC	SS	AFCLR/Gotomb	Aeron	WDORF	SR12,733	-
1968-596	2439847.75	1968 Jan 23 0553	Nike Tomahawk	-	IMSA 19.130E	0.000	GSFC	SS	AFCLR/Gotomb	Aeron	WDORF	SR12,733	-
1968-596	2439847.75	1968 Jan 23 0553	Nike Tomahawk	-	IMSA 19.130E	0.000	GSFC	SS	AFCLR/Gotomb	Aeron	WDORF	SR12,733	-
1968-596	2439847.75	1968 Jan 23 0553	Nike Tomahawk	-	IMSA 19.130E	0.000	GSFC	SS	AFCLR/Gotomb	Aeron	WDORF	SR12,733	-
1968-596	2439847.75	1968 Jan 23 0553	Nike Tomahawk	-	IMSA 19.130E	0.000	GSFC	SS	AFCLR/Gotomb	Aeron	WDORF	SR12,733	-
1968-596	2439847.75	1968 Jan 23 0553	Nike Tomahawk	-	IMSA 19.130E	0.000	GSFC	SS	AFCLR/Gotomb	Aeron	WDORF	SR12,733	-
1968-596	2439847.75	1968 Jan 23 0553	Nike Tomahawk	-									

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	OrbPay	Agency	Launch_Code	Group	Category	LTCite	Cite	Notes
1968-5240	2439946.50	1968 Apr	Nike Apache	?	BMTS	0.000	HICDH	MS	-	Target	WSMR	-	-
1968-5241	2439946.50	1968 Apr	Nike Apache	?	BMTS	0.000	HICDH	MS	-	Target	WSMR	-	-
1968-5251	2439950.67	1968 Apr 4 0859	Nike Apache	-	IMSAS 14. 2770E	0.000	GSCF	MS	GSFC/Evans	Auroral/Plasma	WSMR	-	-
1968-5254	2439950.51	1968 Apr 4 0732	Nike Tomahawk	?	IMSAS 19. 600E	0.000	GSCF	MS	GSFC/Evans	Auroral/Plasma	WDCRF	-	-
1968-5255	2439952.55	1968 Apr 6 0115:46	Nike Apache	?	K-IM-10	0.000	DLR	SF	MPE/	Auroral?	Horaba	SS081	[Centaur?]
1968-5242	2439955.16	1968 Apr 10	Nike Apache	?	BMTS	0.000	HICDH	MS	-	Target	WSMR	-	-
1968-5272	2439965.16	1968 Apr 23 1553	Nike Apache	-	IMSAS 14. 2411G	0.000	ISRO	MS	ISAS/PRL/Oba,Rao	XR Astron	WDCRF	SP-4401	-
1968-5275	2439965.70	1968 Apr 23 0453	Nike Tomahawk	-	IMSAS 19. 410E	0.000	GSCF	SF	UMI/UMW/Cahill,Potter	Auroral	FC	WDCRF	-
1968-475	2439969.75	1968 Apr 23 0554	Nike Apache	-	IMSAS 14. 3650H	0.000	GSCF	SF	UMI/Horvath	Aeronomy	WDCRF	SP-4010	-
1968-5280	2439971.16	1968 Apr 24 1544	Nike Tomahawk	-	IMSAS 14. 2601G	0.000	ISRO	SF	ISAS/PRL/Oba,Rao	XR Astron	WDCRF	SP-4401	-
1968-5282	2439971.75	1968 Apr 25 0501	Nike Apache	-	IMSAS 19. 390E	0.000	GSCF	SS	TRW/Bernstein	Ions	WDCRF	-	-
1968-5281	2439972.21	1968 Apr 25 1706	Nike Tomahawk	-	Round 121	0.000	HICDH	SS	UMS/	Target	AD738848	-	-
1968-5283	2439971.77	1968 Apr 25 0523	Nike Tomahawk	-	IMSAS 19. 420E	0.000	GSCF	SS	UMH/UMW/Cahill,Potter	Auroral	FC	-	-
1968-5243	2439973.50	1968 Apr 27	Nike Tomahawk	?	BMTS	0.000	HICDH	SF	UMH/Cahill	Target	WSMR	-	-
1968-5296	2439976.53	1968 Apr 30 0749	Nike Tomahawk	-	IMSAS 19. 400E	0.000	GSCF	SF	UMH/Cahill	Auroral	FC	-	-
1968-5299	2439978.35	1968 May 1 2025	Nike Tomahawk	-	CHL AH07.177	0.000	AFCLR	SS	AFCLR/Faire	Aeron	AFCLR	SR11,821	-
1968-5300	2439978.73	1968 May 2 0625	Nike Trojans	-	CHL AH07.178	0.000	AFCLR	SS	AFCLR/	Aeron	AFCLR	-	-
1968-5301	2439978.73	1968 May 2 0625	Nike Trojans	-	CHL AH07.325	0.000	AFCLR	SS	AFCLR/	Ions	AFCLR	-	-
1968-5302	2439978.90	1968 May 2 0715	Nike Trojans	-	CHL AG07.644	0.000	AFCLR	SS	AFCLR/Rosenberg	Aeron	AFCLR	-	-
1968-5304	2439979.72	1968 May 2 0611	Nike Tomahawk	-	IMSAS 19. 390E	0.000	GSCF	SS	UMH/Cahill	Auroral	WDCRF	-	-
1968-5307	2439983.79	1968 May 7 0700	Nike Trojans	-	CHL AG07.643	0.000	AFCLR	SS	SAND/	Aeron	AFCLR	-	-
1968-5308	2439985.18	1968 May 9 1625	Nike Apache	-	Round 122	0.000	HICDH	SS	HICDH/	XR Astron	AD738848	-	-
1968-5309	2439985.76	1968 May 9 0615	Nike Tomahawk	12	Sandia 152-114	0.000	SAND	SS	SAND/LRL/Harri,Seward	XR Astron	UCRL-50687	-	-
1968-5314	2439988.88	1968 May 12 0906	Nike Tomahawk	-	CHL AH08.670	0.000	AFCLR	SS	AFCLR/Rosenberg	Aeron	AFCLR	-	-
1968-5316	2439989.58	1968 May 13 0906	Nike Tomahawk	-	CHL AH08.666	0.000	AFCLR	SS	AFCLR/Rosenberg	Aeron	AFCLR	-	-
1968-5320	2439991.78	1968 May 15 0638:00	Nike Tomahawk	12	Sandia 152-111	0.000	SAND	SS	LRL/Seward,Hill	XR Astron	UCRL-50687	-	-
1968-5324	2439993.53	1968 May 17 0800	Nike Tomahawk	-	Sandia 154-106	0.000	SAND	SS	AFCLR/	Aeron	FDS	-	-
1968-5327	2439993.53	1968 May 17 0900	Nike Trojans	-	CHL AH07.571	0.000	AFCLR	SS	AFCLR/Faucher	Aeron	SP-219	-	-
1968-5328	2439993.59	1968 May 17 0945	Nike Trojans	-	Sandia 154-110	0.000	SAND	SS	SAND/	Aeron	SP-219	-	-
1968-5328	2439994.52	1968 May 18 0030	Nike Tomahawk	-	Sandia 152-112	0.000	SAND	SS	SAND/	Aeron	SP-219	-	-
1968-5329	2439994.52	1968 May 18 0133	Nike Tomahawk	-	Sandia 154-104	0.000	SAND	SS	SAND/	Aeron	SP-219	-	-
1968-5347	2440000.51	1968 May 24 0045	Nike Tomahawk	-	Sandia 154-113	0.000	SAND	SS	SAND/	Aeron	SP-219	-	-
1968-5346	2440000.61	1968 May 24 0245	Nike Tomahawk	-	Sandia 152-115	0.000	SAND	SS	SAND/	Aeron	SP-219	-	-
1968-5358	2440009.59	1968 Jun 2 0945	Nike Apache	?	SEDEE R1	0.000	ARPA	SS	UMF/LASJ/Davis	Aeron/Fields	PlainspaceS122, 67	WDCRF	-
1968-5359	2440012.19	1968 Jun 4 1655	Nike Apache	-	MSA 14. 3638T	0.000	GSCF/Wood	SS	GSCF/Wood	Test	WDCRF	-	-
1968-5367	2440017.02	1968 Jun 10 1095	Nike Apache	-	MSA 14. 2228E	0.000	GSCF	SS	GSCF/Fichtel,Bertsch	Plasma	FC	SP-4401	-
1968-5369	2440018.17	1968 Jun 10 1095	Nike Apache	-	MSA 14. 3638A	0.000	GSCF	SS	UMF/Henmaney	Plasma	FC	SP-4401	-
1968-5370	2440018.22	1968 Jun 10 1095	Nike Apache	-	MSA 14. 3638A	0.000	GSCF	SS	UMF/Henmaney	Plasma	FC	SP-4401	-
1968-5372	2440019.56	1968 Jun 11 1721:02	Nike Apache	-	SEDEE R2	0.000	SND	SS	UMF/Sitte	Plasma	FC	SR10,287	-
1968-5416	2440019.56	1968 Jun 12 0908	Nike Apache	-	SEDEE R2	0.000	SND	SS	UMF/Sitte	Plasma	FC	SR10,287	-
1968-5377	2440020.36	1968 Jun 12 0908	Nike Apache	?	MSA 14. 3641A	0.000	ARPA	SS	UMF/Sitte	Plasma	FC	SP-4401	-
1968-5378	2440020.36	1968 Jun 12 0908	Nike Apache	-	MSA 14. 3641A	0.000	ARPA	SS	UMF/Sitte	Plasma	FC	SP-4401	-
1968-5643	2440054.95	1968 Jul 17 0895	Nike Tomahawk	-	MSA 10. 2940M	0.000	GSCF	SS	GSCF/Saite	Plasma	FC	SR10,287	-
1968-5644	2440054.98	1968 Jul 17 0895	Nike Tomahawk	-	MSA 10. 2940M	0.000	GSCF	SS	GSCF/Saite	Plasma	FC	SR10,287	-
1968-5390	2440055.56	1968 Jul 18 0130	Nike Trojans	-	CHL AG07.681	0.000	AFCLR	SS	GSCF/Saite	Aeronomy	WDCRF	SP-4401	-
1968-5402	2440057.97	1968 Jul 19 1833	Nike Trojans	-	CHL AG07.681	0.000	AFCLR	SS	GSCF/Saite	Aeronomy	WDCRF	SP-4401	-
1968-5403	2440058.68	1968 Jul 23 0433	Nike Trojans	-	CHL AG07.629	0.000	AFCLR	SS	AFCLR/Marceli	Meteorites	AFCLR	-	-
1968-5405	2440058.68	1968 Jul 23 0438	Nike Trojans	-	CHL AG07.629	0.000	AFCLR	SS	AFCLR/Marceli	Meteorites	AFCLR	-	-
1968-5406	2440060.88	1968 Jul 23 0438	Nike Trojans	-	CHL AG07.629	0.000	AFCLR	SS	AFCLR/Marceli	Meteorites	AFCLR	-	-
1968-5407	2440060.88	1968 Jul 23 0438	Nike Trojans	-	CHL AG07.629	0.000	AFCLR	SS	AFCLR/Marceli	Meteorites	AFCLR	-	-
1968-5409	2440061.51	1968 Jul 24 0046	Nike Apache	-	CHL AG07.632	0.000	AFCLR	SS	AFCLR/Marceli	Meteorites	AFCLR	-	-
1968-5410	2440061.51	1968 Jul 24 0046	Nike Apache	-	CHL AG07.632	0.000	AFCLR	SS	AFCLR/Marceli	Meteorites	AFCLR	-	-
1968-5412	2440061.53	1968 Jul 24 0046	Nike Apache	-	CHL AG07.632	0.000	AFCLR	SS	AFCLR/Marceli	Meteorites	AFCLR	-	-
1968-5414	2440061.72	1968 Jul 24 0520	Nike Tomahawk	-	MSA 14. 3491A	0.000	GSCF	SS	UCI/Peaton	Aeronomy	WDCRF	-	-
1968-5413	2440061.91	1968 Jul 24 0954	Nike Apache	-	MSA 14. 3491A	0.000	GSCF	SS	UCI/Peaton	Aeronomy	WDCRF	-	-
1968-5414	2440061.92	1968 Jul 24 1006	Nike Apache	-	MSA 14. 3491A	0.000	GSCF	SS	UCI/Peaton	Aeronomy	WDCRF	-	-
1968-5415	2440061.93	1968 Jul 24 1019	Nike Tomahawk	-	MSA 14. 3491A	0.000	GSCF	SS	UCI/Peaton	Aeronomy	WDCRF	-	-
1968-5416	2440061.94	1968 Jul 24 1036	Nike Apache	-	MSA 14. 3590T	0.000	GSCF	SS	UTIC/Saith	Aeronomy	WDCRF	-	-
1968-5416	2440062.21	1968 Jul 24 1700	Nike Apache	-	MSA 14. 3590T	0.000	GSCF	SS	UTIC/Saith	Aeronomy	WDCRF	-	-
1968-5417	2440062.21	1968 Jul 24 1700	Nike Apache	-	MSA 14. 3590T	0.000	GSCF	SS	UTIC/Saith	Aeronomy	WDCRF	-	-
1968-5418	2440062.28	1968 Jul 24 1845	Nike Apache	-	MSA 10. 2541A	0.000	GSCF	SS	UTIC/Saith	Aeronomy	WDCRF	-	-
1968-5419	2440062.40	1968 Jul 24 2136	Nike Apache	-	MSA 14. 3611T	0.000	GSCF	SS	UTIC/Saith	Aeronomy	WDCRF	-	-
1968-5420	2440062.40	1968 Jul 24 2136	Nike Apache	-	MSA 14. 3611T	0.000	GSCF	SS	UTIC/Saith	Aeronomy	WDCRF	-	-
1968-5426	2440068.39	1968 Aug 7 1205	Nike Tomahawk	-	MSA 18. 3111A	0.000	GSCF	SS	UTIC/Saith	Aeronomy	WDCRF	-	-
1968-5434	2440076.60	1968 Aug 7 1205	Nike Tomahawk	-	MSA 18. 3111A	0.000	GSCF	SS	UTIC/Saith	Aeronomy	WDCRF	-	-
1968-5446	2440077.92	1968 Aug 8 1910:00	Nike Tomahawk	-	CHL AG07.273	0.000	AFCLR	SS	AFCLR/Strivaneak	Meteorites	WDCRF	-	-
1968-5447	2440077.92	1968 Aug 8 1910:00	Nike Tomahawk	-	CHL AG07.273	0.000	AFCLR	SS	AFCLR/Strivaneak	Meteorites	WDCRF	-	-
1968-5448	2440077.92	1968 Aug 8 1910:00	Nike Tomahawk	-	CHL AG07.273	0.000	AFCLR	SS	AFCLR/Strivaneak	Meteorites	WDCRF	-	-
1968-5449	2440077.92	1968 Aug 9 0702	Nike Apache	-	MSA 18. 562A	0.000	GSCF	SS	UMI/Horvath	Aeronomy	WDCRF	-	-
1968-5450	2440077.92	1968 Aug 9 0702	Nike Apache	-	MSA 18. 562A	0.000	GSCF	SS	UMI/Horvath	Aeronomy	WDCRF	-	-
1968-5451	2440079.88	1968 Aug 11 0904	Nike Apache	-	CHL AG07.274	0.000	AFCLR	SS	UMI/Horvath	Aeronomy	WDCRF	-	-
1968-5452	2440081.01	1968 Aug 12 1214	Nike Apache	-	STV SR-071	0.000	AFCLR	SS	USAF/	Aeronomy	DTIC	-	-
1968-5453	2440080.88	1968 Aug 12 0900	Nike Trojans	-	CHL AG07.275	0.000	AFCLR	SS	AFCLR/Strivaneak	Meteorites	WDCRF	-	-
1968-5454	2440080.86	1968 Aug 12 0838	Nike Apache	-	CHL AG07.275	0.000	AFCLR	SS	AFCLR/Strivaneak	Meteorites	WDCRF	-	-
1968-5457	2440083.88	1968 Aug 15 0900	Nike Trojans	-	MSA 14. 3361A	0.000	GSCF	SS	DID/Hemany	Meteorites	WDCRF	SR10,272	-
1968-5461	2440087.89	1968 Aug 19 0917	Nike Trojans	-	CHL AG07.636	0.000	AFCLR	SF	AFCLR/Strivaneak?	Meteorites	WDCRF	AFCLR SR12, 733	-
1968-5463	2440088.88	1968 Aug 20 0900	Nike Tomahawk	-	CHL AH08.649	0.000	AFCLR	SS	AFCLR/GsLomb	Aeron	AFCLR	SR12, 675	-
1968-5464	2440088.92	1968 Aug 20 1010	Nike Tomahawk	-	CHL AG07.685	0.000	AFCLR	SS	AFCLR/GsLomb	Aeron	AFCLR	SR12, 733	-
1968-5465	2440089.31	1968 Aug 20 1932	Nike Apache	-	MSA 14. 3011A	0.000	GSCF	SS	DID/Hemany	Meteorites	WDCRF	SR10	



Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Orbit	Agency	Launch_Code	Group	Category	LTCite	Cite	Notes
1969-S99	2440253.25	1969 Jan 31 1757	Mike Cajun	-	MMSA 10. 307GH	0.000	GSFC	SS	GSFC/Smith	Aeronomy	WDCRF	-	-
1969-S100	2440253.27	1969 Jan 31 1886	Nike Iroquois	-	CHL AH07 573	0.000	AFCLRL	SS	AFCLRL/Faucher	Aeron	AFCLRL	-	-
1969-S101	2440253.30	1969 Jan 31 1910	Nike Apache	-	MMSA 14. 3890A	0.000	AFCLRL	SS	UCU/Barth	Aeronomy	WDCRF	-	-
1969-S102	2440253.38	1969 Jan 31 2112	Nike Apache	-	MMSA 14. 3890B	0.000	GSFC	SS	GSFC/Heath	Aeronomy	WDCRF	-	-
1969-S103	2440253.39	1969 Jan 31 2125	Nike Cajun	-	MMSA 14. 3890H	0.000	GSFC	SS	GSFC/Smith,Krueger	Aeronomy	WDCRF	-	-
1969-S104	2440253.41	1969 Jan 31 2153	Nike Iroquois	-	CHL AH07 576	0.000	AFCLRL	SS	AFCLRL/?	Aeron	DTIC	-	-
1969-S106	2440257.13	1969 Feb 4 1511	Nike Hydac	-	STV 82	0.000	SMSD	SS	USAF/?	Aeron	DTIC	-	-
1969-S107	2440257.17	1969 Feb 4 1600	Nike Hydac	-	STV 83	0.000	SMSD	SS	USAF/?	Aeron	DTIC	-	-
1969-S109	2440257.44	1969 Feb 6 0939	Nike Cajun	-	MMSA 10. 300GH	0.000	GSFC	SS	GSFC/Smith	Aeronomy	WDCRF	-	-
1969-S112	2440259.21	1969 Feb 6 1709	Nike Apache	-	MMSA 10. 303GH	0.000	GSFC	SS	GSFC/Smith	Aeronomy	WDCRF	-	-
1969-S114	2440259.31	1969 Feb 6 1929	Nike Apache	-	MMSA 14. 3920U	0.000	GSFC	SS	UTIC/GCM/Bowhill	Ions	WDCRF	-	-
1969-S116	2440259.38	1969 Feb 6 2109	Nike Cajun	-	MMSA 10. 267GH	0.000	GSFC	SS	UCU/Barth	Aeronomy	WDCRF	-	-
1969-S118	2440260.69	1969 Feb 6 0440	Nike Apache	-	MMSA 14. 3690U	0.000	GSFC	SS	UTD/Heikkila	Ions	WDCRF	-	-
1969-S122	2440264.64	1969 Feb 12 0316	Nike Apache	-	MMSA 14. 3690U	0.000	GSFC	SS	UTD/Heikkila	Ions	WDCRF	-	-
1969-S128	2440266.47	1969 Feb 13 0541	Nike Cajun	-	Launcher test	0.000	MCC	SS	CRU/	Test	SP-4014	WISR	-
1969-S134	2440266.47	1969 Feb 13 2311	Nike Tomahawk	-	MMSA 19. 86CA	0.000	GSFC	SS	GCM/Bedinger	Aeronomy	WDCRF	-	-
1969-S136	2440266.54	1969 Feb 14 0100	Nike Apache	-	MMSA 14. 397CH	0.000	GSFC	SS	GCM/Bedinger	Aeronomy	WDCRF	-	-
1969-S138	2440266.64	1969 Feb 14 0319	Nike Apache	-	MMSA 14. 399CH	0.000	GSFC	SS	GCM/Bedinger	Aeronomy	WDCRF	-	-
1969-S137	2440266.71	1969 Feb 14 0500	Nike Apache	-	MMSA 14. 400CH	0.000	GSFC	SS	GCM/Bedinger	Aeronomy	WDCRF	-	-
1969-S138	2440266.79	1969 Feb 14 0500	Nike Apache	-	MMSA 14. 401CH	0.000	GSFC	SS	GCM/Bedinger	Aeronomy	WDCRF	-	-
1969-S139	2440266.88	1969 Feb 14 0900	Nike Apache	-	MMSA 14. 398CH	0.000	GSFC	SS	GCM/Bedinger	Aeronomy	WDCRF	-	-
1969-S140	2440266.97	1969 Feb 14 1113	Nike Apache	-	MMSA 14. 402CH	0.000	GSFC	SS	GCM/Bedinger	Aeronomy	WDCRF	-	-
1969-S143	2440270.33	1969 Feb 17 2002	Nike Apache	-	MMSA 14. 3740U	0.000	GSFC	SS	UTD/Schmerling,Heikkila	Ions	FC	-	-
1969-S149	2440273.63	1969 Feb 21 0301	Nike Apache	-	MMSA 14. 3070U	0.000	GSFC	SS	UTD/Schmerling,Heikkila	Ions	FC	-	-
1969-S154	2440280.18	1969 Feb 27 1614	Nike Hydac	-	STV 84	0.000	SMSD	SS	USAF/?	Aeron	DTIC	WISR	-
1969-S155	2440279.59	1969 Feb 27 0205	Nike Apache	-	MMSA 14. 3210E	0.000	GSFC	SS	RICE/Cloutier	Magnetospheric	DTIC	-	-
1969-S162	2440284.69	1969 Mar 4 0430	Nike Hydac	-	SEDEDE R3	0.000	USAF/ARPA	SS	RAF/Davis	Aeronomy Ba	WM-PPFR	-	-
1969-S163	2440285.05	1969 Mar 5 0930	Nike Tomahawk	-	SEDEDE R4	0.000	USAF/ARPA	SS	RAF/Davis	Aeronomy Ba	WM-PPFR	-	-
1969-S169	2440285.05	1969 Mar 7 1312	Nike Tomahawk	-	MMSA 19. 83BE	0.000	GSFC	SS	GSFC/Wescott	Magnetospheric	WDCRF	-	-
1969-S171	2440285.05	1969 Mar 8 0316	Nike Tomahawk	-	MMSA 19. 84GE	0.000	GSFC	SS	GSFC/Wescott	Magnetospheric	WDCRF	-	-
1969-S174	2440285.05	1969 Mar 9 0329	Nike Tomahawk	-	MMSA 19. 85DE	0.000	GSFC	SS	GSFC/Wescott	Magnetospheric	WDCRF	-	-
1969-S180	2440289.17	1969 Mar 11 0632	Nike Tomahawk	-	MMSA 19. 810A	0.000	GSFC	SS	UCU/Sharp,Barth	Aeronomy	WDCRF	-	-
1969-S181	2440292.09	1969 Mar 11 1408	Nike Hydac	-	SEDEDE R6	0.000	ARPA	SS	WFE/LASL/	Aeronomy	WDCRF	-	-
1969-S183	2440296.28	1969 Mar 15 1785	Nike Apache	-	K-MK-11	0.000	DFVLA	SS	RAF/Davis	Aeronomy/Fields	Horaba	WML-PPFR	-
1969-S186	2440297.25	1969 Mar 16 1805	Nike Apache	-	K-MK-10	0.000	DFVLA	SS	RAF/Davis	Aeronomy/Fields	Horaba	JBI524, 233	-
1969-S189	2440298.03	1969 Mar 17 1238	Nike Tomahawk	-	MMSA 19. 150E	0.000	DFVLA	SS	RAF/Davis	Aeronomy/Fields	Horaba	JBI524, 233	-
1969-S200	2440306.26	1969 Mar 17 1810	Nike Apache	-	K-MK-10	0.000	DFVLA	SS	RAF/Davis	Aeronomy/Fields	Horaba	JBI524, 233	-
1969-S494	2440306.30	1969 Mar 27 1905	Nike Apache	-	Smoke 10	0.000	LARC	AS	LARC/	Aeronomy	WDCRF	-	-
1969-S495	2440306.32	1969 Mar 27 1947	Nike Apache	-	Smoke 11	0.000	LARC	AS	LARC/	Aeronomy	WDCRF	-	-
1969-S230	2440306.52	1969 Mar 28 0725	Nike Cajun	-	MMSA 10. 309GH	0.000	GSFC	SS	GSFC/INTA/Smith	Aeronomy	WDCRF	-	-
1969-S232	2440306.51	1969 Mar 28 0752	Nike Cajun	-	MMSA 10. 310GH	0.000	GSFC	SS	GSFC/INTA/Smith	Aeronomy	WDCRF	-	-
1969-S234	2440309.50	1969 Mar 29 0045	Nike Cajun	-	MMSA 10. 310GH	0.000	GSFC	SS	GSFC/INTA/Smith	Aeronomy	WDCRF	-	-
1969-S236	2440309.50	1969 Mar 29 0045	Nike Cajun	-	MMSA 10. 310GH	0.000	GSFC	SS	GSFC/INTA/Smith	Aeronomy	WDCRF	-	-
1969-S239	2440321.36	1969 Apr 9 2036:32	Nike Apache	-	Ferdinand 20	0.000	NFF	SS	WFE/INDE/Zahr...Landmark	Aeronomy	WDCRF	-	-
1969-S282	2440324.47	1969 Apr 12 2319	Nike Apache	-	MMSA 14. 3253H	0.000	GSFC	SS	GSFC/Bertuch	Magnetospheric	WDCRF	-	-
1969-S284	2440325.07	1969 Apr 13 0445	Nike Apache	-	MMSA 14. 326DE	0.000	GSFC	SS	GSFC/Bertuch	Magnetospheric	WDCRF	-	-
1969-S287	2440325.07	1969 Apr 14 0105	Nike Apache	-	MMSA 14. 327DE	0.000	GSFC	SS	GSFC/Bertuch	Magnetospheric	WDCRF	-	-
1969-S274	2440328.78	1969 Apr 16 0105	Nike Apache	-	MMSA 14. 3370E	0.000	GSFC	SS	UTIC/Bowhill	Ions	WDCRF	-	-
1969-S276	2440328.78	1969 Apr 17 0557	Nike Tomahawk	-	MMSA 19. 80CE	0.000	GSFC	SS	TRU/Barnstein	Ions	WDCRF	-	-
1969-S281	2440328.74	1969 Apr 18 0547	Nike Tomahawk	-	CHL AH08 298	0.000	AFCLRL	SS	AFCLRL/Mancour	Magnetospheric	WDCRF	-	-
1969-S282	2440328.74	1969 Apr 18 0547	Nike Tomahawk	-	CHL AH07 297	0.000	AFCLRL	SS	AFCLRL/Mancour	Magnetospheric	WDCRF	-	-
1969-S301	2440338.21	1969 Apr 26 1700	Nike Apache	-	MMSA 14. 4031G	0.000	GSFC	SS	PRL/ISAS/Ohnishi Oda	XR Aeron	WDCRF	ApSSci12,378	-
1969-S303	2440338.21	1969 Apr 26 1700	Nike Apache	-	MMSA 14. 4041G	0.000	GSFC	SS	PRL/ISAS/Ohnishi Oda	XR Aeron	WDCRF	ApSSci12,378	-
1969-S317	2440349.50	1969 May 8 0005	Nike Cajun	-	MMSA 10. 311EM	0.000	GSFC	SS	INTA/	Aeronomy	WDCRF	-	-
1969-S319	2440354.63	1969 May 8 0815	Nike Cajun	-	MMSA 10. 312EM	0.000	GSFC	SS	INTA/	Aeronomy	WDCRF	-	-
1969-S320	2440351.57	1969 May 10 0436	Nike Cajun	-	MMSA 10. 321EM	0.000	GSFC	SS	INTA/	Aeronomy	WDCRF	-	-
1969-S321	2440354.29	1969 May 12 1882	Nike Apache	-	MMSA 14. 380G1	0.000	GSFC	SS	GSFC/Galberg	Ions	USCSPAR70	-	-
1969-S322	2440354.31	1969 May 12 1923.00	Nike Apache	-	MMSA 14. 3820M	0.000	GSFC	SS	INTA/Hornath	Aeronomy	WDCRF	-	-
1969-S323	2440354.31	1969 May 12 1923.00	Nike Apache	-	CHL AH07 678	0.000	AFCLRL	SS	AFCLRL/McLeod	Aeron	AFCLRL	-	-
1969-S324	2440354.56	1969 May 13 0123	Nike Iroquois	-	CHL AH07 674	0.000	AFCLRL	SS	AFCLRL/Rosenberg	Aeron	AFCLRL	-	-
1969-S326	2440355.13	1969 May 13 1760	Nike Iroquois	-	Smoke 111	0.000	LARC	AS	LARC/	Aeronomy	WDCRF	-	-
1969-S326	2440355.13	1969 May 13 1760	Nike Iroquois	-	Smoke 111	0.000	LARC	AS	LARC/	Aeronomy	WDCRF	-	-
1969-S327	2440356.55	1969 May 14 1510	Nike Iroquois	-	CHL AH07 686	0.000	AFCLRL	SS	AFCLRL/Galomb	Aeron	AFCLRL	-	-
1969-S328	2440356.56	1969 May 15 0105	Nike Iroquois	-	CHL AH07 679	0.000	AFCLRL	SS	AFCLRL/McLeod	Aeron	AFCLRL	-	-
1969-S328	2440356.56	1969 May 15 0105	Nike Iroquois	-	CHL AH07 679	0.000	AFCLRL	SS	AFCLRL/McLeod	Aeron	AFCLRL	-	-
1969-S332	2440358.79	1969 May 17 0653	Nike Tomahawk	-	Santha 152-127	0.000	SAND	SS	AFCLRL/Bosenberg	Aeron	AFCLRL	-	-
1969-S337	2440363.74	1969 May 22 0738	Nike Tomahawk	-	CHL AH07 687	0.000	AFCLRL	SS	AFCLRL/Bosenberg	Aeron	AFCLRL	-	-
1969-S338	2440363.82	1969 May 22 0738	Nike Tomahawk	-	CHL AH08 669	0.000	AFCLRL	SS	AFCLRL/Galomb	Aeron	AFCLRL	-	-
1969-S338	2440363.82	1969 May 22 0738	Nike Tomahawk	-	CHL AH08 669	0.000	AFCLRL	SS	AFCLRL/Galomb	Aeron	AFCLRL	-	-
1969-S340	2440364.14	1969 May 22 1300	Nike Tomahawk	-	Santha 152-125	0.000	SAND	SS	LASL/Reaton	Plasma/Active	LA-947	-	-
1969-S340	2440364.14	1969 May 22 1300	Nike Tomahawk	-	Santha 152-125	0.000	SAND	SS	LASL/Reaton	Plasma/Active	LA-947	-	-
1969-S348	2440370.37	1969 May 28 2048	Nike Apache	-	CHL 407 918-1	0.000	AFCLRL	SS	AFCLRL/Dandekar, Galomb	Aeron	AFCLRL	-	-
1969-S350	2440371.17	1969 Jun 4 1600	Nike Hydac	-	STV 95	0.000	SMSD	SS	DUD/Thickett,Hemenway	Aeronomy	AD738848	-	-
1969-S355	2440377.07	1969 Jun 9 1600	Nike Apache	-	STV 96	0.000	SMSD	SS	USMB/	Aeronomy	AD738848	-	-
1969-S384	2440400.03	1969 Jul 1 1239	Nike Apache	-	MMSA 14. 4200A	0.000	GSFC	SS	USMB/	Aeronomy	DTIC	-	-
1969-S384	2440400.03	1969 Jul 1 1239	Nike Apache	-	MMSA 14. 4200A	0.000	GSFC	SS	USMB/	Aeronomy	DTIC	-	-
1969-S389	2440404.42	1969 Jul 1 1930	Nike Iroquois	-	CHL AH07 888	0.000	SMSD	SS	USMB/	Aeronomy	DTIC	-	-
1969-S398	2440413.23	1969 Jul 10 1730	Nike Hydac	-	STV 88	0.000	SMSD	SS	USMB/	Aeronomy	DTIC	-	-
1969-S399	2440413.27	1969 Jul 10 1830	Nike Hydac	-	Ballistic round	0.000	SMSD	SS	USMB/	Aeronomy	DTIC	-	-
1969-S431	2440433.20	1969 Jul 30 1655	Nike Hydac	-	Ballistic round	0.000	SMSD	SS	USMB/	Aeronomy	DTIC	-	

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	OrbPay	Agency	Launch_Code	Group	Category	LTCite	Cite	Notes
1969-5445	2440440.65	1969 Aug 7 0836	Nike Iroquois	-	CRL AT07.179	0.000	AFORL	SS	AFORL/Faire	Aeron	FC	AFORL	-
1969-5446	2440440.69	1969 Aug 7 0430	Nike Iroquois	-	CRL A07.902-1	0.000	AFORL	SF	AFORL/Marci1	Aeron	FC	AFORL	-
1969-5451	2440446.68	1969 Aug 13 0423	Nike Iroquois	-	CRL A07.902-2	0.000	AFORL	SF	AFORL/Marci1	Aeron	FC	AFORL	-
1969-5462	2440446.77	1969 Aug 13 0630	Nike Apache	-	IMSA 14.4220A	0.000	GSCF	SS	DDU/Hemenway	Aeronomy/Meteorites	WDCRF	SR11.377	-
1969-5460	2440455.09	1969 Aug 21 1409	Nike Tomahawk	-	IMSA 19.786A	0.000	GSCF	SS	DDU/Carrigan	Aeronomy	WDCRF	-	-
1969-5461	2440455.13	1969 Aug 21 1509	Nike Tomahawk	-	IMSA 19.1026A	0.000	GSCF	SS	GSCF/ONI/Carrigan,Brace	Aeronomy	WDCRF	-	-
1969-5465	2440455.94	1969 Aug 22 1036	Nike Apache	-	IMSA 14.4230G	0.000	GSCF	SS	DDU/Hemenway	Meteorites	WDCRF	SR11.377	-
1969-5708	2440462.25	1969 Aug 28 1803	Nike Cajun	-	-	0.000	NRL?	SS	NRL/?	Aeron	NRL-FR-7105	-	-
1969-5709	2440462.52	1969 Aug 29 1000	Nike Cajun	-	-	0.000	NRL?	SS	NRL/?	Aeron	NRL-FR-7105	-	-
1969-5149	2440469.50	1969 Sep 5 0155	Aerobee 170	-	NRL MEA.234	0.000	NRL	SF	NRL/?	Solar	WDCRF	-	-
1969-5481	2440470.58	1969 Sep 5 0152	Nike Javelin	-	-	0.000	ARPA	SU	URF/LASL/	Aeron?	DTIC	-	-
1969-5484	2440471.58	1969 Sep 10 2046	Nike Javelin	-	-	0.000	ARPA	SU	URF/LASL/	Aeron?	DTIC	-	-
1969-5492	2440475.37	1969 Sep 10 2046	Nike Apache	-	IMSA 14.3950U	0.000	GSCF	SU	UTIC/GCM/Hechtly,Smith	Aeron?	WDCRF	-	-
1969-5495	2440476.49	1969 Sep 11 2344.14	Nike Tomahawk	12	Sandia 152-109	0.000	SAND	SS	LRL/	Ions	FDS	-	-
1969-5497	2440476.67	1969 Sep 12 0406	Nike Apache	-	IMSA 14.3940U	0.000	GSCF	SS	UTIC/Bowhill	Aeron	WDCRF	LRL-EMW73-172	-
1969-5500	2440478.57	1969 Sep 14 0142	Nike Javelin	-	-	0.000	ARPA	SS	URF/LASL/	Aeron?	DTIC	-	-
1969-5517	2440489.55	1969 Sep 25 0111	Nike Hydrac	-	STV 90	0.000	SARSD	SS	WSNR/	Aeron	DTIC	-	-
1969-5532	2440498.72	1969 Oct 1 0515	Nike Tomahawk	-	IMSA 19.710G	0.000	GSCF	SS	CTI/Garmire	XR Astron	WDCRF	-	-
1969-5537	2440505.58	1969 Oct 11 0200	Nike Iroquois	-	CRL A07.923	0.000	AFORL	SS	AFORL/Marci1	Aeron	AFORL	-	-
1969-5567	2440517.22	1969 Oct 22 1712	Nike Hydrac	-	STV 91	0.000	SARSD	SS	WSNR/	Aeron	DTIC	-	-
1969-5590	2440528.39	1969 Nov 2 2110	Nike Javelin	-	-	0.000	AFORL	SS	BRU/Mester,Swider	Ions	WDCRF	-	-
1969-5593	2440528.77	1969 Nov 3 0629	Nike Iroquois	-	CRL A07.902-3	0.000	AFORL	SS	AFORL/Marci1	Aeron	AFORL	-	-
1969-5594	2440528.78	1969 Nov 3 0642	Nike Iroquois	-	CRL AT07.396	0.000	AFORL	SS	AFORL/Marci1	Aeron	AFORL	-	-
1969-5595	2440528.61	1969 Nov 3 0730	Nike Iroquois	-	CRL A07.382	0.000	AFORL	SS	AFORL/Marci1	Aeron	AFORL	-	-
1969-5597	2440529.02	1969 Nov 3 1232	Nike Iroquois	-	CRL AT07.397	0.000	AFORL	SS	AFORL/Marci1	Aeron	AFORL	-	-
1969-5598	2440529.04	1969 Nov 3 1257:00	Nike Javelin	-	-	0.000	BRL	SS	BRU/Mester,Swider	Ions/Plasma	WDCRF	-	-
1969-5599	2440529.06	1969 Nov 3 1530	Nike Javelin	-	-	0.000	BRL	SS	BRU/Mester,Swider	Ions/Plasma	WDCRF	-	-
1969-5603	2440529.23	1969 Nov 3 1730	Nike Iroquois	-	CRL A07.886	0.000	AFORL	SS	AFORL/Marci1	Aeron	AFORL	-	-
1969-5604	2440529.24	1969 Nov 3 1747	Nike Iroquois	-	CRL A07.902-4	0.000	AFORL	SS	AFORL/Marci1	Aeron	AFORL	-	-
1969-5185	2440529.28	1969 Nov 3 1840	Nike Iroquois	-	CRL AT07.395	0.000	AFORL	SF	AFORL/Faire	Aeron	WDCRF	-	-
1969-5605	2440529.29	1969 Nov 3 1854	Nike Javelin	-	-	0.000	BRL	SS	BRU/Mester,Swider	Ions	WDCRF	-	-
1969-5607	2440529.46	1969 Nov 3 2306	Nike Iroquois	-	CRL AT07.398	0.000	AFORL	SS	AFORL/Faire	Aeron	WDCRF	-	-
1969-5611	2440530.44	1969 Nov 4 2130	Nike Javelin	-	-	0.000	BRL	SS	BRU/Mester,Swider	Ions	WDCRF	-	-
1969-5613	2440530.45	1969 Nov 4 2238:00	Nike Javelin	-	-	0.000	BRL	SS	BRU/Mester,Swider	Ions	WDCRF	-	-
1969-5614	2440530.46	1969 Nov 4 2230	Nike Iroquois	-	CRL A07.883	0.000	AFORL	SS	AFORL/Marci1	Aeron	AFORL	-	-
1969-5619	2440531.37	1969 Nov 5 2049	Nike Iroquois	-	CRL A07.889	0.000	AFORL	SS	AFORL/Marci1	Aeron	AFORL	-	-
1969-5622	2440532.02	1969 Nov 7 0253	Nike Iroquois	-	CRL A07.892	0.000	AFORL	SS	AFORL/Marci1	Aeron	AFORL	-	-
1969-5659	2440544.40	1969 Nov 18 2132:42	Nike Tomahawk	12	Sandia 152-155	0.000	SAND	SS	LRL/	Aeron	AFORL	AFORL	-
1969-5723	2440546.35	1969 Nov 20 2019	Nike Cajun	-	Ferdinand 21	0.000	AFORL	SS	LRL/?	Aeron	AFORL	LRL-EMW73-172	-
1969-5658	2440551.53	1969 Nov 26 0038:37	Nike Cajun	-	-	0.000	HTPF	SS	WPE/MDZ/Zahr.,Folkestead	Aeron/Ionos	WDCRF	AND	-
1969-5768	2440555.50	1969 Dec 5 0131	Nike Hydrac	-	-	0.000	AFORL	SS	AFORL	Aeron/Ionos	astronautix.com	-	-
1969-5769	2440560.36	1969 Dec 5 0930	Nike Iroquois	-	MSA 14.3580G	0.000	GSCF	SS	AFORL/Tackett,Hemenway	XR Astron	AD738648	-	-
1969-5859	2440560.39	1969 Dec 5 1000	Nike Iroquois	-	CRL A07.680	0.000	AFORL	SS	AFORL/Rosenberg	Aeron	AFORL	-	-
1969-5860	2440560.52	1969 Dec 5 1131	Nike Iroquois	-	CRL A07.681	0.000	AFORL	SS	AFORL/Rosenberg	Aeron	AFORL	-	-
1969-5861	2440561.00	1969 Dec 5 1131	Nike Iroquois	-	CRL A07.682	0.000	AFORL	SS	AFORL/Rosenberg	Aeron	AFORL	-	-
1969-5866	2440565.09	1969 Dec 10 0559	Nike Iroquois	-	CRL A07.697-1	0.000	AFORL	SS	AFORL/Sauidy	Auroral	AFORL	-	-
1969-5868	2440567.00	1969 Dec 12 0253	Nike Iroquois	-	CRL A07.682	0.000	KFNO	SF	KFNO/Rosenberg	Aeron	AFORL	-	-
1969-5864	2440568.58	1969 Dec 12 0253	Aerobee 170	-	RF3.26	0.000	KFNO	SF	KFNO/Aeron	Solar UV	DTIC	KFNO	-
1969-5871	2440568.78	1969 Dec 13 2222	Nike Cajun	-	MSA 14.445CH	0.000	AFORL	SS	GCM/Bedinger	Aeron	DTIC	-	-
1969-5872	2440568.78	1969 Dec 13 2222	Nike Apache	-	MSA 14.446CH	0.000	GSCF	SS	GCM/Bedinger	Aeronomy	SP-4014	WDCRF	-
1969-5746	2440569.52	1969 Dec 14 0030	Nike Hydrac	-	-	0.000	AFORL	SS	AFORL	Aeronomy	SP-4014	WDCRF	-
1969-5846	2440569.78	1969 Dec 14 0642	Nike Apache	-	MSA 14.445CH	0.000	AFORL	SS	AFORL	Aeronomy	SR11.1131	WDCRF	-
1969-5847	2440569.78	1969 Dec 14 0642	Nike Apache	-	MSA 14.446CH	0.000	AFORL	SS	AFORL	Aeronomy	SR11.1131	WDCRF	-
1969-5848	2440569.78	1969 Dec 14 0642	Nike Apache	-	MSA 14.445CH	0.000	AFORL	SS	AFORL	Aeronomy	SR11.1131	WDCRF	-
1969-5849	2440569.78	1969 Dec 14 0642	Nike Apache	-	MSA 14.446CH	0.000	AFORL	SS	AFORL	Aeronomy	SR11.1131	WDCRF	-
1969-5850	2440569.78	1969 Dec 14 0642	Nike Apache	-	MSA 14.445CH	0.000	AFORL	SS	AFORL	Aeronomy	SR11.1131	WDCRF	-
1969-5851	2440569.78	1969 Dec 14 0642	Nike Apache	-	MSA 14.446CH	0.000	AFORL	SS	AFORL	Aeronomy	SR11.1131	WDCRF	-
1969-5852	2440569.78	1969 Dec 14 0642	Nike Apache	-	MSA 14.445CH	0.000	AFORL	SS	AFORL	Aeronomy	SR11.1131	WDCRF	-
1969-5853	2440569.78	1969 Dec 14 0642	Nike Apache	-	MSA 14.446CH	0.000	AFORL	SS	AFORL	Aeronomy	SR11.1131	WDCRF	-
1969-5854	2440569.78	1969 Dec 14 0642	Nike Apache	-	MSA 14.445CH	0.000	AFORL	SS	AFORL	Aeronomy	SR11.1131	WDCRF	-
1969-5855	2440569.78	1969 Dec 14 0642	Nike Apache	-	MSA 14.446CH	0.000	AFORL	SS	AFORL	Aeronomy	SR11.1131	WDCRF	-
1969-5856	2440569.78	1969 Dec 14 0642	Nike Apache	-	MSA 14.445CH	0.000	AFORL	SS	AFORL	Aeronomy	SR11.1131	WDCRF	-
1969-5857	2440569.78	1969 Dec 14 0642	Nike Apache	-	MSA 14.446CH	0.000	AFORL	SS	AFORL	Aeronomy	SR11.1131	WDCRF	-
1969-5858	2440569.78	1969 Dec 14 0642	Nike Apache	-	MSA 14.445CH	0.000	AFORL	SS	AFORL	Aeronomy	SR11.1131	WDCRF	-
1969-5859	2440569.78	1969 Dec 14 0642	Nike Apache	-	MSA 14.446CH	0.000	AFORL	SS	AFORL	Aeronomy	SR11.1131	WDCRF	-
1969-5860	2440569.78	1969 Dec 14 0642	Nike Apache	-	MSA 14.445CH	0.000	AFORL	SS	AFORL	Aeronomy	SR11.1131	WDCRF	-
1969-5861	2440569.78	1969 Dec 14 0642	Nike Apache	-	MSA 14.446CH	0.000	AFORL	SS	AFORL	Aeronomy	SR11.1131	WDCRF	-
1969-5862	2440569.78	1969 Dec 14 0642	Nike Apache	-	MSA 14.445CH	0.000	AFORL	SS	AFORL	Aeronomy	SR11.1131	WDCRF	-
1969-5863	2440569.78	1969 Dec 14 0642	Nike Apache	-	MSA 14.446CH	0.000	AFORL	SS	AFORL	Aeronomy	SR11.1131	WDCRF	-
1969-5864	2440569.78	1969 Dec 14 0642	Nike Apache	-	MSA 14.445CH	0.000	AFORL	SS	AFORL	Aeronomy	SR11.1131	WDCRF	-
1969-5865	2440569.78	1969 Dec 14 0642	Nike Apache	-	MSA 14.446CH	0.000	AFORL	SS	AFORL	Aeronomy	SR11.1131	WDCRF	-
1969-5866	2440569.78	1969 Dec 14 0642	Nike Apache	-	MSA 14.445CH	0.000	AFORL	SS	AFORL	Aeronomy	SR11.1131	WDCRF	-
1969-5867	2440569.78	1969 Dec 14 0642	Nike Apache	-	MSA 14.446CH	0.000	AFORL	SS	AFORL	Aeronomy	SR11.1131	WDCRF	-
1969-5868	2440569.78	1969 Dec 14 0642	Nike Apache	-	MSA 14.445CH	0.000	AFORL	SS	AFORL	Aeronomy	SR11.1131	WDCRF	-
1969-5869	2440569.78	1969 Dec 14 0642	Nike Apache	-	MSA 14.446CH	0.000	AFORL	SS	AFORL	Aeronomy	SR11.1131	WDCRF	-
1969-5870	2440569.78	1969 Dec 14 0642	Nike Apache	-	MSA 14.445CH	0.000	AFORL	SS	AFORL	Aeronomy	SR11.1131	WDCRF	-
1969-5871	2440569.78	1969 Dec 14 0642	Nike Apache	-	MSA 14.446CH	0.000	AFORL	SS	AFORL	Aeronomy	SR11.1131	WDCRF	-
1969-5872	2440569.78	1969 Dec 14 0642	Nike Apache	-	MSA 14.445CH	0.000	AFORL	SS	AFORL	Aeronomy	SR11.1131	WDCRF	-
1969-5873	2440569.78	1969 Dec 14 0642	Nike Apache	-	MSA 14.446CH	0.000	AFORL	SS					





Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	OrbPay	Agency	Launch_Code	Group	Category	LTCite	Cite	Notes
1970-5475	2440806.56	1970 Aug 8 0132	Nike Apache	-	MSA 14. 465DA	0.000	RTG	SS	AFCLC/Chrest	Aeronomy	WDCRF	-	-
1970-5474	2440806.62	1970 Aug 8 0254	Nike Apache	-	MSA 14. 465DA	0.000	RTG	SS	DUU/Hemenway	Aeronomy	WDCRF	-	-
1970-5467	2440809.22	1970 Aug 10 1719	Nike Hydac	-	STV 95	0.000	SANSO	SS	SANSO/	Reentry test	WSNR	-	-
1970-5482	2440811.29	1970 Aug 12 1852	Aerobee 350	-	CHL A04. 0002-1	0.000	AFCLC	SS	AFCLC/Hinteregger	Plasma	AFCLC	-	-
1970-5483	2440812.19	1970 Aug 13 1631	Aerobee 170	-	MSA 17. 000E	0.000	GSCF	SS	UMI/Winckler	Solar EDV	AFCLC	-	-
1970-5484	2440820.15	1970 Aug 21 1539.00	Nike Apache	-	MSA 14. 431DH	0.000	GSCF	SS	UMI/Horvath	Aeronomy	AFCLC	-	-
1970-5491	2440820.71	1970 Aug 22 0468	Aerobee 170	-	MSA 13. 17DG	0.000	GSCF	SS	UMI/Horvath	UV Astron?	WDCRF	-	-
1970-5497	2440826.70	1970 Aug 28 0443	Nike Apache	-	MSA 14. 414UG	0.000	GSCF	SS	UMI/Horvath	XR Astron	WDCRF	-	-
1970-5495	2440827.67	1970 Aug 29 0400	Nike Hydac	-	STV 96	0.000	SANSO	SS	CIT/Garnire	Reentry test	DTIC	-	-
1970-5522	2440847.15	1970 Sep 17 1542	Nike Cajun	-	MSA 10. 324GR	0.000	GSCF	SS	GSCF/Thoen	Aeronomy	WDCRF	-	-
1970-5523	2440847.17	1970 Sep 17 1558.00	Nike Apache	-	MSA 14. 385DH	0.000	GSCF	SS	UMI/Horvath,Allen	Aeronomy	WDCRF	-	-
1970-5528	2440851.18	1970 Sep 21 1614.00	Nike Cajun	-	MSA 10. 327DH	0.000	GSCF	SS	UCU/Barth	Aeronomy	WDCRF	-	-
1970-5529	2440851.67	1970 Sep 22 0400	Nike Apache	-	MSA 14. 464UH	0.000	GSCF	SS	UMI/Horvath	Aeronomy	WDCRF	-	-
1970-5530	2440851.69	1970 Sep 22 0430	Aerobee 170	-	MSA 13. 070G	0.000	GSCF	SS	GSCF/Holt	XR Astron	WDCRF	-	-
1970-5533	2440851.89	1970 Sep 28 0901	Aerobee 170	-	MSA 13. 260G	0.000	GSCF	SS	ASE/Kellogg	XR Astron	WDCRF	-	-
1970-5546	2440861.07	1970 Oct 1 1346:12	Nike Apache	-	U-MX-50	0.000	DLR	SS	BRSM/	Ions/Plasma?	Horaba	-	MatrP5233,110
1970-5554	2440865.58	1970 Oct 6 1536:25	Nike Apache	-	U-MX-50	0.000	DLR	SS	BRSM/	Ions/Plasma?	Horaba	-	-
1970-5560	2440865.67	1970 Oct 6 0200	Nike Cajun	-	-	0.000	WSNR?	SS	WSNR/	Aeron	AD738848	-	-
1970-5561	2440865.67	1970 Oct 7 0200	Nike Cajun	-	-	0.000	WSNR?	SS	WSNR/	Aeron	AD738848	-	-
1970-5567	2440866.58	1970 Oct 7 0200	Nike Cajun	-	-	0.000	WSNR?	SS	WSNR/	Aeron	AD738848	-	-
1970-5571	2440866.59	1970 Oct 7 0200	Nike Cajun	-	-	0.000	WSNR?	SS	WSNR/	Aeron	AD738848	-	-
1970-5572	2440866.59	1970 Oct 7 0200	Nike Cajun	-	-	0.000	WSNR?	SS	WSNR/	Aeron	AD738848	-	-
1970-5573	2440866.59	1970 Oct 7 0200	Nike Cajun	-	-	0.000	WSNR?	SS	WSNR/	Aeron	AD738848	-	-
1970-5574	2440866.59	1970 Oct 7 0200	Nike Cajun	-	-	0.000	WSNR?	SS	WSNR/	Aeron	AD738848	-	-
1970-5575	2440866.59	1970 Oct 7 0200	Nike Cajun	-	-	0.000	WSNR?	SS	WSNR/	Aeron	AD738848	-	-
1970-5576	2440866.59	1970 Oct 7 0200	Nike Cajun	-	-	0.000	WSNR?	SS	WSNR/	Aeron	AD738848	-	-
1970-5577	2440866.59	1970 Oct 7 0200	Nike Cajun	-	-	0.000	WSNR?	SS	WSNR/	Aeron	AD738848	-	-
1970-5578	2440866.59	1970 Oct 7 0200	Nike Cajun	-	-	0.000	WSNR?	SS	WSNR/	Aeron	AD738848	-	-
1970-5579	2440866.59	1970 Oct 7 0200	Nike Cajun	-	-	0.000	WSNR?	SS	WSNR/	Aeron	AD738848	-	-
1970-5580	2440866.59	1970 Oct 7 0200	Nike Cajun	-	-	0.000	WSNR?	SS	WSNR/	Aeron	AD738848	-	-
1970-5581	2440866.59	1970 Oct 7 0200	Nike Cajun	-	-	0.000	WSNR?	SS	WSNR/	Aeron	AD738848	-	-
1970-5582	2440866.59	1970 Oct 7 0200	Nike Cajun	-	-	0.000	WSNR?	SS	WSNR/	Aeron	AD738848	-	-
1970-5583	2440866.59	1970 Oct 7 0200	Nike Cajun	-	-	0.000	WSNR?	SS	WSNR/	Aeron	AD738848	-	-
1970-5584	2440866.59	1970 Oct 7 0200	Nike Cajun	-	-	0.000	WSNR?	SS	WSNR/	Aeron	AD738848	-	-
1970-5585	2440866.59	1970 Oct 7 0200	Nike Cajun	-	-	0.000	WSNR?	SS	WSNR/	Aeron	AD738848	-	-
1970-5586	2440866.59	1970 Oct 7 0200	Nike Cajun	-	-	0.000	WSNR?	SS	WSNR/	Aeron	AD738848	-	-
1970-5587	2440866.59	1970 Oct 7 0200	Nike Cajun	-	-	0.000	WSNR?	SS	WSNR/	Aeron	AD738848	-	-
1970-5588	2440866.59	1970 Oct 7 0200	Nike Cajun	-	-	0.000	WSNR?	SS	WSNR/	Aeron	AD738848	-	-
1970-5589	2440866.59	1970 Oct 7 0200	Nike Cajun	-	-	0.000	WSNR?	SS	WSNR/	Aeron	AD738848	-	-
1970-5590	2440866.59	1970 Oct 7 0200	Nike Cajun	-	-	0.000	WSNR?	SS	WSNR/	Aeron	AD738848	-	-
1970-5591	2440866.59	1970 Oct 7 0200	Nike Cajun	-	-	0.000	WSNR?	SS	WSNR/	Aeron	AD738848	-	-
1970-5592	2440866.59	1970 Oct 7 0200	Nike Cajun	-	-	0.000	WSNR?	SS	WSNR/	Aeron	AD738848	-	-
1970-5593	2440866.59	1970 Oct 7 0200	Nike Cajun	-	-	0.000	WSNR?	SS	WSNR/	Aeron	AD738848	-	-
1970-5594	2440866.59	1970 Oct 7 0200	Nike Cajun	-	-	0.000	WSNR?	SS	WSNR/	Aeron	AD738848	-	-
1970-5595	2440866.59	1970 Oct 7 0200	Nike Cajun	-	-	0.000	WSNR?	SS	WSNR/	Aeron	AD738848	-	-
1970-5596	2440866.59	1970 Oct 7 0200	Nike Cajun	-	-	0.000	WSNR?	SS	WSNR/	Aeron	AD738848	-	-
1970-5597	2440866.59	1970 Oct 7 0200	Nike Cajun	-	-	0.000	WSNR?	SS	WSNR/	Aeron	AD738848	-	-
1970-5598	2440866.59	1970 Oct 7 0200	Nike Cajun	-	-	0.000	WSNR?	SS	WSNR/	Aeron	AD738848	-	-
1970-5599	2440866.59	1970 Oct 7 0200	Nike Cajun	-	-	0.000	WSNR?	SS	WSNR/	Aeron	AD738848	-	-
1970-5600	2440866.59	1970 Oct 7 0200	Nike Cajun	-	-	0.000	WSNR?	SS	WSNR/	Aeron	AD738848	-	-
1970-5601	2440866.59	1970 Oct 7 0200	Nike Cajun	-	-	0.000	WSNR?	SS	WSNR/	Aeron	AD738848	-	-
1970-5602	2440866.59	1970 Oct 7 0200	Nike Cajun	-	-	0.000	WSNR?	SS	WSNR/	Aeron	AD738848	-	-
1970-5603	2440866.59	1970 Oct 7 0200	Nike Cajun	-	-	0.000	WSNR?	SS	WSNR/	Aeron	AD738848	-	-
1970-5604	2440866.59	1970 Oct 7 0200	Nike Cajun	-	-	0.000	WSNR?	SS	WSNR/	Aeron	AD738848	-	-
1970-5605	2440866.59	1970 Oct 7 0200	Nike Cajun	-	-	0.000	WSNR?	SS	WSNR/	Aeron	AD738848	-	-
1970-5606	2440866.59	1970 Oct 7 0200	Nike Cajun	-	-	0.000	WSNR?	SS	WSNR/	Aeron	AD738848	-	-
1970-5607	2440866.59	1970 Oct 7 0200	Nike Cajun	-	-	0.000	WSNR?	SS	WSNR/	Aeron	AD738848	-	-
1970-5608	2440866.59	1970 Oct 7 0200	Nike Cajun	-	-	0.000	WSNR?	SS	WSNR/	Aeron	AD738848	-	-
1970-5609	2440866.59	1970 Oct 7 0200	Nike Cajun	-	-	0.000	WSNR?	SS	WSNR/	Aeron	AD738848	-	-
1970-5610	2440866.59	1970 Oct 7 0200	Nike Cajun	-	-	0.000	WSNR?	SS	WSNR/	Aeron	AD738848	-	-
1970-5611	2440866.59	1970 Oct 7 0200	Nike Cajun	-	-	0.000	WSNR?	SS	WSNR/	Aeron	AD738848	-	-
1970-5612	2440866.59	1970 Oct 7 0200	Nike Cajun	-	-	0.000	WSNR?	SS	WSNR/	Aeron	AD738848	-	-
1970-5613	2440866.59	1970 Oct 7 0200	Nike Cajun	-	-	0.000	WSNR?	SS	WSNR/	Aeron	AD738848	-	-
1970-5614	2440866.59	1970 Oct 7 0200	Nike Cajun	-	-	0.000	WSNR?	SS	WSNR/	Aeron	AD738848	-	-
1970-5615	2440866.59	1970 Oct 7 0200	Nike Cajun	-	-	0.000	WSNR?	SS	WSNR/	Aeron	AD738848	-	-
1970-5616	2440866.59	1970 Oct 7 0200	Nike Cajun	-	-	0.000	WSNR?	SS	WSNR/	Aeron	AD738848	-	-
1970-5617	2440866.59	1970 Oct 7 0200	Nike Cajun	-	-	0.000	WSNR?	SS	WSNR/	Aeron	AD738848	-	-
1970-5618	2440866.59	1970 Oct 7 0200	Nike Cajun	-	-	0.000	WSNR?	SS	WSNR/	Aeron	AD738848	-	-
1970-5619	2440866.59	1970 Oct 7 0200	Nike Cajun	-	-	0.000	WSNR?	SS	WSNR/	Aeron	AD738848	-	-
1970-5620	2440866.59	1970 Oct 7 0200	Nike Cajun	-	-	0.000	WSNR?	SS	WSNR/	Aeron	AD738848	-	-
1970-5621	2440866.59	1970 Oct 7 0200	Nike Cajun	-	-	0.000	WSNR?	SS	WSNR/	Aeron	AD738848	-	-
1970-5622	2440866.59	1970 Oct 7 0200	Nike Cajun	-	-	0.000	WSNR?	SS	WSNR/	Aeron	AD738848	-	-
1970-5623	2440866.59	1970 Oct 7 0200	Nike Cajun	-	-	0.000	WSNR?	SS	WSNR/	Aeron	AD738848	-	-
1970-5624	2440866.59	1970 Oct 7 0200	Nike Cajun	-	-	0.000	WSNR?	SS	WSNR/	Aeron	AD738848	-	-
1970-5625	2440866.59	1970 Oct 7 0200	Nike Cajun	-	-	0.000	WSNR?	SS	WSNR/	Aeron	AD738848	-	-
1970-5626	2440866.59	1970 Oct 7 0200	Nike Cajun	-	-	0.000	WSNR?	SS	WSNR/	Aeron	AD738848	-	-
1970-5627	2440866.59	1970 Oct 7 0200	Nike Cajun	-	-	0.000	WSNR?	SS	WSNR/	Aeron	AD738848	-	-
1970-5628	2440866.59	1970 Oct 7 0200	Nike Cajun	-	-	0.000	WSNR?	SS	WSNR/	Aeron	AD738848	-	-
1970-5629	2440866.59	1970 Oct 7 0200	Nike Cajun	-	-	0.000	WSNR?	SS	WSNR/	Aeron	AD738848	-	-
1970-5630	2440866.59	1970 Oct 7 0200	Nike Cajun	-	-	0.000	WSNR?	SS	WSNR/	Aeron	AD738848	-	-
1970-5631	2440866.59	1970 Oct 7 0200	Nike Cajun	-	-	0.000	WSNR?	SS	WSNR/	Aeron	AD738848	-	-
1970-5632	2440866.59	1970 Oct 7 0200	Nike Cajun	-	-	0.000	WSNR?	SS	WSNR/	Aeron	AD738848	-	-
1970-5633	2440866.59	1970 Oct 7 0200	Nike Cajun	-	-	0.000	WSNR?	SS	WSNR/	Aeron	AD738848	-	-
1970-5634	2440866.59	1970 Oct 7 0200	Nike Cajun	-</									



Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	OrbPay	Agency	Launch_Code	Group	Category	LTCite	Cite	Notes
1971-3651	2441154.24	1971 Jun 21 1745	Mike Cajun	-	-	0.000	USAF?	SS	AFCLL/7	Aeron	AD738848	-	-
1971-3374	2441160.05	1971 Jul 27 1318	Aerobee 170	-	3-Sphere Ejection 6	0.000	USAF?	SS	UMI/Sharpe,Hansen	Aeronomy	-	-	-
1971-3375	2441163.53	1971 Jul 31 0044:54	Mike Apache	-	IMSX 13.520A	0.000	USAF?	SS	DDU/MP/K/Hallgren	Aeronomy	WDKRF	SR13,1127	-
1971-3376	2441164.48	1971 Jul 31 2354:00	Mike Apache	-	IMSX 14.4680A	0.000	USAF?	SS	DDU/MP/K/Hallgren	Aeronomy	WDKRF	SR13,1127	-
1971-3377	2441163.50	1971 Aug 1 0000:00	Mike Apache	?	Capache	0.000	NSMCHS	NU	NSMCHS/	Target?	NSMR	-	-
1971-3378	2441172.01	1971 Aug 6 1211:46	Mike Cajun	-	Ferdinand 27	0.000	NTNF	SS	NDR/E/Johannessen,Folk.	UV Astron?	AND/J.Hadios93,128	-	Mature235,215
1971-3387	2441173.69	1971 Aug 10 0040	Aerobee 170	-	-	0.000	USAF?	SS	NRL/Carruthers	UV Astron?	-	-	-
1971-3388	2441176.38	1971 Aug 12 2114	Aerobee 170	-	IMSX 13.180G	0.000	USAF?	SS	NRL/Carruthers	UV Astron?	-	-	-
1971-3389	2441183.34	1971 Aug 20 0745	Mike Apache	-	IMSX 13.086G	0.000	USAF?	SS	NRL/Brueckner,Tousley	Solar	-	-	-
1971-3394	2441183.62	1971 Aug 20 0745	Mike Apache	-	IMSX 14.4910H	0.000	USAF?	SS	ESSA/ONI/Henderson,Horr.	Aeronomy	WDKRF	-	-
1971-3399	2441183.89	1971 Aug 20 0949	Mike Apache	-	IMSX 14.4920H	0.000	USAF?	SS	ESSA/ONI/Henderson,Horr.	Aeronomy	WDKRF	-	-
1971-3400	2441183.91	1971 Aug 20 0944	Mike Apache	-	IMSX 14.4750I	0.000	USAF?	SS	UTIC/Boothill	Aeronomy	WDKRF	-	-
1971-3401	2441183.93	1971 Aug 20 1014	Mike Apache	-	IMSX 14.4760I	0.000	USAF?	SS	UTIC/Boothill	Ions	WDKRF	-	-
1971-3402	2441184.33	1971 Aug 20 1365	Mike Apache	-	IMSX 14.4770I	0.000	USAF?	SS	UTIC/Boothill	Ions	WDKRF	-	-
1971-3403	2441185.61	1971 Aug 22 0234	Mike Apache	-	-	0.000	DHI	SS	ESSA/ONI/Henderson,Horr.	Aeronomy	WDKRF	-	-
1971-3404	2441187.60	1971 Aug 24 0224	Mike Apache	-	-	0.000	DHI	SS	DHI/CORN/Nilkenisen	Ions	WDKRF	-	-
1971-3414	2441194.50	1971 Sep 7 0758	Mike Apache	?	Capache	0.000	NSMCHS	NU	NSMCHS/	Target?	NSMR	-	-
1971-3415	2441194.50	1971 Sep 7 2000	Mike Apache	?	IMSX 14.4340E	0.000	USAF?	SS	AFCLL/7	Plasma	AD738848	-	-
1971-3430	2441202.33	1971 Sep 7 2357	Mike Apache	-	3-Sphere Ejection 7	0.000	USAF?	SS	AFCLL/7	Plasma	AD738848	-	-
1971-3435	2441202.90	1971 Sep 16 0956	Mike Apache	-	IMSX 14.4940A	0.000	USAF?	SS	GCM/Bedinger	Aeronomy	WDKRF	-	-
1971-3449	2441214.41	1971 Sep 19 2156	Mike Apache	-	IMSX 14.4940A	0.000	USAF?	SS	GCM/Bedinger	Aeronomy	WDKRF	-	-
1971-3451	2441214.41	1971 Sep 19 2156	Mike Apache	-	IMSX 10.3490H	0.000	USAF?	SS	GSCF/Theon	Aeronomy	WDKRF	-	-
1971-3454	2441214.65	1971 Sep 20 0530	Mike Cajun	-	IMSX 10.3490H	0.000	USAF?	SS	GSCF/Theon	Aeronomy	WDKRF	-	-
1971-3455	2441214.76	1971 Sep 20 0615	Mike Cajun	-	IMSX 10.3520H	0.000	USAF?	SS	GSCF/Theon	Aeronomy	WDKRF	-	-
1971-3457	2441214.90	1971 Sep 20 0930	Mike Cajun	-	IMSX 10.3520H	0.000	USAF?	SS	GSCF/Theon	Aeronomy	WDKRF	-	-
1971-3458	2441215.11	1971 Sep 20 1445	Mike Cajun	-	IMSX 10.3550H	0.000	USAF?	SS	GSCF/Theon	Aeronomy	WDKRF	-	-
1971-3459	2441215.29	1971 Sep 20 1900	Mike Cajun	-	IMSX 10.3550H	0.000	USAF?	SS	GSCF/Theon	Aeronomy	WDKRF	-	-
1971-3460	2441215.70	1971 Sep 21 0005	Mike Cajun	-	IMSX 10.3560H	0.000	USAF?	SS	GSCF/Theon	Aeronomy	WDKRF	-	-
1971-3461	2441215.70	1971 Sep 21 0450	Mike Cajun	-	IMSX 10.3510H	0.000	USAF?	SS	GSCF/Theon	Aeronomy	WDKRF	-	-
1971-3462	2441215.98	1971 Sep 21 0914	Mike Cajun	-	IMSX 10.3570H	0.000	USAF?	SS	GSCF/Theon	Aeronomy	WDKRF	-	-
1971-3463	2441215.98	1971 Sep 21 0930	Mike Cajun	-	CHL A07.017-1	0.000	AFCLL	SS	AFCLL/Cohen	Aeronomy	WDKRF	-	-
1971-3464	2441216.08	1971 Sep 21 1400	Mike Cajun	-	IMSX 10.3580H	0.000	USAF?	SS	GSCF/Theon	Aeronomy	WDKRF	-	-
1971-3465	2441216.28	1971 Sep 21 1840	Mike Cajun	-	IMSX 10.3590H	0.000	USAF?	SS	GSCF/Theon	Aeronomy	WDKRF	-	-
1971-3466	2441216.49	1971 Sep 21 2340	Mike Cajun	-	IMSX 10.3600H	0.000	USAF?	SS	GSCF/Theon	Aeronomy	WDKRF	-	-
1971-3467	2441216.66	1971 Sep 22 0350	Mike Cajun	-	IMSX 10.3510H	0.000	USAF?	SS	GSCF/Theon	Aeronomy	WDKRF	-	-
1971-3468	2441217.19	1971 Sep 22 1630	Mike Cajun	-	3-Sphere Ejection 8	0.000	USAF?	SS	AFCLL/7	Aeronomy	AD738848	-	-
1971-3471	2441221.85	1971 Sep 27 0630	Mike Apache	-	CHL A07.914-1	0.000	AFCLL	SS	AFCLL/Cohen	Aeronomy	WDKRF	-	-
1971-3472	2441224.50	1971 Oct 4 1830	Mike Apache	?	Capache	0.000	NSMCHS	NU	NSMCHS/	Target?	NSMR	-	-
1971-3481	2441230.27	1971 Oct 5 1830	Mike Apache	-	CHL A05.103-2	0.000	AFCLL	SS	AFCLL/Weeks	Aeronomy	WDKRF	-	-
1971-3483	2441230.52	1971 Oct 6 0832	Mike Apache	-	CHL A07.913-6A	0.000	AFCLL	SS	AFCLL/Weeks	Aeronomy	WDKRF	-	-
1971-3484	2441230.52	1971 Oct 6 0832	Mike Apache	-	CHL A07.101-9	0.000	AFCLL	SS	AFCLL/Thibrick	Aeronomy	WDKRF	-	-
1971-3485	2441230.53	1971 Oct 6 0942	Mike Apache	-	CHL A07.102-4	0.000	AFCLL	SS	AFCLL/Thibrick	Aeronomy	WDKRF	-	-
1971-3486	2441230.54	1971 Oct 6 0942	Mike Apache	-	CHL A07.913-6	0.000	AFCLL	SS	AFCLL/Faire	Aeronomy	WDKRF	-	-
1971-3489	2441230.61	1971 Oct 6 1246	Mike Apache	-	CHL A07.902-6	0.000	AFCLL	SS	AFCLL/Faire	Aeronomy	WDKRF	-	-
1971-3490	2441231.01	1971 Oct 6 1310	Mike Apache	-	CHL A07.101-3	0.000	AFCLL	SS	AFCLL/Marcic1	Aeronomy	WDKRF	-	-
1971-3500	2441231.03	1971 Oct 6 1344	Mike Apache	-	CHL A07.101-3	0.000	AFCLL	SS	AFCLL/Marcic1	Aeronomy	WDKRF	-	-
1971-3503	2441231.05	1971 Oct 6 1344	Mike Apache	-	CHL A07.101-2	0.000	AFCLL	SS	AFCLL/Marcic1	Aeronomy	WDKRF	-	-
1971-3512	2441232.84	1971 Oct 8 1305	Mike Apache	-	NRL W61.263	0.000	NRL	SS	NRL/Ty/Holmes	UV Astron	Ap1195,643	Ap1195,643	-
1971-3513	2441232.84	1971 Oct 8 1305	Mike Apache	-	CHL A07.101-2	0.000	AFCLL	SS	AFCLL/Marcic1	UV Astron	Ap1195,643	Ap1195,643	-
1971-3521	2441232.30	1971 Oct 13 1938	Mike Cajun	-	CHL A07.914-1	0.000	USAF?	SS	GSCF/3-shberg	Ions	WDKRF	50787,7667	-
1971-3522	2441234.31	1971 Oct 13 1938	Mike Cajun	-	CHL A07.914-1	0.000	USAF?	SS	GSCF/3-shberg	Ions	WDKRF	50787,7667	-
1971-3523	2441234.31	1971 Oct 13 1938	Mike Cajun	-	CHL A07.914-1	0.000	USAF?	SS	GSCF/3-shberg	Ions	WDKRF	50787,7667	-
1971-3524	2441234.31	1971 Oct 13 1938	Mike Cajun	-	CHL A07.914-1	0.000	USAF?	SS	GSCF/3-shberg	Ions	WDKRF	50787,7667	-
1971-3525	2441234.31	1971 Oct 13 1938	Mike Cajun	-	CHL A07.914-1	0.000	USAF?	SS	GSCF/3-shberg	Ions	WDKRF	50787,7667	-
1971-3526	2441234.31	1971 Oct 13 1938	Mike Cajun	-	CHL A07.914-1	0.000	USAF?	SS	GSCF/3-shberg	Ions	WDKRF	50787,7667	-
1971-3527	2441234.31	1971 Oct 13 1938	Mike Cajun	-	CHL A07.914-1	0.000	USAF?	SS	GSCF/3-shberg	Ions	WDKRF	50787,7667	-
1971-3528	2441234.31	1971 Oct 13 1938	Mike Cajun	-	CHL A07.914-1	0.000	USAF?	SS	GSCF/3-shberg	Ions	WDKRF	50787,7667	-
1971-3529	2441234.31	1971 Oct 13 1938	Mike Cajun	-	CHL A07.914-1	0.000	USAF?	SS	GSCF/3-shberg	Ions	WDKRF	50787,7667	-
1971-3530	2441234.31	1971 Oct 13 1938	Mike Cajun	-	CHL A07.914-1	0.000	USAF?	SS	GSCF/3-shberg	Ions	WDKRF	50787,7667	-
1971-3531	2441234.31	1971 Oct 13 1938	Mike Cajun	-	CHL A07.914-1	0.000	USAF?	SS	GSCF/3-shberg	Ions	WDKRF	50787,7667	-
1971-3532	2441234.31	1971 Oct 13 1938	Mike Cajun	-	CHL A07.914-1	0.000	USAF?	SS	GSCF/3-shberg	Ions	WDKRF	50787,7667	-
1971-3533	2441234.31	1971 Oct 13 1938	Mike Cajun	-	CHL A07.914-1	0.000	USAF?	SS	GSCF/3-shberg	Ions	WDKRF	50787,7667	-
1971-3534	2441234.31	1971 Oct 13 1938	Mike Cajun	-	CHL A07.914-1	0.000	USAF?	SS	GSCF/3-shberg	Ions	WDKRF	50787,7667	-
1971-3535	2441234.31	1971 Oct 13 1938	Mike Cajun	-	CHL A07.914-1	0.000	USAF?	SS	GSCF/3-shberg	Ions	WDKRF	50787,7667	-
1971-3536	2441234.31	1971 Oct 13 1938	Mike Cajun	-	CHL A07.914-1	0.000	USAF?	SS	GSCF/3-shberg	Ions	WDKRF	50787,7667	-
1971-3537	2441234.31	1971 Oct 13 1938	Mike Cajun	-	CHL A07.914-1	0.000	USAF?	SS	GSCF/3-shberg	Ions	WDKRF	50787,7667	-
1971-3538	2441234.31	1971 Oct 13 1938	Mike Cajun	-	CHL A07.914-1	0.000	USAF?	SS	GSCF/3-shberg	Ions	WDKRF	50787,7667	-
1971-3539	2441234.31	1971 Oct 13 1938	Mike Cajun	-	CHL A07.914-1	0.000	USAF?	SS	GSCF/3-shberg	Ions	WDKRF	50787,7667	-
1971-3540	2441234.31	1971 Oct 13 1938	Mike Cajun	-	CHL A07.914-1	0.000	USAF?	SS	GSCF/3-shberg	Ions	WDKRF	50787,7667	-
1971-3541	2441234.31	1971 Oct 13 1938	Mike Cajun	-	CHL A07.914-1	0.000	USAF?	SS	GSCF/3-shberg	Ions	WDKRF	50787,7667	-
1971-3542	2441234.31	1971 Oct 13 1938	Mike Cajun	-	CHL A07.914-1	0.000	USAF?	SS	GSCF/3-shberg	Ions	WDKRF	50787,7667	-
1971-3543	2441234.31	1971 Oct 13 1938	Mike Cajun	-	CHL A07.914-1	0.000	USAF?	SS	GSCF/3-shberg	Ions	WDKRF	50787,7667	-
1971-3544	2441234.31	1971 Oct 13 1938	Mike Cajun	-	CHL A07.914-1	0.000	USAF?	SS	GSCF/3-shberg	Ions	WDKRF	50787,7667	-
1971-3545	2441234.31	1971 Oct 13 1938	Mike Cajun	-	CHL A07.914-1	0.000	USAF?	SS	GSCF/3-shberg	Ions	WDKRF	50787,7667	-
1971-3546	2441234.31	1971 Oct 13 1938	Mike Cajun	-	CHL A07.914-1	0.000	USAF?	SS	GSCF/3-shberg	Ions	WDKRF	50787,7667	-
1971-3547	2441234.31	1971 Oct 13 1938	Mike Cajun	-	CHL A07.914-1	0.000	USAF?	SS	GSCF/3-shberg	Ions	WDKRF	50787,7667	-
1971-3548	2441234.31	1971 Oct 13 1938	Mike Cajun	-	CHL A07.914-1	0.000	USAF?	SS	GSCF/3-shberg	Ions	WDKRF	50787,7667	-
1971-3549													

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	OrbitPay	Agency	Launch_Code	Group	Category	LTCite	Cite	Notes
1972-861	2441349-98	1972 Feb 2 11:25:00	Mike Tomahawk	-	IMSA 19. 1110UE	0.000	GSFC	SS	RICE/Cloutier	Plasma	ww.pfrr.alaska.edu	-	-
1972-868	2441354-22	1972 Feb 6 17:15	Mike Troquois	-	CHL A07.001-1	0.000	AFORL	SS	AFORL/Marcisi	Aeron	AFORL	-	-
1972-869	2441356-48	1972 Feb 7 23:33:34	Mike Tomahawk	-	IMSA 19. 1311A	0.000	GSFC/RTG	SS	RTG/Eugstrom	Aeronomy	WDCRF	-	-
1972-877	2441361.47	1972 Feb 13 23:20:11	Mike Tomahawk	-	IMSA 19. 1371E	0.000	GSFC	SS	MDRE/Haehum	Plasma	WDCRF	AMD	-
1972-880	2441362.68	1972 Feb 15 04:21	Mike Apache	-	IMSA 14. 4860A	0.000	GSFC	SS	PITTI/Zipf	Aeronomy	WDCRF	-	-
1972-885	2441366.72	1972 Feb 15 05:23	Aerobee 170	-	IMSA 13. 0820G	0.000	GSFC	SS	UMI/Kraushaar	XR Astron	WDCRF	-	-
1972-891	2441372.81	1972 Feb 25 07:22	Mike Tomahawk	-	IMSA 19. 1120E	0.000	GSFC	AS	RICE/Cloutier	Plasma	WDCRF	-	-
1972-820	2441377.28	1972 Feb 29 19:45	Mike	-	-	0.000	LARON	AS	LARC/Pierce	Test	FDC	SFLT15_392	-
1972-8102	2441383.72	1972 Mar 7 05:16:00	Mike Tomahawk	-	IMSA 19. 1410E	0.000	GSFC	SS	GSFC/Hegner	Plasma	WDCRF	-	-
1972-8104	2441384.10	1972 Mar 7 14:28:00	Mike Tomahawk	-	IMSA 19. 1420E	0.000	GSFC	SS	GSFC/Hegner	Plasma	WDCRF	-	-
1972-8108	2441386.00	1972 Mar 9 12:00	Mike Tomahawk	-	IMSA 19. 730E	0.000	GSFC	SS	UMI/Lockwood	Plasma	WDCRF	-	-
1972-8109	2441386.09	1972 Mar 9 14:08:00	Mike Apache	-	IMSA 19. 1430E	0.000	GSFC	SS	GSFC/Hegner	Plasma	WDCRF	-	-
1972-8110	2441390.17	1972 Mar 13 16:00	Mike Apache	-	ISRC-P0-4	0.000	CHL	SS	CRM/Broglio	Aeron	WDCRF	Serra	-
1972-8112	2441391.17	1972 Mar 14 15:58	Mike Apache	-	ISRC-P0-5	0.000	CHL	SS	CRM/Broglio	Aeron	WDCRF	Serra	-
1972-8113	2441392.17	1972 Mar 15 16:00	Mike Apache	-	ISRC-P0-6	0.000	CHL	SS	CRM/Broglio	Aeron	WDCRF	Serra	-
1972-8118	2441393.15	1972 Mar 16 15:43	Mike Apache	-	ISRC-P0-7	0.000	CHL	SS	CRM/Broglio	Aeron	WDCRF	Serra	-
1972-8152	2441398.07	1972 Mar 21 13:55:02	Aerobee 170	-	FP3-38	0.000	KPNO	SS	CHL/Novick	XR Astron	ApJ183.L63	WDC	-
1972-826	2441398.96	1972 Mar 22 01:21:38	Mike Cajun	-	Ferdinand 28	0.000	HTHF	SF	MDRE/Arnold,Folk	Test/Aeron/Ionos	AMD	WDC	-
1972-8133	2441398.95	1972 Mar 22 02:22	Mike Apache	-	ISRC-P0-9	0.000	CHL	SS	CRM/Broglio	Ionos	WDCRF	Serra	-
1972-8137	2441401.93	1972 Mar 25 10:15	Mike Javelin	-	IRL (Omnom)	0.000	WFF	SS	IRL/Davis	Aeron	SP-4017	-	-
1972-8139	2441403.52	1972 Mar 27 10:08	Mike Javelin	-	IRL (Omnom)	0.000	WFF	SS	IRL/Davis	Aeron	SP-4017	-	-
1972-8140	2441405.92	1972 Mar 29 10:07	Mike Javelin	-	IRL (Omnom)	0.000	WFF	SS	IRL/Davis	Aeron	SP-4017	-	-
1972-8146	2441406.71	1972 Apr 1 05:05	Aerobee 170	-	IMSA 13. 0270G	0.000	GSFC	SS	ASP/gornstein	XR Astron	ASE-3062	SP-4017	-
1972-8147	2441410.92	1972 Apr 1 10:06	Mike Javelin	-	IRL (Omnom)	0.000	WFF	SS	IRL/Davis	Aeron	SP-4017	-	-
1972-8151	2441413.49	1972 Apr 5 10:04	Mike Apache	-	CHL A07.921-3	0.000	AFORL	SS	AFORL/Vichery	Ionos	WDCRF	SR14.173	-
1972-8155	2441416.53	1972 Apr 11 00:38	Mike Troquois	-	IMSA 14. 4121P	0.000	GSFC	SS	PRU/Prakash	Ionos	WDCRF	AFORL	-
1972-8157	2441420.53	1972 Apr 13 00:43	Mike Troquois	-	CHL A07.921-4	0.000	AFORL	SS	AFORL/Vichery	Aeron	WDCRF	AFORL	-
1972-8159	2441420.58	1972 Apr 13 02:00	Mike Troquois	-	CHL A07.921-5	0.000	AFORL	SS	AFORL/Vichery	Aeron	WDCRF	AFORL	-
1972-8160	2441420.59	1972 Apr 13 02:16	Mike Troquois	-	CHL A07.107-1	0.000	AFORL	SS	AFORL/Philbrick	Aeron	AFORL	SR14.81	-
1972-8161	2441420.60	1972 Apr 13 02:30	Mike Tomahawk	-	CHL A07.094	0.000	AFORL	SS	AFORL/Philbrick	Aeron	AFORL	SR13.265	-
1972-8162	2441420.61	1972 Apr 13 02:45	Mike Troquois	-	CHL A05.013-1	0.000	AFORL	SS	AFORL/Good	Aeron	AFORL	-	-
1972-8163	2441420.71	1972 Apr 13 02:45	Mike Troquois	-	CHL A07.217-2	0.000	AFORL	SS	AFORL/Faire	Aeron	AFORL	-	-
1972-8164	2441420.72	1972 Apr 13 05:15	Mike Troquois	-	CHL A07.215-1	0.000	AFORL	SS	AFORL/Faire	Aeron	AFORL	-	-
1972-8165	2441420.87	1972 Apr 13 08:15	Mike Troquois	-	CHL A07.921-4	0.000	AFORL	SS	AFORL/Rosenberg	Aeron	AFORL	SR14.81	-
1972-8166	2441420.87	1972 Apr 13 08:50	Mike Troquois	-	CHL A07.921-4	0.000	AFORL	SS	AFORL/Rosenberg	Aeron	AFORL	SR14.81	-
1972-8168	2441420.94	1972 Apr 13 10:30	Mike Troquois	-	CHL A07.921-6	0.000	AFORL	SS	AFORL/Rosenberg	Aeron	AFORL	SR13.265	-
1972-8168	2441422.53	1972 Apr 15 00:45	Mike Troquois	-	CHL A07.106-2	0.000	AFORL	SS	AFORL/Rosenberg	Aeron	AFORL	-	-
1972-8170	2441422.77	1972 Apr 15 06:22	Aerobee 170	-	CHL A04.004-7	0.000	GSFC	SS	LPARL/Catura	XR Astron	AFORL	-	-
1972-8179	2441432.37	1972 Apr 24 20:57	Aerobee 170	-	IMSA 13. 156S	0.000	AFORL	SS	AFORL/Shuman	Solar X	AFORL	-	-
1972-8186	2441438.95	1972 May 1 08:23	Mike Tomahawk	-	CHL A08.113-1	0.000	AFORL	SS	AFORL/Shuman	Plasma	AFORL	-	-
1972-8187	2441438.95	1972 May 1 08:23	Mike Tomahawk	-	CHL A08.113-1	0.000	AFORL	SS	AFORL/Shuman	Plasma	AFORL	-	-
1972-8189	2441441.94	1972 May 12 10:50	Aerobee 170A	-	IRL/SBFC	0.000	IRL	SS	IRL/Carruthers	Plasma	AFORL	-	-
1972-8196	2441454.94	1972 May 12 10:50	Mike Cajun	-	IMSA 13. 3970H	0.000	GSFC	SS	GSFC/Theson	Aeronomy	WDCRF	-	-
1972-8200	2441454.94	1972 May 17 01:50	Mike Cajun	-	IMSA 10. 3950H	0.000	GSFC	SS	GSFC/Theson	Aeronomy	WDCRF	-	-
1972-8201	2441455.04	1972 May 17 13:05	Mike Cajun	-	IMSA 10. 3950H	0.000	GSFC	SS	UMI/Jorvath	Aeronomy	WDCRF	-	-
1972-8204	2441455.04	1972 May 17 13:05	Mike Cajun	-	IMSA 13. 3700H	0.000	GSFC	SS	UMI/Jorvath	Aeronomy	WDCRF	-	-
1972-8204	2441456.96	1972 May 17 08:35	Aerobee 170	-	IMSA 13. 090G	0.000	GSFC	SS	MTT/Bart	XR Astron	WDCRF	-	-
1972-8205	2441456.96	1972 May 19 08:35	Aerobee 170A	-	LEMAX 11	0.000	SANL	SS	LETD/MAG/Walker	XR Astron	AFORL	ApJ190.L5	-
1972-8207	2441460.96	1972 May 22 12:00	Mike Tomahawk	-	IMSA 14. 4861U	0.000	GSFC/HTHF	SS	UMI/MDRE/McTheaters	Ionos	AMD	WDCRF	-
1972-8208	2441465.79	1972 May 31 05:19:11	Mike Apache	-	IMSA 10. 3910U	0.000	GSFC/HTHF	SS	UMI/MDRE/McTheaters	Ionos	AMD	WDCRF	-
1972-8209	2441468.50	1972 May 31 06:55:20	Mike Cajun	-	HARSES	0.000	AFCL	SS	WMB	Aerobee?	AFORL	-	-
1972-8231	2441470.76	1972 Jun 2 06:16:00	Mike Tomahawk	?	Scudex 152-185	0.000	SANL	SS	IRL/Seward	XR Astron?	FNS	LEL-EMW73-172	-
1972-8236	2441477.74	1972 Jun 9 05:45	Aerobee 170A	12	IMSA 14. 4150G	0.000	GSFC	SS	GSFC/Saath	XR Astron?	AFORL	-	-
1972-8236	2441478.69	1972 Jun 10 04:30	Mike Apache	-	IMSA 14. 4150G	0.000	GSFC	SS	CITJ/Saath	XR Astron?	AFORL	-	-
1972-8239	2441483.33	1972 Jun 13 20:00	Aerobee 170	-	IMSA 14. 6818	0.000	GSFC	SS	CHIC/Bl/White	Solar X	AFORL	-	-
1972-8246	2441489.20	1972 Jun 20 16:45	Aerobee 170	-	CHL A04.116-3	0.000	AFSC	SF	AFORL/Huffman?	ABM Tech IR	AFORL	-	-
1972-8250	2441494.94	1972 Jun 27 20:00	Mike Apache	-	IMSA 13. 081U	0.000	GSFC	SS	CHL/Hoff	Ionos	WDCRF	-	-
1972-8261	2441504.84	1972 Jul 3 08:10	Mike Apache	-	IMSA 14. 4830I-II	0.000	GSFC	SS	GSFC/INTA/Alkin	Ionos	WDCRF	-	-
1972-8265	2441509.42	1972 Jul 10 22:01	Mike Cajun	-	IMSA 13. 808S	0.000	GSFC	SS	IRL/Kocman	Solar	AFORL	-	-
1972-8265	2441509.42	1972 Jul 10 22:01	Mike Apache	-	IMSA 13. 808S	0.000	GSFC	SS	IRL/Kocman	Solar	AFORL	-	-
1972-8266	2441512.75	1972 Jul 11 06:51	Aerobee 170A	-	IMSA 13. 040G	0.000	GSFC	SS	UCI/Lillie	XR Astron	AFORL	-	-
1972-8269	2441516.95	1972 Jul 11 18:02	Aerobee 170	-	FP3 40	0.000	KPNO	SS	RCM/Harbit	Solar	AFORL	-	-
1972-8271	2441526.26	1972 Jul 13 27 18:10	Aerobee 170	-	IMSA 13. 31US	0.000	GSFC	SS	HCU/Parkeason	Solar	AFORL	-	-
1972-8278	2441534.30	1972 Aug 4 19:16	Mike Apache	-	IMSA 14. 4890E	0.000	GSFC	SS	GSFC/Bartch	Plasma	WDCRF	-	-
1972-8278	2441534.30	1972 Aug 4 19:16	Mike Apache	-	IMSA 14. 4890E	0.000	GSFC	SS	GSFC/Bartch	Plasma	WDCRF	-	-
1972-8279	2441534.73	1972 Aug 5 05:26	Mike Apache	-	IMSA 14. 5060H	0.000	GSFC	SF	GSFC/Bartch	Plasma	WDCRF	-	-
1972-8282	2441539.74	1972 Aug 5 05:52	Aerobee 170	-	IMSA 13. 300G	0.000	GSFC	SS	ASE/Kollog	XR Astron	WDCRF	-	-
1972-8289	2441539.74	1972 Aug 10 05:45	Aerobee 170	-	IMSA 13. 380G	0.000	GSFC	SS	MTT/Brad	XR Astron	WDCRF	-	-
1972-8283	2441539.79	1972 Aug 10 06:59	Aerobee 170	-	IMSA 13. 230G	0.000	GSFC	SS	UMI/Bless	UV Astron?	AFORL	-	-
1972-8285	2441542.79	1972 Aug 13 06:59	Mike Apache	-	TSRO 10. 44	0.000	ISRO	SS	PRU/Prakash?	Ionos	ASB5.7_35	-	-
1972-8292	2441547.93	1972 Aug 18 10:21	Aerobee 170	-	CHL A04.004-8	0.000	AFORL	SS	AFORL/Halper	XR Astron	AFORL	-	-
1972-8293	2441553.38	1972 Aug 23 21:00	Aerobee 170A	-	CHL A04.104-1	0.000	AFORL	SS	AFORL/Haroux	Solar XIV	AFORL	ApJ205.848	-
1972-8302	2441576.67	1972 Sep 1 04:10	Aerobee 170	-	IMSA 13. 470L	0.000	GSFC	SS	HUI/Neos	UV Astron	AFORL	-	-
1972-8307	2441576.67	1972 Sep 16 04:00	Aerobee 170	-	IMSA 13. 390G	0.000	GSFC	SS	MTT/Brad	XR Astron	AFORL	-	-
1972-8333	2441600.15	1972 Oct 1 15:30	Mike Apache	-	IMSA 14. 5010A	0.000	GSFC	SS	SSC/DUD/Hemaway	Meteorites	WDCRF	-	-
1972-8335	2441600.15	1972 Oct 1 15:30	Mike Apache	-	IMSA 14. 5010A	0.000	GSFC	SS	SSC/DUD/Hemaway	Meteorites	WDCRF	-	-
1972-8341	2441603.15	1972 Oct 12 11:31	Mike Apache	-	CHL A04.116-4	0.000	AFORL	SS	AFORL/Huffman	ABM Tech IR	AFORL	-	-
1972-8343													



Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	OrbitPay	Agency	Launch_Code	Group	Category	LTCite	Cite	Notes
1973-S317	2441952.17	1973 Sep 26 1600	Nike Iroquois	-	CRL A07_306-2	0.000	AFCLR	SS	AFCLR/Faire	Aeron	SR16_383	AFCLR	-
1973-S319	2441952.69	1973 Sep 27 0427	Nike Iroquois	-	CRL A07_306-3	0.000	AFCLR	SS	AFCLR/Faire	Aeron	AFCLR	-	-
1973-S323	2441955.50	1973 Oct	Nike Hydrac	?	HMSSES	0.000	AFCLR	SS	WSNR/	Aeron	WSNR	-	-
1973-S324	2441955.50	1973 Oct	Nike Apache	?	Capache	0.000	NSNCS	MU	NSNCS/	Target?	WSNR	-	-
1973-S325	2441955.50	1973 Oct	Nike Apache	?	Capache	0.000	NSNCS	MU	NSNCS/	Target?	WSNR	-	-
1973-S326	2441955.50	1973 Oct	Nike Apache	?	Capache	0.000	NSNCS	MU	NSNCS/	Target?	WSNR	-	-
1973-S451	2441959.51	1973 Oct 4 0010	Nike Cajun	-	AFCLR 73-1	0.000	AFCLR	SS	AFCLR/	Aeron	AFCLR	-	-
1973-S452	2441959.54	1973 Oct 4 0054	Nike Apache	-	AFCLR 71-B2	0.000	AFCLR	SS	AFCLR/Holt	XR Astron	WDCRF	SP-361/p63	-
1973-S341	2441959.55	1973 Oct 4 0340	Aerobee 170A	-	MMSA 13.1030G	0.000	GSFC	SS	AFCLR/Rosenberg	Aeron	AFCLR	-	-
1973-S354	2441974.49	1973 Oct 18 2345	Nike Tomahawk	-	CRL A07_105-1	0.000	AFCLR	SS	AFCLR/Rosenberg	Aeron	AFCLR	-	-
1973-S355	2441974.50	1973 Oct 19 0000	Nike Tomahawk	-	CRL A07_105-11	0.000	AFCLR	SS	AFCLR/Rosenberg	Aeron	AFCLR	-	-
1973-S357	2441974.53	1973 Oct 19 0050	Nike Tomahawk	-	CRL A07_105-2	0.000	AFCLR	SS	AFCLR/Rosenberg	Aeron	AFCLR	-	-
1973-S358	2441974.98	1973 Oct 19 1125	Nike Tomahawk	-	CRL A08_105-2	0.000	AFCLR	SS	AFCLR/Rosenberg	Aeron	AFCLR	-	-
1973-S361	2441975.49	1973 Oct 20 2363	Nike Tomahawk	-	CRL A08_105-12	0.000	AFCLR	SS	AFCLR/Rosenberg	Aeron	AFCLR	-	-
1973-S362	2441976.49	1973 Oct 20 2343	Nike Tomahawk	-	CRL A07_105-3	0.000	AFCLR	SS	AFCLR/Rosenberg	Aeron	AFCLR	-	-
1973-S366	2441978.94	1973 Oct 24 0815	Aerobee 200A	-	MMSA 26.060G	0.000	GSFC	SS	JRU/Hoos	UV Astron	WDCRF	-	-
1973-S377	2441988.15	1973 Nov 1 1530	Aerobee 170	-	MMSA 13.1030G	0.000	GSFC	SS	UMI/Kraushaar	XR Astron	WDCRF	Ap-269-107	-
1973-S378	2441988.23	1973 Nov 1 1730	Aerobee 170	-	MMSA 13.650G	0.000	GSFC	SS	UMI/Kraushaar	XR Astron	WDCRF	Ap-212,427	-
1973-S380	2441988.23	1973 Nov 1 1630	Aerobee 170	-	CRL A04_104-2	0.000	AFCLR	SS	AFCLR/Horoux	XR Astron	WDCRF	-	-
1973-S383	2441993.15	1973 Nov 6 1540	Aerobee 170	-	MMSA 13.1040G	0.000	GSFC	SS	AFCLR/Horoux	Solar EDV	AFCLR	-	-
1973-S384	2441996.22	1973 Nov 9 1715	Aerobee 170	-	MMSA 13.1060G	0.000	GSFC	SS	AFCLR/Horoux	XR Astron	WDCRF	-	-
1973-S385	2441996.25	1973 Nov 9 1800	Aerobee 170	-	MMSA 13.1060G	0.000	GSFC	SS	AFCLR/Horoux	XR Astron	WDCRF	-	-
1973-S387	2441999.05	1973 Nov 12 1400	Aerobee 170	-	MMSA 13.1090G	0.000	GSFC	SS	AFCLR/Horoux	XR Astron	WDCRF	-	-
1973-S405	2442009.12	1973 Nov 23 1460	Aerobee 170	-	MMSA 13.1000S	0.000	GSFC	SS	AFCLR/Horoux	XR Astron	WDCRF	-	-
1973-S406	2442009.50	1973 Nov 23 2205	Aerobee 200A	-	MMSA 26.090S	0.000	GSFC	SS	AFCLR/Horoux	Solar	WDCRF	-	-
1973-S445	2442036.42	1973 Dec 19 2205	Aerobee 200A	-	MMSA 26.030S	0.000	GSFC	SS	AFCLR/Horoux	Solar	WDCRF	-	-
1974-S51	2442052.57	1974 Jan 5 0145	Aerobee 200A	-	MMSA 26.220G-0P	0.000	GSFC	SS	JRU/Fastie	Opt/UV Astron	AFCLR, G5S	-	-
1974-S52	2442055.57	1974 Jan 6 0140	Aerobee 200A	-	MMSA 26.220G-0P	0.000	GSFC	SS	JRU/Fastie	Opt/UV Astron	AFCLR, G5S	-	-
1974-S57	2442060.59	1974 Jan 13 0210	Aerobee 200A	-	MMSA 26.240G-0P	0.000	GSFC	SS	JRU/Opal	Aeron	WDCRF	SP-4019	-
1974-S60	2442063.50	1974 Jan 16 1740	Aerobee 200A	-	MMSA 26.140S	0.000	GSFC	SS	ASD/Davis	Solar	WDCRF	-	-
1974-S63	2442064.24	1974 Jan 17 0237	Nike Apache	-	MMSA 14.5110A	0.000	GSFC	SS	AFCLR/Smith	Aeronomy	WDCRF	-	-
1974-S64	2442066.61	1974 Jan 17 0239	Nike Tomahawk	-	MMSA 19.1600E	0.000	GSFC	SS	GSFC/Hegppner	Plasma	WDCRF	-	-
1974-S66	2442066.61	1974 Jan 21 0239	Nike Tomahawk	-	MMSA 19.1610E	0.000	GSFC	SS	GSFC/Hegppner	Plasma	WDCRF	-	-
1974-S71	2442069.61	1974 Jan 22 0241	Nike Tomahawk	-	MMSA 19.1620E	0.000	GSFC	SS	GSFC/Hegppner	Plasma	WDCRF	-	-
1974-S73	2442070.20	1974 Jan 22 1645	Nike Tomahawk	-	MMSA 26.070S	0.000	GSFC	SS	AFCLR/Walker	Solar EDV/X	WDCRF	AMD	-
1974-S80	2442075.30	1974 Jan 27 1908:46	Nike Tomahawk	-	MMSA 19.1391E	0.000	GSFC	SS	AFCLR/Walker	Aeronomy	WDCRF	-	-
1974-S86	2442080.67	1974 Feb 9 0210	Aerobee 200A	-	MMSA 26.310G	0.000	GSFC	SS	AFCLR/Walker	XR Astron	WDCRF	-	-
1974-S91	2442090.96	1974 Feb 12 0853	Aerobee 200A	-	MMSA 26.310G	0.000	GSFC	SS	AFCLR/Walker	XR Astron	WDCRF	-	-
1974-S103	2442094.86	1974 Feb 16 0853	Aerobee 350	-	CRL A35_191-2	0.000	AFCLR	SS	AFCLR/Champion	IR Astron	WDCRF	-	-
1974-S106	2442097.52	1974 Feb 19 0743	Nike Hydrac	-	MMSA 19.1341E	0.000	GSFC	SS	AFCLR/Champion	Aeron	WDCRF	WV-PPFR	-
1974-S108	2442099.25	1974 Feb 20 1807:00	Nike Tomahawk	-	MMSA 19.1331E	0.000	GSFC	SS	AFCLR/Champion	Aeron	WDCRF	-	-
1974-S110	2442099.30	1974 Feb 20 1807:00	Nike Tomahawk	-	MMSA 14.5200A	0.000	GSFC	SS	AFCLR/Champion	Aeron	WDCRF	-	-
1974-S115	2442100.77	1974 Feb 22 0651	Nike Apache	-	MMSA 14.5200A	0.000	GSFC	SS	AFCLR/Champion	Aeron	WDCRF	-	-
1974-S116	2442101.55	1974 Feb 22 0651	Nike Apache	-	MMSA 14.5200A	0.000	GSFC	SS	AFCLR/Champion	Aeron	WDCRF	-	-
1974-S117	2442107.73	1974 Mar 6 0554	Nike Apache	-	MMSA 14.5200A	0.000	GSFC	SS	AFCLR/Champion	Aeron	WDCRF	-	-
1974-S118	2442107.73	1974 Mar 6 0554	Nike Apache	-	MMSA 14.5200A	0.000	GSFC	SS	AFCLR/Champion	Aeron	WDCRF	-	-
1974-S124	2442112.66	1974 Mar 14 0835	Nike Tomahawk	-	MMSA 19.1800A	0.000	GSFC	SS	AFCLR/Champion	Aeron	WDCRF	-	-
1974-S126	2442112.66	1974 Mar 14 0835	Nike Tomahawk	-	MMSA 19.1800A	0.000	GSFC	SS	AFCLR/Champion	Aeron	WDCRF	-	-
1974-S128	2442120.55	1974 Mar 16 1348	Nike Tomahawk	-	MMSA 26.110G	0.000	SAND	SS	AFCLR/Champion	Aeron	WDCRF	-	-
1974-S138	2442123.08	1974 Mar 16 1348	Nike Tomahawk	-	MMSA 26.200G	0.000	SAND	SS	AFCLR/Champion	Aeron	WDCRF	-	-
1974-S142	2442127.58	1974 Mar 21 0433	Nike Apache	-	MMSA 10.4310M	0.000	GSFC	SS	AFCLR/Champion	Plasma	WDCRF	-	-
1974-S143	2442127.58	1974 Mar 21 0433	Nike Apache	-	MMSA 10.4310M	0.000	GSFC	SS	AFCLR/Champion	Plasma	WDCRF	-	-
1974-S144	2442127.58	1974 Mar 21 0433	Nike Apache	-	MMSA 10.4310M	0.000	GSFC	SS	AFCLR/Champion	Plasma	WDCRF	-	-
1974-S145	2442127.58	1974 Mar 21 0433	Nike Apache	-	MMSA 10.4310M	0.000	GSFC	SS	AFCLR/Champion	Plasma	WDCRF	-	-
1974-S146	2442128.78	1974 Mar 22 0645	Nike Cajun	-	MMSA 10.4310M	0.000	GSFC	SS	AFCLR/Champion	Aeronomy	WDCRF	-	-
1974-S147	2442128.78	1974 Mar 22 0645	Nike Cajun	-	MMSA 10.4310M	0.000	GSFC	SS	AFCLR/Champion	Aeronomy	WDCRF	-	-
1974-S169	2442143.67	1974 Apr 6 0410	Aerobee 350	-	MMSA 17.120G	0.000	GSFC	SS	AFCLR/Champion	XR Astron	WDCRF	Ap-207, L163	-
1974-S177	2442158.69	1974 Apr 11 0800	Nike Arvellin	-	MMSA 14.5200H	0.000	GSFC	SS	AFCLR/Champion	Aeronomy	WDCRF	SR17,427	-
1974-S178	2442158.69	1974 Apr 11 0800	Nike Apache	-	MMSA 14.5200H	0.000	GSFC	SS	AFCLR/Champion	Aeronomy	WDCRF	-	-
1974-S179	2442167.50	1974 Apr 22 1802	Nike Hydrac	?	CRL A04_208-2	0.000	AFCLR	SS	AFCLR/Champion	Aeron	AFCLR	-	-
1974-S184	2442182.28	1974 May 14 1843	Nike Malacate	-	MMSA 26.010G	0.000	GSFC	SS	AFCLR/Champion	Aeron	AFCLR	-	-
1974-S185	2442183.40	1974 May 15 2137	Nike Apache	-	MMSA 26.010G	0.000	GSFC	SS	AFCLR/Champion	Aeron	AFCLR	-	-
1974-S196	2442183.42	1974 May 15 2137	Nike Apache	-	MMSA 26.180S	0.000	GSFC	SS	AFCLR/Champion	Aeron	AFCLR	-	-
1974-S207	2442198.50	1974 May 15 2211	Nike Hydrac	?	HMSSES	0.000	AFCLR	SS	AFCLR/Champion	Aeron	AFCLR	-	-
1974-S220	2442216.50	1974 Jun 18	Nike Hydrac	-	DASA HMSSES	0.000	DASA	SS	AFCLR/Champion	Aeron	AFCLR	-	-
1974-S224	2442218.21	1974 Jun 19 1700	Aerobee 200A	-	MMSA 26.360S	0.000	GSFC	SS	AFCLR/Champion	Aeron	AFCLR	-	-
1974-S231	2442220.51	1974 Jun 22 0730	Aerobee 200A	-	MMSA 26.266G	0.000	GSFC	SS	AFCLR/Champion	Aeron	AFCLR	-	-
1974-S234	2442226.28	1974 Jun 27 1845	Aerobee 200A	-	MMSA 26.150S	0.000	GSFC	SS	AFCLR/Champion	Aeron	AFCLR	-	-
1974-S236	2442227.55	1974 Jun 29 0110	Nike Iroquois	-	CRL A07_105-7	0.000	AFCLR	SS	AFCLR/Champion	Aeron	AFCLR	-	-
1974-S238	2442228.32	1974 Jun 29 1945	Aerobee 170	-	CRL A08_208-1	0.000	AFCLR	SS	AFCLR/Champion	Aeron	AFCLR	-	-
1974-S241	2442228.36	1974 Jun 29 2033	Nike Tomahawk	-	CRL A08_306-4	0.000	AFCLR	SS	AFCLR/Champion	Aeron	AFCLR	-	-
1974-S242	2442228.38	1974 Jun 29 2105	Nike Tomahawk	-	CRL A08_207-2	0.000	AFCLR	SS	AFCLR/Champion	Aeron	AFCLR	-	-
1974-S244	2442228.51	1974 Jun 30 0010	Nike Cajun	-	E2-7213	0.000	DM7	SU	AFCLR/Champion	Aeron	AFCLR	-	-
1974-S247	2442228.60	1974 Jun 30 0220	Nike Apache	-	MMSA 14.5210H	0.000	GSFC	SS	AFCLR/Champion	Aeron	AFCLR	-	-
1974-S249	2442228.69	1974 Jun 30 0440	Nike Apache	-	MMSA 14.5210H	0.000	GSFC	SS	AFCLR/Champion	Aeron	AFCLR	-	-
1974-S250	2442228.73	1974 Jun 30 0530	Nike Apache	-	MMSA 14.5200H	0.000	GSFC	SS	AFCLR/Champion	Aeron	AFCLR	-	-
1974-S252	2442228.80	1974 Jun 30 0710	Nike Tomahawk	-	CRL A08_207-1	0.000	AFCLR	SS	AFCLR/Champion	Aeron	AFCLR	-	-
1974-S256	2442228.88	1974 Jun 30 0900	Nike Apache	-	MMSA 14.5200H	0.000	GSFC	SS	AFCLR/Champion	Aeron	AFCLR	-	-
1974-S267	2442228.99	1974 Jun 30 0915	Nike Apache	-	MMSA 14.5200H	0.000	GSFC	SS	AFCLR/Champion	Aeron	AFCLR	-	-
1974-S262	2442231.01	1974 Jul 2 1216	Nike Apache	-	MMSA 14.5200H	0.000							



Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	OrbitPay	Agency	Launch_Code	Group	Category	LTCite	Cite	Notes
1975-S323	2442737.67	1975 Nov 21 04:11	Mike Cajun	-	MMSA 10_423RH	0.000	GSFC	SS	GSFC/Bright	Aeronomy	WDCRF	-	-
1975-S324	2442738.19	1975 Nov 21 16:37:36	Mike Apache	-	SSC S01 (TL)	0.000	SSC	SS	SSC/Bright	Test	WDCRF	ESR075	-
1975-S325	2442750.21	1975 Dec 3 16:57	Mike Cajun	-	MMSA 10_424RH	0.000	GSFC	SS	BAL/Sevier	Aeronomy	WDCRF	-	-
1975-S342	2442750.50	1975 Dec 4	Black Brant 8B	-	AMF-WBP-01	0.000	BAL	SS	AFCL/Walker	Test	SRCTCon3	FC	-
1975-S346	2442750.64	1975 Dec 4 03:22	Aerobee 350	-	CHL A35-191-1	0.000	AFCL	SS	GSFC/Walker	IR Astron	WDCRF	-	-
1975-S348	2442752.75	1975 Dec 4 06:25	Mike Cajun	-	MMSA 10_4100H	0.000	GSFC	SS	SAD/Gornstein	Aeronomy	WDCRF	-	-
1975-S349	2442752.75	1975 Dec 4 06:25	Aerobee 350	-	MMSA 17_160H	0.000	GSFC	SS	SAU/Carrubers	XR Astron	WDCRF	-	-
1975-S352	2442752.92	1975 Dec 6 07:42	Aerobee 170	-	MMSA 12_310G	0.000	GSFC	SS	NRL/Carrubers	UV Astron?	WDCRF	-	-
1975-S46	2442762.17	1976 Jan 4 14:30	Mike Tomahawk	-	DLR H-1H-70	0.000	DLR	SS	MPZ/Krakovsky	Test	WDCRF	-	-
1976-S80	2442796.22	1976 Jan 18 17:12	Mike Tomahawk	-	MMSA 18_1007UE	0.000	GSFC	SS	UTUC/Snath,Sechrist	Aerom/Ionos/Solar UV	Horaba	JATP41,1097	-
1976-S86	2442799.11	1976 Jan 21 14:32:09	Mike Apache	-	DLR H-1H-72/Ferd 43	0.000	DLR/ATNF	SS	MPZ/Krakovsky	Plasma	UriCh/FDC	WISR	-
1976-S72	2442800.29	1976 Jan 22 18:58:36	Mike Tomahawk	-	SSC S17-1 (FRB)	0.000	SSC	SS	RGJ/OID/	Aerom/Ionos	ESR-SP115-213	JATP41,1097	-
1976-S76	2442801.45	1976 Jan 23 22:45	Mike Tomahawk	-	GL A08-608-1	0.000	AFGL	SS	AFCL/Vichery	Ionos	AFCL	-	-
1976-S89	2442810.31	1976 Feb 1 19:28:15	Mike Tomahawk	-	MMSA 18_208UE	0.000	GSFC	SS	MPZ/Krakovsky	Aurora/Active	AND	ESA-SP115-213	-
1976-A10	2442815.50	1976 Feb 7 00:05:10	Mike Tomahawk	-	-	0.000	PPFR	SS	MPZ/Krakovsky	Test	WM-PPFR	-	-
1976-S103	2442826.80	1976 Feb 18 07:05:59	Mike Tomahawk	-	MMSA 18_1001UE	0.000	GSFC	SS	URF/Bron	Plasma	WM-PPFR	-	-
1976-S107	2442830.32	1976 Feb 21 19:42:32	Mike Apache	-	SSC S16-2	0.000	SSC	SS	RICE/Cloutier	Ionos	ESR-SP115-213	JATP41,1185	-
1976-S110	2442833.31	1976 Feb 24 19:20	Aerobee 170	-	GL A04-305-1	0.000	AFGL	SS	MPZ/MDRE/VOU/Bjorn	Ionos	AFCL	-	-
1976-S119	2442837.01	1976 Feb 28 12:12:50	Mike Tomahawk	-	MMSA 19_1640UE	0.000	AFGL	SS	AFCL/Horoux	Aurora/Ionos	AFCL	-	-
1976-S115	2442838.95	1976 Mar 1 10:45:45	Mike Tomahawk	-	MMSA 19_1002UE	0.000	GSFC	SS	UTUC/Hanson	Aurora/Ionos	WDCRF	-	-
1976-S120	2442839.64	1976 Mar 2 03:24:30	Mike Apache	-	MMSA 14_461UE	0.000	GSFC	SS	RICE/Cloutier	Plasma	WDCRF	-	-
1976-S122	2442842.98	1976 Mar 2 03:24:30	Mike Apache	-	SSC S21-1	0.000	SSC	SS	PITT/ZiPf	Plasma	WDCRF	-	-
1976-S126	2442844.38	1976 Mar 5 11:36	Aerobee 170	-	MMSA 13_1280C	0.000	GSFC	SS	UCU/Barrh	Ionos	ESR-SP115-213	-	-
1976-S128	2442844.38	1976 Mar 5 11:40	Aerobee 200A	-	SSC S17-2	0.000	SSC	SS	JRU/Feldman	UV Astron	WDCRF	-	-
1976-S133	2442847.96	1976 Mar 6 21:00:16	Mike Tomahawk	-	MMSA 26_500C	0.000	GSFC	SS	RGJ/OID/	Ionos	ESR-SP115-213	-	-
1976-S139	2442857.22	1976 Mar 10 10:58	Aerobee 170	-	MMSA 13_1296C	0.000	GSFC	SS	UCU/Barrh	Aeronomy	WDCRF	-	-
1976-S140	2442859.78	1976 Mar 19 17:15	Mike Cajun	-	MMSA 10_425RH	0.000	GSFC	SS	UHL/Horvath	Plasma	WDCRF	-	-
1976-S144	2442860.75	1976 Mar 23 06:43:40	Aerobee 170A	-	MMSA 13_1160E	0.000	GSFC	SS	UHL/Sharp	Plasma	FC	-	-
1976-S141	2442860.75	1976 Mar 23 06:43:40	Aerobee 200A	-	MMSA 26_595G	0.000	GSFC	SS	GSFC/Stecher	UV Astron	WDCRF	-	-
1976-S146	2442864.07	1976 Mar 26 13:40	Mike Hydac	-	MMSA 13_0770A	0.000	GSFC	SS	JRU/Feldman,Fastie	Aurora	WDCRF	-	-
1976-S148	2442864.38	1976 Mar 26 21:00	Aerobee 200A	-	DNA 10607/11-2C	0.000	AFGL/DNA	SS	AFGL/Olwick	Aurora	WDCRF	-	-
1976-S149	2442864.38	1976 Mar 26 21:00	Aerobee 200A	-	MMSA 26_017As	0.000	GSFC	SS	EGM/Blake	Aurora	WDCRF	-	-
1976-S169	2442866.03	1976 Mar 27 06:43	Mike Tomahawk	-	MMSA 19_1760E	0.000	GSFC	SS	GSFC/Blake	Solar X/UV	WDCRF	-	-
1976-S168	2442866.04	1976 Mar 27 12:50	Mike Tomahawk	-	MMSA 19_1940E	0.000	GSFC	SS	GSFC/Feppner	Plasma	WDCRF	-	-
1976-S165	2442866.04	1976 Mar 28 13:00	Mike Tomahawk	-	MMSA 19_1950E	0.000	GSFC	SS	GSFC/Feppner	Plasma	WDCRF	-	-
1976-S164	2442866.04	1976 Mar 28 13:00	Mike Tomahawk	-	MMSA 19_1770E	0.000	GSFC	SS	GSFC/Feppner	Plasma	WDCRF	-	-
1976-S165	2442866.04	1976 Mar 28 13:00	Mike Tomahawk	-	MMSA 19_1770E	0.000	GSFC	SS	GSFC/Feppner	Plasma	WDCRF	-	-
1976-S164	2442866.04	1976 Apr 21 03:15	Mike Hydac	-	MMSA 26_0480H	0.000	NSF	SS	UAF/Davis,Wescott	Aerom/Fields	WM-PPFR	-	-
1976-S178	2442895.57	1976 May 11 08:55	Aerobee 200A	-	MMSA 26_0368H	0.000	GSFC	SS	NRL/Fritz,Crudace	XR Astron	APJ222,156	-	-
1976-S179	2442895.57	1976 May 11 08:55	Aerobee 200	-	MMSA 26_045C5	0.000	GSFC	SS	GSFC/Clif/Boidt,Germire	XR Astron	WDCRF	-	-
1976-S189	2442905.26	1976 May 11 17:08	Aerobee 200	-	MMSA 26_045C5	0.000	GSFC	SS	USNO/McKenzie	Solar	WDCRF	-	-
1976-A94	2442939.25	1976 Jun 9 18:00	Mike Nike	-	GL-94	0.000	AFGL	SS	WFF/7	Aerom	WDCRF	-	-
1976-S203	2442941.29	1976 Jun 11 08:55	Mike Javelin	-	MMSA 32_004HT	0.000	GSFC	SS	WFF/7	Test?	AFGL/Ditrich	WISR	-
1976-S203	2442941.29	1976 Jun 11 08:55	Aerobee 350	-	MMSA 32_004HT	0.000	GSFC	SS	WFF/7	Test?	AFGL/Ditrich	WISR	-
1976-S218	2442956.73	1976 Jun 17 08:50	Mike Tomahawk	-	MMSA 19_1810A	0.000	GSFC	SS	SAD/Gornstein	XR Astron	WDCRF	-	-
1976-S218	2442956.73	1976 Jun 17 08:50	Mike Tomahawk	-	MMSA 19_1810A	0.000	GSFC	SS	SAD/Gornstein	XR Astron	WDCRF	-	-
1976-S225	2442979.24	1976 Jun 29 17:48	Aerobee 170A	-	MMSA 13_030G5	0.000	GSFC	SS	GSFC/Guenther	Aeronomy	WDCRF	-	-
1976-S225	2442979.24	1976 Jun 29 17:48	Aerobee 170A	-	MMSA 13_030G5	0.000	GSFC	SS	GSFC/Guenther	Aeronomy	WDCRF	-	-
1976-S222	2442985.71	1976 Jul 13 15:59	Aerobee 170A	-	MMSA 12_0390T	0.000	GSFC	SS	GSFC/Thielsen	Solar	WDCRF	-	-
1976-S222	2442985.71	1976 Jul 13 15:59	Aerobee 170A	-	MMSA 12_0390T	0.000	GSFC	SS	GSFC/Thielsen	Solar	WDCRF	-	-
1976-S243	2442994.30	1976 Jul 28 19:16	Mike Nike	-	MMSA 12_0390T	0.000	GSFC	SS	GSFC/Thielsen	Test	WDCRF	-	-
1976-S243	2442994.30	1976 Jul 28 19:16	Mike Nike	-	MMSA 12_0390T	0.000	GSFC	SS	GSFC/Thielsen	Test	WDCRF	-	-
1976-S244	2442994.30	1976 Aug 4 17:20	Aerobee 350	-	CHL A35-191-4	0.000	AFGL	SS	USNB/Pratt	Aerom	AD0365E14	-	-
1976-S244	2442994.30	1976 Aug 4 17:20	Aerobee 350	-	CHL A35-191-4	0.000	AFGL	SS	USNB/Pratt	Aerom	AD0365E14	-	-
1976-S243	2443003.15	1976 Aug 12 15:54	Mike Tomahawk	-	MMSA 26_0430S	0.000	GSFC	SS	AFCL/Schurin,Murdock	IR Astron	AFGL	-	-
1976-S243	2443003.15	1976 Aug 12 15:54	Mike Tomahawk	-	MMSA 26_0430S	0.000	GSFC	SS	AFCL/Schurin,Murdock	IR Astron	AFGL	-	-
1976-S249	2443011.65	1976 Aug 12 09:40	Mike Hydac	-	MMSA 19_1680E	0.000	GSFC	SS	UHL/Lafayette	Solar UV	AFGL	-	-
1976-S249	2443011.65	1976 Aug 12 09:40	Mike Hydac	-	MMSA 19_1680E	0.000	GSFC	SS	UHL/Lafayette	Solar UV	AFGL	-	-
1976-S269	2443013.25	1976 Aug 27 17:55	Mike Tomahawk	-	MMSA 18_2010E	0.000	GSFC	SS	UTUC/Snath,Boehill	Plasma/Aerom	AFGL	-	-
1976-S269	2443013.25	1976 Aug 27 17:55	Mike Tomahawk	-	MMSA 18_2010E	0.000	GSFC	SS	UTUC/Snath,Boehill	Plasma/Aerom	AFGL	-	-
1976-S283	2443021.81	1976 Aug 31 03:40	Mike Tomahawk	-	MMSA 13_134CS	0.000	AFGL	SS	DSRL/DK/Prinndahl,esp.	Plasma/Auroral	WDCRF	-	-
1976-S283	2443021.81	1976 Aug 31 03:40	Mike Tomahawk	-	MMSA 13_134CS	0.000	AFGL	SS	DSRL/DK/Prinndahl,esp.	Plasma/Auroral	WDCRF	-	-
1976-S296	2443034.04	1976 Sep 23 11:37:10	Mike Tomahawk	-	MMSA 18_1796E	0.000	GSFC	SS	AFCL/Draize	Aerom	WDCRF	-	-
1976-S296	2443034.04	1976 Sep 23 11:37:10	Mike Tomahawk	-	MMSA 18_1796E	0.000	GSFC	SS	AFCL/Draize	Aerom	WDCRF	-	-
1976-M09	2443052.04	1976 Sep 30 12:53:25	Mike Tomahawk	-	MMSA 10_3170T	0.000	GSFC	SS	GSFC/Ostberg	Plasma	WDCRF	-	-
1976-M09	2443052.04	1976 Sep 30 12:53:25	Mike Tomahawk	-	MMSA 10_3170T	0.000	GSFC	SS	GSFC/Ostberg	Plasma	WDCRF	-	-
1976-A63	2443058.31	1976 Oct 6 19:30	Mike Cajun	-	MMSA 18_1800E	0.000	GSFC	SS	GSFC/Ostberg	Plasma	WDCRF	-	-
1976-A63	2443058.31	1976 Oct 6 19:30	Mike Cajun	-	MMSA 18_1800E	0.000	GSFC	SS	GSFC/Ostberg	Plasma	WDCRF	-	-
1976-S315	2443081.45	1976 Oct 29 22:11	Mike Tomahawk	-	MMSA 18_1550A	0.000	GSFC	SS	PSU/Keehall	Ionos	WDCRF	-	-
1976-S315	2443081.45	1976 Oct 29 22:11	Mike Tomahawk	-	MMSA 18_1550A	0.000	GSFC	SS	PSU/Keehall	Ionos	WDCRF	-	-
1976-S325	2443100.27	1976 Oct 30 03:30	Aerobee 200A	-	MMSA 26_0560C	0.000	GSFC	SS	NRL/Carrubers	Aeronomy	WDCRF	-	-
1976-S325	2443100.27	1976 Oct 30 03:30	Aerobee 200A	-	MMSA 26_0560C	0.000	GSFC	SS	NRL/Carrubers	Aeronomy	WDCRF	-	-
1976-S326	2443101.89	1976 Nov 19 09:25	Black Brant 8C	-	MMSA 27_0021CS	0.000	GSFC	SS	ASE/Davis	UV Astron	WDCRF	-	-
1976-S326	2443101.89	1976 Nov 19 09:25	Black Brant 8C	-	MMSA 27_0021CS	0.000	GSFC	SS	ASE/Davis	UV Astron	WDCRF	-	-
1976-S338	2443110.37	1976 Nov 27 20:51:41	Mike Tomahawk	-	MMSA 18_2061E	0.000	GSFC	SS	MDRE/OSD/Egeland	Plasma	WDCRF	-	-
1976-S338	2443110.37	1976 Nov 27 20:51:41	Mike Tomahawk	-	MMSA 18_2061E	0.000	GSFC	SS	MDRE/OSD/Egeland	Plasma	WDCRF	-	-
1977-S40	2443158.73	1977 Jan 15 00:50:02	Aerobee 170A	-	SSC S19-1	0.000	GSFC	SS	UTUC/Snath	Auroral	AND	ESA-SP291-71	-
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Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Agency	Launch_Code	Group	Category	LTCite	Cite	Notes
1979-S76	2443931.49	1979 Feb 26 2348	Mike Iroquois	-	GL A07.712-2	AFGL	SS	AFGL/Faire	Eclipse/Aeron	WI-PR75-6	AFORL	-
1979-S121	2443977.42	1979 Apr 13 2205	Black Brant 8C	-	IMS2 27.33A8-US	GSCF	SS	HAD/HCO/Machuen, Parkin.	Solar Upz/Solar UV	WDORF	-	-
1979-S122	2443978.69	1979 Apr 15 0925	Nike Tomahawk	-	IMS2 18.218GE	GSCF	SS	GSCF/Heppner	Plasma	WDORF	-	-
1979-S126	2443981.89	1979 Apr 18 0915	Nike Tomahawk	-	IMS2 18.217GE	GSCF	SS	UMD/Noore	Plasma	WDORF	-	-
1979-S130	2443984.92	1979 Apr 21 1010	Black Brant 8C	-	IMS2 27.280GE	GSCF	SS	UCU/Rotman	XR Aeron	WDORF	-	-
1979-S144	2444030.22	1979 Jun 21 0525	Black Brant 8C	-	IMS2 27.2900G	GSCF	SS	UMI/Kraushaar	Solar UV/X	WDORF	-	-
1979-S150	2444046.73	1979 Jun 21 1630	Black Brant 8C	-	IMS2 27.322CS	GSCF	SS	LPARK/LPSV/Acton, Bonnet	Solar UV/X	WDORF	-	-
1979-S156	2444058.19	1979 Jul 1 207007	Black Brant 8C	-	IMS2 19.1026GU	GSCF	SS	GSCF/Guenther	Aeron	WDORF	-	-
1979-S167	2444075.21	1979 Jul 30 180000	Nike Tomahawk	-	GL A08.705-2	AFGL	SS	SSC/	Test	WDORF	-	-
1979-S184	2444100.26	1979 Aug 14 181000	Nike Orion	-	SSC T3 Test	AFGL	SS	AFGL/Philbrick	Test	WDORF	-	-
1979-S35	2444100.32	1979 Aug 14 1940	Nike Tomahawk	-	GL A08.706-2	AFGL	SS	AFGL/Philbrick	Aeron	WDORF	-	-
1979-S186	2444100.35	1979 Aug 14 2020	Aerobee 170	-	GL A04.703	AFGL	SS	AFGL/Heroux	Aeron	WDORF	-	-
1979-S189	2444106.55	1979 Aug 21 011416	Nike Orion	-	IMS2 31.160E	GSCF	SS	UUD/MISU/JHO/Holback	Aeronomy	WDORF	-	-
1979-S208	2444127.50	1979 Sep 11	Nike Orion	-	IMS2 31.041U	GSCF	SS	CHM/Kelly	Aeron	WDORF	-	-
1979-S220	2444141.35	1979 Sep 24 202010	Black Brant 8C	-	IMS2 27.390E	GSCF	SS	MSC/Chassy	Micrograv/Release	WDORF	-	-
1979-S226	2444164.03	1979 Oct 17 124000	Black Brant 8C	-	IMS2 27.160P	GSCF	SS	WFF/Perry	Micrograv	WDORF	-	-
1979-S224	2444168.14	1979 Oct 21 1625	Nike Orion	-	IMS2 31.101U	GSCF	SS	WFF/Perry	Aeron	WDORF	-	-
1979-S225	2444168.24	1979 Oct 21 1748	Nike Orion	-	IMS2 31.091U	GSCF	SS	WFF/Perry	Aeron	WDORF	-	-
1979-S228	2444169.20	1979 Oct 21 1650	Nike Orion	-	IMS2 31.111U	GSCF	SS	WFF/Perry	Aeron	WDORF	-	-
1979-S232	2444170.41	1979 Oct 26 2145	Nike Orion	-	DLR H-80-99	DLR	SS	DLR/	Test	WDORF	-	-
1979-S233	2444170.46	1979 Oct 26 2145	Nike Orion	-	DLR H-80-99	DLR	SS	DLR/	Test	WDORF	-	-
1979-H01	2444170.46	1979 Oct 26 2304	Nike Nike	-	GL A45.803-1	AFGL	SS	AFGL/Queada	Aeron release	WDORF	-	-
1979-H02	2444171.48	1979 Oct 24 2324	Nike Nike	-	GL A45.803-2	AFGL	SS	AFGL/Queada	Aeron release	WDORF	-	-
1979-H03	2444176.46	1979 Oct 29 2304	Nike Nike	-	GL A45.803-3	AFGL	SS	AFGL/Queada	Aeron release	WDORF	-	-
1979-S233	2444176.50	1979 Nov 1	Nike Orion	-	IMS2 31.131U	GSCF	SS	WFF/Perry	Aeron	WDORF	-	-
1979-S234	2444176.50	1979 Nov 1	Nike Orion	-	IMS2 31.121U	GSCF	SS	WFF/Perry	Aeron	WDORF	-	-
1979-S235	2444176.50	1979 Nov 1	Nike Orion	-	IMS2 31.111U	GSCF	SS	WFF/Perry	Aeron	WDORF	-	-
1979-S237	2444185.37	1979 Nov 7 2050	Black Brant 8C	-	IMS2 27.300CS	GSCF	SS	ASB/Davis	Solar	WDORF	-	-
1979-S236	2444210.73	1979 Dec 5 0652147	Black Brant 8C	-	AF-NWP-06	IRCC	SS	WFF/Perry	Solar	WDORF	-	-
1980-S29	2444263.22	1980 Jan 24 1721159	Nike Tomahawk	-	Ferdinand 50	IRCC	SS	UUD/BERG/Holback	Aurora/Ionos	JGR9.1, A6, 7079	FC	-
1980-S44	2444285.85	1980 Feb 16 082330	Black Brant 8C	-	IMS2 27.42AS	GSCF	SS	LASL/Argo	Test/Ionos/Plasma	AND	WDORF	-
1980-S46	2444286.19	1980 Feb 16 1632	Black Brant 8C	-	IMS2 27.370S	GSCF	SS	UUD/BERG/Holback	Solar Eclipse	ESA-SP229-206	ProclinMS48, A3, 11	-
1980-S46	2444286.19	1980 Feb 16 1632	Black Brant 8C	-	IMS2 27.370S	GSCF	SS	UUD/BERG/Holback	Solar Eclipse	ESA-SP229-206	ProclinMS48, A3, 11	-
1980-S46	2444286.19	1980 Feb 16 1632	Black Brant 8C	-	IMS2 27.370S	GSCF	SS	UUD/BERG/Holback	Solar Eclipse	ESA-SP229-206	ProclinMS48, A3, 11	-
1980-S46	2444286.19	1980 Feb 16 1632	Black Brant 8C	-	IMS2 27.370S	GSCF	SS	UUD/BERG/Holback	Solar Eclipse	ESA-SP229-206	ProclinMS48, A3, 11	-
1980-S46	2444286.19	1980 Feb 16 1632	Black Brant 8C	-	IMS2 27.370S	GSCF	SS	UUD/BERG/Holback	Solar Eclipse	ESA-SP229-206	ProclinMS48, A3, 11	-
1980-S46	2444286.19	1980 Feb 16 1632	Black Brant 8C	-	IMS2 27.370S	GSCF	SS	UUD/BERG/Holback	Solar Eclipse	ESA-SP229-206	ProclinMS48, A3, 11	-
1980-S46	2444286.19	1980 Feb 16 1632	Black Brant 8C	-	IMS2 27.370S	GSCF	SS	UUD/BERG/Holback	Solar Eclipse	ESA-SP229-206	ProclinMS48, A3, 11	-
1980-S46	2444286.19	1980 Feb 16 1632	Black Brant 8C	-	IMS2 27.370S	GSCF	SS	UUD/BERG/Holback	Solar Eclipse	ESA-SP229-206	ProclinMS48, A3, 11	-
1980-S46	2444286.19	1980 Feb 16 1632	Black Brant 8C	-	IMS2 27.370S	GSCF	SS	UUD/BERG/Holback	Solar Eclipse	ESA-SP229-206	ProclinMS48, A3, 11	-
1980-S46	2444286.19	1980 Feb 16 1632	Black Brant 8C	-	IMS2 27.370S	GSCF	SS	UUD/BERG/Holback	Solar Eclipse	ESA-SP229-206	ProclinMS48, A3, 11	-
1980-S46	2444286.19	1980 Feb 16 1632	Black Brant 8C	-	IMS2 27.370S	GSCF	SS	UUD/BERG/Holback	Solar Eclipse	ESA-SP229-206	ProclinMS48, A3, 11	-
1980-S46	2444286.19	1980 Feb 16 1632	Black Brant 8C	-	IMS2 27.370S	GSCF	SS	UUD/BERG/Holback	Solar Eclipse	ESA-SP229-206	ProclinMS48, A3, 11	-
1980-S46	2444286.19	1980 Feb 16 1632	Black Brant 8C	-	IMS2 27.370S	GSCF	SS	UUD/BERG/Holback	Solar Eclipse	ESA-SP229-206	ProclinMS48, A3, 11	-
1980-S46	2444286.19	1980 Feb 16 1632	Black Brant 8C	-	IMS2 27.370S	GSCF	SS	UUD/BERG/Holback	Solar Eclipse	ESA-SP229-206	ProclinMS48, A3, 11	-
1980-S46	2444286.19	1980 Feb 16 1632	Black Brant 8C	-	IMS2 27.370S	GSCF	SS	UUD/BERG/Holback	Solar Eclipse	ESA-SP229-206	ProclinMS48, A3, 11	-
1980-S46	2444286.19	1980 Feb 16 1632	Black Brant 8C	-	IMS2 27.370S	GSCF	SS	UUD/BERG/Holback	Solar Eclipse	ESA-SP229-206	ProclinMS48, A3, 11	-
1980-S46	2444286.19	1980 Feb 16 1632	Black Brant 8C	-	IMS2 27.370S	GSCF	SS	UUD/BERG/Holback	Solar Eclipse	ESA-SP229-206	ProclinMS48, A3, 11	-
1980-S46	2444286.19	1980 Feb 16 1632	Black Brant 8C	-	IMS2 27.370S	GSCF	SS	UUD/BERG/Holback	Solar Eclipse	ESA-SP229-206	ProclinMS48, A3, 11	-
1980-S46	2444286.19	1980 Feb 16 1632	Black Brant 8C	-	IMS2 27.370S	GSCF	SS	UUD/BERG/Holback	Solar Eclipse	ESA-SP229-206	ProclinMS48, A3, 11	-
1980-S46	2444286.19	1980 Feb 16 1632	Black Brant 8C	-	IMS2 27.370S	GSCF	SS	UUD/BERG/Holback	Solar Eclipse	ESA-SP229-206	ProclinMS48, A3, 11	-
1980-S46	2444286.19	1980 Feb 16 1632	Black Brant 8C	-	IMS2 27.370S	GSCF	SS	UUD/BERG/Holback	Solar Eclipse	ESA-SP229-206	ProclinMS48, A3, 11	-
1980-S46	2444286.19	1980 Feb 16 1632	Black Brant 8C	-	IMS2 27.370S	GSCF	SS	UUD/BERG/Holback	Solar Eclipse	ESA-SP229-206	ProclinMS48, A3, 11	-
1980-S46	2444286.19	1980 Feb 16 1632	Black Brant 8C	-	IMS2 27.370S	GSCF	SS	UUD/BERG/Holback	Solar Eclipse	ESA-SP229-206	ProclinMS48, A3, 11	-
1980-S46	2444286.19	1980 Feb 16 1632	Black Brant 8C	-	IMS2 27.370S	GSCF	SS	UUD/BERG/Holback	Solar Eclipse	ESA-SP229-206	ProclinMS48, A3, 11	-
1980-S46	2444286.19	1980 Feb 16 1632	Black Brant 8C	-	IMS2 27.370S	GSCF	SS	UUD/BERG/Holback	Solar Eclipse	ESA-SP229-206	ProclinMS48, A3, 11	-
1980-S46	2444286.19	1980 Feb 16 1632	Black Brant 8C	-	IMS2 27.370S	GSCF	SS	UUD/BERG/Holback	Solar Eclipse	ESA-SP229-206	ProclinMS48, A3, 11	-
1980-S46	2444286.19	1980 Feb 16 1632	Black Brant 8C	-	IMS2 27.370S	GSCF	SS	UUD/BERG/Holback	Solar Eclipse	ESA-SP229-206	ProclinMS48, A3, 11	-
1980-S46	2444286.19	1980 Feb 16 1632	Black Brant 8C	-	IMS2 27.370S	GSCF	SS	UUD/BERG/Holback	Solar Eclipse	ESA-SP229-206	ProclinMS48, A3, 11	-
1980-S46	2444286.19	1980 Feb 16 1632	Black Brant 8C	-	IMS2 27.370S	GSCF	SS	UUD/BERG/Holback	Solar Eclipse	ESA-SP229-206	ProclinMS48, A3, 11	-
1980-S46	2444286.19	1980 Feb 16 1632	Black Brant 8C	-	IMS2 27.370S	GSCF	SS	UUD/BERG/Holback	Solar Eclipse	ESA-SP229-206	ProclinMS48, A3, 11	-
1980-S46	2444286.19	1980 Feb 16 1632	Black Brant 8C	-	IMS2 27.370S	GSCF	SS	UUD/BERG/Holback	Solar Eclipse	ESA-SP229-206	ProclinMS48, A3, 11	-
1980-S46	2444286.19	1980 Feb 16 1632	Black Brant 8C	-	IMS2 27.370S	GSCF	SS	UUD/BERG/Holback	Solar Eclipse	ESA-SP229-206	ProclinMS48, A3, 11	-
1980-S46	2444286.19	1980 Feb 16 1632	Black Brant 8C	-	IMS2 27.370S	GSCF	SS	UUD/BERG/Holback	Solar Eclipse	ESA-SP229-206	ProclinMS48, A3, 11	-
1980-S46	2444286.19	1980 Feb 16 1632	Black Brant 8C	-	IMS2 27.370S	GSCF	SS	UUD/BERG/Holback	Solar Eclipse	ESA-SP229-206	ProclinMS48, A3, 11	-
1980-S46	2444286.19	1980 Feb 16 1632	Black Brant 8C	-	IMS2 27.370S	GSCF	SS	UUD/BERG/Holback	Solar Eclipse	ESA-SP229-206	ProclinMS48, A3, 11	-
1980-S46	2444286.19	1980 Feb 16 1632	Black Brant 8C	-	IMS2 27.370S	GSCF	SS	UUD/BERG/Holback	Solar Eclipse	ESA-SP229-206	ProclinMS48, A3, 11	-
1980-S46	2444286.19	1980 Feb 16 1632	Black Brant 8C	-	IMS2 27.370S	GSCF	SS	UUD/BERG/Holback	Solar Eclipse	ESA-SP229-206	ProclinMS48, A3, 11	-
1980-S46	2444286.19	1980 Feb 16 1632	Black Brant 8C	-	IMS2 27.370S	GSCF	SS	UUD/BERG/Holback	Solar Eclipse	ESA-SP229-206	ProclinMS48, A3, 11	-
1980-S46	2444286.19	1980 Feb 16 1632	Black Brant 8C	-	IMS2 27.370S	GSCF	SS	UUD/BERG/Holback	Solar Eclipse	ESA-SP229-206	ProclinMS48, A3, 11	-
1980-S46	2444286.19	1980 Feb 16 1632	Black Brant 8C	-	IMS2 27.370S	GSCF	SS	UUD/BERG/Holback	Solar Eclipse	ESA-SP229-206	ProclinMS48, A3, 11	-
1980-S46	2444286.19	1980 Feb 16 1632	Black Brant 8C	-	IMS2 27.370S	GSCF	SS	UUD/BERG/Holback	Solar Eclipse	ESA-SP229-206	ProclinMS48, A3, 11	-
1980-S46	2444286.19	1980 Feb 16 1632	Black Brant 8C	-	IMS2 27.370S	GSCF	SS	UUD/BERG/Holback	Solar Eclipse	ESA-SP229-206	ProclinMS48, A3, 11	-
1980-S46	2444286.19	1980 Feb 16 1632	Black Brant 8C	-	IMS2 27.370S	GSCF	SS	UUD/BERG/Holback	Solar Eclipse	ESA-SP229-206	ProclinMS48, A3, 11	-
1980-S46	2444286.19	1980 Feb 16 1632	Black Brant 8C	-	IMS2 27.370S	GSCF	SS	UUD/BERG/Holback	Solar Eclipse	ESA-SP229-206	ProclinMS48, A3, 11	-
1980-S46	2444286.19	1980 Feb 16 1632	Black Brant 8C	-	IMS2 27.370S	GSCF	SS	UUD/BERG/Holback	Solar Eclipse	ESA-SP229-206	ProclinMS48, A3, 11	-
1980-S46	2444286.19	1980 Feb 16 1632	Black Brant 8C	-	IMS2 27.370S	GSCF	SS	UUD/BERG/Holback	Solar Eclipse	ESA-SP229-206	ProclinMS48, A3, 11	-
1980-S46	2444286.19	1980 Feb 16 1632	Black Brant 8C	-	IMS2 27.370S	GSCF	SS	UUD/BERG/Holback	Solar Eclipse	ESA-SP229-206	ProclinMS48, A3, 11	-
1980-S4												



Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Agency	Launch_Code	Group	Category	LTCite	Cite	Notes
1985-S97	2446243.24	1985 Jun 26 1746	Nike Orion	-	MMSA 31.540E	GSFC	SS	UUC/Smith	Plasma	MISR	-	-
1985-S112	2446315.12	1985 Sep 6 1500	Nike Orion	-	MMSA 31.5500	GSFC	SS	PITV/ZiPf	Aeronomy	MISR	-	-
1985-S116	2446318.50	1985 Sep 10 0003:07	Nike Orion	-	MMSA 31.51GE	GSFC	SS	GSC/Goldberg	Plasma	MISR	-	-
1985-S130	2446321.12	1985 Sep 12 1450	Nike Orion	-	MMSA 31.5600	GSFC	SS	PITV/ZiPf	Aeronomy	MISR	-	-
1985-S137	2446364.22	1985 Oct 25 1720	Black Brant 8C	-	MMSA 27.90CS	GSFC	SS	UML/LPSV/Brumer, Bonnet	Solar UV/X	ASR6, 8, 273	-	-
1986-S19	2446497.26	1986 Feb 1 0540	Black Brant 8C	-	MMSA 27.1030H	GSFC	SS	UML/McCannon, Kraushaar	XR Astron	Ap-1367, 182	-	-
1986-S28	2446497.26	1986 Mar 7 1812:39	Black Brant 8C	-	MMSA 27.1030H	GSFC	SS	GSC/Mentall	Solar UV	MISR	-	-
1986-S39	2446539.15	1986 Apr 18 1535	Nike Orion	-	MMSA 31.5900	GSFC	SS	PITV/ZiPf	Aeronomy	MISR	-	-
1986-S40	2446542.80	1986 Apr 22 0711	Black Brant 8B	-	MMSA 27.0800G	GSFC	SS	UCB/Boyer	EUV Astron	MISR	-	-
1986-S42	2446546.06	1986 Apr 25 1330	Nike Orion	-	MMSA 31.5800	GSFC	SS	PITV/ZiPf	Aeronomy	MISR	-	-
1986-S69	2446638.44	1986 Jul 26 2237:20	Nike Orion	-	MMSA 31.570E	GSFC	SS	GSC/Goldberg	Plasma	MISR	-	-
1986-S70	2446638.46	1986 Jul 26 2303	Nike Orion	-	MMSA 31.600E	GSFC	SS	PSU/Hale	Plasma	MISR	-	-
1986-S71	2446638.49	1986 Jul 26 2344:40	Nike Orion	-	MMSA 31.610E	GSFC	SS	PSU/Hale	Solar EUV	MISR	-	-
1986-S102	2446719.22	1986 Oct 15 1710	Black Brant 8C	-	MMSA 27.75CS	GSFC	SS	GSC/Neupert	Solar	WIPR66-48	-	-
1986-S103	2446726.33	1986 Oct 22 2000	Black Brant 8C	-	MMSA 27.990S	GSFC	SS	SAD/Golub	Solar	AFORL	-	-
1987-S84	2446875.79	1987 Mar 21 0556	Nike Tomahawk	-	G. A19.427	AFGL	SS	CLEW/DNI/Larson	Plasma Ba	MISR	-	-
1987-S86	2446875.81	1987 Mar 21 0721	Nike Tomahawk	-	MMSA 19.2200E	GSFC	SS	UUC/Boothill	Plasma	MISR	-	-
1987-S73	2447009.23	1987 Mar 24 1830	Nike Orion	-	MMSA 31.620E	GSFC	SS	UUC/Boothill	Plasma	MISR	-	-
1987-S117	2447009.23	1987 Jul 27 1727:13	Black Brant 8C	-	MMSA 31.630E	GSFC	SS	UUC/Boothill	EUV Astron	MISR	-	-
1987-S126	2447015.13	1987 Aug 7 1602:09	Black Brant 8C	-	MMSA 31.630E	GSFC	SS	UUC/Boothill	EUV Astron	MISR	-	-
1987-S127	2447022.19	1987 Aug 14 1629	Black Brant 8C	-	MMSA 27.1200E	GSFC	SS	UUC/Boothill	EUV Astron	MISR	-	-
1987-S147	2447067.92	1987 Sep 29 1000	Black Brant 8B	-	MMSA 27.1060G	GSFC	SS	UUC/Boyer	Aeronomy	MISR	-	-
1987-S161	2447083.95	1987 Oct 15 1052:00	Nike Orion	-	DLR A-100-146	GSFC	SS	AFGL/Ballenhain	Aeronomy	MISR	-	-
1987-S165	2447083.95	1987 Oct 15 1052:40	Nike Orion	-	DLR A-100-146	GSFC	SS	AFGL/Ballenhain	Aeronomy	MISR	-	-
1987-S168	2447090.40	1987 Oct 21 2133:00	Nike Orion	-	DLR A-100-149 F-75	GSFC	SS	UUC/Boothill	Aeronomy	ESA-SF291-161	-	-
1987-S169	2447090.40	1987 Oct 21 2133:20	Nike Orion	-	DLR A-100-150 F-77	GSFC	SS	UUC/Boothill	Aeronomy	ESA-SF291-161	-	-
1987-S160	2447090.40	1987 Oct 21 2133:40	Nike Orion	-	DLR A-100-151	GSFC	SS	UUC/Boothill	Aeronomy	MISR	-	-
1987-S169	2447090.40	1987 Oct 21 2133:40	Nike Orion	-	MMSA 31.666E	GSFC	SS	UUC/Boothill	Aeronomy	ESA-SF291-161	-	-
1987-S169	2447090.40	1987 Oct 21 2133:40	Nike Orion	-	MMSA 31.666E	GSFC	SS	UUC/Boothill	Aeronomy	ESA-SF291-161	-	-
1987-S162	2447092.25	1987 Oct 21 2134:20	Black Brant 8C	-	MMSA 27.920S	GSFC	SS	UUC/Boothill	Aeronomy	MISR	-	-
1987-S165	2447096.51	1987 Oct 28 0021:00	Nike Orion	-	MMSA 31.670E	GSFC	SS	UUC/Boothill	Aeronomy	MISR	-	-
1987-S169	2447111.51	1987 Nov 12 0021:00	Nike Orion	-	DLR A-100-151	GSFC	SS	UUC/Boothill	Aeronomy	MISR	-	-
1987-S171	2447111.51	1987 Nov 12 0021:00	Nike Orion	-	DLR A-100-151	GSFC	SS	UUC/Boothill	Aeronomy	MISR	-	-
1987-S173	2447111.52	1987 Nov 12 0022:00	Nike Orion	-	MMSA 31.650E	GSFC	SS	UUC/Boothill	Aeronomy	MISR	-	-
1988-S90	2447283.67	1988 May 2 0400	Black Brant 8B	-	DLR V-MB85-156	GSFC	SS	WBL/ESTEC	Aeronomy	MISR	-	-
1988-S91	2447285.12	1988 May 2 0400	Nike Orion	-	MMSA 31.6900	GSFC	SS	PITV/ZiPf	Aeronomy	MISR	-	-
1988-S92	2447287.69	1988 May 6 0430	Black Brant 8B	-	DLR V-MB85-156	GSFC	SS	PITV/ZiPf	Aeronomy	MISR	-	-
1988-S99	2447282.10	1988 May 10 1430	Nike Orion	-	MMSA 31.6900	GSFC	SS	WBL/ESTEC	Aeronomy	MISR	-	-
1988-S108	2447365.74	1988 Jul 27 0547:43	Black Brant 8C	-	MMSA 27.1200E	GSFC	SS	PITV/ZiPf	Aeronomy	MISR	-	-
1988-S116	2447415.94	1988 Sep 15 1040	Black Brant 8C	-	MMSA 27.1100L	GSFC	SS	UCM/Kelley	Plasma	MISR	-	-
1988-S146	2447502.69	1988 Dec 7 0440	Black Brant 8C	-	MMSA 27.1210H	GSFC	SS	UML/McCannon	XR Astron	MISR	-	-
1989-S46	2447604.17	1989 Jan 21 0056	Nike Orion	-	MMSA 31.7300	GSFC	SS	UML/McCannon	XR Astron	MISR	-	-
1989-S47	2447606.17	1989 Jan 22 1601:31	Nike Orion	-	MMSA 31.7300	GSFC	SS	UML/McCannon	XR Astron	MISR	-	-
1989-S72	2447745.56	1989 Jul 17 0822:26	Black Brant 8C	-	MMSA 27.1228E	GSFC	SS	PITV/ZiPf	Aeronomy	MISR	-	-
1989-S73	2447745.56	1989 Jul 17 0822:26	Black Brant 8C	-	MMSA 27.1228E	GSFC	SS	PITV/ZiPf	Aeronomy	MISR	-	-
1989-S81	2447761.86	1989 Aug 13 0839:59	Black Brant 8C	-	SDIO Black Star 1	GSFC	SS	UML/Sharp	Plasma	MISR	-	-
1989-S86	2447850.90	1989 Aug 13 0930	Black Brant 8C	-	SDIO Black Star 2	GSFC	SS	UML/Sharp	Plasma	MISR	-	-
1989-S108	2447850.90	1989 Aug 13 0930	Black Brant 8C	-	SDIO Black Star 2	GSFC	SS	UML/Sharp	Plasma	MISR	-	-
1990-S26	2447912.42	1990 Jan 21 0056	Black Brant 8C	-	MMSA 27.1230G	GSFC	SS	UCG/Cash	UV Astron	MISR	-	-
1990-S28	2447912.42	1990 Jan 21 0056	Black Brant 8C	-	MMSA 27.1230G	GSFC	SS	UCG/Cash	UV Astron	MISR	-	-
1990-S40	2447945.70	1990 Feb 22 0454:00	Nike Orion	-	Featherland 81	GSFC	SS	UCG/Cash	Submm Astron	MISR	-	-
1990-S41	2447945.70	1990 Feb 22 0454:00	Nike Orion	-	DLR C-10-175	GSFC	SS	UCG/Cash	Submm Astron	MISR	-	-
1990-S44	2447948.31	1990 Feb 25 0930:00	Nike Orion	-	SSC RSI/MDOE	GSFC	SS	UCG/Cash	Aeronomy	ESA-SF317-381	-	-
1990-S47	2447948.31	1990 Feb 25 0930:00	Nike Orion	-	SSC RSI/MDOE	GSFC	SS	UCG/Cash	Aeronomy	ESA-SF317-381	-	-
1990-S47	2447948.31	1990 Feb 25 0930:00	Nike Orion	-	SSC RSI/MDOE	GSFC	SS	UCG/Cash	Aeronomy	ESA-SF317-381	-	-
1990-S50	2447956.54	1990 Feb 28 0051:59	Nike Orion	-	SSC RSG/ITOMIC 1	GSFC	SS	UCG/Cash	Aeronomy	ESA-SF317-381	-	-
1990-S53	2447956.54	1990 Feb 28 0051:59	Nike Orion	-	SSC RSG/ITOMIC 2	GSFC	SS	UCG/Cash	Aeronomy	ESA-SF317-381	-	-
1990-S54	2447956.54	1990 Feb 28 0051:59	Nike Orion	-	Featherland 81	GSFC	SS	UCG/Cash	Aeronomy	ESA-SF317-381	-	-
1990-S54	2447956.54	1990 Feb 28 0051:59	Nike Orion	-	Featherland 81	GSFC	SS	UCG/Cash	Aeronomy	ESA-SF317-381	-	-
1990-S54	2447956.54	1990 Feb 28 0051:59	Nike Orion	-	Featherland 81	GSFC	SS	UCG/Cash	Aeronomy	ESA-SF317-381	-	-
1990-S54	2447956.54	1990 Feb 28 0051:59	Nike Orion	-	Featherland 81	GSFC	SS	UCG/Cash	Aeronomy	ESA-SF317-381	-	-
1990-S59	2447959.50	1990 Mar 9 0925	Nike Orion	-	DLR C-10-176	GSFC	SS	UCG/Cash	Aeronomy	ESA-SF317-381	-	-
1990-S61	2447962.36	1990 Mar 11 0243	Nike Orion	-	Featherland 86	GSFC	SS	UCG/Cash	Aeronomy	ESA-SF317-381	-	-
1990-S63	2447963.68	1990 Mar 13 0421	Nike Orion	-	DLR C-10-177	GSFC	SS	UCG/Cash	Aeronomy	ESA-SF317-381	-	-
1990-S67	2447972.92	1990 Mar 22 1003:23	Nike Orion	-	MMSA 31.700E	GSFC	SS	UCG/Cash	Aeronomy	ESA-SF317-381	-	-
1990-S98	2448040.71	1990 Mar 29 0509:00	Nike Orion	-	MMSA 31.700E	GSFC	SS	UCG/Cash	Aeronomy	ESA-SF317-381	-	-
1990-S104	2448088.79	1990 Jul 16 0700:00	Black Brant 8C	-	MMSA 27.1240G	GSFC	SS	UCG/Cash	Aeronomy	ESA-SF317-381	-	-
1991-S99	2448372.30	1991 Apr 25 1800	Nike Orion	-	MMSA 31.7800U	GSFC	SS	PITV/ZiPf	Aeronomy	MISR	-	-
1991-S102	2448377.30	1991 Apr 30 1919	Nike Orion	-	MMSA 31.8000U	GSFC	SS	PITV/ZiPf	Aeronomy	MISR	-	-
1991-S183	2448469.57	1991 Aug 1 0139:00	Nike Orion	-	MMSA 31.770E WLC-91	GSFC	SS	PITV/ZiPf	Aeronomy	MISR	-	-
1991-S184	2448469.57	1991 Aug 1 0140:00	Nike Orion	-	MMSA 31.770E WLC-91	GSFC	SS	PITV/ZiPf	Aeronomy	MISR	-	-
1991-S184	2448478.47	1991 Aug 9 2315:15	Nike Orion	-	DLR V-10-188 WLC-91	GSFC	SS	UAP/Lubben	Aeronomy	ASR14, 9, 113	-	-
1991-S182	2448478.47	1991 Aug 9 2315:15	Nike Orion	-	DLR V-10-189 WLC-91	GSFC	SS	UAP/Lubben	Aeronomy	ASR14, 9, 113	-	-
1991-S183	2448478.47	1991 Aug 9 2340:00	Nike Orion	-	UAP/Lubben	GSFC	SS	UAP/Lubben	Aeronomy	ASR14, 9, 113	-	-
1991-S183	2448478.47	1991 Aug 9 2340:00	Nike Orion	-	UAP/Lubben	GSFC	SS	UAP/Lubben	Aeronomy	ASR14, 9, 113	-	-
1991-S183	2448478.47	1991 Aug 9 2340:00	Nike Orion	-	UAP/Lubben	GSFC	SS	UAP/Lubben	Aeronomy	ASR14, 9, 113	-	-
1991-S145	2448506.41	1991 Sep 6 2150	Black Brant 8C	-	MMSA 27.1240E	GSFC	SS	UML/Sharp	Plasma	MISR	-	-
1991-S161	2448517.49	1991 Sep 17 2343	Nike Orion	-	DLR A-100-190	GSFC	SS	UML/Sharp	Plasma	MISR	-	-
1991-S162	2448520.37	1991 Sep 20 2048	Nike Orion	-	DLR A-100-190	GSFC	SS	UML/Sharp	Plasma	MISR	-	-
1991-S163	2448520.44	1991 Sep 20 2240	Nike Orion	-	DLR A-100-192	GSFC	SS	UML/Sharp	Plasma	MISR	-	-
1991-S168	2448530.37	1991 Sep 30 2055:15	Nike Orion	-	DLR A-100-193	GSFC	SS	UML/Sharp	Plasma	MISR	-	-
1991-S160	2448533.44	1991 Oct 3 2227:30	Nike Orion	-	DLR A-100-194	GSFC	SS	UML/Sharp	Plasma	MISR	-	-
1991-S161	2448533.44	1991 Oct 4 0008	Nike Orion	-	DLR A-100-195	GSFC	SS	UML/Sharp	Plasma	MISR	-	-
1992-S23	2448685.08	1992 Mar 3 1357:30	Nike Tomahawk	-	MMSA 19.2210E	GSFC	SS	UML/Sharp	Plasma	MISR	-	-
1992-S24	2448685.09	1992 Mar 3 1406:48	Black Brant 8C	-	MMSA 27.1300E	GSFC	SS	UML/Sharp				



Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Orbit	Agency	Launch_Code	Group	Category	LTCite	Cite	Notes
2011-S41	2465763.79	2011 Jul 21 0701:00	Nike Improved Orion	-	-	0.000	SSC	SS	MISU/GumbeL	Aeron	www.ssc.se	-	-
2012-S70	2466266.97	2012 Nov 25 1120	Nike Improved Orion	-	-	0.000	SSC/DLR	SS	DLR/Kolbe,Kargl,Sperl	Microgravity	www.ssc.se	-	-







Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Mission	FlightCode	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee km	Range km	Dest
2024-359	2460585.19	2024 Oct 1 1630?	Ghadr-110	-	(many)	-	-	-	-	SHIRS	-	-	-	200?	1000?	Israel
2024-360	2460585.19	2024 Oct 1 1630?	Shahab 3	-	(many)	-	-	-	-	SHIRS	-	-	-	200?	1000?	Israel





Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Launch_Upsay	Agency	Launch_Code	Group	Category	LTCite	Cite	Notes
2024-859	2460686.19	2024 Oct 1 1630?	Ghadr-110	-	(many)	0.000	IR	MS	-	Weapon	Wire	-	-
2024-860	2460686.19	2024 Oct 1 1630?	Shahab 3	-	(many)	0.000	IR	MS	-	Weapon	Wire	-	-



Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Mission	Flightcode	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee Km	Range Km	Dest
2018-S53	2456389-01	2018 Sep 27 1216	llucLeus	-	1	-	-	-	-	AMD	03	-	-	107	-	-



Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Display	Agency	Launch_Code	Group	Category	LTCite	Cite	Notes
2018-563	2458389-01	2018 Sep 27 12:16	hucLeus	-	1	0.000	MAMMO	SS	MAMMO/	Test	Wire	-	-





Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Launch			Ascent_Site	Ascent_Pad	Apogee km	Range km	Dest
							Mission	FlightCode	Platform					
1977-429	2443280.84	1977 May 17 0815	OTRAG	-	1	4x9m	-	-	-	-	12	-	-	
1978-421	2443648.42	1978 May 19 2201	OTRAG	-	2	4x9m	-	SHABA	-	-	9	-	-	
1978-427	2443664.99	1978 Jun 5 1140	OTRAG	-	3a	4x15m	-	SHABA	-	-	0?	-	-	
1981-375	2444664.89	1981 Mar 1 0920	OTRAG	-	3	4x15m	-	SEBA	-	-	150?	-	-	
1981-402	2444762.50	1981 Jun 7	OTRAG	-	4	4x15m	-	SEBA	-	-	50?	-	-	
1981-403	2444864.50	1981 Sep 17	OTRAG	-	5	1x15m	-	SEBA	-	-	50?	-	-	
1981-404	2444878.50	1981 Oct 1	OTRAG	-	6	1x15m	-	SEBA	-	-	50?	-	-	
1981-405	2444901.50	1981 Oct 24	OTRAG	-	7	1x15m	-	SEBA	-	-	50?	-	-	
1981-406	2444927.50	1981 Nov 19	OTRAG	-	8	1x15m	-	SEBA	-	-	50?	-	-	
1981-407	2444950.50	1981 Dec 12	OTRAG	-	9	1x15m	-	SEBA	-	-	50?	-	-	
1982-463	2445122.50	1982 Jun 2	OTRAG	-	10	1x15m	-	SEBA	-	-	50?	-	-	
1982-464	2445144.50	1982 Jun 24	OTRAG	-	11	1x15m RSD test	-	SEBA	-	-	10?	-	-	
1982-465	2445214.50	1982 Sep 2	OTRAG	-	12	1x15m	-	SEBA	-	-	50?	-	-	
1982-466	2445223.50	1982 Sep 11	OTRAG	-	13	1x15m	-	SEBA	-	-	50?	-	-	
1982-467	2445283.50	1982 Nov 10	OTRAG	-	14	1x15m	-	SEBA	-	-	50?	-	-	
1982-468	2445289.50	1982 Nov 16	OTRAG	-	15	1x15m	-	SEBA	-	-	50?	-	-	
1982-469	2445312.50	1982 Dec 9	OTRAG	-	16	1x15m	-	SEBA	-	-	50?	-	-	
1983-401	2445596.75	1983 Sep 19 0559	OTRAG	-	DLR K-0L-120	1-3-B 4x9m	-	ESR	-	-	4	-	-	



Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	0rsPay	Agency	Launch_Code	Group	Category	LTCite	Cite	Notes
1977-429	2443280.84	1977 May 17 0815	OTMAG	-	1	0.000	OTR	SS	OTR/	Test	OTRAMBrochure	AAS25-201	-
1978-421	2443648.42	1978 May 19 2201	OTMAG	-	2	0.000	OTR	SS	OTR/	Test	AMS25-201	-	-
1978-427	2443664.99	1978 Jun 5 1140	OTMAG	-	3a	0.000	OTR	SF	OTR/	Test	AMS25-201	-	-
1981-375	2444664.89	1981 Mar 1 0920	OTMAG	-	3	0.000	OTR	SS	OTR/	Test	AMS25-201	astronautix.com	-
1981-302	2444762.50	1981 Jun 7	OTMAG	-	4	0.000	OTR	SS	OTR/	Test	bernd-leitenberger.d	-	-
1981-303	2444864.50	1981 Sep 17	OTMAG	-	5	0.000	OTR	SS	OTR/	Test	astronautix.com	-	-
1981-304	2444878.50	1981 Oct 1	OTMAG	-	6	0.000	OTR	SS	OTR/	Test	astronautix.com	-	-
1981-305	2444901.50	1981 Oct 24	OTMAG	-	7	0.000	OTR	SS	OTR/	Test	astronautix.com	-	-
1981-306	2444927.50	1981 Nov 19	OTMAG	-	8	0.000	OTR	SS	OTR/	Test	astronautix.com	-	-
1981-307	2444950.50	1981 Dec 12	OTMAG	-	9	0.000	OTR	SS	OTR/	Test	astronautix.com	-	-
1982-363	2445122.50	1982 Jun 2	OTMAG	-	10	0.000	OTR	SS	OTR/	Test	astronautix.com	-	-
1982-364	2445144.50	1982 Jun 24	OTMAG	-	11	0.000	OTR	SS	OTR/	Test	astronautix.com	-	-
1982-365	2445214.50	1982 Sep 2	OTMAG	-	12	0.000	OTR	SS	OTR/	Test	astronautix.com	-	-
1982-366	2445223.50	1982 Sep 11	OTMAG	-	13	0.000	OTR	SS	OTR/	Test	astronautix.com	-	-
1982-367	2445283.50	1982 Sep 10	OTMAG	-	14	0.000	OTR	SS	OTR/	Test	astronautix.com	-	-
1982-368	2445289.50	1982 Nov 16	OTMAG	-	15	0.000	OTR	SS	OTR/	Test	astronautix.com	-	-
1982-369	2445312.50	1982 Dec 9	OTMAG	-	16	0.000	OTR	SS	OTR/	Test	astronautix.com	-	-
1983-301	2445596.75	1983 Sep 19 0559	OTMAG	-	DLR K-UL-120	0.000	OTR/DLR	SF	DLR/	Test	AMS25-201	Moraba	-



Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Mission	Launch_Site	Platform	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee	Range	Dest
1977-S332	2443386.50	1977 Sep	Uka	-	-	First launch	-	Grp-4	-	-	-	-	1207	-	-
1979-S276	2444085.50	1979 Aug	Uka	-	-	Stage 1, last	-	Grp-4	-	-	-	-	1207	-	-
1979-S277	2444116.50	1979 Sep	Uka	-	-	Stage 2, first	-	Grp-4	-	-	-	-	1207	-	-
1980-S259	2444420.50	1980 Jul	Uka	-	-	Flight KY 104 (last)	-	Grp-4	-	-	-	-	1207	-	-
1987-S202	2446795.50	1987	-	-	-	-	-	Grp-4	-	-	-	-	507	-	-
1991-M03	2448256.50	1991	Iskander	1	-	-	-	Grp-4	-	-	-	-	507	-	-
1991-M04	2448256.50	1991	Iskander	2	-	-	-	Grp-4	-	-	-	-	507	-	-
1991-M05	2448256.50	1991	Iskander	3	-	-	-	Grp-4	-	-	-	-	507	-	-
1991-M06	2448256.50	1991	Iskander	4	-	-	-	Grp-4	-	-	-	-	507	-	-
1991-M07	2448256.50	1991	Iskander	5	-	-	-	Grp-4	-	-	-	-	507	-	-
1992-M05	2448621.50	1992	Iskander	-	-	-	-	Grp-4	-	-	-	-	507	-	-
1996-M04	2450082.50	1996	Iskander-M	-	-	-	-	Grp-4	-	-	-	-	507	-	-
1997-M08	2450448.50	1997	Iskander-M	-	-	-	-	Grp-4	-	-	-	-	507	-	-
2008-M10	2454686.50	2008 Aug 8	Iskander-M	?	-	S Ossetia war	-	Grp-4	-	-	-	-	507	-	Gori
2013-M06	2456956.50	2013 Oct 30	Iskander-M	-	-	-	-	Grp-4	-	-	-	-	507	-	-
2016-M03	24571618.50	2016 Aug 18?	Iskander-M	-	-	-	-	Grp-4	-	-	-	-	507	-	-
2017-M03	2457998.50	2017 Sep 2	Iskander-M	-	-	-	-	Grp-4	-	-	-	-	507	-	-
2017-M04	2457998.50	2017 Sep 2	Iskander-M	-	-	-	-	Grp-4	-	-	-	-	507	-	-
2018-M05	2458187.50	2018 Mar 10?	Kizilzai	-	-	-	-	Grp-4?	-	-	-	-	507	-	-
2019-M02	2458607.58	2019 May 4 0154	Hasong-11Ga	-	-	-	-	Grp-4?	-	-	-	-	507	-	-
2019-M03	2458612.81	2019 May 9 0729	Hasong-11Ga	-	-	107-120-893	-	Grp-4?	-	-	-	-	507	-	-
2019-M04	2458612.83	2019 May 9 0749	Hasong-11Ga	-	-	-	-	Grp-4?	-	-	-	-	507	-	-
2019-M06	2458689.36	2019 Jul 24 2034	Hasong-11Ga	-	-	-	-	Grp-4?	-	-	-	-	507	-	-
2019-M07	2458689.37	2019 Jul 24 2057	Hasong-11Ga	-	-	-	-	Grp-4?	-	-	-	-	507	-	-
2019-M100	2458701.35	2019 Aug 5 2024	Hasong-11Ga	-	-	-	-	Grp-4?	-	-	-	-	507	-	-
2019-M101	2458701.36	2019 Aug 5 2036	Hasong-11Ga	-	-	-	-	Grp-4?	-	-	-	-	507	-	-
2020-M06	2458126.50	2020 Oct 4?	Iskander	-	-	Attack on Ganja	-	Grp-4	-	-	-	-	407	-	-
2020-M07	2458162.50	2020 Nov 9?	Iskander	-	-	-	-	Grp-4	-	-	-	-	407	-	-
2021-M01	2459298.42	2021 Mar 24 2206	Hasong-11Da	-	-	High payload mass	-	Grp-4	-	-	-	-	450	-	-
2021-M02	2459298.43	2021 Mar 24 2226	Hasong-11Da	-	-	199-92-891	-	Grp-4	-	-	-	-	450	-	-
2021-M05	2459472.65	2021 Sep 15 0534	Hasong-11Ga	?	-	Rail Launch	-	Grp-4	-	-	-	-	60	-	-
2021-M06	2459472.65	2021 Sep 15 0539	Hasong-11Ga	?	-	Rail Launch	-	Grp-4	-	-	-	-	60	-	-
2021-M08	2459666.55	2021 Oct 19 0117	Buglaekseong-6	?	-	-	-	Grp-4	-	-	-	-	60	-	Sea of J.
2022-M01	2459593.74	2022 Jan 14 0541	Hasong-11Ga	?	-	Rail Launch	-	Grp-4	-	-	-	-	36	-	-
2022-M02	2459606.46	2022 Jan 26 2300?	Hasong-11Ga	?	-	Rail Launch	-	Grp-4	-	-	-	-	36	-	-
2022-M06	2459633.50	2022 Feb 23	Hasong-11Ga	?	-	-	-	Grp-4	-	-	-	-	20	-	-
2022-M08	2459633.50	2022 Feb 23	Iskander-M	?	-	9N723	-	Grp-4	-	-	-	-	60?	-	-
2022-M10	2459634.50	2022 Feb 24	Iskander-M	?	-	-	-	Grp-4	-	-	-	-	60?	-	-
2022-M11	2459634.50	2022 Feb 24	Iskander-M	?	-	-	-	Grp-4	-	-	-	-	60?	-	-
2022-M12	2459634.50	2022 Feb 24	Iskander-M	?	-	-	-	Grp-4	-	-	-	-	60?	-	-
2022-M13	2459634.50	2022 Feb 24	Iskander-M	?	-	-	-	Grp-4	-	-	-	-	60?	-	-
2022-M14	2459634.50	2022 Feb 24	Iskander-M	?	-	-	-	Grp-4	-	-	-	-	60?	-	-
2022-M15	2459634.50	2022 Feb 24	Iskander-M	?	-	-	-	Grp-4	-	-	-	-	60?	-	-
2022-M16	2459634.50	2022 Feb 24	Iskander-M	?	-	-	-	Grp-4	-	-	-	-	60?	-	-
2022-M17	2459634.50	2022 Feb 24	Iskander-M	?	-	-	-	Grp-4	-	-	-	-	60?	-	-
2022-M18	2459634.50	2022 Feb 24	Iskander-M	?	-	-	-	Grp-4	-	-	-	-	60?	-	-
2022-M19	2459634.50	2022 Feb 24	Iskander-M	?	-	-	-	Grp-4	-	-	-	-	60?	-	-
2022-M20	2459634.50	2022 Feb 24	Iskander-M	?	-	-	-	Grp-4	-	-	-	-	60?	-	-
2022-M21	2459640.10	2022 Mar 1 1037	Iskander-M	?	-	-	-	Grp-4	-	-	-	-	60?	-	-
2022-M22	2459640.10	2022 Mar 1 1418	Iskander-M	?	-	-	-	Grp-4	-	-	-	-	60?	-	-
2022-M23	2459685.88	2022 Mar 16 0900?	Hasong-11Ra	?	-	-	-	Grp-4	-	-	-	-	25	-	-
2022-M24	2459685.88	2022 Mar 16 0900?	Hasong-11Ra	?	-	-	-	Grp-4	-	-	-	-	25	-	-
2022-M25	2459706.71	2022 Mar 7 0505	Buglaekseong-6	?	-	-	-	Grp-4	-	-	-	-	60	-	-
2022-M26	2459735.56	2022 Jun 5 0120?	Hasong-11Ga	?	-	KN-23?	-	Grp-4	-	-	-	-	60?	-	-
2022-M27	2459735.56	2022 Jun 5 0120?	Hasong-11Ga	?	-	-	-	Grp-4	-	-	-	-	60?	-	-
2022-M28	2459735.56	2022 Jun 5 0120?	Hasong-11Ga	?	-	-	-	Grp-4	-	-	-	-	60?	-	-
2022-M29	2459850.88	2022 Sep 28 0910	Hasong-11Ga	?	-	-	-	Grp-4	-	-	-	-	20?	-	-
2022-M30	2459850.88	2022 Sep 28 0920	Hasong-11Ga	?	-	-	-	Grp-4	-	-	-	-	20?	-	-
2022-M31	2459852.41	2022 Sep 29 2145	Hasong-11Ga	?	-	-	-	Grp-4	-	-	-	-	36	-	-
2022-M32	2459852.41	2022 Sep 29 2145	Hasong-11Ga	?	-	-	-	Grp-4	-	-	-	-	36	-	-
2022-M33	2459852.42	2022 Oct 5 2123	Hasong-11Ga	?	-	-	-	Grp-4	-	-	-	-	30	-	-
2022-M34	2459858.38	2022 Oct 28 0259	Hasong-11Ga	?	-	-	-	Grp-4	-	-	-	-	60	-	-
2022-M35	2459880.62	2022 Oct 28 0318	Hasong-11Ga	?	-	-	-	Grp-4	-	-	-	-	60	-	-
2022-M36	2459880.64	2022 Oct 28 0318	Hasong-11Ga	?	-	-	-	Grp-4	-	-	-	-	60	-	-
2022-M37	2459885.49	2022 Nov 1 2351	Hasong-11Ga	?	-	-	-	Grp-4	-	-	-	-	60?	-	-
2022-M38	2459885.49	2022 Nov 5 0232	Hasong-11Ga	?	-	-	-	Grp-4	-	-	-	-	60?	-	-
2022-M39	2459888.61	2022 Nov 5 0240?	Hasong-11Ga	?	-	-	-	Grp-4	-	-	-	-	60?	-	-
2022-M40	2459888.62	2022 Nov 5 0250?	Hasong-11Ga	?	-	-	-	Grp-4	-	-	-	-	60?	-	-
2022-M41	2459888.62	2022 Nov 5 0259	Hasong-11Ga	?	-	-	-	Grp-4	-	-	-	-	60?	-	-
2022-M42	2459892.77	2022 Nov 9 0631	Hasong-11Ga	?	-	-	-	Grp-4	-	-	-	-	60	-	-
2022-M43	2460012.89	2023 Mar 9 0920	Hasong-11Ra	?	-	-	-	Grp-4	-	-	-	-	25	-	-
2022-M44	2460012.89	2023 Mar 9 0920	Hasong-11Ra	?	-	-	-	Grp-4	-	-	-	-	25	-	-
2022-M45	2460012.89	2023 Mar 9 0920	Hasong-11Ra	?	-	-	-	Grp-4	-	-	-	-	25	-	-
2022-M46	2460012.89	2023 Mar 9 0920	Hasong-11Ra	?	-	-	-	Grp-4	-	-	-	-	25	-	-
2022-M47	2460012.89	2023 Mar 9 0920	Hasong-11Ra	?	-	-	-	Grp-4	-	-	-	-	25	-	-
2022-M48	2460017.45	2023 Mar 13 2241	Hasong-11Ga	?	-	Hasong-11S?	-	Grp-4	-	-	-	-	100?	-	-
2022-M49	2460017.45	2023 Mar 13 2251	Hasong-11Ga	?	-	-	-	Grp-4	-	-	-	-	100?	-	-
2022-M50	2460022.59	2023 Mar 19 0205	Hasong-11Ga	?	-	S11o test?	-	Grp-4	-	-	-	-	60	-	-
2022-M51	2460042.34	2024 Jun 30 2005	Hasong-11Da-4, 5	?	-	-	-	Grp-4	-	-	-	-	100?	-	-

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Mission	FlightCode	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee km	Range km	Dest
2024-S43	2460492.34	2024 Jun 30 2015	Hwasong-11Da	?	-	-	-	-	-	JANGY	-	-	-	1007	120	-





Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Launch	Agency	Launch_Code	Group	Category	LTCite	Cite	Notes
						t							
1977-S532	2443586.50	1977 Sep	Uka	-	-	0.000	RVSH	MS	-	Test	KY60	-	-
1979-S276	2444055.50	1979 Aug	Uka	-	-	0.000	RVSH	MS	-	Test	KY60	-	-
1979-S277	2444116.50	1979 Sep	Uka	-	-	0.000	RVSH	MS	-	Test	KY60	-	-
1980-S259	2444420.50	1980 Jul	Uka	-	-	0.000	RVSH	MS	-	Test	KY60	-	-
1987-S202	2446795.50	1987	Uka	-	-	0.000	RVSH	MS	-	Test	KY60	-	-
1991-M03	2448256.50	1991	Iskander	-	1	0.000	RVSH	MS	-	Test	KY60	-	-
1991-M04	2448256.50	1991	Iskander	-	2	0.000	RVSH	MS	-	Test	KY60	-	-
1991-M05	2448256.50	1991	Iskander	-	3	0.000	RVSH	MS	-	Test	KY60	-	-
1991-M06	2448256.50	1991	Iskander	-	4	0.000	RVSH	MS	-	Test	KY60	-	-
1991-M07	2448256.50	1991	Iskander	-	5	0.000	RVSH	MS	-	Test	KY60	-	-
1992-M05	2448621.50	1992	Iskander	-	II-1	0.000	RVSH	MS	-	Test	KY60	-	-
1996-M04	2450052.50	1996	Iskander-H	-	II-10	0.000	RVSH	MS	-	Test	KY60	-	-
1997-M08	2450448.50	2008 Aug 8	Iskander-H	?	-	0.000	RVSH	MS	-	Test	KY60	-	-
2008-H10	2456656.50	2013 Oct 30	Iskander-H	-	-	0.000	RVSH	MS	-	Test	KY60	-	-
2013-M06	2456595.50	2016 Aug 18?	Iskander-H	-	-	0.000	RVSH	MS	-	Test	russianforces.org	-	-
2016-M03	2457618.50	2017 Sep 2	Iskander-H	-	-	0.000	RVSH	MS	-	Test	Wire	-	-
2017-M03	2457988.50	2017 Sep 2	Iskander-H	-	-	0.000	RVSH	MS	-	Test	Wire	-	-
2017-M04	2457988.50	2018 Mar 10?	Kinzhalt	-	-	0.000	RVSH	MS	-	Test	Wire	-	-
2018-M05	2458157.50	2018 Mar 10?	Iskander	-	-	0.000	RVSH	MS	-	Test	Wire	-	-
2019-M02	2458607.58	2019 May 4 0154	Hasong-110a	-	-	0.000	JRG	MS	-	OT	twitter.com/hktipnd	-	-
2019-M03	2458612.81	2019 May 9 0729	Hasong-110a	-	107-120-893	0.000	JRG	MS	-	OT	Wire	-	-
2019-M04	2458612.83	2019 May 9 0749	Hasong-110a	-	-	0.000	JRG	MS	-	OT	Wire	-	-
2019-M06	2458659.36	2019 Jul 24 2034	Hasong-110a	-	-	0.000	JRG	MS	-	OT	Wire	-	-
2019-M07	2458659.37	2019 Jul 24 2057	Hasong-110a	-	-	0.000	JRG	MS	-	OT	Wire	-	-
2019-K100	2458701.35	2019 Aug 5 2024	Hasong-110a	-	-	0.000	JRG	MS	-	OT	Wire	-	-
2019-K101	2458701.36	2019 Aug 5 2036	Hasong-110a	-	-	0.000	JRG	MS	-	OT	Wire	-	-
2020-M06	24589126.50	2020 Oct 4?	Iskander	-	-	0.000	AMAD	MS	-	Weapon	Weapon	-	-
2020-M07	2459162.50	2020 Nov 9?	Iskander	-	-	0.000	AMAD	MS	-	Weapon	Weapon	-	-
2021-M01	2459288.42	2021 Mar 24 2206	Hasong-110a	-	199-92-891	0.000	JRG	MS	-	OT	Wire	-	-
2021-M02	2459288.43	2021 Mar 24 2228	Hasong-110a	-	199-92-892	0.000	JRG	MS	-	OT	Wire	-	-
2021-M05	2459472.65	2021 Sep 15 0334	Hasong-110a	?	-	0.000	JRG	MS	-	OT	Wire	-	-
2021-M06	2459472.66	2021 Sep 15 0339	Hasong-110a	?	-	0.000	JRG	MS	-	OT	Wire	-	-
2021-M08	2459472.65	2021 Oct 19 0117	Bulgaksong-6	?	-	0.000	JRG	MS	-	Test	Wire	-	-
2022-M01	2459593.74	2022 Jan 14 0941	Hasong-110a	?	-	0.000	JRG	MS	-	OT	Wire	-	-
2022-M02	2459593.74	2022 Jan 14 0952	Hasong-110a	?	-	0.000	JRG	MS	-	OT	Wire	-	-
2022-M05	2459606.46	2022 Jan 26 2300?	Hasong-110a	?	-	0.000	RVA	MS	-	Test	Wire	-	-
2022-M06	2459606.46	2022 Jan 26 2300?	Hasong-110a	?	-	0.000	RVA	MS	-	Test	Wire	-	-
2022-M08	2459633.50	2022 Feb 23	Iskander-H	?	9M723	0.000	RVA	MS	-	Weapon	Twitter	-	-
2022-M09	2459633.50	2022 Feb 23	Iskander-H	?	-	0.000	RVA	MS	-	Weapon	Twitter	-	-
2022-M10	2459633.50	2022 Feb 24	Iskander-H	?	-	0.000	RVA	MS	-	Weapon	Twitter	-	-
2022-M11	2459633.50	2022 Feb 24	Iskander-H	?	-	0.000	RVA	MS	-	Weapon	Twitter	-	-
2022-M12	2459633.50	2022 Feb 24	Iskander-H	?	-	0.000	RVA	MS	-	Weapon	Twitter	-	-
2022-M13	2459633.50	2022 Feb 24	Iskander-H	?	-	0.000	RVA	MS	-	Weapon	Twitter	-	-
2022-M14	2459633.50	2022 Feb 24	Iskander-H	?	-	0.000	RVA	MS	-	Weapon	Twitter	-	-
2022-M15	2459633.50	2022 Feb 24	Iskander-H	?	-	0.000	RVA	MS	-	Weapon	Twitter	-	-
2022-M16	2459633.50	2022 Feb 24	Iskander-H	?	-	0.000	RVA	MS	-	Weapon	Twitter	-	-
2022-M17	2459633.50	2022 Feb 24	Iskander-H	?	-	0.000	RVA	MS	-	Weapon	Twitter	-	-
2022-M18	2459633.50	2022 Feb 24	Iskander-H	?	-	0.000	RVA	MS	-	Weapon	Twitter	-	-
2022-M19	2459633.50	2022 Feb 24	Iskander-H	?	-	0.000	RVA	MS	-	Weapon	Twitter	-	-
2022-M20	2459633.50	2022 Feb 24	Iskander-H	?	-	0.000	RVA	MS	-	Weapon	Twitter	-	-
2022-M21	2459633.50	2022 Feb 24	Iskander-H	?	-	0.000	RVA	MS	-	Weapon	Twitter	-	-
2022-M22	2459633.50	2022 Feb 24	Iskander-H	?	-	0.000	RVA	MS	-	Weapon	Twitter	-	-
2022-M23	2459633.50	2022 Feb 24	Iskander-H	?	-	0.000	RVA	MS	-	Weapon	Twitter	-	-
2022-M24	2459633.50	2022 Feb 24	Iskander-H	?	-	0.000	RVA	MS	-	Weapon	Twitter	-	-
2022-M25	2459633.50	2022 Feb 24	Iskander-H	?	-	0.000	RVA	MS	-	Weapon	Twitter	-	-
2022-M26	2459633.50	2022 Feb 24	Iskander-H	?	-	0.000	RVA	MS	-	Weapon	Twitter	-	-
2022-M27	2459633.50	2022 Feb 24	Iskander-H	?	-	0.000	RVA	MS	-	Weapon	Twitter	-	-
2022-M28	2459633.50	2022 Feb 24	Iskander-H	?	-	0.000	RVA	MS	-	Weapon	Twitter	-	-
2022-M29	2459633.50	2022 Feb 24	Iskander-H	?	-	0.000	RVA	MS	-	Weapon	Twitter	-	-
2022-M30	2459633.50	2022 Feb 24	Iskander-H	?	-	0.000	RVA	MS	-	Weapon	Twitter	-	-
2022-M31	2459633.50	2022 Feb 24	Iskander-H	?	-	0.000	RVA	MS	-	Weapon	Twitter	-	-
2022-M32	2459633.50	2022 Feb 24	Iskander-H	?	-	0.000	RVA	MS	-	Weapon	Twitter	-	-
2022-M33	2459633.50	2022 Feb 24	Iskander-H	?	-	0.000	RVA	MS	-	Weapon	Twitter	-	-
2022-M34	2459633.50	2022 Feb 24	Iskander-H	?	-	0.000	RVA	MS	-	Weapon	Twitter	-	-
2022-M35	2459633.50	2022 Feb 24	Iskander-H	?	-	0.000	RVA	MS	-	Weapon	Twitter	-	-
2022-M36	2459633.50	2022 Feb 24	Iskander-H	?	-	0.000	RVA	MS	-	Weapon	Twitter	-	-
2022-M37	2459633.50	2022 Feb 24	Iskander-H	?	-	0.000	RVA	MS	-	Weapon	Twitter	-	-
2022-M38	2459633.50	2022 Feb 24	Iskander-H	?	-	0.000	RVA	MS	-	Weapon	Twitter	-	-
2022-M39	2459633.50	2022 Feb 24	Iskander-H	?	-	0.000	RVA	MS	-	Weapon	Twitter	-	-
2022-M40	2459633.50	2022 Feb 24	Iskander-H	?	-	0.000	RVA	MS	-	Weapon	Twitter	-	-
2022-M41	2459633.50	2022 Feb 24	Iskander-H	?	-	0.000	RVA	MS	-	Weapon	Twitter	-	-
2022-M42	2459633.50	2022 Feb 24	Iskander-H	?	-	0.000	RVA	MS	-	Weapon	Twitter	-	-
2022-M43	2459633.50	2022 Feb 24	Iskander-H	?	-	0.000	RVA	MS	-	Weapon	Twitter	-	-
2022-M44	2459633.50	2022 Feb 24	Iskander-H	?	-	0.000	RVA	MS	-	Weapon	Twitter	-	-
2022-M45	2459633.50	2022 Feb 24	Iskander-H	?	-	0.000	RVA	MS	-	Weapon	Twitter	-	-
2022-M46	2459633.50	2022 Feb 24	Iskander-H	?	-	0.000	RVA	MS	-	Weapon	Twitter	-	-
2022-M47	2459633.50	2022 Feb 24	Iskander-H	?	-	0.000	RVA	MS	-	Weapon	Twitter	-	-
2022-M48	2459633.50	2022 Feb 24	Iskander-H	?	-	0.000	RVA	MS	-	Weapon	Twitter	-	-
2022-M49	2459633.50	2022 Feb 24	Iskander-H	?	-	0.000	RVA	MS	-	Weapon	Twitter	-	-
2022-M50	2459633.50	2022 Feb 24	Iskander-H	?	-	0.000	RVA	MS	-	Weapon	Twitter	-	-
2022-M51	2459633.50	2022 Feb 24	Iskander-H	?	-	0.000	RVA	MS	-	Weapon	Twitter	-	-
2022-M52	2459633.50	2022 Feb 24	Iskander-H	?	-	0.000	RVA	MS	-	Weapon	Twitter	-	-
2022-M53	2459633.50	2022 Feb 24	Iskander-H	?	-	0.000	RVA	MS	-	Weapon	Twitter	-	-
2022-M54	2459633.50	2022 Feb 24	Iskander-H	?	-	0.000	RVA	MS	-	Weapon	Twitter	-	-
2022-M55	2459633.50	2022 Feb 24	Iskander-H	?	-	0.000	RVA	MS	-	Weapon	Twitter	-	-
2022-M56	2459633.50	2022 Feb 24	Iskander-H	?	-	0.000	RVA	MS	-	Weapon	Twitter	-	-
2022-M57	2459633.50	2022 Feb 24	Iskander-H	?	-	0.000	RVA	MS	-	Weapon	Twitter	-	-
2022-M58	2459633.50	2022 Feb 24	Iskander-H	?	-	0.000	RVA	MS	-	Weapon	Twitter	-	-
2022-M59	2459633.50	2022 Feb 24	Iskander-H	?	-	0.000	RVA	MS	-	Weapon	Twitter	-	-
2022-M60	2459633.50	2022 Feb 24	Iskander-H	?	-	0.000	RVA	MS	-	Weapon	Twitter	-	-
2022-M61	2459633.50	2022 Feb 24	Iskander-H	?	-	0.000	RVA	MS	-	Weapon	Twitter	-	-
2022-M62	2459633.50	2022 Feb 24	Iskander-H	?	-	0.000	RVA	MS	-	Weapon	Twitter	-	-
2022-M63	2459633.50	2022 Feb 24	Iskander-H	?	-	0.000	RVA	MS	-	Weapon	Twitter	-	-
2022-M64	2459633.50	2022 Feb 24	Iskander-H	?	-	0.000	RVA	MS	-	Weapon	Twitter	-	-
2022-M65	2459633.50	2022 Feb 24	Iskander-H	?	-	0.000	RVA	MS	-	Weapon	Twitter	-	-
2022-M66	2459633.50	2022 Feb 24	Iskander-H	?	-	0.000	RVA	MS	-	Weapon	Twitter	-	-
2022-M67	2459633.50	2022 Feb 24	Iskander-H	?	-	0.000	RVA	MS	-	Weapon	Twitter	-	-
2022-M68	2459633.50	2022 Feb 24	Iskander-H	?	-	0.000	RVA	MS	-	Weapon	Twitter	-	-
2022-M69	2459633.50	2022 Feb 24	Iskander-H	?	-	0.000	RVA	MS	-	Weapon	Twitter	-	-
2022-M70	2459633.50	2022 Feb 24	Iskander-H	?	-	0.000	RVA	MS	-	Weapon	Twitter	-	-
2022-M71	2459633.50	2022 Feb 24	Iskander-H	?	-	0.000	RVA	MS	-	Weapon	Twitter	-	-
2022-M72	2459633.50	2022 Feb 24	Iskander-H	?	-	0.000	RVA	MS	-	Weapon	Twitter	-	-
2022-M73	2459633.50	2022 Feb 24	Iskander-H	?	-	0.000	RVA	MS	-	Weapon	Twitter	-	-
2022-M74	2459633.50	2022 Feb 24	Iskander-H	?	-	0.000	RVA	MS	-	Weapon	Twitter	-	-
2022-M75	2459633.50	2022 Feb 24	Iskander-H	?	-	0.000	RVA	MS	-	Weapon	Twitter	-	-
2022-M76	2459633.50	2022 Feb 24	Iskander-H	?	-	0.000	RVA	MS	-	Weapon	Twitter	-	-
20													

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variat	Flight_ID	Launch	Agency	Launch_Code	Group	Category	LTCite	Cite	Notes
						OrbPay							
2024-S43	2460462.34	2024 Jun 30 2015	Hwasong-11Da	?	-	0.000	RPA	MF	-	Test	Wire	-	-



Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Mission	LaunchCode	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee km	Range km	Dest
2010-422	245523.04	2010 May 6 13:00:00	Orion LAS	-	PA-1	-	-	-	-	WS	LC32E	-	-	1	-	-



Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	OrbPay	Agency	Launch_Code	Group	Category	LTCite	Cite	Notes
2010-422	2465323.04	2010 May 6 1300:00	Orion LAS	-	PA-1	0.000	JSC/LARCN	TS	-	Test	Wire	-	-



Launch Mission

Launch_Tag	Launch_ID	Variant	Flight	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee_Km	Range_Km	Dest
1958-M31	2436347.44	-	SS12.48	IGV SS12.48	-	-	-	60	-	-
1958-M16	2436511.04	Aerobee 75	Grenades	IGV SS12.50F	WS	-	-	54	-	-
1958-M17	2436515.02	Aerobee 75	Grenades	IGV SS12.51F	GDJM	-	-	59	-	-
1958-M24	2436530.21	Aerobee 75	Grenades	SS12.051	GDJM	-	-	59	-	-
1974-K23	2442197.33	Orion	Hawk Motor Test	MASH 30.02MT	WT	-	-	46	-	-
1974-M05	2442260.31	Orion	-	MASH 30.02MT	WT	-	-	73	-	-
1977-M01	2443339.02	Orion	Parachute Test	MASH 30.030U	WS	-	-	59	-	-
1978-M01	2443541.97	Orion	A-OR-30 Orion 1	DLR K-0-89	AND	-	-	57	-	-
1979-S208	2443765.32	Orion	K-OR-91	DLR K-0-91	ESR	-	-	62	-	-
1979-S236	2444181.89	Orion	-	MASH 30.091U	WT	-	-	82	-	-
1980-M05	2444435.30	Orion	-	MASH 30.030U	WT	-	-	76	-	-
1980-S179	2444619.65	Orion	TYZ-7688	MASH 30.100U	AND	-	-	87	-	-
1980-S184	2444624.42	Orion	TYZ-7684	MASH 30.110U	AND	-	-	83	-	-
1980-M06	2444629.29	Orion	-	MASH 30.040U	WT	-	-	75	-	-
1980-S190	2444630.62	Orion	-	MASH 30.126U	AND	-	-	85	-	-
1981-M01	2444663.27	Orion	UM MD Profile	MASH 30.070U	WT	-	-	77	-	-
1981-S130	2444689.23	Orion	UM MD Profile	MASH 30.140U	WT	-	-	73	-	-
1981-S131	2444689.26	Orion	UM MD Profile	MASH 30.080U	WT	-	-	75	-	-
1981-S146	2444690.50	Orion	UM MD Profile	MASH 30.160E	WT	-	-	85	-	-
1981-M15	2444692.08	Orion	DFVLR Strafram 1/1	MASH 30.130E	WT	-	-	71	-	-
1981-M16	2444692.89	Orion	DFVLR Strafram 1/1	DLR K-0-111	ESR	-	-	60	-	-
1982-S143	2446184.50	Orion	UM MD Profile	MASH 30.210U	WS	-	-	85	-	-
1983-S46	2446346.23	Orion	UM MD Profile	MASH 30.150U	WT	-	-	70	-	-
1983-S46	2446346.28	Orion	UM MD Profile	MASH 30.180U	WT	-	-	75	-	-
1983-S82	2446451.73	Orion	DFVLR Strafram 1/3	DLR K-0-117	ESR	-	-	58	-	-
1984-M03	2446731.38	Orion	DFVLR Strafram 1/4	DLR K-0-128 DRDPHMS	ESR	-	-	57	-	-
1984-S107	2446929.36	Orion	FSU E	MASH 30.190U	WT	-	-	85	-	-
1984-S109	2446935.52	Orion	FSU E	MASH 30.220E	WT	-	-	85	-	-
1985-S28	2446994.42	Orion	Fin test	MASH 30.230U	WT	-	-	85	-	-
1985-S36	2446104.42	Orion	Fin test	MASH 30.240U	WT	-	-	85	-	-
1985-S43	2446112.14	Orion	Fin test	DLR K-0-135	CLDI	-	-	85	-	-
1985-S45	2446119.14	Orion	Fin test	DLR K-0-136	CLDI	-	-	85	-	-
1985-S46	2446157.61	Orion	-	MASH 30.280E	WT	-	-	85	-	-
1985-S48	2446157.91	Orion	-	MASH 30.280E	WT	-	-	85	-	-
1985-S113	2446316.90	Orion	-	MASH 30.280E	WT	-	-	85	-	-
1985-S114	2446316.90	Orion	-	MASH 30.280E	WT	-	-	85	-	-
1985-S120	2446326.30	Orion	-	MASH 30.270U	WT	-	-	85	-	-
1985-S129	2446354.82	Orion	-	MASH 30.310E	WT	-	-	85	-	-
1985-S75	2446199.67	Orion	DFVLR Strafram 1/5	DLR K-0-140	ESR	-	-	95	-	-
1985-S114	2446754.85	Orion	Turbulence	MASH 30.330E	WT	-	-	87	-	-
1987-S82	2446643.95	Orion	Strafram 2/1 DRDPHMS	DLR K-0-143	ESR	-	-	89	-	-
1987-S83	2446921.71	Orion	RASHMOS 2	DLR K-0-143	ESR	-	-	61	-	-
1987-S111	2447083.45	Orion	RASHMOS 3	MASH 30.44E	WT	-	-	80	-	-
1987-S162	2447083.95	Orion	WTF/FSU E	MASH 30.380E	WT	-	-	81	-	-
1987-S161	2447090.40	Orion	MIC/Epsilon YAG	MASH 30.390E	WT	-	-	80	-	-
1988-S172	2447101.52	Orion	MIC/Epsilon HME	MASH 30.390E	WT	-	-	89	-	-
1988-S172	2447101.52	Orion	MIC/Epsilon HME	MASH 30.370E	WT	-	-	87	-	-
1988-S44	2447156.82	Orion	RASHMOS 2	DLR K-0-163	ESR	-	-	65	-	-
1989-S32	2447156.82	Orion	Strafram 2/2	DLR K-0-166	ESR	-	-	65	-	-
1989-S55	2447191.67	Orion	Strafram 2/3	DLR K-0-172	ESR	-	-	97	-	-
1989-S56	2447195.65	Orion	RASHMOS 3	DLR K-0-172	ESR	-	-	70	-	-
1989-S89	2448202.85	Orion	Strafram 3/2	MASH 30.351E	WT	-	-	85	-	-
1991-S59	2448290.85	Orion	Strafram 3/2	DLR K-0-185	ESR	-	-	58	-	-
1991-S93	2448392.85	Orion	RASHMOS 4	DLR K-0-185	ESR	-	-	65	-	-
1992-M02	2448397.97	Orion	CSOAS	MASH 30.400P	WT	-	-	54	-	-
1993-S18	2449045.50	Orion	Strafram 3/21	DLR K-0-207	ESR	-	-	85	-	-
1994-S17	2449400.89	Orion	RASHMOS 5	DLR K-0-207	ESR	-	-	3	-	-
1994-S48	2449545.52	Orion	-	MASH 30.300E	WT	-	-	85	-	-
1994-S59	2449597.32	Orion	CSHARP	MASH 30.410P	WT	-	-	85	-	-
1994-M01	2449691.32	Orion	SSC Hygrosond	SSC HYGROSOND	ESR	-	-	77	-	-
1995-S49	2449912.83	Orion	DLR Test Orion 1	DLR K-0/7-216	ESR	-	-	74	-	-
1995-S65	2449998.94	Orion	DLR Test Orion 2	DLR K-0/7-217	ESR	-	-	74	-	-
1995-S83	2450055.83	Orion	SSC REBUS 1	SSC REBUS 1	ESR	-	-	89	-	-
1997-S44	2450603.98	Orion	SSC GYROTTEST	SSC GYROTTEST	ESR	-	-	94	-	-
1998-S41	2450940.35	Orion	DLR Test Maxus-4	MASH 30.0420P	WT	-	-	85	-	-
1998-S58	2451093.98	Orion	DLR Test Maxus-4	DLR K-0-236	ESR	-	-	56	-	-
1999-S46	2451365.50	Orion	DLR Test Maxus-4	MS-MT-05	WT	-	-	85	-	-
1999-M03	2451366.26	Orion	DLR Test Maxus-4	MS-MT-05	WT	-	-	40	-	-
2000-M01	2451573.93	Orion	ASRP SRP-3	MASH 30.0430U	WT	-	-	79	-	-
2000-S28	2451671.21	Orion	ASRP SRP-3	MASH 30.0430U	WT	-	-	79	-	-
2000-S29	2451679.53	Orion	MIDAS Ferdinand-115	MIDAS Ferdinand-115	WT	-	-	85	-	-
2000-S36	2451713.96	Orion	MIDAS Ferdinand-116	MIDAS Ferdinand-116	WT	-	-	85	-	-
2001-S11	2451959.75	Orion	DLR K-0-?	MASH 30.0450U	WT	-	-	85	-	-
2001-M05	2452026.94	Orion	DLR Test Maxus-4	MASH 30.0460U	ESR	-	-	81	-	-
2001-S22	2452044.58	Orion	DLR Test Maxus-4	H01-2	WT	-	-	47	-	-
2001-S24	2452066.95	Orion	DLR Test Maxus-4	MASH 30.0460U	WT	-	-	115	-	-
2001-S25	2452077.50	Orion	DLR Test Maxus-4	MASH 30.0480U	WT	-	-	85	-	-
2001-S27	2452085.39	Orion	DLR Test Maxus-4	MS-MT-05	WT	-	-	85	-	-
2001-S29	2452259.72	Orion	SSC Hygrosond-2	SSC Hygrosond-2	WT	-	-	85	-	-
2002-S13	2452340.88	Orion	MASA 30.500E	MASA 30.490E	ESR	-	-	90	-	-
2002-S14	2452348.97	Orion	MASA 30.500E	MASA 30.500E	ESR	-	-	85	-	-
2002-S15	2452349.94	Orion	MASA 30.510E	MASA 30.510E	ESR	-	-	85	-	-
2002-S16	2452349.07	Orion	MASA 30.510E	MASA 30.510E	ESR	-	-	85	-	-
2002-S21	2452352.38	Orion	MASA 30.470U	MASA 30.470U	WT	-	-	89	-	-
2002-S40	2452431.95	Orion	MASA 30.530U	MASA 30.530U	WT	-	-	85	-	-
2002-S47	2452457.57	Orion	MIDAS	MIDAS	WT	-	-	106	-	-
2002-S51	2452460.55	Orion	MIDAS	MIDAS	WT	-	-	85	-	-
2002-S52	2452460.57	Orion	MIDAS	MIDAS	WT	-	-	85	-	-



Launch Mission

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee_Km	Range_Km	Dest
2003-404	2452796.92	2003 Jun 6 1001:00	Orion	-	MASH 30.5590	Student rocket	-	WI	-	-	-	40?	-	-
2003-351	2452821.89	2003 Jul 1 0923:00	Improved Orion	-	ROMA RI-MI-01	ROMA 2003	-	SVAL	-	-	-	107	-	-
2003-352	2452824.86	2003 Jul 4 0820:00	Improved Orion	-	ROMA RI-MI-02	ROMA 2003	-	SVAL	-	-	-	106	-	-
2003-353	2452826.86	2003 Jul 6 0827:00	Improved Orion	-	ROMA RI-MI-03	ROMA 2003	-	SVAL	-	-	-	106	-	-
2003-301	2452921.98	2003 Oct 9 1137:00	Improved Orion	-	MASH 30.5400	Student rocket	-	WI	-	-	-	64?	-	-
2004-406	2453165.94	2004 Jun 9 1036	Orion	-	MASH 30.6000	Student rocket	-	WI	-	-	-	43	-	-
2004-362	2453307.33	2004 Dec 28 1949	Improved Orion	-	SSC MAGIC 1I	EURO REXUS-2/ECDMA	-	ESR	MRL?	-	-	91	-	-
2005-302	2453380.69	2005 Jan 10 0437:29	Improved Orion	-	SSC MAGIC	SSC MAGIC 1	-	ESR	MRL	-	-	96	-	-
2005-314	2453444.74	2005 Mar 15 0545:00	Improved Orion	-	MASH 30.580E	DUST	-	ESR	MRL	-	-	108?	-	-
2005-315	2453444.82	2005 Mar 15 0745:00	Improved Orion	-	MASH 30.590E	DUST	-	PF	LC3	-	-	108?	-	-
2005-320	2453507.37	2005 May 17 1114	Improved Orion	-	MASH 30.5600	MAGIC 2	-	WI	LC2	-	-	90?	-	-
2005-404	2453530.94	2005 Jun 9 1032	Improved Orion	-	MASH 30.6100	Student rocket	-	WI	-	-	-	48?	-	-
2005-325	2453538.50	2005 Jun 17	Orion	-	-	Target	-	WI	-	-	-	85?	-	-
2005-326	2453538.50	2005 Jun 17	Orion	-	-	IMEF	-	WS	-	-	-	85?	-	-
2005-328	2453565.86	2005 Jul 4 0641	Improved Orion	-	HP-200 Hotel	-	-	AMD	-	-	-	100?	-	-
2005-302	2453622.61	2005 Sep 9 0245	Improved Orion	-	MASH 30.092DR	-	-	AMD	-	-	-	50?	-	-
2005-363	2453622.61	2005 Sep 9 0245	Improved Orion	-	MASH 30.063DR	Acoustic monitoring	-	WS	-	-	-	50?	-	-
2005-340	2453622.76	2005 Sep 9 0614	Improved Orion	-	MASH 30.070DR	Acoustic monitoring	-	WS	-	-	-	90?	-	-
2005-349	2453684.15	2005 Sep 29 0915:40	Improved Orion	-	MASH 30.070DR	Telemetry Test	-	WS	-	-	-	90?	-	-
2006-308	2453819.88	2005 Nov 9 1640	Orion	-	MASH 30.064DR	-	-	WS	-	-	-	90?	-	-
2006-309	2453820.05	2006 Mar 25 0900:00	Orion	-	MASH 30.064DR	-	-	WS	-	-	-	90?	-	-
2006-311	2453830.75	2006 Apr 5 0656	Improved Orion	-	SSC REXUS 3	EURO REXUS 3	-	ESR	-	-	-	95	-	-
2006-301	2453894.37	2006 Jun 8 1111	Orion	-	MASH 30.072DU	Student (SUBSES)	-	WI	-	-	-	51	-	-
2006-403	2453917.80	2006 Jul 1 0705	Improved Orion	-	MASH 30.066DR	ARK Hobby-1	-	AMD	-	-	-	40?	-	-
2006-342	2453937.88	2006 Jul 21 0904	Improved Orion	-	MASH 30.066DR	Target?	-	WS	-	-	-	90?	-	-
2006-344	2453938.05	2006 Jul 21 1305	Improved Orion	-	MASH 30.067DR	Target?	-	WS	-	-	-	90?	-	-
2007-408	2454438.17	2007 Dec 5 1607	Orion	-	-	NCMB Target	-	WS	-	-	-	20?	-	-
2008-386	2454658.01	2008 Apr 1 1220	Improved Orion	-	SSC April 1 One	SSC APR ONE	-	ESR	-	-	-	101	-	-
2008-303	2454644.94	2008 Jun 27 1036	Orion	-	MASH 30.0740	Rocdon	-	WI	-	-	-	6?	-	-
2008-352	2454766.79	2008 Oct 27 0704:08	Improved Orion	-	ABE V01	Paralhas	-	CLEI	-	-	-	95?	-	-
2009-301	2454642.47	2009 Jan 10 2317	Improved Orion	-	MASH 30.0730U	ASP SRM-5 (ISIS)	-	PF	-	-	-	92?	-	-
2009-313	2454902.52	2009 Mar 12 1008	Improved Orion	-	SSC REXUS 6	EURO REXUS 6	-	ESR	-	-	-	85	-	-
2009-314	2454903.75	2009 Mar 13 0600	Improved Orion	-	SSC REXUS 5	EURO REXUS 5	-	ESR	-	-	-	87	-	-
2009-326	2454961.31	2009 May 29 1926	Improved Orion	-	ABE V02	Paracat. 1	-	ALCA	UL	-	-	93	-	-
2010-322	2455267.81	2010 Mar 2 0725	Improved Orion	-	SSC REXUS 7	EURO REXUS 7	-	ESR	-	-	-	88	-	-
2010-325	2455289.53	2010 Mar 4 1015	Improved Orion	-	SSC REXUS 8	EURO REXUS 8	-	ESR	-	-	-	88	-	-
2010-371	2455657.22	2010 Dec 5 1719	Improved Orion	-	ABE V03	Paracat. 2	-	ALCA	UL	-	-	103	-	-
2011-304	2455616.04	2011 Feb 22 1256	Improved Orion	-	SSC REXUS 9	EURO REXUS 9	-	ESR	-	-	-	81	-	-
2011-306	2455616.52	2011 Feb 23 1000	Improved Orion	-	SSC REXUS 10	EURO REXUS 10	-	ESR	-	-	-	82	-	-
2011-361	2455693.28	2011 May 11 1800	Improved Orion	-	ABE V04	Camurupim	-	ESR	-	-	-	82	-	-
2011-362	2455691.46	2011 Nov 25 2300	Improved Orion	-	ABE V05	Brasili-Altemania	-	CLEI	-	-	-	100	-	-
2012-389	2455702.80	2012 Feb 15	Improved Orion	-	SSC REXUS 11	Economista Target 1	-	ESR	-	-	-	80?	-	-
2012-390	2455706.08	2012 Mar 19 1405	Improved Orion	-	SSC REXUS 12	Economista Target 1	-	ESR	-	-	-	82	-	-
2012-391	2455747.89	2012 Nov 16 1046	Improved Orion	-	SSC REXUS 11	EURO REXUS 11	-	ESR	-	-	-	70	-	-
2013-3107	2455749.67	2013 May 7 0400	Improved Orion	-	SSC REXUS 14	EURO REXUS 14	-	ESR	-	-	-	81?	-	-
2013-3108	2455749.67	2013 May 8 0400	Improved Orion	-	SSC REXUS 13	EURO REXUS 13	-	ESR	-	-	-	81?	-	-
2014-328	2455806.86	2014 May 28 1130	Improved Orion	-	SSC REXUS 15	EURO REXUS 15	-	ESR	-	-	-	80	-	-
2014-329	2455806.86	2014 May 28 1130	Improved Orion	-	SSC REXUS 15	EURO REXUS 15	-	ESR	-	-	-	80	-	-
2014-383	2457098.87	2014 Dec 17 0400	Improved Orion	-	MASH 30.076DR	CTEX	-	WS	-	-	-	90?	-	-
2015-321	2457098.89	2015 Mar 17 0915	Improved Orion	-	SSC REXUS 17	EURO REXUS 17	-	ESR	-	-	-	81	-	-
2015-322	2457098.89	2015 Mar 18 1330	Improved Orion	-	SSC REXUS 16	EURO REXUS 16	-	ESR	-	-	-	81	-	-
2016-324	2457465.72	2016 Mar 15 0530	Improved Orion	-	SSC REXUS 16	EURO REXUS 16	-	ESR	-	-	-	81	-	-
2016-335	2457465.72	2016 Mar 15 0510	Improved Orion	-	SSC REXUS 20	EURO REXUS 20	-	ESR	-	-	-	81	-	-
2017-323	2457927.95	2017 Mar 15 1043	Improved Orion	-	SSC REXUS 21	EURO REXUS 21	-	ESR	-	-	-	84	-	-
2017-324	2457929.84	2017 Mar 16 1300	Improved Orion	-	SSC REXUS 22	EURO REXUS 22	-	ESR	-	-	-	84	-	-
2018-452	2458190.10	2018 Mar 12 1435?	Improved Orion	-	SSC REXUS 24	EURO REXUS 24	-	ESR	-	-	-	84	-	-
2019-401	2458546.87	2019 Mar 4 0856?	Improved Orion	-	SSC REXUS 24	EURO REXUS 24	-	ESR	-	-	-	84	-	-
2019-309	2458553.89	2019 Mar 11 0920	Improved Orion	-	SSC REXUS 23	EURO REXUS 23	-	ESR	-	-	-	40?	-	-
2019-313	2458561.89	2019 Mar 19 0940	Improved Orion	-	SSC REXUS 25	EURO REXUS 25	-	ESR	-	-	-	75	-	-
2019-343	2459076.80	2019 Aug 15 0236	Improved Orion	-	SSC REXUS 26	EURO REXUS 26	-	ESR	-	-	-	80	-	-
2020-302	2459076.80	2020 Aug 15 0236	Improved Orion	-	SSC REXUS 26	EURO REXUS 26	-	ESR	-	-	-	80?	-	-
2023-303	2459992.02	2023 Feb 16 1200:00	Improved Orion	-	Practic Dragon 2020	SSO	-	KAU	-	-	-	139	-	-
2023-314	2460035.88	2023 Feb 16 1208:00	Improved Orion	-	MASA 12 090MT	MesaOrion 1	-	WI	-	-	-	126	-	-
2023-311	2460035.88	2023 Mar 29 0430:00	Improved Orion	-	SSC REXUS 30	EURO REXUS 30	-	ESR	-	-	-	80	-	-
2024-308	2460381.72	2024 Mar 12 0514:58	Improved Orion	?	SSC REXUS 29	EURO REXUS 29	-	ESR	-	-	-	80?	-	-
2024-309	2460384.00	2024 Mar 14 1200	Improved Orion	?	SSC REXUS 31	EURO REXUS 31	-	ESR	-	-	-	80?	-	-



Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	DrpPay	Agency	Launch_Code	Group	Category	LTCite	Cite	Notes
1956-M31	2436347.44	1956 May 23 2239	Aerobee 75	-	SS12.48	0.000	SCEL	SS	SEEL/	Aeron	IGY	-	-
1956-M16	2436511.04	1956 Nov 3 1252	Aerobee 75	-	SS12.050	0.000	SCEL	SS	UMI/Allen	Aeron	WDCRF	-	-
1956-M17	2436515.02	1956 Nov 7 1225:38	Aerobee 75	-	SS12.051	0.000	SCEL	SS	UMI/Allen	Aeron	WDCRF	-	-
1956-M24	2442197.30	1974 May 29 1706:00	Aerobee 75	-	SS12.057	0.000	SCEL	SS	UMI/Allen	Aeron	WDCRF	-	-
1974-A23	2442197.30	1974 May 29 1948	Orion	-	MSA 30.01MT	0.000	GSCF	SS	WFF/Flowers	Test	WDCRF	-	Always-Bash
1974-M05	2442350.31	1974 Nov 8 1933	Orion	-	MSA 30.02MT	0.000	GSCF	SS	WFF/Flowers	Test	WDCRF	-	WDCRF
1977-M01	2443339.01	1977 Jul 14 1230	Orion	-	MSA 12.27GT	0.000	GSCF	SS	GSCF/Maksimovic	Test	WDCRF	-	SRCTCom6
1978-M01	2443541.97	1978 Feb 2 1110:00	Orion	-	DLR K-0-89	0.000	DFVLR	SS	DFVLR/	Range Test	WDCRF	-	ESA-SF138/AMD
1978-S208	2443765.32	1978 Sep 13 1936	Orion	-	DLR K-0-91	0.000	DFVLR	SS	DFVLR/	Range Test	WDCRF	-	sec.se
1979-S236	2444181.89	1979 Nov 4 0927	Orion	-	MSA 30.091U	0.000	GSCF	SS	WFF/Perry	Aeron	JOR89_1468	-	WDCRF
1980-M05	2444435.30	1980 Jul 14 1911	Orion	-	MSA 30.030U	0.000	GSCF	SS	UMI/Horvath	Aeron	WDCRF	-	WDCRF
1980-S179	2444519.65	1980 Oct 7 0336:42	Orion	-	MSA 30.10GU	0.000	GSCF	SS	GSCF/Goldberg	Ionospheric	WDCRF	-	WDCRF
1980-S184	2444524.42	1980 Oct 11 2157:54	Orion	-	MSA 30.11GU	0.000	GSCF	SS	GSCF/Goldberg	Ionospheric	WDCRF	-	WDCRF
1980-M06	2444529.28	1980 Oct 16 1854	Orion	-	MSA 30.094U	0.000	GSCF	SS	UMI/Horvath	Aeron	WDCRF	-	WDCRF
1980-S190	2444530.62	1980 Oct 18 0250:25	Orion	-	MSA 30.125U	0.000	GSCF	SS	GSCF/Goldberg	Ionospheric	WDCRF	-	WDCRF
1981-M01	2444653.27	1981 Feb 27 1527	Orion	-	MSA 30.076U	0.000	GSCF	SS	UMI/Horvath	Aeron	WDCRF	-	WDCRF
1981-S130	2444809.23	1981 Jul 23 1730	Orion	-	MSA 30.140U	0.000	GSCF	SS	UMI/Horvath	Aeron	WDCRF	-	WDCRF
1981-S131	2444809.26	1981 Jul 23 1520	Orion	-	MSA 30.080U	0.000	GSCF	SS	UMI/Horvath	Aeron	WDCRF	-	WDCRF
1981-S146	2444872.08	1981 Aug 24	Orion	-	MSA 30.106U	0.000	GSCF	SS	PSU/Hale	Plasma	WDCRF	-	WDCRF
1981-M16	2444872.89	1981 Nov 14 0915	Orion	-	MSA 30.130E	0.000	GSCF	SS	PSU/Hale	Plasma	WDCRF	-	WDCRF
1982-S143	2445164.50	1982 Aug 3	Orion	-	DLR K-0-111	0.000	DFVLR	SS	MPK/Arnold	Aeron	ES481	-	ESA-SF183
1983-S145	2445384.23	1983 Jan 13 1731	Orion	-	MSA 30.21GU	0.000	GSCF	SS	GSCF/Mentall	Aeron	WDCRF	-	WDCRF
1983-S146	2445385.28	1983 Jan 13 1639	Orion	-	MSA 30.150U	0.000	GSCF	SS	UMI/Horvath	Aeron	WDCRF	-	WDCRF
1983-S182	2445451.73	1983 Apr 27 0530	Orion	-	MSA 30.160U	0.000	GSCF	SS	UMI/Horvath	Aeron	WDCRF	-	WDCRF
1984-M03	2445731.38	1984 Jan 31 2105:36	Orion	-	DLR K-0-117	0.000	DFVLR	SS	MPK/Arnold	Aeron	WDCRF	-	WDCRF
1984-S107	2445929.36	1984 Aug 16 2040	Orion	-	DLR K-0-129 DRDPAS	0.000	DFVLR	SS	MPK/Pfeilsticker	Aeron	WDCRF	-	WDCRF
1984-S109	2445935.92	1984 Aug 16 2040	Orion	-	MSA 30.190U	0.000	GSCF	SS	UMI/Horvath	Plasma	WDCRF	-	WDCRF
1985-S28	2446094.42	1985 Jan 26 2205	Orion	-	MSA 30.230U	0.000	GSCF	SS	UMI/Horvath	Plasma	WDCRF	-	WDCRF
1985-S36	2446104.42	1985 Feb 7 2201	Orion	-	MSA 30.240U	0.000	GSCF	SS	UMI/Horvath	Aeron	WDCRF	-	WDCRF
1985-S43	2446112.14	1985 Feb 15 1515	Orion	-	DLR W-0-135	0.000	DLA	SS	DLR/	Test	WDCRF	-	WDCRF
1985-S46	2446119.14	1985 Feb 22 1520	Orion	-	DLR W-0-136	0.000	DLA	SS	DLR/	Test	WDCRF	-	WDCRF
1985-S68	2446157.81	1985 Apr 2 0721:01	Orion	-	MSA 30.250E	0.000	GSCF	SS	PSU/Hale	Plasma	WDCRF	-	WDCRF
1985-S113	2446315.91	1985 Sep 7 0945	Orion	-	MSA 30.280E	0.000	GSCF	SS	PSU/Hale	Plasma	WDCRF	-	WDCRF
1985-S114	2446316.50	1985 Sep 10 0901:00	Orion	-	MSA 30.280E	0.000	GSCF	SS	PSU/Hale	Plasma	WDCRF	-	WDCRF
1985-S120	2446326.30	1985 Sep 17 1915	Orion	-	MSA 30.280E	0.000	GSCF	SS	PSU/Hale	Plasma	WDCRF	-	WDCRF
1985-S129	2446354.92	1985 Oct 16 1001:00	Orion	-	MSA 30.270U	0.000	GSCF	SS	UMI/Horvath	Aeron	WDCRF	-	WDCRF
1985-S176	2446189.67	1985 May 14 0400	Orion	-	MSA 30.310E	0.000	GSCF	SS	PSU/Hale	Plasma	WDCRF	-	WDCRF
1985-S177	2446194.95	1985 May 14 0400	Orion	-	MSA 30.310E	0.000	GSCF	SS	MPK/Arnold	Aeron?	WDCRF	-	WDCRF
1987-S82	2446693.45	1987 Feb 17 0643	Orion	-	MSA 30.350E	0.000	GSCF	SS	MPK/Hale	Plasma	WDCRF	-	WDCRF
1987-S83	2446921.71	1987 May 6 0595	Orion	-	DLR K-0-143	0.000	DLA	SS	MPK/Pfeilsticker	Aeron	WDCRF	-	WDCRF
1987-S84	2447063.47	1987 Jul 6 2809	Orion	-	DLR K-0-145	0.000	DLA	SS	MPK/Pfeilsticker	Aeron	WDCRF	-	WDCRF
1987-S152	2447063.46	1987 Oct 15 0552:20	Orion	-	MSA 30.380E	0.000	GSCF	SS	PSU/Hale	Plasma	WDCRF	-	WDCRF
1987-S171	2447190.50	1987 Oct 2 2134	Orion	-	MSA 30.380E	0.000	GSCF	SS	PSU/Hale	Plasma	WDCRF	-	WDCRF
1988-S144	2447111.52	1987 Nov 12 0221:43	Orion	-	MSA 30.350E	0.000	GSCF	SS	PSU/Hale	Plasma	WDCRF	-	WDCRF
1988-S21	2447501.92	1988 Dec 10 082	Orion	-	DLR K-0-163	0.000	DLA	SS	MPK/Pfeilsticker	Aeron	WDCRF	-	WDCRF
1988-S31	2447506.85	1988 Jan 26 0850	Orion	-	DLR K-0-172	0.000	DLA	SS	MPK/Pfeilsticker	Aeron	WDCRF	-	WDCRF
1988-S32	2447515.87	1988 Jan 26 0850	Orion	-	DLR K-0-172	0.000	DLA	SS	MPK/Pfeilsticker	Aeron	WDCRF	-	WDCRF
1988-S33	2447515.87	1988 Jan 26 0850	Orion	-	DLR K-0-172	0.000	DLA	SS	MPK/Pfeilsticker	Aeron	WDCRF	-	WDCRF
1988-S34	2447515.87	1988 Jan 26 0850	Orion	-	DLR K-0-172	0.000	DLA	SS	MPK/Pfeilsticker	Aeron	WDCRF	-	WDCRF
1988-S35	2447515.87	1988 Jan 26 0850	Orion	-	DLR K-0-172	0.000	DLA	SS	MPK/Pfeilsticker	Aeron	WDCRF	-	WDCRF
1988-S36	2447515.87	1988 Jan 26 0850	Orion	-	DLR K-0-172	0.000	DLA	SS	MPK/Pfeilsticker	Aeron	WDCRF	-	WDCRF
1988-S37	2447515.87	1988 Jan 26 0850	Orion	-	DLR K-0-172	0.000	DLA	SS	MPK/Pfeilsticker	Aeron	WDCRF	-	WDCRF
1988-S38	2447515.87	1988 Jan 26 0850	Orion	-	DLR K-0-172	0.000	DLA	SS	MPK/Pfeilsticker	Aeron	WDCRF	-	WDCRF
1988-S39	2447515.87	1988 Jan 26 0850	Orion	-	DLR K-0-172	0.000	DLA	SS	MPK/Pfeilsticker	Aeron	WDCRF	-	WDCRF
1988-S40	2447515.87	1988 Jan 26 0850	Orion	-	DLR K-0-172	0.000	DLA	SS	MPK/Pfeilsticker	Aeron	WDCRF	-	WDCRF
1988-S41	2447515.87	1988 Jan 26 0850	Orion	-	DLR K-0-172	0.000	DLA	SS	MPK/Pfeilsticker	Aeron	WDCRF	-	WDCRF
1988-S42	2447515.87	1988 Jan 26 0850	Orion	-	DLR K-0-172	0.000	DLA	SS	MPK/Pfeilsticker	Aeron	WDCRF	-	WDCRF
1988-S43	2447515.87	1988 Jan 26 0850	Orion	-	DLR K-0-172	0.000	DLA	SS	MPK/Pfeilsticker	Aeron	WDCRF	-	WDCRF
1988-S44	2447515.87	1988 Jan 26 0850	Orion	-	DLR K-0-172	0.000	DLA	SS	MPK/Pfeilsticker	Aeron	WDCRF	-	WDCRF
1988-S45	2447515.87	1988 Jan 26 0850	Orion	-	DLR K-0-172	0.000	DLA	SS	MPK/Pfeilsticker	Aeron	WDCRF	-	WDCRF
1988-S46	2447515.87	1988 Jan 26 0850	Orion	-	DLR K-0-172	0.000	DLA	SS	MPK/Pfeilsticker	Aeron	WDCRF	-	WDCRF
1988-S47	2447515.87	1988 Jan 26 0850	Orion	-	DLR K-0-172	0.000	DLA	SS	MPK/Pfeilsticker	Aeron	WDCRF	-	WDCRF
1988-S48	2447515.87	1988 Jan 26 0850	Orion	-	DLR K-0-172	0.000	DLA	SS	MPK/Pfeilsticker	Aeron	WDCRF	-	WDCRF
1988-S49	2447515.87	1988 Jan 26 0850	Orion	-	DLR K-0-172	0.000	DLA	SS	MPK/Pfeilsticker	Aeron	WDCRF	-	WDCRF
1988-S50	2447515.87	1988 Jan 26 0850	Orion	-	DLR K-0-172	0.000	DLA	SS	MPK/Pfeilsticker	Aeron	WDCRF	-	WDCRF
1988-S51	2447515.87	1988 Jan 26 0850	Orion	-	DLR K-0-172	0.000	DLA	SS	MPK/Pfeilsticker	Aeron	WDCRF	-	WDCRF
1988-S52	2447515.87	1988 Jan 26 0850	Orion	-	DLR K-0-172	0.000	DLA	SS	MPK/Pfeilsticker	Aeron	WDCRF	-	WDCRF
1988-S53	2447515.87	1988 Jan 26 0850	Orion	-	DLR K-0-172	0.000	DLA	SS	MPK/Pfeilsticker	Aeron	WDCRF	-	WDCRF
1988-S54	2447515.87	1988 Jan 26 0850	Orion	-	DLR K-0-172	0.000	DLA	SS	MPK/Pfeilsticker	Aeron	WDCRF	-	WDCRF
1988-S55	2447515.87	1988 Jan 26 0850	Orion	-	DLR K-0-172	0.000	DLA	SS	MPK/Pfeilsticker	Aeron	WDCRF	-	WDCRF
1988-S56	2447515.87	1988 Jan 26 0850	Orion	-	DLR K-0-172	0.000	DLA	SS	MPK/Pfeilsticker	Aeron	WDCRF	-	WDCRF
1988-S57	2447515.87	1988 Jan 26 0850	Orion	-	DLR K-0-172	0.000	DLA	SS	MPK/Pfeilsticker	Aeron	WDCRF	-	WDCRF
1988-S58	2447515.87	1988 Jan 26 0850	Orion	-	DLR K-0-172	0.000	DLA	SS	MPK/Pfeilsticker	Aeron	WDCRF	-	WDCRF
1988-S59	2447515.87	1988 Jan 26 0850	Orion	-	DLR K-0-172	0.000	DLA	SS	MPK/Pfeilsticker	Aeron	WDCRF	-	WDCRF
1988-S60	2447515.87	1988 Jan 26 0850	Orion	-	DLR K-0-172	0.000	DLA	SS	MPK/Pfeilsticker	Aeron	WDCRF	-	WDCRF
1988-S61	2447515.87	1988 Jan 26 0850	Orion	-	DLR K-0-172	0.000	DLA	SS	MPK/Pfeilsticker	Aeron	WDCRF	-	WDCRF
1988-S62	2447515.87	1988 Jan 26 0850	Orion	-	DLR K-0-172	0.000	DLA	SS	MPK/Pfeilsticker	Aeron	WDCRF	-	WDCRF
1988-S63	2447515.87	1988 Jan 26 0850	Orion	-	DLR K-0-172	0.000	DLA	SS	MPK/Pfeilsticker	Aeron	WDCRF	-	WDCRF
1988-S64	2447515.87	1988 Jan 26 0850	Orion	-	DLR K-0-172	0.000	DLA	SS	MPK/Pfeilsticker	Aeron	WDCRF	-	WDCRF
1988-S65	2447515.87	1988 Jan 26 0850	Orion	-	DLR K-0-172	0.000	DLA						

**Launch**

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	OrbPay	Agency	Launch_Code	Group	Category	LTCite	Cite	Notes
2003-A04	2452796.92	2003 Jun 6 1001:00	Orion	-	MASA 30.55NDU	0.000	GSFC	SS	WFF/Parrott	Education	www.vff.nasa.gov	-	-
2003-S31	2452821.89	2003 Jul 1 0923:00	Improved Orion	-	ROMA RU-MI-01	0.000	DLR	SS	IAP/NDRE/Lubken	Aeron	www.rockrange.no	ESA-Sp690-191	-
2003-S32	2452824.86	2003 Jul 4 0820:00	Improved Orion	-	ROMA RU-MI-02	0.000	DLR	SS	IAP/NDRE/Lubken	Aeron	www.rockrange.no	ESA-Sp690-191	-
2003-S33	2452826.86	2003 Jul 6 0827:00	Improved Orion	-	ROMA RU-MI-03	0.000	DLR	SS	IAP/NDRE/Lubken	Aeron	www.rockrange.no	ESA-Sp690-191	-
2003-M01	2452921.98	2003 Oct 9 1137:00	Improved Orion	-	MASA 30.54UDU	0.000	GSFC	SS	UVA/Lauser	Education	www.vff.nasa.gov	-	-
2004-A06	2453165.94	2004 Jun 9 1035	Orion	-	MASA 30.60NDU	0.000	GSFC	SS	WFF/Parrott	Education	www.vff.nasa.gov	-	-
2004-S62	2453307.33	2004 Oct 28 1949	Improved Orion	-	SSC REXUS II	0.000	ERNDL	SS	EDUCATION/Meteor	Education	www.vff.nasa.gov	ESASP-590-81	-
2005-S02	2453380.69	2005 Jan 10 0437:29	Improved Orion	-	SSC MAGIC	0.000	SSC	SS	STU/ML/Gumbel	Meteorite dust	www.osd.acq.mil	ESASP-590-139	-
2005-S14	2453444.74	2005 Mar 15 0945:00	Improved Orion	-	MASA 30.59UE	0.000	GSFC	SS	DMK/Lynch	Aeron/Dust	www.vff.nasa.gov	-	-
2005-S15	2453444.82	2005 Mar 15 0745:00	Improved Orion	-	MASA 30.59UE	0.000	GSFC	SS	DMK/Lynch	Aeron/Dust	www.vff.nasa.gov	-	-
2005-S20	2453507.17	2005 May 17 1114	Improved Orion	-	MASA 30.56UDU	0.000	GSFC	SS	VAP/Hall	Aeron	www.vff.nasa.gov	-	-
2005-A04	2453530.94	2005 Jun 9 1032	Improved Orion	-	MASA 30.61NDU	0.000	GSFC	SS	WFF/Justis	Education	www.vff.nasa.gov	-	-
2005-S25	2453538.50	2005 Jun 17	Improved Orion	-	-	0.000	SHDC?	MS	-	Target	-	-	-
2005-S26	2453538.50	2005 Jun 17	Improved Orion	-	-	0.000	SHDC?	MS	-	Target	-	-	-
2005-S28	2453538.56	2005 Jul 4 0684	Improved Orion	-	HP-200 Hotel	0.000	NDRE	MS	OSLO/TROM	Aeron/Ionos	www.rockrange.no	-	-
2005-M02	2453622.61	2005 Sep 9 0245	Improved Orion	-	MASA 30.062DR	0.000	GSFC	SS	MAMC/Minstead	Callb	www.vff.nasa.gov	-	-
2005-M03	2453622.61	2005 Sep 9 0614	Improved Orion	-	MASA 30.063DR	0.000	GSFC	SS	MAMC/Minstead	Callb	www.vff.nasa.gov	-	-
2005-S40	2453684.19	2005 Sep 29 0915:40	Improved Orion	-	MASA 30.070DR	0.000	GSFC	SS	MAMC/Minstead	Test	www.vff.nasa.gov	-	-
2005-S49	2453684.15	2005 Nov 9 1540	Improved Orion	-	MASA 30.071DR	0.000	GSFC	SS	MAMC/Minstead	Target	www.vff.nasa.gov	-	-
2006-S08	2453819.88	2006 Mar 25 0900:00	Orion	-	MASA 30.064DR	0.000	GSFC	SS	MAMC/Minstead	Target	www.vff.nasa.gov	-	-
2006-S09	2453820.05	2006 Mar 25 1307:21	Orion	-	MASA 30.065DR	0.000	GSFC	SS	MAMC/Minstead	Target	www.vff.nasa.gov	-	-
2006-S11	2453830.75	2006 Apr 5 0556	Improved Orion	-	SSC REXUS 3	0.000	ERNDL	SS	SSC/DLR Student	Education	www.vff.nasa.gov	-	-
2006-M01	2453894.97	2006 Jun 8 1111	Orion	-	MASA 30.072NDU	0.000	GSFC	SS	WFF/Justis	Education	www.vff.nasa.gov	-	-
2006-A03	2453917.80	2006 Jul 1 0705	Improved Orion	-	MASA 30.066DR	0.000	ARR	SS	STU/Gumbel	Aeron	www.rockrange.no	-	-
2006-S42	2453937.88	2006 Jul 21 0904	Improved Orion	-	MASA 30.067DR	0.000	GSFC	SS	MAMC/Minstead	Target	www.vff.nasa.gov	-	-
2006-S44	2453938.05	2006 Jul 21 1305	Improved Orion	-	MASA 30.067DR	0.000	GSFC	SS	MAMC/Minstead	Target	www.vff.nasa.gov	-	-
2007-A08	2454438.17	2007 Dec 3 1607	Orion	-	-	0.000	NDA	MS	-	Target	www.mda.mil	-	-
2008-S86	2454565.01	2008 Apr 3 1120	Improved Orion	-	SSC April One	0.000	SSC	SS	SSC/Grabin	Test	www.ssc.se	www.vff.nasa.gov	-
2008-M03	2454644.94	2008 Jun 27 1036	Orion	-	MASA 30.074NDU	0.000	GSFC	SS	WFF/Eberspaecker	Education	nanaspacflight.com	-	-
2008-S82	2454766.79	2008 Oct 27 0704:08	Improved Orion	-	MASA 30.074NDU	0.000	GSFC	SS	WFF/Eberspaecker	Education	nanaspacflight.com	-	-
2009-S01	2454842.47	2009 Jan 10 2317	Improved Orion	-	MASA 30.07300	0.000	ERNDL	SS	IMF/Thorsen	Plasma	www.usf.edu	-	-
2009-S13	2454902.92	2009 Mar 12 1008	Improved Orion	-	SSC REXUS 6	0.000	GSFC	SS	IMF/Thorsen	Plasma	www.usf.edu	-	-
2009-S14	2454903.75	2009 Mar 13 0900	Improved Orion	-	SSC REXUS 6	0.000	ERNDL	SS	IMF/Thorsen	Plasma	www.usf.edu	-	-
2009-S26	2454981.31	2009 Mar 28 1926	Improved Orion	-	MESA V02	0.000	ERNDL	SS	IAP/TIT/UPC/Strelnikova	Ionos/Tech	www.ssc.se	-	-
2010-S22	2455257.81	2010 Mar 2 0725	Improved Orion	-	SSC REXUS 7	0.000	ERNDL	SS	ACH/ROSNAP/IMP/Vetter	Test	www.bemparana.com.br	-	-
2010-S23	2455259.55	2010 Mar 4 1015	Improved Orion	-	SSC REXUS 8	0.000	ERNDL	SS	ACH/ROSNAP/IMP/Vetter	Test	www.ssc.se	-	-
2010-S71	2455615.04	2010 Dec 9 1719	Improved Orion	-	SSC REXUS 9	0.000	ERNDL	SS	ACH/ROSNAP/IMP/Vetter	Test	www.ssc.se	-	-
2011-S61	2455685.25	2011 Feb 22 1266	Improved Orion	-	SSC REXUS 10	0.000	ERNDL	SS	ACH/ROSNAP/IMP/Vetter	Test	www.ssc.se	-	-
2011-S62	2455691.56	2011 May 11 1800	Improved Orion	-	MESA V04	0.000	ERNDL	SS	ACH/ROSNAP/IMP/Vetter	Test	www.ssc.se	-	-
2011-S63	2455691.56	2011 Nov 28 2300	Improved Orion	-	MESA V05	0.000	ERNDL	SS	ACH/ROSNAP/IMP/Vetter	Test	www.ssc.se	-	-
2012-M01	2455972.50	2012 Feb 15 1405	Improved Orion	-	SSC REXUS 12	0.000	SHDC	MS	ACH/ROSNAP/IMP/Vetter	Target	www.ssc.se	-	-
2012-S107	2456246.95	2012 Mar 7 0400	Improved Orion	-	SSC REXUS 11	0.000	ERNDL	SS	EUROL/	Tech	www.ssc.se	-	-
2013-S106	2456419.87	2013 May 9 0400	Improved Orion	-	SSC REXUS 14	0.000	ERNDL	SS	EUROL/	Tech	www.sscspace.com	-	-
2013-S107	2456419.87	2013 May 9 0400	Improved Orion	-	SSC REXUS 13	0.000	ERNDL	SS	EUROL/	Tech	www.sscspace.com	-	-
2014-S28	2456806.92	2014 Dec 17 0915	Improved Orion	-	SSC REXUS 15	0.000	ERNDL	SS	EUROL/	Tech	www.sscspace.com	-	-
2015-S21	2457008.89	2015 Mar 18 1300	Improved Orion	-	MASA 30.076DR	0.000	GSFC	SS	NS/CNH/Quamill	Tech	www.vff.nasa.gov	-	-
2015-S22	2457008.89	2015 Mar 17 0915	Improved Orion	-	SSC REXUS 17	0.000	ERNDL	SS	NS/CNH/Quamill	Tech	www.sscspace.com	-	-
2015-S34	2457482.06	2015 Mar 18 1930	Improved Orion	-	SSC REXUS 18	0.000	ERNDL	SS	EUROL/	Tech/Aeron	www.sscspace.com	-	-
2016-S34	2457482.73	2016 Mar 18 0500	Improved Orion	-	SSC REXUS 19	0.000	ERNDL	SS	EUROL/	Tech	www.sscspace.com	-	-
2016-S35	2457485.72	2016 Mar 18 0500	Improved Orion	-	SSC REXUS 20	0.000	ERNDL	SS	EUROL/	Tech	www.sscspace.com	-	-
2017-S24	2457697.95	2017 Mar 15 1043	Improved Orion	-	SSC REXUS 21	0.000	ERNDL	SS	EUROL/	Tech	www.sscspace.com	-	-
2018-AE2	2457699.04	2017 Mar 16 1300	Improved Orion	-	SSC REXUS 22	0.000	ERNDL	SS	EUROL/	Tech	www.sscspace.com	-	-
2019-M01	2458180.10	2019 Mar 12 1425F	Improved Orion	-	SSC REXUS 24	0.000	ERNDL	SS	EUROL/	Tech	www.sscspace.com	-	-
2019-S09	2458563.87	2019 Mar 4 0850	Improved Orion	-	SSC REXUS 23	0.000	ERNDL	SS	EUROL/	Tech	www.sscspace.com	-	-
2019-S13	2458563.80	2019 Mar 11 0920	Improved Orion	-	SSC REXUS 25	0.000	ERNDL	SS	EUROL/	Tech	www.sscspace.com	-	-
2020-S43	2459076.60	2020 Aug 15 0226	Improved Orion	-	SSC REXUS 26	0.000	ERNDL	SS	EUROL/	Tech	www.sscspace.com	-	-
2023-S02	2459992.02	2023 Feb 16 1200:00	Improved Orion	-	Pacific Dragon 2020	0.000	NDA	MS	-	Target	www.mda.mil	-	-
2023-S14	2460036.68	2023 Apr 1 0430:00	Improved Orion	-	MASA 12.090HT	0.000	GSFC	SS	WFF/Ewards	Tech	youtube.com	-	-
2024-S08	2460381.72	2024 Mar 12 0514:58	Improved Orion	?	SSC REXUS 30	0.000	ERNDL	SS	WFF/Ewards	Tech	youtube.com	-	-
2024-S09	2460384.00	2024 Mar 14 1200	Improved Orion	?	SSC REXUS 29	0.000	ERNDL	SS	WFF/Ewards	Tech	www.sscspace.com	-	-
					SSC REXUS 31	0.000	ERNDL	SS	WFF/Ewards	Tech	www.sscspace.com	-	-



Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Mission	Launch_Site	Platform	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee_Km	Range_Km	Dest
1965-H39	2435056.50	1965 Oct 23	SRSS S112	-	2601	Esasl 1	-	HMG	-	Brigitte	-	-	507	-	-
1965-H41	2435067.50	1965 Nov 3	SRSS S112	-	2602	Esasl 2	-	HMG	-	Brigitte	-	-	507	-	-
1966-H08	2435171.50	1966 Feb 15	SRSS S112	-	2603	Silo 1	-	CEL	-	BLB	-	-	507	-	-
1966-H19	2435271.50	1966 May 26	SRSS M12	-	-	Esasl 1	-	HMG	-	Brigitte	-	-	507	-	-
1966-H20	2435276.50	1966 Jun	SRSS M12	-	-	Esasl 2	-	HMG	-	Brigitte	-	-	507	-	-
1966-H23	2435283.50	1966 Jun 7	SRSS S112	-	2604	Silo 2	-	CEL	-	BLB	-	-	507	-	-
1966-H25	2435318.50	1966 Jul 12	SRSS M12	-	-	Caisson 1	-	CERES	-	Nemo	-	-	507	-	-
1966-H40	2435439.50	1966 Nov 10	SRSS S112	-	2605	Silo 3	-	CEL	-	BLB	-	-	507	-	-
1966-H01	2435521.50	1967 Feb	SRSS M12	-	-	Caisson 2	-	CERES	-	Nemo	-	-	507	-	-
1967-H06	2435551.50	1967 Mar 2	SRSS S112	-	2606	Silo 4	-	CEL	-	BLB	-	-	507	-	-
1967-H01	2435549.50	1967 Mar?	SRSS M12	-	-	Caisson 3	-	CERES	-	Nemo	-	-	507	-	-
1967-H08	2435559.50	1967 Apr 19	SRSS M12	-	-	Gymnote 1	-	CERES	-	BLB	-	-	507	-	-
1967-H15	2435569.50	1967 Jul 25	SRSS S01	-	-	SCIV-1	-	CEL	-	BLB	-	-	507	-	-
1967-H18	2435804.50	1967 Nov 10	SRSS S01	-	-	SCIV-2	-	CEL	-	BLB	-	-	507	-	-
1967-H02	2435840.50	1967	SRSS M12	-	-	Gymnote 2	-	CERES	-	BLB	-	-	507	-	-
1967-H03	2435840.50	1967	SRSS M12	-	-	Gymnote 3	-	CERES	-	BLB	-	-	507	-	-
1967-H04	2435840.50	1967	SRSS M12	-	-	Gymnote 4 NSD Test	-	CERES	-	BLB	-	-	507	-	-
1967-H04	2435840.50	1967	SRSS M12	-	-	Caisson 1	-	CERES	-	Nemo	-	-	507	-	-
1968-H02	2435855.50	1968	SRSS M11	-	-	A2	-	CEL	-	BLB	-	-	5007	-	-
1968-H08	2435855.50	1968	SRSS M12	-	A2	B1	-	CEL	-	BLB	-	-	5007	-	-
1968-H09	2435855.50	1968	SRSS M12	-	B2	B2	-	CEL	-	BLB	-	-	5007	-	-
1968-H10	2435855.50	1968	SRSS M12	-	V2	V2	-	CEL	-	BLB	-	-	5007	-	-
1968-H11	2435855.50	1968	SRSS M13	-	V3	V3	-	CEL	-	BLB	-	-	5007	-	-
1968-H12	2435855.50	1968	SRSS M13	-	V4	V4	-	CEL	-	BLB	-	-	5007	-	-
1968-H30	2435868.50	1968 Jan 13	SRSS M12	-	A1	A1	-	CEL	-	BLB	-	-	5007	-	-
1968-H35	2435878.50	1968 Jan 23	SRSS S01	-	-	SCIV-3	-	CEL	-	BLB	-	-	5007	-	-
1968-H26	2435878.50	1968 Apr 9	SRSS S01	-	-	SCIV-4	-	CEL	-	BLB	-	-	5007	-	-
1968-H391	2440040.50	1968 Jul 3	SRSS S01	-	-	SCIV-5	-	CEL	-	BLB	-	-	5007	-	-
1968-H524	2440063.50	1968 Jul 26	SRSS S01	-	-	SCIV-6	-	CEL	-	BLB	-	-	5007	-	-
1968-H523	2440137.50	1968 Oct 6	SRSS S01	-	-	SCIC-1	-	CEL	-	BLB	-	-	5007	-	-
1968-H578	2440169.50	1968 Nov 9	SRSS S01	-	-	SCIC-2	-	CEL	-	BLB	-	-	5007	-	-
1968-H586	2440176.50	1968 Nov 16	SRSS M13	-	V1	V1 Vecteur	-	CEL	-	BLB	-	-	5007	-	-
1969-H03	2440221.50	1969	SRSS M13	-	V4	V4	-	CEL	-	BLB	-	-	5007	-	-
1969-H04	2440221.50	1969	SRSS M13	-	V5	V5	-	CEL	-	BLB	-	-	5007	-	-
1969-H05	2440221.50	1969	SRSS M13	-	V6	V6	-	CEL	-	BLB	-	-	5007	-	-
1970-H01	2440596.50	1970	SRSS M13	-	V7	V7	-	CEL	-	BLB	-	-	5007	-	-
1970-H02	2440748.50	1970 Jun 11	SRSS M13	-	C1	C1 Charge (RV)	-	CEL	-	BLB	-	-	5007	-	-
1970-H03	2440686.50	1970	SRSS M13	-	C2	C2	-	CEL	-	BLB	-	-	5007	-	-
1970-H04	2440686.50	1970	SRSS M13	-	C3	C3	-	CEL	-	BLB	-	-	5007	-	-
1970-H05	2440686.50	1970	SRSS M13	-	C4	C4	-	CEL	-	BLB	-	-	5007	-	-
1971-H04	2440686.50	1971	SRSS M13	-	C5	C5	-	CEL	-	BLB	-	-	5007	-	-
1971-H07	2440681.50	1971	SRSS M13	-	C6	C6	-	CEL	-	BLB	-	-	5007	-	-
1971-H08	2440681.50	1971	SRSS M13	-	C7	C7	-	CEL	-	BLB	-	-	5007	-	-
1971-H09	2440681.50	1971	SRSS M13	-	C8	C8	-	CEL	-	BLB	-	-	5007	-	-
1971-H10	2440681.50	1971	SRSS M13	-	C8	C8	-	CEL	-	BLB	-	-	5007	-	-
1971-H318	2441001.50	1971 May 29 1000?	SRSS M1	-	-	-	-	CEL	-	BLB	-	-	5007	-	-
1971-H319	2441102.50	1971 Jun 22	SRSS M1	-	-	-	-	CEL	-	BLB	-	-	5007	-	-
1971-H320	2441198.50	1971 Jun 26	SRSS M1	-	-	-	-	CEL	-	BLB	-	-	5007	-	-
1972-H04	2441318.50	1972 Jun	SRSS M1	-	-	-	-	CEL	-	BLB	-	-	5007	-	-
1972-H244	2441883.50	1972 Jul 20	SRSS M2	-	-	-	-	CEL	-	BLB	-	-	6007	-	-
1972-H01	2441682.50	1972	SRSS M2	-	-	-	-	CEL	-	BLB	-	-	6007	-	-
1972-H02	2441682.50	1972	SRSS M2	-	-	-	-	CEL	-	BLB	-	-	6007	-	-
1972-H03	2441682.50	1972	SRSS M2	-	-	-	-	CEL	-	BLB	-	-	6007	-	-
1974-H217	2442292.50	1974 Jun 12	SRSS M20	-	-	-	-	CEL	-	BLB	-	-	6007	-	-
1976-H160	2442875.50	1976 Apr 7	SRSS M20	-	-	-	-	CEL	-	BLB	-	-	6007	-	-
1979-H165	2444054.50	1979 Jul	SRSS M20	-	-	-	-	CEL	-	BLB	-	-	6007	-	-
1980-H02	2444238.50	1980?	SRSS M20	-	-	-	-	CEL	-	BLB	-	-	6007	-	-



Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	DrBday	Agency	Launch_Code	Group	Category	LTCite	Cite	Notes
1965-1039	2439056.50	1965 Oct 23	SSRS S112	-	2601	0.000	DMA	MS	-	Test	Villain	Serra	-
1965-1041	2439067.50	1965 Nov 3	SSRS S112	-	2602	0.000	DMA	MS	-	Test	Villain	Serra	-
1966-1008	2439171.50	1966 Feb 15	SSRS S112	-	2603	0.000	DMA	MS	-	Test	Villain	Serra	-
1966-1019	2439271.50	1966 May 26	MSRS M112	-	-	0.000	DMA	MS	-	Test	deCordemy	Serra	-
1966-1020	2439276.50	1966 Jun 7	MSRS M112	-	-	0.000	DMA	MS	-	Test	Villain	Serra	-
1966-1023	2439283.50	1966 Jun 7	MSRS S112	-	2604	0.000	DMA	MS	-	Test	Sentinelles	Serra	-
1966-1025	2439318.50	1966 Jul 12	MSRS M112	-	-	0.000	DMA	MU	-	Test	deCordemy	Serra	-
1966-1040	2439439.50	1966 Nov 10	SSRS S112	-	2605	0.000	DMA	MU	-	Test	Sentinelles	Serra	-
1966-1041	2439521.50	1967 Feb	MSRS S112	-	-	0.000	DMA	MU	-	Test	Villain	Serra	-
1967-1006	2439551.50	1967 Mar 2	SSRS S112	-	2606	0.000	DMA	MU	-	Test	Sentinelles	Serra	-
1967-1001	2439549.50	1967 Mar?	MSRS S112	-	-	0.000	DMA	MU	-	Test	Villain	Serra	-
1967-1008	2439599.50	1967 Apr 19	MSRS M112	-	-	0.000	DMA	MS	-	Test	deCordemy	Serra	-
1967-1015	2439696.50	1967 Jul 25	SSRS S01	-	-	0.000	DMA	MU	-	Test	Sentinelles	Serra	-
1967-1018	2439804.50	1967 Nov 10	SSRS S01	-	-	0.000	DMA	MU	-	Test	Sentinelles	Serra	-
1967-1002	2439490.50	1967	MSRS M112	-	-	0.000	DMA	MS	-	Test	Villain	Serra	-
1967-1003	2439490.50	1967	MSRS M112	-	-	0.000	DMA	MS	-	Test	Villain	Serra	-
1967-1004	2439490.50	1967	MSRS M112	-	-	0.000	DMA	MS	-	Test	Villain	Serra	-
1968-1002	2439490.50	1967	MSRS M011	-	-	0.000	DMA	MS	-	Test	Villain	Serra	-
1968-1002	2439665.50	1968	MSRS M011	-	-	0.000	DMA	MS	-	Test	Villain	Serra	-
1968-1008	2439665.50	1968	MSRS M012	-	A2	0.000	DMA	MS	-	Test	Villain	Serra	-
1968-1009	2439665.50	1968	MSRS M012	-	B1	0.000	DMA	MS	-	Test	Villain	Serra	-
1968-1010	2439665.50	1968	MSRS M012	-	B2	0.000	DMA	MS	-	Test	Villain	Serra	-
1968-1011	2439665.50	1968	MSRS M013	-	V2	0.000	DMA	MS	-	Test	Villain	Serra	-
1968-1012	2439665.50	1968	MSRS M013	-	V3	0.000	DMA	MS	-	OT	Villain	Serra	-
1968-1013	2439665.50	1968	MSRS M013	-	A1	0.000	DMA	MS	-	OT	Villain	Serra	-
1968-1014	2439665.50	1968 Jan 13	MSRS M012	-	-	0.000	DMA	MS	-	Test	Sentinelles	Serra	-
1968-1015	2439678.50	1968 Jan 23	SSRS S01	-	-	0.000	DMA	MU	-	Test	Sentinelles	Serra	-
1968-1016	2439678.50	1968 Apr 9	SSRS S01	-	-	0.000	DMA	MU	-	Test	Sentinelles	Serra	-
1968-1017	2440040.50	1968 Jun 3	SSRS S01	-	-	0.000	DMA	MS	-	Test	Sentinelles	Serra/SP-4010	-
1968-1018	2440063.50	1968 Jul 26	SSRS S01	-	-	0.000	DMA	MU	-	Test	Sentinelles	Serra	-
1968-1023	2440137.50	1968 Oct 6	SSRS S01	-	-	0.000	DMA	MU	-	Test	Sentinelles	Serra	-
1968-1024	2440169.50	1968 Nov 9	SSRS S01	-	-	0.000	DMA	MS	-	Test	Sentinelles	Serra	-
1968-1026	2440176.50	1968 Nov 16	MSRS M013	-	V1	0.000	DMA	MS	-	OT	Villain	Serra	-
1969-1003	2440221.50	1969	MSRS M013	-	V4	0.000	DMA	MS	-	OT	Villain	Serra	-
1969-1004	2440221.50	1969	MSRS M013	-	V6	0.000	DMA	MS	-	OT	Villain	Serra	-
1969-1005	2440221.50	1969	MSRS M013	-	V6	0.000	DMA	MS	-	OT	Villain	Serra	-
1970-1001	2440596.50	1970	MSRS M013	-	V6	0.000	DMA	MS	-	OT	Villain	Serra	-
1970-1002	2440748.50	1970 Jun 11	MSRS M013	-	V1	0.000	DMA	MS	-	OT	Villain	Serra	-
1970-1003	2440748.50	1970	MSRS M013	-	V1	0.000	DMA	MS	-	OT	Villain	Serra	-
1970-1004	2440686.50	1970	MSRS M013	-	C2	0.000	DMA	MS	-	OT	deCordemy	Villain	-
1970-1005	2440686.50	1970	MSRS M013	-	C3	0.000	DMA	MS	-	OT	Villain	Serra	-
1970-1006	2440686.50	1970	MSRS M013	-	C4	0.000	DMA	MS	-	OT	Villain	Serra	-
1970-1007	2440686.50	1970	MSRS M013	-	C5	0.000	DMA	MS	-	OT	Villain	Serra	-
1971-1007	2440951.50	1971	MSRS M013	-	C6	0.000	DMA	MS	-	OT	Villain	Serra	-
1971-1007	2440951.50	1971	MSRS M013	-	C7	0.000	DMA	MS	-	OT	Villain	Serra	-
1971-1008	2440951.50	1971	MSRS M013	-	C8	0.000	DMA	MS	-	OT	Villain	Serra	-
1971-1010	2440951.50	1971	MSRS M1	-	-	0.000	DMA	MS	-	OT	Villain	Serra	-
1971-1011	2441000.50	1971 May 29 1000?	MSRS M1	-	-	0.000	DMA	MS	-	OT	www.defense.gouv.fr	Villain	-
1971-1018	2441108.50	1971 Jun 24	MSRS M1	-	-	0.000	DMA	MS	-	OT	www.defense.gouv.fr	www.nemmarino.net	-
1971-1019	2441108.50	1971 Jun 26	MSRS M1	-	-	0.000	DMA	MS	-	OT	Villain	-	-
1972-1004	2441138.50	1972	MSRS M1	-	-	0.000	DMA	MS	-	OT	Villain	-	-
1972-1004	2441189.50	1972	MSRS M2	-	-	0.000	DMA	MS	-	OT	deCordemy	Villain	-
1972-1004	2441693.50	1972 Jul 20	MSRS M2	-	-	0.000	DMA	MS	-	OT	Villain	-	-
1972-1004	2441692.50	1972	MSRS M2	-	-	0.000	DMA	MS	-	OT	Villain	-	-
1972-1002	2442921.50	1972	MSRS M20	-	-	0.000	DMA	MS	-	OT	Villain	-	-
1972-1002	2442921.50	1972	MSRS M20	-	-	0.000	DMA	MS	-	OT	Villain	-	-
1974-1017	2442921.50	1974 Jun 12	MSRS M20	-	-	0.000	DMA	MS	-	OT	Villain	-	-
1976-1016	2442921.50	1976 Apr 7	MSRS M20	-	-	0.000	DMA	MS	-	OT	Villain	-	-
1976-1016	2442921.50	1976 Apr 7	MSRS M20	-	-	0.000	DMA	MS	-	OT	Villain	-	-
1976-1016	2444054.50	1979 Jul	MSRS M20	-	-	0.000	DMA	MS	-	OT	Basansky,pc	-	-
1980-1002	2444238.50	1980?	MSRS M20	-	-	0.000	DMA	MS	-	OT	Villain	-	-





Launch

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Mission	FlightCode	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee_Km	Range_Km	Dest
1965-S657	2440211-50	1968 Dec 21	SSBS S02	-	V1	S02W-1	-	-	-	CEL	BLB	-	-	1000?	-	-
1965-S293	2440334-50	1969 Apr 23	SSBS S02	-	V2	S02W-2	-	-	-	CEL	BLB	-	-	1000?	-	-
1965-S351	2440371-50	1969 May 30	SSBS S02	-	V3	S02W-3	-	-	-	CEL	BLB	-	-	1000?	-	-
1965-S377	2440396-50	1969 Jun 24	SSBS S02	-	V4	S02W-4	-	-	-	CEL	BLB	-	-	1000?	-	-
1965-S418	2440427-50	1969 Jul 25	SSBS S02	-	V5	S02C-1	-	-	-	CEL	BLB	-	-	1000?	-	-
1965-S641	2440507-50	1969 Oct 13	SSBS S02	-	C2	S02C-2	-	-	-	CEL	BLB	-	-	1000?	-	-
1965-S655	2440565-50	1969 Dec 10	SSBS S02	-	C3	S02C3	-	-	-	CEL	BLB	-	-	1000?	-	-
1970-S310	2440696-50	1970 Apr 20	SSBS S02	-	C4	S02C4	-	-	-	CEL	BLB	-	-	1000?	-	-
1970-S651	2440853-50	1970 Sep 24	SSBS S02	-	C5	S02C5	-	-	-	CEL	BLB	-	-	1000?	-	-
1970-S699	2440900-50	1970 Nov 10	SSBS S02	-	C6	S02C6	-	-	-	CEL	BLB	-	-	1000?	-	-
1971-S610	2441301-50	1971 Dec 16	SSBS S02	-	S-IE-2601	Tir d'exercice	-	-	-	CEL	BLB	-	-	1000?	-	-
1973-S688	2441727-50	1973 Feb 14	SSBS S02	-	2601	S02C 2601	-	-	-	CEL	BLB	-	-	1000?	-	-
1973-S105	2441766-50	1973 Mar 15	SSBS S02	-	2602	S02C 2602	-	-	-	CEL	BLB	-	-	1000?	-	-
1973-S308	2441943-50	1973 Sep 18	SSBS S02	-	S-IE-2602	Tir d'exercice	-	-	-	CEL	BLB	-	-	1000?	-	-
1974-S81	2442077-50	1974 Jan 30	SSBS S2	-	S-IE-2603	Tir d'exercice	-	-	-	CEL	BLB	-	-	1000?	-	-
1974-S221	2442216-50	1974 Jun 18	SSBS S2	-	S-IE-2604	-	-	-	-	CEL	BLB	-	-	1000?	-	-
1975-S209	2442587-50	1975 Jun 24	SSBS S2	-	S-IE-2605	-	-	-	-	CEL	BLB	-	-	1000?	-	-
1975-S194	2442930-50	1976 Jun 1	SSBS S2	-	S-IE-2606	Tir d'exercice	-	-	-	CEL	BLB	-	-	1000?	-	-
1975-S342	2443115-50	1976 Dec 3	SSBS S3	-	V1	-	-	-	-	CEL	BLB	-	-	1000?	-	-
1977-S111	2443218-50	1977 Mar 16	SSBS S3	-	V2	Tir d'exercice	-	-	-	CEL	BLB	-	-	1000?	-	-
1977-S147	2443247-50	1977 Apr 14	SSBS S3	-	V3	-	-	-	-	CEL	BLB	-	-	1000?	-	-
1977-S212	2443324-50	1977 Jun 30	SSBS S3	-	V4	-	-	-	-	CEL	BLB	-	-	1000?	-	-
1977-S283	2443464-50	1977 Nov 17	SSBS S3	-	V5	-	-	-	-	CEL	BLB	-	-	1000?	-	-
1978-S101	2443603-50	1978 Apr 5	SSBS S3	-	V6	-	-	-	-	CEL	BLB	-	-	1000?	-	-
1978-S161	2443679-50	1978 Jun 20	SSBS S3	-	V7	-	-	-	-	CEL	BLB	-	-	1000?	-	-
1978-S247	2443844-50	1978 Dec 2	SSBS S3	-	V8	-	-	-	-	CEL	BLB	-	-	1000?	-	-
1978-S699	2444070-50	1979 Mar 20	SSBS S3	-	TS-2601	Qualification	-	-	-	CEL	BLB	-	-	1000?	-	-
1980-S229	2444563-50	1980 Dec 10	SSBS S3	-	2601	Tir d'exercice	-	-	-	CEL	BLB	-	-	1000?	-	-
1981-S115	2444766-50	1981 Jun 3	SSBS S3	-	2602	Tir d'exercice	-	-	-	CEL	BLB	-	-	1000?	-	-
1982-S117	2445114-50	1982 May 28	SSBS S3	-	2603	Tir d'exercice	-	-	-	CEL	BLB	-	-	1000?	-	-
1982-S131	2445146-50	1982 Jun 26	SSBS S3	-	2605	Tir d'exercice	-	-	-	CEL	BLB	-	-	1000?	-	-
1983-S122	2445510-50	1983 Jun 25	SSBS S3	-	2606	Tir d'exercice	-	-	-	CEL	BLB	-	-	1000?	-	-
1983-S164	2445611-50	1983 Oct 4	SSBS S3	-	2604	Tir d'exercice	-	-	-	CEL	BLB	-	-	1000?	-	-
1985-S21	2446471-50	1986 Feb 10	SSBS S3	-	2607	Tir d'exercice	-	-	-	CEL	BLB	-	-	1000?	-	-
1985-S21	2446966-50	1987 Jun 10	SSBS S3	-	2608	Tir d'exercice	-	-	-	CEL	BLB	-	-	1000?	-	-
1985-S196	2447006-50	1987 Mar 21	SSBS S3	-	2609	Tir d'exercice	-	-	-	CEL	BLB	-	-	1000?	-	-
1985-S117	2447006-50	1989 Mar 21	SSBS S3	-	2608	Tir d'exercice	-	-	-	CEL	BLB	-	-	1000?	-	-
1985-S61	2447095-50	1989 Jun 18	SSBS S3	-	26010	Tir d'exercice	-	-	-	CEL	BLB	-	-	1000?	-	-
1991-S114	2446431-50	1991 Jun 24	SSBS S3	-	26010	Tir d'exercice	-	-	-	CEL	BLB	-	-	1000?	-	-
1993-S67	2449294-50	1993 Nov 3	SSBS S3	-	26011	Tir d'exercice	-	-	-	CEL	BLB	-	-	1000?	-	-



Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	OrbPay	Agency	Launch_Code	Group	Category	LCite	Cite	Notes
1968-8657	2440211.50	1968 Dec 21	SSBS S02	-	V1	0.000	DMA	RS	-	Test	Willain	-	-
1969-8293	2440334.50	1969 Apr 23	SSBS S02	-	V2	0.000	DMA	RS	-	Test	Willain	-	-
1969-8361	2440371.50	1969 May 30	SSBS S02	-	V3	0.000	DMA	RS	-	Test	Willain	-	-
1969-8377	2440396.50	1969 Jun 24	SSBS S02	-	V4	0.000	DMA	RS	-	Test	Willain	-	-
1969-8418	2440427.50	1969 Jun 25	SSBS S02	-	C1	0.000	DMA	RS	-	Test	Willain	-	-
1969-8541	2440507.50	1969 Oct 13	SSBS S02	-	C2	0.000	DMA	RS	-	Test	Willain	-	-
1969-8665	2440565.50	1969 Dec 10	SSBS S02	-	C3	0.000	DMA	RS	-	Test	Willain	-	-
1970-8310	2440696.50	1970 Apr 20	SSBS S02	-	C4	0.000	DMA	RS	-	Test	Willain	-	-
1970-8531	2440853.50	1970 Sep 24	SSBS S02	-	C5	0.000	DMA	RS	-	Test	Willain	-	-
1970-8599	2440900.50	1970 Nov 10	SSBS S02	-	C6	0.000	DMA	RS	-	Test	Willain	-	-
1971-8610	2441301.50	1971 Dec 16	SSBS S02	-	S-1E-2601	0.000	DMA	RS	-	UT	Willain	-	-
1973-868	2441727.50	1973 Feb 14	SSBS S02	-	2601	0.000	DMA	RS	-	Test	Willain	-	-
1973-8105	2441756.50	1973 Mar 15	SSBS S02	-	2602	0.000	DMA	RS	-	Test	Willain	-	-
1973-8308	2441943.50	1973 Sep 18	SSBS S2	-	S-1E-2602	0.000	DMA	RS	-	UT	Willain	-	-
1974-881	2442077.50	1974 Jan 30	SSBS S2	-	S-1E-2603	0.000	DMA	RS	-	UT	Willain	-	-
1974-8221	2442216.50	1974 Jan 18	SSBS S2	-	S-1E-2604	0.000	DMA	RS	-	UT	Willain	-	-
1975-8269	2442567.50	1975 Jun 24	SSBS S2	-	S-1E-2605	0.000	DMA	RS	-	UT	Willain	-	-
1976-8194	2442930.50	1976 Jun 1	SSBS S2	-	S-1E-2606	0.000	DMA	RS	-	UT	Willain	-	-
1976-8342	2443115.50	1976 Dec 3	SSBS S2	-	V1	0.000	DMA	RS	-	Test	Willain	-	-
1977-8111	2443218.50	1977 Mar 16	SSBS S2	-	V2	0.000	DMA	RS	-	Test	Willain	-	-
1977-8147	2443247.50	1977 Apr 14	SSBS S2	-	V3	0.000	DMA	RS	-	Test	Willain	-	-
1977-8212	2443524.50	1977 Jun 30	SSBS S3	-	V4	0.000	DMA	RS	-	Test	Willain	-	-
1977-8283	2443464.50	1977 Nov 17	SSBS S3	-	V5	0.000	DMA	RS	-	Test	Willain	-	-
1978-8101	2443603.50	1978 Apr 5	SSBS S3	-	V6	0.000	DMA	RS	-	Test	Willain	-	-
1978-8161	2443679.50	1978 Jun 20	SSBS S3	-	V7	0.000	DMA	RS	-	Test	Willain	-	-
1978-8247	2443844.50	1978 Dec 2	SSBS S3	-	V8	0.000	DMA	RS	-	Test	Willain	-	-
1979-8399	2443962.50	1979 Mar 20	SSBS S3	-	V9	0.000	DMA	RS	-	Test	Willain	-	-
1979-8164	2444070.50	1979 Jul 16	SSBS S3	-	TS-2601	0.000	DMA	RS	-	Test	Willain	-	-
1980-8229	2444563.50	1980 Dec 10	SSBS S3	-	2601	0.000	DMA	RS	-	UT	Willain	-	-
1981-8115	2444756.50	1981 Jun 3	SSBS S3	-	2602	0.000	DMA	RS	-	UT	Willain	-	-
1982-8117	2445114.50	1982 May 25	SSBS S3	-	2603	0.000	DMA	RS	-	UT	Willain	-	-
1982-8151	2445146.50	1982 Jun 26	SSBS S3	-	2604	0.000	DMA	RS	-	UT	Willain	-	-
1983-8122	2445510.50	1983 Jun 25	SSBS S3	-	2605	0.000	DMA	RS	-	UT	Willain	-	-
1983-8194	2445611.50	1983 Oct 4	SSBS S3	-	2606	0.000	DMA	RS	-	UT	Willain	-	-
1986-821	2446471.50	1986 Feb 10	SSBS S3	-	2607	0.000	DMA	RS	-	UT	Willain	-	-
1987-8396	2446966.50	1987 Jun 10	SSBS S3	-	2608	0.000	DMA	RS	-	UT	Willain	-	-
1989-8117	2447606.50	1989 Mar 21	SSBS S3	-	2609	0.000	DMA	RS	-	UT	Willain	-	-
1989-861	2447695.50	1989 Jun 18	SSBS S3	-	2610	0.000	DMA	RS	-	UT	Willain	-	-
1991-8114	2446431.50	1991 Jun 24	SSBS S3	-	26010	0.000	DMA	RS	-	UT	Willain	-	-
1993-867	2449234.50	1993 Nov 3	SSBS S3	-	26011	0.000	DMA	RS	-	UT	Willain	-	-



Launch

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Mission	FlightCode	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee Km	Range Km	Dest
1973-A82	2442013.50	1973 Nov 27	PRS-1 S1a26	-	PRS-1	Test	-	-	-	BALKH	-	-	-	40?	-	-
1978-A89	2443088.50	1978	PRS-1 S1a26	-	PRS-1	Test	-	-	-	BALKH	-	-	-	40?	-	-
1979-A49	2444085.50	1979 Aug	PRS-1	-	5376	Ejection Test	-	-	-	BALKH	LC35/1	-	-	0	-	-
1980-A60	2444329.50	1980 Apr?	PRS-1	-	5376	Test	-	-	-	BALKH	LC35/1	-	-	0	-	-
1981-A37	2444785.50	1981 Jul	PRS-1 S1a26	-	PRS-1	Ejection Test	-	-	-	BALKH	LC35	-	-	40?	-	-
1982-A41	2446087.50	1982 Apr 28	PRS-1 S1a26	-	PRS-1	Intercept Test	8K650 intercept	-	-	BALKH	LC35	-	-	40?	-	-
1982-A42	2446138.50	1982 Jun 18	PRS-1 S1a26	?	PRS-1	Intercept Test	4K750 intercept	-	-	BALKH	LC35	-	-	40?	-	-
1982-A48	2446138.62	1982 Jun 18 0300	PRS-1	-	PRS-1	-	15Z045 intercept	-	-	BALKH	LC35	-	-	40?	-	-
1982-A44	2446273.50	1982 Nov?	PRS-1	-	5376	Amur-P LKI	-	-	-	BALKH	LC35	-	-	40?	-	-
1982-A45	2446273.50	1982 Nov?	PRS-1	-	5376	Amur-P LKI	-	-	-	BALKH	LC35	-	-	40?	-	-
1982-A46	2446273.50	1982 Nov?	PRS-1	-	5376	Amur-P LKI	-	-	-	BALKH	LC35	-	-	40?	-	-
1982-A47	2446273.50	1982 Nov?	PRS-1	-	5376	Amur-P LKI	-	-	-	BALKH	LC35	-	-	40?	-	-
1984-A43	2446273.50	1984 Mar	PRS-1	-	5376	Amur-P LKI	-	-	-	BALKH	LC35	-	-	40?	-	-
1984-A43	2446273.50	1984 Mar	PRS-1	-	5376	Amur-P LKI	-	-	-	BALKH	LC35	-	-	40?	-	-
1987-A36	2446694.50	1987 Mar	PRS-1	-	5376	Amur-P LKI	-	-	-	BALKH	LC35	-	-	40?	-	-
1987-A37	2446694.50	1987 Mar	PRS-1	-	5376	Amur-P LKI	-	-	-	BALKH	LC35	-	-	40?	-	-
1987-A38	2446694.50	1987 Mar	PRS-1	-	5376	Amur-P LKI	-	-	-	BALKH	LC35	-	-	40?	-	-
1987-A39	2446694.50	1987 Mar	PRS-1	-	5376	Amur-P LKI	-	-	-	BALKH	LC35	-	-	40?	-	-
1987-A35	2447068.50	1987 Oct?	PRS-1	-	5376	Amur-P LKI	-	-	-	BALKH	LC35	-	-	40?	-	-
1988-A95	2447160.50	1988	PRS-1	-	5376	Amur-P K-1	-	-	-	BALKH	LC35	-	-	40?	-	-
1988-A97	2447160.50	1988	PRS-1	-	5376	Amur-P K-2	-	-	-	BALKH	LC35	-	-	40?	-	-
1988-A98	2447342.50	1988 Jul	PRS-1	-	5376	Amur-P K-3	-	-	-	BALKH	LC35	-	-	40?	-	-
1989-A23	2447526.50	1989	PRS-1	-	5376	Amur-P	-	-	-	BALKH	LC35	-	-	40?	-	-
1989-A24	2447526.50	1989	PRS-1	-	5376	Amur-P	-	-	-	BALKH	LC35	-	-	40?	-	-
1989-A25	2447526.50	1989	PRS-1	-	5376	Amur-P	-	-	-	BALKH	LC35	-	-	40?	-	-
1989-A26	2447526.50	1989	PRS-1	-	5376	Amur-P	-	-	-	BALKH	LC35	-	-	40?	-	-
1989-A27	2447526.50	1989	PRS-1	-	5376	Amur-P	-	-	-	BALKH	LC35	-	-	40?	-	-
1989-A28	2447526.50	1989	PRS-1	-	5376	Amur-P	-	-	-	BALKH	LC35	-	-	40?	-	-
1989-A29	2447526.50	1989	PRS-1	-	5376	Amur-P	-	-	-	BALKH	LC35	-	-	40?	-	-
1989-A30	2447526.50	1989	PRS-1	-	5376	Amur-P	-	-	-	BALKH	LC35	-	-	40?	-	-
1989-A32	2447660.50	1989 Dec 2, 1451	PRS-1	-	5376	LKI-11	-	-	-	BALKH	LC35	-	-	40?	-	-
1989-A32	2447660.50	1989 Dec 2, 1451	PRS-1	-	5376	LKI-11	-	-	-	BALKH	LC35	-	-	40?	-	-
1992-A56	2461465.12	1992 Nov 29 0800	PRS-1	-	5376	UBP	-	-	-	BALKH	LC35	-	-	40?	-	-
2004-S87	2463336.83	2004 Nov 29 0800	PRS-1	-	5376	UBP	No. 655-0561-8022-088	-	-	BALKH	LC35/2	-	-	40?	-	-
2005-A08	2464074.83	2005 Dec 5 0800	PRS-1	-	5376	UBP	No. 655-0531-9035-095	-	-	BALKH	LC35	-	-	40?	-	-
2007-A07	2464403.83	2007 Oct 11 0801	PRS-1	-	5376	UBP	-	-	-	BALKH	LC35	-	-	40?	-	-
2009-A07	2465133.50	2009 Oct 29	PRS-1	-	5376	UBP	-	-	-	BALKH	LC35	-	-	40?	-	-
2010-A23	2465495.80	2010 Oct 26	PRS-1	-	5376	UBP	-	-	-	BALKH	LC35	-	-	40?	-	-
2011-A05	2465915.83	2011 Dec 20 0801	PRS-1	-	5376	UBP	No. 655-0531-8021-090	-	-	BALKH	LC35	-	-	40?	-	-
2012-A19	2466216.83	2012 Oct 16 0801	PRS-1	-	5376	UBP	No. 655-0561-9054-100	-	-	BALKH	LC35/2	-	-	40?	-	-
2013-A20	2466595.80	2013 Oct 30	PRS-1	-	5376	UBP	-	-	-	BALKH	LC35	-	-	40?	-	-
2014-A06	246785.80	2014 May 6	PRS-1	-	5376	UBP	-	-	-	BALKH	LC35	-	-	40?	-	-
2015-A07	246785.80	2015 Jun 21 0832	PRS-1	-	5376	UBP	-	-	-	BALKH	LC35	-	-	40?	-	-
2016-A07	246785.80	2016 Jun 21 0400	PRS-1	-	5376	UBP	-	-	-	BALKH	LC35/2	-	-	40?	-	-
2017-A07	246785.80	2017 Jun 21 0400	PRS-1	-	5376	UBP	-	-	-	BALKH	LC35/2	-	-	40?	-	-
2017-A07	246785.80	2017 Jun 21 0400	PRS-1	-	5376	UBP	-	-	-	BALKH	LC35/2	-	-	40?	-	-
2017-A100	2468200.50	2017 Jun 23	PRS-1M	-	5376M No. 0102	UBP	-	-	-	BALKH	LC35/2	-	-	40?	-	-
2018-A100	2468200.50	2018 Feb 17	PRS-1M	?	5376M	LKI-1	-	-	-	BALKH	LC35/2	-	-	40?	-	-
2018-A103	2468200.50	2018 Feb 17	PRS-1M	?	5376M	LKI-2	-	-	-	BALKH	LC35/2	-	-	40?	-	-
2018-A103	2468200.50	2018 Apr 11	PRS-1M	?	5376M	LKI-3	-	-	-	BALKH	LC35/2	-	-	40?	-	-
2018-A103	2468200.50	2018 Jul 19?	PRS-1M	?	5376M	LKI-4	-	-	-	BALKH	LC35/2	-	-	40?	-	-
2018-A103	2468200.50	2018 Aug 29?	PRS-1M	?	5376M	LKI-5	-	-	-	BALKH	LC35/2	-	-	40?	-	-
2018-A103	2468200.50	2018 Nov 30?	PRS-1M	?	5376M	LKI-6	-	-	-	BALKH	LC35/2	-	-	40?	-	-
2018-A103	2468200.50	2018 Nov 30?	PRS-1M	?	5376M	LKI-7	-	-	-	BALKH	LC35/2	-	-	40?	-	-
2019-A88	2468200.50	2019 Jun 4	PRS-1M	-	5376M	LKI-7	-	-	-	BALKH	LC35/1	-	-	40?	-	-
2020-A93	2469170.50	2020 Oct 28	PRS-1M	-	5376M	-	-	-	-	BALKH	LC35	-	-	40?	-	-
2020-A94	2469170.50	2020 Nov 28	PRS-1M	-	5376M	-	-	-	-	BALKH	LC35	-	-	40?	-	-
2021-A06	2469330.50	2021 Apr 26?	PRS-1M	-	5376M	-	-	-	-	BALKH	LC35	-	-	40?	-	-
2021-A06	2469330.50	2021 Apr 26?	PRS-1M	-	5376M	-	-	-	-	BALKH	LC35	-	-	40?	-	-
2021-A38	2469467.50	2021 Sep 10	PRS-1M	-	5376M	-	-	-	-	BALKH	LC35	-	-	40?	-	-
2022-A38	2469914.50	2022 Dec 1	PRS-1M	-	5376M	-	-	-	-	BALKH	LC35	-	-	40?	-	-



Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Agency	Launch_Code	Group	Category	LTCite	Cite	Notes
1973-A82	2442013.50	1973 Nov 27	PRS-1 5Ya26	-	PRS-1	PRD	MS	-	Test	Pervov-RMO	-	-
1978-A59	2443008.50	1978	PRS-1 5Ya26	-	PRS-1	PRD	MS	-	Test	kursakov.narod.ru	-	-
1979-A69	2444085.50	1979 Aug	PRS-1	-	5376	PRD	MS	-	Test	kursakov.narod.ru	-	-
1980-A60	2444329.50	1980 Apr?	PRS-1	-	5376	PRD	MS	-	Test	RML	-	-
1981-A37	2444785.50	1981 Jul	PRS-1 5Ya26	-	PRS-1	PRD	MS	-	Test	kursakov.narod.ru	-	-
1982-A41	2445097.50	1982 Apr 28	PRS-1 5Ya26	-	PRS-1	PRD	MS	-	ABM Test	RML	kursakov.narod.ru	-
1982-A42	2445138.50	1982 Jun 18	PRS-1 5Ya26	?	PRS-1	PRD	MS	-	ABM Test	kursakov.narod.ru	-	-
1982-A48	2445138.62	1982 Jun 18 0300	PRS-1	-	PRS-1	PRD	MS	-	Test	RML	-	-
1982-A44	2445273.50	1982 Nov?	PRS-1	-	5376	PRD	MS	-	Test	RML	-	-
1982-A45	2445273.50	1982 Nov?	PRS-1	-	5376	PRD	MS	-	Test	RML	-	-
1982-A46	2445273.50	1982 Nov?	PRS-1	-	5376	PRD	MS	-	Test	RML	-	-
1982-A47	2445273.50	1982 Nov?	PRS-1	-	5376	PRD	MS	-	Test	RML	-	-
1984-A43	2445759.50	1984 Mar	PRS-1	-	5376	PRD	MS	-	Test	RML	-	-
1987-A36	2446884.50	1987 Mar	PRS-1	-	5376	PRD	MS	-	Test	RML	-	-
1987-A37	2446884.50	1987 Mar	PRS-1	-	5376	PRD	MS	-	Test	RML	-	-
1987-A38	2446884.50	1987 Mar	PRS-1	-	5376	PRD	MS	-	Test	RML	-	-
1987-A39	2446884.50	1987 Mar	PRS-1	-	5376	PRD	MS	-	Test	RML	-	-
1987-A35	2447088.50	1987 Oct?	PRS-1	-	5376	PRD	MS	-	Test	RML	-	-
1988-A35	2447160.50	1988	PRS-1	-	5376	PRD	MS	-	Test	RML	-	-
1988-A37	2447160.50	1988	PRS-1	-	5376	PRD	MS	-	Test	RML	-	-
1988-A38	2447342.50	1988 Jul	PRS-1	-	5376	PRD	MS	-	Test	RML	-	-
1989-A23	2447526.50	1989	PRS-1	-	5376	PRD	MS	-	Test	RML	-	-
1989-A24	2447526.50	1989	PRS-1	-	5376	PRD	MS	-	Test	RML	-	-
1989-A25	2447526.50	1989	PRS-1	-	5376	PRD	MS	-	Test	RML	-	-
1989-A26	2447526.50	1989	PRS-1	-	5376	PRD	MS	-	Test	RML	-	-
1989-A27	2447526.50	1989	PRS-1	-	5376	PRD	MS	-	Test	RML	-	-
1989-A28	2447526.50	1989	PRS-1	-	5376	PRD	MS	-	Test	RML	-	-
1989-A29	2447526.50	1989	PRS-1	-	5376	PRD	MS	-	Test	RML	-	-
1989-A30	2447526.50	1989	PRS-1	-	5376	PRD	MS	-	Test	RML	-	-
1989-A32	2447860.50	1989 Dec	PRS-1	-	5376	PRD	MS	-	Test	RML	-	-
1989-A42	2447860.50	1989 Nov 2 1451	PRS-1	-	5376	PRD	MS	-	ABM Test	kursakov.narod.ru	-	-
1999-A05	2451486.12	1999 Nov 29 0800	PRS-1	-	5376	PRD	MS	-	Op Test	kursakov.narod.ru	russianforces.org	-
2004-567	2453336.63	2004 Dec 5 0800	PRS-1	-	5376	PRD	MS	-	Op Test	russianforces.org	-	-
2006-A08	2454074.63	2006 Dec 5 0800	PRS-1	-	5376	PRD	MS	-	Op Test	russianforces.org	-	-
2007-A06	2454394.63	2007 Oct 11 0801	PRS-1	-	5376	PRD	MS	-	Op Test	russianforces.org	-	-
2007-A07	2454403.63	2007 Oct 30 0800	PRS-1	-	5376	PRD	MS	-	Op Test	russianforces.org	-	-
2009-A07	2455133.50	2009 Oct 29	PRS-1	-	5376	PRD	MS	-	Op Test	russianforces.org	-	-
2010-A23	2456496.50	2010 Oct 26	PRS-1	-	5376	PRD	MS	-	Op Test	russianforces.org	-	-
2011-A05	2456915.63	2011 Dec 20 0801	PRS-1	-	5376	PRD	MS	-	Op Test	russianforces.org	-	-
2012-A19	2456216.63	2012 Oct 16 0801	PRS-1	-	5376	PRD	MS	-	Op Test	russianforces.org	-	-
2013-A20	2456696.50	2013 Oct 30	PRS-1	-	5376	PRD	MS	-	Op Test	russianforces.org	-	-
2014-A09	2457185.50	2014 May 6	PRS-1	-	5376	PRD	MS	-	Op Test	russianforces.org	-	-
2015-A07	2457185.50	2015 Jun 9 0632	PRS-1	-	5376	PRD	MS	-	Op Test	russianforces.org	-	-
2015-A37	2457185.60	2015 Jun 21 0400	PRS-1	-	5376	PRD	MS	-	Op Test	russianforces.org	-	-
2017-A07	2457920.50	2017 Jun 16	PRS-1	-	5376	PRD	MS	-	Test	russianforces.org	-	-
2017-A10	2458020.50	2017 Nov 16	PRS-1M	-	5376M No. 0102	PRD	MS	-	Test	russianforces.org	-	-
2018-A10	2458160.50	2018 Feb 11?	PRS-1M	?	5376M	PRD	MS	-	Test	RML	-	-
2018-A09	2458260.50	2018 Apr 11?	PRS-1M	?	5376M	PRD	MS	-	Test	RML	-	-
2018-A13	2458318.50	2018 Jul 19?	PRS-1M	?	5376M No. 0101	PRD	MS	-	Test	russianforces.org	russianforces.org	-
2018-A133	2458369.50	2018 Aug 30?	PRS-1M	-	5376M	PRD	MS	-	Test	russianforces.org	-	-
2018-A137	2458450.50	2018 Nov 30?	PRS-1M	-	5376M	PRD	MS	-	Test	russianforces.org	-	-
2019-A88	2458450.50	2019 Nov 30?	PRS-1M	-	5376M	PRD	MS	-	Test	russianforces.org	-	-
2020-A23	2458450.50	2020 Jun 28	PRS-1M	-	5376M	PRD	MS	-	Test	russianforces.org	-	-
2020-A24	2458450.50	2020 Oct 26	PRS-1M	-	5376M	PRD	MS	-	Test	russianforces.org	-	-
2021-A06	2458450.50	2021 Nov 26?	PRS-1M	-	5376M	PRD	MS	-	Test	russianforces.org	-	-
2021-A28	2458450.50	2021 Sep 10	PRS-1M	-	5376M	PRD	MS	-	Test	russianforces.org	-	-
2022-A38	2458914.50	2022 Dec 1	PRS-1M	-	5376M	PRD	MS	-	Test	russianforces.org	-	-





Launch

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Mission	FlightCode	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee_Km	Range_Km	Dest
1995-F03	2449250.72	1993 Sep 20 0512	PSLV	-	IRSL-IE	IRSL-IE	-	-	SHAR	FLP	-	-	349	-	-
1995-F08	2449640.71	1994 Oct 15 0605	PSLV	-	IRSL-P2	IRSL-P2	-	-	SHAR	FLP	-	-	884	-	-
1996-017	2450163.70	1996 Mar 21 0453	PSLV	-	IRSL-P3	IRSL-P3	-	-	SHAR	FLP	-	-	851	-	-
1997-029	2450720.70	1997 Sep 29 0447	PSLV	C	IRSL-D	IRSL-D	-	-	SHAR	FLP	-	-	834	-	-
1999-029	2451324.77	1999 May 26 0622	PSLV	C	IRSL-P4	IRSL-P4	-	-	SHAR	FLP	-	-	740	-	-
2001-015	2452017.93	2001 Apr 18 1013	GSLV Rk I	a	GSMT-1	GSMT-1	-	-	SHAR	FLP	-	-	35859	-	-
2001-049	2452204.70	2001 Oct 22 0453:00	PSLV	c	IRSL-C3	IRSL-C3	-	-	SHAR	FLP	-	-	677	-	-
2002-043	2452529.93	2002 Sep 12 1023:40	PSLV	c	METSAT	METSAT	-	-	SHAR	FLP	-	-	36379	-	-
2002-018	2452767.98	2003 May 8 1128	GSLV Rk I	a	GSMT-2	GSMT-2	-	-	SHAR	FLP	-	-	37999	-	-
2003-046	2453292.70	2003 Oct 17 0452:08	PSLV	c	IRSL-P6	IRSL-P6	-	-	SHAR	FLP	-	-	877	-	-
2003-046	2453298.94	2004 Sep 20 1031	GSLV Rk I	b	GSMT-3	GSMT-3	-	-	SHAR	FLP	-	-	36097	-	-
2006-017	2453495.70	2005 May 5 0445	PSLV	c	Cartosat	Cartosat	-	-	SHAR	FLP	-	-	719	-	-
2006-012	2453927.01	2006 Jul 10 1208	GSLV Rk I	b	Ineat 4C	Ineat 4C	-	-	SHAR	SLP	-	-	407	-	-
2007-001	2454110.66	2007 Jan 10 0354	PSLV	c	Cartosat-2/SRE	Cartosat-2/SRE	-	-	SHAR	FLP	-	-	553	-	-
2007-013	2454213.92	2007 Apr 23 1000	PSLV	CA	AGILE/AM	AGILE/AM	-	-	SHAR	SLP	-	-	563	-	-
2007-037	2454346.04	2007 Sep 2 1251	GSLV Rk I	a	Ineat 4CR	Ineat 4CR	-	-	SHAR	SLP	-	-	36235	-	-
2008-002	2454486.66	2008 Jan 21 0345	PSLV	CA	TecSar	TecSar	-	-	SHAR	SLP	-	-	586	-	-
2008-021	2454584.66	2008 Apr 28 0353:51	PSLV	CA	Cartosat-2A/INS-1	Cartosat-2A/INS-1	-	-	SHAR	SLP	-	-	664	-	-
2008-052	2454761.54	2008 Oct 22 0652:11	PSLV-XL	-	PSLV-C9	Chandrayaan-1	-	-	SHAR	SLP	-	-	150000	-	-
2009-019	2454941.55	2009 Apr 20 0115	PSLV	CA	PSLV-C12	Chandrayaan-1	-	-	SHAR	SLP	-	-	565	-	-
2009-061	2455097.76	2009 Sep 23 0621	PSLV	CA	PSLV-C14	Deccanast-2	-	-	SHAR	SLP	-	-	796	-	-
2010-F01	2455301.96	2010 Apr 15 1057	GSLV Rk II	-	PSLV-D3	PSLV Rideshare 02	-	-	SHAR	SLP	-	-	137	-	-
2010-036	2455389.66	2010 Jul 12 0352	PSLV	CA	PSLV-C15	Cartosat-2B	-	-	SHAR	SLP	-	-	675	-	-
2010-F04	2455565.94	2010 Dec 26 1034	GSLV Rk I	c	GSVL-F06	PSLV Rideshare 03	-	-	SHAR	SLP	-	-	15	-	-
2011-016	2455971.70	2011 Apr 20 0442	PSLV	C	PSLV-C16	Resourcement-2	-	-	SHAR	SLP	-	-	825	-	-
2011-068	2457571.97	2011 Jul 15 1116	PSLV-XL	-	PSLV-C17	Mega-Tropiques	-	-	SHAR	SLP	-	-	35957	-	-
2012-047	2458546.73	2012 Oct 12 0651	PSLV	CA	PSLV-C18	Mega-Tropiques	-	-	SHAR	SLP	-	-	874	-	-
2012-047	2458643.51	2012 Apr 26 0017	PSLV-XL	-	PSLV-C19	RISAT-1	-	-	SHAR	SLP	-	-	550	-	-
2013-009	2458719.66	2012 Sep 9 0423	PSLV	CA	PSLV-C21	SPOT-6	-	-	SHAR	FLP	-	-	700	-	-
2013-004	2458349.02	2013 Feb 25 1231	PSLV	CA	PSLV-C20	SHAR/Sapphiro	-	-	SHAR	FLP	-	-	768	-	-
2013-068	2458475.26	2013 Jul 1 1811	PSLV-XL	-	PSLV-C22	SHAR/1A	-	-	SHAR	FLP	-	-	35923	-	-
2013-060	2458601.86	2013 Nov 5 0908	PSLV-XL	-	PSLV-C25	MR3	-	-	SHAR	FLP	-	-	35847	-	-
2014-001	2458662.96	2014 Jan 5 1048	GSLV Rk II	-	GSMT-14	INSIS-1A	-	-	SHAR	FLP	-	-	30644	-	-
2014-017	2458751.99	2014 Apr 4 1144	PSLV-XL	-	PSLV-C24	INSIS-1B	-	-	SHAR	FLP	-	-	689	-	-
2014-034	2458838.66	2014 Jun 30 0422	PSLV	CA	PSLV-C23	PSLV Rideshare 05	-	-	SHAR	FLP	-	-	35888	-	-
2014-061	2458946.33	2014 Oct 15 2002	PSLV-XL	-	PSLV-C26	INSIS-1C	-	-	SHAR	FLP	-	-	35888	-	-
2015-018	2459109.39	2015 Mar 28 1149	PSLV-XL	-	PSLV-C27	INSIS-1D	-	-	SHAR	FLP	-	-	35887	-	-
2015-024	2457244.19	2015 Jul 17 0226	PSLV-XL	-	PSLV-C28	MR3	-	-	SHAR	FLP	-	-	665	-	-
2015-041	2457261.97	2015 Aug 26 1122	GSLV Rk II	-	GSMT-6	GSMT-6	-	-	SHAR	SLP	-	-	35837	-	-
2015-052	2457293.69	2015 Sep 28 0430	PSLV-XL	-	ASTROSAT	ASTROSAT	-	-	SHAR	SLP	-	-	666	-	-
2015-077	2457373.02	2015 Dec 16 1230	PSLV	CA	TELEOS-1	TELEOS-1	-	-	SHAR	FLP	-	-	573	-	-
2016-013	2457447.67	2016 Jan 10 1031	PSLV-XL	-	INSIS-1E	INSIS-1E	-	-	SHAR	SLP	-	-	35854	-	-
2016-013	2457457.94	2016 Mar 10 1031	PSLV-XL	-	INSIS-1F	INSIS-1F	-	-	SHAR	SLP	-	-	35854	-	-
2016-040	2457506.81	2016 Apr 28 0350	PSLV-XL	-	PSLV-C33	INSIS-1G	-	-	SHAR	SLP	-	-	527	-	-
2016-054	2457561.66	2016 Jun 2 1135	GSLV Rk II	-	Cartosat-2(S)	Cartosat-2(S)	-	-	SHAR	SLP	-	-	36221	-	-
2016-059	2457639.97	2016 Sep 28 1342	PSLV	C	Ineat-3DR	Ineat-3DR	-	-	SHAR	SLP	-	-	746	-	-
2016-074	2457759.95	2016 Sep 2 0454	PSLV	C	Resourceat-2A	Resourceat-2A	-	-	SHAR	FLP	-	-	846	-	-
2017-008	2457769.67	2017 Feb 15 0358	PSLV-XL	-	Resourceat-2(B)	Resourceat-2(B)	-	-	SHAR	FLP	-	-	529	-	-
2017-024	2457878.95	2017 May 5 1127	GSLV Rk II	-	GSMT-9	GSMT-9	-	-	SHAR	SLP	-	-	35349	-	-
2017-056	2457987.67	2017 Jun 23 0359	PSLV-XL	-	Cartosat-2(S)/Flock-3p	Cartosat-2(S)/Flock-3p	-	-	SHAR	SLP	-	-	686	-	-
2017-061	2457987.67	2017 Aug 31 1339	PSLV-XL	-	INSIS-2(S)/Cubeats	INSIS-2(S)/Cubeats	-	-	SHAR	SLP	-	-	6563	-	-
2018-004	2458130.67	2018 Jan 12 0359	PSLV-XL	-	INSIS-2(S)/Cubeats	INSIS-2(S)/Cubeats	-	-	SHAR	SLP	-	-	1068	-	-
2018-004	2458206.98	2018 Jan 12 0359	PSLV-XL	-	Cartosat-2(S)/Cubeats	Cartosat-2(S)/Cubeats	-	-	SHAR	SLP	-	-	57815	-	-
2018-027	2458206.98	2018 Jan 12 0359	GSLV Rk II	b	GSMT-6A	GSMT-6A	-	-	SHAR	SLP	-	-	45282	-	-
2018-035	2458220.44	2018 Apr 11 2234:00	PSLV-XL	-	INSIS-1I	INSIS-1I	-	-	SHAR	SLP	-	-	618	-	-
2018-071	2458378.19	2018 Sep 16 1634:00	PSLV	CA	PSLV-C42	INSIS-2(S)/S1-4	-	-	SHAR	FLP	-	-	649	-	-
2018-096	2458451.64	2018 Nov 29 0427:30	PSLV	CA	PSLV-C43	PSLV Rideshare 12	-	-	SHAR	FLP	-	-	42013	-	-
2018-105	2458471.94	2018 Dec 19 1047:00	GSLV Rk II	c	GSMT-7A	PSLV Rideshare 13	-	-	SHAR	FLP	-	-	452	-	-
2019-006	2458508.25	2019 Jan 24 1907:00	PSLV-DL	-	GSMT-7A	PSLV Rideshare 13	-	-	SHAR	SLP	-	-	753	-	-
2019-018	2458574.66	2019 Apr 1 0357:00	PSLV-DL	-	Microsat-R	Microsat-R	-	-	SHAR	SLP	-	-	618	-	-
2019-028	2458625.56	2019 May 22 0000	PSLV	CA	EMISAT	PSLV Rideshare 14	-	-	SHAR	SLP	-	-	563	-	-
2019-081	2458814.67	2019 Nov 27 0358	PSLV	CA	PSLV-C46	PSLV Rideshare 15	-	-	SHAR	SLP	-	-	582	-	-
2019-089	2458828.91	2019 Dec 11 0955	PSLV-DL	-	PSLV-C47	PSLV Rideshare 16	-	-	SHAR	SLP	-	-	588	-	-
2020-018	2459160.90	2020 Nov 7 0941	PSLV-DL	-	PSLV-C48	PSLV Rideshare 17	-	-	SHAR	FLP	-	-	36823	-	-
2020-089	2459200.92	2020 Dec 17 1011	PSLV-DL	-	INS-01	PSLV Rideshare 18	-	-	SHAR	SLP	-	-	-	-	-
2021-015	2459273.70	2021 Feb 28 0454	PSLV-DL	-	CMS-01	PSLV Rideshare 18	-	-	SHAR	SLP	-	-	760	-	-
2021-F06	2459438.51	2021 Aug 12 0013	GSLV Rk II	c	INS-03	INS-03	-	-	SHAR	SLP	-	-	542	-	-
2022-013	2459624.52	2022 Feb 14 0029	PSLV	C	PSLV-C50	PSLV Rideshare 19	-	-	SHAR	SLP	-	-	623	-	-
2022-072	2459761.02	2022 Jun 30 1232	PSLV	CA	PSLV-C52	DS-EO/PROE	-	-	SHAR	SLP	-	-	-	-	-
2023-057	2459761.02	2022 Jun 30 1232	PSLV	CA	PSLV-C54	DS-EO	-	-	SHAR	SLP	-	-	-	-	-
2023-076	2460068.77	2023 Apr 22 0850	PSLV	CA	PSLV-C55	TeLEOS-2	-	-	SHAR	FLP	-	-	-	-	-
2023-109	2460155.54	2023 May 29 0512	GSLV Rk II	c	INS-01	TeLEOS-2	-	-	SHAR	FLP	-	-	-	-	-
2023-132	2460189.76	2023 Jul 30 0101:00	PSLV	CA	PSLV-C56	DS-SAR	-	-	SHAR	FLP	-	-	-	-	-
2024-001	2460310.65	2023 Sep 2 0620:00	PSLV-DL	-	PSLV-C57	Aditya-L1	-	-	SHAR	FLP	-	-	-	-	-
2024-033	2460358.00	2024 Feb 17 1205	GSLV Rk II	c	PSLV-C58	XPASAT	-	-	SHAR	FLP	-	-	-	-	-
					GSVL-F14	INSAT-2DS	-	-	SHAR	SLP	-	-	-	-	-



Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	OrbPay	Agency	Launch_Code	Group	Category	LTcite	Cite	Notes
1995-F03	2449250.72	1993 Sep 20 05:12	PSLV	-	PSLV-D1	0.846	ISRO	0F	G	Sat SSO 0	SN930927-28	-	-
1994-068	2449640.71	1994 Oct 15 05:05	PSLV	-	PSLV-D2	0.805	ISRO	0S	G	Sat SSO 0	WSL	-	-
1996-017	2450163.70	1996 Mar 21 04:53	PSLV	-	PSLV-D3	0.922	ISRO	0S	G	Sat SSO 0	SN960325-03	-	-
1997-057	2450720.70	1997 Sep 29 04:27	PSLV	C	PSLV-C1	1.200	ISRO	0S75	G	Sat SSO 0	Wire	AMST971006-30	-
1999-029	2451324.77	1999 May 26 06:42	PSLV Mk I	C	PSLV-C2	1.191	ISRO	0S75	G	Sat SSO 0	Wire	Wire	-
2001-015	2452017.93	2001 Apr 18 10:13	PSLV Mk I	a	PSLV-D1	1.530	ISRO	0S80	G	Sat SSO 0	Wire	www.dlr.de	-
2001-049	2452294.90	2001 Oct 22 04:53:00	PSLV	a	PSLV-C3	1.294	ISRO	0S80	G	Sat SSO 0	CurrSci83-1081	www.isro.org	-
2002-043	2452529.93	2002 Sep 12 10:23:40	PSLV	a	PSLV-C4	1.060	ISRO	0S	G	Sat SSO 0	Wire	-	-
2003-018	2452767.98	2003 May 8 11:28	PSLV Mk I	a	PSLV-D2	1.800	ISRO	0S	G	Sat SSO 0	Wire	-	-
2004-036	2452929.70	2004 Oct 17 04:52:08	PSLV	b	PSLV-F01	1.960	ISRO	0S	G	Sat SSO 0	Wire	-	-
2005-017	2453495.70	2005 May 5 04:45	PSLV Mk I	b	PSLV-C6	1.603	ISRO	0S	G	Sat SSO 0	Wire	-	-
2006-F02	2453927.01	2006 Jul 10 12:08	PSLV Mk I	b	PSLV-F02	2.168	ISRO	0F	G	Sat SSO 0	Wire	-	-
2007-001	2454110.66	2007 Jan 10 03:54	PSLV	b	PSLV-C7	1.342	ISRO	0S	G	Sat SSO 0	Wire	-	-
2007-013	2454213.92	2007 Apr 23 10:00	PSLV	Ca	PSLV-C8	0.632	ISRO	0S	C/0G	Sat LED 0	Wire	-	-
2007-037	2454346.04	2007 Sep 2 12:51	PSLV Mk I	b	PSLV-F04	2.130	ISRO	0S75	G	Sat LED 0	Wire	-	-
2008-002	2454486.66	2008 Jan 21 03:46	PSLV	Ca	PSLV-C10	0.300	ISRO	0S	G/0G	Sat LED 0	Wire	-	-
2008-021	2454584.66	2008 Apr 28 03:53:51	PSLV	Ca	PSLV-C9	0.806	ISRO	0S	G	Sat SSO 0	Wire	-	-
2008-052	2454761.54	2008 Oct 22 03:52:11	PSLV-XL	-	PSLV-C11	1.409	ISRO	0S	G	Sat SSO 0	Wire	-	-
2009-019	2454941.95	2009 Apr 20 06:15	PSLV	Ca	PSLV-C12	0.980	ISRO	0S	G	Sat SSO 0	Wire	-	-
2009-051	2455097.76	2009 Sep 23 02:21	PSLV	Ca	PSLV-C14	0.980	ISRO	0S	G	Sat SSO 0	Wire	-	-
2010-F01	2455301.96	2010 Apr 15 10:57	PSLV Mk II	Ca	PSLV-D3	2.200	ISRO	0F	G	Sat SSO 0 1	Wire	-	-
2010-035	2455389.66	2010 Jul 12 03:52	PSLV	Ca	PSLV-F06	2.260	ISRO	0F	G	Sat SSO 0	Wire	-	-
2010-F04	2455555.94	2010 Dec 25 10:34	PSLV Mk I	c	PSLV-C17	1.410	ISRO	0S	G	Sat SSO 0	Wire	-	-
2011-015	2455671.70	2011 Apr 20 04:42	PSLV	c	PSLV-C18	1.403	ISRO	0S	G	Sat SSO 0	Wire	-	-
2011-058	2455757.97	2011 Jul 15 11:16	PSLV-XL	-	PSLV-C16	1.042	ISRO	0S	G	Sat LED 0	Wire	-	-
2011-088	2455846.73	2011 Oct 12 05:31	PSLV-XL	Ca	PSLV-C19	1.868	ISRO	0S	G	Sat SSO 0	Wire	-	-
2012-017	2456043.51	2012 Apr 26 00:17	PSLV	Ca	PSLV-C21	0.728	ISRO	0S	G/C	Sat SSO 0	Wire	-	-
2012-047	2456179.68	2012 Sep 9 04:23	PSLV	Ca	PSLV-C20	0.654	ISRO	0S	G	Sat SSO 0 1	Wire	-	-
2013-009	2456349.02	2013 Feb 25 12:31	PSLV-XL	-	PSLV-C22	1.425	ISRO	0S	G	Sat SSO 0	Wire	-	-
2013-034	2456475.26	2013 Jul 1 18:11	PSLV-XL	-	PSLV-C25	1.337	ISRO	0S	G	Sat SSO 0	Wire	-	-
2013-060	2456601.86	2013 Nov 5 09:08	PSLV-XL	-	PSLV-C26	1.922	ISRO	0S	G	Sat SSO 0	Wire	-	-
2014-001	2456662.96	2014 Jan 5 10:48	PSLV Mk II	-	PSLV-C24	1.432	ISRO	0S	G	Sat SSO 0	Wire	-	-
2014-017	2456751.99	2014 Apr 4 11:44	PSLV-XL	-	PSLV-C23	0.740	ISRO	0S	G/C	Sat SSO 0	Wire	-	-
2014-034	2456838.68	2014 Jun 30 04:22	PSLV	Ca	PSLV-C25	1.426	ISRO	0S	G	Sat SSO 0	Wire	-	-
2014-061	2456946.33	2014 Oct 15 20:02	PSLV-XL	-	PSLV-C26	1.426	ISRO	0S	G	Sat SSO 0	Wire	-	-
2015-018	2457109.39	2015 Mar 26 11:49	PSLV-XL	-	PSLV-C27	1.426	ISRO	0S	G	Sat SSO 0	Wire	-	-
2015-032	2457214.19	2015 Jul 10 10:28	PSLV-XL	-	PSLV-C28	2.069	ISRO	0S	G	Sat SSO 0	Wire	-	-
2015-041	2457281.97	2015 Aug 27 11:22	PSLV Mk II	-	PSLV-C26	1.217	ISRO	0S	G/0+C	Sat SSO 0	Wire	-	-
2015-052	2457283.69	2015 Sep 28 04:30	PSLV-XL	-	PSLV-C28	0.611	ISRO	0S	G/0+C	Sat LED 0	Wire	-	-
2015-077	2457373.02	2015 Dec 16 12:30	PSLV	Ca	PSLV-C30	0.622	ISRO	0S	G/C	Sat LED 0	Wire	-	-
2016-002	2457467.67	2016 Jan 20 10:31	PSLV-XL	-	PSLV-C31	1.426	ISRO	0S	G	Sat SSO 0	Wire	-	-
2016-015	2457467.67	2016 Mar 10 09:31	PSLV-XL	-	PSLV-C32	1.426	ISRO	0S	G	Sat SSO 0	Wire	-	-
2016-024	2457467.67	2016 Apr 26 07:20	PSLV-XL	-	PSLV-C33	1.426	ISRO	0S	G	Sat SSO 0	Wire	-	-
2016-040	2457561.97	2016 Jun 22 03:56	PSLV-XL	-	PSLV-C34	2.267	ISRO	0S	G/0+C	Sat SSO 0 1	Wire	-	-
2016-054	2457639.97	2016 Sep 6 11:32	PSLV Mk II	-	PSLV-F05	0.644	ISRO	0S	G/0+C	Sat SSO 0	Wire	-	-
2016-064	2457659.97	2016 Sep 26 03:42	PSLV-XL	C	PSLV-C35	1.265	ISRO	0S	G/0+C	Sat SSO 0	Wire	-	-
2016-074	2457759.70	2016 Sep 26 03:42	PSLV-XL	-	PSLV-C36	1.265	ISRO	0S	G/0+C	Sat SSO 0	Wire	-	-
2017-004	2457769.67	2017 Feb 15 03:58	PSLV-XL	-	PSLV-F09	1.197	ISRO	0S	G/0+C	Sat SSO 0	Wire	-	-
2017-024	2457938.98	2017 May 5 03:59	PSLV-XL	-	PSLV-F09	2.230	ISRO	0S	G/0+C	Sat SSO 0	Wire	-	-
2017-036	2457997.67	2017 Jun 23 03:59	PSLV-XL	-	PSLV-C38	0.899	ISRO	0S	G/0+C	Sat SSO 0	Wire	-	-
2017-051	2457997.67	2017 Aug 12 03:59	PSLV-XL	-	PSLV-C39	3.445	ISRO	0S	G/0+C	Sat SSO 0	Wire	-	-
2018-004	2458130.67	2018 Mar 29 04:27:30	PSLV-XL	-	PSLV-F09	2.230	ISRO	0S	G/0+C	Sat SSO 0 1	Wire	-	-
2018-035	2458206.98	2018 Apr 16 16:38	PSLV-XL	b	PSLV-F09	2.230	ISRO	0S	G	Sat SSO 0	Wire	maspaceflight.com	-
2018-071	2458278.19	2018 Apr 16 16:38	PSLV	Ca	PSLV-F09	0.889	ISRO	0S	G/C	Sat SSO 0	Wire	maspaceflight.com	-
2018-086	2458451.69	2018 Sep 29 04:27:30	PSLV	Ca	PSLV-F09	2.260	ISRO	0S	G/0+C	Sat SSO 0	Wire	maspaceflight.com	-
2018-105	2458471.94	2018 Nov 19 10:40	PSLV	Ca	PSLV-F11	2.260	ISRO	0S	G	Sat SSO 0	Wire	maspaceflight.com	-
2019-006	2458508.26	2019 Jan 24 18:07:00	PSLV-XL	-	PSLV-F11	0.741	ISRO	0S	G	Sat SSO 0	Wire	maspaceflight.com	-
2019-018	2458574.66	2019 Apr 21 03:57:00	PSLV-DL	-	PSLV-F04	0.611	ISRO	0S	G/0+C	Sat SSO 0	Wire	maspaceflight.com	-
2019-028	2458595.50	2019 May 20 00:00	PSLV-XL	-	PSLV-F04	0.611	ISRO	0S	G/0+C	Sat SSO 0	Wire	maspaceflight.com	-
2019-081	2458814.67	2019 May 27 03:59	PSLV-XL	Ca	PSLV-F07	1.698	ISRO	0S	G/0+C	Sat SSO 0	Wire	maspaceflight.com	-
2019-089	2458828.91	2019 Dec 11 09:55	PSLV-XL	-	PSLV-C40	0.867	ISRO	0S	G/0+C	Sat SSO 0	Wire	maspaceflight.com	-
2020-081	2459160.90	2020 Nov 7 09:41	PSLV-XL	-	PSLV-C49	0.953	ISRO	0S	G/0+C	Sat SSO 0 1	Wire	maspaceflight.com	-
2020-099	2459200.92	2020 Dec 17 10:11	PSLV-XL	-	PSLV-C50	1.410	ISRO	0S	G/0+C	Sat SSO 0	Wire	maspaceflight.com	-
2021-015	2459273.70	2021 Feb 28 04:54	PSLV-XL	-	PSLV-F05	0.657	NSIL	0S	C/0+G	Sat SSO 0	Wire	maspaceflight.com	-
2021-F06	2459438.51	2021 Feb 28 04:54	PSLV-XL	c	PSLV-F10	2.268	ISRO	0F	G	Sat SSO 0	Wire	maspaceflight.com	-
2022-013	2459624.52	2022 Aug 12 00:23	PSLV-XL	-	PSLV-F10	1.736	ISRO	0S	G	Sat SSO 0	Wire	maspaceflight.com	-
2022-072	2459761.02	2022 Feb 10 12:32	PSLV-XL	Ca	PSLV-C53	1.187	NSIL	0S	C/0+G	Sat SSO 0 1	Wire	maspaceflight.com	-
2022-158	2459909.77	2022 Nov 26 06:26	PSLV-XL	-	PSLV-C55	1.187	NSIL	0S	C/0+G	Sat SSO 0	Wire	maspaceflight.com	-
2023-057	2460056.87	2023 Apr 29 05:12	PSLV-XL	Ca	PSLV-F12	0.807	NSIL	0S	C/0+G	Sat SSO 0	Wire	maspaceflight.com	-
2023-076	2460093.72	2023 May 29 05:12	PSLV-XL	Ca	PSLV-C56	2.232	NSIL	0S	C/0+G	Sat SSO 0	Wire	maspaceflight.com	-
2023-109	2460155.54	2023 Jul 30 01:01:00	PSLV-XL	Ca	PSLV-F15	0.423	NSIL	0S	C/0+G	Sat SSO 0	Wire	maspaceflight.com	-
2023-132	2460189.76	2023 Sep 1 06:20:00	PSLV-XL	Ca	PSLV-C57	1.480	ISRO	0S	C/0+G	Sat SSO 0	Wire	maspaceflight.com	-
2024-001	2460310.65	2024 Jan 1 03:40:00	PSLV-DL	-	PSLV-C58	0.519	ISRO	0S	G	Sat SSO 0	Wire	maspaceflight.com	-
2024-033	2460368.00	2024 Feb 17 12:05	PSLV Mk II	c	PSLV-F14	2.275	ISRO	0S	C/0+G	Sat SSO 0	Wire	maspaceflight.com	-



Launch

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Mission	FlightCode	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee km	Range km	Dest
1975-406	2442448.27	1975 Feb 4, 1835	Pedro Recruit	-	FLAME 1	FLAME	-	-	F-4J-077	MATC	RM06/24?	WI	LP1	17	-	-
1975-409	2442470.50	1975 Feb 27	Pedro Recruit	-	FLAME 2	FLAME	-	-	F-4J-077	MOTS	RM03/21?	TTR	LP1	17	-	-
1975-417	2442500.38	1975 Mar 28 2104	Pedro Recruit	-	FLAME 3	FLAME	-	-	F-4J-077	MATC	RM06/24?	WI	LP1	18	-	-
1975-423	2442520.50	1975 Apr 18	Pedro Recruit	-	FLAME 4	FLAME	-	-	F-4J-077	MOTS	RM03/21?	TTR	LP1	17	-	-
1975-432	2442566.50	1975 Jun 3	Pedro Recruit	-	FLAME 5	FLAME	Tungsten noestip test	-	F-4J-077	MOTS	RM03/21?	TTR	LP1	18	-	-
1975-436	2442567.50	1975 Jun 4	Pedro Recruit	-	FLAME 6	FLAME	-	-	F-4J-077	MOTS	RM03/21?	TTR	LP1	17	-	-
1976-404	2442799.50	1976 Jan 22	Pedro Recruit	-	FLAME 7	FLAME	-	-	F-4J-077	MOTS	RM03/21?	TTR	LP1	17	-	-
1976-405	2442803.50	1976 Jan 26	Pedro Recruit	-	FLAME 8	FLAME	-	-	F-4J-077	MOTS	RM03/21?	TTR	LP1	17	-	-



Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Display	Agency	Launch_Code	Group	Category	LTCite	Cite	Notes
1975-406	2442445.27	1975 Feb 4, 1835	Pedro Recruit	-	FLAME 1	0.000	SAMSO	AS	-	Test	FDG/Ulrich	SkrtCon3	-
1975-409	2442470.50	1975 Feb 27	Pedro Recruit	-	FLAME 2	0.000	SAMSO	AS	-	Test	SAMSO	Powell	-
1975-417	2442500.38	1975 Mar 28 21:04	Pedro Recruit	-	FLAME 3	0.000	SAMSO	AS	-	Test	FirstDayCover	Powell	-
1975-423	2442520.50	1975 Apr 18	Pedro Recruit	-	FLAME 4	0.000	SAMSO	AF	-	Test	SAMSO	Powell	-
1975-432	2442566.50	1975 Jun 3	Pedro Recruit	-	FLAME 5	0.000	SAMSO	AS	-	Test	SAMSO	Powell	-
1975-436	2442567.50	1975 Jun 4	Pedro Recruit	-	FLAME 6	0.000	SAMSO	AF	-	Test	SAMSO	Powell	-
1976-404	2442795.50	1976 Jan 22	Pedro Recruit	-	FLAME 7	0.000	SAMSO	AS	-	Test	SAMSO	Powell	-
1976-405	2442803.50	1976 Jan 26	Pedro Recruit	-	FLAME 8	0.000	SAMSO	AS	-	Test	SAMSO	Powell	-





Launch_Thg	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Launch_Mission	FlightCode	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee_Km	Range_Km	Dest
1990-028	2447987.30	1990 Apr 5 19:10:17	Pegasus XL/HAPS	-	001/F1	Pegasus/USA 55 GLOMR	Pegast	-	MB-52-008	ENFB	RM04/22	WTR	PAMA	680	-	-
1991-051	2449455.23	1991 Jul 17 17:33:53	Pegasus XL/HAPS	-	002/F2	Microsat 1	Microsat 1	-	MB-52-008	ENFB	RM04/22	WTR	PAMA	792	-	-
1993-009	2449028.10	1993 Feb 9 14:30:34	Pegasus XL	-	003/F3	Microsat	Microsat	-	MB-52-008	KSC	RM15/33	WTR	HFVA	479	-	-
1993-026	2449103.08	1993 Apr 25 13:56	Pegasus XL/HAPS	-	004/F4	Alexis	Alexis	-	MB-52-008	ENFB	RM04/22	WTR	PAMA	861	-	-
1994-029	2449492.21	1994 May 19 17:03	Pegasus XL/HAPS	-	005/F5	STEP 2	STEP 2	-	MB-52-008	ENFB	RM04/22	WTR	PAMA	824	-	-
1994-F03	2449531.39	1994 Jun 27 21:15	Pegasus XL	-	F6	STEP 1	STEP 1	-	L-1011	V	RM03/12	WTR	PAMA	388	-	-
1994-046	2449668.11	1994 Aug 3 14:38	Pegasus XL	-	F7	APEX	APEX	-	MB-52-008	ENFB	RM04/22	WTR	PAMA	251	-	-
1995-017	2449811.08	1995 Apr 3 13:48	Pegasus H	-	F8	Orbcomm 1/2	Orbcomm F1	-	L-1011	V	RM03/12	WTR	PAMA	766	-	-
1995-F03	2449891.33	1995 Jun 2 19:58	Pegasus XL	-	F9	STEP 3	STEP 3	-	L-1011	V	RM03/12	WTR	PAMA	144	-	-
1996-014	2450151.56	1996 Mar 9 01:33	Pegasus XL	-	F10	REX II	REX II	-	L-1011	V	RM03/12	WTR	PAMA	766	-	-
1996-037	2450220.61	1996 May 17 02:44	Pegasus H	-	F11	MSI 3	MSI 3	-	L-1011	V	RM03/12	WTR	PAMA	477	-	-
1996-049	2450266.83	1996 Jul 2 07:48	Pegasus XL	-	F12	TOMS-EP	TOMS-EP	-	L-1011	V	RM03/12	WTR	PAMA	836	-	-
1996-061	2450316.91	1996 Aug 21 09:47:26	Pegasus XL	-	F13	FAST	FAST	-	L-1011	V	RM03/12	WTR	PAMA	943	-	-
1996-061	2450392.21	1996 Nov 4 17:08:56	Pegasus XL	-	F14	SAC-B/HETE	SAC-B/HETE	-	L-1011	V	RM03/12	WTR	PAMA	4180	-	-
1997-018	2450560.00	1997 Apr 21 11:59:06	Pegasus XL	-	F15	Minisat-01	Minisat-01	-	L-1011	V	RM03/21	WTR	LP3	565	-	-
1997-037	2450662.35	1997 Aug 1 20:20	Pegasus XL	-	F16	OrbView-2	OrbView-2	-	L-1011	V	RM03/12	WTR	PAMA	584	-	-
1997-047	2450690.13	1997 Aug 29 15:02:22	Pegasus XL	-	F17	FORTE	FORTE	-	L-1011	V	RM03/12	WTR	PAMA	786	-	-
1997-063	2450744.05	1997 Oct 22 13:13	Pegasus XL	-	F18	STEP 4	STEP 4	-	L-1011	V	RM04/22Z	WTR	LP3	835	-	-
1997-064	2450806.30	1997 Dec 23 19:11:42	Pegasus XL/HAPS	-	F19	Orbcomm A1-A8	Orbcomm FMS	-	L-1011	V	RM04/22Z	WTR	LP3	501	-	-
1998-012	2450870.60	1998 Feb 26 07:07	Pegasus XL	-	F20	SHOZ/T1	SHOZ/T1	-	L-1011	V	RM03/12	WTR	PAMA	864	-	-
1998-020	2450905.61	1998 Apr 2 02:42:39	Pegasus XL	-	F21	TRACE	TRACE	-	L-1011	V	RM03/12	WTR	PAMA	587	-	-
1998-046	2451028.18	1998 Aug 2 16:24	Pegasus XL/HAPS	-	F22	Orbcomm B1-B8	Orbcomm FM17	-	L-1011	V	RM04/22Z	WTR	LP3	644	-	-
1998-063	2451079.71	1998 Sep 23 05:06	Pegasus XL/HAPS	-	F23	Orbcomm C1-C8	Orbcomm FM17	-	L-1011	V	RM04/22Z	WTR	LP3	833	-	-
1998-060	2451109.50	1998 Oct 23 00:02	Pegasus H	-	F24/P-33	SD-2	Orbcomm FM21	-	L-1011	CC	RM03/12	WTR	LP3	831	-	-
1998-071	2451163.94	1998 Dec 6 06:57:54	Pegasus XL	-	F25	SWAS	SWAS	-	L-1011	CC	RM03/12	WTR	HFVA	774	-	-
1999-011	2451242.62	1999 Mar 5 02:56	Pegasus XL/HAPS	-	F26/P-22	WIRE	WIRE	-	L-1011	V	RM03/12	WTR	PAMA	652	-	-
1999-026	2451316.71	1999 May 18 06:09:36	Pegasus XL/HAPS	-	F27	TERKLIERS/NUBLCOM	TERKLIERS	-	L-1011	V	RM03/12	WTR	PAMA	593	-	-
1999-060	2451517.29	1999 Dec 4 18:53	Pegasus XL/HAPS	-	F28	Orbcomm D1-D7	Orbcomm F30	-	L-1011	V	RM22	WTR	LP3	1375	-	-
2000-030	2451703.06	2000 Jun 7 13:19:30	Pegasus XL	-	F29	TSX-5	TSX-5	-	L-1011	V	RM22	WTR	LP3	1704	-	-
2000-061	2451826.73	2000 Oct 9 05:38:18	Pegasus H	-	F30/P-35	HETE 2	HETE 2	-	L-1011	V	RM03/12	WTR	LP1	966	-	-
2001-401	2452063.36	2001 Jun 2 20:43:31	Hyper X	-	F31	X-43A	X-43A	-	MB-52-008	ENFB	RM06/24	WTR	PAMA	460	-	-
2002-004	2452311.37	2002 Feb 5 20:58:12	Pegasus XL	-	F32	HESSI	HESSI	-	L-1011	CC	RM04/22	WTR	HFVA	609	-	-
2003-004	2452665.34	2003 Jan 25 20:13:35	Pegasus XL	-	F33	SURGE	SURGE	-	L-1011	CC	RM03/12	WTR	HFVA	682	-	-
2003-006	2452677.38	2003 Feb 6 21:00	GBI	-	F34	Taurus Lite	Taurus Lite	-	L-1011	CC	576E	WTR	HFVA	810	-	-
2003-017	2452798.00	2003 Apr 28 11:59:57	Pegasus XL	-	F35	GALEX	GALEX	-	L-1011	CC	RM03/12	WTR	HFVA	703	-	-
2003-030	2452817.29	2003 Jun 26 18:53	Pegasus XL	-	F36	Orbview-3	Orbview-3	-	L-1011	V	RM03/12	WTR	PAMA	460	-	-
2003-036	2452864.59	2003 Aug 13 02:09:33	Pegasus XL	-	F37	SciSat-1	SciSat-1	-	L-1011	V	RM03/12	WTR	PAMA	684	-	-
2003-539	2452868.28	2003 Aug 16 18:00	GBI	-	3	BT-6	BT-6	-	L-1011	CC	LP23	-	-	674	-	-
2004-506	2453031.60	2004 Jan 27 02:23	GBI	-	4	XFT-13b	XFT-13b	-	L-1011	KMR	Reck 1	-	-	2727	-	-
2004-403	2453092.42	2004 Mar 17 21:59:57	Hyper X	-	2	X-43A	X-43A	-	MB-52-008	ENFB	RM04/22	WTR	PAMA	29	-	-
2004-412	2453226.54	2004 Nov 16 12:35	Hyper X	-	1	X-43A	X-43A	-	MB-52-008	ENFB	RM04/22	WTR	PAMA	31	-	-
2005-454	2453476.23	2005 Apr 15 02:26:50	Pegasus XL/HAPS	-	F36	MAI	MAI	-	L-1011	KMR	Reck 2	WTR	PAMA	73	-	-
2005-556	2453815.65	2005 Dec 14 03:03:53	GBI	-	4	FT-1	FT-1	-	L-1011	KMR	Reck 3	WTR	PAMA	15007	-	-
2006-556	2453917.09	2006 Mar 22 13:03:53	Pegasus XL	-	F37	STS	STS	-	L-1011	V	RM03/12	WTR	PAMA	45664	-	-
2006-549	2453980.54	2006 Sep 17 03:26:03	GBI	-	5	GIN FTO-02	GIN FTO-02	-	L-1011	V	RM03/12	WTR	PAMA	10007	-	-
2007-545	2454216.35	2007 Apr 25 20:26:03	Pegasus XL	-	F38	AIM	AIM	-	L-1011	V	RM03/12	WTR	PAMA	10007	-	-
2007-541	2454216.35	2007 Apr 25 20:26:03	Pegasus XL	-	F38	AIM	AIM	-	L-1011	V	RM03/12	WTR	PAMA	10007	-	-
2008-017	2454572.94	2008 Apr 25 09:02:48	Pegasus XL	-	F39	C/NDFS	C/NDFS	-	L-1011	KMR	RM03/24	KMR	LP2	852	-	-
2008-046	2454759.88	2008 Aug 25 17:02:48	ALV	-	X-1	HARIS/SOAREX-6	HARIS/SOAREX-6	-	L-1011	MARS	RM06/24	KMR	LP2	107	-	-
2008-051	2454759.88	2008 Aug 25 17:02:48	Pegasus XL	-	F40	IBEX/Target 27	IBEX	-	L-1011	KMR	RM06/24	KMR	LP2	150000	-	-
2008-571	2454808.35	2008 Dec 31 20:47:23	Pegasus XL	-	-	GBI FTO-06	GBI FTO-06	-	L-1011	V	LP23	-	-	10007	-	-
2010-513	2455208.30	2010 Jan 6 22:45:05	GBI	-	-	BT-1	BT-1	-	L-1011	V	LP23	-	-	10007	-	-
2010-537	2455264.43	2010 Jan 6 22:45:05	GBI	-	-	BT-1	BT-1	-	L-1011	V	LP23	-	-	10007	-	-
2010-577	2455546.34	2010 Dec 15 20:03	GBI	-	-	GIN FTO-06a	GIN FTO-06a	-	L-1011	V	RM06/24	KMR	LP3	636	-	-
2012-031	2456092.17	2012 Jun 13 16:00:42	Pegasus XL	-	F41	InsSTAR	InsSTAR	-	L-1011	KMR	RM06/24	KMR	LP3	636	-	-
2013-011	2456319.42	2013 Jan 26 22:00:00	GBI	-	F42	IRIS	IRIS	-	L-1011	V	RM03/12	WTR	PAMA	663	-	-
2013-033	2456471.60	2013 Jan 28 02:27:46	Pegasus XL	-	F42	IRIS	IRIS	-	L-1011	V	RM03/12	WTR	PAMA	663	-	-
2013-848	2456479.37	2013 Jul 5 18:35	GBI	-	GBI	CE-11 EKV	CE-11 EKV	-	L-1011	V	LP23	-	-	10007	-	-
2014-833	2456831.29	2014 Jun 29 18:55	GBI	-	GBI	CE-11 EKV	CE-11 EKV	-	L-1011	V	LP23	-	-	10007	-	-
2015-409	2457199.50	2015 Jun 26	TRBM-T1	-	AGSIS FTO-02E1	AGSIS FTO-02E1	AGSIS FTO-02E1	-	C-17	HICK	RM08/26L	J17	LP3	07	-	-
2015-587	2457266.50	2015 Dec 10	TRBM-T1	-	AGSIS FTO-02E1a	AGSIS FTO-02E1a	AGSIS FTO-02E1a	-	C-17	HICK	RM08/26L	J17	LP3	3007	-	-
2016-504	2457416.41	2016 Jan 28 21:557	TRBM-T1	-	AGSIS FTO-02E1a	AGSIS FTO-02E1a	AGSIS FTO-02E1a	-	C-17	HICK	RM08/26L	J17	LP3	3007	-	-
2016-078	2457738.07	2016 Dec 15 13:37	GBI	-	GBI Target	GBI Target	GBI Target	-	L-1011	CC	RM08/26L	J17	LP3	10007	-	-
2017-537	2457904.31	2017 May 30 19:28:04	Pegasus XL	-	F43	CYGNSS	CYGNSS	-	L-1011	CC	RM08/26L	J17	LP3	575	-	-
2017-556	2457945.50	2017 Jul 11	TRBM-T1	-	FTC-15	FTC-15	FTC-15	-	L-1011	V	RM08/26L	J17	LP3	10007	-	-
2018-576	2458462.50	2018 Dec 10	TRBM-T1	-	FTC-15	FTC-15	FTC-15	-	L-1011	V	RM08/26L	J17	LP3	10007	-	-
2019-811	2458568.23	2019 Mar 25 17:30	GBI	-	FTC-11	FTC-11	FTC-11	-	L-1011	V	RM08/26L	J17	LP3	3007	-	-
2019-068	2458767.58	2019 Oct 11 02:00	Pegasus XL	-	FTC-11	FTC-11	FTC-11	-	L-1011	V	RM08/26L	J17	LP3	3007	-	-
2021-051	2459378.84	2021 Sep 13 08:11	Pegasus XL	-	F44 /MS1	ICOM	ICOM	-	L-1011	CC	RM08/26L	J17	LP3	611	-	-
2021-561	2459470.23	2021 Sep 12 17:30	GBI	-	F45 /XS053	DeVosy	DeVosy	-	L-1011	VSEF	RM08/26L	J17	LP3	454	-	-
2023-570	2460290.11	2023 Dec 11 14:387														



Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	OrbPay	Agency	Launch_Code	Group	Category	LTCite	Cite	Notes
1990-028	2447387-30	1990 Apr 5 1910:17	Pegasus		001/F1	0.474	OSC	OS	CG/G	Sat LED 0	Wire		
1991-051	2448658-23	1991 Jul 17 1738:53	Pegasus/HAPS		002/F2	0.147	OSC	DF40	CG/G	Sat LED SD	Wire	ANS191072Z-24	
1993-009	2449028-10	1993 Feb 9 1430:34	Pegasus		003/F3	0.130	OSC	OS	CG/G	Sat LED 0	Wire		
1993-026	2449103-08	1993 Apr 25 1356	Pegasus		004/F4	0.333	OSC	OS	CG/G	Sat LED 0	Wire		
1994-029	2449492-21	1994 May 19 1703	Pegasus/HAPS		005/F5	0.180	OSC	OS	CG/G	Sat LED SD	Wire		
1994-033	2449831-39	1994 Jun 27 2115	Pegasus XL		F6	0.348	OSC	DF	CG/G	Sat LED 0	Wire		
1994-046	2449868-11	1994 Aug 3 1438	Pegasus		F7	0.383	OSC	OS	CG/G	Sat LED 0	Wire		
1995-017	2449811-08	1995 Apr 3 1348	Pegasus H		F8	0.126	OSC	OS	C	Sat LED 0	Wire		
1995-033	2449891-33	1995 Jun 22 1958	Pegasus XL		F9	0.268	OSC	DF	CG/G	Sat LED 0	Wire		
1996-014	2450151-56	1996 Mar 9 0133	Pegasus XL		F10	0.110	OSC	OS	CG/G	Sat LED 0	Wire		
1996-031	2450220-61	1996 May 17 0244	Pegasus XL		F11	0.211	OSC	OS	CG/G	Sat LED 0	Wire		
1996-037	2450266-83	1996 Jul 2 0748	Pegasus XL		F12	0.295	OSC	OS	CG/G	Sat LED 0	Wire		
1996-049	2450316-91	1996 Aug 21 0947:26	Pegasus XL		F13	0.162	OSC	OS	CG/G	Sat LED 0	Wire		
1996-061	2450392-21	1996 Nov 4 1708:56	Pegasus XL		F14	0.640	OSC	DF25	CG/G	Sat LED 0 1	Wire		
1997-018	2450560-10	1997 Apr 21 1159:06	Pegasus XL		F15	0.210	OSC	OS	CG/G	Sat LED 0	Wire		
1997-047	2450662-35	1997 Aug 1 2020	Pegasus XL		F16	0.309	OSC	OS	CG/G	Sat LED 0	Wire		
1997-063	2450744-05	1997 Aug 29 1502:22	Pegasus XL		019/F17	0.212	OSC	OS	CG/G	Sat LED 0	Wire		
1997-084	2450744-05	1997 Oct 22 1313	Pegasus XL		F18	0.403	OSC	OS	CG/G	Sat LED 0	Wire		
1997-084	2450744-05	1997 Oct 22 1313	Pegasus XL/HAPS		F19	0.336	OSC	OS	C	Sat LED 0 1	Wire		
1998-012	2450970-80	1998 Feb 26 0707	Pegasus XL		F20	0.353	OSC	OS	CG/G	Sat LED 0	Wire		
1998-040	2450905-61	1998 Apr 2 0242:39	Pegasus XL		F21	0.260	OSC	OS	CG/G	Sat LED 0	Wire		
1998-046	2451028-18	1998 Feb 2 1624	Pegasus XL/HAPS		F22	0.336	OSC	OS	C	Sat LED 0 1	Wire		
1998-053	2451079-71	1998 Sep 23 0606	Pegasus XL/HAPS		F23	0.356	OSC	OS	CG/G	Sat LED 0 1	Wire		
1998-060	2451109-50	1998 Dec 6 0057:54	Pegasus H		F24/P-33	0.115	OSC	OS	CG/G	Sat LED 0	Wire		
1998-071	2451153-54	1998 Oct 23 0002	Pegasus XL/HAPS		F25	0.282	OSC	OS	CG/G	Sat LED 0	Wire		
1999-011	2451242-62	1999 Mar 5 0286	Pegasus XL		F26/H-22	0.167	OSC	OS	CG/G	Sat LED 0	Wire		
1999-026	2451316-71	1999 May 18 0609:36	Pegasus XL/HAPS		F27	0.192	OSC	OS	CG/G	Sat LED 0 1	Wire		
1999-065	2451317-29	1999 Dec 4 1653	Pegasus XL/HAPS		F28	0.306	OSC	OS	C	Sat LED 0	Wire		
2000-030	2451703-06	2000 Jun 7 1319:30	Pegasus XL		F30/P-35	0.260	OSC	OS	CG/G	Sat LED 0	Wire		
2000-061	2451626-17	2000 Oct 9 0538:16	Pegasus H		F31	0.124	OSC	AF	CG/G	Test	Wire		
2001-401	2452063-36	2001 Jun 2 2043:51	Hyper-X		F32	0.290	OSC	OS	CG/G	Sat LED 0	Wire		
2002-004	2452311-37	2002 Feb 5 2056:12	Pegasus XL		F33	0.304	OSC	OS	CG/G	Test	www.orbital.com		
2003-004	2452665-34	2003 Jan 26 2018:35	Pegasus XL		F34	0.150	OSC	OS	CG/G	Sat LED 0	Wire		
2003-306	2452577-36	2003 Feb 6 2100	Pegasus XL		F35	0.000	OSC	NS	CG/G	Test	Wire		
2003-017	2452736-10	2003 Apr 28 1159:57	IBL		2	0.000	OSC	NS	-	Test	www.orbital.com	SI040202-20	spaceflightnow.com
2003-030	2452817-29	2003 Jun 29 1853	Pegasus XL		2	0.000	OSC	AS	-	Test	JSC443-105		
2003-036	2452864-59	2003 Aug 13 0209:33	Pegasus XL		F36	0.350	OSC	AS	CG/G	Test	spaceflightnow.com		
2004-306	2452866-26	2004 Aug 19 1600	IBL		F37	0.000	MDA	NS	-	Test	NS43-TV		
2004-403	2453031-60	2004 Mar 27 2159:57	Hyper-X		F38	0.115	OSC	NS	CG/G	Test	www.mda.mil		
2004-412	2453226-42	2004 Nov 16 2235	Pegasus XL/HAPS		F39	0.192	OSC	OS	CG/G	Test	AKS07-091		
2005-044	2453716-23	2005 Apr 13 1726:50	IBL		F40	0.000	MDA	NS	-	Test	www.mda.mil		
2005-568	2453817-65	2005 Dec 22 1403:53	Pegasus XL		F41	0.000	MDA	NS	-	Test	www.mda.mil		
2006-049	2453830-79	2006 Mar 22 1403:53	Pegasus XL		F42	0.115	OSC	OS	CG/G	Test	www.mda.mil		
2007-015	2454216-35	2007 Sep 25 2028:03	Pegasus XL		F43	0.394	OSC	OS	CG/G	Test	www.mda.mil		
2007-043	2454373-21	2007 Apr 28 2016	Pegasus XL		F44	0.394	OSC	OS	CG/G	Test	www.mda.mil		
2008-017	2454732-34	2008 Sep 18 1702:48	Pegasus XL		F45	0.000	OSC	OS	CG/G	Test	www.mda.mil		
2008-006	2454700-86	2008 Apr 29 0910	ALV		Y-1	0.394	OSC	OS	CG/G	Test	www.mda.mil		
2008-061	2454759-24	2008 Oct 19 1747:23	Pegasus XL		Y-1	0.000	LARCN	DF	LARCN/ARC/Pittman,White	Test/entry Test	Wire		
2008-071	2454906-35	2008 Dec 5 2021	Pegasus XL		F40	0.117	OSC	DS	CG/G	Sat LED 0	Wire		
2010-013	2455298-49	2010 Jun 6 2245:05	IBL		-	0.000	MDA	NS	-	Test	www.mda.mil		
2010-377	2455264-43	2010 Jun 6 2245:05	IBL		-	0.000	MDA	NS	-	Test	www.mda.mil		
2010-377	2455264-43	2010 Jun 6 2245:05	IBL		-	0.000	MDA	NS	-	Test	www.mda.mil		
2012-031	2456092-17	2012 Dec 15 2003	Pegasus XL		F41	0.360	OSC	OS	CG/G	Test	Wire		
2012-031	2456319-42	2013 Jun 13 1600:40	Pegasus XL		F41	0.000	MDA	NS	-	Test	www.mda.mil		
2012-031	2456319-42	2013 Jun 26 2000:00	IBL		-	0.000	MDA	NS	-	Test	www.mda.mil		
2013-033	2456671-62	2013 Jun 26 0227:46	Pegasus XL		F42	0.183	OSC	OS	CG/G	Test	www.mda.mil		
2013-048	2456679-27	2013 Jul 5 1836	IBL		F42	0.000	MDA	NS	-	Test	www.mda.mil		
2014-033	2456931-29	2014 Jun 22 1855	IBL		F43	0.000	MDA	NS	-	Test	www.mda.mil		
2015-009	2457094-31	2015 Dec 10	IBL		-	0.000	MDA	NS	-	Test	www.mda.mil		
2015-037	2457199-50	2015 Dec 10	IBL		-	0.000	MDA	NS	-	Test	www.mda.mil		
2015-087	2457266-50	2015 Dec 10	IBL		-	0.000	MDA	NS	-	Test	www.mda.mil		
2016-004	2457416-41	2016 Jan 28 21557	IBL		-	0.000	MDA	NS	-	Test	www.mda.mil		
2016-004	2457416-41	2016 Jan 28 21557	IBL		-	0.000	MDA	NS	-	Test	www.mda.mil		
2016-078	2457738-07	2016 Dec 15 1337	Pegasus XL		F43	0.232	OSC	OS	CG/G	Test	www.mda.mil		
2017-037	2457904-31	2017 May 30 1928:04	Pegasus XL		-	0.000	MDA	NS	-	Test	www.mda.mil		
2017-356	2457945-50	2017 Jul 11	IBL		-	0.000	MDA	NS	-	Test	www.mda.mil		
2018-076	2458062-50	2018 Dec 10	IBL		-	0.000	MDA	NS	-	Test	www.mda.mil		
2019-011	2458668-23	2019 Mar 26 1730	IBL		-	0.000	MDA	NS	-	Test	www.mda.mil		
2019-011	2458668-23	2019 Mar 26 1730	IBL		-	0.000	MDA	NS	-	Test	www.mda.mil		
2019-068	2458767-58	2019 Oct 11 0200	Pegasus XL		F44 / NS1	0.288	OSC	OS	CG/G	Test	www.mda.mil		
2021-051	2459378-84	2021 Sep 13 0811	Pegasus XL		F45 / NS063	0.250	OSC	OS	CG/G	Test	www.mda.mil		
2021-061	2459470-23	2021 Sep 12 1730	IBL		-	0.000	MDA	NS	-	Test	www.mda.mil		
2023-070	2460290-11	2023 Dec 11 14387	IBL		-	0.000	MDA	NS	-	Test	www.mda.mil		
2023-071	2460290-12	2023 Dec 11 1448	IBL		-	0.000	MDA	NS	-	Test	www.mda.mil		





Launch Mission

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Mission	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee_Km	Range_Km	Dest
1965-864	2438795.15	1965 Feb 3 1530	Pershing 1	-	AD-22?	P-877	-	FW	-	-	-	1807	-	-
1965-863	2438795.15	1965 Feb 3 1535	Pershing 1	-	AD-21?	P-887	-	FW	-	-	-	1807	-	-
1965-862	2438800.54	1965 Feb 12 0059	Pershing 1	-	AD-23?	P-887	-	FW	-	-	-	1807	-	-
1965-861	2438907.42	1965 May 26 2200	Pershing 1	-	AD-24?	P-907	-	GLB	-	-	-	1807	-	-
1965-860	2438907.50	1965 May 27	Pershing 1	-	AD-25? (overshot)	P-907	-	GLB	-	-	-	1807	-	-
1965-859	2438913.50	1965 Jun 2	Pershing 1	-	AD-26	P-927	-	GLB	-	-	-	1807	-	-
1965-858	2438927.50	1965 Jun 16	Pershing 1	-	AD-27	P-937	-	GLB	-	-	-	1807	-	-
1965-857	2439039.50	1965 Oct 6	Pershing 1	-	AD-28	P-947	-	GLB	-	-	-	1807	-	-
1965-856	2439045.14	1965 Oct 6	Pershing 1	-	AD-29?	P-967	-	GLB	-	-	-	107	-	-
1965-855	2439053.50	1965 Oct 20	Pershing 1	-	-	P-967	-	GLB	-	-	-	1807	-	-
1965-854	2439055.12	1965 Oct 21 1500?	Pershing 1	-	-	P-977	-	GLB	-	-	-	407	-	-
1965-853	2439055.17	1965 Oct 21 1600?	Pershing 1	-	-	P-987	-	GLB	-	-	-	1807	-	-
1965-852	2439156.50	1966 Jan 31	Pershing 1	-	AD-30	P-987	-	FTB	-	-	-	1807	-	-
1965-851	2439171.20	1966 Feb 14 1652	Pershing 1	-	AD-31?	P-1007	-	FTB	-	-	-	1807	-	-
1965-850	2439173.14	1966 Feb 16 1515	Pershing 1	-	AD-32	P-1017	-	FTB	-	-	-	1807	-	-
1965-849	2439298.50	1966 Jun 22	Pershing 1	-	AD-33?	P-1017	-	FTB	-	-	-	1807	-	-
1965-848	2439303.50	1966 Jun 27	Pershing 1	-	AD-34?	P-1027	66 Summer 01	GLB	-	-	-	1807	-	-
1965-847	2439305.50	1966 Jun 29	Pershing 1	-	-	P-1027	66 Summer 02	GLB	-	-	-	1807	-	-
1965-846	2439305.50	1966 Jul 19	Pershing 1	-	AD-35?	P-1047	66 Summer 03	GLB	-	-	-	1807	-	-
1965-845	2439325.50	1966 Jul 25 1530?	Pershing 1	-	AD-37	P-1057	66 Summer 04	GLB	-	-	-	1807	-	-
1965-844	2439332.15	1966 Jul 25 1600?	Pershing 1	-	AD-38	P-1067	66 Summer 05	GLB	-	-	-	1807	-	-
1965-843	2439332.17	1966 Jul 25 1700?	Pershing 1	-	AD-39?	P-1077	66 Summer 06	GLB	-	-	-	1807	-	-
1965-842	2439332.21	1966 Jul 26 1600?	Pershing 1	-	AD-40?	P-1087	66 Summer 07	GLB	-	-	-	1807	-	-
1965-841	2439333.17	1966 Jul 26 1600?	Pershing 1	-	-	P-1097	66 Summer 08	GLB	-	-	-	1807	-	-
1965-840	2439333.21	1966 Jul 26 1700?	Pershing 1	-	-	P-1107	66 Summer 09	GLB	-	-	-	1807	-	-
1965-839	2439333.25	1966 Jul 26 1800?	Pershing 1	-	-	P-1117	66 Summer 10	GLB	-	-	-	1807	-	-
1965-838	2439419.50	1966 Oct 21	Pershing 1	-	AD-41	P-1127	66 Fall 01	GLB	-	-	-	1807	-	-
1965-837	2439419.50	1966 Oct 21	Pershing 1	-	AD-42?	P-1137	66 Fall 02	GLB	-	-	-	1807	-	-
1965-836	2439419.50	1966 Oct 21	Pershing 1	-	AD-43?	P-1147	66 Fall 03	GLB	-	-	-	1807	-	-
1965-835	2439424.50	1966 Oct 26	Pershing 1	-	AD-44	P-1157	66 Fall 04	GLB	-	-	-	1807	-	-
1965-834	2439433.50	1966 Nov 4	Pershing 1	-	AD-46?	P-1167	66 Fall 05	GLB	-	-	-	1807	-	-
1965-833	2439566.17	1967 Mar 6 1600?	Pershing 1	-	AD-48?	P-1177	67 Spring 01	GLB	-	-	-	1807	-	-
1965-832	2439566.17	1967 Mar 13	Pershing 1	-	AD-47?	P-1187	67 Spring 02	GLB	-	-	-	1807	-	-
1965-831	2439566.20	1967 Mar 15	Pershing 1	-	AD-48?	P-1197	67 Spring 03	GLB	-	-	-	1807	-	-
1965-830	2439566.20	1967 Mar 15	Pershing 1	-	AD-49	P-1207	67 Spring 04	GLB	-	-	-	1807	-	-
1965-829	2439662.50	1967 Mar 29 0030	Pershing 1	-	-	P-1217	67 Spring 05	GLB	-	-	-	1807	-	-
1965-828	2439662.50	1967 Mar 29 0030	Pershing 1	-	-	P-1227	67 Spring 06	GLB	-	-	-	1807	-	-
1965-827	2439662.50	1967 Mar 29 0100	Pershing 1	-	-	P-1237	67 Spring 07	GLB	-	-	-	1807	-	-
1965-826	2439678.52	1967 Mar 29 0100	Pershing 1	-	-	P-1247	67 Spring 08	GLB	-	-	-	1807	-	-
1965-825	2439678.54	1967 Mar 29 0100	Pershing 1	-	-	P-1257	67 Summer 01	GLB	-	-	-	1807	-	-
1965-824	2439643.50	1967 Jun 2	Pershing 1	-	-	P-1267	67 Summer 02	GLB	-	-	-	1807	-	-
1965-823	2439643.50	1967 Jun 2	Pershing 1	-	-	P-1277	67 Summer 03	GLB	-	-	-	1807	-	-
1965-822	2439660.50	1967 Jun 2	Pershing 1	-	-	P-1287	67 Summer 04	GLB	-	-	-	1807	-	-
1965-821	2439660.50	1967 Jun 22	Pershing 1	-	-	P-1297	67 Summer 05	GLB	-	-	-	1807	-	-
1965-820	2439663.50	1967 Jun 22	Pershing 1	-	-	P-1307	67 Fall 01	GLB	-	-	-	1807	-	-
1965-819	2439722.94	1967 Jun 25 2010	Pershing 1	-	-	P-1317	67 Fall 02	GLB	-	-	-	1807	-	-
1965-818	2439722.94	1967 Aug 29 2015?	Pershing 1	-	-	P-1327	67 Fall 03	GLB	-	-	-	1807	-	-
1965-817	2439722.94	1967 Aug 29 2015?	Pershing 1	-	-	P-1337	67 Fall 04	GLB	-	-	-	1807	-	-
1965-816	2439722.96	1967 Aug 29 2045?	Pershing 1	-	-	P-1347	67 Fall 05	GLB	-	-	-	1807	-	-
1965-815	2439722.96	1967 Aug 29 2045?	Pershing 1	-	-	P-1357	67 Fall 06	GLB	-	-	-	1807	-	-
1965-814	2439742.96	1967 Sep 12 0746	Pershing 1	-	AD-53	P-1367	67 Fall 07	GLB	-	-	-	1807	-	-
1965-813	2439746.58	1967 Sep 12 0746	Pershing 1	-	AD-54 Hit Mexico	P-1377	67 Fall 08	GLB	-	-	-	1807	-	-
1965-812	2439760.50	1967 Sep 27	Pershing 1	-	-	P-1387	67 Fall 09	GLB	-	-	-	1807	-	-
1965-811	2439810.15	1967 Nov 15 1500	Pershing 1	-	AD-55?	P-1397	67 Fall 10	GLB	-	-	-	1807	-	-
1965-810	2439810.15	1967 Nov 15 1530	Pershing 1	-	AD-56?	P-1407	67 Fall 11	GLB	-	-	-	1807	-	-
1965-809	2439810.24	1967 Nov 15 1745	Pershing 1A	-	AD-57?	P-1417	Next Mar.	FTB	-	-	-	1807	-	-
1965-808	2439920.50	1968 Mar 6	Pershing 1A	-	-	P-1427	Next Mar.	FTB	-	-	-	1807	-	-
1965-807	2439923.50	1968 Mar 9	Pershing 1A	-	-	P-1437	Next Mar.	FTB?	-	-	-	1807	-	-
1965-806	2439915.50	1968 Mar 16	Pershing 1A	-	AD-58?	P-1447	68 Spring 01	FTB?	-	-	-	1807	-	-
1965-805	2439962.50	1968 Apr 16	Pershing 1	-	AD-60	P-1457	68 Spring 02	FTB?	-	-	-	1807	-	-
1965-804	2439962.50	1968 Apr 16	Pershing 1	-	AD-61	P-1467	68 Spring 03	FTB?	-	-	-	1807	-	-
1965-803	2439976.50	1968 Apr 30	Pershing 1	-	AD-62?	P-1477	68 Spring 04	FTB?	-	-	-	1807	-	-
1965-802	2439976.50	1968 Apr 30	Pershing 1	-	AD-63?	P-1487	68 Spring 05	FTB	-	-	-	1807	-	-
1965-801	2440028.50	1968 Apr 21	Pershing 1	-	AD-64	P-1497	68 Summer 01	GLB	-	-	-	1807	-	-
1965-800	2440028.50	1968 Jun 21	Pershing 1	-	AD-65	P-1507	68 Summer 02	GLB	-	-	-	1807	-	-
1965-799	2440056.50	1968 Jul 19	Pershing 1	-	AD-66?	P-1517	68 Summer 03	GLB	-	-	-	1807	-	-
1965-798	2440056.50	1968 Jul 19	Pershing 1	-	AD-67?	P-1527	68 Summer 04	GLB	-	-	-	1807	-	-
1965-797	2440071.50	1968 Aug 3	Pershing 1	-	AD-68	P-1537	68 Summer 05	GLB	-	-	-	1807	-	-
1965-796	2440071.50	1968 Aug 3	Pershing 1	-	AD-69	P-1547	68 Summer 06	GLB	-	-	-	1807	-	-
1965-795	2440073.50	1968 Aug 5	Pershing 1A	-	PIA	P-1557	68 Summer 07	GLB	-	-	-	1807	-	-
1965-794	2440075.50	1968 Aug 7	Pershing 1A	-	PIA	P-1567	68 Summer 08	GLB	-	-	-	1807	-	-
1965-793	2440075.50	1968 Aug 7	Pershing 1A	-	PIA	P-1577	68 Summer 09	GLB	-	-	-	1807	-	-
1965-792	2440166.17	1968 Nov 5 1611	Pershing 1A	-	AD-70?	P-1587	68 Winter 01	GLB	-	-	-	1807	-	-
1965-791	2440166.25	1968 Nov 5 1800?	Pershing 1	-	AD-71?	P-1597	68 Winter 02	GLB	-	-	-	1807	-	-
1965-790	2440173.50	1968 Nov 13	Pershing 1	-	AD-72	P-1597	68 Winter 03	GLB	-	-	-	1807	-	-
1965-789	2440314.19	1969 Apr 2 1630	Pershing 1	-	AD-73	P-1607	69 Spring 01	GLB	-	-	-	1807	-	-
1965-788	2440314.23	1969 Apr 2 1730	Pershing 1	-	AD-74	P-1617	69 Spring 02	GLB	-	-	-	1807	-	-
1965-787	2440327.22	1969 Apr 15 1710	Pershing 1	-	AD-75?	P-1627	69 Spring 03	GLB	-	-	-	1807	-	-
1965-786	2440328.36	1969 Apr 16 2045	Pershing 1	-	AD-76?	P-1637	69 Spring 04	GLB	-	-	-	1807	-	-
1965-785	2440341.25	1969 Apr 29 1755	Pershing 1	-	AD-77?	P-1647	69 Spring 05	GLB	-	-	-	1807	-	-
1965-784	2440341.29	1969 Apr 29 1900	Pershing 1	-	AD-78	P-1657	69 Spring 06	GLB	-	-	-	107	-	-
1965-783	2440355.15	1969 May 13 1530	Pershing 1	-	AD-79?	P-1667	69 Spring 07	GLB	-	-	-	1807	-	-
1965-782	2440355.15	1969 May 13 1640	Pershing 1	-	AD-80?	P-1677	69 Spring 08	GLB	-	-	-	1807	-	-
1965-781	2440470.33	1969 Sep 5 1955	Pershing 1	-	AD-81	P-1687	69 Fall 01	GLB	-	-	-	1807	-	-
1965-780	2440470.35	1969 Sep 5 2030	Pershing 1	-	AD-82	P-1697	69 Fall 02	GLB	-	-	-	1807	-	-
1965-779	2440480.50	1969 Sep 16	Pershing 1A	-	AD-83?	P-1707	69 Fall 03	GLB	-	-	-	1807	-	-
1965-778	2440480.50	1969 Sep 16	Pershing 1A	-	AD-84?	P-1717	69 Fall 04	GLB	-	-	-	1807	-	-
1965-777	2440495.35	1969 Sep 30 2017	Pershing 1A	-	AD-85?	P-1727	69 Fall 05	GLB	-	-	-	1807	-	-

Launch Mission

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Mission	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee_Km	Range_Km	Dest
1969-S378	2440495.50	1969 Sep 30 2356	Pershing 1A	-	AD-86?	P-173? 69 Fall 06	-	ELAN	-	-	-	180?	-	-
1970-S301	2440693.33	1970 Apr 16 2007	Pershing 1	-	AD-87	P-174? 70 Spring 01	-	ELAN	-	-	-	180?	-	-
1970-S302	2440693.36	1970 Apr 16 2037	Pershing 1	-	AD-88	P-175? 70 Spring 02	-	ELAN	-	-	-	180?	-	-
1970-A88	2440704.50	1970 Jun 28	Pershing 1A	-	AD-89?	P-176? 70 Spring 03	-	ELAN	-	-	-	1?	-	-
1970-S378	2440740.55	1970 Jun 3 0110	Pershing 1	-	AD-90	P-177? 70 Spring 04	-	ELAN	-	-	-	180?	-	-
1970-S379	2440742.33	1970 Jun 4 2000	Pershing 1	-	AD-91	P-178? 70 Spring 05	-	ELAN	-	-	-	180?	-	-
1970-S380	2440742.50	1970 Jun 5 0000	Pershing 1	?	-	P-179? 70 Spring 06	-	ELAN	-	-	-	180?	-	-
1970-S381	2440762.50	1970 Jun 25	Pershing 1	?	-	P-180? 70 Spring 07	-	ELAN	-	-	-	180?	-	-
1970-S382	2440762.50	1970 Jun 25	Pershing 1	?	-	P-181? 70 Spring 08	-	ELAN	-	-	-	180?	-	-
1970-S383	2440782.15	1970 Jul 14 1535	Pershing 1A	-	DASD	P-182? 70 Spring 09	-	ELAN	-	-	-	180?	-	-
1970-S367	2440803.38	1970 Aug 4 2101	Pershing 1A	-	-	P-183? 70 Spring 10	-	ELAN	-	-	-	180?	-	-
1970-S368	2440803.39	1970 Aug 4 2125	Pershing 1A	-	-	P-184? 70 Spring 11	-	ELAN	-	-	-	180?	-	-
1970-S319	2440844.50	1970 Sep 15	Pershing 1	-	-	P-185? 70 Spring 12	-	ELAN	-	-	-	180?	-	-
1970-S324	2440847.33	1970 Sep 17 2000	Pershing 1	-	-	P-187? 70 Fall 01	-	ELAN	-	-	-	180?	-	-
1970-S340	2440859.30	1970 Sep 29 1915	Pershing 1	-	-	P-188? 70 Fall 03	-	ELAN	-	-	-	180?	-	-
1970-S342	2440859.32	1970 Sep 29 1936	Pershing 1	-	-	P-189? 70 Fall 04	-	ELAN	-	-	-	180?	-	-
1970-S343	2440859.38	1970 Sep 29 2110	Pershing 1	-	-	P-190? 70 Fall 05	-	ELAN	-	-	-	180?	-	-
1970-S344	2440859.40	1970 Sep 29 2154	Pershing 1	-	-	P-191? 70 Fall 06	-	ELAN	-	-	-	180?	-	-
1970-S345	2440873.63	1970 Oct 14 0305	Pershing 1	-	DFR 117	P-192? 70 Fall 07	-	ELAN	-	-	-	180?	-	-
1970-A111	2440873.68	1970 Oct 14 0415	Pershing 1	-	AD-96	P-193? 70 Fall 08	-	ELAN	-	-	-	1?	-	-
1970-S394	2440895.65	1970 Nov 5 0335	Pershing 1A	-	-	P-194? 70 Fall 09	-	ELAN	-	-	-	180?	-	-
1970-S395	2440895.67	1970 Nov 5 0405	Pershing 1A	-	-	P-195? 70 Fall 10	-	ELAN	-	-	-	180?	-	-
1970-A117	2440895.73	1970 Nov 5 0525	Pershing 1A	-	-	P-196? 70 Fall 11	-	ELAN	-	-	-	1?	-	-
1970-S396	2440895.82	1970 Nov 5 0735	Pershing 1A	-	-	P-197? 70 Fall 12	-	ELAN	-	-	-	180?	-	-
1970-S620	2440914.35	1970 Nov 23 2030	Pershing 1A	-	-	P-198? 70 Fall 13	-	ELAN	-	-	-	180?	-	-
1970-S621	2440914.47	1970 Nov 23 2310	Pershing 1A	-	-	P-199? 70 Fall 14	-	ELAN	-	-	-	180?	-	-
1970-S622	2440914.49	1970 Nov 23 2345	Pershing 1A	-	-	P-200? 70 Fall 15	-	ELAN	-	-	-	180?	-	-
1970-S623	2440914.51	1970 Nov 24 0020	Pershing 1A	-	-	P-201? 70 Fall 16	-	ELAN	-	-	-	180?	-	-
1971-S257	2441069.27	1971 Apr 27 1800?	Pershing 1A	-	-	P-202? 71 Spring 01	-	GALC	-	-	-	180?	-	-
1971-S258	2441069.29	1971 Apr 27 2000?	Pershing 1A	-	-	P-203? 71 Spring 02	-	GALC	-	-	-	180?	-	-
1971-S259	2441069.35	1971 Apr 27 2000?	Pershing 1A	-	-	P-204? 71 Spring 03	-	GALC	-	-	-	180?	-	-
1971-S260	2441069.35	1971 Apr 27 2030	Pershing 1A	-	-	P-205? 71 Spring 04	-	GALC	-	-	-	180?	-	-
1971-S274	2441063.50	1971 May 12	Pershing 1A	-	-	P-206? 71 Spring 05	-	GALC	-	-	-	180?	-	-
1971-S275	2441063.50	1971 May 12	Pershing 1A	-	-	P-207? 71 Spring 06	-	GALC	-	-	-	180?	-	-
1971-S276	2441063.50	1971 May 12	Pershing 1A	-	-	P-208? 71 Spring 07	-	GALC	-	-	-	180?	-	-
1971-S277	2441069.16	1971 May 27 1620	Pershing 1A	-	-	P-209? 71 Spring 08	-	GALC	-	-	-	180?	-	-
1971-S313	2441099.20	1971 May 27 1855	Pershing 1A	-	-	P-210? 71 Spring 09	-	GALC	-	-	-	180?	-	-
1971-S316	2441099.28	1971 May 27 1855	Pershing 1A	-	-	P-211? 71 Spring 10	-	GALC	-	-	-	180?	-	-
1971-S326	2441111.35	1971 Jun 5 2031	Pershing 1A	-	-	P-212? 71 Spring 11	-	GALC	-	-	-	180?	-	-
1971-S327	2441111.35	1971 Jun 5 2031	Pershing 1A	-	-	P-213? 71 Spring 12	-	GALC	-	-	-	180?	-	-
1971-S328	2441225.55	1971 Sep 23 1950	Pershing 1A	-	Imp.	P-215? 71 Fall 01	-	FTB	WCC	-	-	180?	-	-
1971-S329	2441225.55	1971 Sep 23 1960	Pershing 1A	-	Imp.	P-216? 71 Fall 02	-	FTB	WCC	-	-	180?	-	-
1971-S330	2441225.55	1971 Oct 22	Pershing 1A	-	-	P-217? 71 Fall 03	-	FTB	WCC	-	-	180?	-	-
1971-S331	2441225.55	1971 Oct 27	Pershing 1A	-	-	P-218? 71 Fall 04	-	FTB	WCC	-	-	180?	-	-
1971-S332	2441251.50	1971 Nov 9	Pershing 1A	-	-	P-219? 71 Fall 05	-	FTB	WCC	-	-	180?	-	-
1971-S333	2441251.50	1971 Nov 9	Pershing 1A	-	-	P-220? 71 Fall 06	-	FTB	WCC	-	-	180?	-	-
1971-S334	2441251.50	1971 Nov 9	Pershing 1A	-	-	P-221? 71 Fall 07	-	FTB	WCC	-	-	180?	-	-
1971-S335	2441251.50	1971 Nov 9	Pershing 1A	-	-	P-222? 71 Fall 08	-	FTB	WCC	-	-	180?	-	-
1971-S336	2441251.50	1971 Nov 9	Pershing 1A	-	-	P-223? 71 Fall 09	-	FTB	WCC	-	-	180?	-	-
1971-S337	2441251.50	1971 Nov 9	Pershing 1A	-	-	P-224? 71 Fall 10	-	FTB	WCC	-	-	180?	-	-
1971-S338	2441251.50	1971 Nov 9	Pershing 1A	-	-	P-225? 71 Fall 11	-	FTB	WCC	-	-	180?	-	-
1971-S339	2441251.50	1971 Nov 9	Pershing 1A	-	-	P-226? 71 Fall 12	-	FTB	WCC	-	-	180?	-	-
1971-S340	2441251.50	1971 Nov 9	Pershing 1A	-	-	P-227? 71 Fall 13	-	FTB	WCC	-	-	180?	-	-
1971-S341	2441251.50	1971 Nov 9	Pershing 1A	-	-	P-228? 71 Fall 14	-	FTB	WCC	-	-	180?	-	-
1971-S342	2441251.50	1971 Nov 9	Pershing 1A	-	-	P-229? 71 Fall 15	-	FTB	WCC	-	-	180?	-	-
1971-S343	2441251.50	1971 Nov 9	Pershing 1A	-	-	P-230? 71 Fall 16	-	FTB	WCC	-	-	180?	-	-
1971-S344	2441251.50	1971 Nov 9	Pershing 1A	-	-	P-231? 71 Fall 17	-	FTB	WCC	-	-	180?	-	-
1971-S345	2441251.50	1971 Nov 9	Pershing 1A	-	-	P-232? 71 Fall 18	-	FTB	WCC	-	-	180?	-	-
1971-S346	2441251.50	1971 Nov 9	Pershing 1A	-	-	P-233? 71 Fall 19	-	FTB	WCC	-	-	180?	-	-
1971-S347	2441251.50	1971 Nov 9	Pershing 1A	-	-	P-234? 71 Fall 20	-	FTB	WCC	-	-	180?	-	-
1971-S348	2441251.50	1971 Nov 9	Pershing 1A	-	-	P-235? 71 Fall 21	-	FTB	WCC	-	-	180?	-	-
1971-S349	2441251.50	1971 Nov 9	Pershing 1A	-	-	P-236? 71 Fall 22	-	FTB	WCC	-	-	180?	-	-
1971-S350	2441251.50	1971 Nov 9	Pershing 1A	-	-	P-237? 71 Fall 23	-	FTB	WCC	-	-	180?	-	-
1971-S351	2441251.50	1971 Nov 9	Pershing 1A	-	-	P-238? 71 Fall 24	-	FTB	WCC	-	-	180?	-	-
1971-S352	2441251.50	1971 Nov 9	Pershing 1A	-	-	P-239? 71 Fall 25	-	FTB	WCC	-	-	180?	-	-
1971-S353	2441251.50	1971 Nov 9	Pershing 1A	-	-	P-240? 71 Fall 26	-	FTB	WCC	-	-	180?	-	-
1971-S354	2441251.50	1971 Nov 9	Pershing 1A	-	-	P-241? 71 Fall 27	-	FTB	WCC	-	-	180?	-	-
1971-S355	2441251.50	1971 Nov 9	Pershing 1A	-	-	P-242? 71 Fall 28	-	FTB	WCC	-	-	180?	-	-
1971-S356	2441251.50	1971 Nov 9	Pershing 1A	-	-	P-243? 71 Fall 29	-	FTB	WCC	-	-	180?	-	-
1971-S357	2441251.50	1971 Nov 9	Pershing 1A	-	-	P-244? 71 Fall 30	-	FTB	WCC	-	-	180?	-	-
1971-S358	2441251.50	1971 Nov 9	Pershing 1A	-	-	P-245? 71 Fall 31	-	FTB	WCC	-	-	180?	-	-
1971-S359	2441251.50	1971 Nov 9	Pershing 1A	-	-	P-246? 71 Fall 32	-	FTB	WCC	-	-	180?	-	-
1971-S360	2441251.50	1971 Nov 9	Pershing 1A	-	-	P-247? 71 Fall 33	-	FTB	WCC	-	-	180?	-	-
1971-S361	2441251.50	1971 Nov 9	Pershing 1A	-	-	P-248? 71 Fall 34	-	FTB	WCC	-	-	180?	-	-
1971-S362	2441251.50	1971 Nov 9	Pershing 1A	-	-	P-249? 71 Fall 35	-	FTB	WCC	-	-	180?	-	-
1971-S363	2441251.50	1971 Nov 9	Pershing 1A	-	-	P-250? 71 Fall 36	-	FTB	WCC	-	-	180?	-	-
1971-S364	2441251.50	1971 Nov 9	Pershing 1A	-	-	P-251? 71 Fall 37	-	FTB	WCC	-	-	180?	-	-
1971-S365	2441251.50	1971 Nov 9	Pershing 1A	-	-	P-252? 71 Fall 38	-	FTB	WCC	-	-	180?	-	-
1971-S366	2441251.50	1971 Nov 9	Pershing 1A	-	-	P-253? 71 Fall 39	-	FTB	WCC	-	-	180?	-	-
1971-S367	2441251.50	1971 Nov 9	Pershing 1A	-	-	P-254? 71 Fall 40	-	FTB	WCC	-	-	180?	-	-
1971-S368	2441251.50	1971 Nov 9	Pershing 1A	-	-	P-255? 71 Fall 41	-	FTB	WCC	-	-	180?	-	-
1971-S369	2441251.50	1971 Nov 9	Pershing 1A	-	-	P-256? 71 Fall 42	-	FTB	WCC	-	-	180?	-	-
1971-S370	2441251.50	1971 Nov 9	Pershing 1A	-	-	P-257? 71 Fall 43	-	FTB	WCC	-	-	180?	-	-
1971-S371	2441251.50	1971 Nov 9	Pershing 1A	-	-	P-258? 71 Fall 44	-	FTB	WCC	-	-	180?	-	-
1971-S372	2441251.50	1971 Nov 9	Pershing 1A	-	-	P-259? 71 Fall 45	-	FTB	WCC	-	-	180?	-	-
1971-S373	2441251.50	1971 Nov 9	Pershing 1A	-	-	P-260? 71 Fall 46	-	FTB	WCC	-	-	180?	-	-
1971-S374	2441251.50	1971 Nov 9	Pershing 1A	-	-	P-261? 71 Fall 47	-	FTB	WCC	-	-	180?	-	-
1971-S375	2441251.50	1971 Nov 9	Pershing 1A	-	-	P-262? 71 Fall 48	-	FTB	WCC	-	-	180?	-	-
1971-S376	2441251.50	1971 Nov 9	Pershing 1A	-	-	P-263? 71 Fall 49	-	FTB	WCC	-	-	180?	-	-
1971-S377	2441251.50	1971 Nov 9	Pershing 1A	-	-	P-264? 71 Fall 50	-	FTB	WCC	-	-	180?	-	-
1971-S378	2441251.50	1971 Nov 9	Pershing 1A	-	-	P-265? 71 Fall 51	-	FTB	WCC	-	-	180?	-	-
1971-S379	2441251.50	1971 Nov 9	Pershing 1A	-	-	P-266? 71 Fall 52	-	FTB	WCC	-	-	180?	-	-
1971-S380	2441251.50	1971 Nov 9	Pershing 1A	-	-	P-267? 71 Fall 53	-	FTB	WCC	-	-	180?	-	-
1971-S381	2441251.5													



Launch Mission

Launch_Thg	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Mission	Launch_Site	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee_Km	Range_Km	Dest
1973-S110	2441761.24	1973 Mar 19 1752	Pershing IA	-	110	P-2597 73 Cape 12	-	CC	-	LC31A TEL	-	-	-	1807	-	-
1973-S189	2441853.09	1973 Jun 19 1405	Pershing IA	-	AD-120?	P-2617 73 Spring 01	-	FTB	-	ROC	-	-	-	1807	-	-
1973-S190	2441853.29	1973 Jun 19 1900	Pershing IA	-	AD-121?	P-2617 73 Spring 02	-	FTB	-	ROC	-	-	-	1807	-	-
1973-S209	2441860.50	1973 Jun 27	Pershing IA	-	AD-122?	P-2627 73 Spring 03	-	FTB	-	ROC	-	-	-	1807	-	-
1973-S210	2441860.50	1973 Jun 27	Pershing IA	-	AD-123?	P-2627 73 Spring 04	-	FTB	-	ROC	-	-	-	507	-	-
1973-S236	2441881.12	1973 Jul 17 1453	Pershing IA	-	AD-124	P-2647 73 Spring 06	-	FTB	-	ROC	-	-	-	1807	-	-
1973-S236	2441881.18	1973 Jul 17 1619	Pershing IA	-	AD-125	P-2647 73 Spring 06	-	FTB	-	ROC	-	-	-	1807	-	-
1973-S215	2441889.50	1973 Jul 26	Pershing IA	-	AD-126	P-2667 73 Spring 07	-	FTB	-	ROC	-	-	-	0?	-	-
1973-S216	2441889.50	1973 Jul 26	Pershing IA	-	AD-127	P-2667 73 Spring 08	-	FTB	-	ROC	-	-	-	1807	-	-
1973-S315	2441950.90	1973 Sep 25 0930	Pershing IA	-	AD-128?	P-2687 73 Fall 01	-	GRLC	-	-	-	-	-	1807	-	-
1973-S316	2441950.92	1973 Sep 25 1005	Pershing IA	-	AD-129?	P-2687 73 Fall 02	-	GRLC	-	-	-	-	-	1807	-	-
1973-S331	2441965.89	1973 Oct 10 0928	Pershing IA	-	AD-130	P-270 73 Fall 03	-	GRLC	-	-	-	-	-	1807	-	-
1973-S332	2441965.99	1973 Oct 10 1141	Pershing IA	-	AD-131	P-271 73 Fall 04	-	GRLC	-	-	-	-	-	1807	-	-
1973-S333	2441979.93	1973 Oct 24 1015	Pershing IA	-	AD-132	P-272 73 Fall 05	-	GRLC	-	-	-	-	-	1807	-	-
1973-S334	2441979.96	1973 Oct 24 1015	Pershing IA	-	AD-133	P-273 73 Fall 06	-	GRLC	-	-	-	-	-	1807	-	-
1973-S372	2441989.93	1973 Nov 13 1015	Pershing IA	-	AD-134?	P-274 73 Fall 07	-	GRLC	-	-	-	-	-	1807	-	-
1973-S373	2441989.95	1973 Nov 13 1055	Pershing IA	-	AD-135?	P-275 73 Fall 08	-	GRLC	-	-	-	-	-	1807	-	-
1973-S374	2442013.50	1973 Nov 27	Pershing IA	-	AD-136?	P-276 73 Fall 09	-	GRLC	-	-	-	-	-	1807	-	-
1973-S375	2442013.50	1973 Nov 27	Pershing IA	-	AD-137?	P-277 73 Fall 10	-	GRLC	-	-	-	-	-	1807	-	-
1973-S426	2442022.93	1973 Dec 6 1015	Pershing IA	-	AD-137?	P-278 73 Fall 11	-	GRLC	-	-	-	-	-	1807	-	-
1973-S426	2442022.95	1973 Dec 6 1045	Pershing IA	-	AD-138*	P-278 73 Fall 11	-	GRLC	-	-	-	-	-	1807	-	-
1973-S426	2442022.95	1973 Dec 6 1045	Pershing IA	-	AD-139 *	P-279 73 Fall 12	-	GRLC	-	-	-	-	-	1807	-	-
1974-S189	2442176.29	1974 May 7 1900	Pershing IA	-	103	P-280 74 Cape 01	-	CC	-	LC16	-	-	-	1807	-	-
1974-S190	2442176.30	1974 May 7 1915	Pershing IA	-	104	P-281 74 Cape 02	-	CC	-	LC16	-	-	-	1807	-	-
1974-S191	2442176.34	1974 May 7 2005	Pershing IA	-	102	P-282 74 Cape 03	-	CC	-	LC16	-	-	-	1807	-	-
1974-S192	2442176.35	1974 May 7 2021	Pershing IA	-	101	P-283 74 Cape 04	-	CC	-	LC16	-	-	-	1807	-	-
1974-S200	2442169.04	1974 May 21 1304	Pershing IA	-	109	P-284 74 Cape 05	-	CC	-	LC16	-	-	-	1807	-	-
1974-S201	2442169.05	1974 May 21 1318	Pershing IA	-	110	P-285 74 Cape 06	-	CC	-	LC16	-	-	-	1807	-	-
1974-S202	2442169.06	1974 May 21 1328	Pershing IA	-	111	P-286 74 Cape 07	-	CC	-	LC16	-	-	-	407	-	-
1974-S203	2442169.11	1974 May 21 1443	Pershing IA	-	112	P-287 74 Cape 08	-	CC	-	LC16	-	-	-	407	-	-
1974-S209	2442199.29	1974 May 31 1900	Pershing IA	-	106	P-288 74 Cape 09	-	CC	-	LC16	-	-	-	1807	-	-
1974-S209	2442199.30	1974 May 31 1915	Pershing IA	-	107	P-289 74 Cape 10	-	CC	-	LC16	-	-	-	1807	-	-
1974-S210	2442199.34	1974 May 31 2005	Pershing IA	-	108	P-291 74 Cape 11	-	CC	-	LC16	-	-	-	1807	-	-
1974-S211	2442358.09	1974 May 31 2021	Pershing IA	-	AD-140?	P-292 74 Fall 01	-	FTB	-	ROC	-	-	-	1807	-	-
1974-S212	2442358.13	1974 Oct 17 1410	Pershing IA	-	AD-141?	P-293 74 Fall 02	-	FTB	-	ROC	-	-	-	1807	-	-
1974-S213	2442358.13	1974 Oct 17 1508	Pershing IA	-	AD-142?	P-294 74 Fall 03	-	FTB	-	ROC	-	-	-	1807	-	-
1974-S214	2442358.13	1974 Oct 31 1502	Pershing IA	-	AD-143?	P-295 74 Fall 04	-	FTB	-	ROC	-	-	-	1807	-	-
1974-S215	2442358.18	1974 Oct 31 1623	Pershing IA	-	AD-144	P-296 74 Fall 05	-	FTB	-	ROC	-	-	-	1807	-	-
1974-S216	2442377.08	1974 Nov 25 1400	Pershing IA	-	AD-145	P-297 74 Fall 06	-	FTB	-	ROC	-	-	-	1807	-	-
1974-S217	2442377.15	1974 Nov 25 1501	Pershing IA	-	AD-146	P-298 74 Fall 07	-	FTB	-	ROC	-	-	-	1807	-	-
1974-S218	2442387.50	1974 Dec 6	Pershing IA	-	AD-147	P-299 74 Fall 08	-	FTB	-	ROC	-	-	-	1807	-	-
1974-S219	2442387.50	1974 Dec 6	Pershing IA	-	AD-148	P-300 75 Spring 01	-	GRLC	-	-	-	-	-	1807	-	-
1974-S220	2442387.50	1974 Dec 6	Pershing IA	-	AD-149	P-301 75 Spring 02	-	GRLC	-	-	-	-	-	1807	-	-
1974-S221	2442387.50	1974 Dec 6	Pershing IA	-	AD-150	P-302 75 Spring 03	-	GRLC	-	-	-	-	-	1807	-	-
1974-S222	2442387.50	1974 Dec 6	Pershing IA	-	AD-151	P-303 75 Spring 04	-	GRLC	-	-	-	-	-	1807	-	-
1974-S223	2442387.50	1974 Dec 6	Pershing IA	-	AD-152?	P-304 75 Spring 05	-	GRLC	-	-	-	-	-	1807	-	-
1974-S224	2442387.50	1974 Dec 6	Pershing IA	-	AD-153?	P-305 75 Spring 06	-	GRLC	-	-	-	-	-	1807	-	-
1974-S225	2442387.50	1974 Dec 6	Pershing IA	-	AD-154?	P-306 75 Spring 07	-	GRLC	-	-	-	-	-	1807	-	-
1974-S226	2442387.50	1974 Dec 6	Pershing IA	-	AD-155?	P-307 75 Spring 08	-	GRLC	-	-	-	-	-	1807	-	-
1974-S227	2442387.50	1974 Dec 6	Pershing IA	-	AD-156?	P-308 75 Spring 09	-	GRLC	-	-	-	-	-	1807	-	-
1974-S228	2442387.50	1974 Dec 6	Pershing IA	-	AD-157	P-309 75 Cape 01	-	CC	-	LC16	-	-	-	1807	-	-
1974-S229	2442387.50	1974 Dec 6	Pershing IA	-	AD-158	P-309 75 Cape 02	-	CC	-	LC16	-	-	-	1807	-	-
1974-S230	2442387.50	1974 Dec 6	Pershing IA	-	AD-159	P-310 75 Cape 03	-	CC	-	LC16	-	-	-	1807	-	-
1974-S231	2442387.50	1974 Dec 6	Pershing IA	-	AD-160	P-311 75 Cape 04	-	CC	-	LC16	-	-	-	1807	-	-
1974-S232	2442387.50	1974 Dec 6	Pershing IA	-	AD-161	P-312 75 Cape 05	-	CC	-	LC16	-	-	-	1807	-	-
1974-S233	2442387.50	1974 Dec 6	Pershing IA	-	AD-162	P-313 75 Cape 06	-	CC	-	LC16	-	-	-	407	-	-
1974-S234	2442387.50	1974 Dec 6	Pershing IA	-	AD-163	P-314 75 Cape 07	-	CC	-	LC16	-	-	-	1807	-	-
1974-S235	2442387.50	1974 Dec 6	Pershing IA	-	AD-164	P-315 75 Cape 08	-	CC	-	LC16	-	-	-	1807	-	-
1974-S236	2442387.50	1974 Dec 6	Pershing IA	-	AD-165	P-316 75 Cape 09	-	CC	-	LC16	-	-	-	407	-	-
1974-S237	2442387.50	1974 Dec 6	Pershing IA	-	AD-166	P-317 75 Cape 10	-	CC	-	LC16	-	-	-	1807	-	-
1974-S238	2442387.50	1974 Dec 6	Pershing IA	-	AD-167	P-318 75 Cape 11	-	CC	-	LC16	-	-	-	1807	-	-
1974-S239	2442387.50	1974 Dec 6	Pershing IA	-	AD-168	P-319 75 Cape 12	-	CC	-	LC16	-	-	-	407	-	-
1974-S240	2442387.50	1974 Dec 6	Pershing IA	-	AD-169	P-320 75 Fall 01	-	FTB	-	WCS	-	-	-	1807	-	-
1974-S241	2442387.50	1974 Dec 6	Pershing IA	-	AD-170	P-321 75 Fall 02	-	FTB	-	WCS	-	-	-	1807	-	-
1974-S242	2442387.50	1974 Dec 6	Pershing IA	-	AD-171	P-322 75 Fall 03	-	FTB	-	WCS	-	-	-	1807	-	-
1974-S243	2442387.50	1974 Dec 6	Pershing IA	-	AD-172	P-323 75 Fall 04	-	FTB	-	WCS	-	-	-	1807	-	-
1974-S244	2442387.50	1974 Dec 6	Pershing IA	-	AD-173	P-324 75 Winter 01	-	FTB	-	WCS	-	-	-	1807	-	-
1974-S245	2442387.50	1974 Dec 6	Pershing IA	-	AD-174	P-325 75 Winter 02	-	FTB	-	WCS	-	-	-	1807	-	-
1974-S246	2442387.50	1974 Dec 6	Pershing IA	-	AD-175	P-326 75 Winter 03	-	FTB	-	WCS	-	-	-	1807	-	-
1974-S247	2442387.50	1974 Dec 6	Pershing IA	-	AD-176	P-327 75 Winter 04	-	FTB	-	WCS	-	-	-	1807	-	-
1974-S248	2442387.50	1974 Dec 6	Pershing IA	-	AD-177	P-328 75 Winter 05	-	FTB	-	WCS	-	-	-	1807	-	-
1974-S249	2442387.50	1974 Dec 6	Pershing IA	-	AD-178	P-329 76 Spring 01	-	FTB	-	WCS	-	-	-	1807	-	-
1974-S250	2442387.50	1974 Dec 6	Pershing IA	-	AD-179	P-330 76 Spring 02	-	FTB	-	WCS	-	-	-	1807	-	-
1974-S251	2442387.50	1974 Dec 6	Pershing IA	-	AD-180	P-331 76 Spring 03	-	FTB	-	WCS	-	-	-	1807	-	-
1974-S252	2442387.50	1974 Dec 6	Pershing IA	-	AD-181	P-332 76 Spring 04	-	FTB	-	WCS	-	-	-	1807	-	-
1974-S253	2442387.50	1974 Dec 6	Pershing IA	-	AD-182	P-333 76 Spring 05	-	FTB	-	WCS	-	-	-	1807	-	-
1974-S254	2442387.50	1974 Dec 6	Pershing IA	-	AD-183	P-334 76 Spring 06	-	FTB	-	WCS	-	-	-	1807	-	-
1974-S255	2442387.50	1974 Dec 6	Pershing IA	-	AD-184	P-335 76 Spring 07	-	FTB	-	WCS	-	-	-	1807	-	-
1974-S256	2442387.50	1974 Dec 6	Pershing IA	-	AD-185	P-336 76 Spring 08	-	FTB	-	WCS	-	-	-	1807	-	-
1974-S257	2442387.50	1974 Dec 6	Pershing IA	-	AD-186	P-337 76 Spring 09	-	FTB	-	WCS	-	-	-	1807	-	-
1974-S258	2442387.50	1974 Dec 6	Pershing IA	-	AD-187	P-338 76 Spring 10	-	FTB	-	WCS	-	-	-	1807	-	-
1974-S259	2442387.50	1974 Dec 6	Pershing IA	-	AD-188	P-339 76 Spring 11	-	FTB	-	WCS	-	-	-	1807	-	-
1974-S260	2442387.50	1974 Dec 6	Pershing IA	-	AD-189	P-340 76 Spring 12	-	FTB	-	WCS	-	-	-	1807	-	-
1974-S261	2442387.50	1974 Dec 6	Pershing IA	-	AD-190	P-341 76 Spring 13	-	FTB	-	WCS	-	-	-	1807	-	-
1974-S262	2442387.50	1974 Dec 6	Pershing IA	-	AD-191	P-342 76 Spring 14	-	FTB	-							

Launch Mission

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Mission	FlightCode	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee_km	Range_km	Dest
1977-S165	2445267.16	1977 May 3 1649	Pershing 1A	-	AD-172	P-345 77 Spring 01	-	-	-	FTB	KCC	-	-	1807	-	-
1977-S166	2445267.19	1977 May 3 1630	Pershing 1A	-	AD-173	P-346 77 Spring 02	-	-	-	FTB	KCC	-	-	1807	-	-
1977-S167	2445281.13	1977 May 17 1613	Pershing 1A	-	AD-174	P-347 77 Spring 03	-	-	-	FTB	KCC	-	-	1807	-	-
1977-S168	2445281.20	1977 May 17 1653	Pershing 1A	-	AD-175	P-348 77 Spring 04	-	-	-	FTB	KCC	-	-	1807	-	-
1977-S169	2445296.14	1977 Jun 1 1619	Pershing 1A	-	AD-176	P-349 77 Spring 05	-	-	-	FTB	KCC	-	-	1807	-	-
1977-S160	2445296.16	1977 Jun 1 1645	Pershing 1A	-	AD-177	P-350 77 Spring 06	-	-	-	FTB	KCC	-	-	1807	-	-
1977-S161	2445309.09	1977 Jun 14 1407	Pershing 1A	-	AD-178	P-351 77 Spring 07	-	-	-	FTB	KCC	-	-	0?	-	-
1977-S162	2445466.13	1977 Jun 18 1504	Pershing 1A	-	AD-179	P-352 77 Spring 08	-	-	-	FTB	KCC	-	-	1807	-	-
1977-S163	2445466.13	1977 Dec 8 1605	Pershing 1A	-	AD-180	P-353 77 Winter 01	-	-	-	FTB	KCC	-	-	1807	-	-
1977-S164	2445560.50	1978 Mar 30 1400	Pershing 1A	-	AD-181	P-354 77 Winter 02	-	-	-	FTB	KCC	-	-	1807	-	-
1978-S370	2445569.09	1978 Mar 30 1300	Pershing 1A	-	AD-182	P-355 77 Winter 03	-	-	-	FTB	KCC	-	-	1807	-	-
1978-S371	2445697.04	1978 Jun 13 1437	Pershing 1A	-	AD-183	P-356 77 Winter 04	-	-	-	FTB	KCC	-	-	1807	-	-
1978-S372	2445703.21	1978 Jun 13 1657	Pershing 1A	-	AD-184	P-357 77 Winter 05	-	-	-	FTB	KCC	-	-	1807	-	-
1978-S373	2445703.26	1978 Jun 13 1609	Pershing 1A	-	AD-185	P-358 77 Winter 06	-	-	-	FTB	KCC	-	-	1807	-	-
1978-S374	2445715.10	1978 Jun 13 1809	Pershing 1A	-	AD-186	P-359 77 Winter 07	-	-	-	FTB	KCC	-	-	1807	-	-
1978-S375	2445715.12	1978 Jun 13 1448	Pershing 1A	-	AD-187	P-360 77 Winter 08	-	-	-	FTB	KCC	-	-	1807	-	-
1978-S376	2445715.13	1978 Jun 25 1506	Pershing 1A	-	AD-188	P-361 77 Winter 09	-	-	-	FTB	KCC	-	-	1807	-	-
1978-S377	2445715.13	1978 Jun 25 1506	Pershing 1A	-	AD-189	P-362 77 Winter 10	-	-	-	FTB	KCC	-	-	1807	-	-
1978-S378	2445746.06	1978 Aug 25 1323	Pershing 1A	-	AD-190	P-363 77 Winter 11	-	-	-	FTB	KCC	-	-	1807	-	-
1978-S379	2445746.06	1978 Aug 25 1323	Pershing 1A	-	AD-191	P-364 77 Winter 12	-	-	-	FTB	KCC	-	-	1807	-	-
1978-S380	2445746.06	1978 Aug 25 1353	Pershing 1A	-	AD-192	P-365 77 Winter 13	-	-	-	FTB	KCC	-	-	1807	-	-
1978-S381	2445801.09	1978 Oct 19 1405	Pershing 1A	-	AD-193	P-366 77 Winter 14	-	-	-	FTB	KCC	-	-	1807	-	-
1978-S382	2445801.11	1978 Oct 19 1435	Pershing 1A	-	AD-194	P-367 77 Winter 15	-	-	-	FTB	KCC	-	-	1807	-	-
1978-S383	2445819.50	1978 Nov 20 1505	Pershing 1A	-	AD-195	P-368 77 Winter 16	-	-	-	FTB	KCC	-	-	1807	-	-
1978-S384	2445819.50	1978 Nov 20 1540	Pershing 1A	-	AD-196	P-369 77 Winter 17	-	-	-	FTB	KCC	-	-	1807	-	-
1978-S385	2445833.13	1978 Nov 20 1540	Pershing 1A	-	AD-197	P-370 77 Winter 18	-	-	-	FTB	KCC	-	-	1807	-	-
1978-S386	2445833.13	1978 Nov 20 1540	Pershing 1A	-	AD-198	P-371 77 Winter 19	-	-	-	FTB	KCC	-	-	1807	-	-
1978-S387	2445847.15	1978 Dec 5	Pershing 1A	-	AD-199	P-372 77 Winter 20	-	-	-	FTB	KCC	-	-	1807	-	-
1979-S567	2445847.15	1978 Dec 5	Pershing 1A	-	AD-200	P-373 77 Winter 21	-	-	-	FTB	KCC	-	-	1807	-	-
1979-S568	2445877.11	1979 Feb 22 1443	Pershing 1A	-	AD-201	P-374 77 Winter 22	-	-	-	FTB	KCC	-	-	1807	-	-
1979-S569	2445877.11	1979 Feb 22 1500	Pershing 1A	-	AD-202	P-375 77 Winter 23	-	-	-	FTB	KCC	-	-	1807	-	-
1979-S570	2445877.12	1979 Feb 22 1519	Pershing 1A	-	AD-203	P-376 77 Winter 24	-	-	-	FTB	KCC	-	-	1807	-	-
1979-S571	2445899.14	1979 Apr 25 1503	Pershing 1A	-	AD-204	P-377 77 Winter 25	-	-	-	FTB	KCC	-	-	1807	-	-
1979-S572	2445899.14	1979 Apr 25 1517	Pershing 1A	-	AD-205	P-378 77 Winter 26	-	-	-	FTB	KCC	-	-	1807	-	-
1979-S573	2445899.14	1979 Apr 25 1540	Pershing 1A	-	AD-206	P-379 77 Winter 27	-	-	-	FTB	KCC	-	-	1807	-	-
1979-S574	2446003.21	1979 May 9 1700	Pershing 1A	-	AD-207	P-380 77 Winter 28	-	-	-	FTB	KCC	-	-	1807	-	-
1979-S575	2446003.21	1979 May 9 1829	Pershing 1A	-	AD-208	P-381 77 Winter 29	-	-	-	FTB	KCC	-	-	1807	-	-
1979-S576	2446003.28	1979 May 9 1850	Pershing 1A	-	AD-209	P-382 77 Winter 30	-	-	-	FTB	KCC	-	-	1807	-	-
1979-S577	2446191.13	1979 Nov 13 1506	Pershing 1A	-	AD-210	P-383 77 Winter 31	-	-	-	FTB	KCC	-	-	1807	-	-
1979-S578	2446191.13	1979 Nov 13 1506	Pershing 1A	-	AD-211	P-384 77 Winter 32	-	-	-	FTB	KCC	-	-	1807	-	-
1979-S579	2446212.15	1979 Dec 4 1694	Pershing 1A	-	AD-212	P-385 77 Winter 33	-	-	-	FTB	KCC	-	-	1807	-	-
1980-S580	2446212.15	1979 Dec 4 1694	Pershing 1A	-	AD-213	P-386 77 Winter 34	-	-	-	FTB	KCC	-	-	1807	-	-
1980-S581	2446212.15	1979 Dec 4 1694	Pershing 1A	-	AD-214	P-387 77 Winter 35	-	-	-	FTB	KCC	-	-	1807	-	-
1980-S582	2446212.15	1979 Dec 4 1694	Pershing 1A	-	AD-215	P-388 77 Winter 36	-	-	-	FTB	KCC	-	-	1807	-	-
1980-S583	2446212.15	1979 Dec 4 1694	Pershing 1A	-	AD-216	P-389 77 Winter 37	-	-	-	FTB	KCC	-	-	1807	-	-
1980-S584	2446212.15	1979 Dec 4 1694	Pershing 1A	-	AD-217	P-390 77 Winter 38	-	-	-	FTB	KCC	-	-	1807	-	-
1980-S585	2446212.15	1979 Dec 4 1694	Pershing 1A	-	AD-218	P-391 77 Winter 39	-	-	-	FTB	KCC	-	-	1807	-	-
1980-S586	2446212.15	1979 Dec 4 1694	Pershing 1A	-	AD-219	P-392 77 Winter 40	-	-	-	FTB	KCC	-	-	1807	-	-
1980-S587	2446212.15	1979 Dec 4 1694	Pershing 1A	-	AD-220	P-393 77 Winter 41	-	-	-	FTB	KCC	-	-	1807	-	-
1980-S588	2446212.15	1979 Dec 4 1694	Pershing 1A	-	AD-221	P-394 77 Winter 42	-	-	-	FTB	KCC	-	-	1807	-	-
1980-S589	2446212.15	1979 Dec 4 1694	Pershing 1A	-	AD-222	P-395 77 Winter 43	-	-	-	FTB	KCC	-	-	1807	-	-
1980-S590	2446212.15	1979 Dec 4 1694	Pershing 1A	-	AD-223	P-396 77 Winter 44	-	-	-	FTB	KCC	-	-	1807	-	-
1980-S591	2446212.15	1979 Dec 4 1694	Pershing 1A	-	AD-224	P-397 77 Winter 45	-	-	-	FTB	KCC	-	-	1807	-	-
1980-S592	2446212.15	1979 Dec 4 1694	Pershing 1A	-	AD-225	P-398 77 Winter 46	-	-	-	FTB	KCC	-	-	1807	-	-
1980-S593	2446212.15	1979 Dec 4 1694	Pershing 1A	-	AD-226	P-399 77 Winter 47	-	-	-	FTB	KCC	-	-	1807	-	-
1980-S594	2446212.15	1979 Dec 4 1694	Pershing 1A	-	AD-227	P-400 77 Winter 48	-	-	-	FTB	KCC	-	-	1807	-	-
1980-S595	2446212.15	1979 Dec 4 1694	Pershing 1A	-	AD-228	P-401 77 Winter 49	-	-	-	FTB	KCC	-	-	1807	-	-
1980-S596	2446212.15	1979 Dec 4 1694	Pershing 1A	-	AD-229	P-402 77 Winter 50	-	-	-	FTB	KCC	-	-	1807	-	-
1980-S597	2446212.15	1979 Dec 4 1694	Pershing 1A	-	AD-230	P-403 77 Winter 51	-	-	-	FTB	KCC	-	-	1807	-	-
1980-S598	2446212.15	1979 Dec 4 1694	Pershing 1A	-	AD-231	P-404 77 Winter 52	-	-	-	FTB	KCC	-	-	1807	-	-
1980-S599	2446212.15	1979 Dec 4 1694	Pershing 1A	-	AD-232	P-405 77 Winter 53	-	-	-	FTB	KCC	-	-	1807	-	-
1980-S600	2446212.15	1979 Dec 4 1694	Pershing 1A	-	AD-233	P-406 77 Winter 54	-	-	-	FTB	KCC	-	-	1807	-	-
1980-S601	2446212.15	1979 Dec 4 1694	Pershing 1A	-	AD-234	P-407 77 Winter 55	-	-	-	FTB	KCC	-	-	1807	-	-
1980-S602	2446212.15	1979 Dec 4 1694	Pershing 1A	-	AD-235	P-408 77 Winter 56	-	-	-	FTB	KCC	-	-	1807	-	-
1980-S603	2446212.15	1979 Dec 4 1694	Pershing 1A	-	AD-236	P-409 77 Winter 57	-	-	-	FTB	KCC	-	-	1807	-	-
1980-S604	2446212.15	1979 Dec 4 1694	Pershing 1A	-	AD-237	P-410 77 Winter 58	-	-	-	FTB	KCC	-	-	1807	-	-
1980-S605	2446212.15	1979 Dec 4 1694	Pershing 1A	-	AD-238	P-411 77 Winter 59	-	-	-	FTB	KCC	-	-	1807	-	-
1980-S606	2446212.15	1979 Dec 4 1694	Pershing 1A	-	AD-239	P-412 77 Winter 60	-	-	-	FTB	KCC	-	-	1807	-	-
1980-S607	2446212.15	1979 Dec 4 1694	Pershing 1A	-	AD-240	P-413 77 Winter 61	-	-	-	FTB	KCC	-	-	1807	-	-
1980-S608	2446212.15	1979 Dec 4 1694	Pershing 1A	-	AD-241	P-414 77 Winter 62	-	-	-	FTB	KCC	-	-	1807	-	-
1980-S609	2446212.15	1979 Dec 4 1694	Pershing 1A	-	AD-242	P-415 77 Winter 63	-	-	-	FTB	KCC	-	-	1807	-	-
1980-S610	2446212.15	1979 Dec 4 1694	Pershing 1A	-	AD-243	P-416 77 Winter 64	-	-	-	FTB	KCC	-	-	1807	-	-
1980-S611	2446212.15	1979 Dec 4 1694	Pershing 1A	-	AD-244	P-417 77 Winter 65	-	-	-	FTB	KCC	-	-	1807	-	-
1980-S612	2446212.15	1979 Dec 4 1694	Pershing 1A	-	AD-245	P-418 77 Winter 66	-	-	-	FTB	KCC	-	-	1807	-	-
1980-S613	2446212.15	1979 Dec 4 1694	Pershing 1A	-	AD-246	P-419 77 Winter 67	-	-	-	FTB	KCC	-	-	1807	-	-
1980-S614	2446212.15	1979 Dec 4 1694	Pershing 1A	-	AD-247	P-420 77 Winter 68	-	-	-	FTB	KCC	-	-	1807	-	-
1980-S615	2446212.15	1979 Dec 4 1694	Pershing 1A	-	AD-248	P-421 77 Winter 69	-	-	-	FTB	KCC	-	-	1807	-	-
1980-S616	2446212.15	1979 Dec 4 1694	Pershing 1A	-	AD-249	P-422 77 Winter 70	-	-	-	FTB	KCC	-	-	1807	-	-
1980-S617	2446212.15	1979 Dec 4 1694	Pershing 1A	-	AD-250	P-423 77 Winter 71	-	-	-	FTB	KCC	-	-	1807	-	-
1980-S618	2446212.15	1979 Dec 4 1694	Pershing 1A	-	AD-251	P-424 77 Winter 72	-	-	-	FTB	KCC	-	-	1807	-	-
1980-S619	2446212.15	1979 Dec 4 1694	Pershing 1A	-	AD-252	P-425 77 Winter 73	-	-	-	FTB	KCC	-	-	1807	-	-
1980-S620	2446212.15	1979 Dec 4 1694	Pershing 1A	-	AD-253	P-426 77 Winter 74	-	-	-	FTB	KCC	-	-	1807	-	-

Launch Mission

Launch_Thg	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Mission	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee_Km	Range_Km	Dest
1982-S141	2445173.12	1982 Jul 22 1449	Pershing 2	-	ED-1	P-4317 P-II Fl	-	LC16	CC	-	-	17	-	-
1982-S262	2445206.19	1982 Aug 24 1634	Pershing 1A	-	AD-213	P-4327 82 Fall 01	-	WCC	FTB	-	-	1807	-	-
1982-S263	2445206.21	1982 Aug 24 1700	Pershing 1A	-	AD-214	P-4337 82 Fall 02	-	WCC	FTB	-	-	1807	-	-
1982-S264	2445214.17	1982 Sep 1 1600	Pershing 1A	-	AD-215	P-4347 82 Fall 03	-	WCC	FTB	-	-	1807	-	-
1982-S265	2445214.20	1982 Sep 1 1646	Pershing 1A	-	AD-216	P-4357 82 Fall 04	-	WCC	FTB	-	-	1807	-	-
1982-S191	2445293.27	1982 Nov 19 1830	Pershing 2	-	ED-37	P-4367	-	WCC	CC	-	-	320	-	-
1983-S49	2445366.12	1983 Jan 21 1448	Pershing 2	-	ED-10	P-4377	-	WCC	CC	-	-	314	-	-
1983-S88	2445375.13	1983 Feb 9 1506	Pershing 2	-	ED-2	P-4387	-	WCC	CC	-	-	342	-	-
1983-S63	2445392.20	1983 Feb 26 1655	Pershing 2	1	ED-5	P-4397	-	WCC	FTB	-	-	309	-	-
1983-S75	2445407.19	1983 Mar 13 1635	Pershing 2	1	ED-4	P-4407 (1-stage)	-	WCC	FTB	-	-	316	-	-
1983-S83	2445422.12	1983 Mar 28 1529	Pershing 2	1	ED-9	P-4417	-	WCC	CC	-	-	330	-	-
1983-S88	2445435.33	1983 Apr 10 1955	Pershing 2	1	ED-8	P-4427	-	WCC	CC	-	-	1807	-	-
1983-S91	2445449.13	1983 Apr 24 1513	Pershing 2	1	ED-67	P-4437	-	WCC	FTB	-	-	1807	-	-
1983-S97	2445461.26	1983 May 6 1812	Pershing 2	1	ED-7	P-4447	-	WCC	FTB	-	-	316	-	-
1983-S103	2445462.12	1983 May 27 1448	Pershing 2	1	ED-11	P-4457	-	WCC	CC	-	-	1807	-	-
1983-S109	2445468.12	1983 Jun 2 1446	Pershing 2	1	ED-14	P-4467	-	WCC	CC	-	-	1807	-	-
1983-S119	2445505.13	1983 Jun 19 1512	Pershing 2	1	ED-13	P-4477	-	WCC	FTB	-	-	1807	-	-
1983-S127	2445510.15	1983 Jun 24 1531	Pershing 2	1	ED	P-4487	-	WCC	FTB	-	-	1807	-	-
1983-S131	2445532.13	1983 Jul 15 1513	Pershing 2	1	ED-17	P-4497	-	WCC	FTB	-	-	365	-	-
1983-S162	2445543.09	1983 Jul 27 1415	Pershing 2	-	ED-16	P-4507	-	WCC	CC	-	-	907	-	-
1983-S165	2445565.21	1983 Sep 7 1704	Pershing 2	-	ED-15/20	P-4517	-	WCC	CC	-	-	320	-	-
1983-S170	2445596.12	1983 Sep 18 1500	Pershing 2	1	-	P-4527	-	WCC	FTB	-	-	317	-	-
1983-S171	2445606.00	1983 Sep 28 1205	Pershing 1A	-	-	P-4537 83 Cape 01	-	WCC	CC	-	-	1807	-	-
1983-S172	2445606.06	1983 Sep 28 1321	Pershing 1A	-	-	P-4547 83 Cape 02	-	WCC	CC	-	-	1807	-	-
1983-S173	2445606.11	1983 Sep 28 1494	Pershing 1A	-	-	P-4557 83 Cape 03	-	WCC	CC	-	-	1807	-	-
1983-S174	2445606.12	1983 Sep 28 1465	Pershing 1A	-	-	P-4567 83 Cape 04	-	WCC	CC	-	-	1807	-	-
1983-S190	2445621.16	1983 Sep 28 1617	Pershing 1A	-	-	P-4577 83 Cape 05	-	WCC	CC	-	-	1807	-	-
1983-S191	2445621.20	1983 Oct 13 1625	Pershing 1A	-	-	P-4587 83 Cape 06	-	WCC	CC	-	-	1807	-	-
1983-S192	2445621.22	1983 Oct 13 1713	Pershing 1A	-	-	P-4597 83 Cape 07	-	WCC	CC	-	-	1807	-	-
1983-S258	2445621.24	1983 Oct 13 1745	Pershing 1A	-	AD-217	P-4607 83 Cape 08	-	WCC	CC	-	-	1807	-	-
1983-S259	2445647.22	1983 Nov 8 1721	Pershing 1A	-	AD-218	P-4617 83 Cape 09	-	WCC	FTB	-	-	1807	-	-
1983-S260	2445647.24	1983 Nov 8 1745	Pershing 1A	-	AD-219	P-4627 83 Fall 01	-	WCC	FTB	-	-	1807	-	-
1983-S261	2445664.50	1983 Nov 16 1651	Pershing 1A	-	AD-220	P-4637 83 Fall 02	-	WCC	FTB	-	-	1807	-	-
1984-S80	2445667.20	1983 Nov 16 1651	Pershing 1A	-	AD-220	P-4647 83 Fall 03	-	WCC	FTB	-	-	1807	-	-
1984-S106	2445687.10	1984 May 16 1451	Pershing 2	-	ED-21	P-4667	-	WCC	CC	-	-	3207	-	-
1984-S116	2445920.00	1984 Aug 7 1200	Pershing 2	-	AD-27	P-4687 Hot Shot	-	WCC	CC	-	-	3207	-	-
1984-S120	2445964.10	1984 Sep 20 1430	Pershing 2	-	AD-27	P-4687 Hot Shot	-	WCC	CC	-	-	3207	-	-
1984-S126	2445977.10	1984 Oct 3 1422	Pershing 2	-	AD-27	P-4677	-	WCC	CC	-	-	3207	-	-
1984-S206	2446018.15	1984 Nov 13 1536	Pershing 1A	-	AD-225	P-4707	-	WCC	CC	-	-	1807	-	-
1984-S207	2446018.16	1984 Nov 13 1605	Pershing 1A	-	AD-225	P-4717	-	WCC	FTB	-	-	1807	-	-
1984-S208	2446018.26	1984 Nov 13 1810	Pershing 1A	-	AD-226	P-4727	-	WCC	FTB	-	-	1807	-	-
1984-S209	2446018.27	1984 Nov 13 1830	Pershing 1A	-	AD-226	P-4737	-	WCC	FTB	-	-	1807	-	-
1985-S143	2446416.04	1985 Dec 19 1303	Pershing 2	-	SSU-1 Syg. Shakhed.	P-4743 85 Cape 01	-	WCC	CC	-	-	3207	-	-
1985-S144	2446417.10	1985 Dec 17 1502	Pershing 2	-	SSU-2	P-4753 85 Cape 02	-	WCC	CC	-	-	3207	-	-
1985-S145	2446417.17	1985 Dec 17 2137	Pershing 2	-	SSU-3	P-4763 85 Cape 03	-	WCC	CC	-	-	3207	-	-
1986-Feb 14	2446475.50	1986 Feb 14	Pershing 2	1	-	P-4773 86 Spring 01	-	WCC	FTB	-	-	3207	-	-
1986-Feb 14	2446475.50	1986 Feb 14	Pershing 2	1	-	P-4783 86 Spring 01	-	WCC	FTB	-	-	3207	-	-
1986-Feb 14	2446475.50	1986 Feb 14	Pershing 2	1	-	P-4793 86 Spring 01	-	WCC	FTB	-	-	3207	-	-
1986-Feb 14	2446475.50	1986 Feb 14	Pershing 2	1	-	P-4803 86 Spring 01	-	WCC	FTB	-	-	3207	-	-
1986-Feb 14	2446475.50	1986 Feb 14	Pershing 2	1	-	P-4813 86 Cape 01	-	WCC	CC	-	-	3207	-	-
1986-Feb 14	2446475.50	1986 Feb 14	Pershing 2	1	-	P-4823 86 Cape 02	-	WCC	CC	-	-	3207	-	-
1986-Feb 14	2446475.50	1986 Feb 14	Pershing 2	1	-	P-4833 86 Cape 03	-	WCC	CC	-	-	3207	-	-
1986-Feb 14	2446475.50	1986 Feb 14	Pershing 2	1	-	P-4843 86 Cape 04	-	WCC	CC	-	-	3207	-	-
1986-Feb 14	2446475.50	1986 Feb 14	Pershing 2	1	-	P-4853 86 Cape 05	-	WCC	CC	-	-	3207	-	-
1986-Feb 14	2446475.50	1986 Feb 14	Pershing 2	1	-	P-4863 86 Fall 01	-	WCC	FTB	-	-	1807	-	-
1986-Feb 14	2446475.50	1986 Feb 14	Pershing 2	1	-	P-4873 86 Fall 02	-	WCC	FTB	-	-	1807	-	-
1986-Feb 14	2446475.50	1986 Feb 14	Pershing 2	1	-	P-4883 86 Fall 03	-	WCC	FTB	-	-	1807	-	-
1986-Feb 14	2446475.50	1986 Feb 14	Pershing 2	1	-	P-4893 86 Fall 04	-	WCC	FTB	-	-	1807	-	-
1986-Feb 14	2446475.50	1986 Feb 14	Pershing 2	1	-	P-4903 86 Fall 05	-	WCC	FTB	-	-	1807	-	-
1986-Feb 14	2446475.50	1986 Feb 14	Pershing 2	1	-	P-4913 86 Fall 06	-	WCC	FTB	-	-	1807	-	-
1986-Feb 14	2446475.50	1986 Feb 14	Pershing 2	1	-	P-4923 86 Fall 07	-	WCC	FTB	-	-	1807	-	-
1986-Feb 14	2446475.50	1986 Feb 14	Pershing 2	1	-	P-4933 86 Fall 08	-	WCC	FTB	-	-	1807	-	-
1986-Feb 14	2446475.50	1986 Feb 14	Pershing 2	1	-	P-4943 86 Fall 09	-	WCC	FTB	-	-	1807	-	-
1986-Feb 14	2446475.50	1986 Feb 14	Pershing 2	1	-	P-4953 86 Fall 10	-	WCC	FTB	-	-	1807	-	-
1986-Feb 14	2446475.50	1986 Feb 14	Pershing 2	1	-	P-4963 86 Fall 11	-	WCC	FTB	-	-	1807	-	-
1986-Feb 14	2446475.50	1986 Feb 14	Pershing 2	1	-	P-4973 86 Fall 12	-	WCC	FTB	-	-	1807	-	-
1986-Feb 14	2446475.50	1986 Feb 14	Pershing 2	1	-	P-4983 86 Fall 13	-	WCC	FTB	-	-	1807	-	-
1986-Feb 14	2446475.50	1986 Feb 14	Pershing 2	1	-	P-4993 86 Fall 14	-	WCC	FTB	-	-	1807	-	-
1986-Feb 14	2446475.50	1986 Feb 14	Pershing 2	1	-	P-5003 86 Fall 15	-	WCC	FTB	-	-	1807	-	-
1986-Feb 14	2446475.50	1986 Feb 14	Pershing 2	1	-	P-5013 86 Fall 16	-	WCC	FTB	-	-	1807	-	-
1986-Feb 14	2446475.50	1986 Feb 14	Pershing 2	1	-	P-5023 86 Fall 17	-	WCC	FTB	-	-	1807	-	-
1986-Feb 14	2446475.50	1986 Feb 14	Pershing 2	1	-	P-5033 86 Fall 18	-	WCC	FTB	-	-	1807	-	-
1986-Feb 14	2446475.50	1986 Feb 14	Pershing 2	1	-	P-5043 86 Fall 19	-	WCC	FTB	-	-	1807	-	-
1986-Feb 14	2446475.50	1986 Feb 14	Pershing 2	1	-	P-5053 86 Fall 20	-	WCC	FTB	-	-	1807	-	-
1986-Feb 14	2446475.50	1986 Feb 14	Pershing 2	1	-	P-5063 86 Fall 21	-	WCC	FTB	-	-	1807	-	-
1986-Feb 14	2446475.50	1986 Feb 14	Pershing 2	1	-	P-5073 86 Fall 22	-	WCC	FTB	-	-	1807	-	-
1986-Feb 14	2446475.50	1986 Feb 14	Pershing 2	1	-	P-5083 86 Fall 23	-	WCC	FTB	-	-	1807	-	-
1986-Feb 14	2446475.50	1986 Feb 14	Pershing 2	1	-	P-5093 86 Fall 24	-	WCC	FTB	-	-	1807	-	-
1986-Feb 14	2446475.50	1986 Feb 14	Pershing 2	1	-	P-5103 86 Fall 25	-	WCC	FTB	-	-	1807	-	-
1986-Feb 14	2446475.50	1986 Feb 14	Pershing 2	1	-	P-5113 86 Fall 26	-	WCC	FTB	-	-	1807	-	-
1986-Feb 14	2446475.50	1986 Feb 14	Pershing 2	1	-	P-5123 86 Fall 27	-	WCC	FTB	-	-	1807	-	-
1986-Feb 14	2446475.50	1986 Feb 14	Pershing 2	1	-	P-5133 86 Fall 28	-	WCC	FTB	-	-	1807	-	-
1986-Feb 14	2446475.50	1986 Feb 14	Pershing 2	1	-	P-5143 86 Fall 29	-	WCC	FTB	-	-	1807	-	-
1986-Feb 14	2446475.50	1986 Feb 14	Pershing 2	1	-	P-5153 86 Fall 30	-	WCC	FTB	-	-	1807	-	-
1987-S274	2447130.50	1987 Dec 17	Pershing 2	1	AD-238	P-5157 87 Fall 06	-	WCC	FTB	-	-	1807	-	-

Launch

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Mission	FlightCode	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee km	Range km	Dest
1987-5275	2447130.50	1987 Dec 1?	Pershing 2	1	AD-239	P-5167 87 Fall 07	-	-	-	FTB	MCG	-	-	1807	-	-
1988-5164	2447160.50	1988	Pershing 1A	-	AD-241	P-5187	-	-	-	FTB	MCG	-	-	1807	-	-
1988-593	2447174.08	1988 Jan 13 1401:05	Pershing 2	-	AD	P-5197 88 Cape 01	-	-	-	CC	LC16	-	-	3207	-	-
1988-583	2447207.04	1988 Feb 15 1303:03	Pershing 2	-	-	P-5207 88 Cape 02	-	-	-	CC	LC16	-	-	3207	-	-
1988-584	2447207.06	1988 Feb 15 1321:05	Pershing 2	-	-	P-5217 88 Cape 03	-	-	-	CC	LC16	-	-	3207	-	-
1988-585	2447207.07	1988 Feb 15 1342:06	Pershing 2	-	-	P-5227 88 Cape 04	-	-	-	CC	LC16	-	-	3207	-	-
1988-586	2447207.14	1988 Feb 15 1516:04	Pershing 2	-	-	P-5237 88 Cape 05	-	-	-	CC	LC16	-	-	3207	-	-
1988-587	2447207.15	1988 Feb 15 1542:06	Pershing 2	-	-	P-5247 88 Cape 06	-	-	-	CC	LC16	-	-	3207	-	-
1988-588	2447207.17	1988 Feb 15 1601:05	Pershing 2	-	- P2-61	P-5257 88 Cape 07	-	-	-	CC	LC16	-	-	3207	-	-
1988-588	2447242.04	1988 Mar 21 1301:05	Pershing 2	-	-	P-5267 88 Cape 08	-	-	-	CC	LC16	-	-	3207	-	-
1988-589	2447242.05	1988 Mar 21 1319:05	Pershing 2	-	-	P-5277 88 Cape 09	-	-	-	CC	LC16	-	-	3207	-	-
1988-570	2447242.09	1988 Mar 21 1413:03	Pershing 2	-	-	P-5287 88 Cape 10	-	-	-	CC	LC16	-	-	3207	-	-
1988-571	2447242.16	1988 Mar 21 1545:05	Pershing 2	-	-	P-5297 88 Cape 11	-	-	-	CC	LC16	-	-	3207	-	-
1988-572	2447242.20	1988 Mar 21 1653:04	Pershing 2	-	-	P-5307 88 Cape 12	-	-	-	CC	LC16	-	-	3207	-	-
1988-5163	2447295.10	1988 May 13 1430	Pershing 2	1	AD	P-5317	-	-	-	FTB	MCG	-	-	1807	-	-
1988-5164	2447295.12	1988 May 13 1465	Pershing 2	1	AD	P-5327	-	-	-	FTB	MCG	-	-	1807	-	-
1988-5165	2447295.18	1988 May 13 1615	Pershing 2	1	AD	P-5337	-	-	-	FTB	MCG	-	-	1807	-	-
1988-5166	2447160.50	1988	Pershing 1A	?	AD-242	P-5347	-	-	-	FTB	MCG	-	-	1807	-	-
1988-5167	2447441.50	1988 Oct 7	Pershing 1A	-	AD-243 Cert. Fir.	P-5357 88 Fall 01	-	-	-	FTB	MCG	-	-	1807	-	-
1988-5168	2447441.50	1988 Oct 7	Pershing 1A	-	AD-244 Cert. Fir.	P-5367 88 Fall 02	-	-	-	FTB	MCG	-	-	1807	-	-
1988-5168	2447455.50	1988 Oct 21	Pershing 1A	-	AD-245 Cert. Fir.	P-5377 88 Fall 03	-	-	-	FTB	MCG	-	-	1807	-	-
1988-5169	2447455.50	1988 Oct 21	Pershing 1A	-	AD-246 Cert. Fir.	P-5387 88 Fall 04	-	-	-	FTB	MCG	-	-	1807	-	-



Launch

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	OrbPay	Agency	Launch_Code	Group	Category	LTCite	Cite	Notes
1960-539	2436990.25	1960 Feb 25 1802	Pershing 1	-	105	0.000	ABMA	MS	-	Test	Th-X-64796	-	-
1960-577	2437045.27	1960 Apr 20 1830	Pershing 1	-	106	0.000	ABMA	MS	-	Test	Th-X-64796	-	-
1960-596	2437065.17	1960 May 10 1600	Pershing 1	-	107	0.000	ABMA	MS	-	Test	Th-X-64796	-	-
1960-5121	2437095.18	1960 Jun 9 1619	Pershing 1	-	108	0.000	ABMA	MS	-	Test	Th-X-64796	-	-
1960-5159	2437115.17	1960 Jun 30 1600	Pershing 1	-	109	0.000	ABMA	MS	-	Test	Th-X-64796	-	-
1960-5197	2437142.17	1960 Jul 26 1600	Pershing 1	-	110	0.000	ABMA	MS	-	Test	Th-X-64796	-	-
1960-5293	2437206.32	1960 Sep 28 1938	Pershing 1	-	205	0.000	ABMA	MF	-	Test	Th-X-64796	-	-
1960-5366	2437255.27	1960 Dec 16 1825	Pershing 1	-	206	0.000	ABMA	MS	-	Test	Th-X-64796	-	-
1960-5402	2437281.28	1960 Dec 12 1842	Pershing 1	-	207	0.000	ABMA	MS	-	Test	Th-X-64796	-	-
1961-417	2437305.51	1961 Jan 6 0010	Pershing 1	-	208	0.000	ABMA	MF	-	Test	Th-X-64796	-	-
1961-527	2437325.52	1961 Jan 26 0030	Pershing 1	-	209	0.000	ABMA	MS	-	Test	Th-X-64796	-	-
1961-549	2437346.56	1961 Feb 16 0127	Pershing 1	-	210	0.000	ABMA	MS	-	Test	Th-X-64796	-	-
1961-565	2437360.71	1961 Mar 2 0507	Pershing 1	-	211	0.000	ABMA	MS	-	Test	Th-X-64796	-	-
1961-584	2437374.55	1961 Mar 16 0119	Pershing 1	-	212	0.000	ABMA	MS	-	Test	Th-X-64796	-	-
1961-5125	2437411.16	1961 Apr 21 1553	Pershing 1	-	308	0.000	ABMA	MF	-	Test	Th-X-64796	-	-
1961-5155	2437458.58	1961 May 19 0200	Pershing 1	-	310	0.000	ABMA	MS	-	Test	Th-X-64796	-	-
1961-5173	2437469.72	1961 Jun 9 0511	Pershing 1	-	311	0.000	ABMA	MS	-	Test	Th-X-64796	-	-
1961-5199	2437481.58	1961 Jul 1 0200	Pershing 1	-	312	0.000	ABMA	MS	-	Test	Th-X-64796	-	-
1961-5212	2437500.58	1961 Jul 20 0200	Pershing 1	-	313	0.000	ABMA	MS	-	Test	Th-X-64796	-	-
1961-5196	2437522.58	1961 Aug 11 0149	Pershing 1	-	315	0.000	ABMA	MS	-	Test	Th-X-64796	-	-
1961-5249	2437554.58	1961 Aug 23 0155	Pershing 1	-	316	0.000	ABMA	MS	-	Test	Th-X-64796	-	-
1961-5279	2437566.56	1961 Sep 14 0130	Pershing 1	-	318	0.000	ABMA	MS	-	Test	Th-X-64796	-	-
1961-5296	2437569.56	1961 Sep 27 0130	Pershing 1	-	319	0.000	ABMA	MS	-	Test	Th-X-64796	-	-
1961-5328	2437583.57	1961 Oct 11 0134	Pershing 1	-	320	0.000	ABMA	MS	-	Test	Th-X-64796	-	-
1961-5374	2437606.54	1961 Nov 5 0100	Pershing 1	-	322	0.000	ABMA	MS	-	Test	Th-X-64796	-	-
1961-5374	2437619.61	1961 Nov 16 0235	Pershing 1	-	323	0.000	ABMA	MS	-	Test	Th-X-64796	-	-
1961-5440	2437635.54	1961 Dec 2 0100	Pershing 1	-	324	0.000	ABMA	MS	-	Test	Th-X-64796	-	-
1961-5441	2437652.52	1961 Dec 29 0030	Pershing 1	-	327	0.000	ADIC	MS	-	Test	Th-X-64796	-	-
1962-516	2437681.29	1962 Jan 16 1859:59	Pershing 1	-	334	0.000	ADIC	MS	-	Test	Th-X-64796	-	-
1962-523	2437689.64	1962 Jan 25 0326	Pershing 1	-	332	0.000	ADIC	MS	-	Test	Th-X-64796	-	-
1962-545	2437715.54	1962 Feb 20 0100:01	Pershing 1	-	335	0.000	ADIC	MS	-	Test	Th-X-64796	-	-
1962-566	2437739.48	1962 Mar 15 2331:50	Pershing 1	-	328	0.000	ADIC	MS	-	Test	Th-X-64796	-	-
1962-567	2437759.32	1962 Apr 4 1945:45	Pershing 1	-	326	0.000	ADIC	MS	-	Test	Th-X-64796	-	-
1962-459	2437779.21	1962 Apr 27 1724:46	Pershing 1	-	337	0.000	ADIC	MS	-	Test	Th-X-64796	-	-
1962-5111	2437782.23	1962 Apr 27 1724:46	Pershing 1	-	329	0.000	ADIC	MS	-	Test	Th-X-64796	-	-
1962-4716	2437794.06	1962 Jun 9 1239:59	Pershing 1	-	330	0.000	ADIC	MS	-	Test	Th-X-64796	-	-
1962-5158	2437820.67	1962 Jun 5 0406:21	Pershing 1	-	342	0.000	ADIC	MS	-	Test	Th-X-64796	-	-
1962-496	2437830.58	1962 Jun 15 0200:01	Pershing 1	-	340	0.000	ADIC	MS	-	Test	Th-X-64796	-	-
1962-5239	2437836.56	1962 Aug 22 0130:00	Pershing 1	-	342	0.000	ADIC	MS	-	Test	Th-X-64796	-	-
1962-5344	2437864.59	1962 Sep 27 0214:56	Pershing 1	-	347	0.000	ADIC	MS	-	Test	Th-X-64796	-	-
1962-5469	2437960.66	1962 Oct 23 0344:24	Pershing 1	-	346	0.000	ADIC	MS	-	Test	Th-X-64796	-	-
1962-5476	2437984.54	1962 Nov 16 0032:28	Pershing 1	-	350	0.000	ADIC	MS	-	Test	Th-X-64796	-	-
1962-5482	2437996.29	1962 Nov 28 0212:08	Pershing 1	-	351	0.000	ADIC	MS	-	Test	Th-X-64796	-	-
1962-5486	2438009.62	1962 Dec 11 0235:29	Pershing 1	-	353	0.000	ADIC	MS	-	Test	Th-X-64796	-	-
1963-523	2438047.65	1963 Jan 31 0036:08	Pershing 1	-	383	0.000	ADIC	MS	-	Test	Th-X-64796	-	-
1963-546	2438050:02	1963 Feb 15 0146:04	Pershing 1	-	383	0.000	ADIC	MS	-	Test	Th-X-64796	-	-
1963-546	2438050:02	1963 Feb 15 0146:04	Pershing 1	-	383	0.000	ADIC	MS	-	Test	Th-X-64796	-	-
1963-546	2438050:02	1963 Feb 15 0146:04	Pershing 1	-	383	0.000	ADIC	MS	-	Test	Th-X-64796	-	-
1963-546	2438050:02	1963 Feb 15 0146:04	Pershing 1	-	383	0.000	ADIC	MS	-	Test	Th-X-64796	-	-
1963-579	2438093.54	1963 Mar 5 0104:13	Pershing 1	-	405	0.000	ADIC	MS	-	Test	Th-X-64796	-	-
1963-589	2438102.57	1963 Mar 15 0146:04	Pershing 1	-	407	0.000	ADIC	MS	-	Test	Th-X-64796	-	-
1963-5107	2438110.55	1963 Mar 24 0100:00	Pershing 1	-	408	0.000	ADIC	MS	-	Test	Th-X-64796	-	-
1963-5131	2438122.54	1963 Apr 4 0925	Pershing 1	-	408	0.000	ADIC	MS	-	Test	Th-X-64796	-	-
1963-5136	2438132.53	1963 Apr 6 0944:55	Pershing 1	-	511	0.000	ADIC	MS	-	Test	Th-X-64796	-	-
1963-5146	2438132.53	1963 Apr 12 1939:21	Pershing 1	-	511	0.000	ADIC	MS	-	Test	Th-X-64796	-	-
1963-5151	2438137.19	1963 Apr 17 1639	Pershing 1	-	520	0.000	ADIC	MS	-	Test	Th-X-64796	-	-
1963-5171	2438144.36	1963 Apr 24 2040:49	Pershing 1	-	521	0.000	ADIC	MS	-	Test	Th-X-64796	-	-
1963-5308	2438061.50	1963 Aug 27	Pershing 1	-	-	0.000	ADIC	MS	-	Test	Th-X-64796	-	-
1963-5451	2438058.50	1963 Aug 27	Pershing 1	-	-	0.000	ADIC	MS	-	Test	Th-X-64796	-	-
1963-5451	2438097.21	1963 Aug 24 1702	Pershing 1	-	-	0.000	ADIC	MS	-	Test	Th-X-64796	-	-
1963-5452	2438098.07	1963 Sep 25 1340	Pershing 1	-	-	0.000	ADIC	MS	-	Test	Th-X-64796	-	-
1963-5454	2438098.06	1963 Sep 25 2305	Pershing 1	-	-	0.000	ADIC	MS	-	Test	Th-X-64796	-	-
1963-5465	2438200.07	1963 Sep 27 1340	Pershing 1	-	-	0.000	ADIC	MS	-	Test	Th-X-64796	-	-
1963-5466	2438200.36	1963 Sep 27 2040:07	Pershing 1	-	-	0.000	ADIC	MS	-	Test	Th-X-64796	-	-
1963-5496	2438317.26	1963 Oct 16 1515	Pershing 1	-	-	0.000	ADIC	MS	-	Test	Th-X-64796	-	-
1963-5495	2438321.14	1963 Oct 16 1515	Pershing 1	-	-	0.000	ADIC	MS	-	Test	Th-X-64796	-	-
1963-5500	2438319.14	1963 Oct 18 1400	Pershing 1	-	-	0.000	ADIC	MS	-	Test	Th-X-64796	-	-
1963-5503	2438321.08	1963 Oct 18 1400	Pershing 1	-	-	0.000	ADIC	MS	-	Test	Th-X-64796	-	-
1963-5503	2438323.30	1963 Oct 21	Pershing 1	-	-	0.000	ADIC	MS	-	Test	Th-X-64796	-	-
1963-5503	2438325.50	1963 Oct 21	Pershing 1	-	-	0.000	ADIC	MS	-	Test	Th-X-64796	-	-
1963-5519	2438330.50	1963 Oct 28	Pershing 1	-	-	0.000	ADIC	MS	-	Test	Th-X-64796	-	-
1963-5552	2438348.10	1963 Nov 14 1430	Pershing 1	-	-	0.000	ADIC	MS	-	Test	Th-X-64796	-	-
1963-5560	2438354.23	1963 Nov 20 1731	Pershing 1	-	-	0.000	ADIC	MS	-	Test	Th-X-64796	-	-
1963-5596	2438360.50	1963 Nov 27	Pershing 1	-	-	0.000	ADIC	MS	-	Test	Th-X-64796	-	-
1963-5596	2438368.50	1963 Dec 5	Pershing 1	-	-	0.000	ADIC	MS	-	Test	Th-X-64796	-	-
1964-5115	2438450.12	1964 Feb 24 1457	Pershing 1	-	-	0.000	ADIC	MS	-	Test	Th-X-64796	-	-
1964-5116	2438450.51	1964 Feb 25 0017	Pershing 1	-	-	0.000	ADIC	MS	-	Test	Th-X-64796	-	-
1964-565	2438451.25	1964 Feb 25 1800:07	Pershing 1	-	-	0.000	ADIC	MS	-	Test	Th-X-64796	-	-
1964-564	2438454.28	1964 Feb 28 1800:07	Pershing 1	-	-	0.000	ADIC	MS	-	Test	Th-X-64796	-	-
1964-5219	2438507.46	1964 Apr 21 2300	Pershing 1	-	-	0.000	ADIC	MS	-	Test	Th-X-64796	-	-
1964-5224	2438509.52	1964 Apr 24 0030	Pershing 1	-	-	0.000	ADIC	MS	-	Test	Th-X-64796	-	-
1964-5363	2438593.50	1964 Jul 17	Pershing 1	-	-	0.000	ADIC	MS	-	Test	Th-X-64796	-	-
1964-5376	2438599.50	1964 Jul 22	Pershing 1	-	-	0.000	ADIC	MS	-	Test	Th-X-64796	-	-
1964-5630	2438718.12	1964 Nov 18 1455	Pershing 1	-	-	0.000	ADIC	MS	-	Test	Th-X-64796	-	-
1964-5633	2438718.44	1964 Nov 18 2230	Pershing 1	-	-	0.000	ADIC	MS	-	Test	Th-X-64796	-	-
1964-5633	2438719.12	1964 Nov 19 1500	Pershing 1	-	-	0.000	ADIC	MS	-	Test	Th-X-64796	-	-
1964-5636	2438719.44	1964 Nov 19 2230	Pershing 1	-	-	0.000	ADIC	MS	-	Test	Th-X-64796	-	-
1965-553	2438759.45	1965 Jan 28 2246	Pershing 1	-	-	0.000	ADIC	MS	-	Test	Th-X-64796	-	-







Launch

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	OrbPay	Agency	Launch_Code	Group	Category	LTCite	Cite	Notes
1973-S110	2441761.24	1973 Mar 19 1752	Pershing 1A	-	110	0.000	84FA3	MS	-	OT	COMPS	-	-
1973-S189	2441853.09	1973 Jun 19 1405	Pershing 1A	-	AD-1207	0.000	9FA3	MS	-	OT	Missilehanger730622	-	-
1973-S190	2441853.29	1973 Jun 19 1900	Pershing 1A	-	AD-121?	0.000	US7A	MS	-	OT	Missilehanger730622	-	-
1973-S209	2441860.50	1973 Jun 27	Pershing 1A	-	AD-122?	0.000	US7A	MS	-	OT	Wire	-	-
1973-S210	2441860.50	1973 Jun 27	Pershing 1A	-	AD-123?	0.000	US7A	MS	-	OT	Wire	-	-
1973-S235	2441881.12	1973 Jul 17 1463	Pershing 1A	-	AD-124	0.000	FRG1	MS	-	OT	Wire	WSHRgr730720	-
1973-S236	2441881.18	1973 Jul 17 1619	Pershing 1A	-	AD-125	0.000	FRG1	MS	-	OT	Wire	WSHRgr730720	-
1973-S215	2441889.50	1973 Jul 26	Pershing 1A	-	AD-126	0.000	FRG2	MS	-	OT	Wire	-	-
1973-S216	2441889.50	1973 Jul 26	Pershing 1A	-	AD-127	0.000	FRG2	MS	-	OT	Wire	-	-
1973-S315	2441950.90	1973 Sep 25 0930	Pershing 1A	-	AD-128?	0.000	9FA3	MS	-	OT	WSHRgr730928	-	-
1973-S316	2441950.92	1973 Sep 25 1005	Pershing 1A	-	AD-128?	0.000	9FA3	MS	-	OT	WSHRgr730928	-	-
1973-S331	2441966.89	1973 Oct 10 0928	Pershing 1A	-	AD-130	0.000	FRG2	MS	-	OT	Missilehanger731012	-	-
1973-S332	2441966.99	1973 Oct 10 1141	Pershing 1A	-	AD-130	0.000	FRG2	MS	-	OT	Missilehanger731012	-	-
1973-S333	2441979.93	1973 Oct 24 1015	Pershing 1A	-	AD-132	0.000	FRG1	MS	-	OT	Wire(DST)	-	-
1973-S334	2441979.96	1973 Oct 24 1105	Pershing 1A	-	AD-133	0.000	FRG1	MS	-	OT	Wire(DST)	-	-
1973-S372	2441999.93	1973 Nov 13 1015	Pershing 1A	-	AD-134?	0.000	US7A	MS	-	OT	Ulrich/Wire	WSHR	-
1973-S373	2441999.95	1973 Nov 13 1055	Pershing 1A	-	AD-135?	0.000	US7A	MS	-	OT	Ulrich/Wire	WSHR	-
1973-S374	2442013.50	1973 Nov 27	Pershing 1A	-	AD-136?	0.000	US7A	MS	-	OT	Wire	-	-
1973-S375	2442013.50	1973 Nov 27	Pershing 1A	-	AD-137?	0.000	US7A	MS	-	OT	Wire	-	-
1973-S426	2442022.93	1973 Dec 6 1015	Pershing 1A	-	AD-138?	0.000	US7A	MS	-	OT	lib.utah.edu	Mariettaless040125	-
1973-S426	2442022.93	1973 Dec 6 1045	Pershing 1A	-	AD-138?	0.000	US7A	MS	-	OT	lib.utah.edu	www.wsmr-history.org	-
1974-S169	2442175.29	1974 May 7 1915	Pershing 1A	-	AD-139 *	0.000	81FA1	MS	-	OT	COMPS	-	-
1974-S170	2442175.30	1974 May 7 1915	Pershing 1A	-	104	0.000	81FA1	MS	-	OT	COMPS	-	-
1974-S191	2442175.34	1974 May 7 2005	Pershing 1A	-	102	0.000	81FA1	MS	-	OT	COMPS	-	-
1974-S192	2442175.35	1974 May 7 2021	Pershing 1A	-	101	0.000	81FA1	MS	-	OT	COMPS	-	-
1974-S200	2442189.04	1974 May 21 1304	Pershing 1A	-	109	0.000	84FAS	MS	-	OT	COMPS	-	-
1974-S201	2442189.05	1974 May 21 1318	Pershing 1A	-	110	0.000	84FAS	MS	-	OT	COMPS	-	-
1974-S202	2442189.06	1974 May 21 1328	Pershing 1A	-	111	0.000	84FAS	MS	-	OT	COMPS	-	-
1974-S203	2442189.11	1974 May 21 1463	Pershing 1A	-	112	0.000	84FAS	MS	-	OT	COMPS	-	-
1974-S209	2442199.29	1974 May 31 1900	Pershing 1A	-	106	0.000	81FA1	MS	-	OT	COMPS	-	-
1974-S210	2442199.30	1974 May 31 1915	Pershing 1A	-	105	0.000	81FA1	MS	-	OT	COMPS	-	-
1974-S211	2442199.35	1974 May 31 2005	Pershing 1A	-	107	0.000	81FA1	MS	-	OT	COMPS	-	-
1974-S212	2442199.35	1974 May 31 2021	Pershing 1A	-	108	0.000	81FA1	MS	-	OT	COMPS	-	-
1974-S331	2442358.09	1974 Oct 17 1410	Pershing 1A	-	AD-140?	0.000	9FA3	MS	-	OT	Wire(DOT)	-	-
1974-S332	2442358.13	1974 Oct 17 1508	Pershing 1A	-	AD-141?	0.000	9FA3	MS	-	OT	Wire(DOT)	-	-
1974-S333	2442358.13	1974 Oct 17 1508	Pershing 1A	-	AD-141?	0.000	9FA3	MS	-	OT	Wire(DOT)	-	-
1974-S353	2442352.13	1974 Oct 31 1502	Pershing 1A	-	AD-142?	0.000	US7A	MS	-	OT	Wire(DST)	-	-
1974-S354	2442352.18	1974 Oct 31 1625	Pershing 1A	-	AD-143?	0.000	US7A	MS	-	OT	Wire(DST)	-	-
1974-S368	2442377.08	1974 Nov 25 1400	Pershing 1A	-	AD-144	0.000	FRG2	MS	-	OT	Missilehanger741129	Wire	-
1974-S369	2442377.15	1974 Nov 25 1501	Pershing 1A	-	AD-145	0.000	FRG2	MS	-	OT	Missilehanger741129	Wire	-
1974-S396	2442387.50	1974 Dec 6	Pershing 1A	-	AD-146	0.000	FRG2	MS	-	OT	WSHR	-	-
1974-S397	2442387.50	1974 Dec 6	Pershing 1A	-	AD-147	0.000	FRG2	MS	-	OT	WSHR	-	-
1975-S122	2442456.29	1975 May 13 0925	Pershing 1A	-	AD-148	0.000	FRG1	MS	-	OT	ClovisNewsJ	USHR	-
1975-S163	2442456.31	1975 May 13 0952	Pershing 1A	-	AD-148	0.000	FRG1	MS	-	OT	ClovisNewsJ	USHR	-
1975-S163	2442456.31	1975 May 13 0958	Pershing 1A	-	AD-148	0.000	FRG1	MS	-	OT	ClovisNewsJ	USHR	-
1975-S164	2442460.90	1975 May 28 0958	Pershing 1A	-	AD-150	0.000	FRG1	MS	-	OT	Wire	-	-
1975-S168	2442460.92	1975 May 28 1004	Pershing 1A	-	AD-150?	0.000	FRG1	MS	-	OT	Wire	-	-
1975-S174	2442474.69	1975 Jun 11 0922	Pershing 1A	-	AD-152?	0.000	US7A	MS	-	OT	SaltLakeTri18760412	-	-
1975-S179	2442474.72	1975 Jun 11 1000	Pershing 1A	-	AD-152?	0.000	US7A	MS	-	OT	SaltLakeTri18760412	-	-
1975-S214	2442488.50	1975 Jun 25	Pershing 1A	-	AD-154?	0.000	US7A	MS	-	OT	Wire	-	-
1975-S214	2442488.50	1975 Jun 25	Pershing 1A	-	AD-154?	0.000	US7A	MS	-	OT	Wire	-	-
1975-S227	2442493.17	1975 Jun 25 1504	Pershing 1A	-	F07-37	0.000	84FA3	MS	-	OT	COMPS	-	-
1975-S228	2442493.17	1975 Jun 25 1504	Pershing 1A	-	F07-37	0.000	84FA3	MS	-	OT	COMPS	-	-
1975-S229	2442493.17	1975 Jun 25 1504	Pershing 1A	-	F07-37	0.000	84FA3	MS	-	OT	COMPS	-	-
1975-S230	2442493.17	1975 Jun 25 1504	Pershing 1A	-	F07-37	0.000	84FA3	MS	-	OT	COMPS	-	-
1975-S231	2442493.17	1975 Jun 25 1504	Pershing 1A	-	F07-37	0.000	84FA3	MS	-	OT	COMPS	-	-
1975-S232	2442493.17	1975 Jun 25 1504	Pershing 1A	-	F07-37	0.000	84FA3	MS	-	OT	COMPS	-	-
1975-S233	2442493.17	1975 Jun 25 1504	Pershing 1A	-	F07-37	0.000	84FA3	MS	-	OT	COMPS	-	-
1975-S234	2442493.17	1975 Jun 25 1504	Pershing 1A	-	F07-37	0.000	84FA3	MS	-	OT	COMPS	-	-
1975-S235	2442493.17	1975 Jun 25 1504	Pershing 1A	-	F07-37	0.000	84FA3	MS	-	OT	COMPS	-	-
1975-S236	2442493.17	1975 Jun 25 1504	Pershing 1A	-	F07-37	0.000	84FA3	MS	-	OT	COMPS	-	-
1975-S237	2442493.17	1975 Jun 25 1504	Pershing 1A	-	F07-37	0.000	84FA3	MS	-	OT	COMPS	-	-
1975-S238	2442493.17	1975 Jun 25 1504	Pershing 1A	-	F07-37	0.000	84FA3	MS	-	OT	COMPS	-	-
1975-S239	2442493.17	1975 Jun 25 1504	Pershing 1A	-	F07-37	0.000	84FA3	MS	-	OT	COMPS	-	-
1975-S240	2442493.17	1975 Jun 25 1504	Pershing 1A	-	F07-37	0.000	84FA3	MS	-	OT	COMPS	-	-
1975-S241	2442493.17	1975 Jun 25 1504	Pershing 1A	-	F07-37	0.000	84FA3	MS	-	OT	COMPS	-	-
1975-S242	2442493.17	1975 Jun 25 1504	Pershing 1A	-	F07-37	0.000	84FA3	MS	-	OT	COMPS	-	-
1975-S243	2442493.17	1975 Jun 25 1504	Pershing 1A	-	F07-37	0.000	84FA3	MS	-	OT	COMPS	-	-
1975-S244	2442493.17	1975 Jun 25 1504	Pershing 1A	-	F07-37	0.000	84FA3	MS	-	OT	COMPS	-	-
1975-S245	2442493.17	1975 Jun 25 1504	Pershing 1A	-	F07-37	0.000	84FA3	MS	-	OT	COMPS	-	-
1975-S246	2442493.17	1975 Jun 25 1504	Pershing 1A	-	F07-37	0.000	84FA3	MS	-	OT	COMPS	-	-
1975-S247	2442493.17	1975 Jun 25 1504	Pershing 1A	-	F07-37	0.000	84FA3	MS	-	OT	COMPS	-	-
1975-S248	2442493.17	1975 Jun 25 1504	Pershing 1A	-	F07-37	0.000	84FA3	MS	-	OT	COMPS	-	-
1975-S249	2442493.17	1975 Jun 25 1504	Pershing 1A	-	F07-37	0.000	84FA3	MS	-	OT	COMPS	-	-
1975-S250	2442493.17	1975 Jun 25 1504	Pershing 1A	-	F07-37	0.000	84FA3	MS	-	OT	COMPS	-	-
1975-S251	2442493.17	1975 Jun 25 1504	Pershing 1A	-	F07-37	0.000	84FA3	MS	-	OT	COMPS	-	-
1975-S252	2442493.17	1975 Jun 25 1504	Pershing 1A	-	F07-37	0.000	84FA3	MS	-	OT	COMPS	-	-
1975-S253	2442493.17	1975 Jun 25 1504	Pershing 1A	-	F07-37	0.000	84FA3	MS	-	OT	COMPS	-	-
1975-S254	2442493.17	1975 Jun 25 1504	Pershing 1A	-	F07-37	0.000	84FA3	MS	-	OT	COMPS	-	-
1975-S255	2442493.17	1975 Jun 25 1504	Pershing 1A	-	F07-37	0.000	84FA3	MS	-	OT	COMPS	-	-
1975-S256	2442493.17	1975 Jun 25 1504	Pershing 1A	-	F07-37	0.000	84FA3	MS	-	OT	COMPS	-	-
1975-S257	2442493.17	1975 Jun 25 1504	Pershing 1A	-	F07-37	0.000	84FA3	MS	-	OT	COMPS	-	-
1975-S258	2442493.17	1975 Jun 25 1504	Pershing 1A	-	F07-37	0.000	84FA3	MS	-	OT	COMPS	-	-
1975-S259	2442493.17	1975 Jun 25 1504	Pershing 1A	-	F07-37	0.000	84FA3	MS	-	OT	COMPS	-	-

Launch

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	OrbPay	Agency	Launch_Code	Group	Category	LTCite	Cite	Notes
1977-S155	2443267.16	1977 May 3 1549	Pershing 1A	-	AO-172	0.000	FRGI	MS	-	OT NS-244 - off by 1	Wire/Ulrich	-	-
1977-S156	2443267.19	1977 May 3 1650	Pershing 1A	-	AO-173	0.000	FRGI	MS	-	OT	Missilehanger70520	-	-
1977-S157	2443261.13	1977 May 17 1513	Pershing 1A	-	AO-174	0.000	FRG	MS	-	OT	Missilehanger70520	-	-
1977-S158	2443261.20	1977 May 17 1653	Pershing 1A	-	AO-175	0.000	FRG	MS	-	OT NS-247	Missilehanger70520	-	-
1977-S159	2443296.14	1977 Jun 1 1519	Pershing 1A	-	AO-176?	0.000	US7A	MS	-	OT	Missilehanger70603	-	-
1977-S160	2443296.14	1977 Jun 1 1545	Pershing 1A	-	AO-177?	0.000	US7A	MS	-	OT	Missilehanger70603	-	-
1977-S161	2443309.09	1977 Jun 14 1407	Pershing 1A	-	AO-178?	0.000	US7A	MF	-	OT NS-250	WSR/Wire	-	-
1977-S162	2443309.11	1977 Jun 14 1442	Pershing 1A	-	AO-179?	0.000	US7A	MF	-	OT	WSR/Wire (WDT)	-	-
1977-S286	2443466.13	1977 Nov 18 1504	Pershing 1A	-	AO-180	0.000	9FA3?	MS	-	OT	Wire	-	-
1977-S270	2443466.13	1977 Dec 8 1505	Pershing 1A	-	AO-181?	0.000	9FA3?	MF	-	OT	FarmingdonballyT	-	-
1978-S376	2443560.50	1978 Feb 21	Pershing 1A	-	AO-182	0.000	9FA3?	MF	-	OT	F1810808	WSR	-
1978-S274	2443598.09	1978 Mar 30 1404	Pershing 1A	-	AO-183	0.000	9FA3?	MF	-	OT	Ulrich/Wire	F1810808	-
1978-S140	2443647.04	1978 May 18 1300?	Pershing 1A	-	AO-184	0.000	9FA3?	MS	-	OT	Ulrich/Wire	F1810808	-
1978-S180	2443703.11	1978 Jun 13 1437	Pershing 1A	-	F01-111	0.000	81FA1	MS	-	OT	COMPS	-	-
1978-S181	2443703.21	1978 Jun 13 1457	Pershing 1A	-	F01-112	0.000	81FA1	MS	-	OT	COMPS	-	-
1978-S182	2443703.26	1978 Jun 13 1809	Pershing 1A	-	F01-115	0.000	81FA1	MS	-	OT	COMPS	-	-
1978-S186	2443715.10	1978 Jun 13 1840	Pershing 1A	-	F01-116	0.000	84FA3	MS	-	OT	COMPS	-	-
1978-S187	2443715.12	1978 Jun 13 1848	Pershing 1A	-	F01-114	0.000	84FA3	MS	-	OT	COMPS	-	-
1978-S188	2443715.13	1978 Jun 13 1848	Pershing 1A	-	F01-117	0.000	84FA3	MS	-	OT	COMPS	-	-
1978-S201	2443746.05	1978 Aug 25 1306	Pershing 1A	-	F01-118	0.000	84FA3	MS	-	OT	COMPS	-	-
1978-S202	2443746.06	1978 Aug 25 1323	Pershing 1A	-	F01-119	0.000	84FA3	MS	-	OT	COMPS	-	-
1978-S203	2443746.08	1978 Aug 25 1353	Pershing 1A	-	F01-120	0.000	84FA3	MS	-	OT	COMPS	-	-
1978-S238	2443801.09	1978 Oct 19 1405	Pershing 1A	-	F01-121	0.000	84FA3?	MS	-	OT	Ulrich/Wire	-	-
1978-S340	2443801.11	1978 Oct 19 1435	Pershing 1A	-	AO-186?	0.000	FRG	MS	-	OT	Ulrich/Wire	-	-
1978-S341	2443819.50	1978 Nov 7	Pershing 1A	-	AO-187	0.000	FRG	MS	-	OT	Ulrich/Wire	-	-
1978-S342	2443833.15	1978 Nov 20 1505	Pershing 1A	-	AO-188?	0.000	FRG	MS	-	OT	Ulrich/Wire	-	-
1978-S343	2443833.15	1978 Nov 20 1540	Pershing 1A	-	AO-189?	0.000	FRG	MS	-	OT	Ulrich/Wire	-	-
1978-S276	2443847.50	1978 Dec 5	Pershing 1A	-	AO-191?	0.000	9FA3?	MS	-	OT	Ulrich/Wire	-	-
1978-S277	2443847.50	1978 Dec 5	Pershing 1A	-	AO-192?	0.000	9FA3?	MS	-	OT	Ulrich/Wire	-	-
1979-S66	2443927.11	1979 Feb 22 1443	Pershing 1A	-	AO-193?	0.000	9FA3?	MS	-	OT	COMPS	-	-
1979-S69	2443927.12	1979 Feb 22 1500	Pershing 1A	-	F01-122	0.000	US7A	MS	-	OT	COMPS	-	-
1979-S70	2443927.14	1979 Feb 22 1519	Pershing 1A	-	F01-120	0.000	US7A	MS	-	OT	COMPS	-	-
1979-S132	2443969.13	1979 Apr 25 1503	Pershing 1A	-	F01-126	0.000	US7A	MS	-	OT	COMPS	-	-
1979-S133	2443969.14	1979 Apr 25 1517	Pershing 1A	-	F01-124	0.000	US7A	MS	-	OT	COMPS	-	-
1979-S134	2443969.15	1979 Apr 25 1540	Pershing 1A	-	F01-123	0.000	US7A	MS	-	OT	COMPS	-	-
1979-S135	2444003.21	1979 May 9 1700	Pershing 1A	-	F01-128	0.000	US7A	MS	-	OT	COMPS	-	-
1979-S136	2444003.27	1979 May 9 1829	Pershing 1A	-	F01-126	0.000	US7A	MS	-	OT	COMPS	-	-
1979-S137	2444003.28	1979 May 9 1850	Pershing 1A	-	F01-127	0.000	US7A	MS	-	OT	COMPS	-	-
1979-S264	2444191.13	1979 Nov 13 1506	Pershing 1A	-	AO-196?	0.000	9FA3?	MS	-	OT	COMPS	-	-
1979-S265	2444121.15	1979 Dec 4 1504	Pershing 1A	-	AO-194	0.000	US7A	MS	-	OT	Missilehanger79116	-	-
1979-S266	2444121.15	1979 Dec 4 1556	Pershing 1A	-	AO-194	0.000	US7A	MS	-	OT	Missilehanger791207	-	-
1979-S267	2444121.15	1979 Dec 4 1556	Pershing 1A	-	AO-194	0.000	US7A	MS	-	OT	Missilehanger791207	-	-
1980-S40	2444322.16	1980 Feb 12 1571	Pershing 1A	-	F01-131	0.000	US7A	MS	-	OT	COMPS	-	-
1980-S41	2444322.19	1980 Feb 12 1571	Pershing 1A	-	F01-132	0.000	US7A	MS	-	OT	COMPS	-	-
1980-S42	2444322.19	1980 Feb 12 1571	Pershing 1A	-	F01-133	0.000	US7A	MS	-	OT	COMPS	-	-
1980-S43	2444322.19	1980 Feb 12 1571	Pershing 1A	-	F01-134	0.000	US7A	MS	-	OT	COMPS	-	-
1980-S44	2444322.19	1980 Feb 12 1571	Pershing 1A	-	F01-135	0.000	US7A	MS	-	OT	COMPS	-	-
1980-S45	2444322.19	1980 Feb 12 1571	Pershing 1A	-	F01-136	0.000	US7A	MS	-	OT	COMPS	-	-
1980-S46	2444322.19	1980 Feb 12 1571	Pershing 1A	-	F01-137	0.000	US7A	MS	-	OT	COMPS	-	-
1980-S47	2444322.19	1980 Feb 12 1571	Pershing 1A	-	F01-138	0.000	US7A	MS	-	OT	COMPS	-	-
1980-S48	2444322.19	1980 Feb 12 1571	Pershing 1A	-	F01-139	0.000	US7A	MS	-	OT	COMPS	-	-
1980-S49	2444322.19	1980 Feb 12 1571	Pershing 1A	-	F01-140	0.000	US7A	MS	-	OT	COMPS	-	-
1980-S50	2444322.19	1980 Feb 12 1571	Pershing 1A	-	F01-141	0.000	US7A	MS	-	OT	COMPS	-	-
1980-S51	2444322.19	1980 Feb 12 1571	Pershing 1A	-	F01-142	0.000	US7A	MS	-	OT	COMPS	-	-
1980-S52	2444322.19	1980 Feb 12 1571	Pershing 1A	-	F01-143	0.000	US7A	MS	-	OT	COMPS	-	-
1980-S53	2444322.19	1980 Feb 12 1571	Pershing 1A	-	F01-144	0.000	US7A	MS	-	OT	COMPS	-	-
1980-S54	2444322.19	1980 Feb 12 1571	Pershing 1A	-	F01-145	0.000	US7A	MS	-	OT	COMPS	-	-
1980-S55	2444322.19	1980 Feb 12 1571	Pershing 1A	-	F01-146	0.000	US7A	MS	-	OT	COMPS	-	-
1980-S56	2444322.19	1980 Feb 12 1571	Pershing 1A	-	F01-147	0.000	US7A	MS	-	OT	COMPS	-	-
1980-S57	2444322.19	1980 Feb 12 1571	Pershing 1A	-	F01-148	0.000	US7A	MS	-	OT	COMPS	-	-
1980-S58	2444322.19	1980 Feb 12 1571	Pershing 1A	-	F01-149	0.000	US7A	MS	-	OT	COMPS	-	-
1980-S59	2444322.19	1980 Feb 12 1571	Pershing 1A	-	F01-150	0.000	US7A	MS	-	OT	COMPS	-	-
1980-S60	2444322.19	1980 Feb 12 1571	Pershing 1A	-	F01-151	0.000	US7A	MS	-	OT	COMPS	-	-
1980-S61	2444322.19	1980 Feb 12 1571	Pershing 1A	-	F01-152	0.000	US7A	MS	-	OT	COMPS	-	-
1980-S62	2444322.19	1980 Feb 12 1571	Pershing 1A	-	F01-153	0.000	US7A	MS	-	OT	COMPS	-	-
1980-S63	2444322.19	1980 Feb 12 1571	Pershing 1A	-	F01-154	0.000	US7A	MS	-	OT	COMPS	-	-
1980-S64	2444322.19	1980 Feb 12 1571	Pershing 1A	-	F01-155	0.000	US7A	MS	-	OT	COMPS	-	-
1980-S65	2444322.19	1980 Feb 12 1571	Pershing 1A	-	F01-156	0.000	US7A	MS	-	OT	COMPS	-	-
1980-S66	2444322.19	1980 Feb 12 1571	Pershing 1A	-	F01-157	0.000	US7A	MS	-	OT	COMPS	-	-
1980-S67	2444322.19	1980 Feb 12 1571	Pershing 1A	-	F01-158	0.000	US7A	MS	-	OT	COMPS	-	-
1980-S68	2444322.19	1980 Feb 12 1571	Pershing 1A	-	F01-159	0.000	US7A	MS	-	OT	COMPS	-	-
1980-S69	2444322.19	1980 Feb 12 1571	Pershing 1A	-	F01-160	0.000	US7A	MS	-	OT	COMPS	-	-
1980-S70	2444322.19	1980 Feb 12 1571	Pershing 1A	-	F01-161	0.000	US7A	MS	-	OT	COMPS	-	-
1980-S71	2444322.19	1980 Feb 12 1571	Pershing 1A	-	F01-162	0.000	US7A	MS	-	OT	COMPS	-	-
1980-S72	2444322.19	1980 Feb 12 1571	Pershing 1A	-	F01-163	0.000	US7A	MS	-	OT	COMPS	-	-
1980-S73	2444322.19	1980 Feb 12 1571	Pershing 1A	-	F01-164	0.000	US7A	MS	-	OT	COMPS	-	-
1980-S74	2444322.19	1980 Feb 12 1571	Pershing 1A	-	F01-165	0.000	US7A	MS	-	OT	COMPS	-	-
1980-S75	2444322.19	1980 Feb 12 1571	Pershing 1A	-	F01-166	0.000	US7A	MS	-	OT	COMPS	-	-
1980-S76	2444322.19	1980 Feb 12 1571	Pershing 1A	-	F01-167	0.000	US7A	MS	-	OT	COMPS	-	-
1980-S77	2444322.19	1980 Feb 12 1571	Pershing 1A	-	F01-168	0.000	US7A	MS	-	OT	COMPS	-	-
1980-S78	2444322.19	1980 Feb 12 1571	Pershing 1A	-	F01-169	0.000	US7A	MS	-	OT	COMPS	-	-
1980-S79	2444322.19	1980 Feb 12 1571	Pershing 1A	-	F01-170	0.000	US7A	MS	-	OT	COMPS	-	-
1980-S80	2444322.19	1980 Feb 12 1571	Pershing 1A	-	F01-171	0.000	US7A	MS	-	OT	COMPS	-	-
1980-S81	2444322.19	1980 Feb 12 1571	Pershing 1A	-	F01-172	0.000	US7A	MS	-	OT	COMPS	-	-
1980-S82	2444322.19	1980 Feb 12 1571	Pershing 1A	-	F01-173	0.000	US7A	MS	-	OT	COMPS	-	-
1980-S83	2444322.19	1980 Feb 12 1571	Pershing 1A	-	F01-174	0.000	US7A	MS	-	OT	COMPS	-	-
1980-S84	2444322.19	1980 Feb 12 1571	Pershing 1A	-	F01-175	0.000	US7A	MS	-	OT	COMPS	-	-
1980-S85	2444322.19	1980 Feb 12 1571	Pershing 1A	-	F01-176	0.000	US7A	MS	-	OT	COMPS	-	-
1980-S86	2444322.19	1980 Feb 12 1571	Pershing 1A	-	F01-177	0.000	US7A	MS	-	OT	COMPS	-	-
1980-S87	2444322.19	1980 Feb 12 1571	Pershing 1A	-	F01-178	0.000	US7A	MS	-	OT	COMPS	-	-
1980-S88	2444322.19	1980 Feb 12 1571	Pershing 1A	-	F01-179	0.000	US7A	MS	-	OT	COMPS	-	-
1980-S89	2444322.19	1980 Feb 12 1571	Pershing 1A	-	F01-180	0.000	US7A	MS	-	OT	COMPS	-	-
1980-S90	2444322.19	1980 Feb 12 1571	Pershing 1A	-	F01-181	0.000	US7A	MS	-	OT	COMPS	-	-
1980-S91	2444322.19	1980 Feb 12 1571	Pershing 1A	-	F01-182	0.000	US7A	MS	-	OT	COMPS	-	-
1980-S92	2444322.19	1980 Feb 12 1571											

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	OrbPay	Agency	Launch_Code	Group	Category	LTCite	Cite	Notes
1982-S141	2445173.12	1982 Jul 22 1449	Pershing 2	-	ED-1	0.000	US7A?	MF	-	Test	COMPS	Wire	-
1982-S252	2445206.19	1982 Aug 24 1654	Pershing 1A	-	AO-213	0.000	FRG	MU	-	OT	Ulrich/Wire	FRGPER	-
1982-S253	2445206.21	1982 Aug 24 1700	Pershing 1A	-	AO-214	0.000	FRG	MU	-	OT	Ulrich/Wire	FRGPER	-
1982-S254	2445214.17	1982 Sep 1 1600	Pershing 1A	-	AO-215	0.000	FRG	MU	-	OT	Ulrich	FRGPER	-
1982-S255	2445214.20	1982 Sep 1 1646	Pershing 1A	-	AO-216	0.000	FRG	MU	-	OT	Ulrich	FRGPER	-
1982-S191	2445293.27	1982 Nov 19 1830	Pershing 2	-	ED-37	0.000	US7A?	MS	-	Test	INT821120	-	-
1983-S49	2445356.12	1983 Jan 21 1448	Pershing 2	-	ED-10	0.000	US7A?	MS	-	Test	COMPS	-	-
1983-S58	2445375.13	1983 Feb 9 1506	Pershing 2	-	ED-2	0.000	US7A?	MS	-	Test	Ulrich/Wire	-	-
1983-S63	2445392.20	1983 Feb 26 1655	Pershing 2	1	ED-5	0.000	US7A?	MS	-	Test	Ulrich/Wire	-	-
1983-S75	2445407.19	1983 Mar 13 1635	Pershing 2	1	ED-4	0.000	US7A?	MS	-	Test	Wire/Ulrich	-	-
1983-S83	2445422.15	1983 Mar 28 1529	Pershing 2	-	ED-8	0.000	US7A?	MS	-	Test	COMPS	-	-
1983-S88	2445435.33	1983 Apr 10 1395	Pershing 2	1	ED-6?	0.000	US7A?	MS	-	Test	Ulrich/Wire	-	-
1983-S91	2445449.13	1983 Apr 24 1513	Pershing 2	1	ED-7	0.000	US7A?	MS	-	Test	Ulrich/Wire	-	-
1983-S97	2445461.26	1983 May 6 1612	Pershing 2	1	ED-11	0.000	US7A?	MS	-	Test	COMPS	-	-
1983-S103	2445482.12	1983 May 27 1448	Pershing 2	-	ED-14	0.000	US7A?	MS	-	Test	Ulrich/Wire	-	-
1983-S109	2445488.12	1983 Jun 2 1446	Pershing 2	1	ED-13	0.000	US7A?	MS	-	Test	Ulrich/Wire	-	-
1983-S119	2445505.13	1983 Jun 19 1512	Pershing 2	1	ED-17	0.000	US7A?	MS	-	Test	Ulrich/Wire	-	-
1983-S127	2445532.13	1983 Jul 16 1513	Pershing 2	1	ED-17	0.000	US7A?	MS	-	Test	Ulrich/Wire	-	-
1983-S131	2445543.09	1983 Jul 27 1415	Pershing 2	-	ED-18	0.000	US7A?	MS	-	Test	COMPS	-	-
1983-S162	2445585.21	1983 Sep 7 1704	Pershing 2	-	ED-19/20	0.000	9FA3	MS	-	Test	Ulrich/Wire	-	-
1983-S165	2445596.12	1983 Sep 18 1500	Pershing 2	1	ED-19/20	0.000	9FA3	MS	-	Test	COMPS	-	-
1983-S170	2445606.00	1983 Sep 28 1205	Pershing 1A	-	-	0.000	US7A?	MU	-	OT	COMPS	-	-
1983-S171	2445606.06	1983 Sep 28 1321	Pershing 1A	-	-	0.000	US7A?	MU	-	OT	COMPS	-	-
1983-S172	2445606.11	1983 Sep 28 1454	Pershing 1A	-	-	0.000	US7A?	MU	-	OT	COMPS	-	-
1983-S173	2445606.12	1983 Sep 28 1465	Pershing 1A	-	-	0.000	US7A?	MU	-	OT	COMPS	-	-
1983-S174	2445606.18	1983 Sep 28 1617	Pershing 1A	-	-	0.000	US7A?	MU	-	OT	COMPS	-	-
1983-S190	2445621.16	1983 Oct 13 1625	Pershing 1A	-	-	0.000	US7A?	MU	-	OT	COMPS	-	-
1983-S191	2445621.20	1983 Oct 13 1650	Pershing 1A	-	-	0.000	US7A?	MU	-	OT	COMPS	-	-
1983-S192	2445621.22	1983 Oct 13 1713	Pershing 1A	-	-	0.000	US7A?	MU	-	OT	COMPS	-	-
1983-S193	2445621.24	1983 Oct 13 1743	Pershing 1A	-	-	0.000	US7A?	MU	-	OT	COMPS	-	-
1983-S259	2445647.22	1983 Nov 6 1721	Pershing 1A	-	AO-217	0.000	FRG	MU	-	OT	Ulrich/Wire	FRGPER	-
1983-S260	2445654.50	1983 Nov 6 1745	Pershing 1A	-	AO-218	0.000	FRG	MU	-	OT	Ulrich/Wire	FRGPER	-
1983-S261	2445659.20	1983 Nov 16 1651	Pershing 1A	-	AO-219	0.000	FRG	MU	-	OT	Ulrich/Wire	FRGPER	-
1984-S90	2445657.10	1984 May 16 1451	Pershing 2	-	AO-220	0.000	FRG	MU	-	OT	COMPS	-	-
1984-S106	2445620.00	1984 Aug 16 1450	Pershing 2	-	ED-21	0.000	US7A?	MS	-	OT	COMPS	-	-
1984-S118	2445694.10	1984 Sep 20 1450	Pershing 2	-	ED-22	0.000	US7A?	MS	-	OT	COMPS	-	-
1984-S120	2445697.10	1984 Oct 9 1422	Pershing 2	-	AO-27	0.000	9FA3?	MS	-	OT	COMPS	-	-
1984-S205	2446016.15	1984 Nov 13 1536	Pershing 1A	-	AO-225	0.000	FRG	MU	-	OT	AP/Ulrich	FRGPER	-
1984-S206	2446016.17	1984 Nov 13 1603	Pershing 1A	-	AO-226	0.000	FRG	MU	-	OT	AP/Ulrich	FRGPER	-
1984-S207	2446016.26	1984 Nov 13 1810	Pershing 1A	-	AO-228	0.000	FRG	MU	-	OT	AP/Ulrich	FRGPER	-
1984-S208	2446016.27	1984 Nov 13 1810	Pershing 1A	-	SSO-1	0.000	US7A	MS	-	OT	COMPS	-	-
1985-S145	2446416.04	1985 Dec 17 1303	Pershing 2	-	SSO-2	0.000	US7A	MS	-	OT	COMPS	-	-
1985-S146	2446417.17	1985 Dec 17 1357	Pershing 2	-	SSO-3	0.000	US7A	MS	-	OT	COMPS	-	-
1985-S147	2446417.40	1985 Dec 17 1517	Pershing 2	-	SSO-4	0.000	US7A	MS	-	OT	COMPS	-	-
1985-S148	2446417.50	1985 Dec 17 1517	Pershing 2	-	SSO-5	0.000	US7A	MS	-	OT	COMPS	-	-
1985-S149	2446417.50	1985 Dec 17 1517	Pershing 2	-	SSO-6	0.000	US7A	MS	-	OT	COMPS	-	-
1985-S150	2446417.50	1985 Dec 17 1517	Pershing 2	-	SSO-7	0.000	US7A	MS	-	OT	COMPS	-	-
1985-S151	2446417.50	1985 Dec 17 1517	Pershing 2	-	SSO-8	0.000	US7A	MS	-	OT	COMPS	-	-
1985-S152	2446417.50	1985 Dec 17 1517	Pershing 2	-	SSO-9	0.000	US7A	MS	-	OT	COMPS	-	-
1985-S153	2446417.50	1985 Dec 17 1517	Pershing 2	-	SSO-10	0.000	US7A	MS	-	OT	COMPS	-	-
1985-S154	2446417.50	1985 Dec 17 1517	Pershing 2	-	SSO-11	0.000	US7A	MS	-	OT	COMPS	-	-
1985-S155	2446417.50	1985 Dec 17 1517	Pershing 2	-	SSO-12	0.000	US7A	MS	-	OT	COMPS	-	-
1985-S156	2446417.50	1985 Dec 17 1517	Pershing 2	-	SSO-13	0.000	US7A	MS	-	OT	COMPS	-	-
1985-S157	2446417.50	1985 Dec 17 1517	Pershing 2	-	SSO-14	0.000	US7A	MS	-	OT	COMPS	-	-
1985-S158	2446417.50	1985 Dec 17 1517	Pershing 2	-	SSO-15	0.000	US7A	MS	-	OT	COMPS	-	-
1985-S159	2446417.50	1985 Dec 17 1517	Pershing 2	-	SSO-16	0.000	US7A	MS	-	OT	COMPS	-	-
1985-S160	2446417.50	1985 Dec 17 1517	Pershing 2	-	SSO-17	0.000	US7A	MS	-	OT	COMPS	-	-
1985-S161	2446417.50	1985 Dec 17 1517	Pershing 2	-	SSO-18	0.000	US7A	MS	-	OT	COMPS	-	-
1985-S162	2446417.50	1985 Dec 17 1517	Pershing 2	-	SSO-19	0.000	US7A	MS	-	OT	COMPS	-	-
1985-S163	2446417.50	1985 Dec 17 1517	Pershing 2	-	SSO-20	0.000	US7A	MS	-	OT	COMPS	-	-
1985-S164	2446417.50	1985 Dec 17 1517	Pershing 2	-	SSO-21	0.000	US7A	MS	-	OT	COMPS	-	-
1985-S165	2446417.50	1985 Dec 17 1517	Pershing 2	-	SSO-22	0.000	US7A	MS	-	OT	COMPS	-	-
1985-S166	2446417.50	1985 Dec 17 1517	Pershing 2	-	SSO-23	0.000	US7A	MS	-	OT	COMPS	-	-
1985-S167	2446417.50	1985 Dec 17 1517	Pershing 2	-	SSO-24	0.000	US7A	MS	-	OT	COMPS	-	-
1985-S168	2446417.50	1985 Dec 17 1517	Pershing 2	-	SSO-25	0.000	US7A	MS	-	OT	COMPS	-	-
1985-S169	2446417.50	1985 Dec 17 1517	Pershing 2	-	SSO-26	0.000	US7A	MS	-	OT	COMPS	-	-
1985-S170	2446417.50	1985 Dec 17 1517	Pershing 2	-	SSO-27	0.000	US7A	MS	-	OT	COMPS	-	-
1985-S171	2446417.50	1985 Dec 17 1517	Pershing 2	-	SSO-28	0.000	US7A	MS	-	OT	COMPS	-	-
1985-S172	2446417.50	1985 Dec 17 1517	Pershing 2	-	SSO-29	0.000	US7A	MS	-	OT	COMPS	-	-
1985-S173	2446417.50	1985 Dec 17 1517	Pershing 2	-	SSO-30	0.000	US7A	MS	-	OT	COMPS	-	-
1985-S174	2446417.50	1985 Dec 17 1517	Pershing 2	-	SSO-31	0.000	US7A	MS	-	OT	COMPS	-	-
1985-S175	2446417.50	1985 Dec 17 1517	Pershing 2	-	SSO-32	0.000	US7A	MS	-	OT	COMPS	-	-
1985-S176	2446417.50	1985 Dec 17 1517	Pershing 2	-	SSO-33	0.000	US7A	MS	-	OT	COMPS	-	-
1985-S177	2446417.50	1985 Dec 17 1517	Pershing 2	-	SSO-34	0.000	US7A	MS	-	OT	COMPS	-	-
1985-S178	2446417.50	1985 Dec 17 1517	Pershing 2	-	SSO-35	0.000	US7A	MS	-	OT	COMPS	-	-
1985-S179	2446417.50	1985 Dec 17 1517	Pershing 2	-	SSO-36	0.000	US7A	MS	-	OT	COMPS	-	-
1985-S180	2446417.50	1985 Dec 17 1517	Pershing 2	-	SSO-37	0.000	US7A	MS	-	OT	COMPS	-	-
1985-S181	2446417.50	1985 Dec 17 1517	Pershing 2	-	SSO-38	0.000	US7A	MS	-	OT	COMPS	-	-
1985-S182	2446417.50	1985 Dec 17 1517	Pershing 2	-	SSO-39	0.000	US7A	MS	-	OT	COMPS	-	-
1985-S183	2446417.50	1985 Dec 17 1517	Pershing 2	-	SSO-40	0.000	US7A	MS	-	OT	COMPS	-	-
1985-S184	2446417.50	1985 Dec 17 1517	Pershing 2	-	SSO-41	0.000	US7A	MS	-	OT	COMPS	-	-
1985-S185	2446417.50	1985 Dec 17 1517	Pershing 2	-	SSO-42	0.000	US7A	MS	-	OT	COMPS	-	-
1985-S186	2446417.50	1985 Dec 17 1517	Pershing 2	-	SSO-43	0.000	US7A	MS	-	OT	COMPS	-	-
1985-S187	2446417.50	1985 Dec 17 1517	Pershing 2	-	SSO-44	0.000	US7A	MS	-	OT	COMPS	-	-
1985-S188	2446417.50	1985 Dec 17 1517	Pershing 2	-	SSO-45	0.000	US7A	MS	-	OT	COMPS	-	-
1985-S189	2446417.50	1985 Dec 17 1517	Pershing 2	-	SSO-46	0.000	US7A	MS	-	OT	COMPS	-	-
1985-S190	2446417.50	1985 Dec 17 1517	Pershing 2	-	SSO-47	0.000	US7A	MS	-	OT	COMPS	-	-
1985-S191	2446417.50	1985 Dec 17 1517	Pershing 2	-	SSO-48	0.000	US7A	MS	-	OT	COMPS	-	-
1985-S192	2446417.50	1985 Dec 17 1517	Pershing 2	-	SSO-49	0.000	US7A	MS	-	OT	COMPS	-	-
1985-S193	2446417.50	1985 Dec 17 1517	Pershing 2	-	SSO-50	0.000	US7A	MS	-	OT	COMPS	-	-
1985-S194	2446417.50	1985 Dec 17 1517	Pershing 2	-	SSO-51	0.000	US7A	MS	-	OT	COMPS	-	-
1985-S195	2446417.50	1985 Dec 17 1517	Pershing 2	-	SSO-52	0.000	US7A	MS	-	OT	COMPS	-	-
1985-S196	2446417.50	1985 Dec 17 1517	Pershing 2	-	SSO-53	0.000	US7A	MS	-	OT	COMPS	-	-
1985-S197	2446417.50	1985 Dec 17 1517	Pershing 2	-	SSO-54	0.000	US7A	MS	-	OT	COMPS	-	-
1985-S198	2446417.50	1985 Dec 17 1517	Pershing 2	-	SSO-55	0.000	US7A	MS	-	OT	COMPS	-	-
1985-S199	2446417.50	1985 Dec 17 1517	Pershing 2	-	SSO-56	0.000	US7A	MS	-	OT	COMPS	-	-
1985-S200	2446417.50	1985											

Launch

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	OrbPay	Agency	Launch_Code	Group	Category	LTCite	Cite	Notes
1987-5275	2447130.50	1987 Dec 1?	Pershing 2	1	AD-239	0.000	US7A?	MU	-	OT	Stats	-	-
1988-5164	2447160.50	1988?	Pershing 1A	-	AD-241	0.000	US7A?	MU	-	OT	FRGPER	-	-
1988-543	2447174.08	1988 Jan 13 1401:05	Pershing 2	-	AD	0.000	9FA3	MS	-	OT	COMPS	Wire (14042)	-
1988-543	2447174.08	1988 Jan 13 1401:05	Pershing 2	-	AD	0.000	9FA3	MS	-	OT	COMPS	Wire (14042)	-
1988-553	2447207.04	1988 Feb 15 1303:03	Pershing 2	-	-	0.000	US7A	MS	-	OT	COMPS	-	-
1988-554	2447207.06	1988 Feb 15 1321:05	Pershing 2	-	-	0.000	US7A	MS	-	OT	COMPS	-	-
1988-555	2447207.07	1988 Feb 15 1342:06	Pershing 2	-	-	0.000	US7A	MS	-	OT	COMPS	-	-
1988-556	2447207.14	1988 Feb 15 1516:04	Pershing 2	-	-	0.000	US7A	MS	-	OT	COMPS	-	-
1988-557	2447207.15	1988 Feb 15 1502:06	Pershing 2	-	-	0.000	US7A	MS	-	OT	COMPS	-	-
1988-558	2447207.17	1988 Feb 15 1601:05	Pershing 2	-	- P2-61	0.000	US7A	MS	-	OT	COMPS	-	-
1988-558	2447242.04	1988 Mar 21 1301:05	Pershing 2	-	-	0.000	US7A	MS	-	OT	COMPS	-	-
1988-569	2447242.05	1988 Mar 21 1319:05	Pershing 2	-	-	0.000	US7A	MS	-	OT	COMPS	-	-
1988-570	2447242.09	1988 Mar 21 1413:03	Pershing 2	-	-	0.000	US7A	MS	-	OT	COMPS	-	-
1988-571	2447242.16	1988 Mar 21 1546:05	Pershing 2	-	-	0.000	US7A	MS	-	OT	COMPS	-	-
1988-572	2447242.20	1988 Mar 21 1653:04	Pershing 2	-	-	0.000	US7A	MS	-	OT	COMPS	-	-
1988-5170	2447295.10	1988 May 13 1430	Pershing 2	1	AD	0.000	9FA3	MS	-	OT	Missilehanger680520	FRGPER	-
1988-5163	2447295.12	1988 May 13 1455	Pershing 2	1	AD	0.000	9FA3	MS	-	OT	Missilehanger680520	FRGPER	-
1988-5164	2447295.18	1988 May 13 1615	Pershing 2	1	AD	0.000	9FA3	MS	-	OT	Missilehanger680520	FRGPER	-
1988-5165	2447160.50	1988?	Pershing 1A	?	AD-242	0.000	US7A?	MU	-	OT	FRGPER	-	-
1988-5166	2447441.50	1988 Oct 7	Pershing 1A	-	AD-243 Cert. Fir.	0.000	FRG2	MU	-	OT	FRGPER	-	-
1988-5167	2447441.50	1988 Oct 7	Pershing 1A	-	AD-244 Cert. Fir.	0.000	FRG2	MU	-	OT	FRGPER	-	-
1988-5168	2447456.50	1988 Oct 21	Pershing 1A	-	AD-245 Cert. Fir.	0.000	FRG1	MU	-	OT	FRGPER	-	-
1988-5169	2447456.50	1988 Oct 21	Pershing 1A	-	AD-246 Cert. Fir.	0.000	FRG1	MU	-	OT	FRGPER	-	-





Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Mission	FlightCode	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee_Km	Range_Km	Dest
1972-A16	2441566.03	1972 Feb 18 1238	Petrel	-	P117H	E-region multiprobe	-	-	-	SUIST	-	-	-	25	-	-
1972-S295	2441555.97	1972 Aug 29 1112	Petrel	-	P116H	E-region multiprobe	-	-	-	SUIST	-	-	-	140?	-	-
1972-S296	2441555.06	1972 Aug 29 1312	Petrel	-	P130H	Solar La/X	-	-	-	SUIST	-	-	-	136	-	-
1972-S297	2441560.42	1972 Aug 30 2202	Petrel	-	P75H	Scattered La	-	-	-	SUIST	-	-	-	118	-	-
1972-S300	2441560.50	1972 Aug 31 0002	Petrel	-	P108H	Scattered La	-	-	-	SUIST	-	-	-	146	-	-
1972-S301	2441560.59	1972 Aug 31 0216	Petrel	-	P76H	Scattered La	-	-	-	SUIST	-	-	-	126	-	-
1972-S331	2441596.31	1972 Oct 5 1924:07	Petrel	-	P127A	Particles/substorm	-	-	-	AND	-	-	-	117	-	-
1972-S332	2441596.45	1972 Oct 7 2247:55	Petrel	-	P42A	Particles/substorm	-	-	-	AND	-	-	-	140?	-	-
1972-S336	2441601.39	1972 Oct 10 2121:51	Petrel	-	P65A	L7/VLF 3	-	-	-	AND	-	-	-	140?	-	-
1972-S358	2441614.33	1972 Oct 21 2000:50	Petrel	-	P126A	Particles/substorm	-	-	-	AND	-	-	-	117	-	-
1972-S359	2441614.30	1972 Oct 23 1905:21	Petrel	-	P125A	Elec. analyser	-	-	-	AND	-	-	-	140?	-	-
1972-S391	2441624.99	1972 Nov 3 1145:48	Petrel	-	P129A	L7/VLF 4 Pol chorus	-	-	-	AND	-	-	-	140?	-	-
1972-S396	2441630.46	1972 Nov 8 2256:24	Petrel	-	P41A	Particles/substorm	-	-	-	AND	-	-	-	140?	-	-
1973-A86	2441662.50	1973	Petrel	-	D	Target	-	-	-	ABER	-	-	-	1	-	-
1973-S73	2441735.05	1973 Feb 19 1317	Petrel	-	P116H	Composition	-	-	-	SUIST	-	-	-	124	-	-
1973-S80	2441735.04	1973 Feb 22 1304	Petrel	-	P114H	Electrons/La	-	-	-	SUIST	-	-	-	126	-	-
1973-S82	2441737.08	1973 Feb 23 1348	Petrel	-	P113H	Electrons/La	-	-	-	SUIST	-	-	-	140?	-	-
1973-S111	2441761.65	1973 Mar 20 0341	Petrel	-	P43H	Dawn chorus	-	-	-	SUIST	-	-	-	129	-	-
1973-S132	2441772.64	1973 Mar 31 0317	Petrel	-	P44H	Dawn chorus	-	-	-	SUIST	-	-	-	126	-	-
1973-S134	2441775.79	1973 Apr 3 0609	Petrel	-	P131H	D-region/Solar La/X	-	-	-	SUIST	-	-	-	131	-	-
1973-S135	2441775.77	1973 Apr 3 0854	Petrel	-	P133H	D-region/Solar La/X	-	-	-	SUIST	-	-	-	132	-	-
1973-S136	2441775.84	1973 Apr 3 0914	Petrel	-	P105H	D-region/Solar La/X	-	-	-	SUIST	-	-	-	137	-	-
1973-S137	2441775.91	1973 Apr 3 0948	Petrel	-	P105H	D-region/Solar La/X	-	-	-	SUIST	-	-	-	139	-	-
1973-S139	2441776.12	1973 Apr 3 1452	Petrel	-	P134H	D-region/Solar La/X	-	-	-	SUIST	-	-	-	140	-	-
1973-S140	2441776.18	1973 Apr 3 1615	Petrel	-	P104H	D-region/Solar La/X	-	-	-	SUIST	-	-	-	136	-	-
1973-S142	2441776.24	1973 Apr 3 1744	Petrel	-	P104H	D-region/Solar La/X	-	-	-	SUIST	-	-	-	134	-	-
1973-S170	2441821.97	1973 May 19 1111	Petrel	-	P66H	XRB scintillator tel	-	-	-	SUIST	-	-	-	137	-	-
1973-S213	2441863.00	1973 Jun 29 1159	Petrel	-	P162H	Composition	-	-	-	SUIST	-	-	-	140?	-	-
1973-S226	2441866.02	1973 Jun 29 1230	Petrel	-	P162H	Composition	-	-	-	SUIST	-	-	-	136	-	-
1973-S246	2441867.02	1973 Jul 23 1223	Petrel	-	P46H	XRB scintillator tel	-	-	-	SUIST	-	-	-	143	-	-
1973-S254	2441828.50	1973 Sep 3 0003	Petrel	-	P98H	Airglow	-	-	-	SUIST	-	-	-	135	-	-
1973-S254	2441828.59	1973 Sep 3 0204	Petrel	-	P98H	Airglow	-	-	-	SUIST	-	-	-	143	-	-
1973-S257	2441831.99	1973 Sep 6 1138	Petrel	-	P168H	Composition/La	-	-	-	SUIST	-	-	-	131	-	-
1973-S300	2441835.68	1973 Sep 10 0002	Petrel	-	P102H	TPA	-	-	-	SUIST	-	-	-	170	-	-
1973-S301	2441835.68	1973 Sep 10 0418	Petrel	-	P102H	TPA	-	-	-	SUIST	-	-	-	166	-	-
1973-S305	2441840.69	1973 Sep 15 0436	Petrel	-	P106H	ELF/VLF	-	-	-	SUIST	-	-	-	138	-	-
1973-S308	2441869.50	1973 Oct 14 0001:20	Petrel	-	P100A	High Lat/la	-	-	-	AND	-	-	-	166	-	-
1973-S346	2441872.32	1973 Oct 16 1941:39	Petrel	-	P141A	High Lat/Particles	-	-	-	AND	-	-	-	148	-	-
1973-S349	2441873.23	1973 Oct 17 1728:10	Petrel	-	P101A	High Lat/la	-	-	-	AND	-	-	-	124	-	-
1973-S350	2441886.29	1973 Oct 30 1854:19	Petrel	-	P147A	High Lat/Particles	-	-	-	AND	-	-	-	136	-	-
1973-S351	2441886.30	1973 Oct 30 1915:54	Petrel	-	P142A	High Lat/la	-	-	-	AND	-	-	-	138	-	-
1973-S351	2441886.34	1973 Oct 30 2004:06	Petrel	-	P142A	High Lat/la	-	-	-	AND	-	-	-	138	-	-
1973-S351	2441886.34	1973 Oct 30 2004:26	Petrel	-	P142A	High Lat/la	-	-	-	AND	-	-	-	138	-	-
1973-S351	2441886.34	1973 Oct 30 2004:46	Petrel	-	P142A	High Lat/la	-	-	-	AND	-	-	-	138	-	-
1973-S351	2441886.34	1973 Oct 30 2004:66	Petrel	-	P142A	High Lat/la	-	-	-	AND	-	-	-	138	-	-
1973-S351	2441886.34	1973 Oct 30 2004:86	Petrel	-	P142A	High Lat/la	-	-	-	AND	-	-	-	138	-	-
1973-S351	2441886.34	1973 Oct 30 2004:106	Petrel	-	P142A	High Lat/la	-	-	-	AND	-	-	-	138	-	-
1973-S351	2441886.34	1973 Oct 30 2004:126	Petrel	-	P142A	High Lat/la	-	-	-	AND	-	-	-	138	-	-
1973-S351	2441886.34	1973 Oct 30 2004:146	Petrel	-	P142A	High Lat/la	-	-	-	AND	-	-	-	138	-	-
1973-S351	2441886.34	1973 Oct 30 2004:166	Petrel	-	P142A	High Lat/la	-	-	-	AND	-	-	-	138	-	-
1973-S351	2441886.34	1973 Oct 30 2004:186	Petrel	-	P142A	High Lat/la	-	-	-	AND	-	-	-	138	-	-
1973-S351	2441886.34	1973 Oct 30 2004:206	Petrel	-	P142A	High Lat/la	-	-	-	AND	-	-	-	138	-	-
1973-S351	2441886.34	1973 Oct 30 2004:226	Petrel	-	P142A	High Lat/la	-	-	-	AND	-	-	-	138	-	-
1973-S351	2441886.34	1973 Oct 30 2004:246	Petrel	-	P142A	High Lat/la	-	-	-	AND	-	-	-	138	-	-
1973-S351	2441886.34	1973 Oct 30 2004:266	Petrel	-	P142A	High Lat/la	-	-	-	AND	-	-	-	138	-	-
1973-S351	2441886.34	1973 Oct 30 2004:286	Petrel	-	P142A	High Lat/la	-	-	-	AND	-	-	-	138	-	-
1973-S351	2441886.34	1973 Oct 30 2004:306	Petrel	-	P142A	High Lat/la	-	-	-	AND	-	-	-	138	-	-
1973-S351	2441886.34	1973 Oct 30 2004:326	Petrel	-	P142A	High Lat/la	-	-	-	AND	-	-	-	138	-	-
1973-S351	2441886.34	1973 Oct 30 2004:346	Petrel	-	P142A	High Lat/la	-	-	-	AND	-	-	-	138	-	-
1973-S351	2441886.34	1973 Oct 30 2004:366	Petrel	-	P142A	High Lat/la	-	-	-	AND	-	-	-	138	-	-
1973-S351	2441886.34	1973 Oct 30 2004:386	Petrel	-	P142A	High Lat/la	-	-	-	AND	-	-	-	138	-	-
1973-S351	2441886.34	1973 Oct 30 2004:406	Petrel	-	P142A	High Lat/la	-	-	-	AND	-	-	-	138	-	-
1973-S351	2441886.34	1973 Oct 30 2004:426	Petrel	-	P142A	High Lat/la	-	-	-	AND	-	-	-	138	-	-
1973-S351	2441886.34	1973 Oct 30 2004:446	Petrel	-	P142A	High Lat/la	-	-	-	AND	-	-	-	138	-	-
1973-S351	2441886.34	1973 Oct 30 2004:466	Petrel	-	P142A	High Lat/la	-	-	-	AND	-	-	-	138	-	-
1973-S351	2441886.34	1973 Oct 30 2004:486	Petrel	-	P142A	High Lat/la	-	-	-	AND	-	-	-	138	-	-
1973-S351	2441886.34	1973 Oct 30 2004:506	Petrel	-	P142A	High Lat/la	-	-	-	AND	-	-	-	138	-	-
1973-S351	2441886.34	1973 Oct 30 2004:526	Petrel	-	P142A	High Lat/la	-	-	-	AND	-	-	-	138	-	-
1973-S351	2441886.34	1973 Oct 30 2004:546	Petrel	-	P142A	High Lat/la	-	-	-	AND	-	-	-	138	-	-
1973-S351	2441886.34	1973 Oct 30 2004:566	Petrel	-	P142A	High Lat/la	-	-	-	AND	-	-	-	138	-	-
1973-S351	2441886.34	1973 Oct 30 2004:586	Petrel	-	P142A	High Lat/la	-	-	-	AND	-	-	-	138	-	-
1973-S351	2441886.34	1973 Oct 30 2004:606	Petrel	-	P142A	High Lat/la	-	-	-	AND	-	-	-	138	-	-
1973-S351	2441886.34	1973 Oct 30 2004:626	Petrel	-	P142A	High Lat/la	-	-	-	AND	-	-	-	138	-	-
1973-S351	2441886.34	1973 Oct 30 2004:646	Petrel	-	P142A	High Lat/la	-	-	-	AND	-	-	-	138	-	-
1973-S351	2441886.34	1973 Oct 30 2004:666	Petrel	-	P142A	High Lat/la	-	-	-	AND	-	-	-	138	-	-
1973-S351	2441886.34	1973 Oct 30 2004:686	Petrel	-	P142A	High Lat/la	-	-	-	AND	-	-	-	138	-	-
1973-S351	2441886.34	1973 Oct 30 2004:706	Petrel	-	P142A	High Lat/la	-	-	-	AND	-	-	-	138	-	-
1973-S351	2441886.34	1973 Oct 30 2004:726	Petrel	-	P142A	High Lat/la	-	-	-	AND	-	-	-	138	-	-
1973-S351	2441886.34	1973 Oct 30 2004:746	Petrel	-	P142A	High Lat/la	-	-	-	AND	-	-	-	138	-	-
1973-S351	2441886.34	1973 Oct 30 2004:766	Petrel	-	P142A	High Lat/la	-	-	-	AND	-	-	-	138	-	-
1973-S351	2441886.34	1973 Oct 30 2004:786	Petrel	-	P142A	High Lat/la	-	-	-	AND	-	-	-	138	-	-
1973-S351	2441886.34	1973 Oct 30 2004:806	Petrel	-	P142A	High Lat/la	-	-	-	AND	-	-	-	138	-	-
1973-S351	2441886.34	1973 Oct 30 2004:826	Petrel	-	P142A	High Lat/la	-	-	-	AND	-	-	-	138	-	-
1973-S351	2441886.34	1973 Oct 30 2004:846	Petrel	-	P142A	High Lat/la	-	-	-	AND	-	-	-	138	-	-
1973-S351	2441886.34	1973 Oct 30 2004:866	Petrel	-	P142A	High Lat/la	-	-	-	AND	-	-	-	138	-	-
1973-S351	2441886.34	1973 Oct 30 2004:886	Petrel	-	P142A	High Lat/la	-	-	-	AND	-	-	-	138	-	-
1973-S351	2441886.34	1973 Oct 30 2004:906	Petrel	-	P142A	High Lat/la	-	-	-	AND	-	-	-	138	-	-
1973-S351	2441886.34	1973 Oct 30 2004:926	Petrel	-	P142A	High Lat/la	-	-	-	AND	-	-	-	138	-	-
1973-S351	2441886.34	1973 Oct 30 2004:946	Petrel	-	P142A	High Lat/la	-	-	-	AND	-	-	-	138	-</	









Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	OrbPay	Agency	Launch_Code	Group	Category	LTCite	Cite	Notes
1972-A16	2441386-03	1972 Feb 18 1238	Petrel	-	P117H	0.000	SRC	SS	BIR/Goodall	Ionospheric	WDCRF	-	-
1972-S295	2441558-97	1972 Aug 29 1112	Petrel	-	P130H	0.000	SRC	SS	BIR/Goodall	Ionospheric	WDCRF	-	-
1972-S296	2441559-50	1972 Aug 29 1312	Petrel	-	P130H	0.000	SRC	SS	RSRS/Hall	Solar UV_X	WDCRF	-	-
1972-S297	2441560-42	1972 Aug 30 2202	Petrel	-	P76H	0.000	SRC	SS	RSRS/Hall	Ionospheric/Aeron	WDCRF	-	-
1972-S300	2441560-50	1972 Aug 31 0002	Petrel	-	P108H	0.000	SRC	SS	RSRS/Hall	Ionospheric	WDCRF	-	-
1972-S301	2441560-59	1972 Aug 31 0216	Petrel	-	P76H	0.000	SRC	SS	RSRS/Hall	Ionospheric	WDCRF	-	-
1972-S331	2441596-31	1972 Oct 5 1924-07	Petrel	-	P127A	0.000	SRC	SS	SUDM/BLR/Collin,D'Arcy	Auroral	WDCRF	-	-
1972-S332	2441598-45	1972 Oct 7 2247-58	Petrel	-	P42A	0.000	SRC	SS	SUDM/BLR/Collin,D'Arcy	Auroral	WDCRF	-	-
1972-S336	2441601-39	1972 Oct 10 2121-51	Petrel	-	P62A	0.000	SRC	SS	SUDM/BLR/Collin,D'Arcy	Auroral	WDCRF	-	-
1972-S358	2441612-33	1972 Oct 21 2000-50	Petrel	-	P126A	0.000	SRC	SS	SUDM/BLR/Collin,D'Arcy	Auroral	WDCRF	-	-
1972-S358	2441614-30	1972 Oct 23 1905-21	Petrel	-	P126A	0.000	SRC	SS	MSL/Passto	Auroral	WDCRF	-	-
1972-S391	2441624-46	1972 Nov 3 1145-46	Petrel	-	P129A	0.000	SRC	SS	SUDM/BLR/Collin,D'Arcy	Auroral	WDCRF	-	-
1972-S396	2441630-44	1972 Nov 8 2256-24	Petrel	-	P41A	0.000	SRC	SS	SUDM/BLR/Collin,D'Arcy	Auroral	WDCRF	-	-
1973-A86	2441662-50	1973	HD	-	D	0.000	AS	AS	Target	Target	JES128,245	-	-
1973-S73	2441733-05	1973 Feb 19 1317	Petrel	-	P116H	0.000	SRC	SS	UCW/Williams	Ionospheric	WDCRF	-	-
1973-S80	2441736-04	1973 Feb 22 1304	Petrel	-	P114H	0.000	SRC	SS	UCW/Williams	Ionospheric	WDCRF	JATP42,307	-
1973-S82	2441737-08	1973 Feb 23 1348	Petrel	-	P113H	0.000	SRC	SS	UCW/Williams	Ionospheric	WDCRF	-	-
1973-S111	2441761-65	1973 Mar 20 0341	Petrel	-	P44H	0.000	SRC	SS	BIR/SUDM/Goodall,Roch.	Ionospheric	WDCRF	-	-
1973-S132	2441772-64	1973 Mar 31 0317	Petrel	-	P44H	0.000	SRC	SS	BIR/SUDM/Goodall,Roch.	Ionospheric	WDCRF	-	-
1973-S134	2441775-79	1973 Apr 3 0654	Petrel	-	P131H	0.000	SRC	SS	RSRS/Dickinson	Ionospheric	WDCRF	SFL16,385	-
1973-S136	2441775-84	1973 Apr 3 0814	Petrel	-	P135H	0.000	SRC	SS	RSRS/Dickinson	Ionospheric	WDCRF	-	-
1973-S137	2441775-91	1973 Apr 3 0948	Petrel	-	P105H	0.000	SRC	SS	RSRS/Dickinson	Ionospheric	WDCRF	-	-
1973-S139	2441776-12	1973 Apr 3 1452	Petrel	-	P125H	0.000	SRC	SS	RSRS/Dickinson	Ionospheric	WDCRF	-	-
1973-S140	2441776-16	1973 Apr 3 1615	Petrel	-	P104H	0.000	SRC	SS	RSRS/Dickinson	Ionospheric	WDCRF	-	-
1973-S142	2441776-24	1973 Apr 3 1744	Petrel	-	P135H	0.000	SRC	SS	RSRS/Dickinson	Ionospheric	WDCRF	-	-
1973-S170	2441821-97	1973 May 19 1111	Petrel	-	P56H	0.000	SRC	SS	BRIS/Hillier	XR Astronomy	WDCRF	-	-
1973-S213	2441865-00	1973 Jun 29 1159	Petrel	-	P126H	0.000	SRC	SS	UCW/Williams	Ionospheric	WDCRF	JATP42,307	-
1973-S226	2441866-02	1973 Jul 2 1230	Petrel	-	P165H	0.000	SRC	SS	UCW/Williams	Ionospheric	WDCRF	-	-
1973-S246	2441867-02	1973 Jul 23 1223	Petrel	-	P49H	0.000	SRC	SS	BRIS/Hillier	XR Astronomy	WDCRF	-	-
1973-S293	2441928-50	1973 Sep 3 0053	Petrel	-	P98H	0.000	SRC	SS	QWB/Crew	Atmospheric	WDCRF	-	-
1973-S294	2441928-59	1973 Sep 6 0294	Petrel	-	P98H	0.000	SRC	SS	QWB/Crew	Atmospheric	WDCRF	-	-
1973-S297	2441931-99	1973 Sep 6 1139	Petrel	-	P165H	0.000	SRC	SS	UCW/Williams	Ionospheric	WDCRF	JATP42,307	-
1973-S300	2441935-50	1973 Sep 10 0002	Petrel	-	P102H	0.000	SRC	SS	UCW/Williams	Ionospheric	WDCRF	-	-
1973-S301	2441935-68	1973 Sep 10 0418	Petrel	-	P102H	0.000	SRC	SS	UCW/Williams	Ionospheric	WDCRF	-	-
1973-S305	2441940-69	1973 Sep 15 0436	Petrel	-	P106H	0.000	SRC	SS	UCW/Williams	Ionospheric	WDCRF	-	-
1973-S346	2441969-50	1973 Oct 14 0001-20	Petrel	-	P100A	0.000	SRC	SS	SUDM/Jenkins	Ionospheric	WDCRF	-	-
1973-S346	2441972-32	1973 Oct 16 1941-59	Petrel	-	P141A	0.000	SRC	SS	SUDM/Jenkins	Ionospheric	WDCRF	-	-
1973-S349	2441973-25	1973 Oct 17 1281-10	Petrel	-	P101A	0.000	SRC	SS	SUDM/Jenkins	Ionospheric	WDCRF	-	-
1973-S313	2441986-28	1973 Oct 30 0544-19	Petrel	-	P142A	0.000	SRC	SS	RSRS/Reason	Ionospheric	WDCRF	-	-
1973-S370	2441986-30	1973 Oct 30 0315-94	Petrel	-	P142A	0.000	SRC	SS	RSRS/Reason	Ionospheric	WDCRF	-	-
1973-S371	2441986-34	1973 Oct 30 2004-96	Petrel	-	P160A	0.000	SRC	SS	UCW/Willson	Ionospheric	WDCRF	-	-
1973-S390	2442003-46	1973 Nov 16 2324-50	Petrel	-	P160A	0.000	SRC	SS	UCW/Willson	Ionospheric	WDCRF	-	-
1973-S391	2442003-52	1973 Nov 17 2324-53	Petrel	-	P160A	0.000	SRC	SS	UCW/Willson	Ionospheric	WDCRF	-	-
1973-S392	2442003-54	1973 Nov 17 0225-53	Petrel	-	P160A	0.000	SRC	SS	UCW/Willson	Ionospheric	WDCRF	-	-
1973-S393	2442003-55	1973 Nov 17 0121-00	Petrel	-	P160A	0.000	SRC	SS	UCW/Willson	Ionospheric	WDCRF	-	-
1973-S394	2442003-56	1973 Nov 17 1221-00	Petrel	-	P160A	0.000	SRC	SS	UCW/Willson	Ionospheric	WDCRF	-	-
1973-S395	2442003-57	1973 Dec 2 0711-00	Petrel	-	P81A	0.000	SRC	SS	BIR/Goodall	Ionospheric	WDCRF	-	-
1973-S425	2442022-80	1973 Dec 6 0918-43	Petrel	-	P90A	0.000	SRC	SS	SUS/Merzalli	Ionospheric	WDCRF	-	-
1973-S426	2442022-89	1973 Dec 6 0918-43	Petrel	-	P90A	0.000	SRC	SS	SUS/Merzalli	Ionospheric	WDCRF	-	-
1974-S155	2442136-44	1974 Apr 1 9237	Petrel	-	P174H	0.000	SRC	SS	SUDM/SHEF/Rycroft,Bull.	Ionospheric	SL16, 301	-	-
1974-S156	2442136-44	1974 Apr 1 9256	Petrel	-	P178H	0.000	SRC	SS	SUDM/SHEF/Rycroft,Bull.	Ionospheric	SL16, 301	-	-
1974-S161	2442140-72	1974 Apr 3 0656	Petrel	-	P172H	0.000	SRC	SS	UCW/Hilliams	Ionospheric	WDCRF	-	-
1974-S162	2442140-74	1974 Apr 3 0656	Petrel	-	P177H	0.000	SRC	SS	UCW/Hilliams	Ionospheric	WDCRF	-	-
1974-S195	2442168-20	1974 Apr 30 0655	Petrel	-	P72H	0.000	SRC	SS	SHEF/Chalcraft	Ionospheric	WDCRF	JB1527,481	-
1974-S293	2442284-48	1974 Sep 6 2359	Petrel	-	P90H	0.000	SRC	SS	SUDM/Boothwell	Ionospheric	WDCRF	-	-
1974-S297	2442287-50	1974 Sep 11 1102	Petrel	2	P907/C	0.000	SRC	SS	NSI/Ingram	Ionospheric	WDCRF	-	-
1974-S326	2442315-47	1974 Sep 24 2317	Petrel	-	P50H	0.000	SRC	SS	UCB/Byrnie	Atmospheric	WDCRF	-	-
1974-S328	2442315-59	1974 Sep 27 0209	Petrel	-	P57H	0.000	SRC	SS	UCB/Byrnie	Atmospheric	WDCRF	-	-
1974-S330	2442318-98	1974 Sep 28 1132	Petrel	-	P161H	0.000	SRC	SS	UCW/Hilliams	Ionospheric	WDCRF	-	-
1974-S333	2442381-93	1974 Nov 29 1017	Petrel	-	P192H	0.000	SRC	SS	WPE/Krankovsky	Ionospheric	WDCRF	-	-
1974-S394	2442381-01	1974 Nov 29 1153	Petrel	-	P175H	0.000	SRC	SS	UCW/Hilliams	Ionospheric	WDCRF	-	-
1974-S395	2442381-01	1974 Nov 29 1209	Petrel	-	P179H	0.000	SRC	SS	WPE/Krankovsky	Ionospheric	WDCRF	-	-
1974-S404	2442384-02	1974 Dec 2 1236	Petrel	-	P163H	0.000	SRC	SS	UCW/Hilliams	Ionospheric	WDCRF	-	-
1974-S405	2442389-36	1974 Dec 7 2037	Petrel	-	P180H	0.000	SRC	SS	RSRS/Dickinson	Ionospheric	WDCRF	-	-
1974-S406	2442389-43	1974 Dec 7 2226	Petrel	-	P176H	0.000	SRC	SS	RSRS/Dickinson	Ionospheric	WDCRF	-	-
1974-S407	2442389-45	1974 Dec 7 2253	Petrel	-	P176H	0.000	SRC	SS	UCB/Crew	Atmospheric	WDCRF	-	-
1974-S419	2442388-97	1974 Dec 17 1237	Petrel	-	P86G	0.000	SRC	SS	UCI/Beas	Atmospheric	WDCRF	-	-
1974-S420	2442389-03	1974 Dec 17 1112	Petrel	-	P87G	0.000	SRC	SS	UCI/Beas	Atmospheric	WDCRF	-	-
1974-S422	2442389-07	1974 Dec 18 1115	Petrel	-	P166G	0.000	SRC	SS	UCI/Beas	Atmospheric	WDCRF	-	-
1974-S423	2442400-03	1974 Dec 18 1245	Petrel	-	P167G	0.000	SRC	SS	UCI/Beas	Atmospheric	WDCRF	-	-
1975-S346	2442438-03	1975 Jan 25 1240	Petrel	-	UNTA MRFDP-7501	0.000	UNTA	SU	WPAE/Ciarneros,Rose	Ionospheric	WDCRF	-	-
1975-S363	2442443-01	1975 Jan 30 1215	Petrel	-	UNTA MRFDP-7502	0.000	UNTA	SU	WPAE/Ciarneros,Rose	Ionospheric	WDCRF	-	-
1975-S364	2442452-52	1975 Feb 9 0024	Petrel	-	P1647/C	0.000	SRC	SS	UCI/Beas	Atmospheric	WDCRF	-	-
1975-S365	2442452-52	1975 Feb 9 0024	Petrel	-	P1687/C	0.000	SRC	SS	UCI/Beas	Atmospheric	WDCRF	-	-
1975-S366	2442452-73	1975 Feb 9 0530	Petrel	-	P1377/C	0.000	SRC	SS	PRL/RIR/Hilson	Ionospheric	WDCRF	SR17,515	-
1975-S367	2442452-73	1975 Feb 9 0535	Petrel	-	P1657/C	0.000	SRC	SS	PRL/UCI/Sastry,Rees	Ionospheric	WDCRF	SR16,407	-
1975-S368	2442452-80	1975 Feb 9 0708	Petrel	-	P1657/C	0.000	SRC	SS	PRL/UCI/Sastry,Rees	Ionospheric	WDCRF	SR16,407	-
1975-S375	2442462-86	1975 Feb 19 0842	Petrel	-	P1657/C	0.000	SRC	SS	PRL/UCI/Sastry,Rees	Ionospheric	WDCRF	SR16,407	-
1975-S376	2442462-86	1975 Feb 19 0842	Petrel	-	P1387/C	0.000	SRC	SS	RIR/Hilson	Ionospheric	WDCRF	-	-
1975-S378	2442463-06	1975 Mar 15 1332	Petrel	-	P1677/C	0.000	SRC	SS	UCI/Beas	Atmospheric	WDCRF	-	-
1975-S106	2442487-19	1975 Mar 15 1634	Petrel	-	P707/C	0.000	SRC	SS	PRL/SUDM/Gurta,Rothwell	Ionospheric	WDCRF	SR16,407	-
1975-S107	2442487-50	1975 Mar 16 0000	Petrel	-	P1847/C	0.000	SRC	SS	PRL/SUDM/Gurta,Rothwell	Ionospheric	WDCRF	SR19,275	-
1975-S110	2442490-89	1975 Mar 19 0921	Petrel	-	P1857/C	0.000	SRC	SS	PRL/SUDM/Gurta,Rothwell	Ionospheric	WDCRF	-	-

Launch

Launch_Tag	Launch_ID	Variant	LV_Type	OrbPay	Agency	Launch_Code	Group	Category	LTCite	Cite	Notes
1975-S112	2442495.50	-	Petrel	0.000	SRC	SS	PRL/beasal	Fields	WDCRF	-	-
1975-S142	2442536.29	-	Petrel	0.000	SRC	SS	UCW/Williams	Ionospheric	WDCRF	SM17,279	-
1975-S144	2442567.97	-	Petrel	0.000	INTA?	SU	RFPE/Cisneros,Rose	Ionos	WDCRF	WDCRF [May 4]	-
1975-S147	2442570.97	-	Petrel	0.000	INTA?	SU	RFPE/Cisneros,Rose	Ionos	WDCRF	WDCRF [May 7]	1218/JGR
1975-S269	2442664.52	-	Petrel	0.000	SRC	SS	QBE/	Atmospheric	ElAren	Massey	-
1975-S270	2442664.50	-	Petrel	0.000	SRC	SS	RSRS/	Atmospheric	Amdeco2,487	Massey	-
1975-S328	2442745.02	-	Petrel	0.000	SRC	SS	UCW/Williams	Ionospheric	WDCRF	JATM42,307	-
1975-S329	2442745.02	-	Petrel	0.000	SRC	SS	RSRS/Dickinson	Ionospheric	WDCRF	-	-
1976-S349	2442782.17	-	Petrel	0.000	DLR/INTA	SS	RFPE/INTA/Cisneros,Rose	Ionos	WDCRF	Massey	-
1976-M02	2442799.07	-	Petrel	0.000	DLR/INTA	SS	RFPE/INTA/Cisneros,Rose	Ionos	WDCRF	-	-
1976-M04	2442799.07	-	Petrel	0.000	DLR/INTA	SS	RFPE/INTA/Cisneros,Rose	Aeron/Ionos	WDCRF	-	-
1976-S368	2442799.16	-	Petrel	0.000	INTA/SRC	SS	UCL/Rees	Aeron	WDCRF	Massey	-
1976-S369	2442799.16	-	Petrel	0.000	INTA/SRC	SS	UCL/Rees	Aeron	WDCRF	Massey	-
1976-S397	2442817.10	-	Petrel	0.000	DLR/INTA	SS	RFPE/INTA/Cisneros,Rose	Aeron/Ionos	WDCRF	-	-
1976-S176	2442904.99	-	Petrel	0.000	SRC	SS	RSLS/McMan	Ionospheric	WDCRF	-	-
1976-S177	2442905.01	-	Petrel	0.000	SRC	SS	RFPE/INTA/Cisneros,Rose	Ionospheric	WDCRF	-	-
1976-S393	2442907.18	-	Petrel	0.000	DLR/INTA	SS	RFPE/INTA/Cisneros,Rose	Aeron/Ionos	WDCRF	-	-
1976-S394	2442914.17	-	Petrel	0.000	DLR/INTA	SS	RFPE/INTA/Cisneros,Rose	Aeron/Ionos	WDCRF	-	-
1976-S196	2442933.68	-	Petrel	0.000	SRC	SS	SHEP/Bullough	Ionospheric	WDCRF	-	-
1976-S196	2442964.99	-	Petrel	0.000	SRC	SS	SHEP/Bullough	Ionospheric	WDCRF	-	-
1977-S61	2443182.40	-	Petrel	0.000	SRC	SS	UKMO/UCW/Williams	Atmospheric	WDCRF	-	-
1977-M09	2443182.42	-	Petrel	0.000	UKMO	SS	RFPE/Arankowsky	Atmospheric	WDCRF	-	-
1977-S62	2443182.46	-	Petrel	0.000	SRC	SS	RSRS/Dickinson	Aeron/Ionos	WDCRF	-	-
1977-S63	2443182.46	-	Petrel	0.000	SRC	SS	RSRS/Dickinson	Atmospheric	WDCRF	-	-
1977-S70	2443186.02	-	Petrel	0.000	SRC	SS	UCW/Williams	Ionos/Plasma	WDCRF	-	-
1977-S71	2443186.02	-	Petrel	0.000	SRC	SS	UCW/?	Ionos	WDCRF	-	-
1977-S72	2443186.06	-	Petrel	0.000	SRC	SS	RSRS/	Atmospheric	WDCRF	-	-
1977-S206	2443321.99	-	Petrel	0.000	SRC	SS	RSRS/Dickinson	Atmospheric	WDCRF	JATM42,307	-
1977-S207	2443321.99	-	Petrel	0.000	SRC	SS	UCW/Williams	Atmospheric	WDCRF	AND	-
1977-S261	2443453.44	-	Petrel 2	0.000	SRC	SS	UCL/Rees	Atmospheric	WDCRF	-	-
1976-S87	2443542.04	-	Petrel	0.000	SRC	SS	RSRS/Dickinson	Atmospheric	WDCRF	-	-
1976-S88	2443542.06	-	Petrel	0.000	SRC	SS	RSRS/PE/Arankowsky	Ionospheric/Solar UV	WDCRF	-	-
1976-S89	2443542.06	-	Petrel	0.000	SRC	SS	RSRS/UCW/Williams	Atmospheric	WDCRF	-	-
1976-S89	2443545.51	-	Petrel	0.000	SRC	SS	RSRS/UCW/Williams	Atmospheric	WDCRF	-	-
1976-S81	2443545.54	-	Petrel	0.000	SRC	SS	RSRS/UCW/Williams	Atmospheric	WDCRF	-	-
1976-S82	2443545.54	-	Petrel	0.000	SRC	SS	RSRS/UCW/Williams	Atmospheric	WDCRF	-	-
1976-S83	2443546.52	-	Petrel	0.000	SRC	SS	RSRS/PE/Arankowsky	Ionospheric	WDCRF	-	-
1976-S84	2443546.54	-	Petrel	0.000	SRC	SS	RSRS/	Atmospheric	WDCRF	-	-
1976-S86	2443546.54	-	Petrel	0.000	UKMO	SS	UKMO	Atmospheric	Massey	-	-
1976-S89	2443552.30	-	Petrel	0.000	UKMO	SS	UKMO	Atmospheric	Massey	-	-
1976-S192	2443720.45	-	Petrel	0.000	WDK	SS	RSRS/SSC/	Aeronomy	sec.86	ESA-SF152	-
1976-S261	2443720.45	-	Petrel	0.000	WDK	SS	WDK/	Aeronomy?	sec.86	-	-
1976-S262	2443735.52	-	Petrel	0.000	WDK	SS	WDK/	Aeronomy?	sec.86	-	-
1976-S196	2443735.54	-	Petrel	0.000	SRC	SS	RSRS/SSC/Dickinson	Aeronomy	sec.86	-	-
1976-S39	2443899.38	-	Petrel 2	0.000	SRC	SS	RSRS/Byant	Ionospheric	ES-SP152-317	-	-
1976-S48	2443981.34	-	Petrel 2	0.000	SRC	SS	RSRS/Byant	Ionospheric	WDCRF/ESRLV	-	-
1976-S107	2443989.02	-	Petrel 2	0.000	SRC	SS	SHEP/Bullough	Ionospheric	WDCRF	AND	-
1976-S131	2443989.02	-	Petrel 2	0.000	SRC	SS	UCW/Williams	Ionospheric	WDCRF	-	-
1976-S165	2444071.50	-	Petrel	0.000	SRC	SS	RSRS/UCW/	Aeronomy	Massey	-	-
1976-S169	2444071.50	-	Petrel	0.000	SRC	SS	RSRS/UCW/	Aeronomy	Massey	-	-
1976-S170	2444071.50	-	Petrel	0.000	SRC	SS	RSRS/UCW/	Aeronomy	Massey	-	-
1976-M11	2444140.73	-	Petrel 2	0.000	SRC	SS	SMSX/Martelli	Ionospheric	WDCRF	-	-
1976-S295	2444148.52	-	Petrel 2	0.000	UKMO	SS	UKMO/Naughtan	Ozone	Nature296,133	-	-
1976-S296	2444148.76	-	Petrel	0.000	UKMO	SS	UKMO/Naughtan	Ozone	Nature296,133	-	-
1976-S297	2444148.90	-	Petrel	0.000	UKMO	SS	UKMO/Naughtan	Ozone	Nature296,133	-	-
1976-S298	2444149.15	-	Petrel	0.000	UKMO	SS	UKMO/Naughtan	Ozone	Nature296,133	-	-
1976-S216	2444150.28	-	Petrel 2	0.000	SRC	SS	SHEF/	Ionospheric	WDCRF	-	-
1980-S146	2444447.48	-	Petrel 2	0.000	SRC	SS	RSRS/UCW/	Ionospheric	sec.86	Massey	-
1980-S146	2444554.51	-	Petrel 2	0.000	SRC	SS	RSRS/UCW/	Ionospheric	sec.86	Massey	-
1980-S200	2444559.63	-	Petrel 2	0.000	SRC	SS	RSRS/UCW/	Aeronomy	sec.86	-	-
1980-S217	2444574.49	-	Petrel 2	0.000	SRC	SS	RSRS/UCW/	Aeronomy	sec.86	-	-
1981-S63	2444643.34	-	Petrel 2	0.000	SRC	SS	RSRS/UCW/	Aeronomy	sec.86	-	-
1981-S174	2444940.16	-	Petrel 2	0.000	SRC	SS	UCL/	Aeronomy	sec.86	Massey	-
1981-S181	2444948.22	-	Petrel 2	0.000	SRC	SS	UCL/	Aeronomy	sec.86	Massey	-
1981-S185	2444955.09	-	Petrel	0.000	INTA	SS	INTA	Aeron	ElAren	udit.iaa.cfic.es	-
1981-S186	2444958.33	-	Petrel	0.000	INTA	SS	INTA	Aeron	ElAren	udit.iaa.cfic.es	-
1982-S279	2445044.25	-	Petrel	0.000	SRC	SS	UCL/	Aeronomy	sec.86	-	-
1982-S280	2445052.42	-	Petrel	0.000	SRC	SS	UCL/	Aeronomy	sec.86	-	-
1982-S281	2445052.42	-	Petrel	0.000	SRC	SS	UCL/	Aeronomy	sec.86	-	-
1982-S282	2445052.42	-	Petrel	0.000	SRC	SS	UCL/	Aeronomy	sec.86	-	-
1982-S283	2445052.42	-	Petrel	0.000	SRC	SS	UCL/	Aeronomy	sec.86	-	-
1982-S284	2445052.42	-	Petrel	0.000	SRC	SS	UCL/	Aeronomy	sec.86	-	-
1982-S285	2445052.42	-	Petrel	0.000	SRC	SS	UCL/	Aeronomy	sec.86	-	-
1982-S286	2445052.42	-	Petrel	0.000	SRC	SS	UCL/	Aeronomy	sec.86	-	-
1982-S287	2445052.42	-	Petrel	0.000	SRC	SS	UCL/	Aeronomy	sec.86	-	-
1982-S288	2445052.42	-	Petrel	0.000	SRC	SS	UCL/	Aeronomy	sec.86	-	-
1982-S289	2445052.42	-	Petrel	0.000	SRC	SS	UCL/	Aeronomy	sec.86	-	-
1982-S290	2445052.47	-	Petrel	0.000	SRC	SS	UCL/	Aeronomy	sec.86	-	-
1982-S291	2445052.47	-	Petrel	0.000	SRC	SS	UCL/	Aeronomy	sec.86	-	-
1982-S292	2445052.48	-	Petrel	0.000	SRC	SS	UCL/	Aeronomy	sec.86	-	-
1982-S293	2445052.50	-	Petrel	0.000	SRC	SS	UCL/	Aeronomy	sec.86	-	-
1982-S149	2445185.50	-	Petrel	0.000	SRC	SS	RAL/Dickinson	Aeronomy	sec.86	WDCRF	-
1982-S155	2445193.48	-	Petrel	0.000	SRC	SS	WPK/RAL/Dickinson	Aeronomy	sec.86	WDCRF	-





Launch Mission

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Mission	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee_Km	Range_Km	Dest
1961-009	2437401.15	1961 Apr 11 1540	Polaris A2	-	A2X-12	-	-	CC	LC29A	-	-	507	228	-
1961-5113	2437409.42	1961 Apr 19 2204	Polaris A1	-	A1E-20	-	-	ETR	SLBR?	-	-	500?	2000?	-
1961-5131	2437421.21	1961 May 1 1700	Polaris A2	-	A2X-16	-	-	CC	LC29A	-	-	1000?	2411	Antigua
1961-5133	2437423.21	1961 May 3 1700	Polaris A1	-	A1E-22	-	-	ETR	SLBR	-	-	500?	2000?	-
1961-5138	2437425.22	1961 May 8 1710	Polaris A2	-	A2X-19	-	-	CC	LC29A	-	-	1000?	2413	Antigua
1961-5147	2437436.50	1961 May 17	Polaris A1	-	A1E-26 (A1P-70)	-	-	ETR	SLBR	-	-	500?	1300?	-
1961-5150	2437436.50	1961 May 17	Polaris A1	-	A1E-27 (A1P-65)	-	-	ETR	SLBR	-	-	500?	2000?	-
1961-5148	2437436.50	1961 May 17	Polaris A1	-	A1E-28 (A1P-66)	-	-	ETR	SLBR	-	-	500?	200?	-
1961-5151	2437436.50	1961 May 17	Polaris A1	-	A1E-29	-	-	ETR	SLBR	-	-	500?	2000?	-
1961-5149	2437436.50	1961 May 17	Polaris A1	-	A1E-33 (A1P-66)	-	-	ETR	SLBR	-	-	500?	1800?	-
1961-5129	2437445.33	1961 May 25 1853	Polaris A2	-	A2X-5	-	-	CC	LC25A	-	-	0	0	-
1961-5176	2437465.20	1961 Jun 12 1653	Polaris A2	-	A2X-11	-	-	ETR	SLBR	-	-	1000?	2655	-
1961-5168	2437477.28	1961 Jun 26 1862	Polaris A2	-	A2X-20	-	-	CC	LC29A	-	-	500?	1059	-
1961-5204	2437495.52	1961 Jul 13 0031	Polaris A2	-	A2X-20	-	-	CC	LC29A	-	-	1000?	1233	GTI
1961-5228	2437513.50	1961 Aug 2	Polaris A2	-	A2X-21	-	-	CC	LC29A	-	-	1000?	2408	Antigua
1961-5236	2437523.50	1961 Aug 12	Polaris A1	-	A1E-42 (A1P-9)	-	-	ETR	SLBR	-	-	10?	10?	-
1961-5238	2437523.50	1961 Aug 12	Polaris A1	-	A1E-43 (A1P-97)	-	-	ETR	SLBR	-	-	500?	2000?	-
1961-5239	2437523.50	1961 Aug 12	Polaris A1	-	A1E-34 (A1P-103)	-	-	ETR	SLBR	-	-	500?	2000?	-
1961-5240	2437523.50	1961 Aug 12	Polaris A1	-	A1E-35 (A1P-68)	-	-	ETR	SLBR	-	-	500?	2000?	-
1961-5241	2437523.50	1961 Aug 12	Polaris A1	-	A1E-36 (A1P-106)	-	-	ETR	SLBR	-	-	500?	2000?	-
1961-5241	2437523.50	1961 Aug 12	Polaris A1	-	A1E-37 (A1P-96)	-	-	ETR	SLBR	-	-	500?	2000?	-
1961-5169	2437529.50	1961 Aug 16	Polaris A2	-	A2X-22	-	-	CC	LC25A	-	-	2?	1?	-
1961-5302	2437572.12	1961 Sep 29 1500	Polaris A1	-	A1X-50	-	-	CC	LC25A	-	-	500?	1390?	-
1961-5318	2437577.14	1961 Oct 4 1522	Polaris A2	-	A2X-13	-	-	ETR	SLBR	-	-	1000?	2576	-
1961-5318	2437589.12	1961 Oct 16 1464	Polaris A1	-	A1E-38 (A1P-100)	-	-	ETR	SLBR	-	-	500?	2036	-
1961-5343	2437596.18	1961 Oct 23 1622	Polaris A2	-	A2E-X1 (A2X-4)	-	-	ETR	SLBR	-	-	1000?	2591	-
1961-5367	2437607.08	1961 Nov 3 1401:32	Polaris A1	-	A1E-39	-	-	ETR	SLBR	-	-	500?	2037	-
1961-5368	2437607.15	1961 Nov 3 1530	Polaris A1	-	A1E-40	-	-	ETR	SLBR	-	-	500?	2037	-
1961-5369	2437607.21	1961 Nov 3 1700	Polaris A1	-	A1E-41 (A1P-12)	-	-	ETR	SLBR	-	-	500?	2037	-
1961-5370	2437612.17	1961 Nov 6 1610	Polaris A2	-	A2E-X2 (A2X-15)	-	-	ETR	SLBR	-	-	1000?	2593	-
1961-5401	2437615.67	1961 Nov 10 0400	Polaris A2	-	A2X-14 (A2X-1)	-	-	CC	LC29A	-	-	20?	10?	-
1961-5406	2437639.64	1961 Dec 1 1629	Polaris A1	-	A2X-23	-	-	CC	LC29A	-	-	1000?	2743	-
1962-011	2437658.21	1962 Jan 6 0222	Polaris A1	-	A1X-51	-	-	CC	LC25A	-	-	500?	1389	-
1962-041	2437658.21	1962 Jan 23 1705:37	Polaris A2	-	A2X-17 (A2C-2)	-	-	ETR	SLBR	-	-	500?	1589	-
1962-049	2437725.32	1962 Mar 1 1945:01	Polaris A2	-	A2X-27 (A2C-5)	-	-	CC	LC29A	-	-	150?	680	-
1962-440	2437754.39	1962 Mar 30 2128	Polaris A2	-	A2X-26 (A2H-3)	-	-	CC	LC29A	-	-	1000?	3176	-
1962-5107	2437760.20	1962 Apr 25 1600:26	Polaris A2	-	A2E-1	-	-	CC	LC25A	-	-	0	0	-
1962-5126	2437768.57	1962 May 4 0141:02	Polaris A2	-	A2X-18 (A2H-1)	-	-	CC	LC25A	-	-	1000?	2333	-
1962-5129	2437794.43	1962 May 6 231:49	Polaris A2	-	A1E-42	-	-	CC	LC29A	-	-	500?	3582	-
1962-5129	2437796.27	1962 May 11 1826:04	Polaris A2	-	A2E-3	-	-	ETR	SLBR	-	-	10?	5?	-
1962-5129	2437808.25	1962 May 23 1801:36	Polaris A2	-	A2E-4	-	-	ETR	SLBR	-	-	1000?	2600?	-
1962-5146	2437808.33	1962 May 23 1846:00	Polaris A2	-	A2E-5	-	-	ETR	SLBR	-	-	1000?	2600?	-
1962-5156	2437816.30	1962 May 25 1946:00	Polaris A2	-	A2E-7	-	-	ETR	SLBR	-	-	1000?	2600?	-
1962-5157	2437816.34	1962 Jun 2 0341:01	Polaris A2	-	A2E-6	-	-	ETR	SLBR	-	-	1000?	2600?	-
1962-5157	2437816.34	1962 Jun 2 2258:57	Polaris A2	-	A2E-8	-	-	ETR	SLBR	-	-	10?	5?	-
1962-5208	2437820.08	1962 Jun 14 1405:58	Polaris A2	-	A2X-30 (A2H-2)	-	-	CC	LC25A	-	-	10?	3472	-
1962-5208	2437820.08	1962 Jun 29 1405:58	Polaris A2	-	A2X-29 (A2H-4)	-	-	CC	LC25A	-	-	1000?	2410?	Antigua
1962-5208	2437859.24	1962 Jun 12 1831:57	Polaris A2	-	A2E-11	-	-	ETR	SLBR	-	-	1000?	2410?	Antigua
1962-5208	2437859.34	1962 Jul 12 0045:13	Polaris A2	-	A2E-10	-	-	ETR	SLBR	-	-	1000?	2878	Antigua
1962-5249	2437867.37	1962 Jul 21 0249:54	Polaris A2	-	A2E-12	-	-	ETR	SLBR	-	-	1000?	2878	Antigua
1962-5250	2437867.43	1962 Jul 21 0249:54	Polaris A2	-	A2E-13	-	-	ETR	SLBR	-	-	1000?	2878	Antigua
1962-5250	2437867.43	1962 Jul 21 0249:54	Polaris A2	-	A2E-12	-	-	ETR	SLBR	-	-	1000?	2878	Antigua
1962-5254	2437871.24	1962 Jul 26 1700:02	Polaris A2	-	A2E-1	-	-	CC	LC25A	-	-	20?	20?	GTI?
1962-5265	2437871.50	1962 Jul 26 1700:02	Polaris A1	-	A1E-1	-	-	CC	LC25A	-	-	20?	20?	GTI?
1962-5266	2437871.50	1962 Jul 27	Polaris A1	-	A1E-2	-	-	ETR	SLBR	-	-	500?	2000?	-
1962-5267	2437871.50	1962 Jul 27	Polaris A1	-	A1E-3	-	-	ETR	SLBR	-	-	500?	2000?	-
1962-5268	2437871.50	1962 Jul 27	Polaris A1	-	A1E-4	-	-	ETR	SLBR	-	-	500?	2000?	-
1962-5269	2437884.31	1962 Jul 27 1925:05	Polaris A3	-	A3X-1	-	-	ETR	SLBR	-	-	500?	2000?	-
1962-5269	2437884.31	1962 Jul 27 1925:05	Polaris A3	-	A3X-2	-	-	ETR	SLBR	-	-	500?	2000?	-
1962-5269	2437887.39	1962 Aug 10 2127:00	Polaris A2	-	A2E-2	-	-	ETR	SLBR	-	-	500?	2000?	-
1962-4140	2437894.19	1962 Aug 17 1634:10	Polaris A2	-	A2E-3	-	-	CC	LC29A	-	-	200?	315	-
1962-5312	2437904.13	1962 Aug 27 1502:03	Polaris A2	-	A2E-4	-	-	CC	LC29A	-	-	0	0	-
1962-5327	2437914.17	1962 Sep 6 1600:00	Polaris A3	-	A3X-2	-	-	CC	LC29A	-	-	1000?	2000?	EDA
1962-5334	2437921.84	1962 Sep 14 0809:06	Polaris A1	-	A1E-6	-	-	ETR	SLBR	-	-	500?	2000?	-
1962-5334	2437923.36	1962 Sep 15 2037:10	Polaris A1	-	A1E-5	-	-	ETR	SLBR	-	-	500?	2000?	-
1962-5358	2437937.50	1962 Oct 4	Polaris A2	-	A2	-	-	ETR	SLBR	-	-	1000?	2000?	-
1962-5359	2437937.50	1962 Oct 4	Polaris A2	-	A2	-	-	ETR	SLBR	-	-	1000?	2000?	-
1962-5360	2437937.50	1962 Oct 4	Polaris A2	-	A2	-	-	ETR	SLBR	-	-	1000?	2000?	-
1962-5361	2437937.50	1962 Oct 4	Polaris A2	-	A2	-	-	ETR	SLBR	-	-	1000?	2000?	-
1962-5361	2437943.15	1962 Oct 5 1530	Polaris A3	-	A3X-3	-	-	ETR	SLBR	-	-	20?	20	-
1962-5369	2437951.50	1962 Oct 14	Polaris A1	-	A1E-8	-	-	ETR	SLBR	-	-	500?	2000	-
1962-4170	2437951.50	1962 Oct 14	Polaris A1	-	A1E-7	-	-	ETR	SLBR	-	-	10?	10	-
1962-4189	2437974.15	1962 Nov 5 1529:59	Polaris A3	-	A3X-4	-	-	ETR	SLBR	-	-	10?	10	-
1962-4190	2437986.21	1962 Nov 17 1706:17	Polaris A3	-	A3X-5	-	-	ETR	SLBR	-	-	50?	50?	-
1962-4339	2438005.10	1962 Dec 6 1419:04	Polaris A3	-	A3X-6	-	-	ETR	SLBR	-	-	100?	400	78H 321P?
1962-5571	2438017.82	1962 Dec 10 0733:44	Polaris A2	-	A2E-24 (A2C-4)	-	-	CC	LC29A	-	-	1000?	2619	-
1963-533	2438064.50	1963 Feb 4	Polaris A2	-	A2E-108	-	-	ETR	SLBR	-	-	1000?	1000?	Antigua
1963-534	2438064.50	1963 Feb 4	Polaris A2	-	A2E-109	-	-	ETR	SLBR	-	-	1000?	2410?	Antigua
1963-535	2438065.50	1963 Feb 5	Polaris A2	-	A2E-110	-	-	ETR	SLBR	-	-	1000?	2410?	Antigua
1963-536	2438065.50	1963 Feb 5	Polaris A2	-	A2E-111	-	-	ETR	SLBR	-	-	1000?	2410?	Antigua
1963-539	2438068.17	1963 Feb 7 1559:59	Polaris A3	-	A3X-8	-	-	CC	LC29A	-	-	1000?	3350	-
1963-544	2438072.15	1963 Feb 11 1530	Polaris A3	-	A3X-7	-	-	CC	LC25A	-	-	1000?	3445	-
1963-425	2438072.15	1963 Feb 18 1400:02	Polaris A3	-	A3X-9	-	-	CC	LC29A	-	-	10?	10?	-
1963-425	2438082.25	1963 Feb 21 1756:07	Polaris A2	-	A2E-117	-	-	ETR	SLBR	-	-	1000?	2500?	-
1963-432	2438096.24	1963 Mar 7 1745:15	Polaris A2	-	A2E-116	-	-	ETR	SLBR	-	-	17	10?	-
1963-583	2438096.28	1963 Mar 7 1848:15	Polaris A2	-	A2E-120	-	-	ETR	SLBR	-	-	1000?	2500?	-
1963-592	2438102.50	1963 Mar 14	Polaris A2	-	A2	-	-	ETR	SLBR	-	-	500?	500?	-





Launch Mission

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Mission	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee_Km	Range_Km	Dest
1964-5189	2438492.19	1964 Apr 6 1630:03	Polaris A2	-	A2P-320	-	-	ETR	SLBM	-	-	1000?	-	-
1964-5195	2438493.50	1964 Apr 8	Polaris A3	-	A3X-55	PX-2	-	JI	LP2	-	-	10?	-	-
1964-5217	2438500.19	1964 Apr 20 1630:03	Polaris A2	-	A2P-286	-	-	ETR	SLBM	-	-	1000?	-	-
1964-5218	2438506.21	1964 Apr 20 1700:09	Polaris A2	-	A2P-119	-	Surface Launch Test	ETR	SLBM	-	-	1000?	-	-
1964-5796	2438527.01	1964 May 12	Polaris A3	-	A3X-60	PY-2	-	JI	LP2	-	-	1000?	2856	KMR BDA?
1964-5264	2438541.27	1964 May 25 1829:05	Polaris A3	-	A3P-6	-	-	ETR	SLBM	-	-	1000?	-	-
1964-5265	2438541.30	1964 May 25 1915:06	Polaris A3	-	A3P-1	-	-	ETR	SLBM	-	-	1000?	-	-
1964-5282	2438555.19	1964 Jun 8 1634:07	Polaris A3	-	A3P-2	-	-	ETR	SLBM	-	-	1000?	-	-
1964-5283	2438555.21	1964 Jun 8 1705:07	Polaris A3	-	A3P-4	-	-	ETR	SLBM	-	-	1000?	-	-
1964-5306	2438570.26	1964 Jun 23 1816:03	Polaris A2	-	A2P-296	-	-	ETR	SLBM	-	-	1000?	-	-
1964-5308	2438570.40	1964 Jun 23 1933:03	Polaris A2	-	A2P-319	-	-	ETR	SLBM	-	-	1000?	-	-
1964-5322	2438575.52	1964 Jul 2 0224:03	Polaris A3	-	A3X-10	-	-	CC	LC25A	-	-	1000?	2961	-
1964-5350	2438585.30	1964 Jul 8 1915:03	Polaris A2	-	A2P-165	-	-	ETR	SLBM	-	-	1000?	-	-
1964-5351	2438585.34	1964 Jul 8 2015:03	Polaris A2	-	A2P-232	-	-	ETR	SLBM	-	-	1000?	-	-
1964-5352	2438585.39	1964 Jul 8 2116:02	Polaris A2	-	A2P-232	-	-	ETR	SLBM	-	-	1000?	-	-
1964-5357	2438593.20	1964 Jul 16 1654:04	Polaris A3	-	A3P-19	-	-	ETR	SLBM	-	-	1000?	-	-
1964-5358	2438593.23	1964 Jul 16 1724:07	Polaris A3	-	A3P-14	-	-	ETR	SLBM	-	-	1000?	-	-
1964-5391	2438607.19	1964 Jul 30 1630:03	Polaris A3	-	A3P-52	-	-	ETR	SLBM	-	-	1000?	-	-
1964-5408	2438614.19	1964 Aug 6 1630	Polaris A3	-	A3P-7	-	-	ETR	SLBM	-	-	1000?	-	-
1964-5436	2438628.19	1964 Aug 20 1630:02	Polaris A3	-	A3P-53	-	-	ETR	SLBM	-	-	1000?	-	-
1964-5459	2438644.19	1964 Sep 5 1630:03	Polaris A3	-	A3P-13	-	-	ETR	SLBM	-	-	1000?	-	-
1964-5476	2438660.19	1964 Sep 21 1630:03	Polaris A3	-	A3P-58	-	-	ETR	SLBM	-	-	1000?	-	-
1964-5490	2438667.19	1964 Sep 28 1630:03	Polaris A3	-	A3P-57	-	-	ETR	SLBM	-	-	1000?	-	-
1964-5519	2438682.20	1964 Oct 13 1630:04	Polaris A3	-	A3P-17	-	-	ETR	SLBM	-	-	1000?	-	-
1964-5527	2438687.50	1964 Oct 19	Polaris A2	-	A2	-	-	ETR	SLBM	-	-	1000?	-	-
1964-5528	2438687.50	1964 Oct 19	Polaris A2	-	A2	-	-	ETR	SLBM	-	-	1000?	-	-
1964-5550	2438687.50	1964 Oct 19	Polaris A2	-	A2	-	-	ETR	SLBM	-	-	1000?	-	-
1964-5544	2438696.50	1964 Oct 26	Polaris A2	-	A2	-	-	ETR	SLBM	-	-	1000?	-	-
1964-5545	2438696.50	1964 Oct 26	Polaris A2	-	A2	-	-	ETR	SLBM	-	-	1000?	-	-
1964-5546	2438696.50	1964 Oct 26	Polaris A2	-	A2	-	-	ETR	SLBM	-	-	1000?	-	-
1964-5547	2438696.50	1964 Oct 26	Polaris A2	-	A2	-	-	ETR	SLBM	-	-	1000?	-	-
1964-5559	2438700.25	1964 Oct 31 1804:03	Polaris A2	-	A3P-72	PX-2	-	ETR	LP2	-	-	1000?	-	-
1964-5759	2438719.50	1964 Nov 20	Polaris A3	-	A3X	PX-2	-	ETR	LP2	-	-	1000?	-	-
1964-5800	2438724.50	1964 Nov 20	Polaris A3	-	A3P-87	-	-	ETR	SLBM	-	-	1000?	-	-
1964-5862	2438733.21	1964 Nov 13 1657:03	Polaris A3	-	A3P-100	-	-	ETR	SLBM	-	-	1000?	-	-
1964-5866	2438732.19	1964 Dec 2 1633:04	Polaris A3	-	A3P-45	-	-	ETR	SLBM	-	-	1000?	-	-
1964-5862	2438746.19	1964 Dec 16 1634:03	Polaris A3	-	A3P-46	-	-	ETR	SLBM	-	-	1000?	-	-
1964-5896	2438752.19	1964 Dec 22 1630:04	Polaris A3	-	A3P-46	-	-	ETR	SLBM	-	-	1000?	-	-
1965-532	2438764.22	1965 Jan 11 1713:03	Polaris A3	-	A3P-61	-	-	ETR	SLBM	-	-	1000?	-	-
1965-545	2438767.19	1965 Jan 23 1630:06	Polaris A3	-	A3P-157	-	-	ETR	SLBM	-	-	1000?	-	-
1965-577	2438767.50	1965 Feb 6	Polaris A2	-	A2	-	-	ETR	SLBM	-	-	1000?	-	-
1965-579	2438767.50	1965 Feb 6	Polaris A2	-	A2	-	-	ETR	SLBM	-	-	1000?	-	-
1965-580	2438767.50	1965 Feb 6	Polaris A2	-	A2	-	-	ETR	SLBM	-	-	1000?	-	-
1965-592	2438800.23	1965 Feb 8 1725:05	Polaris A3	-	A3P-5	-	-	ETR	SLBM	-	-	1000?	-	-
1965-592	2438803.50	1965 Feb 12	Polaris A2	-	A2	-	-	ETR	SLBM	-	-	1000?	-	-
1965-596	2438807.19	1965 Feb 16 1630:03	Polaris A2	-	A3P-171	-	-	ETR	SLBM	-	-	1000?	-	-
1965-591	2438821.29	1965 Feb 17 1715:06	Polaris A3	-	A3P-172	-	-	ETR	SLBM	-	-	1000?	-	-
1965-5123	2438824.55	1965 Mar 5 0111:59	Polaris A2E	-	A2P-193	-	-	ETR	SLBM	-	-	1000?	-	-
1965-5160	2438828.27	1965 Mar 15 1822:02	Polaris A3	-	A3P-168	-	-	ETR	SLBM	-	-	1000?	-	-
1965-5161	2438838.30	1965 Mar 15 1909:01	Polaris A3	-	A3P-21	-	-	ETR	SLBM	-	-	1000?	-	-
1965-5164	2438840.27	1965 Mar 20 1830:07	Polaris A3	-	A3P-11	-	-	ETR	SLBM	-	-	1000?	-	-
1965-5594	2438864.76	1965 Apr 14 0639:19	Polaris A1	-	C2X-1	-	Surface launch	CC	LC25A	-	-	1000?	-	-
1965-5328	2438911.50	1965 May 31	Polaris A2	-	A2	-	-	ETR	SLBM	-	-	1000?	-	-
1965-5329	2438911.50	1965 May 31	Polaris A2	-	A2	-	-	ETR	SLBM	-	-	1000?	-	-
1965-5327	2438924.50	1965 Jun 15	Polaris A2	-	A2	-	-	ETR	SLBM	-	-	1000?	-	-
1965-5358	2438924.50	1965 Jun 15	Polaris A2	-	A2	-	-	ETR	SLBM	-	-	1000?	-	-
1965-5361	2438928.08	1965 Jun 16 1356:04	Polaris A1	-	C2X-2	-	-	ETR	SLBM	-	-	1000?	-	-
1965-5463	2438964.29	1965 Jun 11 1901:01	Polaris A3	-	C2X-3	-	-	ETR	SLBM	-	-	1000?	-	-
1965-5791	2439024.50	1965 Nov 22	Polaris A3	-	A3X-61	-	-	ETR	SLBM	-	-	1000?	-	-
1965-5596	2439069.50	1965 Nov 5	Polaris A3	-	A3	-	-	ETR	SLBM	-	-	1000?	-	-
1965-5597	2439069.50	1965 Nov 5	Polaris A3	-	A3	-	-	ETR	SLBM	-	-	1000?	-	-
1965-5598	2439069.50	1965 Nov 5	Polaris A3	-	A3	-	-	ETR	SLBM	-	-	1000?	-	-
1965-5599	2439069.50	1965 Nov 5	Polaris A3	-	A3	-	-	ETR	SLBM	-	-	1000?	-	-
1965-5615	2439077.44	1965 Nov 12 2228:14	Polaris A1	-	C2X-4	-	-	ETR	SLBM	-	-	1000?	-	-
1965-5662	2439101.31	1965 Dec 6 1925:41	Polaris A3	-	A3P-42	-	-	ETR	SLBM	-	-	1000?	-	-
1965-5690	2439115.19	1965 Dec 20 1633:03	Polaris A3	-	A3P-188	-	-	ETR	SLBM	-	-	1000?	-	-
1965-5622	2439143.20	1966 Jan 17 1642:04	Polaris A3	-	A3P-393	-	-	ETR	SLBM	-	-	1000?	-	-
1965-586	2439157.19	1966 Jan 31 1630:03	Polaris A3	-	A3P-388	-	-	ETR	SLBM	-	-	1000?	-	-
1966-5113	2439174.19	1966 Feb 17 1630:03	Polaris A3	-	A3P-14	-	-	ETR	SLBM	-	-	1000?	-	-
1966-5131	2439181.21	1966 Feb 24 1704:04	Polaris A3	-	A3P-380	-	-	ETR	SLBM	-	-	1000?	-	-
1966-5132	2439181.50	1966 Feb 25	Polaris A2	-	A2	-	-	ETR	SLBM	-	-	1000?	-	-
1966-5133	2439181.50	1966 Feb 25	Polaris A2	-	A2	-	-	ETR	SLBM	-	-	1000?	-	-
1966-5143	2439185.50	1966 Mar 1	Polaris A2	-	A2	-	-	ETR	SLBM	-	-	1000?	-	-
1966-5144	2439185.50	1966 Mar 1	Polaris A2	-	A2	-	-	ETR	SLBM	-	-	1000?	-	-
1966-5147	2439188.20	1966 Mar 3 1650:02	Polaris A3	-	A3P-135	-	-	ETR	SLBM	-	-	1000?	-	-
1966-5157	2439195.17	1966 Mar 10 1600:02	Polaris A3	-	A3P-383	-	-	ETR	SLBM	-	-	1000?	-	-
1966-5164	2439198.50	1966 Mar 14	Polaris A2	-	A2	-	-	ETR	SLBM	-	-	1000?	-	-
1966-5165	2439198.50	1966 Mar 14	Polaris A2	-	A2	-	-	ETR	SLBM	-	-	1000?	-	-
1966-5166	2439198.50	1966 Mar 14	Polaris A2	-	A2	-	-	ETR	SLBM	-	-	1000?	-	-
1966-5167	2439198.50	1966 Mar 14	Polaris A2	-	A2	-	-	ETR	SLBM	-	-	1000?	-	-
1966-5171	2439201.50	1966 Mar 17	Polaris A2	-	A2	-	-	ETR	SLBM	-	-	1000?	-	-

Launch

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Mission	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee_Km	Range_Km	Dest
1966-S172	2439201.50	1966 Mar 17	Polaris A2	-	A2	-	-	ETR	SLBR	-	-	1000?	-	-
1966-S202	2439216.17	1966 Mar 31 1600	Polaris A3	-	A3P-396	-	-	ETR	SLBR	-	-	1000?	-	-
1966-S213	2439223.17	1966 Apr 7 1600	Polaris A3	-	A3P-445	-	-	ETR	SLBR	-	-	20?	-	-
1966-S214	2439223.19	1966 Apr 7 1630	Polaris A3	-	A3P-400	-	-	ETR	SLBR	-	-	1000?	-	-
1966-S217	2439230.17	1966 Apr 14 1600	Polaris A3	-	A3P-375	-	-	ETR	SLBR	-	-	1000?	-	-
1966-S226	2439237.17	1966 Apr 21 1600	Polaris A3	-	A3P-440	-	-	ETR	SLBR	-	-	1000?	-	-
1966-S227	2439237.19	1966 Apr 21 1915:02	Polaris A3	-	A3P-431	-	-	ETR	SLBR	-	-	1000?	-	-
1966-S228	2439237.30	1966 Apr 21 1915:02	Polaris A3	-	A3P-437	-	-	ETR	SLBR	-	-	1000?	-	-
1966-S306	2439287.17	1966 Jun 10 1609	Polaris A3	-	A3P-421	-	-	ETR	SLBR	-	-	1000?	-	-
1966-S330	2439300.17	1966 Jun 23 1600	Polaris A3	-	A3P-484	-	-	ETR	SLBR	-	-	1000?	-	-
1966-S364	2439318.17	1966 Jul 11 1600	Polaris A3	-	A3P-399	-	-	ETR	SLBR	-	-	1000?	-	-
1966-S368	2439320.17	1966 Jul 15 1600	Polaris A3	-	A3P-419	-	-	ETR	SLBR	-	-	1000?	-	-
1966-S475	2439370.21	1966 Sep 1 17:00:00	Polaris A3	-	A3P-386	-	-	ETR	SLBR	-	-	1000?	-	-
1966-S496	2439388.50	1966 Sep 20	Polaris A2	-	A2	-	-	ETR	SLBR	-	-	1000?	-	-
1966-S497	2439388.50	1966 Sep 20	Polaris A2	-	A2	-	-	ETR	SLBR	-	-	1000?	-	-
1966-S508	2439396.50	1966 Sep 28	Polaris A2	-	A2P	-	-	ETR	SLBR	-	-	1000?	-	-
1966-S509	2439396.50	1966 Sep 28	Polaris A2	-	A2P	-	-	ETR	SLBR	-	-	1000?	-	-
1966-S535	2439409.17	1966 Oct 10 1610:03	Polaris A3	-	A3P-447	-	-	ETR	SLBR	-	-	1000?	-	-
1966-S574	2439430.18	1966 Oct 31 1615	Polaris A3	-	A3P-397	-	-	ETR	SLBR	-	-	1000?	-	-
1966-S575	2439430.20	1966 Oct 31 1615	Polaris A3	-	A3P-460	-	-	ETR	SLBR	-	-	1000?	-	-
1966-S516	2439443.50	1966 Nov 14 1645	Polaris A3	-	A3P-512	-	-	ETR	SLBR	-	-	1000?	-	-
1966-S517	2439443.50	1966 Nov 14 1645	Polaris A3	-	A3P-512	-	-	ETR	SLBR	-	-	1000?	-	-
1966-S525	2439444.20	1966 Nov 14 1650:02	Polaris A3	-	A3P-394	-	-	ETR	SLBR	-	-	1000?	-	-
1966-S526	2439447.17	1966 Nov 17 1609:14	Polaris A3	-	A3TX-1 (A3P-492)	-	-	ETR	SLBR	-	-	500?	-	-
1966-S528	2439458.18	1966 Nov 28 1615:02	Polaris A3	-	A3P-389	-	-	ETR	SLBR	-	-	1000?	-	-
1966-S557	2439458.20	1966 Nov 28 1645:02	Polaris A3	-	A3P-376	-	-	ETR	SLBR	-	-	1000?	-	-
1967-S52	2439457.19	1967 Jan 6 1635:46	Polaris A3	-	A3TX-2 (A3P-496)	-	-	ETR	SLBR	-	-	1000?	-	-
1967-S133	2439452.07	1967 Mar 2 1945:01	Polaris A3	-	A3TX-4 (A3P-531)	-	-	ETR	SLBR	-	-	1000?	-	-
1967-S141	2439455.61	1967 Mar 6 0245:01	Polaris A3	-	A3P-549	-	-	ETR	SLBR	-	-	1000?	-	-
1967-S169	2439456.48	1967 Apr 3 2325:01	Polaris A3	-	A3P-401	-	-	ETR	SLBR	-	-	1000?	-	-
1967-S253	2439460.25	1967 Apr 27 1800:01	Polaris A3	-	A3P-510	-	-	ETR	SLBR	-	-	1000?	-	-
1967-S560	2439462.50	1967 Jun 21	Polaris A3	-	A3TX-06 (A3P-566)	-	USN Mr 2 Mod 2 RV x 2	ETR	SLBR	-	-	500?	2660?	KHR?
1967-S561	2439462.50	1967 Jun 21	Polaris A3	-	A3TX-07 (A3P-573)	-	Antelope 5	ETR	SLBR	-	-	500?	2660?	KHR?
1967-A157	2439462.50	1967 Jun 21	Polaris A3	-	A3TX-06 (A3P-566)	-	Antelope 6	ETR	SLBR	-	-	500?	2660?	KHR?
1967-S315	2439464.50	1967 Jun 23	Polaris A2	-	A2	-	-	ETR	SLBR	-	-	1000?	-	-
1967-S316	2439464.50	1967 Jun 23	Polaris A2	-	A2	-	-	ETR	SLBR	-	-	1000?	-	-
1967-S317	2439464.50	1967 Jun 23	Polaris A2	-	A2	-	-	ETR	SLBR	-	-	1000?	-	-
1967-S318	2439464.50	1967 Jun 23	Polaris A2	-	A2	-	-	ETR	SLBR	-	-	1000?	-	-
1967-S329	2439467.50	1967 Jul 6	Polaris A2	-	A2P	-	-	ETR	SLBR	-	-	1000?	-	-
1967-S340	2439473.50	1967 Jul 8	Polaris A2	-	A2P	-	-	ETR	SLBR	-	-	1000?	-	-
1967-S352	2439703.14	1967 Jul 31 1518:04	Polaris A2	-	A2P-S29	-	-	ETR	SLBR	-	-	1000?	-	-
1967-S426	2439742.16	1967 Sep 6 1945:02	Polaris A3	-	A3P-377	-	-	ETR	SLBR	-	-	1000?	-	-
1967-S427	2439742.16	1967 Sep 6 1945:02	Polaris A3	-	A3P-377	-	-	ETR	SLBR	-	-	1000?	-	-
1967-S514	2439748.50	1967 Sep 15	Polaris A3	-	A3TX-1 (A3P-613)	-	Antelope 7	ETR	SLBR	-	-	1000?	-	-
1967-S515	2439748.50	1967 Nov 1 1715:07	Polaris A3	-	A3TX-3 (A3P-683)	-	Antelope 8	ETR	SLBR	-	-	1000?	-	-
1967-S516	2439748.50	1967 Nov 1	Polaris A3	-	A3P	-	-	ETR	SLBR	-	-	1000?	-	-
1967-S517	2439748.50	1967 Nov 1	Polaris A3	-	A3P	-	-	ETR	SLBR	-	-	1000?	-	-
1967-S519	2439748.50	1967 Nov 1	Polaris A3	-	A3P	-	-	ETR	SLBR	-	-	1000?	-	-
1967-S520	2439748.50	1967 Nov 1	Polaris A3	-	A3P	-	-	ETR	SLBR	-	-	1000?	-	-
1967-S521	2439748.50	1967 Nov 1	Polaris A3	-	A3P	-	-	ETR	SLBR	-	-	1000?	-	-
1967-S522	2439800.50	1967 Nov 6	Polaris A2	-	A2P	-	-	ETR	SLBR	-	-	1000?	-	-
1967-S523	2439800.50	1967 Nov 6	Polaris A2	-	A2P	-	-	ETR	SLBR	-	-	1000?	-	-
1967-S524	2439800.50	1967 Nov 6	Polaris A2	-	A2P	-	-	ETR	SLBR	-	-	1000?	-	-
1967-S525	2439800.50	1967 Nov 6	Polaris A2	-	A2P	-	-	ETR	SLBR	-	-	1000?	-	-
1967-S526	2439800.50	1967 Nov 6	Polaris A2	-	A2P	-	-	ETR	SLBR	-	-	1000?	-	-
1967-S527	2439800.50	1967 Nov 6	Polaris A2	-	A2P	-	-	ETR	SLBR	-	-	1000?	-	-
1967-S528	2439810.50	1967 Nov 25	Polaris A2	-	A2P	-	-	ETR	SLBR	-	-	1000?	-	-
1967-S529	2439810.50	1967 Nov 25	Polaris A2	-	A2P	-	-	ETR	SLBR	-	-	1000?	-	-
1967-S530	2439810.50	1967 Nov 25	Polaris A2	-	A2P	-	-	ETR	SLBR	-	-	1000?	-	-
1967-S531	2439810.50	1967 Nov 25	Polaris A2	-	A2P	-	-	ETR	SLBR	-	-	1000?	-	-
1967-S532	2439810.50	1967 Nov 25	Polaris A2	-	A2P	-	-	ETR	SLBR	-	-	1000?	-	-
1967-S533	2439810.50	1967 Nov 25	Polaris A2	-	A2P	-	-	ETR	SLBR	-	-	1000?	-	-
1967-S534	2439810.50	1967 Nov 25	Polaris A2	-	A2P	-	-	ETR	SLBR	-	-	1000?	-	-
1967-S535	2439810.50	1967 Nov 25	Polaris A2	-	A2P	-	-	ETR	SLBR	-	-	1000?	-	-
1967-S536	2439810.50	1967 Nov 25	Polaris A2	-	A2P	-	-	ETR	SLBR	-	-	1000?	-	-
1967-S537	2439810.50	1967 Nov 25	Polaris A2	-	A2P	-	-	ETR	SLBR	-	-	1000?	-	-
1967-S538	2439810.50	1967 Nov 25	Polaris A2	-	A2P	-	-	ETR	SLBR	-	-	1000?	-	-
1967-S539	2439810.50	1967 Nov 25	Polaris A2	-	A2P	-	-	ETR	SLBR	-	-	1000?	-	-
1967-S540	2439810.50	1967 Nov 25	Polaris A2	-	A2P	-	-	ETR	SLBR	-	-	1000?	-	-
1967-S541	2439810.50	1967 Nov 25	Polaris A2	-	A2P	-	-	ETR	SLBR	-	-	1000?	-	-
1967-S542	2439810.50	1967 Nov 25	Polaris A2	-	A2P	-	-	ETR	SLBR	-	-	1000?	-	-
1967-S543	2439810.50	1967 Nov 25	Polaris A2	-	A2P	-	-	ETR	SLBR	-	-	1000?	-	-
1967-S544	2439810.50	1967 Nov 25	Polaris A2	-	A2P	-	-	ETR	SLBR	-	-	1000?	-	-
1967-S545	2439810.50	1967 Nov 25	Polaris A2	-	A2P	-	-	ETR	SLBR	-	-	1000?	-	-
1967-S546	2439810.50	1967 Dec 6	Polaris A3	-	A3TX-03 (A3P-514)	-	Antelope 9	ETR	SLBR	-	-	500?	2660?	KHR
1967-S547	2439810.50	1967 Dec 6	Polaris A3	-	A3TX-05 (A3P-544)	-	Antelope 10	ETR	SLBR	-	-	500?	2660?	KHR
1967-S548	2439810.50	1967 Dec 6	Polaris A3	-	A3TX-06 (A3P-544)	-	Antelope 10	ETR	SLBR	-	-	500?	2660?	KHR
1967-S549	2439810.50	1967 Dec 6	Polaris A3	-	A3TX-06 (A3P-544)	-	Antelope 10	ETR	SLBR	-	-	500?	2660?	KHR
1967-S550	2439810.50	1967 Dec 6	Polaris A3	-	A3TX-06 (A3P-544)	-	Antelope 10	ETR	SLBR	-	-	500?	2660?	KHR
1967-S551	2439810.50	1967 Dec 6	Polaris A3	-	A3TX-06 (A3P-544)	-	Antelope 10	ETR	SLBR	-	-	500?	2660?	KHR
1967-S552	2439810.50	1967 Dec 6	Polaris A3	-	A3TX-06 (A3P-544)	-	Antelope 10	ETR	SLBR	-	-	500?	2660?	KHR
1967-S553	2439810.50	1967 Dec 6	Polaris A3	-	A3TX-06 (A3P-544)	-	Antelope 10	ETR	SLBR	-	-	500?	2660?	KHR
1967-S554	2439810.50	1967 Dec 6	Polaris A3	-	A3TX-06 (A3P-544)	-	Antelope 10	ETR	SLBR	-	-	500?	2660?	KHR
1967-S555	2439810.50	1967 Dec 6	Polaris A3	-	A3TX-06 (A3P-544)	-	Antelope 10	ETR	SLBR	-	-	500?	2660?	KHR
1967-S556	2439810.50	1967 Dec 6	Polaris A3	-	A3TX-06 (A3P-544)	-	Antelope 10	ETR	SLBR	-	-	500?	2660?	KHR
1967-S557	2439810.50	1967 Dec 6	Polaris A3	-	A3TX-06 (A3P-544)	-	Antelope 10	ETR	SLBR	-	-	500?	2660?	KHR
1967-S558	2439810.50	1967 Dec 6	Polaris A3	-	A3TX-06 (A3P-544)	-	Antelope 10	ETR	SLBR	-	-	500?	2660?	KHR
1967-S559	2439810.50	1967 Dec 6	Polaris A3	-	A3TX-06 (A3P-544)	-	Antelope 10	ETR	SLBR	-	-	500?	2660?	KHR
1967-S560	2439810.50	1967 Dec 6	Polaris A3	-	A3TX-06 (A3P-544)	-	Antelope 10	ETR	SLBR	-	-	500?	2660?	KHR
1967-S561	2439810.50	1967 Dec 6	Polaris A3	-	A3TX-06 (A3P-544)	-	Antelope 10	ETR	SLBR	-	-	500?	2660?	KHR
1967-S562	2439810.50	1967 Dec 6	Polaris A3	-	A3TX-06 (A3P-544)	-	Antelope 10	ETR	SLBR	-	-	500?	2660?	KHR
1967-S563	2439810.50	1967 Dec 6	Polaris A3	-	A3TX-06 (A3P-544)	-	Antelope 10	ETR	SLBR	-	-	500?	2660?	KHR
1967-S564	2439810.50	1967 Dec 6	Polaris A3	-	A3TX-06 (A3P-544)	-	Antelope 10	ETR	SLBR	-	-	500?	2660?	KHR
1967-S565	2439810.50	1967 Dec 6	Polaris A3	-	A3TX-06 (A3P-544)	-	Antelope 10	ETR	SLBR	-	-	500?	2660?	KHR
1967-S566	2439810.50	1967 Dec 6	Polaris A3	-	A3TX-06 (A3P-544)	-	Antelope 10	ETR	SLBR	-	-	500?	2660?	KHR
1967-S567	2439810.50	1967 Dec 6	Polaris A3	-	A3TX-06 (A3P-544									



Launch Mission

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Mission	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee_Km	Range_Km	Dest
1971-5202	2441034.50	1971 Mar 24	Polaris A3	-	A3	FOT	-	ETR	SLBM	-	-	10007	-	-
1971-5203	2441034.50	1971 Mar 24	Polaris A3	-	A3	FOT	-	ETR	SLBM	-	-	10007	-	-
1971-5214	2441040.50	1971 Mar 30	Polaris A2	-	A2	FOT	-	ETR	SLBM	-	-	10007	-	-
1971-5215	2441040.50	1971 Mar 30	Polaris A2	-	A2	FOT	-	ETR	SLBM	-	-	10007	-	-
1971-5216	2441040.50	1971 Mar 30	Polaris A2	-	A2	FOT	-	ETR	SLBM	-	-	10007	-	-
1971-5217	2441040.50	1971 Mar 30	Polaris A2	-	A2	FOT	-	ETR	SLBM	-	-	10007	-	-
1971-5218	2441040.50	1971 Mar 30	Polaris A2	-	A2	FOT	-	ETR	SLBM	-	-	10007	-	-
1971-5219	2441040.50	1971 Mar 30	Polaris A2	-	A2	FOT	-	ETR	SLBM	-	-	10007	-	-
1971-5220	2441040.50	1971 Mar 30	Polaris A2	-	A2	FOT	-	ETR	SLBM	-	-	10007	-	-
1971-5233	2441056.50	1971 Apr 15	Polaris A2	-	A2	FOT	-	ETR	SLBM	-	-	10007	-	-
1971-5269	2441136.50	1971 Aug 23	Polaris A2	-	A2S-01	Safeguard M1-7	-	EAG-154	LP4	-	-	38807	-	KRR
1971-5607	2441136.50	1971 Aug 23	Polaris A2	-	A2S-03	Safeguard M1-8	-	EAG-154	LP4	-	-	38807	-	KRR
1971-5608	2441136.50	1971 Aug 23	Polaris A2	-	A2	FOT	-	ETR	SLBM	-	-	10007	-	-
1971-5619	2441136.50	1971 Aug 23	Polaris A2	-	A2	FOT	-	ETR	SLBM	-	-	10007	-	-
1971-5620	2441136.50	1971 Sep 1	Polaris A2	-	A2	FOT	-	ETR	SLBM	-	-	10007	-	-
1971-5621	2441136.50	1971 Sep 1	Polaris A2	-	A2	FOT	-	ETR	SLBM	-	-	10007	-	-
1971-5622	2441136.50	1971 Sep 1	Polaris A2	-	A2	FOT	-	ETR	SLBM	-	-	10007	-	-
1971-5623	2441136.50	1971 Sep 1	Polaris A2	-	A2	FOT	-	ETR	SLBM	-	-	10007	-	-
1971-5624	2441136.50	1971 Sep 1	Polaris A2	-	A2	FOT	-	ETR	SLBM	-	-	10007	-	-
1971-5625	2441136.50	1971 Sep 2	Polaris A2	-	A2	FOT	-	ETR	SLBM	-	-	10007	-	-
1971-5658	2441265.50	1971 Nov 10	Polaris A2	-	A2S-02	Safeguard M2-5	-	EAG-154	LP4	-	-	38807	-	KRR
1971-5659	2441265.50	1971 Nov 10	Polaris A2	-	A2S-04	Safeguard M2-6	-	EAG-154	LP4	-	-	38807	-	KRR
1971-5660	2441265.50	1971 Nov 12	Polaris A2	-	A2S-01	Safeguard M2-3	-	EAG-154	LP4	-	-	38807	-	KRR
1972-565	2441352.18	1972 Feb 4 1615	Polaris A3	A3T	A3T	DASO	-	DASO	SLBM	-	-	10007	-	-
1972-5100	2441353.19	1972 Mar 6 1630	Polaris A3	A3T	A3T	DASO	-	DASO	SLBM	-	-	10007	-	-
1972-5178	2441352.17	1972 Apr 24 1600	Polaris A3	A3T	A3T	DASO	-	DASO	SLBM	-	-	10007	-	-
1972-5330	2441356.12	1972 Oct 5 1500	Polaris A3	A3T	A3T	DASO	-	DASO	SLBM	-	-	10007	-	-
1973-567	2441727.19	1973 Feb 13 1629:59	Polaris A3	A3T	A3T	DASO	-	DASO	SLBM	-	-	10007	-	-
1974-568	2442084.50	1974 Feb 6	Polaris A3	A3T	A3T	FOT	-	ETR	SLBM	-	-	10007	-	-
1974-569	2442084.50	1974 Feb 6	Polaris A3	A3T	A3T	FOT	-	ETR	SLBM	-	-	10007	-	-
1974-591	2442084.50	1974 Feb 6	Polaris A3	A3T	A3T	FOT	-	ETR	SLBM	-	-	10007	-	-
1974-592	2442084.50	1974 Feb 6	Polaris A3	A3T	A3T	FOT	-	ETR	SLBM	-	-	10007	-	-
1974-596	2442084.50	1974 Feb 6	Polaris A3	A3T	A3T	FOT	-	ETR	SLBM	-	-	10007	-	-
1974-5208	2442139.12	1974 May 31 1459:59	Polaris A3	A3T	A3T	DASO	-	DASO	SLBM	-	-	10007	-	-
1974-5212	2442207.50	1974 Jun 9	Polaris A3	A3T	A3T	FOT	-	ETR	SLBM	-	-	10007	-	-
1974-5213	2442207.50	1974 Jun 9	Polaris A3	A3T	A3T	FOT	-	ETR	SLBM	-	-	10007	-	-
1974-5214	2442207.50	1974 Jun 9	Polaris A3	A3T	A3T	FOT	-	ETR	SLBM	-	-	10007	-	-
1974-5215	2442207.50	1974 Jun 9	Polaris A3	A3T	A3T	FOT	-	ETR	SLBM	-	-	10007	-	-
1974-5216	2442207.50	1974 Jun 9	Polaris A3	A3T	A3T	FOT	-	ETR	SLBM	-	-	10007	-	-
1974-5259	2442426.12	1974 Jul 16 1459:59	Polaris A3	A3T	A3T	DASO	-	DASO	SLBM	-	-	10007	-	-
1974-5276	2442426.14	1974 Jul 26 1512:00	Polaris A3	A3T	A3T	DASO	-	DASO	SLBM	-	-	10007	-	-
1974-5277	2442426.15	1974 Aug 15 1512:59	Polaris A3	A3T	A3T	DASO	-	DASO	SLBM	-	-	10007	-	-
1974-5285	2442438.12	1974 Aug 27 1500:00	Polaris A3	A3T	A3T	FOT	-	ETR	SLBM	-	-	10007	-	-
1974-5348	2442338.50	1974 Oct 15	Polaris A3	A3T	A3T	FOT	-	ETR	SLBM	-	-	10007	-	-
1974-5349	2442338.50	1974 Oct 15	Polaris A3	A3T	A3T	FOT	-	ETR	SLBM	-	-	10007	-	-
1974-5350	2442338.50	1974 Oct 15	Polaris A3	A3T	A3T	FOT	-	ETR	SLBM	-	-	10007	-	-
1974-5351	2442338.50	1974 Oct 15	Polaris A3	A3T	A3T	FOT	-	ETR	SLBM	-	-	10007	-	-
1974-5352	2442338.50	1974 Oct 15	Polaris A3	A3T	A3T	FOT	-	ETR	SLBM	-	-	10007	-	-
1975-5126	2442351.12	1975 Apr 12 1459	Polaris A3	A3T	A3T	DASO	-	DASO	SLBM	-	-	10007	-	-
1975-5129	2442352.13	1975 Apr 26 1510	Polaris A3	A3T	A3T	DASO	-	DASO	SLBM	-	-	10007	-	-
1975-5201	2442351.50	1975 Jun 18	Polaris A3	A3T	A3T	FOT	-	ETR	SLBM	-	-	10007	-	-
1975-5202	2442351.50	1975 Jun 18	Polaris A3	A3T	A3T	FOT	-	ETR	SLBM	-	-	10007	-	-
1975-5203	2442351.50	1975 Jun 18	Polaris A3	A3T	A3T	FOT	-	ETR	SLBM	-	-	10007	-	-
1975-5204	2442351.50	1975 Jun 18	Polaris A3	A3T	A3T	FOT	-	ETR	SLBM	-	-	10007	-	-
1975-5205	2442351.50	1975 Jun 18	Polaris A3	A3T	A3T	FOT	-	ETR	SLBM	-	-	10007	-	-
1975-5206	2442351.50	1975 Jun 18	Polaris A3	A3T	A3T	FOT	-	ETR	SLBM	-	-	10007	-	-
1975-5207	2442351.50	1975 Jun 18	Polaris A3	A3T	A3T	FOT	-	ETR	SLBM	-	-	10007	-	-
1975-5208	2442351.50	1975 Jun 18	Polaris A3	A3T	A3T	FOT	-	ETR	SLBM	-	-	10007	-	-
1975-5209	2442351.50	1975 Jun 18	Polaris A3	A3T	A3T	FOT	-	ETR	SLBM	-	-	10007	-	-
1975-5210	2442351.50	1975 Jun 18	Polaris A3	A3T	A3T	FOT	-	ETR	SLBM	-	-	10007	-	-
1975-5211	2442351.50	1975 Jun 18	Polaris A3	A3T	A3T	FOT	-	ETR	SLBM	-	-	10007	-	-
1975-5212	2442351.50	1975 Jun 18	Polaris A3	A3T	A3T	FOT	-	ETR	SLBM	-	-	10007	-	-
1975-5213	2442351.50	1975 Jun 18	Polaris A3	A3T	A3T	FOT	-	ETR	SLBM	-	-	10007	-	-
1975-5214	2442351.50	1975 Jun 18	Polaris A3	A3T	A3T	FOT	-	ETR	SLBM	-	-	10007	-	-
1975-5215	2442351.50	1975 Jun 18	Polaris A3	A3T	A3T	FOT	-	ETR	SLBM	-	-	10007	-	-
1975-5216	2442351.50	1975 Jun 18	Polaris A3	A3T	A3T	FOT	-	ETR	SLBM	-	-	10007	-	-
1975-5217	2442351.50	1975 Jun 18	Polaris A3	A3T	A3T	FOT	-	ETR	SLBM	-	-	10007	-	-
1975-5218	2442351.50	1975 Jun 18	Polaris A3	A3T	A3T	FOT	-	ETR	SLBM	-	-	10007	-	-
1975-5219	2442351.50	1975 Jun 18	Polaris A3	A3T	A3T	FOT	-	ETR	SLBM	-	-	10007	-	-
1975-5220	2442351.50	1975 Jun 18	Polaris A3	A3T	A3T	FOT	-	ETR	SLBM	-	-	10007	-	-
1975-5221	2442351.50	1975 Jun 18	Polaris A3	A3T	A3T	FOT	-	ETR	SLBM	-	-	10007	-	-
1975-5222	2442351.50	1975 Jun 18	Polaris A3	A3T	A3T	FOT	-	ETR	SLBM	-	-	10007	-	-
1975-5223	2442351.50	1975 Jun 18	Polaris A3	A3T	A3T	FOT	-	ETR	SLBM	-	-	10007	-	-
1975-5224	2442351.50	1975 Jun 18	Polaris A3	A3T	A3T	FOT	-	ETR	SLBM	-	-	10007	-	-
1975-5225	2442351.50	1975 Jun 18	Polaris A3	A3T	A3T	FOT	-	ETR	SLBM	-	-	10007	-	-
1975-5226	2442351.50	1975 Jun 18	Polaris A3	A3T	A3T	FOT	-	ETR	SLBM	-	-	10007	-	-
1975-5227	2442351.50	1975 Jun 18	Polaris A3	A3T	A3T	FOT	-	ETR	SLBM	-	-	10007	-	-
1975-5228	2442351.50	1975 Jun 18	Polaris A3	A3T	A3T	FOT	-	ETR	SLBM	-	-	10007	-	-
1975-5229	2442351.50	1975 Jun 18	Polaris A3	A3T	A3T	FOT	-	ETR	SLBM	-	-	10007	-	-
1975-5230	2442351.50	1975 Jun 18	Polaris A3	A3T	A3T	FOT	-	ETR	SLBM	-	-	10007	-	-
1975-5231	2442351.50	1975 Jun 18	Polaris A3	A3T	A3T	FOT	-	ETR	SLBM	-	-	10007	-	-
1975-5232	2442351.50	1975 Jun 18	Polaris A3	A3T	A3T	FOT	-	ETR	SLBM	-	-	10007	-	-
1975-5233	2442351.50	1975 Jun 18	Polaris A3	A3T	A3T	FOT	-	ETR	SLBM	-	-	10007	-	-
1975-5234	2442351.50	1975 Jun 18	Polaris A3	A3T	A3T	FOT	-	ETR	SLBM	-	-	10007	-	-
1975-5235	2442351.50	1975 Jun 18	Polaris A3	A3T	A3T	FOT	-	ETR	SLBM	-	-	10007	-	-
1975-5243	2443943.42	1978 Nov 30 2200	Polaris A3	A3T	A3T	CHEMVALINE P2	-	CC	LC29	-	-	10007	-	-
1979-566	2443925.21	1979 Feb 20 1700	Polaris A3	A3T	A3T	DASO?	-	CC	LC29	-	-	10007	-	-
1977-5245	2443399.48	1977 Jul 14 1600:00	Polaris A3	A3T	A3T	CHEMVALINE P-A	-	CC	LC29	-	-	10007	-	-
1977-5246	2443399.48	1977 Sep 12 2330	Polaris A3	A3T	A3T	CHEMVALINE P-B	-	CC	LC29	-	-	10007	-	-
1977-5278	2443456.44	1977 Nov 8 2230	Polaris A3	A3T	A3T	DASO	-	ETR	SLBM	-	-	10007	-	-
1978-5169	2443688.38	1978 Jun 28 2100	Polaris A3	A3T	A3T	FOT	-	ETR	SLBM	-	-	10007	-	-
1978-5175	2443696.50	1978 Jul 7	Polaris A3	A3T	A3T	FOT	-	ETR	SLBM	-	-	10007	-	-
1978-5176	2443696.50	1978 Jul 7	Polaris A3	A3T	A3T	FOT	-	ETR	SLBM	-	-	10007	-	-
1978-5177	2443701.50	1978 Jul 12	Polaris A3	A3T	A3T	FOT	-	ETR	SLBM	-	-	10007	-	-
1978-5178	2443701.50	1978 Jul 12	Polaris A3	A3T	A3T	FOT	-	ETR	SLBM	-	-	10007	-	-
1978-5179	2443701.50	1978 Jul 12	Polaris A3	A3T	A3T	FOT	-	ETR	SLBM	-	-	10007	-	-
1978-5180	2443717.48	1978 Jul 27 2330	Polaris A3	A3T	A3T	FOT	-	ETR	SLBM	-	-	10007	-	-
1978-														

Launch Mission

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Mission	FlightCode	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee_Km	Range_Km	Dest
1979-5111	2443967.50	1979 Apr 4	Polaris A3	A3T	A3TA	FUT	-	-	SBBN-608	WTR	LP5	-	-	1000?	-	-
1979-5112	2443967.50	1979 Apr 4	Polaris A3	A3T	A3TA	FUT	-	-	SBBN-608	WTR	LP5	-	-	1000?	-	-
1979-5114	2443968.49	1979 Apr 4 2347	Polaris A3	A3T	A3TK P-3	CHEVALINE P3	-	-	-	CC	LC29A	-	-	1000?	-	-
1979-5117	2443974.50	1979 Apr 11	Polaris A3	A3T	A3TA	FUT	-	-	SBBN-599	WTR	LP5	-	-	1000?	-	-
1979-5118	2443974.50	1979 Apr 11	Polaris A3	A3T	A3TA	FUT	-	-	SBBN-599	WTR	LP5	-	-	1000?	-	-
1979-5119	2443974.50	1979 Apr 11	Polaris A3	A3T	A3TA	FUT	-	-	SBBN-599	WTR	LP5	-	-	1000?	-	-
1979-5158	2444060.56	1979 Jul 6 0120	Polaris A3	A3T	A3TK C9E	CHEVALINE P4	-	-	-	CC	LC29	-	-	1000?	-	-
1979-5157	2444117.68	1979 Sep 1 0416	Polaris A3	A3T	A3TK P-5	CHEVALINE P5	-	-	-	CC	LC29A	-	-	1000?	-	-
1979-5239	2444186.42	1979 Nov 8 2200	Polaris A3	A3T	A3TK P-6	CHEVALINE P6	-	-	-	CC	LC29A	-	-	1000?	-	-
1980-586	2444320.48	1980 Mar 21 2330	Polaris A3	A3T	A3TK PT-2	CHEVALINE PT2	-	-	-	CC	LC29	-	-	1000?	-	-
1980-586	2444340.51	1980 Mar 21 2330	Polaris A3	A3T	A3TK PT-1	CHEVALINE PT1	-	-	-	CC	LC29	-	-	1000?	-	-
1980-5110	2444375.52	1980 May 19 0030	Polaris A3	A3T	A3TK PT-3	CHEVALINE PT3	-	-	UR-526	ETR	SLBR	-	-	1000?	-	-
1980-5159	2444558.33	1980 Nov 14 2000	Polaris A3	A3T	A3TK PS-1	CHEVALINE PS1	-	-	UR-526	ETR	SLBR	-	-	1000?	-	-
1980-5209	2444562.19	1980 Nov 18 1630	Polaris A3	A3T	A3TK PS-2	CHEVALINE PS2	-	-	UR-526	ETR	SLBR	-	-	1000?	-	-
1982-549	2445000.19	1982 Jan 30 1630	Polaris A3	A3T	A3TK PS-2	CHEVALINE PS-2	-	-	UR-526	ETR	SLBR	-	-	1000?	-	-
1982-552	2445002.27	1982 Feb 1 1830	Polaris A3	A3T	A3TK	CHEVALINE DNSO-1	-	-	UR-527	ETR	SLBR	-	-	1000?	-	-
1982-554	2445004.19	1982 Feb 3 1630	Polaris A3	A3T	A3TK	CHEVALINE DNSO-1	-	-	UR-527	ETR	SLBR	-	-	1000?	-	-
1982-554	2445009.27	1982 Feb 8 1630	Polaris A3	A3T	A3TK	CHEVALINE DNSO-1	-	-	UR-527	ETR	SLBR	-	-	1000?	-	-
1983-5101	2445470.16	1983 May 16 1546	Polaris A3	A3T	A3TK	CHEVALINE DNSO-2	-	-	UR-527	ETR	SLBR	-	-	1000?	-	-
1983-5102	2445471.15	1983 Jun 9 1530	Polaris A3	A3T	A3TK	CHEVALINE DNSO-2	-	-	UR-527	ETR	SLBR	-	-	1000?	-	-
1983-424	2445498.12	1983 Jun 11 1643	Polaris A3	A3T	A3TK	CHEVALINE DNSO-2	-	-	UR-527	ETR	SLBR	-	-	1000?	-	-
1983-5110	2445498.17	1983 Jun 9 1605	Polaris A3	A3T	A3TK	CHEVALINE DNSO-2	-	-	UR-527	ETR	SLBR	-	-	1000?	-	-
1983-5112	2445497.12	1983 Jun 11 1500	Polaris A3	A3T	A3TK	CHEVALINE DNSO-2	-	-	UR-527	ETR	SLBR	-	-	1000?	-	-
1983-5113	2445497.20	1983 Jun 11 1500	Polaris A3	A3T	A3TK	CHEVALINE DNSO-2	-	-	UR-527	ETR	SLBR	-	-	1000?	-	-
1986-576	2446204.54	1986 May 19 0955	Polaris A3	A3T	A3TK	CHEVALINE DNSO-2	-	-	UR-522	ETR	SLBR	-	-	1000	-	-
1986-404	2446205.75	1986 May 20 0900	Polaris A3	A3T	A3TK	CHEVALINE DNSO-3	-	-	UR-522	ETR	SLBR	-	-	1	-	-
1986-581	2446226.65	1986 Jun 10 0926	Polaris A3	A3T	A3TK	CHEVALINE DNSO-3	-	-	UR-522	ETR	SLBR	-	-	1000	-	-
1986-587	2446637.44	1986 Jul 25 2230	Polaris A3	A3T	A3TK/A3R	CHEVALINE DNSO-4 PEH	-	-	UR-527	ETR	SLBR	-	-	1000?	-	-
1986-588	2446637.59	1986 Jul 25 0213	Polaris A3	A3T	A3TK/A3R	CHEVALINE DNSO-4 PEH	-	-	UR-527	ETR	SLBR	-	-	1000?	-	-
1986-578	2446644.43	1986 Aug 1 2215	Polaris A3	A3T	A3TK/A3R	CHEVALINE DNSO-4 PEH	-	-	UR-527	ETR	SLBR	-	-	1000?	-	-
1987-576	2446644.57	1986 Aug 2 0135	Polaris A3	A3T	A3TK/A3R	CHEVALINE DNSO-4 PEH	-	-	UR-527	ETR	SLBR	-	-	1000?	-	-
1987-579	2446901.89	1987 Apr 16 0925	Polaris A3	A3T	A3TK	CHEVALINE CNF	-	-	UR-523	ETR	SLBR	-	-	1000?	-	-
1987-408	2446903.62	1987 May 18 0300	Polaris A3	A3T	A3TK	CHEVALINE CNF	-	-	UR-523	ETR	SLBR	-	-	5	-	-
1987-585	2446925.96	1987 May 10 1107	Polaris A3	A3T	A3TK	CHEVALINE CNF	-	-	UR-523	ETR	SLBR	-	-	900?	-	KHR
1993-556	2449445.36	1993 Feb 26 2045	STARS	-	FTU-1	FTU-1	Chevaline	-	-	KAU	LC42	-	-	10?	-	-
1994-550	2449224.92	1994 Jul 22	STARS	-	W-1 STARS II	W-1 STARS II	26 Mock Target RVs	-	-	KAU	LC42	-	-	999	-	KHR
1996-554	2460527.15	1996 Aug 31 1541:49	STARS	-	W-2 STARS II	W-2 STARS II	-	-	-	KAU	LC42	-	-	10?	-	-
2001-403	2462223.26	2001 Nov 9 1614	STARS	-	W-3 WGRN	W-3 WGRN	-	-	-	KLC	LP2	-	-	1000?	-	-
2004-571	2463594.74	2004 Dec 15 0945	STARS	-	W-4 WGRN	W-4 WGRN	-	-	-	KLC	LP2	-	-	1000?	-	-
2006-506	2463740.77	2006 Feb 14 0922	STARS	-	FT-13c Target	FT-13c Target	-	-	-	KLC	LP2	-	-	1000?	-	-
2006-506	2463740.77	2006 Feb 21 1709	STARS	-	FT-13c Target	FT-13c Target	-	-	-	KLC	LP2	-	-	1000?	-	-
2006-506	2463890.22	2006 Sep 22 1729	STARS	-	W-6 FT04-1	W-6 FT04-1 Target	-	-	-	KLC	LP2	-	-	1000?	-	-
2007-832	2464275.33	2007 Sep 25 1415	STARS	-	W-9	W-9 Target	-	-	-	KLC	LP2	-	-	400?	-	-
2008-586	2464626.33	2007 Sep 28 0045	STARS	-	FTX-03	FTX-03 Target	-	-	-	KLC	LP2	-	-	1000?	-	-
2008-870	2464696.31	2008 Jul 5 2147	STARS	-	FTX-03	FTX-03a Target	-	-	-	KLC	LP2	-	-	1000?	-	-
2011-857	2464890.98	2011 Nov 17 1130	STARS	-	AHW/FTIA	AHW/FTIA	-	-	-	KAU	LP2	-	-	1000?	-	-
2017-894	2465894.85	2014 Aug 25 0834F	STARS	-	AHW/FTIA	AHW/FTIA	-	-	-	KAU	LP2	-	-	1000?	-	-
2017-894	2465897.04	2017 Oct 30 1900	STARS	-	CPS FE-1	CPS FE-1	-	-	-	KAU	LP2	-	-	1?	-	-
2020-517	2465926.85	2020 Mar 20 0830	STARS	-	CPS FE-2	CPS FE-2	-	-	-	KAU	LP2	-	-	500?	-	-



Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Agency	Launch_Code	Group	Category	LTcite	Cite	Notes
1956-A125	2436471.22	1956 Sep 24 1716	Polaris AX	-	AX-1	USNSPO	MF	-	Test	Clearj95/Wire	-	-
1956-A136	2436491.50	1956 Oct 15	Polaris AX	-	AX-2	USNSPO	MF	-	Test	Clearj95	-	-
1956-A171	2436568.14	1956 Dec 30 1528	Polaris AX	-	AX-3	USNSPO	MF	-	Test	Clearj95/Wire	-	-
1959-M03	2436588.16	1959 Jan 19 1552	Polaris AX	-	AX-4	USNSPO	MF	-	Test	Clearj95/Wire	-	-
1959-A36	2436627.30	1959 Feb 27 1916	Polaris AX	-	AX-5	USNSPO	MF	-	Test	Clearj95/Wire	-	-
1959-S82	2436679.15	1959 Apr 20 1534	Polaris AX	-	AX-6	USNSPO	MS	-	Test	Clearj95/Wire	-	-
1959-S85	2436697.31	1959 May 8 1928	Polaris AX	-	AX-8	USNSPO	MS	-	Test	Clearj95/Wire	-	-
1959-A78	2436707.47	1959 May 18 2316	Polaris AX	-	AX-7	USNSPO	MF	-	Test	Clearj95/Wire (EST)	-	-
1959-A99	2436732.29	1959 Jun 12 1957	Polaris AX	-	AX-10	USNSPO	MF	-	Test	Clearj95/Wire (EST)	-	-
1959-S98	2436749.15	1959 Jun 29 1542	Polaris AX	-	AX-9	USNSPO	MS	-	Test	Clearj95/Wire	-	-
1959-A117	2436765.21	1959 Jul 15 1659	Polaris AX	-	AX-11	USNSPO	MF	-	Test	Clearj95/Wire	-	-
1959-A132	2436787.37	1959 Aug 6 2048	Polaris AX	-	AX-15	USNSPO	MF	-	Test	Clearj95/Wire	Clearj95	EST
1959-S140	2436795.39	1959 Aug 14 2124	Polaris AX	-	AX-13	USNSPO	MS	-	Test	Clearj95	Clearj95	EST
1959-A144	2436806.19	1959 Aug 26 1633	Polaris AX	-	AX-18	USNSPO	MF	-	Test	Clearj95	Clearj95	-
1959-S151	2436808.20	1959 Aug 26 1633	Polaris AX	-	AX-22	USNSPO	MS	-	Test	Clearj95	Clearj95	-
1959-S182	2436833.27	1959 Sep 21 1529	Polaris AX	-	AX-14	USNSPO	MS	-	Test	Clearj95	Clearj95	-
1959-A166	2436840.21	1959 Sep 26 1706	Polaris AX	-	AX-14	USNSPO	MF	-	Test	Clearj95	Clearj95	-
1959-A169	2436844.26	1959 Oct 2 1811	Polaris AX	-	AX-20	USNSPO	MF	-	Test	Clearj95/Wire	-	-
1959-A173	2436854.26	1959 Oct 12 1518	Polaris AX	-	AX-2	USNSPO	MF	-	Test	Clearj95/Wire	-	-
1959-S248	2436893.22	1959 Nov 20 1711	Polaris AX	-	AX-3	USNSPO	MS	-	Test	Clearj95/Wire	-	-
1959-S268	2436910.34	1959 Dec 7 2013	Polaris AX	-	AX-4	USNSPO	MS	-	Test	Clearj95/Wire	-	-
1959-S268	2436918.70	1959 Dec 16 0450	Polaris AX	-	AX-6	USNSPO	MF	-	Test	Clearj95/Wire	-	-
1959-A210	2436926.26	1959 Dec 23 2007	Polaris AX	-	AX-5	USNSPO	MF	-	Test	Clearj95/Wire	-	-
1960-S07	2436941.62	1960 Jan 8 0252	Polaris AX	-	AX-7	USNSPO	MS	-	Test	UP1	Clearj95/Wire	EST
1960-S16	2436954.36	1960 Jan 13 2107	Polaris AX	-	AX-6	USNSPO	MS	-	Test	Clearj95/Wire	Clearj95	-
1960-S23	2436961.38	1960 Jan 20 2034	Polaris AX	-	AX-9	USNSPO	MS	-	Test	Clearj95/Wire	Clearj95	-
1960-S30	2436969.43	1960 Jan 27 2102	Polaris AX	-	AX-10	USNSPO	MS	-	Test	Clearj95/Wire	Clearj95	-
1960-S33	2436974.50	1960 Feb 10	Polaris AX	-	AX-11	USNSPO	MS	-	Test	Clearj95/Wire	Clearj95	-
1960-S45	2436990.50	1960 Feb 26	Polaris AX	-	AX-12	USNSPO	MS	-	Test	Clearj95/Wire	Clearj95	-
1960-S50	2437002.50	1960 Mar 9	Polaris AX	-	AX-13	USNSPO	MF	-	Test	Clearj95	Clearj95	-
1960-S55	2437011.50	1960 Mar 16	Polaris AX	-	AX-14	USNSPO	MS	-	Test	Clearj95	Clearj95	-
1960-S62	2437018.50	1960 Mar 25	Polaris AX	-	AX-16	USNSPO	MS	-	Test	Clearj95	Clearj95	-
1960-S67	2437023.54	1960 Mar 26 0103	Polaris AX	-	AX-16	USNSPO	MF	-	Test	Clearj95	Clearj95	-
1960-A96	2437039.43	1960 Apr 14 2221	Polaris AX	-	STV-2A-2	USNSPO	MS	-	Test	Clearj95/Wire	-	-
1960-S65	2437042.50	1960 Apr 16	Polaris AX	-	AX-19	USNSPO	MF	-	Test	Clearj95	Clearj95	-
1960-S65	2437050.58	1960 Apr 26 0113	Polaris AX	-	AX-22	USNSPO	MS	-	Test	Clearj95/Wire (EDT)	-	-
1960-S67	2437054.49	1960 Apr 29 0345	Polaris AX	-	AX-28	USNSPO	MS	-	Test	Clearj95/Wire (EDT)	-	-
1960-S68	2437054.66	1960 Apr 30 0345	Polaris AX	-	AX-28	USNSPO	MS	-	Test	Clearj95/Wire (EDT)	-	-
1960-S98	2437073.27	1960 May 18 1634	Polaris AX	-	AX-30	USNSPO	MS	-	Test	Clearj95/Wire	Clearj95	EST
1960-S101	2437078.16	1960 May 23 1539	Polaris AX	-	AX-37	USNSPO	MF	-	Test	Clearj95/Wire	Clearj95	EST
1960-S136	2437083.16	1960 Jun 23 0752	Polaris AX	-	AX-32	USNSPO	MS	-	Test	Clearj95/Wire	Clearj95	EST
1960-S150	2437108.74	1960 Jun 23 0852	Polaris AX	-	AX-34	USNSPO	MS	-	Test	Clearj95/Wire	Clearj95	EST
1960-A159	2437115.16	1960 Jun 30 0552	Polaris AX	-	AX-40	USNSPO	MS	-	Test	Clearj95/Wire	Clearj95	-
1960-A161	2437122.50	1960 Jul 7 1555	Polaris AX	-	AX-39	USNSPO	MF	-	Test	Clearj95/Wire	Clearj95	-
1960-S176	2437132.76	1960 Jul 15 0810	Polaris AX	-	AX-42	USNSPO	MS	-	Test	Clearj95/Wire	Clearj95	-
1960-S184	2437136.24	1960 Jul 19 1600	Polaris AX	-	AX-42	USNSPO	MS	-	Test	Clearj95/Wire	Clearj95	-
1960-S186	2437138.26	1960 Jul 20 2032	Polaris AX	-	AX-1 (A1XP-E)	USNSPO	MS	-	Test	Clearj95/Wire	Clearj95	-
1960-S205	2437146.38	1960 Jul 30 2020	Polaris AX	-	AX-2 (A1XP-B)	USNSPO	MS	-	Test	Clearj95/Wire	Clearj95	-
1960-A185	2437147.10	1960 Aug 3 0058	Polaris AX	-	AX-3 (A1XP-3)	USNSPO	MF	-	Test	Clearj95/Wire	Clearj95	-
1960-A185	2437149.54	1960 Aug 3 0058	Polaris AX	-	AX-3 (A1XP-2)	USNSPO	MF	-	Test	Clearj95/Wire	Clearj95	-
1960-S215	2437151.23	1960 Aug 4 1728	Polaris AX	-	AX-34	USNSPO	MS	-	Test	Clearj95/Wire	Clearj95	-
1960-S215	2437159.27	1960 Aug 12 1928	Polaris AX	-	AX-44	USNSPO	MS	-	Test	Clearj95/Wire	Clearj95	-
1960-A205	2437165.64	1960 Aug 19 0320	Polaris AX	-	AX-43	USNSPO	MS	-	Test	Clearj95/Wire	Clearj95	-
1960-A205	2437171.36	1960 Aug 24 2043	Polaris AX	-	AX-43	USNSPO	MS	-	Test	Clearj95/Wire	Clearj95	-
1960-A219	2437180.12	1960 Sep 2 1500	Polaris AX	-	AX-5 (A1XP-7)	USNSPO	MF	-	Test	Clearj95/Wire	Clearj95	-
1960-A226	2437193.39	1960 Sep 13 1755	Polaris AX	-	AXE-5 (A1FP-10)	USNSPO	MF	-	Test	Clearj95/Wire	Clearj95	-
1960-A226	2437193.39	1960 Sep 15 2128	Polaris AX	-	AXE-6 (A1FP-11)	USNSPO	MF	-	Test	Clearj95/Wire	Clearj95	-
1960-A226	2437200.42	1960 Sep 22 2205	Polaris AX	-	AXE-7 (A1FP-3)	USNSPO	MF	-	Test	Clearj95/Wire	Clearj95	-
1960-A227	2437200.55	1960 Sep 23 0105?	Polaris AX	-	AXE-8 (A1FP-4)	USNSPO	MF	-	Test	Clearj95/Wire	Clearj95	-
1960-S282	2437201.58	1960 Sep 24 0202	Polaris AX	-	AXE-8 (A1FP-4)	USNSPO	MS	-	Test	Clearj95/Wire (+3h)	-	-
1960-S307	2437213.17	1960 Sep 24 0202	Polaris AX	-	AXE-8 (A1FP-4)	USNSPO	MS	-	Test	Clearj95/Wire (+3h)	-	-
1960-S313	2437217.17	1960 Oct 5 1604	Polaris AX	-	AX-49	USNSPO	MS	-	Test	Clearj95/Wire (EST)	-	-
1960-S320	2437222.50	1960 Oct 15	Polaris AX	-	AX-53	USNSPO	MS	-	Test	Clearj95	Clearj95	-
1960-S321	2437222.50	1960 Oct 15	Polaris AX	-	AXE-9 (A1FP-9)	USNSPO	MS	-	Test	Clearj95	Clearj95	-
1960-S322	2437223.50	1960 Oct 15	Polaris AX	-	AXE-6 (A1FP-10)	USNSPO	MS	-	Test	Clearj95	Clearj95	-
1960-S325	2437225.50	1960 Oct 18	Polaris AX	-	AXE-7 (A1FP-11)	USNSPO	MS	-	Test	Clearj95	Clearj95	-
1960-S351	2437225.50	1960 Oct 18	Polaris AX	-	AXE-8 (A1FP-12)	USNSPO	MS	-	Test	Clearj95	Clearj95	-
1960-S353	2437246.29	1960 Nov 7 1900	Polaris AX	-	AX-46	USNSPO	MS	-	Test	Clearj95/Wire	Clearj95	-
1960-S365	2437249.18	1960 Nov 10 1622	Polaris AX	-	AX-41	USNSPO	MS	-	Test	Clearj95/Wire	Clearj95	-
1960-S393	2437256.29	1960 Nov 17 1900	Polaris AX	-	AX-52	USNSPO	MF	-	Test	Clearj95	Clearj95	-
1960-S417	2437273.60	1960 Dec 5	Polaris AX	-	AX-2	USNSPO	MS	-	OT	Clearj95/Wire (pm/sum)	-	-
1961-S13	2437310.27	1961 Dec 22 1834	Polaris AX	-	AXE-13 (A1P-19)	USNSPO	MS	-	OT	Clearj95/Wire	-	-
1961-A18	2437314.27	1961 Jan 10 1715	Polaris AX	-	AXE-13 (A1P-23)	USNSPO	MF	-	OT	Clearj95/Wire	-	-
1961-A21	2437314.27	1961 Jan 11 1840	Polaris AX	-	AXE-15 (A1P-23)	USNSPO	MF	-	OT	Clearj95/Wire	-	-
1961-A44	2437337.40	1961 Jan 14 1834	Polaris AX	-	AXE-14 (A1P-24)	USNSPO	MF	-	OT	Clearj95/Wire	-	-
1961-S63	2437360.26	1961 Mar 1 1819	Polaris AX	-	AX-7	USNSPO	MS	-	Test	Clearj95/Wire	-	-
1961-S76	2437367.50	1961 Mar 9	Polaris AX	-	AX-8	USNSPO	MS	-	Test	Clearj95/Wire	-	-
1961-S82	2437374.23	1961 Mar 15 1730	Polaris AX	-	AX-10	USNSPO	MS	-	Test	FDC	Clearj95	-
1961-A80	2437382.31	1961 Mar 23 1625	Polaris AX	-	AXE-16	USNSPO	MF	-	OT	Clearj95/Wire	-	-
1961-S86	2437382.31	1961 Mar 23 1925	Polaris AX	-	AXE-17	USNSPO	MS	-	OT	Clearj95/Wire	-	-
1961-A81	2437382.45	1961 Mar 23 2241	Polaris AX	-	AXE-18 (A1P-39)	USNSPO	MF	-	OT	Clearj95/Wire	-	-
1961-S105	2437395.50	1961 Apr 6	Polaris AX	-	AXE-19 (A1P-65)	USNSPO	MS	-	OT	Clearj95	-	-

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Orbpay	Agency	Launch_Code	Group	Category	LTcite	Cite	Notes
1961-M09	2437401-15	1961 Apr 11 1540	Polaris A2	-	AXZ-12	0.000	USNSPO	MF	-	Test	Cleary95/Mire	-	-
1961-S113	2437409-42	1961 Apr 19 2204	Polaris A1	-	AIE-20	0.000	USNSPO	MS	-	OT	FDC	Cleary95	-
1961-S131	2437421-21	1961 May 1 1700	Polaris A2	-	AXZ-16	0.000	USNSPO	MS	-	Test	Wire/Ulrich	Cleary95	-
1961-S138	2437423-21	1961 May 3 1700	Polaris A1	-	AIE-22	0.000	USNSPO	MS	-	OT	Cleary95/Mire	-	-
1961-S147	2437428-22	1961 May 8 1710	Polaris A2	-	AXZ-19	0.000	USNSPO	MS	-	Test	Cleary95/Mire	-	-
1961-S150	2437436-50	1961 May 17	Polaris A1	-	AIE-26 (AIP-70)	0.000	USNSPO	MF	-	OT	Cleary95	-	-
1961-S148	2437436-50	1961 May 17	Polaris A1	-	AIE-27 (AIP-55)	0.000	USNSPO	MF	-	OT	Cleary95	-	-
1961-S148	2437436-50	1961 May 17	Polaris A1	-	AIE-28 (AIP-56)	0.000	USNSPO	MF	-	OT	Cleary95	-	-
1961-S149	2437436-50	1961 May 17	Polaris A1	-	AIE-33 (AIP-66)	0.000	USNSPO	MS	-	OT	Cleary95	-	-
1961-A129	2437445-33	1961 May 26 1953	Polaris A2	-	AXZ-3	0.000	USNSPO	MF	-	Test	Wire/Ulrich	Cleary95	-
1961-S176	2437463-20	1961 Jun 12 1653	Polaris A2	-	AXZ-5	0.000	USNSPO	MS	-	Test	Cleary95/Mire	-	EST
1961-S188	2437477-28	1961 Jun 26 1942	Polaris A2	-	AXZ-11	0.000	USNSPO	MF	-	Test	Wire/Ulrich	Cleary95	ST2 uburn
1961-S204	2437493-52	1961 Jul 13 0031	Polaris A2	-	AXZ-20	0.000	USNSPO	MS	-	Test	FDC	Cleary95	EST
1961-S228	2437513-50	1961 Aug 2	Polaris A2	-	AXZ-21	0.000	USNSPO	MS	-	Test	Cleary95	-	-
1961-S236	2437523-50	1961 Aug 12	Polaris A1	-	AIE-42 (AIP-9)	0.000	USNSPO	MF	-	OT	Cleary95	-	-
1961-S238	2437523-50	1961 Aug 12	Polaris A1	-	AIE-43 (AIP-97)	0.000	USNSPO	MF	-	OT	Cleary95	-	-
1961-S239	2437523-50	1961 Aug 12	Polaris A1	-	AIE-54 (AIP-103)	0.000	USNSPO	MS	-	OT	Cleary95	-	-
1961-S240	2437523-50	1961 Aug 12	Polaris A1	-	AIE-58 (AIP-88)	0.000	USNSPO	MS	-	OT	Cleary95	-	-
1961-S241	2437523-50	1961 Aug 12	Polaris A1	-	AIE-56 (AIP-105)	0.000	USNSPO	MS	-	OT	Cleary95	-	-
1961-A189	2437529-50	1961 Aug 16	Polaris A2	-	AIE-37 (AIP-98)	0.000	USNSPO	MS	-	OT	Cleary95	-	-
1961-S302	2437572-12	1961 Sep 29 1500	Polaris A1	-	AXZ-22	0.000	USNSPO	MF	-	Test	Cleary95	-	EST
1961-S316	2437577-14	1961 Oct 4 1522	Polaris A2	-	AIX-50	0.000	USNSPO	MS	-	RMD	Cleary95/Mire	-	EST
1961-S335	2437589-12	1961 Oct 16 1454	Polaris A1	-	AXZ-13	0.000	USNSPO	MS	-	Test	Cleary95/Mire	-	-
1961-S343	2437596-16	1961 Oct 23 1622	Polaris A2	-	AIE-36 (AIP-100)	0.000	USNSPO	MS	-	OT	Cleary95/Mire	-	-
1961-S366	2437607-08	1961 Nov 3 1401-32	Polaris A1	-	AIE-38	0.000	USNSPO	MS	-	Test	Cleary95/Mire	-	[or 1638]
1961-S368	2437607-21	1961 Nov 3 1530	Polaris A1	-	AIE-40	0.000	USNSPO	MS	-	OT	Cleary95/Mire	-	-
1961-S370	2437612-17	1961 Nov 6 1610	Polaris A2	-	AIE-41 (AIP-12)	0.000	USNSPO	MS	-	OT	Cleary95/Mire	-	-
1961-S372	2437613-67	1961 Nov 10 0400	Polaris A2	-	AXZ-X2 (AX-15)	0.000	USNSPO	MF	-	RMD	Wire/Ulrich	Cleary95	-
1961-S401	2437635-19	1961 Dec 1 1629	Polaris A2	-	AXZ-14 (AZ0-1)	0.000	USNSPO	MS	-	Test	Ulrich/Mire	Cleary95	-
1961-S406	2437639-64	1961 Dec 6 0322	Polaris A1	-	AIX-51	0.000	USNSPO	MS	-	RMD	Cleary95	-	-
1962-A11	2437688-21	1962 Jan 23 1705-37	Polaris A2	-	AXZ-17 (AZ0-2)	0.000	USNSPO	MF	-	RMD	Cleary95/Mire	-	-
1962-S49	2437752-32	1962 Mar 1 1945-01	Polaris A2	-	AXZ-27 (AZ0-5)	0.000	USNSPO	MS	-	RMD	msf-koenn	Cleary95	-
1962-A40	2437754-39	1962 Mar 30 2125	Polaris A2	-	AXZ-26 (AZ0-3)	0.000	USNSPO	MF	-	RMD	FDC	R6220409-11	-
1962-S107	2437780-20	1962 Apr 26 1650-26	Polaris A2	-	APE-1	0.000	USNSPO	MS	-	Test	Cleary95/Mire	-	-
1962-S122	2437786-97	1962 May 4 0141-02	Polaris A2	-	AXZ-16 (AZ0G-1)	0.000	USNSPO	MS	-	RMD	DOHILIC	Cleary95	-
1962-S126	2437791-47	1962 May 6 2317-49	Polaris A1	-	AIE-3	0.000	USNSPO	MF	-	OT	Wire/Cleary95	McManus	Az. 243
1962-A129	2437794-43	1962 May 9 2215-24	Polaris A2	-	APE-4	0.000	USNSPO	MS	-	OT	msf-koenn	NRL-FR-5881	-
1962-S129	2437806-27	1962 May 11 1624-94	Polaris A2	-	APE-5	0.000	USNSPO	MS	-	OT	msf-koenn	Cleary95	-
1962-S139	2437808-35	1962 May 23 0931-36	Polaris A2	-	APE-6	0.000	USNSPO	MS	-	OT	msf-koenn	Cleary95	-
1962-S140	2437808-38	1962 May 23 0946-06	Polaris A2	-	APE-7	0.000	USNSPO	MS	-	OT	msf-koenn	Cleary95	-
1962-S156	2437818-40	1962 Jun 2 1916-11	Polaris A2	-	APE-8	0.000	USNSPO	MS	-	OT	msf-koenn	Cleary95/Mire	-
1962-S157	2437818-40	1962 Jun 2 2234-57	Polaris A2	-	APE-8	0.000	USNSPO	MS	-	OT	msf-koenn	Cleary95/Mire	-
1962-S161	2437820-08	1962 Jun 29 1405-58	Polaris A2	-	AXZ-6 (AZ0G-2)	0.000	USNSPO	MF	-	Test	Cleary95/Mire	R6220611-10	-
1962-S238	2437828-27	1962 Jul 12 1931-57	Polaris A2	-	AXZ-7 (AZ0G-4)	0.000	USNSPO	MS	-	Test	Cleary95/Mire	-	-
1962-S240	2437858-34	1962 Jul 21 2045-13	Polaris A2	-	APE-11	0.000	USNSPO	MS	-	OT	msf-koenn	Cleary95	-
1962-S245	2437867-37	1962 Jul 21 2045-15	Polaris A2	-	APE-10	0.000	USNSPO	MS	-	OT	msf-koenn	Cleary95	-
1962-S250	2437867-43	1962 Jul 21 2245-15	Polaris A2	-	APE-13	0.000	USNSPO	MS	-	OT	msf-koenn	Cleary95	-
1962-S251	2437867-43	1962 Jul 21 2245-15	Polaris A2	-	APE-13	0.000	USNSPO	MS	-	OT	msf-koenn	Cleary95	-
1962-S264	2437872-24	1962 Jul 26 1750-12	Polaris A2	-	APE-1	0.000	USNSPO	MF	-	Test	Cleary95/Mire	-	-
1962-S265	2437872-50	1962 Jul 27	Polaris A1	-	AIE-1	0.000	USNSPO	MS	-	OT	Cleary95	-	-
1962-S267	2437872-50	1962 Jul 27	Polaris A1	-	AIE-2	0.000	USNSPO	MS	-	OT	Cleary95	-	-
1962-S268	2437872-50	1962 Jul 27	Polaris A1	-	AIE-3	0.000	USNSPO	MS	-	OT	Cleary95	-	-
1962-S280	2437884-31	1962 Aug 7 1920-05	Polaris A3	-	AIX-4	0.000	USNSPO	MF	-	Test	msf-koenn	Cleary95	-
1962-S287	2437887-38	1962 Aug 10 2127-00	Polaris A2	-	AIX-3	0.000	USNSPO	MF	-	Test	msf-koenn	Cleary95	-
1962-A140	2437894-19	1962 Aug 17 1634-10	Polaris A2	-	AZTE-2	0.000	USNSPO	MF	-	Test	msf-koenn	Cleary95	-
1962-S312	2437904-13	1962 Aug 27 1502-03	Polaris A3	-	AZTE-4	0.000	USNSPO	MF	-	Test	msf-koenn	Cleary95	-
1962-S327	2437914-17	1962 Sep 6 1600	Polaris A3	-	AXZ-2	0.000	USNSPO	MF	-	Test	msf-koenn	Cleary95	-
1962-S333	2437921-84	1962 Sep 14 0809-06	Polaris A1	-	AIT-6	0.000	USNSPO	MF	-	Test	msf-koenn	Cleary95	-
1962-S334	2437923-36	1962 Sep 15 2037-10	Polaris A1	-	AIT-5	0.000	USNSPO	MF	-	Test	msf-koenn	Cleary95	-
1962-S358	2437937-50	1962 Oct 4	Polaris A2	-	AZTE-1	0.000	USNSPO	MS	-	OT	msf-koenn	Cleary95	-
1962-S359	2437937-50	1962 Oct 4	Polaris A2	-	AZTE-1	0.000	USNSPO	MS	-	OT	msf-koenn	Cleary95	-
1962-S360	2437937-50	1962 Oct 4	Polaris A2	-	AZTE-1	0.000	USNSPO	MS	-	OT	msf-koenn	Cleary95	-
1962-S361	2437937-50	1962 Oct 4	Polaris A2	-	AZTE-1	0.000	USNSPO	MS	-	OT	msf-koenn	Cleary95	-
1962-A166	2437943-15	1962 Oct 5 1530	Polaris A3	-	AIX-3	0.000	USNSPO	MF	-	Test	msf-koenn	Cleary95	[Oct Oct 6]
1962-S389	2437951-50	1962 Oct 14	Polaris A1	-	AIX-8	0.000	USNSPO	MF	-	Test	Cleary95	-	-
1962-A170	2437951-50	1962 Oct 14	Polaris A1	-	AIX-7	0.000	USNSPO	MF	-	Test	Cleary95	-	-
1962-A189	2437974-15	1962 Nov 5 1529-59	Polaris A3	-	AIX-4	0.000	USNSPO	MF	-	Test	Cleary95/Mire	-	-
1962-M31	2438005-10	1962 Nov 17 1706-17	Polaris A3	-	AIX-5	0.000	USNSPO	MF	-	Test	Cleary95/Mire	-	-
1962-M39	2438005-21	1962 Dec 6 1419-04	Polaris A3	-	AXZ-6	0.000	USNSPO	MF	-	Test	msf-koenn	R6221126-15	-
1962-S371	2438061-82	1963 Feb 4 0733-44	Polaris A2	-	AZTE-24 (AZ0-4)	0.000	USNSPO	MS	-	Test	msf-koenn	R6221217-12	-
1962-S373	2438064-50	1963 Feb 4	Polaris A2	-	AZTE-108	0.000	USNSPO	MS	-	OT	Cleary95	-	-
1963-S34	2438064-50	1963 Feb 4	Polaris A2	-	AZTE-109	0.000	USNSPO	MS	-	OT	Cleary95	-	-
1963-S36	2438065-50	1963 Feb 5	Polaris A2	-	AZTE-110	0.000	USNSPO	MS	-	OT	Cleary95	-	-
1963-S36	2438065-50	1963 Feb 5	Polaris A2	-	AZTE-111	0.000	USNSPO	MS	-	OT	Cleary95	-	-
1963-S39	2438068-17	1963 Feb 7 1559-59	Polaris A3	-	AXZ-8	0.000	USNSPO	MS	-	Test	Cleary95/Mire	-	-
1963-S41	2438072-15	1963 Feb 11 1530	Polaris A3	-	AXZ-7	0.000	USNSPO	MS	-	Test	Cleary95/Mire	-	-
1963-A25	2438079-08	1963 Feb 18 1400-02	Polaris A3	-	AXZ-9	0.000	USNSPO	MS	-	Test	Cleary95/Mire	-	-
1963-S62	2438082-25	1963 Feb 21 1756-07	Polaris A2	-	AZTE-11	0.000	USNSPO	MS	-	OT	msf-koenn	SP-4004	-
1963-A32	2438096-24	1963 Mar 7 1748-15	Polaris A2	-	AZTE-116	0.000	USNSPO	MS	-	OT	msf-koenn	Cleary95	-
1963-S83	2438096-28	1963 Mar 7 1848-15	Polaris A2	-	AZTE-120	0.000	USNSPO	MS	-	OT	R6230318-10	Cleary95	-
1963-S92	2438102-50	1963 Mar 14	Polaris A2	-	A2	0.000	USNSPO	MF	-	OT	Cleary95	-	-

















Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Launch_Mission	FlightCode	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee_Km	Range_Km	Dest
1960-5460	2440084.94	1968 Aug 16 1030	Poseidon C3	-	C3D-01	-	-	-	-	CC	LC25C	-	-	5007	-	-
1960-5611	2440187.21	1968 Nov 26 1700	Poseidon C3	-	C3D-02	-	-	-	-	CC	LC25C	-	-	5007	-	-
1960-578	2440243.17	1969 Jan 21 1600	Poseidon C3	-	C3D-03	-	-	-	-	CC	LC25C	-	-	27	-	-
1960-5144	2440272.17	1969 Feb 19 1605	Poseidon C3	-	C3D-04	-	-	-	-	CC	LC25C	-	-	5007	-	-
1960-5207	2440301.47	1969 Mar 20 2310	Poseidon C3	-	C3D-05	-	USN Mk 3 RV x 14	-	-	CC	LC25C	-	-	5007	-	-
1960-5257	2440321.42	1969 Apr 9 2202:01	Poseidon C3	-	C3D-06	-	-	-	-	CC	LC25C	-	-	1007	-	-
1960-5341	2440366.46	1969 May 24 2256:02	Poseidon C3	-	C3D-09	-	USN Mk 3 RV x 3	-	-	CC	LC25C	-	-	5007	-	-
1960-5365	2440387.96	1969 Jun 19 0357:01	Poseidon C3	-	C3D-10	-	USN Mk 3 RV x 10	-	-	CC	LC25C	-	-	5007	-	-
1960-5396	2440411.99	1969 Jun 19 0357:01	Poseidon C3	-	C3D-11	-	-	-	-	CC	LC25C	-	-	5007	-	-
1960-5464	2440465.52	1969 Aug 22 0030	Poseidon C3	-	C3D-12	-	-	-	-	CC	LC25D	-	-	5007	-	-
1960-5505	2440465.19	1969 Sep 17 1637	Poseidon C3	-	C3D-13	-	-	-	-	CC	LC25D	-	-	5007	-	-
1960-5801	2440529.17	1969 Nov 3 1600	Poseidon C3	-	C3D-08	-	-	-	-	CC	LC25C	-	-	5007	-	-
1960-5836	2440552.33	1969 Nov 26 2001	Poseidon C3	-	C3T-17	-	Tactical config	-	-	EMG-154	SLBR	-	-	5007	-	-
1960-5860	2440572.23	1969 Dec 16 1725	Poseidon C3	-	C3T-18	-	-	-	-	EMG-154	SLBR	-	-	5007	-	-
1970-580	2440610.25	1970 Jan 23 1800	Poseidon C3	-	C3T-19	-	-	-	-	EMG-154	SLBR	-	-	1007	-	-
1970-5102	2440622.36	1970 Feb 4 2038	Poseidon C3	-	C3T-20	-	-	-	-	EMG-154	SLBR	-	-	5007	-	-
1970-5261	2440670.30	1970 Mar 24 1917	Poseidon C3	-	C3T-21	-	-	-	-	EMG-154	SLBR	-	-	5007	-	-
1970-5357	2440721.33	1970 May 14 2000	Poseidon C3	-	C3T-22	-	-	-	-	EMG-154	SLBR	-	-	5007	-	-
1970-5396	2440755.13	1970 Jun 17 1500:01	Poseidon C3	-	C3T-23	-	-	-	-	EMG-154	SLBR	-	-	5007	-	-
1970-5411	2440767.57	1970 Jun 30 0139:59	Poseidon C3	-	C3T-24	-	-	-	-	EMG-154	SLBR	-	-	5007	-	-
1970-5461	2440802.12	1970 Aug 17 1616	Poseidon C3	-	C3P-1	-	IF no sep	-	-	SSBN-627	SLBR	-	-	5007	-	-
1970-5467	2440816.16	1970 Sep 8 1600	Poseidon C3	-	C3P-2	-	-	-	-	SSBN-627	SLBR	-	-	5007	-	-
1970-5505	2440836.17	1970 Sep 8 1600	Poseidon C3	-	C3P-3	-	-	-	-	SSBN-627	SLBR	-	-	5007	-	-
1970-5527	2440851.12	1970 Sep 21 1500	Poseidon C3	-	C3P-4	-	-	-	-	SSBN-629	SLBR	-	-	5007	-	-
1970-5565	2440866.14	1970 Oct 6 1516	Poseidon C3	-	C3P-5	-	-	-	-	SSBN-629	SLBR	-	-	5007	-	-
1970-5561	2440883.42	1970 Oct 23 2200	Poseidon C3	-	C3P-6	-	-	-	-	SSBN-627	SLBR	-	-	5007	-	-
1970-5628	2440916.45	1970 Nov 27 2217	Poseidon C3	-	C3S-10	-	USN Mk 3 RV x 10	DASO-1	-	SSBN-629	SLBR	-	-	5007	-	-
1971-5114	2440987.46	1971 Feb 4 2246	Poseidon C3	-	C3S-19	-	-	-	-	SSBN-632	SLBR	-	-	5007	-	-
1971-5169	2441026.46	1971 Mar 15 2300	Poseidon C3	-	C3S-19	-	-	-	-	SSBN-632	SLBR	-	-	5007	-	-
1971-5213	2441040.46	1971 Mar 29 2305	Poseidon C3	-	C3S-39	-	-	-	-	SSBN-632	SLBR	-	-	5007	-	-
1971-5238	2441061.49	1971 Apr 19 2346	Poseidon C3	-	C3S-12	-	-	-	-	SSBN-631	SLBR	-	-	5007	-	-
1971-5264	2441072.50	1971 May 1 0003	Poseidon C3	-	C3S-44	-	-	-	-	SSBN-630	SLBR	-	-	5007	-	-
1971-5272	2441083.44	1971 May 11 2230	Poseidon C3	-	C3S-70	-	-	-	-	SSBN-628	SLBR	-	-	5007	-	-
1971-5273	2441083.44	1971 May 11 2230	Poseidon C3	-	C3S-2	-	-	-	-	SSBN-631	SLBR	-	-	5007	-	-
1971-5322	2441110.20	1971 May 11 2347	Poseidon C3	-	C3S-9	-	-	-	-	SSBN-631	SLBR	-	-	5007	-	-
1971-5356	2441135.16	1971 Jun 7 1658	Poseidon C3	-	C3S-4	-	-	-	-	SSBN-630	SLBR	-	-	5007	-	-
1971-5370	2441150.46	1971 Jul 2 1630	Poseidon C3	-	-	-	-	-	-	SSBN-630	SLBR	-	-	5007	-	-
1971-5392	2441186.19	1971 Jul 17 2330	Poseidon C3	-	DASO-11	-	-	-	-	SSBN-633	SLBR	-	-	5007	-	-
1971-5523	2441238.36	1971 Aug 10 1632	Poseidon C3	-	DASO-12	-	-	-	-	SSBN-628	SLBR	-	-	5007	-	-
1971-5549	2441258.50	1971 Oct 14 2113	Poseidon C3	-	DASO-13	-	-	-	-	SSBN-635	SLBR	-	-	5007	-	-
1971-5572	2441260.39	1971 Nov 24 1115	Poseidon C3	-	DASO-15	-	DASO-15 Surface	-	-	SSBN-635	SLBR	-	-	5007	-	-
1971-5594	2441260.39	1971 Nov 24 1115	Poseidon C3	-	DASO-16	-	-	-	-	SSBN-636	SLBR	-	-	5007	-	-
1971-5814	2441338.41	1971 Dec 27 1716	Poseidon C3	-	DASO-17	-	-	-	-	SSBN-636	SLBR	-	-	5007	-	-
1972-5042	2441368.41	1972 Jan 27 2145	Poseidon C3	-	DASO-18	-	-	-	-	SSBN-636	SLBR	-	-	5007	-	-
1972-5056	2441368.41	1972 Jan 27 2145	Poseidon C3	-	DASO-19	-	-	-	-	SSBN-636	SLBR	-	-	5007	-	-
1972-5258	2441457.47	1972 Jun 6 2315	Poseidon C3	-	DASO-20	-	-	-	-	SSBN-634	SLBR	-	-	5007	-	-
1972-5268	2441457.47	1972 Jun 6 2315	Poseidon C3	-	DASO-21	-	-	-	-	SSBN-640	SLBR	-	-	5007	-	-
1972-5269	2441457.50	1972 Aug 18	Poseidon C3	-	FUT-1	-	-	-	-	SSBN-631	SLBR	-	-	5007	-	-
1972-5281	2441457.50	1972 Aug 18	Poseidon C3	-	FUT-1	-	-	-	-	SSBN-631	SLBR	-	-	5007	-	-
1972-5320	2441536.46	1972 Sep 25 2245	Poseidon C3	-	FUT-2	-	-	-	-	SSBN-631	SLBR	-	-	5007	-	-
1972-5321	2441536.46	1972 Sep 25 2245	Poseidon C3	-	FUT-2	-	-	-	-	SSBN-632	SLBR	-	-	5007	-	-
1972-5322	2441536.46	1972 Sep 25 2245	Poseidon C3	-	FUT-2	-	-	-	-	SSBN-632	SLBR	-	-	5007	-	-
1972-5323	2441536.46	1972 Sep 25 2245	Poseidon C3	-	FUT-2	-	-	-	-	SSBN-632	SLBR	-	-	5007	-	-
1972-5324	2441536.46	1972 Sep 25 2245	Poseidon C3	-	FUT-2	-	-	-	-	SSBN-632	SLBR	-	-	5007	-	-
1972-5325	2441536.46	1972 Sep 25 2245	Poseidon C3	-	FUT-2	-	-	-	-	SSBN-632	SLBR	-	-	5007	-	-
1972-5383	2441593.50	1972 Nov 2	Poseidon C3	-	FUT-3	-	-	-	-	SSBN-630	SLBR	-	-	5007	-	-
1972-5384	2441593.50	1972 Nov 2	Poseidon C3	-	FUT-3	-	-	-	-	SSBN-630	SLBR	-	-	5007	-	-
1972-5385	2441593.50	1972 Nov 2	Poseidon C3	-	FUT-3	-	-	-	-	SSBN-630	SLBR	-	-	5007	-	-
1972-5386	2441593.50	1972 Nov 2	Poseidon C3	-	FUT-3	-	-	-	-	SSBN-630	SLBR	-	-	5007	-	-
1972-5424	2441662.50	1972 Dec 11	Poseidon C3	-	FUT-4	-	-	-	-	SSBN-629	SLBR	-	-	5007	-	-
1972-5425	2441662.50	1972 Dec 11	Poseidon C3	-	FUT-4	-	-	-	-	SSBN-629	SLBR	-	-	5007	-	-
1972-5426	2441662.50	1972 Dec 11	Poseidon C3	-	FUT-4	-	-	-	-	SSBN-629	SLBR	-	-	5007	-	-
1972-5427	2441662.50	1972 Dec 11	Poseidon C3	-	FUT-4	-	-	-	-	SSBN-629	SLBR	-	-	5007	-	-
1972-5441	2441667.39	1972 Dec 15 2125	Poseidon C3	-	DASO-23	-	-	-	-	SSBN-642	SLBR	-	-	5007	-	-
1972-5442	2441670.39	1972 Dec 18 2115	Poseidon C3	-	DASO-24	-	-	-	-	SSBN-642	SLBR	-	-	5007	-	-
1972-5443	2441670.39	1972 Dec 18 2115	Poseidon C3	-	DASO-24	-	-	-	-	SSBN-644	SLBR	-	-	5007	-	-
1972-5444	2441670.39	1972 Dec 18 2115	Poseidon C3	-	DASO-24	-	-	-	-	SSBN-644	SLBR	-	-	5007	-	-
1972-5445	2441670.39	1972 Dec 18 2115	Poseidon C3	-	DASO-24	-	-	-	-	SSBN-644	SLBR	-	-	5007	-	-
1972-5446	2441670.39	1972 Dec 18 2115	Poseidon C3	-	DASO-24	-	-	-	-	SSBN-644	SLBR	-	-	5007	-	-
1972-5447	2441670.39	1972 Dec 18 2115	Poseidon C3	-	DASO-24	-	-	-	-	SSBN-644	SLBR	-	-	5007	-	-
1972-5448	2441670.39	1972 Dec 18 2115	Poseidon C3	-	DASO-24	-	-	-	-	SSBN-644	SLBR	-	-	5007	-	-
1972-5449	2441670.39	1972 Dec 18 2115	Poseidon C3	-	DASO-24	-	-	-	-	SSBN-644	SLBR	-	-	5007	-	-
1972-5450	2441670.39	1972 Dec 18 2115	Poseidon C3	-	DASO-24	-	-	-	-	SSBN-644	SLBR	-	-	5007	-	-
1972-5451	2441670.39	1972 Dec 18 2115	Poseidon C3	-	DASO-24	-	-	-	-	SSBN-644	SLBR	-	-	5007	-	-
1972-5452	2441670.39	1972 Dec 18 2115	Poseidon C3	-	DASO-24	-	-	-	-	SSBN-644	SLBR	-	-	5007	-	-
1972-5453	2441670.39	1972 Dec 18 2115	Poseidon C3	-	DASO-24	-	-	-	-	SSBN-644	SLBR	-	-	5007	-	-
1972-5454	2441670.39	1972 Dec 18 2115	Poseidon C3	-	DASO-24	-	-	-	-	SSBN-644	SLBR	-	-	5007	-	-
1972-5455	2441670.39	1972 Dec 18 2115	Poseidon C3	-	DASO-24	-	-	-	-	SSBN-644	SLBR	-	-	5007	-	-
1972-5456	2441670.39	1972 Dec 18 2115	Poseidon C3	-	DASO-24	-	-	-	-	SSBN-644	SLBR	-	-	5007	-	-
1972-5457	2441670.39	1972 Dec 18 2115	Poseidon C3	-	DASO-24	-	-	-	-	SSBN-644	SLBR	-	-	5007	-	-
1972-5458	2441670.39	1972 Dec 18 2115	Poseidon C3	-	DASO-24	-	-	-	-	SSBN-644	SLBR	-	-	5007	-	-
1972-5459	2441670.39	1972 Dec 18 2115	Poseidon C3	-	DASO-24	-	-	-	-	SSBN-644	SLBR	-	-	5007	-	-
1972-5460	2441670.39	1972 Dec 18 2115	Poseidon C3	-	DASO-24	-	-	-	-	SSBN-644	SLBR	-	-	5007	-	-
1972-5461	2441670.39	1972 Dec 18 2115	Poseidon C3	-	DASO-24	-	-	-	-	SSBN-644	SLBR	-	-	5007	-	-
1972-5462	2441670.39	1972 Dec 18 2115	Poseidon C3	-	DASO-24	-	-	-	-	SSBN-644	SLBR	-	-	5007	-	-
1972-5463	2441670.39	1972 Dec 18 2115	Poseidon C3	-	DASO-24	-	-	-	-	SSBN-644	SLBR	-				



Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Launch_Mission	FlightCode	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee_Km	Range_Km	Dest
1974-SS84	2442373-50	1974 Nov 22	Poseidon C3	-	-	FUT-8	-	-	SSBN-688	SLBM	-	-	-	5007	-	-
1974-SS85	2442373-50	1974 Nov 22	Poseidon C3	-	-	FUT-8	-	-	SSBN-688	SLBM	-	-	-	5007	-	-
1974-SS86	2442373-50	1974 Nov 22	Poseidon C3	-	-	FUT-8	-	-	SSBN-688	SLBM	-	-	-	5007	-	-
1974-SS14	2442396-17	1974 Dec 10 1600:02	Poseidon C3	-	-	DASO	-	-	SSBN-616	SLBM	-	-	-	5007	-	-
1975-SS126	2442521-52	1975 Apr 19 0028:00	Poseidon C3	-	-	FUT-9	-	-	SSBN-645	SLBM	-	-	-	5007	-	-
1975-SS127	2442521-52	1975 Apr 19 0033:34	Poseidon C3	-	-	FUT-9	-	-	SSBN-645	SLBM	-	-	-	5007	-	-
1975-SS134	2442526-50	1975 Apr 24	Poseidon C3	-	-	FUT-10?	-	-	SSBN-633	SLBM	-	-	-	5007	-	-
1975-SS167	2442561-46	1975 May 28 2300:02	Poseidon C3	-	-	DASO-34	-	-	SSBN-617	SLBM	-	-	-	5007	-	-
1975-SS168	2442561-46	1975 May 28 0002:02	Poseidon C3	-	-	DASO-35	-	-	SSBN-617	SLBM	-	-	-	5007	-	-
1975-SS207	2442586-50	1975 Jun 23	Poseidon C3	-	-	FUT-11?	-	-	SSBN-627	SLBM	-	-	-	5007	-	-
1975-SS208	2442586-50	1975 Jun 23	Poseidon C3	-	-	FUT-11?	-	-	SSBN-627	SLBM	-	-	-	5007	-	-
1975-SS210	2442587-50	1975 Jun 24	Poseidon C3	-	-	FUT-12?	-	-	SSBN-656	SLBM	-	-	-	5007	-	-
1975-SS211	2442587-50	1975 Jun 24	Poseidon C3	-	-	FUT-12?	-	-	SSBN-656	SLBM	-	-	-	5007	-	-
1975-SS260	2442647-21	1975 Aug 22 1708:40	Poseidon C3	-	-	FUT-13?	-	-	SSBN-634	SLBM	-	-	-	5007	-	-
1975-SS261	2442647-21	1975 Aug 22 1709:08	Poseidon C3	-	-	FUT-13?	-	-	SSBN-634	SLBM	-	-	-	5007	-	-
1975-SS262	2442647-23	1975 Aug 22 1726:10	Poseidon C3	-	-	FUT-13?	-	-	SSBN-634	SLBM	-	-	-	5007	-	-
1975-SS263	2442647-23	1975 Aug 28 1724:26	Poseidon C3	-	-	FUT-14?	-	-	SSBN-645	SLBM	-	-	-	5007	-	-
1975-SS264	2442654-23	1975 Aug 28 1724:44	Poseidon C3	-	-	FUT-14?	-	-	SSBN-645	SLBM	-	-	-	5007	-	-
1975-SS284	2442680-46	1975 Sep 24 2300:02	Poseidon C3	-	-	DASO	-	-	SSBN-619	SLBM	-	-	-	5007	-	-
1975-SS301	2442696-46	1975 Oct 10 2300:02	Poseidon C3	-	-	DASO	-	-	SSBN-619	SLBM	-	-	-	5007	-	-
1975-SS315	2442724-50	1975 Nov 8	Poseidon C3	-	-	FUT-18?	-	-	SSBN-635	SLBM	-	-	-	5007	-	-
1975-SS316	2442724-50	1975 Nov 8	Poseidon C3	-	-	FUT-18?	-	-	SSBN-635	SLBM	-	-	-	5007	-	-
1975-SS319	2442729-50	1975 Nov 13	Poseidon C3	-	-	FUT-18?	-	-	SSBN-635	SLBM	-	-	-	5007	-	-
1975-SS319	2442729-50	1975 Nov 13	Poseidon C3	-	-	FUT-18?	-	-	SSBN-635	SLBM	-	-	-	5007	-	-
1976-SS80	2442812-39	1976 Feb 3 2115	Poseidon C3	-	-	FUT-16?	-	-	SSBN-642	SLBM	-	-	-	5007	-	-
1976-SS91	2442812-39	1976 Feb 3 2116	Poseidon C3	-	-	FUT-16?	-	-	SSBN-642	SLBM	-	-	-	5007	-	-
1976-SS92	2442812-41	1976 Feb 3 2147	Poseidon C3	-	-	FUT-17?	-	-	SSBN-643	SLBM	-	-	-	5007	-	-
1976-SS101	2442823-42	1976 Feb 14 2200	Poseidon C3	-	-	FUT-17?	-	-	SSBN-643	SLBM	-	-	-	5007	-	-
1976-SS101	2442823-42	1976 Feb 14 2200	Poseidon C3	-	-	DASO	-	-	SSBN-624	SLBM	-	-	-	5007	-	-
1976-SS162	2442889-34	1976 Apr 20 2009	Poseidon C3	-	-	FUT-18?	-	-	SSBN-666	SLBM	-	-	-	5007	-	-
1976-SS163	2442889-34	1976 Apr 20 2009	Poseidon C3	-	-	FUT-18?	-	-	SSBN-666	SLBM	-	-	-	5007	-	-
1976-SS165	2442891-91	1976 Apr 23 0946	Poseidon C3	-	-	FUT-19?	-	-	SSBN-644	SLBM	-	-	-	5007	-	-
1976-SS166	2442891-91	1976 Apr 23 0953	Poseidon C3	-	-	FUT-19?	-	-	SSBN-644	SLBM	-	-	-	5007	-	-
1976-SS167	2442894-42	1976 May 25 2200	Poseidon C3	-	-	DASO	-	-	SSBN-620	SLBM	-	-	-	5007	-	-
1976-SS207	2442892-35	1976 Jun 22 2017	Poseidon C3	-	-	FUT-20?	-	-	SSBN-632	SLBM	-	-	-	5007	-	-
1976-SS208	2442892-35	1976 Jun 22 2017	Poseidon C3	-	-	FUT-20?	-	-	SSBN-632	SLBM	-	-	-	5007	-	-
1976-SS211	2442895-87	1976 Jun 26 0858	Poseidon C3	-	-	FUT-21?	-	-	SSBN-640	SLBM	-	-	-	5007	-	-
1976-SS212	2442895-86	1976 Jun 26 0906	Poseidon C3	-	-	FUT-21?	-	-	SSBN-640	SLBM	-	-	-	5007	-	-
1976-SS265	2443011-46	1976 Aug 20 2248	Poseidon C3	-	-	FUT-22?	-	-	SSBN-636	SLBM	-	-	-	5007	-	-
1976-SS266	2443011-46	1976 Aug 20 2250	Poseidon C3	-	-	FUT-22?	-	-	SSBN-636	SLBM	-	-	-	5007	-	-
1976-SS272	2443016-90	1976 Aug 28 0942	Poseidon C3	-	-	FUT-23?	-	-	SSBN-641	SLBM	-	-	-	5007	-	-
1976-SS273	2443016-90	1976 Aug 28 0945	Poseidon C3	-	-	FUT-23?	-	-	SSBN-641	SLBM	-	-	-	5007	-	-
1976-SS329	2443102-21	1976 Nov 19 1707	Poseidon C3	-	-	FUT-24?	-	-	SSBN-617	SLBM	-	-	-	5007	-	-
1976-SS330	2443102-21	1976 Nov 19 1708	Poseidon C3	-	-	FUT-24?	-	-	SSBN-617	SLBM	-	-	-	5007	-	-
1976-SS331	2443102-30	1976 Nov 19 1908	Poseidon C3	-	-	FUT-24?	-	-	SSBN-617	SLBM	-	-	-	5007	-	-
1976-SS332	2443102-30	1976 Nov 19 1909	Poseidon C3	-	-	FUT-24?	-	-	SSBN-617	SLBM	-	-	-	5007	-	-
1976-SS335	2443106-50	1976 Nov 23	Poseidon C3	-	-	FUT-25?	-	-	SSBN-655	SLBM	-	-	-	5007	-	-
1976-SS336	2443106-50	1976 Nov 23	Poseidon C3	-	-	FUT-25?	-	-	SSBN-655	SLBM	-	-	-	5007	-	-
1976-SS354	2443172-30	1977 Jan 23 2036	Poseidon C3	-	-	FUT-26?	-	-	SSBN-695	VTR	-	-	-	5007	-	-
1976-SS354	2443172-30	1977 Jan 23 2037	Poseidon C3	-	-	FUT-26?	-	-	SSBN-695	VTR	-	-	-	5007	-	-
1977-SS53	2443172-44	1977 Jan 28 2037	Poseidon C3	-	-	OT-36	-	-	SSBN-623	SLBM	-	-	-	5007	-	-
1977-SS53	2443172-44	1977 Jan 28 2037	Poseidon C3	-	-	OT-36	-	-	SSBN-623	SLBM	-	-	-	5007	-	-
1977-SS54	2443172-44	1977 Jan 28 2037	Poseidon C3	-	-	OT-36	-	-	SSBN-623	SLBM	-	-	-	5007	-	-
1977-SS54	2443172-44	1977 Jan 28 2037	Poseidon C3	-	-	OT-36	-	-	SSBN-623	SLBM	-	-	-	5007	-	-
1977-SS58	2443176-65	1977 Feb 5 0303	Poseidon C3	-	-	FUT-27	-	-	SSBN-628	SLBM	-	-	-	5007	-	-
1977-SS127	2443207-37	1977 Mar 24 2047	Poseidon C3	-	-	OT-38	-	-	SSBN-624	SLBM	-	-	-	5007	-	-
1977-SS128	2443207-37	1977 Mar 24 2047	Poseidon C3	-	-	OT-38	-	-	SSBN-624	SLBM	-	-	-	5007	-	-
1977-SS129	2443207-37	1977 Mar 24 2047	Poseidon C3	-	-	OT-38	-	-	SSBN-624	SLBM	-	-	-	5007	-	-
1977-SS130	2443207-37	1977 Mar 24 2047	Poseidon C3	-	-	OT-38	-	-	SSBN-624	SLBM	-	-	-	5007	-	-
1977-SS131	2443207-37	1977 Mar 24 2047	Poseidon C3	-	-	OT-38	-	-	SSBN-624	SLBM	-	-	-	5007	-	-
1977-SS132	2443207-37	1977 Mar 24 2047	Poseidon C3	-	-	OT-38	-	-	SSBN-624	SLBM	-	-	-	5007	-	-
1977-SS133	2443207-37	1977 Mar 24 2047	Poseidon C3	-	-	OT-38	-	-	SSBN-624	SLBM	-	-	-	5007	-	-
1977-SS134	2443207-37	1977 Mar 24 2047	Poseidon C3	-	-	OT-38	-	-	SSBN-624	SLBM	-	-	-	5007	-	-
1977-SS135	2443207-37	1977 Mar 24 2047	Poseidon C3	-	-	OT-38	-	-	SSBN-624	SLBM	-	-	-	5007	-	-
1977-SS136	2443207-37	1977 Mar 24 2047	Poseidon C3	-	-	OT-38	-	-	SSBN-624	SLBM	-	-	-	5007	-	-
1977-SS137	2443207-37	1977 Mar 24 2047	Poseidon C3	-	-	OT-38	-	-	SSBN-624	SLBM	-	-	-	5007	-	-
1977-SS138	2443207-37	1977 Mar 24 2047	Poseidon C3	-	-	OT-38	-	-	SSBN-624	SLBM	-	-	-	5007	-	-
1977-SS139	2443207-37	1977 Mar 24 2047	Poseidon C3	-	-	OT-38	-	-	SSBN-624	SLBM	-	-	-	5007	-	-
1977-SS140	2443207-37	1977 Mar 24 2047	Poseidon C3	-	-	OT-38	-	-	SSBN-624	SLBM	-	-	-	5007	-	-
1977-SS141	2443207-37	1977 Mar 24 2047	Poseidon C3	-	-	OT-38	-	-	SSBN-624	SLBM	-	-	-	5007	-	-
1977-SS142	2443207-37	1977 Mar 24 2047	Poseidon C3	-	-	OT-38	-	-	SSBN-624	SLBM	-	-	-	5007	-	-
1977-SS143	2443207-37	1977 Mar 24 2047	Poseidon C3	-	-	OT-38	-	-	SSBN-624	SLBM	-	-	-	5007	-	-
1977-SS144	2443207-37	1977 Mar 24 2047	Poseidon C3	-	-	OT-38	-	-	SSBN-624	SLBM	-	-	-	5007	-	-
1977-SS145	2443207-37	1977 Mar 24 2047	Poseidon C3	-	-	OT-38	-	-	SSBN-624	SLBM	-	-	-	5007	-	-
1977-SS146	2443207-37	1977 Mar 24 2047	Poseidon C3	-	-	OT-38	-	-	SSBN-624	SLBM	-	-	-	5007	-	-
1977-SS147	2443207-37	1977 Mar 24 2047	Poseidon C3	-	-	OT-38	-	-	SSBN-624	SLBM	-	-	-	5007	-	-
1977-SS148	2443207-37	1977 Mar 24 2047	Poseidon C3	-	-	OT-38	-	-	SSBN-624	SLBM	-	-	-	5007	-	-
1977-SS149	2443207-37	1977 Mar 24 2047	Poseidon C3	-	-	OT-38	-	-	SSBN-624	SLBM	-	-	-	5007	-	-
1977-SS150	2443207-37	1977 Mar 24 2047	Poseidon C3	-	-	OT-38	-	-	SSBN-624	SLBM	-	-	-	5007	-	-
1977-SS151	2443207-37	1977 Mar 24 2047	Poseidon C3	-	-	OT-38	-	-	SSBN-624	SLBM	-	-	-	5007	-	-
1977-SS152	2443207-37	1977 Mar 24 2047	Poseidon C3	-	-	OT-38	-	-	SSBN-624	SLBM	-	-	-	5007	-	-
1977-SS153	2443207-37	1977 Mar 24 2047	Poseidon C3	-	-	OT-38	-	-	SSBN-624	SLBM	-	-	-	5007	-	-
1977-SS154	2443207-37	1977 Mar 24 2047	Poseidon C3	-	-	OT-38	-	-	SSBN-624	SLBM	-	-	-	5007	-	-
1977-SS155	2443207-37	1977 Mar 24 2047	Poseidon C3	-	-	OT-38	-	-	SSBN-624	SLBM	-	-	-	5007	-	-
1977-SS156	2443207-37	1977 Mar 24 2047	Poseidon C3	-	-	OT-38	-	-	SSBN-624	SLBM	-	-	-	5007	-	-
1977-SS157	2443207-37	1977 Mar 24 2047	Poseidon C3	-	-	OT-38	-	-	SSBN-624	SLBM	-	-	-	5007	-	-
1977-SS158	2443207-37	1977 Mar 24 2														

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Mission	FlightCode	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee_Km	Range_Km	Dest
1979-390	2443938-34	1979 Mar 5 2007	Poseidon C3	-	C3	0T-37	-	-	SSBN-642	SLBM	-	-	-	5007	-	-
1979-391	2443938-43	1979 Mar 5 2226	Poseidon C3	-	C3	0T-37	-	-	SSBN-642	SLBM	-	-	-	5007	-	-
1979-3103	2443966-43	1979 Mar 23 2226	Poseidon C3	-	C3E	DASO	-	-	SSBN-630	SLBM	-	-	-	5007	-	-
1979-3141	2444020-43	1979 May 26 2215:03	Poseidon C3	-	C3E	DASO	-	-	SSBN-631	SLBM	-	-	-	5007	-	-
1979-3230	2444170-41	1979 Oct 23 2151	Poseidon C3	-	C3E	DASO	-	-	SSBN-628	SLBM	-	-	-	5007	-	-
1980-334	2444272-56	1980 Feb 3 0113	Poseidon C3	-	-	FOT-38F	-	-	SSBN-664	SLBM	-	-	-	5007	-	-
1980-336	2444272-56	1980 Feb 3 0113	Poseidon C3	-	-	FOT-38F	-	-	SSBN-664	SLBM	-	-	-	5007	-	-
1980-336	2444272-56	1980 Feb 3 0113	Poseidon C3	-	-	FOT-38F	-	-	SSBN-664	SLBM	-	-	-	5007	-	-
1980-337	2444273-61	1980 Feb 4 0242	Poseidon C3	-	-	FOT-38F	-	-	SSBN-664	SLBM	-	-	-	5007	-	-
1980-342	2444283-42	1980 Feb 13 2200:02	Poseidon C3	-	-	DASO	-	-	SSBN-635	SLBM	-	-	-	5007	-	-
1980-387	2444351-41	1980 Apr 21 2147	Poseidon C3	-	-	FOT-40F	-	-	SSBN-656	SLBM	-	-	-	5007	-	-
1980-388	2444351-41	1980 Apr 21 2147	Poseidon C3	-	-	FOT-40F	-	-	SSBN-656	SLBM	-	-	-	5007	-	-
1980-389	2444351-41	1980 Apr 21 2147	Poseidon C3	-	-	FOT-40F	-	-	SSBN-656	SLBM	-	-	-	5007	-	-
1980-390	2444351-41	1980 Apr 21 2148	Poseidon C3	-	-	FOT-40F	-	-	SSBN-656	SLBM	-	-	-	5007	-	-
1980-3139	2444632-17	1980 Jul 11 1601	Poseidon C3	-	-	FOT-41F	-	-	SSBN-642	SLBM	-	-	-	5007	-	-
1980-3140	2444632-17	1980 Jul 11 1601	Poseidon C3	-	-	FOT-41F	-	-	SSBN-642	SLBM	-	-	-	5007	-	-
1980-3141	2444632-17	1980 Jul 11 1602	Poseidon C3	-	-	FOT-41F	-	-	SSBN-642	SLBM	-	-	-	5007	-	-
1980-3142	2444632-17	1980 Jul 11 1602	Poseidon C3	-	-	FOT-41F	-	-	SSBN-642	SLBM	-	-	-	5007	-	-
1980-3143	2444635-42	1980 Jul 14 2200	Poseidon C3	-	-	DASO-48	-	-	SSBN-634	SLBM	-	-	-	5007	-	-
1980-3164	244472-39	1980 Aug 20 2119	Poseidon C3	-	-	FOT-42F	-	-	SSBN-625	SLBM	-	-	-	5007	-	-
1980-3165	244472-39	1980 Aug 20 2119	Poseidon C3	-	-	FOT-42F	-	-	SSBN-625	SLBM	-	-	-	5007	-	-
1980-3166	244472-39	1980 Aug 20 2127	Poseidon C3	-	-	FOT-42F	-	-	SSBN-625	SLBM	-	-	-	5007	-	-
1980-3167	244472-40	1980 Aug 20 2132	Poseidon C3	-	-	FOT-42F	-	-	SSBN-625	SLBM	-	-	-	5007	-	-
1981-3118	244474-56	1981 Jun 19 0115	Poseidon C3	-	-	FOT-43F	-	-	SSBN-644	SLBM	-	-	-	5007	-	-
1981-3119	244474-56	1981 Jun 19 0116	Poseidon C3	-	-	FOT-43F	-	-	SSBN-644	SLBM	-	-	-	5007	-	-
1981-3120	244474-56	1981 Jun 19 0116	Poseidon C3	-	-	FOT-43F	-	-	SSBN-644	SLBM	-	-	-	5007	-	-
1981-3121	244474-56	1981 Jun 19 0116	Poseidon C3	-	-	FOT-43F	-	-	SSBN-644	SLBM	-	-	-	5007	-	-
1981-3122	244474-56	1981 Jun 19 0116	Poseidon C3	-	-	FOT-43F	-	-	SSBN-644	SLBM	-	-	-	5007	-	-
1981-3127	2444797-12	1981 Jul 11 1448	Poseidon C3	-	-	FOT-44F	-	-	SSBN-664	SLBM	-	-	-	5007	-	-
1981-3128	2444797-12	1981 Jul 11 1448	Poseidon C3	-	-	FOT-44F	-	-	SSBN-664	SLBM	-	-	-	5007	-	-
1981-3129	2444797-12	1981 Jul 11 1449	Poseidon C3	-	-	FOT-44F	-	-	SSBN-664	SLBM	-	-	-	5007	-	-
1981-3129	2444797-12	1981 Jul 11 1449	Poseidon C3	-	-	FOT-44F	-	-	SSBN-664	SLBM	-	-	-	5007	-	-
1981-3146	2446568-54	1981 Aug 22 0100	Poseidon C3	-	-	DASO	-	-	SSBN-636	SLBM	-	-	-	5007	-	-
1982-3171	2446028-50	1982 Feb 28	Poseidon C3	-	-	FOT-46F	-	-	SSBN-628	SLBM	-	-	-	5007	-	-
1982-3172	2446028-50	1982 Feb 28	Poseidon C3	-	-	FOT-46F	-	-	SSBN-628	SLBM	-	-	-	5007	-	-
1982-3176	2446114-50	1982 May 25	Poseidon C3	-	-	FOT-46F	-	-	SSBN-619	SLBM	-	-	-	5007	-	-
1982-3119	2446114-50	1982 May 25	Poseidon C3	-	-	FOT-46F	-	-	SSBN-619	SLBM	-	-	-	5007	-	-
1982-3120	2446114-50	1982 May 25	Poseidon C3	-	-	FOT-46F	-	-	SSBN-619	SLBM	-	-	-	5007	-	-
1982-3121	2446115-47	1982 May 25 2313	Poseidon C3	-	-	FOT-46F	-	-	SSBN-619	SLBM	-	-	-	5007	-	-
1982-3132	2446146-50	1982 Jun 26	Poseidon C3	-	-	FOT-46F	-	-	SSBN-619	SLBM	-	-	-	5007	-	-
1982-3133	2446146-50	1982 Jun 26 0257	Poseidon C3	-	-	FOT	-	-	SSBN-620	SLBM	-	-	-	5007	-	-
1983-3442	2446344-50	1983 Jan 10	Poseidon C3	-	-	FOT	-	-	SSBN-624	SLBM	-	-	-	5007	-	-
1983-3753	2446344-50	1983 Jan 10 0919	Poseidon C3	-	-	FOT	-	-	SSBN-624	SLBM	-	-	-	5007	-	-
1983-3609	2446344-50	1983 Mar 21 0254	Poseidon C3	-	-	FOT	-	-	SSBN-624	SLBM	-	-	-	5007	-	-
1983-3820	2446343-52	1983 Apr 21 1900	Poseidon C3	-	-	DASO	-	-	SSBN-636	SLBM	-	-	-	5007	-	-
1983-3129	2446533-25	1983 Jul 23 1915	Poseidon C3	-	-	FOT	-	-	SSBN-636	SLBM	-	-	-	5007	-	-
1983-3132	2446543-50	1983 Jul 28	Poseidon C3	-	-	FOT	-	-	SSBN-622	SLBM	-	-	-	5007	-	-
1983-3133	2446543-50	1983 Jul 28	Poseidon C3	-	-	FOT	-	-	SSBN-622	SLBM	-	-	-	5007	-	-
1983-3134	2446543-50	1983 Jul 28	Poseidon C3	-	-	FOT	-	-	SSBN-622	SLBM	-	-	-	5007	-	-
1983-3135	2446543-50	1983 Jul 28 0522	Poseidon C3	-	-	FOT	-	-	SSBN-622	SLBM	-	-	-	5007	-	-
1983-3136	2446560-17	1983 Oct 13 0641	Poseidon C3	-	-	DASO	-	-	SSBN-616	SLBM	-	-	-	5007	-	-
1983-3188	2446560-17	1983 Oct 13 1600	Poseidon C3	-	-	FOT	-	-	SSBN-623	SLBM	-	-	-	5007	-	-
1983-3189	2446560-17	1983 Oct 13 1600	Poseidon C3	-	-	FOT	-	-	SSBN-623	SLBM	-	-	-	5007	-	-
1983-3190	2446560-17	1983 Oct 13 1600	Poseidon C3	-	-	FOT	-	-	SSBN-623	SLBM	-	-	-	5007	-	-
1983-3191	2446560-17	1983 Oct 13 1600	Poseidon C3	-	-	FOT	-	-	SSBN-623	SLBM	-	-	-	5007	-	-
1983-3192	2446560-17	1983 Oct 13 1600	Poseidon C3	-	-	FOT	-	-	SSBN-623	SLBM	-	-	-	5007	-	-
1983-3193	2446560-17	1983 Oct 13 1600	Poseidon C3	-	-	FOT	-	-	SSBN-623	SLBM	-	-	-	5007	-	-
1983-3194	2446560-17	1983 Oct 13 1600	Poseidon C3	-	-	FOT	-	-	SSBN-623	SLBM	-	-	-	5007	-	-
1983-3195	2446560-17	1983 Oct 13 1600	Poseidon C3	-	-	FOT	-	-	SSBN-623	SLBM	-	-	-	5007	-	-
1983-3196	2446560-17	1983 Oct 13 1600	Poseidon C3	-	-	FOT	-	-	SSBN-623	SLBM	-	-	-	5007	-	-
1983-3197	2446560-17	1983 Oct 13 1600	Poseidon C3	-	-	FOT	-	-	SSBN-623	SLBM	-	-	-	5007	-	-
1983-3198	2446560-17	1983 Oct 13 1600	Poseidon C3	-	-	FOT	-	-	SSBN-623	SLBM	-	-	-	5007	-	-
1983-3199	2446560-17	1983 Oct 13 1600	Poseidon C3	-	-	FOT	-	-	SSBN-623	SLBM	-	-	-	5007	-	-
1983-3200	2446560-17	1983 Oct 13 1600	Poseidon C3	-	-	FOT	-	-	SSBN-623	SLBM	-	-	-	5007	-	-
1984-3770	2446770-21	1984 Mar 19 1700	Poseidon C3	-	-	DASO	-	-	SSBN-644	SLBM	-	-	-	5007	-	-
1984-3820	2446769-21	1984 Mar 19 1700	Poseidon C3	-	-	DASO	-	-	SSBN-644	SLBM	-	-	-	5007	-	-
1984-3821	2446769-21	1984 Mar 19 1700	Poseidon C3	-	-	DASO	-	-	SSBN-644	SLBM	-	-	-	5007	-	-
1984-3822	2446769-21	1984 Mar 19 1700	Poseidon C3	-	-	DASO	-	-	SSBN-644	SLBM	-	-	-	5007	-	-
1984-3823	2446769-21	1984 Mar 19 1700	Poseidon C3	-	-	DASO	-	-	SSBN-644	SLBM	-	-	-	5007	-	-
1984-3824	2446769-21	1984 Mar 19 1700	Poseidon C3	-	-	DASO	-	-	SSBN-644	SLBM	-	-	-	5007	-	-
1984-3825	2446769-21	1984 Mar 19 1700	Poseidon C3	-	-	DASO	-	-	SSBN-644	SLBM	-	-	-	5007	-	-
1984-3826	2446769-21	1984 Mar 19 1700	Poseidon C3	-	-	DASO	-	-	SSBN-644	SLBM	-	-	-	5007	-	-
1984-3827	2446769-21	1984 Mar 19 1700	Poseidon C3	-	-	DASO	-	-	SSBN-644	SLBM	-	-	-	5007	-	-
1984-3828	2446769-21	1984 Mar 19 1700	Poseidon C3	-	-	DASO	-	-	SSBN-644	SLBM	-	-	-	5007	-	-
1984-3829	2446769-21	1984 Mar 19 1700	Poseidon C3	-	-	DASO	-	-	SSBN-644	SLBM	-	-	-	5007	-	-
1984-3830	2446769-21	1984 Mar 19 1700	Poseidon C3	-	-	DASO	-	-	SSBN-644	SLBM	-	-	-	5007	-	-
1984-3831	2446769-21	1984 Mar 19 1700	Poseidon C3	-	-	DASO	-	-	SSBN-644	SLBM	-	-	-	5007	-	-
1984-3832	2446769-21	1984 Mar 19 1700	Poseidon C3	-	-	DASO	-	-	SSBN-644	SLBM	-	-	-	5007	-	-
1984-3833	2446769-21	1984 Mar 19 1700	Poseidon C3	-	-	DASO	-	-	SSBN-644	SLBM	-	-	-	5007	-	-
1984-3834	2446769-21	1984 Mar 19 1700	Poseidon C3	-	-	DASO	-	-	SSBN-644	SLBM	-	-	-	5007	-	-
1984-3835	2446769-21	1984 Mar 19 1700	Poseidon C3	-	-	DASO	-	-	SSBN-644	SLBM	-	-	-	5007	-	-
1984-3836	2446769-21	1984 Mar 19 1700	Poseidon C3	-	-	DASO	-	-	SSBN-644	SLBM	-	-	-	5007	-	-
1984-3837	2446769-21	1984 Mar 19 1700	Poseidon C3	-	-	DASO	-	-	SSBN-644	SLBM	-	-	-	5007	-	-
1984-3838	2446769-21	1984 Mar 19 1700	Poseidon C3	-	-	DASO	-	-	SSBN-644	SLBM	-	-	-	5007	-	-
1984-3839	2446769-21	1984 Mar 19 1700	Poseidon C3	-	-	DASO	-	-	SSBN-644	SLBM	-	-	-	5007	-	-
1984-3840	2446769-21	1984 Mar 19 1700	Poseidon C3	-	-	DASO	-	-	SSBN-644	SLBM	-	-	-	5007	-	-
1984-3841	2446769-21	1984 Mar 19 1700	Poseidon C3	-	-	DASO	-	-	SSBN-644	SLBM	-	-	-	5007	-	

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Mission	FlightCode	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee km	Range km	Dest
1987-3155	2447084.50	1987 Oct 16	Poseidon C3	-	-	FOT	-	-	SSBN-654	ETR	SLBM	-	-	5007	-	-
1987-3156	2447084.50	1987 Oct 16	Poseidon C3	-	-	FOT	-	-	SSBN-654	ETR	SLBM	-	-	5007	-	-
1987-3157	2447085.18	1987 Oct 16 1617	Poseidon C3	-	-	FOT	-	-	SSBN-654	ETR	SLBM	-	-	5007	-	-
1988-374	2447252.50	1988 Apr 1	Poseidon C3	-	-	FOT	-	-	SSBN-628	ETR	SLBM	-	-	5007	-	-
1988-375	2447252.50	1988 Apr 1	Poseidon C3	-	-	FOT	-	-	SSBN-628	ETR	SLBM	-	-	5007	-	-
1988-376	2447252.50	1988 Apr 1	Poseidon C3	-	-	FOT	-	-	SSBN-628	ETR	SLBM	-	-	5007	-	-
1988-377	2447253.35	1988 Apr 1 2019	Poseidon C3	-	-	FOT	-	-	SSBN-628	ETR	SLBM	-	-	5007	-	-
1989-344	2447595.40	1989 Mar 9 2133:02	Poseidon C3	-	-	DASO	-	-	SSBN-645	ETR	SLBM	-	-	5007	-	-
1989-397	2447799.25	1989 Sep 29 1804:02	Poseidon C3	-	-	DASO	-	-	SSBN-617	ETR	SLBM	-	-	5007	-	-
1990-386	2448012.24	1990 Apr 30 1750	Poseidon C3	-	-	DASO-61	-	-	SSBN-642	ETR	SLBM	-	-	5007	-	-



Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Agency	Launch_Code	Group	Category	LTCite	Cite	Notes
1968-S460	2440084.94	1968 Aug 16 1030	Posidon C3	-	C3X-01	SSPO	MS	-	Test	Wire	-	-
1968-S611	2440187.21	1968 Nov 26 1700	Posidon C3	-	C3X-02	SSPO	MS	-	Test	CCMPS/Wire	-	-
1969-S78	2440243.17	1969 Jan 21 1600	Posidon C3	-	C3X-03	SSPO	MF	-	Test	AMST690127-16	FBM	-
1969-S144	2440272.17	1969 Feb 19 1605	Posidon C3	-	C3X-04	SSPO	MS	-	Test	CCMPS/Wire	-	-
1969-S207	2440301.47	1969 Mar 20 2310	Posidon C3	-	C3X-05	SSPO	MS	-	Test	CCMPS/Wire	-	-
1969-S257	2440321.42	1969 Apr 9 2202:01	Posidon C3	-	C3X-06	SSPO	MF	-	Test	nsf-koenn	DKS	-
1969-S341	2440366.45	1969 May 24 2255:02	Posidon C3	-	C3X-09	SSPO	MS	-	Test	nsf-koenn	DKS	CCMPS
1969-S365	2440387.66	1969 Jun 15 0357:01	Posidon C3	-	C3X-10	SSPO	MS	-	Test	nsf-koenn	DKS	CCMPS
1969-S396	2440411.99	1969 Jul 9 1150	Posidon C3	-	C3X-11	SSPO	MS	-	Test	CCMPS	-	-
1969-S464	2440485.52	1969 Aug 22 0030	Posidon C3	-	C3X-12	SSPO	MS	-	Test	CCMPS	-	-
1969-S505	2440529.17	1969 Sep 17 1637	Posidon C3	-	C3X-13	SSPO	MF	-	Test	CCMPS	-	-
1969-S601	2440552.33	1969 Nov 26 2001	Posidon C3	-	C3X-17	SSPO	MS	-	Test	CCMPS	-	-
1969-S636	2440562.23	1969 Dec 16 1725	Posidon C3	-	C3X-18	SSPO	MS	-	Test	CCMPS	-	-
1969-S680	2440610.25	1970 Jan 23 1800	Posidon C3	-	C3X-19	SSPO	MS	-	Test	CCMPS	-	-
1970-S80	2440622.36	1970 Feb 4 2038	Posidon C3	-	C3X-20	SSPO	MF	-	Test	CCMPS	-	-
1970-S102	2440670.30	1970 Mar 24 1917	Posidon C3	-	C3X-22	SSPO	MF	-	Test	CCMPS	-	-
1970-S357	2440721.33	1970 May 14 2000	Posidon C3	-	C3X-23	SSPO	MS	-	Test	nsf-koenn	Clear95	-
1970-S396	2440755.13	1970 Jun 17 1500:01	Posidon C3	-	C3X-23	SSPO	MS	-	Test	nsf-koenn	Clear95	-
1970-S411	2440767.57	1970 Jun 30 0139:59	Posidon C3	-	C3X-24	SSPO	MF	-	Test	nsf-koenn	Clear95	-
1970-S461	2440802.12	1970 Aug 3 1500	Posidon C3	-	C3P-1	SSPO	MS	-	OT	CCMPS	-	-
1970-S467	2440816.18	1970 Aug 17 1616	Posidon C3	-	C3P-2	SSPO	MS	-	OT	CCMPS	-	-
1970-S505	2440836.17	1970 Sep 8 1600	Posidon C3	-	C3P-3	SSPO	MS	-	OT	CCMPS	-	-
1970-S527	2440851.12	1970 Sep 21 1500	Posidon C3	-	C3P-4	SSPO	MS	-	OT	CCMPS	-	-
1970-S555	2440866.14	1970 Oct 6 1515	Posidon C3	-	C3P-5	SSPO	MS	-	OT	CCMPS	-	-
1970-S561	2440883.42	1970 Oct 23 2201	Posidon C3	-	C3E-5	SSPO	MS	-	OT	CCMPS	-	-
1970-S528	2440918.45	1970 Nov 27 2217	Posidon C3	-	C3E-10	SSPO	MS	-	OT	CCMPS	-	-
1971-S114	2440987.46	1971 Feb 4 2245	Posidon C3	-	C3E-19	SSPO	MS	-	OT	CCMPS	-	-
1971-S169	2441026.46	1971 Mar 15 2300	Posidon C3	-	C3E-39	SSPO	MS	-	OT	CCMPS	-	-
1971-S213	2441040.46	1971 Mar 29 2305	Posidon C3	-	C3E-12	SSPO	MS	-	OT	CCMPS	-	-
1971-S238	2441061.49	1971 Apr 19 2345	Posidon C3	-	C3E-44	SSPO	MS	-	OT	CCMPS	-	-
1971-S264	2441072.50	1971 May 1 0003	Posidon C3	-	C3E-70	SSPO	MS	-	OT	CCMPS	-	-
1971-S272	2441083.44	1971 May 11 2230	Posidon C3	-	C3E-2	SSPO	MS	-	OT	CCMPS	-	-
1971-S273	2441083.49	1971 May 11 2347	Posidon C3	-	C3E-9	SSPO	MS	-	OT	CCMPS	-	-
1971-S322	2441110.20	1971 Jun 7 1653	Posidon C3	-	C3E-4	SSPO	MS	-	OT	CCMPS	-	-
1971-S356	2441135.19	1971 Jul 2 1630	Posidon C3	-	-	SSPO	MS	-	OT	CCMPS	-	-
1971-S370	2441160.46	1971 Jul 17 2330	Posidon C3	-	-	SSPO	MS	-	OT	CCMPS	-	-
1971-S392	2441180.19	1971 Aug 16 0632	Posidon C3	-	-	SSPO	MS	-	OT	CCMPS	-	-
1971-S523	2441239.39	1971 Oct 14 2113	Posidon C3	-	-	SSPO	MS	-	OT	CCMPS	-	-
1971-S549	2441260.17	1971 Nov 4 1600	Posidon C3	-	-	SSPO	MS	-	OT	CCMPS	-	-
1971-S572	2441280.59	1971 Nov 24 1715	Posidon C3	-	-	SSPO	MS	-	OT	CCMPS	-	-
1971-S594	2441322.24	1971 Dec 6 1745	Posidon C3	-	-	SSPO	MS	-	OT	CCMPS	-	-
1971-S614	2441369.41	1971 Dec 21 2145	Posidon C3	-	-	SSPO	MS	-	OT	CCMPS	-	-
1972-S42	2441385.47	1972 Jan 21 2315	Posidon C3	-	-	SSPO	MS	-	OT	CCMPS	-	-
1972-S554	2441507.47	1972 Jun 8 2315	Posidon C3	-	CBE	SSPO	MS	-	OT	CCMPS	-	-
1972-S588	2441507.50	1972 Jul 6 2315	Posidon C3	-	-	SSPO	MS	-	OT	CCMPS	-	-
1972-S598	2441517.50	1972 Aug 18	Posidon C3	-	-	SSPO	MS	-	OT	CCMPS	-	-
1972-S601	2441517.50	1972 Aug 18	Posidon C3	-	-	SSPO	MS	-	OT	CCMPS	-	-
1972-S620	2441556.45	1972 Aug 19	Posidon C3	-	-	SSPO	MS	-	OT	CCMPS	-	-
1972-S622	2441588.50	1972 Aug 19	Posidon C3	-	-	SSPO	MS	-	OT	CCMPS	-	-
1972-S624	2441588.50	1972 Sep 25 2245	Posidon C3	-	-	SSPO	MS	-	OT	CCMPS	-	-
1972-S626	2441588.50	1972 Sep 28	Posidon C3	-	-	SSPO	MS	-	OT	CCMPS	-	-
1972-S628	2441588.50	1972 Sep 28	Posidon C3	-	-	SSPO	MS	-	OT	CCMPS	-	-
1972-S630	2441588.50	1972 Sep 28	Posidon C3	-	-	SSPO	MS	-	OT	CCMPS	-	-
1972-S632	2441588.50	1972 Sep 28	Posidon C3	-	-	SSPO	MS	-	OT	CCMPS	-	-
1972-S634	2441588.50	1972 Sep 28	Posidon C3	-	-	SSPO	MS	-	OT	CCMPS	-	-
1972-S636	2441693.50	1972 Nov 2	Posidon C3	-	-	SSPO	MS	-	OT	CCMPS	-	-
1972-S638	2441693.50	1972 Nov 2	Posidon C3	-	-	SSPO	MS	-	OT	CCMPS	-	-
1972-S640	2441693.50	1972 Nov 2	Posidon C3	-	-	SSPO	MS	-	OT	CCMPS	-	-
1972-S642	2441693.50	1972 Dec 11	Posidon C3	-	-	SSPO	MS	-	OT	CCMPS	-	-
1972-S644	2441693.50	1972 Dec 11	Posidon C3	-	-	SSPO	MS	-	OT	CCMPS	-	-
1972-S646	2441693.50	1972 Dec 11	Posidon C3	-	-	SSPO	MS	-	OT	CCMPS	-	-
1972-S648	2441693.50	1972 Dec 11	Posidon C3	-	-	SSPO	MS	-	OT	CCMPS	-	-
1972-S650	2441693.50	1972 Dec 11	Posidon C3	-	-	SSPO	MS	-	OT	CCMPS	-	-
1972-S652	2441693.50	1972 Dec 11	Posidon C3	-	-	SSPO	MS	-	OT	CCMPS	-	-
1972-S654	2441693.50	1972 Dec 11	Posidon C3	-	-	SSPO	MS	-	OT	CCMPS	-	-
1972-S656	2441693.50	1972 Dec 11	Posidon C3	-	-	SSPO	MS	-	OT	CCMPS	-	-
1972-S658	2441693.50	1972 Dec 11	Posidon C3	-	-	SSPO	MS	-	OT	CCMPS	-	-
1972-S660	2441693.50	1972 Dec 11	Posidon C3	-	-	SSPO	MS	-	OT	CCMPS	-	-
1972-S662	2441693.50	1972 Dec 11	Posidon C3	-	-	SSPO	MS	-	OT	CCMPS	-	-
1972-S664	2441693.50	1972 Dec 11	Posidon C3	-	-	SSPO	MS	-	OT	CCMPS	-	-
1972-S666	2441693.50	1972 Dec 11	Posidon C3	-	-	SSPO	MS	-	OT	CCMPS	-	-
1972-S668	2441693.50	1972 Dec 11	Posidon C3	-	-	SSPO	MS	-	OT	CCMPS	-	-
1972-S670	2441693.50	1972 Dec 11	Posidon C3	-	-	SSPO	MS	-	OT	CCMPS	-	-
1972-S672	2441693.50	1972 Dec 11	Posidon C3	-	-	SSPO	MS	-	OT	CCMPS	-	-
1972-S674	2441693.50	1972 Dec 11	Posidon C3	-	-	SSPO	MS	-	OT	CCMPS	-	-
1972-S676	2441693.50	1972 Dec 11	Posidon C3	-	-	SSPO	MS	-	OT	CCMPS	-	-
1972-S678	2441693.50	1972 Dec 11	Posidon C3	-	-	SSPO	MS	-	OT	CCMPS	-	-
1972-S680	2441693.50	1972 Dec 11	Posidon C3	-	-	SSPO	MS	-	OT	CCMPS	-	-
1972-S682	2441693.50	1972 Dec 11	Posidon C3	-	-	SSPO	MS	-	OT	CCMPS	-	-
1972-S684	2441693.50	1972 Dec 11	Posidon C3	-	-	SSPO	MS	-	OT	CCMPS	-	-
1972-S686	2441693.50	1972 Dec 11	Posidon C3	-	-	SSPO	MS	-	OT	CCMPS	-	-
1972-S688	2441693.50	1972 Dec 11	Posidon C3	-	-	SSPO	MS	-	OT	CCMPS	-	-
1972-S690	2441693.50	1972 Dec 11	Posidon C3	-	-	SSPO	MS	-	OT	CCMPS	-	-
1972-S692	2441693.50	1972 Dec 11	Posidon C3	-	-	SSPO	MS	-	OT	CCMPS	-	-
1972-S694	2441693.50	1972 Dec 11	Posidon C3	-	-	SSPO	MS	-	OT	CCMPS	-	-
1972-S696	2441693.50	1972 Dec 11	Posidon C3	-	-	SSPO	MS	-	OT	CCMPS	-	-
1972-S698	2441693.50	1972 Dec 11	Posidon C3	-	-	SSPO	MS	-	OT	CCMPS	-	-
1972-S700	2441693.50	1972 Dec 11	Posidon C3	-	-	SSPO	MS	-	OT	CCMPS	-	-
1972-S702	2441693.50	1972 Dec 11	Posidon C3	-	-	SSPO	MS	-	OT	CCMPS	-	-
1972-S704	2441693.50	1972 Dec 11	Posidon C3	-	-	SSPO	MS	-	OT	CCMPS	-	-
1972-S706	2441693.50	1972 Dec 11	Posidon C3	-	-	SSPO	MS	-	OT	CCMPS	-	-
1972-S708	2441693.50	1972 Dec 11	Posidon C3	-	-	SSPO	MS	-	OT	CCMPS	-	-
1972-S710	2441693.50	1972 Dec 11	Posidon C3	-	-	SSPO	MS	-	OT	CCMPS	-	-
1972-S712	2441693.50	1972 Dec 11	Posidon C3	-	-	SSPO	MS	-	OT	CCMPS	-	-
1972-S714	2441693.50	1972 Dec 11	Posidon C3	-	-	SSPO	MS	-	OT	CCMPS	-	-
1972-S716	2441693.50	1972 Dec 11	Posidon C3	-	-	SSPO	MS	-	OT	CCMPS	-	-
1972-S718	2441693.50	1972 Dec 11	Posidon C3	-	-	SSPO	MS	-	OT	CCMPS	-	-
1972-S720	2441693.50	1972 Dec 11	Posidon C3	-	-	SSPO	MS	-	OT	CCMPS	-	-
1972-S722	2441693.50	1972 Dec 11	Posidon C3	-	-	SSPO	MS	-	OT	CCMPS	-	-
1972-S724	2441693.50	1972 Dec 11	Posidon C3	-	-	SSPO	MS	-	OT	CCMPS	-	-
1972-S726	2441693.50	1972 Dec 11	Posidon C3	-	-	SSPO	MS	-	OT	CCMPS	-	-
1972-S728	2441693.50	1972 Dec 11	Posidon C3	-	-	SSPO	MS	-	OT	CCMPS	-	-
1972-S730	2441693.50	1972 Dec 11	Posidon C3	-	-	SSPO	MS	-	OT	CCMPS	-	-
1972-S732	2441693.50	1972 Dec 11	Posidon C3	-	-	SSPO	MS	-	OT	CCMPS	-	-
1972-S734	2441693.50	1972 Dec 11	Posidon C3	-	-	SSPO	MS	-	OT	CCMPS	-	-
1972-S736	2441693.50	1972 Dec 11	Posidon C3	-	-	SSPO	MS	-	OT	CCMPS	-	-
1972-S738	2441693.50	1972 Dec 11	Posidon C3	-	-	SSPO	MS	-	OT	CCMPS	-	-
1972-S740	2441693.50	1972 Dec 11	Posidon C3	-	-	SSPO	MS	-	OT	CCMPS	-	-
1972-S742	2441693.50	1972 Dec 11	Posidon C3	-	-	SSPO	MS	-	OT	CCMPS	-	-
1972-S744	2441693.50	1972 Dec 11	Posidon C3	-	-	SSPO	MS	-	OT	CCMPS	-	-
1972-S746	2441693.50											

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Agency	Launch_Code	Group	Category	LTCite	Cite	Notes
1974-SB84	2442373.50	1974 Nov 22	Posidon C3	-	-	SSPD	MS	-	OT	CCMPS	-	-
1974-SB85	2442373.50	1974 Nov 22	Posidon C3	-	-	SSPD	MS	-	OT	CCMPS	-	-
1974-SB86	2442373.50	1974 Nov 22	Posidon C3	-	-	SSPD	MS	-	OT	CCMPS	-	-
1974-SB14	2442398.17	1974 Dec 16 1600:02	Posidon C3	-	-	SSPD	MS	-	OT	CCMPS	-	-
1975-S126	2442521.52	1975 Apr 19 0028:00	Posidon C3	-	-	SSPD	MS	-	OT	nsf-koenn	CCMPS	-
1975-S127	2442521.52	1975 Apr 19 0033:34	Posidon C3	-	-	SSPD	MS	-	OT	nsf-koenn	CCMPS	-
1975-S134	2442526.50	1975 Apr 24	Posidon C3	-	-	SSPD	MS	-	OT	CCMPS	-	-
1975-S167	2442561.46	1975 May 28 2300:02	Posidon C3	-	-	SSPD	MS	-	OT	CCMPS	-	-
1975-S168	2442561.50	1975 May 29 0002:02	Posidon C3	-	-	SSPD	MS	-	OT	CCMPS	-	-
1975-S207	2442586.50	1975 Jun 23	Posidon C3	-	-	SSPD	MS	-	OT	CCMPS	-	-
1975-S208	2442586.50	1975 Jun 23	Posidon C3	-	-	SSPD	MS	-	OT	CCMPS	-	-
1975-S210	2442587.50	1975 Jun 24	Posidon C3	-	-	SSPD	MS	-	OT	CCMPS	-	-
1975-S211	2442587.50	1975 Jun 24	Posidon C3	-	-	SSPD	MS	-	OT	CCMPS	-	-
1975-S250	2442647.21	1975 Aug 22 1708:40	Posidon C3	-	-	SSPD	MS	-	OT	Cleary95	Cleary95	-
1975-S251	2442647.21	1975 Aug 22 1709:08	Posidon C3	-	-	SSPD	MS	-	OT	Cleary95	Cleary95	-
1975-S252	2442647.23	1975 Aug 22 1726:10	Posidon C3	-	-	SSPD	MS	-	OT	nsf-koenn	Cleary95	-
1975-S260	2442654.23	1975 Aug 29 1724:26	Posidon C3	-	-	SSPD	MS	-	OT	nsf-koenn	Cleary95	-
1975-S261	2442654.23	1975 Aug 29 1724:44	Posidon C3	-	-	SSPD	MS	-	OT	nsf-koenn	Cleary95	-
1975-S284	2442680.46	1975 Sep 24 2300:02	Posidon C3	-	-	SSPD	MS	-	OT	nsf-koenn	CCMPS	-
1975-S301	2442696.46	1975 Oct 10 2300:02	Posidon C3	-	-	SSPD	MS	-	OT	nsf-koenn	CCMPS	-
1975-S315	2442724.50	1975 Nov 6	Posidon C3	-	-	SSPD	MS	-	OT	Cleary95	-	-
1975-S316	2442724.50	1975 Nov 6	Posidon C3	-	-	SSPD	MS	-	OT	Cleary95	-	-
1975-S319	2442729.50	1975 Nov 13	Posidon C3	-	-	SSPD	MS	-	OT	Cleary95	-	-
1976-S80	2442812.39	1976 Feb 3 2115	Posidon C3	-	-	SSPD	MS	-	OT	CCMPS	-	-
1976-S81	2442812.39	1976 Feb 3 2116	Posidon C3	-	-	SSPD	MS	-	OT	CCMPS	-	-
1976-S82	2442812.41	1976 Feb 3 2147	Posidon C3	-	-	SSPD	MS	-	OT	CCMPS	-	-
1976-S101	2442823.42	1976 Feb 14 2200	Posidon C3	-	-	SSPD	MS	-	OT	CCMPS	-	-
1976-S162	2442869.34	1976 Apr 20 2008	Posidon C3	-	-	SSPD	MS	-	OT	CCMPS	-	-
1976-S163	2442869.34	1976 Apr 20 2009	Posidon C3	-	-	SSPD	MS	-	OT	CCMPS	-	-
1976-S166	2442891.31	1976 Apr 23 0946	Posidon C3	-	-	SSPD	MS	-	OT	CCMPS	-	-
1976-S166	2442891.31	1976 Apr 23 0953	Posidon C3	-	-	SSPD	MS	-	OT	CCMPS	-	-
1976-S167	2442924.42	1976 May 25 2200	Posidon C3	-	-	SSPD	MS	-	OT	CCMPS	-	-
1976-S207	2442962.34	1976 Jun 22 2015	Posidon C3	-	-	SSPD	MS	-	OT	CCMPS	-	-
1976-S208	2442962.35	1976 Jun 22 2017	Posidon C3	-	-	SSPD	MS	-	OT	CCMPS	-	-
1976-S211	2442965.87	1976 Jun 26 0858	Posidon C3	-	-	SSPD	MS	-	OT	CCMPS	-	-
1976-S212	2442965.88	1976 Jun 26 0946	Posidon C3	-	-	SSPD	MS	-	OT	CCMPS	-	-
1976-S265	2443011.46	1976 Aug 20 2250	Posidon C3	-	-	SSPD	MS	-	OT	CCMPS	-	-
1976-S266	2443011.46	1976 Aug 28 0943	Posidon C3	-	-	SSPD	MS	-	OT	CCMPS	-	-
1976-S272	2443018.90	1976 Aug 28 0942	Posidon C3	-	-	SSPD	MS	-	OT	CCMPS	-	-
1976-S273	2443018.90	1976 Aug 28 0943	Posidon C3	-	-	SSPD	MS	-	OT	CCMPS	-	-
1976-S275	2443102.21	1976 Nov 19 1707	Posidon C3	-	-	SSPD	MS	-	OT	CCMPS	-	-
1976-S279	2443102.21	1976 Nov 19 1707	Posidon C3	-	-	SSPD	MS	-	OT	CCMPS	-	-
1976-S330	2443102.42	1976 Nov 19 1708	Posidon C3	-	-	SSPD	MS	-	OT	CCMPS	-	-
1976-S331	2443102.42	1976 Nov 19 1708	Posidon C3	-	-	SSPD	MS	-	OT	CCMPS	-	-
1976-S332	2443102.50	1976 Nov 19 1909	Posidon C3	-	-	SSPD	MS	-	OT	CCMPS	-	-
1976-S335	2443105.50	1976 Nov 23	Posidon C3	-	-	SSPD	MS	-	OT	FBI	-	-
1976-S336	2443105.50	1976 Nov 23	Posidon C3	-	-	SSPD	MS	-	OT	FBI	-	-
1976-S356	2443172.44	1977 Jan 28 2238	Posidon C3	-	-	SSPD	MS	-	OT	CCMPS	-	-
1977-S81	2443172.44	1977 Jan 28 2237	Posidon C3	-	-	SSPD	MS	-	OT	CCMPS	-	-
1977-S82	2443172.44	1977 Jan 28 2237	Posidon C3	-	-	SSPD	MS	-	OT	CCMPS	-	-
1977-S84	2443172.44	1977 Jan 28 2237	Posidon C3	-	-	SSPD	MS	-	OT	CCMPS	-	-
1977-S85	2443172.44	1977 Jan 28 2237	Posidon C3	-	-	SSPD	MS	-	OT	CCMPS	-	-
1977-S86	2443176.63	1977 Feb 5 0303	Posidon C3	-	-	SSPD	MS	-	OT	CCMPS	-	-
1977-S127	2443257.37	1977 Mar 24 2047	Posidon C3	-	-	SSPD	MS	-	OT	CCMPS	-	-
1977-S127	2443257.37	1977 Mar 24 2047	Posidon C3	-	-	SSPD	MS	-	OT	CCMPS	-	-
1977-S128	2443257.37	1977 Mar 30 1326	Posidon C3	-	-	SSPD	MS	-	OT	CCMPS	-	-
1977-S137	2443293.07	1977 Mar 30 1326	Posidon C3	-	-	SSPD	MS	-	OT	CCMPS	-	-
1977-S138	2443293.07	1977 Mar 30 1326	Posidon C3	-	-	SSPD	MS	-	OT	CCMPS	-	-
1977-S170	2443289.46	1977 May 25 2257	Posidon C3	-	-	SSPD	MS	-	OT	CCMPS	-	-
1977-S171	2443289.48	1977 May 25 2257	Posidon C3	-	-	SSPD	MS	-	OT	CCMPS	-	-
1977-S171	2443289.48	1977 May 25 2257	Posidon C3	-	-	SSPD	MS	-	OT	CCMPS	-	-
1977-S192	2443296.41	1977 Jun 4 2146	Posidon C3	-	-	SSPD	MS	-	OT	CCMPS	-	-
1977-S193	2443296.41	1977 Jun 4 2147	Posidon C3	-	-	SSPD	MS	-	OT	CCMPS	-	-
1977-S225	2443359.17	1977 Aug 3 1600.02	Posidon C3	-	-	SSPD	MS	-	OT	CCMPS	-	-
1977-S242	2443393.38	1977 Sep 6 2100.01	Posidon C3	-	-	SSPD	MS	-	OT	CCMPS	-	-
1978-S97	2443597.46	1978 Mar 29 2300.01	Posidon C3	-	-	SSPD	MS	-	OT	nsf-koenn	CCMPS	-
1978-S106	2443610.42	1978 Apr 11 2169	Posidon C3	-	-	SSPD	MS	-	OT	CCMPS	-	-
1978-S107	2443610.42	1978 Apr 11 2169	Posidon C3	-	-	SSPD	MS	-	OT	CCMPS	-	-
1978-S108	2443610.42	1978 Apr 11 2200	Posidon C3	-	-	SSPD	MS	-	OT	CCMPS	-	-
1978-S109	2443610.42	1978 Apr 11 2200	Posidon C3	-	-	SSPD	MS	-	OT	CCMPS	-	-
1978-S122	2443622.90	1978 Apr 24 0935	Posidon C3	-	-	SSPD	MS	-	OT	CCMPS	-	-
1978-S123	2443622.90	1978 Apr 24 0935	Posidon C3	-	-	SSPD	MS	-	OT	CCMPS	-	-
1978-S124	2443622.90	1978 Apr 24 0936	Posidon C3	-	-	SSPD	MS	-	OT	CCMPS	-	-
1978-S125	2443622.90	1978 Apr 24 0936	Posidon C3	-	-	SSPD	MS	-	OT	CCMPS	-	-
1978-S133	2443641.47	1978 May 12 2311	Posidon C3	-	-	SSPD	MS	-	OT	CCMPS	-	-
1978-S134	2443641.47	1978 May 12 2312	Posidon C3	-	-	SSPD	MS	-	OT	CCMPS	-	-
1978-S135	2443641.47	1978 May 12 2313	Posidon C3	-	-	SSPD	MS	-	OT	CCMPS	-	-
1978-S136	2443641.47	1978 May 12 2313	Posidon C3	-	-	SSPD	MS	-	OT	CCMPS	-	-
1978-S138	2443644.38	1978 May 15 2100	Posidon C3	-	-	SSPD	MS	-	OT	CCMPS	-	-
1978-S141	2443649.50	1978 May 21 1222	Posidon C3	-	-	SSPD	MS	-	OT	CCMPS	-	-
1978-S142	2443650.02	1978 May 21 1223	Posidon C3	-	-	SSPD	MS	-	OT	CCMPS	-	-
1978-S143	2443650.02	1978 May 21 1223	Posidon C3	-	-	SSPD	MS	-	OT	CCMPS	-	-
1978-S144	2443650.04	1978 May 21 1255	Posidon C3	-	-	SSPD	MS	-	OT	CCMPS	-	-
1979-S61	2443923.65	1979 Feb 19 0332?	Posidon C3	-	-	SSPD	MS	-	OT	nsf-koenn	CCMPS	-
1979-S62	2443923.65	1979 Feb 19 0333	Posidon C3	-	-	SSPD	MS	-	OT	CCMPS	-	-
1979-S63	2443923.65	1979 Feb 19 0335	Posidon C3	-	-	SSPD	MS	-	OT	CCMPS	-	-
1979-S64	2443923.71	1979 Feb 19 0500	Posidon C3	-	-	SSPD	MS	-	OT	CCMPS	-	-
1979-S88	2443938.28	1979 Mar 5 1847	Posidon C3	-	-	SSPD	MS	-	OT	CCMPS	-	-
1979-S89	2443938.28	1979 Mar 5 1848	Posidon C3	-	-	SSPD	MS	-	OT	CCMPS	-	-

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Orbital	Agency	Launch_Code	Group	Category	LTCite	Cite	Notes
1979-S90	2443938-34	1979 Mar 5 2007	Posidon C3	-	C3	0.000	SSPO	MS	-	OT	CCMPS	-	-
1979-S91	2443938-43	1979 Mar 5 2225	Posidon C3	-	C3	0.000	SSPO	MS	-	OT	CCMPS	-	-
1979-S103	2443966-43	1979 Mar 23 2225	Posidon C3	-	C3E	0.000	SSPO	MS	-	OT	CCMPS	-	-
1979-S141	2444020-43	1979 May 26 2215:03	Posidon C3	-	C3E	0.000	SSPO	MS	-	OT	nsf-koenn	-	-
1979-S230	2444170-41	1979 Oct 23 2151	Posidon C3	-	-	0.000	SSPO	MS	-	OT	CCMPS	-	-
1980-S34	2444272-55	1980 Feb 3 0112	Posidon C3	-	-	0.000	SSPO	MS	-	OT	CCMPS	-	-
1980-S35	2444272-55	1980 Feb 3 0113	Posidon C3	-	-	0.000	SSPO	MS	-	OT	CCMPS	-	-
1980-S36	2444272-55	1980 Feb 3 0113	Posidon C3	-	-	0.000	SSPO	MS	-	OT	CCMPS	-	-
1980-S37	2444273-61	1980 Feb 4 0242	Posidon C3	-	-	0.000	SSPO	MS	-	OT	CCMPS	-	-
1980-S42	2444283-42	1980 Feb 13 2200:02	Posidon C3	-	-	0.000	SSPO	MS	-	OT	CCMPS	-	-
1980-S87	2444351-41	1980 Apr 21 2147	Posidon C3	-	-	0.000	SSPO	MS	-	OT	CCMPS	-	-
1980-S88	2444351-41	1980 Apr 21 2147	Posidon C3	-	-	0.000	SSPO	MS	-	OT	CCMPS	-	-
1980-S89	2444351-41	1980 Apr 21 2146	Posidon C3	-	-	0.000	SSPO	MS	-	OT	CCMPS	-	-
1980-S90	2444351-41	1980 Apr 21 2146	Posidon C3	-	-	0.000	SSPO	MS	-	OT	CCMPS	-	-
1980-S139	2444432-17	1980 Jul 11 1601	Posidon C3	-	-	0.000	SSPO	MS	-	OT	CCMPS	-	-
1980-S140	2444432-17	1980 Jul 11 1601	Posidon C3	-	-	0.000	SSPO	MS	-	OT	CCMPS	-	-
1980-S141	2444432-17	1980 Jul 11 1602	Posidon C3	-	-	0.000	SSPO	MS	-	OT	CCMPS	-	-
1980-S142	2444432-17	1980 Jul 11 1602	Posidon C3	-	-	0.000	SSPO	MS	-	OT	CCMPS	-	-
1980-S143	2444435-42	1980 Jul 14 2200	Posidon C3	-	-	0.000	SSPO	MS	-	OT	CCMPS	-	-
1980-S154	2444472-39	1980 Aug 20 2119	Posidon C3	-	-	0.000	SSPO	MS	-	OT	CCMPS	-	-
1980-S155	2444472-39	1980 Aug 20 2119	Posidon C3	-	-	0.000	SSPO	MS	-	OT	CCMPS	-	-
1980-S156	2444472-39	1980 Aug 20 2127	Posidon C3	-	-	0.000	SSPO	MS	-	OT	CCMPS	-	-
1980-S157	2444472-40	1980 Aug 20 2132	Posidon C3	-	-	0.000	SSPO	MS	-	OT	CCMPS	-	-
1981-S118	2444774-55	1981 Jun 19 0115	Posidon C3	-	-	0.000	SSPO	MS	-	OT	nsf-koenn	CCMPS	-
1981-S119	2444774-55	1981 Jun 19 0115	Posidon C3	-	-	0.000	SSPO	MS	-	OT	nsf-koenn	CCMPS	-
1981-S120	2444774-55	1981 Jun 19 0116	Posidon C3	-	-	0.000	SSPO	MS	-	OT	nsf-koenn	CCMPS	-
1981-S121	2444774-55	1981 Jun 19 0116	Posidon C3	-	-	0.000	SSPO	MS	-	OT	nsf-koenn	CCMPS	-
1981-S122	2444797-12	1981 Jul 11 1448	Posidon C3	-	-	0.000	SSPO	MS	-	OT	nsf-koenn	CCMPS	-
1981-S123	2444797-12	1981 Jul 11 1448	Posidon C3	-	-	0.000	SSPO	MS	-	OT	nsf-koenn	CCMPS	-
1981-S124	2444797-12	1981 Jul 11 1449	Posidon C3	-	-	0.000	SSPO	MS	-	OT	nsf-koenn	CCMPS	-
1981-S125	2444797-12	1981 Jul 11 1449	Posidon C3	-	-	0.000	SSPO	MS	-	OT	nsf-koenn	CCMPS	-
1981-S145	2446335-54	1981 Aug 22 0100	Posidon C3	-	-	0.000	SSPO	MS	-	OT	CCMPS	-	-
1982-S71	2446028-50	1982 Feb 28	Posidon C3	-	-	0.000	SSPO	MS	-	OT	CCMPS	-	-
1982-S72	2446028-50	1982 Feb 28	Posidon C3	-	-	0.000	SSPO	MS	-	OT	CCMPS	-	-
1982-S116	2446114-50	1982 May 25	Posidon C3	-	-	0.000	SSPO	MS	-	OT	CCMPS	-	-
1982-S119	2446114-50	1982 May 25	Posidon C3	-	-	0.000	SSPO	MS	-	OT	CCMPS	-	-
1982-S120	2446114-50	1982 May 25	Posidon C3	-	-	0.000	SSPO	MS	-	OT	CCMPS	-	-
1982-S121	2446115-47	1982 May 25 2313	Posidon C3	-	-	0.000	SSPO	MS	-	OT	CCMPS	-	-
1982-S132	2446146-60	1982 Jun 26	Posidon C3	-	-	0.000	SSPO	MS	-	OT	CCMPS	-	-
1982-S133	2446146-62	1982 Jun 26 0257	Posidon C3	-	-	0.000	SSPO	MS	-	OT	CCMPS	-	-
1983-S42	2446344-50	1983 Jan 10	Posidon C3	-	-	0.000	SSPO	MS	-	OT	CCMPS	-	-
1983-S43	2446344-50	1983 Jan 10 0919	Posidon C3	-	-	0.000	SSPO	MS	-	OT	CCMPS	-	-
1983-S79	2446414-60	1983 Mar 21 0254	Posidon C3	-	-	0.000	SSPO	MS	-	OT	CCMPS	-	-
1983-S80	2446414-60	1983 Mar 21 0254	Posidon C3	-	-	0.000	SSPO	MS	-	OT	CCMPS	-	-
1983-S89	2446533-28	1983 Apr 9 1900	Posidon C3	-	-	0.000	SSPO	MS	-	OT	CCMPS	-	-
1983-S122	2446533-50	1983 Jul 23 1915	Posidon C3	-	-	0.000	SSPO	MS	-	OT	CCMPS	-	-
1983-S133	2446543-50	1983 Jul 28	Posidon C3	-	-	0.000	SSPO	MS	-	OT	CCMPS	-	-
1983-S134	2446543-50	1983 Jul 28	Posidon C3	-	-	0.000	SSPO	MS	-	OT	CCMPS	-	-
1983-S135	2446543-50	1983 Jul 28 0522	Posidon C3	-	-	0.000	SSPO	MS	-	OT	CCMPS	-	-
1983-S136	2446543-72	1983 Jul 28 0522	Posidon C3	-	-	0.000	SSPO	MS	-	OT	CCMPS	-	-
1983-S155	2446560-17	1983 Sep 2 1600	Posidon C3	-	-	0.000	SSPO	MS	-	OT	CCMPS	-	-
1983-S156	2446560-17	1983 Sep 2 1600	Posidon C3	-	-	0.000	SSPO	MS	-	OT	CCMPS	-	-
1983-S188	2446620-78	1983 Oct 13 0641	Posidon C3	-	-	0.000	SSPO	MS	-	OT	CCMPS	-	-
1983-S189	2446620-78	1983 Oct 13 0641	Posidon C3	-	-	0.000	SSPO	MS	-	OT	CCMPS	-	-
1984-S70	2446770-21	1984 Mar 19 1700	Posidon C3	-	-	0.000	SSPO	MS	-	OT	CCMPS	-	-
1984-S82	2446789-50	1984 Apr 9	Posidon C3	-	-	0.000	SSPO	MS	-	OT	CCMPS	-	-
1984-S83	2446789-72	1984 Apr 9 0516	Posidon C3	-	-	0.000	SSPO	MS	-	OT	CCMPS	-	-
1984-S97	2446880-50	1984 Jun 29	Posidon C3	-	-	0.000	SSPO	MS	-	OT	CCMPS	-	-
1984-S98	2446881-34	1984 Jun 29 2003	Posidon C3	-	-	0.000	SSPO	MS	-	OT	CCMPS	-	-
1984-S102	2446906-21	1984 Jul 24 1700	Posidon C3	-	-	0.000	SSPO	MS	-	OT	CCMPS	-	-
1985-S52	2446130-50	1985 Mar 6	Posidon C3	-	-	0.000	SSPO	MS	-	OT	CCMPS	-	-
1985-S53	2446130-50	1985 Mar 6	Posidon C3	-	-	0.000	SSPO	MS	-	OT	CCMPS	-	-
1985-S54	2446130-50	1985 Mar 6 0342	Posidon C3	-	-	0.000	SSPO	MS	-	OT	CCMPS	-	-
1985-S55	2446130-65	1985 Mar 6 0342	Posidon C3	-	-	0.000	SSPO	MS	-	OT	CCMPS	-	-
1985-S82	2446229-50	1985 Jun 13	Posidon C3	-	-	0.000	SSPO	MS	-	OT	CCMPS	-	-
1985-S83	2446229-50	1985 Jun 13	Posidon C3	-	-	0.000	SSPO	MS	-	OT	CCMPS	-	-
1985-S84	2446229-50	1985 Jun 13	Posidon C3	-	-	0.000	SSPO	MS	-	OT	CCMPS	-	-
1985-S85	2446229-76	1985 Jun 13 0608	Posidon C3	-	-	0.000	SSPO	MS	-	OT	CCMPS	-	-
1985-S104	2446288-21	1985 Aug 10 1700	Posidon C3	-	-	0.000	SSPO	MS	-	OT	nsf-koenn	CCMPS	-
1985-S110	2446310-50	1985 Sep 2	Posidon C3	-	-	0.000	SSPO	MS	-	OT	CCMPS	-	-
1985-S111	2446310-71	1985 Sep 2 0503	Posidon C3	-	-	0.000	SSPO	MS	-	OT	CCMPS	-	-
1986-S48	2446571-20	1986 May 20 1645	Posidon C3	-	-	0.000	SSPO	MS	-	OT	CCMPS	-	-
1986-S52	2446585-50	1986 Jun 4	Posidon C3	-	-	0.000	SSPO	MS	-	OT	CCMPS	-	-
1986-S53	2446585-50	1986 Jun 4	Posidon C3	-	-	0.000	SSPO	MS	-	OT	CCMPS	-	-
1986-S54	2446585-50	1986 Jun 4	Posidon C3	-	-	0.000	SSPO	MS	-	OT	CCMPS	-	-
1986-S55	2446586-40	1986 Jun 4 2134	Posidon C3	-	-	0.000	SSPO	MS	-	OT	CCMPS	-	-
1986-S109	2446738-50	1986 Nov 4	Posidon C3	-	-	0.000	SSPO	MS	-	OT	CCMPS	-	-
1986-S110	2446738-50	1986 Nov 4	Posidon C3	-	-	0.000	SSPO	MS	-	OT	CCMPS	-	-
1986-S111	2446739-37	1986 Nov 4 2059	Posidon C3	-	-	0.000	SSPO	MS	-	OT	CCMPS	-	-
1986-S113	2446739-37	1986 Nov 4 2059	Posidon C3	-	-	0.000	SSPO	MS	-	OT	CCMPS	-	-
1987-S48	2446827-31	1987 Jan 31 1930:03	Posidon C3	-	-	0.000	USHSSP	MS	-	OT	CCMPS	-	-
1987-S124	2447068-25	1987 Jul 31 1800:03	Posidon C3	-	-	0.000	USHSSP	MS	-	OT	nsf-koenn	CCMPS	-
1987-S142	2447050-50	1987 Sep 12	Posidon C3	-	-	0.000	USHSSP	MS	-	OT	CCMPS	-	-
1987-S143	2447050-50	1987 Sep 12	Posidon C3	-	-	0.000	USHSSP	MS	-	OT	CCMPS	-	-
1987-S144	2447050-50	1987 Sep 12	Posidon C3	-	-	0.000	USHSSP	MS	-	OT	CCMPS	-	-
1987-S145	2447050-73	1987 Sep 12 0528	Posidon C3	-	-	0.000	USHSSP	MS	-	OT	CCMPS	-	-
1987-S154	2447084-50	1987 Oct 16	Posidon C3	-	-	0.000	USHSSP	MS	-	OT	CCMPS	-	-

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Launch_Display	Agency	Launch_Code	Group	Category	LTCite	Cite	Notes
1987-S155	2447084.50	1987 Oct 16	Posetdon C3	-	-	0.000	USNSP	MS	-	OT	CCMDFS	-	-
1987-S156	2447084.50	1987 Oct 16	Posetdon C3	-	-	0.000	USNSP	MS	-	OT	CCMDFS	-	-
1987-S157	2447085.18	1987 Oct 16 1617	Posetdon C3	-	-	0.000	USNSP	MS	-	OT	CCMDFS	-	-
1988-S74	2447252.50	1988 Apr 1	Posetdon C3	-	-	0.000	USNSP	MS	-	OT	CCMDFS	-	-
1988-S75	2447252.50	1988 Apr 1	Posetdon C3	-	-	0.000	USNSP	MS	-	OT	CCMDFS	-	-
1988-S76	2447252.50	1988 Apr 1	Posetdon C3	-	-	0.000	USNSP	MS	-	OT	CCMDFS	-	-
1988-S77	2447253.35	1988 Apr 1 2019	Posetdon C3	-	-	0.000	USNSP	MS	-	OT	CCMDFS	-	-
1989-S44	2447595.40	1989 Mar 9 2133:02	Posetdon C3	-	-	0.000	USNSP	MS	-	OT	CCMDFS	-	-
1989-S97	2447799.25	1989 Sep 29 1504:02	Posetdon C3	-	-	0.000	USNSP	MS	-	OT	CCMDFS	-	-
1990-S86	2448012.24	1990 Apr 30 1750	Posetdon C3	-	-	0.000	USNSP	MS	-	OT	CCMDFS	-	-
												CCMDFS	Cleary95
												CCMDFS	Cleary95





Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Mission	Launch	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee	Range	Dest
1988-S60	2447216.50	1988 Feb 25	Prihvi	-	1	-	-	-	SHAR	-	-	-	100?	-	-
1989-S96	2447795.72	1989 Sep 26 05:10	Prihvi	-	2	SS-520	-	-	SHAR	-	-	-	100?	-	-
1991-S64	2446298.78	1991 Feb 11 06:45	Prihvi	-	3	-	-	-	SHAR	-	-	-	100?	-	-
1991-M01	2448441.85	1991 Jul 4 09:22	Prihvi	-	4	-	-	-	SHAR	-	-	-	50?	-	-
1991-M02	2448476.73	1991 Aug 7 05:28	Prihvi	-	5	-	-	-	SHAR	-	-	-	0?	-	-
1992-A01	2448665.50	1992 Feb 13	Prihvi	-	6	-	-	-	SHAR	-	-	-	100?	-	-
1992-S40	2448747.50	1992 May 5	Prihvi	-	7	-	-	-	CHHU	-	-	-	100?	-	-
1992-S72	2448852.67	1992 Aug 18 04:00	Prihvi	-	8	-	-	-	CHHU	-	-	-	100?	-	-
1992-S106	2448863.72	1992 Aug 29 05:13	Prihvi	-	9	-	-	-	CHHU	-	-	-	100?	-	-
1993-S12	2449025.85	1993 Feb 7 08:20	Prihvi	-	10	-	-	-	CHHU	-	-	-	100?	-	-
1993-S41	2449150.50	1993 Jun 12	Prihvi	-	11	-	-	-	CHHU	-	-	-	100?	-	-
1993-M07	2449321.79	1993 Nov 30 06:55	Prihvi	-	12	250 kg RV	-	-	CHHU	-	-	-	100?	-	-
1994-S36	2449507.76	1994 Jun 4 06:10	Prihvi	-	13	-	-	-	CHHU	-	-	-	100?	-	-
1994-S37	2449509.50	1994 Jun 6	Prihvi	-	14	-	Army user trial	-	CHHU	-	-	-	100?	-	-
1996-S04	2450109.87	1996 Jan 27 08:52	Prihvi 2	-	2-1 (15)	-	-	-	CHHU	-	-	-	100?	-	-
1996-S01	2450062.50	1996 Jun 6	Prihvi 2	-	2-2	-	-	-	CHHU	-	-	-	100?	-	-
1997-S19	2450502.77	1997 Feb 23 06:22	Prihvi 2	-	2-3	-	-	-	CHHU	-	-	-	100?	-	-
2000-A02	2451645.84	2000 Apr 11 08:05	Dhanush	-	17	Test	-	-	CHHU	-	-	-	100?	-	-
2000-S35	2451711.96	2000 Jun 16 08:45	Prihvi	-	18	Solid fuel test	-	-	CHHU	-	-	-	100?	-	-
2001-S16	2451999.75	2001 Mar 31 06:00	Prihvi	-	-	Test	-	-	CHHU	-	-	-	50?	-	-
2001-M04	2452173.50	2001 Sep 21	Prihvi	-	-	Prihvi-2	-	INS-P51	SEA	-	-	-	100?	-	-
2001-S88	2452285.72	2001 Dec 12 05:11	Prihvi	-	-	Prihvi-2?	-	-	CHHU	-	-	-	100?	-	-
2003-S10	2452724.75	2003 Mar 26 06:00	Prihvi	-	-	Prihvi-2?	-	-	CHHU	-	-	-	100?	-	-
2003-S20	2452788.74	2003 Apr 29 05:50	Prihvi	-	-	Prihvi-3	-	-	CHHU	-	-	-	100?	-	-
2004-S05	2453027.88	2004 Jan 23 09:09	Prihvi	-	23	Ship test	-	-	CHHU	-	-	-	50?	-	-
2004-H10	2453083.69	2004 Mar 19 04:40	Prihvi	-	-	Prihvi-3 (Dhanush?)	-	-	CHHU	-	-	-	50?	-	-
2004-M08	2453305.75	2004 Oct 27 05:59	Prihvi	-	-	INS-P51	-	-	SEA	-	-	-	50?	-	-
2005-M04	2453516.78	2004 Nov 7 06:50	Dhanush	-	3	INS-P51	-	-	SEA	-	-	-	50?	-	-
2005-M05	2453502.82	2005 May 12 07:34	Prihvi	-	-	INS-P51	-	-	SEA	-	-	-	50?	-	-
2006-M05	2453732.85	2005 Dec 26 08:28	Dhanush	-	4	INS-P51	-	-	SEA	-	-	-	50?	-	-
2006-M03	2453897.84	2005 Jun 11 05:10	Prihvi	-	-	INS-P51	-	-	SEA	-	-	-	50?	-	-
2006-S65	2454088.68	2005 Nov 19 04:25	Prihvi	-	-	INS-P51	-	-	SEA	-	-	-	50?	-	-
2006-S66	2454086.70	2005 Nov 27 04:45	Prihvi	-	-	INS-P51	-	-	SEA	-	-	-	48	-	-
2007-S48	2454066.70	2005 Nov 27 04:46	Prihvi	-	5	INS-P51	-	-	SEA	-	-	-	50?	-	-
2007-S49	2454189.88	2007 Mar 30 09:05	Dhanush	-	-	INS-P51	-	-	SEA	-	-	-	100?	-	-
2007-S77	2454229.72	2007 May 9 05:10	Prihvi	-	-	INS-P51	-	-	SEA	-	-	-	110	-	-
2008-A03	2454460.73	2007 Dec 6 05:30	Prihvi 2	-	2	INS-P51	-	-	SEA	-	-	-	44	-	-
2008-S02	2454669.71	2008 May 23 04:56	Prihvi 2	-	-	INS-P51	-	-	SEA	-	-	-	120	-	-
2009-M01	2454886.96	2009 Mar 6 10:54	Dhanush	-	-	INS-P51	-	-	SEA	-	-	-	75	-	-
2009-M03	2454986.70	2009 Apr 15 04:40	Prihvi 2	-	2	INS-P51	-	-	SEA	-	-	-	50?	-	-
2009-M06	2455116.71	2009 Oct 12 05:08	Prihvi 2	-	2	INS-P51	-	-	SEA	-	-	-	50?	-	-
2009-M07	2455116.71	2009 Oct 12 05:09	Prihvi 2	-	2	INS-P51	-	-	SEA	-	-	-	50?	-	-
2009-M08	2455270.78	2009 Dec 13 05:32	Dhanush	-	-	INS-P51	-	-	SEA	-	-	-	70	-	-
2010-S05	2455270.69	2010 Mar 19 03:42	Prihvi	-	14	INS-P51	-	-	SEA	-	-	-	100?	-	-
2010-S25	2455282.51	2010 Mar 27 01:18	Dhanush	-	-	INS-P51	-	-	SEA	-	-	-	100?	-	-
2010-S66	2455285.54	2010 Mar 27 01:18	Prihvi	-	-	INS-P51	-	-	SEA	-	-	-	100?	-	-
2010-S67	2455285.54	2010 Jun 19 01:00?	Prihvi	-	-	INS-P51	-	-	SEA	-	-	-	100?	-	-
2010-S08	2455285.68	2010 Jun 19 01:00?	Prihvi	-	-	INS-P51	-	-	SEA	-	-	-	100?	-	-
2010-M07	2455285.68	2010 Jul 26 04:45	Prihvi	-	-	INS-P51	-	-	SEA	-	-	-	50?	-	-
2010-M08	2455285.68	2010 Dec 22 03:45	Prihvi	-	-	INS-P51	-	-	SEA	-	-	-	50?	-	-
2011-M01	2455285.67	2010 Dec 22 03:45	Prihvi	-	-	INS-P51	-	-	SEA	-	-	-	50?	-	-
2011-M04	2455631.69	2011 Mar 6 10:43	Prihvi	-	-	INS-P51	-	-	SEA	-	-	-	50?	-	-
2011-M05	2455631.73	2011 Mar 11 05:30	Dhanush	-	-	INS-P51	-	-	SEA	-	-	-	50?	-	-
2011-M02	2455721.65	2011 Mar 11 05:30	Prihvi 2	-	2	INS-P51	-	-	SEA	-	-	-	50?	-	-
2011-S02	2455830.64	2011 Jun 26 03:30	Prihvi 2	-	-	INS-P51	-	-	SEA	-	-	-	50?	-	-
2012-S04	2455907.69	2012 Feb 10 04:40	Prihvi 2	-	12	INS-P51	-	-	SEA	-	-	-	100?	-	-
2012-S76	2456164.73	2012 Feb 10 04:40	Prihvi 2	-	?	INS-P51	-	-	SEA	-	-	-	100?	-	-
2012-S85	2456204.65	2012 Oct 5 05:34	Prihvi 2	-	-	INS-P51	-	-	SEA	-	-	-	100?	-	-
2012-S86	2456204.65	2012 Oct 5 05:55	Dhanush	-	-	INS-P51	-	-	SEA	-	-	-	100?	-	-
2012-M02	2456205.75	2012 Nov 23 07:22	Prihvi	-	-	INS-P51	-	-	SEA	-	-	-	50?	-	-
2012-S74	2456281.66	2012 Dec 20 03:51	Prihvi 2	-	-	INS-P51	-	-	SEA	-	-	-	50?	-	-
2013-S84	2456516.66	2013 Aug 12 03:45	Prihvi 2	-	-	INS-P51	-	-	SEA	-	-	-	350	-	-
2013-S87	2456572.66	2013 Oct 7 03:45	Prihvi 2	-	-	INS-P51	-	-	SEA	-	-	-	100?	-	-
2013-S91	2456573.78	2013 Oct 8 06:50	Prihvi 2	-	-	INS-P51	-	-	SEA	-	-	-	100?	-	-
2014-A02	2456664.68	2014 Jan 7 04:18	Prihvi 2	-	-	INS-P51	-	-	SEA	-	-	-	325	-	-
2014-S19	2456774.65	2014 Apr 27 03:37	Prihvi 2	-	-	INS-P51	-	-	SEA	-	-	-	325	-	-
2014-S20	2456774.65	2014 Apr 27 03:40?	Prihvi 2	-	-	INS-P51	-	-	SEA	-	-	-	120?	-	-
2014-S39	2456976.72	2014 Nov 14 05:10	Prihvi 2	-	-	INS-P51	-	-	SEA	-	-	-	45?	-	-
2014-M04	2456976.09	2014 Nov 14 14:10	Dhanush	-	-	INS-P51	-	-	SEA	-	-	-	50?	-	-
2015-M01	2457072.66	2015 Apr 9 05:32	Prihvi 2	-	-	INS-P51	-	-	SEA	-	-	-	50?	-	-
2015-M03	2457121.73	2015 Apr 9 05:32	Dhanush	-	-	INS-P51	-	-	SEA	-	-	-	50?	-	-
2016-M04	2457713.67	2016 Nov 21 04:07	Prihvi 2	-	-	INS-P51	-	-	SEA	-	-	-	50?	-	-
2016-M05	2457713.67	2016 Nov 21 04:08	Prihvi 2	-	-	INS-P51	-	-	SEA	-	-	-	50?	-	-
2017-M02	2457906.68	2017 Jun 2 04:20	Prihvi 2	-	-	INS-P51	-	-	SEA	-	-	-	97	-	-
2017-S107	2457996.59	2017 Feb 12 02:37	Prihvi 2	-	?	INS-P51	-	-	SEA	-	-	-	97	-	-
2017-S108	2457996.59	2017 Feb 12 02:35	Prihvi 2	-	-	INS-P51	-	-	SEA	-	-	-	97	-	-
2017-M06	2457813.70	2017 Mar 1 04:33	Prihvi	-	-	INS-P51	-	-	SEA	-	-	-	250	-	-
2017-M08	2457906.68	2017 Jun 2 04:20	Prihvi 2	-	-	INS-P51	-	-	SEA	-	-	-	250	-	-
2017-M07	2458115.50	2017 Dec 28	Prihvi 2	-	-	INS-P51	-	-	SEA	-	-	-	250	-	-
2018-M01	2458171.12	2018 Feb 21 15:00	Prihvi 2	-	-	INS-P51	-	-	SEA	-	-	-	250	-	-
2018-M02	2458172.72	2018 Feb 23 05:22	Dhanush	-	-	INS-P51	-	-	SEA	-	-	-	250	-	-
2018-S85	2458395.11	2018 Sep 23 14:33?	Prihvi 2	-	-	INS-P51	-	-	SEA	-	-	-	350	-	-
2018-S86	2458395.11	2018 Sep 23 14:35	Prihvi 2	-	-	INS-P51	-	-	SEA	-	-	-	90?	-	-
2019-M05	2458662.12	2019 Jun 27 15:00	Prihvi 2	-	-	INS-P51	-	-	SEA	-	-	-	250	-	-
2019-M08	2458806.06	2019 Nov 18 13:00?	Prihvi 2	-	-	INS-P51	-	-	SEA	-	-	-	50?	-	-

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Mission	Launch_FlightCode	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee km	Range km	Dest
2019-M09	2458806.07	2019 Nov 18 13:45?	Prithvi 2	-	-	Test	-	-	-	GHAN	IC3	-	-	50?	250	-
2020-M08	2459115.50	2020 Sep 23	Prithvi 2	-	-	Test	-	-	-	GHAN	IC3	-	-	50?	250	-
2020-M09	2459139.08	2020 Oct 16 14:00	Prithvi 2	-	-	Test	-	-	-	GHAN	IC3	-	-	50?	250	-



Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	OrbPay	Agency	Launch_Code	Group	Category	LT/Cite	Cite	Notes
1988-S60	2447216.50	1988 Feb 25	Prihvi 1	-	1	0.000	IDRDL	NS	-	Test	ww.fas.org	-	-
1989-S96	2447795.72	1989 Sep 26 05:10	Prihvi 1	-	2	0.000	IDRDL	NS	-	Test	Ulrich/Wire	F1910306	-
1991-S64	2448298.78	1991 Feb 11 06:45	Prihvi 1	-	3	0.000	IDRDL	NS	-	Test	Ulrich/Wire	bharat-rakshak.com	-
1991-M01	2449441.86	1991 Jul 4 08:22	Prihvi 1	-	4	0.000	IDRDL	NS	-	Test	Ulrich/Wire	Ulrich	-
1991-M02	2449476.73	1991 Aug 7 05:28	Prihvi 1	-	5	0.000	IDRDL	NS	-	Test	atl.org	-	-
1992-A01	2448665.50	1992 Feb 13	Prihvi 1	-	6	0.000	IDRDL	HF	-	Test	bharat-rakshak.com	-	-
1992-S40	2448747.50	1992 May 5	Prihvi 1	-	7	0.000	IDRDL	NS	-	Test	bharat-rakshak.com	-	-
1992-S72	2448862.67	1992 Aug 18 04:00	Prihvi 1	-	8	0.000	IDRDL	NS	-	Test	Ulrich/Wire	F1910306	-
1992-S106	2448863.72	1992 Aug 29 05:13	Prihvi 1	-	9	0.000	IDRDL	NS	-	Test	TimesOfIndia920829	Ulrich	-
1993-S12	2449025.86	1993 Feb 7 08:20	Prihvi 1	-	10	0.000	IDRDL	NS	-	Test	Ulrich/Wire	ww.fas.org	-
1993-S41	2449321.79	1993 Jun 12	Prihvi 1	-	11	0.000	IDRDL	NS	-	Test	bharat-rakshak.com	F1930901	-
1993-M07	2449507.76	1993 Nov 30 06:55	Prihvi 1	-	12	0.000	IDRDL	NS	-	Test	Ulrich/Wire	bharat-rakshak.com	-
1994-S36	2449509.60	1994 Jun 6	Prihvi 1	-	13	0.000	IDRDL	NS	-	Test	Ulrich/Wire	-	-
1994-S37	2449509.87	1994 Jun 6	Prihvi 2	-	14	0.000	IDRDL	NS	-	Test	Ulrich/Wire	-	-
1996-S01	2450062.50	1996 Jan 27 08:52	Prihvi 2	-	2-1 (16)	0.000	IDRDL	NS	-	Test	Ulrich/Wire	-	-
1997-S19	2450502.77	1997 Feb 23 06:22	Prihvi 2	-	2-2	0.000	IDRDL	NS	-	Test	ww.fas.org	-	-
2000-A02	2451646.84	2000 Apr 11 08:05	Dhanush	-	2-3	0.000	IDRDL	NS	-	Test	Ulrich/Wire	-	-
2000-S35	2451711.96	2000 Jun 16 08:45	Prihvi 1	-	17	0.000	IDRDL	HF	-	Test	Ulrich/Wire	-	-
2001-S16	2451999.75	2001 Mar 31 06:00	Prihvi 1	-	18	0.000	IDRDL	NS	-	Test	Ulrich/Wire	-	-
2001-M04	2452173.50	2001 Sep 21	Dhanush	-	-	0.000	IDRDL	NS	-	Test	bharat-rakshak.com	-	-
2003-S10	2452285.72	2003 Dec 12 05:11	Prihvi 1	-	-	0.000	IDRDL	NS	-	Test	Ulrich/Wire	-	-
2003-S50	2452724.75	2003 Mar 26 06:00	Prihvi 1	-	-	0.000	IDRDL	NS	-	Test	Ulrich/Wire	-	-
2004-S05	2452788.74	2003 Apr 29 05:50	Prihvi 1	-	23	0.000	IDRDL	NS	-	Test	Ulrich/Wire	-	-
2004-H10	2453027.88	2004 Mar 19 04:40	Prihvi 1	-	-	0.000	IDRDL	NS	-	Test	Ulrich/Wire	-	-
2004-H11	2453063.69	2004 Oct 27 05:59	Prihvi 1	-	-	0.000	IDRDL	NS	-	Test	Ulrich/Wire	-	-
2004-M08	2453305.75	2004 Oct 27 05:59	Prihvi 1	-	-	0.000	IDRDL	NS	-	Test	expressindia.com	-	-
2005-M04	2453516.78	2004 Nov 7 06:50	Dhanush	-	3	0.000	IDRDL	NS	-	Test	Ulrich/Wire	-	-
2005-M06	2453502.82	2005 May 12 07:34	Prihvi 1	-	-	0.000	IDRDL	NS	-	Test	Ulrich/Wire	-	-
2005-M05	2453732.85	2005 Dec 26 08:28	Dhanush	-	4	0.000	IDRDL	NS	-	Test	Ulrich/Wire	-	-
2006-M03	245387.84	2006 Jun 11 05:10	Prihvi 1	-	-	0.000	ISFC	NS	-	Test	Ulrich/Wire	-	-
2006-S65	2454058.98	2006 Nov 19 04:28	Prihvi 1	-	-	0.000	ISFC	NS	-	Test	Rigg	thaindian.com	-
2006-S66	2454066.70	2006 Nov 27 04:46	Prihvi 1	-	-	0.000	IDRDL	NS	-	Test	Wire	-	-
2006-S67	2454066.70	2006 Nov 27 04:46	Prihvi 1	-	-	0.000	IDRDL	NS	-	Test	Wire	-	-
2007-S48	2454189.98	2007 Mar 30 09:05	Dhanush	-	5	0.000	IDRDL	NS	-	Test	Wire	-	-
2007-S49	2454229.72	2007 May 9 05:10	Prihvi 1	-	-	0.000	ISFC	NS	-	Test	Wire	-	-
2007-S77	2454440.73	2007 Dec 6 05:30	Prihvi 2	-	-	0.000	ISFC	NS	-	Test	Wire	-	-
2008-A03	2454609.71	2008 May 23 04:56	Prihvi 2	-	2	0.000	ISFC	NS	-	Test	Wire	-	-
2008-S01	2454686.96	2009 Mar 6 10:54	Dhanush	-	-	0.000	ISFC	NS	-	Test	Wire	-	-
2009-M01	2454986.96	2009 Mar 6 10:54	Prihvi 1	-	-	0.000	ISFC	NS	-	Test	Wire	-	-
2009-M03	2454986.96	2009 Apr 15 04:50	Prihvi 2	-	2	0.000	IDRDL	NS	-	Test	Wire	-	-
2009-M06	2455116.71	2009 Oct 12 04:58	Prihvi 2	-	2	0.000	ISFC	NS	-	Test	Wire	-	-
2009-M08	2455116.71	2009 Oct 12 04:58	Prihvi 2	-	2	0.000	ISFC	NS	-	Test	Wire	-	-
2010-M06	2455178.78	2009 Dec 13 05:03	Dhanush	-	-	0.000	IDRDL	NS	-	Test	Ulrich/Wire	-	-
2010-S25	2455270.69	2010 Mar 19 04:32	Prihvi 1	-	-	0.000	IDRDL	NS	-	Test	Ulrich/Wire	-	-
2010-S26	2455282.51	2010 Mar 27 00:14	Dhanush	-	-	0.000	IDRDL	NS	-	Test	Ulrich/Wire	-	-
2010-S28	2455285.54	2010 Mar 27 00:14	Prihvi 1	-	-	0.000	ISFC	NS	-	Test	Ulrich/Wire	-	-
2010-S66	2455285.54	2010 Jun 16 01:30	Prihvi 1	-	-	0.000	ISFC	NS	-	Test	Ulrich/Wire	-	-
2010-S68	2455303.69	2010 Jul 26 04:35	Prihvi 1	-	-	0.000	IDRDL	NS	-	Test	Ulrich/Wire	-	-
2010-M07	2455555.66	2010 Dec 22 03:45	Prihvi 1	-	-	0.000	ISFC	NS	-	Test	Ulrich/Wire	-	-
2010-M08	2455555.66	2010 Dec 22 03:45	Prihvi 1	-	-	0.000	ISFC	NS	-	Test	Ulrich/Wire	-	-
2011-M01	2455626.67	2011 Mar 5 04:32	Prihvi 1	-	-	0.000	IDRDL	NS	-	Test	Ulrich/Wire	-	-
2011-M04	2455631.69	2011 Mar 5 04:32	Dhanush	-	-	0.000	IDRDL	NS	-	Test	Ulrich/Wire	-	-
2011-M05	2455631.73	2011 Mar 11 05:30	Dhanush	-	2	0.000	ISFC	NS	-	Test	Ulrich/Wire	-	-
2011-M02	2455721.65	2011 Mar 11 05:30	Prihvi 2	-	-	0.000	ISFC	NS	-	Test	Ulrich/Wire	-	-
2011-S02	2455830.64	2011 Sep 26 03:50	Prihvi 2	-	-	0.000	ISFC	NS	-	Test	Ulrich/Wire	-	-
2012-S04	2455967.69	2012 Feb 10 04:40	Prihvi 2	-	-	0.000	IDRDL	NS	-	Test	Ulrich/Wire	-	-
2012-S76	2456164.73	2012 Feb 25 05:34	Prihvi 2	-	-	0.000	ISFC	NS	-	Test	Ulrich/Wire	-	-
2012-S85	2456204.65	2012 Oct 5 03:37	Prihvi 2	-	-	0.000	ISFC	NS	-	Test	Ulrich/Wire	-	-
2012-S86	2456205.75	2012 Oct 5 03:37	Prihvi 2	-	-	0.000	ISFC	NS	-	Test	Ulrich/Wire	-	-
2012-S87	2456205.75	2012 Oct 5 03:37	Prihvi 2	-	-	0.000	ISFC	NS	-	Test	Ulrich/Wire	-	-
2012-M04	2456264.81	2012 Nov 23 07:22	Prihvi 1	-	-	0.000	IDRDL	NS	-	Test	Ulrich/Wire	-	-
2012-S74	2456291.66	2012 Dec 20 03:51	Prihvi 2	-	-	0.000	ISFC	NS	-	Test	Ulrich/Wire	-	-
2013-S64	2456516.66	2013 Aug 12 03:45	Prihvi 2	-	-	0.000	ISFC	NS	-	Test	Ulrich/Wire	-	-
2013-S87	2456572.66	2013 Oct 7 03:45	Prihvi 2	-	-	0.000	ISFC	NS	-	Test	Ulrich/Wire	-	-
2013-S91	2456573.78	2013 Oct 8 06:50	Prihvi 2	-	-	0.000	ISFC	NS	-	Test	Ulrich/Wire	-	-
2014-A02	2456664.68	2014 Jan 7 04:18	Prihvi 2	-	-	0.000	ISFC	NS	-	Test	Ulrich/Wire	-	-
2014-S19	2456774.65	2014 Apr 27 03:37	Prihvi 2	-	-	0.000	IDRDL	NS	-	Test	Ulrich/Wire	-	-
2014-S20	2456774.65	2014 Apr 27 03:40	Prihvi 2	-	-	0.000	IDRDL	NS	-	Test	Ulrich/Wire	-	-
2014-S39	2456976.72	2014 Nov 14 05:10	Prihvi 2	-	-	0.000	ISFC	NS	-	Test	Ulrich/Wire	-	-
2014-M04	2456976.09	2014 Nov 14 14:10	Dhanush	-	-	0.000	ISFC	NS	-	Test	Ulrich/Wire	-	-
2015-A01	2457072.66	2015 Feb 19 03:45	Prihvi 2	-	-	0.000	ISFC	NS	-	Test	Ulrich/Wire	-	-
2015-M03	2457191.73	2015 Apr 9 05:32	Prihvi 2	-	-	0.000	ISFC	NS	-	Test	Ulrich/Wire	-	-
2016-M04	2457113.67	2016 Nov 21 04:07	Prihvi 2	-	-	0.000	ISFC	NS	-	Test	Ulrich/Wire	-	-
2016-M05	2457113.67	2016 Nov 21 04:07	Prihvi 2	-	-	0.000	ISFC	NS	-	Test	Ulrich/Wire	-	-
2017-M02	2457906.68	2017 Jun 2 04:20	Prihvi 2	-	-	0.000	ISFC	NS	-	Test	Ulrich/Wire	-	-
2017-S107	2457996.59	2017 Feb 12 02:13	Prihvi 2	-	-	0.000	IDRDL	NS	-	Test	Ulrich/Wire	-	-
2017-S108	2457996.59	2017 Feb 12 02:13	Prihvi 2	-	-	0.000	IDRDL	NS	-	Test	Ulrich/Wire	-	-
2017-M06	2457813.70	2017 Mar 1 04:43	Prihvi 1	-	-	0.000	ISFC	NS	-	Test	Ulrich/Wire	-	-
2017-M08	2457906.68	2017 Jun 2 04:20	Prihvi 2	-	-	0.000	ISFC	NS	-	Test	Ulrich/Wire	-	-
2018-M01	2458115.50	2018 Dec 28	Prihvi 2	-	-	0.000	ISFC	NS	-	Test	Ulrich/Wire	-	-
2018-M02	2458171.12	2018 Feb 21 15:00	Prihvi 2	-	-	0.000	ISFC	NS	-	Test	Ulrich/Wire	-	-
2018-M02	2458172.72	2018 Feb 23 05:22	Dhanush	-	-	0.000	ISFC	NS	-	Test	Ulrich/Wire	-	-
2018-S85	2458395.11	2018 Sep 23 14:33	Prihvi 2	-	-	0.000	IDRDL	NS	-	Test	Ulrich/Wire	-	-
2018-S86	2458395.11	2018 Sep 23 14:33	Prihvi 2	-	-	0.000	IDRDL	NS	-	Test	Ulrich/Wire	-	-
2019-M05	2458662.12	2019 Jun 27 15:00	Prihvi 2	-	-	0.000	ISFC	NS	-	Test	Ulrich/Wire	-	-
2019-M08	2458806.06	2019 Nov 18 13:30	Prihvi 2	-	-	0.000	ISFC	NS	-	Test	Ulrich/Wire	-	-

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	OrbitPay	Agency	Launch_Code	Group	Category	LTCite	Cite	Notes
2019-M09	2458806.07	2019 Nov 18 13457	Prithvi 2	-	-	0.000	ISFC	MS	-	Test	Wire	-	-
2020-M08	2459115.50	2020 Sep 23	Prithvi 2	-	-	0.000	ISFC	MS	-	Test	Wire	-	-
2020-M09	2459139.08	2020 Oct 16 1400	Prithvi 2	-	-	0.000	ISFC	MS	-	Test	Wire	-	-



Launch

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Mission	FlightCode	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee km	Range km	Dest
1944-434	2431425.50	1944 Dec 1	Private A	-	1	-	-	-	-	IRW	-	-	-	5?	-	-
1944-435	2431424.50	1944 Dec	Private A	-	2	-	-	-	-	IRW	-	-	-	5?	-	-
1944-436	2431424.50	1944 Dec	Private A	-	3	-	-	-	-	IRW	-	-	-	5?	-	-
1944-437	2431424.50	1944 Dec	Private A	-	4	-	-	-	-	IRW	-	-	-	5?	-	-
1944-438	2431424.50	1944 Dec	Private A	-	5	-	-	-	-	IRW	-	-	-	5?	-	-
1944-439	2431424.50	1944 Dec	Private A	-	6	-	-	-	-	IRW	-	-	-	5?	-	-
1944-440	2431424.50	1944 Dec	Private A	-	7	-	-	-	-	IRW	-	-	-	5?	-	-
1944-441	2431424.50	1944 Dec	Private A	-	8	-	-	-	-	IRW	-	-	-	5?	-	-
1944-442	2431424.50	1944 Dec	Private A	-	9	-	-	-	-	IRW	-	-	-	5?	-	-
1944-443	2431424.50	1944 Dec	Private A	-	10	-	-	-	-	IRW	-	-	-	5?	-	-
1944-444	2431424.50	1944 Dec	Private A	-	11	-	-	-	-	IRW	-	-	-	5?	-	-
1944-445	2431424.50	1944 Dec	Private A	-	12	-	-	-	-	IRW	-	-	-	5?	-	-
1944-446	2431424.50	1944 Dec	Private A	-	13	-	-	-	-	IRW	-	-	-	5?	-	-
1944-447	2431424.50	1944 Dec	Private A	-	14	-	-	-	-	IRW	-	-	-	5?	-	-
1944-448	2431424.50	1944 Dec	Private A	-	15	-	-	-	-	IRW	-	-	-	5?	-	-
1944-449	2431424.50	1944 Dec	Private A	-	16	-	-	-	-	IRW	-	-	-	5?	-	-
1944-450	2431424.50	1944 Dec	Private A	-	17	-	-	-	-	IRW	-	-	-	5?	-	-
1944-451	2431424.50	1944 Dec	Private A	-	18	-	No booster	-	-	IRW	-	-	-	1	-	-
1944-452	2431424.50	1944 Dec	Private A	-	19	-	-	-	-	IRW	-	-	-	5?	-	-
1944-453	2431424.50	1944 Dec	Private A	-	20	-	-	-	-	IRW	-	-	-	5?	-	-
1944-454	2431424.50	1944 Dec	Private A	-	21	-	-	-	-	IRW	-	-	-	5?	-	-
1944-455	2431424.50	1944 Dec	Private A	-	22	-	-	-	-	IRW	-	-	-	5?	-	-
1944-456	2431424.50	1944 Dec	Private A	-	23	-	-	-	-	IRW	-	-	-	5?	-	-
1944-457	2431440.50	1944 Dec 16	Private A	-	24	-	-	-	-	IRW	-	-	-	5?	-	-
1945-416	2431546.50	1945 Apr 1	Private F	-	1	-	Dummy sustainer	-	-	FTB	-	-	-	1?	-	-
1945-419	2431546.50	1945 Apr 1	Private F	-	2	-	Dummy sustainer	-	-	FTB	-	-	-	1?	-	-
1945-420	2431546.50	1945 Apr	Private F	-	3	-	-	-	-	FTB	-	-	-	1?	-	-
1945-421	2431546.50	1945 Apr	Private F	-	4	-	-	-	-	FTB	-	-	-	1?	-	-
1945-422	2431546.50	1945 Apr	Private F	-	5	-	-	-	-	FTB	-	-	-	1?	-	-
1945-423	2431546.50	1945 Apr	Private F	-	6	-	-	-	-	FTB	-	-	-	1?	-	-
1945-424	2431546.50	1945 Apr	Private F	-	7	-	-	-	-	FTB	-	-	-	1?	-	-
1945-425	2431546.50	1945 Apr	Private F	-	8	-	-	-	-	FTB	-	-	-	1?	-	-
1945-427	2431546.50	1945 Apr	Private F	-	9	-	-	-	-	FTB	-	-	-	1?	-	-
1945-426	2431546.50	1945 Apr	Private F	-	10	-	-	-	-	FTB	-	-	-	1?	-	-
1945-428	2431546.50	1945 Apr	Private F	-	11	-	-	-	-	FTB	-	-	-	1?	-	-
1945-429	2431546.50	1945 Apr	Private F	-	12	-	-	-	-	FTB	-	-	-	1?	-	-
1945-430	2431546.50	1945 Apr	Private F	-	13	-	-	-	-	FTB	-	-	-	1?	-	-
1945-431	2431546.50	1945 Apr	Private A-1	-	14	-	-	-	-	FTB	-	-	-	8	-	-
1945-432	2431546.50	1945 Apr	Private A	-	15	-	-	-	-	FTB	-	-	-	1?	-	-
1945-433	2431546.50	1945 Apr	Private F	-	16	-	-	-	-	FTB	-	-	-	1?	-	-
1945-434	2431568.50	1945 Apr 13	Private F	-	17	-	-	-	-	FTB	-	-	-	1?	-	-





Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Agency	Launch_Code	Group	Category	LTCite	Cite	Notes
1944-A34	2431425-50	1944 Dec 1	Private A	-	1	JPL	MS	-	Test	Corp-Hist	-	-
1944-A35	2431424-50	1944 Dec	Private A	-	2	JPL	MS	-	Test	Corp-Hist	-	-
1944-A36	2431424-50	1944 Dec	Private A	-	3	JPL	MS	-	Test	Corp-Hist	-	-
1944-A37	2431424-50	1944 Dec	Private A	-	4	JPL	MS	-	Test	Corp-Hist	-	-
1944-A38	2431424-50	1944 Dec	Private A	-	5	JPL	MS	-	Test	Corp-Hist	-	-
1944-A39	2431424-50	1944 Dec	Private A	-	6	JPL	MS	-	Test	Corp-Hist	-	-
1944-A40	2431424-50	1944 Dec	Private A	-	7	JPL	MS	-	Test	Corp-Hist	-	-
1944-A41	2431424-50	1944 Dec	Private A	-	8	JPL	MS	-	Test	Corp-Hist	-	-
1944-A42	2431424-50	1944 Dec	Private A	-	9	JPL	MS	-	Test	Corp-Hist	-	-
1944-A43	2431424-50	1944 Dec	Private A	-	10	JPL	MS	-	Test	Corp-Hist	-	-
1944-A44	2431424-50	1944 Dec	Private A	-	11	JPL	MS	-	Test	Corp-Hist	-	-
1944-A45	2431424-50	1944 Dec	Private A	-	12	JPL	MS	-	Test	Corp-Hist	-	-
1944-A46	2431424-50	1944 Dec	Private A	-	13	JPL	MS	-	Test	Corp-Hist	-	-
1944-A47	2431424-50	1944 Dec	Private A	-	14	JPL	MS	-	Test	Corp-Hist	-	-
1944-A48	2431424-50	1944 Dec	Private A	-	15	JPL	MS	-	Test	Corp-Hist	-	-
1944-A49	2431424-50	1944 Dec	Private A	-	16	JPL	MS	-	Test	Corp-Hist	-	-
1944-A50	2431424-50	1944 Dec	Private A	-	17	JPL	MS	-	Test	Corp-Hist	-	-
1944-A51	2431424-50	1944 Dec	Private A	-	18	JPL	MS	-	Test	Corp-Hist	-	-
1944-A52	2431424-50	1944 Dec	Private A	-	19	JPL	MS	-	Test	Corp-Hist	-	-
1944-A53	2431424-50	1944 Dec	Private A	-	20	JPL	MS	-	Test	Corp-Hist	-	-
1944-A54	2431424-50	1944 Dec	Private A	-	21	JPL	MS	-	Test	Corp-Hist	-	-
1944-A55	2431424-50	1944 Dec	Private A	-	22	JPL	MS	-	Test	Corp-Hist	-	-
1944-A56	2431424-50	1944 Dec	Private A	-	23	JPL	MS	-	Test	Corp-Hist	-	-
1944-A57	2431440-50	1944 Dec 16	Private A	-	24	JPL	MS	-	Test	Corp-Hist	-	-
1945-A18	2431546-50	1945 Apr 1	Private F	-	1	JPL	MS	-	Test	Corp-Hist	-	-
1945-A19	2431546-50	1945 Apr 1	Private F	-	2	JPL	MS	-	Test	Corp-Hist	-	-
1945-A20	2431546-50	1945 Apr	Private F	-	3	JPL	MS	-	Test	Corp-Hist	-	-
1945-A21	2431546-50	1945 Apr	Private F	-	4	JPL	MS	-	Test	Corp-Hist	-	-
1945-A22	2431546-50	1945 Apr	Private F	-	5	JPL	MS	-	Test	Corp-Hist	-	-
1945-A23	2431546-50	1945 Apr	Private F	-	6	JPL	MS	-	Test	Corp-Hist	-	-
1945-A24	2431546-50	1945 Apr	Private F	-	7	JPL	MS	-	Test	Corp-Hist	-	-
1945-A25	2431546-50	1945 Apr	Private F	-	8	JPL	MS	-	Test	Corp-Hist	-	-
1945-A26	2431546-50	1945 Apr	Private F	-	9	JPL	MS	-	Test	Corp-Hist	-	-
1945-A27	2431546-50	1945 Apr	Private F	-	10	JPL	MS	-	Test	Corp-Hist	-	-
1945-A28	2431546-50	1945 Apr	Private F	-	11	JPL	MS	-	Test	Corp-Hist	-	-
1945-A29	2431546-50	1945 Apr	Private F	-	12	JPL	MS	-	Test	Corp-Hist	-	-
1945-A30	2431546-50	1945 Apr	Private F	-	13	JPL	MS	-	Test	Corp-Hist	-	-
1945-A31	2431546-50	1945 Apr	Private F	-	14	JPL	MS	-	Test	Corp-Hist	-	-
1945-A32	2431546-50	1945 Apr	Private F	-	15	JPL	MS	-	Test	Corp-Hist	-	-
1945-A33	2431546-50	1945 Apr	Private F	-	16	JPL	MS	-	Test	Corp-Hist	-	-
1945-A34	2431585-50	1945 Apr 13	Private F	-	17	JPL	MS	-	Test	Corp-Hist	-	-



Launch_Tag	Launch_JD	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Mission	FlightCode	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee km	Range km	Dest
1963-H70	2438265.50	1963 Aug 24	Proton M1	-	1	-	-	-	-	CELPA	-	-	-	50	-	-
1963-H71	2438266.50	1963 Aug 25	Proton M1	-	2	-	-	-	-	CELPA	-	-	-	50	-	-



Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Launch		Agency	Launch_Code	Group	Category	LTCite	Cite	Notes
						OrbPay	t							
1963-M70	2438266.50	1963 Aug 24	Proson M1	-	1	0.000		CITEF	SS	CITEF/	Test	Deleon	-	-
1963-M71	2438266.50	1963 Aug 25	Proson M1	-	2	0.000		CITEF	SS	CITEF/	Test	Deleon	-	-



Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Mission	FlightCode	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee_Km	Range_Km	Dest
1965-064	2439857.97	1965 Jul 16 1116	UR-500	-	107207-01 (207)	Proton	N-4 No. 1	-	-	MIIP-5	L681/23	-	-	792	-	-
1965-087	2439067.02	1965 Nov 2 1228	UR-500	-	209	Proton-2	N-4 No. 2	-	-	MIIP-5	L681/23	-	-	760	-	-
1966-003	2439209.11	1966 Mar 24 1439	UR-500	-	211	Proton-3	N-4 No. 3	-	-	MIIP-5	L681/23	-	-	1807	-	-
1966-020	2439313.04	1966 Jul 6 1257	UR-500	-	212	Proton-3	N-4 No. 4	-	-	MIIP-5	L681/23	-	-	608	-	-
1967-011	2439585.98	1967 Mar 10 1130:33	UR-500K/Blokk D	-	M10722701	Kosmos-146	L-1 No. 2P	-	-	MIIP-5	L681/23	-	-	150000	-	-
1967-032	2439586.88	1967 Apr 8 0900:33	Proton-K/D	-	228-01	Kosmos-154	L-1 No. 3P	-	-	MIIP-5	L681/23	-	-	220	-	-
1967-111	2439761.42	1967 Sep 27 2211:54	Proton-K/D	-	229-01	-	L-1 No. 4L	-	-	MIIP-5	L681/23	-	-	307	-	-
1967-112	2439817.30	1967 Nov 22 1907:59	Proton-K/D	-	230-01	-	L-1 No. 5L	-	-	MIIP-5	L681/24	-	-	507	-	-
1968-013	2439818.27	1968 Mar 2 1829:23	Proton-K/D	-	231-01	Zond-4	L-1 No. 6L	-	-	MIIP-5	L681/23	-	-	150000	-	-
1968-033	2439869.46	1968 Apr 22 2301:27	Proton-K/D	-	232-01	-	L-1 No. 7L	-	-	MIIP-5	L681/24	-	-	1207	-	-
1968-101	2440052.50	1968 Jul 15	Proton-K/D	-	-	-	-	-	-	MIIP-5	L681/24?	-	-	0	-	-
1968-076	2440114.40	1968 Sep 14 2142:11	Proton-K/D	-	234-01	Zond-5	L-1 No. 9L	-	-	MIIP-5	L681/23	-	-	150000	-	-
1968-101	2440171.30	1968 Nov 10 1911:31	Proton-K/D	-	235-01	Zond-6	L-1 No. 12L	-	-	MIIP-5	L681/23	-	-	150000	-	-
1968-103	2440176.99	1968 Nov 16 1140	Proton-K	-	236-01	Proton-4	L-1 No. 1	-	-	MIIP-5	L681/24	-	-	481	-	-
1969-101	2440241.68	1969 Jan 20 0414:36	Proton-K/D	-	237-01	-	L-1 No. 13L	-	-	MIIP-5	L681/23	-	-	2007	-	-
1969-104	2440271.78	1969 Feb 19 0648:15	Proton-K/D	-	239-01	-	E-6 No. 201	-	-	MIIP-5	L681/24	-	-	157	-	-
1969-106	2440307.94	1969 Mar 27 1040:45	Proton-K/D	-	240-01	-	2R No. 521	-	-	MIIP-5	L681/23	-	-	1807	-	-
1969-107	2440313.94	1969 Apr 2 1033:00	Proton-K/D	-	233-01	-	2R No. 522	-	-	MIIP-5	L681/24	-	-	407	-	-
1969-108	2440366.67	1969 Jun 14 0400:47	Proton-K/D	-	238-01	-	E-6-5 No. 402	-	-	MIIP-5	L681/24	-	-	150000	-	-
1969-068	2440415.62	1969 Jul 13 0254:42	Proton-K/D	-	242-01	Luna-15	L-1 No. 11	-	-	MIIP-5	L681/23	-	-	150000	-	-
1969-087	2440441.49	1969 Aug 7 2348:06	Proton-K/D	-	243-01	Zond-7	E-6-5 No. 401	-	-	MIIP-5	L681/23	-	-	207	-	-
1969-080	2440468.09	1969 Sep 23 1407:36	Proton-K/D	-	244-01	Kosmos-300	E-6-5 No. 403	-	-	MIIP-5	L681/24	-	-	150000	-	-
1969-092	2440517.09	1969 Oct 22 1409:59	Proton-K/D	-	241-01	Kosmos-305	VA	-	-	MIIP-5	L681/23	-	-	215	-	-
1969-102	2440523.66	1969 Feb 6 0416:06	Proton-K/D	-	245-01	-	L-te No. 1	-	-	MIIP-5	L681/23	-	-	180	-	-
1970-022	2440526.66	1970 Aug 15 0345:00	Proton-K	-	246-01	92-EV	E-6-5 No. 405	-	-	MIIP-5	L681/23	-	-	507	-	-
1970-048	2440582.06	1970 Sep 12 1325:53	Proton-K/D	-	248-01	Luna-16	GWR 7K-LIE	-	-	MIIP-5	L681/23	-	-	2007	-	-
1970-088	2440580.33	1970 Oct 20 1956:39	Proton-K/D	-	280-01	Zond-6	E-6-5 No. 406	-	-	MIIP-5	L681/23	-	-	150000	-	-
1970-103	2440593.21	1970 Nov 10 1444:01	Proton-K/D	-	281-01	Luna-17	L-1 No. 14	-	-	MIIP-5	L681/23	-	-	150000	-	-
1971-032	2440600.57	1971 Apr 19 1040:00	Proton-K/D	-	282-01	Kosmos-382	L-te No. 2K	-	-	MIIP-5	L681/24	-	-	6386	-	-
1971-042	2440682.21	1971 May 10 1658:42	Proton-K/D	-	285-01	Kosmos-419	MS-1 17K No. 121	-	-	MIIP-5	L681/23	-	-	316	-	-
1971-048	2441091.16	1971 May 19 1622:44	Proton-K/D	-	285-01	Kosmos-419	MS No. 170	-	-	MIIP-5	L681/23	-	-	191	-	-
1971-049	2441100.14	1971 May 28 1526:30	Proton-K/D	-	285-01	Nars-2	4R No. 171	-	-	MIIP-5	L681/24	-	-	150000	-	-
1971-073	2441197.07	1971 Sep 2 1340:40	Proton-K/D	-	286-01	Nars-3	4R No. 172	-	-	MIIP-5	L681/23	-	-	150000	-	-
1971-082	2441224.92	1971 Sep 28 1000:22	Proton-K/D	-	286-01	Luna-18	E-6-5 No. 407	-	-	MIIP-5	L681/24	-	-	150000	-	-
1972-007	2441351.64	1972 Feb 14 0327:59	Proton-K/D	-	287-01	Luna-19	R-6L5 No. 202	-	-	MIIP-5	L681/24	-	-	150000	-	-
1972-104	2441327.64	1972 Jul 28 0320:57	Proton-K/D	-	288-01	Luna-20	MS-2 (17K No. 122)	-	-	MIIP-5	L681/23	-	-	960	-	-
1973-001	2441390.79	1973 Jan 8 0655:36	Proton-K/D	-	289-01	Luna-21	E-6 No. 204	-	-	MIIP-5	L681/23	-	-	150000	-	-
1973-017	2441378.86	1973 Apr 3 0900:00	Proton-K	-	285-01	Salyut-2	Lunaz OPS 1	-	-	MIIP-5	L681/23	-	-	374	-	-
1973-026	2441353.51	1973 May 11 0200:00	Proton-K	-	284-01	Kosmos-567	MS S	-	-	MIIP-5	L681/23	-	-	249	-	-
1973-049	2441386.31	1973 Jul 1 1850:59	Proton-K/D	-	281-01	Nars-4	MS No. 595	-	-	MIIP-5	L681/23	-	-	150000	-	-
1973-052	2441386.29	1973 Jul 25 1855:46	Proton-K/D	-	281-01	Nars-5	MS No. 598	-	-	MIIP-5	L681/24	-	-	150000	-	-
1973-053	2441390.24	1973 Aug 6 1746:46	Proton-K/D	-	281-01	Nars-6	MS No. 599	-	-	MIIP-5	L681/24	-	-	150000	-	-
1973-055	2441390.24	1973 Aug 6 1746:46	Proton-K/D	-	281-02	Nars-7	MS No. 51P	-	-	MIIP-5	L681/24	-	-	150000	-	-
1973-057	2441383.87	1974 Mar 26 1336:00	Proton-K/DH	-	282-01	Kosmos-637	11F638 3WV	-	-	MIIP-5	L681/23	-	-	150000	-	-
1974-037	2442293.44	1974 May 29 0356:51	Proton-K/DH	-	283-02	Luna-22	E-6L5 No. 206	-	-	MIIP-5	L681/23	-	-	374	-	-
1974-046	2442268.00	1974 Jun 24 2326:00	Proton-K/DH	-	283-02	Salyut-3	MS-2 (11F71 No. 101-2)	-	-	MIIP-5	L681/23	-	-	150000	-	-
1974-084	2442349.16	1974 Jul 29 1330:00	Proton-K/DH	-	285-01	Polynya-15	Molnaz 2 (11F71 No. 101-2)	-	-	MIIP-5	L681/24	-	-	36547	-	-
1974-104	2442407.66	1974 Dec 26 0415:00	Proton-K/D	-	285-01	Luna-23	E-6L5 No. 410	-	-	MIIP-5	L681/24	-	-	150000	-	-
1975-004	2442571.61	1975 Jun 8 0238:38	Proton-K/D	-	286-02	Venera-9	MS-4 (17K No. 124)	-	-	MIIP-5	L681/24	-	-	150000	-	-
1975-064	2442577.65	1975 Jun 14 0300:31	Proton-K/D	-	286-02	Venera-9	4V-1 No. 660	-	-	MIIP-5	L681/24	-	-	150000	-	-
1975-087	2442583.65	1975 Oct 6 0030:00	Proton-K/DH	-	286-02	Venera-10	4V-1 No. 661	-	-	MIIP-5	L681/24	-	-	150000	-	-
1975-105	2442701.67	1975 Oct 16 0404:56	Proton-K/DH	-	287-02	Kosmos-775	0bs?	-	-	MIIP-5	L681/23	-	-	35976	-	-
1975-121	2442769.04	1975 Dec 22 1300:00	Proton-K/DH	-	288-01	Raduga	E-6-5M No. 412	-	-	MIIP-5	L681/23	-	-	1907	-	-
1976-027	2442969.25	1976 Jun 22 1804:00	Proton-K/DH	-	289-02	Salyut-5	Gran' No. 11L	-	-	MIIP-5	L681/23	-	-	36599	-	-
1976-081	2443000.13	1976 Aug 9 1504:10	Proton-K/DH	-	289-02	Luna-24	Araz OPS 3	-	-	MIIP-5	L681/23	-	-	273	-	-
1976-092	2443078.12	1976 Sep 11 1824:10	Proton-K/DH	-	289-02	Raduga	E-6-5M No. 413	-	-	MIIP-5	L681/23	-	-	150000	-	-
1976-121	2443127.56	1976 Dec 15 1450:00	Proton-K	-	290-01	Kosmos-881/882	Gran' No. 12L	-	-	MIIP-5	L681/24	-	-	36954	-	-
1977-066	2443341.88	1977 Jul 17 0900:00	Proton-K	-	293-02	Kosmos-929	Gran' No. 12L	-	-	MIIP-5	L681/24	-	-	36176	-	-
1977-071	2443348.39	1977 Jul 17 0900:00	Proton-K	-	293-02	Raduga	TRV VA No. 009M/1	-	-	MIIP-5	L681/24	-	-	448	-	-
1977-082	2443360.42	1977 Aug 4 2200:00	Proton-K/DH	-	291-01	Raduga	Gran' No. 13L	-	-	MIIP-5	L681/24	-	-	36981	-	-
1977-089	2443405.78	1977 Sep 20 1728:00	Proton-K/DH	-	291-02	Ekran	TRV VA No. 009M/P	-	-	MIIP-5	L681/24	-	-	207	-	-
1978-033	2443557.50	1978 Sep 29 0650:00	Proton-K	-	292-01	Kosmos-997/998	Ekran No. 12L	-	-	MIIP-5	L681/24	-	-	37364	-	-
1978-102	2443655.56	1978 May 27 0125:00	Proton-K/DH	-	292-02	Raduga	TRV VA No. 009M/P2	-	-	MIIP-5	L681/24	-	-	436	-	-
1978-103	2443708.42	1978 Jul 18 2159:00	Proton-K/DH	-	294-02	Raduga	Ekran No. 13L	-	-	MIIP-5	L681/24?	-	-	213	-	-
1978-103	2443738.33	1978 Aug 17 2002:00	Proton-K/DH	-	297-02	Raduga	Ekran No. 15L	-	-	MIIP-5	L681/24	-	-	407	-	-
1978-064	2443760.64	1978 Sep 9 0325:39	Proton-K/DH-1	-	296-01	Venera-11	4V-1 No. 961	-	-	MIIP-5	L681/23	-	-	150000	-	-
1978-068	2443765.60	1978 Sep 14 0225:13	Proton-K/DH-1	-	296-02	Venera-12	4V-1 No. 961	-	-	MIIP-5	L681/23	-	-	150000	-	-
1978-104	2443799.17	1978 Oct 17 1604:00	Proton-K/DH	-	298-01	Raduga	Ekran No. 14L	-	-	MIIP-5	L681/24	-	-	1007	-	-
1979-118	2443862.															



Launch

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Mission	FlightCode	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee_Km	Range_Km	Dest
1981-039	2444719.58	1981 Apr 25 0201	Proton-K	-	289-02	Kosmos-1267	TKS No. 16501	-	-	MIP-5	L200/39	-	-	410	-	-
1981-061	2444781.50	1981 Jun 25 2356:00	Proton-K/DM	-	305-01	Ekran	Ekran No. 21L	-	-	MIP-5	L200/40	-	-	36921	-	-
1981-069	2444816.40	1981 Jul 30 2138:00	Proton-K/DM	-	301-02	Raduga	Ekran No. 19L	-	-	MIP-5	L200/39	-	-	37194	-	-
1981-102	2444887.21	1981 Oct 9 1659:00	Proton-K/DM	-	310-01	Raduga	Ekran No. 20L	-	-	MIP-5	L200/40	-	-	39365	-	-
1981-106	2444907.75	1981 Oct 30 0604:22	Proton-K/DM	-	311-01	Venera-13	4V-1R No. 760	-	-	MIP-5	L200/39	-	-	150000	-	-
1981-110	2444912.73	1981 Nov 4 0531:16	Proton-K/DM	-	311-02	Venera-14	4V-1R No. 761	-	-	MIP-5	L200/39	-	-	150000	-	-
1982-009	2445005.88	1982 Feb 5 0912:00	Proton-K/DM	-	308-01	Ekran	Ekran No. 22L	-	-	MIP-5	L200/40	-	-	36575	-	-
1982-020	2445043.69	1982 Mar 15 0439:00	Proton-K/DM	-	306-02	Geizler	Geizler No. 14L	-	-	MIP-5	L200/39	-	-	42755	-	-
1982-033	2445079.32	1982 Apr 19 1946:00	Proton-K	-	306-02	Salyut-7	DOS 6 (17R No. 126-02)	-	-	MIP-5	L200/39	-	-	521	-	-
1982-044	2445107.49	1982 May 17 2350:00	Proton-K/DM	-	310-02	-	Ekran No. 11L	-	-	MIP-5	L200/39	-	-	38941	-	-
1982-044	2445173.42	1982 Jul 22 2211:00	Proton-K/DM	-	307-02	-	Ekran No. 23L	-	-	MIP-5	L200/40	-	-	3801	-	-
1982-093	2445229.27	1982 Sep 15 1831:00	Proton-K/DM	-	309-01	Ekran	Ekran No. 24L	-	-	MIP-5	L200/40	-	-	38515	-	-
1982-100	2445255.12	1982 Oct 12 1456:59	Proton-K/DM-2	-	315-01	Kosmos-1413/1415	Uragan No. 11L	-	-	MIP-5	L200/39	-	-	19491	-	-
1982-103	2445262.18	1982 Oct 20 1626:00	Proton-K/DM	-	312-01	Geizler	Geizler No. 16L	-	-	MIP-5	L200/40	-	-	36657	-	-
1982-113	2445300.09	1982 Nov 26 1413:00	Proton-K/DM	-	313-01	Raduga	Ekran No. 21L	-	-	MIP-5	L200/39	-	-	37449	-	-
1982-108	2445326.00	1982 Dec 24 1200:00	Proton-K/DM	-	314-01	-	Ekran No. 22L	-	-	MIP-5	L200/39	-	-	607	-	-
1983-013	2445395.90	1983 Mar 2 0937:08	Proton-K	-	309-02	Kosmos-1443	TKS-M No. 16401	-	-	MIP-5	L200/39	-	-	395	-	-
1983-016	2445406.08	1983 Mar 12 1400:00	Proton-K/DM	-	304-02	Ekran	Ekran No. 18L	-	-	MIP-5	L200/40	-	-	37694	-	-
1983-020	2445417.03	1983 Mar 23 1245:06	Proton-K/DM	-	307-01	Astron	IA No. 602	-	-	MIP-5	L200/39	-	-	150000	-	-
1983-028	2445432.70	1983 Apr 8 0446:00	Proton-K/DM	-	315-02	Raduga	Ekran No. 23L	-	-	MIP-5	L200/40	-	-	36806	-	-
1983-053	2445487.61	1983 Jun 2 0238:40	Proton-K/DM	-	321-01	Venera-15	4V-2 No. 860	-	-	MIP-5	L200/39	-	-	150000	-	-
1983-054	2445492.61	1983 Jun 7 0232:51	Proton-K/DM	-	321-02	Venera-16	4V-2 No. 861	-	-	MIP-5	L200/40	-	-	150000	-	-
1983-064	2445516.50	1983 Jun 30 2356:00	Proton-K/DM	-	317-01	Geizler	Geizler No. 17L	-	-	MIP-5	L200/39	-	-	36647	-	-
1983-066	2445557.27	1983 Aug 10 1824:26	Proton-K/DM-2	-	314-02	Kosmos-1490/1492	Uragan No. 12L	-	-	MIP-5	L200/39	-	-	36639	-	-
1983-084	2445572.33	1983 Aug 25 2002:00	Proton-K/DM	-	316-02	Raduga	Ekran No. 24L	-	-	MIP-5	L200/40	-	-	36276	-	-
1983-100	2445607.23	1983 Sep 28 1737:00	Proton-K/DM	-	318-01	Ekran	Ekran No. 25L	-	-	MIP-5	L200/39	-	-	36606	-	-
1983-116	2445669.06	1983 Nov 30 1351:00	Proton-K/DM	-	308-02	Ekran	Ekran No. 16L	-	-	MIP-5	L200/40	-	-	37637	-	-
1983-127	2445699.54	1983 Dec 29 0842:24	Proton-K/DM-2	-	320-02	Raduga	Ekran No. 14L	-	-	MIP-5	L200/40	-	-	19533	-	-
1984-016	2445745.87	1984 Feb 15 0846:00	Proton-K/DM	-	318-02	Kosmos-1519/1521	Uragan No. 18L	-	-	MIP-5	L200/39	-	-	37637	-	-
1984-022	2445776.06	1984 Mar 2 0354:00	Proton-K/DM	-	316-01	Ekran	Ekran No. 26L	-	-	MIP-5	L200/40	-	-	36341	-	-
1984-028	2445786.75	1984 Mar 15 1400:00	Proton-K/DM	-	322-01	Kosmos-1540	Ekran No. 26L	-	-	MIP-5	L200/39	-	-	37126	-	-
1984-031	2445798.75	1984 Mar 29 0552:56	Proton-K/DM	-	319-02	Ekran	Okor-S F1	-	-	MIP-5	L200/40	-	-	36919	-	-
1984-041	2445812.66	1984 Apr 25 0421:00	Proton-K/DM	-	312-02	Kosmos-1546	Ekran No. 26L	-	-	MIP-5	L200/39	-	-	36367	-	-
1984-047	2445840.13	1984 May 19 1510:42	Proton-K/DM-2	-	323-02	Geizler	Geizler No. 19L	-	-	MIP-5	L200/40	-	-	36367	-	-
1984-053	2445873.51	1984 Jun 22 0200:00	Proton-K/DM	-	319-01	Raduga	Ekran No. 16L	-	-	MIP-5	L200/40	-	-	19338	-	-
1984-078	2445914.40	1984 Jul 21 2137:00	Proton-K/DM	-	324-02	Ekran	Ekran No. 20L	-	-	MIP-5	L200/39	-	-	37300	-	-
1984-080	2445937.33	1984 Aug 24 1350:00	Proton-K/DM	-	324-02	Ekran	Ekran No. 27L	-	-	MIP-5	L200/40	-	-	36540	-	-
1984-088	2445946.16	1984 Sep 25 1549:55	Proton-K/DM-2	-	320-01	Kosmos-1583/1595	Uragan No. 18L	-	-	MIP-5	L200/39	-	-	37119	-	-
1984-106	2445972.06	1984 Sep 28 1400:00	Proton-K/DM-2	-	327-02	Kosmos-1605	Tsallinat-2	-	-	MIP-5	L200/38	-	-	22846	-	-
1984-128	2446055.86	1984 Dec 15 0916:24	Proton-K/DM	-	329-01	Vega-1	SVK No. 901	-	-	MIP-5	L200/39	-	-	150000	-	-
1985-004	2446085.86	1985 Dec 18 0913:52	Proton-K/DM	-	326-02	Kosmos-1606	Ekran No. 902	-	-	MIP-5	L200/40	-	-	150000	-	-
1985-016	2446147.53	1985 Feb 22 0756:46	Proton-K/DM	-	326-01	Ekran	Ekran No. 28L	-	-	MIP-5	L200/39	-	-	36485	-	-
1985-042	2446216.44	1985 May 17 2250:41	Proton-K/DM-2	-	330-02	Kosmos-1629	Okor-S F2	-	-	MIP-5	L200/40	-	-	36485	-	-
1985-047	2446245.11	1985 May 22 0900:00	Proton-K/DM	-	326-01	Ekran	Ekran No. 20L	-	-	MIP-5	L200/39	-	-	37300	-	-
1985-062	2446261.12	1985 May 27 1495:00	Proton-K/DM-2	-	330-02	Kosmos-1650/52	Uragan No. 28L	-	-	MIP-5	L200/40	-	-	31665	-	-
1985-066	2446335.36	1985 Aug 9 21:00:00	Proton-K/DM	-	315-02	Raduga	Tsallinat-2	-	-	MIP-5	L200/39	-	-	21665	-	-
1985-072	2446358.16	1985 Sep 27 0841:42	Proton-K/DM	-	331-01	Ekran	Ekran No. 26L	-	-	MIP-5	L200/40	-	-	49637	-	-
1985-072	2446358.16	1985 Sep 27 0841:42	Proton-K/DM	-	331-01	Raduga	Tsallinat-2	-	-	MIP-5	L200/39	-	-	49637	-	-
1985-097	2446384.10	1985 Oct 25 1549:00	Proton-K/DM-2	-	326-01	Kosmos-1686	TKS-M No. 16501	-	-	MIP-5	L200/39	-	-	36367	-	-
1985-119	2446424.41	1985 Nov 15 1443:28	Proton-K/DM	-	326-01	Raduga	AI Tai No. 11L	-	-	MIP-5	L200/40	-	-	37473	-	-
1985-017	2446447.93	1985 Dec 24 1143:28	Proton-K/DM-2	-	331-02	Ekran	Ekran No. 28L	-	-	MIP-5	L200/39	-	-	19401	-	-
1985-017	2446447.93	1985 Dec 24 1143:28	Proton-K/DM-2	-	331-02	Raduga	Uragan No. 29L	-	-	MIP-5	L200/40	-	-	36776	-	-
1985-027	2446581.26	1986 Jan 19 2128:33	Proton-K/DM	-	337-01	Ekran	DOS 7 (17R No. 127-01)	-	-	MIP-5	L200/39	-	-	472	-	-
1985-027	2446581.26	1986 Jan 19 2128:33	Proton-K/DM	-	337-01	Ekran	DOS 7 (17R No. 127-01)	-	-	MIP-5	L200/39	-	-	472	-	-
1985-038	2446574.57	1986 Apr 4 0345:00	Proton-K/DM	-	332-01	Kosmos-1738	Ekran No. 32L	-	-	MIP-5	L200/40	-	-	37111	-	-
1985-044	2446591.53	1986 Apr 24 0142:00	Proton-K/DM	-	333-01	Ekran	Ekran No. 30L	-	-	MIP-5	L200/39	-	-	38233	-	-
1985-071	2446599.98	1986 Jun 10 0045:00	Proton-K/DM	-	332-02	Ekran	Ekran No. 30L	-	-	MIP-5	L200/39	-	-	37617	-	-
1985-082	2446729.15	1986 Oct 25 1543:00	Proton-K/DM-2	-	336-01	Raduga	Uragan No. 24L	-	-	MIP-5	L200/40	-	-	19570	-	-
1985-082	2446729.15	1986 Oct 25 1543:00	Proton-K/DM-2	-	336-01	Raduga	Uragan No. 24L	-	-	MIP-5	L200/40	-	-	19570	-	-
1985-090	2446763.83	1986 Nov 18 1408:03	Proton-K/DM	-	334-01	Ekran	Ekran No. 30L	-	-	MIP-5	L200/40	-	-	36740	-	-
1985-097	2446763.83	1986 Nov 18 1408:03	Proton-K/DM	-	334-01	Ekran	Ekran No. 30L	-	-	MIP-5	L200/39	-	-	37225	-	-
1987-010	2446925.89	1987 Jan 30 0919:00	Proton-K/DM-2	-	338-01	Ekran	Mech-K No. 22L	-	-	MIP-5	L200/40	-	-	5075	-	-
1987-010	2446925.89	1987 Jan 30 0919:00	Proton-K/DM-2	-	338-01	Ekran	Mech-K No. 22L	-	-	MIP-5	L200/40	-	-	5075	-	-
1987-028	2446973.66	1987 Mar 19 0354:00	Proton-K/DM	-	323-01	Raduga	Ekran-M No. 11L	-	-	MIP-5	L200/40	-	-	257	-	-
1987-030	2446985.50	1987 Mar 31 0006:16	Proton-K	-	323-01	Ekran	Ekran-M No. 11L	-	-	MIP-5	L200/40	-	-	37227	-	-
1987-036	2446910.03	1987 Apr 24 1242:54	Proton-K/DM-2	-	335-01	Kosmos-1833/1840	TKS-o 376s No. 010	-	-	MIP-5	L200/39	-	-	473	-	-
1987-040	2446927.11	1987 Mar 11 1445:00	Proton-K/DM	-	338-02	Ekran	Uragan No. 30L	-	-	MIP-5	L200/40	-	-	17648	-	-
1987-073	2447042.31	1987 Jul 25 0900:00	Proton-K	-	337-02	Ekran	Geizler No. 23L	-	-	MIP-5	L200/39	-	-	36890	-	-
1987-073	2447042.31	1987 Jul 25 0900:00	Proton-K	-	337-02	Ekran	Geizler No. 23L	-	-	MIP-5	L200/39	-	-	36890	-	-
1987-073	2447042.31	1987 Jul 25 0900:00	Proton-K	-	337-02	Ekran	Geizler No. 23L	-	-	MIP-5	L200/39	-	-	36890	-	-
1987-073	2447042.31	1987 Jul 25 0900:00	Proton-K	-	337-02	Ekran	Geizler No. 23L	-	-	MIP-5	L200/39	-	-	36890	-	-
1987-084	2447070.21	1987 Oct 1 1709:00	Proton-K/DM-2	-	339-02	Ekran	Mech-K No. 304	-	-	MIP-5	L200/40	-	-	287	-	-
1987-084	2447070.21	1987 Oct 1 1709:00	Proton-K/DM-2	-	339-02	Ekran	Mech-K No. 304	-	-	MIP-5	L200/40	-	-	287	-	-
1987-084	2447070.21	1987 Oct 1 1709:00	Proton-K/DM-2	-	339-02	Ekran	Mech-K No. 304	-	-	MIP-5	L200/40	-	-	287	-	-
1987-084	2447070.21	1987 Oct 1 1709:00	Proton-K/DM-2	-	339-02	Ekran	Mech-K No. 304	-	-	MIP-5	L200/40	-	-	287	-	-
1987-096	2447126.06	1987 Nov 26 1328:00	Proton-K/DM-2	-	343											

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Mission	FlightCode	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee_Km	Range_Km	Dest
1989-001	2447536.59	1989 Jan 10 0205:26	Proton-K/DM-2	-	350-02	Kosmos-1987/1989	Uragan No. 27L	-	-	GIK-5	L200/39	-	-	19379	-	-
1989-004	2447552.89	1989 Jan 26 0916:00	Proton-K/DM-2	-	351-02	Gorizont	Gorizont No. 29L	-	-	GIK-5	L200/40	-	-	38302	-	-
1989-030	2447630.67	1989 Apr 14 0408:00	Proton-K/DM-2	-	359-02	Raduga	Gren' No. 33L	-	-	GIK-5	L200/39	-	-	38070	-	-
1989-048	2447677.86	1989 May 31 0831:59	Proton-K/DM-2	-	352-02	Kosmos-2022/2024	Uragan No. 1I	-	-	GIK-5	L200/39	-	-	19692	-	-
1989-049	2447699.48	1989 Jun 21 2335:00	Proton-K/DM-2	-	355-02	Raduga-1	Globus No. 1I	-	-	GIK-5	L200/39	-	-	37495	-	-
1989-052	2447713.46	1989 Jul 5 2245:00	Proton-K/DM-2	-	340-02	Gorizont	Gorizont No. 27L	-	-	GIK-5	L200/40	-	-	36206	-	-
1989-081	2447798.21	1989 Sep 28 1705:00	Proton-K/DM-2	-	346-01	Gorizont	Gorizont No. 31L	-	-	GIK-5	L200/40	-	-	37572	-	-
1989-093	2447857.04	1989 Nov 26 1301:41	Proton-K	-	354-01	Kvant-2	Tsh-D	-	-	GIK-5	L200/39	-	-	420	-	-
1989-096	2447862.32	1989 Dec 1 2020:57	Proton-K/D-1	-	352-01	Granat	LRS No. 1	-	-	GIK-5	L200/40	-	-	150000	-	-
1989-098	2447875.98	1989 Dec 15 1130:00	Proton-K/DM-2	-	347-02	Raduga	Gren' No. 36L	-	-	GIK-5	L200/39	-	-	38786	-	-
1989-101	2447887.97	1989 Dec 27 1100:00	Proton-K/DM-2	-	344-02	Raduga	Al'tair No. 14L	-	-	GIK-5	L200/39	-	-	37068	-	-
1990-016	2447937.83	1990 Feb 15 0752:00	Proton-K/DM-2	-	363-02	Raduga	Gren' No. 35L	-	-	GIK-5	L200/40	-	-	38161	-	-
1990-046	2448030.86	1990 May 19 0832:33	Proton-K/DM-2	-	350-01	Raduga	Uragan No. 46L	-	-	GIK-5	L200/40	-	-	19371	-	-
1990-064	2448042.94	1990 May 31 1033:20	Proton-K	-	360-01	Kristall	Tsh-1 77KST No. 17201	-	-	GIK-5	L200/39	-	-	421	-	-
1990-066	2448063.48	1990 Jun 20 2336:00	Proton-K/DM	-	342-02	Gorizont	Gorizont No. 30L	-	-	GIK-5	L200/40	-	-	36146	-	-
1990-061	2448091.41	1990 Jul 15 2146:00	Proton-K/DM-2	-	345-02	Kosmos-2085	Geizer No. 17L	-	-	GIK-5	L200/39	-	-	39863	-	-
1990-004	2448113.35	1990 Aug 9 2018:59	Proton-K/DM-2	-	345-02	-	Ekran-M No. 14L	-	-	GIK-5	L200/39	-	-	587	-	-
1990-094	2448199.11	1990 Nov 3 1440:00	Proton-K/DM-2	-	370-01	Gorizont	Gorizont No. 32L	-	-	GIK-5	L200/39	-	-	36220	-	-
1990-102	2448219.06	1990 Nov 23 1322:00	Proton-K/DM-2	-	348-02	Gorizont	Gorizont No. 33L	-	-	GIK-5	L200/39	-	-	38198	-	-
1990-110	2448253.61	1990 Dec 8 0243:00	Proton-K/DM-2	-	365-02	Raduga	Uragan No. 47L	-	-	GIK-5	L200/39	-	-	19632	-	-
1990-112	2448265.98	1990 Dec 20 1136:00	Proton-K/DM-2	-	361-01	Raduga	Gren' No. 37L	-	-	GIK-5	L200/40	-	-	36029	-	-
1991-016	2448282.96	1991 Feb 14 0831:56	Proton-K/DM-2	-	344-02	Raduga-1	Globus No. 12	-	-	GIK-5	L200/39	-	-	36653	-	-
1991-010	2448301.86	1991 Feb 28 0530:00	Proton-K/DM-2	-	360-02	Raduga	Dko-1 No. 7120	-	-	GIK-5	L200/39	-	-	36151	-	-
1991-024	2448347.13	1991 Mar 31 1512:00	Proton-K	-	365-01	Raduga	Mech-KO No. 305	-	-	GIK-5	L200/40	-	-	358	-	-
1991-028	2448350.96	1991 Apr 4 1047:12	Proton-K	-	354-02	Kosmos-2139/2141	Uragan No. 80L	-	-	GIK-5	L200/39	-	-	19536	-	-
1991-046	2448359.41	1991 Jul 1 2153:00	Proton-K/DM-2	-	373-01	Gorizont	Gorizont No. 34L	-	-	GIK-5	L200/39	-	-	36240	-	-
1991-074	2448513.24	1991 Sep 15 1751:02	Proton-K/DM-2	-	363-02	Raduga	Dko-S F4	-	-	GIK-5	L200/39	-	-	36240	-	-
1991-084	2448553.14	1991 Oct 23 1525:00	Proton-K/DM-2	-	362-02	Raduga	Gorizont No. 35L	-	-	GIK-5	L200/39	-	-	36866	-	-
1991-079	2448565.06	1991 Nov 22 1327:00	Proton-K/DM-2	-	353-02	Raduga	Geizer No. 16L	-	-	GIK-5	L200/39	-	-	36492	-	-
1991-087	2448609.99	1991 Dec 19 1441:00	Proton-K/DM-2	-	355-01	Raduga	Gren' No. 38L	-	-	GIK-5	L200/39	-	-	37136	-	-
1992-005	2448651.45	1992 Jan 28 2219:12	Proton-K/DM-2	-	372-02	Raduga	Uragan No. 68L	-	-	GIK-5	L200/39	-	-	19661	-	-
1992-017	2448714.56	1992 Apr 2 0150:00	Proton-K/DM-2	-	369-01	Gorizont	Gorizont No. 36L	-	-	GIK-5	L200/39	-	-	37086	-	-
1992-043	2448816.42	1992 Jul 14 2202:00	Proton-K/DM-2	-	371-02	Gorizont	Uragan No. 96L	-	-	GIK-5	L200/39	-	-	19892	-	-
1992-047	2448833.56	1992 Jul 30 0159:00	Proton-K/DM-2	-	376-01	Raduga	Dko-S F5	-	-	GIK-5	L200/39	-	-	36705	-	-
1992-059	2448876.25	1992 Sep 10 1801:18	Proton-K/DM-2	-	363-01	Raduga	Ekran	-	-	GIK-5	L200/40	-	-	35944	-	-
1992-074	2448926.12	1992 Oct 30 1459:00	Proton-K/DM-2	-	364-01	Raduga	Dko-S F5	-	-	GIK-5	L200/39	-	-	37324	-	-
1992-082	2448954.05	1992 Nov 27 1310:00	Proton-K/DM-2	-	367-02	Raduga	Gorizont No. 38L	-	-	GIK-5	L200/39	-	-	36178	-	-
1992-088	2448974.03	1992 Dec 17 1245:00	Proton-K/DM-2	-	362-01	Raduga	Uragan No. 42L	-	-	GIK-5	L200/39	-	-	19621	-	-
1993-010	2449036.34	1993 Feb 17 2009:47	Proton-K/DM-2	-	385-00	Raduga	Gren' No. 40L	-	-	GIK-5	L200/39	-	-	19828	-	-
1993-013	2449071.60	1993 Mar 25 0228:00	Proton-K/DM-2	-	369-02	Gorizont	Gorizont No. 39L	-	-	GIK-5	L200/39	-	-	19828	-	-
1993-021	2449134.56	1993 May 2 1131:00	Proton-K/DM-2	-	364-02	Raduga	Gren' No. 41L	-	-	GIK-5	L200/39	-	-	37057	-	-
1993-062	2449261.14	1993 Sep 30 1517:00	Proton-K/DM-2	-	369-01	Gorizont	Gorizont No. 40L	-	-	GIK-5	L200/39	-	-	35971	-	-
1993-072	2449371.06	1993 Oct 19 1354:59	Proton-K/DM-2	-	366-02	Raduga	Gals No. 11L	-	-	GIK-5	L200/39	-	-	36716	-	-
1994-008	2449381.87	1994 Feb 5 0849:00	Proton-K/DM-2	-	376-02	Raduga	Gren' No. 43L	-	-	GIK-5	L200/39	-	-	36406	-	-
1994-021	2449401.83	1994 Feb 15 0746:00	Proton-K/DM-2	-	377-01	Raduga	Gren' No. 40L	-	-	GIK-5	L200/39	-	-	19955	-	-
1994-030	2449462.55	1994 Apr 11 0749:22	Proton-K/DM-2	-	357-01	Raduga	Kosmos-2275/2277	-	-	GIK-5	L200/39	-	-	35897	-	-
1994-038	2449520.10	1994 May 30 0200:00	Proton-K/DM-2	-	365-02	Raduga	Dko-1 No. 7123	-	-	GIK-5	L200/39	-	-	36207	-	-
1994-060	2449576.14	1994 Jul 6 2358:15	Proton-K/DM-2	-	367-02	Raduga	Uragan No. 67L	-	-	GIK-5	L200/39	-	-	19550	-	-
1994-067	2449617.25	1994 Aug 21 1755:00	Proton-K/DM-2	-	361-02	Raduga	Geizer No. 19L	-	-	GIK-5	L200/39	-	-	36417	-	-
1994-087	2449629.18	1994 Sep 21 1619:00	Proton-K/DM-2	-	371-02	Raduga	Kosmos-2281	-	-	GIK-5	L200/39	-	-	36028	-	-
1994-089	2449639.16	1994 Oct 31 1439:56	Proton-K/DM-2	-	361-02	Raduga	Ekspres No. 11L	-	-	GIK-5	L200/39	-	-	35857	-	-
1994-099	2449657.16	1994 Nov 20 0339:37	Proton-K/DM-2	-	371-01	Raduga	Ekspres No. 11L	-	-	GIK-5	L200/39	-	-	35857	-	-
1994-076	2449676.53	1994 Nov 26 1209:00	Proton-K/DM-2	-	373-02	Raduga	Uragan No. 62L	-	-	GIK-5	L200/39	-	-	19508	-	-
1994-087	2449703.00	1994 Dec 16 1300:00	Proton-K/DM-2	-	366-01	Raduga	Uragan No. 43L	-	-	GIK-5	L200/39	-	-	36106	-	-
1995-009	2449783.85	1995 May 7 0923:44	Proton-K	-	370-02	Raduga	Gren' No. 65L	-	-	GIK-5	L200/39	-	-	19541	-	-
1995-024	2449857.65	1995 May 20 0333:22	Proton-K/DM-2	-	378-02	Raduga	Uragan No. 82L	-	-	GIK-5	L200/39	-	-	36810	-	-
1995-037	2449923.16	1995 Jul 24 1552:10	Proton-K/DM-2	-	374-01	Raduga	Gren' No. 44L	-	-	GIK-5	L200/39	-	-	39000	-	-
1995-045	2449960.31	1995 Aug 30 1933:00	Proton-K/DM-2	-	379-01	Raduga	Task-I 77KST No. 17401	-	-	GIK-5	L200/39	-	-	673	-	-
1995-046	2450002.18	1995 Nov 11 1629:00	Proton-K/DM-2	-	369-02	Raduga	Uragan No. 80L	-	-	GIK-5	L200/39	-	-	37118	-	-
1995-054	2450039.10	1995 Nov 17 1429:00	Proton-K/DM-2	-	386-01	Raduga	Uragan No. 20L	-	-	GIK-5	L200/39	-	-	39240	-	-
1995-068	2450065.76	1995 Dec 14 0610:31	Proton-K/DM-2	-	384-01	Raduga	Gals No. 12L	-	-	GIK-5	L200/39	-	-	36303	-	-
1995-005	2450107.91	1996 Jan 25 0956:00	Proton-K/DM-2	-	374-02	Raduga	Gals No. 12L	-	-	GIK-5	L200/39	-	-	19294	-	-
1995-010	2450132.85	1996 Feb 19 0819:00	Proton-K/DM-2	-	383-02	Raduga	Uragan No. 82L	-	-	GIK-5	L200/39	-	-	36810	-	-
1995-021	2450182.46	1996 Apr 8 2309:01	Proton-K/DM-2	-	390-02	Raduga	Gren' No. 44L	-	-	GIK-5	L200/39	-	-	36597	-	-
1995-034	2450196.99	1996 Apr 23 1148:50	Proton-K	-	390-01	Raduga	Astra 1F	-	-	GIK-5	L200/39	-	-	39000	-	-
1995-034	2450228.59	1996 May 25 0205:00	Proton-K	-	395-01	Raduga	Task-I 77KST No. 17401	-	-	GIK-5	L200/39	-	-	673	-	-
1995-033	2450333.23	1996 Sep 6 1737:37	Proton-K/DM-2	-	379-01	Raduga	Uragan No. 44L	-	-	GIK-5	L200/39	-	-	37118	-	-
1995-068	2450363.24	1996 Sep 26 1750:53	Proton-K/DM-2	-	375-02	Raduga	IMMARSAT III F-2	-	-	GIK-5	L200/3					

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Mission	FlightCode	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee_Km	Range_Km	Dest
1998-065	2451121.72	1998 Nov 4 05:12:00	Proton-K/DM-2H	DM3	385-02	PAS 8	PAS 8			GIK-5	LCS1/23			38608		
1998-067	2451137.78	1998 Nov 20 06:40:00	Proton-K	-	385-01	Zarya	77KM No. 17501			GIK-5	LCS1/23			430		
1998-077	2451178.27	1998 Dec 30 18:38:46	Proton-K/DM-2	DM3	385-02	Kosmos-2362/2364	Uragan No. 86L			GIK-5	LCS1/23			36786		
1999-010	2451224.72	1999 Feb 15 05:12:00	Proton-K/DM-2H	DM3	387-01	Telstar 6	Telstar 6			GIK-5	LCS1/23			36876		
1999-015	2451237.67	1999 Feb 25 04:00:00	Proton-K/DM-2H	DM3	387-01	Raduga-1	Raduga-1			GIK-5	LCS1/23			36807		
1999-013	2451258.51	1999 Mar 21 00:09:30	Proton-K/DM-2H	DM3	388-01	Asiasat 3S	Asiasat 3S			GIK-5	LCS1/23			36304		
1999-027	2451319.44	1999 May 20 22:30:00	Proton-K/DM-2H	DM3	387-02	Minliq	Telestar DTH-1			GIK-5	LCS1/23			36326		
1999-033	2451347.58	1999 Jun 15 01:49:30	Proton-K/DM-2H	DM3	387-02	Astra 1H	Astra 1H			GIK-5	LCS1/23			39375		
1999-032	2451365.06	1999 Jun 5 13:32:00	Proton-K/Briz-M	DM3	389-01/88501	Raduga	Raduga			GIK-5	LCS1/24			30		
1999-047	2451448.19	1999 Sep 6 16:36:00	Proton-K/DM-2H	DM3	388-02	Yamal-100 No. 1/2	Yamal-100 No. 2			GIK-5	LCS1/23			39029		
1999-053	2451484.44	1999 Sep 26 22:30:00	Proton-K/DM-2H	DM3	388-02	LMT-1	LMT-1			GIK-5	LCS1/23			36101		
1999-073	2451579.18	1999 Oct 27 16:16:00	Proton-K/DM-2H	DM3	389-02	Express A No. 1	Express-A No. R 001			GIK-5	LCS1/23			1207		
2000-011	2451586.88	2000 Feb 12 09:10:54	Proton-K/DM-2H	DM3	389-02	Garuda 1	Garuda 1			GIK-5	LCS1/23			36957		
2000-013	2451615.67	2000 Mar 12 04:07:00	Proton-K/DM-2H	DM3	389-01	Express A No. 2	Express A No. 2			GIK-5	LCS1/23			36410		
2000-019	2451652.38	2000 Apr 17 21:06:00	Proton-K/DM-2H	DM3	387-01	Seasat	SESAT			GIK-5	LCS1/23			37673		
2000-029	2451701.62	2000 Jun 6 02:59:00	Proton-K/Briz-M	DM3	382-01/88502	Horizont No. 45	Horizont No. 45L			GIK-5	LCS1/23			36046		
2000-031	2451719.52	2000 Jun 24 02:08:00	Proton-K/DM-2H	DM3	389-02	Express A No. 3	Sirius CD Radio 1			GIK-5	LCS1/24			36255		
2000-038	2451726.42	2000 Jun 30 22:08:47	Proton-K/DM-2H	DM3	400-01	Sirius CD Radio 1	Sirius CD Radio 1			GIK-5	LCS1/24			51626		
2000-036	2451730.49	2000 Jul 4 23:44:00	Proton-K/DM-2H	DM3	389-02	Kosmos-2371	Kosmos-2371			GIK-5	LCS1/23			35944		
2000-037	2451737.71	2000 Jul 12 04:08:36	Proton-K	-	389-02	Zvezda	Zvezda			GIK-5	LCS1/23			419		
2000-049	2451785.34	2000 Aug 28 00:56:00	Proton-K/DM-2H	DM3	401-02	Raduga-1	Raduga-1			GIK-5	LCS1/24			36653		
2000-051	2451792.91	2000 Sep 5 09:43:56	Proton-K/DM-2H	DM3	401-02	Sirius CD Radio 2	Sirius CD Radio 2			GIK-5	LCS1/24			51694		
2000-059	2451819.42	2000 Oct 1 22:00:00	Proton-K/DM-2H	DM3	401-01	GE-1A	GE-1A			GIK-5	LCS1/23			35913		
2000-063	2451831.09	2000 Oct 21 14:12:48	Proton-K/DM-2H	DM3	383-01	Uragan No. 83L	Uragan No. 83L			GIK-5	LCS1/23			19353		
2000-067	2451839.42	2000 Oct 21 22:00:00	Proton-K/DM-2H	DM3	402-01	Kosmos-2374/2376	GE 6			GIK-5	LCS1/23			36020		
2000-077	2451879.33	2000 Nov 30 19:59:47	Proton-K/DM-2H	DM3	402-01	GE-6	GE 6			GIK-5	LCS1/23			47696		
2001-014	2452006.66	2001 Apr 7 03:47:00	Proton-K/Briz-M	DM3	535-01/88503	Sirius CD Radio 3	Sirius CD Radio 3			GIK-5	LCS1/24			37681		
2001-019	2452044.56	2001 May 15 01:11:30	Proton-K/DM-2H	DM3	403-01	Ekran-M No. 18	Ekran-M No. 18L			GIK-5	LCS1/24			36066		
2001-025	2452076.56	2001 Jun 15 01:49:00	Proton-K/DM-2H	DM3	403-02	PAS 10	PAS 10			GIK-5	LCS1/23			36076		
2001-037	2452146.36	2001 Aug 24 20:34:50	Proton-K/DM-2H	DM3	405-01	Astra 2C	Astra 2C			GIK-5	LCS1/24			36190		
2001-046	2452189.20	2001 Oct 6 16:45:00	Proton-K/DM-2H	DM3	405-01	Kosmos-2379	Kosmos-2379			GIK-5	LCS1/24			37371		
2001-063	2452245.25	2001 Dec 31 16:04:44	Proton-K/DM-2H	DM3	405-02	Raduga-1	Raduga-1			GIK-5	LCS1/24			19463		
2002-016	2452264.25	2002 Mar 30 17:25:00	Proton-K/DM-2H	DM3	406-01	Kosmos-2380/2382	Kosmos-2380/2382			GIK-5	LCS1/24			37406		
2002-023	2452302.21	2002 May 17 07:00:00	Proton-K/DM-2H	DM3	406-01	Intelsat 903	Intelsat 903			GIK-5	LCS1/23			36047		
2002-029	2452325.55	2002 Jun 10 01:14:00	Proton-K/DM-2H	DM3	404-02	DirectV-5	DirectV-5			GIK-5	LCS1/24			36306		
2002-037	2452381.15	2002 Jun 25 15:13:21	Proton-K/DM-2H	DM3	407-01	Express A No. 4	Express-A No. 4			GIK-5	LCS1/23			2869		
2002-039	2452386.72	2002 Aug 22 05:16:00	Proton-K/Briz-M	DM3	408-01	Kosmos-2392	Kosmos-2392			GIK-5	LCS1/24			36502		
2002-048	2452394.46	2002 Oct 25 04:41:00	Proton-K/Briz-M	DM2	409-01	EchoStar VIII	EchoStar VIII			GIK-5	LCS1/23			19000		
2002-063	2452394.46	2002 Nov 25 23:42:00	Proton-K/DM-2H	DM3	408-02	Integral	Integral			GIK-5	LCS1/23			352		
2002-062	2452398.47	2002 Dec 25 23:16:40	Proton-K/DM-2H	DM3	535-02/88504	Astra 1K	Astra 1K			GIK-5	LCS1/23			19355		
2003-013	2452735.66	2003 Apr 24 14:23:17	Proton-K/DM-2H	DM3	410-02	Minliq 2	Minliq 2			GIK-5	LCS1/24			36196		
2003-014	2452742.85	2003 Jun 9 22:15:15	Proton-K/Briz-M	DM3	410-02	Kosmos-2397	Kosmos-2397			GIK-5	LCS1/24			36654		
2003-063	2452871.75	2003 Jun 24 17:00:00	Proton-K/Briz-M	DM3	410-02	Yamal-200	Yamal-200			GIK-5	LCS1/23			19360		
2003-068	2452904.24	2003 Nov 10 17:42:00	Proton-K/Briz-M	DM3	410-03/88506	Kosmos-2402/2404	Kosmos-2402/2404			GIK-5	LCS1/23			19360		
2003-069	2452906.46	2003 Dec 15 23:00:00	Proton-K/Briz-M	DM3	410-03	Express IM-22	Express IM-22			GIK-5	LCS1/23			36850		
2003-080	2452921.36	2004 Mar 27 03:00:00	Proton-K/Briz-M	DM3	535-03/88507	Euclat 3A	Euclat 3A			GIK-5	LCS1/23			19366		
2004-015	2453172.36	2004 Apr 26 23:07:00	Proton-K/DM-2H	DM3	410-06	Raduga-1	Raduga-1			GIK-5	LCS1/23			37837		
2004-022	2453222.44	2004 Aug 1 23:32:00	Proton-K/DM-2H	DM3	410-06	Express IM-11	Express IM-11			GIK-5	LCS1/23			36173		
2004-041	2453293.39	2004 Oct 24 21:43:00	Proton-K/Briz-M	DM3	535-06/88509	Intelsat 10-02	Intelsat 10-02			GIK-5	LCS1/23			37034		
2004-043	2453298.42	2004 Oct 29 23:43:00	Proton-K/Briz-M	DM3	535-07/88508	Amazons	Amazons			GIK-5	LCS1/23			36306		
2004-063	2453298.42	2004 Dec 26 13:53:00	Proton-K/DM-2H	DM3	410-09	ANC-15	ANC-15			GIK-5	LCS1/23			19264		
2005-003	2453404.60	2005 Feb 9 02:27:31	Proton-K/Briz-M	DM3	535-09/88511	Express IM-1	Express IM-1			GIK-5	LCS1/24			35854		
2005-010	2453459.40	2005 Mar 29 21:31:00	Proton-K/Briz-M	DM3	410-10	Uragan No. 796	Uragan No. 796			GIK-5	LCS1/24			38117		
2005-019	2453513.25	2005 May 24 17:59:08	Proton-K/Briz-M	DM3	410-12	American 12	American 12			GIK-5	LCS1/23			36176		
2005-023	2453549.32	2005 Jun 24 19:41:00	Proton-K/Briz-M	DM3	410-07	Express IM-2	Express IM-2			GIK-5	LCS1/23			36165		
2005-036	2453922.41	2005 Sep 8 21:53:40	Proton-K/Briz-M	DM3	535-12/88513	Express IM-3	Express IM-3			GIK-5	LCS1/23			35816		
2005-060	2453979.71	2005 Dec 25 05:07:00	Proton-K/DM-2H	DM3	410-11	Asik F18	Asik F18			GIK-5	LCS1/24			19394		
2005-060	2453979.71	2005 Dec 25 05:07:00	Proton-K/Briz-M	DM3	535-13/88514	Uragan No. 798	Uragan No. 798			GIK-5	LCS1/24			35942		
2005-062	2453979.71	2005 Dec 25 05:07:00	Proton-K/Briz-M	DM3	535-14/88514	Arabsat 4A	Arabsat 4A			GIK-5	LCS1/24			14956		
2005-062	2453979.71	2005 Dec 25 05:07:00	Proton-K/Briz-M	DM3	535-15/88515	Hot Bird 8	Hot Bird 8			GIK-5	LCS1/24			35999		
2005-062	2453979.71	2005 Dec 25 05:07:00	Proton-K/Briz-M	DM3	535-21/88518	Kasat 78S	Kasat 78S			GIK-5	LCS1/24			35854		
2005-062	2453979.71	2005 Dec 25 05:07:00	Proton-K/Briz-M	DM3	535-21/88518	Arabsat 4B	Arabsat 4B			GIK-5	LCS1/24			35952		
2005-062	2453979.71	2005 Dec 25 05:07:00	Proton-K/Briz-M	DM3	535-16/88520	Measat 4F	Measat 4F			GIK-5	LCS1/24			35934		
2005-062	2453979.71	2005 Dec 25 05:07:00	Proton-K/Briz-M	DM3	535-20/88520	Asik F3	Asik F3			GIK-5	LCS1/24			37245		
2005-062	2453979.71	2005 Dec 25 05:07:00	Proton-K/Briz-M	DM3	535-22/88522	DirectV-10	DirectV-10			GIK-5	LCS1/24			74		
2005-067	2454299.82	2007 Oct 26 07:29:24	Proton-K/DM-2H	DM3	410-17	JCSAT 11	JCSAT 11			GIK-5	LCS1/24			19381		
2005-067	2454299.82	2007 Oct 26 07:29:24	Proton-K/Briz-M	DM3	535-23/88523	Sirius 4	Sirius 4			GIK-5	LCS1/24			35895		
2007-003	2454349.45	2007 Sep 5 22:43:00	Proton-K/Briz-M	DM3	535-20/88520	Raduga-1M (Globeus)	Raduga-1M (Globeus)			GIK-5	LCS1/24			36063		
2007-057	2454403.51</															

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Mission	FlightCode	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee_Km	Range_Km	Dest
2009-016	2454925-18	2009 Apr 3 16:24:00	Proton-M/Briz-M	-	935-04/99504	Eurelast W2A	-	-	GIK-5	L200/39	-	-	36100	-	-
2009-027	2454967-54	2009 May 16 00:57:38	Proton-M/Briz-M	-	935-06/99505	Protestar 2	-	-	GIK-5	L200/39	-	-	35886	-	-
2009-034	2455013-30	2009 Jun 30 19:00:00	Proton-M/Briz-M	-	935-06/99506	Sirius FM6	-	-	GIK-5	L200/39	-	-	35975	-	-
2009-042	2455065-32	2009 Aug 11 19:47:33	Proton-M/Briz-M	-	935-07/99507	Asiatat 5	-	-	GIK-5	L200/39	-	-	35889	-	-
2009-050	2455092-31	2009 Sep 17 19:19:39	Proton-M/Briz-M	-	935-07/99508	Asiatat 5	-	-	GIK-5	L200/39	-	-	35885	-	-
2009-065	2455160-10	2009 Dec 24 14:18:27	Proton-M/DM-2	-	935-09/99509	Eurelast W7	-	-	GIK-5	L200/39	-	-	35924	-	-
2009-070	2455179-94	2009 Dec 28 00:22:00	Proton-M/Briz-M	-	935-38/1151L	Komos-2456/2468	-	-	Glonass Blok 41	L200/39	-	-	19420	-	-
2010-002	2455244-52	2010 Jan 28 02:18:00	Proton-M/Briz-M	-	935-10/99510	DirectV 12	-	-	GIK-5	L200/39	-	-	41078	-	-
2010-006	2455294-51	2010 Feb 12 00:39:40	Proton-M/DM-2	-	935-35/85527	Raduga-1M	-	-	GIK-5	L200/39	-	-	36934	-	-
2010-007	2455297-39	2010 Mar 1 21:19:44	Proton-M/Briz-M	-	935-40/1161L	Intelsat IS-16	-	-	GIK-5	L200/39	-	-	19400	-	-
2010-010	2455316-97	2010 Mar 20 18:26:57	Proton-M/Briz-M	-	935-14/99514	Komos-2459/2461	-	-	Glonass Blok 40	L200/39	-	-	35638	-	-
2010-026	2455381-42	2010 Apr 24 11:19:00	Proton-M/Briz-M	-	935-11/99512	SES-1	-	-	GIK-5	L200/39	-	-	37420	-	-
2010-028	2455386-28	2010 Jun 3 22:00:00	Proton-M/Briz-M	-	935-12/99513	EchoStar 5B	-	-	GIK-5	L200/39	-	-	35917	-	-
2010-041	2455441-54	2010 Jul 10 18:40:36	Proton-M/Briz-M	-	935-15/99515	Arabsat 5B	-	-	GIK-5	L200/39	-	-	35901	-	-
2010-053	2455494-29	2010 Oct 14 18:53:21	Proton-M/DM-2	-	935-30/1181L	Komos-2464/2466	-	-	Glonass Blok 42	L200/39	-	-	19496	-	-
2010-061	2455516-23	2010 Nov 14 17:29:20	Proton-M/Briz-M	-	935-13/99516	Sirius XM-5	-	-	GIK-5	L200/39	-	-	35932	-	-
2010-063	2455535-93	2010 Nov 14 17:29:20	Proton-M/DM-3	-	935-37/011L	SkyTerra 1	-	-	Glonass Blok 43	L200/39	-	-	35638	-	-
2010-069	2455557-41	2010 Dec 26 21:51:00	Proton-M/Briz-M	-	935-17/99518	Glonass-M	-	-	Glonass Blok 43	L200/39	-	-	1697	-	-
2011-021	2455702-30	2011 May 20 19:16:19	Proton-M/Briz-M	-	935-19/99520	Telexat 14R	-	-	GIK-5	L200/39	-	-	35855	-	-
2011-038	2455736-47	2011 Jul 15 23:16:10	Proton-M/Briz-M	-	935-16/99519	SES-3/Kazsat-2	-	-	GIK-5	L200/39	-	-	35993	-	-
2011-048	2455791-39	2011 Aug 17 21:26:01	Proton-M/Briz-M	-	935-21/99522	Express AM-4	-	-	GIK-5	L200/39	-	-	36032	-	-
2011-064	2455826-45	2011 Sep 20 22:47:00	Proton-M/Briz-M	-	935-42/85529	Express AM-4	-	-	GIK-5	L200/39	-	-	20416	-	-
2011-064	2455834-27	2011 Sep 29 18:52:00	Proton-M/Briz-M	-	935-22/99524	QuetzSat-1	-	-	GIK-5	L200/39	-	-	36019	-	-
2011-064	2455846-26	2011 Oct 19 18:46:58	Proton-M/Briz-M	-	935-20/99521	YasSat-1	-	-	GIK-5	L200/39	-	-	36285	-	-
2011-069	2455870-04	2011 Nov 4 12:51:41	Proton-M/Briz-M	-	935-39/99523	Komos-2475/2477	-	-	Glonass Blok 44	L200/39	-	-	19325	-	-
2011-069	2455891-30	2011 Nov 25 19:10:34	Proton-M/Briz-M	-	935-25/99527	Asiatat-7	-	-	GIK-5	L200/39	-	-	35994	-	-
2011-074	2455906-97	2011 Dec 11 11:17:00	Proton-M/Briz-M	-	935-23/99525	Asiatat-7	-	-	GIK-5	L200/39	-	-	42492	-	-
2012-007	2455972-32	2012 Feb 24 19:58:37	Proton-M/Briz-M	-	935-24/99526	Intelsat IS-22	-	-	GIK-5	L200/39	-	-	35822	-	-
2012-011	2456012-01	2012 Mar 26 12:10:32	Proton-M/Briz-M	-	935-24/99526	SES-4	-	-	GIK-5	L200/39	-	-	64857	-	-
2012-012	2456016-74	2012 Mar 30 09:49:32	Proton-M/DM-2	-	935-26/99527	Komos-2479	-	-	GIK-5	L200/39	-	-	35659	-	-
2012-016	2456041-43	2012 Apr 23 22:18:13	Proton-M/DM-2	-	410-16/1171L	Tausat-1B	-	-	GIK-5	L200/39	-	-	35864	-	-
2012-028	2456068-30	2012 May 17 19:12:14	Proton-M/Briz-M	-	935-27/99529	Manat 1B	-	-	GIK-5	L200/39	-	-	35842	-	-
2012-044	2456116-26	2012 Jul 9 18:38:50	Proton-M/Briz-M	-	935-29/99530	Manat 1B	-	-	GIK-5	L200/39	-	-	35864	-	-
2012-067	2456146-31	2012 Aug 6 19:31:00	Proton-M/Briz-M	-	935-30/99530	Manat 1B	-	-	GIK-5	L200/39	-	-	42130	-	-
2012-074	2456214-86	2012 Oct 14 08:57:00	Proton-M/Briz-M	-	935-31/99532	Intelsat IS-25	-	-	GIK-5	L200/39	-	-	36096	-	-
2012-085	2456234-36	2012 Nov 2 21:04:00	Proton-M/Briz-M	-	935-32/99533	Intelsat IS-25	-	-	GIK-5	L200/39	-	-	36096	-	-
2012-070	2456270-06	2012 Dec 6 13:13:43	Proton-M/Briz-M	-	935-33/99533	EchoStar 16	-	-	GIK-5	L200/39	-	-	36096	-	-
2013-012	2456376-30	2013 Mar 28 19:06:48	Proton-M/Briz-M	-	935-34/99536	Yamal 402	-	-	GIK-5	L200/39	-	-	36245	-	-
2013-014	2456397-21	2013 Apr 19 18:56:00	Proton-M/Briz-M	-	935-34/99536	Samex 6	-	-	GIK-5	L200/39	-	-	36094	-	-
2013-024	2456437-41	2013 May 14 16:29:00	Proton-M/Briz-M	-	935-37/99538	Amik G-1	-	-	GIK-5	L200/39	-	-	36096	-	-
2013-029	2456446-89	2013 Jun 5 09:18:51	Proton-M/Briz-M	-	935-38/99538	Intelsat 3D	-	-	GIK-5	L200/39	-	-	35872	-	-
2013-030	2456446-89	2013 Jun 5 09:18:51	Proton-M/DM-3	-	935-38/99538	Intelsat 3D	-	-	GIK-5	L200/39	-	-	49256	-	-
2013-036	2456476-61	2013 Jul 29 09:38:22	Proton-M/DM-3	-	935-43/719541	SES-6	-	-	Glonass-M	L200/39	-	-	49256	-	-
2013-036	2456476-61	2013 Jul 29 09:38:22	Proton-M/Briz-M	-	935-39/99540	Glonass-M	-	-	Glonass-M 48,49,50	L200/39	-	-	35957	-	-
2013-040	2456486-10	2013 Sep 26 13:58:40	Proton-M/Briz-M	-	935-40/99540	Astra 2E	-	-	GIK-5	L200/39	-	-	35957	-	-
2013-040	2456486-10	2013 Sep 26 13:58:40	Proton-M/DM-3	-	935-38/99540	Sirius FM6	-	-	GIK-5	L200/39	-	-	36212	-	-
2013-049	2456504-26	2013 Oct 25 13:46:00	Proton-M/Briz-M	-	935-41/99542	Globus-1M No. 13L	-	-	GIK-5	L200/39	-	-	36211	-	-
2013-072	2456595-09	2013 Nov 6 12:10:00	Proton-M/Briz-M	-	935-44/99546	Imarsat EF1	-	-	GIK-5	L200/39	-	-	65021	-	-
2013-077	2456593-36	2013 Dec 26 11:41:00	Proton-M/Briz-M	-	935-41/99543	Imarsat EF1	-	-	GIK-5	L200/39	-	-	65021	-	-
2014-007	2456703-38	2014 Feb 14 21:09:56	Proton-M/Briz-M	-	935-43/99544	Express AM-5	-	-	GIK-5	L200/39	-	-	41512	-	-
2014-010	2456732-46	2014 Mar 15 23:06:00	Proton-M/Briz-M	-	935-42/99544	Turksat 4A1/Exp. M72	-	-	GIK-5	L200/39	-	-	41973	-	-
2014-023	2456776-68	2014 Mar 26 04:25:00	Proton-M/Briz-M	-	935-46/99548	ExpSat AT1/IT2	-	-	GIK-5	L200/39	-	-	40893	-	-
2014-031	2456793-40	2014 May 15 21:45:00	Proton-M/Briz-M	-	935-45/99548	Luch-SV/KazSat-3	-	-	GIK-5	L200/39	-	-	16097	-	-
2014-058	2456928-35	2014 Sep 27 20:29:00	Proton-M/Briz-M	-	935-47/99549	Express AM-4R	-	-	GIK-5	L200/39	-	-	41187	-	-
2014-064	2456962-13	2014 Oct 21 15:09:30	Proton-M/Briz-M	-	935-48/99549	Luch	-	-	GIK-5	L200/39	-	-	39881	-	-
2014-082	2457006-51	2014 Dec 15 00:16:00	Proton-M/Briz-M	-	935-50/99551	Express AM-6	-	-	GIK-5	L200/39	-	-	39881	-	-
2014-089	2457019-40	2014 Dec 27 21:37:49	Proton-M/Briz-M	-	935-49/99552	Yamal-601	-	-	GIK-5	L200/39	-	-	35821	-	-
2015-005	2457045-02	2015 Feb 1 12:31:00	Proton-M/Briz-M	-	935-51/99554	Astra 2G	-	-	GIK-5	L200/39	-	-	35865	-	-
2015-012	2457070-42	2015 Feb 18 22:05:00	Proton-M/Briz-M	-	935-52/99553	Imarsat EF2	-	-	GIK-5	L200/39	-	-	65019	-	-
2015-042	2457168-74	2015 Aug 28 14:44:00	Proton-M/Briz-M	-	935-54/99555	Express AM-7	-	-	GIK-5	L200/39	-	-	36039	-	-
2015-042	2457262-99	2015 Aug 28 14:44:00	Proton-M/DM-3	-	935-54/99555	Express AM-7	-	-	GIK-5	L200/39	-	-	16097	-	-
2015-048	2457280-29	2015 Sep 16 20:40:11	Proton-M/Briz-M	-	935-56/99557	Manat EF3	-	-	GIK-5	L200/39	-	-	64901	-	-
2015-060	2457312-36	2015 Sep 16 20:40:11	Proton-M/Briz-M	-	935-53/51	Neosat 5	-	-	GIK-5	L200/39	-	-	36872	-	-
2015-075	2457369-51	2015 Dec 24 13:31:19	Proton-M/Briz-M	-	935-43/99556	Neosat 5	-	-	GIK-5	L200/39	-	-	35814	-	-
2015-082	2457381-40	2015 Dec 24 13:31:19	Proton-M/Briz-M	-	935-44/99556	Neosat 5	-	-	GIK-5	L200/39	-	-	35946	-	-
2015-082	2457381-40	2015 Dec 24 13:31:19	Proton-M/DM-3	-	935-44/99556	Neosat 5	-	-	GIK-5	L200/39	-	-	35946	-	-
2016-017	2457417-43	2016 Jan 29 22:20:00	Proton-M/Briz-M	-	935-54/99556	Express AM-8	-	-	GIK-5	L200/39	-	-	36192	-	-
2016-017	2457461-90	2016 Mar 14 08:31:42	Proton-M/Briz-M	-	935-56/99557	Turksat 4B	-	-	GIK-5	L200/39	-	-	35814	-	-
2016-035	2457494-80	2016 Jun 9 07:10:00	Proton-M/Briz-M	-	935-44/99556	Garbin No 12L	-	-	GIK-5	L200/39	-	-	36192	-	-
2017-0															



Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Orbpay	Agency	Launch_Code	Group	Category	LTCite	Cite	Notes
1985-054	2438957.97	1985 Jul 16 11:16	UR-500	-	107207-01 (207)	8.700	RWSH	DS	G	Sat LED 0 2	NK9810-25	-	-
1985-087	2439067.02	1986 Nov 2 12:28	UR-500	-	209	8.700	RWSH	DS	G	Sat LED 0 2	NK9810-25	-	-
1986-F03	2439209.11	1986 Mar 24 14:59	UR-500	-	211	8.700	RWSH	DS	G	Sat LED 0 2	AK15	-	-
1986-060	2439313.04	1986 Jul 6 12:57	UR-500	-	212	12.200	RWSH	DS	G	Sat LED 0 2	NK9810-25	-	-
1967-021	2439559.98	1967 Mar 10 11:30:33	UR-500K/Blok D	-	M10722701	5.890	RWSH	DS	G	Sat DSO 0 2	NK9810-25	-	-
1967-032	2439588.88	1967 Apr 8 09:00:33	Proton-K/D	-	228-01	7.750	RWSH	DF40	G	Sat DSO 0 2	NK9708-59	-	-
1967-F11	2439761.42	1967 Sep 27 22:11:54	Proton-K/D	-	229-01	5.680	RWSH	DF	G	Sat EEO E 2	NK9810-25	-	-
1968-F12	2439817.30	1967 Nov 22 19:07:59	Proton-K/D	-	230-01	5.680	RWSH	DF	G	Sat EEO E 2	NK9810-25	-	-
1968-013	2439915.27	1968 Mar 2 18:23:23	Proton-K/D	-	231-01	5.950	RWSH	DF	G	Sat EEO E 2	NK9810-25	-	-
1968-F03	2439959.46	1968 Apr 22 23:01:27	Proton-K/D	-	232-01	7.680	RWSH	DF	G	Sat EEO E 2	NK9810-25	-	-
1968-F04	2440052.60	1968 Jul 15	Proton-K/D	-	234-01	0.000	RWSH	DE	G	Sat EEO E 2	-	-	-
1968-076	2440114.40	1968 Sep 14 21:42:11	Proton-K/D	-	235-01	5.950	RWSH	DS	G	Sat EEO E 2	NK9810-25	-	YSA074, Petrov71
1968-101	2440174.30	1968 Nov 10 19:11:31	Proton-K/D	-	236-01	5.950	RWSH	DS	G	Sat EEO E 2	NK9810-25	-	Petrov71
1968-103	2440176.99	1968 Nov 16 11:40	Proton-K/D	-	237-01	17.000	RWSH	DS	G	Sat LED 0	NK9810-25	-	-
1968-F01	2440241.68	1968 Jan 20 04:14:36	Proton-K/D	-	238-01	5.680	RWSH	DF	G	Sat EEO E 2	AYMNLJ	-	-
1969-F04	2440271.78	1968 Feb 19 06:48:15	Proton-K/D	-	239-01	4.100	RWSH	DF	G	Sat EEO E 2	NK9524-70	-	-
1969-F06	2440307.94	1968 Mar 27 10:40:45	Proton-K/D	-	240-01	3.500	RWSH	DF	G	Sat EEO E 2	KLAM	-	-
1969-F08	2440313.94	1968 Apr 2 10:33:00	Proton-K/D	-	243-01	3.500	RWSH	DF	G	Sat EEO E 2	KLAM	-	-
1969-F08	2440386.67	1968 Jun 14 04:00:47	Proton-K/D	-	243-01	4.100	RWSH	DF	G	Sat EEO E 2	NK9810-25	-	-
1969-067	2440415.62	1968 Jul 13 02:54:42	Proton-K/D	-	242-01	5.820	RWSH	DS	G	Sat EEO E 2	NK9810-25	-	-
1969-080	2440441.49	1968 Aug 7 23:45:06	Proton-K/D	-	243-01	5.950	RWSH	DS	G	Sat EEO E 2	NK9810-25	-	-
1969-092	2440468.09	1968 Sep 23 14:07:36	Proton-K/D	-	244-01	5.700	RWSH	DF40	G	Sat EEO E 2	NK9810-25	-	-
1969-F14	2440553.88	1968 Oct 22 14:09:59	Proton-K/D	-	241-01	5.700	RWSH	DF	G	Sat EEO E 2	NK9810-25	-	-
1970-F02	2440623.68	1968 Nov 28 09:00:00	Proton-K/D	-	245-01	19.040	RWSH	DF	G	Sat EEO E 2	NK9810-25	-	-
1970-072	2440616.06	1970 Feb 6 04:16:06	Proton-K	-	247-01	4.100	RWSH	TS	G	Test	NK9810-25	-	-
1970-086	2440692.06	1970 Aug 18 03:45:00	Proton-K/D	-	246-01	0.000	RWSH	DS	G	Sat EEO E 2	NK9810-25	-	-
1970-088	2440690.33	1970 Sep 12 13:25:53	Proton-K/D	-	248-01	5.820	RWSH	DS	G	Sat EEO E 2	NK9810-25	-	-
1970-103	2440923.21	1970 Oct 20 19:55:39	Proton-K/D	-	250-01	5.740	RWSH	DS	G	Sat EEO E 2	NK9810-25	-	-
1970-105	2440923.21	1970 Nov 10 14:44:01	Proton-K/D	-	251-01	4.220	RWSH	DS	G	Sat EEO E 2	NK9810-25	-	-
1971-052	2441060.57	1971 Apr 19 01:40:00	Proton-K/D	-	252-01	19.040	RWSH	DS	G	Sat LED 0 2	NK9810-25	-	-
1971-042	2441082.21	1971 May 10 18:58:42	Proton-K/D	-	254-01	16.210	RWSH	DS	G	Sat LED 0 2	NK9810-25	-	-
1971-046	2441091.18	1971 May 19 16:22:44	Proton-K/D	-	255-01	16.029	RWSH	DF40	G	Sat LED 0 2	KLAM	-	-
1971-049	2441100.14	1971 May 28 15:26:30	Proton-K/D	-	255-01	5.984	RWSH	DS	G	Sat EEO E 2	KLAM	-	-
1971-073	2441197.07	1971 Sep 2 19:40:40	Proton-K/D	-	249-01	5.984	RWSH	DS	G	Sat EEO E 2	KLAM	-	-
1971-082	2441222.92	1971 Sep 28 10:00:22	Proton-K/D	-	256-01	5.820	RWSH	DS	G	Sat EEO E 2	NK9810-25	-	-
1972-007	2441261.64	1972 Feb 14 03:27:59	Proton-K/D	-	257-01	3.920	RWSH	DS	G	Sat EEO E 2	NK9810-25	-	-
1972-F04	2441327.94	1972 Jul 29 03:20:57	Proton-K/D	-	258-01	4.701	RWSH	DF	G	Sat LED 0 3	NK9810-25	-	-
1973-001	2441390.79	1973 Jan 8 06:55:38	Proton-K/D	-	260-01	16.900	RWSH	DF	G	Sat LED 0 3	NK9810-25	-	-
1973-017	2441775.68	1973 Apr 3 09:05:00	Proton-K	-	262-01	4.304	RWSH	DS	G	Sat EEO E 2	NK9524-70	-	Yu10724-501
1973-026	2441838.51	1973 May 31 00:20:00	Proton-K	-	263-01	19.078	RWSH	DS	G	Sat LED 0	NK9810-25	-	-
1973-047	2441869.21	1973 Jul 21 18:50:59	Proton-K/D	-	264-01	16.500	RWSH	DS	G	Sat LED 0 2	KLAM	-	-
1973-059	2441889.39	1973 Jul 25 14:55:48	Proton-K/D	-	265-01	3.440	RWSH	DS	G	Sat LED 0 2	NK9810-25	-	-
1973-062	2441900.24	1973 Aug 8 17:40:46	Proton-K/D	-	262-01	3.440	RWSH	DS	G	Sat EEO E 2	KLAM	-	-
1973-065	2441930.21	1973 Aug 8 17:40:46	Proton-K/D	-	261-01	4.470	RWSH	DS	G	Sat EEO E 2	KLAM	-	-
1973-037	2442138.87	1974 Mar 26 13:30:00	Proton-K/DH	-	282-02	2.765	RWSH	DS	G	Sat EEO E 2	NK9810-25	-	-
1974-036	2442229.44	1974 Jul 29 12:00:00	Proton-K/D	-	283-02	19.260	RWSH	DS	G	Sat LED 0 3	NK9810-25	-	-
1974-084	2442369.10	1974 Oct 28 14:30:00	Proton-K/DH	-	285-01	4.250	RWSH	DS	G	Sat EEO 0 3	NK9810-25	-	-
1974-104	2442371.63	1974 Dec 2 04:15:32	Proton-K/D	-	287-01	4.220	RWSH	DS	G	Sat EEO E 2	NK9810-25	-	-
1975-054	2442577.63	1975 Jun 8 03:30:00	Proton-K/D	-	286-01	18.500	RWSH	DS	G	Sat LED 0	KLAM	-	-
1975-064	2442577.63	1975 Jun 8 03:30:00	Proton-K/D	-	286-01	6.705	RWSH	DS	G	Sat EEO E 2	NK9810-25	-	-
1975-087	2442693.52	1975 Oct 8 03:30:00	Proton-K/DH	-	286-02	2.765	RWSH	DS	G	Sat EEO 0 3	NK9810-25	-	-
1975-123	2442701.67	1975 Oct 16 04:04:56	Proton-K/DH	-	288-01	4.100	RWSH	DF	G	Sat EEO E 2	NK9810-25	-	-
1976-057	2442859.25	1976 Dec 25 13:00:00	Proton-K/DH	-	288-02	2.765	RWSH	DS	G	Sat LED 0 3	NK9810-25	-	-
1976-081	2443000.13	1976 Aug 9 15:04:12	Proton-K/DH	-	289-01	19.260	RWSH	DS	G	Sat LED 0 3	NK9810-25	-	-
1976-092	2443033.27	1976 Sep 11 18:04:00	Proton-K/DH	-	289-02	2.765	RWSH	DS	G	Sat EEO 0 3	NK9810-25	-	-
1976-107	2443078.12	1976 Oct 26 14:50:00	Proton-K/DH	-	290-01	2.800	RWSH	DS	G	Sat EEO 0 3	NK9810-25	-	-
1976-121	2443127.56	1976 Dec 15 01:30:00	Proton-K	-	289-02	18.500	RWSH	DS	G	Sat LED 0 1	NK9810-25	-	-
1977-066	2443341.88	1977 Jul 17 09:00:00	Proton-K	-	293-01	23.250	RWSH	DS	G	Sat EEO 0 3	NK9810-25	-	-
1977-071	2443348.39	1977 Jul 17 09:00:00	Proton-K	-	293-02	2.765	RWSH	DS	G	Sat EEO 0 3	NK9810-25	-	-
1977-092	2443360.42	1977 Aug 4 22:00:00	Proton-K	-	291-01	13.700	RWSH	DF	G	Sat LED 0	NK9810-25	-	-
1977-097	2443415.78	1977 Sep 29 06:50:00	Proton-K	-	291-02	2.800	RWSH	DS	G	Sat EEO 0 3	NK9810-25	-	-
1978-032	2443597.50	1978 Mar 27 03:30:00	Proton-K	-	292-01	19.824	RWSH	DS	G	Sat LED 0	NK9810-25	-	-
1978-073	2443655.56	1978 May 27 01:25:00	Proton-K/DH	-	294-02	2.000	RWSH	DF	G	Sat EEO 0 3	NK9810-25	-	-
1978-073	2443708.42	1978 Jul 18 21:59:00	Proton-K/DH	-	292-02	2.765	RWSH	DS	G	Sat EEO 0 3	NK9810-25	-	-
1978-084	2443738.33	1978 Aug 17 20:02:00	Proton-K/DH	-	297-02	2.000	RWSH	DF	G	Sat EEO 0 3	NK9810-25	-	-
1978-086	2443765.60	1978 Sep 14 02:25:13	Proton-K/DH	-	296-01	6.120	RWSH	DS	G	Sat EEO E 2	NK9810-25	-	-
1978-F04	2443799.17	1978 Dec 19 12:15:00	Proton-K/DH	-	298-01	2.000	RWSH	DF	G	Sat EEO 0 3	NK9810-25	-	-
1979-015	2443925.83	1979 Feb 25 07:49:00	Proton-K/DH	-	295-02	2.765	RWSH	DS	G	Sat EEO 0 3	NK9810-25	-	-
1979-035	2443988.66	1979 Apr 25 03:44:00	Proton-K/DH	-	294-01	2.800	RWSH	DS	G	Sat EEO 0 3	NK9810-25	-	-
1979-042	2444016.46	1979 May 22 23:00:00	Proton-K	-	300-02	18.500	RWSH	DS	G	Sat LED 0	NK9810-25	-	-
1979-087	2444060.47	1979 Jul 5 23:19:00	Proton-K/DH	-	299-01	2.920	RWSH	DS	G	Sat EEO 0 3	NK9602-24	-	-
1979-105	2444150.22	1979 Oct 3 17:12:00	Proton-K/DH	-	302-01	2.112	RWSH	DS	G	Sat EEO 0 3	NK9810-25	-	-
1980-016	2444235.99	1980 Feb 28 11:51:00	Proton-K/DH	-	303-02	2.120	RWSH	DS	G	Sat EEO 0 3	NK9602-24	-	-
1980-049	2444404.53	1980 Jun 14 00:49:50	Proton-K/DH	-	297-01	2.765	RWSH	DS	G	Sat EEO 0 3	NK9810-25	-	-
1980-060	2444435.44	1980 Jul 14 22:35	Proton-K/DH	-	303-02	2.920	RWSH	DS	G	Sat EEO 0 3	NK9602-24	-	-
1980-081	2444518.22	1980 Oct 5 17:10:00	Proton-K/DH	-	301-01	2.800	RWSH	DS	G	Sat EEO 0 3	NK9810-25	-	-
1980-104	2444599.99	1980 Dec 26 11:49:00	Proton-K/DH	-	304-01	2.800	RWSH	DS	G	Sat EEO 0 3	NK9810-25	-	-
1981-027	2444681.69	1981 Mar 18 04:40:00	Proton-K/DH	-	306-01	2.765	RWSH	DS	G	Sat EEO 0 3	NK9810-25	-	-

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Orbpay	Agency	Launch_Code	Group	Category	LTCite	Cite	Notes
1981-039	2444719.58	1981 Apr 25 0201	Proton-K	-	299-02	23,250	RWSH	DS	G	Sat LSS 0	IK9810-25	IK9810-25	-
1981-061	2444781.50	1981 Jun 25 2355:00	Proton-K/DH	-	305-01	2,800	RWSH	DS	G	Sat GEO 0 3	IK9810-25	IK9810-25	-
1981-069	2444816.40	1981 Jul 30 21:38:00	Proton-K/DH	-	301-02	2,765	RWSH	DS	G	Sat GEO 0 3	IK9810-25	IK9810-25	-
1981-102	2444887.21	1981 Oct 9 1659:00	Proton-K/DH	-	310-01	2,765	RWSH	DS	G	Sat GEO 0 3	IK9810-25	IK9810-25	-
1981-106	2444907.71	1981 Oct 30 0604:22	Proton-K/D-1	-	311-01	6,120	RWSH	DS	G	Sat EDU E. 2	AK15	IK9810-25	-
1981-110	2444912.73	1981 Nov 4 0831:16	Proton-K/D-1	-	311-02	6,120	RWSH	DS	G	Sat EDU E. 2	AK15	IK9810-25	-
1982-009	2445005.88	1982 Feb 5 0912:00	Proton-K/DH	-	308-01	2,800	UMKS	DS	G	Sat GEO 0 3	IK9810-25	IK9810-25	-
1982-020	2445043.69	1982 Mar 15 0439:00	Proton-K/DH	-	305-02	2,920	UMKS	DS	G	Sat GEO 0 3	IK9602-24	IK9810-25	-
1982-033	2445079.32	1982 Apr 19 1946:00	Proton-K	-	306-02	2,900	UMKS	DS	G	Sat LSS 0	IK9708-59	IK9810-25	-
1982-044	2445107.49	1982 May 17 2350:00	Proton-K/DH	-	310-02	19,852	UMKS	DS	G	Sat GEO 0 3	IK9422-47	IK9810-25	-
1982-059	2445229.27	1982 Sep 16 1831:00	Proton-K/DH	-	309-01	2,800	UMKS	DF	G	Sat GEO 0 3	IK9810-25	IK9810-25	-
1982-100	2445255.12	1982 Oct 12 1458:59	Proton-K/DH-2	-	315-01	4,700	UMKS	DS	G	Sat GEO 0 3	IK9810-25	IK9810-25	-
1982-103	2445265.18	1982 Oct 20 1626:00	Proton-K/DH	-	312-01	2,920	UMKS	DS	G	Sat GEO 0 3	IK9602-24	IK9810-25	-
1982-113	2445300.09	1982 Nov 26 1413:00	Proton-K/DH	-	313-01	2,765	UMKS	DS	G	Sat GEO 0 3	IK9810-25	IK9810-25	-
1982-F08	2445328.00	1982 Dec 24 1200:00	Proton-K/DH	-	314-01	1,965	UMKS	DF	G	Sat GEO 0 3	IK9810-25	IK9810-25	-
1983-013	2445395.90	1983 Mar 2 0937:00	Proton-K	-	309-02	23,250	UMKS	DS	G	Sat LSS 0	IK9810-25	IK9810-25	-
1983-016	2445405.08	1983 Mar 12 1400:00	Proton-K/DH	-	304-02	2,800	UMKS	DS	G	Sat GEO 0 3	IK9810-25	IK9810-25	-
1983-020	2445417.03	1983 Mar 23 1246:06	Proton-K/D-1	-	307-01	3,500	UMKS	DS	G	Sat DSU SDO 2	IK9810-25	IK9810-25	-
1983-028	2445432.70	1983 Apr 8 0446:00	Proton-K/DH	-	315-02	2,765	UMKS	DS	G	Sat GEO 0 3	IK9810-25	IK9810-25	-
1983-053	2445467.61	1983 Jun 2 0238:40	Proton-K/D-1	-	321-01	5,362	UMKS	DS	G	Sat EDU E. 2	IK9810-25	IK9810-25	-
1983-054	2445492.61	1983 Jun 7 0232:51	Proton-K/D-1	-	321-02	5,412	UMKS	DS	G	Sat EDU E. 2	IK9810-25	IK9810-25	-
1983-066	2445516.50	1983 Jun 30 2356:00	Proton-K/DH-2	-	314-02	2,920	UMKS	DS	G	Sat GEO 0 3	IK9602-24	IK9810-25	-
1983-084	2445557.27	1983 Aug 10 1824:26	Proton-K/DH	-	316-02	4,700	UMKS	DS	G	Sat GEO 0 3	IK9810-25	IK9810-25	-
1983-088	2445572.33	1983 Aug 25 2002:00	Proton-K/DH	-	317-01	2,765	UMKS	DS	G	Sat GEO 0 3	IK9810-25	IK9810-25	-
1983-100	2445607.23	1983 Sep 29 1737:00	Proton-K/DH	-	318-01	2,800	UMKS	DS	G	Sat GEO 0 3	IK9810-25	IK9810-25	-
1983-116	2445669.08	1983 Nov 30 1351:00	Proton-K/DH	-	316-02	2,920	UMKS	DS	G	Sat GEO 0 3	IK9602-24	IK9810-25	-
1983-127	2445697.84	1983 Dec 29 0922:24	Proton-K/DH-2	-	320-02	4,700	UMKS	DS	G	Sat GEO 0 3	IK9810-25	IK9810-25	-
1984-016	2445745.87	1984 Feb 15 0946:00	Proton-K/DH	-	318-02	2,765	UMKS	DS	G	Sat GEO 0 3	IK9810-25	IK9810-25	-
1984-022	2445761.66	1984 Mar 2 0954:00	Proton-K/DH	-	316-01	2,900	UMKS	DS	G	Sat GEO 0 3	IK9422-47	IK9810-25	-
1984-026	2445776.75	1984 Mar 16 1400:00	Proton-K/DH	-	322-01	2,800	UMKS	DS	G	Sat GEO 0 3	IK9810-25	IK9810-25	-
1984-031	2445785.08	1984 Apr 29 0952:56	Proton-K/DH	-	319-02	2,050	UMKS	DS	G	Sat GEO 0 3	IK9810-25	IK9810-25	-
1984-041	2445812.68	1984 Apr 22 0421:00	Proton-K/DH	-	312-01	2,920	UMKS	DS	G	Sat GEO 0 3	IK9602-24	IK9810-25	-
1984-047	2445840.13	1984 May 19 1510:42	Proton-K/DH-2	-	323-02	4,700	UMKS	DS	G	Sat GEO 0 3	IK9810-25	IK9810-25	-
1984-063	2445873.51	1984 Jun 22 0920:00	Proton-K/DH	-	319-01	2,765	UMKS	DS	G	Sat GEO 0 3	IK9810-25	IK9810-25	-
1984-076	2445914.40	1984 Aug 1 2137:00	Proton-K/DH	-	324-01	2,800	UMKS	DS	G	Sat GEO 0 3	IK9810-25	IK9810-25	-
1984-080	2445931.33	1984 Aug 24 1950:00	Proton-K/DH	-	324-02	2,920	UMKS	DS	G	Sat GEO 0 3	IK9602-24	IK9810-25	-
1984-085	2445945.16	1984 Sep 4 1945:53	Proton-K/DH	-	327-01	4,700	UMKS	DS	G	Sat GEO 0 3	IK9810-25	IK9810-25	-
1984-106	2445972.08	1984 Sep 28 1400:00	Proton-K/DH-2	-	327-02	4,700	UMKS	DS	G	Sat GEO 0 3	IK9810-25	IK9810-25	-
1984-125	2446046.89	1984 Dec 21 0916:24	Proton-K/D-1	-	329-01	6,784	UMKS	DS	G	Sat EDU E. 2	IK9810-25	IK9810-25	-
1985-007	2446055.68	1984 Dec 21 0915:52	Proton-K/D-1	-	329-02	6,784	UMKS	DS	G	Sat EDU E. 2	IK9810-25	IK9810-25	-
1985-016	2446085.83	1985 Jan 16 0725:00	Proton-K/DH	-	328-01	2,820	UMKS	DS	G	Sat EDU E. 2	IK9810-25	IK9810-25	-
1985-024	2446114.83	1985 Feb 22 0526:46	Proton-K/DH	-	328-02	2,820	UMKS	DS	G	Sat EDU E. 2	IK9810-25	IK9810-25	-
1985-028	2446136.71	1985 Mar 17 0526:00	Proton-K/DH	-	327-01	2,800	UMKS	DS	G	Sat GEO 0 3	IK9810-25	IK9810-25	-
1985-042	2446203.44	1985 May 30 1429:00	Proton-K/DH-2	-	332-01	4,700	UMKS	DS	G	Sat GEO 0 3	IK9810-25	IK9810-25	-
1985-046	2446218.12	1985 Aug 2 1046:00	Proton-K/DH	-	313-02	4,700	UMKS	DS	G	Sat GEO 0 3	IK9810-25	IK9810-25	-
1985-058	2446236.38	1985 Aug 27 0841:42	Proton-K/DH	-	317-02	4,776	UMKS	DS	G	Sat LSS 0	IK9810-25	IK9810-25	-
1985-066	2446326.86	1985 Sep 27 0545:00	Proton-K/DH	-	331-01	23,250	UMKS	DS	G	Sat LSS 0	IK9810-25	IK9810-25	-
1985-102	2446364.86	1985 Oct 25 1545:00	Proton-K/DH-2	-	332-02	3,200	UMKS	DS	G	Sat GEO 0 3	IK9810-25	IK9810-25	-
1985-107	2446385.16	1985 Oct 25 1543:00	Proton-K/DH	-	336-01	2,765	UMKS	DS	G	Sat GEO 0 3	IK9810-25	IK9810-25	-
1985-116	2446421.41	1985 Dec 24 1413:38	Proton-K/DH-2	-	334-02	2,765	UMKS	DS	G	Sat GEO 0 3	IK9810-25	IK9810-25	-
1986-007	2446447.93	1985 Dec 24 1413:00	Proton-K/DH	-	334-01	2,920	UMKS	DS	G	Sat GEO 0 3	IK9602-24	IK9810-25	-
1986-017	2446481.39	1986 Feb 19 2128:23	Proton-K	-	338-01	18,500	UMKS	DF	G	Sat LEO 0	IK9810-25	IK9810-25	-
1986-027	2446524.66	1986 Feb 4 0345:00	Proton-K/DH	-	338-01	2,900	UMKS	DS	G	Sat GEO 0 3	IK9810-25	IK9810-25	-
1986-038	2446574.57	1986 Feb 24 0142:00	Proton-K/DH	-	302-01	2,800	UMKS	DS	G	Sat GEO 0 3	IK9422-47	IK9810-25	-
1986-044	2446591.53	1986 May 16 0049:00	Proton-K/DH	-	333-01	2,800	UMKS	DS	G	Sat GEO 0 3	IK9810-25	IK9810-25	-
1986-071	2446689.98	1986 Sep 16 1138:00	Proton-K/DH-2	-	332-02	2,920	UMKS	DS	G	Sat GEO 0 3	IK9602-24	IK9810-25	-
1986-083	2446729.15	1986 Oct 25 1543:00	Proton-K/DH	-	336-01	4,700	UMKS	DS	G	Sat GEO 0 3	IK9810-25	IK9810-25	-
1986-090	2446753.09	1986 Oct 18 1408:03	Proton-K/DH	-	335-02	2,765	UMKS	DS	G	Sat GEO 0 3	IK9810-25	IK9810-25	-
1986-097	2446763.83	1986 Nov 18 0900:00	Proton-K/DH	-	334-01	2,920	UMKS	DS	G	Sat GEO 0 3	IK9602-24	IK9810-25	-
1987-010	2446826.89	1987 Jan 30 0919:00	Proton-K/DH-2	-	338-01	18,500	UMKS	DF	G	Sat LEO 0	IK9810-25	IK9810-25	-
1987-028	2446873.66	1987 Mar 17 0354:00	Proton-K/DH	-	341-01	2,900	UMKS	DS	G	Sat GEO 0 3	IK9810-25	IK9810-25	-
1987-036	2446885.50	1987 Mar 31 0006:16	Proton-K	-	333-01	2,765	UMKS	DS	G	Sat GEO 0 3	IK9810-25	IK9810-25	-
1987-040	2446910.03	1987 Apr 24 1242:54	Proton-K/DH-2	-	335-02	20,600	UMKS	DF	G	Sat LSS 0	IK9707-75	IK9810-25	-
1987-044	2446927.11	1987 May 11 1445:00	Proton-K/DH	-	336-01	4,700	UMKS	DS	G	Sat GEO 0 3	IK9810-25	IK9810-25	-
1987-064	2447001.88	1987 Jul 25 0900:00	Proton-K	-	338-02	2,920	UMKS	DS	G	Sat GEO 0 3	IK9602-24	IK9810-25	-
1987-073	2447043.31	1987 Sep 3 1925:00	Proton-K/DH-2	-	337-01	18,500	UMKS	DS	G	Sat LEO 0	IK9810-25	IK9810-25	-
1987-079	2447054.62	1987 Sep 16 0253:31	Proton-K/DH-2	-	337-02	2,800	UMKS	DS	G	Sat GEO 0 3	IK9810-25	IK9810-25	-
1987-084	2447070.21	1987 Oct 1 1709:00	Proton-K/DH-2	-	339-02	4,700	UMKS	DS	G	Sat GEO 0 3	IK9810-25	IK9810-25	-
1987-091	2447097.14	1987 Oct 28 1515:00	Proton-K/DH-2	-	338-01	2,900	UMKS	DS	G	Sat GEO 0 3	IK9810-25	IK9810-25	-
1987-096	2447126.06	1987 Nov 26 1320:00	Proton-K/DH-2	-	335-02	2,050	UMKS	DS	G	Sat GEO 0 3	IK9422-47	IK9810-25	-
1987-100	2447139.98	1987 Nov 26 1320:00	Proton-K/DH-2	-	333-01	3,200	UMKS	DS	G	Sat GEO 0 3	IK9810-25	IK9810-25	-
1987-109	2447156.98	1987 Dec 27 1125:00	Proton-K/DH-2	-	340-01	2,765	UMKS	DS	G	Sat GEO 0 3	IK9810-25	IK9810-25	-
1988-001	2447178.92	1988 Jan 18 0958:00	Proton-K/DH-2	-	345-01	2,900	UMKS	DS	G	Sat GEO 0 3	IK9810-25	IK9810-25	-
1988-008	2447208.52	1988 Feb 17 0023:22	Proton-K/DH-2	-	341-02	2,120	UMKS	DF	G	Sat GEO 0 3	IK9810-25	IK9810-25	-
1988-028	2447251.68	1988 Mar 31 0418:00	Proton-K/DH	-	343-02	2,920	UMKS	DS	G	Sat GEO 0 3	IK9602-24	IK9810-25	-
1988-034	2447277.62	1988 May 6 0247:00	Proton-K/DH-2	-	332-01	3,000	UMKS	DS	G	Sat GEO 0 3	IK9810-25	IK9810-25	-
1988-043	2447303.25	1988 May 6 0247:00	Proton-K/DH	-	339-01	2,800	UMKS	DS	G	Sat GEO 0 3	IK9810-25	IK9810-25	-
1988-058	2447350.23	1988 Jul 7 1738:04	Proton-K/DH-2	-	346-02	4,700	UMKS	DS	G	Sat GEO 0 3	IK9810-25	IK9810-25	-
1988-069	2447355.21	1988 Jul 12 1701:43	Proton-K/DH-2	-	348-01	6,220	UMKS	DS	G	Sat DSU SDO 2	IK9810-25	IK9810-25	-
1988-066	2447375.38	1988 Aug 1 2104:00	Proton-K/DH-2	-	345-01	2,900	UMKS	DS	G	Sat GEO 0 3	IK9810-25	IK9810-25	-
1988-071	2447392.33	1988 Aug 18 1952:00	Proton-K/DH-2	-	351-01	2,920	UMKS	DS	G	Sat GEO 0 3	IK9422-47	IK9810-25	-
1988-085	2447420.58	1988 Sep 16 0200:47											

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Orbpay_t	Agency	Launch_Code	Group	Category	LTCite	Cite	Notes
1989-001	2447536.59	1989 Jan 10 0205:26	Proton-K/DH-2	-	350-02	3.830	UMMS	DS	G	Sat MED 00 3	IK9810-25	IK9810-25	-
1989-004	2447552.89	1989 Jan 26 0916:00	Proton-K/DH-2	-	351-02	2.920	UMMS	DS	G	Sat GEO 00 3	IK9602-24	IK9810-25	-
1989-030	2447630.67	1989 Apr 14 0408:00	Proton-K/DH-2	-	359-02	2.765	UMMS	DS	G	Sat GEO 00 3	IK9810-25	IK9810-25	-
1989-039	2447677.86	1989 May 31 0851:59	Proton-K/DH-2	-	352-02	3.830	UMMS	DS	G	Sat MED 00 3	IK9810-25	IK9810-25	-
1989-048	2447699.48	1989 Jun 21 2335:00	Proton-K/DH-2	-	355-02	3.300	UMMS	DS	G	Sat GEO 00 3	IK9810-25	IK9810-25	-
1989-052	2447713.45	1989 Jul 5 2245:00	Proton-K/DH-2	-	340-02	2.920	UMMS	DS	G	Sat GEO 00 3	IK9602-24	IK9810-25	-
1989-081	2447796.21	1989 Sep 28 1705:00	Proton-K/DH-2	-	346-01	2.920	UMMS	DS	G	Sat GEO 00 3	IK9602-24	IK9810-25	-
1989-093	2447857.04	1989 Nov 26 1301:41	Proton-K	-	354-01	23.500	UMMS	DS	G	Sat LSS 0	IK9810-25	IK9810-25	-
1989-096	2447862.35	1989 Dec 1 2020:57	Proton-K/DH-1	-	352-01	4.402	UMMS	DS	G	Sat LSS 0 2	IK9810-25	IK9810-25	-
1989-098	2447875.98	1989 Dec 15 1138:00	Proton-K/DH-2	-	344-01	2.765	UMMS	DS	G	Sat GEO 00 3	IK9810-25	IK9810-25	-
1989-101	2447937.83	1990 Feb 27 1110:00	Proton-K/DH-2	-	344-02	3.200	UMMS	DS	G	Sat GEO 00 3	IK9810-25	IK9810-25	-
1990-016	2448030.86	1990 May 19 0852:33	Proton-K/DH-2	-	365-02	2.765	UMMS	DS	G	Sat GEO 00 3	IK9810-25	IK9810-25	-
1990-048	2448044.94	1990 May 31 1033:20	Proton-K/DH-2	-	350-01	3.900	UMMS	DS	G	Sat MED 00 3	IK9810-25	IK9810-25	-
1990-054	2448065.48	1990 Jun 20 2336:00	Proton-K	-	360-01	19.500	UMMS	DS	G	Sat LSS 0	IK9810-25	IK9810-25	-
1990-061	2448091.41	1990 Jul 18 2146:00	Proton-K/DH	-	342-02	2.920	UMMS	DS	G	Sat GEO 00 3	IK9602-24	IK9810-25	-
1990-074	2448113.35	1990 Jul 18 2146:00	Proton-K/DH-2	-	340-01	2.900	UMMS	DS	G	Sat GEO 00 3	IK9422-47	IK9810-25	-
1990-094	2448199.11	1990 Nov 3 1440:00	Proton-K/DH-2	-	340-02	2.100	UMMS	DS	G	Sat GEO 00 3	IK9422-47	IK9810-25	-
1990-102	2448219.16	1990 Nov 23 1322:00	Proton-K/DH-2	-	370-01	2.920	UMMS	DS	G	Sat GEO 00 3	IK9602-24	IK9810-25	-
1990-110	2448233.61	1990 Dec 8 0243:00	Proton-K/DH-2	-	348-02	2.920	UMMS	DS	G	Sat GEO 00 3	IK9602-24	IK9810-25	-
1990-112	2448245.98	1990 Dec 20 1138:00	Proton-K/DH-2	-	361-01	4.700	UMMS	DS	G	Sat MED 00 3	IK9810-25	IK9810-25	-
1990-116	2448252.96	1990 Dec 27 1108:00	Proton-K/DH-2	-	366-02	2.765	UMMS	DS	G	Sat GEO 00 3	IK9810-25	IK9810-25	-
1991-010	2448301.86	1991 Feb 14 0851:56	Proton-K/DH-2	-	342-01	3.300	UMMS	DS	G	Sat GEO 00 3	IK9810-25	IK9810-25	-
1991-014	2448315.73	1991 Feb 28 0530:00	Proton-K/DH-2	-	344-02	3.000	UMMS	DS	G	Sat GEO 00 3	IK9810-25	IK9810-25	-
1991-024	2448347.13	1991 Mar 31 1512:00	Proton-K	-	360-02	2.765	UMMS	DS	G	Sat LSS 0	IK9810-25	IK9810-25	-
1991-025	2448350.95	1991 Apr 4 1047:12	Proton-K/DH-2	-	365-01	16.500	UMMS	DS	G	Sat MED 00 3	IK9810-25	IK9810-25	-
1991-046	2448359.41	1991 Jul 1 2155:00	Proton-K/DH-2	-	354-02	3.900	UMMS	DS	G	Sat MED 00 3	IK9810-25	IK9810-25	-
1991-064	2448513.24	1991 Sep 13 1751:02	Proton-K/DH-2	-	355-01	2.920	UMMS	DS	G	Sat GEO 00 3	IK9602-24	IK9810-25	-
1991-074	2448555.14	1991 Oct 23 1525:00	Proton-K/DH-2	-	365-02	2.050	UMMS	DS	G	Sat GEO 00 3	IK9810-25	IK9810-25	-
1991-079	2448609.99	1991 Nov 22 1327:00	Proton-K/DH-2	-	355-02	2.920	UMMS	DS	G	Sat GEO 00 3	IK9602-24	IK9810-25	-
1991-087	2448659.99	1991 Dec 19 1141:00	Proton-K/DH-2	-	385-01	2.765	UMMS	DS	G	Sat GEO 00 3	IK9810-25	IK9810-25	-
1992-005	2448651.43	1992 Jan 29 2219:12	Proton-K/DH-2	-	372-02	4.700	UMMSR	DS	G	Sat MED 00 3	IK9602-24	IK9810-25	-
1992-017	2448714.58	1992 Apr 2 0150:00	Proton-K/DH-2	-	369-01	2.920	UMMSR	DS	G	Sat GEO 00 3	IK9602-24	IK9810-25	-
1992-043	2448815.42	1992 Jul 14 2202:00	Proton-K/DH-2	-	371-02	2.920	UMMSR	DS	G	Sat GEO 00 3	IK9602-24	IK9810-25	-
1992-047	2448833.58	1992 Jul 30 0159:01	Proton-K/DH-2	-	376-01	4.700	UMMSR	DS	G	Sat MED 00 3	IK9602-24	IK9810-25	-
1992-059	2448876.25	1992 Sep 10 1801:18	Proton-K/DH-2	-	363-01	2.050	VMSR	DS	G	Sat GEO 00 3	IK9810-25	IK9810-25	-
1992-074	2448926.12	1992 Oct 30 1493:00	Proton-K/DH-2	-	372-01	2.900	VMSR	DS	G	Sat GEO 00 3	IK9810-25	IK9810-25	-
1992-082	2448954.05	1992 Nov 27 1310:00	Proton-K/DH-2	-	364-01	2.920	VMSR	DS	G	Sat GEO 00 3	IK9602-24	IK9810-25	-
1992-086	2448974.03	1992 Dec 17 1248:00	Proton-K/DH-2	-	387-02	3.000	VMSR	DS	G	Sat GEO 00 3	IK9810-25	IK9810-25	-
1993-010	2449036.34	1993 Feb 17 2009:47	Proton-K/DH-2	-	362-01	4.700	VMSR	DS	G	Sat MED 00 3	IK9810-25	IK9810-25	-
1993-013	2449071.60	1993 Mar 25 0228:00	Proton-K/DH-2	-	388-01	2.765	VMSR	DS	G	Sat GEO 00 3	IK9810-25	IK9810-25	-
1993-061	2449334.56	1993 Mar 27 0122:00	Proton-K/DH-2	-	388-02	2.120	VMSR	DS	G	Sat GEO 00 3	IK9602-24	IK9810-25	-
1993-062	2449354.21	1993 Sep 20 1517:00	Proton-K/DH-2	-	388-01	2.765	VMSR	DS	G	Sat GEO 00 3	IK9602-24	IK9810-25	-
1993-069	2449369.14	1993 Oct 28 1517:00	Proton-K/DH-2	-	389-01	2.920	VMSR	DS	G	Sat GEO 00 3	IK9602-24	IK9810-25	-
1993-072	2449382.81	1994 Feb 18 0949:00	Proton-K/DH-2M	DH-2H	389-02	3.000	VMSR	DS	G	Sat GEO 00 3	IK9601-24	IK9810-25	-
1994-002	2449377.91	1994 Feb 18 0949:00	Proton-K/DH-2	-	395-02	3.300	VMSR	DS	G	Sat GEO 00 3	IK9601-24	IK9810-25	-
1994-016	2449391.83	1994 Feb 18 0756:00	Proton-K/DH-2	-	376-02	2.765	VMSR	DS	G	Sat GEO 00 3	IK9601-24	IK9810-25	-
1994-021	2449453.83	1994 Apr 11 0749:22	Proton-K/DH-2	-	377-01	4.700	VMSR	DS	G	Sat MED 00 3	IK9601-24	IK9810-25	-
1994-030	2449480.58	1994 May 20 2959:10	Proton-K/DH-2	-	367-01	2.920	VMSR	DS	G	Sat GEO 00 3	IK9602-24	IK9810-25	-
1994-036	2449576.14	1994 Jul 6 1557:46	Proton-K/DH-2	-	385-02	4.700	VMSR	DS	G	Sat GEO 00 3	IK9601-24	IK9810-25	-
1994-062	2449631.25	1994 Sep 21 1753:00	Proton-K/DH-2	-	386-02	3.700	VMSR	DS	G	Sat GEO 00 3	IK9601-24	IK9810-25	-
1994-067	2449639.18	1994 Oct 13 1619:00	Proton-K/DH-2	-	387-02	2.900	VMSR	DS	G	Sat GEO 00 3	IK9601-24	IK9810-25	-
1994-069	2449657.10	1994 Oct 31 1430:56	Proton-K/DH-2	-	381-02	3.300	VMSR	DS	G	Sat GEO 00 3	IK9601-24	IK9810-25	-
1994-087	2449703.00	1994 Nov 20 0039:37	Proton-K/DH-2	-	371-01	4.700	VMSR	DS	G	Sat MED 00 3	IK9601-24	IK9810-25	-
1994-076	2449876.53	1994 Dec 16 1200:00	Proton-K/DH-2	-	373-02	3.200	VMSR	DS	G	Sat GEO 00 3	IK9601-24	IK9810-25	-
1995-009	2449763.89	1995 Dec 28 1131:00	Proton-K/DH-2	-	366-01	2.765	VMSR	DS	G	Sat GEO 00 3	IK9601-24	IK9810-25	-
1995-024	2449857.65	1995 Mar 7 0923:44	Proton-K	-	370-02	4.700	VMSR	DS	G	Sat LSS 0	IK9605-47	IK9810-25	-
1995-037	2449923.16	1995 Mar 20 0333:22	Proton-K/DH-2	-	378-02	22.000	VMSR	DS	G	Sat LSS 0	IK9810-25	IK9810-25	-
1995-045	2449963.31	1995 Jul 24 1552:10	Proton-K/DH-2	-	374-01	4.700	VMSR	DS	G	Sat MED 00 3	IK9815-28	IK9810-25	-
1995-054	2450002.18	1995 Oct 11 1626:00	Proton-K/DH-2	-	386-01	3.200	VMSR	DS	G	Sat GEO 00 3	IK9521-36	IK9810-25	-
1995-063	2450039.10	1995 Nov 17 1425:00	Proton-K/DH-2	-	384-01	3.400	VMSR	DS	G	Sat GEO 00 3	IK9529-59	IK9810-25	-
1995-068	2450065.76	1995 Dec 14 0610:31	Proton-K/DH-2	-	378-01	4.700	VMSR	DS	G	Sat MED 00 3	IK9528-30	IK9810-25	-
1995-093	2450107.91	1996 Feb 25 0956:00	Proton-K/DH-2	-	374-02	2.920	VMSR	DS	G	Sat GEO 00 3	IK9602-24	IK9810-25	-
1996-010	2450130.85	1996 Feb 18 0819:00	Proton-K/DH-2	-	383-02	2.765	VMSR	DS	G	Sat GEO 00 3	IK9604-45	IK9810-25	-
1996-021	2450182.46	1996 Apr 8 2309:01	Proton-K/DH-2M	DH3	390-01	3.810	ILSK	DS	G	Sat CTD 00 1	IK9609-29	IK9810-25	-
1996-023	2450196.99	1996 Apr 23 1148:50	Proton-K	-	385-01	19.470	VMSR	DS	G	Sat LSS 0	IK9609-13	IK9810-25	-
1996-034	2450228.59	1996 May 25 0205:00	Proton-K/DH-2	-	379-01	2.920	VMSR	DS	G	Sat GEO 00 3	IK9811-38	IK9810-25	-
1996-053	2450333.23	1996 Sep 6 1737:39	Proton-K/DH-2	-	375-01	1.930	KBRI	DS	G/C	Sat GEO 00 1	IK9819-26	IK9810-25	-
1996-058	2450353.24	1996 Sep 26 1750:53	Proton-K/DH-2M	DH1	379-02	3.300	KBRI	DS	G	Sat GEO 00 1	IK9819-26	IK9810-25	-
1996-064	2450404.37	1996 Nov 26 2048:53	Proton-K/DH-2	-	392-02	6.825	VMSR	DS	G	Sat LSS 0 2	IK9822-25	IK9810-25	-
1997-026	2450594.21	1997 May 24 1700:00	Proton-K/DH-2M	DH4	380-02	4.700	ILSK	DS	G	Sat MED 00 3	IK9711-18	IK9810-25	-
1997-028	2450681.09	1997 Jun 6 1656:54	Proton-K/17540	DH-5	390-01	5.934	KBRI	DS	G/C	Sat CTD 00 1	IK9713-34	IK9810-25	-
1997-041	2450688.57	1997 Jun 18 1402:45	Proton-K/DH-2	-	380-02	7.500	ILSK	DS	G	Sat MED 00 3	IK9712-20	IK9810-25	-
1997-044	2450689.32	1997 Aug 14 2049:14	Proton-K/DH-2	-	381-01	2.050	ILSK	DS	G	Sat CTD 00 1	IK9713-57	IK9810-25	-
1997-051	2450705.57	1997 Aug 28 0033:30	Proton-K/DH-2M	DH2	381-02	4.400	ILSK	DS	G	Sat CTD 00 1	IK9721-38	IK9810-25	-
1997-070	2450765.21	1997 Sep 14 0136:54	Proton-K/DH-2M	DH2	382-01	5.934	KBRI	DS	G/C	Sat LSS 0	IK9729-55	IK9810-25	-
1997-076	2450785.47	1997 Dec 2 2310:37	Proton-K/DH-2M	DH3	382-02	4.188	VMSR	DS	G/C	Sat GEO 00 3	IK9739-36	IK9810-25	-
1998-021	2450910.59	1998 Apr 2 2319:00	Proton-K/DH-2M	DH3	394-01	4.280	ILSK	DS	G	Sat CTD 00 1	IK9726-45	IK9810-25	-
1998-022	2450932.69	1998 Apr 29 0436:54	Proton-K/17540	DH2	391-02	5.934	KBRI	DS	G/C	Sat LSS 0	IK9809-11	IK9810-25	-
1998-028	2450941.49	1998 May 7 2345:00	Proton-K/DH-2M	DH3	384-02	3.000	VMSR	DS	G	Sat GEO 00 3	IK9811-15	IK9810-25	-
1998-050	2451055.52	1998 Aug 30 0031:00	Proton-K/DH-2M	DH3	383-01	4.350	ILSK	DS	G	Sat CTD 00 1	IK9817-2		



Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Orbpay_t	Agency	Launch_Code	Group	Category	LfCite	Cite	Notes
1998-065	2451121.72	1998 Nov 4 05:12:00	Proton-K/DH-2M	DH3	395-02	4.600	ILSK	DS	CO	Sat CTD 00 1	IK9823-30	-	-
1998-067	2451137.78	1998 Nov 20 06:40:00	Proton-K	-	395-01	100.424	RWSIR	US	G	Sat LSS 0	IK9901-02	-	-
1998-070	2451176.27	1998 Dec 30 18:45:46	Proton-K/DH-2	-	386-02	4.812	RWSIR	US	G	Sat HEH 00 3	IK9902-18	-	-
1999-000	2451224.72	1999 Feb 15 05:12:00	Proton-K/DH-2M	-	397-01	4.470	ILSK	US	CO	Sat CTD 00 1	IK9904-28	IK9901-58	-
1999-010	2451237.67	1999 Feb 28 04:00:00	Proton-K/DH-2	-	386-01	3.412	RWSIR	US	CO	Sat GEO 00 3	IK9904-38	-	-
1999-020	2451251.51	1999 Mar 21 00:09:30	Proton-K/DH-2M	DH3	388-01	4.263	ILSK	US	CO	Sat CTD 00 1	IK9905-17	-	-
1999-027	2451315.44	1999 May 20 22:30:00	Proton-K/DH-2M	DH3	396-02	4.446	ILSK	US	CO	Sat CTD 00 1	IK9907-42	-	-
1999-034	2451347.88	1999 Jun 18 01:49:30	Proton-K/DH-2M	DH3	397-02	4.528	ILSK	US	CO	Sat CTD 00 1	IK9908-12	-	-
1999-F02	2451365.06	1999 Jul 5 13:32:00	Proton-K/Briz-M	-	389-01/88501	1.932	RWSIR	DF	CO	Sat GEO SO 1	IK9909-26	-	-
1999-047	2451428.19	1999 Sep 6 16:36:00	Proton-K/DH-2M	DH-2H	388-02	3.740	KHRU	US	CO	Sat GEO SO 1	IK9911-04	-	-
1999-055	2451448.44	1999 Sep 26 22:30:00	Proton-K/DH-2M	DH-2H	388-02	4.540	ILSK	US	CO	Sat CTD 00 1	IK9911-20	-	-
1999-F03	2451479.18	1999 Oct 17 16:16:00	Proton-K/DH-2	-	389-02	2.300	KHRU	DF	CO	Sat GEO SO 3	Kosmodrom9911	IK9912-13	-
2000-011	2451586.88	2000 Feb 12 09:10:54	Proton-K/DH-2M	DH3	386-02	4.500	ILSK	US	CO	Sat CTD SO 1	IK0004-32	-	-
2000-013	2451615.67	2000 Mar 12 04:07:00	Proton-K/DH-2M	DH-2H	389-01	3.320	KHRU	US	CO	Sat GEO 00 3	IK0005-20	-	-
2000-019	2451652.38	2000 Apr 17 21:06:00	Proton-K/DH-2M	DH-2H	397-01	3.512	KHRU	US	G	Sat GEO 00 3	IK0006-26	-	-
2000-029	2451701.62	2000 Jun 6 02:59:00	Proton-K/Briz-M	-	392-01/88502	3.168	KHRU	US	G	Sat GEO SO 1	IK0008-16	-	-
2000-031	2451719.52	2000 Jun 24 02:28:00	Proton-K/DH-2M	DH-2H	394-02	3.620	KHRU	US	G	Sat GEO 00 3	IK0008-23	-	-
2000-036	2451730.42	2000 Jun 30 22:44:47	Proton-K/DH-2M	DH3	400-01	4.600	ILSK	US	CO	Sat HEH 00 1	IK0009-35	-	-
2000-037	2451737.71	2000 Jul 12 04:46:36	Proton-K	-	389-02	3.120	KHRU	US	G	Sat GEO 00 3	IK0009-24	-	-
2000-049	2451786.34	2000 Jul 28 20:08:00	Proton-K/DH-2	-	401-02	20.300	KHRU	US	G	Sat LSS 0	IK0010-13	-	-
2000-051	2451792.91	2000 Sep 5 09:43:58	Proton-K/DH-2M	DH3	400-02	3.520	KHRU	US	G	Sat GEO 00 3	IK0010-13	-	-
2000-059	2451819.42	2000 Oct 1 22:01:00	Proton-K/DH-2M	DH3	400-02	4.600	ILSK	US	CO	Sat HEH 00 1	IK0011-29	-	-
2000-063	2451831.09	2000 Oct 13 14:12:46	Proton-K/DH-2	DH3	401-01	4.393	ILSK	US	CO	Sat CTD 00 1	IK0012-38	-	-
2000-067	2451839.42	2000 Oct 21 22:00:00	Proton-K/DH-2M	DH3	402-01	4.812	KHRU	US	G	Sat HEH 00 3	IK0012-43	-	-
2000-077	2451879.33	2000 Nov 30 19:59:47	Proton-K/DH-2M	DH3	402-02	4.352	ILSK	US	CO	Sat CTD 00 1	IK0012-38	-	-
2001-014	2452006.66	2001 Apr 7 03:47:00	Proton-K/Briz-M	-	402-02	4.565	KHRU	US	CO	Sat HEH 00 1	IK0101-31	-	-
2001-019	2452044.55	2001 May 15 01:11:30	Proton-K/DH-2M	DH3	403-01	3.005	KHRU	US	G	Sat GEO SO 1	IK0106-38	-	-
2001-025	2452076.58	2001 Jun 16 01:49:00	Proton-K/DH-2M	DH3	403-02	4.572	ILSK	US	CO	Sat CTD 00 1	IK0107-22	-	-
2001-037	2452146.36	2001 Aug 24 20:34:50	Proton-K/DH-2	-	404-01	4.443	ILSK	US	CO	Sat CTD 00 1	IK0107-22	-	-
2001-046	2452189.20	2001 Oct 1 16:45:44	Proton-K/DH-2	-	405-01	3.220	KHRU	US	G	Sat GEO 00 3	IK0110-37	-	-
2001-053	2452245.25	2001 Dec 1 16:04:14	Proton-K/DH-2	-	405-02	5.162	KHRU	US	G	Sat GEO 00 3	IK0112-37	-	-
2002-016	2452364.23	2002 Mar 30 17:25:00	Proton-K/DH-2M	DH3	406-01	4.726	ILSK	US	CO	Sat HEH 00 3	IK0205-49	-	-
2002-023	2452402.21	2002 May 7 17:00:00	Proton-K/DH-2M	DH3	406-01	4.440	ILSK	US	CO	Sat CTD SO 1	IK0206-30	-	-
2002-029	2452438.55	2002 Jun 10 01:14:00	Proton-K/DH-2M	DH-2H	404-02	3.566	KHRU	US	CO	Sat GEO 00 3	IK0206-30	-	-
2002-037	2452481.13	2002 Jul 25 15:13:21	Proton-K/Briz-M	DH-5	406-01	8.412	KHRU	US	CO	Sat LSS 0 3	www.cosmosworld.ru	-	-
2002-039	2452500.72	2002 Aug 22 05:15:00	Proton-K/DH-2M	DH3	408-01	4.685	ILSK	US	CO	Sat CTD SO 1	IK0210-19	-	-
2002-046	2452564.70	2002 Oct 17 04:41:00	Proton-K/Briz-M	DH2	408-01	4.784	KHRU	US	CO	Sat GEO SO 3	IK0212-40	-	-
2002-053	2452604.46	2002 Nov 25 23:41:23	Proton-K/DH-2M	DH3	408-02	4.050	ILSK	DF40	CO	Sat CTD SO 1	IK0301-50	-	-
2002-060	2452633.82	2002 Dec 25 07:37:58	Proton-K/DH-2	-	409-02	4.462	KHRU	US	CO	Sat HEH 00 3	IK0301-40	-	-
2002-062	2452659.87	2002 Dec 29 23:16:49	Proton-K/Briz-M	-	535-02/88504	4.600	ILSK	US	CO	Sat CTD SO 1	Vire	-	-
2003-015	2452733.68	2003 Apr 24 04:23:17	Proton-K/DH-2	-	410-02	3.112	ILSK	US	CO	Sat GEO 00 3	IK0306-40	-	-
2003-024	2452867.77	2003 Nov 24 05:21:15	Proton-K/Briz-M	-	407-01	5.000	ILSK	US	CO	Sat CTD SO 1	IK0306-29	-	-
2003-063	2452891.77	2003 Nov 24 09:22:00	Proton-K/DH-2M	DH-2H	410-01	3.589	KHRU	US	CO	Sat GEO 00 3	IK0306-40	-	-
2003-066	2452895.46	2003 Dec 28 05:00:00	Proton-K/Briz-M	-	410-03/88506	3.585	KHRU	US	G	Sat HEH 00 1	IK0401-19	-	-
2003-060	2453001.46	2004 Dec 28 23:00:00	Proton-K/DH-2M	DH-5	408-02	3.454	KHRU	US	G	Sat GEO 00 3	IK0402-16	-	-
2004-006	2453081.46	2004 Mar 26 03:00:00	Proton-K/Briz-M	-	535-03/88507	3.454	ILSK	US	CO	Sat CTD SO 1	IK0402-26	-	-
2004-010	2453171.36	2004 Mar 27 03:30:00	Proton-K/DH-2M	DH-2H	410-06	3.412	KHRU	US	CO	Sat CTD SO 1	IK0408-24	-	-
2004-022	2453172.44	2004 Apr 16 02:27:00	Proton-K/DH-2M	DH-2H	410-06	3.455	KHRU	US	G	Sat GEO 00 3	IK0408-24	-	-
2004-031	2453272.44	2004 Jun 4 23:21:00	Proton-K/Briz-M	-	535-06/88509	5.475	ILSK	US	CO	Sat CTD SO 1	IK0410-25	-	-
2004-034	2453293.35	2004 Oct 14 21:33:00	Proton-K/Briz-M	-	535-07/88508	5.540	ILSK	US	CO	Sat CTD SO 1	IK0410-25	-	-
2004-043	2453309.42	2004 Oct 29 23:11:00	Proton-K/Briz-M	-	535-09/88510	5.021	ILSK	US	CO	Sat CTD SO 1	IK0410-25	-	-
2004-054	2453346.08	2004 Dec 26 15:33:31	Proton-K/DH-2M	DH-2H	410-09	3.451	KHRU	US	CO	Sat GEO 00 3	IK0412-37	-	-
2005-003	2453404.60	2005 Feb 3 02:27:32	Proton-K/Briz-M	-	535-09/88511	5.974	ILSK	US	CO	Sat HEH 00 3	glonass-center.ru	-	-
2005-010	2453459.40	2005 Feb 29 21:31:00	Proton-K/DH-2M	DH-2H	410-10	3.463	KHRU	US	CO	Sat CTD SO 3	IK0504-06	-	-
2005-011	2453459.40	2005 Mar 29 17:59:08	Proton-K/Briz-M	-	535-10/88512	4.711	ILSK	US	CO	Sat GEO 00 3	IK0504-11	-	-
2005-023	2453544.32	2005 Mar 24 19:41:00	Proton-K/DH-2	-	410-07	3.467	KHRU	US	CO	Sat CTD SO 3	IK0509-09	-	-
2005-036	2453629.41	2005 Sep 8 21:53:40	Proton-K/DH-2	-	535-12/88513	5.500	ILSK	US	CO	Sat GEO 00 3	IK0511-06	-	-
2005-050	2453729.71	2005 Dec 25 05:57:10	Proton-K/DH-2M	-	410-11	4.462	KHRU	US	CO	Sat HEH 00 3	IK0602-32	-	-
2005-052	2453733.60	2005 Feb 28 20:10:00	Proton-K/Briz-M	-	535-13/88514	6.035	ILSK	US	CO	Sat CTD SO 1	IK0602-38	-	-
2006-002	2453796.34	2006 Jun 17 22:44:05	Proton-K/DH-2M	DH3	535-14/88515	3.341	ILSK	DF40	CO	Sat CTD SO 1	IK0604-10	-	-
2006-022	2453902.41	2006 Aug 4 21:48:00	Proton-K/DH-2M	-	535-15/88516	1.892	KHRU	US	CO	Sat GEO 00 1	IK0609-06	-	-
2006-054	2454048.33	2006 Mar 11 23:28:43	Proton-K/Briz-M	-	535-16/88517	5.875	ILSK	US	CO	Sat CTD SO 1	IK0701-10	-	-
2006-056	2454095.48	2006 Mar 8 20:01:00	Proton-K/Briz-M	-	535-15/88517	4.304	ILSK	US	CO	Sat CTD SO 1	IK0702-26	-	-
2006-062	2454096.35	2006 Dec 25 20:18:12	Proton-K/DH-2	-	535-21/88518	5.765	ILSK	US	CO	Sat CTD SO 1	IK0702-44	-	-
2006-069	2454200.45	2006 Nov 7 09:25:40	Proton-K/Briz-M	-	410-12	5.262	KHRU	US	G	Sat HEH 00 3	IK0702-44	-	-
2006-092	2454298.55	2007 Jul 7 01:15:00	Proton-K/Briz-M	-	535-16/88521	5.640	ILSK	US	CO	Sat CTD SO 1	IK0709-19	-	-
2007-032	2454348.44	2007 Oct 9 22:54:10	Proton-K/Briz-M	-	535-20/88520	6.893	ILSK	US	CO	Sat CTD SO 1	IK0711-16	-	-
2007-033	2454349.82	2007 Sep 5 22:43:10	Proton-K/Briz-M	-	535-22/88522	5.007	ILSK	DF	CO	Sat CTD SO 1	IK0711-16	-	-
2007-052	2454399.82	2007 Oct 26 07:35:47	Proton-K/DH-2M	-	410-17	5.262	KHRU	US	CO	Sat HEH 00 3	IK0801-26	-	-
2007-057	2454422.44	2007 Nov 17 23:29:24	Proton-K/Briz-M	-	535-23/88523	5.385	ILSK	US	CO	Sat CTD SO 1	IK0802-25	-	-
2007-058	2454443.51	2007 Dec 9 00:15:00	Proton-K/Briz-M	-	535-26/88526	3.600	KHRU	US	G	Sat GEO SO 1	IK0802-25	-	-
2007-065	2454460.31	2007 Dec 25 19:32:34	Proton-K/DH-2M	-	535-28	3.679	KHRU	US	G	Sat HEH 00 3	IK0803-35	-	-
2008-003	2454493.51	2008 Jan 28 00:18:00	Proton-K/Briz-M	-	535-27/88530	3.579	KHRU	US	CO	Sat GEO SO 1	IK0804-36	-	-
2008-006	2454507.98	2008 Feb 11 13:41:00	Proton-K/Briz-M	-	535-24/88524	3.012	ILSK	US	CO	Sat GEO SO 1	IK0804-36	-	-
2008-011	2454540.47	2008 Mar 14 23:18:55	Proton-K/Briz-M	-	535-25/88525	4.140	ILSK	DF40	CO	Sat CTD SO 1	IK0805-37	-	-
2008-033	2454644.50	2008 Jun 26 23:59:43	Proton-K/DH-2	-	410-14/1111	3.512	KHRU	US	CO	Sat GEO 00 3	IK0809-50	-	-
2008-039	2454697.45	2008 Aug 18 22:43:00	Proton-K/Briz-M	-	935-02/98528	6.958	ILSK	US	CO	Sat CTD SO 1	IK0810-30	-	-
2008-044	2454729.41	2008 Sep 19 21:48:00	Proton-K/Briz-M	-	535-29/88528	5.850	ILSK	US	CO	Sat CTD SO 1	IK0811-33	-	-
2008-046	2454734.87	2008 Sep 25 08:49:37	Proton-K/Briz-M	-	535-33/88531	6.345	ILSK	US	CO	Sat HEH 00 3	IK0811-35	-	-
2008-057	2454776.36	2008 Nov 5 20:44:20	Proton-K/DH-2M	-	935-03/98531	6.345	ILSK	US	CO	Sat CTD SO 1	Vire	-	-
2008-063	2454811.07	2008 Dec 25 10:43:42	Proton-K/Briz-M	-	935-34/1141	6.625	ILSK	US	CO	Sat CTD SO 1	IK0902-39	-	-
2008-067	2454825.95	2008 Dec 25 10:43:42	Proton-K/DH-2M	-	935-04								

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Launch_Code	Group	Category	LICite	Cite	Notes
2009-016	2454925.18	2009 Apr 3 1624:00	Preton-W/Briz-M	-	935-04/99504	US		Sat STD SO 1	NK0906-18	-	-
2009-027	2454967.54	2009 May 16 0057:38	Preton-W/Briz-M	-	935-06/99505	US		Sat STD SO 1	NK0907-40	-	-
2009-034	2455013.30	2009 Jun 30 1910:00	Preton-W/Briz-M	-	935-06/99506	US		Sat STD SO 1	Wire	-	-
2009-042	2455055.32	2009 Aug 17 1947:33	Preton-W/Briz-M	-	935-07/99507	US		Sat STD SO 1	Wire	-	-
2009-050	2455092.31	2009 Sep 17 1919:19	Preton-W/Briz-M	-	935-08/99508	US		Sat STD SO 1	NK0911-41	-	-
2009-065	2455160.10	2009 Nov 24 1419:10	Preton-W/Briz-M	-	935-09/99509	US		Sat STD SO 1	NK1001-35	-	-
2009-070	2455179.94	2009 Dec 14 1038:27	Preton-W/DK-2	-	935-38/115L	US		Sat STD SO 3	Wire	-	-
2009-075	2455194.52	2009 Dec 29 0022:00	Preton-W/Briz-M	-	935-10/99510	US		Sat STD SO 1	Wire	-	-
2010-002	2455224.51	2010 Jan 28 0018:00	Preton-W/Briz-M	-	935-36/99527	US		Sat STD SO 1	Wire	-	-
2010-006	2455239.53	2010 Feb 12 0039:40	Preton-W/Briz-M	-	935-32/99511	US		Sat STD SO 1	Wire	-	-
2010-007	2455257.39	2010 Mar 1 2119:44	Preton-W/DK-2	-	935-40/116L	US		Sat STD SO 3	Wire	-	-
2010-010	2455276.57	2010 Mar 20 1826:57	Preton-W/Briz-M	-	935-14/99514	US		Sat STD SO 3	NK1005-15	-	-
2010-016	2455310.97	2010 Apr 24 1119:00	Preton-W/Briz-M	-	935-11/99512	US		Sat STD SO 1	NK1005-21	-	-
2010-025	2455351.42	2010 Jun 3 2200:08	Preton-W/Briz-M	-	935-12/99513	US		Sat STD SO 1	NK1006-51	-	-
2010-034	2455386.28	2010 Jul 10 1840:36	Preton-W/Briz-M	-	935-15/99515	US		Sat STD SO 1	NK1008-22	-	-
2010-041	2455441.54	2010 Sep 2 0055:50	Preton-W/DK-2	-	935-30/118L	US		Sat STD SO 3	NK1011-18	-	-
2010-053	2455484.29	2010 Oct 14 1853:21	Preton-W/Briz-M	-	935-16/99517	US		Sat STD SO 3	NK1012-28	-	-
2010-061	2455515.23	2010 Oct 14 1729:20	Preton-W/Briz-M	-	935-13/99516	US		Sat STD SO 1	NK101-26	-	NK1102-30
2010-063	2455535.93	2010 Dec 5 1025:19	Preton-W/Briz-M	-	935-37/01L	US		Sat STD SO 3	maspaceflight.com	-	-
2010-069	2455575.41	2010 Dec 26 2151:00	Preton-W/Briz-M	-	935-17/99518	US		Sat STD SO 1	NK1105-37	-	-
2011-021	2455702.30	2011 May 20 1915:19	Preton-W/Briz-M	-	935-18/99520	US		Sat STD SO 1	NK1107-35	-	-
2011-035	2455735.47	2011 Jul 15 2316:10	Preton-W/Briz-M	-	935-15/99519	US		Sat STD SO 2	NK1109-34	-	-
2011-045	2455791.39	2011 Aug 17 2125:01	Preton-W/Briz-M	-	935-21/99522	US		Sat STD SO 1	NK1111-34	-	-
2011-046	2455825.45	2011 Sep 20 2247:00	Preton-W/Briz-M	-	935-42/99529	US		Sat STD SO 1	coopi.krunchev.ru	or 935-25/99524	-
2011-054	2455834.27	2011 Sep 29 1832:00	Preton-W/Briz-M	-	935-22/99524	US		Sat STD SO 1	coopi.krunchev.ru	-	-
2011-059	2455854.28	2011 Oct 19 1848:58	Preton-W/Briz-M	-	935-35/99523	US		Sat STD SO 1	coopi.krunchev.ru	-	-
2011-064	2455970.04	2011 Nov 4 1251:41	Preton-W/Briz-M	-	935-25/99527	US		Sat STD SO 1	coopi.krunchev.ru	-	-
2011-069	2455984.30	2011 Nov 25 1910:34	Preton-W/Briz-M	-	935-27/99529	US		Sat STD SO 1	coopi.krunchev.ru	-	-
2011-074	2455996.97	2011 Dec 11 1117:00	Preton-W/Briz-M	-	935-28/99528	US		Sat STD SO 1	NK1202-21	-	-
2012-007	2456272.32	2012 Feb 14 1936:37	Preton-W/Briz-M	-	935-30/99531	US		Sat STD SO 1	NK1204-35	-	-
2012-011	2456292.01	2012 Mar 25 1210:32	Preton-W/Briz-M	-	935-51/99532	US		Sat STD SO 1	coopi.krunchev.ru	-	-
2012-012	2456291.74	2012 Mar 25 1210:32	Preton-W/Briz-M	-	935-26/99537	US		Sat STD SO 1	coopi.krunchev.ru	-	-
2012-016	2456301.43	2012 Apr 25 2218:13	Preton-W/Briz-M	-	410-15/117L	US		Sat STD SO 3	NK1205-24	-	-
2012-026	2456305.30	2012 Apr 27 1921:14	Preton-W/DK-2	-	935-27/99529	US		Sat STD SO 3	coopi.krunchev.ru	-	-
2012-036	2456318.28	2012 Jul 9 1635:30	Preton-W/Briz-M	-	935-29/99530	US		Sat STD SO 1	coopi.krunchev.ru	-	-
2012-044	2456346.31	2012 Aug 6 1931:00	Preton-W/Briz-M	-	935-50/99531	US		Sat STD SO 1	coopi.krunchev.ru	-	-
2012-049	2456234.86	2012 Oct 14 0837:00	Preton-W/Briz-M	-	935-51/99532	US		Sat STD SO 1	coopi.krunchev.ru	-	-
2012-061	2456254.39	2012 Nov 2 2104:00	Preton-W/Briz-M	-	935-26/99534	US		Sat STD SO 1	coopi.krunchev.ru	-	-
2012-066	2456252.27	2012 Nov 20 1831:00	Preton-W/Briz-M	-	935-32/99533	US		Sat STD SO 1	coopi.krunchev.ru	-	-
2012-070	2456270.05	2012 Dec 6 8 133:43	Preton-W/Briz-M	-	935-33/99528	US		Sat STD SO 1	maspaceflight.com	NK1301-18	-
2013-012	2456335.50	2013 Mar 26 1806:48	Preton-W/Briz-M	-	935-34/99538	US		Sat STD SO 1	coopi.krunchev.ru	NK1305-30	-
2013-014	2456335.50	2013 Apr 15 1836:00	Preton-W/Briz-M	-	935-36/99538	US		Sat STD SO 1	coopi.krunchev.ru	NK1306-26	-
2013-024	2456335.77	2013 Apr 15 1836:00	Preton-W/Briz-M	-	935-36/99539	US		Sat STD SO 1	coopi.krunchev.ru	-	-
2013-022	2456342.47	2013 May 3 1819:31	Preton-W/Briz-M	-	935-36/99539	US		Sat STD SO 1	coopi.krunchev.ru	-	-
2013-026	2456347.89	2013 Jun 5 0919:31	Preton-W/DK-2	-	935-43/19941	US		Sat STD SO 1	coopi.krunchev.ru	-	-
2013-022	2456375.01	2013 Jun 5 0919:31	Preton-W/DK-2	-	935-43/19941	US		Sat STD SO 1	maspaceflight.com	NK1309-20	-
2013-066	2456565.60	2013 Sep 29 1438:43	Preton-W/Briz-M	-	935-39/19940	US		Sat STD SO 1	coopi.krunchev.ru	NK1311-42	-
2013-066	2456565.60	2013 Oct 15 1938:54	Preton-W/Briz-M	-	935-35/19942	US		Sat STD SO 1	coopi.krunchev.ru	NK1312-24	-
2013-066	2456565.60	2013 Nov 1 1938:54	Preton-W/Briz-M	-	935-35/19942	US		Sat STD SO 1	coopi.krunchev.ru	NK1400-34	-
2013-072	2456585.91	2013 Nov 8 1912:00	Preton-W/Briz-M	-	935-44/19946	US		Sat STD SO 1	maspaceflight.com	NK1402-44	-
2013-077	2456585.91	2013 Dec 8 1049:58	Preton-W/Briz-M	-	935-44/19946	US		Sat STD SO 1	coopi.krunchev.ru	-	-
2014-007	2456723.46	2014 Feb 15 1039:03	Preton-W/Briz-M	-	935-43/19944	US		Sat STD SO 1	maspaceflight.com	NK1404-28	-
2014-010	2456723.46	2014 Mar 15 1308:00	Preton-W/Briz-M	-	935-43/19944	US		Sat STD SO 1	maspaceflight.com	NK1405-22	-
2014-023	2456775.69	2014 Mar 25 0425:00	Preton-W/Briz-M	-	935-46/19948	US		Sat STD SO 1	maspaceflight.com	NK1406-51	-
2014-030	2456793.40	2014 May 15 2142:00	Preton-W/Briz-M	-	935-46/19948	US		Sat STD SO 1	maspaceflight.com	NK1407-28	-
2014-054	2456829.35	2014 Sep 27 2023:00	Preton-W/Briz-M	-	935-47/19949	US		Sat STD SO 1	maspaceflight.com	-	-
2014-064	2456852.13	2014 Oct 21 1509:32	Preton-W/Briz-M	-	935-48/19950	US		Sat STD SO 1	maspaceflight.com	-	-
2014-082	2457009.40	2014 Dec 15 1016:00	Preton-W/Briz-M	-	935-50/19952	US		Sat STD SO 1	maspaceflight.com	NK1502-44	-
2015-012	2457055.02	2015 Feb 27 2137:49	Preton-W/Briz-M	-	935-49/19951	US		Sat STD SO 1	maspaceflight.com	NK1504-19	-
2015-012	2457100.42	2015 Feb 18 2205:00	Preton-W/Briz-M	-	935-51/19954	US		Sat STD SO 1	maspaceflight.com	-	-
2015-042	2457158.74	2015 Mar 16 0547:39	Preton-W/Briz-M	-	935-54/19955	US		Sat STD SO 1	maspaceflight.com	-	-
2015-048	2457262.99	2015 Sep 28 1144:00	Preton-W/Briz-M	-	935-53/19956	US		Sat STD SO 1	maspaceflight.com	NK1510-46	-
2015-060	2457310.36	2015 Oct 16 2040:11	Preton-W/Briz-M	-	935-56/19957	US		Sat STD SO 1	maspaceflight.com	-	-
2015-075	2457369.51	2015 Dec 24 2131:19	Preton-W/Briz-M	-	935-57/19959	US		Sat STD SO 1	maspaceflight.com	NK1602-46	-
2015-082	2457417.43	2016 Jan 29 2220:09	Preton-W/Briz-M	-	935-60/19960	US		Sat STD SO 1	maspaceflight.com	NK1602-67	-
2016-017	2457461.90	2016 Mar 14 0931:42	Preton-W/DK-3	-	937-01/19970	US		Sat STD SO 1	maspaceflight.com	-	-
2016-035	2457548.80	2016 Jun 9 0710:00	Preton-W/Briz-M	-	935-61/19971	US		Sat STD SO 1	maspaceflight.com	NK1608-20	-
2017-032	2457912.66	2017 Jun 8 0345:47	Preton-W/Briz-M	-	935-59/19962	US		Sat STD SO 1	maspaceflight.com	-	-
2017-046	2457992.42	2017 Aug 16 2207:00	Preton-W/Briz-M	-	935-62/19963	US		Sat STD SO 1	maspaceflight.com	-	-
2017-053	2458008.31	2017 Sep 11 1923:41	Preton-W/Briz-M	-	937-02/19972	US		Sat STD SO 1	maspaceflight.com	-	-
2018-037	2458025.29	2018 Sep 28 1852:16	Preton-W/Briz-M	-	935-62/19963	US		Sat STD SO 1	maspaceflight.com	-	-
2018-107	2458473.51	2018 Dec 21 0020:00	Preton-W/Briz-M	-	935-63/19965	US		Sat STD SO 1	maspaceflight.com	-	-
2019-031	2458634.24	2019 Mar 30 1742:00	Preton-W/Briz-M	-	935-69/19964	US		Sat STD SO 1	maspaceflight.com	-	-
2019-048	2458701.41	2019 Aug 5 2156:00	Preton-W/Briz-M	-	935-47/14L	US		Sat STD SO 1	maspaceflight.com	-	-
2019-067	2458765.93	2019 Dec 24 1203:02	Preton-W/Briz-M	-	937-04/19973	US		Sat STD SO 1	maspaceflight.com	-	-
2020-053	2459061.39	2020 Jul 30 2125:19	Preton-W/Briz-M	-	935-66/13L	US		Sat STD SO 1	maspaceflight.com	-	-
2021-066	2459417.12	2021 Jul 21 1458:25	Preton-W	-	935-67/19968	US		Sat STD SO 1	maspaceflight.com	-	-
2021-123	2459562.00	2021 Dec 13 1207:00	Preton-W/DK-3	-	535-45	US		Sat STD SO 1	maspaceflight.com	-	-
2022-131	2459562.12	2022 Oct 12 1500:00	Preton-W/DK-3	-	535-46/19968	US		Sat STD SO 1	maspaceflight.com	-	-
2023-016	2459880.88	2023 Feb 5 0912:52	Preton-W/DK-3	-	935-71/1L	US		Sat STD SO 1	maspaceflight.com	-	-
2023-031	2460016.47	2023 Mar 12 2313:00	Preton-W/Briz-M	-	935-72/19969	US		Sat STD SO 1	maspaceflight.com	-	-



Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Mission	Launch_FlightCode	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee km	Range km	Dest
2022-S116	2459888.50	2022 Nov 5	Qaem-100	-	FTW-B1	Test	-	-	-	SHARH	-	-	-	2007	-	Arabian Sea
2023-F10	2460007.50	2023 Mar 4	Qaem-100	-	-	Mahid-1	-	-	-	SHARH	-	-	-	2007	-	Arabian Sea?
2024-015	2460329.77	2024 Jan 20 0628:34	Qaem-100	-	FTW-B2	Shraya	-	-	-	SHARH	-	-	-	-	-	-
2024-165	2460657.75	2024 Sep 14 0600?	Qaem-100	-	0H-B2	Chamran-1	-	-	-	SHARH	-	-	-	-	-	-



**Launch**

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Display	Agency	Launch_Code	Group	Category	LTCite	Cite	Notes
2022-S116	2459888.50	2022 Nov 5	Qaer-100	-	FTH-B1	0.000	IRGC	TS	-	Test	Wire	-	-
2023-F10	2460007.50	2023 Mar 4	Qaer-100	-	-	0.050	IRGC	OF	G	Sat LEO 0	Wire	-	Unknown failure
2024-015	2460329.77	2024 Jan 20 0628:34	Qaer-100	-	FTH-B2	0.050	IRGC	US	G	Sat LEO 0	Wire	-	-
2024-165	2460567.75	2024 Sep 14 0600?	Qaer-100	-	OH-B2	0.060	IRGC	US	G	Sat LEO 0	TLE	-	-







Launch Mission

Launch_Tag	Launch_ID	Variant	Flight_ID	Flight	Launch_Site	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee km	Range km	Dest
1957-3227	2436072.50	-	-	ZI	GTSP-4	-	GTSP-4	-	-	-	1507	-	-
1957-369	2436073.50	-	-	-	GTSP-4	-	GTSP-4	-	-	-	867	-	-
1957-3228	2436073.50	-	-	ZI	GTSP-4	-	GTSP-4	-	-	-	1507	-	-
1957-3229	2436073.50	-	-	ZI	GTSP-4	-	GTSP-4	-	-	-	1507	-	-
1957-3230	2436076.50	-	-	-	GTSP-4	-	GTSP-4	-	-	-	867	-	-
1957-3231	2436077.50	-	-	-	GTSP-4	-	GTSP-4	-	-	-	867	-	-
1957-3232	2436078.50	-	-	-	GTSP-4	-	GTSP-4	-	-	-	867	-	-
1957-3233	2436080.50	-	-	-	GTSP-4	-	GTSP-4	-	-	-	867	-	-
1957-3234	2436082.50	-	-	-	GTSP-4	-	GTSP-4	-	-	-	867	-	-
1957-3105	2436083.50	-	-	-	GTSP-4	-	GTSP-4	-	-	-	867	-	-
1957-3269	2436108.50	-	-	-	GTSP-4	-	GTSP-4	-	-	-	1507	-	-
1957-3270	2436108.50	-	-	-	GTSP-4	-	GTSP-4	-	-	-	1507	-	-
1957-3271	2436117.50	-	-	-	GTSP-4	-	GTSP-4	-	-	-	1507	-	-
1957-3272	2436160.50	-	-	-	GTSP-4	-	GTSP-4	-	-	-	1507	-	-
1957-3273	2436162.50	-	-	-	GTSP-4	-	GTSP-4	-	-	-	1507	-	-
1957-3274	2436168.50	-	-	-	GTSP-4	-	GTSP-4	-	-	-	1507	-	-
1957-3275	2436169.50	-	-	-	GTSP-4	-	GTSP-4	-	-	-	1507	-	-
1957-3276	2436171.50	-	-	-	GTSP-4	-	GTSP-4	-	-	-	407	-	-
1957-A163	2436183.50	-	-	-	GTSP-4	-	GTSP-4	-	-	-	407	-	-
1957-A164	2436183.50	-	-	-	GTSP-4	-	GTSP-4	-	-	-	407	-	-
1957-A165	2436184.50	-	-	-	GTSP-4	-	GTSP-4	-	-	-	407	-	-
1957-3277	2436188.50	-	-	-	GTSP-4	-	GTSP-4	-	-	-	1507	-	-
1957-3278	2436188.50	-	-	-	GTSP-4	-	GTSP-4	-	-	-	1507	-	-
1957-3279	2436198.50	-	-	-	GTSP-4	-	GTSP-4	-	-	-	1507	-	-
1957-3280	2436200.50	-	-	-	GTSP-4	-	GTSP-4	-	-	-	1507	-	-
1957-3281	2436203.50	-	-	-	GTSP-4	-	GTSP-4	-	-	-	1507	-	-
1957-3282	2436203.50	-	-	-	GTSP-4	-	GTSP-4	-	-	-	1507	-	-
1958-3311	2436270.50	-	-	-	GTSP-4	-	GTSP-4	-	-	-	867	-	-
1958-3350	2436293.50	-	-	-	GTSP-4	-	GTSP-4	-	-	-	867	-	-
1958-3372	2436346.50	-	-	-	GTSP-4	-	GTSP-4	-	-	-	867	-	-
1958-3373	2436349.50	-	-	-	GTSP-4	-	GTSP-4	-	-	-	867	-	-
1958-3329	2436354.50	-	-	-	GTSP-4	-	GTSP-4	-	-	-	1507	-	-
1958-3330	2436354.50	-	-	-	GTSP-4	-	GTSP-4	-	-	-	1507	-	-
1958-3334	2436392.50	-	-	-	GTSP-4	-	GTSP-4	-	-	-	1507	-	-
1958-3356	2436416.50	-	-	-	GTSP-4	-	GTSP-4	-	-	-	1507	-	-
1958-3359	2436421.50	-	-	-	GTSP-4	-	GTSP-4	-	-	-	1507	-	-
1958-3360	2436447.50	-	-	-	GTSP-4	-	GTSP-4	-	-	-	1507	-	-
1958-3363	2436462.50	-	-	-	GTSP-4	-	GTSP-4	-	-	-	867	-	-
1958-3193	2436464.50	-	-	-	GTSP-4	-	GTSP-4	-	-	-	1507	-	-
1958-3394	2436494.50	-	-	-	GTSP-4	-	GTSP-4	-	-	-	1507	-	-
1958-3426	2436494.50	-	-	-	GTSP-4	-	GTSP-4	-	-	-	1507	-	-
1958-3357	2436494.50	-	-	-	GTSP-4	-	GTSP-4	-	-	-	1507	-	-
1958-3358	2436494.50	-	-	-	GTSP-4	-	GTSP-4	-	-	-	1507	-	-
1958-3359	2436494.50	-	-	-	GTSP-4	-	GTSP-4	-	-	-	1507	-	-
1958-3360	2436494.50	-	-	-	GTSP-4	-	GTSP-4	-	-	-	1507	-	-
1958-3361	2436494.50	-	-	-	GTSP-4	-	GTSP-4	-	-	-	1507	-	-
1958-3265	2436496.50	-	-	-	GTSP-4	-	GTSP-4	-	-	-	88	-	-
1958-3266	2436496.50	-	-	-	GTSP-4	-	GTSP-4	-	-	-	88	-	-
1958-3267	2436496.50	-	-	-	GTSP-4	-	GTSP-4	-	-	-	807	-	-
1958-3268	2436496.50	-	-	-	GTSP-4	-	GTSP-4	-	-	-	807	-	-
1958-3269	2436496.50	-	-	-	GTSP-4	-	GTSP-4	-	-	-	103	-	-
1958-3270	2436496.50	-	-	-	GTSP-4	-	GTSP-4	-	-	-	103	-	-
1958-3271	2436496.50	-	-	-	GTSP-4	-	GTSP-4	-	-	-	807	-	-
1958-3272	2436496.50	-	-	-	GTSP-4	-	GTSP-4	-	-	-	807	-	-
1958-3273	2436496.50	-	-	-	GTSP-4	-	GTSP-4	-	-	-	101	-	-
1958-3274	2436496.50	-	-	-	GTSP-4	-	GTSP-4	-	-	-	102	-	-
1958-3275	2436496.50	-	-	-	GTSP-4	-	GTSP-4	-	-	-	1507	-	-
1958-3379	2436567.50	-	-	-	GTSP-4	-	GTSP-4	-	-	-	807	-	-
1958-3380	2436567.50	-	-	-	GTSP-4	-	GTSP-4	-	-	-	807	-	-
1958-3293	2436593.50	-	-	-	GTSP-4	-	GTSP-4	-	-	-	1507	-	-
1958-3294	2436593.50	-	-	-	GTSP-4	-	GTSP-4	-	-	-	1507	-	-
1958-3295	2436593.50	-	-	-	GTSP-4	-	GTSP-4	-	-	-	807	-	-
1958-3296	2436593.50	-	-	-	GTSP-4	-	GTSP-4	-	-	-	807	-	-
1958-3300	2436598.50	-	-	-	GTSP-4	-	GTSP-4	-	-	-	807	-	-
1958-3303	2436631.50	-	-	-	GTSP-4	-	GTSP-4	-	-	-	1507	-	-
1958-3305	2436639.50	-	-	-	GTSP-4	-	GTSP-4	-	-	-	1507	-	-
1958-3309	2436640.50	-	-	-	GTSP-4	-	GTSP-4	-	-	-	1507	-	-
1958-3310	2436657.50	-	-	-	GTSP-4	-	GTSP-4	-	-	-	807	-	-
1958-3311	2436657.50	-	-	-	GTSP-4	-	GTSP-4	-	-	-	807	-	-
1958-3312	2436678.50	-	-	-	GTSP-4	-	GTSP-4	-	-	-	807	-	-
1958-3417	2436681.50	-	-	-	GTSP-4	-	GTSP-4	-	-	-	807	-	-
1958-3418	2436682.50	-	-	-	GTSP-4	-	GTSP-4	-	-	-	807	-	-
1958-3419	2436686.50	-	-	-	GTSP-4	-	GTSP-4	-	-	-	1507	-	-
1958-3415	2436687.50	-	-	-	GTSP-4	-	GTSP-4	-	-	-	807	-	-
1958-3321	2436687.50	-	-	-	GTSP-4	-	GTSP-4	-	-	-	807	-	-
1958-3416	2436686.50	-	-	-	GTSP-4	-	GTSP-4	-	-	-	1507	-	-
1958-3322	2436703.50	-	-	-	GTSP-4	-	GTSP-4	-	-	-	1507	-	-
1958-3323	2436707.50	-	-	-	GTSP-4	-	GTSP-4	-	-	-	1507	-	-
1958-3329	2436725.50	-	-	-	GTSP-4	-	GTSP-4	-	-	-	807	-	-
1958-3330	2436725.50	-	-	-	GTSP-4	-	GTSP-4	-	-	-	807	-	-
1958-3331	2436729.50	-	-	-	GTSP-4	-	GTSP-4	-	-	-	807	-	-

First R-11A at NZ

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Launch_Mission	FlightCode	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee_Km	Range_Km	Dest
1969-3532	2436732.50	1969 Jun 13	R-11M	-	IL-5TS	-	-	-	GTSP-4	-	-	-	807	-	-
1969-3541	2436736.50	1969 Jun 17	R-11M	-	IL-4TS	-	-	-	GTSP-4	-	-	-	807	-	-
1969-3542	2436737.50	1969 Jun 18	R-11M	-	IL-3TS	-	-	-	GTSP-4	-	-	-	807	-	-
1969-3543	2436739.50	1969 Jun 20	R-11M	-	IL-14	-	-	-	GTSP-4	-	-	-	807	-	-
1969-3544	2436752.50	1969 Jun 3	R-11M	-	IL-23TS	-	-	-	GTSP-4	-	-	-	807	-	-
1969-3554	2436764.50	1969 Jun 14	R-11M	-	IL-7T	-	-	-	GTSP-4	-	-	-	807	-	-
1969-3555	2436764.50	1969 Jun 15	R-11M	-	IL-18TS	-	-	-	GTSP-4	-	-	-	807	-	-
1969-3556	2436769.50	1969 Jun 20	R-11M	-	IL-20TS	-	-	-	GTSP-4	-	-	-	807	-	-
1969-3116	2436770.58	1969 Jun 21 0200	R-11A	-	-	-	-	-	GTSP-4	-	-	-	105	-	-
1969-3119	2436771.08	1969 Jun 21 1400	R-11A	-	-	-	-	-	GTSP-4	-	-	-	105	-	-
1969-3357	2436773.50	1969 Jun 24	R-11M	-	IL-24TS	-	-	-	GTSP-4	-	-	-	807	-	-
1969-3358	2436773.50	1969 Jun 24	R-11M	-	IL-4-1	-	-	-	GTSP-4	-	-	-	807	-	-
1969-3359	2436776.50	1969 Jun 27	R-11M	-	IL-10-10T	-	-	-	GTSP-4	-	-	-	807	-	-
1969-3360	2436777.50	1969 Jun 28	R-11M	-	IL-7	-	-	-	GTSP-4	-	-	-	807	-	-
1969-3361	2436779.50	1969 Jun 30	R-11M	-	IL-6TS	-	-	-	GTSP-4	-	-	-	807	-	-
1969-3362	2436780.50	1969 Jun 31	R-11M	-	IL-13T	-	-	-	GTSP-4	-	-	-	807	-	-
1969-3363	2436787.50	1969 Aug 7	R-11M	-	IL-11	-	-	-	GTSP-4	-	-	-	807	-	-
1969-3365	2436797.50	1969 Aug 17	R-11M	-	B4-32	-	-	-	GTSP-4	-	-	-	807	-	-
1969-3366	2436799.50	1969 Aug 19	R-11M	-	B4-31	-	-	-	GTSP-4	-	-	-	807	-	-
1969-3367	2436802.50	1969 Aug 22	R-11M	-	B4-26	-	-	-	GTSP-4	-	-	-	807	-	-
1969-3368	2436814.50	1969 Sep 3	R-11M	-	IL-1-7	-	-	-	GTSP-4	-	-	-	807	-	-
1969-3369	2436814.50	1969 Sep 3	R-11M	-	IL-1-3T	-	-	-	GTSP-4	-	-	-	807	-	-
1969-3370	2436818.50	1969 Sep 7	R-11M	-	B4-1T	-	-	-	GTSP-4	-	-	-	807	-	-
1969-3371	2436819.50	1969 Sep 8	R-11M	-	B4-9T	-	-	-	GTSP-4	-	-	-	807	-	-
1969-3375	2436819.50	1969 Sep 6	R-11M	-	BL-2	-	-	-	GTSP-4	-	-	-	807	-	-
1969-3376	2436829.50	1969 Sep 18	R-11M	-	B4-30	-	-	-	GTSP-4	-	-	-	807	-	-
1969-3377	2436833.50	1969 Sep 22	R-11M	-	IL-1	-	-	-	GTSP-4	-	-	-	807	-	-
1969-3378	2436833.50	1969 Sep 22	R-11M	-	IL-6T	-	-	-	GTSP-4	-	-	-	807	-	-
1969-3379	2436836.50	1969 Sep 25	R-11M	-	B4-28	-	-	-	GTSP-4	-	-	-	807	-	-
1969-3380	2436836.50	1969 Sep 25	R-11M	-	B4-27	-	-	-	GTSP-4	-	-	-	807	-	-
1969-3381	2436842.50	1969 Oct 1	R-11M	-	IL-20T	-	-	-	GTSP-4	-	-	-	807	-	-
1969-3382	2436844.50	1969 Oct 3	R-11M	-	IL-10	-	-	-	GTSP-4	-	-	-	807	-	-
1969-3384	2436860.50	1969 Oct 9	R-11M	-	BL-5	-	-	-	GTSP-4	-	-	-	807	-	-
1969-3385	2436866.50	1969 Oct 15	R-11M	-	IL-2-7T	-	-	-	GTSP-4	-	-	-	807	-	-
1969-3386	2436861.50	1969 Oct 20	R-11M	-	IL-2	-	-	-	GTSP-4	-	-	-	807	-	-
1969-3394	2436898.50	1969 Nov 26	R-11M	-	IL-3-2T	-	-	-	GTSP-4	-	-	-	807	-	-
1969-3395	2436899.50	1969 Nov 27	R-11M	-	IL-3-1T	-	-	-	GTSP-4	-	-	-	807	-	-
1969-3396	2436914.50	1969 Dec 12	R-11M	-	IL-6-1T	-	-	-	GTSP-4	-	-	-	807	-	-
1969-3397	2436914.50	1969 Dec 12	R-11M	-	IL-6-0T (R-11M)	-	-	-	GTSP-4	-	-	-	807	-	-
1969-3229	2436914.50	1969 Dec 12	R-11M	-	VKI-02 (R-11M)	-	-	-	GTSP-4	-	-	-	807	-	-
1969-3398	2436919.50	1969 Dec 17	R-11M	-	IL-4-1T	-	-	-	GTSP-4	-	-	-	807	-	-
1969-3399	2436921.50	1969 Dec 19	R-11M	-	IL-4-0	-	-	-	GTSP-4	-	-	-	807	-	-
1969-3400	2436926.50	1969 Dec 24	R-11M	-	BL-28	-	-	-	GTSP-4	-	-	-	807	-	-
1969-3401	2436926.50	1969 Dec 24	R-11M	-	BL-26	-	-	-	GTSP-4	-	-	-	807	-	-
1969-3402	2436926.50	1969 Dec 24	R-11M	-	VKI-04 (R-11M)	-	-	-	GTSP-4	-	-	-	807	-	-
1969-3403	2436926.50	1969 Dec 24	R-11M	-	IL-8-2T	-	-	-	GTSP-4	-	-	-	807	-	-
1969-3404	2436927.50	1969 Dec 25	R-11M	-	IL-8-1T	-	-	-	GTSP-4	-	-	-	807	-	-
1969-3405	2436927.50	1969 Dec 25	R-11M	-	IL-8-0T	-	-	-	GTSP-4	-	-	-	807	-	-
1969-3406	2436928.50	1969 Dec 27	R-11M	-	BL-25	-	-	-	GTSP-4	-	-	-	807	-	-
1969-3407	2436928.50	1969 Dec 27	R-11M	-	BL-22	-	-	-	GTSP-4	-	-	-	807	-	-
1969-3408	2436929.50	1969 Dec 27	R-11M	-	BL-21	-	-	-	GTSP-4	-	-	-	807	-	-
1969-3409	2436929.50	1969 Dec 27	R-11M	-	BL-19	-	-	-	GTSP-4	-	-	-	807	-	-
1969-3410	2436931.50	1969 Dec 29	R-11M	-	BL-11	-	-	-	GTSP-4	-	-	-	807	-	-
1969-3405	2436931.50	1969 Dec 29	R-11M	-	BL-23	-	-	-	GTSP-4	-	-	-	807	-	-
1969-106	2436958.50	1969 Jan 8	R-11FN	-	-	-	-	B-67	BLA?	-	-	-	07	-	-
1969-3502	2436961.50	1969 Jan 8	R-17	-	VKI-01	-	-	-	GTSP-4	-	-	-	1507	-	-
1969-3503	2436961.50	1969 Jan 26	R-17	-	VKI-03	-	-	-	GTSP-4	-	-	-	1507	-	-
1969-3504	2436961.50	1969 Jan 28	R-17	-	VKI-05	-	-	-	GTSP-4	-	-	-	1507	-	-
1969-3505	2436966.50	1969 Feb 5	R-17	-	VKI-07	-	-	-	GTSP-4	-	-	-	1507	-	-
1969-3435	2436969.50	1969 Feb 5	R-17	-	VKI-06	-	-	-	GTSP-4	-	-	-	1507	-	-
1969-3436	2436969.50	1969 Feb 5	R-17	-	VKI-06	-	-	-	GTSP-4	-	-	-	206	-	-
1969-3177	2437183.50	1969 Sep 8	R-11A	-	-	-	-	-	BLA?	-	-	-	867	-	-
1969-3267	2437187.50	1969 Sep 9	R-11FN	-	-	-	-	-	BLA?	-	-	-	867	-	-
1969-3278	2437196.50	1969 Sep 19	R-11M	-	-	-	-	-	GTSP-4	-	-	-	210	-	-
1969-3283	2437198.50	1969 Sep 21	R-11A	-	-	-	-	-	GTSP-4	-	-	-	867	-	-
1969-3285	2437345.50	1961 Feb 15	R-11A	-	-	-	-	-	GTSP-4	-	-	-	867	-	-
1961-547	2437345.95	1961 Feb 15 0820?	R-11A	-	UV ozone spectra	-	-	-	GTSP-4	-	-	-	96	-	-
1961-5447	2437542.50	1961 Sep 5	R-17	-	Last VKI	-	-	-	GTSP-4	-	-	-	867	-	-
1961-5294	2437565.50	1961 Sep 23	R-17	-	UV parachute tests	-	-	-	GTSP-4	-	-	-	867	-	-
1962-501	2437664.50	1962	R-11A-WV	-	-	-	-	-	GTSP-4	-	-	-	867	-	-
1962-502	2437664.50	1962	R-11A-WV	-	-	-	-	-	GTSP-4	-	-	-	867	-	-
1962-503	2437664.50	1962	R-11A-WV	-	-	-	-	-	GTSP-4	-	-	-	867	-	-
1962-504	2437664.50	1962	R-11A-WV	-	-	-	-	-	GTSP-4	-	-	-	867	-	-
1962-505	2437664.50	1962	R-11A-WV	-	-	-	-	-	GTSP-4	-	-	-	867	-	-
1964-118	2438430.75	1964 Feb 5 0600?	R-17	-	KY-2	-	-	-	GTSP-4	-	-	-	07	-	-
1964-121	2438437.00	1964 Feb 11 1200?	R-17	-	KY-2	-	-	-	GTSP-4	-	-	-	07	-	-
1964-3162	2438470.09	1964 Mar 15 1412:54	R-17	-	KY-2	-	-	-	GTSP-4	-	-	-	2787	-	-
1964-3194	2438493.86	1964 Apr 8 0841	R-17	-	KY-2	-	-	-	GTSP-4	-	-	-	278	-	-
1964-1459	2438510.75	1964 Apr 25 0605:26	R-17	-	KY-2	-	-	-	GTSP-4	-	-	-	07	-	-
1964-3369	2438569.69	1964 Jul 18 0430	R-17	-	KY-2	-	-	-	GTSP-4	-	-	-	250	-	-
1964-3424	2438619.63	1964 Aug 12 0300:12	R-17	-	KY-2	-	-	-	GTSP-4	-	-	-	246	-	-
1964-4126	2438641.20	1964 Sep 2 1645	R-17	-	KY-2	-	-	-	GTSP-4	-	-	-	07	-	-
1964-4126	2438641.20	1964 Oct 10 0700:04	R-17	-	KY-2	-	-	-	GTSP-4	-	-	-	254	-	-
1964-3515	2438678.79	1964 Oct 16 1210	R-17	-	KY-2	-	-	-	GTSP-4	-	-	-	254	-	-
1964-3515	2438678.79	1964 Oct 16 1210	R-17	-	KY-2	-	-	-	GTSP-4	-	-	-	254	-	-
1964-3524	2438685.01	1964 Oct 29 1215:02	R-17	-	KY-2	-	-	-	GTSP-4	-	-	-	248	-	-
1964-3550	2438698.01	1964 Oct 29 1215:02	R-17	-	KY-2	-	-	-	GTSP-4	-	-	-	2507	-	-
1964-3562	2438727.97	1964 Nov 28 1114:26	R-17	-	KY-2	-	-	-	GTSP-4	-	-	-	2507	-	-
1964-3697	2438750.91	1964 Dec 21 0944:59	R-17	-	Long range R-17	-	-	-	GTSP-4	-	-	-	2507	-	-
1965-3703	2438760.50	1965	R-17	-	KY-3 (Scud C)	-	-	-	GTSP-4	-	-	-	2507	-	-

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Launch_Mission	FlightCode	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee_km	Range_km	Dest
1965-S39	2438776.13	1965 Jan 15 1500:03	R-17	?					GRSP-4				2507		
1965-S57	2438790.72	1965 Jan 30 0515	R-17	?	KY-2				GRSP-4				206		
1965-S95	2438804.00	1965 Feb 12 1200:06	R-17	?	KY-2				GRSP-4				2507		
1965-A33	2438811.77	1965 Feb 20 0630:02	R-17	?	KY-2				GRSP-4				07		
1965-S136	2438824.96	1965 Mar 5 1100:21	R-17	?	KY-2				GRSP-4				250		
1965-S159	2438832.85	1965 Mar 13 0820:31	R-17	?	KY-2				GRSP-4				207		
1965-S251	2438874.92	1965 Apr 24 1000:25	R-17	?	KY-2				GRSP-4				2507		
1965-S275	2438887.91	1965 May 7 0728	R-11	?					GRSP-4				867		
1965-S277	2438888.95	1965 May 6 1047	R-11	?					GRSP-4				867		
1965-S292	2438895.30	1965 May 14 1912	R-11	?					GRSP-4				867		
1965-S293	2438895.83	1965 May 15 0800	R-11	?					GRSP-4				867		
1965-S297	2438898.88	1965 May 18 0907	R-11	?					GRSP-4				867		
1965-S315	2438907.23	1965 May 26 1730	R-17	?					GRSP-4				231		
1973-S478	2441978.20	1973 Oct 22 1650?	R-17	-	R-17E				DEVER				1007		
1973-S479	2441978.20	1973 Oct 22 1650?	R-17	-	R-17E				DEVER				1007		
1973-S480	2441978.20	1973 Oct 22 1650?	R-17	-	R-17E				DEVER				1007		
1977-S318	2443416.50	1977 Oct?	R-17	-					IRMQ-A				1007		
1977-S319	2443416.50	1977 Oct?	R-17	-					IRMQ-A				1007		
1977-S320	2443416.50	1977 Oct?	R-17	-					IRMQ-A				1007		
1977-S321	2443416.50	1977 Oct?	R-17	-					IRMQ-A				1007		
1977-S322	2443416.50	1977 Oct?	R-17	-					IRMQ-A				1007		
1977-S323	2443416.50	1977 Oct?	R-17	-					IRMQ-A				1007		
1977-S324	2443416.50	1977 Oct?	R-17	-					IRMQ-A				1007		
1977-S325	2443416.50	1977 Oct?	R-17	-					IRMQ-A				1007		
1978-S262	2443508.50	1978 Sep 29	R-17VTD	-					Aerofon				867		
1978-S266	2444146.50	1979 Sep 29	R-17VTD	-					Aerofon				867		
1980-S249	2444543.50	1980 Nov?	R-17	-	69 against Iran				IRMQ-A				1007		
1981-S197	2444694.50	1981 Apr?	R-17	-					IRMQ-A				1007		
1981-S198	2444694.50	1981 Apr?	R-17	-					IRMQ-A				1007		
1981-S199	2444694.50	1981 Apr?	R-17	-					IRMQ-A				1007		
1981-S200	2444694.50	1981 Apr?	R-17	-					IRMQ-A				1007		
1981-S201	2444694.50	1981 Apr?	R-17	-					IRMQ-A				1007		
1981-S202	2444756.50	1981 Jun?	R-17	-					IRMQ-A				1007		
1981-S203	2444756.50	1981 Jun?	R-17	-					IRMQ-A				1007		
1981-S204	2444756.50	1981 Jun?	R-17	-					IRMQ-A				1007		
1981-S205	2444908.50	1981 Nov?	R-17	-					IRMQ-A				1007		
1981-S206	2444908.50	1981 Nov?	R-17	-					IRMQ-A				1007		
1981-S207	2444938.50	1981 Dec?	R-17	-					IRMQ-A				1007		
1981-S208	2445069.50	1981 Dec?	R-17	-					IRMQ-A				1007		
1982-S226	2445069.50	1982 May?	R-17	-					IRMQ-A				1007		
1982-S228	2445069.50	1982 May?	R-17	-					IRMQ-A				1007		
1982-S229	2445150.50	1982 Jul?	R-17	-					IRMQ-A				1007		
1982-S230	2445150.50	1982 Jul?	R-17	-					IRMQ-A				1007		
1982-S231	2445150.50	1982 Jul?	R-17	-					IRMQ-A				1007		
1982-S232	2445150.50	1982 Jul?	R-17	-					IRMQ-A				1007		
1982-S233	2445150.50	1982 Jul?	R-17	-					IRMQ-A				1007		
1982-S234	2445150.50	1982 Jul?	R-17	-					IRMQ-A				1007		
1982-S235	2445150.50	1982 Jul?	R-17	-					IRMQ-A				1007		
1982-S236	2445150.50	1982 Jul?	R-17	-					IRMQ-A				1007		
1982-S237	2445150.50	1982 Sep?	R-17	-					IRMQ-A				1007		
1982-S238	2445150.50	1982 Sep?	R-17	-					IRMQ-A				1007		
1982-S239	2445150.50	1982 Sep?	R-17	-					IRMQ-A				1007		
1982-S240	2445150.50	1982 Sep?	R-17	-					IRMQ-A				1007		
1982-S241	2445212.50	1982 Sep?	R-17	-					IRMQ-A				1007		
1982-S242	2445212.50	1982 Sep?	R-17	-					IRMQ-A				1007		
1982-S243	2445212.50	1982 Sep?	R-17	-					IRMQ-A				1007		
1982-S244	2445212.50	1982 Sep?	R-17	-					IRMQ-A				1007		
1982-S245	2445212.50	1982 Sep?	R-17	-					IRMQ-A				1007		
1982-S246	2445212.50	1982 Sep?	R-17	-					IRMQ-A				1007		
1982-S247	2445212.50	1982 Sep?	R-17	-					IRMQ-A				1007		
1982-S248	2445212.50	1982 Sep?	R-17	-					IRMQ-A				1007		
1982-S249	2445303.50	1982 Dec?	R-17	-					IRMQ-A				1007		
1982-S250	2445303.50	1982 Dec?	R-17	-					IRMQ-A				1007		
1983-S263	2445334.50	1983?	R-17VTD	-					Aerofon				867		
1983-S266	2445334.50	1983?	R-17VTD	-					Aerofon				867		
1983-S270	2445365.50	1983 Feb?	R-17	-					IRMQ-A				1007		
1983-S271	2445365.50	1983 Feb?	R-17	-					IRMQ-A				1007		
1983-S272	2445365.50	1983 Feb?	R-17	-					IRMQ-A				1007		
1983-S273	2445365.50	1983 Feb?	R-17	-					IRMQ-A				1007		
1983-S274	2445454.50	1983 May?	R-17	-					IRMQ-A				1007		
1983-S275	2445454.50	1983 May?	R-17	-					IRMQ-A				1007		
1983-S276	2445454.50	1983 May?	R-17	-					IRMQ-A				1007		
1983-S277	2445454.50	1983 May?	R-17	-					IRMQ-A				1007		
1983-S278	2445454.50	1983 May?	R-17	-					IRMQ-A				1007		
1983-S279	2445454.50	1983 May?	R-17	-					IRMQ-A				1007		
1983-S280	2445454.50	1983 May?	R-17	-					IRMQ-A				1007		
1983-S281	2445454.50	1983 May?	R-17	-					IRMQ-A				1007		
1983-S282	2445454.50	1983 Aug?	R-17	-					IRMQ-A				1007		
1983-S283	2445607.50	1983 Oct?	R-17	-					IRMQ-A				1007		
1983-S284	2445607.50	1983 Oct?	R-17	-					IRMQ-A				1007		
1983-S285	2445607.50	1983 Oct?	R-17	-					IRMQ-A				1007		
1983-S286	2445607.50	1983 Oct?	R-17	-					IRMQ-A				1007		
1983-S287	2445638.50	1983 Nov?	R-17	-					IRMQ-A				1007		
1983-S288	2445638.50	1983 Nov?	R-17	-					IRMQ-A				1007		
1983-S289	2445638.50	1983 Nov?	R-17	-					IRMQ-A				1007		



Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Launch_Mission	FlightCode	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee_Km	Range_Km	Dest
1985-S157	2446124.50	1985 Mar	Shahab 1	-	-	-	-	-	-	KERM	-	-	-	100?	-	-
1985-S158	2446124.50	1985 Mar	Shahab 1	-	-	-	-	-	-	KERM	-	-	-	100?	-	-
1985-S159	2446124.50	1985 Mar	Shahab 1	-	-	-	-	-	-	KERM	-	-	-	100?	-	-
1985-S160	2446124.50	1985 Mar	Shahab 1	-	-	-	-	-	-	KERM	-	-	-	100?	-	-
1985-S161	2446155.50	1985 Apr?	R-17	-	-	-	-	-	-	IRMQ-A	-	-	-	100?	-	-
1985-S162	2446185.50	1985 May?	R-17	-	-	-	-	-	-	IRMQ-A	-	-	-	100?	-	-
1985-S163	2446185.50	1985 May?	R-17	-	-	-	-	-	-	IRMQ-A	-	-	-	100?	-	-
1985-S164	2446185.50	1985 May?	R-17	-	-	-	-	-	-	IRMQ-A	-	-	-	100?	-	-
1985-S165	2446185.50	1985 May?	R-17	-	-	-	-	-	-	IRMQ-A	-	-	-	100?	-	-
1985-S166	2446185.50	1985 May?	R-17	-	-	-	-	-	-	IRMQ-A	-	-	-	100?	-	-
1985-S167	2446277.50	1985 Aug?	R-17	-	-	-	-	-	-	IRMQ-A	-	-	-	100?	-	-
1986-S136	2446430.50	1986	R-17VTD	-	-	-	-	-	-	GRSP-4	-	-	-	86?	-	-
1986-S138	2446489.50	1986 Mar?	R-17VTD	-	-	-	-	-	-	GRSP-4	-	-	-	86?	-	-
1986-S123	2446535.50	1986 Apr 15	R-17	-	-	-	-	-	-	TRIP	-	-	-	100?	-	-
1986-S124	2446535.50	1986 Apr 15	R-17	-	-	-	-	-	-	TRIP	-	-	-	100?	-	-
1986-S194	2446550.50	1986 May	Hwasong 5	-	-	-	-	-	-	TUGH	-	-	-	86?	-	-
1987-S190	2446795.50	1987 Jan?	R-17	-	-	-	-	-	-	IRMQ-A	-	-	-	100?	-	-
1987-S191	2446837.50	1987 Feb 11	R-17	-	-	-	-	-	-	IRMQ-A	-	-	-	100?	-	-
1987-S192	2446864.50	1987 Mar?	R-17	-	-	-	-	-	-	IRMQ-A	-	-	-	100?	-	-
1987-S193	2446906.50	1987 Apr 21	R-17	-	-	-	-	-	-	IRMQ-A	-	-	-	100?	-	-
1987-S194	2446913.50	1987 Apr 28	R-17	-	-	-	-	-	-	IRMQ-A	-	-	-	100?	-	-
1987-S195	2447010.50	1987 Aug 3	R-17	-	-	-	-	-	-	IRMQ-A	-	-	-	100?	-	-
1987-S196	2447157.50	1987 Dec 28	Al Hussein	-	-	-	-	-	-	IRMQ-A	-	-	-	100?	-	-
1988-S149	2447220.50	1988 Feb 29	Al Hussein	-	-	-	-	-	-	IRMQ-A	-	-	-	100?	-	-
1988-S150	2447220.50	1988 Feb 29	Al Hussein	-	-	-	-	-	-	IRMQ-A	-	-	-	100?	-	-
1988-S151	2447220.50	1988 Feb 29	Al Hussein	-	-	-	-	-	-	IRMQ-A	-	-	-	100?	-	-
1988-S152	2447220.50	1988 Feb 29	Al Hussein	-	-	-	-	-	-	IRMQ-A	-	-	-	100?	-	-
1988-S153	2447221.50	1988 Mar 1	Al Hussein	-	-	-	-	-	-	AMR	-	-	-	100?	-	-
1988-S154	2447221.50	1988 Mar 1	Al Hussein	-	-	-	-	-	-	AMR	-	-	-	100?	-	-
1988-S155	2447221.50	1988 Mar 1	Al Hussein	-	-	-	-	-	-	AMR	-	-	-	100?	-	-
1988-S156	2447276.50	1988 Apr 25	Al Abbas	-	-	-	-	-	-	AMR	-	-	-	100?	-	-
1988-S157	2447339.50	1988 Jun 27	Al Abbas	-	-	-	-	-	-	AMR	-	-	-	100?	-	-
1988-S158	2447340.50	1988 Jun 28	Al Abbas	-	-	-	-	-	-	AMR	-	-	-	100?	-	-
1988-S159	2447341.50	1988 Jun 29	Al Abbas	-	-	-	-	-	-	AMR	-	-	-	100?	-	-
1989-S116	2447569.50	1989 Feb 12	Al Abbas	-	-	-	-	-	-	AMR	-	-	-	100?	-	-
1989-S119	2447569.50	1989 Feb 12	Al Abbas	-	-	-	-	-	-	AMR	-	-	-	100?	-	-
1989-S121	2447734.50	1989 Jul 27	Al Hussein	-	-	-	-	-	-	AMR	-	-	-	100?	-	-
1989-S120	2447769.50	1989 Aug 21	Al Abbas	-	-	-	-	-	-	AMR	-	-	-	100?	-	-
1989-S123	2447769.50	1989 Sep	R-17VTD	-	-	-	-	-	-	GRSP-4	-	-	-	86?	-	-
1990-S176	2447693.50	1990 Jan 2	Short Al Hussein	-	-	-	-	-	-	IRMQ-A	-	-	-	100?	-	-
1990-S179	2447693.50	1990 Jan 2	Short Al Hussein	-	-	-	-	-	-	IRMQ-A	-	-	-	100?	-	-
1990-S180	2447693.50	1990 Jan 2	Short Al Hussein	-	-	-	-	-	-	IRMQ-A	-	-	-	100?	-	-
1990-S181	2447693.50	1990 Jan 2	Short Al Hussein	-	-	-	-	-	-	IRMQ-A	-	-	-	100?	-	-
1990-S182	2447693.50	1990 Apr 8	Al Hussein	-	-	-	-	-	-	IRMQ-A	-	-	-	100?	-	-
1990-S183	2447693.50	1990 Apr 8	Short Al Hussein	-	-	-	-	-	-	IRMQ-A	-	-	-	100?	-	-
1990-S184	2447693.50	1990 Apr 8	Al Hussein	-	-	-	-	-	-	IRMQ-A	-	-	-	100?	-	-
1990-S185	2448251.50	1990 Dec 26	R-17	-	-	-	-	-	-	TUGH	-	-	-	86?	-	-
1990-S186	2448251.50	1990 Dec 28	Al Abbas	-	-	-	-	-	-	TRIP	-	-	-	100?	-	-
1990-S187	2448251.50	1990 Dec 28	Al Hussein	-	-	-	-	-	-	IRMQ-A	-	-	-	100?	-	-
1990-S188	2448251.50	1990 Dec 28	Al Hussein	-	-	-	-	-	-	IRMQ-A	-	-	-	100?	-	-
1990-S189	2448251.50	1990 Dec 28	Al Hussein	-	-	-	-	-	-	IRMQ-A	-	-	-	100?	-	-
1991-S17	2448272.50	1991 Jan 17	Al Hussein	-	-	-	-	-	-	IRMQ-A	-	-	-	100?	-	-
1991-S18	2448272.50	1991 Jan 19	Al Hussein	-	-	-	-	-	-	IRMQ-A	-	-	-	100?	-	-
1991-S19	2448272.50	1991 Jan 19	Al Hussein	-	-	-	-	-	-	IRMQ-A	-	-	-	100?	-	-
1991-S20	2448272.50	1991 Jan 19	Al Hussein	-	-	-	-	-	-	IRMQ-A	-	-	-	100?	-	-
1991-S21	2448272.50	1991 Jan 19	Al Hussein	-	-	-	-	-	-	IRMQ-A	-	-	-	100?	-	-
1991-S22	2448272.50	1991 Jan 20 1943	Al Hussein	-	-	-	-	-	-	IRMQ-A	-	-	-	100?	-	-
1991-S23	2448272.50	1991 Jan 20 1943	Al Hussein	-	-	-	-	-	-	IRMQ-A	-	-	-	100?	-	-
1991-S24	2448272.50	1991 Jan 21 0929	Al Hussein	-	-	-	-	-	-	IRMQ-A	-	-	-	100?	-	-
1991-S25	2448272.50	1991 Jan 21 0942	Al Hussein	-	-	-	-	-	-	IRMQ-A	-	-	-	100?	-	-
1991-S26	2448272.50	1991 Jan 21 0942	Al Hussein	-	-	-	-	-	-	IRMQ-A	-	-	-	100?	-	-
1991-S27	2448272.50	1991 Jan 21 0942	Al Hussein	-	-	-	-	-	-	IRMQ-A	-	-	-	100?	-	-
1991-S28	2448272.50	1991 Jan 21 0942	Al Hussein	-	-	-	-	-	-	IRMQ-A	-	-	-	100?	-	-
1991-S29	2448272.50	1991 Jan 21 1918	Al Hussein	-	-	-	-	-	-	IRMQ-A	-	-	-	100?	-	-
1991-S30	2448272.50	1991 Jan 22 0041	Al Hussein	-	-	-	-	-	-	IRMQ-A	-	-	-	100?	-	-
1991-S31	2448272.50	1991 Jan 22 0041	Al Hussein	-	-	-	-	-	-	IRMQ-A	-	-	-	100?	-	-
1991-S32	2448272.50	1991 Jan 22 0041	Al Hussein	-	-	-	-	-	-	IRMQ-A	-	-	-	100?	-	-
1991-S33	2448272.50	1991 Jan 22 0041	Al Hussein	-	-	-	-	-	-	IRMQ-A	-	-	-	100?	-	-
1991-S34	2448272.50	1991 Jan 22 0410	Al Hussein	-	-	-	-	-	-	IRMQ-A	-	-	-	100?	-	-
1991-S35	2448272.50	1991 Jan 22 0410	Al Hussein	-	-	-	-	-	-	IRMQ-A	-	-	-	100?	-	-
1991-S36	2448272.50	1991 Jan 22 0410	Al Hussein	-	-	-	-	-	-	IRMQ-A	-	-	-	100?	-	-
1991-S37	2448272.50	1991 Jan 22 0410	Al Hussein	-	-	-	-	-	-	IRMQ-A	-	-	-	100?	-	-
1991-S38	2448272.50	1991 Jan 23 1954	Al Hussein	-	-	-	-	-	-	IRMQ-A	-	-	-	100?	-	-
1991-S39	2448280.33	1991 Jan 23 1954	Al Hussein	-	-	-	-	-	-	IRMQ-A	-	-	-	100?	-	-
1991-S40	2448280.33	1991 Jan 23 1954	Al Hussein	-	-	-	-	-	-	IRMQ-A	-	-	-	100?	-	-
1991-S41	2448280.33	1991 Jan 23 1954	Al Hussein	-	-	-	-	-	-	IRMQ-A	-	-	-	100?	-	-
1991-S42	2448280.33	1991 Jan 23 1954	Al Hussein	-	-	-	-	-	-	IRMQ-A	-	-	-	100?	-	-
1991-S43	2448281.50	1991 Jan 25 1923	Al Hussein	-	-	-	-	-	-	IRMQ-A	-	-	-	100?	-	-
1991-S44	2448282.31	1991 Jan 25 1923	Al Hussein	-	-	-	-	-	-	IRMQ-A	-	-	-	100?	-	-
1991-S45	2448282.31	1991 Jan 25 1923	Al Hussein	-	-	-	-	-	-	IRMQ-A	-	-	-	100?	-	-
1991-S46	2448282.50	1991 Jan 26 1946	Al Hussein	-	-	-	-	-	-	IRMQ-A	-	-	-	100?	-	-
1991-S47	2448282.50	1991 Jan 26 1946	Al Hussein	-	-	-	-	-	-	IRMQ-A	-	-	-	100?	-	-
1991-S48	2448283.32	1991 Jan 26 1946	Al Hussein	-	-	-	-	-	-	IRMQ-A	-	-	-	100?	-	-
1991-S49	2448283.32	1991 Jan 26 1946	Al Hussein	-	-	-	-	-	-	IRMQ-A	-	-	-	100?	-	-
1991-S50	2448285.25	1991 Jan 28 1755	Al Hussein	-	-	-	-	-	-	IRMQ-A	-	-	-	100?	-	-
1991-S53	2448287.50	1991 Feb	Al Hussein	-	-	-	-	-	-	IRMQ-A	-	-	-	100?	-	-



Launch Mission

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Launch_Mission	FlightCode	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee_Km	Range_Km	Dest
2012-S63	2456225.50	2012 Oct 26?	Scud	-	FTI-01 PAC-3 Target	FMA 18	-	-	MLP	KMR	BOA-HE	-	-	150?	-	-
2012-S78	2456271.10	2012 Dec 10	Scud	-	-	-	-	-	-	ALMASR	-	-	-	80?	-	-
2012-S79	2456271.50	2012 Dec 10	Scud	-	-	-	-	-	-	ALMASR	-	-	-	80?	-	-
2012-S84	2456271.50	2012 Dec 10?	Scud	-	-	-	-	-	-	ALMASR	-	-	-	80?	-	-
2012-S85	2456271.50	2012 Dec 10?	Scud	-	-	-	-	-	-	ALMASR	-	-	-	80?	-	-
2012-S86	2456271.50	2012 Dec 10?	Scud	-	-	-	-	-	-	ALMASR	-	-	-	80?	-	-
2012-S87	2456271.50	2012 Dec 10?	Scud	-	-	-	-	-	-	ALMASR	-	-	-	80?	-	-
2012-S80	2456281.50	2012 Dec 20	Scud	-	-	-	-	-	-	ALMASR	-	-	-	80?	-	-
2012-S81	2456281.50	2012 Dec 20	Scud	-	-	-	-	-	-	ALMASR	-	-	-	80?	-	-
2012-S82	2456281.50	2012 Dec 20	Scud	-	-	-	-	-	-	ALMASR	-	-	-	80?	-	-
2012-S83	2456297.50	2013 Jan 5	Scud	-	-	-	-	-	-	ALMASR?	-	-	-	100?	-	-
2013-S44	2456338.50	2013 Feb 15	Scud	?	Scud	-	-	-	-	ALMASR	-	-	-	80?	-	-
2013-S10	2456338.50	2013 Feb 15?	Scud	?	-	-	-	-	-	ALMASR	-	-	-	80?	-	-
2013-S11	2456339.50	2013 Feb 16?	Scud	?	-	-	-	-	-	ALMASR	-	-	-	80?	-	-
2013-S12	2456339.50	2013 Feb 16?	Scud	?	-	-	-	-	-	ALMASR	-	-	-	80?	-	-
2013-S13	2456340.50	2013 Feb 17?	Scud	?	-	-	-	-	-	ALMASR	-	-	-	80?	-	-
2013-S14	2456340.50	2013 Feb 17?	Scud	?	-	-	-	-	-	ALMASR	-	-	-	80?	-	-
2013-S15	2456341.50	2013 Feb 18?	Scud	?	-	-	-	-	-	ALMASR	-	-	-	80?	-	-
2013-S16	2456341.50	2013 Feb 19	Scud	?	-	-	-	-	-	ALMASR	-	-	-	80?	-	-
2013-S17	2456342.50	2013 Feb 22	Scud	?	-	-	-	-	-	ALMASR	-	-	-	80?	-	-
2013-S18	2456346.50	2013 Feb 22	Scud	?	-	-	-	-	-	SEK	SMF?	-	-	120	-	-
2013-S19	2456440.50	2013 Dec 14	Shahab 1	?	Kavoshgar Pzshubeth	Kavoshgar Type D	-	-	-	SEK	-	-	-	100?	-	-
2014-S88	2456698.50	2014 Feb 10	Qlam-1	?	-	-	-	-	-	KITT	-	-	-	80?	220	-
2014-S89	2456715.86	2014 Feb 27 0642	Hasong 5	?	-	-	-	-	-	KITT	-	-	-	80?	220	-
2014-S09	2456715.86	2014 Feb 27 0642?	Hasong 5	?	-	-	-	-	-	KITT	-	-	-	80?	220	-
2014-S10	2456715.86	2014 Feb 27 0642?	Hasong 5	?	-	-	-	-	-	KITT	-	-	-	80?	220	-
2014-S11	2456715.86	2014 Feb 27 0642?	Hasong 5	?	-	-	-	-	-	KITT	-	-	-	80?	220	-
2014-S12	2456719.39	2014 Mar 2 2119	Hasong 6	?	Scud C	-	-	-	-	WONSAN?	-	-	-	150?	500	-
2014-S13	2456719.39	2014 Mar 2 2119	Hasong 6	?	Scud C	-	-	-	-	WONSAN?	-	-	-	150?	500	-
2014-S35	2456637.33	2014 Jun 28 1950	Hasong 6	?	Scud C	-	-	-	-	WONSAN	LP2	-	-	150?	500	-
2014-S36	2456647.33	2014 Jun 28 1950	Hasong 6	?	Scud C	-	-	-	-	WONSAN	LP2	-	-	150?	500	-
2014-S46	2456647.29	2014 Jun 28 1950	Hasong 6	?	Scud C	-	-	-	-	HJUJ	-	-	-	150?	500	-
2014-S47	2456647.31	2014 Jun 28 1950	Hasong 6	?	Scud C	-	-	-	-	HJUJ	-	-	-	150?	500	-
2014-S38	2456651.18	2014 Jul 12 1620?	Hasong 6	?	Scud C	-	-	-	-	KAS	-	-	-	150?	500	-
2014-S39	2456651.18	2014 Jul 12 1620?	Hasong 6	?	Scud C	-	-	-	-	KAS	-	-	-	150?	500	-
2014-S86	2456666.03	2014 Jul 26 1240	Hasong 6	?	Scud C	-	-	-	-	HJUJ?	-	-	-	150?	500	S. of Japan
2015-H01	2457063.40	2015 Mar 1 2133	Hasong 6	?	Scud C	-	-	-	-	WAFU?	-	-	-	134	493	S. of Japan
2015-S52	2457063.40	2015 Mar 1 2141	Hasong 6	?	Scud C	-	-	-	-	WAFU?	-	-	-	134	493	S. of Japan
2015-S53	2457179.50	2015 Jun 5	Hasong 6	?	Scud C	-	-	-	-	SADAH	-	-	-	80?	-	KRG,Saudi
2015-S56	2457263.50	2015 Jun 20	Hasong 6	?	Scud C	-	-	-	-	SADAH	-	-	-	80?	-	KRG,Saudi
2015-S46	2457260.50	2015 Aug 20	Hasong 6	?	Scud C or Qahir-1?	-	-	-	-	SADAH	-	-	-	80?	-	Alshayll
2016-S12	2457466.50	2016 Mar 20	Shahab 1	?	-	-	-	-	-	SADAH	-	-	-	80?	-	Jizan
2016-S13	2457466.50	2016 Mar 20	Shahab 1	?	-	-	-	-	-	SADAH	-	-	-	80?	-	-
2016-S14	2457466.50	2016 Mar 20	Shahab 1	?	-	-	-	-	-	SADAH	-	-	-	80?	-	-
2016-S15	2457466.50	2016 Mar 20	Shahab 1	?	-	-	-	-	-	SADAH	-	-	-	80?	-	-
2016-S16	2457466.50	2016 Mar 20	Shahab 1	?	-	-	-	-	-	SADAH	-	-	-	80?	-	-
2016-S17	2457466.50	2016 Mar 20	Shahab 1	?	-	-	-	-	-	SADAH	-	-	-	80?	-	-
2016-S18	2457466.50	2016 Mar 20	Shahab 1	?	-	-	-	-	-	SADAH	-	-	-	80?	-	-
2016-S19	2457466.50	2016 Mar 20	Shahab 1	?	-	-	-	-	-	SADAH	-	-	-	80?	-	-
2016-S20	2457466.50	2016 Mar 20	Shahab 1	?	-	-	-	-	-	SADAH	-	-	-	80?	-	-
2016-S21	2457466.50	2016 Mar 20	Shahab 1	?	-	-	-	-	-	SADAH	-	-	-	80?	-	-
2016-S22	2457466.50	2016 Mar 20	Shahab 1	?	-	-	-	-	-	SADAH	-	-	-	80?	-	-
2016-S23	2457466.50	2016 Mar 20	Shahab 1	?	-	-	-	-	-	SADAH	-	-	-	80?	-	-
2016-S24	2457466.50	2016 Mar 20	Shahab 1	?	-	-	-	-	-	SADAH	-	-	-	80?	-	-
2016-S25	2457466.50	2016 Mar 20	Shahab 1	?	-	-	-	-	-	SADAH	-	-	-	80?	-	-
2016-S26	2457466.50	2016 Mar 20	Shahab 1	?	-	-	-	-	-	SADAH	-	-	-	80?	-	-
2016-S27	2457466.50	2016 Mar 20	Shahab 1	?	-	-	-	-	-	SADAH	-	-	-	80?	-	-
2016-S28	2457466.50	2016 Mar 20	Shahab 1	?	-	-	-	-	-	SADAH	-	-	-	80?	-	-
2016-S29	2457466.50	2016 Mar 20	Shahab 1	?	-	-	-	-	-	SADAH	-	-	-	80?	-	-
2016-S30	2457466.50	2016 Mar 20	Shahab 1	?	-	-	-	-	-	SADAH	-	-	-	80?	-	-
2016-S31	2457466.50	2016 Mar 20	Shahab 1	?	-	-	-	-	-	SADAH	-	-	-	80?	-	-
2016-S32	2457466.50	2016 Mar 20	Shahab 1	?	-	-	-	-	-	SADAH	-	-	-	80?	-	-
2016-S33	2457466.50	2016 Mar 20	Shahab 1	?	-	-	-	-	-	SADAH	-	-	-	80?	-	-
2016-S34	2457466.50	2016 Mar 20	Shahab 1	?	-	-	-	-	-	SADAH	-	-	-	80?	-	-
2016-S35	2457466.50	2016 Mar 20	Shahab 1	?	-	-	-	-	-	SADAH	-	-	-	80?	-	-
2016-S36	2457466.50	2016 Mar 20	Shahab 1	?	-	-	-	-	-	SADAH	-	-	-	80?	-	-
2016-S37	2457466.50	2016 Mar 20	Shahab 1	?	-	-	-	-	-	SADAH	-	-	-	80?	-	-
2016-S38	2457466.50	2016 Mar 20	Shahab 1	?	-	-	-	-	-	SADAH	-	-	-	80?	-	-
2016-S39	2457466.50	2016 Mar 20	Shahab 1	?	-	-	-	-	-	SADAH	-	-	-	80?	-	-
2016-S40	2457466.50	2016 Mar 20	Shahab 1	?	-	-	-	-	-	SADAH	-	-	-	80?	-	-
2016-S41	2457466.50	2016 Mar 20	Shahab 1	?	-	-	-	-	-	SADAH	-	-	-	80?	-	-
2016-S42	2457466.50	2016 Mar 20	Shahab 1	?	-	-	-	-	-	SADAH	-	-	-	80?	-	-
2016-S43	2457466.50	2016 Mar 20	Shahab 1	?	-	-	-	-	-	SADAH	-	-	-	80?	-	-
2016-S44	2457466.50	2016 Mar 20	Shahab 1	?	-	-	-	-	-	SADAH	-	-	-	80?	-	-
2016-S45	2457466.50	2016 Mar 20	Shahab 1	?	-	-	-	-	-	SADAH	-	-	-	80?	-	-
2016-S46	2457466.50	2016 Mar 20	Shahab 1	?	-	-	-	-	-	SADAH	-	-	-	80?	-	-
2016-S47	2457466.50	2016 Mar 20	Shahab 1	?	-	-	-	-	-	SADAH	-	-	-	80?	-	-
2016-S48	2457466.50	2016 Mar 20	Shahab 1	?	-	-	-	-	-	SADAH	-	-	-	80?	-	-
2016-S49	2457466.50	2016 Mar 20	Shahab 1	?	-	-	-	-	-	SADAH	-	-	-	80?	-	-
2016-S50	2457466.50	2016 Mar 20	Shahab 1	?	-	-	-	-	-	SADAH	-	-	-	80?	-	-
2016-S51	2457466.50	2016 Mar 20	Shahab 1	?	-	-	-	-	-	SADAH	-	-	-	80?	-	-
2016-S52	2457466.50	2016 Mar 20	Shahab 1	?	-	-	-	-	-	SADAH	-	-	-	80?	-	-
2016-S53	2457466.50	2016 Mar 20	Shahab 1	?	-	-	-	-	-	SADAH	-	-	-	80?	-	-
2016-S54	2457466.50	2016 Mar 20	Shahab 1	?	-	-	-	-	-	SADAH	-	-	-	80?	-	-
2016-S55	2457466.50	2016 Mar 20	Shahab 1	?	-	-	-	-	-	SADAH	-	-	-	80?	-	-
2016-S56	2457466.50	2016 Mar 20	Shahab 1	?	-	-	-	-	-	SADAH	-	-	-	80?	-	-
2016-S57	2457466.50	2016 Mar 20	Shahab 1	?	-	-	-	-	-	SADAH	-	-	-	80?	-	-
2016-S58	2457466.50	2016 Mar 20	Shahab 1	?	-	-	-	-	-	SADAH	-	-	-	80?	-	-
2016-S59	2457466.50	2016 Mar 20	Shahab 1	?	-	-	-	-	-	SADAH	-	-	-	80?	-	-
2016-S60	2457466.50	2016 Mar 20	Shahab 1	?	-	-	-	-	-	SADAH	-	-	-	80?	-	-
2016-S61	2457466.50	2016 Mar 20	Shahab 1	?	-	-	-	-	-	SADAH	-	-	-	80?	-	-
2016-S62	2457466.50	2016 Mar 20	Shahab 1	?	-	-	-	-	-	SADAH	-	-	-	80?	-	-
2016-S63	2457466.50	2016 Mar 20	Shahab 1	?	-	-	-	-	-	SADAH	-	-	-	80?	-	-
2016-S64	2457466.50	2016 Mar 20	Shahab 1	?	-	-	-	-	-	SADAH	-	-	-	80?	-	-
2016-S65	2457466.50	2016 Mar 20	Shahab 1	?	-	-	-	-	-	SADAH	-	-	-	80?	-	-
2016-S66	2457466.50	2016 Mar 20	Shahab 1	?	-	-	-	-	-	SADAH	-	-	-	80?	-	-
2016-S67	2457466.50	2016 Mar 20	Shahab 1	?	-	-	-									

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Launch_Mission	FlightCode	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee km	Range km	Dest
2020-S01	2458856.46	2020 Jan 7 2301?	Qian-1	-	-	-	-	-	-	TABRIZ?	-	-	-	200?	-	Erbil
2020-S02	2458856.46	2020 Jan 7 2301?	Qian-1	-	-	-	-	-	-	TABRIZ?	-	-	-	200?	-	AynalAsad
2020-S03	2458856.46	2020 Jan 7 2301?	Qian-1	-	-	-	-	-	-	TABRIZ?	-	-	-	200?	-	AynalAsad
2020-S18	2458900.40	2020 Feb 20 2130?	Zulficar	YE	-	-	-	-	-	SADAA?	-	-	-	150?	1150?	Yanbu
2020-S19	2458937.35	2020 Mar 28 2020?	Zulficar	YE	-	-	-	-	-	SADAA?	-	-	-	150?	1060?	Riyadh
2021-S19	2459262.50	2021 Feb 17	Zulficar	YE	-	-	-	-	-	SADAA?	-	-	-	150?	1060?	Riyadh
2021-S57	2459462.50	2021 Sep 5	Zulficar	YE	-	-	-	-	-	SADAA?	-	-	-	150?	1060?	Ras AlTanura
2022-S05	2459596.50	2022 Jan 17	Zulficar	YE	-	-	-	-	-	ALJAMF?	-	-	-	150?	1000?	Abu Dhabi
2022-S06	2459596.50	2022 Jan 17	Zulficar	YE	-	-	-	-	-	ALJAMF?	-	-	-	150?	1000?	Abu Dhabi
2022-S07	2459596.50	2022 Jan 17	Zulficar	YE	-	-	-	-	-	ALJAMF?	-	-	-	150?	1000?	Abu Dhabi
2022-S08	2459603.51	2022 Jan 24 0015?	Zulficar	YE	-	-	-	-	-	ALJAMF?	-	-	-	150?	1000?	Abu Dhabi
2022-S09	2459603.51	2022 Jan 24 0015?	Zulficar	YE	-	-	-	-	-	ALJAMF?	-	-	-	150?	1000?	Abu Dhabi
2022-S10	2459603.51	2022 Jan 24 0015?	Zulficar	YE	-	-	-	-	-	ALJAMF?	-	-	-	150?	1000?	Abu Dhabi
2022-S111	2459887.02	2022 Nov 3 1235	Hwasong 6	?	-	-	-	-	-	RUKSHI	-	-	-	150	500	-
2022-S112	2459887.03	2022 Nov 3 1239	Hwasong 6	?	-	-	-	-	-	RUKSHI	-	-	-	150	500	-
2022-S113	2459887.03	2022 Nov 3 1242	Hwasong 6	?	-	-	-	-	-	RUKSHI	-	-	-	150	500	-







Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	DrbPay	Agency	Launch	Launch_Code	Group	Category	LTCite	Cite	Notes
1957-5227	2436072.50	1957 Aug 22	R-11	-	M686	0.000	UNRV	NS	NS	-	Test	Z10	-	-
1957-569	2436073.50	1957 Aug 23	R-11M	-	M1-26	0.000	UNRV	NS	NS	-	Test	Sladdqi	Z10	-
1957-5228	2436074.50	1957 Aug 23	R-11	-	M581	0.000	UNRV	NS	NS	-	Test	Z10	-	-
1957-5229	2436075.50	1957 Aug 23	R-11	-	M583	0.000	UNRV	NS	NS	-	Test	Z10	-	-
1957-5230	2436076.50	1957 Aug 26	R-11M	-	M1-28	0.000	UNRV	NS	NS	-	Test	Z10	-	-
1957-5231	2436077.50	1957 Aug 27	R-11M	-	M1-29	0.000	UNRV	NS	NS	-	Test	Z10	-	-
1957-5232	2436078.50	1957 Aug 28	R-11M	-	M1-20	0.000	UNRV	NS	NS	-	Test	Z10	-	-
1957-5233	2436080.50	1957 Aug 30	R-11M	-	M1-10	0.000	UNRV	NS	NS	-	Test	Z10	-	-
1957-5234	2436082.50	1957 Sep 1	R-11M	-	M1-27	0.000	UNRV	NS	NS	-	Test	Z10	-	-
1957-5105	2436083.50	1957 Sep 2	R-11M	-	M1-30	0.000	UNRV	NS	NS	-	Test	Sladdqi	Z10	-
1957-5269	2436106.50	1957 Sep 27	R-11	-	M689	0.000	UNRV	NS	NS	-	Test	Z10	-	-
1957-5270	2436108.50	1957 Sep 27	R-11	-	M681	0.000	UNRV	NS	NS	-	Test	Z10	-	-
1957-5271	2436117.50	1957 Oct 6	R-11	-	M6816	0.000	UNRV	NS	NS	-	Test	Z10	-	-
1957-5272	2436160.50	1957 Nov 18	R-11	-	M6812	0.000	UNRV	NS	NS	-	Test	Z10	-	-
1957-5273	2436162.50	1957 Nov 20	R-11	-	M6868	0.000	UNRV	NS	NS	-	Test	Z10	-	-
1957-5274	2436166.50	1957 Nov 26	R-11	-	M6814	0.000	UNRV	NS	NS	-	Test	Z10	-	-
1957-5275	2436169.50	1957 Nov 27	R-11	-	M6811	0.000	UNRV	NS	NS	-	Test	Z10	-	-
1957-5276	2436171.50	1957 Nov 29	R-11	-	M6817	0.000	UNRV	NS	NS	-	Test	Z10	-	-
1957-5277	2436183.50	1957 Dec 11	R-11	-	M6818	0.000	UNRV	NS	NS	-	Test	Z10	-	-
1957-5278	2436184.50	1957 Dec 12	R-11	-	M6813	0.000	UNRV	NS	NS	-	Test	Z10	-	-
1957-5279	2436186.50	1957 Dec 16	R-11	-	M2-2	0.000	UNRV	NS	NS	-	Test	Z10	-	-
1957-5280	2436188.50	1957 Dec 16	R-11	-	M2-28	0.000	UNRV	NS	NS	-	Test	Z10	-	-
1957-5281	2436200.50	1957 Dec 28	R-11	-	M3-28T	0.000	UNRV	NS	NS	-	Test	Z10	-	-
1957-5282	2436203.50	1957 Dec 31	R-11	-	M4-4T	0.000	UNRV	NS	NS	-	Test	Z10	-	-
1958-5311	2436230.50	1958 Mar 6	R-11	-	B1-19	0.000	UNRV	NS	NS	-	Test	Z10	-	-
1958-530	2436235.50	1958 Mar 31	R-LIFH	-	-	0.000	UNRV	NS	NS	-	Test	Delo	-	-
1958-512	2436346.50	1958 May 25	R-LIFH	-	-	0.000	UNRV	NS	NS	-	Test	Delo	-	-
1958-575	2436349.50	1958 May 26	R-LIFH	-	-	0.000	UNRV	NS	NS	-	Test	Delo	-	-
1958-5329	2436354.50	1958 May 31	R-11	-	B2-3	0.000	UNRV	NS	NS	-	Test	Z10	-	-
1958-5330	2436354.50	1958 May 31	R-11	-	B2-6T	0.000	UNRV	NS	NS	-	Test	Z10	-	-
1958-5334	2436354.50	1958 Jul 8	R-11	-	M2-12	0.000	UNRV	NS	NS	-	Test	Z10	-	-
1958-5356	2436416.50	1958 Jul 31	R-11	-	M2-21	0.000	UNRV	NS	NS	-	Test	Z10	-	-
1958-5359	2436416.50	1958 Aug 1	R-11	-	M2-22	0.000	UNRV	NS	NS	-	Test	Z10	-	-
1958-5360	2436421.50	1958 Aug 6	R-11	-	M2-22	0.000	UNRV	NS	NS	-	Test	Z10	-	-
1958-5353	2436447.50	1958 Sep 1	R-11	-	B2-23	0.000	UNRV	NS	NS	-	Test	Z10	-	-
1958-5354	2436452.50	1958 Sep 6	R-LIFH	-	-	0.000	UNRV	NS	NS	-	Test	Zapolskiy	-	-
1958-5354	2436454.50	1958 Sep 6	R-11	-	M2-9	0.000	UNRV	NS	NS	-	Test	Z10	-	-
1958-5216	2436454.50	1958 Sep 6	R-11	-	M2-24	0.000	UNRV	NS	NS	-	Test	Z10	-	-
1958-5355	2436464.50	1958 Sep 18	R-11	-	B2-6	0.000	UNRV	NS	NS	-	Test	Z10	-	-
1958-5355	2436464.50	1958 Sep 18	R-11	-	B2-6	0.000	UNRV	NS	NS	-	Test	Z10	-	-
1958-5355	2436464.50	1958 Sep 23	R-11	-	B2-2	0.000	UNRV	NS	NS	-	Test	Z10	-	-
1958-5356	2436469.50	1958 Sep 11	R-11	-	B2-4	0.000	UNRV	NS	NS	-	Test	Z10	-	-
1958-5313	2436476.50	1958 Sep 30	R-11	-	B2-11	0.000	UNRV	NS	NS	-	Test	Z10	-	-
1958-5313	2436481.08	1958 Oct 4 1400	R-11A	-	B2-11	0.000	UNRV	NS	NS	-	Test	Z10	-	-
1958-5368	2436484.50	1958 Oct 8	R-11M	-	B1-6T	0.000	UNRV	NS	NS	-	Test	Z10	-	-
1958-5368	2436484.50	1958 Oct 8	R-11M	-	B1-11	0.000	UNRV	NS	NS	-	Test	Z10	-	-
1958-5217	2436487.08	1958 Oct 10 1350	R-11A	-	B2-3	0.000	MUS	SS	F1AN/	-	Test	Z10	-	-
1958-5269	2436504.50	1958 Oct 30	R-11M	-	B2-9	0.000	UNRV	NS	NS	-	Test	Z10	-	-
1958-5270	2436507.50	1958 Oct 31	R-11M	-	B2-9T	0.000	UNRV	NS	NS	-	Test	Z10	-	-
1958-5239	2436513.50	1958 Nov 6	R-11A	-	1-3T	0.000	AI	SS	AN/	-	Test	Z10	-	-
1958-5252	2436513.50	1958 Nov 6	R-11A	-	1-3T	0.000	AI	SS	AN/	-	Test	Z10	-	-
1958-5281	2436526.50	1958 Nov 19	R-11A	-	1-5T	0.000	AI	SS	AN/	-	Test	Z10	-	-
1958-5274	2436528.50	1958 Nov 21	R-11M	-	B3-11	0.000	UNRV	NS	NS	-	Test	Z10	-	-
1958-5375	2436535.50	1958 Nov 28	R-11M	-	B3-3	0.000	UNRV	NS	NS	-	Test	Z10	-	-
1958-5293	2436539.50	1958 Dec 2	R-11M	-	B3-6T	0.000	UNRV	NS	NS	-	Test	Z10	-	-
1958-5293	2436561.04	1958 Dec 2 1300	R-11A	-	1-9	0.000	MUS	SS	AN/	-	Test	Z10	-	-
1958-5297	2436563.05	1958 Dec 25 1310	R-11A	-	B1-6T	0.000	UNRV	NS	NS	-	Test	Z10	-	-
1958-5378	2436564.50	1958 Dec 27	R-11	-	B1-8T	0.000	UNRV	NS	NS	-	Test	Z10	-	-
1958-5379	2436567.50	1958 Dec 30	R-11M	-	B4-10	0.000	UNRV	NS	NS	-	Test	Z10	-	-
1958-5380	2436567.50	1958 Dec 30	R-11M	-	B4-2T	0.000	UNRV	NS	NS	-	Test	Z10	-	-
1958-5293	2436580.50	1959 Jan 12	R-11	-	B1-18T	0.000	UNRV	NS	NS	-	Test	Z10	-	-
1958-5294	2436581.50	1959 Jan 13	R-11	-	B1-2	0.000	UNRV	NS	NS	-	Test	Z10	-	-
1958-5295	2436581.50	1959 Jan 13	R-11	-	B1-15	0.000	UNRV	NS	NS	-	Test	Z10	-	-
1958-5298	2436587.50	1959 Jan 29	R-11M	-	B689T	0.000	UNRV	NS	NS	-	Test	Z10	-	-
1958-5299	2436597.50	1959 Jan 29	R-11	-	M3-17	0.000	UNRV	NS	NS	-	Test	Z10	-	-
1958-5300	2436598.50	1959 Jan 30	R-11M	-	B681	0.000	UNRV	NS	NS	-	Test	Z10	-	-
1958-5303	2436631.50	1959 Mar 4	R-11	-	M3-19	0.000	UNRV	NS	NS	-	Test	Z10	-	-
1958-5305	2436639.50	1959 Mar 12	R-11	-	M2-23	0.000	UNRV	NS	NS	-	Test	Z10	-	-
1958-5309	2436640.50	1959 Mar 13	R-11	-	11-15T	0.000	UNRV	NS	NS	-	Test	Z10	-	-
1958-5310	2436657.50	1959 Mar 30	R-11M	-	11-6	0.000	UNRV	NS	NS	-	Test	Z10	-	-
1958-5311	2436657.50	1959 Mar 30	R-11M	-	12-6	0.000	UNRV	NS	NS	-	Test	Z10	-	-
1958-5312	2436678.50	1959 Apr 20	R-11M	-	12-15T	0.000	UNRV	NS	NS	-	Test	Z10	-	-
1958-5417	2436681.50	1959 Apr 23	R-11M	-	B2-16T	0.000	UNRV	NS	NS	-	Test	Z10	-	-
1958-5418	2436682.50	1959 Apr 24	R-11M	-	B2-12T	0.000	UNRV	NS	NS	-	Test	Z10	-	-
1958-5419	2436686.50	1959 Apr 28	R-11	-	B2-6	0.000	UNRV	NS	NS	-	Test	Z10	-	-
1958-5415	2436686.50	1959 Apr 28	R-11M	-	12-3T	0.000	UNRV	NS	NS	-	Test	Z10	-	-
1958-5321	2436687.50	1959 Apr 29	R-11M	-	B2-20	0.000	UNRV	NS	NS	-	Test	Z10	-	-
1958-5416	2436703.50	1959 Apr 28	R-11	-	B2-14	0.000	UNRV	NS	NS	-	Test	Z10	-	-
1958-5322	2436703.50	1959 May 15	R-11	-	B2-1	0.000	UNRV	NS	NS	-	Test	Z10	-	-
1958-5323	2436707.50	1959 May 19	R-11M	-	B2-20	0.000	UNRV	NS	NS	-	Test	Z10	-	-
1958-5330	2436725.50	1959 Jun 6	R-11M	-	11-5T	0.000	UNRV	NS	NS	-	Test	Z10	-	-
1958-5331	2436729.50	1959 Jun 10	R-11M	-	13-2TS	0.000	UNRV	NS	NS	-	Test	Z10	-	-

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	OrbPay	Agency	Launch	Launch_Code	Group	Category	LTCite	Cite	Notes	
1959-5352	2436732.50	1959 Jun 13	R-LIM	-	I1-5TS	0.000	UNRV	NS	NS	-	Test	Z10	-	-	
1959-5341	2436736.50	1959 Jun 17	R-LIM	-	I3-4TS	0.000	UNRV	NS	NS	-	Test	Z10	-	-	
1959-5342	2436737.50	1959 Jun 18	R-LIM	-	I3-3TS	0.000	UNRV	NS	NS	-	Test	Z10	-	-	
1959-5343	2436739.50	1959 Jun 20	R-LIM	-	I1-14	0.000	UNRV	NS	NS	-	Test	Z10	-	-	
1959-5344	2436752.50	1959 Jul 3	R-LIM	-	I1-23TS	0.000	UNRV	MF	MF	-	Test	Z10	-	-	
1959-5345	2436763.50	1959 Jul 14	R-LIM	-	I4-7T	0.000	UNRV	NS	NS	-	Test	Z10	-	-	
1959-5346	2436764.50	1959 Jul 15	R-LIM	-	I1-18TS	0.000	UNRV	NS	NS	-	Test	Z10	-	-	
1959-5347	2436769.50	1959 Jul 20	R-LIM	-	I1-20TS	0.000	UNRV	NS	NS	-	Test	Z10	-	-	
1959-5316	2436770.58	1959 Jul 21 0200	R-LIA	-	-	0.000	MVS	SS	F.LIM/Mandelstam	Ionos/Aeron/Solar X	Ionos/Aeron/Solar X	MDCRF	AAS89-191/Z10	-	
1959-5319	2436771.08	1959 Jul 21 1400	R-LIA	-	-	0.000	MVS	SS	F.LIM/Mandelstam	Ionos/Aeron/Solar X	Ionos/Aeron/Solar X	MDCRF	SR3.822/Z10	-	
1959-5357	2436773.50	1959 Jul 24	R-LIM	-	I1-24TS	0.000	UNRV	NS	NS	-	Test	Z10	-	-	
1959-5358	2436773.50	1959 Jul 24	R-LIM	-	I4-1	0.000	UNRV	NS	NS	-	Test	Z10	-	-	
1959-5359	2436776.50	1959 Jul 27	R-LIM	-	I10-10T	0.000	UNRV	NS	NS	-	Test	Z10	-	-	
1959-5360	2436777.50	1959 Jul 28	R-LIM	-	I10-7	0.000	UNRV	NS	NS	-	Test	Z10	-	-	
1959-5361	2436779.50	1959 Jul 30	R-LIM	-	I1-6TS	0.000	UNRV	NS	NS	-	Test	Z10	-	-	
1959-5362	2436780.50	1959 Jul 31	R-LIM	-	I7-13T	0.000	UNRV	NS	NS	-	Test	Z10	-	-	
1959-5363	2436787.50	1959 Aug 7	R-LIM	-	I7-11	0.000	UNRV	NS	NS	-	Test	Z10	-	-	
1959-5365	2436797.50	1959 Aug 17	R-LIM	-	B4-32	0.000	UNRV	NS	NS	-	Test	Z10	-	-	
1959-5366	2436799.50	1959 Aug 19	R-LIM	-	B4-31	0.000	UNRV	NS	NS	-	Test	Z10	-	-	
1959-5367	2436802.50	1959 Aug 22	R-LIM	-	B4-26	0.000	UNRV	NS	NS	-	Test	Z10	-	-	
1959-5368	2436814.50	1959 Sep 3	R-LIM	-	I11-7	0.000	UNRV	NS	NS	-	Test	Z10	-	-	
1959-5369	2436814.50	1959 Sep 3	R-LIM	-	I11-3T	0.000	UNRV	NS	NS	-	Test	Z10	-	-	
1959-5370	2436816.50	1959 Sep 7	R-LIM	-	B4-1T	0.000	UNRV	NS	NS	-	Test	Z10	-	-	
1959-5371	2436819.50	1959 Sep 8	R-LIM	-	B4-9T	0.000	UNRV	NS	NS	-	Test	Z10	-	-	
1959-5375	2436831.50	1959 Sep 8	R-LIM	-	B1-2	0.000	UNRV	NS	NS	-	Test	Z10	-	-	
1959-5376	2436829.50	1959 Sep 18	R-LIM	-	B4-30	0.000	UNRV	NS	NS	-	Test	Z10	-	-	
1959-5377	2436833.50	1959 Sep 22	R-LIM	-	I5-1	0.000	UNRV	NS	NS	-	Test	Z10	-	-	
1959-5378	2436836.50	1959 Sep 25	R-LIM	-	B4-26	0.000	UNRV	NS	NS	-	Test	Z10	-	-	
1959-5380	2436836.50	1959 Sep 25	R-LIM	-	B4-27	0.000	UNRV	NS	NS	-	Test	Z10	-	-	
1959-5381	2436842.50	1959 Oct 1	R-LIM	-	I8-20T	0.000	UNRV	NS	NS	-	Test	Z10	-	-	
1959-5382	2436844.50	1959 Oct 3	R-LIM	-	I8-20T	0.000	UNRV	NS	NS	-	Test	Z10	-	-	
1959-5384	2436844.50	1959 Oct 9	R-LIM	-	B1-6	0.000	UNRV	NS	NS	-	Test	Z10	-	-	
1959-5385	2436850.50	1959 Oct 9	R-LIM	-	I12-7T	0.000	UNRV	NS	NS	-	Test	Z10	-	-	
1959-5386	2436856.50	1959 Oct 15	R-LIM	-	I12-7T	0.000	UNRV	NS	NS	-	Test	Z10	-	-	
1959-5387	2436861.50	1959 Oct 20	R-LIM	-	I12-3	0.000	UNRV	NS	NS	-	Test	Z10	-	-	
1959-5394	2436866.50	1959 Nov 26	R-LIM	-	I13-2T	0.000	UNRV	NS	NS	-	Test	Z10	-	-	
1959-5395	2436869.50	1959 Nov 27	R-LIM	-	I13-12	0.000	UNRV	NS	NS	-	Test	Z10	-	-	
1959-5396	2436914.50	1959 Dec 12	R-LIM	-	I6-11	0.000	UNRV	NS	NS	-	Test	Z10	-	-	
1959-5397	2436914.50	1959 Dec 12	R-LIM	-	I6-6	0.000	UNRV	NS	NS	-	Test	Z10	-	-	
1959-5398	2436914.50	1959 Dec 12	R-LIM	-	VK1-02 (R-11MD)	0.000	MVS	NS	NS	-	Test	Z10	-	ZalogsScud	
1959-5399	2436919.50	1959 Dec 12	R-LIM	-	VK1-02	0.000	UNRV	NS	NS	-	Test	Z10	-	-	
1959-5400	2436924.50	1959 Dec 19	R-LIM	-	I14-1T	0.000	UNRV	NS	NS	-	Test	Z10	-	-	
1959-5401	2436924.50	1959 Dec 24	R-LIM	-	B1-26	0.000	UNRV	NS	NS	-	Test	Z10	-	-	
1959-5410	2436926.50	1959 Dec 24	R-LIM	-	B1-26	0.000	UNRV	NS	NS	-	Test	Z10	-	-	
1959-5411	2436926.50	1959 Dec 24	R-LIM	-	VK1-04	0.000	MVS	NS	NS	-	Test	Z10	-	-	
1959-5407	2436927.50	1959 Dec 25	R-LIM	-	I18-10	0.000	UNRV	NS	NS	-	Test	Z10	-	-	
1959-5408	2436927.50	1959 Dec 25	R-LIM	-	I18-2T	0.000	UNRV	NS	NS	-	Test	Z10	-	-	
1959-5409	2436928.50	1959 Dec 25	R-LIM	-	B1-5	0.000	UNRV	NS	NS	-	Test	Z10	-	-	
1959-5402	2436929.50	1959 Dec 27	R-LIM	-	B1-22	0.000	UNRV	NS	NS	-	Test	Z10	-	-	
1959-5403	2436930.50	1959 Dec 27	R-LIM	-	B1-22	0.000	UNRV	NS	NS	-	Test	Z10	-	-	
1959-5404	2436931.50	1959 Dec 28	R-LIM	-	B1-24	0.000	UNRV	NS	NS	-	Test	Z10	-	-	
1959-5405	2436931.50	1959 Dec 28	R-LIM	-	B1-19	0.000	UNRV	NS	NS	-	Test	Z10	-	-	
1959-5406	2436931.50	1959 Dec 29	R-LIM	-	B1-23	0.000	UNRV	NS	NS	-	Test	Z10	-	-	
1959-5408	2436938.50	1959 Dec 29	R-LIM	-	VK1-06	0.000	MVS	MF	MF	-	Test	Z10	-	-	
1959-5502	2436941.50	1960 Jan 8	R-17M	-	-	0.000	UNRV	NS	NS	-	Test	Zapolskiy	-	-	
1959-5503	2436941.50	1960 Jan 8	R-17	-	VK1-01	0.000	MVS	NS	NS	-	Test	Z10	-	-	
1959-5504	2436949.50	1960 Jan 26	R-17	-	VK1-03	0.000	MVS	NS	NS	-	Test	Z10	-	-	
1959-5505	2436961.50	1960 Jan 26	R-17	-	VK1-06	0.000	MVS	NS	NS	-	Test	Z10	-	-	
1959-5435	2436966.50	1960 Feb 2	R-17	-	VK1-07	0.000	MVS	NS	NS	-	Test	Z10	-	-	
1959-5436	2436969.50	1960 Feb 5	R-17	-	VK1-06	0.000	MVS	NS	NS	-	Test	Z10	-	-	
1959-5177	2437163.50	1960 Feb 6	R-LIA	-	-	0.000	MVS	SS	AM/	Ionos/Aeron	Ionos/Aeron	MDCRF	KY60	-	
1959-5267	2437167.50	1960 Sep 6	R-LIM	-	-	0.000	MVS	NS	NS	AM/	Ionos/Aeron	Ionos/Aeron	MDCRF	-	
1959-5278	2437196.50	1960 Sep 10	R-LIA	-	-	0.000	MVS	NS	NS	AM/	Ionos/Aeron	Ionos/Aeron	MDCRF	-	
1959-5283	2437198.50	1960 Sep 21	R-LIA	-	-	0.000	MVS	NS	NS	AM/	Ionos/Aeron	Ionos/Aeron	MDCRF	-	
1951-535	2437345.50	1961 Feb 15	R-LIA	-	-	0.000	MVS	SS	AM/	Ionos/Aeron	Ionos/Aeron	MDCRF	-	-	
1951-547	2437345.85	1961 Feb 15 0820?	R-LIA	-	-	0.000	MVS	SS	F.LIM/Mandelstam	Aeron/Eclipse	Aeron/Eclipse	MDCRF	-	-	
1951-5447	2437342.50	1961 Feb 15 0820?	R-LIA	-	-	0.000	MVS	NS	NS	AM/	Ionos/Aeron	Ionos/Aeron	MDCRF	-	-
1951-5294	2437365.50	1961 Sep 23	R-LIA	-	-	0.000	MVS	NS	NS	AM/	Ionos/Aeron	Ionos/Aeron	MDCRF	-	-
1952-501	2437366.50	1962	R-LIA-MV	-	-	0.000	MVS	NS	NS	AM/	Ionos/Aeron	Ionos/Aeron	MDCRF	-	-
1952-502	2437366.50	1962	R-LIA-MV	-	-	0.000	MVS	NS	NS	AM/	Ionos/Aeron	Ionos/Aeron	MDCRF	-	-
1952-503	2437366.50	1962	R-LIA-MV	-	-	0.000	MVS	NS	NS	AM/	Ionos/Aeron	Ionos/Aeron	MDCRF	-	-
1952-504	2437366.50	1962	R-LIA-MV	-	-	0.000	MVS	NS	NS	AM/	Ionos/Aeron	Ionos/Aeron	MDCRF	-	-
1952-505	2437366.50	1962	R-LIA-MV	-	-	0.000	MVS	NS	NS	AM/	Ionos/Aeron	Ionos/Aeron	MDCRF	-	-
1964-118	2438030.75	1964 Feb 5 0600?	R-17	-	KY-2	0.000	MVS	MF	MF	-	Test	NS5-65	-	-	
1964-121	2438037.00	1964 Feb 11 1200?	R-17	-	KY-2	0.000	MVS	MF	MF	-	Test	NS5-65	-	-	
1964-5192	2438070.09	1964 Mar 15 1412:54	R-17	-	KY-2	0.000	MVS	NS	NS	-	Test	NS5-65	-	-	
1964-5194	2438083.86	1964 Apr 8 0841	R-17	-	KY-2	0.000	MVS	NS	NS	-	Test	NS5-65	-	-	
1964-1659	2438510.75	1964 Apr 25 0805:26	R-17	-	KY-2	0.000	MVS	MF	MF	-	Test	NS5-65	-	-	
1964-5369	2438594.69	1964 Jul 18 0430	R-17	-	KY-2	0.000	MVS	NS	NS	-	Test	NS5-65	-	-	
1964-5424	2438619.63	1964 Aug 12 0300:12	R-17	-	KY-2	0.000	MVS	NS	NS	-	Test	NS5-65	-	-	
1964-4126	2438641.20	1964 Sep 2 1645	R-17	-	KY-2	0.000	MVS	MF	MF	-	Test	NS5-65	-	-	
1964-5515	2438678.79	1964 Oct 10 0700:04	R-17	-	KY-2	0.000	MVS	NS	NS	-	Test	NS5-65	-	-	
1964-5524	2438685.01	1964 Oct 16 1210	R-17	-	KY-2	0.000	MVS	NS	NS	-	Test	NS5-65	-	-	
1964-5550	2438698.01	1964 Oct 29 1215:02	R-17	-	KY-2	0.000	MVS	NS	NS	-	Test	NS5-65	-	-	
1964-5652	2438727.97	1964 Nov 28 1114:26	R-17	-	KY-2	0.000	MVS	NS	NS	-	Test	NS5-65	-	-	
1964-5697	2438760.91	1964 Dec 21 0944:59	R-17	-	KY-2	0.000	MVS	NS	NS	-	Test	NS5-65	-	-	
1965-5703	2438760.50	1965	R-17	-	KY-3 (Scud C)	0.000	MVS	NS	NS	-	Test	ZalogsScud	-	-	













Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	OrbPay	Agency	Launch_Code	Group	Category	LTCite	Cite	Notes
2020-S01	2458556.46	2020 Jan 7 2301?	Qiam-1	-	-	0.000	IR	NS	-	Weapon	Mire	-	-
2020-S02	2458556.46	2020 Jan 7 2301?	Qiam-1	-	-	0.000	IR	NS	-	Weapon	Mire	-	-
2020-S03	2458556.46	2020 Jan 7 2301?	Qiam-1	-	-	0.000	IR	NS	-	Weapon	Mire	-	-
2020-S18	2458900.40	2020 Feb 20 2130?	Zulfiqar	VE	-	0.000	ANSAL	NS	-	Weapon	Mire	-	-
2020-S19	2458937.35	2020 Mar 28 2020?	Zulfiqar	VE	-	0.000	ANSAL	NS	-	Weapon	Mire	-	-
2021-S87	2459262.50	2021 Feb 17	Zulfiqar	VE	-	0.000	ANSAL	NS	-	Weapon	Mire	-	-
2021-S87	2459462.50	2021 Sep 5	Zulfiqar	VE	-	0.000	ANSAL	NS	-	Weapon	Mire	-	-
2022-S05	2459596.50	2022 Jan 17	Zulfiqar	VE	-	0.000	ANSAL	NS	-	Weapon	Mire	-	-
2022-S06	2459596.50	2022 Jan 17	Zulfiqar	VE	-	0.000	ANSAL	NS	-	Weapon	Mire	-	-
2022-S07	2459596.50	2022 Jan 17	Zulfiqar	VE	-	0.000	ANSAL	NS	-	Weapon	Mire	-	-
2022-S08	2459603.51	2022 Jan 24 0016?	Zulfiqar	VE	-	0.000	ANSAL	NS	-	Weapon	Mire	-	-
2022-S09	2459603.51	2022 Jan 24 0016?	Zulfiqar	VE	-	0.000	ANSAL	NS	-	Weapon	Mire	-	-
2022-S10	2459603.51	2022 Jan 24 0016?	Zulfiqar	VE	-	0.000	ANSAL	NS	-	Weapon	Mire	-	-
2022-S111	2459837.02	2022 Nov 3 1236	Hwasong 6	?	-	0.000	RFA	NS	-	Test	Mire	-	-
2022-S112	2459837.03	2022 Nov 3 1239	Hwasong 6	?	-	0.000	RFA	NS	-	Test	Mire	-	-
2022-S113	2459837.03	2022 Nov 3 1242	Hwasong 6	?	-	0.000	RFA	NS	-	Test	Mire	-	-





Launch

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Mission	FlightCode	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee_Km	Range_Km	Dest
1960-S192	2437139.50	1960 Jun 24	R-12	-	ID10-1988a	8K63 UBP-597	-	-	-	GTSB-4	LC21	-	-	4027	1757	BALKH
1960-S193	2437141.50	1960 Jun 26	R-12	-	LP1-2	8K63 UBP-607	-	-	-	GTSB-4	LC21	-	-	4027	1948	BALKH
1960-S199	2437143.50	1960 Jun 28	R-12	-	LP1-8	8K63 UBP-617	-	-	-	GTSB-4	LC21	-	-	4027	-	BALKH
1960-S203	2437144.50	1960 Jun 29	R-12	-	2L08-20T	8K63 UBP-627	-	-	-	GTSB-4	LC21	-	-	4027	-	(BALKH)
1960-A196	2437146.50	1960 Aug 2	R-12	-	ID3-11KL	8K63 UBP-637	-	-	-	GTSB-4	LC21	-	-	0?	-	BALKH
1960-S220	2437150.50	1960 Aug 4	R-12	-	2LP3-20T	8K63 UBP-647	-	-	-	GTSB-4	LC21	-	-	4027	1948	BALKH
1960-S208	2437150.50	1960 Aug 4	R-12	-	LP1-1	8K63 UBP-717	-	-	-	GTSB-4	LC21	-	-	4027	1949	BALKH
1960-S223	2437150.50	1960 Aug 8	R-12	-	LP1-4	8K63 UBP-667	-	-	-	GTSB-4	LC21	-	-	4027	-	BALKH
1960-S228	2437154.50	1960 Aug 10	R-12	-	LP1-5	8K63 UBP-687	-	-	-	GTSB-4	LC21	-	-	4027	1948	BALKH
1960-S233	2437156.50	1960 Aug 10	R-12	-	2L06-20T	8K63 UBP-697	-	-	-	GTSB-4	LC21	-	-	4027	1949	BALKH
1960-S236	2437158.50	1960 Aug 11	R-12	-	LP1-6	8K63 UBP-707	-	-	-	GTSB-4	LC21	-	-	4027	1948	BALKH
1960-S248	2437163.50	1960 Aug 12	R-12	-	ID5-31S	8K63 UBP-727	-	-	-	GTSB-4	LC21	-	-	4027	1168	BALKH??
1960-S301	2437176.50	1960 Aug 17	R-12	-	2L09-201S	8K63 UBP-957	-	-	-	GTSB-4	LC21	-	-	4027	1948	BALKH
1960-S366	2437182.50	1960 Aug 30	R-12	-	LP1-3	8K63 UBP-737	-	-	-	GTSB-4	LC21	-	-	4027	-	BALKH
1960-S273	2437192.50	1960 Sep 5	R-12	-	ID3-6	8K63 UBP-747	-	-	-	GTSB-4	LC21	-	-	4027	-	BALKH
1960-S270	2437194.50	1960 Sep 15	R-12	-	ID3-13	8K63 UBP-757	-	-	-	GTSB-4	LC21	-	-	4027	-	BALKH
1960-S279	2437199.50	1960 Sep 17	R-12	-	ID3-9	8K63 UBP-767	-	-	-	GTSB-4	LC21	-	-	4027	-	BALKH
1960-S285	2437201.50	1960 Sep 22	R-12	-	2L10-20T	8K63 UBP-777	-	-	-	GTSB-4	LC21	-	-	4027	-	BALKH
1960-S291	2437205.50	1960 Sep 24	R-12	-	2L11-20T	8K63 UBP-787	-	-	-	GTSB-4	LC21	-	-	4027	-	BALKH
1960-S295	2437206.50	1960 Sep 28	R-12	-	2L14-20T	8K63 UBP-797	-	-	-	GTSB-4	LC21	-	-	4027	-	BALKH
1960-S298	2437207.50	1960 Sep 30	R-12	-	123-5	8K63 UBP-807	-	-	-	GTSB-4	LC21	-	-	4027	-	BALKH
1960-S299	2437207.50	1960 Sep 30	R-12	-	2L05-26T	8K63 UBP-817	-	-	-	GTSB-4	LC21	-	-	4027	1168	BALKH??
1960-S300	2437210.50	1960 Oct 3	R-12	-	ID3-7	8K63 UBP-827	-	-	-	GTSB-4	LC21	-	-	4027	-	BALKH
1960-S410	2437212.50	1960 Oct 5	R-12	-	ID5-41S	8K63 UBP-837	-	-	-	GTSB-4	LC21	-	-	4027	1948	BALKH
1960-S411	2437214.50	1960 Oct 7	R-12	-	2L07-20T	8K63 UBP-847	-	-	-	GTSB-4	LC21	-	-	4027	1949	BALKH
1960-S323	2437215.50	1960 Oct 8	R-12	-	2L05-26T	8K63 UBP-857	-	-	-	GTSB-4	LC21	-	-	4027	1949	BALKH
1960-S326	2437224.50	1960 Oct 17	R-12	-	ID3-10	8K63 UBP-867	-	-	-	GTSB-4	LC21	-	-	4027	1168	BALKH
1960-S327	2437225.50	1960 Oct 18	R-12	-	ID3-21	8K63 UBP-877	-	-	-	GTSB-4	LC21	-	-	4027	-	BALKH
1960-S329	2437226.50	1960 Oct 19	R-12	-	128-61S	8K63 UBP-887	-	-	-	GTSB-4	LC21	-	-	4027	1168	BALKH??
1960-S330	2437227.50	1960 Oct 20	R-12	-	ID3-14	8K63 UBP-897	-	-	-	GTSB-4	LC21	-	-	4027	-	BALKH
1960-S333	2437228.50	1960 Oct 21	R-12	-	ID3-15	8K63 UBP-907	-	-	-	GTSB-4	LC21	-	-	4027	1167	BALKH??
1960-S335	2437238.50	1960 Oct 31	R-12	-	102-16	8K63 UBP-917	-	-	-	GTSB-4	LC21	-	-	4027	-	BALKH
1960-S342	2437239.50	1960 Nov 1	R-12	-	2L11-19T	8K63 UBP-927	-	-	-	GTSB-4	LC21	-	-	4027	-	BALKH
1960-S345	2437242.50	1960 Nov 4	R-12	-	ID3-4	8K63 UBP-937	-	-	-	GTSB-4	LC21	-	-	4027	1947	(BALKH)
1960-S346	2437242.50	1960 Nov 4	R-12	-	2L12-20T	8K63 UBP-947	-	-	-	GTSB-4	LC21	-	-	4027	-	BALKH
1960-S347	2437242.50	1960 Nov 4	R-12	-	2L06-20T	8K63 UBP-957	-	-	-	GTSB-4	LC21	-	-	4027	-	BALKH
1960-S348	2437246.50	1960 Nov 10	R-12	-	ID3-17	8K63 UBP-967	-	-	-	GTSB-4	LC21	-	-	4027	1960	BALKH
1960-S349	2437246.50	1960 Nov 10	R-12	-	ID3-18	8K63 UBP-977	-	-	-	GTSB-4	LC21	-	-	4027	1161	BALKH??
1960-S350	2437250.50	1960 Nov 12	R-12	-	2L11-19T	8K63 UBP-977	-	-	-	GTSB-4	LC21	-	-	4027	1947	BALKH??
1960-S351	2437250.50	1960 Nov 22	R-12	-	ID3-12	8K63 UBP-977	-	-	-	GTSB-4	LC21	-	-	4027	1167	BALKH??
1960-S352	2437251.50	1960 Nov 23	R-12	-	ID3-6	8K63 UBP-977	-	-	-	GTSB-4	LC21	-	-	4027	-	BALKH
1960-S353	2437258.50	1960 Nov 24	R-12	-	ID3-3	8K63 UBP-977	-	-	-	GTSB-4	LC21	-	-	4027	-	BALKH
1960-S355	2437268.50	1960 Nov 30	R-12	-	2L01-15-20T	8K63 UBP-987	-	-	-	GTSB-4	LC21	-	-	4027	1960	BALKH
1960-S400	2437280.50	1960 Nov 30	R-12	-	2L05-20T	8K63 UBP-997	-	-	-	GTSB-4	LC21	-	-	4027	1960	BALKH
1960-S401	2437280.50	1960 Dec 12	R-12	-	2L06-20T	8K63 UBP-997	-	-	-	GTSB-4	LC21	-	-	4027	1948	BALKH
1960-S402	2437280.50	1960 Dec 13	R-12	-	2L06-20T	8K63 UBP-997	-	-	-	GTSB-4	LC21	-	-	4027	1948	BALKH
1960-S403	2437280.50	1960 Dec 15	R-12	-	ID3-11	8K63 UBP-1007	-	-	-	GTSB-4	LC21	-	-	4027	-	BALKH
1960-S404	2437280.50	1960 Dec 15	R-12	-	2L06-20T	8K63 UBP-1007	-	-	-	GTSB-4	LC21	-	-	4027	-	BALKH
1960-S405	2437280.50	1960 Dec 15	R-12	-	ID3-9T	8K63 UBP-1007	-	-	-	GTSB-4	LC21	-	-	4027	-	BALKH
1960-S406	2437280.50	1960 Dec 15	R-12	-	ID3-9T	8K63 UBP-1007	-	-	-	GTSB-4	LC21	-	-	4027	-	BALKH
1960-S407	2437280.50	1960 Dec 15	R-12	-	ID3-9T	8K63 UBP-1007	-	-	-	GTSB-4	LC21	-	-	4027	-	BALKH
1960-S408	2437280.50	1960 Dec 15	R-12	-	ID3-9T	8K63 UBP-1007	-	-	-	GTSB-4	LC21	-	-	4027	-	BALKH
1960-S409	2437280.50	1960 Dec 15	R-12	-	ID3-9T	8K63 UBP-1007	-	-	-	GTSB-4	LC21	-	-	4027	-	BALKH
1960-S410	2437280.50	1960 Dec 15	R-12	-	ID3-9T	8K63 UBP-1007	-	-	-	GTSB-4	LC21	-	-	4027	-	BALKH
1960-S411	2437280.50	1960 Dec 15	R-12	-	ID3-9T	8K63 UBP-1007	-	-	-	GTSB-4	LC21	-	-	4027	-	BALKH
1960-S412	2437280.50	1960 Dec 15	R-12	-	ID3-9T	8K63 UBP-1007	-	-	-	GTSB-4	LC21	-	-	4027	-	BALKH
1960-S413	2437280.50	1960 Dec 15	R-12	-	ID3-9T	8K63 UBP-1007	-	-	-	GTSB-4	LC21	-	-	4027	-	BALKH
1960-S414	2437280.50	1960 Dec 15	R-12	-	ID3-9T	8K63 UBP-1007	-	-	-	GTSB-4	LC21	-	-	4027	-	BALKH
1960-S415	2437280.50	1960 Dec 15	R-12	-	ID3-9T	8K63 UBP-1007	-	-	-	GTSB-4	LC21	-	-	4027	-	BALKH
1960-S416	2437280.50	1960 Dec 15	R-12	-	ID3-9T	8K63 UBP-1007	-	-	-	GTSB-4	LC21	-	-	4027	-	BALKH
1960-S417	2437280.50	1960 Dec 15	R-12	-	ID3-9T	8K63 UBP-1007	-	-	-	GTSB-4	LC21	-	-	4027	-	BALKH
1960-S418	2437280.50	1960 Dec 15	R-12	-	ID3-9T	8K63 UBP-1007	-	-	-	GTSB-4	LC21	-	-	4027	-	BALKH
1960-S419	2437280.50	1960 Dec 15	R-12	-	ID3-9T	8K63 UBP-1007	-	-	-	GTSB-4	LC21	-	-	4027	-	BALKH
1960-S420	2437280.50	1960 Dec 15	R-12	-	ID3-9T	8K63 UBP-1007	-	-	-	GTSB-4	LC21	-	-	4027	-	BALKH
1960-S421	2437280.50	1960 Dec 15	R-12	-	ID3-9T	8K63 UBP-1007	-	-	-	GTSB-4	LC21	-	-	4027	-	BALKH
1960-S422	2437280.50	1960 Dec 15	R-12	-	ID3-9T	8K63 UBP-1007	-	-	-	GTSB-4	LC21	-	-	4027	-	BALKH
1960-S423	2437280.50	1960 Dec 15	R-12	-	ID3-9T	8K63 UBP-1007	-	-	-	GTSB-4	LC21	-	-	4027	-	BALKH
1960-S424	2437280.50	1960 Dec 15	R-12	-	ID3-9T	8K63 UBP-1007	-	-	-	GTSB-4	LC21	-	-	4027	-	BALKH
1960-S425	2437280.50	1960 Dec 15	R-12	-	ID3-9T	8K63 UBP-1007	-	-	-	GTSB-4	LC21	-	-	4027	-	BALKH
1960-S426	2437280.50	1960 Dec 15	R-12	-	ID3-9T	8K63 UBP-1007	-	-	-	GTSB-4	LC21	-	-	4027	-	BALKH
1960-S427	2437280.50	1960 Dec 15	R-12	-	ID3-9T	8K63 UBP-1007	-	-	-	GTSB-4	LC21	-	-	4027	-	BALKH
1960-S428	2437280.50	1960 Dec 15	R-12	-	ID3-9T	8K63 UBP-1007	-	-	-	GTSB-4	LC21	-	-	4027	-	BALKH
1960-S429	2437280.50	1960 Dec 15	R-12	-	ID3-9T	8K63 UBP-1007	-	-	-	GTSB-4	LC21	-	-	4027	-	BALKH
1960-S430	2437280.50	1960 Dec 15	R-12	-	ID3-9T	8K63 UBP-1007	-	-	-	GTSB-4	LC21	-	-	4027	-	BALKH
1960-S431	2437280.50	1960 Dec 15	R-12	-	ID3-9T	8K63 UBP-1007	-	-	-	GTSB-4	LC21	-	-	4027	-	BALKH
1960-S432	2437280.50	1960 Dec 15	R-12	-	ID3-9T	8K63 UBP-1007	-	-	-	GTSB-4	LC21	-	-	4027	-	BALKH
1960-S433	2437280.50	1960 Dec 15	R-12	-	ID3-9T	8K63 UBP-1007	-	-	-	GTSB-4	LC21	-	-	4027	-	BALKH
1960-S434	2437280.50	1960 Dec 15	R-12	-	ID3-9T	8K63 UBP-1007	-	-	-	GTSB-4	LC21	-	-	4027	-	BALKH
1960-S435	2437280.50	1960 Dec 15	R-12	-	ID3-9T	8K63 UBP-1007	-	-	-	GTSB-4	LC21	-	-	4027	-	BALKH
1960-S436	2437280.50	1960 Dec 15	R-12	-	ID3-9T	8K63 UBP-1007	-	-	-	GTSB-4	LC21	-	-	4027	-	BALKH
1960-S437	2437280.50	1960 Dec 15	R-12	-	ID3-9T	8K63 UBP-1007	-	-	-	GTSB-4	LC21	-	-	4027	-	BALKH
1960-S438	2437280.50	1960 Dec 15	R-12	-	ID3-9T	8K63 UBP-1007	-	-	-	GTSB-4	LC21					

Launch

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Mission	FlightCode	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee_km	Range_km	Dest
1961-S191	2437479.50	1961 Jun 29	R-12	-	2E23104-10T	8K63 UBP-1407	-	-	-	Grp-4	LC21	-	-	4027	1948	BALXH
1961-S193	2437480.50	1961 Jun 30	R-12	-	ID4-11A	8K63 PRD-5	V-1000 target	-	-	MAKAT	LC12	-	-	4027	1454	BALXH
1961-S217	2437502.50	1961 Jul 22	R-12	-	IPCh-10PLA	8K63 UBP-1417	-	-	-	Grp-4	LC21	-	-	4027	1947	BALXH
1961-S218	2437505.50	1961 Jul 22	R-12	-	2E22605-20T	8K63 UBP-1427	-	-	-	Grp-4	LC21	-	-	4027	-	BALXH
1961-S223	2437507.50	1961 Jul 27	R-12	-	2I09-10	8K63 60 RD UBP-1	-	-	-	Grp-4	LC21	-	-	4027	-	Pacific
1961-S243	2437526.50	1961 Aug 15	R-12	-	2E22903-20T	8K63 UBP-1447	-	-	-	Grp-4	LC21	-	-	4027	1949	BALXH
1961-S259	2437541.50	1961 Aug 30	R-12	-	2E22606-20T	8K63 UBP-1467	-	-	-	Grp-4	LC21	-	-	4027	-	BALXH
1961-S261	2437542.50	1961 Aug 31	R-12	-	2E23106-10T	8K63 UBP-1467	-	-	-	Grp-4	LC21	-	-	4027	-	BALXH
1961-S463	2437545.50	1961 Sep 3	R-12	-	2E23104-16	8K63 Satehard-1	-	-	-	Grp-4	LC21	-	-	4007	-	BALXH
1961-S464	2437546.50	1961 Sep 3	R-12	-	2E23104-15	8K63 Satehard-2	-	-	-	Grp-4	LC21	-	-	4007	-	BALXH
1961-S277	2437553.50	1961 Sep 11	R-12	-	2E23102T	8K63 UBP-1477	-	-	-	Grp-4	LC21	-	-	4027	-	BALXH
1961-S278	2437554.71	1961 Sep 12	R-12	-	2E23104-14T	8K63 UBP-1487	Nuclear test	-	-	Grp-4	LC21	-	-	4007	-	BALXH
1961-S280	2437555.50	1961 Sep 13	R-12	-	2E23101-1	8K63 UBP-1487	-	-	-	Grp-4	LC21	-	-	4027	-	BALXH
1961-S285	2437555.50	1961 Sep 16	R-12	-	2E23104-18T	8K63 Satehard-4	-	-	-	Grp-4	LC21	-	-	4007	-	BALXH
1961-S287	2437558.50	1961 Sep 26	R-12	-	2E22904-20T	8K63 UBP-1507	-	-	-	Grp-4	LC21	-	-	4027	-	BALXH
1961-S282	2437570.50	1961 Sep 28	R-12	-	ID5-11	8K63 UBP-1497	Up K-2 Support	-	-	Grp-4	LC21	-	-	4027	1947	BALXH
1961-S303	2437572.50	1961 Sep 30	R-12	-	2E23106-10T	8K63 UBP-1517	Vertical probe	-	-	Grp-4	LC21	-	-	4027	-	BALXH
1961-S307	2437576.50	1961 Oct 4	R-12	-	LP1-14	8K63 UBP-1527 29 RD	-	-	-	Grp-4	LC21	-	-	4027	-	BALXH
1961-S304	2437584.50	1961 Oct 12	R-12	-	ID5-12	8K63 UBP-1537	-	-	-	Grp-4	LC21	-	-	4027	1948	BALXH
1961-S305	2437587.50	1961 Oct 15	R-12	-	LP1-15	8K63 UBP-1547	-	-	-	Grp-4	LC21	-	-	4027	-	BALXH
1961-S306	2437597.50	1961 Oct 15	R-12	-	LP1-16	8K63 UBP-1567	Vertical probe	-	-	Grp-4	LC21	-	-	4027	1948	BALXH
1961-S308	2437598.50	1961 Oct 17	R-12	-	ID15-14	8K63 UBP-1567	-	-	-	Grp-4	LC21	-	-	4027	-	BALXH
1961-S309	2437599.50	1961 Oct 17	R-12	-	LP1-16	8K63 UBP-1577	Up K-2 support	-	-	Grp-4	LC21	-	-	4027	-	BALXH
1961-S310	2437593.50	1961 Oct 21	R-12	-	-	8K63 UBP-1587	-	-	-	Grp-4	LC21	-	-	4027	-	BALXH
1961-S311	2437593.50	1961 Oct 21	R-12	-	LP1-16	8K63 UBP-1597	-	-	-	Grp-4	LC21	-	-	4027	-	BALXH
1961-S466	2437596.50	1961 Oct 24	R-12	-	-	8K63	Up, Rora (to NIZEN)	-	-	YORK	-	-	-	4007	-	NIZEN
1961-S314	2437598.50	1961 Oct 24	R-12	-	-	8K63 K-1	Up, Rora (to NIZEN)	-	-	MAKAT	-	-	-	180	-	BALXH
1961-S354	2437598.50	1961 Oct 27	R-12	-	ID5-17	8K63 K-1	Op K-1 Nuclear test	-	-	MAKAT	LC12	-	-	4027	-	BALXH
1961-S461	2437598.50	1961 Oct 27	R-12	-	ID5-17	8K63 K-1	Op K-1 Rocket 27 PRD?	-	-	MAKAT	LC12	-	-	180	-	BALXH
1961-S365	2437598.50	1961 Oct 27	R-12	-	ID5-18	8K63 K-2	Op K-2 Nuclear test	-	-	MAKAT	LC12	-	-	300	-	BALXH
1961-S462	2437598.50	1961 Oct 27	R-12	-	1LK	8K63 K-2	Op K-2 Rocket 27 PRD?	-	-	MAKAT	LC12	-	-	300	-	BALXH
1961-F11	2437600.19	1961 Oct 27 1630	Kosmos 6351	-	-	DS-1 No. 1	-	-	-	Mayak-2	-	-	-	2007	-	BALXH
1961-S313	2437602.50	1961 Oct 30	R-12	-	2E22607-20T	8K63 UBP-1617	-	-	-	Grp-4	LC21	-	-	4027	-	BALXH
1961-S362	2437603.50	1961 Oct 31	R-12	-	-	8K63J LKT-1, ShPU	1 BB A448	MCCh BF126	-	-	-	-	-	4027	-	BALXH
1961-S479	2437603.50	1961 Nov	R-12	-	-	8K63J LKT-1, ShPU	-	-	-	Grp-4	LC21	-	-	4027	-	BALXH
1961-S368	2437628.50	1961 Nov 25	R-12	-	2E22905-23T	8K63 UBP-1637 32 RD	-	-	-	Grp-4	LC21	-	-	4027	-	BALXH
1961-S404	2437636.50	1961 Dec 2	R-12	-	2E22605-20T	8K63 UBP-1647 43 RD	-	-	-	Grp-4	LC21	-	-	4027	-	BALXH
1961-F15	2437656.02	1961 Dec 23	Kosmos 6351	-	2LK	8K63 UBP-1667	DS-1 No. 2	-	-	Mayak-2	-	-	-	4027	-	BALXH
1961-S435	2437656.50	1961 Dec 25	R-12	-	2E23601-15T	8K63 UBP-1677	-	-	-	Grp-4	LC21	-	-	4027	-	BALXH
1961-S440	2437660.50	1961 Dec 27	R-12	-	-	8K63	-	-	-	Grp-4	LC21	-	-	4027	-	BALXH
1961-S442	2437662.50	1961 Dec 29	R-12	-	2E22607-19	8K63 UBP-1697	-	-	-	Grp-4	LC21	-	-	4027	-	BALXH
1961-S476	2437663.86	1961 Dec 30 0836	R-12	-	-	8K63J LKT-1, NPU	1 BB A448	MCCh BF126	-	-	-	-	-	4027	-	BALXH
1962-S666	2437664.50	1962	R-12	-	-	HP7 2	-	-	-	Grp-4	LC21	-	-	4027	-	BALXH
1962-S667	2437664.50	1962	R-12	-	-	HP7 3	-	-	-	Grp-4	LC21	-	-	4027	-	BALXH
1962-S668	2437664.50	1962	R-12	-	-	HP7 4	-	-	-	Grp-4	LC21	-	-	4027	-	BALXH
1962-S669	2437664.50	1962	R-12	-	-	HP7 5	-	-	-	Grp-4	LC21	-	-	4027	-	BALXH
1962-S670	2437664.50	1962	R-12	-	-	HP7 6	-	-	-	Grp-4	LC21	-	-	4027	-	BALXH
1962-S671	2437664.50	1962	R-12	-	-	HP7 7	-	-	-	Grp-4	LC21	-	-	4027	-	BALXH
1962-S672	2437664.50	1962	R-12	-	-	HP7 8	-	-	-	Grp-4	LC21	-	-	4027	-	BALXH
1962-S673	2437664.50	1962	R-12	-	-	HP7 9	-	-	-	Grp-4	LC21	-	-	4027	-	BALXH
1962-S674	2437664.50	1962	R-12	-	-	HP7 10	-	-	-	Grp-4	LC21	-	-	4027	-	BALXH
1962-S675	2437664.50	1962	R-12	-	-	HP7 11	-	-	-	Grp-4	LC21	-	-	4027	-	BALXH
1962-S676	2437664.50	1962	R-12	-	-	HP7 12	-	-	-	Grp-4	LC21	-	-	4027	-	BALXH
1962-S677	2437664.50	1962	R-12	-	-	HP7 13	-	-	-	Grp-4	LC21	-	-	4027	-	BALXH
1962-S678	2437664.50	1962	R-12	-	-	HP7 14	-	-	-	Grp-4	LC21	-	-	4027	-	BALXH
1962-S679	2437664.50	1962	R-12	-	-	HP7 15	-	-	-	Grp-4	LC21	-	-	4027	-	BALXH
1962-S680	2437664.50	1962	R-12	-	-	HP7 16	-	-	-	Grp-4	LC21	-	-	4027	-	BALXH
1962-S681	2437664.50	1962	R-12	-	-	HP7 17	-	-	-	Grp-4	LC21	-	-	4027	-	BALXH
1962-S682	2437664.50	1962	R-12	-	-	HP7 18	-	-	-	Grp-4	LC21	-	-	4027	-	BALXH
1962-S683	2437664.50	1962	R-12	-	-	HP7 19	-	-	-	Grp-4	LC21	-	-	4027	-	BALXH
1962-S684	2437664.50	1962	R-12	-	-	HP7 20	-	-	-	Grp-4	LC21	-	-	4027	-	BALXH
1962-S685	2437664.50	1962	R-12	-	-	HP7 21	-	-	-	Grp-4	LC21	-	-	4027	-	BALXH
1962-S686	2437664.50	1962	R-12	-	-	HP7 22	-	-	-	Grp-4	LC21	-	-	4027	-	BALXH
1962-S687	2437664.50	1962	R-12	-	-	HP7 23	-	-	-	Grp-4	LC21	-	-	4027	-	BALXH
1962-S688	2437664.50	1962	R-12	-	-	HP7 24	-	-	-	Grp-4	LC21	-	-	4027	-	BALXH
1962-S689	2437664.50	1962	R-12	-	-	HP7 25	-	-	-	Grp-4	LC21	-	-	4027	-	BALXH
1962-S690	2437664.50	1962	R-12	-	-	HP7 26	-	-	-	Grp-4	LC21	-	-	4027	-	BALXH
1962-S691	2437664.50	1962	R-12	-	-	HP7 27	-	-	-	Grp-4	LC21	-	-	4027	-	BALXH
1962-S692	2437664.50	1962	R-12	-	-	HP7 28	-	-	-	Grp-4	LC21	-	-	4027	-	BALXH
1962-S693	2437664.50	1962	R-12	-	-	HP7 29	-	-	-	Grp-4	LC21	-	-	4027	-	BALXH
1962-S694	2437664.50	1962	R-12	-	-	HP7 30	-	-	-	Grp-4	LC21	-	-	4027	-	BALXH
1962-S695	2437664.50	1962	R-12	-	-	HP7 31	-	-	-	Grp-4	LC21	-	-	4027	-	BALXH
1962-S696	2437664.50	1962	R-12	-	-	HP7 32	-	-	-	Grp-4	LC21	-	-	4027	-	BALXH
1962-S697	2437664.50	1962	R-12	-	-	HP7 33	-	-	-	Grp-4	LC21	-	-	4027	-	BALXH
1962-S698	2437664.50	1962	R-12	-	-	HP7 34	-	-	-	Grp-4	LC21	-	-	4027	-	BALXH
1962-S699	2437664.50	1962	R-12	-	-	HP7 35	-	-	-	Grp-4	LC21	-	-	4027	-	BALXH
1962-S700	2437664.50	1962	R-12	-	-	HP7 36	-	-	-	Grp-4	LC21	-	-	4027	-	BALXH
1962-S701	2437664.50	1962	R-12	-	-	HP7 37	-	-	-	Grp-4	LC21	-	-	4027	-	BALXH
1962-S702	2437664.50	1962	R-12	-	-	HP7 38	-	-	-	Grp-4	LC21	-	-	4027	-	BALXH
1962-S703	2437664.50	1962	R-12	-	-	HP7 39	-	-	-	Grp-4	LC21	-	-	4027	-	BALXH
1962-S704	2437664.50	1962	R-12	-	-	HP7 40	-	-	-	Grp-4	LC21	-	-	4027	-	BALXH
1962-S705	2437664.50	1962	R-12	-	-	HP7 41	-	-	-	Grp-4	LC21	-	-	4027	-	BALXH
1962-S706	2437664.50	1962	R-12	-	-	HP7 42	-	-	-	Grp-4	LC21	-	-	4027	-	BALXH
1962-S707	2437664.50	1962	R-12	-	-	HP7 43	-	-	-	Grp-4	LC21	-	-	4027	-	BALXH
1962-S708	2437664.50	1962	R-12	-	-	HP7 44	-	-	-	Grp-4	LC21	-	-	4027	-	BALXH
1962-S709	2437664.50	1962	R-12	-	-	HP7 45	-	-	-	Grp-4	LC21	-				



Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Mission	Launch	FlightCode	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee km	Range km	Dest
1963-3471	2438303.50	1963 Oct 1	R-12U	-	-	8K630 PRD-27	1 BB A448	-	MGCH 8F126	-	MAKAT	LC12	-	-	4027	-	BALXH
1963-3478	2438306.50	1963 Oct 4	R-12U	-	-	8K630 PRD-28	1 BB A448	-	MGCH 8F126	-	MAKAT	LC12	-	-	4027	-	BALXH
1963-3484	2438313.50	1963 Oct 11	R-12U	-	-	8K630 RY63-26	1 BB A448	-	MGCH 8F126	-	GPSP-4	-	-	-	4027	-	BALXH
1963-3489	2438317.50	1963 Oct 15	R-12U	-	-	8K630 RY63-27	1 BB A448	-	MGCH 8F126	-	GPSP-4	-	-	-	4027	-	BALXH
1963-3649	2438324.50	1963 Oct 22	R-12U	-	-	8K630 UBP 35 RB	1 BB A448	Groza	MGCH 8F126	-	UNDZH	-	-	-	4027	-	BALXH
1963-3645	2438324.50	1963 Oct 22	R-12U	-	-	8K630 UBP 51 RB	1 BB A448	-	MGCH 8F126	-	KATTAK	LC3/9	-	-	4027	-	BALXH
1963-3517	2438326.69	1963 Oct 24 0430	Kosmos	6351	-	-	DS-A1 No. 4	-	-	-	Hayak-2	-	-	-	2507	-	-
1963-3541	2438328.50	1963 Oct 26	R-12U	-	-	8K630 RY63-28	1 BB A448	-	MGCH 8F126	-	GPSP-4	-	-	-	4027	-	BALXH
1963-3541	2438328.50	1963 Nov 5	R-12U	-	-	8K630 RY63-29	1 BB A448	-	MGCH 8F126	-	GPSP-4	-	-	-	4027	-	BALXH
1963-3557	2438349.50	1963 Nov 16	R-12U	-	-	8K630 RY63-30	1 BB A448	-	MGCH 8F126	-	GPSP-4	-	-	-	4027	-	BALXH
1963-3566	2438356.50	1963 Nov 23	R-12U	-	-	8K630 RY63-31	1 BB A448	-	MGCH 8F126	-	GPSP-4	-	-	-	4027	-	BALXH
1963-3571	2438360.50	1963 Nov 27	R-12U	-	-	8K630 RY63-32	1 BB A448	-	MGCH 8F126	-	GPSP-4	-	-	-	4027	-	BALXH
1963-3576	2438362.50	1963 Nov 29	R-12U	-	-	8K630 RY63-33	1 BB A448	-	MGCH 8F126	-	GPSP-4	-	-	-	4027	-	BALXH
1963-3580	2438366.50	1963 Dec 3	R-12U	-	-	8K630 RY63-34	1 BB A448	-	MGCH 8F126	-	GPSP-4	-	-	-	4027	-	BALXH
1963-3581	2438366.50	1963 Dec 3	R-12U	-	-	8K630 RY63-35	1 BB A448	-	MGCH 8F126	-	GPSP-4	-	-	-	4027	-	BALXH
1963-3584	2438367.50	1963 Dec 4	R-12U	-	-	8K630 RY63-36	1 BB A448	-	MGCH 8F126	-	GPSP-4	-	-	-	4027	-	BALXH
1963-3582	2438373.50	1963 Dec 10	R-12U	-	-	8K630 RY63-37	1 BB A448	-	MGCH 8F126	-	GPSP-4	-	-	-	4027	-	BALXH
1963-3584	2438375.50	1963 Dec 12	R-12U	-	-	8K630 RY63-38	1 BB A448	-	MGCH 8F126	-	GPSP-4	-	-	-	4027	-	BALXH
1963-0500	2438377.09	1963 Dec 13 1415:24	Kosmos	6351	-	Kosmos-23	Omega-1 No. 2	-	MGCH 8F126	-	Hayak-2	-	-	-	652	-	(BALXH)
1963-3604	2438380.50	1963 Dec 17	R-12U	-	-	8K630 RY63-39	1 BB A448	-	MGCH 8F126	-	GPSP-4	-	-	-	4027	-	BALXH
1964-520	2438403.50	1964 Jan. 9	R-12U	-	-	8K630 RY64-1	1 BB A448	-	MGCH 8F126	-	GPSP-4	-	-	-	4027	-	BALXH
1964-529	2438409.50	1964 Jan. 14	R-12U	-	-	8K630 RY64-2	1 BB A448	-	MGCH 8F126	-	GPSP-4	-	-	-	4027	-	BALXH
1964-546	2438417.50	1964 Jan. 23	R-12U	-	-	8K630 RY64-3	1 BB A448	-	MGCH 8F126	-	GPSP-4	-	-	-	4027	-	BALXH
1964-566	2438425.50	1964 Jan. 31	R-12U	-	-	8K630 RY64-4	1 BB A448	-	MGCH 8F126	-	GPSP-4	-	-	-	4027	-	BALXH
1964-5819	2438427.50	1964 Feb 2	R-12U	-	-	8K630 29 RD UBP	1 BB A448	-	MGCH 8F126	-	SNPU	-	-	-	4027	-	BALXH
1964-580	2438433.50	1964 Feb 8	R-12U	-	-	8K630 RY64-6	1 BB A448	-	MGCH 8F126	-	GPSP-4	-	-	-	4027	-	BALXH
1964-590	2438438.50	1964 Feb 13	R-12U	-	-	8K630 RY64-7	1 BB A448	-	MGCH 8F126	-	GPSP-4	-	-	-	4027	-	BALXH
1964-5103	2438443.50	1964 Feb 16	R-12U	-	-	8K630 RY64-8	1 BB A448	-	MGCH 8F126	-	GPSP-4	-	-	-	4027	-	BALXH
1964-010	2438445.06	1964 Feb 27 1330	Kosmos	6351	-	Kosmos-25	DS-P1 No. 4	-	MGCH 8F126	-	Hayak-2	-	-	-	645	-	-
1964-5126	2438454.50	1964 Feb 29	R-12U	-	-	8K630 PRD-29 Target	1 BB A448	-	MGCH 8F126	-	MAKAT	LC12	-	-	4027	-	BALXH
1964-5130	2438458.50	1964 Mar. 4	R-12U	-	-	8K630 PRD-30 Target	1 BB A448	-	MGCH 8F126	-	MAKAT	LC12	-	-	4027	-	BALXH
1964-5135	2438464.50	1964 Mar. 10	R-12U	-	-	8K630 PRD-31 Target	1 BB A448	-	MGCH 8F126	-	MAKAT	LC12	-	-	4027	-	BALXH
1964-5141	2438466.50	1964 Mar. 11	R-12U	-	-	8K630 PRD-32 Target	1 BB A448	-	MGCH 8F126	-	MAKAT	LC12	-	-	4027	-	BALXH
1964-015	2438473.13	1964 Mar. 18 16077	Kosmos	6351	-	Kosmos-26	DS-NG No. 1	-	MGCH 8F126	-	GPSP-4	-	-	-	419	-	-
1964-5162	2438477.50	1964 Mar. 25	R-12U	-	-	8K630 RY64-9	1 BB A448	-	MGCH 8F126	-	GPSP-4	-	-	-	4027	-	BALXH
1964-5178	2438478.50	1964 Mar. 24	R-12U	-	-	8K630 RY64-10	1 BB A448	-	MGCH 8F126	-	GPSP-4	-	-	-	4027	-	BALXH
1964-445	2438481.50	1964 Mar. 27	R-12U	-	-	8K630 RY64-11	1 BB A448	-	MGCH 8F126	-	GPSP-4	-	-	-	4027	-	BALXH
1964-5228	2438482.50	1964 Apr. 27	R-12U	-	-	8K630 RY64-12 UBP 51 NB	1 BB A448	-	MGCH 8F126	-	GPSP-4	-	-	-	4027	-	BALXH
1964-5280	2438485.50	1964 Jun. 8	R-12U	-	-	8K630 RY64-13 UBP 29 RD	1 BB A448	-	MGCH 8F126	-	GPSP-4	-	-	-	4027	-	BALXH
1964-028	2438485.75	1964 Jun. 6 0800?	Kosmos	6351	-	Kosmos-31	DS-RT No. 2	-	MGCH 8F126	-	Hayak-2	-	-	-	431	-	-
1964-5291	2438487.50	1964 Jun. 11	R-12U	-	-	8K630 RY64-14	1 BB A448	-	MGCH 8F126	-	GPSP-4	-	-	-	4027	-	BALXH
1964-5291	2438487.50	1964 Jun. 11	R-12U	-	-	8K630 RY64-15	1 BB A448	-	MGCH 8F126	-	GPSP-4	-	-	-	4027	-	BALXH
1964-5293	2438487.50	1964 Jun. 7	R-12U	-	-	8K630 RY64-16	1 BB A448	-	MGCH 8F126	-	GPSP-4	-	-	-	4027	-	BALXH
1964-5293	2438487.50	1964 Jun. 7	R-12U	-	-	8K630 RY64-17	1 BB A448	-	MGCH 8F126	-	GPSP-4	-	-	-	4027	-	BALXH
1964-5293	2438487.50	1964 Jun. 8	R-12U	-	-	8K630 RY64-18	1 BB A448	-	MGCH 8F126	-	GPSP-4	-	-	-	4027	-	BALXH
1964-5293	2438487.50	1964 Jun. 8	R-12U	-	-	8K630 RY64-19	1 BB A448	-	MGCH 8F126	-	GPSP-4	-	-	-	4027	-	BALXH
1964-5294	2438489.50	1964 Jun. 14	R-12U	-	-	8K630 RY64-20	1 BB A448	-	MGCH 8F126	-	GPSP-4	-	-	-	4027	-	BALXH
1964-5294	2438489.50	1964 Jun. 17	R-12U	-	-	8K630 RY64-21	1 BB A448	-	MGCH 8F126	-	GPSP-4	-	-	-	4027	-	BALXH
1964-5295	2438493.50	1964 Jun. 17	R-12U	-	-	8K630 RY64-22	1 BB A448	-	MGCH 8F126	-	GPSP-4	-	-	-	4027	-	BALXH
1964-5295	2438493.50	1964 Jun. 21 0336?	Kosmos	6351	-	Kosmos-36	DS-PI-Yu. No. 1	-	MGCH 8F126	-	GPSP-4	-	-	-	403	-	(Pacific)
1964-5296	2438497.50	1964 Jul. 31	R-12U	-	-	8K630 RY64-23	1 BB A448	-	MGCH 8F126	-	GPSP-4	-	-	-	4027	-	BALXH
1964-5300	2438498.50	1964 Aug. 4	R-12U	-	-	8K630 RY64-24	1 BB A448	-	MGCH 8F126	-	GPSP-4	-	-	-	4027	-	BALXH
1964-5304	2438498.50	1964 Aug. 6	R-12U	-	-	8K630 RY64-25	1 BB A448	-	MGCH 8F126	-	GPSP-4	-	-	-	4027	-	BALXH
1964-5305	2438498.50	1964 Aug. 6	R-12U	-	-	8K630 60 RD UBP-67	1 BB A448	-	MGCH 8F126	-	GPSP-4	-	-	-	4027	-	Pacific
1964-5307	2438497.50	1964 Aug. 6	R-12U	-	-	8K630 RY64-26	1 BB A448	-	MGCH 8F126	-	GPSP-4	-	-	-	4027	-	BALXH
1964-5307	2438497.50	1964 Aug. 6	R-12U	-	-	8K630 RY64-27	1 BB A448	-	MGCH 8F126	-	GPSP-4	-	-	-	4027	-	BALXH
1964-050	2438499.96	1964 Aug. 22 1100	Kosmos	6351	-	Kosmos-42/43	Star-1	-	MGCH 8F126	-	GPSP-4	-	-	-	1139	-	-
1964-5474	2438523.50	1964 Aug. 26	R-12U	-	-	8K630 60 RD UBP-97	1 BB A448	-	MGCH 8F126	-	GPSP-4	-	-	-	4027	-	BALXH
1964-5474	2438523.50	1964 Aug. 26	R-12U	-	-	8K630 RY64-32	1 BB A448	-	MGCH 8F126	-	GPSP-4	-	-	-	4027	-	BALXH
1964-5474	2438523.50	1964 Aug. 16	R-12U	-	-	8K630 RY64-32	1 BB A448	-	MGCH 8F126	-	GPSP-4	-	-	-	4027	-	BALXH
1964-5496	2438568.50	1964 Sep. 16	R-12U	-	-	8K630 RY64-33	1 BB A448	-	MGCH 8F126	-	GPSP-4	-	-	-	4027	-	BALXH
1964-5503	2438575.50	1964 Oct. 30	R-12U	-	-	8K630 RY64-34	1 BB A448	-	MGCH 8F126	-	GPSP-4	-	-	-	4027	-	BALXH
1964-5512	2438577.50	1964 Oct. 9	R-12U	-	-	8K630 RY64-29	1 BB A448	-	MGCH 8F126	-	GPSP-4	-	-	-	4027	-	BALXH
1964-5523	2438577.50	1964 Oct. 16	R-12U	-	-	8K630 23 RD UBP	1 BB A448	-	MGCH 8F126	-	SNPU	-	-	-	4027	-	BALXH
1964-5523	2438584.50	1964 Oct. 16	R-12U	-	-	8K630 23 RD UBP	1 BB A448	-	MGCH 8F126	-	GPSP-4	-	-	-	4027	-	BALXH
1964-069	2438589.72	1964 Oct. 24 0517	Kosmos	6351	-	Kosmos-49	DS-NG No. 2	-	MGCH 8F126	-	GPSP-4	-	-	-	476	-	-
1964-513	2438730.86	1964 Dec. 1 0845	Kosmos	6351	-	Kosmos-51	DS-RT No. 2	-	MGCH 8F126	-	GPSP-4	-	-	-	203	-	-
1964-080	2438739.46	1964 Dec. 9 2300	Kosmos	6351	-	Kosmos-51	DS-RT No. 3	-	MGCH 8F126	-	GPSP-4	-	-	-	543	-	-
1964-5690	2438744.50	1964 Dec. 15	R-12U	-	-	8K630 RY64-31	1 BB A448	-	MGCH 8F126	-	GPSP-4	-	-	-	4027	-	BALXH
1964-5690	2438747.50	1964 Dec. 18	R-12U	-	-	8K630 RY64-32	1 BB A448	-	MGCH 8F126	-	GPSP-4	-	-	-	4027	-	BALXH
1964-5701	2438759.50	1964 Dec. 23	R-12U	-	-	8K630 RY64-33	1 BB A448	-	MGCH 8F126	-	GPSP-4	-	-	-	4027	-	BALXH
1964-5702	2438755.50	1964 Dec. 26	R-12U	-	-	8K630 RY64-34	1 BB A448	-	MGCH 8F126	-	GPSP-4	-	-	-	4027	-	BALXH
1964-5703	2438756.50	1964 Dec. 27	R-12U	-	-	8K630 RY64-35 UBP 40 RD	1 BB A448	-	MGCH 8F126	-	GPSP-4	-	-	-	4027	-	BALXH
1965-006	2438790.90	1965 Jan. 30 0936?	Kosmos	6351	-	Kosmos-53	DS-A1 No. 5	-	MGCH 8F126	-	GPSP-4	-	-	-	1177	-	-
1965-002	2438804.00	1965 Feb. 12 1200	Kosmos	6351	-	-	DS-P1-Yu. No. 2	-	MGCH 8F126	-	GPSP-4	-	-	-	407	-	-
1965-003	2438804.00	1965 Feb.															





Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Mission	Launch	FlightCode	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee_Km	Range_Km	Dest
1968-079	2440120.11	1968 Sep 20 14:39:59	Kosmos 11K63	-	Yv231-04	Kosmos-242	DS-P1-I No. 4	MILP-53	-	-	MILP-53	LC133/3	-	-	407	-	-
1968-078	2440127.50	1968 Sep 28	R-120	-	V295-02	Kosmos-243	1 BB AA48	GPSP-4	-	-	GPSP-4	LC133/3	-	-	4027	-	BALKH
1968-083	2440133.04	1968 Oct 3 12:56:59	Kosmos 11K63	-	V295-02	Kosmos-245	DS-P1-Yu No. 16	MILP-53	-	-	MILP-53	LC133/3	-	-	482	-	BALKH
1968-0762	2440174.50	1968 Nov 14	R-120	-	V295-03	Kosmos-257	1 BB AA48	GPSP-4	-	-	GPSP-4	LC133/3	-	-	448	-	BALKH
1968-0768	2440194.12	1968 Dec 3 14:52:21	Kosmos 11K63	-	V295-03	Kosmos-289	1 BB AA48	GPSP-4	-	-	GPSP-4	LC133/3	-	-	4027	-	BALKH
1968-0768	2440204.72	1968 Dec 14 05:09:54	Kosmos 11K63	-	M231-13	Kosmos-289	1 BB AA48	GPSP-4	-	-	GPSP-4	LC86/4	-	-	1335	-	BALKH
1968-117	2440210.50	1968 Dec 19 23:55	Kosmos 11K63	-	M231-13	Kosmos-281	DS-02-IK No. 3	GPSP-4	-	-	GPSP-4	LC133/3	-	-	647	-	BALKH
1968-0759	2440215.50	1968 Dec 25	R-120	-	V295-07	Kosmos-262	DS-02-QF No. 1	GPSP-4	-	-	GPSP-4	LC86/4	-	-	801	-	BALKH
1968-119	2440216.91	1968 Dec 26 09:45:02	Kosmos 11K63	-	V295-07	Kosmos-262	1 BB AA48	GPSP-4	-	-	GPSP-4	LC86/4	-	-	4027	-	BALKH
1968-0760	2440221.50	1969	R-120	-	-	Kosmos 247	1 BB AA48	KATTAK	-	-	KATTAK	LCS	-	-	4027	-	BALKH
1968-0761	2440221.50	1969 Feb 4	R-120	-	-	Kosmos 248	1 BB AA48	KATTAK	-	-	KATTAK	LCS	-	-	4027	-	BALKH
1968-0762	2440221.50	1969 Feb 7 13:59	R-120	-	-	Kosmos 249	1 BB AA48	KATTAK	-	-	KATTAK	LCS	-	-	4027	-	BALKH
1968-0768	2440256.50	1969 Feb 12	R-120	-	-	Kosmos 250	1 BB AA48	GPSP-4	-	-	GPSP-4	LC133/3	-	-	4027	-	BALKH
1968-0768	2440264.50	1969 Feb 18	R-120	-	V295-07	Kosmos-265	DS-P1-Yu No. 21	GPSP-4	-	-	GPSP-4	LC133/3	-	-	468	-	BALKH
1968-020	2440266.05	1969 Mar 5 13:04:55	Kosmos 11K63	-	V295-07	Kosmos-268	1 BB AA48	GPSP-4	-	-	GPSP-4	LC133/3	-	-	4027	-	BALKH
1969-031	2440309.17	1969 Mar 28 16:00:08	Kosmos 11K63	-	-	Kosmos-275	DS-P1-Yu No. 18	GPSP-4	-	-	GPSP-4	LC86/4	-	-	2173	-	-
1969-033	2440316.04	1969 Apr 4 13:00:04	Kosmos 11K63	-	V295-06	Kosmos-277	DS-P1-I No. 5	MILP-53	-	-	MILP-53	LC133/3	-	-	779	-	-
1969-047	2440365.04	1969 May 27 12:59:59	Kosmos 11K63	-	V295-05	Kosmos-283	DS-P1-Yu No. 19	MILP-53	-	-	MILP-53	LC133/3	-	-	466	-	-
1969-049	2440375.04	1969 Jun 3 12:57:27	Kosmos 11K63	-	V295-10	Kosmos-285	DS-P1-Yu No. 24	MILP-53	-	-	MILP-53	LC133/3	-	-	1509	-	-
1969-049	2440375.04	1969 Jun 3 12:57:27	Kosmos 11K63	-	V295-10	Kosmos-285	1 BB AA48	GPSP-4	-	-	GPSP-4	LC133/3	-	-	493	-	-
1969-0715	2440417.50	1969 Jun 15	K63D	-	Yv295-11	K63D BOR-1	BOR-1	VLAD	-	-	VLAD	LC133/3	-	-	100	-	BALKH
1969-F11	2440425.88	1969 Jul 23 09:00:00	Kosmos 11K63	-	V295-11	Kosmos-295	DS-P1-Yu No. 23	MILP-53	-	-	MILP-53	LC133/3	-	-	2707	-	-
1969-0770	2440426.50	1969 Jul 24	R-120	-	-	K663 31 RD UBP	1 BB AA48	GPSP-4	-	-	GPSP-4	LC133/3	-	-	4027	-	BALKH
1969-0771	2440426.50	1969 Jul 24	R-120	-	-	K663 31 RD UBP	1 BB AA48	GPSP-4	-	-	GPSP-4	LC133/3	-	-	4027	-	BALKH
1969-0772	2440426.50	1969 Jul 24	R-120	-	-	K663 31 RD UBP	1 BB AA48	GPSP-4	-	-	GPSP-4	LC133/3	-	-	4027	-	BALKH
1969-0773	2440426.50	1969 Jul 24	R-120	-	-	K663 31 RD UBP	1 BB AA48	GPSP-4	-	-	GPSP-4	LC133/3	-	-	4027	-	BALKH
1969-0774	2440426.50	1969 Jul 24	R-120	-	-	K663 31 RD UBP	1 BB AA48	GPSP-4	-	-	GPSP-4	LC133/3	-	-	4027	-	BALKH
1969-0775	2440426.50	1969 Jul 24	R-120	-	-	K663 31 RD UBP	1 BB AA48	GPSP-4	-	-	GPSP-4	LC133/3	-	-	4027	-	BALKH
1969-0776	2440426.50	1969 Jul 24	R-120	-	-	K663 31 RD UBP	1 BB AA48	GPSP-4	-	-	GPSP-4	LC133/3	-	-	4027	-	BALKH
1969-0777	2440426.50	1969 Jul 24	R-120	-	-	K663 31 RD UBP	1 BB AA48	GPSP-4	-	-	GPSP-4	LC133/3	-	-	4027	-	BALKH
1969-0778	2440426.50	1969 Jul 24	R-120	-	-	K663 31 RD UBP	1 BB AA48	GPSP-4	-	-	GPSP-4	LC133/3	-	-	4027	-	BALKH
1969-0779	2440426.50	1969 Jul 24	R-120	-	-	K663 31 RD UBP	1 BB AA48	GPSP-4	-	-	GPSP-4	LC133/3	-	-	4027	-	BALKH
1969-0780	2440426.50	1969 Jul 24	R-120	-	-	K663 31 RD UBP	1 BB AA48	GPSP-4	-	-	GPSP-4	LC133/3	-	-	4027	-	BALKH
1969-0781	2440426.50	1969 Jul 24	R-120	-	-	K663 31 RD UBP	1 BB AA48	GPSP-4	-	-	GPSP-4	LC133/3	-	-	4027	-	BALKH
1969-0782	2440426.50	1969 Jul 24	R-120	-	-	K663 31 RD UBP	1 BB AA48	GPSP-4	-	-	GPSP-4	LC133/3	-	-	4027	-	BALKH
1969-0783	2440426.50	1969 Jul 24	R-120	-	-	K663 31 RD UBP	1 BB AA48	GPSP-4	-	-	GPSP-4	LC133/3	-	-	4027	-	BALKH
1969-0784	2440426.50	1969 Jul 24	R-120	-	-	K663 31 RD UBP	1 BB AA48	GPSP-4	-	-	GPSP-4	LC133/3	-	-	4027	-	BALKH
1969-0785	2440426.50	1969 Jul 24	R-120	-	-	K663 31 RD UBP	1 BB AA48	GPSP-4	-	-	GPSP-4	LC133/3	-	-	4027	-	BALKH
1969-0786	2440426.50	1969 Jul 24	R-120	-	-	K663 31 RD UBP	1 BB AA48	GPSP-4	-	-	GPSP-4	LC133/3	-	-	4027	-	BALKH
1969-0787	2440426.50	1969 Jul 24	R-120	-	-	K663 31 RD UBP	1 BB AA48	GPSP-4	-	-	GPSP-4	LC133/3	-	-	4027	-	BALKH
1969-0788	2440426.50	1969 Jul 24	R-120	-	-	K663 31 RD UBP	1 BB AA48	GPSP-4	-	-	GPSP-4	LC133/3	-	-	4027	-	BALKH
1969-0789	2440426.50	1969 Jul 24	R-120	-	-	K663 31 RD UBP	1 BB AA48	GPSP-4	-	-	GPSP-4	LC133/3	-	-	4027	-	BALKH
1969-0790	2440426.50	1969 Jul 24	R-120	-	-	K663 31 RD UBP	1 BB AA48	GPSP-4	-	-	GPSP-4	LC133/3	-	-	4027	-	BALKH
1969-0791	2440426.50	1969 Jul 24	R-120	-	-	K663 31 RD UBP	1 BB AA48	GPSP-4	-	-	GPSP-4	LC133/3	-	-	4027	-	BALKH
1969-0792	2440426.50	1969 Jul 24	R-120	-	-	K663 31 RD UBP	1 BB AA48	GPSP-4	-	-	GPSP-4	LC133/3	-	-	4027	-	BALKH
1969-0793	2440426.50	1969 Jul 24	R-120	-	-	K663 31 RD UBP	1 BB AA48	GPSP-4	-	-	GPSP-4	LC133/3	-	-	4027	-	BALKH
1969-0794	2440426.50	1969 Jul 24	R-120	-	-	K663 31 RD UBP	1 BB AA48	GPSP-4	-	-	GPSP-4	LC133/3	-	-	4027	-	BALKH
1969-0795	2440426.50	1969 Jul 24	R-120	-	-	K663 31 RD UBP	1 BB AA48	GPSP-4	-	-	GPSP-4	LC133/3	-	-	4027	-	BALKH
1969-0796	2440426.50	1969 Jul 24	R-120	-	-	K663 31 RD UBP	1 BB AA48	GPSP-4	-	-	GPSP-4	LC133/3	-	-	4027	-	BALKH
1969-0797	2440426.50	1969 Jul 24	R-120	-	-	K663 31 RD UBP	1 BB AA48	GPSP-4	-	-	GPSP-4	LC133/3	-	-	4027	-	BALKH
1969-0798	2440426.50	1969 Jul 24	R-120	-	-	K663 31 RD UBP	1 BB AA48	GPSP-4	-	-	GPSP-4	LC133/3	-	-	4027	-	BALKH
1969-0799	2440426.50	1969 Jul 24	R-120	-	-	K663 31 RD UBP	1 BB AA48	GPSP-4	-	-	GPSP-4	LC133/3	-	-	4027	-	BALKH
1969-0800	2440426.50	1969 Jul 24	R-120	-	-	K663 31 RD UBP	1 BB AA48	GPSP-4	-	-	GPSP-4	LC133/3	-	-	4027	-	BALKH
1969-0801	2440426.50	1969 Jul 24	R-120	-	-	K663 31 RD UBP	1 BB AA48	GPSP-4	-	-	GPSP-4	LC133/3	-	-	4027	-	BALKH
1969-0802	2440426.50	1969 Jul 24	R-120	-	-	K663 31 RD UBP	1 BB AA48	GPSP-4	-	-	GPSP-4	LC133/3	-	-	4027	-	BALKH
1969-0803	2440426.50	1969 Jul 24	R-120	-	-	K663 31 RD UBP	1 BB AA48	GPSP-4	-	-	GPSP-4	LC133/3	-	-	4027	-	BALKH
1969-0804	2440426.50	1969 Jul 24	R-120	-	-	K663 31 RD UBP	1 BB AA48	GPSP-4	-	-	GPSP-4	LC133/3	-	-	4027	-	BALKH
1969-0805	2440426.50	1969 Jul 24	R-120	-	-	K663 31 RD UBP	1 BB AA48	GPSP-4	-	-	GPSP-4	LC133/3	-	-	4027	-	BALKH
1969-0806	2440426.50	1969 Jul 24	R-120	-	-	K663 31 RD UBP	1 BB AA48	GPSP-4	-	-	GPSP-4	LC133/3	-	-	4027	-	BALKH
1969-0807	2440426.50	1969 Jul 24	R-120	-	-	K663 31 RD UBP	1 BB AA48	GPSP-4	-	-	GPSP-4	LC133/3	-	-	4027	-	BALKH
1969-0808	2440426.50	1969 Jul 24	R-120	-	-	K663 31 RD UBP	1 BB AA48	GPSP-4	-	-	GPSP-4	LC133/3	-	-	4027	-	BALKH
1969-0809	2440426.50	1969 Jul 24	R-120	-	-	K663 31 RD UBP	1 BB AA48	GPSP-4	-	-	GPSP-4	LC133/3	-	-	4027	-	BALKH
1969-0810	2440426.50	1969 Jul 24	R-120	-	-	K663 31 RD UBP	1 BB AA48	GPSP-4	-	-	GPSP-4	LC133/3	-	-	4027	-	BALKH
1969-0811	2440426.50	1969 Jul 24	R-120	-	-	K663 31 RD UBP	1 BB AA48	GPSP-4	-	-	GPSP-4	LC133/3	-	-	4027	-	BALKH
1969-0812	2440426.50	1969 Jul 24	R-120	-	-	K663 31 RD UBP	1 BB AA48	GPSP-4	-	-	GPSP-4	LC133/3	-	-	4027	-	BALKH
1969-0813	2440426.50	1969 Jul 24	R-120	-	-	K663 31 RD UBP	1 BB AA48	GPSP-4	-	-	GPSP-4	LC133/3	-	-	4027	-	BALKH
1969-0814	2440426.50	1969 Jul 24	R-120	-	-	K663 31 RD UBP	1 BB AA48	GPSP-4	-	-	GP						

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Mission	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee_Km	Range_Km	Dest
1971-072	2441190.95	1971 Aug 27 1054:56	Kosmos 11K63	-	64657-134	Kosmos-435	DS-P1-Yu No. 41	MILP-53	-	-	-	478	-	BALKH
1971-8696	2441205.50	1971 Sep 15	R-12U	-	64634-148	8K630 29 RD UBP	1 BB AA48	GTP-4	-	-	-	4007	-	BALKH
1971-079	2441215.94	1971 Sep 24 1030:00	Kosmos 11K63	-	64634-148	Kosmos-440	DS-P1-I No. 10	MILP-53	-	-	-	788	-	BALKH
1971-8689	2441232.50	1971 Oct 8	R-12U	-	64634-145	8K630 51 RB UBP	1 BB AA48	KATMAK	-	-	-	4027	-	BALKH
1971-090	2441244.03	1971 Oct 19 1240:01	Kosmos 11K63	-	28547-144	Kosmos-453	DS-P1-Yu No. 44	MILP-53	-	-	-	496	-	BALKH
1971-097	2441272.97	1971 Nov 17 1009:48	Kosmos 11K63	-	28547-144	Kosmos-458	DS-P1-Yu No. 54	MILP-53	-	-	-	490	-	BALKH
1971-101	2441284.92	1971 Nov 29 1009:56	Kosmos 11K63	-	28524-151	Kosmos-465	DS-P1-Yu No. 53	MILP-53	-	-	-	498	-	BALKH
1971-104	2441287.85	1971 Dec 2 0825:14	Kosmos 11K63	-	4747-140	Interkosmos-5	DS-02-IK No. 2	GTP-4	-	-	-	1166	-	BALKH
1971-113	2441302.94	1971 Dec 17 1039:58	Kosmos 11K63	-	4747-140	Kosmos-467	DS-P1-Yu No. 45	MILP-53	-	-	-	472	-	BALKH
1972-004	2441341.97	1972 Jan 26 1115:01	Kosmos 11K63	-	28547-143	Kosmos-472	DS-P1-Yu No. 52	MILP-53	-	-	-	1546	-	BALKH
1972-562	2441355.75	1972 Feb 8 0859	K63D	-	64657-134	K63D BUR-2	BUR-2 No. 104	VJAD	-	-	-	100	-	BALKH
1972-020	2441401.94	1972 Mar 25 1039:59	Kosmos 11K63	-	64657-134	Kosmos-481	DS-P1-Yu No. 46	MILP-53	-	-	-	514	-	BALKH
1972-028	2441418.96	1972 Apr 11 1104:58	Kosmos 11K63	-	47394-142	Kosmos-485	DS-P1-Yu No. 58	MILP-53	-	-	-	478	-	BALKH
1972-033	2441429.00	1972 Apr 21 1159:59	Kosmos 11K63	-	47394-142	Kosmos-485	DS-P1-Yu No. 57	MILP-53	-	-	-	504	-	BALKH
1972-032	2441432.98	1972 Apr 25 1129:59	Kosmos 11K63	-	64634-146	Kosmos-487	DS-P1-Yu No. 51	MILP-53	-	-	-	2707	-	BALKH
1972-047	2441498.75	1972 Jun 30 0858:41	Kosmos 11K63	-	28524-153	Interkosmos-7	DS-03-IK No. 3	GTP-4	-	-	-	565	-	BALKH
1972-048	2441498.89	1972 Jun 30 0919:49	Kosmos 11K63	-	28524-153	Kosmos-497	DS-P1-I No. 12	MILP-53	-	-	-	787	-	BALKH
1972-050	2441503.90	1972 Jul 5 0829:58	Kosmos 11K63	-	28524-152	Kosmos-498	DS-P1-Yu No. 56	MILP-53	-	-	-	484	-	BALKH
1972-054	2441510.75	1972 Jul 12 0859:57	Kosmos 11K63	-	64657-135	Kosmos-501	DS-P1-Yu No. 60	MILP-53	-	-	-	2145	-	BALKH
1972-078	2441595.98	1972 Oct 5 1130:00	Kosmos 11K63	-	64657-135	Kosmos-523	DS-P1-Yu No. 63	MILP-53	-	-	-	481	-	BALKH
1972-080	2441602.06	1972 Oct 11 1319:58	Kosmos 11K63	-	64657-136	Kosmos-524	DS-P1-Yu No. 61	MILP-53	-	-	-	510	-	BALKH
1972-084	2441652.41	1972 Oct 25 1039:57	Kosmos 11K63	-	64657-136	Kosmos-526	DS-P1-Yu No. 64	MILP-53	-	-	-	484	-	BALKH
1972-094	2441652.41	1972 Nov 30 2149:57	Kosmos 11K63	-	28524-155	Interkosmos-8	DS-01-IK No. 2	MILP-53	-	-	-	673	-	BALKH
1973-004	2441784.99	1973 Jan 24 1144:50	Kosmos 11K63	-	64653-149	Kosmos-545	DS-P1-Yu No. 62	MILP-53	-	-	-	494	-	BALKH
1973-020	2441791.93	1973 Apr 12 1149:58	Kosmos 11K63	-	64643-161	Kosmos-633	DS-P1-Yu No. 67	MILP-53	-	-	-	482	-	BALKH
1973-029	2441791.93	1973 Apr 19 1019:58	Kosmos 11K63	-	28547-142	IK-Kopernik-500	DS-02-IK Kopernik-500	GTP-4	-	-	-	1527	-	BALKH
1973-029	2441820.06	1973 May 17 1319:58	Kosmos 11K63	-	47394-143	Kosmos-553	DS-P1-Yu No. 65	MILP-53	-	-	-	500	-	BALKH
1973-029	2441820.06	1973 May 24 1050	K63D	-	64634-149	BUR-3 No. 301	BUR-3 No. 301	VJAD	-	-	-	207	-	BALKH
1973-055	2441826.96	1973 Jun 5 1129:47	Kosmos 11K63	-	64634-149	Kosmos-562	DS-P1-Yu No. 66	MILP-53	-	-	-	483	-	BALKH
1973-566	2441858.50	1973 Jun 25	R-12U	-	47394-141	8K630 40 RD UBP	1 BB AA48	GTP-4	-	-	-	4027	-	BALKH
1973-567	2441916.98	1973 Aug 22 1124:55	Kosmos 11K63	-	28519-181	Kosmos-560	DS-P1-Yu No. 59	MILP-53	-	-	-	482	-	BALKH
1973-075	2441972.08	1973 Oct 16 1400:01	Kosmos 11K63	-	28524-154	Kosmos-601	DS-P1-Yu No. 60	MILP-53	-	-	-	1531	-	BALKH
1973-091	2442007.02	1973 Nov 20 1229:58	Kosmos 11K63	-	64653-170	Kosmos-608	DS-P1-Yu No. 69	MILP-53	-	-	-	501	-	BALKH
1973-094	2442014.90	1973 Nov 28 0929:58	Kosmos 11K63	-	64653-170	Kosmos-611	DS-P1-Yu No. 64	MILP-53	-	-	-	481	-	BALKH
1973-099	2442025.97	1973 Dec 15 1110:03	Kosmos 11K63	-	47394-140	Kosmos-615	DS-P1-I No. 13	MILP-53	-	-	-	833	-	BALKH
1974-010	2442105.96	1974 Feb 27 1041:58	Kosmos 11K63	-	64643-161	Kosmos-633	DS-P1-Yu No. 71	MILP-53	-	-	-	490	-	BALKH
1974-012	2442112.17	1974 Mar 5 1604:58	Kosmos 11K63	-	64643-162	Kosmos-634	DS-P1-Yu No. 67	MILP-53	-	-	-	601	-	BALKH
1974-044	2442228.02	1974 Jun 26 1229:57	K63D	-	28543-163	Kosmos-662	DS-P1-I No. 14	MILP-53	-	-	-	612	-	BALKH
1974-545	2442239.71	1974 Jul 11 0821	R-12U	-	28543-164	Kosmos-668	DS-P1-Yu No. 68	VJAD	-	-	-	100	-	BALKH
1974-704	2442239.96	1974 Jul 11 1039:58	Kosmos 11K63	-	28543-164	Kosmos-668	DS-P1-Yu No. 68	MILP-53	-	-	-	307	-	BALKH
1974-828	2442254.50	1974 Jul 25 1206	Kosmos 11K63	-	28543-165	8K630 29 RD UBP	1 BB AA48	MILP-53	-	-	-	494	-	BALKH
1974-828	2442254.50	1974 Jul 25 1206	R-12U	-	47394-141	8K630 29 RD UBP	1 BB AA48	GTP-4	-	-	-	4027	-	BALKH
1974-828	2442254.50	1974 Jul 25 1206	R-12U	-	47394-141	8K630 43 RD UBP	1 BB AA48	GTP-4	-	-	-	4027	-	BALKH
1974-828	2442254.50	1974 Jul 25 1206	R-12U	-	47394-141	8K630 43 RD UBP	1 BB AA48	GTP-4	-	-	-	4027	-	BALKH
1974-828	2442254.50	1974 Jul 25 1206	R-12U	-	47394-141	8K630 43 RD UBP	1 BB AA48	GTP-4	-	-	-	4027	-	BALKH
1974-828	2442254.50	1974 Jul 25 1206	R-12U	-	47394-141	8K630 43 RD UBP	1 BB AA48	GTP-4	-	-	-	4027	-	BALKH
1974-828	2442254.50	1974 Jul 25 1206	R-12U	-	47394-141	8K630 43 RD UBP	1 BB AA48	GTP-4	-	-	-	4027	-	BALKH
1974-828	2442254.50	1974 Jul 25 1206	R-12U	-	47394-141	8K630 43 RD UBP	1 BB AA48	GTP-4	-	-	-	4027	-	BALKH
1974-828	2442254.50	1974 Jul 25 1206	R-12U	-	47394-141	8K630 43 RD UBP	1 BB AA48	GTP-4	-	-	-	4027	-	BALKH
1974-828	2442254.50	1974 Jul 25 1206	R-12U	-	47394-141	8K630 43 RD UBP	1 BB AA48	GTP-4	-	-	-	4027	-	BALKH
1974-828	2442254.50	1974 Jul 25 1206	R-12U	-	47394-141	8K630 43 RD UBP	1 BB AA48	GTP-4	-	-	-	4027	-	BALKH
1974-828	2442254.50	1974 Jul 25 1206	R-12U	-	47394-141	8K630 43 RD UBP	1 BB AA48	GTP-4	-	-	-	4027	-	BALKH
1974-828	2442254.50	1974 Jul 25 1206	R-12U	-	47394-141	8K630 43 RD UBP	1 BB AA48	GTP-4	-	-	-	4027	-	BALKH
1974-828	2442254.50	1974 Jul 25 1206	R-12U	-	47394-141	8K630 43 RD UBP	1 BB AA48	GTP-4	-	-	-	4027	-	BALKH
1974-828	2442254.50	1974 Jul 25 1206	R-12U	-	47394-141	8K630 43 RD UBP	1 BB AA48	GTP-4	-	-	-	4027	-	BALKH
1974-828	2442254.50	1974 Jul 25 1206	R-12U	-	47394-141	8K630 43 RD UBP	1 BB AA48	GTP-4	-	-	-	4027	-	BALKH
1974-828	2442254.50	1974 Jul 25 1206	R-12U	-	47394-141	8K630 43 RD UBP	1 BB AA48	GTP-4	-	-	-	4027	-	BALKH
1974-828	2442254.50	1974 Jul 25 1206	R-12U	-	47394-141	8K630 43 RD UBP	1 BB AA48	GTP-4	-	-	-	4027	-	BALKH
1974-828	2442254.50	1974 Jul 25 1206	R-12U	-	47394-141	8K630 43 RD UBP	1 BB AA48	GTP-4	-	-	-	4027	-	BALKH
1974-828	2442254.50	1974 Jul 25 1206	R-12U	-	47394-141	8K630 43 RD UBP	1 BB AA48	GTP-4	-	-	-	4027	-	BALKH
1974-828	2442254.50	1974 Jul 25 1206	R-12U	-	47394-141	8K630 43 RD UBP	1 BB AA48	GTP-4	-	-	-	4027	-	BALKH
1974-828	2442254.50	1974 Jul 25 1206	R-12U	-	47394-141	8K630 43 RD UBP	1 BB AA48	GTP-4	-	-	-	4027	-	BALKH
1974-828	2442254.50	1974 Jul 25 1206	R-12U	-	47394-141	8K630 43 RD UBP	1 BB AA48	GTP-4	-	-	-	4027	-	BALKH
1974-828	2442254.50	1974 Jul 25 1206	R-12U	-	47394-141	8K630 43 RD UBP	1 BB AA48	GTP-4	-	-	-	4027	-	BALKH
1974-828	2442254.50	1974 Jul 25 1206	R-12U	-	47394-141	8K630 43 RD UBP	1 BB AA48	GTP-4	-	-	-	4027	-	BALKH
1974-828	2442254.50	1974 Jul 25 1206	R-12U	-	47394-141	8K630 43 RD UBP	1 BB AA48	GTP-4	-	-	-	4027	-	BALKH
1974-828	2442254.50	1974 Jul 25 1206	R-12U	-	47394-141	8K630 43 RD UBP	1 BB AA48	GTP-4	-	-	-	4027	-	BALKH
1974-828	2442254.50	1974 Jul 25 1206	R-12U	-	47394-141	8K630 43 RD UBP	1 BB AA48	GTP-4	-	-	-	4027	-	BALKH
1974-828	2442254.50	1974 Jul 25 1206	R-12U	-	47394-141	8K630 43 RD UBP	1 BB AA48	GTP-4	-	-	-	4027	-	BALKH
1974-828	2442254.50	1974 Jul 25 1206	R-12U	-	47394-141	8K630 43 RD UBP	1 BB AA48	GTP-4	-	-	-	4027	-	BALKH
1974-828	2442254.50	1974 Jul 25 1206	R-12U	-	47394-141	8K630 43 RD UBP	1 BB AA48	GTP-4	-	-	-	4027	-	BALKH
1974-828	2442254.50	1974 Jul 25 1206	R-12U	-	47394-141	8K630 43 RD UBP	1 BB AA48	GTP-4	-	-	-	4027	-	BALKH
1974-82														

Launch

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Mission	FlightCode	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee km	Range km	Dest
1981-5257	2444935.50	1981 Dec	R-12U	-	-	8K630 40 RD UBP	-	-	-	GTSP-4	-	-	-	4027	-	BALKH
1982-5261	2445242.50	1982 Uct	R-12U	-	-	8K630 40 RD UBP	-	-	-	GTSP-4	-	-	-	4027	-	BALKH
1984-5209	2445699.50	1984	K63	-	-	Dzno 1	-	-	-	GTSP-4	-	-	-	4007	-	BALKH
1984-5276	2446034.50	1984 Dec	R-12U	-	-	8K630 40 RD UBP	1 BB AM48	MCCh 8F126	-	GTSP-4	-	-	-	4027	-	BALKH
1984-5277	2446034.50	1984 Dec	R-12U	-	-	8K630 40 RD UBP	1 BB AM48	MCCh 8F126	-	GTSP-4	-	-	-	4027	-	BALKH
1986-5194	2446430.50	1986	K63	-	-	BAMBUK-H	-	-	-	GTSP-4	-	-	-	4007	-	BALKH
1986-5204	2446430.50	1986	K63	-	-	Amur-P	-	-	-	GTSP-4	-	-	-	4007	-	BALKH
1986-5205	2446430.50	1986	K63	-	-	Amur-P	-	-	-	GTSP-4	-	-	-	4007	-	BALKH
1987-5201	2446795.50	1987	K63	-	-	Amur-P	-	-	-	GTSP-4	-	-	-	4007	-	BALKH
1987-5266	2446795.50	1987	K63	-	-	Amur-P	-	-	-	GTSP-4	-	-	-	4007	-	BALKH
1987-5267	2446795.50	1987	K63	-	-	Pchola-2	-	-	-	GTSP-4	-	-	-	4007	-	BALKH
1987-5268	2446795.50	1987	K63	-	-	Amur-P	-	-	-	GTSP-4	-	-	-	4007	-	BALKH
1988-5196	2447160.50	1988	K63	-	-	Amur-P	-	-	-	GTSP-4	-	-	-	4007	-	BALKH
1988-5197	2447160.50	1988	K63	-	-	Amur-P	-	-	-	GTSP-4	-	-	-	4007	-	BALKH
1988-5198	2447160.50	1988	K63	-	-	Amur-P	-	-	-	GTSP-4	-	-	-	4007	-	BALKH
1989-5148	2447526.50	1989	K63	-	-	Amur-P	-	-	-	GTSP-4	-	-	-	4007	-	BALKH
1989-5149	2447526.50	1989	K63	-	-	Amur-P	-	-	-	GTSP-4	-	-	-	4007	-	BALKH
1989-5152	2447526.50	1989	K63	-	-	Amur-P	-	-	-	GTSP-4	-	-	-	4007	-	BALKH
1990-5214	2447891.50	1990	K63	-	-	Amur-P	-	-	-	GTSP-4	-	-	-	4007	-	BALKH
1990-5215	2447891.50	1990	K63	-	-	Amur-P	-	-	-	GTSP-4	-	-	-	4007	-	BALKH
1991-5224	2448266.50	1991	K63	-	-	Amur-P	-	-	-	GTSP-4	-	-	-	4007	-	BALKH
1992-5111	2448621.50	1992	K63	-	-	Amur-P	-	-	-	GTSP-4	-	-	-	4007	-	BALKH





Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	OrbPay	Agency	Launch_Code	Group	Category	LTCite	Cite	Notes
1960-S192	2437139.50	1960 Jun 24	R-12	-	IDI0-19S8	0.000	NWS	MS	-	Test	MS5-65	-	-
1960-S195	2437141.50	1960 Jun 26	R-12	-	LP1-2	0.000	NWS	MS	-	Test	MS5-65	-	-
1960-S199	2437143.50	1960 Jun 28	R-12	-	LP1-8	0.000	NWS	MS	-	Test	MS5-65	-	-
1960-S203	2437144.50	1960 Jun 29	R-12	-	2LD8-20T	0.000	NWS	MS	-	Test	MS5-65	-	-
1960-A196	2437148.50	1960 Aug 2	R-12	-	ID3-1TKL	0.000	NWS	MF	-	Test	MS5-65	-	-
1960-S220	2437150.50	1960 Aug 4	R-12	-	2LP3-20T	0.000	NWS	MS	-	Test	MS5-65	-	-
1960-S208	2437150.50	1960 Aug 4	R-12	-	LP1-1	0.000	NWS	MS	-	Test	MS5-65	-	-
1960-S223	2437154.50	1960 Aug 8	R-12	-	LP1-4	0.000	NWS	MS	-	Test	MS5-65	-	-
1960-S228	2437156.50	1960 Aug 10	R-12	-	ID5-2TS	0.000	NWS	MS	-	Test	MS5-65	-	-
1960-S207	2437157.50	1960 Aug 10	R-12	-	LP1-5	0.000	NWS	MS	-	Test	MS5-65	-	-
1960-S233	2437157.50	1960 Aug 11	R-12	-	20LO6-20T	0.000	NWS	MS	-	Test	MS5-65	-	-
1960-S236	2437158.50	1960 Aug 12	R-12	-	LP1-6	0.000	NWS	MS	-	Test	MS5-65	-	-
1960-S248	2437163.50	1960 Aug 17	R-12	-	ID5-3TS	0.000	NWS	MS	-	Test	MS5-65	-	-
1960-S301	2437176.50	1960 Aug 30	R-12	-	2LD9-20TS	0.000	NWS	MS	-	Test	MS5-65	-	-
1960-S266	2437182.50	1960 Sep 5	R-12	-	LP1-3	0.000	NWS	MS	-	Test	MS5-65	-	RML
1960-S270	2437192.50	1960 Sep 15	R-12	-	ID3-6	0.000	NWS	MS	-	Test	MS5-65	-	-
1960-S273	2437194.50	1960 Sep 17	R-12	-	ID3-13	0.000	NWS	MS	-	Test	MS5-65	-	-
1960-S279	2437199.50	1960 Sep 22	R-12	-	ID3-9	0.000	NWS	MS	-	Test	MS5-65	-	-
1960-S285	2437201.50	1960 Sep 24	R-12	-	2DD10-20T	0.000	NWS	MS	-	Test	MS5-65	-	-
1960-S291	2437205.50	1960 Sep 28	R-12	-	2DD11-20T	0.000	NWS	MS	-	Test	MS5-65	-	-
1960-S295	2437206.50	1960 Sep 29	R-12	-	2LD14-20T	0.000	NWS	MS	-	Test	MS5-65	-	-
1960-S298	2437207.50	1960 Sep 30	R-12	-	LD3-5	0.000	NWS	MS	-	Test	MS5-65	-	-
1960-S299	2437207.50	1960 Sep 30	R-12	-	2A03-26T	0.000	NWS	MS	-	Test	MS5-65	-	-
1960-S300	2437210.50	1960 Oct 3	R-12	-	ID3-7	0.000	NWS	MS	-	Test	MS5-65	-	-
1960-S340	2437212.50	1960 Oct 5	R-12	-	ID5-4TS	0.000	NWS	MS	-	Test	MS5-65	-	-
1960-S323	2437214.50	1960 Oct 6	R-12	-	2LD10-20T	0.000	NWS	MS	-	Test	MS5-65	-	-
1960-S326	2437224.50	1960 Oct 17	R-12	-	ID3-10	0.000	NWS	MS	-	Test	MS5-65	-	-
1960-S327	2437224.50	1960 Oct 18	R-12	-	ID3-21	0.000	NWS	MS	-	Test	MS5-65	-	-
1960-S329	2437226.50	1960 Oct 19	R-12	-	LD3-6TS	0.000	NWS	MS	-	Test	MS5-65	-	-
1960-S329	2437226.50	1960 Oct 20	R-12	-	ID3-5TS	0.000	NWS	MS	-	Test	MS5-65	-	-
1960-S330	2437227.50	1960 Oct 21	R-12	-	ID5-16	0.000	NWS	MS	-	Test	MS5-65	-	-
1960-S333	2437228.50	1960 Oct 31	R-12	-	ID3-16	0.000	NWS	MS	-	Test	MS5-65	-	-
1960-S335	2437236.50	1960 Oct 31	R-12	-	ID2-16	0.000	NWS	MS	-	Test	MS5-65	-	-
1960-S340	2437240.50	1960 Nov 1	R-12	-	ID3-4	0.000	NWS	MS	-	Test	MS5-65	-	-
1960-S341	2437242.50	1960 Nov 4	R-12	-	2DD12-20T	0.000	NWS	MS	-	Test	MS5-65	-	-
1960-S346	2437242.50	1960 Nov 4	R-12	-	2A05-20T	0.000	NWS	MS	-	Test	MS5-65	-	-
1960-S347	2437242.50	1960 Nov 4	R-12	-	LD1-15	0.000	NWS	MS	-	Test	MS5-65	-	-
1960-S418	2437246.50	1960 Nov 10	R-12	-	ID3-17	0.000	NWS	MS	-	Test	MS5-65	-	-
1960-S355	2437260.50	1960 Nov 12	R-12	-	2DD11-19T	0.000	NWS	MS	-	Test	MS5-65	-	-
1960-S419	2437260.50	1960 Nov 22	R-12	-	ID3-12	0.000	NWS	MS	-	Test	MS5-65	-	-
1960-S421	2437261.50	1960 Nov 23	R-12	-	ID3-6	0.000	NWS	MS	-	Test	MS5-65	-	-
1960-S359	2437262.50	1960 Nov 24	R-12	-	ID3-1	0.000	NWS	MS	-	Test	MS5-65	-	-
1960-S365	2437266.50	1960 Nov 30	R-12	-	2D3-3-20T	0.000	NWS	MS	-	Test	MS5-65	-	-
1960-S400	2437280.50	1960 Dec 12	R-12	-	2D5-20T	0.000	NWS	MS	-	Test	MS5-65	-	-
1960-S401	2437281.50	1960 Dec 13	R-12	-	4DD1-3T	0.000	NWS	MS	-	Test	MS5-65	-	-
1960-S408	2437281.50	1960 Dec 15	R-12	-	ID5-8TS	0.000	NWS	MS	-	Test	MS5-65	-	-
1960-S409	2437283.50	1960 Dec 16	R-12	-	ID5-9TS	0.000	NWS	MS	-	Test	MS5-65	-	-
1960-S412	2437287.50	1960 Dec 19	R-12	-	ID5-10TS	0.000	NWS	MS	-	Test	MS5-65	-	-
1960-S416	2437291.50	1960 Dec 23	R-12	-	2DD14-20T	0.000	NWS	MS	-	Test	MS5-65	-	-
1960-S456	2437291.50	1960 Dec 23	R-12	-	2A05-20T	0.000	NWS	MS	-	Test	MS5-65	-	-
1960-S457	2437291.50	1960 Dec 27	R-12	-	2D08-1T	0.000	NWS	MS	-	Test	MS5-65	-	-
1961-S14	2437300.50	1961 Jan 10	R-12	-	2D08-1T	0.000	NWS	MS	-	Test	MS5-65	-	-
1961-S16	2437312.50	1961 Jan 13	R-12	-	2D08-4T	0.000	NWS	MS	-	Test	MS5-65	-	-
1961-S18	2437313.50	1961 Jan 14	R-12	-	2D08-1T	0.000	NWS	MS	-	Test	MS5-65	-	-
1961-S35	2437333.50	1961 Feb 1	R-12	-	E22601-20T	0.000	NWS	MS	-	Test	MS5-65	-	-
1961-S36	2437340.50	1961 Feb 1	R-12	-	E23101-20T	0.000	NWS	MS	-	Test	MS5-65	-	-
1961-S40	2437340.50	1961 Feb 10	R-12	-	2A03-14	0.000	NWS	MS	-	Test	MS5-65	-	-
1961-S472	2437354.50	1961 Feb 24	R-12	-	-	0.000	NWS	MS	-	Test	MS5-65	-	-
1961-S468	2437360.50	1961 Feb 24	R-12	-	-	0.000	NWS	MS	-	Test	MS5-65	-	-
1961-S464	2437360.50	1961 Feb 2	R-12	-	E2-2	0.000	SRE30	MS	-	Target	MS5-65	-	-
1961-S470	2437362.50	1961 Feb 4	R-12	-	2E22901-10T	0.000	SRE30	MS	-	Target	MS5-65	-	-
1961-S478	2437368.50	1961 Feb 10	R-12	-	E22602-20T	0.000	NWS	MS	-	Test	MS5-65	-	-
1961-S479	2437375.50	1961 Feb 11	R-12	-	2A03-15	0.000	NWS	MS	-	Test	MS5-65	-	-
1961-S485	2437375.50	1961 Feb 17	R-12	-	2E23102-20T	0.000	NWS	MS	-	Test	MS5-65	-	-
1961-S489	2437383.50	1961 Feb 25	R-12	-	2DD4-11	0.000	NWS	MS	-	Test	MS5-65	-	-
1961-S494	2437385.50	1961 Feb 27	R-12	-	2DD4-9	0.000	NWS	MS	-	Test	MS5-65	-	-
1961-S495	2437387.50	1961 Feb 29	R-12	-	-	0.000	NWS	MS	-	Test	MS5-65	-	-
1961-S480	2437390.50	1961 Feb 1	R-12	-	2D04-8	0.000	NWS	MS	-	Test	MS5-65	-	-
1961-S101	2437392.50	1961 Feb 3	R-12	-	2D04-7	0.000	NWS	MS	-	Test	MS5-65	-	-
1961-S106	2437396.50	1961 Feb 6	R-12	-	LD1-17	0.000	NWS	MS	-	Test	MS5-65	-	-
1961-S108	2437399.50	1961 Feb 7	R-12	-	2DD4-10	0.000	NWS	MS	-	Test	MS5-65	-	-
1961-S473	2437402.50	1961 Feb 10	R-12	-	LD1-14	0.000	NWS	MS	-	Test	MS5-65	-	-
1961-S114	2437408.50	1961 Feb 13	R-12	-	E2-13T	0.000	NWS	MS	-	Test	MS5-65	-	-
1961-S127	2437416.50	1961 Feb 19	R-12	-	E232603-20T	0.000	NWS	MS	-	Test	MS5-65	-	-
1961-S129	2437417.50	1961 Feb 27	R-12	-	E23103-10T	0.000	NWS	MS	-	Test	MS5-65	-	-
1961-S474	2437417.50	1961 Feb 28	R-12	-	-	0.000	NWS	MS	-	Test	MS5-65	-	-
1961-S475	2437417.50	1961 Feb 28	R-12	-	2DD4-10	0.000	NWS	MS	-	Test	MS5-65	-	-
1961-S141	2437429.50	1961 May 10	R-12	-	LD1-14	0.000	NWS	MS	-	Test	MS5-65	-	-
1961-S162	2437448.50	1961 May 29	R-12	-	IDI10-19S8	0.000	NWS	MS	-	Test	MS5-65	-	-
1961-S171	2437458.50	1961 Jun 9	R-12	-	IDI14-12A	0.000	SRE30	MS	-	Target	MS5-65	-	-
1961-S172	2437459.50	1961 Jun 8	R-12	-	2E22902-20T	0.000	NWS	MS	-	Test	MS5-65	-	-
1961-S178	2437465.50	1961 Jun 15	R-12	-	ID5-20A	0.000	NWS	MS	-	Test	MS5-65	-	-
1961-S186	2437474.50	1961 Jun 24	R-12	-	-	0.000	SRE30	MS	-	Target	MS5-65	-	-

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Orbpay	Agency	Launch_Code	Group	Category	LTCite	Cite	Notes
1961-S191	2437479.50	1961 Jun 29	R-12	-	2E23104-10T	0.000	NVS	MS	-	Test	Z20	-	-
1961-S193	2437480.50	1961 Jun 30	R-12	-	IDP4-11A	0.000	SKE30	MS	-	Target	Z20	-	-
1961-S217	2437602.50	1961 Jul 22	R-12	-	IPCH-10TRL	0.000	NVS	MS	-	Test	Z20	-	-
1961-S218	2437606.50	1961 Jul 25	R-12	-	2E22605-20T	0.000	NVS	MS	-	Test	Z20	-	-
1961-S223	2437607.50	1961 Jul 27	R-12	-	2L09-10	0.000	NVS	MS	-	Test	Z20	-	-
1961-S243	2437626.50	1961 Aug 15	R-12	-	2E22903-20T	0.000	NVS	MS	-	Test	Z20	-	-
1961-S259	2437641.50	1961 Aug 30	R-12	-	2E22606-20T	0.000	NVS	MS	-	Test	Z20	-	-
1961-S261	2437642.50	1961 Aug 31	R-12	-	2E23105-10T	0.000	NVS	MS	-	Test	Z20	-	-
1961-S463	2437646.50	1961 Sep 3	R-12	-	2E23104-16	0.000	NVS	MS	-	Nuclear test support	BMLX	-	-
1961-S464	2437646.50	1961 Sep 3	R-12	-	2E23104-15	0.000	NVS	MS	-	Nuclear test support	BMLX	-	-
1961-S277	2437653.50	1961 Sep 4	R-12	-	2E23102T	0.000	NVS	MS	-	Test	Z20	-	-
1961-S278	2437654.71	1961 Sep 12 0500?	R-12	-	2E23104-14T	0.000	NVS	MS	-	Nuclear Test	Podng	-	-
1961-S280	2437656.50	1961 Sep 13	R-12	-	2E23101-T	0.000	NVS	MS	-	Test	Z20	-	-
1961-S465	2437658.50	1961 Sep 16	R-12	-	2E23104-18T	0.000	NVS	MS	-	Nuclear test support	BMLX	-	-
1961-S297	2437668.50	1961 Sep 26	R-12	-	2E22904-20T	0.000	NVS	MS	-	Test	Z20	-	-
1961-S262	2437670.50	1961 Sep 28	R-12	-	ID5-11	0.000	NVS	MS	-	Test	Z20	-	-
1961-S303	2437672.50	1961 Sep 30	R-12	-	2E23106-10T	0.000	NVS	MS	-	Test	Z20	-	-
1961-S307	2437676.50	1961 Oct 4	R-12	-	-	0.000	NVS	MS	-	Test	Z20	-	-
1961-S304	2437684.50	1961 Oct 12	R-12	-	LP1-14	0.000	NVS	MS	-	Test	Z20	-	-
1961-S305	2437687.50	1961 Oct 15	R-12	-	ID5-12	0.000	NVS	MS	-	Test	Z20	-	-
1961-S306	2437687.50	1961 Oct 15	R-12	-	LP1-15	0.000	NVS	MS	-	Test	Z20	-	-
1961-S308	2437689.50	1961 Oct 17	R-12	-	ID1E-14	0.000	NVS	MS	-	Test	Z20	-	-
1961-S309	2437689.50	1961 Oct 17	R-12	-	LP1-16	0.000	NVS	MS	-	Test	Z20	-	-
1961-S310	2437693.50	1961 Oct 21	R-12	-	-	0.000	NVS	MS	-	Test	Z20	-	-
1961-S314	2437693.50	1961 Oct 21	R-12	-	LP1-18	0.000	NVS	MS	-	Test	Zak06	-	-
1961-S466	2437696.50	1961 Oct 24	R-12	-	-	0.000	NVS	MS	-	Test	Z20	-	-
1961-S354	2437699.50	1961 Oct 27	R-12	-	-	0.000	NVS	MS	-	Test	Z20	-	-
1961-S461	2437699.50	1961 Oct 27	R-12	-	-	0.000	PRD	MS	-	Nuclear Test	Podng	-	-
1961-S355	2437699.50	1961 Oct 27	R-12	-	ID5-17	0.000	PRD	MS	-	Nuclear Test	Podng	-	-
1961-S462	2437699.50	1961 Oct 27	R-12	-	ID5-19	0.000	PRD	MS	-	Nuclear Test	Podng	-	-
1961-F11	2437600.19	1961 Oct 27 1630	Romos 6381	-	ILK	0.160	NVS	OF	G	Sat_LED 0	AVNDS	-	-
1961-S313	2437602.50	1961 Oct 30	R-12	-	2E22607-20T	0.000	NVS	MS	-	Test	Z20	-	-
1961-S362	2437603.50	1961 Oct 31	R-12	-	-	0.000	NVS	MS	-	Test	Z20	-	-
1961-S479	2437603.50	1961 Nov 25	R-12	-	-	0.000	NVS	MS	-	Test	Z20	-	-
1961-S358	2437628.50	1961 Nov 25	R-12	-	2E22905-25T	0.000	NVS	MS	-	Test	Z20	-	-
1961-S404	2437636.50	1961 Dec 21 1230	R-12	-	2E22608-20T	0.000	NVS	MS	-	Test	Z20	-	-
1961-F15	2437636.02	1961 Dec 21 1230	Romos 6381	-	2LK	0.160	NVS	OF	G	Sat_LED 0	AVNDS	-	-
1961-S455	2437636.50	1961 Dec 23	R-12	-	2E22601-15T	0.000	NVS	MS	-	Test	Z20	-	-
1961-S440	2437660.50	1961 Dec 27	R-12	-	-	0.000	NVS	MS	-	Test	Z20	-	-
1961-F14	2437662.50	1961 Dec 29	R-12	-	2E22607-19	0.000	NVS	MS	-	Reentry Test	2Lidiq1	-	[or VLAD?]
1961-S311	2437663.50	1961 Dec 30 0836	R-12	-	-	0.000	NVS	MS	-	Test	Z20	-	-
1961-S366	2437664.50	1962	R-12	-	-	0.000	NVS	MS	-	Test	Z20	-	-
1962-S867	2437664.50	1962	R-12	-	-	0.000	NVS	MS	-	Reentry Test	BML	-	-
1962-S868	2437664.50	1962	R-12	-	-	0.000	NVS	MS	-	Reentry Test	BML	-	-
1962-S869	2437664.50	1962	R-12	-	-	0.000	NVS	MS	-	Reentry Test	BML	-	-
1962-S870	2437664.50	1962	R-12	-	-	0.000	NVS	MS	-	Reentry Test	BML	-	-
1962-S871	2437664.50	1962	R-12	-	-	0.000	NVS	MS	-	Reentry Test	BML	-	-
1962-S872	2437664.50	1962	R-12	-	-	0.000	NVS	MS	-	Reentry Test	BML	-	-
1962-S873	2437664.50	1962	R-12	-	-	0.000	NVS	MS	-	Reentry Test	BML	-	-
1962-S874	2437664.50	1962	R-12	-	-	0.000	NVS	MS	-	Test	NSE-65	-	-
1962-S274	2437694.50	1962 Jan 27	R-12	-	-	0.000	NVS	MS	-	Test	NSE-65	-	-
1962-S31	2437694.50	1962 Jan 30	R-12	-	-	0.000	NVS	MS	-	Test	NSE-65	-	-
1962-S40	2437713.36	1962 Feb 17 2025	R-12	-	-	0.000	NVS	MS	-	Test	NSE-65	-	-
1962-S41	2437713.37	1962 Feb 17 2055	R-12	-	-	0.000	NVS	MS	-	Test	NSE-65	-	-
1962-S46	2437716.50	1962 Feb 21	R-12	-	-	0.000	NVS	MS	-	Test	NSE-65	-	-
1962-S47	2437720.50	1962 Mar 6	R-12	-	-	0.000	NVS	MS	-	Test	NSE-65	-	-
1962-S48	2437720.50	1962 Mar 6	R-12	-	-	0.000	NVS	MS	-	Test	NSE-65	-	-
1962-S49	2437754.50	1962 Mar 16 1159	R-12	-	6LK	0.047	EVSNI	OS	G	Sat_LED 0	AVNDS	-	-
1962-S90	2437760.50	1962 Apr 6	R-12	-	-	0.000	NVS	MS	-	Test	NSE-65	-	-
1962-THE	2437761.22	1962 Apr 6 1715	R-12	-	5LK	0.224	EVSNI	OS	G	Sat_LED 0	AVNDS	-	-
1962-TOT	2437761.22	1962 Apr 6 1715	R-12	-	-	0.000	NVS	MS	-	Test	NSE-65	-	-
1962-S92	2437764.50	1962 Apr 10	R-12	-	-	0.000	NVS	MS	-	Test	NSE-65	-	-
1962-S97	2437767.50	1962 Apr 13	R-12	-	-	0.000	NVS	MS	-	Test	NSE-65	-	-
1962-S98	2437767.50	1962 Apr 13	R-12	-	-	0.000	NVS	MS	-	Test	NSE-65	-	-
1962-S99	2437768.50	1962 Apr 14	R-12	-	-	0.000	NVS	MS	-	Test	NSE-65	-	-
1962-S99	2437778.67	1962 Apr 24 0400	R-12	-	4LK	0.251	EVSNI	OS	G	Sat_LED 0	AVNDS	-	-
1962-S109	2437780.50	1962 Apr 26	R-12	-	-	0.000	NVS	MS	-	Test	NSE-65	-	-
1962-S132	2437801.50	1962 May 17	R-12	-	-	0.000	NVS	MS	-	Test	NSE-65	-	-
1962-S138	2437806.50	1962 May 22	R-12	-	-	0.000	NVS	MS	-	Test	NSE-65	-	-
1962-S144	2437811.50	1962 May 27	R-12	-	-	0.000	NVS	MS	-	Test	NSE-65	-	-
1962-UPS	2437812.62	1962 May 28 0300	R-12	-	3LK	0.252	EVSNI	OS	G	Sat_LED 0	AVNDS	-	-
1962-S148	2437814.50	1962 May 30	R-12	-	-	0.000	NVS	MS	-	Test	NSE-65	-	-
1962-S172	2437822.50	1962 Jun 7	R-12	-	-	0.000	NVS	MS	-	Test	NSE-65	-	-
1962-S187	2437830.50	1962 Jun 15	R-12	-	-	0.000	NVS	MS	-	Test	NSE-65	-	-
1962-S191	2437834.50	1962 Jun 19	R-12	-	-	0.000	NVS	MS	-	Test	NSE-65	-	-
1962-S198	2437837.50	1962 Jun 22	R-12	-	-	0.000	NVS	MS	-	Test	NSE-65	-	-
1962-S199	2437841.50	1962 Jun 26	R-12	-	-	0.000	NVS	MS	-	Test	NSE-65	-	-
1962-S202	2437842.50	1962 Jun 27	R-12	-	-	0.000	NVS	MS	-	Test	NSE-65	-	-
1962-S205	2437843.50	1962 Jun 28	R-12	-	-	0.000	NVS	MS	-	Test	NSE-65	-	-
1962-S209	2437844.50	1962 Jun 29	R-12	-	-	0.000	NVS	MS	-	Test	NSE-65	-	-
1962-A DEL	2437846.17	1962 Jun 30 1600	R-12	-	-	0.240	EVSNI	OS	G	Sat_LED 0	AVNDS	-	-
1962-S219	2437849.50	1962 Jul 4	R-12	-	-	0.000	NVS	MS	-	Test	NSE-65	-	-
1962-S269	2437872.50	1962 Jul 27	R-12	-	-	0.000	NVS	MS	-	Test	NSE-65	-	-
1962-A117	2437874.10	1962 Jul 28 1417	R-12	-	-	0.000	NVS	MS	-	Test	NSE-65	-	-
1962-S271	2437875.50	1962 Jul 30	R-12	-	-	0.000	NVS	MS	-	Test	NSE-65	-	-
1962-S282	2437884.50	1962 Aug 8	R-12	-	-	0.000	NVS	MS	-	Test	NSE-65	-	-







Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Orbpay	Agency	Launch_Code	Group	Category	LTCite	Cite	Notes
1965-5817	2438958.50	1965 Jul 17	R-120			0.000	NVS	MS	-	Test	RML	-	
1965-059	2438964.69	1965 Jul 23 0434	Kosmos 6381			0.200	RVSN	OS	G	Sat_LED 0	AK15	AWMDS	
1965-5805	2438977.50	1965 Aug 5	R-120			0.000	NVS	MS	-	Test	BMLX	-	
1965-5806	2439004.50	1965 Sep 1	R-120			0.000	NVS	MS	-	Test	BMLX	-	
1965-084	2439052.74	1965 Oct 19 0544?	Kosmos 11K63			0.240	RVSN	OS	G	Sat_LED 0	RAE/ARK15	AWMDS	
1965-088	2439068.73	1965 Nov 4 0531?	Kosmos 11K63			0.240	RVSN	OS	G	Sat_LED 0	RAE	AWMDS	
1965-089	2439091.01	1965 Nov 26 1214?	Kosmos 11K63			0.230	RVSN	OS	G	Sat_LED 0	RAE	AWMDS	
1965-5814	2439094.50	1965 Dec 21 0614?	R-120			0.000	NVS	MS	-	Test	RML	-	
1965-107	2439115.76	1965 Dec 21 0614?	Kosmos 6381			0.200	RVSN	OS	G	Sat_LED 0	RAE	AWMDS	
1965-F12	2439122.84	1965 Dec 28 0810	Kosmos 6381			0.200	RVSN	OF	G	Sat_LED 0	AK15	AWMDS	
1966-5775	2439125.50	1966	R-120			0.000	NVS	MS	-	Test	BMLX	-	
1966-004	2439151.02	1966 Jan 25 1228?	Kosmos 11K63			0.200	RVSN	OS	G	Sat_LED 0	RAE	AWMDS	
1966-5780	2439156.50	1966 Feb	R-120			0.000	NVS	MS	-	Test	BMLX	-	
1966-011	2439168.25	1966 Feb 11 1800?	Kosmos 6381			0.291	RVSN	OS	G	Sat_LED 0	RAE	AWMDS	
1966-F02	2439178.06	1966 Feb 21 1330	Kosmos 6381			0.200	RVSN	OF	G	Sat_LED 0	AK15	AWMDS	
1966-5781	2439215.50	1966 Apr	R-120			0.000	NVS	MS	-	Test	BMLX	-	
1966-5782	2439215.50	1966 Apr	R-120			0.000	NVS	MS	-	Test	BMLX	-	
1966-036	2439241.52	1966 Apr 26 1004?	Kosmos 11K63			0.200	RVSN	OS	G	Sat_LED 0	RAE	AWMDS	
1966-043	2439269.73	1966 May 24 0531?	Kosmos 11K63			1.126	RVSN	OS	G	Sat_LED 0	RAE	AWMDS	
1966-5783	2439299.50	1966 Jun 23	R-120			0.000	NVS	MS	-	Test	BMLX	-	
1966-5784	2439312.50	1966 Jun 6	R-120			0.000	NVS	MS	-	Test	BMLX	-	
1966-061	2439314.73	1966 Jul 8 0531?	Kosmos 6381			0.200	RVSN	OS	G	Sat_LED 0	RAE	AWMDS	
1966-5785	2439368.50	1966 Sep	R-120			0.000	NVS	MS	-	Test	BMLX	-	
1966-5786	2439369.50	1966 Sep 21	R-120			0.000	NVS	MS	-	Test	BMLX	-	
1966-5786	2439399.50	1966 Oct 1	R-120			0.000	NVS	MS	-	Test	BMLX	-	
1966-5777	2439410.50	1966 Oct 12	R-120			0.000	NVS	MS	-	Test	BMLX	-	
1966-5778	2439417.50	1966 Oct 19	R-120			0.000	NVS	MS	-	Test	BMLX	-	
1966-5806	2439420.50	1966 Oct 22	R-120			0.000	NVS	MS	-	Test	BMLX	-	
1966-5805	2439455.50	1966 Nov 26	R-120			0.000	NVS	MS	-	Test	BMLX	-	
1966-5787	2439459.50	1966 Nov 30	R-120			0.000	NVS	MS	-	Test	BMLX	-	
1966-5804	2439471.50	1966 Dec 12 2038?	Kosmos 11K63			0.000	NVS	OS	G	Sat_LED 0	RAE	AWMDS	
1966-112	2439472.36	1966 Dec 21 1312?	Kosmos 6381			0.237	RVSN	OS	G	Sat_LED 0	RAE	AWMDS	
1966-5788	2439481.05	1966 Dec 22	R-120			0.000	NVS	MS	-	Test	BMLX	-	
1967-5745	2439523.50	1967 Feb 2	R-120			0.000	NVS	MS	-	Test	BMLX	-	
1967-5746	2439523.50	1967 Feb 2	R-120			0.000	NVS	MS	-	Test	BMLX	-	
1967-5751	2439526.50	1967 Feb 14 1004:56	R-120			0.000	NVS	MS	-	Test	BMLX	-	
1967-015	2439555.52	1967 Mar 5 0503	Kosmos 11K63			0.286	RVSN	OS	G	Sat_LED 0	AWMDS	-	
1967-019	2439562.78	1967 Mar 9 0944:58	Kosmos 11K63			0.280	RVSN	OS	G	Sat_LED 0	AWMDS	-	
1967-023	2439566.23	1967 Mar 16 1730	Kosmos 11K63		U231-05	0.200	RVSN	OS	G	Sat_LED 0	AWMDS	-	
1967-024	2439570.52	1967 Mar 21 1007	Kosmos 11K63			0.321	RVSN	OS	G	Sat_LED 0	AWMDS	-	
1967-5748	2439574.79	1967 Mar 25 0659:30	Kosmos 11K63		U231-08	0.200	RVSN	MS	-	Test	BMLX	-	
1967-5746	2439580.50	1967 Apr 5	R-120			0.000	NVS	MS	-	Test	BMLX	-	
1967-5752	2439585.50	1967 Apr 5	R-120			0.000	NVS	MS	-	Test	BMLX	-	
1967-5746	2439606.50	1967 Apr 26	R-12			0.000	NVS	MS	-	Test	BMLX	-	
1967-016	2439646.50	1967 Jun 5 0503	R-12			0.280	RVSN	OS	G	Sat_LED 0	AWMDS	-	
1967-5746	2439654.25	1967 Jun 12 1806	Kosmos 11K63		U231-12	0.200	RVSN	OS	G	Sat_LED 0	AWMDS	-	
1967-056	2439654.25	1967 Jun 13	R-12			0.000	NVS	MS	-	Test	BMLX	-	
1967-5749	2439657.50	1967 Jun 16 0444	Kosmos 11K63			0.295	RVSN	OS	G	Sat_LED 0	AWMDS	-	
1967-5750	2439702.50	1967 Jun 16 0444	Kosmos 11K63			0.295	RVSN	OS	G	Sat_LED 0	AWMDS	-	
1967-5752	2439702.71	1967 Aug 24 0459:49	Kosmos 11K63		U231-10	0.200	RVSN	OS	G	Sat_LED 0	AWMDS	-	
1967-085	2439746.11	1967 Sep 12 1700	Kosmos 11K63		U231-08	0.200	RVSN	OS	G	Sat_LED 0	AWMDS	-	
1967-5753	2439768.50	1967 Sep 27	R-120			0.000	NVS	MS	-	Test	BMLX	-	
1967-5753	2439768.50	1967 Sep 27	R-120			0.000	NVS	MS	-	Test	BMLX	-	
1967-5754	2439793.50	1967 Oct 23	R-120			0.000	NVS	MS	-	Test	BMLX	-	
1967-5754	2439793.50	1967 Oct 23	R-120			0.000	NVS	MS	-	Test	BMLX	-	
1967-116	2439815.10	1967 Nov 21 1429:48	Kosmos 11K63		U231-11	0.200	RVSN	OS	G	Sat_LED 0	AWMDS	-	
1967-126	2439845.77	1967 Dec 19 0630:07	Kosmos 6381			0.294	RVSN	OS	G	Sat_LED 0	AWMDS	-	
1967-126	2439850.88	1967 Dec 26 0901:59	Kosmos 11K63			0.240	RVSN	OS	G	Sat_LED 0	AWMDS	-	
1967-5750	2439851.50	1967 Dec 27	R-120			0.000	NVS	MS	-	Test	BMLX	-	
1968-5745	2439855.50	1968	R-120			0.000	NVS	MS	-	Test	BMLX	-	
1968-5746	2439855.50	1968	R-120			0.000	NVS	MS	-	Test	BMLX	-	
1968-5743	2439855.50	1968?	R-120			0.000	NVS	MS	-	Test	BMLX	-	
1968-5784	2439855.50	1968?	R-120			0.000	NVS	MS	-	Test	BMLX	-	
1968-5785	2439855.50	1968?	R-120			0.000	NVS	MS	-	Test	BMLX	-	
1968-5792	2439855.50	1968?	R-120			0.000	NVS	MS	-	Test	BMLX	-	
1968-5757	2439886.50	1968 Feb	R-120			0.000	NVS	MS	-	Test	BMLX	-	
1968-010	2439906.92	1968 Feb 20 1003:11	Kosmos 11K63			0.240	RVSN	OS	G	Sat_LED 0	AWMDS	-	
1968-015	2439920.97	1968 Mar 5 1120?	Kosmos 11K63		U231-06	0.200	RVSN	OS	G	Sat_LED 0	AWMDS	-	
1968-F02	2439921.96	1968 Mar 6 1102:57	Kosmos 6381			0.316	RVSN	OF	G	Sat_LED 0	AWMDS	AWMDS	
1968-028	2439955.98	1968 Apr 9 1126:25	Kosmos 11K63		Yac231-02	0.200	RVSN	OS	G	Sat_LED 0	AWMDS	-	
1968-033	2439965.44	1968 Apr 18 2229:53	Kosmos 11K63			0.302	RVSN	OS	G	Sat_LED 0	AWMDS	-	
1968-5747	2439972.70	1968 Apr 26	R-120			0.000	NVS	MS	-	Test	BMLX	-	
1968-038	2439972.70	1968 Apr 26 0442:56	Kosmos 11K63			0.237	RVSN	OS	G	Sat_LED 0	AWMDS	-	
1968-5760	2440000.50	1968 May 24	R-120			0.000	NVS	MS	-	Test	BMLX	-	
1968-043	2440000.80	1968 May 24 0704:50	Kosmos 11K63			0.200	RVSN	OS	G	Sat_LED 0	AWMDS	-	
1968-044	2440007.35	1968 May 30 2029:49	Kosmos 11K63		Yac231-01	0.200	RVSN	OS	G	Sat_LED 0	AWMDS	-	
1968-5761	2440007.50	1968 May 31	R-120			0.000	NVS	MS	-	Test	BMLX	-	
1968-5748	2440009.50	1968 Jun 2	R-120			0.000	NVS	MS	-	Test	BMLX	-	
1968-5749	2440010.50	1968 Jun 3	R-12			0.000	NVS	MS	-	Test	BMLX	-	
1968-5750	2440011.50	1968 Jun 4	R-12			0.000	NVS	MS	-	Test	BMLX	-	
1968-5767	2440014.50	1968 Jun 7	R-12			0.000	NVS	MS	-	Test	BMLX	-	
1968-5765	2440014.50	1968 Jun 7	R-12			0.000	NVS	MS	-	Test	BMLX	-	
1968-5751	2440015.50	1968 Jun 8	R-12			0.000	NVS	MS	-	Test	BMLX	-	
1968-048	2440019.40	1968 Jun 11 2129:54	Kosmos 11K63			0.316	RVSN	OS	G	Sat_LED 0	AWMDS	-	
1968-056	2440042.79	1968 Jul 5 0659:50	Kosmos 11K63			0.285	RVSN	OS	G	Sat_LED 0	AWMDS	-	
1968-061	2440056.33	1968 Jul 18 1959:50	Kosmos 11K63			0.200	RVSN	OS	G	Sat_LED 0	AWMDS	-	

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Orbit	Agency	Launch_Code	Group	Category	LTCite	Cite	Notes
1968-079	2440120.11	1968 Sep 20 1439:59	Kosmos 11K63	-	Ya231-04	0.200	RVSN	OS	G	Sat_LED 0	AVMDS	-	-
1968-5768	2440127.50	1968 Sep 28	R-120	-	-	0.000	NVS	MS	-	Test	BMLX	-	-
1968-083	2440133.04	1968 Oct 3 1258:59	Kosmos 11K63	-	V295-02	0.200	RVSN	OS	G	Sat_LED 0	AVMDS	-	-
1968-5762	2440174.50	1968 Nov 14	R-120	-	-	0.000	NVS	MS	-	Test	BMLX	-	-
1968-107	2440194.12	1968 Nov 3 1452:21	Kosmos 11K63	-	V295-03	0.200	RVSN	OS	G	Sat_LED 0	AVMDS	-	-
1968-5768	2440204.50	1968 Dec 14	R-120	-	-	0.000	NVS	MS	-	Test	BMLX	-	-
1968-113	2440204.72	1968 Dec 14 0509:54	Kosmos 11K63	-	-	0.286	RVSN	OS	G	Sat_LED 0	AVMDS	-	-
1968-117	2440210.50	1968 Dec 19 2385	Kosmos 11K63	-	M231-13	0.335	RVSN	OS	G	Sat_LED 0	AVMDS	-	-
1968-5759	2440215.50	1968 Dec 25	R-120	-	-	0.000	NVS	MS	-	Test	BMLX	-	-
1968-119	2440216.91	1968 Dec 26 0945:02	Kosmos 11K63	-	-	0.283	RVSN	OS	G	Sat_LED 0	AVMDS	-	-
1968-5760	2440221.50	1968?	R-120	-	-	0.000	NVS	MS	-	Test	BMLX	-	-
1968-5761	2440221.50	1968?	R-120	-	-	0.000	NVS	MS	-	Test	BMLX	-	-
1968-5762	2440221.50	1968?	R-120	-	-	0.000	NVS	MS	-	Test	BMLX	-	-
1968-5767	2440266.50	1969 Feb 4	R-120	-	-	0.000	NVS	MS	-	Test	BMLX	-	-
1968-012	2440260.08	1969 Feb 7 1559	Kosmos 11K63	-	V295-07	0.200	RVSN	OS	G	Sat_LED 0	AVMDS	-	-
1968-5768	2440264.50	1969 Feb 12	R-120	-	-	0.000	NVS	MS	-	Test	BMLX	-	-
1968-5769	2440270.50	1969 Feb 16	R-120	-	-	0.000	NVS	MS	-	Test	BMLX	-	-
1968-020	2440286.05	1969 Mar 5 1304:55	Kosmos 11K63	-	-	0.200	RVSN	OS	G	Sat_LED 0	AVMDS	-	-
1968-031	2440309.17	1969 Mar 28 1600:08	Kosmos 11K63	-	-	0.200	RVSN	OS	G	Sat_LED 0	AVMDS	-	-
1968-033	2440316.04	1969 Apr 4 1300:04	Kosmos 11K63	-	V295-06	0.200	RVSN	OS	G	Sat_LED 0	AVMDS	-	-
1968-047	2440359.04	1969 May 27 1259:59	Kosmos 11K63	-	V295-05	0.200	RVSN	OS	G	Sat_LED 0	AVMDS	-	-
1968-049	2440376.04	1969 Jun 3 1257:27	Kosmos 11K63	-	V295-10	0.200	RVSN	OS	G	Sat_LED 0	AVMDS	-	-
1968-5715	2440417.50	1969 Jun 15	R63D	-	-	0.000	RVSN	TS	G	Reentry Test	LuckFan	-	-
1968-F11	2440425.88	1969 Jun 23 0900:00	Kosmos 11K63	-	V295-11	0.200	RVSN	OF	G	Sat_LED 0	AVMDS	-	-
1968-5770	2440426.50	1969 Jun 24	R-120	-	-	0.000	NVS	MS	-	Test	BMLX	-	-
1968-5771	2440426.50	1969 Jun 24	R-120	-	-	0.000	NVS	MS	-	Test	BMLX	-	-
1968-5772	2440426.50	1969 Jun 24	R-120	-	-	0.000	NVS	MS	-	Test	BMLX	-	-
1968-5773	2440426.50	1969 Jun 24	R-120	-	-	0.000	NVS	MS	-	Test	BMLX	-	-
1968-5774	2440426.50	1969 Jun 24	R-120	-	-	0.000	NVS	MS	-	Test	BMLX	-	-
1968-5775	2440440.50	1969 Aug 7	R-12	-	Yu295-02	0.200	RVSN	OS	G	Sat_LED 0	AVMDS	-	-
1968-075	2440456.09	1969 Aug 22 1414:57	Kosmos 11K63	-	-	0.000	NVS	MS	-	Test	BMLX	-	-
1968-5802	2440464.50	1969 Sep	R-120	-	-	0.000	NVS	MS	-	Test	BMLX	-	-
1968-086	2440599.06	1969 Oct 14 1319:53	Kosmos 11K63	-	2I	0.303	RVSN	OS	G	Sat_LED 0	AVMDS	-	-
1968-090	2440512.52	1969 Oct 18 1000:03	Kosmos 11K63	-	Yu295-03	0.200	RVSN	OS	G	Sat_LED 0	AVMDS	-	-
1968-094	2440519.04	1969 Oct 24 1301:58	Kosmos 11K63	-	-	0.200	RVSN	OS	G	Sat_LED 0	AVMDS	-	-
1968-5801	2440523.50	1969 Oct 29	R-120	-	V295-09	0.000	NVS	MS	-	Target	BMLX	-	-
1968-096	2440530.00	1969 Nov 4 1159:59	Kosmos 11K63	-	-	0.200	RVSN	OS	G	Sat_LED 0	AVMDS	-	-
1968-102	2440549.96	1969 Nov 24 1100:04	Kosmos 11K63	-	Yu646-24	0.200	RVSN	OS	G	Sat_LED 0	AVMDS	-	-
1968-5716	2440561.75	1969 Dec 6 0900	R63D	-	-	0.000	RVSN	TS	G	Reentry Test	LuckFan	-	-
1968-106	2440567.04	1969 Dec 11 1258:59	Kosmos 11K63	-	Yu646-25	0.200	RVSN	US	G	Sat_LED 0	AVMDS	-	-
1968-5776	2440576.50	1969 Dec 21	R-120	-	-	0.000	NVS	MS	-	Test	BMLX	-	-
1968-5787	2440586.50	1969 Dec 21	R-120	-	-	0.288	RVSN	OS	G	Sat_LED 0	AVMDS	-	-
1968-5789	2440590.52	1969 Dec 25 0959:51	Kosmos 11K63	-	-	0.200	NVS	MS	-	Test	BMLX	-	-
1968-5777	2440592.50	1969 Dec 27	R-12	-	V295-12	0.200	RVSN	OS	G	Sat_LED 0	AVMDS	-	-
1970-004	2440602.06	1970 Jan 15 1339:59	Kosmos 11K63	-	-	0.000	RVSN	OS	G	Sat_LED 0	AVMDS	-	-
1970-005	2440602.56	1970 Jan 16 1039:58	Kosmos 11K63	-	-	0.321	RVSN	OS	G	Sat_LED 0	AVMDS	-	-
1970-006	2440602.96	1970 Jan 20 2020:00	Kosmos 11K63	-	M231-06	0.285	RVSN	OS	G	Sat_LED 0	AVMDS	-	-
1970-5766	2440607.96	1970 Jan 30	R-120	-	-	0.000	NVS	MS	-	Test	BMLX	-	-
1970-5767	2440616.15	1970 Jan 30 1540:01	Kosmos 11K63	-	V295-13	0.200	RVSN	OF	G	Sat_LED 0	AVMDS	-	-
1970-011	2440617.75	1970 Jan 30 1724:55	Kosmos 11K63	-	Yu646-27	0.200	RVSN	OS	G	Sat_LED 0	AVMDS	-	-
1970-5740	2440645.25	1970 Feb 17	R-120	-	-	0.000	NVS	MS	-	Test	BMLX	-	-
1970-5741	2440645.50	1970 Feb 17	R-120	-	-	0.000	NVS	MS	-	Test	BMLX	-	-
1970-023	2440662.11	1970 Feb 18 1439:56	Kosmos 11K63	-	Yu646-28	0.200	RVSN	OS	G	Sat_LED 0	AVMDS	-	-
1970-033	2440700.06	1970 Apr 23 1320:00	Kosmos 11K63	-	Yu646-26	0.200	RVSN	OS	G	Sat_LED 0	AVMDS	-	-
1970-035	2440700.93	1970 Apr 24 2224:49	Kosmos 11K63	-	-	0.315	RVSN	OF	G	Sat_LED 0	AVMDS	-	-
1970-036	2440720.03	1970 May 22 1239:55	Kosmos 11K63	-	Yu4457-32	0.200	RVSN	OS	G	Sat_LED 0	AVMDS	-	-
1970-043	2440749.90	1970 Jun 12 0930:02	Kosmos 11K63	-	-	0.235	RVSN	OS	G	Sat_LED 0	AVMDS	-	-
1970-044	2440750.71	1970 Jun 13 0459:58	Kosmos 11K63	-	M231-10	0.200	RVSN	OS	G	Sat_LED 0	AVMDS	-	-
1970-051	2440764.52	1970 Jun 27 0739:55	Kosmos 11K63	-	Yu4457-34	0.303	RVSN	OS	G	Sat_LED 0	AVMDS	-	-
1970-5742	2440798.58	1970 Jul 31 0200	R63D	-	-	0.000	RVSN	TS	G	Reentry Test	LuckFan	-	-
1970-5868	2440805.62	1970 Aug 7 0959:53	Kosmos 11K63	-	-	0.222	RVSN	OS	G	Sat_LED 0	AVMDS	-	-
1970-059	2440809.33	1970 Aug 10 1959:55	Kosmos 11K63	-	M231-05	0.265	RVSN	OS	G	Sat_LED 0	AVMDS	-	-
1970-063	2440818.12	1970 Aug 19 1459:53	Kosmos 11K63	-	Yu457-36	0.200	RVSN	OS	G	Sat_LED 0	AVMDS	-	-
1970-073	2440846.00	1970 Sep 16 1159:55	Kosmos 11K63	-	Yu457-37	0.200	RVSN	OS	G	Sat_LED 0	AVMDS	-	-
1970-081	2440868.13	1970 Oct 8 1510:03	Kosmos 11K63	-	64657-132	0.300	RVSN	OS	G	Sat_LED 0	AVMDS	-	-
1970-084	2440873.98	1970 Oct 14 1129:58	Kosmos 11K63	-	-	0.000	NVS	MS	-	Test	BMLX	-	-
1970-5743	2440880.50	1970 Oct 21	R-120	-	-	0.000	NVS	MS	-	Test	BMLX	-	-
1970-5744	2440880.50	1970 Oct 21	R-120	-	-	0.000	NVS	MS	-	Test	BMLX	-	-
1970-100	2440914.96	1970 Nov 24 1059:56	Kosmos 11K63	-	64657-131	0.200	RVSN	OS	G	Sat_LED 0	AVMDS	-	-
1970-112	2440938.90	1970 Dec 18 0939:13	Kosmos 11K63	-	Yu4457-29	0.200	RVSN	OS	G	Sat_LED 0	AVMDS	-	-
1970-112	2440941.50	1970 Dec 21	R-120	-	-	0.000	RVSN	OS	G	Test	BMLX	-	-
1971-002	2440966.00	1971 Jan 14 1200:00	Kosmos 11K63	-	Yu295-01	0.200	RVSN	OS	G	Sat_LED 0	AVMDS	-	-
1971-007	2440978.03	1971 Jan 26 1244:33	Kosmos 11K63	-	Yu4457-31	0.200	RVSN	OS	G	Sat_LED 0	AVMDS	-	-
1971-F02	2441015.84	1971 Mar 5 0815:02	Kosmos 11K63	-	-	0.000	NVS	MS	-	Test	BMLX	-	-
1971-5863	2441055.50	1971 Apr 14	R-120	-	-	0.000	NVS	MS	-	Test	BMLX	-	-
1971-5864	2441055.50	1971 Apr 14	R-120	-	-	0.000	NVS	MS	-	Test	BMLX	-	-
1971-5865	2441062.50	1971 Apr 21	R-120	-	-	0.000	NVS	MS	-	Test	BMLX	-	-
1971-5866	2441063.68	1971 Apr 22 0422	R63D	-	-	0.000	RVSN	TS	G	Reentry Test	LuckFan	-	-
1971-037	2441065.97	1971 Apr 24 1115:02	Kosmos 11K63	-	Yu457-33	0.200	RVSN	OS	G	Sat_LED 0	AVMDS	-	-
1971-1044	2441090.93	1971 May 19 1020:00	Kosmos 11K63	-	45747-138	0.200	RVSN	OS	G	Sat_LED 0	AVMDS	-	-
1971-047	2441099.00	1971 May 27 1159:55	Kosmos 11K63	-	64657-133	0.200	RVSN	OS	G	Sat_LED 0	AVMDS	-	-
1971-5687	2441102.50	1971 Jun	R-120	-	-	0.000	NVS	MS	-	Test	BMLX	-	-
1971-5706	2441102.50	1971 Jun	R-120	-	-	0.000	NVS	MS	-	Test	BMLX	-	-
1971-5688	2441156.50	1971 Jul 24	R-120	-	-	0.000	NVS	MS	-	Test	BMLX	-	-
1971-F08	2441166.96	1971 Aug 3 1100:00	Kosmos 11K63	-	45747-139	0.200	RVSN	OF	G	Sat_LED 0	AVMDS	-	-

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Orbpay	Agency	Launch_Code	Group	Category	LTCite	Cite	Notes
1971-072	2441190.95	1971 Aug 27 1054:56	Koeros 11K63	-	64657-134	0.200	RVSN	OS	G	Sat_LED 0	AVMDS	-	-
1971-5856	2441209.50	1971 Sep 15	R-120	-	-	0.000	MVS	MS	G	Test	BMLX	-	-
1971-079	2441218.94	1971 Sep 24 1030:00	Koeros 11K63	-	64634-148	0.200	RVSN	OS	G	Sat_LED 0	AVMDS	-	-
1971-5869	2441232.50	1971 Oct 8	R-120	-	-	0.000	MVS	MS	G	Test	BMLX	-	-
1971-090	2441244.03	1971 Oct 19 1240:01	Koeros 11K63	-	64634-145	0.200	RVSN	OS	G	Sat_LED 0	AVMDS	-	-
1971-097	2441272.97	1971 Nov 17 1109:48	Koeros 11K63	-	29547-144	0.200	RVSN	OS	G	Sat_LED 0	AVMDS	-	-
1971-101	2441284.92	1971 Nov 29 1009:56	Koeros 11K63	-	29524-151	0.200	RVSN	OS	G	Sat_LED 0	AVMDS	-	-
1971-104	2441287.85	1971 Dec 2 0825:14	Koeros 11K63	-	45747-140	0.296	RVSN	OS	G	Sat_LED 0	AVMDS	-	SR13_695
1971-113	2441302.94	1971 Dec 17 1039:58	Koeros 11K63	-	29547-143	0.200	RVSN	OS	G	Sat_LED 0	AVMDS	-	-
1972-004	2441341.97	1972 Jan 25 1115:01	Koeros 11K63	-	-	0.000	RVSN	OS	G	Reentry Test	Luxkran	-	-
1972-5462	2441355.75	1972 Feb 8 0659	R63D	-	64657-134	0.200	RVSN	OS	G	Sat_LED 0	AVMDS	-	-
1972-020	2441401.94	1972 Mar 25 1039:59	Koeros 11K63	-	45734-142	0.200	RVSN	OS	G	Sat_LED 0	AVMDS	-	-
1972-028	2441418.96	1972 Apr 11 1104:58	Koeros 11K63	-	45747-137	0.200	RVSN	OS	G	Sat_LED 0	AVMDS	-	-
1972-033	2441429.00	1972 Apr 21 1159:59	Koeros 11K63	-	64634-146	0.200	RVSN	OF	G	Sat_LED 0	AVMDS	-	AVMDS
1972-042	2441432.98	1972 Apr 25 1129:59	Koeros 11K63	-	-	0.301	RVSN	OS	G	Sat_LED 0	AVMDS	-	-
1972-047	2441498.75	1972 Jun 30 0558:41	Koeros 11K63	-	29524-153	0.200	RVSN	OS	G	Sat_LED 0	AVMDS	-	-
1972-048	2441498.89	1972 Jun 30 0919:49	Koeros 11K63	-	-	0.200	RVSN	OS	G	Reentry Test	Luxkran	-	-
1972-054	2441503.90	1972 Jul 5 0929:58	Koeros 11K63	-	64657-135	0.200	RVSN	OS	G	Sat_LED 0	AVMDS	-	-
1972-054	2441510.75	1972 Jul 12 0559:57	Koeros 11K63	-	64657-136	0.200	RVSN	OS	G	Sat_LED 0	AVMDS	-	-
1972-060	2441595.98	1972 Oct 5 1130:00	Koeros 11K63	-	29524-152	0.200	RVSN	OS	G	Sat_LED 0	AVMDS	-	-
1972-070	2441602.06	1972 Oct 11 1319:58	Koeros 11K63	-	64657-147	0.200	RVSN	OS	G	Sat_LED 0	AVMDS	-	-
1972-084	2441615.94	1972 Oct 25 1039:57	Koeros 11K63	-	64657-136	0.200	RVSN	OS	G	Sat_LED 0	AVMDS	-	-
1972-094	2441652.41	1972 Nov 30 2149:57	Koeros 11K63	-	29524-155	0.287	RVSN	OS	G	Sat_LED 0	AVMDS	-	-
1973-004	2441706.99	1973 Jan 24 1144:50	Koeros 11K63	-	64653-169	0.200	RVSN	OS	G	Sat_LED 0	AVMDS	-	-
1973-020	2441784.99	1973 Apr 12 1149:58	Koeros 11K63	-	29547-142	0.200	RVSN	OS	G	Sat_LED 0	AVMDS	-	-
1973-029	2441791.93	1973 Apr 19 1019:58	Koeros 11K63	-	45734-143	0.256	RVSN	OS	G	Sat_LED 0	AVMDS	-	SR17_493
1973-029	2441820.06	1973 May 17 1319:58	Koeros 11K63	-	-	0.000	RVSN	OS	G	Reentry Test	Luxkran	-	-
1973-483	2441826.66	1973 May 24 0350	R63D	-	64634-149	0.200	RVSN	TF	G	Sat_LED 0	AVMDS	-	-
1973-035	2441838.96	1973 Jun 5 1129:47	Koeros 11K63	-	-	0.000	MVS	MS	G	Test	BMLX	-	-
1973-5856	2441866.50	1973 Jul 25	R-120	-	45734-141	0.200	RVSN	OS	G	Sat_LED 0	AVMDS	-	-
1973-057	2441916.98	1973 Aug 22 1124:55	Koeros 11K63	-	29519-181	0.200	RVSN	OS	G	Sat_LED 0	AVMDS	-	-
1973-075	2441972.08	1973 Oct 16 1400:01	Koeros 11K63	-	29524-154	0.200	RVSN	OS	G	Sat_LED 0	AVMDS	-	-
1973-091	2442007.02	1973 Nov 20 1229:58	Koeros 11K63	-	64653-170	0.200	RVSN	OS	G	Sat_LED 0	AVMDS	-	-
1973-094	2442014.90	1973 Nov 28 0929:58	Koeros 11K63	-	45734-144	0.200	RVSN	OS	G	Sat_LED 0	AVMDS	-	-
1973-099	2442029.97	1973 Dec 13 1110:08	Koeros 11K63	-	64653-161	0.200	RVSN	OS	G	Sat_LED 0	AVMDS	-	AK15/AVMDS
1974-010	2442105.96	1974 Feb 27 1104:58	Koeros 11K63	-	64653-162	0.200	RVSN	OS	G	Sat_LED 0	AVMDS	-	AK15/AVMDS
1974-012	2442112.17	1974 Mar 5 1604:58	Koeros 11K63	-	29543-163	0.200	RVSN	OS	G	Sat_LED 0	AVMDS	-	-
1974-5456	2442225.02	1974 Jun 26 1229:57	R63D	-	-	0.000	RVSN	TS	G	Reentry Test	Luxkran	-	-
1974-5456	2442235.71	1974 Jul 11 0901	Koeros 11K63	-	29543-164	0.200	RVSN	OF	G	Sat_LED 0	AVMDS	-	-
1974-F04	2442259.96	1974 Jul 11 1059:58	Koeros 11K63	-	29543-165	0.200	RVSN	OF	G	Sat_LED 0	AVMDS	-	-
1974-5856	2442294.00	1974 Jul 25 1206	R-120	-	-	0.000	MVS	MS	G	Test	BMLX	-	-
1974-5856	2442357.50	1974 Jul 29	R-120	-	-	0.000	MVS	MS	G	Test	BMLX	-	-
1974-5859	2442389.50	1974 Jul 31	R-120	-	-	0.000	MVS	MS	G	Test	BMLX	-	-
1974-5859	2442430.50	1974 Aug 26 1634:56	Koeros 11K63	-	45733-166	0.200	RVSN	OS	G	Sat_LED 0	AVMDS	-	-
1974-094	2442437.00	1974 Sep 20 1159:58	Koeros 11K63	-	45733-168	0.200	RVSN	OS	G	Sat_LED 0	AVMDS	-	-
1974-094	2442437.00	1974 Sep 20 1159:58	Koeros 11K63	-	-	0.000	MVS	MS	G	Test	BMLX	-	-
1975-8407	2442442.50	1975	R-120	-	-	0.000	MVS	MS	G	Test	BMLX	-	-
1975-8362	2442442.50	1975	R-120	-	-	0.000	MVS	MS	G	Test	BMLX	-	-
1975-8363	2442442.50	1975	R-120	-	-	0.000	MVS	MS	G	Test	BMLX	-	-
1975-8440	2442443.50	1975 Feb?	R-12	-	-	0.000	MVS	MS	G	Test	BMLX	-	-
1975-005	2442433.96	1975 Feb?	Koeros 11K63	-	45733-167	0.200	RVSN	OS	G	Sat_LED 0	AVMDS	-	-
1975-005	2442441.00	1975 Jun 28 1205:01	Koeros 11K63	-	64653-171	0.200	RVSN	OS	G	Sat_LED 0	AVMDS	-	-
1975-026	2442511.97	1975 Apr 8 0929:56	Koeros 11K63	-	64653-172	0.200	RVSN	OS	G	Sat_LED 0	AVMDS	-	-
1975-026	2442588.00	1975 Jul 24 1204:58	Koeros 11K63	-	45733-173	0.200	RVSN	OS	G	Sat_LED 0	AVMDS	-	-
1975-8408	2442610.50	1975 Jul 17	R-12	-	-	0.000	MVS	MS	G	Test	BMLX	-	-
1975-067	2442610.88	1975 Jul 17 0910:01	Koeros 11K63	-	64653-175	0.200	RVSN	OS	G	Sat_LED 0	AVMDS	-	-
1976-8484	2442777.50	1976	R-120	-	-	0.000	MVS	MS	G	Test	BMLX	-	-
1976-8485	2442777.50	1976	R-120	-	-	0.000	MVS	MS	G	Test	BMLX	-	-
1976-8486	2442777.50	1976	R-120	-	-	0.000	MVS	MS	G	Test	BMLX	-	-
1976-8366	2442777.50	1976	R-120	-	-	0.000	MVS	MS	G	Test	BMLX	-	-
1976-013	2442814.10	1976 Feb 5 1430:03	Koeros 11K63	-	-	0.000	MVS	MS	G	Test	BMLX	-	-
1976-044	2442916.96	1976 May 18 1059:57	Koeros 11K63	-	64653-174	0.200	RVSN	OS	G	Reentry Test	KY60	-	-
1976-083	2443008.90	1976 Aug 19 0930:01	Koeros 11K63	-	29519-182	0.200	RVSN	OS	G	Sat_LED 0	AVMDS	-	-
1976-084	2443016.96	1976 Aug 26 1059:57	Koeros 11K63	-	64619-184	0.200	RVSN	OS	G	Sat_LED 0	AVMDS	-	-
1977-8330	2443143.50	1977	R63	-	29519-183	0.193	RVSN	OS	G	Sat_LED 0	AVMDS	-	-
1977-025	2443238.94	1977 Apr 5 1030	Koeros 11K63	-	45739-186	0.200	RVSN	OS	G	Reentry Test	KY60	-	-
1977-8440	2443312.94	1977 Jun 18 1030	Koeros 11K63	-	64619-185	0.200	RVSN	OS	G	Sat_LED 0	AVMDS	-	-
1977-8441	2443403.50	1977 Sep 17	R-12	-	-	0.000	MVS	MS	G	Test	BMLX	-	Sep17-24
1977-8442	2443447.50	1977 Sep 17	R-12	-	-	0.000	MVS	MS	G	Test	BMLX	-	Sep17-24
1978-8279	2443508.50	1978 Nov	R-12	-	-	0.000	MVS	MS	G	Test	BMLX	-	-
1978-8331	2443659.50	1978 Jun	R-12	-	-	0.000	MVS	MS	G	Reentry Test	KY60	-	-
1978-8332	2443762.50	1978 Jun	R-12	-	-	0.000	MVS	MS	G	Test	BMLX	-	-
1978-8333	2443762.50	1978 Oct 1	R-12	-	-	0.000	MVS	MS	G	Test	BMLX	-	-
1978-8334	2443764.50	1978 Oct 3	R-12	-	-	0.000	MVS	MS	G	Test	BMLX	-	-
1979-8303	2443965.50	1979 Apr 2	R-12	-	-	0.000	MVS	MS	G	Test	BMLX	-	-
1979-8304	2444177.50	1979 Nov	R-12	-	-	0.000	MVS	MS	G	Test	BMLX	-	-
1979-8305	2444207.50	1979 Dec	R-12	-	-	0.000	MVS	MS	G	Test	BMLX	-	-
1979-8306	2444207.50	1979 Dec	R-12	-	-	0.000	MVS	MS	G	Test	BMLX	-	-
1980-8287	2444387.50	1980 May 28?	R-12	-	-	0.000	MVS	MS	G	Test	BMLX	-	-
1980-8288	2444390.50	1980 Jun?	R-12	-	-	0.000	MVS	MS	G	Test	BMLX	-	-
1980-8289	2444403.50	1980 Jun 13?	R-120	-	-	0.000	MVS	MS	G	Test	BMLX	-	-
1980-8290	2444514.50	1980 Oct 27	R-120	-	-	0.000	MVS	MS	G	Test	BMLX	-	-
1980-8291	2444522.50	1980 Oct 10?	R-120	-	-	0.000	MVS	MS	G	Test	BMLX	-	-
1981-8265	2444844.50	1981 Aug 28?	R-120	-	-	0.000	MVS	MS	G	Test	BMLX	-	-
1981-8266	2444938.50	1981 Dec	R-120	-	-	0.000	MVS	MS	G	Test	BMLX	-	-

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Drbby	Agency	Launch_Code	Group	Category	LTCite	Cite	Notes
1981-5257	2444938.50	1981 Dec	R-120	-	-	0.000	NVS	MS	-	Test	BMLX	-	-
1982-5281	2445242.50	1982 Oct	R-120	-	-	0.000	NVS	MS	-	Test	BMLX	-	-
1984-5209	2445699.50	1984	R63	-	-	0.000	RVSN	MS	-	Reentry Test	KY60	-	-
1984-5276	2446034.50	1984 Dec	R-120	-	-	0.000	NVS	MS	-	Test	BMLX	-	-
1984-5277	2446034.50	1984 Dec	R-120	-	-	0.000	NVS	MS	-	Test	BMLX	-	-
1986-5134	2446430.50	1986	R63	-	-	0.000	RVSN	MS	-	Reentry Test	KY60	-	-
1986-5204	2446430.50	1986	R63	-	-	0.000	RVSN	MS	-	Reentry Test	RML	-	-
1986-5205	2446430.50	1986	R63	-	-	0.000	RVSN	MS	-	Reentry Test	RML	-	-
1987-5201	2446796.50	1987	R63	-	-	0.000	RVSN	MS	-	Reentry Test	KY60	-	-
1987-5266	2446796.50	1987	R63	-	-	0.000	RVSN	MS	-	Reentry Test	RML	-	-
1987-5267	2446796.50	1987	R63	-	-	0.000	RVSN	MS	-	Reentry Test	RML	-	-
1987-5268	2446796.50	1987	R63	-	-	0.000	RVSN	MS	-	Reentry Test	RML	-	-
1988-5196	2447160.50	1988	R63	-	-	0.000	RVSN	MS	-	Reentry Test	RML	-	-
1988-5197	2447160.50	1988	R63	-	-	0.000	RVSN	MS	-	Reentry Test	RML	-	-
1988-5198	2447160.50	1988	R63	-	-	0.000	RVSN	MS	-	Reentry Test	RML	-	-
1989-5148	2447526.50	1989	R63	-	-	0.000	RVSN	MS	-	Reentry Test	RML	-	-
1989-5149	2447526.50	1989	R63	-	-	0.000	RVSN	MS	-	Reentry Test	RML	-	-
1989-5152	2447526.50	1989	R63	-	-	0.000	RVSN	MS	-	Reentry Test	RML	-	-
1990-5214	2447891.50	1990	R63	-	-	0.000	RVSN	MS	-	Reentry Test	RML	-	-
1990-5215	2447891.50	1990	R63	-	-	0.000	RVSN	MS	-	Reentry Test	RML	-	-
1991-5224	2448266.50	1991	R63	-	-	0.000	RVSN	MS	-	Reentry Test	RML	-	-
1992-5111	2448621.50	1992	R63	-	-	0.000	RVSN	MS	-	Reentry Test	RML	-	-



Launch

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Mission	FlightCode	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee Km	Range Km	Dest
1959-S80	2436719.50	1959 Jun	R-13	-	-	-	-	-	-	GTSB-4	-	-	-	150?	-	-
1959-S229	2436972.50	1959 Nov	R-13	-	-	-	-	-	ZULUV	UMPPL	-	-	-	150?	-	-
1960-S42	2436993.50	1960 Mar	R-13	-	-	-	-	-	-	GTSB-4	-	-	-	150?	-	-
1960-S209	2437146.50	1960 Aug	R-13	-	-	-	-	-	ZULUV	UMPPL	-	-	-	150?	-	-
1961-S284	2437556.70	1961 Sep 14 0445?	R-13	-	-	-	-	-	ZULUV?	BELA?	-	-	-	150?	-	-
1961-S285	2437556.67	1961 Sep 16 0400?	R-13	-	-	-	-	-	ZULUV?	BELA?	-	-	-	150?	-	-
1961-S457	2437591.50	1961 Oct 19	R-13	-	-	-	-	-	ZULUV?	BELA?	-	-	-	150?	-	-
1961-S338	2437592.50	1961 Oct 20	R-13	-	-	-	-	-	ZULUV?	BELA?	-	-	-	150?	-	-
1965-S299	2438900.04	1965 May 19 1300	R-13	-	-	-	-	-	GULF	BLA	-	-	-	150?	-	-
1965-S306	2438904.92	1965 May 24 1000	R-13	-	-	-	-	-	GULF	BLA	-	-	-	150?	-	-
1965-S309	2438906.04	1965 May 26 1300	R-13	-	-	-	-	-	GULF	BLA	-	-	-	150?	-	-
1965-S314	2438907.07	1965 May 26 1336	R-13	-	-	-	-	-	GULF	BLA	-	-	-	150?	-	-
1965-S332	2438912.06	1965 May 31 1330	R-13	-	-	-	-	-	GULF	BLA	-	-	-	150?	-	-





Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	OrbPay	Agency	Launch_Code	Group	Category	LTCite	Cite	Notes
1959-880	2436719.50	1959 Jun	R-13	-	-	0.000	RWSH	MS	-	Test	JCH	-	-
1959-8229	2436672.50	1959 Nov	R-13	-	-	0.000	RWSH	MS	-	Test	JCH	-	-
1960-842	2436993.50	1960 Mar	R-13	-	-	0.000	RWSH	MS	-	Test	JCH	-	-
1960-8209	2437146.50	1960 Aug	R-13	-	-	0.000	RWSH	MS	-	Test	JCH	-	-
1961-8284	2437556.70	1961 Sep 14 0446?	R-13	-	-	0.000	RWSH	MS	-	NuClear Test	Podvig	-	-
1961-8285	2437556.67	1961 Sep 16 0400?	R-13	-	-	0.000	RWSH	MS	-	NuClear Test	Podvig	-	-
1961-8457	2437591.50	1961 Oct 19	R-13	-	-	0.000	RWSH	MS	-	Test	russianinspaceweb.com	-	-
1961-8338	2437591.50	1961 Oct 20	R-13	-	-	0.000	RWSH	MS	-	NuClear Test	Podvig	-	-
1965-8289	2438900.04	1965 May 19 1300	R-13	-	-	0.000	RWSH	MS	-	Test	RSS-65	-	-
1965-8306	2438904.92	1965 May 24 1000	R-13	-	-	0.000	RWSH	MS	-	Test	RSS-65	-	-
1965-8309	2438906.04	1965 May 25 1300	R-13	-	-	0.000	RWSH	MS	-	Test	RSS-65	-	-
1965-8314	2438907.07	1965 May 26 1336	R-13	-	-	0.000	RWSH	MS	-	Test	RSS-65	-	-
1965-8352	2438912.06	1965 May 31 1330	R-13	-	-	0.000	RWSH	MS	-	Test	RSS-65	-	-





Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Mission	Launch	FlightCode	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee km	Range km	Dest
1964-F12	2438691.81	1964 Oct 23 0730	Kosmos 6553	-	4000-000-01L	-	Strela-1	MIP-5	-	-	LC41/15	-	-	-	2507	-	-
1964-S694	2438747.50	1964 Dec 18	R-140	-	-	8K65U UBP-3 68 RB	-	GfSP-4	-	-	-	-	-	-	6757	-	Bratsk
1965-S821	2438760.50	1965 Jan 8	R-140	-	-	8K65U UBP	-	NOVOST	-	-	-	-	-	-	6757	-	Kura
1965-S08	2438760.50	1965 Jan 8	R-140	-	-	8K65U UBP-57	-	GfSP-4	-	-	-	-	-	-	6757	-	Bratsk
1965-S30	2438768.50	1965 Jan 8	R-140	-	-	8K65U UBP-56	-	GfSP-4	-	-	-	-	-	-	6757	-	Bratsk
1965-S46	2438763.50	1965 Jan 23	R-140	-	-	8K65U UBP-58	-	GfSP-4	-	-	-	-	-	-	6757	-	Bratsk
1965-S182	2438812.96	1965 Feb 21 1100	Kosmos 6553	-	4000-000-03L	-	Strela-1	MIP-5	-	-	LC41/15	-	-	-	1838	-	Bratsk
1965-S182	2438841.96	1965 Mar 22	Kosmos 6553	-	4000-000-04L	-	Strela-1	MIP-5	-	-	LC41/15	-	-	-	1827	-	Bratsk
1965-S182	2438951.96	1965 Mar 15 1100	Kosmos 6553	-	4000-000-04L	-	Strela-1	MIP-5	-	-	LC41/15	-	-	-	1827	-	Bratsk
1965-S182	2438951.96	1965 Jul 14 0331	Kosmos 6553	-	4000-000-05L	-	Strela-1	MIP-5	-	-	LC41/15	-	-	-	647	-	Bratsk
1965-S073	2438957.65	1965 Sep 3 1400	Kosmos 6553	-	4000-000-07LS	-	Strela-1	MIP-5	-	-	LC41/15	-	-	-	1578	-	Bratsk
1965-S073	2439021.83	1965 Sep 18 0759	Kosmos 6553	-	4000-000-08LS	-	Strela-1	MIP-5	-	-	LC41/15	-	-	-	1700	-	Bratsk
1965-S809	2439033.02	1965 Dec 28 1230	Kosmos 6553	-	4000-000-09LP	-	Strela-2	MIP-5	-	-	LC41/15	-	-	-	652	-	Bratsk
1965-S789	2439213.50	1966 Mar 29	R-140	-	-	8K65U UBP-103	-	GfSP-4	-	-	-	-	-	-	6757	-	Bratsk
1965-S790	2439270.50	1966 May 25	R-140	-	-	8K65U UBP-60 43 RD	-	GfSP-4	-	-	-	-	-	-	6757	-	Bratsk
1965-S791	2439305.50	1966 Jun 29	R-140	-	-	8K65U UBP-61 43 RD	-	GfSP-4	-	-	-	-	-	-	6757	-	Bratsk
1965-S807	2439311.50	1966 Jul 5	R-140	-	-	8K65U UBP-62 43 RD	-	GfSP-4	-	-	-	-	-	-	6757	-	Bratsk
1965-S792	2439312.50	1966 Jul 6	R-140	-	-	8K65U UBP	-	GfSP-4	-	-	-	-	-	-	6757	-	Bratsk
1965-S793	2439335.50	1966 Jul 29	R-140	-	-	8K65U UBP-63 43 RD	-	GfSP-4	-	-	-	-	-	-	6757	-	Bratsk
1965-S794	2439345.50	1966 Oct 21	R-140	-	-	8K65U UBP-6 29 RD	-	GfSP-4	-	-	-	-	-	-	6757	-	Bratsk
1965-S795	2439445.50	1966 Nov 16 1300	R-140	-	-	8K65U UBP-64 43 RD	-	GfSP-4	-	-	-	-	-	-	6757	-	Bratsk
1965-F11	2439446.04	1966 Nov 16 1300	Kosmos 11K65	-	4000-000-10LP	-	Strela-2 No. 1	MIP-5	-	-	LC41/15	-	-	-	5007	-	Bratsk
1967-S776	2439528.50	1967 Feb 7	R-140	-	-	8K65U UBP	-	GfSP-4	-	-	-	-	-	-	6757	-	Bratsk
1967-S755	2439565.50	1967 Mar 17	R-140	-	-	8K65U UBP 29 RD	-	GfSP-4	-	-	-	-	-	-	6757	-	Bratsk
1967-S755	2439565.50	1967 Mar 17	R-140	-	-	8K65U UBP 29 RD	-	GfSP-4	-	-	-	-	-	-	6757	-	Bratsk
1967-S756	2439565.50	1967 Mar 24 1150	R-140	-	4000-000-06LM	-	Strela-2	MIP-5	-	-	LC41/15	-	-	-	686	-	Bratsk
1967-S756	2439625.96	1967 May 15 1100:00	R-140	-	M149 -16LM	-	Tsikhon GVM	MIP-5	-	-	LC132/2	-	-	-	849	-	Bratsk
1967-S756	2439637.50	1967 May 27	R-140	-	-	8K65U UBP 43 RD	-	GfSP-4	-	-	-	-	-	-	6757	-	Bratsk
1967-S757	2439661.50	1967 Jun 20 0430	R-140	-	M149 -20LM	-	Tselina-0 GVM	MIP-5	-	-	LC132/2	-	-	-	6757	-	Bratsk
1967-S758	2439667.69	1967 Jun 26 1100	R-140	-	-	8K65U UBP 68 RD	-	GfSP-4	-	-	-	-	-	-	6757	-	Bratsk
1967-S758	2439717.50	1967 Aug 15	R-140	-	-	8K65U UBP 29 RD	-	GfSP-4	-	-	-	-	-	-	6757	-	Bratsk
1967-S758	2439745.50	1967 Sep 12	R-140	-	-	8K65U UBP 43 RD	-	GfSP-4	-	-	-	-	-	-	6757	-	Bratsk
1967-F10	2439762.50	1967 Sep 27 1100	R-140	-	M149 -15LM	-	Tsikhon GVM	MIP-5	-	-	LC132/2	-	-	-	6757	-	Bratsk
1967-S761	2439767.01	1967 Oct 4	R-140	-	-	8K65U UBP 43 RD	-	GfSP-4	-	-	-	-	-	-	6757	-	Bratsk
1967-S761	2439776.01	1967 Oct 12 1215	R-140	-	U149 -13 (13L)	-	-	GfSP-4	-	-	-	-	-	-	6757	-	Bratsk
1967-S764	2439786.50	1967 Oct 23 1758:59	R-140	-	M149 -19LM	-	Tselina-0 GVM	MIP-5	-	-	LC41/15	-	-	-	4000	-	Bratsk
1967-S764	2439794.25	1967 Oct 30 1500:00	R-140	-	M149 -18LM	-	Tsikhon	MIP-5	-	-	LC132/2	-	-	-	598	-	Bratsk
1967-S764	2439818.12	1967 Nov 19 2200:00	R-140	-	M149 -21LM	-	Tselina-0	MIP-5	-	-	LC132/2	-	-	-	762	-	Bratsk
1968-S09	2439865.42	1968 Jan 23 2200:00	R-140	-	-	8K65U UBP	-	GfSP-4	-	-	-	-	-	-	6757	-	Bratsk
1968-S772	2439867.70	1968 Feb 5 1600:00	R-140	-	M149 -22LM	-	Sfera	MIP-5	-	-	LC132/2	-	-	-	591	-	Bratsk
1968-S711	2439907.97	1968 Feb 20 1300:00	R-140	-	M149 -14 (14L)	-	Tsikhon	MIP-5	-	-	LC132/2	-	-	-	1208	-	Bratsk
1968-S719	2439943.48	1968 Mar 25 1130	R-140	-	-	8K65U 68 RB UBP-1	-	GfSP-4	-	-	-	-	-	-	4000?	-	Kura
1968-S756	2439964.26	1968 May 7 1358:00	R-140	-	M149 -17LM	-	-	GfSP-4	-	-	-	-	-	-	830	-	NovZem
1968-S756	2439964.26	1968 May 16	R-140	-	-	8K65U 68 RB UBP-1	-	GfSP-4	-	-	-	-	-	-	6757	-	Bratsk
1968-S756	2440005.95	1968 May 29 1846:00	R-140	-	-	8K65U UBP 43 RD	-	GfSP-4	-	-	-	-	-	-	6757	-	Bratsk
1968-S756	2440012.98	1968 Jun 7 1100	R-140	-	-	8K65U UBP 43 RD	-	GfSP-4	-	-	-	-	-	-	6757	-	Bratsk
1968-S752	2440014.50	1968 Jun 7 1100	R-140	-	M149 -23LM	-	Sfera No. 12L	MIP-5	-	-	LC132/2	-	-	-	1000?	-	Bratsk
1968-S752	2440014.50	1968 Jun 7 1100	R-140	-	-	8K65U 35 RD UBP-2	-	GfSP-4	-	-	-	-	-	-	6757	-	Bratsk
1968-S752	2440014.50	1968 Jun 7 1100	R-140	-	-	8K65U 35 RD UBP-3	-	GfSP-4	-	-	-	-	-	-	6757	-	Bratsk
1968-S752	2440033.02	1968 Jun 15 1225	R-140	-	4000-000-11LP	-	Strela-2 No. 3	MIP-5	-	-	LC41/15	-	-	-	2007	-	Bratsk
1968-S752	2440033.02	1968 Jun 15 1225	R-140	-	-	8K65U UBP 43 RD	-	GfSP-4	-	-	-	-	-	-	6757	-	Bratsk
1968-S752	2440033.02	1968 Jun 15 1225	R-140	-	-	8K65U UBP 29 RD	-	GfSP-4	-	-	-	-	-	-	6757	-	Bratsk
1968-S752	2440040.50	1968 Jul 19	R-140	-	-	8K65U UBP 43 RD	-	GfSP-4	-	-	-	-	-	-	6757	-	Bratsk
1968-S752	2440040.50	1968 Jul 19	R-140	-	-	8K65U UBP 43 RD	-	GfSP-4	-	-	-	-	-	-	6757	-	Bratsk
1968-S754	2440055.50	1968 Aug 27 1129	R-140	-	-	8K65U 35 RD UBP-4	-	GfSP-4	-	-	-	-	-	-	6757	-	Bratsk
1968-S754	2440098.98	1968 Aug 27 1129	R-140	-	4000-000-12L	-	Strela-2 No. 4	MIP-5	-	-	LC132/2	-	-	-	585	-	Bratsk
1968-S754	2440160.42	1968 Oct 30 2200:00	R-140	-	M149 -26LM	-	Tselina-0	MIP-5	-	-	LC132/2	-	-	-	1210	-	Bratsk
1968-S754	2440160.42	1968 Oct 30 2200:00	R-140	-	M149 -26LM	-	Tselina-0	MIP-5	-	-	LC132/2	-	-	-	6757	-	Bratsk
1968-S754	2440191.01	1968 Nov 30 1200:01	R-140	-	M149 -24LM	-	Sfera	MIP-5	-	-	LC132/2	-	-	-	1228	-	Bratsk
1968-S778	2440248.50	1969 Jan 20	R-140	-	-	8K65U UBP 29 RD	-	GfSP-4	-	-	-	-	-	-	6757	-	Bratsk
1968-S778	2440248.50	1969 Jan 27	R-140	-	-	8K65U UBP 43 RD	-	GfSP-4	-	-	-	-	-	-	6757	-	Bratsk
1968-S778	2440270.50	1969 Feb 19	R-140	-	-	8K65U UBP 43 RD	-	GfSP-4	-	-	-	-	-	-	6757	-	Bratsk
1968-S778	2440270.50	1969 Feb 19	R-140	-	-	8K65U UBP 43 RD	-	GfSP-4	-	-	-	-	-	-	6757	-	Bratsk
1968-S780	2440270.50	1969 Feb 19	R-140	-	-	8K65U UBP 43 RD	-	GfSP-4	-	-	-	-	-	-	6757	-	Bratsk
1968-S780	2440296.23	1969 Mar 5 1725:01	R-140	-	M149 -26LM	-	Tselina-0M	MIP-5	-	-	LC132/2	-	-	-	585	-	Bratsk
1968-S780	2440296.23	1969 Mar 5 1725:01	R-140	-	M149 -26LM	-	Tselina-0	MIP-5	-	-	LC132/2	-	-	-	6757	-	Bratsk
1968-S780	2440398.19	1969 Mar 17 1640:18	R-140	-	-	8K65U UBP 43 RD	-	GfSP-4	-	-	-	-	-	-	6757	-	Bratsk
1968-S781	2440395.50	1969 Mar 25	R-140	-	-	8K65U UBP 32 RD	-	GfSP-4	-	-	-	-	-	-	6757	-	Bratsk
1968-S782	2440394.50	1969 Apr 3	R-140	-	-	8K65U UBP 32 RD	-	GfSP-4	-	-	-	-	-	-	6757	-	Bratsk
1968-S784	2440384.50	1969 Jun 12	R-140	-	-	8K65U 68 RB UBP-2	-	GfSP-4	-	-	-	-	-	-	6757	-	Bratsk
1968-S784	2440384.50	1969 Jun 12	R-140	-	-	8K65U 68 RB UBP-2	-	GfSP-4	-	-	-	-	-	-	6757	-	Bratsk
1968-S785	2440384.50	1969 Jun 12	R-140	-	-	8K65U 45 RD UBP	-	GfSP-4	-	-	-	-	-	-	6757	-	Bratsk
1968-S785	2440384.50	1969 Jun 12	R-140	-	-	8K65U 45 RD UBP	-	GfSP-4	-	-	-	-	-	-	6757	-	Bratsk
1968-S809	2440393.50	1969 Jun 13	R-140	-	-	8K65U UBP 29 RD	-	GfSP-4	-	-	-	-	-	-	6757	-	Bratsk
1968-S783	2440402.50	1969 Jun 21	R-140	-	-	8K65U 35 RD UBP-5	-	GfSP-4	-	-	-	-	-	-	6757	-	Bratsk
1968-S783	2440402.50	1969 Jun 21	R-140	-	-	8K65U 35 RD UBP-6	-	GfSP-4	-	-	-	-	-	-	6757	-	Bratsk
1968-S764	2440402.50	1969 Jul 3	R-140	-	-	8K65U UBP	-	GfSP-4	-	-	-	-	-	-	6757	-	Bratsk
1968-S803	2440405.50	1969 Jul 3	R-140	-	-	8K65U UBP	-	GfSP-4	-	-	-	-	-	-	6757	-	Bratsk
1968-S804	2440404.44	1969 Jul 17 2230	R-140	-	-	8K65U Aldan Target 1	-	GfSP-4	-	-	-	-	-	-	0?	-	Bratsk
1968-S794	2440404.44	1969 Aug 13 2200:02	R-140	-	Y149 -38LM	-	Tsikhon	MIP-5	-	-	LC131/1						

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Mission	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee_km	Range_km	Dest
1970-5731	2440743.88	1970 Jun 6 0900	R-14U	-	T 14901-01T	8K65U Aldan Target 6	Aldan	MIP-53	LC131?	-	-	6757	-	BALKH
1970-5746	2440757.50	1970 Jun 20 1639:59	R-14U	-	47117-102	8K65U UBP 32 RD	Strela-2M	GP8-4	LC132/1	-	-	407	-	Bratsk
1970-F05	2440765.19	1970 Aug 20 1430:01	Kosmos 11K65M	-	Yu47121-113	Kosmos-368	Lira	MIP-53	LC132/1	-	-	542	-	-
1970-064	2440812.08	1970 Oct 12 1357:00	Kosmos 11K65M	-	47117-103	Kosmos-371	Tsklon	MIP-53	LC132/1	-	-	759	-	Bratsk
1970-5747	2440872.50	1970 Oct 13	R-14U	-	-	8K65U UBP 68 RD	-	GP8-4	-	-	-	6757	-	-
1970-086	2440876.12	1970 Oct 16 1459:59	Kosmos 11K65M	-	53717-104	Kosmos-372	Strela-2M	MIP-53	LC132/1	-	-	822	-	Bratsk
1970-5762	2440882.50	1970 Oct 23	R-14U	-	-	8K65U UBP 68 RD	-	GP8-4	-	-	-	6757	-	Bratsk
1970-097	2440908.26	1970 Oct 27 1820:01	Kosmos 11K65M	-	65017-107	Kosmos-374	DS-U2-IP No. 1	GP8-4	LC132/2	-	-	1742	-	-
1970-102	2440922.67	1970 Dec 2 0400:02	Kosmos 11K65M	-	47117-105	Kosmos-381	Konosternaya Stantsiya N	MIP-53	LC132/2	-	-	1013	-	-
1970-108	2440933.04	1970 Dec 12 1300:00	Kosmos 11K65M	-	Y149-30LM	Kosmos-385	Tsklon	MIP-53	LC132/2	-	-	986	-	-
1970-F10	2440936.69	1970 Dec 22 0429:59	Kosmos 11K65M	-	47117-106	Kosmos-387	Tselina-OM	MIP-53	LC132/2	-	-	538	-	-
1970-110	2440943.40	1971 Feb 9 1348:48	Kosmos 11K65M	-	65027-119	Kosmos-384	DS-P1-M No. 1	MIP-53	LC132/1	-	-	622	-	-
1971-010	2440962.38	1971 Feb 17 2109:59	Kosmos 11K65M	-	53727-117	Kosmos-395	Tselina-OM	MIP-53	LC132/1	-	-	1031	-	-
1971-013	2441000.28	1971 Feb 18 2146:00	Kosmos 11K65M	-	65027-118	Kosmos-400	DS-P1-M No. 2	MIP-53	LC132/1	-	-	844	-	-
1971-020	2441029.41	1971 Apr 23 1130:00	Kosmos 11K65M	-	53727-116	Kosmos-407	Strela-2M	MIP-53	LC132/1	-	-	1229	-	-
1971-038	2441074.96	1971 Apr 26 1436	Kosmos 11K65M	-	53727-121	Kosmos-409	Strela-1M	MIP-53	LC132/1	-	-	1594	-	-
1971-041	2441079.10	1971 May 7 1420:00	Kosmos 11K65M	-	53727-120	Kosmos-411/418	Tsklon	MIP-53	LC132/1	-	-	1029	-	-
1971-046	2441093.54	1971 May 22 0051:31	R-14U	-	-	8K65U UBP 29 RD	-	GP8-4	-	-	-	6757	-	Bratsk
1971-5697	2441099.50	1971 May 29 0949:58	R-14U	-	Y149-30LM	Kosmos-422	Tselina-OM	MIP-53	LC132/1	-	-	569	-	-
1971-5850	2441100.66	1971 Jun 4 1810:00	R-14U	-	65014-101	Kosmos-425	Kug	GP8-4	LC132/1	-	-	6757	-	Bratsk
1971-5852	2441102.50	1971 Jun 4 1810:00	R-14U	-	65014-101	8K65U 35 RD UBP-9	8K65U 35 RD UBP-9	GP8-4	LC132/1	-	-	6757	-	BALKH
1971-5858	2441132.50	1971 Jun 4 1810:00	R-14	-	Y149-32LM	Kosmos-426	MMRCH	MIP-53	LC132/2	-	-	1999	-	Bratsk
1971-F07	2441178.50	1971 Jul 22 1345:00	R-14	-	Yu49-42	8K65 UBP 43 RD	Tselina-OM	GP8-4	LC132/2	-	-	5407	-	Bratsk
1971-074	2441201.65	1971 Sep 10 0115:01	Kosmos 11K65M	-	65014-102	Kosmos-436	Tselina-OM	MIP-53	LC132/2	-	-	545	-	-
1971-075	2441204.65	1971 Sep 10 0337:59	Kosmos 11K65M	-	65014-106	Kosmos-437	Tselina-OM	MIP-53	LC132/2	-	-	545	-	-
1971-5704	2441211.50	1971 Sep 17	R-14U	-	-	8K65U UBP 68 RD	-	GP8-4	-	-	-	6757	-	Bratsk
1971-5700	2441217.50	1971 Sep 23	R-14U	-	-	8K65U UBP 68 RD	-	GP8-4	-	-	-	6757	-	Bratsk
1971-5701	2441236.50	1971 Oct 12 1341:00	R-14U	-	47114-104	8K65U UBP 29 RD	-	GP8-4	-	-	-	6757	-	Bratsk
1971-086	2441238.07	1971 Oct 13 1900:00	Kosmos 11K65M	-	65027-110	8K65U UBP 43 RD	Strela-1M	GP8-4	LC132/2	-	-	1628	-	-
1971-089	2441276.25	1971 Nov 20 1900:00	Kosmos 11K65M	-	65027-105	Kosmos-447/451	Strela-1M	GP8-4	LC132/2	-	-	1628	-	-
1971-102	2441276.25	1971 Nov 20 1900:00	Kosmos 11K65M	-	65027-105	Kosmos-457	Strela-1M	GP8-4	LC132/2	-	-	1628	-	-
1971-103	2441286.19	1971 Nov 29 1730:00	Kosmos 11K65M	-	65017-101	Kosmos-459	DS-P1-M No. 5	MIP-53	LC132/1	-	-	285	-	-
1971-105	2441288.23	1971 Dec 2 1730:00	Kosmos 11K65M	-	47117-109	Kosmos-460	Tselina-OM	MIP-53	LC132/2	-	-	543	-	-
1971-111	2441300.69	1971 Dec 15 0431:21	Kosmos 11K65M	-	65017-108	Kosmos-461	DS-U2-IP No. 1	MIP-53	LC132/1	-	-	912	-	-
1971-114	2441303.04	1971 Dec 17 1900:00	Kosmos 11K65M	-	65014-102	Kosmos-465	Tsklon	MIP-53	LC132/2	-	-	1027	-	-
1971-119	2441313.29	1971 Dec 27 1900:00	Kosmos 11K65M	-	65024-110	Kosmos-468	Strela-2M	MIP-53	LC132/2	-	-	836	-	-
1972-5763	2441322.30	1972 Feb 15 0750:29	R-14U	-	53727-113	Aureole No. 1	DS-U2-6KA No. 1	MIP-53	LC132/2	-	-	2461	-	Bratsk
1972-009	2441322.30	1972 Feb 15 0750:29	R-14U	-	53727-113	Kosmos-475	Tsklon	GP8-4	LC132/2	-	-	1002	-	-
1972-016	2441329.35	1972 Mar 22 2030:59	Kosmos 11K65M	-	47127-122	Kosmos-479	Tselina-OM	MIP-53	LC132/2	-	-	546	-	-
1972-017	2441331.50	1972 Mar 25 0220:00	Kosmos 11K65M	-	65027-123	Kosmos-480	Sfera	MIP-53	LC132/2	-	-	1204	-	-
1972-5764	2441437.98	1972 May 6 1124:51	R-14U	-	65024-110	8K65U UBP 35 RD	-	GP8-4	-	-	-	6757	-	Bratsk
1972-5765	2441453.98	1972 May 6 1124:51	R-14U	-	65024-110	8K65U UBP 29 RD	-	GP8-4	-	-	-	6757	-	Bratsk
1972-5766	2441458.50	1972 May 6 1124:51	R-14U	-	47127-111	8K65U UBP 43 RD	-	GP8-4	-	-	-	6757	-	Bratsk
1972-5767	2441461.50	1972 Jun 29	R-14U	-	-	8K65U UBP 43 RD	-	GP8-4	-	-	-	6757	-	Bratsk
1972-5768	2441463.98	1972 Jun 29	R-14U	-	-	8K65U UBP 43 RD	-	GP8-4	-	-	-	6757	-	Bratsk
1972-5769	2441465.50	1972 Jun 29	R-14U	-	-	8K65U UBP 43 RD	-	GP8-4	-	-	-	6757	-	Bratsk
1972-5770	2441467.46	1972 Jun 29	R-14U	-	-	8K65U UBP 43 RD	-	GP8-4	-	-	-	6757	-	Bratsk
1972-5771	2441469.50	1972 Jun 29	R-14U	-	-	8K65U UBP 43 RD	-	GP8-4	-	-	-	6757	-	Bratsk
1972-5772	2441471.50	1972 Jun 29	R-14U	-	-	8K65U UBP 43 RD	-	GP8-4	-	-	-	6757	-	Bratsk
1972-5773	2441473.50	1972 Jun 29	R-14U	-	-	8K65U UBP 43 RD	-	GP8-4	-	-	-	6757	-	Bratsk
1972-5774	2441475.50	1972 Jun 29	R-14U	-	-	8K65U UBP 43 RD	-	GP8-4	-	-	-	6757	-	Bratsk
1972-5775	2441477.50	1972 Jun 29	R-14U	-	-	8K65U UBP 43 RD	-	GP8-4	-	-	-	6757	-	Bratsk
1972-5776	2441479.50	1972 Jun 29	R-14U	-	-	8K65U UBP 43 RD	-	GP8-4	-	-	-	6757	-	Bratsk
1972-5777	2441481.50	1972 Jun 29	R-14U	-	-	8K65U UBP 43 RD	-	GP8-4	-	-	-	6757	-	Bratsk
1972-5778	2441483.50	1972 Jun 29	R-14U	-	-	8K65U UBP 43 RD	-	GP8-4	-	-	-	6757	-	Bratsk
1972-5779	2441485.50	1972 Jun 29	R-14U	-	-	8K65U UBP 43 RD	-	GP8-4	-	-	-	6757	-	Bratsk
1972-5780	2441487.50	1972 Jun 29	R-14U	-	-	8K65U UBP 43 RD	-	GP8-4	-	-	-	6757	-	Bratsk
1972-5781	2441489.50	1972 Jun 29	R-14U	-	-	8K65U UBP 43 RD	-	GP8-4	-	-	-	6757	-	Bratsk
1972-5782	2441491.50	1972 Jun 29	R-14U	-	-	8K65U UBP 43 RD	-	GP8-4	-	-	-	6757	-	Bratsk
1972-5783	2441493.50	1972 Jun 29	R-14U	-	-	8K65U UBP 43 RD	-	GP8-4	-	-	-	6757	-	Bratsk
1972-5784	2441495.50	1972 Jun 29	R-14U	-	-	8K65U UBP 43 RD	-	GP8-4	-	-	-	6757	-	Bratsk
1972-5785	2441497.50	1972 Jun 29	R-14U	-	-	8K65U UBP 43 RD	-	GP8-4	-	-	-	6757	-	Bratsk
1972-5786	2441499.50	1972 Jun 29	R-14U	-	-	8K65U UBP 43 RD	-	GP8-4	-	-	-	6757	-	Bratsk
1972-5787	2441501.50	1972 Jun 29	R-14U	-	-	8K65U UBP 43 RD	-	GP8-4	-	-	-	6757	-	Bratsk
1972-5788	2441503.50	1972 Jun 29	R-14U	-	-	8K65U UBP 43 RD	-	GP8-4	-	-	-	6757	-	Bratsk
1972-5789	2441505.50	1972 Jun 29	R-14U	-	-	8K65U UBP 43 RD	-	GP8-4	-	-	-	6757	-	Bratsk
1972-5790	2441507.50	1972 Jun 29	R-14U	-	-	8K65U UBP 43 RD	-	GP8-4	-	-	-	6757	-	Bratsk
1972-5791	2441509.50	1972 Jun 29	R-14U	-	-	8K65U UBP 43 RD	-	GP8-4	-	-	-	6757	-	Bratsk
1972-5792	2441511.50	1972 Jun 29	R-14U	-	-	8K65U UBP 43 RD	-	GP8-4	-	-	-	6757	-	Bratsk
1972-5793	2441513.50	1972 Jun 29	R-14U	-	-	8K65U UBP 43 RD	-	GP8-4	-	-	-	6757	-	Bratsk
1972-5794	2441515.50	1972 Jun 29	R-14U	-	-	8K65U UBP 43 RD	-	GP8-4	-	-	-	6757	-	Bratsk
1972-5795	2441517.50	1972 Jun 29	R-14U	-	-	8K65U UBP 43 RD	-	GP8-4	-	-	-	6757	-	Bratsk
1972-5796	2441519.50	1972 Jun 29	R-14U	-	-	8K65U UBP 43 RD	-	GP8-4	-	-	-	6757	-	Bratsk
1972-5797	2441521.50	1972 Jun 29	R-14U	-	-	8K65U UBP 43 RD	-	GP8-4	-	-	-	6757	-	Bratsk
1972-5798	2441523.50	1972 Jun 29	R-14U	-	-	8K65U UBP 43 RD	-	GP8-4	-	-	-	6757	-	Bratsk
1972-5799	2441525.50	1972 Jun 29	R-14U	-	-	8K65U UBP 43 RD	-							



Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Mission	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee_km	Range_km	Dest
1975-103	2442720.93	1975 Nov 4 10:12:53	Kosmos 11K65M	-	53731-275	Kosmos-778	Tsikhon-B	MIP-53	LC132/1	-	-	1013	-	-
1975-109	2442738.22	1975 Nov 21 17:11	Kosmos 11K65M	-	53731-271	Kosmos-781	Tselina-OK	MIP-53	LC132/1	-	-	914	-	-
1975-112	2442744.51	1975 Nov 28 00:10:08	Kosmos 11K65M	-	53731-262	Kosmos-783	Strela-2H	MIP-53	LC132/1	-	-	825	-	-
1975-115	2442758.21	1975 Dec 11 17:00:01	Kosmos 11K65M	-	53740-308	Interkosmos-14	DS-U2-1K No. 6	MIP-53	LC132/1	-	-	1881	-	-
1975-F07	2442766.08	1975 Dec 19 14:00	Kosmos 11K65M	-	53721-263	-	-	MIP-53	LC132/1	-	-	675?	-	BALKH
1976-508	2442777.50	1976	K65M-R	-	-	RGCh	3 BB 15F204	GTSP-4	LC107	-	-	675?	-	BALKH
1976-509	2442777.50	1976	K65M-R	-	-	GCh	-	GTSP-4	LC107	-	-	675?	-	BALKH
1976-510	2442777.50	1976	K65M-R	-	-	GCh	-	GTSP-4	LC107	-	-	675?	-	BALKH
1976-511	2442777.50	1976	K65M-R	-	-	GCh	-	GTSP-4	LC107	-	-	675?	-	BALKH
1976-512	2442777.50	1976	K65M-R	-	-	GCh	-	GTSP-4	LC107	-	-	675?	-	BALKH
1976-513	2442777.50	1976	K65M-R	-	-	GCh	-	GTSP-4	LC107	-	-	675?	-	BALKH
1976-514	2442777.50	1976	K65M-R	-	-	GCh	-	GTSP-4	LC107	-	-	675?	-	BALKH
1976-515	2442777.50	1976	K65M-R	-	-	GCh	-	GTSP-4	LC107	-	-	675?	-	BALKH
1976-516	2442777.50	1976	K65M-R	-	-	GCh	-	GTSP-4	LC107	-	-	675?	-	BALKH
1976-517	2442777.50	1976	K65M-R	-	-	GCh	-	GTSP-4	LC107	-	-	675?	-	BALKH
1976-518	2442777.50	1976	K65M-R	-	-	GCh	-	GTSP-4	LC107	-	-	675?	-	BALKH
1976-001	2442783.70	1976 Jan 6 04:52:02	Kosmos 11K65M	-	53731-269	Kosmos-787	Tselina-OK	MIP-53	LC132/1	-	-	563	-	-
1976-002	2442788.21	1976 Jan 20 17:07:41	Kosmos 11K65M	-	53749-164	Kosmos-789	Tsikhon-B	MIP-53	LC132/1	-	-	1018	-	-
1976-005	2442800.43	1976 Jan 22 22:28:01	Kosmos 11K65M	-	53731-285	Kosmos-790	Tselina-OK	MIP-53	LC132/1	-	-	563	-	-
1976-008	2442805.94	1976 Jan 26 10:39:01	Kosmos 11K65M	-	53731-281	Kosmos-791/798	Strela-1H	MIP-53	LC132/1	-	-	1698	-	-
1976-011	2442811.84	1976 Feb 3 08:16	Kosmos 11K65M	-	53731-282	Kosmos-800	Zalyv	MIP-53	LC132/1	-	-	1015	-	-
1976-014	2442821.04	1976 Feb 12 13:00:01	Kosmos 11K65M	-	53731-286	Kosmos-803	Lira	MIP-53	LC132/2	-	-	626	-	-
1976-022	2442820.06	1976 Mar 12 13:30	Kosmos 11K65M	-	53740-310	Kosmos-807	Vektor	MIP-53	LC132/1	-	-	1988	-	-
1976-519	2442867.88	1976 Mar 30 09:00	Vertikal, R65UP	-	6	K65UP No. 6	VZAS Luch	GTSP-4	LC108	-	-	500?	-	-
1976-031	2442874.68	1976 Apr 6 04:14	Kosmos 11K65M	-	53731-280	Kosmos-812	Tselina-OK	MIP-53	LC132/1	-	-	547	-	-
1976-037	2442897.06	1976 Apr 28 15:30	Kosmos 11K65M	-	53740-301	Kosmos-816	Romb 1	MIP-53	LC132/1	-	-	532	-	-
1976-049	2442927.13	1976 May 28 15:00:01	Kosmos 11K65M	-	53716-328	Kosmos-822	Vektor	MIP-53	LC132/1	-	-	710	-	-
1976-081	2442945.44	1976 Jun 2 22:30:15	Kosmos 11K65M	-	53731-283	Kosmos-823	Zalyv	MIP-53	LC132/2	-	-	1012	-	-
1976-084	2442945.05	1976 Jun 15 13:18:01	Kosmos 11K65M	-	53731-277	Kosmos-825/832	Strela-1H	MIP-53	LC132/2	-	-	1691	-	-
1976-086	2442949.17	1976 Jun 19 16:00:01	Kosmos 11K65M	-	53731-276	Interkosmos-15	Strela-2H	MIP-53	LC132/1	-	-	518	-	-
1976-087	2442965.84	1976 Jun 29 08:12	Kosmos 11K65M	-	53731-284	Kosmos-836	Lira	MIP-53	LC132/1	-	-	836	-	-
1976-089	2442965.38	1976 Jul 6 21:08	Kosmos 11K65M	-	53740-324	Kosmos-839	Strela-2H	MIP-53	LC132/1	-	-	2103	-	-
1976-091	2442965.06	1976 Jul 15 13:11	Kosmos 11K65M	-	53740-304	Kosmos-841	Lira	MIP-53	LC132/1	-	-	836	-	-
1976-097	2442975.05	1976 Jul 16 15:11	Kosmos 11K65M	-	53740-304	Kosmos-842	Geoid	MIP-53	LC132/1	-	-	1012	-	-
1976-070	2442980.93	1976 Jul 21 02:20	Kosmos 11K65M	-	53740-307	Kosmos-845	Strela-2H	MIP-53	LC132/2	-	-	732	-	-
1976-076	2442986.72	1976 Jul 27 12:00:02	Kosmos 11K65M	-	53740-316	Kosmos-846	DS-U3-1K No. 6	GTSP-4	LC107/2	-	-	519	-	-
1976-078	2442987.34	1976 Jul 29 20:02:44	Kosmos 11K65M	-	53716-329	Kosmos-848	Zalyv	MIP-53	LC107/2	-	-	1015	-	-
1976-098	2443060.79	1976 Sep 29 07:40:01	Kosmos 11K65M	-	53716-333	Kosmos-858	Strela-2H	MIP-53	LC132/2	-	-	824	-	-
1976-108	2443061.03	1976 Oct 14 09:50	Vertikal, R65UP	-	-	-	VZA Fon	GTSP-4	LC132/2	-	-	1512	-	-
1976-115	2443114.51	1976 Dec 2 00:17	Kosmos 11K65M	-	53770-414	Kosmos-864	Parus	MIP-53	LC132/2	-	-	1010	-	-
1976-118	2443114.51	1976 Dec 2 00:17	Kosmos 11K65M	-	53770-414	Kosmos-864	Tselina-OK	MIP-53	LC132/2	-	-	885	-	-
1976-120	2443119.33	1976 Dec 6 10:23	Kosmos 11K65M	-	53716-330	Kosmos-870	Strela-1H	MIP-53	LC132/2	-	-	1690	-	-
1976-126	2443122.33	1976 Dec 8 20:05:59	Kosmos 11K65M	-	53729-153	Kosmos-869	Lira	MIP-53	LC132/2	-	-	626	-	-
1976-122	2443125.08	1976 Dec 15 13:05	Kosmos 11K65M	-	53729-153	Kosmos-869	Tsikhon-B	MIP-53	LC132/2	-	-	1013	-	-
1976-124	2443125.08	1976 Dec 15 13:05	Kosmos 11K65M	-	53729-153	Kosmos-869	Romb 2	MIP-53	LC132/2	-	-	515	-	-
1976-128	2443130.43	1976 Dec 28 07:40:56	Kosmos 11K65M	-	53721-265	Kosmos-885	Romb 2	MIP-53	LC132/2	-	-	1019	-	-
1976-870	2443140.74	1976 Dec 28 07:40:56	Kosmos 11K65M	-	60072-415	Kosmos-885	Parus	MIP-53	LC132/1	-	-	1600?	-	-
1977-803	2443143.50	1977	K65M-R	-	-	K65UP No. 8	VZAS Luch-2	GTSP-4	LC132/1	-	-	675?	-	BALKH
1977-804	2443143.50	1977	K65M-R	-	-	Bakshian-1	6 BB	GTSP-4	LC107	-	-	675?	-	BALKH
1977-805	2443143.50	1977	K65M-R	-	-	Bakshian-1	6 BB	GTSP-4	LC107	-	-	675?	-	BALKH
1977-806	2443143.50	1977	K65M-R	-	-	Bakshian-1	6 BB	GTSP-4	LC107	-	-	675?	-	BALKH
1977-807	2443143.50	1977	K65M-R	-	-	Bakshian-1	6 BB	GTSP-4	LC107	-	-	675?	-	BALKH
1977-808	2443143.50	1977	K65M-R	-	-	Bakshian-1	6 BB	GTSP-4	LC107	-	-	675?	-	BALKH
1977-809	2443143.50	1977	K65M-R	-	-	Bakshian-1	6 BB	GTSP-4	LC107	-	-	675?	-	BALKH
1977-810	2443143.50	1977	K65M-R	-	-	Bakshian-1	6 BB	GTSP-4	LC107	-	-	675?	-	BALKH
1977-811	2443143.50	1977	K65M-R	-	-	Bakshian-1	6 BB	GTSP-4	LC107	-	-	675?	-	BALKH
1977-812	2443143.50	1977	K65M-R	-	-	Bakshian-1	6 BB	GTSP-4	LC107	-	-	675?	-	BALKH
1977-813	2443143.50	1977	K65M-R	-	-	Bakshian-1	6 BB	GTSP-4	LC107	-	-	675?	-	BALKH
1977-814	2443143.50	1977	K65M-R	-	-	Bakshian-1	6 BB	GTSP-4	LC107	-	-	675?	-	BALKH
1977-815	2443143.50	1977	K65M-R	-	-	Bakshian-1	6 BB	GTSP-4	LC107	-	-	675?	-	BALKH
1977-816	2443143.50	1977	K65M-R	-	-	Bakshian-1	6 BB	GTSP-4	LC107	-	-	675?	-	BALKH
1977-817	2443164.34	1977 Jan 20 20:05	Kosmos 11K65M	-	53719-155	Kosmos-890	Zalyv	MIP-53	LC132/1	-	-	626	-	-
1977-818	2443169.50	1977 Jan 26	K65M-R	-	GCh	GCh	-	GTSP-4	LC107	-	-	522	-	BALKH
1977-819	2443171.02	1977 Feb 2 14:30	Kosmos 11K65M	-	53746-306	Kosmos-891	Vektor	MIP-53	LC132/2	-	-	1678	-	-
1977-011	2443179.96	1977 Feb 15 11:00	Kosmos 11K65M	-	53721-261	Kosmos-893	GW DS-U2-1K	MIP-53	LC132/2	-	-	1017	-	-
1977-013	2443196.22	1977 Feb 21 17:20	Kosmos 11K65M	-	53740-309	Kosmos-894	Parus	MIP-53	LC132/1	-	-	568	-	-
1977-022	2443207.42	1977 Mar 24 22:11	Kosmos 11K65M	-	53749-169	Kosmos-899	Tselina-OK	MIP-53	LC132/1	-	-	522	-	-
1977-023	2443230.46	1977 Mar 29 23:00	Kosmos 11K65M	-	53749-168	Kosmos-900	AUS-Z-R-0 Oval	MIP-53	LC132/2	-	-	675?	-	BALKH
1977-8476	2443235.50	1977 Apr 2	R-14U	-	-	8K65U UPR	-	GTSP-4	-	-	-	-	-	-
1977-031	2443260.65	1977 Apr 27 03:30	Kosmos 11K65M	-	53731-287	Kosmos-906	ERT63-4	GTSP-4	LC107/1	-	-	515	-	-
1977-036	2443293.19	1977 May 19 16:30:01	Kosmos 11K65M	-	53719-156	Kosmos-909	Lira	MIP-53	LC132/2	-	-	2114	-	-
1977-039	2443298.96	1977 May 25 11:00	Kosmos 11K65M	-	53749-161	Kosmos-911	Geoid	MIP-53	LC132/2	-	-	1010	-	-
1977-042	2443294.44	1977 May 30 22:30	Kosmos 11K65M	-	53749-161	Kosmos-913	Romb 3	MIP-53	LC132/1	-	-	527	-	-
1977-049	2443311.65	1977 Jun 17 03:30	Kosmos 11K65M	-	53749-162	Signe 3	Strela-2H	GTSP-4	LC107/1	-	-	519	-	-
1977-059	2443325.99	1977 Jul 1 11:52	Kosmos 11K65M	-	53749-162	Kosmos-923	Tselina-OK	MIP-53	LC132/1	-	-	819	-	-
1977-060	2443329.43	1977 Jul 8 17:20	Kosmos 11K65M	-	53746-303	Kosmos-924	Tsikhon-B	MIP-53	LC132/2	-	-	551	-	-
1977-062	2443333.23	1977 Jul 13 05:02	Kosmos 11K65M	-	53731-282	Kosmos-926	Parus	MIP-53	LC132/1	-	-	1046	-	-
1977-064	2443337.71	1977 Jul 19 08:40	Kosmos 11K65M	-	53721-264	Kosmos-928	Vektor	MIP-53	LC132/1	-	-	1011	-	-
1977-070	2443346.92	1977 Aug 24 18:20	Kosmos 11K65M	-	53731-266	Kosmos-930	Strela-1H	MIP-53	LC132/1	-	-	408	-	-
1977-079	2443360.26	1977 Aug 24 18:20	Kosmos 11K65M	-	53731-267	Kosmos-933	Vektor	MIP-53	LC132/1	-	-	1682	-	-
1977-087	2443400.33	1977 Sep 30 09:50	Vertikal, R65UP	-	53716-326	Kosmos-939/946	Strela-2H	GTSP-4	LC108	-	-	500	-	-
1977-088	2443411.19	1977 Sep 30 09:50	Kosmos 11K65M	-	65089-526	Kosmos-951	VZAS Luch-2	MIP-53	LC132/1	-	-	1018	-	-
1977-096	2443411.19	1977 Sep 24 16:30	Kosmos 11K65M	-	53731-278	Interkosmos-17	AUS-Z-R-1K	MIP-53	LC132/1	-	-	515	-	-
1977-101	2443437.92	1977 Oct 21 10:05	Kosmos 11K65M	-	53716-325	Kosmos-959	Lira	MIP-53	LC132/1	-	-	864	-	-



Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Mission	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee km	Range km	Dest
1977-103	2443441.73	1977 Oct 25 0525	Kosmos 11K65M		53746-309	Kosmos-960	Tselina-OM	MIP-53	LC132/1			562		
1977-5266	2443442.01	1977 Oct 25 1215	Vertikal' R65UP		10	Kosmos-961	ZVA 121K	GTS-4	LC108			1500		
1977-107	2443445.17	1977 Oct 26 1000	Kosmos 11K65M		53768-313	Kosmos-962	Zaly	MIP-53	LC132/1			1011		
1977-106	2443472.10	1977 Nov 24 1430	Kosmos 11K65M		53746-302	Kosmos-963	Gecid	MIP-53	LC132/1			1214		
1977-F06	2443476.80	1977 Nov 29 0705	Kosmos 11K65M		53721-265		Tskada?	MIP-53	LC132/1			887		
1977-111	2443485.96	1977 Dec 8 1100	Kosmos 11K65M		65068-308	Kosmos-965	Romb 4	MIP-53	LC132/2			520		
1977-116	2443491.16	1977 Dec 13 1853	Kosmos 11K65M		53710-332	Kosmos-967	Lira	MIP-53	LC132/1			1028		
1977-119	2443493.68	1977 Dec 16 0425	Kosmos 11K65M		53746-305	Kosmos-968	Strela-2H	MIP-53	LC132/1			843		
1977-122	2443501.18	1977 Dec 23 1624	Kosmos 11K65M		53710-322	Kosmos-971	Parus	MIP-53	LC132/1			1011		
1977-S19	2443505.12	1977 Dec 27 1455	Vertikal' R65UP		11	K65UP No. 11	VZAF-S	GTS-4	LC108			1500?		
1978-501	2443508.50	1978	K65M-R			GCh		GTS-4	LC107			675?		BALKH
1978-502	2443508.50	1978	K65M-R			GCh		GTS-4	LC107			675?		BALKH
1978-503	2443508.50	1978	K65M-R			GCh		GTS-4	LC107			675?		BALKH
1978-504	2443508.50	1978	K65M-R			GCh		GTS-4	LC107			675?		BALKH
1978-505	2443508.50	1978	K65M-R			GCh		GTS-4	LC107			675?		BALKH
1978-506	2443508.50	1978	K65M-R			GCh		GTS-4	LC107			675?		BALKH
1978-507	2443508.50	1978	K65M-R			GCh		GTS-4	LC107			675?		BALKH
1978-508	2443508.50	1978	K65M-R			GCh		GTS-4	LC107			675?		BALKH
1978-509	2443508.50	1978	K65M-R			GCh		GTS-4	LC107			675?		BALKH
1978-005	2443519.37	1978 Jan 10 2051	Kosmos 11K65M		53716-319	Kosmos-976/983	Strela-1H	MIP-53	LC132/2			1695		
1978-007	2443525.64	1978 Jan 17 0326	Kosmos 11K65M		53716-327	Kosmos-985	Parus	MIP-53	LC132/1			1026		
1978-019	2443567.19	1978 Feb 17 1633	Kosmos 11K65M		53746-312	Kosmos-990	Strela-2H	MIP-53	LC132/2			816		
1978-022	2443567.78	1978 Feb 28 0643	Kosmos 11K65M		53716-323	Kosmos-991	Strela-2H	MIP-53	LC132/2			1015		
1978-028	2443563.16	1978 Mar 15 1957	Kosmos 11K65M		53746-314	Kosmos-994	Zaly	MIP-53	LC132/2			1015		
1978-031	2443565.56	1978 Mar 26 0130	Kosmos 11K65M		53746-314	Kosmos-996	Zaly	MIP-53	LC132/2			1011		
1978-034	2443569.08	1978 Mar 31 1401	Kosmos 11K65M		53768-307	Kosmos-1000	Tskada	MIP-53	LC132/1			1014		
1978-046	2443590.46	1978 May 12 1100	Kosmos 11K65M		53746-316	Kosmos-1006	Vektor	MIP-53	LC132/1			469		
1978-049	2443594.11	1978 May 17 1439	Kosmos 11K65M		53798-316	Kosmos-1008	Tselina-OK	MIP-53	LC132/1			560		
1978-053	2443622.21	1978 May 23 1657	Kosmos 11K65M		53768-310	Kosmos-1011	Parus	MIP-53	LC132/1			1017		
1978-512	2443627.42	1978 May 30 2036	Vertikal' R65UP		12	K65UP No. 12	ZVA	GTS-4	LC108			1007		
1978-056	2443667.42	1978 Jun 7 2200	Kosmos 11K65M		53716-321	Kosmos-1013/1020	Strela-1H	MIP-53	LC132/1			700		
1978-063	2443680.89	1978 Jun 21 0927	Kosmos 11K65M		53716-317	Kosmos-1023	Strela-2H	MIP-53	LC132/1			839		
1978-074	2443689.59	1978 Jun 27 0449	Kosmos 11K65M		53716-313	Kosmos-1025	Barzhan-1	MIP-53	LC132/2			675?		
1978-075	2443716.70	1978 Jul 17 27 0449	Vertikal' R65UP		13	K65UP No. 13	ZVA Pon	GTS-4	LC108			1004		
1978-511	2443751.50	1978 Oct 4 0349	K65M-R			Kosmos-1027		GTS-4	LC107			1500?		BALKH
1978-091	2443785.66	1978 Oct 4 0349	Kosmos 11K65M		53782-429	Barzhan-2	3 BB	GTS-4	LC107			675?		
1978-092	2443785.66	1978 Oct 4 0349	Kosmos 11K65M		53782-429	Barzhan-2	3 BB	GTS-4	LC107			675?		
1978-093	2443806.28	1978 Oct 24 1500	Kosmos 11K65M		65065-106	Kosmos-1034/1041	Strela-1H	MIP-53	LC132/1			701		
1978-5227	2443816.00	1978 Nov 5 1205	Kosmos 11K65M		65065-106	Interkosmos-16	100S-2 Mag-TK	MIP-53	LC132/1			763		
1978-095	2443823-41	1978 Nov 16 2145	Vertikal' R65UP		14	Vertikal' R67	VZAS	GTS-4	LC108			1500		
1978-5535	2443829-41	1978 Nov 16 2145	Kosmos 11K65M		53755-111	Kosmos-1048	Strela-2H	MIP-53	LC132/2			832		Bratsk
1978-109	2443839.50	1978 Nov 27 1812	R-14		53715-200	8K65 UPB 43 RD		GTS-4	LC132/2			171		
1978-115	2443865.26	1978 Dec 5 1119	Kosmos 11K65M		53782-429	Kosmos-1051/1058	Strela-1H	MIP-53	LC132/2			549		
1978-119	2443865.98	1978 Dec 15 2043	Kosmos 11K65M		53782-429	Kosmos-1062	Tselina-OM	MIP-53	LC132/2			949		
1978-120	2443865.98	1978 Dec 15 2043	Kosmos 11K65M		53782-429	Kosmos-1064	Parus	MIP-53	LC132/1			949		
1978-120	2443865.98	1978 Dec 22 2200	Kosmos 11K65M		65068-305	Kosmos-1064	Romb 5	MIP-53	LC107/1			541		
1978-122	2443865.98	1978 Dec 26 1330	Kosmos 11K65M		53782-430	Kosmos-1067	Gecid-145	MIP-53	LC132/2			1015		
1979-503	2443873.50	1979	K65M-R			RCh	RGCh Pioneer-UTrKh RD	GTS-4	LC107			675?		BALKH
1979-504	2443873.50	1979	K65M-R			GCh		GTS-4	LC107			675?		BALKH
1979-505	2443873.50	1979	K65M-R			GCh		GTS-4	LC107			675?		BALKH
1979-506	2443873.50	1979	K65M-R			GCh		GTS-4	LC107			675?		BALKH
1979-507	2443873.50	1979	K65M-R			GCh		GTS-4	LC107			675?		BALKH
1979-508	2443873.50	1979	K65M-R			GCh		GTS-4	LC107			675?		BALKH
1979-509	2443873.50	1979	K65M-R			GCh		GTS-4	LC107			675?		BALKH
1979-510	2443873.50	1979	K65M-R			GCh		GTS-4	LC107			675?		BALKH
1979-511	2443873.50	1979	K65M-R			GCh		GTS-4	LC107			675?		BALKH
1979-512	2443873.50	1979	K65M-R			GCh		GTS-4	LC107			675?		BALKH
1979-513	2443873.50	1979	K65M-R			GCh		GTS-4	LC107			675?		BALKH
1979-514	2443873.50	1979	K65M-R			GCh		GTS-4	LC107			675?		BALKH
1979-003	2443890.28	1979 Jan 16 1737	Kosmos 11K65M		47182-437	Barzhan-2	3 BB	GTS-4	LC107			1019		
1979-010	2443912.92	1979 Feb 8 1000	Kosmos 11K65M		53782-417	Kosmos-1072	Barzhan-2	MIP-53	LC132/1			515		
1979-011	2443912.92	1979 Feb 8 1000	Kosmos 11K65M		53782-417	Kosmos-1075	Vektor	MIP-53	LC132/2			989		
1979-020	2443932.21	1979 Feb 27 1200	Kosmos 11K65M		47155-107	Interkosmos-19	AUGS-Z Ionosond-TK	MIP-53	LC132/2			1699		
1979-024	2443947.62	1979 Mar 15 0268	Kosmos 11K65M		47168-312	Kosmos-1081/1088	Strela-1H	MIP-53	LC132/2			1005		
1979-026	2443953.68	1979 Mar 21 0413	Kosmos 11K65M		47179-413	Kosmos-1089	Parus	MIP-53	LC132/2			1013		
1979-028	2443970.76	1979 Apr 7 0620	Kosmos 11K65M		65082-324	Kosmos-1091	Strela-1H	MIP-53	LC132/2			1010		
1979-030	2443975.41	1979 Apr 11 2151	Kosmos 11K65M		53782-423	Kosmos-1092	Tskada	MIP-53	LC132/1			1011		
1979-046	2444025.25	1979 May 31 1758	Kosmos 11K65M		65095-109	Kosmos-1104	Parus	MIP-53	LC132/1			560		
1979-051	2444025.25	1979 May 31 1758	Kosmos 11K65M		65095-109	Kosmos-1104	SED	GTS-4	LC107/1			814		
1979-061	2444031.94	1979 Jun 7 1030	Kosmos 11K65M		65095-109	Phasbara	Strela-2H	MIP-53	LC132/1			541		
1979-060	2444034.34	1979 Jun 28 2009	Kosmos 11K65M		65095-109	Kosmos-1110	Romb	GTS-4	LC107/1			551		
1979-063	2444066.15	1979 Jul 11 1541	Kosmos 11K65M		65095-124	Kosmos-1112	Tselina-OM	MIP-53	LC132/1			817		
1979-065	2444066.15	1979 Jul 11 1541	Kosmos 11K65M		65095-124	Kosmos-1114	Strela-2H	MIP-53	LC132/1			1689		
1979-078	2444113.54	1979 Aug 28 0055	Kosmos 11K65M		47189-419	Kosmos-1125	Strela-1H	MIP-53	LC132/2			505		
1979-084	2444142.38	1979 Sep 25 2100	Kosmos 11K65M		47147-243	Kosmos-1130/1137	VZAF	GTS-4	LC108			807		
1979-516	2444142.64	1979 Sep 26 0320	Vertikal' R65UP		15	Vertikal' R-8	Strela-2H	MIP-53	LC132/2			1010		
1979-089	2444168.19	1979 Oct 11 1636	Kosmos 11K65M		47179-407	Kosmos-1140	Parus	MIP-53	LC132/2			675?		Bratsk
1979-090	2444165.01	1979 Oct 16 1217	Kosmos 11K65M		47172-410	Kosmos-1141		GTS-4	LC108			1500?		Bratsk
1979-517	2444171.07	1979 Oct 19	R-14		16	K65UP UPB 43 RD	VZAF	GTS-4	LC108			675?		Bratsk
1979-5308	2444172.50	1979 Oct 24 1340	R-14U			8K65UP UPB 29 RD		GTS-4	LC108			675?		Bratsk
1979-515	2444172.50	1979 Oct 26	K65M-R			8K65UP UPB 29 RD		GTS-4	LC108			675?		BALKH
1979-096	2444178.84	1979 Nov 1 0805	Kosmos 11K65M		53755-105	Interkosmos-20	3 BB	GTS-4	LC107			517		
1979-100	2444212.88	1979 Nov 1 0900	Kosmos 11K65M		47168-309	Interkosmos-16	AUGS-Z ?	MIP-53	LC132/2			486		
1980-503	2444238.50	1980	K65M-R			RCh	Tafun-1B	MIP-53	LC132/2			675?		BALKH
1980-504	2444238.50	1980	K65M-R			GCh	3 BB 15F454	LC107				675?		BALKH
1980-505	2444238.50	1980	K65M-R			GCh		GTS-4	LC107			675?		BALKH
1980-506	2444238.50	1980	K65M-R			GCh		GTS-4	LC107			675?		BALKH
1980-507	2444238.50	1980	K65M-R			GCh		GTS-4	LC107			675?		BALKH



Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Mission	Launch	FlightCode	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee_km	Range_km	Dest
1982-5300	2445087.50	1982 Apr 28 0952:00	R-14U			8K65U UB7/Target	ABM Target				GTSP-4				6007		BALKH
1982-037	2445087.62	1982 Apr 28 0952:00	Kosmos 11K65M		47175-125	Kosmos-1364	Strela-2H				LC132/1				845		
1982-040	2445096.25	1982 May 6 1307	Kosmos 11K65M		53775-123	Kosmos-1357/1364	Strela-2H				MILP-53				1889		
1982-051	2445121.69	1982 Jun 1 0437	Kosmos 11K65M		47167-268	Kosmos-1371	Strela-2H				MILP-53				844		
1982-054	2445124.40	1982 Jun 3 2130	K65M-RB			Kosmos-1374	BOK-4 No. 404				GTSP-4				229		
1982-055	2445127.22	1982 Jun 6 1710	Kosmos 11K65M		65067-257	Kosmos-1375	Lira				MILP-53				1020		
1982-061	2445139.00	1982 Jun 18 1158	Kosmos 11K65M		47185-457	Kosmos-1380	Madzhida 11F643N No. 514				MILP-53				724		
1982-066	2445150.41	1982 Jun 29 2145:41	Kosmos 11K65M		23	K65UP No. 23	VZAF				MILP-53				1031		
1982-526	2445153.27	1982 Jul 2 1830	Vertikal' 1665UP			Kosmos-1386					LC132/2				15007		
1982-069	2445171.91	1982 Jul 7 0947	Kosmos 11K65M		65095-473	Kosmos-1388/1395	Strela-1H				LC132/1				1013		
1982-073	2445171.77	1982 Jul 21 0631	Kosmos 11K65M		65095-103	Kosmos-1397	Romb				LC132/2				1716		
1982-076	2445180.32	1982 Jul 29 1940	Kosmos 11K65M		65095-472	Kosmos-1417	Strela-2H				LC132/2				8007		
1982-F05	2445212.33	1982 Aug 30 1955	Kosmos 11K65M		65047-236	Kosmos-1418	Strela-2H				LC132/2				1012		
1982-102	2445242.75	1982 Oct 19 0558	Kosmos 11K65M		53785-460	Kosmos-1418	Taifun-1B				LC107/1				410		
1982-104	2445264.08	1982 Oct 21 1400	Kosmos 11K65M		47193-171	Kosmos-1420	Strela-2H				LC132/1				817		
1982-109	2445284.76	1982 Nov 11 0614	Kosmos 11K65M		47185-465	Kosmos-1420	Strela-1H				LC132/1				407		
1982-F07	2445297.96	1982 Nov 24 1100	Vertikal' 1665UP		24	K65UP No. 24	VZAF				LC108				15007		
1982-121	2445333.04	1982 Dec 17 1303	Kosmos 11K65M		53783-454	Kosmos-1427	Taifun-1B				LC132/1				498		
1983-503	2445334.50	1983	K65M-R			Barzhan-3	R-29RKH/R-29RM RMD				LC107				6757		BALKH
1983-504	2445334.50	1983	K65M-R			Barzhan-3	R-29RKH/R-29RM RMD				LC107				6757		BALKH
1983-505	2445334.50	1983	K65M-R			Barzhan-3	R-29RKH/R-29RM RMD				LC107				6757		BALKH
1983-506	2445334.50	1983	K65M-R			Barzhan-3	R-29RKH/R-29RM RMD				LC107				6757		BALKH
1983-507	2445334.50	1983	K65M-R			Barzhan-3	R-29RKH/R-29RM RMD				LC107				6757		BALKH
1983-508	2445334.50	1983	K65M-R			Barzhan-3	R-29RKH/R-29RM RMD				LC107				6757		BALKH
1983-509	2445334.50	1983	K65M-R			Barzhan-3	R-29RKH/R-29RM RMD				LC107				6757		BALKH
1983-510	2445334.50	1983	K65M-R			Barzhan-3	R-29RKH/R-29RM RMD				LC107				6757		BALKH
1983-511	2445334.50	1983	K65M-R			Barzhan-3	R-29RKH/R-29RM RMD				LC107				6757		BALKH
1983-512	2445334.50	1983	K65M-R			Barzhan-3	R-29RKH/R-29RM RMD				LC107				6757		BALKH
1983-513	2445334.50	1983	K65M-R			Barzhan-3	R-29RKH/R-29RM RMD				LC107				6757		BALKH
1983-514	2445334.50	1983	K65M-R			Barzhan-3	R-29RKH/R-29RM RMD				LC107				6757		BALKH
1983-515	2445334.50	1983	K65M-R			Barzhan-3	R-29RKH/R-29RM RMD				LC107				6757		BALKH
1983-516	2445334.50	1983	K65M-R			Barzhan-3	R-29RKH/R-29RM RMD				LC107				6757		BALKH
1983-517	2445334.50	1983	K65M-R			Barzhan-3	R-29RKH/R-29RM RMD				LC107				6757		BALKH
1983-518	2445334.50	1983	K65M-R			Barzhan-3	R-29RKH/R-29RM RMD				LC107				6757		BALKH
1983-001	2445347.06	1983 Jun 12 1402	Kosmos 11K65M		65093-479	Kosmos-1428					LC132/2				1006		
1983-002	2445353.60	1983 Jun 19 0225	Kosmos 11K65M		53793-461	Kosmos-1429/1436	Strela-1H				LC132/1				6707		
1983-F01	2445360.00	1983 Jun 26 2000	Kosmos		47193-460	Kosmos-1445	BOK-4 No. 403				LC132/2				607		
1983-017	2445369.44	1983 Mar 15 2230	K65M-RB			Kosmos-1447	Madzhida 11F643N No. 530				LC132/2				1016		
1983-021	2445418.37	1983 Mar 24 2050:10	Kosmos 11K65M		53739-548	Kosmos-1446	Romb				LC132/2				1009		
1983-023	2445423.56	1983 Mar 30 0110	Kosmos 11K65M		65019-522	Kosmos-1446	Strela-2H				LC132/1				815		
1983-027	2445431.26	1983 Apr 6 1200	Kosmos 11K65M		53719-512	Kosmos-1460	Vektor				LC132/2				815		
1983-031	2445437.26	1983 Apr 12 0200	Kosmos 11K65M		65019-519	Kosmos-1462	Strela-2H				LC132/2				815		
1983-034	2445444.40	1983 Apr 19 1200	Kosmos 11K65M		65019-519	Kosmos-1463	Romb				LC132/2				556		
1983-042	2445444.40	1983 May 6 0300:00	Kosmos 11K65M		47139-511	Kosmos-1469	Taifun-1B				LC132/2				1024		
1983-046	2445474.42	1983 May 19 0400	Kosmos 11K65M		47139-511	Kosmos-1469	Taifun-1B				LC132/1				1551		
1983-048	2445474.42	1983 May 19 0400	Kosmos 11K65M		47139-511	Kosmos-1469	Taifun-1B				LC132/1				1551		
1983-049	2445474.42	1983 May 19 0400	Kosmos 11K65M		47139-511	Kosmos-1469	Taifun-1B				LC132/1				1551		
1983-050	2445474.42	1983 May 19 0400	Kosmos 11K65M		47139-511	Kosmos-1469	Taifun-1B				LC132/1				1551		
1983-051	2445474.42	1983 May 19 0400	Kosmos 11K65M		47139-511	Kosmos-1469	Taifun-1B				LC132/1				1551		
1983-052	2445474.42	1983 May 19 0400	Kosmos 11K65M		47139-511	Kosmos-1469	Taifun-1B				LC132/1				1551		
1983-053	2445474.42	1983 May 19 0400	Kosmos 11K65M		47139-511	Kosmos-1469	Taifun-1B				LC132/1				1551		
1983-054	2445474.42	1983 May 19 0400	Kosmos 11K65M		47139-511	Kosmos-1469	Taifun-1B				LC132/1				1551		
1983-055	2445474.42	1983 May 19 0400	Kosmos 11K65M		47139-511	Kosmos-1469	Taifun-1B				LC132/1				1551		
1983-056	2445474.42	1983 May 19 0400	Kosmos 11K65M		47139-511	Kosmos-1469	Taifun-1B				LC132/1				1551		
1983-057	2445474.42	1983 May 19 0400	Kosmos 11K65M		47139-511	Kosmos-1469	Taifun-1B				LC132/1				1551		
1983-058	2445474.42	1983 May 19 0400	Kosmos 11K65M		47139-511	Kosmos-1469	Taifun-1B				LC132/1				1551		
1983-059	2445474.42	1983 May 19 0400	Kosmos 11K65M		47139-511	Kosmos-1469	Taifun-1B				LC132/1				1551		
1983-060	2445474.42	1983 May 19 0400	Kosmos 11K65M		47139-511	Kosmos-1469	Taifun-1B				LC132/1				1551		
1983-061	2445474.42	1983 May 19 0400	Kosmos 11K65M		47139-511	Kosmos-1469	Taifun-1B				LC132/1				1551		
1983-062	2445474.42	1983 May 19 0400	Kosmos 11K65M		47139-511	Kosmos-1469	Taifun-1B				LC132/1				1551		
1983-063	2445474.42	1983 May 19 0400	Kosmos 11K65M		47139-511	Kosmos-1469	Taifun-1B				LC132/1				1551		
1983-064	2445474.42	1983 May 19 0400	Kosmos 11K65M		47139-511	Kosmos-1469	Taifun-1B				LC132/1				1551		
1983-065	2445474.42	1983 May 19 0400	Kosmos 11K65M		47139-511	Kosmos-1469	Taifun-1B				LC132/1				1551		
1983-066	2445474.42	1983 May 19 0400	Kosmos 11K65M		47139-511	Kosmos-1469	Taifun-1B				LC132/1				1551		
1983-067	2445474.42	1983 May 19 0400	Kosmos 11K65M		47139-511	Kosmos-1469	Taifun-1B				LC132/1				1551		
1983-068	2445474.42	1983 May 19 0400	Kosmos 11K65M		47139-511	Kosmos-1469	Taifun-1B				LC132/1				1551		
1983-069	2445474.42	1983 May 19 0400	Kosmos 11K65M		47139-511	Kosmos-1469	Taifun-1B				LC132/1				1551		
1983-070	2445474.42	1983 May 19 0400	Kosmos 11K65M		47139-511	Kosmos-1469	Taifun-1B				LC132/1				1551		
1983-071	2445474.42	1983 May 19 0400	Kosmos 11K65M		47139-511	Kosmos-1469	Taifun-1B				LC132/1				1551		
1983-072	2445474.42	1983 May 19 0400	Kosmos 11K65M		47139-511	Kosmos-1469	Taifun-1B				LC132/1				1551		
1983-073	2445474.42	1983 May 19 0400	Kosmos 11K65M		47139-511	Kosmos-1469	Taifun-1B		</								

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Mission	Launch_Site	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee_km	Range_km	Dest
1984-010	2445733.23	1984 Feb 2 1738	Kosmos 11K65M	-	47139-532	Kosmos-1535	Parus	MIP-53	-	MIP-53	LC132/1	-	-	1019	-	-
1984-019	2445752.15	1984 Feb 21 1536	Kosmos 11K65M	-	65039-537	Kosmos-1538	Strela-2H	MIP-53	-	MIP-53	LC132/1	-	-	815	-	BALKH
1984-529	2445759.50	1984 Mar 7	K65M-R	-	-	Barzhan-3	3 BB	GP8-4	-	GP8-4	LC107	-	-	675?	-	BALKH
1984-043	2445831.76	1984 May 11 0619	Kosmos 11K65M	-	53739-533	Kosmos-1550	Parus	MIP-53	-	MIP-53	LC132/2	-	-	1014	-	-
1984-046	2445838.11	1984 May 17 1443:26	Kosmos 11K65M	-	47139-538	Kosmos-1553	Tsiskada	MIP-53	-	MIP-53	LC132/1	-	-	1012	-	-
1984-052	2445849.41	1984 May 28 2152:00	Kosmos 11K65M	-	65039-531	Kosmos-1569/1566	Strela-1H	MIP-53	-	MIP-53	LC132/2	-	-	1683	-	-
1984-056	2445859.98	1984 Jun 8 1128	Kosmos 11K65M	-	53739-542	Kosmos-1570	Strela-2H	MIP-53	-	MIP-53	LC132/1	-	-	836	-	-
1984-062	2445873.32	1984 Jun 21 1940:03	Kosmos 11K65M	-	53719-521	Kosmos-1574	Madezhda 11F643H No. 531	MIP-53	-	MIP-53	LC132/2	-	-	1010	-	-
1984-067	2445878.71	1984 Jun 27 0459	Kosmos 11K65M	-	65039-549	Kosmos-1577	Parus	MIP-53	-	MIP-53	LC132/2	-	-	1018	-	-
1984-068	2445880.05	1984 Jun 28 1310:00	Kosmos 11K65M	-	47134-133	Kosmos-1578	Taifun-1B	GP8-4	-	GP8-4	LC107/1	-	-	1642	-	-
1984-599	2445887.35	1984 Jul 5 2020	K65M-RB	-	-	BDR-5 No. 501	-	GP8-4	-	GP8-4	LC107/1	-	-	210	-	-
1984-100	2445970.90	1984 Sep 13 1554:08	Kosmos 11K65M	-	53739-539	Kosmos-1598	Parus	MIP-53	-	MIP-53	LC132/1	-	-	1021	-	-
1984-104	2445970.90	1984 Sep 27 0930:00	Kosmos 11K65M	-	53790-180	Kosmos-1601	Romb	MIP-53	-	MIP-53	LC132/2	-	-	525	-	-
1984-109	2445985.11	1984 Oct 11 1443	Kosmos 11K65M	-	53734-125	Kosmos-1605	Parus	MIP-53	-	MIP-53	LC132/2	-	-	1021	-	-
1984-118	2446019.78	1984 Nov 15 0640	Kosmos 11K65M	-	47139-124	Kosmos-1610	Parus	MIP-53	-	MIP-53	LC132/1	-	-	1015	-	-
1984-126	2446033.66	1984 Dec 19 0355	K65M-RB	-	-	Kosmos-1614	BDR-4 No. 406	GP8-4	-	GP8-4	LC107/1	-	-	223	-	-
1984-127	2446035.04	1984 Dec 20 1300:00	Kosmos 11K65M	-	47134-127	Kosmos-1615	Taifun-1B	MIP-53	-	MIP-53	LC132/2	-	-	507	-	-
1985-501	2446065.50	1985	K65M-R	-	-	Barzhan-4	3 BB 3095?	GP8-4	-	GP8-4	LC107	-	-	675?	-	BALKH
1985-502	2446065.50	1985	K65M-R	-	-	Barzhan-4	3 BB 3095?	GP8-4	-	GP8-4	LC107	-	-	675?	-	BALKH
1985-503	2446065.50	1985	K65M-R	-	-	Barzhan-4	3 BB 3095?	GP8-4	-	GP8-4	LC107	-	-	675?	-	BALKH
1985-504	2446065.50	1985	K65M-R	-	-	Barzhan-4	3 BB 3095?	GP8-4	-	GP8-4	LC107	-	-	675?	-	BALKH
1985-505	2446065.50	1985	K65M-R	-	-	Barzhan-4	3 BB 3095?	GP8-4	-	GP8-4	LC107	-	-	675?	-	BALKH
1985-506	2446065.50	1985	K65M-R	-	-	Oval	-	GP8-4	-	GP8-4	LC107	-	-	675?	-	BALKH
1985-507	2446065.50	1985	K65M-R	-	-	Umanshchenie-8	15F178 Prototype	GP8-4	-	GP8-4	LC107	-	-	675?	-	BALKH
1985-508	2446065.50	1985	K65M-R	-	-	Umanshchenie-3	6 BB 15F358	GP8-4	-	GP8-4	LC107	-	-	675?	-	BALKH
1985-509	2446065.50	1985	K65M-R	-	-	Umanshchenie-3	RCh 15F357	GP8-4	-	GP8-4	LC107	-	-	675?	-	BALKH
1985-510	2446065.50	1985	K65M-R	-	-	Umanshchenie-3	8 BB 15F1437U	GP8-4	-	GP8-4	LC107	-	-	675?	-	BALKH
1985-511	2446065.50	1985	K65M-R	-	-	Umanshchenie-2	1 BB 15F176	GP8-4	-	GP8-4	LC107	-	-	675?	-	BALKH
1985-512	2446065.50	1985	K65M-R	-	-	Umanshchenie-2	10 BB 15F174	GP8-4	-	GP8-4	LC107	-	-	675?	-	BALKH
1985-513	2446065.50	1985	K65M-R	-	-	Och	-	GP8-4	-	GP8-4	LC107	-	-	675?	-	BALKH
1985-514	2446065.50	1985	K65M-R	-	-	Och	-	GP8-4	-	GP8-4	LC107	-	-	675?	-	BALKH
1985-515	2446065.50	1985	K65M-R	-	-	Och	-	GP8-4	-	GP8-4	LC107	-	-	675?	-	BALKH
1985-516	2446065.50	1985	K65M-R	-	-	Och	-	GP8-4	-	GP8-4	LC107	-	-	675?	-	BALKH
1985-517	2446065.50	1985	K65M-R	-	-	Och	-	GP8-4	-	GP8-4	LC107	-	-	675?	-	BALKH
1985-506	2446063.24	1985 Jun 17 1746:00	K65M-R	-	65034-138	Kosmos-1624	Strela-2H	MIP-53	-	MIP-53	LC132/1	-	-	840	-	-
1985-011	2446096.32	1985 Feb 1 1936:26	Kosmos 11K65M	-	47144-445	Kosmos-1627	Parus	MIP-53	-	MIP-53	LC132/2	-	-	1022	-	-
1985-018	2446124.04	1985 Feb 27 1256:00	Kosmos 11K65M	-	47134-139	Kosmos-1631	Vektor	MIP-53	-	MIP-53	LC132/1	-	-	521	-	-
1985-022	2446136.51	1985 Mar 14 0109	Kosmos 11K65M	-	53744-146	Kosmos-1634	Parus	MIP-53	-	MIP-53	LC132/2	-	-	1014	-	-
1985-023	2446145.31	1985 Mar 21 0008	Kosmos 11K65M	-	53734-134	Kosmos-1639/1642	Strela-1H	MIP-53	-	MIP-53	LC132/2	-	-	1716	-	-
1985-509	2446172.44	1985 Apr 16 2230	K65M-RB	-	-	BDR-5 No. 502	-	GP8-4	-	GP8-4	LC132/1	-	-	210	-	-
1985-041	2446215.58	1985 May 10 1144:50	Kosmos 11K65M	-	47144-148	Kosmos-1665	Tsiskada	MIP-53	-	MIP-53	LC132/1	-	-	1021	-	-
1985-050	2446235.36	1985 Jun 19 1931:00	Kosmos 11K65M	-	65044-149	Kosmos-1665	Romb	MIP-53	-	MIP-53	LC132/2	-	-	528	-	-
1985-059	2446252.80	1985 Sep 4 0705	Kosmos 11K65M	-	65011-211	Kosmos-1682	Strela-2H	MIP-53	-	MIP-53	LC132/1	-	-	836	-	-
1985-079	2446340.88	1985 Oct 2 0920:24	Kosmos 11K65M	-	65034-153	Kosmos-1686	Romb	GP8-4	-	GP8-4	LC132/1	-	-	559	-	-
1985-F04	2446362.28	1985 Oct 23 0704	Kosmos 11K65M	-	47122-346	Kosmos-1686	Parus	MIP-53	-	MIP-53	LC133/3	-	-	801	-	-
1985-110	2446395.98	1985 Nov 28 1312:41	Kosmos 11K65M	-	65022-346	Kosmos-1704	Parus	MIP-53	-	MIP-53	LC133/3	-	-	1011	-	-
1985-116	2446434.97	1985 Dec 19 0946:55	K65M-R	-	-	Kosmos-1709	-	GP8-4	-	GP8-4	LC132/1	-	-	1015	-	-
1986-001	2446434.97	1986 Dec 19 0946:55	K65M-R	-	-	Barzhan-4	3 BB 3095?	GP8-4	-	GP8-4	LC107	-	-	675?	-	BALKH
1986-002	2446434.97	1986 Dec 19 0946:55	K65M-R	-	-	Barzhan-4	3 BB 3095?	GP8-4	-	GP8-4	LC107	-	-	675?	-	BALKH
1986-003	2446434.97	1986 Dec 19 0946:55	K65M-R	-	-	Barzhan-4	3 BB 3095?	GP8-4	-	GP8-4	LC107	-	-	675?	-	BALKH
1986-004	2446434.97	1986 Dec 19 0946:55	K65M-R	-	-	Barzhan-4	3 BB 3095?	GP8-4	-	GP8-4	LC107	-	-	675?	-	BALKH
1986-005	2446434.97	1986 Dec 19 0946:55	K65M-R	-	-	Barzhan-4	3 BB 3095?	GP8-4	-	GP8-4	LC107	-	-	675?	-	BALKH
1986-006	2446434.97	1986 Dec 19 0946:55	K65M-R	-	-	Oval	-	GP8-4	-	GP8-4	LC107	-	-	675?	-	BALKH
1986-007	2446434.97	1986 Dec 19 0946:55	K65M-R	-	-	Oval	-	GP8-4	-	GP8-4	LC107	-	-	675?	-	BALKH
1986-008	2446434.97	1986 Dec 19 0946:55	K65M-R	-	-	Oval	-	GP8-4	-	GP8-4	LC107	-	-	675?	-	BALKH
1986-009	2446434.97	1986 Dec 19 0946:55	K65M-R	-	-	Oval	-	GP8-4	-	GP8-4	LC107	-	-	675?	-	BALKH
1986-010	2446434.97	1986 Dec 19 0946:55	K65M-R	-	-	Oval	-	GP8-4	-	GP8-4	LC107	-	-	675?	-	BALKH
1986-011	2446434.97	1986 Dec 19 0946:55	K65M-R	-	-	Oval	-	GP8-4	-	GP8-4	LC107	-	-	675?	-	BALKH
1986-012	2446434.97	1986 Dec 19 0946:55	K65M-R	-	-	Oval	-	GP8-4	-	GP8-4	LC107	-	-	675?	-	BALKH
1986-013	2446434.97	1986 Dec 19 0946:55	K65M-R	-	-	Oval	-	GP8-4	-	GP8-4	LC107	-	-	675?	-	BALKH
1986-014	2446434.97	1986 Dec 19 0946:55	K65M-R	-	-	Oval	-	GP8-4	-	GP8-4	LC107	-	-	675?	-	BALKH
1986-015	2446434.97	1986 Dec 19 0946:55	K65M-R	-	-	Oval	-	GP8-4	-	GP8-4	LC107	-	-	675?	-	BALKH
1986-016	2446434.97	1986 Dec 19 0946:55	K65M-R	-	-	Oval	-	GP8-4	-	GP8-4	LC107	-	-	675?	-	BALKH
1986-017	2446434.97	1986 Dec 19 0946:55	K65M-R	-	-	Oval	-	GP8-4	-	GP8-4	LC107	-	-	675?	-	BALKH
1986-018	2446434.97	1986 Dec 19 0946:55	K65M-R	-	-	Oval	-	GP8-4	-	GP8-4	LC107	-	-	675?	-	BALKH
1986-019	2446434.97	1986 Dec 19 0946:55	K65M-R	-	-	Oval	-	GP8-4	-	GP8-4	LC107	-	-	675?	-	BALKH
1986-020	2446434.97	1986 Dec 19 0946:55	K65M-R	-	-	Oval	-	GP8-4	-	GP8-4	LC107	-	-	675?	-	BALKH
1986-021	2446434.97	1986 Dec 19 0946:55	K65M-R	-	-	Oval	-	GP8-4	-	GP8-4	LC107	-	-	675?	-	BALKH
1986-022	2446434.97	1986 Dec 19 0946:55	K65M-R	-	-	Oval	-	GP8-4	-	GP8-4	LC107	-	-	675?	-	BALKH
1986-023	2446434.97	1986 Dec 19 0946:55	K65M-R	-	-	Oval	-	GP8-4	-	GP8-4	LC107	-	-	675?	-	BALKH
1986-024	2446434.97	1986 Dec 19 0946:55	K65M-R	-	-	Oval	-	GP8-4	-	GP8-4	LC107	-	-	675?	-	BALKH
1986-025	2446434.97	1986 Dec 19 0946:55	K65M-R	-	-	Oval	-	GP8-4	-	GP8-4	LC107	-	-	675?	-	BALKH
1986-026	2446434.97	1986 Dec 19 0946:55	K65M-R	-	-	Oval	-	GP8-4	-	GP8-4	LC107	-	-	675?	-	BALKH
1986-027	2446434.97	1986 Dec 19 0946:55	K65M-R	-	-	Oval	-	GP8-4	-	GP8-4	LC107	-	-	675?	-	BALKH
1986-028	2446434.97	1986 Dec 19 0946:55	K65M-R	-	-	Oval	-	GP8-4	-	GP8-4	LC107	-	-	675?	-	BALKH
1986-029	2446434.97	1986 Dec 19 0946:55	K65M-R	-	-	Oval	-	GP8-4	-	GP8-4	LC107	-	-	675?	-	BALKH
1986-030	2446434.97	1986 Dec 19 0946:55	K65M-R	-	-	Oval	-	GP8-4	-	GP8-4	LC107	-	-	675?	-	BALKH
1986-031	2446434.97	1986 Dec 19 0946:55	K65M-R	-	-	Oval	-	GP8-4	-	GP8-4	LC107	-	-	675?	-	BALKH
1986-032	2446434.97	1986 Dec 19 0946:55	K65M-R	-	-	Oval	-	GP8-4	-	GP8-4	LC107	-	-	675?	-	BALKH
1986-033	2446434.97	1986 Dec 19 0946:55	K6													





Launch

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Mission	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee km	Range km	Dest
1993-020	2449079.29	1993 Apr 1 18:57:26	Kosmos 11K65M	-	47178-431	Kosmos-2239	Parus	GNIIPV	LC132/3	-	-	1018	-	-
1993-036	2449154.68	1993 Jun 16 04:17:00	Kosmos 11K65M	-	47138-001	Kosmos-2251	Strela-2M	GNIIPV	LC132/1	-	-	817	-	-
1993-067	2449237.04	1993 Oct 26 13:00:04	Kosmos 11K65M	-	65085-024	Kosmos-2265	Taifun-1B	GNIIPV	LC132/1	-	-	1574	-	-
1993-070	2449294.01	1993 Nov 2 12:10:09	K65M-R	-	53735-008	Kosmos-2266	MgCh	GNIIPV	LC132/1	-	-	1021	-	-
1994-501	2449352.50	1994	K65M-R	-	-	Miva-9	Topol'-M RMD Miva-9	GISP-4	LC107	-	-	6757	-	-
1994-502	2449352.50	1994	K65M-R	-	-	Barzhan-6	BRLL RMD Barzhan-6	GISP-4	LC107	-	-	6757	-	-
1994-024	2449468.59	1994 Apr 26 02:14:15	Kosmos 11K65M	-	53735-514	Kosmos-2279	Parus	GNIIPV	LC133/3	-	-	1020	-	-
1994-041	2449547.72	1994 Jul 14 05:13:30	Kosmos 11K65M	-	65038-012	Radezhda	Radezhda 17F118 No. 104	GNIIPV	LC133/3	-	-	1008	-	-
1994-045	2449567.33	1994 Aug 2 20:00:01	Kosmos 11K65M	-	47138-413	Kosmos-2285	Obzor No. 1	GNIIPV	LC133/3	-	-	1013	-	-
1994-061	2449623.08	1994 Sep 27 14:00:00	Kosmos 11K65M	-	47138-516	Kosmos-2292	Vektor	GNIIPV	LC132/1	-	-	1954	-	-
1994-083	2449706.72	1994 Dec 20 05:11:01	Kosmos 11K65M	-	53735-517	Kosmos-2298	Strela-2M	GNIIPV	LC132/1	-	-	838	-	-
1995-002	2449741.66	1995 Jan 24 03:54:22	Kosmos 11K65M	-	65065-020	Tskada/Astrid	Tskada	GTR-1	LC132/1	-	-	1027	-	-
1995-008	2449779.04	1995 Mar 2 13:00:00	Kosmos 11K65M	-	65065-027	Kosmos-2306	Romb	GTR-1	LC132/1	-	-	544	-	-
1995-012	2449798.67	1995 Mar 22 04:09:03	Kosmos 11K65M	-	47138-522	Kosmos-2310	Parus	GTR-1	LC132/1	-	-	1013	-	-
1995-032	2449903.63	1995 Jul 5 03:09:03	Kosmos 11K65M	-	53765-038	Kosmos-2315	Radezhda 17F118	GTR-1	LC132/1	-	-	1016	-	-
1995-052	2449996.64	1995 Oct 6 03:23:10	Kosmos 11K65M	-	47165-025	Kosmos-2321	MgCh	GTR-1	LC132/1	-	-	802	-	-
1995-572	2450023.50	1995 Nov 27	K65M-R	-	-	Miva-9	Topol'-M RMD Miva-9	GISP-4	LC107	-	-	6757	-	BALKH
1996-004	2450062.50	1996	K65M-R	-	-	Miva-9	Topol'-M RMD Miva-9	GISP-4	LC107	-	-	6757	-	BALKH
1996-004	2450069.15	1996 Jan 16 15:33:45	Kosmos 11K65M	-	47187-201	Kosmos-2327	MgCh	GTR-1	LC132/1	-	-	1033	-	-
1996-025	2450181.04	1996 Apr 24 13:00:01	Kosmos 11K65M	-	47187-213	Kosmos-2332	Taifun-1B	GTR-1	LC132/1	-	-	1033	-	-
1996-052	2450352.03	1996 Sep 5 12:47:39	Kosmos 11K65M	-	53759-526	Kosmos-2334 UMANSMT	Parus	GTR-1	LC132/1	-	-	1565	-	-
1996-071	2450437.78	1996 Dec 20 06:43:58	Kosmos 11K65M	-	65065-033	Kosmos-2336	Parus	GTR-1	LC132/1	-	-	1014	-	-
1997-501	2450448.50	1997	K65M-R	-	-	Miva-9	Topol'-M RMD Miva-9	GTR-1	LC132/1	-	-	1014	-	BALKH
1997-502	2450448.50	1997	K65M-R	-	-	Barzhan-6	BRLL RMD Barzhan-6	GTR-1	LC132/1	-	-	6757	-	BALKH
1997-502	2450456.04	1997 Apr 17 13:03:21	Kosmos 11K65M	-	53765-035	Kosmos-2341	Parus	GTR-1	LC132/1	-	-	1016	-	-
1997-017	2450556.04	1997 Sep 23 16:44:51	Kosmos 11K65M	-	47165-037	Kosmos-2346 FAISAT	MgCh	GTR-1	LC132/1	-	-	996	-	-
1998-051	2450715.20	1998 Dec 10 11:57:07	Kosmos 11K65M	-	53713-500	Radezhda/Astrid-2	Radezhda 17F118	GTR-1	LC132/1	-	-	1045	-	-
1998-072	2451155.00	1998 Dec 24 20:02:19	Kosmos 11K65M	-	47164-414	Kosmos-2351	Parus	GTR-1	LC132/1	-	-	1015	-	-
1998-072	2451172.38	1999 Apr 28 20:00:00	Kosmos 11K65M	-	65036-413	ARIAS/Magat-0	ARIAS	GTR-1	LC132/1	-	-	608	-	-
1999-022	2451297.35	1999 Aug 26 12:02:15	Kosmos 11K65M	-	65021-703	Kosmos-2356	MgCh	GTR-1	LC132/1	-	-	608	-	-
1999-045	2451417.00	1999 Aug 27 19:19:59	Kosmos 11K65M	-	53752-105	Miva-9	Topol'-M RMD Miva-9	GTR-1	LC132/1	-	-	608	-	BALKH
1999-557	2451418.31	2000 Jun 28 10:37:42	K65M-R	-	47138-511	Radezhda/Tsinghua	Radezhda 17F118 No. 701	GTR-1	LC132/1	-	-	477	-	-
2000-033	2451723.94	2000 Jul 15 12:00:00	Kosmos 11K65M	-	47165-031	CHMP/BIRO/MTA	MIK-MIDA	GTR-1	LC132/1	-	-	614	-	-
2000-039	2451741.00	2000 Nov 20 2:00:00	Kosmos 11K65M	-	53706-412	Quicbird 1	Quicbird 1	GTR-1	LC132/1	-	-	477	-	-
2001-023	2452069.13	2001 Jun 6 15:08:42	K65M-R	-	65015-316	Miva-10	Yars/bulava RMD	GTR-1	LC132/1	-	-	1012	-	-
2002-586	2452274.50	2002 May 28 19:14:41	Kosmos 11K65M	-	53721-702	Kosmos-2389	Parus	GTR-1	LC132/1	-	-	6757	-	-
2002-026	2452463.29	2002 Jul 6 06:35:41	Kosmos 11K65M	-	47121-704	Kosmos-2390/2391	Strela-3	GTR-1	LC132/1	-	-	1018	-	-
2002-036	2452464.10	2002 Sep 28 14:27:14	Kosmos 11K65M	-	65021-706	Radezhda-H	Radezhda-4 17F118K No. 4	GTR-1	LC132/1	-	-	1524	-	-
2002-046	2452564.79	2002 Nov 28 09:07:07	Kosmos 11K65M	-	53773-502	DNC-1/Nozhaets	DNC Alsat-1	GTR-1	LC132/1	-	-	1018	-	-
2002-054	2452606.79	2003 Jun 4 19:53:52	Kosmos 11K65M	-	53775-103	Kosmos-2398	Parus	GTR-1	LC132/1	-	-	780	-	-
2003-052	2452670.36	2003 Aug 19 09:51:45	Kosmos 11K65M	-	47178-504	Kosmos-2398	Strela-3	GTR-1	LC132/1	-	-	1620	-	-
2003-072	2452670.36	2003 Sep 27 09:11:44	K65M-R	-	65055-003	StSat-1/DNC-2/Nozh.	StSat-1	GTR-1	LC132/1	-	-	1697	-	-
2003-951	2452939.10	2003 Dec 24 17:46:28	Kosmos 11K65M	-	53719-511	Kosmos-2407	Parus	GTR-1	LC132/1	-	-	6757	-	BALKH
2004-024	2452959.24	2004 Jul 22 17:46:28	Kosmos 11K65M	-	53778-505	Kosmos-2408/2409	Strela-3	GTR-1	LC132/1	-	-	1506	-	-
2004-927	2453277.13	2005 Sep 23 15:07:36	K65M-R	-	53778-511	Miva-11	Yars/bulava RMD	GTR-1	LC132/1	-	-	1506	-	-
2005-824	2453280.63	2005 Jan 20 03:00:07	K65M-R	-	47108-111	Miva-12	Yars/bulava RMD	GTR-1	LC132/1	-	-	969	-	-
2005-002	2453280.63	2005 Dec 31 09:52:26	Kosmos 11K65M	-	47159-104	Popsat/DNC-3/Nozh	China-DNC	GTR-1	LC132/1	-	-	713	-	-
2005-043	2453280.63	2005 Oct 21 19:34:20	Kosmos 11K65M	-	53727-292	PRS test 2	China-DNC	GTR-1	LC132/1	-	-	1458	-	-
2005-048	2453280.63	2005 Dec 21 19:34:20	K65M-R	-	65037-105	PRS test 2	China-DNC	GTR-1	LC132/1	-	-	6757	-	-
2006-516	2453280.63	2006 Apr 19 14:00:19	K65M-R	-	53727-296 SL	SAR-Lupe 2	3 x 3G32 BB	GTR-1	LC107/1	-	-	512	-	BALKH
2006-060	2453280.63	2006 Sep 19 14:00:19	Kosmos 11K65M	-	47163-213 SL	SAR-Lupe 2	SAR-Lupe 2	GTR-1	LC132/1	-	-	600	-	-
2007-030	2453280.63	2007 Jul 1 09:38:41	Kosmos 11K65M	-	53759-108	Kosmos-2409	Parus	GTR-1	LC132/1	-	-	1012	-	-
2007-038	2453280.63	2007 Sep 11 19:05:06	Kosmos 11K65M	-	53759-108	Kosmos-2409	Parus	GTR-1	LC132/1	-	-	1012	-	-
2007-038	2453280.63	2007 Sep 11 19:05:06	Kosmos 11K65M	-	53759-108	Kosmos-2409	Parus	GTR-1	LC132/1	-	-	1012	-	-
2007-038	2453280.63	2007 Sep 11 19:05:06	Kosmos 11K65M	-	53759-108	Kosmos-2409	Parus	GTR-1	LC132/1	-	-	1012	-	-
2008-014	2454553.22	2008 Mar 27 17:16:18	Kosmos 11K65M	-	53719-206 SL	SAR-Lupe 3	SAR-Lupe 3	GTR-1	LC132/1	-	-	521	-	-
2008-031	2454536.78	2008 Jun 19 06:38:46	Kosmos 11K65M	-	53719-206 SL	SAR-Lupe 3	SAR-Lupe 3	GTR-1	LC132/1	-	-	521	-	-
2008-036	2454636.46	2008 Jun 19 06:38:46	Kosmos 11K65M	-	53719-206 SL	SAR-Lupe 3	SAR-Lupe 3	GTR-1	LC132/1	-	-	521	-	-
2008-036	2454636.46	2008 Jun 19 06:38:46	Kosmos 11K65M	-	53719-206 SL	SAR-Lupe 3	SAR-Lupe 3	GTR-1	LC132/1	-	-	521	-	-
2009-039	2455033.67	2009 Jul 21 03:57:43	Kosmos 11K65M	-	47181-710	Kosmos-2454/Sterekh	Parus	GTR-1	LC132/1	-	-	946	-	-
2010-017	2455313.55	2010 Apr 27 01:05:09	Kosmos 11K65M	-	47181-707	Kosmos-2463	Parus	GTR-1	LC132/1	-	-	1023	-	-





Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	OrbPay	Agency	Launch_Code	Group	Category	LTCite	Cite	Notes
1960-S119	2437051.50	1960 Jun 6	R-14	-	LD1-3F	0.000	RUSN	NS	-	Test	BMLX	-	-
1960-S114	2437110.50	1960 Jun 26	R-14	-	LD1-4T	0.000	RUSN	MF	-	Test	Z20	-	-
1960-S210	2437149.50	1960 Aug 3	R-14	-	LD1-6T	0.000	RUSN	NS	-	Test	Z20	-	-
1960-S211	2437159.50	1960 Aug 13	R-14	-	LD1-7T	0.000	RUSN	NS	-	Test	Z20	-	-
1960-S212	2437166.50	1960 Aug 20	R-14	-	LD1-8T	0.000	RUSN	NS	-	Test	Z20	-	-
1960-S280	2437196.15	1960 Sep 8 1536	R-14	-	LD1-9T	0.000	RUSN	NS	-	Test	Z20	-	-
1960-S281	2437196.15	1960 Sep 17 1431	R-14	-	LD1-10T	0.000	RUSN	NS	-	Test	Z20	-	-
1960-S302	2437209.04	1960 Oct 1 1303	R-14	-	LD1-11T	0.000	RUSN	NS	-	Test	Z20	-	-
1960-S303	2437214.10	1960 Oct 6 1427	R-14	-	LD1-12T	0.000	RUSN	NS	-	Test	Z20	-	-
1960-S340	2437288.50	1960 Nov 20	R-14	-	LD1-11L	0.000	RUSN	NS	-	Test	Z20	-	-
1960-S341	2437284.50	1960 Nov 26	R-14	-	13L-15T	0.000	RUSN	NS	-	Test	Z20	-	-
1960-S328	2437282.50	1960 Dec 24	R-14	-	14L-16T	0.000	RUSN	NS	-	Test	Z20	-	-
1960-S328	2437288.50	1960 Dec 30	R-14	-	15L-17T	0.000	RUSN	NS	-	Test	Z20	-	-
1961-S04	2437303.50	1961 Jan 4	R-14	-	16L-18T	0.000	RUSN	NS	-	Test	Z20	-	-
1961-S05	2437307.50	1961 Jan 8	R-14	-	17L-19T	0.000	RUSN	NS	-	Test	Z20	-	-
1961-S06	2437325.50	1961 Jan 26	R-14	-	12L-14T	0.000	RUSN	NS	-	Test	Z20	-	-
1961-S07	2437327.50	1961 Jan 28	R-14	-	18L-20T	0.000	RUSN	NS	-	Test	Z20	-	-
1961-S08	2437333.50	1961 Jan 31	R-14	-	19L-21T	0.000	RUSN	NS	-	Test	Z20	-	-
1961-S29	2437333.50	1961 Feb 3	R-14	-	20L-21T	0.000	RUSN	NS	-	Test	Z20	-	-
1961-S38	2437338.50	1961 Feb 6	R-14	-	21L-26T	0.000	RUSN	NS	-	Test	Z20	-	-
1961-S30	2437345.50	1961 Feb 15	R-14	-	21L-21T	0.000	RUSN	NS	-	Test	Z20	-	-
1961-S3478	2437389.50	1961 Apr	R-14	-	E22601-09T	0.000	RUSN	NS	-	Test	BMLX	-	-
1961-S166	2437484.50	1961 Jun 4	R-14	-	24L	0.000	RUSN	NS	-	Test	BMLX	-	-
1961-S263	2437561.50	1961 Sep 19	R-14	-	23L	0.000	RUSN	NS	-	Test	Z20	-	-
1961-S264	2437562.50	1961 Sep 20	R-14	-	11U	0.000	RUSN	NS	-	Test	Z20	-	-
1961-S264	2437591.50	1961 Oct 19	R-14	-	30L	0.000	RUSN	NS	-	Test	Z20	-	-
1961-S537	2437591.50	1961 Oct 19	R-14	-	R-14-210	0.000	RUSN	NS	-	Test	Z20	-	-
1961-A221	2437595.50	1961 Oct 23	R-14	-	28L	0.000	RUSN	NS	-	Test	Z20	-	-
1961-S583	2437603.50	1961 Oct 31	R-14	-	E22601-08T	0.000	RUSN	NS	-	Test	BMLX	-	-
1961-S589	2437629.50	1961 Nov 26	R-14	-	29L	0.000	RUSN	NS	-	Test	Z20	-	-
1961-S590	2437632.50	1961 Nov 29	R-14	-	31L	0.000	RUSN	NS	-	Test	Z20	-	-
1961-S602	2437634.50	1961 Dec 1	R-14	-	E22603-07T	0.000	RUSN	NS	-	Test	BMLX	-	-
1961-S645	2437637.50	1961 Dec 4	R-14	-	-	0.000	RUSN	NS	-	Test	Z20	-	-
1961-A247	2437641.50	1961 Dec 6	R-14	-	-	0.000	RUSN	NS	-	Test	Z20	-	-
1961-A251	2437659.50	1961 Dec 26	R-14	-	-	0.000	RUSN	NS	-	Test	Z20	-	-
1962-S10	2437675.50	1962 Jan 11	R-14	-	-	0.000	RUSN	NS	-	Test	BMLX	NS5-65	-
1962-S11	2437676.50	1962 Jan 12	R-14	-	-	0.000	RUSN	NS	-	Test	BMLX	NS5-65	-
1962-S586	2437707.15	1962 Feb 11 1533	R-14U	-	-	0.000	RUSN	NS	-	Test	Z20	-	-
1962-S652	2437723.50	1962 Mar	R-14	-	-	0.000	RUSN	NS	-	Test	BMLX	-	-
1962-S653	2437723.50	1962 Mar	R-14	-	-	0.000	RUSN	NS	-	Test	BMLX	-	-
1962-A49	2437765.50	1962 Apr 11	R-14U	-	-	0.000	RUSN	NS	-	Test	BMLX	-	-
1962-S189	2437765.50	1962 Jun 4	R-14	-	-	0.000	RUSN	NS	-	Test	NS5-65	-	-
1962-S168	2437821.50	1962 Jun 6	R-14	-	-	0.000	RUSN	NS	-	Test	NS5-65	-	-
1962-S179	2437821.50	1962 Jun 6	R-14	-	-	0.000	RUSN	NS	-	Test	NS5-65	-	-
1962-S211	2437848.50	1962 Jun 8	R-14	-	-	0.000	RUSN	NS	-	Test	NS5-65	-	-
1962-S212	2437848.50	1962 Jul 1	R-14	-	-	0.000	RUSN	NS	-	Test	NS5-65	-	-
1962-S213	2437848.50	1962 Jul 1	R-14	-	-	0.000	RUSN	NS	-	Test	NS5-65	-	-
1962-S273	2437891.50	1962 Aug 5	R-14	-	-	0.000	RUSN	NS	-	Test	NS5-65	-	-
1962-S643	2437911.50	1962 Sep 5	R-14	-	-	0.000	RUSN	NS	-	Test	NS5-65	-	-
1962-S644	2437911.50	1962 Sep 5	R-14	-	-	0.000	RUSN	NS	-	Test	NS5-65	-	-
1962-S645	2437915.50	1962 Sep 5	R-14	-	-	0.000	RUSN	NS	-	Test	NS5-65	-	-
1962-S318	2437935.50	1962 Sep 26	R-14	-	-	0.000	RUSN	NS	-	Test	NS5-65	-	-
1962-S373	2437937.50	1962 Oct	R-14	-	-	0.000	RUSN	NS	-	Test	BMLX	-	-
1962-S374	2437937.50	1962 Oct	R-14	-	-	0.000	RUSN	NS	-	Test	BMLX	-	-
1962-S375	2437937.50	1962 Oct	R-14	-	-	0.000	RUSN	NS	-	Test	NS5-65	-	-
1962-S376	2437937.50	1962 Oct	R-14	-	-	0.000	RUSN	NS	-	Test	NS5-65	-	-
1962-S377	2437966.50	1962 Oct 29	R-14	-	-	0.000	RUSN	NS	-	Test	BMLX	-	-
1962-S445	2437968.50	1962 Nov	R-14	-	-	0.000	RUSN	NS	-	Test	NS5-65	-	-
1962-S446	2437968.50	1962 Nov	R-14	-	-	0.000	RUSN	NS	-	Test	NS5-65	-	-
1962-S447	2437972.50	1962 Nov 4	R-14	-	-	0.000	RUSN	NS	-	Test	NS5-65	-	-
1962-S448	2437983.50	1962 Nov 15	R-14	-	-	0.000	RUSN	NS	-	Test	NS5-65	-	-
1962-S642	2437983.50	1962 Nov 15	R-14	-	-	0.000	RUSN	NS	-	Test	NS5-65	-	-
1962-S448	2437983.50	1962 Nov 26	R-14U	-	-	0.000	RUSN	NS	-	Test	NS5-65	-	-
1962-A265	2437994.50	1962 Dec 9	R-14U	-	-	0.000	RUSN	NS	-	Test	BMLX	NS5-65	-
1962-S506	2438007.50	1962 Dec 9	R-14U	-	-	0.000	RUSN	NS	-	Test	BMLX	NS5-65	-
1962-S506	2438024.50	1962 Dec 26	R-14U	-	-	0.000	RUSN	NS	-	Test	BMLX	NS5-65	-
1963-S04	2438029.50	1963 Jan	R-14U	-	-	0.000	RUSN	NS	-	Test	BMLX	-	-
1963-S643	2438047.50	1963 Jan 18	R-14	-	-	0.000	RUSN	NS	-	Test	BMLX	NS5-65	-
1963-S644	2438071.50	1963 Feb 1	R-14	-	-	0.000	RUSN	NS	-	Test	BMLX	NS5-65	-
1963-S645	2438071.50	1963 Feb 13	R-14U	-	-	0.000	RUSN	NS	-	Test	BMLX	NS5-65	-
1963-A46	2438119.50	1963 Mar 28	R-14U	-	-	0.000	RUSN	NS	-	Test	BMLX	NS5-65	-
1963-S144	2438119.50	1963 Apr 2	R-14U	-	-	0.000	RUSN	NS	-	Test	BMLX	NS5-65	-
1963-S144	2438130.50	1963 Apr 11	R-14U	-	-	0.000	RUSN	NS	-	Test	BMLX	NS5-65	-
1963-S310	2438209.50	1963 Jun 29	R-14U	-	-	0.000	RUSN	NS	-	Test	BMLX	NS5-65	-
1963-S310	2438209.50	1963 Jun 29	R-14U	-	-	0.000	RUSN	NS	-	Test	BMLX	NS5-65	-
1963-S653	2438228.50	1963 Jul 18	R-14U	-	-	0.000	RUSN	NS	-	Test	BMLX	NS5-65	-
1963-S413	2438271.50	1963 Aug 30	R-14U	-	-	0.000	RUSN	NS	-	Test	BML	NS5-65	-
1963-S646	2438324.50	1963 Oct 22	R-14U	-	-	0.000	RUSN	NS	-	Test	NS5-65	-	-
1963-A172	2438352.50	1963 Nov 19	R-14U	-	-	0.000	RUSN	NS	-	Test	NS5-65	-	-
1963-S659	2438372.50	1963 Dec 9	R-14U	-	-	0.000	RUSN	NS	-	Test	NS5-65	-	-
1963-S618	2438393.50	1963 Dec 30	R-14U	-	-	0.000	RUSN	NS	-	Test	NS5-65	-	-
1964-S669	2438427.50	1964 Feb 2	R-14U	-	-	0.000	RUSN	NS	-	Test	NS5-65	-	-
1964-A33	2438479.50	1964 Mar 13	R-14U	-	-	0.000	RUSN	NS	-	Test	NS5-65	-	-
1964-S171	2438479.50	1964 Mar 25	R-14U	-	-	0.000	RUSN	NS	-	Test	NS5-65	-	-
1964-S276	2438564.50	1964 Jun 8	R-14U	-	-	0.000	RUSN	NS	-	Test	BMLX	NS5-65	-
1964-S305	2438564.50	1964 Jun 22	R-14U	-	-	0.000	RUSN	NS	-	Test	BMLX	NS5-65	-
1964-S046	2438625.89	1964 Aug 18 0915	Koamos	65S3	-	0.150	RUSN	OS	G	Sat_LED 0	BAL	NS5-65	-
1964-S664	2438669.50	1964 Sep 11	R-14U	-	4000-000-02L	0.000	RUSN	NS	-	Test	NS5-65	-	-



Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	OrbPay	Agency	Launch_Code	Group	Category	LTCite	Cite	Notes
1970-S731	2440743.88	1970 Jun 6 0900	R-140	-	T 14901-01T	0.000	RUSN	MS	-	Target	RNOL	-	-
1970-S746	2440757.50	1970 Jun 20	R-140	-	47117-102	0.000	RUSN	MU	-	Test	BMLX	-	-
1970-F05	2440765.19	1970 Jun 27 1639:59	Kosmos 11K65M	-	47117-102	0.800	RUSN	UF	G	Set LED 0	AK15/RAEX	AWMLJ	-
1970-064	2440819.10	1970 Aug 20 1430:01	Kosmos 11K65M	-	Yu47121-103	0.643	RUSN	US	G	Set LED 0	AK15/RAEX	XPC	-
1970-083	2440872.08	1970 Oct 12 1357:00	Kosmos 11K65M	-	47117-103	0.775	RUSN	US	G	Set LED 0	BMLX	-	-
1970-S747	2440876.50	1970 Oct 13 1469:59	R-140	-	53717-104	0.000	RUSN	MU	G	Test	AK15/RAEX	-	-
1970-S762	2440882.50	1970 Oct 23	Kosmos 11K65M	-	65017-107	0.800	RUSN	US	G	Test	RML	-	-
1970-S762	2440882.50	1970 Oct 23 23 1820:01	Kosmos 11K65M	-	65017-107	0.281	RUSN	MU	G	Set LED 0	AVMS	-	-
1970-S762	2440882.50	1970 Dec 2 0400:02	Kosmos 11K65M	-	47117-106	0.800	RUSN	US	G	Set LED 0	AK15/RAEX	-	-
1970-102	2440922.67	1970 Dec 12 1300:00	Kosmos 11K65M	-	47117-106	0.800	RUSN	US	G	Set LED 0	AK15/RAEX	-	-
1970-108	2440933.04	1970 Dec 16 0429:59	Kosmos 11K65M	-	47149-30LM	0.434	RUSN	US	G	Set LED 0	AK15/RAEX	-	-
1970-F10	2440943.40	1970 Dec 22 2130:00	Kosmos 11K65M	-	47117-106	0.643	RUSN	UF	G	Set LED 0	AK15/RAEX	-	-
1971-010	2440943.40	1971 Feb 9 1648:48	Kosmos 11K65M	-	65027-119	0.643	RUSN	US	G	Set LED 0	AVMS	-	-
1971-013	2440982.38	1971 Feb 9 1648:48	Kosmos 11K65M	-	65027-117	0.643	RUSN	US	G	Set LED 0	AK15/RAEX	-	-
1971-035	2441029.41	1971 Mar 18 2145:00	Kosmos 11K65M	-	65027-118	0.643	RUSN	US	G	Set LED 0	AK15/RAEX	-	-
1971-038	2441064.96	1971 Apr 23 1145:00	Kosmos 11K65M	-	65027-116	0.800	RUSN	US	G	Set LED 0	AK15/RAEX	-	-
1971-041	2441079.11	1971 Apr 28 1435:00	Kosmos 11K65M	-	65027-116	0.800	RUSN	US	G	Set LED 0	AK15/RAEX	-	-
1971-046	2441079.11	1971 Apr 28 1435:00	Kosmos 11K65M	-	65027-116	0.800	RUSN	US	G	Set LED 0	AK15/RAEX	-	-
1971-S697	2441099.50	1971 May 22 0051:31	Kosmos 11K65M	-	53721-121	0.480	RUSN	US	G	Set LED 0	AK15/RAEX	-	-
1971-S680	2441100.66	1971 May 29 0349:58	R-140	-	53721-120	0.680	RUSN	MU	G	Set LED 0	AK15/RAEX	-	-
1971-S692	2441102.50	1971 Jun 4 1810:00	Kosmos 11K65M	-	47149-30LM	0.434	RUSN	MU	G	Set LED 0	AK15/RAEX	-	-
1971-S682	2441107.26	1971 Jun 4 1810:00	Kosmos 11K65M	-	65014-101	0.000	RUSN	MS	G	Test	BMLX	-	[Jun 3-8]
1971-S696	2441132.50	1971 Jul 22 1345:00	R-14	-	65014-101	0.298	RUSN	US	G	Test	BMLX	-	-
1971-F07	2441155.07	1971 Jul 22 1345:00	R-14	-	47149-32LM	0.434	RUSN	UF	G	Test	BMLX	-	-
1971-S699	2441178.50	1971 Aug 15	Kosmos 11K65M	-	Yu449-42	0.000	RUSN	MU	G	Test	BMLX	-	-
1971-074	2441201.85	1971 Sep 7 0115:01	Kosmos 11K65M	-	65014-106	0.434	RUSN	US	G	Set LED 0	AK15/RAEX	-	-
1971-075	2441204.65	1971 Sep 10 0337:59	Kosmos 11K65M	-	65014-106	0.434	RUSN	US	G	Set LED 0	AK15/RAEX	-	-
1971-S704	2441211.50	1971 Sep 17	R-140	-	-	0.000	RUSN	MU	G	Test	RML	-	-
1971-S700	2441217.50	1971 Sep 23	R-140	-	-	0.000	RUSN	MU	G	Test	BMLX	-	-
1971-S701	2441236.50	1971 Oct 12 13 1341:00	Kosmos 11K65M	-	47114-104	0.480	RUSN	MU	G	Test	AK15/RAEX	-	-
1971-086	2441236.07	1971 Oct 13 1341:00	Kosmos 11K65M	-	47114-106	0.800	RUSN	US	G	Set LED 0	AK15/RAEX	-	-
1971-089	2441276.25	1971 Nov 29 1730:00	Kosmos 11K65M	-	65027-110	0.643	RUSN	US	G	Set LED 0	AK15/RAEX	-	-
1971-102	2441285.23	1971 Nov 29 1730:00	Kosmos 11K65M	-	65017-101	0.434	RUSN	US	G	Set LED 0	AK15/RAEX	-	-
1971-103	2441286.19	1971 Dec 2 1730:01	Kosmos 11K65M	-	65017-101	0.434	RUSN	US	G	Set LED 0	AK15/RAEX	-	-
1971-105	2441286.23	1971 Dec 2 1730:01	Kosmos 11K65M	-	65017-109	0.330	RUSN	US	G	Set LED 0	AK15/RAEX	-	-
1971-111	2441300.69	1971 Dec 15 0931:21	Kosmos 11K65M	-	65014-106	0.680	RUSN	US	G	Set LED 0	AK15/RAEX	-	-
1971-114	2441303.04	1971 Dec 17 1300:01	Kosmos 11K65M	-	65014-102	0.800	RUSN	US	G	Set LED 0	AK15/RAEX	-	-
1971-119	2441313.28	1971 Dec 27 1900:00	Kosmos 11K65M	-	65014-103	0.348	RUSN	US	G	Set LED 0	AVMS	-	-
1972-S763	2441352.50	1972 Feb 15 0752:29	R-140	-	53727-113	0.000	RUSN	MU	G	Test	BMLX	-	-
1972-009	2441372.50	1972 Feb 25 2030:59	Kosmos 11K65M	-	47127-112	0.434	RUSN	US	G	Set LED 0	AK15/RAEX	-	-
1972-017	2441399.35	1972 Mar 22 0230:00	Kosmos 11K65M	-	65027-123	0.800	RUSN	US	G	Set LED 0	AK15/RAEX	-	-
1972-S784	2441431.00	1972 Mar 25 0220:00	R-140	-	65024-110	0.000	RUSN	MU	G	Test	BMLX	-	-
1972-S785	2441431.00	1972 Mar 25 0220:00	R-140	-	65024-110	0.680	RUSN	MU	G	Test	BMLX	-	-
1972-S786	2441431.00	1972 Mar 25 0220:00	R-140	-	65024-110	0.000	RUSN	MU	G	Test	BMLX	-	-
1972-S787	2441451.99	1972 May 6 1124:51	Kosmos 11K65M	-	47127-111	0.800	RUSN	MU	G	Set LED 0	AK15/RAEX	-	-
1972-S788	2441451.99	1972 May 6 1124:51	Kosmos 11K65M	-	47127-111	0.800	RUSN	MU	G	Set LED 0	AK15/RAEX	-	-
1972-S789	2441457.50	1972 Jun 25 0924:00	Kosmos 11K65M	-	65014-107	0.000	RUSN	MU	G	Test	BMLX	-	-
1972-S791	2441506.50	1972 Jun 25	R-140	-	47127-112	0.334	RUSN	US	G	Set LED 0	AK15/RAEX	-	-
1972-S792	2441509.19	1972 Jul 6 1615:00	Kosmos 11K65M	-	47127-112	0.480	RUSN	US	G	Set LED 0	AK15/RAEX	-	-
1972-S793	2441509.19	1972 Jul 20 1810:00	Kosmos 11K65M	-	47127-112	0.800	RUSN	US	G	Set LED 0	AK15/RAEX	-	-
1972-S794	2441516.07	1972 Jul 16 1340:01	Kosmos 11K65M	-	Yu47121-11	0.643	RUSN	US	G	Set LED 0	AK15/RAEX	-	-
1972-S795	2441516.07	1972 Sep 29 2018:59	Kosmos 11K65M	-	Yu47121-11	0.800	RUSN	US	G	Set LED 0	AK15/RAEX	-	-
1972-S796	2441550.35	1972 Oct 17 1959:01	Kosmos 11K65M	-	Yu449-46	0.800	RUSN	US	G	Set LED 0	AK15/RAEX	-	-
1972-S797	2441629.33	1972 Oct 17 1959:01	Kosmos 11K65M	-	Yu449-46	0.480	RUSN	US	G	Set LED 0	AK15/RAEX	-	-
1972-S798	2441629.33	1972 Nov 3 0134:00	Kosmos 11K65M	-	Yu47121-1U	0.434	RUSN	US	G	Set LED 0	AK15/RAEX	-	-
1972-S799	2441629.33	1972 Nov 3 0134:00	Kosmos 11K65M	-	Yu449-43	0.800	RUSN	US	G	Set LED 0	AK15/RAEX	-	-
1972-104	2441677.59	1972 Dec 21 0205:00	Kosmos 11K65M	-	53724-113	0.800	RUSN	US	G	Set LED 0	AK15/RAEX	-	-
1972-104	2441677.59	1972 Dec 25 2305:01	Kosmos 11K65M	-	53724-113	0.800	RUSN	US	G	Set LED 0	AK15/RAEX	-	-
1972-S803	2441682.50	1973	Kosmos 11K65M	-	-	0.000	RUSN	MU	-	Reentry Test	W69006-01	-	-
1972-S804	2441682.50	1973	Kosmos 11K65M	-	-	0.000	RUSN	MU	-	Reentry Test	W69006-01	-	-
1972-S805	2441682.50	1973	Kosmos 11K65M	-	-	0.000	RUSN	MU	-	Reentry Test	W69006-01	-	-
1972-S806	2441682.50	1973	Kosmos 11K65M	-	-	0.000	RUSN	MU	-	Reentry Test	W69006-01	-	-
1972-S807	2441702.85	1973 Jan 20 0336:05	Kosmos 11K65M	-	Yu149-44	0.434	RUSN	MU	G	Set LED 0	AK15/RAEX	-	-
1972-S808	2441708.99	1973 Jan 26 1144:45	Kosmos 11K65M	-	Yu149-37	0.800	RUSN	US	G	Set LED 0	AK15/RAEX	-	-
1972-S809	2441741.69	1973 Feb 28 0437:00	Kosmos 11K65M	-	Yu149-45	0.434	RUSN	US	G	Set LED 0	AK15/RAEX	-	-
1972-S810	2441827.89	1973 May 25 0915:34	Kosmos 11K65M	-	65024-109	0.800	RUSN	US	G	Set LED 0	AK15/RAEX	-	-
1972-S811	2441831.50	1973 Jun 29 0915:34	Kosmos 11K65M	-	65024-109	0.800	RUSN	US	G	Set LED 0	AK15/RAEX	-	-
1972-S812	2441842.16	1973 Jun 8 1650:00	Kosmos 11K65M	-	53753-210	0.480	RUSN	US	G	Set LED 0	AK15/RAEX	-	-
1972-S813	2441853.76	1973 Jun 20 0616:27	Kosmos 11K65M	-	53724-116	0.800	RUSN	US	G	Set LED 0	AK15/RAEX	-	-
1972-S814	2441859.56	1973 Jun 26 0122:00	Kosmos 11K65M	-	Yu47121-16	0.000	RUSN	OE	G	Set LED 0	Sergeev96	-	-
1972-S815	2441882.50	1973 Jul 19 19 0122:00	Kosmos 11K65M	-	1	0.000	RUSN	TU	-	Test/Aercon?	BMLX	-	-
1972-S816	2441912.16	1973 Aug 17 1545	Vertikal' K65UP	-	-	0.000	RUSN	MU	-	Test	BMLX	-	-
1972-S817	2441919.50	1973 Aug 18	R-140	-	-	0.000	RUSN	MU	-	Test	BMLX	-	-
1972-S818	2441919.50	1973 Aug 25	R-140	-	-	0.000	RUSN	MU	-	Test	BMLX	-	-
1972-S819	2441922.92	1973 Aug 28 1008:29	Kosmos 11K65M	-	65033-201	0.434	RUSN	US	G	Set LED 0	AK15/RAEX	-	-
1972-S820	2441933.58	1973 Sep 8 0150:00	Kosmos 11K65M	-	65027-114	0.800	RUSN	US	G	Set LED 0	AK15/RAEX	-	-
1972-S821	2441939.52	1973 Sep 14 0031:32	Kosmos 11K65M	-	53714-106	0.800	RUSN	US	G	Set LED 0	AK15/RAEX	-	-
1972-S822	2441958.41	1973 Oct 2 2146:00	Kosmos 11K65M	-	53724-115	0.480	RUSN	US	G	Set LED 0	AK15/RAEX	-	-
1972-S823	2441966.29	1973 Oct 30 1900:00	Kosmos 11K65M	-	53749-158	0.329	RUSN	US	G	Set LED 0	AVMS	-	-
1972-S824	2442013.51	1973 Nov 27 0008:01	Kosmos 11K65M	-	53724-114	0.434	RUSN	US	G	Set LED 0	AK15/RAEX	-	-
1972-S825	2442021.13	1973 Dec 4 1600:01	Kosmos 11K65M	-	53753-211	0.800	RUSN	MU	G	Set LED 0	AK15/RAEX	-	-
1972-S826	2442034.50	1973 Dec 18 1500:00	R-140	-	-	0.000	RUSN	MU	G	Test	BMLX	-	-
1972-S827	2442035.90	1973 Dec 19 0943:00	Kosmos 11K65M	-	53724-112	0.480	RUSN	US	G	Set LED 0	AK15/RAEX	-	-
1972-S828	2442043.19	1973 Dec 26 1630:01	Kosmos 11K65M	-	65024-111	0.348	RUSN	US	G	Set LED 0	AVMS	-	-



Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	OrbPay	Agency	Launch_Code	Group	Category	LTCite	Cite	Notes
1975-103	2442720.99	1975 Nov 4 10:12:53	Kosmos 11K65H	-	53731-275	0.800	RUSN	OS	G	Sat LE0 0	AK15/RAEX	Polyot	-
1975-109	2442738.22	1975 Nov 21 17:11	Kosmos 11K65H	-	53731-271	0.434	RUSN	OS	G	Sat LE0 0	AK15/RAEX	Polyot	-
1975-112	2442744.51	1975 Nov 28 00:10:08	Kosmos 11K65H	-	53721-262	0.800	RUSN	OS	G	Sat LE0 0	AK15/RAEX	Polyot	-
1975-115	2442758.21	1975 Dec 11 17:00:01	Kosmos 11K65H	-	53746-308	0.312	RUSN	OS	G	Sat LE0 0	AVMS	Polyot	-
1975-F07	2442766.08	1975 Dec 19 14:00:01	Kosmos 11K65H	-	53721-263	0.650	RUSN	UF	G	Sat LE0 0	AK15	AVHMLJ	Polyot
1976-308	2442777.50	1976	K65H-R	-	-	0.000	RUSN	MU	-	Reentry Test	IK65906-01	-	-
1976-309	2442777.50	1976	K65H-R	-	-	0.000	RUSN	MU	-	Reentry Test	IK65906-01	-	-
1976-310	2442777.50	1976	K65H-R	-	-	0.000	RUSN	MU	-	Reentry Test	IK65906-01	-	-
1976-311	2442777.50	1976	K65H-R	-	-	0.000	RUSN	MU	-	Reentry Test	IK65906-01	-	-
1976-312	2442777.50	1976	K65H-R	-	-	0.000	RUSN	MU	-	Reentry Test	IK65906-01	-	-
1976-313	2442777.50	1976	K65H-R	-	-	0.000	RUSN	MU	-	Reentry Test	IK65906-01	-	-
1976-314	2442777.50	1976	K65H-R	-	-	0.000	RUSN	MU	-	Reentry Test	IK65906-01	-	-
1976-315	2442777.50	1976	K65H-R	-	-	0.000	RUSN	MU	-	Reentry Test	IK65906-01	-	-
1976-316	2442777.50	1976	K65H-R	-	-	0.000	RUSN	MU	-	Reentry Test	IK65906-01	-	-
1976-317	2442777.50	1976	K65H-R	-	-	0.000	RUSN	MU	-	Reentry Test	IK65906-01	-	-
1976-318	2442777.50	1976	K65H-R	-	-	0.000	RUSN	MU	-	Reentry Test	IK65906-01	-	-
1976-001	2442783.70	1976 Jan 6 04:52:02	Kosmos 11K65H	-	53731-269	0.434	RUSN	OS	G	Sat LE0 0	AK15/RAEX	Polyot	-
1976-005	2442788.21	1976 Jan 20 17:07:41	Kosmos 11K65H	-	53749-164	0.800	RUSN	OS	G	Sat LE0 0	AK15/RAEX	Polyot	-
1976-006	2442800.43	1976 Jan 22 22:26:01	Kosmos 11K65H	-	53731-286	0.434	RUSN	OS	G	Sat LE0 0	AK15/RAEX	Polyot	-
1976-008	2442805.94	1976 Jan 28 10:39:01	Kosmos 11K65H	-	53731-281	0.480	RUSN	OS	G	Sat LE0 0	AK15/RAEX	Polyot	-
1976-011	2442811.84	1976 Feb 3 09:16	Kosmos 11K65H	-	53721-282	0.800	RUSN	OS	G	Sat LE0 0	AK15/RAEX	Polyot	-
1976-014	2442821.04	1976 Feb 12 13:00:01	Kosmos 11K65H	-	53731-286	1.045	RUSN	OS	G	Sat LE0 0	AK15/RAEX	Polyot	-
1976-022	2442850.06	1976 Mar 12 13:30	Kosmos 11K65H	-	53746-310	0.570	RUSN	OS	G	Sat LE0 0	AK15/RAEX	Polyot	-
1976-319	2442867.68	1976 Mar 30 09:00	Vertikal' K650P	-	6	0.000	RUSN	TU	-	Ionos/Solar?	IK65906-01	-	-
1976-031	2442874.68	1976 Apr 6 04:14	Kosmos 11K65H	-	53731-280	0.434	RUSN	OS	G	Sat LE0 0	AK15/RAEX	Polyot	-
1976-037	2442897.06	1976 Apr 28 15:30	Kosmos 11K65H	-	53746-301	1.045	RUSN	OS	G	Sat LE0 0	AK15/RAEX	Polyot	-
1976-049	2442927.13	1976 May 28 15:00:01	Kosmos 11K65H	-	53716-328	0.570	RUSN	OS	G	Sat LE0 0	AK15/RAEX	Polyot	-
1976-051	2442932.44	1976 Jun 2 22:30:15	Kosmos 11K65H	-	53731-263	0.800	RUSN	OS	G	Sat LE0 0	AK15/RAEX	Polyot	-
1976-054	2442945.05	1976 Jun 15 13:19:01	Kosmos 11K65H	-	53731-277	0.480	RUSN	OS	G	Sat LE0 0	IK65921-43	Polyot	-
1976-056	2442949.17	1976 Jun 19 10:00:01	Kosmos 11K65H	-	53731-276	0.800	RUSN	OS	G	Sat LE0 0	AK15/RAEX	Polyot	-
1976-061	2442958.64	1976 Jun 29 06:12	Kosmos 11K65H	-	53716-324	0.800	RUSN	OS	G	Sat LE0 0	AK15/RAEX	Polyot	-
1976-067	2442968.38	1976 Jul 6 21:08	Kosmos 11K65H	-	53746-304	1.045	RUSN	OS	G	Sat LE0 0	AK15/RAEX	Polyot	-
1976-069	2442975.05	1976 Jul 15 13:11	Kosmos 11K65H	-	53746-307	0.434	RUSN	OS	G	Sat LE0 0	AK15/RAEX	Polyot	-
1976-070	2442980.93	1976 Jul 21 10:20	Kosmos 11K65H	-	53731-266	0.800	RUSN	OS	G	Sat LE0 0	AK15/RAEX	Polyot	-
1976-075	2442986.72	1976 Jul 27 05:21	Kosmos 11K65H	-	53746-316	0.302	RUSN	OS	G	Sat LE0 0	AK15/RAEX	Polyot	-
1976-076	2442987.00	1976 Jul 27 12:00:02	Kosmos 11K65H	-	53746-316	0.434	RUSN	OS	G	Sat LE0 0	AK15/RAEX	Polyot	-
1976-078	2442989.34	1976 Jul 29 20:24:44	Kosmos 11K65H	-	53716-329	0.800	RUSN	OS	G	Sat LE0 0	AK15/RAEX	Polyot	-
1976-086	2442995.79	1976 Sep 23 07:04:01	Kosmos 11K65H	-	53716-329	0.800	RUSN	OS	G	Sat LE0 0	AK15/RAEX	Polyot	-
1976-088	2443005.95	1976 Sep 29 16:56	Vertikal' K650P	-	53716-333	0.000	RUSN	RS	-	Ionos/Solar?	SFL123-161	-	-
1976-108	2443031.03	1976 Oct 14 06:00	Kosmos 11K65H	-	53773-414	0.800	RUSN	OS	G	Sat LE0 0	AK15/RAEX	Polyot	-
1976-118	2443114.51	1976 Dec 2 00:17	Kosmos 11K65H	-	53731-273	0.434	RUSN	OS	G	Sat LE0 0	AK15/RAEX	Polyot	-
1976-120	2443139.33	1976 Dec 7 00:03	Kosmos 11K65H	-	53716-319	0.480	RUSN	OS	G	Sat LE0 0	AK15/RAEX	Polyot	-
1976-124	2443152.38	1976 Dec 8 00:03	Kosmos 11K65H	-	53716-319	0.480	RUSN	OS	G	Sat LE0 0	AK15/RAEX	Polyot	-
1976-122	2443158.00	1976 Dec 15 13:59:59	Kosmos 11K65H	-	53762-426	1.045	RUSN	OS	G	Sat LE0 0	AK15/RAEX	Polyot	-
1976-124	2443158.00	1976 Dec 15 13:59:59	Kosmos 11K65H	-	53721-269	1.045	RUSN	OS	G	Sat LE0 0	AK15/RAEX	Polyot	-
1976-128	2443160.93	1976 Dec 26 07:40:56	Kosmos 11K65H	-	68072-415	0.800	RUSN	OS	G	Sat LE0 0	AK15/RAEX	Polyot	-
1976-820	2443161.41	1976 Dec 29 05:40	Vertikal' K650P	-	6	0.000	RUSN	TU	-	Ionos/Solar?	IK65906-01	-	-
1977-803	2443161.41	1977	K65M-R	-	-	0.000	RUSN	MU	-	Reentry Test	IK65906-01	-	-
1977-804	2443161.41	1977	K65M-R	-	-	0.000	RUSN	MU	-	Reentry Test	IK65906-01	-	-
1977-805	2443161.41	1977	K65M-R	-	-	0.000	RUSN	MU	-	Reentry Test	IK65906-01	-	-
1977-806	2443161.41	1977	K65M-R	-	-	0.000	RUSN	MU	-	Reentry Test	IK65906-01	-	-
1977-807	2443161.41	1977	K65M-R	-	-	0.000	RUSN	MU	-	Reentry Test	IK65906-01	-	-
1977-808	2443161.41	1977	K65M-R	-	-	0.000	RUSN	MU	-	Reentry Test	IK65906-01	-	-
1977-809	2443161.41	1977	K65M-R	-	-	0.000	RUSN	MU	-	Reentry Test	IK65906-01	-	-
1977-810	2443161.41	1977	K65M-R	-	-	0.000	RUSN	MU	-	Reentry Test	IK65906-01	-	-
1977-811	2443161.41	1977	K65M-R	-	-	0.000	RUSN	MU	-	Reentry Test	IK65906-01	-	-
1977-812	2443161.41	1977	K65M-R	-	-	0.000	RUSN	MU	-	Reentry Test	IK65906-01	-	-
1977-813	2443161.41	1977	K65M-R	-	-	0.000	RUSN	MU	-	Reentry Test	IK65906-01	-	-
1977-814	2443161.41	1977	K65M-R	-	-	0.000	RUSN	MU	-	Reentry Test	IK65906-01	-	-
1977-815	2443161.41	1977	K65M-R	-	-	0.000	RUSN	MU	-	Reentry Test	IK65906-01	-	-
1977-816	2443161.41	1977	K65M-R	-	-	0.000	RUSN	MU	-	Reentry Test	IK65906-01	-	-
1977-817	2443161.41	1977	K65M-R	-	-	0.000	RUSN	MU	-	Reentry Test	IK65906-01	-	-
1977-818	2443161.41	1977	K65M-R	-	-	0.000	RUSN	MU	-	Reentry Test	IK65906-01	-	-
1977-819	2443161.41	1977	K65M-R	-	-	0.000	RUSN	MU	-	Reentry Test	IK65906-01	-	-
1977-820	2443161.41	1977	K65M-R	-	-	0.000	RUSN	MU	-	Reentry Test	IK65906-01	-	-
1977-821	2443161.41	1977	K65M-R	-	-	0.000	RUSN	MU	-	Reentry Test	IK65906-01	-	-
1977-822	2443161.41	1977	K65M-R	-	-	0.000	RUSN	MU	-	Reentry Test	IK65906-01	-	-
1977-823	2443161.41	1977	K65M-R	-	-	0.000	RUSN	MU	-	Reentry Test	IK65906-01	-	-
1977-824	2443161.41	1977	K65M-R	-	-	0.000	RUSN	MU	-	Reentry Test	IK65906-01	-	-
1977-825	2443161.41	1977	K65M-R	-	-	0.000	RUSN	MU	-	Reentry Test	IK65906-01	-	-
1977-826	2443161.41	1977	K65M-R	-	-	0.000	RUSN	MU	-	Reentry Test	IK65906-01	-	-
1977-827	2443161.41	1977	K65M-R	-	-	0.000	RUSN	MU	-	Reentry Test	IK65906-01	-	-
1977-828	2443161.41	1977	K65M-R	-	-	0.000	RUSN	MU	-	Reentry Test	IK65906-01	-	-
1977-829	2443161.41	1977	K65M-R	-	-	0.000	RUSN	MU	-	Reentry Test	IK65906-01	-	-
1977-830	2443161.41	1977	K65M-R	-	-	0.000	RUSN	MU	-	Reentry Test	IK65906-01	-	-
1977-831	2443161.41	1977	K65M-R	-	-	0.000	RUSN	MU	-	Reentry Test	IK65906-01	-	-
1977-832	2443161.41	1977	K65M-R	-	-	0.000	RUSN	MU	-	Reentry Test	IK65906-01	-	-
1977-833	2443161.41	1977	K65M-R	-	-	0.000	RUSN	MU	-	Reentry Test	IK65906-01	-	-
1977-834	2443161.41	1977	K65M-R	-	-	0.000	RUSN	MU	-	Reentry Test	IK65906-01	-	-
1977-835	2443161.41	1977	K65M-R	-	-	0.000	RUSN	MU	-	Reentry Test	IK65906-01	-	-
1977-836	2443161.41	1977	K65M-R	-	-	0.000	RUSN	MU	-	Reentry Test	IK65906-01	-	-
1977-837	2443161.41	1977	K65M-R	-	-	0.000	RUSN	MU	-	Reentry Test	IK65906-01	-	-
1977-838	2443161.41	1977	K65M-R	-	-	0.000	RUSN	MU	-	Reentry Test	IK65906-01	-	-
1977-839	2443161.41	1977	K65M-R	-	-	0.000	RUSN	MU	-	Reentry Test	IK65906-01	-	-
1977-840	2443161.41	1977	K65M-R	-	-	0.000	RUSN	MU	-	Reentry Test	IK65906-01	-	-
1977-841	2443161.41	1977	K65M-R	-	-	0.000	RUSN	MU	-	Reentry Test	IK65906-01	-	-
1977-842	2443161.41	1977	K65M-R	-	-	0.000	RUSN	MU	-	Reentry Test	IK65906-01	-	-
1977-843	2443161.41	1977	K65M-R	-	-	0.000	RUSN	MU	-	Reentry Test	IK65906-01	-	-
1977-844	2443161.41	1977	K65M-R	-	-	0.000	RUSN	MU	-	Reentry Test	IK65906-01	-	-
1977-845	2443161.41	1977	K65M-R	-	-	0.000	RUSN	MU	-	Reentry Test	IK65906-01	-	-
1977-846	2443161.41	1977	K65M-R	-	-	0.000	RUSN	MU	-	Reentry Test	IK65906-01	-	-
1977-847	2443161.41	1977	K65M-R	-	-	0.000	RUSN	MU	-	Reentry Test	IK65906-01	-	-
1977-848	2443161.41	1977	K65M-R	-	-	0.000	RUSN	MU	-	Reentry Test	IK65906-01	-	-
1977-849	2443161.41	1977	K65M-R										

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	OrbPay	Agency	Launch_Code	Group	Category	LTCite	Cite	Notes
1977-103	2445441.73	1977 Oct 25 0525	Kosmos 11K65H	-	55746-309	0.434	RUSN	DS	G	Sat LE0 0	AK15/RMEX	Polyot	-
1977-104	2445442.01	1977 Oct 25 1215	Vertikal' K650P	-	10	0.000	RUSN	RS	G	Aerom/Ionos	ZV1-78/KI19_576	Polyot	SR19_291
1977-107	2445445.17	1977 Oct 26 1600	Kosmos 11K65H	-	53766-313	0.800	RUSN	DS	G	Sat LE0 0	AK15/RMEX	Polyot	-
1977-109	2445472.10	1977 Nov 24 1430	Kosmos 11K65H	-	53746-302	0.800	RUSN	DS	G	Sat LE0 0	AK15/RMEX	Polyot	-
1977-F06	2445476.80	1977 Nov 29 0705	Kosmos 11K65H	-	53741-266	0.870	RUSN	DF	G	Sat LE0 0	AK15	AVMLJ	-
1977-111	2445483.96	1977 Dec 8 1100	Kosmos 11K65H	-	65065-308	1.045	RUSN	DS	G	Sat LE0 0	AK15/RMEX	Polyot	-
1977-116	2445493.16	1977 Dec 13 1553	Kosmos 11K65H	-	53716-332	0.800	RUSN	DS	G	Sat LE0 0	AK15/RMEX	Polyot	-
1977-119	2445493.68	1977 Dec 16 0425	Kosmos 11K65H	-	53746-305	0.800	RUSN	DS	G	Sat LE0 0	AK15/RMEX	Polyot	-
1977-122	2445501.18	1977 Dec 23 1624	Kosmos 11K65H	-	53716-322	0.800	RUSN	TU	G	Sat LE0 0	AK15/RMEX	Polyot	-
1977-S19	2445505.12	1977 Dec 27 1465	Vertikal' K650P	-	11	0.000	RUSN	TU	G	Ionos?	RML	IKS906-01	-
1978-501	2445508.50	1978	K65H-R	-	-	0.000	RUSN	MU	-	Reentry Test	IKS906-01	-	-
1978-502	2445508.50	1978	K65H-R	-	-	0.000	RUSN	MU	-	Reentry Test	IKS906-01	-	-
1978-503	2445508.50	1978	K65H-R	-	-	0.000	RUSN	MU	-	Reentry Test	IKS906-01	-	-
1978-504	2445508.50	1978	K65H-R	-	-	0.000	RUSN	MU	-	Reentry Test	IKS906-01	-	-
1978-505	2445508.50	1978	K65H-R	-	-	0.000	RUSN	MU	-	Reentry Test	IKS906-01	-	-
1978-506	2445508.50	1978	K65H-R	-	-	0.000	RUSN	MU	-	Reentry Test	IKS906-01	-	-
1978-507	2445508.50	1978	K65H-R	-	-	0.000	RUSN	MU	-	Reentry Test	IKS906-01	-	-
1978-508	2445508.50	1978	K65H-R	-	-	0.000	RUSN	MU	-	Reentry Test	IKS906-01	-	-
1978-509	2445508.50	1978	K65H-R	-	-	0.000	RUSN	MU	-	Reentry Test	IKS906-01	-	-
1978-505	2445519.37	1978 Jan 10 2051	Kosmos 11K65H	-	53716-319	0.480	RUSN	DS	G	Sat LE0 0	AK15/RMEX	Polyot	-
1978-007	2445525.64	1978 Jan 17 0326	Kosmos 11K65H	-	53716-327	0.800	RUSN	DS	G	Sat LE0 0	AK15/RMEX	Polyot	-
1978-019	2445527.19	1978 Feb 17 1033	Kosmos 11K65H	-	53746-312	0.800	RUSN	DS	G	Sat LE0 0	AK15/RMEX	Polyot	-
1978-022	2445527.78	1978 Feb 28 0643	Kosmos 11K65H	-	53716-323	0.800	RUSN	DS	G	Sat LE0 0	AK15/RMEX	Polyot	-
1978-028	2445583.16	1978 Mar 15 1557	Kosmos 11K65H	-	53746-315	0.800	RUSN	DS	G	Sat LE0 0	AK15/RMEX	Polyot	-
1978-031	2445585.56	1978 Mar 28 0130	Kosmos 11K65H	-	53746-314	0.800	RUSN	DS	G	Sat LE0 0	AK15/RMEX	Polyot	-
1978-034	2445589.08	1978 Mar 31 1401	Kosmos 11K65H	-	53765-307	0.800	RUSN	DS	G	Sat LE0 0	AK15/RMEX	Polyot	-
1978-046	2445590.96	1978 Apr 12 1100	Kosmos 11K65H	-	53746-318	0.570	RUSN	DS	G	Sat LE0 0	AK15/RMEX	Polyot	-
1978-049	2445562.11	1978 May 17 1439	Kosmos 11K65H	-	53765-316	0.434	RUSN	DS	G	Sat LE0 0	AK15/RMEX	Polyot	-
1978-063	2445562.21	1978 May 23 1657	Kosmos 11K65H	-	53765-310	0.800	RUSN	DS	G	Sat LE0 0	AK15/RMEX	Polyot	-
1978-066	2445569.36	1978 Jun 7 2200	Vertikal' K650P	-	12	0.000	RUSN	TF	G	Ionos?	RML	IKS906-01	-
1978-062	2445567.42	1978 Jun 7 2200	Kosmos 11K65H	-	53716-321	0.480	RUSN	DS	G	Sat LE0 0	AK15/RMEX	Polyot	-
1978-063	2445569.50	1978 Jun 7 2200	Kosmos 11K65H	-	53716-317	0.800	RUSN	MU	G	Reentry Test	IKS906-01	-	-
1978-510	2445569.50	1978 Jun 21 0927	Kosmos 11K65H	-	53716-313	0.800	RUSN	DS	G	Sat LE0 0	AK15/RMEX	Polyot	-
1978-514	2445716.70	1978 Jul 17 0449	Kosmos 11K65H	-	53716-313	0.800	RUSN	DS	G	Sat LE0 0	AK15/RMEX	Polyot	-
1978-513	2445726.27	1978 Sep 16 1835	Vertikal' K650P	-	13	0.000	RUSN	TU	G	Ionos?	RML	IKS906-01	-
1978-515	2445751.50	1978 Oct 4 0349	K65H-R	-	-	0.000	RUSN	MU	-	Reentry Test	IKS906-01	-	-
1978-511	2445751.50	1978 Oct 4 0349	Kosmos 11K65H	-	53762-429	0.480	RUSN	DS	G	Sat LE0 0	AK15/RMEX	Polyot	-
1978-091	2445755.66	1978 Oct 4 0349	Kosmos 11K65H	-	60955-106	1.005	RUSN	DS	G	Sat LE0 0	IKS921-4S	Polyot	-
1978-099	2445806.28	1978 Oct 24 1800	Kosmos 11K65H	-	14	0.000	RUSN	RS	G	Aerom/Ionos	IKS921-4S	Polyot	KL28-576 diff lt
1978-5227	2445816.00	1978 Nov 5 1205	Vertikal' K650P	-	14	0.000	RUSN	RS	G	Aerom/Ionos	IKS921-4S	Polyot	-
1978-506	2445829.41	1978 Nov 16 2145	Kosmos 11K65H	-	55755-111	0.800	RUSN	DS	G	Sat LE0 0	AK15/RMEX	Polyot	-
1978-5058	2445839.50	1978 Nov 21 1812	R-14	-	-	0.000	RUSN	MU	-	Test	BML	IKS906-01	-
1978-109	2445858.26	1978 Dec 5 1812	Kosmos 11K65H	-	53716-320	0.480	RUSN	DS	G	Sat LE0 0	AK15/RMEX	Polyot	-
1978-115	2445858.26	1978 Dec 5 1812	Kosmos 11K65H	-	53762-468	0.454	RUSN	DS	G	Sat LE0 0	AK15/RMEX	Polyot	-
1978-119	2445858.26	1978 Dec 15 0343	Kosmos 11K65H	-	53762-468	0.454	RUSN	DS	G	Sat LE0 0	AK15/RMEX	Polyot	-
1978-119	2445858.26	1978 Dec 20 0343	Kosmos 11K65H	-	53762-468	0.454	RUSN	DS	G	Sat LE0 0	AK15/RMEX	Polyot	-
1978-120	2445858.26	1978 Dec 22 2200	Kosmos 11K65H	-	65685-308	1.045	RUSN	DS	G	Sat LE0 0	AK15/RMEX	Polyot	-
1978-122	2445859.06	1978 Dec 26 1330	Kosmos 11K65H	-	53762-430	0.800	RUSN	DS	G	Sat LE0 0	AK15/RMEX	Polyot	-
1978-504	2443873.50	1979	K65H-R	-	-	0.000	RUSN	MU	-	Reentry Test	IKS906-01	-	-
1978-504	2443873.50	1979	K65H-R	-	-	0.000	RUSN	MU	-	Reentry Test	IKS906-01	-	-
1978-506	2443873.50	1979	K65H-R	-	-	0.000	RUSN	MU	-	Reentry Test	IKS906-01	-	-
1978-506	2443873.50	1979	K65H-R	-	-	0.000	RUSN	MU	-	Reentry Test	IKS906-01	-	-
1978-507	2443873.50	1979	K65H-R	-	-	0.000	RUSN	MU	-	Reentry Test	IKS906-01	-	-
1978-508	2443873.50	1979	K65H-R	-	-	0.000	RUSN	MU	-	Reentry Test	IKS906-01	-	-
1978-509	2443873.50	1979	K65H-R	-	-	0.000	RUSN	MU	-	Reentry Test	IKS906-01	-	-
1978-510	2443873.50	1979	K65H-R	-	-	0.000	RUSN	MU	-	Reentry Test	IKS906-01	-	-
1978-511	2443873.50	1979	K65H-R	-	-	0.000	RUSN	MU	-	Reentry Test	IKS906-01	-	-
1978-512	2443873.50	1979	K65H-R	-	-	0.000	RUSN	MU	-	Reentry Test	IKS906-01	-	-
1978-513	2443873.50	1979	K65H-R	-	-	0.000	RUSN	MU	-	Reentry Test	IKS906-01	-	-
1978-514	2443873.50	1979	K65H-R	-	-	0.000	RUSN	MU	-	Reentry Test	IKS906-01	-	-
1978-003	2443880.23	1979 Jan 16 1737	Kosmos 11K65H	-	47182-437	0.800	RUSN	MU	G	Reentry Test	IKS906-01	-	-
1978-010	2443912.82	1979 Feb 8 0000	Kosmos 11K65H	-	53762-417	0.570	RUSN	DS	G	Sat LE0 0	AK15/RMEX	Polyot	-
1978-022	2443932.21	1979 Feb 27 1700	Kosmos 11K65H	-	47155-107	1.042	RUSN	DS	G	Sat LE0 0	IKS921-43	Polyot	-
1978-024	2443947.62	1979 Mar 15 0258	Kosmos 11K65H	-	47168-312	0.480	RUSN	DS	G	Sat LE0 0	AK15/RMEX	Polyot	-
1978-026	2443953.88	1979 Mar 21 0413	Kosmos 11K65H	-	47172-413	0.800	RUSN	DS	G	Sat LE0 0	AK15/RMEX	Polyot	-
1978-028	2443970.76	1979 Apr 7 0620	Kosmos 11K65H	-	65682-424	0.800	RUSN	DS	G	Sat LE0 0	AK15/RMEX	Polyot	-
1978-030	2443975.41	1979 Apr 11 2151	Kosmos 11K65H	-	53762-423	0.800	RUSN	DS	G	Sat LE0 0	AK15/RMEX	Polyot	-
1978-036	2444025.25	1979 May 31 1758	Kosmos 11K65H	-	65682-418	0.800	RUSN	DS	G	Sat LE0 0	AK15/RMEX	Polyot	-
1978-051	2444031.94	1979 Jun 7 0330	Kosmos 11K65H	-	65685-109	0.425	RUSN	DS	G	Sat LE0 0	ES1-SP166-325	Polyot	-
1978-060	2444053.34	1979 Jun 28 2009	Kosmos 11K65H	-	65685-109	0.800	RUSN	DS	G	Sat LE0 0	AK15/RMEX	Polyot	-
1978-063	2444066.15	1979 Jul 6 0820	Kosmos 11K65H	-	65075-124	0.800	RUSN	DS	G	Sat LE0 0	AK15/RMEX	Polyot	-
1978-065	2444066.15	1979 Jul 11 1541	Kosmos 11K65H	-	65075-124	1.045	RUSN	DS	G	Sat LE0 0	AK15/RMEX	Polyot	-
1978-078	2444113.54	1979 Aug 28 0055	Kosmos 11K65H	-	47182-419	0.434	RUSN	DS	G	Sat LE0 0	AK15/RMEX	Polyot	-
1978-084	2444142.84	1979 Sep 25 2100	Kosmos 11K65H	-	47182-419	0.800	RUSN	DS	G	Sat LE0 0	AK15/RMEX	Polyot	-
1978-089	2444158.19	1979 Oct 11 1636	Vertikal' K650P	-	15	0.000	AN	SS	AM/	Solar W/Solar X	SPT23-161	Polyot	-
1978-090	2444158.19	1979 Oct 11 1636	Kosmos 11K65H	-	47172-407	0.800	RUSN	DS	G	Sat LE0 0	AK15/RMEX	Polyot	-
1978-9307	2444165.01	1979 Oct 16 1217	Kosmos 11K65H	-	47172-410	0.800	RUSN	DS	G	Sat LE0 0	AK15/RMEX	Polyot	-
1978-517	2444171.07	1979 Oct 19 1217	R-14	-	-	0.000	RUSN	MU	-	Test	BML	IKS906-01	-
1978-517	2444171.07	1979 Oct 24 1340	Vertikal' K650P	-	16	0.000	RUSN	TU	-	Loose/Solar?	RML	IKS906-01	-
1978-5208	2444172.50	1979 Oct 26	R-14U	-	-	0.000	RUSN	MU	-	Test	BML	IKS906-01	-
1978-515	2444177.50	1979 Nov 1 0605	K65H-R	-	-	0.000	RUSN	MU	-	Reentry Test	IKS906-01	-	-
1978-096	2444178.84	1979 Nov 1 0605	Kosmos 11K65H	-	53755-105	0.995	RUSN	DS	G	Sat LE0 0	IKS921-43	Polyot	-
1978-100	2444212.88	1979 Dec 5 0900	Kosmos 11K65H	-	47168-309	0.750	RUSN	DS	G	Sat LE0 0	AK15/RMEX	Polyot	-
1980-503	2444238.50	1980	K65H-R	-	-	0.000	RUSN	MU	-	Reentry Test	IKS906-01	-	-
1980-504	2444238.50	1980	K65H-R	-	-	0.000	RUSN	MU	-	Reentry Test	IKS906-01	-	-
1980-505	2444238.50	1980	K65H-R	-	-	0.000	RUSN	MU	-	Reentry Test	IKS906-01	-	-
1980-506	2444238.50	1980	K65H-R	-	-	0.000	RUSN	MU	-	Reentry Test	IKS906-01	-	-
1980-507	2444238.50	1980	K65H-R	-	-	0.000	RUSN	MU	-	Reentry Test	IKS906-01	-	-

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	OrbPay	Agency	Launch_Code	Group	Category	LTCite	Cite	Notes
1980-508	2444238-50	1980	KG5H-R	-	-	0.000	RUSN	MU	-	Reentry Test	IK9906-01	-	-
1980-509	2444238-50	1980	KG5H-R	-	-	0.000	RUSN	MU	-	Reentry Test	IK9906-01	-	-
1980-003	2444233-33	1980	Kosmos 11K65H	-	65067-248	0.800	RUSN	US	G	Sat LE0 0	AK15/RAEX	-	-
1980-007	2444264-36	1980 Jan 25 2036	Kosmos 11K65H	-	47167-249	0.800	RUSN	US	G	Sat LE0 0	AK15/RAEX	-	-
1980-021	2444281-48	1980 Feb 11 2332	Kosmos 11K65H	-	53772-402	0.480	RUSN	US	G	Sat LE0 0	AK15/RAEX	-	-
1980-022	2444316-40	1980 Mar 17 2137	Kosmos 11K65H	-	65098-314	0.800	RUSN	US	G	Sat LE0 0	AK15/RAEX	-	-
1980-023	2444325-81	1980 Mar 27 0730	Kosmos 11K65H	-	65098-311	0.570	RUSN	US	G	Sat LE0 0	AK15/RAEX	-	-
1980-026	2444322-82	1980 Apr 3 0740	Kosmos 11K65H	-	47198-315	1.045	RUSN	US	G	Sat LE0 0	AK15/RAEX	-	-
1980-511	2444352-61	1980 Apr 23 0245	Vertikal' K650P	-	17	0.000	RUSN	TU	-	Aerom/lonos?	BMLX	IK9906-01	-
1980-037	2444374-04	1980 May 14 1300	Kosmos 11K65H	-	53785-466	0.750	RUSN	US	G	Sat LE0 0	AK15/RAEX	-	-
1980-039	2444379-89	1980 May 20 0921	Kosmos 11K65H	-	47175-116	0.800	RUSN	US	G	Sat LE0 0	AK15/RAEX	-	-
1980-047	2444396-96	1980 Jun 6 1100	Kosmos 11K65H	-	47168-306	1.045	RUSN	MU	G	Sat LE0 0	AK15/RAEX	-	-
1980-5298	2444407-50	1980 Jun 30	R-140	-	-	0.000	RUSN	MU	-	Test	RML	-	-
1980-5299	2444420-50	1980 Jun 30	R-140	-	-	0.800	RUSN	US	G	Sat LE0 0	AK15/RAEX	-	-
1980-056	2444421-60	1980 Jul 1 0712	Kosmos 11K65H	-	65072-409	0.480	RUSN	US	G	Sat LE0 0	AK15/RAEX	-	-
1980-058	2444429-53	1980 Jul 9 0042	Kosmos 11K65H	-	-	0.000	RUSN	MU	-	Test	BMLX	-	-
1980-5292	2444437-50	1980 Jul 17	R-140	-	-	0.000	RUSN	MU	-	Test	BMLX	-	-
1980-5293	2444451-50	1980 Jul 31	R-140	-	-	0.000	RUSN	MU	-	Test	BMLX	-	-
1980-067	2444461-93	1980 Jul 31 1020	Kosmos 11K65H	-	47175-122	1.045	RUSN	US	G	Sat LE0 0	AK15/RAEX	-	-
1980-512	2444466-31	1980 Sep 3 1920	Vertikal' K650P	-	18	0.000	RUSN	TU	-	Aerom/lonos?	RML	IK9906-01	-
1980-083	2444482-36	1980 Sep 14 2041	Kosmos 11K65H	-	47172-401	0.434	RUSN	US	G	Sat LE0 0	AK15/RAEX	-	-
1980-097	2444573-50	1980 Dec 5 0423	KG5H-R	-	65098-317	0.000	RUSN	MU	G	Reentry Test	RML	IK9906-01	-
1980-5222	2444578-68	1980 Dec 5 0200	KG5H-RB	-	KG5H-RB4	0.000	RUSN	US	G	Reentry Test	RML	IK9906-01	-
1980-099	2444578-58	1980 Dec 10 2053	KG5H-RB	-	65083-464	0.800	RUSN	US	G	Reentry Test	RML	IK9906-01	-
1980-102	2444594-37	1980 Dec 23 2248	Kosmos 11K65H	-	47198-318	0.480	RUSN	US	G	Sat LE0 0	AK15/RAEX	-	-
1980-513	2444597-73	1980 Dec 24 0530	Vertikal' K650P	-	19	0.000	RUSN	TU	-	Aerom/lonos?	RML	IK9906-01	-
1981-505	2444604-50	1981	KG5H-R	-	-	0.000	RUSN	MU	-	Reentry Test	IK9906-01	-	-
1981-506	2444604-50	1981	KG5H-R	-	-	0.000	RUSN	MU	-	Reentry Test	IK9906-01	-	-
1981-507	2444604-50	1981	KG5H-R	-	-	0.000	RUSN	MU	-	Reentry Test	IK9906-01	-	-
1981-508	2444604-50	1981	KG5H-R	-	-	0.000	RUSN	MU	-	Reentry Test	IK9906-01	-	-
1981-516	2444604-50	1981	KG5H-R	-	-	0.000	RUSN	MU	-	Reentry Test	IK9906-01	-	-
1981-509	2444604-50	1981	KG5H-R	-	-	0.000	RUSN	MU	-	Reentry Test	IK9906-01	-	-
1981-510	2444604-50	1981	KG5H-R	-	-	0.000	RUSN	MU	-	Reentry Test	IK9906-01	-	-
1981-511	2444604-50	1981	KG5H-R	-	-	0.000	RUSN	MU	-	Reentry Test	IK9906-01	-	-
1981-512	2444604-50	1981	KG5H-R	-	-	0.000	RUSN	MU	-	Reentry Test	IK9906-01	-	-
1981-513	2444604-50	1981	KG5H-R	-	-	0.000	RUSN	MU	-	Reentry Test	IK9906-01	-	-
1981-514	2444604-50	1981	KG5H-R	-	-	0.000	RUSN	MU	-	Reentry Test	IK9906-01	-	-
1981-515	2444604-50	1981	KG5H-R	-	-	0.000	RUSN	MU	-	Reentry Test	IK9906-01	-	-
1981-003	2444620-88	1981 Jan 16 0900	Kosmos 11K65H	-	53798-319	0.570	RUSN	US	G	Sat LE0 0	AK15/RAEX	-	-
1981-006	2444625-85	1981 Jan 21 0829	Kosmos 11K65H	-	65062-477	1.045	RUSN	US	G	Sat LE0 0	AK15/RAEX	-	-
1981-011	2444631-53	1981 Feb 6 0900	Kosmos 11K65H	-	65068-476	0.995	RUSN	US	G	Sat LE0 0	AK15/RAEX	-	-
1981-015	2444638-58	1981 Feb 12 1921	Kosmos 11K65H	-	65068-476	0.800	RUSN	US	G	Sat LE0 0	AK15/RAEX	-	-
1981-022	2444659-36	1981 Mar 6 1531	Kosmos 11K65H	-	65067-249	0.460	RUSN	US	G	Sat LE0 0	AK15/RAEX	-	-
1981-033	2444702-04	1981 Apr 9 1201	Kosmos 11K65H	-	53798-322	0.570	RUSN	US	G	Sat LE0 0	AK15/RAEX	-	-
1981-051	2444722-06	1981 May 7 1521	Kosmos 11K65H	-	65098-317	0.800	RUSN	US	G	Sat LE0 0	AK15/RAEX	-	-
1981-072	2444752-09	1981 Jun 6 1149	Kosmos 11K65H	-	65098-313	0.800	RUSN	US	G	Sat LE0 0	AK15/RAEX	-	-
1981-077	2444752-09	1981 Jun 6 1149	Kosmos 11K65H	-	65098-313	0.800	RUSN	US	G	Sat LE0 0	AK15/RAEX	-	-
1981-077	2444828-74	1981 Aug 2 0546	Kosmos 11K65H	-	47198-324	0.800	RUSN	US	G	Sat LE0 0	AK15/RAEX	-	-
1981-084	2444845-14	1981 Aug 26 0240	Vertikal' K650P	-	20	0.000	AN	SS	AM/	Sat LE0 0	IK1556-271	ESR-SP493-377	-
1981-084	2444845-14	1981 Aug 26 0240	Vertikal' K650P	-	20	0.000	AN	SS	AM/	Sat LE0 0	IK1556-271	ESR-SP493-377	-
1981-097	2444851-08	1981 Aug 28 1618	Kosmos 11K65H	-	47155-101	0.800	RUSN	US	G	Sat LE0 0	AK15/RAEX	-	-
1981-091	2444856-05	1981 Sep 16 0324	Kosmos 11K65H	-	53785-108	0.800	RUSN	US	G	Sat LE0 0	AK15/RAEX	-	-
1981-5157	2444866-95	1981 Sep 18 1759:58	Vertikal' K650P	-	47175-113	0.800	RUSN	RS	IKL/Managadze	Sat LE0 0	AK15/RAEX	-	-
1981-095	2444870-83	1981 Sep 23 0900	Kosmos 11K65H	-	53719-507	0.570	RUSN	US	G	Sat LE0 0	AK15/RAEX	-	-
1981-097	2444876-38	1981 Sep 26 2100	Kosmos 11K65H	-	53775-114	1.045	RUSN	US	G	Sat LE0 0	AK15/RAEX	-	-
1981-115	2444928-95	1981 Nov 20 0930	Kosmos 11K65H	-	47193-468	0.425	RUSN	OS	G/OC	Sat LE0 0	AK15/RAEX	-	-
1981-120	2444955-06	1981 Nov 29 1908	Kosmos 11K65H	-	65093-191	0.480	RUSN	OS	G	Sat LE0 0	AK15/RAEX	-	-
1981-5187	2444960-28	1981 Dec 17 1100	Vertikal' K650P	-	53775-120	0.420	RUSN	OS	G	Sat LE0 0	AK15/RAEX	-	-
1982-509	2444969-50	1982 Dec 21 1837	Vertikal' K650P	-	22	0.000	RUSN	RS	IKL/Managadze	Aerom/lonos?	IK24-941	K122-884	-
1982-509	2444969-50	1982	KG5H-R	-	-	0.000	RUSN	MU	-	Reentry Test	IK9906-01	-	-
1982-511	2444969-50	1982	KG5H-R	-	-	0.000	RUSN	MU	-	Reentry Test	IK9906-01	-	-
1982-512	2444969-50	1982	KG5H-R	-	-	0.000	RUSN	MU	-	Reentry Test	IK9906-01	-	-
1982-513	2444969-50	1982	KG5H-R	-	-	0.000	RUSN	MU	-	Reentry Test	IK9906-01	-	-
1982-514	2444969-50	1982	KG5H-R	-	-	0.000	RUSN	MU	-	Reentry Test	IK9906-01	-	-
1982-515	2444969-50	1982	KG5H-R	-	-	0.000	RUSN	MU	-	Reentry Test	IK9906-01	-	-
1982-516	2444969-50	1982	KG5H-R	-	-	0.000	RUSN	MU	-	Reentry Test	IK9906-01	-	-
1982-517	2444969-50	1982	KG5H-R	-	-	0.000	RUSN	MU	-	Reentry Test	IK9906-01	-	-
1982-518	2444969-50	1982	KG5H-R	-	-	0.000	RUSN	MU	-	Reentry Test	IK9906-01	-	-
1982-519	2444969-50	1982	KG5H-R	-	-	0.000	RUSN	MU	-	Reentry Test	IK9906-01	-	-
1982-520	2444969-50	1982	KG5H-R	-	-	0.000	RUSN	MU	-	Reentry Test	IK9906-01	-	-
1982-521	2444969-50	1982	KG5H-R	-	-	0.000	RUSN	MU	-	Reentry Test	IK9906-01	-	-
1982-522	2444969-50	1982	KG5H-R	-	-	0.000	RUSN	MU	-	Reentry Test	IK9906-01	-	-
1982-523	2444969-50	1982	KG5H-R	-	-	0.000	RUSN	MU	-	Reentry Test	IK9906-01	-	-
1982-524	2444969-50	1982	KG5H-R	-	-	0.000	RUSN	MU	-	Reentry Test	IK9906-01	-	-
1982-525	2444969-50	1982	KG5H-R	-	-	0.000	RUSN	MU	-	Reentry Test	IK9906-01	-	-
1982-001	2444977-15	1982 Jan 7 1638	Kosmos 11K65H	-	53755-102	0.800	UKKS	OS	G	Sat LE0 0	AK15/RAEX	-	-
1982-003	2444983-83	1982 Jan 14 0751	Kosmos 11K65H	-	53767-260	0.800	UKKS	OS	G	Sat LE0 0	AK15/RAEX	-	-
1982-007	2444998-96	1982 Jan 29 1100	Kosmos 11K65H	-	65075-115	1.045	UKKS	OS	G	Sat LE0 0	AK15/RAEX	-	-
1982-012	2445018-41	1982 Feb 17 2156	Kosmos 11K65H	-	65067-261	0.800	UKKS	OS	G	Sat LE0 0	AK15/RAEX	-	-
1982-F01	2445033-20	1982 Mar 4 1641	Kosmos 11K65H	-	53739-530	1.040	UKKS	OF	G	Sat LE0 0	AK15	AWMLJ	-
1982-024	2445053-30	1982 Mar 24 1947	Kosmos 11K65H	-	53767-263	0.800	UKKS	OS	G	Sat LE0 0	AK15/RAEX	-	-
1982-026	2445059-88	1982 Mar 31 0900	Kosmos 11K65H	-	53747-241	0.434	UKKS	OS	G	Sat LE0 0	AK15/RAEX	-	-
1982-030	2445067-51	1982 Apr 8 0015	Kosmos 11K65H	-	65047-242	0.800	UKKS	OS	G	Sat LE0 0	AK15/RAEX	-	-
1982-034	2445080-57	1982 Apr 21 0140	Kosmos 11K65H	-	53767-256	1.045	UKKS	OS	G	Sat LE0 0	AK15/RAEX	-	-

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	OrbPay	Agency	Launch_Code	Group	Category	LTCite	Cite	Notes
1982-S500	2445057.50	1982 Apr 28 0252:00	R-14U	-	-	0.000	RUSN	MS	-	Target	RML	-	-
1982-037	2445057.62	1982 Apr 28 0252:00	Koamos 11K65H	-	47175-126	0.800	UNKS	US	G	Sat LED 0	AK15/RAEX	Polyot	-
1982-040	2445056.26	1982 May 6 1807	Koamos 11K65H	-	5775-123	0.480	UNKS	US	G	Sat LED 0	AK15/RAEX	Polyot	-
1982-051	2445121.69	1982 Jun 3 0437	Koamos 11K65H	-	47167-258	0.800	UNKS	US	G	Sat LED 0	AK15/RAEX	Polyot	-
1982-084	2445124.40	1982 Jun 3 2130	R65H-RB	-	-	1.074	UNKS	US	G	Sat LED 0	AK15/RAEX	-	-
1982-085	2445127.22	1982 Jun 6 1710	Koamos 11K65H	-	65067-287	0.800	UNKS	US	G	Sat LED 0	AK15/RAEX	Polyot	-
1982-086	2445139.00	1982 Jun 18 1158	Koamos 11K65H	-	53785-460	0.800	UNKS	US	G	Sat LED 0	AK15/RAEX	Polyot	-
1982-087	2445150.41	1982 Jun 29 2145:41	Koamos 11K65H	-	47185-457	0.838	UNKS	US	G	Sat LED 0	AK15/RAEX	Polyot	-
1982-526	2445153.27	1982 Jul 2 1830	Vertikal' K650P	-	23	0.000	RUSN	TU	G	Icons?	RML	IK6906-01	-
1982-069	2445157.91	1982 Jul 7 0947	Koamos 11K65H	-	65095-473	0.800	UNKS	US	G	Sat LED 0	AK15/RAEX	Polyot	-
1982-073	2445171.77	1982 Jul 21 0631	Koamos 11K65H	-	65095-103	0.480	UNKS	US	G	Sat LED 0	AK15/RAEX	Polyot	-
1982-076	2445180.32	1982 Jul 29 1940	Koamos 11K65H	-	53793-472	1.045	UNKS	US	G	Sat LED 0	AK15/RAEX	Polyot	-
1982-F05	2445212.33	1982 Aug 30 1956	Koamos 11K65H	-	65047-236	0.800	UNKS	US	G	Sat LED 0	AK15/RAEX	Polyot	-
1982-102	2445261.75	1982 Oct 19 0558	Koamos 11K65H	-	53734-137	0.750	UNKS	US	G	Sat LED 0	AK15/RAEX	Polyot	-
1982-104	2445264.08	1982 Oct 21 1400	Koamos 11K65H	-	47139-471	0.800	UNKS	US	G	Sat LED 0	AK15/RAEX	Polyot	-
1982-109	2445297.96	1982 Nov 11 0614	Koamos 11K65H	-	47167-262	0.800	UNKS	US	G	Sat LED 0	AK15/RAEX	Polyot	-
1982-F07	2445321.04	1982 Nov 24 1100	Vertikal' K650P	-	47185-465	0.480	UNKS	US	G	Sat LED 0	AK15/RAEX	Polyot	-
1982-527	2445333.00	1982 Dec 17 1303	Koamos 11K65H	-	24	0.000	RUSN	TU	G	Icons?	RML	IK6906-01	-
1982-121	2445334.50	1982 Dec 29 1200:02	Koamos 11K65H	-	53785-454	0.750	UNKS	US	G	Sat LED 0	AK15/RAEX	Polyot	-
1983-503	2445334.50	1983	R65H-R	-	-	0.000	RUSN	RU	-	Reentry Test	IK6906-01	-	-
1983-504	2445334.50	1983	R65H-R	-	-	0.000	RUSN	RU	-	Reentry Test	IK6906-01	-	-
1983-505	2445334.50	1983	R65H-R	-	-	0.000	RUSN	RU	-	Reentry Test	IK6906-01	-	-
1983-506	2445334.50	1983	R65H-R	-	-	0.000	RUSN	RU	-	Reentry Test	IK6906-01	-	-
1983-507	2445334.50	1983	R65H-R	-	-	0.000	RUSN	RU	-	Reentry Test	IK6906-01	-	-
1983-508	2445334.50	1983	R65H-R	-	-	0.000	RUSN	RU	-	Reentry Test	IK6906-01	-	-
1983-509	2445334.50	1983	R65H-R	-	-	0.000	RUSN	RU	-	Reentry Test	IK6906-01	-	-
1983-510	2445334.50	1983	R65H-R	-	-	0.000	RUSN	RU	-	Reentry Test	IK6906-01	-	-
1983-511	2445334.50	1983	R65H-R	-	-	0.000	RUSN	RU	-	Reentry Test	IK6906-01	-	-
1983-512	2445334.50	1983	R65H-R	-	-	0.000	RUSN	RU	-	Reentry Test	IK6906-01	-	-
1983-513	2445334.50	1983	R65H-R	-	-	0.000	RUSN	RU	-	Reentry Test	IK6906-01	-	-
1983-514	2445334.50	1983	R65H-R	-	-	0.000	RUSN	RU	-	Reentry Test	IK6906-01	-	-
1983-515	2445334.50	1983	R65H-R	-	-	0.000	RUSN	RU	-	Reentry Test	IK6906-01	-	-
1983-516	2445334.50	1983	R65H-R	-	-	0.000	RUSN	RU	-	Reentry Test	IK6906-01	-	-
1983-517	2445334.50	1983	R65H-R	-	-	0.000	RUSN	RU	-	Reentry Test	IK6906-01	-	-
1983-518	2445334.50	1983	R65H-R	-	-	0.000	RUSN	RU	-	Reentry Test	IK6906-01	-	-
1983-001	2445347.06	1983 Jan 12 1402	Koamos 11K65H	-	65093-479	0.800	UNKS	US	G	Sat LED 0	AK15/RAEX	Polyot	-
1983-002	2445353.60	1983 Jan 19 1928	Koamos 11K65H	-	53793-481	0.480	UNKS	US	G	Sat LED 0	AK15/RAEX	Polyot	-
1983-F01	2445360.00	1983 Jan 28 1200	Koamos 11K65H	-	47139-480	1.040	UNKS	US	G	Sat LED 0	AK15/RAEX	Polyot	-
1983-017	2445409.44	1983 Mar 15 2230:50	R65H-RB	-	-	1.074	UNKS	US	G	Sat LED 0	AK15/RAEX	AMMLJ	-
1983-021	2445418.37	1983 Mar 24 2055:50	Koamos 11K65H	-	53739-548	0.840	UNKS	US	G	Sat LED 0	AK15/RAEX	Polyot	-
1983-022	2445423.55	1983 Mar 30 0110	Koamos 11K65H	-	65019-522	0.800	UNKS	US	G	Sat LED 0	AK15/RAEX	Polyot	-
1983-023	2445423.55	1983 Apr 6 1130	Koamos 11K65H	-	53719-512	0.570	UNKS	US	G	Sat LED 0	AK15/RAEX	Polyot	-
1983-024	2445427.26	1983 Apr 12 1200	Koamos 11K65H	-	65019-519	0.800	UNKS	US	G	Sat LED 0	AK15/RAEX	Polyot	-
1983-025	2445434.40	1983 Apr 19 1300	Koamos 11K65H	-	65119-529	1.045	UNKS	US	G	Sat LED 0	AK15/RAEX	Polyot	-
1983-026	2445444.00	1983 Apr 6 0300	Koamos 11K65H	-	65119-513	0.900	UNKS	US	G	Sat LED 0	AK15/RAEX	Polyot	-
1983-042	2445474.60	1983 May 19 1200:00	Koamos 11K65H	-	47139-511	0.750	UNKS	US	G	Sat LED 0	AK15/RAEX	Polyot	-
1983-046	2445478.00	1983 May 24 0239	Koamos 11K65H	-	65083-468	1.800	UNKS	US	G	Sat LED 0	AK15/RAEX	Polyot	-
1983-048	2445478.00	1983 May 24 0519	Koamos 11K65H	-	47185-483	0.480	UNKS	US	G	Sat LED 0	AK15/RAEX	Polyot	-
1983-049	2445478.00	1983 May 24 0519	Koamos 11K65H	-	53783-483	0.800	UNKS	US	G	Sat LED 0	AK15/RAEX	Polyot	-
1983-069	2445521.52	1983 Jul 6 0321:00	Koamos 11K65H	-	47139-483	0.800	UNKS	US	G	Sat LED 0	AK15/RAEX	Polyot	-
1983-101	2445577.77	1983 Aug 31 1030	Koamos 11K65H	-	53783-483	1.845	UNKS	US	G	Sat LED 0	AK15/RAEX	Polyot	-
1983-102	2445607.06	1983 Sep 8 1100	Koamos 11K65H	-	65093-482	1.045	UNKS	US	G	Sat LED 0	AK15/RAEX	Polyot	-
1983-103	2445613.00	1983 Sep 8 1200	Koamos 11K65H	-	65039-540	0.750	UNKS	US	G	Sat LED 0	AK15/RAEX	Polyot	-
1983-104	2445619.51	1983 Oct 12 0020	Koamos 11K65H	-	65039-543	0.800	UNKS	US	G	Sat LED 0	AK15/RAEX	Polyot	-
1983-108	2445627.68	1983 Oct 30 0425	Vertikal' K650P	-	25	0.000	AN	SS	AW/	Scalar W/Solar X	IK6906-01	-	Dr R-5?
1983-111	2445634.22	1983 Aug 31 1230:00	Koamos 11K65H	-	47122-331	0.800	UNKS	US	G	Sat LED 0	AK15/RAEX	Polyot	-
1983-112	2445650.76	1983 Nov 8 1200:00	Koamos 11K65H	-	65093-470	0.800	UNKS	US	G	Sat LED 0	AK15/RAEX	Polyot	-
1983-120	2445676.76	1983 Dec 8 0613	Koamos 11K65H	-	65019-528	0.800	UNKS	US	G	Sat LED 0	AK15/RAEX	Polyot	-
1983-125	2445695.92	1983 Dec 27 1000	Koamos 11K65H	-	65019-528	1.074	UNKS	US	G	Sat LED 0	AK15/RAEX	Polyot	-
1984-505	2445699.50	1984	R65H-R	-	-	0.000	RUSN	RU	-	Reentry Test	IK6906-01	-	-
1984-506	2445699.50	1984	R65H-R	-	-	0.000	RUSN	RU	-	Reentry Test	IK6906-01	-	-
1984-507	2445699.50	1984	R65H-R	-	-	0.000	RUSN	RU	-	Reentry Test	IK6906-01	-	-
1984-508	2445699.50	1984	R65H-R	-	-	0.000	RUSN	RU	-	Reentry Test	IK6906-01	-	-
1984-509	2445699.50	1984	R65H-R	-	-	0.000	RUSN	RU	-	Reentry Test	IK6906-01	-	-
1984-510	2445699.50	1984	R65H-R	-	-	0.000	RUSN	RU	-	Reentry Test	IK6906-01	-	-
1984-511	2445699.50	1984	R65H-R	-	-	0.000	RUSN	RU	-	Reentry Test	IK6906-01	-	-
1984-512	2445699.50	1984	R65H-R	-	-	0.000	RUSN	RU	-	Reentry Test	IK6906-01	-	-
1984-513	2445699.50	1984	R65H-R	-	-	0.000	RUSN	RU	-	Reentry Test	IK6906-01	-	-
1984-514	2445699.50	1984	R65H-R	-	-	0.000	RUSN	RU	-	Reentry Test	IK6906-01	-	-
1984-515	2445699.50	1984	R65H-R	-	-	0.000	RUSN	RU	-	Reentry Test	IK6906-01	-	-
1984-516	2445699.50	1984	R65H-R	-	-	0.000	RUSN	RU	-	Reentry Test	IK6906-01	-	-
1984-517	2445699.50	1984	R65H-R	-	-	0.000	RUSN	RU	-	Reentry Test	IK6906-01	-	-
1984-518	2445699.50	1984	R65H-R	-	-	0.000	RUSN	RU	-	Reentry Test	IK6906-01	-	-
1984-519	2445699.50	1984	R65H-R	-	-	0.000	RUSN	RU	-	Reentry Test	IK6906-01	-	-
1984-520	2445699.50	1984	R65H-R	-	-	0.000	RUSN	RU	-	Reentry Test	IK6906-01	-	-
1984-521	2445699.50	1984	R65H-R	-	-	0.000	RUSN	RU	-	Reentry Test	IK6906-01	-	-
1984-522	2445699.50	1984	R65H-R	-	-	0.000	RUSN	RU	-	Reentry Test	IK6906-01	-	-
1984-523	2445699.50	1984	R65H-R	-	-	0.000	RUSN	RU	-	Reentry Test	IK6906-01	-	-
1984-524	2445699.50	1984	R65H-R	-	-	0.000	RUSN	RU	-	Reentry Test	IK6906-01	-	-
1984-525	2445699.50	1984	R65H-R	-	-	0.000	RUSN	RU	-	Reentry Test	IK6906-01	-	-
1984-526	2445699.50	1984	R65H-R	-	-	0.000	RUSN	RU	-	Reentry Test	IK6906-01	-	-
1984-527	2445699.50	1984	R65H-R	-	-	0.000	RUSN	RU	-	Reentry Test	IK6906-01	-	-
1984-528	2445699.50	1984	R65H-R	-	-	0.000	RUSN	RU	-	Reentry Test	IK6906-01	-	-
1984-001	2445705.34	1984 Jan 5 2009	Koamos 11K65H	-	47119-529	0.480	UNKS	US	G	Sat LED 0	AK15/RAEX	Polyot	-
1984-003	2445711.26	1984 Jan 11 1808	Koamos 11K65H	-	65039-546	0.800	UNKS	US	G	Sat LED 0	AK15/RAEX	Polyot	-
1984-007	2445726.00	1984 Jan 26 1200	Koamos 11K65H	-	53793-469	0.570	UNKS	US	G	Sat LED 0	AK15/RAEX	Polyot	-



Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	OrbPay	Agency	Launch_Code	Group	Category	LTCite	Cite	Notes
1984-010	2445733.23	1984 Feb 2 1738	Kosmos 11K65H	-	47139-532	0.800	UNKS	US	G	Sat LED 0	AK15/RAEX	Polyot	-
1984-019	2445752.15	1984 Feb 21 1536	Kosmos 11K65H	-	65039-537	0.800	UNKS	US	G	Sat LED 0	AK15/RAEX	MIKROUR	-
1984-529	2445759.50	1984 Mar?	R65H-R	-	-	0.000	RUSN	MU	-	Reentry Test	RML	MIKROUR	-
1984-043	2445831.76	1984 May 11 0619	Kosmos 11K65H	-	53739-533	0.800	UNKS	US	G	Sat LED 0	AK15/RAEX	Polyot	-
1984-046	2445838.11	1984 May 17 1443:26	Kosmos 11K65H	-	47139-538	0.800	UNKS	US	G	Sat LED 0	AK15/RAEX	Polyot	-
1984-052	2445849.41	1984 May 28 2152:00	Kosmos 11K65H	-	65039-531	0.800	UNKS	US	G	Sat LED 0	AK15/RAEX	Polyot	-
1984-056	2445859.98	1984 Jun 8 1128	Kosmos 11K65H	-	53739-542	0.800	UNKS	US	G	Sat LED 0	AK15/RAEX	Polyot	-
1984-062	2445873.32	1984 Jun 21 1940:03	Kosmos 11K65H	-	53719-521	0.864	UNKS	US	G	Sat LED 0	PL39	Polyot	-
1984-067	2445878.71	1984 Jun 27 0459	Kosmos 11K65H	-	65039-549	0.800	UNKS	US	G	Sat LED 0	AK15/RAEX	Polyot	-
1984-068	2445880.05	1984 Jun 28 1310:00	Kosmos 11K65H	-	47134-133	0.750	UNKS	US	G	Sat LED 0	AK15/RAEX	Polyot	-
1984-589	2445887.35	1984 Jul 5 2020	R65H-RB	-	-	0.000	UNKS	TF	-	Reentry Test	RPCB	MIKROUR	-
1984-100	2445897.16	1984 Sep 13 1554:08	Kosmos 11K65H	-	53739-539	0.800	UNKS	US	G	Sat LED 0	AK15/RAEX	Polyot	-
1984-104	2445970.90	1984 Sep 27 0930:00	Kosmos 11K65H	-	53796-180	1.045	UNKS	US	G	Sat LED 0	AK15/RAEX	Polyot	-
1984-109	2445985.11	1984 Oct 11 1443	Kosmos 11K65H	-	47139-126	0.800	UNKS	US	G	Sat LED 0	AK15/RAEX	Polyot	-
1984-118	2446019.78	1984 Nov 15 0640	Kosmos 11K65H	-	47139-124	0.800	UNKS	US	G	Sat LED 0	AK15/RAEX	Polyot	-
1984-126	2446033.66	1984 Dec 19 0355	R65H-RB	-	-	1.074	UNKS	US	G	Sat LED 0	AK15/RAEX	-	-
1984-127	2446035.04	1984 Dec 20 1300:00	Kosmos 11K65H	-	47134-127	0.750	UNKS	US	G	Sat LED 0	AK15/RAEX	Polyot	-
1985-501	2446035.50	1985	R65H-R	-	-	0.000	RUSN	MU	-	Reentry Test	MIKROUR	-	-
1985-502	2446035.50	1985	R65H-R	-	-	0.000	RUSN	MU	-	Reentry Test	MIKROUR	-	-
1985-503	2446035.50	1985	R65H-R	-	-	0.000	RUSN	MU	-	Reentry Test	MIKROUR	-	-
1985-504	2446035.50	1985	R65H-R	-	-	0.000	RUSN	MU	-	Reentry Test	MIKROUR	-	-
1985-505	2446035.50	1985	R65H-R	-	-	0.000	RUSN	MU	-	Reentry Test	MIKROUR	-	-
1985-506	2446035.50	1985	R65H-R	-	-	0.000	RUSN	MU	-	Reentry Test	MIKROUR	-	-
1985-507	2446035.50	1985	R65H-R	-	-	0.000	RUSN	MU	-	Reentry Test	MIKROUR	-	-
1985-508	2446035.50	1985	R65H-R	-	-	0.000	RUSN	MU	-	Reentry Test	MIKROUR	-	-
1985-509	2446035.50	1985	R65H-R	-	-	0.000	RUSN	MU	-	Reentry Test	MIKROUR	-	-
1985-510	2446035.50	1985	R65H-R	-	-	0.000	RUSN	MU	-	Reentry Test	MIKROUR	-	-
1985-511	2446035.50	1985	R65H-R	-	-	0.000	RUSN	MU	-	Reentry Test	MIKROUR	-	-
1985-512	2446035.50	1985	R65H-R	-	-	0.000	RUSN	MU	-	Reentry Test	MIKROUR	-	-
1985-513	2446035.50	1985	R65H-R	-	-	0.000	RUSN	MU	-	Reentry Test	MIKROUR	-	-
1985-514	2446035.50	1985	R65H-R	-	-	0.000	RUSN	MU	-	Reentry Test	MIKROUR	-	-
1985-515	2446035.50	1985	R65H-R	-	-	0.000	RUSN	MU	-	Reentry Test	MIKROUR	-	-
1985-516	2446035.50	1985	R65H-R	-	-	0.000	RUSN	MU	-	Reentry Test	MIKROUR	-	-
1985-517	2446035.50	1985	R65H-R	-	-	0.000	RUSN	MU	-	Reentry Test	MIKROUR	-	-
1985-506	2446033.24	1985 Jan 17 1746:00	Kosmos 11K65H	-	65034-138	0.800	UNKS	US	G	Sat LED 0	AK15/RAEX	Polyot	-
1985-011	2446039.32	1985 Feb 1 1336:26	Kosmos 11K65H	-	47144-445	0.800	UNKS	US	G	Sat LED 0	AK15/RAEX	Polyot	-
1985-018	2446124.04	1985 Feb 27 1256:00	Kosmos 11K65H	-	47134-139	0.570	UNKS	US	G	Sat LED 0	AK15/RAEX	Polyot	-
1985-022	2446138.85	1985 Mar 14 0109	Kosmos 11K65H	-	53734-146	0.800	UNKS	US	G	Sat LED 0	AK15/RAEX	Polyot	-
1985-023	2446145.51	1985 Mar 21 0508	Kosmos 11K65H	-	53734-154	0.460	UNKS	US	G	Sat LED 0	AK15/RAEX	Polyot	-
1985-509	2446212.44	1985 Apr 16 2230	R65H-RB	-	-	0.000	UNKS	TS	-	Reentry Test	MIKROUR	-	-
1985-061	2446215.58	1985 May 30 0144:50	Kosmos 11K65H	-	47144-149	0.800	UNKS	US	G	Sat LED 0	AK15/RAEX	Polyot	-
1985-050	2446235.95	1985 Jun 19 1830:00	Kosmos 11K65H	-	65044-147	1.045	UNKS	US	G	Sat LED 0	AK15/RAEX	Polyot	-
1985-059	2446252.80	1985 Sep 4 0705	Kosmos 11K65H	-	65011-241	0.800	UNKS	US	G	Sat LED 0	AK15/RAEX	Polyot	-
1985-079	2446316.80	1985 Oct 2 0000	Kosmos 11K65H	-	65034-153	0.800	UNKS	US	G	Sat LED 0	AK15/RAEX	Polyot	-
1985-F04	2446322.23	1985 Oct 23 1724	Kosmos 11K65H	-	47122-345	0.800	UNKS	US	G	Sat LED 0	AK15/RAEX	Polyot	-
1985-110	2446328.92	1985 Nov 28 1312:41	Kosmos 11K65H	-	65022-346	0.800	UNKS	US	G	Sat LED 0	AK15/RAEX	Polyot	-
1985-116	2446340.87	1985 Dec 19 0546:55	Kosmos 11K65H	-	65022-348	0.800	UNKS	US	G	Sat LED 0	AK15/RAEX	Polyot	-
1985-502	2446430.50	1986	R65H-R	-	-	0.000	RUSN	MU	-	Reentry Test	MIKROUR	-	-
1985-503	2446430.50	1986	R65H-R	-	-	0.000	RUSN	MU	-	Reentry Test	MIKROUR	-	-
1985-504	2446430.50	1986	R65H-R	-	-	0.000	RUSN	MU	-	Reentry Test	MIKROUR	-	-
1985-505	2446430.50	1986	R65H-R	-	-	0.000	RUSN	MU	-	Reentry Test	MIKROUR	-	-
1985-506	2446430.50	1986	R65H-R	-	-	0.000	RUSN	MU	-	Reentry Test	MIKROUR	-	-
1985-507	2446430.50	1986	R65H-R	-	-	0.000	RUSN	MU	-	Reentry Test	MIKROUR	-	-
1985-508	2446430.50	1986	R65H-R	-	-	0.000	RUSN	MU	-	Reentry Test	MIKROUR	-	-
1985-509	2446430.50	1986	R65H-R	-	-	0.000	RUSN	MU	-	Reentry Test	MIKROUR	-	-
1985-510	2446430.50	1986	R65H-R	-	-	0.000	RUSN	MU	-	Reentry Test	MIKROUR	-	-
1985-002	2446439.62	1986 Jan 9 0248:00	Kosmos 11K65H	-	47122-337	0.480	UNKS	US	G	Sat LED 0	AK15/RAEX	Polyot	-
1985-002	2446439.62	1986 Jan 16 1138:19	Kosmos 11K65H	-	53744-152	0.800	UNKS	US	G	Sat LED 0	AK15/RAEX	Polyot	-
1985-005	2446454.29	1986 Jan 23 1852:58	Kosmos 11K65H	-	47122-334	0.800	UNKS	US	G	Sat LED 0	AK15/RAEX	Polyot	-
1985-008	2446538.38	1986 Mar 17 2102:00	Kosmos 11K65H	-	53726-198	0.800	UNKS	US	G	Sat LED 0	AK15/RAEX	Polyot	-
1985-037	2446574.04	1986 Apr 23 1254:22	Kosmos 11K65H	-	53726-198	0.800	UNKS	US	G	Sat LED 0	AK15/RAEX	Polyot	-
1985-042	2446587.66	1986 Jun 6 0357:00	Kosmos 11K65H	-	47172-384	0.480	UNKS	US	G	Sat LED 0	AK15/RAEX	Polyot	-
1985-047	2446600.34	1986 Jun 18 2003:49	Kosmos 11K65H	-	53722-341	0.800	UNKS	US	G	Sat LED 0	AK15/RAEX	Polyot	-
1985-052	2446627.88	1986 Jun 16 0421:00	Kosmos 11K65H	-	53722-385	0.800	UNKS	OS75	G	Sat LED 0	AK15/RAEX	Polyot	-
1985-052	2446627.88	1986 Sep 3 0900:00	Kosmos 11K65H	-	65022-342	1.045	UNKS	OS	G	Sat LED 0	AK15/RAEX	Polyot	-
1985-070	2446693.57	1986 Sep 10 0145:00	Kosmos 11K65H	-	47196-164	0.800	UNKS	OS	G	Sat LED 0	AK15/RAEX	Polyot	-
1985-511	2446713.50	1986 Oct 10 1445:00	R65H-R	-	-	0.000	RUSN	MU	-	Reentry Test	MIKROUR	-	-
1985-083	2446721.03	1986 Oct 27 1240:00	Kosmos 11K65H	-	53748-411	0.570	UNKS	OS	G	Sat LED 0	AK15/RAEX	Polyot	-
1985-083	2446721.03	1986 Nov 13 0610:25	Kosmos 11K65H	-	53748-414	0.800	UNKS	OS	G	Sat LED 0	AK15/RAEX	Polyot	-
1985-092	2446745.58	1986 Nov 21 0200:00	Kosmos 11K65H	-	53796-168	0.480	UNKS	OS	G	Sat LED 0	AK15/RAEX	Polyot	-
1985-093	2446759.41	1986 Nov 24 2143:13	Kosmos 11K65H	-	47122-349	0.800	UNKS	OS	G	Sat LED 0	AK15/RAEX	Polyot	-
1985-100	2446792.21	1986 Dec 17 1702:32	Kosmos 11K65H	-	53772-363	0.800	UNKS	OS	G	Sat LED 0	AK15/RAEX	Polyot	-
1985-518	2446799.54	1986 Dec 25 0100	R65H-RB	-	-	0.000	UNKS	TS	-	Reentry Test	RPCB	MIKROUR	-
1987-501	2446795.50	1987	R65H-R	-	-	0.000	RUSN	MU	-	Reentry Test	MIKROUR	-	-
1987-502	2446795.50	1987	R65H-R	-	-	0.000	RUSN	MU	-	Reentry Test	MIKROUR	-	-
1987-503	2446795.50	1987	R65H-R	-	-	0.000	RUSN	MU	-	Reentry Test	MIKROUR	-	-
1987-504	2446795.50	1987	R65H-R	-	-	0.000	RUSN	MU	-	Reentry Test	MIKROUR	-	-
1987-505	2446795.50	1987	R65H-R	-	-	0.000	RUSN	MU	-	Reentry Test	MIKROUR	-	-
1987-506	2446795.50	1987	R65H-R	-	-	0.000	RUSN	MU	-	Reentry Test	MIKROUR	-	-
1987-507	2446795.50	1987	R65H-R	-	-	0.000	RUSN	MU	-	Reentry Test	MIKROUR	-	-
1987-508	2446795.50	1987	R65H-R	-	-	0.000	RUSN	MU	-	Reentry Test	MIKROUR	-	-
1987-509	2446795.50	1987	R65H-R	-	-	0.000	RUSN	MU	-	Reentry Test	MIKROUR	-	-
1987-510	2446795.50	1987	R65H-R	-	-	0.000	RUSN	MU	-	Reentry Test	MIKROUR</		



Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	OrbPay	Agency	Launch_Code	Group	Category	LTCite	Cite	Notes
1989-005	2447553-15	1989 Jan 26 1536:00	Kosmos 11K65H	-	65075-812	0.800	UNKS	US	G	Sat LED 0	AK15/RAEX	Polyot	-
1989-012	2447572-21	1989 Feb 14 1700:00	Kosmos 11K65H	-	53726-192	0.810	UNKS	US	G	Sat LED 0	AK15/RAEX	Polyot	-
1989-017	2447579-65	1989 Feb 22 0328:49	Kosmos 11K65H	-	47111-236	0.800	UNKS	US	G	Sat LED 0	AK15/RAEX	Polyot	-
1989-025	2447610-07	1989 Mar 24 1338:00	Kosmos 11K65H	-	65011-232	0.480	UNKS	US	G	Sat LED 0	AK15/RAEX	Polyot	-
1989-028	2447621-28	1989 Apr 4 1836:52	Kosmos 11K65H	-	47128-194	0.800	UNKS	US	G	Sat LED 0	AK15/RAEX	Polyot	-
1989-045	2447694-72	1989 Jun 7 0512:35	Kosmos 11K65H	-	53711-225	0.800	UNKS	US	G	Sat LED 0	AK15/RAEX	Polyot	-
1989-046	2447692-02	1989 Jun 14 1230:00	Kosmos 11K65H	-	53761-249	0.570	UNKS	US	G	Sat LED 0	AK15/RAEX	Polyot	-
1989-050	2447712-14	1989 Jul 4 1521:36	Kosmos 11K65H	-	65061-250	0.822	UNKS	US	G	Sat LED 0	PL38	Polyot	-
1989-059	2447732-83	1989 Jul 26 0748:44	Kosmos 11K65H	-	65061-256	0.800	UNKS	US	G	Sat LED 0	AK15/RAEX	Polyot	-
1990-306	2447891-50	1990	KG5H-R	-	-	0.000	RUSN	RU	-	Reentry Test	IKS9906-01	-	-
1990-307	2447891-50	1990	KG5H-R	-	-	0.000	RUSN	RU	-	Reentry Test	IKS9906-01	-	-
1990-308	2447891-50	1990	KG5H-R	-	-	0.000	RUSN	RU	-	Reentry Test	IKS9906-01	-	-
1990-309	2447891-50	1990	KG5H-R	-	-	0.000	RUSN	RU	-	Reentry Test	IKS9906-01	-	-
1990-310	2447891-50	1990	KG5H-R	-	-	0.000	RUSN	RU	-	Reentry Test	IKS9906-01	-	-
1990-311	2447891-50	1990	KG5H-R	-	-	0.000	RUSN	RU	-	Reentry Test	IKS9906-01	-	-
1990-312	2447891-50	1990	KG5H-R	-	-	0.000	RUSN	RU	-	Reentry Test	IKS9906-01	-	-
1990-313	2447891-50	1990	KG5H-R	-	-	0.000	RUSN	RU	-	Reentry Test	IKS9906-01	-	-
1990-314	2447891-50	1990	KG5H-R	-	-	0.000	RUSN	RU	-	Reentry Test	IKS9906-01	-	-
1990-315	2447891-50	1990	KG5H-R	-	-	0.000	RUSN	RU	-	Reentry Test	IKS9906-01	-	-
1990-316	2447891-50	1990	KG5H-R	-	-	0.000	RUSN	RU	-	Reentry Test	IKS9906-01	-	-
1990-317	2447891-50	1990	KG5H-R	-	-	0.000	RUSN	RU	-	Reentry Test	IKS9906-01	-	-
1990-318	2447891-50	1990	KG5H-R	-	-	0.000	RUSN	RU	-	Reentry Test	IKS9906-01	-	-
1990-319	2447891-50	1990	KG5H-R	-	-	0.000	RUSN	RU	-	Reentry Test	IKS9906-01	-	-
1990-320	2447891-50	1990	KG5H-R	-	-	0.000	RUSN	RU	-	Reentry Test	IKS9906-01	-	-
1990-321	2447891-50	1990	KG5H-R	-	-	0.000	RUSN	RU	-	Reentry Test	IKS9906-01	-	-
1990-322	2447891-50	1990	KG5H-R	-	-	0.000	RUSN	RU	-	Reentry Test	IKS9906-01	-	-
1990-323	2447891-50	1990	KG5H-R	-	-	0.000	RUSN	RU	-	Reentry Test	IKS9906-01	-	-
1990-324	2447891-50	1990	KG5H-R	-	-	0.000	RUSN	RU	-	Reentry Test	IKS9906-01	-	-
1990-325	2447891-50	1990	KG5H-R	-	-	0.000	RUSN	RU	-	Reentry Test	IKS9906-01	-	-
1990-004	2447910-04	1990 Jan 16 1252:00	Kosmos 11K65H	-	65061-247	0.800	UNKS	US	G	Sat LED 0	AK15/RAEX	Polyot	-
1990-012	2447920-19	1990 Feb 6 1630:00	Kosmos 11K65H	-	53711-237	0.810	UNKS	US	G	Sat LED 0	AK15/RAEX	Polyot	-
1990-017	2447929-37	1990 Feb 27 0269:42	Kosmos 11K65H	-	47161-248	0.800	UNKS	US	G	Sat LED 0	PL38	Polyot	-
1990-023	2447970-52	1990 Mar 20 0026:22	Kosmos 11K65H	-	65091-269	0.800	UNKS	US	G	Sat LED 0	AK15/RAEX	Polyot	-
1990-029	2447987-65	1990 Apr 6 0313:00	Kosmos 11K65H	-	53728-199	0.480	UNKS	US	G	Sat LED 0	AK15/RAEX	Polyot	-
1990-036	2448002-28	1990 Apr 20 1641:06	Kosmos 11K65H	-	65091-263	0.800	UNKS	US	G	Sat LED 0	AK15/RAEX	Polyot	-
1990-038	2448007-04	1990 Apr 26 1300:00	Kosmos 11K65H	-	53711-249	1.045	UNKS	US	G	Sat LED 0	AK15/RAEX	Polyot	-
1990-078	2448132-16	1990 Aug 28 1946:00	Kosmos 11K65H	-	65094-403	0.585	UNKS	US	G	Sat LED 0	AK15/RAEX	Polyot	-
1990-083	2448146-75	1990 Sep 14 0559:07	Kosmos 11K65H	-	47126-203	0.800	UNKS	US	G	Sat LED 0	AK15/RAEX	Polyot	-
1990-111	2448255-83	1990 Dec 10 0754:59	Kosmos 11K65H	-	-	0.000	RUSN	RU	-	Reentry Test	IKS9906-01	-	-
1991-503	2448256-50	1991	KG5H-R	-	-	0.000	RUSN	RU	-	Reentry Test	IKS9906-01	-	-
1991-504	2448256-50	1991	KG5H-R	-	-	0.000	RUSN	RU	-	Reentry Test	IKS9906-01	-	-
1991-506	2448256-50	1991	KG5H-R	-	-	0.000	RUSN	RU	-	Reentry Test	IKS9906-01	-	-
1991-509	2448256-50	1991	KG5H-R	-	-	0.000	RUSN	RU	-	Reentry Test	IKS9906-01	-	-
1991-509	2448256-50	1991	KG5H-R	-	-	0.000	RUSN	RU	-	Reentry Test	IKS9906-01	-	-
1991-508	2448256-50	1991	KG5H-R	-	-	0.000	RUSN	RU	-	Reentry Test	IKS9906-01	-	-
1991-509	2448256-50	1991	KG5H-R	-	-	0.000	RUSN	RU	-	Reentry Test	IKS9906-01	-	-
1991-510	2448256-50	1991	KG5H-R	-	-	0.000	RUSN	RU	-	Reentry Test	IKS9906-01	-	-
1991-511	2448256-50	1991	KG5H-R	-	-	0.000	RUSN	RU	-	Reentry Test	IKS9906-01	-	-
1991-512	2448256-50	1991	KG5H-R	-	-	0.000	RUSN	RU	-	Reentry Test	IKS9906-01	-	-
1991-513	2448256-50	1991	KG5H-R	-	-	0.000	RUSN	RU	-	Reentry Test	IKS9906-01	-	-
1991-514	2448256-50	1991	KG5H-R	-	-	0.000	RUSN	RU	-	Reentry Test	IKS9906-01	-	-
1991-515	2448256-50	1991	KG5H-R	-	-	0.000	RUSN	RU	-	Reentry Test	IKS9906-01	-	-
1991-516	2448256-50	1991	KG5H-R	-	-	0.000	RUSN	RU	-	Reentry Test	IKS9906-01	-	-
1991-006	2448256-50	1991	KG5H-R	-	-	0.000	RUSN	RU	-	Reentry Test	IKS9906-01	-	-
1991-007	2448256-50	1991	KG5H-R	-	-	0.000	RUSN	RU	-	Reentry Test	IKS9906-01	-	-
1991-009	2448256-50	1991	KG5H-R	-	-	0.000	RUSN	RU	-	Reentry Test	IKS9906-01	-	-
1991-013	2448256-50	1991	KG5H-R	-	-	0.000	RUSN	RU	-	Reentry Test	IKS9906-01	-	-
1991-019	2448313-70	1991 Feb 26 0453:00	Kosmos 11K65H	-	47187-204	0.480	UNKS	US	G	Sat LED 0	AK15/RAEX	Polyot	-
1991-021	2448328-31	1991 Feb 26 0453:06	Kosmos 11K65H	-	47168-264	0.800	UNKS	US	G	Sat LED 0	AK15/RAEX	Polyot	-
1991-029	2448335-10	1991 Mar 12 1929:04	Kosmos 11K65H	-	65048-406	0.826	UNKS	US	G	Sat LED 0	PL38	Polyot	-
1991-029	2448335-10	1991 Mar 19 1430:00	Kosmos 11K65H	-	53448-417	0.750	UNKS	US	G	Sat LED 0	AK15/RAEX	Polyot	-
1991-041	2448342-81	1991 Apr 16 0721:42	Kosmos 11K65H	-	47148-401	0.800	UNKS	US	G	Sat LED 0	AK15/RAEX	Polyot	-
1991-041	2448418-74	1991 Apr 11 0541:59	Kosmos 11K65H	-	47159-819	0.800	UNKS	US	G	Sat LED 0	AK15/RAEX	Polyot	-
1991-042	2448418-74	1991 Apr 11 0541:59	Kosmos 11K65H	-	65061-262	1.040	UNKS	US	G	Sat LED 0	AK15/RAEX	Polyot	-
1991-042	2448433-06	1991 Jun 25 1320:00	Kosmos 11K65H	-	53775-429	0.800	UNKS	US	G	Sat LED 0	AK15/RAEX	Polyot	-
1991-059	2448450-08	1991 Aug 12 1235:46	Kosmos 11K65H	-	53775-429	0.750	UNKS	US	G	Sat LED 0	AK15/RAEX	Polyot	-
1991-072	2448450-08	1991 Oct 10 1400:00	Kosmos 11K65H	-	65048-409	0.800	UNKS	US	G	Sat LED 0	AK15/RAEX	Polyot	-
1991-081	2448527-85	1992 Nov 27 0330:26	KG5H-R	-	-	0.000	RUSN	RU	-	Reentry Test	IKS9906-01	-	-
1992-303	2448621-50	1992	KG5H-R	-	-	0.000	RUSN	RU	-	Reentry Test	IKS9906-01	-	-
1992-304	2448621-50	1992	KG5H-R	-	-	0.000	RUSN	RU	-	Reentry Test	IKS9906-01	-	-
1992-305	2448621-50	1992	KG5H-R	-	-	0.000	RUSN	RU	-	Reentry Test	IKS9906-01	-	-
1992-306	2448621-50	1992	KG5H-R	-	-	0.000	RUSN	RU	-	Reentry Test	IKS9906-01	-	-
1992-307	2448621-50	1992	KG5H-R	-	-	0.000	RUSN	RU	-	Reentry Test	IKS9906-01	-	-
1992-308	2448621-50	1992	KG5H-R	-	-	0.000	RUSN	RU	-	Reentry Test	IKS9906-01	-	-
1992-309	2448621-50	1992	KG5H-R	-	-	0.000	RUSN	RU	-	Reentry Test	IKS9906-01	-	-
1992-008	2448670-42	1992 Feb 17 2205:08	Kosmos 11K65H	-	65075-418	0.800	UNKS	US	G	Sat LED 0	IKS9305-11	Polyot	-
1992-012	2448691-44	1992 Mar 9 2235:59	Kosmos 11K65H	-	53775-423	0.800	UNKS	US	G	Sat LED 0	IKS9305-11	Polyot	-
1992-020	2448727-80	1992 Apr 15 0717:43	Kosmos 11K65H	-	47175-419	0.480	UNKS	US	G	Sat LED 0	IKS9305-11	Polyot	-
1992-030	2448776-54	1992 Jun 3 0050:30	Kosmos 11K65H	-	53742-114	0.480	UNKS	US	G	Sat LED 0	IKS9305-11	Polyot	-
1992-036	2448805-34	1992 Jul 1 2016:22	Kosmos 11K65H	-	65072-427	0.800	UNKS	US	G	Sat LED 0	IKS9305-11	Polyot	-
1992-053	2448846-74	1992 Aug 12 0544:01	Kosmos 11K65H	-	65075-421	0.800	UNKS	US	G	Sat LED 0	IKS9317-22	Polyot	-
1992-073	2448924-94	1992 Oct 29 1040:33	Kosmos 11K65H	-	65075-424	0.800	UNKS	US	G	Sat LED 0	IKS9305-11	Polyot	-
1993-304	2448957-50	1993	KG5H-R	-	-	0.000	RUSN	RU	-	Reentry Test	IKS9906-01	-	-
1993-305	2448957-50	1993	KG5H-R	-	-	0.000	RUSN	RU	-	Reentry Test	IKS9906-01	-	-
1993-306	2448957-50	1993	KG5H-R	-	-	0.000	RUSN	RU	-	Reentry Test	IKS9906-01	-	-
1993-307	2448957-50	1993	KG5H-R	-	-	0.000	RUSN	RU	-	Reentry Test	IKS9906-01	-	-
1993-308	2448957-50	1993	KG5H-R	-	-	0.000	RUSN	RU	-	Reentry Test	IKS9906-01	-	-
1993-001	2448959-97	1993 Jan 12 1110:17	Kosmos 11K65H	-	53775-426	0.800	UNKS	US	G	Sat LED 0	AK15/RAEX	Polyot	-
1993-008	2449027-62	1993 Feb 9 0256:56	Kosmos 11K65H	-	47175-428	0.800	UNKS	US	G	Sat LED 0	AK15/RAEX	Polyot	-

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	OrbPay	Agency	Launch_Code	Group	Category	LTCite	Cite	Notes
1995-020	2448079.29	1993 Apr 1 1857:26	Kosmos 11K65H	-	47175-431	0.800	WISR	DS	G	Sat LED 0	IK9317-20	Polyot	-
1995-036	2449154.68	1993 Jun 16 0417:00	Kosmos 11K65H	-	47138-601	0.800	WISR	DS	G	Sat LED 0	IK9317-20	Polyot	-
1995-067	2449277.04	1993 Oct 26 1300:04	Kosmos 11K65H	-	65065-624	0.750	WISR	DS	G	Sat LED 0	IK9322-23	Polyot	-
1995-070	2449294.01	1993 Nov 2 1210:09	Kosmos 11K65H	-	53735-608	0.800	WISR	DS	G	Sat LED 0	IK9322-23	Polyot	-
1994-501	2449352.50	1994	KB5H-R	-	-	0.000	WISR	MU	-	Reentry Test	IK9306-01	-	-
1994-502	2449352.50	1994	KB5H-R	-	-	0.000	WISR	MU	-	Reentry Test	IK9306-01	-	-
1994-024	2449488.59	1994 Apr 26 0214:15	Kosmos 11K65H	-	53735-614	0.800	WISR	DS	G	Sat LED 0	IK9301-24	AVHP	-
1994-041	2449577.72	1994 Jul 14 0513:30	Kosmos 11K65H	-	65035-612	0.842	WISR	DS	G	Sat LED 0	IK9301-24	PL38	-
1994-045	2449577.33	1994 Aug 2 2000:01	Kosmos 11K65H	-	47138-613	0.900	WISR	DS	G	Sat LED 0	IK9301-24	AVHP	-
1994-061	2449623.08	1994 Sep 27 1400:00	Kosmos 11K65H	-	47138-616	0.570	WISR	DS	G	Sat LED 0	IK9301-24	AVHP	-
1994-083	2449706.72	1994 Dec 20 0511:01	Kosmos 11K65H	-	53735-617	0.800	WISR	DS	G	Sat LED 0	IK9301-24	AVHN	-
1995-002	2449741.66	1995 Jan 24 0354:22	Kosmos 11K65H	-	53735-620	0.940	WISR	DS	G	Sat LED 0	IK9301-24	AVHN	-
1995-008	2449779.04	1995 Mar 2 1300:00	Kosmos 11K65H	-	65065-627	1.110	WISR	DS	G	Sat LED 0	IK9305-47	TLE	-
1995-012	2449788.67	1995 Mar 22 0409:03	Kosmos 11K65H	-	47138-622	0.800	WISR	DS	G	Sat LED 0	IK9310-34	-	-
1995-032	2449803.63	1995 Jul 5 0309:03	Kosmos 11K65H	-	53765-638	0.840	WISR	DS	G	Sat LED 0	IK9310-34	-	-
1995-052	2449896.64	1995 Oct 6 0323:10	Kosmos 11K65H	-	47165-625	0.800	WISR	UP40	G	Sat LED 0	IK9310-34	-	-
1995-072	2450023.50	1995 Nov 27	KB5H-R	-	-	0.000	WISR	MU	-	Reentry Test	IK9306-01	-	-
1996-502	2450082.50	1996	KB5H-R	-	-	0.000	WISR	MU	-	Reentry Test	IK9306-01	-	-
1996-009	2450099.15	1996 Jan 16 1533:45	Kosmos 11K65H	-	47187-201	0.800	WISR	DS	G	Sat LED 0	IK9306-01	-	-
1996-025	2450138.04	1996 Apr 24 1300:01	Kosmos 11K65H	-	47187-213	0.750	WISR	DS	G	Sat LED 0	IK9302-23	-	-
1996-052	2450332.03	1996 Sep 5 1247:59	Kosmos 11K65H	-	53759-626	0.811	WISR	DS	G	Sat LED 0	IK9318-23	AVHN	-
1996-071	2450437.78	1996 Dec 20 0643:58	Kosmos 11K65H	-	65065-633	0.800	WISR	DS	G	Sat LED 0	IK9326-30	-	-
1997-501	2450448.50	1997	KB5H-R	-	-	0.000	WISR	MU	-	Reentry Test	IK9306-01	-	-
1997-502	2450448.50	1997	KB5H-R	-	-	0.000	WISR	MU	-	Reentry Test	IK9306-01	-	-
1997-017	2450556.04	1997 Apr 17 1303:21	Kosmos 11K65H	-	53765-635	0.800	WISR	DS	G	Sat LED 0	IK9708-36	-	-
1997-052	2450715.20	1997 Sep 23 1644:51	Kosmos 11K65H	-	47165-637	0.914	WISR	DS	G	Sat LED 0	IK9310-34	-	-
1998-072	2450813.50	1998 Dec 10 1157:07	Kosmos 11K65H	-	53713-320	0.800	WISR	MU	G	Reentry Test	IK9306-01	-	-
1998-076	2451172.33	1998 Dec 24 2002:19	Kosmos 11K65H	-	47164-504	0.900	WISR	DS	G	Sat LED 0	IK9302-17	-	-
1999-022	2451287.35	1999 Apr 28 2030:00	Kosmos 11K65H	-	65035-413	0.505	WISR	DS	G/OC	Sat LED 0	IK9306-01	-	-
1999-045	2451417.00	1999 Aug 26 1202:15	Kosmos 11K65H	-	65021-703	0.800	WISR	DS	G	Sat LED 0	IK9310-34	-	-
1999-557	2451418.31	1999 Aug 27 1919:59	KB5H-R	-	-	0.000	WISR	HF	-	Reentry Test	RML	Todd, D-pc	or Aug 29
2000-033	2451723.94	2000 Jun 28 1037:42	Kosmos 11K65H	-	53752-105	0.526	WISR	DS	-	Sat SS0 0	IK0008-25	-	-
2000-039	2451741.00	2000 Jul 15 1200:00	Kosmos 11K65H	-	47165-631	0.699	WISR	DS	G/OC	Sat LED 0	IK0009-29	-	-
2000-074	2451869.46	2000 Nov 20 2300:00	Kosmos 11K65H	-	47165-631	2.365	WISR	UP40	G	Sat LED 0	IK0101-21	-	-
2001-023	2452099.13	2001 Jun 6 1508:42	Kosmos 11K65H	-	65013-318	0.800	WISR	DS	G	Sat LED 0	IK0106-21	-	-
2002-586	2452274.50	2002 May 28 1814:41	Kosmos 11K65H	-	53721-702	0.800	WISR	HF	G	Reentry Test	RML	www.phototbase.com	-
2002-028	2452423.28	2002 Jul 6 0635:41	Kosmos 11K65H	-	53721-704	0.450	WISR	DS	G	Sat LED 0	IK0207-36	-	-
2002-036	2452453.77	2002 Sep 26 1427:14	Kosmos 11K65H	-	65021-706	0.570	WISR	DS	G	Sat LED 0	IK0211-40	-	-
2002-046	2452544.10	2002 Nov 28 0307:07	Kosmos 11K65H	-	53773-802	0.154	WISR	DS	G/OC	Sat SS0 0	IK0308-54	-	-
2003-054	2452568.75	2003 Jun 4 1923:52	Kosmos 11K65H	-	53723-708	0.800	WISR	DS	G	Sat LED 0	IK0310-29	-	-
2003-023	2452595.51	2003 Aug 19 1030:45	Kosmos 11K65H	-	65052-103	0.450	WISR	DS	G	Sat LED 0	IK0311-56	-	-
2003-042	2452690.76	2003 Sep 27 0611:44	Kosmos 11K65H	-	65013-301	0.460	WISR	DS	G/OC	Sat SS0 0	RML	-	-
2003-056	2452929.94	2003 Dec 24 1746:28	Kosmos 11K65H	-	65013-301	0.900	WISR	NS	G	Reentry Test	IK0409-27	-	-
2004-029	2453272.13	2004 Jul 22 1746:28	Kosmos 11K65H	-	53773-805	0.520	WISR	DS	G	Sat LED 0	IK0411-39	-	-
2004-032	2453272.13	2004 Sep 23 1507:36	Kosmos 11K65H	-	53773-805	0.400	WISR	DS	G	Sat LED 0	RML	-	-
2005-864	2453370.50	2005 Jan 20 0300:07	KB5H-R	-	-	0.000	WISR	NS	-	Reentry Test	IK0503-17	-	-
2005-002	2453670.69	2005 Oct 27 0852:26	Kosmos 11K65H	-	47105-411	0.850	WISR	DS	G/OC	Sat LED 0	IK0503-43	-	-
2005-043	2453726.32	2006 Dec 31 1934:20	Kosmos 11K65H	-	47105-411	0.650	WISR	DS	G/OC	Sat SS0 0	IK0602-24	-	-
2005-046	2453848.15	2006 Apr 20 1540:00	KB5H-R	-	65087-215	0.800	WISR	NS	G	Reentry Test	IK0602-24	-	-
2005-060	2454099.08	2006 Aug 19 1400:19	Kosmos 11K65H	-	53727-216 SL	0.770	WISR	DS	G/OC	Sat SS0 0	IK0702-19	-	-
2007-030	2454284.32	2007 Jul 13 0338:41	Kosmos 11K65H	-	47163-313 SL	0.770	WISR	DS	G/OC	Sat SS0 0	IK0709-16	-	-
2007-038	2454355.55	2007 Sep 11 1305:06	Kosmos 11K65H	-	53765-632 SL	0.820	WISR	DS	G/OC	Sat SS0 0	IK0711-16	-	-
2007-083	2454405.64	2007 Nov 1 0051:44	Kosmos 11K65H	-	53765-632 SL	0.770	WISR	DS	G/OC	Sat SS0 0	IK0801-26	-	-
2008-014	2454553.22	2008 Mar 27 1716:18	Kosmos 11K65H	-	53713-316 SL	0.770	WISR	DS	G/OC	Sat SS0 0	IK0805-44	-	-
2008-031	2454636.78	2008 Jun 19 0636:46	Kosmos 11K65H	-	53781-708 KL	0.666	WISR	DS	G/OC	Sat LED 0	IK0808-43	-	-
2008-036	2454669.61	2008 Jul 22 0240:09	Kosmos 11K65H	-	53752-101 SL	0.770	WISR	DS	G/OC	Sat SS0 0	IK0809-31	-	-
2009-039	2455033.67	2009 Jul 21 0357:43	Kosmos 11K65H	-	47181-710	0.870	WISR	DS	G	Sat LED 0	IK0909-36	-	-
2010-017	2455313.55	2010 Apr 27 0105:09	Kosmos 11K65H	-	47181-707	0.820	WISR	DS	G	Sat LED 0	IK1006-53	-	-



Launch

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Mission	FlightCode	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee_Km	Range_Km	Dest
1960-501	2437232.16	1960 Oct 24 1545	R-16	-	LD1-3T	8K64 LKI-1	MGCh 8F17	Medellin disaster	-	MIP-5	LC01/3	-	-	0	-	(Kura)
1961-443	2437333.29	1961 Feb 2 1900	R-16	-	4L-5T 3L	8K64 LKI-1	MGCh 8F17	-	-	MIP-5	LC01/3	-	-	1000?	2200	(Kura)
1961-589	2437362.08	1961 Mar 3 1359:19	R-16	-	4L-5T	8K64 LKI-2	MGCh 8F17	-	-	MIP-5	LC01	-	-	1210?	-	(Kura)
1961-5100	2437392.09	1961 Apr 2 1406	R-16	-	5L-7T	8K64 LKI-3	MGCh 8F17	-	-	MIP-5	LC01	-	-	1210?	-	(Kura)
1961-5105	2437405.08	1961 Apr 15 1358:29	R-16	-	5L-7T	8K64 LKI-4	MGCh 8F17	-	-	MIP-5	LC01	-	-	40?	-	(Kura)
1961-5106	2437411.12	1961 Apr 21 1459	R-16	-	6L-11T	8K64 LKI-5	MGCh 8F17	-	-	MIP-5	LC01	-	-	0?	-	(Kura)
1961-5134	2437436.31	1961 May 24 1923:27	R-16	-	6L-11T	8K64 LKI-6	MGCh 8F17	-	-	MIP-5	LC01	-	-	0?	-	(Kura)
1961-5128	2437443.64	1961 May 24 0318:06	R-16	-	9L-9T	8K64 LKI-7	MGCh 8F17	-	-	MIP-5	LC01/4	-	-	0?	6294	(Kura)
1961-5165	2437463.23	1961 Jun 2 1724:30	R-16	-	10L-10T	8K64 LKI-8	MGCh 8F17	-	-	MIP-5	LC01/4	-	-	0?	-	(Kura)
1961-5148	2437467.25	1961 Jun 6 1800	R-16	-	11L-13T	8K64 LKI-9	MGCh 8F17	-	-	MIP-5	LC01/4	-	-	0?	-	(Kura)
1961-5153	2437466.82	1961 Jun 16 0747:23	R-16	-	14L-16T	8K64 LKI-10	MGCh 8F17	-	-	MIP-5	LC01/4	-	-	0?	-	(Kura)
1961-5171	2437502.83	1961 Jul 22 0755	R-16	-	13L-15T	8K64 LKI-11	MGCh 8F17	-	-	MIP-5	LC01/4	-	-	0?	5243	(Kura)
1961-5231	2437520.67	1961 Aug 9 0405	R-16	-	12L-14T	8K64 LKI-12	MGCh 8F17	-	-	MIP-5	LC01/4	-	-	1210?	-	(Kura)
1961-5188	2437524.67	1961 Aug 13 0400	R-16	-	21L	8K64 LKI-13	MGCh 8F17	-	-	MIP-5	LC01/4	-	-	1210?	-	(Kura)
1961-5266	2437546.62	1961 Sep 4 0246	R-16	-	23L	8K64 LKI-14	MGCh 8F17	-	-	MIP-5	LC01/4	-	-	1210?	-	(Kura)
1961-5275	2437552.49	1961 Sep 13 2345:7	R-16	-	22L	8K64 LKI-15	MGCh 8F17	-	-	MIP-5	LC01/4	-	-	1210?	12001	(Kura)
1961-5288	2437560.16	1961 Sep 17 1545	R-16	-	15L-17T	8K64 LKI-16	MGCh 8F17	-	-	MIP-5	LC01/4	-	-	1210?	-	Pacific
1961-5205	2437565.16	1961 Sep 22 1545	R-16	-	16L-18T	8K64 LKI-17	MGCh 8F17	-	-	MIP-5	LC01/4	-	-	80?	326	(Pacific)
1961-5327	2437582.37	1961 Oct 9 2047	R-16	-	21L	8K640 LKI-1	-	-	-	MIP-5	LC01/4	-	-	1210?	6293	(Kura)
1961-5219	2437584.15	1961 Oct 11 1540	R-16	-	21L	8K640 LKI-2	-	-	-	MIP-5	LC01/4	-	-	0?	-	(Kura)
1961-5394	2437586.21	1961 Oct 15 1700	R-16	-	4L	8K640 LKI-3	-	-	-	MIP-5	LC01	-	-	1210?	-	Pacific
1961-5341	2437595.21	1961 Oct 22 1700	R-16	-	3L	8K640 LKI-4	-	-	-	MIP-5	LC01	-	-	1210?	-	Pacific
1961-5358	2437601.15	1961 Oct 28 1540	R-16	-	5L	8K640 LKI-5	-	-	-	MIP-5	LC01	-	-	1210?	-	Pacific
1961-5391	2437632.84	1961 Nov 29 0815	R-16	-	5L	8K640 LKI-6	-	-	-	MIP-5	LC01	-	-	1210?	-	Pacific
1961-5245	2437635.46	1961 Dec 1 2329	R-16	-	E 22S 01-01T	8K640 UBP-1	Pad explosion	-	-	MIP-5	LC01/3	-	-	0	-	(Kura)
1962-506	2437668.97	1962 Jan 4 1115	R-16	-	E 22S 02-12T	8K64 UBP-2	-	-	-	MIP-5	LC01/4	-	-	1210?	-	(Kura)
1962-512	2437677.42	1962 Jan 12 2200	R-16	-	5L	8K640 LKI-6	-	-	-	MIP-5	LC01/4	-	-	1210?	-	(Kura)
1962-517	2437681.00	1962 Jan 16 1205	R-16	-	7L	8K640 LKI-7	-	-	-	MIP-5	LC01/4	-	-	1210?	-	(Kura)
1962-516	2437682.00	1962 Jan 17 1200	R-16	-	5L	8K640 LKI-8	-	-	-	MIP-5	LC01/4	-	-	1210?	-	(Kura)
1962-516	2437690.04	1962 Jan 25 1300	R-16	-	5L	8K640 LKI-9	-	-	-	MIP-5	LC01/4	-	-	1210?	-	(Kura)
1962-536	2437727.50	1962 Mar 4	R-16	-	T 22S 01-15T	8K640 K 1 (Kontrol'ny)	-	-	-	MIP-5	LC01/4	-	-	-	-	(Kura)
1962-5194	2437716.59	1962 Jun 1 0210:50	R-16	-	T 22S 02-20T	8K640 K 2 (Kontrol'ny)	-	-	-	MIP-5	LC01/4	-	-	-	-	(Kura)
1962-5173	2437823.17	1962 Jun 13 1600:45	R-16	-	T 22S 03-20T	8K640 K 3 (Kontrol'ny)	-	-	-	MIP-5	LC01/4	-	-	-	-	(Kura)
1962-5111	2437859.10	1962 Jul 13 1424:59	R-16	-	10P	8K640 LKI-10	Silo test	-	-	MIP-5	LC00/8	-	-	0?	-	(Kura)
1962-5252	2437866.66	1962 Jul 21 0421	R-16	-	11L	8K640 LKI-11	-	-	-	MIP-5	LC00/8	-	-	1210?	-	(Kura)
1962-5272	2437877.09	1962 Jul 31 0410	R-16	-	T 22S 04	8K640 K 6	-	-	-	MIP-5	LC01/4	-	-	1210?	-	(Kura)
1962-5345	2437885.17	1962 Aug 27 1600	R-16	-	12L	8K640 K 9	-	-	-	MIP-5	LC00/8	-	-	1210?	-	(Kura)
1962-5379	2437943.15	1962 Oct 5 1511:35	R-16	-	T 22S 05-20T	8K640 LKI-12	Salvo	-	-	MIP-5	LC00/8	-	-	1210?	-	(Kura)
1962-5380	2437943.15	1962 Oct 5 1529	R-16	-	T 22S 06-20T	8K640 UBP-1	MGCh 8F115	-	-	MIP-5	LC00/8	-	-	1210?	-	(Kura)
1962-5381	2437943.15	1962 Oct 11 01:38	R-16	-	T 22S 07-20T	8K640 UBP-2	MGCh 8F115	-	-	MIP-5	LC01/4	-	-	1210?	-	(Kura)
1962-5385	2437943.07	1962 Oct 14 1545	R-16	-	T 22S 02L	8K640 UBP-3	MGCh 8F115	-	-	MIP-5	LC01/4	-	-	1210?	19500	(Pacific)
1962-5383	2437954.14	1962 Oct 16 1230:35	R-16	-	T 22S 02-16L	8K640 UBP-4	MGCh 8F115	-	-	MIP-5	LC01/4	-	-	1210?	12500	(Pacific)
1962-5386	2437951.15	1962 Oct 17 1539:19	R-16	-	T 22S 02-16L	8K640 UBP-5	MGCh 8F115	-	-	MIP-5	LC01/4	-	-	1210?	-	(Kura)
1962-5383	2437951.15	1962 Oct 17 1539:19	R-16	-	T 22S 02-20T	8K640 UBP-6	MGCh 8F115	-	-	MIP-5	LC01/4	-	-	1210?	-	(Kura)
1962-5486	2437971.52	1962 Nov 27 0263	R-16	-	T 22S 03L	8K640 UBP-7	MGCh 8F116	-	-	MIP-5	LC01/4	-	-	1210?	-	(Kura)
1962-5486	2437983.24	1962 Nov 24 1745:15	R-16	-	T 22S 04L	8K640 UBP-8	MGCh 8F116	-	-	MIP-5	LC01/4	-	-	1210?	-	(Kura)
1962-5203	2438011.24	1962 Nov 26 1745:15	R-16	-	T 22S 05-16L	8K640 UBP-9	MGCh 8F116	-	-	MIP-5	LC01/4	-	-	1210?	8800	(Pacific)
1962-5353	2438011.97	1962 Dec 13 1118:35	R-16	-	T 22S 05-16L	8K640 UBP-10	MGCh 8F116	-	-	MIP-5	LC01/4	-	-	1000?	7300	(Pacific)
1962-5353	2438011.97	1962 Dec 13 1118:35	R-16	-	T 22S 05-16L	8K640 UBP-11	MGCh 8F116	-	-	MIP-5	LC01/4	-	-	1210?	6294	(Kura)
1962-5358	2438015.48	1962 Dec 15 2330:26	R-16	-	T 22S 01-17L	8K640 UBP-12	MGCh 8F116K	-	-	MIP-5	LC01/4	-	-	1210?	6294	(Kura)
1962-5358	2438015.48	1962 Dec 15 2330:26	R-16	-	T 22S 01-17L	8K640 UBP-13	MGCh 8F116K	-	-	MIP-5	LC01/4	-	-	1210?	6294	(Kura)
1962-5124	2438118.65	1963 Mar 30 0230:58	R-16	-	C 22S 01-20T	8K640 UBP-14	MGCh 8F17, 3000	-	-	MIP-5	LC01/4	-	-	1210?	-	(Kura)
1962-5177	2438145.62	1963 Apr 26 0250:58	R-16	-	C 22S 02-20T	8K640 UBP-15	MGCh 8F115	-	-	MIP-5	LC01/4	-	-	1210?	-	(Kura)
1962-5209	2438168.12	1963 Apr 18 1450:01	R-16	-	C 22S 03-20T	8K640 UBP-16	MGCh 8F115	-	-	MIP-5	LC01/4	-	-	1210?	-	(Kura)
1962-5210	2438168.12	1963 Apr 18 1450:03	R-16	-	C 22S 03-20T	8K640 UBP-17	MGCh 8F115	-	-	MIP-5	LC01/4	-	-	1210?	-	(Kura)
1962-5237	2438175.13	1963 Apr 25 1506:17	R-16	-	C 22S 03-20T	8K640 UBP-18	MGCh 8F115	-	-	MIP-5	LC01/4	-	-	1210?	-	(Kura)
1962-5251	2438181.62	1963 Jun 1 0259:54	R-16	-	E 22S 02-15	8K640 UBP-19	MGCh 8F115	-	-	MIP-5	LC01/15	-	-	1210?	-	(Kura)
1962-5164	2438201.68	1963 Jun 21 0413:36	R-16	-	T 22S 01-15	8K640 UBP-20	MGCh 8F116	-	-	MIP-5	LC01/3	-	-	1210?	-	(Kura)
1962-5207	2438209.15	1963 Jun 28 1530:06	R-16	-	T 22S 01-15	8K640 UBP-21	MGCh 8F116	-	-	MIP-5	LC01/3	-	-	1210?	-	(Kura)
1962-5314	2438210.54	1963 Jul 8 1530:12	R-16	-	C 22S 03-20T	8K640 UBP-22	MGCh 8F116	-	-	MIP-5	LC01/3	-	-	1210?	-	(Kura)
1962-5332	2438219.15	1963 Jul 8 1530:12	R-16	-	C 22S 03-20T	8K640 UBP-23	MGCh 8F116	-	-	MIP-5	LC01/3	-	-	1210?	-	(Kura)
1962-5333	2438220.15	1963 Jul 9 1530:04	R-16	-	C 22S 03-20T	8K640 UBP-24	MGCh 8F116	-	-	MIP-5	LC01/3	-	-	1210?	-	(Kura)
1962-5647	2438222.50	1963 Jul 12	R-16	-	C 22S 03-20T	8K640 UBP-25	MGCh 8F116	-	-	MIP-5	LC01/3	-	-	1210?	-	(Kura)
1962-5647	2438222.50	1963 Jul 12	R-16	-	C 22S 03-20T	8K64 42 RD UBP-1	MGCh 8F116	-	-	NTAG	LC355/23	-	-	1210?	-	(Kura)
1962-5647	2438237.62	1963 Jul 27 0300	R-16	-	C 22S 03-20T	8K640 UBP-26	MGCh 8F116	-	-	MIP-5	LC01/3	-	-	1210?	-	(Kura)
1962-5387	2438254.71	1963 Aug 13 0459:47	R-16	-	C 22S 01-02T	8K640 UBP-27	MGCh 8F116	-	-	MIP-5	LC01/3	-	-	75?	-	(Kura)
1962-5648	2438265.50	1963 Aug 20 0730	R-16	-	C 22S 01-02T	8K640 UBP-28	MGCh 8F116	-	-	MIP-5	LC01/3	-	-	1210?	-	(Kura)
1962-5415																

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Mission	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee_Km	Range_Km	Dest
1964-5270	2438545-77	1964 May 30 0631	R-160	-	R 22503-20T	8K640 UBP-42 K	-	MIP-5	LC41/4	-	-	12107	-	Kura
1964-5397	2438607-84	1964 Jul 31 0805	R-160	-	R 22504-20T	8K640 UBP-43	-	MIP-5	LC41/4	-	-	12107	-	Kura
1964-5463	2438649-23	1964 Sep 10 1725	R-160	-	R 22504-20T	8K640 UBP-44	-	MIP-5	LC41/3	-	-	12107	-	Kura
1964-5483	2438663-75	1964 Sep 25 0659	R-160	-	G 22501-13T	8K640 UBP-45	Keat	MIP-5	LC80/8	-	-	12107	-	Kura
1964-5489	2438664-72	1964 Sep 26 0659	R-160	-	R 22505-20T	8K640 UBP-46	Climate Test	MIP-5	LC80/6	-	-	12107	-	Kura
1964-5813	2438727-50	1964 Nov 28 0659	R-160	-	-	8K640 54 RD UBP-4	-	TEK	LC15/33	-	-	12107	-	Kura
1964-5815	2438747-71	1964 Dec 15 0459	R-160	-	R 22604-20T	8K640 UBP-47	-	MIP-5	LC41/3	-	-	12107	-	Kura
1964-5704	2438765-71	1964 Dec 26 0600	R-160	-	G 22602-20T	8K640 UBP-48	-	MIP-5	LC41/3	-	-	12107	-	Kura
1965-5104	2438817-62	1965 Feb 26 0300	R-160	-	U 22501-20T	8K640 UBP-49 PBG	-	MIP-5	LC41/4	-	-	12107	-	Kura
1965-5147	2438829-75	1965 Mar 10 0600	R-160	-	R 22601-02T	8K640 UBP-50	-	MIP-5	LC41/4	-	-	12107	-	Kura
1965-5207	2438849-67	1965 Mar 30 0401	R-160	-	T 22601-12TB	8K640 UBP-51	-	MIP-5	LC80/6	-	-	12107	-	Kura
1965-5225	2438862-81	1965 Apr 12 0730	R-160	-	U 22601-20T	8K640 UBP-52	-	MIP-5	LC80/6	-	-	12107	-	Kura
1965-5252	2438877-04	1965 Apr 26 1300	R-160	-	G 22602-20T	8K640 UBP-53	-	MIP-5	LC41/4	-	-	12107	-	Kura
1965-4658	2438879-04	1965 Apr 28 1258	R-160	-	U 22603-08T	8K640 UBP-54 K	-	MIP-5	LC41/4	-	-	07	-	Kura
1965-5304	2438902-77	1965 May 22 0629	R-160	-	G 22603-08T	8K640 UBP-55	-	MIP-5	LC80/6	-	-	920	-	Kura
1965-5318	2438906-60	1965 May 28 0223	R-160	-	T 22601-17T	8K640 UBP-56	-	MIP-5	LC80/6	-	-	743	-	Kura
1965-4659	2438940-72	1965 Jun 29 0511	R-160	-	G 22601-03T	8K640 UBP-57	-	MIP-5	LC80/6	-	-	07	-	(Kura)
1965-5427	2438962-67	1965 Jul 21 0412	R-160	-	U 22602-20T	8K640 UBP-58	-	MIP-5	LC80/6	-	-	12107	-	Kura
1965-5464	2439003-73	1965 Aug 31 0631	R-160	-	U 22602-20T	8K640 UBP-59 K	-	MIP-5	LC41/3	-	-	1007	-	(Kura)
1965-5800	2439021-62	1965 Sep 18 0255	R-160	-	T 22601-07T	8K640 UBP-60 PBG	-	MIP-5	LC41/3	-	-	12107	-	Kura
1965-5812	2439028-75	1965 Sep 25 0659	R-160	-	U 22603-09T	8K640 UBP-61	-	MIP-5	LC41/4	-	-	12107	-	Kura
1965-5828	2439033-81	1965 Sep 30 0730	R-160	-	U 22603-20T	8K640 UBP-62 K	-	MIP-5	LC41/4	-	-	12107	-	Kura
1965-5895	2439068-69	1965 Nov 4 0432	R-160	-	G 22601-06T	8K640 UBP-64	-	TEK	LC15/2	-	-	12107	-	Kura
1965-5814	2439076-67	1965 Nov 12 0358	R-160	-	E 22501-10	8K640 54 RD UBP-6	Verification	MIP-53	LC41/3	-	-	12107	-	Kura
1965-5798	2439114-50	1965 Dec 20	R-160	-	G 22602-10T	8K640 UBP-65	-	MIP-53	-	-	-	12107	-	Kura
1965-5857	2439115-79	1965 Dec 23 0700	R-160	-	T 22602-04	8K640 UBP-66	Verification	MIP-53	-	-	-	12107	-	Kura
1965-5896	2439116-79	1965 Dec 24 0700	R-160	-	T 22602-05	8K640 UBP-64	-	MIP-53	-	-	-	12107	-	Kura
1965-5868	2439119-50	1965 Dec 25	R-160	-	T 22602-06TB	8K640 5 RD UBP-1	-	TEK	LC29/16	-	-	12107	-	Kura
1965-5800	2439119-50	1965 Dec 25 0716	R-160	-	U 22601-06T	8K640 UBP-66	-	MIP-5	LC41/4	-	-	12107	-	Kura
1965-5897	2439119-50	1965 Dec 26 1243	R-160	-	U 22601-05T	8K640 UBP-67	-	MIP-5	LC41/3	-	-	12107	-	Kura
1965-5700	2439121-03	1966 Jan 31 0736	R-160	-	G 22604-13T	8K640 UBP-68	-	MIP-5	LC41/4	-	-	12107	-	Kura
1966-387	2439156-82	1966 Mar 17 1605	R-160	-	U 22601-20T	8K640 UBP-69	-	MIP-5	LC80/7	-	-	12107	-	Kura
1966-5173	2439202-17	1966 Mar 24 0949	R-160	-	G 22602-03T	8K640 UBP-70	-	MIP-53	LC41/4	-	-	407	-	(Kura)
1966-5162	2439213-80	1966 Mar 29 0713	R-160	-	G 22602-04T	8K640 UBP-71	-	MIP-5	LC41/4	-	-	12107	-	Kura
1966-5794	2439233-76	1966 Apr 12 0747	R-160	-	G 22602-01T	8K640 UBP-72	-	MIP-5	LC41/4	-	-	12107	-	Kura
1966-5216	2439233-76	1966 Apr 15 0649	R-160	-	G 22601-12T	8K640 UBP-74 PBG	-	MIP-5	LC41/4	-	-	12107	-	Kura
1966-5222	2439241-92	1966 Apr 26 0959	R-160	-	U 22604-01T	8K640 UBP-76	-	MIP-5	LC41/4	-	-	12107	-	Kura
1966-5234	2439266-69	1966 May 21 0440	R-160	-	G 22604-01T	8K640 UBP-76	-	MIP-5	LC41/4	-	-	07	-	(Kura)
1966-4659	2439272-79	1966 Jun 8 0416	R-160	-	G 22603-07T	8K640 UBP-75	-	MIP-5	LC41/4	-	-	12107	-	Kura
1966-5789	2439284-66	1966 Jun 8 0252	R-160	-	U 22603-07T	8K640 UBP-76	-	MIP-5	LC80/7	-	-	12107	-	Kura
1966-5329	2439284-66	1966 Jun 8 0252	R-160	-	G 22601-04T	8K640 UBP-77	-	MIP-5	LC80/8	-	-	12107	-	Kura
1966-5342	2439301-87	1966 Jun 25 1329	R-160	-	T 22604-02T	8K640 UBP-79	-	MIP-53	LC80/8	-	-	12107	-	Kura
1966-5358	2439302-76	1966 Jun 25 1329	R-160	-	G 22604-02T	8K640 UBP-79	-	MIP-53	LC80/8	-	-	12107	-	Kura
1966-5768	2439303-96	1966 Jul 5 1122	R-160	-	G 22604-04T	8K640 UBP-87	-	MIP-53	LC41/4	-	-	12107	-	Kura
1966-5766	2439331-79	1966 Jul 25 0700	R-160	-	G 22604-04T	8K640 UBP-88	-	MIP-53	LC41/4	-	-	12107	-	Kura
1966-5432	2439346-60	1966 Aug 9 0203	R-160	-	G 22603-10T	8K640 UBP-80	-	MIP-53	LC80/8	-	-	12107	-	Kura
1966-5454	2439362-74	1966 Aug 25 0548	R-160	-	G 22603-13T	8K640 UBP-80	-	MIP-53	LC41/4	-	-	12107	-	Kura
1966-5764	2439384-89	1966 Sep 15 0915	R-160	-	G 22603-03T	8K640 UBP-89	-	MIP-53	LC41/4	-	-	12107	-	Kura
1966-5768	2439390-75	1966 Sep 22 0527	R-160	-	G 22602-03T	8K640 UBP-89	-	MIP-53	LC41/4	-	-	12107	-	Kura
1966-5768	2439394-50	1966 Sep 27 0527	R-160	-	G 22602-07T	8K640 54 RD UBP-8	-	TEK	LC41/4	-	-	103	30	(Kura)
1966-5768	2439395-75	1966 Sep 27 0530	R-160	-	G 22603-11T	8K640 UBP-84	-	MIP-53	LC15/33	-	-	12107	-	Kura
1966-5817	2439399-75	1966 Oct 1 0644	R-160	-	G 22603-11T	8K640 UBP-84	-	MIP-53	LC41/4	-	-	12107	-	Kura
1966-5762	2439406-98	1966 Oct 1 1145	R-160	-	U 22604-01T	8K640 UBP-85	-	MIP-53	LC80/8	-	-	12107	-	Kura
1966-5847	2439419-74	1966 Oct 20 0547	R-160	-	U 22604-01T	8K640 UBP-86	-	MIP-53	LC80/6	-	-	12107	-	Kura
1966-5846	2439420-69	1966 Oct 22 0433	R-160	-	G 22604-04T	8K640 UBP-87	-	MIP-53	LC41/4	-	-	12107	-	Kura
1966-5763	2439422-75	1966 Oct 24 0600	R-160	-	G 22604-04T	8K640 UBP-87	-	MIP-53	LC41/4	-	-	12107	-	Kura
1966-5871	2439426-70	1966 Oct 28 0442	R-160	-	G 22604-04T	8K640 UBP-87	-	MIP-53	LC41/4	-	-	12107	-	Kura
1966-5774	2439430-69	1966 Nov 1 0434	R-160	-	G 22604-04T	8K640 UBP-88	-	MIP-53	LC41/4	-	-	12107	-	Kura
1966-5766	2439432-75	1966 Nov 3 0600	R-160	-	G 22604-05T	8K640 UBP-88	-	MIP-53	LC41/4	-	-	12107	-	Kura
1966-5893	2439433-66	1966 Nov 4 0349	R-160	-	U 22601-06T	8K640 UBP-89	-	MIP-53	LC41/4	-	-	12107	-	Kura
1966-5826	2439446-80	1966 Nov 17 0705	R-160	-	G 22603-06T	8K640 UBP-90	-	MIP-53	LC41/4	-	-	12107	-	Kura
1966-5851	2439463-64	1966 Nov 24 0315	R-160	-	G 22603-03T	8K640 UBP-91	-	MIP-53	LC41/3	-	-	12107	-	Kura
1966-5765	2439454-75	1966 Nov 25 0600	R-160	-	G 22602-17T	8K640 UBP-93	-	MIP-53	LC41/4	-	-	12107	-	Kura
1966-5864	2439465-68	1966 Nov 26 0415	R-160	-	G 22602-08T	8K640 8 RD UBP-2	-	VRM	LC29/21	-	-	12107	-	Kura
1966-5779	2439465-50	1966 Dec 6	R-160	-	G 22602-16T	8K640 UBP-93	-	MIP-53	LC29/21	-	-	12107	-	Kura
1966-5757	2439467-75	1966 Dec 8 0600	R-160	-	G 22603-18T	8K640 UBP-94	-	MIP-53	LC80/7	-	-	12107	-	Kura
1966-5871	2439467-83	1966 Dec 8 0756	R-160	-	G 22602-12T	8K640 UBP-94	-	MIP-53	LC41/4	-	-	12107	-	Kura
1966-5872	2439468-79	1966 Dec 9 0654	R-160	-	G 22602-14T	8K640 UBP-95	-	MIP-53	LC41/4	-	-	12107	-	Kura
1966-5766	2439469-96	1966 Dec 10 1100	R-160	-	T 22502-04	8K640 UBP-95	-	MIP-53	LC41/4	-	-	12107	-	(Kura)
1966-5758	2439483-75	1966 Dec 23 1205	R-160	-	G 22604-17T	8K640 UBP-96	-	MIP-53	LC25-1B/11	-	-	12107	-	Kura
1966-5755	2439483-00	1966 Dec 24 0600	R-160	-	G 22604-18T	8K640 UBP-97	-	MIP-53	LC41/4	-	-	12107	-	Kura
1967-5739	2439490-50	1967 Dec 26 0600	R-160	-	-	8K640 36 RD UBP-2	-	FRAS	LC25-1B/11	-	-	12107	-	Pacific
1967-5666	2439511-92	1967 Jan 21 1000	R-160	-	G 22603-12T	8K640 UBP-98	-	MIP-53	LC41/4	-	-	12107	-	Kura
1967-5667	2439518-80	1967 Jan 26 0708	R-160	-	G 22603-15T	8K640 UBP-99	R-16 PL67-1	MIP-53	-	-	-	12107	-	Kura
1967-5668	2439524-79	1967 Feb 3 0700	R-160	-	G 22603-08T	8K640 UBP-99	R-16 PL67-2	MIP-53	-	-	-	12107	-	Kura
1967-5681	2439543-79	1967 Feb 22 0700	R-160	-	G 22603-08T	8K640 UBP-99	R-16 PL67-3	MIP-53	-	-	-	107	-	(Kura)
1967-5669	2439560-50	1967 Mar 11	R-160	-	G 22603-17T	8K640 UBP-99	R-16 PL67-6	MIP-53	LC25-1B/11	-	-	12107	-	Kura
1967-5737	2439571-50	1967 Mar 22	R-160	-	-	8K640 42 RD UBP-4	-	WTAG	LC336/3	-	-	12107	-	Kura
1967-5682	2439580-79	1967 Mar 31 0700	R-160	-	T 22501-09	8K640 UBP-99	R-16 PL67-6	MIP-53	-	-	-	12107	-	Kura
1967-5870	2439589-79	1967 Apr 19 0700	R-160	-	G 22603-08T	8K640 UBP-99	R-16 PL67-7	MIP-53	-	-	-	12107	-	Kura
1967-5883	2439602-88	1967 Apr 22 0900	R-160	-	G 22603-08T	8K640 UBP-99	R-16 PL67-8	MIP-53	-	-	-	12107	-	Kura
1967-5871	2439629-83													

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Mission	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee_Km	Range_Km	Dest
1967-5270	2459634.69	1967 May 24 0429	R-160	-	G 22604-05T	8K640 UBP-96	-	MIP-5	LC01/3	-	-	12107	-	Kura
1967-5684	2459636.83	1967 May 26 0800	R-160	-	G 22603-10T	8K640 UBP-P27	R-16 PL67-10	MIP-53	-	-	-	12107	-	Kura
1967-5685	2459663.29	1967 Jun 21 1900	R-160	-	T 22502-02	8K640 UBP-P28	R-16 PL67-11	MIP-53	-	-	-	12107	-	Kura
1967-5686	2459676.21	1967 Jul 3 1700	R-160	-	T 22502-06	8K640 UBP-P29	R-16 PL67-12	MIP-53	-	-	-	12107	-	Kura
1967-5342	2459682.68	1967 Jul 11 0425	R-160	-	T 22502-08	8K640 UBP-97	-	MIP-5	LC01/4	-	-	07	-	Kura
1967-496	2459687.04	1967 Jul 15 1259	R-160	-	T 22503-12	8K640 UBP-98	-	MIP-5	LC01/4	-	-	12107	-	Kura
1967-5738	2459691.50	1967 Jul 20	R-160	-	-	8K64 42 RD UBP-5	-	MIP-5	LC038/12	-	-	12107	-	Kura
1967-5672	2459693.75	1967 Jul 22 0600	R-160	-	G 22604-08T	8K640 UBP-P30	R-16 PL67-13	MIP-53	-	-	-	12107	-	Kura
1967-5687	2459694.00	1967 Jul 22 1200	R-160	-	G 22604-06T	8K640 UBP-P31	R-16 PL67-14	MIP-53	-	-	-	12107	-	Kura
1967-5374	2459710.66	1967 Aug 8 0345	R-160	-	T 22505-17	8K640 UBP-99	R-16 PL67-15	MIP-53	-	-	-	12107	-	Kura
1967-5673	2459713.81	1967 Aug 11 0730	R-160	-	G 22604-11T	8K640 UBP-100	R-16 PL67-16	MIP-53	-	-	-	12107	-	Kura
1967-5674	2459732.66	1967 Aug 30 0345	R-160	-	T 22502-12T	8K640 UBP-P32	-	MIP-53	LC01/4	-	-	12107	-	Kura
1967-5675	2459735.79	1967 Sep 2 0700	R-160	-	T 22603-16T	8K640 UBP-101	-	MIP-53	LC01/4	-	-	12107	-	Kura
1967-5463	2459766.04	1967 Oct 3 1264	R-160	-	T 22503-14T	8K640 UBP-P34	-	MIP-53	LC080/7	-	-	12107	-	Kura
1967-5675	2459768.00	1967 Oct 4 1200	R-160	-	T 22503-01	8K640 UBP-102	R-16 PL67-17	MIP-53	-	-	-	12107	-	Kura
1967-5479	2459772.70	1967 Oct 9 0449	R-160	-	T 22504-16T	8K640 UBP-P35	R-16 PL67-18	MIP-53	-	-	-	12107	-	Kura
1967-5676	2459774.79	1967 Oct 11 0700	R-160	-	T 22503-09	8K640 UBP-P36	-	MIP-53	LC01/4	-	-	12107	-	Kura
1967-5490	2459776.79	1967 Oct 13 0703	R-160	-	T 22502-17T	8K640 UBP-104	-	MIP-53	LC01/4	-	-	12107	-	Kura
1967-5684	2459790.02	1967 Oct 26 1222	R-160	-	T 22501-12T	8K640 UBP-105	R-16 PL67-19	MIP-53	-	-	-	12107	-	Kura
1967-5688	2459796.79	1967 Oct 27 0700	R-160	-	T 22502-18T	8K640 UBP-P37	R-16 PL67-20	MIP-53	-	-	-	12107	-	Kura
1967-5677	2459793.83	1967 Dec 1 0800	R-160	-	T 22501-11T	8K640 UBP-P38	R-16 PL67-21	MIP-53	-	-	-	12107	-	Kura
1967-5689	2459826.88	1967 Dec 7 1041	R-160	-	T 22501-11T	8K640 UBP-P39	R-16 PL67-22	MIP-53	-	-	-	12107	-	Kura
1967-5678	2459831.96	1967 Dec 9 0414	R-160	-	T 22501-13T	8K640 UBP-106	-	MIP-53	LC01/4	-	-	1007	-	Kura
1967-5675	2459833.66	1967 Dec 9 0414	R-160	-	T 22502-16T	8K640 UBP-107	-	MIP-53	LC01/4	-	-	12107	-	Kura
1967-4144	2459836.66	1967 Dec 12 0419	R-160	-	T 22502-07T	8K640 UBP-108	R-16 PL67-23	MIP-53	-	-	-	12107	-	Kura
1967-5679	2459846.67	1967 Dec 22 0409	R-160	-	T 22502-14T	8K640 UBP-P40	R-16 PL67-24	MIP-53	-	-	-	12107	-	Kura
1967-5684	2459849.84	1967 Dec 25 0810	R-160	-	T 22502-02	8K640 UBP-P41	-	MIP-53	LC01/4	-	-	12107	-	Kura
1967-5680	2459851.50	1967 Dec 27	R-160	-	T 22502-15T	8K640 UBP-109	-	MIP-53	LC029	-	-	107	30	Kura
1967-4146	2459851.66	1967 Dec 27 0416	R-160	-	-	8K64 UBP	-	TKR	LC029	-	-	12107	-	Kura
1966-5776	2459855.50	1968	R-160	-	-	8K64 UBP	-	TKR	LC029	-	-	12107	-	Kura
1966-5777	2459855.50	1968	R-160	-	-	8K64 UBP	-	TKR	LC029	-	-	12107	-	Kura
1966-5778	2459855.50	1968	R-160	-	-	8K64 UBP	-	TKR	LC029	-	-	12107	-	Kura
1966-5779	2459855.50	1968	R-160	-	-	8K64 UBP	-	TKR	LC029	-	-	12107	-	Kura
1966-5786	2459855.50	1968	R-160	-	-	8K64 UBP	-	TKR	LC029	-	-	12107	-	Kura
1966-5787	2459855.50	1968	R-160	-	-	8K64 UBP	-	TKR	LC029	-	-	12107	-	Kura
1966-5788	2459855.50	1968	R-160	-	-	8K64 UBP	-	TKR	LC029	-	-	12107	-	Kura
1966-5789	2459855.50	1968	R-160	-	-	8K64 UBP	-	TKR	LC029	-	-	12107	-	Kura
1966-5791	2459855.50	1968	R-160	-	-	8K64 UBP	-	TKR	LC029	-	-	12107	-	Kura
1966-5790	2459855.50	1968	R-160	-	-	8K64 UBP	-	TKR	LC029	-	-	12107	-	Kura
1966-5761	2459855.50	1968	R-160	-	-	8K64 UBP	-	TKR	LC029	-	-	12107	-	Kura
1966-5762	2459855.50	1968	R-160	-	-	8K64 UBP	-	TKR	LC029	-	-	12107	-	Kura
1966-5763	2459855.50	1968	R-160	-	-	8K64 UBP	-	TKR	LC029	-	-	12107	-	Kura
1966-5764	2459855.50	1968	R-160	-	-	8K64 UBP	-	TKR	LC029	-	-	12107	-	Kura
1966-5765	2459855.50	1968	R-160	-	-	8K64 UBP	-	TKR	LC029	-	-	12107	-	Kura
1966-5766	2459855.50	1968	R-160	-	-	8K64 UBP	-	TKR	LC029	-	-	12107	-	Kura
1966-5767	2459855.50	1968	R-160	-	-	8K64 UBP	-	TKR	LC029	-	-	12107	-	Kura
1966-5768	2459855.50	1968	R-160	-	-	8K64 UBP	-	TKR	LC029	-	-	12107	-	Kura
1966-5769	2459855.50	1968	R-160	-	-	8K64 UBP	-	TKR	LC029	-	-	12107	-	Kura
1966-5770	2459855.50	1968	R-160	-	-	8K64 UBP	-	TKR	LC029	-	-	12107	-	Kura
1966-5771	2459855.50	1968	R-160	-	-	8K64 UBP	-	TKR	LC029	-	-	12107	-	Kura
1966-5772	2459855.50	1968	R-160	-	-	8K64 UBP	-	TKR	LC029	-	-	12107	-	Kura
1966-5773	2459855.50	1968	R-160	-	-	8K64 UBP	-	TKR	LC029	-	-	12107	-	Kura
1966-5774	2459855.50	1968	R-160	-	-	8K64 UBP	-	TKR	LC029	-	-	12107	-	Kura
1966-5775	2459855.50	1968	R-160	-	-	8K64 UBP	-	TKR	LC029	-	-	12107	-	Kura
1966-5776	2459855.50	1968	R-160	-	-	8K64 UBP	-	TKR	LC029	-	-	12107	-	Kura
1966-5777	2459855.50	1968	R-160	-	-	8K64 UBP	-	TKR	LC029	-	-	12107	-	Kura
1966-5778	2459855.50	1968	R-160	-	-	8K64 UBP	-	TKR	LC029	-	-	12107	-	Kura
1966-5779	2459855.50	1968	R-160	-	-	8K64 UBP	-	TKR	LC029	-	-	12107	-	Kura
1966-5780	2459855.50	1968	R-160	-	-	8K64 UBP	-	TKR	LC029	-	-	12107	-	Kura
1966-5781	2459855.50	1968	R-160	-	-	8K64 UBP	-	TKR	LC029	-	-	12107	-	Kura
1966-5782	2459855.50	1968	R-160	-	-	8K64 UBP	-	TKR	LC029	-	-	12107	-	Kura
1966-5783	2459855.50	1968	R-160	-	-	8K64 UBP	-	TKR	LC029	-	-	12107	-	Kura
1966-5784	2459855.50	1968	R-160	-	-	8K64 UBP	-	TKR	LC029	-	-	12107	-	Kura
1966-5785	2459855.50	1968	R-160	-	-	8K64 UBP	-	TKR	LC029	-	-	12107	-	Kura
1966-5786	2459855.50	1968	R-160	-	-	8K64 UBP	-	TKR	LC029	-	-	12107	-	Kura
1966-5787	2459855.50	1968	R-160	-	-	8K64 UBP	-	TKR	LC029	-	-	12107	-	Kura
1966-5788	2459855.50	1968	R-160	-	-	8K64 UBP	-	TKR	LC029	-	-	12107	-	Kura
1966-5789	2459855.50	1968	R-160	-	-	8K64 UBP	-	TKR	LC029	-	-	12107	-	Kura
1966-5790	2459855.50	1968	R-160	-	-	8K64 UBP	-	TKR	LC029	-	-	12107	-	Kura
1966-5791	2459855.50	1968	R-160	-	-	8K64 UBP	-	TKR	LC029	-	-	12107	-	Kura
1966-5792	2459855.50	1968	R-160	-	-	8K64 UBP	-	TKR	LC029	-	-	12107	-	Kura
1966-5793	2459855.50	1968	R-160	-	-	8K64 UBP	-	TKR	LC029	-	-	12107	-	Kura
1966-5794	2459855.50	1968	R-160	-	-	8K64 UBP	-	TKR	LC029	-	-	12107	-	Kura
1966-5795	2459855.50	1968	R-160	-	-	8K64 UBP	-	TKR	LC029	-	-	12107	-	Kura
1966-5796	2459855.50	1968	R-160	-	-	8K64 UBP	-	TKR	LC029	-	-	12107	-	Kura
1966-5797	2459855.50	1968	R-160	-	-	8K64 UBP	-	TKR	LC029	-	-	12107	-	Kura
1966-5798	2459855.50	1968	R-160	-	-	8K64 UBP	-	TKR	LC029	-	-	12107	-	Kura
1966-5799	2459855.50	1968	R-160	-	-	8K64 UBP	-	TKR	LC029	-	-	12107	-	Kura
1966-5800	2459855.50	1968	R-160	-	-	8K64 UBP	-	TKR	LC029	-	-	12107	-	Kura
1966-5801	2459855.50	1968	R-160	-	-	8K64 UBP	-	TKR	LC029	-	-	12107	-	Kura
1966-5802	2459855.50	1968	R-160	-	-	8K64 UBP	-							



Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Mission	Launch_FlightCode	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee_Km	Range_Km	Dest
1960-512	2440243-72	1969 Jan 22 0512	R-160	-	T 22505-06T	8K640 UBP-126	MCh, 8F115	-	-	MIP-5	L041/4	-	-	12107	-	Kura
1960-5727	2440251-79	1969 Jan 30 0700	R-160	-	G 22501-16T	8K640 UBP-P64	MCh, 8F17	-	-	MIP-5	-	-	-	12107	-	Kura
1960-506	2440280-67	1969 Feb 28 0404	R-160	-	T 22505-02T	8K640 UBP-127	MCh, 8F17	-	-	MIP-5	L041/3	-	-	12107	-	Kura
1960-5728	2440280-83	1969 Feb 28 0800	R-160	-	T 22504-16T	8K640 UBP-P65	MCh, 8F17	-	-	MIP-5	-	-	-	12107	-	Kura
1960-5730	2440307-83	1969 Mar 27 0800	R-160	-	T 22503-11T	8K640 UBP-P66	R-16 P169-04	-	-	MIP-5	-	-	-	12107	-	Kura
1960-5810	2440372-50	1969 Jun	R-16	-	-	8K640 UBP	R-16 P169-05	-	-	YORVA	LC293/17/2	-	-	12107	-	Kura
1960-5811	2440372-50	1969 Jun	R-16	-	-	8K640 UBP	-	-	-	YORVA	LC293	-	-	12107	-	Kura
1960-5812	2440372-50	1969 Jun	R-16	-	-	8K640 UBP	-	-	-	YORVA	LC293	-	-	12107	-	Kura
1960-5752	2440384-50	1969 Jun 12	R-16	-	-	8K640 5 RD UBP-3	-	-	-	YORVA	LC293	-	-	12107	-	Kura
1960-507	2440496-50	1969 Jun 12	R-160	-	-	8K640 42 RD UBP-7	-	-	-	YORVA	LC293/12	-	-	12107	-	Kura
1960-509	2440507-14	1969 Oct 12 1528	R-160	-	T 22503-10T	8K640 UBP-128	MCh, 8F17	-	-	MIP-5	-	-	-	12107	-	Kura
1960-513	2440508-13	1969 Oct 13 1508	R-160	-	T 22504-10T	8K640 UBP-129	MCh, 8F17	-	-	MIP-5	L041/3	-	-	12107	-	Kura
1960-509	2440508-13	1969 Oct 14 1448	R-160	-	T 22503-06T	8K640 UBP-130	MCh, 8F17	-	-	MIP-5	L041/3	-	-	12107	-	Kura
1960-514	2440509-12	1969 Oct 15 0710	R-160	-	T 22503-06T	8K640 UBP-131	MCh, 8F17	-	-	MIP-5	L041/4	-	-	12107	-	Kura
1960-5731	2440512-80	1969 Oct 15 0710	R-160	-	T 22505-12T	8K640 UBP-P67	R-16 P169-06	-	-	MIP-5	-	-	-	12107	-	Kura
1960-5733	2440522-79	1969 Oct 20 0700	R-160	-	T 22505-14T	8K640 UBP-P68	R-16 P169-07	-	-	MIP-5	-	-	-	12107	-	Kura
1960-515	2440524-67	1969 Oct 30 0405	R-160	-	T 22505-13T	8K640 UBP-132	MCh, 8F17	-	-	MIP-5	L041/4	-	-	12107	-	Kura
1960-517	2440540-71	1969 Nov 15 0500	R-160	-	T 22505-10T	8K640 UBP-133	MCh, 8F17	-	-	MIP-5	-	-	-	12107	-	Kura
1960-5734	2440549-88	1969 Nov 24 0900	R-160	-	T 22505-10T	8K640 UBP-P69	R-16 P169-08	-	-	MIP-5	-	-	-	12107	-	Kura
1960-510	2440556-75	1969 Dec 1 0606	R-160	-	T 22505-19T	8K640 UBP-134	MCh, 8F17	-	-	MIP-5	L041/4	-	-	12107	-	Kura
1960-5732	2440556-75	1969 Dec 13 0402	R-160	-	T 22505-19T	8K640 UBP-135	MCh, 8F17	-	-	MIP-5	-	-	-	12107	-	Kura
1960-516	2440575-67	1969 Dec 20 2100	R-160	-	T 22505-11T	8K640 UBP-P70	MCh, 8F17	-	-	MIP-5	L041/4	-	-	12107	-	Kura
1960-5759	2440582-36	1969 Dec 20 0403	R-160	-	T 22504-12T	8K640 UBP-136	MCh, 8F17	-	-	MIP-5	-	-	-	12107	-	Kura
1960-511	2440585-67	1969 Dec 30 0403	R-160	-	T 22504-12T	8K640 UBP-P71	MCh, 8F17	-	-	MIP-5	L041/4	-	-	12107	-	Kura
1970-512	2440624-73	1970 Jan 24 0532	R-160	-	G 22501-01T	8K640 UBP-137	MCh, 8F17	-	-	MIP-5	-	-	-	12107	-	Kura
1970-518	2440645-66	1970 Feb 28 0350	R-160	-	G 22501-01T	8K640 UBP-138	MCh, 8F17	-	-	MIP-5	L041/4	-	-	12107	-	Kura
1970-5729	2440657-69	1970 Mar 12 0435	R-160	-	G 22501-01T	8K640 UBP-139	MCh, 8F17	-	-	MIP-5	-	-	-	12107	-	Kura
1970-507	2440669-72	1970 Mar 24 0510	R-160	-	G 22501-21T	8K640 UBP-140	MCh, 8F17	-	-	MIP-5	L041/4	-	-	12107	-	Kura
1970-5794	2440672-83	1970 Mar 27 0750	R-160	-	T 22503-07T	8K640 UBP-141	MCh, 8F17	-	-	MIP-5	-	-	-	12107	-	Kura
1970-510	2440740-71	1970 Jun 5 0505	R-160	-	G 22501-05T	8K640 UBP-142	MCh, 8F17	-	-	MIP-5	L041/4	-	-	12107	-	Kura
1970-5891	2440747-79	1970 Jun 10 0700	R-160	-	G 22501-05T	8K640 UBP-143	MCh, 8F17	-	-	MIP-5	-	-	-	12107	-	Kura
1970-5802	2440753-79	1970 Jun 25 0700	R-160	-	R 22602-06	8K640 UBP-P72	R-16 P170-11	-	-	MIP-5	-	-	-	12107	-	Kura
1970-5701	2440762-79	1970 Jun 25 0700	R-160	-	R 22604-18T	8K640 UBP-P73	R-16 P170-11	-	-	MIP-5	-	-	-	12107	-	Kura
1970-512	2440774-70	1970 Jun 30 0460	R-160	-	G 22501-09T	8K640 UBP-P74	MCh, 8F17	-	-	MIP-5	-	-	-	12107	-	Kura
1970-5893	2440774-79	1970 Jul 31 0700	R-160	-	G 22501-09T	8K640 UBP-P75	MCh, 8F17	-	-	MIP-5	-	-	-	12107	-	Kura
1970-5894	2440799-37	1970 Jul 31 2059:59	R-160	-	G 22501-25T	8K640 UBP-P76	R-16 P170-03	-	-	MIP-5	-	-	-	12107	-	Kura
1970-5895	2440813-26	1970 Aug 14 1820	R-160	-	G 22501-22T	8K640 UBP-P77	R-16 P170-04	-	-	MIP-5	-	-	-	12107	-	Kura
1970-5896	2440824-21	1970 Aug 25 1659	R-160	-	G 22502-10T	8K640 UBP-P78	R-16 P170-06	-	-	MIP-5	-	-	-	12107	-	Kura
1970-513	2440836-75	1970 Sep 15 0535	R-160	-	G 22502-10T	8K640 UBP-146	MCh, 8F17	-	-	MIP-5	L041/4	-	-	12107	-	Kura
1970-5897	2440856-79	1970 Sep 25 0700	R-160	-	G 22501-11T	8K640 UBP-147	MCh, 8F17	-	-	MIP-5	-	-	-	12107	-	Kura
1970-518	2440866-71	1971 Feb 25 1705	R-160	-	G 22501-20T	8K640 UBP-148	MCh, 8F17	-	-	MIP-5	L041/4	-	-	12107	-	Kura
1971-518	2440866-71	1971 Feb 25 1705	R-160	-	G 22503-19T	8K640 UBP-149	MCh, 8F17	-	-	MIP-5	-	-	-	12107	-	Kura
1971-519	2441037-75	1971 Mar 17 0635	R-160	-	G 22503-19T	8K640 UBP-150	MCh, 8F17	-	-	MIP-5	L041/4	-	-	12107	-	Kura
1971-520	2441037-69	1971 Mar 17 0635	R-160	-	G 22503-19T	8K640 UBP-151	MCh, 8F17	-	-	MIP-5	-	-	-	12107	-	Kura
1971-511	2441096-65	1971 May 29 0343	R-160	-	G 22504-10T	8K640 UBP-152	MCh, 8F115	-	-	MIP-5	L041/4	-	-	12107	-	Kura
1971-511	2441096-65	1971 May 29 0343	R-160	-	G 22504-10T	8K640 UBP-153	MCh, 8F115	-	-	MIP-5	-	-	-	12107	-	Kura
1971-5663	2441119-75	1971 Jun 17 0600	R-160	-	G 22501-07T	8K640 UBP-154	MCh, 8F115	-	-	MIP-5	L041/4	-	-	12107	-	Kura
1971-513	2441126-38	1971 Jun 23 2111	R-160	-	G 22502-06T	8K640 UBP-155	MCh, 8F115	-	-	MIP-5	-	-	-	12107	-	Kura
1971-514	2441130-68	1971 Jun 28 0420	R-160	-	G 22503-10T	8K640 UBP-156	MCh, 8F115	-	-	MIP-5	L041/4	-	-	12107	-	Kura
1971-5664	2441132-21	1971 Jun 29 1700	R-160	-	G 22503-10T	8K640 UBP-157	MCh, 8F115	-	-	MIP-5	-	-	-	12107	-	Kura
1971-5665	2441148-21	1971 Jul 15 1700	R-160	-	T 22505-06T	8K640 UBP-P81	R-16 P171-03	-	-	MIP-5	-	-	-	12107	-	Kura
1971-5670	2441159-25	1971 Jul 26 1800	R-160	-	G 22505-06T	8K640 UBP-P82	R-16 P171-04	-	-	MIP-5	-	-	-	12107	-	Kura
1971-5722	2441169-65	1971 Aug 6 0435	R-160	-	G 22501-12T	8K640 UBP-P83	MCh, 8F17	-	-	MIP-5	-	-	-	12107	-	Kura
1971-5666	2441180-17	1971 Aug 16 1600	R-160	-	G 22501-12T	8K640 UBP-155	MCh, 8F17	-	-	MIP-5	L041/4	-	-	12107	-	Kura
1971-5669	2441189-17	1971 Aug 25 1600	R-160	-	G 22501-12T	8K640 UBP-P84	MCh, 8F17	-	-	MIP-5	-	-	-	12107	-	Kura
1971-512	2441219-91	1971 Sep 25 0950	R-160	-	G 22504-10T	8K640 UBP-P85	MCh, 8F17	-	-	MIP-5	L041/4	-	-	12107	-	Kura
1971-5683	2441232-80	1971 Oct 8 0705	R-160	-	G 22504-10T	8K640 UBP-156	MCh, 8F17	-	-	MIP-5	-	-	-	12107	-	Kura
1971-515	2441247-72	1971 Oct 23 0510	R-160	-	R 22601-05T	8K640 UBP-157	MCh, 8F17	-	-	MIP-5	L041/4	-	-	12107	-	Kura
1971-515	2441247-72	1971 Oct 23 0510	R-160	-	R 22601-05T	8K640 UBP-158	MCh, 8F17	-	-	MIP-5	-	-	-	12107	-	Kura
1971-516	2441289-77	1971 Dec 4 0630	R-160	-	G 22602-11T	8K640 UBP-159	MCh, 8F17	-	-	MIP-5	L041/4	-	-	12107	-	Kura
1972-5480	2441309-86	1971 Dec 24 0840	R-160	-	G 22602-11T	8K640 UBP-160	MCh, 8F17	-	-	MIP-5	-	-	-	12107	-	Kura
1972-508	2441331-79	1972 Jan 15 0700	R-160	-	G 22504-17T	8K640 UBP-P86	MCh, 8F115	-	-	MIP-5	L041/4	-	-	12107	-	Kura
1972-508	2441336-80	1972 Jan 15 0700	R-160	-	G 22504-17T	8K640 UBP-P86	MCh, 8F115	-	-	MIP-5	-	-	-	12107	-	Kura
1972-5483	2441344-79	1972 Jan 20 0700	R-160	-	G 22503-16T	8K640 UBP-181	MCh, 8F115	-	-	MIP-5	L041/4	-	-	12107	-	Kura
1972-509	2441357-03	1972 Jan 28 0700	R-160	-	G 22503-03T	8K640 UBP-P87	MCh, 8F115	-	-	MIP-5	-	-	-	12107	-	Kura
1972-505	2441367-00	1972 Feb 9 1240	R-160	-	G 22503-03T	8K640 UBP-182	MCh, 8F115	-	-	MIP-5	L041/4	-	-	12107	-	Kura
1972-5484	2441376-88	1972 Feb 19 1205	R-160	-	G 22503-15T	8K640 UBP-183	MCh, 8F115	-	-	MIP-5	-	-	-	12107	-	Kura
1972-510	2441380-90	1972 Feb 29 0900	R-160	-	G 22503-15T	8K640 UBP-P88	MCh, 8F115	-	-	MIP-5	L041/4	-	-	12107	-	Kura
1972-5485	2441393-88	1972 Mar 4 0940	R-160	-	G 22502-14T	8K640 UBP-184	MCh, 8F115	-	-	MIP-5	-	-	-	12107	-	Kura
1972-5794	2441399-03	1972 Mar 17 0900	R-160	-	G 22502-14T	8K640 UBP-P89	R-16 P172-03	-	-	MIP-5	L041/4	-	-	12107	-	Kura
1972-5754	2441399-50	1972 Mar 22 1240	R-160	-	G 22504-06T	8K640 UBP	-	-	-	FRAS	L041/4	-	-	12107	-	Pacific
1972-5755	2441399-50	1972 Mar 23	R-160	-	-	8K640 36 RD UBP-6	-	-	-	FRAS	-	-	-	12107	-	Pacific
1972-5486	2441406-79	1972 Mar 30 0700	R-160	-	G 22502-17T	8K640 UBP-P90	R-16 P172-04	-	-	MIP-5	-	-	-	12107	-	Kura
1972-506	2441419-17	1972 Apr 11 1605	R-160	-	G 22503-10T	8K640 UBP-185	MCh, 8F115	-	-	MIP-5	L041/4	-	-	12107	-	Kura
1972-5481	2441425-88	1972 Apr 18 0900	R-160	-	G 22503-10T	8K640 UBP-P91	MCh, 8F115	-	-	MIP-5						

Launch

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Mission	FlightCode	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee_Km	Range_Km	Dest
1972-5761	2441622-27	1972 Oct 31 1850	R-160	-	R 22604-01T	8K640 UBP-P98	R-16 PL72-11	-	-	MLIP-53	LC35-1B/10	-	-	1210?	-	Kura
1972-5762	2441653-89	1972 Dec 2 0920	R-160	-	R 22604-10T	8K640 UBP-P99	R-16 PL72-11	-	-	MLIP-53	-	-	-	1210?	-	Kura
1973-3487	2441322-73	1973 Feb 19 0630	R-160	-	R 22604-13T	8K640 UBP-P100	R-16 PL73-01	-	-	MLIP-53	-	-	-	1210?	-	Kura
1973-3488	2441734-96	1973 Feb 21 1100	R-160	-	G 22501-14T	8K640 UBP-P101	R-16 PL73-02	-	-	MLIP-53	-	-	-	1210?	-	Kura
1973-3489	2441760-77	1973 Mar 19 0630	R-160	-	G 22502-08T	8K640 UBP-P102	R-16 PL73-03	-	-	MLIP-53	-	-	-	1210?	-	Kura
1973-3499	2441197-50	1973 Apr 25	R-160	-	-	8K640 S RD UBP-5	Vesna-73	-	-	YORVA	LC239/18/30	-	-	1210?	-	Kura
1973-3563	2441831-50	1973 May 28	R-160	-	-	8K640 UBP	-	-	-	MTAG	LC336/3	-	-	1210?	-	Kura
1973-3490	2441901-55	1973 Aug 7 0115	R-160	-	R 22601-14	8K640 UBP-P103	R-16 PL73-04	-	-	MLIP-53	-	-	-	1210?	-	Kura
1973-3549	2441925-44	1973 Aug 30 2230	R-160	-	U 22501-18	8K640 UBP-P104	R-16 PL73-04	-	-	MLIP-53	-	-	-	1210?	-	Kura
1974-3445	2442197-73	1974 May 30 0530	R-160	-	G 22504-04T	8K640 UBP-P105	R-16 PL74-01	-	-	MLIP-53	-	-	-	1210?	-	Kura
1974-3446	2442243-71	1974 Jul 15 0500	R-160	-	G 22502-09T	8K640 UBP-P106	R-16 PL74-02	-	-	MLIP-53	-	-	-	1210?	-	Kura
1975-3379	2442812-50	1975?	R-160	-	-	8K640 4TRD UBP-1	Duga-1	-	-	YSMYA	-	-	-	0?	-	(Pacific)
1975-3380	2442812-50	1975?	R-160	-	-	8K640 4TRD UBP-2	Duga-1	-	-	YSMYA	-	-	-	0?	-	(Pacific)
1975-3381	2442812-50	1975?	R-160	-	-	8K640 4TRD UBP-3	Duga-1	-	-	YSMYA	-	-	-	0?	-	(Pacific)
1975-3382	2442812-50	1975?	R-160	-	-	8K640 4TRD UBP-4	Duga-1	-	-	YSMYA	-	-	-	0?	-	(Pacific)
1975-3383	2442812-50	1975?	R-160	-	-	8K640 4TRD UBP-5	Duga-1	-	-	YSMYA	-	-	-	0?	-	(Pacific)
1975-3384	2442812-50	1975?	R-160	-	-	8K640 4TRD UBP-6	Duga-1	-	-	YSMYA	-	-	-	1210?	-	Pacific
1975-3385	2442812-50	1975?	R-160	-	-	8K640 4TRD UBP-7	Duga-1	-	-	YSMYA	-	-	-	1210?	-	Pacific
1975-3386	2442812-50	1975?	R-160	-	-	8K640 4TRD UBP-8	Duga-1	-	-	YSMYA	-	-	-	1210?	-	Pacific
1975-3387	2442812-50	1975?	R-160	-	-	8K640 4TRD UBP-9	Duga-1	-	-	YSMYA	-	-	-	1210?	-	Pacific
1975-3388	2442812-50	1975?	R-160	-	-	8K640 4TRD UBP-10	Duga-1	-	-	YSMYA	-	-	-	1210?	-	Pacific
1975-3375	2442895-50	1975 Jul 2	R-16	-	-	8K64 42 RD UBP-6	-	-	-	MTAG	LC336/3	-	-	1210?	-	Kura
1975-3376	2442816-50	1975 Jul 23	R-16	-	-	8K640 42 RD UBP-9	-	-	-	MTAG	LC329/18	-	-	1210?	-	Kura
1975-3377	2442851-50	1975 Aug 27	R-160	-	-	8K640 42 RD UBP-10	-	-	-	MTAG	LC336	-	-	1210?	-	Kura
1975-3378	2442777-50	1976?	R-160	-	-	8K640 4TRD UBP-11	Duga-1	-	-	YSMYA	-	-	-	1210?	-	Pacific
1975-3379	2442777-50	1976?	R-160	-	-	8K640 4TRD UBP-12	Duga-1	-	-	YSMYA	-	-	-	1210?	-	Pacific
1975-3380	2442777-50	1976?	R-160	-	-	8K640 4TRD UBP-13	Duga-1	-	-	YSMYA	-	-	-	1210?	-	Pacific
1975-3381	2442777-50	1976?	R-160	-	-	8K640 4TRD UBP-14	Duga-1	-	-	YSMYA	-	-	-	1210?	-	Pacific
1975-3382	2442777-50	1976?	R-160	-	-	8K640 4TRD UBP-15	Duga-1	-	-	YSMYA	-	-	-	1210?	-	Pacific
1975-3383	2442777-50	1976?	R-160	-	-	8K640 4TRD UBP-16	Duga-1	-	-	YSMYA	-	-	-	1210?	-	Pacific
1975-3384	2442777-50	1976?	R-160	-	-	8K640 4TRD UBP-17	Duga-1	-	-	YSMYA	-	-	-	1210?	-	Pacific
1975-3385	2442777-50	1976?	R-160	-	-	8K640 4TRD UBP-18	Duga-1	-	-	YSMYA	-	-	-	1210?	-	Pacific
1975-3386	2442777-50	1976?	R-160	-	-	8K640 4TRD UBP-19	Duga-1	-	-	YSMYA	-	-	-	1210?	-	Pacific
1975-3386	2442777-50	1976?	R-160	-	-	8K640 4TRD UBP-20	Duga-1	-	-	YSMYA	-	-	-	1210?	-	Pacific



Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	OrbPay	Agency	Launch_Code	Group	Category	LTCite	Cite	Notes
1960-501	2437232.16	1960 Oct 24 1545	R-16	-	LD1-3T	0.000	RVSN	ME	-	Test	NezavB	-	-
1961-443	2437335.29	1961 Feb 2 1900	R-16	-	4L-5T 3L	0.000	RVSN	MF	-	Test	NezavB	-	-
1961-569	2437362.08	1961 Mar 3 1359:19	R-16	-	4L-6T	0.000	RVSN	MS	-	Test	NezavB	-	-
1961-5100	2437392.09	1961 Apr 2 1406	R-16	-	5L-7T	0.000	RVSN	MS	-	Test	NezavB	-	-
1961-4105	2437405.08	1961 Apr 15 1358:29	R-16	-	7L-12T	0.000	RVSN	MF	-	Test	NezavB	-	-
1961-4106	2437411.12	1961 Apr 21 1459	R-16	-	6L-11T	0.000	RVSN	MF	-	Test	BML	-	-
1961-5146	2437436.31	1961 May 16 1923:27	R-16	-	8L-8T	0.000	RVSN	MS	-	Test	NezavB	-	1955:23 (BML)
1961-4128	2437443.64	1961 May 24 0318:06	R-16	-	9L-9T	0.000	RVSN	MF	-	Test	NezavB	-	-
1961-5165	2437453.23	1961 Jun 2 1724:30	R-16	-	10L-10T	0.000	RVSN	MS	-	Test	NezavB	-	-
1961-4148	2437457.25	1961 Jun 6 1600	R-16	-	11L-13T	0.000	RVSN	MF	-	Test	NezavB	-	-
1961-4153	2437466.62	1961 Jun 16 0747:23	R-16	-	14L-16T	0.000	RVSN	MS	-	Test	NezavB	-	-
1961-5231	2437502.83	1961 Jul 22 0755	R-16	-	13L-15T	0.000	RVSN	MS	-	Test	BML	-	-
1961-5188	2437520.67	1961 Aug 9 0405	R-16	-	12L-14T	0.000	RVSN	MS	-	Test	BML	-	-
1961-5286	2437524.67	1961 Aug 13 0400	R-16	-	21L	0.000	RVSN	MS	-	Test	BML	-	-
1961-5285	2437546.62	1961 Sep 4 0246	R-16	-	23L	0.000	RVSN	MS	-	Test	BML	-	-
1961-5275	2437552.49	1961 Sep 4 2345:7	R-16	-	22L	0.000	RVSN	MS	-	Test	BML	-	-
1961-5281	2437556.16	1961 Sep 13 1544	R-16	-	17L-19T	0.000	RVSN	MS	-	Test	BML	-	-
1961-5288	2437560.16	1961 Sep 17 1545	R-16	-	15L-17T	0.000	RVSN	MS	-	Test	BML	-	-
1961-4205	2437565.16	1961 Sep 22 1545	R-16	-	16L-18T	0.000	RVSN	MF	-	Test	BML	-	-
1961-5327	2437562.37	1961 Oct 9 2047	R-16U	-	21U	0.000	RVSN	MF	-	Test	BML	-	-
1961-4219	2437568.15	1961 Oct 11 1540	R-16U	-	41U	0.000	RVSN	MS	-	Test	BML	-	-
1961-5334	2437568.21	1961 Oct 15 1700	R-16U	-	31U	0.000	RVSN	MS	-	Test	BML	-	-
1961-5341	2437595.21	1961 Oct 22 1700	R-16U	-	91U	0.000	RVSN	MS	-	Test	BML	-	-
1961-5358	2437601.15	1961 Oct 28 1540	R-16U	-	T 228 01-15T	0.000	RVSN	MS	-	Test	BML	-	-
1961-5351	2437632.84	1961 Nov 29 0815	R-16	-	E 228 01-01T	0.000	RVSN	MF	-	Test	BML	-	-
1961-4246	2437635.48	1961 Dec 1 2329	R-16	-	E 228 02-12T	0.000	RVSN	ME	-	Test	BML	-	-
1962-506	2437665.97	1962 Jan 4 1115	R-16	-	61U	0.000	RVSN	MS	-	Test	BML	-	-
1962-512	2437677.42	1962 Jan 12 2200	R-16U	-	71U	0.000	RVSN	MS	-	Test	BML	-	-
1962-517	2437681.00	1962 Jan 16 1205	R-16U	-	T 228 05-20T	0.000	RVSN	MS	-	Test	BML	-	[Or 1701]
1962-518	2437682.00	1962 Jan 17 1200	R-16U	-	T 228 01-20T	0.000	RVSN	MS	-	Test	BML	-	-
1962-525	2437690.04	1962 Jan 25 1300	R-16U	-	T 228 04	0.000	RVSN	MS	-	Test	BML	-	-
1962-556	2437727.50	1962 Mar 4 0210:50	R-16U	-	T 228 01-15T	0.000	RVSN	MS	-	Test	BML	-	-
1962-5154	2437810.59	1962 Jun 1 1600:43	R-16U	-	T 228 02-20T	0.000	RVSN	MS	-	Test	BML	-	-
1962-5173	2437823.17	1962 Jun 13 1424:59	R-16U	-	T 228 03-20T	0.000	RVSN	MS	-	Test	BML	-	-
1962-5252	2437856.68	1962 Jul 21 0421	R-16U	-	T 228 03-20T	0.000	RVSN	MS	-	Test	BML	-	-
1962-5272	2437867.09	1962 Jul 31 1410	R-16U	-	10F0	0.000	RVSN	MF	-	Test	BML	-	-
1962-5263	2437868.17	1962 Aug 2 1419:18	R-16U	-	T 228 04-20T	0.000	RVSN	MS	-	Test	BML	-	-
1962-5359	2437943.13	1962 Oct 8 1521:33	R-16U	-	T 228 01-20T	0.000	RVSN	MS	-	Test	BML	-	-
1962-5360	2437943.15	1962 Oct 8 1521:33	R-16U	-	T 228 04	0.000	RVSN	MS	-	Test	BML	-	-
1962-5365	2437946.55	1962 Oct 11 0111:38	R-16U	-	T 228 05-20T	0.000	RVSN	MS	-	Test	BML	-	-
1962-5366	2437946.57	1962 Oct 11 0111:38	R-16U	-	T 228 011U	0.000	RVSN	MS	-	Test	BML	-	-
1962-5367	2437949.07	1962 Oct 11 0111:38	R-16U	-	E 228 021U	0.000	RVSN	MS	-	Test	BML	-	-
1962-5368	2437954.14	1962 Oct 16 1520:35	R-16U	-	T 228 021U	0.000	RVSN	MS	-	Test	BML	-	-
1962-5369	2437954.14	1962 Oct 16 1520:35	R-16U	-	T 228 021U	0.000	RVSN	MS	-	Test	BML	-	-
1962-5370	2437971.32	1962 Nov 22 1748:13	R-16U	-	T 228 021U	0.000	RVSN	MS	-	Test	BML	-	-
1962-5386	2437989.24	1962 Nov 24 1748:13	R-16U	-	T 228 021U	0.000	RVSN	MS	-	Test	BML	-	-
1962-4563	2437994.24	1962 Nov 25 1748:13	R-16U	-	T 228 021U	0.000	RVSN	MS	-	Test	BML	-	-
1962-4563	2437994.24	1962 Nov 25 1748:13	R-16U	-	T 228 021U	0.000	RVSN	MS	-	Test	BML	-	-
1962-4561	2438011.97	1962 Dec 13 1158:35	R-16U	-	T 228 01-20T	0.000	RVSN	MS	-	Test	BML	-	-
1962-4568	2438015.48	1962 Dec 13 1158:35	R-16U	-	T 228 01-20T	0.000	RVSN	MS	-	Test	BML	-	-
1962-5209	2438145.62	1963 Mar 30 0329:59	R-16U	-	G 228 01-20T	0.000	RVSN	MS	-	Test	BML	-	-
1962-5177	2438145.62	1963 Mar 30 0329:59	R-16U	-	G 228 02-20T	0.000	RVSN	MS	-	Test	BML	-	-
1962-5179	2438168.12	1963 Mar 18 1450:01	R-16U	-	G 228 02-20T	0.000	RVSN	MS	-	Test	BML	-	-
1962-5210	2438168.12	1963 Mar 18 1450:01	R-16U	-	G 228 02-20T	0.000	RVSN	MS	-	Test	BML	-	-
1962-5237	2438175.13	1963 Mar 25 1506:17	R-16U	-	G 228 02-20T	0.000	RVSN	MS	-	Test	BML	-	-
1962-494	2438181.62	1963 Jun 21 0259:54	R-16U	-	G 228 02-20T	0.000	RVSN	MS	-	Test	BML	-	-
1962-494	2438201.68	1963 Jun 21 0413:36	R-16U	-	G 228 02-20T	0.000	RVSN	MS	-	Test	BML	-	-
1962-4907	2438209.15	1963 Jun 28 1530:06	R-16U	-	G 228 02-20T	0.000	RVSN	MS	-	Test	BML	-	-
1962-5314	2438210.54	1963 Jun 30 0059:55	R-16U	-	G 228 03-20T	0.000	RVSN	MS	-	Test	BML	-	-
1962-5332	2438219.15	1963 Jul 8 1530:12	R-16U	-	G 228 03-20T	0.000	RVSN	MS	-	Test	BML	-	-
1962-5333	2438220.15	1963 Jul 9 1530:04	R-16U	-	G 228 03-20T	0.000	RVSN	MS	-	Test	BML	-	-
1962-5627	2438222.50	1963 Jul 12	R-16U	-	G 228 03-20T	0.000	RVSN	MS	-	Test	BML	-	-
1962-5365	2438337.62	1963 Jul 27 0300	R-16U	-	G 228 02-20T	0.000	RVSN	MS	-	Test	BML	-	-
1962-5367	2438354.71	1963 Aug 13 0459:47	R-16U	-	G 228 02-20T	0.000	RVSN	MS	-	Test	BML	-	-
1962-5369	2438261.81	1963 Aug 20 0730	R-16U	-	G 228 02-20T	0.000	RVSN	MS	-	Test	BML	-	-
1962-5648	2438265.50	1963 Aug 24	R-16U	-	G 228 01-20T	0.000	RVSN	MS	-	Test	BML	-	-
1962-5428	2438271.77	1963 Aug 6 0630:26	R-16U	-	G 228 02-20T	0.000	RVSN	MS	-	Test	BML	-	-
1962-5428	2438292.65	1963 Sep 10 0323	R-16U	-	G 228 02-20T	0.000	RVSN	MS	-	Test	BML	-	-
1962-5427	2438298.67	1963 Sep 26 0400	R-16U	-	G 228 02-20T	0.000	RVSN	MS	-	Test	BML	-	-
1962-5472	2438303.64	1963 Oct 1 0326	R-16U	-	G 228 02-20T	0.000	RVSN	MS	-	Test	BML	-	-
1962-5506	2438324.81	1963 Oct 22 0720	R-16U	-	G 228 02-20T	0.000	RVSN	MS	-	Test	BML	-	-
1962-5564	2438325.65	1963 Oct 23 0329	R-16U	-	G 228 02-20T	0.000	RVSN	MS	-	Test	BML	-	-
1962-5595	2438355.65	1963 Nov 22 0451	R-16U	-	G 228 02-20T	0.000	RVSN	MS	-	Test	BML	-	-
1962-5612	2438375.70	1963 Dec 2 0449	R-16U	-	F 228 01-01T	0.000	RVSN	MS	-	Test	BML	-	-
1964-570	2438428.21	1964 Feb 2 1700	R-16U	-	R 228 03-09	0.000	RVSN	MS	-	Test	BML	-	-
1964-579	2438432.04	1964 Feb 6 1301	R-16U	-	R 228 01-20T	0.000	RVSN	MF	-	Test	BML	-	-
1964-428	2438452.02	1964 Feb 26 1229	R-16U	-	R 228 01-20T	0.000	RVSN	MS	-	Test	BML	-	-
1964-5131	2438479.50	1964 Mar 3 0914	R-16U	-	R 228 02-20T	0.000	RVSN	MS	-	Test	BML	-	-
1964-5814	2438488.88	1964 Mar 3 0914	R-16U	-	R 228 02-20T	0.000	RVSN	MS	-	Test	BML	-	-
1964-5814	2438500.50	1964 Apr 15	R-16U	-	R 228 02-20T	0.000	RVSN	MS	-	Test	BML	-	-

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	OrbPay	Agency	Launch_Code	Group	Category	LTCite	Cite	Notes
1964-5270	2438545.77	1964 May 30 0651	R-16U	-	R 22603-20T	0.000	RVSN	MS	-	OT	Kosmodrom010	-	-
1964-5387	2438607.84	1964 Jul 31 0805	R-16U	-	R 22604-20T	0.000	RVSN	MS	-	OT	BML	Kosmodrom010	-
1964-5463	2438645.23	1964 Sep 10 1725	R-16U	-	R 22603-20T	0.000	RVSN	MS	-	OT	BML	Kosmodrom010	-
1964-5463	2438663.75	1964 Sep 25 0519	R-16U	-	R 22601-13T	0.000	RVSN	MS	-	OT	Kosmodrom010	-	-
1964-5469	2438664.72	1964 Sep 25 0519	R-16U	-	R 22605-20T	0.000	RVSN	MS	-	OT	RML	Kosmodrom010	-
1964-5813	2438727.50	1964 Nov 28 7	R-16U	-	-	0.000	RVSN	MS	-	OT	-	-	-
1964-5813	2438747.71	1964 Dec 18 0459	R-16U	-	R 22604-20T	0.000	RVSN	MS	-	OT	BML	Kosmodrom010	-
1964-5704	2438755.71	1964 Dec 26 0500	R-16U	-	R 22603-20T	0.000	RVSN	MS	-	OT	BML	Kosmodrom010	-
1965-5104	2438817.62	1965 Feb 26 0300	R-16U	-	R 22603-15T	0.000	RVSN	MS	-	OT	BML	Kosmodrom010	-
1965-5147	2438829.75	1965 Mar 30 0401	R-16U	-	R 22601-20T	0.000	RVSN	MS	-	OT	BML	Kosmodrom010	-
1965-5207	2438849.67	1965 Mar 30 0401	R-16U	-	R 22601-02T	0.000	RVSN	MS	-	OT	BML	Kosmodrom010	-
1965-5225	2438862.81	1965 Apr 12 0730	R-16U	-	U 22601-12TB	0.000	RVSN	MS	-	OT	BML	Kosmodrom010	-
1965-5252	2438877.04	1965 Apr 26 1300	R-16U	-	U 22601-20T	0.000	RVSN	MS	-	OT	BML	Kosmodrom010	-
1965-5458	2438879.04	1965 Apr 28 1258	R-16U	-	U 22602-20T	0.000	RVSN	MS	-	OT	BML	Kosmodrom010	-
1965-5304	2438902.77	1965 May 28 0629	R-16U	-	G 22603-08T	0.000	RVSN	MS	-	OT	MS-65	Kosmodrom010	-
1965-5318	2438908.60	1965 May 28 0223	R-16U	-	T 22601-17T	0.000	RVSN	MS	-	OT	MS-65	Kosmodrom010	-
1965-489	2438940.72	1965 Jun 29 0511	R-16U	-	T 22601-14T	0.000	RVSN	MS	-	OT	BML	Kosmodrom010	-
1965-5427	2438962.67	1965 Jul 21 0412	R-16U	-	G 22602-03T	0.000	RVSN	MS	-	OT	BML	Kosmodrom010	-
1965-5484	2439003.73	1965 Aug 31 0531	R-16U	-	U 22602-20T	0.000	RVSN	MS	-	OT	BML	Kosmodrom010	-
1965-5500	2439021.62	1965 Sep 18 0255	R-16U	-	G 22601-07T	0.000	RVSN	MS	-	OT	BML	Kosmodrom010	-
1965-5512	2439028.75	1965 Sep 25 0559	R-16U	-	T 22601-09T	0.000	RVSN	MS	-	OT	BML	Kosmodrom010	-
1965-5528	2439033.61	1965 Sep 30 0730	R-16U	-	U 22602-09T	0.000	RVSN	MS	-	OT	BML	Kosmodrom010	-
1965-5595	2439068.69	1965 Nov 4 0432	R-16U	-	U 22603-20T	0.000	RVSN	MS	-	OT	BML	Kosmodrom010	-
1965-5514	2439076.67	1965 Nov 4 0358	R-16U	-	G 22601-06T	0.000	RVSN	MS	-	OT	BML	Kosmodrom010	-
1965-5798	2439114.50	1965 Dec 20	R-16U	-	E 22601-10	0.000	RVSN	MS	-	OT	BML	Kosmodrom010	-
1965-5857	2439115.79	1965 Dec 21 0700	R-16U	-	T 22602-10T	0.000	RVSN	MS	-	OT	PCBA	Kosmodrom010	-
1965-5856	2439117.62	1965 Dec 23 0739	R-16U	-	T 22602-04	0.000	RVSN	MS	-	OT	PCB	-	-
1965-5858	2439118.79	1965 Dec 24 0700	R-16U	-	T 22602-05	0.000	RVSN	MS	-	OT	PCB	-	-
1965-5795	2439119.50	1965 Dec 25	R-16U	-	-	0.000	RVSN	MS	-	OT	-	-	-
1965-5800	2439119.50	1965 Dec 25	R-16U	-	-	0.000	RVSN	MS	-	OT	-	-	-
1965-5857	2439119.80	1965 Dec 25 0716	R-16U	-	T 22602-06TB	0.000	RVSN	MS	-	OT	BML	Kosmodrom010	-
1965-5857	2439119.80	1965 Dec 26 1243	R-16U	-	G 22602-10T	0.000	RVSN	MS	-	OT	BML	Kosmodrom010	-
1965-5700	2439121.03	1966 Jan 31 0736	R-16U	-	G 22601-05T	0.000	RVSN	MS	-	OT	BML	Kosmodrom010	-
1966-585	2439156.62	1966 Jan 31 0736	R-16U	-	G 22604-13T	0.000	RVSN	MS	-	OT	BML	Kosmodrom010	-
1966-5173	2439202.17	1966 Mar 17 1605	R-16U	-	N 22601-20T	0.000	RVSN	MS	-	OT	PCBA	-	-
1966-5182	2439205.74	1966 Mar 24 0549	R-16U	-	-	0.000	RVSN	MS	-	OT	-	-	-
1966-5794	2439213.60	1966 Mar 29 0713	R-16U	-	G 22602-03T	0.000	RVSN	MS	-	OT	BML	Kosmodrom010	-
1966-5216	2439221.62	1966 Apr 18 0649	R-16U	-	G 22602-04T	0.000	RVSN	MS	-	OT	BML	Kosmodrom010	-
1966-5222	2439231.78	1966 Apr 18 0649	R-16U	-	G 22601-01T	0.000	RVSN	MS	-	OT	BML	Kosmodrom010	-
1966-5294	2439241.92	1966 Apr 18 0649	R-16U	-	G 22601-12T	0.000	RVSN	MS	-	OT	PCBA	-	-
1966-469	2439266.69	1966 May 21 0440	R-16U	-	G 22602-01T	0.000	RVSN	MS	-	OT	BML	Kosmodrom010	-
1966-5759	2439272.79	1966 May 21 0700	R-16U	-	N 22604-01T	0.000	RVSN	MS	-	OT	BML	Kosmodrom010	-
1966-5299	2439280.66	1966 Jun 8 0416	R-16U	-	N 22603-07T	0.000	RVSN	MS	-	OT	BML	Kosmodrom010	-
1966-5301	2439284.61	1966 Jun 8 0416	R-16U	-	N 22601-17T	0.000	RVSN	MS	-	OT	BML	Kosmodrom010	-
1966-5332	2439301.67	1966 Jun 25 0852	R-16U	-	N 22603-07T	0.000	RVSN	MS	-	OT	BML	Kosmodrom010	-
1966-5356	2439302.09	1966 Jun 25 1529	R-16U	-	N 22601-01T	0.000	RVSN	MS	-	OT	BML	Kosmodrom010	-
1966-5366	2439306.74	1966 Jul 2 0722	R-16U	-	G 22602-02T	0.000	RVSN	MS	-	OT	BML	Kosmodrom010	-
1966-5766	2439309.96	1966 Jul 2 0700	R-16U	-	G 22602-02T	0.000	RVSN	MS	-	OT	BML	Kosmodrom010	-
1966-5439	2439331.79	1966 Jul 26 0700	R-16U	-	N 22604-01T	0.000	RVSN	MS	-	OT	BML	Kosmodrom010	-
1966-5454	2439346.64	1966 Aug 25 0548	R-16U	-	G 22603-10T	0.000	RVSN	MS	-	OT	BML	Kosmodrom010	-
1966-5761	2439365.74	1966 Aug 25 0548	R-16U	-	G 22603-13T	0.000	RVSN	MS	-	OT	BML	Kosmodrom010	-
1966-5761	2439380.89	1966 Sep 16 0815	R-16U	-	G 22603-03T	0.000	RVSN	MS	-	OT	BML	Kosmodrom010	-
1966-5768	2439390.73	1966 Sep 22 0527	R-16U	-	G 22602-03T	0.000	RVSN	MS	-	OT	PCBA	-	-
1966-5768	2439395.73	1966 Sep 27 0520	R-16U	-	G 22602-07T	0.000	RVSN	MS	-	OT	PCBA	BML0232/0530	-
1966-5767	2439399.78	1966 Sep 27 0520	R-16U	-	G 22603-11T	0.000	RVSN	MS	-	OT	PCB	-	-
1966-5767	2439408.99	1966 Oct 8 1144	R-16U	-	G 22603-08T	0.000	RVSN	MS	-	OT	PCB	-	-
1966-5576	2439419.74	1966 Oct 8 1144	R-16U	-	G 22604-10T	0.000	RVSN	MS	-	OT	PCB	-	-
1966-5566	2439420.69	1966 Oct 20 0547	R-16U	-	N 22601-24T	0.000	RVSN	MS	-	OT	BML	Kosmodrom9904	-
1966-5763	2439422.75	1966 Oct 24 0600	R-16U	-	G 22604-09T	0.000	RVSN	MS	-	OT	BML	Kosmodrom010	-
1966-5571	2439426.70	1966 Oct 28 0442	R-16U	-	G 22603-14T	0.000	RVSN	MS	-	OT	BML	Kosmodrom010	-
1966-5577	2439430.69	1966 Nov 1 0434	R-16U	-	G 22603-14T	0.000	RVSN	MS	-	OT	BML	Kosmodrom010	-
1966-5764	2439430.75	1966 Nov 3 0600	R-16U	-	G 22604-05T	0.000	RVSN	MS	-	OT	BML	Kosmodrom010	-
1966-5593	2439433.66	1966 Nov 4 0349	R-16U	-	N 22601-06T	0.000	RVSN	MS	-	OT	BML	Kosmodrom010	-
1966-5626	2439448.80	1966 Nov 17 0705	R-16U	-	G 22603-08T	0.000	RVSN	MS	-	OT	BML	Kosmodrom010	-
1966-5651	2439453.64	1966 Nov 25 0600	R-16U	-	G 22603-03T	0.000	RVSN	MS	-	OT	BML	Kosmodrom010	-
1966-5765	2439454.75	1966 Nov 25 0600	R-16U	-	G 22602-17T	0.000	RVSN	MS	-	OT	BML	Kosmodrom010	-
1966-5654	2439455.68	1966 Nov 26 0415	R-16U	-	G 22602-08T	0.000	RVSN	MS	-	OT	BML	Kosmodrom010	-
1966-5779	2439465.50	1966 Dec 6	R-16U	-	-	0.000	RVSN	MS	-	OT	BML	Kosmodrom010	-
1966-5677	2439467.75	1966 Dec 8 0600	R-16U	-	G 22602-18T	0.000	RVSN	MS	-	OT	BML	Kosmodrom010	-
1966-5671	2439467.83	1966 Dec 8 0756	R-16U	-	G 22603-12T	0.000	RVSN	MS	-	OT	BML	Kosmodrom010	-
1966-5762	2439468.79	1966 Dec 9 0654	R-16U	-	G 22602-14T	0.000	RVSN	MS	-	OT	BML	Kosmodrom010	-
1966-5766	2439469.96	1966 Dec 10 1100	R-16U	-	T 22602-04	0.000	RVSN	MS	-	OT	BML	Kosmodrom010	-
1966-5768	2439483.00	1966 Dec 23 1205	R-16U	-	G 22604-17T	0.000	RVSN	MS	-	OT	BML	Kosmodrom010	-
1966-5768	2439483.75	1966 Dec 24 0600	R-16U	-	G 22604-18T	0.000	RVSN	MS	-	OT	BML	Kosmodrom010	-
1966-5765	2439485.75	1966 Dec 26 0600	R-16U	-	-	0.000	RVSN	MS	-	OT	PCBA	-	-
1967-5739	2439490.50	1967	R-16U	-	-	0.000	RVSN	MS	-	OT	BML	Kosmodrom010	-
1967-5666	2439511.92	1967 Jan 21 1000	R-16U	-	G 22603-12T	0.000	RVSN	MS	-	OT	BML	Kosmodrom010	-
1967-5667	2439518.80	1967 Jan 28 0708	R-16U	-	G 22603-15T	0.000	RVSN	MS	-	OT	BML	Kosmodrom010	-
1967-5668	2439524.79	1967 Feb 3 0700	R-16U	-	G 22603-08T	0.000	RVSN	MS	-	OT	BML	Kosmodrom010	-
1967-5681	2439543.79	1967 Feb 22 0700	R-16U	-	-	0.000	RVSN	MS	-	OT	PCBA	-	-
1967-5669	2439560.50	1967 Mar 11	R-16U	-	G 22603-17T	0.000	RVSN	MS	-	OT	PCBA	-	-
1967-5737	2439571.50	1967 Mar 22	R-16U	-	-	0.000	RVSN	MS	-	OT	BML	Kosmodrom010	-
1967-5692	2439580.79	1967 Apr 31 0700	R-16U	-	T 22602-09	0.000	RVSN	MS	-	OT	BML	Kosmodrom010	-
1967-5670	2439599.79	1967 Apr 19 0700	R-16U	-	G 22603-05T	0.000	RVSN	MS	-	OT	BML	Kosmodrom010	-
1967-5683	2439602.88	1967 Apr 22 0900	R-16U	-	-	0.000	RVSN	MS	-	OT	BML	Kosmodrom010	-
1967-5671	2439629.83	1967 May 19 0800	R-16U	-	T 22602-01T	0.000	RVSN	MS	-	OT	BML	Kosmodrom010	-



Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	OrbPay	Agency	Launch_Code	Group	Category	LTCite	Cite	Notes
1969-812	2440243.72	1969 Jan 22 0512	R-16U	-	T 22505-08T	0.000	RVSN	MS	-	OT	RML	Kosmodrom0010	-
1969-8727	2440251.79	1969 Jan 30 0700	R-16U	-	G 22501-16T	0.000	RVSN	MS	-	OT	RML	-	-
1969-806	2440280.67	1969 Feb 28 0404	R-16U	-	T 22505-02T	0.000	RVSN	MS	-	OT	RML	Kosmodrom0010	-
1969-8728	2440280.83	1969 Feb 28 0800	R-16U	-	T 22504-16T	0.000	RVSN	MS	-	OT	RML	-	-
1969-8730	2440307.83	1969 Mar 27 0800	R-16U	-	T 22503-11T	0.000	RVSN	MS	-	OT	RML	-	-
1969-8811	2440372.50	1969 Jun	R-16	-	-	0.000	RVSN	MS	-	OT	RML	-	-
1969-8812	2440372.50	1969 Jun	R-16	-	-	0.000	RVSN	MS	-	OT	RML	-	-
1969-8766	2440372.50	1969 Jun	R-16	-	-	0.000	RVSN	MS	-	OT	RML	-	-
1969-8752	2440384.50	1969 Jun 12	R-16	-	-	0.000	RVSN	MS	-	OT	RML	-	-
1969-807	2440384.50	1969 Jun 12	R-16U	-	-	0.000	RVSN	MS	-	OT	RML	-	-
1969-809	2440507.14	1969 Oct 12 1528	R-16U	-	T 22503-10T	0.000	RVSN	MS	-	OT	RML	-	-
1969-813	2440508.13	1969 Oct 13 1508	R-16U	-	T 22504-10T	0.000	RVSN	MS	-	OT	RML	-	-
1969-814	2440509.12	1969 Oct 14 1448	R-16U	-	T 22505-06T	0.000	RVSN	MS	-	OT	RML	-	-
1969-8751	2440512.80	1969 Oct 18 0710	R-16U	-	T 22505-12T	0.000	RVSN	MS	-	OT	RML	-	-
1969-8753	2440522.79	1969 Oct 28 0700	R-16U	-	T 22505-14T	0.000	RVSN	MS	-	OT	RML	-	-
1969-815	2440524.67	1969 Oct 30 0405	R-16U	-	T 22505-13T	0.000	RVSN	MS	-	OT	RML	-	-
1969-817	2440540.71	1969 Nov 25 0505	R-16U	-	T 22505-15T	0.000	RVSN	MS	-	OT	RML	-	-
1969-8794	2440549.88	1969 Nov 24 0900	R-16U	-	T 22505-10T	0.000	RVSN	MS	-	OT	RML	-	-
1969-810	2440556.75	1969 Dec 1 0606	R-16U	-	T 22505-04T	0.000	RVSN	MS	-	OT	RML	-	-
1969-808	2440558.67	1969 Dec 15 0402	R-16U	-	T 22501-19T	0.000	RVSN	MS	-	OT	RML	-	[RPCB0ct2]
1969-8752	2440571.38	1969 Dec 15 2104	R-16U	-	T 22505-17T	0.000	RVSN	MS	-	OT	RML	-	[RPCB]
1969-816	2440575.67	1969 Dec 26 2100	R-16U	-	T 22504-11T	0.000	RVSN	MS	-	OT	RML	-	-
1969-8759	2440582.38	1969 Dec 26 2100	R-16U	-	T 22504-12T	0.000	RVSN	MS	-	OT	RML	-	-
1969-811	2440586.67	1969 Dec 30 0403	R-16U	-	T 22505-08T	0.000	RVSN	MS	-	OT	RML	-	-
1970-8727	2440610.73	1970 Jan 24 0532	R-16U	-	G 22501-01T	0.000	RVSN	MS	-	OT	RML	-	-
1970-806	2440624.73	1970 Feb 7 0635	R-16U	-	G 22503-19T	0.000	RVSN	MS	-	OT	RML	-	-
1970-8728	2440645.66	1970 Feb 25 0350	R-16U	-	G 22501-02T	0.000	RVSN	MS	-	OT	RML	-	-
1970-8729	2440645.66	1970 Feb 25 0350	R-16U	-	G 22501-21T	0.000	RVSN	MS	-	OT	RML	-	-
1970-807	2440669.72	1970 Mar 24 0510	R-16U	-	G 22501-04T	0.000	RVSN	MS	-	OT	RML	-	-
1970-8754	2440672.83	1970 Mar 27 0750	R-16U	-	T 22505-07T	0.000	RVSN	MS	-	OT	RML	-	-
1970-810	2440740.71	1970 Jun 3 0605	R-16U	-	R 22501-05T	0.000	RVSN	MS	-	OT	RML	-	-
1970-8691	2440740.71	1970 Jun 10 0700	R-16U	-	R 22501-01T	0.000	RVSN	MS	-	OT	RML	-	-
1970-8692	2440753.79	1970 Jun 16 0700	R-16U	-	R 22502-06	0.000	RVSN	MS	-	OT	RML	-	-
1970-8701	2440762.79	1970 Jun 25 0700	R-16U	-	R 22504-18T	0.000	RVSN	MS	-	OT	RML	-	-
1970-812	2440767.70	1970 Jun 30 0450	R-16U	-	G 22501-09T	0.000	RVSN	MS	-	OT	RML	-	-
1970-8693	2440774.79	1970 Jul 1 0700	R-16U	-	G 22501-24T	0.000	RVSN	MS	-	OT	RML	-	-
1970-8694	2440799.37	1970 Jul 31 2059:59	R-16U	-	G 22501-22T	0.000	RVSN	MS	-	OT	RML	-	-
1970-8695	2440833.26	1970 Aug 14 1820	R-16U	-	G 22502-03T	0.000	RVSN	MS	-	OT	RML	-	-
1970-8696	2440824.21	1970 Aug 25 1659	R-16U	-	G 22501-21T	0.000	RVSN	MS	-	OT	RML	-	-
1970-8357	2440850.75	1970 Sep 1 0955	R-16U	-	G 22502-01T	0.000	RVSN	MS	-	OT	RML	-	-
1970-805	2440855.74	1970 Sep 15 0500	R-16U	-	G 22501-11T	0.000	RVSN	MS	-	OT	RML	-	-
1970-836	2440868.21	1970 Sep 25 0540	R-16U	-	G 22503-29T	0.000	RVSN	MS	-	OT	RML	-	-
1971-816	2440896.21	1971 Feb 1 1705	R-16U	-	G 22503-21T	0.000	RVSN	MS	-	OT	RML	-	-
1971-818	2440929.75	1971 Mar 19 0635	R-16U	-	G 22503-18T	0.000	RVSN	MS	-	OT	RML	-	-
1971-820	2441039.69	1971 Mar 27 0635	R-16U	-	G 22503-08T	0.000	RVSN	MS	-	OT	RML	-	-
1971-821	2441039.69	1971 Mar 27 0635	R-16U	-	G 22503-18T	0.000	RVSN	MS	-	OT	RML	-	-
1971-822	2441039.69	1971 Mar 27 0635	R-16U	-	G 22503-08T	0.000	RVSN	MS	-	OT	RML	-	-
1971-823	2441119.75	1971 May 29 0245	R-16U	-	G 22504-19T	0.000	RVSN	MS	-	OT	RML	-	-
1971-8663	2441119.75	1971 Jun 29 0635	R-16U	-	G 22501-07T	0.000	RVSN	MS	-	OT	RML	-	-
1971-813	2441126.38	1971 Jun 23 2111	R-16U	-	G 22502-02T	0.000	RVSN	MS	-	OT	RML	-	-
1971-813	2441130.38	1971 Jun 23 2111	R-16U	-	G 22503-19T	0.000	RVSN	MS	-	OT	RML	-	-
1971-814	2441130.68	1971 Jun 28 0420	R-16U	-	G 22501-10T	0.000	RVSN	MS	-	OT	RML	-	-
1971-8664	2441130.21	1971 Jun 28 0420	R-16U	-	G 22501-10T	0.000	RVSN	MS	-	OT	RML	-	-
1971-8665	2441148.21	1971 Jul 12 1700	R-16U	-	T 22505-05T	0.000	RVSN	MS	-	OT	RML	-	-
1971-8670	2441158.25	1971 Jul 26 1600	R-16U	-	T 22502-13T	0.000	RVSN	MS	-	OT	RML	-	-
1971-820	2441168.69	1971 Jul 26 1600	R-16U	-	G 22501-12T	0.000	RVSN	MS	-	OT	RML	-	-
1971-8666	2441180.17	1971 Aug 6 0435	R-16U	-	G 22501-15T	0.000	RVSN	MS	-	OT	RML	-	-
1971-8669	2441180.17	1971 Aug 16 1600	R-16U	-	G 22503-19T	0.000	RVSN	MS	-	OT	RML	-	-
1971-819	2441219.91	1971 Aug 25 0950	R-16U	-	U 22502-10T	0.000	RVSN	MS	-	OT	RML	-	-
1971-8663	2441232.81	1971 Oct 8 0705	R-16U	-	T 22505-05T	0.000	RVSN	MS	-	OT	RML	-	-
1971-815	2441247.72	1971 Oct 23 0510	R-16U	-	R 22501-10T	0.000	RVSN	MS	-	OT	RML	-	-
1971-817	2441268.77	1971 Oct 23 0510	R-16U	-	G 22502-07T	0.000	RVSN	MS	-	OT	RML	-	[BMLDec29]
1971-816	2441268.77	1971 Dec 4 0630	R-16U	-	G 22503-03T	0.000	RVSN	MS	-	OT	RML	-	-
1972-8480	2441309.86	1971 Dec 24 0840	R-16U	-	G 22503-04T	0.000	RVSN	MS	-	OT	RML	-	-
1972-8481	2441331.79	1972 Jan 15 0700	R-16U	-	G 22502-16T	0.000	RVSN	MS	-	OT	RML	-	-
1972-808	2441336.80	1972 Jan 20 0705	R-16U	-	G 22504-17T	0.000	RVSN	MS	-	OT	RML	-	-
1972-8483	2441344.79	1972 Jan 28 0700	R-16U	-	G 22503-03T	0.000	RVSN	MS	-	OT	RML	-	-
1972-809	2441357.03	1972 Feb 9 1240	R-16U	-	G 22503-04T	0.000	RVSN	MS	-	OT	RML	-	-
1972-805	2441367.00	1972 Feb 9 1205	R-16U	-	G 22502-15T	0.000	RVSN	MS	-	OT	RML	-	-
1972-8484	2441376.88	1972 Feb 29 0900	R-16U	-	G 22503-06T	0.000	RVSN	MS	-	OT	RML	-	-
1972-810	2441380.90	1972 Mar 4 0940	R-16U	-	G 22502-11T	0.000	RVSN	MS	-	OT	RML	-	-
1972-8485	2441393.88	1972 Mar 17 0900	R-16U	-	G 22502-11T	0.000	RVSN	MS	-	OT	RML	-	-
1972-8794	2441399.03	1972 Mar 22 1240	R-16U	-	G 22504-06T	0.000	RVSN	MS	-	OT	RML	-	-
1972-8755	2441399.50	1972 Mar 23	R-16U	-	-	0.000	RVSN	MS	-	OT	RML	-	-
1972-8486	2441406.79	1972 Mar 30 0700	R-16U	-	G 22502-17T	0.000	RVSN	MS	-	OT	RML	-	-
1972-806	2441419.17	1972 Mar 11 1605	R-16U	-	G 22503-10T	0.000	RVSN	MS	-	OT	RML	-	-
1972-8481	2441428.88	1972 Mar 18 0900	R-16U	-	G 22503-12T	0.000	RVSN	MS	-	OT	RML	-	-
1972-811	2441429.18	1972 Mar 21 1615	R-16U	-	G 22504-01T	0.000	RVSN	MS	-	OT	RML	-	-
1972-8487	2441471.04	1972 Mar 2 1300	R-16U	-	G 22504-02T	0.000	RVSN	MS	-	OT	RML	-	-
1972-8488	2441484.88	1972 Mar 16 0900	R-16U	-	G 22504-03T	0.000	RVSN	MS	-	OT	RML	-	-
1972-8489	2441486.92	1972 Jun 28 1010	R-16U	-	G 22504-07T	0.000	RVSN	MS	-	OT	RML	-	-
1972-8490	2441496.92	1972 Jun 29 0900	R-16U	-	-	0.000	RVSN	MS	-	OT	RML	-	-
1972-810	2441516.78	1972 Jul 31 1100	R-16U	-	G 22501-03T	0.000	RVSN	MS	-	OT	RML	-	-
1972-8760	2441529.96	1972 Jul 31 0800	R-16U	-	G 22503-17T	0.000	RVSN	MS	-	OT	RML	-	-
1972-8482	2441546.83	1972 Aug 18 1810	R-16U	-	G 22502-02T	0.000	RVSN	MS	-	OT	RML	-	-
1972-807	2441548.26	1972 Aug 18 1810	R-16U	-	G 22503-14T	0.000	RVSN	MS	-	OT	RML	-	-
1972-8771	2441560.96	1972 Aug 31 1100	R-16U	-	R 22502-02T	0.000	RVSN	MS	-	OT	RML	-	-

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	OrbPay	Agency	Launch_Code	Group	Category	LTCite	Cite	Notes
1972-8761	2441622.27	1972 Oct 31 1850	R-160	-	R 22604-01T	0.000	RVSN	MS	-	UT	RML	-	-
1972-8762	2441653.89	1972 Dec 2 0920	R-160	-	R 22604-10T	0.000	RVSN	MS	-	UT	RPCA	-	-
1973-8467	2441732.73	1973 Feb 19 0530	R-160	-	R 22604-13T	0.000	RVSN	MS	-	UT	RPCA	-	-
1973-8468	2441734.96	1973 Feb 21 1100	R-160	-	G 22601-14T	0.000	RVSN	MS	-	UT	RPCA	-	-
1973-8469	2441760.77	1973 Mar 19 0630	R-160	-	G 22602-05T	0.000	RVSN	MS	-	UT	RPCA	-	-
1973-8469	2441797.50	1973 Apr 25	R-160	-	-	0.000	RVSN	MS	-	UT	RPCA	-	-
1973-8563	2441831.50	1973 May 29	R-160	-	-	0.000	RVSN	MS	-	UT	RPCA	-	-
1973-8490	2441901.55	1973 Aug 7 0115	R-160	-	R 22601-14	0.000	RVSN	MS	-	UT	RML	-	-
1973-8549	2441925.44	1973 Aug 30 2230	R-160	-	U 22601-18	0.000	RVSN	MS	-	UT	RML	-	-
1974-8445	2442197.73	1974 May 30 0530	R-160	-	G 22604-04T	0.000	RVSN	MS	-	UT	RML	-	-
1974-8446	2442243.71	1974 Jul 15 0500	R-160	-	G 22602-09T	0.000	RVSN	MS	-	UT	RML	-	-
1975-8379	2442412.50	1975?	R-160	-	-	0.000	RVSN	MF	-	UT	RPCA	BMLX	RML
1975-8380	2442412.50	1975?	R-160	-	-	0.000	RVSN	MF	-	UT	RPCA	BMLX	RML
1975-8381	2442412.50	1975?	R-160	-	-	0.000	RVSN	MF	-	UT	RPCA	BMLX	RML
1975-8382	2442412.50	1975?	R-160	-	-	0.000	RVSN	MF	-	UT	RPCA	BMLX	RML
1975-8383	2442412.50	1975?	R-160	-	-	0.000	RVSN	MF	-	UT	RPCA	BMLX	RML
1975-8384	2442412.50	1975?	R-160	-	-	0.000	RVSN	MS	-	UT	RPCA	BMLX	-
1975-8385	2442412.50	1975?	R-160	-	-	0.000	RVSN	MS	-	UT	RPCA	BMLX	-
1975-8386	2442412.50	1975?	R-160	-	-	0.000	RVSN	MS	-	UT	RPCA	BMLX	-
1975-8387	2442412.50	1975?	R-160	-	-	0.000	RVSN	MS	-	UT	RPCA	BMLX	-
1975-8388	2442412.50	1975?	R-160	-	-	0.000	RVSN	MS	-	UT	RPCA	BMLX	-
1975-8375	2442595.50	1975 Jul 2	R-160	-	-	0.000	RVSN	MS	-	UT	RPCA	-	-
1975-8378	2442616.50	1975 Jul 23	R-16	-	-	0.000	RVSN	MS	-	UT	RPCA	-	-
1975-8376	2442651.50	1975 Aug 27	R-160	-	-	0.000	RVSN	MS	-	UT	RPCA	-	-
1975-8377	2442651.50	1975 Aug 27	R-160	-	-	0.000	RVSN	MS	-	UT	RPCA	-	-
1976-8377	2442777.50	1976?	R-160	-	-	0.000	RVSN	MS	-	UT	RPCA	-	-
1976-8378	2442777.50	1976?	R-160	-	-	0.000	RVSN	MS	-	UT	RPCA	BMLX	RML:1975
1976-8379	2442777.50	1976?	R-160	-	-	0.000	RVSN	MS	-	UT	RPCA	BMLX	RML:1975
1976-8380	2442777.50	1976?	R-160	-	-	0.000	RVSN	MS	-	UT	RPCA	BMLX	RML:1975
1976-8381	2442777.50	1976?	R-160	-	-	0.000	RVSN	MS	-	UT	RPCA	BMLX	RML:1975
1976-8382	2442777.50	1976?	R-160	-	-	0.000	RVSN	MS	-	UT	RPCA	BMLX	RML:1975
1976-8383	2442777.50	1976?	R-160	-	-	0.000	RVSN	MS	-	UT	RPCA	BMLX	RML:1975
1976-8384	2442777.50	1976?	R-160	-	-	0.000	RVSN	MS	-	UT	RPCA	BMLX	RML:1975
1976-8385	2442777.50	1976?	R-160	-	-	0.000	RVSN	MS	-	UT	RPCA	BMLX	RML:1975
1976-8386	2442777.50	1976?	R-160	-	-	0.000	RVSN	MS	-	UT	RPCA	BMLX	RML:1975























Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	OrbPay	Agency	Launch_Code	Group	Category	LTCite	Cite	Notes
1975-5425	2442598.50	1975 Jul 5	Zyb	-	-	0.000	RWSII	NS	-	Test	RML	-	-
1975-5426	2442598.50	1975 Jul 5	Zyb	-	-	0.000	RWSII	NS	-	Test	RML	-	-
1975-5427	2442598.50	1975 Jul 5	Zyb	-	-	0.000	RWSII	NS	-	Test	RML	-	-
1975-5428	2442598.50	1975 Jul 5	Zyb	-	-	0.000	RWSII	NS	-	Test	RML	-	-
1975-5429	2442598.50	1975 Jul 5	Zyb	-	-	0.000	RWSII	NS	-	Test	RML	-	-
1975-5430	2442598.50	1975 Jul 5	Zyb	-	-	0.000	RWSII	NS	-	Test	RML	-	-
1975-5431	2442598.50	1975 Jul 5	Zyb	-	-	0.000	RWSII	NS	-	Test	RML	-	-
1975-5432	2442598.50	1975 Jul 5	Zyb	-	-	0.000	RWSII	NS	-	Test	RML	-	-
1975-5418	2442685.50	1975 Sep	Zyb	-	-	0.000	RWSII	NS	-	Test	RML	-	-
1975-5419	2442685.50	1975 Oct	Zyb	-	-	0.000	RWSII	NS	-	Test	RML	-	-
1975-5420	2442685.50	1975 Oct	Zyb	-	-	0.000	RWSII	NS	-	Test	RML	-	-
1975-5421	2442685.50	1975 Oct	Zyb	-	-	0.000	RWSII	NS	-	Test	RML	-	-
1975-5422	2442685.50	1975 Oct	Zyb	-	-	0.000	RWSII	NS	-	Test	RML	-	-
1975-5423	2442685.50	1975 Oct	Zyb	-	-	0.000	RWSII	NS	-	Test	RML	-	-
1975-5424	2442685.50	1975 Oct	Zyb	-	-	0.000	RWSII	NS	-	Test	RML	-	-
1975-5425	2442777.50	1976	Zyb	-	-	0.000	RWSII	NS	-	Test	RML	-	Jul?
1975-5426	2442777.50	1976	Zyb	-	-	0.000	RWSII	NS	-	Test	RML	-	-
1975-5427	2442777.50	1976	Zyb	-	-	0.000	RWSII	NS	-	Test	RML	-	-
1975-5428	2442777.50	1976	Zyb	-	-	0.000	RWSII	NS	-	Test	RML	-	-
1975-5429	2442990.50	1976 Aug?	Zyb	-	-	0.000	RWSII	NS	-	Test	RML	-	-
1975-5430	2442990.50	1976 Aug?	Zyb	-	-	0.000	RWSII	NS	-	Test	RML	-	-
1975-5431	2443567.50	1978 Mar?	Zyb	-	-	0.000	RWSII	NS	-	Test	RML	-	-
1975-5432	2443567.50	1978 Mar?	Zyb	-	-	0.000	RWSII	NS	-	Test	RML	-	-
1975-5433	2443567.50	1978 Mar 19	Zyb	-	-	0.000	RWSII	NS	-	Test	RML	-	-
1975-5434	2443567.50	1978 Mar 19	Zyb	-	-	0.000	RWSII	NS	-	Test	RML	-	-
1975-5435	2443567.50	1978 Apr?	Zyb	-	-	0.000	RWSII	NS	-	Test	RML	-	-
1975-5436	2444177.50	1979 Nov	Zyb	-	-	0.000	RWSII	NS	-	Test	RML	-	-
1960-5306	2444313.50	1980 Mar 15	Zyb	-	-	0.000	RWSII	NS	-	OT	96C-HartGoldwater	-	-
1960-5307	2444313.50	1980 Mar 15	Zyb	-	-	0.000	RWSII	NS	-	OT	96C-HartGoldwater	-	-
1960-5308	2444313.50	1980 Mar 15	Zyb	-	-	0.000	RWSII	NS	-	OT	96C-HartGoldwater	-	-
1960-5309	2444313.50	1980 Mar 15	Zyb	-	-	0.000	RWSII	NS	-	OT	96C-HartGoldwater	-	-
1961-518	2444604.50	1981	Zyb	-	-	0.000	RWSII	NS	-	OT	RML	-	-
1963-520	2445522.50	1983 Sep 5	Zyb	-	-	0.000	RWSII	NS	-	OT	RML	-	-
1964-444	2445599.50	1984	Zyb	-	-	0.000	RWSII	NS	-	OT	RML	-	-
1967-5444	2447038.50	1987 Sep?	Zyb	-	-	0.000	RWSII	NS	-	OT	RML	-	-
1967-5245	2447038.50	1987 Sep?	Zyb	-	-	0.000	RWSII	NS	-	OT	RML	-	-
1988-522	2447160.50	1988	Zyb	-	-	0.000	RWSII	NS	-	OT	RML	-	-
1982-576	2446608.50	1991 Dec 18	Zyb	-	-	0.000	RWSII	NS	-	OT	www.fes.org	-	-
1982-599	2446608.50	1992 Dec 9 0000	Zyb	-	-	0.000	RWSII	NS	-	Tech	RussianSpaceWeb.com	-	-
1983-573	2452283.50	1993 Nov 2	Zyb	-	-	0.000	RWSII	NS	-	Tech	RussianSpaceWeb.com	-	-
2016-A26	2452283.50	2016 Apr 24	Hasong-10	-	-	0.000	RGC	WF	-	Test	Mir	-	-
2016-A26	2457565.36	2016 Apr 24	Hasong-10	-	-	0.000	RGC	WF	-	Test	Mir	-	-
2016-A26	2457565.36	2016 Apr 27 2140	Hasong-10	-	-	0.000	RGC	WF	-	Test	Mir	-	-
2016-A24	2457565.36	2016 Apr 30 2030	Hasong-10	-	-	0.000	RGC	WF	-	Test	Mir	-	-
2016-S38	2457565.36	2016 May 30 2030	Hasong-10	-	-	0.000	RGC	WF	-	Test	Mir	-	-
2016-S38	2457561.37	2016 Jun 21 2066	Hasong-10	-	-	0.000	RGC	WF	-	Test	Mir	-	-
2016-S38	2457561.14	2016 Jun 21 2303	Hasong-10	-	-	0.000	RGC	WF	-	Test	Mir	-	-
2016-S38	2457561.14	2016 Jun 21 2303	Hasong-10	-	-	0.000	RGC	WF	-	Test	Mir	-	-
2016-S38	2457561.14	2016 Jun 21 2303	Hasong-10	-	-	0.000	RGC	WF	-	Test	Mir	-	-
2017-S06	2457792.50	2017 Jan 29	Khorrāmshahr	-	-	0.000	TR	MS	-	Test	Mir	-	-
2017-S06	2457792.50	2017 Jan 29	Khorrāmshahr	-	-	0.000	TR	MS	-	Test	Mir	-	-
2017-S03	2457934.42	2017 Mar 21 2200?	Hasong-10	?	-	0.000	RGC	WF	-	Test	Mir	-	-
2017-S03	2457934.42	2017 Mar 21 2200?	Hasong-10	?	-	0.000	RGC	WF	-	Test	Mir	-	-
2018-S70	2458462.50	2018 Nov 30	Khorrāmshahr	-	-	0.000	TR	MS	-	Test	Mir	-	-







Launch

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Mission	FlightCode	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee_Km	Range_Km	Dest
1981-522	2444908.50	1981 Nov	Vyesta	-	-	R-29 4K75D UBP	MCh	-	K-523	UMKPL	-	-	-	1000?	-	-
1981-A39	2444909.50	1981 Nov?	Shitl'	-	-	R-29R4 3K37	B-1-1 Eject test	-	K-180	CHH	-	-	-	1	-	-
1982-5307	2444909.50	1982?	Vyesta	-	-	R-29R 3H40L UBP	3 BB	-	-	UMKPL	-	-	-	1000?	-	-
1982-A49	2444909.50	1982 Jan?	Shitl'	-	-	R-29R4 3K37	B-1-2 Eject test	-	-	CHH	-	-	-	1	-	-
1982-A51	2444909.50	1982 Jan?	Shitl'	-	-	R-29R4 3K37	B-1-3 Eject test	-	-	CHH	-	-	-	1	-	-
1982-A52	2444909.50	1982 Jan?	Shitl'	-	-	R-29R4 3K37	B-1-4 Eject test	-	-	CHH	-	-	-	1	-	-
1982-A53	2444909.50	1982 Jan?	Shitl'	-	-	R-29R4 3K37	B-1-5 Eject test	-	-	CHH	-	-	-	1	-	-
1982-A54	2444909.50	1982 Jan?	Shitl'	-	-	R-29R4 3K37	B-1-6 Eject test	-	-	CHH	-	-	-	1	-	-
1982-A55	2444909.50	1982 Jan?	Shitl'	-	-	R-29R4 3K37	B-1-7 Eject test	-	-	CHH	-	-	-	1	-	-
1982-A56	2444909.50	1982 Jan?	Shitl'	-	-	R-29R4 3K37	B-1-8 Eject test	-	-	CHH	-	-	-	1	-	-
1982-5304	2444998.50	1982 Jan 29?	Vyesta	-	-	R-29 4K75D UBP	MCh	-	K-421	BLA	-	-	-	1000?	-	Kura
1982-5305	2444999.50	1982 Jan 30?	Vyesta	-	-	R-29 4K75D UBP	MCh	-	K-421	BLA	-	-	-	1000?	-	Kura
1982-5306	2445000.50	1982 Jan 31?	Vyesta	-	-	R-29 4K75D UBP	MCh	-	K-385	BLA	-	-	-	1000?	-	Kura?
1982-5301	2445002.50	1982 Apr 23	Vyesta	-	-	R-29 4K75D UBP	MCh	-	K-92	STANMA	-	-	-	1000?	-	-
1982-5302	2445002.50	1982 Apr 23	Vyesta	-	-	R-29 4K75D UBP	MCh	-	K-92	STANMA	-	-	-	1000?	-	-
1982-5296	2445138.50	1982 Jun 18	Vyesta	-	-	R-29 4K75D UBP	Shchlt-82 ABM Target	-	-	NPOL	-	-	-	1000?	-	BALLH
1982-5295	2445251.50	1982 Oct 9	Vyesta	-	-	R-29 4K75D UBP	MCh	-	K-512	UMKPL	-	-	-	1000?	-	-
1982-AD0	2445273.50	1982 Nov	Shitl'	-	-	R-29R4 3K37	B-1-9 Eject test	-	-	CHH	-	-	-	1	-	-
1983-5338	2445334.50	1983	Volna	-	-	R-29R 3H40K UBP	7 BB	-	K-506	UMKPL	-	-	-	1000?	-	-
1983-5339	2445334.50	1983	Vyesta	-	-	R-29 4K75D UBP	MCh	-	K-506	UMKPL	-	-	-	1000?	-	-
1983-5340	2445334.50	1983	Vyesta	-	-	R-29 4K75D UBP	MCh	-	K-506	UMKPL	-	-	-	1000?	-	-
1983-AD8	2445479.50	1983 May 25	Volna	-	-	R-29R 3H40K UBP	7 BB	-	PLBR	POLA	-	-	-	0?	-	Chiza
1983-5107	2445485.50	1983 Jun	Shitl'	-	-	R-29R4 3K37 LK1-2-1	10 BB	-	-	NSK-37	-	-	-	1000?	-	-
1983-5317	2445485.50	1983 Jun	Shitl'	-	-	R-29R4 3K37 LK1-2-2	10 BB	-	-	NSK-37	-	-	-	1000?	-	-
1983-5316	2445485.50	1983 Jun	Shitl'	-	-	R-29R4 3K37 LK1-2-3	10 BB	-	-	NSK-37	-	-	-	1000?	-	-
1983-5319	2445485.50	1983 Jun	Shitl'	-	-	R-29R4 3K37 LK1-2-4	10 BB	-	-	NSK-37	-	-	-	1000?	-	-
1983-5320	2445485.50	1983 Jun	Shitl'	-	-	R-29R4 3K37 LK1-2-5	10 BB	-	-	NSK-37	-	-	-	1000?	-	-
1983-5321	2445485.50	1983 Jun	Shitl'	-	-	R-29R4 3K37 LK1-2-6	10 BB	-	-	NSK-37	-	-	-	1000?	-	-
1983-5322	2445485.50	1983 Jun	Shitl'	-	-	R-29R4 3K37 LK1-2-7	10 BB	-	-	NSK-37	-	-	-	1000?	-	-
1983-5323	2445485.50	1983 Jun	Shitl'	-	-	R-29R4 3K37 LK1-2-8	10 BB	-	-	NSK-37	-	-	-	1000?	-	-
1983-5324	2445485.50	1983 Jun	Shitl'	-	-	R-29R4 3K37 LK1-2-9	10 BB	-	-	NSK-37	-	-	-	1000?	-	-
1983-5325	2445485.50	1983 Jun	Shitl'	-	-	R-29R4 3K37 LK1-2-10	10 BB	-	-	NSK-37	-	-	-	1000?	-	-
1983-5326	2445485.50	1983 Jun	Shitl'	-	-	R-29R4 3K37 LK1-2-11	10 BB	-	-	NSK-37	-	-	-	1000?	-	-
1983-5328	2445485.50	1983 Jun	Shitl'	-	-	R-29R4 3K37 LK1-2-12	10 BB	-	-	NSK-37	-	-	-	1000?	-	-
1983-5329	2445485.50	1983 Jun	Shitl'	-	-	R-29R4 3K37 LK1-2-13	10 BB	-	-	NSK-37	-	-	-	1000?	-	-
1983-5316	2445485.50	1983 Jun	Shitl'	-	-	R-29R4 3K37 LK1-2-14	10 BB	-	-	NSK-37	-	-	-	1000?	-	-
1983-5318	2445485.50	1983 Jun	Shitl'	-	-	R-29R4 3K37 LK1-2-15	10 BB	-	-	NSK-37	-	-	-	1000?	-	-
1983-5319	2445690.50	1983 Dec 22	Vyesta	-	-	R-29R 3H40L UBP	9 BB	-	K-223	UMKPL	-	-	-	1000?	-	Kura?
1984-5317	2445690.50	1984	Volna	-	-	R-29R 3H40K UBP	7 BB	-	K-490	UMKPL	-	-	-	1000?	-	-
1984-5318	2445752.50	1984 Feb 22	Vyesta	-	-	R-29R 3H40L UBP	3 BB?	-	K-453	UMKPL	-	-	-	1000?	-	-
1984-5315	2445790.50	1984 Apr?	Vyesta	-	-	R-29 4K75D UBP	3 BB?	-	K-453	UMKPL	-	-	-	1000?	-	-
1984-5314	2445891.50	1984 Apr 11	Volna	-	-	R-29R 3H40K UBP	7 BB	-	K-453	UMKPL	-	-	-	1000?	-	-
1984-5313	2445891.50	1984 Jun?	Vyesta	-	-	R-29R 3H40K UBP	MCh	-	K-92	STANMA	-	-	-	1000?	-	-
1984-5312	2445903.50	1984 Sep?	Shitl'	-	-	R-29R4 3K37 LK1-2-16	10 BB	-	-	NSK-37	-	-	-	1000?	-	Kura?
1984-5311	2445903.50	1984 Sep?	Volna	-	-	R-29R 3H40K UBP	7 BB	-	PLBR	BLA	-	-	-	1000?	-	Kura?
1984-5290	2445970.50	1984 Sep 27	Volna	-	-	R-29R 3H40K UBP	7 BB	-	K-424	BLA	-	-	-	1000?	-	Kura?
1984-5291	2446002.50	1984 Oct 29	Shitl'	-	-	R-29R4 3K37 LK1-3-1	10 BB	-	K-91	RELA	-	-	-	1000?	-	-
1984-5292	2446002.50	1984 Oct 30	Shitl'	-	-	R-29R4 3K37 LK1-3-2	10 BB	-	K-91	RELA	-	-	-	1000?	-	-
1984-5293	2446002.50	1984 Nov 19	Shitl'	-	-	R-29R4 3K37 LK1-3-3	10 BB	-	K-91	RELA	-	-	-	1000?	-	-
1984-5294	2446002.50	1984 Nov 20	Shitl'	-	-	R-29R4 3K37 LK1-3-4	10 BB	-	K-91	RELA	-	-	-	1000?	-	-
1984-5295	2446002.50	1984 Nov 27	Shitl'	-	-	R-29R4 3K37 LK1-3-5	10 BB	-	K-91	RELA	-	-	-	1000?	-	-
1984-5296	2446053.50	1984 Dec 19	Shitl'	-	-	R-29R4 3K37 LK1-3-6	10 BB	-	K-91	RELA	-	-	-	1000?	-	-
1984-5297	2446053.50	1984 Dec 19	Shitl'	-	-	R-29R4 3K37 LK1-3-7	10 BB	-	K-91	RELA	-	-	-	1000?	-	-
1984-5298	2446060.50	1984 Dec 26	Shitl'	-	-	R-29R4 3K37 LK1-3-8	10 BB	-	K-51	RELA	-	-	-	1000?	-	Pacific
1984-5299	2446060.50	1984 Dec 26	Shitl'	-	-	R-29R4 3K37 LK1-3-9	10 BB	-	K-51	RELA	-	-	-	1000?	-	Pacific
1984-5298	2446060.50	1984 Dec 26	Shitl'	-	-	R-29R4 3K37 LK1-3-10	10 BB	-	K-51	RELA	-	-	-	1000?	-	Pacific
1984-5299	2446060.50	1984 Dec 26	Shitl'	-	-	R-29R4 3K37 LK1-3-11	10 BB	-	K-51	RELA	-	-	-	1000?	-	Pacific
1984-5298	2446060.50	1984 Dec 26	Shitl'	-	-	R-29R4 3K37 LK1-3-12	10 BB	-	K-51	RELA	-	-	-	1000?	-	Pacific
1985-5326	2446065.50	1985	Volna	-	-	R-29R 3H40K UBP	7 BB	-	K-129	NPOL	-	-	-	1000?	-	-
1985-5327	2446065.50	1985	Volna	-	-	R-29R 3H40K UBP	7 BB	-	K-129	NPOL	-	-	-	1000?	-	-
1985-5314	2446155.50	1985 Apr?	Vyesta	-	-	R-29 4K75D UBP	MCh	-	PLBR	MAOLA	-	-	-	1000?	-	-
1985-5315	2446155.50	1985 Apr?	Vyesta	-	-	R-29 4K75D UBP	MCh	-	PLBR	UMKPL	-	-	-	1000?	-	-
1985-5316	2446155.50	1985 Apr?	Vyesta	-	-	R-29 4K75D UBP	MCh	-	PLBR	UMKPL	-	-	-	1000?	-	-
1985-5317	2446155.50	1985 Apr?	Vyesta	-	-	R-29 4K75D UBP	MCh	-	PLBR	UMKPL	-	-	-	1000?	-	-
1985-5318	2446155.50	1985 Apr?	Vyesta	-	-	R-29 4K75D UBP	MCh	-	PLBR	UMKPL	-	-	-	1000?	-	-
1985-5319	2446155.50	1985 Apr?	Vyesta	-	-	R-29 4K75D UBP	MCh	-	PLBR	UMKPL	-	-	-	1000?	-	-
1985-5320	2446155.50	1985 Apr?	Vyesta	-	-	R-29 4K75D UBP	MCh	-	PLBR	UMKPL	-	-	-	1000?	-	-
1985-5321	2446155.50	1985 Apr?	Vyesta	-	-	R-29 4K75D UBP	MCh	-	PLBR	UMKPL	-	-	-	1000?	-	-
1985-5322	2446155.50	1985 Apr?	Vyesta	-	-	R-29 4K75D UBP	MCh	-	PLBR	UMKPL	-	-	-	1000?	-	-
1985-5323	2446155.50	1985 Apr?	Vyesta	-	-	R-29 4K75D UBP	MCh	-	PLBR	UMKPL	-	-	-	1000?	-	-
1985-5324	2446155.50	1985 Apr?	Vyesta	-	-	R-29 4K75D UBP	MCh	-	PLBR	UMKPL	-	-	-	1000?	-	-
1985-5325	2446155.50	1985 Apr?	Vyesta	-	-	R-29 4K75D UBP	MCh	-	PLBR	UMKPL	-	-	-	1000?	-	-
1985-5313	2446246.50	1985 Jul	Volna	-	-	R-29R 3H40K UBP	7 BB	-	K-51	UMKPL	-	-	-	100?	-	-
1985-5312	2446273.50	1985 Jul 27	Shitl'	-	-	R-29R4 3K37 LK1-1	10 BB	-	K-51	UMKPL	-	-	-	100?	-	-
1985-5311	2446273.50	1985 Jul 27	Shitl'	-	-	R-29R4 3K37 LK1-2	10 BB	-	K-51	UMKPL	-	-	-	100?	-	-
1985-5310	2446295.50	1985 Aug 18?	Volna	-	-	R-29R 3H40K UBP	7 BB	-	K-487	NPOL	-	-	-	1000?	-	Kura?
1985-5306	2446295.50	1985 Aug 18?	Volna	-	-	R-29R 3H40K UBP	7 BB	-	K-487	NPOL	-	-	-	1000?	-	Kura?
1985-5307	2446361.50	1985 Oct 23	Shitl'	-	-	R-29R4 3K37 LK1-3	10 BB	-	K-51	UMKPL	-	-	-	1000?	-	-
1985-5308	2446361.50	1985 Oct 23	Shitl'	-	-	R-29R4 3K37 LK1-4	10 BB	-	K-51	UMKPL	-	-	-	1000?	-	-
1985-5304	2446361.50	1985 Oct 23	Shitl'	-	-	R-29R4 3K37 LK1-5	10 BB	-	K-84	UMKPL	-	-	-	1000?	-	-
1985-5305	2446361.50	1985 Nov 12	Shitl'	-	-	R-29R4 3K37 LK1-6	10 BB	-	K-84	UMKPL	-	-	-	1000?	-	-
1986-5208	2446430.50	1986	Volna	-	-	R-29R 3H40K UBP	7 BB	-	K-44	NPOL	-	-	-	1000?	-	Kura?
1986-5209	2446430.50	1986	Volna	-	-	R-29R 3H40K UBP	7 BB	-	PLBR	UMKPL	-	-	-	1000?	-	Kura?
1986-5210	2446430.50	1986	Volna	-	-	R-29R 3H40K UBP	7 BB	-	PLBR	UMKPL	-	-	-	1000?	-	Kura?
1986-5211	2446430.50	1986	Volna	-	-	R-29R 3H40K UBP	7 BB	-	PLBR	UMKPL	-	-	-	1000?	-	Kura?
1986-5212	2446430.50	1986	Volna													



Launch

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Mission	FlightCode	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee_Km	Range_Km	Dest
1997-503	2450463.50	1997 Jan 15	Volna	-	-	R-29RUK-01 UB	3 BB 3095	3M40KX-01	KALMAR	BLA	-	-	-	1000?	-	Kura
1997-551	2450652.50	1997 Jul 23	Volna	?	-	R-29RUK-01 UB	3 BB 3095	3M40KX-01	PLBR	OMLA?	-	-	-	1000?	-	Ch.Lzha
1997-562	2450693.50	1997 Sep 2	Volna	-	-	R-29 4K7500 UB	MCh	-	K-457	BLA	-	-	-	1000?	-	Kura
1997-560	2450724.50	1997 Oct 3	Volna	-	-	R-29 4K7500 UB	Souvenir container	-	K-447	BLA	-	-	-	1000?	-	Kura
1997-561	2450752.50	1997 Nov?	Volna	?	-	R-29 4K7500 UB	MCh	-	K-447	BLA	-	-	-	1000?	-	Kura
1998-515	2450863.50	1998 Feb 19	Shill'	-	-	R-29RM 3K370 UB	4 BB 3095	-	DELTA4	BLA	-	-	-	1000?	-	Kura
1998-516	2450863.50	1998 Feb 19	Shill'	-	-	R-29RM 3K370 UB	4 BB 3095	-	DELTA4	BLA	-	-	-	1000?	-	Kura
1998-573	2450994.50	1998 Jul 7	Volna	-	-	R-29R 4K7500 UB	MCh	-	K-447	BLA	-	-	-	1000?	-	Kura
1998-042	2450001.64	1998 Jul 7 0315:00	Shill' -1	-	L-1492-524	TUBSAT-N	-	-	K-407	BLA	LP1	-	-	809	-	-
1999-351	2450466.50	1998 Aug 21	Volna	-	-	R-29RUK-01 UB	3 BB 3095	3M40KX-01	PLBR	BLA	-	-	-	1000?	-	Kura
1999-352	2451289.50	1999 Apr 1	Volna	-	-	R-29RUK-01 UB	3 BB 3095	3M40KX-01	K-496	BLA	-	-	-	1000?	-	Kura
1999-364	2451462.75	1999 Oct 1 0557	Volna	-	-	R-29RUK-01 UB	3 BB 3095	3M40KX-01	K-211	OMLA	-	-	-	1000?	-	Ch.Lzha
1999-A04	2451462.74	1999 Oct 1 0545	Volna	-	-	R-29RUK-01 UB	3 BB 3095	3M40KX-01	K-44	BLA	-	-	-	10?	-	Kura
2000-514	2451630.75	2000 Mar 27 0600	Shill'	-	-	R-29RM 3K370 UB	4 BB 3095	-	K-18	BLA	-	-	-	1000?	-	Kura
2000-515	2451630.88	2000 Mar 27 0900	Shill'	-	-	R-29RM 3K370 UB	4 BB 3095	-	K-18	BLA	-	-	-	1000?	-	Kura
2000-519	2451640.73	2000 Apr 6 0530	Volna	-	-	R-29RUK-01 UB	3 BB 3095	-	K-496	BLA	-	-	-	1000?	-	Kura
2000-560	2451797.50	2000 Sep 10	Shueva	-	-	R-29RM 3K3702 LK1-1	4 BB	-	K-18	BLA	-	-	-	1000?	-	Kura
2000-568	2451906.83	2000 Dec 27 0800	Shill'	?	-	R-29RM 3K370 UB	4 BB	-	K-407	BLA	-	-	-	1000?	-	Kura
2001-509	2451986.94	2001 Feb 16 1028	Shill'	-	WFE RF	R-29RM 3K3702 LK1-2	4 BB	-	K-407	BLA	-	-	-	1000?	-	Kura
2001-523	2452066.98	2001 Jun 5 1132	Shill'	?	-	R-29RM 3K3701 LK1-3	4 BB	-	K-51	BLA	-	-	-	1000?	-	Kura
2001-537	2452110.52	2001 Jul 20 0031	Volna	-	P-1491-210	Cosmos 1 Solar Sail	-	-	K-496	BLA	-	-	-	41.2	-	Ch.Lzha
2001-541	2452170.50	2001 Sep 18	Volna	?	WFE RF	R-29RUK-01 UB	3 BB 3095	-	K-223	OMLA	-	-	-	1000?	-	Kura
2001-542	2452179.50	2001 Sep 27	Shill'	-	WFE RF	-	-	-	TK-20	BLA	-	-	-	1000?	-	Kura
2001-543	2452179.50	2001 Sep 27	Shill'	?	WFE RF	-	-	-	TK-20	BLA	-	-	-	1000?	-	Kura
2001-545	2452467.94	2002 Jul 12 0658:31	Volna	-	-	R-29RUK-01 UB	INOT-2	-	K-44	BLA	-	-	-	200?	-	Kura
2002-563	2452589.88	2002 Oct 12 0912	Volna	-	WFE RF	R-29RUK-01 UB	3 BB 3095	-	TK-20	OMLA	-	-	-	1000?	-	Ch.Lzha
2002-565	2452589.88	2002 Oct 12 0955	Shill'	?	WFE RF	R-29RUK-01 UB	4 BB 3095	Shill?	TK-20	BLA	-	-	-	1000?	-	Kura
2003-565	2452684.85	2003 Sep 2 0823	Volna	-	WFE RF	R-29RUK-01 UB	3 BB 3095	-	K-506	OMLA	-	-	-	1000?	-	Ch.Lzha
2003-565	2452979.34	2003 Dec 5 2005	Shueva	-	-	R-29RM 3K3702 LK1-1	4 BB	-	K-94	BLA	-	-	-	1000?	-	Kura
2003-564	2452999.96	2003 Dec 28 1100	Shueva	-	WFE RF	R-29RM 3K3702 LK1-2	4 BB	-	K-94	BLA	-	-	-	10?	-	(Kura)
2004-A01	2453053.88	2004 Feb 18 0900	Shueva	-	WFE RF	R-29RM 3K3701 UB	4 BB	-	K-18	BLA	-	-	-	1000?	-	Kura
2004-513	2453062.01	2004 Mar 17 1208	Shueva	-	WFE RF	R-29RM 3K3701 UB	4 BB	-	K-407	BLA	-	-	-	1000?	-	Kura
2004-524	2453166.81	2004 Jun 29 0725	Shueva	?	WFE RF	R-29RM 3K3702 LK1-3	4 BB	Shill?	K-407	BLA	-	-	-	1000?	-	Kura
2004-542	2453286.73	2004 Sep 6 0538	Shill'	-	-	R-29RM 3K3701 UB	4 BB	-	K-94	BLA	-	-	-	1000?	-	Kura
2004-543	2453286.82	2004 Sep 6 0738	Volna	-	-	R-29RUK-01 UB	3 BB 3095	-	K-496	BLA	-	-	-	1000?	-	Kura
2004-563	2453311.89	2004 Nov 21 0925	Volna	-	-	R-29RUK-01 UB	3 BB 3095	-	K-453	OMLA	-	-	-	1000?	-	Ch.Lzha
2005-F02	2453599.80	2005 Jun 21 1946:09	Volna	-	K-1491-035	Cosmos-179em-2A	-	-	K-94	BLA	-	-	-	860?	-	Kura
2005-563	2453643.85	2005 Aug 17 0706	Shueva	-	WFE RF	R-29RUK-01 UB	3 BB 3095	-	K-453	OMLA	-	-	-	1000?	-	Ch.Lzha
2005-563	2453644.50	2005 Sep 30 0822	Volna	-	WFE RF	R-29RUK-01 UB	3 BB 3095	-	K-453	OMLA	-	-	-	1000?	-	Ch.Lzha
2005-562	2453882.46	2005 Oct 6 2130:04	Shill' -1	?	P-1491-205	R-29RUK-02 LK1	3 BB	-	K-496	BLA	-	-	-	200?	-	Kura
2006-529	2453907.17	2006 May 26 1859	Shill' -1	-	-	INOT-2A	-	-	K-94	BLA	-	-	-	520?	-	Kura
2006-532	2453916.77	2006 Jun 30 1025	Shueva	-	WFE RF	Kompass 2K3701	4 BB	-	K-114	BLA	-	-	-	1000?	-	Kura
2006-551	2453987.07	2006 Sep 9 1120	Shueva	-	WFE RF	R-29RM 3K3701	4 BB	-	K-114	BLA	-	-	-	1000?	-	Ch.Lzha
2006-551	2453989.12	2006 Sep 9 1450	Volna	-	WFE RF	R-29RUK-01 UB	3 BB 3095	-	K-94	OMLA	-	-	-	1000?	-	Ch.Lzha
2006-551	2454193.50	2006 Aug 17	Volna	-	WFE RF	R-29RM 3K3701 UB	4 BB	-	K-211	OMLA	-	-	-	1000?	-	Ch.Lzha
2007-564	2454451.90	2007 Dec 17	Shueva	-	WFE RF	R-29RM 3K3701 UB	4 BB	Shill?	K-114	BLA	-	-	-	1000?	-	Kura
2007-565	2454451.90	2007 Dec 17	Shueva	-	WFE RF	R-29RM 3K3701 UB	4 BB	-	K-114	BLA	-	-	-	1000?	-	Kura
2008-556	2454679.86	2008 Aug 1 0800	Volna	-	WFE RF	R-29RM 3K3702 UB	3 BB 3095	-	K-114	BLA	-	-	-	1000?	-	Kura
2008-546	2454750.88	2008 Oct 15 0850	Shueva	-	WFE RF	R-29RM 3K3702 UB	3 BB 3095	-	K-114	BLA	-	-	-	1000?	-	Pacific
2008-546	2454751.78	2008 Oct 15 0850	Volna	-	WFE RF	R-29RM 3K3702 UB	3 BB 3095	-	K-114	BLA	-	-	-	1000?	-	Ch.Lzha
2008-549	2454751.81	2008 Oct 15 0730	Shueva	-	WFE RF	R-29RM 3K3702 UB	4 BB	-	K-506	BLA	-	-	-	1000?	-	Kura
2008-548	2454925.56	2009 Jul 13 0130	Shueva	-	WFE RF	R-29RM 3K3702 UB	4 BB	-	K-94	BLA	-	-	-	1000?	-	Kura
2008-534	2455026.49	2009 Jul 13 2350	Shueva	-	WFE RF	R-29RM 3K3702 UB	4 BB	-	K-94	BLA	-	-	-	1000?	-	Kura
2009-524	2455110.78	2009 Oct 6 0637	Volna	-	WFE RF	R-29RM 3K3702 UB	3 BB 3095	-	K-117	OMLA	-	-	-	1500?	-	Ch.Lzha
2009-551	2455111.77	2009 Oct 7 0630	Volna	-	WFE RF	R-29RM 3K3702 UB	3 BB 3095	-	K-433	OMLA	-	-	-	1000?	-	Ch.Lzha
2009-554	2455136.81	2009 Nov 4 0730	Shueva	-	WFE RF	R-29RM 3K3702 UB	4 BB	-	K-44	BLA	-	-	-	1000?	-	Ch.Lzha
2009-554	2455259.70	2010 Mar 4 0450	Shueva	-	WFE RF	R-29RM 3K3702 UB	4 BB	-	K-117	BLA	-	-	-	1000?	-	Kura
2010-521	2455415.14	2010 Aug 6 1515	Shueva	-	WFE RF	R-29RM 3K3702 UB	4 BB	-	K-114	BLA	-	-	-	1000?	-	Kura
2010-552	2455415.14	2010 Aug 6 1516	Shueva	-	WFE RF	R-29RM 3K3702 UB	4 BB	-	K-114	BLA	-	-	-	1000?	-	Kura
2010-562	2455497.94	2010 Oct 28 1030	Shueva	-	WFE RF	R-29RM 3K3701 UB	4 BB	-	K-117	BLA	-	-	-	1000?	-	Ch.Lzha
2010-564	2455497.93	2010 Oct 28 1017	Volna	-	WFE RF	R-29RM 3K3701 UB	4 BB	-	K-117	BLA	-	-	-	1000?	-	Ch.Lzha
2011-514	2455678.22	2011 May 26 1711	Shueva	-	WFE RF	R-29RM 3K3701	3 BB	-	K-433	OMLA	-	-	-	1000?	-	Ch.Lzha
2011-517	2455702.12	2011 May 20 1450	Layner	-	WFE RF/LAYNER	R-29RM 3K3702 1 LK1-1	10 BB	-	K-84	BLA	-	-	-	1000?	-	Kura
2011-534	2455770.05	2011 Jul 27 1306	Layner	-	WFE RF	R-29RM 3K3702 K	4 BB	-	K-84	BLA	-	-	-	1000?	-	Kura
2011-543	2455834.22	2011 Sep 29 1720	Layner	-	WFE RF	R-29RM 3K3702 1 LK1-2	10 BB	-	K-84	BLA	-	-	-	1000?	-	Kura
2012-568	2456219.89	2012 Oct 19 0925	Volna	-	WFE RF	R-29RM 3K3702 UB	3 BB	-	K-433	OMLA	-	-	-	1000?	-	Ch.Lzha
2013-511.3	2456379.82	2013 Mar 28 0030	Shueva	-	WFE RF	R-29RM 3K3702 K	4 BB	-	K-84	BLA	-	-	-	1000?	-	Ch.Lzha
2013-596	2456595.94	2013 Oct 30 1039	Volna	-	WFE RF	R-29RM 3K3702 UB	3 BB	-	K-433	OMLA	-	-	-	1000?	-	Ch.Lzha
2013-595	2456595.97	2013 Oct 30 1110	Volna	-	WFE RF	R-29RM 3K3702 UB	3 BB	-	K-117	BLA	-	-	-	1000?	-	Ch.Lzha
2014-523	2456785.50	2014 May 8	Shueva	-	WFE RF	R-29RM 3K3702 UB	4 BB	-	K-114	BLA	-	-	-	1000?	-	Ch.Lzha
2014-522	2456785.50	2014 May 8	Shueva	-	WFE RF	R-29RM 3K3702 K	4 BB	-	K-114	BLA	-	-	-	1000?	-	Kura
2014-566	2456966.77	2014 Nov 5 0630?	Shueva	-	WFE RF	R-29RM 3K3702 UB	4 BB	-	K-117	BLA	-	-	-	1000?	-	Ch.Lzha
2015-568	2457325.93	2015 Oct 30 1026	Shueva	-	WFE RF	R-29RM 3K3702 UB	3 BB	-	K-223	OMLA	-	-	-	1000?	-	Ch.Lzha
2015-569	2457325.94	2015 Oct 30 1028	Volna	-	WFE RF	R-29RM 3K3702 UB	3 BB	-	K-117	BLA	-	-	-	1000?	-	Ch.Lzha
2015-590	2457678.84	2016 Dec 12 0805	Shueva	-	WFE RF	R-29RM 3K3702 UB	4 BB	-	K-51	BLA	-	-	-	1000?	-	Kura
2016-561	2457673.94	2016 Oct 12 1032	Volna	-	WFE RF	R-29RM 3K3702 K	3 BB	-	K-433	OMLA	-	-	-	1000?	-	Ch.Lzha
2016-562	2457673.96	2016 Oct 12 1104	Shueva	-	WFE RF	R-29RM 3K3702 K	4 BB	-	K-407	BLA	-	-	-	1000?	-	Kura
2016-561	2457701.96	2016 Nov 9 1107	Shueva	-	WFE RF	R-29RM 3K3702 UB	4 BB	-	K-117	BLA	-	-	-	1000?	-	Kura
2017-591	2458053.13	2017 Oct 26 1507:21	Shueva	-	WFE RF	R-29RM 3K3702 UB	4 BB	-	K-117	BLA	-	-	-	1000?	-	Kura
2017-592	2458053.13	2017 Oct 26 1507:20	Shueva	-	WFE RF	R-29RM 3K3702 UB	4 BB	-	K-44	BLA	-	-	-	1000?	-	Kura
2017-593	2458053.13	2017 Oct 26 150														



Launch

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Mission	FlightCode	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee km	Range km	Dest
2018-S62	2458402.94	2018 Oct 11 1027?	Sineva	?	VMF RF	R-29R4 3K3702 UBP	-	-	K-114?	BLA	-	-	-	1000?	-	Kura
2019-S60	2458719.50	2019 Aug 24	Sineva	-	VMF RF	R-29R4 3K3702 UBP	4 BB?	-	K-114	MPOLE	-	-	-	1000?	-	Chizha
2019-S62	2458773.50	2019 Oct 17?	Sineva	-	-	R-29R4 3K3702 UBP	4 BB?	Grom-2019	K-18	BLA	-	-	-	1000?	-	Kura
2019-S63	2458773.50	2019 Oct 17?	Volna	-	VMF RF	R-29R4U-02 UBP	3 BB	Grom-2019	K-44	OMLA	-	-	-	1000?	-	Chizha
2020-S46	2459192.50	2019 Dec 9	Sineva	-	-	R-29R4 3K3702 UBP	4 BB?	-	K-18	BLA	-	-	-	1000?	-	Kura
2022-S16	2459629.50	2022 Feb 19	Sineva	-	-	R-29R4 3K3702 UBP	4 BB?	-	K-18	BLA	-	-	-	1000?	-	Kura
2022-S18	2459878.50	2022 Oct 26	Sineva	-	-	R-29R4 3K3702 UBP	4 BB?	-	K-114	BLA	-	-	-	1000?	-	Kura
2023-S73	2460178.50	2023 Aug 22	Sineva	-	-	R-29R4 3K3702 UBP	4 BB?	Laptev Sea?	K-114	BLA?	-	-	-	1000?	-	Chizha
2023-S88	2460242.50	2023 Oct 25	Sineva	-	-	R-29R4 3K3702 UBP	4 BB?	-	K-114	BLA	-	-	-	1000?	-	Kura











Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	OrbPay	Agency	Launch_Code	Group	Category	LTCite	Cite	Notes
1997-503	2450463.50	1997 Jan 15	Volna	-	-	0.000	VHFR	NS	-	OT	TAS970117	-	-
1997-551	2450652.50	1997 Jul 23	Volna	?	-	0.000	VHFR	NS	-	OT	www.nti.org	-	-
1997-582	2450935.50	1997 Sep 2	Volna	-	-	0.000	VHFR	NS	-	OT	RML	-	-
1997-580	2450724.50	1997 Oct 3	Wyota	-	-	0.000	VHFR	NS	-	OT	FDC	-	-
1997-581	2450752.50	1997 Nov 7	Volna	?	-	0.000	VHFR	NS	-	OT	RML	-	-
1998-515	2450963.50	1998 Feb 19	Shill'	-	-	0.000	VHFR	NS	-	OT	www.nti.org	-	-
1998-516	2450963.50	1998 Feb 19	Shill'	-	-	0.000	VHFR	NS	-	OT	www.nti.org	-	-
1998-573	2450994.50	1998 Jul 7	Volna	-	-	0.000	VHFR	NS	-	OT	RML	-	-
1998-042	2451001.64	1998 Jul 7	Shill'-1	-	-	0.107	VHFR	US	G	Sat LED 0 2	MG9815-15	-	-
1998-351	2451046.50	1998 Aug 21	Volna	-	-	0.000	VHFR	NS	-	OT	www.nti.org	-	-
1999-522	2451269.50	1999 Apr 1	Volna	-	-	0.000	VHFR	NS	-	OT	www.nti.org	-	-
1999-564	2451452.75	1999 Oct 1 0657	Volna	-	-	0.000	VHFR	NS	-	OT	www.nti.org	-	-
1999-004	2451452.75	1999 Oct 1 0645	Volna	-	-	0.000	VHFR	NS	-	OT	www.nti.org	-	-
2000-514	2451630.75	2000 Mar 27 0600	Shill'	-	-	0.000	VHFR	NS	-	OT	www.nti.org	-	-
2000-516	2451630.88	2000 Mar 27 0900	Shill'	-	-	0.000	VHFR	NS	-	OT	www.nti.org	-	-
2000-519	2451640.73	2000 Apr 6 0630	Volna	-	-	0.000	VHFR	NS	-	OT	www.nti.org	-	-
2000-550	2451737.50	2000 Sep 10	Sineva	-	-	0.000	VHFR	NS	-	OT	orbreport.com	www.orbreport.com	-
2000-568	2451905.83	2000 Dec 27 0800	Shill'	?	-	0.000	VHFR	NS	-	OT	russianspacesweb.com	AIRCCosmos	-
2001-509	2451956.94	2001 Feb 16 1028	Shill'	?	-	0.000	VHFR	NS	-	OT	russianspacesweb.com	www.nti.org	-
2001-523	2452065.96	2001 Jun 5 1132	Shill'	?	-	0.000	VHFR	SS	-	OT	SC Test	NO109-41	-
2001-537	2452110.52	2001 Jul 20 0031	Volna	-	-	0.000	VHFR	NS	-	OT	orbreport.com	-	-
2001-541	2452170.50	2001 Sep 27	Volna	?	-	0.000	VHFR	NS	-	OT	www.nti.org	-	-
2001-542	2452179.50	2001 Sep 27	Shill'	?	-	0.000	VHFR	NS	-	OT	www.rsnaki.com	-	Not in RML
2001-543	2452467.54	2002 Jul 12 0658:51	Volna	?	-	0.000	VHFR	SS	ESTEC/NPDL/	Reentry Test	www.nti.org	-	Not in RML
2002-553	2452569.86	2002 Oct 12 0912	Volna	?	-	0.000	VHFR	NS	-	OT	www.nti.org	-	-
2002-565	2452569.91	2002 Oct 12 0955	Shill'	?	-	0.000	VHFR	NS	-	OT	russianspacesweb.com	-	-
2002-568	2452594.85	2003 Sep 2 0623	Volna	?	-	0.000	VHFR	NS	-	OT	www.nti.org	-	-
2003-563	2452979.34	2003 Dec 5 2005	Sineva	-	-	0.000	VHFR	NS	-	OT	RML	-	-
2003-564	2452999.96	2003 Dec 26 1100	Sineva	-	-	0.000	VHFR	NS	-	OT	RML	-	-
2004-001	2453053.86	2004 Feb 16 0900	Sineva	-	-	0.000	VHFR	NS	-	OT	RML	-	RSD 98s
2004-512	2453082.01	2004 Mar 17 1208	Sineva	-	-	0.000	VHFR	NS	-	OT	lenta.ru	-	-
2004-513	2453082.06	2004 Mar 17 1400	Sineva	-	-	0.000	VHFR	NS	-	OT	lenta.ru	-	-
2004-524	2453156.81	2004 Jun 28 0725	Sineva	?	-	0.000	VHFR	NS	-	OT	IR-WW	-	-
2004-542	2453256.73	2004 Sep 8 0538	Shill'	-	-	0.000	VHFR	NS	-	OT	Wire	-	-
2004-543	2453256.82	2004 Sep 8 0738	Volna	-	-	0.000	VHFR	NS	-	OT	Wire	-	-
2004-563	2453311.89	2004 Nov 2 0925	Volna	-	-	0.000	VHFR	NS	-	OT	russianforces.org	-	-
2005-002	2453543.32	2005 Jun 21 1946:09	Volna	-	-	0.153	VHFR	UF	G	Sat LED 0 2	Wire	-	-
2005-533	2453599.80	2005 Aug 30 0706	Sineva	-	-	0.000	VHFR	NS	-	OT	Wire	-	-
2005-541	2453643.85	2005 Sep 30 0822	Volna	?	-	0.000	VHFR	NS	-	OT	russianforces.org	-	-
2005-543	2453644.50	2005 Oct 5 2130:04	Volna	-	-	0.000	VHFR	NS	-	OT	Wire	-	-
2005-545	2453690.40	2005 Oct 2 1130:04	Volna	-	-	0.000	VHFR	NS	-	OT	Wire	-	-
2005-546	2453690.45	2005 May 26 0850	Sineva	-	-	0.175	VHFR	SS	ESTEC/NPDL/	Reentry Test	MG0512-32	-	-
2006-532	2453937.77	2006 Jun 30 0625	Sineva	-	-	0.000	VHFR	NS	-	OT	MG0607-39	-	-
2006-551	2453989.97	2006 Sep 10 1120	Volna	-	-	0.000	VHFR	NS	-	OT	Wire	-	-
2006-563	2453989.97	2006 Sep 10 1450	Volna	-	-	0.000	VHFR	NS	-	OT	Wire	-	-
2007-564	2454151.50	2007 Aug 17	Volna	-	-	0.000	VHFR	NS	-	OT	Wire	-	-
2007-565	2454159.82	2007 Dec 25 1000	Sineva	-	-	0.000	VHFR	NS	-	OT	Wire	-	-
2008-536	2454769.88	2008 Aug 09 0900	Volna	-	-	0.000	VHFR	NS	-	OT	russianforces.org	-	-
2008-546	2454769.88	2008 Aug 09 0900	Volna	-	-	0.000	VHFR	NS	-	OT	russianforces.org	-	-
2008-549	2454751.83	2008 Oct 11 0800	Sineva	-	-	0.000	VHFR	NS	-	OT	russianforces.org	-	-
2008-549	2454751.83	2008 Oct 12 0650	Volna	-	-	0.000	VHFR	NS	-	OT	russianforces.org	-	-
2008-548	2454751.81	2008 Oct 12 0720	Volna	-	-	0.000	VHFR	NS	-	OT	Wire	-	-
2008-533	2455025.56	2009 Jul 13 0120	Sineva	-	-	0.000	VHFR	NS	-	OT	Wire	-	-
2008-534	2455026.48	2009 Jul 13 2350	Sineva	-	-	0.000	VHFR	NS	-	OT	Wire	-	-
2008-560	2455107.48	2009 Oct 6 0637	Volna	-	-	0.000	VHFR	NS	-	OT	RML	-	-
2008-561	2455111.77	2009 Oct 7 0630	Volna	-	-	0.000	VHFR	NS	-	OT	RML	-	-
2008-564	2455136.81	2009 Nov 4 0450	Sineva	-	-	0.000	VHFR	NS	-	OT	RML	-	-
2010-521	2455269.71	2010 Mar 4 0450	Sineva	-	-	0.000	VHFR	NS	-	OT	Wire	-	-
2010-551	2455415.14	2010 Aug 6 1515	Sineva	-	-	0.000	VHFR	NS	-	OT	Wire	-	-
2010-560	2455415.14	2010 Aug 6 1516	Sineva	-	-	0.000	VHFR	NS	-	OT	Wire	-	-
2010-563	2455497.94	2010 Oct 28 1030	Sineva	-	-	0.000	VHFR	NS	-	OT	FederalSpace.ru	-	-
2010-564	2455497.93	2010 Oct 28 1017	Sineva	-	-	0.000	VHFR	NS	-	OT	FederalSpace.ru	-	-
2011-514	2455678.22	2011 Apr 26 1711	Sineva	-	-	0.000	VHFR	NS	-	OT	RML	-	-
2011-517	2455702.12	2011 Jul 27 1306	Sineva	-	-	0.000	VHFR	NS	-	OT	RML	-	-
2011-534	2455770.05	2011 Jul 20 1450	Lappar	-	-	0.000	VHFR	NS	-	OT	RML	-	-
2011-543	2455934.22	2011 Sep 29 1720	Lappar	-	-	0.000	VHFR	NS	-	OT	RML	-	-
2011-568	2456219.89	2012 Oct 19 0925	Lappar	-	-	0.000	VHFR	NS	-	OT	RML	-	-
2013-1113	2456379.52	2013 Mar 28 0030	Volna	-	-	0.000	VHFR	NS	-	OT	RML	-	-
2013-596	2456595.94	2013 Oct 30 1039	Volna	-	-	0.000	VHFR	NS	-	OT	RML	-	-
2013-596	2456595.97	2013 Oct 30 1110	Sineva	-	-	0.000	VHFR	NS	-	OT	RML	-	-
2014-523	2456785.50	2014 May 8	Volna	-	-	0.000	VHFR	NS	-	OT	russianforces.org	-	-
2014-522	2456785.50	2014 May 8	Sineva	-	-	0.000	VHFR	NS	-	OT	russianforces.org	-	-
2014-568	2456966.77	2014 Nov 5 06307	Sineva	-	-	0.000	VHFR	NS	-	OT	RML	-	-
2015-568	2457295.93	2015 Oct 30 1026	Sineva	-	-	0.000	VHFR	NS	-	OT	RML	-	-
2015-569	2457295.94	2015 Oct 30 1028	Volna	-	-	0.000	VHFR	NS	-	OT	RML	-	-
2015-590	2457268.84	2015 Dec 12 0805	Sineva	-	-	0.000	VHFR	NS	-	OT	RML	-	-
2016-561	2457273.94	2016 Oct 12 1032	Volna	-	-	0.000	VHFR	NS	-	OT	RML	-	-
2016-562	2457273.96	2016 Oct 12 1104	Sineva	-	-	0.000	VHFR	NS	-	OT	RML	-	-
2016-581	2457701.96	2016 Nov 9 1107	Sineva	-	-	0.000	VHFR	NS	-	OT	russianforces.org	-	-
2017-591	2458063.13	2017 Oct 26 1507:21	Sineva	-	-	0.000	VHFR	NS	-	OT	russianforces.org	-	-
2017-592	2458063.13	2017 Oct 26 1507:20	Volna	-	-	0.000	VHFR	NS	-	OT	russianforces.org	-	-
2017-593	2458063.13	2017 Oct 26 1507:33	Volna	-	-	0.000	VHFR	NS	-	OT	russianforces.org	-	-
2018-563	2458402.93	2018 Oct 11 1014	Volna	-	-	0.000	VHFR	NS	-	OT	RML	-	-
2018-564	2458402.93	2018 Oct 11 1014?	Volna	?	-	0.000	VHFR	NS	-	OT	russianforces.org	-	-
2018-561	2458402.94	2018 Oct 11 1027	Sineva	-	-	0.000	VHFR	NS	-	OT	RML	-	-

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	OrbPay	Launch			Category	LTCite	Cite	Notes
							Agency	Launch_Code	Group				
2018-562	2458402.94	2018 Oct 11 1027?	Sineva	?	VNF RF	0.000	WFR	NS	-	DT	russianforces.org	-	
2019-550	2458719.50	2019 Aug 24	Sineva	-	VNF RF	0.000	WFR	NS	-	DT	russianforces.org	-	
2019-562	2458773.50	2019 Oct 17?	Sineva	-	-	0.000	WFR	NS	-	DT	Wire	-	
2019-563	2458773.50	2019 Oct 17?	Volna	-	VNF RF	0.000	WFR	NS	-	DT	twitter.com/anki1992	-	
2020-546	2459192.50	2020 Dec 9	Sineva	-	-	0.000	WFR	NS	-	DT	Wire	-	
2022-516	2459299.50	2022 Feb 19	Sineva	-	-	0.000	WFR	NS	-	DT	Wire	-	
2022-5118	2459878.50	2022 Oct 26	Sineva	-	-	0.000	WFR	NS	-	DT	Wire	-	
2023-573	2460178.50	2023 Aug 22	Sineva	-	-	0.000	WFR	NS	-	DT	Wire	-	
2023-558	2460242.50	2023 Oct 25	Sineva	-	-	0.000	WFR	NS	-	DT	Wire	-	









Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Agency	Launch_Code	Group	Category	LTCite	Cite	Notes
1972-A155	2441430.08	1972 Apr 22 1355	R-31	-	-	RVSN	MS	-	Test	RNL	-	-
1972-A156	2441437.50	1972 May?	R-31	-	-	RVSN	MS	-	Test	RNL	-	-
1972-A157	2441437.50	1972 May?	R-31	-	-	RVSN	MS	-	Test	RNL	-	-
1972-A158	2441437.50	1972 May?	R-31	-	-	RVSN	MS	-	Test	RNL	-	-
1972-A147	2441621.50	1972 Nov	R-31	-	-	RVSN	MS	-	Test	RNL	-	-
1972-A148	2441621.50	1972 Nov	R-31	-	-	RVSN	MS	-	Test	RNL	-	-
1972-A149	2441621.50	1972 Nov	R-31	-	-	RVSN	MS	-	Test	RNL	-	-
1972-A150	2441621.50	1972 Nov	R-31	-	-	RVSN	MS	-	Test	RNL	-	-
1972-A151	2441621.50	1972 Nov	R-31	-	-	RVSN	MS	-	Test	RNL	-	-
1972-A152	2441621.50	1972 Nov	R-31	-	-	RVSN	MS	-	Test	RNL	-	-
1972-A153	2441621.50	1972 Nov	R-31	-	-	RVSN	MS	-	Test	RNL	-	-
1974-A82	2442047.50	1974	R-31	-	-	RVSN	MS	-	Test	RNL	-	-
1974-A83	2442047.50	1974	R-31	-	-	RVSN	MS	-	Test	RNL	-	-
1974-A84	2442047.50	1974	R-31	-	-	RVSN	MS	-	Test	RNL	-	-
1974-A85	2442047.50	1974	R-31	-	-	RVSN	MS	-	Test	RNL	-	-
1974-A86	2442047.50	1974	R-31	-	-	RVSN	MS	-	Test	RNL	-	-
1974-A88	2442047.50	1974	R-31	-	-	RVSN	MS	-	Test	RNL	-	-
1974-S398	2442405.50	1974 Dec 24	R-31	-	-	RVSN	MS	-	Test	RNL	-	-
1975-S16	2442412.50	1975	R-31	-	-	RVSN	MS	-	Test	RNL	-	-
1975-S446	2442412.50	1975	R-31	-	-	RVSN	MS	-	Test	RNL	-	-
1975-S447	2442412.50	1975	R-31	-	-	RVSN	MS	-	Test	RNL	-	-
1976-S492	2442777.50	1976	R-31	-	-	RVSN	MS	-	Test	RNL	-	-
1976-S493	2442777.50	1976	R-31	-	-	RVSN	MS	-	Test	RNL	-	-
1976-S494	2442777.50	1976	R-31	-	-	RVSN	MS	-	Test	RNL	-	-
1976-S495	2442777.50	1976	R-31	-	-	RVSN	MS	-	Test	RNL	-	-
1976-S496	2442777.50	1976	R-31	-	-	RVSN	MS	-	Test	RNL	-	-
1976-S497	2442777.50	1976	R-31	-	-	RVSN	MS	-	Test	RNL	-	-
1976-S498	2442777.50	1976	R-31	-	-	RVSN	MS	-	Test	RNL	-	-
1976-S499	2442777.50	1976	R-31	-	-	RVSN	MS	-	Test	RNL	-	-
1976-S500	2442777.50	1976	R-31	-	-	RVSN	MS	-	Test	RNL	-	-
1976-S501	2442777.50	1976	R-31	-	-	RVSN	MS	-	Test	RNL	-	-
1976-A155	2443051.50	1976 Oct 2	R-31	-	-	RVSN	MS	-	Test	RNL	-	-
1976-S552	2443134.69	1976 Dec 22 0430	R-31	-	821	RVSN	MS	-	Test	NevskiyBastion901	TestVor9711	-
1977-S21	2443143.50	1977	R-31	-	-	RVSN	MS	-	Test	NevskiyBastion901	-	-
1977-S477	2443143.50	1977	R-31	-	-	RVSN	MS	-	Test	RNL	-	-
1977-S478	2443143.50	1977	R-31	-	-	RVSN	MS	-	Test	RNL	-	-
1977-S479	2443143.50	1977	R-31	-	-	RVSN	MS	-	Test	RNL	-	-
1977-S480	2443143.50	1977	R-31	-	-	RVSN	MS	-	Test	RNL	-	-
1977-S481	2443143.50	1977	R-31	-	-	RVSN	MS	-	Test	RNL	-	-
1977-S482	2443143.50	1977	R-31	-	-	RVSN	MS	-	Test	RNL	-	-
1977-S483	2443143.50	1977	R-31	-	-	RVSN	MS	-	Test	RNL	-	-
1977-S484	2443143.50	1977	R-31	-	-	RVSN	MS	-	Test	RNL	-	-
1977-S485	2443143.50	1977	R-31	-	-	RVSN	MS	-	Test	RNL	-	-
1977-S486	2443143.50	1977	R-31	-	-	RVSN	MS	-	Test	RNL	-	-
1977-S487	2443143.50	1977	R-31	-	-	RVSN	MS	-	Test	RNL	-	-
1977-S488	2443143.50	1977	R-31	-	-	RVSN	MS	-	Test	RNL	-	-
1977-S489	2443143.50	1977	R-31	-	-	RVSN	MS	-	Test	RNL	-	-
1977-S490	2443143.50	1977	R-31	-	-	RVSN	MS	-	Test	RNL	-	-
1977-S491	2443143.50	1977	R-31	-	-	RVSN	MS	-	Test	RNL	-	-
1977-S492	2443143.50	1977	R-31	-	-	RVSN	MS	-	Test	RNL	-	-
1977-S493	2443143.50	1977	R-31	-	-	RVSN	MS	-	Test	RNL	-	-
1977-S494	2443143.50	1977	R-31	-	-	RVSN	MS	-	Test	RNL	-	-
1977-S495	2443143.50	1977	R-31	-	-	RVSN	MS	-	Test	RNL	-	-
1977-S496	2443143.50	1977	R-31	-	-	RVSN	MS	-	Test	RNL	-	-
1978-S561	2443508.50	1978	R-31	-	-	RVSN	MS	-	Test	NevskiyBastion901	-	-
1978-S562	2443508.50	1978	R-31	-	-	RVSN	MS	-	Test	RNL	-	-
1978-S563	2443508.50	1978	R-31	-	-	RVSN	MS	-	Test	RNL	-	-
1978-S564	2443508.50	1978	R-31	-	-	RVSN	MS	-	Test	RNL	-	-
1978-S565	2443508.50	1978	R-31	-	-	RVSN	MS	-	Test	RNL	-	-
1978-S566	2443508.50	1978	R-31	-	-	RVSN	MS	-	Test	RNL	-	-
1978-S567	2443508.50	1978	R-31	-	-	RVSN	MS	-	Test	RNL	-	-
1978-S568	2443508.50	1978	R-31	-	-	RVSN	MS	-	Test	RNL	-	-
1978-S569	2443508.50	1978	R-31	-	-	RVSN	MS	-	Test	RNL	-	-
1978-S570	2443508.50	1978	R-31	-	-	RVSN	MS	-	Test	RNL	-	-
1978-S571	2443508.50	1978	R-31	-	-	RVSN	MS	-	Test	RNL	-	-
1978-S572	2443508.50	1978	R-31	-	-	RVSN	MS	-	Test	RNL	-	-
1978-S174	2444085.50	1979 Aug	R-31	-	-	RVSN	MS	-	Test	NevskiyBastion901	-	-
1979-S755	2444116.50	1979 Sep?	R-31	-	-	RVSN	MS	-	Test	RNL	-	-
1979-S756	2444116.50	1979 Sep?	R-31	-	-	RVSN	MS	-	Test	RNL	-	-
1990-S205	2448151.50	1990 Sep 17	R-31	-	-	RVSN	MS	-	Test	RNL	-	-
1990-S206	2448152.50	1990 Sep 18	R-31	-	-	RVSN	MS	-	Test	RNL	-	-
1990-S207	2448163.50	1990 Sep 29	R-31	-	-	RVSN	MS	-	Test	RNL	-	-
1990-S208	2448164.50	1990 Sep 30	R-31	-	-	RVSN	MS	-	Test	RNL	-	-
1990-S209	2448164.50	1990 Oct 1	R-31	-	-	RVSN	MS	-	Test	RNL	-	-
1990-A16	2448165.50	1990 Oct 1	R-31	-	-	RVSN	MS	-	Test	RNL	-	-
1990-S199	2448175.50	1990 Oct 11	R-31	-	-	RVSN	MS	-	Test	RNL	-	-
1990-S200	2448175.50	1990 Oct 11	R-31	-	-	RVSN	MS	-	Test	RNL	-	-
1990-S201	2448175.50	1990 Oct 11	R-31	-	-	RVSN	MS	-	Test	RNL	-	-
1990-S202	2448175.50	1990 Oct 11	R-31	-	-	RVSN	MS	-	Test	RNL	-	-
1990-S203	2448225.50	1990 Nov 30	R-31	-	-	RVSN	MS	-	Test	RNL	-	-
1990-S204	2448225.50	1990 Nov 30	R-31	-	-	RVSN	MS	-	Test	RNL	-	-



Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Mission	Launch	FlightCode	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee_Km	Range_Km	Dest
1963-A128	2438300.75	1963 Sep 28 0600	R-36 8K67	-	G 22500-02L	GCh 8F674 No. 2L	8K67 LMI-0	-	-	MIP-5	L067/21	-	-	0	-	(Kura)
1963-S583	2438366.63	1963 Dec 3 0800:29	R-36 8K67	-	G 22500-04L	-	8K67 LMI-1	-	-	MIP-5	L067/21	-	-	903	-	(Kura)
1963-A185	2438376.62	1963 Dec 13 0300	R-36 8K67	-	G 22500-03L	-	8K67 LMI-2	-	-	MIP-5	L067/21	-	-	908	6300	(Kura)
1964-A186	2438400.69	1964 Jan 16 0428:58	R-36 8K67	-	G 22500-06L	-	8K67 LMI-3	-	-	MIP-5	L067/21	-	-	906	-	(Kura)
1964-A12	2438420.22	1964 Jan 25 1715	R-36 8K67	-	G 22500-07L	-	8K67 LMI-4	-	-	MIP-5	L067/21	-	-	906	-	(Kura)
1964-S105	2438445.14	1964 Feb 19 1515:07	R-36 8K67	-	G 22500-08L	-	8K67 LMI-5	-	-	MIP-5	L067/21	-	-	107	25	(Kura)
1964-A30	2438452.60	1964 Feb 27 0230:28	R-36 8K67	-	G 22500-11L	-	8K67 LMI-6	-	-	MIP-5	L067/22	-	-	07	-	(Kura)
1964-A60	2438511.78	1964 Apr 26 0650	R-36 8K67	-	G 22500-09L	-	8K67 LMI-7	-	-	MIP-5	L067/22	-	-	870	-	(Kura)
1964-S261	2438538.71	1964 May 23 0439:50	R-36 8K67	-	G 22500-10L	-	8K67 LMI-8	-	-	MIP-5	L067/22	-	-	864	-	(Kura)
1964-S271	2438545.60	1964 May 30 0230:30	R-36 8K67	-	G 22500-11L	-	8K67 LMI-9	-	-	MIP-5	L067/22	-	-	874	-	(Kura)
1964-S309	2438570.70	1964 Jun 24 0442:17	R-36 8K67	-	G 22500-13L	-	8K67 LMI-10	-	-	MIP-5	L067/22	-	-	872	-	(Kura)
1964-S318	2438577.56	1964 Jul 1 0130	R-36 8K67	-	G 22500-14L	-	8K67 LMI-11	-	-	MIP-5	L067/22	-	-	1493	-	Pacific (Pacific?)
1964-S318	2438612.58	1964 Aug 5 0200:29	R-36 8K67	-	G 22500-16L	-	8K67 LMI-12	-	-	MIP-5	L067/22	-	-	1495	-	Pacific
1964-A119	2438615.68	1964 Aug 11 0200:16L	R-36 8K67	-	G 22500-17L	-	8K67 LMI-13	-	-	MIP-5	L067/22	-	-	1000?	-	Pacific
1964-S461	2438647.59	1964 Sep 9 0213:03	R-36 8K67	-	G 22500-19L	-	8K67 LMI-14	-	-	MIP-5	L067/22	-	-	865	-	(Kura)
1964-S485	2438663.75	1964 Sep 25 0600	R-36 8K67	-	G 22500-18L	-	8K67 LMI-15	-	-	MIP-5	L067/22	-	-	868	-	(Kura)
1964-S514	2438678.67	1964 Oct 10 0400	R-36 8K67	-	G 22500-20L	-	8K67 LMI-16	-	-	MIP-5	L067/22	-	-	870?	-	(Kura)
1964-S318	2438697.58	1964 Dec 15 0000?	R-36 8K67	-	G 22500-21L	-	8K67 LMI-17	-	-	MIP-5	L067/22	-	-	1493	-	(Kura)
1965-A06	2438773.71	1965 Jan 30 0511	R-36 8K67	-	G 22500-22L	-	8K67 LMI-18	-	-	MIP-5	L067/22	-	-	870?	-	(Kura)
1965-S59	2438790.54	1965 Jan 30 0811	R-36 8K67	-	G 22500-28L	-	8K67 LMI-19	-	-	MIP-5	L067/22	-	-	1493	-	(Kura)
1965-S285	2438877.71	1965 Apr 27 0159	R-36 8K67	-	G 22500-29L	-	8K67 LMI-20	-	-	MIP-5	L067/22	-	-	870?	-	(Kura)
1965-S296	2438896.61	1965 Apr 27 0500	R-36 8K67	-	G 22500-35L	-	8K67 LMI-21	-	-	MIP-5	L067/22	-	-	1000?	-	(Kura)
1965-S422	2438950.60	1965 Jul 9 0415	R-36 8K67	-	G 22500-27L	-	8K67 LMI-22	-	-	MIP-5	L067/22	-	-	1000?	-	(Kura)
1965-A117	2438955.68	1965 Aug 13 0345	R-36 8K67	-	G 22500-26L	-	8K67 LMI-23	-	-	MIP-5	L067/22	-	-	1000?	-	(Kura)
1965-S467	2438965.91	1965 Aug 15 0945	R-36 8K67	-	G 22500-25L	-	8K67 LMI-24	-	-	MIP-5	L067/22	-	-	1000?	-	(Kura)
1965-A123	2438993.63	1965 Aug 21 0310	R-36 8K67	-	G 22500-28L	-	8K67 LMI-25	-	-	MIP-5	L067/22	-	-	1000?	-	(Kura)
1965-S553	2439034.69	1965 Oct 1 0440	R-36 8K67	-	G 22500-32L	-	8K67 LMI-26	-	-	MIP-5	L067/22	-	-	1000?	-	(Kura)
1965-S547	2439042.71	1965 Oct 9 0605	R-36 8K67	-	G 22500-34L	-	8K67 LMI-27	-	-	MIP-5	L067/22	-	-	1000?	-	(Kura)
1965-S555	2439046.67	1965 Oct 15 0405	R-36 8K67	-	G 22500-33L	-	8K67 LMI-28	-	-	MIP-5	L067/22	-	-	1000?	-	(Kura)
1965-S563	2439062.63	1965 Oct 29 0312	R-36 8K67	-	G 22500-35L	-	8K67 LMI-29	-	-	MIP-5	L067/22	-	-	1000?	-	(Kura)
1965-S590	2439066.68	1965 Nov 2 0418	R-36 8K67	-	G 22500-36L	-	8K67 LMI-30	-	-	MIP-5	L067/22	-	-	1000?	-	(Kura)
1965-S616	2439076.62	1965 Nov 14 0300	R-36 8K67	-	G 22500-38L	-	8K67 LMI-31	-	-	MIP-5	L067/22	-	-	1000?	-	(Kura)
1965-S652	2439091.60	1965 Nov 27	R-36 8K67	-	G 22500-39L	-	8K67 LMI-32	-	-	MIP-5	L067/22	-	-	1000?	-	(Kura)
1965-S665	2439101.67	1965 Dec 7 0405	R-36 8K67	-	G 22500-40L	-	8K67 LMI-33	-	-	MIP-5	L067/22	-	-	200?	-	(Kura)
1965-001	2439111.09	1965 Dec 16 1409:22	R-36 8K69	-	G 22602-01L	00Ch No. 01L	8K69-0 LMI-I-1	-	-	MIP-5	L067/21	-	-	1000?	-	(Kura)
1965-S698	2439115.67	1965 Dec 25 0400	R-36 8K67	-	G 22602-02L	00Ch No. 02L	8K69-0 LMI-I-2	-	-	MIP-5	L067/21	-	-	1000?	-	(Kura)
1965-S699	2439119.67	1965 Dec 25 0400	R-36 8K67	-	G 22602-03L	00Ch No. 03L	8K69-0 LMI-I-3a	-	-	MIP-5	L067/21	-	-	1000?	-	(Kura)
1965-S701	2439120.52	1965 Dec 26 1000	R-36 8K67	-	G 22602-04L	00Ch No. 04L	8K69-0 LMI-I-3	-	-	MIP-5	L067/21	-	-	1000?	-	(Kura)
1966-001	2439162.01	1966 Feb 15 2230	R-36 8K67	-	G 22602-05L	00Ch No. 05L	8K69-0 LMI-II-1	-	-	MIP-5	L067/21	-	-	1221	-	(Nov-Kazanka)
1966-001	2439200.42	1966 Mar 15 0132	R-36 8K67	-	G 22602-06L	00Ch No. 06L	8K69-0 LMI-II-2	-	-	MIP-5	L067/21	-	-	1000?	-	(Kura)
1966-S235	2439231.66	1966 Mar 30 0132	R-36 8K67	-	G 22602-07L	00Ch No. 07L	8K69-0 LMI-II-3	-	-	MIP-5	L067/21	-	-	1000?	-	(Kura)
1966-S236	2439237.66	1966 Apr 22 0418	R-36 8K67	-	G 22602-08L	00Ch No. 08L	8K69-0 LMI-II-4	-	-	MIP-5	L067/21	-	-	1000?	-	(Kura)
1966-S235	2439265.64	1966 Apr 26 0335	R-36 8K67	-	G 22602-09L	00Ch No. 09L	8K69-0 LMI-II-5	-	-	MIP-5	L067/21	-	-	1000?	-	(Kura)
1966-S235	2439266.66	1966 Apr 26 0335	R-36 8K67	-	G 22602-10L	00Ch No. 10L	8K69-0 LMI-II-6	-	-	MIP-5	L067/21	-	-	1000?	-	(Kura)
1966-S235	2439266.66	1966 Apr 26 0335	R-36 8K67	-	G 22602-11L	00Ch No. 11L	8K69-0 LMI-II-7	-	-	MIP-5	L067/21	-	-	1000?	-	(Kura)
1966-S235	2439266.66	1966 Apr 26 0335	R-36 8K67	-	G 22602-12L	00Ch No. 12L	8K69-0 LMI-II-8	-	-	MIP-5	L067/21	-	-	1000?	-	(Kura)
1966-S235	2439266.66	1966 Apr 26 0335	R-36 8K67	-	G 22602-13L	00Ch No. 13L	8K69-0 LMI-II-9	-	-	MIP-5	L067/21	-	-	1000?	-	(Kura)
1966-S235	2439266.66	1966 Apr 26 0335	R-36 8K67	-	G 22602-14L	00Ch No. 14L	8K69-0 LMI-II-10	-	-	MIP-5	L067/21	-	-	1000?	-	(Kura)
1966-S235	2439266.66	1966 Apr 26 0335	R-36 8K67	-	G 22602-15L	00Ch No. 15L	8K69-0 LMI-II-11	-	-	MIP-5	L067/21	-	-	1000?	-	(Kura)
1966-S235	2439266.66	1966 Apr 26 0335	R-36 8K67	-	G 22602-16L	00Ch No. 16L	8K69-0 LMI-II-12	-	-	MIP-5	L067/21	-	-	1000?	-	(Kura)
1966-S235	2439266.66	1966 Apr 26 0335	R-36 8K67	-	G 22602-17L	00Ch No. 17L	8K69-0 LMI-II-13	-	-	MIP-5	L067/21	-	-	1000?	-	(Kura)
1966-S235	2439266.66	1966 Apr 26 0335	R-36 8K67	-	G 22602-18L	00Ch No. 18L	8K69-0 LMI-II-14	-	-	MIP-5	L067/21	-	-	1000?	-	(Kura)
1966-S235	2439266.66	1966 Apr 26 0335	R-36 8K67	-	G 22602-19L	00Ch No. 19L	8K69-0 LMI-II-15	-	-	MIP-5	L067/21	-	-	1000?	-	(Kura)
1966-S235	2439266.66	1966 Apr 26 0335	R-36 8K67	-	G 22602-20L	00Ch No. 20L	8K69-0 LMI-II-16	-	-	MIP-5	L067/21	-	-	1000?	-	(Kura)
1966-S235	2439266.66	1966 Apr 26 0335	R-36 8K67	-	G 22602-21L	00Ch No. 21L	8K69-0 LMI-II-17	-	-	MIP-5	L067/21	-	-	1000?	-	(Kura)
1966-S235	2439266.66	1966 Apr 26 0335	R-36 8K67	-	G 22602-22L	00Ch No. 22L	8K69-0 LMI-II-18	-	-	MIP-5	L067/21	-	-	1000?	-	(Kura)
1966-S235	2439266.66	1966 Apr 26 0335	R-36 8K67	-	G 22602-23L	00Ch No. 23L	8K69-0 LMI-II-19	-	-	MIP-5	L067/21	-	-	1000?	-	(Kura)
1966-S235	2439266.66	1966 Apr 26 0335	R-36 8K67	-	G 22602-24L	00Ch No. 24L	8K69-0 LMI-II-20	-	-	MIP-5	L067/21	-	-	1000?	-	(Kura)
1966-S235	2439266.66	1966 Apr 26 0335	R-36 8K67	-	G 22602-25L	00Ch No. 25L	8K69-0 LMI-II-21	-	-	MIP-5	L067/21	-	-	1000?	-	(Kura)
1966-S235	2439266.66	1966 Apr 26 0335	R-36 8K67	-	G 22602-26L	00Ch No. 26L	8K69-0 LMI-II-22	-	-	MIP-5	L067/21	-	-	1000?	-	(Kura)
1966-S235	2439266.66	1966 Apr 26 0335	R-36 8K67	-	G 22602-27L	00Ch No. 27L	8K69-0 LMI-II-23	-	-	MIP-5	L067/21	-	-	1000?	-	(Kura)
1966-S235	2439266.66	1966 Apr 26 0335	R-36 8K67	-	G 22602-28L	00Ch No. 28L	8K69-0 LMI-II-24	-	-	MIP-5	L067/21	-	-	1000?	-	(Kura)
1966-S235	2439266.66	1966 Apr 26 0335	R-36 8K67	-	G 22602-29L	00Ch No. 29L	8K69-0 LMI-II-25	-	-	MIP-5	L067/21	-	-	1000?	-	(Kura)
1966-S235	2439266.66	1966 Apr 26 0335	R-36 8K67	-	G 22602-30L	00Ch No. 30L	8K69-0 LMI-II-26	-	-	MIP-5	L067/21	-	-	1000?	-	(Kura)
1966-S235	2439266.66	1966 Apr 26 0335	R-36 8K67	-	G 22602-31L	00Ch No. 31L	8K69-0 LMI-II-27	-	-	MIP-5	L067/21	-	-	1000?	-	(Kura)

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Mission	Launch	FlightCode	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee_Km	Range_Km	Dest
1968-001	2439997.42	1968 May 20 2205:02	R-360 8K69	-	Yv22500-15L (6ND)	-	0CCh No. 18LU	8K69-0 LKI-II-14	-	MIP-5	LC162/36	-	-	-	-	Pacific
1968-002	2439999.50	1968 May 23 2315:01	R-360 8K67A	-	Yv22500-15L (7ND)	8K67M LKI-3	0CCh No. 19LU	8K69-0 LKI-II-15	-	MIP-5	LC140/33	-	-	1000?	-	Kura
1968-003	2440014.24	1968 Jun 1 0720	R-36 8K67	-	Yv22503-15T	8K67 UBP-22	MCh 8F674 Special Test	-	-	MIP-5	LC161/35	-	-	1000?	-	Pacific
1968-004	2440040.76	1968 Jun 6 1640	R-36 8K67	-	U 22503-07T	8K67A UBP-1	MCh 8F675	-	-	MIP-5	LC141/31	-	-	1000?	-	Kura 2K
1968-005	2440054.36	1968 Jun 16 0330	R-36 8K67A	-	U 22505-06T	8K67M UBP-2	MCh 8F675	-	-	MIP-5	LC141/31	-	-	1000?	-	Kura 2K
1968-006	2440082.65	1968 Aug 14 0330	R-36 8K67A	-	V 22500-02L	8K67P UBP-1	3 BB 8F673	RCh. UK-4500	-	MIP-5	LC140/33	-	-	1000?	-	Kura 2K
1968-007	2440092.66	1968 Aug 23 1330	R-36 8K67P	-	V 22500-01L	8K67P LKI-1	3 BB 8F673	RCh. UK-4500	-	MIP-5	LC140/33	-	-	1000?	-	Kura 2K
1968-008	2440110.37	1968 Sep 11 1115	R-36 8K67P	-	V 22500-10T	8K67P LKI-2	3 BB 8F673	8K69-0 LKI-II-16	-	MIP-5	LC161/35	-	-	193	-	Kura
1968-009	2440132.07	1968 Oct 2 1335:01	R-360 8K69	-	V 22500-03L	8K67P LKI-3	3 BB 8F673	RCh. UK-4500	-	MIP-5	LC140/33	-	-	1000?	-	Nov.Kazanka
1968-010	2440134.02	1968 Oct 4 1230	R-36 8K67P	-	N 22500-06L	Kosmos-248	12H	-	-	MIP-5	LC90/19	-	-	570	-	Kura
1968-011	2440148.68	1968 Oct 19 0420:00	Tsuklon-2A	-	N 22500-06L	Kosmos-248	12P	-	-	MIP-5	LC90/19	-	-	2165	-	(Kura 2K)
1968-012	2440149.57	1968 Oct 20 0420:00	Tsuklon-2A	-	N 22500-05L	8K67 UBP-26	MCh 8F675	-	-	MIP-5	LC90/20	-	-	0?	-	(Kura 2K)
1968-013	2440157.59	1968 Oct 28 0210	R-36 8K67	-	N 22500-15T	8K67P UBP-24	MCh 8F675	-	-	MIP-5	LC90/20	-	-	2149	-	Kura 2K
1968-014	2440161.52	1968 Nov 1 0227:15	Tsuklon-2A	-	N 22500-09L	8K67M UBP-3	12P	-	-	MIP-5	LC90/20	-	-	1000?	-	Kura 2K
1968-015	2440194.05	1968 Dec 4 0330	R-36 8K67P	-	V 22503-14T	8K67P LKI-4	MCh 8F675	RCh. UK-4500	-	MIP-5	LC142/34	-	-	1000?	-	Kura 2K
1968-016	2440209.21	1968 Dec 18 1705	R-36 8K67P	-	V 22500-04L	8K67P UBP-4	3 BB 8F673	-	-	MIP-5	LC140/33	-	-	1000?	-	Kura 2K
1969-001	2440246.37	1969 Jan 25 1114:03	Tsuklon-2A	-	N 22500-12L	Kosmos	US-A No. 5? reactor	-	-	MIP-5	LC90/19	-	-	100	-	Kura
1969-002	2440309.64	1969 Mar 29 0320	R-36 8K67	-	Yv22501-14T	8K67 UBP-25	-	-	-	MIP-5	LC142/34	-	-	1000?	-	Kura
1969-003	2440315.64	1969 Apr 2 0320	R-36 8K67	-	Yv22500-01L	8K67P UBP-26	-	-	-	MIP-5	LC162/36	-	-	1000?	-	Kura 2K
1969-004	2440329.53	1969 Apr 2 0320	R-36 8K67P	-	V 22500-05L	8K67P LKI-5	3 BB 8F677	RCh. 8F676	-	MIP-5	LC161/35	-	-	1000?	-	Kura 2K
1969-005	2440336.74	1969 Apr 25 0545	R-36 8K67	-	Yv22500-16L	8K67 UBP-27	3 BB 8F677	RCh. 8F676	-	MIP-5	LC162/36	-	-	1000?	-	Pacific
1969-006	2440356.54	1969 Apr 25 0545	R-36 8K67	-	Yv22502-14T	8K67 UBP-28	3 BB 8F677	RCh. 8F676	-	MIP-5	LC162/36	-	-	1000?	-	Kura 2K
1969-007	2440359.75	1969 Jun 22 0055	R-36 8K67	-	Yv22501-10T	8K67 UBP-29	MCh 8F674	RCh. 8F676	-	MIP-5	LC161/35	-	-	1000?	-	Kura 2K
1969-008	2440414.21	1969 Jun 27 0605	R-36 8K67A	-	Yv45023-54T	8K67M UBP-4	MCh 8F675	-	-	MIP-5	LC162/36	-	-	1000?	-	Kura 2K
1969-009	2440437.71	1969 Jun 27 0605	R-36 8K67A	-	Yv45023-54T	8K67M UBP-5	MCh 8F675	-	-	MIP-5	LC162/36	-	-	1000?	-	Kura 2K
1969-010	2440458.74	1969 Aug 6 0940:03	Tsuklon-2	-	V 22500-02L	Kosmos-251	15-H GW	-	-	MIP-5	LC90/19	-	-	550	-	Nov.Kazanka
1969-011	2440460.17	1969 Aug 6 0940:03	R-360 8K69	-	Yv45021-50T	Kosmos-251	0CCh No. 21?	8K69-0 UBP	-	MIP-5	LC90/19	-	-	181	-	Kura
1969-012	2440468.62	1969 Sep 25 0285	R-36 8K67P	-	Yv51024-54T	8K67P UBP-1	MCh 8F675	-	-	MIP-5	LC162/36	-	-	1000?	-	Kura 2K
1969-013	2440503.49	1969 Sep 25 0285	R-36 8K67P	-	Yv22502-04L	8K67P UBP-2	MCh 8F675	-	-	MIP-5	LC162/36	-	-	1000?	-	Kura 2K
1969-014	2440503.49	1969 Oct 6 2345	R-36 8K67P	-	Yv22502-04L	8K67P UBP-2	MCh 8F675	-	-	MIP-5	LC162/36	-	-	1000?	-	Kura 2K
1969-015	2440516.09	1969 Oct 23 1406	R-36 8K67P	-	Yv22502-04T	8K67P UBP-3	MCh 8F675 Pal ma-3	-	-	MIP-5	LC161/35	-	-	1000?	-	Kura 2K
1969-016	2440519.01	1969 Oct 24 1210	R-36 8K67P	-	Yv22504-04T	8K67P UBP-4	MCh 8F675 Pal ma-3	-	-	MIP-5	LC142/34	-	-	1000?	-	Kura 2K
1969-017	2440519.01	1969 Oct 24 1210	R-36 8K67P	-	Yv22504-04T	8K67P UBP-4	3 BB 8F677	RCh. 8F676	-	MIP-5	LC162/36	-	-	1000?	-	Kura 2K
1969-018	2440526.96	1969 Oct 25 0300	Tsuklon-2	-	U 22500-02L	8K67P UBP-5?	GH US-A	-	-	MIP-5	LC90/20	-	-	200?	-	Kura
1969-019	2440526.96	1969 Nov 1 1059:27	R-36 8K67P	-	Yv22500-04L	8K67P UBP-6?	MCh 8F675/05-67 No. 1L	-	-	MIP-5	LC142/34	-	-	1000?	-	Kura 2K
1969-020	2440529.54	1969 Nov 4 0325	R-36 8K67P	-	Yv22502-02L	8K67P UBP-7?	3 BB 8F677	RCh. 8F676	-	MIP-5	LC162/36	-	-	1000?	-	Kura 2K
1969-021	2440557.56	1969 Dec 2 0035	R-36 8K67P	-	Yv22525-54T	8K67P UBP-7?	3 BB 8F677	-	-	MIP-5	LC162/36	-	-	1000?	-	Kura 2K
1969-022	2440574.56	1969 Dec 12 0124	R-36 8K67P	-	Yv22525-54T	8K67P UBP-7?	3 BB 8F677	-	-	MIP-5	LC142/34	-	-	1000?	-	Kura 2K
1969-023	2440574.56	1969 Dec 12 0124	R-36 8K67P	-	Yv22525-54T	8K67P UBP-7?	3 BB 8F677	-	-	MIP-5	LC142/34	-	-	1000?	-	Kura 2K
1969-024	2440574.56	1969 Dec 12 0124	R-36 8K67P	-	Yv22525-54T	8K67P UBP-7?	3 BB 8F677	-	-	MIP-5	LC142/34	-	-	1000?	-	Kura 2K
1969-025	2440574.56	1969 Dec 12 0124	R-36 8K67P	-	Yv22525-54T	8K67P UBP-7?	3 BB 8F677	-	-	MIP-5	LC142/34	-	-	1000?	-	Kura 2K
1969-026	2440574.56	1969 Dec 12 0124	R-36 8K67P	-	Yv22525-54T	8K67P UBP-7?	3 BB 8F677	-	-	MIP-5	LC142/34	-	-	1000?	-	Kura 2K
1969-027	2440574.56	1969 Dec 12 0124	R-36 8K67P	-	Yv22525-54T	8K67P UBP-7?	3 BB 8F677	-	-	MIP-5	LC142/34	-	-	1000?	-	Kura 2K
1969-028	2440574.56	1969 Dec 12 0124	R-36 8K67P	-	Yv22525-54T	8K67P UBP-7?	3 BB 8F677	-	-	MIP-5	LC142/34	-	-	1000?	-	Kura 2K
1969-029	2440574.56	1969 Dec 12 0124	R-36 8K67P	-	Yv22525-54T	8K67P UBP-7?	3 BB 8F677	-	-	MIP-5	LC142/34	-	-	1000?	-	Kura 2K
1969-030	2440574.56	1969 Dec 12 0124	R-36 8K67P	-	Yv22525-54T	8K67P UBP-7?	3 BB 8F677	-	-	MIP-5	LC142/34	-	-	1000?	-	Kura 2K
1969-031	2440574.56	1969 Dec 12 0124	R-36 8K67P	-	Yv22525-54T	8K67P UBP-7?	3 BB 8F677	-	-	MIP-5	LC142/34	-	-	1000?	-	Kura 2K
1969-032	2440574.56	1969 Dec 12 0124	R-36 8K67P	-	Yv22525-54T	8K67P UBP-7?	3 BB 8F677	-	-	MIP-5	LC142/34	-	-	1000?	-	Kura 2K
1969-033	2440574.56	1969 Dec 12 0124	R-36 8K67P	-	Yv22525-54T	8K67P UBP-7?	3 BB 8F677	-	-	MIP-5	LC142/34	-	-	1000?	-	Kura 2K
1969-034	2440574.56	1969 Dec 12 0124	R-36 8K67P	-	Yv22525-54T	8K67P UBP-7?	3 BB 8F677	-	-	MIP-5	LC142/34	-	-	1000?	-	Kura 2K
1969-035	2440574.56	1969 Dec 12 0124	R-36 8K67P	-	Yv22525-54T	8K67P UBP-7?	3 BB 8F677	-	-	MIP-5	LC142/34	-	-	1000?	-	Kura 2K
1969-036	2440574.56	1969 Dec 12 0124	R-36 8K67P	-	Yv22525-54T	8K67P UBP-7?	3 BB 8F677	-	-	MIP-5	LC142/34	-	-	1000?	-	Kura 2K
1969-037	2440574.56	1969 Dec 12 0124	R-36 8K67P	-	Yv22525-54T	8K67P UBP-7?	3 BB 8F677	-	-	MIP-5	LC142/34	-	-	1000?	-	Kura 2K
1969-038	2440574.56	1969 Dec 12 0124	R-36 8K67P	-	Yv22525-54T	8K67P UBP-7?	3 BB 8F677	-	-	MIP-5	LC142/34	-	-	1000?	-	Kura 2K
1969-039	2440574.56	1969 Dec 12 0124	R-36 8K67P	-	Yv22525-54T	8K67P UBP-7?	3 BB 8F677	-	-	MIP-5	LC142/34	-	-	1000?	-	Kura 2K
1969-040	2440574.56	1969 Dec 12 0124	R-36 8K67P	-	Yv22525-54T	8K67P UBP-7?	3 BB 8F677	-	-	MIP-5	LC142/34	-	-	1000?	-	Kura 2K
1969-041	2440574.56	1969 Dec 12 0124	R-36 8K67P	-	Yv22525-54T	8K67P UBP-7?	3 BB 8F677	-	-	MIP-5	LC142/34	-	-	1000?	-	Kura 2K
1969-042	2440574.56	1969 Dec 12 0124	R-36 8K67P	-	Yv22525-54T	8K67P UBP-7?	3 BB 8F677	-	-	MIP-5	LC142/34	-	-	1000?	-	Kura 2K
1969-043	2440574.56	1969 Dec 12 0124	R-36 8K67P	-	Yv22525-54T	8K67P UBP-7?	3 BB 8F677	-	-	MIP-5	LC142/34	-	-	1000?	-	Kura 2K
1969-044	2440574.56	1969 Dec 12 0124	R-36 8K67P	-	Yv22525-54T	8K67P UBP-7?	3 BB 8F677	-	-	MIP-5	LC142/34	-	-	1000?	-	Kura 2K
1969-045	2440574.56	1969 Dec 12 0124	R-36 8K67P	-	Yv22525-54T	8K67P UBP-7?	3 BB 8F677	-	-	MIP-5	LC142/34	-	-	1000?	-	Kura 2K
1969-046	2440574.56	1969 Dec 12 0124	R-36 8K67P	-	Yv22525-54T	8K67P UBP-7?	3 BB 8F677	-	-	MIP-5	LC142/34	-	-	1000?	-	Kura 2K
1969-047	2440574.56	1969 Dec 12 0124	R-36 8K67P	-	Yv22525-54T	8K67P UBP-7?										

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Mission	Launch	FlightCode	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee_Km	Range_Km	Dest
1971-S124	2440999.78	1971 Feb 17 0647	R-36 8K67	-	4650141-150T	8K67 UBP-44	MGCh 8F675	MIP-5	-	-	MIP-5	LC161/35	-	-	1000?	-	Kura 2K
1971-015	2441007.97	1971 Feb 25 1111:10	Tsuklon-2	-	Yu22500-13L	Kosmos-387	IZP	MIP-5	-	-	MIP-5	LC90/20	-	-	2211	-	-
1971-025	2441042.98	1971 Apr 1 1129:59	Tsuklon-2	-	Kosmos-402	Kosmos-402	US-A reactor	MIP-5	-	-	MIP-5	LC90/20	-	-	1035	-	-
1971-027	2441046.10	1971 Apr 4 1427:43	Tsuklon-2	-	Yu22500-14L	Kosmos-404	IZP	MIP-5	-	-	MIP-5	LC90/20	-	-	1009	-	-
1971-029	2441071.50	1971 May?	R-36M 15A14	-	-	15A14 BL-1 D-1	Silo ejection test	MIP-5	-	-	MIP-5	LC90/20	-	-	1?	-	-
1971-A181	2441072.54	1971 May 1 0100	R-36M 15A14	-	-	15A14 BL-1 D-2	Silo ejection test	MIP-5	-	-	MIP-5	LC90/20	-	-	0	-	-
1971-A191	2441102.50	1971 Jun?	R-36M 15A14	-	-	15A14 BL-1 D-3	Silo ejection test	MIP-5	-	-	MIP-5	LC90/20	-	-	0	-	-
1971-5345	2441129.35	1971 Jun 26 2030	R-36M 15A14	-	-	15A14 BL-1 D-4	Silo ejection test	MIP-5	-	-	MIP-5	LC142/34	-	-	1000?	-	Kura
1971-A211	2441132.50	1971 Jun?	R-36M 15A14	-	-	15A14 BL-1 D-5	Silo ejection test	MIP-5	-	-	MIP-5	LC142/34	-	-	1000?	-	Kura
1971-068	2441172.49	1971 Aug 8 2345:00	R-36M 15A14	-	V 22501-07	Kosmos-433	MGCh 8F675	MIP-5	8K69M-0 UBP K	-	MIP-5	LC191/66	-	-	300	-	Nov.Kazanka
1971-A182	2441191.50	1971 Aug 28	R-36M 15A14	-	Yu46023-41	8K67M UBP-13	MGCh 8F675	MIP-5	-	-	MIP-5	LC142/34	-	-	1000?	-	L.Karakoyun
1971-A183	2441205.60	1971 Sep 1	R-36M 15A14	-	-	15A14 BL-1 K-15	Silo ejection test	MIP-5	-	-	MIP-5	LC142/34	-	-	1000?	-	-
1971-5677	2441214.60	1971 Sep 11	R-36M 15A14	-	-	8K67 62 RD UBP-1	US-A reactor	MIP-5	-	-	MIP-5	LC142/34	-	-	1000?	-	-
1971-5678	2441226.63	1971 Oct 2 0310	R-36M 15A14	-	-	8K67M UBP-14	US-A reactor	MIP-5	-	-	MIP-5	LC142-1B/35	-	-	1000?	-	-
1971-489	2441246.77	1971 Oct 22 0625	R-36M 15A14	-	45014-01	15A14 BL-2-1	Silo ejection series II	MIP-5	-	-	MIP-5	LC67/21	-	-	1000?	-	Kura
1971-459	2441258.69	1971 Nov 9 0430	R-36M 15A14	-	51014-02	8K67M UBP-15	US-A reactor	MIP-5	-	-	MIP-5	LC67/21	-	-	1000?	-	Kura
1971-5579	2441287.55	1971 Dec 2 0115	R-36M 15A14	-	46014-04L	8K67M UBP-15	US-A reactor	MIP-5	-	-	MIP-5	LC67/21	-	-	1000?	-	Kura
1971-A106	2441288.79	1971 Dec 3 0700	R-36M 15A14	-	67014-03	8K67M UBP-15	US-A reactor	MIP-5	-	-	MIP-5	LC67/21	-	-	1000?	-	Kura
1971-117	2441289.06	1971 Dec 3 1315:22	Tsuklon-2	-	Yu22500-19L	15A14 BL-2-3	US-A reactor	MIP-5	-	-	MIP-5	LC67/21	-	-	1800	-	-
1971-116	2441310.38	1971 Dec 5 1129:58	Tsuklon-2	-	Kosmos-462	Kosmos-462	US-A reactor	MIP-5	-	-	MIP-5	LC90/20	-	-	1031	-	-
1971-A112	2441314.51	1971 Dec 29 0720	R-36M 15A14	-	46014-01	15A14 BL-3-1	US-A reactor	MIP-5	-	-	MIP-5	LC67/21	-	-	1000?	-	MIP-5
1972-A21	2441342.72	1972 Mar 6 0515	R-36M 15A14	-	51014-02	15A14 BL-3-2	Dummy GCh	MIP-5	-	-	MIP-5	LC67/21	-	-	1000?	-	MIP-5
1972-5156	2441420.23	1972 Apr 12 1725	R-36M 15A14	-	46014-04L	8K67M LKI-1	1 BB 15F141-500	MIP-5	-	-	MIP-5	LC142-1B/35	-	-	1000?	-	Kura
1972-440	2441436.60	1972 Apr 29 0710	R-36M 15A14	-	67014-03	8K67M LKI-1	Dummy GCh	MIP-5	-	-	MIP-5	LC67/21	-	-	1000?	-	Kura
1972-5240	2441463.68	1972 Jun 6 0420	R-36M 15A14	-	46023-30A	8K67M LKI-2	1 BB 15F141	MIP-5	-	-	MIP-5	LC161/35	-	-	1000?	-	Kura
1972-463	2441477.10	1972 Jun 14 0305	R-36M 15A14	-	46023-30B	8K67M LKI-3	1 BB 15F141	MIP-5	-	-	MIP-5	LC67/21	-	-	1000?	-	Kura
1972-5268	2441512.63	1972 Aug 1 14 0305	R-36M 15A14	-	67023-30C	8K67M LKI-3	1 BB 15F141	MIP-5	-	-	MIP-5	LC142/34	-	-	1000?	-	Kura
1972-460	2441547.50	1972 Aug 16 1036:20	R-36M 15A14	-	46014-19L	15A14 BL-3-5	Dummy GCh	MIP-5	-	-	MIP-5	LC67/21	-	-	1000?	-	MIP-5
1972-066	2441549.94	1972 Aug 21 0305	Tsuklon-2	-	Kosmos-516	Kosmos-516	US-A reactor	MIP-5	-	-	MIP-5	LC90/19	-	-	1041	-	Kura
1972-586	2441555.68	1972 Aug 24 0415	R-36M 15A14	-	46023-301	8K67M LKI-4	1 BB 15F141	MIP-5	MGCh 15B857	-	MIP-5	LC161/35	-	-	1000?	-	Kura
1972-5294	2441595.65	1972 Sep 15 0330	R-36M 15A14	-	46023-302	8K67M LKI-5	1 BB 15F141	MIP-5	MGCh 15B857	-	MIP-5	LC142/34	-	-	1000?	-	Kura
1972-A108	2441609.65	1972 Oct 19 0537	R-36M 15A14	-	67023-302	15A14 BL-4-1	1 BB 15F141	MIP-5	MGCh 15B857	-	MIP-5	LC104/92	-	-	100?	-	(Kura)
1972-A123	2441680.51	1972 Dec 29 0730	R-36M 15A14	-	46023-301	15A14 BL-4-2	1 BB 15F141	MIP-5	MGCh 15B857	-	MIP-5	LC104/92	-	-	100?	-	(Kura)
1973-529	2441706.53	1973 Jan 24 0310	R-36M 15A14	-	46023-30-1L	8K67M LKI-6	1 BB 15F141	MIP-5	MGCh 15B857	-	MIP-5	LC142/34	-	-	1000?	-	Kura
1973-574	2441734.75	1973 Feb 21 0620	R-36M 15A14	-	Ku22800-21L	8K67M LKI-7	1 BB 15F141	MIP-5	MGCh 15B857	-	MIP-5	LC101/93	-	-	1000?	-	Kura
1973-S101	2441750.67	1973 Mar 9 0402	R-36M 15A14	-	67023-30-2L	8K67M LKI-7	1 BB 15F141	MIP-5	MGCh 15B857	-	MIP-5	LC101/93	-	-	1000?	-	Kura
1973-S144	2441778.53	1973 Apr 6 0800	R-36M 15A14	-	67023-30-2L	8K67M LKI-7	1 BB 15F141	MIP-5	MGCh 15B857	-	MIP-5	LC104/92	-	-	1000?	-	Kura
1973-A19	2441780.50	1973 Apr 6 0800	R-36M 15A14	-	Yu22500-17L	8K66PM LKI-1	US-A	MIP-5	MGCh 8F676M	-	MIP-5	LC162/36	-	-	0?	-	(Kura)
1973-001	2441791.58	1973 Apr 25 0910:00	Tsuklon-2	-	51023-30-3L	15A14 LKI-3	US-A	MIP-5	MGCh 15B857	-	MIP-5	LC90	-	-	250?	-	-
1973-S161	2441804.37	1973 Apr 25 1115	R-36M 15A14	-	Yu22500-37L	8K67PM LKI-2	3 BB 15F141	MIP-5	MGCh 15B857	-	MIP-5	LC103/94	-	-	1000?	-	Kura
1973-S172	2441825.21	1973 May 23 1715	R-36M 15A14	-	46023-30-4L	8K67PM LKI-2	3 BB 15F142.500	MIP-5	MGCh 8F676M	-	MIP-5	LC161/35	-	-	1000?	-	Kura
1973-462	2441826.09	1973 May 24 1415	R-36M 15A14	-	6L	15A14 LKI-4	1 BB 15F142	MIP-5	MGCh 15B856	-	MIP-5	LC101/93	-	-	100?	-	(Kura)
1973-5262	2441849.50	1973 Jun 1 16	R-36M 15A14	-	8L	15A14 LKI-5	1 BB 15F142	MIP-5	MGCh 15B856	-	MIP-5	LC104/92	-	-	1000?	-	Kura
1973-5227	2441867.50	1973 Jun 16	R-36M 15A14	-	9L	15A14 LKI-6	1 BB 15F142	MIP-5	MGCh 15B856	-	MIP-5	LC104/92	-	-	1000?	-	Kura
1973-465	2441898.69	1973 Jul 1 0440	R-36M 15A14	-	10L	8K67PM LKI-3	3 BB 15F141	MIP-5	MGCh 8F676M	-	MIP-5	LC161/35	-	-	1000?	-	(Kura)
1973-5271	2441899.50	1973 Jul 31 20	R-36M 15A14	-	7L	15A14 LKI-7	8 BB 15F141	MIP-5	MGCh 15B857	-	MIP-5	LC103/93	-	-	1000?	-	Kura
1973-5272	2441911.50	1973 Aug 17	R-36M 15A14	-	8L	15A14 LKI-7	8 BB 15F141	MIP-5	MGCh 15B857	-	MIP-5	LC103/93	-	-	1000?	-	Kura
1973-5273	2441923.50	1973 Aug 17	R-36M 15A14	-	9L	8K67PM LKI-4	8 BB 15F14301	MIP-5	MGCh 8F676M	-	MIP-5	LC162/36	-	-	1000?	-	Kura
1973-447	2441937.50	1973 Sep 12	R-36M 15A14	-	10L	15A14 LKI-9	8 BB 15F14301	MIP-5	MGCh 15B857	-	MIP-5	LC140/18	-	-	50?	-	(Kura)
1973-457	2441954.67	1973 Sep 12	R-36M 15A14	-	11L	15A14 LKI-10	8 BB 15F14301	MIP-5	MGCh 8F676M	-	MIP-5	LC140/18	-	-	0?	-	(Kura)
1973-461	2441967.50	1973 Oct 1 0410	R-36M 15A14	-	12L	8K67PM LKI-5	8 BB 15F14301	MIP-5	MGCh 8F676M	-	MIP-5	LC161/35	-	-	500?	-	(Kura)
1973-5392	2441991.50	1973 Oct 12	R-36M 15A14	-	13L	15A14 LKI-11	8 BB 15F14301	MIP-5	MGCh 15B857	-	MIP-5	LC101/93	-	-	1000?	-	(Kura)
1973-450	2441995.50	1973 Oct 5	R-36M 15A14	-	14L	15A14 LKI-12	1 BB 15F141	MIP-5	MGCh 15B856	-	MIP-5	LC104/92	-	-	1000?	-	Kura
1973-5442	2442030.50	1973 Nov 20	R-36M 15A14	-	15L	15A14 LKI-13	1 BB 15F141	MIP-5	MGCh 15B856	-	MIP-5	LC140/18	-	-	1000?	-	Kura
1973-5443	2442039.01	1973 Nov 20	R-36M 15A14	-	16L	15A14 LKI-14	1 BB 15F141	MIP-5	MGCh 15B856	-	MIP-5	LC140/18	-	-	1000?	-	Kura
1973-5448	2442039.01	1973 Dec 21 1220	R-36M 15A14	-	14L	8K67PM LKI-6	3 BB 15F141	MIP-5	MGCh 8F676M	-	MIP-5	LC162/36	-	-	1000?	-	Kura
1973-108	2442044.35	1973 Dec 26 2019:58	Tsuklon-2	-	46023-413-01	15A14 LKI-15	8 BB 15F14301	MIP-5	MGCh 8F676M	-	MIP-5	LC101/93	-	-	1000?	-	Kura
1974-855	2442059.42	1974 Jan 11 2200	R-36M 15A14	-	18L	Kosmos-626	US-A reactor	MIP-5	MGCh 15B857	-	MIP-5	LC90/19	-	-	98?	-	(Kura)
1974-867	2442067.50	1974 Jan 11 2200	R-36M 15A14	-	18L	8K67 UBP-45	3 BB 8F677	MIP-5	MGCh 8F676 OS-67-1A	-	MIP-5	LC90/19	-	-	1000?	-	Kura
1974-407	2442099.50	1974 Feb 13	R-36M 15A14	-	16L	15A14 LKI-16	1 BB 15F141	MIP-5	MGCh 15B856	-	MIP-5	LC162/36	-	-	1000?	-	Pacific
1974-S111	2442099.50	1974 Feb 13	R-36M 15A14	-	17L	15A14 LKI-17	1 BB 15F142	MIP-5	MGCh 15B856	-	MIP-5	LC103/94	-	-	1000?	-	Pacific
1974-S116	2442100.50	1974 Feb 24	R-36M 15A14	-													



Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Mission	Launch_Site	Platform	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee_Km	Range_Km	Dest
1974-5417	2442398.50	1974 Dec 17	R-36M 15A14	-	29L	15A14 LKT-29	8 BB 15F14301	MIP-5	-	LC106	-	-	10007	-	Kura
1974-5425	2442404.50	1974 Dec 23	R-36M 15A14	-	159T	15A14 K-3	1 BB 15F142	MIP-5	-	LC104	-	-	10007	-	Kura
1974-103	2442406.56	1974 Dec 24 11:00:00	Tsuklon-2	-	67014-21L	Kosmos-689	8 BB 15F14301	MIP-5	-	LC90/20	-	-	444	-	-
1974-5427	2442406.50	1974 Dec 25	R-36M 15A14	-	30L	15A14 LKT-30	8 BB 15F14301	MIP-5	-	LC109	-	-	10007	-	(Kura)
1974-543	2442410.50	1974 Dec 29	R-36M 15A14	-	32L	15A14 LKT-31	8 BB 15F14301	MIP-5	-	LC103	-	-	107	-	Kura
1975-543	2442432.27	1975 Jan 19 18:58	R-36 8K67	-	NZ25601-02	8K67 UBP-49 Svinnets-5	MCCh 8F674	MIP-5	-	LC162/36	-	-	10007	-	Kura
1975-544	2442434.20	1975 Jan 21 16:46	R-36 8K67	-	NZ25602-03	8K67 UBP-50 Svinnets-5	MCCh 8F674	MIP-5	-	LC162/36	-	-	10007	-	Kura
1975-545	2442440.34	1975 Jan 27 20:05	R-36 8K67	-	NZ25606-04	8K67 UBP-51 Svinnets-5	MCCh 8F674	MIP-5	-	LC142/34	-	-	10007	-	Kura
1975-558	2442444.50	1975 Feb 4	R-36M 15A14	-	21L	15A14 LKT-52	1 BB 15F142	MIP-5	-	LC140/18	-	-	10007	-	Kura
1975-581	2442469.50	1975 Feb 26 22:45	R-36M 15A14	-	517T	15A14 K-4 ZP	8 BB 15F14301	MIP-5	-	LC109/95	-	-	10007	-	Kura
1975-583	2442470.45	1975 Feb 26 22:45	R-36 8K67MA	-	-	8K67MA LKT-8	1 BB 15F142	MIP-5	-	LC140/33	-	-	10007	-	Kura
1975-586	2442471.63	1975 Feb 28 03:10	R-36 8K67MA	-	-	8K67MA LKT-9	1 BB 15F142	MIP-5	-	LC142/34	-	-	10007	-	Kura
1975-5108	2442489.50	1975 Mar 18	R-36M 15A14	-	38L	15A14 LKT-53	1 BB 15F142	MIP-5	-	LC103/94	-	-	10007	-	Pacific
1975-5113	2442489.50	1975 Mar 20	R-36M 15A14	-	33L	15A14 LKT-54	1 BB 15F142	MIP-5	-	LC105/99	-	-	10007	-	Pacific
1975-024	2442504.96	1975 Apr 2 11:00:00	Tsuklon-2	-	67049-158	Kosmos-723	US-A reactor	MIP-5	-	LC90/20	-	-	1046	-	-
1975-025	2442509.96	1975 Apr 7 11:00:00	Tsuklon-2	-	45023-413-02	Kosmos-724	US-A reactor	MIP-5	-	LC90/20	-	-	953	-	-
1975-5135	2442526.50	1975 Apr 24	R-36M 15A14	-	37L	15A14 LKT-55	8 BB 15F14301	MIP-5	-	LC106/100	-	-	10007	-	Kura
1975-5165	2442560.50	1975 Jun 4	R-36M 15A14	-	38L	15A14 LKT-56	8 BB 15F14301	MIP-5	-	LC105/99	-	-	10007	-	Kura
1975-5191	2442567.50	1975 Jun 7	R-36M 15A14	-	34L	15A14 LKT-57	8 BB 15F14301	MIP-5	-	LC101/93	-	-	10007	-	Pacific
1975-5192	2442570.50	1975 Jun 7	R-36M 15A14	-	40L	15A14 LKT-58	8 BB 15F14301	MIP-5	-	LC109/95	-	-	10007	-	Pacific
1975-5215	2442588.62	1975 Jun 15 02:50	R-36 8K67	-	NZ25601-01	8K67 UBP-52 08-67-1A	GCh 8F674	MIP-5	-	LC142/34	-	-	10007	-	Kura
1975-5219	2442593.50	1975 Jun 30	R-36M 15A14	-	39L	15A14 LKT-59	8 BB 15F14302	MIP-5	-	LC140/96	-	-	10007	-	Kura
1975-5245	2442640.50	1975 Aug 16	R-36M 15A14	-	40L	15A14 LKT-60	8 BB 15F14302	MIP-5	-	LC106	-	-	10007	-	Kura
1975-5254	2442650.50	1975 Aug 26	R-36M 15A14	-	516T	15A14 K-5 ZP	8 BB 15F14301	MIP-5	-	LC109	-	-	10007	-	Kura
1975-5258	2442651.50	1975 Aug 27	R-36M 15A14	-	41L	15A14 LKT-61	8 BB 15F14302	MIP-5	-	LC105	-	-	10007	-	Kura
1975-5285	2442664.50	1975 Sep 29	R-36M 15A14	-	42L	15A14 LKT-62	8 BB 15F14302	MIP-5	-	LC103	-	-	10007	-	Kura
1975-5291	2442666.50	1975 Oct 1	R-36M 15A14	-	43L	15A14 LKT-63	8 BB 15F14302	MIP-5	-	LC101	-	-	10007	-	Kura
1975-5307	2442710.50	1975 Oct 25	R-36 8K67	-	-	-	-	MIP-5	-	-	-	-	54T	-	Kura?
1975-102	2442714.96	1975 Oct 29 11:00:00	Tsuklon-2	-	51014-420L	Kosmos-777	US-P	MIP-5	-	LC90	-	-	1029	-	Kura
1975-116	2442759.03	1975 Dec 12 12:45:00	Tsuklon-2	-	51011-110	Kosmos-785	US-A reactor	MIP-5	-	LC90	-	-	1029	-	Kura
1976-584	2442807.50	1976 Jan 30	R-36M 15A14	-	18T	15A14 UBP-1	8 BB 15F14301	MIP-5	-	LC103/94	-	-	10007	-	Kura
1976-589	2442820.50	1976 Feb 12	R-36M 15A14	-	40A49-156	15A14 UBP-2 SLL	8 BB 15F14302	MIP-5	-	LC140/96	-	-	10007	-	Kura
1976-015	2442824.55	1976 Feb 16 08:29:00	Tsuklon-2	-	45049-156	Kosmos-684	IS	MIP-5	-	LC90	-	-	928	-	-
1976-5102	2442826.22	1976 Feb 18	R-36M 15A14	-	IT	15A14 UBP-3 SLL	1 BB 15F141	MIP-5	-	LC101/93	-	-	10007	-	Kura
1976-034	2442862.22	1976 Apr 15 17:15:37	Tsuklon-2	-	51019-154	Kosmos-814	IS	MIP-5	-	LC90	-	-	621	-	Kura
1976-5163	2442915.50	1976 May 17	R-36M 15A14	-	4T	15A14 UBP-4 SLL	8 BB 15F142	MIP-5	-	LC106/100	-	-	10007	-	Kura
1976-5199	2442956.50	1976 May 17	R-36M 15A14	-	4T	15A14 UBP-4 SLL	8 BB 15F14302	MIP-5	-	LC106/100	-	-	10007	-	Kura
1976-5217	2442968.50	1976 Jun 29	R-36M 15A14	-	4T	15A14 UBP-6 ZP	8 BB 15F14301	MIP-5	-	LC103/94	-	-	10007	-	Kura
1976-063	2442981.94	1976 Jul 2 10:30:00	Tsuklon-2	-	67012-101T	Kosmos-688	US-P	MIP-5	-	LC90	-	-	446	-	-
1976-071	2442981.15	1976 Jul 21 15:14	Tsuklon-2	-	67012-101T	Kosmos-688	US-P	MIP-5	-	LC90	-	-	289T	-	-
1976-5287	2443024.50	1976 Sep 5	R-36M 15A14	-	51022-52-517T	15A14 UBP-7 ZP	1 BB 15F141	MIP-5	-	LC109/95	-	-	10007	-	Kura
1976-103	2443059.25	1976 Oct 17 06:43	Tsuklon-2	-	67021-119	Kosmos-680	US-A reactor	MIP-5	-	LC90	-	-	1022	-	-
1976-104	2443073.20	1976 Oct 21 18:53	Tsuklon-2	-	67021-119	Kosmos-681	US-A reactor	MIP-5	-	LC90	-	-	1022	-	-
1976-5383	2443134.50	1976 Nov 26 14:50	R-36M 15A14	-	46011-102	15A14 UBP-8 DP	8 BB 15F14303	MIP-5	-	LC106/100	-	-	10007	-	Kura
1976-155	2443134.50	1976 Nov 26 14:50	R-36M 15A14	-	46022-15-144T	15A14 UBP-9 ZP	IS	MIP-5	-	LC106/100	-	-	2321	-	Kura
1976-156	2443134.50	1976 Nov 26 14:50	R-36M 15A14	-	46022-15-144T	15A14 UBP-9 ZP	IS	MIP-5	-	LC106/100	-	-	2321	-	Kura
1976-515	2443210.50	1977 Feb 17	R-36M 15A14	-	21T	15A14 UBP-10 SLL	8 BB 15F14302	MIP-5	-	LC103	-	-	10007	-	Kura
1976-516	2443210.50	1977 Feb 17	R-36M 15A14	-	6T	15A14 UBP-11 SLL	8 BB 15F14302	MIP-5	-	LC103	-	-	10007	-	Kura
1976-517	2443210.50	1977 Feb 17	R-36M 15A14	-	6T	15A14 UBP-11 SLL	8 BB 15F14302	MIP-5	-	LC103	-	-	10007	-	Kura
1976-518	2443287.01	1977 May 23 12:14:51	Tsuklon-2	-	51026-502	Kosmos-910	IS	MIP-5	-	LC90	-	-	2104	-	-
1976-5174	2443291.01	1977 May 23 12:14:51	Tsuklon-2	-	51026-502	Kosmos-910	IS	MIP-5	-	LC90	-	-	2104	-	-
1976-5174	2443291.01	1977 May 23 12:14:51	Tsuklon-2	-	51026-502	Kosmos-910	IS	MIP-5	-	LC90	-	-	2104	-	-
1976-5174	2443291.01	1977 May 23 12:14:51	Tsuklon-2	-	51026-502	Kosmos-910	IS	MIP-5	-	LC90	-	-	2104	-	-
1976-5174	2443291.01	1977 May 23 12:14:51	Tsuklon-2	-	51026-502	Kosmos-910	IS	MIP-5	-	LC90	-	-	2104	-	-
1976-5174	2443291.01	1977 May 23 12:14:51	Tsuklon-2	-	51026-502	Kosmos-910	IS	MIP-5	-	LC90	-	-	2104	-	-
1976-5174	2443291.01	1977 May 23 12:14:51	Tsuklon-2	-	51026-502	Kosmos-910	IS	MIP-5	-	LC90	-	-	2104	-	-
1976-5174	2443291.01	1977 May 23 12:14:51	Tsuklon-2	-	51026-502	Kosmos-910	IS	MIP-5	-	LC90	-	-	2104	-	-
1976-5174	2443291.01	1977 May 23 12:14:51	Tsuklon-2	-	51026-502	Kosmos-910	IS	MIP-5	-	LC90	-	-	2104	-	-
1976-5174	2443291.01	1977 May 23 12:14:51	Tsuklon-2	-	51026-502	Kosmos-910	IS	MIP-5	-	LC90	-	-	2104	-	-
1976-5174	2443291.01	1977 May 23 12:14:51	Tsuklon-2	-	51026-502	Kosmos-910	IS	MIP-5	-	LC90	-	-	2104	-	-
1976-5174	2443291.01	1977 May 23 12:14:51	Tsuklon-2	-	51026-502	Kosmos-910	IS	MIP-5	-	LC90	-	-	2104	-	-
1976-5174	2443291.01	1977 May 23 12:14:51	Tsuklon-2	-	51026-502	Kosmos-910	IS	MIP-5	-	LC90	-	-	2104	-	-
1976-5174	2443291.01	1977 May 23 12:14:51	Tsuklon-2	-	51026-502	Kosmos-910	IS	MIP-5	-	LC90	-	-	2104	-	-
1976-5174	2443291.01	1977 May 23 12:14:51	Tsuklon-2	-	51026-502	Kosmos-910	IS	MIP-5	-	LC90	-	-	2104	-	-
1976-5174	2443291.01	1977 May 23 12:14:51	Tsuklon-2	-	51026-502	Kosmos-910	IS	MIP-5	-	LC90	-	-	2104	-	-
1976-5174	2443291.01	1977 May 23 12:14:51	Tsuklon-2	-	51026-502	Kosmos-910	IS	MIP-5	-	LC90	-	-	2104	-	-
1976-5174	2443291.01	1977 May 23 12:14:51	Tsuklon-2	-	51026-502	Kosmos-910	IS	MIP-5	-	LC90	-	-	2104	-	-
1976-5174	2443291.01	1977 May 23 12:14:51	Tsuklon-2	-	51026-502	Kosmos-910	IS	MIP-5	-	LC90	-	-	2104	-	-
1976-5174	2443291.01	1977 May 23 12:14:51	Tsuklon-2	-	51026-502	Kosmos-910	IS	MIP-5	-	LC90	-	-	2104	-	-
1976-5174	2443291.01	1977 May 23 12:14:51	Tsuklon-2	-	51026-										

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Mission	Launch	FlightCode	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee_Km	Range_Km	Dest
1978-823	2443868.07	1978 Dec 25 1345	R-36M 15A18	-	67055-505(9L)	15A18 LK1-12	10 BB 15F162/AM79	RCh. 15F183	-	MIP-5	LC103/94	-	-	1000?	-	Kura
1978-824	2443869.03	1978 Dec 26 1240	R-36M 15A18	-	45055-509(13L)	15A18 LK1-13	10 BB 15F162/AM79	RCh. 15F183	-	MIP-5	LC105/99	-	-	1000?	-	Kura
1979-011	2443917.04	1979 Feb 12 1300:00	Tsikhon-3	-	45055-509(13L)	Kosmos-1076	Okean-E HRK No. 1	-	-	MIP-5	LC32/2	-	-	665	-	-
1979-033	2443982.00	1979 Apr 18 1200	Tsikhon-2	-	45026-504	Kosmos-1094	US-P	-	-	MIP-5	LC90	-	-	461	-	-
1979-5129	2443982.50	1979 Apr 19	R-36M 15A14	-	46L	15A14 UBP-23 DP	GCh 8F678	-	-	MIP-5	LC106/100	-	-	1000?	-	-
1979-036	2443986.82	1979 Apr 25 1000	Tsikhon-2	-	45052-105	Kosmos-1096	US-P	-	-	MIP-5	LC90	-	-	443	-	-
1979-818	2443989.89	1979 Apr 25 1000	R-36M 15A18	-	67087-401(14L)	15A18 LK1-14	10 BB 15F162/AM79	RCh. 15F183	-	MIP-5	LC102/32	-	-	1000?	-	Kura
1979-819	2443989.60	1979 Apr 26 0250	R-36M 15A18	-	67087-514(24T)	15A18 K-1	10 BB 15F162/AM79	RCh. 15F183	-	MIP-5	LC104/92	-	-	1000?	-	Kura
1979-820	2444023.66	1979 May 30 0350	R-36M 15A18	-	45087-402(16L)	15A18 LK1-15	10 BB 15F162/AM79	RCh. 15F183	-	MIP-5	LC103/94	-	-	1000?	-	Kura
1979-821	2444052.02	1979 Jun 27 1280	R-36M 15A18	-	45087-403(16L)	15A18 LK1-16	10 BB 15F162/AM79	RCh. 15F183	-	MIP-5	LC101/93	-	-	1000?	-	Kura
1979-822	2444164.03	1979 Jun 27 1280	R-36M 15A18	-	67087-404(17L)	15A18 LK1-17	10 BB 15F162/AM79	RCh. 15F183	-	MIP-5	LC103/94	-	-	1000?	-	Kura
1979-823	2444166.63	1979 Oct 20 0305	R-36M 15A18	-	45087-524-23T	15A18 K-2	10 BB 15F162/AM79	RCh. 15F183	-	MIP-5	LC104/92	-	-	1000?	-	Kura
1979-824	2444201.12	1979 Nov 23 1005	R-36M 15A18	-	45087-405(18L)	15A18 LK1-18	10 BB 15F162/AM79	RCh. 15F183	-	MIP-5	LC101/93	-	-	1000?	-	Kura
1979-825	2444205.10	1979 Nov 27 1425	R-36M 15A18	-	51067-406(19L)	15A18 LK1-19	10 BB 15F162/AM79	RCh. 15F183	-	MIP-5	LC103/94	-	-	1000?	-	Kura
1979-826	2444206.99	1979 Nov 29 1145	R-36M 15A18	-	51067-534-23T	15A18 UBP-1 ZP	10 BB 15F162/AM79	RCh. 15F183	-	MIP-5	LC104/92	-	-	1000?	-	Kura
1980-005	2444231.79	1980 Jan 23 0700:00	Tsikhon-3	-	67067-401	Kosmos-1151	Okean-E HRK No. 2	-	-	MIP-5	LC32/1	-	-	667	-	-
1980-815	2444237.64	1980 Feb 28 0300?	R-36M 15A18	-	45033-416-44T	15A18 UBP-2 ZP	10 BB 15F162/AM79	RCh. 15F183	-	MIP-5	LC102/32	-	-	1000?	-	Kura
1980-864	2444304.50	1980 Mar 14 1040	Tsikhon-2	-	48L	15A14 UBP-24 DP	GCh 8F678	-	-	MIP-5	LC109/95	-	-	1000?	-	-
1980-021	2444312.94	1980 Mar 14 1040	Tsikhon-2	-	51052-106	Kosmos-1167	US-P	-	-	MIP-5	LC90	-	-	593	-	-
1980-030	2444347.54	1980 Apr 18 0051	Tsikhon-2	-	45055-506	Kosmos-1174	IS	-	-	MIP-5	LC90	-	-	1689	-	-
1980-896	2444354.50	1980 Apr 25 1140	R-36M 15A14	-	47L	15A14 UBP-25 DP	GCh 8F678	-	-	MIP-5	LC106/100	-	-	1000?	-	Kura
1980-834	2444356.99	1980 Apr 29 1140	Tsikhon-2	-	51052-103	Kosmos-1176	US-A reactor	-	-	MIP-5	LC90	-	-	969	-	-
1980-816	2444366.66	1980 May 27 0355	R-36M 15A18	-	67083-426-43T	15A18 UBP-3 ZP	10 BB 15F162/AM79	RCh. 15F183	-	MIP-5	LC103/94	-	-	1000?	-	Kura
1980-8138	2444424.50	1980 Jul 4	R-36M 15A14	-	49L	15A14 UBP-26 DP	GCh 8F678	-	-	MIP-5	LC109/95	-	-	1000?	-	Kura
1980-8163	2444460.50	1980 Jul 29	R-36M 15A14	-	50L	15A14 UBP-27 DP	GCh 8F678	-	-	MIP-5	LC106/100	-	-	1000?	-	Kura
1980-817	2444512.60	1980 Sep 30 0230	R-36M 15A18	-	67083-436-43T	15A18 UBP-4 ZP	10 BB 15F162/AM79	RCh. 15F183	-	MIP-5	LC103/94	-	-	1000?	-	Kura
1980-816	2444543.63	1980 Oct 31 0305?	R-36M 15A18	-	51067-534-22T	15A18 UBP-5 ZP	10 BB 15F162/AM79	RCh. 15F183	-	MIP-5	LC102/32	-	-	1000?	-	Kura
1980-089	2444546.13	1980 Nov 4 1504	Tsikhon-2	-	51028-202	Kosmos-1220	US-P	-	-	MIP-5	LC90	-	-	904	-	-
1980-8264	2444570.50	1980 Nov 27	R-36M 15A14	-	504	15A14 UBP-28 DKh	I BB 15F142	RCh. 15B86	-	MIP-5	LC32/1	-	-	200?	-	-
1981-701	2444627.97	1981 Jan 23 1120	Tsikhon-3	-	45058-621	Kosmos-1243	Mission No. 11	-	-	MIP-5	LC32/1	-	-	1014	-	-
1981-010	2444657.60	1981 Feb 2 0219	Tsikhon-2	-	45028-201	Kosmos-1243	IS	-	-	MIP-5	LC90	-	-	1014	-	-
1981-5236	2444646.50	1981 Feb 10	R-36M 15A14	-	91L	15A14 G2 RD UBP-2	I BB 15F141	RCh. 15B85	-	UZUR	LC379/1/2	-	-	1000?	-	Kura
1981-5237	2444646.50	1981 Feb 11	R-36M 15A14	-	92L	15A14 G2 RD UBP-3	I BB 15F141	RCh. 15B85	-	UZUR	LC379/1/4	-	-	1000?	-	Kura
1981-553	2444659.16	1981 Feb 17 1430	R-36M 15A18	-	51099-718-08T	15A18 UBP-6 ZP	10 BB 15F162/AM79	RCh. 15F183	-	MIP-5	LC103/94	-	-	1000?	-	Kura
1981-021	2444665.26	1981 Mar 5 1809	Tsikhon-2	-	67052-104	Kosmos-1249	US-A reactor	-	-	MIP-5	LC90	-	-	993	-	-
1981-5238	2444666.50	1981 Mar 6	R-36M 15A14	-	507	15A14 G2 RD UBP-4	I BB 15F141	RCh. 15B85	-	UZUR	LC379/1/2	-	-	1000?	-	Kura
1981-5239	2444666.50	1981 Mar 6	R-36M 15A14	-	502	15A14 G2 RD UBP-5	I BB 15F141	RCh. 15B85	-	UZUR	LC379/1/7	-	-	1000?	-	Kura
1981-5240	2444669.50	1981 Mar 6	R-36M 15A14	-	502	15A14 G2 RD UBP-6	I BB 15F141	RCh. 15B85	-	UZUR	LC379/1/10	-	-	1000?	-	Kura
1981-024	2444676.20	1981 Mar 14 1655	Tsikhon-2	-	45048-204	Kosmos-1258	IS	-	-	MIP-5	LC90	-	-	766	-	-
1981-028	2444684.49	1981 Mar 20 2345	Tsikhon-2	-	45058-503	Kosmos-1258	US-P	-	-	MIP-5	LC90	-	-	766	-	-
1981-5243	2444684.50	1981 Mar 21 0345	R-36M 15A14	-	51036-504	15A14 UBP-8 RD	BB 15F143U1	RCh. 15B87	-	KAT	LC373/1/9	-	-	1000?	-	Kura
1981-031	2444715.66	1981 Apr 21 0345	Tsikhon-2	-	509	US-A reactor	US-A reactor	-	-	MIP-5	LC373/1/2	-	-	968	-	-
1981-8244	2444725.50	1981 Apr 28	R-36M 15A14	-	509	15A14 UBP-9 RD	8 BB 15F143U1	RCh. 15B87	-	KAT	LC373/1/2	-	-	1000?	-	Kura
1981-8245	2444753.50	1981 Apr 29 0050	R-36M 15A18	-	67089-728-08T	15A18 UBP-7	10 BB 15F162/AM79	RCh. 15F183	-	MIP-5	LC103/94	-	-	1000?	-	Kura
1981-854	2444759.50	1981 May 18 0111	R-36M 15A18	-	67083-436-42T	15A18 UBP-8	8 BB 15F162/AM79	RCh. 15F183	-	MIP-5	LC102/32	-	-	1000?	-	Pacific
1981-855	2444809.54	1981 Jul 18 0100	Tsikhon-2	-	21128-203	Kosmos-1268	US-PH1430U	RCh. 15F183	-	MIP-5	LC90	-	-	449	-	-
1981-872	2444824.50	1981 Aug 16 0255	R-36M 15A18	-	21128-205	Kosmos-1268	US-PH1430U	RCh. 15B87	-	KAT	LC373/2/2	-	-	1000?	-	Kura
1981-871	2444841.50	1981 Aug 16 1637	Tsikhon-2	-	51048-205	15A14 UBP-9 RD	US-A reactor	-	-	MIP-5	LC90	-	-	988	-	-
1981-882	2444841.19	1981 Aug 24 1420	Tsikhon-2	-	51099-809	Kosmos-1269	US-A reactor	-	-	MIP-5	LC92/1	-	-	670	-	-
1981-883	2444842.35	1981 Sep 24 1100	Tsikhon-2	-	67095-505	Kosmos-1306	US-PH	-	-	MIP-5	LC92/1	-	-	462	-	-
1981-884	2444862.35	1981 Sep 24 0331	Tsikhon-2	-	67095-505	Kosmos-1306	US-PH	-	-	MIP-5	LC92/1	-	-	1998	-	-
1981-894	2444862.05	1981 Sep 25 0800	Tsikhon-2	-	67095-505	Kosmos-1306	US-PH	-	-	MIP-5	LC92/1	-	-	1504	-	-
1981-895	2444872.83	1981 Sep 25 0800	Tsikhon-2	-	67095-505	Kosmos-1306	US-PH	-	-	MIP-5	LC92/1	-	-	1504	-	-
1981-896	2444877.83	1981 Sep 25 0800	Tsikhon-2	-	67095-505	Kosmos-1306	US-PH	-	-	MIP-5	LC92/1	-	-	1504	-	-
1981-897	2444877.83	1981 Sep 25 0800	Tsikhon-2	-	67095-505	Kosmos-1306	US-PH	-	-	MIP-5	LC92/1	-	-	1504	-	-
1981-898	2444877.83	1981 Sep 25 0800	Tsikhon-2	-	67095-505	Kosmos-1306	US-PH	-	-	MIP-5	LC92/1	-	-	1504	-	-
1981-899	2444877.83	1981 Sep 25 0800	Tsikhon-2	-	67095-505	Kosmos-1306	US-PH	-	-	MIP-5	LC92/1	-	-	1504	-	-
1981-899	2444877.83	1981 Sep 25 0800	Tsikhon-2	-	67095-505	Kosmos-1306	US-PH	-	-	MIP-5	LC92/1	-	-	1504	-	-
1981-899	2444877.83	1981 Sep 25 0800	Tsikhon-2	-	67095-505	Kosmos-1306	US-PH	-	-	MIP-5	LC92/1	-	-	1504	-	-
1981-899	2444877.83	1981 Sep 25 0800	Tsikhon-2	-	67095-505	Kosmos-1306	US-PH	-	-	MIP-5	LC92/1	-	-	1504	-	-
1981-899	2444877.83	1981 Sep 25 0800	Tsikhon-2	-	67095-505	Kosmos-1306	US-PH	-	-	MIP-5	LC92/1	-	-	1504	-	-
1981-899	2444877.83	1981 Sep 25 0800	Tsikhon-2	-	67095-505	Kosmos-1306	US-PH	-	-	MIP-5	LC92/1	-	-	1504	-	-
1981-899	2444877.83	1981 Sep 25 0800	Tsikhon-2	-	67095-505	Kosmos-1306	US-PH	-	-	MIP-5	LC92/1	-	-	1504	-	-
1981-899	2444877.83	1981 Sep 25 0800	Tsikhon-2	-	67095-505	Kosmos-1306	US-PH	-	-	MIP-5	LC92/1	-	-	1504	-	-
1981-899	2444877.83	1981 Sep 25 0800	Tsikhon-2	-	67095-505	Kosmos-1306	US-PH	-	-	MIP-5						

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Mission	Launch	FlightCode	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee_Km	Range_Km	Dest
1983-S187	2445618:70	1983 Oct 11 0450	R-36U 15A18	-	45046-315-10	15A14 UBP-35	8 BB 15F1430		RGCh, 15F183	MIP-5	MIP-5	LC105/99	-	-	10007	-	Kura
1983-S24	2445633:85	1983 Oct 26 0450	R-36U 15A18	-	45029-737-03	15A18 UBP-17 K	10 BB 15F162/AM79		RGCh, 15F183	MIP-5	MIP-5	LC102/32	-	-	10007	-	Kura
1983-110	2445636:85	1983 Oct 29 0450	TsKlon-3	-	45083-628	Kosmos-1807	US-PH1			MIP-5	MIP-5	LC90	-	-	623	-	-
1983-115	2445663:02	1983 Nov 24 1223	TsKlon-3	-	67014-701	Kosmos-1510	Mission No. 14			MIP-5	MIP-5	LC32/2	-	-	1525	-	-
1983-122	2445668:02	1983 Dec 15 1223	TsKlon-3	-	67014-708	Kosmos-1515	Tselina-D			MIP-5	MIP-5	LC32/2	-	-	685	-	-
1984-013	2445738:59	1984 Feb 8 0923	TsKlon-3	-	67014-705	Kosmos-1536	Tselina-D			MIP-5	MIP-5	LC32/2	-	-	687	-	-
1984-027	2445775:21	1984 Mar 15 1705	TsKlon-3	-	46014-706	Kosmos-1544	Tselina-D			MIP-5	MIP-5	LC32/2	-	-	684	-	-
1984-S211	2445818:27	1984 Apr 27 1835	R-36U 15A18	-	51086-111-5T	15A18 UBP-18 K	10 BB 15F162/AM79		RGCh, 15F183	MIP-5	MIP-5	LC102/32	-	-	10007	-	Kura
1984-053	2445851:28	1984 May 30 1846	TsKlon-2	-	45067-402	Kosmos-1867	US-PH1			MIP-5	MIP-5	LC90	-	-	446	-	-
1984-069	2445860:51	1984 Jun 29 0021	TsKlon-2	-	67074-702	Kosmos-1879	Meteor-2 No. 16			MIP-5	MIP-5	LC32/2	-	-	992	-	-
1984-072	2445890:45	1984 Jul 5 0335:00	TsKlon-2	-	67074-701	Kosmos-1889	US-PH1			MIP-5	MIP-5	LC90	-	-	971	-	-
1984-084	2445920:45	1984 Aug 7 2250:34	TsKlon-2	-	45099-807	Kosmos-1888	Meteor-2 No. 15			MIP-5	MIP-5	LC32/2	-	-	445	-	-
1984-106	2445971:50	1984 Aug 8 1208	TsKlon-2	-	45042-301	15A18 UBP 59 RD	10 BB 15F162/AM79		RGCh, 15F183	MIP-5	MIP-5	LC32/2	-	-	10007	-	Kura
1984-111	2445992:24	1984 Sep 2 0500:00	TsKlon-3	-	51032-311-16L	Kosmos-1802	Orkan-UE WMM No. 2			MIP-5	MIP-5	LC32/2	-	-	687	-	-
1984-112	2446005:02	1984 Oct 18 1746	TsKlon-3	-	51074-701	Kosmos-1606	Tselina-D			MIP-5	MIP-5	LC32/2	-	-	998	-	-
1984-120	2446032:10	1984 Nov 27 1422:00	TsKlon-3	-	51083-625	Kosmos-1607	US-A reactor			MIP-5	MIP-5	LC90	-	-	10007	-	Kura
1985-000	2446089:33	1985 Jan 23 1988	TsKlon-3	-	67042-303	Kosmos-1606	Meteor-3 No. 1			MIP-5	MIP-5	LC32/1	-	-	1475	-	-
1985-009	2446090:20	1985 Jan 24 1645	TsKlon-3	-	67042-308	Kosmos-1628	Strala-3			MIP-5	MIP-5	LC32/1	-	-	399	-	-
1985-013	2446103:41	1985 Feb 6 2148:00	TsKlon-3	-	51014-710	Meteor-2	Tselina-D			MIP-5	MIP-5	LC32/2	-	-	686	-	-
1985-020	2446130:15	1985 Mar 5 1539	TsKlon-3	-	67029-808	Kosmos-1633	Meteor-2 No. 13			MIP-5	MIP-5	LC32/2	-	-	966	-	-
1985-030	2446230:94	1985 Apr 16 2140:43	TsKlon-3	-	51049-601	Kosmos-1646	US-PH1			MIP-5	MIP-5	LC32/1	-	-	639	-	-
1985-044	2446276:73	1985 Jun 14 1036	TsKlon-3	-	45032-307	Kosmos-1660	Tselina-D			MIP-5	MIP-5	LC32/2	-	-	449	-	-
1985-056	2446285:49	1985 Jul 8 2340	TsKlon-3	-	45042-301	Kosmos-1666	Mission No. 17			MIP-5	MIP-5	LC32/2	-	-	1529	-	-
1985-064	2446276:73	1985 Aug 1 0536	TsKlon-3	-	67032-306	Kosmos-1670	Tselina-D			MIP-5	MIP-5	LC32/2	-	-	1014	-	-
1985-069	2446301:44	1985 Aug 6 1149	TsKlon-3	-	45099-804	Kosmos-1674	US-A reactor			MIP-5	MIP-5	LC32/1	-	-	686	-	-
1985-072	2446327:56	1985 Aug 23 2233	TsKlon-2	-	45099-803	Kosmos-1677	Tselina-D			MIP-5	MIP-5	LC32/1	-	-	1005	-	-
1985-076	2446328:50	1985 Sep 20 0152	TsKlon-2	-	67099-602	Kosmos-1682	US-PH1			MIP-5	MIP-5	LC90	-	-	517	-	-
1985-094	2446346:40	1985 Oct 9 2135	TsKlon-3	-	51076-111	15A18 62 RD UBP-1	10 BB 15F162/AM79		RGCh, 15F183	UZUR	UZUR	LC379/3/2	-	-	10007	-	Kura
1985-100	2446362:60	1985 Oct 24 0230:00	TsKlon-3	-	45061-504	Kosmos-1690/1695	Strala-3 No. 2			MIP-5	MIP-5	LC32/1	-	-	1474	-	-
1985-106	2446392:43	1985 Nov 22 2220:00	TsKlon-3	-	45032-310	Meteor-3	Tselina-D			MIP-5	MIP-5	LC32/1	-	-	1283	-	-
1985-113	2446412:16	1985 Dec 12 1951	TsKlon-3	-	51042-305	Kosmos-1703	Tselina-D			MIP-5	MIP-5	LC32/2	-	-	689	-	-
1985-119	2446425:56	1985 Dec 26 0190:00	TsKlon-3	-	67032-302	Kosmos-1707	Tselina-D			MIP-5	MIP-5	LC32/1	-	-	987	-	-
1986-S186	2446430:50	1986 Jan 17 0721:09	R-36U 15A18	-	51032-308	15A18 UBP 38 RD	Meteor-2 No. 14		RGCh, 15F183	DEZH	DEZH	LC371/3	-	-	964	-	Kura
1986-006	2446447:51	1986 Feb 5 1306	TsKlon-3	-	45087-524-18	Kosmos-1726	10 BB 15F162/AM79			MIP-5	MIP-5	LC102/32	-	-	10007	-	Kura
1986-012	2446467:79	1986 Feb 11 0506:00	TsKlon-3	-	45014-709	15A18 UBP 20 K	10 BB 15F162/AM79		RGCh, 15F183	MIP-5	MIP-5	LC102/32	-	-	1526	-	-
1986-016	2446481:46	1986 Feb 19 2041:00	TsKlon-3	-	45066-801	Kosmos-1738	Mission No. 16			MIP-5	MIP-5	LC32/1	-	-	694	-	-
1986-021	2446486:57	1986 Feb 27 0344	TsKlon-2	-	45066-801	Kosmos-1738	US-PH1			MIP-5	MIP-5	LC32/1	-	-	446	-	-
1986-024	2446510:52	1986 Mar 23 0750	TsKlon-2	-	67029-811	15A18M LK1-1	US-A reactor			MIP-5	MIP-5	LC90	-	-	1012	-	-
1986-026	2446516:52	1986 Mar 25 1328	TsKlon-3	-	51032-302	Kosmos-1737	US-PH1			MIP-5	MIP-5	LC101/93	-	-	454	-	(Kura)
1986-034	2446531:55	1986 Mar 25 1328	TsKlon-3	-	45032-302	Kosmos-1743	US-PH1			MIP-5	MIP-5	LC32/1	-	-	987	-	-
1986-036	2446535:15	1986 Mar 25 1328	TsKlon-3	-	67036-103	Meteor-3 No. 18	Tselina-D			MIP-5	MIP-5	LC32/1	-	-	962	-	-
1986-039	2446597:66	1986 May 15 0920:00	TsKlon-3	-	51081-502	Kosmos-1768	Meteor-2 No. 18			MIP-5	MIP-5	LC32/1	-	-	672	-	-
1986-049	2446593:70	1986 Jun 12 0433:00	TsKlon-3	-	67086-109	Kosmos-1768	Tselina-D			MIP-5	MIP-5	LC32/1	-	-	669	-	-
1986-055	2446594:38	1986 Jun 26 1071:59	TsKlon-3	-	67099-806	Kosmos-1769	Orkan-UE WMM No. 3			MIP-5	MIP-5	LC32/2	-	-	449	-	-
1986-059	2446546:71	1986 Jul 4 0159	TsKlon-2	-	67099-806	Kosmos-1771	US-PH1			MIP-5	MIP-5	LC90	-	-	1007	-	-
1986-062	2446565:04	1986 Aug 2 0258	TsKlon-2	-	67099-806	15A18M LK1-2	US-A reactor			MIP-5	MIP-5	LC103/94	-	-	702	-	-
1986-074	2446570:27	1986 Aug 20 1824:00	R-36U 15A18	-	67032-303	Kosmos-1782	10 BB 15F174		RGCh, 15F173	MIP-5	MIP-5	LC32/1	-	-	750	-	-
1986-074	2446570:27	1986 Aug 20 1824:00	TsKlon-3	-	67032-303	Kosmos-1782	Tselina-D			MIP-5	MIP-5	LC32/2	-	-	202	-	-
1986-101	2446715:73	1986 Oct 17 0554:08	R-36U 15A18	-	67081-503(19S)	15A18M LK1-3	Strala-3		RGCh, 15F173	MIP-5	MIP-5	LC103/94	-	-	1007	-	(Kura)
1986-112	2446731:62	1986 Oct 17 0554:08	TsKlon-3	-	45086-101	Kosmos-1803	Mission No. 18			MIP-5	MIP-5	LC32/2	-	-	1504	-	-
1986-094	2446764:76	1986 Dec 2 0700:00	TsKlon-3	-	67086-103	Kosmos-1805	Tselina-D			MIP-5	MIP-5	LC32/1	-	-	667	-	-
1986-097	2446774:51	1986 Dec 19 0900:00	TsKlon-3	-	45081-501	Kosmos-1809	Meteor-2 No. 17			MIP-5	MIP-5	LC32/2	-	-	969	-	-
1986-101	2446793:83	1986 Dec 19 0900:00	TsKlon-3	-	45086-105	Meteor-2	Strala-3			MIP-5	MIP-5	LC32/2	-	-	962	-	-
1987-001	2446800:56	1987 Jan 5 0120:00	TsKlon-3	-	45086-101	Kosmos-1812	Tselina-D			MIP-5	MIP-5	LC32/2	-	-	666	-	-
1987-003	2446809:88	1987 Jan 14 0905:00	TsKlon-3	-	51026-325-09	15A18 UBP-21 K	10 BB 15F162/AM79		RGCh, 15F183	MIP-5	MIP-5	LC104/92	-	-	1007	-	(Kura)
1987-011	2446812:05	1987 Jan 16 1315:56	TsKlon-2	-	67076-106	Kosmos-1818	Plasma-A No. 41			MIP-5	MIP-5	LC90	-	-	816	-	-
1987-020	2446824:78	1987 Feb 20 0443:00	TsKlon-2	-	67076-106	Kosmos-1823	Mission No. 19			MIP-5	MIP-5	LC32/2	-	-	1527	-	-
1987-024	2446846:13	1987 Mar 3 1603:00	TsKlon-3	-	67086-108	Kosmos-1825	Tselina-D			MIP-5	MIP-5	LC32/2	-	-	666	-	-
1987-026	2446868:05	1987 Mar 5 0120:00	TsKlon-3	-	67086-108	Kosmos-1825	Strala-3			MIP-5	MIP-5	LC32/2	-	-	1471	-	-
1987-030	2446879:32	1987 Mar 14 0905:00	TsKlon-3	-	45038-402(4L)	15A18M LK1-4	US-PH1			MIP-5	MIP-5	LC105/99	-	-	10007	-	-
1987-031	2446893:66	1987 Mar 25 0310	R-36U 15A18	-	67032-302	Kosmos-1834	US-PH1		RGCh, 15F173	MIP-5	MIP-5	LC90	-	-	430	-	-
1987-031	2446893:66	1987 Mar 25 0310	TsKlon-3	-	67032-302	Kosmos-1834	Meteor-2 No. 16			MIP-5	MIP-5	LC32/2	-	-	10007	-	-
1987-038	2446912:50	1987 Apr 27 2000:00	TsKlon-3	-	51086-811-03	15A18 UBP-22 K	10 BB 15F162/AM79		RGCh, 15F183	MIP-5	MIP-5	LC104/92	-	-	705	-	-
1987-039	2446944:57	1987 Apr 28 1245	R-36U 15A18	-	45038-403(5L)	15A18M LK1-5	Tselina-D		RGCh, 15F173	MIP-5	MIP-5						

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Mission	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee_Km	Range_Km	Dest
1987-086	2447079.41	1987 Oct 10 2148:30	Tsikhon-2	-	67029-814	Kosmos-1890	US-PM No. 10L	MIP-5	LC90	-	-	420	-	-
1987-S148	2447083.06	1987 Oct 14 0300:00	R-36MU 15A18H	-	51074-317-07	15A18 UBR-24 K	Tselina-D	MIP-5	LC104/92	-	-	1000?	-	Kura
1987-088	2447088.58	1987 Oct 14 0300:00	Tsikhon-3	-	51038-401	Kosmos-1892	Tselina-D	MIP-5	LC32/1	-	-	666	-	Kura
1987-S36	2447111.76	1987 Nov 25 0610:00	R-36MU 15A18H	-	51095-602(13L)	15A18H LMT-12	10 BB 15F174	MIP-5	LC140/96	-	-	1000?	-	Kura
1987-S37	2447128.76	1987 Nov 25 0610:00	R-36MU 15A18H	-	67095-603(13L)	15A18H LMT-13	10 BB 15F174	MIP-5	LC109/96	-	-	1000?	-	Kura
1987-S204	2447141.74	1987 Dec 25 0540:00	Tsikhon-2	-	45041-504	Kosmos-1900	US-AM reactor	MIP-5	LC90	-	-	868	-	Kura
1988-001	2447154.71	1987 Dec 25 0540:00	R-36MU 15A18H	-	45049-604(14L)	15A18H LMT-14	10 BB 15F174	MIP-5	LC103/94	-	-	1000?	-	Kura
1988-002	2447166.62	1988 Jan 6 0741:00	Tsikhon-3	-	45076-110	Kosmos-1908	Tselina-D No. 60L	MIP-5S	LC32/2	-	-	667	-	-
1988-005	2447175.66	1988 Jan 15 0349:21	Tsikhon-3	-	45038-404	Kosmos-1909	Strala-3	MIP-5S	LC32/1	-	-	1473	-	-
1988-006	2447190.59	1988 Jan 30 1059:59	Tsikhon-3	-	45068-607(16L)	Meteor-2	Meteor-2 No. 20	MIP-5	LC109/96	-	-	965	-	(Kura)
1988-009	2447205.17	1988 Feb 9 0145	R-36MU 15A18H	-	45065-607(16L)	15A18H LMT-15	10 BB 15F174	MIP-5	LC90	-	-	1000?	-	-
1988-010	2447235.10	1988 Mar 14 1421:00	Tsikhon-2	-	67074-702	Kosmos-1932	US-A reactor	MIP-5	LC32/2	-	-	663	-	(Kura)
1988-020	2447236.28	1988 Mar 15 1800:00	Tsikhon-3	-	51095-605(15L)	Kosmos-1933	Tselina-D No. 61L	MIP-5S	LC32/2	-	-	1000?	-	(Kura)
1988-004	2447239.06	1988 Apr 18 1300	R-36MU 15A18H	-	51065-606(16L)	15A18H LMT-16	10 BB 15F174	MIP-5	LC140/96	-	-	1000?	-	Kura
1988-537	2447272.12	1988 Apr 20 0530	R-36MU 15A18H	-	51065-608(17L)	15A18H LMT-17	10 BB 15F174	MIP-5	LC105/99	-	-	1000?	-	Kura
1988-533	2447287.62	1988 May 5 1510	R-36MU 15A18H	-	51029-748-04	15A18 UBR-25	10 BB 15F162/AM79	MIP-5	LC104/92	-	-	1000?	-	Kura
1988-045	2447309.62	1988 May 28 0249:00	Tsikhon-2	-	45074-703	Kosmos-1949	US-PU No. 2	MIP-5	LC90	-	-	419	-	-
1988-002	2447311.53	1988 Jun 28 0249:00	Tsikhon-3	-	45059-606	Kosmos-1950	Mission No. 21	MIP-5S	LC32/1	-	-	1523	-	-
1988-050	2447347.91	1988 Jun 14 0318:00	Tsikhon-3	-	45058-606	Kosmos-1953	Tselina-D No. 64L	MIP-5S	LC32/2	-	-	669	-	-
1988-056	2447347.91	1988 Jul 5 0945:00	Tsikhon-3	-	45065-201(23L)	Kosmos-1953	Okean-UL WdM No. 5	MIP-5S	LC32/1	-	-	666	-	-
1988-064	2447368.71	1988 Jul 18 0501:00	Tsikhon-3	-	67061-506(24L)	15A18 UBR 38 RD	10 BB 15F162/AM79	MIP-5S	LC104/92	-	-	1000?	-	(Kura)
1988-534	2447413.99	1988 Sep 9 1150	R-36MU 15A18H	-	51074-317-01	15A18 UBR-26	Tselina-D No. 67L	MIP-5	LC32/1	-	-	666	-	-
1988-535	2447445.53	1988 Oct 11 0802:00	Tsikhon-2	-	45028-403	Kosmos-1975	Tselina-D No. 8L	MIP-5S	LC32/1	-	-	428	-	Kura
1988-101	2447483.51	1988 Nov 18 0012:28	Tsikhon-3	-	45029-615	Kosmos-1976	US-PM No. 8L	MIP-5	LC140/96	-	-	1000?	-	Kura
1988-538	2447483.70	1988 Nov 18 0445	R-36MU 15A18H	-	45065-216-01(18L)	15A18H LMT-18	10 BB 15F174	MIP-5	LC103/94	-	-	1000?	-	Kura
1988-539	2447487.77	1988 Nov 22 0630	R-36MU 15A18H	-	45079-203	15A18H LMT-19	10 BB 15F174	MIP-5	LC140/96	-	-	1000?	-	Kura
1988-540	2447509.69	1988 Dec 14 0440	R-36MU 15A18H	-	67019-203	15A18 UBR 38 RD	10 BB 15F162/AM79	DRZH	LC37/1	-	-	1000?	-	Kura
1988-S162	2447514.50	1988 Dec 19	R-36MU 15A18H	-	45042-613-06	15A18 UBR-27	10 BB 15F162/AM79	MIP-5	LC104/92	-	-	542	-	Kura
1988-535	2447517.92	1988 Dec 23 0720:00	Tsikhon-3	-	67019-206(28L)	Kosmos-1985	Kol'tso No. 1L	MIP-5S	LC32/1	-	-	1000?	-	-
1988-113	2447516.51	1988 Dec 23 0720:00	Tsikhon-3	-	45019-201(20L)	15A18H LMT-20	10 BB 15F174	MIP-5	LC32/2	-	-	1474	-	-
1989-009	2447566.13	1989 Feb 10 0415	Tsikhon-3	-	45065-607	Kosmos-1994/1999	Strala-3	MIP-5S	LC105/94	-	-	1000?	-	Kura
1989-016	2447565.67	1989 Apr 28 0405:00	Tsikhon-3	-	67019-206	Meteor-2	Meteor-2 No. 22	MIP-5S	LC32/2	-	-	969	-	-
1989-S22	2447567.68	1989 Apr 28 0405:00	Tsikhon-3	-	45065-607	15A18H LMT-21	10 BB 15F174	MIP-5	LC32/1	-	-	1000?	-	-
1989-F01	2447566.92	1989 Jun 9 1010:00	Tsikhon-2	-	67019-206	Okean-UL No. 4 (WdM)	US-PM No. 14L	MIP-5S	LC32/2	-	-	430	-	-
1989-008	2447571.50	1989 Jun 24 0000:59	Tsikhon-2	-	45032-306	Kosmos-2033	US-PM No. 14L	MIP-5S	LC32/2	-	-	430	-	-
1989-S23	2447570.42	1989 Aug 1 1340	R-36MU 15A18H	-	67057-319-08T	15A18H K-2	10 BB 15F174	MIP-5	LC103/94	-	-	1000?	-	Kura
1989-S24	2447570.42	1989 Aug 1 1340	R-36MU 15A18H	-	51057-902(23L)	15A18H LMT-22	10 BB 15F174	MIP-5	LC109/96	-	-	1000?	-	Pacific
1989-066	2447566.51	1989 Aug 11 0100:00	Tsikhon-3	-	51065-608	Kosmos-2037	Mission No. 20	MIP-5S	LC32/2	-	-	1525	-	-
1989-525	2447566.51	1989 Aug 22 0330:00	Tsikhon-3	-	51019-202	15A18H LMT-23	10 BB 15F174	MIP-5	LC105/99	-	-	1000?	-	Kura
1989-074	2447573.91	1989 Sep 14 0549:06	Tsikhon-2	-	45079-202	15A18 UBR-28	10 BB 15F174	MIP-5S	LC32/1	-	-	4376	-	-
1989-008	2447577.15	1989 Sep 27 1630:00	Tsikhon-2	-	45057-904	Kosmos-2046	Strala-3	MIP-5S	LC32/2	-	-	2407	-	-
1989-066	2447577.50	1989 Sep 27 1630:00	Tsikhon-3	-	67057-904	Kosmos-2046	US-PM No. 201	MIP-5S	LC32/2	-	-	1584	-	-
1989-080	2447624.49	1989 Oct 24 0305:00	Tsikhon-3	-	51086-102	Intertkosmos-24	AUGS-2 No. 2	MIP-5S	LC32/1	-	-	1596	-	-
1989-092	2447655.57	1989 Oct 24 0305:00	Tsikhon-3	-	67057-901	Meteor-3	US-PM No. 4	MIP-5S	LC32/1	-	-	1584	-	-
1989-100	2447655.57	1989 Oct 24 0305:00	Tsikhon-3	-	67057-901	Meteor-3	US-PM No. 4	MIP-5S	LC32/1	-	-	1584	-	-
1989-526	2447685.59	1989 Dec 26 0400:00	R-36MU 15A18H	-	67057-319-10T	15A18H K-2 ZP	10 BB 15F174	MIP-5S	LC140/96	-	-	1000?	-	Kura
1989-110	2447685.59	1989 Dec 26 0400:00	R-36MU 15A18H	-	67057-319-10T	15A18H K-2 ZP	10 BB 15F174	MIP-5S	LC32/1	-	-	665	-	-
1989-016	2447685.59	1989 Dec 26 0400:00	Tsikhon-3	-	45097-909	Kosmos-2063	Kol'tso No. 2L	MIP-5S	LC32/1	-	-	665	-	-
1989-022	2447685.59	1989 Dec 26 0400:00	Tsikhon-3	-	45097-909	Kosmos-2063	Okean-UL No. 5/WdM No.	MIP-5S	LC32/1	-	-	665	-	-
1989-051	2448074.54	1990 Feb 28 0300:00	R-36MU 15A18H	-	67076-603	Okean	US-PM No. 21	MIP-5S	LC32/2	-	-	421	-	-
1989-052	2448074.54	1990 Feb 28 0300:00	R-36MU 15A18H	-	67076-603	Okean	US-PM No. 21	MIP-5S	LC32/2	-	-	421	-	-
1989-053	2448074.54	1990 Feb 28 0300:00	R-36MU 15A18H	-	51013-713-03T	15A18H K-4 ZP	10 BB 15F174	MIP-5S	LC140/96	-	-	1000?	-	Kura
1989-054	2448074.54	1990 Feb 28 0300:00	R-36MU 15A18H	-	51013-713-03T	15A18H K-4 ZP	10 BB 15F174	MIP-5S	LC140/96	-	-	1000?	-	Kura
1989-055	2448074.54	1990 Feb 28 0300:00	R-36MU 15A18H	-	51085-605(13L)	Meteor-2	Meteor-2 No. 23	MIP-5S	LC32/2	-	-	1596	-	-
1989-076	2448111.58	1990 Aug 8 0415:07	Tsikhon-3	-	45079-204	Kosmos-2068	Strala-3	MIP-5S	LC32/2	-	-	1470	-	-
1989-077	2448111.58	1990 Aug 8 0415:07	Tsikhon-3	-	45079-204	Kosmos-2068	Strala-3	MIP-5S	LC32/2	-	-	1470	-	-
1989-078	2448120.92	1990 Aug 23 1617:00	R-36MU 15A18H	-	51086-811-05	15A18 UBR-29 K	10 BB 15F162/AM79	MIP-5S	LC104/92	-	-	1000?	-	Kura
1989-079	2448127.18	1990 Aug 23 1617:00	R-36MU 15A18H	-	45076-104	Kol'tso No. 3L	US-PM No. 6L	MIP-5S	LC104/92	-	-	421	-	-
1989-080	2448130.71	1990 Sep 28 0500:00	Tsikhon-2	-	45076-104	Kol'tso No. 3L	US-PM No. 6L	MIP-5S	LC32/2	-	-	421	-	-
1989-081	2448162.81	1990 Sep 28 0500:00	Tsikhon-2	-	45076-104	Kol'tso No. 3L	US-PM No. 6L	MIP-5S	LC32/2	-	-	421	-	-
1989-082	2448223.52	1990 Dec 11 0740	R-36MU 15A18H	-	45085-611	Meteor-2	Meteor-2 No. 25	MIP-5S	LC32/1	-	-	963	-	-
1989-083	2448223.52	1990 Dec 11 0740	R-36MU 15A18H	-	45085-611	Meteor-2	Meteor-2 No. 25	MIP-5S	LC32/1	-	-	963	-	-
1989-084	2448223.52	1990 Dec 11 0740	R-36MU 15A18H	-	45085-611	Meteor-2	Meteor-2 No. 25	MIP-5S	LC32/1	-	-	963	-	-
1989-085	2448223.52	1990 Dec 11 0740	R-36MU 15A18H	-	45085-611	Meteor-2	Meteor-2 No. 25	MIP-5S	LC32/1	-	-	963	-	-
1989-104	2448224.19	1990 Nov 28 0730:00	Tsikhon-2	-	67061-503	Kosmos-2108	Kol'tso No. 3L	MIP-5S	LC32/2	-	-	537	-	-
1989-108	2448223.52	1990 Nov 28 0730:00	Tsikhon-2	-	67061-503	Kosmos-2108	Kol'tso No. 3L	MIP-5S	LC32/2	-	-	537	-	-
1989-109	2448223.52	1990 Nov 28 0730:00	Tsikhon-2	-	67061-503	Kosmos-2108	Kol'tso No. 3L	MIP-5S	LC32/2	-	-	537	-	-
1989-114	2448274.98	1991 Jan 18 1134:40	Tsikhon-3	-	51013-713-10T	15A18H K-5	US-PM No. 6L	MIP-5S	LC140/96	-	-	1000?	-	Kura
1989-115	2448274.98	1991 Jan 18 1134:40	Tsikhon-3	-	51013-713-10T	15A18H K-5	US-PM No. 6L	MIP-5S						

Launch

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Mission	Launch_Site	Platform	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee_Km	Range_Km	Dest
1993-024	2449093.83	1993 Apr 16 07:49:00	Tsikhon-3	-	51027-908	Kosmos-2542	Tselma-R	GMLPV	-	LC32/1	-	-	669	-	-
1993-025	2449105.65	1993 Apr 28 03:39:20	Tsikhon-2	-	45042-304	Kosmos-2544	US-PH	GMLPV	-	LC90/20	-	-	433	-	-
1993-030	2449119.12	1993 May 11 14:06:01	Tsikhon-3	-	51013-301	Kosmos-2545/2260	Strelna-3	GMLPV	-	LC32/1	-	-	1420	-	-
1993-038	2449162.68	1993 Jun 24 04:12:41	Tsikhon-2	-	45082-601	Kosmos-2552/2267	Strelna-3	GMLPV	-	LC90/20	-	-	1483	-	-
1993-044	2449175.50	1993 Jul 7 07:15:00	Tsikhon-2	-	51032-305	Kosmos-2258	US-PH	GMLPV	-	LC90/20	-	-	429	-	-
1993-055	2449230.69	1993 Aug 31 04:40:00	Tsikhon-2	-	45082-604	Meteor-2	Meteor-2 No. 24	GMLPV	-	LC90/20	-	-	993	-	-
1993-060	2449247.53	1993 Sep 17 00:43:10	Tsikhon-2	-	67087-801	Kosmos-2264	US-PH	GMLPV	-	LC90/20	-	-	431	-	-
1994-011	2449377.52	1994 Jan 25 00:25:00	Tsikhon-3	-	67081-701	Meteor-3	Meteor-3 No. 7	GMLPV	-	LC32/1	-	-	1214	-	-
1994-011	2449396.57	1994 Feb 12 08:54:13	Tsikhon-3	-	67013-303	Kosmos-2268/2273	Strelna-3	GMLPV	-	LC32/1	-	-	1478	-	-
1994-012	2449413.64	1994 Mar 2 03:25:00	Tsikhon-3	-	51024-504	Kosmos-2268/2273	Strelna-3	GMLPV	-	LC32/1	-	-	529	-	-
1994-012	2449497.93	1994 May 25 10:15:00	Tsikhon-3	-	51082-802	Korona-1	Tselma-D	GMLPV	-	LC32/2	-	-	221	-	-
1994-066	2449657.10	1994 Oct 11 14:30:00	Tsikhon-3	-	67033-306	Ukan	Okan-U1 No. 7/NMNM No.	GMLPV	-	LC32/2	-	-	673	-	-
1994-072	2449658.54	1994 Nov 2 01:04:00	Tsikhon-2	-	51013-301	Kosmos-2293	US-PH	GMLPV	-	LC90/20	-	-	433	-	-
1994-078	2449658.62	1994 Nov 29 02:54:00	Tsikhon-3	-	51092-805	Geo-1K	Musson No. 24	GMLPV	-	LC32/2	-	-	1537	-	-
1994-086	2449713.44	1994 Dec 26 22:26:58	Tsikhon-3	-	67034-502	Kosmos-2299/2304	Strelna-3	GMLPV	-	LC32/2	-	-	1474	-	-
1995-028	2449876.70	1995 Jun 8 04:43:00	Tsikhon-3	-	51041-505	Kosmos-2313	US-PH	GMLPV	-	LC90/20	-	-	430	-	-
1995-046	2449960.78	1995 Aug 31 06:49:59	Tsikhon-3	-	45026-801	Stich	Okan-U1 No. 8/NMNM 10	GMLPV	-	LC32/2	-	-	671	-	-
1995-071	2450071.54	1995 Dec 20 00:52:14	Tsikhon-2	-	67041-506	Kosmos-2326	Okan-U1 No. 7/NMNM No.	GMLPV	-	LC32/2	-	-	421	-	-
1996-009	2450132.54	1996 Feb 19 08:28:25	Tsikhon-3	-	51034-301	Gonets/Kosmos	Gonets-D1 No. 13/14/15	GMLPV	-	LC90/20	-	-	1480	-	-
1996-069	2450429.00	1996 Dec 11 12:00:00	Tsikhon-2	-	45013-302	Kosmos-2336	US-PH	GMLPV	-	LC90/19	-	-	421	-	-
1997-006	2450983.66	1997 Feb 14 03:47:22	Tsikhon-2	-	51091-702	Gonets/Kosmos	Gonets-D1 No. 16/17/18	GMLPV	-	LC32/1	-	-	1476	-	-
1997-079	2450971.80	1997 Apr 17 12:30:19	R-36M 15A18	-	670-4635-207	Tlmgat/Heghat-1/	Strelna-3 Blok 32?	-	-	LC90/20	-	-	1000?	-	-
1998-535	2450918.99	1998 Apr 15 11:50:01	R-36M 15A18	-	670-33-303	Kosmos-2347	Gonets-D1 No. 19/20/21	-	-	LC90/20	-	-	1000?	-	-
1998-535	2450960.46	1998 Jun 15 22:58:05	R-36M 15A18	-	510-3541-504	Kosmos-2347	10 BB 15F162/AM79	-	-	LC90/19	-	-	421	-	-
1999-021	2451289.71	1999 Apr 21 04:59:12	Dnepr	-	450-91-702	15A18 UBP 13 RD	US-PH 15F162/AM79	-	-	LC90/20	-	-	1000?	-	-
2000-057	2451538.53	1999 Sep 26 10:05:00	Dnepr	-	450-82-801	US-SAT-12	US-SAT-12	-	-	LC90/20	-	-	1427	-	-
2000-057	2451613.52	2000 Sep 26 10:05:00	Dnepr	-	450-82-801	US-SAT-12	US-SAT-12	-	-	LC90/20	-	-	482	-	-
2000-057	2451905.91	2000 Dec 27 09:56:31	Tsikhon-3	-	450-34-503	Dnepr Ridenhare 1	US-PH/fonus-A	-	-	LC90/20	-	-	1375	-	-
2001-052	2452121.53	2001 Jul 31 09:00:00	Tsikhon-3	-	670-21-803	Kosmos-2383	Gonets-D1 No. 19/20/21	-	-	LC32/2	-	-	200?	-	-
2001-057	2452264.67	2001 Dec 21 04:00:00	Tsikhon-2	-	510-62-802	Kosmos-2383	US-PH No. 9L	-	-	LC90/20	-	-	534	-	-
2001-058	2452271.54	2001 Dec 28 03:24:24	Tsikhon-2	-	670-21-803	Gonets/Kosmos	US-PH 9L	-	-	LC90/20	-	-	422	-	-
2002-058	2452529.21	2002 Dec 20 17:00:00	Dnepr	-	510-3541-505	Gonets/Kosmos	Gonets-D1 No. 22/23/24	-	-	LC90/20	-	-	1463	-	-
2004-020	2453153.75	2004 May 28 09:00:00	Dnepr	-	450-92-803	Kosmos-2405	Dnepr Ridenhare 2	-	-	LC90/20	-	-	1033	-	-
2004-025	2453186.77	2004 Jun 29 06:30:06	Dnepr	-	450-3541-531	Demeter/Lacinate/	US-PH Ridenhare 3	-	-	LC90/20	-	-	422	-	-
2004-572	2453361.95	2004 Dec 22 05:30:20	Tsikhon-3	-	450-7951-210	15A18 UBP 13 RD	RCh 15F173(COR 15F174)	-	-	LC90/20	-	-	1185	-	-
2004-652	2453363.97	2004 Dec 24 11:20:00	Tsikhon-3	-	450-35-01.40L	Stich-1H	RCh 15F173(COR 15F174)	-	-	SH370/35	-	-	1000?	-	-
2005-031	2453606.38	2005 Aug 23 21:09:59	Dnepr	-	510-3541-521	ULCETS/INDEX	Okan-U1 No. 9	-	-	LC90/20	-	-	640	-	-
2006-026	2453911.67	2006 Jun 25 04:00:00	Tsikhon-2	-	450-96-804	Kosmos-2421	US-PH/fonus-A	-	-	LC90/20	-	-	1188	-	-
2006-029	2453929.12	2006 Jul 12 14:53:06	Dnepr	-	450-2975-806	Kosmos-2421	US-PH/fonus-A	-	-	SH370/11	-	-	421	-	-
2006-035	2453946.52	2006 Jul 26 07:43:06	Dnepr	-	450-2975-806	Genesis-1	Belgorod Genesis-1	-	-	SH370/11	-	-	1761	-	-
2006-377	2454099.51	2006 Dec 21 02:20:00	R-36M2 15A18M	-	450-7951-514	15A18M UBP 13 RD	Dnepr Ridenhare	-	-	LC90/20	-	-	407	-	-
2007-012	2454264.78	2007 Apr 17 06:46:39	Dnepr	-	670-8341-508	Hsri/Sautsat-3/	RCh 15F173(COR 15F174)	-	-	SH370/35	-	-	1800?	-	-
2007-026	2454466.19	2007 Jun 15 02:45:20	Dnepr	-	670-8341-508	Ferradukh-X	Dnepr Ridenhare 5	-	-	LC90/20	-	-	1090?	-	-
2008-040	2454700.79	2008 Aug 29 03:15:59	Dnepr	-	670-8341-508	Applidyge 1-5	Belgorod Genesis-2	-	-	SH370/35	-	-	1095	-	-
2008-041	2454700.79	2008 Oct 4 09:33:00	Dnepr	-	670-8341-508	Applidyge 2	Belgorod Genesis-2	-	-	SH370/35	-	-	1823	-	-
2009-041	2454950.68	2009 Oct 30 13:30:00	Tsikhon-3	-	450-84-701	THEOS	THEOS	-	-	SH370/13B?	-	-	135	-	-
2009-041	2454950.78	2009 Jul 29 18:46:29	Dnepr	-	510-7851-113	Korona-Foton	Korona-Foton	-	-	LC90/20	-	-	553	-	-
2009-071	2455195.77	2009 Jul 29 06:30:03	R-36M2 15A18M	-	450-7951-202	15A18M UBP 13 RD	Dnepr Ridenhare 6	-	-	LC90/20	-	-	1303	-	-
2010-011	2455295.08	2010 Apr 8 18:57:00	Dnepr	-	450-3261-316	CRISA-2	RCh 15F173(CO x 15F174)	-	-	LC90/20	-	-	1000?	-	-
2010-036	2455295.11	2010 Jun 15 14:42:05	Dnepr	-	450-3261-316	PRISMA-X	Cyosat 2	-	-	LC90/20	-	-	1200	-	-
2011-004	2455709.80	2011 Aug 17 07:12:20	Dnepr	-	450-3261-319	Stich-X	TKA	-	-	LC90/20	-	-	1168	-	-
2013-004	2456527.11	2013 Aug 20 09:52:00	Dnepr	-	510-7851-319	Stich-X	Dnepr Ridenhare 7	-	-	LC90/20	-	-	1211	-	-
2013-054	2456595.51	2013 Dec 20 06:52:00	Dnepr	-	450-7851-202	Arifang-5	Korona-Foton	-	-	SH370/13	-	-	1296	-	-
2013-066	2456817.50	2013 Nov 21 07:10:17	Dnepr	-	510-7851-111	15A18M UBP 13 RD	RCh 15F173(COR 15F174)	-	-	SH370/13	-	-	1211	-	-
2014-033	2456920.30	2014 Nov 19 19:11:11	Dnepr	-	510-7851-108	Dubasat-2	Dnepr Ridenhare 8	-	-	SH370/13	-	-	1000?	-	-
2014-070	2456967.82	2014 Nov 6 07:38:55	Dnepr	-	510-7881-109	Dubasat-2	Dnepr Ridenhare 9	-	-	SH370/13	-	-	1610	-	-
2015-014	2457107.42	2015 Mar 25 22:08:53	Dnepr	-	510-8881-101	Arifang-3A	ANSARU-1	-	-	SH370/13	-	-	1943	-	-
							Kompet-3A	-	-	SH370/13	-	-	1440	-	-













Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	OrbPay	Agency	Launch_Code	Group	Category	LTCite	Cite	Notes
1978-S23	2448688.07	1978 Dec 25 1345	R-36H0 15A18	-	67055-505(9L)	0.000	RWISN	NS	-	OT	BHL	PP	XPC
1978-S24	2448689.03	1978 Dec 26 1240	R-36H0 15A18	-	45055-509(13L)	0.000	RWISN	NS	-	Sat LE0 0	BHL	PP	XPC
1979-011	2448917.04	1979 Feb 12 1300:00	Teiklon-3	-	45055-503	1.717	RWISN	NS	G	Sat LE0 P	AK15/FAEX	PL36	-
1979-033	2448922.00	1979 Apr 18 1200	Teiklon-2	-	45028-504	3.300	RWISN	NS	G	Sat LE0 P	AK15/FAEX	-	-
1979-S129	2448922.50	1979 Apr 19	R-36H 15A14	-	46L	0.000	RWISN	NS	G	Sat LE0 P	Kosmodrom0103-11	-	-
1979-036	2448988.92	1979 Apr 25 1000	Teiklon-2	-	45052-106	3.300	RWISN	NS	G	Sat LE0 P	BHL	PP	-
1979-S18	2448989.03	1979 Apr 25 1240	R-36H0 15A18	-	67087-401(14L)	0.000	RWISN	NS	-	OT	BHL	PP	-
1979-S19	2448989.60	1979 Apr 26 0220	R-36H0 15A18	-	67087-514(24H)	0.000	RWISN	NS	-	OT	BHL	PP	-
1979-S20	2444023.66	1979 May 30 0350	R-36H0 15A18	-	45087-402(16L)	0.000	RWISN	NS	-	OT	BHL	PP	-
1979-S21	2444052.02	1979 Jun 27 1230	R-36H0 15A18	-	51087-403(16L)	0.000	RWISN	NS	-	OT	BHL	PP	-
1979-S22	2444104.03	1979 Jun 17 1250	R-36H0 15A18	-	67087-404(17L)	0.000	RWISN	NS	-	OT	BHL	PP	-
1979-S23	2444106.63	1979 Oct 20 0305	R-36H0 15A18	-	45087-524-23T	0.000	RWISN	NS	-	OT	BHL	PP	-
1979-S24	2444201.12	1979 Nov 23 1500	R-36H0 15A18	-	45087-405(18L)	0.000	RWISN	NS	-	OT	BHL	PP	-
1979-S25	2444206.10	1979 Nov 27 1425	R-36H0 15A18	-	51067-406(19L)	0.000	RWISN	NS	-	OT	BHL	PP	-
1979-S26	2444206.99	1979 Nov 29 1145	R-36H0 15A18	-	51067-406(19L)	0.000	RWISN	NS	-	OT	BHL	PP	-
1980-005	2444261.79	1980 Jan 23 0700:00	Teiklon-3	-	67067-401	1.888	RWISN	NS	G	Sat LE0 0	AK15/FAEX	PL36	-
1980-S15	2444267.64	1980 Feb 28 0320?	R-36H0 15A18	-	45053-416-44T	0.000	RWISN	NS	G	Sat LE0 0	BHL	PL36	[Or Aug28]
1980-S64	2444304.50	1980 Mar 6	R-36H 15A14	-	46L	0.000	RWISN	NS	G	OT	Kosmodrom0103-11	-	-
1980-021	2444312.94	1980 Mar 14 1040	Teiklon-2	-	51052-106	3.300	RWISN	NS	G	Sat LE0 P	AK15/FAEX	-	-
1980-030	2444347.54	1980 Apr 18 0051	Teiklon-2	-	45055-506	1.400	RWISN	NS	G	Sat LE0 P	AK15/FAEX	-	-
1980-S95	2444354.50	1980 Apr 25 1140	R-36H 15A14	-	47L	0.000	RWISN	NS	G	Sat LE0 P	AK15/FAEX	-	-
1980-034	2444358.99	1980 Apr 29 1140	Teiklon-2	-	51052-103	4.300	RWISN	NS	G	Sat LE0 S	AK15/FAEX	RPCA	-
1980-S16	2444358.66	1980 Jul 4	R-36H0 15A18	-	49L	0.000	RWISN	NS	-	OT	BHL	PPCA	-
1980-S138	2444424.50	1980 Jul 4	R-36H 15A14	-	50L	0.000	RWISN	NS	-	OT	BHL	PPCA	-
1980-S17	2444460.50	1980 Sep 30 0230	R-36H0 15A18	-	67083-436-43T	0.000	RWISN	NS	G	Sat LE0 P	Kosmodrom0103-11	-	Self-gt,ded
1980-S18	2444512.60	1980 Oct 31 0305?	R-36H0 15A18	-	51067-534-22T	0.000	RWISN	NS	G	Sat LE0 P	AK15/FAEX	RPCA	-
1980-S18	2444543.63	1980 Nov 4 1504	Teiklon-2	-	51028-502	3.300	RWISN	NS	G	Sat LE0 P	AK15/FAEX	-	-
1980-089	2444570.50	1980 Nov 27	R-36H 15A14	-	504	0.000	RWISN	NS	-	OT	BHL	PPCA	-
1981-024	2444627.97	1981 Jan 23 1120	Teiklon-3	-	45085-521	1.530	RWISN	NS	G	Sat LE0 P	AK15/FAEX	PL39	-
1981-S236	2444627.60	1981 Feb 2 0219	Teiklon-2	-	45028-501	1.400	RWISN	NS	G	Sat LE0 0	AK15/FAEX	-	-
1981-S236	2444646.50	1981 Feb 10	R-36H 15A14	-	51L	0.000	RWISN	NS	-	OT	RPCA	-	-
1981-S237	2444646.50	1981 Feb 11	R-36H 15A14	-	51L	0.000	RWISN	NS	-	OT	RPCA	-	-
1981-S238	2444669.26	1981 Feb 17 1430	R-36H0 15A18	-	67059-716-09T	0.000	RWISN	NS	G	Sat LE0 S	AK15/FAEX	RPCA	-
1981-S238	2444668.50	1981 Mar 5	Teiklon-2	-	67052-104	4.300	RWISN	NS	G	Sat LE0 S	AK15/FAEX	-	-
1981-S239	2444668.50	1981 Mar 5	R-36H 15A14	-	50T	0.000	RWISN	NS	-	OT	RPCA	-	-
1981-S240	2444669.50	1981 Mar 6	R-36H 15A14	-	50T	0.000	RWISN	NS	-	OT	RPCA	-	-
1981-S241	2444678.20	1981 Mar 14 1655	Teiklon-2	-	45048-204	0.000	RWISN	NS	G	Sat LE0 P	AK15/FAEX	-	-
1981-S243	2444684.49	1981 Mar 20 2345	Teiklon-2	-	45035-503	3.300	RWISN	NS	G	Sat LE0 P	AK15/FAEX	-	-
1981-S243	2444685.50	1981 Apr 1	R-36H 15A14	-	51028-52-503	0.000	RWISN	NS	G	Sat LE0 P	AK15/FAEX	-	-
1981-S244	2444722.00	1981 Apr 24 0345	Teiklon-2	-	51028-504	4.300	RWISN	NS	G	Sat LE0 S	AK15/FAEX	-	-
1981-S245	2444722.00	1981 Apr 26	R-36H 15A14	-	509	0.000	RWISN	NS	-	OT	RPCA	-	-
1981-S251	2444753.54	1981 Apr 29 0060	R-36H 15A18	-	67089-708-08T	0.000	RWISN	NS	-	OT	BHL	RPCA	-
1981-S252	2444753.54	1981 May 29 0350	R-36H0 15A18	-	67089-436-42T	0.000	RWISN	NS	-	OT	BHL	RPCA	-
1981-S253	2444820.50	1981 Jul 18 0100	R-36H0 15A18	-	67089-436-42T	0.000	RWISN	NS	-	OT	BHL	RPCA	-
1981-S254	2444820.50	1981 Aug 4 0828	Teiklon-2	-	67028-503	3.300	RWISN	NS	G	Sat LE0 P	AK15/FAEX	RPCA	-
1981-S255	2444820.50	1981 Aug 15 1637	Teiklon-2	-	51048-205	4.300	RWISN	NS	G	Sat LE0 P	AK15/FAEX	-	-
1981-S256	2444841.10	1981 Aug 24 2140	Teiklon-2	-	51099-501	1.750	RWISN	NS	G	Sat LE0 S	AK15/FAEX	-	-
1981-S256	2444852.35	1981 Sep 14 2031	Teiklon-2	-	67085-505	1.300	RWISN	NS	G	Sat LE0 P	AK15/FAEX	-	-
1981-S257	2444856.05	1981 Sep 14 1310	Teiklon-3	-	67089-502	1.300	RWISN	NS	G	Sat LE0 P	AK15/FAEX	-	-
1981-S258	2444877.83	1981 Sep 30 0900	Teiklon-3	-	51089-501	1.588	RWISN	NS	G	Sat LE0 0	PL39	-	-
1981-S259	2444879.57	1981 Oct 3 0145	R-36H0 15A18	-	45029-709-07T	0.000	RWISN	NS	-	OT	BHL	PL39	-
1981-S260	2444936.24	1981 Nov 27 1745	R-36H0 15A18	-	51029-708-08T	0.000	RWISN	NS	-	OT	BHL	RPCA	-
1981-S261	2444941.69	1981 Dec 3 1147	Teiklon-3	-	45029-503	1.750	RWISN	NS	G	Sat LE0 0	AK15/FAEX	-	-
1982-010	2445011.85	1982 Feb 11 0111	Teiklon-3	-	51038-501	3.300	UNKS	NS	G	Sat LE0 P	AK15/FAEX	-	-
1982-S28	2445045.30	1982 Mar 16 1905	R-36H0 15A18	-	51074-317-10T	0.000	UNKS	NS	G	Sat LE0 P	AK15/FAEX	-	-
1982-S28	2445053.91	1982 Mar 25 0950:00	Teiklon-3	-	67028-505	1.500	UNKS	NS	G	Sat LE0 0	TLE/AVN	XPC	-
1982-S28	2445058.91	1982 Apr 29 0955	Teiklon-3	-	67038-502	3.300	UNKS	NS	G	Sat LE0 0	AK15/FAEX	-	-
1982-S28	2445104.32	1982 Jun 1 1939	Teiklon-2	-	51055-502	4.300	UNKS	NS	G	Sat LE0 S	AK15/FAEX	-	-
1982-S29	2445122.08	1982 Jun 1 1958	Teiklon-2	-	51083-502	4.300	UNKS	NS	G	Sat LE0 S	AK15/FAEX	-	-
1982-S29	2445124.31	1982 Jun 3 1920	R-36H0 15A18	-	51074-317-03T	0.000	RWISN	NS	G	Sat LE0 S	AK15/FAEX	RPCA	-
1982-S29	2445131.23	1982 Jun 10 1737	Teiklon-3	-	51029-504	1.750	UNKS	NS	G	Sat LE0 0	AK15/FAEX	-	-
1982-S29	2445138.96	1982 Jun 18 1104	Teiklon-2	-	45083-504	0.000	RWISN	NS	-	OT	BHL	RPCA	-
1982-S29	2445149.05	1982 Jun 28 1305	R-36H0 15A18	-	67074-327-08T	0.000	RWISN	NS	-	OT	BHL	RPCA	-
1982-S29	2445166.31	1982 Jul 15 1925	R-36H0 15A18	-	45046-315-08	0.000	RWISN	NS	-	OT	BHL	RPCA	-
1982-S30	2445177.50	1982 Jul 27	R-36H 15A14	-	45046-315-05	0.000	RWISN	NS	-	OT	BHL	RPCA	-
1982-S30	2445194.30	1982 Aug 12 1905	R-36H 15A14	-	45039-501	0.000	RWISN	NS	-	OT	BHL	RPCA	-
1982-S30	2445211.92	1982 Aug 30 1006	Teiklon-2	-	45039-502	0.000	RWISN	NS	-	OT	BHL	RPCA	-
1982-S30	2445217.24	1982 Sep 4 1750	Teiklon-2	-	67083-503	3.300	UNKS	NS	G	Sat LE0 S	AK15/FAEX	-	-
1982-S30	2445228.70	1982 Sep 16 0455	Teiklon-3	-	45029-506	0.000	UNKS	NS	G	Sat LE0 0	AK15/FAEX	XPC	-
1982-S30	2445236.89	1982 Sep 24 0915	Teiklon-3	-	45029-503	1.547	UNKS	NS	G	Sat LE0 0	PL39	XPC	-
1982-S30	2445244.50	1982 Oct 2 0001	Teiklon-2	-	51067-403	4.300	UNKS	NS	G	Sat LE0 S	AK15/FAEX	XPC	-
1982-S30	2445327.06	1982 Dec 23 1320	R-36H 15A14	-	45046-315-15	0.000	RWISN	NS	-	OT	BHL	RPCA	-
1983-S200	2445374.01	1983 Feb 8 1210	R-36H0 15A18	-	45043-513-08T	0.000	RWISN	NS	-	OT	BHL	RPCA	-
1983-S200	2445411.03	1983 Feb 17 1940	R-36H0 15A18	-	45046-315-03	0.000	RWISN	NS	-	OT	BHL	RPCA	-
1983-S200	2445411.03	1983 Mar 17 1238	R-36H0 15A18	-	67014-327-07	0.000	RWISN	NS	-	OT	BHL	RPCA	-
1983-S200	2445448.10	1983 Apr 23 1430	Teiklon-3	-	45099-506	3.300	UNKS	NS	G	Sat LE0 0	AK15/FAEX	XPC	-
1983-S200	2445461.94	1983 May 7 1030	Teiklon-2	-	45074-703	0.000	UNKS	NS	G	Sat LE0 0	AK15/FAEX	XPC	-
1983-S200	2445508.50	1983 Jun 22 2358	Teiklon-3	-	45029-738-05T	0.000	RWISN	NS	-	OT	BHL	RPCA	-
1983-S200	2445528.93	1983 Jul 13 1025	R-36H0 15A18	-	51026-525-02	0.000	RWISN	NS	-	OT	BHL	RPCA	-
1983-S200													

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	OrbPay	Agency	Launch_Code	Group	Category	LTCiTe	CiTe	Notes
1983-S187	2445618.70	1983 Oct 11 0450	R-36H 15A14	-	45046-515-10	0.000	RVSN	NS	-	OT	BML	Kommodrom0103-11	-
1983-S24	2445633.70	1983 Oct 26 0450	R-36MU 15A18	-	45058-738-03	0.000	RVSN	NS	-	OT	BML	RPCA	XPC
1983-110	2445636.85	1983 Oct 29 0830	Teiklon-2	-	45059-827	3.300	UNKS	OS	G	Sat LE0 P	AK15/FAEX	XPC	-
1983-115	2445663.02	1983 Oct 24 1233	Teiklon-3	-	67014-701	1.550	UNKS	OS	G	Sat LE0	AK15/FAEX	PL39	-
1983-122	2445664.02	1983 Dec 15 1225	Teiklon-3	-	67014-708	1.750	UNKS	OS	G	Sat LE0	AK15/FAEX	XPC	-
1984-013	2445738.89	1984 Feb 8 0923	Teiklon-3	-	45014-706	1.750	UNKS	OS	G	Sat LE0	AK15/FAEX	XPC	-
1984-027	2445775.21	1984 Mar 15 1705	Teiklon-3	-	67014-705	1.750	UNKS	OS	G	Sat LE0	AK15/FAEX	XPC	-
1984-S211	2445818.27	1984 Apr 27 1835	R-36MU 15A18	-	51086-111-5T	0.000	RVSN	NS	-	OT	BML	RPCA	-
1984-053	2445851.28	1984 May 30 1846	Teiklon-2	-	45067-402	3.300	UNKS	OS	G	Sat LE0 P	AK15/FAEX	XPC	-
1984-069	2445880.51	1984 Jun 29 0021	Teiklon-2	-	67067-401	4.300	UNKS	OS	G	Sat LE0 S	AK15/FAEX	XPC	-
1984-083	2445886.65	1984 Jul 5 0335:00	Teiklon-2	-	67074-702	1.500	UNKS	OS	G	Sat LE0	AK15/FAEX	XPC	-
1984-072	2445920.45	1984 Aug 7 2250:34	Teiklon-2	-	51099-507	3.300	UNKS	OS	G	Sat LE0 P	AK15/FAEX	XPC	-
1984-104	2445921.01	1984 Aug 8 1208	Teiklon-3	-	45042-301	1.554	UNKS	OS	G	Sat LE0	AK15/FAEX	PL39	-
1984-S305	2445971.75	1984 Aug 9	R-36H 15A14	-	51032-511-16L	0.000	RVSN	NS	-	OT	russlanespaceweb.com	PL39	BRK4, PUI
1984-111	2445992.24	1984 Oct 31 1746	Teiklon-3	-	51074-701	1.922	UNKS	OS	G	Sat LE0	AK15/FAEX	PL36	-
1984-112	2446005.02	1984 Oct 31 1229	Teiklon-2	-	51074-701	1.750	UNKS	OS	G	Sat LE0 S	AK15/FAEX	XPC	-
1984-S129	2446032.47	1984 Nov 13 2322:00	R-36MU 15A18	-	51075-511-14T	0.000	RVSN	NS	-	OT	BML	RPCA	Zaloga
1984-120	2446032.47	1984 Nov 27 1422:00	Teiklon-3	-	51014-707	1.750	UNKS	OS	G	Sat LE0	AK15/FAEX	PL39	PL27 sayS 1412
1985-001	2446051.12	1985 Jan 15 1450:59	Teiklon-2	-	67042-303	1.350	UNKS	OS	G	Sat LE0	AK15/FAEX	XPC	-
1985-008	2446059.33	1985 Jan 23 1958	Teiklon-3	-	67055-526	3.300	UNKS	OS	G	Sat LE0 P	AK15/FAEX	XPC	-
1985-009	2446090.20	1985 Jan 24 1645	Teiklon-3	-	51014-710	1.750	UNKS	OS	G	Sat LE0	AK15/FAEX	XPC	-
1985-013	2446103.41	1985 Feb 6 2146:00	Teiklon-3	-	51014-704	1.500	UNKS	OS	G	Sat LE0	AK15/FAEX	XPC	-
1985-020	2446130.15	1985 Mar 5 1559	Teiklon-3	-	67029-508	1.750	UNKS	OS	G	Sat LE0	AK15/FAEX	XPC	-
1985-030	2446174.40	1985 Apr 18 2140:43	Teiklon-2	-	51099-501	3.300	UNKS	OS	G	Sat LE0 P	AK15/FAEX	XPC	-
1985-047	2446250.94	1985 Jun 14 1036	Teiklon-3	-	45032-307	1.556	UNKS	OS	G	Sat LE0	AK15/FAEX	PL39	-
1985-055	2446250.94	1985 Jun 16 2340	Teiklon-3	-	45042-301	1.750	UNKS	OS	G	Sat LE0	AK15/FAEX	XPC	-
1985-064	2446278.73	1985 Aug 1 0536	Teiklon-2	-	51099-504	4.300	UNKS	OS	G	Sat LE0 S	AK15/FAEX	XPC	-
1985-069	2446285.99	1985 Aug 8 1149	Teiklon-2	-	67032-306	1.750	UNKS	OS	G	Sat LE0	AK15/FAEX	XPC	-
1985-075	2446301.44	1985 Aug 23 2233	Teiklon-2	-	45099-503	4.300	UNKS	OS	G	Sat LE0	AK15/FAEX	XPC	-
1985-082	2446327.56	1985 Sep 19 0132	Teiklon-2	-	67099-502	3.300	UNKS	OS	G	Sat LE0 P	AK15/FAEX	XPC	-
1985-S270	2446328.50	1985 Sep 20	R-36MU 15A18	-	51032-308	0.000	RVSN	NS	-	OT	RPCA	XPC	-
1985-094	2446346.40	1985 Oct 9 2135	Teiklon-3	-	51076-111	1.350	UNKS	OS	G	Sat LE0	AK15/FAEX	XPC	-
1985-100	2446352.60	1985 Oct 24 0230:00	Teiklon-3	-	45061-504	1.750	UNKS	OS	G	Sat LE0	AK15/FAEX	PL39	-
1985-108	2446352.43	1985 Nov 22 2220:00	Teiklon-3	-	45062-310	1.750	UNKS	OS	G	Sat LE0	AK15/FAEX	XPC	-
1985-113	2446412.16	1985 Dec 12 1551	Teiklon-3	-	51042-302	1.750	UNKS	OS	G	Sat LE0	AK15/FAEX	XPC	-
1985-119	2446425.56	1985 Dec 26 0150:00	Teiklon-3	-	51052-305	1.500	UNKS	OS	G	Sat LE0	AK15/FAEX	XPC	-
1985-S186	2446430.50	1986 Jan 17 0721:09	R-36MU 15A18	-	51032-308	0.000	RVSN	NS	-	OT	RPCA	XPC	-
1986-006	2446447.81	1986 Feb 5 1306	Teiklon-3	-	45067-524-18	0.000	RVSN	NS	-	OT	BML	RPCA	-
1986-012	2446472.79	1986 Feb 11 0556:00	Teiklon-3	-	45014-709	1.957	UNKS	OS	G	Sat LE0	AK15/FAEX	PL39	-
1986-015	2446472.79	1986 Feb 19 2304:00	Teiklon-3	-	45064-701	1.750	UNKS	OS	G	Sat LE0	AK15/FAEX	XPC	-
1986-016	2446481.57	1986 Feb 21 0044	Teiklon-2	-	45068-512	3.300	UNKS	OS	G	Sat LE0 P	AK15/FAEX	XPC	-
1986-024	2446510.82	1986 Mar 21 0026	Teiklon-2	-	51029-511	4.300	UNKS	OS	G	Sat LE0 S	AK15/FAEX	XPC	-
1986-A06	2446512.82	1986 Mar 25 0750	R-36H2 15A18M	-	51054-502(1L)	0.000	UNKS	OS	-	OT	BML	Kommodrom-1	XPC
1986-025	2446515.31	1986 Mar 27 0426:00	Teiklon-3	-	45024-511	3.000	UNKS	OS	G	Sat LE0 P	AK15/FAEX	XPC	-
1986-028	2446515.31	1986 Mar 29 0426:00	Teiklon-3	-	45024-511	1.750	UNKS	OS	G	Sat LE0	AK15/FAEX	XPC	-
1986-039	2446577.99	1986 May 27 0930:00	Teiklon-3	-	67076-109	1.500	UNKS	OS	G	Sat LE0	AK15/FAEX	XPC	-
1986-046	2446593.70	1986 Jun 10 0443:00	Teiklon-3	-	51086-102	1.750	UNKS	OS	G	Sat LE0	AK15/FAEX	XPC	-
1986-055	2446650.38	1986 Jun 26 2107:59	Teiklon-3	-	51061-502	1.951	UNKS	OS	G	Sat LE0	AK15/FAEX	PL36	-
1986-055	2446654.71	1986 Jul 5 0508	Teiklon-2	-	67099-508	4.300	UNKS	OS	G	Sat LE0 P	AK15/FAEX	XPC	-
1986-074	2446659.14	1986 Aug 21 0340	Teiklon-2	-	67099-508	0.000	UNKS	OS	G	Sat LE0 S	AK15/FAEX	XPC	-
1986-074	2446704.27	1986 Aug 31 0340	R-36H2 15A18M	-	67044-503(2L)	0.000	RVSN	NS	-	OT	BML	St2Fal1	-
1986-F06	2446718.73	1986 Sep 30 1834:00	Teiklon-3	-	67032-309	1.750	UNKS	OS	G	Sat LE0	AK15/FAEX	XPC	-
1986-A12	2446718.73	1986 Oct 15 0524:08	Teiklon-3	-	67064-503(19S)	1.350	UNKS	OS	G	Sat LE0	AK15/FAEX	AVMMLJ	-
1986-094	2446741.62	1986 Nov 27 0250	R-36H2 15A18M	-	67064-503(3L)	0.000	UNKS	OS	-	OT	BML	Fal1300Es	-
1986-094	2446741.62	1986 Nov 27 0250	Teiklon-3	-	67064-503(3L)	0.000	UNKS	OS	-	OT	BML	Fal1300Es	-
1986-094	2446741.62	1986 Nov 27 0250	Teiklon-3	-	67064-503(3L)	1.552	UNKS	OS	G	Sat LE0	AK15/FAEX	PL39	-
1986-097	2446774.81	1986 Dec 10 0730:00	Teiklon-3	-	67089-103	1.750	UNKS	OS	G	Sat LE0	AK15/FAEX	XPC	-
1986-101	2446792.83	1986 Dec 18 0900:00	Teiklon-3	-	45061-501	1.042	UNKS	OS	G	Sat LE0	AK15/FAEX	XPC	-
1987-001	2446800.56	1987 Jan 5 0120:00	Teiklon-3	-	51086-105	1.500	UNKS	OS	G	Sat LE0	AK15/FAEX	XPC	-
1987-003	2446809.88	1987 Jan 14 0905:00	Teiklon-3	-	45089-101	1.750	UNKS	OS	G	Sat LE0	AK15/FAEX	XPC	-
1987-A01	2446812.05	1987 Jan 16 1315	R-36MU 15A18	-	51026-525-09	0.000	RVSN	NS	-	OT	BML	XPC	-
1987-011	2446828.48	1987 Feb 1 2430	Teiklon-3	-	51076-105	3.550	UNKS	OS	G	Sat LE0 P	AK15/FAEX	XPC	-
1987-020	2446846.70	1987 Feb 20 0443:00	Teiklon-3	-	67076-106	1.545	UNKS	OS	G	Sat LE0	AK15/FAEX	PL39	-
1987-026	2446868.13	1987 Mar 3 1503:00	Teiklon-3	-	67059-108	1.750	UNKS	OS	G	Sat LE0	AK15/FAEX	XPC	-
1987-031	2446879.63	1987 Mar 13 1311:56	Teiklon-3	-	67059-108	1.350	UNKS	OS	G	Sat LE0	AK15/FAEX	RPCA	-
1987-031	2446893.66	1987 Apr 8 0351:21	R-36H2 15A18M	-	45029-509	0.000	RVSN	NS	-	OT	BML	XPC	-
1987-038	2446901.00	1987 Apr 15 1200	Teiklon-3	-	51086-511-03	3.000	UNKS	OS	G	Sat LE0	AK15/FAEX	XPC	-
1987-038	2446912.50	1987 Apr 27 0000:00	Teiklon-3	-	51059-407	0.000	RVSN	NS	-	OT	BML	XPC	-
1987-S31	2446944.57	1987 May 28 1245	R-36H2 15A18M	-	45039-403(5L)	0.000	RVSN	NS	-	OT	BML	RPCA	-
1987-S32	2446944.57	1987 May 28 1245	Teiklon-3	-	51059-403(5L)	0.000	RVSN	NS	-	OT	BML	RPCA	-
1987-A10	2446955.60	1987 Jun 9 0220	R-36H2 15A18M	-	51029-510	4.300	UNKS	OS	G	Sat LE0 S	AK15/FAEX	XPC	-
1987-052	2446955.60	1987 Jun 18 2133	Teiklon-2	-	51061-505	1.750	UNKS	OS	G	Sat LE0	AK15/FAEX	XPC	-
1987-055	2446978.32	1987 Jul 1 1935:00	Teiklon-3	-	51086-511-02	0.000	RVSN	NS	-	OT	BML	XPC	-
1987-S29	2446985.15	1987 Jul 8 1350	R-36MU 15A18	-	51029-513	0.000	RVSN	NS	-	OT	BML	XPC	-
1987-S38	2446992.50	1987 Jul 16 1535:00	Teiklon-2	-	-	0.000	RVSN	NS	-	OT	BML	XPC	-
1987-S38	2446992.50	1987 Jul 16 1535:00	Teiklon-3	-	-	0.000	RVSN	NS	-	OT	BML	XPC	-
1987-062	2446999.68	1987 Jul 23	Teiklon-3	-	67039-402	1.936	UNKS	OS	G	Sat LE0	RPCA	PL36	-
1987-S229	2447025.60	1987 Aug 18 0227:00	Teiklon-3	-	-	0.000	RVSN	NS	-	OT	BML	XPC	-
1987-068	2447025.60	1987 Aug 18 0227:00	Teiklon-3	-	51041-508	1.500	UNKS	OS	G	Sat LE0	AK15/FAEX	RPCA	-
1987-S33	2447046.49	1987 Sep 4 0105	R-36H2 15A18M	-	45059-406(8L)	0.000	RVSN	NS	-	OT	BML	XPC	-
1987-074	2447049.23	1987 Sep 7 2350:09	Teiklon-3	-	67095-603	1.350	UNKS	OS	G	Sat LE0	AK15/FAEX	RPCA	-
1987-S34	2447068.50	1987 Sep 10 1735	Teiklon-2	-	51059-407(9L)	0.000	RVSN	NS	-	OT	BML	XPC	-
1987-S35	2447068.50	1987 Sep 30 0005	R-36H2 15A18M	-	45095-601(10L)	0.000	RVSN	NS	-	OT	BML	XPC	-
1987-A15	2447069.63	1987 Oct 1 0305	R-36H2 15A18M	-	67059-408(11L)	0.000	RVSN	NS	-	OT	BML	RPCA	-

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	OrbPay	Agency	Launch_Code	Group	Category	LTCite	Cite	Notes
1987-086	2447079.41	1987 Oct 10 2148:30	Teiklon-2	-	67029-514	3.300	UMKS	OS	G	Sat LE0 P	AK15/FAEX	XPC	-
1987-S148	2447083.06	1987 Oct 14 1320	R-36M0 15A18	-	51074-317-07	0.000	RVSN	NS	G	UT	BML	RPCA	XPC
1987-088	2447088.88	1987 Oct 20 0909:00	Teiklon-3	-	51038-401	1.750	UMKS	NS	G	Sat LE0 0	AK15/FAEX	RPCA	-
1987-S36	2447111.76	1987 Nov 12 0610	R-36M2 15A18M	-	51098-602(132L)	0.000	RVSN	NS	-	UT	BML	RPCA	XPC
1987-S37	2447124.76	1987 Nov 25 0613	R-36M2 15A18M	-	67099-603(133L)	0.000	RVSN	NS	-	UT	BML	RPCA	XPC
1987-101	2447141.74	1987 Dec 12 0640:00	Teiklon-2	-	45041-504	4.300	UMKS	NS	G	Sat LE0 S	AK15/FAEX	RPCA	-
1987-S204	2447154.71	1987 Dec 25 0458	R-36M2 15A18M	-	45099-604(144L)	0.000	RVSN	NS	G	UT	BML	RPCA	-
1988-001	2447166.82	1988 Jan 6 0741:21	Teiklon-3	-	67038-110	1.750	UMKS	OS	G	Sat LE0 0	AK15/FAEX	XPC	-
1988-002	2447175.66	1988 Jan 15 0349:21	Teiklon-3	-	67038-110	1.750	UMKS	OS	G	Sat LE0 0	AK15/FAEX	XPC	-
1988-005	2447190.96	1988 Jan 30 1059:59	Teiklon-3	-	51038-404	1.500	UMKS	NS	G	UT	BML	RPCA	XPC
1988-S36	2447200.57	1988 Feb 9 0145	R-36M2 15A18M	-	45065-507(16L)	4.300	UMKS	NS	G	Sat LE0 S	AK15/FAEX	RPCA	-
1988-019	2447235.10	1988 Mar 14 1421:00	Teiklon-2	-	67074-702	4.300	UMKS	OS	G	UT	BML	RPCA	-
1988-020	2447236.28	1988 Mar 15 1850:00	Teiklon-3	-	51095-602	1.750	UMKS	OS	G	Sat LE0 0	AK15/FAEX	RPCA	-
1988-404	2447239.06	1988 Mar 18 1330	R-36M2 15A18M	-	67065-606(15L)	0.000	RVSN	NS	-	UT	BML	RPCA	-
1988-S37	2447252.12	1988 Apr 20 1500	R-36M2 15A18M	-	51065-608(17L)	0.000	RVSN	NS	-	UT	BML	RPCA	-
1988-S33	2447287.13	1988 May 5 1510	Teiklon-2	-	51029-748-04	1.944	UMKS	NS	G	UT	BML	RPCA	-
1988-045	2447309.62	1988 May 28 0249:00	Teiklon-2	-	45074-703	0.000	UMKS	NS	G	UT	BML	RPCA	-
1988-046	2447311.83	1988 May 30 0800:00	Teiklon-3	-	45095-601	1.548	UMKS	OS	G	Sat LE0 0	AK15/FAEX	RPCA	-
1988-050	2447326.64	1988 Jun 14 0318:00	Teiklon-3	-	45058-606	1.750	UMKS	OS	G	Sat LE0 0	AK15/FAEX	RPCA	-
1988-056	2447347.91	1988 Jul 5 0946:00	Teiklon-3	-	45065-201(23L)	1.944	UMKS	NS	G	UT	BML	RPCA	-
1988-S181	2447360.50	1988 Jul 18 0501:00	R-36M0 15A18	-	67061-506(24L)	2.150	UMKS	NS	G	Sat LE0 0	AK15/FAEX	RPCA	-
1988-094	2447368.71	1988 Sep 9 1150	R-36M0 15A18	-	51074-317-01	0.000	RVSN	NS	G	UT	BML	RPCA	-
1988-S34	2447413.99	1988 Sep 11 0802:00	Teiklon-3	-	45038-603	1.750	UMKS	OS	G	Sat LE0 P	AK15/FAEX	RPCA	-
1988-093	2447446.83	1988 Oct 11 0021:00	Teiklon-2	-	45029-516	3.300	UMKS	OS	G	Sat LE0 0	AK15/FAEX	RPCA	-
1988-101	2447463.51	1988 Nov 18 0012:28	R-36M2 15A18M	-	45065-216-01(18L)	0.000	RVSN	NS	-	UT	BML	RPCA	-
1988-S38	2447463.70	1988 Nov 18 0455	R-36M2 15A18M	-	45079-512-05	0.000	RVSN	NS	-	UT	BML	RPCA	-
1988-S39	2447467.77	1988 Nov 22 0630	R-36M2 15A18M	-	67019-203	0.000	RVSN	NS	-	UT	BML	RPCA	-
1988-S40	2447509.69	1988 Dec 14 0440	R-36M2 15A18M	-	45042-513-06	0.000	RVSN	NS	-	UT	BML	RPCA	-
1988-S182	2447514.50	1988 Dec 22 1005	R-36M0 15A18	-	67019-206(26L)	1.630	UMKS	NS	G	Sat LE0 0	AK15/FAEX	RPCA	-
1988-S35	2447517.82	1988 Dec 23 0720:00	Teiklon-3	-	45019-201(20L)	0.000	RVSN	NS	-	UT	BML	RPCA	-
1988-113	2447518.81	1989 Jan 13 0415	R-36M2 15A18M	-	67065-606	1.350	UMKS	OS	G	Test	BML	RPCA	-
1989-S21	2447544.68	1989 Feb 10 1513:56	Teiklon-3	-	45065-507	1.500	UMKS	NS	G	Sat LE0 0	AK15/FAEX	RPCA	-
1989-059	2447568.13	1989 Feb 26 0405:00	Teiklon-3	-	67032-210	1.896	UMKS	OS	G	Test	BML	RPCA	-
1989-018	2447585.67	1989 Apr 11 0426	R-36M2 15A18M	-	67059-519-08T	3.300	UMKS	OS	G	Sat LE0 P	AK15/FAEX	RPCA	-
1989-S22	2447627.68	1989 Jun 9 1010:59	Teiklon-2	-	51057-502(23L)	0.000	RVSN	NS	-	UT	BML	RPCA	-
1989-058	2447731.50	1989 Jul 24 0000:59	Teiklon-4	-	67069-519-08T	0.000	RVSN	NS	-	UT	BML	RPCA	-
1989-S23	2447740.07	1989 Aug 1 2159	R-36M2 15A18M	-	51069-506	1.548	UMKS	NS	G	Test	BML	RPCA	-
1989-S24	2447756.51	1989 Aug 26 0014:00	Teiklon-3	-	51069-506	1.548	UMKS	NS	G	Sat LE0 0	AK15/FAEX	RPCA	-
1989-066	2447771.73	1989 Sep 2 0630	R-36M2 15A18M	-	51019-202	0.000	RVSN	NS	G	UT	BML	RPCA	-
1989-074	2447783.91	1989 Sep 14 0949:06	Teiklon-3	-	51019-202	0.000	RVSN	NS	G	Sat LE0 0	AK15/FAEX	RPCA	-
1989-079	2447797.15	1989 Sep 26 0030:00	Teiklon-2	-	51038-404	3.300	UMKS	OS	G	Sat LE0 P	AK15/FAEX	RPCA	-
1989-086	2447797.50	1989 Sep 26 0030:59	Teiklon-3	-	45029-504	1.465	UMKS	OS	G	Sat LE0 0	AK15/FAEX	RPCA	-
1989-086	2447827.00	1989 Oct 24 2135:00	Teiklon-3	-	67065-604	2.250	UMKS	OS	G	Sat LE0 0	AK15/FAEX	RPCA	-
1989-086	2447827.00	1989 Nov 24 2322:00	Teiklon-3	-	67065-604	2.250	UMKS	OS	G	Sat LE0 0	AK15/FAEX	RPCA	-
1989-S26	2447885.47	1989 Nov 24 2322:00	R-36M2 15A18M	-	45074-703	0.000	UMKS	OS	G	UT	BML	RPCA	-
1989-000	2447887.69	1989 Dec 27 0900:00	R-36M2 15A18M	-	45074-703	0.000	UMKS	OS	G	UT	BML	RPCA	-
1990-000	2447921.97	1990 Dec 27 0900:00	Teiklon-3	-	45095-604	1.630	UMKS	OS	G	Sat LE0 0	AK15/FAEX	RPCA	-
1990-018	2447951.54	1990 Feb 28 0045:00	Teiklon-3	-	45095-604	1.750	UMKS	OS	G	Sat LE0 0	AK15/FAEX	RPCA	-
1990-S25	2447956.14	1990 Mar 30 0045:00	Teiklon-3	-	67076-603	1.906	UMKS	OS	G	Sat LE0 0	AK15/FAEX	RPCA	-
1990-055	2448025.00	1990 Mar 17 1527:00	R-36M0 15A18	-	45040-513-07	3.300	UMKS	OS	G	Sat LE0 P	AK15/FAEX	RPCA	-
1990-S101	2448054.65	1990 May 17 1205	R-36M2 15A18M	-	51012-713-07T	0.000	RVSN	NS	-	UT	BML	RPCA	-
1990-070	2448070.44	1990 Jun 17 0330	Teiklon-3	-	51098-605(13L)	1.500	UMKS	OS	G	UT	BML	RPCA	-
1990-070	2448103.69	1990 Jun 27 2320:00	R-36M2 15A18M	-	51098-605(13L)	1.500	UMKS	OS	G	Sat LE0 0	AK15/FAEX	RPCA	-
1990-070	2448111.69	1990 Jul 30 0006:00	Teiklon-3	-	67072-303	1.350	UMKS	OS	G	Sat LE0 0	AK15/FAEX	RPCA	-
1990-S121	2448120.92	1990 Aug 23 1817:00	Teiklon-2	-	51098-611-05	0.000	RVSN	NS	-	UT	BML	RPCA	-
1990-S125	2448132.71	1990 Aug 29 0520:00	R-36M2 15A18M	-	45057-503(34L)	3.300	UMKS	OS	G	Sat LE0 P	AK15/FAEX	RPCA	-
1990-076	2448132.71	1990 Aug 29 0520:00	Teiklon-3	-	67065-604	3.300	UMKS	OS	G	Sat LE0 0	AK15/FAEX	RPCA	-
1990-086	2448209.77	1990 Sep 26 0730:00	Teiklon-2	-	67065-604	3.300	UMKS	OS	G	UT	BML	RPCA	-
1990-104	2448234.19	1990 Sep 26 0730:00	R-36M2 15A18M	-	45057-503(34L)	3.300	UMKS	OS	G	Sat LE0 P	AK15/FAEX	RPCA	-
1990-S169	2448236.82	1990 Sep 26 0730:00	Teiklon-2	-	67065-604	3.300	UMKS	OS	G	UT	BML	RPCA	-
1990-104	2448242.19	1990 Nov 14 0833:40	Teiklon-3	-	45061-501	3.300	UMKS	OS	G	Sat LE0 0	AK15/FAEX	RPCA	-
1990-086	2448242.19	1990 Nov 28 1833:58	Teiklon-2	-	45061-501	3.300	UMKS	OS	G	Sat LE0 P	AK15/FAEX	RPCA	-
1990-114	2448247.81	1990 Dec 11 0740	R-36M2 15A18M	-	67065-609	1.350	UMKS	OS	G	UT	BML	RPCA	-
1991-005	2448274.98	1991 Dec 22 0728:53	Teiklon-2	-	67065-609	1.350	UMKS	OS	G	Sat LE0 0	AK15/FAEX	RPCA	-
1991-030	2448370.57	1991 Jan 18 1134:40	Teiklon-3	-	51019-205	2.250	UMKS	OS	G	Sat LE0 0	AK15/FAEX	RPCA	-
1991-033	2448393.40	1991 Apr 24 0137:00	Teiklon-3	-	67027-502	0.000	RVSN	NS	-	UT	BML	RPCA	-
1991-039	2448404.96	1991 May 16 2140:54	Teiklon-3	-	51019-713-10T	0.000	RVSN	NS	-	UT	BML	RPCA	-
1991-S111	2448411.84	1991 May 28 1105	R-36M2 15A18M	-	67027-519-14(36L)	1.907	UMKS	OS	G	Sat LE0 0	AK15/FAEX	RPCA	-
1991-056	2448421.15	1991 Jun 13 0541:00	Teiklon-3	-	45033-305	2.150	UMKS	OS	G	Sat LE0 0	AK15/FAEX	RPCA	-
1991-056	2448421.15	1991 Jun 15 0915:00	Teiklon-3	-	45033-305	2.150	UMKS	OS	G	Sat LE0 0	AK15/FAEX	RPCA	-
1991-S160	2448516.89	1991 Sep 17 0920	R-36M0 15A18M	-	67027-504(35L)	0.000	RVSN	NS	-	UT	BML	RPCA	-
1991-068	2448527.80	1991 Sep 28 0705:55	Teiklon-3	-	51074-317-08	0.000	RVSN	NS	-	UT	BML	RPCA	-
1991-S162	2448529.92	1991 Oct 10 1005	R-36M2 15A18M	-	45089-418-05T	0.000	RVSN	NS	-	UT	BML	RPCA	-
1991-S175	2448557.76	1991 Oct 12 2009:33	Teiklon-3	-	45099-418-10T	0.000	RVSN	NS	-	UT	BML	RPCA	-
1991-077	2448573.34	1991 Nov 20 0705:00	Teiklon-3	-	45099-418-10T	0.000	RVSN	NS	-	UT	BML	RPCA	-
1991-086	2448580.80	1991 Nov 20 0705:00	R-36M0 15A18	-	67049-330-15	0.000	RVSN	NS	-	UT	BML	RPCA	-
1992-042	2448817.24	1992 Oct 13 1741:40	Teiklon-3	-	51019-208	1.318	UMKS	OS	G	Sat LE0 0	AK15/FAEX	RPCA	-
1992-068	2448916.04	1992 Oct 20 1258:12	Teiklon-3	-	67019-209	1.350	UMKS	OS	G	Sat LE0 0	AK15/FAEX	RPCA	-
1992-080	2448960.67	1992 Nov 24 0409:59	Teiklon-3	-	51027-905	1.500	UMKS	OS	G	Sat LE0 0	AK15/FAEX	RPCA	-
1992-092	2448979.02	1992 Dec 22 1236:00	Teiklon-3	-	67027-910	1.536	UMKS	OS	G	Sat LE0 0	AK15/FAEX	RPCA	-
1992-094	2448982.34	1992 Dec 25 2007:59	Teiklon-3	-	45027-906	1.750	UMKS	OS	G	Sat LE0 0	AK15/FAEX	RPCA	-
1993-018	2449077.00	1993 Mar 30 1200:00	Teiklon-2	-	67042-303	3.300	UMKS	OS	G	Sat LE0 P	AK15/FAEX	RPCA	-





Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Mission	Launch	FlightCode	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee_Km	Range_Km	Dest
1977-480	2443395.50	1977 Sep 8?	R-39	-	IRS -	BR-1-1 eject test	3M65	CHM	-	-	PS-65	-	-	-	17	-	PS-65
1977-468	2443477.50	1977 Dec	R-39	-	IRS -	BR-1-2 eject test	3M65	CHM	-	-	PS-65	-	-	-	17	-	PS-65
1977-469	2443477.50	1977 Dec	R-39	-	IRS -	BR-1-3 eject test	3M65	CHM	-	-	PS-65	-	-	-	17	-	PS-65
1977-479	2443477.50	1977 Dec	R-39	-	IRS -	BR-1-4 eject test	3M65	CHM	-	-	PS-65	-	-	-	17	-	PS-65
1977-471	2443477.50	1977 Dec	R-39	-	IRS -	BR-1-5 eject test	3M65	CHM	-	-	PS-65	-	-	-	17	-	PS-65
1977-472	2443477.50	1977 Dec	R-39	-	IRS -	BR-1-6 eject test	3M65	CHM	-	-	PS-65	-	-	-	17	-	PS-65
1977-473	2443477.50	1977 Dec	R-39	-	IRS -	BR-1-7 eject test	3M65	CHM	-	-	PS-65	-	-	-	17	-	PS-65
1977-474	2443477.50	1977 Dec	R-39	-	IRS -	BR-1-8 eject test	3M65	CHM	-	-	PS-65	-	-	-	17	-	PS-65
1978-474	2443842.50	1978 Dec?	R-39	-	IRS -	BR-1-9 eject test	3M65	CHM	-	-	PS-65	-	-	-	17	-	PS-65
1978-471	2443871.50	1978 Dec 29	R-39	-	IRS -	BR-1-10 eject test	-	K-153	-	-	PS-65	-	-	-	17	-	GHA
1979-462	2443873.50	1979 Jan?	R-39	-	IRS -	BR-II-1 eject test	-	K-153	-	-	PS-65	-	-	-	17	-	GHA
1979-463	2443873.50	1979 Jan?	R-39	-	IRS -	BR-II-2 eject test	-	K-153	-	-	PS-65	-	-	-	17	-	GHA
1979-464	2443873.50	1979 Jan?	R-39	-	IRS -	BR-II-3 eject test	-	K-153	-	-	PS-65	-	-	-	17	-	GHA
1979-465	2443873.50	1979 Jan?	R-39	-	IRS -	BR-II-4 eject test	-	K-153	-	-	PS-65	-	-	-	17	-	GHA
1979-466	2443873.50	1979 Jan?	R-39	-	IRS -	BR-II-5 eject test	-	K-153	-	-	PS-65	-	-	-	17	-	GHA
1979-467	2444116.50	1979 Sep?	R-39	-	IRS -	BR-II-6 eject test	-	K-153	-	-	PS-65	-	-	-	17	-	GHA
1980-519	2444266.50	1980 Jan 28	R-39	-	2L -	LXI-III-1	-	RES	-	-	MSK-65	-	-	-	100?	-	(Kura)
1980-520	2444333.50	1980 Apr 4	R-39	-	3L -	LXI-III-2	-	RES	-	-	MSK-65	-	-	-	100?	-	(Kura)
1980-521	2444407.50	1980 Jun 17	R-39	-	3L -	LXI-III-3	-	RES	-	-	MSK-65	-	-	-	100?	-	(Kura)
1980-466	2444615.50	1980 Dec 3	R-39	-	6L 59A/45x	LXI-III-4	-	RES	-	-	MSK-65	-	-	-	40?	-	(Kura)
1980-467	2444616.50	1980 Dec 3	R-39	-	6L 59A/46x	LXI-III-5	-	RES	-	-	MSK-65	-	-	-	40?	-	(Kura)
1980-522	2444660.50	1980 Dec 27	R-39	-	7L 56A/49x	LXI-III-6	5 BB	RES	-	-	MSK-65	-	-	-	1000?	-	(Kura)
1981-5192	2444661.50	1981 Jan 27	R-39	-	2L 36x/51x	LXI-III-7	5 BB	RES	-	-	MSK-65	-	-	-	1000?	-	(Kura)
1981-5193	2444695.50	1981 Apr 1	R-39	-	9L 38x/50x	LXI-III-8	-	RES	-	-	MSK-65	-	-	-	100?	-	(Kura)
1981-436	2444716.50	1981 Apr 22	R-39	-	6L 31P/53x	LXI-III-9	-	RES	-	-	MSK-65	-	-	-	30?	-	(Kura)
1981-5196	2444955.50	1981 Nov 27	R-39	-	10L 38P/56A	LXI-III-10	5 BB	RES	-	-	MSK-65	-	-	-	1000?	-	(Kura)
1981-5198	2444959.50	1981 Dec 21	R-39	-	13L 37P/63A	LXI-III-11	4 BB	RES	-	-	MSK-65	-	-	-	1000?	-	(Kura)
1981-5173	2444965.50	1981 Dec 27	R-39	-	15L 45x/65A	LXI-III-12	5 BB	RES	-	-	MSK-65	-	-	-	1000?	-	(Kura)
1982-5206	2444997.50	1982 Jan 28	R-39	-	16L 37A/66A	LXI-III-13	5 BB	RES	-	-	MSK-65	-	-	-	1000?	-	(Kura)
1982-5206	2446012.50	1982 Feb 10	R-39	-	17L 41P/70A	LXI-III-14	3 BB?	RES	-	-	MSK-65	-	-	-	1000?	-	(Kura)
1982-5207	2446031.50	1982 Mar 5	R-39	-	23L 47A/67A	LXI-III-15	5 BB	RES	-	-	MSK-65	-	-	-	1000?	-	(Kura)
1982-5208	2446070.50	1982 Apr 11	R-39	-	14L 41P/73A	LXI-III-16	5 BB	RES	-	-	MSK-65	-	-	-	1000?	-	(Kura)
1982-5209	2446129.50	1982 Apr 23	R-39	-	16L 76A/74A	LXI-III-17	4 BB	RES	-	-	MSK-65	-	-	-	1000?	-	(Kura)
1982-5210	2446149.50	1982 Jun 9	R-39	-	20L 75/76	LXI-III-18	4 BB	RES	-	-	MSK-65	-	-	-	1000?	-	(Kura)
1982-5211	2446149.50	1982 Jun 29	R-39	-	50L 79/82	LXI-IV-1	3 BB	RES	-	-	MSK-65	-	-	-	1000?	-	(Kura)
1982-5212	2446171.50	1982 Jul 21	R-39	-	27L 83/84	LXI-IV-2	4 BB	RES	-	TK-208	BELA	-	-	-	1000?	-	(Kura)
1982-5220	2446172.50	1982 Jul 22	R-39	-	31L 85/84	LXI-IV-3	HL variant	RES	-	TK-208?	BELA	-	-	-	1000?	-	(Kura)
1982-5213	2446193.50	1982 Aug 12	R-39	-	53L 94P/85	LXI-IV-4	2 BB	RES	-	TK-208	BELA	-	-	-	1000?	-	(Kura)
1982-5214	2446193.50	1982 Aug 12	R-39	-	24L 87/88	LXI-IV-5	2 BB	RES	-	TK-208	BELA	-	-	-	1000?	-	(Kura)
1982-5215	2446213.50	1982 Sep 1	R-39	-	22L 91A/86	LXI-IV-6	-	RES	-	TK-208	BELA	-	-	-	1000?	-	(Kura)
1982-5222	2446213.50	1982 Sep 1	R-39	-	28L 96/75	LXI-IV-7	-	RES	-	TK-208	BELA	-	-	-	1000?	-	(Kura)
1982-5177	2446256.50	1982 Oct 14	R-39	-	26L 92/87	LXI-IV-8	4 BB	RES	-	TK-208	BELA	-	-	-	1000?	-	(Kura)
1982-5178	2446256.50	1982 Oct 14	R-39	-	26L 92/87	LXI-IV-9	4 BB	RES	-	TK-208	BELA	-	-	-	1000?	-	(Kura)
1982-5162	2446266.50	1982 Oct 14	R-39	-	22L 87/93?	LXI-IV-10	1 BB	RES	-	TK-208	BELA	-	-	-	1000?	-	(Kura)
1982-5268	2446266.50	1982 Oct 26 0500	R-39	-	48764-251-1L	LXI-IV-11	1 BB	RES	-	TK-208	BELA	-	-	-	1000?	-	(Kura)
1982-5269	2446266.50	1982 Dec 12	R-39	-	48764-251-1L	LXI-IV-12	2 BB	RES	-	TK-208	BELA	-	-	-	1000?	-	(Kura)
1982-5217	2446315.50	1982 Dec 12	R-39	-	35L 84/Mkv	LXI-IV-13	2 BB	RES	-	TK-208	BELA	-	-	-	1000?	-	(Kura)
1982-5218	2446315.50	1982 Dec 12	R-39	-	36L 68/	LXI-IV-14	2 BB	RES	-	TK-208	BELA	-	-	-	1000?	-	(Kura)
1982-5219	2446315.50	1982 Dec 12	R-39	-	37L	LXI-IV-15	2 BB	RES	-	TK-208	BELA	-	-	-	1000?	-	(Kura)
1982-5219	2446315.50	1982 Dec 12	R-39	-	37L	LXI-IV-16	2 BB	RES	-	TK-208	BELA	-	-	-	1000?	-	(Kura)
1982-5219	2446315.50	1982 Dec 12	R-39	-	37L	LXI-IV-17	2 BB	RES	-	TK-208	BELA	-	-	-	1000?	-	(Kura)
1982-5219	2446315.50	1982 Dec 12	R-39	-	37L	LXI-IV-18	2 BB	RES	-	TK-208	BELA	-	-	-	1000?	-	(Kura)
1982-5219	2446315.50	1982 Dec 12	R-39	-	37L	LXI-IV-19	2 BB	RES	-	TK-208	BELA	-	-	-	1000?	-	(Kura)
1982-5219	2446315.50	1982 Dec 12	R-39	-	37L	LXI-IV-20	2 BB	RES	-	TK-208	BELA	-	-	-	1000?	-	(Kura)
1982-5219	2446315.50	1982 Dec 12	R-39	-	37L	LXI-IV-21	2 BB	RES	-	TK-208	BELA	-	-	-	1000?	-	(Kura)
1982-5219	2446315.50	1982 Dec 12	R-39	-	37L	LXI-IV-22	2 BB	RES	-	TK-208	BELA	-	-	-	1000?	-	(Kura)
1982-5219	2446315.50	1982 Dec 12	R-39	-	37L	LXI-IV-23	2 BB	RES	-	TK-208	BELA	-	-	-	1000?	-	(Kura)
1982-5219	2446315.50	1982 Dec 12	R-39	-	37L	LXI-IV-24	2 BB	RES	-	TK-208	BELA	-	-	-	1000?	-	(Kura)
1982-5219	2446315.50	1982 Dec 12	R-39	-	37L	LXI-IV-25	2 BB	RES	-	TK-208	BELA	-	-	-	1000?	-	(Kura)
1982-5219	2446315.50	1982 Dec 12	R-39	-	37L	LXI-IV-26	2 BB	RES	-	TK-208	BELA	-	-	-	1000?	-	(Kura)
1982-5219	2446315.50	1982 Dec 12	R-39	-	37L	LXI-IV-27	2 BB	RES	-	TK-208	BELA	-	-	-	1000?	-	(Kura)
1982-5219	2446315.50	1982 Dec 12	R-39	-	37L	LXI-IV-28	2 BB	RES	-	TK-208	BELA	-	-	-	1000?	-	(Kura)
1982-5219	2446315.50	1982 Dec 12	R-39	-	37L	LXI-IV-29	2 BB	RES	-	TK-208	BELA	-	-	-	1000?	-	(Kura)
1982-5219	2446315.50	1982 Dec 12	R-39	-	37L	LXI-IV-30	2 BB	RES	-	TK-208	BELA	-	-	-	1000?	-	(Kura)
1982-5219	2446315.50	1982 Dec 12	R-39	-	37L	LXI-IV-31	2 BB	RES	-	TK-208	BELA	-	-	-	1000?	-	(Kura)
1982-5219	2446315.50	1982 Dec 12	R-39	-	37L	LXI-IV-32	2 BB	RES	-	TK-208	BELA	-	-	-	1000?	-	(Kura)
1982-5219	2446315.50	1982 Dec 12	R-39	-	37L	LXI-IV-33	2 BB	RES	-	TK-208	BELA	-	-	-	1000?	-	(Kura)
1982-5219	2446315.50	1982 Dec 12	R-39	-	37L	LXI-IV-34	2 BB	RES	-	TK-208	BELA	-	-	-	1000?	-	(Kura)
1982-5219	2446315.50	1982 Dec 12	R-39	-	37L	LXI-IV-35	2 BB	RES	-	TK-208	BELA	-	-	-	1000?	-	(Kura)
1982-5219	2446315.50	1982 Dec 12	R-39	-	37L	LXI-IV-36	2 BB	RES	-	TK-208	BELA	-	-	-	1000?	-	(Kura)
1982-5219	2446315.50	1982 Dec 12	R-39	-	37L	LXI-IV-37	2 BB	RES	-	TK-208	BELA	-	-	-	1000?	-	(Kura)
1982-5219	2446315.50	1982 Dec 12	R-39	-	37L	LXI-IV-38	2 BB	RES	-	TK-208	BELA	-	-	-			





Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Mission	Launch_Site	Platform	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee_Km	Range_Km	Dest
1997-A19	2450535.50	1997 Mar 28?	R-39	-	-	Arms control	-	BLA	TK-13	-	-	-	37	-	-
1997-A20	2450535.50	1997 Mar 28?	R-39	-	-	Arms control	-	BLA	TK-13	-	-	-	37	-	-
1997-A21	2450535.50	1997 Mar 28?	R-39	-	-	Arms control	-	BLA	TK-13	-	-	-	37	-	-
1997-A22	2450535.50	1997 Mar 28?	R-39	-	-	Arms control	-	BLA	TK-13	-	-	-	37	-	-
1997-A23	2450535.50	1997 Mar 28	R-39	-	-	Arms control	-	BLA	TK-13	-	-	-	37	-	-
1997-A24	2450535.50	1997 Mar 28	R-39	-	-	Arms control	-	BLA	TK-13	-	-	-	37	-	-
1997-A25	2450535.50	1997 Mar 28	R-39	-	-	Arms control	-	BLA	TK-13	-	-	-	37	-	-
1997-A26	2450535.50	1997 Mar 28	R-39	-	-	Arms control	-	BLA	TK-13	-	-	-	37	-	-
1997-A27	2450535.50	1997 Mar 28	R-39	-	-	Arms control	-	BLA	TK-13	-	-	-	37	-	-
1997-A34	2450771.50	1997 Nov 19	Orion	-	3L	3M91 LKI-111-3	8 BB	REN	-	-	-	0	-	(Kura)	
1997-A36	2450785.50	1997 Dec 3	R-39	-	-	Arms control	-	BLA	TK-20	-	-	-	10?	-	-
1997-A37	2450785.50	1997 Dec 3	R-39	-	-	Arms control	-	BLA	TK-20	-	-	-	10?	-	-
1997-A38	2450785.50	1997 Dec 3	R-39	-	-	Arms control	-	BLA	TK-20	-	-	-	10?	-	-
1997-A39	2450785.50	1997 Dec 3	R-39	-	-	Arms control	-	BLA	TK-20	-	-	-	10?	-	-
1997-A40	2450785.50	1997 Dec 3	R-39	-	-	Arms control	-	BLA	TK-20	-	-	-	10?	-	-
1997-A41	2450785.50	1997 Dec 3	R-39	-	-	Arms control	-	BLA	TK-20	-	-	-	10?	-	-
1997-A42	2450785.50	1997 Dec 3	R-39	-	-	Arms control	-	BLA	TK-20	-	-	-	10?	-	-
1997-A43	2450785.50	1997 Dec 3	R-39	-	-	Arms control	-	BLA	TK-20	-	-	-	10?	-	-
1997-A44	2450785.50	1997 Dec 3	R-39	-	-	Arms control	-	BLA	TK-20	-	-	-	10?	-	-
1997-A45	2450785.50	1997 Dec 3	R-39	-	-	Arms control	-	BLA	TK-20	-	-	-	10?	-	-
1997-A46	2450785.50	1997 Dec 3	R-39	-	-	Arms control	-	BLA	TK-20	-	-	-	10?	-	-
1997-A47	2450785.50	1997 Dec 3	R-39	-	-	Arms control	-	BLA	TK-20	-	-	-	10?	-	-
1997-A48	2450786.50	1997 Dec 4	R-39	-	-	Arms control	-	BLA	TK-20	-	-	-	10?	-	-
1997-A49	2450786.50	1997 Dec 4	R-39	-	-	Arms control	-	BLA	TK-20	-	-	-	10?	-	-
1997-A50	2450786.50	1997 Dec 4	R-39	-	-	Arms control	-	BLA	TK-20	-	-	-	10?	-	-
1997-A51	2450786.50	1997 Dec 4	R-39	-	-	Arms control	-	BLA	TK-20	-	-	-	10?	-	-
1997-A52	2450786.50	1997 Dec 4	R-39	-	-	Arms control	-	BLA	TK-20	-	-	-	10?	-	-
1997-A53	2450786.50	1997 Dec 4	R-39	-	-	Arms control	-	BLA	TK-20	-	-	-	10?	-	-
1997-A54	2450786.50	1997 Dec 4	R-39	-	-	Arms control	-	BLA	TK-20	-	-	-	10?	-	-
1997-A55	2450786.50	1997 Dec 4	R-39	-	-	Arms control	-	BLA	TK-20	-	-	-	10?	-	-
1997-A56	2450786.50	1997 Dec 4	R-39	-	-	Arms control	-	BLA	TK-20	-	-	-	10?	-	-
1998-568	2481156.53	1998 Dec 5 1020	RT-23U 152A61	-	487-9221-306	Arms control	10 BB 15F444/MA90	BLA	TK-20	LC163/4	-	-	1000?	-	Kura
1999-375	2481499.50	1999 Nov 17	R-390	-	-	52A61 UBP-2	-	BLA	TK-20	-	-	-	1000?	-	Kura
1999-376	2481499.50	1999 Nov 17	R-390	-	-	3H65U UBP	-	BLA	TK-20	-	-	-	1000?	-	Kura
1999-387	2481512.50	1999 Dec?	R-39	?	-	3H65U UBP	-	BLA	TK-20	-	-	-	1000?	-	Kura
2001-546	2482200.63	2001 Oct 18 0800	R-390	-	-	3H65U UBP	10 BB	BLA	TK-20	-	-	-	1000?	-	Kura
2001-571	2482200.52	2001 Oct 18 1000	R-390	-	-	3H65U UBP	10 BB	BLA	TK-20	-	-	-	1000?	-	Kura
2002-588	2482668.50	2002 Dec	R-390	-	-	3H65U UBP	10 BB	BLA	TK-17	-	-	-	1000?	-	Kura
2003-598	2482927.52	2003 Dec 15 1003	R-390	-	-	3H65U UBP	10 BB	BLA	TK-17	-	-	-	1000?	-	Kura





Launch_Thg	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	OrbPay	Agency	Launch_Code	Group	Category	LTCite	Cite	Notes
1985-S300	2446385.50	1985 Nov 16	R-39	-	-	0.000	VHF	MS	-	Test	tehnovar.ru	-	-
1985-S301	2446386.50	1985 Nov 16	R-39	-	-	0.000	VHF	MS	-	Test	tehnovar.ru	-	-
1985-S302	2446398.34	1985 Nov 28 2004	RT-230 152a61	-	48751-205-6L	0.000	RWSN	MS	-	Test	tehnovar.ru	-	-
1985-S268	2446419.45	1985 Dec 19 2250	RT-230 152a61	-	48751-206-7L	0.000	RWSN	MS	-	Test	RML	-	-
1986-S172	2446503.35	1986 Mar 13 2030	RT-230 152a61	-	48751-207-9L	0.000	RWSN	MS	-	Test	RPCA	-	-
1986-S173	2446620.19	1986 Jul 8 1630	RT-230 152a61	-	48751-208-10L	0.000	RWSN	MS	-	Test	RML	-	-
1986-S174	2446642.96	1986 Jul 31 0126	RT-230 152a60	-	48788-302-1L	0.000	RWSN	MS	-	Test	Pervov	-	-
1986-S174	2446654.62	1986 Aug 12 0300	RT-230 152a61	-	48788-302-1L	0.000	RWSN	MS	-	Test	RML	-	-
1986-S201	2446656.50	1986 Aug 14	R-39	-	48788-213-02	0.000	VHF	MS	-	Test	tehnovar.ru	-	-
1986-S199	2446656.50	1986 Aug 14	R-39	-	-	0.000	VHF	MS	-	Test	tehnovar.ru	-	-
1986-S200	2446658.50	1986 Aug 26?	R-39	-	-	0.000	VHF	MS	-	Test	RML	-	-
1986-S202	2446675.50	1986 Sep 2?	R-39	-	-	0.000	VHF	MS	-	Test	RML	-	-
1986-S175	2446675.54	1986 Sep 2 0100	RT-230 152a61	-	48788-213-01	0.000	RWSN	MS	-	Test	RML	-	-
1986-S176	2446677.40	1986 Sep 3 2143	RT-230 152a60	-	48788-303-2L	0.000	RWSN	MS	-	Test	RML	-	-
1986-S197	2446690.50	1986 Sep 17	R-39	-	-	0.000	VHF	MS	-	Test	RML	-	-
1986-S196	2446691.50	1986 Sep 18?	R-39	-	-	0.000	VHF	MS	-	Test	tehnovar.ru	-	tehnovar.ru
1986-S198	2446698.50	1986 Sep 25	R-39	-	-	0.000	VHF	MS	-	Test	tehnovar.ru	-	-
1986-S176	2446747.26	1986 Nov 12 1815	RT-230 152a61	-	48788-213-03	0.000	RWSN	MS	-	Test	RML	-	-
1986-S177	2446747.08	1986 Nov 11 1400	RT-230 152a61	-	48788-213-07	0.000	RWSN	MS	-	Test	RML	-	-
1986-S179	2446789.15	1986 Dec 24 1540	RT-230 152a60	-	48798-304-3L	0.000	RWSN	MS	-	Test	RML	-	-
1987-S33	2446795.50	1987	R-39	-	-	0.000	VHF	MS	-	Test	tehnovar.ru	-	-
1987-S39	2446795.50	1987	R-39	-	-	0.000	VHF	MS	-	Test	tehnovar.ru	-	88N
1987-S215	2447046.08	1987 Sep 6 1401	RT-230 152a61	-	48798-213-09	0.000	RWSN	MS	-	Test	RPCA	-	-
1987-S216	2447046.08	1987 Sep 9 1401	RT-230 152a60	-	48798-305-4L	0.000	RWSN	MS	-	Test	RML	-	-
1987-S219	2447056.59	1987 Sep 18 0915	RT-230 152a60	-	48798-403-7L	0.000	RWSN	MS	-	Test	RML	-	-
1987-S214	2447069.24	1987 Jun 17 1740	RT-230 152a61	-	48798-213-08	0.000	RWSN	MS	-	Test	RML	-	-
1987-S217	2446993.38	1987 Jul 16 2105	RT-230 152a60	-	48798-401-5L	0.000	RWSN	MS	-	Test	RML	-	-
1987-S216	2447035.29	1987 Aug 27 1900	RT-230 152a60	-	48798-402-6L	0.000	RWSN	MS	-	Test	RML	-	-
1987-S434	2447046.50	1987 Sep 6	R-39	-	-	0.000	VHF	MS	-	Test	RML	-	-
1987-S222	2447123.53	1987 Dec 4 0050	RT-230 152a60	-	48798-406-13L	0.000	RWSN	MS	-	Test	RML	-	-
1987-S182	2447151.94	1987 Dec 22 1030	RT-230 152a61	-	48798-209-8L	0.000	RWSN	MS	-	Test	RML	-	-
1986-S176	2447195.15	1986 Feb 3 1630	RT-230 152a60	-	48798-409-9L	0.000	RWSN	MS	-	Test	RML	-	-
1986-S177	2447209.23	1986 Feb 17 1729	RT-230 152a60	-	48798-411-15L	0.000	RWSN	MS	-	Test	RML	-	-
1986-S178	2447279.17	1986 Apr 27 1559	RT-230 152a60	-	48798-410-10L	0.000	RWSN	MS	-	Test	RML	-	-
1986-S179	2447357.58	1986 Jun 25 0200	RT-230 152a60	-	48798-314-96	0.000	RWSN	MS	-	Test	RPCA	-	-
1986-S180	2447358.03	1986 Jul 25 1250	RT-230 152a60	-	48798-602-10L	0.000	RWSN	MS	-	Test	RPCA	-	-
1986-S119	2447427.31	1986 Sep 22 1930	RT-230 152a60	-	48798-412-14L	0.000	RWSN	MS	-	Test	RPCA	-	-
1989-S139	2447478.50	1989 Aug 10?	R-39?	-	-	0.000	VHF	MS	-	Test	tehnovar.ru	-	-
1988-S190	2447478.50	1989 Aug 10?	R-39?	-	-	0.000	VHF	MS	-	Test	tehnovar.ru	-	-
1988-S191	2447478.50	1989 Aug 10?	R-39?	-	-	0.000	VHF	MS	-	Test	tehnovar.ru	-	-
1989-S151	2447790.06	1989 Sep 20 1400	RT-230 152a61	-	48797-415-03	0.000	RWSN	MS	-	Test	RML	-	-
1989-S150	2447799.30	1989 Oct 1 1930	RT-230 152a60	-	48797-601-8L	0.000	RWSN	MS	-	Test	tehnovar.ru	-	-
1989-S156	2447832.31	1990 Feb 28 1430	RT-230 152a60	-	48797-415-03	0.000	RWSN	MS	-	Test	RPCA	-	-
1990-S52	2448051.10	1990 Jul 15 1215	RT-230 152a60	-	48797-415-13	0.000	RWSN	MS	-	Test	RPCA	-	-
1990-S97	2448097.01	1990 Jul 24 1155	RT-230 152a60	-	48793-711-43	0.000	RWSN	MS	-	Test	RML	-	-
1990-S107	2447891.00	1990	R-39?	-	-	0.000	VHF	MS	-	Test	tehnovar.ru	-	-
1990-S198	2448072.50	1990 Q3?	R-39?	-	-	0.000	VHF	MS	-	Test	tehnovar.ru	-	-
1991-S298	2448468.50	1991 Aug	R-39?	-	-	0.000	VHF	MS	-	Test	tehnovar.ru	-	-
1991-S299	2448468.50	1991 Aug	R-39?	-	-	0.000	VHF	MS	-	Test	tehnovar.ru	-	-
1991-S290	2448468.50	1991 Aug	R-39?	-	-	0.000	VHF	MS	-	Test	tehnovar.ru	-	-
1991-S143	2448527.18	1991 Sep 27 1613	R-39	-	-	0.000	VHF	MS	-	Test	PravdaServer41029	-	-
1992-S108	2448907.50	1992 Oct 12	R-39	-	-	0.000	VHF	MS	-	Test	tehnovar.ru	-	-
1992-S109	2448907.50	1992 Oct 12	R-39	-	-	0.000	VHF	MS	-	Test	tehnovar.ru	-	-
1992-S110	2448907.50	1992 Oct 12	R-39	-	-	0.000	VHF	MS	-	Test	tehnovar.ru	-	-
1993-S84	2449260.50	1993 Oct?	R-39	-	-	0.000	VHF	MS	-	Test	RML	-	-
1993-S84	2449291.50	1993 Oct?	R-39TTTh	-	1L	0.000	VHF	MS	-	Test	RML	-	-
1993-S80	2449318.50	1993 Nov 27	R-39	-	-	0.000	VHF	MS	-	Test	tehnovar.ru	-	-
1994-S103	2449386.50	1994 Dec	R-39TTTh	-	2L	0.000	VHF	MS	-	Test	RML	-	-
1995-S93	2449717.50	1995	R-39?	-	-	0.000	VHF	MS	-	Test	rusestog	-	-
1995-S94	2449717.50	1995	R-39?	-	-	0.000	VHF	MS	-	Test	rusestog	-	-
1995-S95	2449717.50	1995	R-39?	-	-	0.000	VHF	MS	-	Test	rusestog	-	-
1995-S96	2449717.50	1995	R-39?	-	-	0.000	VHF	MS	-	Test	rusestog	-	-
1995-S97	2449717.50	1995	R-39?	-	-	0.000	VHF	MS	-	Test	rusestog	-	-
1995-S98	2449964.50	1995 Aug 25	R-39?	-	-	0.000	VHF	MS	-	Test	rusestog	-	-
1996-S101	2450082.50	1996	Orbit	-	RSN-52V	0.000	RWSN/VHF	MS	-	Test	rusestog	-	-
1996-S102	2450379.50	1996 Oct 23	R-39?	-	-	0.000	VHF	MS	-	Test	rusestog	-	-
1996-S103	2450379.50	1996 Oct 23	R-39?	-	-	0.000	VHF	MS	-	Test	rusestog	-	-
1996-S104	2450387.50	1996 Nov	R-39?	-	-	0.000	VHF	MS	-	Test	rusestog	-	-
1996-S83	2450387.50	1996 Nov	R-39?	-	-	0.000	VHF	MS	-	Test	rusestog	-	-
1996-S84	2450387.50	1996 Nov	R-39?	-	-	0.000	VHF	MS	-	Test	rusestog	-	-
1996-S81	2450391.50	1996 Nov 4?	R-39?	-	-	0.000	VHF	MS	-	Test	rusestog	-	-
1996-S73	2450415.97	1996 Nov 28 1110	RT-230 152a61	-	152a61	0.000	RWSN/VHF	MS	-	Test	rusestog	-	-
1997-S401	2450448.50	1997	Orbit	-	-	0.000	RWSN/VHF	MS	-	Test	rusestog	-	-
1997-S402	2450534.50	1997 Mar 27	R-39	-	-	0.000	VHF	MS	-	Test	rusestog	-	-
1997-S403	2450534.50	1997 Mar 27	R-39	-	-	0.000	VHF	MS	-	Test	rusestog	-	-
1997-S404	2450534.50	1997 Mar 27	R-39	-	-	0.000	VHF	MS	-	Test	rusestog	-	-
1997-S405	2450534.50	1997 Mar 27	R-39	-	-	0.000	VHF	MS	-	Test	rusestog	-	-
1997-S406	2450534.50	1997 Mar 27	R-39	-	-	0.000	VHF	MS	-	Test	rusestog	-	-
1997-S407	2450534.50	1997 Mar 27	R-39	-	-	0.000	VHF	MS	-	Test	rusestog	-	-
1997-S408	2450534.50	1997 Mar 27	R-39	-	-	0.000	VHF	MS	-	Test	rusestog	-	-
1997-S409	2450534.50	1997 Mar 27	R-39	-	-	0.000	VHF	MS	-	Test	rusestog	-	-
1997-S410	2450534.50	1997 Mar 27	R-39	-	-	0.000	VHF	MS	-	Test	rusestog	-	-
1997-S411	2450534.50	1997 Mar 27	R-39	-	-	0.000	VHF	MS	-	Test	rusestog	-	-
1997-S412	2450534.50	1997 Mar 27	R-39	-	-	0.000	VHF	MS	-	Test	rusestog	-	-
1997-S413	2450534.50	1997 Mar 27	R-39	-	-	0.000	VHF	MS	-	Test	rusestog	-	-
1997-S414	2450534.50	1997 Mar 27	R-39	-	-	0.000	VHF	MS	-	Test	rusestog	-	-
1997-S415	2450534.50	1997 Mar 27	R-39	-	-	0.000	VHF	MS	-	Test	rusestog	-	-
1997-S416	2450534.50	1997 Mar 27	R-39	-	-	0.000	VHF	MS	-	Test	rusestog	-	-
1997-S417	2450534.50	1997 Mar 28?	R-39	-	-	0.000	VHF	MS	-	Test	rusestog	-	-
1997-S418	2450534.50	1997 Mar 28?	R-39	-	-	0.000	VHF	MS	-	Test	rusestog	-	-
1997-S419	2450534.50	1997 Mar 28?	R-39	-	-	0.000	VHF	MS	-	Test	rusestog	-	-
1997-S420	2450534.50	1997 Mar 28?	R-39	-	-	0.000	VHF	MS	-	Test	rusestog	-	-
1997-S421	2450534.50	1997 Mar 28?	R-39	-	-	0.000	VHF	MS	-	Test	rusestog	-	-
1997-S422	2450534.50	1997 Mar 28?	R-39	-	-	0.000	VHF	MS	-	Test	rusestog	-	-
1997-S423	2450534.50	1997 Mar 28?	R-39	-	-	0.000	VHF	MS	-	Test	rusestog	-	-
1997-S424	2450534.50	1997 Mar 28?	R-39	-	-	0.000	VHF	MS	-	Test	rusestog	-	-
1997-S425	2450534.50	1997 Mar 28?	R-39	-	-	0.000	VHF	MS	-	Test	rusestog	-	-
1997-S426	2450534.50	1997 Mar 28?	R-39	-	-	0.000	VHF	MS	-	Test	rusestog	-	-
1997-S427	2450534.50	1997 Mar 28?	R-39	-	-	0.000	VHF	MS	-	Test	rusestog	-	-
1997-S428	2450534.50	1997 Mar 28?	R-39	-	-	0.000	VHF	MS	-	Test			

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	OrbPay	Agency	Launch_Code	Group	Category	LICite	Cite	Notes
1997-419	2450535.50	1997 Mar 287	R-39	-	-	0.000	VHF	MS	-	Destruct	ww.bellona.no	-	-
1997-420	2450535.50	1997 Mar 287	R-39	-	-	0.000	VHF	MS	-	Destruct	ww.bellona.no	-	-
1997-421	2450535.50	1997 Mar 287	R-39	-	-	0.000	VHF	MS	-	Destruct	ww.bellona.no	-	-
1997-422	2450535.50	1997 Mar 287	R-39	-	-	0.000	VHF	MS	-	Destruct	ww.bellona.no	-	-
1997-423	2450535.50	1997 Mar 28	R-39	-	-	0.000	VHF	MS	-	Destruct	ww.bellona.no	-	-
1997-424	2450535.50	1997 Mar 28	R-39	-	-	0.000	VHF	MS	-	Destruct	ww.bellona.no	-	-
1997-425	2450535.50	1997 Mar 28	R-39	-	-	0.000	VHF	MS	-	Destruct	ww.bellona.no	-	-
1997-426	2450535.50	1997 Mar 28	R-39	-	-	0.000	VHF	MS	-	Destruct	ww.bellona.no	-	-
1997-427	2450535.50	1997 Mar 28	R-39	-	-	0.000	VHF	MS	-	Destruct	ww.bellona.no	-	-
1997-434	2450771.50	1997 Nov 19	Grom	-	3L	0.000	RWSN/VHF	MF	-	Test	ww.cdiss.org	-	-
1997-436	2450785.50	1997 Dec 3	R-39	-	-	0.000	VHF	MS	-	Destruct	ww.nti.org	-	-
1997-437	2450785.50	1997 Dec 3	R-39	-	-	0.000	VHF	MS	-	Destruct	news.bbc.co.uk	-	-
1997-438	2450785.50	1997 Dec 3	R-39	-	-	0.000	VHF	MS	-	Destruct	news.bbc.co.uk	-	-
1997-439	2450785.50	1997 Dec 3	R-39	-	-	0.000	VHF	MS	-	Destruct	news.bbc.co.uk	-	-
1997-440	2450785.50	1997 Dec 3	R-39	-	-	0.000	VHF	MS	-	Destruct	news.bbc.co.uk	-	-
1997-441	2450785.50	1997 Dec 3	R-39	-	-	0.000	VHF	MS	-	Destruct	news.bbc.co.uk	-	-
1997-442	2450785.50	1997 Dec 3	R-39	-	-	0.000	VHF	MS	-	Destruct	news.bbc.co.uk	-	-
1997-443	2450785.50	1997 Dec 3	R-39	-	-	0.000	VHF	MS	-	Destruct	news.bbc.co.uk	-	-
1997-444	2450785.50	1997 Dec 3	R-39	-	-	0.000	VHF	MS	-	Destruct	news.bbc.co.uk	-	-
1997-445	2450785.50	1997 Dec 3	R-39	-	-	0.000	VHF	MS	-	Destruct	news.bbc.co.uk	-	-
1997-446	2450785.50	1997 Dec 3	R-39	-	-	0.000	VHF	MS	-	Destruct	news.bbc.co.uk	-	-
1997-447	2450785.50	1997 Dec 3	R-39	-	-	0.000	VHF	MS	-	Destruct	news.bbc.co.uk	-	-
1997-448	2450786.50	1997 Dec 4	R-39	-	-	0.000	VHF	MS	-	Destruct	news.bbc.co.uk	-	-
1997-449	2450786.50	1997 Dec 4	R-39	-	-	0.000	VHF	MS	-	Destruct	news.bbc.co.uk	-	-
1997-450	2450786.50	1997 Dec 4	R-39	-	-	0.000	VHF	MS	-	Destruct	news.bbc.co.uk	-	-
1997-451	2450786.50	1997 Dec 4	R-39	-	-	0.000	VHF	MS	-	Destruct	news.bbc.co.uk	-	-
1997-452	2450786.50	1997 Dec 4	R-39	-	-	0.000	VHF	MS	-	Destruct	news.bbc.co.uk	-	-
1997-453	2450786.50	1997 Dec 4	R-39	-	-	0.000	VHF	MS	-	Destruct	news.bbc.co.uk	-	-
1997-454	2450786.50	1997 Dec 4	R-39	-	-	0.000	VHF	MS	-	Destruct	news.bbc.co.uk	-	-
1997-455	2450786.50	1997 Dec 4	R-39	-	-	0.000	VHF	MS	-	Destruct	news.bbc.co.uk	-	-
1998-568	2481156.53	1998 Dec 9 1020	R1-230	152461	487-9221-306	0.000	RWSN	MS	-	Test	PL55	RPCA	RML
1999-575	2481499.50	1999 Nov 17	R-390	-	-	0.000	RWSN	MS	-	Test	Wire	-	Dr TK-12?
1999-576	2481499.50	1999 Nov 17	R-390	-	-	0.000	RWSN	MS	-	Test	Wire	-	Dr TK-12?
1999-587	2481512.50	1999 Dec?	R-39	?	-	0.000	RWSN	MS	-	Test	tbowar.ru	-	-
2001-546	2482200.53	2001 Oct 18 0800	R-390	-	-	0.000	RWSN	MS	-	Test	RML	tbowar.ru	-
2001-571	2482200.52	2001 Oct 18 1000	R-390	-	-	0.000	RWSN	MS	-	Test	RML	tbowar.ru	-
2002-588	2482698.50	2002 Dec	R-390	-	-	0.000	RWSN	MS	-	Test	RML	tbowar.ru	-
2003-588	2482927.52	2003 Oct 15 1003	R-390	-	-	0.000	RWSN	MS	-	Test	RML	tbowar.ru	-



Launch

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Mission	FlightCode	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee_Km	Range_Km	Dest
1953-A118	2434451.50	1953 Mar 15	R-5	-	-	8462 LKI I-1	MCh	-	-	GTSP-4	LC21	-	-	07	-	-
1953-A125	2434454.50	1953 Mar 18	R-5	-	-	8462 LKI I-2	MCh	-	-	GTSP-4	LC21	-	-	07	-	-
1953-S09	2434469.50	1953 Apr 2	R-5	-	-	8462 LKI I-3	MCh	-	-	GTSP-4	LC21	-	-	3007	1200	-
1953-A162	2434475.50	1953 Apr 8	R-5	-	-	8462 LKI I-4	MCh	-	-	GTSP-4	LC21	-	-	07	-	-
1953-S08	2434486.50	1953 Apr 19	R-5	-	-	8462 LKI I-5	MCh	-	-	GTSP-4	LC21	-	-	3007	1206	-
1953-S15	2434491.50	1953 Apr 24	R-5	-	-	8462 LKI I-6	MCh	-	-	GTSP-4	LC21	-	-	3007	-	-
1953-S16	2434510.50	1953 May 13	R-5	-	-	8462 LKI I-7	MCh	-	-	GTSP-4	LC21	-	-	3007	1206	-
1953-S20	2434520.50	1953 May 23	R-5	-	-	8462 LKI I-8	MCh	-	-	GTSP-4	LC21	-	-	3007	950	-
1953-S50	2434600.50	1953 Oct 30	R-5	-	-	8462 LKI II-1	MCh	-	-	GTSP-4	LC21	-	-	3007	1185	-
1953-S52	2434684.50	1953 Nov 3	R-5	-	-	8462 LKI II-2	MCh	-	-	GTSP-4	LC21	-	-	3007	1185	-
1953-S53	2434702.50	1953 Nov 21	R-5	-	-	8462 LKI II-3	MCh	-	-	GTSP-4	LC21	-	-	3007	1185	-
1953-S54	2434707.50	1953 Nov 26	R-5	-	-	8462 LKI II-4	MCh	-	-	GTSP-4	LC21	-	-	3007	1185	-
1953-S57	2434716.50	1953 Dec 5	R-5	-	-	8462 LKI II-5	MCh	-	-	GTSP-4	LC21	-	-	3007	1185	-
1953-S59	2434720.50	1953 Dec 9	R-5	-	-	8462 LKI II-6	MCh	-	-	GTSP-4	LC21	-	-	3007	1185	-
1954-S53	2434965.50	1954 Aug 12	R-5	-	K3-1	8462 LKI III-1	MCh	-	-	GTSP-4	LC21	-	-	3007	-	1200?
1954-S59	2434971.50	1954 Aug 17	R-5	-	K3-2	8462 LKI III-2	MCh	-	-	GTSP-4	LC21	-	-	3007	-	-
1954-S60	2434973.50	1954 Aug 19	R-5	-	K3-3	8462 LKI III-3	MCh	-	-	GTSP-4	LC21	-	-	3007	1191	-
1954-S67	2434975.50	1954 Aug 24	R-5	-	K3-4	8462 LKI III-4	MCh	-	-	GTSP-4	LC21	-	-	3007	1191	-
1954-S68	2434979.50	1954 Aug 25	R-5	-	K3-5	8462 LKI III-5	MCh	-	-	GTSP-4	LC21	-	-	3007	1191	-
1954-S69	2434990.50	1954 Sep 5	R-5	-	K3-11	8462 LKI III-6	MCh	-	-	GTSP-4	LC21	-	-	3007	1191	-
1954-S73	2434993.50	1954 Sep 8	R-5	-	K3-7	8462 LKI III-7	MCh	-	-	GTSP-4	LC21	-	-	3007	1191	-
1954-S74	2435024.90	1954 Oct 9	R-5	-	K3-9	8462 LKI III-8	MCh	-	-	GTSP-4	LC21	-	-	3007	1191	-
1954-S75	2435034.50	1954 Oct 19	R-5	-	K3-6	8462 LKI III-9	MCh	-	-	GTSP-4	LC21	-	-	3007	1191	-
1954-S80	2435106.50	1954 Dec 30	R-5	-	K3-10	8462 ZI-1	MCh	-	-	GTSP-4	LC21	-	-	3007	1191	-
1955-S02	2435113.50	1955 Jan 6	R-5	-	K3-13	8462 ZI	MCh	-	-	GTSP-4	LC21	-	-	3007	1191	-
1955-S04	2435115.50	1955 Jan 6	R-5	-	K3-14	8462 ZI	MCh	-	-	GTSP-4	LC21	-	-	3007	1191	-
1955-S04	2435124.50	1955 Jan 17	R-5M	-	S1-2	8462 ZI	MCh	-	-	GTSP-4	LC21	-	-	3007	1191	-
1955-S05	2435127.50	1955 Jan 20	R-5M	-	S1-2	8462 ZI	MCh	-	-	GTSP-4	LC21	-	-	3007	1191	-
1955-S116	2435128.50	1955 Jan 21	R-5	-	K3-17	8462 ZI	MCh	-	-	GTSP-4	LC21	-	-	3007	1191	-
1955-S117	2435129.50	1955 Jan 22	R-5	-	K3-16	8462 ZI	MCh	-	-	GTSP-4	LC21	-	-	3007	1163	-
1955-S118	2435132.50	1955 Jan 25	R-5	-	K3-19	8462 ZI	MCh	-	-	GTSP-4	LC21	-	-	3007	1191	-
1955-S119	2435136.50	1955 Jan 29	R-5	-	K3-20	8462 ZI	MCh	-	-	GTSP-4	LC21	-	-	3007	1191	-
1955-S21	2435139.50	1955 Feb 1	R-5	-	K3-15	8462 ZI	MCh	-	-	GTSP-4	LC21	-	-	3007	-	-
1955-S16	2435145.50	1955 Feb 7	R-5	-	K3-6	8462 ZI	MCh	-	-	GTSP-4	LC21	-	-	3007	1191	-
1955-S11	2435147.50	1955 Feb 9	R-5M	-	S1-3	8462 ZI	MCh	-	-	GTSP-4	LC21	-	-	3007	1191	-
1955-S12	2435152.50	1955 Feb 14	R-5M	-	S1-4	8462 LKI-2	MCh	-	-	GTSP-4	LC21	-	-	3007	1191	-
1955-S20	2435226.50	1955 Mar 29	R-5M	-	S1-5	8462 LKI-3	MCh	-	-	GTSP-4	LC21	-	-	3007	1163	-
1955-S36	2435241.50	1955 May 20	R-5M	-	S1-6	8462 LKI-4	MCh	-	-	GTSP-4	LC21	-	-	3007	1163	-
1955-S37	2435249.50	1955 May 26	R-5M	-	S1-7	8462 LKI-5	MCh	-	-	GTSP-4	LC21	-	-	3007	1163	-
1955-S45	2435253.50	1955 May 26	R-5M	-	S1-1	8462 LKI-6	MCh	-	-	GTSP-4	LC21	-	-	3007	1163	-
1955-S46	2435254.50	1955 Jun 6	R-5M	-	S1-7	8462 LKI-7	MCh	-	-	GTSP-4	LC21	-	-	3007	1163	-
1955-S166	2435259.50	1955 Jun 6	R-5M	-	S1-10	8462 LKI-8	MCh	-	-	GTSP-4	LC21	-	-	3007	1163	-
1955-S46	2435260.50	1955 Jun 22	R-5M	-	S1-9	8462 LKI-9	MCh	-	-	GTSP-4	LC21	-	-	3007	1163	-
1955-S57	2435264.50	1955 Jun 23	R-5M	-	S1-12	8462 LKI-10	MCh	-	-	GTSP-4	LC21	-	-	3007	1163	-
1955-S54	2435268.50	1955 Jun 26	R-5M	-	S1-11	8462 LKI-11	MCh	-	-	GTSP-4	LC21	-	-	3007	1163	-
1955-S24	2435268.50	1955 Jun 30	R-5M	-	S1-8	8462 LKI-12	MCh	-	-	GTSP-4	LC21	-	-	3007	1163	-
1955-S55	2435270.50	1955 Jul 7	R-5M	-	S1-13	8462 LKI-13	MCh	-	-	GTSP-4	LC21	-	-	3007	1163	-
1955-S56	2435297.50	1955 Jul 9	R-5M	-	S1-14	8462 LKI-14	MCh	-	-	GTSP-4	LC21	-	-	3007	552	-
1955-S64	2435329.50	1955 Aug 9	R-5M	-	S1-17	8462 LKI-2-1	MCh	-	-	GTSP-4	LC21	-	-	3007	936	-
1955-S61	2435331.50	1955 Aug 12	R-5M	-	S1-18	8462 LKI-2-2	MCh	-	-	GTSP-4	LC21	-	-	3007	1165	-
1955-S61	2435335.50	1955 Aug 16	R-5M	-	S1-16	8462 LKI-2-3	MCh	-	-	GTSP-4	LC21	-	-	1007	1165	-
1955-S62	2435340.50	1955 Sep 15	R-5M	-	S1-20	8462 LKI-2-4	MCh	-	-	GTSP-4	LC21	-	-	3007	1165	-
1955-S65	2435371.50	1955 Sep 23	R-5M	-	S1-19	8462 LKI-2-5	MCh	-	-	GTSP-4	LC21	-	-	3007	1171	-
1955-S66	2435377.50	1955 Sep 27	R-5M	-	S1-24	8462 LKI-2-6	MCh	-	-	GTSP-4	LC21	-	-	3007	1190	-
1955-S96	2435381.50	1955 Oct 1	R-5M	-	S1-25	8462 LKI-2-7	MCh	-	-	GTSP-4	LC21	-	-	3007	1190	-
1955-S99	2435411.50	1955 Nov 4	R-5M	-	S1-23	8462 LKI-2-8	MCh	-	-	GTSP-4	LC21	-	-	3007	1093	-
1955-S99	2435430.50	1955 Nov 19	R-5M	-	S1-21	8462 LKI-2-9	MCh	-	-	GTSP-4	LC21	-	-	3007	1093	-
1955-S103	2435430.50	1955 Nov 19	R-5M	-	S1-22	8462 LKI-2-10	MCh	-	-	GTSP-4	LC21	-	-	3007	1093	-
1956-S03	2435489.50	1956 Jan 11	R-5M	-	S1-26	8462 ZI-1 Certification	MCh	-	-	GTSP-4	LC21	-	-	3007	1165	-
1956-S04	2435489.50	1956 Jan 17	R-5M	-	S1-27	8462 ZI-2 Certification	MCh	-	-	GTSP-4	LC21	-	-	3007	1165	-
1956-S10	2435493.50	1956 Jan 21	R-5M	-	S1-28	8462 ZI-3 Certification	MCh	-	-	GTSP-4	LC21	-	-	3007	1190	-
1956-S10	2435505.81	1956 Feb 2	R-5M	-	S1-30	8462 ZI-4 BAYKAL	MCh	-	-	GTSP-4	LC21	-	-	3007	1190	-
1956-S13	2435509.50	1956 Feb 6	R-5M	-	S1-29	8462 ZI-5 Certification	MCh	-	-	GTSP-4	LC21	-	-	3007	1190	-
1956-S13	2435519.50	1956 Feb 16	R-5M	-	M-5RD S1-3	M5-RD 1	MCh	-	-	GTSP-4	LC21	-	-	3007	1160	-
1956-S09	2435539.50	1956 Mar 15	R-5M	-	M-5RD A1-4	M5-RD 2	MCh	-	-	GTSP-4	LC21	-	-	3007	1160	-
1956-S14	2435547.50	1956 Mar 15	R-5M	-	M-5RD A1-5	M5-RD 3	MCh	-	-	GTSP-4	LC21	-	-	3007	1160	-
1956-S15	2435549.50	1956 Mar 17	R-5M	-	M-5RD A1-6	M5-RD 4	MCh	-	-	GTSP-4	LC21	-	-	3007	1160	-
1956-S20	2435555.50	1956 Mar 23	R-5M	-	M-5RD S1-2	M5-RD 5	MCh	-	-	GTSP-4	LC21	-	-	3007	1160	-
1956-S34	2435624.50	1956 May 31	R-5M	-	R-5R S1-1	R-5R 1	MCh	-	-	GTSP-4	LC21	-	-	3007	1160	-
1956-S30	2435631.50	1956 Jun 7	R-5M	-	R-5R A1-3	R-5R 2	MCh	-	-	GTSP-4	LC21	-	-	3007	1160	-
1956-S41	2435639.50	1956 Jun 15	R-5M	-	R-5R A1-4	R-5R 3	MCh	-	-	GTSP-4	LC21	-	-	3007	1160	-
1956-S57	2435674.50	1956 Jul 20	R-5M	-	M-5RD A1-7	M5-RD 6	MCh	-	-	GTSP-4	LC21	-	-	3007	1130	-
1956-S48	2435692.50	1956 Aug 7	R-5M	-	M-5RD A2-8	M5-RD 7	MCh	-	-	GTSP-4	LC21	-	-	3007	1130	-
1956-S68	2435695.50	1956 Aug 25	R-5M	-	M-5RD A2-6	M5-RD 8	MCh	-	-	GTSP-4	LC21	-	-	3007	1167	-
1956-S198	2435710.50	1956 Sep 16	R-5M	-	A1-10	8462 KS-1 (Kontrolny)	MCh	-	-	GTSP-4	LC21	-	-	3007	1167	-
1956-S199	2435732.50	1956 Sep 25	R-5M	-	A1-2TS	8462 KS-2	MCh	-	-	GTSP-4	LC21	-	-	3007	1167	-
1956-S140	2435735.50	1956 Sep 19	R-5M	-	A1-2TS	8462 KS-3	MCh	-	-	GTSP-4	LC21	-	-	3007	1167	-
1956-S69	2435741.50	1956 Sep 26	R-5M	-	M-5RD A2-9	M5-RD 9	MCh	-	-	GTSP-4	LC21	-	-	3007	1130	-
1956-S76	2435742.50	1956 Sep 26	R-5M	-	M-5RD A2-10	M5-RD 10	MCh	-	-	GTSP-4	LC21	-	-	3007	530	-
1956-S148	2435760.50	1956 Nov 3	R-5M	-	8462 KS-4	8462 KS-4	MCh	-	-	GTSP-4	LC21	-	-	3007	530	-
1956-S151	2435790.50	1956 Nov 13	R-5M	-	8462 KS-5	8462 KS-5	MCh	-	-	GTSP-4	LC21	-	-	3007	530	-
1956-S152	2435793.50	1956 Nov 16	R-5M	-	8462 KS-6	8462 KS-6	MCh	-	-	GTSP-4	LC21	-	-	3007	1167	-
1956-S153	2435801.50	1956 Nov 24	R-5M	-	A1-20	8462 KS-7	MCh	-	-	GTSP-4	LC21	-	-	3007	1167	-
1956-S154	2435813.50	1956 Dec 6	R-5M	-	A1-5TS	8462 KS-8	MCh	-	-	GTSP-4	LC21	-	-	3007	1167	-



Launch

Launch_Tag	Launch_JD	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Mission	FlightCode	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee_Km	Range_Km	Dest
1957-5157	2455915.50	1957 Mar 18	R-5M	-	M5-77K	8651 ST-2	VV GCh	-	-	GTSP-4	LC21	-	-	5007	1167	-
1957-5158	2455915.50	1957 Mar 18	R-5M	-	A2-13TS	8651 ST-3	THP-2 GCh	-	-	GTSP-4	LC21	-	-	5007	1167	-
1957-5159	2455915.50	1957 Mar 21	R-5M	-	A2-15TS	8651 ST-4	THP-2 GCh	-	-	GTSP-4	LC21	-	-	5007	1167	-
1957-5205	2456003.50	1957 Mar 28	R-5M	-	M1-20	8651 OT-1	MGCh	Series production	-	GTSP-4	LC21	-	-	5007	1167	-
1957-5207	2456017.50	1957 Jun 28	R-5M	-	A683-V	8651 ST-5	Vibrator	-	-	GTSP-4	LC21	-	-	5007	1167	-
1957-5208	2456017.50	1957 Jun 28	R-5M	-	M2-20T	8651 OT-2	MGCh	-	-	GTSP-4	LC21	-	-	5007	1167	-
1957-5212	2456025.50	1957 Jul 9	R-5M	-	A681-V	8651 ST-6	Vibrator	-	-	GTSP-4	LC21	-	-	5007	1167	-
1957-5216	2456037.50	1957 Jul 18	R-5M	-	A2-17TS	8651 OT-3	GCh/ROD	-	-	GTSP-4	LC21	-	-	5007	1167	-
1957-5217	2456043.50	1957 Jul 24	R-5M	-	A2-16TS	8651 OT-4	GCh/ROD	-	-	GTSP-4	LC21	-	-	5007	1167	-
1957-5241	2456086.50	1957 Sep 5	R-5M	?	M1-1	8651 OT-5	GCh/ROD	-	-	GTSP-4	LC21	-	-	5007	1167	-
1957-5242	2456093.50	1957 Sep 12	R-5M	-	A2-19TS	Generator-5 ho. M1-1	THP-2	-	-	GTSP-4	LC21	-	-	5007	1167	-
1957-5243	2456095.50	1957 Sep 14	R-5M	-	A2-14TS	8651 OT-7	THP-2	-	-	GTSP-4	LC21	-	-	5007	1167	-
1957-5267	2456107.50	1957 Sep 26	R-5M	-	M1-2	8651 OT-8	THP-2	-	-	GTSP-4	LC21	-	-	5007	1167	-
1957-5268	2456145.50	1957 Nov 3	R-5M	?	M4-20	Generator-5 ho. M1-2	THP-2	-	-	GTSP-4	LC21	-	-	5007	1167	-
1957-5284	2456172.50	1957 Nov 30	R-5M	?	M4-20	Generator-5 ho. M1-3	THP-2	-	-	GTSP-4	LC21	-	-	5007	1167	-
1958-5381	2456196.50	1957 Dec 26	R-5M	-	M1-3	Generator-5 ho. M1-3	THP-2	-	-	GTSP-4	LC21	-	-	5007	1167	-
1958-5386	2456246.50	1958 Feb 4	R-5M	-	M5-3TK	VV GCh	-	-	-	GTSP-4	LC21	-	-	5007	-	-
1958-5377	2456256.52	1958 Feb 12	R-5M	-	Al-7	R-5M Geophysical 1	-	-	-	GTSP-4	LC21	-	-	5007	-	-
1958-5382	2456269.50	1958 Mar 7	R-5M	-	M5-5TK	8651 OT-12	VV GCh	-	-	GTSP-4	LC21	-	-	5007	1167	-
1958-5383	2456290.50	1958 Mar 28	R-5M	-	A6-64V	8651 OT-13	Vibrator	-	-	GTSP-4	LC21	-	-	5007	1167	-
1958-5384	2456291.50	1958 Mar 29	R-5M	-	E2-20T	8651 OT-14	Series prod.	-	-	GTSP-4	LC21	-	-	5007	1171	-
1958-5319	2456292.50	1958 Mar 30	R-5M	-	E3-20T	8651 OT-15	Series prod.	-	-	GTSP-4	LC21	-	-	5007	1167	-
1958-5320	2456315.50	1958 Apr 22	R-5M	-	A6-65V	8651 OT-16	Vibrator	-	-	GTSP-4	LC21	-	-	5007	1167	-
1958-5321	2456323.50	1958 Apr 30	R-5M	-	B4-20TS	8651 OT-17	Mirareemash Flight	-	-	GTSP-4	LC21	-	-	5007	1171	-
1958-5322	2456332.50	1958 Apr 9	R-5M	-	M6-6TK	8651 OT-18	VV GCh	-	-	GTSP-4	LC21	-	-	5007	1167	-
1958-5323	2456339.50	1958 Apr 16	R-5M	-	A6-62V	8651 OT-19	Vibrator	-	-	GTSP-4	LC21	-	-	5007	1171	-
1958-5324	2456352.50	1958 May 29	R-5M	-	B5-20T	8651 UBP-1	THP-2	-	-	GTSP-4	LC21	-	-	5007	1167	-
1958-5325	2456353.50	1958 May 30	R-5M	-	M6-4TK	8651 UBP-2	VV GCh	-	-	GTSP-4	LC21	-	-	5007	1167	-
1958-5326	2456357.50	1958 Jun 3	R-5M	-	M6-10TK	8651 UBP-3	VV GCh	-	-	GTSP-4	LC21	-	-	5007	1167	-
1958-5327	2456377.50	1958 Jun 23	R-5M	-	M6-6TK	8651 UBP-4	VV GCh	-	-	GTSP-4	LC21	-	-	5007	1167	-
1958-5328	2456380.50	1958 Jun 26	R-5M	-	M6-20T	8651 UBP-5	VV GCh	-	-	GTSP-4	LC21	-	-	5007	1167	-
1958-5340	2456394.50	1958 Jul 10	R-5M	-	M6-11TK	8651 UBP-6	VV GCh	-	-	GTSP-4	LC21	-	-	5007	951	-
1958-5341	2456395.50	1958 Jul 11	R-5M	-	M6-11TK	8651 UBP-6	VV GCh	-	-	GTSP-4	LC21	-	-	5007	951	-
1958-5342	2456413.50	1958 Jul 29	R-5M	-	M6-11TK	8651 UBP-7	No BRK-2 guidance	-	-	GTSP-4	LC21	-	-	5007	1167	-
1958-5357	2456436.50	1958 Aug 21	R-5M	-	E7-20T	8651 UBP-8	MGCh	-	-	GTSP-4	LC21	-	-	450	1167	-
1958-5172	2456442.67	1958 Aug 27 0404	R-5M	-	Al-6	R-5M Geophysical 2	IR Atmos	-	-	GTSP-4	LC21	-	-	450	-	-
1958-5352	2456454.50	1958 Sep 6	R-5M	-	Al-16	R-5M Geophysical 3	IR Atmos	-	-	GTSP-4	LC21	-	-	5007	1167	-
1958-5263	2456466.53	1958 Sep 19 0048	R-5M	-	Al-10	R-5M Geophysical 3	E-1 Kometa (Na test)	-	-	GTSP-4	LC21	-	-	5007	430	-
1958-5361	2456469.50	1958 Sep 23	R-5M	-	M6-26	8651 UBP-10	THP-2	-	-	GTSP-4	LC21	-	-	5007	1167	-
1958-5362	2456469.50	1958 Sep 23	R-5M	-	M6-27TK	8651 UBP-11	THP-2	-	-	GTSP-4	LC21	-	-	5007	1167	-
1958-5363	2456476.50	1958 Sep 23	R-5M	-	M6-27TK	8651 UBP-11	THP-2	-	-	GTSP-4	LC21	-	-	5007	1167	-
1958-5364	2456476.50	1958 Sep 23	R-5M	-	M6-27TK	8651 UBP-12	THP-2	-	-	GTSP-4	LC21	-	-	5007	1167	-
1958-5365	2456476.50	1958 Sep 23	R-5M	-	M6-27TK	8651 UBP-13	THP-2	-	-	GTSP-4	LC21	-	-	5007	1167	-
1958-5366	2456476.50	1958 Sep 23	R-5M	-	M6-27TK	8651 UBP-14	THP-2	-	-	GTSP-4	LC21	-	-	5007	1167	-
1958-5367	2456476.50	1958 Sep 23	R-5M	-	M6-27TK	8651 UBP-15	THP-2	-	-	GTSP-4	LC21	-	-	5007	1167	-
1958-5368	2456476.50	1958 Sep 23	R-5M	-	M6-27TK	8651 UBP-16	THP-2	-	-	GTSP-4	LC21	-	-	5007	1167	-
1958-5369	2456476.50	1958 Sep 23	R-5M	-	M6-27TK	8651 UBP-17	THP-2	-	-	GTSP-4	LC21	-	-	5007	1167	-
1958-5370	2456476.50	1958 Sep 23	R-5M	-	M6-27TK	8651 UBP-18	THP-2	-	-	GTSP-4	LC21	-	-	5007	1167	-
1958-5371	2456476.50	1958 Sep 23	R-5M	-	M6-27TK	8651 UBP-19	THP-2	-	-	GTSP-4	LC21	-	-	5007	1167	-
1958-5372	2456476.50	1958 Sep 23	R-5M	-	M6-27TK	8651 UBP-20	THP-2	-	-	GTSP-4	LC21	-	-	5007	1167	-
1958-5373	2456476.50	1958 Sep 23	R-5M	-	M6-27TK	8651 UBP-21	THP-2	-	-	GTSP-4	LC21	-	-	5007	1167	-
1958-5374	2456476.50	1958 Sep 23	R-5M	-	M6-27TK	8651 UBP-22	THP-2	-	-	GTSP-4	LC21	-	-	5007	1167	-
1958-5375	2456476.50	1958 Sep 23	R-5M	-	M6-27TK	8651 UBP-23	THP-2	-	-	GTSP-4	LC21	-	-	5007	1167	-
1958-5376	2456476.50	1958 Sep 23	R-5M	-	M6-27TK	8651 UBP-24	THP-2	-	-	GTSP-4	LC21	-	-	5007	1167	-
1958-5377	2456476.50	1958 Sep 23	R-5M	-	M6-27TK	8651 UBP-25	THP-2	-	-	GTSP-4	LC21	-	-	5007	1167	-
1958-5378	2456476.50	1958 Sep 23	R-5M	-	M6-27TK	8651 UBP-26	THP-2	-	-	GTSP-4	LC21	-	-	5007	1167	-
1958-5379	2456476.50	1958 Sep 23	R-5M	-	M6-27TK	8651 UBP-27	THP-2	-	-	GTSP-4	LC21	-	-	5007	1167	-
1958-5380	2456476.50	1958 Sep 23	R-5M	-	M6-27TK	8651 UBP-28	THP-2	-	-	GTSP-4	LC21	-	-	5007	1167	-
1958-5381	2456476.50	1958 Sep 23	R-5M	-	M6-27TK	8651 UBP-29	THP-2	-	-	GTSP-4	LC21	-	-	5007	1167	-
1958-5382	2456476.50	1958 Sep 23	R-5M	-	M6-27TK	8651 UBP-30	THP-2	-	-	GTSP-4	LC21	-	-	5007	1167	-
1958-5383	2456476.50	1958 Sep 23	R-5M	-	M6-27TK	8651 UBP-31	THP-2	-	-	GTSP-4	LC21	-	-	5007	1167	-
1958-5384	2456476.50	1958 Sep 23	R-5M	-	M6-27TK	8651 UBP-32	THP-2	-	-	GTSP-4	LC21	-	-	5007	1167	-
1958-5385	2456476.50	1958 Sep 23	R-5M	-	M6-27TK	8651 UBP-33	THP-2	-	-	GTSP-4	LC21	-	-	5007	1167	-
1958-5386	2456476.50	1958 Sep 23	R-5M	-	M6-27TK	8651 UBP-34	THP-2	-	-	GTSP-4	LC21	-	-	5007	1167	-
1958-5387	2456476.50	1958 Sep 23	R-5M	-	M6-27TK	8651 UBP-35	THP-2	-	-	GTSP-4	LC21	-	-	5007	1167	-
1958-5388	2456476.50	1958 Sep 23	R-5M	-	M6-27TK	8651 UBP-36	THP-2	-	-	GTSP-4	LC21	-	-	5007	1167	-
1958-5389	2456476.50	1958 Sep 23	R-5M	-	M6-27TK	8651 UBP-37	THP-2	-	-	GTSP-4	LC21	-	-	5007	1167	-
1958-5390	2456476.50	1958 Sep 23	R-5M	-	M6-27TK	8651 UBP-38	THP-2	-	-	GTSP-4	LC21	-	-	5007	1167	-
1958-5391	2456476.50	1958 Sep 23	R-5M	-	M6-27TK	8651 UBP-39	THP-2	-	-	GTSP-4	LC21	-	-	5007	1167	-
1958-5392	2456476.50	1958 Sep 23	R-5M	-	M6-27TK	8651 UBP-40	THP-2	-	-	GTSP-4	LC21	-	-	5007	1167	-
1958-5393	2456476.50	1958 Sep 23	R-5M	-	M6-27TK	8651 UBP-41	THP-2	-	-	GTSP-4	LC21	-	-	5007	1167	-
1958-5394	2456476.50	1958 Sep 23	R-5M	-	M6-27TK	8651 UBP-42	THP-2	-	-	GTSP-4	LC21	-	-	5007	1167	-
1958-5395	2456476.50	1958 Sep 23	R-5M	-	M6-27TK	8651 UBP-43	THP-2	-	-	GTSP-4	LC21	-	-	5007	1167	-
1958-5396	2456476.50	1958 Sep 23	R-5M	-	M6-27TK	8651 UBP-44	THP-2	-	-	GTSP-4	LC21	-	-	5007	1167	-
1958-5397	2456476.50	1958 Sep 23	R-5M	-	M6-27TK	8651 UBP-45	THP-2	-	-	GTSP-4	LC21	-	-	5007	1167	-
1958-5398	2456476.50	1958 Sep 23	R-5M	-	M6-27TK	8651 UBP-46	THP-2	-	-	GTSP-4	LC21	-	-	5007	1167	-
1958-5399	2456476.50	1958 Sep 23	R-5M	-	M6-27TK	8651 UBP-47	THP-2	-	-	GTSP-4	LC21	-	-	5007	1167	-
1958-5400	2456476.50	1958 Sep 23	R-5M	-	M6-27TK	8651 UBP-48	THP-2	-	-	GTSP-4	LC21	-	-	5007	1167	-
1958-5401	2456476.50	1958 Sep 23	R-5M	-	M6-27TK	8651 UBP-49	THP-2	-	-	GTSP-4	LC21	-	-	5007	1167	-
1958-5402	2456476.50	1958 Sep 23	R-5M	-	M6-27TK	8651 UBP-50	THP-2	-	-	GTSP-4	LC21	-	-	5007	1167	-
1958-5403	2456476.50	1958 Sep 2														

Launch

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Mission	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee_Km	Range_Km	Dest
1960-5494	2437201.50	1960 Sep 24	R-5M	-	M1-12	-	-	GTSP-4	-	-	-	500?	-	-
1960-5495	2437221.50	1960 Oct 14	R-5A	?	M11-TG	-	-	GTSP-4	-	-	-	183	-	-
1960-5496	2437243.53	1960 Nov 5 0042	R-5M	-	L1-6	8A62 PRD Target C-1	M1IP-A Target	LCS	-	-	-	300?	500	(BALRH)
1960-5388	2437245.50	1960 Nov 17	R-5M	-	-	8A51 PRD Target C-5	M1IP-A Target	LCS	-	-	-	0?	-	(BALRH)
1960-5389	2437246.50	1960 Nov 24	R-5M	-	L1-3	8A51 PRD Target C-6	M1IP-A Target	LCS	-	-	-	0?	-	(BALRH)
1960-5398	2437276.50	1960 Dec 8	R-5M	-	L1-1	8A62 PRD Target C-2	V-1000 Target	LCS	-	-	-	300?	-	BALRH
1960-5399	2437278.50	1960 Dec 10	R-5M	-	L1-2	8A62 PRD Target C-3	V-1000 Target	LCS	-	-	-	300?	-	BALRH
1960-5414	2437286.50	1960 Dec 17	R-5M	-	L1-8	8A62 PRD Target C-4	V-1000 Target	LCS	-	-	-	300?	-	BALRH
1960-5420	2437290.50	1960 Dec 22	R-5M	-	L1-7	8A62 PRD Target C-5	V-1000 Target	LCS	-	-	-	300?	-	BALRH
1960-5422	2437291.50	1960 Dec 23	R-5M	-	L1-9	8A62 PRD Target C-6	V-1000 Target	LCS	-	-	-	300?	-	BALRH
1960-5429	2437299.50	1960 Dec 31	R-5M	-	L1-11	8A62 PRD Target C-7	V-1000 Target	LCS	-	-	-	300?	-	BALRH
1961-5530	2437304.50	1961 Jan 5	R-5M	-	M2-2	-	-	GTSP-4	-	-	-	500?	1167	-
1961-5531	2437306.50	1961 Jan 9	R-5M	-	M1-17	-	-	GTSP-4	-	-	-	500?	-	-
1961-517	2437312.50	1961 Jan 13	R-5M	-	L1-12	8A62 PRD Target C-8	V-1000 Target	LCS	-	-	-	300?	-	BALRH
1961-519	2437313.50	1961 Jan 14	R-5M	-	L1-10	8A62 PRD Target C-9	V-1000 Target	LCS	-	-	-	300?	-	BALRH
1961-554	2437346.50	1961 Feb 18	R-5M	-	BI-09	8A62 PRD Target C-10	V-1000 Target	LCS	-	-	-	300?	-	BALRH
1961-557	2437352.50	1961 Feb 22	R-5M	-	BI-14	8A62 PRD Target C-11	V-1000 Target	LCS	-	-	-	300?	-	BALRH
1961-5532	2437366.50	1961 Mar 7	R-5M	-	BI-19	-	-	GTSP-4	-	-	-	500?	-	-
1961-5533	2437366.50	1961 Mar 8	R-5M	-	M1-1	-	-	GTSP-4	-	-	-	500?	-	-
1961-5534	2437368.50	1961 Mar 25	R-5M	-	BI-12	-	-	GTSP-4	-	-	-	500?	-	-
1961-5391	2437384.50	1961 Mar 26	R-5M	-	BI-10TA	8A62 PRD Target C-12	V-1000 Target	LCS	-	-	-	300?	-	BALRH
1961-5467	2437397.50	1961 Apr 8	R-5	-	V-1000 target	8A62 PRD Target C-13	V-1000 Target	LCS	-	-	-	300?	-	BALRH
1961-5468	2437401.50	1961 Apr 12	R-5	-	V-1000 target	8A62 PRD Target C-14	V-1000 Target	LCS	-	-	-	300?	-	BALRH
1961-5535	2437463.50	1961 Jul 3	R-5M	-	L1-3	-	-	GTSP-4	-	-	-	500?	-	-
1961-5536	2437464.50	1961 Jul 4	R-5M	-	A2-10TA	-	-	GTSP-4	-	-	-	500?	1167	-
1961-5537	2437494.50	1961 Jul 14	R-5M	-	M1-16	8A62 D04B	-	GTSP-4	-	-	-	500?	-	-
1961-5209	2437506.50	1961 Jul 26	R-5M	-	M1-11	8A62 D04B	-	GTSP-4	-	-	-	500?	-	-
1961-5243	2437511.50	1961 Jul 31	R-5M	-	UNK	8A62 D04B	-	GTSP-4	-	-	-	500?	-	-
1961-5469	2437522.50	1961 Aug 11	R-5	?	UNK	8A62 D04B	-	GTSP-4	-	-	-	500?	-	-
1961-5470	2437522.50	1961 Aug 11	R-5	?	UNK	8A62 D04B	-	GTSP-4	-	-	-	500?	-	-
1961-5254	2437524.50	1961 Aug 16	R-5M	-	A2-77A	8A51 IPR-31 (38 RD)	-	GTSP-4	-	-	-	500?	1167	-
1961-5247	2437527.50	1961 Aug 16	R-5M	-	UNK	8A51 IPR-32	-	GTSP-4	-	-	-	500?	-	-
1961-5471	2437528.50	1961 Aug 17	R-5	?	UNK	8A62 D04B	-	GTSP-4	-	-	-	500?	-	-
1961-5260	2437528.50	1961 Aug 17	R-5	?	UNK	8A62 D04B	-	GTSP-4	-	-	-	500?	-	-
1961-5251	2437533.50	1961 Aug 22	R-5	?	UNK	8A62 D04B	-	GTSP-4	-	-	-	500?	-	-
1961-5254	2437536.50	1961 Aug 22	R-5	?	UNK	8A62 D04B	-	GTSP-4	-	-	-	500?	-	-
1961-5255	2437536.50	1961 Aug 24	R-5	?	UNK	8A62 D04B	-	GTSP-4	-	-	-	500?	-	-
1961-5256	2437536.50	1961 Aug 25	R-5	?	UNK	8A62 D04B	-	GTSP-4	-	-	-	500?	-	-
1961-5256	2437536.50	1961 Aug 25	R-5	?	UNK	8A62 D04B	-	GTSP-4	-	-	-	500?	-	-
1961-5256	2437546.50	1961 Sep 2	R-5M	?	E4-2	8A51 Nuclear Test	-	GTSP-4	-	-	-	500?	-	-
1961-5256	2437546.50	1961 Sep 2	R-5M	?	E4-2	8A51 Nuclear Test	-	GTSP-4	-	-	-	500?	-	-
1961-5393	2437566.50	1961 Sep 23	R-5M	?	M1-2TG	-	-	GTSP-4	-	-	-	500?	-	-
1961-4391	2437569.50	1961 Sep 27	R-5M	?	M1-3TG	-	-	GTSP-4	-	-	-	500?	-	-
1961-4392	2437572.50	1961 Oct 4	R-5A	?	-	-	-	GTSP-4	-	-	-	500?	-	BALRH
1961-8323	2437575.50	1961 Oct 21	R-5M	-	No. 3	8A62 PRD Target C-15	M1IP-A Target	LCS	-	-	-	500?	-	-
1961-8323	2437575.50	1961 Oct 21	R-5M	-	No. 4	8A51 Nuclear Test	GRDM	LCS	-	-	-	500?	-	-
1961-8323	2437575.50	1961 Oct 21	R-5M	-	No. 4	8A54 Geophysical?	GRDM	LCS	-	-	-	500?	-	-
1961-8320	2437583.50	1961 Oct 21	R-5A	-	UNK	8A54 Geophysical	-	GTSP-4	-	-	-	430	-	-
1961-8340	2437584.50	1961 Oct 22	R-5	?	UNK	8A62 D04B	-	GTSP-4	-	-	-	500?	-	-
1961-8344	2437586.50	1961 Oct 23	R-5	?	UNK	8A62 PRD Target C-16	M1IP-A Target	LCS	-	-	-	500?	-	BALRH
1961-8345	2437586.50	1961 Oct 24	R-5	?	UNK	8A62 D04B	-	GTSP-4	-	-	-	500?	-	-
1961-8349	2437597.50	1961 Oct 24	R-5	?	UNK	8A62 D04B	-	GTSP-4	-	-	-	500?	-	-
1961-8351	2437598.50	1961 Oct 26	R-5	?	UNK	8A62 D04B	-	GTSP-4	-	-	-	500?	-	-
1961-8359	2437600.50	1961 Oct 26	R-5	-	-	8A62 D04B	-	GTSP-4	-	-	-	500?	-	-
1961-8377	2437619.04	1961 Nov 15 1300	R-5A	-	-	8A62 Geophysical	-	GTSP-4	-	-	-	430	-	-
1961-8426	2437656.50	1961 Dec 22	R-5	-	A2-11TA	8A62 PRD Target C-17	M1IP-A Target	LCS	-	-	-	500?	-	BALRH
1961-8426	2437656.50	1961 Dec 22	R-5	-	A2-6TA	8A62 PRD Target C-18	M1IP-A Target	LCS	-	-	-	500?	1010	-
1961-8427	2437659.50	1961 Dec 26	R-5	-	A2-9TA	8A62 PRD Target C-19	M1IP-A Target	LCS	-	-	-	500?	-	BALRH
1961-8428	2437659.50	1961 Dec 26	R-5	-	A1-17TA	8A62 PRD Target C-20	M1IP-A Target	LCS	-	-	-	500?	-	BALRH
1961-8443	2437662.50	1961 Dec 26	R-5	-	M1-3	8A62 PRD Target C-21	M1IP-A Target	LCS	-	-	-	500?	-	BALRH
1961-8444	2437662.50	1961 Dec 30	R-5	-	M1-6	8A62 PRD Target C-22	M1IP-A Target	LCS	-	-	-	500?	-	BALRH
1961-8446	2437664.50	1961 Dec 31	R-5	-	-	8A62 PRD Target C-23	M1IP-A Target	LCS	-	-	-	500?	-	BALRH
1962-879	2437751.50	1962 Mar 28	R-5	-	-	8A62 PRD Target C-24	M1IP-A Target	LCS	-	-	-	500?	-	BALRH
1962-893	2437765.50	1962 Apr 11	R-5	-	-	8A62 PRD Target C-24	M1IP-A Target	LCS	-	-	-	500?	-	BALRH
1962-8400	2437955.50	1962 Oct 18	R-5B	-	-	8A62 Geophysical	-	GTSP-4	-	-	-	508	-	-
1962-8410	2437958.50	1962 Oct 21?	R-5B	-	-	8A62 Geophysical	-	GTSP-4	-	-	-	500?	-	-
1963-8263	2438186.52	1963 Jun 6 0030	R-5B	-	-	8A62 Geophysical	-	GTSP-4	-	-	-	500?	-	-
1963-8293	2438198.52	1963 Jun 18 0030	R-5B	-	-	8A62 Geophysical	-	GTSP-4	-	-	-	500	-	-
1963-8331	2438216.52	1963 Jul 6 0038	R-5B	-	-	8A62 Geophysical	-	GTSP-4	-	-	-	400	-	-
1963-8515	2438327.50	1963 Oct 25	R-5B	-	-	8A62 Geophysical	-	GTSP-4	-	-	-	500?	-	-
1963-8615	2438387.50	1963 Dec 24	R-5B	-	-	8A62 Geophysical?	-	GTSP-4	-	-	-	500?	-	-
1964-8816	2438551.50	1964 Jun 5	R-5M	-	-	8A51 29 BD IHP-1	VAO	GTSP-4	-	-	-	500?	-	-
1964-8817	2438551.50	1964 Jun 5	R-5M	-	-	8A51 29 BD IHP-2	VAO	GTSP-4	-	-	-	500?	-	-
1964-8467	2438664.66	1964 Sep 26 0350	R-5M	-	1?	R-5 Geophysical	VAO	GTSP-4	-	-	-	500?	-	-
1964-8818	2438680.50	1964 Oct 12	R-5M	-	-	8A51 29 BD IHP-3	VAO	GTSP-4	-	-	-	500?	-	-
1965-8244	2438874.50	1965 Apr 22	R-5M	-	-	8A51 29 BD IHP-4	VAO	GTSP-4	-	-	-	500?	-	-
1965-8249	2438877.50	1965 Apr 24	R-5M	-	-	8A51 29 BD IHP-5	VAO	GTSP-4	-	-	-	500?	-	-
1965-8253	2438977.09	1965 Apr 26 1413	R-5M	-	-	8A51 29 BD IHP-6	VAO	GTSP-4	-	-	-	500?	-	-
1965-8308	2438905.50	1965 May 26	R-5M	-	-	8A51 29 BD IHP-7	VAO	GTSP-4	-	-	-	500?	-	-
1965-8313	2438906.50	1965 May 26	R-5M	-	-	8A51 29 BD IHP-8	VAO	GTSP-4	-	-	-	500?	-	-
1965-8503	2439023.64	1965 Sep 20 0327	R-5M	-	2?	R-5V Geophysical	VAO	GTSP-4	-	-	-	480	-	-
1965-8804	2439027.50	1965 Sep 24	R-5M	-	-	8A51 29 BD IHP-8	VAO	GTSP-4	-	-	-	500?	-	-
1965-8536	2439034.66	1965 Oct 1 0357	R-5M	-	3?	R-5V Geophysical	VAO	GTSP-4	-	-	-	480	-	-
1965-8549	2439046.50	1965 Oct 13	R-5V	-	4?	R-5V Geophysical	VAO	GTSP-4	-	-	-	500?	-	-
1970-8335	2440703.59	1970 Apr 27 0215	R-5V	-	5	R-5V Geophysical	VAO	GTSP-4	-	-	-	500?	-	-

Launch

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Mission	FlightCode	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee km	Range km	Dest
1970-S358	2440722.60	1970 May 16 0230	R-5V	-	6	R-5V Geophysical	RAD K-2 Ho. 1	-	-	GTSP-4	LC84/1	-	-	500?	-	-
1970-S550	2440862.68	1970 Oct 3 0420	R-5V	-	7?	R-5V Geophysical	RAD K-2 Ho. 2	-	-	GTSP-4	LC84/1	-	-	500	-	-
1970-S629	2440918.73	1970 Nov 28 0530	R-5V	-	8?	Vertikal'-1	RAD/VZAF	-	-	GTSP-4	LC84/1	-	-	468	-	-
1971-S397	2441185.64	1971 Aug 20 0320	R-5V	-	9?	Vertikal'-2	RAD/VZAF	-	-	GTSP-4	LC84/1	-	-	463	-	-
1971-S469	2441218.66	1971 Sep 24 0345	R-5V	-	10?	R-5V Geophysical	RAD	-	-	GTSP-4	LC84/1	-	-	100?	-	-
1971-S517	2441234.25	1971 Oct 9 1802	R-5V	-	11?	R-5V Geophysical	-	-	-	GTSP-4	LC84/1	-	-	500?	-	-
1975-S225	2442608.65	1975 Jul 15 0335	R-5V	-	-	R-5V Geophysical	-	-	-	GTSP-4	-	-	-	503	-	-
1978-S336	2443842.50	1978 Dec	R-5V	?	-	R-5V Geophysical	Vol't	-	-	GTSP-4	-	-	-	380	-	-









Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Orbit	Agency	Launch_Code	Group	Category	LTCite	Cite	Notes
1970-S358	2440722.60	1970 May 16 0230	R-5V	-	6	0.000	AN	SF	AM/	Solar X	germi-cosmos.com	-	-
1970-S550	2440862.68	1970 Oct 3 0420	R-5V	-	7?	0.000	AN	SS	AM/	Solar X	SpaSciRev13,731	-	-
1970-S629	2440918.73	1970 Nov 28 0530	R-5V	-	8?	0.000	AN	SS	AM/	Aeron/Ionos/Solar UV/X	WDRF	SRI2,651	-
1971-S397	2441183.64	1971 Aug 20 0320	R-5V	-	9?	0.000	AN	SS	AM/	Solar UV/Solar X	SRI3,787	SFLT23-161	-
1971-S469	2441218.66	1971 Sep 24 0345	R-5V	-	10?	0.000	AN	SF	AM/	Ionos?	RML	-	-
1971-S517	2441234.25	1971 Oct 9 1802	R-5V	-	11?	0.000	AN	SS	AM/	Ionos?	RML	-	-
1975-S225	2442608.65	1975 Jul 15 0335	R-5V	-	-	0.000	AN	SS	IKI/GRS/Biryukov,Danilov	Ionos	SRI7,465	SRI7,451/KI16,315	-
1978-S336	2443842.50	1978 Dec	R-5V	?	-	0.000	AN	SS	AM/Porotnikov	Active Plasma	KI19,314	-	-







Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Launch	FlightCode	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee_Km	Range_Km	Dest
1965-F01	2438063.90	1963 Feb 5 0929:14	Molniya 8K78	E6	G103-10	-	E-6 No. 3	-	-	MIP-5	LC1	-	-	220?	-	-
1965-006	2438109.85	1963 Mar 21 0830:01	Vostok 8A92	-	T 15000-01	Kosmos-13	Zent-2 No. 9	-	-	MIP-5	LC1	-	-	324	-	-
1965-008	2438121.94	1963 Apr 2 0616:37	Molniya 8K78	E6	G103-11	Luna-4	E-6 No. 4	-	-	MIP-5	LC1	-	-	150000	-	Kura
1965-3167	2438142.02	1963 Apr 22 1232:06	R-7A	-	Li-4	8K7A UBP-12	MGCh 46A	-	-	MIP-5	LC31	-	-	1350?	-	-
1965-011	2438141.85	1963 Apr 22 0830	Vostok 8A92	-	T 15000-08	Kosmos-15	Zent-2 No. 8	-	-	MIP-5	LC1	-	-	367	-	-
1965-012	2438147.87	1963 Apr 28 0949:56	Vostok 8A92	-	E 15000-02	Kosmos-16	Zent-2 No. 10	-	-	MIP-5	LC31	-	-	396	-	-
1965-3211	2438167.82	1963 May 18 0741	R-7A	-	Li-6	8K7A UBP-13	MGCh 46A	-	-	MIP-5	LC31	-	-	1350?	-	Kura
1965-018	2438173.94	1963 May 24 1034:06	Vostok 8A92	-	E 15000-12	Kosmos-18	Zent-2 No. 11	-	-	MIP-5	LC1	-	-	301	-	-
1965-020	2438196.90	1963 Jun 14 1158:58	Vostok 8K72	K	E103-24	Vostok-5	Vostok-3A No. 7	-	-	MIP-5	LC1	-	-	223	-	-
1965-023	2438196.90	1963 Jun 16 0929:52	Vostok 8K72	K	E103-24	Vostok-6	Vostok-3A No. 8	-	-	MIP-5	LC1	-	-	223	-	-
1965-E01	2438200.92	1963 Jul 10 1003:25	Vostok 8A92	-	E 15000-04	-	Zent-2 No. 12	-	-	MIP-5	LC1	-	-	0	-	-
1965-3687	2438317.08	1963 Oct 14 1356:40	R-7A	-	L2-5	8K7A UBP-14	MGCh 46A	-	-	MIP-5	LC1	-	-	1350?	-	Kura
1965-040	2438320.90	1963 Oct 18 0929:58	Vostok 8A92	-	G 15001-01	Kosmos-20	Zent-2 No. 13	-	-	MIP-5	LC1	-	-	309	-	-
1965-046	2438334.37	1963 Nov 1 0856:38	Polyot 11A59	-	E 15000-02A	Polyot	I-2B No. 102	-	-	MIP-5	LC31	-	-	1424	-	-
1965-044	2438344.77	1963 Nov 11 0623:35	Molniya 8K78	-	G 15000-17/G10318	Kosmos-21	3MV-1 No. 1	-	-	MIP-5	LC1	-	-	232	-	-
1965-045	2438349.94	1963 Nov 16 1004:25	Vostok 11A57	-	G 15001-06	Kosmos-22	Zent-4 No. 1	-	-	MIP-5	LC1	-	-	390	-	-
1965-F15	2438361.89	1963 Nov 28 0919:59	Vostok 8A92	-	G 15000-12	-	Zent-2 No. 14	-	-	MIP-5	LC1	-	-	206	-	-
1965-052	2438382.90	1963 Dec 19 0928:58	Vostok 8A92	-	G 15001-03	Kosmos-24	Zent-2 No. 15	-	-	MIP-5	LC1	-	-	398	-	-
1964-006	2438424.91	1964 Jan 30 0945:09	Vostok 8K72	K	G103-18	Elektron-1/2	ZD No. 1	-	-	MIP-5	LC1	-	-	69333	-	-
1964-F01	2438444.74	1964 Feb 19 0547:40	Molniya 8K78	E6	T 15000-19	Kosmos-25	3MV-1 No. 2	-	-	MIP-5	LC1	-	-	200?	-	-
1964-014	2438476.84	1964 Mar 21 0615:35	Molniya 8K78	E6	T 15000-20	[8K78/EEF?]	E-6 No. 6	-	-	MIP-5	LC1	-	-	207	-	-
1964-016	2438481.64	1964 Mar 27 0324:42	Molniya 8K78	M	G 15000-22	Zond	3MV-1 No. 3	-	-	MIP-5	LC1	-	-	269	-	-
1964-014	2438487.61	1964 Apr 2 0242:40	Molniya 8K78	M	G 15000-23/23	-	3MV-1 No. 4	-	-	MIP-5	LC1	-	-	150000	-	-
1964-017	2438489.91	1964 Apr 4 0946:00	Vostok 8A92	-	G 15001-04	Kosmos-28	Zent-2 No. 16	-	-	MIP-5	LC31	-	-	380	-	-
1964-019	2438497.90	1964 Apr 12 0930	Polyot 11A59	-	T 15000-21	[8K78/EEF?]	E-6 No. 5	-	-	MIP-5	LC1	-	-	200	-	-
1964-F05	2438506.84	1964 Apr 20 0606:28	Molniya 8K78	E6	R 15000-01	Kosmos-29	Zent-2 No. 19	-	-	MIP-5	LC1	-	-	289	-	-
1964-021	2438510.95	1964 Apr 25 1021	Vostok 8A92	-	R 15000-02	Kosmos-30	Zent-4 No. 2	-	-	MIP-5	LC31	-	-	286	-	-
1964-023	2438553.90	1964 May 18 0942	Vostok 11A57	-	E 15000-15	8K7A UBP-15	MGCh 46A	-	-	MIP-5	LC1	-	-	368	-	-
1964-5277	2438549.75	1964 Jun 3 0604	R-7A	-	G 15000-13/R10334	-	Molniya-1 11F67 No 2	-	-	MIP-5	LC31	-	-	1530?	-	Kura
1964-F07	2438560.87	1964 Jun 4 0400	Molniya 8K78	-	R 15001-02	Kosmos-32	Zent-2 No. 18	-	-	MIP-5	LC1	-	-	329	-	-
1964-029	2438566.96	1964 Jun 10 1100	Vostok 8A92	-	R 15000-05	Kosmos-33	Zent-2 No. 20	-	-	MIP-5	LC31	-	-	4066	-	-
1964-034	2438569.52	1964 Jun 23 1000	Vostok 8A92	-	T 15000-04	Kosmos-34	Zent-4 No. 3	-	-	MIP-5	LC1	-	-	67511	-	-
1964-039	2438577.96	1964 Jul 1 1100	Vostok 11A57	K	G103-19	Elektron-3/4	ZD No. 3	-	-	MIP-5	LC1	-	-	289	-	-
1964-038	2438587.41	1964 Jul 10 2151:02	Vostok 8K72	-	R 15001-03	Kosmos-35	Zent-2 No. 21	-	-	MIP-5	LC31	-	-	1530?	-	-
1964-5384	2438591.96	1964 Jul 15 1127	Vostok 8A92	-	Li-1	8K7A UBP-16	MGCh 46A	-	-	MIP-5	LC31	-	-	50?	-	-
1964-040	2438604.90	1964 Jul 27 1400	Vostok 8A92	-	G 15001-04	Kosmos-37	Zent-2 No. 22	-	-	MIP-5	LC31	-	-	283	-	-
1964-049	2438621.91	1964 Aug 14 0930	Molniya 8K78	-	T 15000-19/R10336	Kosmos-41	Molniya-1 11F67 No. 1	-	-	MIP-5	LC31	-	-	4066	-	-
1964-063	2438629.17	1964 Aug 22 0721	Vostok 8A92A	-	R 15000-05	Kosmos-44	Meteor 11F614 No. 1	-	-	MIP-5	LC31	-	-	873	-	-
1964-065	2438636.17	1964 Aug 28 1600	Vostok 8A92A	-	T 15000-06	Kosmos-45	Zent-4 No. 5	-	-	MIP-5	LC1	-	-	317	-	-
1964-068	2438661.91	1964 Sep 13 0946	Vostok 11A57	-	R 15001-01	Kosmos-46	Zent-2 No. 23	-	-	MIP-5	LC31	-	-	294	-	-
1964-069	2438663.00	1964 Sep 24 1204	Vostok 8A92	-	R 15000-02	Kosmos-47	Vostok 3KV No. 2	-	-	MIP-5	LC1	-	-	385	-	-
1964-062	2438674.79	1964 Oct 4 0730:00	Vostok 11A57	-	R 15000-04	Kosmos-48	Vostok 3KV No. 3	-	-	MIP-5	LC1	-	-	31	-	-
1964-065	2438680.81	1964 Oct 12 0730:01	Vostok 11A57	-	R 15002-01	Kosmos-50	Zent-2 No. 24	-	-	MIP-5	LC31	-	-	288	-	-
1964-066	2438682.82	1964 Oct 14 1000	Vostok 8A92	-	G 15002-02	Kosmos-50	Zent-2 No. 25	-	-	MIP-5	LC31	-	-	288	-	-
1964-070	2438696.94	1964 Oct 28 0936	Vostok 8A92	-	R 15000-29	Zond-3	3MV-4A No. 2	-	-	MIP-5	LC31	-	-	307	-	-
1964-078	2438730.06	1964 Nov 30 1325	Molniya 8K78	-	R 15000-03	Kosmos-52	Zent-2 No. 26	-	-	MIP-5	LC31	-	-	43	-	-
1965-010	2438730.06	1965 Jan 11 0730:58	Vostok 8A92	-	R 15002-03	Kosmos-52	Vostok 3KV No. 1	-	-	MIP-5	LC31	-	-	307	-	-
1965-012	2438811.90	1965 Feb 26 0930:32	Vostok 11A57	-	R 15000-05	Kosmos-58	Meteor 11F614 No. 2	-	-	MIP-5	LC31	-	-	718	-	-
1965-030	2438817.51	1965 Feb 26 0930:32	Vostok 8A92A	-	R 15001-05	Kosmos-59	Zent-4 No. 11	-	-	MIP-5	LC31	-	-	386	-	-
1965-011	2438826.67	1965 Feb 26 0930:32	Vostok 8A92	-	R 15001-05	Kosmos-59	Meteor 11F614 No. 2	-	-	MIP-5	LC31	-	-	386	-	-
1965-011	2438826.67	1965 Feb 26 0930:32	Vostok 8A92	-	R 15001-05	Kosmos-59	Meteor 11F614 No. 2	-	-	MIP-5	LC31	-	-	386	-	-
1965-019	2438837.79	1965 Mar 15 0925:31	Molniya 8K78	-	G 15000-24/R10325	Kosmos-62	Zent-4 No. 11	-	-	MIP-5	LC31	-	-	472	-	-
1965-022	2438837.79	1965 Mar 15 0700:00	Vostok 11A57	E6	G 15000-02	Vostok-2	Vostok 3KV No. 4	-	-	MIP-5	LC1	-	-	263	-	-
1965-025	2438844.41	1965 Mar 25 1000	Vostok 11A57	-	G 15001-06	Kosmos-64	Zent-2 No. 17	-	-	MIP-5	LC31	-	-	200?	-	-
1965-026	2438860.86	1965 Apr 10 0839:01	Molniya 8K78	-	U 15000-27/R10326	-	E-6 No. 9	-	-	MIP-5	LC1	-	-	335	-	-
1965-029	2438867.91	1965 Apr 17 0930:01	Vostok 11A57	-	G 15000-11	Kosmos-65	Zent-4 No. 6	-	-	MIP-5	LC31	-	-	406	-	-
1965-030	2438873.68	1965 Apr 23 0155:00	Molniya 8K78	-	U 15000-35/010335	Molniya-1	Molniya-1 11F67 No. 3	-	-	MIP-5	LC1	-	-	48183	-	-
1965-030	2438873.68	1965 Apr 23 0155:00	Molniya 8K78	-	U 15000-35/010335	Molniya-1	Molniya-1 11F67 No. 3	-	-	MIP-5	LC1	-	-	48183	-	-
1965-036	2438889.93	1965 May 9 0749:37	Vostok 8A92	-	R 15002-02	Kosmos-66	Zent-2 No. 27	-	-	MIP-5	LC31	-	-	296	-	-
1965-036	2438889.93	1965 May 9 0749:37	Vostok 8A92	-	U 15000-24/010330	Luna-5 [8K78/EEF?]	E-6 No. 10	-	-	MIP-5	LC1	-	-	150000	-	-
1965-044	2438905.93	1965 May 25 1050:00	Vostok 11A57	M	R 15001-04	Kosmos-67	Zent-4 No. 10	-	-	MIP-5	LC1	-	-	354	-	-
1965-044	2438905.93	1965 May 25 1050:00	Vostok 11A57	M	U 15000-23/010331	Luna-6 [8K78/EEF?]	E-6 No. 7	-	-	MIP-5	LC1	-	-	150000	-	-
1965-044	2438919.82	1965 Jun 8 0740:23	Molniya 8K78	-	G 15001-10	Kosmos-68	Zent-2 No. 29	-	-	MIP-5	LC31	-	-	339	-	-
1965-046	2438926.90	1965 Jun 15 0943:02	Vostok 8A92	-	G 15000-10	Kosmos-69	Zent-4 No. 4	-	-	MIP-5	LC1	-	-	388	-	-
1965-049	2438936.91	1965 Jun 25 0945:00	Vostok 11A57	-	R 15002-05	Zond-3	Zent-2 No. 28	-	-	MIP-5	LC31	-	-	100?	-	-
1965-056	2438960.11	1965 Jul 18 1432:05	Molniya 8K78	-	U 15000-02	Kosmos-77	3MV-4 No. 3	-	-	MIP-5	LC31	-	-	150000	-	-
1965-061	2438975.96	1965 Aug 3 1100	Vostok 8A92	-	U 15001-01	Kosmos-78	Zent-4 No. 13	-	-	MIP-5	LC31	-	-	300	-	-
1965-066	2438986.96	1965 Aug 14 1056:46	Vostok 11A57	-	R 15001-02	Kosmos-79	Zent-2 No. 30									

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Mission	Launch_Site	Platform	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee_Km	Range_Km	Dest
1966-010	2435166.86	1966 Feb 10 0840	Vostok 8k92	-	U 15001-06	Kosmos-107	Zenit-2 No. 34	MIP-5	-	LC31	-	-	312	-	-
1966-014	2435175.87	1966 Feb 19 0849	Vostokh 11k67	-	R 15001-02	Kosmos-109	Zenit-4 No. 14	MIP-5	-	LC31	-	-	292	-	-
1966-015	2435179.34	1966 Feb 22 2009:36	Vostokh 11k67	-	R 15001-06	Kosmos-110	Vostokh 3KV No. 5	MIP-5	-	LC31	-	-	879	-	-
1966-017	2435186.96	1966 Mar 1 1103:49	Molniya 8K78M	?	U 15001-09	Kosmos-111	E-6S No. 204 ISL	MIP-5	-	LCM/1	-	-	194	-	-
1966-021	2435201.94	1966 Mar 17 1028:42	Vostok 8k92	-	U 15001-05	Kosmos-112	Zenit-2 No. 37	MIP-5	-	LCM/1	-	-	565	-	-
1966-023	2435206.21	1966 Mar 21 0940	Vostokh 11k67	-	U 15001-05	Kosmos-113	Zenit-4 No. 17	MIP-5	-	LC31	-	-	313	-	-
1966-F04	2435211.81	1966 Mar 27 0720	Molniya 8K78	M	U 15001-40	-	Molniya-1 11F67 No. 5	MIP-5	-	LC31	-	-	2007	-	-
1966-027	2435215.91	1966 Apr 31 1046:59	Molniya 8K78M	?	U 15001-07	Luna-10	E-6S No. 206 ISL	MIP-5	-	LC31	-	-	150000	-	-
1966-028	2435221.99	1966 Apr 6 1140	Vostokh 11k67	-	U 15001-01	Kosmos-114	Zenit-4 No. 19	MIP-5	-	LCM/1	-	-	353	-	-
1966-035	2435235.94	1966 Apr 20 1040	Vostok 8k92	-	U 15001-07	Kosmos-115	Zenit-2 No. 35	MIP-5	-	LC31	-	-	286	-	-
1966-036	2435240.94	1966 Apr 25 0710	Molniya 8K78	M	U 15001-37	Molniya-1	Molniya-1 11F67 No. 6	MIP-5	-	LC31	-	-	39587	-	-
1966-037	2435251.96	1966 May 6 1058	Vostok 8k92	-	R 15001-01	Kosmos-117	Zenit-2 No. 39	MIP-5	-	LC31	-	-	314	-	-
1966-038	2435257.59	1966 May 11 1410	Vostok 8k92A	-	R 15001-32	Kosmos-118	Meteor 11F614 No. 4	MIP-5	-	LC31	-	-	681	-	-
1966-F06	2435262.96	1966 May 17 1100	Vostokh 11k67	-	U 15001-06	-	Zenit-4 No. 18	MIP-5	-	LCM/1	-	-	107	-	-
1966-F747	2435272.50	1966 May 27 1100	R-7A	-	-	8K74 UPB	-	LC1	-	LC1	-	-	15807	-	-
1966-050	2435284.96	1966 Jun 8 1100	Vostokh 11k67	-	U 15001-13	Kosmos-120	Zenit-2 No. 41	MIP-5	-	LC31	-	-	331	-	-
1966-054	2435293.96	1966 Jun 17 1100	Vostokh 11k67	-	U 15001-08	Kosmos-121	Zenit-4 No. 20	MIP-5	-	LCM/1	-	-	331	-	Kura
1966-057	2435301.50	1966 Jun 25 1030	R-7A	-	-	8K74 UPB	-	LC1	-	LC1	-	-	15807	-	-
1966-067	2435301.94	1966 Jun 25 1030	Vostok 8k92A	-	R 15001-21	Kosmos-122	Meteor 11F614 No. 5	MIP-5	-	LC31	-	-	715	-	-
1966-068	2435320.93	1966 Jul 14 1025	Vostokh 11k67	-	U 15001-14	Kosmos-124	Zenit-2 No. 42	MIP-5	-	LC31	-	-	289	-	-
1966-069	2435326.87	1966 Jul 20 0858	Vostok-2A 11k610	-	G 15001-02	Kosmos-126	US-A	MIP-5	-	LC31	-	-	259	-	-
1966-068	2435334.96	1966 Jul 28 1050	Vostokh 11k67	-	U 15001-01	Kosmos-126	Zenit-4 No. 21	MIP-5	-	LC31	-	-	349	-	-
1966-078	2435346.96	1966 Aug 8 1129	Vostokh 11k67	-	U 15001-02	Kosmos-127	Zenit-4 No. 22	MIP-5	-	LC31	-	-	270	-	-
1966-078	2435361.94	1966 Aug 24 0803:21	Molniya 8K78M	?	U 15001-52	Kosmos-128	E-6LF No. 101	MIP-5	-	LC31	-	-	150000	-	-
1966-F09	2435364.91	1966 Aug 27 0950	Vostokh 11k67	-	U 15001-03	Luna-11	Zenit-4 No. 23	MIP-5	-	LC1	-	-	342	-	-
1966-081	2435374.96	1966 Sep 16 0930	Vostok 8k92	-	U 15001-02	Kosmos-129	Zenit-2 No. 40	MIP-5	-	LC31	-	-	17	-	-
1966-082	2435413.01	1966 Oct 14 1213:08	Vostok 8k92	-	U 15001-07	Kosmos-129	Zenit-2 No. 33	MIP-5	-	LCM/1	-	-	312	-	-
1966-082	2435416.87	1966 Oct 20 0750	Molniya 8K78	M	U 15001-40	Molniya-1	Molniya-1 11F67 No. 7	MIP-5	-	LC1	-	-	40063	-	-
1966-082	2435416.87	1966 Oct 20 0846	Vostokh 11k67	-	U 15001-04	Kosmos-130	Zenit-4 No. 24	MIP-5	-	LC31	-	-	314	-	-
1966-094	2435420.86	1966 Oct 22 0842:26	Molniya 8K78M	?	U 15001-55	Luna-12	E-6LF No. 102	MIP-5	-	LCM/1	-	-	150000	-	-
1966-104	2435441.91	1966 Nov 12 0950	Vostokh 11k67	-	U 15001-08	Kosmos-131	Zenit-4 No. 25	MIP-5	-	LCM/1	-	-	374	-	-
1966-106	2435446.83	1966 Nov 19 0600	Vostok 8k92	-	U 15001-02	Kosmos-132	Zenit-2 No. 46	MIP-5	-	LC31	-	-	273	-	-
1966-107	2435467.96	1966 Nov 28 1100:00	Vostok 11k61	-	U 15001-02	Kosmos-133	Soyuz 7K-OK No. 2	MIP-5	-	LC31	-	-	248	-	-
1966-108	2435467.96	1966 Dec 3 0815	Vostokh 11k67	-	U 15001-06	Kosmos-134	Zenit-4 No. 26	MIP-5	-	LC31	-	-	310	-	-
1966-F12	2435473.96	1966 Dec 14 1100	Soyuz 11k611	-	U 15001-01	Kosmos-136	Soyuz No. 1	MIP-5	-	LC31	-	-	0	-	-
1966-115	2435479.00	1966 Dec 19 1200:01	Vostok 8k92	-	U 15001-09	Kosmos-136	Zenit-2 No. 47	MIP-5	-	LCM/1	-	-	602	-	-
1966-116	2435480.93	1966 Dec 21 1017:08	Molniya 8K78M	?	U 15001-55	Luna-13	E-6R No. 205	MIP-5	-	LC1	-	-	150000	-	-
1967-004	2435510.93	1967 Jan 1 1239:59	Vostok 8k92	-	U 15001-05	Kosmos-138	Zenit-2 No. 43	MIP-5	-	LCM/1	-	-	276	-	-
1967-004	2435528.64	1967 Feb 7 0230:00	Soyuz 11k61	-	U 15001-03	Kosmos-140	Soyuz No. 3	MIP-5	-	LC1	-	-	294	-	-
1967-012	2435529.93	1967 Feb 8 1019:59	Vostokh 11k67	-	U 15001-09	Kosmos-141	Zenit-4 No. 29	MIP-5	-	LCM/1	-	-	327	-	-
1967-016	2435568.96	1967 Feb 27 0845:01	Vostok 8k92	-	U 15001-03	Kosmos-143	Zenit-2 No. 48	MIP-5	-	LC1	-	-	286	-	-
1967-022	2435660.11	1967 Feb 28 1454:59	Vostok 8k92A	?	U 15001-05	Kosmos-144	Meteor 11F614 No. 6	MIP-5	-	LCM/1	-	-	307	-	-
1967-022	2435660.11	1967 Mar 13 1210:53	Vostok 8k92A	-	U 15001-06	Kosmos-147	Zenit-2 No. 44	MIP-5	-	LCM/1	-	-	300	-	-
1967-025	2435672.03	1967 Mar 22 1404:59	Vostokh 11k67	-	U 15001-07	Kosmos-150	Zenit-4 No. 27	MIP-5	-	LCM/1	-	-	332	-	-
1967-039	2435685.06	1967 Apr 4 1201:02	Vostok 8k92	-	U 15001-01	Kosmos-150	Zenit-2 No. 48	MIP-5	-	LCM/1	-	-	277	-	-
1967-039	2435685.06	1967 Apr 4 1201:02	Vostokh 11k67	-	U 15001-08	Kosmos-155	Zenit-4 No. 28	MIP-5	-	LC1	-	-	276	-	-
1967-039	2435685.06	1967 Apr 22 1051:02	Soyuz 11k611	-	U 15001-02	Soyuz-1	Soyuz No. 4	MIP-5	-	LC1	-	-	703	-	-
1967-039	2435685.06	1967 Apr 22 1051:02	Vostok 8k92	-	U 15001-22	Kosmos-167	Meteor 11F614 No. 7	MIP-5	-	LCM/1	-	-	297	-	-
1967-039	2435685.06	1967 Apr 27 1030:02	Vostok 8k92A	-	U 15001-05	Kosmos-167	Zenit-2 No. 49	MIP-5	-	LC1	-	-	60882	-	-
1967-044	2435692.94	1967 May 12 1043:07	Vostokh 11k67	-	U 15001-12	Kosmos-169	E-6LS No. 111	MIP-5	-	LC1	-	-	30796	-	-
1967-046	2435693.96	1967 May 15 1446:57	Molniya 8K78M	?	U 15001-12	Kosmos-181	Zenit-4 No. 31	MIP-5	-	LCM/1	-	-	30796	-	-
1967-052	2435693.96	1967 May 15 1446:57	Vostokh 11k67	-	U 15001-12	Molniya-1	Molniya-1 11F67 No. 8	MIP-5	-	LC1	-	-	301	-	-
1967-054	2435694.94	1967 May 24 0230:00	Molniya 8K78	M	U 15001-04	Kosmos-164	Zenit-2 No. 50	MIP-5	-	LC1	-	-	301	-	-
1967-057	2435695.04	1967 Jun 8 1300:01	Vostokh 11k67	-	U 15001-04	Kosmos-164	Zenit-2 No. 50	MIP-5	-	LCM/1	-	-	301	-	-
1967-058	2435695.81	1967 Jun 8 1300:01	Vostokh 11k67	-	U 15001-04	Venera-4	4V-1 No. 310	MIP-5	-	LC1	-	-	150000	-	-
1967-058	2435695.81	1967 Jun 12 0239:45	Molniya 8K78M	VL	U 15000-71 L70	-	4V-1 No. 311	MIP-5	-	LC1	-	-	283	-	-
1967-063	2435696.81	1967 Jun 17 0236:38	Molniya 8K78M	VL	U 15001-13	-	Zenit-2 No. 52	MIP-5	-	LCM/1	-	-	386	-	-
1967-F06	2435697.75	1967 Jun 20 1100:00	Vostokh 11k67	-	U 15001-05	Kosmos-168	Zenit-2 No. 52	MIP-5	-	LC31	-	-	2007	-	-
1967-F06	2435697.75	1967 Jun 21 0559:59	Vostokh 11k67	-	U 15001-05	Kosmos-168	Zenit-2 No. 52	MIP-5	-	LC31	-	-	2007	-	-
1967-F08	2435699.93	1967 Jul 1 0600:04	Vostokh 11k67	-	E 15002-05	-	MCS 464	MIP-5	-	LC31	-	-	13507	-	-
1967-F357	2435711.74	1967 Jul 25 0800	R-7A	-	-	8K74 UPB	-	LC3/4	-	LC3/4	-	-	290	-	Kura
1967-078	2435711.74	1967 Aug 6 0645:48	Vostokh 11k67	-	U 15001-15	Kosmos-172	Zenit-4 No. 34	MIP-5	-	LC1	-	-	39005	-	-
1967-082	2435733.83	1967 Aug 31 0800:03	Molniya 8K78	M	U 15001-81 L81	Kosmos-174	Molniya-Yu 11F67 No. 11	MIP-5	-	LC1	-	-	2007	-	-
1967-F09	2435743.94	1967 Sep 1 1030	Vostokh 11k67	-	U 15001-03	Kosmos-175	Zenit-2 No. 51	MIP-5	-	LCM/1	-	-	362	-	-
1967-F09	2435744.94	1967 Sep 1 1030	Vostokh 11k67	-	U 15001-03	Kosmos-175	Zenit-2 No. 51	MIP-5	-	LCM/1	-	-	362	-	-
1967-085	2435749.75	1967 Sep 16 0606:00	Vostokh 11k67	-	U 15001-06	Kosmos-177	Zenit-2 No. 53	MIP-5	-	LCM/1	-	-	275	-	-
1967-093	2435759.93	1967 Sep 26 1020	Vostokh 11k67	-	U 15001-07	Kosmos-180	Zenit-2 No. 54	MIP-5	-	LCM/1	-	-	348	-	-
1967-095	2435766.71	1967 Oct 3 0500:01	Molniya 8K78	M	U 15001-07	Molniya-1	Molniya-1 11F67 No. 9	MIP-5	-	LC1	-	-	39990	-	-
1967-097	2435774.98	1967 Oct 11 1130:04	Vostokh 11k67	-	U 15002-01 L83	Kosmos-181	Zenit-2 No. 55	MIP-5	-	LCM/1	-	-	324	-	-
1967-101	2435785.86	1967 Oct 22 0840:01	Molniya 8K78	M	U 15001-17	Molniya-1	Zenit-4 No. 36	MIP-5	-	LC31	-	-	336	-	-
1967-102	2435788.45	1967 Oct 27 0929:59	Vostok 8k92N	M	U 15000-56	Molniya-1	Molniya-1 11F67 No. 12	MIP-5	-	LCM/1	-	-	40911	-	-
1967-105	2435790.90	1967 Oct 27 0929:59	Soyuz 11k611	-	U 15000-05	Kosmos-184	Zenit-4 No. 36	MIP-5	-	LCM/1	-	-	713	-	-
1967-107	2435793.84	1967 Oct 30 0812:41	Soyuz 11k611	-	U 15000-05	Kosmos-186	Meteor 11F614 No. 8	MIP-5	-	LCM/1	-	-	254	-	-
1967-110	2435819.98	1967 Nov 25 1130	Vostokh 11k67	-	U 15001-07	Kosmos-188	Soyuz No. 5	MIP-5	-	LC1	-	-	337	-	-
1967-117	2435828.20	1967 Dec 3 1200	Vostokh 11k67	-	U 15001-16	Kosmos-190	Zenit-4 No. 35	MIP-5	-	LCM/1	-	-	356	-	-
1967-124	2435841.00	1968 Jan 16 1200:37	Vostokh 11k67	-	U 15002-03	Kosmos-193	Zenit-2 No. 58	MIP-5	-	LCM/1	-	-	328	-	-
1968-003	2435872.93	1968 Jan 16 1200:01	Vostokh 11k67	-	U 15002-03	Kosmos-194	Zenit-4								

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Launch	FlightCode	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee_Km	Range_Km	Dest
1988-029	243960.92	1988 Apr 14 10:00:00	Soyuz 11A511	-	Yai5000-09	Kosmos-212	Soyuz No. 8	-	-	MIP-5	LC31	-	-	204	-	-
1988-030	243961.90	1988 Apr 15 09:34:18	Soyuz 11A511	-	U 15000-06	Kosmos-213	Soyuz No. 7	-	-	MIP-5	LC31	-	-	276	-	-
1988-032	243964.94	1988 Apr 18 10:30:01	Voskhod 11A57	-	V 15000-12	Kosmos-214	Zenit-4 No. 45	-	-	MIP-53	LCM/1	-	-	373	-	-
1988-034	243966.94	1988 Apr 20 10:30:01	Voskhod 11A57	-	Yai5000-01	Kosmos-216	Zenit-2 No. 62	-	-	MIP-5	LC31	-	-	270	-	-
1988-035	243967.68	1988 Apr 21 04:20:01	Molniya KR78M	-	Yai5000-02	Molniya-1	Molniya-1 11F67 No. 10	-	-	MIP-5	LC31	-	-	40089	-	-
1988-045	244008.98	1988 Jun 1 10:50	Voskhod 11A57	-	V 15000-13	Kosmos-223	Zenit-2 No. 63	-	-	MIP-53	LCM/1	-	-	334	-	-
1988-046	244001.78	1988 Jun 4 06:45:02	Voskhod 11A57	-	V 15000-13	Kosmos-224	Zenit-4 No. 46	-	-	MIP-5	LC31	-	-	337	-	-
1988-049	244020.25	1988 Jun 12 13:14:59	Vostok 8A92M	-	R 15000-58	Kosmos-226	Meteor No. 10	-	-	MIP-53	LCM/1	-	-	712	-	-
1988-051	244025.76	1988 Jun 18 06:15:06	Voskhod 11A57	-	V 15000-11	Kosmos-227	Zenit-4 No. 44	-	-	MIP-5	LC31	-	-	275	-	-
1988-053	244029.00	1988 Jun 26 11:00:03	Voskhod 11A57	-	Yai5000-12	Kosmos-228	Zenit-2M	-	-	MIP-5	LC31	-	-	258	-	-
1988-054	244033.96	1988 Jun 26 12:00:03	Voskhod 11A57	-	Yai5000-15	Kosmos-229	Zenit-4 No. 41	-	-	MIP-53	LCM/1	-	-	329	-	-
1988-058	244043.43	1988 Jul 5 15:25:59	Molniya KR78M	-	Yai5000-84	Molniya-1	Molniya-1 11F67 No. 13	-	-	MIP-5	LC31	-	-	40085	-	-
1988-058	244048.33	1988 Jul 10 19:49:58	Voskhod 11A57	-	Yai5000-03	Kosmos-231	Zenit-2 No. 64	-	-	MIP-5	LC31	-	-	346	-	-
1988-060	244054.05	1988 Jul 16 13:10:00	Voskhod 11A57	-	V 15000-14	Kosmos-232	Zenit-4 No. 47	-	-	MIP-53	LCM/1	-	-	335	-	-
1988-062	244065.94	1988 Jul 30 07:00:00	Voskhod 11A57	-	Yai5000-16	Kosmos-234	Zenit-4 No. 42	-	-	MIP-5	LC31	-	-	292	-	-
1988-067	244077.79	1988 Aug 9 07:00:00	Voskhod 11A57	-	Yai5000-17	Kosmos-235	Zenit-2 No. 61	-	-	MIP-53	LCM/1	-	-	340	-	-
1988-071	244096.02	1988 Aug 27 12:29:59	Voskhod 11A57	-	V 15000-13	Kosmos-237	Zenit-4 No. 43	-	-	MIP-53	LCM/1	-	-	357	-	-
1988-072	244096.92	1988 Aug 28 10:00:00	Soyuz 11A511	-	V 15000-13	Kosmos-238	Soyuz No. 9	-	-	MIP-5	LC31	-	-	253	-	-
1988-073	244094.79	1988 Sep 14 06:50:00	Voskhod 11A57	-	V 15000-15	Kosmos-239	Zenit-4 No. 48	-	-	MIP-5	LC31	-	-	282	-	-
1988-075	244013.78	1988 Sep 14 06:50:00	Voskhod 11A57	-	V 15000-16	Kosmos-240	Zenit-2 No. 66	-	-	MIP-5	LC31	-	-	311	-	-
1988-077	244016.02	1988 Sep 16 12:30:01	Voskhod 11A57	-	V 15000-16	Kosmos-241	Zenit-4 No. 49	-	-	MIP-53	LCM/1	-	-	324	-	-
1988-080	244022.82	1988 Sep 23 07:39:59	Voskhod 11A57	-	R 15000-08	Kosmos-243	Zenit-2M	-	-	MIP-53	LCM/1	-	-	317	-	-
1988-085	244034.52	1988 Oct 5 03:32:00	Molniya KR78M	-	V 15000-08	Kosmos-246	Molniya-1 11F67 No. 14	-	-	MIP-5	LC31	-	-	40588	-	-
1988-087	244037.00	1988 Oct 7 12:05:46	Voskhod 11A57	-	V 15000-11	Kosmos-247	Zenit-4 No. 51	-	-	MIP-53	LCM/1	-	-	334	-	-
1988-088	244041.00	1988 Oct 11 12:05:01	Voskhod 11A57	-	Yai5000-02	Kosmos-247	Zenit-2 No. 65	-	-	MIP-53	LCM/1	-	-	388	-	-
1988-088	244041.88	1988 Oct 11 12:05:01	Soyuz 11A511	-	Yai5000-08	Soyuz-2	Soyuz No. 11	-	-	MIP-5	LC31	-	-	232	-	-
1988-093	244054.88	1988 Oct 25 09:00:00	Voskhod 11A57	-	R 15000-010	Kosmos-251	Zenit-4M	-	-	MIP-5	LC31	-	-	354	-	-
1988-094	244056.88	1988 Oct 26 08:34:18	Voskhod 11A57	-	V 15000-010	Kosmos-251	Zenit-2 No. 67	-	-	MIP-53	LCM/1	-	-	336	-	-
1988-102	244074.00	1988 Oct 31 09:14:55	Voskhod 11A57	-	V 15000-06	Kosmos-253	Zenit-4 No. 50	-	-	MIP-53	LCM/1	-	-	335	-	-
1988-104	244082.01	1988 Nov 21 12:10:01	Voskhod 11A57	-	V 15000-07	Kosmos-254	Zenit-2 No. 68	-	-	MIP-53	LCM/1	-	-	316	-	-
1988-105	244090.93	1988 Nov 29 12:40:34	Voskhod 11A57	-	V 15000-07	Kosmos-255	Zenit-2 No. 69	-	-	MIP-53	LCM/1	-	-	306	-	-
1988-111	244020.85	1988 Dec 16 09:25:00	Voskhod 11A57	-	Yai5000-039	Kosmos-256	Molniya-1ru 11F67 No. 15	-	-	MIP-5	LC31	-	-	396	-	-
1988-115	244026.99	1988 Dec 16 09:25:00	Molniya KR78M	-	V 15000-039	Kosmos-260	Molniya-1ru 11F67 No. 15	-	-	MIP-5	LC31	-	-	396	-	-
1989-001	244026.77	1989 Jan 5 06:28:05	Voskhod 11A57	VL	Venara-5	Venara-5	4Y-1 No. 330	-	-	MIP-5	LC31	-	-	388	-	-
1989-002	244031.74	1989 Jan 10 05:51:52	Molniya KR78M	-	V 15000-072	Kosmos-276	Zenit-2 No. 55	-	-	MIP-53	LCM/1	-	-	305	-	-
1989-003	244034.01	1989 Jan 10 05:51:52	Molniya KR78M	-	V 15000-072	Kosmos-276	Zenit-2 No. 55	-	-	MIP-53	LCM/1	-	-	305	-	-
1989-004	244034.81	1989 Jan 12 12:10:00	Voskhod 11A57	-	Yai5000-02	Kosmos-283	Zenit-2 No. 70	-	-	MIP-53	LCM/1	-	-	150000	-	-
1989-005	244036.50	1989 Jan 14 07:30:00	Soyuz 11A511	-	Yai5000-012	Kosmos-283	Zenit-2 No. 70	-	-	MIP-53	LCM/1	-	-	356	-	-
1989-006	244038.49	1989 Jan 23 09:15:00	Soyuz 11A511	-	Yai5000-011	Soyuz-4	Soyuz No. 12	-	-	MIP-5	LC31	-	-	224	-	-
1989-008	244042.89	1989 Jan 23 09:15:00	Voskhod 11A57	-	V 15000-011	Soyuz-5	Soyuz No. 13	-	-	MIP-5	LC31	-	-	237	-	-
1989-010	244054.01	1989 Feb 1 12:11:00	Vostok 8A92M	-	V 15000-060	Kosmos-284	Zenit-4M	-	-	MIP-5	LC31	-	-	321	-	-
1989-015	244072.95	1989 Feb 25 10:20:01	Voskhod 11A57	-	V 15000-060	Kosmos-286	Zenit-2 No. 71	-	-	MIP-53	LCM/1	-	-	1507	-	-
1989-017	244077.85	1989 Feb 26 08:30:01	Voskhod 11A57	-	V 15002-003	Kosmos-267	Zenit-2 No. 71	-	-	MIP-53	LCM/1	-	-	336	-	-
1989-022	244087.01	1989 Mar 6 12:15:00	Voskhod 11A57	-	V 15002-014	Kosmos-270	Zenit-4 No. 54	-	-	MIP-5	LC31	-	-	330	-	-
1989-023	244086.01	1989 Mar 6 12:15:00	Voskhod 11A57	-	V 15002-014	Kosmos-270	Zenit-4 No. 54	-	-	MIP-53	LCM/1	-	-	219	-	-
1989-026	244096.01	1989 Mar 22 12:15:00	Voskhod 11A57	-	V 15002-002	Kosmos-271	Zenit-4 No. 53	-	-	MIP-53	LCM/1	-	-	219	-	-
1989-027	244093.01	1989 Mar 22 12:15:00	Voskhod 11A57	-	V 15002-002	Kosmos-271	Zenit-4 No. 53	-	-	MIP-53	LCM/1	-	-	219	-	-
1989-028	244094.52	1989 Mar 25 10:10:00	Voskhod 11A57	-	V 15002-009	Kosmos-273	Zenit-4 No. 57	-	-	MIP-53	LCM/1	-	-	335	-	-
1989-029	244094.52	1989 Mar 25 10:10:00	Voskhod 11A57	-	V 15002-008	Kosmos-274	Zenit-4 No. 59	-	-	MIP-53	LCM/1	-	-	335	-	-
1989-032	244031.04	1989 Mar 26 10:30:00	Vostok 8A92M	-	R 15002-005	Kosmos-274	Zenit-4 No. 59	-	-	MIP-53	LCM/1	-	-	335	-	-
1989-033	244031.04	1989 Mar 26 10:30:00	Voskhod 11A57	-	V 15002-015	Kosmos-276	Meteor 11F61A8 No. 12	-	-	MIP-53	LCM/1	-	-	335	-	-
1989-034	244032.04	1989 Apr 5 12:00:01	Voskhod 11A57	-	V 15002-015	Kosmos-276	Zenit-2 No. 55	-	-	MIP-53	LCM/1	-	-	305	-	-
1989-035	244032.04	1989 Apr 5 12:00:01	Molniya KR78M	-	V 15002-015	Kosmos-276	Zenit-2 No. 55	-	-	MIP-53	LCM/1	-	-	305	-	-
1989-036	244032.91	1989 Apr 15 09:45:15	Voskhod 11A57	-	Yai5000-084	Kosmos-278	Zenit-2 No. 78	-	-	MIP-53	LCM/1	-	-	318	-	-
1989-038	244032.84	1989 Apr 15 09:45:15	Voskhod 11A57	-	Yai5000-084	Kosmos-278	Zenit-2 No. 78	-	-	MIP-53	LCM/1	-	-	318	-	-
1989-040	244036.94	1989 Apr 23 09:15:00	Voskhod 11A57	-	V 15000-007	Molniya-1	Molniya-1 11F67 No. 16	-	-	MIP-5	LC31	-	-	40083	-	-
1989-042	244038.91	1989 Apr 23 09:15:00	Voskhod 11A57	-	V 15000-007	Molniya-1	Zenit-4M	-	-	MIP-5	LC31	-	-	214	-	-
1989-043	244038.91	1989 Apr 23 09:15:00	Voskhod 11A57	-	V 15000-007	Molniya-1	Zenit-4M	-	-	MIP-5	LC31	-	-	214	-	-
1989-044	244038.91	1989 Apr 23 09:15:00	Voskhod 11A57	-	V 15000-007	Molniya-1	Zenit-4M	-	-	MIP-5	LC31	-	-	214	-	-
1989-044	244038.91	1989 Apr 23 09:15:00	Voskhod 11A57	-	V 15000-007	Molniya-1	Zenit-4M	-	-	MIP-5	LC31	-	-	214	-	-
1989-044	244038.91	1989 Apr 23 09:15:00	Voskhod 11A57	-	V 15000-007	Molniya-1	Zenit-4M	-	-	MIP-5	LC31	-	-	214	-	-
1989-044	244038.91	1989 Apr 23 09:15:00	Voskhod 11A57	-	V 15000-007	Molniya-1	Zenit-4M	-	-	MIP-5	LC31	-	-	214	-	-
1989-044	244038.91	1989 Apr 23 09:15:00	Voskhod 11A57	-	V 15000-007	Molniya-1	Zenit-4M	-	-	MIP-5	LC31	-	-	214	-	-
1989-044	244038.91	1989 Apr 23 09:15:00	Voskhod 11A57	-	V 15000-007	Molniya-1	Zenit-4M	-	-	MIP-5	LC31	-	-	214	-	-
1989-044	244038.91	1989 Apr 23 09:15:00	Voskhod 11A57	-	V 15000-007	Molniya-1	Zenit-4M	-	-	MIP-5	LC31	-	-	214	-	-
1989-044	244038.91	1989 Apr 23 09:15:00	Voskhod 11A57	-	V 15000-007	Molniya-1	Zenit-4M	-	-	MIP-5	LC31	-	-			

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Launch	FlightCode	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee_Km	Range_Km	Dest
1970-026	2440684.93	1970 Apr 8 10:15:20	Voshkod 11A57	-	Yu15001-018	Kosmos-331	Zenit-4 No. 66	-	-	MIP-5	LC31	-	-	323	-	-
1970-030	2440691.88	1970 Apr 28 10:50:01	Voshkod 11A57	-	Yu15003-044	Kosmos-333	Zenit-4M	-	-	MIP-53	LC31/1	-	-	370	-	-
1970-037	2440704.95	1970 Apr 28 10:50:00	Vostok 8A92A	-	Yu15003-062	Meteor	Meteor 11F614H No. 13	-	-	MIP-53	LC31/1	-	-	784	-	-
1970-038	2440718.92	1970 May 12 10:10:01	Voshkod 11A57	-	Yu15001-003	Kosmos-344	Zenit-2 No. 81	-	-	MIP-53	LC31	-	-	327	-	-
1970-041	2440739.29	1970 Jun 10 09:30:00	Soyuz 11A511	-	Yu15002-019	Kosmos-345	Zenit-4 No. 77	-	-	MIP-5	LC31	-	-	285	-	-
1970-042	2440747.90	1970 Jun 10 09:30:01	Voshkod 11A57	-	Yu15002-014	Kosmos-346	Soyuz No. 17	-	-	MIP-5	LC31	-	-	289	-	-
1970-045	2440755.04	1970 Jun 17 12:59:57	Voshkod 11A57	-	Yu15002-005	Kosmos-349	Zenit-4 No. 72	-	-	MIP-53	LC31/1	-	-	334	-	-
1970-047	2440761.09	1970 Jun 23 14:15:00	Vostok 8A92A	-	Yu15002-063	Meteor	Zenit-4 No. 17	-	-	MIP-53	LC31/1	-	-	931	-	-
1970-049	2440764.64	1970 Jun 26 12:00:01	Voshkod 11A57	ML	Yu15000-069	Molniya-1	Molniya-1 11F67 No. 21	-	-	MIP-53	LC31/1	-	-	40100	-	-
1970-050	2440774.94	1970 Jul 7 10:30:01	Voshkod 11A57	-	KR16001-036	Kosmos-350	Zenit-2M	-	-	MIP-5	LC31	-	-	302	-	-
1970-053	2440777.07	1970 Jul 21 12:30:01	Voshkod 11A57	-	Yu15002-018	Kosmos-352	Zenit-2M	-	-	MIP-53	LC31/1	-	-	507	-	-
1970-056	2440785.92	1970 Aug 7 09:30:00	Voshkod 11A57	ML	Yu15002-026	Kosmos-353	Zenit-4 No. 76	-	-	MIP-53	LC31/1	-	-	302	-	-
1970-060	2440805.96	1970 Aug 17 05:38:22	Voshkod 11A57	-	Yu15002-017	Kosmos-355	4V-1 No. 630	-	-	MIP-53	LC31/1	-	-	507	-	-
1970-062	2440815.73	1970 Aug 22 05:36:09	Molniya 8K78A	ML	Yu15002-028	Kosmos-353	Zenit-4 No. 76	-	-	MIP-53	LC31/1	-	-	325	-	-
1970-065	2440820.20	1970 Aug 29 08:30:00	Voshkod 11A57	-	Yu15002-016	Kosmos-353	4V-1 No. 631	-	-	MIP-53	LC31/1	-	-	150000	-	-
1970-067	2440827.94	1970 Sep 8 10:30:00	Voshkod 11A57	-	KR16002-046	Kosmos-360	Zenit-4M	-	-	MIP-5	LC31	-	-	890	-	-
1970-071	2440837.94	1970 Sep 22 08:14:01	Voshkod 11A57	-	KR16002-045	Kosmos-361	Zenit-4M	-	-	MIP-5	LC31	-	-	315	-	-
1970-074	2440842.94	1970 Sep 27 10:10:01	Voshkod 11A57	-	KR16001-034	Kosmos-363	Zenit-2M	-	-	MIP-53	LC31/1	-	-	352	-	-
1970-077	2440846.94	1970 Sep 29 06:14:01	Voshkod 11A57	ML	Yu15000-003	Kosmos-364	Zenit-2M	-	-	MIP-53	LC31/1	-	-	283	-	-
1970-078	2440850.94	1970 Oct 1 08:20:03	Voshkod 11A57	-	Yu15000-029	Kosmos-366	Molniya-1 11F67 No. 19	-	-	MIP-53	LC31/1	-	-	40174	-	-
1970-080	2440858.94	1970 Oct 8 12:39:02	Voshkod 11A57	-	KR16002-049	Kosmos-368	Zenit-2M (Blon)	-	-	MIP-5	LC31	-	-	402	-	-
1970-082	2440866.96	1970 Oct 9 11:04:58	Voshkod 11A57	-	KR16002-049	Kosmos-370	Zenit-4M	-	-	MIP-5	LC31	-	-	286	-	-
1970-084	2440880.96	1970 Oct 30 13:20:00	Voshkod 11A57	-	KR16001-065	Kosmos-376	Zenit-4M	-	-	MIP-53	LC31/1	-	-	735	-	-
1970-086	2440891.59	1970 Nov 11 09:20:01	Voshkod 11A57	-	KR16001-035	Kosmos-377	Zenit-2M	-	-	MIP-5	LC31	-	-	285	-	-
1970-089	2440914.72	1970 Nov 24 05:15:01	Soyuz 11A511L	-	Yu15000-016	Kosmos-379	L2K No. 1	-	-	MIP-5	LC31	-	-	14041	-	-
1970-101	2440916.16	1970 Dec 2 13:55:19	Voshkod 11A57	-	KR15000-095	Kosmos-383	Molniya-1 11F67 No. 23	-	-	MIP-53	LC31/1	-	-	40164	-	-
1970-104	2440924.06	1970 Dec 7 15:47:17	Voshkod 11A57	-	KR15000-004	Kosmos-383	Zenit-4M	-	-	MIP-53	LC31/1	-	-	332	-	-
1970-110	2440930.90	1970 Dec 15 10:00:00	Voshkod 11A57	-	KR16002-051	Kosmos-384	Zenit-2M	-	-	MIP-53	LC31/1	-	-	289	-	-
1970-113	2440935.92	1970 Dec 18 16:15:00	Voshkod 11A57	-	KR16002-051	Kosmos-386	Zenit-4M	-	-	MIP-5	LC31	-	-	462	-	-
1970-114	2440938.94	1970 Dec 25 05:50:02	Voshkod 11A57	-	Yu15000-006	Kosmos-389	Isellina-D No. Yu2250-01	-	-	MIP-53	LC31/1	-	-	730	-	-
1971-001	2440945.86	1971 Jan 12 09:30:01	Voshkod 11A57	-	Yu15000-078 94	Kosmos-390	Zenit-4M	-	-	MIP-5	LC31	-	-	39200	-	-
1971-003	2440963.90	1971 Jan 20 11:24:00	Vostok 8A92A	-	KR15000-005	Meteor	Meteor-M No. 19	-	-	MIP-5	LC31/1	-	-	340	-	-
1971-004	2440971.96	1971 Jan 21 08:40:00	Voshkod 11A57	-	KR16001-038	Kosmos-392	Zenit-2M	-	-	MIP-5	LC31	-	-	736	-	-
1971-014	2441001.95	1971 Feb 18 13:59:59	Voshkod 11A57	-	KR16002-048	Kosmos-396	Zenit-4M	-	-	MIP-5	LC31	-	-	286	-	-
1971-016	2441013.90	1971 Feb 26 08:36:21	Soyuz 11A511L	-	Yu15000-015	Kosmos-396	Zenit-2M	-	-	MIP-53	LC31/1	-	-	286	-	-
1971-017	2441013.90	1971 Feb 26 08:36:21	Voshkod 11A57	-	Yu15000-015	Kosmos-396	Zenit-4M	-	-	MIP-5	LC31	-	-	10905	-	-
1971-023	2441037.95	1971 Mar 5 10:21:59	Voshkod 11A57	-	KR16001-057	Kosmos-399	Zenit-2M	-	-	MIP-5	LC31	-	-	546	-	-
1971-026	2441043.95	1971 Apr 2 02:00:00	Vostok 8A92A	-	KR16001-039	Kosmos-401	Zenit-2M	-	-	MIP-53	LC31/1	-	-	437	-	-
1971-029	2441048.95	1971 Apr 14 11:00:00	Voshkod 11A57	-	KR16001-039	Kosmos-403	Zenit-4M	-	-	MIP-53	LC31/1	-	-	437	-	-
1971-031	2441058.95	1971 Apr 22 03:54:56	Vostok 8A92A	-	Yu15000-054	Kosmos-406	Teellina-D	-	-	MIP-53	LC31/1	-	-	729	-	-
1971-034	2441077.92	1971 Apr 27 08:30:00	Voshkod 11A57	-	Yu15000-025	Kosmos-406	Zenit-4M	-	-	MIP-53	LC31/1	-	-	383	-	-
1971-048	2441098.94	1971 May 8 08:30:00	Voshkod 11A57	-	Yu15002-065	Kosmos-424	Zenit-4M	-	-	MIP-53	LC31/1	-	-	739	-	-
1971-053	2441120.92	1971 Jun 1 04:59:00	Soyuz 11A511	-	KR15002-065	Kosmos-424	Soyuz 7T-UK No. 32	-	-	MIP-53	LC31/1	-	-	361	-	-
1971-055	2441126.92	1971 Jun 24 07:59:59	Voshkod 11A57	-	Yu15000-024	Kosmos-427	Zenit-4M	-	-	MIP-5	LC31	-	-	287	-	-
1971-056	2441127.94	1971 Jun 25 10:30:01	Voshkod 11A57	-	Yu15000-024	Kosmos-428	Zenit-2M	-	-	MIP-5	LC31	-	-	207	-	-
1971-059	2441148.97	1971 Jul 16 01:41:36	Vostok 8A92A	-	KR14322-235	Meteor	Zenit-4M	-	-	MIP-53	LC31/1	-	-	720	-	-
1971-061	2441152.92	1971 Jul 20 10:00:00	Voshkod 11A57	-	Yu15002-065	Kosmos-429	Zenit-4M	-	-	MIP-5	LC31	-	-	365	-	-
1971-062	2441160.95	1971 Jul 23 11:00:00	Voshkod 11A57	-	Yu15002-065	Kosmos-430	Zenit-4M	-	-	MIP-53	LC31/1	-	-	333	-	-
1971-064	2441160.95	1971 Jul 23 11:00:00	Molniya 8K78A	-	KR15000-096	Molniya-1	Molniya-1 11F67 No. 20	-	-	MIP-53	LC31/1	-	-	40115	-	-
1971-065	2441162.95	1971 Jul 30 08:29:54	Voshkod 11A57	-	KR14321-141	Kosmos-431	Zenit-2M	-	-	MIP-5	LC31/1	-	-	284	-	-
1971-066	2441168.92	1971 Aug 5 10:00:00	Voshkod 11A57	-	Yu15000-017	Kosmos-434	Zenit-4M	-	-	MIP-5	LC31	-	-	316	-	-
1971-069	2441173.73	1971 Aug 12 05:30:00	Soyuz 11A511L	-	KR16001-040	Kosmos-434	TK No. 3	-	-	MIP-5	LC31	-	-	11821	-	-
1971-070	2441182.77	1971 Aug 19 08:30:00	Voshkod 11A57	-	KR16001-040	Kosmos-434	Zenit-4M	-	-	MIP-5	LC31	-	-	487	-	-
1971-079	2441209.04	1971 Sep 14 13:00:29	Voshkod 11A57	-	Yu15002-042	Kosmos-438	Zenit-4M	-	-	MIP-53	LC31/1	-	-	301	-	-
1971-081	2441216.00	1971 Sep 21 12:00:00	Voshkod 11A57	-	Yu15002-042	Kosmos-438	Zenit-4M	-	-	MIP-53	LC31/1	-	-	342	-	-
1971-082	2441222.92	1971 Sep 28 07:40:00	Voshkod 11A57	-	Yu15002-042	Kosmos-441	Zenit-4M	-	-	MIP-53	LC31/1	-	-	405	-	-
1971-084	2441232.98	1971 Sep 29 11:30:00	Voshkod 11A57	-	Yu15002-042	Kosmos-442	Zenit-4M	-	-	MIP-53	LC31/1	-	-	331	-	-
1971-085	2441232.02	1971 Oct 7 13:30:00	Voshkod 11A57	-	Yu15002-042	Kosmos-443	Zenit-4M	-	-	MIP-53	LC31/1	-	-	306	-	-
1971-088	2441258.18	1971 Oct 14 09:00:01	Voshkod 11A57	-	Yu15002-042	Kosmos-462	Zenit-4M	-	-	MIP-53	LC31/1	-	-	444	-	-
1971-094	2441272.00	1971 Nov 2 14:25:02	Voshkod 11A57	-	Yu15002-042	Kosmos-464	Zenit-4M	-	-	MIP-53	LC31/1	-	-	496	-	-
1971-098	2441279.00	1971 Nov 24 09:30:02	Molniya 8K78A	-	Yu15000-092	Kosmos-466	Zenit-4M	-	-	MIP-53	LC31/1	-	-	357	-	-
1971-101	2441289.94	1971 Dec 3 13:00:01	Voshkod 11A57	-	KR14321-137	Molniya-2	Molniya-2	-	-	MIP-53	LC31/1	-	-	40124	-	-
1971-107	2441291.90	1971 Dec 6 09:50:01	Voshkod 11A57	-	KR16002-053	Kosmos-463	Zenit-4M	-	-	MIP-53	LC31	-	-	294	-	-
1971-108	2441295.96	1971 Dec 10 11:00:00	Voshkod 11A57	-	KR14322-238	Kosmos-464	Zenit-4M	-	-	MIP-53	LC31/1	-	-	390	-	-
1971-112	2441300.90	1971 Dec 16 09:39:59	Voshkod 11A57	-	KR14322-236	Kosmos-466	Zenit-4M	-	-	MIP-53	LC31	-	-	375	-	-
1971-115	2441305.45	1971 Dec 27 14:04:51	Molniya 8K78A	-	Yu15001-497	Molniya-1	Molniya-1 11F67 No. 25	-	-	MIP-						

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Mission	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee_Km	Range_Km	Dest
1972-022	2441407.09	1972 Mar 30 1405:01	Vostok 8A92M	-	7702421-354	Meteor	Meteor-NV No. 23	MIP-53	LC61/1	-	-	931	-	-
1972-023	2441410.67	1972 Mar 31 0402:33	Molniya 8K78M	MVL	7801421-513	Kosmos-482	Zenit-4M	MIP-5	LC31	-	-	9801	-	-
1972-024	2441410.93	1972 Apr 3 1015:00	Vostokh 11A57	-	7801422-245	Kosmos-483	Zenit-4M	MIP-53	LC61/1	-	-	333	-	-
1972-025	2441412.36	1972 Apr 4 0800:30	Molniya 8K78M	-	7801422-246	Molniya-1	Molniya-1 11F67 No. 27	MIP-53	LC63/4	-	-	40136	-	-
1972-026	2441413.53	1972 Apr 6 0800:00	Vostokh 11A57	-	7801421-139	Kosmos-484	Zenit-2M	MIP-53	LC63/3	-	-	235	-	-
1972-027	2441414.52	1972 Apr 7 1000:00	Vostokh 11A57	-	7801421-140	Interkosmos-6	Progruz	MIP-5	LC31	-	-	335	-	-
1972-028	2441421.54	1972 Apr 14 0004:36	Molniya 8K78M	SUL	7801421-141	Kosmos-486	SO No. 501	MIP-5	LC31	-	-	150000	-	-
1972-029	2441421.83	1972 Apr 14 0800:00	Vostokh 11A57	-	7801422-253	Kosmos-488	Zenit-4M	MIP-53	LC63/3	-	-	315	-	-
1972-030	2441422.37	1972 May 5 1120:00	Vostokh 11A57	-	7702424-717	Kosmos-488	Zenit-4M	MIP-53	LC63/3	-	-	360	-	-
1972-031	2441424.93	1972 May 17 1030:59	Molniya 8K78M	-	7701421-140	Kosmos-490	Zenit-2M	MIP-53	LC63/4	-	-	338	-	-
1972-032	2441427.79	1972 May 25 0635:00	Vostokh 11A57	-	7801422-244	Kosmos-491	Molniya-2	MIP-53	LC63/3	-	-	40139	-	-
1972-033	2441428.11	1972 Jun 9 0639:59	Vostokh 11A57	-	7702423-250	Kosmos-492	Zenit-4M	MIP-5	LC31	-	-	402	-	-
1972-034	2441429.77	1972 Jun 21 1119:57	Vostokh 11A57	-	7801421-142	Kosmos-493	Zenit-4M	MIP-5	LC31	-	-	334	-	-
1972-035	2441431.97	1972 Jun 23 1119:57	Vostokh 11A57	-	7801422-259	Kosmos-495	Zenit-2M	MIP-53	LC63/3	-	-	358	-	-
1972-036	2441435.12	1972 Jun 26 1465:00	Soyuz 11A511	-	7801422-259	Kosmos-496	Zenit-4M	MIP-53	LC63/3	-	-	358	-	-
1972-037	2441437.66	1972 Jun 29 0347:35	Molniya 8K78M	SUL	7801422-259	Progruz-2	Soyuz 7k-T No. 33A	MIP-5	LC31	-	-	150000	-	-
1972-038	2441439.29	1972 Jun 30 1622:01	Vostok 8A92M	-	7801421-353	Meteor	SO-K No. 503	MIP-5	LC31	-	-	943	-	-
1972-039	2441440.94	1972 Jul 1 1040:00	Vostokh 11A57	-	7702423-246	Kosmos-499	Zenit-4M	MIP-53	LC61/1	-	-	285	-	-
1972-040	2441451.10	1972 Jul 13 1430:25	Soyuz 11A511M	-	7801423-246	Kosmos-502	Zenit-4M	MIP-53	LC31	-	-	308	-	-
1972-041	2441451.07	1972 Jul 19 1345:00	Vostokh 11A57	-	78033-267	Kosmos-503	Zenit-4M	MIP-53	LC63/4	-	-	320	-	-
1972-042	2441452.36	1972 Jul 28 1019:00	Vostokh 11A57	-	7702421-143	Kosmos-512	Zenit-2M	MIP-53	LC63/4	-	-	274	-	-
1972-043	2441453.94	1972 Aug 2 0815:00	Vostokh 11A57	-	78033-266	Kosmos-513	Zenit-4M	MIP-53	LC31	-	-	462	-	-
1972-044	2441454.93	1972 Aug 8 1000:00	Vostokh 11A57	-	7702424-718	Kosmos-515	Zenit-4M	MIP-53	LC63/4	-	-	332	-	-
1972-045	2441457.92	1972 Aug 18 0639:59	Vostokh 11A57	-	7702421-144	Kosmos-517	Zenit-2M	MIP-53	LC63/4	-	-	290	-	-
1972-046	2441458.55	1972 Sep 2 1049:59	Vostokh 11A57	-	78033-271	Kosmos-518	Zenit-4M	MIP-53	LC63/4	-	-	507	-	-
1972-047	2441457.85	1972 Sep 15 0940:00	Vostokh 11A57	-	78033-265	Kosmos-519	Zenit-4M	MIP-53	LC63/4	-	-	307	-	-
1972-048	2441458.30	1972 Sep 16 0820:00	Vostokh 11A57	-	78033-265	Kosmos-520	Zenit-4M	MIP-53	LC31	-	-	489	-	-
1972-049	2441459.29	1972 Sep 19 1919:03	Molniya 8K78M	2BL	S 15000-100	Kosmos-520	Molniya-2	MIP-53	LC61/1	-	-	39477	-	-
1972-050	2441501.35	1972 Sep 30 2019:01	Molniya 8K78M	-	S 15000-106	Kosmos-522	Zenit-4M	MIP-53	LC61/1	-	-	40123	-	-
1972-051	2441502.10	1972 Oct 4 1200:02	Vostokh 11A57	-	78033-272	Kosmos-522	Zenit-4M	MIP-53	LC61/1	-	-	480	-	-
1972-052	2441504.76	1972 Oct 14 1616:00	Molniya 8K78M	-	7705711-486	Molniya-1	Molniya-1 11F67 No. 26	MIP-53	LC61/1	-	-	40182	-	-
1972-053	2441509.00	1972 Oct 18 1159:59	Vostokh 11A57	-	76043-161	Kosmos-525	Zenit-2M	MIP-53	LC63/4	-	-	291	-	-
1972-054	2441511.42	1972 Oct 26 2205:01	Vostokh 11A57	-	78033-279	Meteor	Zenit-4M	MIP-53	LC63/4	-	-	926	-	-
1972-055	2441522.96	1972 Oct 31 1329:59	Vostokh 11A57	-	78033-151	Kosmos-527	Zenit-4M	MIP-53	LC63/4	-	-	341	-	-
1972-056	2441546.58	1972 Nov 25 0910:01	Vostokh 11A57	-	78033-151	Kosmos-537	Zenit-2M	MIP-5	LC31	-	-	308	-	-
1972-057	2441563.39	1972 Dec 2 0439:57	Vostokh 11A57	-	78033-151	Molniya-1	Molniya-1 11F67 No. 28	MIP-5	LC31	-	-	40164	-	-
1972-058	2441568.79	1972 Dec 12 0651:01	Molniya 8K78M	-	78043-157	Molniya-2	Molniya-2	MIP-53	LC63/4	-	-	40094	-	-
1972-059	2441666.07	1972 Dec 14 1340:02	Vostokh 11A57	-	78043-157	Kosmos-538	Zenit-4M	MIP-53	LC63/4	-	-	386	-	-
1972-060	2441678.94	1972 Dec 27 1030:04	Vostok 8A92M	-	78043-157	Kosmos-541	Zenit-4M	MIP-53	LC61/1	-	-	384	-	-
1972-061	2441679.96	1972 Dec 27 1030:04	Vostok 8A92M	-	78043-157	Kosmos-542	Zenit-4M	MIP-53	LC61/1	-	-	384	-	-
1972-062	2441693.52	1973 Jan 11 1000:00	Vostokh 11A57	-	S 15000-002	Kosmos-544	Zenit-4M	MIP-53	LC63/4	-	-	969	-	-
1972-063	2441716.14	1973 Feb 3 0430:00	Vostokh 11A57	-	78033-150	Kosmos-545	Zenit-4M	MIP-5	LC31	-	-	309	-	-
1972-064	2441728.58	1973 Feb 6 1315:55	Molniya 8K78M	-	78033-150	Kosmos-547	Zenit-4M	MIP-5	LC31	-	-	309	-	-
1972-065	2441731.92	1973 Feb 6 1315:55	Vostokh 11A57	-	7801422-257	Kosmos-546	Molniya-1 11F67 No. 31	MIP-5	LC63/4	-	-	40124	-	-
1972-066	2441737.87	1973 Mar 4 0920:02	Vostokh 11A57	-	78033-150	Progruz-3	SO-H No. 602	MIP-53	LC31	-	-	150000	-	-
1972-067	2441737.87	1973 Mar 4 0920:02	Vostokh 11A57	-	78033-150	Kosmos-550	Zenit-4M	MIP-53	LC31	-	-	431	-	-
1972-068	2441737.87	1973 Mar 4 0920:02	Vostokh 11A57	-	7702423-249	Kosmos-551	Zenit-4M	MIP-53	LC31	-	-	307	-	-
1972-069	2441763.92	1973 Mar 20 1100:02	Vostokh 11A57	-	78033-155	Meteor-5E2	Meteor-N No. 29	MIP-53	LC61/1	-	-	933	-	-
1972-070	2441777.97	1973 Mar 22 1010:00	Molniya 8K78M	-	78033-155	Molniya-2	Molniya-2	MIP-53	LC61/1	-	-	303	-	-
1972-071	2441777.97	1973 Mar 22 1010:00	Vostokh 11A57	-	78033-155	Molniya-2	Molniya-2	MIP-53	LC61/1	-	-	303	-	-
1972-072	2441777.97	1973 Mar 22 1010:00	Vostokh 11A57	-	78033-155	Molniya-2	Molniya-2	MIP-53	LC61/1	-	-	303	-	-
1972-073	2441777.97	1973 Mar 22 1010:00	Vostokh 11A57	-	78033-155	Molniya-2	Molniya-2	MIP-53	LC61/1	-	-	303	-	-
1972-074	2441777.97	1973 Mar 22 1010:00	Vostokh 11A57	-	78033-155	Molniya-2	Molniya-2	MIP-53	LC61/1	-	-	303	-	-
1972-075	2441777.97	1973 Mar 22 1010:00	Vostokh 11A57	-	78033-155	Molniya-2	Molniya-2	MIP-53	LC61/1	-	-	303	-	-
1972-076	2441777.97	1973 Mar 22 1010:00	Vostokh 11A57	-	78033-155	Molniya-2	Molniya-2	MIP-53	LC61/1	-	-	303	-	-
1972-077	2441777.97	1973 Mar 22 1010:00	Vostokh 11A57	-	78033-155	Molniya-2	Molniya-2	MIP-53	LC61/1	-	-	303	-	-
1972-078	2441777.97	1973 Mar 22 1010:00	Vostokh 11A57	-	78033-155	Molniya-2	Molniya-2	MIP-53	LC61/1	-	-	303	-	-
1972-079	2441777.97	1973 Mar 22 1010:00	Vostokh 11A57	-	78033-155	Molniya-2	Molniya-2	MIP-53	LC61/1	-	-	303	-	-
1972-080	2441777.97	1973 Mar 22 1010:00	Vostokh 11A57	-	78033-155	Molniya-2	Molniya-2	MIP-53	LC61/1	-	-	303	-	-
1972-081	2441777.97	1973 Mar 22 1010:00	Vostokh 11A57	-	78033-155	Molniya-2	Molniya-2	MIP-53	LC61/1	-	-	303	-	-
1972-082	2441777.97	1973 Mar 22 1010:00	Vostokh 11A57	-	78033-155	Molniya-2	Molniya-2	MIP-53	LC61/1	-	-	303	-	-
1972-083	2441777.97	1973 Mar 22 1010:00	Vostokh 11A57	-	78033-155	Molniya-2	Molniya-2	MIP-53	LC61/1	-	-	303	-	-
1972-084	2441777.97	1973 Mar 22 1010:00	Vostokh 11A57	-	78033-155	Molniya-2	Molniya-2	MIP-53	LC61/1	-	-	303	-	-
1972-085	2441777.97	1973 Mar 22 1010:00	Vostokh 11A57	-	78033-155	Molniya-2	Molniya-2	MIP-53	LC61/1	-	-	303	-	-
1972-086	2441777.97	1973 Mar 22 1010:00	Vostokh 11A57	-	78033-155	Molniya-2	Molniya-2	MIP-53	LC61/1	-	-	303	-	-
1972-087	2441777.97	1973 Mar 22 1010:00	Vostokh 11A57	-	78033-155	Molniya-2	Molniya-2	MIP-53	LC61/1	-	-	303	-	-
1972-088	2441777.97	1973 Mar 22 1010:00	Vostokh 11A57	-	78033-155	Molniya-2	Molniya-2	MIP-53	LC61/1	-	-	303	-	-
1972-089	2441777.97	1973 Mar 22 1010:00	Vostokh 11A57	-	78033-155	Molniya-2	Molniya-2	MIP-53	LC61/1	-	-	303	-	-
1972-090	2441777.97	1973 Mar 22 1010:00	Vostokh 11A57	-	78033-155	Molniya-2	Molniya-2	MIP-53	LC61/1	-	-	303	-	-
1972-091	2441777.97	1973 Mar 22 1010:00	Vostokh 11A57	-	78033-155	Molniya-2	Molniya-2	MIP-53	LC61/1	-	-	303	-	-
1972-092	2441777.97	1973 Mar 22 1010:00	Vostokh 11A57	-	78033-155	Molniya-2	Molniya-2	MIP-53	LC61/1	-	-	303	-	-
1972-093	2441777.97													

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight	Flight_ID	Launch	FlightCode	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee_Km	Range_Km	Dest
1973-089	2442001.36	1973 Nov 14 2040:02	Molniya EK78M	-	Molniya-1	78014 -215-15	Molniya-11F67 No. 32	-	-	MIP-5	LC1	-	-	40037	-	-
1973-092	2442001.92	1973 Nov 21 1000:00	Voskhod 11A57	-	Kosmos-609	78019 -177	Zent-4M	-	-	MIP-5	LC1	-	-	338	-	-
1973-095	2442014.99	1973 Nov 28 1143:05	Voskhod 11A57	-	Kosmos-612	78029 -759	Zent-4MK	-	-	MIP-53	LC63/4	-	-	345	-	-
1973-096	2442016.72	1973 Nov 30 0520:00	Soyuz 11A511	-	S 15000-029	77019 -850	Soyuz 7K-T No. 34A	-	-	MIP-53	LC1	-	-	397	-	-
1973-097	2442017.05	1973 Nov 30 1308:59	Molniya EK78M	-	Molniya-1	78043 -625	Zent-4MT	-	-	MIP-53	LC61/1	-	-	40937	-	-
1973-102	2442034.00	1973 Dec 18 1200:01	Soyuz 11A511M	-	Kosmos-616	78043 -625	Zent-4MT	-	-	MIP-53	LC61/1	-	-	330	-	-
1973-103	2442034.00	1973 Dec 18 1155:00	Soyuz 11A511	-	S 15000-028	78029 -755	Soyuz 7K-T No. 33	-	-	MIP-53	LC1	-	-	310	-	-
1973-105	2442038.02	1973 Dec 21 1230:00	Voskhod 11A57	-	Kosmos-625	78029 -755	Zent-4MK	-	-	MIP-53	LC63/4	-	-	40879	-	-
1973-106	2442041.37	1973 Dec 25 1117:00	Molniya EK78M	-	Kosmos-629	77019 -178	Zent-2M	-	-	MIP-53	LC63/4	-	-	332	-	-
1974-001	2442027.13	1974 Jan 24 1500:01	Voskhod 11A57	-	Kosmos-630	78033 -735	Zent-4MK	-	-	MIP-53	LC63/4	-	-	344	-	-
1974-004	2442030.87	1974 Feb 12 0856:00	Voskhod 11A57	-	Kosmos-632	78033 -735	Zent-4MK	-	-	MIP-53	LC31	-	-	382	-	-
1974-011	2442111.98	1974 Mar 5 1138:00	Vostok 8A92M	-	Meteor	78043 -350	Meteor-N No. 30	-	-	MIP-53	LC63/4	-	-	930	-	-
1974-014	2442120.94	1974 Mar 14 1029:59	Voskhod 11A57	-	Kosmos-638	78031 -191	Zent-2M	-	-	MIP-53	LC63/4	-	-	348	-	-
1974-016	2442126.85	1974 Mar 20 0830:00	Soyuz-U	-	Kosmos-638	A 15000-006	Zent-4MK	-	-	MIP-53	LC63/4	-	-	420	-	-
1974-018	2442440.81	1974 Apr 3 0730:00	Soyuz-U	-	Kosmos-638	A 15000-009	Soyuz 7K-TM No. 71-EPSA	-	-	MIP-53	LC63/4	-	-	353	-	-
1974-019	2442440.81	1974 Apr 4 0830	Voskhod 11A57	-	Kosmos-632	78031 -192	Zent-4MK	-	-	MIP-53	LC61/1	-	-	402	-	-
1974-021	2442449.02	1974 Apr 11 1222:59	Voskhod 11A57	-	Kosmos-636	78031 -192	Zent-4MK	-	-	MIP-53	LC63/4	-	-	225	-	-
1974-022	2442449.83	1974 Apr 12 0800:01	Voskhod 11A57	-	Kosmos-638	7702421-516	Zent-4MK	-	-	MIP-53	LC63/4	-	-	1707	-	-
1974-023	2442458.37	1974 Apr 20 2055:44	Molniya EK78M	ML	Meteor	78033 -347	Meteor-N No. 22	-	-	MIP-53	LC63/4	-	-	40904	-	-
1974-025	2442461.99	1974 Apr 24 1150:00	Vostok 8A92M	-	Kosmos-649	78029 -554	Zent-4MK	-	-	MIP-53	LC63/4	-	-	927	-	-
1974-026	2442464.10	1974 Apr 26 1422:59	Molniya EK78M	-	Kosmos-649	78043 -737 ?	Zent-4MK	-	-	MIP-53	LC61/1	-	-	41093	-	-
1974-027	2442467.06	1974 Apr 29 1329:59	Voskhod 11A57	-	Kosmos-652	78031 -193	Zent-4MK	-	-	MIP-53	LC63/4	-	-	289	-	-
1974-030	2442463.82	1974 May 15 0830:00	Soyuz-U	-	Kosmos-653	A 15000-008	Zent-2M	-	-	MIP-53	LC31	-	-	441	-	-
1974-031	2442463.82	1974 May 15 1230	Voskhod 11A57	-	Kosmos-653	78031 -193	Zent-2M	-	-	MIP-53	LC63/4	-	-	320	-	-
1974-034	2442491.01	1974 May 23 1216:51	Soyuz-U	-	Kosmos-666	A 15000-005	Tanrar-2K No. 1	-	-	MIP-53	LC63/3	-	-	1707	-	-
1974-035	2442491.01	1974 May 27 0725:00	Soyuz-U	-	Kosmos-666	A 15000-052	Soyuz 7K-T(A9) No. 61	-	-	MIP-53	LC1	-	-	373	-	-
1974-036	2442498.03	1974 May 30 1244:59	Voskhod 11A57	-	Kosmos-667	78029 -762	Zent-4MK	-	-	MIP-53	LC63/4	-	-	314	-	-
1974-041	2442424.76	1974 Jun 6 0620:00	Voskhod 11A57	-	Kosmos-657	77033 -267	Zent-2M	-	-	MIP-53	LC63/4	-	-	285	-	-
1974-043	2442212.02	1974 Jun 13 1229:59	Voskhod 11A57	-	Kosmos-668	77019 -7537	Zent-4MK	-	-	MIP-53	LC63/4	-	-	374	-	-
1974-049	2442284.79	1974 Jun 29 1000:00	Voskhod 11A57	-	Kosmos-667	78029 -762	Zent-4MK	-	-	MIP-53	LC63/4	-	-	362	-	-
1974-051	2442285.50	1974 Jun 29 1659:58	Soyuz 11A511M	-	Kosmos-669	7602983 -7	Zent-4MT	-	-	MIP-53	LC63/4	-	-	320	-	-
1974-052	2442282.29	1974 Jul 3 1851:08	Molniya EK78M	2BL	Kosmos-664	A 15000-121	Soyuz 7K-T(A9) No. 62	-	-	MIP-53	LC61/1	-	-	40095	-	-
1974-051	2442282.29	1974 Jul 3 1851:08	Soyuz 11A511	-	Kosmos-665	A 15000-051	Oko	-	-	MIP-53	LC1	-	-	336	-	-
1974-052	2442286.11	1974 Jul 5 1439:58	Vostok 8A92M	-	Meteor	78043 -349	Meteor-Priloda No. 1	-	-	MIP-53	LC63/4	-	-	921	-	-
1974-053	2442241.03	1974 Jul 12 1250:01	Voskhod 11A57	-	Kosmos-666	78029 -761	Zent-4MK	-	-	MIP-53	LC63/4	-	-	471	-	-
1974-056	2442261.95	1974 Jul 23 0123:01	Molniya EK78M	-	Kosmos-667	78033 -529	Molniya-2	-	-	MIP-53	LC63/4	-	-	40928	-	-
1974-057	2442283.79	1974 Jul 25 0700:00	Voskhod 11A57	-	Kosmos-667	77019 -789	Zent-4M	-	-	MIP-53	LC63/4	-	-	320	-	-
1974-059	2442284.79	1974 Jul 26 0659:59	Voskhod 11A57	-	Kosmos-669	78029 -180	Zent-4MK	-	-	MIP-53	LC63/4	-	-	231	-	-
1974-061	2442285.50	1974 Aug 6 0002:00	Soyuz-U	-	Kosmos-670	A 15000-011	Soyuz 7K-S No. 1L	-	-	MIP-53	LC63/4	-	-	282	-	-
1974-062	2442287.03	1974 Aug 7 1249:59	Voskhod 11A57	-	Kosmos-671	78029 -760	Zent-4MK	-	-	MIP-53	LC63/4	-	-	366	-	-
1974-064	2442271.77	1974 Aug 12 0625:02	Soyuz-U	-	Kosmos-672	A 15000-007	Soyuz 7K-TH No. 72-EPSA	-	-	MIP-53	LC63/4	-	-	394	-	-
1974-066	2442276.55	1974 Aug 16 0351	Vostok 8A92M	-	Kosmos-673	78035 -325	Selma	-	-	MIP-53	LC63/4	-	-	378	-	-
1974-068	2442286.53	1974 Aug 26 1955:05	Voskhod 11A57	-	Kosmos-674	78031 -174	Zent-2M	-	-	MIP-53	LC63/4	-	-	293	-	-
1974-069	2442288.52	1974 Aug 29 0839:59	Voskhod 11A57	-	Kosmos-675	78031 -174	Zent-2M	-	-	MIP-53	LC63/4	-	-	3007	-	-
1974-076	2442289.58	1974 Aug 29 0930:00	Voskhod 11A57	-	Kosmos-685	78031 -186	Zent-2M	-	-	MIP-53	LC63/4	-	-	326	-	-
1974-073	2442330.70	1974 Sep 20 0830:00	Voskhod 11A57	-	Kosmos-688	78031 -754	Zent-4MK	-	-	MIP-53	LC63/4	-	-	295	-	-
1974-078	2442333.72	1974 Oct 15 1520:59	Voskhod 11A57	-	Kosmos-690	K 15000-054	Blon No. 2	-	-	MIP-53	LC63/4	-	-	551	-	-
1974-081	2442346.03	1974 Oct 24 1238:41	Molniya EK78M	-	Kosmos-691	78033 -626	Molniya-3 No. 26	-	-	MIP-53	LC61/1	-	-	40824	-	-
1974-082	2442346.03	1974 Oct 25 0931:00	Soyuz-U	-	Kosmos-691	K 15000-052	Zent-4MK	-	-	MIP-53	LC61/1	-	-	939	-	-
1974-082	2442346.03	1974 Oct 26 1017:00	Vostok 8A92M	-	Kosmos-692	78031 -572	Zent-4MK	-	-	MIP-53	LC63/4	-	-	323	-	-
1974-087	2442348.93	1974 Oct 28 1017:00	Voskhod 11A57	-	Kosmos-692	78031 -572	Zent-4MK	-	-	MIP-53	LC63/4	-	-	341	-	-
1974-088	2442355.04	1974 Nov 4 1040	Soyuz 11A511M	-	Kosmos-693	78029 -938	Zent-4MT	-	-	MIP-53	LC61/1	-	-	241	-	-
1974-089	2442355.04	1974 Nov 4 1040	Voskhod 11A57	-	Kosmos-694	78029 -763	Zent-4MK	-	-	MIP-53	LC63/4	-	-	335	-	-
1974-092	2442372.84	1974 Nov 21 1033:01	Molniya EK78M	-	Kosmos-693	78031 -572	Molniya-3 No. 11	-	-	MIP-53	LC61/1	-	-	40818	-	-
1974-095	2442378.90	1974 Nov 27 1134:59	Voskhod 11A57	-	Kosmos-696	78031 -197	Zent-2M	-	-	MIP-53	LC63/4	-	-	375	-	-
1974-098	2442385.06	1974 Dec 2 0940:00	Soyuz-U	-	Kosmos-697	A 15000-014	Soyuz 7K-TH No. 73-EPSA	-	-	MIP-53	LC1	-	-	575	-	-
1974-099	2442385.06	1974 Dec 3 1330	Vostok 8A92M	-	Kosmos-697	A 15000-003	Tanrar-2K No. 2	-	-	MIP-53	LC63/3	-	-	304	-	-
1974-099	2442385.06	1974 Dec 17 1145:00	Molniya EK78M	-	Molniya-2	77019 -383	Molniya-2	-	-	MIP-53	LC63/4	-	-	993	-	-
1974-102	2442402.80	1974 Dec 17 0910:00	Voskhod 11A57	-	Molniya-2	78033 -530	Molniya-2	-	-	MIP-53	LC61/1	-	-	40909	-	-
1975-001	2442423.81	1975 Jan 17 0900:00	Soyuz 11A511	-	Kosmos-701	78043 -738	Zent-4MK	-	-	MIP-53	LC61/1	-	-	373	-	-
1975-002	2442423.81	1975 Jan 17 0900:00	Voskhod 11A57	-	Kosmos-701	K 15000-022	Zent-4MK	-	-	MIP-53	LC61/1	-	-	360	-	-
1975-005	2442435.96	1975 Jan 23 1100	Voskhod 11A57	-	Kosmos-702	78031 -775	Zent-2M	-	-	MIP-53	LC61/1	-	-	317	-	-
1975-006	2442435.96	1975 Jan 23 1100	Voskhod 11A57	-	Kosmos-702	78031 -775	Zent-2M	-	-	MIP-53	LC61/1	-	-	397	-	-
1975-009	2442443.70	1975 Feb 8 0449	Molniya EK78M	2BL	Molniya-2	78043 -532	Oko	-	-	MIP-53	LC61/1	-	-	39821	-	-
1975-013	2442456.10	1975 Feb 12 1430	Voskhod 11A57	-	Kosmos-704	78031 -574	Zent-4MK	-	-	MIP-53	LC61/1	-	-	40890	-	-
1975-015	2442469.88	1975 Feb 26 0900:00	Voskhod 11A57	-	Kosmos-709	78031 -775	Zent-4MK	-	-	MIP-53	LC61/1	-	-	315	-	-
1975-018	2442483.87	1975 Mar 12 0855:00	Voskhod 11A57	-	Kosmos-710	78031 -775	Zent-4MK	-	-	M						



Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Mission	FlightCode	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee_Km	Range_Km	Dest
1975-056	2442583.79	1975 Jun 20 0654	Vostok 8A92M	-	76043-524	Kosmos-744	Tselina-D	-	-	MIP-53	L041/1	-	-	818	-	-
1975-059	2442589.04	1975 Jun 25 1259:56	Voshkod 11A57	-	76041-785	Kosmos-746	Zent-4MK	-	-	MIP-53	L043/3	-	-	340	-	-
1975-060	2442591.04	1975 Jun 27 1300	Voshkod 11A57	-	76041-198	Kosmos-747	Zent-2M	-	-	MIP-53	L041/1	-	-	344	-	-
1975-061	2442597.07	1975 Jul 3 1340	Voshkod 11A57	-	76041-776	Kosmos-748	Zent-4MK	-	-	MIP-53	L041/1	-	-	354	-	-
1975-063	2442601.71	1975 Jul 6 0605	Molniya 8K78M	ML	76019-852	Molniya-2	Molniya-2	-	-	MIP-53	L041/1	-	-	40895	-	-
1975-064	2442609.01	1975 Jul 11 0415:00	Vostok 8A92M	-	77016-383	Meteor-2	Meteor-2 No. 1	-	-	MIP-53	L041/1	-	-	957	-	-
1975-065	2442609.01	1975 Jul 15 1220:00	Soyuz-U	-	F 15000-017	Soyuz-19	Soyuz 7K-TM No. 75	-	-	MIP-5	L041/1	-	-	240	-	-
1975-068	2442617.04	1975 Jul 23 1300	Voshkod 11A57	-	76041-200	Kosmos-751	Zent-2M	-	-	MIP-53	L043/3	-	-	315	-	-
1975-069	2442625.04	1975 Jul 31 1300	Voshkod 11A57	-	76041-786	Kosmos-753	Zent-4MK	-	-	MIP-53	L043/3	-	-	329	-	-
1975-073	2442646.59	1975 Aug 13 0721:04	Vostok 8A92M	-	76031-782	Kosmos-754	Zent-4MK	-	-	MIP-53	L041/1	-	-	352	-	-
1975-074	2442657.81	1975 Aug 22 0210:59	Vostok 8A92M	-	76031-371	Kosmos-756	Zent-4MK	-	-	MIP-53	L041/1	-	-	681	-	-
1975-078	2442658.05	1975 Sep 2 1449:59	Voshkod 11A57	ML	76041-877	Kosmos-757	Zent-4MK	-	-	MIP-53	L041/1	-	-	332	-	-
1975-080	2442661.12	1975 Sep 5 0019:06	Soyuz-U	ML	76031-571	Molniya-1	Molniya-1	-	-	MIP-53	L041/1	-	-	41008	-	-
1975-081	2442661.12	1975 Sep 9 0019:06	Molniya 8K78M	ML	A 15000-016	Kosmos-758	Yantar-2K No. 3	-	-	MIP-53	L043/3	-	-	577	-	-
1975-084	2442667.73	1975 Sep 12 0630	Soyuz-U	ML	76029-860	Molniya-2	Molniya-2	-	-	MIP-53	L041/1	-	-	40865	-	-
1975-085	2442671.88	1975 Sep 16 0900:00	Voshkod 11A57	-	76041-789	Kosmos-759	Zent-4MK	-	-	MIP-53	L043/3	-	-	275	-	-
1975-087	2442673.51	1975 Sep 18 0012	Vostok 8A92M	-	76029-354	Meteor	Meteor-N No. 28	-	-	MIP-53	L041/1	-	-	947	-	-
1975-088	2442676.92	1975 Sep 23 0959:59	Voshkod 11A57	-	77016-214	Kosmos-760	Zent-2M	-	-	MIP-53	L043/3	-	-	306	-	-
1975-089	2442680.80	1975 Sep 29 0415:00	Soyuz-U	-	F 15000-021	Kosmos-771	Fram	-	-	MIP-53	L043/3	-	-	242	-	-
1975-093	2442686.55	1975 Oct 1 0830:00	Soyuz-U	-	76041-011	Kosmos-772	Zent-4MK	-	-	MIP-53	L041/1	-	-	328	-	-
1975-095	2442703.10	1975 Oct 17 1429:59	Voshkod 11A57	-	76041-790	Kosmos-774	Zent-4MK	-	-	MIP-53	L041/1	-	-	908	-	-
1975-104	2442721.14	1975 Nov 4 1519:58	Voshkod 11A57	ML	76041-216	Kosmos-776	Zent-2M	-	-	MIP-53	L043/3	-	-	288	-	-
1975-105	2442731.50	1975 Nov 14 1913:58	Molniya 8K78M	ML	76041-791	Kosmos-779	Zent-4MK	-	-	MIP-53	L043/3	-	-	340	-	-
1975-106	2442734.11	1975 Nov 17 1436:37	Soyuz-U	ML	76041-686	Molniya-3	Molniya-3 No. 13	-	-	MIP-53	L043/3	-	-	40681	-	-
1975-108	2442737.89	1975 Nov 21 0920:00	Soyuz-U	-	K 15000-15	Soyuz-20	Soyuz 7K-T(A9) No. 64	-	-	MIP-5	L041/1	-	-	350	-	-
1975-110	2442742.21	1975 Nov 25 1700	Soyuz-U	-	F 15000-022	Kosmos-780	Zent-2M	-	-	MIP-5	L041/1	-	-	286	-	-
1975-113	2442749.32	1975 Dec 3 1000	Voshkod 11A57	-	76041-201	Kosmos-782	Bion No. 3	-	-	MIP-53	L043/3	-	-	447	-	-
1975-120	2442762.91	1975 Dec 16 0950:00	Voshkod 11A57	-	76041-792	Kosmos-784	Zent-2M	-	-	MIP-53	L043/3	-	-	328	-	-
1975-121	2442763.96	1975 Dec 17 1106:01	Molniya 8K78M	ML	76041-697	Kosmos-786	Zent-4MK	-	-	MIP-53	L043/3	-	-	40760	-	-
1975-122	2442766.59	1975 Dec 22 0208:00	Molniya 8K78M	ML	76041-575	Kosmos-788	Molniya-2	-	-	MIP-53	L043/3	-	-	150000	-	-
1975-124	2442772.28	1975 Dec 25 1900:00	Vostok 8A92M	SOL	76041-866	Prognoz-4	SO-H No. 604	-	-	MIP-53	L043/3	-	-	40762	-	-
1975-125	2442773.95	1975 Dec 27 1022:02	Molniya 8K78M	ML	76041-366	Meteor	Meteor No. 38	-	-	MIP-5	L041/1	-	-	383	-	-
1976-002	2442786.15	1976 Jan 7 0534:58	Voshkod 11A57	ML	76041-793	Kosmos-788	Molniya-3	-	-	MIP-53	L043/3	-	-	35994	-	-
1976-009	2442789.98	1976 Jan 22 1138:00	Molniya 8K78M	ML	76029-559	Kosmos-788	Molniya-3 No. 15	-	-	MIP-53	L043/3	-	-	383	-	-
1976-009	2442806.85	1976 Jan 29 0830:00	Molniya 8K78M	ML	77016-218	Kosmos-789	Molniya-1	-	-	MIP-53	L041/1	-	-	318	-	-
1976-013	2442819.87	1976 Feb 11 0650:00	Voshkod 11A57	-	77016-685	Kosmos-802	Zent-2M	-	-	MIP-5	L041/1	-	-	382	-	-
1976-018	2442829.58	1976 Feb 20 1401:02	Soyuz-U	-	K 15000-013	Kosmos-806	Zent-4MK	-	-	MIP-53	L043/3	-	-	352	-	-
1976-020	2442847.53	1976 Mar 10 0800:00	Soyuz-U	-	78026-666	Kosmos-806	Zent-4MK	-	-	MIP-53	L043/3	-	-	382	-	-
1976-021	2442849.52	1976 Mar 11 1945	Molniya 8K78M	ML	76031-575	Molniya-2	Molniya-2	-	-	MIP-53	L041/1	-	-	40704	-	-
1976-024	2442854.22	1976 Mar 16 0720:00	Vostok 8A92M	-	78026-357	Kosmos-808	Tselina-D	-	-	MIP-53	L041/1	-	-	890	-	-
1976-025	2442855.89	1976 Mar 18 0915:00	Soyuz-U	-	78026-252	Kosmos-809	Zent-2M	-	-	MIP-5	L041/1	-	-	384	-	-
1976-026	2442867.51	1976 Mar 19 1501:00	Molniya 8K78M	ML	76029-555	Kosmos-810	Molniya-1	-	-	MIP-53	L043/3	-	-	337	-	-
1976-028	2442868.12	1976 Mar 26 1500:00	Voshkod 11A57	-	77016-938	Kosmos-810	Molniya-1	-	-	MIP-53	L041/1	-	-	335	-	-
1976-030	2442869.05	1976 Mar 29 0720:00	Soyuz 11A57M	-	76029-368	Meteor-2	Orion	-	-	MIP-53	L043/3	-	-	234	-	-
1976-032	2442876.05	1976 Apr 6 0830:00	Vostok 8A92M	-	77016-217	Meteor-2	Zent-4MK	-	-	MIP-53	L043/3	-	-	318	-	-
1976-033	2442876.05	1976 Apr 6 0830:00	Voshkod 11A57	-	76041-764	Kosmos-811	Zent-4MK	-	-	MIP-53	L043/3	-	-	337	-	-
1976-036	2442893.93	1976 Apr 26 0750:00	Voshkod 11A57	-	77016-598	Kosmos-815	Zent-4MK	-	-	MIP-5	L041/1	-	-	40685	-	-
1976-041	2442911.18	1976 May 5 1757	Molniya 8K78M	ML	77016-598	Molniya-3	Molniya-3 No. 16	-	-	MIP-53	L041/1	-	-	918	-	-
1976-043	2442911.18	1976 May 15 1330	Vostok 8A92M	-	76042-338	Kosmos-819	Meteor-Priloda No. 2-1	-	-	MIP-53	L043/3	-	-	282	-	-
1976-046	2442919.90	1976 May 21 0900:00	Voshkod 11A57	-	77016-213	Kosmos-820	Zent-2M	-	-	MIP-53	L043/3	-	-	282	-	-
1976-048	2442924.24	1976 May 26 0900:00	Voshkod 11A57	-	77016-555	Kosmos-821	Zent-4MK	-	-	MIP-53	L043/3	-	-	339	-	-
1976-052	2442937.70	1976 Jun 8 0700:00	Voshkod 11A57	-	77016-657	Kosmos-821	Zent-4MK	-	-	MIP-53	L043/3	-	-	387	-	-
1976-055	2442946.45	1976 Jun 16 1309:58	Voshkod 11A57	-	77016-654	Kosmos-824	Zent-4MK	-	-	MIP-53	L043/3	-	-	343	-	-
1976-058	2442958.91	1976 Jun 24 0710:01	Soyuz-U	-	78026-220	Kosmos-834	Zent-2M	-	-	MIP-53	L043/3	-	-	234	-	-
1976-060	2442960.91	1976 Jun 29 0720:00	Voshkod 11A57	-	77016-661	Kosmos-834	Zent-4MK	-	-	MIP-5	L041/1	-	-	382	-	-
1976-062	2442960.91	1976 Jun 31 0805:38	Molniya 8K78M	ML	77016-594	Kosmos-835	Molniya-2	-	-	MIP-53	L043/4	-	-	962	-	-
1976-064	2442963.06	1976 Jul 6 1208:45	Soyuz-U	ML	F 15000-034	Kosmos-837	Molniya-2	-	-	MIP-5	L041/1	-	-	273	-	-
1976-068	2442973.98	1976 Jul 14 0900	Soyuz-U	-	78026-221	Kosmos-840	Soyuz 7K-T No. 41	-	-	MIP-53	L043/4	-	-	316	-	-
1976-072	2442983.16	1976 Jul 23 1549:00	Molniya 8K78M	ML	76029-556	Kosmos-844	Yantar-2K No. 5	-	-	MIP-53	L043/4	-	-	421	-	-
1976-074	2442983.16	1976 Jul 23 1549:00	Molniya 8K78M	ML	76029-556	Kosmos-844	Molniya-1 11F688 No. 43	-	-	MIP-53	L043/4	-	-	40129	-	-
1976-079	2442995.07	1976 Aug 1 1340	Soyuz-U	-	78026-668	Kosmos-847	Zent-2M	-	-	MIP-53	L043/4	-	-	318	-	-
1976-082	2443003.06	1976 Aug 17 1330	Vostok 8A92M	-	76042-241	Kosmos-848	Zent-2M	-	-	MIP-53	L043/4	-	-	304	-	-
1976-085	2443018.11	1976 Aug 27 1434:58	Vostok 8A92M	-	76042-385	Kosmos-851	Tselina-D	-	-	MIP-53	L043/4	-	-	664	-	-
1976-086	2443018.11	1976 Aug 28 0900:00	Soyuz-U	-	76042-690	Kosmos-851	Zent-4MK	-	-	MIP-53	L043/4	-	-	332	-	-
1976-088	2443022.84	1976 Sep 3 0920	Soyuz-U	ML	76041-576	Kosmos-853	Molniya-2	-	-	MIP-53	L043/3	-	-	487	-	-
1976-090	2443024.99	1976 Sep 3 0920	Soyuz-U	ML	78026-665	Kosmos-854	Zent-4MK	-	-	MIP-53	L043/3	-	-	305	-	-
1976-093	2443036.91	1976 Sep 15 0948:30	Soyuz-U	-	E 15000-069	Kosmos-855	Soyuz 7K-TM No. 74	-	-	MIP-53	L043/3	-	-	295	-	-
1976-095	2443043.92	1976 Sep 21 1140	Soyuz-U	-	7											

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Mission	FlightCode	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee_Km	Range_Km	Dest
1976-119	2443121.92	1976 Dec 9 1000	Soyuz-U	-	76042-238	Kosmos-879	Zenit-2M	-	-	MIP-53	L043/4	-	-	235	-	-
1976-123	2443129.90	1976 Dec 17 0930:00	Soyuz-U	ML	76026-674	Kosmos-884	Zenit-4MK	-	-	MIP-5	L043/4	-	-	361	-	-
1976-127	2443140.78	1976 Dec 28 0638	Molniya SK78M	ML	76042-602	Molniya-3	Molniya-3 No. 17	-	-	MIP-53	L043/4	-	-	40840	-	-
1977-001	2443149.90	1977 Jan 6 0940:00	Soyuz-U	-	76026-675	Kosmos-888	Zenit-4MK	-	-	MIP-53	L043/4	-	-	368	-	-
1977-002	2443150.47	1977 Jan 6 2317	Vostok 8A92M	-	76042-390	Meteor-2	Meteor-2 No. 2	-	-	MIP-53	L043/3	-	-	940	-	-
1977-003	2443163.85	1977 Jan 20 0830:00	Soyuz-U	-	76026-224	Kosmos-889	Zenit-2M	-	-	MIP-5	L043/4	-	-	328	-	-
1977-008	2443182.17	1977 Feb 7 1611:50	Soyuz-U	-	E 15000-092	Kosmos-892	Zenit-4MK	-	-	MIP-53	L043/4	-	-	377	-	-
1977-009	2443183.98	1977 Feb 9 1130	Soyuz-U	-	76026-667	Kosmos-892	Zenit-4MK	-	-	MIP-53	L043/4	-	-	427	-	-
1977-010	2443186.12	1977 Feb 11 1457	Molniya SK78M	ML	76041-577	Molniya-2	Molniya-2	-	-	MIP-53	L043/4	-	-	40756	-	-
1977-011	2443196.89	1977 Feb 22 0919	Vostok 8A92M	-	76026-672	-	Zenit-4MK	-	-	MIP-5	L043/4	-	-	107	-	-
1977-015	2443201.39	1977 Feb 26 2118	Soyuz-U	-	76052-391	Kosmos-895	Tselina-D	-	-	MIP-53	L043/4	-	-	690	-	-
1977-016	2443212.96	1977 Mar 3 1030	Soyuz-U	-	76052-391	Kosmos-896	Zenit-6	-	-	MIP-53	L043/4	-	-	518	-	-
1977-017	2443215.94	1977 Mar 10 1100	Soyuz-U	-	76026-670	Kosmos-897	Zenit-4MK	-	-	MIP-53	L043/4	-	-	415	-	-
1977-021	2443226.99	1977 Mar 17 0830	Soyuz-U	-	76042-235	Kosmos-898	Zenit-2M	-	-	MIP-53	L043/4	-	-	228	-	-
1977-021	2443226.99	1977 Mar 24 1151	Molniya SK78M	ML	76026-599	Molniya-1	Molniya-1	-	-	MIP-53	L043/4	-	-	40819	-	-
1977-024	2443238.59	1977 Apr 5 0205:00	Vostok 8A92M	-	76033-948	Meteor	Meteor-H No. 39	-	-	MIP-53	L043/4	-	-	923	-	-
1977-026	2443240.57	1977 Apr 7 0859	Soyuz-U	-	76026-671	Kosmos-902	Zenit-4MK	-	-	MIP-53	L043/4	-	-	283	-	-
1977-027	2443244.57	1977 Apr 11 0138	Molniya SK78M	2BL	E 15000-160	Kosmos-902	Zenit-4MK	-	-	MIP-53	L043/4	-	-	40053	-	-
1977-028	2443253.58	1977 Apr 20 0900	Soyuz-U	-	76042-236	Kosmos-904	Zenit-2M	-	-	MIP-5	L043/4	-	-	326	-	-
1977-030	2443260.11	1977 Apr 26 1445	Soyuz-U	-	E 15000-031	Kosmos-904	Zenit-2M	-	-	MIP-53	L043/4	-	-	415	-	-
1977-032	2443261.88	1977 Apr 28 0910	Molniya SK78M	ML	76026-604	Kosmos-905	Molniya-3 No. 19	-	-	MIP-53	L043/4	-	-	40843	-	-
1977-033	2443269.08	1977 May 5 1400	Soyuz-U	-	76042-687	Kosmos-907	Zenit-4MK	-	-	MIP-53	L043/4	-	-	384	-	-
1977-035	2443280.52	1977 May 17 1010:00	Soyuz-U	-	76042-688	Kosmos-908	Zenit-4MK	-	-	MIP-53	L043/4	-	-	289	-	-
1977-040	2443289.79	1977 May 26 0700	Soyuz-U	-	76018-034	Kosmos-912	Fram	-	-	MIP-53	L043/4	-	-	230	-	-
1977-043	2443294.51	1977 May 31 0730:00	Soyuz-U	-	76042-237	Kosmos-914	Zenit-2M	-	-	MIP-53	L043/4	-	-	359	-	-
1977-046	2443303.08	1977 Jun 6 1400	Soyuz-U	-	76042-689	Kosmos-915	Zenit-4MK	-	-	MIP-53	L043/4	-	-	356	-	-
1977-047	2443304.53	1977 Jun 10 0800	Soyuz-U	-	76026-585	Kosmos-916	Orion	-	-	MIP-53	L043/4	-	-	40174	-	-
1977-052	2443310.58	1977 Jun 16 0158	Molniya SK78M	2BL	D 15000-162	Kosmos-920	Zenit-4MK	-	-	MIP-53	L043/4	-	-	342	-	-
1977-052	2443310.58	1977 Jun 22 0800:00	Soyuz-U	-	76042-691	Kosmos-920	Zenit-4MK	-	-	MIP-5	L043/4	-	-	40062	-	-
1977-054	2443316.74	1977 Jun 24 0541	Molniya SK78M	ML	76041-580	Molniya-1	Molniya-1 11F668 No. 45	-	-	MIP-5	L043/4	-	-	670	-	-
1977-057	2443324.27	1977 Jun 29 1854	Vostok 8A92M	-	76016-582	Meteor-Priroda	Meteor-Priroda No. 2-2	-	-	MIP-5	L043/4	-	-	301	-	-
1977-058	2443325.06	1977 Jun 30 1400	Soyuz-U	-	76042-239	Kosmos-922	Zenit-2M	-	-	MIP-53	L043/4	-	-	677	-	-
1977-061	2443331.51	1977 Jul 7 0725	Vostok 8A92M	-	76041-587	Kosmos-925	Tselina-D	-	-	MIP-53	L043/4	-	-	384	-	-
1977-063	2443336.56	1977 Jul 12 0900	Soyuz-U	-	76042-692	Kosmos-927	Zenit-4MK	-	-	MIP-53	L043/4	-	-	40065	-	-
1977-066	2443344.70	1977 Jul 20 0444	Molniya SK78M	2BL	76042-693	Kosmos-931	Zenit-4MK	-	-	MIP-53	L043/4	-	-	356	-	-
1977-069	2443344.82	1977 Jul 27 0735	Soyuz-U	-	76042-695	Kosmos-932	Zenit-6	-	-	MIP-53	L043/4	-	-	343	-	-
1977-072	2443352.25	1977 Jul 27 1807	Soyuz-U	-	E 15000-082	Kosmos-934	Zenit-6	-	-	MIP-53	L043/4	-	-	280	-	-
1977-073	2443353.53	1977 Jul 29 0800	Soyuz-U	-	76032-244	Kosmos-938	Zenit-2M	-	-	MIP-53	L043/4	-	-	397	-	-
1977-074	2443359.05	1977 Aug 5 1401	Soyuz-U	-	D 15000-113	Kosmos-936	Zenit-4MK	-	-	MIP-53	L043/4	-	-	376	-	-
1977-F03	2443366.94	1977 Aug 10 1060	Soyuz-U	-	76042-694	Kosmos-938	Zenit-4MK	-	-	MIP-53	L043/4	-	-	376	-	-
1977-078	2443380.10	1977 Aug 24 1429:59	Soyuz-U	-	76032-695	Kosmos-947	Zenit-4MK	-	-	MIP-53	L043/4	-	-	266	-	-
1977-078	2443380.10	1977 Aug 27 1009	Soyuz-U	-	76018-100	Kosmos-947	Zenit-2M	-	-	MIP-53	L043/3	-	-	266	-	-
1977-081	2443382.52	1977 Aug 30 1806	Molniya SK78M	ML	76018-595	Molniya-3	Molniya-3	-	-	MIP-53	L043/3	-	-	266	-	-
1977-082	2443386.25	1977 Aug 30 1806	Molniya SK78M	ML	76018-595	Molniya-3	Molniya-3	-	-	MIP-53	L043/3	-	-	266	-	-
1977-085	2443388.58	1977 Sep 2 0700	Soyuz-U	-	76035-931	Kosmos-948	Fram	-	-	MIP-53	L043/4	-	-	352	-	-
1977-086	2443393.23	1977 Sep 6 1720	Soyuz-U	-	76032-961	Kosmos-949	Yantar'-2K No. 7	-	-	MIP-53	L043/4	-	-	291	-	-
1977-086	2443393.23	1977 Sep 13 1510	Soyuz-U	-	76035-111	Kosmos-949	Zenit-2M	-	-	MIP-53	L043/3	-	-	284	-	-
1977-089	2443403.13	1977 Sep 16 0150	Soyuz-U	-	76036-985	Kosmos-950	Zenit-4MK	-	-	MIP-53	L043/3	-	-	688	-	-
1977-090	2443404.14	1977 Sep 16 0159	Vostok 8A92M	-	76036-985	Kosmos-950	Tselina-D	-	-	MIP-53	L043/3	-	-	688	-	-
1977-093	2443404.54	1977 Sep 22 0945:00	Molniya SK78M	SOL	D 15000-163	Kosmos-956	SU-H No. 006	-	-	MIP-53	L043/4	-	-	150000	-	-
1977-093	2443416.81	1977 Sep 22 0945:00	Soyuz-U	-	76052-697	Kosmos-957	Zenit-4MK	-	-	MIP-5	L043/4	-	-	361	-	-
1977-099	2443428.11	1977 Oct 1 1154	Soyuz-U	-	D 15000-093	Kosmos-957	Zenit-4MK	-	-	MIP-5	L043/4	-	-	437	-	-
1977-100	2443428.11	1977 Oct 1 1154	Molniya SK78M	ML	76052-698	Kosmos-958	Yantar' 7K-T No. 42	-	-	MIP-53	L043/4	-	-	437	-	-
1977-105	2443434.57	1977 Oct 18 0130	Molniya SK78M	ML	76052-698	Kosmos-958	Molniya-3 No. 18	-	-	MIP-53	L043/4	-	-	40840	-	-
1977-110	2443482.00	1977 Dec 6 1200	Soyuz-U	-	76052-698	Kosmos-964	Zenit-4MK	-	-	MIP-53	L043/4	-	-	365	-	-
1977-113	2443487.55	1977 Dec 6 1200	Soyuz-U	-	76052-698	Kosmos-964	Zenit-4MK	-	-	MIP-53	L043/4	-	-	365	-	-
1977-115	2443489.90	1977 Dec 12 0940:00	Soyuz-U	-	76018-105	Kosmos-966	Yantar' 7K-T No. 43	-	-	MIP-5	L043/4	-	-	295	-	-
1977-117	2443489.90	1977 Dec 12 0940:00	Soyuz-U	-	76018-105	Kosmos-966	Yantar' 7K-T No. 43	-	-	MIP-5	L043/4	-	-	295	-	-
1977-120	2443498.16	1977 Dec 20 1550	Soyuz-U	-	76052-243	Kosmos-969	Zenit-4MK	-	-	MIP-53	L043/4	-	-	910	-	-
1977-124	2443504.69	1977 Dec 27 0920	Soyuz-U	-	76052-243	Kosmos-973	Zenit-2M	-	-	MIP-53	L043/4	-	-	339	-	-
1978-001	2443515.16	1978 Jan 6 1550	Soyuz-U	-	76052-702	Kosmos-974	Zenit-4MK	-	-	MIP-53	L043/3	-	-	347	-	-
1978-003	2443519.02	1978 Jan 10 1226:00	Soyuz-U	-	D 15000-106	Kosmos-974	Zenit-4MK	-	-	MIP-53	L043/3	-	-	348	-	-
1978-004	2443519.06	1978 Jan 10 1323	Vostok 8A92M	-	76026-394	Soyuz-27	Yantar' 7K-T No. 44	-	-	MIP-53	L043/4	-	-	693	-	-
1978-006	2443522.14	1978 Jan 13 1515	Soyuz-U	-	76018-104	Kosmos-975	Tselina-D	-	-	MIP-53	L043/4	-	-	292	-	-
1978-008	2443528.55	1978 Jan 20 0824:40	Soyuz-U	-	E 15000-075	Kosmos-984	Zenit-2M	-	-	MIP-53	L043/3	-	-	345	-	-
1978-009	2443532.79	1978 Jan 24 0651	Molniya SK78M	ML	76026-596	Progress-7K-TG No. 102	Progress-7K-TG No. 102	-	-	MIP-5	L043/3	-	-	40616	-	-
1978-010	2443532.91	1978 Jan 24 0651	Molniya SK78M	ML	76052-700	Molniya-3	Molniya-3 No. 20	-	-	MIP-53	L043/3	-	-	343	-	-
1978-013	2443540.12	1978 Jan 31 1450	Soyuz-U	-	76052-703	Kosmos-986	Zenit-4MK	-	-	MIP-53	L043/4	-	-	350	-	-
1978-015	2443540.12	1978 Jan 31 1450	Soyuz-U	-	76052-703	Kosmos-987	Zenit-4MK	-	-							

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight	Mission	FlightCode	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee_Km	Range_Km	Dest
1978-061	2443675.34	1978 Jun 15 20:16:45	Soyuz-U	-	Soyuz-29	Soyuz 7k-T No. 46	-	-	MIP-5	LCl	-	-	354	-	-
1978-065	2443687.14	1978 Jun 27 15:27:21	Soyuz-U	2BL	Soyuz-30	Soyuz 7k-T(A9) No. 67	-	-	MIP-5	LCl	-	-	339	-	-
1978-066	2443687.62	1978 Jun 28 02:58	Molniya SK78M	-	Kosmos-1024	Okc	-	-	MIP-53	LCl	-	-	40093	-	-
1978-069	2443691.90	1978 Jul 2 09:30:16	Soyuz-U	-	Kosmos-1026	Energys No. 2	-	-	MIP-5	LCl	-	-	246	-	-
1978-070	2443696.98	1978 Jul 7 12:31:16	Soyuz-U	-	Progress-2	Progress 7k-TG No. 101	-	-	MIP-5	LCl	-	-	342	-	-
1978-072	2443704.12	1978 Jul 14 15:00	Molniya SK78M	ML	Kosmos-1028	Molniya-1	-	-	MIP-53	LCl	-	-	40664	-	-
1978-076	2443706.12	1978 Aug 5 15:00	Soyuz-U	-	Kosmos-1028	Feniks No. 14	-	-	MIP-53	LCl	-	-	390	-	-
1978-077	2443728.44	1978 Aug 7 23:31:22	Soyuz-U	-	Progress-3	Progress 7k-TG No. 103	-	-	MIP-5	LCl	-	-	354	-	-
1978-080	2443743.49	1978 Aug 22 23:47	Molniya SK78M	ML	Kosmos-1029	Molniya-1	-	-	MIP-53	LCl	-	-	40647	-	-
1978-081	2443747.12	1978 Aug 26 14:51:30	Soyuz-U	-	Soyuz-31	Soyuz 7k-T No. 47	-	-	MIP-5	LCl	-	-	361	-	-
1978-082	2443750.12	1978 Aug 29 15:00	Soyuz-U	-	Kosmos-1029	Zenit-4MKM	-	-	MIP-53	LCl	-	-	357	-	-
1978-083	2443757.63	1978 Sep 6 09:04	Molniya SK78M	2BL	Kosmos-1030	Okc	-	-	MIP-53	LCl	-	-	40310	-	-
1978-085	2443761.12	1978 Sep 9 15:00	Soyuz-U	-	Kosmos-1031	Zenit-4MKM	-	-	MIP-53	LCl	-	-	342	-	-
1978-088	2443770.84	1978 Sep 19 08:05	Soyuz-U	-	Kosmos-1032	Zenit-2M	-	-	MIP-53	LCl	-	-	223	-	-
1978-089	2443784.96	1978 Oct 3 11:00	Soyuz-U	-	Kosmos-1033	Fram	-	-	MIP-53	LCl	-	-	238	-	-
1978-090	2443785.46	1978 Oct 3 23:09:30	Soyuz-U	-	Progress-4	Progress 7k-TG No. 105	-	-	MIP-5	LCl	-	-	361	-	-
1978-092	2443786.15	1978 Oct 6 15:30	Soyuz-U	-	Kosmos-1042	Zenit-4MKM	-	-	MIP-53	LCl	-	-	329	-	-
1978-094	2443787.12	1978 Oct 10 19:44	Vostok 8492M	-	Kosmos-1043	Tselina-D	-	-	MIP-53	LCl	-	-	683	-	-
1978-095	2443794.72	1978 Oct 17 15:00	Molniya SK78M	ML	Kosmos-1043	Molniya-3	-	-	MIP-53	LCl	-	-	40911	-	-
1978-097	2443799.12	1978 Oct 17 05:19	Soyuz-U	-	Kosmos-1044	Zenit-2M	-	-	MIP-53	LCl	-	-	308	-	-
1978-101	2443811.72	1978 Oct 30 05:23:00	Molniya SK78M	SUL	Progress-7	SO-H No. 907	-	-	MIP-5	LCl	-	-	150000	-	-
1978-102	2443814.00	1978 Nov 1 12:00	Soyuz-U	-	Kosmos-1046	Orion	-	-	MIP-53	LCl	-	-	481	-	-
1978-104	2443827.99	1978 Nov 15 11:45	Soyuz-U	-	Kosmos-1047	Zenit-4MKM	-	-	MIP-53	LCl	-	-	354	-	-
1978-107	2443834.00	1978 Nov 21 12:00	Soyuz-U	-	Kosmos-1049	Zenit-4MKM	-	-	MIP-53	LCl	-	-	348	-	-
1978-108	2443841.18	1978 Nov 26 16:20	Soyuz-U	-	Kosmos-1050	Zenit-6	-	-	MIP-53	LCl	-	-	331	-	-
1978-110	2443850.15	1978 Dec 7 15:30	Soyuz-U	-	Kosmos-1059	Zenit-4MKM	-	-	MIP-53	LCl	-	-	369	-	-
1978-111	2443850.90	1978 Dec 6 09:50:00	Soyuz-U	-	Kosmos-1060	Zenit-2M	-	-	MIP-5	LCl	-	-	290	-	-
1978-114	2443857.14	1978 Dec 14 15:20	Soyuz-U	-	Kosmos-1061	Zenit-2M	-	-	MIP-53	LCl	-	-	309	-	-
1978-117	2443861.57	1978 Dec 19 01:35	Vostok 8492M	-	Kosmos-1063	Tselina-D	-	-	MIP-53	LCl	-	-	697	-	-
1978-121	2443866.96	1978 Dec 23 06:59	Vostok 8492M	-	Kosmos-1066	Tselina-D	-	-	MIP-53	LCl	-	-	919	-	-
1978-123	2443869.15	1978 Dec 26 15:50	Soyuz-U	-	Kosmos-1068	Astrofizika IIF653 No. 1	-	-	MIP-53	LCl	-	-	388	-	-
1978-124	2443871.19	1978 Dec 28 16:50	Soyuz-U	-	Kosmos-1069	Zenit-4MKM	-	-	MIP-53	LCl	-	-	352	-	-
1979-001	2443871.19	1979 Jan 11 15:00	Soyuz-U	-	Kosmos-1070	Orion	-	-	MIP-53	LCl	-	-	296	-	-
1979-002	2443877.15	1979 Jan 13 15:00	Soyuz-U	-	Kosmos-1071	Zenit-2M	-	-	MIP-53	LCl	-	-	428	-	-
1979-004	2443887.15	1979 Jan 15 15:00	Molniya SK78M	ML	Kosmos-1071	Molniya-3	-	-	MIP-53	LCl	-	-	674	-	-
1979-005	2443896.74	1979 Jan 18 15:42	Molniya SK78M	-	Kosmos-1072	Molniya-3 No. 23	-	-	MIP-5	LCl	-	-	40929	-	-
1979-006	2443904.14	1979 Jan 20 09:45	Vostok 8492M	-	Meteor-Priroda	Meteor-Priroda No. 2-3	-	-	MIP-5	LCl	-	-	385	-	-
1979-008	2443916.40	1979 Jan 31 09:00:00	Soyuz-U	-	Kosmos-1073	Zenit-4MKM	-	-	MIP-53	LCl	-	-	382	-	-
1979-012	2443921.12	1979 Feb 13 21:41	Vostok 8492M	-	Kosmos-1074	Soyuz 7k-ST No. 5L	-	-	MIP-53	LCl	-	-	2007	-	-
1979-F01	2443921.12	1979 Feb 16 15:00	Soyuz-U	-	Kosmos-1077	Zenit-2M	-	-	MIP-53	LCl	-	-	379	-	-
1979-016	2443927.01	1979 Feb 22 12:10	Soyuz-U	-	Kosmos-1078	Zenit-4MKM	-	-	MIP-53	LCl	-	-	364	-	-
1979-018	2443930.00	1979 Feb 25 16:55:49	Soyuz-U	-	Kosmos-1079	Soyuz 7k-T No. 48	-	-	MIP-5	LCl	-	-	357	-	-
1979-021	2443932.12	1979 Feb 27 18:00	Vostok 8492M	-	Progress-5	Feniks No. 15	-	-	MIP-53	LCl	-	-	325	-	-
1979-022	2443934.24	1979 Mar 1 16:45:00	Soyuz-U	-	Kosmos-1080	Meteor-2 No. 4	-	-	MIP-53	LCl	-	-	390	-	-
1979-024	2443944.74	1979 Mar 12 06:47:28	Soyuz-U	-	Progress-6	Progress 7k-TG No. 104	-	-	MIP-53	LCl	-	-	352	-	-
1979-025	2443946.96	1979 Mar 14 10:00	Soyuz-U	-	Kosmos-1080	Zenit-4MKM	-	-	MIP-53	LCl	-	-	385	-	-
1979-029	2443953.95	1979 Mar 31 16:30	Soyuz-U	-	Kosmos-1090	Zenit-2M	-	-	MIP-53	LCl	-	-	328	-	-
1979-031	2443975.52	1979 Apr 10 09:58:00	Molniya SK78M	ML	Kosmos-1090	Soyuz 7k-T No. 49	-	-	MIP-53	LCl	-	-	40768	-	-
1979-032	2443975.52	1979 Apr 12 06:47:28	Vostok 8492M	-	Molniya-1	Tselina-D	-	-	MIP-53	LCl	-	-	414	-	-
1979-034	2443983.68	1979 Apr 15 11:10	Soyuz-U	-	Kosmos-1093	Zenit-6	-	-	MIP-53	LCl	-	-	383	-	-
1979-037	2443989.50	1979 Apr 27 11:10	Soyuz-U	-	Kosmos-1095	Zenit-4MKM	-	-	MIP-53	LCl	-	-	366	-	-
1979-039	2444006.68	1979 Apr 27 11:10	Soyuz-U	-	Progress-6	Yantar-4K1 No. 1	-	-	MIP-53	LCl	-	-	247	-	-
1979-040	2444009.99	1979 May 15 11:40	Soyuz-U	-	Kosmos-1099	Progress 7k-TG No. 106	-	-	MIP-53	LCl	-	-	366	-	-
1979-041	2444018.70	1979 May 17 07:10	Soyuz-U	-	Kosmos-1099	Zenit-4MKM	-	-	MIP-53	LCl	-	-	247	-	-
1979-045	2444026.19	1979 May 31 16:30	Soyuz-U	-	Kosmos-1102	Fram	-	-	MIP-53	LCl	-	-	416	-	-
1979-048	2444030.18	1979 Jun 8 17:10	Molniya SK78M	ML	Kosmos-1103	Molniya-3 No. 21	-	-	MIP-53	LCl	-	-	269	-	-
1979-052	2444033.26	1979 Jun 8 18:12:41	Soyuz-U	-	Soyuz-34	Soyuz 7k-T No. 50	-	-	MIP-5	LCl	-	-	40772	-	-
1979-054	2444036.70	1979 Jun 8 07:10	Soyuz-U	-	Kosmos-1105	Molniya-3	-	-	MIP-53	LCl	-	-	405	-	-
1979-055	2444039.95	1979 Jun 12 07:00	Soyuz-U	-	Kosmos-1107	Geokor-Priroda	-	-	MIP-53	LCl	-	-	240	-	-
1979-056	2444046.79	1979 Jun 22 07:00	Soyuz-U	-	Kosmos-1107	Geokor-Priroda	-	-	MIP-53	LCl	-	-	383	-	-
1979-058	2444052.26	1979 Jun 27 18:11:23	Molniya SK78M	2BL	Kosmos-1109	Fram	-	-	MIP-53	LCl	-	-	244	-	-
1979-059	2444054.17	1979 Jun 28 09:25:11	Soyuz-U	-	Progress-7	Progress 7k-TG No. 107	-	-	MIP-53	LCl	-	-	40267	-	-
1979-061	2444054.17	1979 Jun 29 16:00	Soyuz-U	-	Kosmos-1109	Okc	-	-	MIP-5	LCl	-	-	404	-	-
1979-064	2444064.98	1979 Jul 13 08:25	Soyuz-U	-	Kosmos-1111	Zenit-6	-	-	MIP-53	LCl	-	-	485	-	-
1979-066	2444067.95	1979 Jul 13 08:25	Soyuz-U	-	Kosmos-1111	Zenit-6	-	-	MIP-53	LCl	-	-	344	-	-
1979-067	2444075.10	1979 Jul 20 11:58	Vostok 8492M	-	Kosmos-1115	Zenit-6	-	-	MIP-53	LCl	-	-	233	-	-
1979-068	2444080.14	1979 Jul 31 07:00	Soyuz-U	-	Kosmos-1115	Fram	-	-	MIP-53	LCl	-	-	672	-	-
1979-069	2444081.81	1979 Jul 31 03:56	Molniya SK78M	ML	Kosmos-1116	Tselina-D	-	-	MIP-53	LCl	-	-	308	-	-
1979-071	2444088.95	1979 Aug 3 11 09:15:00	Soyuz-U	-	Kosmos-1118	Molniya-1	-	-	MIP-53	LCl	-	-	40810	-	-
1979-073	2444088.95	1979 Aug 3 11 09:15:00	Soyuz-U	-	Kosmos-1119	Orion	-	-	MIP-53	LCl	-	-	238	-	-
1979-075	2444102.82	1979 Aug 14 15:30	Soyuz-U	-	Kosmos-1120	Zenit-4MKM	-	-	MIP-53	LCl	-	-	366	-	-
1979-076	2444106.97	1979 Aug 17 07:45	Soyuz-U	-	Kosmos-1122	Feniks No. 929	-	-	MIP-53	LCl	-	-	350	-	-
1979-077	2444116.98	1979 Aug 21 11:10	Soyuz-U	-	Kosmos-1123	Geokor-Priroda	-	-	MIP-53	LCl	-	-	235	-	-
1979-079	2444121.93	1979 Aug 31 11:30	Soyuz-U	2BL	Kosmos-1124	Fram	-	-	MIP-53	LCl	-	-	239	-	-
1979-080	2444121.93	1979 Sep 5 10:20	Soyuz-U	-	Kosmos-1126	Okc	-	-	MIP-53	LCl	-	-	594	-	-
1979-081	2444131.15	1979 Sep 14 15:30	Soyuz-U	-	Kosmos-1127	Zenit-6	-	-	MIP-53	LCl	-	-	40262	-	-
1979															

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Mission	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee_Km	Range_Km	Dest
1979-092	2444169.02	1979 Oct 22 1230	Soyuz-U	-	76047-445	Kosmos-1142	Zenit-6	MIP-53	LC63/3	-	-	417	-	-
1979-093	2444173.26	1979 Oct 26 1812	Vostok 8A92M	-	78018-906 ?	Kosmos-1143	Tselina-D	MIP-53	LC63/4	-	-	681	-	-
1979-094	2444177.89	1979 Oct 31 0925:00	Vostok 8A92M	-	78065-528	Meteor-2	Meteor-2 No. 7	MIP-53	LC63/4	-	-	924	-	-
1979-095	2444180.17	1979 Nov 2 1600	Soyuz-U	-	76047-939	Kosmos-1144	Feniks No. 939	MIP-53	LC63/3	-	-	435	-	-
1979-099	2444204.91	1979 Nov 27 0955	Vostok 8A92M	-	78065-327	Kosmos-1145	Tselina-D	MIP-53	LC63/4	-	-	682	-	-
1979-102	2444220.02	1979 Dec 12 1230	Soyuz-U	-	76047-442	Kosmos-1147	Zenit-6	MIP-53	LC63/3	-	-	418	-	-
1979-103	2444224.02	1979 Dec 16 1229:50	Soyuz-U	-	78018-912	Kosmos-1148	Soyuz 7k-ST No. 6L	MIP-5	LC31	-	-	389	-	-
1979-106	2444236.04	1979 Dec 28 1300	Soyuz-U	-	76047-760	Kosmos-1149	Zenit-4MKM	MIP-53	LC63/3	-	-	405	-	-
1980-001	2444248.01	1980 Jan 9 1215	Soyuz-U	-	76047-443	Kosmos-1149	Zenit-6	MIP-53	LC63/3	-	-	432	-	-
1980-002	2444250.02	1980 Jan 11 1228	Molniya 8K78M	ML	78018-605	Kosmos-1149	Molniya-1	MIP-53	LC63/3	-	-	4084	-	-
1980-003	2444263.16	1980 Jan 24 1545	Soyuz-U	-	78038-914	Kosmos-1152	Feniks No. 928	MIP-53	LC63/3	-	-	374	-	-
1980-008	2444269.04	1980 Jan 30 1251	Vostok 8A92M	-	78065-329	Kosmos-1154	Tselina-D	MIP-53	LC63/4	-	-	689	-	-
1980-009	2444276.96	1980 Feb 7 1100	Soyuz-U	-	78017-452	Kosmos-1155	Zenit-6	MIP-53	LC63/4	-	-	414	-	-
1980-013	2444281.54	1980 Feb 12 0624:37	Molniya 8K78M	2BL	78065-532	Kosmos-1164	Orion	MIP-53	LC63/4	-	-	352	-	-
1980-017	2444291.00	1980 Feb 21 1200	Soyuz-U	-	78038-713	Kosmos-1165	Zenit-4MKM	MIP-53	LC63/4	-	-	352	-	-
1980-020	2444302.94	1980 Mar 4 1030	Soyuz-U	-	78017-447	Kosmos-1166	Zenit-6	MIP-53	LC63/4	-	-	415	-	-
1980-021	2444317.17	1980 Mar 18 1601	Vostok 8A92M	-	78065-530	-	-	-	-	-	-	0	-	-
1980-024	2444326.29	1980 Mar 27 1853:31	Soyuz-U	-	Zh15000-200	Progress-8	Progress 7k-TG No. 108	MIP-5	LC31	-	-	354	-	-
1980-025	2444330.53	1980 Apr 1 0800	Soyuz-U	-	77026-734	Kosmos-1170	Zenit-4MKM	MIP-5	LC31	-	-	381	-	-
1980-027	2444335.83	1980 Apr 9 0338:12	Soyuz-U	-	Zh15000-189	Soyuz-36	Soyuz 7k-T No. 51	MIP-5	LC61	-	-	354	-	-
1980-028	2444342.35	1980 Apr 12 2017:57	Molniya 8K78M	2BL	77026-526	Kosmos-1172	Orion	MIP-53	LC61/1	-	-	40334	-	-
1980-029	2444346.55	1980 Apr 17 0830	Soyuz-U	-	77026-735	Kosmos-1173	Zenit-4MKM	MIP-5	LC1	-	-	411	-	-
1980-031	2444348.23	1980 Apr 18 1731	Molniya 8K78M	ML	78065-606	Kosmos-1175	Molniya-3 No. 26	MIP-53	LC61/1	-	-	462	-	-
1980-033	2444358.77	1980 Apr 27 0624:11	Soyuz-U	-	Zh15000-210	Progress-9	Progress 7k-TG No. 109	MIP-5	LC1	-	-	370	-	-
1980-035	2444359.06	1980 Apr 29 1330	Soyuz-U	-	Zh15000-213	Kosmos-1177	Kantar-4K1 No. 2	MIP-53	LC63/3	-	-	399	-	-
1980-036	2444367.94	1980 May 7 1500	Soyuz-U	-	78017-449	Kosmos-1178	Zenit-6	MIP-53	LC63/3	-	-	414	-	-
1980-038	2444374.73	1980 May 15 0535	Soyuz-U	-	78017-448	Kosmos-1180	Orion	MIP-53	LC63/3	-	-	397	-	-
1980-040	2444386.26	1980 May 23 0710	Soyuz-U	-	78017-064	Kosmos-1182	Fram	MIP-5	LC63/3	-	-	249	-	-
1980-042	2444388.90	1980 May 26 1620:39	Soyuz-U	-	P 15000-226	Soyuz-36	Soyuz 7k-T No. 52	MIP-5	LC61/1	-	-	354	-	-
1980-044	2444396.10	1980 Jun 4 0734	Vostok 8A92M	-	76047-446	Kosmos-1183	Zenit-6	MIP-53	LC63/3	-	-	417	-	-
1980-045	2444396.79	1980 Jun 6 0700	Soyuz-U	-	76047-351	Kosmos-1184	Tselina-D	MIP-53	LC61/1	-	-	684	-	-
1980-046	2444398.10	1980 Jun 6 0700	Soyuz-U	-	Zh15000-196	Soyuz T-2	Soyuz 7k-ST No. 7L	MIP-5	LC61/1	-	-	348	-	-
1980-048	2444403.02	1980 Jun 14 2051:34	Soyuz-U	-	78035-925	Kosmos-1185	Nesurs-FI 17F41 No. 12	MIP-53	LC61/1	-	-	280	-	-
1980-051	2444405.37	1980 Jun 15 0644:12	Molniya 8K78M	2BL	78017-461	Kosmos-1187	Zenit-6	MIP-53	LC63/3	-	-	305	-	-
1980-053	2444412.76	1980 Jun 15 0644:12	Vostok 8A92M	-	78038-513	Kosmos-1188	Meteor-Pirroda No. 3-1	MIP-53	LC63/3	-	-	40229	-	-
1980-054	2444417.01	1980 Jun 21 1854	Molniya 8K78M	ML	76047-950	Molniya-1	Molniya-1	MIP-53	LC61/1	-	-	685	-	-
1980-055	2444419.69	1980 Jun 26 1220	Soyuz-U	-	78017-950	Kosmos-1189	Zenit-6	MIP-53	LC61/1	-	-	4704	-	-
1980-057	2444422.54	1980 Jun 29 0440:42	Soyuz-U	-	P 15000-252	Progress-10	Progress 7k-TG No. 110	MIP-5	LC1	-	-	338	-	-
1980-059	2444430.63	1980 Jul 2 0658:41	Molniya 8K78M	2BL	77025-529	Kosmos-1191	Orion	MIP-53	LC61/1	-	-	40666	-	-
1980-061	2444438.51	1980 Jul 18 1730	Soyuz-U	-	78017-953	Kosmos-1200	Zenit-6	MIP-53	LC61/1	-	-	240	-	-
1980-063	2444438.94	1980 Jul 18 1930	Molniya 8K78M	ML	76047-953	Kosmos-1201	Fram	MIP-53	LC63/3	-	-	246	-	-
1980-064	2444441.27	1980 Jul 23 1533:03	Soyuz-U	-	76047-595	Molniya-3	Molniya-3 No. 97	MIP-53	LC61/1	-	-	359	-	-
1980-065	2444445.03	1980 Jul 24 1740	Soyuz-U	-	78017-958	Kosmos-1202	Soyuz 7k-T No. 53	MIP-53	LC1	-	-	306	-	-
1980-066	2444451.52	1980 Jul 31 1745	Soyuz-U	-	77023-754	Kosmos-1203	Soyuz 7k-T No. 54	MIP-53	LC63/3	-	-	412	-	-
1980-068	2444458.29	1980 Aug 12 1150	Soyuz-U	-	78017-455	Kosmos-1205	Nesurs-FI 17F41 No. 13	MIP-53	LC63/3	-	-	304	-	-
1980-069	2444463.79	1980 Aug 15 0554	Vostok 8A92M	-	76047-352	Kosmos-1206	Tselina-D	MIP-53	LC63/3	-	-	698	-	-
1980-071	2444472.15	1980 Aug 26 1530	Soyuz-U	-	76047-065	Kosmos-1207	Fram	MIP-53	LC61/1	-	-	268	-	-
1980-072	2444480.53	1980 Aug 26 1530	Soyuz-U	-	78063-475	Kosmos-1208	Feniks No. 907	MIP-53	LC61/1	-	-	278	-	-
1980-073	2444484.16	1980 Sep 3 1100:00	Vostok 8A92M	-	78018-308	Kosmos-1209	Nesurs-FI 17F41 No. 14	MIP-53	LC61/1	-	-	972	-	-
1980-075	2444491.92	1980 Sep 19 1011:04	Soyuz-U	-	P 15000-292	Meteor-2	Meteor-2	MIP-53	LC63/3	-	-	338	-	-
1980-076	2444493.10	1980 Sep 19 1011:04	Soyuz-U	-	77023-466	Kosmos-1210	Soyuz 7k-T No. 54	MIP-5	LC1	-	-	434	-	-
1980-077	2444498.92	1980 Sep 23 1030	Soyuz-U	-	78065-940	Kosmos-1211	Orion	MIP-53	LC61/1	-	-	297	-	-
1980-078	2444501.13	1980 Sep 26 1010	Soyuz-U	-	77023-076	Kosmos-1211	Orion	MIP-53	LC61/1	-	-	238	-	-
1980-079	2444511.13	1980 Sep 28 1509:55	Soyuz-U	-	P 15000-219	Progress-11	Progress 7k-TG No. 111	MIP-5	LC1	-	-	573	-	-
1980-080	2444516.10	1980 Oct 3 1200	Soyuz-U	-	77023-467	Kosmos-1213	Zenit-6	MIP-53	LC61/1	-	-	505	-	-
1980-082	2444523.05	1980 Oct 10 1310	Soyuz-U	-	77023-470	Kosmos-1214	Zenit-4MKM	MIP-53	LC61/1	-	-	437	-	-
1980-084	2444529.95	1980 Oct 16 1220	Soyuz-U	-	77023-470	Kosmos-1216	Zenit-6	MIP-53	LC61/1	-	-	450	-	-
1980-085	2444536.95	1980 Oct 24 1053:29	Molniya 8K78M	2BL	76047-548	Kosmos-1217	Orion	MIP-53	LC61/1	-	-	40293	-	-
1980-086	2444542.92	1980 Oct 30 1000	Soyuz-U	-	P 15000-293	Kosmos-1218	Yantar-4K1 No. 3	MIP-5	LC31	-	-	357	-	-
1980-088	2444544.00	1980 Oct 31 1200	Soyuz-U	-	77023-471	Kosmos-1219	Zenit-6	MIP-53	LC61/1	-	-	407	-	-
1980-090	2444556.02	1980 Nov 12 1230	Soyuz-U	-	77023-472	Kosmos-1221	Zenit-6	MIP-53	LC61/1	-	-	415	-	-
1980-092	2444559.68	1980 Nov 16 0418	Molniya 8K78M	ML	77025-524	Molniya-1	Molniya-1	MIP-53	LC61/1	-	-	40891	-	-
1980-093	2444565.00	1980 Nov 21 1153	Vostok 8A92M	-	76047-353	Kosmos-1222	Tselina-D	MIP-53	LC63/3	-	-	686	-	-
1980-094	2444571.10	1980 Nov 27 1418:28	Soyuz-U	-	Zh15000-202	Soyuz T-3	Soyuz 7k-ST No. 8L	MIP-5	LC1	-	-	357	-	-
1980-095	2444571.40	1980 Nov 27 2137:10	Molniya 8K78M	2BL	78065-536	Kosmos-1223	Orion	MIP-53	LC61/1	-	-	40188	-	-
1980-096	2444575.01	1980 Dec 1 1215	Soyuz-U	-	77023-473	Kosmos-1224	Zenit-6	MIP-53	LC63/3	-	-	443	-	-
1980-101	2444590.01	1980 Dec 16 1215	Soyuz-U	-	77023-475	Kosmos-1227	Zenit-6	MIP-53	LC63/3	-	-	305	-	-
1980-103	2444598.67	1980 Dec 25 0402	Molniya 8K78M	SOL	P 15000-203	Progress-8	SO-M No. 508	MIP-5	LC31	-	-	150000	-	-
1981-001	2444611.01	1981 Jan 6 1215	Soyuz-U	-	76038-913	Kosmos-1236	Feniks No. 941	MIP-53	LC61/1	-	-	395	-	-
1981-002	2444614.12	1981 Jan 9 1457	Molniya 8K78M	ML	77023-617	Molniya-3	Molniya-3 No. 25	MIP-53	LC61/1	-	-	415	-	-
1981-004	2444621.96	1981 Jan 16 1200	Soyuz-U	-	78017-921	Kosmos-1239	Orion	MIP-53	LC61/1	-	-	40762	-	-
1981-005	2444624.96	1981 Jan 20 1100	Soyuz-U	-	77023-975	Kosmos-1240	Feniks No. 975	MIP-53	LC61/1	-	-	224	-	-
1981-007	2444629.10	1981 Jan 24 1418:02	Soyuz-U	-	P 15000-235	Progress-12	Progress 7k-TG No. 113	MIP-5	LC1	-	-	385	-	-
1981-008	2444632.12	1981 Jan 27 1458	Vostok 8A92M	-	78017-354	Kosmos-1242	Tselina-D	MIP-53	LC63/3	-	-	701	-	-
1981-019	2444635.97	1981 Jan 30 1627	Molniya 8K78M	ML	76038-510	Molniya-1	Molniya-1	MIP-53	LC63/3	-	-	40979	-	-
1981-014	2444648.97	1981 Feb 13 1115	Soyuz-U	-	78063-478	Kosmos-1245	Zenit-6	MIP-53	LC63/3	-	-	437	-	-
1981-015	2444653.58	1981 Feb 18 0900	Soyuz-U	-	Ts15000-264	Kosmos-1246	Siluet No. 1	MIP-5	LC31	-	-	274	-	-
1981-016	2444654.92	1981 Feb 19 1000:26	Molniya 8K78M	-	76047-549	Kosmos-1247	Orion	MIP-53	LC16/2	-	-	39741	-	-
1981-020	2444669.12	1981 Mar 12 1900:11	Soyuz-U	2BL	77023-475 ?	Kosmos-1248	Feniks No. 940	MIP-53	LC61/1	-	-	363	-	-
1981-023	2444676.29	1981 Mar 12 1900:11	Soyuz-U	-	Ts15000-266	Kosmos-1248	Soyuz T-4	MIP-53	LC1	-	-	373	-	-
1981-026	2444680.56	1981 Mar 17 0840	Soyuz-U	-	77023-468	Kosmos-1259	Zenit-6	MIP-5	LC31	-	-	571	-	-
1981-029	2444686.12	1981 Mar 22 1458:55	Soyuz-U	-	P 15000-257	Soyuz-39	Soyuz 7k							

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight	Mission	FlightCode	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee_Km	Range_Km	Dest
1981-030	2444687.65	1981 Mar 24 0331	Molniya 8K78M	ML	77026-525	Molniya-3	-	-	MIP-53	L041/1	-	-	40888	-	-
1981-F02	2444691.90	1981 Mar 28 0930	Soyuz-U	-	78065-927	Feniks No. 979	-	-	MIP-5	L041/1	-	-	207	-	-
1981-031	2444694.90	1981 Mar 31 0939:49	Molniya 8K78M	2BL	78017-553	Kosmos-1261	-	-	MIP-53	L041/1	-	-	39765	-	-
1981-032	2444701.95	1981 Apr 7 1051	Soyuz-U	-	78063-480	Zent-6	-	-	MIP-53	L041/1	-	-	391	-	-
1981-035	2444709.94	1981 Apr 15 1030	Soyuz-U	-	78063-482	Kosmos-1264	-	-	MIP-53	L041/1	-	-	459	-	-
1981-036	2444710.98	1981 Apr 16 1130	Soyuz-U	-	78063-479	Kosmos-1265	-	-	MIP-53	L041/1	-	-	477	-	-
1981-040	2444722.88	1981 Apr 28 0900	Soyuz-U	-	78063-484	Kosmos-1268	-	-	MIP-53	L041/1	-	-	451	-	-
1981-042	2444739.22	1981 May 14 1716:38	Vostok 8A92M	-	P 15000-246	Soyuz 7K-T No. 56	-	-	MIP-5	L041/1	-	-	372	-	-
1981-043	2444739.41	1981 May 14 2146:00	Soyuz-U	-	78052-392	Meteor-2	-	-	MIP-53	L041/1	-	-	925	-	-
1981-046	2444742.99	1981 May 18 1150	Vostok 8A92M	-	78063-485	Feniks No. 980	-	-	MIP-5	L041/1	-	-	405	-	-
1981-047	2444746.88	1981 May 19 0349	Soyuz-U	-	78063-488	Tselina-D	-	-	MIP-5	L041/1	-	-	777	-	-
1981-048	2444746.88	1981 May 21 0910	Soyuz-U	-	78039-418	Zent-6	-	-	MIP-5	L041/1	-	-	424	-	-
1981-049	2444746.88	1981 May 22 0710	Soyuz-U	-	78039-418	Zent-6	-	-	MIP-5	L041/1	-	-	404	-	-
1981-052	2444759.08	1981 Jun 3 1400	Soyuz-U	-	78063-077	Kosmos-1271	-	-	MIP-53	L041/1	-	-	371	-	-
1981-054	2444761.50	1981 Jun 9 0333	Molniya 8K78M	ML	78063-483	Kosmos-1272	-	-	MIP-53	L041/1	-	-	40880	-	-
1981-055	2444771.79	1981 Jun 9 0700	Soyuz-U	-	78063-622	Molniya-3	-	-	MIP-53	L041/1	-	-	438	-	-
1981-056	2444772.90	1981 Jun 16 0700	Soyuz-U	-	78039-078	Kosmos-1276	-	-	MIP-53	L041/1	-	-	417	-	-
1981-058	2444776.32	1981 Jun 19 1937:04	Molniya 8K78M	2BL	78047-554	Kosmos-1277	-	-	MIP-53	L041/1	-	-	40416	-	-
1981-060	2444780.24	1981 Jun 24 1747	Molniya 8K78M	ML	78038-607	Kosmos-1278	-	-	MIP-53	L041/1	-	-	40761	-	-
1981-062	2444786.90	1981 Jul 1 0930	Soyuz-U	-	78038-422	Kosmos-1279	-	-	MIP-53	L041/1	-	-	419	-	-
1981-063	2444787.50	1981 Jul 2 0710	Soyuz-U	-	78026-663	Kosmos-1280	-	-	MIP-53	L041/1	-	-	443	-	-
1981-064	2444793.02	1981 Jul 7 1230	Soyuz-U	-	78063-477	Kosmos-1281	-	-	MIP-53	L041/1	-	-	430	-	-
1981-065	2444796.72	1981 Jul 10 0514	Vostok 8A92M	-	78042-389	Meteor-Priroda	-	-	MIP-53	L041/1	-	-	370	-	-
1981-066	2444801.04	1981 Jul 15 1300	Soyuz-U	-	78017-951	Kosmos-1282	-	-	MIP-53	L041/1	-	-	355	-	-
1981-067	2444816.50	1981 Jul 17 0800	Soyuz-U	-	78047-940	Kosmos-1283	-	-	MIP-53	L041/1	-	-	399	-	-
1981-068	2444820.51	1981 Jul 29 1155	Molniya 8K78M	-	78039-421	Kosmos-1284	-	-	MIP-53	L041/1	-	-	708	-	-
1981-071	2444824.07	1981 Aug 4 0012:58	Vostok 8A92M	2BL	78047-522	Feniks No. 951	-	-	MIP-53	L041/1	-	-	40249	-	-
1981-075	2444830.16	1981 Aug 13 1335	Soyuz-U	-	78039-375	IK Bulgaria-1300	-	-	MIP-53	L041/1	-	-	902	-	-
1981-076	2444830.16	1981 Aug 13 1620	Soyuz-U	-	78063-976	Kosmos-1286	-	-	MIP-53	L041/1	-	-	387	-	-
1981-079	2444834.94	1981 Aug 15 0930	Soyuz-U	-	78063-481	Kosmos-1287	-	-	MIP-53	L041/1	-	-	362	-	-
1981-080	2444837.93	1981 Aug 21 1020	Soyuz-U	-	78039-115	Kosmos-1288	-	-	MIP-53	L041/1	-	-	418	-	-
1981-083	2444857.94	1981 Aug 27 1030	Soyuz-U	-	78049-416	Kosmos-1301	-	-	MIP-53	L041/1	-	-	322	-	-
1981-086	2444861.53	1981 Sep 4 0800	Soyuz-U	-	78017-941	Kosmos-1305	-	-	MIP-53	L041/1	-	-	415	-	-
1981-088	2444861.53	1981 Sep 4 0800	Molniya 8K78M	ML	78065-535	Kosmos-1305	-	-	MIP-53	L041/1	-	-	13664	-	-
1981-089	2444862.96	1981 Sep 11 0643:10	Soyuz-U	-	78039-416	Kosmos-1307	-	-	MIP-53	L041/1	-	-	564	-	-
1981-090	2444862.96	1981 Sep 15 1330	Soyuz-U	-	78023-602	Kosmos-1309	-	-	MIP-53	L041/1	-	-	289	-	-
1981-092	2444866.90	1981 Sep 18 0930	Soyuz-U	-	78039-427	Kosmos-1313	-	-	MIP-53	L041/1	-	-	271	-	-
1981-099	2444878.55	1981 Oct 1 0900	Soyuz-U	-	78049-079	Kosmos-1314	-	-	MIP-53	L041/1	-	-	284	-	-
1981-101	2444886.94	1981 Oct 9 1040	Soyuz-U	-	78017-957	Kosmos-1315	-	-	MIP-53	L041/1	-	-	689	-	-
1981-103	2444891.46	1981 Oct 13 2301	Vostok 8A92M	-	78039-425	Kosmos-1316	-	-	MIP-53	L041/1	-	-	384	-	-
1981-104	2444892.75	1981 Oct 15 0915	Soyuz-U	-	78039-425	Kosmos-1316	-	-	MIP-53	L041/1	-	-	40889	-	-
1981-106	2444894.59	1981 Oct 17 0529	Molniya 8K78M	ML	78065-550	Molniya-3	-	-	MIP-53	L041/1	-	-	10162	-	-
1981-108	2444909.45	1981 Oct 31 2285:31	Molniya 8K78M	2BL	78039-953	Feniks No. 944	-	-	MIP-53	L041/1	-	-	390	-	-
1981-109	2444921.04	1981 Nov 5 1300	Soyuz-U	-	78023-977	Kosmos-1318	-	-	MIP-53	L041/1	-	-	289	-	-
1981-112	2444921.04	1981 Nov 5 1300	Soyuz-U	-	78039-429	Kosmos-1319	-	-	MIP-53	L041/1	-	-	6887	-	-
1981-113	2444926.14	1981 Nov 13 0930	Molniya 8K78M	ML	78039-601	Molniya-1	-	-	MIP-53	L041/1	-	-	288	-	-
1981-116	2444942.91	1981 Dec 4 0930	Soyuz-U	-	78039-426	Kosmos-1320	-	-	MIP-53	L041/1	-	-	388	-	-
1981-121	2444967.96	1981 Dec 19 1010	Soyuz-U	-	78039-426	Kosmos-1329	-	-	MIP-53	L041/1	-	-	40076	-	-
1981-123	2444967.96	1981 Dec 21 1315	Molniya 8K78M	ML	78039-640	Kosmos-1330	-	-	MIP-53	L041/1	-	-	254	-	-
1982-002	2444982.04	1982 Dec 31 0930	Soyuz-U	-	78039-953	Feniks No. 953	-	-	MIP-53	L041/2	-	-	437	-	-
1982-004	2444982.04	1982 Jan 12 1330	Soyuz-U	-	78039-953	Feniks No. 953	-	-	MIP-53	L041/2	-	-	376	-	-
1982-008	2444982.04	1982 Jan 20 1130	Soyuz-U	-	78039-953	Feniks No. 953	-	-	MIP-53	L041/2	-	-	414	-	-
1982-011	2445019.97	1982 Jan 16 1130	Soyuz-U	-	78039-953	Feniks No. 953	-	-	MIP-53	L041/2	-	-	671	-	-
1982-013	2445019.97	1982 Feb 19 0140	Soyuz-U	-	78039-953	Feniks No. 953	-	-	MIP-53	L041/2	-	-	40749	-	-
1982-015	2445027.94	1982 Feb 26 2010	Vostok 8A92M	ML	77023-620	Molniya-1	-	-	MIP-53	L041/2	-	-	39717	-	-
1982-016	2445031.74	1982 Feb 3 0644:38	Molniya 8K78M	2BL	77023-618	Molniya-3	-	-	MIP-53	L041/2	-	-	306	-	-
1982-018	2445033.05	1982 Mar 5 1054	Soyuz-U	-	78039-420	Kosmos-1342	-	-	MIP-53	L041/1	-	-	40623	-	-
1982-021	2445045.51	1982 Mar 17 1030	Soyuz-U	-	78039-426	Kosmos-1343	-	-	MIP-53	L041/1	-	-	398	-	-
1982-027	2445060.19	1982 Mar 31 1637	Molniya 8K78M	ML	78039-939	Kosmos-1346	-	-	MIP-53	L041/1	-	-	681	-	-
1982-029	2445060.19	1982 Mar 31 1637	Soyuz-U	-	77023-939	Kosmos-1347	-	-	MIP-53	L041/2	-	-	436	-	-
1982-029	2445067.07	1982 Apr 7 1341:47	Molniya 8K78M	2BL	77023-621	Kosmos-1348	-	-	MIP-53	L041/2	-	-	39760	-	-
1982-032	2445075.10	1982 Apr 15 1430	Soyuz-U	-	78063-979	Kosmos-1350	-	-	MIP-53	L041/1	-	-	418	-	-
1982-035	2445080.90	1982 Apr 21 0915	Soyuz-U	-	78039-428	Kosmos-1352	-	-	MIP-53	L041/1	-	-	415	-	-
1982-036	2445082.90	1982 Apr 23 0940	Soyuz-U	-	78039-428	Kosmos-1352	-	-	MIP-53	L041/1	-	-	248	-	-
1982-039	2445094.93	1982 May 8 0801	Vostok 8A92M	-	77023-340	Kosmos-1353	-	-	MIP-53	L041/2	-	-	703	-	-
1982-042	2445102.82	1982 May 13 0958:05	Soyuz-U	-	Ts15000-272	Soyuz T-5	-	-	MIP-53	L041/1	-	-	343	-	-
1982-042	2445105.10	1982 May 15 1420	Soyuz-U	-	77049-431	Zent-6	-	-	MIP-53	L041/1	-	-	107	-	-
1982-045	2445110.05	1982 May 20 1308:31	Molniya 8K78M	2BL	78063-624	Kosmos-1367	-	-	MIP-53	L041/1	-	-	39770	-	-
1982-046	2445111.75	1982 May 21 1240	Soyuz-U	-	78018-710	Kosmos-1368	-	-	MIP-53	L041/1	-	-	370	-	-
1982-048	2445114.88	1982 May 23 0556:41	Soyuz-U	-	Ts15000-283	Progress-13	-	-	MIP-53	L041/1	-	-	347	-	-
1982-048	2445114.88	1982 May 23 0556:41	Soyuz-U	-	78065-117	Kosmos-1370	-	-	MIP-53	L041/1	-	-	285	-	-
1982-050	2445117.98	1982 May 28 0910	Soyuz-U	-	Ts15000-290	Kosmos-1370	-	-	MIP-53	L041/1	-	-	275	-	-
1982-050	2445118.42	1982 May 28 2202:59	Molniya 8K78M	ML	78017-556	Molniya-1	-	-	MIP-53	L041/1	-	-	40635	-	-

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Flight	Variant	Flight_ID	Mission	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee_Km	Range_Km	Dest
1982-077	2445184.98	1982 Aug 3 1130	Soyuz-U	Kosmos-1398	-	77049-803	Orion No. 216	MIP-53	LC03/3	-	-	244	-	-
1982-078	2445185.98	1982 Aug 4 1130	Soyuz-U	Kosmos-1399	-	77049-216	Orion No. 216	MIP-5	LC31	-	-	354	-	-
1982-079	2445186.79	1982 Aug 5 0656	Vostok 8A92H	Kosmos-1400	-	76053-941	Tselina-D	MIP-53	LC16/2	-	-	690	-	-
1982-080	2445201.22	1982 Aug 19 1711:52	Soyuz-U	Soyuz T-7	-	Ts15000-276	Soyuz 7k-ST No. 12L	MIP-5	LC1	-	-	379	-	-
1982-081	2445201.91	1982 Aug 20 0950	Soyuz-U	Kosmos-1401	-	76054-119	Resurs-F1 17F41 No. 19	MIP-53	LC01/1	-	-	399	-	-
1982-082	2445208.50	1982 Aug 27 0002	Molniya 8K78H	Molniya-3	ML	76047-547	Molniya-3 No. 33	MIP-53	LC01/1	-	-	40869	-	-
1982-083	2445213.88	1982 Sep 1 0900	Soyuz-U	Kosmos-1403	-	76054-763	Zent-6	MIP-53	LC31	-	-	592	-	-
1982-084	2445213.99	1982 Sep 1 1140	Soyuz-U	Kosmos-1404	-	76047-944	Zent-6	MIP-53	LC03/3	-	-	592	-	-
1982-085	2445220.93	1982 Sep 8 1020	Soyuz-U	Kosmos-1406	-	77024-082	Zent-6	MIP-53	LC01/1	-	-	231	-	-
1982-086	2445220.93	1982 Sep 8 1020	Soyuz-U	Kosmos-1406	-	77024-082	Zent-6	MIP-53	LC01/1	-	-	364	-	-
1982-094	2445230.71	1982 Sep 15 0458:54	Soyuz-U	Kosmos-1407	-	77049-955	Feniks No. 965	MIP-53	LC01/1	-	-	374	-	-
1982-095	2445230.77	1982 Sep 15 0458:54	Soyuz-U	Kosmos-1407	-	77049-955	Feniks No. 965	MIP-53	LC01/1	-	-	374	-	-
1982-096	2445242.77	1982 Sep 22 0623:11	Molniya 8K78H	Progress-15	2BL	Sh15000-282	Progress 7k-TG No. 112	MIP-5	LC1	-	-	40163	-	-
1982-098	2445242.99	1982 Sep 30 1150	Soyuz-U	Kosmos-1409	-	76054-639	Zent-6	MIP-53	LC16/2	-	-	356	-	-
1982-101	2445256.88	1982 Oct 14 0910	Soyuz-U	Kosmos-1411	-	76054-761	Zent-6	MIP-53	LC16/2	-	-	356	-	-
1982-107	2445273.37	1982 Oct 31 1120:36	Soyuz-U	Kosmos-1416	-	Sh15000-335	Progress 7k-TG No. 115	MIP-5	LC31	-	-	362	-	-
1982-108	2445276.90	1982 Nov 2 0930	Soyuz-U	Kosmos-1419	-	76054-767	Zent-6	MIP-5	LC31	-	-	320	-	-
1982-110	2445291.89	1982 Nov 18 0925	Soyuz-U	Kosmos-1421	-	76054-767	Zent-6	MIP-5	LC31	-	-	281	-	-
1982-114	2445307.00	1982 Dec 3 1200	Soyuz-U	Kosmos-1422	-	76054-766	Zent-6	MIP-53	LC03/3	-	-	288	-	-
1982-115	2445312.07	1982 Dec 8 1346	Molniya 8K78H	Kosmos-1423	ML	77024-656	Molniya-11F668 No. 60	MIP-53	LC1	-	-	589	-	-
1982-116	2445316.44	1982 Dec 14 2230:00	Vostok 8A92H	Meteor-2	-	78017-356	Meteor-2 No. 9	MIP-53	LC03/3	-	-	907	-	-
1982-117	2445319.52	1982 Dec 16 1000	Soyuz-U	Kosmos-1424	-	77049-217	Zent-6	MIP-5	LC31	-	-	350	-	-
1982-119	2445326.58	1982 Dec 23 0910	Soyuz-U	Kosmos-1425	-	Sh15000-332	Zent-6	MIP-5	LC31	-	-	442	-	-
1982-120	2445332.00	1982 Dec 28 1200	Soyuz-U	Kosmos-1426	-	Sh15000-332	Zent-6	MIP-5	LC31	-	-	442	-	-
1983-003	2445356.23	1983 Jan 20 1726	Vostok 8A92H	Kosmos-1426	-	76053-342	Tselina-D	MIP-53	LC16/2	-	-	694	-	-
1983-005	2445371.86	1983 Jan 27 0830	Soyuz-U	Kosmos-1438	-	77024-773	Zent-6	MIP-5	LC31	-	-	369	-	-
1983-009	2445376.50	1983 Feb 6 1131	Soyuz-U	Kosmos-1439	-	77049-956	Feniks No. 966	MIP-5	LC31	-	-	346	-	-
1983-010	2445381.52	1983 Feb 16 1003	Vostok 8A92H	Kosmos-1440	-	77024-120	Resurs-F1 17F41 No. 20	MIP-53	LC01/1	-	-	276	-	-
1983-014	2445386.95	1983 Feb 25 1248	Soyuz-U	Kosmos-1441	-	76053-343	Tselina-D	MIP-53	LC16/2	-	-	685	-	-
1983-015	2445396.95	1983 Mar 1 1529:00	Soyuz-U	Kosmos-1442	-	78017-348	Zent-6	MIP-53	LC01/1	-	-	365	-	-
1983-016	2445409.57	1983 Mar 16 0850	Molniya 8K78H	Kosmos-1444	ML	78039-641	Molniya-3 No. 34	MIP-53	LC01/1	-	-	418	-	-
1983-018	2445410.26	1983 Mar 16 1814	Soyuz-U	Molniya-3	ML	77024-778 (0017)	Molniya-3 No. 34	MIP-53	LC01/1	-	-	40794	-	-
1983-024	2445424.95	1983 Mar 31 1050	Soyuz-U	Kosmos-1441	-	76053-625	Zent-6	MIP-53	LC1	-	-	343	-	-
1983-025	2445426.58	1983 Apr 2 0202:00	Soyuz-U	Kosmos-1446	-	77024-654	Zent-6	MIP-53	LC16/2	-	-	40825	-	-
1983-029	2445432.55	1983 Apr 2 0202:00	Soyuz-U	Kosmos-1449	-	77024-654	Zent-6	MIP-53	LC16/2	-	-	431	-	-
1983-035	2445445.05	1983 Apr 20 1310:54	Soyuz-U	Molniya-1	ML	77024-777	Molniya-1	MIP-53	LC16/2	-	-	40069	-	-
1983-036	2445447.10	1983 Apr 20 1310:54	Soyuz-U	Molniya-1	ML	77024-777	Molniya-1	MIP-53	LC16/2	-	-	322	-	-
1983-038	2445450.52	1983 Apr 25 1933:43	Molniya 8K78H	Soyuz T-6	-	Sh15000-342	Soyuz 7k-ST No. 13L	MIP-53	LC03/4	-	-	384	-	-
1983-039	2445460.52	1983 Apr 26 1000	Soyuz-U	Kosmos-1456	-	77049-946	Feniks No. 957	MIP-53	LC16/2	-	-	40100	-	-
1983-043	2445470.88	1983 May 6 0930	Soyuz-U	Kosmos-1457	-	78039-214	Orion No. 214	MIP-53	LC31	-	-	352	-	-
1983-045	2445480.88	1983 May 17 0930	Soyuz-U	Kosmos-1458	-	76054-768	Zent-6	MIP-53	LC31	-	-	246	-	-
1983-050	2445481.05	1983 May 26 1200	Soyuz-U	Kosmos-1460	-	77024-775	Zent-6	MIP-53	LC31	-	-	445	-	-
1983-052	2445486.29	1983 May 31 1240	Soyuz-U	Kosmos-1462	-	77024-750	Resurs-F1 17F41 No. 21	MIP-53	LC03/4	-	-	446	-	-
1983-055	2445490.52	1983 Jun 7 0752	Soyuz-U	Kosmos-1466	-	78012-122	Zent-6	MIP-53	LC01/1	-	-	419	-	-
1983-057	2445490.54	1983 Jun 17 0912:18	Soyuz-U	Kosmos-1469	-	76054-762	Zent-6	MIP-53	LC03/4	-	-	378	-	-
1983-062	2445511.94	1983 Jun 28 1500	Soyuz-U	Soyuz T-6	-	Sh15000-349	Soyuz 7k-ST No. 14L	MIP-53	LC01/1	-	-	367	-	-
1983-067	2445517.12	1983 Jun 28 1500	Soyuz-U	Kosmos-1471	-	77024-954	Feniks No. 958	MIP-53	LC31	-	-	383	-	-
1983-068	2445520.93	1983 Jul 4 0217	Molniya 8K78H	Progress-17	SOL	Ts15000-214	Progress 7k-TG No. 119	MIP-53	LC03/4	-	-	150000	-	-
1983-068	2445520.93	1983 Jul 4 0217	Soyuz-U	Kosmos-1472	-	78012-623	Zent-6	MIP-53	LC01/1	-	-	531099	-	-
1983-071	2445528.50	1983 Jul 9 1640	Molniya 8K78H	Kosmos-1481	2BL	76054-147	Molniya-3 No. 32	MIP-53	LC03/3	-	-	569	-	-
1983-073	2445538.13	1983 Jul 19 1514	Molniya 8K78H	Kosmos-1482	ML	78012-781	Zent-6	MIP-5	LC1	-	-	44096	-	-
1983-074	2445539.74	1983 Jul 24 0550:37	Soyuz-U	Molniya-1	ML	78012-660	Molniya-11F668 No. 66	MIP-53	LC03/4	-	-	449	-	-
1983-076	2445542.00	1983 Jul 26 1200	Vostok 8A92H	Kosmos-1483	-	77049-975	Resurs-F1 17F41 No. 23	MIP-53	LC03/4	-	-	693	-	-
1983-080	2445542.00	1983 Aug 5 0920	Soyuz-U	Kosmos-1485	-	76054-769? (2697)	Resurs-F1 17F41 No. 3-2	MIP-53	LC31	-	-	435	-	-
1983-082	2445555.97	1983 Aug 9 1130	Soyuz-U	Kosmos-1487	-	78012-125	Zent-6	MIP-53	LC03/4	-	-	457	-	-
1983-083	2445557.04	1983 Aug 10 1300	Soyuz-U	Kosmos-1489	-	77024-774	Zent-6	MIP-53	LC03/4	-	-	592	-	-
1983-085	2445564.01	1983 Aug 17 1208:23	Soyuz-U	Progress-17	-	77024-954	Orbita-6	MIP-5	LC1	-	-	363	-	-
1983-087	2445569.96	1983 Aug 23 1105	Soyuz-U	Progress-17	-	Ts15000-302	Progress 7k-TG No. 119	MIP-53	LC1	-	-	368	-	-
1983-090	2445577.45	1983 Aug 30 2249:00	Molniya 8K78H	Kosmos-1493	ML	77024-776	Progress 7k-TG No. 118	MIP-53	LC03/4	-	-	430	-	-
1983-092	2445580.93	1983 Sep 3 0115	Soyuz-U	Molniya-3	-	76054-650	Molniya-3 No. 32	MIP-53	LC01/1	-	-	40798	-	-
1983-093	2445585.06	1983 Sep 3 1324	Soyuz-U	Kosmos-1495	-	78012-084	Molniya-3 No. 32	MIP-53	LC03/4	-	-	242	-	-
1983-095	2445586.96	1983 Sep 9 1100	Soyuz-U	Kosmos-1496	-	78012-782	Orbita No. 251	MIP-53	LC16/2	-	-	393	-	-
1983-096	2445591.93	1983 Sep 9 1100	Soyuz-U	Kosmos-1497	-	78012-783	Zent-6	MIP-53	LC03/4	-	-	581	-	-
1983-097	2445594.97	1983 Sep 14 1025	Soyuz-U	Kosmos-1498	-	78039-952	Resurs-F1 17F41 No. 24	MIP-53	LC03/4	-	-	474	-	-
1983-102	2445604.32	1983 Sep 26 1937:51	Soyuz-U	Kosmos-1499	-	77024-251	Zent-6	MIP-53	LC01/1	-	-	570	-	-
1983-104	2445621.92	1983 Oct 14 1000	Soyuz-U	Soyuz T	-	Yt15000-363	Soyuz 7k-ST No. 16L	MIP-5	LC1	-	-	1	-	-
1983-106	2445627.92	1983 Oct 21 1210	Soyuz-U	Progress-18	-	77024-903	Progress 7k-TG No. 118	MIP-5	LC31	-	-	390	-	-
1983-109	2445635.88	1983 Oct 28 0900:00	Vostok 8A92H	Kosmos-1504	-	Ts15000-287	Progress 7k-TG No. 118	MIP-53	LC16/2	-	-	347	-	-
1983-112	2445656.66	1983 Nov 17 1215	Soyuz-U	Kosmos-1505	-	78012-784	Zent-6	MIP-53	LC16/2	-	-	581	-	-
1983-114	2445669.07	1983 Nov 23 1645	Molniya 8K78H	Met-aor-2	-	77025-325	Met-aor-2 No. 10	MIP-53	LC16/2	-	-	901	-	-
1983-117	2445669.07	1983 Nov 30 1345	Soyuz-U	Kosmos-1509	-	78012-785	Zent-6	MIP-53	LC16/2	-	-	443	-	-
1983-119	2445682.01	1983 Dec 7 1210	Soyuz-U	Molniya-1	ML	77024-619	Molniya-1 No. 48	MIP-53	LC01/1	-	-	39977	-	-
1983-121	2445682.79	1983 Dec 14 0700	Soyuz-U	Kosmos-1512	-	78012-786	Orbita No. 249	MIP-53	LC01/1	-	-	448	-	-
1983-123	2445689.76</													

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Launch	FlightCode	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee_Km	Range_Km	Dest
1984-018	2445751.78	1984 Feb 21 0646:05	Soyuz-U	-	Yu15000-367	Progress-19	Progress 7k-TG No. 120	-	-	MIP-5	LC31	-	-	310	-	-
1984-020	2445759.59	1984 Feb 28 1359:59	Molniya SK78M	ML	78012-789	Kosmos-1539	Kobal't	-	-	MIP-53	LC16/2	-	-	405	-	-
1984-024	2445766.22	1984 Mar 6 1710:18	Soyuz-U2	-	78054-649	Kosmos-1541	Zenit-6	-	-	MIP-5	LC31	-	-	39785	-	-
1984-025	2445766.83	1984 Mar 7 0800	Soyuz-U2	-	78032-792 (-004)	Kosmos-1542	Zenit-6	-	-	MIP-5	LC31	-	-	679	-	-
1984-029	2445770.21	1984 Mar 10 1700	Soyuz-U	-	Ts15000-309	Kosmos-1543	Efir No. 1	-	-	MIP-53	LC31/1	-	-	4021	-	-
1984-030	2445776.48	1984 Mar 16 2329:59	Molniya SK78M	2BL	78039-637	Molniya-1	Molniya-1 No. 51	-	-	MIP-53	LC31/1	-	-	40716	-	-
1984-032	2445780.96	1984 Mar 21 1105	Soyuz-U-P/B	-	78024-779	Kosmos-1545	Zenit-6	-	-	MIP-53	LC31/1	-	-	486	-	-
1984-033	2445794.57	1984 Apr 4 0308:42	Molniya SK78M	2BL	Sc15000-395	Kosmos-1547	Soyuz 7k-ST No. 17L	-	-	MIP-53	LC16/2	-	-	39749	-	-
1984-038	2445801.08	1984 Apr 10 1400	Soyuz-U2	-	78032-608	Kosmos-1548	Kobal't	-	-	MIP-53	LC31/1	-	-	355	-	-
1984-040	2445809.99	1984 Apr 15 0822:53	Soyuz-U2	-	78032-788	Kosmos-1549	Progress 7k-TG No. 121	-	-	MIP-53	LC16/2	-	-	276	-	-
1984-042	2445828.48	1984 Apr 19 1140	Soyuz-U	-	78032-796	Kosmos-1549	Zenit-6	-	-	MIP-53	LC31	-	-	813	-	-
1984-044	2445832.04	1984 May 7 2247:15	Soyuz-U	-	78032-811	Kosmos-1551	Progress 7k-TG No. 116	-	-	MIP-53	LC31	-	-	349	-	-
1984-045	2445835.08	1984 May 11 1300	Soyuz-U	-	78032-811	Kosmos-1551	Zenit-6	-	-	MIP-53	LC31	-	-	403	-	-
1984-046	2445842.95	1984 May 14 1400	Soyuz-U	-	78032-811	Kosmos-1551	Yantar-4KS1	-	-	MIP-53	LC31	-	-	365	-	-
1984-048	2445846.38	1984 May 22 0830	Soyuz-U	-	78032-810	Kosmos-1557	Fram	-	-	MIP-53	LC31/1	-	-	390	-	-
1984-050	2445849.98	1984 May 25 1030	Soyuz-U	-	78032-810	Kosmos-1557	Kobal't	-	-	MIP-53	LC31/1	-	-	343	-	-
1984-051	2445853.08	1984 May 28 1412:52	Soyuz-U	-	Sc15000-405	Kosmos-1558	Progress 7k-TG No. 122	-	-	MIP-53	LC16/2	-	-	356	-	-
1984-054	2445858.15	1984 Jun 1 1350	Molniya SK78M	2BL	78046-148	Kosmos-1568	Zenit-6	-	-	MIP-53	LC31	-	-	661	-	-
1984-058	2445862.96	1984 Jun 6 1533:32	Soyuz-U	-	78046-148	Kosmos-1568	Progress-22	-	-	MIP-53	LC16/2	-	-	40028	-	-
1984-060	2445866.55	1984 Jun 11 0840	Soyuz-U	-	78032-795	Kosmos-1569	Kobal't	-	-	MIP-53	LC31	-	-	639	-	-
1984-061	2445870.55	1984 Jun 15 0820	Soyuz-U	-	78032-795	Kosmos-1571	Kobal't	-	-	MIP-53	LC31	-	-	465	-	-
1984-064	2445873.82	1984 Jun 19 1055	Soyuz-U	-	78032-796	Kosmos-1572	Resurs-FI 17F41 No. 26	-	-	MIP-53	LC16/1	-	-	405	-	-
1984-066	2445876.15	1984 Jun 22 0740	Soyuz-U	-	78032-796	Kosmos-1573	Zenit-6	-	-	MIP-53	LC16/2	-	-	470	-	-
1984-068	2445881.12	1984 Jun 26 1535	Soyuz-U	-	78032-807	Kosmos-1575	Resurs-FI 17F41 No. 48	-	-	MIP-53	LC31/1	-	-	397	-	-
1984-070	2445885.40	1984 Jun 29 1500	Soyuz-U	-	78046-306	Kosmos-1576	Kobal't	-	-	MIP-53	LC31/1	-	-	402	-	-
1984-071	2445885.40	1984 Jul 3 2130:42	Molniya SK78M	2BL	78012-659	Kosmos-1580	Oblik No. 793	-	-	MIP-53	LC31/1	-	-	39788	-	-
1984-073	2445890.55	1984 Jul 17 1740:54	Soyuz-U2	-	Yu15000-006	Kosmos-1581	Soyuz 7k-ST No. 16L	-	-	MIP-53	LC31	-	-	373	-	-
1984-074	2445890.55	1984 Jul 19 0830	Soyuz-U	-	78046-149	Kosmos-1582	Resurs-FI 17F41 No. 49	-	-	MIP-53	LC31/1	-	-	446	-	-
1984-075	2445906.03	1984 Jul 24 1240	Soyuz-U	-	78046-150	Kosmos-1583	Resurs-FI 17F41 No. 50	-	-	MIP-53	LC16/2	-	-	607	-	-
1984-076	2445906.03	1984 Jul 27 0659:59	Soyuz-U	-	78046-307	Kosmos-1584	Oblik (Priroda)	-	-	MIP-53	LC16/2	-	-	565	-	-
1984-077	2445913.02	1984 Jul 31 1229:54	Soyuz-U	-	78046-307	Kosmos-1584	Kobal't	-	-	MIP-53	LC31/1	-	-	361	-	-
1984-079	2445914.86	1984 Aug 2 0638:16	Molniya SK78M	2BL	78032-667	Kosmos-1585	Kobal't	-	-	MIP-53	LC31/1	-	-	39668	-	-
1984-082	2445922.50	1984 Aug 6 1400	Soyuz-U	-	78032-667	Kosmos-1585	Oblik	-	-	MIP-53	LC16/2	-	-	628	-	-
1984-085	2445922.50	1984 Aug 10 0003:58	Molniya SK78M	ML	78032-666 ?	Molniya-1	Molniya-1 No. 53	-	-	MIP-53	LC31/1	-	-	40817	-	-
1984-086	2445926.77	1984 Aug 14 0628:15	Soyuz-U	-	Sc15000-411	Progress-23	Progress 7k-TG No. 124	-	-	MIP-53	LC1	-	-	350	-	-
1984-087	2445928.91	1984 Aug 15 0950	Soyuz-U	-	78046-309	Kosmos-1590	Resurs-FI 17F41 No. 51	-	-	MIP-53	LC31/1	-	-	512	-	-
1984-089	2445936.85	1984 Aug 24 0626:59	Molniya SK78M	ML	78012-661	Molniya-1	Resurs-FI 17F41 No. 54	-	-	MIP-53	LC31/1	-	-	41046	-	-
1984-092	2445942.82	1984 Aug 30 1010	Soyuz-U	-	78046-351	Kosmos-1591	Molniya-1	-	-	MIP-53	LC31/1	-	-	512	-	-
1984-094	2445947.53	1984 Sep 4 1020	Soyuz-U	-	78046-308	Kosmos-1592	Resurs-FI 17F41 No. 51	-	-	MIP-53	LC31/1	-	-	628	-	-
1984-096	2445951.30	1984 Sep 7 1312:58	Molniya SK78M	2BL	78054-651	Kosmos-1596	Oblik	-	-	MIP-53	LC31/1	-	-	39795	-	-
1984-099	2445956.75	1984 Sep 15 1025	Soyuz-U	-	78046-308	Kosmos-1596	Fram	-	-	MIP-53	LC16/2	-	-	329	-	-
1984-102	2445961.00	1984 Sep 25 1450	Soyuz-U	-	78046-308	Kosmos-1597	Kobal't	-	-	MIP-53	LC31/1	-	-	354	-	-
1984-103	2445970.84	1984 Sep 27 0840	Soyuz-U	-	78046-305 (310?)	Kosmos-1599	Oblik	-	-	MIP-53	LC31/1	-	-	354	-	-
1984-107	2445978.55	1984 Oct 4 1003:13	Molniya SK78M	2BL	78012-662	Kosmos-1600	Oblik	-	-	MIP-53	LC16/2	-	-	39796	-	-
1984-110	2445980.82	1984 Nov 14 0740	Soyuz-U	-	Yu15000-312	Kosmos-1604	Soyuz No. 4	-	-	MIP-53	LC16/2	-	-	291	-	-
1984-111	2445980.82	1984 Nov 14 0740	Soyuz-U	-	Yu15000-312	Kosmos-1608	Soyuz No. 4	-	-	MIP-53	LC16/2	-	-	291	-	-
1984-119	2445983.01	1984 Nov 11 1020	Soyuz-U	-	78056-925	Kosmos-1609	Oblik	-	-	MIP-53	LC31/1	-	-	361	-	-
1984-121	2445983.01	1984 Nov 11 1020	Soyuz-U-P/B	-	78056-925	Kosmos-1609	Kobal't	-	-	MIP-53	LC31/1	-	-	361	-	-
1984-124	2445984.98	1984 Nov 29 1400	Molniya SK78M	ML	78032-672	Kosmos-1611	Molniya-1	-	-	MIP-53	LC31/1	-	-	586	-	-
1984-125	2445984.98	1984 Dec 5 2049:59	Molniya SK78M	ML	78032-672	Kosmos-1611	Molniya-1 No. 55	-	-	MIP-53	LC31/1	-	-	48848	-	-
1985-002	2445984.98	1985 Jan 6 0529:30	Molniya SK78M	ML	78032-672	Kosmos-1611	Molniya-1 No. 55	-	-	MIP-53	LC31/1	-	-	48848	-	-
1985-004	2445984.98	1985 Jan 16 0845	Molniya SK78M	ML	78032-672	Kosmos-1611	Molniya-3 No. 36	-	-	MIP-53	LC31/1	-	-	48848	-	-
1985-005	2445984.98	1985 Jan 16 0845	Molniya SK78M	ML	78032-672	Kosmos-1611	Molniya-3 No. 36	-	-	MIP-53	LC31/1	-	-	48848	-	-
1985-012	2445984.98	1985 Feb 6 1045	Soyuz-U	-	78046-313	Kosmos-1623	Oblik	-	-	MIP-53	LC16/2	-	-	65001	-	-
1985-015	2445984.98	1985 Feb 6 1045	Soyuz-U	-	78046-313	Kosmos-1623	Oblik	-	-	MIP-53	LC16/2	-	-	65001	-	-
1985-017	2445984.98	1985 Feb 27 1110	Soyuz-U	-	78056-626	Kosmos-1628	Oblik	-	-	MIP-53	LC31	-	-	365	-	-
1985-019	2445984.98	1985 Feb 27 1110	Soyuz-U	-	78056-626	Kosmos-1628	Oblik	-	-	MIP-53	LC31	-	-	365	-	-
1985-026	2445984.98	1985 Mar 5 1040	Soyuz-U	-	78032-797	Kosmos-1632	Kobal't	-	-	MIP-53	LC31/1	-	-	433	-	-
1985-027	2445984.98	1985 Mar 5 1040	Soyuz-U	-	78056-304	Kosmos-1644	Torlan	-	-	MIP-53	LC31	-	-	316	-	-
1985-029	2445984.98	1985 Apr 3 0840	Soyuz-U	-	78046-312	Kosmos-1644	Kobal't	-	-	MIP-53	LC31/1	-	-	698	-	-
1985-031	2445984.98	1985 Apr 16 1715	Soyuz-U	-	Sh15000-128	Kosmos-1645	Kobal't	-	-	MIP-53	LC31/1	-	-	401	-	-
1985-032	2445984.98	1985 Apr 19 1400	Soyuz-U	-	78032-901	Kosmos-1647	Kobal't	-	-	MIP-53	LC31/1	-	-	439	-	-
1985-033	2445984.98	1985 Apr 25 0930	Molniya SK78M	SOL	78046-314	Kosmos-1649	Oblik	-	-	MIP-53	LC31/1	-	-	150000	-	-
1985-036	2445984.98	1985 Apr 25 0930	Molniya SK78M	SOL	78046-314	Kosmos-1649	Oblik	-	-	MIP-53	LC31/1	-	-	150000	-	-
1985-038	2445984.98	1985 May 15 1240	Soyuz-U	-	78056-315	Kosmos-1653	Oblik	-	-	MIP-53	LC31/1	-	-	692	-	-
1985-039	2445984.98	1985 May 22 0835	Soyuz-U	-	78056-315	Kosmos-1653	Oblik	-	-	MIP-53	LC31/1	-	-	481	-	-
1985-040	2445984.98	1985 May 29 0740:44	Molniya SK78M	ML	78056-676	Kosmos-1654	Kobal't	-	-	MIP-53	LC31/1	-	-	350	-	-
1985-040	2445984.98	1985 May 29 0740:44	Molniya SK78M	ML	78056-676	Kosmos-1654	Kobal't	-	-	MIP-53	LC31/1	-	-	350	-	-
1985-044																

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Mission	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee_Km	Range_Km	Dest
1985-078	2446306.98	1985 Aug 29 1133	Soyuz-U	-	78056-828	Kosmos-1679	Kobal't	MIP-5	LC51	-	-	357	-	-
1985-080	2446314.95	1985 Sep 6 1045	Soyuz-U	-	77011-052	Kosmos-1681	Fram	MIP-53	LC41/1	-	-	412	-	-
1985-081	2446326.03	1985 Sep 17 1238:52	Soyuz-U2	-	Sc15000-007	Soyuz T-14	Soyuz 7k-ST No. 20L	MIP-5	LC1	-	-	368	-	-
1985-082	2446327.92	1985 Sep 19 1010	Soyuz-U	-	77042-100	Kosmos-1684	Oblik	MIP-53	LC41/1	-	-	642	-	-
1985-083	2446332.55	1985 Sep 24 01:18:10	Molniya 8K78M	2BL	76048-674	Kosmos-1684	Oblik	MIP-53	LC43/4	-	-	39763	-	-
1985-084	2446334.37	1985 Sep 26 11:15	Soyuz-U	-	78056-822	Kosmos-1685	Oblik	MIP-53	LC16/2	-	-	587	-	-
1985-085	2446339.31	1985 Sep 30 19:23:20	Molniya 8K78M	2BL	76032-670	Kosmos-1687	Oblik	MIP-53	LC16/2	-	-	39785	-	-
1985-086	2446341.74	1985 Oct 3 05:48	Vostok 8A92M	ML	76053-944	Kosmos-1689	Resurs-O1 No. 1L	MIP-5	LC31	-	-	671	-	-
1985-087	2446341.81	1985 Oct 3 07:33:00	Molniya 8K78M	ML	76021-685	Molniya-3	Molniya-3 No. 38	MIP-53	LC43/4	-	-	40869	-	-
1985-088	2446344.89	1985 Oct 16 09:25	Soyuz-U	-	76021-327	Kosmos-1696	Oblik	MIP-5	LC31	-	-	432	-	-
1985-089	2446361.35	1985 Oct 22 20:24:07	Molniya 8K78M	2BL	76048-675	Kosmos-1698	Oblik	MIP-53	LC43/4	-	-	39738	-	-
1985-090	2446364.11	1985 Oct 23 04:42:07	Molniya 8K78M	ML	78012-663	Molniya-1	Molniya-1 11F668 No. 73	MIP-5	LC1	-	-	40133	-	-
1985-101	2446364.11	1985 Oct 25 14:40	Soyuz-U	-	76048-913	Kosmos-1699	Kobal't	MIP-53	LC16/2	-	-	364	-	-
1985-103	2446367.23	1985 Oct 28 17:24:58	Molniya 8K78M	ML	76021-686	Molniya-1	Molniya-1 No. 56	MIP-53	LC43/4	-	-	40034	-	-
1985-106	2446376.85	1985 Nov 9 08:25:27	Molniya 8K78M	2BL	76056-681 / 688?	Kosmos-1701	Oblik	MIP-53	LC41/1	-	-	40115	-	-
1985-111	2446403.01	1985 Dec 3 12:15	Soyuz-U	-	77011-331	Kosmos-1702	Oblik	MIP-53	LC16/2	-	-	621	-	-
1985-112	2446411.11	1985 Dec 3 12:15	Soyuz-U	-	76021-454	Kosmos-1705	Oblik	MIP-53	LC16/2	-	-	776	-	-
1985-115	2446412.82	1985 Dec 13 07:45	Soyuz-U	-	76032-612	Kosmos-1706	Kobal't	MIP-53	LC16/2	-	-	350	-	-
1985-117	2446424.29	1985 Dec 24 18:56:00	Molniya 8K78M	ML	76021-456	Kosmos-1706	Resurs-F1 17F41 No. 56	MIP-53	LC43/4	-	-	40764	-	-
1986-001	2446438.96	1986 Jan 8 11:25	Soyuz-U	-	78056-823	Molniya-3	Molniya-3 No. 40	MIP-53	LC41/1	-	-	576	-	-
1986-004	2446446.10	1986 Jan 8 11:25	Soyuz-U	-	76021-330	Kosmos-1715	Oblik	MIP-53	LC43/4	-	-	441	-	-
1986-009	2446468.96	1986 Jan 28 08:55	Soyuz-U	-	76021-837	Kosmos-1724	Kobal't	MIP-53	LC41/1	-	-	362	-	-
1986-011	2446463.26	1986 Feb 1 18:11:56	Molniya 8K78M	2BL	76056-677	Kosmos-1728	Oblik	MIP-53	LC16/2	-	-	39748	-	-
1986-012	2446466.96	1986 Feb 4 11:15	Soyuz-U	-	76021-524	Kosmos-1730	Oblik	MIP-53	LC41/1	-	-	471	-	-
1986-013	2446468.96	1986 Feb 7 08:45	Soyuz-U	-	77011-635	Kosmos-1731	Terilan	MIP-53	LC1	-	-	312	-	-
1986-022	2446603.02	1986 Feb 26 13:59:59	Soyuz-U2	-	77011-635	Kosmos-1731	Kobal't	MIP-53	LC43/4	-	-	385	-	-
1986-023	2446606.92	1986 Mar 13 12:53:09	Soyuz-U2	-	B 15000-012	Kosmos-1734	Soyuz 7k-ST No. 21H	MIP-5	LC1	-	-	366	-	-
1986-F02	2446615.94	1986 Mar 19 10:08:25	Soyuz-U2	-	B 15000-010	Soyuz T-15	Progress 7k-TG No. 134	MIP-5	LC1	-	-	360	-	-
1986-025	2446629.63	1986 Apr 9 08:00	Soyuz-U	-	76021-328	Progress-25	Oblik?	MIP-5	LC31	-	-	507	-	-
1986-029	2446635.99	1986 Apr 15 11:40:00	Soyuz-U	-	76021-655	Kosmos-1739	Oblik	MIP-5	LC31	-	-	353	-	-
1986-031	2446644.32	1986 Apr 18 19:50:02	Molniya 8K78M	ML	77046-673	Kosmos-1740	Oblik	MIP-5	LC1	-	-	732	-	-
1986-032	2446649.53	1986 Apr 23 19:40:05	Soyuz-U2	-	77011-332	Molniya-3	Molniya-3 No. 43	MIP-53	LC16/2	-	-	40849	-	-
1986-033	2446656.03	1986 May 14 12:40:00	Soyuz-U2	-	B 15000-009	Progress-26	Progress 7k-TG No. 136	MIP-53	LC41/1	-	-	359	-	-
1986-035	2446671.55	1986 May 21 08:21:51	Soyuz-U2	-	77011-335	Kosmos-1742	Oblik	MIP-53	LC16/2	-	-	690	-	-
1986-036	2446672.19	1986 May 21 08:21:51	Soyuz-U2	-	B 15000-013	Soyuz TM	Soyuz 7k-ST No. 51	MIP-53	LC1	-	-	462	-	-
1986-040	2446678.63	1986 May 23 07:50:01	Soyuz-U	-	76048-458	Kosmos-1744	Resurs-F1 17F41 No. 58	MIP-53	LC43/4	-	-	463	-	-
1986-041	2446679.89	1986 May 23 09:20	Soyuz-U	-	76056-915	Kosmos-1746	Oblik	MIP-53	LC43/4	-	-	389	-	-
1986-045	2446688.82	1986 Jun 6 17:40	Soyuz-U	-	77011-335	Kosmos-1756	Oblik	MIP-5	LC31	-	-	389	-	-
1986-046	2446690.94	1986 Jun 11 09:44:59	Soyuz-U	-	76021-336	Kosmos-1757	Kobal't	MIP-5	LC31	-	-	674	-	-
1986-048	2446700.94	1986 Jun 19 10:59	Molniya 8K78M	ML	76048-505	Kosmos-1760	Oblik (Priroda)	MIP-53	LC43/4	-	-	686	-	-
1986-050	2446701.56	1986 Jun 19 10:59	Molniya 8K78M	2BL	76048-505	Kosmos-1760	Oblik	MIP-53	LC41/1	-	-	686	-	-
1986-051	2446706.15	1986 Jun 21 01:16:46	Soyuz-U	-	76054-653	Molniya-3	Molniya-3 No. 44	MIP-53	LC43/4	-	-	39739	-	-
1986-052	2446709.02	1986 Jun 21 08:00:00	Soyuz-U	-	76048-459	Kosmos-1762	Oblik	MIP-53	LC43/4	-	-	476	-	-
1986-053	2446723.92	1986 Jun 24 12:30	Soyuz-U	-	77011-337	Kosmos-1764	Oblik	MIP-53	LC16/2	-	-	351	-	-
1986-054	2446724.13	1986 Jun 24 12:30	Soyuz-U	-	77011-337	Kosmos-1764	Oblik	MIP-53	LC16/2	-	-	351	-	-
1986-057	2446742.13	1986 Jun 30 15:06:00	Molniya 8K78M	ML	76021-688	Kosmos-1765	Resurs-F1 14F40 No. 59	MIP-53	LC43/4	-	-	40844	-	-
1986-058	2446745.69	1986 Jun 30 15:06:00	Molniya 8K78M	ML	76021-688	Molniya-1	Molniya-1 No. 59	MIP-53	LC16/2	-	-	372	-	-
1986-063	2446745.69	1986 Aug 8 13:30:00	Soyuz-U	-	78056-160	Kosmos-1768	Resurs-F1 14F40 No. 60	MIP-53	LC16/2	-	-	372	-	-
1986-064	2446746.99	1986 Aug 8 13:30:00	Soyuz-U	-	76021-445	Kosmos-1770	Terilan	MIP-53	LC43/4	-	-	574	-	-
1986-065	2446747.84	1986 Aug 9 08:02:00	Molniya 8K78M	2BL	76021-687	Kosmos-1772	Oblik	MIP-53	LC43/4	-	-	374	-	-
1986-066	2446748.93	1986 Aug 29 08:02:43	Molniya 8K78M	ML	76048-351	Kosmos-1775	Oblik	MIP-53	LC16/2	-	-	40068	-	-
1986-068	2446758.98	1986 Sep 8 07:59:59	Soyuz-U3	-	76048-505	Kosmos-1775	Oblik	MIP-53	LC31	-	-	694	-	-
1986-072	2446760.93	1986 Sep 8 09:12:59	Molniya 8K78M	ML	76048-505	Molniya-1	Molniya-1 No. 57	MIP-53	LC43/4	-	-	40727	-	-
1986-073	2446769.92	1986 Sep 8 10:30:41	Molniya 8K78M	2BL	76048-505	Molniya-1	Oblik	MIP-53	LC31	-	-	666	-	-
1986-074	2446770.92	1986 Oct 4 07:40	Molniya 8K78M	2BL	77011-694	Kosmos-1783	Oblik	MIP-53	LC41/1	-	-	282	-	-
1986-078	2446773.97	1986 Oct 15 09:29:18	Molniya 8K78M	2BL	76021-684	Kosmos-1785	Siluet No. 6	MIP-53	LC1	-	-	20386	-	-
1986-079	2446775.98	1986 Oct 22 09:40:00	Molniya 8K78M	ML	77049-645	Kosmos-1789	Molniya-3 No. 41	MIP-53	LC41/1	-	-	40116	-	-
1986-084	2446784.93	1986 Oct 31 08:00:00	Soyuz-U	-	76048-352	Kosmos-1790	Oblik	MIP-53	LC16/2	-	-	40001	-	-
1986-085	2446784.93	1986 Oct 31 08:00:00	Soyuz-U	-	76048-352	Kosmos-1790	Oblik	MIP-53	LC16/2	-	-	469	-	-
1986-089	2446787.96	1986 Nov 13 10:59:59	Molniya 8K78M	ML	77011-333	Molniya-1	Molniya-1 No. 60	MIP-53	LC41/1	-	-	393	-	-
1986-091	2446785.01	1986 Nov 15 21:35:00	Soyuz-U	-	76048-353	Kosmos-1792	Oblik	MIP-53	LC1	-	-	40166	-	-
1986-093	2446785.01	1986 Nov 15 21:35:00	Soyuz-U	-	76048-353	Kosmos-1792	Oblik	MIP-53	LC16/2	-	-	457	-	-
1986-094	2446787.97	1986 Dec 12 18:35:36	Soyuz-U	-	76048-353	Kosmos-1792	Oblik	MIP-53	LC16/2	-	-	393	-	-
1986-095	2446787.97	1986 Dec 16 14:00	Molniya 8K78M	2BL	77011-689	Molniya-1	Molniya-1 No. 60	MIP-53	LC41/1	-	-	40131	-	-
1986-099	2446790.96	1986 Dec 26 11:00	Soyuz-U	-	76048-951	Kosmos-1804	Oblik	MIP-53	LC1	-	-	600	-	-
1986-102	2446791.14	1986 Dec 26 15:25:59	Molniya 8K78M	ML	76056-318	Kosmos-1806	Oblik	MIP-53	LC43/4	-	-	39739	-	-
1987-002	2446805.03	1987 Jan 9 12:38:04	Soyuz-U	-	78028-512	Kosmos-1810	Terilan	MIP-53	LC41/1	-	-	331	-	-
1987-004	2446805.03	1987 Jan 9 12:38:04	Soyuz-U	-	78028-512	Molniya-1	Molniya-1 No. 62	MIP-53	LC1	-	-	40108	-	-
1987-005	2446811.75	1987 Jan 15 11:20:00	Soyuz-U2	-	77011-334	Kosmos-1813	Oblik	MIP-53	LC31	-	-	559	-	-
1987-008	2446818.17	1987 Jan 16 06:06:23	Molniya 8K78M	ML	77046-671	Progress-27	Progress 7k-TG No. 135	MIP-53	LC1	-	-	369	-	-
1987-010	2446832.40	1987 Feb 5 21:38:16	Soyuz-U2	-	B 15000-014	Progress-27	Molniya-3 No. 42	MIP-53	LC41/1	-	-	40809	-	-
1987-011	2446833.94	1987 Feb 7 10:30:00	Soyuz-U	-	I 15000-014	Soyuz TM-2	Soyuz 7k-ST No. 52	MIP-53	LC1	-	-	369	-	-
1987-014	2446845.03	1987 Feb												



Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Launch	FlightCode	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee_Km	Range_Km	Dest
1987-037	2446910.21	1987 Apr 24 1659:59	Soyuz-U	-	I 15000-510	Kosmos-1841	Foton No. 3L	-	-	MIP-53	LC41/1	-	-	461	-	-
1987-038	2446920.89	1987 May 5 0916	Soyuz-U	-	78028-365	Kosmos-1843	Oblik	-	-	MIP-5	LC31	-	-	574	-	-
1987-042	2446928.75	1987 May 13 0600	Soyuz-U	-	78028-361	Kosmos-1845	Oblik	-	-	MIP-5	LC31	-	-	595	-	-
1987-044	2446934.67	1987 May 19 0402:10	Soyuz-U2	-	I 15000-018	Progress-30	Resurs-FI 7K-TG No. 128	-	-	MIP-5	LC1	-	-	368	-	-
1987-045	2446936.62	1987 May 21 0744:59	Soyuz-U	-	77015-104	Kosmos-1846	Resurs-FI 14F40 No. 104	-	-	MIP-53	LC43/4	-	-	685	-	-
1987-046	2446942.07	1987 May 28 1359:59	Soyuz-U	-	76048-829	Kosmos-1847	Oblik	-	-	MIP-53	LC16/2	-	-	348	-	-
1987-047	2446944.03	1987 May 28 1245:00	Soyuz-U	-	77015-364	Kosmos-1848	Oblik	-	-	MIP-53	LC43/4	-	-	576	-	-
1987-048	2446951.28	1987 Jun 4 1650:23	Molniya 8K78M	2BL	76048-511	Kosmos-1849	Oblik	-	-	MIP-53	LC16/2	-	-	40006	-	-
1987-050	2446958.82	1987 Jun 12 0740:28	Molniya 8K78M	2BL	76048-507	Kosmos-1849	Oblik	-	-	MIP-53	LC43/4	-	-	39742	-	-
1987-F04	2446964.81	1987 Jun 18 0724:59	Soyuz-U	-	77015-105	Kosmos-1851	Resurs-FI 14F40 No. 105	-	-	MIP-53	LC41/1	-	-	0	-	-
1987-052	2446964.02	1987 Jul 4 1225:00	Soyuz-U	-	76048-354	Kosmos-1863	Oblik	-	-	MIP-53	LC41/1	-	-	582	-	-
1987-058	2446964.96	1987 Jul 8 1059	Soyuz-U	-	76021-446	Kosmos-1865	Siluet No. 7	-	-	MIP-5	LC1	-	-	307	-	-
1987-059	2446966.17	1987 Jul 9 1610:00	Soyuz-U	-	78028-891	Kosmos-1866	Kobal't	-	-	MIP-53	LC16/2	-	-	778	-	-
1987-062	2446968.58	1987 Jul 22 0159:17	Soyuz-U2	-	I 15000-019	Progress-31	Soyuz 7K-STH No. 53	-	-	MIP-5	LC1	-	-	364	-	-
1987-066	2447011.36	1987 Aug 3 2044:11	Soyuz-U2	-	I 15000-017	Progress-31	Progress 7K-TG No. 138	-	-	MIP-5	LC1	-	-	360	-	-
1987-069	2447026.79	1987 Aug 19 0659:59	Soyuz-U	-	76021-207	Kosmos-1872	Oblik	-	-	MIP-53	LC43/4	-	-	446	-	-
1987-072	2447041.93	1987 Sep 3 1024:59	Soyuz-U	-	78028-652	Kosmos-1874	Oblik	-	-	MIP-53	LC43/4	-	-	388	-	-
1987-076	2447049.59	1987 Sep 11 0206:00	Soyuz-U	-	78028-652	Kosmos-1881	Terrilan	-	-	MIP-5	LC43/4	-	-	296	-	-
1987-077	2447053.94	1987 Sep 15 1030:00	Soyuz-U	-	78028-653	Kosmos-1882	Resurs-FI 14F40 No. 107	-	-	MIP-53	LC17	-	-	236	-	-
1987-081	2447056.12	1987 Sep 17 1459:59	Soyuz-U	-	78028-210	Kosmos-1886	Kobal't	-	-	MIP-53	LC43/4	-	-	436	-	-
1987-082	2447062.49	1987 Sep 23 2343:54	Soyuz-U2	-	L 15000-021	Progress-32	Kobal't	-	-	MIP-53	LC41/1	-	-	384	-	-
1987-083	2447068.03	1987 Sep 29 1249:59	Soyuz-U	-	L 15000-543	Kosmos-1887	Oblik	-	-	MIP-53	LC41/1	-	-	481	-	-
1987-085	2447077.85	1987 Oct 9 0830	Soyuz-U	-	77015-368	Kosmos-1889	Oblik	-	-	MIP-5	LC1	-	-	610	-	-
1987-089	2447091.10	1987 Oct 22 1424:57	Soyuz-U	-	76035-945	Kosmos-1899	Kobal't	-	-	MIP-5	LC16/2	-	-	388	-	-
1987-092	2447113.90	1987 Nov 14 0904	Soyuz-U	-	77015-459	Kosmos-1895	Oblik	-	-	MIP-5	LC31	-	-	311	-	-
1987-094	2447120.49	1987 Nov 20 2347:12	Soyuz-U2	-	L 15000-022	Progress-33	Kometa No. 8	-	-	MIP-5	LC31	-	-	360	-	-
1987-099	2447136.87	1987 Dec 7 0850:00	Soyuz-U	-	77015-370	Kosmos-1899	Oblik	-	-	MIP-5	LC31	-	-	414	-	-
1987-102	2447143.96	1987 Dec 14 1129:59	Soyuz-U	-	L 15000-020	Kosmos-1901	Kobal't	-	-	MIP-5	LC31	-	-	391	-	-
1987-104	2447150.97	1987 Dec 21 1118:03	Soyuz-U2	-	I 15000-020	Soyuz TM-4	Soyuz 7K-STH No. 54	-	-	MIP-5	LC41/1	-	-	361	-	-
1987-105	2447151.44	1987 Dec 21 1235:42	Molniya 8K78M	2BL	78028-514	Kosmos-1903	Oblik	-	-	MIP-53	LC41/1	-	-	39769	-	-
1987-107	2447164.86	1987 Dec 25 0644:59	Soyuz-U	-	77015-369	Kosmos-1905	Oblik	-	-	MIP-5	LC31	-	-	482	-	-
1987-110	2447166.99	1987 Dec 29 1140:00	Soyuz-U	-	78028-362	Kosmos-1906	Oblik	-	-	MIP-53	LC16/2	-	-	432	-	-
1987-112	2447181.45	1988 Jan 29 2251:54	Soyuz-U2	-	L 15000-025	Progress-34	Progress 7K-TG No. 142	-	-	MIP-53	LC43/4	-	-	636	-	-
1988-004	2447186.91	1988 Feb 18 0849:59	Soyuz-U	-	78028-352	Kosmos-1907	Oblik	-	-	MIP-5	LC1	-	-	356	-	-
1988-007	2447196.97	1988 Feb 25 0644:59	Soyuz-U	-	77015-365	Kosmos-1915	Kobal't	-	-	MIP-53	LC41/1	-	-	515	-	-
1988-011	2447209.91	1988 Feb 25 1214:56	Soyuz-U	-	76035-371	Kosmos-1920	Oblik	-	-	MIP-53	LC16/2	-	-	483	-	-
1988-012	2447210.53	1988 Feb 26 0931:12	Molniya 8K78M	2BL	77015-528	Kosmos-1921	Resurs-FI 14F40 No. 106	-	-	MIP-53	LC16/2	-	-	469	-	-
1988-015	2447217.90	1988 Feb 26 0931:12	Molniya 8K78M	2BL	78028-360	Kosmos-1922	Oblik	-	-	MIP-5	LC1	-	-	39744	-	-
1988-016	2447230.94	1988 Mar 10 1030:00	Soyuz-U	-	78028-360	Kosmos-1923	Oblik	-	-	MIP-53	LC43/4	-	-	394	-	-
1988-017	2447231.76	1988 Mar 17 0638:07	Molniya 8K78M	ML	78028-360	Kosmos-1923	Molniya-1 No. 65	-	-	MIP-5	LC43/4	-	-	30018	-	-
1988-018	2447237.91	1988 Mar 17 0638:07	Molniya 8K78M	ML	I 15000-019	IRS-1A	Molniya-1 No. 64	-	-	MIP-5	LC31	-	-	836	-	-
1988-022	2447238.56	1988 Mar 23 1056:59	Molniya 8K78M	ML	78028-515	Molniya-1	Molniya-3 No. 49	-	-	MIP-53	LC43/4	-	-	40761	-	-
1988-024	2447242.56	1988 Mar 23 1105:12	Soyuz-U2	-	L 15000-026	Progress-35	Progress 7K-TG No. 143	-	-	MIP-53	LC16/2	-	-	362	-	-
1988-025	2447246.09	1988 Mar 24 1100:00	Soyuz-U	-	76048-860	Kosmos-1935	Kobal't	-	-	MIP-53	LC16/2	-	-	346	-	-
1988-027	2447251.07	1988 Mar 30 1116:00	Soyuz-U	-	77015-367	Kosmos-1936	Terrilan	-	-	MIP-53	LC16/2	-	-	429	-	-
1988-031	2447262.51	1988 Apr 11 1710:00	Soyuz-U	-	I 15000-023	Progress-36	Oblik	-	-	MIP-53	LC41/1	-	-	456	-	-
1988-032	2447272.74	1988 Apr 15 0548:12	Progress 8A92M	-	I 15000-020	Foton	Foton No. 4L	-	-	MIP-53	LC41/1	-	-	456	-	-
1988-037	2447278.58	1988 Apr 27 0916:00	Soyuz-U	-	76035-375	Kosmos-1941	Oblik	-	-	MIP-5	LC31	-	-	489	-	-
1988-040	2447284.52	1988 May 13 0430:25	Soyuz-U2	-	77015-106	Kosmos-1941	Kobal't	-	-	MIP-53	LC43/4	-	-	369	-	-
1988-041	2447289.94	1988 May 18 1030:01	Soyuz-U	-	L 15000-023	Progress-36	Progress 7K-TG No. 144	-	-	MIP-5	LC1	-	-	369	-	-
1988-042	2447300.80	1988 May 19 0915:00	Soyuz-U	-	76035-376	Kosmos-1944	Kometa No. 9	-	-	MIP-5	LC1	-	-	273	-	-
1988-044	2447308.94	1988 May 26 1527:00	Molniya 8K78M	ML	76035-375	Kosmos-1945	Oblik	-	-	MIP-5	LC31	-	-	413	-	-
1988-047	2447310.52	1988 May 31 0745:00	Soyuz-U2	-	77011-692	Molniya-3	Molniya-3 No. 49	-	-	MIP-53	LC43/4	-	-	40837	-	-
1988-048	2447320.90	1988 Jun 7 1043:13	Soyuz-U2	-	I 15000-027	Progress-37	Resurs-FI 14F43 No. 28	-	-	MIP-53	LC41/1	-	-	274	-	-
1988-049	2447323.92	1988 Jun 11 1300:00	Soyuz-U	-	76035-376	Soyuz TM-5	Oblik	-	-	MIP-53	LC41/1	-	-	368	-	-
1988-054	2447335.94	1988 Jun 22 1030:00	Soyuz-U	-	76035-373	Kosmos-1955	Kobal't	-	-	MIP-5	LC1	-	-	401	-	-
1988-055	2447349.94	1988 Jun 23 0745:00	Soyuz-U	-	78039-129	Kosmos-1956	Oblik	-	-	MIP-53	LC41/1	-	-	370	-	-
1988-057	2447352.36	1988 Jul 7 0805:00	Soyuz-U	-	78028-212	Kosmos-1957	Resurs-FI 14F43 No. 29	-	-	MIP-53	LC16/2	-	-	468	-	-
1988-061	2447361.98	1988 Jul 18 2113:09	Soyuz-U2	-	L 15000-024	Progress-37	Terrilan	-	-	MIP-5	LC1	-	-	597	-	-
1988-062	2447361.98	1988 Jul 18 2113:09	Soyuz-U2	-	L 15000-024	Progress-37	Resurs-FI 14F43 No. 145	-	-	MIP-5	LC1	-	-	369	-	-
1988-064	2447369.98	1988 Jul 27 0945:00	Soyuz-U	-	78039-130	Kosmos-1962	Progress-FI 14F43 No. 30	-	-	MIP-53	LC43/4	-	-	0	-	-
1988-068	2447381.99	1988 Aug 8 0925:00	Soyuz-U	-	76035-946	Kosmos-1962	Oblik	-	-	MIP-53	LC43/4	-	-	457	-	-
1988-070	2447386.04	1988 Aug 16 1300:00	Molniya 8K78M	ML	76035-532	Molniya-1	Molniya-1 No. 66	-	-	MIP-53	LC41/1	-	-	40880	-	-
1988-072	2447386.99	1988 Aug 16 1300:00	Soyuz-U	-	76035-947	Kosmos-1963	Kobal't	-	-	MIP-53	LC41/1	-	-	364	-	-
1988-073	2447386.99	1988 Aug 23 0920:00	Soyuz-U	-	78039-381	Kosmos-1964	Oblik	-	-	MIP-5	LC1	-	-	445	-	-
1988-075	2447386.97	1988 Aug 23 1115:00	Soyuz-U	-	I 15000-569	Kosmos-1965	Resurs-FI 14F43 No. 2	-	-	MIP-53	LC41/1	-	-	588	-	-
1988-076	2447402.68	1988 Aug 29 0423:11	Soyuz-U2	-	L 15000-030	Soyuz TM-6	Oblik	-	-	MIP-53	LC41/1	-	-	370	-	-
1988-077	2447404.09	1988 Aug 30 1414:54	Molniya 8K78M	2BL	77015-526	Kosmos-1966	Oblik	-	-	MIP-53	LC16/2	-	-	40036	-	-
1988-079																

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Mission	FlightCode	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee_Km	Range_Km	Dest
1988-107	2447504.12	1988 Dec 8 1450:00	Soyuz-U-PVB	-	76035-380	Kosmos-1983	Oblik	-	-	MIP-53	LC63/3	-	-	359	-	-
1988-110	2447512.29	1988 Dec 16 1900:00	Soyuz-U	-	78039-968	Kosmos-1984	Kobal't	-	-	MIP-53	LC16/2	-	-	371	-	-
1988-112	2447518.09	1988 Dec 22 1415:59	Molniya SK78M	ML	77011-690	Molniya-3	Molniya-3 No. 52	-	-	MIP-53	LC63/3	-	-	40063	-	-
1988-114	2447520.67	1988 Dec 25 0411:37	Soyuz-U2	ML	Ye15000-029	Progress-39	Progress 7K-TG No. 147	-	-	MIP-5	LC1	-	-	368	-	-
1988-115	2447523.73	1988 Dec 28 0527:59	Molniya SK78M	ML	78039-959	Molniya-1	Molniya-1 No. 63	-	-	MIP-53	LC63/3	-	-	40077	-	-
1988-116	2447524.92	1988 Dec 29 1000:00	Soyuz-U	-	78028-488	Kosmos-1986	Kometa No. 10	-	-	MIP-5	LC1	-	-	313	-	-
1988-118	2447538.98	1989 Jan 12 1129:59	Soyuz-U	-	Ye15000-560	Kosmos-1990	Resurs-F2 17F42 No. 3	-	-	MIP-53	LC16/2	-	-	442	-	-
1989-003	2447544.55	1989 Jan 18 0820:00	Soyuz-U	-	77015-388	Kosmos-1991	Oblik	-	-	GH-5	LC1	-	-	604	-	-
1989-007	2447555.02	1989 Jan 28 1230:00	Soyuz-U	-	77015-944	Kosmos-1991	Kobal't	-	-	GH-5	LC1	-	-	351	-	-
1989-008	2447567.37	1989 Feb 10 0655:52	Soyuz-U2	-	Ye15000-032	Progress-40	Progress 7K-TG No. 148	-	-	GH-5	LC1	-	-	370	-	-
1989-010	2447568.20	1989 Feb 10 0853:00	Soyuz-U	-	77015-974	Kosmos-2000	Oblik	-	-	MIP-53	LC61/1	-	-	575	-	-
1989-011	2447571.68	1989 Feb 14 0421:11	Molniya SK78M	2BL	78039-957	Kosmos-2001	Oblik	-	-	MIP-53	LC61/1	-	-	40098	-	-
1989-014	2447572.96	1989 Feb 15 1100:00	Molniya SK78M	ML	77011-691	Molniya-1	Molniya-1 11F668 No. 84	-	-	GH-5	LC17	-	-	39901	-	-
1989-016	2447575.12	1989 Feb 17 1459:59	Soyuz-U	-	78039-984	Kosmos-2003	Oblik	-	-	MIP-53	LC63/3	-	-	370	-	-
1989-019	2447588.29	1989 Mar 2 1659:59	Soyuz-U	-	78039-989	Kosmos-2005	Kobal't	-	-	MIP-53	LC63/3	-	-	356	-	-
1989-022	2447602.12	1989 Mar 16 1854:15	Soyuz-U-PVB	-	78039-982	Kosmos-2006	Oblik	-	-	MIP-53	LC16/2	-	-	601	-	-
1989-024	2447609.02	1989 Mar 23 1226:00	Soyuz-U2	-	T 15000-034	Progress-41	Progress 7K-TG No. 149	-	-	GH-5	LC1	-	-	417	-	-
1989-029	2447623.08	1989 Apr 6 1400:00	Soyuz-U-PVB	-	77015-875	Kosmos-2007	Terrien	-	-	GH-5	LC1	-	-	308	-	-
1989-031	2447637.27	1989 Apr 20 1829:59	Soyuz-U	-	78039-983	Kosmos-2017	Kobal't	-	-	MIP-53	LC63/3	-	-	353	-	-
1989-032	2447643.21	1989 Apr 26 1700:00	Soyuz-U	-	77015-931	Kosmos-2018	Oblik	-	-	MIP-53	LC63/3	-	-	356	-	-
1989-034	2447652.04	1989 May 5 1300:00	Soyuz-U-PVB	-	T 15000-593	Photon	Photon No. 5L	-	-	MIP-53	LC61/1	-	-	444	-	-
1989-036	2447664.04	1989 May 17 1300:00	Soyuz-U-PVB	-	77015-984	Kosmos-2019	Oblik	-	-	MIP-53	LC16/2	-	-	357	-	-
1989-037	2447670.94	1989 May 24 1030:00	Soyuz-U-PVB	-	76047-146	Kosmos-2020	Kobal't	-	-	GH-5	LC1	-	-	371	-	-
1989-038	2447671.57	1989 May 25 0850:00	Soyuz-U-PVB	-	76047-145	Resurs-F	Kometa No. 11	-	-	MIP-53	LC63/3	-	-	301	-	-
1989-043	2447679.04	1989 Jun 1 1259:59	Molniya SK78M	ML	77015-989	Molniya-3	Resurs-F1 14F43 No. 45	-	-	MIP-53	LC63/3	-	-	355	-	-
1989-045	2447686.22	1989 Jun 8 1709:59	Soyuz-U	-	76048-506	Kosmos-2025	Oblik	-	-	MIP-53	LC63/3	-	-	40661	-	-
1989-047	2447683.90	1989 Jun 8 1930:00	Soyuz-U	-	77015-998	Kosmos-2028	Oblik	-	-	GH-5	LC1	-	-	444	-	-
1989-049	2447704.84	1989 Jun 27 0804:59	Soyuz-U	-	76047-146	Resurs-F	Resurs-F1 14F43 No. 46	-	-	MIP-53	LC16/2	-	-	476	-	-
1989-051	2447712.53	1989 Jul 1 0800:00	Soyuz-U-PVB	-	78039-995	Kosmos-2029	Oblik	-	-	MIP-53	LC63/3	-	-	567	-	-
1989-054	2447720.12	1989 Jul 12 1500:00	Soyuz-U	-	78039-970	Kosmos-2030	Kobal't	-	-	MIP-53	LC61/1	-	-	350	-	-
1989-055	2447726.91	1989 Jul 18 0944:59	Soyuz-U	-	76047-147	Resurs-F	Resurs-F1 14F43 No. 47	-	-	MIP-53	LC16/2	-	-	442	-	-
1989-056	2447726.01	1989 Jul 18 1210:00	Soyuz-U	-	T 15000-594	Resurs-F	Orlets	-	-	GH-5	LC1	-	-	378	-	-
1989-057	2447727.87	1989 Jul 20 0659:59	Soyuz-U	-	77015-993	Kosmos-2031	Oblik	-	-	MIP-53	LC63/3	-	-	407	-	-
1989-060	2447740.96	1989 Aug 2 1129:59	Soyuz-U	-	77015-995	Kosmos-2032	Oblik	-	-	MIP-53	LC63/3	-	-	428	-	-
1989-063	2447753.94	1989 Aug 15 1029:59	Soyuz-U	-	76047-148	Resurs-F	Resurs-F2 17F42 No. 4	-	-	MIP-53	LC16/2	-	-	479	-	-
1989-065	2447761.04	1989 Aug 22 1259:59	Soyuz-U	-	76047-149	Resurs-F	Resurs-F2 17F42 No. 5	-	-	MIP-53	LC63/3	-	-	288	-	-
1989-066	2447761.63	1989 Aug 23 0309:32	Soyuz-U2	-	T 15000-037	Progress M	Progress 7K-TGM No. 201	-	-	MIP-53	LC61/1	-	-	408	-	-
1989-071	2447775.40	1989 Sep 5 2138:59	Soyuz-U2	-	76047-150	Soyuz TM-6	Progress 7K-TGM No. 58	-	-	GH-5	LC1	-	-	414	-	-
1989-073	2447781.95	1989 Sep 6 1049:59	Soyuz-U-PVB	-	T 15000-036	Resurs-F	Resurs-F1 14F43 No. 48	-	-	MIP-53	LC63/3	-	-	453	-	-
1989-075	2447784.77	1989 Sep 15 0630:02	Soyuz-U	-	76047-151	Kosmos-2044	Oblik	-	-	MIP-53	LC61/1	-	-	333	-	-
1989-076	2447787.11	1989 Sep 22 0800:00	Soyuz-U	-	T 15000-599	Kosmos-2046	Oblik	-	-	GH-5	LC1	-	-	438	-	-
1989-078	2447797.11	1989 Sep 27 1438:00	Molniya SK78M	ML	78039-982	Kosmos-2047	Molniya-1 No. 69	-	-	GH-5	LC63/4	-	-	40600	-	-
1989-082	2447803.14	1989 Oct 7 1459:59	Soyuz-U	-	78039-986	Kosmos-2048	Kobal't	-	-	MIP-53	LC63/4	-	-	390	-	-
1989-086	2447817.64	1989 Oct 17 1300:00	Soyuz-U	-	78039-992	Kosmos-2049	Oblik	-	-	MIP-53	LC63/3	-	-	387	-	-
1989-088	2447827.95	1989 Nov 15 0650:00	Soyuz-U	-	78039-995	Kosmos-2048	Oblik	-	-	GH-5	LC63/4	-	-	376	-	-
1989-091	2447847.95	1989 Nov 23 0055:04	Molniya SK78M	2BL	77015-525	Kosmos-2050	Oblik	-	-	MIP-53	LC63/3	-	-	30766	-	-
1989-092	2447854.95	1989 Nov 25 1002:00	Molniya SK78M	ML	78039-997	Kosmos-2049	Oblik	-	-	MIP-53	LC63/3	-	-	40762	-	-
1989-095	2447861.13	1989 Nov 30 1502:01	Molniya SK78M	ML	78039-991	Molniya-3	Molniya-3 No. 46	-	-	MIP-53	LC16/2	-	-	387	-	-
1989-099	2447867.65	1989 Dec 7 0330:50	Soyuz-U2	-	T 15000-039	Kosmos-2052	Kobal't	-	-	GH-5	LC1	-	-	417	-	-
1990-003	2447909.01	1990 Dec 17 1445:00	Soyuz-U2	-	76047-152	Progress M-2	Progress 7K-TGM No. 202	-	-	MIP-53	LC63/3	-	-	335	-	-
1990-004	2447914.52	1990 Jan 23 0251:59	Molniya SK78M	ML	77015-527	Kosmos-2055	Oblik	-	-	MIP-53	LC63/4	-	-	46132	-	-
1990-009	2447917.76	1990 Jan 25 1715:00	Soyuz-U2	-	77015-531	Molniya-3	Molniya-3 No. 53	-	-	MIP-53	LC63/4	-	-	364	-	-
1990-014	2447933.72	1990 Feb 11 0616:00	Soyuz-U2	-	77015-537	Kosmos-2057	Kobal't	-	-	MIP-53	LC16/2	-	-	410	-	-
1990-020	2447951.47	1990 Feb 22 0720:00	Soyuz-U2	-	T 15000-040	Progress M-3	Progress 7K-TGM No. 60	-	-	GH-5	LC1	-	-	400	-	-
1990-024	2447972.81	1990 Mar 27 1640:08	Molniya SK78M	2BL	78039-985	Kosmos-2062	Oblik	-	-	MIP-53	LC63/4	-	-	509	-	-
1990-026	2447978.35	1990 Mar 31 1800:00	Soyuz-U	-	76047-153	Kosmos-2065	Oblik	-	-	MIP-53	LC63/4	-	-	39740	-	-
1990-032	2447988.91	1990 Apr 17 0820:00	Soyuz-U	-	76047-154	Kosmos-2068	Oblik	-	-	MIP-53	LC63/4	-	-	4387	-	-
1990-033	2447993.91	1990 Apr 17 1700:00	Soyuz-U	-	76047-155	Kosmos-2065	Oblik	-	-	MIP-53	LC63/3	-	-	4387	-	-
1990-035	2447998.91	1990 Apr 17 0820:00	Soyuz-U	-	76035-714	Photon	Kobal't No. 6L	-	-	GH-5	LC1	-	-	299	-	-
1990-039	2448007.57	1990 Apr 17 0800:00	Soyuz-U	-	77015-524	Kosmos-2072	Oblik	-	-	MIP-53	LC63/4	-	-	454	-	-
1990-040	2448009.98	1990 Apr 26 0137:00	Molniya SK78M	ML	77015-528	Molniya-1	Molniya-1 No. 71	-	-	MIP-53	LC63/4	-	-	40809	-	-
1990-041	2448019.98	1990 Apr 26 1137:02	Molniya SK78M	2BL	76047-157	Kosmos-2076	Oblik	-	-	MIP-53	LC63/4	-	-	40038	-	-
1990-042	2448017.96	1990 May 8 2044:01	Soyuz-U2	-	T 15000-041	Progress-42	Progress 7K-TG No. 150	-	-	MIP-53	LC16/2	-	-	398	-	-
1990-044	2448019.28	1990 May 7 1839:59	Soyuz-U	-	77015-973	Kosmos-2077	Oblik	-	-	MIP-53	LC16/2	-	-	387	-	-
1990-047	2448026.91	1990 May 15 0955:00	Soyuz-U	-	77015-972	Kosmos-2078	Kobal't	-	-	GH-5	LC1	-	-	289	-	-
1990-049	2448040.81	1990 May 29 0719:59	Soyuz-U	-	77015-149	Resurs-F	Kometa No. 12	-	-	MIP-53	LC63/4	-	-	458	-	-
1990-052	2448055.55	1990 Jun 13 0107:00	Molniya SK78M	ML	77015-530	Resurs-F	Resurs-F1 14F43 No. 50	-	-	MIP-53	LC63/3	-	-	40838	-	-
1990-053	2448061.86	1990 Jun 19 0845:00	Soyuz-U	-	77015-915	Molniya-3	Molniya-3 No. 47	-	-	MIP-53	LC16/2	-	-	603	-	-

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Mission	FlightCode	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee_Km	Range_Km	Dest
1990-092	2448181.29	1990 Oct 16 1900:00	Soyuz-U	-	76047-977	Kosmos-2102	Kobal't	-	-	MIP-53	LC16/2	-	-	374	-	-
1990-099	2448212.19	1990 Nov 16 1630:00	Soyuz-U	-	76053-812	Kosmos-2104	Oblik	-	-	MIP-53	LC63/4	-	-	404	-	-
1990-098	2448216.61	1990 Nov 20 0233:14	Molniya 8K78M-PVB	2BL	76047-968	Kosmos-2105	Molniya	-	-	MIP-53	LC16/2	-	-	40153	-	-
1990-101	2448218.66	1990 Nov 23 0351:00	Molniya 8K78M	ML	77015-529	Molniya-1	Molniya-IT No. 70	-	-	MIP-53	LC63/3	-	-	40757	-	-
1990-107	2448227.94	1990 Dec 2 0813:32	Soyuz-U2	-	76047-978	Kosmos-2108	T 15000-046	-	-	GIF-5	LC1	-	-	405	-	-
1990-109	2448230.27	1990 Dec 4 1830:00	Soyuz-U	-	76047-978	Kosmos-2108	Kobal't	-	-	MIP-53	LC63/4	-	-	379	-	-
1990-113	2448246.76	1990 Dec 21 0620:11	Soyuz-U	-	77017-739	Kosmos-2113	Terrilen	-	-	GIF-5	LC17	-	-	364	-	-
1990-115	2448251.97	1990 Dec 26 1110:00	Soyuz-U-PVB	-	77053-813	Kosmos-2113	Oblik	-	-	MIP-53	LC16/2	-	-	351	-	-
1991-001	2448251.97	1990 Dec 26 1110:00	Soyuz-U2	-	77053-813	Kosmos-2113	Oblik	-	-	MIP-53	LC16/2	-	-	351	-	-
1991-002	2448271.12	1991 Jan 14 1450:27	Soyuz-U2	-	78023-917	Progress M-6	Progress 7K-TGM No. 205	-	-	MIP-53	LC16/2	-	-	397	-	-
1991-004	2448273.94	1991 Jan 17 1030:01	Soyuz-U-PVB	-	78023-917	Kosmos-2120	Kobal't	-	-	MIP-53	LC16/2	-	-	444	-	-
1991-034	2448295.26	1991 Feb 7 1815:00	Soyuz-U	-	77017-810	Kosmos-2121	Kobal't	-	-	MIP-53	LC16/2	-	-	409	-	-
1991-041	2448302.90	1991 Feb 15 0930:00	Soyuz-U	-	77053-883	Kosmos-2134	Komet No. 13	-	-	MIP-53	LC1	-	-	308	-	-
1991-012	2448303.14	1991 Feb 15 1519:00	Molniya 8K78M	ML	77017-571	Molniya-1	Molniya-IT No. 73?	-	-	MIP-53	LC63/3	-	-	40086	-	-
1991-016	2448322.15	1991 Mar 6 1530:00	Soyuz-U-PVB	-	78023-819	Kosmos-2136	Oblik	-	-	MIP-53	LC16/2	-	-	375	-	-
1991-002	2448335.05	1991 Mar 19 1305:15	Soyuz-U2	-	77017-574	Progress M-7	Progress 7K-TGM No. 208	-	-	GIF-5	LC1	-	-	388	-	-
1991-022	2448338.07	1991 Mar 22 1219:59	Molniya 8K78M	ML	77017-574	Molniya-3	Molniya-3 No. 55	-	-	MIP-53	LC63/3	-	-	40022	-	-
1991-034	2448342.07	1991 Mar 26 1345:00	Soyuz-U	-	77053-892	Kosmos-2138	Kobal't	-	-	MIP-53	LC16/2	-	-	372	-	-
1991-035	2448395.04	1991 May 18 1250:28	Soyuz-U2	-	R 15000-051	Resurs-F2	Resurs-F2 17F42 No. 6	-	-	GIF-5	LC1	-	-	407	-	-
1991-036	2448469.58	1991 May 21 0900:00	Soyuz-U-PVB	-	78023-266	Resurs-F	Resurs-F2 17F42 No. 6	-	-	MIP-53	LC63/4	-	-	415	-	-
1991-038	2448461.15	1991 May 24 1529:59	Soyuz-U	-	77017-981	Kosmos-2149	Kobal't	-	-	MIP-53	LC63/3	-	-	377	-	-
1991-038	2448466.94	1991 May 30 0804:03	Soyuz-U2	-	R 15000-050	Progress M-8	Progress 7K-TGM No. 207	-	-	MIP-53	LC63/3	-	-	388	-	-
1991-043	2448425.58	1991 Jun 18 0609:00	Molniya 8K78M	ML	77053-806	Molniya-1	Molniya-IT No. 74	-	-	MIP-53	LC63/4	-	-	40811	-	-
1991-044	2448425.58	1991 Jun 28 0609:59	Soyuz-U-PVB	-	78023-515	Resurs-F	Resurs-F1 14F43 No. 52	-	-	MIP-53	LC63/3	-	-	436	-	-
1991-048	2448446.90	1991 Jul 10 0400:00	Soyuz-U-PVB	-	77059-725	Kosmos-2152	Oblik	-	-	MIP-53	LC63/4	-	-	431	-	-
1991-049	2448446.90	1991 Jul 10 0400:00	Soyuz-U	-	78012-152	Resurs-F	Yantar-4K31H	-	-	GIF-5	LC31	-	-	321	-	-
1991-052	2448460.58	1991 Jul 23 0905:00	Soyuz-U	-	78012-152	Resurs-F	Resurs-F1 14F43 No. 53	-	-	MIP-53	LC63/3	-	-	401	-	-
1991-053	2448470.00	1991 Aug 1 1153:00	Molniya 8K78M	ML	R 15000-052	Progress M-9	Molniya-IT No. 76	-	-	MIP-53	LC63/4	-	-	407	-	-
1991-057	2448469.58	1991 Aug 20 2254:10	Soyuz-U2	-	R 15000-052	Progress M-9	Resurs-F2 17F42 No. 7	-	-	MIP-53	LC63/3	-	-	364	-	-
1991-058	2448469.58	1991 Aug 20 2254:10	Soyuz-U-PVB	-	78012-269	Resurs-F	Resurs-F2 17F42 No. 7	-	-	MIP-53	LC31	-	-	923	-	-
1991-061	2448497.73	1991 Aug 29 0646:43	Vostok 8K22M	ML	R 15000-079	Progress M-10	Molniya-3 No. 48	-	-	MIP-53	LC63/3	-	-	40844	-	-
1991-065	2448517.53	1991 Sep 17 2001:59	Soyuz-U	-	77053-983	Kosmos-2156	Kobal't	-	-	MIP-53	LC63/3	-	-	358	-	-
1991-066	2448519.18	1991 Sep 17 2001:59	Molniya 8K78M	ML	77053-983	Kosmos-2174	Kobal't	-	-	MIP-53	LC63/3	-	-	405	-	-
1991-069	2448531.75	1991 Oct 9 1620:00	Soyuz-U	-	R 15000-054	Kosmos-2176	Foton No. 7L	-	-	MIP-53	LC63/4	-	-	415	-	-
1991-070	2448539.26	1991 Oct 2 0659:38	Soyuz-U-PVB	-	R 15000-026	Resurs-F	Foton No. 7L	-	-	MIP-53	LC63/4	-	-	380	-	-
1991-071	2448539.05	1991 Oct 9 1315:00	Soyuz-U2	-	R 15000-054	Kosmos-2163	Orlets	-	-	MIP-53	LC1	-	-	360	-	-
1991-073	2448464.50	1991 Oct 17 0005:25	Soyuz-U2	-	R 15000-056	Progress M-10	Progress 7K-TGM No. 211	-	-	MIP-53	LC63/3	-	-	350	-	-
1991-078	2448561.30	1991 Nov 20 1915:00	Soyuz-U	-	77053-984	Kosmos-2171	Kobal't	-	-	MIP-53	LC63/3	-	-	388	-	-
1991-085	2448607.95	1991 Dec 17 1100:00	Soyuz-U	-	76032-494	Kosmos-2174	Kobal't	-	-	MIP-53	LC31	-	-	366	-	-
1992-001	2448643.12	1992 Jan 21 1500:00	Soyuz-U	-	77053-985	Kosmos-2175	Kobal't	-	-	MIP-53	LC63/3	-	-	40061	-	-
1992-004	2448646.55	1992 Jan 24 0116:01	Molniya 8K78M	2BL	78023-608	Kosmos-2176	Kobal't	-	-	MIP-53	LC63/3	-	-	405	-	-
1992-004	2448646.55	1992 Jan 25 0601:17	Molniya 8K78M	2BL	78023-608	Kosmos-2176	Kobal't	-	-	MIP-53	LC63/3	-	-	405	-	-
1992-011	2448668.59	1992 Mar 1 0427:00	Soyuz-U2	-	R 15000-058	Progress M-11	Progress 7K-TGM No. 212	-	-	MIP-53	LC63/4	-	-	4026	-	-
1992-014	2448668.59	1992 Mar 1 0427:00	Molniya 8K78M	ML	R 15000-058	Progress M-11	Molniya-IT No. 75	-	-	MIP-53	LC63/4	-	-	415	-	-
1992-016	2448721.01	1992 Apr 4 1205:00	Soyuz-U-PVB	-	78023-765	Kosmos-2182	Kobal't	-	-	MIP-53	LC16/2	-	-	388	-	-
1992-016	2448721.01	1992 Apr 4 1205:00	Soyuz-U	-	78023-765	Kosmos-2182	Kobal't	-	-	MIP-53	LC16/2	-	-	388	-	-
1992-022	2448732.40	1992 Apr 19 0239:25	Soyuz-U2	-	R 15000-059	Progress M-12	Progress 7K-TGM No. 213	-	-	GIF-5	LC1	-	-	295	-	-
1992-022	2448732.40	1992 Apr 19 0239:25	Soyuz-U	-	R 15000-059	Progress M-12	Resurs-F2 17F42 No. 8	-	-	MIP-53	LC63/4	-	-	415	-	-
1992-025	2448741.55	1992 Apr 25 0000:00	Soyuz-U	-	77017-737	Resurs-F	Resurs-F2 17F42 No. 8	-	-	MIP-53	LC63/4	-	-	316	-	-
1992-025	2448741.55	1992 Apr 25 0000:00	Soyuz-U	-	77017-737	Resurs-F	Komet No. 15	-	-	GIF-5	LC1	-	-	302	-	-
1992-029	2448771.52	1992 May 28 1909:59	Soyuz-U	-	78012-154	Kosmos-2185	Kobal't	-	-	MIP-53	LC16/2	-	-	388	-	-
1992-033	2448776.53	1992 May 28 0800:00	Soyuz-U	-	78012-154	Kosmos-2186	Kobal't	-	-	MIP-53	LC63/3	-	-	388	-	-
1992-035	2448804.24	1992 Jun 30 0453:13	Soyuz-U-PVB	-	U 15000-062	Resurs-F M-13	Resurs-F1 14F43 No. 55	-	-	MIP-53	LC63/3	-	-	412	-	-
1992-035	2448804.24	1992 Jun 30 0453:13	Molniya 8K78M-PVB	2BL	77053-985	Progress M-13	Progress 7K-TGM No. 214	-	-	MIP-53	LC63/3	-	-	40093	-	-
1992-045	2448823.72	1992 Jul 24 1900:00	Soyuz-U2	-	78012-985	Kosmos-2196	Kobal't	-	-	MIP-53	LC63/3	-	-	370	-	-
1992-046	2448830.56	1992 Jul 27 0638:42	Soyuz-U2	-	78012-985	Kosmos-2196	Kobal't	-	-	MIP-53	LC63/3	-	-	370	-	-
1992-048	2448833.66	1992 Jul 30 1100:00	Soyuz-U-PVB	-	R 15000-053	Kosmos-2207	Soyuz 7K-STH No. 65	-	-	MIP-53	LC1	-	-	410	-	-
1992-050	2448841.31	1992 Aug 6 0930:59	Molniya 8K78M	ML	76032-552	Molniya-3	Oblik	-	-	MIP-53	LC63/4	-	-	509	-	-
1992-055	2448850.43	1992 Aug 15 2318:32	Soyuz-U2	-	78023-987	Progress M-14	Molniya-IT No. 72	-	-	MIP-53	LC63/4	-	-	40837	-	-
1992-056	2448850.43	1992 Aug 15 2318:32	Soyuz-U	-	78023-987	Progress M-14	Progress 7K-TGM No. 209	-	-	MIP-53	LC63/4	-	-	409	-	-
1992-062	2448898.17	1992 Sep 22 1610:00	Soyuz-U	-	76024-157	Resurs-F	Resurs-F1 14F43 No. 54	-	-	MIP-53	LC16/2	-	-	392	-	-
1992-065	2448904.29	1992 Sep 22 1610:00	Soyuz-U	-	78023-987	Kosmos-2210	Kobal't	-	-	MIP-53	LC63/4	-	-	372	-	-
1992-065	2448904.29	1992 Sep 22 1610:00	Soyuz-U	-	78023-987	Kosmos-2210	Kobal't	-	-	MIP-53	LC63/4	-	-	372	-	-
1992-067	2448910.33	1992 Oct 14 1958:00	Molniya 8K78M-PVB	ML	78012-841	Molniya-3	Foton No. 8L	-	-	MIP-53	LC63/3	-	-	40853	-	-
1992-069	2448916.93	1992 Oct 14 1958:00	Molniya 8K78M-PVB	2BL	77053-984	Kosmos-2217	Molniya-3 No. 50	-	-	MIP-53	LC16/2	-	-	40058	-	-
1992-071	2448923.22	1992 Oct 17 1719:41	Soyuz-U2	-	U 15000-061	Progress M-15	Progress 7K-TGM No. 215	-	-	GIF-5	LC31	-	-	402	-	-
1992-071	2448923.22	1992 Oct 17 1719:41	Soyuz-U	-	U 15000-061	Progress M-15	Progress 7K-TGM No. 215	-	-	MIP-53	LC16/2	-	-	377	-	-
1992-07																

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Mission	FlightCode	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee_Km	Range_Km	Dest
1995-047	2449190.86	1993 Jun 22 0845:00	Soyuz-U-PVB	-	76024 -269	Kosmos-2260	Resurs-T	-	-	LC63/3	-	-	-	496	-	-
1995-049	2449203.64	1993 Aug 4 0052:10	Molniya SK78M	2BL	76024 -659	Molniya-3	Molniya-3 No. 58	-	-	GNIPV	-	-	-	40003	-	-
1995-051	2449210.12	1993 Aug 10 1453:45	Molniya SK78M	2BL	78023 -610	Kosmos-2261	Kosmos-2261	-	-	GNIPV	-	-	-	40170	-	-
1995-052	2449210.43	1993 Aug 10 2223:45	Soyuz-U	-	N 15000-654	Progress M-19	Progress 7K-TGM No. 219	-	-	GIF-5	-	-	-	397	-	-
1995-053	2449223.95	1993 Aug 24 1045:00	Soyuz-U-PVB	-	78012 -155	Resurs-F	Resurs-F 14F43 No. 56	-	-	GNIPV	-	-	-	447	-	-
1995-054	2449238.06	1993 Sep 7 1325:00	Soyuz-U	-	77044 -956	Kosmos-2262	Don	-	-	GIF-5	-	-	-	336	-	-
1995-057	2449272.40	1993 Oct 11 2133:19	Soyuz-U	-	77044 -270	Progress M-20	Progress 7K-TGM No. 220	-	-	GIF-5	-	-	-	397	-	-
1995-061	2449296.35	1993 Nov 5 0825:00	Molniya SK78M	ML	78024 -658	Kosmos-2267	Neman	-	-	GNIPV	-	-	-	322	-	-
1995-079	2449344.36	1993 Dec 22 2037:16	Soyuz-U	-	78024 -658	Molniya-IT	Molniya-IT	-	-	GNIPV	-	-	-	40086	-	-
1994-001	2449360.92	1994 Jan 8 1006:34	Soyuz-U	-	N 15000-071	Soyuz TM-18	Soyuz 7K-STK No. 67	-	-	GIF-5	-	-	-	403	-	-
1994-005	2449429.19	1994 Jan 28 0212:10	Soyuz-U	-	N 15000-635	Progress M-21	Progress 7K-TGM No. 221	-	-	GNIPV	-	-	-	381	-	-
1994-018	2449433.70	1994 Mar 17 1630:00	Soyuz-U-PVB	-	78032 -993	Kosmos-2274	Kobal't	-	-	GNIPV	-	-	-	402	-	-
1994-025	2449471.22	1994 Mar 22 0464:12	Soyuz-U	-	78023 -992	Progress M-22	Progress 7K-TGM No. 222	-	-	GIF-5	-	-	-	331	-	-
1994-031	2449494.69	1994 Apr 28 1714:00	Soyuz-U	-	78023 -751	Kosmos-2280	Neman	-	-	GIF-5	-	-	-	400	-	-
1994-032	2449510.81	1994 May 22 0430:04	Soyuz-U	-	78012 -631	Progress M-23	Progress 7K-TGM No. 223	-	-	GNIPV	-	-	-	509	-	-
1994-033	2449510.17	1994 Jun 7 0720:00	Soyuz-U-PVB	-	N 15000-040	Kosmos-2281	Ob.LK (Priroda)	-	-	GNIPV	-	-	-	454	-	-
1994-036	2449535.02	1994 Jun 14 1605:00	Soyuz-U-PVB	-	N 15000-072	Foton	Foton No. 9	-	-	GNIPV	-	-	-	399	-	-
1994-042	2449565.23	1994 Jul 1 1224:50	Soyuz-U	-	N 15000-051	Soyuz TM-19	Soyuz 7K-STK No. 68	-	-	GIF-5	-	-	-	373	-	-
1994-044	2449569.50	1994 Jul 29 0735:00	Soyuz-U	-	77044 -995	Kosmos-2283	Kobal't	-	-	GNIPV	-	-	-	321	-	-
1994-048	2449629.10	1994 Aug 5 0112:21	Molniya SK78M	2BL	77031 -497	Kosmos-2284	Kometeta No. 17	-	-	GNIPV	-	-	-	376	-	-
1994-051	2449669.55	1994 Aug 23 1430:59	Molniya SK78M	ML	77044 -661	Kosmos-2286	Molniya-3	-	-	GNIPV	-	-	-	40086	-	-
1994-063	2449690.10	1994 Aug 25 1425:12	Soyuz-U	-	N 15000-636	Progress M-24	Progress 7K-TGM No. 224	-	-	GNIPV	-	-	-	423	-	-
1994-065	2449692.46	1994 Aug 26 1430:59	Soyuz-U	-	78032 -992	Soyuz TM-20	Soyuz 7K-STK No. 69	-	-	GIF-5	-	-	-	386	-	-
1994-071	2449697.51	1994 Oct 3 2242:30	Soyuz-U	-	77031 -672	Progress M-25	Progress 7K-TGM No. 225	-	-	GIF-5	-	-	-	398	-	-
1994-081	2449701.10	1994 Nov 11 0721:58	Molniya SK78M	ML	78032 -762	Kosmos-2305	Molniya-IT	-	-	GNIPV	-	-	-	40145	-	-
1994-082	2449715.96	1994 Dec 14 1421:00	Soyuz-U	-	78032 -762	Kosmos-2305	Neman	-	-	GIF-5	-	-	-	317	-	-
1995-005	2449764.20	1995 Feb 29 1130:00	Soyuz-U	-	78032 -762	Progress M-26	Progress 7K-TGM No. 226	-	-	GIF-5	-	-	-	397	-	-
1995-006	2449766.24	1995 Feb 15 1646:28	Soyuz-U	-	78032 -762	Progress M-26	Progress 7K-TGM No. 226	-	-	GIF-5	-	-	-	462	-	-
1995-010	2449790.76	1995 Feb 16 1739:59	Soyuz-U	-	78032 -762	Progress M-26	Progress 7K-TGM No. 226	-	-	GIF-5	-	-	-	400	-	-
1995-014	2449799.20	1995 Mar 4 0611:34	Soyuz-U	-	N 15000-075	Kosmos-2311	Soyuz 7K-STK No. 70	-	-	GIF-5	-	-	-	400	-	-
1995-020	2449817.32	1995 Apr 9 1934:12	Soyuz-U	-	77031 -507	Progress M-27	Kobal't	-	-	GIF-5	-	-	-	388	-	-
1995-026	2449862.94	1995 Apr 9 1934:12	Molniya SK78M	2BL	77017 -573	Progress M-27	Progress 7K-TGM No. 227	-	-	GIF-5	-	-	-	417	-	-
1995-031	2449897.27	1995 Jun 20 0824:41	Soyuz-U-PVB	-	77031 -506	Kosmos-2312	Ob.LK	-	-	GNIPV	-	-	-	39999	-	-
1995-036	2449916.63	1995 Jul 20 0304:00	Soyuz-U-PVB	-	77031 -506	Kosmos-2314	Kobal't	-	-	GIF-5	-	-	-	408	-	-
1995-042	2449932.50	1995 Aug 2 2359:11	Molniya SK78M	2BL	N 15000-663	Progress M-28	Progress 7K-TGM No. 228	-	-	GIF-5	-	-	-	396	-	-
1995-047	2449963.66	1995 Aug 9 0221:00	Molniya SK78M	ML	N 15000-294	Intercol-1	SO-HZ No. 511	-	-	GIF-1	-	-	-	150000	-	-
1995-048	2449963.66	1995 Aug 9 0221:00	Molniya SK78M	ML	N 15000-294	Intercol-1	SO-HZ No. 511	-	-	GIF-1	-	-	-	46922	-	-
1995-049	2449963.66	1995 Aug 9 0221:00	Molniya SK78M	ML	N 15000-294	Intercol-1	SO-HZ No. 511	-	-	GIF-1	-	-	-	389	-	-
1995-051	2449969.24	1995 Sep 29 0625:00	Soyuz-U	-	77031 -674	Progress M-29	Progress 7K-TGM No. 229	-	-	GIF-5	-	-	-	482	-	-
1995-052	2449969.24	1995 Sep 29 0625:00	Soyuz-U	-	77031 -674	Progress M-29	Progress 7K-TGM No. 229	-	-	GIF-5	-	-	-	388	-	-
1995-053	2449999.24	1995 Oct 6 1850:46	Soyuz-U	-	77031 -674	Progress M-29	Progress 7K-TGM No. 229	-	-	GIF-5	-	-	-	389	-	-
1995-054	2450009.11	1995 Oct 6 1850:46	Soyuz-U	-	77031 -674	Progress M-29	Progress 7K-TGM No. 229	-	-	GIF-5	-	-	-	388	-	-
1995-072	2450079.16	1995 Dec 28 1451:35	Molniya SK78M	2BL	N 15000-660	Progress M-30	Progress 7K-TGM No. 230	-	-	GIF-5	-	-	-	482	-	-
1996-011	2450137.24	1996 Feb 23 0445:16	Soyuz-U-PVB	-	N 15000-661	Progress M-30	Progress 7K-TGM No. 230	-	-	GIF-5	-	-	-	388	-	-
1996-012	2450137.24	1996 Feb 23 0445:16	Soyuz-U-PVB	-	N 15000-661	Progress M-30	Progress 7K-TGM No. 230	-	-	GIF-5	-	-	-	388	-	-
1996-028	2450167.69	1996 Mar 14 1740:10	Soyuz-U	-	78012 -642	Progress M-31	Progress 7K-TGM No. 231	-	-	GIF-5	-	-	-	386	-	-
1996-029	2450167.69	1996 Mar 14 1740:10	Soyuz-U	-	78012 -642	Progress M-31	Progress 7K-TGM No. 231	-	-	GIF-5	-	-	-	386	-	-
1996-032	2450217.56	1996 May 5 0855:18	Soyuz-U-PVB	-	78012 -642	Progress M-31	Progress 7K-TGM No. 231	-	-	GIF-5	-	-	-	386	-	-
1996-033	2450217.56	1996 May 5 0855:18	Soyuz-U-PVB	-	78012 -642	Progress M-31	Progress 7K-TGM No. 231	-	-	GIF-5	-	-	-	386	-	-
1996-034	2450217.56	1996 May 5 0855:18	Soyuz-U-PVB	-	78012 -642	Progress M-31	Progress 7K-TGM No. 231	-	-	GIF-5	-	-	-	386	-	-
1996-045	2450296.33	1996 Jun 31 2000:00	Soyuz-U-PVB	-	77044 -943	Progress M-32	Progress 7K-TGM No. 232	-	-	GIF-5	-	-	-	392	-	-
1996-047	2450313.32	1996 Aug 17 1318:03	Molniya SK78M	ML	77031 -675	Molniya-IT	Progress 7K-TGM No. 232	-	-	GIF-5	-	-	-	40826	-	-
1996-050	2450320.90	1996 Aug 29 0625:00	Molniya SK78M	2BL	76047 -660	Progress M-33	Molniya-IT	-	-	GIF-5	-	-	-	395	-	-
1996-051	2450320.90	1996 Aug 29 0625:00	Molniya SK78M	2BL	76047 -660	Progress M-33	Molniya-IT	-	-	GIF-5	-	-	-	395	-	-
1996-052	2450320.90	1996 Aug 29 0625:00	Molniya SK78M	2BL	76047 -660	Progress M-33	Molniya-IT	-	-	GIF-5	-	-	-	395	-	-
1996-053	2450320.90	1996 Aug 29 0625:00	Molniya SK78M	2BL	76047 -660	Progress M-33	Molniya-IT	-	-	GIF-5	-	-	-	395	-	-
1996-054	2450320.90	1996 Aug 29 0625:00	Molniya SK78M	2BL	76047 -660	Progress M-33	Molniya-IT	-	-	GIF-5	-	-	-	395	-	-
1996-055	2450320.90	1996 Aug 29 0625:00	Molniya SK78M	2BL	76047 -660	Progress M-33	Molniya-IT	-	-	GIF-5	-	-	-	395	-	-
1996-056	2450320.90	1996 Aug 29 0625:00	Molniya SK78M	2BL	76047 -660	Progress M-33	Molniya-IT	-	-	GIF-5	-	-	-	395	-	-
1996-057	2450320.90	1996 Aug 29 0625:00	Molniya SK78M	2BL	76047 -660	Progress M-33	Molniya-IT	-	-	GIF-5	-	-	-	395	-	-
1996-058	2450320.90	1996 Aug 29 0625:00	Molniya SK78M	2BL	76047 -660	Progress M-33	Molniya-IT	-	-	GIF-5	-	-	-	395	-	-
1996-059	2450320.90	1996 Aug 29 0625:00	Molniya SK78M	2BL	76047 -660	Progress M-33	Molniya-IT	-	-	GIF-5	-	-	-	395	-	-
1996-060	2450320.90	1996 Aug 29 0625:00	Molniya SK78M	2BL	76047 -660	Progress M-33	Molniya-IT	-	-	GIF-5	-	-	-	395	-	-
1996-061	2450320.90	1996 Aug 29 0625:00	Molniya SK78M	2BL	76047 -660	Progress M-33	Molniya-IT	-	-	GIF-5	-	-	-	395	-	-
1996-062	2450320.90	1996 Aug 29 0625:00	Molniya SK78M	2BL	76047 -660	Progress M-33	Molniya-IT	-	-	GIF-5	-	-	-	395	-	-
1996-063	2450320.90	1996 Aug 29 0625:00	Molniya SK78M	2BL	76047 -660	Progress M-33	Molniya-IT	-	-	GIF-5	-	-	-	395	-	-
1996-064	2450320.90	1996 Aug 29 0625:00	Molniya SK78M	2BL	76047 -660	Progress M-33	Molniya-IT	-	-	GIF-5	-	-	-	395	-	-
1996-065	2450320.90	1996 Aug 29 0625:00	Molniya SK78M	2BL	76047 -660	Progress M-33	Molniya-IT	-	-	GIF-5	-	-	-	395	-	-
1996-066	2450320.90	1996 Aug 29 0625:00	Molniya SK78M	2BL	76047 -660	Progress M-33	Molniya-IT	-	-	GIF-5	-	-	-	395	-	

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Mission	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee_Km	Range_Km	Dest
1999-044	2451409.25	1999 Aug 18 1800:01	Soyuz-U-PVB	-	77017 - 785	Kosmos-2365	Kobal't	GIX-1	LC43/3	-	-	410	-	-
1999-048	2451431.25	1999 Sep 9 1800:00	Soyuz-U-PVB	-	M 15000-062	Globalstar S-4	Globalstar S-4	GIX-1	LC43/4	-	-	496	-	-
1999-049	2451444.11	1999 Sep 22 1433:00	Soyuz-U-PVB	Ikar	N 15000-061	Globalstar S-4	Globalstar S-4	GIX-5	LC43/4	-	-	5517	-	-
1999-054	2451449.96	1999 Sep 28 1100:05	Soyuz-U-PVB	Ikar	M 15000-045	Globalstar S-5	Globalstar S-5	GIX-1	LC43/4	-	-	433	-	-
1999-058	2451470.06	1999 Oct 18 1332:00	Soyuz-U-PVB	Ikar	N 15000-062	Globalstar S-5	Globalstar S-5	GIX-5	LC43/4	-	-	1682	-	-
1999-062	2451505.30	1999 Nov 27 1620:00	Soyuz-U-PVB	Ikar	M 15000-063	Globalstar S-6	Globalstar S-6	GIX-5	LC43/4	-	-	1792	-	-
1999-073	2451546.18	1999 Dec 27 1912:44	Soyuz-U-PVB	2BL	77017 - 681	Kosmos-2368	Globalstar S-6	GIX-5	LC16/2	-	-	39792	-	-
2000-005	2451575.78	2000 Feb 1 0647:23	Soyuz-U-PVB	-	A 15000-669	Progress M-1	Progress 7K-TGM No. 260	GIX-5	LC43/4	-	-	354	-	-
2000-009	2451583.47	2000 Feb 8 2320:00	Soyuz-U-PVB	Fregat	A 15000-079/1001	Progress M-1	Dummy satellite	GIX-5	LC43/4	-	-	18021	-	-
2000-018	2451628.71	2000 Mar 20 1828:30	Soyuz-U-PVB	Fregat	A 15000-665	Progress M-1	Dumayt	GIX-5	LC43/4	-	-	384	-	-
2000-021	2451660.34	2000 Apr 25 2008:02	Soyuz-U-PVB	-	A 15000-666	Progress M-2	Progress 7K-TGM No. 204	GIX-5	LC43/4	-	-	394	-	-
2000-023	2451668.06	2000 May 3 1325:00	Soyuz-U-PVB	-	A 15000-669	Kosmos-2370	Progress M No. 252	GIX-5	LC43/4	-	-	374	-	-
2000-041	2451742.03	2000 Jun 16 1239:34	Soyuz-U-PVB	Fregat	A 15000-068/1003	Cluster FME/FPH	Cluster F17 (C3)	GIX-5	LC43/4	-	-	134657	-	-
2000-044	2451763.27	2000 Jun 16 1239:34	Soyuz-U-PVB	Fregat	A 15000-668	Progress M-3	Progress M1 No. 251	GIX-5	LC43/4	-	-	389	-	-
2000-045	2451765.37	2000 Aug 6 1626:42	Soyuz-U-PVB	Fregat	A 15000-070/1004	Cluster FME/FPH	Cluster F15 (C1)	GIX-5	LC43/4	-	-	134664	-	-
2000-048	2451816.90	2000 Sep 29 0930:15	Soyuz-U-PVB	-	76023 - 462 075	Kosmos-2373	Kometka No. 207	GIX-5	LC43/4	-	-	286	-	-
2000-064	2451834.39	2000 Oct 16 2127:06	Soyuz-U-PVB	-	K 15000-085	Progress M-43	Progress 7K-TGM No. 243	GIX-5	LC43/4	-	-	358	-	-
2000-070	2451848.53	2000 Oct 31 0752:47	Soyuz-U-PVB	-	A 15000-666	Progress M-31	Progress 7K-TGM No. 205	GIX-5	LC43/4	-	-	404	-	-
2000-073	2451864.56	2000 Nov 16 0132:36	Soyuz-U-PVB	-	K 15000-671	Progress M-4	Progress M1 No. 253	GIX-5	LC43/4	-	-	305	-	-
2001-003	2451983.69	2001 Jan 24 0428:42	Soyuz-U-PVB	-	K 15000-673	Progress M-5	Progress M1 No. 254	GIX-5	LC43/4	-	-	305	-	-
2001-008	2451966.94	2001 Feb 26 0809:35	Soyuz-U-PVB	-	K 15000-670	Progress M-44	Progress 7K-TGM No. 244	GIX-5	LC43/4	-	-	395	-	-
2001-017	2452027.82	2001 Apr 28 0737:20	Soyuz-U-PVB	-	K 15000-674	Progress M-52	Progress 7K-TGM No. 206	GIX-5	LC43/4	-	-	403	-	-
2001-021	2452050.44	2001 May 20 2232:40	Soyuz-FG	-	K 15000-001	Progress M-6	Progress M1 No. 255	GIX-5	LC43/4	-	-	402	-	-
2001-022	2452059.25	2001 May 29 1765:00	Soyuz-U-PVB	-	77023 - 841 076	Kosmos-2377	Kobal't	GIX-1	LC43/4	-	-	365	-	-
2001-030	2452110.51	2001 Jun 20 0017:00	Holnitya SKR78	ML	F 15000-065	Holnitya-3	Holnitya-3K No. 117	GIX-1	LC43/4	-	-	40581	-	-
2001-036	2452142.59	2001 Aug 21 0923:54	Soyuz-U-PVB	-	F 15000-677	Progress M-45	Progress M1 No. 245	GIX-5	LC43/4	-	-	417	-	-
2001-041	2452167.46	2001 Sep 14 2354:55	Soyuz-U-PVB	-	F 15000-672	Pirs	Progress M No. 301	GIX-5	LC43/4	-	-	677	-	-
2001-048	2452207.96	2001 Oct 21 0659:35	Soyuz-U-PVB	-	F 15000-677	Progress M-7	Progress M1 No. 207	GIX-5	LC43/4	-	-	401	-	-
2001-061	2452240.27	2001 Oct 21 1154:13	Soyuz-U-PVB	ML	F 15000-002	Holnitya-3	Holnitya-3 No. 64	GIX-1	LC43/3	-	-	40876	-	-
2002-002	2452351.23	2002 Feb 25 1726:21	Soyuz-U-PVB	-	F 15000-672	Progress M-7	Progress M1 No. 256	GIX-5	LC43/3	-	-	401	-	-
2002-013	2452356.34	2002 Feb 25 1726:21	Soyuz-U-PVB	-	F 15000-678	Kosmos-2387	Kobal't	GIX-1	LC43/3	-	-	357	-	-
2002-017	2452369.77	2002 Apr 1 2206:45	Holnitya SKR78	2BL	78084 - 685 045	Kosmos-2386	Progress M1 No. 257	GIX-5	LC16/2	-	-	40013	-	-
2002-020	2452389.72	2002 Apr 1 2206:45	Holnitya SKR78	-	F 15000-675	Progress M-6	Progress M1 No. 208	GIX-5	LC16/2	-	-	408	-	-
2002-033	2452461.73	2002 Jun 26 0536:30	Soyuz-U-PVB	-	E 15000-679	Progress M-46	Progress M1 No. 246	GIX-5	LC16/2	-	-	408	-	-
2002-045	2452483.21	2002 Sep 25 1658:24	Soyuz-FG	-	E 15000-003	Progress M-9	Progress M1 No. 288	GIX-5	LC16/2	-	-	406	-	-
2002-F02	2452565.26	2002 Oct 15 1820:00	Soyuz-U-PVB	-	K 15000-066	Foton-H No. 1	Progress M1 No. 1	GIX-1	LC43/3	-	-	0	-	-
2002-060	2452577.63	2002 Oct 30 0311:11	Soyuz-FG	-	K 15000-044	Soyuz-TM-1	Soyuz-TM No. 211	GIX-5	LC43/3	-	-	404	-	-
2002-069	2452583.01	2002 Dec 24 1220:15	Holnitya SKR78	2BL	77045 - 685 042	Kosmos-2393	Soyuz-TM No. 211	GIX-1	LC16/2	-	-	40163	-	-
2003-006	2452593.04	2003 Feb 2 1229:40	Holnitya SKR78	-	F 15000-680	Progress M-47	Progress M1 No. 247	GIX-5	LC16/2	-	-	401	-	-
2003-016	2452751.56	2003 Apr 26 0455:52	Holnitya SKR78	2BL	78029 - 684 041	Soyuz-TM-2	Holnitya-11	GIX-1	LC16/2	-	-	40840	-	-
2003-025	2452785.24	2003 Jun 2 1034:36	Soyuz-U-PVB	-	E 15000-065	Hars Express	Progress M1 No. 212	GIX-5	LC43/4	-	-	150000	-	-
2003-029	2452786.94	2003 Jun 19 2000:35	Holnitya SKR78	Fregat	E 15000-067/1005	Soyuz-TM-2	Progress M1 No. 212	GIX-5	LC43/4	-	-	396	-	-
2003-032	2452801.53	2003 Aug 12 0716:55	Soyuz-U-PVB	-	D 15000-681	Hars Express	Progress M1 No. 259	GIX-5	LC43/4	-	-	384	-	-
2003-036	2452804.73	2003 Aug 29 0147:59	Soyuz-U-PVB	2BL	77082 - 685 046	Kosmos-2399	Holnitya-3 No. 65L	GIX-5	LC43/4	-	-	40863	-	-
2003-047	2452880.17	2003 Apr 15 0538:03	Soyuz-FG	-	D 15000-682	Progress M-48	Progress M1 No. 213	GIX-5	LC43/4	-	-	384	-	-
2003-059	2452930.71	2003 Oct 27 2111:00	Soyuz-U-PVB	-	D 15000-097	Soyuz-TM-3	Progress M1 No. 248	GIX-5	LC43/4	-	-	30662	-	-
2004-000	2452931.40	2004 Dec 27 1159:00	Soyuz-FG	Fregat	D 15000-098/1006	Progress M-11	Progress M1 No. 260	GIX-5	LC43/4	-	-	40719	-	-
2004-002	2452935.13	2004 Jan 29 0716:55	Holnitya SKR78	ML	76092 - 689 047	Progress M-11	Progress M1 No. 260	GIX-5	LC43/4	-	-	370	-	-
2004-013	2453111.84	2004 Feb 10 0319:00	Soyuz-FG	-	D 15000-684	Soyuz-TM-4	Holnitya-17	GIX-1	LC16/2	-	-	370	-	-
2004-019	2453115.04	2004 Apr 16 0349:00	Soyuz-U-PVB	-	D 15000-684	Progress M-49	Progress M1 No. 249	GIX-5	LC43/4	-	-	367	-	-
2004-032	2453228.71	2004 May 15 0046:25	Soyuz-U-PVB	-	D 15000-685	Progress M-50	Progress M1 No. 249	GIX-5	LC43/4	-	-	370	-	-
2004-038	2453238.21	2004 Aug 14 1650:00	Soyuz-U-PVB	-	78036 - 844 087	Kosmos-2411	Kobal't	GIX-1	LC16/2	-	-	368	-	-
2004-040	2453292.63	2004 Oct 14 0306:26	Soyuz-FG	-	Zh 15000-012	Progress M-51	Progress M1 No. 215	GIX-5	LC43/4	-	-	367	-	-
2004-101	2453318.97	2004 Nov 8 1829:48	Soyuz-2-1A	-	F 15000-001	Oblik 17F116ML	Oblik 17F116ML No. 103	GIX-5	LC43/4	-	-	366	-	-
2004-051	2453363.43	2004 Dec 23 2219:34	Soyuz-U-PVB	-	Zh 15000-092	Progress M-51	Progress 7K-TGM No. 351	GIX-1	LC43/4	-	-	413	-	-
2005-007	2453430.30	2005 Feb 28 1909:18	Soyuz-U-PVB	-	Zh 15000-093	Progress M-52	Progress 7K-TGM No. 352	GIX-5	LC43/4	-	-	360	-	-
2005-013	2453475.53	2005 Apr 15 0046:25	Soyuz-FG	-	Zh 15000-014	Soyuz-TM-6	Progress M1 No. 216	GIX-5	LC43/4	-	-	518	-	-
2005-020	2453522.82	2005 May 31 1200:00	Soyuz-U-PVB	-	Zh 15000-094	Foton-M No. 2	Progress M1 No. 2	GIX-5	LC43/4	-	-	357	-	-
2005-F01	2453542.53	2005 Jun 16 2309:34	Holnitya SKR78	ML	Zh 15000-094	Progress M-53	Progress 7K-TGM No. 353	GIX-5	LC16/2	-	-	1357	-	-
2005-030	2453566.48	2005 Jun 21 0048:37	Soyuz-FG	Fregat	Zh 15000-011/1007	Progress M-53	Molnitya-3K No. 12L	GIX-5	LC43/4	-	-	66268	-	-
2005-034	2453568.15	2005 Aug 2 0850:00	Soyuz-U-PVB	-	78036 - 575 086	Kosmos-2415	Galaxy 4	GIX-5	LC43/4	-	-	313	-	-
2005-039	2453622.05	2005 Sep 8 1307:54	Soyuz-U-PVB	-	Zh 15000-097	Progress M-54	Kometka No. 21L	GIX-5	LC43/4	-	-	358	-	-
2005-045	2453643.66	2005 Oct 1 0354:53	Soyuz-FG	-	Zh 15000-016	Progress M-54	Progress 11F732 No. 217	GIX-5	LC43/4	-	-	358	-	-
2005-047	2453726.28	2005 Dec 2 0333:34	Soyuz-U-PVB	Fregat	Zh 15000-1010/1010	Progress M-54	Progress 11F732 No. 217	GIX-5	LC43/4	-	-	150000	-	-
2005-051	2453732.72	2005 Dec 28 0915:08	Soyuz-FG	-	P 15000-080	Venus Express	Venus Express	GIX-5	LC43/4	-	-	356	-	-
2005-059	2453792.60	2006 Mar 20 0230:20	Soyuz-FG	Fregat	P 15000-015/1009	GLONASS	GLONASS	GIX-5	LC43/4	-	-	23744	-	-
2006-013	2453824.17	2006 Apr 24 1603:25	Soyuz-U-PVB	-	Zh 15000-101	Progress M-56	Progress 7K-TGM No. 356	GIX-5	LC43/4	-	-	351	-	-
2006-017	2453859.23	2006 May 3 1738:01	Soyuz-U-PVB	-	78031 - 800 090	Progress M-56	Kobal't+M	GIX-1	LC16/2	-	-	351	-	-
2006-021	2453911.13	2006 Jun 24 1508:18	Soyuz-U-PVB	-	Zh 15000-101	Progress M-57	Progress 7K-TGM No. 1	GIX-5	LC43/4	-	-	585	-	-
2006-025	2453911.13	2006 Jun 24 1508:18	Soyuz-U-PVB	-	Zh 15000-101	Progress M-57	Progress 7K-TGM No. 1	GIX-5	LC43/4	-	-	359	-	-
2006-030	2453937.68	2006 Sep 14 1341:00	Holnitya SKR78	2BL	78041 - 490 0									

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Mission	FlightCode	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee_Km	Range_Km	Dest
2007-020	2450250.36	2007 May 29 20:31:30	Soyuz-FG	Fregat	Ts15000-021/1016	Globalstar	Globalstar 2-1	ST16	-	GIR-5	LC31	-	-	1423	-	-
2007-021	2450259.25	2007 Jun 7 18:00:01	Soyuz-U-PWB	-	76033 - 137 099	Kosmos-2427	Kobal't'sh	-	-	GIR-1	LC16/2	-	-	386	-	-
2007-033	2450315.23	2007 Aug 2 17:33:47	Soyuz-U-PWB	-	Ts15000-108	Progress M-61	Progress 7k-TGM No. 361	ISS 26P	-	GIR-5	LC1	-	-	347	-	-
2007-040	2450357.96	2007 Sep 14 11:00:00	Soyuz-U-PWB	-	Ts15000-098	Foton-M No. 3	Foton-M No. 3	-	-	GIR-5	LC1	-	-	516	-	-
2007-045	2450384.06	2007 Oct 10 13:22:39	Soyuz-FG	Fregat	Ts15000-020	Globalstar	Soyuz 11F732A17 No. 221	ISS 15S	-	GIR-5	LC1	-	-	345	-	-
2007-049	2450394.34	2007 Oct 20 04:29:15	Soyuz-FG	Fregat	77046 - 692 049	Globalstar	Globalstar 2-2	ST19	-	GIR-5	LC31	-	-	1505	-	-
2007-061	2450396.69	2007 Oct 23 04:59:17	Soyuz-FG	Fregat	Ts15000-022/1015	Radarstar-2	OkO US-KS	-	-	GIR-5	LC16/2	-	-	40143	-	-
2007-064	2450449.05	2007 Dec 14 13:17:34	Soyuz-U-PWB	-	Sh15000-109	Radarstar-2	Radarstar-2	ST20	-	GIR-5	LC31	-	-	1012	-	-
2008-004	2450457.80	2007 Dec 23 07:12:41	Soyuz-U-PWB	-	Sh15000-106	Progress M-62	Progress 7k-TGM No.362	ISS 27P	-	GIR-5	LC1	-	-	350	-	-
2008-015	2450560.04	2008 Feb 5 13:02:57	Soyuz-U-PWB	-	Sh15000-106	Progress M-63	Progress 7k-TGM No.363	ISS 28P	-	GIR-5	LC1	-	-	344	-	-
2008-024	2450564.37	2008 Apr 8 11:16:39	Soyuz-FG	Fregat	Sh15000-024	Globalstar	Soyuz 11F732A17 No. 222	ISS 16S	-	GIR-5	LC1	-	-	362	-	-
2008-025	2450568.43	2008 Apr 26 22:16:02	Soyuz-U-PWB	-	P 15000-016/1008	Progress M-64	Progress 7k-TGM No.364	ISS 29P	-	GIR-5	LC31	-	-	23838	-	-
2008-032	2450601.35	2008 May 14 20:22:56	Soyuz-2-IB	-	Sh15000-110	Kosmos-2441	Persona No. 1	ISS 30P	-	GIR-1	LC31	-	-	746	-	-
2008-037	2450674.27	2008 Jun 26 18:31:36	Soyuz-U-PWB	-	Sh15000-111	Progress M-65	Progress 7k-TGM No.365	ISS 17S	-	GIR-5	LC31	-	-	366	-	-
2008-043	2450720.33	2008 Sep 10 19:50:02	Soyuz-FG	Fregat	Sh15000-026	Progress M-66	Soyuz 11F732A17 No. 223	ISS 18S	-	GIR-5	LC1	-	-	363	-	-
2008-050	2450751.79	2008 Oct 12 07:01:33	Soyuz-U-PWB	-	Sh15000-113	Kosmos-2445	Kobal't'sh	-	-	GIR-1	LC16/2	-	-	401	-	-
2008-058	2450785.16	2008 Nov 14 15:50:00	Soyuz-U-PWB	-	Sh15000-114	Progress M-01H	Progress 7k-TGM No.401	ISS 31P	-	GIR-5	LC1	-	-	363	-	-
2008-062	2450802.71	2008 Dec 2 04:59:59	Soyuz-U-PWB	-	77046 - 693 050	Kosmos-2446	OkO TP 6070	ISS 32P	-	GIR-1	LC16/2	-	-	40078	-	-
2009-006	2450872.74	2009 Feb 10 05:49:46	Soyuz-U-PWB	-	Sh15000-115	Progress M-66	Progress 7k-TGM No.366	ISS 33P	-	GIR-5	LC31	-	-	414	-	-
2009-015	2450916.99	2009 Feb 26 11:49:18	Soyuz-FG	Fregat	76075 - 152 105	Progress M-67	Progress 7k-TGM No.402	ISS 34P	-	GIR-5	LC1	-	-	380	-	-
2009-022	2450951.21	2009 Apr 29 16:58:00	Soyuz-U-PWB	-	Sh15000-112	Kosmos-2450	Kobal't'sh	-	-	GIR-1	LC16/2	-	-	382	-	-
2009-024	2450959.28	2009 May 7 16:57:09	Soyuz-U-PWB	Fregat	Sh15000-113	Progress M-02H	Progress 7k-TGM No.402	ISS 35P	-	GIR-5	LC1	-	-	357	-	-
2009-029	2450973.41	2009 May 21 12:53:33	Soyuz-2-1A	-	Sh15000-113	Meridian No. 12	Progress 7k-TGM No.402	ISS 33P	-	GIR-1	LC31/4	-	-	36473	-	-
2009-030	2450978.94	2009 May 27 10:54:53	Soyuz-FG	Fregat	77067 - 162 005	Soyuz TM-15	Soyuz 11F732A17 No. 225	ISS 19S	-	GIR-5	LC1	-	-	354	-	-
2009-030	2450983.96	2009 Sep 17 15:55:07	Soyuz-U-PWB	-	Ts15000-012	Progress M-67	Progress 7k-TGM No.367	ISS 34P	-	GIR-5	LC1	-	-	384	-	-
2009-049	2450992.16	2009 Sep 30 07:14:45	Soyuz-2-1B	-	Sh15000-102	Meridian No. 16	Progress 7k-TGM No.403	ISS 20S	-	GIR-5	LC1	-	-	824	-	-
2009-056	2451014.80	2009 Sep 17 15:55:07	Soyuz-U-PWB	-	B 15000-029	Progress M-68	Progress 7k-TGM No.403	ISS 35P	-	GIR-5	LC1	-	-	849	-	-
2009-060	2451046.10	2009 Nov 10 14:22:04	Soyuz-U-PWB	-	B 15000-120	Progress M-03H	Progress 7k-TGM No.407	ISS 5K	-	GIR-5	LC1	-	-	415	-	-
2009-063	2451059.95	2009 Oct 15 01:14:37	Soyuz-U-PWB	-	B 15000-121	Progress M-03H	Progress 7k-TGM No.407	ISS 5K	-	GIR-5	LC16/2	-	-	912	-	-
2009-066	2451146.10	2009 Nov 20 10:44:00	Soyuz-U-PWB	-	B 15000-030	Kosmos-2455	Lotus-5 No. 801	ISS 21S	-	GIR-1	LC16/2	-	-	46024	-	-
2009-074	2451186.41	2009 Dec 2 01:28:00	Soyuz-FG	Fregat	B 15000-031	Soyuz TM-17	Soyuz 11F732A17 No. 227	ISS 24S	-	GIR-5	LC1	-	-	355	-	-
2010-001	2451288.66	2010 Feb 3 03:45:29	Soyuz-U-PWB	-	B 15000-031	Soyuz TM-17	Soyuz 11F732A17 No. 227	ISS 24S	-	GIR-5	LC1	-	-	355	-	-
2010-011	2451304.33	2010 Apr 2 04:04:33	Soyuz-U-PWB	-	B 15000-117	Progress M-04H	Progress 7k-TGM No.408	ISS 40P	-	GIR-5	LC1	-	-	320	-	-
2010-014	2451305.12	2010 Apr 16 15:00:00	Soyuz-U-PWB	-	B 15000-028	Soyuz TM-16	Soyuz 11F732A17 No. 228	ISS 22S	-	GIR-5	LC1	-	-	361	-	-
2010-018	2451315.22	2010 Jun 28 17:15:09	Soyuz-U-PWB	-	B 15000-117	Progress M-04H	Progress 7k-TGM No.408	ISS 40P	-	GIR-5	LC1	-	-	320	-	-
2010-018	2451315.22	2010 Jun 28 17:15:09	Soyuz-U-PWB	-	76028 - 169 124	Soyuz TM-16	Soyuz 11F732A17 No. 228	ISS 22S	-	GIR-5	LC1	-	-	361	-	-
2010-029	2451363.10	2010 Jun 30 15:58:14	Soyuz-U-PWB	-	B 15000-112	Kosmos-2462	Kobal't'sh No. 561	ISS 25S	-	GIR-1	LC16/2	-	-	373	-	-
2010-033	2451378.15	2010 Jun 30 15:58:14	Soyuz-U-PWB	-	B 15000-032	Progress M-08H	Progress 7k-TGM No.405	ISS 37P	-	GIR-5	LC1	-	-	374	-	-
2010-044	2451449.93	2010 Sep 10 10:22:57	Soyuz-U-PWB	-	B 15000-119	Progress M-08H	Soyuz 11F732A17 No. 229	ISS 23S	-	GIR-5	LC1	-	-	361	-	-
2010-044	2451449.93	2010 Sep 10 10:22:57	Soyuz-U-PWB	-	B 15000-119	Progress M-08H	Soyuz 11F732A17 No. 229	ISS 38P	-	GIR-5	LC1	-	-	367	-	-
2010-062	2451470.21	2010 Sep 30 00:11:15	Holnitya SKR08	2BL	78041 - 695 062	Progress M-07H	Progress 7k-TGM No.407	ISS 39P	-	GIR-5	LC31	-	-	360	-	-
2010-062	2451470.21	2010 Sep 30 00:11:15	Holnitya SKR08	2BL	78041 - 695 062	Kosmos-2469	OkO TP 6073A247 No. 701	ISS 24S	-	GIR-1	LC16/2	-	-	46024	-	-
2010-064	2451489.12	2010 Oct 19 10:10:59	Soyuz-2-1A	Fregat	B 15000-035	Soyuz TM-01H	Soyuz 11F732A17 No. 227	ISS 24S	-	GIR-5	LC1	-	-	355	-	-
2010-064	2451489.12	2010 Oct 19 10:10:59	Soyuz-2-1A	Fregat	B 15000-035	Soyuz TM-01H	Soyuz 11F732A17 No. 227	ISS 24S	-	GIR-5	LC1	-	-	355	-	-
2010-065	2451507.13	2010 Oct 19 10:10:59	Soyuz-U-PWB	-	I 15000-123	Globalstar	Globalstar 2-3	ST25	-	GIR-5	LC31	-	-	320	-	-
2010-065	2451507.13	2010 Oct 19 10:10:59	Soyuz-U-PWB	-	I 15000-123	Globalstar	Globalstar 2-3	ST25	-	GIR-5	LC31	-	-	320	-	-
2010-066	2451507.13	2010 Oct 19 10:10:59	Soyuz-U-PWB	-	I 15000-123	Globalstar	Globalstar 2-3	ST25	-	GIR-5	LC31	-	-	320	-	-
2010-067	2451509.20	2010 Dec 15 19:09:25	Soyuz-2-1A	Fregat	76028 - 169 124	Meridian No. 13	Progress 7k-TGM No.409	ISS 41P	-	GIR-1	LC31/4	-	-	39778	-	-
2011-001	2451589.56	2011 Jan 28 08:31:56	Soyuz-U-PWB	-	I 15000-136	Soyuz TM-20	Soyuz 11F732A17 No. 230	ISS 25S	-	GIR-5	LC1	-	-	437	-	-
2011-002	2451589.56	2011 Jan 28 08:31:56	Soyuz-U-PWB	-	I 15000-136	Soyuz TM-20	Soyuz 11F732A17 No. 230	ISS 25S	-	GIR-5	LC1	-	-	437	-	-
2011-009	2451628.15	2011 Feb 20 03:18:15	Soyuz-2-1B	-	770 - 209 028 017	Progress M-09H	Progress 7k-TGM No.409	ISS 41P	-	GIR-5	LC31/4	-	-	19719	-	-
2011-017	2451628.15	2011 Feb 20 03:18:15	Soyuz-2-1B	-	770 - 209 028 017	Progress M-09H	Progress 7k-TGM No.409	ISS 41P	-	GIR-5	LC31/4	-	-	19719	-	-
2011-017	2451628.15	2011 Feb 20 03:18:15	Soyuz-2-1B	-	770 - 209 028 017	Progress M-09H	Progress 7k-TGM No.409	ISS 41P	-	GIR-5	LC31/4	-	-	19719	-	-
2011-018	2451628.15	2011 Apr 7 13:05:21	Soyuz-U-PWB	-	B 15000-116	Progress M-21	Progress 7k-TGM No.410	ISS 42P	-	GIR-5	LC1	-	-	396	-	-
2011-018	2451628.15	2011 Apr 7 13:05:21	Soyuz-U-PWB	-	B 15000-116	Progress M-21	Progress 7k-TGM No.410	ISS 42P	-	GIR-5	LC1	-	-	396	-	-
2011-027	2451720.31	2011 Jun 7 20:11:35	Soyuz-2-1A	Fregat	760 - 19 - 222 015	Progress M-10H	Progress 7k-TGM No.410	ISS 27S	-	GIR-5	LC31/4	-	-	413	-	-
2011-027	2451720.31	2011 Jun 7 20:11:35	Soyuz-2-1A	Fregat	760 - 19 - 222 015	Progress M-10H	Progress 7k-TGM No.410	ISS 27S	-	GIR-5	LC31/4	-	-	413	-	-
2011-027	2451720.31	2011 Jun 7 20:11:35	Soyuz-2-1A	Fregat	760 - 19 - 222 015	Progress M-10H	Progress 7k-TGM No.410	ISS 27S	-	GIR-5	LC31/4	-	-	413	-	-
2011-028	2451740.17	2011 Jun 27 16:00:00	Soyuz-U-PWB	-	I 15000-137	Progress M-11H	Progress 7k-TGM No.411	ISS 43P	-	GIR-5	LC1	-	-	360	-	-
2011-028	2451740.17	2011 Jun 27 16:00:00	Soyuz-U-PWB	-	I 15000-137	Progress M-11H	Progress 7k-TGM No.411	ISS 43P	-	GIR-5	LC1	-	-	360	-	-
2011-033	2451755.60	2011 Jul 24 13:00:04	Soyuz-U-PWB	-	B 15000-039	Kosmos-2472	Globalstar 2-4	ST23	-	GIR-1	LC31	-	-	1422	-	-
2011-033	2451755.60	2011 Jul 24 13:00:04	Soyuz-U-PWB	-	B 15000-039	Kosmos-2472	Globalstar 2-4	ST23	-	GIR-1	LC31	-	-	1422	-	-
2011-055	2451837.94	2011 Oct 4 21:00:19	Soyuz-2-1B	-	770 - 24 - 209 018/1045	Progress M-12H	Progress 7k-TGM No.412	ISS 44P	-	GIR-5	LC31	-	-	1907	-	-
2011-055	2451837.94	2011 Oct 4 21:00:19	Soyuz-2-1B	-	770 - 24 - 209 018/1045											

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight	Mission	Launch_Site	Platform	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee_Km	Range_Km	Dest
2013-030	2456469.23	2013 Jun 25 17:28:48	Soyuz-2-B	-	I 15000-013	Resurs-P No. 1	GIR-5	-	-	-	-	484	-	-
2013-031	2456469.31	2013 Jun 25 19:27:03	Soyuz-ST-B	Fregat	E 15000-100/1041	Resurs-P No. 1	GSO	-	-	-	-	8351	-	-
2013-039	2456501.36	2013 Jul 27 20:07:08	Soyuz-b-PWB	-	L 15000-030/141	Progress M-20M	GIR-5	-	-	-	-	421	-	-
2013-054	2456561.37	2013 Sep 25 20:58:50	Soyuz-FG	-	E 15000-046	Soyuz TMA-10M	GIR-5	-	-	-	-	417	-	-
2013-061	2456563.68	2013 Nov 7 04:14:15	Soyuz-FG	-	L 15000-046	Soyuz TMA-11M	GIR-5	-	-	-	-	418	-	-
2013-069	2456622.37	2013 Dec 25 20:53:06	Soyuz-b-PWB	-	E 15000-133	Progress M-21M	GIR-5	-	-	-	-	423	-	-
2013-074	2456646.88	2013 Nov 19 09:12:18	Soyuz-ST-B	Fregat	E 15000-044/1040	Gaia	GSO	-	-	-	-	150000	-	-
2013-078	2456656.02	2013 Dec 28 12:30:00	Soyuz-2-IV	Volga	760-58- 002/001	Aist-1	GIR-1	-	-	-	-	627	-	-
2014-005	2456694.18	2014 Feb 5 16:23:33	Soyuz-2-IV	Volga	760-58- 103/112-01	Progress 7K-TGM No. 422	GIR-1	-	-	-	-	422	-	-
2014-012	2456740.45	2014 Mar 23 22:54:03	Soyuz-2-B	Fregat	780-86- 168/112-02	Uragan-M No. 754	GIR-1	-	-	-	-	19678	-	-
2014-016	2456742.39	2014 Mar 25 21:17:23	Soyuz-FG	Fregat	B 15000-044/1038	Sentinel 1A	GIR-5	-	-	-	-	701	-	-
2014-018	2456757.14	2014 Apr 3 21:02:26	Soyuz-ST-A	Fregat	L 15000-143	Progress M-22M	GIR-5	-	-	-	-	417	-	-
2014-021	2456764.18	2014 Apr 16 16:20:00	Soyuz-b-PWB	-	L 15000-047	Soyuz TMA-12M	GIR-5	-	-	-	-	718	-	-
2014-025	2456784.08	2014 May 6 13:49:35	Soyuz-2-IA	-	760-58- 163 019	EgyptSat-2	GIR-1	-	-	-	-	285	-	-
2014-031	2456806.33	2014 May 28 19:57:41	Soyuz-2-B	Fregat	L 15000-069	Soyuz TMA-13M	GIR-5	-	-	-	-	417	-	-
2014-037	2456847.17	2014 Jun 14 17:16:48	Soyuz-2-B	Fregat	T 15000-023/112-02	Uragan-M No. 755	GIR-1	-	-	-	-	19664	-	-
2014-038	2456849.29	2014 Jun 15 16:58:28	Soyuz-2-B	Fregat	E 15000-015/1025	Soyuz TMA-15M	GIR-5	-	-	-	-	828	-	-
2014-041	2456867.37	2014 Jul 10 20:50:00	Soyuz-ST-B	Fregat	E 15000-005/1028	Meteosat No. 2	GIR-5	-	-	-	-	8347	-	-
2014-042	2456868.41	2014 Jul 18 21:44:44	Soyuz-2-IA	-	L 15000-020	Foton-M No. 4	GIR-5	-	-	-	-	808	-	-
2014-050	2456892.02	2014 Aug 22 12:27:11	Soyuz-ST-B	Fregat	E 15000-066/1039	Progress M-24M	GSO	-	-	-	-	26282	-	-
2014-057	2456926.35	2014 Sep 25 20:25:00	Soyuz-FG	-	L 15000-050	Galileo FOC 1/2	GIR-5	-	-	-	-	328	-	-
2014-060	2456959.80	2014 Oct 30 07:09:43	Soyuz-2-IA	-	760-58- 174 013/1026	Meridian No. 17L	GIR-1	-	-	-	-	39753	-	-
2014-064	2456962.41	2014 Nov 30 21:52:26	Soyuz-2-IA	-	L 15000-061	Soyuz TMA-14M	GIR-5	-	-	-	-	417	-	-
2014-068	2457010.28	2014 Dec 25 03:01:13	Soyuz-2-IB	Fregat	T 15000-026/1044	Kosmos-2501	GIR-1	-	-	-	-	19668	-	-
2014-075	2457016.29	2014 Dec 28 18:55:50	Soyuz-2-IB	Fregat	L 15000-044	Kosmos-2502	GIR-1	-	-	-	-	12776	-	-
2015-008	2457070.96	2015 Feb 17 11:00:17	Soyuz-2-PWB	-	780-31- 189 005	Resurs-P No. 2	GIR-1	-	-	-	-	913	-	-
2015-009	2457080.96	2015 Feb 27 11:01:35	Soyuz-2-IB	-	L 15000-149	Progress 7K-TGM No. 425	GIR-5	-	-	-	-	478	-	-
2015-016	2457109.41	2015 Mar 27 19:42:57	Soyuz-FG	-	770-46- 243 010	Resurs-P No. 2	GIR-5	-	-	-	-	403	-	-
2015-017	2457109.41	2015 Mar 27 19:42:57	Soyuz-ST-B	Fregat	L 15000-063	Progress 7K-TGM No. 716	GIR-1	-	-	-	-	403	-	-
2015-024	2457140.90	2015 Apr 28 07:09:50	Soyuz-2-IA	-	T 15000-022	Galileo FOC 3/4	GIR-5	-	-	-	-	23682	-	-
2015-027	2457179.14	2015 Jun 5 15:23:54	Soyuz-2-IA	-	780-72- 171 024	Progress 7K-TGM No. 426	GIR-1	-	-	-	-	536	-	-
2015-029	2457197.20	2015 Jun 23 16:44:10	Soyuz-2-IB	-	760-58- 166 012	Kosmos-2506	GIR-1	-	-	-	-	729	-	-
2015-035	2457236.71	2015 Jul 5 04:55:45	Soyuz-FG	-	L 15000-162	Kosmos-2506	GIR-5	-	-	-	-	411	-	-
2015-045	2457267.69	2015 Sep 2 04:57:45	Soyuz-2-IV	Volga	L 15000-052	Progress M-26M	GIR-5	-	-	-	-	411	-	-
2015-046	2457287.69	2015 Sep 11 16:58:40	Soyuz-ST-B	Fregat	760-32- 227 015/1033	Galileo FOC 5/6	GSO	-	-	-	-	23700	-	-
2015-055	2457385.77	2015 Oct 1 16:48:40	Soyuz-b-PWB	-	780-31- 189 005	Progress 7K-TGM No. 429	GIR-5	-	-	-	-	413	-	-
2015-071	2457462.51	2015 Nov 17 06:53:35	Soyuz-2-IV	Volga	R 15000-021/001/002	Kosmos-2511/2512	GIR-1	-	-	-	-	39301	-	-
2015-078	2457487.99	2015 Dec 15 11:03:50	Soyuz-ST-B	Fregat	R 15000-065	Kanopus-ST/Visib-1	GIR-1	-	-	-	-	694	-	-
2015-079	2457493.89	2015 Dec 17 08:51:56	Soyuz-2-IA	-	R 15000-020/133-04	Soyuz TMA-19M	GIR-5	-	-	-	-	694	-	-
2015-080	2457497.86	2015 Dec 17 08:51:56	Soyuz-2-IA	-	R 15000-020/133-04	Galileo FOC 6/9	GSO	-	-	-	-	23649	-	-
2015-081	2457497.86	2015 Dec 17 08:51:56	Soyuz-2-IB	-	R 15000-020/133-04	Progress MS-01	GIR-1	-	-	-	-	19680	-	-
2015-082	2457497.86	2015 Dec 17 08:51:56	Soyuz-2-IB	-	R 15000-020/133-04	Kosmos-2513	GIR-5	-	-	-	-	475	-	-
2015-083	2457497.86	2015 Dec 17 08:51:56	Soyuz-2-IB	-	R 15000-020/133-04	Resurs-P No. 3	GIR-1	-	-	-	-	475	-	-
2015-084	2457497.86	2015 Dec 17 08:51:56	Soyuz-2-IB	-	R 15000-020/133-04	Soyuz TMA-20M	GIR-1	-	-	-	-	597	-	-
2015-085	2457497.86	2015 Dec 17 08:51:56	Soyuz-2-IB	-	R 15000-020/133-04	Kosmos-2515	GIR-1	-	-	-	-	469	-	-
2015-086	2457497.86	2015 Dec 17 08:51:56	Soyuz-2-IB	-	R 15000-020/133-04	Progress MS-02	GIR-5	-	-	-	-	715	-	-
2015-087	2457497.86	2015 Dec 17 08:51:56	Soyuz-2-IB	-	R 15000-020/133-04	Sentinel 1B	GIR-5	-	-	-	-	486	-	-
2015-088	2457497.86	2015 Dec 17 08:51:56	Soyuz-2-IB	-	R 15000-020/133-04	Galileo FOC 10/11	GIR-1	-	-	-	-	23684	-	-
2015-089	2457497.86	2015 Dec 17 08:51:56	Soyuz-2-IB	-	R 15000-020/133-04	Kosmos-2516	GIR-1	-	-	-	-	19887	-	-
2015-090	2457497.86	2015 Dec 17 08:51:56	Soyuz-2-IB	-	R 15000-020/133-04	Soyuz MS-01	GIR-1	-	-	-	-	469	-	-
2015-091	2457497.86	2015 Dec 17 08:51:56	Soyuz-2-IB	-	R 15000-020/133-04	Progress MS-03	GIR-5	-	-	-	-	411	-	-
2015-092	2457497.86	2015 Dec 17 08:51:56	Soyuz-2-IB	-	R 15000-020/133-04	Soyuz MS-03	GIR-5	-	-	-	-	411	-	-
2015-093	2457497.86	2015 Dec 17 08:51:56	Soyuz-2-IB	-	R 15000-020/133-04	Progress 7K-TGM No. 434	GIR-5	-	-	-	-	190	-	-
2015-094	2457497.86	2015 Dec 17 08:51:56	Soyuz-2-IB	-	R 15000-020/133-04	HiSpaSat 36M-1	GIR-5	-	-	-	-	36882	-	-
2015-095	2457497.86	2015 Dec 17 08:51:56	Soyuz-2-IB	-	R 15000-020/133-04	Progress MS-05	GIR-5	-	-	-	-	409	-	-
2015-096	2457497.86	2015 Dec 17 08:51:56	Soyuz-2-IB	-	R 15000-020/133-04	SBS-15	GIR-5	-	-	-	-	44510	-	-
2015-097	2457497.86	2015 Dec 17 08:51:56	Soyuz-2-IB	-	R 15000-020/133-04	Kosmos-2518	GIR-1	-	-	-	-	39194	-	-
2015-098	2457497.86	2015 Dec 17 08:51:56	Soyuz-2-IB	-	R 15000-020/133-04	Progress MS-06	GIR-5	-	-	-	-	679	-	-
2015-099	2457497.86	2015 Dec 17 08:51:56	Soyuz-2-IB	-	R 15000-020/133-04	Kosmos-2519	GIR-5	-	-	-	-	678	-	-
2015-100	2457497.86	2015 Dec 17 08:51:56	Soyuz-2-IB	-	R 15000-020/133-04	Progress 7K-TGM No. 436	GIR-5	-	-	-	-	608	-	-
2015-101	2457497.86	2015 Dec 17 08:51:56	Soyuz-2-IB	-	R 15000-020/133-04	Meteosat-2524	GIR-5	-	-	-	-	408	-	-
2015-102	2457497.86	2015 Dec 17 08:51:56	Soyuz-2-IB	-	R 15000-020/133-04	Progress 7K-TGM No. 737	GIR-5	-	-	-	-	408	-	-
2015-103	2457497.86	2015 Dec 17 08:51:56	Soyuz-2-IB	-	R 15000-020/133-04	Soyuz Rideshare 4	GIR-5	-	-	-	-	408	-	-
2015-104	2457497.86	2015 Dec 17 08:51:56	Soyuz-2-IB	-	R 15000-020/133-04	Soyuz Rideshare 5	GIR-5	-	-	-	-	408	-	-
2015-105	2457497.86	2015 Dec 17 08:51:56	Soyuz-2-IB	-	R 15000-020/133-04	Soyuz Rideshare 6	GIR-5	-	-	-	-	408	-	-
2015-106	2457497.86	2015 Dec 17 08:51:56	Soyuz-2-IB	-	R 15000-020/133-04	03b-FM13/14/15/16	GIR-5	-	-	-	-	8429	-	-
2015-107	2457497.86	2015 Dec 17 08:51:56	Soyuz-2-IB	-	R 15000-020/133-04	03b-FM13/14/15/16	GIR-5	-	-	-	-	409	-	-
2015-108	2457497.86	2015 Dec 17 08:51:56	Soyuz-2-IB	-	R 15000-020/133-04	EMKA	GIR-5	-	-	-	-	318	-	-
2015-109	2457497.86	2015 Dec 17 08:51:56	Soyuz-2-IB	-	R 15000-020/133-04	Soyuz 11F732A48 No. 738	GIR-5	-	-	-	-	409	-	-
2015-110	2457497.86	2015 Dec 17 08:51:56	Soyuz-2-IB	-	R 15000-020/133-04	Soyuz 11F732A48 No. 739	GIR-5	-	-	-	-	409	-	-
2015-111	2457497.86	2015 Dec 17 08:51:56	Soyuz-2-IB	-	R 15000-020/133-04	Uragan-M No. 756	GIR-5	-	-	-	-	19678	-	-
2015-112	2457497.86	2015 Dec 17 08:51:56	Soyuz-2-IB	-	R 15000-020/133-04	Progress 7K-TGM No. 439	GIR-5	-	-	-	-	410	-	-
2015-113	2457497.86	2015 Dec 17 08:51:56	Soyuz-2-IB	-	R 15000-020/133-04	Soyuz 11F732A48 No. 740	GIR-5	-	-	-	-</			

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Mission	FlightCode	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee_Km	Range_Km	Dest
2018-086	2458426.35	2018 Nov 3 20:17:53	Soyuz-2-B	Fregat	R 15000-036/112-08	Kosmos-2629	Uragan-M No. 757	Glonass Blok 57S	-	GIX-1	LC03/4	-	-	19713	-	-
2018-087	2458429.53	2018 Nov 7 00:47:28	Soyuz-ST-B	Fregat	U 15000-014/133-14	MetOp-C	MetOp-C	V519/SZ27	-	CSG	ELS	-	-	894	-	-
2018-091	2458439.26	2018 Nov 16 18:14:08	Soyuz-FG	-	N 15000-068	Progress MS-10	Progress 7K-TGM No. 440	ISS 71P	-	GIX-5	LC1	-	-	411	-	-
2018-098	2458445.98	2018 Dec 3 11:31:52	Soyuz-FG	-	N 15000-067	Soyuz MS-11	Soyuz 11F/32A48 No. 741	ISS 57S	-	GIX-5	LC1	-	-	419	-	-
2018-110	2458472.19	2018 Dec 19 16:37:14	Soyuz-ST-A	Fregat	Y 15000-009/138-10	Kanopus-V-5,6	Soyuz Rideshare 7	V520/SZ26	-	CSG	ELS	-	-	815	-	-
2018-111	2458479.59	2018 Dec 21 02:07:18	Soyuz-2-1A	Fregat	E 15000-003/122-06	EGYPTSat-A	Soyuz Rideshare 7	-	-	VOBT	PUIS	-	-	589	-	-
2019-001	2458565.20	2019 Feb 21 16:47:14	Soyuz-2-B	Fregat	Y 15000-024/112-07	OneWeb P6	OneWeb P6	-	-	GIX-5	LC31	-	-	1227	-	-
2019-010	2458562.40	2019 Feb 27 21:34:00	Soyuz-ST-B	Fregat	U 15000-016/133-15	OneWeb P6	OneWeb P6	-	-	GIX-5	LC31	-	-	421	-	-
2019-013	2458567.30	2019 Mar 14 19:19:09	Soyuz-FG	-	Y 15000-070	Progress MS-11	Progress 7K-TGM No. 441	ISS 58S	-	GIX-5	LC31	-	-	410	-	-
2019-020	2458577.96	2019 Apr 4 11:01:35	Soyuz-2-1A	Fregat	Y 15000-036	03b Mission 5	03b FMI/7/19/19/20	ISS 72P	-	GIX-5	LC31	-	-	19868	-	-
2019-030	2458580.77	2019 May 27 06:23:00	Soyuz-2-B	Fregat	Y 15000-053/112-09	Kosmos-2634	Uragan-M No. 758	V522/SZ23	-	GIX-1	LC03/4	-	-	19896	-	-
2019-038	2458589.74	2019 Jul 6 06:41:46	Soyuz-2-B	Fregat	Y 15000-002/122-04	Kosmos-2635/2638	Soyuz Rideshare 8	-	-	VOBT	PUIS	-	-	655	-	-
2019-039	2458575.22	2019 Jul 10 17:14	Soyuz-2-1V	Fregat	780-72 -004/005	Meridian No. 18L	Meridian No. 18L	-	-	GIX-1	LC03/4	-	-	39741	-	-
2019-041	2458585.19	2019 Jul 20 16:28:20	Soyuz-FG	-	N 15000-069	Progress MS-13	Progress 7K-TGM No. 443	ISS 59S	-	GIX-5	LC1	-	-	625	-	-
2019-047	2458596.01	2019 Jul 31 12:10:46	Soyuz-2-1A	Fregat	780-21 -117/1036	Meridian No. 19L	Meridian No. 19L	-	-	GIX-1	LC03/4	-	-	19715	-	-
2019-048	2458596.01	2019 Jul 31 12:10:46	Soyuz-2-1A	Fregat	N 15000-035	Progress MS-14	Progress 7K-TGM No. 445	ISS 74P	-	GIX-5	LC31	-	-	712	-	-
2019-055	2458712.65	2019 Aug 22 03:38:31	Soyuz-2-1A	Fregat	Y 15000-037	Kosmos-2644	Uragan-M No. 759	ISS 73P	-	GIX-5	LC31	-	-	426	-	-
2019-064	2458752.08	2019 Sep 25 13:57:43	Soyuz-FG	-	Y 15000-071	Soyuz MS-14	Soyuz 11F/32A48 No. 743	ISS 60S	-	GIX-5	LC31	-	-	424	-	-
2019-065	2458752.08	2019 Sep 25 13:57:43	Soyuz-FG	-	780-72 -176/111-302	Kosmos-2641	Soyuz 11F/32A48 No. 744	ISS 61S	-	GIX-1	LC03/4	-	-	38994	-	-
2019-079	2458813.24	2019 Nov 25 07:46	Soyuz-2-1B	Fregat	780-72 -176/111-302	Kosmos-2642	Uragan-M No. 760	-	-	GIX-1	LC03/4	-	-	915	-	-
2019-085	2458823.90	2019 Dec 6 09:34:11	Soyuz-2-1A	Fregat	N 15000-034	Progress MS-13	Progress 7K-TGM No. 443	ISS 74P	-	GIX-5	LC31	-	-	19715	-	-
2019-088	2458828.97	2019 Dec 18 08:54	Soyuz-2-1A	Fregat	R 15000-046/112-10	Kosmos-2644	Uragan-M No. 759	ISS 74P	-	GIX-1	LC03/3	-	-	19715	-	-
2019-092	2458835.57	2019 Dec 18 08:54	Soyuz-2-1A	Fregat	R 15000-008/133-12	CSG-1/CHOPS	OneWeb L2	ST27	-	CSG	ELS	-	-	712	-	-
2020-008	2458866.40	2020 Feb 6 21:42:41	Soyuz-2-1B	Fregat	Y 15000-048/123-01	Meridian No. 19L	Uragan-M No. 760	-	-	GIX-5	LC31	-	-	1249	-	-
2020-015	2458899.85	2020 Feb 20 08:24:54	Soyuz-2-1A	Fregat	780-21 -118/111-303	Kosmos-2645	Uragan-M No. 760	-	-	GIX-1	LC03/4	-	-	23228	-	-
2020-018	2458925.27	2020 Mar 16 18:28:10	Soyuz-2-1B	Fregat	780-58 -145/112-11	Kosmos-2645	Uragan-M No. 760	-	-	GIX-5	LC31	-	-	1246	-	-
2020-020	2458930.21	2020 Mar 21 17:06:58	Soyuz-2-1A	Fregat	N 15000-042	Progress MS-14	Soyuz 11F/32A48 No. 745	ISS 62S	-	GIX-5	LC31	-	-	423	-	-
2020-023	2458946.84	2020 Apr 9 06:05:06	Soyuz-2-1A	Fregat	Y 15000-038	Kosmos-2646	Uragan-M No. 760	ISS 75P	-	GIX-5	LC31	-	-	422	-	-
2020-026	2458964.58	2020 Apr 25 01:51:41	Soyuz-2-1A	Fregat	Y 15000-040	Progress MS-14	Uragan-M No. 760	ISS 76P	-	GIX-1	LC03/4	-	-	38678	-	-
2020-031	2458991.51	2020 May 22 07:31:17	Soyuz-2-1B	Fregat	T 15000-025/112-501	Progress MS-15	Progress 7K-TGM No. 444	ISS 63S	-	GIX-5	LC31	-	-	422	-	-
2020-060	2459260.70	2020 Jul 23 14:26:22	Soyuz-2-1A	Fregat	Kh 15000-045	Conets-H Blok 16	Conets-H No. 27/28/29	ISS 76P	-	GIX-5	LC31	-	-	1514	-	-
2020-072	2459136.74	2020 Oct 14 09:46:04	Soyuz-2-1B	Fregat	U 15000-010/133-15	Conets-H Blok 17	Conets-H No. 27/28/29	ISS 63S	-	GIX-1	LC03/4	-	-	19865	-	-
2020-075	2459148.30	2020 Oct 25 19:06	Soyuz-2-1B	Fregat	U 15000-007/123-02	Glonass-K No. 15L	Glonass-K No. 15L	-	-	GIX-1	LC03/4	-	-	616	-	-
2020-090	2459166.55	2020 Dec 2 01:33:28	Soyuz-ST-A	Fregat	U 15000-010/133-15	Glonass-K No. 15L	Glonass-K No. 15L	-	-	GIX-1	LC03/4	-	-	1513	-	-
2020-091	2459166.55	2020 Dec 2 01:33:28	Soyuz-ST-A	Fregat	V 15000-047/112-062	Galcombye 2	Galcombye 2	V524/SZ2x	-	VOBT	PUIS	-	-	1225	-	-
2020-100	2459213.02	2020 Dec 18 12:28:27	Soyuz-2-1B	Fregat	V 15000-004/123-08	OneWeb L4	OneWeb L4	ST29	-	CSG	ELS	-	-	469	-	-
2020-104	2459213.02	2020 Dec 18 12:28:27	Soyuz-2-1B	Fregat	A 15000-066/123-11F	CSG 2	CSG 2	V525/SZ2x	-	CSG	ELS	-	-	812	-	-
2021-008	2459465.36	2021 Feb 2 04:45:28	Soyuz-2-1A	Fregat	V 15000-041	Kosmos-2649	Soyuz-S No. 5	ISS 77P	-	GIX-1	LC03/4	-	-	422	-	-
2021-011	2459490.70	2021 Feb 15 04:45:06	Soyuz-2-1A	Fregat	V 15000-034/122-07	Progress MS-16	Progress 7K-TGM No. 445	ISS 77P	-	GIX-5	LC31	-	-	39766	-	-
2021-016	2459500.72	2021 Feb 25 06:59:01	Soyuz-2-1B	Fregat	V 15000-034/122-07	Arktika-H No. 1	Arktika-H No. 1	-	-	GIX-5	LC31	-	-	936	-	-
2021-022	2459506.75	2021 Mar 22 09:07:32	Soyuz-2-1A	Fregat	V 15000-065/122-06	CSG00-1	Soyuz Rideshare 9	-	-	GIX-5	LC31	-	-	435	-	-
2021-025	2459506.75	2021 Mar 22 09:07:32	Soyuz-2-1A	Fregat	V 15000-065/123-09	OneWeb L5	Soyuz 11F/32A48 No. 748	ISS 64S	-	VOBT	PUIS	-	-	434	-	-
2021-029	2459313.52	2021 Apr 25 07:47:15	Soyuz-2-1B	Fregat	Kh 15000-046	Soyuz MS-18	Soyuz 11F/32A48 No. 748	ISS 64S	-	VOBT	PUIS	-	-	1214	-	-
2021-031	2459330.43	2021 Apr 28 17:28:36	Soyuz-2-1B	Fregat	V 15000-007/123-11	OneWeb L9	OneWeb L9	ST31	-	VOBT	PUIS	-	-	1207	-	-
2021-036	2459383.53	2021 May 28 19:38:39	Soyuz-2-1B	Fregat	V 15000-007/123-11	OneWeb L9	OneWeb L9	ST32	-	GIX-1	LC03/4	-	-	482	-	-
2021-057	2459390.53	2021 Jun 25 03:27:20	Soyuz-2-1B	Fregat	R 15000-043	Kosmos-2650	Uragan-M No. 761	ISS 78P	-	GIX-5	LC31	-	-	422	-	-
2021-060	2459397.58	2021 Jun 29 23:27:20	Soyuz-2-1B	Fregat	V 15000-038/123-12	Progress MS-17	Progress 7K-TGM No. 446	ISS 78P	-	VOBT	PUIS	-	-	1304	-	-
2021-071	2459444.93	2021 Jul 11 22:45:33	Soyuz-2-1A	Fregat	V 15000-038/123-12	OneWeb L9	OneWeb L9	ST33	-	GIX-5	LC31	-	-	1216	-	-
2021-075	2459447.93	2021 Aug 1 16:53:40	Soyuz-2-1A	Fregat	N 15000-056/123-03	Kosmos-2651	Uragan-M No. 761	ISS 79P	-	GIX-1	LC03/4	-	-	434	-	-
2021-083	2459472.36	2021 Sep 14 09:57:19	Soyuz-2-1B	Fregat	Kh 15000-047	Progress MS-19	Soyuz 11F/32A48 No. 749	ISS 65S	-	GIX-5	LC31	-	-	1313	-	-
2021-089	2459492.97	2021 Oct 1 08:52:02	Soyuz-2-1A	Fregat	Kh 15000-049	OneWeb L11	OneWeb L11	ST36	-	VOBT	PUIS	-	-	1308	-	-
2021-090	2459501.00	2021 Oct 14 09:40:10	Soyuz-2-1B	Fregat	Kh 15000-049/123-14	Progress MS-18	Uragan-M No. 762	ISS 79P	-	GIX-5	LC31	-	-	434	-	-
2021-111	2459545.55	2021 Oct 24 13:06:32	Soyuz-2-1B	Fregat	S 15000-049	Progress MS-18	Uragan-M No. 762	ISS 80P	-	GIX-5	LC31	-	-	434	-	-
2021-119	2459563.51	2021 Nov 24 13:06:32	Soyuz-2-1B	Fregat	Y 15000-054	Progress MS-18	Uragan-M No. 762	ISS 80P	-	GIX-5	LC31	-	-	434	-	-
2021-113	2459563.51	2021 Dec 5 01:19:13	Soyuz-2-1B	Fregat	U 15000-015/133-13	Kritchev-2652	Uragan-M No. 762	ISS 80P	-	GIX-1	LC03/4	-	-	38774	-	-
2021-116	2459563.51	2021 Dec 5 01:19:13	Soyuz-2-1B	Fregat	U 15000-015/133-13	Galileo FOC M9	Galileo FOC M9	V526/SZ2x	-	CSG	ELS	-	-	28623	-	-
2021-132	2459576.95	2021 Dec 9 07:38:10	Soyuz-2-1A	Fregat	N 15000-052/123-04	OneWeb L12	OneWeb L12	ST37	-	GIX-5	LC31	-	-	1220	-	-
2022-011	2459615.79	2022 Feb 6 07:00:30	Soyuz-2-1A	Fregat	N 15000-052/123-04	OneWeb L12	OneWeb L12	V527/SZ2x	-	GIX-5	LC31	-	-	2001	-	-
2022-012	2459621.26	2022 Feb 15 04:25:40	Soyuz-ST-B	Fregat	780-72-085/111-001	OneWeb L13	OneWeb L13	ISS 80P	-	GIX-5	LC31	-	-	1331	-	-
2022-014	2459625.68	2022 Feb 15 04:25:40	Soyuz-ST-B	Fregat	S 15000-018/133-19	Progress MS-19	Progress 7K-TGM No. 449	ISS 80P	-	GIX-5	LC31	-	-	422	-	-
2022-028	2459667.16	2022 Mar 18 15:55:18	Soyuz-2-1A	Fregat	S 15000-050	Meridian No. 20L	Soyuz 11F/32A48 No. 750	ISS 67S	-	GIX-5	LC31	-	-	421	-	-
2022-030	2459667.16	2022 Mar 22 12:48:22	Soyuz-2-1A	Fregat	780-97-216/111-30x	Kosmos-2654	Uragan-M No. 762	ISS 67S	-	GIX-1	LC03/4	-	-	39767	-	-
2022-036	2459676.97	2022 Apr 7 1														



Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Mission	FlightCode	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee_Km	Range_Km	Dest
2023-091	2460122.88	2023 Jun 27 1134:49	Soyuz-2-IB	Fregat	Rh15000-010/ 142-02	Meteor-M No. 2-3	Soyuz Rideshare 11	-	-	VOST	PUIS	-	-	-	-	-
2023-114	2460164.06	2023 Aug 7 1319:26	Soyuz-2-IB	Fregat	- / 112-23	Kosmos-2669	Glomsat-K2 No. 13L	-	-	GIX-1	LC83/3	-	-	-	-	-
2023-118	2460167.47	2023 Aug 10 2310:57	Soyuz-2-IB	Fregat	V 15000-003/ 122-10	Luna-25	Luna-Glob	-	-	VOST	PUIS	-	-	-	-	-
2023-125	2460179.55	2023 Aug 23 0108:10	Soyuz-2-IA	-	M 15000-065	Progress MS-24	Progress 7K-TGM No. 464	ISS 86P	-	GIX-5	LC31	-	-	-	-	-
2023-143	2460203.16	2023 Sep 15 1544:35	Soyuz-2-IA	-	M 15000-061	Soyuz MS-24	Soyuz 11F/32M48 No. 765	ISS 70S	-	GIX-5	LC31	-	-	-	-	-
2023-165	2460244.75	2023 Oct 27 0604:43	Soyuz-2-IB	-	-	Kosmos-2570/Kosmos-2571	Lotos-SI No. 808?	-	-	GIX-1	LC83/3	-	-	-	-	-
2023-162	2460274.37	2023 Nov 25 2059:06	Soyuz-2-IB	-	-	Kosmos-2572	Yantar' Unknown M1	-	-	GIX-1	LC83/4	-	-	-	-	-
2023-184	2460279.89	2023 Dec 1 0925:12	Soyuz-2-IA	Fregat	M 15000-067	Progress MS-25	Progress 7K-TGM No. 465	ISS 86P	-	GIX-5	LC31	-	-	-	-	-
2023-198	2460294.89	2023 Dec 16 0917:48	Soyuz-2-IB	-	Yal15000-058/ 122-11	Arktika-M No. 2	Arktika-M No. 2	-	-	GIX-5	LC31	-	-	-	-	-
2023-201	2460299.87	2023 Dec 21 0848:39	Soyuz-2-IB	?	-	Kosmos-2573	Bars-M No. 5?	-	-	GIX-1	LC83/4	-	-	-	-	-
2023-209	2460306.79	2023 Dec 27 0703:44	Soyuz-2-IV	-	-	Kosmos-2574	ED-HKA No. 3?	-	-	GIX-1	LC83/4	-	-	-	-	-
2024-026	2460349.79	2024 Feb 9 0703	Soyuz-2-IV	-	-	Kosmos-2575	ED-HKA No. 4?	-	-	GIX-1	LC83/4	-	-	-	-	-
2024-029	2460356.64	2024 Feb 15 0325:06	Soyuz-2-IA	-	M 15000-068	Progress MS-26	Progress 7K-TGM No. 466	ISS 87P	-	GIX-5	LC31	-	-	-	-	-
2024-039	2460369.74	2024 Feb 29 0543:26	Soyuz-2-IB	Fregat	S 15000-012/ 142-04	Meteor-M No. 2-4	Soyuz Rideshare 12	-	-	VOST	PUIS	-	-	-	-	-
2024-055	2460393.03	2024 Mar 23 1236:10	Soyuz-2-IA	-	M 15000-066	Soyuz MS-25	Soyuz 11F/32M48 No. 766	ISS 71S	-	GIX-5	LC31	-	-	-	-	-
2024-061	2460400.90	2024 Mar 31 0936:45	Soyuz-2-IB	-	M 15000-067	Resurs-P No. 4	Resurs-P No. 4	-	-	GIX-5	LC31	-	-	-	-	-
2024-092	2460447.39	2024 May 16 2121	Soyuz-2-IB	Fregat	770-53-735 xxx-xx	Kosmos-2576	Soyuz Rideshare 13	-	-	GIX-1	LC83/4	-	-	-	-	-
2024-103	2460460.90	2024 May 30 0942:59	Soyuz-2-IA	-	-	Progress MS-27	Progress 7K-TGM No. 467	ISS 88P	-	GIX-5	LC31	-	-	-	-	-
2024-145	2460537.64	2024 Aug 15 0320:18	Soyuz-2-IA	-	A 15000-072	Progress MS-28	Progress 7K-TGM No. 468	ISS 89P	-	GIX-5	LC31	-	-	-	-	-
2024-162	2460565.18	2024 Sep 11 1623:13	Soyuz-2-IA	-	M 15000-070	Soyuz MS-26	Soyuz 11F/32M48 No. 757	ISS 21S	-	GIX-5	LC31	-	-	-	-	-
2024-197	2460614.53	2024 Oct 31 0751:31	Soyuz-2-IA	-	660-72-531	Kosmos-2579	Bars-M No. 6?	-	-	GIX-1	LC83/4	-	-	-	-	-
2024-199	2460619.47	2024 Nov 4 2316:40	Soyuz-2-IB	Fregat	S 15000-013 xxx-xx	Ionosfera-M No. 1/2	Ionosfera-M No. 1/2	-	-	VOST	PUIS	-	-	-	-	-
2024-215	2460636.02	2024 Nov 21 1222:24	Soyuz-2-IA	-	-	Progress MS-29	Progress 7K-TGM No. 469	ISS 90P	-	GIX-5	LC31	-	-	-	-	-



Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	OrbPly	Agency	Launch_Code	Group	Category	LTCsite	Cite	Notes
1957-5183	2435974.17	1957 May 15 1601	R-7	-	M1-5	0.000	MVS	HF	-	Test	Z10	Men shikov	-
1957-462	2435032.04	1957 Jul 12 1253	R-7	-	M1-7	0.000	MVS	HF	-	Test	EnergyYa	Men shikov	-
1957-582	2435072.02	1957 Aug 21 1225	R-7	-	M1-8	0.000	MVS	MS	-	Test	EnergyYa	Men shikov	-
1957-5107	2435088.99	1957 Sep 7 1139	R-7	-	M1-9	0.000	MVS	MS	-	Test	EnergyYa	SFL139-351	-
1957-ALP	2435116.31	1957 Oct 4 1928:34	Sputnik 8K71FS	-	M1-PS	0.084	MVS	US	G	Sat LE0 0 1	EnergyYa	SFL139-351	-
1957-BET	2435145.60	1957 Nov 3 0230:42	Sputnik 8K71FS	-	M1-2FS	8.308	MVS	US	G	Sat LE0 A 1	Gram-NNW	EnergyYa	-
1958-549	2435233.39	1958 Jan 29 2115	R-7	-	M1-11	0.000	MVS	HF	-	Test	SFL138-49	SFL139-351	-
1958-581	2435292.11	1958 Mar 29 1443	R-7	-	M1-12	0.000	MVS	MS	-	Test	Z10	SFL138-49	-
1958-585	2435298.15	1958 Apr 4 1530	R-7	-	M1-10	0.000	MVS	MS	-	Test	SFL138-49	SFL139-351	-
1958-F03	2435320.88	1958 Apr 27 0901:35	Sputnik 8K61	-	B1-1	1.327	MVS	US	G	Sat LE0 0 3	MezavB	EnergyYa	-
1958-F04	2435338.79	1958 May 24 1030	Sputnik 8K61	-	B1-2	0.000	MVS	US	G	Sat LE0 0 3	MezavB	EnergyYa	-
1958-570	2435347.94	1958 Jul 10 0742	R-7	-	B1-3	0.000	MVS	HF	-	Test	EnergyYa	SFL139-351	-
1958-469	2435394.82	1958 Sep 23 0740:23	Vostok-L 8K72	-	B1-4	0.170	MVS	UF	G	Sat EEO E	AK15	EnergyYa	-
1958-F15	2435469.82	1958 Oct 11 2141:58	Vostok-L 8K72	-	B1-4	0.170	MVS	UF	G	Sat EEO E	AK15	EnergyYa	-
1958-F17	2435488.40	1958 Dec 4 1818:46	Vostok-L 8K72	-	B1-4	0.170	MVS	UF	G	Sat EEO E	AK15	EnergyYa	-
1958-F20	2435542.26	1958 Dec 24 1600	R-7	-	B3-16	0.000	MVS	MS	-	Test	BML	Chertok2,Z10	SFL138-49
1958-5377	2435562.17	1958 Jan 2 1641:21	Vostok-L 8K72	-	B1-6	0.205	MVS	DS	G	Sat EEO E	EnergyYa	-	-
1959 NU	2435571.20	1959 Feb 17 0146	R-7	-	Mo. 04.1081	0.000	MVS	MS	-	Test	MF-PUDNR	SFL138-49	-
1959-532	2435616.57	1959 Mar 25 0626	R-7	-	Mo. 13-18	0.000	MVS	MS	-	Test	SFL138-49	MezavB	-
1959-536	2435652.73	1959 Mar 30 2253	R-7	-	Mo. 13-20	0.000	MVS	MS	-	Test	SFL138-49	MezavB	-
1959-5281	2435665.45	1959 Mar 30 2253	R-7	-	Mo. 13-21	0.000	MVS	MS	-	Test	SFL138-49	MezavB	-
1959-5282	2435696.29	1959 May 9 1859	R-7	-	Mo. 13-21	0.000	MVS	MS	-	Test	SFL138-49	MezavB	-
1959-5283	2435719.40	1959 May 30 2142	R-7	-	Mo. 13-22	0.000	MVS	MS	-	Test	SFL138-49	MezavB	-
1959-5284	2435729.36	1959 Jun 9 2034	R-7	-	Mo. 13-23	0.000	MVS	MS	-	Test	SFL138-49	MezavB	-
1959-F06	2435737.84	1959 Jun 16 0806	Vostok-L 8K72	-	Mo. 13-24	0.170	MVS	UF	G	Sat EEO E	MezavB	EnergyYa	-
1959-5112	2435768.26	1959 Jul 16 1815	R-7	-	Mo. 13-24	0.000	MVS	MS	-	Test	SFL138-49	MezavB	-
1959-5130	2435779.67	1959 Jul 30 0400	R-7	-	Mo. 04.1082	0.000	MVS	MS	-	Test	SFL138-49	MezavB	-
1959-5139	2435793.47	1959 Aug 13 2314	R-7	-	Mo. 13-25	0.000	MVS	MS	-	Test	SFL138-49	MezavB	-
1959 XI	2435823.76	1959 Sep 12 0659:42	Vostok-L 8K72	-	II-7B	0.205	MVS	DS	G	Sat EEO E	EnergyYa	-	-
1959-5179	2435850.17	1959 Sep 16 1602	R-7	-	II-7B	0.205	MVS	DS	G	Sat EEO E	EnergyYa	-	-
1959-5180	2435864.53	1959 Oct 4 0043:39	Vostok-L 8K72	-	II-8	0.000	MVS	MS	-	Test	Wozzlaw-fpspace	EnergyYa	-
1959-5220	2435864.23	1959 Oct 22 1730	R-7	-	Mo. 267432	0.278	MVS	DS	G	Sat EEO E	MezavB	-	-
1959-5221	2435867.23	1959 Oct 25 1732	R-7	-	Mo. 267432	0.000	MVS	MS	-	Test	SFL138-49	MezavB	-
1959-5230	2435874.39	1959 Nov 1 2123	R-7	-	Mo. 267434	0.000	MVS	MS	-	Test	SFL138-49	MezavB	-
1959-5251	2435895.36	1959 Nov 20 2106	R-7	-	Mo. 267431	0.000	MVS	MS	-	Test	Wozzlaw-fpspace	MezavB	-
1959-5253	2435899.56	1959 Nov 27 0112:33	R-7	-	II-7	0.000	MVS	MS	-	Test	Wozzlaw-fpspace	MezavB	-
1959-5277	2435926.30	1959 Dec 23 1906	R-7	-	Mo. 267433	0.000	MVS	MS	-	Test	EnergyYa	MezavB	-
1960-5177	2435954.16	1960 Jan 20 1624	R-7	-	II-1	0.000	MVS	MS	-	Test	MezavB	SFL12-183	SFL140-28
1960-528	2435985.16	1960 Jan 24 1615	R-7	-	II-2	0.000	MVS	MS	-	Test	BML	SFL12-183	SFL140-28
1960-528	2435985.16	1960 Jan 31 1617	R-7	-	II-3	0.000	MVS	MS	-	Test	BML	SFL12-183	SFL140-28
1960-584	2437011.50	1960 Mar 31 2358	R-7	-	II-4	0.000	MVS	MS	-	Test	MezavB	MezavB	-
1960-581	2437011.50	1960 Mar 31 2358	R-7	-	II-4	0.000	MVS	MS	-	Test	MezavB	MezavB	-
1960-F14	2437041.15	1960 Apr 15 1506:45	Vostok-L 8K72	-	II-6	0.000	MVS	MS	-	Test	Wozzlaw-fpspace	MezavB	-
1960-F15	2437041.15	1960 Apr 15 1607:41	Vostok-L 8K72	-	II-9A	0.280	MVS	DF	G	Sat EEO E	MezavB	-	-
1960-F16	2437069.50	1960 Apr 15 0000:05	Vostok 8K72	-	II-9A	7.100	MVS	OS	G	Sat LE0 0	VSX07/4	MezavB	-
1960-5164	2437091.16	1960 Jun 4 1549	R-7	-	II-7	0.000	MVS	MS	-	Test	MezavB	MezavB	-
1960-5164	2437123.14	1960 Jul 7 1559	R-7	-	II-7	0.000	MVS	MS	-	Test	MezavB	MezavB	-
1960-F09	2437143.90	1960 Jul 28 0931	R-7	-	II-6	0.000	MVS	MS	-	Test	MezavB	MezavB	-
1960-LAM	2437165.90	1960 Aug 19 0844:06	Vostok 8K72	-	II-10	4.700	MVS	DF	G	Sat LE0 0	MezavB	MezavB	-
1960-F12	2437208.96	1960 Oct 10 1327:49	Vostok 8K78	-	II-10	4.580	MVS	DF	G	Sat LE0 0	MezavB	MezavB	-
1960-F14	2437252.10	1960 Oct 14 1351:49	Molnitya 8K78	-	II-4M	0.480	MVS	DF	G	Sat EEO DE 1	KIAM	MezavB	-
1960-F10	2437269.81	1960 Oct 14 0730:00	Molnitya 8K78	-	II-5M	0.480	MVS	DF	G	Sat EEO DE 1	KIAM	MezavB	-
1960-F10	2437269.81	1960 Dec 22 0745:19	Vostok 8K72	-	II-13	4.580	MVS	DF	G	Sat EEO DE 1	KIAM	MezavB	-
1961-S20	2437300.81	1961 Jan 14 0119:04	R-7	-	II-13A	4.700	MVS	DF	G	Sat LE0 0	MezavB	MezavB	-
1961-RET	2437334.55	1961 Jan 14 0119:04	R-7	-	II-13A	4.700	MVS	DF	G	Sat LE0 0	MezavB	MezavB	-
1961-RET	2437334.55	1961 Feb 4 0118:03	Molnitya 8K78	-	II-7V	6.220	MVS	DF	G	Sat EEO DE 1	MezavB	MezavB	-
1961-RET	2437343.52	1961 Feb 13 0436:36	Molnitya 8K78	-	II-6V	1.220	MVS	DF	G	Sat EEO DE 1	MezavB	MezavB	-
1961-RET	2437357.54	1961 Feb 27 0952:03	R-7	-	II-3T	0.000	MVS	MS	-	Test	MezavB	MezavB	-
1961-RET	2437367.77	1961 Mar 9 0629:00	Vostok 8K72	-	L2-1	0.000	MVS	MS	-	Test	MezavB	MezavB	-
1961-RET	2437383.75	1961 Mar 25 0554:00	Vostok 8K72	-	E103-14	4.700	MVS	OS	G	Sat LE0 0	MezavB	MezavB	-
1961-RET	2437401.75	1961 Apr 12 0607:00	Vostok 8K72	-	E103-15	4.725	MVS	OS	G	Sat LE0 0	MezavB	MezavB	-
1961-RET	2437404.31	1961 Apr 14 1924	R-7	-	E15001-05	0.000	MVS	MS	-	Test	MezavB	MezavB	-
1961-RET	2437465.74	1961 Jun 15 0545	R-7	-	E15001-06	0.000	MVS	MS	-	Test	MezavB	MezavB	-
1961-S2001	2437484.67	1961 Jul 4 0400	R-7	-	L2-2	0.000	MVS	MS	-	Test	MezavB	MezavB	-
1961-S2001	2437485.35	1961 Jul 4 2020	R-7	-	L2-4	0.000	MVS	MS	-	Test	MezavB	MezavB	-
1961-TAU	2437517.75	1961 Aug 6 0600	Vostok 8K72	-	E103-17	4.700	MVS	OS	G	Sat LE0 0	MezavB	MezavB	-
1961-S293	2437564.19	1961 Sep 21 1830	R-7	-	E15003-03	0.000	MVS	MS	-	Test	MezavB	MezavB	-
1961-S293	2437632.75	1961 Sep 21 0959	R-7	-	L2-3	0.000	MVS	MS	-	Test	MezavB	MezavB	-
1961-S312	2437644.90	1961 Dec 11 0830:17	Vostok 8K72	-	E103-20	4.700	MVS	DF	G	Sat LE0 0	MezavB	MezavB	-
1962 XI	2437780.92	1962 Apr 26 1002	Vostok 8K72	-	E15000-01	4.700	MVS	DF	G	Sat LE0 0	MezavB	MezavB	-
1962-F06	2437816.90	1962 Jun 1 0938	Vostok 8A92	-	T15000-03	0.000	MVS	OS	G	Sat LE0 0	MezavB	MezavB	-
1962-S218	2437848.19	1962 Jul 2 1636	R-7	-	T15000-07	4.700	MVS	OS	G	Sat LE0 0	MezavB	MezavB	-
1962 A IOT	2437873.89	1962 Aug 12 0918:31	Vostok 8A92	-	E103-23	4.700	MVS	OS	G	Sat LE0 0	MezavB	MezavB	-
1962 A NU	2437887.85	1962 Aug 11 0830	Vostok 8K72	-	E103-22	4.700	MVS	DF	G	Sat LE0 0	MezavB	MezavB	-
1962 A NU	2437888.83	1962 Aug 12 0802:17	Vostok 8K72	-	E103-23	6.500	MVS	DF	G	Sat EEO DE 1	MezavB	MezavB	-
1962 A PI	2437901.60	1962 Aug 25 0218:45	Molnitya 8K78	-	T103-12	6.500	MVS	DF	G	Sat EEO DE 1	MezavB	MezavB	-
1962 A PI	2437908.59	1962 Sep 1 0212:30	Molnitya 8K78	-	T103-13	6.500	MVS	DF	G	Sat EEO DE 1	MezavB	MezavB	-
1962 A PI	2437919.54	1962 Sep 12 0059:13	Molnitya 8K78	-	T103-14	6.500	MVS	DF	G	Sat EEO DE 1	MezavB	MezavB	-
1962 A ONE	2437934.90	1962 Sep 27 0939:51	Vostok 8A92	-	T15000-06	4.700	MVS	OS	G	Sat LE0 0	MezavB	MezavB	-
1962 B ZET	2437954.88	1962 Oct 24 1755:04	Vostok 8A92	-	T15000-03	1.493	MVS	OS	G	Sat EEO DE 1	KIAM	MezavB	-
1962 B IOT	2437962.25	1962 Oct 24 1755:04	Molnitya 8K78	-	T103-15	1.493	MVS	OS	G	Sat EEO DE 1	KIAM	MezavB	-
1962 B XI	2437970.18	1962 Nov 1 1614:16	Molnitya 8K78	-	T103-16	1.493	MVS	OS	G	Sat EEO DE 1	KIAM	MezavB	-
1962 B XI	2437973.15	1962 Nov 4 1535:15	Molnitya 8K78	-	T103-17	6.500	MVS	OS	G	Sat EEO DE 1	KIAM	MezavB	-
1962 B ONE	2438020.89	1962 Dec 22 0923	Vostok 8A92	-	T15000-10	4.700	MVS	OS	G	Sat LE0 0	MezavB	MezavB	-
1963-001	2438033.87	1963 Jan 4 0849	Molnitya 8K78	E6	T103-09	1.770	MVS	DF	G	Sat EEO DE 1	MezavB	MezavB	-

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	OrbFly	Agency	Launch_Code	Group	Category	LTCsite	Cite	Notes
1965-F01	2438063-90	1965 Feb 3 0929:14	Molniya 8K78	E6	G103-10	1.470	RUSN	DF	G	Sat EEO DE 1	MK9701-29	-	-
1965-006	2438109-86	1965 Mar 21 0830:01	Vostok 8A92	-	T 15000-01	1.422	RUSN	DS	G	Sat LE0 DE 1	AK13	TLE	-
1965-008	2438121-84	1965 Apr 2 0816:37	Molniya 8K78	-	G103-11	0.000	RUSN	DS	G	Sat EEO DE 1	JB1563-319	TLE	XPC
1965-017	2438142-02	1965 Apr 22 1232:06	R-7A	-	L1-4	4.700	RUSN	MS	G	UT	BHL	TLE	-
1965-011	2438141-86	1965 Apr 22 0830	Vostok 8A92	-	L1-5	4.700	RUSN	MS	G	Sat LE0 DE 0	AK13	-	-
1965-021	2438147-87	1965 Apr 28 0849:56	Vostok 8A92	-	L1-6	0.000	RUSN	MS	G	UT	BHL	-	XPC
1965-022	2438167-82	1965 May 28 0741	R-7A	-	L1-6	4.700	RUSN	MS	G	Sat LE0 DE 0	TLE	-	-
1965-020	2438173-94	1965 May 24 1034:06	Vostok 8A92	-	E 15000-12	4.700	RUSN	DS	G	Sat LE0 DE 0	VSA074	-	-
1965-023	2438195-00	1965 Jun 14 1158:58	Vostok 8K72	K	E103-24	4.700	RUSN	DS	G	Sat LE0 DE 0	VSA074	-	-
1965-024	2438196-90	1965 Jun 16 0929:52	Vostok 8K72	K	E103-25	4.700	RUSN	DE	G	Sat LE0 DE 0	RML	-	-
1965-021	2438220-92	1965 Jul 10 1003:25	Vostok 8A92	-	L1-5	0.000	RUSN	DE	G	Sat LE0 DE 0	BHL	-	XPC
1965-040	2438317-08	1965 Oct 14 1356:40	Vostok 8A92	-	L2-5	4.700	RUSN	MS	G	UT	BHL	-	-
1965-040	2438320-90	1965 Oct 18 0929:58	Vostok 8A92	-	G 15001-01	1.950	RUSN	DS	G	Sat LE0 DE 0	MK96-10-65	-	-
1965-044	2438334-87	1965 Nov 1 0856:38	Polyot 11A69	-	E 15003-02A	6.890	RUSN	DS	G	Sat EEO DE 1	AK13	XPC	-
1965-044	2438344-77	1965 Nov 11 0623:35	Molniya 8K78	-	G 15000-06	5.650	RUSN	DS	G	Sat LE0 DE 0	AK15	-	-
1965-046	2438351-89	1965 Nov 28 1034:25	Voshkod 11A67	-	G 15001-02	4.700	RUSN	DF	G	Sat LE0 DE 0	AK13	-	-
1965-F16	2438361-89	1965 Nov 28 0919:59	Vostok 8A92	-	G 15001-03	4.700	RUSN	DF	G	Sat LE0 DE 0	MK96-10-65	-	-
1965-062	2438362-90	1965 Dec 9 0928:58	Vostok 8A92	-	G103-18	0.810	RUSN	DS	G	Sat HE0 DE 0	Emergya	-	-
1964-010	2438424-91	1964 Jan 30 0945:09	Vostok 8K72	K	T 15000-19	0.890	RUSN	DF	G	Sat EEO DE 1	MK9701-29	-	-
1964-003	2438444-74	1964 Feb 19 0847:40	Molniya 8K78	E6	T 15000-20	1.472	RUSN	DF	G	Sat EEO DE 1	MK9701-29	-	-
1964-003	2438454-84	1964 Mar 21 0815:35	Molniya 8K78	E6	T 15000-22	6.490	RUSN	DF	G	Sat EEO DE 1	MK9701-29	-	-
1964-014	2438461-64	1964 Mar 27 0324:42	Molniya 8K78	H	T 15000-28/23	1.090	RUSN	DS	G	Sat EEO DE 1	AK15	-	-
1964-016	2438467-61	1964 Apr 2 0242:40	Molniya 8K78	H	G 15000-04	2.250	RUSN	DS	G	Sat LE0 DE 0	AK15	MK96-10-65	Kosmodrom-15
1964-017	2438469-91	1964 Apr 4 0945:00	Vostok 8A92	-	T 15001-01A	1.472	RUSN	DF	G	Sat LE0 DE 1	Stiddiq1	-	-
1964-019	2438497-90	1964 Apr 12 0930	Polyot 11A69	-	R 15000-21	4.700	RUSN	DF	G	Sat EEO DE 1	MK9701-29	-	-
1964-006	2438505-84	1964 Apr 20 0608:28	Molniya 8K78	E6	R 15001-01	5.650	RUSN	DF	G	Sat LE0 DE 0	AK15	-	-
1964-021	2438510-93	1964 May 16 1021	Vostok 8A92	-	G 15000-12	6.890	RUSN	DS	G	Sat LE0 DE 0	AK15	-	-
1964-023	2438533-90	1964 May 16 0942	Voshkod 11A67	-	E 15003-15	0.000	RUSN	MS	G	UT	BHL	-	Chertok:0500
1964-039	2438549-75	1964 Jun 3 0604	R-7A	-	R 15000-16/R10334	1.600	RUSN	DF	G	Sat HOL DE 0	BHL	-	-
1964-039	2438560-67	1964 Jun 4 0400	Molniya 8K78	-	G 15000-19/R10336	1.250	RUSN	DF	G	Sat HOL DE 0	AK15	-	-
1964-044	2438565-96	1964 Jun 10 1100	Vostok 8A92	-	T 15000-06	1.250	RUSN	DS	G	Sat LE0 DE 0	AK15	-	-
1964-029	2438566-96	1964 Jun 10 1100	Vostok 8A92	-	R 15001-02	4.700	RUSN	DS	G	Sat LE0 DE 0	AK15	-	-
1964-033	2438569-92	1964 Jun 23 1000	Voshkod 11A67	-	T 15000-06	5.650	RUSN	DS	G	Sat LE0 DE 0	AK15	-	-
1964-034	2438577-96	1964 Jul 1 1100	Voshkod 11A67	-	R 15001-01	4.700	RUSN	DS	G	Sat LE0 DE 0	AK15	-	-
1964-038	2438587-41	1964 Jul 10 2151:02	Vostok 8K72	K	G103-19	0.794	RUSN	DS	G	Sat HE0 DE 0	Emergya	-	-
1964-039	2438591-96	1964 Jul 15 1127	Vostok 8A92	-	R 15001-03	4.700	RUSN	DS	G	Sat LE0 DE 0	AK15	-	-
1964-039	2438594-00	1964 Jul 27 1400	R-7A	-	L1-7	0.000	RUSN	MS	G	UT	BHL	-	-
1964-038	2438604-00	1964 Aug 1 1600	Vostok 8A92	-	R 15001-04	4.700	RUSN	DS	G	Sat LE0 DE 0	AK15	-	-
1964-044	2438621-90	1964 Aug 14 0930	Molniya 8K78	-	G 15000-19/R10336	1.250	RUSN	DS	G	Sat HOL DE 0	AK15	-	-
1964-049	2438629-61	1964 Aug 22 0721	Vostok 8A92M	-	T 15000-06	1.250	RUSN	DS	G	Sat LE0 DE 0	AK15	-	-
1964-053	2438636-17	1964 Aug 28 1800	Vostok 8A92M	-	R 15001-02	4.700	RUSN	DS	G	Sat LE0 DE 0	AK15	-	-
1964-059	2438651-91	1964 Sep 13 0946	Voshkod 11A67	-	R 15001-05	5.650	RUSN	DS	G	Sat LE0 DE 0	AK15	-	-
1964-069	2438663-00	1964 Sep 24 2024:00	Vostok 8A92	-	R 15000-04	6.320	RUSN	DS	G	Sat LE0 DE 0	AK15	-	-
1964-062	2438674-79	1964 Oct 1 0700:00	Voshkod 11A67	-	R 15000-02	4.700	RUSN	DS	G	Sat LE0 DE 0	VSA074	-	VSN074:0712
1964-066	2438682-92	1964 Oct 14 0730:01	Voshkod 11A67	-	R 15002-02	4.700	RUSN	DS	G	Sat LE0 DE 0	AK15	-	-
1964-078	2438696-94	1964 Oct 28 1040	Vostok 8A92	-	R 15002-02	4.700	RUSN	DS	G	Sat LE0 DE 0	AK15	-	-
1964-078	2438701-06	1964 Oct 30 1320	Molniya 8K78	-	R 15000-29	2.390	RUSN	DS	G	Sat LE0 DE 0	AK15	-	-
1965-011	2438711-90	1965 Jan 31 0229:58	Vostok 8A92	-	R 15002-03	4.700	RUSN	DS	G	Sat LE0 DE 0	AK15	-	-
1965-012	2438713-90	1965 Feb 22 0729:58	Voshkod 11A67	-	R 15000-03	6.890	RUSN	DS	G	Sat LE0 DE 0	AK15	-	-
1965-014	2438817-71	1965 Feb 26 0510:32	Vostok 8A92M	-	R 15000-06	1.750	RUSN	DS	G	Sat LE0 DE 0	AK15	-	-
1965-015	2438826-97	1965 Feb 27 0859:28	Vostok 8A92M	-	R 15000-09	5.650	RUSN	DS	G	Sat LE0 DE 0	AK15	-	-
1965-018	2438831-89	1965 Mar 12 0925:31	Molniya 8K78	E6	R 15000-24/R10325	7.070	RUSN	DS	G	Sat EEO DE 1	VSA074	-	-
1965-022	2438837-93	1965 Mar 18 0920:00	Vostok 8A92	-	R 15000-05	4.700	RUSN	DS	G	Sat LE0 DE 0	AK15	-	-
1965-026	2438844-75	1965 Mar 25 1000:00	Vostok 8A92	-	R 15001-08	4.700	RUSN	DF	G	Sat EEO DE 1	AK15	-	-
1965-026	2438860-86	1965 Apr 10 0829:01	Molniya 8K78	-	G 15000-11	1.472	RUSN	DF	G	Sat EEO DE 1	AK15	-	-
1965-029	2438867-91	1965 Apr 17 0952:00	Voshkod 11A67	-	G 15000-35/R10335	2.350	RUSN	DS	G	Sat LE0 DE 0	AK15/RAE	-	-
1965-030	2438873-56	1965 Apr 23 0155:00	Molniya 8K78	-	R 15002-04	4.700	RUSN	DS	G	Sat LE0 DE 0	MK96-10-65	-	-
1965-036	2438887-93	1965 May 7 0929:59	Vostok 8A92	-	R 15002-04	1.971	RUSN	DS	G	Sat EEO DE 1	AK15	-	-
1965-036	2438889-83	1965 May 9 0749:37	Molniya 8K78	M	R 15000-24/110330	5.654	RUSN	DS	G	Sat EEO DE 1	JB1563-319	-	-
1965-044	2438905-95	1965 May 25 1050:00	Molniya 8K78	M	R 15001-04	5.654	RUSN	DS	G	Sat EEO DE 1	AK15	-	-
1965-044	2438919-82	1965 Jun 15 0943:02	Voshkod 11A67	M	R 15001-33/110331	4.702	RUSN	DS	G	Sat EEO DE 1	JB1563-319	-	-
1965-046	2438926-91	1965 Jun 15 0943:02	Vostok 8A92	-	G 15000-01	4.700	RUSN	DS	G	Sat LE0 DE 0	AK15	-	-
1965-046	2438936-91	1965 Jun 25 0945:00	Molniya 8K78	-	R 15000-10	5.650	RUSN	DS	G	Sat EEO DE 1	AK15	-	-
1965-046	2438936-96	1965 Aug 14 1056:46	Vostok 8A92	-	R 15002-05	2.460	RUSN	DS	G	Sat EEO DE 1	RML	-	-
1965-069	2438987-92	1965 Aug 25 1010:02	Voshkod 11A67	-	R 15001-02	5.650	RUSN	DS	G	Sat LE0 DE 0	AK15	-	-
1965-071	2439001-90	1965 Sep 9 0930	Voshkod 11A67	-	R 15001-06	5.650	RUSN	DS	G	Sat LE0 DE 0	AK15	-	-
1965-075	2439026-88	1965 Sep 23 0900	Voshkod 11A67	-	R 15001-03	5.650	RUSN	DS	G	Sat LE0 DE 0	AK15	-	-
1965-077	2439037-82	1965 Oct 4 0736:48	Voshkod 11A67	-	R 15000-54/110327	2.106	RUSN	DS	G	Sat EEO DE 1	AK15	-	-
1965-080	2439047-75	1965 Oct 14 0800:00	Molniya 8K78M	-	U 15000-34	2.250	RUSN	DS	G	Sat LE0 DE 0	AK15	-	-
1965-083	2439049-84	1965 Oct 16 0814:59	Voshkod 11A67	-	U 15001-04	5.650	RUSN	DS	G	Sat LE0 DE 0	AK15	-	-
1965-085	2439061-84	1965 Oct 28 0815:01	Voshkod 11A67	-	U 15001-03	5.650	RUSN	DS	G	Sat LE0 DE 0	AK15	-	-
1965-091	2439076-18	1965 Nov 12 0446:48	Molniya 8K78	M	U 15000-42	2.463	RUSN	DS	G	Sat EEO DE 1	AK15	-	-
1965-092	2439080-68	1965 Nov 16 0419:35	Molniya 8K78	M	U 15000-31	6.563	RUSN	DS	G	Sat EEO DE 1	AK15	-	-
1965-094	2439087-90	1965 Nov 23 0314:10	Molniya 8K78	M	U 15000-30	6.563	RUSN	DS	G	Sat EEO DE 1	AK15	-	-
1965-097	2439091-85	1965 Nov 27 0820	Vostok 8A92	-	U 15001-05	4.700	RUSN	DS	G	Sat EEO DE 1	AK15	-	-
1965-099	2439097-95	1965 Dec 3 1046:14	Molniya 8K78	-	U 15000-48/110328	2.152	RUSN	DS	G	Sat EEO DE 1	JB1563-319	-	-
1965-103	2439104-84	1965 Dec 10 0810	Vostok 8A92	-	U 15001-04	4.700	RUSN	DS	G	Sat LE0 DE 0	AK15	-	-
1965-106	2439108-97	1965 Dec 14 1118	R-7A</										

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	OrbPay	Agency	Launch_Code	Group	Category	LTCsite	Cite	Notes
1966-010	2439166-86	1966 Feb 10 0840	Vostok 8A92	-	U 15001-06	4.700	RUSN	DS	G	Sat LE0 0	AK15	WK96-10-65	-
1966-014	2439175-87	1966 Feb 19 0849	Vostokhd 11A57	-	R 15000-02	5.650	RUSN	DS	G	Sat LE0 0	AK15	Kosmodrom-15	-
1966-017	2439185-96	1966 Feb 22 2009:36	Molniya 8K78M	?	U 15000-06	5.350	RUSN	DS	G	Sat LE0 0	VS4074	Kosmodrom-15	-
1966-021	2439201-94	1966 Mar 17 1103:49	Vostok 8A92	-	U 15000-09	7.182	RUSN	DF40	G	Sat LE0 0	JBI553-319	WK9701-29	-
1966-023	2439205-90	1966 Mar 21 0940	Vostokhd 11A57	-	U 15000-06	4.700	RUSN	DS	G	Sat LE0 0	AK15	WK96-10-65	-
1966-024	2439211-81	1966 Mar 27 0720	Molniya 8K78	M	U 15000-40	5.650	RUSN	DF	G	Sat MLD 00 1	AK15	WK9701-29	Kosmodrom-15
1966-028	2439215-96	1966 Apr 31 1046:59	Molniya 8K78M	?	N 15000-51/N10351	2.182	RUSN	DS	G	Sat LE0 DE 1	JBI553-319	-	-
1966-028	2439221-99	1966 Apr 6 1140	Vostokhd 11A57	-	U 15001-07 *	5.650	RUSN	DS	G	Sat LE0 0	AK15/RAEX	-	-
1966-033	2439235-94	1966 Apr 25 1040	Vostok 8A92	-	U 15001-07	4.700	RUSN	DS	G	Sat MLD 00 1	AK15	WK96-10-65	-
1966-037	2439251-96	1966 Apr 25 0710	Molniya 8K78	M	N 15000-37	2.250	RUSN	DS	G	Sat MLD 00 1	AK15	WK96-10-65	-
1966-038	2439257-09	1966 May 6 1058	Vostok 8A92	-	R 15000-01	4.700	RUSN	DS	G	Sat LE0 0	AK15	Kosmodrom-15	-
1966-038	2439262-96	1966 May 11 1410	Vostok 8A92M	-	U 15000-32	1.250	RUSN	DS	G	Sat LE0 0	AK15	AVMHLJ	-
1966-046	2439272-50	1966 May 17 1100	R-7A	-	U 15001-06	5.650	RUSN	DF	G	Sat LE0 0	AK15	WK96-10-65	Not in BML
1966-050	2439284-96	1966 Jun 8 1100	Vostokhd 11A57	-	U 15001-13	4.700	RUSN	DS	G	Sat LE0 0	AK15	WK96-10-65	-
1966-054	2439293-96	1966 Jun 17 1100	Vostokhd 11A57	-	U 15001-08	5.650	RUSN	DS	G	Sat LE0 0	AK15/RAEX	-	-
1966-057	2439301-50	1966 Jun 26	R-7A	-	R 15000-21	0.000	RUSN	MS	G	Test	AK15/msf	-	-
1966-064	2439320-93	1966 Jun 26 1030	Vostok 8A92M	-	N 15000-14	1.250	RUSN	DS	G	Sat LE0 0	AK15/RAEX	Kosmodrom-15	-
1966-067	2439326-87	1966 Jul 14 1025	Vostokhd 11A57	-	G 15000-02	4.700	RUSN	DS	G	Sat LE0 0	AK15	WK96-10-65	-
1966-068	2439334-96	1966 Jul 28 1050	Vostokhd 11A57	-	N 15001-01	3.600	RUSN	DS	G	Sat LE0 S	AK15	Kosmodrom-15	-
1966-071	2439345-96	1966 Aug 8 1129	Vostokhd 11A57	-	N 15001-02	5.650	RUSN	DS	G	Sat LE0 0	AK15	-	-
1966-078	2439361-84	1966 Aug 24 0803:21	Molniya 8K78M	?	N 15000-52	2.240	RUSN	DS	G	Sat EEO DE 1	JBI553-319	-	-
1966-079	2439364-90	1966 Aug 27 0950	Vostokhd 11A57	-	N 15001-03	5.650	RUSN	DS	G	Sat LE0 0	AK15/RAEX	-	-
1966-082	2439413-01	1966 Sep 16 0930	Vostok 8A92	-	N 15001-02	4.700	RUSN	DF	G	Sat LE0 0	AK15	WK96-10-65	-
1966-083	2439416-83	1966 Oct 14 1213:08	Vostok 8A92	-	N 15001-07	4.700	RUSN	DS	G	Sat LE0 0	AK15	-	-
1966-084	2439424-86	1966 Oct 20 0750	Molniya 8K78	M	N 15000-40	2.250	RUSN	DS	G	Sat MLD 00 1	AK15	-	-
1966-094	2439430-86	1966 Oct 22 0842:26	Vostokhd 11A57	-	N 15001-04	5.650	RUSN	DS	G	Sat LE0 0	AK15	-	-
1966-106	2439441-91	1966 Nov 12 0950	Molniya 8K78M	?	N 15001-05	2.220	RUSN	DS	G	Sat EEO DE 1	JBI553-319	-	-
1966-107	2439445-83	1966 Nov 19 0800	Vostokhd 11A57	-	N 15001-06	5.650	RUSN	DS	G	Sat LE0 0	AK15	WK96-10-65	-
1966-108	2439457-96	1966 Nov 28 1100:00	Soyuz 11A57	-	U 15000-02	4.700	RUSN	DS	G	Sat LE0 0	AK15	-	-
1966-112	2439462-84	1966 Dec 14 1100	Vostokhd 11A57	-	N 15001-06	6.350	RUSN	DS	G	Sat LE0 0	AK15	WK96-10-65	-
1966-116	2439479-00	1966 Dec 19 1201:01	Soyuz 11A57	-	U 15000-01	3.500	RUSN	DF	G	Sat LE0 0	AK15	AVMHLJ	-
1967-004	2439480-93	1966 Dec 21 1017:08	Molniya 8K78M	-	N 15000-09	4.700	RUSN	DS	G	Sat LE0 0	AK15	WK96-10-65	-
1967-004	2439510-03	1967 Jan 19 1239:59	Vostok 8A92	-	N 15000-58	2.220	RUSN	DS	G	Sat EEO DE 1	CR-91706	JBI553-319	-
1967-012	2439528-64	1967 Feb 7 0320:50	Soyuz 11A57	-	U 15000-03	4.700	RUSN	DS	G	Sat LE0 0	AK15	WK96-10-65	-
1967-015	2439546-86	1967 Feb 26 0845:01	Vostok 8A92	-	N 15001-09	5.650	RUSN	DS	G	Sat LE0 0	AK15	WK96-10-65	-
1967-016	2439569-11	1967 Feb 23 1534:59	Vostok 8A92M	?	N 15001-08	4.700	RUSN	DS	G	Sat LE0 0	AK15	WK96-10-65	-
1967-023	2439572-03	1967 Mar 22 1210:23	Vostok 8A92	-	N 15001-06	1.250	RUSN	DS	G	Sat LE0 0	AK15	WK96-10-65	-
1967-026	2439585-06	1967 Apr 22 1534:59	Vostokhd 11A57	-	U 15001-01	5.650	RUSN	DS	G	Sat LE0 0	AK15	WK96-10-65	-
1967-030	2439603-52	1967 Apr 23 0356:00	Vostokhd 11A57	-	R 15000-04	6.650	RUSN	DS	G	Sat LE0 0	AK15	WK96-10-65	-
1967-034	2439608-52	1967 Apr 27 1230:02	Vostok 8A92	-	N 15000-22	1.450	RUSN	DS	G	Sat LE0 0	AK15	WK96-10-65	-
1967-044	2439622-94	1967 May 16 2143:57	Molniya 8K78M	?	U 15001-08	2.112	RUSN	DS	G	Sat LE0 00 1	JBI553-319	-	-
1967-046	2439633-01	1967 May 22 1400:00	Vostokhd 11A57	-	U 15001-12	5.650	RUSN	DS	G	Sat LE0 0	AK15	WK96-10-65	-
1967-052	2439635-06	1967 May 24 2350:00	Molniya 8K78	M	U 15001-11	2.950	RUSN	DS	G	Sat MLD 00 1	AK15	-	-
1967-054	2439642-94	1967 Jun 8 1300:01	Vostokhd 11A57	-	U 15001-04	4.700	RUSN	DS	G	Sat LE0 0	AK15	WK96-10-65	-
1967-058	2439659-61	1967 Jun 12 0239:45	Molniya 8K78M	VL	U 15000-71 L70	1.706	RUSN	DS	G	Sat LE0 0	AK15	WK96-10-65	-
1967-063	2439668-61	1967 Jun 17 0236:38	Molniya 8K78M	VL	U 15000-70 L71	1.706	RUSN	DF40	G	Sat EEO DE 1	Chesest	WK9701-29	-
1967-066	2439674-94	1967 Jun 20 1100:00	Vostokhd 11A57	-	U 15001-06	5.650	RUSN	DS	G	Sat LE0 0	AK15	AVMHLJ	-
1967-068	2439675-76	1967 Jun 4 0559:59	Vostokhd 11A57	-	U 15001-05	4.700	RUSN	DF	G	Sat LE0 0	AK15	AVMHLJ	-
1967-069	2439682-75	1967 Jul 21 0800:04	R-7A mod 11A57	-	E 15002-05	0.000	RUSN	MS	G	OT	AK15	WK9609-68	-
1967-075	2439696-83	1967 Jul 25 0800	Vostokhd 11A57	-	U 15002-06	5.650	RUSN	DS	G	Sat LE0 0	AK15	WK96-10-65	-
1967-078	2439711-74	1967 Aug 9 0545:18	Vostokhd 11A57	-	U 15001-15	5.650	RUSN	DS	G	Sat LE0 0	AK15	YFC	-
1967-082	2439733-83	1967 Aug 31 0800:03	Molniya 8K78	M	N 15000-81 L81	2.250	RUSN	DS	G	Sat MLD 00 1	AK15	YFC	-
1967-089	2439734-94	1967 Sep 1 1030	Vostokhd 11A57	-	U 15000-03	4.700	RUSN	DF	G	Sat LE0 0	AK15	YFC	-
1967-088	2439744-94	1967 Sep 11 1030	Vostokhd 11A57	-	U 15002-11	5.650	RUSN	DS	G	Sat LE0 0	AK15	YFC	-
1967-088	2439749-75	1967 Sep 16 0606:00	Vostokhd 11A57	-	U 15001-07	4.700	RUSN	DS	G	Sat LE0 0	AK15	YFC	-
1967-088	2439759-93	1967 Sep 26 1020	Vostokhd 11A57	-	U 15001-06	4.700	RUSN	DS	G	Sat MLD 00 1	AK15	YFC	-
1967-089	2439766-71	1967 Oct 3 0500:01	Molniya 8K78	M	U 15000-83 L83	2.250	RUSN	DS	G	Sat MLD 00 1	AK15	YFC	-
1967-097	2439774-98	1967 Oct 11 1130:04	Vostokhd 11A57	-	U 15002-01	4.700	RUSN	DS	G	Sat LE0 0	AK15	YFC	-
1967-098	2439779-83	1967 Oct 16 0800	Vostokhd 11A57	-	U 15001-17	5.650	RUSN	DS	G	Sat MLD 00 1	AK15	YFC	-
1967-101	2439785-86	1967 Oct 22 0840:01	Molniya 8K78	M	U 15000-84 L84	2.250	RUSN	DS	G	Sat LE0 0	AK15	YFC	-
1967-102	2439788-45	1967 Oct 24 2249:09	Vostok 8A92M	-	U 15000-56	1.250	RUSN	DS	G	Sat MLD 00 1	AK15	YFC	-
1967-105	2439790-90	1967 Oct 27 0929:59	Soyuz 11A57	-	U 15000-05	6.450	RUSN	DS	G	Sat LE0 0	AK15	YFC	-
1967-107	2439793-84	1967 Oct 30 0812:41	Soyuz 11A51	-	U 15000-07	6.450	RUSN	DS	G	Sat LE0 0	AK15	YFC	-
1967-110	2439797-97	1967 Nov 3 1120	Vostokhd 11A57	-	N 15000-16	6.450	RUSN	DS	G	Sat LE0 0	AK15	YFC	-
1967-117	2439819-98	1967 Nov 25 1130	Vostokhd 11A57	-	U 15000-14	5.650	RUSN	DS	G	Sat LE0 0	AK15/RAEX	YFC	-
1967-124	2439828-00	1967 Dec 3 1200	Vostokhd 11A57	-	U 15000-04	4.700	RUSN	DS	G	Sat LE0 0	AK15/RAEX	YFC	-
1968-003	2439841-00	1968 Jan 16 1200:37	Vostokhd 11A57	-	U 15002-13	5.650	RUSN	DS	G	Sat LE0 0	AK15/RAEX	YFC	-
1968-009	2439862-83	1968 Feb 6 0800	Vostokhd 11A57	-	U 15002-05	4.700	RUSN	DS	G	Sat LE0 0	AK15	YFC	-
1968-009	2439869-83	1968 Feb 7 1043:54	Molniya 8K78M	-	U 15002-06	4.750	RUSN	DS	G	Sat LE0 0	AK15	YFC	WK96-10-65
1968-016	2439921-02	1968 Mar 5 1230:01	Vostokhd 11A57	-	U 15000-14 L57	5.650	RUSN	DS	G	Sat EEO DE 1	AK15/RAEX	AVMHLJ	-
1968-019	2439929-90	1968 Mar 14 0934:01	Vostok 8A92M	-	U 15000-02	1.702	RUSN	DF	G	Sat LE0 0	AK15/RAEX	YFC	-
1968-021	2439932-02	1968 Mar 16 1230:00	Vostokhd 11A57	-	U 15000-03	1.280	RUSN	DS	G	Sat LE0 0	PI-HW	YFC	-
1968-022	2439936-91	1968 Mar 21 0950:00	Vostokhd 11A57	-	U 15000-12	5.650	RUSN	DS	G	Sat LE0 0	AK15/RAEX	YFC	-
1968-024	2439949-96	1968 Apr 3 1100	Vostokhd 11A57	-	U 15002-06	6.030	RUSN	DS	G	Sat LE0 0	AK15/TLE	Kosmodrom-15	-
1968-027	2439953-92	1968 Apr 7 1009:32	Molniya 8K78M	-	U 15000-58 L58	2.300	RUSN	DS	G	Sat EEO DE 1	PKrov71	JBI553-319	-

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	OrbPlay	Agency	Launch_Code	Group	Category	LTCite	Cite	Notes
1966-029	2439960-92	1968 Apr 14 10:00:00	Soyuz 11A511	-	Yal5000-09	RUSN	US	OS	G	Sat LE0 0	IKO204-71	-	-
1966-030	2439961-94	1968 Apr 15 09:34:18	Soyuz 11A511	-	U 15000-06	RUSN	US	OS	G	Sat LE0 0	IKO204-71	-	-
1966-032	2439964-94	1968 Apr 18 10:30:01	Voshked 11A57	-	V 15001-12	RUSN	US	OS	G	Sat LE0 0	AK15/RAEX	XPC	-
1966-034	2439966-94	1968 Apr 20 10:30:01	Voshked 11A57	-	V 15001-01	RUSN	US	OS	G	Sat LE0 0	IK15/RAEX	XPC	-
1966-035	2439967-68	1968 Apr 21 04:20:01	Molnlya 8K78M	-	Yal5000-82 L82	RUSN	US	OS	G	Sat MOL 00 1	IK15/RAEX	XPC	-
1966-045	2440008-95	1968 Jun 1 06:45:02	Voshked 11A57	-	V 15001-02	RUSN	US	OS	G	Sat LE0 0	IK15/RAEX	XPC	-
1966-046	2440011-78	1968 Jun 4 06:45:02	Voshked 11A57	-	V 15001-13	RUSN	US	OS	G	Sat LE0 0	IK15/RAEX	XPC	-
1966-049	2440020-05	1968 Jun 12 13:14:59	Vostok 8A92M	-	N 15000-58	RUSN	US	OS	G	Sat LE0 0	PL-WNH	XPC	-
1966-051	2440025-76	1968 Jun 18 06:15:06	Voshked 11A57	-	V 15001-11	RUSN	US	OS	G	Sat LE0 0	AK15/RAEX	XPC	-
1966-053	2440029-00	1968 Jun 21 12:00:03	Voshked 11A57	-	Yal5000-12	RUSN	US	OS	G	Sat LE0 0	AK15/RAEX	XPC	Kosmodrom-15
1966-054	2440033-96	1968 Jun 26 11:00:01	Voshked 11A57	-	Yal5000-15	RUSN	US	OS	G	Sat LE0 0	AK15/RAEX	XPC	-
1966-057	2440043-14	1968 Jul 5 16:25:59	Molnlya 8K78M	-	Yal5000-84 L85	RUSN	US	OS	G	Sat MOL 00 1	AK15/RAEX	XPC	-
1966-058	2440048-33	1968 Jul 10 19:48:58	Voshked 11A57	-	V 15001-03	RUSN	US	OS	G	Sat LE0 0	IK15/RAEX	XPC	-
1966-060	2440064-05	1968 Jul 16 13:10:00	Voshked 11A57	-	Yal5000-14	RUSN	US	OS	G	Sat LE0 0	IK15/RAEX	XPC	-
1966-062	2440067-79	1968 Jul 30 07:00:00	Voshked 11A57	-	Yal5000-16	RUSN	US	OS	G	Sat LE0 0	IK15/RAEX	XPC	-
1966-067	2440077-79	1968 Aug 9 07:00:00	Voshked 11A57	-	Yal5000-07	RUSN	US	OS	G	Sat LE0 0	IK15/RAEX	XPC	-
1966-071	2440096-02	1968 Aug 27 12:28:59	Voshked 11A57	-	Yal5000-17	RUSN	US	OS	G	Sat LE0 0	IKO204-71	-	-
1966-072	2440104-79	1968 Aug 28 10:00:00	Soyuz 11A511	-	V 15000-13	RUSN	US	OS	G	Sat LE0 0	AK15/RAEX	XPC	-
1966-073	2440104-79	1968 Sep 5 07:00:01	Voshked 11A57	-	V 15000-15	RUSN	US	OS	G	Sat LE0 0	IK15/RAEX	XPC	-
1966-074	2440113-78	1968 Sep 14 06:50:00	Voshked 11A57	-	V 15001-05	RUSN	US	OS	G	Sat LE0 0	IK15/RAEX	XPC	-
1966-077	2440116-02	1968 Sep 16 12:30:01	Voshked 11A57	-	V 15001-16	RUSN	US	OS	G	Sat LE0 0	IK15/RAEX	XPC	-
1966-080	2440122-82	1968 Sep 23 07:38:59	Voshked 11A57	-	R 15000-08	RUSN	US	OS	G	Sat LE0 0	Kosmodrom-15	XPC	-
1966-083	2440134-52	1968 Oct 5 00:32:00	Molnlya 8K78M	-	V 15000-86 L86	RUSN	US	OS	G	Sat MOL 00 1	IK15/RAEX	XPC	-
1966-087	2440137-00	1968 Oct 7 12:05:46	Voshked 11A57	-	V 15002-11	RUSN	US	OS	G	Sat LE0 0	IK15/RAEX	XPC	-
1966-088	2440141-00	1968 Oct 11 12:05:01	Voshked 11A57	-	V 15002-04	RUSN	US	OS	G	Sat LE0 0	IK15/RAEX	XPC	-
1966-093	2440154-86	1968 Oct 26 08:34:18	Soyuz 11A511	-	Yal5000-068	RUSN	US	OS	G	Sat LE0 0	IKO204-71	-	-
1966-094	2440155-86	1968 Oct 26 08:34:18	Soyuz 11A511	-	Yal5000-010	RUSN	US	OS	G	Sat LE0 0	Kosmodrom-15	XPC	-
1966-096	2440160-89	1968 Oct 31 09:14:55	Voshked 11A57	-	N 15001-010	RUSN	US	OS	G	Sat LE0 0	IK15/RAEX	XPC	-
1966-102	2440174-00	1968 Nov 13 12:00:01	Voshked 11A57	-	V 15001-066	RUSN	US	OS	G	Sat LE0 0	IK15/RAEX	XPC	-
1966-104	2440182-01	1968 Nov 21 12:10:01	Voshked 11A57	-	V 15001-017	RUSN	US	OS	G	Sat LE0 0	IK15/RAEX	XPC	-
1966-105	2440190-03	1968 Nov 29 12:40:54	Voshked 11A57	-	V 15001-007	RUSN	US	OS	G	Sat LE0 0	IK15/RAEX	XPC	-
1966-111	2440200-85	1968 Dec 10 08:25:01	Voshked 11A57	-	V 15002-01	RUSN	US	OS	G	Sat LE0 0	IK15/RAEX	XPC	-
1966-115	2440206-99	1968 Dec 16 09:15:03	Molnlya 8K78M	-	Yal5000-039 L87	RUSN	US	OS	G	Sat MOL 00 1	IK15/RAEX	XPC	-
1966-101	2440231-74	1969 Jan 5 06:28:05	Molnlya 8K78M	VL	V 15000-072 72	RUSN	US	OS	G	Sat ERO DE 1	Petrov71	XPC	-
1966-002	2440234-01	1969 Jan 10 08:51:52	Molnlya 8K78M	VL	V 15000-073 73	RUSN	US	OS	G	Sat ERO DE 1	Petrov71	XPC	-
1966-003	2440235-81	1969 Jan 12 12:10:00	Voshked 11A57	-	Yal5000-012	RUSN	US	OS	G	Sat LE0 0	IK696-10-65	XPC	-
1966-004	2440235-81	1969 Jan 15 07:40:57	Soyuz 11A511	-	Yal5000-002	RUSN	US	OS	G	Sat LE0 0	IKO204-71	-	-
1966-006	2440236-30	1969 Jan 23 09:15:00	Soyuz 11A511	-	Yal5000-011	RUSN	US	OS	G	Sat LE0 0	IKO204-71	-	-
1966-008	2440244-39	1969 Jan 23 09:15:00	Voshked 11A57	-	N 15001-011	RUSN	US	OS	G	Sat LE0 0	IK15/RAEX	XPC	-
1966-013	2440254-01	1969 Feb 12 11:11:00	Vostok 8A92M	-	V 15000-060	RUSN	US	OS	G	Sat LE0 0	PL-WNH	XPC	-
1966-015	2440272-95	1969 Feb 28 02:20:01	Voshked 11A57	-	V 15009-003	RUSN	US	OS	G	Sat LE0 0	IK696-10-65	XPC	-
1966-017	2440273-85	1969 Feb 28 06:50:01	Voshked 11A57	-	V 15009-014	RUSN	US	OS	G	Sat LE0 0	AK15/RAEX	XPC	-
1966-022	2440282-01	1969 Mar 15 12:15:00	Voshked 11A57	-	V 15009-013	RUSN	US	OS	G	Sat LE0 0	AK15/RAEX	XPC	-
1966-027	2440286-01	1969 Mar 24 12:15:00	Voshked 11A57	-	V 15009-012	RUSN	US	OS	G	Sat LE0 0	IK696-10-65	XPC	-
1966-028	2440303-01	1969 Mar 24 10:10:00	Voshked 11A57	-	V 15009-018	RUSN	US	OS	G	Sat LE0 0	IK15/RAEX	XPC	-
1966-030	2440307-92	1969 Mar 26 10:30:00	Vostok 8A92M	-	R 15009-014	RUSN	US	OS	G	Sat LE0 0	IK15/RAEX	XPC	-
1966-032	2440315-93	1969 Apr 9 13:30:01	Voshked 11A57	-	V 15009-015	RUSN	US	OS	G	Sat LE0 0	IK15/RAEX	XPC	-
1966-034	2440321-94	1969 Apr 11 09:20:01	Voshked 11A57	-	Yal5000-084 L88	RUSN	US	OS	G	Sat MOL 00 1	IK696-10-65	XPC	-
1966-036	2440322-02	1969 Apr 15 08:14:59	Molnlya 8K78M	-	R 15001-013	RUSN	US	OS	G	Sat LE0 0	AK15/RAEX	XPC	-
1966-038	2440326-84	1969 Apr 23 09:55:01	Voshked 11A57	-	V 15009-013	RUSN	US	OS	G	Sat LE0 0	IK15/RAEX	XPC	-
1966-040	2440334-91	1969 Apr 23 09:55:01	Voshked 11A57	-	V 15009-004	RUSN	US	OS	G	Sat LE0 0	IK696-10-65	XPC	-
1966-042	2440354-81	1969 May 13 09:15:01	Voshked 11A57	-	V 15009-017	RUSN	US	OS	G	Sat LE0 0	IK15/RAEX	XPC	-
1966-044	2440361-86	1969 May 20 08:40:02	Voshked 11A57	-	Yal5001-014	RUSN	US	OS	G	Sat LE0 0	AK15/RAEX	XPC	-
1966-046	2440361-86	1969 May 29 08:59:59	Voshked 11A57	-	Yal5001-012	RUSN	US	OS	G	Sat LE0 0	AK15/RAEX	XPC	-
1966-048	2440370-70	1969 Jun 29 08:59:59	Voshked 11A57	-	V 15009-008	RUSN	US	OS	G	Sat LE0 0	IK696-10-65	XPC	-
1966-052	2440387-87	1969 Jun 24 08:59:59	Voshked 11A57	-	V 15009-011	RUSN	US	OS	G	Sat LE0 0	IK15/RAEX	XPC	-
1966-054	2440399-76	1969 Jun 27 08:59:59	Voshked 11A57	-	V 15009-007	RUSN	US	OS	G	Sat LE0 0	IK15/RAEX	XPC	-
1966-055	2440412-88	1969 Jul 10 09:00:00	Voshked 11A57	-	V 15009-017	RUSN	US	OS	G	Sat LE0 0	IK15/RAEX	XPC	-
1966-057	2440425-02	1969 Jul 22 12:30:00	Voshked 11A57	-	V 15009-007	RUSN	US	OS	G	Sat LE0 0	IK696-10-65	XPC	-
1966-060	2440425-04	1969 Jul 22 12:30:00	Voshked 11A57	-	V 15009-089 L89	RUSN	US	OS	G	Sat MOL 00 1	IK696-10-65	XPC	-
1966-071	2440450-04	1969 Aug 16 11:59:59	Molnlya 8K78M	-	Yal5000-024	RUSN	US	OS	G	Sat LE0 0	AK15/RAEX	XPC	-
1966-072	2440450-04	1969 Aug 16 11:59:59	Voshked 11A57	-	Yal5001-015	RUSN	US	OS	G	Sat LE0 0	AK15/RAEX	XPC	-
1966-075	2440463-04	1969 Aug 19 13:00:01	Voshked 11A57	-	Yal5001-016	RUSN	US	OS	G	Sat LE0 0	AK15/RAEX	XPC	-
1966-076	2440462-88	1969 Aug 29 09:05:00	Voshked 11A57	-	Yal5001-020	RUSN	US	OS	G	Sat LE0 0	AK15/RAEX	XPC	-
1966-077	2440466-96	1969 Sep 2 11:00:01	Voshked 11A57	-	Yal5001-016	RUSN	US	OS	G	Sat LE0 0	AK15/RAEX	XPC	-
1966-078	2440482-86	1969 Sep 18 08:40:01	Voshked 11A57	-	Yal5001-017	RUSN	US	OS	G	Sat LE0 0	AK15/RAEX	XPC	-
1966-081	2440489-01	1969 Sep 24 12:15:01	Voshked 11A57	-	Yal5001-001	RUSN	US	OS	G	Sat LE0 0	IK696-10-65	XPC	-
1966-084	2440500-57	1969 Oct 6 01:45:00	Vostok 8A92M	-	V 15009-061	RUSN	US	OS	G	Sat LE0 0	PL-WNH	XPC	-
1966-086	2440505-97	1969 Oct 11 11:10:00	Soyuz 11A511	-	V 15000-14	RUSN	US	OS	G	Sat LE0 0	Petrov71	IK6912-70	-
1966-088	2440506-95	1969 Oct 12 10:44:42	Soyuz 11A511	-	Yal5000-19	RUSN	US	OS	G	Sat LE0 0	Petrov71	IK6912-70	-
1966-089	2440507-93	1969 Oct 13 10:19:09	Soyuz 11A511	-	Yal5001-019	RUSN	US	OS	G	Sat LE0 0	Petrov71	IK6912-70	-
1966-093	2440511-99	1969 Oct 17 11:45:01	Voshked 11A57	-	Yal5001-019	RUSN	US	OS	G	Sat LE0 0	AK15/RAEX	XPC	-
1966-098	2440518-90	1969 Oct 24 09:40:00	Voshked 11A57	-	Yal5002-026	RUSN	US	OS	G	Sat LE0 0	IK696-10-65	XPC	-
1966-099	2440537-98	1969 Nov 12 11:30:00	Voshked 11A57	-	Yal5002-012	RUSN	US	OS	G	Sat LE0 0	AK15/RAEX	XPC	-
1966-100	2440540-85	1969 Nov 15 08:30:00	Voshked 11A57	-	Yal5002-027	RUSN	US	OS	G	Sat LE0 0	AK15/RAEX	XPC	-
1966-104	2440559-06	1969 Dec 3 13:20:02	Voshked 11A57	-	Yal5009-019	RUSN	US	OS	G	Sat LE0 0	IK696-10-65	XPC	-
1966-109	2440579-08	1970 Jan 9 09:20:00	Voshked 11A57	-	V 15009-019	RUSN	US	OS	G	Sat LE0 0	AK15/RAEX	XPC	-
1970-001	2440595-89	1970 Jan 23 13:50:01	Voshked 11A57	-	V 15009-025	RUSN	US	OS	G	Sat LE0 0	AK15/RAEX	XPC	-
1970-002	2440608-00	1970 Jan 24 12:00:00	Voshked 11A57	-	Yal5002-011	RUSN	US	OS	G	Sat LE0 0	AK15/RAEX	XPC	-
1970-010	2440628-00	1970 Feb 10 12:00:00	Voshked 11A57	-	Yal5002-013	RUSN	US	OS	G	Sat LE0 0	AK15/RAEX	XPC	-
1970-013	2440637-29	1970 Feb 19 18:57:15	Molnlya 8K78M	MIH	V 15009-087	RUSN	US	OS	G	Sat LE0 0	IK0709-36	XPC	-
1970-015	2440650-01	1970 Mar 4 12:14:42	Voshked 11A57	-	V 15009-005	RUSN	US	OS	G	Sat LE0 0	IK696-10-65	XPC	-
1970-018	2440658-83	1970 Mar 13 08:00:02	Voshked 11A57	-	R 15009-006	RUSN	US	OS	G	Sat LE0 0	IK696-10-65	XPC	-
1970-019	2440662-97	1970 Mar 17 11:10:01	Vostok 8A92M	-	V 15009-005	RUSN	US	OS	G	Sat LE0 0	PL-WNH	XPC	-
1970-022	2440672-99	1970 Mar 27 11											

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	OrbPay	Agency	Launch_Code	Group	Category	LTCsite	Cite	Notes
1970-026	2440684-93	1970 Apr 8 10:15:20	Veskhod 11A57	-	Yu15001-018	5.650	RUSN	DS	G	Sat LE0 0	AK15/RAEX	XPC	-
1970-030	2440691-88	1970 Apr 15 09:00:01	Veskhod 11A57	-	Yu15003-044	6.000	RUSN	DS	G	Sat LE0 0	AK15/RAEX	XPC	-
1970-037	2440704-96	1970 Apr 28 10:50:00	Veskhod 8A92M	-	Yu15000-062	1.280	RUSN	DS	G	Sat LE0 0	PL-WW	XPC	-
1970-038	2440718-92	1970 May 12 10:10:01	Veskhod 11A57	-	Yu15001-003	4.750	RUSN	DS	G	Sat LE0 0	IK96-10-65	XPC	-
1970-039	2440726-89	1970 May 20 09:20:01	Veskhod 11A57	-	Yu15002-019	5.650	RUSN	DS	G	Sat LE0 0	AK15/RAEX	XPC	-
1970-041	2440739-29	1970 Jun 1 19:00:00	Soyuz 11A511	-	Yu15000-021S	6.650	RUSN	DS	G	Sat LE0 0	IK0204-71	-	-
1970-042	2440747-90	1970 Jun 10 09:30:01	Veskhod 11A57	-	Yu15002-014	5.650	RUSN	DS	G	Sat LE0 0	AK15/RAEX	XPC	-
1970-045	2440761-04	1970 Jun 17 12:59:57	Veskhod 11A57	-	Yu15002-015	5.650	RUSN	DS	G	Sat LE0 0	AK15/RAEX	XPC	-
1970-049	2440763-64	1970 Jun 26 03:23:01	Molnlya 8K78M	MIH	Yu15000-063	1.280	RUSN	DS	G	Sat LE0 0	PL-WW	XPC	-
1970-052	2440764-00	1970 Jun 28 12:00:01	Molnlya 8K78M	MIH	Rh76001-036	5.400	RUSN	DS	G	Sat LE0 0	AK15/RAEX	XPC	-
1970-053	2440774-94	1970 Jul 7 10:30:01	Veskhod 11A57	-	Yu15002-016	5.650	RUSN	DS	G	Sat LE0 0	AK15/RAEX	XPC	-
1970-056	2440789-02	1970 Jul 21 12:30:01	Veskhod 11A57	-	Yu15002-017	5.650	RUSN	DS	G	Sat LE0 0	AK15/RAEX	XPC	-
1970-065	2440815-73	1970 Aug 7 09:30:00	Veskhod 11A57	-	Yu15002-018	5.650	RUSN	DS	G	Sat LE0 0	AK15/RAEX	XPC	-
1970-066	2440820-71	1970 Aug 17 05:58:22	Molnlya 8K78M	HWL	Rh15000-062	1.530	RUSN	DS	G	Sat EEO DE 1	Petrov1	XPC	-
1970-068	2440827-86	1970 Aug 29 08:30:00	Veskhod 11A57	-	Rh76002-046	6.000	RUSN	DS	G	Sat EEO DE 1	IK9701-29	XPC	Kosmodrom-15
1970-071	2440837-94	1970 Sep 17 08:10:01	Veskhod 11A57	-	Rh76002-046	6.000	RUSN	DS	G	Sat LE0 0	AK15/RAEX	XPC	-
1970-074	2440846-84	1970 Sep 17 08:10:01	Veskhod 11A57	-	Rh76001-034	5.400	RUSN	DS	G	Sat LE0 0	AK15/RAEX	XPC	-
1970-075	2440852-04	1970 Sep 22 13:00:01	Veskhod 11A57	-	Yu15000-003	6.010	RUSN	DS	G	Sat LE0 0	AK15/RAEX	XPC	-
1970-077	2440858-84	1970 Sep 29 08:14:01	Molnlya 8K78M	MIH	Yu15000-090	1.378	RUSN	DS	G	Sat LE0 0	AK15/RAEX	XPC	-
1970-078	2440860-85	1970 Oct 1 08:20:00	Veskhod 11A57	-	Yu15002-029	5.400	RUSN	DS	G	Sat LE0 0	AK15/RAEX	XPC	-
1970-080	2440868-03	1970 Oct 8 12:39:02	Veskhod 11A57	-	Yu15002-011	6.940	RUSN	DS	G	Sat LE0 0	AK15/RAEX	XPC	-
1970-082	2440874-97	1970 Oct 9 11:04:56	Veskhod 11A57	-	Rh76002-049	6.000	RUSN	DS	G	Sat LE0 0	AK15/RAEX	XPC	-
1970-085	2440890-06	1970 Oct 16 11:22:02	Veskhod 11A57	-	Rh76002-047	1.280	RUSN	DS	G	Sat LE0 0	PL-WW	XPC	-
1970-086	2440901-89	1970 Oct 30 13:20:00	Veskhod 11A57	-	Rh76001-035	6.000	RUSN	DS	G	Sat LE0 0	AK15/RAEX	XPC	-
1970-089	2440914-72	1970 Nov 11 09:20:01	Veskhod 11A57	-	Yu15000-016	5.400	RUSN	DS	G	Sat LE0 0	AK15/RAEX	XPC	IK9625-32
1970-101	2440916-16	1970 Nov 27 15:47:17	Molnlya 8K78M	-	Rh15000-096	1.378	RUSN	DS	G	Sat LE0 0	AK15/RAEX	XPC	-
1970-104	2440924-06	1970 Dec 3 13:55:19	Veskhod 11A57	-	Rh15000-004	6.010	RUSN	DS	G	Sat LE0 0	AK15/RAEX	XPC	-
1970-105	2440930-97	1970 Dec 10 11:00:00	Veskhod 11A57	-	Yu15002-031	6.940	RUSN	DS	G	Sat LE0 0	AK15/RAEX	XPC	-
1970-110	2440935-92	1970 Dec 15 10:00:01	Veskhod 11A57	-	Rh76002-051	6.000	RUSN	DS	G	Sat LE0 0	AK15/RAEX	XPC	-
1970-113	2440939-16	1970 Dec 18 16:15:00	Veskhod 11A57	-	Rh76002-049	1.750	RUSN	DS	G	Sat LE0 0	AK15/RAEX	XPC	-
1970-114	2440945-66	1970 Dec 26 08:00:02	Molnlya 8K78M	-	R 15000-076	1.378	RUSN	DS	G	Sat LE0 0	AK15/RAEX	XPC	-
1971-001	2440963-90	1971 Jan 12 09:30:01	Veskhod 11A57	-	Rh15000-016	6.000	RUSN	DS	G	Sat LE0 0	AK15/RAEX	XPC	-
1971-003	2440971-36	1971 Jan 20 11:24:00	Veskhod 8A92M	-	Rh15000-068	1.280	RUSN	DS	G	Sat LE0 0	AK15/RAEX	XPC	-
1971-004	2440972-06	1971 Jan 21 09:40:01	Veskhod 11A57	-	Rh76001-038	6.000	RUSN	DS	G	Sat LE0 0	AK15/RAEX	XPC	IK9609-68
1971-011	2441001-76	1971 Feb 18 13:59:59	Veskhod 11A57	-	Rh76002-046	6.000	RUSN	DS	G	Sat LE0 0	AK15/RAEX	XPC	-
1971-016	2441008-71	1971 Feb 26 09:05:21	Soyuz 11A511L	-	Yu15000-015	6.960	RUSN	DS	G	Sat LE0 0	IK9625-32	XPC	-
1971-017	2441013-90	1971 Mar 5 09:30:01	Veskhod 11A57	-	Yu15001-029	6.000	RUSN	DS	G	Sat LE0 0	AK15/RAEX	XPC	-
1971-023	2441037-54	1971 Mar 5 10:26:59	Veskhod 11A57	-	Yu15001-010	6.000	RUSN	DS	G	Sat LE0 0	AK15/RAEX	XPC	-
1971-028	2441043-86	1971 Apr 7 08:20:00	Veskhod 11A57	-	Rh76001-034	5.400	RUSN	DS	G	Sat LE0 0	AK15/RAEX	XPC	-
1971-029	2441048-80	1971 Apr 14 09:00:00	Veskhod 8A92M	-	Rh76002-064	1.750	RUSN	DS	G	Sat LE0 0	AK15/RAEX	XPC	-
1971-034	2441064-59	1971 Apr 22 23:54:06	Soyuz 11A511	-	Rh15000-069	1.280	RUSN	DS	G	Sat LE0 0	PL-WW	XPC	-
1971-040	2441077-76	1971 May 6 06:30:01	Veskhod 11A57	-	Yu15001-065	6.960	RUSN	DS	G	Sat LE0 0	IK9625-32	XPC	-
1971-043	2441089-83	1971 May 18 08:30:00	Veskhod 11A57	-	Yu15001-022	6.930	RUSN	DS	G	Sat LE0 0	AK15/RAEX	XPC	-
1971-049	2441099-84	1971 May 28 19:30:00	Veskhod 11A57	-	Yu15002-049	6.000	RUSN	DS	G	Sat LE0 0	AK15/RAEX	XPC	-
1971-053	2441108-70	1971 Jun 5 04:45:00	Soyuz 11A511	-	Yu15000-064	6.960	RUSN	DS	G	Sat LE0 0	AK15/RAEX	XPC	-
1971-057	2441113-90	1971 Jun 11 10:00:00	Veskhod 11A57	-	Yu15001-065	6.960	RUSN	DS	G	Sat LE0 0	AK15/RAEX	XPC	-
1971-058	2441126-82	1971 Jun 24 07:59:59	Veskhod 11A57	-	Yu15001-023	6.930	RUSN	DS	G	Sat LE0 0	AK15/RAEX	XPC	-
1971-059	2441127-94	1971 Jun 26 10:30:01	Veskhod 11A57	-	Yu15001-023	6.980	RUSN	DS	G	Sat LE0 0	AK15/RAEX	XPC	-
1971-061	2441152-92	1971 Jul 16 01:41:36	Veskhod 8A92M	-	Yu15001-021	1.280	RUSN	DS	G	Sat LE0 0	PL-WW	XPC	-
1971-062	2441155-96	1971 Jul 23 11:00:00	Veskhod 11A57	-	Yu15001-021	6.000	RUSN	DS	G	Sat LE0 0	AK15/RAEX	XPC	-
1971-064	2441160-65	1971 Jul 28 09:29:54	Molnlya 8K78M	-	Yu15000-096	1.978	RUSN	DS	G	Sat LE0 0	AK15/RAEX	XPC	-
1971-065	2441162-85	1971 Jul 30 08:29:54	Veskhod 11A57	-	Yu15000-017	5.400	RUSN	DS	G	Sat LE0 0	AK15/RAEX	XPC	-
1971-066	2441168-92	1971 Aug 5 10:00:00	Veskhod 11A57	-	Yu15000-017	5.560	RUSN	DS	G	Sat LE0 0	AK15/RAEX	XPC	-
1971-069	2441175-73	1971 Aug 12 08:30:00	Soyuz 11A511L	-	Yu15000-017	5.980	RUSN	DS	G	Sat LE0 0	AK15/RAEX	XPC	IK9625-32
1971-070	2441182-77	1971 Aug 19 08:30:00	Veskhod 11A57	-	Rh76001-040	6.000	RUSN	DS	G	Sat LE0 0	AK15/RAEX	XPC	-
1971-072	2441209-04	1971 Aug 14 13:00:29	Veskhod 11A57	-	Yu15002-024	6.030	RUSN	DS	G	Sat LE0 0	AK15/RAEX	XPC	-
1971-078	2441216-00	1971 Sep 28 07:40:00	Veskhod 11A57	-	Yu15002-024	6.000	RUSN	DS	G	Sat LE0 0	AK15/RAEX	XPC	-
1971-081	2441222-82	1971 Sep 29 11:30:01	Veskhod 11A57	-	Yu15002-024	6.000	RUSN	DS	G	Sat LE0 0	AK15/RAEX	XPC	-
1971-084	2441232-98	1971 Oct 7 12:30:00	Veskhod 11A57	-	Yu15002-024	6.000	RUSN	DS	G	Sat LE0 0	AK15/RAEX	XPC	-
1971-085	2441238-88	1971 Oct 14 09:00:01	Veskhod 11A57	-	Yu15002-024	6.000	RUSN	DS	G	Sat LE0 0	AK15/RAEX	XPC	-
1971-088	2441258-10	1971 Nov 2 14:25:02	Veskhod 11A57	-	Yu15002-024	6.000	RUSN	DS	G	Sat LE0 0	AK15/RAEX	XPC	-
1971-094	2441268-10	1971 Nov 19 12:00:01	Veskhod 11A57	-	Yu15002-024	6.000	RUSN	DS	G	Sat LE0 0	AK15/RAEX	XPC	-
1971-098	2441275-00	1971 Nov 24 09:30:02	Molnlya 8K78M	-	Yu15000-092	1.978	RUSN	DS	G	Sat LE0 0	AK15/RAEX	XPC	-
1971-102	2441289-04	1971 Dec 3 13:00:01	Veskhod 11A57	-	Rh76002-063	6.000	RUSN	DS	G	Sat LE0 0	AK15/RAEX	XPC	-
1971-107	2441291-91	1971 Dec 6 09:50:01	Veskhod 11A57	-	Rh76002-063	6.000	RUSN	DS	G	Sat LE0 0	AK15/RAEX	XPC	-
1971-108	2441296-96	1971 Dec 10 11:00:00	Veskhod 11A57	-	Rh76002-063	6.000	RUSN	DS	G	Sat LE0 0	AK15/RAEX	XPC	-
1971-112	2441301-90	1971 Dec 16 09:39:59	Veskhod 11A57	-	Rh76002-063	6.000	RUSN	DS	G	Sat LE0 0	AK15/RAEX	XPC	-
1971-115	2441305-45	1971 Dec 19 22:50:12	Molnlya 8K78M	-	Rh76002-063	1.978	RUSN	DS	G	Sat LE0 0	AK15/RAEX	XPC	-
1971-118	2441313-09	1971 Dec 27 14:04:51	Soyuz 11A511L	-	Yu15000-001	6.680	RUSN	DS	G	Sat LE0 0	AK15/RAEX	XPC	IK9625-32
1971-120	2441314-95	1971 Dec 29 10:50:01	Veskhod 11A57	-	Yu15000-001	1.280	RUSN	DS	G	Sat LE0 0	AK15/RAEX	XPC	-
1972-001	2441328-92	1972 Jan 12 09:59:59	Veskhod 11A57	-	Yu15000-001	6.000	RUSN	DS	G	Sat LE0 0	AK15/RAEX	XPC	-
1972-006	2441350-86	1972 Feb 3 08:40:00	Veskhod 11A57	-	Yu15000-009	6.000	RUSN	DS	G	Sat LE0 0	AK15/RAEX	XPC	-
1972-011	2441377-97	1972 Mar 4 11:15:00	Veskhod 11A57	-	Rh76002-063	6.030	RUSN	DS	G	Sat LE0 0	AK15/RAEX	XPC	-
1972-015	2441380-92	1972 Mar 4 10:00:00	Veskhod 11A57	-	Rh76002-063	6.000	RUSN	DS	G	Sat LE0 0	AK15/RAEX	XPC	-
1972-021	2441392-04	1972 Mar 15 13:00:01	Veskhod 11A57	-	S 15000-063	1.534	RUSN	DS	G	Sat EEO DE 1	IK9707-75	XPC	-
1972-015	2441403-68	1972 Mar 27 04:15:01	Molnlya 8K78M	HWL	S 15000-063	1.534	RUSN	DS	G	Sat EEO DE 1	IK9707-75	XPC	-

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	OrbPay	Agency	Launch_Code	Group	Category	LTCite	Cite	Notes
1972-022	2441407-09	1972 Mar 30 1405:01	Vostok 8A92M	-	7702421-534	1.280	RUSN	05	G	Sat LE0 0	PL-WM	XPC	-
1972-023	2441407-67	1972 Mar 31 0402:33	Molaiya 8K78M	MVL	7801421-513	1.654	RUSN	0F40	G	Sat EEO DE 1	M9701-29	XPC	Not S15000-064
1972-024	2441410-93	1972 Apr 3 1015:00	Voskhod 11A57	-	7801422-245	6.000	RUSN	05	G	Sat LE0 0	AK15/RAEX	XPC	-
1972-025	2441412-36	1972 Apr 4 2038:30	Molaiya 8K78M	-	Yu15000-093	1.993	RUSN	05	G	Sat MOL 00 1	M9707-75	XPC	-
1972-026	2441413-83	1972 Apr 6 0800:00	Voskhod 11A57	-	7801421-139	6.030	RUSN	05	G	Sat LE0 0	AK15/RAEX	XPC	-
1972-027	2441414-92	1972 Apr 7 1000:00	Voskhod 11A57	-	Rh15000-013	5.886	RUSN	05	G	Sat LE0 0	M9521-43	XPC	-
1972-028	2441421-83	1972 Apr 14 0054:36	Molaiya 8K78M	SOL	Rh15000-079	1.173	RUSN	05	G	Sat DSO 00 1	Kosmodrom-15	XPC	-
1972-029	2441421-83	1972 Apr 14 0800:00	Voskhod 11A57	-	7702423-253	6.000	RUSN	05	G	Sat LE0 0	AK15/RAEX	XPC	-
1972-030	2441422-37	1972 Apr 15 1120:00	Voskhod 11A57	-	7702424-717	6.010	RUSN	05	G	Sat LE0 0	AK15/RAEX	XPC	-
1972-031	2441454-93	1972 May 17 1019:59	Molaiya 8K78M	-	7701421-140	6.030	RUSN	05	G	Sat LE0 0	AK15/RAEX	XPC	-
1972-032	2441462-77	1972 May 19 1430:03	Voskhod 11A57	-	Yu15000-091	1.378	RUSN	05	G	Sat MOL 00 1	AK15/RAEX	XPC	-
1972-033	2441462-77	1972 May 26 0658:00	Voskhod 11A57	-	7801422-244	6.000	RUSN	05	G	Sat LE0 0	AK15/RAEX	XPC	-
1972-034	2441477-79	1972 Jun 9 0659:59	Voskhod 11A57	-	7702423-250	6.000	RUSN	05	G	Sat LE0 0	AK15/RAEX	XPC	-
1972-035	2441469-77	1972 Jun 21 0628:00	Voskhod 11A57	-	7801421-142	5.400	RUSN	05	G	Sat LE0 0	AK15/RAEX	XPC	-
1972-036	2441491-97	1972 Jun 23 1119:57	Voskhod 11A57	-	7702421-239	6.000	RUSN	05	G	Sat LE0 0	AK15/RAEX	XPC	-
1972-037	2441495-12	1972 Jun 26 1453:00	Soyuz 11A511	-	Yu15000-020	6.600	RUSN	05	G	Sat DSO 00 1	M9204-71	XPC	-
1972-038	2441497-66	1972 Jun 29 0347:35	Molaiya 8K78M	SOL	H15000-108	1.173	RUSN	05	G	Sat LE0 0	AK15/RAEX	XPC	Kosmodrom-15
1972-039	2441499-29	1972 Jun 30 1852:01	Vostok 8A92M	-	7801421-533	1.280	RUSN	05	G	Sat LE0 0	PL-WM	XPC	-
1972-040	2441504-94	1972 Jul 1 1040:00	Voskhod 11A57	-	7702423-246	6.000	RUSN	05	G	Sat LE0 0	AK15/RAEX	XPC	-
1972-041	2441512-10	1972 Jul 13 1430:25	Soyuz 11A511M	-	Rh15000-002	6.680	RUSN	05	G	Sat LE0 0	AK15/RAEX	XPC	-
1972-042	2441516-07	1972 Jul 19 1345:00	Voskhod 11A57	-	78033-267	6.000	RUSN	05	G	Sat LE0 0	AK15/RAEX	XPC	-
1972-043	2441526-93	1972 Jul 28 1019:00	Voskhod 11A57	-	7702421-143	6.400	RUSN	05	G	Sat LE0 0	AK15/RAEX	XPC	-
1972-044	2441531-84	1972 Aug 2 0815:00	Voskhod 11A57	-	78033-266	6.000	RUSN	05	G	Sat LE0 0	AK15/RAEX	XPC	-
1972-045	2441547-32	1972 Aug 16 1000:01	Voskhod 11A57	-	7702424-718	6.010	RUSN	05	G	Sat LE0 0	AK15/RAEX	XPC	-
1972-046	2441569-85	1972 Aug 30 0819:59	Voskhod 11A57	-	7702421-144	5.400	RUSN	05	G	Sat LE0 0	AK15/RAEX	XPC	-
1972-047	2441562-35	1972 Sep 2 1049:59	Voskhod 11A57	-	78033-271	6.300	RUSN	0F	G	Sat LE0 0	APRMLJ	XPC	-
1972-048	2441575-90	1972 Sep 15 0940:00	Voskhod 11A57	-	78033-156	6.030	RUSN	05	G	Sat LE0 0	AK15/RAEX	XPC	-
1972-049	2441576-85	1972 Sep 16 0820:00	Voskhod 11A57	-	78033-268	6.000	RUSN	05	G	Sat LE0 0	AK15/RAEX	XPC	-
1972-050	2441580-30	1972 Sep 19 1919:03	Molaiya 8K78M	2BL	S15000-100	1.578	RUSN	05	G	Sat LE0 0	AK15/RAEX	XPC	-
1972-051	2441591-35	1972 Sep 30 2019:01	Molaiya 8K78M	-	S15000-106	1.378	RUSN	05	G	Sat MOL 00 1	M9715-46	XPC	-
1972-052	2441595-00	1972 Oct 4 1200:02	Voskhod 11A57	-	78033-272	6.000	RUSN	05	G	Sat LE0 0	AK15/RAEX	XPC	-
1972-053	2441604-76	1972 Oct 14 0616:00	Molaiya 8K78M	-	7705711-496	1.378	RUSN	05	G	Sat MOL 00 1	AK15/RAEX	XPC	-
1972-054	2441609-00	1972 Oct 16 1159:59	Voskhod 11A57	-	78045-151	6.030	RUSN	05	G	Sat LE0 0	AK15/RAEX	XPC	-
1972-055	2441617-42	1972 Oct 26 2205:01	Vostok 8A92M	-	Rh15000-006	1.280	RUSN	05	G	Sat LE0 0	PL-WM	XPC	-
1972-056	2441622-06	1972 Oct 28 1329:59	Voskhod 11A57	-	78033-179	6.010	RUSN	05	G	Sat LE0 0	AK15/RAEX	XPC	-
1972-057	2441646-86	1972 Nov 25 0910:01	Voskhod 11A57	-	78033-157	5.400	RUSN	05	G	Sat LE0 0	AK15/RAEX	XPC	-
1972-058	2441653-59	1972 Dec 2 0459:57	Molaiya 8K78M	-	7801421-512	1.378	RUSN	05	G	Sat MOL 00 1	AK15/RAEX	XPC	-
1972-059	2441663-79	1972 Dec 12 0651:01	Molaiya 8K78M	-	78048-557	1.378	RUSN	05	G	Sat MOL 00 1	AK15/RAEX	XPC	-
1972-060	2441666-07	1972 Dec 14 1340:02	Voskhod 11A57	-	78045-151	6.000	RUSN	05	G	Sat LE0 0	AK15/RAEX	XPC	-
1972-061	2441678-94	1972 Dec 22 1050:04	Soyuz 11A511M	-	S15000-003	1.750	RUSN	05	G	Sat LE0 0	AK15/RAEX	XPC	-
1972-062	2441679-96	1972 Dec 26 1100:00	Vostok 8A92M	-	S15000-012	6.680	RUSN	05	G	Sat LE0 0	AK15/RAEX	XPC	-
1972-063	2441693-92	1972 Jan 1 1000:00	Voskhod 11A57	-	78033-170	6.000	RUSN	05	G	Sat LE0 0	AK15/RAEX	XPC	-
1972-064	2441715-74	1972 Feb 3 0830:00	Voskhod 11A57	-	78033-157	5.400	RUSN	05	G	Sat LE0 0	AK15/RAEX	XPC	-
1972-065	2441728-55	1972 Feb 3 0946:59	Molaiya 8K78M	-	7801422-243	1.378	RUSN	05	G	Sat LE0 0	AK15/RAEX	XPC	-
1972-066	2441732-55	1972 Feb 5 1315:05	Voskhod 11A57	-	78033-157	6.000	RUSN	05	G	Sat LE0 0	AK15/RAEX	XPC	-
1972-067	2441735-74	1972 Feb 5 1315:05	Molaiya 8K78M	-	7801422-243	1.378	RUSN	05	G	Sat LE0 0	AK15/RAEX	XPC	-
1972-068	2441738-55	1972 Feb 5 1315:05	Voskhod 11A57	-	78033-157	6.000	RUSN	05	G	Sat LE0 0	AK15/RAEX	XPC	-
1972-069	2441742-51	1972 Feb 5 1315:05	Molaiya 8K78M	-	7801422-243	1.378	RUSN	05	G	Sat LE0 0	AK15/RAEX	XPC	-
1972-070	2441747-97	1972 Feb 6 0930:02	Voskhod 11A57	-	78033-157	1.173	RUSN	05	G	Sat LE0 0	AK15/RAEX	XPC	-
1972-071	2441761-97	1972 Feb 6 0930:02	Vostok 8A92M	-	78033-157	6.010	RUSN	05	G	Sat LE0 0	AK15/RAEX	XPC	-
1972-072	2441763-97	1972 Feb 20 1100:02	Vostok 8A92M	-	7702423-249	1.280	RUSN	05	G	Sat LE0 0	AK15/RAEX	XPC	-
1972-073	2441771-97	1972 Feb 22 1100:02	Voskhod 11A57	-	78033-158	6.200	RUSN	05	G	Sat LE0 0	AK15/RAEX	XPC	-
1972-074	2441779-97	1972 Apr 5 1110:00	Molaiya 8K78M	-	78033-158	1.978	RUSN	05	G	Sat LE0 0	AK15/RAEX	XPC	-
1972-075	2441791-97	1972 Apr 19 0859:59	Voskhod 11A57	-	78043-733	6.010	RUSN	05	G	Sat LE0 0	AK15/RAEX	XPC	-
1972-076	2441797-95	1972 Apr 25 1045:00	Voskhod 11A57	-	77019-173	6.030	RUSN	05	G	Sat LE0 0	AK15/RAEX	XPC	-
1972-077	2441807-95	1972 May 3 0700:00	Voskhod 11A57	-	77019-173	6.010	RUSN	05	G	Sat LE0 0	AK15/RAEX	XPC	-
1972-078	2441820-94	1972 May 18 1100:02	Soyuz-U	-	78043-731	6.010	RUSN	05	G	Sat LE0 0	AK15/RAEX	XPC	-
1972-079	2441825-94	1972 May 23 1030:00	Voskhod 11A57	-	7702423-248	6.000	RUSN	05	G	Sat LE0 0	AK15/RAEX	XPC	-
1972-080	2441828-94	1972 May 26 1330:01	Voskhod 11A57	-	78033-160	6.030	RUSN	05	G	Sat LE0 0	AK15/RAEX	XPC	-
1972-081	2441831-93	1972 May 29 1016:03	Vostok 8A92M	-	7702423-251	1.280	RUSN	05	G	Sat LE0 0	AK15/RAEX	XPC	-
1972-082	2441839-98	1972 Jun 6 1130:00	Voskhod 11A57	-	7702423-251	6.000	RUSN	05	G	Sat LE0 0	AK15/RAEX	XPC	-
1972-083	2441843-92	1972 Jun 10 1010:00	Voskhod 11A57	-	7702423-254	6.000	RUSN	05	G	Sat LE0 0	AK15/RAEX	XPC	-
1972-084	2441848-75	1972 Jun 15 0800:00	Soyuz-U	-	S15000-027	6.800	RUSN	05	G	Sat LE0 0	AK15/RAEX	XPC	-
1972-085	2441855-02	1972 Jun 21 1230:57	Voskhod 11A57	-	77019-176	5.400	RUSN	05	G	Sat LE0 0	AK15/RAEX	XPC	-
1972-086	2441860-90	1972 Jun 27 1150:01	Voskhod 11A57	-	Yu15000-004	6.880	RUSN	05	G	Sat LE0 0	AK15/RAEX	XPC	-
1972-087	2441867-96	1972 Jul 4 1059:59	Molaiya 8K78M	-	7801422-243	5.890	RUSN	0F	G	Sat LE0 0	AK15/RAEX	XPC	-
1972-088	2441874-92	1972 Jul 11 0958:00	Molaiya 8K78M	-	78043-533	1.978	RUSN	05	G	Sat LE0 0	AK15/RAEX	XPC	-
1972-089	2441888-98	1972 Jul 25 1130:00	Voskhod 11A57	-	7702423-254	6.000	RUSN	05	G	Sat LE0 0	AK15/RAEX	XPC	-
1972-090	2441896-08	1972 Aug 1 1400:01	Voskhod 11A57	-	77019-174	5.400	RUSN	05	G	Sat LE0 0	AK15/RAEX	XPC	-
1972-091	2441916-02	1972 Aug 21 1230:01	Voskhod 11A57	-	78033-265	6.000	RUSN	05	G	Sat LE0 0	AK15/RAEX	XPC	-
1972-092	2441918-96	1972 Aug 24 1059:55	Voskhod 11A57	-	77043-273	6.000	RUSN	05	G	Sat LE0 0	AK15/RAEX	XPC	-
1972-093	2441924-51	1972 Aug 30 0007:59	Molaiya 8K78M	-	7705711-499	1.978	RUSN	05	G	Sat LE0 0	AK15/RAEX	XPC	-
1972-094	2441924-94	1972 Aug 30 1030:02	Voskhod 11A57	-	78043-162	5.400	RUSN	05	G	Sat LE0 0	AK15/RAEX	XPC	-
1972-095	2441931-94	1972 Sep 6 1040:01	Voskhod 11A57	-	77019-285	6.000	RUSN	05	G	Sat LE0 0	AK15/RAEX	XPC	-
1972-096	2441947-												



Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Orb/Play	Agency	Launch_Code	Group	Category	LTC/ite	Cite	Notes
1975-089	2442001-36	1973 Nov 14 2040:02	Molniya 8K78M	-	78014 -215-15	1.978	RUSN	05	G	Sat MOL 00 1	AK15/RAEX	XFC	-
1975-092	2442007-92	1973 Nov 21 1000:00	Veskhod 11A57	-	77019 -177	6.000	RUSN	05	G	Sat LE0 0	AK15/RAEX	XFC	-
1975-096	2442014-99	1973 Nov 28 1143:05	Veskhod 11A57	-	76029 -759	6.010	RUSN	05	G	Sat LE0 0	AK15/RAEX	XFC	-
1975-097	2442016-72	1973 Nov 30 0520:00	Soyuz 11A511	-	S 15000-029	6.800	RUSN	05	G	Sat LE0 0	AK15/RAEX	-	-
1975-097	2442017-05	1973 Nov 30 1308:59	Molniya 8K78M	-	77019 -550	1.978	RUSN	05	G	Sat MOL 00 1	AK15/RAEX	XFC	-
1975-102	2442034-00	1973 Dec 17 1200:01	Soyuz 11A511	-	76043 -825	6.860	RUSN	05	G	Sat LE0 0	AK15/RAEX	-	-
1975-103	2442035-00	1973 Dec 18 1155:00	Veskhod 11A57	-	S 15000-028	6.800	RUSN	05	G	Sat LE0 0	AK15/RAEX	XFC	-
1975-106	2442038-02	1973 Dec 21 1230:00	Molniya 8K78M	-	76029 -755	6.010	RUSN	05	G	Sat LE0 0	AK15/RAEX	XFC	-
1975-106	2442041-97	1973 Dec 25 1177:00	Molniya 8K78M	-	76029 -555	1.978	RUSN	05	G	Sat LE0 0	AK15/RAEX	XFC	-
1974-004	2442072-13	1974 Jan 24 1500:01	Veskhod 11A57	-	77019 -178	6.030	RUSN	05	G	Sat MOL 00 1	AK15/RAEX	XFC	-
1974-004	2442077-96	1974 Jan 30 1100	Veskhod 11A57	-	78033 -735	6.010	RUSN	05	G	Sat LE0 0	AK15/RAEX	XFC	-
1974-006	2442090-87	1974 Feb 12 0856:00	Veskhod 11A57	-	77019 -280	6.000	RUSN	05	G	Sat LE0 0	AK15/RAEX	XFC	-
1974-011	2442111-98	1974 Mar 5 1138:00	Veskhod 11A57	-	76043 -350	1.280	RUSN	05	G	Sat LE0 0	AK15/RAEX	XFC	-
1974-014	2442120-94	1974 Mar 14 1029:59	Veskhod 8A92M	-	78031 -191	6.030	RUSN	05	G	Sat LE0 0	AK15/RAEX	XFC	-
1974-016	2442126-86	1974 Mar 20 0830:00	Soyuz-U	-	78031 -191	6.010	RUSN	05	G	Sat LE0 0	AK15/RAEX	XFC	-
1974-018	2442140-81	1974 Apr 3 0730:00	Soyuz-U	-	A 15000-009	6.000	RUSN	05	G	Sat LE0 0	AK15/RAEX	XFC	-
1974-018	2442141-86	1974 Apr 4 0830:00	Veskhod 11A57	-	76043 -734	6.010	RUSN	05	G	Sat LE0 0	AK15/RAEX	XFC	-
1974-021	2442149-02	1974 Apr 11 1222:59	Veskhod 11A57	-	78031 -152	5.400	RUSN	05	G	Sat LE0 0	AK15/RAEX	XFC	-
1974-022	2442149-83	1974 Apr 12 0800:01	Veskhod 11A57	-	76029 -757	5.675	RUSN	05	G	Sat LE0 0	AK15/RAEX	XFC	-
1974-023	2442156-37	1974 Apr 20 2053:44	Molniya 8K78M	ML	7702821-516	1.978	RUSN	05	G	Sat MOL 00 1	AK15/RAEX	XFC	XPC
1974-026	2442161-99	1974 Apr 24 1150:00	Veskhod 8A92M	-	78033 -547	1.280	RUSN	05	G	Sat MOL 00 1	AK15/RAEX	XFC	-
1974-026	2442164-10	1974 Apr 26 1422:59	Molniya 8K78M	-	76029 -554	1.978	RUSN	05	G	Sat LE0 0	AK15/RAEX	XFC	-
1974-027	2442167-06	1974 Apr 29 1329:59	Veskhod 11A57	-	76043 -737 ?	6.010	RUSN	05	G	Sat LE0 0	AK15/RAEX	XFC	-
1974-031	2442182-86	1974 May 15 0830:00	Soyuz-U	-	78031 -193	5.400	RUSN	05	G	Sat LE0 0	AK15/RAEX	XFC	-
1974-031	2442191-01	1974 May 23 1216:51	Veskhod 11A57	-	A 15000-008	6.800	RUSN	05	G	Sat LE0 0	AK15/RAEX	XFC	-
1974-036	2442194-81	1974 May 27 0725:00	Soyuz-U	-	A 15000-032	6.010	RUSN	05	G	Sat LE0 0	AK15/RAEX	XFC	-
1974-036	2442196-03	1974 May 30 1244:59	Veskhod 11A57	-	76029 -762	6.010	RUSN	05	G	Sat LE0 0	AK15/RAEX	XFC	-
1974-041	2442204-76	1974 Jun 6 0620:00	Veskhod 11A57	-	77033 -257	6.400	RUSN	05	G	Sat LE0 0	AK15/RAEX	XFC	-
1974-043	2442212-02	1974 Jun 13 1229:59	Veskhod 11A57	-	77019 -757	6.010	RUSN	05	G	Sat LE0 0	AK15/RAEX	XFC	-
1974-049	2442228-05	1974 Jun 29 1250:02	Soyuz 11A511	2BL	7602968-7	6.050	RUSN	05	G	Sat LE0 0	AK15/RAEX	XFC	-
1974-051	2442232-29	1974 Jun 29 1859:58	Molniya 8K78M	-	78031 -194	1.978	RUSN	05	G	Sat MOL 00 1	AK15/RAEX	XFC	-
1974-052	2442235-11	1974 Jul 3 1851:06	Soyuz-U	-	S 15000-031	6.800	RUSN	05	G	Sat LSS 0	AK15/RAEX	XFC	-
1974-052	2442238-10	1974 Jul 9 1439:58	Veskhod 8A92M	-	76043 -549	1.280	RUSN	05	G	Sat LE0 0	AK15/RAEX	XFC	-
1974-052	2442241-05	1974 Jul 12 1230:01	Veskhod 11A57	-	76029 -761	6.010	RUSN	05	G	Sat LE0 0	AK15/RAEX	XFC	-
1974-056	2442251-56	1974 Jul 25 1235:01	Molniya 8K78M	-	78033 -529	1.978	RUSN	05	G	Sat MOL 00 1	AK15/RAEX	XFC	-
1974-057	2442253-79	1974 Jul 28 0700:00	Veskhod 11A57	-	77019 -759	6.000	RUSN	05	G	Sat LE0 0	AK15/RAEX	XFC	-
1974-059	2442254-79	1974 Jul 26 0659:59	Veskhod 11A57	-	76029 -150	6.030	RUSN	05	G	Sat LE0 0	AK15/RAEX	XFC	-
1974-061	2442265-50	1974 Aug 6 0002:00	Soyuz-U	-	K 15000-011	6.800	RUSN	05	G	Sat LE0 0	AK15/RAEX	XFC	-
1974-061	2442267-05	1974 Aug 6 1249:59	Veskhod 11A57	-	76029 -760	6.010	RUSN	05	G	Sat LE0 0	AK15/RAEX	XFC	-
1974-064	2442271-77	1974 Aug 12 0625:02	Soyuz-U	-	K 15000-007	6.900	RUSN	05	G	Sat LE0 0	AK15/RAEX	XFC	-
1974-069	2442278-55	1974 Aug 26 0554:59	Veskhod 8A92M	-	78033 -258	1.750	RUSN	05	G	Sat LE0 0	AK15/RAEX	XFC	-
1974-069	2442280-35	1974 Aug 26 0554:59	Soyuz 11A511	-	S 15000-030	6.800	RUSN	05	G	Sat LE0 0	AK15/RAEX	XFC	-
1974-068	2442285-82	1974 Aug 30 0739:59	Veskhod 11A57	-	78031 -174	6.010	RUSN	05	G	Sat LE0 0	AK15/RAEX	XFC	-
1974-073	2442310-90	1974 Sep 20 0950:00	Veskhod 11A57	-	78031 -196	6.630	RUSN	05	G	Sat LE0 0	AK15/RAEX	XFC	-
1974-073	2442310-90	1974 Sep 20 0950:00	Veskhod 11A57	-	77019 -754	6.010	RUSN	05	G	Sat LE0 0	AK15/RAEX	XFC	-
1974-081	2442323-12	1974 Oct 25 1959:59	Soyuz-U	-	K 15000-010	6.010	RUSN	05	G	Sat MOL 00 1	AK15/RAEX	XFC	-
1974-081	2442325-05	1974 Oct 24 1328:41	Molniya 8K78M	-	78033 -538	1.978	RUSN	05	G	Sat LE0 0	AK15/RAEX	XFC	-
1974-082	2442345-90	1974 Oct 26 0930:01	Soyuz-U	-	K 15000-012	6.010	RUSN	05	G	Sat LE0 0	AK15/RAEX	XFC	-
1974-082	2442345-90	1974 Oct 26 1017:00	Soyuz-U	-	77019 -352	1.980	RUSN	05	G	Sat LE0 0	AK15/RAEX	XFC	-
1974-087	2442353-93	1974 Nov 14 1451:00	Veskhod 11A57	-	78033 -172	6.800	RUSN	05	G	Sat LE0 0	AK15/RAEX	XFC	-
1974-088	2442355-94	1974 Nov 16 1145	Soyuz 11A511	-	76029 -826	6.800	RUSN	05	G	Sat LE0 0	AK15/RAEX	XFC	-
1974-088	2442367-94	1974 Nov 16 1145	Veskhod 11A57	-	76029 -763	6.010	RUSN	05	G	Sat LE0 0	AK15/RAEX	XFC	-
1974-088	2442372-94	1974 Nov 21 1033:01	Molniya 8K78M	-	78031 -197	2.078	RUSN	05	G	Sat MOL 00 1	AK15/RAEX	XFC	-
1974-088	2442373-94	1974 Nov 27 1144:59	Veskhod 11A57	-	78031 -197	6.800	RUSN	05	G	Sat LE0 0	AK15/RAEX	XFC	-
1974-088	2442383-90	1974 Dec 13 1330:00	Soyuz-U	-	K 15000-014	6.800	RUSN	05	G	Sat LE0 0	AK15/RAEX	XFC	-
1974-088	2442385-06	1974 Dec 13 1330:00	Soyuz-U	-	A 15000-003	6.010	RUSN	05	G	Sat LE0 0	AK15/RAEX	XFC	-
1974-088	2442388-99	1974 Dec 17 1145:00	Veskhod 8A92M	-	77019 -353	1.980	RUSN	05	G	Sat LE0 0	AK15/RAEX	XFC	-
1974-102	2442402-60	1974 Dec 21 0219:59	Molniya 8K78M	-	78033 -530	1.978	RUSN	05	G	Sat MOL 00 1	AK15/RAEX	XFC	-
1974-106	2442408-88	1974 Dec 27 0910:00	Veskhod 11A57	-	78043 -738	6.010	RUSN	05	G	Sat LE0 0	AK15/RAEX	XFC	-
1975-002	2442423-41	1975 Jan 10 2143:37	Soyuz 11A511	-	K 15000-022	6.800	RUSN	05	G	Sat LE0 0	AK15/RAEX	XFC	-
1975-002	2442429-88	1975 Jan 17 0900:00	Veskhod 11A57	-	K 15000-033	6.400	RUSN	05	G	Sat LE0 0	AK15/RAEX	XFC	-
1975-002	2442435-96	1975 Jan 23 1100	Veskhod 11A57	-	78031 -775	1.978	RUSN	05	G	Sat LE0 0	AK15/RAEX	XFC	-
1975-009	2442443-70	1975 Jan 30 1502	Molniya 8K78M	2BL	78043 -532	1.978	RUSN	05	G	Sat MOL 00 1	AK15/RAEX	XFC	-
1975-013	2442449-10	1975 Feb 6 0449	Molniya 8K78M	-	78031 -777 (177)	6.010	RUSN	05	G	Sat MOL 00 1	AK15/RAEX	XFC	-
1975-013	2442456-10	1975 Feb 26 0900:00	Veskhod 11A57	-	78031 -778	6.010	RUSN	05	G	Sat LE0 0	AK15/RAEX	XFC	-
1975-018	2442469-88	1975 Feb 26 0900:00	Veskhod 11A57	-	77019 -750	6.010	RUSN	05	G	Sat LE0 0	AK15/RAEX	XFC	-
1975-018	2442483-87	1975 Mar 12 0855:00	Soyuz-U	-	76041 -851	6.860	RUSN	05	G	Sat LE0 0	AK15/RAEX	XFC	-
1975-018	2442492-78	1975 Mar 21 0850:00	Veskhod 11A57	-	76041 -199	6.030	RUSN	05	G	Sat LE0 0	AK15/RAEX	XFC	-
1975-021	2442498-83	1975 Mar 27 0800:00	Veskhod 11A57	-	78031 -781	6.010	RUSN	05	G	Sat LE0 0	AK15/RAEX	XFC	-
1975-021	2442504-02	1975 Mar 27 0800:00	Veskhod 11A57	-	76041 -366	1.280	RUSN	05	G	Sat LE0 0	AK15/RAEX	XFC	-
1975-022	2442507-96	1975 Apr 1 1230:00	Veskhod 8A92M	-	K 15000-023	4.130	RUSN	05	G	Sat LSS 0	AK15/RAEX	XFC	-
1975-022	2442517-25	1975 Apr 5 1104:54	Soyuz 11A511	ML	76043 -531	2.078	RUSN	05	G	Sat MOL 00 1	AK15/RAEX	XFC	-
1975-030	2442518-83	1975 Apr 14 1259:59	Molniya 8K78M	-	76041 -849	6.010	RUSN	05	G	Sat LE0 0	AK15/RAEX	XFC	-
1975-031	2442520-92	1975 Apr 16 0800:01	Soyuz-U	-	77016 -212	6.030	RUSN	05	G	Sat LE0 0	AK15/RAEX	XFC	-
1975-031	2442526-84	1975 Apr 18 1000	Veskhod 11A57	-	76041 -788	6.010	RUSN	05	G	Sat LE0 0	AK15/RAEX	XFC	-
1975-036	2442531-93	1975 Apr 24 0804:59	Veskhod 11A57	-	M 15000-064	1.978	RUSN	05	G	Sat MOL 00 1	AK15/RAEX	XFC	-
1975-041	2442553-79	1975 May 21 0659:32	Molniya 8K78M	-	78031 -195	6.030	RUSN	05	G	Sat LE0 0	AK15/RAEX	XFC	-
1975-044	2442557-12	1975 May 24 1458:10	Soyuz 11A511	-	F 15000-033	6.800	RUSN	05	G	Sat LSS 0	AK15/RAEX	XFC	-
1975-047	2442560-81	1975 May 28 0729:59	Veskhod 11A57	-	77016 -215	6.010	RUSN	05	G	Sat LE0 0	AK15/RAEX	XFC	-
1975-048	2442562-78	1975 May 30 0645	Veskhod 11A57	-	76029 -756	6.030	RUSN	05	G	Sat LE0 0	AK15/RAEX	XFC	-
1975-049	2442568-57	1975 Jun 5 0137:59	Molniya 8K78M	ML	76041 -579	2.000	RUSN	05	G	Sat MOL 00 1	AK15/RAEX	XFC	-
1975-053	2442576-02	1975 Jun 12 1230:27	Soyuz-U	-	76041 -850	6.010	RUSN	05	G	Sat LE0 0	AK15/RAEX	XFC	-

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	OrbPlay	Agency	Launch_Code	Group	Category	LTCite	Cite	Notes
1975-066	2442583-79	1975 Jun 20 0654	Vostok 8A92M	-	76043-324	1.750	RUSN	DS	G	Sat LE0 0	AK15/RAEX	XFC	-
1975-069	2442589-04	1975 Jun 25 1259:58	Voskhod 11A57	-	76041-785	6.010	RUSN	DS	G	Sat LE0 0	AK15/RAEX	XFC	-
1975-061	2442591-04	1975 Jun 27 1300	Voskhod 11A57	-	76041-198	6.030	RUSN	DS	G	Sat LE0 0	AK15/RAEX	XFC	-
1975-061	2442597-07	1975 Jul 3 1340	Voskhod 11A57	-	76041-776	6.010	RUSN	DS	G	Sat LE0 0	AK15/RAEX	XFC	-
1975-063	2442601-71	1975 Jul 8 0505	Molnlya 8K78M	ML	78019-562	1.978	RUSN	DS	G	Sat MOL 00 1	AK15/RAEX	XFC	-
1975-064	2442604-68	1975 Jul 11 0415:00	Vostok 8A92M	-	77016-383	1.500	RUSN	DS	G	Sat LE0 0	PL-WNH	XFC	-
1975-064	2442609-01	1975 Jul 15 1220:00	Soyuz-U	-	F 15000-017	6.800	RUSN	DS	G	Sat LE0 0	IK9204-71	-	-
1975-068	2442617-04	1975 Jul 31 1300	Voskhod 11A57	-	76041-200	6.400	RUSN	DS	G	Sat LE0 0	AK15/RAEX	XFC	-
1975-071	2442625-04	1975 Jul 31 1300	Voskhod 11A57	-	76041-786	6.010	RUSN	DS	G	Sat LE0 0	AK15/RAEX	XFC	-
1975-076	2442637-81	1975 Aug 22 0210:59	Vostok 8A92M	-	76031-752	6.010	RUSN	DS	G	Sat LE0 0	AK15/RAEX	XFC	-
1975-078	2442646-59	1975 Aug 27 1446	Voskhod 11A57	-	76041-757	6.010	RUSN	DS	G	Sat LE0 0	AK15/RAEX	XFC	-
1975-079	2442652-11	1975 Sep 2 1309	Molnlya 8K78M	ML	78031-571	1.978	RUSN	DS	G	Sat MOL 00 1	AK15/RAEX	XFC	-
1975-080	2442661-12	1975 Sep 5 1449:59	Soyuz-U	-	A 15000-016	6.600	RUSN	DS	G	Sat LE0 0	IK9204-71	-	-
1975-081	2442664-51	1975 Sep 9 0019:06	Molnlya 8K78M	ML	76029-560	1.978	RUSN	DS	G	Sat MOL 00 1	AK15/RAEX	XFC	-
1975-084	2442677-88	1975 Sep 12 0650	Soyuz-U	-	77016-662	6.050	RUSN	DS	G	Sat LE0 0	AK15/RAEX	XFC	-
1975-084	2442678-16	1975 Sep 16 0900:00	Voskhod 11A57	-	76041-789	6.010	RUSN	DS	G	Sat LE0 0	AK15/RAEX	XFC	-
1975-087	2442673-51	1975 Sep 18 0012	Vostok 8A92M	-	76029-354	1.280	RUSN	DS	G	Sat LE0 0	PL-WNH	XFC	-
1975-088	2442676-92	1975 Sep 23 0959:59	Voskhod 11A57	-	77016-214	6.100	RUSN	DS	G	Sat LE0 0	AK15/RAEX	XFC	-
1975-090	2442680-91	1975 Sep 25 0949:59	Soyuz-U	-	F 15000-021	6.850	RUSN	DS	G	Sat LE0 0	IK9204-71	-	-
1975-093	2442684-68	1975 Sep 25 0415:00	Soyuz-U	-	77016-011	6.100	RUSN	DS	G	Sat LE0 0	IK9204-71	-	-
1975-096	2442686-86	1975 Oct 1 0830:00	Voskhod 11A57	-	76041-790	6.030	RUSN	DS	G	Sat LE0 0	IK9204-71	-	-
1975-101	2442703-10	1975 Oct 17 1429:59	Voskhod 11A57	-	77016-216	6.010	RUSN	DS	G	Sat LE0 0	AK15/RAEX	XFC	-
1975-104	2442721-14	1975 Nov 4 1619:58	Voskhod 11A57	-	76041-791	6.030	RUSN	DS	G	Sat LE0 0	AK15/RAEX	XFC	-
1975-105	2442731-30	1975 Nov 14 1913:58	Molnlya 8K78M	ML	76041-588	2.078	RUSN	DS	G	Sat MOL 00 1	IK9204-71	-	-
1975-106	2442734-11	1975 Nov 17 1436:57	Soyuz-U	-	K 15000-16	6.800	RUSN	DS	G	Sat LSS 0	AK15/RAEX	XFC	-
1975-108	2442737-89	1975 Nov 21 0920:00	Voskhod 11A57	-	77016-213	6.030	RUSN	DS	G	Sat LE0 0	AK15/RAEX	XFC	-
1975-110	2442742-21	1975 Nov 26 1700	Soyuz-U	-	F 15000-022	6.260	RUSN	DS	G	Sat LE0 0	IK9204-71	-	-
1975-113	2442749-92	1975 Dec 3 1000	Voskhod 11A57	-	76041-201	6.030	RUSN	DS	G	Sat LE0 0	IK9204-71	-	-
1975-120	2442762-91	1975 Dec 16 0950:00	Voskhod 11A57	-	76041-792	6.010	RUSN	DS	G	Sat LE0 0	AK15/RAEX	XFC	-
1975-121	2442763-96	1975 Dec 17 1106:01	Molnlya 8K78M	ML	78031-567	1.978	RUSN	DS	G	Sat MOL 00 1	AK15/RAEX	XFC	-
1975-122	2442765-59	1975 Dec 22 0200:00	Molnlya 8K78M	SOL	76041-575	1.233	RUSN	DS	G	Sat DSO 00 1	AK15/RAEX	XFC	-
1975-124	2442772-29	1975 Dec 25 1900:00	Vostok 8A92M	-	76041-388	1.280	RUSN	DS	G	Sat MOL 00 1	PL-WNH	XFC	-
1975-125	2442773-93	1975 Dec 27 1022:02	Molnlya 8K78M	ML	F 15000-142	2.078	RUSN	DS	G	Sat MOL 00 1	IK9204-71	-	-
1975-126	2442785-15	1976 Jan 22 1534:58	Voskhod 11A57	-	76041-793	6.010	RUSN	DS	G	Sat LE0 0	AK15/RAEX	XFC	-
1975-068	2442789-96	1976 Jan 22 1138:00	Molnlya 8K78M	ML	76029-559	1.978	RUSN	DS	G	Sat MOL 00 1	AK15/RAEX	XFC	-
1975-069	2442806-86	1976 Jan 29 0850:00	Voskhod 11A57	-	77016-218	6.400	RUSN	DS	G	Sat LE0 0	AK15/RAEX	XFC	-
1975-013	2442819-87	1976 Feb 11 0850:00	Voskhod 11A57	-	77016-668	6.000	RUSN	DS	G	Sat LE0 0	IK9204-71	-	-
1975-016	2442823-06	1976 Feb 20 1401:02	Soyuz-U	-	K 15000-013	6.010	RUSN	DS	G	Sat LE0 0	AK15/RAEX	XFC	-
1975-021	2442847-83	1976 Mar 10 0800:00	Soyuz-U	-	78026-666	6.010	RUSN	DS	G	Sat LE0 0	AK15/RAEX	XFC	-
1975-021	2442849-32	1976 Mar 14 1946	Molnlya 8K78M	ML	78031-575	1.978	RUSN	DS	G	Sat MOL 00 1	AK15/RAEX	XFC	-
1975-024	2442851-22	1976 Mar 19 1472	Vostok 8A92M	-	78026-257	1.750	RUSN	DS	G	Sat LE0 0	IK9204-71	-	-
1975-028	2442855-99	1976 Mar 19 0815:00	Soyuz-U	-	78026-252	5.490	RUSN	DS	G	Sat LE0 0	AK15/RAEX	XFC	-
1975-028	2442861-31	1976 Mar 26 1650	Molnlya 8K78M	ML	78029-558	1.978	RUSN	DS	G	Sat MOL 00 1	AK15/RAEX	XFC	-
1975-028	2442864-12	1976 Mar 26 1500	Voskhod 11A57	-	77016-666	6.010	RUSN	DS	G	Sat LE0 0	AK15/RAEX	XFC	-
1975-029	2442869-05	1976 Mar 31 1305:03	Soyuz 8A92M	-	76029-386	6.010	RUSN	DS	G	Sat LE0 0	AK15/RAEX	XFC	-
1975-032	2442877-95	1976 Apr 9 0805:00	Vostok 8A92M	-	76041-794	6.280	RUSN	DS	G	Sat LE0 0	AK15/RAEX	XFC	-
1975-036	2442896-95	1976 Apr 28 0930	Voskhod 11A57	-	77016-217	1.880	RUSN	DS	G	Sat LE0 0	PL-WNH	XFC	-
1975-040	2442903-80	1976 May 12 1757	Voskhod 11A57	-	76041-754	6.400	RUSN	DS	G	Sat LE0 0	AK15/RAEX	XFC	-
1975-041	2442911-25	1976 May 12 1957	Voskhod 11A57	-	77016-665	6.010	RUSN	DS	G	Sat LE0 0	AK15/RAEX	XFC	-
1975-041	2442914-26	1976 May 15 1330	Molnlya 8K78M	ML	77016-558	2.078	RUSN	DS	G	Sat MOL 00 1	IK9204-71	-	-
1975-046	2442919-86	1976 May 20 0900:00	Vostok 8A92M	-	76043-388	1.978	RUSN	DS	G	Sat LE0 0	IK9204-71	-	-
1975-046	2442921-88	1976 May 20 0900:00	Vostok 8A92M	-	77016-219	6.400	RUSN	DS	G	Sat LE0 0	IK9204-71	-	-
1975-046	2442923-88	1976 May 21 0700:00	Soyuz-U	-	76043-022	6.400	RUSN	DS	G	Sat LE0 0	IK9204-71	-	-
1975-046	2442924-88	1976 May 26 0900	Soyuz-U	-	77016-669	6.010	RUSN	DS	G	Sat LE0 0	IK9204-71	-	-
1975-052	2442937-78	1976 Jun 8 0700:00	Voskhod 11A57	-	77016-667	6.010	RUSN	DS	G	Sat LE0 0	AK15/RAEX	XFC	-
1975-058	2442946-01	1976 Jun 16 1309:58	Voskhod 11A57	-	77016-654	6.010	RUSN	DS	G	Sat LE0 0	AK15/RAEX	XFC	-
1975-058	2442953-80	1976 Jun 24 0710:01	Soyuz-U	-	78026-220	6.400	RUSN	DS	G	Sat LE0 0	AK15/RAEX	XFC	-
1975-062	2442958-81	1976 Jun 29 0720:00	Voskhod 11A57	-	77016-661	6.010	RUSN	DS	G	Sat LE0 0	AK15/RAEX	XFC	-
1975-062	2442960-84	1976 Jul 1 0805:38	Molnlya 8K78M	ML	77016-594	1.978	RUSN	DS	G	Sat MOL 00 1	IK9204-71	-	-
1975-064	2442966-01	1976 Jul 6 1208:45	Soyuz 11A511	-	F 15000-034	6.800	RUSN	DS	G	Sat LSS 0	AK15/RAEX	XFC	-
1975-064	2442973-88	1976 Jul 14 0900	Soyuz-U	-	78026-221	6.400	RUSN	DS	G	Sat LE0 0	IK9204-71	-	-
1975-072	2442982-15	1976 Jul 23 1540:01	Soyuz-U	-	78026-959	6.400	RUSN	DS	G	Sat LE0 0	IK9204-71	-	-
1975-074	2442983-16	1976 Jul 23 1549:00	Molnlya 8K78M	ML	78029-556	1.978	RUSN	DS	G	Sat MOL 00 1	AK15/RAEX	XFC	-
1975-079	2442995-07	1976 Aug 4 1340	Soyuz-U	-	78026-668	6.030	RUSN	DS	G	Sat LE0 0	AK15/RAEX	XFC	-
1975-082	2443003-06	1976 Aug 12 1330	Soyuz-U	-	76042-241	6.030	RUSN	DS	G	Sat LE0 0	AK15/RAEX	XFC	-
1975-086	2443018-11	1976 Aug 27 1434:58	Vostok 8A92M	-	78026-385	1.750	RUSN	DS	G	Sat LE0 0	AK15/RAEX	XFC	-
1975-086	2443024-84	1976 Aug 28 0900:00	Soyuz-U	-	76042-690	6.010	RUSN	DS	G	Sat LE0 0	AK15/RAEX	XFC	-
1975-088	2443022-64	1976 Sep 3 0323	Molnlya 8K78M	ML	78026-665	6.010	RUSN	DS	G	Sat MOL 00 1	IK9204-71	-	-
1975-093	2443036-91	1976 Sep 15 0948:30	Soyuz-U	-	F 15000-069	6.800	RUSN	DS	G	Sat LSS 0	AK15/RAEX	XFC	-
1975-096	2443042-99	1976 Sep 21 1140	Soyuz-U	-	78026-662	6.050	RUSN	DS	G	Sat LE0 0	AK15/RAEX	XFC	-
1975-096	2443046-12	1976 Sep 22 0930:00	Soyuz-U	-	76042-240	6.030	RUSN	DS	G	Sat LE0 0	AK15/RAEX	XFC	-
1975-097	2443043-96	1976 Sep 24 1500	Soyuz-U	-	78026-669	6.010	RUSN	DS	G	Sat LE0 0	AK15/RAEX	XFC	-
1975-F02	2443051-96	1976 Oct 4 1100	Soyuz-U	-	F 15000-056	6.010	RUSN	DS	G	Sat LSS 0	AK15/RAEX	XFC	-
1975-099	2443061-90	1976 Oct 10 0935	Soyuz-U	-	78026-664	6.800	RUSN	DS	G	Sat LE0 0	AK15/RAEX	XFC	-
1975-100	2443066-24	1976 Oct 14 1739:18	Soyuz 11A511	-	F 15000-035	1.280	RUSN	DS	G	Sat LE0 0	PL-WNH	XFC	-
1975-102	2443067-46	1976 Oct 15 2259:38	Vostok 8A92M	-	76041-370	1.578	RUSN	DS	G	Sat MOL 00 1	IK9204-71	-	-
1975-106	2443073-88	1976 Oct 22 0911:59	Molnlya 8K78M	2BL	78026-686	6.010	RUSN	DS	G	Sat LE0 0	AK15/RAEX	XFC	-
1975-106	2443077-10	1976 Oct 25 1430	Soyuz-U	-	78026-223	5.400	RUSN	DS	G	Sat LE0 0	AK15/RAEX	XFC	-
1975-109	2443083-97	1976 Nov 1 1120	Soyuz-U	-	78026-673	6.010	RUSN	DS	G	Sat LE0 0	AK15/RAEX	XFC	-
1975-111	2443106-19	1976 Nov 11 1045	Soyuz-U	-	F 15000-052	6.300	RUSN	DS	G	Sat LE0 0	AK15/RAEX	XFC	-
1975-111	2443107-67	1976 Nov 25 0359:00	Molnlya 8K78M	SOL	F 15000-163	1.258	RUSN	DS	G	Sat DSO 00 1	AK15/RAEX	XFC	-
1975-114	2443112-17	1976 Nov 29 1600:00	Soyuz-U	-	F 15000-071	6.850	RUSN	DS	G	Sat LE0 0	IK9204-71	-	-
1975-116	2443114-61	1976 Dec 2 0244:57	Molnlya 8K78M	ML	78026-657	1.978	RUSN	DS	G	Sat MOL 00 1	AK15/RAEX	XFC	-

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	OrbPay	Agency	Launch_Code	Group	Category	LTCsite	Cite	Notes
1976-119	2443121-92	1976 Dec 9 1000	Soyuz-U	-	76042-238	5.400	RUSN	05	G	Sat LE0 0	AK15/RAEX	XFC	-
1976-123	2443129-90	1976 Dec 17 0930:00	Soyuz-U	-	76026-674	2.078	RUSN	05	G	Sat LE0 0	AK15/RAEX	XFC	-
1976-127	2443140-78	1976 Dec 28 0638	Molniya 8K78M	ML	76042-602	2.078	RUSN	05	G	Sat MOL 00 1	AK15/RAEX	XFC	-
1977-001	2443149-90	1977 Jan 6 0940:00	Soyuz-U	-	76026-675	6.010	RUSN	05	G	Sat LE0 0	AK15/RAEX	XFC	-
1977-002	2443150-47	1977 Jan 6 2317	Vostok 8A92M	-	76042-380	1.500	RUSN	05	G	Sat LE0 0	PL-WNH	XFC	-
1977-003	2443163-85	1977 Jan 20 0830:00	Soyuz-U	-	76026-224	5.400	RUSN	05	G	Sat LE0 0	AK15/RAEX	XFC	-
1977-004	2443162-17	1977 Feb 7 1611:50	Soyuz-U	-	E 15000-092	6.800	RUSN	05	G	Sat LSS 0	AK15	IK9703-47	-
1977-009	2443183-98	1977 Feb 9 1130	Soyuz-U	-	76026-667	6.010	RUSN	05	G	Sat LE0 0	AK15/RAEX	XFC	-
1977-010	2443186-12	1977 Feb 11 1457	Molniya 8K78M	ML	76041-577	1.978	RUSN	05	G	Sat MOL 00 1	AK15/RAEX	XFC	-
1977-011	2443196-89	1977 Feb 22 0919	Soyuz-U	-	77052-672	5.675	RUSN	05	G	Sat LE0 0	AK15/RAEX	XFC	-
1977-015	2443201-39	1977 Feb 26 2118	Vostok 8A92M	-	77052-381	1.750	RUSN	05	G	Sat LE0 0	AK15/RAEX	XFC	-
1977-016	2443205-94	1977 Mar 3 1030	Soyuz-U	-	77052-023	6.300	RUSN	05	G	Sat LE0 0	AK15/RAEX	XFC	-
1977-017	2443212-96	1977 Mar 10 1100	Soyuz-U	-	77052-670	6.010	RUSN	05	G	Sat LE0 0	AK15/RAEX	XFC	-
1977-020	2443219-85	1977 Mar 17 0830	Soyuz-U	-	77052-235	6.030	RUSN	05	G	Sat LE0 0	AK15/RAEX	XFC	-
1977-021	2443226-99	1977 Mar 24 1151	Molniya 8K78M	ML	76042-589	1.978	RUSN	05	G	Sat MOL 00 1	AK15/RAEX	XFC	-
1977-022	2443236-59	1977 Apr 5 0265:00	Vostok 8A92M	-	76026-348	1.260	RUSN	05	G	Sat LE0 0	PL-WNH	XFC	-
1977-024	2443240-87	1977 Apr 7 0859	Soyuz-U	-	76026-671	6.010	RUSN	05	G	Sat LE0 0	AK15/RAEX	XFC	-
1977-027	2443244-57	1977 Apr 11 0138	Molniya 8K78M	2BL	E 15000-160	1.578	RUSN	05	G	Sat MOL 00 1	AK15/RAEX	XFC	-
1977-028	2443253-86	1977 Apr 20 0900	Soyuz-U	-	76042-236	5.400	RUSN	05	G	Sat LE0 0	AK15/RAEX	XFC	-
1977-030	2443260-11	1977 Apr 26 1446	Soyuz-U	-	E 15000-031	6.400	RUSN	05	G	Sat LE0 0	AK15/RAEX	XFC	-
1977-032	2443261-86	1977 Apr 28 0910	Molniya 8K78M	ML	76026-604	2.078	RUSN	05	G	Sat MOL 00 1	IK9716-91	XFC	-
1977-033	2443269-08	1977 May 5 1400	Soyuz-U	-	76042-667	6.010	RUSN	05	G	Sat LE0 0	AK15/RAEX	XFC	-
1977-038	2443280-92	1977 May 17 1010:00	Soyuz-U	-	76042-668	6.010	RUSN	05	G	Sat LE0 0	AK15/RAEX	XFC	-
1977-043	2443289-79	1977 May 26 0700	Soyuz-U	-	78018-034	6.100	RUSN	05	G	Sat LE0 0	IK96-26-40	XFC	-
1977-044	2443294-81	1977 May 31 0730:00	Soyuz-U	-	76042-237	6.030	RUSN	05	G	Sat LE0 0	AK15/RAEX	XFC	-
1977-046	2443303-06	1977 Jun 8 1400	Soyuz-U	-	76042-669	6.010	RUSN	05	G	Sat LE0 0	AK15/RAEX	XFC	-
1977-048	2443304-83	1977 Jun 10 0800	Soyuz-U	-	76026-863	6.050	RUSN	05	G	Sat LE0 0	AK15/RAEX	XFC	-
1977-049	2443310-56	1977 Jun 16 0158	Molniya 8K78M	2BL	D 15000-162	1.578	RUSN	05	G	Sat MOL 00 1	IK9715-46	XFC	-
1977-052	2443316-63	1977 Jun 22 0800:00	Soyuz-U	-	76042-661	6.010	RUSN	05	G	Sat LE0 0	AK15/RAEX	XFC	-
1977-054	2443316-74	1977 Jun 24 0841	Molniya 8K78M	ML	76041-560	1.978	RUSN	05	G	Sat MOL 00 1	AK15/RAEX	XFC	Kosmodrom-15
1977-057	2443324-27	1977 Jun 28 1834	Vostok 8A92M	-	77016-352	1.260	RUSN	05	G	Sat SSO 0	IK9617-56	XFC	-
1977-058	2443325-06	1977 Jun 30 1400	Soyuz-U	-	76042-239	5.400	RUSN	05	G	Sat LE0 0	AK15/RAEX	XFC	-
1977-061	2443331-81	1977 Jul 1 0726	Vostok 8A92M	-	76041-567	6.100	RUSN	05	G	Sat LE0 0	AK15/RAEX	XFC	-
1977-063	2443335-86	1977 Jul 12 0900	Soyuz-U	-	76042-662	6.100	RUSN	05	G	Sat MOL 00 1	AK15/RAEX	XFC	-
1977-068	2443344-70	1977 Jul 20 0444	Molniya 8K78M	2BL	77052-669	6.100	RUSN	05	G	Sat MOL 00 1	AK15/RAEX	XFC	-
1977-069	2443344-62	1977 Jul 20 0735	Soyuz-U	-	76042-693	6.100	RUSN	05	G	Sat LE0 0	AK15/RAEX	XFC	-
1977-072	2443352-25	1977 Jul 21 1807	Soyuz-U	-	E 15000-082	6.300	RUSN	05	G	Sat LE0 0	AK15/RAEX	XFC	-
1977-073	2443355-35	1977 Jul 23 0800	Soyuz-U	-	77052-244	6.400	RUSN	05	G	Sat LE0 0	AK15/RAEX	XFC	-
1977-074	2443359-06	1977 Aug 3 1401	Soyuz-U	-	D 15000-113	6.260	RUSN	05	G	Sat LE0 0	IK96-26-34	IK9609-68	-
1977-078	2443365-94	1977 Aug 10 1040	Soyuz-U	-	76042-684	6.765	RUSN	05	G	Sat LE0 0	AK15/RAEX	XFC	-
1977-078	2443365-10	1977 Aug 10 1428:59	Soyuz-U	-	76042-695	6.100	RUSN	05	G	Sat LE0 0	AK15/RAEX	XFC	-
1977-081	2443382-92	1977 Aug 21 1009	Soyuz-U	-	78018-150	5.400	RUSN	05	G	Sat LE0 0	AK15/RAEX	XFC	-
1977-082	2443388-25	1977 Aug 30 1806	Molniya 8K78M	ML	76016-555	1.978	RUSN	05	G	Sat MOL 00 1	AK15/RAEX	XFC	-
1977-083	2443389-56	1977 Sep 2 0900	Soyuz-U	-	76038-965	6.100	RUSN	05	G	Sat LE0 0	IK96-26-40	XFC	-
1977-085	2443393-23	1977 Sep 3 1730	Soyuz-U	-	76038-941	6.800	RUSN	05	G	Sat LE0 0	AK15/RAEX	XFC	-
1977-086	2443403-13	1977 Sep 13 1510	Soyuz-U	-	76038-911	6.400	RUSN	05	G	Sat LE0 0	AK15/RAEX	XFC	-
1977-089	2443408-10	1977 Sep 20 0156:59	Soyuz-U	-	76038-911	6.400	RUSN	05	G	Sat LE0 0	AK15/RAEX	XFC	-
1977-091	2443408-14	1977 Sep 22 0361:00	Molniya 8K78M	SOL	78022-393	1.750	RUSN	05	G	Sat LE0 0	AK15/RAEX	XFC	-
1977-093	2443408-54	1977 Sep 26 0946:00	Soyuz-U	-	E 15000-163	1.238	RUSN	05	G	Sat SSO 00 1	AK15/RAEX	XFC	-
1977-094	2443415-61	1977 Oct 9 0246:00	Soyuz-U	-	D 15000-103	6.400	RUSN	05	G	Sat LE0 0	AK15/RAEX	XFC	-
1977-099	2443425-61	1977 Oct 11 1514	Soyuz-U	-	E 15000-099	6.800	RUSN	05	G	Sat LE0 0	AK15/RAEX	XFC	-
1977-105	2443444-57	1977 Oct 28 0137	Molniya 8K78M	ML	77052-698	2.078	RUSN	05	G	Sat MOL 00 1	AK15/RAEX	XFC	-
1977-110	2443462-10	1977 Dec 4 1200	Soyuz-U	-	77052-698	6.800	RUSN	05	G	Sat LE0 0	AK15/RAEX	XFC	-
1977-113	2443487-55	1977 Dec 10 0118:40	Soyuz-U	-	D 15000-093	6.800	RUSN	05	G	Sat LE0 0	AK15/RAEX	XFC	-
1977-115	2443489-90	1977 Dec 12 0940:00	Soyuz-U	-	78018-106	6.030	RUSN	05	G	Sat LE0 0	AK15/RAEX	XFC	-
1977-117	2443489-16	1977 Dec 14 0930:00	Vostok 8A92M	-	78018-305	1.500	RUSN	05	G	Sat LE0 0	PL-WNH	XFC	-
1977-120	2443490-89	1977 Dec 20 1550	Soyuz-U	-	77052-699	6.030	RUSN	05	G	Sat LE0 0	AK15/RAEX	XFC	-
1977-124	2443504-89	1977 Dec 27 0920	Soyuz-U	-	77052-703	6.100	RUSN	05	G	Sat LE0 0	AK15/RAEX	XFC	-
1978-001	2443515-16	1978 Jan 6 1550	Soyuz-U	-	77052-702	6.100	RUSN	05	G	Sat LE0 0	AK15/RAEX	XFC	-
1978-003	2443519-02	1978 Jan 10 1226:00	Soyuz-U	-	D 15000-106	6.800	RUSN	05	G	Sat LSS 0	IK92004-71	XFC	-
1978-004	2443519-06	1978 Jan 10 1323	Vostok 8A92M	-	78026-394	1.750	RUSN	05	G	Sat LE0 0	AK15/RAEX	XFC	-
1978-006	2443522-14	1978 Jan 13 1515	Soyuz-U	-	E 15000-075	5.400	RUSN	05	G	Sat LE0 0	AK15/RAEX	XFC	-
1978-008	2443528-85	1978 Jan 20 0824:40	Soyuz-U	-	E 15000-075	9.397	RUSN	05	G	Sat LSS 0	IK9807-46	XFC	-
1978-009	2443532-79	1978 Jan 24 0851	Molniya 8K78M	ML	78026-596	2.078	RUSN	05	G	Sat MOL 00 1	IK9815-26	XFC	-
1978-010	2443532-91	1978 Jan 24 0950:00	Soyuz-U	-	77052-700	6.100	RUSN	05	G	Sat LE0 0	AK15/RAEX	XFC	-
1978-013	2443548-01	1978 Jan 31 1450	Soyuz-U	-	77052-703	6.050	RUSN	05	G	Sat LE0 0	AK15/RAEX	XFC	-
1978-015	2443548-01	1978 Feb 8 1215	Soyuz-U	-	77052-875	6.100	RUSN	05	G	Sat LE0 0	AK15/RAEX	XFC	-
1978-017	2443553-90	1978 Feb 14 0930:00	Soyuz-U	-	77052-701	6.100	RUSN	05	G	Sat LE0 0	AK15/RAEX	XFC	-
1978-023	2443570-14	1978 Mar 2 1528:10	Soyuz-U	-	D 15000-132	6.800	RUSN	05	G	Sat LSS 0	IK92004-71	XFC	-
1978-025	2443570-42	1978 Mar 2 2207	Molniya 8K78M	ML	76041-561	1.978	RUSN	05	G	Sat MOL 00 1	AK15/RAEX	XFC	-
1978-027	2443577-95	1978 Mar 4 0740:00	Soyuz-U	-	78026-242	5.400	RUSN	05	G	Sat LE0 0	AK15/RAEX	XFC	-
1978-030	2443584-95	1978 Mar 10 1042	Soyuz-U	-	78018-107	6.100	RUSN	05	G	Sat LE0 0	AK15/RAEX	XFC	-
1978-033	2443597-83	1978 Mar 30 0750:00	Soyuz-U	-	78018-705	6.100	RUSN	05	G	Sat LE0 0	AK15/RAEX	XFC	-
1978-036	2443603-12	1978 Mar 30 0750:00	Soyuz-U	-	78018-705	6.850	RUSN	05	G	Sat LE0 0	AK15/RAEX	XFC	-
1978-037	2443604-88	1978 Apr 6 0910	Soyuz-U	-	D 15000-123	6.100	RUSN	05	G	Sat LE0 0	AK15/RAEX	XFC	-
1978-040	2443619-15	1978 Apr 20 1530	Soyuz-U	-	78018-109	5.400	RUSN	05	G	Sat LE0 0	AK15/RAEX	XFC	-
1978-045	2443634-15	1978 May 5 1530	Soyuz-U	-	78018-706	6.030	RUSN	05	G	Sat LE0 0	AK15/RAEX	XFC	-
1978-048	2443640-67	1978 May 12 0407	Vostok 8A92M	-	78018-309	1.750	RUSN	05	G	Sat LE0 0	AK15/RAEX	XFC	-
1978-054	2443644-94	1978 May 16 1040	Soyuz-U	-	78018-707	6.100	RUSN	05	G	Sat LE0 0	AK15/RAEX	XFC	-
1978-052	2443651-81	1978 May 23 0730	Soyuz-U	-	77025-046	6.100	RUSN	05	G	Sat LE0 0	AK15/RAEX	XFC	-
1978-054	2443654-10	1978 May 25 1430	Soyuz-U	-	76038-112	5.400	RUSN	05	G	Sat LE0 0	AK15/RAEX	XFC	-
1978-055	2443662-01	1978 Jun 2 1212	Molniya 8K78M	ML	78026-595	1.978	RUSN	05	G	Sat MOL 00 1	AK15/RAEX	XFC	-
1978-057	2443669-86	1978 Jun 10 0835:00	Soyuz-U	-	78018-711	6.100	RUSN	05	G	Sat LE0 0	AK15/RAEX	XFC	-
1978-059	2443671-94	1978 Jun 12 1030	Soyuz-U	-	78018-708	6.100	RUSN	05	G	Sat LE0 0	AK15/RAEX	XFC	-



Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	OrbPay	Agency	Launch_Code	Group	Category	LTCsite	Cite	Notes
1979-092	2444169-02	1979 Oct 22 1230	Soyuz-U	-	76047-445	6.300	RUSN	05	G	Sat LE0 0	AK15/RAEX	XFC	-
1979-093	2444173-26	1979 Oct 26 1812	Vostok 8A92M	-	78018-306 ?	1.750	RUSN	05	G	Sat LE0 0	AK15/RAEX	XFC	-
1979-096	2444177-89	1979 Oct 31 0925:00	Vostok 8A92M	-	78055-328	1.500	RUSN	05	G	Sat LE0 0	PL-WM	XFC	-
1979-097	2444180-17	1979 Nov 2 1600	Soyuz-U	-	76047-959	6.600	RUSN	05	G	Sat LE0 0	AK15/RAEX	XFC	-
1979-099	2444204-91	1979 Nov 27 0955	Vostok 8A92M	-	78055-327	1.750	RUSN	05	G	Sat LE0 0	AK15/RAEX	XFC	-
1979-102	2444220-02	1979 Dec 12 1238:50	Soyuz-U	-	76047-442	6.300	RUSN	05	G	Sat LE0 0	AK15/RAEX	XFC	-
1979-103	2444224-02	1979 Dec 16 1239:50	Soyuz-U	-	78018-912	6.850	RUSN	05	G	Sat LE0 0	AK15/RAEX	XFC	-
1979-106	2444236-04	1979 Dec 28 1300	Soyuz-U	-	76047-760	6.100	RUSN	05	G	Sat LE0 0	AK15/RAEX	XFC	-
1980-001	2444248-01	1980 Jan 9 1215	Soyuz-U	-	76047-443	6.300	RUSN	05	G	Sat LE0 0	AK15/RAEX	XFC	-
1980-002	2444250-02	1980 Jan 11 1228	Molniya 8K78M	ML	78018-914	1.978	RUSN	05	G	Sat LE0 0	AK15/RAEX	XFC	-
1980-006	2444263-16	1980 Jan 24 1545	Molniya 8K78M	-	76038-905	6.600	RUSN	05	G	Sat LE0 0	AK15/RAEX	XFC	-
1980-008	2444269-04	1980 Jan 30 1251	Vostok 8A92M	-	78055-329	1.750	RUSN	05	G	Sat LE0 0	AK15/RAEX	XFC	-
1980-009	2444276-96	1980 Feb 7 1100	Soyuz-U	-	78017-452	6.300	RUSN	05	G	Sat LE0 0	AK15/RAEX	XFC	-
1980-013	2444281-54	1980 Feb 12 0052:37	Molniya 8K78M	-	78055-552	7.378	RUSN	05	G	Sat LE0 0	AK15/RAEX	XFC	-
1980-017	2444291-00	1980 Feb 21 1200	Soyuz-U	2BL	76038-713	6.100	RUSN	05	G	Sat LE0 0	AK15/RAEX	XFC	-
1980-020	2444302-94	1980 Mar 4 1030	Soyuz-U	-	78017-447	6.300	RUSN	05	G	Sat LE0 0	AK15/RAEX	XFC	-
1980-021	2444317-17	1980 Mar 16 1601	Vostok 8A92M	-	78055-330	6.000	RUSN	05	G	Sat LE0 0	AK15/RAEX	XFC	-
1980-024	2444326-29	1980 Mar 27 1653:31	Soyuz-U	-	Zh15000-200	9.009	RUSN	05	G	Sat LE0 0	Sergeev96	XFC	-
1980-025	2444330-83	1980 Apr 1 0800	Soyuz-U	-	77025-734	6.800	RUSN	05	G	Sat LE0 0	AK15/RAEX	XFC	-
1980-027	2444339-07	1980 Apr 9 1338:22	Soyuz-U	-	Zh15000-189	6.300	RUSN	05	G	Sat LE0 0	AK15/RAEX	XFC	-
1980-028	2444342-36	1980 Apr 12 2017:57	Molniya 8K78M	2BL	77025-526	1.578	RUSN	05	G	Sat LE0 0	AK15/RAEX	XFC	-
1980-029	2444346-85	1980 Apr 17 0830	Soyuz-U	-	77025-735	2.078	RUSN	05	G	Sat LE0 0	AK15/RAEX	XFC	-
1980-031	2444348-23	1980 Apr 27 0624:11	Molniya 8K78M	ML	Zh15000-210	9.030	RUSN	05	G	Sat LE0 0	AK15/RAEX	XFC	-
1980-033	2444356-77	1980 Apr 28 1530	Soyuz-U	-	78017-449	6.600	RUSN	05	G	Sat LE0 0	AK15/RAEX	XFC	-
1980-035	2444359-06	1980 Apr 29 1300	Soyuz-U	-	78017-448	6.680	RUSN	05	G	Sat LE0 0	AK15/RAEX	XFC	-
1980-038	2444367-04	1980 May 7 1300	Soyuz-U	-	78017-064	6.100	RUSN	05	G	Sat LE0 0	AK15/RAEX	XFC	-
1980-040	2444382-20	1980 May 23 0710	Soyuz-U	-	78017-064	6.800	RUSN	05	G	Sat LE0 0	AK15/RAEX	XFC	-
1980-041	2444386-26	1980 May 26 1520:39	Soyuz-U	-	76047-446	1.750	RUSN	05	G	Sat LE0 0	AK15/RAEX	XFC	-
1980-042	2444388-00	1980 May 28 1200	Soyuz-U	-	76047-351	6.300	RUSN	05	G	Sat LE0 0	AK15/RAEX	XFC	-
1980-044	2444394-82	1980 Jun 4 0734	Soyuz-U	-	Zh15000-196	6.850	RUSN	05	G	Sat LE0 0	AK15/RAEX	XFC	-
1980-046	2444396-79	1980 Jun 6 0700	Soyuz-U	-	78055-925	6.300	RUSN	05	G	Sat LE0 0	AK15/RAEX	XFC	-
1980-048	2444403-02	1980 Jun 12 1230	Soyuz-U	-	78017-451	6.300	RUSN	05	G	Sat LE0 0	AK15/RAEX	XFC	-
1980-049	2444405-37	1980 Jun 14 2051:34	Molniya 8K78M	2BL	77025-527	1.578	RUSN	05	G	Sat LE0 0	AK15/RAEX	XFC	-
1980-050	2444406-76	1980 Jun 16 0614:12	Vostok 8A92M	-	78038-513	1.800	RUSN	05	G	Sat LE0 0	AK15/RAEX	XFC	-
1980-051	2444412-27	1980 Jun 21 1854	Molniya 8K78M	ML	76047-560	1.978	RUSN	05	G	Sat LE0 0	AK15/RAEX	XFC	-
1980-054	2444417-01	1980 Jun 26 1220	Soyuz-U	-	78018-910	6.300	RUSN	05	G	Sat LE0 0	AK15/RAEX	XFC	-
1980-055	2444419-69	1980 Jun 28 0440:42	Soyuz-U	-	78018-910	9.267	RUSN	05	G	Sat LE0 0	AK15/RAEX	XFC	-
1980-057	2444422-54	1980 Jun 29 0055:41	Molniya 8K78M	2BL	Zh15000-232	1.578	RUSN	05	G	Sat LE0 0	AK15/RAEX	XFC	-
1980-059	2444430-03	1980 Jul 2 0655:41	Soyuz-U	-	78017-463	6.300	RUSN	05	G	Sat LE0 0	AK15/RAEX	XFC	-
1980-061	2444435-81	1980 Jul 15 0737	Soyuz-U	-	76047-455	6.100	RUSN	05	G	Sat LE0 0	AK15/RAEX	XFC	-
1980-063	2444438-27	1980 Jul 18 0737	Molniya 8K78M	ML	78017-463	2.078	RUSN	05	G	Sat LE0 0	AK15/RAEX	XFC	-
1980-064	2444441-51	1980 Jul 19 0737	Soyuz-U	-	78017-463	6.800	RUSN	05	G	Sat LE0 0	AK15/RAEX	XFC	-
1980-065	2444445-05	1980 Jul 23 1653:03	Soyuz-U	-	Zh15000-238	6.300	RUSN	05	G	Sat LE0 0	AK15/RAEX	XFC	-
1980-066	2444451-52	1980 Jul 31 1240	Soyuz-U	-	78017-464	6.300	RUSN	05	G	Sat LE0 0	AK15/RAEX	XFC	-
1980-068	2444461-52	1980 Aug 11 1150	Soyuz-U	-	78017-396	1.750	RUSN	05	G	Sat LE0 0	AK15/RAEX	XFC	-
1980-069	2444462-75	1980 Aug 15 1654	Soyuz-U	-	78017-396	6.100	RUSN	05	G	Sat LE0 0	AK15/RAEX	XFC	-
1980-070	2444468-99	1980 Aug 22 1500	Vostok 8A92M	-	76047-382	6.100	RUSN	05	G	Sat LE0 0	AK15/RAEX	XFC	-
1980-071	2444473-92	1980 Aug 26 1500	Soyuz-U	-	76047-382	6.800	RUSN	05	G	Sat LE0 0	AK15/RAEX	XFC	-
1980-072	2444478-05	1980 Aug 26 1500	Soyuz-U	-	77052-995	6.300	RUSN	05	G	Sat LE0 0	AK15/RAEX	XFC	-
1980-073	2444485-05	1980 Sep 9 1100:00	Soyuz-U	-	78018-378	6.100	RUSN	05	G	Sat LE0 0	AK15/RAEX	XFC	-
1980-074	2444491-06	1980 Sep 9 1100:00	Vostok 8A92M	-	76019-406	1.800	RUSN	05	G	Sat LE0 0	AK15/RAEX	XFC	-
1980-075	2444501-30	1980 Sep 18 1811:04	Soyuz-U	-	78019-308	6.300	RUSN	05	G	Sat LE0 0	AK15/RAEX	XFC	-
1980-076	2444501-90	1980 Sep 19 1010	Soyuz-U	-	77023-472	6.800	RUSN	05	G	Sat LE0 0	AK15/RAEX	XFC	-
1980-077	2444508-94	1980 Sep 23 1010	Soyuz-U	-	78023-466	6.860	RUSN	05	G	Sat LE0 0	AK15/RAEX	XFC	-
1980-078	2444511-13	1980 Sep 26 1509:55	Soyuz-U	-	77023-076	6.346	RUSN	05	G	Sat LE0 0	AK15/RAEX	XFC	-
1980-079	2444515-01	1980 Sep 28 1509:55	Soyuz-U	-	77023-076	6.300	RUSN	05	G	Sat LE0 0	AK15/RAEX	XFC	-
1980-080	2444523-05	1980 Oct 3 1200	Soyuz-U	-	77023-469	6.100	RUSN	05	G	Sat LE0 0	AK15/RAEX	XFC	-
1980-082	2444529-01	1980 Oct 10 1310	Soyuz-U	-	77023-467	6.300	RUSN	05	G	Sat LE0 0	AK15/RAEX	XFC	-
1980-084	2444532-01	1980 Oct 16 1220	Soyuz-U	-	77023-470	6.300	RUSN	05	G	Sat LE0 0	AK15/RAEX	XFC	-
1980-086	2444532-92	1980 Oct 24 1053:29	Molniya 8K78M	2BL	76047-548	1.578	RUSN	05	G	Sat LE0 0	AK15/RAEX	XFC	-
1980-088	2444542-90	1980 Oct 30 1000	Soyuz-U	-	77023-471	6.600	RUSN	05	G	Sat LE0 0	AK15/RAEX	XFC	-
1980-089	2444544-02	1980 Oct 31 1200	Soyuz-U	-	77023-472	6.300	RUSN	05	G	Sat LE0 0	AK15/RAEX	XFC	-
1980-090	2444556-02	1980 Nov 12 1230	Soyuz-U	-	77023-472	6.300	RUSN	05	G	Sat LE0 0	AK15/RAEX	XFC	-
1980-092	2444559-68	1980 Nov 16 0418	Molniya 8K78M	ML	77023-524	1.978	RUSN	05	G	Sat LE0 0	AK15/RAEX	XFC	-
1980-093	2444565-00	1980 Nov 27 1153	Vostok 8A92M	-	77023-473	1.750	RUSN	05	G	Sat LE0 0	AK15/RAEX	XFC	-
1980-094	2444571-40	1980 Nov 27 1418:28	Soyuz-U	-	Zh15000-202	6.850	RUSN	05	G	Sat LE0 0	AK15/RAEX	XFC	-
1980-096	2444576-01	1980 Nov 27 2137:10	Molniya 8K78M	2BL	78055-536	1.578	RUSN	05	G	Sat LE0 0	AK15/RAEX	XFC	-
1980-101	2444590-01	1980 Dec 1 1215	Soyuz-U	-	77023-473	6.300	RUSN	05	G	Sat LE0 0	AK15/RAEX	XFC	-
1980-103	2444598-67	1980 Dec 25 0402	Soyuz-U	-	77023-475	1.238	RUSN	05	G	Sat LE0 0	AK15/RAEX	XFC	-
1980-105	2444600-17	1980 Dec 26 1810	Soyuz-U	-	76038-913	6.600	RUSN	05	G	Sat LE0 0	AK15/RAEX	XFC	-
1981-001	2444611-12	1981 Jan 6 1457	Soyuz-U	-	77023-474	6.300	RUSN	05	G	Sat LE0 0	AK15/RAEX	XFC	-
1981-002	2444614-12	1981 Jan 9 1215	Molniya 8K78M	ML	77023-474	2.078	RUSN	05	G	Sat LE0 0	AK15/RAEX	XFC	-
1981-004	2444621-00	1981 Jan 16 1200	Soyuz-U	-	78017-821	6.800	RUSN	05	G	Sat LE0 0	AK15/RAEX	XFC	-
1981-005	2444624-96	1981 Jan 20 1100	Soyuz-U	-	77023-975	9.350	RUSN	05	G	Sat LE0 0	AK15/RAEX	XFC	-
1981-007	2444629-10	1981 Jan 24 1418:02	Soyuz-U	-	78017-821	6.600	RUSN	05	G	Sat LE0 0	AK15/RAEX	XFC	-
1981-008	2444632-12	1981 Jan 27 1458	Vostok 8A92M	-	77023-975	9.350	RUSN	05	G	Sat LE0 0	AK15/RAEX	XFC	-
1981-009	2444635-19	1981 Jan 30 1627	Molniya 8K78M	ML	78017-364	1.750	RUSN	05	G	Sat LE0 0	AK15/RAEX	XFC	-
1981-014	2444648-97	1981 Feb 13 1115	Soyuz-U	-	76038-510	6.300	RUSN	05	G	Sat LE0 0	AK15/RAEX	XFC	-
1981-015	2444653-82	1981 Feb 18 0900	Soyuz-U	-	76053-478	6.300	RUSN	05	G	Sat LE0 0	AK15/RAEX	XFC	-
1981-016	2444654-98	1981 Feb 18 0900	Molniya 8K78M	2BL	Zh15000-264	6.300	RUSN	05	G	Sat LE0 0	AK15/RAEX	XFC	-
1981-020	2444669-12	1981 Feb 19 1000:26	Soyuz-U	-	76047-549	1.578	RUSN	05	G	Sat LE0 0	AK15/RAEX	XFC	-
1981-023	2444676-29	1981 Mar 5 1500	Soyuz-U	-	77023-475 ?	6.600	RUSN	05	G	Sat LE0 0	AK15/RAEX	XFC	-
1981-026	2444680-86	1981 Mar 12 0840	Soyuz-U	-	Zh15000-266	6.850	RUSN	05	G	Sat LE0 0	AK15/RAEX	XFC	-
1981-029	2444686-12	1981 Mar 22 1458:55	Soyuz-U	-	77023-468	6.300	RUSN	05	G	Sat LE0 0	AK15/RAEX	XFC	-
1981-029	2444686-12	1981 Mar 22 1458:55	Soyuz-U	-	77023-267	6.800	RUSN	05	G	Sat LE0 0	AK15/RAEX	XFC	-



Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	OrbPay	Agency	Launch_Code	Group	Category	LTCite	Cite	Notes
1982-077	2445184-98	1982 Aug 3 1130	Soyuz-U	-	77049-803	6.650	UNKS	05	G	Sat LE0 0	AK15/NAEX	XPC	-
1982-078	2445185-98	1982 Aug 4 1130	Soyuz-U	-	77049-216	6.600	UNKS	05	G	Sat LE0 0	AK15/NAEX	Kosmodrom-15	-
1982-079	2445186-79	1982 Aug 5 0656	Vostok BA92M	-	76053-341	1.750	UNKS	05	G	Sat LE0 0	AK15/NAEX	XPC	-
1982-080	2445201-22	1982 Aug 19 1711:52	Soyuz-U	-	Ts15000-276	6.850	UNKS	05	G	Sat LSS 0	AK15/NAEX	-	-
1982-081	2445201-91	1982 Aug 20 0950	Soyuz-U	-	76054-119	6.300	UNKS	05	G	Sat LSS 0	AK15/NAEX	IK9911-24	-
1982-083	2445208-50	1982 Aug 27 0002	Molniya 8K78M	ML	76047-547	2.078	UNKS	05	G	Sat MOL 00 1	AK15/NAEX	XPC	-
1982-084	2445213-88	1982 Sep 1 0900	Soyuz-U	-	76054-763	6.300	UNKS	05	G	Sat LE0 0	AK15/NAEX	XPC	-
1982-086	2445213-99	1982 Sep 1 1140	Soyuz-U	-	78017-944	6.300	UNKS	05	G	Sat LE0 0	AK15/NAEX	XPC	-
1982-089	2445220-93	1982 Sep 8 1020	Soyuz-U	-	77024-862	6.100	UNKS	05	G	Sat LE0 0	AK15/NAEX	XPC	-
1982-091	2445228-15	1982 Sep 15 1550	Soyuz-U	-	77049-955	6.600	UNKS	05	G	Sat LE0 0	AK15/NAEX	XPC	-
1982-094	2445230-71	1982 Sep 18 0458:54	Soyuz-U	-	Ts15000-292	9.230	UNKS	05	G	Sat LSS 0	AK15/NAEX	XPC	-
1982-096	2445234-77	1982 Sep 22 0623:11	Molniya 8K78M	2BL	76053-639	1.578	UNKS	05	G	Sat MOL 00 1	AK15/NAEX	XPC	-
1982-098	2445242-99	1982 Sep 30 1150	Soyuz-U	-	76054-761	6.300	UNKS	05	G	Sat LE0 0	AK15/NAEX	XPC	-
1982-101	2445256-88	1982 Oct 31 0910	Soyuz-U	-	76054-764	6.300	UNKS	05	G	Sat LE0 0	AK15/NAEX	XPC	-
1982-107	2445273-97	1982 Oct 31 1120:36	Soyuz-U	-	Sh15000-338	9.414	UNKS	05	G	Sat LSS 0	AK15/NAEX	XPC	-
1982-108	2445275-90	1982 Nov 2 0930	Soyuz-U	-	76054-765	6.300	UNKS	05	G	Sat LE0 0	AK15/NAEX	XPC	-
1982-112	2445291-89	1982 Nov 16 0925	Soyuz-U	-	76054-767	6.300	UNKS	05	G	Sat LE0 0	AK15/NAEX	XPC	-
1982-114	2445297-00	1982 Dec 3 1200	Soyuz-U	-	76054-766	6.300	UNKS	05	G	Sat LE0 0	AK15/NAEX	XPC	-
1982-115	2445312-07	1982 Dec 8 1346	Molniya 8K78M	ML	77024-866	1.578	UNKS	05	G	Sat MOL 00 1	AK15/NAEX	IK9701-29	-
1982-116	2445316-44	1982 Dec 14 2230:00	Vostok BA92M	-	78017-356	1.500	UNKS	05	G	Sat LE0 0	PL-WNH	XPC	-
1982-117	2445319-92	1982 Dec 16 1000	Soyuz-U	-	77049-217 (0027)	6.600	UNKS	05	G	Sat LE0 0	AK15/NAEX	Kosmodrom-15	-
1982-119	2445326-86	1982 Dec 23 0910	Soyuz-U	-	Sh15000-332	6.600	UNKS	05	G	Sat LE0 0	AK15/NAEX	XPC	-
1982-120	2445332-00	1982 Dec 28 1200	Soyuz-U	-	76053-342	6.300	UNKS	05	G	Sat LE0 0	AK15/NAEX	Kosmodrom-15	-
1983-005	2445355-23	1983 Jan 20 1726	Vostok BA92M	-	77024-773	1.750	UNKS	05	G	Sat LE0 0	AK15/NAEX	XPC	-
1983-006	2445355-85	1983 Jan 27 0630	Soyuz-U	-	77049-956	6.600	UNKS	05	G	Sat LE0 0	AK15/NAEX	XPC	-
1983-007	2445371-96	1983 Feb 6 1131	Soyuz-U	-	77049-956	6.600	UNKS	05	G	Sat LE0 0	AK15/NAEX	Kosmodrom-15	-
1983-009	2445375-80	1983 Feb 10 0715	Soyuz-U	-	77024-120	6.300	UNKS	05	G	Sat LE0 0	AK15/NAEX	IK9911-24	-
1983-012	2445391-92	1983 Feb 16 1003	Vostok BA92M	-	76053-343	1.750	UNKS	05	G	Sat LE0 0	AK15/NAEX	XPC	-
1983-014	2445395-95	1983 Feb 25 1245	Soyuz-U	-	76054-248	6.600	UNKS	05	G	Sat LE0 0	AK15/NAEX	XPC	-
1983-018	2445405-15	1983 Mar 11 1529:00	Molniya 8K78M	ML	78017-943	6.300	UNKS	05	G	Sat LE0 0	AK15/NAEX	XPC	-
1983-019	2445409-87	1983 Mar 16 0850	Soyuz-U	-	77024-778 (0017)	6.300	UNKS	05	G	Sat LE0 0	AK15/NAEX	XPC	-
1983-024	2445410-26	1983 Mar 31 1050	Molniya 8K78M	ML	77024-770	6.300	UNKS	05	G	Sat LE0 0	AK15/NAEX	XPC	-
1983-026	2445424-96	1983 Apr 2 0202:00	Molniya 8K78M	ML	77024-654	6.300	UNKS	05	G	Sat LE0 0	AK15/NAEX	XPC	-
1983-028	2445426-56	1983 Apr 2 0202:00	Molniya 8K78M	ML	77024-770	6.300	UNKS	05	G	Sat LE0 0	AK15/NAEX	XPC	-
1983-029	2445432-85	1983 Apr 2 0830	Soyuz-U	-	77024-772	6.300	UNKS	05	G	Sat LE0 0	AK15/NAEX	XPC	-
1983-036	2445445-05	1983 Apr 20 1310:54	Soyuz-U	-	Sh15000-342	6.850	UNKS	05	G	Sat LSS 0	AK15/NAEX	IK9909-68	-
1983-038	2445447-10	1983 Apr 22 1450	Soyuz-U	-	76054-957	6.600	UNKS	05	G	Sat LE0 0	AK15/NAEX	XPC	-
1983-039	2445450-32	1983 Apr 28 1553:43	Molniya 8K78M	2BL	76049-866	1.578	UNKS	05	G	Sat LE0 0	AK15/NAEX	XPC	-
1983-040	2445450-92	1983 Apr 28 1000	Soyuz-U	-	78039-214	6.600	UNKS	05	G	Sat MOL 00 1	AK15/NAEX	Kosmodrom-15	-
1983-044	2445460-86	1983 Apr 28 0650	Soyuz-U	-	76054-768	6.100	UNKS	05	G	Sat LE0 0	AK15/NAEX	XPC	-
1983-045	2445461-86	1983 May 7 0910	Soyuz-U	-	76054-771	6.300	UNKS	05	G	Sat LE0 0	AK15/NAEX	XPC	-
1983-046	2445471-53	1983 May 7 0600	Soyuz-U	-	76054-771	6.300	UNKS	05	G	Sat LE0 0	AK15/NAEX	XPC	-
1983-049	2445481-00	1983 May 26 1200	Soyuz-U	-	77024-759	6.300	UNKS	05	G	Sat LE0 0	AK15/NAEX	IK9911-24	-
1983-050	2445485-99	1983 May 31 1140	Soyuz-U	-	78012-775	6.300	UNKS	05	G	Sat LE0 0	AK15/NAEX	XPC	-
1983-052	2445492-83	1983 Jun 14 1610	Soyuz-U	-	76055-742	6.300	UNKS	05	G	Sat LE0 0	AK15/NAEX	XPC	-
1983-057	2445502-91	1983 Jun 14 0915	Soyuz-U	-	76055-742	6.300	UNKS	05	G	Sat LE0 0	AK15/NAEX	XPC	-
1983-062	2445512-96	1983 Jun 27 0912:18	Soyuz-U	-	Sh15000-349	6.850	UNKS	05	G	Sat LSS 0	AK15/NAEX	IK9911-24	-
1983-064	2445514-96	1983 Jun 29 1500	Soyuz-U	-	77024-958	6.300	UNKS	05	G	Sat LE0 0	AK15/NAEX	XPC	-
1983-067	2445517-12	1983 Jun 29 1217	Molniya 8K78M	SOL	Ts15000-314	1.988	UNKS	05	G	Sat LSS 00 1	AK15/NAEX	Kosmodrom-15	-
1983-068	2445520-83	1983 Jul 5 0750	Soyuz-U	-	78012-751	6.300	UNKS	05	G	Sat LE0 0	AK15/NAEX	XPC	-
1983-070	2445524-31	1983 Jul 8 1951	Molniya 8K78M	2BL	78015-627	1.578	UNKS	05	G	Sat MOL 00 1	AK15/NAEX	XPC	-
1983-071	2445528-91	1983 Jul 13 0840	Soyuz-U	-	78015-751	6.300	UNKS	05	G	Sat LE0 0	AK15/NAEX	XPC	-
1983-072	2445535-13	1983 Jul 19 1514	Molniya 8K78M	ML	78015-660	6.300	UNKS	05	G	Sat LE0 0	AK15/NAEX	XPC	-
1983-074	2445535-83	1983 Jul 20 0900	Molniya 8K78M	ML	78015-093	6.300	UNKS	05	G	Sat LE0 0	AK15/NAEX	XPC	-
1983-076	2445539-74	1983 Jul 24 0550:37	Soyuz-U	-	77045-376	6.300	UNKS	05	G	Sat LE0 0	AK15/NAEX	IK9911-24	-
1983-078	2445541-01	1983 Jul 26 1300	Vostok BA92M	-	76054-769 (2697)	1.500	UNKS	05	G	Sat LSS 0	AK15/NAEX	IK9422-46	-
1983-080	2445542-90	1983 Aug 5 0920	Soyuz-U	-	78012-135	6.300	UNKS	05	G	Sat LE0 0	AK15/NAEX	XPC	-
1983-082	2445555-97	1983 Aug 9 1120	Soyuz-U	-	77024-774	6.300	UNKS	05	G	Sat LE0 0	AK15/NAEX	IK9911-24	-
1983-083	2445557-04	1983 Aug 10 1300	Soyuz-U	-	77024-252	6.600	UNKS	05	G	Sat LE0 0	AK15/NAEX	Kosmodrom-15	-
1983-085	2445569-96	1983 Aug 17 1205:23	Soyuz-U	-	Ts15000-302	9.218	UNKS	05	G	Sat LSS 0	AK15/NAEX	IK9907-46	-
1983-089	2445577-45	1983 Aug 23 1105	Soyuz-U	-	77024-776	6.300	UNKS	05	G	Sat LE0 0	AK15/NAEX	XPC	-
1983-090	2445580-93	1983 Aug 30 2249:00	Molniya 8K78M	ML	78014-650	2.078	UNKS	05	G	Sat LE0 0	AK15/NAEX	XPC	-
1983-092	2445580-93	1983 Sep 3 1015	Soyuz-U	-	78012-084	6.100	UNKS	05	G	Sat LE0 0	AK15/NAEX	XPC	-
1983-093	2445586-96	1983 Sep 7 1324	Soyuz-U	-	78012-752	6.600	UNKS	05	G	Sat LE0 0	AK15/NAEX	XPC	-
1983-095	2445586-96	1983 Sep 9 1100	Soyuz-U	-	78012-753	6.300	UNKS	05	G	Sat LE0 0	AK15/NAEX	XPC	-
1983-096	2445594-97	1983 Sep 14 1025	Soyuz-U	-	78039-952	6.300	UNKS	05	G	Sat LE0 0	AK15/NAEX	IK9911-24	-
1983-097	2445594-97	1983 Sep 17 1115	Soyuz-U	-	77024-251	6.300	UNKS	05	G	Sat LE0 0	AK15/NAEX	XPC	-
1983-F02	2445604-32	1983 Sep 26 1937:51	Soyuz-U	-	Yul15000-363	6.900	UNKS	05	G	Sat LSS 0	AK15/NAEX	Kosmodrom-15	-
1983-104	2445621-92	1983 Oct 14 1000	Soyuz-U	-	77024-803	6.600	UNKS	05	G	Sat LE0 0	AK15/NAEX	XPC	-
1983-106	2445627-92	1983 Oct 20 0959:05	Soyuz-U	-	Ts15000-287	9.129	UNKS	05	G	Sat LSS 0	AK15/NAEX	IK9907-46	-
1983-107	2445629-01	1983 Oct 21 1210	Soyuz-U	-	78012-754	6.300	UNKS	05	G	Sat LE0 0	AK15/NAEX	XPC	-
1983-109	2445635-88	1983 Oct 28 0900:00	Vostok BA92M	-	77025-325	1.500	UNKS	05	G	Sat LE0 0	AK15/NAEX	XPC	-
1983-112	2445636-01	1983 Nov 17 1215	Soyuz-U	-	78012-755	6.300	UNKS	05	G	Sat LE0 0	AK15/NAEX	XPC	-
1983-114	2445636-07	1983 Nov 23 1645	Molniya 8K78M	ML	77024-249	1.978	UNKS	05	G	Sat LE0 0	AK15/NAEX	XPC	-
1983-117	2445669-07	1983 Nov 30 1345	Soyuz-U	-	77024-249	6.600	UNKS	05	G	Sat LE0 0	AK15/NAEX	XPC	-
1983-119	2445676-01	1983 Dec 7 1210	Soyuz-U	-	78012-756	6.300	UNKS	05	G	Sat LE0 0	AK15/NAEX	XPC	-
1983-121	2445682-79	1983 Dec 14 0700	Molniya 8K78M	ML	Yul15000-371	6.260	UNKS	05	G	Sat LE0 0	AK15/NAEX	XPC	-
1983-123	2445689-76	1983 Dec 21 0607:59	Molniya 8K78M	ML	Sh15000-345	2.078	UNKS	05	G	Sat LE0 0	AK15/NAEX	XPC	-
1983-124	2445695-94	1983 Dec 27 0930	Soyuz-U	-	78039-642	6.300	UNKS	05	G	Sat LE0 0	AK15/NAEX	XPC	-
1983-126	2445696-66	1983 Dec 28 0348:05	Molniya 8K78M	2BL	78012-757	1.578	UNKS	05	G	Sat LE0 0	AK15/NAEX	XPC	-
1984-002	2445711-01	1984 Jan 11 1220	Soyuz-U	-	78012-806 *	6.300	UNKS	05	G	Sat LE0 0	AK15/NAEX	XPC	-
1984-004	2445713-11	1984 Jan 13 1440	Soyuz-U	-	78012-806 *	6.600	UNKS	05	G	Sat LE0 0	AK15/NAEX	XPC	-
1984-006	2445725-87	1984 Jan 26 0850	Soyuz-U	-	760397-791 (-003)	6.300	UNKS	05	G	Sat LSS 0	AK15/NAEX	XPC	-
1984-011	2445739-01	1984 Feb 8 1207:26	Soyuz-U	-	Yul15000-357	6.850	UNKS	05	G	Sat LSS 0	AK15/NAEX	IK9204-71	-
1984-017	2445746-84	1984 Feb 16 0815	Soyuz-U	-	76032-126	6.300	UNKS	05	G	Sat LE0 0	IK95-20-29	IK9911-24	-

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	OrbPay	Agency	Launch_Code	Group	Category	LTCite	Cite	Notes	
1984-018	2445751.78	1984 Feb 21 0646:05	Soyuz-U	-	Yu15000-367	9.344	UNKS	05	G	Sat LSS 0	NR9807-46	XFC	-	
1984-020	2445759.08	1984 Feb 28 1359:59	Soyuz-U	-	78012-769	6.600	UNKS	05	G	Sat LEO 0	AK15/RAEX	XFC	-	
1984-021	2445766.22	1984 Mar 6 1710:18	Molniya 8K78M	ML	78054-669	1.578	UNKS	05	G	Sat MOL 00 1	NR9715-48	XFC	-	
1984-025	2445766.83	1984 Mar 7 0800	Soyuz-U	-	76032-792 (-004)	6.300	UNKS	05	G	Sat LEO 0	AK15/RAEX	XFC	-	
1984-026	2445770.21	1984 Mar 10 1700	Soyuz-U	-	Ts15000-309	5.400	UNKS	05	G	Sat LEO 0	AK15/RAEX	XFC	-	
1984-029	2445780.46	1984 Mar 16 2329:59	Molniya 8K78M	2BL	78039-637	1.578	UNKS	05	G	Sat MOL 00 1	AK15/RAEX	XFC	-	
1984-032	2445794.05	1984 Mar 21 1106	Soyuz-U-PVB	-	77024-677	6.300	UNKS	05	G	Sat LSS 0	NR9909-68	-	-	
1984-033	2445794.57	1984 Apr 3 1308:42	Molniya 8K78M	-	Sc15000-398	6.850	UNKS	05	G	Sat LSS 0	NR9715-48	XFC	-	
1984-038	2445801.08	1984 Apr 10 1400	Soyuz-U	-	77049-663	1.578	UNKS	05	G	Sat LEO 0	AK15/RAEX	XFC	-	
1984-038	2445805.84	1984 Apr 15 0812:53	Soyuz-U	-	76032-808	6.600	UNKS	05	G	Sat LSS 0	NR9807-46	XFC	-	
1984-040	2445809.99	1984 Apr 19 1140	Soyuz-U	-	76032-788	9.626	UNKS	05	G	Sat LSS 0	AK15/RAEX	XFC	-	
1984-042	2445828.45	1984 May 7 2247:15	Soyuz-U	-	Sc15000-399	9.330	UNKS	05	G	Sat LSS 0	AK15/RAEX	XFC	-	
1984-044	2445832.04	1984 May 11 1300	Soyuz-U	-	76032-811	6.600	UNKS	05	G	Sat LEO 0	AK15/RAEX	XFC	-	
1984-045	2445835.08	1984 May 14 1400	Soyuz-U	-	Yu15000-364	6.600	UNKS	05	G	Sat LEO 0	AK15/RAEX	XFC	-	
1984-046	2445842.86	1984 May 22 0830	Soyuz-U	-	77046-850	6.100	UNKS	05	G	Sat LEO 0	NR96-26-40	XFC	-	
1984-048	2445845.98	1984 May 28 1130	Soyuz-U	-	Sc15000-405	9.376	UNKS	05	G	Sat LSS 0	AK15/RAEX	XFC	-	
1984-051	2445849.09	1984 May 28 1412:52	Soyuz-U	-	76032-810	6.300	UNKS	05	G	Sat LEO 0	NR9807-46	XFC	-	
1984-054	2445853.08	1984 Jun 1 1350	Molniya 8K78M	-	77046-148	1.578	UNKS	05	G	Sat LEO 0	AK15/RAEX	XFC	-	
1984-055	2445855.15	1984 Jun 1 1653:32	Soyuz-U	2BL	77024-657	6.300	UNKS	05	G	Sat MOL 00 1	NR9715-48	XFC	-	
1984-056	2445862.86	1984 Jun 11 0840	Soyuz-U	-	76032-795	6.300	UNKS	05	G	Sat LEO 0	AK15/RAEX	XFC	-	
1984-060	2445866.86	1984 Jun 15 0820	Soyuz-U	-	76032-793	6.300	UNKS	05	G	Sat LEO 0	NR95-20-29	XFC	-	
1984-061	2445870.95	1984 Jun 19 1055	Soyuz-U	-	76032-796	6.300	UNKS	05	G	Sat LEO 0	AK15/RAEX	XFC	-	
1984-064	2445873.82	1984 Jun 22 0740	Soyuz-U	-	76032-790	6.600	UNKS	05	G	Sat LEO 0	NR95-20-29	XFC	-	
1984-066	2445876.15	1984 Jun 26 1555	Soyuz-U	-	76032-807	6.600	UNKS	05	G	Sat LEO 0	AK15/RAEX	XFC	-	
1984-070	2445881.12	1984 Jun 29 1500	Soyuz-U	2BL	77046-506	6.300	UNKS	05	G	Sat MOL 00 1	NR9715-48	XFC	-	
1984-071	2445885.40	1984 Jul 3 2130:42	Molniya 8K78M	-	78012-569	1.578	UNKS	05	G	Sat LSS 0	NR9911-24	XFC	-	
1984-074	2445899.24	1984 Jul 17 1740:54	Soyuz-U	-	Yu15000-066	6.850	UNKS	05	G	Sat LSS 0	NR9911-24	XFC	-	
1984-074	2445900.85	1984 Jul 19 0830	Soyuz-U	-	77046-149	6.300	UNKS	05	G	Sat LEO 0	NR95-20-29	XFC	-	
1984-075	2445906.03	1984 Jul 21 1240	Soyuz-U	-	77046-150	6.300	UNKS	05	G	Sat LEO 0	AK15/RAEX	XFC	-	
1984-076	2445906.87	1984 Jul 21 0859:59	Soyuz-U	-	77046-507	6.600	UNKS	05	G	Sat LEO 0	NR96-26-40	XFC	-	
1984-077	2445913.02	1984 Jul 31 1229:54	Soyuz-U	-	77046-623	6.300	UNKS	05	G	Sat LEO 0	AK15/RAEX	XFC	-	
1984-079	2445914.86	1984 Aug 2 0835:16	Molniya 8K78M	2BL	76032-667	1.578	UNKS	05	G	Sat MOL 00 1	NR9715-48	XFC	-	
1984-082	2445919.06	1984 Aug 6 1400	Soyuz-U	-	76032-794	6.300	UNKS	05	G	Sat LEO 0	AK15/RAEX	XFC	-	
1984-086	2445922.50	1984 Aug 10 0038:58	Molniya 8K78M	HL	76032-666 ?	9.517	UNKS	05	G	Sat LSS 0	NR9807-46	VS4074	-	
1984-087	2445926.77	1984 Aug 14 0628:15	Soyuz-U	-	Sc15000-411	6.300	UNKS	05	G	Sat LSS 0	NR95-20-29	NR9911-24	XFC	-
1984-088	2445928.91	1984 Aug 16 0950	Soyuz-U	-	77046-509	6.300	UNKS	05	G	Sat LEO 0	AK15/RAEX	XFC	-	
1984-089	2445936.35	1984 Aug 24 0626:59	Molniya 8K78M	HL	78012-661	1.578	UNKS	05	G	Sat MOL 00 1	NR95-20-29	XFC	-	
1984-092	2445942.92	1984 Aug 30 1010	Soyuz-U	-	77046-151	6.300	UNKS	05	G	Sat LEO 0	AK15/RAEX	NR9911-24	XFC	-
1984-094	2445947.93	1984 Sep 4 1020	Soyuz-U	-	77046-508	6.100	UNKS	05	G	Sat MOL 00 1	NR96-26-40	XFC	-	
1984-096	2445951.30	1984 Sep 9 1225	Soyuz-U	-	76034-661	6.600	UNKS	05	G	Sat LEO 0	NR95-20-29	XFC	-	
1984-099	2445959.93	1984 Sep 27 0816:10	Soyuz-U	-	77046-061	6.100	UNKS	05	G	Sat LEO 0	NR94-56-16	XFC	-	
1984-102	2445969.10	1984 Sep 25 1450	Soyuz-U	-	77046-302	6.300	UNKS	05	G	Sat MOL 00 1	NR96-26-40	XFC	-	
1984-107	2446070.94	1984 Oct 1 0816:10	Molniya 8K78M	2BL	78012-660	6.300	UNKS	05	G	Sat MOL 00 1	NR95-20-29	XFC	-	
1984-110	2446078.53	1984 Oct 19 1949:13	Soyuz-U	-	Yu15000-352	6.300	UNKS	05	G	Sat LEO 0	AK15/RAEX	XFC	-	
1984-117	2446116.82	1984 Nov 14 1720	Soyuz-U	-	77046-111	6.300	UNKS	05	G	Sat LEO 0	NR9715-48	XFC	-	
1984-119	2446125.01	1984 Nov 21 1020	Soyuz-U	-	78056-825	6.800	UNKS	05	G	Sat LEO 0	AK15/RAEX	XFC	-	
1984-121	2446034.04	1984 Nov 29 1100	Soyuz-U-PVB	-	78024-755	6.800	UNKS	05	G	Sat LEO 0	AK15/RAEX	XFC	-	
1984-124	2446049.36	1984 Dec 14 2040:59	Molniya 8K78M	HL	78032-672	1.973	UNKS	05	G	Sat MOL 00 1	AK15/RAEX	XFC	-	
1985-002	2446074.36	1985 Jan 6 1045	Soyuz-U	-	77046-812	2.073	UNKS	05	G	Sat MOL 00 1	AK15/RAEX	XFC	-	
1985-004	2446081.81	1985 Jan 16 0822:30	Molniya 8K78M	HL	78032-665	6.300	UNKS	05	G	Sat LEO 0	AK15/RAEX	XFC	-	
1985-005	2446091.81	1985 Jan 16 0819	Soyuz-U	-	78056-315	6.300	UNKS	05	G	Sat LEO 0	AK15/RAEX	XFC	-	
1985-017	2446102.96	1985 Feb 6 1100	Soyuz-U	-	77046-313	6.300	UNKS	05	G	Sat LEO 0	AK15/RAEX	XFC	-	
1985-019	2446123.97	1985 Feb 27 1110	Soyuz-U	-	78056-626	6.800	UNKS	05	G	Sat LEO 0	AK15/RAEX	XFC	-	
1985-019	2446125.94	1985 Mar 1 1040	Soyuz-U	-	76032-757	6.300	UNKS	05	G	Sat LEO 0	AK15/RAEX	XFC	-	
1985-026	2446149.94	1985 Mar 25 1000	Soyuz-U	-	78056-204	6.600	UNKS	05	G	Sat LEO 0	AK15/RAEX	XFC	-	
1985-027	2446158.82	1985 Apr 3 0800	Soyuz-U	-	77046-312	6.348	UNKS	05	G	Sat LEO 0	AK15/RAEX	XFC	-	
1985-029	2446172.25	1985 Apr 16 1715	Soyuz-U	-	Sc15000-128	6.600	UNKS	05	G	Sat LEO 0	NR9721-34	XFC	-	
1985-031	2446175.08	1985 Apr 19 1400	Soyuz-U	-	77046-314	6.600	UNKS	05	G	Sat LEO 0	AK15/RAEX	XFC	-	
1985-032	2446180.90	1985 Apr 25 0930	Molniya 8K78M	SOL	B 15000-352	1.923	UNKS	05	G	Sat LSS 00 1	NR9521-43	Kosmodrom-15	-	
1985-033	2446181.74	1985 Apr 26 0548	Soyuz-U	-	78056-316	6.300	UNKS	05	G	Sat LEO 0	AK15/RAEX	XFC	-	
1985-036	2446201.03	1985 May 15 1240	Soyuz-U	-	78056-152	6.300	UNKS	05	G	Sat LEO 0	NR95-20-29	NR9911-24	XFC	-
1985-038	2446207.86	1985 May 22 0835	Soyuz-U	-	78056-827	6.600	UNKS	05	G	Sat MOL 00 1	AK15/RAEX	XFC	-	
1985-039	2446209.03	1985 May 23 1240	Soyuz-U	-	78056-676	2.073	UNKS	05	G	Sat MOL 00 1	NR9815-26	XFC	-	
1985-040	2446214.82	1985 May 29 0740:44	Molniya 8K78M	ML	78056-877	6.950	UNKS	05	G	Sat LSS 0	NR9521-43	Kosmodrom-15	-	
1985-044	2446222.78	1985 Jun 6 0659:52	Soyuz-U	-	B 15000-008	6.300	UNKS	05	G	Sat LEO 0	NR95-20-29	NR9911-24	XFC	-
1985-044	2446223.82	1985 Jun 7 0745	Soyuz-U-PVB	-	78012-605	6.300	UNKS	05	G	Sat LEO 0	NR9715-48	XFC	-	
1985-045	2446228.10	1985 Jun 11 1426:57	Molniya 8K78M	2BL	78032-669	1.578	UNKS	05	G	Sat MOL 00 1	NR9715-48	XFC	-	
1985-046	2446230.01	1985 Jun 13 1220	Soyuz-U	-	78056-317	6.300	UNKS	05	G	Sat LEO 0	NR9715-48	XFC	-	
1985-049	2446234.53	1985 Jun 18 0040:26	Molniya 8K78M	2BL	78032-668	1.578	UNKS	05	G	Sat MOL 00 1	NR9715-48	XFC	-	
1985-051	2446237.53	1985 Jun 21 0039:41	Soyuz-U	-	Sc15000-417	9.227	UNKS	05	G	Sat LSS 0	NR9807-46	VS4074	-	
1985-052	2446237.82	1985 Jun 21 0745	Soyuz-U	-	76021-155	6.300	UNKS	05	G	Sat LEO 0	NR95-20-29	NR9911-24	XFC	-
1985-054	2446243.02	1985 Jun 26 1235	Soyuz-U	-	78056-319	6.300	UNKS	05	G	Sat LEO 0	AK15/RAEX	XFC	-	
1985-057	2446250.01	1985 Jul 3 1210	Soyuz-U	-	78056-320	6.260	UNKS	05	G	Sat LEO 0	AK15/RAEX	XFC	-	
1985-059	2446256.64	1985 Jul 15 0630	Soyuz-U	-	B 15000-463	6.300	UNKS	05	G	Sat LEO 0	NR96-26-34	XFC	-	
1985-060	2446261.77	1985 Jul 15 0930	Soyuz-U	-	76021-325	2.073	UNKS	05	G	Sat MOL 00 1	NR9815-26	XFC	-	
1985-062	2446263.55	1985 Jul 17 1005:00	Molniya 8K78M	ML	77024-658	6.300	UNKS	05	G	Sat LSS 0	NR9807-46	VS4074	-	
1985-065	2446266.01	1985 Jul 15 0315	Soyuz-U	-	B 15000-466	9.504	UNKS	05	G	Sat LEO 0	NR9521-43	Kosmodrom-15	-	
1985-066	2446279.99	1985 Aug 2 1140	Soyuz-U	-	78056-321	6.300	UNKS	05	G	Sat LEO 0	AK15/RAEX	XFC	-	
1985-067	2446284.91	1985 Aug 7 0950	Soyuz-U	-	77011-157	6.300	UNKS	05	G	Sat LEO 0	NR95-20-29	NR9911-24	XFC	-
1985-068	2446285.93	1985 Aug 8 1019	Soyuz-U	-	78056-205	6.300	UNKS	05	G	Sat LEO 0	AK15/RAEX	XFC	-	
1985-071	2446290.13	1985 Aug 12 1509:03	Molniya 8K78M	2BL	76032-664	1.578	UNKS	05	G	Sat LEO 0	NR9715-48	XFC	-	
1985-072	2446294.13	1985 Aug 16 1510	Soyuz-U	-	77046-824	6.600	UNKS	05	G	Sat MOL 00 1	AK15/RAEX	XFC	-	
1985-074	2446300.31	1985 Aug 22 1928:00	Molniya 8K78M	ML	78056-679	1.973	UNKS	05	G	Sat MOL 00 1	AK15/RAEX	XFC	-	
1985-077	2446306.93	1985 Aug 29 1015	Soyuz-U	-	76021-153	6.300	UNKS	05	G	Sat LEO 0	NR95-20-29	NR9911-24	XFC	-



Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	OrbPay	Agency	Launch_Code	Group	Category	LTCsite	Cite	Notes
1985-078	2446306-98	1985 Aug 29 1133	Soyuz-U	-	78056 -828	6.600	UNKS	DS	G	Sat LE0 0	AK15/RAEX	XPC	-
1985-080	2446314-95	1985 Sep 6 1045	Soyuz-U	-	77011 -052	6.100	UNKS	DS	G	Sat LE0 0	NR96-26-40	XPC	-
1985-081	2446326-03	1985 Sep 17 1238:52	Soyuz-U	-	Sc15000-007	6.850	UNKS	DS	G	Sat LSS 0	NR0204-71	-	-
1985-083	2446327-92	1985 Sep 19 1010	Soyuz-U	-	77046 -170	6.300	UNKS	DS	G	Sat LE0 0	AK15/RAEX	XPC	-
1985-084	2446332-55	1985 Sep 24 0118:10	Molnlya 8K78M	2BL	77046 -674	1.578	UNKS	DS	G	Sat MOL 0 1	NR9715-48	XPC	-
1985-085	2446334-97	1985 Sep 26 1115	Soyuz-U	-	78056 -322	6.300	UNKS	DS	G	Sat LE0 0	AK15/RAEX	XPC	-
1985-086	2446339-31	1985 Sep 30 1923:20	Molnlya 8K78M	2BL	76032 -670	1.578	UNKS	DS	G	Sat MOL 0 1	NR9715-48	XPC	-
1985-090	2446341-74	1985 Oct 3 0733:00	Vostok 8A92M	ML	76053 -344	1.900	UNKS	DS	G	Sat LE0 0	NR9422-46	Kosmodrom-15	-
1985-091	2446341-81	1985 Oct 3 0733:00	Molnlya 8K78M	ML	76021 -327	2.078	UNKS	DS	G	Sat MOL 0 1	NR9815-26	XPC	-
1985-095	2446354-84	1985 Oct 16 0925	Soyuz-U	-	76021 -327	6.300	UNKS	DS	G	Sat LE0 0	AK15/RAEX	XPC	-
1985-098	2446361-35	1985 Oct 22 2024:07	Molnlya 8K78M	2BL	77046 -375	1.578	UNKS	DS	G	Sat MOL 0 1	NR9715-48	XPC	-
1985-099	2446361-53	1985 Oct 23 0042:07	Molnlya 8K78M	ML	77046 -663	1.978	UNKS	DS	G	Sat MOL 0 1	AK15/RAEX	XPC	-
1985-101	2446364-11	1985 Oct 26 1440	Soyuz-U	-	77046 -913	6.600	UNKS	DS	G	Sat LE0 0	AK15/RAEX	XPC	-
1985-103	2446367-23	1985 Oct 28 1724:58	Molnlya 8K78M	ML	76021 -666	1.578	UNKS	DS	G	Sat MOL 0 1	AK15/RAEX	XPC	-
1985-105	2446376-85	1985 Nov 9 0825:27	Molnlya 8K78M	2BL	78056 -661 / 668?	1.578	UNKS	DS	G	Sat MOL 0 1	NR9715-48	XPC	-
1985-106	2446383-02	1985 Nov 13 1225	Soyuz-U	-	77011 -331	6.300	UNKS	DS	G	Sat LE0 0	AK15/RAEX	XPC	-
1985-111	2446403-01	1985 Dec 3 1215	Soyuz-U	-	76021 -154	6.300	UNKS	DS	G	Sat LE0 0	AK15/RAEX	XPC	-
1985-112	2446411-11	1985 Dec 11 1440	Soyuz-U	-	76032 -812	6.600	UNKS	DS	G	Sat LE0 0	AK15/RAEX	XPC	-
1985-115	2446412-82	1985 Dec 13 0745	Soyuz-U	-	76021 -156	6.300	UNKS	DS	G	Sat LE0 0	NR95-20-29	XPC	-
1985-117	2446424-29	1985 Dec 24 1856:00	Molnlya 8K78M	ML	78056 -660	2.078	UNKS	DS	G	Sat MOL 0 1	NR9815-26	XPC	-
1985-120	2446427-21	1985 Dec 27 1706	Soyuz-U	-	B 15000-468	6.400	UNKS	DS	G	Sat LE0 0	AK15/RAEX	XPC	-
1986-001	2446436-98	1986 Jan 6 1125	Soyuz-U	-	78056 -323	6.300	UNKS	DS	G	Sat LE0 0	AK15/RAEX	XPC	-
1986-004	2446446-10	1986 Jan 16 1420	Soyuz-U	-	76021 -637	6.600	UNKS	DS	G	Sat LE0 0	AK15/RAEX	XPC	-
1986-009	2446465-86	1986 Jan 26 0635	Soyuz-U	-	76021 -530	6.300	UNKS	DS	G	Sat LE0 0	AK15/RAEX	XPC	-
1986-011	2446465-26	1986 Feb 1 1811:56	Molnlya 8K78M	2BL	78056 -677	1.578	UNKS	DS	G	Sat MOL 0 1	NR9715-46	XPC	-
1986-012	2446465-97	1986 Feb 4 1115	Soyuz-U	-	76021 -524	6.300	UNKS	DS	G	Sat LE0 0	AK15/RAEX	XPC	-
1986-013	2446466-86	1986 Feb 7 0845	Soyuz-U	-	77011 -208	6.600	UNKS	DS	G	Sat LE0 0	AK15/RAEX	XPC	-
1986-020	2446485-02	1986 Feb 26 1339:59	Soyuz-U	-	B 15000-638	6.600	UNKS	DS	G	Sat LE0 0	AK15/RAEX	XPC	-
1986-022	2446503-02	1986 Mar 13 1233:09	Soyuz-U	-	B 15000-012	6.850	UNKS	DS	G	Sat LSS 0	NR95-20-29	XPC	-
1986-024	2446505-92	1986 Mar 19 1008:25	Soyuz-U	-	B 15000-010	9.752	UNKS	DS	G	Sat LSS 0	NR0204-71	XPC	-
1986-028	2446516-94	1986 Mar 26 1030	Soyuz-U	-	76021 -528	2.655	UNKS	DS	G	Sat LE0 0	AK15/RAEX	XPC	-
1986-029	2446529-83	1986 Apr 9 0900	Soyuz-U	-	76021 -636	6.300	UNKS	DS	G	Sat LE0 0	NR9807-46	XPC	-
1986-031	2446535-99	1986 Apr 15 1140:00	Molnlya 8K78M	ML	77046 -673	6.600	UNKS	DS	G	Sat LE0 0	AK15/RAEX	XPC	-
1986-032	2446544-32	1986 Apr 23 1900:02	Soyuz-U	-	B 15000-009	6.855	UNKS	DS	G	Sat LSS 0	NR9807-46	XPC	-
1986-033	2446565-05	1986 May 14 1240:05	Soyuz-U	-	77011 -536	7.230	UNKS	DS	G	Sat LSS 0	NR0204-71	XPC	-
1986-035	2446571-86	1986 May 21 0821:51	Soyuz-U	-	B 15000-013	7.230	UNKS	DS	G	Sat LSS 0	NR9807-46	XPC	-
1986-036	2446572-19	1986 May 24 1650:00	Soyuz-U	-	B 15000-496	6.347	UNKS	DS	G	Sat LE0 0	NR95-20-29	XPC	-
1986-040	2446578-35	1986 May 28 0750:01	Soyuz-U	-	78046 -158	6.300	UNKS	DS	G	Sat LE0 0	AK15/RAEX	XPC	-
1986-041	2446579-39	1986 May 29 0920	Soyuz-U	-	78056 -915	6.300	UNKS	DS	G	Sat LE0 0	AK15/RAEX	XPC	-
1986-043	2446585-05	1986 Jun 6 1240	Soyuz-U	-	76011 -355	6.600	UNKS	DS	G	Sat LE0 0	AK15/RAEX	XPC	-
1986-045	2446592-82	1986 Jun 10 0944:59	Soyuz-U	-	76021 -526	6.300	UNKS	DS	G	Sat LE0 0	NR96-46-40	XPC	-
1986-048	2446601-94	1986 Jun 19 1039	Soyuz-U	-	76021 -546	6.300	UNKS	DS	G	Sat LE0 0	AK15/RAEX	XPC	-
1986-049	2446601-56	1986 Jun 19 2109:00	Molnlya 8K78M	ML	76046 -646	6.300	UNKS	DS	G	Sat LE0 0	AK15/RAEX	XPC	-
1986-051	2446601-55	1986 Jul 5 0156:46	Soyuz-U	-	76046 -663	2.078	UNKS	DS	G	Sat MOL 0 1	NR9815-26	XPC	-
1986-052	2446602-83	1986 Jul 17 0900:00	Soyuz-U	-	76021 -655	1.578	UNKS	DS	G	Sat MOL 0 1	NR95-20-29	XPC	-
1986-054	2446606-02	1986 Jul 24 1330:01	Soyuz-U	-	77011 -337	6.600	UNKS	DS	G	Sat LE0 0	AK15/RAEX	XPC	-
1986-057	2446602-12	1986 Jul 30 1506:00	Molnlya 8K78M	ML	76021 -658	1.978	UNKS	DS	G	Sat MOL 0 1	NR9811-24	XPC	-
1986-058	2446604-39	1986 Aug 2 0929:00	Soyuz-U	-	78028 -156	6.300	UNKS	DS	G	Sat LE0 0	AK15/RAEX	XPC	-
1986-060	2446605-96	1986 Aug 6 1305:00	Soyuz-U	-	78028 -145	6.300	UNKS	DS	G	Sat LE0 0	AK15/RAEX	XPC	-
1986-063	2446603-06	1986 Aug 21 1105:00	Soyuz-U	-	76021 -325	6.600	UNKS	DS	G	Sat LE0 0	AK15/RAEX	XPC	-
1986-064	2446609-90	1986 Aug 27 1140:00	Soyuz-U	-	77011 -917	6.600	UNKS	DS	G	Sat LE0 0	AK15/RAEX	XPC	-
1986-066	2446670-84	1986 Aug 28 0902:43	Molnlya 8K78M	2BL	76048 -351	1.578	UNKS	DS	G	Sat MOL 0 1	NR9715-48	XPC	-
1986-068	2446676-84	1986 Sep 3 0759:59	Soyuz-U	-	76048 -305	6.300	UNKS	DS	G	Sat LE0 0	AK15/RAEX	XPC	-
1986-069	2446680-83	1986 Sep 5 0912:59	Molnlya 8K78M	ML	76048 -349	1.978	UNKS	DS	G	Sat MOL 0 1	NR9701-20	XPC	-
1986-072	2446707-05	1986 Sep 17 0759	Molnlya 8K78M	2BL	77011 -694	1.578	UNKS	DS	G	Sat MOL 0 1	NR9715-48	XPC	-
1986-077	2446709-82	1986 Oct 6 0740	Soyuz-U	-	77011 -447	6.300	UNKS	DS	G	Sat LE0 0	AK15/RAEX	XPC	-
1986-078	2446713-90	1986 Oct 15 0929:18	Molnlya 8K78M	2BL	77011 -694	1.578	UNKS	DS	G	Sat MOL 0 1	NR9715-48	XPC	-
1986-079	2446723-87	1986 Oct 20 0949:00	Molnlya 8K78M	ML	77049 -645	2.078	UNKS	DS	G	Sat MOL 0 1	NR9815-26	XPC	-
1986-081	2446725-88	1986 Oct 22 0900:00	Soyuz-U	-	76048 -353	6.300	UNKS	DS	G	Sat LE0 0	AK15/RAEX	XPC	-
1986-084	2446734-83	1986 Oct 31 0800:00	Soyuz-U	-	78028 -161	6.300	UNKS	DS	G	Sat LE0 0	AK15/RAEX	XPC	-
1986-085	2446738-99	1986 Nov 4 1150:00	Soyuz-U	-	76048 -352	6.600	UNKS	DS	G	Sat LE0 0	AK15/RAEX	XPC	-
1986-087	2446747-96	1986 Nov 13 1059:59	Molnlya 8K78M	ML	76048 -509	1.578	UNKS	DS	G	Sat MOL 0 1	NR9715-48	XPC	-
1986-089	2446750-40	1986 Nov 15 2135:00	Molnlya 8K78M	2BL	77011 -689	6.300	UNKS	DS	G	Sat LE0 0	AK15/RAEX	XPC	-
1986-091	2446755-01	1986 Nov 20 1209:20	Molnlya 8K78M	2BL	76048 -861	6.300	UNKS	DS	G	Sat LE0 0	AK15/RAEX	XPC	-
1986-095	2446768-92	1986 Dec 4 1010	Soyuz-U	-	76048 -318	6.600	UNKS	DS	G	Sat LE0 0	AK15/RAEX	XPC	-
1986-098	2446777-27	1986 Dec 12 1835:36	Molnlya 8K78M	2BL	78056 -206	6.600	UNKS	DS	G	Sat LE0 0	AK15/RAEX	XPC	-
1986-099	2446781-14	1986 Dec 16 1400	Soyuz-U	-	78028 -152	6.600	UNKS	DS	G	Sat LE0 0	AK15/RAEX	XPC	-
1986-103	2446790-96	1986 Dec 26 1100	Molnlya 8K78M	ML	78028 -358	1.978	UNKS	DS	G	Sat MOL 0 1	NR9807-46	XPC	-
1987-002	2446791-94	1987 Jan 6 1258:04	Soyuz-U	-	77011 -334	6.300	UNKS	DS	G	Sat LE0 0	AK15/RAEX	XPC	-
1987-004	2446810-97	1987 Jan 15 1120:00	Soyuz-U	-	77011 -334	6.300	UNKS	DS	G	Sat LE0 0	AK15/RAEX	XPC	-
1987-005	2446810-97	1987 Jan 15 1120:00	Soyuz-U	-	B 15000-011	9.636	UNKS	DS	G	Sat LSS 0	NR9807-46	XPC	-
1987-008	2446811-75	1987 Jan 22 1606:00	Molnlya 8K78M	ML	77046 -671	2.078	UNKS	DS	G	Sat LSS 0	NR9703-56	XPC	-
1987-011	2446832-40	1987 Feb 5 2138:16	Soyuz-U	-	B 15000-014	7.230	UNKS	DS	G	Sat LSS 0	NR9703-56	XPC	-
1987-014	2446833-94	1987 Feb 7 1030:00	Soyuz-U	-	78048 -350	6.300	UNKS	DS	G	Sat LE0 0	AK15/RAEX	XPC	-
1987-019	2446845-93	1987 Feb 19 1015:00	Soyuz-U	-	78028 -357	6.600	UNKS	DS	G	Sat LE0 0	AK15/RAEX	XPC	-
1987-021	2446853-06	1987 Feb 26 1330:00	Soyuz-U	-	78056 -914	6.300	UNKS	DS	G	Sat LE0 0	AK15/RAEX	XPC	-
1987-023	2446857-97	1987 Mar 3 1114:05	Soyuz-U	-	B 15000-016	9.300	UNKS	DS	G	Sat LSS 0	NR9807-46	XPC	-
1987-025	2446865-93	1987 Mar 11 1025:00	Soyuz-U	-	78028 -359	6.300	UNKS	DS	G	Sat LE0 0	AK15/RAEX	XPC	-
1987-030	2446894-99	1987 Apr 9 1144	Soyuz-U	-	77011 -918	6.600	UNKS	DS	G	Sat LE0 0	AK15/RAEX	XPC	-
1987-033	2446901-76	1987 Apr 16 0618	Soyuz-U	-	77011 -209	6.600	UNKS	DS	G	Sat LE0 0	AK15/RAEX	XPC	-
1987-034	2446907-13	1987 Apr 21 1514:17	Soyuz-U	-	B 15000-015	9.327	UNKS	DS	G	Sat LE0 0	NR9807-46	XPC	-
1987-035	2446907-88	1987 Apr 22 0910:01	Soyuz-U	-	78028 -356	6.300	UNKS	DS	G	Sat LE0 0	AK15/RAEX	XPC	-

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	OrbPay	Agency	Launch_Code	Group	Category	LTCsite	Cite	Notes
1987-037	2446910-21	1987 Apr 24 1659:59	Soyuz-U	-	I 15000-510	6.688	UNKS	05	G	Sat LE0 0	IK9721-34	XPC	-
1987-039	2446920-89	1987 May 5 0915	Soyuz-U	-	78028 -385	6.300	UNKS	05	G	Sat LE0 0	AK15/RAEX	XPC	-
1987-042	2446928-75	1987 May 13 0600	Soyuz-U	-	78028 -361	6.300	UNKS	05	G	Sat LE0 0	AK15/RAEX	XPC	-
1987-044	2446934-67	1987 May 19 0402:10	Soyuz-U2	-	I 15000-018	9.105	UNKS	05	G	Sat LSS 0	IK9807-46	XPC	-
1987-045	2446936-82	1987 May 21 0744:19	Soyuz-U	-	77015 -104	6.300	UNKS	05	G	Sat LE0 0	IK9807-46	XPC	IK9811-24
1987-046	2446942-07	1987 May 28 1339:59	Soyuz-U	-	76048 -929	6.600	UNKS	05	G	Sat LE0 0	AK15/RAEX	XPC	-
1987-047	2446944-03	1987 May 28 1339:59	Soyuz-U	-	77015 -364	6.300	UNKS	05	G	Sat LE0 0	AK15/RAEX	XPC	-
1987-048	2446951-28	1987 Jun 4 1850:23	Molniya 8K78M	2BL	78028 -511	1.578	UNKS	05	G	Sat MOL DU 1	IK9715-48	XPC	-
1987-050	2446958-82	1987 Jun 12 0740:28	Molniya 8K78M	2BL	76048 -507	1.578	UNKS	05	G	Sat MOL DU 1	IK9715-48	XPC	-
1987-F04	2446964-81	1987 Jun 18 0724:59	Soyuz-U	-	77015 -105	6.015	UNKS	0F	G	Sat LE0 0	IK9807-46	XPC	IK9809-68
1987-058	2446984-96	1987 Jul 4 1225:00	Soyuz-U	-	76048 -384	6.300	UNKS	05	G	Sat LE0 0	AK15/RAEX	XPC	-
1987-059	2446986-17	1987 Jul 9 1059	Soyuz-U	-	76021 -446	6.600	UNKS	05	G	Sat LE0 0	AK15/RAEX	XPC	-
1987-059	2446996-58	1987 Jul 9 1610:00	Soyuz-U	-	78028 -931	6.600	UNKS	05	G	Sat LE0 0	AK15/RAEX	XPC	-
1987-066	2447011-36	1987 Jul 22 0159:17	Soyuz-U2	-	I 15000-019	7.230	UNKS	05	G	Sat LSS 0	IK9807-46	XPC	-
1987-069	2447026-79	1987 Aug 19 0659:59	Soyuz-U	-	I 15000-017	9.653	UNKS	05	G	Sat LSS 0	IK9807-46	XPC	-
1987-072	2447041-93	1987 Sep 3 1024:59	Soyuz-U	-	77011 -839	6.300	UNKS	05	G	Sat LE0 0	AK15/RAEX	XPC	-
1987-074	2447049-59	1987 Sep 11 0206:00	Soyuz-U	-	76021 -207	6.300	UNKS	05	G	Sat LE0 0	AK15/RAEX	XPC	-
1987-077	2447053-94	1987 Sep 15 1050:00	Soyuz-U	-	78028 -852	6.600	UNKS	05	G	Sat LE0 0	AK15/RAEX	XPC	-
1987-081	2447065-12	1987 Sep 17 1459:59	Soyuz-U	-	76048 -210	6.300	UNKS	05	G	Sat LE0 0	AK15/RAEX	XPC	-
1987-082	2447062-49	1987 Sep 23 2343:54	Soyuz-U2	-	78028 -653	6.600	UNKS	05	G	Sat LSS 0	IK9807-46	XPC	-
1987-083	2447068-03	1987 Sep 28 1249:59	Soyuz-U	-	I 15000-021	9.376	UNKS	05	G	Sat LE0 0	AK15/RAEX	XPC	-
1987-086	2447077-86	1987 Oct 9 0830	Soyuz-U	-	I 15000-543	6.200	UNKS	05	G	Sat LE0 0	AK15/RAEX	XPC	-
1987-089	2447091-10	1987 Oct 22 1424:57	Soyuz-U	-	77015 -368	6.600	UNKS	05	G	Sat LE0 0	AK15/RAEX	XPC	-
1987-092	2447110-86	1987 Nov 11 0904	Soyuz-U	-	76035 -945	6.300	UNKS	05	G	Sat LE0 0	AK15/RAEX	XPC	-
1987-093	2447115-90	1987 Nov 14 0929	Soyuz-U	-	77015 -459	6.300	UNKS	05	G	Sat LE0 0	AK15/RAEX	XPC	-
1987-094	2447120-49	1987 Nov 20 2347:12	Soyuz-U2	-	I 15000-022	6.300	UNKS	05	G	Sat LE0 0	AK15/RAEX	XPC	-
1987-099	2447136-87	1987 Dec 7 0850:00	Soyuz-U	-	76035 -370	6.600	UNKS	05	G	Sat LE0 0	AK15/RAEX	XPC	-
1987-102	2447143-96	1987 Dec 14 1129:59	Soyuz-U	-	77015 -943	7.230	UNKS	05	G	Sat LSS 0	IK9807-46	XPC	-
1987-104	2447150-97	1987 Dec 21 1105:03	Soyuz-U2	2BL	I 15000-020	6.300	UNKS	05	G	Sat LE0 0	AK15/RAEX	XPC	-
1987-105	2447151-44	1987 Dec 21 2335:42	Molniya 8K78M	-	78028 -514	1.578	UNKS	05	G	Sat LSS 0	IK9807-46	XPC	-
1987-106	2447154-86	1987 Dec 26 1044:59	Soyuz-U	-	I 15000-547	6.400	UNKS	05	G	Sat LE0 0	AK15/RAEX	XPC	IK9811-24
1987-108	2447165-96	1987 Dec 28 1130:01	Soyuz-U	-	78028 -352	9.402	UNKS	05	G	Sat LSS 0	IK9807-46	XPC	-
1987-110	2447181-45	1988 Jan 20 2251:54	Soyuz-U2	-	I 15000-028	6.300	UNKS	05	G	Sat LE0 0	AK15/RAEX	XPC	-
1988-003	2447186-97	1988 Feb 3 1214:56	Soyuz-U	-	77015 -363	6.600	UNKS	05	G	Sat LE0 0	AK15/RAEX	XPC	-
1988-004	2447186-97	1988 Feb 3 1214:56	Soyuz-U	-	78028 -952	6.300	UNKS	05	G	Sat LE0 0	AK15/RAEX	XPC	-
1988-010	2447209-91	1988 Feb 18 0949:59	Soyuz-U	-	76035 -107	6.300	UNKS	05	G	Sat LE0 0	AK15/RAEX	XPC	-
1988-011	2447210-35	1988 Feb 19 0800	Soyuz-U	-	76035 -571	1.578	UNKS	05	G	Sat MOL DU 1	IK9715-46	XPC	-
1988-012	2447217-90	1988 Feb 26 0851:12	Molniya 8K78M	2BL	I 15000-526	6.300	UNKS	05	G	Sat LE0 0	AK15/RAEX	XPC	-
1988-015	2447230-94	1988 Mar 10 0350:00	Soyuz-U	-	78028 -360	1.300	UNKS	05	G	Sat LE0 0	AK15/RAEX	XPC	-
1988-017	2447231-76	1988 Mar 17 0658:07	Molniya 8K78M	HL	76035 -978	1.300	UNKS	05	G	Sat LSS 0	IK9807-46	XPC	-
1988-021	2447233-37	1988 Mar 17 0658:07	Molniya 8K78M	HL	I 15000-073	1.300	UNKS	05	G/OG	Sat LSS 0	IK9807-46	XPC	-
1988-022	2447235-37	1988 Mar 23 2105:12	Soyuz-U2	-	76035 -526	1.300	UNKS	05	G	Sat LSS 0	IK9807-46	XPC	-
1988-024	2447245-09	1988 Mar 23 2105:12	Soyuz-U2	-	76048 -86F	9.220	UNKS	05	G	Sat LSS 0	IK9807-46	XPC	-
1988-027	2447245-09	1988 Mar 23 2105:12	Soyuz-U2	-	76048 -86F	6.600	UNKS	05	G	Sat LE0 0	AK15/RAEX	XPC	-
1988-030	2447262-97	1988 Apr 31 1301:00	Soyuz-U	-	77015 -367	6.300	UNKS	05	G	Sat LE0 0	AK15/RAEX	XPC	-
1988-031	2447266-21	1988 Apr 14 1700:00	Soyuz-U	-	77011 -692	6.669	UNKS	05	G	Sat LE0 0	AK15/RAEX	XPC	-
1988-032	2447271-71	1988 Apr 20 0548:12	Vostok 8A92M	-	I 15000-460	1.300	UNKS	05	G	Sat LE0 0	IK9721-34	XPC	-
1988-036	2447278-86	1988 Apr 27 0916:12	Soyuz-U	-	76035 -375	6.300	UNKS	05	G	Sat LE0 0	IK9807-46	XPC	-
1988-037	2447284-14	1988 May 12 1430:59	Soyuz-U2	-	77015 -106	6.300	UNKS	05	G	Sat LE0 0	AK15/RAEX	XPC	-
1988-038	2447284-14	1988 May 13 0330:26	Soyuz-U2	-	I 15000-093	6.414	UNKS	05	G	Sat LSS 0	IK9807-46	XPC	-
1988-042	2447289-52	1988 May 19 0915:00	Soyuz-U	-	76035 -460	6.300	UNKS	05	G	Sat LE0 0	AK15/RAEX	XPC	-
1988-044	2447300-84	1988 May 19 0915:00	Soyuz-U	-	76035 -378	6.300	UNKS	05	G	Sat LE0 0	AK15/RAEX	XPC	-
1988-047	2447308-14	1988 May 26 1527:00	Molniya 8K78M	HL	77011 -692	2.073	UNKS	05	G	Sat MOL DU 1	IK9815-26	XPC	-
1988-049	2447312-82	1988 May 31 0745:00	Soyuz-U2	-	78039 -138	6.300	UNKS	05	G	Sat LSS 0	IK9807-46	XPC	-
1988-054	2447323-92	1988 Jun 11 1000:00	Soyuz-U2	-	I 15000-027	7.230	UNKS	05	G	Sat LSS 0	IK9807-46	XPC	-
1988-054	2447323-92	1988 Jun 22 1300:00	Soyuz-U2	-	76035 -376	6.600	UNKS	05	G	Sat LE0 0	AK15/RAEX	XPC	-
1988-055	2447335-84	1988 Jun 23 0745:00	Soyuz-U	-	77015 -366	6.300	UNKS	05	G	Sat LE0 0	AK15/RAEX	XPC	-
1988-057	2447349-84	1988 Jul 7 0805:00	Soyuz-U	-	78039 -139	6.300	UNKS	05	G	Sat LE0 0	AK15/RAEX	XPC	-
1988-F02	2447352-02	1988 Jul 18 2113:09	Soyuz-U2	-	I 15000-024	9.370	UNKS	0F	G	Sat LSS 0	IK9807-46	XPC	IK9811-24
1988-061	2447361-38	1988 Jul 18 2113:09	Soyuz-U2	-	78028 -212	6.015	UNKS	0F	G	Sat LE0 0	AK15/RAEX	XPC	-
1988-064	2447369-88	1988 Jul 27 0905:00	Soyuz-U	-	78039 -130	6.300	UNKS	05	G	Sat LE0 0	AK15/RAEX	XPC	-
1988-068	2447381-89	1988 Aug 8 0925:00	Molniya 8K78M	ML	76035 -946	6.300	UNKS	05	G	Sat LE0 0	AK15/RAEX	XPC	-
1988-069	2447386-04	1988 Aug 12 1253:00	Soyuz-U	-	76035 -532	6.600	UNKS	05	G	Sat LE0 0	AK15/RAEX	XPC	-
1988-070	2447390-04	1988 Aug 16 1300:00	Soyuz-U	-	78039 -381	6.300	UNKS	05	G	Sat LE0 0	AK15/RAEX	XPC	-
1988-072	2447396-89	1988 Aug 23 0920:00	Soyuz-U	-	78039 -947	6.600	UNKS	05	G	Sat LE0 0	AK15/RAEX	XPC	-
1988-073	2447396-97	1988 Aug 23 1115:00	Soyuz-U	-	I 15000-569	6.300	UNKS	05	G	Sat LE0 0	AK15/RAEX	XPC	-
1988-075	2447402-68	1988 Aug 29 0423:11	Soyuz-U2	-	I 15000-030	7.230	UNKS	05	G	Sat LSS 0	IK9807-46	XPC	-
1988-076	2447404-09	1988 Aug 30 1414:54	Molniya 8K78M	2BL	77015 -526	1.578	UNKS	05	G	Sat MOL DU 1	IK9807-46	XPC	-
1988-079	2447410-81	1988 Sep 6 0730:01	Soyuz-U	-	76035 -377	6.300	UNKS	05	G	Sat LE0 0	AK15/RAEX	XPC	-
1988-083	2447413-94	1988 Sep 9 1040:00	Soyuz-U2	-	78039 -131	6.300	UNKS	05	G	Sat LE0 0	AK15/RAEX	XPC	-
1988-084	2447420-12	1988 Sep 9 2333:40	Soyuz-U2	-	I 15000-031	9.245	UNKS	05	G	Sat LSS 0	IK9807-46	XPC	-
1988-088	2447426-93	1988 Sep 22 1020:00	Soyuz-U	-	76048 -930	6.600	UNKS	05	G	Sat LE0 0	AK15/RAEX	XPC	-
1988-090	2447433-88	1988 Sep 29 0907:00	Molniya 8K78M	ML	76035 -379	6.300	UNKS	05	G	Sat LE0 0	AK15/RAEX	XPC	-
1988-092	2447438-43	1988 Oct 3 2223:39	Molniya 8K78M	2BL	76035 -531	2.073	UNKS	05	G	Sat MOL DU 1	IK9815-26	XPC	-
1988-094	2447447-97	1988 Oct 13 1119:59	Soyuz-U	-	78039 -387	6.300	UNKS	05	G	Sat LE0 0	AK15/RAEX	XPC	-
1988-096	2447460-25	1988 Oct 25 1802:31	Molniya 8K78M	2BL	76035 -534	1.578	UNKS	05	G	Sat LE0 0	AK15/RAEX	XPC	-
1988-097	2447461-98	1988 Oct 27 1131:00	Soyuz-U	-	77059 -390	6.300	UNKS	05	G	Sat LE0 0	AK15/RAEX	XPC	-
1988-P05	2447476-94	1988 Nov 11 1030:00	Soyuz-U	-	76035 -712	5.800	UNKS	0F	G	Sat LE0 0	AK15/RAEX	XPC	AVNMLJ
1988-103	2447480-12	1988 Nov 24 1450:00	Soyuz-U	-	76035 -372	6.300	UNKS	05	G	Sat LE0 0	AK15/RAEX	XPC	-
1988-104	2447482-16	1988 Nov 26 1549:34	Soyuz-U2	-	I 15000-028	7.230	UNKS	05	G	Sat LSS 0	IK9807-46	XPC	-
1988-105	2447485-88	1988 Nov 30 0900:00	Soyuz-U	-	76035 -374	6.300	UNKS	05	G	Sat LE0 0	AK15/RAEX	XPC	-





Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	OrbPay	Agency	Launch_Code	Group	Category	LTCite	Cite	Notes
1995-047	2449190-86	1993 Jul 22 0845:00	Soyuz-U-PVB	-	76024 -269	6.300	WISR	DS	G	Sat LE0 0	IK696-26-40	-	-
1995-049	2449203-54	1993 Aug 4 0052:00	Molniya 8K78M	ML	76024 -659	1.578	WISR	DS	G	Sat MRL DU 1	IK6915-26	-	-
1995-061	2449210-12	1993 Aug 10 1453:45	Molniya 8K78M	2BL	76023 -610	2.078	WISR	DS	G	Sat MRL DU 1	IK6915-48	-	-
1995-062	2449210-43	1993 Aug 10 2233:45	Soyuz-U	-	N 15000-634	9.379	WISR	DS	G	Sat LE0 0	IK6907-46	-	-
1995-063	2449223-95	1993 Aug 24 1045:00	Soyuz-U	-	78012 -155	6.300	WISR	DS	G	Sat LE0 0	IK695-20-29	-	-
1995-067	2449238-06	1993 Sep 7 1325:00	Soyuz-U2	-	77044 -356	7.600	WISR	DS	G	Sat LE0 0	AMVP	-	-
1995-064	2449272-40	1993 Oct 11 2135:19	Soyuz-U	-	77044 -270	7.940	WISR	DS	G	Sat LE0 0	IK6907-46	-	-
1995-071	2449296-85	1993 Nov 5 0825:00	Soyuz-U	-	76024 -486	7.000	WISR	DS	G	Sat LE0 0	AMVP	-	-
1995-079	2449344-32	1993 Dec 22 2037:16	Molniya 8K78M	ML	76024 -668	1.998	WISR	DS	G	Sat MRL DU 1	AMVP	-	-
1994-001	2449360-92	1994 Jan 8 1005:34	Soyuz-U2	-	N 15000-071	7.230	WISR	DS	G	Sat LE0 0	IK6901-24	-	-
1994-005	2449360-92	1994 Jan 28 0212:10	Soyuz-U2	-	N 15000-638	9.515	WISR	DS	G	Sat LE0 0	IK6907-46	-	-
1994-018	2449429-19	1994 Mar 17 1650:00	Soyuz-U-PVB	-	76032 -983	6.600	WISR	DS	G	Sat LE0 0	IK6901-24	-	-
1994-019	2449433-70	1994 Mar 22 0454:12	Soyuz-U	-	76032 -982	9.466	WISR	DS	G	Sat LE0 0	IK6907-46	-	-
1994-026	2449471-22	1994 Apr 28 1714:00	Soyuz-U	-	76023 -751	7.000	WISR	DS	G	Sat LE0 0	AMVP	-	-
1994-031	2449494-69	1994 May 22 0430:04	Soyuz-U2	-	76024 -355	9.324	WISR	DS	G	Sat LE0 0	IK6907-46	-	-
1994-032	2449510-81	1994 Jun 7 0720:00	Soyuz-U-PVB	-	78012 -831	6.300	WISR	DS	G	Sat LE0 0	IK696-26-40	-	-
1994-038	2449516-17	1994 Jun 14 1605:00	Soyuz-U-PVB	-	78012 -831	6.747	WISR	DS	G	Sat LE0 0	IK6901-24	-	-
1994-038	2449535-02	1994 Jul 1 1224:50	Soyuz-U2	-	N 15000-072	7.230	WISR	DS	G	Sat LE0 0	IK6901-24	-	-
1994-042	2449564-23	1994 Jul 20 1735:00	Soyuz-U2	-	77044 -995	6.600	WISR	DS	G	Sat LE0 0	AMVP	-	-
1994-044	2449562-90	1994 Jul 29 0950:00	Soyuz-U-PVB	-	77051 -497	6.300	WISR	DS	G	Sat LE0 0	IK6901-24	-	-
1994-048	2449569-55	1994 Aug 5 0112:21	Molniya 8K78M	2BL	76012 -662	1.578	WISR	DS	G	Sat LE0 0	IK6901-24	-	-
1994-061	2449585-10	1994 Aug 23 1430:59	Molniya 8K78M	ML	77044 -661	2.078	WISR	DS	G	Sat MRL DU 1	IK6915-48	-	-
1994-063	2449590-10	1994 Aug 26 1428:12	Soyuz-U	-	N 15000-636	9.460	WISR	DS	G	Sat LE0 0	IK6907-46	-	-
1994-063	2449629-45	1994 Oct 3 2242:30	Soyuz-U2	-	IK15000-074	7.230	WISR	DS	G	Sat LE0 0	IK6920-6	-	-
1994-075	2449667-81	1994 Nov 11 0721:58	Soyuz-U	-	IK15000-638	9.505	WISR	DS	G	Sat LE0 0	IK6907-46	-	-
1994-081	2449701-10	1994 Dec 14 1421:00	Molniya 8K78M	ML	77051 -672	1.998	WISR	DS	G	Sat MRL DU 1	AMVP	-	-
1994-088	2449715-96	1994 Dec 29 1130:00	Soyuz-U	-	76052 -762	7.000	WISR	DS	G	Sat LE0 0	IK6901-24	-	-
1995-006	2449764-20	1995 Dec 29 1300:00	Soyuz-U	-	IK15000-641	9.527	WISR	DS	G	Sat LE0 0	IK6907-46	-	-
1995-006	2449790-76	1996 Feb 16 1648:28	Soyuz-U	-	IK15000-651	7.170	WISR	DS	G	Sat LE0 0	IK6921-34	-	-
1995-014	2449799-20	1996 Mar 14 0611:54	Soyuz-U2	-	V 15000-075	6.600	WISR	DS	G	Sat LE0 0	AMVP	-	-
1995-020	2449817-32	1996 Mar 22 1644:59	Soyuz-U-PVB	-	77051 -507	6.600	WISR	DS	G	Sat LE0 0	AMVP	-	-
1995-026	2449827-27	1996 Apr 9 1934:12	Molniya 8K78M	2BL	77017 -573	1.578	WISR	DS	G	Sat MRL DU 1	IK6907-46	-	-
1995-031	2449891-65	1996 Jun 28 1825:00	Soyuz-U-PVB	-	V 15000-646	9.600	WISR	DS	G	Sat LE0 0	AMVP	-	-
1995-036	2449916-63	1996 Jul 20 0504:14	Soyuz-U	-	77051 -506	6.600	WISR	DS	G	Sat LE0 0	AMVP	-	-
1995-039	2449932-50	1996 Aug 2 2359:11	Molniya 8K78M	2BL	V 15000-643	9.505	WISR	DS	G	Sat LE0 0	IK6907-46	-	-
1995-042	2449935-60	1996 Aug 9 0221:00	Molniya 8K78M	ML	N 15000-294	1.637	WISR	DS	G	Sat LE0 0	AMVP	-	-
1995-047	2449963-36	1996 Sep 5 0900:25	Soyuz-U2	-	77051 -674	2.078	WISR	DS	G	Sat MRL DU 1	IK6915-48	-	-
1995-060	2449986-97	1996 Sep 26 1120:00	Soyuz-U	-	V 15000-653	7.230	WISR	DS	G	Sat LE0 0	AMVP	-	-
1995-061	2449989-66	1996 Sep 29 0625:00	Soyuz-U	-	IK15000-642	6.460	WISR	DS	G	Sat LE0 0	AMVP	-	-
1995-063	2450070-11	1996 Oct 18 0140:45	Soyuz-U	-	IK15000-645	7.000	WISR	DS	G	Sat LE0 0	AMVP	-	-
1995-070	2450072-76	1996 Dec 28 1451:58	Soyuz-U	-	V 15000-649	9.293	WISR	DS	G	Sat LE0 0	IK6907-46	-	-
1996-011	2450157-02	1996 Feb 28 1645:15	Molniya 8K78M	2BL	V 15000-649	1.600	WISR	DS	G/OG	Sat SS0 0	IK6907-46	-	-
1996-014	2450157-24	1996 Mar 1 1740:00	Soyuz-U-PVB	-	V 15000-651	7.230	WISR	DS	G	Sat LE0 0	IK6907-46	-	-
1996-028	2450207-87	1996 Mar 14 0851:50	Soyuz-U	-	IK15000-651	6.600	WISR	DS	G	Sat LE0 0	IK6907-46	-	-
1996-028	2450215-51	1996 May 20 1854:59	Soyuz-U-PVB	-	77044 -843	6.950	WISR	DS	G	Sat LE0 0	IK6907-46	-	-
1996-043	2450295-33	1996 Jun 31 2009:06	Soyuz-U-PVB	-	77044 -843	6.980	WISR	DS	G	Sat LE0 0	IK696-10-32	-	-
1996-045	2450310-33	1996 Jul 14 2020:56	Soyuz-U	-	IK15000-648	9.533	WISR	DS	G	Sat LE0 0	IK6907-46	-	-
1996-047	2450313-05	1996 Aug 17 1319:03	Molniya 8K78M	ML	N 15000-049	1.998	WISR	DS	G	Sat MRL DU 1	IK6907-46	-	-
1996-050	2450324-72	1996 Aug 29 0529:03	Soyuz-U	-	77033 -676	7.230	WISR	DS	G	Sat LE0 0	IK6907-46	-	-
1996-060	2450360-91	1996 Oct 24 1137:00	Molniya 8K78M	2BL	76044 -650	1.751	WISR	DS	G	Sat LE0 0	AMVP	-	-
1996-066	2450407-42	1996 Nov 19 2320:38	Soyuz-U	-	78012 -645	2.078	WISR	DS	G	Sat MRL DU 1	IK6907-46	-	-
1997-003	2450480-03	1996 Dec 24 1350:00	Soyuz-U	-	IK15000-639	6.300	WISR	DS	G	Sat MRL DU 1	IK6909-68	-	-
1997-014	2450545-17	1997 Feb 10 1039:30	Soyuz-U	-	V 15000-650	7.230	WISR	DS	G	Sat LE0 0	AMVP	-	-
1997-014	2450547-87	1997 Apr 9 0859:44	Molniya 8K78M	2BL	IK15000-660	9.586	WISR	DS	G	Sat LE0 0	IK6907-46	-	-
1997-022	2450582-52	1997 May 14 0039:57	Molniya 8K78M	2BL	76032 -677	1.578	WISR	DS	G	Sat MRL DU 1	IK6909-30	-	-
1997-034	2450584-01	1997 May 15 1210:00	Soyuz-U	-	77031 -168	7.600	WISR	DS	G	Sat MRL DU 1	IK6910-34	-	-
1997-038	2450634-67	1997 Jul 5 0411:54	Soyuz-U	-	S 15000-653	9.575	WISR	DS	G	Sat LE0 0	IK6907-46	-	-
1997-046	2450716-40	1997 Aug 5 1535:53	Molniya 8K78M	ML	S 15000-655	7.230	WISR	DS	G	Sat MRL DU 1	AMVP	-	-
1997-058	2450727-13	1997 Sep 24 2130:59	Soyuz-U	-	78051 -678	1.998	WISR	DS	G	Sat LE0 0	IK6907-46	-	-
1997-060	2450731-25	1997 Oct 5 1508:57	Soyuz-U	-	S 15000-064	6.354	WISR	DS	G	Sat LE0 0	IK6907-46	-	-
1997-072	2450770-97	1997 Nov 18 1114:59	Soyuz-U	-	S 15000-064	6.300	WISR	DS	G	Sat LE0 0	IK6907-46	-	-
1997-080	2450788-15	1997 Dec 15 1540:00	Soyuz-U-PVB	-	76024 -763	6.600	WISR	DS	G	Sat LE0 0	IK6907-46	-	-
1998-004	2450802-86	1997 Dec 20 0845:02	Soyuz-U	-	S 15000-654	9.532	WISR	DS	G	Sat LE0 0	IK6907-46	-	-
1998-009	2450881-94	1998 Jan 29 1633:42	Soyuz-U-PVB	?	S 15000-654	7.230	WISR	DS	G	Sat LE0 0	IK6902-45	-	-
1998-009	2450881-94	1998 Feb 17 1035:00	Soyuz-U-PVB	?	A 15000-046	6.300	WISR	DS	G	Sat LE0 0	IK6902-45	-	-
1998-017	2450940-87	1998 Mar 14 2245:55	Molniya 8K78M	ML	S 15000-656	1.984	WISR	DS	G	Sat LE0 0	IK6907-46	-	-
1998-027	2450948-43	1998 May 7 0853:22	Soyuz-U-PVB	?	78051 -676	9.612	WISR	DS	G	Sat MRL DU 1	IK6911-14	-	-
1998-038	2450989-27	1998 Jun 24 1829:58	Soyuz-U-PVB	?	IK15000-043	6.600	WISR	DS	G	Sat LE0 0	IK6914-10	-	-
1998-039	2450990-53	1998 Jun 25 1400:00	Molniya 8K78M	ML	77017 -662	2.079	WISR	DS	G	Sat MRL DU 2	IK6915-26	-	-
1998-047	2451038-90	1998 Aug 13 0943:11	Soyuz-U-PVB	?	N 15000-658	7.000	WISR	DS	G	Sat LE0 0	IK6902-45	-	-
1998-062	2451111-68	1998 Sep 28 2341:27	Molniya 8K78M	ML	IK15000-030	1.999	WISR	DS	G	Sat MRL DU 2	IK6923-01	-	-
1999-007	2451218-68	1999 Feb 5 0414:57	Soyuz-U-PVB	?	S 15000-660	9.806	WISR	DS	G	Sat LE0 0	IK6902-45	-	-
1999-015	2451252-63	1999 Mar 15 0306:00	Soyuz-U-PVB	?	N 15000-662	7.120	WISR	DS	G	Sat LE0 0	IK6904-03	-	-
1999-019	2451270-93	1999 Apr 2 1128:43	Soyuz-U-PVB	?	S 15000-663	1.800	WISR	DS	G	Sat LE0 0	IK6905-21	-	-
1999-036	2451367-86	1999 Jul 8 0845:06	Molniya 8K78M	ML	S 15000-060	1.800	WISR	DS	G	Sat LE0 0	IK6906-12	-	-
1999-038	2451376-19	1999 Jul 16 1637:33	Soyuz-U-PVB	-	78051 -677	2.079	WISR	DS	G	Sat MRL DU 1	IK6909-32	-	-
					N 15000-667	9.570	WISR	DS	G	Sat LE0 0	IK6909-05		



Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	OrbPly	Agency	Launch_Code	Group	Category	LTCite	Cite	Notes
2007-020	2454250-36	2007 May 29 2031:30	Soyuz-FG	Fregat	Ts15000-021/1016	1.800	STSM	05	CO	Sat LE0 DD	MK0707-23	-	-
2007-021	2454259-25	2007 Jun 7 1800:01	Soyuz-U-PWB	-	76033 -137 099	6.900	KVR	05	G	Sat ISS 0	Wire	-	-
2007-022	2454315-23	2007 Aug 2 1733:47	Soyuz-U-PWB	-	Ts15000-108	9.853	FKA	05	G	Sat ISS 0	MK0710-18	-	-
2007-040	2454357-96	2007 Oct 14 1100:00	Soyuz-FG	-	Ts15000-098	7.270	FKA	05	G	Sat LE0 0	Wire	-	-
2007-048	2454384-06	2007 Oct 10 1322:39	Soyuz-FG	-	Ts15000-020	7.270	FKA	05	G	Sat ISS 0	MK0712-01	-	-
2007-049	2454394-34	2007 Oct 20 2012:25	Soyuz-FG	-	Ts15000-022/1015	1.800	STSM	05	CO	Sat LE0 DD	Wire	-	-
2007-061	2454396-69	2007 Oct 23 0439:17	Molniya 8K78M	2BL	77046 -692 049	2.228	KVR	05	G	Sat MLL DD 1	MK0802-33	-	-
2007-061	2454449-05	2007 Dec 14 1317:34	Soyuz-FG	Fregat	Ts15000-025/1015-2	2.300	STSM	05	CO/0G	Sat SS0 DD	MK0802-12	-	-
2007-064	2454457-80	2007 Dec 23 0712:41	Soyuz-U-PWB	-	Sh15000-109	9.701	FKA	05	G	Sat ISS 0	MK0804-09	-	-
2008-004	2454502-04	2008 Feb 5 1302:57	Soyuz-FG	-	Sh15000-106	9.648	FKA	05	G	Sat ISS 0	Wire	-	-
2008-015	2454564-97	2008 Apr 8 1116:39	Soyuz-FG	-	Sh15000-024	7.270	FKA	05	G	Sat ISS 0	Wire	-	-
2008-020	2454583-43	2008 Apr 26 2216:02	Soyuz-FG	Fregat	P 15000-016/1008	0.630	STSM	05	CO/G	Sat MEO SU	www.esa.int	MK0806-30	-
2008-023	2454601-35	2008 May 14 2022:56	Soyuz-U-PWB	-	Sh15000-110	9.418	FKA	05	G	Sat SS0 0	MK0807-25	-	-
2008-037	2454674-22	2008 Jul 26 1831:36	Soyuz-2-1B	-	77057 -145 003	7.000	KVR	05	G	Sat SS0 0	MK0809-34	-	-
2008-043	2454720-33	2008 Sep 10 1950:02	Soyuz-U-PWB	-	Sh15000-111	9.741	FKA	05	G	Sat ISS 0	Wire	-	-
2008-050	2454751-79	2008 Oct 12 0701:33	Soyuz-FG	-	Sh15000-026	7.270	FKA	05	G	Sat ISS 0	MK0812-02	-	-
2008-060	2454785-16	2008 Nov 26 1238:38	Soyuz-U-PWB	-	77057 -146 103	6.900	KVR	05	G	Sat LE0 0	MK0812-02	-	-
2008-062	2454797-03	2008 Nov 26 1238:38	Soyuz-U-PWB	-	Sh15000-114	9.964	FKA	05	G	Sat LE0 0	MK0812-02	-	-
2008-066	2454802-71	2008 Dec 2 0459:59	Molniya 8K78M	2BL	77046 -693 050	2.228	FKA	05	G	Sat MLL DD 1	MK0801-34	-	-
2008-066	2454812-11	2009 Feb 10 0649:16	Soyuz-U-PWB	-	Ts15000-115	9.495	FKA	05	G	Sat ISS 0	MK0801-34	-	-
2008-066	2454816-99	2009 Mar 26 1149:18	Soyuz-FG	-	Ts15000-115	9.484	FKA	05	G	Sat ISS 0	MK0804-06	-	-
2008-066	2454851-21	2009 Apr 29 1658:00	Soyuz-U-PWB	-	78075 -152 105	6.635	KVR	05	G	Sat LE0 0	MK0806-38	-	-
2008-066	2454859-28	2009 May 7 1837:09	Soyuz-U-PWB	-	Sh15000-113	9.629	FKA	05	G	Sat MEO SU	MK0807-46	-	-
2008-066	2454873-41	2009 May 21 2153:33	Soyuz-2-1A	Fregat	77067 -162 005	7.194	FKA	05	G	Sat ISS 0	MK0807-06	-	-
2008-066	2454876-94	2009 May 27 1054:53	Soyuz-FG	-	Ts15000-112	9.754	FKA	05	G	Sat SS0 DD	MK0811-34	-	-
2008-066	2455036-96	2009 Jul 24 1556:56	Soyuz-U-PWB	-	Ts15000-002	3.179	FKA	05	G	Sat ISS 0	MK0811-22	-	-
2008-069	2455092-16	2009 Sep 17 1555:07	Soyuz-2-1B	Fregat	Ts15000-029	9.197	FKA	05	G	Sat ISS 0	MK0807-06	-	-
2008-069	2455104-80	2009 Sep 30 0714:45	Soyuz-FG	-	Sh15000-030	7.194	FKA	05	G	Sat ISS 0	Wire	-	-
2008-069	2455119-55	2009 Oct 15 0114:37	Soyuz-U-PWB	-	Ts15000-120	9.614	FKA	05	G	Sat ISS 0	MK0811-34	-	-
2008-069	2455146-10	2009 Nov 20 1424:04	Soyuz-U-PWB	-	B 15000-121	7.125	FKA	05	G	Sat ISS 0	MK0811-34	-	-
2008-069	2455185-95	2009 Nov 20 1044:00	Soyuz-U-PWB	-	B 15000-121	7.125	FKA	05	G	Sat ISS 0	MK0811-34	-	-
2008-069	2455186-41	2009 Dec 2 2152:00	Soyuz-FG	-	78043 -611 097	6.000	KVR	05	G	Sat LE0 0	MK1001-23	-	-
2008-069	2455230-66	2010 Feb 3 0346:29	Soyuz-U-PWB	-	B 15000-031	7.200	FKA	05	G	Sat ISS 0	MK1004-1	-	-
2008-069	2455288-67	2010 Apr 2 0404:35	Soyuz-FG	-	Ts15000-028	7.193	FKA	05	G	Sat ISS 0	MK1004-1	-	-
2008-069	2455305-12	2010 Apr 16 1500:00	Soyuz-U-PWB	-	78029 -169 124	6.900	KVR	05	G	Sat ISS 0	MK1006-45	-	-
2008-069	2455315-22	2010 Apr 28 1718:09	Soyuz-U-PWB	-	B 15000-118	9.653	FKA	05	G	Sat LE0 0	MK1006-45	-	-
2008-069	2455363-40	2010 Jun 30 1538:19	Soyuz-FG	-	B 15000-032	7.200	FKA	05	G	Sat ISS 0	MK1006-21	-	-
2008-069	2455376-15	2010 Jun 30 1558:14	Soyuz-U-PWB	-	B 15000-119	9.653	FKA	05	G	Sat ISS 0	Wire	-	-
2008-069	2455449-93	2010 Sep 10 1022:57	Soyuz-U-PWB	-	B 15000-122	9.412	FKA	05	G	Sat ISS 0	MK1011-06	-	-
2008-069	2455470-21	2010 Sep 30 1701:15	Molniya 8K78M	2BL	78041 -698 052	2.228	FKA	05	G	Sat MEO DD 1	MK1011-06	-	-
2008-069	2455477-47	2010 Oct 19 2310:58	Soyuz-FG	-	B 15000-038	7.200	STSM	05	CO	Sat ISS 0	MK1012-30	-	-
2008-069	2455487-22	2010 Oct 19 1710:59	Soyuz-2-1A	Fregat	B 15000-039/ST22	4.290	STSM	05	CO	Sat ISS 0	MK1012-30	-	-
2008-069	2455507-15	2010 Oct 27 181:50	Soyuz-U-PWB	-	78012 -694 006	9.851	FKA	05	G	Sat ISS 0	Wire	-	-
2008-069	2455522-54	2010 Nov 15 0056:59	Soyuz-FG	-	B 15000-123	2.000	KVR	05	G	Sat ISS 0	MK1011-20	-	-
2008-069	2455569-50	2010 Dec 28 1899:55	Soyuz-2-1A	Fregat	78012 -694 006	9.851	FKA	05	G	Sat ISS 0	MK1011-20	-	-
2008-069	2455628-34	2011 Jan 28 0331:39	Soyuz-FG	-	B 15000-034	7.200	FKA	05	G	Sat ISS 0	MK1012-30	-	-
2008-069	2455669-96	2011 Feb 20 0349:15	Soyuz-U-PWB	-	Ts15000-036	10.086	FKA	05	G	Sat ISS 0	MK1013-12	-	-
2008-069	2455668-63	2011 Feb 20 0349:15	Soyuz-FG	-	77015 -696 017	9.955	KVR	05	G	Sat MEO SU	MK1013-12	-	-
2008-069	2455668-63	2011 Feb 20 0349:15	Soyuz-FG	-	Ts15000-036	9.955	KVR	05	G	Sat MEO SU	MK1013-12	-	-
2008-069	2455670-34	2011 Apr 27 1730:51	Soyuz-U-PWB	-	B 15000-036	9.634	FKA	05	G	Sat ISS 0	MK1014-31	-	-
2008-069	2455670-34	2011 Apr 27 1730:51	Soyuz-FG	-	78012 -692 015	7.100	KVR	05	G	Sat MEO SU	MK1014-31	-	-
2008-069	2455670-34	2011 Jun 7 2015:45	Soyuz-2-1A	Fregat	Ts15000-037	7.100	FKA	05	G	Sat MEO SU	MK1014-31	-	-
2008-069	2455670-34	2011 Jun 7 2015:45	Soyuz-FG	-	B 15000-124	9.855	FKA	05	G	Sat ISS 0	MK1014-31	-	-
2008-069	2455670-34	2011 Jun 7 2015:45	Soyuz-FG	-	Ts15000-037	7.100	FKA	05	G	Sat MEO SU	MK1014-31	-	-
2008-069	2455670-34	2011 Jun 7 2015:45	Soyuz-FG	-	78012 -692 125	6.900	KVR	05	G	Sat ISS 0	MK1014-31	-	-
2008-069	2455670-34	2011 Jun 13 0927:04	Soyuz-U-PWB	-	B 15000-124	9.855	FKA	05	G	Sat ISS 0	MK1014-31	-	-
2008-069	2455670-34	2011 Jun 13 0927:04	Soyuz-FG	-	78012 -692 125	6.900	KVR	05	G	Sat ISS 0	MK1014-31	-	-
2008-069	2455670-34	2011 Jun 13 0927:04	Soyuz-FG	-	B 15000-124	9.855	FKA	05	G	Sat ISS 0	MK1014-31	-	-
2008-069	2455670-34	2011 Jun 13 0927:04	Soyuz-FG	-	78012 -692 125	6.900	KVR	05	G	Sat ISS 0	MK1014-31	-	-
2008-069	2455670-34	2011 Jun 13 0927:04	Soyuz-FG	-	B 15000-124	9.855	FKA	05	G	Sat ISS 0	MK1014-31	-	-
2008-069	2455670-34	2011 Jun 13 0927:04	Soyuz-FG	-	78012 -692 125	6.900	KVR	05	G	Sat ISS 0	MK1014-31	-	-
2008-069	2455670-34	2011 Jun 13 0927:04	Soyuz-FG	-	B 15000-124	9.855	FKA	05	G	Sat ISS 0	MK1014-31	-	-
2008-069	2455670-34	2011 Jun 13 0927:04	Soyuz-FG	-	78012 -692 125	6.900	KVR	05	G	Sat ISS 0	MK1014-31	-	-
2008-069	2455670-34	2011 Jun 13 0927:04	Soyuz-FG	-	B 15000-124	9.855	FKA	05	G	Sat ISS 0	MK1014-31	-	-
2008-069	2455670-34	2011 Jun 13 0927:04	Soyuz-FG	-	78012 -692 125	6.900	KVR	05	G	Sat ISS 0	MK1014-31	-	-
2008-069	2455670-34	2011 Jun 13 0927:04	Soyuz-FG	-	B 15000-124	9.855	FKA	05	G	Sat ISS 0	MK1014-31	-	-
2008-069	2455670-34	2011 Jun 13 0927:04	Soyuz-FG	-	78012 -692 125	6.900	KVR	05	G	Sat ISS 0	MK1014-31	-	-
2008-069	2455670-34	2011 Jun 13 0927:04	Soyuz-FG	-	B 15000-124	9.855	FKA	05	G	Sat ISS 0	MK1014-31	-	-
2008-069	2455670-34	2011 Jun 13 0927:04	Soyuz-FG	-	78012 -692 125	6.900	KVR	05	G	Sat ISS 0	MK1014-31	-	-
2008-069	2455670-34	2011 Jun 13 0927:04	Soyuz-FG	-	B 15000-124	9.855	FKA	05	G	Sat ISS 0	MK1014-31	-	-
2008-069	2455670-34	2011 Jun 13 0927:04	Soyuz-FG	-	78012 -692 125	6.900	KVR	05	G	Sat ISS 0	MK1014-31	-	-
2008-069	2455670-34	2011 Jun 13 0927:04	Soyuz-FG	-	B 15000-124	9.855	FKA	05	G	Sat ISS 0	MK1014-31	-	-
2008-069	2455670-34	2011 Jun 13 0927:04	Soyuz-FG	-	78012 -692 125	6.900	KVR	05	G	Sat ISS 0	MK1014-31	-	-
2008-069	2455670-34	2011 Jun 13 0927:04	Soyuz-FG	-	B 15000-124	9.855	FKA	05	G	Sat ISS 0	MK1014-31	-	-
2008-069	2455670-34	2011 Jun 13 0927:04	Soyuz-FG	-	78012 -692 125	6.900	KVR	05	G	Sat ISS 0	MK1014-31	-	-
2008-069	2455670-34	2011 Jun 13 0927:04	Soyuz-FG	-	B 15000-124	9.855	FKA	05	G	Sat ISS 0	MK1014-31	-	-
20													

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Agency	Launch_Code	Group	Category	LTCite	Cite	Notes
2015-030	2454649.23	2013 Jun 25 1728:48	Soyuz-2-1B	-	I 15000-013	FKA	DS	G	Sat SS0 0	spaceflightnow.com	NK1308-38	-
2015-031	2454649.31	2013 Jun 25 1927:03	Soyuz-ST-B	Fregat	E 15000-033/1041	AE	DS	CO	Sat MED 0	naspacerflight.com	-	-
2015-039	2454650.36	2013 Jul 21 2046:08	Soyuz-U-PVB	-	L 15000-130	FKA	DS	G	Sat ISS 0	spaceflightnow.com	NK1309-13	-
2015-046	2454651.37	2013 Sep 25 2058:50	Soyuz-FG	-	T 15000-046	FKA	DS	G	Sat ISS 0	spaceflightnow.com	NK1311-08	-
2015-061	2454653.68	2013 Nov 7 0414:15	Soyuz-FG	-	T 15000-048	FKA	DS	G	Sat ISS 0	spaceflightnow.com	NK1401-02	-
2015-069	2454652.37	2013 Nov 25 2053:06	Soyuz-U-PVB	-	E 15000-134	FKA	DS	G	Sat ISS 0	spaceflightnow.com	NK1401-24	-
2015-074	2454654.88	2013 Dec 19 0912:11	Soyuz-ST-B	Fregat	E 15000-044/1040	AE	DS	CO/G	Sat EDU SE	naspacerflight.com	-	-
2015-078	2454655.02	2013 Dec 28 1230:00	Soyuz-2-1V	Volga	760-55-002/001	AE	DS	G	Sat EDU SD	naspacerflight.com	NK1402-60	-
2015-085	2454656.18	2014 Feb 5 1623:33	Soyuz-U-PVB	-	E 15000-139	FKA	DS	G	Sat ISS 0	spaceflightnow.com	NK1404-13	-
2015-012	2454657.40	2014 Mar 23 2254:03	Soyuz-2-1B	Fregat	780-85-168/112-01	AE	DS	G	Sat ISS 0	spaceflightnow.com	NK1405-39	-
2015-013	2454657.42	2014 Mar 25 2117:23	Soyuz-FG	-	T 15000-047	FKA	DS	G	Sat ISS 0	spaceflightnow.com	NK1406-35	-
2015-016	2454657.38	2014 Apr 3 2102:26	Soyuz-ST-A	Fregat	B 15000-004/1038	AE	DS	CO/G	Sat SS0 D	naspacerflight.com	NK1406-14	-
2015-017	2454657.14	2014 Apr 9 1526:27	Soyuz-U-PVB	-	L 15000-141	FKA	DS	G	Sat ISS 0	spaceflightnow.com	NK1406-47	-
2015-021	2454657.64	2014 Apr 16 1620:00	Soyuz-U-PVB	-	E 15000-143	FKA	DS	G	Sat ISS 0	spaceflightnow.com	NK1407-26	-
2015-025	2454657.84	2014 May 6 1349:35	Soyuz-2-1A	-	760-55-163 019	AE	DS	G	Sat ISS 0	spaceflightnow.com	NK1407-06	-
2015-031	2454658.33	2014 May 28 1957:41	Soyuz-FG	-	T 15000-049	FKA	DS	G	Sat ISS 0	spaceflightnow.com	NK1408-18	-
2015-032	2454658.23	2014 May 28 2028:00	Soyuz-FG	-	E 15000-060	AE	DS	G/G+C	Sat SS0 SD	naspacerflight.com	-	-
2015-037	2454658.47	2014 Jun 4 1716:48	Soyuz-2-1B	Fregat	T 15000-023/112-02	FKA	DS	G	Sat ISS 0	spaceflightnow.com	-	-
2015-038	2454658.49	2014 Jul 8 1658:28	Soyuz-2-1B	Fregat	L 15000-011/1025	AE	DS	G	Sat ISS 0	spaceflightnow.com	NK1412-19	-
2015-041	2454658.37	2014 Jul 18 2050:00	Soyuz-2-1A	-	E 15000-051	FKA	DS	G	Sat MDL SU	spaceflightnow.com	NK1501-04	-
2015-042	2454658.21	2014 Jul 23 2144:44	Soyuz-U-PVB	-	T 15000-026/1044	AE	DS	G	Sat ISS 0	spaceflightnow.com	naspacerflight.com	-
2015-060	2454658.02	2014 Aug 22 1227:11	Soyuz-ST-B	Fregat	780-31-139 005	AE	DS	CO	Sat MED 0	naspacerflight.com	-	-
2015-067	2454659.26	2014 Sep 25 2028:00	Soyuz-FG	-	L 15000-009	FKA	DS	G	Sat ISS 0	spaceflightnow.com	zenite.nu	-
2015-068	2454659.80	2014 Oct 29 0709:43	Soyuz-2-1A	-	770-46-243 010	AE	DS	CO/G	Sat ISS 0	spaceflightnow.com	zenite.nu	-
2015-069	2454659.57	2014 Oct 30 0142:52	Soyuz-2-1A	-	T 15000-022	FKA	DS	G	Sat SS0 0	spaceflightnow.com	NK1509-22	-
2015-074	2454659.36	2014 Nov 20 2152:26	Soyuz-FG	-	780-72-171 024	AE	DS	G	Sat ISS 0	spaceflightnow.com	NK1509-16	-
2015-083	2454659.41	2014 Dec 28 0301:13	Soyuz-ST-B	Fregat	T 15000-069	FKA	DS	G	Sat ISS 0	spaceflightnow.com	NK1509-01	-
2015-086	2457010.26	2014 Dec 28 1857:00	Soyuz-2-1B	-	E 15000-054	FKA	DS	G	Sat ISS 0	spaceflightnow.com	NK1511-25	-
2015-087	2457016.29	2014 Dec 28 1858:50	Soyuz-2-1B	-	T 15000-042	FKA	DS	G	Sat ISS 0	spaceflightnow.com	NK1511-25	-
2015-088	2457018.29	2014 Dec 28 1859:50	Soyuz-2-1B	-	T 15000-052	FKA	DS	G	Sat ISS 0	spaceflightnow.com	NK1512-91	-
2015-089	2457070.96	2015 Feb 17 1103:17	Soyuz-U-PVB	-	780-31-139 005	AE	DS	G	Sat ISS 0	spaceflightnow.com	NK1601-39	-
2015-090	2457080.96	2015 Feb 27 1101:36	Soyuz-FG	-	L 15000-144	FKA	DS	G	Sat ISS 0	spaceflightnow.com	zenite.nu	-
2015-091	2457109.32	2015 Mar 27 1942:57	Soyuz-2-1A	Fregat	780-31-139 005	AE	DS	CO/G	Sat MED 0	naspacerflight.com	-	-
2015-092	2457109.41	2015 Mar 27 2146:18	Soyuz-ST-B	-	T 15000-063	AE	DS	G	Sat ISS 0	spaceflightnow.com	NK1602-34	-
2015-093	2457140.60	2015 Apr 26 0709:50	Soyuz-2-1A	-	T 15000-022	FKA	DS	G	Sat ISS 0	spaceflightnow.com	zenite.nu	-
2015-097	2457179.14	2015 Jun 5 1523:54	Soyuz-2-1B	-	780-72-171 024	AE	DS	G	Sat ISS 0	spaceflightnow.com	NK1602-23	-
2015-099	2457187.20	2015 Jun 23 1644:00	Soyuz-2-1B	-	780-55-156 012	AE	DS	G	Sat ISS 0	spaceflightnow.com	-	-
2015-101	2457206.71	2015 Jul 22 2102:46	Soyuz-FG	-	T 15000-142	FKA	DS	G	Sat ISS 0	spaceflightnow.com	NK1605-08	-
2015-103	2457226.36	2015 Jul 22 2102:46	Soyuz-FG	-	T 15000-062	FKA	DS	G	Sat ISS 0	spaceflightnow.com	NK1605-27	-
2015-104	2457267.69	2015 Sep 11 0208:10	Soyuz-ST-B	Fregat	T 15000-069/133-03	AE	DS	CO/G	Sat SS0 SD	naspacerflight.com	NK1606-02	-
2015-105	2457276.59	2015 Oct 11 0653:41	Soyuz-U-PVB	-	E 15000-054	FKA	DS	G	Sat ISS 0	spaceflightnow.com	NK1606-02	-
2015-106	2457343.70	2015 Nov 17 1658:54	Soyuz-2-1B	-	780-31-139 005	AE	DS	G	Sat ISS 0	spaceflightnow.com	NK1607-20	-
2015-107	2457343.70	2015 Nov 17 1658:54	Soyuz-2-1B	-	780-31-139 005	AE	DS	G	Sat ISS 0	spaceflightnow.com	NK1607-20	-
2015-108	2457343.70	2015 Nov 17 1658:54	Soyuz-2-1B	-	780-31-139 005	AE	DS	G	Sat ISS 0	spaceflightnow.com	NK1607-20	-
2015-109	2457343.70	2015 Nov 17 1658:54	Soyuz-2-1B	-	780-31-139 005	AE	DS	G	Sat ISS 0	spaceflightnow.com	NK1607-20	-
2015-110	2457343.70	2015 Nov 17 1658:54	Soyuz-2-1B	-	780-31-139 005	AE	DS	G	Sat ISS 0	spaceflightnow.com	NK1607-20	-
2015-111	2457343.70	2015 Nov 17 1658:54	Soyuz-2-1B	-	780-31-139 005	AE	DS	G	Sat ISS 0	spaceflightnow.com	NK1607-20	-
2015-112	2457343.70	2015 Nov 17 1658:54	Soyuz-2-1B	-	780-31-139 005	AE	DS	G	Sat ISS 0	spaceflightnow.com	NK1607-20	-
2015-113	2457343.70	2015 Nov 17 1658:54	Soyuz-2-1B	-	780-31-139 005	AE	DS	G	Sat ISS 0	spaceflightnow.com	NK1607-20	-
2015-114	2457343.70	2015 Nov 17 1658:54	Soyuz-2-1B	-	780-31-139 005	AE	DS	G	Sat ISS 0	spaceflightnow.com	NK1607-20	-
2015-115	2457343.70	2015 Nov 17 1658:54	Soyuz-2-1B	-	780-31-139 005	AE	DS	G	Sat ISS 0	spaceflightnow.com	NK1607-20	-
2015-116	2457343.70	2015 Nov 17 1658:54	Soyuz-2-1B	-	780-31-139 005	AE	DS	G	Sat ISS 0	spaceflightnow.com	NK1607-20	-
2015-117	2457343.70	2015 Nov 17 1658:54	Soyuz-2-1B	-	780-31-139 005	AE	DS	G	Sat ISS 0	spaceflightnow.com	NK1607-20	-
2015-118	2457343.70	2015 Nov 17 1658:54	Soyuz-2-1B	-	780-31-139 005	AE	DS	G	Sat ISS 0	spaceflightnow.com	NK1607-20	-
2015-119	2457343.70	2015 Nov 17 1658:54	Soyuz-2-1B	-	780-31-139 005	AE	DS	G	Sat ISS 0	spaceflightnow.com	NK1607-20	-
2015-120	2457343.70	2015 Nov 17 1658:54	Soyuz-2-1B	-	780-31-139 005	AE	DS	G	Sat ISS 0	spaceflightnow.com	NK1607-20	-
2015-121	2457343.70	2015 Nov 17 1658:54	Soyuz-2-1B	-	780-31-139 005	AE	DS	G	Sat ISS 0	spaceflightnow.com	NK1607-20	-
2015-122	2457343.70	2015 Nov 17 1658:54	Soyuz-2-1B	-	780-31-139 005	AE	DS	G	Sat ISS 0	spaceflightnow.com	NK1607-20	-
2015-123	2457343.70	2015 Nov 17 1658:54	Soyuz-2-1B	-	780-31-139 005	AE	DS	G	Sat ISS 0	spaceflightnow.com	NK1607-20	-
2015-124	2457343.70	2015 Nov 17 1658:54	Soyuz-2-1B	-	780-31-139 005	AE	DS	G	Sat ISS 0	spaceflightnow.com	NK1607-20	-
2015-125	2457343.70	2015 Nov 17 1658:54	Soyuz-2-1B	-	780-31-139 005	AE	DS	G	Sat ISS 0	spaceflightnow.com	NK1607-20	-
2015-126	2457343.70	2015 Nov 17 1658:54	Soyuz-2-1B	-	780-31-139 005	AE	DS	G	Sat ISS 0	spaceflightnow.com	NK1607-20	-
2015-127	2457343.70	2015 Nov 17 1658:54	Soyuz-2-1B	-	780-31-139 005	AE	DS	G	Sat ISS 0	spaceflightnow.com	NK1607-20	-
2015-128	2457343.70	2015 Nov 17 1658:54	Soyuz-2-1B	-	780-31-139 005	AE	DS	G	Sat ISS 0	spaceflightnow.com	NK1607-20	-
2015-129	2457343.70	2015 Nov 17 1658:54	Soyuz-2-1B	-	780-31-139 005	AE	DS	G	Sat ISS 0	spaceflightnow.com	NK1607-20	-
2015-130	2457343.70	2015 Nov 17 1658:54	Soyuz-2-1B	-	780-31-139 005	AE	DS	G	Sat ISS 0	spaceflightnow.com	NK1607-20	-
2015-131	2457343.70	2015 Nov 17 1658:54	Soyuz-2-1B	-	780-31-139 005	AE	DS	G	Sat ISS 0	spaceflightnow.com	NK1607-20	-
2015-132	2457343.70	2015 Nov 17 1658:54	Soyuz-2-1B	-	780-31-139 005	AE	DS	G	Sat ISS 0	spaceflightnow.com	NK1607-20	-
2015-133	2457343.70	2015 Nov 17 1658:54	Soyuz-2-1B	-	780-31-139 005	AE	DS	G	Sat ISS 0	spaceflightnow.com	NK1607-20	-
2015-134	2457343.70	2015 Nov 17 1658:54	Soyuz-2-1B	-	780-31-139 005	AE	DS	G	Sat ISS 0	spaceflightnow.com	NK1607-20	-
2015-135	2457343.70	2015 Nov 17 1658:54	Soyuz-2-1B	-	780-31-139 005	AE	DS	G	Sat ISS 0	spaceflightnow.com	NK1607-20	-
2015-136	2457343.70	2015 Nov 17 1658:54	Soyuz-2-1B	-	780-31-139 005	AE	DS	G	Sat ISS 0	spaceflightnow.com	NK1607-20	-
2015-137	2457343.70	2015 Nov 17 1658:54	Soyuz-2-1B	-	780-31-139 005	AE	DS	G	Sat ISS 0	spaceflightnow.com	NK1607-20	-
2015-138	2457343.70	2015 Nov 17 1658:54	Soyuz-2-1B	-	780-31-139 005	AE	DS	G	Sat ISS 0	spaceflightnow.com	NK1607-20	-
2015-139	2457343.70	2015 Nov 17 1658:54	Soyuz-2-1B	-	780-31-139 005	AE	DS	G	Sat ISS 0	spaceflightnow.com	NK1607-20	-
2015-140	2457343.70	2015 Nov 17 1658:54	Soyuz-2-1B	-	780-31-139 005	AE	DS	G	Sat ISS 0	spaceflightnow.com	NK1607-20	-
2015-141	2457343.70	2015 Nov 17 1658:54	Soyuz-2-1B	-	780-31-139 005	AE	DS	G	Sat ISS 0	spaceflightnow.com	NK1607-20	-
2015-142	2457343.70	2015 Nov 17 1658:54	Soyuz-2-1B	-	780-31-139 005	AE	DS	G	Sat ISS 0	spaceflightnow.com	NK1607-20	-
2015-143	2457343.70	2015 Nov 17 1658:54	Soyuz-2-1B	-	780-31-139 005	AE	DS					



Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Orb/Pray	Agency	Launch_Code	Group	Category	LTCite	Cite	Notes
2015-066	2458426.35	2018 Nov 3 20:17:55	Soyuz-2-1B	Fregat	R 15000-036/112-08	1.450	VKRO	05	G	Sat MED SD	spaceflightnow.com	-	-
2015-087	2458429.53	2018 Nov 7 00:47:28	Soyuz-ST-B	-	U 15000-014/133-14	4.086	AE	05	CO/G	Sat ISS SD	spaceflightnow.com	-	-
2015-091	2458439.26	2018 Nov 16 18:14:08	Soyuz-F0	-	N 15000-068	7.430	FKA	05	CO/G	Sat ISS 0	spaceflightnow.com	-	-
2015-096	2458465.98	2018 Dec 3 11:31:52	Soyuz-F0	-	N 15000-067	7.219	FKA	05	CO/G	Sat ISS 0	spaceflightnow.com	-	-
2015-111	2458472.19	2018 Dec 19 16:57:14	Soyuz-ST-A	Fregat	U 15000-009/133-10	3.655	AE	05	CO/G	Sat ISS SD	spaceflightnow.com	-	-
2015-088	2458479.59	2018 Dec 27 20:07:18	Soyuz-2-1B	Fregat	Yal15000-003/122-06	1.242	FKA	05	G/G+C	Sat SSO SD	spaceflightnow.com	-	-
2015-010	2458536.20	2019 Feb 21 16:47:14	Soyuz-2-1B	Fregat	U 15000-024/112-07	1.050	FKA	05	G/G	Sat SSO D	spaceflightnow.com	-	-
2015-013	2458542.40	2019 Feb 27 21:37:00	Soyuz-ST-B	-	U 15000-016/133-15	1.480	AE	05	CO	Sat LE0 SD	spaceflightnow.com	-	-
2015-019	2458557.30	2019 Mar 14 19:14:09	Soyuz-F0	-	Yal15000-070	7.218	FKA	05	G	Sat ISS 0	spaceflightnow.com	-	-
2015-020	2458571.96	2019 Apr 4 11:01:35	Soyuz-2-1A	-	Yal15000-036	9.997	FKA	05	CO	Sat ISS 0	spaceflightnow.com	-	-
2015-030	2458576.21	2019 Apr 27 06:28:30	Soyuz-ST-B	Fregat	U 15000-017/133-17	2.800	AE	05	CO	Sat MED 0	spaceflightnow.com	-	-
2015-038	2458630.77	2019 May 27 06:28:30	Soyuz-2-1B	Fregat	Yal15000-005/112-09	1.450	VKRO	05	G/G+C	Sat MED SD	spaceflightnow.com	-	-
2015-039	2458669.74	2019 Jul 5 06:41:46	Soyuz-2-1B	Fregat	Yal15000-002/122-04	3.192	FKA	05	G	Sat SSO SD	spaceflightnow.com	-	-
2015-041	2458675.22	2019 Jul 10 17:14	Soyuz-2-1V	Volga	780-72 - 004/005	0.710	VKRO	05	G	Sat ISS 0	spaceflightnow.com	-	-
2015-044	2458685.19	2019 Jul 20 16:28:20	Soyuz-F0	-	N 15000-069	7.218	FKA	05	G	Sat ISS 0	spaceflightnow.com	-	-
2015-047	2458696.01	2019 Jul 31 00:57	Soyuz-2-1A	Fregat	780-21 - 117/1036	2.000	VKRO	05	G	nanospaceflight.com	-	-	-
2015-056	2458717.65	2019 Aug 22 03:58:31	Soyuz-2-1A	-	N 15000-035	9.884	FKA	05	G	Sat ISS 0	spaceflightnow.com	-	-
2015-064	2458752.08	2019 Aug 28 13:57:43	Soyuz-F0	-	Yal15000-037	7.218	FKA	05	G	Sat ISS 0	spaceflightnow.com	-	-
2015-075	2458762.82	2019 Sep 26 07:46	Soyuz-2-1B	Fregat	780-72 - 176/111-302	2.850	VKRO	05	G	Sat ISS 0	spaceflightnow.com	-	-
2015-083	2458813.24	2019 Nov 26 17:52	Soyuz-2-1B	Volga	780-21 - 121/004	0.647	VKRO	05	G	Sat SSO DD	spaceflightnow.com	-	-
2015-088	2458823.90	2019 Dec 6 09:54:11	Soyuz-2-1A	-	N 15000-034	9.911	FKA	05	G	Sat MED SD	spaceflightnow.com	-	-
2015-092	2458835.87	2019 Dec 11 08:54	Soyuz-2-1B	Fregat	N 15000-046/112-10	1.450	VKRO	05	CO/G	Sat MED SD	spaceflightnow.com	-	-
2015-098	2458865.40	2020 Feb 6 21:42:41	Soyuz-ST-A	Fregat	R 15000-008/133-12	2.919	AE	05	CO	Sat SSO D	spaceflightnow.com	-	-
2015-016	2458869.65	2020 Feb 20 08:24:54	Soyuz-2-1B	Fregat	U 15000-046/123-01	5.032	STSH	05	CO	Sat LE0 D	spaceflightnow.com	-	-
2015-018	2458895.27	2020 Mar 16 15:28:10	Soyuz-2-1A	Fregat	780-21 - 118/111-303	2.000	VKRO	05	G	Sat HDL SD	nanospaceflight.com	-	-
2015-023	2458925.21	2020 Mar 21 17:06:58	Soyuz-2-1B	Fregat	780-58 - 148/112-11	1.450	VKRO	05	G	Sat LE0 SD	spaceflightnow.com	-	-
2015-028	2458930.21	2020 Apr 9 08:05:06	Soyuz-2-1B	-	N 15000-049/123-02	5.032	STSH	05	CO	Sat LE0 D	spaceflightnow.com	-	-
2015-026	2458964.54	2020 Apr 25 01:51:41	Soyuz-2-1A	Fregat	Yal15000-038	9.216	FKA	05	G	Sat ISS 0	spaceflightnow.com	-	-
2015-031	2458991.81	2020 May 22 07:31:17	Soyuz-2-1B	-	Yal15000-040	9.851	FKA	05	G	Sat ISS 0	spaceflightnow.com	-	-
2015-060	2459094.10	2020 Jul 23 14:26:22	Soyuz-2-1B	Fregat	T 15000-028/112-501	9.855	FKA	05	G	Sat HDL SD	spaceflightnow.com	-	-
2015-068	2459120.97	2020 Sep 28 11:20:33	Soyuz-2-1B	-	N 15000-045	7.216	FKA	05	G	Sat ISS 0	spaceflightnow.com	-	-
2015-072	2459136.74	2020 Oct 14 09:46:04	Soyuz-2-1A	Fregat	Rh15000-046	0.952	VKRO	05	G/G+C	Sat SSO SD	spaceflightnow.com	-	-
2015-076	2459146.30	2020 Oct 26 15:06	Soyuz-2-1B	-	N 15000-031/112-12	0.974	VKRO	05	G	Sat ISS 0	spaceflightnow.com	-	-
2015-090	2459185.56	2020 Dec 2 01:51:28	Soyuz-ST-A	Fregat	N 15000-010/133-16	1.197	AE	05	CO/0/G	Sat MED SD	spaceflightnow.com	-	-
2015-091	2459185.56	2020 Dec 3 11:54	Soyuz-2-1B	Fregat	N 15000-049/112-602	0.679	VKRO	05	CO	Sat SSO SD	spaceflightnow.com	-	-
2015-100	2459202.02	2020 Dec 18 12:26:27	Soyuz-2-1B	Fregat	U 15000-004/123-06	3.226	STSH	05	CO/G	Sat LE0 SD	spaceflightnow.com	-	-
2015-104	2459232.20	2020 Dec 29 16:42:07	Soyuz-ST-A	Fregat	R 15000-069/133-11	3.952	AE	05	CO	Sat SSO SD	spaceflightnow.com	-	-
2015-088	2459246.36	2021 Feb 7 20:45:28	Soyuz-2-1B	-	V 15000-041	6.975	VKRO	05	CO/G	Sat LE0 D	spaceflightnow.com	-	-
2015-111	2459269.70	2021 Feb 15 04:45:06	Soyuz-2-1A	Fregat	N 15000-032/122-07	9.880	FKA	05	G	Sat ISS 0	spaceflightnow.com	-	-
2015-016	2459272.79	2021 Feb 20 06:59:01	Soyuz-2-1B	Fregat	V 15000-044/122-05	1.336	CO/LS	05	CO	Sat SSO SD	spaceflightnow.com	-	-
2015-022	2459286.75	2021 Mar 25 00:07:12	Soyuz-2-1B	Fregat	U 15000-065/123-09	5.328	STSH	05	CO	Sat SSO SD	spaceflightnow.com	-	-
2015-028	2459316.92	2021 Apr 25 09:47:33	Soyuz-2-1B	Fregat	Rh15000-065/123-09	7.328	STSH	05	CO	Sat LE0 D	spaceflightnow.com	-	-
2015-029	2459316.92	2021 Apr 26 07:42:41	Soyuz-2-1A	Fregat	V 15000-006/123-11	5.328	STSH	05	CO	Sat LE0 D	spaceflightnow.com	-	-
2015-043	2459330.43	2021 Apr 28 17:38	Soyuz-2-1B	Fregat	U 15000-007/123-10	5.328	STSH	05	CO	Sat LE0 D	spaceflightnow.com	-	-
2015-044	2459330.43	2021 May 25 10:50:30	Soyuz-2-1B	-	N 15000-043	9.231	VKRO	05	G	Sat ISS 0	spaceflightnow.com	-	-
2015-065	2459391.33	2021 Jun 29 23:27:20	Soyuz-2-1B	-	R 15000-008/123-12	6.821	STSH	05	CO	Sat LE0 D	spaceflightnow.com	-	-
2015-067	2459395.06	2021 Jul 1 12:38:33	Soyuz-2-1A	Fregat	N 15000-060/123-03	6.022	STSH	05	CO	Sat LE0 D	spaceflightnow.com	-	-
2015-076	2459448.43	2021 Aug 21 21:13:40	Soyuz-2-1V	Fregat	N 15000-060/123-03	6.022	VKRO	05	CO	Sat SSO D	spaceflightnow.com	-	-
2015-081	2459467.33	2021 Sep 14 19:50:40	Soyuz-2-1V	Fregat	Kh15000-047	7.020	STSH	05	CO	Sat LE0 D	spaceflightnow.com	-	-
2015-083	2459472.33	2021 Sep 14 18:07:19	Soyuz-2-1B	Fregat	U 15000-015/133-05	7.020	STSH	05	CO	Sat LE0 D	spaceflightnow.com	-	-
2015-084	2459472.33	2021 Oct 5 08:55:02	Soyuz-2-1B	Fregat	Kh15000-009/123-14	7.020	STSH	05	CO	Sat LE0 D	spaceflightnow.com	-	-
2015-088	2459501.90	2021 Oct 14 09:00:30	Soyuz-2-1B	Fregat	N 15000-051/123-05	5.328	STSH	05	CO	Sat LE0 D	spaceflightnow.com	-	-
2015-091	2459515.50	2021 Oct 24 08:00:30	Soyuz-2-1A	-	Yal15000-064	8.186	FKA	05	G	Sat ISS 0	spaceflightnow.com	-	-
2015-111	2459543.05	2021 Nov 24 13:09:35	Soyuz-2-1B	Fregat	U 15000-015/133-13	1.466	AE	05	CO/G	Sat MED SD	spaceflightnow.com	-	-
2015-113	2459543.05	2021 Nov 25 01:09:13	Soyuz-2-1B	Fregat	S 15000-066	9.943	FKA	05	G	Sat ISS 0	spaceflightnow.com	-	-
2015-116	2459567.15	2021 Dec 8 07:38:15	Soyuz-2-1A	Fregat	780-97-216/ 111-30x	2.000	VKRO	05	G	Sat LE0 SD	nanospaceflight.com	-	-
2015-119	2459568.82	2021 Dec 8 07:38:15	Soyuz-2-1A	Fregat	780-21-118/7	6.575	VKRO	05	G	Sat MED SD	spaceflightnow.com	-	-
2015-132	2459576.05	2021 Dec 27 13:10:37	Soyuz-2-1B	-	N 15000-065/ 123-06	0.770	FKA	05	G/G+G	Sat SSO SD	spaceflightnow.com	-	-
2015-011	2459615.79	2022 Feb 5 07:00:00	Soyuz-2-1A	Fregat	U 15000-066/ 112-13	0.974	VKRO	05	G	Sat MED SD	spaceflightnow.com	-	-
2015-012	2459621.68	2022 Feb 10 18:09:37	Soyuz-ST-B	Fregat	780-72-185/ 111-401	2.000	VKRO	05	CO	Sat LE0 SD	spaceflightnow.com	-	-
2015-014	2459625.68	2022 Feb 15 04:25:40	Soyuz-2-1A	Fregat	Yal15000-018/133-19	5.032	AE	05	CO	Sat LE0 D	spaceflightnow.com	-	-
2015-028	2459657.16	2022 Mar 18 15:55:18	Soyuz-2-1A	-	S 15000-066	9.943	FKA	05	G	Sat ISS 0	spaceflightnow.com	-	-
2015-030	2459661.03	2022 Mar 22 12:48:22	Soyuz-2-1A	-	N 15000-060	7.218	FKA	05	G	Sat ISS 0	spaceflightnow.com	-	-
2015-036	2459676.97	2022 Apr 7 11:20:18	Soyuz-2-1B	-	N 15000-064	2.000	VKRO	05	G	Sat LE0 SD	nanospaceflight.com	-	-
2015-054	2459718.84	2022 Apr 19 08:03:32	Soyuz-2-1A	-	780-21-118/7	3.700	VKRO	05	G	Sat SSO D	spaceflightnow.com	-	-
2015-059	2459733.90	2022 Jul 7 09:52:54	Soyuz-2-1A	-	Yal15000-128	9.938	VKRO	05	G	Sat ISS 0	spaceflightnow.com	-	-
2015-075	2459767.89	2022 Jul 7 09:18:06	Soyuz-2-1V	Volga	Yal15000-066/ 112-13	0.547	VKRO	05	G	Sat SSO DD	spaceflightnow.com	-	-
2015-089	2459793.33	2022 Aug 1 02:25	Soyuz-2-1V	Fregat	Yal15000-066/ 112-16	0.974	VKRO	05	G	Sat ISS 0	spaceflightnow.com	-	-
2015-096	2459800.74	2022 Aug 9 05:52:48	Soyuz-2-1B	-	Yal15000-065/ 123-06	0.770	FKA	05	G	Sat SSO SD	spaceflightnow.com	-	-
2015-130	2459844.04	2022 Oct 10 02:52:32	Soyuz-2-1A	-	Yal15000-061	0.974	VKRO	05	G	Sat MED SD	spaceflightnow.com	-	-
2015-137	2459874.31	2022 Oct 21 19:20:15	Soyuz-2-1B	Fregat	Yal15000-066/ 112-16	0.974	VKRO	05	G	Sat ISS 0	spaceflightnow.com	-	-
2015-139	2459875.33	2022 Oct 22 19:57:09	Soyuz-2-1B	-	Kh15000-011/ 142-503	1.000	VKRO	05	G	Sat LE0 SD	spaceflightnow.com	-	-
2015-145	2459878.51	2022 Oct 26 00:20:49	Soyuz-2-1B	-	S 15000-067	9.918	VKRO	05	G	Sat LE0 SD	nanospaceflight.com	-	-
2015-161	2459885.78	2022 Nov 2 06:47:48	Soyuz-2-1B	Fregat	- 111-306	2.150	VKRO	05	G	Sat MED SD	spaceflightnow.com	-	-

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	OrbPay	Agency	Launch_Code	Group	Category	LTCite	Cite	Notes
2023-091	2460122-98	2023 Jun 27 1134:49	Soyuz-2-1B	Fregat	Kh15000-010/ 142-02	3.407	FKA	US	G	Sat S50 SD	naspaceflight.com	-	-
2023-114	2460164-06	2023 Aug 7 1319:25	Soyuz-2-1B	Fregat	- / 112-23	1.645	VKO	US	G	Sat MED SD	naspaceflight.com	-	-
2023-118	2460167-47	2023 Aug 10 2310:57	Soyuz-2-1B	Fregat	V 15000-003/ 122-10	1.800	FKA	DS	G	Sat EEO SE	naspaceflight.com	-	-
2023-126	2460179-55	2023 Aug 23 0108:10	Soyuz-2-1A	-	M 15000-065	7.500	FKA	US	G	Sat ISS 0	spaceflightknow.com	-	-
2023-143	2460203-16	2023 Sep 15 1544:35	Soyuz-2-1A	-	M 15000-061	7.200	FKA	US	G	Sat ISS 0	spaceflightknow.com	-	-
2023-165	2460244-75	2023 Oct 27 0604:43	Soyuz-2-1B	-	-	6.595	VKO	US	G	Sat LEO 0	novosti-kosmonavtika	-	-
2023-182	2460274-37	2023 Nov 25 2058:06	Soyuz-2-1B	-	-	6.500	VKO	US	G	Sat S50 0	naspaceflight.com	-	-
2023-184	2460279-89	2023 Dec 1 0925:12	Soyuz-2-1A	-	M 15000-067	7.500	FKA	US	G	Sat ISS 0	spaceflightknow.com	-	-
2023-196	2460294-89	2023 Dec 16 0917:48	Soyuz-2-1B	-	Ya15000-058/ 122-11	2.200	FKA	US	G	Sat MIL SU	russianspaceweb.com	-	-
2023-201	2460299-87	2023 Dec 21 0848:39	Soyuz-2-1B	?	-	3.700	VKO	US	G	Sat S50 0	naspaceflight.com	-	-
2023-209	2460305-79	2023 Dec 27 0703:44	Soyuz-2-1V	-	-	0.520	VKO	US	G	Sat S50 0	naspaceflight.com	-	-
2024-026	2460349-79	2024 Feb 9 0703	Soyuz-2-1V	-	-	0.520	VKO	US	G	Sat S50 0	naspaceflight.com	-	-
2024-029	2460355-64	2024 Feb 15 0325:06	Soyuz-2-1A	-	M 15000-068	7.500	FKA	US	G	Sat ISS 0	spaceflightknow.com	-	-
2024-039	2460369-74	2024 Feb 29 0643:26	Soyuz-2-1B	Fregat	S 15000-012/ 142-04	3.452	FKA	US	G	Sat S50 SD	naspaceflight.com	-	-
2024-065	2460393-03	2024 Mar 23 1236:10	Soyuz-2-1A	-	M 15000-066	7.200	FKA	US	G	Sat ISS 0	naspaceflight.com	-	-
2024-061	2460400-90	2024 Mar 31 0956:45	Soyuz-2-1B	-	Kh15000-067	6.000	FKA	US	G	Sat S50 SD	russianspaceweb.com	-	-
2024-092	2460447-39	2024 May 16 2121	Soyuz-2-1B	Fregat	770-53-735 xxx-xx	0.700	VKO	US	G	Sat S50 SD	naspaceflight.com	-	-
2024-103	2460460-90	2024 May 30 0942:59	Soyuz-2-1A	-	-	7.500	FKA	US	G	Sat ISS 0	spaceflightknow.com	-	-
2024-145	2460537-64	2024 Aug 15 0320:18	Soyuz-2-1A	-	A 15000-072	7.500	FKA	US	G	Sat ISS 0	spaceflightknow.com	-	-
2024-162	2460565-18	2024 Sep 11 1623:12	Soyuz-2-1A	-	M 15000-070	7.200	FKA	US	G	Sat S50 0	naspaceflight.com	-	-
2024-197	2460614-83	2024 Oct 31 0751:51	Soyuz-2-1A	-	760-72-531	3.700	VKO	US	G	Sat S50 0	naspaceflight.com	-	-
2024-199	2460619-47	2024 Nov 4 2318:40	Soyuz-2-1B	Fregat	S 15000-013 xxx-xx	3.500	FKA	US	G	Sat S50 SD	naspaceflight.com	-	-
2024-215	2460636-02	2024 Nov 21 1222:24	Soyuz-2-1A	-	-	7.500	FKA	US	G	Sat ISS 0	spaceflightknow.com	-	-





Launch

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Mission	Launch	FlightCode	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee_Km	Range_Km	Dest
1970-5768	2440586-50	1970	R-9A	-	-	8K75 UBP 70-2	-	-	-	-	MIP-53?	-	-	-	11607	-	Kura
1970-5769	2440586-50	1970	R-9A	-	-	8K75 UBP 70-3	-	-	-	-	MIP-53?	-	-	-	11607	-	Kura
1970-5770	2440586-50	1970	R-9A	-	-	8K75 UBP 70-4	-	-	-	-	MIP-53?	-	-	-	11607	-	Kura
1970-5771	2440586-50	1970	R-9A	-	-	8K75 UBP 70-5	-	-	-	-	MIP-53?	-	-	-	11607	-	Kura
1970-5772	2440586-50	1970	R-9A	-	-	8K75 UBP 70-6	-	-	-	-	MIP-53?	-	-	-	11607	-	Kura
1970-5773	2440586-50	1970	R-9A	-	-	8K75 UBP 70-7	-	-	-	-	MIP-53?	-	-	-	11607	-	Kura
1970-5774	2440586-50	1970	R-9A	-	-	8K75 UBP 70-8	-	-	-	-	MIP-53?	-	-	-	11607	-	Kura
1970-5775	2440586-50	1970	R-9A	-	-	8K75 UBP 70-9	-	-	-	-	MIP-53?	-	-	-	11607	-	Kura
1970-5776	2440951-50	1971	R-9A	-	-	8K75 UBP 71-1	-	-	-	-	MIP-53?	-	-	-	11607	-	Kura
1971-5708	2440951-50	1971	R-9A	-	-	8K75 UBP 71-2	-	-	-	-	MIP-53?	-	-	-	11607	-	Kura
1971-5709	2440951-50	1971	R-9A	-	-	8K75 UBP 71-3	-	-	-	-	MIP-53?	-	-	-	11607	-	Kura
1971-5710	2440951-50	1971	R-9A	-	-	8K75 UBP 71-4	-	-	-	-	MIP-53?	-	-	-	11607	-	Kura
1971-5711	2440951-50	1971	R-9A	-	-	8K75 UBP 71-5	-	-	-	-	MIP-53?	-	-	-	11607	-	Kura
1971-5712	2440951-50	1971	R-9A	-	-	8K75 UBP 71-6	-	-	-	-	MIP-53?	-	-	-	11607	-	Kura
1971-5713	2440951-50	1971	R-9A	-	-	8K75 UBP 71-7	-	-	-	-	MIP-53?	-	-	-	11607	-	Kura
1971-5714	2440951-50	1971	R-9A	-	-	8K75 UBP 71-8	-	-	-	-	MIP-53?	-	-	-	11607	-	Kura
1971-5715	2440951-50	1971	R-9A	-	-	8K75 UBP 71-9	-	-	-	-	MIP-53?	-	-	-	11607	-	Kura
1971-5716	2440951-50	1971	R-9A	-	-	8K75 UBP 71-10	-	-	-	-	MIP-53?	-	-	-	11607	-	Kura
1971-5717	2440951-50	1971	R-9A	-	-	8K75 UBP 71-11	-	-	-	-	MIP-53?	-	-	-	11607	-	Kura
1971-5718	2440951-50	1971	R-9A	-	-	8K75 UBP 71-12	-	-	-	-	MIP-53?	-	-	-	11607	-	Kura
1971-5719	2440951-50	1971	R-9A	-	-	8K75 UBP 71-13	-	-	-	-	MIP-53?	-	-	-	11607	-	Kura
1971-5720	2440951-50	1971	R-9A	-	-	8K75 UBP 71-14	-	-	-	-	MIP-53?	-	-	-	11607	-	Kura
1971-5721	2440951-50	1971	R-9A	-	-	8K75 UBP 71-15	-	-	-	-	MIP-53?	-	-	-	11607	-	Kura
1971-5722	2440951-50	1971	R-9A	-	-	8K75 UBP 71-16	-	-	-	-	MIP-53?	-	-	-	11607	-	Kura
1971-5723	2440951-50	1971	R-9A	-	-	8K75 UBP 71-17	-	-	-	-	MIP-53?	-	-	-	11607	-	Kura
1971-5724	2440951-50	1971	R-9A	-	-	8K75 UBP 71-18	-	-	-	-	MIP-53?	-	-	-	11607	-	Kura
1971-5725	2440951-50	1971	R-9A	-	-	8K75 UBP 71-19	-	-	-	-	MIP-53?	-	-	-	11607	-	Kura
1971-5726	2440951-50	1971	R-9A	-	-	8K75 UBP 71-20	-	-	-	-	MIP-53?	-	-	-	11607	-	Kura
1971-5667	2441102-75	1971 May 31 0600	R-9A	-	G 15001-01	8K75 UBP-44	-	-	-	-	OMSK	LC320/11/1	-	-	11607	-	Kura
1972-5499	2441390-50	1972 Mar 14	R-9A	-	-	8K75 UBP-46	-	-	-	-	MIP-53	-	-	-	11607	-	Kura
1973-5466	2441875-21	1973 Jul 11 1700	R-9A	-	G 15001-10	8K75 UBP-46	-	-	-	-	MIP-53	-	-	-	11607	-	Kura
1974-5444	2442085-90	1974 Jan 21 0941	R-9A	-	G 15001-08	8K75 UBP-46	-	-	-	-	MIP-53	-	-	-	11607	-	Kura
1976-5469	2442777-50	1976	R-9A	-	-	8K75 UBP-76-1	-	-	-	-	MIP-53?	-	-	-	11607	-	Kura
1976-5470	2442777-50	1976	R-9A	-	-	8K75 UBP-76-2	-	-	-	-	MIP-53?	-	-	-	11607	-	Kura
1976-5471	2442777-50	1976	R-9A	-	-	8K75 UBP-76-3	-	-	-	-	MIP-53?	-	-	-	11607	-	Kura
1976-5472	2442777-50	1976	R-9A	-	-	8K75 UBP-76-4	-	-	-	-	MIP-53?	-	-	-	11607	-	Kura
1976-5473	2442777-50	1976	R-9A	-	-	8K75 UBP-76-5	-	-	-	-	MIP-53?	-	-	-	11607	-	Kura
1976-5474	2442777-50	1976	R-9A	-	-	8K75 UBP-76-6	-	-	-	-	MIP-53?	-	-	-	11607	-	Kura
1976-5475	2442777-50	1976	R-9A	-	-	8K75 UBP-76-7	-	-	-	-	MIP-53?	-	-	-	11607	-	Kura
1976-5476	2442777-50	1976	R-9A	-	-	8K75 UBP-76-8	-	-	-	-	MIP-53?	-	-	-	11607	-	Kura
1976-5477	2442777-50	1976	R-9A	-	-	8K75 UBP-76-9	-	-	-	-	MIP-53?	-	-	-	11607	-	Kura
1976-5478	2442777-50	1976	R-9A	-	-	8K75 UBP-76-10	-	-	-	-	MIP-53?	-	-	-	11607	-	Kura
1976-5479	2442777-50	1976	R-9A	-	-	8K75 UBP-76-11	-	-	-	-	MIP-53?	-	-	-	11607	-	Kura
1976-5480	2442777-50	1976	R-9A	-	-	8K75 UBP-76-12	-	-	-	-	MIP-53?	-	-	-	11607	-	Kura
1976-5481	2442777-50	1976	R-9A	-	-	8K75 UBP-76-13	-	-	-	-	MIP-53?	-	-	-	11607	-	Kura
1976-5482	2442777-50	1976	R-9A	-	-	8K75 UBP-76-14	-	-	-	-	MIP-53?	-	-	-	11607	-	Kura





Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Drbby	Agency	Launch_Code	Group	Category	LTCite	Cite	Notes
1970-5768	2440586.50	1970	R-9A	-	-	0.000	RVSH	MS	-	OT	RNL	-	-
1970-5769	2440586.50	1970	R-9A	-	-	0.000	RVSH	MS	-	OT	RNL	-	-
1970-5770	2440586.50	1970	R-9A	-	-	0.000	RVSH	MS	-	OT	RNL	-	-
1970-5771	2440586.50	1970	R-9A	-	-	0.000	RVSH	MS	-	OT	RNL	-	-
1970-5772	2440586.50	1970	R-9A	-	-	0.000	RVSH	MS	-	OT	RNL	-	-
1970-5773	2440586.50	1970	R-9A	-	-	0.000	RVSH	MS	-	OT	RNL	-	-
1970-5774	2440586.50	1970	R-9A	-	-	0.000	RVSH	MS	-	OT	RNL	-	-
1970-5775	2440586.50	1970	R-9A	-	-	0.000	RVSH	MS	-	OT	RNL	-	-
1971-5707	2440951.50	1971	R-9A	-	-	0.000	RVSH	MS	-	OT	RNL	-	-
1971-5708	2440951.50	1971	R-9A	-	-	0.000	RVSH	MS	-	OT	RNL	-	-
1971-5709	2440951.50	1971	R-9A	-	-	0.000	RVSH	MS	-	OT	RNL	-	-
1971-5710	2440951.50	1971	R-9A	-	-	0.000	RVSH	MS	-	OT	RNL	-	-
1971-5711	2440951.50	1971	R-9A	-	-	0.000	RVSH	MS	-	OT	RNL	-	-
1971-5712	2440951.50	1971	R-9A	-	-	0.000	RVSH	MS	-	OT	RNL	-	-
1971-5713	2440951.50	1971	R-9A	-	-	0.000	RVSH	MS	-	OT	RNL	-	-
1971-5714	2440951.50	1971	R-9A	-	-	0.000	RVSH	MS	-	OT	RNL	-	-
1971-5715	2440951.50	1971	R-9A	-	-	0.000	RVSH	MS	-	OT	RNL	-	-
1971-5716	2440951.50	1971	R-9A	-	-	0.000	RVSH	MS	-	OT	RNL	-	-
1971-5717	2440951.50	1971	R-9A	-	-	0.000	RVSH	MS	-	OT	RNL	-	-
1971-5718	2440951.50	1971	R-9A	-	-	0.000	RVSH	MS	-	OT	RNL	-	-
1971-5719	2440951.50	1971	R-9A	-	-	0.000	RVSH	MS	-	OT	RNL	-	-
1971-5720	2440951.50	1971	R-9A	-	-	0.000	RVSH	MS	-	OT	RNL	-	-
1971-5721	2440951.50	1971	R-9A	-	-	0.000	RVSH	MS	-	OT	RNL	-	-
1971-5722	2440951.50	1971	R-9A	-	-	0.000	RVSH	MS	-	OT	RNL	-	-
1971-5723	2440951.50	1971	R-9A	-	-	0.000	RVSH	MS	-	OT	RNL	-	-
1971-5724	2440951.50	1971	R-9A	-	-	0.000	RVSH	MS	-	OT	RNL	-	-
1971-5725	2440951.50	1971	R-9A	-	-	0.000	RVSH	MS	-	OT	RNL	-	-
1971-5726	2440951.50	1971	R-9A	-	-	0.000	RVSH	MS	-	OT	RNL	-	-
1971-5667	2441102.75	1971 May 31 0600	R-9A	-	0 15001-01	0.000	RVSH	MS	-	OT	RNL	-	-
1972-5499	2441390.50	1972 Mar 14	R-9A	-	-	0.000	RVSH	MS	-	OT	RPCA	-	-
1973-5466	2441875.21	1973 Jul 11 1700	R-9A	-	0 15001-10	0.000	RVSH	MS	-	OT	RNL	-	-
1974-5444	2442065.90	1974 Jan 21 0941	R-9A	-	0 15001-08	0.000	RVSH	MS	-	OT	RNL	-	-
1976-5469	2442777.50	1976	R-9A	-	-	0.000	RVSH	MS	-	OT	RNL	-	-
1976-5470	2442777.50	1976	R-9A	-	-	0.000	RVSH	MS	-	OT	RNL	-	-
1976-5471	2442777.50	1976	R-9A	-	-	0.000	RVSH	MS	-	OT	RNL	-	-
1976-5472	2442777.50	1976	R-9A	-	-	0.000	RVSH	MS	-	OT	RNL	-	-
1976-5473	2442777.50	1976	R-9A	-	-	0.000	RVSH	MS	-	OT	RNL	-	-
1976-5474	2442777.50	1976	R-9A	-	-	0.000	RVSH	MS	-	OT	RNL	-	-
1976-5475	2442777.50	1976	R-9A	-	-	0.000	RVSH	MS	-	OT	RNL	-	-
1976-5476	2442777.50	1976	R-9A	-	-	0.000	RVSH	MS	-	OT	RNL	-	-
1976-5477	2442777.50	1976	R-9A	-	-	0.000	RVSH	MS	-	OT	RNL	-	-
1976-5478	2442777.50	1976	R-9A	-	-	0.000	RVSH	MS	-	OT	RNL	-	-
1976-5479	2442777.50	1976	R-9A	-	-	0.000	RVSH	MS	-	OT	RNL	-	-
1976-5480	2442777.50	1976	R-9A	-	-	0.000	RVSH	MS	-	OT	RNL	-	-
1976-5481	2442777.50	1976	R-9A	-	-	0.000	RVSH	MS	-	OT	RNL	-	-
1976-5482	2442777.50	1976	R-9A	-	-	0.000	RVSH	MS	-	OT	RNL	-	-





Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Mission	FlightCode	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee km	Range km	Dest
1970-A149	2440586.50	1970	RH-125	-	-	First Flight	-	-	-	TEGLS	-	-	-	11?	-	-
1970-A150	2440586.50	1970	Menaka II	-	-	First Flight	-	-	-	TEGLS	-	-	-	40?	-	-
1971-A83	2441233.50	1971 Oct 9	RH-125	-	-	Range Test	-	-	-	SHAR	-	-	-	11?	-	-
1971-A84	2441233.50	1971 Oct 10	RH-125	-	-	TWC	-	-	-	SHAR	-	-	-	40?	-	-
1971-A214	2441234.50	1971 Oct 10	RH-125	-	-	IVC	-	-	-	SHAR	-	-	-	40?	-	-
1972-A140	2441631.50	1972 Nov 10	MCR-3/RH-125	-	-	MCR-3	-	-	-	SHAR	-	-	-	40?	-	-
1972-A141	2441631.50	1972 Nov 10	MCR-3/RH-125	-	-	MCR-3	-	-	-	SHAR	-	-	-	40?	-	-
1972-A142	2441632.50	1972 Nov 11	MCR-3/RH-125	-	-	MCR-3	-	-	-	SHAR	-	-	-	40?	-	-
1972-A143	2441632.50	1972 Dec 7	Menaka II	-	-	-	-	-	-	SHAR	-	-	-	40?	-	-
1972-A144	2441638.50	1972 Dec 7	Menaka II	-	-	-	-	-	-	SHAR	-	-	-	40?	-	-
1972-A145	2441638.50	1972 Dec 7	Menaka II	-	-	-	-	-	-	SHAR	-	-	-	40?	-	-
1972-A146	2441638.50	1972 Dec 8	Menaka II	-	-	-	-	-	-	SHAR	-	-	-	40?	-	-
1973-A95	2441799.50	1973 Apr 27	MCR-3/RH-125	-	-	MCR-3	-	-	-	SHAR	-	-	-	40?	-	-
1973-A96	2441799.50	1973 Apr 27	MCR-3/RH-125	-	-	MCR-3	-	-	-	SHAR	-	-	-	40?	-	-
1973-A98	2441816.50	1973 May 14	MCR-3/RH-125	-	-	MCR-3	-	-	-	SHAR	-	-	-	40?	-	-
1975-A79	2442601.75	1975 Jul 6 0600	Menaka II	-	-	Garden probe	-	-	-	TEGLS	-	-	-	40	-	-
1976-A90	2442648.50	1976 Mar 11	RH-125	-	RH-125-73	-	-	-	-	SHAR	-	-	-	40?	-	-
1976-A91	2442648.50	1976 Mar 11	RH-125	-	RH-125-63	-	-	-	-	SHAR	-	-	-	40?	-	-
1976-A92	2442655.50	1976 Mar 18	RH-125	-	RH-125-78	-	-	-	-	SHAR	-	-	-	40?	-	-
1976-A93	2442655.50	1976 Mar 18	RH-125	-	RH-125-79	-	-	-	-	SHAR	-	-	-	40?	-	-
1976-A94	2442662.50	1976 Mar 25	RH-125	-	RH-125-74	-	-	-	-	SHAR	-	-	-	40?	-	-
1976-A95	2442669.50	1976 Apr 1	RH-125	-	RH-125-85	-	-	-	-	SHAR	-	-	-	40?	-	-
1976-A96	2442669.50	1976 Apr 1	RH-125	-	RH-125-69	-	-	-	-	SHAR	-	-	-	40?	-	-
1976-A97	2442683.50	1976 Apr 15	RH-125	-	RH-125-70	-	-	-	-	SHAR	-	-	-	40?	-	-
1976-A98	2442683.50	1976 Apr 15	RH-125	-	RH-125-91	-	-	-	-	SHAR	-	-	-	40?	-	-
1976-A99	2442690.50	1976 Apr 22	RH-125	-	RH-125-72	-	-	-	-	SHAR	-	-	-	40?	-	-
1976-A100	2442690.50	1976 Apr 22	RH-125	-	RH-125-77	-	-	-	-	SHAR	-	-	-	40?	-	-
1976-A101	2442697.50	1976 Apr 29	RH-125	-	RH-125-82	-	-	-	-	SHAR	-	-	-	40?	-	-
1976-A102	2442697.50	1976 Apr 29	RH-125	-	RH-125-76	-	-	-	-	SHAR	-	-	-	40?	-	-
1976-A103	2442905.50	1976 May 7	RH-125	-	RH-125-80	-	-	-	-	SHAR	-	-	-	40?	-	-
1976-A104	2442905.50	1976 May 7	RH-125	-	RH-125-86	-	-	-	-	SHAR	-	-	-	40?	-	-
1976-A105	2442910.50	1976 May 12	RH-125	-	RH-125-94	-	-	-	-	SHAR	-	-	-	40?	-	-
1976-A106	2442910.50	1976 May 12	RH-125	-	RH-125-78	-	-	-	-	SHAR	-	-	-	40?	-	-
1976-A107	2442918.50	1976 May 20	RH-125	-	RH-125-95	-	-	-	-	SHAR	-	-	-	40?	-	-
1976-A108	2442918.50	1976 May 20	RH-125	-	RH-125-71	-	-	-	-	SHAR	-	-	-	40?	-	-
1976-A109	2442943.50	1976 Jun 14	Menaka II	-	Menaka-II-99	-	-	-	-	SHAR	-	-	-	40?	-	-
1976-A110	2442943.50	1976 Oct 13	Menaka II	-	Menaka-II-07	-	-	-	-	SHAR	-	-	-	40?	-	-
1976-A111	2443064.50	1976 Oct 23	Menaka II	-	Menaka-II-08	-	-	-	-	SHAR	-	-	-	40?	-	-
1976-A112	2443078.50	1976 Oct 27	Menaka II	-	Menaka-II-06	-	-	-	-	SHAR	-	-	-	40?	-	-
1976-A113	2443085.50	1976 Nov 3	Menaka II	-	Menaka-II-10	-	-	-	-	SHAR	-	-	-	40?	-	-
1976-A114	2443085.50	1976 Nov 3	Menaka II	-	Menaka-II-06	-	-	-	-	SHAR	-	-	-	40?	-	-
1976-A115	2443085.50	1976 Nov 3	Menaka II	-	Menaka-II-09	-	-	-	-	SHAR	-	-	-	40?	-	-
1976-A116	2443085.50	1976 Nov 3	Menaka II	-	Menaka-II-04	-	-	-	-	SHAR	-	-	-	40?	-	-
1976-A117	2443085.50	1976 Nov 3	Menaka II	-	Menaka-II-01	-	-	-	-	SHAR	-	-	-	40?	-	-
1976-A118	2443085.50	1976 Nov 3	Menaka II	-	Menaka-II-11	-	-	-	-	SHAR	-	-	-	40?	-	-
1976-A119	2443085.50	1976 Nov 3	Menaka II	-	Menaka-II-12	-	-	-	-	SHAR	-	-	-	40?	-	-
1976-A120	2443085.50	1976 Nov 3	Menaka II	-	Menaka-II-13	-	-	-	-	SHAR	-	-	-	40?	-	-
1976-A121	2443085.50	1976 Nov 3	Menaka II	-	Menaka-II-14	-	-	-	-	SHAR	-	-	-	40?	-	-
1976-A122	2443085.50	1976 Nov 3	Menaka II	-	Menaka-II-15	-	-	-	-	SHAR	-	-	-	40?	-	-
1976-A123	2443085.50	1976 Nov 3	Menaka II	-	Menaka-II-16	-	-	-	-	SHAR	-	-	-	40?	-	-
1976-A124	2443085.50	1976 Nov 3	Menaka II	-	Menaka-II-17	-	-	-	-	SHAR	-	-	-	40?	-	-
1976-A125	2443085.50	1976 Nov 3	Menaka II	-	Menaka-II-18	-	-	-	-	SHAR	-	-	-	40?	-	-
1976-A126	2443085.50	1976 Nov 3	Menaka II	-	Menaka-II-19	-	-	-	-	SHAR	-	-	-	40?	-	-
1976-A127	2443085.50	1976 Nov 3	Menaka II	-	Menaka-II-20	-	-	-	-	SHAR	-	-	-	40?	-	-
1976-A128	2443085.50	1976 Nov 3	Menaka II	-	Menaka-II-21	-	-	-	-	SHAR	-	-	-	40?	-	-
1976-A129	2443085.50	1976 Nov 3	Menaka II	-	Menaka-II-22	-	-	-	-	SHAR	-	-	-	40?	-	-
1976-A130	2443134.50	1976 Dec 22	Menaka II	-	Menaka-II-19	-	-	-	-	SHAR	-	-	-	40?	-	-
1977-A53	2443143.50	1977 Jun 22	Menaka II	-	-	Parachute Test	-	-	-	TEGLS?	-	-	-	40?	-	-
1977-A52	2443316.50	1977 Jun 22	Menaka II	-	Menaka-II	-	-	-	-	SHAR	-	-	-	40?	-	-
1977-A51	2443323.50	1977 Jun 29	Menaka II	-	Menaka-II	-	-	-	-	SHAR	-	-	-	40?	-	-
1977-A63	2443326.50	1977 Jun 29	Menaka II	-	Menaka-II	-	-	-	-	SHAR	-	-	-	40?	-	-
1977-A64	2443326.50	1977 Jun 29	Menaka II	-	Menaka-II	-	-	-	-	SHAR	-	-	-	40?	-	-
1977-A65	2443337.50	1977 Jul 19	Menaka II	-	Menaka-II	-	-	-	-	SHAR	-	-	-	40?	-	-
1977-A66	2443345.50	1977 Jul 21	Menaka II	-	Menaka-II	-	-	-	-	SHAR	-	-	-	40?	-	-
1977-A67	2443346.50	1977 Jul 22	Menaka II	-	Menaka-II	-	-	-	-	SHAR	-	-	-	40?	-	-



Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	DrbPay	Agency	Launch_Code	Group	Category	LTCite	Cite	Notes
1970-A149	2440586.50	1970	RH-125	-	-	0.000	ISRO	SS	ISRO/	Test	LJSP15_412	-	-
1970-A150	2440586.50	1970	Menaka II	-	-	0.000	ISRO	SS	ISRO/	Test	LJSP15_412	-	-
1971-A83	2441233.50	1971 Oct 9	RH-125	-	-	0.000	ISRO	SS	ISRO/	Test	SP-4016	bharat-raahshak.com	-
1971-A214	2441234.50	1971 Oct 10	RH-125	-	-	0.000	ISRO	SS	ISRO/	Test	SDSC-SR	-	-
1971-A215	2441234.50	1971 Oct 10	RH-125	-	-	0.000	ISRO	SS	ISRO/	Test	SDSC-SR	-	-
1972-A140	2441631.50	1972 Nov 10	MCR-3/RH-125	-	-	0.000	ISRO	SS	ISRO/	Test	SDSC-SR	-	-
1972-A141	2441631.50	1972 Nov 10	MCR-3/RH-125	-	-	0.000	ISRO	SS	ISRO/	Test	SDSC-SR	-	-
1972-A142	2441632.50	1972 Nov 11	MCR-3/RH-125	-	-	0.000	ISRO	SS	ISRO/	Test	SDSC-SR	-	-
1972-A143	2441632.50	1972 Nov 11	MCR-3/RH-125	-	-	0.000	ISRO	SS	ISRO/	Test	SDSC-SR	-	-
1972-A144	2441658.50	1972 Dec 7	Menaka II	-	-	0.000	ISRO	SS	ISRO/	Test	SDSC-SR	-	-
1972-A145	2441658.50	1972 Dec 7	Menaka II	-	-	0.000	ISRO	SS	ISRO/	Test	SDSC-SR	-	-
1972-A146	2441658.50	1972 Dec 8	Menaka II	-	-	0.000	ISRO	SS	ISRO/	Test	SDSC-SR	-	-
1973-A85	2441739.50	1973 Apr 27	MCR-3/RH-125	-	-	0.000	ISRO	SS	ISRO/	Test	SDSC-SR	-	-
1973-A86	2441739.50	1973 Apr 27	MCR-3/RH-125	-	-	0.000	ISRO	SS	ISRO/	Test	SDSC-SR	-	-
1973-A88	2441816.50	1973 May 14	MCR-3/RH-125	-	-	0.000	ISRO	SS	ISRO/	Test	SDSC-SR	-	-
1975-A79	2442601.75	1975 Jul 8 0600	Menaka II	-	-	0.000	ISRO/Nonna Rao	SS	ISRO/	Aeron	LJSP17_90	-	-
1976-A80	2442848.50	1976 Mar 11	RH-125	-	RH-125-73	0.000	ISRO	SS	ISRO/	Test	SDSC-SR	-	-
1976-A91	2442848.50	1976 Mar 11	RH-125	-	RH-125-63	0.000	ISRO	SS	ISRO/	Test	SDSC-SR	-	-
1976-A92	2442855.50	1976 Mar 18	RH-125	-	RH-125-78	0.000	ISRO	SS	ISRO/	Test	SDSC-SR	-	-
1976-A93	2442855.50	1976 Mar 18	RH-125	-	RH-125-79	0.000	ISRO	SS	ISRO/	Test	SDSC-SR	-	-
1976-A94	2442862.50	1976 Mar 25	RH-125	-	RH-125-74	0.000	ISRO	SS	ISRO/	Test	SDSC-SR	-	-
1976-A95	2442865.50	1976 Apr 1	RH-125	-	RH-125-65	0.000	ISRO	SS	ISRO/	Test	SDSC-SR	-	-
1976-A96	2442865.50	1976 Apr 1	RH-125	-	RH-125-66	0.000	ISRO	SS	ISRO/	Test	SDSC-SR	-	-
1976-A97	2442865.50	1976 Apr 15	RH-125	-	RH-125-70	0.000	ISRO	SS	ISRO/	Test	SDSC-SR	-	-
1976-A98	2442865.50	1976 Apr 15	RH-125	-	RH-125-61	0.000	ISRO	SS	ISRO/	Test	SDSC-SR	-	-
1976-A99	2442890.50	1976 Apr 22	RH-125	-	RH-125-77	0.000	ISRO	SS	ISRO/	Test	SDSC-SR	-	-
1976-A100	2442890.50	1976 Apr 22	RH-125	-	RH-125-75	0.000	ISRO	SS	ISRO/	Test	SDSC-SR	-	-
1976-A101	2442897.50	1976 Apr 29	RH-125	-	RH-125-62	0.000	ISRO	SS	ISRO/	Test	SDSC-SR	-	-
1976-A102	2442897.50	1976 Apr 29	RH-125	-	RH-125-76	0.000	ISRO	SS	ISRO/	Test	SDSC-SR	-	-
1976-A103	2442905.50	1976 May 7	RH-125	-	RH-125-60	0.000	ISRO	SS	ISRO/	Test	SDSC-SR	-	-
1976-A104	2442905.50	1976 May 7	RH-125	-	RH-125-66	0.000	ISRO	SS	ISRO/	Test	SDSC-SR	-	-
1976-A105	2442910.50	1976 May 12	RH-125	-	RH-125-64	0.000	ISRO	SS	ISRO/	Test	SDSC-SR	-	-
1976-A106	2442910.50	1976 May 12	RH-125	-	RH-125-68	0.000	ISRO	SS	ISRO/	Test	SDSC-SR	-	-
1976-A107	2442916.50	1976 May 20	RH-125	-	RH-125-68	0.000	ISRO	SS	ISRO/	Test	SDSC-SR	-	-
1976-A108	2442916.50	1976 May 20	RH-125	-	RH-125-71	0.000	ISRO	SS	ISRO/	Test	SDSC-SR	-	-
1976-A109	2442943.50	1976 Jun 14	Menaka II	-	Menaka-II-57	0.000	ISRO	SS	ISRO/	Test	SDSC-SR	-	-
1976-A110	2443064.50	1976 Oct 13	Menaka II	-	Menaka-II-58	0.000	ISRO	SS	ISRO/	Test	SDSC-SR	-	-
1976-A111	2443074.50	1976 Oct 13	Menaka II	-	Menaka-II-55	0.000	ISRO	SS	ISRO/	Test	SDSC-SR	-	-
1976-A112	2443078.50	1976 Oct 27	Menaka II	-	Menaka-II-56	0.000	ISRO	SS	ISRO/	Test	SDSC-SR	-	-
1976-A113	2443085.50	1976 Nov 3	Menaka II	-	Menaka-II-59	0.000	ISRO	SS	ISRO/	Test	SDSC-SR	-	-
1976-A114	2443085.50	1976 Nov 3	Menaka II	-	Menaka-II-60	0.000	ISRO	SS	ISRO/	Test	SDSC-SR	-	-
1976-A115	2443095.50	1976 Nov 11	Menaka II	-	Menaka-II-61	0.000	ISRO	SS	ISRO/	Test	SDSC-SR	-	-
1976-A116	2443095.50	1976 Nov 17	Menaka II	-	Menaka-II-62	0.000	ISRO	SS	ISRO/	Test	SDSC-SR	-	-
1976-A117	2443105.50	1976 Nov 20	Menaka II	-	Menaka-II-11	0.000	ISRO	SS	ISRO/	Test	SDSC-SR	-	-
1976-A118	2443105.50	1976 Nov 24	Menaka II	-	Menaka-II-12	0.000	ISRO	SS	ISRO/	Test	SDSC-SR	-	-
1976-A119	2443109.50	1976 Nov 27	Menaka II	-	Menaka-II-13	0.000	ISRO	SS	ISRO/	Test	SDSC-SR	-	-
1976-A120	2443113.50	1976 Dec 4	Menaka II	-	Menaka-II-14	0.000	ISRO	SS	ISRO/	Test	SDSC-SR	-	-
1976-A121	2443115.50	1976 Dec 4	Menaka II	-	Menaka-II-15	0.000	ISRO	SS	ISRO/	Test	SDSC-SR	-	-
1976-A122	2443115.50	1976 Dec 4	Menaka II	-	Menaka-II-16	0.000	ISRO	SS	ISRO/	Test	SDSC-SR	-	-
1976-A123	2443120.50	1976 Dec 8	Menaka II	-	Menaka-II-17	0.000	ISRO	SS	ISRO/	Test	SDSC-SR	-	-
1976-A124	2443120.50	1976 Dec 8	Menaka II	-	Menaka-II-18	0.000	ISRO	SS	ISRO/	Test	SDSC-SR	-	-
1976-A125	2443127.50	1976 Dec 11	Menaka II	-	Menaka-II-19	0.000	ISRO	SS	ISRO/	Test	SDSC-SR	-	-
1976-A126	2443127.50	1976 Dec 15	Menaka II	-	Menaka-II-20	0.000	ISRO	SS	ISRO/	Test	SDSC-SR	-	-
1976-A127	2443134.50	1976 Dec 22	Menaka II	-	Menaka-II-21	0.000	ISRO	SS	ISRO/	Test	SDSC-SR	-	-
1976-A128	2443134.50	1976 Dec 22	Menaka II	-	Menaka-II-22	0.000	ISRO	SS	ISRO/	Test	SDSC-SR	-	-
1977-A53	2443143.50	1977	Menaka II	-	Menaka-II-19	0.000	ISRO	SS	ISRO/	Test	LJSP6_281	-	-
1977-A62	2443316.50	1977 Jun 22	Menaka II	-	Menaka-II	0.000	ISRO	SS	ITM/Venkatkar	Test	SDSC-SR	-	-
1977-A63	2443323.50	1977 Jun 29	Menaka II	-	Menaka-II	0.000	ISRO	SS	ISRO/	Test	SDSC-SR	-	-
1977-A64	2443326.50	1977 Jul 2	Menaka II	-	Menaka-II	0.000	ISRO	SS	ISRO/	Test	SDSC-SR	-	-
1977-A65	2443337.50	1977 Jul 13	Menaka II	-	Menaka-II	0.000	ISRO	SS	ISRO/	Test	SDSC-SR	-	-
1977-A66	2443345.50	1977 Jul 21	Menaka II	-	Menaka-II	0.000	ISRO	SS	ISRO/	Test	SDSC-SR	-	-
1977-A67	2443346.50	1977 Jul 22	Menaka II	-	Menaka-II	0.000	ISRO	SS	ISRO/	Test	SDSC-SR	-	-



Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Launch_Mission	FlightCode	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee_Km	Range_Km	Dest
1978-H05	2443846.50	1978 Dec 4	RH-200	-	-	-	-	-	-	SHAR	RH	-	-	607	-	-
1978-H06	2443846.50	1978 Dec 4	RH-200	-	-	-	-	-	-	SHAR	RH	-	-	607	-	-
1978-H07	2443847.50	1978 Dec 5	RH-200	-	-	-	-	-	-	SHAR	RH	-	-	607	-	-
1978-H08	2443847.50	1978 Dec 5	RH-200	-	-	-	-	-	-	SHAR	RH	-	-	607	-	-
1978-H09	2443847.50	1978 Dec 5	RH-200	-	-	-	-	-	-	SHAR	RH	-	-	607	-	-
1979-H148	2443878.50	1979 Jan 5	RH-200	-	-	-	-	-	-	TERLS	-	-	-	607	-	-
1979-H167	2443879.50	1979 Jan 6	RH-200	-	-	-	-	-	-	SHAR	-	-	-	607	-	-
1979-H05	2443883.50	1979 Jan 10	RH-200	-	-	-	-	-	-	SHAR	-	-	-	607	-	-
1979-H07	2443886.50	1979 Jan 12	RH-200	-	-	-	-	-	-	SHAR	-	-	-	607	-	-
1979-H08	2443886.50	1979 Jan 13	RH-200	-	-	-	-	-	-	SHAR	-	-	-	607	-	-
1979-H09	2443890.50	1979 Jan 17	RH-200	-	-	-	-	-	-	SHAR	-	-	-	607	-	-
1979-H10	2443892.50	1979 Jan 19	RH-200	-	-	-	-	-	-	SHAR	-	-	-	607	-	-
1979-H15	2443897.50	1979 Jan 24	RH-200	-	-	-	-	-	-	CHAN	-	-	-	607	-	-
1979-H11	2443897.50	1979 Jan 24	RH-200	-	-	-	-	-	-	SHAR	-	-	-	607	-	-
1979-H12	2443899.50	1979 Jan 26	RH-200	-	-	-	-	-	-	SHAR	-	-	-	607	-	-
1979-H16	2443899.50	1979 Jan 26	RH-200	-	-	-	-	-	-	CHAN	-	-	-	607	-	-
1979-H13	2443902.50	1979 Jan 29	RH-200	-	-	-	-	-	-	SHAR	-	-	-	607	-	-
1979-H14	2443904.50	1979 Jan 31	RH-200	-	-	-	-	-	-	CHAN	-	-	-	607	-	-
1979-H17	2443906.50	1979 Feb 2	RH-200	-	-	-	-	-	-	SHAR	-	-	-	607	-	-
1979-H166	2443906.50	1979 Feb 2	RH-200	-	-	-	-	-	-	CHAN	-	-	-	607	-	-
1979-H26	2443907.50	1979 Feb 3	RH-200	-	-	-	-	-	-	SHAR	-	-	-	607	-	-
1979-H18	2443907.50	1979 Feb 3	RH-200	-	-	-	-	-	-	CHAN	-	-	-	607	-	-
1979-H19	2443911.50	1979 Feb 7	RH-200	-	-	-	-	-	-	SHAR	-	-	-	607	-	-
1979-H27	2443911.50	1979 Feb 7	RH-200	-	-	-	-	-	-	CHAN	-	-	-	607	-	-
1979-H20	2443913.50	1979 Feb 9	RH-200	-	-	-	-	-	-	SHAR	-	-	-	607	-	-
1979-H25	2443913.50	1979 Feb 9	RH-200	-	-	-	-	-	-	CHAN	-	-	-	607	-	-
1979-H21	2443916.50	1979 Feb 14	RH-200	-	-	-	-	-	-	SHAR	-	-	-	607	-	-
1979-H29	2443916.50	1979 Feb 14	RH-200	-	-	-	-	-	-	CHAN	-	-	-	607	-	-
1979-H168	2443906.50	1979 Feb 2	RH-200	-	-	-	-	-	-	SHAR	-	-	-	607	-	-
1979-H50	2443920.50	1979 Feb 16	RH-200	-	-	-	-	-	-	CHAN	-	-	-	607	-	-
1979-H22	2443920.50	1979 Feb 16	RH-200	-	-	-	-	-	-	SHAR	-	-	-	607	-	-
1979-H23	2443925.50	1979 Feb 21	RH-200	-	-	-	-	-	-	SHAR	-	-	-	607	-	-
1979-H24	2443925.50	1979 Feb 21	RH-200	-	-	-	-	-	-	CHAN	-	-	-	607	-	-
1979-H51	2443927.50	1979 Feb 23	RH-200	-	-	-	-	-	-	SHAR	-	-	-	607	-	-
1979-H24	2443927.50	1979 Feb 23	RH-200	-	-	-	-	-	-	CHAN	-	-	-	607	-	-
1979-H149	2443927.50	1979 Feb 23	RH-200	-	-	-	-	-	-	TERLS	-	-	-	607	-	-
1979-H25	2443952.50	1979 Feb 28	RH-200	-	-	-	-	-	-	SHAR	-	-	-	607	-	-
1979-H53	2443952.50	1979 Feb 28	RH-200	-	-	-	-	-	-	CHAN	-	-	-	607	-	-
1979-H34	2443954.50	1979 Mar 2	RH-200	-	-	-	-	-	-	SHAR	-	-	-	607	-	-
1979-H39	2443954.50	1979 Mar 2	RH-200	-	-	-	-	-	-	CHAN	-	-	-	607	-	-
1979-H35	2443959.50	1979 Mar 7	RH-200	-	-	-	-	-	-	SHAR	-	-	-	607	-	-
1979-H40	2443959.50	1979 Mar 7	RH-200	-	-	-	-	-	-	CHAN	-	-	-	607	-	-
1979-H36	2443946.50	1979 Mar 14	RH-200	-	-	-	-	-	-	SHAR	-	-	-	607	-	-
1979-H70	2443946.50	1979 Mar 14	RH-200	-	-	-	-	-	-	CHAN	-	-	-	607	-	-
1979-H41	2443956.50	1979 Mar 14	RH-200	-	-	-	-	-	-	SHAR	-	-	-	607	-	-
1979-H42	2443955.50	1979 Mar 21	RH-200	-	-	-	-	-	-	CHAN	-	-	-	607	-	-
1979-H47	2443955.50	1979 Mar 21	RH-200	-	-	-	-	-	-	SHAR	-	-	-	607	-	-
1979-H38	2443960.50	1979 Mar 28	RH-200	-	-	-	-	-	-	CHAN	-	-	-	607	-	-
1979-H43	2443960.50	1979 Mar 28	RH-200	-	-	-	-	-	-	SHAR	-	-	-	607	-	-
1979-H44	2443967.50	1979 Apr 4	RH-200	-	-	-	-	-	-	CHAN	-	-	-	607	-	-
1979-H45	2443967.50	1979 Apr 4	RH-200	-	-	-	-	-	-	SHAR	-	-	-	607	-	-
1979-H46	2443974.50	1979 Apr 11	RH-200	-	-	-	-	-	-	CHAN	-	-	-	607	-	-
1979-H45	2443974.50	1979 Apr 11	RH-200	-	-	-	-	-	-	SHAR	-	-	-	607	-	-
1979-H46	2443981.50	1979 Apr 18	RH-200	-	-	-	-	-	-	CHAN	-	-	-	607	-	-
1979-H46	2443981.50	1979 Apr 18	RH-200	-	-	-	-	-	-	SHAR	-	-	-	607	-	-
1979-H47	2443985.50	1979 Apr 25	RH-200	-	-	-	-	-	-	CHAN	-	-	-	607	-	-
1979-H51	2443985.50	1979 Apr 25	RH-200	-	-	-	-	-	-	SHAR	-	-	-	607	-	-
1979-H52	2443995.50	1979 May 2	RH-200	-	-	-	-	-	-	CHAN	-	-	-	607	-	-
1979-H59	2443995.50	1979 May 2	RH-200	-	-	-	-	-	-	SHAR	-	-	-	607	-	-
1979-H53	2444002.50	1979 May 9	RH-200	-	-	-	-	-	-	CHAN	-	-	-	607	-	-
1979-H60	2444002.50	1979 May 9	RH-200	-	-	-	-	-	-	SHAR	-	-	-	607	-	-
1979-H150	2444004.50	1979 May 11	RH-200	-	-	-	-	-	-	TERLS	-	-	-	607	-	-
1979-H61	2444009.50	1979 May 16	RH-200	-	-	-	-	-	-	CHAN	-	-	-	607	-	-
1979-H64	2444009.50	1979 May 16	RH-200	-	-	-	-	-	-	SHAR	-	-	-	607	-	-
1979-H54	2444011.50	1979 May 18	RH-200	-	-	-	-	-	-	CHAN	-	-	-	607	-	-
1979-H62	2444011.50	1979 May 18	RH-200	-	-	-	-	-	-	SHAR	-	-	-	607	-	-
1979-H56	2444016.50	1979 May 23	RH-200	-	-	-	-	-	-	CHAN	-	-	-	607	-	-
1979-H63	2444016.50	1979 May 23	RH-200	-	-	-	-	-	-	SHAR	-	-	-	607	-	-
1979-H57	2444018.50	1979 May 25	RH-200	-	-	-	-	-	-	CHAN	-	-	-	607	-	-
1979-H58	2444023.50	1979 May 30	RH-200	-	-	-	-	-	-	SHAR	-	-	-	607	-	-
1979-H64	2444025.50	1979 Jun 1	RH-200	-	-	-	-	-	-	CHAN	-	-	-	607	-	-
1979-H72	2444025.50	1979 Jun 1	RH-200	-	-	-	-	-	-	SHAR	-	-	-	607	-	-
1979-H65	2444030.50	1979 Jun 6	RH-200	-	-	-	-	-	-	CHAN	-	-	-	607	-	-
1979-H73	2444030.50	1979 Jun 6	RH-200	-	-	-	-	-	-	SHAR	-	-	-	607	-	-
1979-H74	2444032.50	1979 Jun 8	RH-200	-	-	-	-	-	-	CHAN	-	-	-	607	-	-
1979-H74	2444032.50	1979 Jun 8	RH-200	-	-	-	-	-	-	SHAR	-	-	-	607	-	-
1979-H66	2444037.50	1979 Jun 13	RH-200	-	-	-	-	-	-	CHAN	-	-	-	607	-	-
1979-H75	2444037.50	1979 Jun 13	RH-200	-	-	-	-	-	-	SHAR	-	-	-	607	-	-
1979-H76	2444039.50	1979 Jun 15	RH-200	-	-	-	-	-	-	CHAN	-	-	-	607	-	-
1979-H76	2444039.50	1979 Jun 15	RH-200	-	-	-	-	-	-	SHAR	-	-	-	607	-	-
1979-H151	2444039.50	1979 Jun 15	RH-200	-	-	-	-	-	-	TERLS	-	-	-	607	-	-
1979-H69	2444044.50	1979 Jun 20	RH-200	-	-	-	-	-	-	CHAN	-	-	-	607	-	-
1979-H77	2444044.50	1979 Jun 20	RH-200	-	-	-	-	-	-	SHAR	-	-	-	607	-	-
1979-H152	2444046.50	1979 Jun 22	RH-200	-	-	-	-	-	-	TERLS	-	-	-	607	-	-
1979-H70	2444046.50	1979 Jun 22	RH-200	-	-	-	-	-	-	SHAR	-	-	-	607	-	-

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Launch_Mission	FlightCode	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee_Km	Range_Km	Dest
1979-M71	2444051.50	1979 Jun 27	RH-200							SHAR				607		
1979-M78	2444051.50	1979 Jun 27	RH-200							CHAN				607		
1979-M153	2444053.50	1979 Jun 29	RH-200							TERLS				607		
1979-M79	2444053.50	1979 Jun 29	RH-200							CHAN				607		
1979-M169	2444053.50	1979 Jun 29	RH-200							SHAR				607		
1979-M80	2444058.50	1979 Jul 4	RH-200							SHAR				607		
1979-M86	2444058.50	1979 Jul 4	RH-200							CHAN				607		
1979-M87	2444060.50	1979 Jul 6	RH-200							CHAN				607		
1979-M81	2444060.50	1979 Jul 6	RH-200							TERLS				607		
1979-M154	2444066.05	1979 Jul 11 1318	RH-200							SHAR				607		
1979-M84	2444066.50	1979 Jul 11	RH-200							CHAN				607		
1979-M88	2444066.50	1979 Jul 11	RH-200							CHAN				607		
1979-M89	2444067.50	1979 Jul 13	RH-200							TERLS				607		
1979-M155	2444067.50	1979 Jul 13	RH-200							SHAR				607		
1979-M82	2444067.50	1979 Jul 13	RH-200							SHAR				607		
1979-M171	2444070.50	1979 Jul 16	RH-200							CHAN				607		
1979-M83	2444074.50	1979 Jul 20	RH-200							CHAN				607		
1979-M90	2444074.50	1979 Jul 20	RH-200							SHAR				607		
1979-M91	2444079.50	1979 Jul 25	RH-200							CHAN				607		
1979-M84	2444080.50	1979 Jul 26	RH-200							SHAR				607		
1979-M85	2444081.50	1979 Jul 27	RH-200							CHAN				607		
1979-M92	2444081.50	1979 Jul 27	RH-200							CHAN				607		
1979-M93	2444086.50	1979 Aug 1	RH-200							SHAR				607		
1979-M102	2444086.50	1979 Aug 1	RH-200							CHAN				607		
1979-M103	2444086.50	1979 Aug 3	RH-200							SHAR				607		
1979-M94	2444088.50	1979 Aug 3	RH-200							SHAR				607		
1979-M95	2444093.50	1979 Aug 6	RH-200							CHAN				607		
1979-M104	2444096.50	1979 Aug 10	RH-200							CHAN				607		
1979-M105	2444096.50	1979 Aug 10	RH-200							SHAR				607		
1979-M106	2444100.50	1979 Aug 15	RH-200							SHAR				607		
1979-M96	2444101.50	1979 Aug 16	RH-200							CHAN				607		
1979-M97	2444102.50	1979 Aug 17	RH-200							CHAN				607		
1979-M107	2444102.50	1979 Aug 17	RH-200							SHAR				607		
1979-M98	2444107.50	1979 Aug 22	RH-200							CHAN				607		
1979-M108	2444107.50	1979 Aug 22	RH-200							CHAN				607		
1979-M109	2444109.50	1979 Aug 24	RH-200							SHAR				607		
1979-M89	2444109.50	1979 Aug 24	RH-200							CHAN				607		
1979-M100	2444114.50	1979 Aug 29	RH-200							SHAR				607		
1979-M110	2444114.50	1979 Aug 29	RH-200							CHAN				607		
1979-M101	2444116.50	1979 Aug 31	RH-200							SHAR				607		
1979-M111	2444116.50	1979 Aug 31	RH-200							CHAN				607		
1979-M115	2444121.50	1979 Sep 9	RH-200							SHAR				607		
1979-M112	2444121.50	1979 Sep 9	RH-200							CHAN				607		
1979-M116	2444128.50	1979 Sep 12	RH-200							SHAR				607		
1979-M117	2444128.50	1979 Sep 12	RH-200							SHAR				607		
1979-M13	2444138.50	1979 Sep 19	RH-200							CHAN				607		
1979-M17	2444138.50	1979 Sep 19	RH-200							CHAN				607		
1979-M14	2444142.50	1979 Sep 26	RH-200							SHAR				607		
1979-M18	2444142.50	1979 Sep 26	RH-200							CHAN				607		
1979-M165	2444143.50	1979 Sep 27	RH-200							TERLS				607		
1979-M167	2444143.50	1979 Sep 27	RH-200							TERLS				607		
1979-M119	2444148.50	1979 Oct 3	RH-200							SHAR				607		
1979-M123	2444148.50	1979 Oct 3	RH-200							CHAN				607		
1979-M124	2444156.50	1979 Oct 10	RH-200							SHAR				607		
1979-M120	2444156.50	1979 Oct 10	RH-200							CHAN				607		
1979-M125	2444163.50	1979 Oct 15	RH-200							CHAN				607		
1979-M168	2444163.50	1979 Oct 17	RH-200							TERLS				607		
1979-M121	2444163.50	1979 Oct 17	RH-200							TERLS				607		
1979-M159	2444170.50	1979 Oct 24	RH-200							TERLS				607		
1979-M122	2444170.50	1979 Oct 24	RH-200							SHAR				607		
1979-M126	2444172.50	1979 Oct 26	RH-200							CHAN				607		
1979-M160	2444177.50	1979 Oct 31	RH-200							TERLS				607		
1979-M127	2444177.50	1979 Oct 31	RH-200							CHAN				607		
1979-M174	2444177.50	1979 Oct 31	RH-200							CHAN				607		
1979-M128	2444184.96	1979 Nov 7 1100	RH-200							SHAR				607		
1979-M129	2444185.01	1979 Nov 7 1211	RH-200							SHAR				607		
1979-M130	2444185.05	1979 Nov 7 1318	RH-200							SHAR				607		
1979-M131	2444185.08	1979 Nov 7 1357	RH-200							SHAR				607		
1979-M134	2444184.80	1979 Nov 7	RH-200							CHAN				607		
1979-M135	2444191.80	1979 Nov 14	RH-200							CHAN				607		
1979-M161	2444191.80	1979 Nov 14	RH-200							TERLS				607		
1979-M132	2444192.80	1979 Nov 15	RH-200							SHAR				607		
1979-M162	2444198.80	1979 Nov 21	RH-200							TERLS				607		
1979-M133	2444198.80	1979 Nov 21	RH-200							SHAR				607		
1979-M136	2444200.80	1979 Nov 23	RH-200							CHAN				607		
1979-M163	2444205.80	1979 Nov 28	RH-200							SHAR				607		
1979-M137	2444205.80	1979 Nov 28	RH-200							CHAN				607		
1979-M138	2444207.80	1979 Nov 30	RH-200							CHAN				607		
1979-M143	2444212.80	1979 Dec 5	RH-200							CHAN				607		
1979-M139	2444213.80	1979 Dec 6	RH-200							SHAR				607		
1979-M140	2444219.80	1979 Dec 12	RH-200							SHAR				607		
1979-M144	2444219.80	1979 Dec 12	RH-200							CHAN				607		
1979-M141	2444226.80	1979 Dec 19	RH-200							SHAR				607		
1979-M145	2444226.80	1979 Dec 19	RH-200							CHAN				607		
1979-M142	2444233.80	1979 Dec 26	RH-200							SHAR				607		

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Launch_Mission	FlightCode	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee_Km	Range_Km	Dest
1979-M146	2444233.50	1979 Dec 26	RH-200	-	-	-	-	-	-	CHAN	-	-	-	607	-	-
1980-M13	2444240.50	1980 Jan 2	RH-200	-	-	-	-	-	-	CHAN	-	-	-	607	-	-
1980-M14	2444242.50	1980 Jan 4	RH-200	-	-	-	-	-	-	CHAN	-	-	-	607	-	-
1980-M07	2444242.50	1980 Jan 4	RH-200	-	-	-	-	-	-	SHAR	-	-	-	607	-	-
1980-M08	2444247.50	1980 Jan 9	RH-200	-	-	-	-	-	-	SHAR	-	-	-	607	-	-
1980-M15	2444247.50	1980 Jan 9	RH-200	-	-	-	-	-	-	CHAN	-	-	-	607	-	-
1980-M16	2444249.50	1980 Jan 11	RH-200	-	-	-	-	-	-	CHAN	-	-	-	607	-	-
1980-M09	2444249.50	1980 Jan 11	RH-200	-	-	-	-	-	-	SHAR	-	-	-	607	-	-
1980-M17	2444254.50	1980 Jan 16	RH-200	-	-	-	-	-	-	CHAN	-	-	-	607	-	-
1980-M18	2444256.50	1980 Jan 18	RH-200	-	-	-	-	-	-	CHAN	-	-	-	607	-	-
1980-M19	2444261.50	1980 Jan 23	RH-200	-	-	-	-	-	-	CHAN	-	-	-	607	-	-
1980-M10	2444261.50	1980 Jan 23	RH-200	-	-	-	-	-	-	SHAR	-	-	-	607	-	-
1980-M11	2444263.50	1980 Jan 25	RH-200	-	-	-	-	-	-	CHAN	-	-	-	607	-	-
1980-M20	2444263.50	1980 Jan 25	RH-200	-	-	-	-	-	-	CHAN	-	-	-	607	-	-
1980-M12	2444268.50	1980 Jan 25	RH-200	-	-	-	-	-	-	SHAR	-	-	-	607	-	-
1980-M24	2444275.50	1980 Jan 30	RH-200	-	-	-	-	-	-	SHAR	-	-	-	607	-	-
1980-M21	2444282.50	1980 Feb 13	RH-200	-	-	-	-	-	-	CHAN	-	-	-	607	-	-
1980-M25	2444282.50	1980 Feb 13	RH-200	-	-	-	-	-	-	SHAR	-	-	-	607	-	-
1980-M26	2444285.50	1980 Feb 16	RH-200	-	-	-	-	-	-	SHAR	-	-	-	607	-	-
1980-M22	2444285.50	1980 Feb 16	RH-200	-	-	-	-	-	-	CHAN	-	-	-	607	-	-
1980-M02	2444285.94	1980 Feb 16	RH-200	-	-	-	Eclipse control	-	-	CHAN	-	-	-	607	-	-
1980-M04	2444286.94	1980 Feb 16	RH-200	-	-	-	Eclipse control	-	-	CHAN	-	-	-	607	-	-
1980-M23	2444289.50	1980 Feb 20	RH-200	-	-	-	-	-	-	CHAN	-	-	-	607	-	-
1980-M155	2444290.50	1980 Feb 21	RH-200	-	-	-	-	-	-	SHAR	-	-	-	607	-	-
1980-M151	2444296.50	1980 Feb 27	RH-200	-	-	-	-	-	-	CHAN	-	-	-	607	-	-
1980-M25	2444303.50	1980 Mar 5	RH-200	-	-	-	-	-	-	SHAR	-	-	-	607	-	-
1980-M29	2444317.50	1980 Mar 19	RH-200	-	-	-	-	-	-	SHAR	-	-	-	607	-	-
1980-M156	2444317.50	1980 Mar 19	RH-200	-	-	-	-	-	-	CHAN	-	-	-	607	-	-
1980-M157	2444324.50	1980 Mar 26	RH-200	-	-	-	-	-	-	CHAN	-	-	-	607	-	-
1980-M30	2444324.50	1980 Mar 26	RH-200	-	-	-	-	-	-	CHAN	-	-	-	607	-	-
1980-M34	2444331.50	1980 Apr 2	RH-200	-	-	-	-	-	-	CHAN	-	-	-	607	-	-
1980-M35	2444331.50	1980 Apr 2	RH-200	-	-	-	-	-	-	CHAN	-	-	-	607	-	-
1980-M36	2444338.50	1980 Apr 9	RH-200	-	-	-	-	-	-	CHAN	-	-	-	607	-	-
1980-M158	2444346.50	1980 Apr 16	RH-200	-	-	-	-	-	-	CHAN	-	-	-	607	-	-
1980-M32	2444346.50	1980 Apr 16	RH-200	-	-	-	-	-	-	SHAR	-	-	-	607	-	-
1980-M33	2444353.50	1980 Apr 24	RH-200	-	-	-	-	-	-	SHAR	-	-	-	607	-	-
1980-M35	2444353.50	1980 Apr 24	RH-200	-	-	-	-	-	-	SHAR	-	-	-	607	-	-
1980-M36	2444360.50	1980 May 1	RH-200	-	-	-	-	-	-	SHAR	-	-	-	607	-	-
1980-M37	2444373.50	1980 May 14	RH-200	-	-	-	-	-	-	SHAR	-	-	-	607	-	-
1980-M38	2444380.50	1980 May 21	RH-200	-	-	-	-	-	-	SHAR	-	-	-	607	-	-
1980-M39	2444382.50	1980 May 23	RH-200	-	-	-	-	-	-	SHAR	-	-	-	607	-	-
1980-M40	2444382.50	1980 May 23	RH-200	-	-	-	-	-	-	CHAN	-	-	-	607	-	-
1980-M41	2444387.50	1980 May 28	RH-200	-	-	-	-	-	-	CHAN	-	-	-	607	-	-
1980-M46	2444389.50	1980 May 30	RH-200	-	-	-	-	-	-	CHAN	-	-	-	607	-	-
1980-M42	2444389.50	1980 Jun 4	RH-200	-	-	-	-	-	-	CHAN	-	-	-	607	-	-
1980-M45	2444394.50	1980 Jun 4	RH-200	-	-	-	-	-	-	CHAN	-	-	-	607	-	-
1980-M50	2444394.50	1980 Jun 4	RH-200	-	-	-	-	-	-	CHAN	-	-	-	607	-	-
1980-M41	2444396.50	1980 Jun 6	RH-200	-	-	-	-	-	-	CHAN	-	-	-	607	-	-
1980-M44	2444396.50	1980 Jun 6	RH-200	-	-	-	-	-	-	TELS	-	-	-	607	-	-
1980-M46	2444396.50	1980 Jun 6	RH-200	-	-	-	-	-	-	SHAR	-	-	-	607	-	-
1980-M45	2444401.50	1980 Jun 11	RH-200	-	-	-	-	-	-	CHAN	-	-	-	607	-	-
1980-M41	2444401.50	1980 Jun 11	RH-200	-	-	-	-	-	-	CHAN	-	-	-	607	-	-
1980-M52	2444403.50	1980 Jun 13	RH-200	-	-	-	-	-	-	CHAN	-	-	-	607	-	-
1980-M46	2444403.50	1980 Jun 13	RH-200	-	-	-	-	-	-	CHAN	-	-	-	607	-	-
1980-M54	2444408.50	1980 Jun 18	RH-200	-	-	-	-	-	-	CHAN	-	-	-	607	-	-
1980-M47	2444408.50	1980 Jun 18	RH-200	-	-	-	-	-	-	SHAR	-	-	-	607	-	-
1980-M48	2444411.50	1980 Jun 20	RH-200	-	-	-	-	-	-	SHAR	-	-	-	607	-	-
1980-M49	2444417.50	1980 Jun 27	RH-200	-	-	-	-	-	-	CHAN	-	-	-	607	-	-
1980-M55	2444417.50	1980 Jun 27	RH-200	-	-	-	-	-	-	CHAN	-	-	-	607	-	-
1980-M56	2444422.50	1980 Jul 2	RH-200	-	-	-	-	-	-	SHAR	-	-	-	607	-	-
1980-M63	2444422.50	1980 Jul 2	RH-200	-	-	-	-	-	-	CHAN	-	-	-	607	-	-
1980-M62	2444424.50	1980 Jul 4	RH-200	-	-	-	-	-	-	CHAN	-	-	-	607	-	-
1980-M57	2444424.50	1980 Jul 4	RH-200	-	-	-	-	-	-	CHAN	-	-	-	607	-	-
1980-M64	2444429.50	1980 Jul 9	RH-200	-	-	-	-	-	-	CHAN	-	-	-	607	-	-
1980-M65	2444431.50	1980 Jul 11	RH-200	-	-	-	-	-	-	CHAN	-	-	-	607	-	-
1980-M66	2444431.50	1980 Jul 11	RH-200	-	-	-	-	-	-	CHAN	-	-	-	607	-	-
1980-M67	2444436.50	1980 Jul 16	RH-200	-	-	-	-	-	-	CHAN	-	-	-	607	-	-
1980-M68	2444436.50	1980 Jul 16	RH-200	-	-	-	-	-	-	CHAN	-	-	-	607	-	-
1980-M69	2444443.50	1980 Jul 23	RH-200	-	-	-	-	-	-	CHAN	-	-	-	607	-	-
1980-M59	2444443.50	1980 Jul 23	RH-200	-	-	-	-	-	-	SHAR	-	-	-	607	-	-
1980-M60	2444445.50	1980 Jul 25	RH-200	-	-	-	-	-	-	SHAR	-	-	-	607	-	-
1980-M159	2444445.50	1980 Jul 25	RH-200	-	-	-	-	-	-	CHAN	-	-	-	607	-	-
1980-M61	2444450.50	1980 Jul 30	RH-200	-	-	-	-	-	-	SHAR	-	-	-	607	-	-
1980-M160	2444450.50	1980 Jul 30	RH-200	-	-	-	-	-	-	CHAN	-	-	-	607	-	-
1980-M69	2444452.50	1980 Aug 1	RH-200	-	-	-	-	-	-	SHAR	-	-	-	607	-	-
1980-M77	2444452.50	1980 Aug 1	RH-200	-	-	-	-	-	-	CHAN	-	-	-	607	-	-
1980-M78	2444457.50	1980 Aug 6	RH-200	-	-	-	-	-	-	CHAN	-	-	-	607	-	-
1980-M70	2444457.50	1980 Aug 6	RH-200	-	-	-	-	-	-	SHAR	-	-	-	607	-	-
1980-M71	2444459.50	1980 Aug 8	RH-200	-	-	-	-	-	-	SHAR	-	-	-	607	-	-
1980-M79	2444459.50	1980 Aug 8	RH-200	-	-	-	-	-	-	CHAN	-	-	-	607	-	-
1980-M147	2444459.50	1980 Aug 8	RH-200	-	-	-	-	-	-	TELS	-	-	-	607	-	-
1980-M80	2444464.50	1980 Aug 13	RH-200	-	-	-	-	-	-	CHAN	-	-	-	607	-	-
1980-M72	2444466.50	1980 Aug 14	RH-200	-	-	-	-	-	-	SHAR	-	-	-	607	-	-
1980-M81	2444466.50	1980 Aug 15	RH-200	-	-	-	-	-	-	CHAN	-	-	-	607	-	-
1980-M73	2444467.50	1980 Aug 16	RH-200	-	-	-	-	-	-	SHAR	-	-	-	607	-	-
1980-M148	2444467.50	1980 Aug 16	RH-200	-	-	-	-	-	-	TELS	-	-	-	607	-	-



Launch Mission

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Launch_Mission	FlightCode	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee_Km	Range_Km	Dest
1980-M74	2444471.50	1980 Aug 20	RH-200	-	-	-	-	-	-	SHAR	-	-	-	607	-	-
1980-M82	2444471.50	1980 Aug 20	RH-200	-	-	-	-	-	-	CHAN	-	-	-	607	-	-
1980-M83	2444473.50	1980 Aug 22	RH-200	-	-	-	-	-	-	CHAN	-	-	-	607	-	-
1980-M149	2444473.50	1980 Aug 22	RH-200	-	-	-	-	-	-	TERLS	-	-	-	607	-	-
1980-M75	2444473.50	1980 Aug 22	RH-200	-	-	-	-	-	-	SHAR	-	-	-	607	-	-
1980-M84	2444476.50	1980 Aug 25	RH-200	-	-	-	-	-	-	CHAN	-	-	-	607	-	-
1980-M153	2444478.50	1980 Aug 27	RH-200	-	-	-	-	-	-	CHAN	-	-	-	607	-	-
1980-M76	2444478.50	1980 Aug 27	RH-200	-	-	-	-	-	-	SHAR	-	-	-	607	-	-
1980-M152	2444480.50	1980 Aug 29	RH-200	-	-	-	-	-	-	SHAR	-	-	-	607	-	-
1980-M164	2444480.50	1980 Aug 29	RH-200	-	-	-	-	-	-	CHAN	-	-	-	607	-	-
1980-M150	2444481.50	1980 Aug 30	RH-200	-	-	-	-	-	-	TERLS	-	-	-	607	-	-
1980-M94	2444483.50	1980 Sep 1	RH-200	-	-	-	-	-	-	CHAN	-	-	-	607	-	-
1980-M95	2444486.50	1980 Sep 3	RH-200	-	-	-	-	-	-	CHAN	-	-	-	607	-	-
1980-M85	2444486.50	1980 Sep 3	RH-200	-	-	-	-	-	-	SHAR	-	-	-	607	-	-
1980-M86	2444486.50	1980 Sep 5	RH-200	-	-	-	-	-	-	SHAR	-	-	-	607	-	-
1980-M96	2444487.50	1980 Sep 5	RH-200	-	-	-	-	-	-	CHAN	-	-	-	607	-	-
1980-M97	2444487.50	1980 Sep 5	RH-200	-	-	-	-	-	-	SHAR	-	-	-	607	-	-
1980-M98	2444492.50	1980 Sep 10	RH-200	-	-	-	-	-	-	CHAN	-	-	-	607	-	-
1980-M99	2444494.50	1980 Sep 10	RH-200	-	-	-	-	-	-	CHAN	-	-	-	607	-	-
1980-M88	2444494.50	1980 Sep 12	RH-200	-	-	-	-	-	-	SHAR	-	-	-	607	-	-
1980-M89	2444499.50	1980 Sep 12	RH-200	-	-	-	-	-	-	CHAN	-	-	-	607	-	-
1980-M90	2444499.50	1980 Sep 17	RH-200	-	-	-	-	-	-	SHAR	-	-	-	607	-	-
1980-M90	2444501.50	1980 Sep 19	RH-200	-	-	-	-	-	-	SHAR	-	-	-	607	-	-
1980-M100	2444501.50	1980 Sep 19	RH-200	-	-	-	-	-	-	CHAN	-	-	-	607	-	-
1980-M101	2444504.50	1980 Sep 22	RH-200	-	-	-	-	-	-	CHAN	-	-	-	607	-	-
1980-M91	2444504.50	1980 Sep 22	RH-200	-	-	-	-	-	-	SHAR	-	-	-	607	-	-
1980-M92	2444506.50	1980 Sep 24	RH-200	-	-	-	-	-	-	CHAN	-	-	-	607	-	-
1980-M102	2444506.50	1980 Sep 24	RH-200	-	-	-	-	-	-	SHAR	-	-	-	607	-	-
1980-M93	2444506.50	1980 Sep 26	RH-200	-	-	-	-	-	-	CHAN	-	-	-	607	-	-
1980-M165	2444506.50	1980 Sep 26	RH-200	-	-	-	-	-	-	SHAR	-	-	-	607	-	-
1980-M103	2444513.50	1980 Oct 1	RH-200	-	-	-	-	-	-	CHAN	-	-	-	607	-	-
1980-M112	2444513.50	1980 Oct 1	RH-200	-	-	-	-	-	-	CHAN	-	-	-	607	-	-
1980-M113	2444515.50	1980 Oct 3	RH-200	-	-	-	-	-	-	CHAN	-	-	-	607	-	-
1980-M104	2444515.50	1980 Oct 3	RH-200	-	-	-	-	-	-	SHAR	-	-	-	607	-	-
1980-M105	2444516.50	1980 Oct 6	RH-200	-	-	-	-	-	-	CHAN	-	-	-	607	-	-
1980-M114	2444516.50	1980 Oct 6	RH-200	-	-	-	-	-	-	SHAR	-	-	-	607	-	-
1980-M106	2444520.50	1980 Oct 6	RH-200	-	-	-	-	-	-	CHAN	-	-	-	607	-	-
1980-M107	2444522.50	1980 Oct 10	RH-200	-	-	-	-	-	-	SHAR	-	-	-	607	-	-
1980-M108	2444527.50	1980 Oct 15	RH-200	-	-	-	-	-	-	CHAN	-	-	-	607	-	-
1980-M115	2444527.50	1980 Oct 15	RH-200	-	-	-	-	-	-	SHAR	-	-	-	607	-	-
1980-M109	2444529.50	1980 Oct 17	RH-200	-	-	-	-	-	-	CHAN	-	-	-	607	-	-
1980-M119	2444529.50	1980 Oct 17	RH-200	-	-	-	-	-	-	CHAN	-	-	-	607	-	-
1980-M117	2444534.50	1980 Oct 22	RH-200	-	-	-	-	-	-	CHAN	-	-	-	607	-	-
1980-M110	2444534.50	1980 Oct 22	RH-200	-	-	-	-	-	-	SHAR	-	-	-	607	-	-
1980-M111	2444536.50	1980 Oct 24	RH-200	-	-	-	-	-	-	CHAN	-	-	-	607	-	-
1980-M118	2444536.50	1980 Oct 24	RH-200	-	-	-	-	-	-	SHAR	-	-	-	607	-	-
1980-M124	2444541.50	1980 Oct 29	RH-200	-	-	-	-	-	-	CHAN	-	-	-	607	-	-
1980-M124	2444541.50	1980 Oct 29	RH-200	-	-	-	-	-	-	SHAR	-	-	-	607	-	-
1980-M162	2444543.50	1980 Oct 31	RH-200	-	-	-	-	-	-	CHAN	-	-	-	607	-	-
1980-M163	2444543.50	1980 Oct 31	RH-200	-	-	-	-	-	-	SHAR	-	-	-	607	-	-
1980-M119	2444548.50	1980 Nov 5	RH-200	-	-	-	-	-	-	CHAN	-	-	-	607	-	-
1980-M129	2444553.50	1980 Nov 10	RH-200	-	-	-	-	-	-	CHAN	-	-	-	607	-	-
1980-M130	2444553.50	1980 Nov 10	RH-200	-	-	-	-	-	-	SHAR	-	-	-	607	-	-
1980-M130	2444555.50	1980 Nov 12	RH-200	-	-	-	-	-	-	CHAN	-	-	-	607	-	-
1980-M131	2444557.50	1980 Nov 14	RH-200	-	-	-	-	-	-	CHAN	-	-	-	607	-	-
1980-M121	2444557.50	1980 Nov 14	RH-200	-	-	-	-	-	-	SHAR	-	-	-	607	-	-
1980-M122	2444560.50	1980 Nov 17	RH-200	-	-	-	-	-	-	CHAN	-	-	-	607	-	-
1980-M123	2444562.50	1980 Nov 19	RH-200	-	-	-	-	-	-	SHAR	-	-	-	607	-	-
1980-M132	2444562.50	1980 Nov 19	RH-200	-	-	-	-	-	-	CHAN	-	-	-	607	-	-
1980-M133	2444564.50	1980 Nov 21	RH-200	-	-	-	-	-	-	SHAR	-	-	-	607	-	-
1980-M124	2444564.50	1980 Nov 21	RH-200	-	-	-	-	-	-	CHAN	-	-	-	607	-	-
1980-M125	2444567.50	1980 Nov 24	RH-200	-	-	-	-	-	-	SHAR	-	-	-	607	-	-
1980-M134	2444567.50	1980 Nov 24	RH-200	-	-	-	-	-	-	CHAN	-	-	-	607	-	-
1980-M135	2444569.50	1980 Nov 26	RH-200	-	-	-	-	-	-	SHAR	-	-	-	607	-	-
1980-M126	2444569.50	1980 Nov 26	RH-200	-	-	-	-	-	-	CHAN	-	-	-	607	-	-
1980-M127	2444571.50	1980 Nov 28	RH-200	-	-	-	-	-	-	SHAR	-	-	-	607	-	-
1980-M156	2444571.50	1980 Nov 28	RH-200	-	-	-	-	-	-	CHAN	-	-	-	607	-	-
1980-M141	2444576.50	1980 Dec 3	RH-200	-	-	-	-	-	-	CHAN	-	-	-	607	-	-
1980-M137	2444583.50	1980 Dec 10	RH-200	-	-	-	-	-	-	SHAR	-	-	-	607	-	-
1980-M142	2444583.50	1980 Dec 10	RH-200	-	-	-	-	-	-	CHAN	-	-	-	607	-	-
1980-M143	2444590.50	1980 Dec 17	RH-200	-	-	-	-	-	-	CHAN	-	-	-	607	-	-
1980-M138	2444590.50	1980 Dec 17	RH-200	-	-	-	-	-	-	SHAR	-	-	-	607	-	-
1980-M144	2444597.50	1980 Dec 24	RH-200	-	-	-	-	-	-	CHAN	-	-	-	607	-	-
1980-M168	2444597.50	1980 Dec 24	RH-200	-	-	-	-	-	-	SHAR	-	-	-	607	-	-
1980-M140	2444604.50	1980 Dec 31	RH-200	-	-	-	-	-	-	CHAN	-	-	-	607	-	-
1981-M119	2444606.50	1981 Jan 2	RH-200	-	-	-	-	-	-	SHAR	-	-	-	607	-	-
1981-M27	2444606.50	1981 Jan 2	RH-200	-	-	-	-	-	-	CHAN	-	-	-	607	-	-
1981-M20	2444611.50	1981 Jan 7	RH-200	-	-	-	-	-	-	SHAR	-	-	-	607	-	-
1981-M28	2444611.50	1981 Jan 7	RH-200	-	-	-	-	-	-	CHAN	-	-	-	607	-	-
1981-M29	2444613.50	1981 Jan 9	RH-200	-	-	-	-	-	-	CHAN	-	-	-	607	-	-
1981-M21	2444613.50	1981 Jan 9	RH-200	-	-	-	-	-	-	SHAR	-	-	-	607	-	-
1981-M30	2444618.50	1981 Jan 14	RH-200	-	-	-	-	-	-	CHAN	-	-	-	607	-	-
1981-M31	2444620.50	1981 Jan 16	RH-200	-	-	-	-	-	-	CHAN	-	-	-	607	-	-
1981-M22	2444620.50	1981 Jan 16	RH-200	-	-	-	-	-	-	SHAR	-	-	-	607	-	-

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Launch_Mission	FlightCode	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee_Km	Range_Km	Dest
1981-M23	2444625.50	1981 Jan 21	RH-200	-	-	-	-	-	-	SHAR	-	-	-	607	-	-
1981-M32	2444625.50	1981 Jan 21	RH-200	-	-	-	-	-	-	CHAN	-	-	-	607	-	-
1981-M33	2444627.50	1981 Jan 23	RH-200	-	-	-	-	-	-	CHAN	-	-	-	607	-	-
1981-M24	2444627.50	1981 Jan 23	RH-200	-	-	-	-	-	-	SHAR	-	-	-	607	-	-
1981-M25	2444632.50	1981 Jan 28	RH-200	-	-	-	-	-	-	CHAN	-	-	-	607	-	-
1981-M26	2444632.50	1981 Jan 28	RH-200	-	-	-	-	-	-	CHAN	-	-	-	607	-	-
1981-M27	2444634.50	1981 Jan 30	RH-200	-	-	-	-	-	-	SHAR	-	-	-	607	-	-
1981-M28	2444634.50	1981 Jan 30	RH-200	-	-	-	-	-	-	CHAN	-	-	-	607	-	-
1981-M29	2444639.50	1981 Feb 4	RH-200	-	-	-	-	-	-	TERLS	-	-	-	607	-	-
1981-M30	2444639.50	1981 Feb 4	RH-200	-	-	-	-	-	-	CHAN	-	-	-	607	-	-
1981-M31	2444640.50	1981 Feb 5	RH-200	-	-	-	-	-	-	CHAN	-	-	-	607	-	-
1981-M32	2444646.50	1981 Feb 11	RH-200	-	-	-	-	-	-	SHAR	-	-	-	607	-	-
1981-M33	2444646.50	1981 Feb 11	RH-200	-	-	-	-	-	-	CHAN	-	-	-	607	-	-
1981-M34	2444648.50	1981 Feb 13	RH-200	-	-	-	-	-	-	CHAN	-	-	-	607	-	-
1981-M35	2444653.50	1981 Feb 18	RH-200	-	-	-	-	-	-	CHAN	-	-	-	607	-	-
1981-M36	2444653.50	1981 Feb 18	RH-200	-	-	-	-	-	-	TERLS	-	-	-	607	-	-
1981-M37	2444654.57	1981 Feb 19 0412	RH-200	-	-	-	-	-	-	TERLS	-	-	-	607	-	-
1981-M38	2444654.71	1981 Feb 19 0502	RH-200	-	-	-	-	-	-	TERLS	-	-	-	607	-	-
1981-M39	2444654.74	1981 Feb 19 0550	RH-200	-	-	-	-	-	-	TERLS	-	-	-	607	-	-
1981-M40	2444654.78	1981 Feb 19 0637	RH-200	-	-	-	-	-	-	TERLS	-	-	-	607	-	-
1981-M41	2444654.90	1981 Feb 19 0719	RH-200	-	-	-	-	-	-	TERLS	-	-	-	607	-	-
1981-M42	2444655.71	1981 Feb 20 0500	RH-200	-	-	-	-	-	-	TERLS	-	-	-	607	-	-
1981-M43	2444655.77	1981 Feb 20 0545	RH-200	-	-	-	-	-	-	TERLS	-	-	-	607	-	-
1981-M44	2444655.82	1981 Feb 20 0594	RH-200	-	-	-	-	-	-	TERLS	-	-	-	607	-	-
1981-M45	2444656.50	1981 Feb 20 0734	RH-200	-	-	-	-	-	-	TERLS	-	-	-	607	-	-
1981-M46	2444660.50	1981 Feb 25	RH-200	-	-	-	-	-	-	TERLS	-	-	-	607	-	-
1981-M47	2444661.50	1981 Feb 26	RH-200	-	-	-	-	-	-	SHAR	-	-	-	607	-	-
1981-M48	2444666.50	1981 Mar 5	RH-200	-	-	-	-	-	-	SHAR	-	-	-	607	-	-
1981-M49	2444674.50	1981 Mar 11	RH-200	-	-	-	-	-	-	SHAR	-	-	-	607	-	-
1981-M50	2444681.50	1981 Mar 18	RH-200	-	-	-	-	-	-	SHAR	-	-	-	607	-	-
1981-M51	2444683.50	1981 Mar 20	RH-200	-	-	-	-	-	-	CHAN	-	-	-	607	-	-
1981-M52	2444688.50	1981 Mar 25	RH-200	-	-	-	-	-	-	CHAN	-	-	-	607	-	-
1981-M53	2444695.50	1981 Apr 1	RH-200	-	-	-	-	-	-	SHAR	-	-	-	607	-	-
1981-M54	2444696.50	1981 Apr 1	RH-200	-	-	-	-	-	-	CHAN	-	-	-	607	-	-
1981-M55	2444696.50	1981 Apr 2	RH-200	-	-	-	-	-	-	SHAR	-	-	-	607	-	-
1981-M56	2444702.50	1981 Apr 8	RH-200	-	-	-	-	-	-	SHAR	-	-	-	607	-	-
1981-M57	2444702.50	1981 Apr 8	RH-200	-	-	-	-	-	-	CHAN	-	-	-	607	-	-
1981-M58	2444709.50	1981 Apr 15	RH-200	-	-	-	-	-	-	CHAN	-	-	-	607	-	-
1981-M59	2444709.50	1981 Apr 15	RH-200	-	-	-	-	-	-	SHAR	-	-	-	607	-	-
1981-M60	2444710.50	1981 Apr 16	RH-200	-	-	-	-	-	-	SHAR	-	-	-	607	-	-
1981-M61	2444716.50	1981 Apr 22	RH-200	-	-	-	-	-	-	SHAR	-	-	-	607	-	-
1981-M62	2444718.50	1981 Apr 24	RH-200	-	-	-	-	-	-	SHAR	-	-	-	607	-	-
1981-M63	2444723.50	1981 Apr 29	RH-200	-	-	-	-	-	-	SHAR	-	-	-	607	-	-
1981-M64	2444723.50	1981 Apr 29	RH-200	-	-	-	-	-	-	SHAR	-	-	-	607	-	-
1981-M65	2444730.50	1981 May 6	RH-200	-	-	-	-	-	-	SHAR	-	-	-	607	-	-
1981-M66	2444730.50	1981 May 6	RH-200	-	-	-	-	-	-	SHAR	-	-	-	607	-	-
1981-M67	2444731.50	1981 May 7	RH-200	-	-	-	-	-	-	SHAR	-	-	-	607	-	-
1981-M68	2444731.50	1981 May 7	RH-200	-	-	-	-	-	-	SHAR	-	-	-	607	-	-
1981-M69	2444735.50	1981 May 29	RH-200	-	-	-	-	-	-	SHAR	-	-	-	607	-	-
1981-M70	2444735.50	1981 May 29	RH-200	-	-	-	-	-	-	CHAN	-	-	-	607	-	-
1981-M71	2444735.50	1981 May 29	RH-200	-	-	-	-	-	-	CHAN	-	-	-	607	-	-
1981-M72	2444737.50	1981 May 8	RH-200	-	-	-	-	-	-	CHAN	-	-	-	607	-	-
1981-M73	2444737.50	1981 May 13	RH-200	-	-	-	-	-	-	CHAN	-	-	-	607	-	-
1981-M74	2444738.50	1981 May 20	RH-200	-	-	-	-	-	-	CHAN	-	-	-	607	-	-
1981-M75	2444738.50	1981 May 20	RH-200	-	-	-	-	-	-	CHAN	-	-	-	607	-	-
1981-M76	2444744.50	1981 May 22	RH-200	-	-	-	-	-	-	CHAN	-	-	-	607	-	-
1981-M77	2444744.50	1981 May 22	RH-200	-	-	-	-	-	-	CHAN	-	-	-	607	-	-
1981-M78	2444753.50	1981 May 27	RH-200	-	-	-	-	-	-	CHAN	-	-	-	607	-	-
1981-M79	2444753.50	1981 May 27	RH-200	-	-	-	-	-	-	CHAN	-	-	-	607	-	-
1981-M80	2444753.50	1981 May 29	RH-200	-	-	-	-	-	-	CHAN	-	-	-	607	-	-
1981-M81	2444758.50	1981 Jun 3	RH-200	-	-	-	-	-	-	CHAN	-	-	-	607	-	-
1981-M82	2444758.50	1981 Jun 3	RH-200	-	-	-	-	-	-	CHAN	-	-	-	607	-	-
1981-M83	2444765.50	1981 Jun 5	RH-200	-	-	-	-	-	-	SHAR	-	-	-	607	-	-
1981-M84	2444765.50	1981 Jun 5	RH-200	-	-	-	-	-	-	SHAR	-	-	-	607	-	-
1981-M85	2444765.50	1981 Jun 10	RH-200	-	-	-	-	-	-	SHAR	-	-	-	607	-	-
1981-M86	2444772.50	1981 Jun 17	RH-200	-	-	-	-	-	-	SHAR	-	-	-	607	-	-
1981-M87	2444772.50	1981 Jun 17	RH-200	-	-	-	-	-	-	CHAN	-	-	-	607	-	-
1981-M88	2444969.50	1981 Dec 31	RH-200	-	-	-	-	-	-	TERLS	-	-	-	607	-	-
1981-M89	2444991.74	1982 Jan 22 0540	RH-200	-	-	-	-	-	-	TERLS	-	-	-	607	-	-
1981-M90	2444991.74	1982 Jan 22 0630	RH-200	-	-	-	-	-	-	TERLS	-	-	-	607	-	-
1981-M91	2444991.77	1982 Jan 22 0630	RH-200	-	-	-	-	-	-	TERLS	-	-	-	607	-	-
1981-M92	2444996.50	1982 Jan 27	RH-200	-	-	-	-	-	-	TERLS	-	-	-	607	-	-
1981-M93	2445000.50	1982 Feb	RH-200	-	-	-	-	-	-	TERLS	-	-	-	607	-	-
1981-M94	2445032.08	1982 Mar 3 1352	RH-200	-	-	-	-	-	-	TERLS	-	-	-	607	-	-
1981-M95	2445032.18	1982 Mar 3 1616	RH-200	-	-	-	-	-	-	TERLS	-	-	-	607	-	-
1981-M96	2445028.50	1982 Mar?	RH-200	-	-	-	-	-	-	TERLS	-	-	-	607	-	-
1981-M97	2445028.50	1982 Mar?	RH-200	-	-	-	-	-	-	TERLS	-	-	-	607	-	-
1981-M98	2445031.50	1982 Mar 3	RH-200	-	-	-	-	-	-	TERLS	-	-	-	607	-	-
1981-M99	2445033.50	1982 Mar 5	RH-200	-	-	-	-	-	-	CHAN	-	-	-	607	-	-
1981-M100	2445038.50	1982 Mar 10	RH-200	-	-	-	-	-	-	CHAN	-	-	-	607	-	-
1981-M101	2445038.50	1982 Mar 10	RH-200	-	-	-	-	-	-	CHAN	-	-	-	607	-	-
1981-M102	2445045.50	1982 Mar 17	RH-200	-	-	-	-	-	-	CHAN	-	-	-	607	-	-
1981-M103	2445046.50	1982 Mar 18	RH-200	-	-	-	-	-	-	SHAR	-	-	-	607	-	-
1981-M104	2445052.50	1982 Mar 24	RH-200	-	-	-	-	-	-	SHAR	-	-	-	607	-	-
1981-M105	2445054.50	1982 Mar 26	RH-200	-	-	-	-	-	-	CHAN	-	-	-	607	-	-
1981-M106	2445059.50	1982 Mar 31	RH-200	-	-	-	-	-	-	CHAN	-	-	-	607	-	-
1981-M107	2445059.50	1982 Mar 31	RH-200	-	-	-	-	-	-	TERLS	-	-	-	607	-	-
1981-M108	2445069.50	1982 Apr 1	RH-200	-	-	-	-	-	-	TERLS	-	-	-	607	-	-
1981-M109	2445069.50	1982 Apr 6	RH-200	-	-	-	-	-	-	TERLS	-	-	-	607	-	-
1981-M110	2445066.50	1982 Apr 7	RH-200	-	-	-	-	-	-	CHAN	-	-	-	607	-	-
1981-M111	2445066.50	1982 Apr 7	RH-200	-	-	-	-	-	-	SHAR	-	-	-	607	-	-
1981-M112	2445080.50	1982 Apr 21	RH-200	-	-	-	-	-	-	SHAR	-	-	-	607	-	-
1981-M113	2445080.50	1982 Apr 21	RH-200	-	-	-	-	-	-	SHAR	-	-	-	607	-	-

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Launch_Mission	FlightCode	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee_Km	Range_Km	Dest
1982-M19	2445073.50	1982 Apr 14	RH-200	-	-	-	-	-	-	CHAN	-	-	-	607	-	-
1982-M20	2445080.50	1982 Apr 21	RH-200	-	-	-	-	-	-	CHAN	-	-	-	607	-	-
1982-M47	2445087.50	1982 Apr 28	RH-200	-	-	-	-	-	-	SHAR	-	-	-	607	-	-
1982-M21	2445087.50	1982 Apr 28	RH-200	-	-	-	-	-	-	CHAN	-	-	-	607	-	-
1982-M37	2445094.50	1982 May 5	RH-200	-	-	-	-	-	-	SHAR	-	-	-	607	-	-
1982-M38	2445094.50	1982 May 5	RH-200	-	-	-	-	-	-	CHAN	-	-	-	607	-	-
1982-M39	2445101.50	1982 May 12	RH-200	-	-	-	-	-	-	CHAN	-	-	-	607	-	-
1982-M35	2445108.50	1982 May 19	RH-200	-	-	-	-	-	-	CHAN	-	-	-	607	-	-
1982-M48	2445115.50	1982 May 26	RH-200	-	-	-	-	-	-	CHAN	-	-	-	607	-	-
1982-M36	2445122.50	1982 Jun 2	RH-200	-	-	-	-	-	-	CHAN	-	-	-	607	-	-
1982-M52	2445129.50	1982 Jun 9	RH-200	-	-	-	-	-	-	SHAR	-	-	-	607	-	-
1982-M49	2445129.50	1982 Jun 9	RH-200	-	-	-	-	-	-	CHAN	-	-	-	607	-	-
1982-M22	2445255.50	1982 Oct 13	RH-200	-	-	-	-	-	-	CHAN	-	-	-	607	-	-
1982-M23	2445269.50	1982 Oct 27	RH-200	-	-	-	-	-	-	CHAN	-	-	-	607	-	-
1982-M24	2445276.50	1982 Nov 3	RH-200	-	-	-	-	-	-	CHAN	-	-	-	607	-	-
1982-M25	2445283.50	1982 Nov 10	RH-200	-	-	-	-	-	-	CHAN	-	-	-	607	-	-
1982-M26	2445285.50	1982 Nov 12	RH-200	-	-	-	-	-	-	CHAN	-	-	-	607	-	-
1982-M27	2445290.50	1982 Nov 17	RH-200	-	-	-	-	-	-	CHAN	-	-	-	607	-	-
1982-M28	2445292.50	1982 Nov 19	RH-200	-	-	-	-	-	-	CHAN	-	-	-	607	-	-
1982-M29	2445297.50	1982 Nov 24	RH-200	-	-	-	-	-	-	CHAN	-	-	-	607	-	-
1982-M30	2445299.50	1982 Nov 26	RH-200	-	-	-	-	-	-	CHAN	-	-	-	607	-	-
1982-M31	2445304.50	1982 Dec 1	RH-200	-	-	-	-	-	-	CHAN	-	-	-	607	-	-
1982-M32	2445311.50	1982 Dec 6	RH-200	-	-	-	-	-	-	CHAN	-	-	-	607	-	-
1982-M33	2445318.50	1982 Dec 15	RH-200	-	-	-	-	-	-	CHAN	-	-	-	607	-	-
1982-M34	2445332.50	1982 Dec 29	RH-200	-	-	-	-	-	-	CHAN	-	-	-	607	-	-
1983-M04	2445339.50	1983 Jan 5	RH-200	-	-	-	-	-	-	CHAN	-	-	-	607	-	-
1983-M05	2445346.50	1983 Jan 12	RH-200	-	-	-	-	-	-	CHAN	-	-	-	607	-	-
1983-M06	2445353.50	1983 Jan 19	RH-200	-	-	-	-	-	-	CHAN	-	-	-	607	-	-
1983-M07	2445362.50	1983 Jan 26	RH-200	-	-	-	-	-	-	CHAN	-	-	-	607	-	-
1983-M08	2445367.50	1983 Feb 2	RH-200	-	-	-	-	-	-	CHAN	-	-	-	607	-	-
1983-M09	2445374.50	1983 Feb 9	RH-200	-	-	-	-	-	-	CHAN	-	-	-	607	-	-
1983-M10	2445381.50	1983 Feb 16	RH-200	-	-	-	-	-	-	CHAN	-	-	-	607	-	-
1983-M11	2445390.50	1983 Feb 25	RH-200	-	-	-	-	-	-	CHAN	-	-	-	607	-	-
1983-M12	2445395.50	1983 Feb 25	RH-200	-	-	-	-	-	-	CHAN	-	-	-	607	-	-
1983-M13	2445402.50	1983 Mar 2	RH-200	-	-	-	-	-	-	CHAN	-	-	-	607	-	-
1983-M14	2445416.50	1983 Mar 23	RH-200	-	-	-	-	-	-	CHAN	-	-	-	607	-	-
1983-M15	2445423.50	1983 Mar 30	RH-200	-	-	-	-	-	-	CHAN	-	-	-	607	-	-
1983-M16	2445430.50	1983 Apr 6	RH-200	-	-	-	-	-	-	CHAN	-	-	-	607	-	-
1983-M17	2445439.50	1983 Apr 15	RH-200	-	-	-	-	-	-	CHAN	-	-	-	607	-	-
1983-M18	2445468.50	1983 May 4	RH-200	-	-	-	-	-	-	CHAN	-	-	-	607	-	-
1983-M19	2445465.50	1983 May 11	RH-200	-	-	-	-	-	-	CHAN	-	-	-	607	-	-
1983-M20	2445472.50	1983 May 18	RH-200	-	-	-	-	-	-	CHAN	-	-	-	607	-	-
1983-M21	2445479.50	1983 May 25	RH-200	-	-	-	-	-	-	CHAN	-	-	-	607	-	-
1983-M22	2445486.50	1983 Jun 1	RH-200	-	-	-	-	-	-	CHAN	-	-	-	607	-	-
1983-M23	2445488.50	1983 Jun 3	RH-200	-	-	-	-	-	-	TELS	-	-	-	607	-	-
1983-M24	2445489.50	1983 Jun 4	RH-200	-	-	-	-	-	-	TELS	-	-	-	607	-	-
1983-M25	2445493.50	1983 Jun 8	RH-200	-	-	-	-	-	-	CHAN	-	-	-	607	-	-
1983-M26	2445495.50	1983 Jun 15	RH-200	-	-	-	-	-	-	CHAN	-	-	-	607	-	-
1983-M27	2445500.50	1983 Jun 15	RH-200	-	-	-	-	-	-	CHAN	-	-	-	607	-	-
1983-M28	2445507.50	1983 Jun 22	RH-200	-	-	-	-	-	-	CHAN	-	-	-	607	-	-
1983-M29	2445517.50	1983 Jun 29	RH-200	-	-	-	-	-	-	CHAN	-	-	-	607	-	-
1983-M30	2445524.50	1983 Jun 6	RH-200	-	-	-	-	-	-	TELS	-	-	-	607	-	-
1983-M31	2445521.50	1983 Jun 11	RH-200	-	-	-	-	-	-	CHAN	-	-	-	607	-	-
1983-M32	2445528.50	1983 Jun 13	RH-200	-	-	-	-	-	-	CHAN	-	-	-	607	-	-
1983-M33	2445528.50	1983 Jun 13	RH-200	-	-	-	-	-	-	TELS	-	-	-	607	-	-
1983-M34	2445535.50	1983 Jun 20	RH-200	-	-	-	-	-	-	CHAN	-	-	-	607	-	-
1983-M35	2445535.50	1983 Jun 20	RH-200	-	-	-	-	-	-	TELS	-	-	-	607	-	-
1983-M36	2445540.50	1983 Jun 27	RH-200	-	-	-	-	-	-	CHAN	-	-	-	607	-	-
1983-M37	2445540.50	1983 Jun 27	RH-200	-	-	-	-	-	-	TELS	-	-	-	607	-	-
1983-M38	2445545.50	1983 Aug 3	RH-200	-	-	-	-	-	-	CHAN	-	-	-	607	-	-
1983-M39	2445549.50	1983 Aug 3	RH-200	-	-	-	-	-	-	TELS	-	-	-	607	-	-
1983-M40	2445556.50	1983 Aug 10	RH-200	-	-	-	-	-	-	CHAN	-	-	-	607	-	-
1983-M41	2445556.50	1983 Aug 10	RH-200	-	-	-	-	-	-	TELS	-	-	-	607	-	-
1983-M42	2445563.50	1983 Aug 17	RH-200	-	-	-	-	-	-	CHAN	-	-	-	607	-	-
1983-M43	2445563.50	1983 Aug 17	RH-200	-	-	-	-	-	-	TELS	-	-	-	607	-	-
1983-M44	2445565.50	1983 Aug 19	RH-200	-	-	-	-	-	-	CHAN	-	-	-	607	-	-
1983-M45	2445570.50	1983 Aug 24	RH-200	-	-	-	-	-	-	CHAN	-	-	-	607	-	-
1983-M46	2445570.50	1983 Aug 24	RH-200	-	-	-	-	-	-	TELS	-	-	-	607	-	-
1983-M47	2445572.50	1983 Aug 26	RH-200	-	-	-	-	-	-	CHAN	-	-	-	607	-	-
1983-M48	2445577.50	1983 Aug 31	RH-200	-	-	-	-	-	-	TELS	-	-	-	607	-	-
1983-M49	2445577.50	1983 Aug 31	RH-200	-	-	-	-	-	-	CHAN	-	-	-	607	-	-
1983-M50	2445579.50	1983 Sep 7	RH-200	-	-	-	-	-	-	CHAN	-	-	-	607	-	-
1983-M51	2445584.50	1983 Sep 7	RH-200	-	-	-	-	-	-	TELS	-	-	-	607	-	-
1983-M52	2445586.50	1983 Sep 9	RH-200	-	-	-	-	-	-	CHAN	-	-	-	607	-	-
1983-M53	2445591.50	1983 Sep 14	RH-200	-	-	-	-	-	-	CHAN	-	-	-	607	-	-
1983-M54	2445592.50	1983 Sep 15	RH-200	-	-	-	-	-	-	TELS	-	-	-	607	-	-
1983-M55	2445598.50	1983 Sep 21	RH-200	-	-	-	-	-	-	CHAN	-	-	-	607	-	-
1983-M56	2445600.50	1983 Sep 23	RH-200	-	-	-	-	-	-	CHAN	-	-	-	607	-	-
1983-M57	2445605.50	1983 Sep 28	RH-200	-	-	-	-	-	-	CHAN	-	-	-	607	-	-
1983-M58	2445605.50	1983 Sep 28	RH-200	-	-	-	-	-	-	TELS	-	-	-	607	-	-
1983-M59	2445607.50	1983 Sep 28	RH-200	-	-	-	-	-	-	CHAN	-	-	-	607	-	-
1983-M60	2445607.50	1983 Sep 30	RH-200	-	-	-	-	-	-	CHAN	-	-	-	607	-	-
1983-M61	2445614.50	1983 Oct 5	RH-200	-	-	-	-	-	-	CHAN	-	-	-	607	-	-
1983-M62	2445614.50	1983 Oct 5	RH-200	-	-	-	-	-	-	TELS	-	-	-	607	-	-
1983-M63	2445626.50	1983 Oct 19	RH-200	-	-	-	-	-	-	CHAN	-	-	-	607	-	-
1983-M64	2445626.50	1983 Oct 19	RH-200	-	-	-	-	-	-	TELS	-	-	-	607	-	-
1983-M65	2445635.50	1983 Oct 28	RH-200	-	-	-	-	-	-	CHAN	-	-	-	607	-	-
1983-M66	2445635.50	1983 Oct 28	RH-200	-	-	-	-	-	-	TELS	-	-	-	607	-	-
1983-M67	2445640.50	1983 Nov 2	RH-200	-	-	-	-	-	-	CHAN	-	-	-	607	-	-
1983-M68	2445642.50	1983 Nov 4	RH-200	-	-	-	-	-	-	CHAN	-	-	-	607	-	-

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Launch_Mission	FlightCode	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee_Km	Range_Km	Dest
1983-M49	2445647.50	1983 Nov 9	RH-200							CHAN				607		
1983-M50	2445649.50	1983 Nov 11	RH-200							CHAN				607		
1983-M51	2445654.50	1983 Nov 16	RH-200							CHAN				607		
1983-M87	2445659.50	1983 Nov 22	RH-200							TERLS				607		
1983-M88	2445660.50	1983 Nov 22	RH-200							TERLS				607		
1983-M52	2445661.50	1983 Nov 25	RH-200							CHAN				607		
1983-M89	2445663.50	1983 Nov 25	RH-200							TERLS				607		
1983-M90	2445668.50	1983 Nov 30	RH-200							TERLS				607		
1983-M53	2445668.50	1983 Nov 30	RH-200							CHAN				607		
1983-M91	2445669.50	1983 Dec 1	RH-200							TERLS				607		
1983-M92	2445670.50	1983 Dec 2	RH-200							TERLS				607		
1983-M54	2445675.50	1983 Dec 7	RH-200							CHAN				607		
1983-M55	2445682.50	1983 Dec 14	RH-200							CHAN				607		
1983-M56	2445688.50	1983 Dec 21	RH-200							CHAN				607		
1983-M57	2445698.50	1983 Dec 28	RH-200							CHAN				607		
1984-M95	2445703.50	1984 Jan 4	RH-200							CHAN				607		
1984-M96	2445710.50	1984 Jan 11	RH-200							CHAN				607		
1984-M97	2445717.50	1984 Jan 18	RH-200							CHAN				607		
1984-M98	2445728.50	1984 Jan 27	RH-200							CHAN				607		
1984-M40	2445731.50	1984 Feb 1	RH-200							CHAN				607		
1984-M41	2445738.50	1984 Feb 6	RH-200							CHAN				607		
1984-M42	2445745.50	1984 Feb 15	RH-200							CHAN				607		
1984-M43	2445752.50	1984 Feb 22	RH-200							CHAN				607		
1984-M44	2445759.50	1984 Feb 29	RH-200							CHAN				607		
1984-M45	2445766.50	1984 Mar 7	RH-200							CHAN				607		
1984-M46	2445773.50	1984 Mar 14	RH-200							CHAN				607		
1984-M47	2445780.50	1984 Mar 21	RH-200							CHAN				607		
1984-M48	2445787.50	1984 Mar 28	RH-200							CHAN				607		
1984-M49	2445794.50	1984 Apr 4	RH-200							CHAN				607		
1984-M50	2445801.50	1984 Apr 11	RH-200							CHAN				607		
1984-M51	2445809.50	1984 Apr 19	RH-200							CHAN				607		
1984-M52	2445815.50	1984 Apr 25	RH-200							CHAN				607		
1984-M59	2445822.50	1984 May 2	RH-200							CHAN				607		
1984-M100	2445829.50	1984 May 9	RH-200							CHAN				607		
1984-M101	2445836.50	1984 May 16	RH-200							CHAN				607		
1984-M04	2445844.03	1984 May 23 1245	RH-200		RH-200-243		Meteo Chaff			SHAR				64		
1984-M05	2445844.03	1984 May 23 1260	RH-200				Meteo Chaff			CHAN				57		
1984-M06	2445844.03	1984 May 23 1248	RH-200				Meteo Chaff			TERLS				607		
1984-M07	2445844.08	1984 May 23 1354	RH-200				Meteo Chaff			TERLS				61		
1984-M08	2445846.02	1984 May 25 1230	RH-200		RH-200-247		Meteo Chaff			TERLS				42		
1984-M41	2445846.02	1984 May 25 1236	RH-200				Meteo Chaff			SHAR				48		
1984-M09	2445846.07	1984 May 25 1358	RH-200				Meteo Chaff			SHAR				49		
1984-M10	2445848.07	1984 May 25 1356	RH-200		RH-200-244		Meteo Chaff			SHAR				42		
1984-M11	2445848.07	1984 May 27 1274	RH-200		RH-200-245		Meteo Chaff			SHAR				42		
1984-M12	2445848.02	1984 May 27 1274	RH-200				Meteo Chaff			SHAR				42		
1984-M13	2445848.08	1984 May 27 1245	RH-200				Meteo Chaff			CHAN				64		
1984-M14	2445848.08	1984 May 27 1245	RH-200		RH-200-246		Meteo Chaff			CHAN				65		
1984-M15	2445850.06	1984 May 29 1230	RH-200		RH-200-248		Meteo Chaff			SHAR				74		
1984-M16	2445850.03	1984 May 29 1237	RH-200				Meteo Chaff			TERLS				66		
1984-M17	2445850.03	1984 May 29 1246	RH-200				Meteo Chaff			CHAN				68		
1984-M18	2445852.02	1984 May 31 1230	RH-200				Meteo Chaff			CHAN				68		
1984-M19	2445852.02	1984 May 31 1230	RH-200				Meteo Chaff			TERLS				69		
1984-M20	2445852.02	1984 May 31 1230	RH-200		RH-200-249		Meteo Chaff			TERLS				69		
1984-M21	2445852.02	1984 May 31 1230	RH-200				Meteo Chaff			CHAN				55		
1984-M22	2445854.03	1984 Jun 2 1320	RH-200		RH-200-250		Meteo Chaff			CHAN				62		
1984-M23	2445854.08	1984 Jun 2 1357	RH-200				Meteo Chaff			TERLS				68		
1984-M24	2445856.03	1984 Jun 4 1230	RH-200				Meteo Chaff			TERLS				72		
1984-M25	2445856.03	1984 Jun 4 1240	RH-200		RH-200-252		Meteo Chaff			SHAR				73		
1984-M26	2445856.07	1984 Jun 4 1339	RH-200				Meteo Chaff			CHAN				607		
1984-M27	2445856.10	1984 Jun 4 1420	RH-200				Meteo Chaff			CHAN				67		
1984-M28	2445858.03	1984 Jun 6 1230	RH-200				Meteo Chaff			TERLS				61		
1984-M29	2445858.03	1984 Jun 6 1250	RH-200				Meteo Chaff			TERLS				70		
1984-M30	2445860.02	1984 Jun 8 1230	RH-200				Meteo Chaff			CHAN				58		
1984-M31	2445860.02	1984 Jun 8 1233	RH-200				Meteo Chaff			CHAN				64		
1984-M32	2445862.04	1984 Jun 10 1240	RH-200		RH-200-253		Meteo Chaff			TERLS				72		
1984-M33	2445862.04	1984 Jun 10 1245	RH-200				Meteo Chaff			SHAR				62		
1984-M34	2445862.04	1984 Jun 10 1301	RH-200				Meteo Chaff			CHAN				72		
1984-M35	2445862.04	1984 Jun 10 1301	RH-200				Meteo Chaff			TERLS				58		
1984-M36	2445864.02	1984 Jun 12 1230	RH-200		RH-200-254		Meteo Chaff			CHAN				60		
1984-M37	2445864.02	1984 Jun 12 1230	RH-200		RH-200-255		Meteo Chaff			TERLS				607		
1984-M38	2445864.02	1984 Jun 12 1230	RH-200				Meteo Chaff			CHAN				72		
1984-M39	2445864.08	1984 Jun 12 1350	RH-200		RH-200-251		Meteo Chaff			TERLS				59		
1984-M102	2445871.50	1984 Jun 20	RH-200				Meteo Chaff			CHAN				66		
1984-M103	2445878.50	1984 Jun 27	RH-200				Meteo Chaff			CHAN				607		
1984-M53	2445886.50	1984 Jul 1	RH-200				Meteo Chaff			CHAN				607		
1984-M54	2445892.50	1984 Jul 11	RH-200				Meteo Chaff			CHAN				607		
1984-M55	2445899.50	1984 Jul 18	RH-200				Meteo Chaff			CHAN				607		
1984-M56	2445906.50	1984 Jul 25	RH-200				Meteo Chaff			CHAN				607		
1984-M104	2445913.50	1984 Aug 1	RH-200				Meteo Chaff			CHAN				607		
1984-M57	2445920.50	1984 Aug 8	RH-200				Meteo Chaff			CHAN				607		
1984-M58	2445928.50	1984 Aug 16	RH-200				Meteo Chaff			CHAN				607		
1984-M59	2445934.50	1984 Aug 22	RH-200				Meteo Chaff			CHAN				607		
1984-M68	2445942.50	1984 Aug 30	RH-200				Meteo Chaff			CHAN				607		
1984-M89	2445948.50	1984 Sep 5	RH-200				Meteo Chaff			CHAN				607		
1984-M90	2445955.50	1984 Sep 12	RH-200				Meteo Chaff			CHAN				607		
1984-M91	2445962.50	1984 Sep 19	RH-200				Meteo Chaff			CHAN				607		

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Launch_Mission	FlightCode	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee_Km	Range_Km	Dest
1984-M92	2445969.50	1984 Sep 26	RH-200	-	-	-	-	-	-	CHAN	-	-	-	607	-	-
1984-M93	2445976.50	1984 Oct 3	RH-200	-	-	-	-	-	-	CHAN	-	-	-	607	-	-
1984-M94	2445983.50	1984 Oct 10	RH-200	-	-	-	-	-	-	CHAN	-	-	-	607	-	-
1984-M67	2445990.50	1984 Oct 17	RH-200	-	-	-	-	-	-	CHAN	-	-	-	607	-	-
1984-M68	2445998.50	1984 Oct 25	RH-200	-	-	-	-	-	-	CHAN	-	-	-	607	-	-
1984-M69	2446011.50	1984 Nov 7	RH-200	-	-	-	-	-	-	CHAN	-	-	-	607	-	-
1984-M70	2446018.50	1984 Nov 14	RH-200	-	-	-	-	-	-	CHAN	-	-	-	607	-	-
1984-M71	2446025.50	1984 Nov 21	RH-200	-	-	-	-	-	-	CHAN	-	-	-	607	-	-
1984-M72	2446032.50	1984 Nov 28	RH-200	-	-	-	-	-	-	CHAN	-	-	-	607	-	-
1984-M73	2446039.50	1984 Dec 5	RH-200	-	-	-	-	-	-	CHAN	-	-	-	607	-	-
1984-M74	2446046.50	1984 Dec 12	RH-200	-	-	-	-	-	-	CHAN	-	-	-	607	-	-
1984-M75	2446053.50	1984 Dec 19	RH-200	-	-	-	-	-	-	CHAN	-	-	-	607	-	-
1984-M76	2446060.50	1984 Dec 26	RH-200	-	-	-	-	-	-	CHAN	-	-	-	607	-	-
1985-M02	2446067.50	1985 Jan 2	RH-200	-	-	-	-	-	-	CHAN	-	-	-	607	-	-
1985-M03	2446074.50	1985 Jan 9	RH-200	-	-	-	-	-	-	CHAN	-	-	-	607	-	-
1985-M04	2446081.50	1985 Jan 16	RH-200	-	-	-	-	-	-	CHAN	-	-	-	607	-	-
1985-M05	2446088.04	1985 Jan 23 1300	RH-200	-	-	-	-	-	-	CHAN	-	-	-	607	-	-
1985-M06	2446089.08	1985 Jan 23 1400	RH-200	-	-	-	-	-	-	CHAN	-	-	-	607	-	-
1985-M34	2446096.50	1985 Jan 31	RH-200	-	-	-	-	-	-	CHAN	-	-	-	607	-	-
1985-M07	2446102.50	1985 Feb 6	RH-200	-	-	-	-	-	-	CHAN	-	-	-	607	-	-
1985-M08	2446109.50	1985 Feb 13	RH-200	-	-	-	-	-	-	CHAN	-	-	-	607	-	-
1985-M09	2446116.50	1985 Feb 20	RH-200	-	-	-	-	-	-	CHAN	-	-	-	607	-	-
1985-M10	2446123.50	1985 Feb 27	RH-200	-	-	-	-	-	-	CHAN	-	-	-	607	-	-
1985-M11	2446131.50	1985 Mar 7	RH-200	-	-	-	-	-	-	CHAN	-	-	-	607	-	-
1985-M12	2446137.50	1985 Mar 13	RH-200	-	-	-	-	-	-	CHAN	-	-	-	607	-	-
1985-M13	2446144.50	1985 Mar 20	RH-200	-	-	-	-	-	-	CHAN	-	-	-	607	-	-
1985-M14	2446151.50	1985 Mar 27	RH-200	-	-	-	-	-	-	CHAN	-	-	-	607	-	-
1985-M15	2446159.50	1985 Apr 4	RH-200	-	-	-	-	-	-	CHAN	-	-	-	607	-	-
1985-M16	2446166.06	1985 Apr 10 1330	RH-200	-	-	-	-	-	-	CHAN	-	-	-	607	-	-
1985-M17	2446166.09	1985 Apr 10 1415	RH-200	-	-	-	-	-	-	CHAN	-	-	-	607	-	-
1985-M18	2446172.50	1985 Apr 17	RH-200	-	-	-	-	-	-	CHAN	-	-	-	607	-	-
1985-M35	2446179.50	1985 Apr 24	RH-200	-	-	-	-	-	-	CHAN	-	-	-	607	-	-
1985-M19	2446186.50	1985 May 1	RH-200	-	-	-	-	-	-	CHAN	-	-	-	607	-	-
1985-M20	2446193.50	1985 May 8	RH-200	-	-	-	-	-	-	CHAN	-	-	-	607	-	-
1985-M21	2446200.50	1985 May 15	RH-200	-	-	-	-	-	-	CHAN	-	-	-	607	-	-
1985-M22	2446207.50	1985 May 22	RH-200	-	-	-	-	-	-	CHAN	-	-	-	607	-	-
1985-M23	2446214.50	1985 May 29	RH-200	-	-	-	-	-	-	CHAN	-	-	-	607	-	-
1985-M24	2446221.50	1985 Jun 5	RH-200	-	-	-	-	-	-	CHAN	-	-	-	607	-	-
1985-M25	2446229.50	1985 Jun 13	RH-200	-	-	-	-	-	-	CHAN	-	-	-	607	-	-
1985-M26	2446235.50	1985 Jun 19	RH-200	-	-	-	-	-	-	CHAN	-	-	-	607	-	-
1985-M27	2446242.50	1985 Jun 26	RH-200	-	-	-	-	-	-	CHAN	-	-	-	607	-	-
1985-M28	2446249.50	1985 Jul 3	RH-200	-	-	-	-	-	-	CHAN	-	-	-	607	-	-
1985-M29	2446256.50	1985 Jul 10	RH-200	-	-	-	-	-	-	CHAN	-	-	-	607	-	-
1985-M30	2446263.50	1985 Jul 17	RH-200	-	-	-	-	-	-	CHAN	-	-	-	607	-	-
1985-M31	2446270.50	1985 Jul 24	RH-200	-	-	-	-	-	-	CHAN	-	-	-	607	-	-
1985-M32	2446277.50	1985 Jul 31	RH-200	-	-	-	-	-	-	CHAN	-	-	-	607	-	-
1985-M33	2446284.50	1985 Aug 7	RH-200	-	-	-	-	-	-	CHAN	-	-	-	607	-	-
1985-M34	2446291.50	1985 Aug 14	RH-200	-	-	-	-	-	-	CHAN	-	-	-	607	-	-
1985-M35	2446298.50	1985 Aug 21	RH-200	-	-	-	-	-	-	CHAN	-	-	-	607	-	-
1985-M36	2446305.50	1985 Aug 28	RH-200	-	-	-	-	-	-	CHAN	-	-	-	607	-	-
1985-M37	2446312.50	1985 Sep 4	RH-200	-	-	-	-	-	-	CHAN	-	-	-	607	-	-
1985-M38	2446319.50	1985 Sep 11	RH-200	-	-	-	-	-	-	CHAN	-	-	-	607	-	-
1985-M39	2446327.50	1985 Sep 18	RH-200	-	-	-	-	-	-	CHAN	-	-	-	607	-	-
1985-M40	2446334.50	1985 Sep 25	RH-200	-	-	-	-	-	-	CHAN	-	-	-	607	-	-
1985-M41	2446341.50	1985 Oct 2	RH-200	-	-	-	-	-	-	CHAN	-	-	-	607	-	-
1985-M42	2446348.50	1985 Oct 9	RH-200	-	-	-	-	-	-	CHAN	-	-	-	607	-	-
1985-M43	2446355.50	1985 Oct 16	RH-200	-	-	-	-	-	-	CHAN	-	-	-	607	-	-
1985-M44	2446362.50	1985 Oct 23	RH-200	-	-	-	-	-	-	CHAN	-	-	-	607	-	-
1985-M45	2446369.50	1985 Oct 30	RH-200	-	-	-	-	-	-	CHAN	-	-	-	607	-	-
1985-M46	2446376.50	1985 Nov 6	RH-200	-	-	-	-	-	-	CHAN	-	-	-	607	-	-
1985-M47	2446383.50	1985 Nov 13	RH-200	-	-	-	-	-	-	CHAN	-	-	-	607	-	-
1985-M48	2446390.50	1985 Nov 20	RH-200	-	-	-	-	-	-	CHAN	-	-	-	607	-	-
1985-M49	2446397.50	1985 Nov 27	RH-200	-	-	-	-	-	-	CHAN	-	-	-	607	-	-
1985-M50	2446404.50	1985 Dec 4	RH-200	-	-	-	-	-	-	CHAN	-	-	-	607	-	-
1985-M51	2446411.50	1985 Dec 11	RH-200	-	-	-	-	-	-	CHAN	-	-	-	607	-	-
1985-M52	2446418.50	1985 Dec 18	RH-200	-	-	-	-	-	-	CHAN	-	-	-	607	-	-
1985-M53	2446425.50	1985 Dec 25	RH-200	-	-	-	-	-	-	CHAN	-	-	-	607	-	-
1986-M46	2446432.50	1986 Jan 1	RH-200	-	-	-	-	-	-	CHAN	-	-	-	607	-	-
1986-M47	2446439.50	1986 Jan 8	RH-200	-	-	-	-	-	-	CHAN	-	-	-	607	-	-
1986-M48	2446446.50	1986 Jan 15	RH-200	-	-	-	-	-	-	CHAN	-	-	-	607	-	-
1986-M49	2446453.50	1986 Jan 22	RH-200	-	-	-	-	-	-	CHAN	-	-	-	607	-	-
1986-M50	2446460.50	1986 Jan 29	RH-200	-	-	-	-	-	-	CHAN	-	-	-	607	-	-
1986-M01	2446467.50	1986 Feb 5	RH-200	-	-	-	-	-	-	CHAN	-	-	-	607	-	-
1986-M02	2446474.50	1986 Feb 12	RH-200	-	-	-	-	-	-	CHAN	-	-	-	607	-	-
1986-M03	2446481.50	1986 Feb 19	RH-200	-	-	-	-	-	-	CHAN	-	-	-	607	-	-
1986-M04	2446488.50	1986 Feb 26	RH-200	-	-	-	-	-	-	CHAN	-	-	-	607	-	-
1986-M05	2446495.50	1986 Mar 5	RH-200	-	-	-	-	-	-	CHAN	-	-	-	607	-	-
1986-M06	2446502.50	1986 Mar 12	RH-200	-	-	-	-	-	-	CHAN	-	-	-	607	-	-
1986-M07	2446509.50	1986 Mar 19	RH-200	-	-	-	-	-	-	CHAN	-	-	-	607	-	-
1986-M08	2446516.50	1986 Mar 26	RH-200	-	-	-	-	-	-	CHAN	-	-	-	607	-	-
1986-M09	2446523.50	1986 Apr 2	RH-200	-	-	-	-	-	-	CHAN	-	-	-	607	-	-
1986-M10	2446530.50	1986 Apr 9	RH-200	-	-	-	-	-	-	CHAN	-	-	-	607	-	-
1986-M11	2446537.50	1986 Apr 16	RH-200	-	-	-	-	-	-	CHAN	-	-	-	607	-	-
1986-M12	2446544.50	1986 Apr 23	RH-200	-	-	-	-	-	-	CHAN	-	-	-	607	-	-
1986-M13	2446551.50	1986 Apr 30	RH-200	-	-	-	-	-	-	CHAN	-	-	-	607	-	-
1986-M14	2446558.50	1986 May 7	RH-200	-	-	-	-	-	-	CHAN	-	-	-	607	-	-
1986-M15	2446565.50	1986 May 14	RH-200	-	-	-	-	-	-	CHAN	-	-	-	607	-	-
1986-M16	2446572.50	1986 May 21	RH-200	-	-	-	-	-	-	CHAN	-	-	-	607	-	-
1986-M17	2446579.50	1986 May 28	RH-200	-	-	-	-	-	-	CHAN	-	-	-	607	-	-
1986-M18	2446586.50	1986 Jun 4	RH-200	-	-	-	-	-	-	CHAN	-	-	-	607	-	-
1986-M19	2446593.50	1986 Jun 11	RH-200	-	-	-	-	-	-	CHAN	-	-	-	607	-	-
1986-M20	2446600.50	1986 Jun 18	RH-200	-	-	-	-	-	-	CHAN	-	-	-	607	-	-
1986-M21	2446607.50	1986 Jun 25	RH-200	-	-	-	-	-	-	CHAN	-	-	-	607	-	-
1986-M22	2446614.50	1986 Jul 2	RH-200	-	-	-	-	-	-	CHAN	-	-	-	607	-	-
1986-M23	2446621.50	1986 Jul 9	RH-200	-	-	-	-	-	-	CHAN	-	-	-	607	-	-
1986-M24	2446628.50	1986 Jul 16	RH-200	-	-	-	-	-	-	CHAN	-	-	-	607	-	-
1986-M25	2446635.50	1986 Jul 23	RH-200	-	-	-	-	-	-	CHAN	-	-	-	607	-	-
1986-M26	2446642.50	1986 Jul 30	RH-200	-	-	-	-	-	-	CHAN	-	-	-	607	-	-
1986-M27	2446649.50	1986 Aug 6	RH-													

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Launch_Mission	FlightCode	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee_Km	Range_Km	Dest
1986-M16	2446460.50	1986 Jan 30	RH-200	-	RH-200-278	Eq. Wave Campaign II	Meteo Chaff	-	-	SHAR	-	-	-	707	-	-
1986-M50	2446460.50	1986 Jan 30	RH-200	-	-	-	-	-	-	CHAN	-	-	-	607	-	-
1986-M17	2446461.50	1986 Jan 31	RH-200	-	-	Eq. Wave Campaign II	Meteo Chaff	-	-	SHAR	-	-	-	707	-	-
1986-M18	2446462.50	1986 Feb 1	RH-200	-	RH-200-279	Eq. Wave Campaign II	Meteo Chaff	-	-	SHAR	-	-	-	707	-	-
1986-M19	2446463.50	1986 Feb 2	RH-200	-	RH-200-280	Eq. Wave Campaign II	Meteo Chaff	-	-	SHAR	-	-	-	707	-	-
1986-M20	2446464.50	1986 Feb 3	RH-200	-	RH-200-281	Eq. Wave Campaign II	Meteo Chaff	-	-	SHAR	-	-	-	707	-	-
1986-M21	2446465.50	1986 Feb 4	RH-200	-	RH-200-282	Eq. Wave Campaign II	Meteo Chaff	-	-	SHAR	-	-	-	707	-	-
1986-M22	2446466.50	1986 Feb 5	RH-200	-	RH-200-283	Eq. Wave Campaign II	Meteo Chaff	-	-	SHAR	-	-	-	707	-	-
1986-M51	2446466.50	1986 Feb 5	RH-200	-	-	-	-	-	-	CHAN	-	-	-	607	-	-
1986-M23	2446467.50	1986 Feb 6	RH-200	-	RH-200-284	Eq. Wave Campaign II	Meteo Chaff	-	-	SHAR	-	-	-	707	-	-
1986-M24	2446468.50	1986 Feb 7	RH-200	-	RH-200-285	Eq. Wave Campaign II	Meteo Chaff	-	-	SHAR	-	-	-	707	-	-
1986-M25	2446469.50	1986 Feb 8	RH-200	-	RH-200-286	Eq. Wave Campaign II	Meteo Chaff	-	-	SHAR	-	-	-	707	-	-
1986-M26	2446470.50	1986 Feb 9	RH-200	-	RH-200-287	Eq. Wave Campaign II	Meteo Chaff	-	-	SHAR	-	-	-	707	-	-
1986-M106	2446470.50	1986 Feb 9	RH-200	-	RH-200-288	Eq. Wave Campaign II	Meteo Chaff	-	-	SHAR	-	-	-	607	-	-
1986-M27	2446471.50	1986 Feb 10	RH-200	-	RH-200-289	Eq. Wave Campaign II	Meteo Chaff	-	-	SHAR	-	-	-	707	-	-
1986-M28	2446472.50	1986 Feb 11	RH-200	-	RH-200-290	Eq. Wave Campaign II	Meteo Chaff	-	-	SHAR	-	-	-	707	-	-
1986-M29	2446473.50	1986 Feb 12	RH-200	-	RH-200-291	Eq. Wave Campaign II	Meteo Chaff	-	-	SHAR	-	-	-	707	-	-
1986-M107	2446473.50	1986 Feb 12	RH-200	-	-	-	-	-	-	CHAN	-	-	-	607	-	-
1986-M52	2446473.50	1986 Feb 12	RH-200	-	RH-200-293	Eq. Wave Campaign II	Meteo Chaff	-	-	SHAR	-	-	-	707	-	-
1986-M30	2446474.50	1986 Feb 13	RH-200	-	RH-200-296	Eq. Wave Campaign II	Meteo Chaff	-	-	SHAR	-	-	-	707	-	-
1986-M31	2446475.50	1986 Feb 14	RH-200	-	RH-200-295	Eq. Wave Campaign II	Meteo Chaff	-	-	SHAR	-	-	-	707	-	-
1986-M32	2446476.50	1986 Feb 15	RH-200	-	RH-200-296	Eq. Wave Campaign II	Meteo Chaff	-	-	SHAR	-	-	-	707	-	-
1986-M33	2446477.50	1986 Feb 16	RH-200	-	RH-200-297	Eq. Wave Campaign II	Meteo Chaff	-	-	SHAR	-	-	-	707	-	-
1986-M34	2446478.50	1986 Feb 17	RH-200	-	RH-200-298	Eq. Wave Campaign II	Meteo Chaff	-	-	SHAR	-	-	-	707	-	-
1986-M35	2446479.50	1986 Feb 18	RH-200	-	RH-200-299	Eq. Wave Campaign II	Meteo Chaff	-	-	SHAR	-	-	-	707	-	-
1986-M36	2446480.50	1986 Feb 19	RH-200	-	RH-200-300	Eq. Wave Campaign II	Meteo Chaff	-	-	SHAR	-	-	-	607	-	-
1986-M37	2446481.50	1986 Feb 20	RH-200	-	RH-200-301	Eq. Wave Campaign II	Meteo Chaff	-	-	SHAR	-	-	-	707	-	-
1986-M38	2446482.50	1986 Feb 21	RH-200	-	RH-200-303	Eq. Wave Campaign II	Meteo Chaff	-	-	SHAR	-	-	-	707	-	-
1986-M39	2446483.50	1986 Feb 22	RH-200	-	RH-200-304	Eq. Wave Campaign II	Meteo Chaff	-	-	SHAR	-	-	-	707	-	-
1986-M40	2446484.50	1986 Feb 23	RH-200	-	RH-200-304	Eq. Wave Campaign II	Meteo Chaff	-	-	SHAR	-	-	-	707	-	-
1986-M41	2446485.50	1986 Feb 24	RH-200	-	RH-200-294	Eq. Wave Campaign II	Meteo Chaff	-	-	SHAR	-	-	-	707	-	-
1986-M108	2446485.50	1986 Feb 24	RH-200	-	RH-200-302	Eq. Wave Campaign II	Meteo Chaff	-	-	SHAR	-	-	-	607	-	-
1986-M42	2446486.50	1986 Feb 25	RH-200	-	RH-200-307	Eq. Wave Campaign II	Meteo Chaff	-	-	SHAR	-	-	-	707	-	-
1986-M43	2446487.50	1986 Feb 26	RH-200	-	RH-200-308	Eq. Wave Campaign II	Meteo Chaff	-	-	SHAR	-	-	-	707	-	-
1986-M44	2446488.50	1986 Feb 26	RH-200	-	RH-200-306	Eq. Wave Campaign II	Meteo Chaff	-	-	SHAR	-	-	-	707	-	-
1986-M67	2446488.50	1986 Feb 27	RH-200	-	-	-	-	-	-	CHAN	-	-	-	607	-	-
1986-M45	2446489.50	1986 Feb 28	RH-200	-	RH-200-306	Eq. Wave Campaign II	Meteo Chaff	-	-	SHAR	-	-	-	707	-	-
1986-M68	2446494.50	1986 Mar 9	RH-200	-	-	-	-	-	-	CHAN	-	-	-	607	-	-
1986-M69	2446501.50	1986 Mar 12	RH-200	-	-	-	-	-	-	CHAN	-	-	-	607	-	-
1986-M90	2446508.50	1986 Mar 19	RH-200	-	-	-	-	-	-	CHAN	-	-	-	607	-	-
1986-M91	2446515.50	1986 Mar 26	RH-200	-	-	-	-	-	-	CHAN	-	-	-	607	-	-
1986-M92	2446522.50	1986 Apr 6	RH-200	-	-	-	-	-	-	CHAN	-	-	-	607	-	-
1986-M93	2446529.50	1986 Apr 6	RH-200	-	-	-	-	-	-	CHAN	-	-	-	607	-	-
1986-M94	2446536.50	1986 Apr 16	RH-200	-	-	-	-	-	-	CHAN	-	-	-	607	-	-
1986-M95	2446545.50	1986 Apr 23	RH-200	-	-	-	-	-	-	CHAN	-	-	-	607	-	-
1986-M96	2446550.50	1986 Apr 30	RH-200	-	-	-	-	-	-	CHAN	-	-	-	607	-	-
1986-M97	2446557.50	1986 May 7	RH-200	-	-	-	-	-	-	CHAN	-	-	-	607	-	-
1986-M98	2446571.50	1986 May 21	RH-200	-	-	-	-	-	-	CHAN	-	-	-	607	-	-
1986-M99	2446585.50	1986 May 28	RH-200	-	-	-	-	-	-	CHAN	-	-	-	607	-	-
1986-M55	2446595.50	1986 Jun 11	RH-200	-	-	-	-	-	-	CHAN	-	-	-	607	-	-
1986-M56	2446600.50	1986 Jun 19	RH-200	-	-	-	-	-	-	CHAN	-	-	-	607	-	-
1986-M57	2446606.50	1986 Jun 25	RH-200	-	-	-	-	-	-	CHAN	-	-	-	607	-	-
1986-M58	2446614.50	1986 Jul 3	RH-200	-	-	-	-	-	-	CHAN	-	-	-	607	-	-
1986-M59	2446620.50	1986 Jul 9	RH-200	-	-	-	-	-	-	CHAN	-	-	-	607	-	-
1986-M61	2446627.50	1986 Jul 16	RH-200	-	-	-	-	-	-	CHAN	-	-	-	607	-	-
1986-M62	2446634.50	1986 Jul 23	RH-200	-	-	-	-	-	-	CHAN	-	-	-	607	-	-
1986-M63	2446641.50	1986 Jul 30	RH-200	-	-	-	-	-	-	CHAN	-	-	-	607	-	-
1986-M64	2446648.50	1986 Aug 6	RH-200	-	-	-	-	-	-	CHAN	-	-	-	607	-	-
1986-M65	2446655.50	1986 Aug 13	RH-200	-	-	-	-	-	-	CHAN	-	-	-	607	-	-
1986-M66	2446662.50	1986 Aug 20	RH-200	-	-	-	-	-	-	CHAN	-	-	-	607	-	-
1986-M67	2446669.50	1986 Aug 28	RH-200	-	-	-	-	-	-	CHAN	-	-	-	607	-	-
1986-M99	2446670.50	1986 Aug 28	RH-200	-	-	-	-	-	-	SHAR	-	-	-	607	-	-
1986-M109	2446677.50	1986 Sep 4	RH-200	-	-	-	-	-	-	SHAR	-	-	-	607	-	-
1986-M68	2446677.50	1986 Sep 4	RH-200	-	-	-	-	-	-	CHAN	-	-	-	607	-	-
1986-M110	2446678.50	1986 Sep 5	RH-200	-	-	-	-	-	-	SHAR	-	-	-	607	-	-
1986-M69	2446683.50	1986 Sep 10	RH-200	-	-	-	-	-	-	CHAN	-	-	-	607	-	-
1986-M70	2446689.50	1986 Sep 18	RH-200	-	-	-	-	-	-	CHAN	-	-	-	607	-	-
1986-M71	2446698.50	1986 Sep 25	RH-200	-	-	-	-	-	-	CHAN	-	-	-	607	-	-
1986-M72	2446704.50	1986 Oct 1	RH-200	-	-	-	-	-	-	CHAN	-	-	-	607	-	-
1986-M73	2446711.50	1986 Oct 8	RH-200	-	-	-	-	-	-	CHAN	-	-	-	607	-	-
1986-M74	2446718.50	1986 Oct 15	RH-200	-	-	-	-	-	-	CHAN	-	-	-	607	-	-
1986-M75	2446725.50	1986 Oct 22	RH-200	-	-	-	-	-	-	CHAN	-	-	-	607	-	-
1986-M76	2446729.50	1986 Oct 23	RH-200	-	-	-	-	-	-	CHAN	-	-	-	607	-	-
1986-M77	2446733.50	1986 Oct 30	RH-200	-	-	-	-	-	-	CHAN	-	-	-	607	-	-
1986-M78	2446739.50	1986 Nov 5	RH-200	-	-	-	-	-	-	CHAN	-	-	-	607	-	-
1986-M79	2446746.50	1986 Nov 12	RH-200	-	-	-	-	-	-	CHAN	-	-	-	607	-	-
1986-M80	2446753.50	1986 Nov 19	RH-200	-	-	-	-	-	-	CHAN	-	-	-	607	-	-
1986-M81	2446760.50	1986 Nov 26	RH-200	-	-	-	-	-	-	CHAN	-	-	-	607	-	-
1986-M82	2446767.50	1986 Dec 3	RH-200	-	-	-	-	-	-	CHAN	-	-	-	607	-	-
1986-M83	2446774.50	1986 Dec 10	RH-200	-	-	-	-	-	-	CHAN	-	-	-	607	-	-
1986-M84	2446782.50	1986 Dec 18	RH-200	-	-	-	-	-	-	CHAN	-	-	-	607	-	-
1986-M85	2446788.50	1986 Dec 24	RH-200	-	-	-	-	-	-	CHAN	-	-	-	607	-	-
1986-M86	2446795.50	1986 Dec 31	RH-200	-	-	-	-	-	-	CHAN	-	-	-	607	-	-
1987-M01	2446802.50	1987 Jan 7	RH-200	-	-	Meteo Chaff	-	-	-	CHAN	-	-	-	707	-	-







Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Launch_Mission	FlightCode	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee_Km	Range_Km	Dest
1989-M61	2447742.50	1989 Aug 4	RH-200	-	-	-	-	-	-	SHAR	-	-	-	607	-	-
1989-M40	2447754.50	1989 Aug 16	RH-200	-	RH-200	-	-	-	-	CHAN	-	-	-	707	-	-
1989-M41	2447761.50	1989 Aug 23	RH-200	-	-	-	-	-	-	CHAN	-	-	-	707	-	-
1989-M42	2447768.50	1989 Aug 30	RH-200	-	-	-	-	-	-	CHAN	-	-	-	707	-	-
1989-M43	2447775.50	1989 Sep 6	RH-200	-	-	-	-	-	-	CHAN	-	-	-	707	-	-
1989-M44	2447782.50	1989 Sep 13	RH-200	-	-	-	-	-	-	CHAN	-	-	-	707	-	-
1989-M45	2447789.50	1989 Sep 20	RH-200	-	-	-	-	-	-	CHAN	-	-	-	707	-	-
1989-M46	2447796.50	1989 Sep 27	RH-200	-	-	-	-	-	-	CHAN	-	-	-	707	-	-
1989-M47	2447803.50	1989 Oct 4	RH-200	-	-	-	-	-	-	CHAN	-	-	-	707	-	-
1989-M48	2447810.50	1989 Oct 11	RH-200	-	-	-	-	-	-	CHAN	-	-	-	707	-	-
1989-M49	2447817.50	1989 Oct 18	RH-200	-	-	-	-	-	-	CHAN	-	-	-	707	-	-
1989-M50	2447824.50	1989 Oct 25	RH-200	-	-	-	-	-	-	CHAN	-	-	-	707	-	-
1989-M51	2447831.50	1989 Nov 1	RH-200	-	-	-	-	-	-	CHAN	-	-	-	707	-	-
1989-M52	2447838.50	1989 Nov 7	RH-200	-	-	-	-	-	-	SHAR	-	-	-	607	-	-
1989-M53	2447845.50	1989 Nov 15	RH-200	-	-	-	-	-	-	SHAR	-	-	-	607	-	-
1989-M54	2447853.50	1989 Nov 22	RH-200	-	-	-	-	-	-	CHAN	-	-	-	707	-	-
1989-M55	2447860.50	1989 Nov 29	RH-200	-	-	-	-	-	-	CHAN	-	-	-	707	-	-
1989-M56	2447867.50	1989 Dec 7	RH-200	-	-	-	-	-	-	CHAN	-	-	-	707	-	-
1989-M57	2447874.50	1989 Dec 14	RH-200	-	-	-	-	-	-	CHAN	-	-	-	707	-	-
1989-M58	2447881.50	1989 Dec 19	RH-200	-	-	-	-	-	-	SHAR	-	-	-	607	-	-
1989-M59	2447888.50	1989 Dec 21	RH-200	-	-	-	-	-	-	SHAR	-	-	-	607	-	-
1989-M60	2447895.50	1989 Dec 27	RH-200	-	-	-	-	-	-	CHAN	-	-	-	707	-	-
1989-M10	2447901.50	1990 Jan 3	RH-200	-	-	-	-	-	-	CHAN	-	-	-	707	-	-
1989-M11	2447908.50	1990 Jan 10	RH-200	-	-	-	-	-	-	CHAN	-	-	-	707	-	-
1989-M12	2447915.50	1990 Jan 17	RH-200	-	-	-	-	-	-	CHAN	-	-	-	707	-	-
1989-M13	2447922.50	1990 Jan 24	RH-200	-	-	-	-	-	-	CHAN	-	-	-	63	-	-
1989-M14	2447929.50	1990 Jan 31	RH-200	-	-	-	-	-	-	CHAN	-	-	-	78	-	-
1989-M15	2447936.50	1990 Feb 7	RH-200	-	-	-	-	-	-	CHAN	-	-	-	78	-	-
1989-M16	2447943.50	1990 Feb 14	RH-200	-	-	-	-	-	-	CHAN	-	-	-	78	-	-
1989-M17	2447950.50	1990 Feb 21	RH-200	-	-	-	-	-	-	CHAN	-	-	-	78	-	-
1989-M18	2447957.50	1990 Feb 28	RH-200	-	-	-	-	-	-	CHAN	-	-	-	73	-	-
1989-M19	2447964.50	1990 Feb 5	RH-200	-	-	-	-	-	-	CHAN	-	-	-	73	-	-
1989-M20	2447971.50	1990 Feb 12	RH-200	-	-	-	-	-	-	CHAN	-	-	-	77	-	-
1989-M21	2447978.50	1990 Feb 19	RH-200	-	-	-	-	-	-	CHAN	-	-	-	77	-	-
1989-M22	2447985.50	1990 Feb 26	RH-200	-	-	-	-	-	-	CHAN	-	-	-	80	-	-
1989-M23	2447992.50	1990 Feb 3	RH-200	-	-	-	-	-	-	CHAN	-	-	-	80	-	-
1989-M24	2447999.50	1990 Feb 10	RH-200	-	-	-	-	-	-	CHAN	-	-	-	77	-	-
1989-M25	2448006.50	1990 Feb 17	RH-200	-	-	-	-	-	-	CHAN	-	-	-	77	-	-
1989-M26	2448013.50	1990 Feb 24	RH-200	-	-	-	-	-	-	CHAN	-	-	-	77	-	-
1989-M27	2448020.50	1990 Feb 31	RH-200	-	-	-	-	-	-	CHAN	-	-	-	77	-	-
1989-M28	2448027.50	1990 Mar 7	RH-200	-	-	-	-	-	-	CHAN	-	-	-	77	-	-
1989-M29	2448034.50	1990 Mar 14	RH-200	-	-	-	-	-	-	CHAN	-	-	-	707	-	-
1989-M30	2448041.50	1990 Mar 21	RH-200	-	-	-	-	-	-	CHAN	-	-	-	707	-	-
1989-M31	2448048.50	1990 Mar 28	RH-200	-	-	-	-	-	-	CHAN	-	-	-	707	-	-
1989-M32	2448055.50	1990 Apr 4	RH-200	-	-	-	-	-	-	CHAN	-	-	-	707	-	-
1989-M33	2448062.50	1990 Apr 11	RH-200	-	-	-	-	-	-	CHAN	-	-	-	707	-	-
1989-M34	2448069.50	1990 Apr 18	RH-200	-	-	-	-	-	-	CHAN	-	-	-	707	-	-
1989-M35	2448076.50	1990 Apr 25	RH-200	-	-	-	-	-	-	CHAN	-	-	-	707	-	-
1989-M36	2448083.50	1990 May 2	RH-200	-	-	-	-	-	-	CHAN	-	-	-	707	-	-
1989-M37	2448090.50	1990 May 9	RH-200	-	-	-	-	-	-	CHAN	-	-	-	707	-	-
1989-M38	2448097.50	1990 May 16	RH-200	-	-	-	-	-	-	CHAN	-	-	-	707	-	-
1989-M39	2448104.50	1990 May 23	RH-200	-	-	-	-	-	-	CHAN	-	-	-	707	-	-
1989-M40	2448111.50	1990 May 30	RH-200	-	-	-	-	-	-	CHAN	-	-	-	707	-	-
1989-M41	2448118.50	1990 Jun 6	RH-200	-	-	-	-	-	-	CHAN	-	-	-	707	-	-
1989-M42	2448125.50	1990 Jun 13	RH-200	-	-	-	-	-	-	CHAN	-	-	-	707	-	-
1989-M43	2448132.50	1990 Jun 20	RH-200	-	-	-	-	-	-	CHAN	-	-	-	707	-	-
1989-M44	2448139.50	1990 Jun 27	RH-200	-	-	-	-	-	-	CHAN	-	-	-	707	-	-
1989-M45	2448146.50	1990 Jul 4	RH-200	-	-	-	-	-	-	CHAN	-	-	-	707	-	-
1989-M46	2448153.50	1990 Jul 11	RH-200	-	-	-	-	-	-	CHAN	-	-	-	707	-	-
1989-M47	2448160.50	1990 Jul 18	RH-200	-	-	-	-	-	-	CHAN	-	-	-	707	-	-
1989-M48	2448167.50	1990 Jul 25	RH-200	-	-	-	-	-	-	CHAN	-	-	-	707	-	-
1989-M49	2448174.50	1990 Aug 1	RH-200	-	-	-	-	-	-	CHAN	-	-	-	707	-	-
1989-M50	2448181.50	1990 Aug 8	RH-200	-	-	-	-	-	-	CHAN	-	-	-	707	-	-
1989-M51	2448188.50	1990 Aug 15	RH-200	-	-	-	-	-	-	CHAN	-	-	-	707	-	-
1989-M52	2448195.50	1990 Aug 22	RH-200	-	-	-	-	-	-	CHAN	-	-	-	707	-	-
1989-M53	2448202.50	1990 Aug 29	RH-200	-	-	-	-	-	-	CHAN	-	-	-	707	-	-
1989-M54	2448209.50	1990 Sep 5	RH-200	-	-	-	-	-	-	CHAN	-	-	-	707	-	-
1989-M55	2448216.50	1990 Sep 12	RH-200	-	-	-	-	-	-	CHAN	-	-	-	707	-	-
1989-M56	2448223.50	1990 Sep 19	RH-200	-	-	-	-	-	-	CHAN	-	-	-	707	-	-
1989-M57	2448230.50	1990 Sep 26	RH-200	-	-	-	-	-	-	CHAN	-	-	-	707	-	-
1989-M58	2448237.50	1990 Oct 3	RH-200	-	-	-	-	-	-	CHAN	-	-	-	707	-	-
1989-M59	2448244.50	1990 Oct 10	RH-200	-	-	-	-	-	-	CHAN	-	-	-	707	-	-
1989-M60	2448251.50	1990 Oct 17	RH-200	-	-	-	-	-	-	CHAN	-	-	-	707	-	-
1989-M61	2448258.50	1990 Oct 24	RH-200	-	-	-	-	-	-	CHAN	-	-	-	707	-	-
1989-M62	2448265.50	1990 Oct 31	RH-200	-	-	-	-	-	-	CHAN	-	-	-	707	-	-
1989-M63	2448272.50	1990 Nov 7	RH-200	-	-	-	-	-	-	CHAN	-	-	-	707	-	-
1989-M64	2448279.50	1990 Nov 14	RH-200	-	-	-	-	-	-	CHAN	-	-	-	707	-	-
1989-M65	2448286.50	1990 Nov 21	RH-200	-	-	-	-	-	-	CHAN	-	-	-	707	-	-
1989-M66	2448293.50	1990 Nov 28	RH-200	-	-	-	-	-	-	CHAN	-	-	-	707	-	-
1989-M67	2448300.50	1990 Dec 5	RH-200	-	-	-	-	-	-	CHAN	-	-	-	707	-	-
1989-M68	2448307.50	1990 Dec 12	RH-200	-	-	-	-	-	-	CHAN	-	-	-	707	-	-
1989-M69	2448314.50	1990 Dec 19	RH-200	-	-	-	-	-	-	CHAN	-	-	-	707	-	-
1989-M70	2448321.50	1990 Dec 26	RH-200	-	-	-	-	-	-	CHAN	-	-	-	707	-	-
1989-M71	2448328.50	1990 Jan 2	RH-200	-	-	-	-	-	-	CHAN	-	-	-	707	-	-
1989-M72	2448335.50	1990 Jan 9	RH-200	-	-	-	-	-	-	CHAN	-	-	-	707	-	-
1989-M73	2448342.50	1990 Jan 16	RH-200	-	-	-	-	-	-	CHAN	-	-	-	707	-	-
1989-M74	2448349.50	1990 Jan 23	RH-200	-	-	-	-	-	-	CHAN	-	-	-	707	-	-
1989-M75	2448356.50	1990 Jan 30	RH-200	-	-	-	-	-	-	CHAN	-	-	-	707	-	-
1989-M76	2448363.50	1990 Feb 6	RH-200	-	-	-	-	-	-	CHAN	-	-	-	707	-	-
1989-M77	2448370.50	1990 Feb 13	RH-200	-	-	-	-	-	-	CHAN	-	-	-	707	-	-
1989-M78	2448377.50	1990 Feb 20	RH-200	-	-	-	-	-	-	CHAN	-	-	-	707	-	-
1989-M79	2448384.50	1990 Feb 27	RH-200	-	-	-	-	-	-	CHAN	-	-	-	707	-	-
1989-M80	2448391.50	1990 Mar 5	RH-200	-	-	-	-	-	-	CHAN	-	-	-	707	-	-
1989-M81	2448398.50	1990 Mar 12	RH-200	-	-	-	-	-	-	CHAN	-	-	-	707	-	-
1989-M82	2448405.50	1990 Mar 19	RH-200	-	-	-	-	-	-	CHAN	-	-	-	707	-	-
1989-M83	2448412.50	1990 Mar 26	RH-200	-	-	-	-	-	-	CHAN	-	-	-	707	-	-
1989-M84	2448419.50	1990 Apr 2	RH-200	-	-	-	-	-	-	CHAN	-	-	-	707	-	-
1989-M85	2448426.50	1990 Apr 9	RH-200	-	-	-	-	-	-	CHAN	-	-	-	707	-	-
1989-M86	2448433.50	1990 Apr 16	RH-200	-	-	-	-									



Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Launch_Mission	FlightCode	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee_Km	Range_Km	Dest
2011-M03	2455699.50	2011 May 18	RH-200	-	-	Meteo Chaff	-	-	-	TERLS	-	-	-	707	-	-
2013-M07	2456618.04	2013 Nov 21 1255	RH-200	-	-	Jubilee Launch	-	-	-	TERLS	-	-	-	707	-	-
2014-M05	2456937.50	2014 Oct 7	RH-200	-	-	Meteo Chaff	-	-	-	TERLS	-	-	-	707	-	-
2014-M06	2456938.50	2014 Oct 8	RH-200	-	-	Meteo Chaff	-	-	-	TERLS	-	-	-	707	-	-
2014-M07	2456939.50	2014 Oct 9	RH-200	-	-	Meteo Chaff	-	-	-	TERLS	-	-	-	707	-	-
2014-M08	2456940.50	2014 Oct 10	RH-200	-	-	Meteo Chaff	-	-	-	TERLS	-	-	-	707	-	-
2015-M04	2457218.50	2015 Jul 15	RH-200	-	Mo. 1545	-	-	-	-	SBSC	-	-	-	757	-	-
2016-M06	2457666.50	2016 Oct 4	RH-200	-	-	Chaff	-	-	-	SBSC	-	-	-	757	-	-
2016-M07	2457667.50	2016 Oct 5	RH-200	-	-	Chaff	-	-	-	SBSC	-	-	-	757	-	-
2016-M08	2457667.50	2016 Oct 6	RH-200	-	-	Meteo	-	-	-	SBSC	-	-	-	757	-	-
2017-M09	2458031.50	2017 Oct 5	RH-200	-	-	Meteo	-	-	-	SBSC	-	-	-	757	-	-
2017-M10	2458032.50	2017 Oct 6	RH-200	-	-	Meteo	-	-	-	SBSC	-	-	-	757	-	-
2017-M11	2458033.50	2017 Oct 7	RH-200	-	-	Meteo	-	-	-	SBSC	-	-	-	757	-	-
2017-M12	2458036.50	2017 Oct 9	RH-200	-	-	Meteo	-	-	-	SBSC	-	-	-	757	-	-
2018-M08	2458396.50	2018 Oct 5	RH-200	-	-	Meteo	-	-	-	SBSC	-	-	-	757	-	-
2018-M09	2458400.50	2018 Oct 5	RH-200	-	-	Meteo	-	-	-	SBSC	-	-	-	757	-	-
2019-M13	2458620.50	2019 May 17	RH-200	-	-	Meteo	-	-	-	SBSC	-	-	-	757	-	-
2020-M10	2459108.78	2020 Sep 16 0647	RH-200	-	-	HPB Propellant Test	-	-	-	TERLS	-	-	-	63	-	-
2022-M31	2459906.77	2022 Nov 23 0625	RH-200	-	-	Meteo	-	-	-	TERLS	-	-	-	757	-	-















Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	OrbPay	Agency	Launch_Code	Group	Category	LTCite	Cite	Notes
1982-M19	2445073.50	1982 Apr 14	RH-200	-	-	0.000	ISRO	SS	ISRO/	Meteo	IUSRP18, 224	-	-
1982-M20	2445080.50	1982 Apr 21	RH-200	-	-	0.000	ISRO	SS	ISRO/	Meteo	IUSRP18, 224	-	-
1982-M47	2445087.50	1982 Apr 28	RH-200	-	-	0.000	ISRO	SS	ISRO/	Meteo	IUSRP18, 224	-	-
1982-M37	2445094.50	1982 May 5	RH-200	-	-	0.000	ISRO	SS	ISRO/	Meteo	IUSRP18, 224	-	-
1982-M38	2445094.50	1982 May 5	RH-200	-	-	0.000	ISRO	SS	ISRO/	Meteo	IUSRP18, 224	-	-
1982-M39	2445101.50	1982 May 12	RH-200	-	-	0.000	ISRO	SS	ISRO/	Meteo	IUSRP18, 224	-	-
1982-M38	2445108.50	1982 May 19	RH-200	-	-	0.000	ISRO	SS	ISRO/	Meteo	IUSRP18, 224	-	-
1982-M48	2445115.50	1982 May 26	RH-200	-	-	0.000	ISRO	SS	ISRO/	Meteo	IUSRP18, 224	-	-
1982-M36	2445122.50	1982 Jun 2	RH-200	-	-	0.000	ISRO	SS	ISRO/	Meteo	IUSRP18, 224	-	-
1982-M62	2445129.50	1982 Jun 9	RH-200	-	-	0.000	ISRO	SS	ISRO/	Meteo	SUSC-SR	-	-
1982-M49	2445129.50	1982 Jun 9	RH-200	-	-	0.000	ISRO	SS	ISRO/	Meteo	IUSRP18, 224	-	-
1982-M22	2445285.50	1982 Oct 13	RH-200	-	-	0.000	ISRO	SS	ISRO/	Meteo	IUSRP18, 224	-	-
1982-M23	2445289.50	1982 Oct 27	RH-200	-	-	0.000	ISRO	SS	ISRO/	Meteo	IUSRP18, 224	-	-
1982-M24	2445276.50	1982 Nov 3	RH-200	-	-	0.000	ISRO	SS	ISRO/	Meteo	IUSRP18, 224	-	-
1982-M25	2445283.50	1982 Nov 10	RH-200	-	-	0.000	ISRO	SS	ISRO/	Meteo	IUSRP18, 224	-	-
1982-M26	2445285.50	1982 Nov 12	RH-200	-	-	0.000	ISRO	SS	ISRO/	Meteo	IUSRP18, 224	-	-
1982-M27	2445290.50	1982 Nov 17	RH-200	-	-	0.000	ISRO	SS	ISRO/	Meteo	IUSRP18, 224	-	-
1982-M28	2445292.50	1982 Nov 19	RH-200	-	-	0.000	ISRO	SS	ISRO/	Meteo	IUSRP18, 224	-	-
1982-M29	2445299.50	1982 Nov 24	RH-200	-	-	0.000	ISRO	SS	ISRO/	Meteo	IUSRP18, 224	-	-
1982-M30	2445299.50	1982 Nov 24	RH-200	-	-	0.000	ISRO	SS	ISRO/	Meteo	IUSRP18, 224	-	-
1982-M51	2445304.50	1982 Dec 1	RH-200	-	-	0.000	ISRO	SS	ISRO/	Meteo	IUSRP18, 224	-	-
1982-M52	2445311.50	1982 Dec 8	RH-200	-	-	0.000	ISRO	SS	ISRO/	Meteo	IUSRP18, 224	-	-
1982-M53	2445318.50	1982 Dec 15	RH-200	-	-	0.000	ISRO	SS	ISRO/	Meteo	IUSRP18, 224	-	-
1982-M54	2445332.50	1982 Dec 29	RH-200	-	-	0.000	ISRO	SS	ISRO/	Meteo	IUSRP18, 224	-	-
1983-M04	2445339.50	1983 Jan 5	RH-200	-	-	0.000	ISRO	SS	ISRO/	Meteo	IUSRP18, 224	-	-
1983-M05	2445346.50	1983 Jan 12	RH-200	-	-	0.000	ISRO	SS	ISRO/	Meteo	IUSRP18, 224	-	-
1983-M06	2445353.50	1983 Jan 19	RH-200	-	-	0.000	ISRO	SS	ISRO/	Meteo	IUSRP18, 224	-	-
1983-M07	2445362.50	1983 Jan 26	RH-200	-	-	0.000	ISRO	SS	ISRO/	Meteo	IUSRP18, 224	-	-
1983-M08	2445367.50	1983 Feb 2	RH-200	-	-	0.000	ISRO	SS	ISRO/	Meteo	IUSRP18, 224	-	-
1983-M09	2445374.50	1983 Feb 9	RH-200	-	-	0.000	ISRO	SS	ISRO/	Meteo	IUSRP18, 224	-	-
1983-M10	2445381.50	1983 Feb 16	RH-200	-	-	0.000	ISRO	SS	ISRO/	Meteo	IUSRP18, 224	-	-
1983-M11	2445390.50	1983 Feb 26	RH-200	-	-	0.000	ISRO	SS	ISRO/	Meteo	IUSRP18, 224	-	-
1983-M12	2445395.50	1983 Mar 2	RH-200	-	-	0.000	ISRO	SS	ISRO/	Meteo	IUSRP18, 224	-	-
1983-M13	2445402.50	1983 Mar 9	RH-200	-	-	0.000	ISRO	SS	ISRO/	Meteo	IUSRP18, 224	-	-
1983-M14	2445416.50	1983 Mar 23	RH-200	-	-	0.000	ISRO	SS	ISRO/	Meteo	IUSRP18, 224	-	-
1983-M15	2445423.50	1983 Mar 30	RH-200	-	-	0.000	ISRO	SS	ISRO/	Meteo	IUSRP18, 224	-	-
1983-M16	2445430.50	1983 Apr 6	RH-200	-	-	0.000	ISRO	SS	ISRO/	Meteo	IUSRP18, 224	-	-
1983-M17	2445439.50	1983 Apr 16	RH-200	-	-	0.000	ISRO	SS	ISRO/	Meteo	IUSRP18, 224	-	-
1983-M18	2445448.50	1983 May 4	RH-200	-	-	0.000	ISRO	SS	ISRO/	Meteo	IUSRP18, 224	-	-
1983-M19	2445455.50	1983 May 11	RH-200	-	-	0.000	ISRO	SS	ISRO/	Meteo	IUSRP18, 224	-	-
1983-M20	2445472.50	1983 May 18	RH-200	-	-	0.000	ISRO	SS	ISRO/	Meteo	IUSRP18, 224	-	-
1983-M21	2445479.50	1983 May 25	RH-200	-	-	0.000	ISRO	SS	ISRO/	Meteo	IUSRP18, 224	-	-
1983-M22	2445486.50	1983 Jun 1	RH-200	-	-	0.000	ISRO	SS	ISRO/	Meteo	IUSRP18, 224	-	-
1983-M23	2445493.50	1983 Jun 5	RH-200	-	-	0.000	ISRO	SS	ISRO/	Meteo	RG37	-	-
1983-M24	2445499.50	1983 Jun 6	RH-200	-	-	0.000	ISRO	SS	ISRO/	Meteo	IUSRP18, 224	-	-
1983-M25	2445503.50	1983 Jun 6	RH-200	-	-	0.000	ISRO	SS	ISRO/	Meteo	IUSRP18, 224	-	-
1983-M26	2445509.50	1983 Jun 6	RH-200	-	-	0.000	ISRO	SS	ISRO/	Meteo	IUSRP18, 224	-	-
1983-M27	2445514.50	1983 Jun 6	RH-200	-	-	0.000	ISRO	SS	ISRO/	Meteo	IUSRP18, 224	-	-
1983-M28	2445521.50	1983 Jun 6	RH-200	-	-	0.000	ISRO	SS	ISRO/	Meteo	RG37	-	-
1983-M29	2445528.50	1983 Jun 13	RH-200	-	-	0.000	ISRO	SS	ISRO/	Meteo	IUSRP18, 224	-	-
1983-M30	2445535.50	1983 Jun 13	RH-200	-	-	0.000	ISRO	SS	ISRO/	Meteo	IUSRP18, 224	-	-
1983-M31	2445542.50	1983 Jun 20	RH-200	-	-	0.000	ISRO	SS	ISRO/	Meteo	RG37	-	-
1983-M32	2445549.50	1983 Jun 27	RH-200	-	-	0.000	ISRO	SS	ISRO/	Meteo	IUSRP18, 224	-	-
1983-M33	2445556.50	1983 Aug 3	RH-200	-	-	0.000	ISRO	SS	ISRO/	Meteo	IUSRP18, 224	-	-
1983-M34	2445563.50	1983 Aug 10	RH-200	-	-	0.000	ISRO	SS	ISRO/	Meteo	IUSRP18, 224	-	-
1983-M35	2445566.50	1983 Aug 10	RH-200	-	-	0.000	ISRO	SS	ISRO/	Meteo	IUSRP18, 224	-	-
1983-M36	2445569.50	1983 Aug 17	RH-200	-	-	0.000	ISRO	SS	ISRO/	Meteo	IUSRP18, 224	-	-
1983-M37	2445573.50	1983 Aug 17	RH-200	-	-	0.000	ISRO	SS	ISRO/	Meteo	RG37	-	-
1983-M38	2445576.50	1983 Aug 19	RH-200	-	-	0.000	ISRO	SS	ISRO/	Meteo	IUSRP18, 224	-	-
1983-M39	2445579.50	1983 Aug 24	RH-200	-	-	0.000	ISRO	SS	ISRO/	Meteo	IUSRP18, 224	-	-
1983-M40	2445579.50	1983 Aug 24	RH-200	-	-	0.000	ISRO	SS	ISRO/	Meteo	IUSRP18, 224	-	-
1983-M41	2445577.50	1983 Aug 26	RH-200	-	-	0.000	ISRO	SS	ISRO/	Meteo	RG37	-	-
1983-M42	2445577.50	1983 Aug 31	RH-200	-	-	0.000	ISRO	SS	ISRO/	Meteo	IUSRP18, 224	-	-
1983-M43	2445579.50	1983 Aug 31	RH-200	-	-	0.000	ISRO	SS	ISRO/	Meteo	IUSRP18, 224	-	-
1983-M44	2445584.50	1983 Sep 7	RH-200	-	-	0.000	ISRO	SS	ISRO/	Meteo	RG37	-	-
1983-M45	2445584.50	1983 Sep 9	RH-200	-	-	0.000	ISRO	SS	ISRO/	Meteo	IUSRP18, 224	-	-
1983-M46	2445591.50	1983 Sep 14	RH-200	-	-	0.000	ISRO	SS	ISRO/	Meteo	IUSRP18, 224	-	-
1983-M47	2445592.50	1983 Sep 15	RH-200	-	-	0.000	ISRO	SS	ISRO/	Meteo	RG37	-	-
1983-M48	2445598.50	1983 Sep 21	RH-200	-	-	0.000	ISRO	SS	ISRO/	Meteo	IUSRP18, 224	-	-
1983-M49	2445600.50	1983 Sep 23	RH-200	-	-	0.000	ISRO	SS	ISRO/	Meteo	IUSRP18, 224	-	-
1983-M50	2445605.50	1983 Sep 28	RH-200	-	-	0.000	ISRO	SS	ISRO/	Meteo	RG37	-	-
1983-M51	2445605.50	1983 Sep 28	RH-200	-	-	0.000	ISRO	SS	ISRO/	Meteo	IUSRP18, 224	-	-
1983-M52	2445607.50	1983 Sep 28	RH-200	-	-	0.000	ISRO	SS	ISRO/	Meteo	IUSRP18, 224	-	-
1983-M53	2445612.50	1983 Oct 5	RH-200	-	-	0.000	ISRO	SS	ISRO/	Meteo	IUSRP18, 224	-	-
1983-M54	2445614.50	1983 Oct 7	RH-200	-	-	0.000	ISRO	SS	ISRO/	Meteo	IUSRP18, 224	-	-
1983-M55	2445626.50	1983 Oct 19	RH-200	-	-	0.000	ISRO	SS	ISRO/	Meteo	RG37	-	-
1983-M56	2445635.50	1983 Oct 28	RH-200	-	-	0.000	ISRO	SS	ISRO/	Meteo	IUSRP18, 224	-	-
1983-M57	2445640.50	1983 Nov 2	RH-200	-	-	0.000	ISRO	SS	ISRO/	Meteo	IUSRP18, 224	-	-
1983-M58	2445642.50	1983 Nov 4	RH-200	-	-	0.000	ISRO	SS	ISRO/	Meteo	IUSRP18, 224	-	-

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	OrbPay	Agency	Launch_Code	Group	Category	LTCite	Cite	Notes
1983-M49	2445647.50	1983 Nov 9	RH-200	-	-	0.000	ISRO	SS	ISRO/	Neteco	IUSP18, 224	-	-
1983-M50	2445649.50	1983 Nov 11	RH-200	-	-	0.000	ISRO	SS	ISRO/	Neteco	IUSP18, 224	-	-
1983-M51	2445654.50	1983 Nov 16	RH-200	-	-	0.000	ISRO	SS	ISRO/	Neteco	IUSP18, 224	-	-
1983-M57	2445659.50	1983 Nov 21	RH-200	-	-	0.000	ISRO	SS	ISRO/	Neteco	RG37	-	-
1983-M58	2445660.50	1983 Nov 22	RH-200	-	-	0.000	ISRO	SS	ISRO/	Neteco	RG37	-	-
1983-M52	2445661.50	1983 Nov 23	RH-200	-	-	0.000	ISRO	SS	ISRO/	Neteco	IUSP18, 224	-	-
1983-M59	2445663.50	1983 Nov 25	RH-200	-	-	0.000	ISRO	SS	ISRO/	Neteco	RG37	-	-
1983-M60	2445668.50	1983 Nov 30	RH-200	-	-	0.000	ISRO	SS	ISRO/	Neteco	IUSP18, 224	-	-
1983-M63	2445668.50	1983 Nov 30	RH-200	-	-	0.000	ISRO	SS	ISRO/	Neteco	IUSP18, 224	-	-
1983-M91	2445669.50	1983 Dec 1	RH-200	-	-	0.000	ISRO	SS	ISRO/	Neteco	RG37	-	-
1983-M92	2445670.50	1983 Dec 2	RH-200	-	-	0.000	ISRO	SS	ISRO/	Neteco	RG37	-	-
1983-M64	2445675.50	1983 Dec 7	RH-200	-	-	0.000	ISRO	SS	ISRO/	Neteco	IUSP18, 224	-	-
1983-M65	2445682.50	1983 Dec 14	RH-200	-	-	0.000	ISRO	SS	ISRO/	Neteco	IUSP18, 224	-	-
1983-M66	2445689.50	1983 Dec 21	RH-200	-	-	0.000	ISRO	SS	ISRO/	Neteco	IUSP18, 224	-	-
1983-M67	2445696.50	1983 Dec 28	RH-200	-	-	0.000	ISRO	SS	ISRO/	Neteco	IUSP18, 224	-	-
1984-M95	2445703.50	1984 Jan 4	RH-200	-	-	0.000	ISRO	SS	ISRO/	Neteco	IUSP18, 224	-	-
1984-M96	2445710.50	1984 Jan 11	RH-200	-	-	0.000	ISRO	SS	ISRO/	Neteco	IUSP18, 224	-	-
1984-M97	2445717.50	1984 Jan 18	RH-200	-	-	0.000	ISRO	SS	ISRO/	Neteco	IUSP18, 224	-	-
1984-M98	2445726.50	1984 Jan 27	RH-200	-	-	0.000	ISRO	SS	ISRO/	Neteco	IUSP18, 224	-	-
1984-M40	2445731.50	1984 Feb 1	RH-200	-	-	0.000	ISRO	SS	ISRO/	Neteco	IUSP18, 224	-	-
1984-M41	2445738.50	1984 Feb 8	RH-200	-	-	0.000	ISRO	SS	ISRO/	Neteco	IUSP18, 224	-	-
1984-M42	2445745.50	1984 Feb 15	RH-200	-	-	0.000	ISRO	SS	ISRO/	Neteco	IUSP18, 224	-	-
1984-M43	2445752.50	1984 Feb 22	RH-200	-	-	0.000	ISRO	SS	ISRO/	Neteco	IUSP18, 224	-	-
1984-M44	2445759.50	1984 Feb 29	RH-200	-	-	0.000	ISRO	SS	ISRO/	Neteco	IUSP18, 224	-	-
1984-M45	2445766.50	1984 Mar 7	RH-200	-	-	0.000	ISRO	SS	ISRO/	Neteco	IUSP18, 224	-	-
1984-M46	2445773.50	1984 Mar 14	RH-200	-	-	0.000	ISRO	SS	ISRO/	Neteco	IUSP18, 224	-	-
1984-M47	2445780.50	1984 Mar 21	RH-200	-	-	0.000	ISRO	SS	ISRO/	Neteco	IUSP18, 224	-	-
1984-M48	2445787.50	1984 Mar 28	RH-200	-	-	0.000	ISRO	SS	ISRO/	Neteco	IUSP18, 224	-	-
1984-M49	2445794.50	1984 Apr 4	RH-200	-	-	0.000	ISRO	SS	ISRO/	Neteco	IUSP18, 224	-	-
1984-M50	2445801.50	1984 Apr 11	RH-200	-	-	0.000	ISRO	SS	ISRO/	Neteco	IUSP18, 224	-	-
1984-M51	2445809.50	1984 Apr 19	RH-200	-	-	0.000	ISRO	SS	ISRO/	Neteco	IUSP18, 224	-	-
1984-M52	2445815.50	1984 Apr 26	RH-200	-	-	0.000	ISRO	SS	ISRO/	Neteco	IUSP18, 224	-	-
1984-M59	2445822.50	1984 May 2	RH-200	-	-	0.000	ISRO	SS	ISRO/	Neteco	IUSP18, 224	-	-
1984-M60	2445829.50	1984 May 9	RH-200	-	-	0.000	ISRO	SS	ISRO/	Neteco	IUSP18, 224	-	-
1984-M101	2445836.50	1984 May 16	RH-200	-	RH-200-243	0.000	ISRO	SS	ISRO/	Neteco	IUSP18, 224	-	-
1984-M04	2445844.03	1984 May 23 1245	RH-200	-	-	0.000	ISRO	SS	ISRO/KrishnaMurthy	Neteco	IUSP15, 125	CurSci89, 475	-
1984-M05	2445844.03	1984 May 23 1250	RH-200	-	-	0.000	ISRO	SS	ISRO/KrishnaMurthy	Neteco	IUSP15, 125	CurSci89, 475	-
1984-M06	2445844.03	1984 May 23 1246	RH-200	-	-	0.000	ISRO	SS	ISRO/KrishnaMurthy	Neteco	IUSP15, 125	CurSci89, 475	-
1984-M07	2445844.08	1984 May 23 1364	RH-200	-	-	0.000	ISRO	SS	ISRO/KrishnaMurthy	Neteco	IUSP15, 125	CurSci89, 475	-
1984-M08	2445846.02	1984 May 25 1230	RH-200	-	RH-200-247	0.000	ISRO	SS	ISRO/KrishnaMurthy	Neteco	IUSP15, 125	CurSci89, 475	-
1984-M41	2445846.02	1984 May 25 1230	RH-200	-	-	0.000	ISRO	SS	ISRO/	Neteco	IUSP15, 125	CurSci89, 475	-
1984-M09	2445846.07	1984 May 25 1336	RH-200	-	RH-200-244	0.000	ISRO	SS	ISRO/KrishnaMurthy	Neteco	IUSP15, 125	CurSci89, 475	-
1984-M10	2445848.02	1984 May 27 1234	RH-200	-	RH-200-245	0.000	ISRO	SS	ISRO/KrishnaMurthy	Neteco	IUSP15, 125	CurSci89, 475	-
1984-M11	2445848.02	1984 May 27 1234	RH-200	-	-	0.000	ISRO	SS	ISRO/	Neteco	IUSP15, 125	CurSci89, 475	-
1984-M12	2445848.06	1984 May 27 1246	RH-200	-	RH-200-246	0.000	ISRO	SS	ISRO/KrishnaMurthy	Neteco	IUSP15, 125	CurSci89, 475	-
1984-M13	2445848.06	1984 May 27 1246	RH-200	-	-	0.000	ISRO	SS	ISRO/	Neteco	IUSP15, 125	CurSci89, 475	-
1984-M14	2445850.03	1984 May 29 1230	RH-200	-	RH-200-248	0.000	ISRO	SS	ISRO/KrishnaMurthy	Neteco	IUSP15, 125	CurSci89, 475	-
1984-M15	2445850.03	1984 May 29 1237	RH-200	-	-	0.000	ISRO	SS	ISRO/	Neteco	IUSP15, 125	CurSci89, 475	-
1984-M17	2445850.03	1984 May 29 1246	RH-200	-	-	0.000	ISRO	SS	ISRO/	Neteco	IUSP15, 125	CurSci89, 475	-
1984-M18	2445852.02	1984 May 31 1230	RH-200	-	RH-200-249	0.000	ISRO	SS	ISRO/KrishnaMurthy	Neteco	IUSP15, 125	CurSci89, 475	-
1984-M19	2445852.02	1984 May 31 1230	RH-200	-	-	0.000	ISRO	SS	ISRO/	Neteco	IUSP15, 125	CurSci89, 475	-
1984-M20	2445854.02	1984 May 31 1230	RH-200	-	-	0.000	ISRO	SS	ISRO/KrishnaMurthy	Neteco	IUSP15, 125	CurSci89, 475	-
1984-M21	2445854.02	1984 May 31 1230	RH-200	-	-	0.000	ISRO	SS	ISRO/	Neteco	IUSP15, 125	CurSci89, 475	-
1984-M22	2445854.08	1984 Jun 2 1240	RH-200	-	RH-200-250	0.000	ISRO	SS	ISRO/KrishnaMurthy	Neteco	IUSP15, 125	CurSci89, 475	-
1984-M23	2445854.08	1984 Jun 2 1240	RH-200	-	-	0.000	ISRO	SS	ISRO/	Neteco	IUSP15, 125	CurSci89, 475	-
1984-M24	2445856.02	1984 Jun 4 1230	RH-200	-	-	0.000	ISRO	SS	ISRO/KrishnaMurthy	Neteco	IUSP15, 125	CurSci89, 475	-
1984-M25	2445856.02	1984 Jun 4 1230	RH-200	-	-	0.000	ISRO	SS	ISRO/	Neteco	IUSP15, 125	CurSci89, 475	-
1984-M26	2445856.07	1984 Jun 4 1339	RH-200	-	RH-200-252	0.000	ISRO	SS	ISRO/KrishnaMurthy	Neteco	IUSP15, 125	CurSci89, 475	-
1984-M27	2445856.10	1984 Jun 4 1420	RH-200	-	-	0.000	ISRO	SS	ISRO/	Neteco	IUSP15, 125	CurSci89, 475	-
1984-M28	2445858.02	1984 Jun 6 1230	RH-200	-	RH-200-253	0.000	ISRO	SS	ISRO/KrishnaMurthy	Neteco	IUSP15, 125	CurSci89, 475	-
1984-M29	2445858.03	1984 Jun 6 1250	RH-200	-	-	0.000	ISRO	SS	ISRO/KrishnaMurthy	Neteco	IUSP15, 125	CurSci89, 475	-
1984-M30	2445860.02	1984 Jun 8 1230	RH-200	-	-	0.000	ISRO	SS	ISRO/KrishnaMurthy	Neteco	IUSP15, 125	CurSci89, 475	-
1984-M31	2445860.02	1984 Jun 8 1233	RH-200	-	-	0.000	ISRO	SS	ISRO/	Neteco	IUSP15, 125	CurSci89, 475	-
1984-M32	2445860.04	1984 Jun 8 1301	RH-200	-	RH-200-254	0.000	ISRO	SS	ISRO/KrishnaMurthy	Neteco	IUSP15, 125	CurSci89, 475	-
1984-M33	2445862.03	1984 Jun 10 1245	RH-200	-	RH-200-255	0.000	ISRO	SS	ISRO/KrishnaMurthy	Neteco	IUSP15, 125	CurSci89, 475	-
1984-M34	2445862.03	1984 Jun 10 1301	RH-200	-	-	0.000	ISRO	SS	ISRO/	Neteco	IUSP15, 125	CurSci89, 475	-
1984-M35	2445864.02	1984 Jun 12 1230	RH-200	-	-	0.000	ISRO	SS	ISRO/KrishnaMurthy	Neteco	IUSP15, 125	CurSci89, 475	-
1984-M37	2445864.02	1984 Jun 12 1230	RH-200	-	RH-200-251	0.000	ISRO	SS	ISRO/KrishnaMurthy	Neteco	IUSP15, 125	CurSci89, 475	-
1984-M38	2445864.02	1984 Jun 12 1230	RH-200	-	-	0.000	ISRO	SS	ISRO/	Neteco	IUSP15, 125	CurSci89, 475	-
1984-M39	2445864.08	1984 Jun 12 1350	RH-200	-	-	0.000	ISRO	SS	ISRO/	Neteco	IUSP18, 224	-	-
1984-M102	2445871.50	1984 Jun 20	RH-200	-	-	0.000	ISRO	SS	ISRO/	Neteco	IUSP18, 224	-	-
1984-M103	2445878.50	1984 Jun 27	RH-200	-	-	0.000	ISRO	SS	ISRO/	Neteco	IUSP18, 224	-	-
1984-M53	2445892.50	1984 Jul 5	RH-200	-	-	0.000	ISRO	SS	ISRO/	Neteco	IUSP18, 224	-	-
1984-M54	2445892.50	1984 Jul 11	RH-200	-	-	0.000	ISRO	SS	ISRO/	Neteco	IUSP18, 224	-	-
1984-M55	2445899.50	1984 Jul 18	RH-200	-	-	0.000	ISRO	SS	ISRO/	Neteco	IUSP18, 224	-	-
1984-M104	2445913.50	1984 Jul 25	RH-200	-	-	0.000	ISRO	SS	ISRO/	Neteco	IUSP18, 224	-	-
1984-M56	2445913.50	1984 Aug 1	RH-200	-	-	0.000	ISRO	SS	ISRO/	Neteco	IUSP18, 224	-	-
1984-M57	2445920.50	1984 Aug 8	RH-200	-	-	0.000	ISRO	SS	ISRO/	Neteco	IUSP18, 224	-	-
1984-M58	2445928.50	1984 Aug 16	RH-200	-	-	0.000	ISRO	SS	ISRO/	Neteco	IUSP18, 224	-	-
1984-M59	2445934.50	1984 Aug 22	RH-200	-	-	0.000	ISRO	SS	ISRO/	Neteco	IUSP18, 224	-	-
1984-M68	2445942.50	1984 Aug 30	RH-200	-	-	0.000	ISRO	SS	ISRO/	Neteco	IUSP18, 224	-	-
1984-M69	2445948.50	1984 Sep 5	RH-200	-	-	0.000	ISRO	SS	ISRO/	Neteco	IUSP18, 224	-	-
1984-M90	2445955.50	1984 Sep 12	RH-200	-	-	0.000	ISRO	SS	ISRO/	Neteco	IUSP18, 224	-	-
1984-M91	2445962.50	1984 Sep 19	RH-200	-	-	0.000	ISRO	SS	ISRO/	Neteco	IUSP18, 224	-	-



Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Orb_Pay_t	Agency	Launch_Code	Group	Category	LTCite	Cite	Notes
1986-M16	2446460.50	1986 Jan 30	RH-200	-	RH-200-278	0.000	ISRO	SS	ISRO/	Meteo	Cursci189, 475	-	-
1986-M60	2446460.50	1986 Jan 30	RH-200	-	-	0.000	ISRO	SS	ISRO/	Meteo	LISRP16, 224	-	-
1986-M17	2446461.50	1986 Jan 31	RH-200	-	RH-200-279	0.000	ISRO	SS	ISRO/	Meteo	Cursci189, 475	-	-
1986-M18	2446462.50	1986 Feb 1	RH-200	-	RH-200-280	0.000	ISRO	SS	ISRO/	Meteo	Cursci189, 475	-	-
1986-M19	2446463.50	1986 Feb 2	RH-200	-	RH-200-281	0.000	ISRO	SS	ISRO/	Meteo	Cursci189, 475	-	-
1986-M20	2446464.50	1986 Feb 3	RH-200	-	RH-200-275	0.000	ISRO	SS	ISRO/	Meteo	Cursci189, 475	-	-
1986-M21	2446465.50	1986 Feb 4	RH-200	-	RH-200-282	0.000	ISRO	SS	ISRO/	Meteo	Cursci189, 475	-	-
1986-M22	2446466.50	1986 Feb 5	RH-200	-	RH-200-283	0.000	ISRO	SS	ISRO/	Meteo	Cursci189, 475	-	-
1986-M51	2446466.50	1986 Feb 5	RH-200	-	-	0.000	ISRO	SS	ISRO/	Meteo	LISRP16, 224	-	-
1986-M23	2446467.50	1986 Feb 6	RH-200	-	RH-200-284	0.000	ISRO	SS	ISRO/	Meteo	Cursci189, 475	-	-
1986-M24	2446468.50	1986 Feb 7	RH-200	-	RH-200-285	0.000	ISRO	SS	ISRO/	Meteo	Cursci189, 475	-	-
1986-M25	2446469.50	1986 Feb 8	RH-200	-	RH-200-286	0.000	ISRO	SS	ISRO/	Meteo	Cursci189, 475	-	-
1986-M26	2446470.50	1986 Feb 9	RH-200	-	RH-200-287	0.000	ISRO	SS	ISRO/	Meteo	Cursci189, 475	-	-
1986-M106	2446471.50	1986 Feb 9	RH-200	-	RH-200-288	0.000	ISRO	SS	ISRO/	Meteo	SUSC-SR	-	-
1986-M27	2446472.50	1986 Feb 10	RH-200	-	RH-200-289	0.000	ISRO	SS	ISRO/	Meteo	Cursci189, 475	-	-
1986-M28	2446473.50	1986 Feb 11	RH-200	-	RH-200-290	0.000	ISRO	SS	ISRO/	Meteo	Cursci189, 475	-	-
1986-M29	2446474.50	1986 Feb 12	RH-200	-	RH-200-291	0.000	ISRO	SS	ISRO/	Meteo	Cursci189, 475	-	-
1986-M107	2446475.50	1986 Feb 12	RH-200	-	RH-200-292	0.000	ISRO	SS	ISRO/	Meteo	SUSC-SR	-	-
1986-M52	2446473.50	1986 Feb 12	RH-200	-	-	0.000	ISRO	SS	ISRO/	Meteo	LISRP16, 224	-	-
1986-M50	2446474.50	1986 Feb 13	RH-200	-	RH-200-293	0.000	ISRO	SS	ISRO/	Meteo	Cursci189, 475	-	-
1986-M51	2446475.50	1986 Feb 14	RH-200	-	RH-200-295	0.000	ISRO	SS	ISRO/	Meteo	Cursci189, 475	-	-
1986-M52	2446476.50	1986 Feb 15	RH-200	-	RH-200-296	0.000	ISRO	SS	ISRO/	Meteo	Cursci189, 475	-	-
1986-M53	2446477.50	1986 Feb 16	RH-200	-	RH-200-297	0.000	ISRO	SS	ISRO/	Meteo	Cursci189, 475	-	-
1986-M54	2446478.50	1986 Feb 17	RH-200	-	RH-200-298	0.000	ISRO	SS	ISRO/	Meteo	Cursci189, 475	-	-
1986-M55	2446479.50	1986 Feb 18	RH-200	-	RH-200-299	0.000	ISRO	SS	ISRO/	Meteo	Cursci189, 475	-	-
1986-M56	2446480.50	1986 Feb 19	RH-200	-	-	0.000	ISRO	SS	ISRO/	Meteo	LISRP16, 224	-	-
1986-M57	2446480.50	1986 Feb 19	RH-200	-	RH-200-300	0.000	ISRO	SS	ISRO/	Meteo	Cursci189, 475	-	-
1986-M58	2446481.50	1986 Feb 20	RH-200	-	RH-200-301	0.000	ISRO	SS	ISRO/	Meteo	Cursci189, 475	-	-
1986-M59	2446482.50	1986 Feb 21	RH-200	-	RH-200-303	0.000	ISRO	SS	ISRO/	Meteo	Cursci189, 475	-	-
1986-M60	2446483.50	1986 Feb 22	RH-200	-	RH-200-304	0.000	ISRO	SS	ISRO/	Meteo	Cursci189, 475	-	-
1986-M40	2446484.50	1986 Feb 23	RH-200	-	RH-200-270	0.000	ISRO	SS	ISRO/	Meteo	Cursci189, 475	-	-
1986-M41	2446485.50	1986 Feb 24	RH-200	-	RH-200-294	0.000	ISRO	SS	ISRO/	Meteo	Cursci189, 475	-	-
1986-M42	2446486.50	1986 Feb 24	RH-200	-	RH-200-302	0.000	ISRO	SS	ISRO/	Meteo	SUSC-SR	-	-
1986-M43	2446487.50	1986 Feb 25	RH-200	-	RH-200-307	0.000	ISRO	SS	ISRO/	Meteo	Cursci189, 475	-	-
1986-M44	2446488.50	1986 Feb 26	RH-200	-	RH-200-305	0.000	ISRO	SS	ISRO/	Meteo	Cursci189, 475	-	-
1986-M45	2446489.50	1986 Feb 27	RH-200	-	RH-200-306	0.000	ISRO	SS	ISRO/	Meteo	Cursci189, 475	-	-
1986-M46	2446490.50	1986 Feb 28	RH-200	-	-	0.000	ISRO	SS	ISRO/	Meteo	LISRP16, 224	-	-
1986-M68	2446501.50	1986 Mar 5	RH-200	-	RH-200-308	0.000	ISRO	SS	ISRO/	Meteo	Cursci189, 475	-	-
1986-M69	2446502.50	1986 Mar 12	RH-200	-	-	0.000	ISRO	SS	ISRO/	Meteo	LISRP16, 224	-	-
1986-M90	2446508.50	1986 Mar 19	RH-200	-	-	0.000	ISRO	SS	ISRO/	Meteo	LISRP16, 224	-	-
1986-M91	2446515.50	1986 Mar 26	RH-200	-	-	0.000	ISRO	SS	ISRO/	Meteo	LISRP16, 224	-	-
1986-M92	2446522.50	1986 Apr 2	RH-200	-	-	0.000	ISRO	SS	ISRO/	Meteo	LISRP16, 224	-	-
1986-M93	2446529.50	1986 Apr 9	RH-200	-	-	0.000	ISRO	SS	ISRO/	Meteo	LISRP16, 224	-	-
1986-M94	2446535.50	1986 Apr 16	RH-200	-	-	0.000	ISRO	SS	ISRO/	Meteo	LISRP16, 224	-	-
1986-M95	2446542.50	1986 Apr 23	RH-200	-	-	0.000	ISRO	SS	ISRO/	Meteo	LISRP16, 224	-	-
1986-M96	2446549.50	1986 Apr 30	RH-200	-	-	0.000	ISRO	SS	ISRO/	Meteo	LISRP16, 224	-	-
1986-M54	2446557.50	1986 May 7	RH-200	-	-	0.000	ISRO	SS	ISRO/	Meteo	LISRP16, 224	-	-
1986-M55	2446571.50	1986 May 14	RH-200	-	-	0.000	ISRO	SS	ISRO/	Meteo	LISRP16, 224	-	-
1986-M97	2446578.50	1986 May 21	RH-200	-	-	0.000	ISRO	SS	ISRO/	Meteo	LISRP16, 224	-	-
1986-M98	2446578.50	1986 May 25	RH-200	-	-	0.000	ISRO	SS	ISRO/	Meteo	LISRP16, 224	-	-
1986-M99	2446592.50	1986 Jun 1	RH-200	-	-	0.000	ISRO	SS	ISRO/	Meteo	LISRP16, 224	-	-
1986-M58	2446592.50	1986 Jun 11	RH-200	-	-	0.000	ISRO	SS	ISRO/	Meteo	LISRP16, 224	-	-
1986-M59	2446596.50	1986 Jun 19	RH-200	-	-	0.000	ISRO	SS	ISRO/	Meteo	LISRP16, 224	-	-
1986-M60	2446604.50	1986 Jun 25	RH-200	-	-	0.000	ISRO	SS	ISRO/	Meteo	LISRP16, 224	-	-
1986-M61	2446614.50	1986 Jul 2	RH-200	-	-	0.000	ISRO	SS	ISRO/	Meteo	LISRP16, 224	-	-
1986-M62	2446620.50	1986 Jul 9	RH-200	-	-	0.000	ISRO	SS	ISRO/	Meteo	LISRP16, 224	-	-
1986-M63	2446634.50	1986 Jul 16	RH-200	-	-	0.000	ISRO	SS	ISRO/	Meteo	LISRP16, 224	-	-
1986-M64	2446641.50	1986 Jul 23	RH-200	-	-	0.000	ISRO	SS	ISRO/	Meteo	LISRP16, 224	-	-
1986-M65	2446648.50	1986 Aug 6	RH-200	-	-	0.000	ISRO	SS	ISRO/	Meteo	LISRP16, 224	-	-
1986-M66	2446655.50	1986 Aug 13	RH-200	-	-	0.000	ISRO	SS	ISRO/	Meteo	LISRP16, 224	-	-
1986-M67	2446662.50	1986 Aug 20	RH-200	-	-	0.000	ISRO	SS	ISRO/	Meteo	LISRP16, 224	-	-
1986-M68	2446670.50	1986 Aug 28	RH-200	-	-	0.000	ISRO	SS	ISRO/	Meteo	LISRP16, 224	-	-
1986-M99	2446677.50	1986 Sep 4	RH-200	-	RH-200	0.000	ISRO	SS	ISRO/	Meteo	SUSC-SR	-	-
1986-M68	2446677.50	1986 Sep 4	RH-200	-	-	0.000	ISRO	SS	ISRO/	Meteo	LISRP16, 224	-	-
1986-M109	2446677.50	1986 Sep 4	RH-200	-	-	0.000	ISRO	SS	ISRO/	Meteo	SUSC-SR	-	-
1986-M69	2446678.50	1986 Sep 5	RH-200	-	-	0.000	ISRO	SS	ISRO/	Meteo	LISRP16, 224	-	-
1986-M110	2446683.50	1986 Sep 10	RH-200	-	-	0.000	ISRO	SS	ISRO/	Meteo	SUSC-SR	-	-
1986-M70	2446691.50	1986 Sep 18	RH-200	-	-	0.000	ISRO	SS	ISRO/	Meteo	LISRP16, 224	-	-
1986-M71	2446698.50	1986 Sep 25	RH-200	-	-	0.000	ISRO	SS	ISRO/	Meteo	LISRP16, 224	-	-
1986-M72	2446704.50	1986 Oct 1	RH-200	-	-	0.000	ISRO	SS	ISRO/	Meteo	LISRP16, 224	-	-
1986-M73	2446711.50	1986 Oct 8	RH-200	-	-	0.000	ISRO	SS	ISRO/	Meteo	LISRP16, 224	-	-
1986-M74	2446718.50	1986 Oct 15	RH-200	-	-	0.000	ISRO	SS	ISRO/	Meteo	LISRP16, 224	-	-
1986-M75	2446725.50	1986 Oct 22	RH-200	-	-	0.000	ISRO	SS	ISRO/	Meteo	LISRP16, 224	-	-
1986-M76	2446732.50	1986 Oct 29	RH-200	-	-	0.000	ISRO	SS	ISRO/	Meteo	LISRP16, 224	-	-
1986-M77	2446739.50	1986 Nov 5	RH-200	-	-	0.000	ISRO	SS	ISRO/	Meteo	LISRP16, 224	-	-
1986-M78	2446746.50	1986 Nov 12	RH-200	-	-	0.000	ISRO	SS	ISRO/	Meteo	LISRP16, 224	-	-
1986-M79	2446753.50	1986 Nov 19	RH-200	-	-	0.000	ISRO	SS	ISRO/	Meteo	LISRP16, 224	-	-
1986-M80	2446760.50	1986 Nov 26	RH-200	-	-	0.000	ISRO	SS	ISRO/	Meteo	LISRP16, 224	-	-
1986-M81	2446767.50	1986 Dec 3	RH-200	-	-	0.000	ISRO	SS	ISRO/	Meteo	LISRP16, 224	-	-
1986-M82	2446774.50	1986 Dec 10	RH-200	-	-	0.000	ISRO	SS	ISRO/	Meteo	LISRP16, 224	-	-
1986-M83	2446782.50	1986 Dec 18	RH-200	-	-	0.000	ISRO	SS	ISRO/	Meteo	LISRP16, 224	-	-
1986-M84	2446789.50	1986 Dec 24	RH-200	-	-	0.000	ISRO	SS	ISRO/	Meteo	LISRP16, 224	-	-
1986-M85	2446795.50	1986 Dec 31	RH-200	-	-	0.000	ISRO	SS	ISRO/	Meteo	LISRP16, 224	-	-
1986-M86	2446802.50	1987 Jan 7	RH-200	-	-	0.000	ISRO	SS	ISRO/	Meteo	LISRP16, 224	-	-
1987-M01	2446802.50	1987 Jan 7	RH-200	-	-	0.000	ISRO	SS	ISRO/	Meteo	bharat-rakshak.com	-	-

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variat	Flight_ID	OrbPay	Agency	Launch_Code	Group	Category	LTCite	Cite	Notes
1987-M02	2446809.50	1987 Jan 14	RH-200	-	-	0.000	ISRO	SS	ISRO/	Meteo	bharat-rakshak.com	-	-
1987-M03	2446816.50	1987 Jan 21	RH-200	-	-	0.000	ISRO	SS	ISRO/	Meteo	bharat-rakshak.com	-	-
1987-M04	2446823.50	1987 Jan 28	RH-200	-	-	0.000	ISRO	SS	ISRO/	Meteo	bharat-rakshak.com	-	-
1987-M05	2446830.50	1987 Feb 4	RH-200	-	-	0.000	ISRO	SS	ISRO/	Meteo	bharat-rakshak.com	-	-
1987-M06	2446837.50	1987 Feb 11	RH-200	-	-	0.000	ISRO	SS	ISRO/	Meteo	bharat-rakshak.com	-	-
1987-M07	2446844.50	1987 Feb 18	RH-200	-	-	0.000	ISRO	SS	ISRO/	Meteo	bharat-rakshak.com	-	-
1987-M08	2446851.50	1987 Feb 25	RH-200	-	-	0.000	ISRO	SS	ISRO/	Meteo	bharat-rakshak.com	-	-
1987-M09	2446858.50	1987 Mar 4	RH-200	-	-	0.000	ISRO	SS	ISRO/	Meteo	bharat-rakshak.com	-	-
1987-M10	2446865.50	1987 Mar 11	RH-200	-	-	0.000	ISRO	SS	ISRO/	Meteo	bharat-rakshak.com	-	-
1987-M11	2446872.50	1987 Mar 18	RH-200	-	-	0.000	ISRO	SS	ISRO/	Meteo	bharat-rakshak.com	-	-
1987-M12	2446879.50	1987 Mar 25	RH-200	-	-	0.000	ISRO	SS	ISRO/	Meteo	bharat-rakshak.com	-	-
1987-M13	2446886.50	1987 Apr 1	RH-200	-	-	0.000	ISRO	SS	ISRO/	Meteo	bharat-rakshak.com	-	-
1987-M14	2446893.50	1987 Apr 8	RH-200	-	-	0.000	ISRO	SS	ISRO/	Meteo	bharat-rakshak.com	-	-
1987-M15	2446900.50	1987 Apr 15	RH-200	-	-	0.000	ISRO	SS	ISRO/	Meteo	bharat-rakshak.com	-	-
1987-M16	2446907.50	1987 Apr 22	RH-200	-	-	0.000	ISRO	SS	ISRO/	Meteo	bharat-rakshak.com	-	-
1987-M17	2446914.50	1987 Apr 29	RH-200	-	-	0.000	ISRO	SS	ISRO/	Meteo	bharat-rakshak.com	-	-
1987-M18	2446921.50	1987 May 6	RH-200	-	-	0.000	ISRO	SS	ISRO/	Meteo	bharat-rakshak.com	-	-
1987-M19	2446929.50	1987 May 14	RH-200	-	-	0.000	ISRO	SS	ISRO/	Meteo	bharat-rakshak.com	-	-
1987-M20	2446936.50	1987 May 20	RH-200	-	-	0.000	ISRO	SS	ISRO/	Meteo	bharat-rakshak.com	-	-
1987-M21	2446942.50	1987 May 27	RH-200	-	-	0.000	ISRO	SS	ISRO/	Meteo	bharat-rakshak.com	-	-
1987-M22	2446949.50	1987 Jun 3	RH-200	-	-	0.000	ISRO	SS	ISRO/	Meteo	bharat-rakshak.com	-	-
1987-M23	2446956.50	1987 Jun 10	RH-200	-	-	0.000	ISRO	SS	ISRO/	Meteo	bharat-rakshak.com	-	-
1987-M24	2446963.50	1987 Jun 17	RH-200	-	-	0.000	ISRO	SS	ISRO/	Meteo	bharat-rakshak.com	-	-
1987-M25	2446970.50	1987 Jun 24	RH-200	-	-	0.000	ISRO	SS	ISRO/	Meteo	bharat-rakshak.com	-	-
1987-M26	2446977.50	1987 Jul 1	RH-200	-	-	0.000	ISRO	SS	ISRO/	Meteo	bharat-rakshak.com	-	-
1987-M27	2446984.50	1987 Jul 8	RH-200	-	-	0.000	ISRO	SS	ISRO/	Meteo	bharat-rakshak.com	-	-
1987-M28	2446991.50	1987 Jul 15	RH-200	-	-	0.000	ISRO	SS	ISRO/	Meteo	bharat-rakshak.com	-	-
1987-M29	2446998.50	1987 Jul 22	RH-200	-	-	0.000	ISRO	SS	ISRO/	Meteo	bharat-rakshak.com	-	-
1987-M30	2447005.50	1987 Jul 29	RH-200	-	-	0.000	ISRO	SS	ISRO/	Meteo	bharat-rakshak.com	-	-
1987-M31	2447012.50	1987 Aug 5	RH-200	-	-	0.000	ISRO	SS	ISRO/	Meteo	bharat-rakshak.com	-	-
1987-M32	2447019.50	1987 Aug 12	RH-200	-	-	0.000	ISRO	SS	ISRO/	Meteo	bharat-rakshak.com	-	-
1987-M33	2447026.50	1987 Aug 19	RH-200	-	-	0.000	ISRO	SS	ISRO/	Meteo	bharat-rakshak.com	-	-
1987-M34	2447033.50	1987 Aug 26	RH-200	-	-	0.000	ISRO	SS	ISRO/	Meteo	bharat-rakshak.com	-	-
1987-M35	2447040.50	1987 Sep 2	RH-200	-	-	0.000	ISRO	SS	ISRO/	Meteo	bharat-rakshak.com	-	-
1987-M36	2447047.50	1987 Sep 9	RH-200	-	-	0.000	ISRO	SS	ISRO/	Meteo	bharat-rakshak.com	-	-
1987-M37	2447054.50	1987 Sep 16	RH-200	-	-	0.000	ISRO	SS	ISRO/	Meteo	bharat-rakshak.com	-	-
1987-M38	2447061.50	1987 Sep 23	RH-200	-	-	0.000	ISRO	SS	ISRO/	Meteo	bharat-rakshak.com	-	-
1987-M39	2447068.50	1987 Sep 30	RH-200	-	-	0.000	ISRO	SS	ISRO/	Meteo	bharat-rakshak.com	-	-
1987-M40	2447075.50	1987 Oct 7	RH-200	-	-	0.000	ISRO	SS	ISRO/	Meteo	bharat-rakshak.com	-	-
1987-M42	2447082.50	1987 Oct 14	RH-200	-	-	0.000	ISRO	SS	ISRO/	Meteo	bharat-rakshak.com	-	-
1987-M43	2447089.50	1987 Oct 21	RH-200	-	-	0.000	ISRO	SS	ISRO/	Meteo	bharat-rakshak.com	-	-
1987-M44	2447096.50	1987 Oct 28	RH-200	-	-	0.000	ISRO	SS	ISRO/	Meteo	bharat-rakshak.com	-	-
1987-M45	2447103.50	1987 Nov 4	RH-200	-	-	0.000	ISRO	SS	ISRO/	Meteo	bharat-rakshak.com	-	-
1987-M46	2447110.50	1987 Nov 11	RH-200	-	-	0.000	ISRO	SS	ISRO/	Meteo	bharat-rakshak.com	-	-
1987-M47	2447117.50	1987 Nov 18	RH-200	-	-	0.000	ISRO	SS	ISRO/	Meteo	bharat-rakshak.com	-	-
1987-M48	2447124.50	1987 Nov 25	RH-200	-	-	0.000	ISRO	SS	ISRO/	Meteo	bharat-rakshak.com	-	-
1987-M49	2447131.50	1987 Dec 2	RH-200	-	-	0.000	ISRO	SS	ISRO/	Meteo	bharat-rakshak.com	-	-
1987-M50	2447138.50	1987 Dec 9	RH-200	-	-	0.000	ISRO	SS	ISRO/	Meteo	bharat-rakshak.com	-	-
1987-M51	2447145.50	1987 Dec 16	RH-200	-	-	0.000	ISRO	SS	ISRO/	Meteo	bharat-rakshak.com	-	-
1987-M52	2447152.50	1987 Dec 23	RH-200	-	-	0.000	ISRO	SS	ISRO/	Meteo	bharat-rakshak.com	-	-
1987-M53	2447159.50	1987 Dec 30	RH-200	-	-	0.000	ISRO	SS	ISRO/	Meteo	bharat-rakshak.com	-	-
1988-ME2	2447166.50	1988 Jan 6	RH-200	-	-	0.000	ISRO	SS	ISRO/	Meteo	bharat-rakshak.com	-	-
1988-ME3	2447173.50	1988 Jan 13	RH-200	-	-	0.000	ISRO	SS	ISRO/	Meteo	bharat-rakshak.com	-	-
1988-ME4	2447180.50	1988 Jan 20	RH-200	-	-	0.000	ISRO	SS	ISRO/	Meteo	bharat-rakshak.com	-	-
1988-ME5	2447187.50	1988 Jan 27	RH-200	-	-	0.000	ISRO	SS	ISRO/	Meteo	bharat-rakshak.com	-	-
1988-ME6	2447194.50	1988 Feb 3	RH-200	-	-	0.000	ISRO	SS	ISRO/	Meteo	bharat-rakshak.com	-	-
1988-ME7	2447201.50	1988 Feb 10	RH-200	-	-	0.000	ISRO	SS	ISRO/	Meteo	bharat-rakshak.com	-	-
1988-ME8	2447208.50	1988 Feb 17	RH-200	-	-	0.000	ISRO	SS	ISRO/	Meteo	bharat-rakshak.com	-	-
1988-ME9	2447215.50	1988 Feb 24	RH-200	-	-	0.000	ISRO	SS	ISRO/	Meteo	bharat-rakshak.com	-	-
1988-ME10	2447222.50	1988 Mar 2	RH-200	-	-	0.000	ISRO	SS	ISRO/	Meteo	bharat-rakshak.com	-	-
1988-ME11	2447229.50	1988 Mar 9	RH-200	-	-	0.000	ISRO	SS	ISRO/	Meteo	bharat-rakshak.com	-	-
1988-ME12	2447236.50	1988 Mar 16	RH-200	-	-	0.000	ISRO	SS	ISRO/	Meteo	bharat-rakshak.com	-	-
1988-ME13	2447243.50	1988 Mar 23	RH-200	-	-	0.000	ISRO	SS	ISRO/	Meteo	bharat-rakshak.com	-	-
1988-ME14	2447250.50	1988 Mar 30	RH-200	-	-	0.000	ISRO	SS	ISRO/	Meteo	bharat-rakshak.com	-	-
1988-ME15	2447257.50	1988 Apr 6	RH-200	-	-	0.000	ISRO	SS	ISRO/	Meteo	bharat-rakshak.com	-	-
1988-ME16	2447264.50	1988 Apr 13	RH-200	-	-	0.000	ISRO	SS	ISRO/	Meteo	bharat-rakshak.com	-	-
1988-ME17	2447271.50	1988 Apr 20	RH-200	-	-	0.000	ISRO	SS	ISRO/	Meteo	bharat-rakshak.com	-	-
1988-ME18	2447278.50	1988 Apr 27	RH-200	-	-	0.000	ISRO	SS	ISRO/	Meteo	bharat-rakshak.com	-	-
1988-ME19	2447285.50	1988 May 4	RH-200	-	-	0.000	ISRO	SS	ISRO/	Meteo	bharat-rakshak.com	-	-
1988-ME20	2447292.50	1988 May 11	RH-200	-	-	0.000	ISRO	SS	ISRO/	Meteo	bharat-rakshak.com	-	-
1988-ME21	2447299.50	1988 May 18	RH-200	-	-	0.000	ISRO	SS	ISRO/	Meteo	bharat-rakshak.com	-	-
1988-ME22	2447306.50	1988 May 25	RH-200	-	-	0.000	ISRO	SS	ISRO/	Meteo	bharat-rakshak.com	-	-
1988-ME23	2447313.50	1988 Jun 1	RH-200	-	-	0.000	ISRO	SS	ISRO/	Meteo	bharat-rakshak.com	-	-
1988-ME24	2447320.50	1988 Jun 8	RH-200	-	-	0.000	ISRO	SS	ISRO/	Meteo	bharat-rakshak.com	-	-
1988-ME25	2447327.50	1988 Jun 15	RH-200	-	-	0.000	ISRO	SS	ISRO/	Meteo	bharat-rakshak.com	-	-
1988-ME26	2447334.50	1988 Jun 22	RH-200	-	-	0.000	ISRO	SS	ISRO/	Meteo	bharat-rakshak.com	-	-
1988-ME27	2447341.50	1988 Jun 29	RH-200	-	-	0.000	ISRO	SS	ISRO/	Meteo	bharat-rakshak.com	-	-
1988-ME28	2447348.50	1988 Jun 6	RH-200	-	-	0.000	ISRO	SS	ISRO/	Meteo	bharat-rakshak.com	-	-
1988-ME29	2447355.50	1988 Jun 13	RH-200	-	-	0.000	ISRO	SS	ISRO/	Meteo	bharat-rakshak.com	-	-
1988-ME30	2447362.50	1988 Jun 20	RH-200	-	-	0.000	ISRO	SS	ISRO/	Meteo	bharat-rakshak.com	-	-
1988-ME31	2447369.50	1988 Jun 27	RH-200	-	-	0.000	ISRO	SS	ISRO/	Meteo	bharat-rakshak.com	-	-
1988-ME32	2447376.50	1988 Jul 4	RH-200	-	-	0.000	ISRO	SS	ISRO/	Meteo	bharat-rakshak.com	-	-
1988-ME33	2447383.50	1988 Jul 11	RH-200	-	-	0.000	ISRO	SS	ISRO/	Meteo	bharat-rakshak.com	-	-
1988-ME34	2447390.50	1988 Jul 18	RH-200	-	-	0.000	ISRO	SS	ISRO/	Meteo	bharat-rakshak.com	-	-
1988-ME35	2447397.50	1988 Jul 25	RH-200	-	-	0.000	ISRO	SS	ISRO/	Meteo	bharat-rakshak.com	-	-
1988-ME36	2447404.50	1988 Aug 1	RH-200	-	-	0.000	ISRO	SS	ISRO/	Meteo	bharat-rakshak.com	-	-
1988-ME37	2447411.50	1988 Aug 8	RH-200	-	-	0.000	ISRO	SS	ISRO/	Meteo	bharat-rakshak.com	-	-
1988-ME38	2447418.50	1988 Aug 15	RH-200	-	-	0.000	ISRO	SS	ISRO/	Meteo	bharat-rakshak.com	-	-
1988-ME39	2447425.50	1988 Aug 22	RH-200	-	-	0.000	ISRO	SS	ISRO/	Meteo	bharat-rakshak.com	-	-
1988-ME40	2447432.50	1988 Aug 29	RH-200	-	-	0.000	ISRO	SS	ISRO/	Meteo	bharat-rakshak.com	-	-
1988-ME41	2447439.50	1988 Sep 5	RH-200	-	-	0.000	ISRO	SS	ISRO/	Meteo	bharat-rakshak.com	-	-
1988-ME42	2447446.50	1988 Sep 12	RH-200	-	-	0.000	ISRO	SS	ISRO/	Meteo	bharat-rakshak.com	-	-
1988-ME43	2447453.50	1988 Sep 19	RH-200	-	-	0.000	ISRO	SS	ISRO/	Meteo	bharat-rakshak.com	-	-
1988-ME44	2447460.50	1988 Sep 26	RH-200	-	-	0.000	ISRO	SS	ISRO/	Meteo	bharat-rakshak.com	-	-
1988-ME45	2447467.50	1988 Oct 3	RH-200	-	-	0.000	ISRO	SS	ISRO/	Meteo	bharat-rakshak.com	-	-
1988-ME46	2447474.50	1988 Oct 10	RH-200	-	-	0.000	ISRO	SS	ISRO/	Meteo	bharat-rakshak.com	-	-
1988-ME47	2447481.50	1988 Oct 17	RH-200	-	-	0.000	ISRO	SS	ISRO/	Meteo	bharat-rakshak.com	-	-
1988-ME48	2447488.50	1988 Oct 24	RH-200	-	-	0.000	ISRO	SS	IS				



Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Orb_Pay_t	Agency	Launch_Code	Group	Category	LTCite	Cite	Notes
1989-M61	2447742.50	1989 Aug 4	RH-200	-	RH-200	0.000	ISRO	SS	ISRO/	Meteco	SNSC-SR	-	-
1989-M60	2447754.50	1989 Aug 16	RH-200	-	-	0.000	ISRO	SS	ISRO/	Meteco	USRP18_224	-	-
1989-M61	2447761.50	1989 Aug 23	RH-200	-	-	0.000	ISRO	SS	ISRO/	Meteco	USRP18_224	-	-
1989-M62	2447768.50	1989 Aug 30	RH-200	-	-	0.000	ISRO	SS	ISRO/	Meteco	USRP18_224	-	-
1989-M63	2447775.50	1989 Sep 6	RH-200	-	-	0.000	ISRO	SS	ISRO/	Meteco	USRP18_224	-	-
1989-M64	2447782.50	1989 Sep 13	RH-200	-	-	0.000	ISRO	SS	ISRO/	Meteco	USRP18_224	-	-
1989-M65	2447789.50	1989 Sep 20	RH-200	-	-	0.000	ISRO	SS	ISRO/	Meteco	USRP18_224	-	-
1989-M66	2447796.50	1989 Sep 27	RH-200	-	-	0.000	ISRO	SS	ISRO/	Meteco	USRP18_224	-	-
1989-M67	2448003.50	1989 Oct 4	RH-200	-	-	0.000	ISRO	SS	ISRO/	Meteco	USRP18_224	-	-
1989-M68	2448010.50	1989 Oct 11	RH-200	-	-	0.000	ISRO	SS	ISRO/	Meteco	USRP18_224	-	-
1989-M69	2448017.50	1989 Oct 18	RH-200	-	-	0.000	ISRO	SS	ISRO/	Meteco	USRP18_224	-	-
1989-M60	2448024.50	1989 Oct 25	RH-200	-	-	0.000	ISRO	SS	ISRO/	Meteco	USRP18_224	-	-
1989-M61	2448031.50	1989 Nov 1	RH-200	-	-	0.000	ISRO	SS	ISRO/	Meteco	USRP18_224	-	-
1989-M62	2448038.50	1989 Nov 7	RH-200	-	-	0.000	ISRO	SS	ISRO/	Meteco	USRP18_224	-	-
1989-M63	2448045.50	1989 Nov 14	RH-200	-	-	0.000	ISRO	SS	ISRO/	Meteco	USRP18_224	-	-
1989-M64	2448052.50	1989 Nov 21	RH-200	-	-	0.000	ISRO	SS	ISRO/	Meteco	USRP18_224	-	-
1989-M65	2448059.50	1989 Nov 28	RH-200	-	-	0.000	ISRO	SS	ISRO/	Meteco	USRP18_224	-	-
1989-M66	2448066.50	1989 Dec 5	RH-200	-	-	0.000	ISRO	SS	ISRO/	Meteco	USRP18_224	-	-
1989-M67	2448073.50	1989 Dec 12	RH-200	-	-	0.000	ISRO	SS	ISRO/	Meteco	USRP18_224	-	-
1989-M68	2448080.50	1989 Dec 19	RH-200	-	-	0.000	ISRO	SS	ISRO/	Meteco	USRP18_224	-	-
1989-M69	2448087.50	1989 Dec 26	RH-200	-	-	0.000	ISRO	SS	ISRO/	Meteco	USRP18_224	-	-
1989-M60	2448094.50	1989 Dec 31	RH-200	-	-	0.000	ISRO	SS	ISRO/	Meteco	USRP18_224	-	-
1989-M61	2448101.50	1989 Jan 3	RH-200	-	-	0.000	ISRO	SS	ISRO/	Meteco	USRP18_224	-	-
1989-M62	2448108.50	1989 Jan 10	RH-200	-	-	0.000	ISRO	SS	ISRO/	Meteco	USRP18_224	-	-
1989-M63	2448115.50	1989 Jan 17	RH-200	-	-	0.000	ISRO	SS	ISRO/	Meteco	USRP18_224	-	-
1989-M64	2448122.50	1989 Jan 24	RH-200	-	-	0.000	ISRO	SS	ISRO/	Meteco	USRP18_224	-	-
1989-M65	2448129.50	1989 Jan 31	RH-200	-	-	0.000	ISRO	SS	ISRO/	Meteco	USRP18_224	-	-
1989-M66	2448136.50	1989 Feb 7	RH-200	-	-	0.000	ISRO	SS	ISRO/	Meteco	USRP18_224	-	-
1989-M67	2448143.50	1989 Feb 14	RH-200	-	-	0.000	ISRO	SS	ISRO/	Meteco	USRP18_224	-	-
1989-M68	2448150.50	1989 Feb 21	RH-200	-	-	0.000	ISRO	SS	ISRO/	Meteco	USRP18_224	-	-
1989-M69	2448157.50	1989 Feb 28	RH-200	-	-	0.000	ISRO	SS	ISRO/	Meteco	USRP18_224	-	-
1989-M60	2448164.50	1989 Mar 5	RH-200	-	-	0.000	ISRO	SS	ISRO/	Meteco	USRP18_224	-	-
1989-M61	2448171.50	1989 Mar 12	RH-200	-	-	0.000	ISRO	SS	ISRO/	Meteco	USRP18_224	-	-
1989-M62	2448178.50	1989 Mar 19	RH-200	-	-	0.000	ISRO	SS	ISRO/	Meteco	USRP18_224	-	-
1989-M63	2448185.50	1989 Mar 26	RH-200	-	-	0.000	ISRO	SS	ISRO/	Meteco	USRP18_224	-	-
1989-M64	2448192.50	1989 Apr 2	RH-200	-	-	0.000	ISRO	SS	ISRO/	Meteco	USRP18_224	-	-
1989-M65	2448199.50	1989 Apr 9	RH-200	-	-	0.000	ISRO	SS	ISRO/	Meteco	USRP18_224	-	-
1989-M66	2448206.50	1989 Apr 16	RH-200	-	-	0.000	ISRO	SS	ISRO/	Meteco	USRP18_224	-	-
1989-M67	2448213.50	1989 Apr 23	RH-200	-	-	0.000	ISRO	SS	ISRO/	Meteco	USRP18_224	-	-
1989-M68	2448220.50	1989 Apr 30	RH-200	-	-	0.000	ISRO	SS	ISRO/	Meteco	USRP18_224	-	-
1989-M69	2448227.50	1989 May 7	RH-200	-	-	0.000	ISRO	SS	ISRO/	Meteco	USRP18_224	-	-
1989-M60	2448234.50	1989 May 14	RH-200	-	-	0.000	ISRO	SS	ISRO/	Meteco	USRP18_224	-	-
1989-M61	2448241.50	1989 May 21	RH-200	-	-	0.000	ISRO	SS	ISRO/	Meteco	USRP18_224	-	-
1989-M62	2448248.50	1989 May 28	RH-200	-	-	0.000	ISRO	SS	ISRO/	Meteco	USRP18_224	-	-
1989-M63	2448255.50	1989 Jun 4	RH-200	-	-	0.000	ISRO	SS	ISRO/	Meteco	USRP18_224	-	-
1989-M64	2448262.50	1989 Jun 11	RH-200	-	-	0.000	ISRO	SS	ISRO/	Meteco	USRP18_224	-	-
1989-M65	2448269.50	1989 Jun 18	RH-200	-	-	0.000	ISRO	SS	ISRO/	Meteco	USRP18_224	-	-
1989-M66	2448276.50	1989 Jun 25	RH-200	-	-	0.000	ISRO	SS	ISRO/	Meteco	USRP18_224	-	-
1989-M67	2448283.50	1989 Jul 2	RH-200	-	-	0.000	ISRO	SS	ISRO/	Meteco	USRP18_224	-	-
1989-M68	2448290.50	1989 Jul 9	RH-200	-	-	0.000	ISRO	SS	ISRO/	Meteco	USRP18_224	-	-
1989-M69	2448297.50	1989 Jul 16	RH-200	-	-	0.000	ISRO	SS	ISRO/	Meteco	USRP18_224	-	-
1989-M60	2448304.50	1989 Jul 23	RH-200	-	-	0.000	ISRO	SS	ISRO/	Meteco	USRP18_224	-	-
1989-M61	2448311.50	1989 Jul 30	RH-200	-	-	0.000	ISRO	SS	ISRO/	Meteco	USRP18_224	-	-
1989-M62	2448318.50	1989 Aug 6	RH-200	-	-	0.000	ISRO	SS	ISRO/	Meteco	USRP18_224	-	-
1989-M63	2448325.50	1989 Aug 13	RH-200	-	-	0.000	ISRO	SS	ISRO/	Meteco	USRP18_224	-	-
1989-M64	2448332.50	1989 Aug 20	RH-200	-	-	0.000	ISRO	SS	ISRO/	Meteco	USRP18_224	-	-
1989-M65	2448339.50	1989 Aug 27	RH-200	-	-	0.000	ISRO	SS	ISRO/	Meteco	USRP18_224	-	-
1989-M66	2448346.50	1989 Sep 3	RH-200	-	-	0.000	ISRO	SS	ISRO/	Meteco	USRP18_224	-	-
1989-M67	2448353.50	1989 Sep 10	RH-200	-	-	0.000	ISRO	SS	ISRO/	Meteco	USRP18_224	-	-
1989-M68	2448360.50	1989 Sep 17	RH-200	-	-	0.000	ISRO	SS	ISRO/	Meteco	USRP18_224	-	-
1989-M69	2448367.50	1989 Sep 24	RH-200	-	-	0.000	ISRO	SS	ISRO/	Meteco	USRP18_224	-	-
1989-M60	2448374.50	1989 Oct 1	RH-200	-	-	0.000	ISRO	SS	ISRO/	Meteco	USRP18_224	-	-
1989-M61	2448381.50	1989 Oct 8	RH-200	-	-	0.000	ISRO	SS	ISRO/	Meteco	USRP18_224	-	-
1989-M62	2448388.50	1989 Oct 15	RH-200	-	-	0.000	ISRO	SS	ISRO/	Meteco	USRP18_224	-	-
1989-M63	2448395.50	1989 Oct 22	RH-200	-	-	0.000	ISRO	SS	ISRO/	Meteco	USRP18_224	-	-
1989-M64	2448402.50	1989 Oct 29	RH-200	-	-	0.000	ISRO	SS	ISRO/	Meteco	USRP18_224	-	-
1989-M65	2448409.50	1989 Nov 5	RH-200	-	-	0.000	ISRO	SS	ISRO/	Meteco	USRP18_224	-	-
1989-M66	2448416.50	1989 Nov 12	RH-200	-	-	0.000	ISRO	SS	ISRO/	Meteco	USRP18_224	-	-
1989-M67	2448423.50	1989 Nov 19	RH-200	-	-	0.000	ISRO	SS	ISRO/	Meteco	USRP18_224	-	-
1989-M68	2448430.50	1989 Nov 26	RH-200	-	-	0.000	ISRO	SS	ISRO/	Meteco	USRP18_224	-	-
1989-M69	2448437.50	1989 Dec 3	RH-200	-	-	0.000	ISRO	SS	ISRO/	Meteco	USRP18_224	-	-
1989-M60	2448444.50	1989 Dec 10	RH-200	-	-	0.000	ISRO	SS	ISRO/	Meteco	USRP18_224	-	-
1989-M61	2448451.50	1989 Dec 17	RH-200	-	-	0.000	ISRO	SS	ISRO/	Meteco	USRP18_224	-	-
1989-M62	2448458.50	1989 Dec 24	RH-200	-	-	0.000	ISRO	SS	ISRO/	Meteco	USRP18_224	-	-
1989-M63	2448465.50	1989 Dec 31	RH-200	-	-	0.000	ISRO	SS	ISRO/	Meteco	USRP18_224	-	-
1989-M64	2448472.50	1990 Jan 7	RH-200	-	-	0.000	ISRO	SS	ISRO/	Meteco	USRP18_224	-	-
1989-M65	2448479.50	1990 Jan 14	RH-200	-	-	0.000	ISRO	SS	ISRO/	Meteco	USRP18_224	-	-
1989-M66	2448486.50	1990 Jan 21	RH-200	-	-	0.000	ISRO	SS	ISRO/	Meteco	USRP18_224	-	-
1989-M67	2448493.50	1990 Jan 28	RH-200	-	-	0.000	ISRO	SS	ISRO/	Meteco	USRP18_224	-	-
1989-M68	2448500.50	1990 Feb 4	RH-200	-	-	0.000	ISRO	SS	ISRO/	Meteco	USRP18_224	-	-
1989-M69	2448507.50	1990 Feb 11	RH-200	-	-	0.000	ISRO	SS	ISRO/	Meteco	USRP18_224	-	-
1989-M60	2448514.50	1990 Feb 18	RH-200	-	-	0.000	ISRO	SS	ISRO/	Meteco	USRP18_224	-	-
1989-M61	2448521.50	1990 Feb 25	RH-200	-	-	0.000	ISRO	SS	ISRO/	Meteco	USRP18_224	-	-
1989-M62	2448528.50	1990 Mar 3	RH-200	-	-	0.000	ISRO	SS	ISRO/	Meteco	USRP18_224	-	-
1989-M63	2448535.50	1990 Mar 10	RH-200	-	-	0.000	ISRO	SS	ISRO/	Meteco	USRP18_224	-	-
1989-M64	2448542.50	1990 Mar 17	RH-200	-	-	0.000	ISRO	SS	ISRO/	Meteco	USRP18_224	-	-
1989-M65	2448549.50	1990 Mar 24	RH-200	-	-	0.000	ISRO	SS	ISRO/	Meteco	USRP18_224	-	-
1989-M66	2448556.50	1990 Mar 31	RH-200	-	-	0.000	ISRO	SS	ISRO/	Meteco	USRP18_224	-	-
1989-M67	2448563.50	1990 Apr 7	RH-200	-	-	0.000	ISRO	SS	ISRO/	Meteco	USRP18_224	-	-
1989-M68	2448570.50	1990 Apr 14	RH-200	-	-	0.000	ISRO	SS	ISRO/	Meteco	USRP18_224	-	-
1989-M69	2448577.50	1990 Apr 21	RH-200	-	-	0.000	ISRO	SS	ISRO/	Meteco	USRP18_224	-	-
1989-M60	2448584.50	1990 Apr 28	RH-200	-	-	0.000	ISRO	SS	ISRO/	Meteco	USRP18_224	-	-
1989-M61	2448591.50	1990 May 5	RH-200	-	-	0.000	ISRO	SS	ISRO/	Meteco	USRP18_224	-	-
1989-M62	2448598.50	1990 May 12	RH-200	-	-	0.000	ISRO	SS	ISRO/	Meteco	USRP18_224	-	-
1989-M63	2448605.50	1990 May 19	RH-200	-	-	0.000	ISRO	SS	ISRO/	Meteco	USRP18_224	-	-
1989-M64	2448612.50	1990 May 26	RH-200	-	-	0.000	ISRO	SS	ISRO/	Meteco	USRP18_224	-	-
1989-M65	2448619.50	1990 Jun 2	RH-200	-	-	0.000	ISRO	SS	ISRO/	Meteco	USRP18_224	-	-
1989-M66	2448626.50												





Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	OrbPay	Agency	Launch_Code	Group	Category	LTCite	Cite	Notes
2011-M03	2455699.50	2011 May 18	RR-200	-	-	0.000	ISRO	SS	ISRO/	Meteo	Wire	-	-
2013-M07	2456618.04	2013 Nov 21 1255	RR-200	-	-	0.000	ISRO	SS	ISRO/	Meteo	Hindu131121	ISROhannua113-14	-
2014-M05	2456937.50	2014 Oct 7	RR-200	-	-	0.000	ISRO	SS	ISRO/	Meteo	www.isro.org	-	-
2014-M06	2456938.50	2014 Oct 8	RR-200	-	-	0.000	ISRO	SS	ISRO/	Meteo	www.isro.org	-	-
2014-M07	2456939.50	2014 Oct 9	RR-200	-	-	0.000	ISRO	SS	ISRO/	Meteo	www.isro.org	-	-
2014-M08	2456940.50	2014 Oct 10	RR-200	-	-	0.000	ISRO	SS	ISRO/	Meteo	www.isro.org	-	-
2015-M04	2457218.50	2015 Jul 15	RR-200	-	Mo, 1545	0.000	ISRO	SS	ISRO/	Meteo	www.isro.org	-	-
2016-M06	2457665.50	2016 Oct 4	RR-200	-	-	0.000	ISRO	SS	SDSC/	Aeron	SDSC-SR	-	-
2016-M07	2457666.50	2016 Oct 5	RR-200	-	-	0.000	ISRO	SS	SDSC/	Aeron	SDSC-SR	-	-
2016-M08	2457667.50	2016 Oct 6	RR-200	-	-	0.000	ISRO	SS	SDSC/	Aeron	SDSC-SR	-	-
2017-M09	2458031.50	2017 Oct 5	RR-200	-	-	0.000	ISRO	SS	SDSC/	Aeron	SDSC-SR	-	-
2017-M10	2458032.50	2017 Oct 6	RR-200	-	-	0.000	ISRO	SS	SDSC/	Aeron	SDSC-SR	-	-
2017-M11	2458033.50	2017 Oct 7	RR-200	-	-	0.000	ISRO	SS	SDSC/	Aeron	SDSC-SR	-	-
2017-M12	2458035.50	2017 Oct 9	RR-200	-	-	0.000	ISRO	SS	SDSC/	Aeron	SDSC-SR	-	-
2018-M08	2458396.50	2018 Oct 5	RR-200	-	-	0.000	ISRO	SS	SDSC/	Aeron	SDSC-SR	-	-
2018-M09	2458400.50	2018 Oct 9	RR-200	-	-	0.000	ISRO	SS	SDSC/	Aeron	SDSC-SR	-	-
2019-M13	2458620.50	2019 May 17	RR-200	-	-	0.000	ISRO	SS	SDSC/	Aeron	SDSC-SR	-	-
2020-M10	2459108.78	2020 Sep 16 0647	RR-200	-	-	0.000	ISRO	SS	ISRO/	Test	isro.gov.in	-	-
2022-M31	2459906.77	2022 Nov 23 0625	RR-200	-	-	0.000	ISRO	SS	ISRO/	Meteo	isro.gov.in	-	-



Launch_Tag	Launch_JD	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Launch			Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee km	Range km	Dest
							Mission	FlightCode	Platform							
1967-A136	2439814.62	1967 Nov 20 0300	RH-75	-	1	TERLS-54?	-	-	TERLS	-	-	-	9	-	-	
1967-A137	2439814.67	1967 Nov 20 0400	RH-75	-	2	-	-	-	TERLS	-	-	-	9?	-	-	
1967-A139	2439824.50	1967 Dec?	RH-75	-	3	-	-	-	TERLS	-	-	-	9?	-	-	
1968-A47	2439855.50	1968 Jan	RH-75	-	4?	-	-	-	TERLS	-	-	-	9?	-	-	
1968-A48	2439855.50	1968 Jan?	RH-75	-	5?	-	-	-	TERLS	-	-	-	9?	-	-	
1968-A49	2439855.50	1968 Jan?	RH-75	-	6?	-	-	-	TERLS	-	-	-	9?	-	-	
1968-A54	2439886.50	1968 Feb?	RH-75	-	7	-	-	-	TERLS	-	-	-	9?	-	-	
1968-A55	2439886.50	1968 Feb	RH-75	-	8	-	-	-	TERLS	-	-	-	9?	-	-	
1968-A95	2440115.50	1968 Sep 16	RH-75	-	-	Accelerometer	-	-	TERLS	-	-	-	9	-	-	



Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	OrbPay	Agency	Launch_Code	Group	Category	LTCite	Cite	Notes
1967-A136	2439814.62	1967 Nov 20 0300	RH-75	-	1	0.000	ISRO	SS	ISRO/	Test	RajNotes	-	-
1967-A137	2439814.67	1967 Nov 20 0400	RH-75	-	2	0.000	ISRO	SS	ISRO/	Test	RajNotes	-	-
1967-A139	2439824.50	1967 Dec?	RH-75	-	3	0.000	ISRO	SS	ISRO/	Test	Atley	-	-
1968-447	2439855.50	1968 Jan	RH-75	-	4?	0.000	ISRO	SS	ISRO/	Test	Atley	-	-
1968-448	2439855.50	1968 Jan?	RH-75	-	5?	0.000	ISRO	SS	ISRO/	Test	Atley	-	-
1968-449	2439855.50	1968 Jan?	RH-75	-	6?	0.000	ISRO	SS	ISRO/	Test	Atley	-	-
1968-454	2439886.50	1968 Feb?	RH-75	-	7	0.000	ISRO	SS	ISRO/	Test	Atley	-	-
1968-455	2439886.50	1968 Feb	RH-75	-	8	0.000	ISRO	SS	ISRO/	Test	Atley	-	-
1968-495	2440115.50	1968 Sep 16	RH-75	-	-	0.000	ISRO	SS	ISRO/	Test	RajNotes	-	-



Launch																
Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Mission	FlightCode	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee km	Range km	Dest
2023-F02	2459955.48	2023 Jan 10 2327:31	RS1	-	1	Varisat 1A/1B	-	-	-	PSCA	LPSC	-	-	0?	-	-





Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	OrbPay	Agency	Launch_Code	Group	Category	LTCite	Cite	Notes
2023-F02	2459965.48	2023 Jan 10 2327:31	RS1	-	1	0.022	ABLSS	0F	C	Sat SSO L	Wire	-	-







Launch_Tag	Launch_JD	Launch_Date	LV_Type	Variant	Flight_ID	OrbPay	Agency	Launch_Code	Group	Category	LTCite	Cite	Notes
1964-A218	2438515.50	1964 May?	RT-15H	-	-	0.000	WHF	MS	-	Test	RML	-	-
1964-A219	2438515.50	1964 May?	RT-15H	-	-	0.000	WHF	MS	-	Test	RML	-	-
1965-S485	2439003.50	1965 Sep	RT-15H	-	-	0.000	R/VSN	MS	-	Test	www.fas.org	NevskiyBaation9901	-
1965-S14	2439033.50	1965 Q4?	RT-15H	-	-	0.000	R/VSN	MS	-	Test	JCM	-	-
1966-S811	2439463.50	1966 Dec 4	RT-15	-	IRS	0.000	R/VSN	MS	-	Test	RML	RY60	-
1967-S775	2439530.50	1967 Feb 9	RT-15	-	1	0.000	R/VSN	MS	-	Test	RML	-	-
1967-S12	2439580.50	1967 Q2?	RT-15	-	2	0.000	R/VSN	MS	-	Test	RML	-	-
1967-S13	2439580.50	1967 Q2?	RT-15	-	3	0.000	R/VSN	MS	-	Test	RML	-	-
1967-S14	2439702.50	1967 Aug	RT-15	-	4	0.000	R/VSN	MS	-	Test	RML	-	-
1968-S29	2439855.50	1968 Jan	RT-15	-	5	0.000	R/VSN	MS	-	Test	RML	-	-
1968-S30	2439855.50	1968 Jan	RT-15	-	6	0.000	R/VSN	MS	-	Test	RML	-	-
1968-S31	2439855.50	1968	RT-15	-	7	0.000	R/VSN	MS	-	Test	RML	-	-
1968-S32	2439855.50	1968	RT-15	-	8	0.000	R/VSN	MS	-	Test	RML	-	-
1968-S33	2439855.50	1968	RT-15	-	9	0.000	R/VSN	MS	-	Test	RML	-	-
1968-S34	2439855.50	1968	RT-15	-	10	0.000	R/VSN	MS	-	Test	RML	-	-
1968-S35	2439855.50	1968	RT-15	-	11	0.000	R/VSN	MS	-	Test	RML	-	-
1968-S36	2439855.50	1968	RT-15	-	12	0.000	R/VSN	MS	-	Test	RML	-	-
1968-S773	2439855.50	1968?	RT-15	-	-	0.000	R/VSN	MS	-	Test	RML	-	-
1968-S774	2439855.50	1968?	RT-15	-	-	0.000	R/VSN	MS	-	Test	RML	-	-
1969-S19	2440221.50	1969	RT-15	-	13	0.000	R/VSN	MS	-	Test	RML	-	-
1969-S20	2440221.50	1969	RT-15	-	14	0.000	R/VSN	MS	-	Test	RML	-	-
1969-S21	2440221.50	1969	RT-15	-	15	0.000	R/VSN	MS	-	Test	RML	-	-
1970-S777	2440586.50	1970 Feb	RT-15	-	18	0.000	R/VSN	MS	-	Test	RML	-	-
1970-S16	2440617.50	1970 Mar	RT-15	-	19	0.000	R/VSN	MS	-	Test	RY60	RML	-
1970-S172	2440645.50	1970 Mar	RT-15	-	20?	0.000	R/VSN	MS	-	Test	www.fas.org	-	-



Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Mission	Launch_Site	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee_Km	Range_Km	Dest
1962-4239	2453723-50	1962 Mar 28	RT-1		IRS	8K95 BR-1		GTSF-4		GTSF-4	LC84			1?	-	GTSF-4
1962-5114	2453722-50	1962 Apr 28	RT-1			8K95 LKI-1		GTSF-4		GTSF-4	LC84			10?	-	(BALKH)
1962-4289	2453728-50	1962 May 24	RT-1			8K95 LKI-2		GTSF-4		GTSF-4	LC84			40?	-	(BALKH)
1962-4270	2453745-50	1962 Q3?	RT-1			8K95 LKI-3		GTSF-4		GTSF-4	LC84			0?	-	(BALKH)
1962-4271	2453745-50	1962 Q3?	RT-1			8K95 LKI-4		GTSF-4		GTSF-4	LC84			40?	-	(BALKH)
1963-3619	2438106-50	1963 Mar 18	RT-1			8K95 LKI-5		GTSF-4		GTSF-4	LC84			500?	-	BALKH
1963-3664	2438144-50	1963 Apr 25	RT-1			8K95 LKI-6		GTSF-4		GTSF-4	LC84			500?	-	BALKH
1963-3665	2438160-50	1963 May 11	RT-1			8K95 LKI-7		GTSF-4		GTSF-4	LC84			500?	-	BALKH
1963-4240	2438180-50	1963 Jun?	RT-1			8K95 LKI-8		GTSF-4		GTSF-4	LC84			500?	-	(BALKH)
1963-307	2438180-50	1963 Jun	RT-1			8K95 LKI-9		GTSF-4		GTSF-4	LC84			500?	-	(BALKH)
1966-4129	2439003-50	1966 Sep	RT-1		RT-1-1963	8K95-1963 LKI-1		GTSF-4		GTSF-4	LC84			10?	-	(BALKH)
1966-3529	2439003-50	1966 Oct?	RT-1		RT-1-1963	8K95-1963 LKI-2		GTSF-4		GTSF-4	LC84			500?	-	(BALKH)
1966-4151	2439064-50	1966 Nov 31	RT-1		RT-1-1963	8K95-1963 LKI-3		GTSF-4		GTSF-4	LC84			10?	-	(BALKH)
1966-4238	2439125-50	1966 Dec 31	RT-2		IRS	8K98 LKI-BR RT-2		GTSF-4		GTSF-4	LC86			1?	-	GTSF-4
1966-5135	2439182-50	1966 Feb. 26	RT-2		9L?	8K98 LKI-1-1	MGC8 15F1	GTSF-4		GTSF-4	LC86			1000?	-	BALKH
1966-514	2439184-50	1966 Mar?	RT-2		10L?	8K98 LKI-1-2	MGC8 15F1	GTSF-4		GTSF-4	LC86			1000?	-	BALKH
1966-515	2439245-50	1966 May?	RT-2		11L?	8K98 LKI-1-3	MGC8 15F1	GTSF-4		GTSF-4	PL37			1000?	-	BALKH
1966-516	2439245-50	1966 May?	RT-2		12L?	8K98 LKI-1-4	MGC8 15F1	GTSF-4		GTSF-4	PL37			1000?	-	(BALKH)
1966-517	2439245-50	1966 May?	RT-2		14L?	8K98 LKI-1-6	MGC8 15F1	GTSF-4		GTSF-4	PL37			1000?	-	BALKH
1966-518	2439245-50	1966 Jul 1	RT-2		15L?	8K98 LKI-1-7	MGC8 15F1	GTSF-4		GTSF-4	PL37			1000?	-	BALKH
1966-519	2439301-50	1966 Jul 15	RT-2		M10300-16L	8K98 LKI-2-1	MGC8 15F1	GTSF-4		GTSF-4	PL37			1000?	-	BALKH
1966-5566	2439433-83	1966 Nov 4 0802?	RT-2			8K98 LKI-2-2	MGC8 15F1	NIPP-53		NIPP-53	LC161/1			1000?	-	Kura
1966-5727	2439482-83	1966 Dec 23 0800	RT-2			8K98 LKI-2-3	MGC8 15F1	NIPP-53		NIPP-53	LC161/1			1?	-	(Kura)
1967-317	2439487-83	1966 Dec 28 0800	RT-2			8K98 LKI-2-4	MGC8 15F1	NIPP-53		NIPP-53	LC161/1			100?	-	(Kura)
1967-318	2439600-29	1967 Apr 28 0800	RT-2			8K98 LKI-2-5	MGC8 15F1	NIPP-53		NIPP-53	LC161/1			1000?	-	(Kura)?
1967-516	2439603-42	1967 Apr 28 2200	RT-2			8K98 LKI-2-6	MGC8 15F1	NIPP-53		NIPP-53	LC161/1			1000?	-	(Kura)
1967-520	2439630-83	1967 May 20 0800	RT-2			8K98 LKI-2-7	MGC8 15F1	NIPP-53		NIPP-53	LC161/1			1?	-	(Kura)
1967-521	2439636-61	1967 Jun 17 0730	RT-2			8K98 LKI-2-8	MGC8 15F1	NIPP-53		NIPP-53	LC161/1			1000?	-	(Kura)
1967-522	2439676-62	1967 Jul 5 0300	RT-2			8K98 LKI-2-9	MGC8 15F1	NIPP-53		NIPP-53	LC161/1			1000?	-	(Kura)
1967-523	2439695-62	1967 Jul 24 0300	RT-2			8K98 LKI-2-10	MGC8 15F1	NIPP-53		NIPP-53	LC161/1			1?	-	(Kura)
1967-524	2439723-61	1967 Aug 21 0730	RT-2			8K98 LKI-2-11	MGC8 15F1	NIPP-53		NIPP-53	LC161/1			1000?	-	(Kura)
1967-525	2439726-16	1967 Aug 28 1530	RT-2			8K98 LKI-2-12	MGC8 15F1	NIPP-53		NIPP-53	LC161/1			100?	-	(Kura)
1967-526	2439741-79	1967 Sep 8 0700	RT-2			8K98 LKI-2-13	MGC8 15F1	NIPP-53		NIPP-53	LC161/1			1?	-	(Kura)
1967-5730	2439787-27	1967 Oct 23 1830	RT-2			8K98 LKI-2-14	MGC8 15F1	NIPP-53		NIPP-53	LC161/1			1000?	-	(Kura)
1967-5732	2439793-25	1967 Oct 29 1800	RT-2			8K98 LKI-2-15	MGC8 15F1	NIPP-53		NIPP-53	LC161/1			1000?	-	(Kura)
1967-5733	2439823-46	1967 Nov 28 3330	RT-2			8K98 LKI-2-16	MGC8 15F1	NIPP-53		NIPP-53	LC161/1			1000?	-	(Kura)
1967-5734	2439824-46	1967 Nov 29 3330	RT-2			8K98 LKI-2-17	MGC8 15F1	NIPP-53		NIPP-53	LC161/1			1000?	-	(Kura)
1968-542	2439837-62	1968 Mar 28 0200	RT-2			8K98 LKI-2-18	MGC8 15F1	NIPP-53		NIPP-53	LC161/1			1000?	-	(Kura)
1968-543	2439844-42	1968 Mar 28 0200	RT-2			8K98 LKI-2-19	MGC8 15F1	NIPP-53		NIPP-53	LC161/1			1000?	-	(Kura)
1968-546	2440034-56	1968 Jun 27 2200	RT-2			8K98 LKI-2-20	MGC8 15F1	NIPP-53		NIPP-53	LC161/1			1000?	-	(Kura)
1968-547	2440034-42	1968 Jul 17 2200	RT-2			8K98 LKI-2-21	MGC8 15F1	NIPP-53		NIPP-53	LC161/1			1000?	-	(Kura)
1968-548	2440034-44	1968 Aug 23 2240	RT-2			8K98 LKI-2-22	MGC8 15F1	NIPP-53		NIPP-53	LC161/1-1?			1000?	-	(Kura)
1968-549	2440034-45	1968 Aug 23 2240	RT-2			8K98 LKI-2-23	MGC8 15F1	NIPP-53		NIPP-53	LC161/1-2?			1000?	-	(Kura)
1968-5478	2440034-46	1968 Aug 23 2242	RT-2			8K98 LKI-2-24	MGC8 15F1	NIPP-53		NIPP-53	LC161/1-2?			1000?	-	(Kura)
1968-5520	2440183-21	1968 Oct 14 0200	RT-2			8K98 LKI-2-25	MGC8 15F1	NIPP-53		NIPP-53	LC166/3-1?			1000?	-	(Kura)
1968-5711	2440175-21	1968 Oct 24 1730	RT-2			V28501-04	MGC8 15F981	NIPP-53		NIPP-53	LC163/1/18?			1000?	-	(Kura)
1968-5712	2440209-33	1968 Dec 28 2000	RT-2			V28501-08	MGC8 15F981	NIPP-53		NIPP-53	LC163/1/18?			1000?	-	(Kura)
1968-5714	2440219-36	1968 Dec 28 2300	RT-2			V28502-08	MGC8 15F981	NIPP-53		NIPP-53	LC163/1/18?			1000?	-	(Kura)
1968-5813	2440231-50	1969 Jan 10 0300	RT-2			V28501-06	MGC8 15F981	NIPP-53		NIPP-53	LC163/1/18?			1000?	-	(Kura)
1968-5715	2440259-54	1969 Jan 7 0053	RT-2			V28502-08	MGC8 15F981	NIPP-53		NIPP-53	LC163/1/18?			1000?	-	(Kura)
1968-5716	2440264-44	1969 Jul 23 2300	RT-2			V 29502-01	MGC8 15F981	NIPP-53		NIPP-53	LC163/1/18?			1000?	-	(Kura)
1968-5717	2440268-33	1969 Jul 26 2300	RT-2			V 29502-01	MGC8 15F981	NIPP-53		NIPP-53	LC163/1/18?			1000?	-	(Kura)
1968-5718	2440268-33	1969 Aug 28 0804	RT-2			Y 45713-21	MGC8 15F981	NIPP-53		NIPP-53	LC163/1/18?			1000?	-	(Kura)
1968-5719	2440268-33	1969 Aug 28 0804	RT-2			Y 45713-21	MGC8 15F981	NIPP-53		NIPP-53	LC163/1/18?			1000?	-	(Kura)
1968-5719	2440268-33	1969 Aug 28 0804	RT-2			Y 45713-21	MGC8 15F981	NIPP-53		NIPP-53	LC163/1/18?			1000?	-	(Kura)
1968-5719	2440268-33	1969 Aug 28 0804	RT-2			Y 45713-21	MGC8 15F981	NIPP-53		NIPP-53	LC163/1/18?			1000?	-	(Kura)
1968-5719	2440268-33	1969 Aug 28 0804	RT-2			Y 45713-21	MGC8 15F981	NIPP-53		NIPP-53	LC163/1/18?			1000?	-	(Kura)
1968-5719	2440268-33	1969 Aug 28 0804	RT-2			Y 45713-21	MGC8 15F981	NIPP-53		NIPP-53	LC163/1/18?			1000?	-	(Kura)
1968-5719	2440268-33	1969 Aug 28 0804	RT-2			Y 45713-21	MGC8 15F981	NIPP-53		NIPP-53	LC163/1/18?			1000?	-	(Kura)
1968-5719	2440268-33	1969 Aug 28 0804	RT-2			Y 45713-21	MGC8 15F981	NIPP-53		NIPP-53	LC163/1/18?			1000?	-	(Kura)
1968-5719	2440268-33	1969 Aug 28 0804	RT-2			Y 45713-21	MGC8 15F981	NIPP-53		NIPP-53	LC163/1/18?			1000?	-	(Kura)
1968-5719	2440268-33	1969 Aug 28 0804	RT-2			Y 45713-21	MGC8 15F981	NIPP-53		NIPP-53	LC163/1/18?			1000?	-	(Kura)
1968-5719	2440268-33	1969 Aug 28 0804	RT-2			Y 45713-21	MGC8 15F981	NIPP-53		NIPP-53	LC163/1/18?			1000?	-	(Kura)
1968-5719	2440268-33	1969 Aug 28 0804	RT-2			Y 45713-21	MGC8 15F981	NIPP-53		NIPP-53	LC163/1/18?			1000?	-	(Kura)
1968-5719	2440268-33	1969 Aug 28 0804	RT-2			Y 45713-21	MGC8 15F981	NIPP-53		NIPP-53	LC163/1/18?			1000?	-	(Kura)
1968-5719	2440268-33	1969 Aug 28 0804	RT-2			Y 45713-21	MGC8 15F981	NIPP-53		NIPP-53	LC163/1/18?			1000?	-	(Kura)
1968-5719	2440268-33	1969 Aug 28 0804	RT-2			Y 45713-21	MGC8 15F981	NIPP-53		NIPP-53	LC163/1/18?			1000?	-	(Kura)
1968-5719	2440268-33	1969 Aug 28 0804	RT-2			Y 45713-21	MGC8 15F981	NIPP-53		NIPP-53	LC163/1/18?			1000?	-	(Kura)
1968-5719	2440268-33	1969 Aug 28 0804	RT-2			Y 45713-21	MGC8 15F981	NIPP-53		NIPP-53	LC163/1/18?			1000?	-	(Kura)
1968-5719	2440268-33	1969 Aug 28 0804	RT-2			Y 45713-21	MGC8 15F981	NIPP-53		NIPP-53	LC163/1/18?			1000?	-	(Kura)
1968-5719	2440268-33	1969 Aug 28 0804	RT-2			Y 45713-21	MGC8 15F981	NIPP-53		NIPP-53	LC163/1/18?			1000?	-	(Kura)
1968-5719	2440268-33	1969 Aug 28 0804	RT-2			Y 45713-21	MGC8 15F981	NIPP-53		NIPP-53	LC163/1/18?			1000?	-	(Kura)
1968-5719	2440268-33	1969 Aug 28 0804	RT-2			Y 45713-21	MGC8 15F981	NIPP-53		NIPP-53	LC163/1/18?			1000?	-	(Kura)
1968-5719	2440268-33	1969 Aug 28 0804	RT-2			Y 45713-21	MGC8 15F981	NIPP-53		NIPP-53	LC163/1/18?			1000?	-	(Kura)
1968-5719	2440268-33	1969 Aug 28 0804	RT-2			Y 45713-21	MGC8 15F981	NIPP-53		NIPP-53	LC163/1/18?			1000?	-	(Kura)
1968-5719	2440268-33	1969 Aug 28 0804	RT-2			Y 45713-21	MGC8 15F981	NIPP-53		NIPP-53	LC163/1/18?			1000?	-	(Kura)
1968-5719	2440268-33	1969 Aug 28 0804	RT-2			Y 45713-21	MGC8 15F981	NIPP-53		NIPP-53	LC163/1/18?			1000?	-	(Kura)
1968-5719	2440268-33	1969 Aug 28 0804	RT-2			Y 45713-21	MGC8 15F981	NIPP-53		NIPP-53	LC163/1/18?			1000?	-	(Kura)
1968-5719	2440268-33	1969 Aug 28 0804	RT-2			Y 45713										



Mission

Launch

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Mission	FlightCode	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee_Km	Range_Km	Dest
1974-5450	2442393.25	1974 Dec 11 1800	RT-2P	-	45751-612-01	8K98P UBP-1	MCCh 15F982	-	-	NIP-53	-	-	-	1000?	-	Kura
1974-5226	2442407.00	1974 Dec 25 1200	RT-2	-	V 29501-07	8K98 UBP-25	MCCh 15F981	-	-	NIP-53	LC163/1/18?	-	-	1000?	-	Kura
1975-5365	2442425.90	1975 Jan 13 0930	RT-2P	-	45721-612-02	8K98 UBP-25	MCCh 15F982	-	-	NIP-53	-	-	-	1000?	-	Kura
1975-5366	2442482.37	1975 Mar 10 2059:189	RT-2P	-	64646-812-03	8K98P UBP-3	MCCh 15F982	-	-	NIP-53	-	-	-	1000?	-	Kura
1975-5367	2442637.21	1975 Aug 12 1705	RT-2P	-	64647-221-44	8K98P UBP-4	MCCh 15F982	-	-	NIP-53	-	-	-	1000?	-	Kura
1975-5368	2442679.22	1975 Sep 23 1720	RT-2	-	64647-221-44	8K98 UBP-26	MCCh 15F981	-	-	NIP-53	-	-	-	1000?	-	Kura
1975-5369	2442715.08	1975 Oct 29 1355	RT-2P	-	64647-221-41	8K98 UBP-27	MCCh 15F982	-	-	NIP-53	-	-	-	1000?	-	Kura
1975-5370	2442764.46	1975 Dec 17 2300	RT-2P	-	45721-612-04	8K98P UBP-5	MCCh 15F982	-	-	NIP-53	-	-	-	1000?	-	Kura
1975-5371	2442771.83	1975 Dec 25 0800	RT-2	-	64647-221-42	8K98 UBP-28	MCCh 15F981	-	-	NIP-53	-	-	-	1000?	-	Kura
1976-5368	2442813.44	1976 Feb 4 2240	RT-2P	-	29542-713-04	8K98P UBP-6	MCCh 15F982	-	-	NIP-53	-	-	-	40?	-	(Kura)
1976-5369	2443021.48	1976 Aug 30 2330	RT-2P	-	V 29501-10	8K98 UBP-29	MCCh 15F981	-	-	NIP-53	LC163/1/18?	-	-	1000?	-	Kura
1976-5370	2443100.11	1976 Nov 17 1445	RT-2	-	V 29502-07	8K98 UBP-30	MCCh 15F981	-	-	NIP-53	LC163/1/18?	-	-	1000?	-	Kura
1976-5372	2443107.09	1976 Nov 24 1415	RT-2	-	V 29503-02	8K98 UBP-31	MCCh 15F981	-	-	NIP-53	LC163/1/18?	-	-	1000?	-	Kura
1976-5373	2443120.33	1976 Dec 7 2000	RT-2P	-	V 29503-02	8K98 UBP-31	MCCh 15F981	-	-	NIP-53	-	-	-	40?	-	(Kura)
1976-5374	2443130.06	1976 Dec 17 1320	RT-2	-	V 29502-04	8K98 UBP-32	MCCh 15F981	-	-	NIP-53	LC163/1/18?	-	-	1000?	-	Kura
1976-5375	2443137.02	1976 Dec 24 1225	RT-2	-	V 29503-04	8K98 UBP-33	MCCh 15F981	-	-	NIP-53	LC163/1/18?	-	-	1000?	-	Kura
1977-5360	2443203.37	1977 Feb 25 2050	RT-2P	-	V 29503-04	8K98 UBP-34	MCCh 15F982	-	-	NIP-53	-	-	-	1000?	-	Kura
1977-5369	2443240.67	1977 Apr 7 0400	RT-2P	-	29532-713-10	8K98 UBP-10	MCCh 15F982	-	-	NIP-53	-	-	-	1000?	-	Kura
1977-5340	2443255.67	1977 May 28 0800	RT-2P	-	45735-114-04	8K98 UBP-35	MCCh 15F981	-	-	NIP-53	LC163/1/18?	-	-	1000?	-	Kura
1977-5341	2443259.85	1977 May 28 0800	RT-2P	-	V 29503-03	8K98 UBP-36	MCCh 15F981	-	-	NIP-53	LC163/1/18?	-	-	1000?	-	Kura
1977-5342	2443324.77	1977 Jun 30 0630	RT-2P	-	V 29503-03	8K98 UBP-36	MCCh 15F981	-	-	NIP-53	LC163/1/18?	-	-	1000?	-	Kura
1977-5343	2443380.75	1977 Aug 25 0600	RT-2P	-	45735-114-06	8K98 UBP-11	MCCh 15F981	-	-	NIP-53	LC163/1/18?	-	-	1000?	-	Kura
1977-5344	2443400.55	1977 Sep 14 0106	RT-2	-	V 29503-05	8K98 UBP-37	MCCh 15F981	-	-	NIP-53	LC163/1/18?	-	-	1000?	-	Kura
1977-5345	2443415.51	1977 Sep 29 0009	RT-2	7	V 29503-01	8K98 UBP-38	MCCh 15F981	-	-	NIP-53	LC163/1/18?	-	-	1000?	-	Kura
1977-5346	2443530.97	1977 Oct 14 1110	RT-2	-	Vu29501-07	8K98 UBP-39	MCCh 15F981	-	-	NIP-53	LC163/1/18?	-	-	1000?	-	Kura
1977-5347	2443505.22	1977 Dec 27 1715	RT-2	-	Vu29501-11	8K98 UBP-39	MCCh 15F981	-	-	NIP-53	LC163/1/18?	-	-	1000?	-	Kura
1976-5282	2443523.85	1976 Apr 25 0830	RT-2P	-	64675-215-01	8K98 UBP-43	MCCh 15F981	-	-	NIP-53	LC163/1/18?	-	-	1000?	-	Kura
1976-5283	2443564.79	1976 May 18 0656	RT-2	-	Vu29501-03	8K98 UBP-40	MCCh 15F981	-	-	NIP-53	LC163/1/18?	-	-	1000?	-	Kura
1976-5284	2443582.63	1976 Jun 23 0755	RT-2	-	Vu29501-09	8K98 UBP-41	MCCh 15F981	-	-	NIP-53	LC163/1/18?	-	-	1000?	-	Kura
1976-5285	2443702.65	1976 Jul 12 1332	RT-2	-	Vu29501-10	8K98 UBP-42	MCCh 15F981	-	-	NIP-53	LC163/1/18?	-	-	1000?	-	Kura
1976-5286	2443720.67	1976 Jul 31 0400	RT-2P	-	64675-215-05	8K98P UBP-14	MCCh 15F982	-	-	NIP-53	LC163/1/18?	-	-	1000?	-	Kura
1976-5287	2443786.75	1976 Oct 5 0600	RT-2	-	Vu29501-06	8K98 UBP-43	MCCh 15F981	-	-	NIP-53	LC163/1/18?	-	-	1000?	-	Kura
1976-5288	2443890.42	1979 Jan 16 2200	RT-2	-	Vu6412-31	8K98 UBP-44	MCCh 15F981	-	-	NIP-53	-	-	-	1000?	-	Kura
1979-5278	2443832.62	1979 Feb 25 0300	RT-2	-	Vu6412-31	8K98 UBP-44	MCCh 15F981	-	-	NIP-53	-	-	-	1000?	-	Kura
1979-5280	2443860.50	1979 Apr 11 0300	RT-2	-	Vu6412-25	8K98 UBP-45	MCCh 15F981	-	-	NIP-53	-	-	-	1000?	-	Kura
1979-5281	2443868.62	1979 Apr 25 0300	RT-2P	-	Vu6412-24	8K98 UBP-46	MCCh 15F981	-	-	NIP-53	-	-	-	1000?	-	Kura
1979-5282	2444084.80	1979 Jul 30 0710	RT-2P	-	29597-186-04	8K98P UBP-15	MCCh 15F982	-	-	NIP-53	-	-	-	1000?	-	Kura
1979-5283	2444145.19	1979 Sep 28 1640	RT-2	-	29597-186-05	8K98P UBP-16	MCCh 15F982	-	-	NIP-53	-	-	-	1000?	-	Kura
1979-5284	2444141.21	1979 Oct 24 1700	RT-2	-	Vu29501-15	8K98 UBP-47	MCCh 15F981	-	-	NIP-53	-	-	-	1000?	-	Kura
1979-5285	2444215.06	1979 Dec 14 0600	RT-2	-	Vu29501-12	8K98 UBP-48	MCCh 15F981	-	-	NIP-53	-	-	-	1000?	-	Kura
1980-5266	2444327.96	1980 Apr 23 0845	RT-2P	-	45735-317-04	8K98 UBP-17	MCCh 15F981	-	-	NIP-53	-	-	-	1000?	-	Kura
1980-5267	2444301.26	1980 May 27 1640	RT-2P	-	45735-317-05	8K98 UBP-18	MCCh 15F981	-	-	NIP-53	-	-	-	1000?	-	Kura
1980-5268	2444341.66	1980 Jun 3 1940	RT-2	-	Vu6412-22	8K98 UBP-50	MCCh 15F981	-	-	NIP-53	-	-	-	1000?	-	Kura
1980-5269	2444404.32	1980 Jun 30 1700	RT-2	-	Vu6412-22	8K98 UBP-51	MCCh 15F981	-	-	NIP-53	-	-	-	1000?	-	Kura
1980-5269	2444476.21	1980 Aug 24 1700	RT-2P	-	Vu6412-23	8K98 UBP-51	MCCh 15F981	-	-	NIP-53	-	-	-	0?	-	Kura
1980-5270	2444531.29	1980 Sep 25 1000	RT-2	-	Vu29521-31	8K98P UBP-18	MCCh 15F982	-	-	NIP-53	-	-	-	1000?	-	Kura
1980-5271	2444573.32	1980 Oct 30 1945	RT-2	-	Vu29521-31	8K98 UBP-18	MCCh 15F982	-	-	NIP-53	-	-	-	1000?	-	Kura
1980-5272	2444573.32	1980 Oct 30 1945	RT-2	-	Vu29521-32	8K98 UBP-19	MCCh 15F981	-	-	NIP-53	-	-	-	1000?	-	Kura
1981-5211	2444716.31	1981 May 21 1920	RT-2	-	V29502-06	8K98 UBP-55	MCCh 15F981	-	-	NIP-53	-	-	-	1000?	-	Kura
1981-5211	2444716.31	1981 May 21 1920	RT-2	-	V29502-03	8K98 UBP-56	MCCh 15F981	-	-	NIP-53	-	-	-	1000?	-	Kura
1981-5211	2444716.31	1981 May 21 1920	RT-2P	-	45794-418-04	8K98P UBP-19	MCCh 15F982	-	-	NIP-53	-	-	-	1000?	-	Kura
1981-5211	2444716.31	1981 Jun 30 0626	RT-2P	-	45753-317-09	8K98P UBP-20	MCCh 15F982	-	-	NIP-53	-	-	-	1000?	-	Kura
1981-5220	2444814.66	1981 Jul 29 0435	RT-2P	-	64646-812-53	8K98P UBP-21	MCCh 15F982	-	-	NIP-53	-	-	-	1000?	-	Kura
1981-5221	2444830.63	1981 Aug 14 0313	RT-2	-	29557-211-43	8K98 UBP-57	MCCh 15F981	-	-	NIP-53	-	-	-	1000?	-	Kura
1981-5222	2444862.63	1981 Aug 15 0333	RT-2	-	Vu65713-29	8K98 UBP-57	MCCh 15F981	-	-	NIP-53	-	-	-	1000?	-	Kura
1981-5223	2444876.46	1981 Sep 15 2326	RT-2	-	29557-211-45	8K98 UBP-59	MCCh 15F981	-	-	NIP-53	-	-	-	1000?	-	Kura
1981-5224	2444920.90	1981 Sep 28 2326	RT-2	-	29557-211-45	8K98 UBP-59	MCCh 15F981	-	-	NIP-53	-	-	-	1000?	-	Kura
1981-5225	2444982.21	1981 Nov 13 0830	RT-2	-	64647-221-34	8K98 UBP-61	MCCh 15F981	-	-	NIP-53	-	-	-	1000?	-	Kura
1981-5226	2444982.21	1981 Nov 13 0830	RT-2	-	64647-221-34	8K98 UBP-61	MCCh 15F981	-	-	NIP-53	-	-	-	1000?	-	Kura
1981-5226	2444982.21	1981 Nov 13 0830	RT-2	-	64647-221-34	8K98 UBP-61	MCCh 15F981	-	-	NIP-53	-	-	-	1000?	-	Kura
1981-5226	2444982.21	1981 Nov 13 0830	RT-2	-	64647-221-34	8K98 UBP-61	MCCh 15F981	-	-	NIP-53	-	-	-	1000?	-	Kura
1981-5226	2444982.21	1981 Nov 13 0830	RT-2	-	64647-221-34	8K98 UBP-61	MCCh 15F981	-	-	NIP-53	-	-	-	1000?	-	Kura
1981-5226	2444982.21	1981 Nov 13 0830	RT-2	-	64647-221-34	8K98 UBP-61	MCCh 15F981	-	-	NIP-53	-	-	-	1000?	-	Kura
1981-5226	2444982.21	1981 Nov 13 0830	RT-2	-	64647-221-34	8K98 UBP-61	MCCh 15F981	-	-	NIP-53	-	-	-	1000?	-	Kura
1981-5226	2444982.21	1981 Nov 13 0830	RT-2	-	64647-221-34	8K98 UBP-61	MCCh 15F981	-	-	NIP-53	-	-	-	1000?	-	Kura
1981-5226	2444982.21	1981 Nov 13 0830	RT-2	-	64647-221-34	8K98 UBP-61	MCCh 15F981	-	-	NIP-53	-	-	-	1000?	-	Kura
1981-5226	2444982.21	1981 Nov 13 0830	RT-2	-	64647-221-34	8K98 UBP-61	MCCh 15F981	-	-	NIP-53	-	-	-	1000?	-	Kura
1981-5226	2444982.21	1981 Nov 13 0830	RT-2	-	64647-221-34	8K98 UBP-61	MCCh 15F981	-	-	NIP-53	-	-	-	1000?	-	Kura
1981-5226	2444982.21	1981 Nov 13 0830	RT-2	-	64647-221-34	8K98 UBP-61	MCCh 15F981	-	-	NIP-53	-	-	-	1000?	-	Kura
1981-5226	2444982.21	1981 Nov 13 0830	RT-2	-	64647-221-34	8K98 UBP-61	MCCh 15F981	-	-	NIP-53	-	-	-	1000?	-	Kura
1981-5226	2444982.21	1981 Nov 13 0830	RT-2	-	64647-221-34	8K98 UBP-61	MCCh 15F981	-	-	NIP-53	-	-	-	1000?	-	Kura
1981-5226	2444982.21	1981 Nov 13 0830	RT-2	-	64647-221-34	8K98 UBP-61	MCCh 15F981	-	-	NIP-53	-	-	-	1000?	-	Kura
1981-5226	2444982.21	1981 Nov 13 0830	RT-2	-	64647-221-34	8K98 UBP-61	MCCh 15F981	-	-	NIP-53	-	-	-	1000?	-	Kura
1981-5226	2444982.21	1981 Nov 13 08														





Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	DrPay	Agency	Launch_Code	Group	Category	LfCite	Cite	Notes
1974-5450	2442393.25	1974 Dec 11 1800	RT-2P	-	45751-612-01	0.000	RWSN	MS	-	Test	RML	-	-
1974-5226	2442407.00	1974 Dec 25 1200	RT-2	-	V 29501-07	0.000	RWSN	MS	-	Test	RML	-	-
1975-5365	2442425.90	1975 Jan 13 0930	RT-2P	-	45721-612-02	0.000	RWSN	MS	-	Test	RML	-	-
1975-5366	2442482.37	1975 Mar 10 2059:59	RT-2P	-	45721-612-03	0.000	RWSN	MS	-	Test	RML	-	-
1975-5367	2442637.21	1975 Aug 12 1705	RT-2P	-	64646-812-54	0.000	RWSN	MS	-	Test	RML	-	-
1975-5368	2442679.22	1975 Sep 23 1720	RT-2	-	64647-221-44	0.000	RWSN	MS	-	Test	RML	-	-
1975-5369	2442715.08	1975 Oct 29 1385	RT-2	-	64647-221-41	0.000	RWSN	MS	-	Test	RML	-	-
1975-5370	2442764.46	1975 Dec 17 2300	RT-2P	-	45721-612-04	0.000	RWSN	MS	-	Test	RML	-	-
1975-5371	2442771.53	1975 Dec 25 0800	RT-2	-	64647-221-42	0.000	RWSN	MS	-	Test	RML	-	-
1976-5368	2442813.44	1976 Feb 4 2240	RT-2P	-	-	0.000	RWSN	MF	-	Test	RML	-	-
1976-5369	2442867.44	1976 Mar 29 2230	RT-2P	-	29542-713-04	0.000	RWSN	MS	-	Test	RML	-	-
1976-5370	2443021.48	1976 Aug 30 2330	RT-2	-	V 29501-10	0.000	RWSN	MS	-	Test	RML	-	-
1976-5371	2443100.11	1976 Nov 17 1445	RT-2	-	V 29502-07	0.000	RWSN	MS	-	Test	RML	-	-
1976-5372	2443107.09	1976 Nov 24 1415	RT-2	-	V 29503-02	0.000	RWSN	MS	-	Test	RML	-	-
1976-5373	2443120.33	1976 Dec 7 2000	RT-2P	-	-	0.000	RWSN	MF	-	Test	RML	-	-
1976-5374	2443137.02	1976 Dec 17 1320	RT-2	-	V 29502-04	0.000	RWSN	MS	-	Test	RML	-	-
1976-5375	2443137.02	1976 Dec 24 1225	RT-2	-	V 29503-04	0.000	RWSN	MS	-	Test	RML	-	-
1977-5359	2443203.37	1977 Feb 28 2050	RT-2P	-	V 29501-12	0.000	RWSN	MS	-	Test	RML	-	-
1977-5359	2443240.67	1977 Apr 26 0405	RT-2P	-	29552-713-10	0.000	RWSN	MS	-	Test	RML	-	-
1977-5340	2443265.67	1977 May 26 0800	RT-2P	-	V 47395-114-04	0.000	RWSN	MS	-	Test	RML	-	-
1977-5341	2443289.53	1977 May 26 0800	RT-2	-	V 29502-06	0.000	RWSN	MS	-	Test	RML	-	-
1977-5342	2443324.77	1977 Jun 30 0630	RT-2P	-	V 29503-03	0.000	RWSN	MS	-	Test	RML	-	-
1977-5343	2443360.75	1977 Aug 25 0600	RT-2P	-	47395-114-06	0.000	RWSN	MS	-	Test	RML	-	-
1977-5344	2443415.51	1977 Sep 14 0106	RT-2	?	V 29503-05	0.000	RWSN	MS	-	Test	RML	-	-
1977-5345	2443460.57	1977 Sep 29 0009	RT-2	-	V 29501-07	0.000	RWSN	MS	-	Test	RML	-	-
1977-5346	2443460.57	1977 Oct 17 1715	RT-2	-	YU29501-11	0.000	RWSN	MS	-	Test	RML	-	-
1977-5347	2443505.22	1977 Dec 27 1715	RT-2	-	YU29501-11	0.000	RWSN	MS	-	Test	RML	-	-
1978-5252	2443523.55	1978 Apr 25 0630	RT-2P	-	64675-216-01	0.000	RWSN	MS	-	Test	RML	-	-
1978-5253	2443546.79	1978 Apr 18 0656	RT-2	-	YU29501-03	0.000	RWSN	MS	-	Test	RML	-	-
1978-5254	2443662.53	1978 Jun 23 0755	RT-2	-	YU29501-09	0.000	RWSN	MS	-	Test	RML	-	-
1978-5255	2443702.06	1978 Jul 12 1332	RT-2	-	YU29501-10	0.000	RWSN	MS	-	Test	RML	-	-
1978-5256	2443720.57	1978 Jul 31 0400	RT-2P	-	64675-216-05	0.000	RWSN	MS	-	Test	RML	-	-
1978-5257	2443766.75	1978 Oct 5 0900	RT-2	-	YU29501-05	0.000	RWSN	MS	-	Test	RML	-	-
1979-5276	2443890.42	1979 Jun 16 2200	RT-2	-	YU64612-31	0.000	RWSN	MS	-	Test	RML	-	-
1979-5279	2443932.62	1979 Feb 28 0500	RT-2	-	YU64612-25	0.000	RWSN	MS	-	Test	RML	-	-
1979-5280	2443960.50	1979 Apr 17 0300	RT-2P	-	YU64612-24	0.000	RWSN	MS	-	Test	RML	-	-
1979-5281	2443966.62	1979 Apr 25 0300	RT-2P	-	29597-166-04	0.000	RWSN	MS	-	Test	RML	-	-
1979-5282	2444064.50	1979 Jul 30 0710	RT-2P	-	29597-166-05	0.000	RWSN	MS	-	Test	RML	-	-
1979-5283	2444143.19	1979 Sep 26 1640	RT-2	-	YU29501-13	0.000	RWSN	MS	-	Test	RML	-	-
1979-5284	2444141.21	1979 Oct 24 1700	RT-2	-	YU29501-12	0.000	RWSN	MS	-	Test	RML	-	-
1979-5285	2444353.68	1980 Dec 5 1400	RT-2P	-	YU64612-26	0.000	RWSN	MS	-	Test	RML	-	-
1890-5266	2444367.26	1890 Apr 23 0345	RT-2	-	47395-114-04	0.000	RWSN	MS	-	Test	RML	-	-
1890-5267	2444371.32	1890 May 27 1840	RT-2	-	YU64612-30	0.000	RWSN	MS	-	Test	RML	-	-
1890-5268	2444401.32	1890 Jun 10 1940	RT-2	-	YU64612-22	0.000	RWSN	MS	-	Test	RML	-	-
1890-5269	2444476.22	1890 Jul 31 1940	RT-2	-	YU64612-23	0.000	RWSN	MS	-	Test	RML	-	-
1890-5270	2444509.25	1890 Aug 26 1700	RT-2P	-	YU64612-21	0.000	RWSN	MS	-	Test	RML	-	-
1890-5271	2444533.29	1890 Sep 25 1945	RT-2	-	YU64612-22	0.000	RWSN	MS	-	Test	RML	-	-
1890-5272	2444574.17	1890 Oct 29 1945	RT-2	-	YU64612-23	0.000	RWSN	MS	-	Test	RML	-	-
1951-5217	2444774.31	1951 May 21 1600	RT-2	-	YU29501-31	0.000	RWSN	MS	-	Test	RML	-	-
1951-5218	2444774.31	1951 May 21 1600	RT-2	-	YU29501-27	0.000	RWSN	MS	-	Test	RML	-	-
1951-5219	2444774.31	1951 Jun 15 1700	RT-2P	-	YU29501-05	0.000	RWSN	MS	-	Test	RML	-	-
1951-5220	2444814.69	1951 Jun 15 0506	RT-2P	-	45792-118-04	0.000	RWSN	MS	-	Test	RML	-	-
1951-5221	2444814.69	1951 Jun 29 0420	RT-2P	-	45792-118-05	0.000	RWSN	MS	-	Test	RML	-	-
1951-5222	2444830.63	1951 Jul 14 0313	RT-2	-	64646-812-53	0.000	RWSN	MS	-	Test	RML	-	-
1951-5223	2444862.52	1951 Aug 15 0333	RT-2	-	29557-211-43	0.000	RWSN	MS	-	Test	RML	-	-
1951-5224	2444876.48	1951 Sep 28 2326	RT-2	-	YU45713-29	0.000	RWSN	MS	-	Test	RML	-	-
1951-5225	2444920.90	1951 Sep 28 2326	RT-2	-	29557-211-45	0.000	RWSN	MS	-	Test	RML	-	-
1951-5226	2444920.90	1951 Sep 28 2326	RT-2	-	29557-211-46	0.000	RWSN	MS	-	Test	RML	-	-
1951-5227	2444962.21	1951 Oct 13 0931	RT-2	-	64647-221-34	0.000	RWSN	MS	-	Test	RML	-	-
1951-5228	2445020.12	1952 Dec 20 1455	RT-2	-	YU45713-30	0.000	RWSN	MS	-	Test	RML	-	-
1951-5229	2445020.12	1952 Dec 20 1455	RT-2	-	YU45713-25	0.000	RWSN	MS	-	Test	RML	-	-
1951-5230	2445020.12	1952 Dec 20 1455	RT-2	-	-	0.000	RWSN	MS	-	Test	RML	-	-
1951-5231	2445020.12	1952 Dec 20 1455	RT-2	-	29557-211-42	0.000	RWSN	MS	-	Test	RML	-	-
1951-5232	2445020.12	1952 Dec 20 1455	RT-2	-	64647-221-46	0.000	RWSN	MS	-	Test	RML	-	-
1951-5233	2445020.12	1952 Dec 20 1455	RT-2	-	-	0.000	RWSN	MS	-	Test	RML	-	-
1951-5234	2445020.12	1952 Dec 20 1455	RT-2	-	-	0.000	RWSN	MS	-	Test	RML	-	-
1951-5235	2445020.12	1952 Dec 20 1455	RT-2	-	-	0.000	RWSN	MS	-	Test	RML	-	-
1951-5236	2445020.12	1952 Dec 20 1455	RT-2	-	-	0.000	RWSN	MS	-	Test	RML	-	-
1951-5237	2445020.12	1952 Dec 20 1455	RT-2	-	-	0.000	RWSN	MS	-	Test	RML	-	-
1951-5238	2445020.12	1952 Dec 20 1455	RT-2	-	-	0.000	RWSN	MS	-	Test	RML	-	-
1951-5239	2445020.12	1952 Dec 20 1455	RT-2	-	-	0.000	RWSN	MS	-	Test	RML	-	-
1951-5240	2445020.12	1952 Dec 20 1455	RT-2	-	-	0.000	RWSN	MS	-	Test	RML	-	-
1951-5241	2445020.12	1952 Dec 20 1455	RT-2	-	-	0.000	RWSN	MS	-	Test	RML	-	-
1951-5242	2445020.12	1952 Dec 20 1455	RT-2	-	-	0.000	RWSN	MS	-	Test	RML	-	-
1951-5243	2445020.12	1952 Dec 20 1455	RT-2	-	-	0.000	RWSN	MS	-	Test	RML	-	-
1951-5244	2445020.12	1952 Dec 20 1455	RT-2	-	-	0.000	RWSN	MS	-	Test	RML	-	-
1951-5245	2445020.12	1952 Dec 20 1455	RT-2	-	-	0.000	RWSN	MS	-	Test	RML	-	-
1951-5246	2445020.12	1952 Dec 20 1455	RT-2	-	-	0.000	RWSN	MS	-	Test	RML	-	-
1951-5247	2445020.12	1952 Dec 20 1455	RT-2	-	-	0.000	RWSN	MS	-	Test	RML	-	-
1951-5248	2445020.12	1952 Dec 20 1455	RT-2	-	-	0.000	RWSN	MS	-	Test	RML	-	-
1951-5249	2445020.12	1952 Dec 20 1455	RT-2	-	-	0.000	RWSN	MS	-	Test	RML	-	-
1951-5250	2445020.12	1952 Dec 20 1455	RT-2	-	-	0.000	RWSN	MS	-	Test	RML	-	-
1951-5251	2445020.12	1952 Dec 20 1455	RT-2	-	-	0.000	RWSN	MS	-	Test	RML	-	-
1951-5252	2445020.12	1952 Dec 20 1455	RT-2	-	-	0.000	RWSN	MS	-	Test	RML	-	-
1951-5253	2445020.12	1952 Dec 20 1455	RT-2	-	-	0.000	RWSN	MS	-	Test	RML	-	-
1951-5254	2445020.12	1952 Dec 20 1455	RT-2	-	-	0.000	RWSN	MS	-	Test	RML	-	-
1951-5255	2445020.12	1952 Dec 20 1455	RT-2	-	-	0.000	RWSN	MS	-	Test	RML	-	-
1951-5256	2445020.12	1952 Dec 20 1455	RT-2	-	-	0.000	RWSN	MS	-	Test	RML	-	-
1951-5257	2445020.12	1952 Dec 20 1455	RT-2	-	-	0.000	RWSN	MS	-	Test	RML	-	-
1951-5258	2445020.12	1952 Dec 20 1455	RT-2	-	-	0.000	RWSN	MS	-	Test	RML	-	-
1951-5259	2445020.12	1952 Dec 20 1455	RT-2	-	-	0.000	RWSN	MS	-	Test	RML	-	-
1951-5260	2445020.12	1952 Dec 20 1455	RT-2	-	-	0.000	RWSN	MS	-	Test	RML	-	-
1951-5261	2445020.12	1952 Dec 20 1455	RT-2	-	-	0.000	RWSN	MS	-	Test	RML	-	-
1951-5262	2445020.12	1952 Dec 20 1455	RT-2	-	-	0.000	RWSN	MS	-	Test	RML	-	-
1951-5263	2445020.12	1952 Dec 20 1455	RT-2	-	-	0.000	RWSN	MS	-	Test	RML	-	-
1951-5264	2445020.12	1952 Dec 20 1455	RT-2	-	-	0.000	RWSN	MS	-	Test	RML	-	-
1951-5265	2445020.12												



Launch

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Mission	FlightCode	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee km	Range km	Dest
1967-A171	2439490.50	1967	RT-20P	-	IRS	8K99 BR-I	-	-	-	PAVL	-	-	-	1?	-	PAVL
1967-A122	2439787.79	1967 Oct 24 0700	RT-20P	-	4L	8K99 LK1-1	MOCh 15F993	-	-	MIIP-53	LG157	-	-	0?	-	(Bratsk)
1967-A158	2439796.83	1967 Nov 1 0800	RT-20P	-	5L	8K99 LK1-2	MOCh 15F993	-	-	MIIP-53	LG157	-	-	0?	-	(Bratsk)
1968-A60	2439898.62	1968 Feb 12 0300	RT-20P	-	7L	8K99 LK1-3	MOCh 15F993	-	-	MIIP-53	LG157	-	-	0?	-	(Bratsk)
1968-A50	2439943.62	1968 Mar 28 0300	RT-20P	-	8L	8K99 LK1-4	MOCh 15F993	-	-	MIIP-53	LG157	-	-	0?	-	(Bratsk)
1968-S47	2440026.29	1968 Jun 19 1900	RT-20P	-	V 22500-10L	8K99 LK1-5	MOCh 15F993	-	-	MIIP-53	LG157	-	-	1000?	-	Bratsk
1968-S48	2440040.25	1968 Jul 2 1800	RT-20P	-	V 22500-09L	8K99 LK1-6	MOCh 15F993	-	-	MIIP-53	LG157	-	-	1000?	-	Bratsk
1968-A51	2440086.25	1968 Aug 16 1800	RT-20P	-	11L	8K99 LK1-7	MOCh 15F993	-	-	MIIP-53	LG1577	-	-	40?	-	(Bratsk)
1968-A52	2440103.25	1968 Sep 3 1800	RT-20P	-	15L	8K99 LK1-8	MOCh 15F993	-	-	MIIP-53	LG1587	-	-	40?	-	(Kura)
1968-S49	2440151.21	1968 Oct 21 1700	RT-20P	-	14L	8K99 LK1-9	MOCh 15F993	-	-	MIIP-53	LG1587	-	-	0	-	(Kura)
1968-S22	2440403.83	1968 Jan 1 0800	RT-20P	-	V 22500-16L	8K99 LK1-10	MOCh 15F993	-	-	MIIP-53	LG158	-	-	1000?	-	Kura
1969-A01	2440426.79	1969 Jan 23 0700	RT-20P	-	Yu22500-12L	8K99 LK1-11	MOCh 15F993	-	-	MIIP-53	LG158	-	-	1000?	-	Kura
1969-A138	2440442.79	1969 Aug 9 0700	RT-20P	-	V 22500-13L	8K99 LK1-12	MOCh 15F993	-	-	MIIP-53	LG158	-	-	1000?	-	Kura



Launch

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	OrbPay	Agency	Launch_Code	Group	Category	LTCite	Cite	Notes
1967-A171	2439490.50	1967 Oct 24 0700	RT-20P	-	IRS	0.000	RVSN	MS	-	Test	RML	-	-
1967-A122	2439787.79	1967 Nov 1 0800	RT-20P	-	4L	0.000	RVSN	RF	-	Test	RML	-	-
1967-A158	2439795.83	1967 Nov 12 0300	RT-20P	-	5L	0.000	RVSN	RF	-	Test	RML	-	-
1968-A460	2439698.62	1968 Feb 12 0300	RT-20P	-	7L	0.000	RVSN	RF	-	Test	RML	-	-
1968-A450	2439943.62	1968 Mar 28 0300	RT-20P	-	8L	0.000	RVSN	RF	-	Test	RML	-	-
1968-A47	2440026.29	1968 Jun 18 1900	RT-20P	-	V 22500-10L	0.000	RVSN	MS	-	Test	RML	-	-
1968-A48	2440040.26	1968 Jul 2 1800	RT-20P	-	V 22500-09L	0.000	RVSN	MS	-	Test	RML	-	-
1968-A51	2440085.26	1968 Aug 16 1800	RT-20P	-	11L	0.000	RVSN	RF	-	Test	RML	-	-
1968-A52	2440103.26	1968 Sep 3 1800	RT-20P	-	15L	0.000	RVSN	RF	-	Test	RML	-	-
1968-A49	2440151.21	1968 Oct 21 1700	RT-20P	-	14L	0.000	RVSN	RF	-	Test	RML	-	-
1969-A01	2440403.83	1969 Jul 1 0800	RT-20P	-	Vz22500-16L	0.000	RVSN	MS	-	Test	RML	-	-
1969-A01	2440425.79	1969 Jul 23 0700	RT-20P	-	Vz22500-12L	0.000	RVSN	MS	-	Test	RML	-	-
1969-A138	2440442.79	1969 Aug 9 0700	RT-20P	-	V 22500-13L	0.000	RVSN	MS	-	Test	RML	-	-





Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Mission	Launch_FlightCode	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee_Km	Range_Km	Dest
194E-403	2432697.50	1948 May 26	MATV	-	-	-	-	-	-	HADC	MATV	-	-	1?	-	-
194E-409	2432804.50	1948 Sep 10	MATV	-	-	-	-	-	-	HADC	MATV	-	-	16	-	-
194E-438	2432839.50	1948 Oct 15	MATV	-	-	-	-	-	-	HADC	MATV	-	-	16	-	-
194E-440	2432860.50	1948 Nov 5	MATV	-	-	-	-	-	-	HADC	MATV	-	-	0?	-	-



Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Amount	Agency	Launch_Code	Group	Category	LTCIte	Cite	Notes
1948-A03	2432697.50	1948 May 26	NATIV	-	-	0.000	WADD	MF	-	Test	Alway-Shadow	-	-
1948-A09	2432804.50	1948 Sep 10	NATIV	-	-	0.000	WADD	MS	-	Test	AASHZ6-74	-	-
1948-A38	2432839.50	1948 Oct 15	NATIV	-	-	0.000	WADD	MS	-	Test	urb. cso.uiuc.edu	-	-
1948-A40	2432860.50	1948 Nov 5	NATIV	-	-	0.000	WADD	MF	-	Test	AASHZ6-74	-	-



Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Launch			Ascent_Site	Ascent_Pad	Apogee km	Range km	Dest
							Mission	FlightCode	Platform					
1987-M41	2446795.50	1987	RX-2E0-LPN	-	-	-	-	-	-	-	70	-	-	
1995-M01	2449717.50	1995	RX-2E0-LPN	-	-	-	-	LAP	-	-	70	-	-	
2004-M05	2453277.53	2004 Sep 29 0050	RX-2E0-LPN	?	-	-	-	LAP	-	-	70?	-	-	
2004-M06	2453277.60	2004 Sep 29 0225	RX-2E0-LPN	?	-	-	-	LAP	-	-	70?	-	-	
2004-S84	2453278.42	2004 Sep 29 2200	RX-2E0-LPN	?	-	[unconfirmed]	-	LAP	-	-	100?	-	-	
2004-S85	2453278.62	2004 Sep 30 0300	RX-2E0-LPN	?	-	[unconfirmed]	-	LAP	-	-	100?	-	-	
2005-M01	2453522.54	2005 Jun 1 0100	RX-2E0-LPN	?	-	-	-	LAP	-	-	70?	-	-	
2007-M04	2454270.50	2007 Jun 19	RX-2E0-LPN	-	-	-	-	LAP	-	-	50?	-	-	



Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	DrPay	Agency	Launch_Code	Group	Category	LTCite	Cite	Notes
1987-H41	2446795.50	1987	RX-260-LPH	-	-	0.000	LAPAN	SS	LAPAN/	Test	Alway	-	-
1996-H01	2449717.50	1996	RX-260-LPH	-	-	0.000	LAPAN	SS	LAPAN/	Test	Alway	-	-
2004-H05	2453277.53	2004 Sep 28 0650	RX-260-LPH	?	-	0.000	LAPAN	SS	LAPAN/	Aeron	Wire	-	-
2004-H06	2453277.60	2004 Sep 28 0225	RX-260-LPH	?	-	0.000	LAPAN	SS	LAPAN/	Aeron	Wire	-	-
2004-S54	2453278.42	2004 Sep 28 2200	RX-260-LPH	?	-	0.000	LAPAN	SS	LAPAN/	Ionos?	Wire	Rigg	-
2004-S55	2453278.62	2004 Sep 30 0300	RX-260-LPH	?	-	0.000	LAPAN	SS	LAPAN/	Ionos?	Wire	Rigg	-
2006-H01	2453522.54	2005 Jun 1 0100	RX-260-LPH	?	-	0.000	LAPAN	SS	LAPAN/	Test	Wire	-	-
2007-H04	2454270.50	2007 Jun 19	RX-260-LPH	-	-	0.000	LAPAN	SS	LAPAN/	Test	www.lapan.go.id	-	-





Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Launch				Ascent_Pad	Apogee km	Range km	Dest
							Mission	FlightCode	Platform	Launch_Site				
2008-402	2454605.47	2008 May 18 2315	RX-320	-	-	RX-3228.02.01	-	-	-	-	-	42	-	-
2008-409	2454649.50	2008 Jul 2	RX-320	-	-	-	LAP	-	-	-	-	40?	-	-



Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Drbby	Agency	Launch_Code	Group	Category	LTCite	Cite	Notes
2008-A02	2454605.47	2008 May 18 2315	RK-320	-	-	0.000	LAFAM	SS	LAPAM/ LAPAM/	Test	www.lapan.go.id	-	-
2008-A09	2454649.50	2008 Jul 2	RK-320	-	-	0.000	LAFAM	SS	LAPAM/ LAPAM/	Test	www.lapan.go.id	-	-



Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Mission	Launch_FlightCode	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee km	Range km	Dest
2009-H04	2455014.54	2009 Jul 2 0100	RX-420	-	-	-	-	-	-	LAP	-	-	-	53	-	-



Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	OrbPay	Agency	Launch_Code	Group	Category	LTCite	Cite	Notes
2009-104	2455014.54	2009 Jul 2 0100	RX-420	-	-	0.000	LAPAN	SS	LAPAN/	Test	Wire	-	-





Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Mission	FlightCode	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee km	Range km	Dest
1957-A11	2435882.58	1957 Feb 13 0151	SkyLark	1	SL01	RAE Test 1				WOOD	LA2 SL			12		
1957-M08	2435980.72	1957 May 22 0520	SkyLark	1	SL02	RAE Test 2				WOOD	LA2 SL			75		
1957-S64	2436042.63	1957 Jul 23 0302	SkyLark	1	SL03	RAE Test 3/QUB AGP1				WOOD	LA2 SL			85		
1957-S169	2436155.99	1957 Nov 13 1152	SkyLark	1	SL04	UCL Grenade/Chaff 1				WOOD	LA2 SL			127		
1958-427	2436295.36	1958 Apr 17 2032	SkyLark	1	SL06	UCL Grenade/Chaff 2				WOOD	LA2 SL			42		
1958-S55	2436310.96	1958 Apr 17 1057	SkyLark	1	SL07	UCL Grenade/Chaff 2				WOOD	LA2 SL			152		
1958-S56	2436343.68	1958 May 20 0426	SkyLark	1	SL05	RAE Test 5/QUB AGP2				WOOD	LA2 SL			150		
1958-S81	2436359.98	1958 Jun 5 1130	SkyLark	1	SL22	RAE Test 6				WOOD	LA2 SL			153		
1958-A55	2436373.14	1958 Jun 18 1035	SkyLark	1	SL18	UCL Grenade/Chaff 3				WOOD	LA2 SL			3		
1958-S85	2436373.14	1958 Jun 18 1515	SkyLark	2	SL09	UCL Grenade/Chaff 4				WOOD	LA2 SL			144		
1958-S86	2436466.39	1958 Sep 19 2115	SkyLark	2	SL08	UCL Grenade/Chaff 5				WOOD	LA2 SL			154		
1958-S277	2436503.97	1958 Dec 3 1013	SkyLark	1	SL11	QUB Na-1				WOOD	LA2 SL			126		
1959-A43	2436651.37	1959 Mar 4 1114	SkyLark	1	SL21	UCL GC-6/QUB Na-2				WOOD	LA2 SL			30		
1959-A102	2436746.50	1959 Jun 29	Rook	2	SL19	RAE Test 7				ABER	A			07		
1959-M21	2436760.50	1959 Jul 1 0005	SkyLark	2	SL19	RAE Test 7				WOOD	LA2 SL			50		
1959-A114	2436766.50	1959 Jul 7	Rook	2	SL14	LUX-P1/UCL Ion-1				ABER	A			03		
1959-S105	2436767.51	1959 Jul 8 0013	SkyLark	2	SL14	LUX-P1/UCL Ion-1				WOOD	LA2 SL			97		
1959-S122	2436772.56	1959 Jul 23 0126	SkyLark	1	SL24	RAE Test 8				WOOD	LA2 SL			91		
1959-S144	2436799.51	1959 Aug 19 0020	SkyLark	2	SL17	UCL LP-2 (Lang.Pr.)				WOOD	LA2 SL			144		
1959-S174	2436828.51	1959 Sep 17 0012	SkyLark	2	SL12	LUX-P2/Bir-1/UCL SUW1				WOOD	LA2 SL			132		
1959-S165	2436835.52	1959 Sep 24 0029	SkyLark	2	SL15	Bir-2/UCL Ion-2				WOOD	LA2 SL			158		
1959-A178	2436863.50	1959 Oct 22	Leopard	2	L2B	QUB Na-3				ABER	AF			07		
1959-S257	2436902.50	1959 Nov 30 1016	SkyLark	2	SL16	UCL GC-7 Grem/Chaff				WOOD	LA2 SL			151		
1959-S258	2436903.02	1959 Nov 30 1235	SkyLark	2	SL60	UCL GC-7 Grem/Chaff				WOOD	LA2 SL			163		
1959-S266	2436903.96	1959 Dec 1 1136	SkyLark	2	SL38	UCL GC-9/Bir-3				WOOD	LA2 SL			159		
1960-A12	2436935.50	1960 Jan 2	Leopard	2	L1B					ABER	AF			07		
1960-A13	2436940.50	1960 Jan 7	Leopard	2	L1C					ABER	AF			07		
1960-A45	2436967.50	1960 Feb 23	Leopard	2	L1D					ABER	AF			207		
1960-S74	2437036.64	1960 Apr 12 0318	SkyLark	2C	SL51	RAE Test 9				WOOD	LA2 SL			216		
1960-S79	2437045.94	1960 Apr 21 1035	SkyLark	2	SL62	UCL GC-9				WOOD	LA2 SL			141		
1960-A526	2437046.50	1960 Apr 21	Blue Water	2	SL38	Flight 1				WOOD	AF			107		
1960-A527	2437050.50	1960 Apr 26	Blue Water	2	L1E					ABER	AF			207		
1960-A106	2437053.50	1960 Apr 29	Leopard	2	L1F					ABER	AF			207		
1960-A113	2437059.50	1960 May 5	Leopard	2	L1G					ABER	AF			207		
1960-A129	2437061.50	1960 May 27	Leopard	2	L1H	QUB Na-4-WH				WOOD	LA2 SL			129		
1960-S152	2437102.00	1960 Jun 16 1204	SkyLark	2	SL10					WOOD	AF			207		
1960-A168	2437127.50	1960 Jul 12	Leopard	2	L1I					ABER	AF			207		
1960-A169	2437129.50	1960 Jul 14	Leopard	2	L1J					WOOD	AF			207		
1960-S232	2437156.94	1960 Aug 10 1035	SkyLark	2	SL61	UCL GC-10				WOOD	LA2 SL			207		
1960-A4503	2437163.50	1960 Aug 17	Jaguar 1	2	SL13	Dummy Sc 2/St 3				ABER	AF			171		
1960-S254	2437172.56	1960 Aug 26 1100	Rook	2	SL13	QUB Na-5-WH				WOOD	AF			100		
1960-S264	2437200.50	1960 Oct 13	Rook	2	SL23					WOOD	LA2 SL			209		
1960-S364	2437254.96	1960 Nov 19 1102	SkyLark	2	SL29	RAE Test 10				WOOD	LA2 SL			105		
1960-A366	2437255.90	1960 Nov 19 1040	Rook	2C	SL29	UCL GC-11/QUB Na-6				ABER	AF			207		
1960-S371	2437255.94	1960 Nov 23 2355	SkyLark	2	SL29	UCL GC-11/QUB Na-6				WOOD	LA2 SL			217		
1960-S374	2437262.50	1960 Nov 23 2355	SkyLark	2	SL29	LUX-1/UCL Ions/UCL-1				WOOD	LA2 SL			360		
1960-A384	2437262.51	1960 Dec 7 0020	SkyLark	2	SL60	LUX-2/UCL-2				WOOD	LA2 SL			24		
1960-A300	2437263.58	1960 Dec 15	Jaguar 1	2	SL26	UCL GC-12				WOOD	LA2 HRV			146		
1961-S772	2437344.96	1961 Feb 13 1358	SkyLark	2C	SL63	UCL GC-13/QUB Na-7				WOOD	LA2 SL			231		
1961-S103	2437364.96	1961 Mar 5 0056	SkyLark	2C	SL63	UCL GC-13/QUB Na-7				WOOD	LA2 SL			158		
1961-A107	2437410.50	1961 Apr 21	Jaguar 1	2	SL94	UCL GC-14				WOOD	LA2 HRV			207		
1961-A110	2437415.50	1961 Apr 26	Jaguar 1	2	R1K					ABER	A?			207		
1961-S132	2437423.01	1961 May 1 2110	SkyLark	2	SL43	UCL UV-1				WOOD	LA2 SL			155		
1961-S164	2437449.72	1961 May 20 0515	SkyLark	2	SL25	RAE Test 11				WOOD	LA2 SL			149		
1961-S169	2437457.53	1961 Jun 7 0040	SkyLark	2	SL26	RAE Test 12				WOOD	LA2 SL			184		
1961-M18	2437484.93	1961 Jun 4 1023	SkyLark	2	SL65	UCL GC-15				WOOD	LA2 SL			70		
1961-A170	2437500.50	1961 Jul 26	Jaguar 1	2	L15					ABER	A?			207		
1961-A172	2437506.50	1961 Jul 26	Jaguar 1	2	L13					WOOD	LA2 HRV			107		
1961-S227	2437512.96	1961 Aug 1 1102	SkyLark	2	SL24	UCL UV-2				WOOD	LA2 SL			124		
1961-A190	2437535.50	1961 Aug 24	Rook	2	Ra23	Ranger 23				ABER	A?			207		
1961-A191	2437535.50	1961 Aug 24	Rook	2	Ra23	Ranger 23				ABER	A?			207		
1961-S292	2437561.01	1961 Sep 18 1215	SkyLark	2C	MASA 9 0166	Southern Sky Survey				WOOD	LA2 SL			183		
1961-S300	2437569.97	1961 Sep 27 0025	SkyLark	2C	SL40	LUX-3/IC-1/UCL I-4				WOOD	LA2 SL			156		
1961-S320	2437576.97	1961 Oct 4 1119	SkyLark	2C	MASA 9 0266	Southern Sky Survey				WOOD	LA2 SL			183		
1961-S347	2437596.52	1961 Oct 24 0023	SkyLark	2	SL27	LUX-4/UCL I-5/B1-1				WOOD	LA2 SL			142		
1961-A230	2437603.50	1961 Nov 4	Jaguar 1	2	L14					WOOD	LA2 HRV			24		
1961-S365	2437605.25	1961 Nov 1 1756	SkyLark	2C	MASA 9 0366	Southern Sky Survey				WOOD	LA2 SL			183		
1961-S371	2437611.88	1961 Nov 8 0900	SkyLark	2	SL35	MO-1/UCL Ion-6/BP-2				WOOD	LA2 SL			152		
1961-S384	2437624.25	1961 Nov 21 1804	SkyLark	2C	MASA 9 0466	Southern Sky Survey				WOOD	LA2 SL			209		
1961-A239	2437624.50	1961 Nov 21	SkyLark	5C	SL83	LUX-5/UCL I-7/UCL-3				WOOD	LA2 SL			07		
1961-S407	2437639.48	1961 Dec 5 2326	SkyLark	2C	Ra26	LUX-6/UCL I-8/B1-4				WOOD	LA2 SL			206		
1962-A10	2437683.50	1962 Jan 19	Rook	2	Ra26	Ranger 26				ABER	A?			207		
1962-S333	2437701.37	1962 Feb 5 2058	SkyLark	5C	SL25B	RAE Test 13				WOOD	LA2 SL			215		
1962-S60	2437728.91	1962 Mar 5 0955	SkyLark	2	SL66	UCL GC-16/QUB Na-8				WOOD	LA2 SL			233		
1962-S62	2437730.02	1962 Mar 6 1235	SkyLark	2	SL60	UCL GC-17				WOOD	LA2 SL			173		
1962-S71	2437742.96	1962 Mar 19 1104	SkyLark	2	SL161	UCL GC-18				WOOD	LA2 SL			140		
1962-A45	2437758.50	1962 Apr 4	Jaguar 1	2	J5					WOOD	LA2 HRV			24		
1962-S89	2437760.16	1962 Apr 5 1547	SkyLark	2	SL163	UCL GC-19				WOOD	LA2 SL			238		
1962-A48	2437765.26	1962 Apr 10 1820	SkyLark	2	SL162	UCL GC-20				WOOD	LA2 SL			07		
1962-S170	2437821.62	1962 Jun 6 0300	SkyLark	5C	SL25C	RAE Test 14				WOOD	LA2 SL			240		
1962-A243	2437822.50	1962 Jun 7	Blue Water	5C	SL45	Flight 15				ABER	A?			107		
1962-S195	2437835.72	1962 Jun 20 0520	SkyLark	5C	SL45	LUX-7/UCL SUW-26S-2I				WOOD	LA2 SL			227		
1962-A99	2437841.50	1962 Jun 26	Jaguar 1	2	J6					WOOD	LA2 HRV			24		
1962-S225	2437850.66	1962 Jul 5 0346	SkyLark	5	SL164	UCL GC-21				WOOD	LA2 SL			111		





Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Launch_Mission	FlightCode	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee km	Range km	Dest
1969-A125	2440418.50	1969 Jul 16	Jabiru 2	-	J208	WRE Ablation	-	-	-	W00	LA2 HRV	-	-	307	-	-
1969-S412	2440419.44	1969 Jul 16 2233	SkyLark 3	-	SL729	MSSL I-31/QQB AGP6	-	-	-	W00	LA2 SL	-	-	244	-	-
1969-S422	2440427.07	1969 Jul 25 0410	SkyLark 3	5C	SL721	SFH-97004-17	-	-	-	W00	LA2 SL	-	-	213	-	-
1969-S430	2440432.46	1969 Jul 29 2257	SkyLark 3 AC	-	SL005	MSSL I-32/QQB AGP7	-	-	-	W00	LA2 SL	-	-	262	-	-
1969-S459	2440454.58	1969 Aug 21 0157	SkyLark 3	-	SL005	LUX-47 HRCS/PHC	-	-	-	W00	LA2 SL	-	-	197	-	-
1969-S454	2440500.44	1969 Oct 5 2238:10	SkyLark 2	-	S29/1	ESRO S29/1 RRS8-10	-	-	-	ESR	S	-	-	234	-	-
1969-S547	2440510.30	1969 Oct 15 1916	SkyLark 3	-	SL961	UCL GTR8-1 TMA/Ba	-	-	-	W00	LA2 SL	-	-	318	-	-
1969-A178	2440510.50	1969 Oct 16	Jabiru 2	-	J209	UCL GTR8-2	-	-	-	W00	LA2 HRV	-	-	307	-	-
1969-S552	2440511.91	1969 Oct 17 0945	SkyLark 3	-	SL962	UCL GTR8-2	-	-	-	W00	LA2 SL	-	-	318	-	-
1969-S554	2440512.44	1969 Oct 17 2226:40	SkyLark 2 AC	-	S29/2	ESRO S29/2 RRS8-11	-	-	-	ESR	S	-	-	230	-	-
1969-S564	2440514.91	1969 Oct 20 0610	SkyLark 3 AC	-	SL986	RAE Test 41	-	-	-	W00	LA2 SL	-	-	223	-	-
1969-S568	2440516.76	1969 Oct 24 0544:00	SkyLark 3	7C	SL921	MSSL XR1/MSSL SX5	-	-	-	W00	LA2 SL	-	-	184	-	-
1969-S575	2440518.74	1969 Oct 24 0544:00	SkyLark 2 AC	-	SL002	ESRO S66/1	-	-	-	ESR	S	-	-	208	-	-
1969-S626	2440543.30	1969 Nov 18 0217	SkyLark 3 AC	-	SL002	ESRO S66/1 SHF-9	-	-	-	W00	LA2 SL	-	-	242	-	-
1969-S632	2440545.54	1969 Nov 20 0100	SkyLark 3 AC	-	SL901	MSSL XR2 FSG	-	-	-	W00	LA2 HRV	-	-	207	-	-
1969-A194	2440551.50	1969 Nov 26	Roak IIIA	-	0b3	Can UVS/XOVS 14	-	-	-	W00	LA2 SL	-	-	180	-	-
1969-S637	2440552.48	1969 Nov 26 2332	SkyLark 3 AC	-	ESRO S66/1	Overon 3	-	-	-	SDQ	-	-	-	1007	-	-
1970-S81	2440611.10	1970 Jan 24 1427	SkyLark 1	-	ESRO S66/1	Can UVS 16	-	-	-	SDQ	-	-	-	207	-	-
1970-A20	2440622.50	1970 Feb 5	Roak IIIA	-	Lynx 8	RS8 S0V-1	-	-	-	ABER	A?	-	-	211	-	-
1970-S106	2440624.32	1970 Feb 6 1942	SkyLark 2 AC	-	ESRO S44/1	Lynx 8	-	-	-	SDQ	-	-	-	244	-	-
1970-S114	2440628.09	1970 Feb 10 1410	SkyLark 3 AC	-	ESRO S72	ESRO S44/1	-	-	-	W00	LA2 SL	-	-	210	-	-
1970-S120	2440632.18	1970 Feb 14 1615:40	SkyLark 2 AC	-	ESRO S66/2	ESRO S66/2	-	-	-	ESR	S	-	-	186	-	-
1970-S143	2440642.30	1970 Feb 24 1909:59	SkyLark 2	-	S70/1	ESRO S70/1	-	-	-	ESR	S	-	-	220	-	-
1970-S163	2440645.19	1970 Feb 25 1633:03	SkyLark 2	-	S61/1	ESRO S61/1	-	-	-	ESR	S	-	-	225	-	-
1970-S168	2440645.70	1970 Feb 26 0447	SkyLark 2	-	S61/2	ESRO S61/2	-	-	-	ESR	S	-	-	247	-	-
1970-S242	2440657.42	1970 Mar 11 2201	SkyLark 3	-	SL921	MSSL XR3 RMC	-	-	-	W00	LA2 SL	-	-	206	-	-
1970-S249	2440664.44	1970 Mar 18 2230	SkyLark 3 AC	-	SL901	LUX XR57 BCS	-	-	-	W00	LA2 SL	-	-	181	-	-
1970-S259	2440665.14	1970 Mar 19 1518	SkyLark 3 AC	-	SL901	RU8-9 0U Schmidt OP	-	-	-	W00	LA2 SL	-	-	179	-	-
1970-A37	2440667.59	1970 Mar 22 0208	SkyLark 3	-	S67/1	LUX XR59 MC	-	-	-	W00	LA2 HRV	-	-	307	-	-
1970-S262	2440670.42	1970 Mar 24 2200	SkyLark 3 AC	-	SL902	HRV 931/WRE Delta	-	-	-	W00	LA2 SL	-	-	196	-	-
1970-A47	2440677.90	1970 Apr 1	Jabiru 2	-	2210	ESRO S66/1	-	-	-	SDQ	-	-	-	307	-	-
1970-S278	2440678.57	1970 Apr 2 0146	SkyLark 2	-	S67/1	ESRO S66/1	-	-	-	ESR	S	-	-	196	-	-
1970-S284	2440681.30	1970 Apr 4 1912	SkyLark 3 AC	-	S28/1	ESRO S28/1 QUB Na-12	-	-	-	ESR	S	-	-	204	-	-
1970-S285	2440683.64	1970 Apr 7 0320	SkyLark 3 AC	-	SL903	ESRO S28/1 QUB Na-12	-	-	-	W00	LA2 SL	-	-	210	-	-
1970-S307	2440692.88	1970 Apr 16 0907:50	SkyLark 3	-	SL725	Can UVS 16	-	-	-	W00	LA2 SL	-	-	310	-	-
1970-A74	2440760.09	1970 Jun 22 1404	SkyLark 2	-	S69/2	UAT-6740-11	-	-	-	SDQ	-	-	-	3	-	-
1970-S416	2440771.35	1970 Jul 3 1961	SkyLark 1	-	S69/2	ESRO S69/2	-	-	-	SDQ	-	-	-	149	-	-
1970-S425	2440776.52	1970 Jul 8 1945	SkyLark 1	5C	S69/1	ESRO S69/1	-	-	-	SDQ	-	-	-	203	-	-
1970-S430	2440781.70	1970 Jul 10 0030	SkyLark 6	-	SL727	MSSL XR4 RMC	-	-	-	W00	LA2 SL	-	-	194	-	-
1970-S439	2440783.10	1970 Jul 14 0452	SkyLark 3 AC	-	SL911	MSSL XR4 RMC	-	-	-	W00	LA2 SL	-	-	223	-	-
1970-S454	2440785.10	1970 Jul 15 1429	SkyLark 3	-	S65/1	LUX-50/RS8 S0V-2	-	-	-	W00	LA2 SL	-	-	197	-	-
1970-S441	2440791.06	1970 Jul 23 1359	SkyLark 1	-	ESRO S66/1	RS8 S0V-3F	-	-	-	SDQ	-	-	-	126	-	-
1970-S444	2440791.64	1970 Jul 24 0326	SkyLark 1	-	ESRO S66/2	RS8 S0V-4F	-	-	-	SDQ	-	-	-	135	-	-
1970-S449	2440794.98	1970 Jul 24 0326	SkyLark 6	-	S67/2	LUX XR9-4F	-	-	-	SDQ	-	-	-	232	-	-
1970-S449	2440794.98	1970 Jul 24 0326	SkyLark 6	-	S67/2	LUX XR9-4F	-	-	-	SDQ	-	-	-	232	-	-
1970-S469	2440877.85	1970 Oct 6 0628:07	SkyLark 3	-	SL721	LUX XR9-22	-	-	-	SDQ	-	-	-	208	-	-
1970-S567	2440877.85	1970 Oct 13 0628:07	SkyLark 3	-	SL721	LUX XR9-22	-	-	-	SDQ	-	-	-	208	-	-
1970-S569	2440878.22	1970 Oct 14 0945	SkyLark 3 AC	-	SL721	MSSL XR5 RMC	-	-	-	W00	LA2 SL	-	-	270	-	-
1970-S570	2440878.22	1970 Oct 14 0945	SkyLark 3 AC	-	ESRO S53	Can UVS 17	-	-	-	W00	LA2 SL	-	-	209	-	-
1970-S579	2440878.22	1970 Oct 15 0030	SkyLark 3 AC	-	ESRO S58	Can UVS 17	-	-	-	W00	LA2 SL	-	-	209	-	-
1970-S583	2440887.36	1970 Oct 27 2034:22	SkyLark 2	-	ESRO S67/1	ESRO S67/1 RRS8-15	-	-	-	ESR	S	-	-	234	-	-
1970-S586	2440887.36	1970 Oct 27 2034:22	SkyLark 2	-	ESRO S67/2	ESRO S67/2 RRS8-16	-	-	-	ESR	S	-	-	203	-	-
1970-S601	2440909.70	1970 Oct 29 2139:30	SkyLark 3 AC	-	SL904	MSSL XR4	-	-	-	W00	LA2 SL	-	-	183	-	-
1970-S610	2440910.40	1970 Nov 19 2200	SkyLark 3 AC	-	SL905	LUX XR50	-	-	-	W00	LA2 SL	-	-	209	-	-
1970-S625	2440915.43	1970 Nov 24 2213	SkyLark 3 AC	-	SL904	MSSL XR4	-	-	-	W00	LA2 SL	-	-	183	-	-
1970-S634	2440926.97	1970 Nov 24 2213	SkyLark 3 AC	-	ESRO S69	LUX XR50	-	-	-	W00	LA2 SL	-	-	182	-	-
1971-A08	2440965.98	1970 Dec 6 1113	SkyLark 3	-	ESRO S69	LUX XR50	-	-	-	SDQ	-	-	-	187	-	-
1971-S101	2440980.27	1971 Jan 24 1138	SkyLark 6	-	LT 1	LUX RGS 4	-	-	-	ABER	A	-	-	7	-	-
1971-S103	2440980.27	1971 Jan 29 1833:46	SkyLark 3 AC	-	546/2	LUX RGS 4	-	-	-	ESR	S	-	-	218	-	-
1971-S116	2440989.27	1971 Feb 6 1835	SkyLark 3	-	SL001	DLR AB-CR-40	-	-	-	W00	LA2 SL	-	-	203	-	-
1971-S117	2440989.27	1971 Feb 6 1835	SkyLark 3	-	SL001	DLR AB-CR-40	-	-	-	W00	LA2 SL	-	-	203	-	-
1971-S118	2440989.27	1971 Feb 6 1835	SkyLark 3	-	SL001	MSSL XR3	-	-	-	SDQ	-	-	-	222	-	-
1971-S119	2440989.27	1971 Feb 6 1835	SkyLark 3	-	SL001	MSSL XR3	-	-	-	SDQ	-	-	-	222	-	-
1971-S127	2441004.99	1971 Feb 26 1140	SkyLark 3 AC	-	S80/3	ESRO S80/3	-	-	-	SDQ	-	-	-	206	-	-
1971-S133	2441008.93	1971 Feb 26 1140	SkyLark 3 AC	-	S80/3	ESRO S80/3	-	-	-	SDQ	-	-	-	214	-	-
1971-S143	2441012.92	1971 Feb 26 1140	SkyLark 3 AC	-	ESRO S85	MSSL XR5	-	-	-	W00	LA2 SL	-	-	222	-	-
1971-S148	2441013.38	1971 Mar 2 1008	SkyLark 3	-	ESRO S84	MSSL XR5	-	-	-	SDQ	-	-	-	260	-	-
1971-S164	2441021.87	1971 Mar 11 0856:16	SkyLark 2	-	ESRO S16/2	UCL-M11 Tomos Curr.	-	-	-	W00	LA2 SL	-	-	223	-	-
1971-S167	2441026.25	1971 Mar 11 0856:16	SkyLark 3 AC	-	ESRO S55	ESRO S16/2	-	-	-	ESR	S	-	-	143	-	-
1971-S205	2441036.27	1971 Mar 25 1832:00	SkyLark 2	-	ESRO S87/1	LUX RGS 5	-	-	-	SDQ	-	-	-	159	-	-
1971-S206	2441036.27	1971 Mar 25 1832:00	SkyLark 2	-	ESRO S87/2	ESRO S87/1	-	-	-	ESR	S	-	-	188	-	-
1971-S221	2441082.00	1971 Mar 25 1832:00	SkyLark 6 AC	7C	ESRO S66/1	ESRO S87/2	-	-	-	ESR	S	-	-	190	-	-
1971-A57	2441124.50	1971 Jun 14	Roak IIIA	-	S66B/2	LUX-56/RSRS	-	-	-	W00	LA2 SL	-	-	130	-	-
1971-A60	2441132.50	1971 Jun 22	Roak IIIA	-	Or-123	LUX XR511 Survey	-	-	-	SDQ	-	-	-	1919	-	-
1971-A63	2441134.95	1971 Jul 1 1055	Roak IIIA	-	F1	-	-	-	-	W00	LA2 HRV	-	-	207	-	-
1971-A61	2441135.50	1971 Jul 3	Roak IIIA	-	SL77	FFARV	-	-	-	W00	LA2 HRV	-	-	224	-	-
1971-S383	2441162.50	1971 Jul 3	Zenit	C	SL902	ESRO S73	-	-	-	SDQ	-	-	-	207	-	-
1971-S477	2441168.59	1971 Aug 5 0215	SkyLark 6 AC	-	SL002	Lynx 7	-	-	-	SDQ	A?	-	-	26	-	-
1971-S481	2441224.17	1971 Sep 27 0230	SkyLark 3	-	ESRO S47/2	ESRO S29/1	-	-	-	SDQ	-	-	-	272	-	-
1971-S508	2441231.90	1971 Oct 7 0940	SkyLark 3	-	SL973	Can UVS 18	-	-	-	W00	LA2 SL	-	-	224	-	-
1971-S520	2441232.50	1971 Oct 12	Jabiru 2	-	ESRO S81	LUX XR512	-	-	-	W00	LA2 SL	-	-	2107	-	-
1971-A88	2441244.50	1971 Oct 20 0940	SkyLark 3 AC	-	J-1	MSSL XR8 RMC	-	-	-	W00	LA2 SL	-	-	2107	-	-
1971-S535	2441244.50	1971 Oct 20 0940	SkyLark 6 AC	-	SL974	Chevaline?	-	-	-	W00	LA2 HRV	-	-	2107	-	-
1971-S541	2441248.98	1971 Oct 24 1135	SkyLark 6 AC	-	ESRO S89	LUX RGS 6	-	-	-	SDQ	-	-	-	245	-	-
1971-A97	2441271.50	1971 Nov 16 0004	SkyLark 2 AC	-	ESRO											

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Launch_Mission	FlightCode	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee km	Range km	Dest
1971-5574	2441281.22	1971 Nov 25 17:13:05	SkyLark 2	-	ESRO S70/2	ESRO S70/2	-	-	-	ESR	S	-	-	172	-	-
1971-5575	2441286.76	1971 Nov 30 05:59	SkyLark 3 AC	-	SL1101	LUX BCS 7	-	-	-	WOO	LA2 SL	-	-	193	-	-
1971-5576	2441289.50	1971 Dec 4	Jabiru 2	-	SL1003	Chevaline?	-	-	-	WOO	LA2 HRV	-	-	307	-	-
1971-5589	2441296.69	1971 Dec 10 04:30	SkyLark 3 AC	-	SL1003	MSSL SK7 BCS	-	-	-	WOO	LA2 SL	-	-	198	-	-
1971-5605	2441300.01	1971 Dec 14 12:11:16	SkyLark 2	-	ESRO S82	ESRO S82/2	-	-	-	SDQ	-	-	-	151	-	-
1972-5892	2441375.75	1972 Feb 28 05:54:00	SkyLark 3 AC	-	ESRO S84	ESRO S84	-	-	-	SDQ	-	-	-	242	-	-
1972-5893	2441375.91	1972 Feb 28 09:47:03	SkyLark 3 AC	-	ESRO S90	ESRO S90	-	-	-	SDQ	-	-	-	251	-	-
1972-5896	2441379.44	1972 Mar 2 22:26:50	SkyLark 4	-	ESRO S77/1	ESRO S77/1	-	-	-	ESR	-	-	-	237	-	-
1972-5898	2441392.60	1972 Mar 16 02:30	SkyLark 6	-	SL1023	UCL-H12 Midday Sq	-	-	-	WOO	LA2 SL	-	-	260	-	-
1972-5899	2441393.72	1972 Mar 17 05:10	SkyLark 6 AC	-	SL1009	Col. UVS 19	-	-	-	WOO	LA2 SL	-	-	237	-	-
1972-5899	2441401.48	1972 Mar 24 23:31	SkyLark 2	-	ESRO S75/1	ESRO S75/1	-	-	-	WOO	LA2 SL	-	-	136	-	-
1972-5899	2441403.48	1972 Mar 26 23:30	SkyLark 6 AC	-	SL1081	RAE Test 42 (ER1)	-	-	-	WOO	LA2 SL	-	-	279	-	-
1972-5899	2441406.56	1972 Mar 30 01:25	SkyLark 4	-	ESRO S75/2	ESRO S75/2	-	-	-	SDQ	-	-	-	133	-	-
1972-5899	2441490.52	1972 Jun 22	Rook	-	BAS	Badger 5	-	-	-	ABER	A?	-	-	207	-	-
1972-5899	2441494.12	1972 Jun 25 14:47	SkyLark 3 AC	-	ESRO S91	MSSL XR10	-	-	-	SDQ	LA2 SL	-	-	213	-	-
1972-5899	2441503.50	1972 Jul 1	SkyLark 6 AC	-	SL1191	SUPER ANTELOPE S1	-	-	-	WOO	LA2 SL	-	-	150?	-	-
1972-5899	2441518.50	1972 Jul 20	SkyLark 6	-	SL1183	RAE Test 43 (Dummy)	-	-	-	ABER	A	-	-	5?	-	-
1972-5899	2441585.41	1972 Sep 24 21:50	SkyLark 4	-	ESRO S77/2	ESRO S77/2	-	-	-	ESR	S	-	-	227	-	-
1972-5899	2441603.52	1972 Oct 13 00:28:15	SkyLark 2	-	ESRO S105	ESRO S105	-	-	-	ESR	S	-	-	207	-	-
1972-5899	2441608.28	1972 Oct 17 18:39	SkyLark 2	-	SL1022	QUE AP9/SHF-10	-	-	-	WOO	LA2 SL	-	-	142	-	-
1972-5899	2441613.99	1972 Oct 23 11:51	SkyLark 6 AC	-	SL1003	MSSL XR11/MD Lunar IV	-	-	-	WOO	LA2 SL	-	-	210	-	-
1972-5899	2441616.69	1972 Oct 26 04:30	SkyLark 3 AC	-	ESRO S95	MSSL SK8 BCS/RIC	-	-	-	WOO	LA2 SL	-	-	196	-	-
1972-5899	2441623.76	1972 Nov 2 06:10	SkyLark 6 AC	-	ESRO S94	ESRO S94	-	-	-	SDQ	-	-	-	211	-	-
1972-5900	2441641.70	1972 Nov 20 04:54	SkyLark 3 AC	-	SL1202	LUX XRS13	-	-	-	WOO	LA2 SL	-	-	246	-	-
1972-5900	2441658.71	1972 Dec 7 06:03	SkyLark 3 AC	-	SL1005	QUE AP9/SHF-11	-	-	-	WOO	LA2 SL	-	-	196	-	-
1972-5900	2441662.50	1972 Dec 11 00:00	Zenit	C	ESRO S92	DLR A-ZC-48 Astrik	-	-	-	AND	-	-	-	144	-	-
1972-5900	2441665.10	1972 Dec 13 14:19:59	SkyLark 3 AC	-	SL1205	MSSL XR12	-	-	-	WOO	LA2 SL	-	-	234	-	-
1973-580	2441712.77	1973 Jan 30 06:35	SkyLark 3 AC	-	SL1010	LUX XRS14	-	-	-	WOO	LA2 SL	-	-	198	-	-
1973-586	2441742.36	1973 Feb 28 21:00	SkyLark 6 AC	-	SL1004	Col. Walter XUVS-1	-	-	-	WOO	LA2 SL	-	-	226	-	-
1973-586	2441756.64	1973 Mar 14 03:15	SkyLark 6 AC	-	SL1182	DLX UVS 20	-	-	-	WOO	LA2 SL	-	-	242	-	-
1973-5812	2441761.70	1973 Mar 20 04:52	SkyLark 6 AC	-	SL1182	MAE SL1182	-	-	-	HEK	-	-	-	240	-	-
1973-5816	2441764.24	1973 Mar 22 17:43	SkyLark 6 AC	-	SL1181	MAE SL1181	-	-	-	HEK	-	-	-	240	-	-
1973-5816	2441770.24	1973 Mar 22 17:51	SkyLark 6 AC	-	SL1011	LUX XRS15	-	-	-	WOO	LA2 SL	-	-	214	-	-
1973-5815	2441790.15	1973 Apr 17 15:35	SkyLark 6 AC	-	SL1111	Col. FUV-2	-	-	-	WOO	LA2 SL	-	-	227	-	-
1973-5803	2441849.94	1973 Jun 16 10:58	SkyLark 6 AC	-	SL1111	SUPER ANTELOPE S2	-	-	-	WOO	LA2 SL	-	-	210?	-	-
1973-5824	2441880.90	1973 Jul 17	SkyLark 3 AC	-	SL1281	MAE ER1	-	-	-	ESR	S	-	-	7	-	-
1973-5824	2441880.90	1973 Aug 4 08:10	SkyLark 4 AC	-	SL1081A	DLR H-GR-57	LIVA SKY-S93	-	-	ELAR	MORABA	-	-	186	-	-
1973-5826	2441896.84	1973 Oct 2 03:21:06	SkyLark 2 AC	-	ESRO S93	DLR H-GR-56	LIVA SKY-S92	-	-	ELAR	MORABA	-	-	260	-	-
1973-5838	2441971.98	1973 Oct 6 03:31:34	SkyLark 4 AC	-	ESRO S92	UK High Lat 1	-	-	-	AND	-	-	-	229	-	-
1973-5843	2441961.65	1973 Oct 16 19:43:39	SkyLark 6	-	SL1121	UK High Lat 2	-	-	-	AND	-	-	-	229	-	-
1973-5847	2441972.52	1973 Oct 16 18:50:44	SkyLark 6	-	SL1122	Advection 1	-	-	-	AND	-	-	-	268	-	-
1973-5869	2441986.29	1973 Oct 30 16:50:44	Jabiru 3	-	SL1124	UK High Lat 4	-	-	-	AND	LA2 HRV	-	-	218	-	-
1973-5862	2442000.90	1973 Nov 14 22:45:50	Jabiru 3	-	SL1103	UK High Lat 3	-	-	-	AND	LA2 SL	-	-	218	-	-
1973-5869	2442003.45	1973 Nov 29 05:25	SkyLark 6 AC	-	SL1206	LUX BCS (Mk3 BCS)	-	-	-	AND	MORABA	-	-	238	-	-
1973-5869	2442012.75	1973 Nov 29 05:25	SkyLark 6 AC	-	ESRO S74	DLR H-GR-55	-	-	-	ELAR	MORABA	-	-	238	-	-
1973-5804	2442033.95	1973 Nov 29 05:15:56	SkyLark 4 AC	-	SL1004	UK High Lat 1	LIVA SKY-S74	-	-	ELAR	MORABA	-	-	238	-	-
1973-5804	2442032.47	1973 Nov 29 05:15:56	SkyLark 4	-	SL1124	UK High Lat 2	-	-	-	AND	-	-	-	238	-	-
1973-5804	2442032.47	1973 Dec 6 23:25:06	SkyLark 4	-	SL1124	Advection 2	-	-	-	AND	-	-	-	238	-	-
1973-5863	2442022.50	1973 Dec 6 23:25:06	Jabiru 3	-	SL1124	UK High Lat 4	-	-	-	AND	LA2 HRV	-	-	266?	-	-
1974-5892	2442030.30	1974 Jan 19 19:12:33	SkyLark 6 AC	-	HRG 1	DLR H-GR-58	LIVA SKY-N60	-	-	ELAR	MORABA	-	-	266?	-	-
1974-5892	2442030.30	1974 Jan 19 19:12:33	SkyLark 6 AC	-	HRG 1	MSSL XR43/UCB EUV	-	-	-	ELAR	MORABA	-	-	266?	-	-
1974-5892	2442030.30	1974 Jan 19 19:12:33	SkyLark 6 AC	-	HRG 1	MSSL XR43/UCB EUV	-	-	-	ELAR	MORABA	-	-	266?	-	-
1974-5892	2442030.30	1974 Jan 19 19:12:33	SkyLark 6 AC	-	HRG 1	MSSL XR43/UCB EUV	-	-	-	ELAR	MORABA	-	-	266?	-	-
1974-5892	2442030.30	1974 Jan 19 19:12:33	SkyLark 6 AC	-	HRG 1	MSSL XR43/UCB EUV	-	-	-	ELAR	MORABA	-	-	266?	-	-
1974-5892	2442030.30	1974 Jan 19 19:12:33	SkyLark 6 AC	-	HRG 1	MSSL XR43/UCB EUV	-	-	-	ELAR	MORABA	-	-	266?	-	-
1974-5892	2442030.30	1974 Jan 19 19:12:33	SkyLark 6 AC	-	HRG 1	MSSL XR43/UCB EUV	-	-	-	ELAR	MORABA	-	-	266?	-	-
1974-5892	2442030.30	1974 Jan 19 19:12:33	SkyLark 6 AC	-	HRG 1	MSSL XR43/UCB EUV	-	-	-	ELAR	MORABA	-	-	266?	-	-
1974-5892	2442030.30	1974 Jan 19 19:12:33	SkyLark 6 AC	-	HRG 1	MSSL XR43/UCB EUV	-	-	-	ELAR	MORABA	-	-	266?	-	-
1974-5892	2442030.30	1974 Jan 19 19:12:33	SkyLark 6 AC	-	HRG 1	MSSL XR43/UCB EUV	-	-	-	ELAR	MORABA	-	-	266?	-	-
1974-5892	2442030.30	1974 Jan 19 19:12:33	SkyLark 6 AC	-	HRG 1	MSSL XR43/UCB EUV	-	-	-	ELAR	MORABA	-	-	266?	-	-
1974-5892	2442030.30	1974 Jan 19 19:12:33	SkyLark 6 AC	-	HRG 1	MSSL XR43/UCB EUV	-	-	-	ELAR	MORABA	-	-	266?	-	-
1974-5892	2442030.30	1974 Jan 19 19:12:33	SkyLark 6 AC	-	HRG 1	MSSL XR43/UCB EUV	-	-	-	ELAR	MORABA	-	-	266?	-	-
1974-5892	2442030.30	1974 Jan 19 19:12:33	SkyLark 6 AC	-	HRG 1	MSSL XR43/UCB EUV	-	-	-	ELAR	MORABA	-	-	266?	-	-
1974-5892	2442030.30	1974 Jan 19 19:12:33	SkyLark 6 AC	-	HRG 1	MSSL XR43/UCB EUV	-	-	-	ELAR	MORABA	-	-	266?	-	-
1974-5892	2442030.30	1974 Jan 19 19:12:33	SkyLark 6 AC	-	HRG 1	MSSL XR43/UCB EUV	-	-	-	ELAR	MORABA	-	-	266?	-	-
1974-5892	2442030.30	1974 Jan 19 19:12:33	SkyLark 6 AC	-	HRG 1	MSSL XR43/UCB EUV	-	-	-	ELAR	MORABA	-	-	266?	-	-
1974-5892	2442030.30	1974 Jan 19 19:12:33	SkyLark 6 AC	-	HRG 1	MSSL XR43/UCB EUV	-	-	-	ELAR	MORABA	-	-	266?	-	-
1974-5892	2442030.30	1974 Jan 19 19:12:33	SkyLark 6 AC	-	HRG 1	MSSL XR43/UCB EUV	-	-	-	ELAR	MORABA	-	-	266?	-	-
1974-5892	2442030.30	1974 Jan 19 19:12:33	SkyLark 6 AC	-	HRG 1	MSSL XR43/UCB EUV	-	-	-	ELAR	MORABA	-	-	266?	-	-
1974-5892	2442030.30	1974 Jan 19 19:12:33	SkyLark 6 AC	-	HRG 1	MSSL XR43/UCB EUV	-	-	-	ELAR	MORABA	-	-	266?	-	-
1974-5892	2442030.30	1974 Jan 19 19:12:33	SkyLark 6 AC	-	HRG 1	MSSL XR43/UCB EUV	-	-	-	ELAR	MORABA	-	-	266?	-	-
1974-5892	2442030.30	1974 Jan 19 19:12:33	SkyLark 6 AC	-	HRG 1	MSSL XR43/UCB EUV	-	-	-	ELAR	MORABA	-	-	266?	-	-
1974-5892	2442030.30	1974 Jan 19 19:12:33	SkyLark 6 AC	-	HRG 1	MSSL XR43/UCB EUV	-	-	-	ELAR	MORABA	-	-	266?	-	-
1974-5892	2442030.30	1974 Jan 19 19:12:33	SkyLark 6 AC	-	HRG 1	MSSL XR43/UCB EUV	-	-	-	ELAR	MORABA	-	-	266?	-	-
1974-5892	2442030.30	1974 Jan 19 19:12:33	SkyLark 6 AC	-	HRG 1	MSSL XR43/UCB EUV	-	-	-	ELAR	MORABA	-	-	266?	-	-
1974-5892	2442030.30	1974 Jan 19 19:12:33	SkyLark 6 AC	-	HRG 1	MSSL XR43/UCB EUV	-	-	-	ELAR	MORABA	-	-	266?	-	-
1974-5892	2442030.30	1974 Jan 19 19:12:33	SkyLark 6 AC	-	HRG 1	MSSL XR43/UCB EUV	-	-	-	ELAR	MORABA	-	-	266?	-	-
1974-5892	2442030.30	1974 Jan 19 19:12:33	SkyLark 6 AC	-	HRG 1	MSSL XR43/UCB EUV	-	-	-	ELAR	MORABA	-	-	266?	-	-
1974-5892	2442030.30	1974 Jan 19 19:12:33	SkyLark 6 AC	-	HRG 1	MSSL XR43/UCB EUV	-	-	-	ELAR	MORABA	-	-	266?	-	-
1974-5892	2442030.30	1974 Jan 19 19:12:33	SkyLark 6 AC	-	HRG 1	MSSL XR43/UCB EUV	-	-	-	ELAR	MORABA	-	-	266?	-	-
1974-5892	2442030.30	1974 Jan 19 19:12:33	SkyLark 6 AC	-	HRG 1	MSSL XR43/UCB EUV	-	-	-	ELAR	MORABA	-	-	266?	-	-
1974-5892	2442030.30	1974 Jan 19 19:12:33	SkyLark 6 AC	-	HRG 1	MSSL XR43/UCB EUV	-	-	-	ELAR	MORABA	-	-			

Launch Mission

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Platform	FlightCode	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee km	Range km	Dest
1977-S195	2443302.50	1977 Jun 6	SkyLark 3 AC	-	SL1298	CHEVALINE S7	-	-	WOOD	LA2 SL	-	-	210?	-	-
1977-S258	2443430.39	1977 Oct 13 2126:00	SkyLark 12	-	DLR A-CRC-86	T/OL 3A Dagnar	-	-	AUD	-	-	-	536	-	-
1977-S259	2443430.42	1977 Oct 13 2159:00	SkyLark 12	-	SL1423	UK High Lat 8	-	-	AUD	-	-	-	788	-	-
1977-S276	2443450.34	1977 Nov 2 2015:00	SkyLark 12	-	DLR A-CRC-87	T/OL 1B	-	-	AUD	-	-	-	941	-	-
1977-S284	2443465.40	1977 Nov 17 2132:36	SkyLark 12	-	SL1421	UK High Lat 9	-	-	AUD	-	-	-	718	-	-
1977-S303	2443490.87	1977 Dec 13 0846:39	SkyLark 7	-	DLR K-CRC-90	DLR TEXUS 1	-	-	ESR	S	-	-	268	-	-
1978-S83	2443539.40	1978 Jan 30 0217:00	SkyLark 12	-	DLR A-CRC-86	T/OL 4C Gitti	-	-	AUD	-	-	-	940	-	-
1978-S132	2443640.71	1978 Jan 30 2210:00	SkyLark 7 AC	-	SL1305	T/OL 2C Susanne	-	-	AUD	-	-	-	941	-	-
1978-S193	2443720.48	1978 Jul 30 2333:13	SkyLark 1	-	SSC S267/1 ION	Call UVS 21	-	-	WOOD	LA2 SL	-	-	283	-	-
1978-S278	2443734.48	1978 Aug 13 2338:17	SkyLark 1	-	SSC S268/2 ION	SSC S268 Noctilucent	-	-	ESR	S	-	-	114	-	-
1978-S328	2443822.68	1978 Nov 10 0414:22	SkyLark 12	-	SL1424	UK High Lat 10	-	-	ESR	S	-	-	127	-	-
1978-S329	2443822.63	1978 Nov 15 0749	SkyLark 3 AC	-	DLR K-CRC-94	CHEVALINE S8?	-	-	AUD	LA2 SL	-	-	796	-	-
1978-S332	2443828.53	1978 Dec 13	SkyLark 3 AC	-	SL1297	CHEVALINE S9?	-	-	ESR	LA2 SL	-	-	265	-	-
1978-S354	2443927.01	1979 Feb 22 1215:30	SkyLark 6 AC	-	DLR W-CRC-96	CHEVALINE S10?	-	-	WOOD	LA2 SL	-	-	192	-	-
1979-S86	2443933.50	1979 Mar 7	SkyLark 7 AC	-	DLR W-CRC-96	Astro 4-2	-	-	WOOD	LA2 SL	-	-	270?	-	-
1979-S317	2444159.09	1979 Mar 13 0030:00	SkyLark 12 AC	-	DLR W-CRC-95	Astro 4-1	-	-	WOOD	LA2 SL	-	-	258	-	-
1980-S301	2444357.80	1980 Apr 28 0710:02	SkyLark 7	-	DLR M-CRC-97	Astro-Hel	-	-	CLEJI	MAN	-	-	829	-	-
1981-S106	2444559.63	1980 Nov 16 0313	SkyLark 7	-	DLR K-CRC-100	DLR TEXUS 3A	-	-	ESR	S	-	-	253	-	-
1981-S109	2444724.75	1981 Apr 30 0600	SkyLark 7	-	DLR K-CRC-104	EGC-B E2 (ENERGY E81)	-	-	ESR	S	-	-	231	-	-
1982-S111	2444946.39	1981 May 8 0627	SkyLark 7	-	DLR K-CRC-109	DLR TEXUS 3B	-	-	ESR	S	-	-	253	-	-
1982-S115	2445088.72	1981 Dec 9 2125:35	SkyLark 7	-	DLR K-CRC-112	EGC1 E2 (ENERGY E82)	-	-	ESR	S	-	-	237	-	-
1983-S86	2445097.73	1982 Apr 29 0520	SkyLark 7	-	DLR K-CRC-113	DLR TEXUS 5	-	-	ESR	S	-	-	256	-	-
1983-S89	2445467.96	1982 May 6 0630	SkyLark 7	-	DLR K-CRC-114	DLR TEXUS 6	-	-	ESR	S	-	-	227	-	-
1984-S49	2445727.32	1983 May 13 1137	SkyLark 7	-	DLR K-CRC-116	DLR TEXUS 7	-	-	ESR	S	-	-	264	-	-
1984-S58	2445823.68	1984 Feb 10 0412	SkyLark 6	-	DLR K-CRC-131	CASNR 1	-	-	AUD	-	-	-	676	-	-
1984-S584	2445823.68	1984 May 3 0415	SkyLark 7	-	DLR K-CRC-130	MPP/WINE W-1 1	-	-	ESR	S	-	-	180	-	-
1984-S589	2445835.52	1984 May 15 0746	SkyLark 7	-	DLR K-CRC-132	DLR TEXUS 9	-	-	ESR	S	-	-	256	-	-
1985-S29	2446096.31	1985 Jan 30 1930:00	SkyLark 12	-	DLR K-CRC-133	DLR TEXUS 10	-	-	ESR	S	-	-	703	-	-
1985-A03	2446128.11	1985 Mar 5 1445	SkyLark 12	-	DLR A-CRC-134	CASNR 2	-	-	AUD	-	-	-	0?	-	-
1985-S371	2446128.68	1985 Apr 27 0415	SkyLark 7	-	DLR M-CRC-137	Interseek 1	-	-	CLEJI	-	-	-	0?	-	-
1985-S373	2446191.69	1985 May 6 0435	SkyLark 7	-	DLR K-CRC-138	DLR TEXUS 11	-	-	ESR	S	-	-	266	-	-
1986-S44	2446590.69	1986 Apr 30 0440	SkyLark 7	-	DLR K-CRC-139	DLR TEXUS 11	-	-	ESR	S	-	-	253	-	-
1986-S45	2446662.70	1986 May 12 0485	SkyLark 7	-	DLR K-CRC-141	DLR TEXUS 12	-	-	ESR	S	-	-	246	-	-
1987-S82	2446916.67	1987 May 9 0359:59	SkyLark 7	-	DLR K-CRC-142	DLR TEXUS 13	-	-	ESR	S	-	-	260	-	-
1987-S84	2446924.67	1987 May 9 0400	SkyLark 7	-	DLR K-CRC-144	DLR TEXUS 14A	-	-	ESR	S	-	-	260	-	-
1987-S130	2447032.49	1987 Aug 24 1630	SkyLark 7	-	DLR K-CRC-146	DLR TEXUS 14B	-	-	ESR	S	-	-	107	-	-
1988-S460	2447122.88	1987 Nov 23 0910	SkyLark 7	-	DLR K-CRC-145	Supernova	-	-	WOOD	LA2 D	-	-	270?	-	-
1988-S31	2447290.85	1988 Nov 3 0945	SkyLark 7	-	DLR K-CRC-155	DLR TEXUS 16	-	-	ESR	S	-	-	0?	-	-
1988-S118	2447496.09	1988 Sep 26 1100	SkyLark 12	-	DLR K-CRC-156	DLR TEXUS GAE 1	-	-	ESR	S	-	-	262	-	-
1988-S139	2447492.54	1988 Nov 28 0620:10	SkyLark 7	-	DLR K-CRC-159	Interseek 2	-	-	CLEJI	-	-	-	857	-	-
1988-S144	2447493.95	1988 Nov 28 0620:10	SkyLark 7	-	DLR K-CRC-161	DLR TEXUS 19	-	-	AUD	-	-	-	120	-	-
1988-S143	2447501.44	1988 Dec 2 0930	SkyLark 2	-	DLR K-CRC-162	DLR TEXUS 20	-	-	ESR	S	-	-	224	-	-
1989-S37	2447557.48	1989 Feb 7 2338:30	SkyLark 2	-	DLR K-CRC-160	DLR TEXUS 21	-	-	ESR	S	-	-	113	-	-
1989-S54	2447646.65	1989 Feb 9 2346	SkyLark 7	-	DLR K-CRC-164	DLR RISE I	-	-	AUD	-	-	-	134	-	-
1989-S54	2447646.65	1989 Feb 9 2346	SkyLark 7	-	DLR K-CRC-165	DLR RISE II	-	-	ESR	S	-	-	125	-	-
1989-S109	2447856.94	1989 May 25 0805	SkyLark 7	-	DLR K-CRC-168	DLR TEXUS 21	-	-	ESR	S	-	-	268	-	-
1989-S112	2447866.84	1989 Nov 6 0811:08	SkyLark 7	-	DLR K-CRC-170	DLR TEXUS 22	-	-	ESR	S	-	-	293	-	-
1990-S55	2447956.70	1990 Dec 6 0441	SkyLark 6	-	DLR K-CRC-171	DLR TEXUS 24	-	-	ESR	S	-	-	244	-	-
1990-S87	2448024.66	1990 May 13 0350	SkyLark 7	-	DLR K-CRC-173	DLR SISI 1	-	-	ESR	S	-	-	178	-	-
1990-S91	2448026.61	1990 May 15 0245	SkyLark 7	-	DLR K-CRC-175	DLR TEXUS 25	-	-	ESR	S	-	-	234	-	-
1990-S105	2448096.46	1990 May 26 2345	SkyLark 6	-	DLR K-CRC-179	DLR TEXUS 26	-	-	ESR	S	-	-	168	-	-
1990-S114	2448106.44	1990 Jul 2 2240	SkyLark 7	-	DLR K-CRC-181	DLR SISI 2	-	-	ESR	S	-	-	208	-	-
1990-S153	2448210.80	1990 Nov 15 0705	SkyLark 7	-	DLR K-CRC-183	DLR SISI 3	-	-	ESR	S	-	-	239	-	-
1991-S173	2448220.73	1991 Nov 25 0527:00	SkyLark 12	-	DLR K-CRC-184	DLR SISI 4	-	-	ESR	S	-	-	249	-	-
1991-S94	2448356.28	1991 May 9 1848:59	SkyLark 7	-	DLR K-CRC-187	SSC Maxus Test	-	-	ESR	S	-	-	534	-	-
1991-S173	2448383.90	1991 May 23 0942	SkyLark 7	-	DLR K-CRC-196	DLR SISI 4	-	-	ESR	S	-	-	245	-	-
1992-S97	2448948.89	1992 Nov 22 0922	SkyLark 7	-	DLR K-CRC-199	DLR TEXUS 28	-	-	ESR	S	-	-	239	-	-
1993-S30	2449108.73	1993 May 1 0535	SkyLark 7	-	DLR K-CRC-201	DLR TEXUS 29	-	-	ESR	S	-	-	230	-	-
1993-S68	2449295.80	1993 Nov 4 0707	SkyLark 7	-	MASER 6	DLR TEXUS 30	-	-	ESR	S	-	-	234	-	-
1994-S71	2449317.96	1993 Nov 26 1100	SkyLark 7	-	DLR K-CRC-205	DLR TEXUS 27	-	-	ESR	S	-	-	257	-	-
1994-S85	2449477.68	1994 May 5 0415	SkyLark 7	-	DLR K-CRC-209	DLR SISI 1	-	-	ESR	S	-	-	267	-	-
1994-S85	2449686.94	1994 Nov 30 1030	SkyLark 7	-	DLR K-CRC-213	DLR TEXUS 31	-	-	ESR	S	-	-	235	-	-
1994-S80	2450144.92	1996 Mar 2 1000	SkyLark 7	-	DLR K-CRC-220	DLR TEXUS 32	-	-	ESR	S	-	-	267	-	-
1996-S19	2450206.68	1996 May 3 0416	SkyLark 7	-	DLR K-CRC-221	DLR TEXUS 33	-	-	ESR	S	-	-	292	-	-
1996-S72	2450411.96	1996 Nov 24 1105	SkyLark 7	-	DLR K-CRC-222	SSC MASER 7	-	-	ESR	S	-	-	262	-	-
1998-S09	2450851.82	1998 Feb 7 0740	SkyLark 7	-	DLR K-CRC-231	DLR TEXUS 35	-	-	ESR	S	-	-	267	-	-
1998-S32	2451312.98	1999 May 14 1133	SkyLark 7	-	MASER 8	DLR TEXUS 36	-	-	ESR	S	-	-	288	-	-
2000-S16	2451630.97	2000 Mar 27 1117	SkyLark 7	-	TEXUS 37	DLR TEXUS 37	-	-	ESR	S	-	-	260	-	-
2000-S17	2451636.82	2000 Apr 2 0734	SkyLark 7	-	TEXUS 38	DLR TEXUS 38	-	-	ESR	S	-	-	243	-	-
2001-S20	2452037.91	2001 May 8 0955	SkyLark 7	-	TEXUS 39	DLR TEXUS 39	-	-	ESR	S	-	-	260	-	-
2002-S20	2452349.90	2002 Mar 16 0937	SkyLark 7	-	MASER 9	SSC MASER 9	-	-	ESR	S	-	-	248	-	-
2003-S16	2452737.85	2003 Apr 8 0820	SkyLark 7	-	TEXUS 40	DLR TEXUS 40	-	-	ESR	S	-	-	246	-	-
2004-S68	2453341.94	2004 Dec 2 1030	SkyLark 7	-	TEXUS 41	DLR TEXUS 41	-	-	ESR	S	-	-	227	-	-
2005-S18	2453492.71	2005 May 2 0500	SkyLark 7	-	MASER 10	SSC MASER 10	-	-	ESR	S	-	-	262	-	-





Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	OrbPay	Agency	Launch_Code	Group	Category	LTCite	Cite	Notes
1957-A11	2435882.58	1957 Feb 13 0151	SkyLark	1	SL01	0.000	WRE/RAE/	SS	WRE/RAE/	Test	WDQRF	BAE	-
1957-M08	2435980.72	1957 May 22 0520	SkyLark	1	SL02	0.000	WRE/RAE/	SS	WRE/RAE/	Test	WDQRF	BAE	-
1957-S64	2436042.63	1957 Jul 23 0302	SkyLark	1	SL03	0.000	WRE/RAE/	SS	WRE/RAE/	Test	WDQRF	BAE	-
1957-S169	2436155.99	1957 Nov 13 1152	SkyLark	1	SL04	0.000	WRE/RAE/	SS	WRE/RAE/	Test	WDQRF	BAE	-
1958-427	2436295.36	1958 Apr 1 2032	SkyLark	1	SL05	0.000	WRE/RAE/	SS	WRE/RAE/	Test	JCR	SKL1144	-
1958-S55	2436310.96	1958 Apr 17 1057	SkyLark	1	SL06	0.000	WRE/RAE/	SS	WRE/RAE/	Test	WDQRF	SKL1144	-
1958-S66	2436343.68	1958 May 20 0426	SkyLark	1	SL07	0.000	WRE/RAE/	SS	WRE/RAE/	Test	WDQRF	ASHP9-163	-
1958-S81	2436359.98	1958 Jun 8 1035	SkyLark	1	SL08	0.000	WRE/RAE/	SS	WRE/RAE/	Test	WDQRF	BAE	-
1958-S85	2436372.94	1958 Jun 18 1035	SkyLark	1	SL09	0.000	WRE/RAE/	SS	WRE/RAE/	Test	WDQRF	BAE	-
1958-S88	2436373.14	1958 Jun 18 1515	SkyLark	2	SL10	0.000	WRE/RAE/	SS	WRE/RAE/	Test	WDQRF	BAE	-
1958-S85	2436466.39	1958 Sep 19 2115	SkyLark	2	SL08	0.000	WRE/RAE/	SS	WRE/RAE/	Test	WDQRF	BAE	-
1958-S277	2436540.93	1958 Dec 3 1013	SkyLark	1	SL11	0.000	WRE/RAE/	SS	WRE/RAE/	Test	WDQRF	SKL1144	-
1959-443	2436653.97	1959 Mar 4 1114	SkyLark	1	SL21	0.000	WRE/RAE/	SS	WRE/RAE/	Test	WDQRF	BAE	-
1959-M02	2436746.50	1959 Jun 29	Rook	-	-	0.000	WRE/RAE/	SS	WRE/RAE/	Test	Serra	BAE	-
1959-A114	2436750.50	1959 Jul 1 0005	SkyLark	2	SL19	0.000	WRE/RAE/	SS	WRE/RAE/	Test	WDQRF	BAE	-
1959-A114	2436756.50	1959 Jul 7	Rook	-	-	0.000	WRE/RAE/	SS	WRE/RAE/	Test	Serra	BAE	-
1959-S105	2436757.51	1959 Jul 8 0013	SkyLark	2	SL14	0.000	WRE/RAE/	SS	WRE/RAE/	Test	Serra	BAE	-
1959-S105	2436772.56	1959 Jul 23 0126	SkyLark	2	SL24	0.000	WRE/RAE/	SS	WRE/RAE/	Test	WDQRF	BAE	-
1959-S144	2436799.51	1959 Aug 19 0020	SkyLark	1	SL17	0.000	WRE/RAE/	SS	WRE/RAE/	Test	WDQRF	BAE	-
1959-S174	2436828.51	1959 Sep 17 0012	SkyLark	2	SL12	0.000	WRE/RAE/	SS	WRE/RAE/	Test	WDQRF	BAE	-
1959-S165	2436835.52	1959 Sep 24 0029	SkyLark	2	SL15	0.000	WRE/RAE/	SS	WRE/RAE/	Test	WDQRF	BAE	-
1959-A1178	2436863.50	1959 Oct 22	Leopard	-	L2B	0.000	WRE/RAE/	SS	WRE/RAE/	Test	Serra	BAE	-
1959-S257	2436902.93	1959 Nov 30 1016	SkyLark	2	SL16	0.000	WRE/RAE/	SS	WRE/RAE/	Test	WDQRF	BAE	-
1959-S256	2436903.02	1959 Nov 30 1235	SkyLark	2	SL60	0.000	WRE/RAE/	SS	WRE/RAE/	Test	WDQRF	BAE	-
1959-S261	2436903.96	1959 Dec 1 1136	SkyLark	2	SL38	0.000	WRE/RAE/	SS	WRE/RAE/	Test	WDQRF	BAE	-
1960-A12	2436935.50	1960 Jan 2	Leopard	-	L1B	0.000	WRE/RAE/	SS	WRE/RAE/	Test	Serra	BAE	-
1960-A113	2436940.50	1960 Jan 7	Leopard	-	L1C	0.000	WRE/RAE/	SS	WRE/RAE/	Test	Serra	BAE	-
1960-A453	2436967.50	1960 Feb 23	Leopard	-	L1D	0.000	WRE/RAE/	SS	WRE/RAE/	Test	Serra	BAE	-
1960-S74	2437036.64	1960 Apr 12 0318	SkyLark	2C	SL51	0.000	WRE/RAE/	SS	WRE/RAE/	Test	WDQRF	BAE	-
1960-S79	2437045.94	1960 Apr 21 1035	SkyLark	2	SL62	0.000	WRE/RAE/	SS	WRE/RAE/	Test	WDQRF	BAE	-
1960-A526	2437046.50	1960 Apr 21	Blue Water	-	FJ 3	0.000	WRE/RAE/	SS	WRE/RAE/	Test	WDQRF	BAE	-
1960-A527	2437050.50	1960 Apr 26	Blue Water	-	L1E	0.000	WRE/RAE/	SS	WRE/RAE/	Test	WDQRF	BAE	-
1960-A106	2437053.50	1960 Apr 29	Leopard	-	L1F	0.000	WRE/RAE/	SS	WRE/RAE/	Test	WDQRF	BAE	-
1960-A113	2437059.50	1960 May 5	Leopard	-	L1G	0.000	WRE/RAE/	SS	WRE/RAE/	Test	WDQRF	BAE	-
1960-A129	2437061.50	1960 May 27	Leopard	-	L1H	0.000	WRE/RAE/	SS	WRE/RAE/	Test	WDQRF	BAE	-
1960-S152	2437102.00	1960 Jun 16 1204	SkyLark	2	SL10	0.000	WRE/RAE/	SS	WRE/RAE/	Test	WDQRF	BAE	-
1960-A166	2437127.50	1960 Jul 12	Rook	-	L14	0.000	WRE/RAE/	SS	WRE/RAE/	Test	Serra	BAE	-
1960-A168	2437129.50	1960 Jul 14	Rook	-	L1H	0.000	WRE/RAE/	SS	WRE/RAE/	Test	Serra	BAE	-
1960-S232	2437156.94	1960 Aug 10 1035	SkyLark	2	SL61	0.000	WRE/RAE/	SS	WRE/RAE/	Test	WDQRF	BAE	-
1960-A453	2437163.50	1960 Aug 17	Jaguar-1	-	L1	0.000	WRE/RAE/	SS	WRE/RAE/	Test	Serra	BAE	-
1960-S254	2437172.96	1960 Aug 26 1100	SkyLark	2	SL13	0.000	WRE/RAE/	SS	WRE/RAE/	Test	WDQRF	BAE	-
1960-S954	2437200.50	1960 Oct 13	Rook	-	L13	0.000	WRE/RAE/	SS	WRE/RAE/	Test	Serra	BAE	-
1960-S954	2437254.96	1960 Nov 19 1102	SkyLark	2	SL23	0.000	WRE/RAE/	SS	WRE/RAE/	Test	WDQRF	BAE	-
1960-A366	2437255.90	1960 Nov 19 1040	Rook	-	L15	0.000	WRE/RAE/	SS	WRE/RAE/	Test	Serra	BAE	-
1960-S977	2437255.94	1960 Nov 23 2355	SkyLark	2C	SL67	0.000	WRE/RAE/	SS	WRE/RAE/	Test	WDQRF	BAE	-
1960-S978	2437262.90	1960 Nov 23 2355	SkyLark	2	SL69	0.000	WRE/RAE/	SS	WRE/RAE/	Test	WDQRF	BAE	-
1960-A304	2437275.51	1960 Dec 15 0020	SkyLark	2	SL60	0.000	WRE/RAE/	SS	WRE/RAE/	Test	WDQRF	BAE	-
1961-A300	2437284.50	1961 Dec 13 1358	Jaguar-1	-	L16	0.000	WRE/RAE/	SS	WRE/RAE/	Test	Serra	BAE	-
1961-S772	2437304.96	1961 Feb 5 0056	SkyLark	2C	SL26	0.000	WRE/RAE/	SS	WRE/RAE/	Test	WDQRF	BAE	-
1961-S103	2437304.96	1961 Feb 5 0056	SkyLark	2C	SL63	0.000	WRE/RAE/	SS	WRE/RAE/	Test	WDQRF	BAE	-
1961-A107	2437310.50	1961 Apr 21	SkyLark	-	L16	0.000	WRE/RAE/	SS	WRE/RAE/	Test	Serra	BAE	-
1961-A1170	2437315.50	1961 Apr 26	Jaguar-1	-	L17	0.000	WRE/RAE/	SS	WRE/RAE/	Test	Serra	BAE	-
1961-S132	2437342.01	1961 Apr 26	Rook	-	L1K	0.000	WRE/RAE/	SS	WRE/RAE/	Test	Serra	BAE	-
1961-S164	2437449.72	1961 May 1 1210	SkyLark	2	SL43	0.000	WRE/RAE/	SS	WRE/RAE/	Test	WDQRF	BAE	-
1961-S169	2437457.53	1961 May 20 0515	SkyLark	2	SL25	0.000	WRE/RAE/	SS	WRE/RAE/	Test	WDQRF	BAE	-
1961-M18	2437484.93	1961 Jun 4 1023	SkyLark	2	SL65	0.000	WRE/RAE/	SS	WRE/RAE/	Test	WDQRF	BAE	-
1961-A1170	2437500.50	1961 Jul 20	Leopard	-	L15	0.000	WRE/RAE/	SS	WRE/RAE/	Test	Serra	BAE	-
1961-S227	2437512.96	1961 Jul 26	Jaguar-1	-	L13	0.000	WRE/RAE/	SS	WRE/RAE/	Test	Serra	BAE	-
1961-A190	2437535.50	1961 Aug 1 1102	SkyLark	2	SL24	0.000	WRE/RAE/	SS	WRE/RAE/	Test	WDQRF	BAE	-
1961-A190	2437535.50	1961 Aug 24	Rook	-	Ra23	0.000	WRE/RAE/	SS	WRE/RAE/	Test	Serra	BAE	-
1961-A191	2437535.50	1961 Aug 24	Rook	-	-	0.000	WRE/RAE/	SS	WRE/RAE/	Test	Serra	BAE	-
1961-S292	2437561.01	1961 Sep 18 1215	SkyLark	2C	MASA 9 016G	0.000	WRE/RAE/	SS	WRE/RAE/	Test	WDQRF	BAE	-
1961-S300	2437569.50	1961 Sep 27 0005	SkyLark	2C	SL40	0.000	WRE/RAE/	SS	WRE/RAE/	Test	WDQRF	BAE	-
1961-S320	2437576.97	1961 Oct 4 1119	SkyLark	2C	MASA 9 026G	0.000	WRE/RAE/	SS	WRE/RAE/	Test	WDQRF	BAE	-
1961-S347	2437596.50	1961 Oct 24 0023	SkyLark	2C	SL27	0.000	WRE/RAE/	SS	WRE/RAE/	Test	WDQRF	BAE	-
1961-A230	2437603.50	1961 Nov 4	Jaguar-1	-	L14	0.000	WRE/RAE/	SS	WRE/RAE/	Test	Serra	BAE	-
1961-S365	2437605.25	1961 Nov 1 1756	SkyLark	2C	MASA 9 036G	0.000	WRE/RAE/	SS	WRE/RAE/	Test	WDQRF	BAE	-
1961-S371	2437611.88	1961 Nov 8 0900	SkyLark	2C	SL35	0.000	WRE/RAE/	SS	WRE/RAE/	Test	WDQRF	BAE	-
1961-S384	2437624.25	1961 Nov 20 1804	SkyLark	2C	MASA 9 046G	0.000	WRE/RAE/	SS	WRE/RAE/	Test	WDQRF	BAE	-
1961-S407	2437639.48	1961 Dec 5 2326	SkyLark	2C	SL42	0.000	WRE/RAE/	SS	WRE/RAE/	Test	WDQRF	BAE	-
1962-A10	2437683.50	1962 Jan 19	Rook	-	Ra26	0.000	WRE/RAE/	SS	WRE/RAE/	Test	Serra	BAE	-
1962-S333	2437701.37	1962 Feb 5 2058	SkyLark	5C	SL25B	0.000	WRE/RAE/	SS	WRE/RAE/	Test	WDQRF	BAE	-
1962-S660	2437728.91	1962 Mar 5 0955	SkyLark	2	SL66	0.000	WRE/RAE/	SS	WRE/RAE/	Test	WDQRF	BAE	-
1962-S672	2437730.02	1962 Mar 6 1235	SkyLark	2	SL60	0.000	WRE/RAE/	SS	WRE/RAE/	Test	WDQRF	BAE	-
1962-S871	2437742.96	1962 Mar 19 1104	SkyLark	2	SL161	0.000	WRE/RAE/	SS	WRE/RAE/	Test	WDQRF	BAE	-
1962-A45	2437758.50	1962 Apr 5	Jaguar-1	-	J5	0.000	WRE/RAE/	SS	WRE/RAE/	Test	WDQRF	BAE	-
1962-S89	2437760.16	1962 Apr 5 1547	SkyLark	2	SL63	0.000	WRE/RAE/	SS	WRE/RAE/	Test	WDQRF	BAE	-
1962-A48	2437765.26	1962 Apr 10 1820	SkyLark	2	SL62	0.000	WRE/RAE/	SS	WRE/RAE/	Test	WDQRF	BAE	-
1962-S170	2437821.62	1962 Jun 7 0300	SkyLark	5C	SL35C	0.000	WRE/RAE/	SS	WRE/RAE/	Test	WDQRF	BAE	-
1962-A243	2437822.50	1962 Jun 7	Blue Water	-	SL45	0.000	WRE/RAE/	SS	WRE/RAE/	Test	WDQRF	BAE	-
1962-S195	2437835.72	1962 Jun 20 0520	SkyLark	5C	SL45	0.000	WRE/RAE/	SS	WRE/RAE/	Test	WDQRF	BAE	-
1962-A99	2437841.50	1962 Jun 26	Jaguar-1	-	J6	0.000	WRE/RAE/	SS	WRE/RAE/	Test	WDQRF	BAE	-
1962-S225	2437850.66	1962 Jul 5 0346	SkyLark	5	SL164	0.000	WRE/RAE/	SS	WRE/RAE/	Test	WDQRF	BAE	-

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	OrbPay	Agency	Launch_Code	Group	Category	LTCite	Cite	Notes
1962-3295	2437891.14	1962 Aug 14 1520	SkyLark	2	SL109	0.000	WRE/RAE	SS	RSRS/SHEF/UCL/Hall	Ionos	WDGRF	BAE	-
1962-4125	2437900.50	1962 Aug 24	Jaguar 1	2	JL28	0.000	RAE	SS	WRE/RAE/	Test	AASH32-377	BAE	-
1962-3516	2437905.54	1962 Aug 29 0101	SkyLark	2	SL28	0.000	WRE/RAE	SS	WRE/RAE/	Test	WDGRF	BAE	-
1962-4153	2437907.50	1962 Sep	Boak	2C	SL44	0.000	RAE	SS	UCL/	Ionos	JB1545-139	-	-
1962-3530	2437919.06	1962 Sep 11 1330	SkyLark	2C	SL44	0.000	WRE/RAE	SS	RSRS/SHEF/Hall	Ionos	WDGRF	BAE	-
1962-3591	2437927.68	1962 Sep 20 0421	SkyLark	2	SL28	0.000	WRE/RAE	SS	RSRS/SHEF/Hall	Ionos	WDGRF	BAE	-
1962-3592	2437933.18	1962 Oct 15 1617	SkyLark	2	SL28	0.000	WRE/RAE	SS	RSRS/SHEF/Hall	Ionos	WDGRF	BAE	-
1962-3593	2437937.88	1962 Oct 15 1617	SkyLark	2	SL28	0.000	WRE/RAE	SS	RSRS/SHEF/Hall	Ionos	WDGRF	BAE	-
1962-3594	2437941.92	1962 Nov 13 1010	SkyLark	7	SL114	0.000	WRE/RAE	SS	RSRS/SHEF/Hall	Solar X/Aeron/Meteorites	WDGRF	BAE	-
1962-3595	2437945.52	1962 Nov 22 0111	SkyLark	7	SL27	0.000	WRE/RAE	SS	WRE/RAE/	Test	WDGRF	BAE	-
1962-3596	2437949.93	1962 Nov 28 1017	SkyLark	7C	SL165	0.000	WRE/RAE	SS	UCL/ICST/	Test	WDGRF	BAE	-
1962-4207	2437998.50	1962 Nov 30	Leopard	7C	L6	0.000	RAE	AS	UCL/ICST/	Test	JB1545-139	-	-
1962-3528	2438002.63	1962 Dec 4 0756	SkyLark	5	SL166	0.000	WRE/RAE	SS	UCL/ICST/	Aeronomy	WDGRF	BAE	-
1962-3529	2438008.56	1963 Mar 1 0120	SkyLark	7C	SL84	0.000	WRE/RAE	SS	LUX/UCL/VR/UCM, Sayers	Ionos/Solar X/Bir-5	WDGRF	BAE	-
1963-3567	2438099.69	1963 Mar 11 0430	SkyLark	7C	SL85	0.000	WRE/RAE	SS	LUX/UCL/VR/UCM, Sayers	Ionos/Solar X/UCM-5/Bir-6	WDGRF	BAE	-
1963-445	2438115.50	1963 Mar 27	Jaguar 1	7C	J8	0.000	RAE	AS	UCL/ICST/	Test	JB1545-139	-	-
1963-3156	2438136.69	1963 Apr 17 0923	SkyLark	7C	SL167	0.000	WRE/RAE	SS	UCL/ICST/	Aeronomy	WDGRF	BAE	-
1963-3231	2438172.87	1963 May 23 0946	SkyLark	7C	SL115	0.000	WRE/RAE	SS	LUX/UCL/VR/UCM, Sayers	Ionos/Solar X/Bir-5	WDGRF	BAE	-
1963-3244	2438178.69	1963 May 29 0430	SkyLark	7C	SL127	0.000	WRE/RAE	SS	LUX/UCL/VR/UCM, Sayers	Ionos/Solar X/UCM-5/Bir-6	WDGRF	BAE	-
1963-3279	2438198.69	1963 Jun 19 0435	SkyLark	7C	SL126	0.000	WRE/RAE	SS	LUX/UCL/VR/UCM, Sayers	Ionos/Solar X/UCM-5/Bir-6	WDGRF	BAE	-
1963-3268	2438200.72	1963 Jun 20 0520	SkyLark	7C	SL46	0.000	WRE/RAE	SS	LUX/UCL/VR/UCM, Sayers	Ionos/Solar X/UCM-5/Bir-6	WDGRF	BAE	-
1963-4113	2438235.71	1963 Jul 25 0459	SkyLark	7	SL29	0.000	WRE/RAE	SS	WRE/RAE/	Test	WDGRF	BAE	-
1963-4116	2438243.60	1963 Aug 2 0230	SkyLark	9C	SL86	0.000	WRE/RAE	SS	WRE/RAE/	Test	WDGRF	BAE	-
1963-5451	2438277.65	1963 Sep 5 0341	SkyLark	5C	SL87	0.000	WRE/RAE	SS	WRE/RAE/	Test	WDGRF	BAE	-
1963-5475	2438305.13	1963 Oct 2 1510	SkyLark	7C	SL11A	0.000	WRE/RAE	SS	WRE/RAE/	Test	WDGRF	BAE	-
1963-5480	2438317.91	1963 Oct 15 0951	SkyLark	7C	SL171	0.000	WRE/RAE	SS	WRE/RAE/	Test	WDGRF	BAE	-
1963-5481	2438317.99	1963 Oct 15 1148	SkyLark	7C	SL171	0.000	WRE/RAE	SS	WRE/RAE/	Test	WDGRF	BAE	-
1963-5482	2438318.13	1963 Oct 15 1148	SkyLark	7C	SL171	0.000	WRE/RAE	SS	WRE/RAE/	Test	WDGRF	BAE	-
1963-5483	2438318.31	1963 Oct 15 1148	SkyLark	7C	SL171	0.000	WRE/RAE	SS	WRE/RAE/	Test	WDGRF	BAE	-
1963-5484	2438318.31	1963 Oct 15 1148	SkyLark	7C	SL171	0.000	WRE/RAE	SS	WRE/RAE/	Test	WDGRF	BAE	-
1963-5485	2438318.31	1963 Oct 15 1148	SkyLark	7C	SL171	0.000	WRE/RAE	SS	WRE/RAE/	Test	WDGRF	BAE	-
1963-5486	2438318.31	1963 Oct 15 1148	SkyLark	7C	SL171	0.000	WRE/RAE	SS	WRE/RAE/	Test	WDGRF	BAE	-
1963-5487	2438318.31	1963 Oct 15 1148	SkyLark	7C	SL171	0.000	WRE/RAE	SS	WRE/RAE/	Test	WDGRF	BAE	-
1963-5488	2438318.31	1963 Oct 15 1148	SkyLark	7C	SL171	0.000	WRE/RAE	SS	WRE/RAE/	Test	WDGRF	BAE	-
1963-5489	2438318.31	1963 Oct 15 1148	SkyLark	7C	SL171	0.000	WRE/RAE	SS	WRE/RAE/	Test	WDGRF	BAE	-
1963-5490	2438318.31	1963 Oct 15 1148	SkyLark	7C	SL171	0.000	WRE/RAE	SS	WRE/RAE/	Test	WDGRF	BAE	-
1963-5491	2438318.31	1963 Oct 15 1148	SkyLark	7C	SL171	0.000	WRE/RAE	SS	WRE/RAE/	Test	WDGRF	BAE	-
1963-5492	2438318.31	1963 Oct 15 1148	SkyLark	7C	SL171	0.000	WRE/RAE	SS	WRE/RAE/	Test	WDGRF	BAE	-
1963-5493	2438318.31	1963 Oct 15 1148	SkyLark	7C	SL171	0.000	WRE/RAE	SS	WRE/RAE/	Test	WDGRF	BAE	-
1963-5494	2438318.31	1963 Oct 15 1148	SkyLark	7C	SL171	0.000	WRE/RAE	SS	WRE/RAE/	Test	WDGRF	BAE	-
1963-5495	2438318.31	1963 Oct 15 1148	SkyLark	7C	SL171	0.000	WRE/RAE	SS	WRE/RAE/	Test	WDGRF	BAE	-
1963-5496	2438318.31	1963 Oct 15 1148	SkyLark	7C	SL171	0.000	WRE/RAE	SS	WRE/RAE/	Test	WDGRF	BAE	-
1963-5497	2438318.31	1963 Oct 15 1148	SkyLark	7C	SL171	0.000	WRE/RAE	SS	WRE/RAE/	Test	WDGRF	BAE	-
1963-5498	2438318.31	1963 Oct 15 1148	SkyLark	7C	SL171	0.000	WRE/RAE	SS	WRE/RAE/	Test	WDGRF	BAE	-
1963-5499	2438318.31	1963 Oct 15 1148	SkyLark	7C	SL171	0.000	WRE/RAE	SS	WRE/RAE/	Test	WDGRF	BAE	-
1963-5500	2438318.31	1963 Oct 15 1148	SkyLark	7C	SL171	0.000	WRE/RAE	SS	WRE/RAE/	Test	WDGRF	BAE	-
1963-5501	2438318.31	1963 Oct 15 1148	SkyLark	7C	SL171	0.000	WRE/RAE	SS	WRE/RAE/	Test	WDGRF	BAE	-
1963-5502	2438318.31	1963 Oct 15 1148	SkyLark	7C	SL171	0.000	WRE/RAE	SS	WRE/RAE/	Test	WDGRF	BAE	-
1963-5503	2438318.31	1963 Oct 15 1148	SkyLark	7C	SL171	0.000	WRE/RAE	SS	WRE/RAE/	Test	WDGRF	BAE	-
1963-5504	2438318.31	1963 Oct 15 1148	SkyLark	7C	SL171	0.000	WRE/RAE	SS	WRE/RAE/	Test	WDGRF	BAE	-
1963-5505	2438318.31	1963 Oct 15 1148	SkyLark	7C	SL171	0.000	WRE/RAE	SS	WRE/RAE/	Test	WDGRF	BAE	-
1963-5506	2438318.31	1963 Oct 15 1148	SkyLark	7C	SL171	0.000	WRE/RAE	SS	WRE/RAE/	Test	WDGRF	BAE	-
1963-5507	2438318.31	1963 Oct 15 1148	SkyLark	7C	SL171	0.000	WRE/RAE	SS	WRE/RAE/	Test	WDGRF	BAE	-
1963-5508	2438318.31	1963 Oct 15 1148	SkyLark	7C	SL171	0.000	WRE/RAE	SS	WRE/RAE/	Test	WDGRF	BAE	-
1963-5509	2438318.31	1963 Oct 15 1148	SkyLark	7C	SL171	0.000	WRE/RAE	SS	WRE/RAE/	Test	WDGRF	BAE	-
1963-5510	2438318.31	1963 Oct 15 1148	SkyLark	7C	SL171	0.000	WRE/RAE	SS	WRE/RAE/	Test	WDGRF	BAE	-
1963-5511	2438318.31	1963 Oct 15 1148	SkyLark	7C	SL171	0.000	WRE/RAE	SS	WRE/RAE/	Test	WDGRF	BAE	-
1963-5512	2438318.31	1963 Oct 15 1148	SkyLark	7C	SL171	0.000	WRE/RAE	SS	WRE/RAE/	Test	WDGRF	BAE	-
1963-5513	2438318.31	1963 Oct 15 1148	SkyLark	7C	SL171	0.000	WRE/RAE	SS	WRE/RAE/	Test	WDGRF	BAE	-
1963-5514	2438318.31	1963 Oct 15 1148	SkyLark	7C	SL171	0.000	WRE/RAE	SS	WRE/RAE/	Test	WDGRF	BAE	-
1963-5515	2438318.31	1963 Oct 15 1148	SkyLark	7C	SL171	0.000	WRE/RAE	SS	WRE/RAE/	Test	WDGRF	BAE	-
1963-5516	2438318.31	1963 Oct 15 1148	SkyLark	7C	SL171	0.000	WRE/RAE	SS	WRE/RAE/	Test	WDGRF	BAE	-
1963-5517	2438318.31	1963 Oct 15 1148	SkyLark	7C	SL171	0.000	WRE/RAE	SS	WRE/RAE/	Test	WDGRF	BAE	-
1963-5518	2438318.31	1963 Oct 15 1148	SkyLark	7C	SL171	0.000	WRE/RAE	SS	WRE/RAE/	Test	WDGRF	BAE	-
1963-5519	2438318.31	1963 Oct 15 1148	SkyLark	7C	SL171	0.000	WRE/RAE	SS	WRE/RAE/	Test	WDGRF	BAE	-
1963-5520	2438318.31	1963 Oct 15 1148	SkyLark	7C	SL171	0.000	WRE/RAE	SS	WRE/RAE/	Test	WDGRF	BAE	-
1963-5521	2438318.31	1963 Oct 15 1148	SkyLark	7C	SL171	0.000	WRE/RAE	SS	WRE/RAE/	Test	WDGRF	BAE	-
1963-5522	2438318.31	1963 Oct 15 1148	SkyLark	7C	SL171	0.000	WRE/RAE	SS	WRE/RAE/	Test	WDGRF	BAE	-
1963-5523	2438318.31	1963 Oct 15 1148	SkyLark	7C	SL171	0.000	WRE/RAE	SS	WRE/RAE/	Test	WDGRF	BAE	-
1963-5524	2438318.31	1963 Oct 15 1148	SkyLark	7C	SL171	0.000	WRE/RAE	SS	WRE/RAE/	Test	WDGRF	BAE	-
1963-5525	2438318.31	1963 Oct 15 1148	SkyLark	7C	SL171	0.000	WRE/RAE	SS	WRE/RAE/	Test	WDGRF	BAE	-
1963-5526	2438318.31	1963 Oct 15 1148	SkyLark	7C	SL171	0.000	WRE/RAE	SS	WRE/RAE/	Test	WDGRF	BAE	-
1963-5527	2438318.31	1963 Oct 15 1148	SkyLark	7C	SL171	0.000	WRE/RAE	SS	WRE/RAE/	Test	WDGRF	BAE	-
1963-5528	2438318.31	1963 Oct 15 1148	SkyLark	7C	SL171	0.000	WRE/RAE	SS	WRE/RAE/	Test	WDGRF	BAE	-
1963-5529	2438318.31	1963 Oct 15 1148	SkyLark	7C	SL171	0.000	WRE/RAE	SS	WRE/RAE/	Test	WDGRF	BAE	-
1963-5530	2438318.31	1963 Oct 15 1148	SkyLark	7C	SL171	0.000	WRE/RAE	SS	WRE/RAE/	Test	WDGRF	BAE	-
1963-5531	2438318.31	1963 Oct 15 1148	SkyLark	7C	SL171	0.000	WRE/RAE	SS	WRE/RAE/	Test	WDGRF	BAE	-
1963-5532	2438318.31	1963 Oct 15 1148	SkyLark	7C	SL171	0.000	WRE/RAE	SS	WRE/RAE/	Test	WDGRF	BAE	-
1963-5533	2438318.31	1963 Oct 15 1148	SkyLark	7C	SL171	0.000	WRE/RAE	SS	WRE/RAE/	Test	WDGRF	BAE	-



Launch_Img	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Agency	Launch_Code	Group	Category	LTCite	Cite	Notes
1969-A125	2440418.50	1969 Jul 16	Jabiru 2	-	J208	RAE	AS	-	Test	JETS45-139	-	-
1969-5412	2440419.44	1969 Jul 16 2233	SkyLark 3	-	SL729	BAC	SS	MSL/UCV/UBW/Wrem,Byrne	Ionospheric UCH-17	WDCRF	BAE	-
1969-5422	2440427.07	1969 Jul 25 0410	SkyLark 3	5C	SL721	BAC	SS	SHEF/UCV/Kaiser	Ionospheric	WDCRF	BAE	-
1969-5430	2440432.46	1969 Jul 29 2257	SkyLark 3 AC	-	SL730	BAC	SS	MSL/UCV/UBW/Wrem,Byrne	Ionospheric UCH-18	WDCRF	BAE	-
1969-5459	2440454.58	1969 Aug 21 0157	SkyLark 2	-	SL605	BAC	SS	LUX/Evans,Pounds	Solar X	WDCRF	BAE	-
1969-5547	2440500.40	1969 Oct 5 2228:10	SkyLark 2	-	S297/1	ESRO	SS	QBL/RSRS/Byrne,Bryant	Auroral	ESRO69	BAE	-
1969-5547	2440510.30	1969 Oct 15 1916	SkyLark 2	-	SL961	BAC	SS	UCL/Rees	Aeronomy/Ionos	Pluspasc121,1237	WDCRF	-
1969-A178	2440510.50	1969 Oct 16	Jabiru 2	-	J209	RAE	AS	UCL/Rees	Test	WDCRF	WDCRF	-
1969-5552	2440511.91	1969 Oct 17 0945	SkyLark 3	-	SL962	BAC	SS	QBL/RSRS/Byrne,Bryant	Aeronomy/Ionos	Pluspasc121,1237	WDCRF	-
1969-5554	2440512.44	1969 Oct 17 2228:40	SkyLark 3 AC	-	S297/2	ESRO	SS	RAE/WRE/Barnes	Auroral	ESRO69	BAE	-
1969-5568	2440516.76	1969 Oct 22 0610	SkyLark 3	-	SL821	BAC	SS	MSL/Boyd,Willmore	Upr/OV Astron	JETS24,393	BAE	-
1969-5575	2440518.74	1969 Oct 24 0544:00	SkyLark 2	7C	SL921	ESRO	SS	BUL/ESTEC/Prinh,Feel	XX Astronomy/Tech	ESRO69	BAE	-
1969-5626	2440536.38	1969 Nov 10 2100:12	SkyLark 3 AC	-	SL602	BAC	SS	SHEF/BREI/Unger	Auroral	ESRO-SP80	BAE	-
1969-5632	2440543.60	1969 Nov 18 0217	SkyLark 3 AC	-	SL901	BAC	SS	MSL/Willmore	XX Astronomy	Sop115,288	BAE	-
1969-A194	2440551.50	1969 Nov 20 0100	Roek IIIA	-	0b3	RAE	AS	CULH/UKMO/Shenton	Solar UV,X	JETS45-139	BAE	-
1969-5637	2440552.48	1969 Nov 26 2337	SkyLark 3 AC	-	SL603	ESRO	SS	CULH/UB/Shenton,Bates	Test	WDCRF	JETS24,13	-
1970-3821	2440611.10	1970 Jan 24 1427	SkyLark 1	-	ESRO 566A/1	ESRO	SS	MP/K/RSRS/Zahringer,Hall	Ionos/Solar UV	WDCRF	BAE	-
1970-420	2440622.50	1970 Feb 5	Roek IIIA	-	L78	RAE	AS	ME/Boildt,Heesberg	Test	WDCRF	BAE	-
1970-5106	2440624.32	1970 Feb 6 1942	SkyLark 2 AC	-	ESRO 844/1	ESRO	SS	UCL/Bokenberg	UV Astronomy	JETS45-139	BAE	-
1970-5114	2440628.09	1970 Feb 10 1410	SkyLark 3 AC	-	ESRO 872	BAC/ESRO	SS	UCL/WFE/Wrem,Haerdel	UV Astronomy	WDCRF	BAE	-
1970-5120	2440632.18	1970 Feb 14 1615:40	SkyLark 2	-	ESRO 866/2	ESRO	SS	DBL/UKMO/Harries	Ionospheric	WDCRF/ESRLV	SRL2,1369	-
1970-5143	2440643.19	1970 Feb 24 1909:59	SkyLark 2	-	SL70/1	ESRO	SS	UKMO/BOHM/Haller,Toniz	Ionospheric	WDCRF	BAE	-
1970-5165	2440645.43	1970 Feb 25 1633:03	SkyLark 2	-	SL612	ESRO	SS	MSL/RSRS/Jorling	Aeronomy	WDCRF/ESRLV	BAE	-
1970-5168	2440645.70	1970 Mar 11 2201	SkyLark 2	-	SL921	BAC	SS	MSL/Cruise,Willmore	XX Astronomy	WDCRF	BAE	-
1970-5242	2440657.42	1970 Mar 11 2201	SkyLark 3 AC	-	SL901	BAC	SS	LUX/Coose	XX Astronomy	NAPS236,104	BAE	-
1970-5249	2440665.44	1970 Mar 19 1518	SkyLark 3 AC	-	SL941	BAC	SS	REJ/Butler	XX Astronomy	WDCRF	BAE	-
1970-5258	2440665.14	1970 Mar 19 1518	SkyLark 3 AC	-	SL941	BAC	SS	REJ/Butler	XX Astronomy	WDCRF	BAE	-
1970-537	2440667.59	1970 Mar 22 0208	SkyLark 3 AC	-	SL967/1	ESRO	SS	BOHM/Offermann	Aeron	WDCRF	BAE	-
1970-5362	2440670.42	1970 Mar 24 2200	SkyLark 3 AC	-	SL602	ESRO	SS	LUX/Adams,James	XX Astronomy	WDCRF	BAE	-
1970-447	2440677.50	1970 Apr 1	Jabiru 2	-	2210	RAE	AS	LUX/Adams,James	XX Astronomy	WDCRF	BAE	-
1970-5378	2440678.57	1970 Apr 1 0146	SkyLark 2	-	566/1	ESRO	SS	UCL/WFE/Wrem,Haerdel	Ionospheric	SRL2,1369	BAE	-
1970-5384	2440681.30	1970 Apr 4 1912	SkyLark 3 AC	-	S287/1	ESRO	SS	ME/UB/RSRS/Boildt,Byrne	Aeronomy	WDCRF	BAE	-
1970-5385	2440683.64	1970 Apr 7 0320	SkyLark 3 AC	-	SL603	BAC	SS	CULH/Wilson,Boildt	Solar UV	WDCRF	Ap22,161	-
1970-5307	2440692.88	1970 Apr 16 0907:50	SkyLark 2	-	SL725	BAC	SS	DBL/UKMO/Harries	XX Astronomy/Aeron	WDCRF	BAE	-
1970-5414	2440760.09	1970 Jun 22 1404	SkyLark 3	-	ESRO 858	ESRO	SS	MSL/RSRS/Prinh	Ionospheric	WDCRF	BAE	-
1970-5416	2440771.33	1970 Jun 3 1981	SkyLark 1	-	ESRO 859/2	ESRO	SS	MSL/RSRS/Jorling	Ionospheric	WDCRF	BAE	-
1970-5421	2440776.52	1970 Jun 6 1945	SkyLark 1	5C	SL727	BAC	SS	MSL/RSRS/Jorling	Ionospheric	WDCRF	BAE	-
1970-5425	2440777.52	1970 Jun 10 0030	SkyLark 6	-	SL727	BAC	SS	MSL/RSRS/Jorling	Ionospheric	WDCRF	BAE	-
1970-5430	2440781.70	1970 Jun 14 0452	SkyLark 6	-	SL511	BAC	SS	MSL/Willmore	XX Astronomy/Ionos	NAPS234,149	BAE	-
1970-5454	2440783.10	1970 Jun 15 1429	SkyLark 5 AC	-	ESRO 858A/2	ESRO	SS	CULH/MSL/Boildt,Bates	XX Astronomy	WDCRF	BAE	-
1970-5441	2440791.06	1970 Jun 23 1355	SkyLark 1	-	ESRO 866/1	ESRO	SS	RSRS/MSL/Boildt,Bates	XX Astronomy	WDCRF	BAE	-
1970-5444	2440791.64	1970 Jun 24 0326	SkyLark 1	-	ESRO 866/2	ESRO	SS	RSRS/MSL/Boildt,Bates	XX Astronomy	WDCRF	BAE	-
1970-5449	2440794.98	1970 Jun 27 0826	SkyLark 1	-	SL722	BAC	SS	REJ/RSRS/Kaiser,Ha.	Ionospheric	WDCRF	BAE	-
1970-5549	2440867.85	1970 Oct 6 0628:07	SkyLark 6	-	SL722	BAC	SS	LUX/Coose	Ionospheric	WDCRF	BAE	-
1970-5569	2440872.51	1970 Oct 13 0945	SkyLark 3	-	SL722	BAC	SS	LUX/Coose	Ionospheric	WDCRF	BAE	-
1970-5569	2440876.22	1970 Oct 14 0845	SkyLark 3 AC	-	SL722	BAC	SS	LUX/Coose	Ionospheric	WDCRF	BAE	-
1970-5583	2440889.36	1970 Oct 27 2034:22	SkyLark 2	-	ESRO 853	ESRO	SS	RSRS/Bryant	Solar UV?	ESRO70	BAE	-
1970-5586	2440890.70	1970 Oct 27 2130:30	SkyLark 3 AC	-	ESRO 858	ESRO	SS	RSRS/Bryant	Solar UV?	ESRO70	BAE	-
1970-5610	2440901.40	1970 Nov 19 2200	SkyLark 3 AC	-	ESRO 857/1	BAC	SS	MSL/Cruise,Willmore	Solar UV?	ESRO70	BAE	-
1970-5610	2440915.43	1970 Nov 24 2213	SkyLark 3 AC	-	ESRO 857/2	BAC	SS	MSL/Cruise,Willmore	Solar UV?	ESRO70	BAE	-
1970-5625	2440926.97	1970 Dec 6 1113	SkyLark 3 AC	-	SL904	BAC	SS	LUX/Evans,Pounds	Solar X	WDCRF	BAE	-
1971-108	2440965.98	1971 Dec 14 1138	SkyLark 6	-	ESRO 869	ESRO	SS	LUX/Evans,Pounds	Solar X	WDCRF	BAE	-
1971-5101	2440980.37	1971 Jan 29 1833:46	SkyLark 2	-	LT 1	BAC/DLR	SS	PRETR/ESRS/Unger,Reise	Test	WDCRF	BAE	-
1971-5103	2440980.63	1971 Jan 29 0755	SkyLark 3 AC	-	546/2	BAC	SS	MSL/Cruise,Willmore	Ionospheric	WDCRF/ESRLV	Amalese628,109	-
1971-5116	2440989.47	1971 Feb 6 1835	SkyLark 3	-	SL001	BAC	SS	MSL/Cruise,Willmore	Ionospheric	WDCRF/ESRLV	Amalese628,109	-
1971-5117	2440989.97	1971 Feb 6 1835	SkyLark 3	-	SL001	BAC	SS	MSL/Cruise,Willmore	Ionospheric	WDCRF/ESRLV	Amalese628,109	-
1971-5118	2440991.40	1971 Feb 11 0455	SkyLark 3 AC	-	ESRO 857/1	BAC	SS	MSL/Cruise,Willmore	Ionospheric	WDCRF/ESRLV	Amalese628,109	-
1971-5119	2440991.40	1971 Feb 11 0455	SkyLark 3 AC	-	ESRO 857/2	BAC	SS	MSL/Cruise,Willmore	Ionospheric	WDCRF/ESRLV	Amalese628,109	-
1971-5120	2440991.40	1971 Feb 11 0455	SkyLark 3 AC	-	ESRO 857/2	BAC	SS	MSL/Cruise,Willmore	Ionospheric	WDCRF/ESRLV	Amalese628,109	-
1971-5121	2440991.40	1971 Feb 11 0455	SkyLark 3 AC	-	ESRO 857/2	BAC	SS	MSL/Cruise,Willmore	Ionospheric	WDCRF/ESRLV	Amalese628,109	-
1971-5122	2440991.40	1971 Feb 11 0455	SkyLark 3 AC	-	ESRO 857/2	BAC	SS	MSL/Cruise,Willmore	Ionospheric	WDCRF/ESRLV	Amalese628,109	-
1971-5123	2440991.40	1971 Feb 11 0455	SkyLark 3 AC	-	ESRO 857/2	BAC	SS	MSL/Cruise,Willmore	Ionospheric	WDCRF/ESRLV	Amalese628,109	-
1971-5124	2440991.40	1971 Feb 11 0455	SkyLark 3 AC	-	ESRO 857/2	BAC	SS	MSL/Cruise,Willmore	Ionospheric	WDCRF/ESRLV	Amalese628,109	-
1971-5125	2440991.40	1971 Feb 11 0455	SkyLark 3 AC	-	ESRO 857/2	BAC	SS	MSL/Cruise,Willmore	Ionospheric	WDCRF/ESRLV	Amalese628,109	-
1971-5126	2440991.40	1971 Feb 11 0455	SkyLark 3 AC	-	ESRO 857/2	BAC	SS	MSL/Cruise,Willmore	Ionospheric	WDCRF/ESRLV	Amalese628,109	-
1971-5127	2440991.40	1971 Feb 11 0455	SkyLark 3 AC	-	ESRO 857/2	BAC	SS	MSL/Cruise,Willmore	Ionospheric	WDCRF/ESRLV	Amalese628,109	-
1971-5128	2440991.40	1971 Feb 11 0455	SkyLark 3 AC	-	ESRO 857/2	BAC	SS	MSL/Cruise,Willmore	Ionospheric	WDCRF/ESRLV	Amalese628,109	-
1971-5129	2440991.40	1971 Feb 11 0455	SkyLark 3 AC	-	ESRO 857/2	BAC	SS	MSL/Cruise,Willmore	Ionospheric	WDCRF/ESRLV	Amalese628,109	-
1971-5130	2440991.40	1971 Feb 11 0455	SkyLark 3 AC	-	ESRO 857/2	BAC	SS	MSL/Cruise,Willmore	Ionospheric	WDCRF/ESRLV	Amalese628,109	-
1971-5131	2440991.40	1971 Feb 11 0455	SkyLark 3 AC	-	ESRO 857/2	BAC	SS	MSL/Cruise,Willmore	Ionospheric	WDCRF/ESRLV	Amalese628,109	-
1971-5132	2440991.40	1971 Feb 11 0455	SkyLark 3 AC	-	ESRO 857/2	BAC	SS	MSL/Cruise,Willmore	Ionospheric	WDCRF/ESRLV	Amalese628,109	-
1971-5133	2440991.40	1971 Feb 11 0455	SkyLark 3 AC	-	ESRO 857/2	BAC	SS	MSL/Cruise,Willmore	Ionospheric	WDCRF/ESRLV	Amalese628,109	-
1971-5134	2440991.40	1971 Feb 11 0455	SkyLark 3 AC	-	ESRO 857/2	BAC	SS	MSL/Cruise,Willmore	Ionospheric	WDCRF/ESRLV	Amalese628,109	-
1971-5135	2440991.40	1971 Feb 11 0455	SkyLark 3 AC	-	ESRO 857/2	BAC	SS	MSL/Cruise,Willmore	Ionospheric	WDCRF/ESRLV	Amalese628,109	-
1971-5136	2440991.40	1971 Feb 11 0455	SkyLark 3 AC	-	ESRO 857/2	BAC	SS	MSL/Cruise,Willmore	Ionospheric	WDCRF/ESRLV	Amalese628,109	-
1971-5137	2440991.40	1971 Feb 11 0455	SkyLark 3 AC	-	ESRO 857/2	BAC	SS	MSL/Cruise,Willmore	Ionospheric	WDCRF/ESRLV	Amalese628,109	-
1971-5138	2440991.40	1971 Feb 11 0455	SkyLark 3 AC	-	ESRO 857/2	BAC	SS	MSL/Cruise,Willmore	Ionospheric	WDCRF/ESRLV	Amalese628,109	-
1971-5139	2440991.40	1971 Feb 11 0455	SkyLark 3 AC	-	ESRO 857/2	BAC	SS	MSL/Cruise,Willmore	Ionospheric	WDCRF/ESRLV	Amalese628,109	-
1971-5140	2440991.40	1971 Feb 11 0455	SkyLark 3 AC	-	ESRO 857/2	BAC	SS	MSL/Cruise,Willmore	Ionospheric	WDCRF/ESRLV	Amalese628,109	-
1971-5141	2440991.40	1971 Feb 11 0455	SkyLark 3 AC	-	ESRO 857/2	BAC	SS	MSL/Cruise,Willmore	Ionospheric	WDCRF/ESRLV	Amalese628,109	-
1971-5142	2440991.40	1971 Feb 11 0455	SkyLark 3 AC	-	ESRO 857/2	BAC	SS	MSL/Cruise,Willmore	Ionospheric	WDCRF/ESRLV	Amalese628,109	-
1971-5143	2440991.40	1971 Feb 11										

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Agency	Launch_Code	Group	Category	LTCite	Cite	Notes
1971-3574	2441281.22	1971 Nov 25 17:13:05	SkyLark 2	-	ESRO ST0/2	ESRO	SS	RSRS/BIR/	Ionospheric/VLF	WDGRF	BAE	-
1971-3575	2441285.76	1971 Nov 30 05:59	SkyLark 3 AC	-	SL1101	BAC	SS	LUX/Pounds	Test	WDGRF	-	-
1971-A105	2441289.50	1971 Dec 4	Jabiru 2	-	J-2	BAE	AS	-	Solar X	JBI545-139	-	-
1971-3589	2441295.69	1971 Dec 10 04:30	SkyLark 3 AC	-	ESRO S82	ESRO	SS	MSL/Brabban,Glencross	Meteorites	WDGRF	ProcSocAS34,231	-
1972-392	2441300.01	1971 Dec 14 12:11:16	SkyLark 3 AC	-	ESRO S82	ESRO	SS	BERM/JOND/Geiss,Lindblad	Solar X	WDGRF	WDGRF	-
1972-393	2441375.75	1972 Feb 28 05:54:00	SkyLark 3 AC	-	ESRO S84	ESRO	SS	JASB/Ackerman	Solar DV	WDGRF	WDGRF	-
1972-394	2441379.44	1972 Feb 28 09:47:03	SkyLark 3 AC	-	ESRO S84	ESRO	SS	JASB/Ackerman	Solar DV	WDGRF	WDGRF	-
1972-395	2441392.60	1972 Mar 2 22:26:50	SkyLark 4	-	ESRO ST77/1	ESRO	SS	KGO/RSR/Sanderson	Auroral	WDGRF	WDGRF	-
1972-3116	2441393.72	1972 Mar 17 05:10	SkyLark 6 AC	-	SL1023	BAC	SS	UCL/RSR/Rees,Wilson	Ionospheric	WDGRF	WDGRF	-
1972-3119	2441401.48	1972 Mar 24 23:31	SkyLark 6 AC	-	SL1009	BAC	SS	CULH/Shenton	Solar DV	WDGRF	WDGRF	-
1972-3138	2441403.48	1972 Mar 24 23:31	SkyLark 6 AC	-	ESRO ST6/1	ESRO	SS	EDM/Differmann	Ionospheric	WDGRF	WDGRF	-
1972-3142	2441406.56	1972 Mar 30 01:25	SkyLark 6 AC	-	ESRO ST6/2	ESRO	SS	RAE/Abbott	Test/Earth Imaging	WDGRF	WDGRF	-
1972-3467	2441490.50	1972 Jun 22	Roof	-	BA5	BAE	AS	EDM/Differmann	Test	JBI545-139	-	-
1972-3249	2441494.12	1972 Jun 25 14:47	SkyLark 3 AC	-	ESRO S91	ESRO	SS	MSL/	Xr Astronomy	WDGRF	WDGRF	-
1972-3252	2441503.50	1972 Jun 5	SkyLark 6 AC	-	SL1191	BAC	SS	RAE/	Test	WDGRF	WDGRF	-
1972-3460	2441518.50	1972 Jul 20	SkyLark 6 AC	-	SL1163	BAC	SS	RSRS/Bryant,Kremsler	Auroral	WDGRF	WDGRF	-
1972-3534	2441585.41	1972 Sep 24 21:50	SkyLark 4	-	ESRO ST77/2	ESRO	SS	MSL/Baero	Auroral	WDGRF	WDGRF	-
1972-3544	2441603.52	1972 Oct 13 02:28:15	SkyLark 2	-	ESRO S105	ESRO	SS	MSL/RSR	Ionospheric	WDGRF	WDGRF	-
1972-3581	2441608.28	1972 Oct 23 11:51	SkyLark 6 AC	-	SL1022	BAC	SS	QBY/SHER/Byrne	Xr Astron/OV Astron	WDGRF	WDGRF	-
1972-3589	2441613.99	1972 Oct 23 11:51	SkyLark 6 AC	-	SL1022	BAC	SS	MSL/RG/Culhane,Bentley	Solar X	WDGRF	WDGRF	-
1972-3588	2441616.69	1972 Oct 26 04:30	SkyLark 6 AC	-	SL1003	BAC	SS	MSL/RSR/Brabban,Glencross	Xr Astron/Solar X	WDGRF	WDGRF	-
1972-3588	2441623.76	1972 Nov 2 06:10	SkyLark 6 AC	-	ESRO S95	ESRO	SS	CEN/OVR/	Xr Astron	WDGRF	WDGRF	-
1972-3417	2441641.70	1972 Nov 20 04:54	SkyLark 3 AC	-	ESRO S94	ESRO	SS	LUX/Hoffman,Janez	Ionos	WDGRF	WDGRF	-
1972-3423	2441658.71	1972 Dec 7 06:03	SkyLark 3 AC	-	SL1202	BAC	SS	BAW/FRED/Rehhardt	Ionos/Aeron	WDGRF	WDGRF	-
1972-3454	2441662.50	1972 Dec 11 00:00	SkyLark 3 AC	C	SL1205	DPVLR	SS	MSL/Culhane,Cruise	Ionos	WDGRF	WDGRF	-
1972-3454	2441665.10	1972 Dec 13 14:19:59	Zenit-Cuckoo	-	SL1205	BAC	SS	LUX/Griffiths	Xr Astronomy	WDGRF	WDGRF	-
1973-560	2441712.77	1973 Jan 30 06:35	SkyLark 3 AC	-	SL1010	BAC	SS	LUX/Culhane,Cruise	Xr Astronomy	WDGRF	WDGRF	-
1973-566	2441742.38	1973 Feb 28 21:00	SkyLark 6 AC	-	SL1004	BAC	SS	CULH/Shenton	Solar X	WDGRF	WDGRF	-
1973-5103	2441755.64	1973 Mar 14 03:15	SkyLark 6 AC	-	SL1102	BAC	SS	RAE/	Earth Imaging	WDGRF	WDGRF	-
1973-5112	2441761.70	1973 Mar 20 04:52	SkyLark 6 AC	-	SL1162	BAC	SS	RAE/	Earth Imaging	WDGRF	WDGRF	-
1973-5124	2441770.24	1973 Mar 22 17:45	SkyLark 6 AC	-	SL1161	BAC	SS	LUX/Adams,Whitford	Earth Imaging	WDGRF	WDGRF	-
1973-5165	2441790.15	1973 Apr 17 15:35	SkyLark 6 AC	-	SL1011	BAC	SS	RSRS/UCI/Shenton,Griffin	Xr Astronomy	WDGRF	WDGRF	-
1973-5203	2441849.94	1973 Jun 16 10:30	SkyLark 6 AC	-	SL1111	BAC	SS	RAE/SSC/DFVLR/	Earth Imaging	WDGRF	WDGRF	-
1973-5254	2441880.80	1973 Jul 1	SkyLark 3 AC	-	SL1281	BAC	SS	MSL/UCI/Go-dall,Rees	Ionospheric/Auroral	WDGRF	WDGRF	-
1973-5267	2441886.94	1973 Aug 4 08:10	SkyLark 3 AC	-	SL1081A	BAC	SS	MSL/UCI/Go-dall,Rees	Ionospheric/Auroral	WDGRF	WDGRF	-
1973-5338	2441961.95	1973 Oct 2 01:51:06	SkyLark 4 AC	-	ESRO S93	DPVLR	SS	MSL/UCI/Go-dall,Rees	Ionospheric/Auroral	WDGRF	WDGRF	-
1973-5343	2441961.95	1973 Oct 6 03:31:34	SkyLark 4 AC	-	ESRO S92	DPVLR	SS	MSL/UCI/Go-dall,Rees	Ionospheric/Auroral	WDGRF	WDGRF	-
1973-5347	2441972.52	1973 Oct 16 19:43:39	SkyLark 6	-	SL1121	BAC	SS	MSL/UCI/Go-dall,Rees	Ionospheric/Auroral	WDGRF	WDGRF	-
1973-5369	2441986.29	1973 Oct 30 18:50:44	SkyLark 6	-	SL1122	BAC	SS	MSL/UCI/Go-dall,Rees	Ionospheric/Auroral	WDGRF	WDGRF	-
1973-5382	2442000.90	1973 Nov 14 22:45:50	Jabiru 3	-	J-3	BAE	AS	MSL/UCI/Go-dall,Rees	Ionospheric/Auroral	WDGRF	WDGRF	-
1973-5389	2442003.75	1973 Nov 16 02:58:50	SkyLark 6 AC	-	SL1206	BAC	SS	MSL/UCI/Go-dall,Rees	Ionospheric/Auroral	WDGRF	WDGRF	-
1973-5408	2442012.75	1973 Nov 29 05:25	SkyLark 6 AC	-	ESRO S74	DPVLR	SS	MSL/UCI/Go-dall,Rees	Ionospheric/Auroral	WDGRF	WDGRF	-
1973-5409	2442016.10	1973 Nov 29 05:25	SkyLark 6 AC	-	SL1124	BAC	SS	MSL/UCI/Go-dall,Rees	Ionospheric/Auroral	WDGRF	WDGRF	-
1973-5424	2442022.47	1973 Dec 5 23:23:56	SkyLark 4	-	SL1124	BAC	SS	MSL/UCI/Go-dall,Rees	Ionospheric/Auroral	WDGRF	WDGRF	-
1973-5463	2442026.50	1973 Dec 6 19:12:33	Jabiru 3	-	Hgr. 1	BAE	AS	MSL/UCI/Go-dall,Rees	Ionospheric/Auroral	WDGRF	WDGRF	-
1973-5463	2442026.50	1973 Dec 6 19:12:33	Jabiru 3	-	Hgr. 1	BAE	AS	MSL/UCI/Go-dall,Rees	Ionospheric/Auroral	WDGRF	WDGRF	-
1973-5463	2442026.50	1973 Dec 6 19:12:33	Jabiru 3	-	Hgr. 1	BAE	AS	MSL/UCI/Go-dall,Rees	Ionospheric/Auroral	WDGRF	WDGRF	-
1974-8371	2442083.30	1974 Jan 7 06:38:30	SkyLark 6 AC	-	SL1203	BAC	SS	MSL/UCI/Go-dall,Rees	Ionospheric/Auroral	WDGRF	WDGRF	-
1974-8371	2442083.30	1974 Jan 7 06:38:30	SkyLark 6 AC	-	SL1203	BAC	SS	MSL/UCI/Go-dall,Rees	Ionospheric/Auroral	WDGRF	WDGRF	-
1974-8371	2442083.30	1974 Jan 7 06:38:30	SkyLark 6 AC	-	SL1203	BAC	SS	MSL/UCI/Go-dall,Rees	Ionospheric/Auroral	WDGRF	WDGRF	-
1974-8371	2442083.30	1974 Jan 7 06:38:30	SkyLark 6 AC	-	SL1203	BAC	SS	MSL/UCI/Go-dall,Rees	Ionospheric/Auroral	WDGRF	WDGRF	-
1974-8371	2442083.30	1974 Jan 7 06:38:30	SkyLark 6 AC	-	SL1203	BAC	SS	MSL/UCI/Go-dall,Rees	Ionospheric/Auroral	WDGRF	WDGRF	-
1974-8371	2442083.30	1974 Jan 7 06:38:30	SkyLark 6 AC	-	SL1203	BAC	SS	MSL/UCI/Go-dall,Rees	Ionospheric/Auroral	WDGRF	WDGRF	-
1974-8371	2442083.30	1974 Jan 7 06:38:30	SkyLark 6 AC	-	SL1203	BAC	SS	MSL/UCI/Go-dall,Rees	Ionospheric/Auroral	WDGRF	WDGRF	-
1974-8371	2442083.30	1974 Jan 7 06:38:30	SkyLark 6 AC	-	SL1203	BAC	SS	MSL/UCI/Go-dall,Rees	Ionospheric/Auroral	WDGRF	WDGRF	-
1974-8371	2442083.30	1974 Jan 7 06:38:30	SkyLark 6 AC	-	SL1203	BAC	SS	MSL/UCI/Go-dall,Rees	Ionospheric/Auroral	WDGRF	WDGRF	-
1974-8371	2442083.30	1974 Jan 7 06:38:30	SkyLark 6 AC	-	SL1203	BAC	SS	MSL/UCI/Go-dall,Rees	Ionospheric/Auroral	WDGRF	WDGRF	-
1974-8371	2442083.30	1974 Jan 7 06:38:30	SkyLark 6 AC	-	SL1203	BAC	SS	MSL/UCI/Go-dall,Rees	Ionospheric/Auroral	WDGRF	WDGRF	-
1974-8371	2442083.30	1974 Jan 7 06:38:30	SkyLark 6 AC	-	SL1203	BAC	SS	MSL/UCI/Go-dall,Rees	Ionospheric/Auroral	WDGRF	WDGRF	-
1974-8371	2442083.30	1974 Jan 7 06:38:30	SkyLark 6 AC	-	SL1203	BAC	SS	MSL/UCI/Go-dall,Rees	Ionospheric/Auroral	WDGRF	WDGRF	-
1974-8371	2442083.30	1974 Jan 7 06:38:30	SkyLark 6 AC	-	SL1203	BAC	SS	MSL/UCI/Go-dall,Rees	Ionospheric/Auroral	WDGRF	WDGRF	-
1974-8371	2442083.30	1974 Jan 7 06:38:30	SkyLark 6 AC	-	SL1203	BAC	SS	MSL/UCI/Go-dall,Rees	Ionospheric/Auroral	WDGRF	WDGRF	-
1974-8371	2442083.30	1974 Jan 7 06:38:30	SkyLark 6 AC	-	SL1203	BAC	SS	MSL/UCI/Go-dall,Rees	Ionospheric/Auroral	WDGRF	WDGRF	-
1974-8371	2442083.30	1974 Jan 7 06:38:30	SkyLark 6 AC	-	SL1203	BAC	SS	MSL/UCI/Go-dall,Rees	Ionospheric/Auroral	WDGRF	WDGRF	-
1974-8371	2442083.30	1974 Jan 7 06:38:30	SkyLark 6 AC	-	SL1203	BAC	SS	MSL/UCI/Go-dall,Rees	Ionospheric/Auroral	WDGRF	WDGRF	-
1974-8371	2442083.30	1974 Jan 7 06:38:30	SkyLark 6 AC	-	SL1203	BAC	SS	MSL/UCI/Go-dall,Rees	Ionospheric/Auroral	WDGRF	WDGRF	-
1974-8371	2442083.30	1974 Jan 7 06:38:30	SkyLark 6 AC	-	SL1203	BAC	SS	MSL/UCI/Go-dall,Rees	Ionospheric/Auroral	WDGRF	WDGRF	-
1974-8371	2442083.30	1974 Jan 7 06:38:30	SkyLark 6 AC	-	SL1203	BAC	SS	MSL/UCI/Go-dall,Rees	Ionospheric/Auroral	WDGRF	WDGRF	-
1974-8371	2442083.30	1974 Jan 7 06:38:30	SkyLark 6 AC	-	SL1203	BAC	SS	MSL/UCI/Go-dall,Rees	Ionospheric/Auroral	WDGRF	WDGRF	-
1974-8371	2442083.30	1974 Jan 7 06:38:30	SkyLark 6 AC	-	SL1203	BAC	SS	MSL/UCI/Go-dall,Rees	Ionospheric/Auroral	WDGRF	WDGRF	-
1974-8371	2442083.30	1974 Jan 7 06:38:30	SkyLark 6 AC	-	SL1203	BAC	SS	MSL/UCI/Go-dall,Rees	Ionospheric/Auroral	WDGRF	WDGRF	-
1974-8371	2442083.30	1974 Jan 7 06:38:30	SkyLark 6 AC	-	SL1203	BAC	SS	MSL/UCI/Go-dall,Rees	Ionospheric/Auroral	WDGRF	WDGRF	-
1974-8371	2442083.30	1974 Jan 7 06:38:30	SkyLark 6 AC	-	SL1203	BAC	SS	MSL/UCI/Go-dall,Rees	Ionospheric/Auroral	WDGRF	WDGRF	-
1974-8371	2442083.30	1974 Jan 7 06:38:30	SkyLark 6 AC	-	SL1203	BAC	SS	MSL/UCI/Go-dall,Rees	Ionospheric/Auroral	WDGRF	WDGRF	-
1974-8371	2442083.30	1974 Jan 7 06:38:30	SkyLark 6 AC	-	SL1203	BAC	SS	MSL/UCI/Go-dall,Rees	Ionospheric/Auroral	WDGRF	WDGRF	-
1974-8371	2442083.30	1974 Jan 7 06:38:30	SkyLark 6 AC	-	SL1203	BAC	SS	MSL/UCI/Go-dall,Rees	Ionospheric/Auroral	WDGRF	WDGRF	-
1974-8371	2442083.30	1974 Jan 7 06:38:30	SkyLark 6 AC	-	SL1203	BAC	SS	MSL/UCI/Go-dall,Rees	Ionospheric/Auroral	WDGRF	WDGRF	-
1974-8371	2442083.30	1974 Jan 7 06:38:30	SkyLark 6 AC	-	SL1203	BAC	SS	MSL/UCI/Go-dall,Rees	Ionospheric/Auroral	WDGRF	WDGRF	-
1974-8371	2442083.30	1974 Jan 7 06:38:30	SkyLark 6 AC	-	SL1203	BAC	SS	MSL/UCI/Go-dall,Rees	Ionospheric/Auroral	WDGRF	WDGRF	-
1974-8371	2442083.30	1974 Jan 7 06:38:30	SkyLark 6 AC	-	SL1203	BAC	SS	MSL/UCI/Go-dall,Rees	Ionospheric/Auroral	WDGRF	WDGRF	-
1974-8371	2442083.30	1974 Jan 7 06:38:30	SkyLark									

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	OrbPay	Agency	Launch_Code	Group	Category	LTCite	Cite	Notes
1977-5195	2443302.50	1977 Jun 6	SkyLark 3 AC	-	SL1298	0.000	BAC	SS	RAE/	MIRV test	BAE	BAE	-
1977-5258	2443430.39	1977 Oct 13 2126:00	SkyLark 12	-	DLA K-QRC-85	0.000	DFVLR	SS	TUB/FREIB/Theile	Auroral	ESA-SP162-269	BAE/AMD	-
1977-5259	2443430.42	1977 Oct 13 2159:00	SkyLark 12	-	SL1423	0.000	BAC	SS	RSRS/WSSL/Bryant_Sojka	Auroral	AMD	BAE	-
1977-5269	2443430.34	1977 Nov 2 2015:00	SkyLark 12	-	DLA K-QRC-87	0.000	DFVLR	SS	TUB/FREIB/Theile	Auroral	ESA-SP162-269	BAE/AMD	-
1977-5284	2443465.40	1977 Nov 17 2132:36	SkyLark 12	-	SL1421	0.000	BAC	SS	RSRS/WSSL/Bryant_Johnt.	Auroral	AMD	BAE	-
1977-5303	2443490.87	1977 Dec 13 0846:39	SkyLark 7	-	DLA K-QRC-90	0.000	DFVLR	SS	ERNO/SSC/	Micrograv	Moraba	BAE	-
1978-5353	2443639.40	1978 Jan 30 2137:00	SkyLark 7	-	DLA K-QRC-86	0.000	DFVLR	SS	TUB/FREIB/Theile	Auroral	ESA-SP162-269/AMD	BAE	-
1978-5354	2443639.42	1978 Jan 30 2137:00	SkyLark 12	-	DLA K-QRC-88	0.000	DFVLR	SS	TUB/FREIB/Theile	Auroral	ESA-SP162-269/AMD	BAE	-
1978-5132	2443640.41	1978 May 13 0201:00	SkyLark 7 AC	-	SL1305	0.000	BAC	SS	CULH/WSSL/Gabriel_Har.	Solar DV	WDRP	BAE	-
1978-5193	2443720.48	1978 Jul 30 2333:13	SkyLark 1	-	SSC 5267/1 ION	0.000	SSC	SS	SSC/	Ionospheric	ESA-SP162-117	BAE	-
1978-5273	2443734.48	1978 Aug 13 2338:17	SkyLark 1	-	SSC 5267/2 ION	0.000	SSC	SS	RSRS/SHEF/Bryant_Wooll.	Auroral WLF/THA	ESA-SP162-117	BAE	-
1978-5228	2443822.68	1978 Nov 10 0414:22	SkyLark 12	-	SL1424	0.000	BAC	SS	RAE/	MIRV test	ESA-SP162-301/AMD	BAE	-
1978-5230	2443828.63	1978 Nov 15 0749	SkyLark 3 AC	-	SL1296	0.000	BAC	SS	ERNO/SSC/	Micrograv	Moraba	BAE	-
1978-5254	2443865.50	1978 Dec 13	SkyLark 3 AC	-	DLA K-QRC-94	0.000	DFVLR	SS	RAE/	MIRV test	BAE	BAE	-
1979-5267	2443927.01	1979 Feb 22 1215:30	SkyLark 7 AC	-	DLA W-QR-96	0.000	BAC	SS	TUBL/WPE/Br_auninger	Solar X	ESA-SP162	Noraba	-
1979-5384	2443933.50	1979 Mar 13 0030:00	SkyLark 7 AC	-	DLA W-QR-95	0.000	BAC	SS	RAE/	MIRV test	BAE	BAE	-
1979-5327	2444159.09	1979 Oct 12 1409	SkyLark 6 AC	-	DLA K-QRC-97	0.000	DFVLR	SS	TUBL/WPE/Br_auninger	Solar X	ESA-SP162	Noraba	-
1980-5201	2444357.80	1980 Apr 28 0710:02	SkyLark 7 AC	-	DLA K-QRC-95	0.000	DFVLR	SS	TUBL/WPE/Br_auninger	Solar X	ESA-SP162	Noraba	-
1980-5307	2444659.63	1980 Nov 16 0313	SkyLark 7	-	DLA K-QRC-100	0.000	DFVLR	SS	ERNO/SSC/	Micrograv	Moraba	BAE	-
1981-5106	2444724.75	1981 Apr 30 0600	SkyLark 7	-	DLA K-QRC-104	0.000	DFVLR	SS	WPP/FREIB/	Ionos/Pi_lama	ESA-SP163-89	BAE	-
1981-5109	2444732.73	1981 May 9 0627	SkyLark 7	-	DLA K-QRC-110	0.000	DFVLR	SS	DLK/	Micrograv	Moraba	BAE	-
1981-5162	2444946.39	1981 Dec 9 2125:35	SkyLark 7	-	DLA K-QRC-112	0.000	DFVLR	SS	WPP/FREIB/	Ionos/Pi_lama	ESA-SP163-89	BAE	-
1982-5111	2446086.72	1982 Apr 29 0520	SkyLark 7	-	DLA K-QRC-113	0.000	DFVLR	SS	DLK/	Micrograv	Moraba	BAE	-
1982-5115	2446097.73	1982 May 6 0650	SkyLark 7	-	DLA K-QRC-114	0.000	DFVLR	SS	DLK/	Micrograv	Moraba	BAE	-
1983-5386	2446459.71	1983 May 5 0520	SkyLark 7	-	DLA K-QRC-116	0.000	DFVLR	SS	DLK/	Micrograv	Moraba	BAE	-
1983-5389	2446467.96	1983 May 13 1137	SkyLark 7	-	DLA K-QRC-119	0.000	DFVLR	SS	DLK/	Micrograv	Moraba	BAE	-
1984-5359	2446727.32	1984 Jan 27 1937	SkyLark 12	-	DLA K-QRC-131	0.000	DFVLR	SS	DLK/	Micrograv	Moraba	BAE	-
1984-5358	2446740.67	1984 Feb 10 0412	SkyLark 6	-	DLA K-QRC-130	0.000	DFVLR	SS	DLK/	Micrograv	Moraba	BAE	-
1984-5384	2446823.68	1984 May 3 0413	SkyLark 7	-	DLA K-QRC-132	0.000	DFVLR	SS	DLK/	Micrograv	Moraba	BAE	-
1984-5359	2446835.62	1984 May 15 0746	SkyLark 7	-	DLA K-QRC-133	0.000	DFVLR	SS	DLK/	Micrograv	Moraba	BAE	-
1985-5359	2446896.31	1985 Jan 30 1930:00	SkyLark 12	-	DLA K-QRC-154	0.000	DFVLR	SS	DLK/	Micrograv	Moraba	BAE	-
1985-403	2446128.11	1985 Mar 5 1446	SkyLark 12	-	DLA K-QRC-137	0.000	DFVLR	SS	DLK/	Micrograv	Moraba	BAE	-
1985-405	2446182.68	1985 Apr 27 0414	SkyLark 7	-	DLA K-QRC-138	0.000	DFVLR	SS	DLK/	Micrograv	Moraba	BAE	-
1985-5371	2446191.69	1985 May 6 0435	SkyLark 7	-	DLA K-QRC-139	0.000	DFVLR	SS	DLK/	Micrograv	Moraba	BAE	-
1985-5373	2446590.69	1985 Apr 30 0430	SkyLark 7	-	DLA K-QRC-141	0.000	DFVLR	SS	DLK/	Micrograv	Moraba	BAE	-
1985-544	2446662.70	1986 May 12 0485	SkyLark 7	-	DLA K-QRC-142	0.000	DFVLR	SS	DLK/	Micrograv	Moraba	BAE	-
1985-582	2446916.67	1987 May 9 0359:59	SkyLark 7	-	DLA K-QRC-144	0.000	DFVLR	SS	DLK/	Micrograv	Moraba	BAE	-
1987-584	2446924.67	1987 May 9 0400	SkyLark 7	-	DLA K-QRC-146	0.000	DFVLR	SS	DLK/	Micrograv	Moraba	BAE	-
1987-5130	2447032.19	1987 Aug 24 1650	SkyLark 7	-	DLA K-QRC-157	0.000	DFVLR	SS	TUBL/WPE/Br_auninger	AX Telescope	ESA-SP291-24	BAE	-
1987-460	2447122.88	1987 Nov 23 0910	SkyLark 7	-	DLA K-QRC-155	0.000	DFVLR	SS	DLK/	Micrograv	Moraba	BAE	-
1988-315	2447290.86	1988 May 3 0945	SkyLark 7	-	DLA K-QRC-159	0.000	DFVLR	SS	DLK/	Micrograv	Moraba	BAE	-
1988-316	2447306.99	1988 Sep 26 1410	SkyLark 12	-	DLA K-QRC-166	0.000	DFVLR	SS	DLK/	Micrograv	Moraba	BAE	-
1988-5138	2447482.52	1988 Nov 26 0020:10	SkyLark 7	-	DLA K-QRC-168	0.000	DFVLR	SS	DLK/	Micrograv	Moraba	BAE	-
1988-5139	2447493.65	1988 Dec 2 0025	SkyLark 2	-	DLA K-QRC-161	0.000	DFVLR	SS	DLK/	Micrograv	Moraba	BAE	-
1988-5143	2447597.24	1988 Dec 2 0025	SkyLark 2	-	DLA K-QRC-162	0.000	DFVLR	SS	DLK/	Micrograv	Moraba	BAE	-
1989-537	2447565.48	1989 Feb 7 2336:30	SkyLark 2	-	DLA K-QRC-160	0.000	DFVLR	SS	DLK/	Micrograv	Moraba	BAE	-
1989-537	2447567.48	1989 Feb 20 0346	SkyLark 2	-	DLA K-QRC-164	0.000	DFVLR	SS	DLK/	Micrograv	Moraba	BAE	-
1989-554	2447646.65	1989 Apr 2 0336	SkyLark 7	-	DLA K-QRC-165	0.000	DFVLR	SS	DLK/	Micrograv	Moraba	BAE	-
1989-555	2447646.65	1989 Apr 25 0805	SkyLark 7	-	DLA K-QRC-168	0.000	DFVLR	SS	DLK/	Micrograv	Moraba	BAE	-
1989-5109	2447866.94	1989 Nov 6 0811:08	SkyLark 7	-	DLA K-QRC-170	0.000	DFVLR	SS	DLK/	Micrograv	Moraba	BAE	-
1989-5112	2447956.70	1989 Dec 6 0411	SkyLark 6	-	DLA K-QRC-171	0.000	DFVLR	SS	DLK/	Micrograv	Moraba	BAE	-
1989-587	2448026.66	1990 May 6 0343	SkyLark 7	-	DLA K-QRC-173	0.000	DFVLR	SS	DLK/	Micrograv	Moraba	BAE	-
1989-591	2448026.61	1990 May 13 0350	SkyLark 7	-	DLA K-QRC-176	0.000	DFVLR	SS	DLK/	Micrograv	Moraba	BAE	-
1989-5105	2448096.61	1990 Jul 26 0236	SkyLark 6	-	DLA K-QRC-179	0.000	DFVLR	SS	DLK/	Micrograv	Moraba	BAE	-
1989-5114	2448106.44	1990 Jul 26 2340	SkyLark 6	-	DLA K-QRC-181	0.000	DFVLR	SS	DLK/	Micrograv	Moraba	BAE	-
1989-5163	2448210.80	1990 Nov 15 0705	SkyLark 7	-	DLA K-QRC-183	0.000	DFVLR	SS	DLK/	Micrograv	Moraba	BAE	-
1989-5169	2448220.73	1990 Nov 25 0527:00	SkyLark 7	-	DLA K-QRC-184	0.000	DFVLR	SS	DLK/	Micrograv	Moraba	BAE	-
1989-584	2448356.28	1991 Apr 9 1849:59	SkyLark 12	-	DLA K-QRC-187	0.000	DFVLR	SS	DLK/	Micrograv	Moraba	BAE	-
1989-5173	2448893.90	1991 Nov 23 0942	SkyLark 7	-	DLA K-QRC-189	0.000	DFVLR	SS	DLK/	Micrograv	Moraba	BAE	-
1989-587	2448948.89	1992 Nov 22 0922	SkyLark 7	-	DLA K-QRC-196	0.000	DFVLR	SS	DLK/	Micrograv	Moraba	BAE	-
1993-630	2449108.73	1993 May 1 0835	SkyLark 7	-	DLA K-QRC-201	0.000	DFVLR	SS	DLK/	Micrograv	Moraba	BAE	-
1993-568	2449295.80	1993 May 4 0707	SkyLark 7	-	MASER 6	0.000	SSC	SS	SSC/	Micrograv	ESA-SP1206	WHL-SSC	-
1993-571	2449317.96	1993 May 26 1105	SkyLark 7	-	DLA K-QRC-205	0.000	ASTD	SS	ASTD/	Micrograv	Moraba	WHL-SSC	-
1994-533	2449377.68	1994 May 5 0415	SkyLark 7	-	DLA K-QRC-209	0.000	ASTD	SS	ASTD/	Micrograv	Moraba	WHL-SSC	-
1994-585	2449686.94	1994 Nov 30 1030	SkyLark 7	-	DLA K-QRC-213	0.000	ASTD	SS	ASTD/	Micrograv	Moraba	WHL-SSC	-
1996-510	2450144.92	1996 Mar 2 1000	SkyLark 7	-	DLA K-QRC-220	0.000	ASTD	SS	ASTD/	Micrograv	Moraba	WHL-SSC	-
1996-519	2450206.68	1996 May 3 0416	SkyLark 7	-	DLA K-QRC-221	0.000	ASTD	SS	ASTD/	Micrograv	Moraba	WHL-SSC	-
1996-572	2450411.96	1996 Feb 24 1105	SkyLark 7	-	DLA K-QRC-222	0.000	ASTD	SS	ASTD/	Micrograv	Moraba	WHL-SSC	-
1998-509	2450851.82	1998 Feb 7 0740	SkyLark 7	-	DLA K-QRC-231	0.000	ASTD	SS	ASTD/	Micrograv	Moraba	WHL-SSC	-
1998-532	2451312.98	1999 May 14 1133	SkyLark 7	-	MASER 8	0.000	SSC	SS	SSC/	Micrograv	Moraba	WHL-SSC	-
2000-516	2451630.97	2000 Apr 27 1117	SkyLark 7	-	TEUS 37	0.000	SSC	SS	SSC/	Micrograv	Moraba	WHL-SSC	-
2000-517	2451636.82	2000 Apr 27 0734	SkyLark 7	-	TEUS 38	0.000	SSC	SS	SSC/	Micrograv	Moraba	WHL-SSC	-
2001-520	2452037.91	2001 May 6 0955	SkyLark 7	-	TEUS 39	0.000	SSC	SS	SSC/	Micrograv	Moraba	WHL-SSC	-
2002-520	2452349.90	2002 Mar 16 0837	SkyLark 7	-	MASER 9	0.000	SSC	SS	SSC/	Micrograv	Moraba	WHL-SSC	-
2003-516	2452737.85	2003 Apr 8 0820	SkyLark 7	-	TEUS 40	0.000	SSC	SS	SSC/	Micrograv	Moraba	WHL-SSC	-
2004-568	2453341.94	2004 Dec 2 1030	SkyLark 7	-	TEUS 41	0.000	SSC	SS	SSC/	Micrograv	Moraba	WHL-SSC	-
2005-518	2463492.71	2005 May 2 0500	SkyLark 7	-	MASER 10	0.000	SSC	SS	SSC/	Micrograv	Moraba	WHL-SSC	-



Launch

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Mission	FlightCode	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee km	Range km	Dest
1966-A109	2435733.50	1966 Nov 6	Recruit T65	-	-	Heat Transfer	-	-	F2H2-942	MAUTS	RM04/22?	WI	LP1	4	-	-
1967-A73	2436057.50	1967 Aug 7	Recruit T65	-	-	Heat Transfer	-	-	F2H2-942	MAUTS	RM04/22?	WI	LP1	4?	-	-
1967-A105	2436106.50	1967 Sep 25	Paraside	-	-	Shot 1	-	-	BLI-FS	ENW	FS	-	-	20?	-	-
1967-S117	2436114.50	1967 Oct 3	Paraside	-	-	Shot 2	-	-	BLI-FS	ENW	FS	-	-	800?	-	-
1967-S119	2436118.50	1967 Oct 7	Paraside	-	-	Shot 3	-	-	BLI-FS	ENW	FS	-	-	700?	-	-
1967-A120	2436122.50	1967 Oct 11	Paraside	-	-	Shot 4	-	-	BLI-FS	ENW	FS	-	-	30?	-	-
1967-S133	2436131.50	1967 Oct 20	Paraside	-	-	Shot 5	-	-	BLI-FS	ENW	FS	-	-	5000?	-	-
1967-S137	2436133.50	1967 Oct 22	Paraside	-	-	Shot 6	-	-	BLI-FS	ENW	FS	-	-	5000?	-	-
1967-A01	2436838.50	1967 Oct 22	Recruit T65	-	-	Heat Transfer	-	-	F2H2-942	MAUTS	RM04/22?	WI	LP1	4?	-	-
1968-A08	2436234.50	1968 Jan 31	Recruit T65	-	-	Heat Transfer	-	-	F2H2-942	MAUTS	RM04/22?	WI	LP1	4?	-	-
1968-A23	2436290.50	1968 Mar 28	Recruit T65	-	-	-	-	-	F2H2-942	MAUTS	RM04/22?	WI	LP1	4?	-	-
1968-A73	2436399.50	1968 Jul 15	Recruit T65	-	-	-	-	-	B-57A-218	MAUTS	RM04/22?	WI	LP1	14	-	-
1968-A81	2436408.50	1968 Jul 24	Recruit T65	-	-	-	-	-	B-57A-218	MAUTS	RM04/22?	WI	LP1	14	-	-
1968-A115	2436488.50	1968 Sep 12	Recruit T65	-	-	-	-	-	B-57A-218	MAUTS	RM04/22?	WI	LP1	12	-	-
1969-A07	2436568.50	1969	Recruit	-	-	Elumt cone Stab.	-	-	-	WI	-	-	-	6	-	-
1969-A08	2436568.50	1969	Recruit	-	-	Oglive Stab.	-	-	-	WI	-	-	-	4	-	-
1960-S05	2436934.50	1960 Q1?	Jaguar	-	-	-	-	-	B-57A-SWC	HADC	RM07/25?	WS	LP1	800?	-	-
1960-S06	2436934.50	1960 Q1?	Jaguar	-	-	-	-	-	B-57A-SWC	HADC	RM07/25?	WS	LP1	800?	-	-





Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	DrPay	Agency	Launch_Code	Group	Category	LTCite	Cite	Notes
1966-A109	2435783.50	1966 Nov 6	Recruit T55	-	-	0.000	LERC	AS	-	Test	RP-1028	-	-
1967-A73	2436057.50	1967 Aug 7	Recruit T55	-	-	0.000	LERC	AS	-	Test	RP-1028	-	-
1967-A105	2436106.50	1967 Sep 25	Farside	-	-	0.000	AFUSR	HF	-	Test/Ionos	JBES38-462	-	-
1967-S117	2436114.50	1967 Oct 3	Farside	-	-	0.000	AFUSR	HS	-	Test/Ionos	JBES38-462	-	-
1967-S119	2436118.50	1967 Oct 7	Farside	-	-	0.000	AFUSR	HF	-	Test/Ionos	JBES38-462	-	-
1967-A120	2436122.50	1967 Oct 11	Farside	-	-	0.000	AFUSR	HF	-	Test/Ionos	JBES38-462	-	-
1967-S133	2436131.50	1967 Oct 20	Farside	-	-	0.000	AFUSR	HS	-	Test/Ionos	JBES38-462	-	-
1967-S137	2436133.50	1967 Oct 22	Farside	-	-	0.000	AFUSR	HS	-	Test/Ionos	JBES38-462	-	-
1967-A01	2435588.50	1967	Recruit T55	-	-	0.000	LERC	AS	-	Test	AEU960	-	-
1968-A08	2435234.50	1968 Jan 31	Recruit T55	-	-	0.000	LERC	AS	-	Test	RP-1028	-	-
1968-A23	2435290.50	1968 Mar 28	Recruit T55	-	-	0.000	LERC	AS	-	Test	RP-1028	-	-
1968-A73	2435399.50	1968 Jul 15	Recruit T55	-	-	0.000	LERC	AS	-	Test	RP-1028	-	-
1968-A81	2435408.50	1968 Jul 24	Recruit T55	-	-	0.000	LERC	AS	-	Test	RP-1028	-	-
1968-A115	2435488.50	1968 Sep 12	Recruit T55	-	-	0.000	LERC	AS	-	Test	RP-1028	-	-
1969-A07	2435588.50	1969	Recruit	-	-	0.000	LARCH	AS	-	Test	TU-D-1506	-	-
1969-A08	2435588.50	1969	Recruit	-	-	0.000	LARCH	AS	-	Test	TU-D-1506	-	-
1960-S05	2435934.50	1960 Q1?	Jaguar	-	-	0.000	AFSWC	SS	-	Test/Aeron	RP-1028	-	-
1960-S06	2435934.50	1960 Q1?	Jaguar	-	-	0.000	AFSWC	SS	-	Test/Aeron	RP-1028	-	-



Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Mission	FlightCode	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee km	Range km	Dest
2023-412	2460262.02	2023 Nov 13 1250	Red Kite	-	-	SOAR	-	-	-	AHD	-	-	-	72	-	-
2024-806	2460367.81	2024 Feb 27 0727:00	Red Kite/IN	-	MAPHEUS 14	DLR MAPHEUS 14	-	-	-	ESR	S	-	-	265	-	-
2024-868	2460626.86	2024 Nov 11 0838	Red Kite/IN	-	MAPHEUS 15	DLR MAPHEUS 15	-	-	-	ESR	S	-	-	309	-	-



Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Orbit	Agency	Launch_Code	Group	Category	LTCite	Cite	Notes
2023-412	2460262.02	2023 Nov 13 1230	Red Kite	-	-	0.000	DLR	SS	DLR/	Test	andoyaspace.no	-	-
2024-506	2460367.81	2024 Feb 27 0727:00	Red Kite/1X	-	MAPHEUS 14	0.000	DLR	SS	DLR/	Micrograv	sccspace.com	-	-
2024-568	2460625.86	2024 Nov 11 0838	Red Kite/1X	-	MAPHEUS 16	0.000	DLR	SS	DLR/	Micrograv	sccspace.com	-	-



Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Mission	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee_Km	Range_Km	Dest
1953-A334	2454610.11	1953 Aug 20 1437	Redstone	-	RS-1 MR?	-	CC	LC4	-	-	67	15	-
1954-301	2434770.14	1954 Jan 27 1520	Redstone	-	RS-2 MR?	-	CC	LC4	-	-	907	274	-
1954-A242	2434868.23	1954 May 5 1728	Redstone	-	RS-3 MR?	-	CC	LC4	-	-	0	0	-
1954-364	2434973.09	1954 Aug 15 1404	Redstone	-	RS-4 XV	-	CC	LC4	-	-	907	240	-
1954-6641	2435064.26	1954 Nov 17 1812	Redstone	-	RS-6 XL	-	CC	LC4	-	-	39	85	-
1955-AB7	2435148.34	1955 Feb 9 2015	Redstone	-	RS-8 XL	-	CC	LC4	-	-	907	213	-
1955-S31	2435217.79	1955 Apr 20 0651	Redstone	-	RS-9 XE	-	CC	LC6	-	-	907	251	-
1955-S39	2435262.68	1955 May 25 0424	Redstone	-	RS-10 HK?	-	CC	LC6	-	-	907	236	-
1955-S70	2435350.51	1955 Aug 31 0011	Redstone	-	RS-7 XI	-	CC	LC6	-	-	807	157	-
1955-A472	2435372.74	1955 Sep 22 0551	Jupiter A	-	RS-11 HR?	-	CC	LC6	-	-	57	18	-
1955-S106	2435447.53	1955 Dec 6 0046	Jupiter A	-	RS-12 HU?	-	CC	LC6	-	-	907	268	-
1956-S19	2435547.52	1956 Mar 15 0036	Jupiter A	-	RS-18 HL	-	CC	LC6	-	-	907	248	-
1956-S31	2435609.68	1956 May 15 0421	Jupiter A	-	RS-19 HE	-	CC	LC6	-	-	907	314	-
1956-S35	2435673.86	1956 Jul 19 0645	Jupiter A	-	CC-13 HM?	-	CC	LC6	-	-	907	263	GBI
1956-S71	2435693.86	1956 Aug 8 0625	Jupiter A	-	RS-20 UI?	-	CC	LC5	-	-	907	259	-
1956-S80	2435736.78	1956 Sep 20 0645	Jupiter C	-	RS-27 UI	Jupiter C/Dummy Nose	CC	LC5	-	-	1097	5395	-
1956-S86	2435764.88	1956 Oct 15 0605	Jupiter A	-	CC-14 HI	-	CC	LC6	-	-	907	256	-
1956-A106	2435777.59	1956 Oct 31 0204	Jupiter A	-	RS-25 US	-	CC	LC6	-	-	1	0	Wday
1956-S39	2435791.59	1956 Nov 14 0205	Jupiter A	-	RS-28 UL?	-	CC	LC6	-	-	907	282	-
1956-S105	2435807.06	1956 Nov 29 1325	Jupiter A	-	CC-15 HS	-	CC	LC6	-	-	907	259	-
1956-S110	2435826.60	1956 Dec 19 0230	Jupiter A	-	RS-22 UO?	Unstable Flight Control	CC	LC6	-	-	178	744	-
1957-S09	2435857.57	1957 Jan 19 0137	Jupiter A	-	CC-16 HW?	Short Range Test	CC	LC6	-	-	907	114	-
1957-S17	2435911.84	1957 Jan 14 0812	Jupiter A	-	CC-52 UO?	-	CC	LC6	-	-	907	266	-
1957-S20	2435925.56	1957 Mar 28 0722	Jupiter A	-	CC-30 XM	-	CC	LC6	-	-	907	138	-
1957-S33	2435973.63	1957 May 15 0755	Jupiter C	-	RS-34 HI	Hardback test?	CC	LC6	-	-	685	1282	-
1957-S46	2436015.96	1957 Jun 26 1109	Jupiter A	-	CC-31 HR	Hardback test?	CC	LC6	-	-	907	250	-
1957-S57	2436031.77	1957 Jul 12 0630	Jupiter A	-	CC-35 NS?	Hardback test?	CC	LC6	-	-	907	241	-
1957-S67	2436045.66	1957 Jul 26 0417	Jupiter C	-	CC-37 MI?	Hardback test?	CC	LC6	-	-	907	264	-
1957-S76	2436056.79	1957 Aug 6 0669	Jupiter C	-	RS/CC-40 TX	-	CC	LC6	-	-	460	2163	-
1957-S109	2436092.61	1957 Sep 11 0241	Jupiter A	-	CC-38 HL?	-	CC	LC6	-	-	1387	28	-
1957-S116	2436114.31	1957 Oct 2 1929	Jupiter A	-	CC-43 TI	-	CC	LC6	-	-	907	239	-
1957-A127	2436142.70	1957 Oct 31 0482	Jupiter A	-	CC-41 TH?	-	CC	LC6	-	-	407	89	-
1957-S177	2436183.52	1957 Dec 11 0036	Jupiter A	-	CC-42 UO?	-	CC	LC6	-	-	907	263	-
1958-009	2436218.56	1958 Jan 15 0124	Jupiter A	-	CC-45 IS?	Hardback pod test	CC	LC6	-	-	907	264	-
1958-019	2436235.66	1958 Feb 1 0347:56	Jupiter C	JuneI	Explorer 1	-	CC	LC26A	-	-	2843	263	GBI
1958-022	2436246.54	1958 Feb 12 0094	Redstone	-	CC-46 TV?	-	CC	LC6	-	-	907	263	GBI
1958-S22	2436262.33	1958 Feb 21 1959	Jupiter C	JuneI	Explorer 2	-	CC	LC6	-	-	907	264	GBI
1958-V02	2436268.27	1958 Mar 5 1827:03	Jupiter C	JuneI	Explorer 3	-	CC	LC26A	-	-	379	-	-
1958-353	2436289.25	1958 Mar 25 1738:03	Redstone	-	RS-1002	-	CC	LC6	-	-	2809	-	-
1958-357	2436357.70	1958 May 17 0005	Redstone	-	CC-1002	-	CC	LC6	-	-	907	239	-
1958-363	2436366.58	1958 Jun 12 0160	Redstone	-	CC-48 ST	-	CC	LC6	-	-	407	89	-
1958-368	2436379.66	1958 Jun 25 0336	Redstone	-	CC-49 TL?	-	CC	LC6	-	-	907	263	-
1958-375	2436411.13	1958 Jul 26 0500:57	Redstone	JuneI	Explorer 4	-	CC	LC6	-	-	907	264	-
1958-410	2436427.91	1958 Aug 12 0927	Redstone	-	CC-50 SA	-	CC	LC6	-	-	2254	-	-
1958-411	2436430.99	1958 Aug 24 0617:22	Jupiter C	JuneI	Explorer 5	-	CC	LC6	-	-	78	-	-
1958-500	2436464.25	1958 Sep 17 1800	Redstone	JuneI	Beacon	-	CC	LC6	-	-	284	-	-
1958-F18	2436494.25	1958 Oct 23 0921:04	Jupiter C	JuneI	Beacon	-	CC	LC6	-	-	907	340	-
1958-S263	2436513.53	1958 Nov 6 0043	Redstone	-	CC-57 S1	-	CC	LC6	-	-	1007	-	-
1958-S265	2436528.34	1958 Nov 19 2013	Redstone	-	CC-1011	-	CC	LC6	-	-	907	259	-
1958-S265	2436536.21	1958 Feb 16 1700	Redstone	-	CC-1011	46FA 333Bm2 Bat A?	CC	LC6	-	-	907	93	-
1958-S267	2436597.50	1958 Mar 10	Redstone	-	CC-1013	46FA 333Bm2 Bat B?	CC	LC6	-	-	907	116	-
1958-S277	2436700.50	1958 Mar 12	Redstone	-	CC-1013	40FA?	CC	LC6	-	-	907	100	-
1958-S312	2436771.67	1958 Jul 22 0402	Redstone	-	CC-2003	-	CC	LC6	-	-	907	116	-
1958-S314	2436785.59	1958 Aug 5 0205	Redstone	-	CC-2004	Sandia RV	CC	LC26A	-	-	907	231	-
1958-S318	2436829.50	1958 Aug 18 0205	Redstone	-	CC-1018	Sandia RV	CC	LC26A	-	-	907	319	-
1958-S319	2436869.50	1958 Sep 18	Redstone	-	CC-2011	40FA Bat B	CC	LC6	-	-	907	134	-
1958-S319	2436929.50	1958 Oct 26	Redstone	-	CC-2011	40FA Bat B	CC	LC6	-	-	88	127	-
1958-S319	2437009.24	1960 Mar 22 0122	Redstone	-	CC-2020	40FA Bat A	CC	LC6	-	-	907	263	-
1958-S319	2437015.56	1960 Mar 22 0122	Redstone	-	CC-2020	40FA Bat A	CC	LC6	-	-	907	263	-
1958-S319	2437044.44	1960 Apr 19 2230?	Redstone	-	CC-2022	46FA Bat A	CC	LC6	-	-	907	322	-
1958-S117	2437087.50	1960 Jun 2	Redstone	-	CC-1019	46FA Bat B	CC	LC6	-	-	757	174	-
1958-S165	2437121.50	1960 Jun 6	Redstone	-	CC-2023	Field Suitability Test 1	CC	LC6	-	-	907	238	-
1958-S166	2437213.66	1960 Jun 6 0344	Redstone	-	MR-1	Field Suitability Test 1	CC	LC6	-	-	507	204	-
1958-S309	2437260.08	1960 Nov 21 1400	Redstone	-	MR-1	Field Suitability Test 2	CC	LC6	-	-	907	322	-
1958-S311	2437268.18	1960 Dec 19 1615	Redstone	-	MR-1A	-	CC	LC6	-	-	0	0	-
1958-S311	2437321.59	1961 Dec 22 0204	Redstone	-	MR-1B	Field Suitability Test 3	CC	LC6	-	-	210	381	-
1958-S311	2437331.20	1961 Jan 31 1654:51	Redstone	-	MR-2	Field Suitability Test 4	CC	LC6	-	-	907	322	-
1958-S311	2437367.60	1961 Mar 9 0230	Redstone	-	MR-3	Field Suitability Test 4	CC	LC6	-	-	251	667	-
1958-S311	2437383.23	1961 Mar 24 1730	Redstone	-	MR-5	Field Suitability Test 5	CC	LC6	-	-	907	322	-
1958-S315	2437425.11	1961 May 5 1434:13	Redstone	-	MR-7	Field Suitability Test 6	CC	LC6	-	-	187	486	-
1958-S190	2437477.60	1961 Jun 27 0220	Redstone	-	CC-2043	Annual Service Practice	CC	LC6	-	-	907	322	-
1958-S202	2437502.01	1961 Jul 6	Redstone	-	MR-4	Annual Service Practice	CC	LC6	-	-	907	112	-
1958-S216	2437502.01	1961 Jul 21 1220:01	Redstone	-	MR-4	Annual Service Practice	CC	LC6	-	-	189	482	-
1958-S225	2437526.50	1961 Aug 15	Redstone	-	MR-5	Annual Service Practice	CC	LC6	-	-	907	-	-
1958-S225	2437563.50	1961 Sep 21	Redstone	-	MR-5	Annual Service Practice	CC	LC6	-	-	907	-	-
1958-S315	2437598.50	1961 Oct 26	Redstone	-	MR-5	Annual Service Practice	CC	LC6	-	-	907	-	-
1958-S397	2437638.50	1961 Dec 5	Redstone	-	MR-5	Annual Service Practice	CC	LC6	-	-	907	-	-
1958-S149	2437841.50	1962 Jul 17	Redstone	-	MR-5	Annual Service Practice	CC	LC6	-	-	907	130	-
1958-S214	2437862.50	1962 Aug 26	Redstone	-	MR-5	Annual Service Practice	CC	LC6	-	-	907	-	-
1958-S273	2437883.50	1962 Aug 7	Redstone	-	MR-5	Annual Service Practice	CC	LC6	-	-	907	-	-
1958-S274	2437906.50	1962 Aug 30	Redstone	-	MR-5	Annual Service Practice	CC	LC6	-	-	907	-	-
1958-S379	2438246.50	1963 Aug 5	Redstone	-	MR-5	Annual Service Practice	CC	LC6	-	-	907	-	-
1958-S397	2438260.50	1963 Aug 19	Redstone	-	MR-5	Annual Service Practice	CC	LC6	-	-	907	1307	-



Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Mission	FlightCode	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee km	Range km	Dest
1963-3438	2439282.50	1963 Sep 10	Redstone	-	CC-2015	Annual Service Practice	333A Btmi Bat B	-	-	WS	-	-	-	907	1307	-
1963-3449	2439295.50	1963 Sep 23	Redstone	-	CC-2044	ATBM target	333A Btmi Bat A	-	-	WS	ALA3	-	-	907	-	-
1963-3479	2439307.50	1963 Oct 5	Redstone	-	CC-2005	ATBM-11 target	-	-	WS?	WS?	-	-	-	907	-	-
1966-3491	2439095.56	1966 Dec 1 0128:00	Redstone	-	CC-2036/DAT-01	DAT-371 target	-	-	SMI	-	-	-	-	8	-	-
1966-3658	2439458.01	1966 Nov 28 1215	SPARKA	-	CC-201377/SV-1	SPARKA SV-1	-	-	WDD	LA8	-	-	-	907	-	-
1966-3683	2439472.99	1966 Dec 13 1150	SPARKA	-	CC-2034/SV-2	SPARKA SV-2	-	-	WDD	LA8	-	-	-	907	-	-
1967-3225	2439600.46	1967 Apr 19 2307	SPARKA	-	CC-202777/SV-3	SPARKA SV-3	-	-	WDD	LA8	-	-	-	907	-	-
1967-3352	2439676.46	1967 Jul 4 2307	SPARKA	-	CC-2032/SV-4	SPARKA SV-4	-	-	WDD	LA8	-	-	-	907	-	-
1967-3390	2439696.20	1967 Jul 24 1643	SPARKA	-	CC-2009/SV-5	SPARKA SV-5	-	-	WDD	LA8	-	-	-	907	-	-
1967-3438	2439720.32	1967 Aug 17 1946	SPARKA	-	CC-2039/SV-6	SPARKA SV-6	-	-	WDD	LA8	-	-	-	907	-	-
1967-3467	2439749.18	1967 Sep 15 1617	SPARKA	-	CC-2012/SV-7	SPARKA SV-7	-	-	WDD	LA8	-	-	-	91	-	-
1967-3513	2439775.18	1967 Oct 11 1622	SPARKA	-	CC-2030/SV-8	SPARKA SV-8	-	-	WDD	LA8	-	-	-	137	-	-
1967-118	2439823.70	1967 Nov 29 0449	SPARKA	-	CC-2029/SV-10	WRESAT	WRESAT	-	-	WDD	LA8	-	-	111	-	-
														1254		



Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	DrpPay	Agency	Launch_Code	Group	Category	LTCite	Cite	Notes
1955-A334	2434610.11	1953 Aug 20 1437	Readstone	-	RS-1 XH?	0.000	ABMA	MF	-	Test	TH-X-64796	ABMA	-
1954-S01	2434770.14	1954 Jan 27 1520	Readstone	-	RS-2 XU?	0.000	ABMA	MS	-	Test	TH-X-64796	ABMA	-
1964-A242	2434688.23	1954 May 5 1728	Readstone	-	RS-3 XI?	0.000	ABMA	MS	-	Test	TH-X-64796	ABMA	-
1954-S64	2434973.09	1954 Aug 18 1404	Readstone	-	RS-4 XT	0.000	ABMA	MS	-	Test	TH-X-64796	ABMA	-
1954-A641	2435064.26	1954 Nov 17 1812	Readstone	-	RS-5 XV	0.000	ABMA	MS	-	Test	TH-X-64796	ABMA	-
1955-A87	2435148.34	1955 Feb 9 2015	Readstone	-	RS-6 XL	0.000	ABMA	MS	-	Test	TH-X-64796	ABMA	-
1955-S31	2435217.79	1955 Apr 20 0651	Readstone	-	RS-7 XE	0.000	ABMA	MS	-	Test	TH-X-64796	ABMA	-
1955-S39	2435252.68	1955 May 25 0424	Readstone	-	RS-8 XH?	0.000	ABMA	MS	-	Test	TH-X-64796	ABMA	-
1955-S70	2435350.51	1955 Aug 31 0011	Readstone	-	RS-9 HI?	0.000	ABMA	MS	-	Test	TH-X-64796	ABMA	-
1955-A472	2435372.74	1955 Sep 22 0551	Jupiter A	-	RS-10 HX?	0.000	ABMA	MS	-	Test	Jupiter	-	-
1955-S106	2435447.53	1955 Dec 6 0046	Jupiter A	-	RS-11 HI?	0.000	ABMA	MS	-	Test	Jupiter	-	-
1956-S19	2435547.52	1956 Mar 15 0036	Jupiter A	-	RS-12 HO?	0.000	ABMA	MS	-	Test	Jupiter	-	-
1956-S31	2435609.68	1956 May 16 0421	Jupiter A	-	RS-13 HE	0.000	ABMA	MS	-	Test	Jupiter	-	-
1956-S55	2435673.98	1956 Jul 19 0845	Jupiter A	-	RS-14 HI?	0.000	ABMA	MS	-	Test	Jupiter	-	-
1956-S71	2435693.95	1956 Aug 6 0825	Jupiter A	-	RS-15 HU?	0.000	ABMA	MS	-	Test	Jupiter	-	-
1956-S80	2435736.78	1956 Sep 20 0645	Jupiter C	-	RS-16 IX?	0.000	ABMA	MS	-	Test	Jupiter	-	-
1956-S86	2435764.88	1956 Oct 19 0905	Jupiter A	-	CC-14 HI	0.000	ABMA	MS	-	Test	Jupiter	-	-
1956-A106	2435777.59	1956 Oct 31 0204	Jupiter A	-	RS-25 US	0.000	ABMA	MS	-	Test	Jupiter	-	-
1956-S39	2435791.59	1956 Nov 14 0205	Jupiter A	-	RS-26 UL?	0.000	ABMA	MS	-	Test	Jupiter	-	-
1956-S106	2435807.06	1956 Nov 29 1323	Jupiter A	-	CC-15 HS	0.000	ABMA	MS	-	Test	Jupiter	-	-
1956-S110	2435826.60	1956 Dec 19 0230	Jupiter A	-	CC-16 HU?	0.000	ABMA	MS	-	Test	Jupiter	-	-
1957-S09	2435857.57	1957 Jan 19 0137	Jupiter A	-	CC-17 HI?	0.000	ABMA	MS	-	Test	Jupiter	-	-
1957-S17	2435911.94	1957 Mar 14 0812	Jupiter A	-	CC-18 HX?	0.000	ABMA	MS	-	Test	Jupiter	-	-
1957-S20	2435925.56	1957 May 15 0755	Jupiter A	-	CC-19 NX	0.000	ABMA	MS	-	Test	Jupiter	-	-
1957-S33	2435973.53	1957 Jun 28 0122	Jupiter A	-	CC-20 HI?	0.000	ABMA	MS	-	Test	Jupiter	-	-
1957-S45	2436016.96	1957 Jun 26 1109	Jupiter A	-	CC-21 HI?	0.000	ABMA	MS	-	Test	Jupiter	-	-
1957-S57	2436031.77	1957 Jul 12 0630	Jupiter A	-	CC-22 HI?	0.000	ABMA	MS	-	Test	Jupiter	-	-
1957-S57	2436046.66	1957 Jul 26 0417	Jupiter A	-	CC-23 HI?	0.000	ABMA	MS	-	Test	Jupiter	-	-
1957-S78	2436068.79	1957 Aug 6 0659	Jupiter C	-	RS/CC-40 TX	0.000	ABMA	MS	-	Test	Jupiter	-	-
1957-S109	2436092.61	1957 Sep 11 0294	Jupiter A	-	CC-36 HI?	0.000	ABMA	MS	-	Test	Jupiter	-	-
1957-S116	2436114.31	1957 Oct 2 1929	Jupiter A	-	CC-39 HE	0.000	ABMA	MS	-	Test	Jupiter	-	-
1957-A127	2436142.70	1957 Dec 31 0452	Jupiter A	-	CC-41 TH?	0.000	ABMA	MS	-	Test	Jupiter	-	-
1957-S177	2436163.52	1957 Dec 11 0036	Jupiter A	-	CC-42 TU?	0.000	ABMA	MS	-	Test	Jupiter	-	-
1958-S09	2436218.96	1958 Jan 15 0124	Jupiter C	June 1	CC-46 TS?	0.000	ABMA	OS	AFSMP/	Sat LED A	Junoform	-	-
1958-A1P	2436235.66	1958 Feb 1 0347:56	Jupiter C	-	CC-46 TV?	0.000	ABMA	MS	G	Sat LED A	Junoform	-	-
1958-S22	2436246.54	1958 Feb 12 0054	Readstone	-	CC-46 TV?	0.000	ABMA	MS	-	Test	Jupiter	-	-
1958-S57	2436262.23	1958 Feb 27 1959	Jupiter C	June 1	RS/CC-26 UV	0.005	ABMA	OS	G	Sat LED A	Junoform	-	-
1958-6MH	2436268.27	1958 Mar 5 1627:57	Jupiter C	-	RS-100Z	0.000	40FA	MS	-	OT	Jupiter	-	-
1958-S63	2436340.50	1958 May 17 0005	Readstone	-	CC-54 HI?	0.000	40FA	MS	-	OT	Jupiter	-	-
1958-S77	2436357.70	1958 Jun 12 0189	Readstone	-	CC-54 HI?	0.000	40FA	MS	-	OT	Jupiter	-	-
1958-S85	2436396.88	1958 Jun 25 1636	Jupiter A	-	RS/CC-44 TX	0.000	ABMA	OS	-	Test	Jupiter	-	-
1958-S88	2436399.65	1958 Jun 25 1636	Jupiter C	-	CC-58 HI?	0.000	ABMA	MS	-	Test	Jupiter	-	-
1958-EFS	2436411.13	1958 Jul 26 1300:57	Jupiter C	June 1	CC-59 SX	0.000	ABMA	OS	-	Nuclear Test	Jupiter	-	-
1958-A0	2436427.91	1958 Aug 12 0927	Readstone	-	RS/CC-44 TX	0.000	ABMA	OS	-	Nuclear Test	Jupiter	-	-
1958-A09	2436427.99	1958 Aug 12 0927	Readstone	-	CC-59 HI	0.000	ABMA	OS	-	Nuclear Test	Jupiter	-	-
1958-S20	2436447.56	1958 Aug 24 1900	Jupiter C	June 1	RS/CC-44 TX	0.000	ABMA	OS	-	Sat LED A	Jupiter	-	-
1958-F18	2436499.24	1958 Sep 29 0300	Readstone	-	CC-56 SV	0.000	ABMA	MS	-	Test	Jupiter	-	-
1958-S23	2436513.53	1958 Oct 9 0321:04	Jupiter C	June 1	RS/CC-49 HE	0.000	ABMA	OS	-	Sat LED 0	Jupiter	-	-
1958-S05	2436518.54	1958 Nov 6 0041	Readstone	-	CC-57 SI	0.000	ABMA	OS	-	Test	Jupiter	-	-
1958-S45	2436568.54	1958 Jan 19 20:13	Readstone	-	CC-101 V	0.000	46F42	MS	-	OT	Jupiter	-	-
1958-S25	2436573.60	1958 Feb 16 1700	Readstone	-	CC-101 V	0.000	46F42	MS	-	OT	Jupiter	-	-
1958-S67	2436700.50	1958 Mar 12 0151	Readstone	-	CC-101 V	0.000	40FA?	MS	-	OT	Jupiter	-	-
1958-S71	2436700.50	1958 Mar 12 0151	Readstone	-	CC-101 V	0.000	40FA?	MS	-	OT	Jupiter	-	-
1958-S121	2436771.87	1958 Jul 22 0402	Readstone	-	CC-2003	0.000	ABMA	MS	-	Test	Jupiter	-	-
1958-S134	2436785.59	1958 Aug 6 0205	Readstone	-	CC-2004	0.000	ABMA?	MS	-	Test	Jupiter	-	-
1958-S176	2436829.50	1958 Sep 26	Readstone	-	CC-2011	0.000	40FA?	MS	-	OT	Jupiter	-	-
1958-S19	2436859.50	1958 Sep 26	Readstone	-	CC-2014	0.000	40FA	MS	-	OT	Jupiter	-	-
1980-S51	2437009.24	1960 Mar 22 0122	Readstone	-	CC-2014	0.000	40FA?	MS	-	OT	Jupiter	-	-
1980-S58	2437015.56	1960 Mar 22 0122	Readstone	-	CC-2020	0.000	46F42	MS	-	OT	Jupiter	-	-
1980-S75	2437044.44	1960 Apr 19 2230?	Readstone	-	CC-2021	0.000	46F42	MS	-	OT	Jupiter	-	-
1980-S117	2437087.50	1960 Jun 3	Readstone	-	CC-1019	0.000	209FA?	MS	-	OT	Jupiter	-	-
1980-S186	2437121.50	1960 Jul 6	Readstone	-	CC-1019	0.000	209FA?	MS	-	OT	Jupiter	-	-
1980-A196	2437156.56	1960 Aug 10 0131	Readstone	-	CC-2037	0.000	ABMA	MS	-	Test	Jupiter	-	-
1980-S309	2437213.66	1960 Oct 9 0344	Readstone	-	MHLV-1	0.000	ABMA	MS	-	Test	Jupiter	-	-
1980-A271	2437260.88	1960 Nov 21 1400	Readstone	-	MHLV-3	0.000	ABMA	MS	-	Test	Jupiter	-	-
1980-S415	2437288.18	1960 Dec 19 1615	Readstone	-	MHLV-2	0.000	NSFC	TS	-	Test/Blo	Jupiter	-	-
1980-S51	2437321.59	1961 Jan 22 0204	Readstone	-	MHLV-2	0.000	NSFC	TS	-	Test/Blo	Jupiter	-	-
1980-S24	2437331.20	1961 Mar 9 0230	Readstone	-	MHLV-5	0.000	NSFC	TS	-	Test/Blo	Jupiter	-	-
1981-S77	2437367.60	1961 Jan 24 1730	Readstone	-	MHLV-7	0.000	NSFC	TS	-	Test/Blo	Jupiter	-	-
1981-S135	2437425.11	1961 May 5 1434:13	Readstone	-	CC-2042	0.000	ABMA	MS	-	Test	Jupiter	-	-
1981-S190	2437437.58	1961 Jun 27 0220	Readstone	-	CC-1005	0.000	46F42	MS	-	OT	Jupiter	-	-
1981-S202	2437477.80	1961 Jul 31 1220:01	Readstone	-	MHLV-8	0.000	NSFC	TS	-	Test	Jupiter	-	-
1981-S216	2437502.01	1961 Jul 31 1220:01	Readstone	-	MHLV-8	0.000	NSFC	TS	-	Test	Jupiter	-	-
1981-S295	2437526.50	1961 Aug 15	Readstone	-	CC-1009	0.000	46F42	MS	-	OT	Jupiter	-	-
1981-S315	2437563.50	1961 Sep 21	Readstone	-	CC-1006	0.000	40FA	MS	-	OT	Jupiter	-	-
1981-S397	2437598.50	1961 Oct 26	Readstone	-	CC-1012	0.000	40FA	MS	-	OT	Jupiter	-	-
1962-S149	2437681.50	1962 Jan 26	Readstone	-	CC-1008	0.000	209FA	MS	-	OT	Jupiter	-	-
1962-S214	2437682.50	1962 Jul 17	Readstone	-	CC-1014	0.000	46F42	MS	-	OT	Jupiter	-	-
1962-S273	2437683.50	1962 Aug 7	Readstone	-	CC-1017	0.000	40FA	MS	-	OT	Jupiter	-	-
1962-S274	2437906.50	1962 Aug 30	Readstone	-	CC-1015	0.000	40FA	MS	-	OT	Jupiter	-	-
1963-S379	2438246.50	1963 Aug 5	Readstone	-	CC-2033	0.000	40FA	MS	-	OT	Jupiter	-	-
1963-S397	2438260.50	1963 Aug 19	Readstone	-	CC-2008	0.000	40FA	MS	-	OT	Jupiter	-	-

Launch

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	DrbPay	Agency	Launch_Code	Group	Category	LTCite	Cite	Notes
1963-S438	2435282.50	1963 Sep 10	Redstone	-	CC-2015	0.000	40FA	MS	-	UT	ABMA	-	-
1963-S449	2435295.50	1963 Sep 23	Redstone	-	CC-2044	0.000	40FA	MS	-	UT	ABMA	-	-
1963-S479	2435307.50	1963 Oct 5	Redstone	-	CC-2005	0.000	NICOM	MS	-	UT	ABMA	-	-
1965-A191	2435095.56	1965 Dec 1 0128:00	Redstone	-	CC-2036/DAT-01	0.000	ARPA	MS	-	Target	ARPA-TR-DAT-1-66	-	[or 0123Z]
1966-S658	2439458.01	1966 Nov 28 1215	SPARTA	-	CC-20137/SV-1	0.000	NICOM	MF	-	Reentry Test	Henderson	-	-
1966-S683	2439472.99	1966 Dec 13 1150	SPARTA	-	CC-2034/SV-2	0.000	NICOM	MS	-	Reentry Test	Henderson	-	-
1967-S225	2439600.46	1967 Apr 19 2307	SPARTA	-	CC-20277/SV-3	0.000	NICOM	MS	-	Reentry Test	Henderson	-	[0837Apr20 - Henderson]
1967-S332	2439676.46	1967 Jul 4 2307	SPARTA	-	CC-2032/SV-4	0.000	NICOM	MS	-	Reentry Test	Henderson	-	-
1967-S356	2439696.20	1967 Jul 24 1643	SPARTA	-	CC-2039/SV-5	0.000	NICOM	MS	-	Reentry Test	Henderson	-	-
1967-S390	2439720.32	1967 Aug 17 1946	SPARTA	-	CC-2012/SV-7	0.000	NICOM	MS	-	Reentry Test	Henderson	-	-
1967-S438	2439749.18	1967 Sep 15 1617	SPARTA	-	CC-2030/SV-6	0.000	NICOM	MS	-	Reentry Test	Henderson	-	-
1967-S487	2439775.18	1967 Oct 11 1622	SPARTA	-	CC-2041/SV-8	0.000	NICOM	MS	-	Reentry Test	Henderson	-	-
1967-S513	2439795.05	1967 Oct 31 1314	SPARTA	-	CC-2029/SV-10	0.000	NICOM	MS	-	Reentry Test	Henderson	-	-
1967-118	2439823.70	1967 Nov 29 0449	SPARTA	-		0.073	NICOM/WRE	OS	G/UG	Sat LED A	Henderson	-	-



Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Mission	FlightCode	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee km	Range km	Dest
2024-407	2460646.58	2024 Aug 24 0155	Rhumi	-	1	Mission Rhumi 2024	-	-	-	THIR	-	-	-	35	-	-



Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Launch_OrdrPay	Agency	Launch_Code	Group	Category	LTCite	Cite	Notes
2024-407	2460546:58	2024 Aug 24 0155	Rhumi	-	1	0.000	SZI	AS	-	Test	hindustantimes.com	-	-





Launch_Tag	Launch_JD	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Launch_Mission	FlightCode	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee_Km	Range_Km	Dest
1966-4589	2439429.50	1966 Nov	Caopus 1	-	-	-	-	-	-	-	-	-	-	-	-	-
1967-A160	2439671.50	1967 Jul	Caopus 1	-	-	-	-	-	-	CELPA	-	-	-	40?	-	-
1967-5744	2439640.50	1967 Dec 16	Rigel1	-	-	-	-	-	-	CELPA	-	-	-	40?	-	-
1969-5272	2440327.50	1969 Apr 16	Caopus 2	-	-	-	-	-	-	CELPA	-	-	-	295	-	-
1969-5498	2440476.57	1969 Sep 12 04:06?	Rigel1	-	-	-	-	-	-	GELAT	-	-	-	150?	-	-
1969-5571	2440517.50	1969 Oct 23	Caopus 2	-	No 2	-	-	-	-	CELPA	-	-	-	250?	-	-
1969-5690	2440577.50	1969 Dec 22	Rigel1	-	-	-	-	-	-	CELPA?	-	-	-	150?	-	-
1969-5691	2440577.50	1969 Dec 22	Castor (A)	-	CR-X1	-	-	-	-	CELPA?	-	-	-	250?	-	-
1969-5692	2440578.50	1969 Dec 23	Caopus 2	-	No 3	-	-	-	-	CELPA	-	-	-	52	-	-
1970-A151	2440939.50	1970 Dec 19	Castor (A)	-	CR-X2	-	-	-	-	CELPA	-	-	-	70	-	-
1971-428	2441260.50	1971 Nov 5	Caopus 2	-	-	-	-	-	-	CELPA	-	-	-	45	-	-
1972-5389	2441624.48	1972 Nov 2 2328	Rigel1	-	EGANI/72	-	-	-	-	CELPA	-	-	-	60	-	-
1972-5393	2441626.48	1972 Nov 4 2327	Rigel1	-	MPE Eu/Ba EXP 63	-	-	-	-	CELPA	-	-	-	240	-	-
1972-5397	2441632.85	1972 Nov 11 0926	Rigel1	-	EGANI/72	-	-	-	-	CELPA	-	-	-	252	-	-
1973-5396	2442006.48	1973 Nov 18 2334	Rigel1	-	EGANI/72	-	-	-	-	CELPA	-	-	-	260	-	-
1973-5397	2442006.48	1973 Nov 19 2335	Rigel1	-	EGANI/73?	-	-	-	-	CELPA	-	-	-	260	-	-
1973-5401	2442009.49	1973 Nov 22 2339:00	Castor (A)	-	CR-01	-	-	-	-	CELPA	-	-	-	406	-	-
1975-5290	2442666.50	1975 Sep 30	Castor (A)	-	CR-02	-	-	-	-	CELPA	-	-	-	400?	-	-
1975-5297	2442668.52	1975 Oct 3 0744	Castor (A)	-	CR-03	-	-	-	-	VCH	-	-	-	400?	-	-
1977-5419	2443324.50	1977 Jul	Tauro	-	01	-	-	-	-	CELPA	-	-	-	100?	-	-
1979-5300	2443906.50	1979 Feb 2	Tauro	-	02	-	-	-	-	CELPA	-	-	-	100?	-	-
1979-5299	2443954.49	1979 Mar 21 2349	Castor (A)	-	CR-04	-	-	-	-	CELPA	-	-	-	260?	-	-
1979-5101	2443956.50	1979 Mar 22 2353	Castor (A)	-	CR-05	-	-	-	-	GHI	-	-	-	268	-	-
1981-5250	2444949.25	1981 Dec 10 1800	Tauro	-	09	-	-	-	-	GHI	-	-	-	131	-	-
2013-A27	2456644.95	2013 Dec 16 1042	Centenario	-	-	-	-	-	-	CELPA	-	-	-	49?	-	-



Launch

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	OrbPay t	Agency	Launch_Code	Group	Category	LTCite	Cite	Notes
1966-A589	2439429_50	1966 Nov	Canopus 1	-	-	0.000	IIAE	SS	IIAE/	Test	DeLeon	-	-
1967-A160	2439671_50	1967 Jul	Canopus 1	-	-	0.000	IIAE	SS	IIAE/	Test	DeLeon	-	-
1967-S744	2439840_50	1967 Dec 16	Rigel	-	-	0.000	IIAE	SS	IIAE/	Test	DeLeon	-	-
1969-S272	2440327_50	1969 Apr 16	Canopus 2	-	-	0.000	IIAE	SS	IIAE/	Test	Serra/CISPAR	-	-
1969-S498	2440476_67	1969 Sep 12 0406?	Rigel	-	Mo 2	0.000	IIAE	SS	IIAE/	Test	SP-4014	Serra/CISPAR	-
1969-S571	2440517_50	1969 Oct 23	Canopus 2	-	-	0.000	IIAE	SS	IIAE/	Test	Serra/CISPAR	-	-
1969-S690	2440577_50	1969 Dec 22	Rigel	-	-	0.000	IIAE	SS	IIAE/	Test	Serra/CISPAR	-	-
1969-S691	2440577_50	1969 Dec 22	Castor (A)	-	CR-X1	0.000	IIAE	SS	IIAE/	Test	Serra/CISPAR	-	-
1969-S692	2440578_50	1969 Dec 23	Canopus 2	-	No 3	0.000	IIAE	SS	IIAE/	Test	Serra/CISPAR	-	-
1970-A151	2440939_50	1970 Dec 19	Castor (A)	-	CR-X2	0.000	IIAE	SS	IIAE/	Test/Bio	Serra/CISPAR	DeLeon	-
1971-M28	2441260_50	1971 Nov 5	Canopus 2	-	-	0.000	IIAE	SS	IIAE/	Test	Jpcobacteria.com.ar	-	-
1972-S389	2441624_48	1972 Nov 2 2328	Rigel	-	EGMI/72	0.000	IIAE	SS	MPE/Haerendel	Aeron/Ionos	DeLeon	-	-
1972-S393	2441626_48	1972 Nov 4 2327	Rigel	-	EGMI/72	0.000	IIAE	SS	MPE/Haerendel	Aeron/Ionos	SRI4_233	WDCRF	-
1972-S397	2441632_68	1972 Nov 11 0526	Rigel	-	EGMI/72	0.000	IIAE	SS	MPE/Haerendel	Ionos	SRI4_233	WDCRF	-
1973-S396	2442005_48	1973 Nov 18 2354	Rigel	-	EGMI/73?	0.000	IIAE	SS	MPE/IIAE/	Ionos	WDCRF	-	-
1973-S397	2442006_48	1973 Nov 19 2358	Rigel	-	EGMI/73?	0.000	IIAE	SS	MPE/IIAE/	Ionos	WDCRF	-	-
1973-S401	2442009_49	1973 Nov 22 2339:00	Castor (A)	-	CR-01	0.000	IIAE	SS	MPE/	Ionos	WDCRF	-	-
1975-S290	2442685_50	1975 Sep 30	Castor (A)	-	CR-02	0.000	IIAE	SS	MPE/	Ionos	Serra	-	-
1975-S297	2442688_82	1975 Oct 3 0744	Castor (A)	-	CR-03	0.000	IIAE	SS	MPE/	Ionos	Serra	-	-
1977-S419	2443324_50	1977 Jul	Tauro	-	01	0.000	IIAE	SS	IIAE/	Test	DeLeon	-	-
1979-S300	2443906_50	1979 Feb 2	Tauro	-	02	0.000	IIAE	SS	IIAE/	Test	DeLeon	-	-
1979-S289	2443964_49	1979 Mar 21 2349	Castor (A)	-	CR-04	0.000	DFVLR/IIAE	SS	MPE/	Ba release	ESK-SP162	Serra	Payload fail
1979-S101	2443985_50	1979 Mar 22 2353	Castor (A)	-	CR-05	0.000	DFVLR/IIAE	SS	MPE/	Ba release	ESK-SP162	Serra	-
1981-S260	2444949_26	1981 Dec 10 1600	Tauro	-	09	0.000	IIAE	SS	IIAE/	Earth Imaging	frii.utm.edu.ar	DeLeon	-
2013-A27	2456644_96	2013 Dec 18 1042	Centenario	-	-	0.000	IIAE	SS	IIAE/	Micrograv/Tech	Wire	-	-





Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Mission	FlightCode	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Approvee	Range	Dest
1969-W92	2440239.17	1969 Jan 17 16:00:59	Rocketsonde	-	-	Met Para,Arcaonde	-	-	-	WI	-	-	-	53	-	-
1969-W93	2440239.19	1969 Jan 17 16:30:00	Rocketsonde	-	-	Met Para,Arcaonde	-	-	-	SHER	-	-	-	64	-	-
1969-W94	2440239.23	1969 Jan 17 17:37:59	Rocketsonde	-	-	Staruve,Dataonde	-	-	-	PM	-	-	-	63	-	-
1969-W95	2440239.27	1969 Jan 17 18:35:59	Rocketsonde	-	-	Staruve,Dataonde	-	-	-	WI	-	-	-	63	-	-
1969-W97	2440239.33	1969 Jan 17 20:00:00	Rocketsonde	-	-	Staruve,Dataonde	-	-	-	GLY	-	-	-	55	-	-
1969-W98	2440239.37	1969 Jan 17 20:08:00	Rocketsonde	-	-	Met Para,Arcaonde	-	-	-	KAU	-	-	-	54	-	-
1969-A23	2440239.42	1969 Jan 17 22:41:00	Rocketsonde	-	-	Met Para,Arcaonde	-	-	-	WI	-	-	-	57	-	-
1969-W99	2440242.11	1969 Jan 20 14:45:00	Rocketsonde	-	-	Met Para,Arcaonde	-	-	-	ASC	-	-	-	57	-	-
1969-A24	2440242.12	1969 Jan 20 14:55:00	Rocketsonde	-	-	Met Para,Arcaonde	-	-	-	THU	-	-	-	48	-	-
1969-W103	2440242.15	1969 Jan 20 15:30:00	Rocketsonde	-	-	Met Para,Arcaonde	-	-	-	CC	LO43	-	-	64	-	-
1969-W104	2440242.16	1969 Jan 20 15:45:00	Rocketsonde	-	-	Met Para,Arcaonde	-	-	-	AIT	-	-	-	56	-	-
1969-A25	2440242.25	1969 Jan 20 18:02:59	Rocketsonde	-	-	Met Para,Arcaonde	-	-	-	PRIM	-	-	-	42	-	-
1969-W106	2440242.29	1969 Jan 20 18:59:59	Rocketsonde	-	-	Staruve,Dataonde	-	-	-	WS	-	-	-	62	-	-
1969-W108	2440242.35	1969 Jan 20 20:25:00	Rocketsonde	-	-	Staruve,Dataonde	-	-	-	GLY	-	-	-	53	-	-
1969-W110	2440242.38	1969 Jan 21 17:00:00	Rocketsonde	-	-	Met Para,Arcaonde	-	-	-	KAU	LO43	-	-	59	-	-
1969-W114	2440243.25	1969 Jan 21 18:00:00	Rocketsonde	-	-	Met Para,Arcaonde	-	-	-	THU	-	-	-	50	-	-
1969-W115	2440243.29	1969 Jan 21 18:59:59	Rocketsonde	-	-	Staruve,Dataonde	-	-	-	WS	-	-	-	62	-	-
1969-A27	2440243.38	1969 Jan 21 21:02:59	Rocketsonde	-	-	Staruve,Dataonde	-	-	-	GLY	-	-	-	47	-	-
1969-W120	2440243.41	1969 Jan 21 21:45:00	Rocketsonde	-	-	Met Para,Arcaonde	-	-	-	GLY	-	-	-	46	-	-
1969-W121	2440244.10	1969 Jan 22 14:30:00	Rocketsonde	-	-	Met Para,Arcaonde	-	-	-	ASC	-	-	-	56	-	-
1969-W122	2440244.12	1969 Jan 22 14:45:00	Rocketsonde	-	-	Met Para,Arcaonde	-	-	-	AIT	-	-	-	60	-	-
1969-W123	2440244.17	1969 Jan 22 15:00:00	Rocketsonde	-	-	Met Para,Arcaonde	-	-	-	ASC	LO43	-	-	60	-	-
1969-W126	2440244.24	1969 Jan 22 17:40:00	Rocketsonde	-	-	Met Para,Arcaonde	-	-	-	CC	-	-	-	57	-	-
1969-W127	2440244.31	1969 Jan 22 19:24:59	Rocketsonde	-	-	Staruve,Dataonde	-	-	-	SHER	-	-	-	57	-	-
1969-W130	2440245.12	1969 Jan 22 20:00:00	Rocketsonde	-	-	Staruve,Dataonde	-	-	-	WS	-	-	-	68	-	-
1969-A29	2440245.27	1969 Jan 23 18:30:00	Rocketsonde	-	-	Met Para,Arcaonde	-	-	-	GLY	LO43	-	-	54	-	-
1969-W152	2440245.31	1969 Jan 23 19:27:59	Rocketsonde	-	-	Met Para,Arcaonde	-	-	-	WS	-	-	-	58	-	-
1969-A30	2440245.40	1969 Jan 23 21:30:00	Rocketsonde	-	-	Staruve,Dataonde	-	-	-	GLY	-	-	-	27	-	-
1969-W153	2440245.49	1969 Jan 23 23:45:00	Rocketsonde	-	-	Staruve,Dataonde	-	-	-	GLYC	-	-	-	61	-	-
1969-W154	2440245.51	1969 Jan 23 23:45:00	Rocketsonde	-	-	Met Para,Dataonde	-	-	-	WS	LO43	-	-	60	-	-
1969-W156	2440246.01	1969 Jan 24 02:33:00	Rocketsonde	-	-	Met Para,Arcaonde	-	-	-	CC	-	-	-	59	-	-
1969-W157	2440246.10	1969 Jan 24 14:30:00	Rocketsonde	-	-	Met Para,Arcaonde	-	-	-	ASC	LO43	-	-	60	-	-
1969-W158	2440246.11	1969 Jan 24 14:45:00	Rocketsonde	-	-	Met Para,Arcaonde	-	-	-	THU	-	-	-	44	-	-
1969-W159	2440246.15	1969 Jan 24 15:04:59	Rocketsonde	-	-	Met Para,Arcaonde	-	-	-	AIT	-	-	-	59	-	-
1969-W160	2440246.19	1969 Jan 24 15:30:00	Rocketsonde	-	-	Staruve,Dataonde	-	-	-	WS	-	-	-	70	-	-
1969-W161	2440246.25	1969 Jan 24 18:00:00	Rocketsonde	-	-	Staruve,Dataonde	-	-	-	NS	-	-	-	48	-	-
1969-A32	2440246.26	1969 Jan 24 18:14:59	Rocketsonde	-	-	Met Para,Arcaonde	-	-	-	NS	-	-	-	46	-	-
1969-A33	2440246.28	1969 Jan 24 18:42:00	Rocketsonde	-	-	Met Para,Arcaonde	-	-	-	NS	-	-	-	69	-	-
1969-W141	2440246.33	1969 Jan 24 20:00:00	Rocketsonde	-	-	Staruve,Dataonde	-	-	-	GLY	-	-	-	62	-	-
1969-W142	2440246.34	1969 Jan 24 20:06:00	Rocketsonde	-	-	Staruve,Dataonde	-	-	-	PM	-	-	-	59	-	-
1969-W143	2440246.36	1969 Jan 24 20:37:00	Rocketsonde	-	-	Met Para,Dataonde	-	-	-	ASC	-	-	-	59	-	-
1969-W144	2440246.11	1969 Jan 27 14:45:00	Rocketsonde	-	-	Met Para,Arcaonde	-	-	-	ASC	-	-	-	57	-	-
1969-W145	2440246.12	1969 Jan 27 14:57:00	Rocketsonde	-	-	Met Para,Arcaonde	-	-	-	AIT	-	-	-	57	-	-
1969-W146	2440246.15	1969 Jan 27 15:08:00	Rocketsonde	-	-	Met Para,Arcaonde	-	-	-	ASC	LO43	-	-	51	-	-
1969-W147	2440246.24	1969 Jan 27 19:08:59	Rocketsonde	-	-	Met Para,Dataonde	-	-	-	SHER	-	-	-	60	-	-
1969-W148	2440246.29	1969 Jan 27 19:48:59	Rocketsonde	-	-	Met Para,Arcaonde	-	-	-	NS	-	-	-	61	-	-
1969-W149	2440246.33	1969 Jan 27 20:01:59	Rocketsonde	-	-	Met Para,Arcaonde	-	-	-	GLY	-	-	-	59	-	-
1969-W150	2440246.37	1969 Jan 27 20:55:00	Rocketsonde	-	-	Staruve,Dataonde	-	-	-	KAU	-	-	-	63	-	-
1969-W151	2440246.10	1969 Jan 28 15:05:00	Rocketsonde	-	-	Staruve,Dataonde	-	-	-	CC	LO43	-	-	63	-	-
1969-W152	2440250.21	1969 Jan 28 17:00:00	Rocketsonde	-	-	Met Para,Arcaonde	-	-	-	PM	-	-	-	59	-	-
1969-A36	2440250.40	1969 Jan 28 21:33:00	Rocketsonde	-	-	Met Para,Arcaonde	-	-	-	KAU	-	-	-	49	-	-
1969-W156	2440251.11	1969 Jan 28 14:45:00	Rocketsonde	-	-	Met Para,Arcaonde	-	-	-	ASC	LO43	-	-	57	-	-
1969-W157	2440251.12	1969 Jan 28 15:00:00	Rocketsonde	-	-	Staruve,Dataonde	-	-	-	CC	-	-	-	61	-	-
1969-W158	2440251.14	1969 Jan 28 15:15:59	Rocketsonde	-	-	Staruve,Dataonde	-	-	-	NS	-	-	-	68	-	-
1969-W159	2440251.17	1969 Jan 28 15:59:59	Rocketsonde	-	-	Staruve,Dataonde	-	-	-	SHER	-	-	-	64	-	-
1969-W160	2440251.17	1969 Jan 28 15:59:59	Rocketsonde	-	-	Staruve,Dataonde	-	-	-	NS	-	-	-	61	-	-
1969-W161	2440251.25	1969 Jan 28 18:00:00	Rocketsonde	-	-	Met Para,Arcaonde	-	-	-	PRIM	-	-	-	60	-	-
1969-W162	2440251.25	1969 Jan 28 18:37:59	Rocketsonde	-	-	Met Para,Arcaonde	-	-	-	GLY	-	-	-	53	-	-
1969-W163	2440251.29	1969 Jan 28 18:59:59	Rocketsonde	-	-	Met Para,Dataonde	-	-	-	WI	-	-	-	65	-	-
1969-W164	2440251.31	1969 Jan 28 19:31:59	Rocketsonde	-	-	Met Para,Dataonde	-	-	-	Chaff	-	-	-	65	-	-
1969-W165	2440251.32	1969 Jan 28 19:44:59	Rocketsonde	-	-	Staruve,Dataonde	-	-	-	Chaff	-	-	-	62	-	-
1969-W166	2440251.33	1969 Jan 28 20:00:00	Rocketsonde	-	-	Staruve,Dataonde	-	-	-	PM	-	-	-	60	-	-
1969-W167	2440251.34	1969 Jan 28 20:12:00	Rocketsonde	-	-	Met Para,Arcaonde	-	-	-	WI	-	-	-	64	-	-
1969-W168	2440251.36	1969 Jan 28 20:44:00	Rocketsonde	-	-	Met Para,Arcaonde	-	-	-	Chaff	-	-	-	66	-	-
1969-W169	2440251.36	1969 Jan 28 20:45:00	Rocketsonde	-	-	Staruve,Dataonde	-	-	-	KAU	-	-	-	68	-	-
1969-W170	2440251.36	1969 Jan 28 20:45:00	Rocketsonde	-	-	Staruve,Dataonde	-	-	-	GLY	-	-	-	68	-	-
1969-W171	2440251.66	1969 Jan 30 03:45:00	Rocketsonde	-	-	Staruve,Dataonde	-	-	-	GLY	-	-	-	65	-	-
1969-A38	2440252.12	1969 Jan 30 15:00:00	Rocketsonde	-	-	Met Para,Arcaonde	-	-	-	CC	LO43	-	-	49	-	-
1969-W173	2440252.35	1969 Jan 30 20:30:00	Rocketsonde	-	-	Met Para,Dataonde	-	-	-	CC	-	-	-	60	-	-
1969-W175	2440252.42	1969 Jan 30 22:04:59	Rocketsonde	-	-	Met Para,Arcaonde	-	-	-	GLY	LO43	-	-	60	-	-
1969-W177	2440252.67	1969 Jan 31 03:59:59	Rocketsonde	-	-	Met Para,Dataonde	-	-	-	NS	-	-	-	61	-	-
1969-W179	2440253.11	1969 Jan 31 14:35:00	Rocketsonde	-	-	Met Para,Dataonde	-	-	-	NS	-	-	-	64	-	-
1969-W180	2440253.11	1969 Jan 31 14:45:00	Rocketsonde	-	-	Met Para,Arcaonde	-	-	-	ASC	-	-	-	61	-	-
1969-W181	2440253.14	1969 Jan 31 15:18:00	Rocketsonde	-	-	Met Para,Arcaonde	-	-	-	AIT	-	-	-	58	-	-
1969-W182	2440253.25	1969 Jan 31 18:00:00	Rocketsonde	-	-	Met Para,Arcaonde	-	-	-	NS	-	-	-	55	-	-
1969-W184	2440253.27	1969 Jan 31 18:30:00	Rocketsonde	-	-	Met Para,Arcaonde	-	-	-	PRIM	-	-	-	60	-	-
1969-W185	2440253.33	1969 Jan 31 20:00:00	Rocketsonde	-	-	Met Para,Arcaonde	-	-	-	GLY	-	-	-	68	-	-
1969-W186	2440253.37	1969 Jan 31 20:47:00	Rocketsonde	-	-	Met Para,Arcaonde	-	-	-	KAU	-	-	-	66	-	-
1969-W187	2440253.49	1969 Jan 31 23:45:00	Rocketsonde	-	-	Staruve,Dataonde	-	-	-	PM	-	-	-	59	-	-
1969-W188	2440254.33	1969 Feb 1 20:00:00	Rocketsonde	-	-	Staruve,Dataonde	-	-	-	GLY	-	-	-	69	-	-
1969-W189	2440254.35	1969 Feb 2 20:17:00	Rocketsonde	-	-	Met Para,Arcaonde	-	-	-	GLY	-	-	-	69	-	-
1969-W190	2440255.35	1969 Feb 3 14:04:59	Rocketsonde	-	-	Met Para,Arcaonde	-	-	-	AIT	-	-	-	55	-	-
1969-W191	2440256.11	1969 Feb 3 14:45:00	Rocketsonde	-	-	Met Para,Arcaonde	-	-	-	ASC	-	-	-	64	-	-
1969-W192	2440256.12	1969 Feb 3 15:00:00	Rocketsonde	-	-	Met Para,Arcaonde	-	-	-	CC	LO43	-	-	61	-	-

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Mission	FlightCode	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee_Km	Range_Km	Dest
1969-W193	2440256.22	1969 Feb 3 1715:59	Rocketsonde	-	-	Met Para,Arcaasnde	-	-	-	SHER	-	-	-	58	-	-
1969-W194	2440256.29	1969 Feb 3 1859:59	Rocketsonde	-	-	Staruve,Dataasnde	-	-	-	GSLY	-	-	-	58	-	-
1969-W195	2440256.33	1969 Feb 3 2000:00	Rocketsonde	-	-	Met Para,Arcaasnde	-	-	-	KAU	-	-	-	60	-	-
1969-W196	2440256.36	1969 Feb 3 2034:00	Rocketsonde	-	-	Met Para,Arcaasnde	-	-	-	WS	-	-	-	58	-	-
1969-W197	2440256.38	1969 Feb 3 2100:00	Rocketsonde	-	-	Staruve,Dataasnde	-	-	-	PH	-	-	-	65	-	-
1969-W198	2440256.45	1969 Feb 3 2245:59	Rocketsonde	-	-	Staruve,Dataasnde	-	-	-	CC	LO43	-	-	54	-	-
1969-W199	2440257.12	1969 Feb 4 1500:00	Rocketsonde	-	-	Met Para,Arcaasnde	-	-	-	PRIM	-	-	-	58	-	-
1969-W200	2440257.29	1969 Feb 4 1855:00	Rocketsonde	-	-	Met Para,Arcaasnde	-	-	-	WS	-	-	-	60	-	-
1969-W201	2440257.33	1969 Feb 4 1901:59	Rocketsonde	-	-	Met Para,Arcaasnde	-	-	-	THU	-	-	-	51	-	-
1969-W202	2440257.33	1969 Feb 4 2000:00	Rocketsonde	-	-	Met Para,Arcaasnde	-	-	-	GSLY	-	-	-	71	-	-
1969-W203	2440257.36	1969 Feb 4 2045:00	Rocketsonde	-	-	-	-	-	-	PH	-	-	-	61	-	-
1969-W204	2440257.45	1969 Feb 4 2252:00	Rocketsonde	-	-	Met Para,Arcaasnde	-	-	-	PH	-	-	-	56	-	-
1969-W205	2440258.07	1969 Feb 5 1344:59	Rocketsonde	-	-	Met Para,Arcaasnde	-	-	-	AUT	-	-	-	53	-	-
1969-W206	2440258.11	1969 Feb 5 1445:00	Rocketsonde	-	-	Met Para,Arcaasnde	-	-	-	ASC	-	-	-	63	-	-
1969-W207	2440258.12	1969 Feb 5 1500:00	Rocketsonde	-	-	Met Para,Arcaasnde	-	-	-	CC	LO43	-	-	58	-	-
1969-W208	2440258.24	1969 Feb 5 1751:00	Rocketsonde	-	-	-	-	-	-	PRIM	-	-	-	65	-	-
1969-W209	2440258.29	1969 Feb 5 1859:59	Rocketsonde	-	-	Staruve,Dataasnde	-	-	-	WS	-	-	-	65	-	-
1969-W210	2440258.30	1969 Feb 5 1954:59	Rocketsonde	-	-	Rocketsonde	-	-	-	PH	-	-	-	56	-	-
1969-W211	2440258.34	1969 Feb 5 2015:59	Rocketsonde	-	-	Met Para,Arcaasnde	-	-	-	GSLY	-	-	-	67	-	-
1969-W212	2440258.38	1969 Feb 5 2100:00	Rocketsonde	-	-	Met Para,Arcaasnde	-	-	-	KAU	-	-	-	59	-	-
1969-W213	2440258.40	1969 Feb 5 2141:00	Rocketsonde	-	-	Met Para,Arcaasnde	-	-	-	PH	-	-	-	58	-	-
1969-W214	2440258.43	1969 Feb 5 2219:59	Rocketsonde	-	-	Met Para,Arcaasnde	-	-	-	PH	-	-	-	65	-	-
1969-W215	2440259.11	1969 Feb 6 1438:59	Rocketsonde	-	-	Met Para,Arcaasnde	-	-	-	THU	-	-	-	57	-	-
1969-W216	2440259.29	1969 Feb 6 1659:59	Rocketsonde	-	-	Met Para,Arcaasnde	-	-	-	WS	-	-	-	58	-	-
1969-W218	2440259.33	1969 Feb 6 1953:59	Rocketsonde	-	-	Met Para,Arcaasnde	-	-	-	MI	-	-	-	53	-	-
1969-W219	2440259.35	1969 Feb 6 2000:00	Rocketsonde	-	-	Met Para,Arcaasnde	-	-	-	WS	-	-	-	58	-	-
1969-W220	2440259.41	1969 Feb 6 2156:59	Rocketsonde	-	-	Met Para,Arcaasnde	-	-	-	KAU	-	-	-	64	-	-
1969-W221	2440260.08	1969 Feb 7 1400:00	Rocketsonde	-	-	Met Para,Arcaasnde	-	-	-	THU	-	-	-	66	-	-
1969-W222	2440260.12	1969 Feb 7 1447:00	Rocketsonde	-	-	Met Para,Arcaasnde	-	-	-	ASC	-	-	-	63	-	-
1969-W224	2440260.17	1969 Feb 7 1610:59	Rocketsonde	-	-	Met Para,Arcaasnde	-	-	-	AUT	-	-	-	63	-	-
1969-W225	2440260.17	1969 Feb 7 1650:59	Rocketsonde	-	-	Met Para,Arcaasnde	-	-	-	MI	-	-	-	56	-	-
1969-W226	2440260.34	1969 Feb 7 2013:00	Rocketsonde	-	-	Staruve,Dataasnde	-	-	-	GSLY	-	-	-	67	-	-
1969-W227	2440260.36	1969 Feb 7 2100:59	Rocketsonde	-	-	Met Para,Arcaasnde	-	-	-	PH	-	-	-	56	-	-
1969-W228	2440260.40	1969 Feb 7 2150:00	Rocketsonde	-	-	Met Para,Dataasnde	-	-	-	WS	-	-	-	61	-	-
1969-W229	2440260.47	1969 Feb 7 2315:00	Rocketsonde	-	-	Met Para,Arcaasnde	-	-	-	WS	-	-	-	62	-	-
1969-W231	2440263.09	1969 Feb 10 1408:00	Rocketsonde	-	-	Met Para,Arcaasnde	-	-	-	AUT	-	-	-	64	-	-
1969-W232	2440263.11	1969 Feb 10 1448:00	Rocketsonde	-	-	Met Para,Arcaasnde	-	-	-	ASC	-	-	-	64	-	-
1969-W233	2440263.12	1969 Feb 10 1500:00	Rocketsonde	-	-	Met Para,Arcaasnde	-	-	-	ASC	-	-	-	63	-	-
1969-W234	2440263.29	1969 Feb 10 1859:59	Rocketsonde	-	-	Met Para,Arcaasnde	-	-	-	CC	LO43	-	-	56	-	-
1969-W235	2440263.31	1969 Feb 10 1926:59	Rocketsonde	-	-	Met Para,Arcaasnde	-	-	-	THU	-	-	-	66	-	-
1969-W236	2440263.33	1969 Feb 10 2001:00	Rocketsonde	-	-	Staruve,Dataasnde	-	-	-	GSLY	-	-	-	62	-	-
1969-W237	2440263.34	1969 Feb 10 2007:00	Rocketsonde	-	-	Staruve,Dataasnde	-	-	-	PH	-	-	-	57	-	-
1969-W238	2440263.36	1969 Feb 10 2040:00	Rocketsonde	-	-	Met Para,Arcaasnde	-	-	-	KAU	-	-	-	56	-	-
1969-W239	2440263.38	1969 Feb 11 0240:00	Rocketsonde	-	-	Met Para,Arcaasnde	-	-	-	CC	LO43	-	-	56	-	-
1969-W240	2440264.23	1969 Feb 11 1846:00	Rocketsonde	-	-	Met Para,Arcaasnde	-	-	-	THU	-	-	-	54	-	-
1969-W241	2440264.31	1969 Feb 11 2036:00	Rocketsonde	-	-	Met Para,Arcaasnde	-	-	-	PH	-	-	-	57	-	-
1969-W242	2440264.51	1969 Feb 12 0030:00	Rocketsonde	-	-	Met Para,Arcaasnde	-	-	-	KAU	-	-	-	54	-	-
1969-W243	2440265.02	1969 Feb 12 0404:59	Rocketsonde	-	-	Met Para,Arcaasnde	-	-	-	AUT	-	-	-	54	-	-
1969-W244	2440265.02	1969 Feb 12 1404:59	Rocketsonde	-	-	Met Para,Arcaasnde	-	-	-	ASC	-	-	-	56	-	-
1969-W245	2440265.04	1969 Feb 12 1445:00	Rocketsonde	-	-	Met Para,Arcaasnde	-	-	-	ASC	-	-	-	61	-	-
1969-W246	2440265.11	1969 Feb 12 1546:00	Rocketsonde	-	-	Met Para,Arcaasnde	-	-	-	GSLY	-	-	-	67	-	-
1969-W247	2440265.17	1969 Feb 12 1630:59	Rocketsonde	-	-	Met Para,Arcaasnde	-	-	-	SHER	-	-	-	63	-	-
1969-W248	2440265.27	1969 Feb 12 1829:00	Rocketsonde	-	-	Met Para,Arcaasnde	-	-	-	CC	LO43	-	-	54	-	-
1969-W249	2440265.28	1969 Feb 12 1829:59	Rocketsonde	-	-	Met Para,Arcaasnde	-	-	-	PRIM	-	-	-	64	-	-
1969-W250	2440265.28	1969 Feb 12 1828:59	Rocketsonde	-	-	Met Para,Arcaasnde	-	-	-	THU	-	-	-	64	-	-
1969-W251	2440265.38	1969 Feb 12 2100:00	Rocketsonde	-	-	Met Para,Arcaasnde	-	-	-	GSLY	-	-	-	62	-	-
1969-W252	2440265.40	1969 Feb 12 2100:00	Rocketsonde	-	-	Met Para,Arcaasnde	-	-	-	WS	-	-	-	55	-	-
1969-W253	2440265.40	1969 Feb 12 2102:00	Rocketsonde	-	-	Met Para,Arcaasnde	-	-	-	PH	-	-	-	57	-	-
1969-W254	2440265.42	1969 Feb 12 2100:00	Rocketsonde	-	-	Met Para,Arcaasnde	-	-	-	CC	LO43	-	-	60	-	-
1969-W255	2440265.42	1969 Feb 12 2020:00	Rocketsonde	-	-	Met Para,Arcaasnde	-	-	-	PH	-	-	-	60	-	-
1969-W256	2440265.36	1969 Feb 13 2036:00	Rocketsonde	-	-	Met Para,Arcaasnde	-	-	-	MI	-	-	-	59	-	-
1969-W256	2440265.37	1969 Feb 13 2059:00	Rocketsonde	-	-	Met Para,Arcaasnde	-	-	-	THU	-	-	-	53	-	-
1969-W257	2440265.39	1969 Feb 13 2121:00	Rocketsonde	-	-	Met Para,Arcaasnde	-	-	-	THU	-	-	-	50	-	-
1969-W258	2440265.62	1969 Feb 14 0300:00	Rocketsonde	-	-	Met Para,Arcaasnde	-	-	-	WS	-	-	-	60	-	-
1969-W259	2440265.67	1969 Feb 14 0349:59	Rocketsonde	-	-	Met Para,Arcaasnde	-	-	-	WS	-	-	-	66	-	-
1969-W260	2440265.67	1969 Feb 14 0409:59	Rocketsonde	-	-	Met Para,Arcaasnde	-	-	-	WS	-	-	-	61	-	-
1969-W261	2440267.14	1969 Feb 14 1514:59	Rocketsonde	-	-	Met Para,Arcaasnde	-	-	-	ASC	-	-	-	62	-	-
1969-W262	2440267.19	1969 Feb 14 1632:59	Rocketsonde	-	-	Met Para,Arcaasnde	-	-	-	SHER	-	-	-	56	-	-
1969-W263	2440267.21	1969 Feb 14 1700:00	Rocketsonde	-	-	Staruve,Dataasnde	-	-	-	CC	LO43	-	-	64	-	-
1969-W264	2440267.25	1969 Feb 14 1755:00	Rocketsonde	-	-	Staruve,Dataasnde	-	-	-	PM	-	-	-	64	-	-
1969-W265	2440267.27	1969 Feb 14 1835:59	Rocketsonde	-	-	Met Para,Arcaasnde	-	-	-	THU	-	-	-	47	-	-
1969-W266	2440267.28	1969 Feb 14 1837:59	Rocketsonde	-	-	Met Para,Arcaasnde	-	-	-	THU	-	-	-	59	-	-
1969-W267	2440267.33	1969 Feb 14 2000:00	Rocketsonde	-	-	Staruve,Dataasnde	-	-	-	WS	-	-	-	66	-	-
1969-W268	2440267.38	1969 Feb 14 2100:00	Rocketsonde	-	-	Met Para,Arcaasnde	-	-	-	GSLY	-	-	-	65	-	-
1969-W270	2440270.11	1969 Feb 17 1445:00	Rocketsonde	-	-	Met Para,Arcaasnde	-	-	-	KAU	-	-	-	59	-	-
1969-W271	2440270.15	1969 Feb 17 1538:59	Rocketsonde	-	-	Met Para,Arcaasnde	-	-	-	ASC	-	-	-	63	-	-
1969-W272	2440270.17	1969 Feb 17 1602:59	Rocketsonde	-	-	Met Para,Arcaasnde	-	-	-	AUT	-	-	-	58	-	-
1969-W273	2440270.21	1969 Feb 17 1703:59	Rocketsonde	-	-	Met Para,Arcaasnde	-	-	-	SHER	-	-	-	64	-	-
1969-W274	2440270.29	1969 Feb 17 1856:00	Rocketsonde	-	-	Staruve,Dataasnde	-	-	-	PM	-	-	-	64	-	-
1969-W275	2440270.29	1969 Feb 17 1856:00	Rocketsonde	-	-	Staruve,Dataasnde	-	-	-	PRIM	-	-	-	64	-	-
1969-W276	2440270.36	1969 Feb 17 1859:59	Rocketsonde	-	-	Staruve,Dataasnde	-	-	-	WS	-	-	-	63	-	-
1969-W277	2440270.37	1969 Feb 17 2035:00	Rocketsonde	-	-	Staruve,Dataasnde	-	-	-	GSLY	-	-	-	61	-	-
1969-W278	2440271.21	1969 Feb 18 1700:00	Rocketsonde	-	-	Met Para,Arcaasnde	-	-	-	KAU	-	-	-	61	-	-
1969-W279	2440271.39	1969 Feb 18 2134:59	Rocketsonde	-	-	Met Para,Arcaasnde	-	-	-	ASC	-	-	-	61	-	-
1969-W281	2440272.07	1969 Feb 19 1334:59	Rocketsonde	-	-	Met Para,Arcaasnde	-	-	-	AUT	-	-	-	62	-	-



Launch

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Mission	FlightCode	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee_Km	Range_Km	Dest
1969-4282	2440272.11	1969 Feb 19 14:45:00	Rocketsonde	-	-	Met Para, Arcasonde	-	-	-	ASC	-	-	-	68	-	-
1969-4283	2440272.15	1969 Feb 19 15:30:00	Rocketsonde	-	-	Met Para, Arcasonde	-	-	-	WS	-	-	-	65	-	-
1969-4284	2440272.19	1969 Feb 19 16:30:00	Rocketsonde	-	-	Met Para, Arcasonde	-	-	-	CC	L043	-	-	57	-	-
1969-4285	2440272.19	1969 Feb 19 16:40:00	Rocketsonde	-	-	Met Para, Arcasonde	-	-	-	SHER	-	-	-	62	-	-
1969-4286	2440272.26	1969 Feb 19 18:19:00	Rocketsonde	-	-	Met Para, Arcasonde	-	-	-	WI	-	-	-	55	-	-
1969-4287	2440272.27	1969 Feb 19 18:29:00	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	PH	-	-	-	63	-	-
1969-4288	2440272.28	1969 Feb 19 18:38:59	Rocketsonde	-	-	Met Para, Arcasonde	-	-	-	PRIM	-	-	-	63	-	-
1969-4290	2440273.17	1969 Feb 20 15:59:59	Rocketsonde	-	-	Met Sphere	-	-	-	WS	-	-	-	63	-	-
1969-4291	2440273.29	1969 Feb 20 18:59:59	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	PH	-	-	-	61	-	-
1969-4292	2440273.33	1969 Feb 20 19:14:59	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	CC	L043	-	-	58	-	-
1969-4293	2440273.35	1969 Feb 20 20:00:00	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	WS	-	-	-	58	-	-
1969-4294	2440273.40	1969 Feb 20 21:37:59	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	GSLY	-	-	-	72	-	-
1969-4295	2440273.40	1969 Feb 20 21:37:59	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	KAU	-	-	-	58	-	-
1969-4297	2440274.25	1969 Feb 21 18:00:00	Rocketsonde	-	-	Met Para, Arcasonde	-	-	-	PRIM	-	-	-	64	-	-
1969-4298	2440277.11	1969 Feb 24 14:45:00	Rocketsonde	-	-	Met Para, Arcasonde	-	-	-	ASC	-	-	-	59	-	-
1969-4299	2440277.12	1969 Feb 24 15:00:00	Rocketsonde	-	-	Met Para, Arcasonde	-	-	-	CC	L043	-	-	61	-	-
1969-4300	2440277.25	1969 Feb 24 18:00:00	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	PRIM	-	-	-	61	-	-
1969-4301	2440277.29	1969 Feb 24 18:59:59	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	WS	-	-	-	72	-	-
1969-4302	2440277.37	1969 Feb 24 20:47:00	Rocketsonde	-	-	Met Para, Arcasonde	-	-	-	GSLY	-	-	-	59	-	-
1969-4303	2440278.13	1969 Feb 25 15:01:59	Rocketsonde	-	-	Met Para, Arcasonde	-	-	-	KAU	-	-	-	72	-	-
1969-4304	2440278.13	1969 Feb 25 15:01:59	Rocketsonde	-	-	Met Para, Arcasonde	-	-	-	CC	L043	-	-	57	-	-
1969-4305	2440278.40	1969 Feb 25 21:29:00	Rocketsonde	-	-	Chaff	-	-	-	KAU	-	-	-	52	-	-
1969-4306	2440279.15	1969 Feb 26 15:30:00	Rocketsonde	-	-	Met Para, Arcasonde	-	-	-	CC	L043	-	-	61	-	-
1969-4307	2440279.22	1969 Feb 26 17:10:00	Rocketsonde	-	-	Met Para, Arcasonde	-	-	-	SHER	-	-	-	59	-	-
1969-4308	2440279.25	1969 Feb 26 18:00:00	Rocketsonde	-	-	Met Para, Arcasonde	-	-	-	PRIM	-	-	-	64	-	-
1969-4309	2440279.33	1969 Feb 26 20:00:00	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	GSLY	-	-	-	66	-	-
1969-4310	2440280.12	1969 Feb 27 15:00:00	Rocketsonde	-	-	Met Para, Arcasonde	-	-	-	CC	L043	-	-	60	-	-
1969-4311	2440280.12	1969 Feb 27 15:00:00	Rocketsonde	-	-	Met Para, Arcasonde	-	-	-	PH	-	-	-	58	-	-
1969-4312	2440280.32	1969 Feb 27 19:40:00	Rocketsonde	-	-	Chaff	-	-	-	KAU	-	-	-	62	-	-
1969-4313	2440280.41	1969 Feb 27 21:45:59	Rocketsonde	-	-	Met Para, Arcasonde	-	-	-	ASC	-	-	-	66	-	-
1969-4314	2440281.11	1969 Feb 28 14:45:00	Rocketsonde	-	-	Met Para, Arcasonde	-	-	-	AIT	-	-	-	57	-	-
1969-4315	2440281.12	1969 Feb 28 15:00:00	Rocketsonde	-	-	Met Para, Arcasonde	-	-	-	CC	L043	-	-	65	-	-
1969-4316	2440281.12	1969 Feb 28 15:00:00	Rocketsonde	-	-	Met Para, Arcasonde	-	-	-	PRIM	-	-	-	61	-	-
1969-4317	2440281.25	1969 Feb 28 18:04:59	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	PH	-	-	-	62	-	-
1969-4318	2440281.31	1969 Feb 28 19:26:59	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	WS	-	-	-	60	-	-
1969-4319	2440281.31	1969 Feb 28 19:30:00	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	GSLY	-	-	-	57	-	-
1969-4320	2440281.33	1969 Feb 28 20:00:00	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	KAU	-	-	-	60	-	-
1969-4321	2440281.34	1969 Feb 28 20:14:00	Rocketsonde	-	-	Met Para, Arcasonde	-	-	-	MI	-	-	-	53	-	-
1969-4322	2440281.39	1969 Feb 28 21:20:00	Rocketsonde	-	-	Met Para, Arcasonde	-	-	-	KAU	L043	-	-	60	-	-
1969-4323	2440282.09	1969 Mar 1 14:04:59	Rocketsonde	-	-	Met Para, Arcasonde	-	-	-	MI	L043	-	-	58	-	-
1969-4324	2440282.09	1969 Mar 2 14:04:59	Rocketsonde	-	-	Met Para, Arcasonde	-	-	-	ASC	-	-	-	59	-	-
1969-4325	2440282.11	1969 Mar 3 14:45:00	Rocketsonde	-	-	Met Para, Arcasonde	-	-	-	SHER	-	-	-	62	-	-
1969-4326	2440284.16	1969 Mar 3 18:55:59	Rocketsonde	-	-	Met Para, Arcasonde	-	-	-	AIT	-	-	-	56	-	-
1969-4327	2440284.18	1969 Mar 3 19:22:59	Rocketsonde	-	-	Met Para, Arcasonde	-	-	-	SHER	-	-	-	56	-	-
1969-4328	2440284.25	1969 Mar 3 19:50:00	Rocketsonde	-	-	Met Para, Arcasonde	-	-	-	CC	L043	-	-	56	-	-
1969-4329	2440284.25	1969 Mar 3 19:50:00	Rocketsonde	-	-	Chaff	-	-	-	WS	-	-	-	59	-	-
1969-4330	2440284.25	1969 Mar 3 19:50:00	Rocketsonde	-	-	Met Para, Arcasonde	-	-	-	PRIM	-	-	-	55	-	-
1969-4331	2440284.27	1969 Mar 3 19:50:00	Rocketsonde	-	-	Met Para, Arcasonde	-	-	-	CC	L043	-	-	100	-	-
1969-4332	2440284.33	1969 Mar 3 19:50:00	Rocketsonde	-	-	Met Para, Arcasonde	-	-	-	GSLY	-	-	-	61	-	-
1969-4333	2440284.36	1969 Mar 3 20:43:00	Rocketsonde	-	-	Met Para, Arcasonde	-	-	-	KAU	-	-	-	58	-	-
1969-4334	2440284.36	1969 Mar 3 20:43:00	Rocketsonde	-	-	Chaff	-	-	-	KAU	-	-	-	58	-	-
1969-4335	2440285.39	1969 Mar 4 21:17:00	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	ASC	-	-	-	67	-	-
1969-4336	2440285.39	1969 Mar 5 14:45:00	Rocketsonde	-	-	Met Para, Arcasonde	-	-	-	CC	L043	-	-	60	-	-
1969-4337	2440285.43	1969 Mar 5 16:40:00	Rocketsonde	-	-	Met Para, Arcasonde	-	-	-	MI	-	-	-	60	-	-
1969-4338	2440285.13	1969 Mar 5 17:25:00	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	ASC	-	-	-	60	-	-
1969-4339	2440285.19	1969 Mar 5 18:00:00	Rocketsonde	-	-	Met Para, Arcasonde	-	-	-	AIT	-	-	-	64	-	-
1969-4340	2440285.25	1969 Mar 5 18:26:59	Rocketsonde	-	-	Met Para, Arcasonde	-	-	-	PH	-	-	-	67	-	-
1969-4341	2440285.25	1969 Mar 5 18:26:59	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	PRIM	-	-	-	63	-	-
1969-4342	2440285.31	1969 Mar 5 19:21:59	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	PH	-	-	-	63	-	-
1969-4343	2440285.33	1969 Mar 5 20:00:00	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	GSLY	-	-	-	57	-	-
1969-4344	2440285.36	1969 Mar 5 20:39:59	Rocketsonde	-	-	Met Para, Arcasonde	-	-	-	KAU	-	-	-	63	-	-
1969-4345	2440285.36	1969 Mar 5 21:00:00	Rocketsonde	-	-	Met Para, Arcasonde	-	-	-	WS	-	-	-	56	-	-
1969-4346	2440287.33	1969 Mar 6 19:45:59	Rocketsonde	-	-	Met Para, Datasonde	-	-	-	MI	-	-	-	54	-	-
1969-4347	2440287.38	1969 Mar 6 21:04:59	Rocketsonde	-	-	Chaff	-	-	-	KAU	-	-	-	65	-	-
1969-4348	2440288.11	1969 Mar 7 14:45:00	Rocketsonde	-	-	Met Para, Arcasonde	-	-	-	ASC	-	-	-	61	-	-
1969-4349	2440288.13	1969 Mar 7 15:11:00	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	CC	L043	-	-	64	-	-
1969-4350	2440288.21	1969 Mar 7 17:04:59	Rocketsonde	-	-	Met Para, Arcasonde	-	-	-	THU	-	-	-	57	-	-
1969-4351	2440288.21	1969 Mar 7 17:04:59	Rocketsonde	-	-	Met Para, Arcasonde	-	-	-	SHER	-	-	-	67	-	-
1969-4352	2440288.23	1969 Mar 7 17:31:00	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	PM	-	-	-	60	-	-
1969-4353	2440288.27	1969 Mar 7 17:31:00	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	PRIM	-	-	-	60	-	-
1969-4354	2440288.27	1969 Mar 7 18:26:59	Rocketsonde	-	-	Met Para, Arcasonde	-	-	-	WS	-	-	-	64	-	-
1969-4355	2440288.31	1969 Mar 7 19:30:00	Rocketsonde	-	-	Met Para, Arcasonde	-	-	-	PH	-	-	-	59	-	-
1969-4356	2440288.31	1969 Mar 7 19:30:00	Rocketsonde	-	-	Met Para, Arcasonde	-	-	-	WS	-	-	-	64	-	-
1969-4357	2440288.37	1969 Mar 7 20:05:00	Rocketsonde	-	-	Met Para, Arcasonde	-	-	-	KAU	-	-	-	59	-	-
1969-4358	2440288.37	1969 Mar 7 20:05:00	Rocketsonde	-	-	Met Para, Arcasonde	-	-	-	GSLY	-	-	-	64	-	-
1969-4359	2440291.09	1969 Mar 10 14:04:59	Rocketsonde	-	-	Met Para, Arcasonde	-	-	-	AIT	-	-	-	60	-	-
1969-4360	2440291.11	1969 Mar 10 14:45:00	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	ASC	L043	-	-	65	-	-
1969-4361	2440291.12	1969 Mar 10 15:00:00	Rocketsonde	-	-	Met Para, Arcasonde	-	-	-	CC	-	-	-	61	-	-
1969-4362	2440291.17	1969 Mar 10 16:09:59	Rocketsonde	-	-	Met Para, Arcasonde	-	-	-	THU	-	-	-	62	-	-
1969-4363	2440291.22	1969 Mar 10 17:11:00	Rocketsonde	-	-	Met Para, Arcasonde	-	-	-	SHER	-	-	-	61	-	-
1969-4364	2440291.25	1969 Mar 10 18:00:00	Rocketsonde	-	-	Met Para, Arcasonde	-	-	-	PRIM	-	-	-	55	-	-
1969-4365	2440291.33	1969 Mar 10 20:00:00	Rocketsonde	-	-	Chaff	-	-	-	WS	-	-	-	62	-	-
1969-4366	2440291.34	1969 Mar 10 20:04:59	Rocketsonde	-	-	Met Para, Arcasonde	-	-	-	GSLY	-	-	-	58	-	-
1969-4367	2440291.37	1969 Mar 10 20:55:00	Rocketsonde	-	-	Met Para, Arcasonde	-	-	-	KAU	-	-	-	59	-	-
1969-4368	2440291.40	1969 Mar 10 21:41:00	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	PM	-	-	-	59	-	-
1969-4370	2440292.35	1969 Mar 11 20:24:00	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	THU	-	-	-	59	-	-
1969-4371	2440292.40	1969 Mar 11 21:29:00	Rocketsonde	-	-	Chaff	-	-	-	KAU	-	-	-	52	-	-
1969-4372	2440293.11	1969 Mar 12 14:45:00	Rocketsonde	-	-	Met Para, Arcasonde	-	-	-	ASC	-	-	-	61	-	-
1969-4373	2440293.14	1969 Mar 12 15:14:59	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	CC						

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Mission	FlightCode	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Approve	Range	Dest
1969-W375	2440293.16	1969 Mar 12 1556:59	Rocketsonde	-	-	Met Para,Arcasonde	-	-	-	CLBI	-	-	-	58	-	-
1969-W46	2440293.18	1969 Mar 12 1622:59	Rocketsonde	-	-	Chaff	-	-	-	WI	-	-	-	53	-	-
1969-W376	2440293.20	1969 Mar 12 1652:59	Rocketsonde	-	-	Met Para,Arcasonde	-	-	-	WI	-	-	-	58	-	-
1969-W377	2440293.25	1969 Mar 12 1800:00	Rocketsonde	-	-	Met Para	-	-	-	PRIM	-	-	-	60	-	-
1969-W378	2440293.26	1969 Mar 12 1806:00	Rocketsonde	-	-	Met Para	-	-	-	WI	-	-	-	28	-	-
1969-W379	2440293.28	1969 Mar 12 1818:00	Rocketsonde	-	-	Met Para,Arcasonde	-	-	-	CELAT	-	-	-	60	-	-
1969-W380	2440293.33	1969 Mar 12 1912:59	Rocketsonde	-	-	-	-	-	-	WS	-	-	-	54	-	-
1969-W381	2440293.37	1969 Mar 12 2000:00	Rocketsonde	-	-	Met Para,Arcasonde	-	-	-	GLY	-	-	-	59	-	-
1969-W382	2440293.37	1969 Mar 12 2046:00	Rocketsonde	-	-	Met Para,Datasonde	-	-	-	WI	-	-	-	60	-	-
1969-W383	2440293.43	1969 Mar 12 2056:00	Rocketsonde	-	-	Staruve,Datasonde	-	-	-	PH	-	-	-	56	-	-
1969-W104	2440294.16	1969 Mar 12 2213:59	Rocketsonde	-	-	MK-1	-	-	-	CC	LO43	-	-	81	-	-
1969-W385	2440294.25	1969 Mar 13 1800:00	Rocketsonde	-	-	Staruve,Datasonde	-	-	-	CC	LO43	-	-	56	-	-
1969-W386	2440294.30	1969 Mar 13 1914:59	Rocketsonde	-	-	Met Para,Arcasonde	-	-	-	THU	-	-	-	58	-	-
1969-W48	2440294.33	1969 Mar 13 2000:00	Rocketsonde	-	-	Met Para,Arcasonde	-	-	-	WI	-	-	-	45	-	-
1969-W387	2440294.37	1969 Mar 13 2056:00	Rocketsonde	-	-	Staruve,Datasonde	-	-	-	PH	-	-	-	58	-	-
1969-W388	2440294.38	1969 Mar 13 2111:59	Rocketsonde	-	-	Chaff	-	-	-	KAU	-	-	-	64	-	-
1969-W389	2440294.97	1969 Mar 14 1115:00	Rocketsonde	-	-	Staruve,Datasonde	-	-	-	CC	LO43	-	-	63	-	-
1969-W391	2440295.11	1969 Mar 14 1445:00	Rocketsonde	-	-	Met Para,Arcasonde	-	-	-	AIT	-	-	-	56	-	-
1969-W392	2440295.11	1969 Mar 14 1445:00	Rocketsonde	-	-	Met Para,Arcasonde	-	-	-	ASC	-	-	-	62	-	-
1969-W393	2440295.12	1969 Mar 14 1448:59	Rocketsonde	-	-	Met Para,Arcasonde	-	-	-	THU	-	-	-	63	-	-
1969-W49	2440295.18	1969 Mar 14 1613:59	Rocketsonde	-	-	Staruve,Datasonde	-	-	-	WI	-	-	-	47	-	-
1969-W50	2440295.24	1969 Mar 14 1738:59	Rocketsonde	-	-	Staruve,Datasonde	-	-	-	PH	-	-	-	48	-	-
1969-W394	2440295.26	1969 Mar 14 1820:00	Rocketsonde	-	-	Met Para,Arcasonde	-	-	-	PRIM	-	-	-	59	-	-
1969-W395	2440295.30	1969 Mar 14 1904:59	Rocketsonde	-	-	Met Para,Arcasonde	-	-	-	WI	-	-	-	50	-	-
1969-W396	2440295.33	1969 Mar 14 2000:00	Rocketsonde	-	-	Chaff	-	-	-	WS	-	-	-	53	-	-
1969-W397	2440295.37	1969 Mar 14 2049:59	Rocketsonde	-	-	Met Para,Arcasonde	-	-	-	GLY	-	-	-	59	-	-
1969-W400	2440295.09	1969 Mar 17 1404:59	Rocketsonde	-	-	Met Para,Arcasonde	-	-	-	AIT	-	-	-	61	-	-
1969-W401	2440295.12	1969 Mar 17 1451:00	Rocketsonde	-	-	Staruve,Datasonde	-	-	-	ASC	LO43	-	-	64	-	-
1969-W402	2440295.12	1969 Mar 17 1500:00	Rocketsonde	-	-	Staruve,Datasonde	-	-	-	CC	-	-	-	64	-	-
1969-W403	2440295.16	1969 Mar 17 1555:00	Rocketsonde	-	-	Chaff	-	-	-	THU	-	-	-	59	-	-
1969-W404	2440295.25	1969 Mar 17 1800:00	Rocketsonde	-	-	Met Para,Arcasonde	-	-	-	WS	-	-	-	51	-	-
1969-W405	2440295.25	1969 Mar 17 1845:00	Rocketsonde	-	-	Staruve,Datasonde	-	-	-	PRIM	-	-	-	54	-	-
1969-W406	2440295.28	1969 Mar 17 1845:00	Rocketsonde	-	-	Staruve,Datasonde	-	-	-	PH	-	-	-	60	-	-
1969-W407	2440295.35	1969 Mar 17 2018:00	Rocketsonde	-	-	Met Para,Arcasonde	-	-	-	GLY	-	-	-	60	-	-
1969-W408	2440295.35	1969 Mar 17 2030:00	Rocketsonde	-	-	Met Para,Arcasonde	-	-	-	KAU	-	-	-	59	-	-
1969-W409	2440295.21	1969 Mar 18 1700:00	Rocketsonde	-	-	Met Para	-	-	-	WS	-	-	-	59	-	-
1969-W410	2440295.27	1969 Mar 18 1838:59	Rocketsonde	-	-	Chaff	-	-	-	PH	-	-	-	58	-	-
1969-W411	2440295.41	1969 Mar 18 2146:59	Rocketsonde	-	-	Chaff	-	-	-	KAU	-	-	-	57	-	-
1969-W412	2440300.11	1969 Mar 19 1446:00	Rocketsonde	-	-	Met Para,Arcasonde	-	-	-	ASC	-	-	-	61	-	-
1969-W413	2440300.13	1969 Mar 19 1508:00	Rocketsonde	-	-	Met Para,Arcasonde	-	-	-	SHER	-	-	-	67	-	-
1969-W414	2440300.13	1969 Mar 19 1500:59	Rocketsonde	-	-	Met Para,Arcasonde	-	-	-	PR	-	-	-	62	-	-
1969-W415	2440300.25	1969 Mar 19 1700:00	Rocketsonde	-	-	Staruve,Datasonde	-	-	-	CC	LO43	-	-	64	-	-
1969-W416	2440300.26	1969 Mar 19 1800:00	Rocketsonde	-	-	Met Para,Arcasonde	-	-	-	PRIM	-	-	-	60	-	-
1969-W417	2440300.27	1969 Mar 19 1810:59	Rocketsonde	-	-	Met Para,Arcasonde	-	-	-	AIT	-	-	-	57	-	-
1969-W418	2440300.27	1969 Mar 19 1831:59	Rocketsonde	-	-	Met Para,Arcasonde	-	-	-	WS	-	-	-	62	-	-
1969-W419	2440300.28	1969 Mar 19 1837:59	Rocketsonde	-	-	Met Para,Datasonde	-	-	-	GLY	-	-	-	58	-	-
1969-W420	2440300.34	1969 Mar 19 2010:00	Rocketsonde	-	-	Met Para,Arcasonde	-	-	-	KAU	-	-	-	56	-	-
1969-W421	2440300.34	1969 Mar 19 2035:59	Rocketsonde	-	-	Met Para,Arcasonde	-	-	-	THU	-	-	-	61	-	-
1969-W422	2440300.36	1969 Mar 20 1515:59	Rocketsonde	-	-	Chaff	-	-	-	PH	-	-	-	61	-	-
1969-W423	2440301.26	1969 Mar 20 2024:00	Rocketsonde	-	-	Chaff	-	-	-	KAU	-	-	-	62	-	-
1969-W424	2440301.48	1969 Mar 20 2130:00	Rocketsonde	-	-	Met Para,Arcasonde	-	-	-	CC	LO43	-	-	59	-	-
1969-W425	2440301.48	1969 Mar 20 2330:00	Rocketsonde	-	-	Met Para,Arcasonde	-	-	-	ASC	-	-	-	63	-	-
1969-W426	2440302.11	1969 Mar 21 1445:00	Rocketsonde	-	-	Met Sphere	-	-	-	CC	LO43	-	-	65	-	-
1969-W427	2440302.12	1969 Mar 21 1509:00	Rocketsonde	-	-	Staruve,Datasonde	-	-	-	THU	-	-	-	58	-	-
1969-W430	2440302.13	1969 Mar 21 1512:59	Rocketsonde	-	-	Chaff	-	-	-	WI	-	-	-	49	-	-
1969-W431	2440302.13	1969 Mar 21 1845:00	Rocketsonde	-	-	Staruve,Datasonde	-	-	-	PM	-	-	-	62	-	-
1969-W432	2440302.28	1969 Mar 21 1945:00	Rocketsonde	-	-	Staruve,Datasonde	-	-	-	PM	-	-	-	62	-	-
1969-W433	2440302.37	1969 Mar 21 2046:00	Rocketsonde	-	-	Met Para,Arcasonde	-	-	-	KAU	-	-	-	58	-	-
1969-W435	2440305.09	1969 Mar 24 1410:00	Rocketsonde	-	-	Met Para,Arcasonde	-	-	-	AIT	-	-	-	59	-	-
1969-W436	2440305.11	1969 Mar 24 1445:00	Rocketsonde	-	-	Met Spha,Datasonde	-	-	-	ASC	-	-	-	60	-	-
1969-W437	2440305.12	1969 Mar 24 1500:00	Rocketsonde	-	-	Met Para,Datasonde	-	-	-	CC	LO43	-	-	64	-	-
1969-W438	2440305.13	1969 Mar 24 1508:00	Rocketsonde	-	-	Met Para,Arcasonde	-	-	-	THU	-	-	-	62	-	-
1969-W439	2440305.25	1969 Mar 24 1801:59	Rocketsonde	-	-	Met Para,Arcasonde	-	-	-	PRIM	-	-	-	60	-	-
1969-W440	2440305.29	1969 Mar 24 1859:59	Rocketsonde	-	-	Chaff	-	-	-	WS	-	-	-	60	-	-
1969-W441	2440305.33	1969 Mar 24 2000:00	Rocketsonde	-	-	Met Para,Arcasonde	-	-	-	GLY	-	-	-	63	-	-
1969-W442	2440306.30	1969 Mar 25 2140:00	Rocketsonde	-	-	Chaff	-	-	-	KAU	-	-	-	64	-	-
1969-W443	2440306.40	1969 Mar 25 2140:00	Rocketsonde	-	-	Staruve,Datasonde	-	-	-	PM	-	-	-	61	-	-
1969-W444	2440307.12	1969 Mar 26 1445:00	Rocketsonde	-	-	Met Sphere	-	-	-	ASC	LO43	-	-	54	-	-
1969-W445	2440307.12	1969 Mar 26 1500:00	Rocketsonde	-	-	Met Para,Datasonde	-	-	-	WS	-	-	-	55	-	-
1969-W446	2440307.23	1969 Mar 26 1759:00	Rocketsonde	-	-	Met Para,Arcasonde	-	-	-	THU	-	-	-	58	-	-
1969-W447	2440307.23	1969 Mar 26 1759:00	Rocketsonde	-	-	Met Para,Arcasonde	-	-	-	GLY	-	-	-	58	-	-
1969-W448	2440307.23	1969 Mar 26 2000:00	Rocketsonde	-	-	Met Para,Arcasonde	-	-	-	THU	-	-	-	62	-	-
1969-W449	2440307.34	1969 Mar 26 2004:59	Rocketsonde	-	-	Met Sphere	-	-	-	PM	-	-	-	57	-	-
1969-W450	2440307.34	1969 Mar 26 2124:59	Rocketsonde	-	-	Staruve,Datasonde	-	-	-	PM	-	-	-	63	-	-
1969-W451	2440307.45	1969 Mar 26 2251:00	Rocketsonde	-	-	Met Para,Arcasonde	-	-	-	ASC	-	-	-	63	-	-
1969-W452	2440307.65	1969 Mar 27 0332:00	Rocketsonde	-	-	Staruve,Datasonde	-	-	-	WI	-	-	-	56	-	-
1969-W453	2440308.19	1969 Mar 27 1631:59	Rocketsonde	-	-	Staruve,Datasonde	-	-	-	PM	-	-	-	58	-	-
1969-W454	2440308.19	1969 Mar 27 2122:00	Rocketsonde	-	-	Chaff	-	-	-	WI	-	-	-	56	-	-
1969-W455	2440308.69	1969 Mar 27 2136:59	Rocketsonde	-	-	Met Para	-	-	-	KAU	-	-	-	66	-	-
1969-W456	2440308.69	1969 Mar 27 2136:59	Rocketsonde	-	-	Met Para,Arcasonde	-	-	-	WS	-	-	-	63	-	-
1969-W457	2440308.73	1969 Mar 28 0436:59	Rocketsonde	-	-	Met Para,Arcasonde	-	-	-	WI	-	-	-	63	-	-
1969-W458	2440308.73	1969 Mar 28 0537:59	Rocketsonde	-	-	Met Para,Arcasonde	-	-	-	WI	-	-	-	59	-	-
1969-W459	2440308.85	1969 Mar 28 0824:00	Rocketsonde	-	-	Met Sphere	-	-	-	ASC	-	-	-	63	-	-
1969-W460	2440309.11	1969 Mar 28 1445:00	Rocketsonde	-	-	Met Para,Arcasonde	-	-	-	THU	-	-	-	64	-	-
1969-W461	2440309.11	1969 Mar 28 1447:00	Rocketsonde	-	-	Met Para,Arcasonde	-	-	-	THU	-	-	-	64	-	-
1969-W462	2440309.12	1969 Mar 28 1447:00	Rocketsonde	-	-	Met Para,Arcasonde	-	-	-	THU	-	-	-	64	-	-

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Mission	FlightCode	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee_Km	Range_Km	Dest
1969-W463	2440309.18	1969 Mar 28 16:14:59	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	CC	LO43	-	-	60	-	-
1969-W464	2440309.27	1969 Mar 28 18:29:00	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	PH	-	-	-	58	-	-
1969-W465	2440309.27	1969 Mar 28 18:30:00	Rocketsonde	-	-	Met Para	-	-	-	WS	-	-	-	62	-	-
1969-W466	2440309.28	1969 Mar 28 18:40:00	Rocketsonde	-	-	Met Para, Arcsonde	-	-	-	PRIM	-	-	-	68	-	-
1969-W467	2440309.28	1969 Mar 28 18:49:59	Rocketsonde	-	-	Met Para, Arcsonde	-	-	-	AIT	-	-	-	54	-	-
1969-W468	2440309.33	1969 Mar 28 20:00:00	Rocketsonde	-	-	Chaff	-	-	-	GMLY	-	-	-	60	-	-
1969-W469	2440309.41	1969 Mar 28 21:49:59	Rocketsonde	-	-	Met Para, Arcsonde	-	-	-	KAU	-	-	-	60	-	-
1969-W471	2440309.70	1969 Mar 29 04:42:59	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	WI	-	-	-	62	-	-
1969-W474	2440312.09	1969 Mar 31 14:15:00	Rocketsonde	-	-	Met Para, Arcsonde	-	-	-	THU	-	-	-	70	-	-
1969-W476	2440313.10	1969 Apr 1 14:30:00	Rocketsonde	-	-	Met Para, Arcsonde	-	-	-	THU	-	-	-	70	-	-
1969-W477	2440313.29	1969 Apr 1 18:59:59	Rocketsonde	-	-	Chaff	-	-	-	WS	-	-	-	53	-	-
1969-W478	2440314.12	1969 Apr 2 15:00:00	Rocketsonde	-	-	Met Para, Arcsonde	-	-	-	ASC	-	-	-	59	-	-
1969-W479	2440314.15	1969 Apr 2 15:40:00	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	WI	-	-	-	54	-	-
1969-W480	2440314.16	1969 Apr 2 15:53:00	Rocketsonde	-	-	Met Para, Arcsonde	-	-	-	WS	-	-	-	72	-	-
1969-W481	2440314.17	1969 Apr 2 15:58:59	Rocketsonde	-	-	Chaff	-	-	-	WI	-	-	-	60	-	-
1969-W482	2440314.19	1969 Apr 2 16:26:59	Rocketsonde	-	-	Chaff	-	-	-	WI	-	-	-	52	-	-
1969-W483	2440314.25	1969 Apr 2 18:00:00	Rocketsonde	-	-	Met Para, Arcsonde	-	-	-	WS	-	-	-	73	-	-
1969-W484	2440314.31	1969 Apr 2 19:30:00	Rocketsonde	-	-	Met Para, Arcsonde	-	-	-	THU	-	-	-	62	-	-
1969-W485	2440314.35	1969 Apr 2 20:29:00	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	PH	-	-	-	60	-	-
1969-W486	2440314.36	1969 Apr 2 20:43:00	Rocketsonde	-	-	Met Para, Arcsonde	-	-	-	KAU	-	-	-	59	-	-
1969-W487	2440315.08	1969 Apr 3 13:58:59	Rocketsonde	-	-	Met Para, Arcsonde	-	-	-	THU	-	-	-	69	-	-
1969-W488	2440315.26	1969 Apr 3 15:13:59	Rocketsonde	-	-	Met Para, Arcsonde	-	-	-	PRIM	-	-	-	65	-	-
1969-W489	2440315.40	1969 Apr 3 21:30:00	Rocketsonde	-	-	Chaff	-	-	-	PH	-	-	-	63	-	-
1969-W490	2440316.10	1969 Apr 4 14:30:00	Rocketsonde	-	-	Met Para, Arcsonde	-	-	-	THU	-	-	-	64	-	-
1969-W491	2440316.11	1969 Apr 4 14:45:00	Rocketsonde	-	-	Met Sphere	-	-	-	ASC	-	-	-	62	-	-
1969-W492	2440316.12	1969 Apr 4 15:00:00	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	CC	LO43	-	-	65	-	-
1969-W493	2440316.19	1969 Apr 4 16:35:59	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	PH	-	-	-	62	-	-
1969-W494	2440316.21	1969 Apr 4 17:02:00	Rocketsonde	-	-	Met Para, Arcsonde	-	-	-	WI	-	-	-	60	-	-
1969-W495	2440316.22	1969 Apr 4 17:15:00	Rocketsonde	-	-	Chaff	-	-	-	WS	-	-	-	57	-	-
1969-W496	2440316.94	1969 Apr 4 20:10:00	Rocketsonde	-	-	Met Para, Arcsonde	-	-	-	GMLY	-	-	-	62	-	-
1969-W497	2440319.09	1969 Apr 7 14:15:00	Rocketsonde	-	-	Met Para, Arcsonde	-	-	-	THU	-	-	-	50	-	-
1969-W498	2440319.12	1969 Apr 7 15:00:00	Rocketsonde	-	-	Met Sphere	-	-	-	ASC	-	-	-	65	-	-
1969-W499	2440319.17	1969 Apr 7 16:04:59	Rocketsonde	-	-	Met Para, Arcsonde	-	-	-	CC	LO43	-	-	64	-	-
1969-W500	2440319.17	1969 Apr 7 16:11:59	Rocketsonde	-	-	Met Sphere	-	-	-	AIT	-	-	-	56	-	-
1969-W501	2440319.17	1969 Apr 7 16:11:59	Rocketsonde	-	-	Met Para, Arcsonde	-	-	-	SHER	-	-	-	64	-	-
1969-W502	2440319.29	1969 Apr 7 18:59:59	Rocketsonde	-	-	Chaff	-	-	-	WS	-	-	-	55	-	-
1969-W503	2440319.36	1969 Apr 7 20:40:00	Rocketsonde	-	-	Chaff	-	-	-	GMLY	-	-	-	49	-	-
1969-W504	2440319.36	1969 Apr 7 20:45:00	Rocketsonde	-	-	Met Para, Arcsonde	-	-	-	KAU	-	-	-	59	-	-
1969-W505	2440319.38	1969 Apr 7 21:00:00	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	PH	-	-	-	61	-	-
1969-W506	2440320.09	1969 Apr 8 13:51:00	Rocketsonde	-	-	Met Para, Arcsonde	-	-	-	THU	-	-	-	50	-	-
1969-W507	2440320.27	1969 Apr 8 16:21:59	Rocketsonde	-	-	Met Para, Arcsonde	-	-	-	ASC	-	-	-	65	-	-
1969-W508	2440320.29	1969 Apr 8 16:21:59	Rocketsonde	-	-	Chaff	-	-	-	PRIM	-	-	-	64	-	-
1969-W509	2440321.11	1969 Apr 8 16:59:59	Rocketsonde	-	-	Met Para, Arcsonde	-	-	-	AIT	-	-	-	64	-	-
1969-W510	2440321.12	1969 Apr 8 14:45:00	Rocketsonde	-	-	Met Para, Arcsonde	-	-	-	ASC	-	-	-	63	-	-
1969-W511	2440321.13	1969 Apr 9 15:10:00	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	CC	LO43	-	-	64	-	-
1969-W512	2440321.24	1969 Apr 9 17:24:59	Rocketsonde	-	-	Met Para, Arcsonde	-	-	-	THU	-	-	-	59	-	-
1969-W513	2440321.24	1969 Apr 9 17:24:59	Rocketsonde	-	-	Met Para, Arcsonde	-	-	-	SHER	-	-	-	60	-	-
1969-W514	2440321.25	1969 Apr 9 18:00:00	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	PH	-	-	-	58	-	-
1969-W515	2440321.27	1969 Apr 9 18:31:00	Rocketsonde	-	-	Met Para, Arcsonde	-	-	-	WS	-	-	-	63	-	-
1969-W516	2440321.26	1969 Apr 9 20:45:00	Rocketsonde	-	-	Met Para, Arcsonde	-	-	-	ASC	-	-	-	64	-	-
1969-W517	2440321.37	1969 Apr 9 20:45:00	Rocketsonde	-	-	Met Para, Arcsonde	-	-	-	THU	-	-	-	54	-	-
1969-W518	2440321.46	1969 Apr 9 23:02:00	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	GMLY	-	-	-	57	-	-
1969-W519	2440321.46	1969 Apr 9 23:02:00	Rocketsonde	-	-	Met Para, Arcsonde	-	-	-	KAU	-	-	-	62	-	-
1969-W520	2440322.19	1969 Apr 10 15:00:00	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	CC	LO43	-	-	53	-	-
1969-W521	2440322.19	1969 Apr 10 16:38:59	Rocketsonde	-	-	Met Para, Arcsonde	-	-	-	THU	-	-	-	56	-	-
1969-W522	2440322.23	1969 Apr 10 17:30:00	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	PH	-	-	-	62	-	-
1969-W523	2440322.50	1969 Apr 11 09:34:59	Rocketsonde	-	-	Met Para, Arcsonde	-	-	-	KAU	-	-	-	64	-	-
1969-W524	2440323.11	1969 Apr 11 14:45:00	Rocketsonde	-	-	Met Sphere	-	-	-	ASC	-	-	-	68	-	-
1969-W525	2440323.12	1969 Apr 11 15:00:00	Rocketsonde	-	-	Met Para, Arcsonde	-	-	-	THU	-	-	-	51	-	-
1969-W526	2440323.17	1969 Apr 11 15:59:59	Rocketsonde	-	-	Met Para, Arcsonde	-	-	-	THU	-	-	-	66	-	-
1969-W527	2440323.17	1969 Apr 11 16:04:59	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	SHER	-	-	-	62	-	-
1969-W528	2440323.23	1969 Apr 11 17:30:00	Rocketsonde	-	-	Chaff	-	-	-	WI	-	-	-	52	-	-
1969-W529	2440323.26	1969 Apr 11 18:30:00	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	PH	-	-	-	61	-	-
1969-W530	2440323.27	1969 Apr 11 18:30:00	Rocketsonde	-	-	Met Para, Arcsonde	-	-	-	PRIM	-	-	-	65	-	-
1969-W531	2440323.33	1969 Apr 11 20:35:00	Rocketsonde	-	-	Met Para, Arcsonde	-	-	-	GMLY	-	-	-	63	-	-
1969-W532	2440323.36	1969 Apr 11 20:35:00	Rocketsonde	-	-	Met Para, Arcsonde	-	-	-	ASC	-	-	-	63	-	-
1969-W533	2440326.12	1969 Apr 14 14:49:59	Rocketsonde	-	-	Met Para, Arcsonde	-	-	-	KAU	-	-	-	63	-	-
1969-W534	2440326.20	1969 Apr 14 16:51:00	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	ASC	-	-	-	58	-	-
1969-W535	2440326.22	1969 Apr 14 17:19:00	Rocketsonde	-	-	Met Para, Arcsonde	-	-	-	PM	-	-	-	58	-	-
1969-W536	2440326.25	1969 Apr 14 18:00:00	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	ASC	-	-	-	62	-	-
1969-W537	2440326.28	1969 Apr 14 18:36:59	Rocketsonde	-	-	Met Para, Arcsonde	-	-	-	SHER	-	-	-	62	-	-
1969-W538	2440326.32	1969 Apr 14 19:44:59	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	CC	LO43	-	-	70	-	-
1969-W539	2440326.33	1969 Apr 15 21:17:00	Rocketsonde	-	-	Chaff	-	-	-	PRIM	-	-	-	58	-	-
1969-W540	2440326.33	1969 Apr 15 21:17:00	Rocketsonde	-	-	Met Para, Arcsonde	-	-	-	WS	-	-	-	58	-	-
1969-W541	2440326.42	1969 Apr 16 14:45:00	Rocketsonde	-	-	Met Para, Arcsonde	-	-	-	GMLY	-	-	-	58	-	-
1969-W542	2440327.12	1969 Apr 16 16:21:59	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	KAU	-	-	-	70	-	-
1969-W543	2440327.18	1969 Apr 16 16:46:00	Rocketsonde	-	-	Met Para, Arcsonde	-	-	-	THU	-	-	-	69	-	-
1969-W544	2440327.18	1969 Apr 16 16:46:00	Rocketsonde	-	-	Met Para, Arcsonde	-	-	-	WS	-	-	-	66	-	-
1969-W545	2440327.39	1969 Apr 16 16:56:59	Rocketsonde	-	-	Met Para	-	-	-	KAU	-	-	-	46	-	-
1969-W546	2440327.42	1969 Apr 16 16:56:59	Rocketsonde	-	-	-	-	-	-	PM	-	-	-	64	-	-
1969-W547	2440328.09	1969 Apr 16 16:56:59	Rocketsonde	-	-	Met Para, Arcsonde	-	-	-	AIT	-	-	-	58	-	-
1969-W548	2440328.11	1969 Apr 16 16:56:59	Rocketsonde	-	-	Met Para, Arcsonde	-	-	-	ASC	-	-	-	65	-	-
1969-W549	2440328.12	1969 Apr 16 16:56:59	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	CC	LO43	-	-	63	-	-
1969-W550	2440328.13	1969 Apr 16 16:56:59	Rocketsonde	-	-	Chaff	-	-	-	CC	-	-	-	59	-	-
1969-W551	2440328.13	1969 Apr 16 16:56:59	Rocketsonde	-	-	Met Para	-	-	-	WI	-	-	-	56	-	-
1969-W552	2440328.18	1969 Apr 16 16:56:59	Rocketsonde	-	-	Met Para, Arcsonde	-	-	-	THU	-	-	-	65	-	-
1969-W553	2440328.18	1969 Apr 16 16:56:59	Rocketsonde	-	-	Met Para, Datasonde	-	-	-	SHER	-	-	-	60	-	-
1969-W554	2440328.21	1969 Apr 16 16:56:59	Rocketsonde	-	-	Met Para, Datasonde	-	-	-	WI	-	-	-	60	-	-
1969-W555	2440328.29	1969 Apr 16 18:59:59	Rocketsonde	-	-	Met Para, Datasonde	-	-	-	WS	-	-	-	62	-	-

Launch

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Mission	FlightCode	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee_Km	Range_Km	Dest
1969-4656	2440328.33	1969 Apr 16 19:53:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PH	-	-	-	60	-	-
1969-4657	2440328.39	1969 Apr 16 21:14:59	Rocketsonde	-	-	Met Para, Arcasonde	-	-	-	WS	-	-	-	65	-	-
1969-4658	2440328.42	1969 Apr 16 22:01:59	Rocketsonde	-	-	Met Para, Arcasonde	-	-	-	KAU	-	-	-	59	-	-
1969-4659	2440328.42	1969 Apr 16 22:06:00	Rocketsonde	-	-	Met Para, Arcasonde	-	-	-	CELAT	-	-	-	60	-	-
1969-4660	2440329.19	1969 Apr 17 16:52:59	Rocketsonde	-	-	Met Para	-	-	-	WS	-	-	-	59	-	-
1969-4661	2440329.23	1969 Apr 17 17:35:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PH	-	-	-	60	-	-
1969-4662	2440329.34	1969 Apr 17 20:09:00	Rocketsonde	-	-	Met Sphere	-	-	-	WI	-	-	-	53	-	-
1969-4663	2440330.08	1969 Apr 18 13:58:59	Rocketsonde	-	-	Met Sphere	-	-	-	AIT	-	-	-	62	-	-
1969-4664	2440330.11	1969 Apr 18 14:45:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	ASC	-	-	-	63	-	-
1969-4665	2440330.12	1969 Apr 18 15:00:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	CC	LO43	-	-	65	-	-
1969-4666	2440330.13	1969 Apr 18 15:10:00	Rocketsonde	-	-	Met Para	-	-	-	WI	-	-	-	34	-	-
1969-4667	2440330.20	1969 Apr 18 16:54:59	Rocketsonde	-	-	Met Para, Arcasonde	-	-	-	SHER	-	-	-	65	-	-
1969-4668	2440330.26	1969 Apr 18 18:11:00	Rocketsonde	-	-	Met Para, Arcasonde	-	-	-	PRIM	-	-	-	58	-	-
1969-4669	2440330.29	1969 Apr 18 18:59:59	Rocketsonde	-	-	Chaf	-	-	-	WS	-	-	-	56	-	-
1969-4670	2440330.33	1969 Apr 18 20:00:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	GDU	-	-	-	67	-	-
1969-4671	2440330.54	1969 Apr 19 00:52:00	Rocketsonde	-	-	Met Para, Arcasonde	-	-	-	KAU	-	-	-	64	-	-
1969-4672	2440331.11	1969 Apr 21 14:45:00	Rocketsonde	-	-	Met Sphere	-	-	-	AIT	-	-	-	61	-	-
1969-4673	2440333.12	1969 Apr 21 15:00:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	CC	LO43	-	-	66	-	-
1969-4674	2440333.25	1969 Apr 21 18:00:00	Rocketsonde	-	-	Chaf	-	-	-	WS	-	-	-	58	-	-
1969-4675	2440333.31	1969 Apr 21 19:32:59	Rocketsonde	-	-	Met Para, Arcasonde	-	-	-	WI	-	-	-	57	-	-
1969-4676	2440333.32	1969 Apr 21 19:41:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PH	-	-	-	63	-	-
1969-4677	2440333.34	1969 Apr 21 20:04:59	Rocketsonde	-	-	Met Para, Arcasonde	-	-	-	GDU	-	-	-	57	-	-
1969-4678	2440333.34	1969 Apr 21 20:14:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	WI	-	-	-	57	-	-
1969-4679	2440333.37	1969 Apr 21 20:52:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	WI	-	-	-	54	-	-
1969-4680	2440333.38	1969 Apr 21 21:07:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	WI	-	-	-	54	-	-
1969-4681	2440333.39	1969 Apr 21 21:17:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	KAU	-	-	-	53	-	-
1969-4682	2440334.39	1969 Apr 22 21:17:00	Rocketsonde	-	-	Met Para	-	-	-	KAU	-	-	-	49	-	-
1969-4683	2440334.42	1969 Apr 22 22:09:59	Rocketsonde	-	-	Met Para, Arcasonde	-	-	-	ASC	-	-	-	62	-	-
1969-4684	2440334.05	1969 Apr 23 01:11:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	RNR	-	-	-	63	-	-
1969-4685	2440335.11	1969 Apr 23 14:45:00	Rocketsonde	-	-	Met Para, Arcasonde	-	-	-	ASC	LO43	-	-	67	-	-
1969-4686	2440335.12	1969 Apr 23 15:00:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	CC	LO43	-	-	66	-	-
1969-4687	2440335.17	1969 Apr 23 15:59:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	CC	LO43	-	-	66	-	-
1969-4688	2440335.17	1969 Apr 23 16:09:59	Rocketsonde	-	-	Met Para, Arcasonde	-	-	-	SHER	-	-	-	64	-	-
1969-4689	2440335.19	1969 Apr 23 16:30:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PH	-	-	-	61	-	-
1969-4690	2440335.24	1969 Apr 23 17:40:00	Rocketsonde	-	-	Met Para, Arcasonde	-	-	-	AIT	-	-	-	57	-	-
1969-4691	2440335.25	1969 Apr 23 18:00:00	Rocketsonde	-	-	Met Para, Arcasonde	-	-	-	NS	-	-	-	65	-	-
1969-4692	2440335.27	1969 Apr 23 18:54:59	Rocketsonde	-	-	Met Para, Arcasonde	-	-	-	WI	-	-	-	62	-	-
1969-4693	2440335.40	1969 Apr 23 21:29:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	KAU	-	-	-	59	-	-
1969-4694	2440335.40	1969 Apr 23 21:29:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	KAU	-	-	-	56	-	-
1969-4695	2440335.39	1969 Apr 24 21:22:00	Rocketsonde	-	-	Met Para, Arcasonde	-	-	-	ASC	LO43	-	-	62	-	-
1969-4696	2440335.39	1969 Apr 24 21:46:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	CC	-	-	-	63	-	-
1969-4697	2440337.11	1969 Apr 25 14:45:00	Rocketsonde	-	-	Met Sphere	-	-	-	PH	-	-	-	61	-	-
1969-4698	2440337.12	1969 Apr 25 15:00:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PH	-	-	-	59	-	-
1969-4699	2440337.15	1969 Apr 25 15:54:59	Rocketsonde	-	-	Met Para	-	-	-	NS	-	-	-	66	-	-
1969-4700	2440337.21	1969 Apr 25 17:02:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	SHER	-	-	-	66	-	-
1969-4701	2440337.23	1969 Apr 25 17:04:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	SHER	-	-	-	66	-	-
1969-4702	2440337.23	1969 Apr 25 17:35:00	Rocketsonde	-	-	Met Para, Arcasonde	-	-	-	NS	-	-	-	57	-	-
1969-4703	2440337.23	1969 Apr 25 17:35:00	Rocketsonde	-	-	Met Para, Arcasonde	-	-	-	NS	-	-	-	57	-	-
1969-4704	2440338.06	1969 Apr 27 03:35:00	Rocketsonde	-	-	Met Para, Arcasonde	-	-	-	NS	-	-	-	57	-	-
1969-4705	2440338.06	1969 Apr 27 03:35:00	Rocketsonde	-	-	Met Para, Arcasonde	-	-	-	NS	-	-	-	57	-	-
1969-4706	2440338.67	1969 Apr 27 03:59:59	Rocketsonde	-	-	Met Para	-	-	-	NS	-	-	-	56	-	-
1969-4707	2440338.69	1969 Apr 27 05:00:00	Rocketsonde	-	-	Met Para, Arcasonde	-	-	-	NS	-	-	-	56	-	-
1969-4708	2440338.71	1969 Apr 27 05:09:59	Rocketsonde	-	-	Met Para, Arcasonde	-	-	-	NS	-	-	-	56	-	-
1969-4709	2440338.74	1969 Apr 27 05:49:59	Rocketsonde	-	-	Met Para, Arcasonde	-	-	-	NS	-	-	-	56	-	-
1969-4710	2440338.75	1969 Apr 27 05:53:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	NS	-	-	-	63	-	-
1969-4711	2440338.77	1969 Apr 27 06:30:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	CC	LO43	-	-	63	-	-
1969-4712	2440340.09	1969 Apr 28 14:03:00	Rocketsonde	-	-	Met Para, Arcasonde	-	-	-	ASC	-	-	-	66	-	-
1969-4713	2440340.11	1969 Apr 28 14:05:00	Rocketsonde	-	-	Met Para, Arcasonde	-	-	-	ASC	-	-	-	66	-	-
1969-4714	2440340.11	1969 Apr 28 14:45:00	Rocketsonde	-	-	Met Para, Arcasonde	-	-	-	PRIM	-	-	-	67	-	-
1969-4715	2440340.25	1969 Apr 28 18:07:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PRIM	-	-	-	65	-	-
1969-4716	2440340.29	1969 Apr 28 18:59:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	NS	-	-	-	61	-	-
1969-4717	2440340.38	1969 Apr 28 21:06:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	GDU	-	-	-	55	-	-
1969-4718	2440340.42	1969 Apr 28 21:58:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	KAU	-	-	-	62	-	-
1969-4719	2440341.16	1969 Apr 29 15:45:00	Rocketsonde	-	-	Met Para, Arcasonde	-	-	-	NS	-	-	-	61	-	-
1969-4720	2440341.17	1969 Apr 29 16:03:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	NS	-	-	-	62	-	-
1969-4721	2440341.21	1969 Apr 29 17:07:00	Rocketsonde	-	-	Met Para	-	-	-	PH	-	-	-	57	-	-
1969-4722	2440341.21	1969 Apr 29 17:58:00	Rocketsonde	-	-	Met Para	-	-	-	WI	-	-	-	58	-	-
1969-4723	2440341.25	1969 Apr 29 17:58:00	Rocketsonde	-	-	Met Para	-	-	-	WI	-	-	-	61	-	-
1969-4724	2440341.27	1969 Apr 29 18:30:00	Rocketsonde	-	-	Met Para	-	-	-	NS	-	-	-	60	-	-
1969-4725	2440341.28	1969 Apr 29 18:44:00	Rocketsonde	-	-	Met Para	-	-	-	NS	-	-	-	35	-	-
1969-4726	2440341.39	1969 Apr 29 21:33:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	CC	LO43	-	-	46	-	-
1969-4727	2440342.08	1969 Apr 30 14:00:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	CC	-	-	-	64	-	-
1969-4728	2440342.11	1969 Apr 30 14:45:00	Rocketsonde	-	-	Met Para, Arcasonde	-	-	-	VI	-	-	-	56	-	-
1969-4729	2440342.11	1969 Apr 30 14:45:00	Rocketsonde	-	-	Met Para, Arcasonde	-	-	-	ASC	-	-	-	67	-	-
1969-4730	2440342.17	1969 Apr 30 16:09:59	Rocketsonde	-	-	Met Sphere	-	-	-	SHER	-	-	-	60	-	-
1969-4731	2440342.17	1969 Apr 30 16:30:00	Rocketsonde	-	-	Met Sphere	-	-	-	AIT	-	-	-	55	-	-
1969-4732	2440342.25	1969 Apr 30 19:09:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	NS	-	-	-	64	-	-
1969-4733	2440342.38	1969 Apr 30 19:09:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	GDU	-	-	-	60	-	-
1969-4734	2440343.21	1969 Apr 1 14:57:00	Rocketsonde	-	-	Met Para, Arcasonde	-	-	-	KAU	-	-	-	57	-	-
1969-4735	2440343.21	1969 Apr 1 17:00:00	Rocketsonde	-	-	Met Para, Arcasonde	-	-	-	NS	-	-	-	62	-	-
1969-4736	2440343.21	1969 Apr 1 17:00:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	NS	-	-	-	68	-	-
1969-4737	2440343.40	1969 Apr 1 21:32:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PM	-	-	-	50	-	-
1969-4738	2440343.49	1969 Apr 1 23:43:00	Rocketsonde	-	-	Met Para, Arcasonde	-	-	-	KAU	-	-	-	58	-	-
1969-4739	2440344.08	1969 Apr 2 13:58:59	Rocketsonde	-	-	Met Para, Arcasonde	-	-	-	CELAT	-	-	-	48	-	-
1969-4740	2440344.08	1969 Apr 2 14:00:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	NS	-	-	-	60	-	-
1969-4741	2440344.10	1969 Apr 2 14:30:00	Rocketsonde	-	-	Met Para	-	-	-	CC	LO43	-	-	60	-	-
1969-4742	2440344.12	1969 Apr 2 14:57:00	Rocketsonde	-	-	Met Para	-	-	-	NS	-	-	-	60	-	-
1969-4743	2440344.14	1969 Apr 2 15:22:59	Rocketsonde	-	-	Met Para	-	-	-	ASC	-	-	-	60	-	-
1969-4744	2440344.14	1969 Apr 2 15:22:59	Rocketsonde	-	-	Met Para	-	-	-	VI	-	-	-	64	-	-
1969-4745	2440344.2															

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Mission	FlightCode	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee_Km	Range_Km	Dest
1969-4642	2440344.27	1969 May 2 1822:59	Rocketsonde			Met Para,Arcaasode				PRIM				64		
1969-4643	2440344.27	1969 May 2 1824:59	Rocketsonde			Met Para,Alf/DHQ-9				AUT				60		
1969-475	2440344.27	1969 May 2 1832:00	Rocketsonde			Met Para				WI				39		
1969-4644	2440344.29	1969 May 2 1855:00	Rocketsonde			Starute,Dataasode				PH				59		
1969-4645	2440344.29	1969 May 2 1855:59	Rocketsonde			Chaff				WS				58		
1969-4646	2440344.30	1969 May 2 1904:59	Rocketsonde			Met Para				GRLY				58		
1969-476	2440344.31	1969 May 2 1921:59	Rocketsonde			Met Para				WI				39		
1969-4647	2440344.32	1969 May 2 1945:59	Rocketsonde			Chaff				WI				57		
1969-477	2440344.40	1969 May 2 2137:59	Rocketsonde			Met Para,Dataasode				KAU				45		
1969-4648	2440347.08	1969 May 5 1400:00	Rocketsonde			Starute,Dataasode				CC	LO43			66		
1969-4649	2440347.11	1969 May 5 1433:00	Rocketsonde			Met Sphere				AUT				64		
1969-4650	2440347.21	1969 May 5 1700:00	Rocketsonde			Met Para,Arcaasode				PH				63		
1969-4651	2440347.23	1969 May 5 1735:00	Rocketsonde			Met Para,Arcaasode				SHER				62		
1969-4652	2440347.28	1969 May 5 1635:59	Rocketsonde			Met Para,Arcaasode				PRIM				70		
1969-4653	2440347.32	1969 May 5 1944:59	Rocketsonde			Met Para,Arcaasode				GRLY				60		
1969-4654	2440347.33	1969 May 5 2000:00	Rocketsonde			Chaff				WS				64		
1969-4655	2440347.38	1969 May 5 2100:00	Rocketsonde			Met Para,Dataasode				KAU				59		
1969-4656	2440348.12	1969 May 6 1456:00	Rocketsonde			Met Para,Alf/DHQ-9				CC	LO43			53		
1969-4657	2440348.25	1969 May 6 1804:59	Rocketsonde			Met Para				CC	LO43			56		
1969-4658	2440348.39	1969 May 6 2120:00	Rocketsonde			Met Para				KAU				50		
1969-4659	2440349.12	1969 May 7 1446:00	Rocketsonde			Met Para,Arcaasode				ASC				61		
1969-4660	2440349.12	1969 May 7 1500:00	Rocketsonde			Starute,Dataasode				AUT				60		
1969-4662	2440349.19	1969 May 7 1627:59	Rocketsonde			Met Para,Arcaasode				SHER				63		
1969-4663	2440349.21	1969 May 7 1700:00	Rocketsonde			Met Para,Arcaasode				PH				60		
1969-4664	2440349.23	1969 May 7 1728:59	Rocketsonde			Met Para,Arcaasode				WI				60		
1969-479	2440349.24	1969 May 7 1740:00	Rocketsonde			Met Para,Arcaasode				SHI				46		
1969-4665	2440349.25	1969 May 7 1800:00	Rocketsonde			Met Para				CC	LO43			54		
1969-4666	2440349.25	1969 May 7 1800:00	Rocketsonde			Met Para,Arcaasode				WS				63		
1969-4667	2440349.26	1969 May 7 1810:00	Rocketsonde			Met Para,Arcaasode				PRIM				61		
1969-4668	2440349.38	1969 May 7 2104:59	Rocketsonde			Met Para,Arcaasode				KAU				54		
1969-4670	2440350.10	1969 May 8 1430:00	Rocketsonde			Met Para,Arcaasode				CC	LO43			59		
1969-4671	2440350.25	1969 May 8 1800:00	Rocketsonde			Met Para,Alf/DHQ-9				CC	LO43			61		
1969-4672	2440350.31	1969 May 8 1930:00	Rocketsonde			Met Para,Arcaasode				GRLY				67		
1969-4673	2440350.38	1969 May 8 2113:59	Rocketsonde			Met Para				KAU				50		
1969-4674	2440351.11	1969 May 9 1445:00	Rocketsonde			Met Para,Arcaasode				ASC				58		
1969-4676	2440351.29	1969 May 9 1659:59	Rocketsonde			Starute,Dataasode				GRLY				63		
1969-4678	2440351.32	1969 May 9 1935:59	Rocketsonde			Met Para,Arcaasode				PH				53		
1969-4679	2440351.40	1969 May 9 2135:59	Rocketsonde			Met Para,Arcaasode				KAU				56		
1969-4681	2440352.12	1969 May 10 0913:00	Rocketsonde			Met Para,Dataasode				WI				63		
1969-4682	2440352.55	1969 May 11 0115:59	Rocketsonde			Met Para,Arcaasode				KAU				58		
1969-4683	2440352.65	1969 May 11 0330:00	Rocketsonde			Met Para,Arcaasode				NS				58		
1969-4684	2440352.67	1969 May 11 0339:59	Rocketsonde			Met Para,Arcaasode				NS				63		
1969-4685	2440352.69	1969 May 11 0430:00	Rocketsonde			Met Para,Arcaasode				NS				67		
1969-4686	2440352.69	1969 May 11 0430:00	Rocketsonde			Met Para,Arcaasode				NS				65		
1969-4687	2440352.71	1969 May 11 0432:59	Rocketsonde			Met Para,Arcaasode				NS				60		
1969-4688	2440352.72	1969 May 11 0500:00	Rocketsonde			Met Para,Arcaasode				NS				68		
1969-4689	2440352.72	1969 May 11 0500:00	Rocketsonde			Met Para,Arcaasode				NS				65		
1969-4690	2440352.77	1969 May 11 0630:00	Rocketsonde			Met Para,Arcaasode				NS				60		
1969-4691	2440352.77	1969 May 11 0633:00	Rocketsonde			Met Sphere				AUT				41		
1969-4692	2440352.77	1969 May 11 0633:00	Rocketsonde			Starute,Dataasode				CC	LO43			61		
1969-4693	2440352.77	1969 May 11 0633:00	Rocketsonde			Starute,Dataasode				SHER				61		
1969-4694	2440352.77	1969 May 11 0633:00	Rocketsonde			Chaff				NS				64		
1969-4695	2440352.79	1969 May 12 1700:00	Rocketsonde			Met Para,Arcaasode				GRLY				64		
1969-4696	2440352.79	1969 May 12 1901:59	Rocketsonde			Met Para,Arcaasode				PRIM				70		
1969-4697	2440352.30	1969 May 12 2133:00	Rocketsonde			Met Para,Arcaasode				KAU				57		
1969-4698	2440352.14	1969 May 13 1514:59	Rocketsonde			Met Para,Arcaasode				NS				63		
1969-4700	2440355.15	1969 May 13 1532:00	Rocketsonde			Starute,Dataasode				PH				59		
1969-4702	2440355.22	1969 May 13 1712:00	Rocketsonde			Met Para,Arcaasode				NS				59		
1969-4703	2440355.22	1969 May 13 1715:59	Rocketsonde			Met Para,Arcaasode				WI				61		
1969-482	2440355.22	1969 May 13 2101:59	Rocketsonde			Met Para				KAU				49		
1969-4705	2440355.96	1969 May 14 1106:00	Rocketsonde			Met Para,Arcaasode				ASC				61		
1969-4706	2440355.96	1969 May 14 1106:00	Rocketsonde			Starute,Dataasode				CC	LO43			61		
1969-4707	2440355.99	1969 May 14 1412:00	Rocketsonde			Met Para,Arcaasode				CC	LO43			92		
1969-4708	2440355.17	1969 May 14 1608:59	Rocketsonde			Met Para,Arcaasode				SHER				66		
1969-483	2440355.19	1969 May 14 1627:59	Rocketsonde			MK-1				PRIM				73		
1969-4709	2440355.25	1969 May 14 1630:00	Rocketsonde			Met Para,Arcaasode				AUT				66		
1969-4710	2440355.25	1969 May 14 1800:00	Rocketsonde			Met Para,Arcaasode				PRIM				73		
1969-4711	2440355.25	1969 May 14 1859:59	Rocketsonde			Met Para,Arcaasode				NS				43		
1969-484	2440357.08	1969 May 15 1400:00	Rocketsonde			Met Para,Arcaasode				CC	LO43			43		
1969-4712	2440357.13	1969 May 15 1500:00	Rocketsonde			Starute,Dataasode				CC	LO43			64		
1969-4713	2440357.13	1969 May 15 1513:59	Rocketsonde			Met Para,Arcaasode				WI				51		
1969-485	2440357.36	1969 May 15 2032:00	Rocketsonde			Met Para				KAU				43		
1969-4714	2440357.42	1969 May 15 2159:59	Rocketsonde			Met Para,Arcaasode				NS				56		
1969-4715	2440357.42	1969 May 15 2209:59	Rocketsonde			Starute,Dataasode				CELANT				56		
1969-4716	2440358.12	1969 May 16 1445:00	Rocketsonde			Met Para				PM				55		
1969-4717	2440358.12	1969 May 16 1500:00	Rocketsonde			Starute,Dataasode				ASC	LO43			57		
1969-4718	2440358.19	1969 May 16 1630:00	Rocketsonde			Met Para,Arcaasode				SHER				63		
1969-4719	2440358.25	1969 May 16 1801:59	Rocketsonde			Met Para,Arcaasode				PRIM				73		
1969-4721	2440358.31	1969 May 16 1925:59	Rocketsonde			Starute,Dataasode				PM				60		
1969-4722	2440358.36	1969 May 16 2041:00	Rocketsonde			Met Para,Arcaasode				KAU				60		
1969-4723	2440358.40	1969 May 16 2134:59	Rocketsonde			Chaff				NS				62		
1969-4724	2440358.40	1969 May 17 1309:59	Rocketsonde			Starute,Dataasode				CC	LO43			65		
1969-4725	2440360.31	1969 May 18 1927:59	Rocketsonde			Starute,Dataasode				CC	LO43			58		
1969-4739	2440360.35	1969 May 18 2030:00	Rocketsonde			MK-1				CC	LO43			90		

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Mission	FlightCode	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee_Km	Range_Km	Dest
1969-W727	2440361.08	1969 May 19 14:00:00	Rocketsonde	-	-	Stratute, Datasonde	-	-	-	CC	LO43	-	-	53	-	-
1969-W728	2440361.11	1969 May 19 14:46:00	Rocketsonde	-	-	Met Para,Alt/DMQ-9	-	-	-	ASC	-	-	-	65	-	-
1969-W729	2440361.15	1969 May 19 15:31:00	Rocketsonde	-	-	Met Para,Alt/DMQ-9	-	-	-	AUT	-	-	-	54	-	-
1969-W730	2440361.21	1969 May 19 17:01:00	Rocketsonde	-	-	Stratute, Datasonde	-	-	-	PH	-	-	-	63	-	-
1969-W731	2440361.42	1969 May 19 22:06:00	Rocketsonde	-	-	Met Para,Arccasonde	-	-	-	KAU	-	-	-	68	-	-
1969-W732	2440362.26	1969 May 20 18:13:59	Rocketsonde	-	-	Met Para,Arccasonde	-	-	-	PRIM	-	-	-	68	-	-
1969-W733	2440362.35	1969 May 20 18:13:59	Rocketsonde	-	-	Met Para	-	-	-	PH	-	-	-	46	-	-
1969-W734	2440362.42	1969 May 20 21:59:59	Rocketsonde	-	-	Stratute, Datasonde	-	-	-	CC	LO43	-	-	44	-	-
1969-W735	2440363.08	1969 May 21 14:46:00	Rocketsonde	-	-	Met Para,Arccasonde	-	-	-	ASC	-	-	-	64	-	-
1969-W736	2440363.13	1969 May 21 15:04:59	Rocketsonde	-	-	Met Para,Arccasonde	-	-	-	MI	-	-	-	61	-	-
1969-W737	2440363.19	1969 May 21 15:10:00	Rocketsonde	-	-	Stratute, Datasonde	-	-	-	CC	LO43	-	-	59	-	-
1969-W738	2440363.25	1969 May 21 16:34:59	Rocketsonde	-	-	Met Para,Arccasonde	-	-	-	SHER	-	-	-	68	-	-
1969-W739	2440363.29	1969 May 21 18:00:00	Rocketsonde	-	-	Met Para,Arccasonde	-	-	-	PRIM	-	-	-	68	-	-
1969-W739	2440363.29	1969 May 21 18:00:00	Rocketsonde	-	-	Met Para,Arccasonde	-	-	-	WS	-	-	-	69	-	-
1969-W740	2440363.36	1969 May 21 20:32:00	Rocketsonde	-	-	Met Para,Arccasonde	-	-	-	KAU	-	-	-	57	-	-
1969-W741	2440363.42	1969 May 21 21:57:59	Rocketsonde	-	-	Met Para	-	-	-	PH	-	-	-	57	-	-
1969-W743	2440364.25	1969 May 22 17:56:00	Rocketsonde	-	-	Met Para	-	-	-	PH	-	-	-	53	-	-
1969-W744	2440364.25	1969 May 22 18:06:00	Rocketsonde	-	-	Met Para	-	-	-	MI	-	-	-	56	-	-
1969-W745	2440364.28	1969 May 22 18:37:59	Rocketsonde	-	-	Met Para,Exp. Sonde	-	-	-	MI	-	-	-	56	-	-
1969-W746	2440364.29	1969 May 22 18:37:59	Rocketsonde	-	-	Met Para	-	-	-	MI	-	-	-	59	-	-
1969-W746	2440364.29	1969 May 22 18:37:59	Rocketsonde	-	-	Met Para	-	-	-	MI	-	-	-	59	-	-
1969-W748	2440364.38	1969 May 22 21:01:59	Rocketsonde	-	-	Met Para	-	-	-	KAU	-	-	-	48	-	-
1969-W747	2440365.10	1969 May 23 14:21:00	Rocketsonde	-	-	Met Para,Arccasonde	-	-	-	MI	LO43	-	-	52	-	-
1969-W748	2440365.10	1969 May 23 14:30:00	Rocketsonde	-	-	Stratute, Datasonde	-	-	-	CC	-	-	-	58	-	-
1969-W749	2440365.11	1969 May 23 14:46:00	Rocketsonde	-	-	Met Para,Arccasonde	-	-	-	ASC	-	-	-	60	-	-
1969-W749	2440365.11	1969 May 23 14:46:00	Rocketsonde	-	-	Met Para,Exp. Sonde	-	-	-	MI	-	-	-	64	-	-
1969-W750	2440365.16	1969 May 23 15:46:59	Rocketsonde	-	-	Met Para,Arccasonde	-	-	-	PH	-	-	-	64	-	-
1969-W751	2440365.23	1969 May 23 17:30:00	Rocketsonde	-	-	Met Para,Arccasonde	-	-	-	SHER	-	-	-	62	-	-
1969-W752	2440365.24	1969 May 23 17:45:00	Rocketsonde	-	-	Met Para,Arccasonde	-	-	-	PRIM	-	-	-	74	-	-
1969-W752	2440365.27	1969 May 23 18:29:00	Rocketsonde	-	-	Chaff	-	-	-	WS	-	-	-	65	-	-
1969-W755	2440365.35	1969 May 23 20:30:00	Rocketsonde	-	-	Met Para,Arccasonde	-	-	-	KAU	-	-	-	64	-	-
1969-W756	2440365.38	1969 May 23 21:00:00	Rocketsonde	-	-	Stratute, Datasonde	-	-	-	CC	LO43	-	-	65	-	-
1969-W757	2440366.00	1969 May 24 23:55:00	Rocketsonde	-	-	Stratute, Datasonde	-	-	-	CC	LO43	-	-	65	-	-
1969-W758	2440366.08	1969 May 26 14:46:00	Rocketsonde	-	-	Met Para,Arccasonde	-	-	-	AUT	-	-	-	56	-	-
1969-W759	2440366.12	1969 May 26 14:46:00	Rocketsonde	-	-	Met Para	-	-	-	PH	-	-	-	56	-	-
1969-W760	2440366.21	1969 May 26 17:03:59	Rocketsonde	-	-	Met Para,Arccasonde	-	-	-	PRIM	-	-	-	66	-	-
1969-W761	2440366.25	1969 May 26 18:01:59	Rocketsonde	-	-	Chaff	-	-	-	WS	-	-	-	62	-	-
1969-W762	2440366.29	1969 May 26 18:59:59	Rocketsonde	-	-	Met Para,Arccasonde	-	-	-	MI	-	-	-	57	-	-
1969-W763	2440366.42	1969 May 26 21:58:59	Rocketsonde	-	-	Met Para	-	-	-	KAU	-	-	-	53	-	-
1969-W765	2440366.29	1969 May 27 18:59:59	Rocketsonde	-	-	Met Para	-	-	-	PH	-	-	-	49	-	-
1969-W765	2440366.35	1969 May 27 20:26:00	Rocketsonde	-	-	Met Para	-	-	-	MI	-	-	-	64	-	-
1969-W766	2440370.09	1969 May 28 14:15:00	Rocketsonde	-	-	Met Para,Arccasonde	-	-	-	KAU	-	-	-	64	-	-
1969-W767	2440370.11	1969 May 28 14:15:00	Rocketsonde	-	-	Met Para,Arccasonde	-	-	-	AUT	-	-	-	58	-	-
1969-W768	2440370.17	1969 May 28 15:46:00	Rocketsonde	-	-	Stratute, Datasonde	-	-	-	SHER	LO43	-	-	46	-	-
1969-W768	2440370.20	1969 May 28 15:59:59	Rocketsonde	-	-	Met Para	-	-	-	MI	-	-	-	59	-	-
1969-W769	2440370.20	1969 May 28 15:59:59	Rocketsonde	-	-	Met Para,Arccasonde	-	-	-	WS	-	-	-	70	-	-
1969-W770	2440370.21	1969 May 28 16:44:59	Rocketsonde	-	-	Met Sphere	-	-	-	PH	LO43	-	-	60	-	-
1969-W771	2440370.21	1969 May 28 17:00:59	Rocketsonde	-	-	Stratute, Datasonde	-	-	-	CC	-	-	-	60	-	-
1969-W772	2440370.31	1969 May 28 18:05:59	Rocketsonde	-	-	Met Para,Arccasonde	-	-	-	PRIM	-	-	-	71	-	-
1969-W773	2440370.37	1969 May 28 18:25:59	Rocketsonde	-	-	Met Para,Arccasonde	-	-	-	PH	-	-	-	56	-	-
1969-W774	2440370.31	1969 May 28 19:25:00	Rocketsonde	-	-	Met Para,Arccasonde	-	-	-	KAU	-	-	-	57	-	-
1969-W774	2440370.38	1969 May 28 21:12:59	Rocketsonde	-	-	Met Para,Arccasonde	-	-	-	MI	-	-	-	53	-	-
1969-W775	2440371.05	1969 May 29 14:12:00	Rocketsonde	-	-	Chaff	-	-	-	WS	-	-	-	57	-	-
1969-W776	2440371.12	1969 May 29 15:00:00	Rocketsonde	-	-	Chaff	-	-	-	WS	-	-	-	57	-	-
1969-W777	2440371.17	1969 May 29 15:59:59	Rocketsonde	-	-	Met Para	-	-	-	PH	-	-	-	60	-	-
1969-W778	2440371.19	1969 May 29 16:30:00	Rocketsonde	-	-	Met Para,Arccasonde	-	-	-	WS	-	-	-	60	-	-
1969-W779	2440371.25	1969 May 29 18:00:00	Rocketsonde	-	-	Met Para,Arccasonde	-	-	-	CELANT	-	-	-	68	-	-
1969-W780	2440371.29	1969 May 29 18:55:00	Rocketsonde	-	-	Met Para,Arccasonde	-	-	-	PH	-	-	-	64	-	-
1969-W780	2440371.29	1969 May 29 18:55:00	Rocketsonde	-	-	Met Para,Arccasonde	-	-	-	PH	-	-	-	48	-	-
1969-W781	2440372.13	1969 May 30 15:07:00	Rocketsonde	-	-	Stratute, Datasonde	-	-	-	THU	-	-	-	58	-	-
1969-W782	2440372.26	1969 May 30 18:15:59	Rocketsonde	-	-	Met Para,Arccasonde	-	-	-	THU	-	-	-	68	-	-
1969-W785	2440375.13	1969 Jun 2 18:04:59	Rocketsonde	-	-	Stratute, Datasonde	-	-	-	THU	-	-	-	68	-	-
1969-W786	2440375.19	1969 Jun 2 18:59:59	Rocketsonde	-	-	Met Para,Arccasonde	-	-	-	THU	-	-	-	68	-	-
1969-W787	2440375.29	1969 Jun 2 18:59:59	Rocketsonde	-	-	Chaff	-	-	-	SHER	-	-	-	66	-	-
1969-W788	2440375.35	1969 Jun 2 20:29:00	Rocketsonde	-	-	Met Para,Arccasonde	-	-	-	MI	-	-	-	61	-	-
1969-W788	2440375.35	1969 Jun 2 20:29:00	Rocketsonde	-	-	Met Para,Arccasonde	-	-	-	PH	-	-	-	61	-	-
1969-W789	2440375.38	1969 Jun 2 21:11:00	Rocketsonde	-	-	Met Para,Arccasonde	-	-	-	KAU	-	-	-	54	-	-
1969-W789	2440375.38	1969 Jun 2 21:11:00	Rocketsonde	-	-	Met Para	-	-	-	KAU	-	-	-	54	-	-
1969-W790	2440376.38	1969 Jun 3 21:07:00	Rocketsonde	-	-	Met Para	-	-	-	MI	-	-	-	49	-	-
1969-W790	2440377.02	1969 Jun 4 12:26:59	Rocketsonde	-	-	Met Para	-	-	-	PH	-	-	-	62	-	-
1969-W791	2440377.08	1969 Jun 4 14:00:00	Rocketsonde	-	-	Stratute, Datasonde	-	-	-	CC	LO43	-	-	62	-	-
1969-W792	2440377.12	1969 Jun 4 14:49:59	Rocketsonde	-	-	Met Para,Arccasonde	-	-	-	MI	-	-	-	60	-	-
1969-W795	2440377.25	1969 Jun 4 18:00:00	Rocketsonde	-	-	Met Para,Arccasonde	-	-	-	PRIM	-	-	-	66	-	-
1969-W796	2440377.27	1969 Jun 4 18:24:59	Rocketsonde	-	-	Met Para,Arccasonde	-	-	-	PH	-	-	-	58	-	-
1969-W797	2440377.43	1969 Jun 4 22:24:59	Rocketsonde	-	-	Met Para,Arccasonde	-	-	-	KAU	-	-	-	55	-	-
1969-W798	2440378.23	1969 Jun 5 17:34:00	Rocketsonde	-	-	Met Para	-	-	-	PH	-	-	-	54	-	-
1969-W798	2440378.23	1969 Jun 5 17:34:00	Rocketsonde	-	-	Met Para	-	-	-	PH	-	-	-	46	-	-
1969-W799	2440378.38	1969 Jun 5 21:06:00	Rocketsonde	-	-	Met Para	-	-	-	WS	-	-	-	67	-	-
1969-W799	2440378.71	1969 Jun 6 05:04:59	Rocketsonde	-	-	Met Para,Arccasonde	-	-	-	WS	-	-	-	67	-	-
1969-W800	2440378.79	1969 Jun 6 08:59:59	Rocketsonde	-	-	Met Para,Arccasonde	-	-	-	WS	-	-	-	64	-	-
1969-W801	2440379.11	1969 Jun 6 09:59:59	Rocketsonde	-	-	Met Para,Arccasonde	-	-	-	MI	-	-	-	55	-	-
1969-W802	2440379.18	1969 Jun 6 14:41:00	Rocketsonde	-	-	Stratute, Datasonde	-	-	-	PH	-	-	-	58	-	-
1969-W804	2440379.23	1969 Jun 6 16:17:00	Rocketsonde	-	-	Met Para,Arccasonde	-	-	-	SHER	-	-	-	63	-	-
1969-W805	2440379.33	1969 Jun 6 17:35:00	Rocketsonde	-	-	Met Para,Arccasonde	-	-	-	PH	-	-	-	60	-	-
1969-W806	2440379.41	1969 Jun 6 20:00:00	Rocketsonde	-	-	Met Para,Arccasonde	-	-	-	GRLY	-	-	-	62	-	-
1969-W806	2440379.41	1969 Jun 6 20:00:00	Rocketsonde	-	-	Met Para,Arccasonde	-	-	-	PH	-	-	-	60	-	-
1969-W807	2440379.42	1969 Jun 6 21:49:59	Rocketsonde	-	-	Chaff	-	-	-	KAU	-	-	-	62	-	-
1969-W808	2440379.45	1969 Jun 6 22:49:59	Rocketsonde	-	-	Chaff	-	-	-	WS	-	-	-	75	-	-
1969-W809	2440382.11	1969 Jun 9 14:36:00	Rocketsonde	-	-	Stratute, Datasonde	-	-	-	THU	-	-	-	48	-	-
1969-W809	2440382.1															

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Mission	FlightCode	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee_Km	Range_Km	Dest
1969-4812	2440393.12	1969 Jun 10 15:00:00	Rocketsonde	-	-	Met Para,Arcasonde	-	-	-	WS	-	-	-	66	-	-
1969-4813	2440393.18	1969 Jun 10 16:14:59	Rocketsonde	-	-	Met Para,Datasonde	-	-	-	WS	-	-	-	58	-	-
1969-4814	2440393.25	1969 Jun 10 18:00:00	Rocketsonde	-	-	Met Para	-	-	-	PH	-	-	-	52	-	-
1969-4815	2440393.33	1969 Jun 10 19:56:59	Rocketsonde	-	-	Staruve,Datasonde	-	-	-	WI	-	-	-	65	-	-
1969-4817	2440394.08	1969 Jun 11 14:00:00	Rocketsonde	-	-	Staruve,Datasonde	-	-	-	CC	LO43	-	-	63	-	-
1969-4818	2440394.10	1969 Jun 11 14:27:59	Rocketsonde	-	-	Staruve,Datasonde	-	-	-	WI	-	-	-	66	-	-
1969-4819	2440394.11	1969 Jun 11 14:31:00	Rocketsonde	-	-	Staruve,Datasonde	-	-	-	THU	-	-	-	66	-	-
1969-4820	2440394.16	1969 Jun 11 15:46:00	Rocketsonde	-	-	Met Para,Arcasonde	-	-	-	WS	-	-	-	64	-	-
1969-4821	2440394.18	1969 Jun 11 16:12:59	Rocketsonde	-	-	Met Para	-	-	-	PH	-	-	-	64	-	-
1969-4822	2440394.19	1969 Jun 11 16:38:59	Rocketsonde	-	-	Met Para	-	-	-	WI	-	-	-	69	-	-
1969-4824	2440394.24	1969 Jun 11 17:43:00	Rocketsonde	-	-	Met Para,Arcasonde	-	-	-	PRIM	-	-	-	62	-	-
1969-4825	2440394.38	1969 Jun 12 21:00:00	Rocketsonde	-	-	Met Para,Arcasonde	-	-	-	KAU	-	-	-	56	-	-
1969-4899	2440395.38	1969 Jun 12 21:00:00	Rocketsonde	-	-	Staruve,Datasonde	-	-	-	THU	-	-	-	39	-	-
1969-4100	2440395.38	1969 Jun 12 21:01:59	Rocketsonde	-	-	Met Para	-	-	-	KAU	-	-	-	40	-	-
1969-4827	2440395.40	1969 Jun 12 21:30:00	Rocketsonde	-	-	Chaff	-	-	-	WS	-	-	-	72	-	-
1969-4828	2440395.42	1969 Jun 13 14:17:00	Rocketsonde	-	-	Chaff	-	-	-	WS	-	-	-	84	-	-
1969-4829	2440396.10	1969 Jun 13 14:17:00	Rocketsonde	-	-	Staruve,Datasonde	-	-	-	CC	LO43	-	-	63	-	-
1969-4829	2440396.12	1969 Jun 13 14:57:00	Rocketsonde	-	-	Met Para	-	-	-	THU	-	-	-	58	-	-
1969-4830	2440396.21	1969 Jun 13 17:02:00	Rocketsonde	-	-	Met Para,Arcasonde	-	-	-	SHER	-	-	-	61	-	-
1969-4831	2440396.27	1969 Jun 13 18:34:59	Rocketsonde	-	-	Met Para	-	-	-	PH	-	-	-	51	-	-
1969-4832	2440396.32	1969 Jun 13 19:44:59	Rocketsonde	-	-	Met Para,Datasonde	-	-	-	WS	-	-	-	67	-	-
1969-4833	2440396.40	1969 Jun 13 21:33:00	Rocketsonde	-	-	Met Para,Datasonde	-	-	-	KAU	-	-	-	50	-	-
1969-4834	2440397.68	1969 Jun 15 04:18:59	Rocketsonde	-	-	Chaff	-	-	-	CC	LO43	-	-	61	-	-
1969-4835	2440398.23	1969 Jun 15 04:18:59	Rocketsonde	-	-	Chaff	-	-	-	WS	-	-	-	61	-	-
1969-4836	2440398.23	1969 Jun 15 04:18:59	Rocketsonde	-	-	Staruve	-	-	-	PH	-	-	-	56	-	-
1969-4837	2440399.25	1969 Jun 16 17:54:00	Rocketsonde	-	-	Met Para,Datasonde	-	-	-	PH	-	-	-	52	-	-
1969-4838	2440399.17	1969 Jun 17 15:59:59	Rocketsonde	-	-	Met Para	-	-	-	PH	-	-	-	61	-	-
1969-4101	2440399.17	1969 Jun 17 15:59:59	Rocketsonde	-	-	Met Para	-	-	-	KAU	-	-	-	47	-	-
1969-4102	2440399.27	1969 Jun 17 21:07:00	Rocketsonde	-	-	Met Para	-	-	-	KAU	-	-	-	47	-	-
1969-4839	2440399.38	1969 Jun 18 11:26:00	Rocketsonde	-	-	Staruve,Datasonde	-	-	-	RFR	-	-	-	62	-	-
1969-4839	2440399.98	1969 Jun 18 14:16:00	Rocketsonde	-	-	Met Para,Arcasonde	-	-	-	WI	-	-	-	58	-	-
1969-4840	2440399.10	1969 Jun 18 14:16:00	Rocketsonde	-	-	Met Para,Arcasonde	-	-	-	WI	-	-	-	57	-	-
1969-4841	2440399.13	1969 Jun 18 15:11:59	Rocketsonde	-	-	Met Para,Arcasonde	-	-	-	THU	-	-	-	63	-	-
1969-4842	2440399.15	1969 Jun 18 15:30:00	Rocketsonde	-	-	Met Para,Arcasonde	-	-	-	SHER	-	-	-	67	-	-
1969-4844	2440399.21	1969 Jun 18 17:37:59	Rocketsonde	-	-	Met Para,Arcasonde	-	-	-	PRIM	-	-	-	65	-	-
1969-4845	2440399.23	1969 Jun 18 18:09:59	Rocketsonde	-	-	Met Para,Arcasonde	-	-	-	WS	-	-	-	62	-	-
1969-4846	2440399.29	1969 Jun 18 19:14:59	Rocketsonde	-	-	Met Para,Arcasonde	-	-	-	WS	-	-	-	64	-	-
1969-4847	2440399.30	1969 Jun 18 19:14:59	Rocketsonde	-	-	Staruve	-	-	-	PH	-	-	-	57	-	-
1969-4849	2440399.39	1969 Jun 18 22:49:59	Rocketsonde	-	-	Met Para,Arcasonde	-	-	-	CELAT	-	-	-	50	-	-
1969-4849	2440399.45	1969 Jun 18 22:49:59	Rocketsonde	-	-	Met Para,Arcasonde	-	-	-	THU	-	-	-	59	-	-
1969-4850	2440399.15	1969 Jun 19 15:31:00	Rocketsonde	-	-	Met Para	-	-	-	PH	-	-	-	60	-	-
1969-4851	2440399.25	1969 Jun 19 17:30:00	Rocketsonde	-	-	Met Para	-	-	-	PH	-	-	-	49	-	-
1969-4854	2440399.50	1969 Jun 20 00:00:00	Rocketsonde	-	-	Staruve,Datasonde	-	-	-	KAU	-	-	-	47	-	-
1969-4852	2440399.50	1969 Jun 20 01:30:00	Rocketsonde	-	-	Staruve,Datasonde	-	-	-	WI	-	-	-	61	-	-
1969-4853	2440399.57	1969 Jun 20 03:34:59	Rocketsonde	-	-	Met Para,Arcasonde	-	-	-	WI	-	-	-	59	-	-
1969-4854	2440399.58	1969 Jun 20 05:27:59	Rocketsonde	-	-	Staruve,Datasonde	-	-	-	WS	-	-	-	60	-	-
1969-4854	2440399.15	1969 Jun 20 15:34:59	Rocketsonde	-	-	Staruve,Datasonde	-	-	-	WI	-	-	-	60	-	-
1969-4855	2440399.11	1969 Jun 20 15:00:00	Rocketsonde	-	-	Staruve,Datasonde	-	-	-	WI	-	-	-	64	-	-
1969-4856	2440399.17	1969 Jun 20 16:34:59	Rocketsonde	-	-	Staruve,Datasonde	-	-	-	SHER	-	-	-	65	-	-
1969-4859	2440399.19	1969 Jun 20 16:30:00	Rocketsonde	-	-	Staruve,Datasonde	-	-	-	WI	-	-	-	62	-	-
1969-4860	2440399.24	1969 Jun 20 17:35:00	Rocketsonde	-	-	Staruve,Datasonde	-	-	-	WI	-	-	-	61	-	-
1969-4861	2440399.34	1969 Jun 20 17:35:00	Rocketsonde	-	-	Staruve,Datasonde	-	-	-	WI	-	-	-	61	-	-
1969-4862	2440399.37	1969 Jun 20 18:24:59	Rocketsonde	-	-	Staruve,Datasonde	-	-	-	WI	-	-	-	62	-	-
1969-4863	2440399.40	1969 Jun 20 18:24:59	Rocketsonde	-	-	Staruve,Datasonde	-	-	-	WI	-	-	-	61	-	-
1969-4864	2440399.28	1969 Jun 20 18:40:00	Rocketsonde	-	-	Staruve,Datasonde	-	-	-	WI	-	-	-	62	-	-
1969-4865	2440399.29	1969 Jun 20 18:59:59	Rocketsonde	-	-	Met Para,Arcasonde	-	-	-	CELV	-	-	-	69	-	-
1969-4866	2440399.30	1969 Jun 20 19:14:59	Rocketsonde	-	-	Met Para	-	-	-	PH	-	-	-	56	-	-
1969-4867	2440399.32	1969 Jun 20 19:14:59	Rocketsonde	-	-	Staruve,Datasonde	-	-	-	WI	-	-	-	63	-	-
1969-4868	2440399.32	1969 Jun 20 19:14:59	Rocketsonde	-	-	Staruve,Datasonde	-	-	-	WI	-	-	-	63	-	-
1969-4869	2440399.40	1969 Jun 20 19:40:00	Rocketsonde	-	-	Met Para,Datasonde	-	-	-	KAU	-	-	-	61	-	-
1969-4870	2440399.40	1969 Jun 20 21:30:00	Rocketsonde	-	-	Met Para,Datasonde	-	-	-	KAU	-	-	-	54	-	-
1969-4871	2440399.08	1969 Jun 23 14:00:00	Rocketsonde	-	-	Staruve,Datasonde	-	-	-	WS	-	-	-	57	-	-
1969-4872	2440399.11	1969 Jun 23 14:45:00	Rocketsonde	-	-	Staruve,Datasonde	-	-	-	CC	LO43	-	-	64	-	-
1969-4873	2440399.14	1969 Jun 23 15:17:00	Rocketsonde	-	-	Met Spbr,Arcasonde	-	-	-	ASC	-	-	-	60	-	-
1969-4874	2440399.14	1969 Jun 23 15:17:00	Rocketsonde	-	-	Met Para,Arcasonde	-	-	-	THU	-	-	-	55	-	-
1969-4875	2440399.17	1969 Jun 23 15:27:59	Rocketsonde	-	-	Staruve	-	-	-	PH	-	-	-	66	-	-
1969-4876	2440399.20	1969 Jun 23 16:02:59	Rocketsonde	-	-	Met Para	-	-	-	SHER	-	-	-	58	-	-
1969-4877	2440399.20	1969 Jun 23 16:08:59	Rocketsonde	-	-	Met Para	-	-	-	PM	-	-	-	58	-	-
1969-4877	2440399.23	1969 Jun 23 17:30:00	Rocketsonde	-	-	Staruve,Datasonde	-	-	-	PM	-	-	-	63	-	-
1969-4878	2440399.25	1969 Jun 23 18:00:00	Rocketsonde	-	-	Staruve,Datasonde	-	-	-	WS	-	-	-	61	-	-
1969-4879	2440399.38	1969 Jun 23 21:03:59	Rocketsonde	-	-	Met Para,Datasonde	-	-	-	KAU	-	-	-	53	-	-
1969-4880	2440399.08	1969 Jun 24 14:00:00	Rocketsonde	-	-	Staruve,Datasonde	-	-	-	CC	LO43	-	-	62	-	-
1969-4881	2440397.10	1969 Jun 24 14:20:00	Rocketsonde	-	-	Met Para,Arcasonde	-	-	-	PM	-	-	-	63	-	-
1969-4882	2440397.12	1969 Jun 24 14:59:00	Rocketsonde	-	-	Met Para,Arcasonde	-	-	-	THU	-	-	-	63	-	-
1969-4883	2440397.12	1969 Jun 24 15:00:00	Rocketsonde	-	-	Staruve,Datasonde	-	-	-	CC	LO43	-	-	66	-	-
1969-4884	2440397.26	1969 Jun 24 18:13:59	Rocketsonde	-	-	Met Para	-	-	-	WI	-	-	-	66	-	-
1969-4884	2440397.39	1969 Jun 24 21:23:59	Rocketsonde	-	-	Met Para	-	-	-	KAU	-	-	-	45	-	-
1969-4886	2440398.10	1969 Jun 25 14:31:00	Rocketsonde	-	-	Met Para,Arcasonde	-	-	-	THU	-	-	-	65	-	-
1969-4887	2440398.11	1969 Jun 25 14:45:00	Rocketsonde	-	-	Met Para,Arcasonde	-	-	-	ANT	-	-	-	61	-	-
1969-4888	2440398.11	1969 Jun 25 14:45:00	Rocketsonde	-	-	Met Para,Arcasonde	-	-	-	ASC	-	-	-	61	-	-
1969-4889	2440398.12	1969 Jun 25 14:49:59	Rocketsonde	-	-	Met Para,Arcasonde	-	-	-	WI	-	-	-	57	-	-
1969-4890	2440398.12	1969 Jun 25 14:49:59	Rocketsonde	-	-	Staruve	-	-	-	CC	LO43	-	-	59	-	-
1969-4891	2440398.15	1969 Jun 25 15:00:00	Rocketsonde	-	-	Met Para,Arcasonde	-	-	-	PM	-	-	-	60	-	-
1969-4892	2440398.17	1969 Jun 25 16:02:59	Rocketsonde	-	-	Met Para,Arcasonde	-	-	-	SHER	-	-	-	62	-	-
1969-4893	2440398.29	1969 Jun 25 18:59:59	Rocketsonde	-	-	Chaff	-	-	-	WS	-	-	-	64	-	-
1969-4894	2440398.33	1969 Jun 25 20:00:00	Rocketsonde	-	-	Chaff	-	-	-	WS	-	-	-	75	-	-
1969-4895	2440398.39	1969 Jun 25 21:27:59	Rocketsonde	-	-	Met Para,Arcasonde	-	-	-	KAU	-	-	-	54	-	-
1969-4896	2440398.42	1969 Jun 25 21:57:59	Rocketsonde	-	-	Met Para,Arcasonde	-	-	-	ASC	-	-	-	62	-	-

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Mission	FlightCode	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee_Km	Range_Km	Dest
1969-W897	2440399.12	1969 Jun 26 15:00:00	Rocketsonde	-	-	Met Para,Arconsode	-	-	-	THU	-	-	-	68	-	-
1969-W898	2440399.13	1969 Jun 26 15:12:59	Rocketsonde	-	-	Met Para,Arconsode	-	-	-	PH	-	-	-	61	-	-
1969-A107	2440399.38	1969 Jun 26 21:00:00	Rocketsonde	-	-	Met Para	-	-	-	KAU	-	-	-	45	-	-
1969-W899	2440399.41	1969 Jun 26 21:46:59	Rocketsonde	-	-	Starute	-	-	-	PH	-	-	-	64	-	-
1969-W900	2440400.09	1969 Jun 27 14:07:00	Rocketsonde	-	-	Starute, Datasode	-	-	-	CC	LO43	-	-	63	-	-
1969-W902	2440400.25	1969 Jun 27 18:00:00	Rocketsonde	-	-	Starute	-	-	-	PH	-	-	-	72	-	-
1969-W903	2440400.25	1969 Jun 27 18:00:59	Rocketsonde	-	-	Starute	-	-	-	PRIM	-	-	-	69	-	-
1969-W904	2440400.29	1969 Jun 27 18:51:00	Rocketsonde	-	-	Starute	-	-	-	PH	-	-	-	63	-	-
1969-W905	2440400.33	1969 Jun 27 20:00:00	Rocketsonde	-	-	Starute	-	-	-	WS	-	-	-	63	-	-
1969-W906	2440400.39	1969 Jun 27 21:22:00	Rocketsonde	-	-	Starute	-	-	-	KAU	-	-	-	54	-	-
1969-A108	2440400.40	1969 Jun 27 21:35:59	Rocketsonde	-	-	Met Para	-	-	-	WI	-	-	-	31	-	-
1969-W908	2440400.46	1969 Jun 27 22:55:59	Rocketsonde	-	-	Met Para,Arconsode	-	-	-	WI	-	-	-	61	-	-
1969-W909	2440403.11	1969 Jun 30 14:45:00	Rocketsonde	-	-	Met Para,Arconsode	-	-	-	AIT	-	-	-	57	-	-
1969-W910	2440403.11	1969 Jun 30 14:45:00	Rocketsonde	-	-	Met Para,Arconsode	-	-	-	THU	-	-	-	69	-	-
1969-W911	2440403.11	1969 Jun 30 14:45:00	Rocketsonde	-	-	Met Sphere	-	-	-	ASC	-	-	-	62	-	-
1969-W912	2440403.12	1969 Jun 30 14:51:00	Rocketsonde	-	-	Met Para	-	-	-	PH	-	-	-	56	-	-
1969-W913	2440403.14	1969 Jun 30 15:22:00	Rocketsonde	-	-	Starute, Datasode	-	-	-	PH	-	-	-	62	-	-
1969-W914	2440403.38	1969 Jun 30 21:01:59	Rocketsonde	-	-	Starute, Datasode	-	-	-	KAU	-	-	-	57	-	-
1969-W915	2440403.74	1969 Jul 1 09:45:00	Rocketsonde	-	-	Starute, Datasode	-	-	-	KMR	-	-	-	62	-	-
1969-A112	2440404.11	1969 Jul 1 14:45:00	Rocketsonde	-	-	Met Para,Arconsode	-	-	-	THU	-	-	-	42	-	-
1969-W916	2440404.27	1969 Jul 1 18:31:00	Rocketsonde	-	-	Met Para,Arconsode	-	-	-	PH	-	-	-	59	-	-
1969-A113	2440404.38	1969 Jul 1 21:00:00	Rocketsonde	-	-	Met Para	-	-	-	KAU	-	-	-	46	-	-
1969-W916	2440404.52	1969 Jul 1 21:00:59	Rocketsonde	-	-	Starute, Datasode	-	-	-	KMR	-	-	-	61	-	-
1969-W917	2440405.09	1969 Jul 2 10:03:59	Rocketsonde	-	-	Met Para,Arconsode	-	-	-	WI	-	-	-	53	-	-
1969-W918	2440405.11	1969 Jul 2 14:05:00	Rocketsonde	-	-	Met Para,Arconsode	-	-	-	ASC	-	-	-	60	-	-
1969-W919	2440405.13	1969 Jul 2 14:45:59	Rocketsonde	-	-	Met Para,Arconsode	-	-	-	AIT	-	-	-	56	-	-
1969-W920	2440405.13	1969 Jul 2 15:04:59	Rocketsonde	-	-	Met Para,Arconsode	-	-	-	THU	-	-	-	69	-	-
1969-W921	2440405.17	1969 Jul 2 15:59:59	Rocketsonde	-	-	Starute	-	-	-	WS	-	-	-	62	-	-
1969-W922	2440405.17	1969 Jul 2 16:59:59	Rocketsonde	-	-	Met Para,Arconsode	-	-	-	SHER	-	-	-	63	-	-
1969-W923	2440405.23	1969 Jul 2 17:30:00	Rocketsonde	-	-	Starute, Datasode	-	-	-	CC	LO43	-	-	65	-	-
1969-W924	2440405.25	1969 Jul 2 18:00:59	Rocketsonde	-	-	Met Para	-	-	-	PRIM	-	-	-	62	-	-
1969-A114	2440405.29	1969 Jul 2 18:59:59	Rocketsonde	-	-	Met Para	-	-	-	GRLY	-	-	-	43	-	-
1969-W925	2440405.32	1969 Jul 2 18:59:59	Rocketsonde	-	-	Met Para,Arconsode	-	-	-	WS	-	-	-	41	-	-
1969-W926	2440405.35	1969 Jul 2 19:44:59	Rocketsonde	-	-	Met Para,Arconsode	-	-	-	PH	-	-	-	59	-	-
1969-W927	2440405.38	1969 Jul 2 20:23:00	Rocketsonde	-	-	Met Para,Arconsode	-	-	-	WS	-	-	-	54	-	-
1969-A116	2440405.39	1969 Jul 2 21:14:59	Rocketsonde	-	-	Met Para	-	-	-	KAU	-	-	-	42	-	-
1969-W928	2440405.39	1969 Jul 3 18:00:00	Rocketsonde	-	-	Met Para,Arconsode	-	-	-	PH	-	-	-	56	-	-
1969-W929	2440405.26	1969 Jul 3 18:10:00	Rocketsonde	-	-	Met Para,Arconsode	-	-	-	NS	-	-	-	51	-	-
1969-W930	2440405.29	1969 Jul 3 18:59:59	Rocketsonde	-	-	Met Para,Arconsode	-	-	-	GRLY	-	-	-	62	-	-
1969-W931	2440405.31	1969 Jul 3 19:30:00	Rocketsonde	-	-	Met Para	-	-	-	KAU	-	-	-	50	-	-
1969-W932	2440405.31	1969 Jul 7 21:24:59	Rocketsonde	-	-	Starute, Datasode	-	-	-	CC	LO43	-	-	63	-	-
1969-W933	2440410.08	1969 Jul 7 14:00:00	Rocketsonde	-	-	Met Sphere	-	-	-	ASC	-	-	-	68	-	-
1969-W934	2440410.11	1969 Jul 7 14:45:00	Rocketsonde	-	-	Met Sphere	-	-	-	ASC	-	-	-	58	-	-
1969-W935	2440410.12	1969 Jul 7 14:45:00	Rocketsonde	-	-	Met Para	-	-	-	SHER	-	-	-	56	-	-
1969-W936	2440410.15	1969 Jul 7 15:15:59	Rocketsonde	-	-	Met Para,Arconsode	-	-	-	PH	-	-	-	59	-	-
1969-W937	2440410.27	1969 Jul 8 15:45:00	Rocketsonde	-	-	Met Para,Arconsode	-	-	-	PH	-	-	-	59	-	-
1969-W938	2440410.27	1969 Jul 8 15:45:00	Rocketsonde	-	-	Met Para,Arconsode	-	-	-	PH	-	-	-	59	-	-
1969-W939	2440411.26	1969 Jul 8 15:53:00	Rocketsonde	-	-	Met Para	-	-	-	KAU	-	-	-	49	-	-
1969-W940	2440411.26	1969 Jul 8 15:53:00	Rocketsonde	-	-	Met Para	-	-	-	VI	-	-	-	54	-	-
1969-W941	2440411.36	1969 Jul 9 14:19:00	Rocketsonde	-	-	Met Para,Arconsode	-	-	-	VI	-	-	-	54	-	-
1969-W942	2440412.25	1969 Jul 9 14:19:00	Rocketsonde	-	-	Starute, Datasode	-	-	-	CC	LO43	-	-	56	-	-
1969-W943	2440412.26	1969 Jul 9 15:20:00	Rocketsonde	-	-	Starute, Datasode	-	-	-	CC	LO43	-	-	56	-	-
1969-A122	2440413.20	1969 Jul 10 19:07:00	Rocketsonde	-	-	Starute, Datasode	-	-	-	CC	LO43	-	-	60	-	-
1969-W945	2440413.20	1969 Jul 10 19:11:59	Rocketsonde	-	-	Starute, Datasode	-	-	-	ASC	-	-	-	66	-	-
1969-W946	2440413.56	1969 Jul 11 01:19:59	Rocketsonde	-	-	Met Para,Arconsode	-	-	-	KAU	-	-	-	63	-	-
1969-W947	2440414.08	1969 Jul 11 14:00:00	Rocketsonde	-	-	Starute, Datasode	-	-	-	CC	LO43	-	-	63	-	-
1969-W948	2440414.14	1969 Jul 11 14:45:00	Rocketsonde	-	-	Met Sphere	-	-	-	ASC	-	-	-	61	-	-
1969-W949	2440414.12	1969 Jul 11 15:00:00	Rocketsonde	-	-	Met Sphere	-	-	-	ASC	-	-	-	62	-	-
1969-W950	2440414.20	1969 Jul 11 16:17:59	Rocketsonde	-	-	Starute, Datasode	-	-	-	CHIFF	-	-	-	63	-	-
1969-W951	2440414.23	1969 Jul 11 17:34:00	Rocketsonde	-	-	Met Para,Arconsode	-	-	-	PRIM	-	-	-	43	-	-
1969-W952	2440414.23	1969 Jul 11 19:14:59	Rocketsonde	-	-	Met Para,Arconsode	-	-	-	PRIM	-	-	-	58	-	-
1969-W953	2440414.27	1969 Jul 11 23:22:00	Rocketsonde	-	-	Met Para,Arconsode	-	-	-	KAU	-	-	-	60	-	-
1969-W954	2440417.11	1969 Jul 14 14:45:00	Rocketsonde	-	-	Met Para,Arconsode	-	-	-	VI	-	-	-	63	-	-
1969-W955	2440417.11	1969 Jul 14 15:02:59	Rocketsonde	-	-	Met Para,Arconsode	-	-	-	ASC	-	-	-	60	-	-
1969-W956	2440417.28	1969 Jul 14 18:45:00	Rocketsonde	-	-	Met Para,Arconsode	-	-	-	THU	-	-	-	71	-	-
1969-W957	2440417.28	1969 Jul 14 19:02:59	Rocketsonde	-	-	Met Sphere, Datasode	-	-	-	NS	-	-	-	55	-	-
1969-W958	2440417.30	1969 Jul 14 19:02:59	Rocketsonde	-	-	Starute, Datasode	-	-	-	GRLY	-	-	-	52	-	-
1969-W959	2440417.30	1969 Jul 14 19:07:00	Rocketsonde	-	-	Met Para	-	-	-	PM	-	-	-	56	-	-
1970-W14	2440587.56	1970 Jan 1 01:30:00	Rocketsonde	-	-	Starute, Datasode	-	-	-	KMR	-	-	-	57	-	-
1970-W15	2440588.46	1970 Jan 1 23:00:00	Rocketsonde	-	-	Starute, Datasode	-	-	-	GRLY	-	-	-	52	-	-
1970-W16	2440589.10	1970 Jan 2 14:30:00	Rocketsonde	-	-	Met Para,Arconsode	-	-	-	ASC	-	-	-	55	-	-
1970-W17	2440589.13	1970 Jan 2 15:08:00	Rocketsonde	-	-	Starute, Datasode	-	-	-	CC	LO43	-	-	58	-	-
1970-W18	2440589.18	1970 Jan 2 16:24:59	Rocketsonde	-	-	Starute, Datasode	-	-	-	CC	LO43	-	-	58	-	-
1970-W19	2440589.29	1970 Jan 2 18:59:59	Rocketsonde	-	-	Starute, Datasode	-	-	-	SHER	-	-	-	64	-	-
1970-W20	2440589.42	1970 Jan 2 21:59:59	Rocketsonde	-	-	CHIFF	-	-	-	NS	-	-	-	61	-	-
1970-W21	2440589.55	1970 Jan 3 01:15:59	Rocketsonde	-	-	Met Para,Arconsode	-	-	-	GRLY	-	-	-	60	-	-
1970-W22	2440589.55	1970 Jan 3 01:15:59	Rocketsonde	-	-	Starute, Datasode	-	-	-	KMR	-	-	-	60	-	-
1970-W23	2440590.31	1970 Jan 3 19:30:00	Rocketsonde	-	-	Starute, Datasode	-	-	-	NS	-	-	-	60	-	-
1970-W24	2440590.33	1970 Jan 3 19:30:00	Rocketsonde	-	-	Starute, Datasode	-	-	-	NS	-	-	-	60	-	-
1970-W25	2440591.27	1970 Jan 4 18:29:00	Rocketsonde	-	-	Starute, Datasode	-	-	-	GRLY	-	-	-	60	-	-
1970-W30	2440591.31	1970 Jan 4 19:30:00	Rocketsonde	-	-	Starute, Datasode	-	-	-	THU	-	-	-	64	-	-
1970-W31	2440591.31	1970 Jan 4 19:30:00	Rocketsonde	-	-	Starute, Datasode	-	-	-	NS	-	-	-	64	-	-
1970-W32	2440591.35	1970 Jan 4 20:20:00	Rocketsonde	-	-	Starute, Datasode	-	-	-	GRLY	-	-	-	64	-	-
1970-W33	2440591.35	1970 Jan 4 20:20:00	Rocketsonde	-	-	Starute, Datasode	-	-	-	ASC	-	-	-	64	-	-
1970-W34	2440592.10	1970 Jan 5 14:30:00	Rocketsonde	-	-	Met Para,Arconsode	-	-	-	THU	-	-	-	55	-	-
1970-W35	2440592.12	1970 Jan 5 16:00:00	Rocketsonde	-	-	Datasode	-	-	-	THU	-	-	-	55	-	-



Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Mission	FlightCode	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Approvee	Range	Dest
1970-W38	2440592.17	1970 Jan 5 1605:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	SHER	-	-	-	56	-	-
1970-W40	2440592.32	1970 Jan 5 1944:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	WS	-	-	-	63	-	-
1970-W41	2440592.33	1970 Jan 5 2000:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PH	-	-	-	61	-	-
1970-W42	2440592.40	1970 Jan 5 2142:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	WI	-	-	-	56	-	-
1970-W43	2440592.42	1970 Jan 5 2159:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	GRLY	-	-	-	41	-	-
1970-W44	2440592.55	1970 Jan 6 0114:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	KMR	-	-	-	65	-	-
1970-W46	2440593.12	1970 Jan 6 1500:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	CC	-	-	-	66	-	-
1970-W47	2440593.17	1970 Jan 6 1611:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	WI	-	-	-	50	-	-
1970-W48	2440593.40	1970 Jan 6 2130:00	Rocketsonde	-	-	Met Para, Datasonde	-	-	-	GRLY	-	-	-	44	-	-
1970-W51	2440593.46	1970 Jan 6 2306:00	Rocketsonde	-	-	Met Para	-	-	-	PH	-	-	-	52	-	-
1970-W52	2440594.10	1970 Jan 7 1430:00	Rocketsonde	-	-	Met Para, Arcasonde	-	-	-	ASC	-	-	-	57	-	-
1970-W53	2440594.17	1970 Jan 7 1600:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	SHER	-	-	-	57	-	-
1970-W54	2440594.25	1970 Jan 7 1800:00	Rocketsonde	-	-	Met Para, Arcasonde	-	-	-	AUT	-	-	-	54	-	-
1970-W55	2440594.28	1970 Jan 7 1948:59	Rocketsonde	-	-	Met Para, Arcasonde	-	-	-	PRIM	-	-	-	60	-	-
1970-W56	2440594.34	1970 Jan 7 2015:00	Rocketsonde	-	-	Met Para, Arcasonde	-	-	-	WS	-	-	-	68	-	-
1970-W57	2440594.37	1970 Jan 7 2053:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PH	-	-	-	64	-	-
1970-W57	2440594.40	1970 Jan 7 2133:59	Rocketsonde	-	-	Met Para, Arcasonde	-	-	-	KAU	-	-	-	57	-	-
1970-W58	2440594.46	1970 Jan 7 2255:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	GRLY	-	-	-	42	-	-
1970-W59	2440594.55	1970 Jan 8 0114:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	KMR	-	-	-	62	-	-
1970-W60	2440595.28	1970 Jan 8 1837:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	WS	-	-	-	51	-	-
1970-W61	2440595.28	1970 Jan 8 1837:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PH	-	-	-	56	-	-
1970-W61	2440595.33	1970 Jan 8 2000:00	Rocketsonde	-	-	Met Para	-	-	-	WS	-	-	-	78	-	-
1970-W62	2440596.10	1970 Jan 9 1430:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	ASC	-	-	-	62	-	-
1970-W64	2440596.22	1970 Jan 9 1710:00	Rocketsonde	-	-	Met Para, Arcasonde	-	-	-	AUT	-	-	-	56	-	-
1970-W65	2440596.22	1970 Jan 9 1715:00	Rocketsonde	-	-	Met Para	-	-	-	WS	-	-	-	60	-	-
1970-W66	2440596.24	1970 Jan 9 1748:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	SHER	-	-	-	55	-	-
1970-W67	2440596.24	1970 Jan 9 1800:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PH	-	-	-	46	-	-
1970-W67	2440596.31	1970 Jan 9 1930:00	Rocketsonde	-	-	Met Para, Arcasonde	-	-	-	GRLY	-	-	-	60	-	-
1970-W68	2440596.38	1970 Jan 9 2100:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	KMR	-	-	-	59	-	-
1970-W69	2440596.55	1970 Jan 10 0114:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	ASC	-	-	-	63	-	-
1970-W70	2440596.60	1970 Jan 10 0226:00	Rocketsonde	-	-	Met Para, Arcasonde	-	-	-	WI	-	-	-	57	-	-
1970-W72	2440599.11	1970 Jan 12 1436:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	AUT	-	-	-	62	-	-
1970-W74	2440599.17	1970 Jan 12 1559:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PH	-	-	-	61	-	-
1970-W75	2440599.18	1970 Jan 12 1614:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	SHER	-	-	-	57	-	-
1970-W76	2440599.30	1970 Jan 12 1910:59	Rocketsonde	-	-	Arcasonde	-	-	-	WI	-	-	-	61	-	-
1970-W77	2440599.38	1970 Jan 12 2103:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	KAU	-	-	-	63	-	-
1970-W78	2440599.44	1970 Jan 12 2227:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PH	-	-	-	61	-	-
1970-W79	2440599.56	1970 Jan 13 0119:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	KMR	-	-	-	64	-	-
1970-W80	2440600.22	1970 Jan 13 1722:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PH	-	-	-	53	-	-
1970-W80	2440601.10	1970 Jan 14 1430:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	ASC	-	-	-	26	-	-
1970-W85	2440601.19	1970 Jan 14 1530:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	ASC	-	-	-	67	-	-
1970-W86	2440601.19	1970 Jan 14 1530:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	ASC	-	-	-	90	-	-
1970-W87	2440601.17	1970 Jan 14 1539:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PH	-	-	-	51	-	-
1970-W87	2440601.17	1970 Jan 14 1539:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PH	-	-	-	63	-	-
1970-W88	2440601.20	1970 Jan 14 1539:59	Rocketsonde	-	-	Met Para, Arcasonde	-	-	-	AUT	-	-	-	63	-	-
1970-W89	2440601.22	1970 Jan 14 1539:59	Rocketsonde	-	-	Met Para, Arcasonde	-	-	-	CC	-	-	-	64	-	-
1970-W90	2440601.27	1970 Jan 14 1812:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	WS	-	-	-	76	-	-
1970-W91	2440601.27	1970 Jan 14 1812:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	WS	-	-	-	58	-	-
1970-W92	2440601.55	1970 Jan 15 0114:59	Rocketsonde	-	-	Met Para, Arcasonde	-	-	-	KMR	-	-	-	62	-	-
1970-W95	2440602.18	1970 Jan 15 1604:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PH	-	-	-	64	-	-
1970-W97	2440602.20	1970 Jan 15 1604:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	CC	-	-	-	74	-	-
1970-W98	2440602.20	1970 Jan 15 1604:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PH	-	-	-	61	-	-
1970-W99	2440603.10	1970 Jan 16 1430:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	KMR	-	-	-	64	-	-
1970-W100	2440603.12	1970 Jan 16 1500:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	CC	-	-	-	62	-	-
1970-W101	2440603.15	1970 Jan 16 1538:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	ASC	-	-	-	57	-	-
1970-W102	2440603.17	1970 Jan 16 1604:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	ASC	-	-	-	56	-	-
1970-W103	2440603.20	1970 Jan 16 1652:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	CC	-	-	-	60	-	-
1970-W105	2440603.26	1970 Jan 16 1811:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	WI	-	-	-	50	-	-
1970-W107	2440603.30	1970 Jan 16 1907:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	SHER	-	-	-	61	-	-
1970-W108	2440603.33	1970 Jan 16 2000:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PRIM	-	-	-	56	-	-
1970-W109	2440603.33	1970 Jan 16 2000:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PRIM	-	-	-	56	-	-
1970-W110	2440603.41	1970 Jan 16 2145:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	CC	-	-	-	57	-	-
1970-W112	2440603.55	1970 Jan 17 0114:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	GRLY	-	-	-	62	-	-
1970-W111	2440606.17	1970 Jan 19 1659:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	KMR	-	-	-	48	-	-
1970-W116	2440606.17	1970 Jan 19 1659:59	Rocketsonde	-	-	Met Para, Arcasonde	-	-	-	WI	-	-	-	46	-	-
1970-W112	2440606.20	1970 Jan 19 1700:00	Rocketsonde	-	-	Met Para, Arcasonde	-	-	-	AUT	-	-	-	62	-	-
1970-W117	2440606.21	1970 Jan 19 1700:00	Rocketsonde	-	-	Met Para, Arcasonde	-	-	-	PH	-	-	-	58	-	-
1970-W118	2440606.25	1970 Jan 19 1800:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PRIM	-	-	-	59	-	-
1970-W119	2440606.27	1970 Jan 19 1830:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PM	-	-	-	63	-	-
1970-W120	2440606.29	1970 Jan 19 1859:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	WS	-	-	-	57	-	-
1970-W121	2440606.33	1970 Jan 19 2000:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	WS	-	-	-	63	-	-
1970-W122	2440606.42	1970 Jan 20 0114:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	GRLY	-	-	-	54	-	-
1970-W123	2440606.55	1970 Jan 20 0114:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	KAU	-	-	-	64	-	-
1970-W125	2440607.12	1970 Jan 20 1500:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	CC	-	-	-	59	-	-
1970-W126	2440607.23	1970 Jan 20 1726:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PM	-	-	-	52	-	-
1970-W127	2440607.42	1970 Jan 20 2202:59	Rocketsonde	-	-	Met Para	-	-	-	CC	-	-	-	55	-	-
1970-W130	2440608.12	1970 Jan 21 1500:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	KAU	-	-	-	62	-	-
1970-W132	2440608.24	1970 Jan 21 1740:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	SHER	-	-	-	61	-	-
1970-W30	2440608.24	1970 Jan 21 1745:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	CHAF	-	-	-	82	-	-
1970-W134	2440608.26	1970 Jan 21 1814:59	Rocketsonde	-	-	Met Para, Arcasonde	-	-	-	WS	-	-	-	52	-	-
1970-W135	2440608.36	1970 Jan 21 2040:00	Rocketsonde	-	-	Met Para	-	-	-	WI	-	-	-	58	-	-
1970-W136	2440608.37	1970 Jan 21 2058:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	WI	-	-	-	58	-	-
1970-W137	2440608.40	1970 Jan 21 2130:00	Rocketsonde	-	-	Density gauge	-	-	-	GRLY	-	-	-	50	-	-
1970-W138	2440608.42	1970 Jan 21 2206:00	Rocketsonde	-	-	Met Para, Arcasonde	-	-	-	KAU	-	-	-	58	-	-
1970-W139	2440608.45	1970 Jan 21 2254:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PH	-	-	-	61	-	-

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Mission	FlightCode	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee_Km	Range_Km	Dest
1970-W140	2440608.55	1970 Jan 22 01:14:59	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	KMR	-	-	-	63	-	-
1970-W143	2440609.12	1970 Jan 22 15:00:00	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	CC	LO43	-	-	66	-	-
1970-W144	2440609.24	1970 Jan 22 17:46:00	Rocketsonde	-	-	Met Para	-	-	-	PH	-	-	-	55	-	-
1970-W145	2440609.42	1970 Jan 22 21:59:59	Rocketsonde	-	-	Met Para	-	-	-	KAU	-	-	-	47	-	-
1970-W147	2440610.12	1970 Jan 23 15:00:00	Rocketsonde	-	-	Met Para, Arcasonde	-	-	-	AIT	-	-	-	49	-	-
1970-W148	2440610.15	1970 Jan 23 15:35:59	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	MI	-	-	-	61	-	-
1970-W149	2440610.25	1970 Jan 23 18:00:00	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	PRIM	-	-	-	59	-	-
1970-W149	2440610.26	1970 Jan 23 18:20:00	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	CC	LO43	-	-	63	-	-
1970-W150	2440610.30	1970 Jan 23 19:14:59	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	CC	LO43	-	-	59	-	-
1970-W151	2440610.31	1970 Jan 23 19:27:59	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	PH	-	-	-	60	-	-
1970-W152	2440610.34	1970 Jan 23 20:03:00	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	WS	-	-	-	62	-	-
1970-W153	2440610.34	1970 Jan 23 20:15:00	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	GRLY	-	-	-	50	-	-
1970-W154	2440610.40	1970 Jan 23 21:37:59	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	KAU	-	-	-	58	-	-
1970-W155	2440613.10	1970 Jan 26 14:30:00	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	ASC	-	-	-	61	-	-
1970-W155	2440613.12	1970 Jan 26 14:30:00	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	CC	LO43	-	-	62	-	-
1970-W159	2440613.26	1970 Jan 26 15:00:00	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	PH	-	-	-	61	-	-
1970-W159	2440613.35	1970 Jan 26 20:23:00	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	KAU	-	-	-	65	-	-
1970-W160	2440613.38	1970 Jan 26 21:00:00	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	CC	LO43	-	-	62	-	-
1970-W161	2440614.15	1970 Jan 27 15:31:00	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	PH	-	-	-	44	-	-
1970-W161	2440614.20	1970 Jan 27 16:54:59	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	ASC	-	-	-	46	-	-
1970-W164	2440615.10	1970 Jan 28 14:30:00	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	ASC	-	-	-	61	-	-
1970-W165	2440615.12	1970 Jan 28 15:00:00	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	ASC	-	-	-	63	-	-
1970-W165	2440615.12	1970 Jan 28 15:00:00	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	ASC	-	-	-	65	-	-
1970-W166	2440615.25	1970 Jan 28 15:00:00	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	CC	LO43	-	-	65	-	-
1970-W168	2440615.25	1970 Jan 28 18:00:59	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	PRIM	-	-	-	60	-	-
1970-W168	2440615.30	1970 Jan 28 19:14:59	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	WS	-	-	-	61	-	-
1970-W169	2440615.32	1970 Jan 28 19:42:59	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	MI	-	-	-	53	-	-
1970-W170	2440615.33	1970 Jan 28 20:00:00	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	GRLY	-	-	-	61	-	-
1970-W171	2440615.34	1970 Jan 28 20:00:00	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	WS	-	-	-	64	-	-
1970-W172	2440615.35	1970 Jan 28 20:21:00	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	MI	-	-	-	56	-	-
1970-W172	2440615.42	1970 Jan 28 22:10:59	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	KAU	-	-	-	53	-	-
1970-W174	2440615.59	1970 Jan 29 02:12:00	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	KMR	-	-	-	64	-	-
1970-W176	2440616.41	1970 Jan 29 21:56:00	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	PH	-	-	-	52	-	-
1970-W177	2440616.44	1970 Jan 29 22:37:59	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	KAU	-	-	-	56	-	-
1970-W179	2440617.23	1970 Jan 30 17:31:00	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	PH	-	-	-	60	-	-
1970-W180	2440617.26	1970 Jan 30 18:14:59	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	MI	-	-	-	63	-	-
1970-W181	2440617.51	1970 Jan 30 19:30:59	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	GRLY	-	-	-	46	-	-
1970-W181	2440617.56	1970 Jan 30 20:30:00	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	MI	-	-	-	65	-	-
1970-W182	2440617.56	1970 Jan 30 20:37:59	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	KAU	-	-	-	64	-	-
1970-W183	2440617.52	1970 Jan 31 01:39:59	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	KMR	-	-	-	57	-	-
1970-W186	2440620.56	1970 Feb 2 19:01:00	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	PH	-	-	-	60	-	-
1970-W189	2440620.45	1970 Feb 2 22:41:59	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	MI	-	-	-	60	-	-
1970-W190	2440620.45	1970 Feb 2 22:41:59	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	KMR	LO43	-	-	64	-	-
1970-W191	2440620.56	1970 Feb 3 17:31:59	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	PH	-	-	-	59	-	-
1970-W192	2440621.24	1970 Feb 3 19:51:59	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	CC	-	-	-	57	-	-
1970-W193	2440621.24	1970 Feb 3 19:51:59	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	KAU	-	-	-	57	-	-
1970-W195	2440621.55	1970 Feb 3 20:51:00	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	WS	-	-	-	54	-	-
1970-W196	2440621.55	1970 Feb 3 21:51:59	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	ASC	LO43	-	-	58	-	-
1970-W198	2440622.05	1970 Feb 4 14:03:59	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	CC	-	-	-	60	-	-
1970-W199	2440622.09	1970 Feb 4 14:15:59	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	PH	-	-	-	60	-	-
1970-W200	2440622.26	1970 Feb 4 19:20:00	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	KAU	-	-	-	60	-	-
1970-W201	2440622.26	1970 Feb 4 19:27:59	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	ASC	-	-	-	56	-	-
1970-W202	2440622.27	1970 Feb 4 20:55:00	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	CC	LO43	-	-	64	-	-
1970-W203	2440622.27	1970 Feb 4 20:55:00	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	PRIM	-	-	-	59	-	-
1970-W204	2440622.45	1970 Feb 4 22:44:59	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	CC	LO43	-	-	42	-	-
1970-W204	2440622.45	1970 Feb 4 22:44:59	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	CC	LO43	-	-	42	-	-
1970-W205	2440622.56	1970 Feb 5 01:30:00	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	GRLY	-	-	-	54	-	-
1970-W207	2440623.19	1970 Feb 5 16:30:00	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	KMR	-	-	-	64	-	-
1970-W208	2440623.25	1970 Feb 5 18:01:59	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	CC	LO43	-	-	63	-	-
1970-W209	2440623.27	1970 Feb 5 18:27:59	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	CC	LO43	-	-	63	-	-
1970-W210	2440623.38	1970 Feb 5 19:27:59	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	WS	-	-	-	59	-	-
1970-W211	2440624.10	1970 Feb 6 14:20:00	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	PH	-	-	-	58	-	-
1970-W211	2440624.10	1970 Feb 6 14:20:00	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	PH	-	-	-	58	-	-
1970-W212	2440624.10	1970 Feb 6 16:45:59	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	AIT	-	-	-	23	-	-
1970-W212	2440624.10	1970 Feb 6 16:45:59	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	AIT	-	-	-	23	-	-
1970-W215	2440624.25	1970 Feb 6 18:50:59	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	MI	-	-	-	45	-	-
1970-W215	2440624.25	1970 Feb 6 18:50:59	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	MI	-	-	-	45	-	-
1970-W218	2440624.38	1970 Feb 6 21:11:00	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	PRIM	-	-	-	60	-	-
1970-W218	2440624.38	1970 Feb 6 21:11:00	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	WS	-	-	-	68	-	-
1970-W219	2440624.50	1970 Feb 7 02:17:00	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	KAU	-	-	-	57	-	-
1970-W219	2440624.50	1970 Feb 7 02:17:00	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	KMR	-	-	-	64	-	-
1970-W219	2440624.50	1970 Feb 7 02:17:00	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	ASC	-	-	-	63	-	-
1970-W220	2440627.08	1970 Feb 9 15:10:00	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	ASC	-	-	-	59	-	-
1970-W220	2440627.15	1970 Feb 9 15:10:00	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	ASC	LO43	-	-	62	-	-
1970-W221	2440627.21	1970 Feb 9 15:37:59	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	CC	-	-	-	70	-	-
1970-W222	2440627.21	1970 Feb 9 17:00:00	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	WS	-	-	-	69	-	-
1970-W223	2440627.25	1970 Feb 9 18:00:00	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	WS	-	-	-	64	-	-
1970-W224	2440627.25	1970 Feb 9 18:00:00	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	WS	-	-	-	65	-	-
1970-W225	2440627.31	1970 Feb 9 19:30:59	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	WS	-	-	-	67	-	-
1970-W226	2440627.32	1970 Feb 9 19:34:59	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	WS	-	-	-	67	-	-
1970-W227	2440627.33	1970 Feb 9 20:00:00	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	WS	-	-	-	65	-	-
1970-W228	2440627.36	1970 Feb 9 20:30:00	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	WS	-	-	-	65	-	-
1970-W229	2440627.38	1970 Feb 9 20:34:00	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	WS	-	-	-	70	-	-
1970-W230	2440627.42	1970 Feb 9 21:51:59	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	WS	-	-	-	61	-	-
1970-W231	2440627.42	1970 Feb 9 21:51:59	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	KAU	-	-	-	61	-	-
1970-W232	2440627.56	1970 Feb 10 01:30:00	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	GRLY	-	-	-	56	-	-
1970-W234	2440628.13	1970 Feb 10 15:07:00	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	KMR	-	-	-	62	-	-
1970-W234	2440628.13	1970 Feb 10 15:07:00	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	CC	LO43	-	-	66	-	-

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Mission	FlightCode	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee_Km	Range_Km	Dest
1970-W235	2440628.23	1970 Feb 10 17:25:00	Rocketsonde	-	-	Met Para	-	-	-	PH	-	-	-	54	-	-
1970-W237	2440628.37	1970 Feb 10 20:57:00	Rocketsonde	-	-	Met Para, Arcasonde	-	-	-	WI	-	-	-	53	-	-
1970-W239	2440629.05	1970 Feb 11 13:04:59	Rocketsonde	-	-	Met Para, Arcasonde	-	-	-	AIT	-	-	-	58	-	-
1970-W241	2440629.08	1970 Feb 11 14:00:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	ASC	-	-	-	62	-	-
1970-W242	2440629.13	1970 Feb 11 15:06:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	CC	L043	-	-	63	-	-
1970-W243	2440629.28	1970 Feb 11 18:46:00	Rocketsonde	-	-	Met Para, Arcasonde	-	-	-	WS	-	-	-	61	-	-
1970-W244	2440629.30	1970 Feb 11 19:14:59	Rocketsonde	-	-	Met Sphere	-	-	-	WS	-	-	-	56	-	-
1970-W245	2440629.38	1970 Feb 11 21:03:59	Rocketsonde	-	-	Met Para, Arcasonde	-	-	-	KAU	-	-	-	48	-	-
1970-W246	2440629.42	1970 Feb 11 22:01:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PH	-	-	-	63	-	-
1970-W248	2440629.57	1970 Feb 12 01:34:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	KHR	-	-	-	61	-	-
1970-W249	2440630.12	1970 Feb 12 15:00:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	CC	L043	-	-	61	-	-
1970-W250	2440630.19	1970 Feb 12 16:29:00	Rocketsonde	-	-	Met Para	-	-	-	WI	-	-	-	61	-	-
1970-W251	2440630.42	1970 Feb 12 21:59:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	GRLY	-	-	-	55	-	-
1970-W252	2440630.48	1970 Feb 12 23:30:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	ASC	-	-	-	65	-	-
1970-W253	2440631.08	1970 Feb 13 14:00:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	CC	L043	-	-	59	-	-
1970-W254	2440631.13	1970 Feb 13 15:08:00	Rocketsonde	-	-	Met Para, Arcasonde	-	-	-	CC	-	-	-	61	-	-
1970-W255	2440631.31	1970 Feb 13 19:23:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PRIM	-	-	-	59	-	-
1970-W256	2440631.35	1970 Feb 13 20:30:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	GRLY	-	-	-	56	-	-
1970-W257	2440631.44	1970 Feb 13 22:30:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	GRLY	-	-	-	58	-	-
1970-W258	2440631.56	1970 Feb 14 01:30:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	WS	-	-	-	56	-	-
1970-W259	2440634.12	1970 Feb 16 15:00:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	KHR	-	-	-	64	-	-
1970-W260	2440634.14	1970 Feb 16 15:20:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	CC	L043	-	-	64	-	-
1970-W261	2440634.17	1970 Feb 16 16:11:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	WS	-	-	-	63	-	-
1970-W262	2440634.25	1970 Feb 16 18:06:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PH	-	-	-	63	-	-
1970-W263	2440634.35	1970 Feb 16 20:00:00	Rocketsonde	-	-	Met Para, Arcasonde	-	-	-	PRIM	-	-	-	56	-	-
1970-W264	2440634.38	1970 Feb 16 20:20:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	GRLY	-	-	-	56	-	-
1970-W265	2440634.40	1970 Feb 16 21:31:00	Rocketsonde	-	-	Met Para, Arcasonde	-	-	-	WI	-	-	-	54	-	-
1970-W266	2440634.40	1970 Feb 16 21:31:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	KAU	-	-	-	54	-	-
1970-W267	2440634.57	1970 Feb 17 01:35:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	KHR	-	-	-	63	-	-
1970-W268	2440635.14	1970 Feb 17 15:44:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	CC	L043	-	-	57	-	-
1970-W269	2440635.38	1970 Feb 17 21:03:59	Rocketsonde	-	-	Met Para	-	-	-	PH	-	-	-	56	-	-
1970-W270	2440635.62	1970 Feb 17 22:11:59	Rocketsonde	-	-	Met Para	-	-	-	KAU	-	-	-	54	-	-
1970-W271	2440636.09	1970 Feb 18 14:15:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	AIT	-	-	-	52	-	-
1970-W272	2440636.10	1970 Feb 18 14:30:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	ASC	-	-	-	64	-	-
1970-W273	2440636.12	1970 Feb 18 15:00:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	CC	L043	-	-	61	-	-
1970-W274	2440636.26	1970 Feb 18 18:11:59	Rocketsonde	-	-	Met Para, Arcasonde	-	-	-	CC	-	-	-	59	-	-
1970-W275	2440636.26	1970 Feb 18 18:11:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PRIM	-	-	-	59	-	-
1970-W276	2440636.26	1970 Feb 18 18:15:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	WS	-	-	-	63	-	-
1970-W277	2440636.36	1970 Feb 18 20:43:00	Rocketsonde	-	-	Met Para, Arcasonde	-	-	-	PH	-	-	-	60	-	-
1970-W278	2440636.37	1970 Feb 18 20:48:00	Rocketsonde	-	-	Met Para, Arcasonde	-	-	-	WI	-	-	-	61	-	-
1970-W279	2440636.39	1970 Feb 18 20:48:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	KAU	-	-	-	61	-	-
1970-W280	2440636.51	1970 Feb 19 00:14:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	KHR	-	-	-	59	-	-
1970-W281	2440636.57	1970 Feb 19 01:37:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	GRLY	-	-	-	62	-	-
1970-W282	2440637.12	1970 Feb 19 15:00:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	CC	L043	-	-	61	-	-
1970-W283	2440638.08	1970 Feb 20 14:00:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	ASC	-	-	-	60	-	-
1970-W284	2440638.13	1970 Feb 20 15:10:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	ASC	-	-	-	60	-	-
1970-W285	2440638.35	1970 Feb 20 20:00:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	KRLY	-	-	-	61	-	-
1970-W286	2440638.55	1970 Feb 20 23:39:00	Rocketsonde	-	-	Met Para, Arcasonde	-	-	-	KRLY	-	-	-	59	-	-
1970-W287	2440639.56	1970 Feb 21 05:00:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	CC	-	-	-	61	-	-
1970-W288	2440639.56	1970 Feb 21 05:00:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	CC	-	-	-	62	-	-
1970-W289	2440640.12	1970 Feb 24 15:11:59	Rocketsonde	-	-	Met Para, Arcasonde	-	-	-	THU	-	-	-	59	-	-
1970-W290	2440640.12	1970 Feb 24 15:11:59	Rocketsonde	-	-	Met Para	-	-	-	PH	-	-	-	52	-	-
1970-W291	2440640.23	1970 Feb 24 17:37:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	KAU	-	-	-	60	-	-
1970-W292	2440640.29	1970 Feb 24 21:03:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	CC	L043	-	-	66	-	-
1970-W293	2440640.42	1970 Feb 25 15:30:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	CC	-	-	-	66	-	-
1970-W294	2440640.42	1970 Feb 25 15:30:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	CC	L043	-	-	59	-	-
1970-W295	2440640.43	1970 Feb 25 15:36:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	ASC	-	-	-	59	-	-
1970-W296	2440640.43	1970 Feb 25 15:36:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	ASC	-	-	-	59	-	-
1970-W297	2440640.43	1970 Feb 25 18:00:00	Rocketsonde	-	-	Met Para, Arcasonde	-	-	-	AIT	-	-	-	63	-	-
1970-W298	2440640.43	1970 Feb 25 18:00:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	CC	L043	-	-	63	-	-
1970-W299	2440640.43	1970 Feb 25 18:05:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	CC	-	-	-	64	-	-
1970-W300	2440640.43	1970 Feb 25 20:00:00	Rocketsonde	-	-	Met Para, Arcasonde	-	-	-	WS	-	-	-	64	-	-
1970-W301	2440640.43	1970 Feb 25 20:00:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	GRLY	-	-	-	56	-	-
1970-W302	2440640.43	1970 Feb 25 20:15:00	Rocketsonde	-	-	Met Para, Arcasonde	-	-	-	WS	-	-	-	64	-	-
1970-W303	2440640.43	1970 Feb 25 20:15:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PH	-	-	-	64	-	-
1970-W304	2440640.43	1970 Feb 25 20:45:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PH	-	-	-	63	-	-
1970-W305	2440640.43	1970 Feb 25 21:00:00	Rocketsonde	-	-	Met Para, Arcasonde	-	-	-	KAU	-	-	-	59	-	-
1970-W306	2440640.43	1970 Feb 25 21:00:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	KAU	-	-	-	59	-	-
1970-W307	2440640.43	1970 Feb 26 02:37:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	KHR	-	-	-	58	-	-
1970-W308	2440640.43	1970 Feb 26 15:00:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	CC	L043	-	-	63	-	-
1970-W309	2440640.43	1970 Feb 26 17:30:00	Rocketsonde	-	-	Met Para	-	-	-	CC	-	-	-	62	-	-
1970-W310	2440640.43	1970 Feb 26 18:02:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	CC	L043	-	-	62	-	-
1970-W311	2440640.43	1970 Feb 26 21:00:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PH	-	-	-	54	-	-
1970-W312	2440640.43	1970 Feb 26 21:00:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	KAU	-	-	-	62	-	-
1970-W313	2440640.43	1970 Feb 27 14:00:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	ASC	-	-	-	62	-	-
1970-W314	2440640.43	1970 Feb 27 14:37:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	ASC	-	-	-	62	-	-
1970-W315	2440640.43	1970 Feb 27 14:42:00	Rocketsonde	-	-	Met Para, Arcasonde	-	-	-	WI	-	-	-	65	-	-
1970-W316	2440640.43	1970 Feb 27 18:00:00	Rocketsonde	-	-	Met Para, Arcasonde	-	-	-	WI	-	-	-	65	-	-
1970-W317	2440640.43	1970 Feb 27 18:00:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	AIT	-	-	-	62	-	-
1970-W318	2440640.43	1970 Feb 27 18:07:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	CC	L043	-	-	63	-	-
1970-W319	2440640.43	1970 Feb 27 20:00:00	Rocketsonde	-	-	Met Para, Arcasonde	-	-	-	PRIM	-	-	-	70	-	-
1970-W320	2440640.43	1970 Feb 27 21:47:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	GRLY	-	-	-	54	-	-
1970-W321	2440640.43	1970 Feb 28 01:30:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PM	-	-	-	62	-	-
1970-W322	2440640.43	1970 Feb 28 01:30:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PM	-	-	-	62	-	-
1970-W323	2440640.43	1970 Feb 28 01:30:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	KHR	-	-	-	61	-	-
1970-W324	2440640.43	1970 Feb 28 01:30:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	ASC	-	-	-	64	-	-
1970-W325	2440640.43	1970 Mar 2 15:00:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	CC	L043	-	-	58	-	-
1970-W326	2440640.43	1970 Mar 2 15:00:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	CC	-	-	-	62	-	-
1970-W327	2440640.43	1970 Mar 2 16:01:59	Rocketsonde	-	-	Met Para, Arcasonde	-	-	-	THU	-	-	-	67	-	-
1970-W328	2440640.43	1970 Mar 2 18:22:00	Rocketsonde	-</												

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Mission	FlightCode	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee_Km	Range_Km	Dest
1970-W335	2440649_40	1970 Mar 3 2141:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	GRLY	-	-	-	60	-	-
1970-W337	2440650_08	1970 Mar 4 1400:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	ASC	-	-	-	64	-	-
1970-W338	2440650_12	1970 Mar 4 1500:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	CC	L043	-	-	59	-	-
1970-W339	2440650_15	1970 Mar 4 1530:00	Rocketsonde	-	-	Met Para, Arcasonde	-	-	-	AIT	-	-	-	60	-	-
1970-W340	2440650_21	1970 Mar 4 1656:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PH	-	-	-	62	-	-
1970-W341	2440650_25	1970 Mar 4 1800:00	Rocketsonde	-	-	Met Para, Arcasonde	-	-	-	PRIM	-	-	-	56	-	-
1970-W342	2440650_31	1970 Mar 4 1930:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	WS	-	-	-	69	-	-
1970-W343	2440650_37	1970 Mar 4 2043:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	CC	L043	-	-	54	-	-
1970-W344	2440650_44	1970 Mar 4 2230:00	Rocketsonde	-	-	Met Para, Arcasonde	-	-	-	KAU	-	-	-	58	-	-
1970-W345	2440650_55	1970 Mar 5 0114:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	GRLY	-	-	-	57	-	-
1970-W346	2440650_57	1970 Mar 5 0140:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	KMR	-	-	-	63	-	-
1970-W347	2440651_41	1970 Mar 5 2148:59	Rocketsonde	-	-	Met Para	-	-	-	KAU	-	-	-	50	-	-
1970-W348	2440651_43	1970 Mar 5 2218:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PH	-	-	-	53	-	-
1970-W351	2440652_08	1970 Mar 6 1500:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	ASC	-	-	-	60	-	-
1970-W352	2440652_12	1970 Mar 6 1400:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	CC	L043	-	-	55	-	-
1970-W353	2440652_14	1970 Mar 6 1514:59	Rocketsonde	-	-	Met Para, Arcasonde	-	-	-	AIT	-	-	-	55	-	-
1970-W354	2440652_38	1970 Mar 6 2100:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	KAU	-	-	-	59	-	-
1970-W355	2440652_57	1970 Mar 7 0147:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	KMR	-	-	-	62	-	-
1970-W356	2440655_08	1970 Mar 9 1400:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	ASC	-	-	-	56	-	-
1970-W357	2440655_12	1970 Mar 9 1448:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	AIT	-	-	-	46	-	-
1970-W358	2440655_12	1970 Mar 9 1500:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	CC	L043	-	-	56	-	-
1970-W359	2440655_15	1970 Mar 9 1533:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	WI	-	-	-	60	-	-
1970-W368	2440655_19	1970 Mar 9 1630:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PH	-	-	-	63	-	-
1970-W369	2440655_29	1970 Mar 9 1653:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	WS	-	-	-	58	-	-
1970-W370	2440655_38	1970 Mar 9 2100:00	Rocketsonde	-	-	Met Para, Arcasonde	-	-	-	KAU	-	-	-	58	-	-
1970-W371	2440655_43	1970 Mar 9 2214:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	GRLY	-	-	-	46	-	-
1970-W372	2440655_56	1970 Mar 10 0130:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	KMR	-	-	-	60	-	-
1970-W373	2440655_56	1970 Mar 10 0130:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	WI	-	-	-	56	-	-
1970-W374	2440656_14	1970 Mar 10 1526:59	Rocketsonde	-	-	Met Para, Arcasonde	-	-	-	KAU	-	-	-	56	-	-
1970-W375	2440656_39	1970 Mar 10 2115:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	ASC	-	-	-	64	-	-
1970-W376	2440657_09	1970 Mar 11 1403:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	AIT	-	-	-	62	-	-
1970-W377	2440657_14	1970 Mar 11 1522:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	CC	L043	-	-	61	-	-
1970-W380	2440657_19	1970 Mar 11 1830:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	CC	L043	-	-	56	-	-
1970-W381	2440657_25	1970 Mar 11 1800:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PRIM	-	-	-	44	-	-
1970-W383	2440657_27	1970 Mar 11 1833:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PH	-	-	-	65	-	-
1970-W384	2440657_33	1970 Mar 11 1954:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	WI	-	-	-	61	-	-
1970-W385	2440657_46	1970 Mar 11 2335:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	GRLY	-	-	-	56	-	-
1970-W386	2440657_56	1970 Mar 12 0130:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	KMR	-	-	-	60	-	-
1970-W388	2440658_23	1970 Mar 12 1730:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	Met Para	-	-	-	50	-	-
1970-W390	2440659_03	1970 Mar 13 1240:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	KMR	-	-	-	55	-	-
1970-W391	2440659_08	1970 Mar 13 1400:00	Rocketsonde	-	-	Met Para, Arcasonde	-	-	-	ASC	-	-	-	63	-	-
1970-W392	2440659_11	1970 Mar 13 1446:00	Rocketsonde	-	-	Met Para, Arcasonde	-	-	-	AIT	-	-	-	52	-	-
1970-W393	2440659_16	1970 Mar 13 1559:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	CC	L043	-	-	61	-	-
1970-W394	2440659_24	1970 Mar 13 1859:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PH	-	-	-	62	-	-
1970-W395	2440659_34	1970 Mar 13 2006:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	GRLY	-	-	-	59	-	-
1970-W397	2440659_35	1970 Mar 13 2030:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	KAU	-	-	-	65	-	-
1970-W398	2440659_36	1970 Mar 13 2100:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	WI	-	-	-	57	-	-
1970-W399	2440659_38	1970 Mar 13 2100:00	Rocketsonde	-	-	Met Para, Arcasonde	-	-	-	KMR	-	-	-	57	-	-
1970-W400	2440659_38	1970 Mar 13 2100:00	Rocketsonde	-	-	Met Para, Arcasonde	-	-	-	ASC	-	-	-	40	-	-
1970-W401	2440659_38	1970 Mar 13 2100:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	AIT	-	-	-	50	-	-
1970-W402	2440659_38	1970 Mar 13 2100:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PH	-	-	-	56	-	-
1970-W403	2440659_38	1970 Mar 13 2100:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	WI	-	-	-	40	-	-
1970-W404	2440659_38	1970 Mar 13 2100:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PH	-	-	-	56	-	-
1970-W405	2440659_38	1970 Mar 13 2100:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	KAU	-	-	-	62	-	-
1970-W406	2440659_38	1970 Mar 13 2100:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	GRLY	-	-	-	52	-	-
1970-W408	2440659_38	1970 Mar 13 2100:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	KMR	-	-	-	56	-	-
1970-W410	2440659_38	1970 Mar 13 2100:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	Met Para	-	-	-	53	-	-
1970-W411	2440659_38	1970 Mar 13 2100:00	Rocketsonde	-	-	Met Para	-	-	-	KAU	-	-	-	47	-	-
1970-W412	2440661_08	1970 Mar 14 1400:00	Rocketsonde	-	-	Met Para, Arcasonde	-	-	-	ASC	-	-	-	57	-	-
1970-W413	2440661_12	1970 Mar 14 1500:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	CC	L043	-	-	55	-	-
1970-W414	2440661_17	1970 Mar 14 1500:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	CC	L043	-	-	57	-	-
1970-W415	2440661_25	1970 Mar 14 1559:59	Rocketsonde	-	-	Met Para, Arcasonde	-	-	-	PRIM	-	-	-	68	-	-
1970-W416	2440661_25	1970 Mar 14 1800:00	Rocketsonde	-	-	Met Para, Arcasonde	-	-	-	HS	-	-	-	68	-	-
1970-W417	2440661_57	1970 Mar 14 1859:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	Met Para, Arcasonde	-	-	-	60	-	-
1970-W419	2440665_13	1970 Mar 19 0137:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	KMR	-	-	-	60	-	-
1970-W421	2440665_31	1970 Mar 19 0151:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	WI	-	-	-	57	-	-
1970-W422	2440665_31	1970 Mar 19 1930:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	GRLY	-	-	-	50	-	-
1970-W423	2440665_08	1970 Mar 20 1400:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	ASC	-	-	-	58	-	-
1970-W424	2440665_12	1970 Mar 20 1500:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	CC	L043	-	-	62	-	-
1970-W426	2440665_26	1970 Mar 20 1820:00	Rocketsonde	-	-	Met Para, Arcasonde	-	-	-	AIT	-	-	-	42	-	-
1970-W428	2440665_38	1970 Mar 20 2000:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	HS	-	-	-	68	-	-
1970-W429	2440669_08	1970 Mar 23 1400:00	Rocketsonde	-	-	Met Para, Arcasonde	-	-	-	ASC	-	-	-	56	-	-
1970-W430	2440669_12	1970 Mar 23 1500:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	CC	L043	-	-	63	-	-
1970-W431	2440669_13	1970 Mar 23 1500:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	WI	-	-	-	56	-	-
1970-W432	2440669_20	1970 Mar 23 1904:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	Met Para, Arcasonde	-	-	-	47	-	-
1970-W433	2440669_36	1970 Mar 23 2045:00	Rocketsonde	-	-	Chaff	-	-	-	AIT	-	-	-	60	-	-
1970-W434	2440669_40	1970 Mar 23 2134:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	KAU	-	-	-	56	-	-
1970-W435	2440669_42	1970 Mar 23 2159:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PM	-	-	-	54	-	-
1970-W436	2440669_43	1970 Mar 23 2224:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PM	-	-	-	61	-	-
1970-W437	2440669_56	1970 Mar 24 0131:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	KMR	-	-	-	59	-	-
1970-W438	2440670_04	1970 Mar 24 0200:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	GRLY	-	-	-	45	-	-
1970-W439	2440670_15	1970 Mar 24 1302:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	Met Para	-	-	-	64	-	-
1970-W440	2440670_28	1970 Mar 24 1840:00	Rocketsonde	-	-	Met Para, Arcasonde	-	-	-	WI	-	-	-	49	-	-
1970-W438	2440670_31	1970 Mar 24 1927:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	Met Para	-	-	-	53	-	-
1970-W441	2440671_05	1970 Mar 24 2003:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	CC	L043	-	-	60	-	-
1970-W442	2440671_05	1970 Mar 25 1304:59	Rocketsonde	-	-	Met Para, Arcasonde	-	-	-	AIT	-	-	-	53	-	-
1970-W442	2440671_08	1970 Mar 25 1400:00	Rocketsonde	-	-	Met Para, Arcasonde	-	-	-	ASC	-	-	-	61	-	-

Launch

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Mission	FlightCode	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Approvee	Range	Dest
1970-W443	2440671.12	1970 Mar 25 15:00:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	CC	LO43	-	-	66	-	-
1970-A41	2440671.16	1970 Mar 25 15:51:00	Rocketsonde	-	-	Met Para	-	-	-	WI	-	-	-	49	-	-
1970-W445	2440671.17	1970 Mar 25 16:06:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	WI	-	-	-	58	-	-
1970-W446	2440671.20	1970 Mar 25 16:52:59	Rocketsonde	-	-	Met Para	-	-	-	WI	-	-	-	64	-	-
1970-W447	2440671.29	1970 Mar 25 19:01:59	Rocketsonde	-	-	Met Para	-	-	-	WI	-	-	-	60	-	-
1970-W448	2440671.30	1970 Mar 25 19:04:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PH	-	-	-	61	-	-
1970-A42	2440671.33	1970 Mar 25 20:00:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	GRLY	-	-	-	47	-	-
1970-W449	2440671.33	1970 Mar 25 20:00:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	WS	-	-	-	64	-	-
1970-A43	2440671.34	1970 Mar 25 20:03:00	Rocketsonde	-	-	Met Para	-	-	-	WI	-	-	-	44	-	-
1970-W106	2440671.35	1970 Mar 25 20:30:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	WS	-	-	-	91	-	-
1970-W450	2440671.57	1970 Mar 26 01:35:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	KMR	-	-	-	61	-	-
1970-W451	2440671.91	1970 Mar 26 09:45:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	KMR	-	-	-	60	-	-
1970-W452	2440672.38	1970 Mar 26 21:00:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	GRLY	-	-	-	53	-	-
1970-W454	2440673.10	1970 Mar 27 14:20:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	ASC	-	-	-	52	-	-
1970-W455	2440673.12	1970 Mar 27 15:00:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	CC	LO43	-	-	64	-	-
1970-W456	2440673.17	1970 Mar 27 15:11:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	WI	-	-	-	59	-	-
1970-W458	2440673.29	1970 Mar 27 18:59:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	WS	-	-	-	59	-	-
1970-W459	2440673.56	1970 Mar 28 01:30:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	KMR	-	-	-	62	-	-
1970-A44	2440676.08	1970 Mar 30 14:20:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	ASC	-	-	-	48	-	-
1970-A45	2440676.10	1970 Mar 30 14:20:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	ASC	-	-	-	47	-	-
1970-A46	2440676.12	1970 Mar 30 14:20:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	ASC	-	-	-	46	-	-
1970-W462	2440676.18	1970 Mar 30 16:25:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	CC	LO43	-	-	52	-	-
1970-W463	2440676.24	1970 Mar 30 17:49:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PH	-	-	-	64	-	-
1970-A46	2440676.34	1970 Mar 30 20:10:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	SHER	-	-	-	66	-	-
1970-W464	2440676.38	1970 Mar 30 21:11:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	GRLY	-	-	-	46	-	-
1970-W465	2440676.57	1970 Mar 31 01:38:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	KAU	-	-	-	54	-	-
1970-W467	2440677.30	1970 Mar 31 19:10:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	KMR	-	-	-	63	-	-
1970-W468	2440677.39	1970 Mar 31 21:27:59	Rocketsonde	-	-	Met Para	-	-	-	PH	-	-	-	54	-	-
1970-W469	2440678.08	1970 Apr 1 14:00:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	KAU	-	-	-	56	-	-
1970-A45	2440678.09	1970 Apr 1 14:00:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	ASC	-	-	-	58	-	-
1970-A46	2440678.09	1970 Apr 1 14:00:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	ASC	-	-	-	46	-	-
1970-W470	2440678.12	1970 Apr 1 15:00:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	CC	LO43	-	-	61	-	-
1970-W471	2440678.15	1970 Apr 1 15:31:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	WI	-	-	-	55	-	-
1970-W472	2440678.19	1970 Apr 1 16:31:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PH	-	-	-	63	-	-
1970-W473	2440678.19	1970 Apr 1 16:40:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	WI	-	-	-	60	-	-
1970-W474	2440678.20	1970 Apr 1 16:52:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PH	-	-	-	89	-	-
1970-W475	2440678.29	1970 Apr 1 18:59:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	WS	-	-	-	94	-	-
1970-W476	2440678.35	1970 Apr 1 20:00:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	GRLY	-	-	-	54	-	-
1970-W477	2440678.42	1970 Apr 1 21:59:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	KAU	-	-	-	59	-	-
1970-W479	2440678.56	1970 Apr 2 01:50:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	KMR	-	-	-	52	-	-
1970-W480	2440679.35	1970 Apr 2 19:51:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	KMR	-	-	-	53	-	-
1970-W481	2440679.74	1970 Apr 3 09:45:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	ASC	-	-	-	60	-	-
1970-W482	2440680.10	1970 Apr 3 14:20:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	ASC	-	-	-	57	-	-
1970-W483	2440680.10	1970 Apr 3 14:50:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PC	LO43	-	-	57	-	-
1970-W484	2440680.22	1970 Apr 3 17:19:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PC	LO43	-	-	57	-	-
1970-W485	2440680.25	1970 Apr 3 18:59:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PRIM	-	-	-	64	-	-
1970-W486	2440680.29	1970 Apr 3 18:59:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	WS	-	-	-	87	-	-
1970-W487	2440680.40	1970 Apr 3 21:59:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	KAU	-	-	-	61	-	-
1970-A50	2440680.57	1970 Apr 4 01:45:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	ASC	-	-	-	47	-	-
1970-W488	2440680.69	1970 Apr 4 02:10:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	KMR	-	-	-	48	-	-
1970-W489	2440683.03	1970 Apr 6 14:50:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	GRLY	-	-	-	50	-	-
1970-W490	2440683.12	1970 Apr 6 15:00:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	ASC	-	-	-	62	-	-
1970-W491	2440683.21	1970 Apr 6 18:50:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	CC	LO43	-	-	62	-	-
1970-W492	2440683.31	1970 Apr 6 19:30:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PH	-	-	-	66	-	-
1970-W493	2440683.33	1970 Apr 6 20:00:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	WS	-	-	-	68	-	-
1970-W494	2440683.33	1970 Apr 6 20:00:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	WS	-	-	-	68	-	-
1970-W495	2440683.43	1970 Apr 6 21:59:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	GRLY	-	-	-	53	-	-
1970-W496	2440684.03	1970 Apr 7 12:37:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	KAU	-	-	-	57	-	-
1970-W497	2440684.03	1970 Apr 7 14:27:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	WS	-	-	-	56	-	-
1970-W498	2440684.25	1970 Apr 7 18:00:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	CC	LO43	-	-	67	-	-
1970-W500	2440684.25	1970 Apr 7 18:00:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	CC	LO43	-	-	67	-	-
1970-W501	2440684.35	1970 Apr 7 20:26:00	Rocketsonde	-	-	Met Para	-	-	-	PH	-	-	-	55	-	-
1970-W502	2440685.12	1970 Apr 8 14:59:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	WI	-	-	-	60	-	-
1970-W503	2440685.13	1970 Apr 8 15:04:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	CC	LO43	-	-	62	-	-
1970-W505	2440685.21	1970 Apr 8 17:07:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PM	-	-	-	60	-	-
1970-W506	2440685.25	1970 Apr 8 18:00:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	WS	-	-	-	64	-	-
1970-W507	2440685.27	1970 Apr 8 18:00:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	WS	-	-	-	64	-	-
1970-W508	2440685.29	1970 Apr 8 18:59:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	WS	-	-	-	82	-	-
1970-W509	2440685.34	1970 Apr 8 20:12:00	Rocketsonde	-	-	Met Para, Arcasnde	-	-	-	KAU	-	-	-	59	-	-
1970-A51	2440685.59	1970 Apr 8 21:14:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	GRLY	-	-	-	49	-	-
1970-A52	2440685.66	1970 Apr 8 23:30:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	GRLY	-	-	-	46	-	-
1970-W509	2440686.13	1970 Apr 9 01:30:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	KMR	-	-	-	59	-	-
1970-W510	2440686.13	1970 Apr 9 15:04:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	WI	-	-	-	56	-	-
1970-W511	2440686.13	1970 Apr 9 15:11:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	CC	LO43	-	-	81	-	-
1970-W129	2440686.17	1970 Apr 9 15:30:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	CC	LO43	-	-	81	-	-
1970-W130	2440686.19	1970 Apr 9 15:59:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	CC	LO43	-	-	99	-	-
1970-W131	2440686.19	1970 Apr 9 16:30:00	Rocketsonde	-	-	Met Sphere	-	-	-	CC	LO43	-	-	80	-	-
1970-W513	2440686.28	1970 Apr 9 18:41:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PM	-	-	-	49	-	-
1970-W514	2440686.33	1970 Apr 9 20:00:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	WS	-	-	-	60	-	-
1970-W515	2440686.35	1970 Apr 9 20:30:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	GRLY	-	-	-	54	-	-
1970-W516	2440687.08	1970 Apr 10 14:00:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	WS	-	-	-	66	-	-
1970-W517	2440687.22	1970 Apr 10 17:00:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	ASC	-	-	-	58	-	-
1970-W518	2440687.24	1970 Apr 10 17:48:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	ANT	-	-	-	59	-	-
1970-W519	2440687.26	1970 Apr 10 18:08:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	CC	LO43	-	-	59	-	-
1970-W520	2440687.33	1970 Apr 10 20:00:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	WI	-	-	-	61	-	-
1970-W522	2440687.38	1970 Apr 10 21:10:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	KAU	-	-	-	57	-	-

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Mission	FlightCode	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee_Km	Range_Km	Dest
1970-4523	2440887.46	1970 Apr 10 23:00:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PH	-	-	-	59	-	-
1970-4524	2440887.50	1970 Apr 11 00:00:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	GRLY	-	-	-	56	-	-
1970-4525	2440888.37	1970 Apr 11 20:58:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	CC	LO43	-	-	63	-	-
1970-4527	2440890.08	1970 Apr 13 14:00:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	ASC	-	-	-	59	-	-
1970-4528	2440890.10	1970 Apr 13 14:20:00	Rocketsonde	-	-	Met Para, Arcasonde	-	-	-	AIT	-	-	-	62	-	-
1970-4529	2440890.12	1970 Apr 13 15:00:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	CC	LO43	-	-	62	-	-
1970-4530	2440890.25	1970 Apr 13 18:00:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PH	-	-	-	64	-	-
1970-4531	2440890.29	1970 Apr 13 18:59:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	WS	-	-	-	56	-	-
1970-4532	2440890.31	1970 Apr 13 19:32:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	WI	-	-	-	55	-	-
1970-4533	2440890.33	1970 Apr 13 20:00:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	GRLY	-	-	-	53	-	-
1970-4534	2440890.38	1970 Apr 13 21:10:00	Rocketsonde	-	-	Met Para, Arcasonde	-	-	-	KAU	-	-	-	62	-	-
1970-4535	2440891.02	1970 Apr 14 12:35:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	WS	-	-	-	62	-	-
1970-4536	2440891.20	1970 Apr 14 16:41:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PH	-	-	-	59	-	-
1970-4537	2440891.33	1970 Apr 14 20:00:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	GRLY	-	-	-	54	-	-
1970-4538	2440891.42	1970 Apr 14 21:59:59	Rocketsonde	-	-	Met Para	-	-	-	KAU	-	-	-	56	-	-
1970-4539	2440892.06	1970 Apr 15 13:24:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	AIT	-	-	-	60	-	-
1970-4541	2440892.08	1970 Apr 15 14:00:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	ASC	-	-	-	62	-	-
1970-4543	2440892.12	1970 Apr 15 15:00:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	CC	LO43	-	-	62	-	-
1970-4545	2440892.26	1970 Apr 15 18:09:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	WI	-	-	-	56	-	-
1970-4546	2440892.29	1970 Apr 15 18:59:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	WS	-	-	-	61	-	-
1970-4547	2440892.33	1970 Apr 15 20:00:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	GRLY	-	-	-	56	-	-
1970-4548	2440892.34	1970 Apr 15 20:29:00	Rocketsonde	-	-	Met Sphere	-	-	-	PH	-	-	-	96	-	-
1970-4549	2440892.35	1970 Apr 15 20:29:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PH	-	-	-	58	-	-
1970-4550	2440892.37	1970 Apr 15 20:53:00	Rocketsonde	-	-	Starute	-	-	-	PH	-	-	-	60	-	-
1970-4551	2440892.49	1970 Apr 15 23:46:00	Rocketsonde	-	-	Met Para, Arcasonde	-	-	-	KAU	-	-	-	58	-	-
1970-4552	2440892.56	1970 Apr 16 01:30:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	KMR	-	-	-	59	-	-
1970-4553	2440893.21	1970 Apr 16 16:55:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PH	-	-	-	63	-	-
1970-4555	2440893.22	1970 Apr 16 17:13:00	Rocketsonde	-	-	Starute	-	-	-	PH	-	-	-	62	-	-
1970-4556	2440893.30	1970 Apr 16 19:14:59	Rocketsonde	-	-	Met Para, Arcasonde	-	-	-	WS	-	-	-	61	-	-
1970-4557	2440893.38	1970 Apr 16 21:07:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	WS	-	-	-	61	-	-
1970-454	2440893.42	1970 Apr 16 22:01:59	Rocketsonde	-	-	Met Para	-	-	-	KAU	-	-	-	49	-	-
1970-4558	2440894.06	1970 Apr 17 14:01:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	ASC	-	-	-	55	-	-
1970-4559	2440894.12	1970 Apr 17 15:00:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	CC	LO43	-	-	55	-	-
1970-4561	2440894.27	1970 Apr 17 18:50:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PH	-	-	-	60	-	-
1970-4563	2440894.29	1970 Apr 17 18:59:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	WS	-	-	-	61	-	-
1970-4564	2440894.30	1970 Apr 17 19:14:59	Rocketsonde	-	-	Starute	-	-	-	WI	-	-	-	55	-	-
1970-4565	2440894.32	1970 Apr 17 19:56:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PH	-	-	-	59	-	-
1970-4566	2440894.33	1970 Apr 17 20:00:00	Rocketsonde	-	-	Starute	-	-	-	WI	-	-	-	65	-	-
1970-4567	2440894.34	1970 Apr 17 20:15:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	GRLY	-	-	-	94	-	-
1970-4568	2440894.42	1970 Apr 17 21:59:59	Rocketsonde	-	-	Starute	-	-	-	WI	-	-	-	59	-	-
1970-456	2440894.09	1970 Apr 20 14:13:00	Rocketsonde	-	-	Met Para, Arcasonde	-	-	-	KAU	-	-	-	41	-	-
1970-4569	2440894.12	1970 Apr 20 15:00:00	Rocketsonde	-	-	Met Para, Arcasonde	-	-	-	AIT	-	-	-	65	-	-
1970-4570	2440894.25	1970 Apr 20 18:02:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PRIM	LO43	-	-	58	-	-
1970-4571	2440894.26	1970 Apr 20 18:56:59	Rocketsonde	-	-	Met Para, Arcasonde	-	-	-	PH	-	-	-	61	-	-
1970-4572	2440894.29	1970 Apr 20 18:56:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PH	-	-	-	57	-	-
1970-4574	2440894.31	1970 Apr 21 18:25:59	Rocketsonde	-	-	Met Para, Datasonde	-	-	-	GRLY	-	-	-	61	-	-
1970-4575	2440894.33	1970 Apr 21 18:50:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	ASC	-	-	-	61	-	-
1970-4576	2440894.38	1970 Apr 22 14:58:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	WI	-	-	-	62	-	-
1970-4577	2440894.45	1970 Apr 22 14:58:00	Rocketsonde	-	-	Met Para, Arcasonde	-	-	-	CC	LO43	-	-	61	-	-
1970-4578	2440894.12	1970 Apr 22 15:00:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PH	-	-	-	58	-	-
1970-4580	2440894.24	1970 Apr 22 17:01:59	Rocketsonde	-	-	Starute	-	-	-	PH	-	-	-	54	-	-
1970-4581	2440894.25	1970 Apr 22 17:01:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	AIT	-	-	-	53	-	-
1970-4582	2440894.26	1970 Apr 22 18:10:00	Rocketsonde	-	-	Met Para, Arcasonde	-	-	-	PRIM	-	-	-	65	-	-
1970-457	2440894.27	1970 Apr 22 18:21:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	ASC	-	-	-	65	-	-
1970-4583	2440894.28	1970 Apr 22 18:45:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	WS	-	-	-	65	-	-
1970-4584	2440894.33	1970 Apr 22 20:00:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PH	-	-	-	60	-	-
1970-4585	2440894.43	1970 Apr 22 20:06:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	GRLY	-	-	-	60	-	-
1970-4586	2440894.56	1970 Apr 23 01:30:00	Rocketsonde	-	-	Met Para, Arcasonde	-	-	-	KMR	-	-	-	59	-	-
1970-4587	2440700.30	1970 Apr 23 19:13:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PH	-	-	-	54	-	-
1970-4588	2440700.36	1970 Apr 23 20:34:00	Rocketsonde	-	-	Met Para, Arcasonde	-	-	-	PRIM	-	-	-	68	-	-
1970-4589	2440700.39	1970 Apr 23 21:22:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PH	-	-	-	63	-	-
1970-4590	2440700.65	1970 Apr 24 03:34:59	Rocketsonde	-	-	Met Para	-	-	-	KAU	-	-	-	63	-	-
1970-4591	2440700.86	1970 Apr 24 08:45:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	WS	-	-	-	61	-	-
1970-4592	2440701.08	1970 Apr 24 14:00:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	ASC	-	-	-	61	-	-
1970-4593	2440701.12	1970 Apr 24 15:00:00	Rocketsonde	-	-	Met Para, Arcasonde	-	-	-	CC	LO43	-	-	58	-	-
1970-4594	2440701.14	1970 Apr 24 15:14:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	AIT	-	-	-	63	-	-
1970-4595	2440701.25	1970 Apr 24 18:03:59	Rocketsonde	-	-	Met Para, Arcasonde	-	-	-	PRIM	-	-	-	61	-	-
1970-4596	2440701.27	1970 Apr 24 18:29:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PH	-	-	-	60	-	-
1970-4597	2440701.29	1970 Apr 24 18:59:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	WI	-	-	-	60	-	-
1970-4598	2440701.33	1970 Apr 24 20:02:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	GRLY	-	-	-	69	-	-
1970-4599	2440701.40	1970 Apr 24 21:30:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	WS	-	-	-	64	-	-
1970-4600	2440701.42	1970 Apr 24 22:00:59	Rocketsonde	-	-	Met Para, Arcasonde	-	-	-	KAU	-	-	-	61	-	-
1970-4601	2440704.08	1970 Apr 27 14:00:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	ASC	-	-	-	61	-	-
1970-4602	2440704.11	1970 Apr 27 14:34:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	CC	LO43	-	-	61	-	-
1970-4603	2440704.15	1970 Apr 27 15:40:00	Rocketsonde	-	-	Met Para, Arcasonde	-	-	-	AIT	-	-	-	56	-	-
1970-4604	2440704.24	1970 Apr 27 17:48:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PH	-	-	-	64	-	-
1970-4605	2440704.25	1970 Apr 27 18:02:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	WI	-	-	-	61	-	-
1970-4606	2440704.29	1970 Apr 27 18:59:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	GRLY	-	-	-	58	-	-
1970-4607	2440704.45	1970 Apr 27 22:44:59	Rocketsonde	-	-	Met Para, Arcasonde	-	-	-	KAU	-	-	-	58	-	-
1970-4608	2440705.14	1970 Apr 28 15:25:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PH	-	-	-	57	-	-
1970-4609	2440705.32	1970 Apr 28 19:44:59	Rocketsonde	-	-	Met Para	-	-	-	Chaff	-	-	-	67	-	-
1970-4610	2440705.42	1970 Apr 28 22:06:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	WS	-	-	-	52	-	-
1970-4611	2440706.02	1970 Apr 29 12:00:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	KAU	-	-	-	60	-	-
1970-4612	2440706.13	1970 Apr 29 15:07:00	Rocketsonde	-	-	Chaff	-	-	-	ASC	-	-	-	64	-	-
1970-4613	2440706.13	1970 Apr 29 15:07:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	CLBT	-	-	-	59	-	-
1970-4615	2440706.22	1970 Apr 29 17:20:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PH	-	-	-	59	-	-

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Mission	FlightCode	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee_Km	Range_Km	Dest
1970-4616	2440706.23	1970 Apr 29 17:30:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	ASC	-	-	-	61	-	-
1970-4617	2440706.24	1970 Apr 29 17:48:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	CC	LO43	-	-	63	-	-
1970-4618	2440706.25	1970 Apr 29 17:54:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	MI	-	-	-	59	-	-
1970-4619	2440706.26	1970 Apr 29 18:14:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	WS	-	-	-	69	-	-
1970-4620	2440706.29	1970 Apr 29 18:59:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	GRLY	-	-	-	47	-	-
1970-4621	2440706.35	1970 Apr 29 20:30:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	GRLY	-	-	-	65	-	-
1970-4622	2440706.49	1970 Apr 29 23:40:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	KAU	-	-	-	60	-	-
1970-4627	2440707.10	1970 Apr 30 14:17:00	Rocketsonde	-	-	Starute	-	-	-	CC	LO43	-	-	73	-	-
1970-4628	2440707.22	1970 Apr 30 17:15:00	Rocketsonde	-	-	Starute	-	-	-	CC	LO43	-	-	71	-	-
1970-4629	2440707.23	1970 Apr 30 17:25:00	Rocketsonde	-	-	Starute	-	-	-	WS	-	-	-	51	-	-
1970-4630	2440707.42	1970 Apr 30 21:59:59	Rocketsonde	-	-	Met Para, Datasonde	-	-	-	KAU	-	-	-	67	-	-
1970-4631	2440708.08	1970 May 1 14:00:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	ASC	-	-	-	62	-	-
1970-4632	2440708.10	1970 May 1 14:21:00	Rocketsonde	-	-	Starute, Exp., Sonde	-	-	-	CC	LO43	-	-	70	-	-
1970-4633	2440708.15	1970 May 1 15:38:59	Rocketsonde	-	-	Met Para	-	-	-	PH	-	-	-	55	-	-
1970-4634	2440708.17	1970 May 1 16:00:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	SHER	-	-	-	56	-	-
1970-4635	2440708.25	1970 May 1 16:00:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	WS	-	-	-	56	-	-
1970-4636	2440708.27	1970 May 1 16:26:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	MI	-	-	-	54	-	-
1970-4637	2440708.29	1970 May 1 19:03:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	GRLY	-	-	-	64	-	-
1970-4638	2440711.08	1970 May 4 14:00:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	ASC	-	-	-	46	-	-
1970-4611	2440711.18	1970 May 4 16:20:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	SHER	-	-	-	61	-	-
1970-4639	2440711.23	1970 May 4 17:30:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PRIM	-	-	-	57	-	-
1970-4640	2440711.26	1970 May 4 18:14:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	WS	-	-	-	60	-	-
1970-4641	2440711.29	1970 May 4 18:59:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	GRLY	-	-	-	60	-	-
1970-4642	2440711.37	1970 May 4 20:57:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PH	-	-	-	60	-	-
1970-4643	2440712.15	1970 May 5 15:41:00	Rocketsonde	-	-	Met Para, A1/DMP-9	-	-	-	MI	-	-	-	54	-	-
1970-4644	2440712.19	1970 May 5 16:30:00	Rocketsonde	-	-	Met Para	-	-	-	WS	-	-	-	59	-	-
1970-4645	2440712.21	1970 May 5 17:04:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	MI	-	-	-	56	-	-
1970-4646	2440712.42	1970 May 5 22:10:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	KAU	-	-	-	57	-	-
1970-462	2440712.52	1970 May 6 09:59:59	Rocketsonde	-	-	Met Para, Arcasonde	-	-	-	ASC	-	-	-	46	-	-
1970-4649	2440712.55	1970 May 6 10:21:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	ASC	-	-	-	62	-	-
1970-4650	2440713.08	1970 May 6 14:00:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	MI	-	-	-	62	-	-
1970-4651	2440713.11	1970 May 6 14:58:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	GRLY	-	-	-	59	-	-
1970-4652	2440713.16	1970 May 6 15:53:00	Rocketsonde	-	-	Met Para, Arcasonde	-	-	-	MI	-	-	-	55	-	-
1970-4653	2440713.21	1970 May 6 17:00:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	ASC	LO43	-	-	56	-	-
1970-4654	2440713.22	1970 May 6 17:20:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	ASC	-	-	-	59	-	-
1970-4655	2440713.27	1970 May 6 18:50:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	WS	-	-	-	59	-	-
1970-4656	2440713.28	1970 May 6 18:45:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PRIM	-	-	-	54	-	-
1970-4657	2440713.29	1970 May 6 18:51:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	GRLY	-	-	-	59	-	-
1970-4658	2440713.29	1970 May 6 18:59:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	KMR	-	-	-	60	-	-
1970-4659	2440713.29	1970 May 6 19:59:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	KAU	-	-	-	56	-	-
1970-4660	2440714.05	1970 May 7 22:13:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	ASC	-	-	-	64	-	-
1970-4661	2440715.08	1970 May 8 13:14:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	ASC	LO43	-	-	57	-	-
1970-4662	2440715.08	1970 May 8 14:00:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	VC	-	-	-	60	-	-
1970-4663	2440715.08	1970 May 8 14:01:00	Rocketsonde	-	-	Met Para, Arcasonde	-	-	-	PRIM	-	-	-	56	-	-
1970-4664	2440715.09	1970 May 8 14:11:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	ASC	-	-	-	55	-	-
1970-4665	2440715.09	1970 May 8 15:11:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PRIM	-	-	-	62	-	-
1970-4667	2440715.25	1970 May 8 20:50:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	GRLY	-	-	-	59	-	-
1970-4668	2440716.23	1970 May 9 17:20:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	ASC	-	-	-	61	-	-
1970-4669	2440718.03	1970 May 11 14:00:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	ASC	-	-	-	61	-	-
1970-4670	2440718.06	1970 May 11 15:00:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	ASC	-	-	-	59	-	-
1970-4671	2440718.17	1970 May 11 15:05:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	MI	-	-	-	61	-	-
1970-4672	2440718.19	1970 May 11 16:33:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	SHER	-	-	-	61	-	-
1970-4673	2440718.21	1970 May 11 17:00:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	MI	-	-	-	63	-	-
1970-4674	2440718.26	1970 May 11 18:14:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	ASC	-	-	-	65	-	-
1970-4675	2440718.29	1970 May 11 19:01:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PRIM	-	-	-	60	-	-
1970-4676	2440718.45	1970 May 11 22:03:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	GRLY	-	-	-	60	-	-
1970-4677	2440718.45	1970 May 11 22:03:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	GRLY	-	-	-	58	-	-
1970-4678	2440719.27	1970 May 12 18:26:59	Rocketsonde	-	-	Met Para, Arcasonde	-	-	-	KAU	-	-	-	57	-	-
1970-4679	2440719.45	1970 May 12 19:26:59	Rocketsonde	-	-	Met Para	-	-	-	PH	-	-	-	55	-	-
1970-4680	2440720.07	1970 May 12 22:43:59	Rocketsonde	-	-	Met Para	-	-	-	KAU	-	-	-	52	-	-
1970-4681	2440720.08	1970 May 13 13:37:59	Rocketsonde	-	-	Met Para, Arcasonde	-	-	-	ASC	-	-	-	60	-	-
1970-4682	2440720.08	1970 May 13 14:00:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	CC	LO43	-	-	60	-	-
1970-4683	2440720.10	1970 May 13 14:30:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	ASC	-	-	-	52	-	-
1970-4684	2440720.17	1970 May 13 16:07:59	Rocketsonde	-	-	Met Para, Arcasonde	-	-	-	PH	-	-	-	55	-	-
1970-4685	2440720.19	1970 May 13 16:30:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	SHER	-	-	-	62	-	-
1970-4686	2440720.21	1970 May 13 17:00:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	WS	-	-	-	63	-	-
1970-4687	2440720.23	1970 May 13 17:36:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	MI	-	-	-	63	-	-
1970-4688	2440720.25	1970 May 13 17:57:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	MI	-	-	-	64	-	-
1970-4689	2440720.25	1970 May 13 18:01:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PRIM	-	-	-	63	-	-
1970-4691	2440720.29	1970 May 13 18:59:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	GRLY	-	-	-	58	-	-
1970-4692	2440720.30	1970 May 13 19:18:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	MI	-	-	-	70	-	-
1970-4693	2440720.44	1970 May 13 22:27:59	Rocketsonde	-	-	Starute	-	-	-	MI	-	-	-	57	-	-
1970-4694	2440720.56	1970 May 14 01:30:00	Rocketsonde	-	-	Met Para	-	-	-	KAU	-	-	-	70	-	-
1970-4695	2440721.23	1970 May 14 17:30:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	KMR	-	-	-	58	-	-
1970-4696	2440721.33	1970 May 14 21:02:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	WS	-	-	-	58	-	-
1970-4697	2440721.43	1970 May 14 21:59:59	Rocketsonde	-	-	Met Para	-	-	-	PH	-	-	-	60	-	-
1970-4698	2440721.43	1970 May 14 21:59:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	KAU	LO43	-	-	62	-	-
1970-4700	2440722.07	1970 May 15 13:40:00	Rocketsonde	-	-	Met Para, Arcasonde	-	-	-	ASC	-	-	-	65	-	-
1970-4701	2440722.08	1970 May 15 14:00:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	ASC	-	-	-	65	-	-
1970-4702	2440722.13	1970 May 15 15:03:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	CC	LO43	-	-	63	-	-
1970-4703	2440722.14	1970 May 15 15:19:00	Rocketsonde	-	-	Starute	-	-	-	MI	-	-	-	66	-	-
1970-4704	2440722.14	1970 May 15 15:19:00	Rocketsonde	-	-	Met Para, Arcasonde	-	-	-	MI	-	-	-	66	-	-
1970-4705	2440722.21	1970 May 15 17:00:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	WS	-	-	-	65	-	-
1970-4707	2440722.29	1970 May 15 18:59:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	GRLY	-	-	-	59	-	-
1970-4708	2440722.29	1970 May 15 19:00:59	Rocketsonde	-	-	Met Para, A1/DMP-9	-	-	-	PH	-	-	-	59	-	-
1970-4709	2440722.42	1970 May 15 21:59:59	Rocketsonde	-	-	Met Para, Arcasonde	-	-	-	KAU	-	-	-	62	-	-

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Mission	FlightCode	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee_Km	Range_Km	Dest
1970-W710	2440725.08	1970 May 18 14:00:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	ASC	-	-	-	61	-	-
1970-W711	2440725.09	1970 May 18 14:12:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	CC	LO43	-	-	59	-	-
1970-W712	2440725.11	1970 May 18 14:38:59	Rocketsonde	-	-	Met. Para, Arcasonde	-	-	-	AIT	-	-	-	62	-	-
1970-W713	2440725.16	1970 May 18 15:51:00	Rocketsonde	-	-	Met. Para, AI/DMP-9	-	-	-	PH	-	-	-	58	-	-
1970-W714	2440725.20	1970 May 18 16:49:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	SHER	-	-	-	61	-	-
1970-W715	2440725.23	1970 May 18 17:30:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	WS	-	-	-	58	-	-
1970-W716	2440725.27	1970 May 18 18:30:00	Rocketsonde	-	-	Chaf	-	-	-	WS	-	-	-	62	-	-
1970-W717	2440725.42	1970 May 18 21:59:59	Rocketsonde	-	-	Met. Para, Arcasonde	-	-	-	KAU	-	-	-	56	-	-
1970-W718	2440725.56	1970 May 19 01:30:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	KMR	-	-	-	62	-	-
1970-W719	2440726.21	1970 May 19 17:00:00	Rocketsonde	-	-	Chaf	-	-	-	WS	-	-	-	63	-	-
1970-W720	2440726.23	1970 May 19 17:37:00	Rocketsonde	-	-	Starute, Exp. - Sonde	-	-	-	CC	LO43	-	-	64	-	-
1970-W721	2440726.29	1970 May 19 18:56:59	Rocketsonde	-	-	Met. Para	-	-	-	PH	-	-	-	55	-	-
1970-W722	2440726.42	1970 May 19 21:59:59	Rocketsonde	-	-	Met. Para	-	-	-	KAU	-	-	-	53	-	-
1970-W724	2440727.08	1970 May 20 14:00:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	ASC	-	-	-	63	-	-
1970-W725	2440727.08	1970 May 20 14:02:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	WI	-	-	-	62	-	-
1970-W726	2440727.09	1970 May 20 14:07:00	Rocketsonde	-	-	Met. Para	-	-	-	WI	-	-	-	52	-	-
1970-W727	2440727.09	1970 May 20 14:07:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	CC	LO43	-	-	61	-	-
1970-W728	2440727.09	1970 May 20 14:10:00	Rocketsonde	-	-	Met. Para, Arcasonde	-	-	-	AIT	-	-	-	53	-	-
1970-W729	2440727.09	1970 May 20 14:12:00	Rocketsonde	-	-	Met. Para	-	-	-	WI	-	-	-	55	-	-
1970-W730	2440727.10	1970 May 20 14:22:00	Rocketsonde	-	-	Chaf	-	-	-	CLBI	-	-	-	64	-	-
1970-W731	2440727.11	1970 May 20 16:01:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	SHER	-	-	-	62	-	-
1970-W733	2440727.21	1970 May 20 17:00:00	Rocketsonde	-	-	Starute, Exp. - Sonde	-	-	-	CC	LO43	-	-	70	-	-
1970-W734	2440727.22	1970 May 20 17:40:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	WS	-	-	-	63	-	-
1970-W735	2440727.25	1970 May 20 18:00:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PRIM	-	-	-	60	-	-
1970-W736	2440727.25	1970 May 20 18:01:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PH	-	-	-	62	-	-
1970-W737	2440727.32	1970 May 20 19:44:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	GRLY	-	-	-	59	-	-
1970-W738	2440727.56	1970 May 21 01:30:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	KMR	-	-	-	61	-	-
1970-W739	2440728.11	1970 May 21 01:30:00	Rocketsonde	-	-	Starute, Exp. - Sonde	-	-	-	CC	LO43	-	-	70	-	-
1970-W740	2440728.22	1970 May 21 17:12:00	Rocketsonde	-	-	Starute, Exp. - Sonde	-	-	-	CC	LO43	-	-	73	-	-
1970-W741	2440728.34	1970 May 21 20:10:00	Rocketsonde	-	-	Met. Para	-	-	-	PH	-	-	-	42	-	-
1970-W742	2440728.38	1970 May 21 21:00:00	Rocketsonde	-	-	Met. Para	-	-	-	KAU	-	-	-	54	-	-
1970-W743	2440728.55	1970 May 22 01:14:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	GRLY	-	-	-	46	-	-
1970-W744	2440729.05	1970 May 22 13:14:59	Rocketsonde	-	-	Met. Para, Arcasonde	-	-	-	AIT	-	-	-	65	-	-
1970-W745	2440729.08	1970 May 22 14:00:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	ASC	-	-	-	56	-	-
1970-W746	2440729.09	1970 May 22 14:10:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	ASC	-	-	-	55	-	-
1970-W747	2440729.21	1970 May 22 17:00:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	WI	-	-	-	61	-	-
1970-W748	2440729.21	1970 May 22 17:30:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	SHER	-	-	-	65	-	-
1970-W749	2440729.23	1970 May 22 18:00:59	Rocketsonde	-	-	Met. Para, AI/DMP-9	-	-	-	PH	-	-	-	59	-	-
1970-W746	2440729.25	1970 May 22 18:00:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PRIM	-	-	-	63	-	-
1970-W746	2440729.29	1970 May 22 18:59:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	GRLY	-	-	-	46	-	-
1970-W746	2440729.29	1970 May 22 18:59:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	WS	-	-	-	71	-	-
1970-W749	2440729.35	1970 May 22 20:30:00	Rocketsonde	-	-	Met. Para, STS	-	-	-	WS	-	-	-	60	-	-
1970-W750	2440729.42	1970 May 22 22:01:59	Rocketsonde	-	-	Met. Para, Arcasonde	-	-	-	KAU	-	-	-	59	-	-
1970-W751	2440729.48	1970 May 25 09:00:59	Rocketsonde	-	-	Met. Para	-	-	-	ASC	-	-	-	50	-	-
1970-W753	2440729.08	1970 May 25 14:00:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	ASC	-	-	-	59	-	-
1970-W754	2440729.08	1970 May 25 14:00:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	ASC	-	-	-	52	-	-
1970-W754	2440729.16	1970 May 25 15:14:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	SHER	-	-	-	60	-	-
1970-W755	2440729.21	1970 May 25 17:00:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	WS	-	-	-	70	-	-
1970-W756	2440729.21	1970 May 25 17:00:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	WS	-	-	-	56	-	-
1970-W756	2440729.25	1970 May 25 18:12:59	Rocketsonde	-	-	Met. Para, Arcasonde	-	-	-	PH	-	-	-	64	-	-
1970-W756	2440729.26	1970 May 25 18:12:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PRIM	-	-	-	64	-	-
1970-W759	2440729.26	1970 May 25 19:32:00	Rocketsonde	-	-	Met. Para	-	-	-	GRLY	-	-	-	44	-	-
1970-W761	2440729.35	1970 May 25 21:03:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	WS	-	-	-	57	-	-
1970-W761	2440729.38	1970 May 25 21:32:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PH	-	-	-	63	-	-
1970-W762	2440729.40	1970 May 25 21:59:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	KAU	-	-	-	56	-	-
1970-W763	2440729.42	1970 May 25 21:59:59	Rocketsonde	-	-	Met. Para, Arcasonde	-	-	-	KAU	-	-	-	59	-	-
1970-W766	2440729.56	1970 May 26 01:32:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	KMR	-	-	-	63	-	-
1970-W767	2440729.57	1970 May 26 01:40:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	WS	-	-	-	57	-	-
1970-W769	2440729.65	1970 May 26 03:40:00	Rocketsonde	-	-	Met. Para	-	-	-	WS	-	-	-	57	-	-
1970-W771	2440729.18	1970 May 26 16:14:59	Rocketsonde	-	-	Met. Para	-	-	-	PH	-	-	-	53	-	-
1970-W771	2440729.19	1970 May 26 16:14:59	Rocketsonde	-	-	Met. Para	-	-	-	KAU	-	-	-	51	-	-
1970-W772	2440729.30	1970 May 27 09:33:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	KMR	-	-	-	63	-	-
1970-W773	2440729.30	1970 May 27 09:33:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	ASC	-	-	-	63	-	-
1970-W775	2440729.42	1970 May 27 12:24:59	Rocketsonde	-	-	Chaf	-	-	-	WI	-	-	-	62	-	-
1970-W776	2440729.42	1970 May 27 14:12:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	CLBI	-	-	-	62	-	-
1970-W777	2440729.42	1970 May 27 14:37:59	Rocketsonde	-	-	Chaf	-	-	-	CLBI	-	-	-	62	-	-
1970-W778	2440729.21	1970 May 27 17:00:00	Rocketsonde	-	-	Met. Para, Arcasonde	-	-	-	WS	-	-	-	60	-	-
1970-W778	2440729.23	1970 May 27 17:30:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	ASC	-	-	-	59	-	-
1970-W780	2440729.25	1970 May 27 18:00:00	Rocketsonde	-	-	Met. Para, Arcasonde	-	-	-	AIT	-	-	-	59	-	-
1970-W781	2440729.25	1970 May 27 18:00:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PRIM	-	-	-	65	-	-
1970-W782	2440729.29	1970 May 27 18:59:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PRIM	-	-	-	54	-	-
1970-W783	2440729.42	1970 May 28 01:30:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	GRLY	-	-	-	63	-	-
1970-W784	2440729.42	1970 May 28 14:30:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	KMR	-	-	-	63	-	-
1970-W785	2440729.10	1970 May 28 14:30:00	Rocketsonde	-	-	Met. Para, Arcasonde	-	-	-	WI	-	-	-	50	-	-
1970-W786	2440729.12	1970 May 28 14:55:00	Rocketsonde	-	-	Met. Para, Arcasonde	-	-	-	WI	-	-	-	54	-	-
1970-W787	2440729.13	1970 May 28 15:01:59	Rocketsonde	-	-	Met. Para	-	-	-	WI	-	-	-	53	-	-
1970-W788	2440729.25	1970 May 28 18:00:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	GRLY	-	-	-	57	-	-
1970-W789	2440729.27	1970 May 29 18:36:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PRIM	-	-	-	59	-	-
1970-W790	2440729.06	1970 Jun 1 13:30:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	AIT	-	-	-	62	-	-
1970-W790	2440729.08	1970 Jun 1 14:00:00	Rocketsonde	-	-	Met. Para, Arcasonde	-	-	-	ASC	-	-	-	63	-	-
1970-W791	2440729.14	1970 Jun 1 15:24:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	ASC	-	-	-	60	-	-
1970-W792	2440729.21	1970 Jun 1 17:00:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	SHER	-	-	-	63	-	-
1970-W793	2440729.21	1970 Jun 1 17:09:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	CC	LO43	-	-	62	-	-
1970-W794	2440729.22	1970 Jun 1 17:09:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	WI	-	-	-	54	-	-
1970-W794	2440729.24	1970 Jun 1 17:44:00	Rocketsonde	-	-	Met. Para	-	-	-	WI	-	-	-	53	-	-
1970-W795	2440729.24	1970 Jun 1 17:42:00	Rocketsonde	-	-	Met. Para, AI/DMP-9	-	-	-	THU	-	-	-	56	-	-
1970-W796	2440729.29	1970 Jun 1 18:59:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	GRLY	-	-	-	60	-	-
1970-W797	2440729.42	1970 Jun 1 22:04:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	WS	-	-	-	67	-	-
1970-W798	2440729.56	1970 Jun 2 01:30:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	WS	-	-	-	63	-	-
1970-W798	2440740.14	1970 Jun 2 15:14:59	Rocketsonde	-	-	Met. Para, AI/DMP-9	-	-</								



Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Mission	FlightCode	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Approvee	Range	Dest
1970-8801	2440740.02	1970 Jun 3 0255:00	Rocketsonde	-	-	Met. Para, Arcasonde	-	-	-	WS	-	-	-	61	-	-
1970-8803	2440741.08	1970 Jun 3 1400:00	Rocketsonde	-	-	Staruve, Datasonde	-	-	-	ASC	-	-	-	61	-	-
1970-8804	2440741.08	1970 Jun 3 1400:00	Rocketsonde	-	-	Staruve, Datasonde	-	-	-	CC	L043	-	-	60	-	-
1970-8805	2440741.09	1970 Jun 3 1408:00	Rocketsonde	-	-	Staruve, Datasonde	-	-	-	WI	-	-	-	59	-	-
1970-8806	2440741.10	1970 Jun 3 1430:00	Rocketsonde	-	-	Chaff	-	-	-	CLBI	-	-	-	65	-	-
1970-8807	2440741.12	1970 Jun 3 1500:00	Rocketsonde	-	-	Staruve, Datasonde	-	-	-	SHER	-	-	-	62	-	-
1970-8809	2440741.23	1970 Jun 3 1735:00	Rocketsonde	-	-	Staruve, Datasonde	-	-	-	PRIM	-	-	-	63	-	-
1970-8810	2440741.24	1970 Jun 3 1745:00	Rocketsonde	-	-	Met. Para, Arcasonde	-	-	-	WS	-	-	-	53	-	-
1970-8811	2440741.24	1970 Jun 3 1755:00	Rocketsonde	-	-	Staruve, Datasonde	-	-	-	WS	-	-	-	67	-	-
1970-8812	2440741.29	1970 Jun 3 1859:59	Rocketsonde	-	-	Staruve, Datasonde	-	-	-	GRLY	-	-	-	65	-	-
1970-8814	2440741.34	1970 Jun 3 2058:00	Rocketsonde	-	-	Staruve, Datasonde	-	-	-	PH	-	-	-	61	-	-
1970-8815	2440741.37	1970 Jun 3 2224:59	Rocketsonde	-	-	Met. Para, AI/DHQ-9	-	-	-	THU	-	-	-	52	-	-
1970-8816	2440742.15	1970 Jun 4 1530:00	Rocketsonde	-	-	Met. Para, Arcasonde	-	-	-	KAU	-	-	-	58	-	-
1970-8817	2440742.39	1970 Jun 4 2114:59	Rocketsonde	-	-	Chaff	-	-	-	WS	L043	-	-	81	-	-
1970-8819	2440742.42	1970 Jun 4 2159:59	Rocketsonde	-	-	Staruve, Datasonde	-	-	-	CC	-	-	-	63	-	-
1970-8817	2440742.59	1970 Jun 5 0210:00	Rocketsonde	-	-	Met. Para	-	-	-	KAU	-	-	-	45	-	-
1970-8818	2440743.08	1970 Jun 5 1400:00	Rocketsonde	-	-	Staruve, Datasonde	-	-	-	WS	-	-	-	67	-	-
1970-8819	2440743.09	1970 Jun 5 1400:00	Rocketsonde	-	-	Staruve, Datasonde	-	-	-	ASC	-	-	-	60	-	-
1970-8820	2440743.10	1970 Jun 5 1430:00	Rocketsonde	-	-	Staruve, Datasonde	-	-	-	CC	L043	-	-	61	-	-
1970-8821	2440743.11	1970 Jun 5 1444:00	Rocketsonde	-	-	Met. Para, Arcasonde	-	-	-	AIT	-	-	-	53	-	-
1970-8822	2440743.13	1970 Jun 5 1506:00	Rocketsonde	-	-	Staruve, Datasonde	-	-	-	WI	-	-	-	59	-	-
1970-8823	2440743.16	1970 Jun 5 1548:59	Rocketsonde	-	-	Staruve, Datasonde	-	-	-	SHER	-	-	-	59	-	-
1970-8824	2440743.17	1970 Jun 5 1559:59	Rocketsonde	-	-	Staruve, Datasonde	-	-	-	PH	-	-	-	53	-	-
1970-8825	2440743.29	1970 Jun 5 1859:59	Rocketsonde	-	-	Staruve, Datasonde	-	-	-	THU	-	-	-	57	-	-
1970-8826	2440743.36	1970 Jun 5 2040:00	Rocketsonde	-	-	Met. Para, AI/DHQ-9	-	-	-	GRLY	-	-	-	60	-	-
1970-8827	2440743.42	1970 Jun 5 2159:59	Rocketsonde	-	-	Chaff	-	-	-	WS	-	-	-	61	-	-
1970-8828	2440746.04	1970 Jun 6 1259:59	Rocketsonde	-	-	Staruve, Datasonde	-	-	-	KAU	-	-	-	56	-	-
1970-8829	2440746.04	1970 Jun 6 1400:00	Rocketsonde	-	-	Staruve, Datasonde	-	-	-	ASC	L043	-	-	62	-	-
1970-8830	2440746.12	1970 Jun 6 1500:00	Rocketsonde	-	-	Staruve, Datasonde	-	-	-	CC	-	-	-	62	-	-
1970-8831	2440746.15	1970 Jun 6 1533:59	Rocketsonde	-	-	Staruve, Datasonde	-	-	-	SHER	-	-	-	59	-	-
1970-8832	2440746.19	1970 Jun 6 1627:59	Rocketsonde	-	-	Staruve, Datasonde	-	-	-	PH	-	-	-	57	-	-
1970-8833	2440746.21	1970 Jun 6 1700:00	Rocketsonde	-	-	Staruve, Datasonde	-	-	-	WI	-	-	-	64	-	-
1970-8834	2440746.29	1970 Jun 6 1859:59	Rocketsonde	-	-	Staruve, Datasonde	-	-	-	WS	-	-	-	56	-	-
1970-8835	2440746.43	1970 Jun 6 2217:00	Rocketsonde	-	-	Met. Para, Arcasonde	-	-	-	GRLY	-	-	-	58	-	-
1970-8836	2440746.56	1970 Jun 9 0130:00	Rocketsonde	-	-	Staruve, Datasonde	-	-	-	KAU	-	-	-	59	-	-
1970-8837	2440747.05	1970 Jun 9 1307:59	Rocketsonde	-	-	Staruve, Datasonde	-	-	-	RNR	-	-	-	59	-	-
1970-8838	2440747.22	1970 Jun 9 1720:00	Rocketsonde	-	-	Staruve, Datasonde	-	-	-	RNR	-	-	-	56	-	-
1970-8839	2440747.23	1970 Jun 9 1730:00	Rocketsonde	-	-	Staruve, Datasonde	-	-	-	WS	-	-	-	59	-	-
1970-8840	2440747.30	1970 Jun 9 1911:59	Rocketsonde	-	-	Staruve, Datasonde	-	-	-	WS	-	-	-	65	-	-
1970-8841	2440747.42	1970 Jun 9 2159:59	Rocketsonde	-	-	Met. Para	-	-	-	THU	-	-	-	60	-	-
1970-8843	2440748.04	1970 Jun 10 1239:59	Rocketsonde	-	-	Met. Para, Arcasonde	-	-	-	ASC	L043	-	-	54	-	-
1970-8844	2440748.04	1970 Jun 10 1344:59	Rocketsonde	-	-	Staruve, Datasonde	-	-	-	AIT	-	-	-	58	-	-
1970-8845	2440748.06	1970 Jun 10 1400:00	Rocketsonde	-	-	Staruve, Datasonde	-	-	-	ASC	-	-	-	63	-	-
1970-8846	2440748.12	1970 Jun 10 1500:00	Rocketsonde	-	-	Staruve, Datasonde	-	-	-	SHER	-	-	-	61	-	-
1970-8847	2440748.12	1970 Jun 10 1539:59	Rocketsonde	-	-	Staruve, Datasonde	-	-	-	PH	-	-	-	56	-	-
1970-8848	2440748.16	1970 Jun 10 1807:59	Rocketsonde	-	-	Staruve, Datasonde	-	-	-	WI	-	-	-	49	-	-
1970-8846	2440748.20	1970 Jun 10 1808:00	Rocketsonde	-	-	Staruve, Datasonde	-	-	-	THU	-	-	-	49	-	-
1970-8849	2440748.26	1970 Jun 10 2026:00	Rocketsonde	-	-	Met. Para, AI/DHQ-9	-	-	-	WS	-	-	-	69	-	-
1970-8851	2440748.33	1970 Jun 10 2205:59	Rocketsonde	-	-	Staruve, Datasonde	-	-	-	KAU	-	-	-	59	-	-
1970-8852	2440748.55	1970 Jun 11 0125:00	Rocketsonde	-	-	Staruve, Datasonde	-	-	-	RNR	-	-	-	61	-	-
1970-8853	2440748.56	1970 Jun 11 0500:00	Rocketsonde	-	-	Staruve, Datasonde	-	-	-	ASC	-	-	-	61	-	-
1970-8854	2440748.16	1970 Jun 11 1505:59	Rocketsonde	-	-	Staruve, Datasonde	-	-	-	SHER	-	-	-	52	-	-
1970-8855	2440748.20	1970 Jun 11 1648:59	Rocketsonde	-	-	Met. Para, Arcasonde	-	-	-	PH	-	-	-	60	-	-
1970-8856	2440748.29	1970 Jun 11 1859:59	Rocketsonde	-	-	Staruve, Datasonde	-	-	-	GRLY	-	-	-	59	-	-
1970-8856	2440748.35	1970 Jun 11 2030:00	Rocketsonde	-	-	Staruve, Datasonde	-	-	-	GRLY	-	-	-	55	-	-
1970-8857	2440748.43	1970 Jun 11 2039:59	Rocketsonde	-	-	Staruve, Datasonde	-	-	-	KAU	-	-	-	54	-	-
1970-8858	2440750.08	1970 Jun 12 1400:00	Rocketsonde	-	-	Staruve, Datasonde	-	-	-	ASC	-	-	-	54	-	-
1970-8859	2440750.19	1970 Jun 12 1630:00	Rocketsonde	-	-	Staruve, Datasonde	-	-	-	ASC	-	-	-	54	-	-
1970-8860	2440750.19	1970 Jun 12 1640:00	Rocketsonde	-	-	Met. Para, Arcasonde	-	-	-	AIT	-	-	-	61	-	-
1970-8861	2440750.22	1970 Jun 12 1714:00	Rocketsonde	-	-	Chaff	-	-	-	WS	-	-	-	61	-	-
1970-8862	2440750.29	1970 Jun 12 1759:59	Rocketsonde	-	-	Staruve, Datasonde	-	-	-	PM	-	-	-	58	-	-
1970-8863	2440753.06	1970 Jun 13 0130:00	Rocketsonde	-	-	Staruve, Datasonde	-	-	-	GRLY	-	-	-	58	-	-
1970-8864	2440753.04	1970 Jun 13 1259:59	Rocketsonde	-	-	Staruve, Datasonde	-	-	-	RNR	-	-	-	63	-	-
1970-8865	2440753.12	1970 Jun 15 1500:00	Rocketsonde	-	-	Staruve, Datasonde	-	-	-	ASC	-	-	-	57	-	-
1970-8866	2440753.12	1970 Jun 15 1500:00	Rocketsonde	-	-	Staruve, Datasonde	-	-	-	CC	L043	-	-	60	-	-
1970-8867	2440753.17	1970 Jun 15 1559:59	Rocketsonde	-	-	Staruve, Datasonde	-	-	-	SHER	-	-	-	62	-	-
1970-8868	2440753.18	1970 Jun 15 1613:59	Rocketsonde	-	-	Staruve, Datasonde	-	-	-	PM	-	-	-	57	-	-
1970-8869	2440753.21	1970 Jun 15 1700:00	Rocketsonde	-	-	Met. Para, Arcasonde	-	-	-	WI	-	-	-	54	-	-
1970-8870	2440753.29	1970 Jun 15 1859:59	Rocketsonde	-	-	Staruve, Datasonde	-	-	-	WS	-	-	-	59	-	-
1970-8871	2440753.43	1970 Jun 15 2222:59	Rocketsonde	-	-	Staruve, Datasonde	-	-	-	GRLY	-	-	-	64	-	-
1970-8872	2440753.66	1970 Jun 16 0130:00	Rocketsonde	-	-	Staruve, Datasonde	-	-	-	KAU	-	-	-	58	-	-
1970-8873	2440754.15	1970 Jun 16 0130:00	Rocketsonde	-	-	Staruve, Datasonde	-	-	-	RNR	-	-	-	60	-	-
1970-8874	2440754.22	1970 Jun 16 1713:00	Rocketsonde	-	-	Staruve, Datasonde	-	-	-	CC	L043	-	-	71	-	-
1970-8875	2440754.24	1970 Jun 16 1740:00	Rocketsonde	-	-	Staruve	-	-	-	WI	-	-	-	65	-	-
1970-8876	2440754.31	1970 Jun 16 1740:00	Rocketsonde	-	-	Staruve	-	-	-	WI	-	-	-	68	-	-
1970-8877	2440754.40	1970 Jun 16 1930:59	Rocketsonde	-	-	Staruve, Datasonde	-	-	-	WI	-	-	-	58	-	-
1970-8878	2440754.43	1970 Jun 16 2138:59	Rocketsonde	-	-	Staruve, Datasonde	-	-	-	PM	-	-	-	59	-	-
1970-8880	2440755.08	1970 Jun 17 1400:00	Rocketsonde	-	-	Staruve, Datasonde	-	-	-	PM	-	-	-	67	-	-
1970-8882	2440755.12	1970 Jun 17 1500:00	Rocketsonde	-	-	Staruve, Datasonde	-	-	-	ASC	-	-	-	62	-	-
1970-8883	2440755.14	1970 Jun 17 1520:00	Rocketsonde	-	-	Staruve, Datasonde	-	-	-	ASC	-	-	-	60	-	-
1970-8884	2440755.15	1970 Jun 17 1537:59	Rocketsonde	-	-	Chaff	-	-	-	SHER	-	-	-	58	-	-
1970-8885	2440755.17	1970 Jun 17 1607:00	Rocketsonde	-	-	Staruve, Datasonde	-	-	-	CC	L043	-	-	68	-	-
1970-8886	2440755.19	1970 Jun 17 1633:59	Rocketsonde	-	-	Staruve, Datasonde	-	-	-	CC	-	-	-	58	-	-
1970-8888	2440755.21	1970 Jun 17 1700:00	Rocketsonde	-	-	Staruve, Datasonde	-	-	-	WI	-	-	-	54	-	-
1970-8889	2440755.23	1970 Jun 17 1730:00	Rocketsonde	-	-	Met. Para, Arcasonde	-	-	-	WS	-	-	-	61	-	-
1970-8890	2440755.23	1970 Jun 17 1730:00	Rocketsonde	-	-	Met. Para, Arcasonde	-	-	-	AIT	-	-	-	54	-	-

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Mission	FlightCode	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee_Km	Range_Km	Dest
1970-8890	2440755.24	1970 Jun 17 17:41:00	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	CC	LO43	-	-	87	-	-
1970-8891	2440755.25	1970 Jun 17 18:00:00	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	PH	-	-	-	58	-	-
1970-8892	2440755.26	1970 Jun 17 18:19:00	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	PRIM	-	-	-	68	-	-
1970-8893	2440755.28	1970 Jun 17 18:49:59	Rocketsonde	-	-	Starvue	-	-	-	PH	-	-	-	64	-	-
1970-8894	2440755.29	1970 Jun 17 18:59:59	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	GRLY	LO43	-	-	60	-	-
1970-8895	2440755.33	1970 Jun 17 19:52:00	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	CC	-	-	-	72	-	-
1970-8896	2440755.56	1970 Jun 18 01:30:00	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	KMR	-	-	-	60	-	-
1970-8897	2440756.22	1970 Jun 18 17:10:00	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	CC	LO43	-	-	73	-	-
1970-8898	2440756.28	1970 Jun 18 18:47:59	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	CC	LO43	-	-	58	-	-
1970-8899	2440756.30	1970 Jun 18 19:08:59	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	WI	-	-	-	52	-	-
1970-8900	2440756.31	1970 Jun 18 19:25:59	Rocketsonde	-	-	Met. Para.	-	-	-	PH	-	-	-	60	-	-
1970-8901	2440756.35	1970 Jun 18 20:21:00	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	PH	-	-	-	61	-	-
1970-8903	2440757.08	1970 Jun 19 14:00:00	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	ASC	-	-	-	60	-	-
1970-8904	2440757.09	1970 Jun 19 14:04:59	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	KMR	-	-	-	56	-	-
1970-8905	2440757.09	1970 Jun 19 14:06:00	Rocketsonde	-	-	Met. Para, Arcasonde	-	-	-	WI	-	-	-	64	-	-
1970-8906	2440757.12	1970 Jun 19 15:00:00	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	CC	LO43	-	-	52	-	-
1970-8907	2440757.14	1970 Jun 19 15:14:59	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	CC	-	-	-	57	-	-
1970-8908	2440757.21	1970 Jun 19 17:03:59	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	PH	-	-	-	57	-	-
1970-8909	2440757.33	1970 Jun 19 20:00:00	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	GRLY	-	-	-	56	-	-
1970-8910	2440757.43	1970 Jun 19 22:24:59	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	KAU	-	-	-	60	-	-
1970-8911	2440757.56	1970 Jun 20 01:30:00	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	KMR	-	-	-	59	-	-
1970-8912	2440758.00	1970 Jun 20 11:56:00	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	KMR	-	-	-	61	-	-
1970-8913	2440758.08	1970 Jun 22 14:00:00	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	ASC	-	-	-	58	-	-
1970-8914	2440760.12	1970 Jun 22 14:52:00	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	PH	-	-	-	61	-	-
1970-8915	2440760.12	1970 Jun 22 15:00:00	Rocketsonde	-	-	Met. Para, Arcasonde	-	-	-	SHER	LO43	-	-	61	-	-
1970-8916	2440760.12	1970 Jun 22 15:04:00	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	CC	-	-	-	60	-	-
1970-8917	2440760.16	1970 Jun 22 15:13:59	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	WI	-	-	-	51	-	-
1970-8918	2440760.18	1970 Jun 22 15:37:59	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	WI	-	-	-	52	-	-
1970-8919	2440760.19	1970 Jun 22 16:37:59	Rocketsonde	-	-	Chaff	-	-	-	WI	-	-	-	58	-	-
1970-8920	2440760.21	1970 Jun 22 17:00:00	Rocketsonde	-	-	Met. Para.	-	-	-	NS	-	-	-	53	-	-
1970-8921	2440760.42	1970 Jun 23 01:33:59	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	KAU	-	-	-	55	-	-
1970-8922	2440760.57	1970 Jun 23 01:35:59	Rocketsonde	-	-	Met. Para.	-	-	-	KMR	-	-	-	57	-	-
1970-8923	2440761.10	1970 Jun 23 14:30:00	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	NS	-	-	-	61	-	-
1970-8924	2440761.20	1970 Jun 23 16:44:59	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	NS	-	-	-	49	-	-
1970-8925	2440761.29	1970 Jun 23 16:49:59	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	PH	-	-	-	57	-	-
1970-8926	2440761.42	1970 Jun 23 21:59:59	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	GRLY	-	-	-	55	-	-
1970-8928	2440762.08	1970 Jun 24 14:00:00	Rocketsonde	-	-	Met. Para.	-	-	-	KAU	-	-	-	54	-	-
1970-8929	2440762.10	1970 Jun 24 14:20:00	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	ASC	-	-	-	60	-	-
1970-8930	2440762.10	1970 Jun 24 14:30:00	Rocketsonde	-	-	Met. Para, Arcasonde	-	-	-	ASC	-	-	-	44	-	-
1970-8931	2440762.12	1970 Jun 24 15:00:00	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	ASC	LO43	-	-	62	-	-
1970-8932	2440762.14	1970 Jun 24 15:14:59	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	ASC	-	-	-	59	-	-
1970-8933	2440762.21	1970 Jun 24 16:00:00	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	SHER	-	-	-	55	-	-
1970-8934	2440762.26	1970 Jun 24 18:14:59	Rocketsonde	-	-	Chaff	-	-	-	NS	-	-	-	75	-	-
1970-8935	2440762.29	1970 Jun 24 18:59:59	Rocketsonde	-	-	Met. Para, Arcasonde	-	-	-	NS	-	-	-	62	-	-
1970-8936	2440762.32	1970 Jun 24 20:26:00	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	GRLY	-	-	-	65	-	-
1970-8937	2440762.37	1970 Jun 24 20:28:00	Rocketsonde	-	-	Starvue	-	-	-	PH	-	-	-	67	-	-
1970-8938	2440762.42	1970 Jun 24 22:02:59	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	KAU	-	-	-	52	-	-
1970-8939	2440763.14	1970 Jun 25 15:06:59	Rocketsonde	-	-	Met. Para.	-	-	-	WI	-	-	-	59	-	-
1970-8940	2440763.15	1970 Jun 25 15:26:59	Rocketsonde	-	-	Met. Para, Arcasonde	-	-	-	WI	-	-	-	52	-	-
1970-8941	2440763.18	1970 Jun 25 15:48:59	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	WI	-	-	-	59	-	-
1970-8942	2440763.28	1970 Jun 25 18:45:00	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	WI	-	-	-	71	-	-
1970-8943	2440763.41	1970 Jun 25 21:45:00	Rocketsonde	-	-	Met. Para, Arcasonde	-	-	-	NS	-	-	-	60	-	-
1970-8944	2440764.08	1970 Jun 26 14:00:00	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	NS	-	-	-	54	-	-
1970-8945	2440764.12	1970 Jun 26 15:00:00	Rocketsonde	-	-	Met. Para, Arcasonde	-	-	-	SHER	-	-	-	66	-	-
1970-8946	2440764.12	1970 Jun 26 15:00:00	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	CC	LO43	-	-	64	-	-
1970-8947	2440764.28	1970 Jun 26 18:00:00	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	CC	-	-	-	57	-	-
1970-8948	2440764.28	1970 Jun 26 18:45:00	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	GRLY	-	-	-	64	-	-
1970-8949	2440764.31	1970 Jun 26 19:26:59	Rocketsonde	-	-	Met. Para, Arcasonde	-	-	-	ANI	-	-	-	52	-	-
1970-8950	2440764.31	1970 Jun 26 19:30:00	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	PRIM	-	-	-	63	-	-
1970-8951	2440764.52	1970 Jun 27 00:22:00	Rocketsonde	-	-	Chaff	-	-	-	NS	-	-	-	45	-	-
1970-8952	2440767.07	1970 Jun 29 13:44:59	Rocketsonde	-	-	Met. Para.	-	-	-	KAU	-	-	-	49	-	-
1970-8953	2440767.08	1970 Jun 29 14:00:00	Rocketsonde	-	-	Met. Para, Arcasonde	-	-	-	ANI	-	-	-	45	-	-
1970-8954	2440767.12	1970 Jun 29 15:00:00	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	ASC	-	-	-	58	-	-
1970-8955	2440767.12	1970 Jun 29 15:00:00	Rocketsonde	-	-	Met. Para, Arcasonde	-	-	-	SHER	-	-	-	68	-	-
1970-8956	2440767.17	1970 Jun 29 15:57:59	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	CC	LO43	-	-	60	-	-
1970-8957	2440767.18	1970 Jun 29 16:26:59	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	CC	-	-	-	60	-	-
1970-8958	2440767.18	1970 Jun 29 17:00:00	Rocketsonde	-	-	Chaff	-	-	-	PH	-	-	-	59	-	-
1970-8959	2440767.21	1970 Jun 29 17:00:00	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	WI	-	-	-	62	-	-
1970-8960	2440767.42	1970 Jun 29 22:08:59	Rocketsonde	-	-	Met. Para.	-	-	-	KAU	-	-	-	49	-	-
1970-8961	2440767.47	1970 Jun 29 23:15:00	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	GRLY	-	-	-	60	-	-
1970-8962	2440767.56	1970 Jun 30 01:32:59	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	KMR	-	-	-	60	-	-
1970-8963	2440768.12	1970 Jun 30 03:07:00	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	CC	LO43	-	-	60	-	-
1970-8964	2440768.18	1970 Jun 30 14:56:00	Rocketsonde	-	-	Met. Para.	-	-	-	WI	-	-	-	56	-	-
1970-8965	2440768.22	1970 Jun 30 16:13:59	Rocketsonde	-	-	Met. Para.	-	-	-	PH	-	-	-	49	-	-
1970-8966	2440768.42	1970 Jun 30 21:59:59	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	KAU	-	-	-	48	-	-
1970-8967	2440769.06	1970 Jul 1 13:30:00	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	CC	LO43	-	-	59	-	-
1970-8968	2440769.08	1970 Jul 1 14:25:00	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	ASC	-	-	-	65	-	-
1970-8969	2440769.12	1970 Jul 1 14:47:00	Rocketsonde	-	-	Chaff	-	-	-	CLBI	-	-	-	63	-	-
1970-8970	2440769.12	1970 Jul 1 15:00:00	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	WI	-	-	-	50	-	-
1970-8971	2440769.12	1970 Jul 1 15:00:00	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	SHER	-	-	-	64	-	-
1970-8972	2440769.13	1970 Jul 1 15:04:59	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	WI	-	-	-	65	-	-
1970-8973	2440769.19	1970 Jul 1 16:30:00	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	WI	-	-	-	59	-	-
1970-8974	2440769.21	1970 Jul 1 17:00:00	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	NS	-	-	-	64	-	-
1970-8975	2440769.25	1970 Jul 1 18:01:59	Rocketsonde	-	-	Met. Para, Arcasonde	-	-	-	ANI	-	-	-	39	-	-
1970-8976	2440769.29	1970 Jul 1 18:59:59	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	ANI	-	-	-	46	-	-
1970-8977	2440769.29	1970 Jul 1 18:59:59	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	GRLY	-	-	-	56	-	-

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Mission	FlightCode	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee_Km	Range_Km	Dest
1970-#971	2440769_34	1970 Jul 1 2012:00	Rocketsonde	-	-	Starute	-	-	-	PH	-	-	-	59	-	-
1970-#972	2440769_38	1970 Jul 1 2112:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	KAU	-	-	-	54	-	-
1970-#973	2440769_52	1970 Jul 2 0034:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	GLLY	-	-	-	57	-	-
1970-#974	2440769_56	1970 Jul 2 0130:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	KMR	-	-	-	62	-	-
1970-#975	2440770_12	1970 Jul 2 1500:00	Rocketsonde	-	-	Met Para, Arcsosome	-	-	-	SHER	-	-	-	65	-	-
1970-#976	2440770_16	1970 Jul 2 1547:59	Rocketsonde	-	-	Met Para, Arcsosome	-	-	-	WI	-	-	-	61	-	-
1970-#977	2440770_33	1970 Jul 2 2000:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	GLLY	-	-	-	67	-	-
1970-#978	2440770_42	1970 Jul 2 2200:59	Rocketsonde	-	-	Met Para	-	-	-	KAU	-	-	-	54	-	-
1970-#979	2440771_56	1970 Jul 4 0130:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	KMR	-	LO43	-	62	-	-
1970-#980	2440774_04	1970 Jul 6 1259:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	CC	-	-	-	49	-	-
1970-#981	2440774_08	1970 Jul 6 1400:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	ASC	-	-	-	58	-	-
1970-#982	2440774_12	1970 Jul 6 1421:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	AUT	-	-	-	64	-	-
1970-#983	2440774_17	1970 Jul 6 1609:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	SHER	-	-	-	61	-	-
1970-#984	2440774_19	1970 Jul 6 1630:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	WI	-	-	-	65	-	-
1970-#985	2440774_21	1970 Jul 6 1700:00	Rocketsonde	-	-	Starute	-	-	-	PH	-	-	-	59	-	-
1970-#86	2440774_28	1970 Jul 6 1945:00	Rocketsonde	-	-	Chief	-	-	-	GLLY	-	-	-	45	-	-
1970-#986	2440774_42	1970 Jul 6 2159:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	KAU	-	-	-	54	-	-
1970-#987	2440775_15	1970 Jul 7 1533:59	Rocketsonde	-	-	Met Para	-	-	-	PH	-	-	-	50	-	-
1970-#988	2440775_46	1970 Jul 7 2302:00	Rocketsonde	-	-	Met Para	-	-	-	KAU	-	-	-	59	-	-
1970-#989	2440776_04	1970 Jul 8 1259:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	CC	-	LO43	-	60	-	-
1970-#990	2440776_08	1970 Jul 8 1400:00	Rocketsonde	-	-	Met Para, Arcsosome	-	-	-	AUT	-	-	-	60	-	-
1970-#991	2440776_08	1970 Jul 8 1400:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	ASC	-	-	-	59	-	-
1970-#992	2440776_12	1970 Jul 8 1500:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	SHER	-	-	-	56	-	-
1970-#993	2440776_16	1970 Jul 8 1556:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PH	-	-	-	60	-	-
1970-#994	2440776_18	1970 Jul 8 1625:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	WI	-	-	-	64	-	-
1970-#995	2440776_23	1970 Jul 8 1730:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PRIM	-	-	-	55	-	-
1970-#996	2440776_25	1970 Jul 8 1800:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	GLLY	-	-	-	56	-	-
1970-#997	2440776_29	1970 Jul 8 1855:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	KAU	-	-	-	60	-	-
1970-#998	2440776_40	1970 Jul 8 2142:00	Rocketsonde	-	-	Met Para, Arcsosome	-	-	-	RMR	-	-	-	60	-	-
1970-#1000	2440776_59	1970 Jul 9 0205:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PH	-	-	-	53	-	-
1970-#1001	2440777_16	1970 Jul 9 1545:59	Rocketsonde	-	-	Met Para	-	-	-	KAU	-	-	-	52	-	-
1970-#1002	2440777_42	1970 Jul 9 2159:59	Rocketsonde	-	-	Met Para	-	-	-	CC	-	LO43	-	56	-	-
1970-#1003	2440778_04	1970 Jul 10 1259:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	ASC	-	-	-	60	-	-
1970-#1004	2440778_08	1970 Jul 10 1400:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	SHER	-	-	-	63	-	-
1970-#1005	2440778_20	1970 Jul 10 1644:59	Rocketsonde	-	-	Met Para, Arcsosome	-	-	-	PH	-	-	-	57	-	-
1970-#1006	2440778_21	1970 Jul 10 1657:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	MS	-	-	-	57	-	-
1970-#1007	2440778_21	1970 Jul 10 1700:00	Rocketsonde	-	-	Chief	-	-	-	GLLY	-	-	-	60	-	-
1970-#1008	2440778_21	1970 Jul 10 1700:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	RMR	-	-	-	60	-	-
1970-#1009	2440778_26	1970 Jul 11 0130:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	CC	-	LO43	-	58	-	-
1970-#1010	2440781_04	1970 Jul 13 1259:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	CC	-	-	-	62	-	-
1970-#1011	2440781_08	1970 Jul 13 1400:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	ASC	-	-	-	62	-	-
1970-#1012	2440781_18	1970 Jul 13 1619:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	SHER	-	-	-	59	-	-
1970-#1013	2440781_18	1970 Jul 13 1621:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PH	-	-	-	60	-	-
1970-#1014	2440781_19	1970 Jul 13 1621:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	WI	-	-	-	59	-	-
1970-#1015	2440781_21	1970 Jul 13 1700:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	AUT	-	-	-	56	-	-
1970-#1016	2440781_21	1970 Jul 13 1700:00	Rocketsonde	-	-	Met Para, Arcsosome	-	-	-	WI	-	-	-	56	-	-
1970-#1017	2440781_21	1970 Jul 13 1700:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	MS	-	-	-	51	-	-
1970-#1018	2440781_25	1970 Jul 14 0234:59	Rocketsonde	-	-	Chief	-	-	-	GLLY	-	-	-	51	-	-
1970-#1019	2440781_25	1970 Jul 14 0234:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	KAU	-	-	-	56	-	-
1970-#1020	2440781_25	1970 Jul 14 0234:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	KMR	-	-	-	57	-	-
1970-#1021	2440782_05	1970 Jul 15 1311:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	CC	-	LO43	-	56	-	-
1970-#1022	2440782_09	1970 Jul 15 1430:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	CLBT	-	-	-	62	-	-
1970-#1023	2440782_10	1970 Jul 15 1430:00	Rocketsonde	-	-	Chief	-	-	-	ASC	-	-	-	61	-	-
1970-#1024	2440783_10	1970 Jul 15 1430:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	SHER	-	-	-	65	-	-
1970-#1025	2440783_12	1970 Jul 15 1430:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	NS	-	-	-	60	-	-
1970-#1026	2440783_12	1970 Jul 15 1430:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	GLLY	-	-	-	57	-	-
1970-#1027	2440783_24	1970 Jul 15 1745:00	Rocketsonde	-	-	Met Para, Arcsosome	-	-	-	KAU	-	-	-	62	-	-
1970-#1028	2440783_29	1970 Jul 15 1859:59	Rocketsonde	-	-	Met Para	-	-	-	KMR	-	-	-	51	-	-
1970-#1029	2440783_38	1970 Jul 16 0153:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	WI	-	-	-	57	-	-
1970-#1030	2440783_58	1970 Jul 16 1629:59	Rocketsonde	-	-	Met Para, Arcsosome	-	-	-	PH	-	-	-	51	-	-
1970-#1031	2440784_18	1970 Jul 16 1629:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	WI	-	-	-	57	-	-
1970-#1032	2440784_22	1970 Jul 16 1719:00	Rocketsonde	-	-	Met Para, Arcsosome	-	-	-	WI	-	-	-	55	-	-
1970-#1033	2440784_24	1970 Jul 16 1746:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	KAU	-	LO43	-	50	-	-
1970-#1034	2440784_24	1970 Jul 16 1746:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	CC	-	-	-	62	-	-
1970-#1035	2440785_04	1970 Jul 17 1259:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	ASC	-	LO43	-	62	-	-
1970-#1036	2440956_08	1971 Jan 4 1400:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	CC	-	-	-	66	-	-
1970-#1037	2440956_08	1971 Jan 4 1400:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	NS	-	LO43	-	66	-	-
1970-#1038	2440956_31	1971 Jan 4 1930:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	NS	-	-	-	70	-	-
1970-#1039	2440956_58	1971 Jan 5 0156:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	KMR	-	-	-	94	-	-
1970-#1040	2440957_33	1971 Jan 5 2000:00	Rocketsonde	-	-	Met Para, STS	-	-	-	NS	-	-	-	47	-	-
1970-#1041	2440957_59	1971 Jan 6 0959:59	Rocketsonde	-	-	Met Sphero	-	-	-	ASC	-	-	-	62	-	-
1970-#1042	2440958_08	1971 Jan 6 1400:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	CC	-	LO43	-	62	-	-
1970-#1043	2440958_12	1971 Jan 6 1400:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	CC	-	-	-	61	-	-
1970-#1044	2440958_25	1971 Jan 6 1800:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PRIM	-	-	-	58	-	-
1970-#1045	2440958_32	1971 Jan 6 1941:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	WI	-	-	-	61	-	-
1970-#1046	2440958_34	1971 Jan 6 2015:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	NS	-	-	-	48	-	-
1970-#1047	2440958_37	1971 Jan 7 0138:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	KMR	-	-	-	61	-	-
1970-#1048	2440959_29	1971 Jan 7 1859:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PH	-	-	-	57	-	-
1970-#1049	2440959_38	1971 Jan 7 2100:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	KAU	-	-	-	55	-	-
1970-#1050	2440959_38	1971 Jan 7 2100:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	WI	-	-	-	61	-	-
1970-#1051	2440960_08	1971 Jan 8 1400:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	CC	-	LO43	-	61	-	-

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Mission	FlightCode	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee_Km	Range_Km	Dest
1971-422	2440960.13	1971 Jan 8 1504:59	Rocketsonde	-	-	Met. Para, AM/DMQ-9	-	-	-	THU	-	-	-	55	-	-
1971-708	2440960.17	1971 Jan 8 1610:59	Rocketsonde	-	-	Met. Sphere	-	-	-	PH	-	-	-	90	-	-
1971-423	2440960.18	1971 Jan 8 1624:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	MI	-	-	-	56	-	-
1971-424	2440960.21	1971 Jan 8 1709:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PH	-	-	-	59	-	-
1971-425	2440960.24	1971 Jan 8 1745:00	Rocketsonde	-	-	Chaff	-	-	-	GRLLC	-	-	-	62	-	-
1971-426	2440960.25	1971 Jan 8 1800:00	Rocketsonde	-	-	Met. Sphere	-	-	-	WS	-	-	-	51	-	-
1971-427	2440960.25	1971 Jan 8 1800:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PRIM	-	-	-	65	-	-
1971-431	2440960.56	1971 Jan 9 0130:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	KHR	-	-	-	61	-	-
1971-432	2440961.12	1971 Jan 9 0130:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	THU	-	-	-	63	-	-
1971-433	2440961.14	1971 Jan 10 0240:00	Rocketsonde	-	-	Met. Para, AM/DMQ-9	-	-	-	THU	-	-	-	43	-	-
1971-434	2440962.14	1971 Jan 10 0240:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	THU	-	-	-	43	-	-
1971-435	2440963.08	1971 Jan 11 1445:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	ASC	-	-	-	59	-	-
1971-436	2440963.09	1971 Jan 11 1445:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	CC	-	-	-	54	-	-
1971-405	2440963.11	1971 Jan 11 1435:00	Rocketsonde	-	-	Met. Para, Arcasonde	-	-	-	AIT	-	-	-	40	-	-
1971-406	2440963.21	1971 Jan 11 1700:00	Rocketsonde	-	-	Met. Para, STS	-	-	-	WS	-	-	-	46	-	-
1971-437	2440963.22	1971 Jan 11 1715:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	MI	-	-	-	60	-	-
1971-438	2440963.28	1971 Jan 11 1845:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PH	-	-	-	58	-	-
1971-440	2440963.29	1971 Jan 11 1859:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	WS	-	-	-	63	-	-
1971-441	2440964.08	1971 Jan 12 1400:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	CC	-	-	-	62	-	-
1971-441	2440964.17	1971 Jan 12 1611:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PRIM	-	-	-	52	-	-
1971-444	2440964.26	1971 Jan 12 1818:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	MI	-	-	-	59	-	-
1971-444	2440964.30	1971 Jan 12 1914:59	Rocketsonde	-	-	Met. Para	-	-	-	WS	-	-	-	60	-	-
1971-446	2440964.39	1971 Jan 12 2121:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	MI	-	-	-	59	-	-
1971-447	2440964.63	1971 Jan 13 0304:59	Rocketsonde	-	-	Met. Para, AM/DMQ-9	-	-	-	THU	-	-	-	50	-	-
1971-448	2440964.69	1971 Jan 13 0427:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PRIM	-	-	-	64	-	-
1971-409	2440966.08	1971 Jan 13 0427:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	CC	-	-	-	57	-	-
1971-460	2440966.19	1971 Jan 13 1400:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	ASC	-	-	-	59	-	-
1971-462	2440966.24	1971 Jan 13 1440:00	Rocketsonde	-	-	Met. Para, AM/DMQ-9	-	-	-	THU	-	-	-	64	-	-
1971-463	2440966.11	1971 Jan 13 1524:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PRIM	-	-	-	51	-	-
1971-465	2440966.17	1971 Jan 13 1557:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	CC	-	-	-	104	-	-
1971-465	2440966.17	1971 Jan 13 1559:59	Rocketsonde	-	-	Met. Sphere	-	-	-	WS	-	-	-	60	-	-
1971-466	2440966.27	1971 Jan 13 1830:00	Rocketsonde	-	-	Met. Para, Arcasonde	-	-	-	AIT	-	-	-	52	-	-
1971-407	2440966.28	1971 Jan 13 1835:00	Rocketsonde	-	-	Met. Para, Arcasonde	-	-	-	MI	-	-	-	49	-	-
1971-468	2440966.31	1971 Jan 13 1929:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	WS	-	-	-	64	-	-
1971-469	2440966.52	1971 Jan 13 1944:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	KHR	-	-	-	64	-	-
1971-469	2440966.52	1971 Jan 13 1944:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	WS	-	-	-	63	-	-
1971-409	2440966.08	1971 Jan 14 0232:00	Rocketsonde	-	-	Met. Para, AM/DMQ-9	-	-	-	THU	-	-	-	46	-	-
1971-462	2440966.19	1971 Jan 14 1400:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	CC	-	-	-	60	-	-
1971-463	2440966.24	1971 Jan 14 1530:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PRIM	-	-	-	59	-	-
1971-464	2440966.24	1971 Jan 14 1747:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PH	-	-	-	55	-	-
1971-465	2440966.30	1971 Jan 14 1748:59	Rocketsonde	-	-	Met. Para, AM/DMQ-9	-	-	-	WS	-	-	-	59	-	-
1971-466	2440966.30	1971 Jan 14 2227:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	MI	-	-	-	50	-	-
1971-467	2440966.45	1971 Jan 14 1914:59	Rocketsonde	-	-	Met. Sphere	-	-	-	KAU	-	-	-	50	-	-
1971-468	2440966.69	1971 Jan 14 2252:39	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PH	-	-	-	61	-	-
1971-469	2440966.69	1971 Jan 15 0351:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PRIM	-	-	-	61	-	-
1971-470	2440966.69	1971 Jan 15 0402:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	CC	-	-	-	59	-	-
1971-471	2440967.07	1971 Jan 15 1404:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PRIM	-	-	-	52	-	-
1971-472	2440967.11	1971 Jan 15 1500:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	THU	-	-	-	72	-	-
1971-474	2440967.17	1971 Jan 15 1604:59	Rocketsonde	-	-	Met. Para, AM/DMQ-9	-	-	-	MI	-	-	-	56	-	-
1971-477	2440967.37	1971 Jan 15 2057:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PH	-	-	-	59	-	-
1971-477	2440967.56	1971 Jan 15 2019:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	MI	-	-	-	57	-	-
1971-476	2440967.56	1971 Jan 16 0119:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	KHR	-	-	-	59	-	-
1971-475	2440968.13	1971 Jan 16 0514:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	THU	-	-	-	57	-	-
1971-475	2440968.13	1971 Jan 16 0514:59	Rocketsonde	-	-	Met. Para, AM/DMQ-9	-	-	-	THU	-	-	-	62	-	-
1971-481	2440969.15	1971 Jan 17 1530:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	ASC	-	-	-	57	-	-
1971-481	2440970.08	1971 Jan 17 1400:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	CC	-	-	-	61	-	-
1971-482	2440970.08	1971 Jan 17 1400:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	CC	-	-	-	57	-	-
1971-483	2440970.24	1971 Jan 17 1751:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PH	-	-	-	59	-	-
1971-484	2440970.25	1971 Jan 17 1806:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PRIM	-	-	-	52	-	-
1971-485	2440970.27	1971 Jan 17 1833:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	MI	-	-	-	60	-	-
1971-486	2440970.29	1971 Jan 17 1902:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	WS	-	-	-	62	-	-
1971-487	2440970.33	1971 Jan 17 1958:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	KAU	-	-	-	58	-	-
1971-488	2440970.50	1971 Jan 18 0000:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	KAU	-	-	-	57	-	-
1971-490	2440970.56	1971 Jan 19 0130:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	KHR	-	-	-	60	-	-
1971-491	2440970.67	1971 Jan 19 0409:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PH	-	-	-	60	-	-
1971-492	2440971.08	1971 Jan 19 1400:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	CC	-	-	-	58	-	-
1971-494	2440971.25	1971 Jan 19 1756:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PRIM	-	-	-	65	-	-
1971-495	2440971.31	1971 Jan 19 1930:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	KAU	-	-	-	59	-	-
1971-496	2440971.33	1971 Jan 19 2000:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	WS	-	-	-	60	-	-
1971-498	2440971.50	1971 Jan 20 0000:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	KAU	-	-	-	59	-	-
1971-4100	2440972.08	1971 Jan 20 1400:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	ASC	-	-	-	51	-	-
1971-4101	2440972.10	1971 Jan 20 1421:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	CC	-	-	-	62	-	-
1971-4102	2440972.13	1971 Jan 20 1504:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	THU	-	-	-	92	-	-
1971-433	2440972.19	1971 Jan 20 1632:59	Rocketsonde	-	-	Met. Sphere	-	-	-	CC	-	-	-	92	-	-
1971-4103	2440972.21	1971 Jan 20 1652:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	CC	-	-	-	60	-	-
1971-4104	2440972.23	1971 Jan 20 1730:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PH	-	-	-	60	-	-
1971-4105	2440972.26	1971 Jan 20 1812:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	AIT	-	-	-	58	-	-
1971-4106	2440972.27	1971 Jan 20 1826:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	MI	-	-	-	59	-	-
1971-4107	2440972.27	1971 Jan 20 1826:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PRIM	-	-	-	68	-	-
1971-4108	2440972.29	1971 Jan 20 1830:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	WS	-	-	-	61	-	-
1971-4109	2440972.31	1971 Jan 20 1859:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	WS	-	-	-	56	-	-
1971-4110	2440972.56	1971 Jan 21 0130:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	KAU	-	-	-	62	-	-
1971-4113	2440973.25	1971 Jan 21 0130:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	KHR	-	-	-	59	-	-
1971-4114	2440973.25	1971 Jan 21 1834:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PH	-	-	-	65	-	-
1971-4115	2440973.29	1971 Jan 21 1901:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	MI	-	-	-	64	-	-
1971-4116	2440973.32	1971 Jan 21 1937:59	Rocketsonde	-	-	Met. Sphere	-	-	-	MI	-	-	-	64	-	-
1971-4117	2440973.37	1971 Jan 21 2048:59	Rocketsonde	-	-	Met. Sphere	-	-	-	MI	-	-	-	66	-	-
1971-4118	2440973.43	1971 Jan 21 2215:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	KAU	-	-	-	61	-	-

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Mission	FlightCode	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee_Km	Range_Km	Dest
1971-4122	2440974.17	1971 Jan 22 1559:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PH	-	-	-	61	-	-
1971-4123	2440974.27	1971 Jan 22 1822:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PRIM	-	-	-	61	-	-
1971-4124	2440974.50	1971 Jan 23 0000:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	KAU	-	-	-	56	-	-
1971-4111	2440974.51	1971 Jan 23 0014:59	Rocketsonde	-	-	Met. Sphere	-	-	-	WS	-	-	-	46	-	-
1971-4139	2440974.52	1971 Jan 23 0927:59	Rocketsonde	-	-	Met. Sphere	-	-	-	KAU	-	-	-	90	-	-
1971-4128	2440974.56	1971 Jan 23 0130:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	KMR	-	-	-	62	-	-
1971-4132	2440977.08	1971 Jan 25 1400:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	ASC	-	-	-	59	-	-
1971-4134	2440977.17	1971 Jan 25 1559:59	Rocketsonde	-	-	Met. Para.	-	-	-	WS	-	-	-	69	-	-
1971-4135	2440977.19	1971 Jan 25 1630:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	WS	-	-	-	66	-	-
1971-4137	2440977.22	1971 Jan 25 1715:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	WS	-	-	-	58	-	-
1971-4138	2440977.25	1971 Jan 25 1800:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PRIM	-	-	-	65	-	-
1971-4139	2440977.30	1971 Jan 25 1911:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	WI	-	-	-	58	-	-
1971-4139	2440977.33	1971 Jan 25 1956:59	Rocketsonde	-	-	Met. Para, Arcsande	-	-	-	PH	-	-	-	56	-	-
1971-4140	2440977.37	1971 Jan 25 2056:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	KAU	-	-	-	53	-	-
1971-4143	2440977.56	1971 Jan 26 0130:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	KMR	-	-	-	61	-	-
1971-4144	2440978.22	1971 Jan 26 1723:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PH	-	-	-	60	-	-
1971-4146	2440978.34	1971 Jan 26 2015:00	Rocketsonde	-	-	Met. Sphere	-	-	-	WS	-	-	-	56	-	-
1971-4148	2440978.44	1971 Jan 26 2230:00	Rocketsonde	-	-	Met. Para.	-	-	-	WS	-	-	-	60	-	-
1971-744	2440978.52	1971 Jan 27 1004:59	Rocketsonde	-	-	Met. Sphere	-	-	-	ASC	-	-	-	96	-	-
1971-4149	2440979.08	1971 Jan 27 1400:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	ASC	-	-	-	61	-	-
1971-4150	2440979.10	1971 Jan 27 1422:00	Rocketsonde	-	-	Chaf.	-	-	-	CLFI	-	-	-	63	-	-
1971-4151	2440979.15	1971 Jan 27 1534:59	Rocketsonde	-	-	Met. Para, AI/DK-9	-	-	-	THU	-	-	-	52	-	-
1971-4153	2440979.25	1971 Jan 27 1800:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	CC	LO43	-	-	60	-	-
1971-4154	2440979.27	1971 Jan 27 1829:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	WI	-	-	-	50	-	-
1971-4155	2440979.27	1971 Jan 27 1830:00	Rocketsonde	-	-	Met. Para, Arcsande	-	-	-	AIT	-	-	-	57	-	-
1971-4156	2440979.29	1971 Jan 27 1839:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	WS	-	-	-	63	-	-
1971-4157	2440979.34	1971 Jan 27 2010:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PH	-	-	-	60	-	-
1971-4158	2440979.34	1971 Jan 27 2015:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	CC	LO43	-	-	69	-	-
1971-4160	2440979.57	1971 Jan 28 0133:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	KMR	-	-	-	59	-	-
1971-4161	2440980.27	1971 Jan 28 1824:59	Rocketsonde	-	-	Starute	-	-	-	WI	-	-	-	61	-	-
1971-4162	2440980.30	1971 Jan 28 2013:00	Rocketsonde	-	-	Starute	-	-	-	WI	-	-	-	60	-	-
1971-4163	2440980.34	1971 Jan 28 2026:00	Rocketsonde	-	-	Starute	-	-	-	WI	-	-	-	60	-	-
1971-4164	2440980.35	1971 Jan 28 2035:00	Rocketsonde	-	-	Starute	-	-	-	WI	-	-	-	58	-	-
1971-4165	2440980.37	1971 Jan 28 2039:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PH	-	-	-	60	-	-
1971-4166	2440980.37	1971 Jan 28 2039:00	Rocketsonde	-	-	Met. Sphere	-	-	-	WS	-	-	-	66	-	-
1971-4167	2440981.08	1971 Jan 28 2114:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	CC	LO43	-	-	59	-	-
1971-4168	2440981.12	1971 Jan 29 1402:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	CC	LO43	-	-	60	-	-
1971-4169	2440981.15	1971 Jan 29 1500:00	Rocketsonde	-	-	Starute	-	-	-	PI	-	-	-	63	-	-
1971-4170	2440981.16	1971 Jan 29 1537:59	Rocketsonde	-	-	Met. Sphere	-	-	-	PH	-	-	-	67	-	-
1971-4171	2440981.16	1971 Jan 29 1551:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PH	-	-	-	62	-	-
1971-4172	2440981.19	1971 Jan 29 1553:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PI	-	-	-	61	-	-
1971-4173	2440981.22	1971 Jan 29 1631:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PH	-	-	-	54	-	-
1971-4174	2440981.22	1971 Jan 29 1636:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	KMR	-	-	-	61	-	-
1971-4175	2440981.52	1971 Jan 30 0144:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	WS	-	-	-	69	-	-
1971-4176	2440981.56	1971 Jan 30 0144:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	ASC	LO43	-	-	61	-	-
1971-4177	2440981.56	1971 Jan 30 0144:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	CC	LO43	-	-	61	-	-
1971-4178	2440985.46	1971 Feb 1 1911:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	ASC	-	-	-	61	-	-
1971-4179	2440985.46	1971 Feb 1 1911:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	ASC	-	-	-	61	-	-
1971-4180	2440985.46	1971 Feb 1 1911:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	ASC	-	-	-	61	-	-
1971-4181	2440985.46	1971 Feb 1 1911:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	ASC	-	-	-	61	-	-
1971-4182	2440985.46	1971 Feb 1 1911:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	ASC	-	-	-	61	-	-
1971-4183	2440985.46	1971 Feb 1 1911:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	ASC	-	-	-	61	-	-
1971-4184	2440984.25	1971 Feb 1 1755:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	ASC	-	-	-	56	-	-
1971-4185	2440984.25	1971 Feb 1 1755:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	ASC	-	-	-	56	-	-
1971-4186	2440984.25	1971 Feb 1 1755:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	ASC	-	-	-	56	-	-
1971-4187	2440984.25	1971 Feb 1 1755:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	ASC	-	-	-	56	-	-
1971-4188	2440984.41	1971 Feb 1 2143:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PH	-	-	-	57	-	-
1971-4189	2440984.41	1971 Feb 1 2143:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PH	-	-	-	57	-	-
1971-4190	2440984.41	1971 Feb 1 2143:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PH	-	-	-	57	-	-
1971-4191	2440985.19	1971 Feb 2 1631:59	Rocketsonde	-	-	Met. Para, Arcsande	-	-	-	KAU	-	-	-	53	-	-
1971-4192	2440985.22	1971 Feb 2 1715:00	Rocketsonde	-	-	Met. Sphere	-	-	-	WS	-	-	-	70	-	-
1971-4193	2440985.22	1971 Feb 2 1715:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	KMR	-	-	-	59	-	-
1971-4194	2440985.22	1971 Feb 2 1715:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PH	-	-	-	52	-	-
1971-4195	2440985.27	1971 Feb 2 2100:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	WS	-	-	-	57	-	-
1971-4196	2440985.27	1971 Feb 2 2100:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	WS	-	-	-	57	-	-
1971-4197	2440985.27	1971 Feb 2 2100:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	WS	-	-	-	57	-	-
1971-4198	2440985.27	1971 Feb 2 2100:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	ASC	-	-	-	63	-	-
1971-4199	2440985.27	1971 Feb 2 2100:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	ASC	-	-	-	63	-	-
1971-4200	2440986.08	1971 Feb 3 1400:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	ASC	LO43	-	-	59	-	-
1971-4201	2440986.12	1971 Feb 3 1443:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	ASC	-	-	-	59	-	-
1971-4202	2440986.21	1971 Feb 3 1659:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	ASC	LO43	-	-	57	-	-
1971-4203	2440986.24	1971 Feb 3 1747:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	ASC	-	-	-	63	-	-
1971-4204	2440986.26	1971 Feb 3 1812:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	ASC	LO43	-	-	75	-	-
1971-4205	2440986.35	1971 Feb 3 2025:59	Rocketsonde	-	-	Met. Sphere	-	-	-	CC	LO43	-	-	85	-	-
1971-4206	2440986.35	1971 Feb 3 2125:59	Rocketsonde	-	-	Met. Sphere	-	-	-	PM	-	-	-	58	-	-
1971-4207	2440986.41	1971 Feb 3 2125:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PM	-	-	-	58	-	-
1971-4208	2440986.46	1971 Feb 4 0130:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PRIM	-	-	-	64	-	-
1971-4209	2440987.21	1971 Feb 4 1200:00	Rocketsonde	-	-	Met. Sphere	-	-	-	KAU	-	-	-	64	-	-
1971-4210	2440987.21	1971 Feb 4 1200:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	KMR	-	-	-	59	-	-
1971-4211	2440987.21	1971 Feb 4 1200:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	WS	-	-	-	66	-	-
1971-4212	2440987.23	1971 Feb 4 1859:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	WS	-	-	-	70	-	-
1971-4213	2440987.33	1971 Feb 4 2000:00	Rocketsonde	-	-	Met. Para.	-	-	-	WS	-	-	-	57	-	-
1971-4214	2440987.38	1971 Feb 4 2100:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	KAU	-	-	-	59	-	-
1971-4215	2440988.08	1971 Feb 5 0010:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	CC	LO43	-	-	59	-	-
1971-4216	2440988.08	1971 Feb 5 1400:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	CC	LO43	-	-	55	-	-
1971-4217	2440988.25	1971 Feb 5 1400:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	CC	LO43	-	-	61	-	-
1971-4218	2440988.29	1971 Feb 5 1755:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	ASC	-	-	-	62	-	-
1971-4219	2440988.29	1971 Feb 5 1859:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PRIM	-	-	-	60	-	-
1971-4220	2440988.37	1971 Feb 5 2058:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	WS	-	-	-	62	-	-
1971-4221	2440988.40	1971 Feb 5 2143:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PM	-	-	-	60	-	-
1971																

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Mission	FlightCode	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee_Km	Range_Km	Dest
1971-4227	2440991.29	1971 Feb 8 1855:59	Rocketsonde	-	-	Starute, Datasonde	-	-	WS	-	-	-	-	56	-	-
1971-4229	2440991.40	1971 Feb 8 2132:00	Rocketsonde	-	-	Starute, Datasonde	-	-	KAU	-	-	-	-	53	-	-
1971-761	2440992.17	1971 Feb 9 1555:59	Rocketsonde	-	-	Met. Sphere	-	-	CC	LO43	-	-	-	85	-	-
1971-4230	2440992.18	1971 Feb 9 1615:59	Rocketsonde	-	-	Starute, Datasonde	-	-	WI	-	-	-	-	61	-	-
1971-4231	2440992.23	1971 Feb 9 1730:00	Rocketsonde	-	-	Met. Para, Arcasonde	-	-	WS	-	-	-	-	63	-	-
1971-4232	2440992.23	1971 Feb 9 1730:00	Rocketsonde	-	-	Starute, Datasonde	-	-	PH	-	-	-	-	61	-	-
1971-4234	2440992.32	1971 Feb 9 1944:59	Rocketsonde	-	-	Met. Para, Arcasonde	-	-	WS	-	-	-	-	63	-	-
1971-4235	2440992.40	1971 Feb 9 2130:00	Rocketsonde	-	-	Starute, Datasonde	-	-	KAU	-	-	-	-	104	-	-
1971-763	2440992.92	1971 Feb 10 0959:59	Rocketsonde	-	-	Met. Sphere	-	-	ASC	-	-	-	-	60	-	-
1971-416	2440993.08	1971 Feb 10 1400:00	Rocketsonde	-	-	Starute, Datasonde	-	-	ASC	-	-	-	-	60	-	-
1971-4238	2440993.09	1971 Feb 10 1411:00	Rocketsonde	-	-	Met. Para, Arcasonde	-	-	AUT	-	-	-	-	63	-	-
1971-4239	2440993.10	1971 Feb 10 1423:00	Rocketsonde	-	-	Starute, Datasonde	-	-	CLBI	-	-	-	-	57	-	-
1971-4240	2440993.14	1971 Feb 10 1515:59	Rocketsonde	-	-	Met. Para, Arcasonde	-	-	WI	LO43	-	-	-	60	-	-
1971-4241	2440993.17	1971 Feb 10 1559:59	Rocketsonde	-	-	Starute, Datasonde	-	-	WI	-	-	-	-	53	-	-
1971-4242	2440993.18	1971 Feb 10 1612:59	Rocketsonde	-	-	Met. Sphere	-	-	CC	-	-	-	-	58	-	-
1971-4243	2440993.20	1971 Feb 10 1646:59	Rocketsonde	-	-	Starute, Datasonde	-	-	PH	-	-	-	-	66	-	-
1971-4244	2440993.25	1971 Feb 10 1800:59	Rocketsonde	-	-	Starute, Datasonde	-	-	PRIM	-	-	-	-	53	-	-
1971-4246	2440993.35	1971 Feb 10 2030:00	Rocketsonde	-	-	Starute, Datasonde	-	-	WS	-	-	-	-	66	-	-
1971-4247	2440993.44	1971 Feb 10 2231:59	Rocketsonde	-	-	Met. Sphere	-	-	KAU	-	-	-	-	61	-	-
1971-4248	2440993.46	1971 Feb 10 2302:00	Rocketsonde	-	-	Starute, Datasonde	-	-	KAU	-	-	-	-	64	-	-
1971-4249	2440993.56	1971 Feb 11 0130:00	Rocketsonde	-	-	Starute, Datasonde	-	-	KRR	-	-	-	-	58	-	-
1971-4252	2440994.27	1971 Feb 11 1633:00	Rocketsonde	-	-	Starute, Datasonde	-	-	PH	-	-	-	-	63	-	-
1971-4253	2440994.39	1971 Feb 11 2114:59	Rocketsonde	-	-	Starute, Datasonde	-	-	WS	-	-	-	-	67	-	-
1971-4254	2440994.40	1971 Feb 11 2133:59	Rocketsonde	-	-	Starute, Datasonde	-	-	KAU	-	-	-	-	60	-	-
1971-4255	2440995.08	1971 Feb 12 1400:00	Rocketsonde	-	-	Starute, Datasonde	-	-	ASC	-	-	-	-	62	-	-
1971-4256	2440995.08	1971 Feb 12 1400:00	Rocketsonde	-	-	Starute, Datasonde	-	-	CC	LO43	-	-	-	59	-	-
1971-417	2440995.23	1971 Feb 12 1730:00	Rocketsonde	-	-	Starute, Datasonde	-	-	WS	-	-	-	-	46	-	-
1971-4259	2440995.38	1971 Feb 12 2107:00	Rocketsonde	-	-	Starute, Datasonde	-	-	KAU	-	-	-	-	62	-	-
1971-4260	2440995.41	1971 Feb 12 2146:59	Rocketsonde	-	-	Starute, Datasonde	-	-	PH	-	-	-	-	62	-	-
1971-4261	2440995.58	1971 Feb 13 0201:00	Rocketsonde	-	-	Starute, Datasonde	-	-	KRR	-	-	-	-	64	-	-
1971-4262	2440996.25	1971 Feb 15 1755:00	Rocketsonde	-	-	Starute, Datasonde	-	-	PRIM	-	-	-	-	64	-	-
1971-419	2440999.14	1971 Feb 16 1518:00	Rocketsonde	-	-	Chaff	-	-	WI	-	-	-	-	26	-	-
1971-420	2440999.18	1971 Feb 16 1518:00	Rocketsonde	-	-	Chaff	-	-	WI	-	-	-	-	22	-	-
1971-4264	2440999.20	1971 Feb 16 1647:59	Rocketsonde	-	-	Starute, Arcasonde	-	-	WI	-	-	-	-	46	-	-
1971-421	2440999.35	1971 Feb 16 2030:00	Rocketsonde	-	-	Starute, Datasonde	-	-	WS	-	-	-	-	46	-	-
1971-4265	2440999.39	1971 Feb 16 2106:00	Rocketsonde	-	-	Starute, Datasonde	-	-	KAU	-	-	-	-	102	-	-
1971-773	2440999.57	1971 Feb 17 1115:00	Rocketsonde	-	-	Met. Sphere	-	-	ASC	-	-	-	-	59	-	-
1971-4267	2441000.08	1971 Feb 17 1400:00	Rocketsonde	-	-	Starute, Datasonde	-	-	ASC	LO43	-	-	-	49	-	-
1971-422	2441000.10	1971 Feb 17 1417:00	Rocketsonde	-	-	Starute, Datasonde	-	-	CC	-	-	-	-	64	-	-
1971-4268	2441000.11	1971 Feb 17 1440:00	Rocketsonde	-	-	Starute, Datasonde	-	-	ASC	-	-	-	-	60	-	-
1971-4270	2441000.14	1971 Feb 17 1517:00	Rocketsonde	-	-	Starute, Datasonde	-	-	PRIM	-	-	-	-	59	-	-
1971-4271	2441000.25	1971 Feb 17 1804:59	Rocketsonde	-	-	Starute, Datasonde	-	-	PH	-	-	-	-	60	-	-
1971-4272	2441000.29	1971 Feb 17 1856:00	Rocketsonde	-	-	Starute, Datasonde	-	-	WS	-	-	-	-	66	-	-
1971-4273	2441000.29	1971 Feb 17 1859:59	Rocketsonde	-	-	Starute, Datasonde	-	-	ASC	-	-	-	-	66	-	-
1971-4274	2441000.32	1971 Feb 17 1944:59	Rocketsonde	-	-	Met. Sphere	-	-	KAU	-	-	-	-	65	-	-
1971-4275	2441000.39	1971 Feb 17 2126:00	Rocketsonde	-	-	Starute, Datasonde	-	-	KAU	-	-	-	-	90	-	-
1971-4276	2441000.41	1971 Feb 18 04:00	Rocketsonde	-	-	Starute, Datasonde	-	-	KAU	-	-	-	-	64	-	-
1971-4277	2441001.33	1971 Feb 18 0527:59	Rocketsonde	-	-	Starute, Datasonde	-	-	KRR	-	-	-	-	64	-	-
1971-4278	2441002.08	1971 Feb 18 1307:59	Rocketsonde	-	-	Starute, Datasonde	-	-	ASC	-	-	-	-	67	-	-
1971-4279	2441002.08	1971 Feb 18 1400:00	Rocketsonde	-	-	Starute, Datasonde	-	-	CC	LO43	-	-	-	57	-	-
1971-4280	2441002.13	1971 Feb 18 1503:59	Rocketsonde	-	-	Met. Para, Arcasonde	-	-	AUT	-	-	-	-	70	-	-
1971-4281	2441002.25	1971 Feb 18 1800:00	Rocketsonde	-	-	Starute, Datasonde	-	-	PRIM	-	-	-	-	63	-	-
1971-4282	2441002.29	1971 Feb 18 1859:59	Rocketsonde	-	-	Starute, Datasonde	-	-	WS	-	-	-	-	55	-	-
1971-4283	2441002.38	1971 Feb 18 2108:00	Rocketsonde	-	-	Starute, Datasonde	-	-	KAU	-	-	-	-	57	-	-
1971-4284	2441002.62	1971 Feb 20 0252:00	Rocketsonde	-	-	Met. Para, Arcasonde	-	-	ASC	-	-	-	-	60	-	-
1971-4287	2441005.08	1971 Feb 22 1400:00	Rocketsonde	-	-	Starute, Datasonde	-	-	KRR	-	-	-	-	58	-	-
1971-4288	2441005.08	1971 Feb 22 1400:00	Rocketsonde	-	-	Starute, Datasonde	-	-	AUT	-	-	-	-	51	-	-
1971-4289	2441005.08	1971 Feb 22 1400:00	Rocketsonde	-	-	Starute, Datasonde	-	-	CC	LO43	-	-	-	58	-	-
1971-4290	2441005.21	1971 Feb 22 1657:59	Rocketsonde	-	-	Starute, Datasonde	-	-	PH	-	-	-	-	60	-	-
1971-4291	2441005.30	1971 Feb 22 1914:59	Rocketsonde	-	-	Starute, Datasonde	-	-	WS	-	-	-	-	63	-	-
1971-4292	2441005.38	1971 Feb 23 0100:00	Rocketsonde	-	-	Starute, Datasonde	-	-	KAU	-	-	-	-	58	-	-
1971-4293	2441006.29	1971 Feb 23 1859:59	Rocketsonde	-	-	Starute, Datasonde	-	-	WS	-	-	-	-	66	-	-
1971-4294	2441006.33	1971 Feb 23 2000:00	Rocketsonde	-	-	Met. Para, Arcasonde	-	-	ASC	-	-	-	-	61	-	-
1971-4295	2441006.38	1971 Feb 23 2100:00	Rocketsonde	-	-	Starute, Datasonde	-	-	WS	-	-	-	-	66	-	-
1971-4296	2441006.38	1971 Feb 23 2100:00	Rocketsonde	-	-	Starute, Datasonde	-	-	KAU	-	-	-	-	60	-	-
1971-4297	2441006.92	1971 Feb 23 2112:59	Rocketsonde	-	-	Starute, Datasonde	-	-	PM	-	-	-	-	103	-	-
1971-4298	2441007.08	1971 Feb 24 0959:59	Rocketsonde	-	-	Met. Sphere	-	-	ASC	-	-	-	-	54	-	-
1971-4299	2441007.09	1971 Feb 24 1400:00	Rocketsonde	-	-	Starute, Datasonde	-	-	AUT	-	-	-	-	59	-	-
1971-4300	2441007.11	1971 Feb 24 1415:00	Rocketsonde	-	-	Starute, Datasonde	-	-	AUT	-	-	-	-	58	-	-
1971-4301	2441007.14	1971 Feb 24 1527:59	Rocketsonde	-	-	Starute, Datasonde	-	-	CLBI	-	-	-	-	65	-	-
1971-431	2441007.17	1971 Feb 24 1559:59	Rocketsonde	-	-	Chaff	-	-	PM	-	-	-	-	71	-	-
1971-4302	2441007.25	1971 Feb 24 1755:00	Rocketsonde	-	-	Starute, Datasonde	-	-	PRIM	-	-	-	-	48	-	-
1971-4303	2441007.35	1971 Feb 24 1859:59	Rocketsonde	-	-	Starute, Datasonde	-	-	WS	-	-	-	-	62	-	-
1971-4304	2441007.38	1971 Feb 24 2024:00	Rocketsonde	-	-	Starute, Datasonde	-	-	KAU	-	-	-	-	63	-	-
1971-4306	2441008.18	1971 Feb 25 1614:59	Rocketsonde	-	-	Starute, Datasonde	-	-	WT	-	-	-	-	60	-	-
1971-4307	2441008.18	1971 Feb 25 1614:59	Rocketsonde	-	-	Starute, Datasonde	-	-	PM	-	-	-	-	85	-	-
1971-4308	2441008.40	1971 Feb 25 2115:59	Rocketsonde	-	-	Starute, Datasonde	-	-	KAU	-	-	-	-	61	-	-
1971-4309	2441008.51	1971 Feb 25 2138:59	Rocketsonde	-	-	Starute, Datasonde	-	-	GRLC	-	-	-	-	62	-	-
1971-4310	2441008.56	1971 Feb 26 0014:59	Rocketsonde	-	-	Starute, Datasonde	-	-	WS	-	-	-	-	63	-	-
1971-4311	2441009.06	1971 Feb 26 0132:59	Rocketsonde	-	-	Starute, Datasonde	-	-	AUT	-	-	-	-	56	-	-
1971-4312	2441009.08	1971 Feb 26 1400:00	Rocketsonde	-	-	Starute, Datasonde	-	-	ASC	-	-	-	-	60	-	-
1971-4313	2441009.08	1971 Feb 26 1400:00	Rocketsonde	-	-	Starute, Datasonde	-	-	CC	LO43	-	-	-	57	-	-
1971-4314	2441009.25	1971 Feb 26 1757:00	Rocketsonde	-	-	Starute, Datasonde	-	-	PRIM	-	-	-	-	59	-	-
1971-4314	2441009.31	1971 Feb 26 1930:00	Rocketsonde	-	-	Starute, Datasonde	-	-	WS	-	-	-	-	63	-	-



Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Mission	FlightCode	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee_Km	Range_Km	Dest
1971-4409	2441038_20	1971 Mar 24 16:44:59	Rocketsonde	-	-	Met. Para, Arcasonde	-	-	-	AIT	-	-	-	61	-	-
1971-4410	2441038_23	1971 Mar 24 17:30:00	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	WI	-	-	-	61	-	-
1971-4411	2441038_33	1971 Mar 24 20:00:00	Rocketsonde	-	-	Chaff	-	-	-	WS	-	-	-	58	-	-
1971-4412	2441038_37	1971 Mar 24 20:56:00	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	PH	-	-	-	61	-	-
1971-4413	2441038_38	1971 Mar 24 21:11:00	Rocketsonde	-	-	Met. Sphere	-	-	-	KAU	-	-	-	90	-	-
1971-4414	2441038_40	1971 Mar 24 21:42:00	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	KAU	-	-	-	60	-	-
1971-4415	2441038_59	1971 Mar 25 02:15:00	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	KMR	-	-	-	58	-	-
1971-4416	2441038_27	1971 Mar 25 18:30:00	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	WS	-	-	-	54	-	-
1971-4417	2441038_30	1971 Mar 25 19:14:59	Rocketsonde	-	-	Met. Para	-	-	-	WS	-	-	-	63	-	-
1971-4419	2441037_08	1971 Mar 26 14:00:00	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	CC	L043	-	-	59	-	-
1971-4420	2441037_09	1971 Mar 26 14:04:59	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	ASC	-	-	-	56	-	-
1971-4421	2441037_17	1971 Mar 26 16:08:00	Rocketsonde	-	-	Met. Sphere	-	-	-	CC	L043	-	-	90	-	-
1971-4422	2441037_26	1971 Mar 26 18:08:00	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	CC	-	-	-	63	-	-
1971-4423	2441037_35	1971 Mar 26 20:30:00	Rocketsonde	-	-	Met. Para, STS	-	-	-	PRIM	-	-	-	58	-	-
1971-4424	2441037_38	1971 Mar 26 21:00:00	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	WS	-	-	-	57	-	-
1971-4425	2441037_56	1971 Mar 27 01:30:00	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	KAU	-	-	-	60	-	-
1971-4426	2441040_21	1971 Mar 29 17:00:00	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	KMR	-	-	-	66	-	-
1971-4428	2441040_27	1971 Mar 29 18:30:00	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	WS	-	-	-	59	-	-
1971-4429	2441040_38	1971 Mar 29 21:03:59	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	WI	-	-	-	60	-	-
1971-4430	2441040_44	1971 Mar 29 22:30:00	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	PH	-	-	-	58	-	-
1971-4431	2441040_58	1971 Mar 30 01:54:59	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	CC	L043	-	-	61	-	-
1971-4432	2441041_27	1971 Mar 30 01:54:59	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	CC	-	-	-	59	-	-
1971-4433	2441041_38	1971 Mar 30 18:33:00	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	PH	-	-	-	61	-	-
1971-4434	2441041_92	1971 Mar 31 01:30:00	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	KAU	-	-	-	103	-	-
1971-4435	2441042_06	1971 Mar 31 10:04:59	Rocketsonde	-	-	Met. Sphere	-	-	-	ASC	-	-	-	50	-	-
1971-4436	2441042_08	1971 Mar 31 13:30:00	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	AIT	-	-	-	62	-	-
1971-4438	2441042_08	1971 Mar 31 14:04:59	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	ASC	L043	-	-	58	-	-
1971-4439	2441042_29	1971 Mar 31 15:59:59	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	CC	L043	-	-	61	-	-
1971-4440	2441042_29	1971 Mar 31 18:59:59	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	CC	-	-	-	59	-	-
1971-4441	2441042_46	1971 Mar 31 20:00:00	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	PH	-	-	-	59	-	-
1971-4442	2441042_56	1971 Apr 1 01:30:00	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	PH	-	-	-	60	-	-
1971-4443	2441043_27	1971 Apr 1 16:25:59	Rocketsonde	-	-	Met. Sphere	-	-	-	KAU	-	-	-	80	-	-
1971-4443	2441043_38	1971 Apr 1 21:00:00	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	PH	-	-	-	80	-	-
1971-4444	2441043_39	1971 Apr 1 21:26:59	Rocketsonde	-	-	Met. Sphere	-	-	-	ASC	-	-	-	58	-	-
1971-4445	2441043_46	1971 Apr 1 22:56:59	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	PH	-	-	-	80	-	-
1971-4446	2441044_08	1971 Apr 2 14:00:00	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	KAU	-	-	-	80	-	-
1971-4446	2441044_08	1971 Apr 2 14:00:00	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	ASC	L043	-	-	62	-	-
1971-4447	2441044_12	1971 Apr 2 15:00:00	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	CC	-	-	-	58	-	-
1971-4449	2441044_27	1971 Apr 2 16:24:59	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	SHER	-	-	-	56	-	-
1971-4450	2441044_29	1971 Apr 2 18:24:59	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	MS	-	-	-	59	-	-
1971-4450	2441044_29	1971 Apr 2 18:24:59	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	KLY	-	-	-	64	-	-
1971-4451	2441044_38	1971 Apr 2 18:54:59	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	PH	-	-	-	59	-	-
1971-4452	2441044_49	1971 Apr 2 22:26:59	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	PH	-	-	-	54	-	-
1971-4453	2441044_57	1971 Apr 3 04:35:59	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	KMR	-	-	-	58	-	-
1971-4454	2441045_03	1971 Apr 3 04:35:59	Rocketsonde	-	-	Chaff	-	-	-	GRLC	-	-	-	65	-	-
1971-4455	2441045_24	1971 Apr 3 17:41:00	Rocketsonde	-	-	Met. Para, Arcasonde	-	-	-	US	-	-	-	59	-	-
1971-4456	2441045_24	1971 Apr 3 17:41:00	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	GRLC	-	-	-	59	-	-
1971-4457	2441046_71	1971 Apr 5 05:09:00	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	GRLC	-	-	-	55	-	-
1971-4458	2441046_71	1971 Apr 5 05:09:00	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	KMR	-	-	-	59	-	-
1971-4459	2441047_08	1971 Apr 5 09:30:00	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	KMR	-	-	-	59	-	-
1971-4459	2441047_08	1971 Apr 5 14:00:00	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	KMR	-	-	-	59	-	-
1971-4460	2441047_08	1971 Apr 5 14:00:00	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	ASC	-	-	-	60	-	-
1971-4461	2441047_19	1971 Apr 5 15:00:00	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	CC	L043	-	-	60	-	-
1971-4461	2441047_24	1971 Apr 5 17:51:00	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	SHER	-	-	-	61	-	-
1971-4462	2441047_25	1971 Apr 5 18:02:59	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	VI	-	-	-	61	-	-
1971-4463	2441047_25	1971 Apr 5 18:02:59	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	PRIM	-	-	-	61	-	-
1971-4464	2441047_25	1971 Apr 5 18:02:59	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	PM	-	-	-	52	-	-
1971-4465	2441047_31	1971 Apr 5 19:25:59	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	US	-	-	-	65	-	-
1971-4466	2441047_31	1971 Apr 5 20:15:00	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	US	-	-	-	57	-	-
1971-4467	2441047_34	1971 Apr 5 20:59:00	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	GRLY	-	-	-	57	-	-
1971-4468	2441047_56	1971 Apr 6 01:30:00	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	KAU	-	-	-	56	-	-
1971-4470	2441048_38	1971 Apr 6 21:00:00	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	KMR	-	-	-	56	-	-
1971-4470	2441048_39	1971 Apr 6 21:00:00	Rocketsonde	-	-	Met. Sphere	-	-	-	KAU	-	-	-	61	-	-
1971-4471	2441048_92	1971 Apr 7 10:11:59	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	ASC	-	-	-	103	-	-
1971-4472	2441049_08	1971 Apr 7 14:00:00	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	CC	L043	-	-	60	-	-
1971-4473	2441049_08	1971 Apr 7 14:00:00	Rocketsonde	-	-	Met. Para, Arcasonde	-	-	-	CC	-	-	-	60	-	-
1971-4474	2441049_09	1971 Apr 7 14:15:00	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	AIT	-	-	-	55	-	-
1971-4475	2441049_12	1971 Apr 7 15:00:00	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	VI	-	-	-	59	-	-
1971-4476	2441049_16	1971 Apr 7 15:45:00	Rocketsonde	-	-	Met. Para, Arcasonde	-	-	-	AIT	-	-	-	59	-	-
1971-4477	2441049_17	1971 Apr 7 16:40:59	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	SHER	-	-	-	57	-	-
1971-4478	2441049_25	1971 Apr 7 17:58:00	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	PM	-	-	-	61	-	-
1971-4479	2441049_29	1971 Apr 7 18:59:59	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	PRIM	-	-	-	59	-	-
1971-4480	2441049_30	1971 Apr 7 19:14:59	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	GRLY	-	-	-	59	-	-
1971-4481	2441049_34	1971 Apr 7 20:15:00	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	US	-	-	-	61	-	-
1971-4482	2441049_39	1971 Apr 7 21:14:59	Rocketsonde	-	-	Met. Sphere	-	-	-	US	-	-	-	70	-	-
1971-4483	2441049_63	1971 Apr 8 03:04:59	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	KAU	-	-	-	55	-	-
1971-4484	2441050_12	1971 Apr 8 15:00:00	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	KMR	-	-	-	58	-	-
1971-4485	2441050_25	1971 Apr 8 17:59:00	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	SHER	-	-	-	60	-	-
1971-4486	2441050_25	1971 Apr 8 18:00:00	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	PM	-	-	-	46	-	-
1971-4487	2441050_42	1971 Apr 8 22:00:59	Rocketsonde	-	-	Met. Sphere	-	-	-	PM	-	-	-	80	-	-
1971-4488	2441050_49	1971 Apr 8 23:38:59	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	US	-	-	-	60	-	-
1971-4488	2441051_13	1971 Apr 9 14:00:00	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	KAU	-	-	-	60	-	-
1971-4489	2441051_13	1971 Apr 9 15:03:59	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	ASC	-	-	-	59	-	-
1971-4490	2441051_19	1971 Apr 9 16:27:59	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	VI	-	-	-	61	-	-
1971-4491	2441051_19	1971 Apr 9 16:35:59	Rocketsonde	-	-	Met. Para, AI/DMP-9	-	-	-	PH	-	-	-	61	-	-
1971-4492	2441051_25	1971 Apr 9 18:00:00	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	US	-	-	-	63	-	-
1971-4493	2441051_29	1971 Apr 9 18:59:59	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	GRLY	-	-	-	57	-	-



Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Mission	FlightCode	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee_Km	Range_Km	Dest
1971-4494	2441051.38	1971 Apr 9 2100:00	Rocketsonde			Starute, Datasonde				KAU				55	-	-
1971-4495	2441051.56	1971 Apr 10 0130:00	Rocketsonde			Starute, Datasonde				KMR				55	-	-
1971-4496	2441054.08	1971 Apr 12 1400:00	Rocketsonde			Starute, Datasonde				ASC				61	-	-
1971-4497	2441054.08	1971 Apr 12 1400:00	Rocketsonde			Starute, Datasonde				CC	LO43			59	-	-
1971-4498	2441054.12	1971 Apr 12 1500:00	Rocketsonde			Starute, Datasonde				SHER				56	-	-
1971-4499	2441054.23	1971 Apr 12 1733:00	Rocketsonde			Starute, Datasonde				WI				63	-	-
1971-4500	2441054.25	1971 Apr 12 1804:59	Rocketsonde			Starute, Datasonde				PH				59	-	-
1971-4501	2441054.30	1971 Apr 12 1914:59	Rocketsonde			Starute, Datasonde				GRLY				58	-	-
1971-4502	2441054.36	1971 Apr 12 2040:00	Rocketsonde			Starute, Datasonde				WS				63	-	-
1971-4503	2441054.38	1971 Apr 12 2100:00	Rocketsonde			Starute, Datasonde				KAU				57	-	-
1971-4504	2441054.60	1971 Apr 13 0227:59	Rocketsonde			Starute, Datasonde				KMR				57	-	-
1971-4505	2441055.38	1971 Apr 13 2100:00	Rocketsonde			Starute, Datasonde				KAU				59	-	-
1971-4506	2441055.08	1971 Apr 14 1400:00	Rocketsonde			Starute, Datasonde				ASC				55	-	-
1971-4507	2441056.13	1971 Apr 14 1502:59	Rocketsonde			Starute, Datasonde				WI				60	-	-
1971-4508	2441056.13	1971 Apr 14 1510:00	Rocketsonde			Starute, Datasonde				SHER				60	-	-
1971-4510	2441056.20	1971 Apr 14 1649:59	Rocketsonde			Starute, Datasonde				WS				67	-	-
1971-4511	2441056.25	1971 Apr 14 1800:59	Rocketsonde			Starute, Datasonde				PRIM				73	-	-
1971-4512	2441056.34	1971 Apr 14 2015:00	Rocketsonde			Starute, Datasonde				GRLY				57	-	-
1971-4513	2441056.38	1971 Apr 14 2113:59	Rocketsonde			Starute, Datasonde				KAU				54	-	-
1971-4514	2441056.40	1971 Apr 14 2141:00	Rocketsonde			Starute, Datasonde				KAU				58	-	-
1971-4515	2441056.40	1971 Apr 15 0225:00	Rocketsonde			Starute, Datasonde				KMR				59	-	-
1971-4516	2441057.37	1971 Apr 15 2057:00	Rocketsonde			Starute, Datasonde				PH				59	-	-
1971-4517	2441057.48	1971 Apr 15 2334:00	Rocketsonde			Starute, Datasonde				KAU				62	-	-
1971-4518	2441058.08	1971 Apr 16 1400:00	Rocketsonde			Starute, Datasonde				AIT				56	-	-
1971-4519	2441058.08	1971 Apr 16 1445:00	Rocketsonde			Starute, Datasonde				ASC	LO43			57	-	-
1971-4520	2441058.11	1971 Apr 16 1435:00	Rocketsonde			Starute, Datasonde				SHER				61	-	-
1971-4521	2441058.15	1971 Apr 16 1530:00	Rocketsonde			Starute, Datasonde				PRIM				61	-	-
1971-4523	2441058.25	1971 Apr 16 1800:59	Rocketsonde			Starute, Datasonde				WI				90	-	-
1971-4524	2441058.25	1971 Apr 16 1802:59	Rocketsonde			Starute, Datasonde				PH				59	-	-
1971-4525	2441058.44	1971 Apr 16 2006:00	Rocketsonde			Starute, Datasonde				GRLC				59	-	-
1971-4526	2441058.52	1971 Apr 16 2130:00	Rocketsonde			Starute, Datasonde				ASC				63	-	-
1971-4527	2441058.79	1971 Apr 17 0034:59	Rocketsonde			Starute, Datasonde				ASC	LO43			64	-	-
1971-4528	2441061.08	1971 Apr 17 0659:59	Rocketsonde			Starute, Datasonde				SHER				58	-	-
1971-4529	2441061.12	1971 Apr 17 1415:00	Rocketsonde			Starute, Datasonde				AIT				59	-	-
1971-4530	2441061.21	1971 Apr 17 1700:00	Rocketsonde			Starute, Datasonde				PRIM				58	-	-
1971-4531	2441061.21	1971 Apr 17 1757:00	Rocketsonde			Starute, Datasonde				Met. Para, Arcasonde				61	-	-
1971-4532	2441061.25	1971 Apr 17 1800:00	Rocketsonde			Starute, Datasonde				GRLY				56	-	-
1971-4534	2441061.25	1971 Apr 17 1800:00	Rocketsonde			Starute, Datasonde				WS				85	-	-
1971-4535	2441061.31	1971 Apr 17 1930:00	Rocketsonde			Starute, Datasonde				WI				57	-	-
1971-4536	2441061.35	1971 Apr 17 2027:59	Rocketsonde			Starute, Datasonde				WI				62	-	-
1971-4537	2441061.39	1971 Apr 17 2325:59	Rocketsonde			Starute, Datasonde				PH				58	-	-
1971-4538	2441061.45	1971 Apr 17 2223:59	Rocketsonde			Starute, Datasonde				KAU	LO43			63	-	-
1971-4539	2441061.55	1971 Apr 20 0116:59	Rocketsonde			Starute, Datasonde				CC				56	-	-
1971-4540	2441062.56	1971 Apr 20 0130:00	Rocketsonde			Starute, Datasonde				KMR				60	-	-
1971-4541	2441062.56	1971 Apr 20 0130:00	Rocketsonde			Starute, Datasonde				PH				61	-	-
1971-4542	2441062.73	1971 Apr 20 0217:59	Rocketsonde			Starute, Datasonde				KAU				67	-	-
1971-4543	2441062.73	1971 Apr 20 2214:59	Rocketsonde			Starute, Datasonde				ASC				57	-	-
1971-4544	2441063.08	1971 Apr 21 1400:00	Rocketsonde			Starute, Datasonde				ASC	LO43			62	-	-
1971-4545	2441063.08	1971 Apr 21 1400:00	Rocketsonde			Starute, Datasonde				SHER				61	-	-
1971-4546	2441063.17	1971 Apr 21 1508:59	Rocketsonde			Starute, Datasonde				PH				61	-	-
1971-4547	2441063.17	1971 Apr 21 1559:59	Rocketsonde			Starute, Datasonde				WI				66	-	-
1971-4549	2441063.25	1971 Apr 21 1800:00	Rocketsonde			Starute, Datasonde				GRLY				51	-	-
1971-4550	2441063.25	1971 Apr 21 1801:59	Rocketsonde			Starute, Datasonde				PRIM				69	-	-
1971-4551	2441063.25	1971 Apr 21 1804:59	Rocketsonde			Starute, Datasonde				WS				68	-	-
1971-4552	2441063.28	1971 Apr 21 1845:00	Rocketsonde			Starute, Datasonde				ASC				58	-	-
1971-4553	2441063.33	1971 Apr 21 2000:00	Rocketsonde			Starute, Datasonde				AIT				68	-	-
1971-4554	2441063.42	1971 Apr 21 2202:59	Rocketsonde			Starute, Datasonde				GRLY				59	-	-
1971-4555	2441063.46	1971 Apr 22 0130:00	Rocketsonde			Starute, Datasonde				KAU				60	-	-
1971-4556	2441063.46	1971 Apr 22 1536:00	Rocketsonde			Starute, Datasonde				KMR				62	-	-
1971-4556a	2441064.47	1971 Apr 22 1536:00	Rocketsonde			Starute, Datasonde				PH				61	-	-
1971-4557	2441064.88	1971 Apr 23 0900:00	Rocketsonde			Starute, Datasonde				KAU				90	-	-
1971-4558	2441065.08	1971 Apr 23 1600:00	Rocketsonde			Starute, Datasonde				ASC				59	-	-
1971-4559	2441065.12	1971 Apr 23 1400:00	Rocketsonde			Starute, Datasonde				AIT				56	-	-
1971-4560	2441065.13	1971 Apr 23 1500:00	Rocketsonde			Starute, Datasonde				SHER				62	-	-
1971-4561	2441065.25	1971 Apr 23 1506:00	Rocketsonde			Starute, Datasonde				PRIM				56	-	-
1971-4562	2441065.25	1971 Apr 23 1807:00	Rocketsonde			Starute, Datasonde				PM				89	-	-
1971-4563	2441065.30	1971 Apr 23 1851:00	Rocketsonde			Starute, Datasonde				PM				58	-	-
1971-4564	2441065.31	1971 Apr 23 1914:59	Rocketsonde			Starute, Datasonde				GRLY				51	-	-
1971-4565	2441065.56	1971 Apr 24 0130:00	Rocketsonde			Starute, Datasonde				WS				60	-	-
1971-4566	2441068.12	1971 Apr 26 1500:00	Rocketsonde			Starute, Datasonde				SHER				59	-	-
1971-4567	2441068.14	1971 Apr 26 1521:00	Rocketsonde			Starute, Datasonde				PRIM				58	-	-
1971-4568	2441068.15	1971 Apr 26 1536:59	Rocketsonde			Starute, Datasonde				THU				49	-	-
1971-4569	2441068.21	1971 Apr 26 1700:00	Rocketsonde			Starute, Datasonde				GRLY				55	-	-
1971-4570	2441068.24	1971 Apr 26 1745:00	Rocketsonde			Starute, Datasonde				WS				65	-	-
1971-4571	2441068.38	1971 Apr 26 2100:00	Rocketsonde			Starute, Datasonde				AIT				56	-	-
1971-4572	2441068.56	1971 Apr 27 0130:00	Rocketsonde			Starute, Datasonde				KAU				57	-	-
1971-4573	2441069.09	1971 Apr 27 0130:00	Rocketsonde			Starute, Datasonde				WI				58	-	-
1971-4574	2441069.09	1971 Apr 27 1415:00	Rocketsonde			Starute, Datasonde				Met. Para, Arcasonde				64	-	-
1971-4575	2441069.10	1971 Apr 27 1424:00	Rocketsonde			Starute, Datasonde				WS				63	-	-
1971-4576	2441069.10	1971 Apr 27 1424:00	Rocketsonde			Starute, Datasonde				PM				60	-	-
1971-4577	2441069.17	1971 Apr 27 1559:59	Rocketsonde			Starute, Datasonde				WS				63	-	-
1971-4578	2441069.17	1971 Apr 27 1559:59	Rocketsonde			Starute, Datasonde				WI				63	-	-
1971-4579	2441069.19	1971 Apr 27 1633:59	Rocketsonde			Starute, Datasonde				WI				53	-	-
1971-4580	2441069.20	1971 Apr 27 1644:59	Rocketsonde			Starute, Datasonde				Met. Para				64	-	-

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Mission	FlightCode	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee_Km	Range_Km	Dest
1971-4651	2441069.28	1971 Apr 27 1840:00	Rocketsonde	-	-	Met. Para	-	-	-	WI	-	-	-	60	-	-
1971-4652	2441069.31	1971 Apr 27 1921:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	WI	-	-	-	61	-	-
1971-4653	2441069.32	1971 Apr 27 1936:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	WI	-	-	-	62	-	-
1971-4654	2441069.32	1971 Apr 27 1940:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	WS	-	-	-	60	-	-
1971-4655	2441069.42	1971 Apr 27 2159:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	KAU	-	-	-	92	-	-
1971-4656	2441069.52	1971 Apr 28 0959:59	Rocketsonde	-	-	Met. Sphere	-	-	-	ASC	-	-	-	62	-	-
1971-4657	2441070.04	1971 Apr 28 1259:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	SHER	-	-	-	52	-	-
1971-4658	2441070.13	1971 Apr 28 1500:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PRIM	-	-	-	70	-	-
1971-4659	2441070.15	1971 Apr 28 1500:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	WS	-	-	-	65	-	-
1971-4691	2441070.17	1971 Apr 28 1530:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PH	-	-	-	60	-	-
1971-4693	2441070.26	1971 Apr 28 1814:59	Rocketsonde	-	-	Met. Sphere	-	-	-	GRLY	-	-	-	56	-	-
1971-4694	2441070.38	1971 Apr 28 2100:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	KAU	-	-	-	58	-	-
1971-4695	2441070.39	1971 Apr 28 2114:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	KAU	-	-	-	63	-	-
1971-4696	2441070.58	1971 Apr 29 0158:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	KRR	-	-	-	59	-	-
1971-4697	2441071.09	1971 Apr 29 1415:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	WI	-	-	-	66	-	-
1971-4698	2441071.23	1971 Apr 29 1726:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PH	-	-	-	60	-	-
1971-4699	2441071.38	1971 Apr 29 2100:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	KAU	-	-	-	60	-	-
1971-4600	2441072.08	1971 Apr 30 1400:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	ASC	-	-	-	63	-	-
1971-4602	2441072.12	1971 Apr 30 1500:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	SHER	-	-	-	62	-	-
1971-4603	2441072.13	1971 Apr 30 1500:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PRIM	-	-	-	61	-	-
1971-443	2441072.21	1971 Apr 30 1700:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	GRLY	-	-	-	49	-	-
1971-4604	2441072.27	1971 Apr 30 1826:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PH	-	-	-	56	-	-
1971-4605	2441072.38	1971 Apr 30 2100:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	KAU	-	-	-	56	-	-
1971-4606	2441072.64	1971 May 1 0322:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	CC	-	-	-	62	-	-
1971-4607	2441075.08	1971 May 1 0130:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	SHER	-	-	-	61	-	-
1971-4608	2441075.12	1971 May 1 1500:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	ASC	-	-	-	63	-	-
1971-4611	2441075.13	1971 May 1 1503:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PH	-	-	-	58	-	-
1971-4612	2441075.26	1971 May 1 1623:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	WS	-	-	-	63	-	-
1971-4613	2441075.27	1971 May 1 1623:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	GRLY	-	-	-	57	-	-
1971-4614	2441075.34	1971 May 1 2004:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	KAU	-	-	-	56	-	-
1971-4615	2441075.38	1971 May 1 2100:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	KRR	-	-	-	57	-	-
1971-4616	2441075.51	1971 May 1 0232:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PH	-	-	-	56	-	-
1971-4617	2441076.25	1971 May 1 1600:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	KAU	-	-	-	56	-	-
1971-4618	2441076.37	1971 May 1 2053:59	Rocketsonde	-	-	Met. Sphere	-	-	-	ASC	-	-	-	62	-	-
1971-4620	2441076.52	1971 May 1 1448:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	SHER	-	-	-	62	-	-
1971-4621	2441077.12	1971 May 1 1500:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	WS	-	-	-	58	-	-
1971-4622	2441077.23	1971 May 1 1755:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PH	-	-	-	58	-	-
1971-4623	2441077.25	1971 May 1 1801:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PRIM	-	-	-	58	-	-
1971-4624	2441077.35	1971 May 1 2000:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	GRLY	-	-	-	58	-	-
1971-4625	2441077.51	1971 May 1 2146:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	KRR	-	-	-	58	-	-
1971-4626	2441078.12	1971 May 1 1850:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	SHER	-	-	-	62	-	-
1971-4628	2441078.28	1971 May 1 1856:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PH	-	-	-	58	-	-
1971-4629	2441078.38	1971 May 1 2100:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	KAU	-	-	-	54	-	-
1971-4631	2441078.55	1971 May 1 0330:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	GRLC	-	-	-	60	-	-
1971-4632	2441078.56	1971 May 1 0413:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	ASC	-	-	-	62	-	-
1971-453	2441079.09	1971 May 7 1413:00	Rocketsonde	-	-	Met. Para, Arcasonde	-	-	-	MIT	-	-	-	64	-	-
1971-4635	2441079.23	1971 May 7 1726:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PH	-	-	-	60	-	-
1971-4636	2441079.44	1971 May 7 2230:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	KAU	-	-	-	66	-	-
1971-4637	2441079.44	1971 May 7 2230:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	WS	-	-	-	66	-	-
1971-4638	2441082.06	1971 May 8 0130:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	KRR	-	-	-	60	-	-
1971-4639	2441082.06	1971 May 8 0130:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	CC	-	-	-	66	-	-
1971-4640	2441082.08	1971 May 8 1400:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	ASC	-	-	-	61	-	-
1971-4641	2441082.08	1971 May 8 1400:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	SHER	-	-	-	57	-	-
1971-4643	2441082.12	1971 May 8 1500:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	WS	-	-	-	65	-	-
1971-4644	2441082.24	1971 May 8 1740:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PRIM	-	-	-	55	-	-
1971-4645	2441082.29	1971 May 8 1824:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PH	-	-	-	59	-	-
1971-4646	2441082.29	1971 May 8 1901:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	WI	-	-	-	61	-	-
1971-4647	2441082.29	1971 May 8 2355:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	KAU	-	-	-	53	-	-
1971-4648	2441083.37	1971 May 11 2052:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PM	-	-	-	59	-	-
1971-4650	2441083.44	1971 May 11 2230:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	GRLY	-	-	-	54	-	-
1971-4651	2441083.55	1971 May 12 0114:59	Rocketsonde	-	-	Met. Sphere	-	-	-	CC	-	-	-	91	-	-
1971-4652	2441083.93	1971 May 12 1024:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	ASC	-	-	-	59	-	-
1971-4653	2441084.06	1971 May 12 1330:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	CC	-	-	-	60	-	-
1971-4654	2441084.08	1971 May 12 1400:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	MIT	-	-	-	60	-	-
1971-4655	2441084.09	1971 May 12 1400:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	SHER	-	-	-	56	-	-
1971-4656	2441084.12	1971 May 12 1500:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	WS	-	-	-	59	-	-
1971-4657	2441084.12	1971 May 12 1507:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PH	-	-	-	59	-	-
1971-4658	2441084.17	1971 May 12 1656:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	SHER	-	-	-	59	-	-
1971-4659	2441084.21	1971 May 12 1656:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PM	-	-	-	85	-	-
1971-4660	2441084.22	1971 May 12 1711:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PM	-	-	-	71	-	-
1971-4661	2441084.26	1971 May 12 1811:59	Rocketsonde	-	-	Met. Sphere	-	-	-	WS	-	-	-	68	-	-
1971-4662	2441084.31	1971 May 12 1921:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	WS	-	-	-	65	-	-
1971-4663	2441084.35	1971 May 12 2030:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	GRLY	-	-	-	62	-	-
1971-4664	2441084.53	1971 May 13 0045:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	WS	-	-	-	64	-	-
1971-4665	2441084.88	1971 May 13 0153:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	KRR	-	-	-	55	-	-
1971-4666	2441085.20	1971 May 13 1642:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PH	-	-	-	61	-	-
1971-4667	2441085.24	1971 May 13 1740:00	Rocketsonde	-	-	Met. Para, AI/DMP-9	-	-	-	THU	-	-	-	60	-	-
1971-4668	2441086.08	1971 May 14 1400:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	ASC	-	-	-	63	-	-

Launch

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Mission	FlightCode	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee_Km	Range_Km	Dest
1971-4669	2441086.09	1971 May 14 14:04:59	Rocketsonde	-	-	Met. Para. Arcasonde	-	-	-	-	-	-	-	58	-	-
1971-4670	2441086.12	1971 May 14 15:00:00	Rocketsonde	-	-	Starute, Datasonde	-	-	AHT	-	-	-	-	62	-	-
1971-4671	2441086.20	1971 May 14 16:44:59	Rocketsonde	-	-	Starute, Datasonde	-	-	PRIM	-	-	-	-	69	-	-
1971-4672	2441086.29	1971 May 14 18:59:59	Rocketsonde	-	-	Starute, Datasonde	-	-	GRLY	-	-	-	-	62	-	-
1971-4673	2441086.35	1971 May 14 20:26:00	Rocketsonde	-	-	Starute, Datasonde	-	-	PH	-	-	-	-	56	-	-
1971-4674	2441086.42	1971 May 14 22:01:59	Rocketsonde	-	-	Met. Sphere	-	-	KAU	-	-	-	-	55	-	-
1971-4675	2441086.44	1971 May 15 00:46:00	Rocketsonde	-	-	Starute, Datasonde	-	-	KAU	-	-	-	-	65	-	-
1971-4676	2441086.57	1971 May 15 01:42:59	Rocketsonde	-	-	Chaf	-	-	GRLC	-	-	-	-	59	-	-
1971-4677	2441086.70	1971 May 15 04:41:59	Rocketsonde	-	-	Starute, Datasonde	-	-	WS	-	-	-	-	61	-	-
1971-4678	2441088.21	1971 May 16 17:01:00	Rocketsonde	-	-	Met. Para. Arcasonde	-	-	PH	-	-	-	-	54	-	-
1971-4679	2441088.08	1971 May 17 14:00:00	Rocketsonde	-	-	Starute, Datasonde	-	-	ASC	-	-	-	-	62	-	-
1971-4680	2441089.09	1971 May 17 14:40:00	Rocketsonde	-	-	Starute, Datasonde	-	-	AHT	-	-	-	-	59	-	-
1971-4681	2441089.11	1971 May 17 14:40:00	Rocketsonde	-	-	Starute, Datasonde	-	-	PH	-	-	-	-	61	-	-
1971-4682	2441089.12	1971 May 17 14:46:00	Rocketsonde	-	-	Starute, Datasonde	-	-	SHER	-	-	-	-	59	-	-
1971-4683	2441089.12	1971 May 17 15:00:00	Rocketsonde	-	-	Met. Para. AI/DMP-9	-	-	THU	-	-	-	-	61	-	-
1971-4684	2441089.16	1971 May 17 15:49:59	Rocketsonde	-	-	Starute, Datasonde	-	-	WS	-	-	-	-	51	-	-
1971-4685	2441089.21	1971 May 17 17:00:00	Rocketsonde	-	-	Starute, Datasonde	-	-	WI	-	-	-	-	63	-	-
1971-4686	2441089.26	1971 May 17 18:21:00	Rocketsonde	-	-	Starute, Datasonde	-	-	KAU	-	-	-	-	58	-	-
1971-4687	2441089.42	1971 May 17 22:02:59	Rocketsonde	-	-	Starute, Datasonde	-	-	GRLY	-	-	-	-	64	-	-
1971-4688	2441089.49	1971 May 18 14:48:00	Rocketsonde	-	-	Starute, Datasonde	-	-	PH	-	-	-	-	59	-	-
1971-4689	2441090.12	1971 May 18 14:48:00	Rocketsonde	-	-	Starute, Datasonde	-	-	KAU	-	-	-	-	59	-	-
1971-4690	2441090.38	1971 May 18 21:01:59	Rocketsonde	-	-	Met. Sphere	-	-	ASC	LO43	-	-	-	94	-	-
1971-4691	2441090.52	1971 May 19 10:04:59	Rocketsonde	-	-	Starute, Datasonde	-	-	ASC	-	-	-	-	60	-	-
1971-4692	2441091.07	1971 May 19 13:46:59	Rocketsonde	-	-	Starute, Datasonde	-	-	ASC	-	-	-	-	60	-	-
1971-4693	2441091.08	1971 May 19 14:00:00	Rocketsonde	-	-	Starute, Datasonde	-	-	AHT	-	-	-	-	60	-	-
1971-4694	2441091.09	1971 May 19 14:00:00	Rocketsonde	-	-	Starute, Datasonde	-	-	SHER	-	-	-	-	63	-	-
1971-4695	2441091.12	1971 May 19 15:00:00	Rocketsonde	-	-	Met. Sphere	-	-	CC	-	-	-	-	60	-	-
1971-4696	2441091.16	1971 May 19 15:49:59	Rocketsonde	-	-	Starute, Datasonde	-	-	ASC	LO43	-	-	-	94	-	-
1971-4697	2441091.21	1971 May 19 16:55:59	Rocketsonde	-	-	Starute, Datasonde	-	-	ASC	-	-	-	-	60	-	-
1971-4700	2441091.21	1971 May 19 17:00:00	Rocketsonde	-	-	Starute, Datasonde	-	-	PRIM	-	-	-	-	55	-	-
1971-4701	2441091.21	1971 May 19 17:00:00	Rocketsonde	-	-	Met. Para. AI/DMP-9	-	-	THU	-	-	-	-	58	-	-
1971-4702	2441091.25	1971 May 19 18:00:00	Rocketsonde	-	-	Met. Sphere	-	-	WS	-	-	-	-	63	-	-
1971-4703	2441091.25	1971 May 19 18:00:00	Rocketsonde	-	-	Starute, Datasonde	-	-	ASC	-	-	-	-	58	-	-
1971-4704	2441091.34	1971 May 19 20:04:59	Rocketsonde	-	-	Starute, Datasonde	-	-	GRLY	-	-	-	-	58	-	-
1971-4705	2441091.36	1971 May 19 20:52:00	Rocketsonde	-	-	Met. Sphere	-	-	PH	-	-	-	-	90	-	-
1971-4706	2441091.37	1971 May 19 20:52:00	Rocketsonde	-	-	Starute, Datasonde	-	-	PH	-	-	-	-	80	-	-
1971-4707	2441091.40	1971 May 19 21:33:59	Rocketsonde	-	-	Met. Sphere	-	-	KAU	-	-	-	-	85	-	-
1971-4708	2441091.41	1971 May 19 21:36:00	Rocketsonde	-	-	Starute, Datasonde	-	-	KAU	-	-	-	-	80	-	-
1971-4709	2441091.56	1971 May 20 01:30:00	Rocketsonde	-	-	Starute, Datasonde	-	-	KR	-	-	-	-	80	-	-
1971-4710	2441092.13	1971 May 20 15:06:00	Rocketsonde	-	-	Starute, Datasonde	-	-	PH	-	-	-	-	59	-	-
1971-4711	2441093.09	1971 May 21 13:30:00	Rocketsonde	-	-	Met. Para. Arcasonde	-	-	AHT	-	-	-	-	59	-	-
1971-4712	2441093.09	1971 May 21 13:31:59	Rocketsonde	-	-	Starute, Datasonde	-	-	ASC	LO43	-	-	-	89	-	-
1971-4713	2441093.08	1971 May 21 14:00:00	Rocketsonde	-	-	Starute, Datasonde	-	-	SHER	-	-	-	-	61	-	-
1971-4714	2441093.12	1971 May 21 15:00:00	Rocketsonde	-	-	Starute, Datasonde	-	-	THU	-	-	-	-	60	-	-
1971-4715	2441093.22	1971 May 21 16:30:00	Rocketsonde	-	-	Met. Para. AI/DMP-9	-	-	WS	-	-	-	-	86	-	-
1971-4716	2441093.21	1971 May 21 18:26:59	Rocketsonde	-	-	Starute, Datasonde	-	-	PH	-	-	-	-	94	-	-
1971-4717	2441093.31	1971 May 21 20:25:59	Rocketsonde	-	-	Starute, Datasonde	-	-	ASC	-	-	-	-	59	-	-
1971-4718	2441093.31	1971 May 21 21:18:59	Rocketsonde	-	-	Starute, Datasonde	-	-	GRLY	-	-	-	-	58	-	-
1971-4719	2441093.35	1971 May 21 21:58:59	Rocketsonde	-	-	Starute, Datasonde	-	-	KAU	-	-	-	-	58	-	-
1971-4720	2441093.57	1971 May 22 06:57:59	Rocketsonde	-	-	Starute, Datasonde	-	-	KR	-	-	-	-	60	-	-
1971-4721	2441094.21	1971 May 22 17:15:00	Rocketsonde	-	-	Starute, Datasonde	-	-	PH	-	-	-	-	60	-	-
1971-4722	2441095.04	1971 May 23 12:59:59	Rocketsonde	-	-	Met. Sphere	-	-	KAU	-	-	-	-	57	-	-
1971-4723	2441095.08	1971 May 23 12:59:59	Rocketsonde	-	-	Starute, Datasonde	-	-	CC	LO43	-	-	-	56	-	-
1971-4724	2441095.12	1971 May 24 14:00:00	Rocketsonde	-	-	Starute, Datasonde	-	-	ASC	-	-	-	-	56	-	-
1971-4725	2441095.12	1971 May 24 15:00:00	Rocketsonde	-	-	Starute, Datasonde	-	-	PH	-	-	-	-	58	-	-
1971-4726	2441095.21	1971 May 24 17:00:00	Rocketsonde	-	-	Starute, Datasonde	-	-	SHER	-	-	-	-	61	-	-
1971-4727	2441095.38	1971 May 24 21:00:00	Rocketsonde	-	-	Starute, Datasonde	-	-	WS	-	-	-	-	63	-	-
1971-4728	2441095.45	1971 May 24 22:44:59	Rocketsonde	-	-	Starute, Datasonde	-	-	KAU	-	-	-	-	60	-	-
1971-4729	2441095.56	1971 May 25 01:30:00	Rocketsonde	-	-	Starute, Datasonde	-	-	GRLY	-	-	-	-	56	-	-
1971-4730	2441097.31	1971 May 25 19:26:59	Rocketsonde	-	-	Starute, Datasonde	-	-	KR	-	-	-	-	58	-	-
1971-4731	2441097.39	1971 May 25 21:19:00	Rocketsonde	-	-	Starute, Datasonde	-	-	PH	-	-	-	-	58	-	-
1971-4732	2441098.06	1971 May 26 13:30:00	Rocketsonde	-	-	Met. Para. Arcasonde	-	-	KAU	-	-	-	-	54	-	-
1971-4733	2441098.08	1971 May 26 14:00:00	Rocketsonde	-	-	Starute, Datasonde	-	-	CC	LO43	-	-	-	60	-	-
1971-4734	2441098.12	1971 May 26 15:00:00	Rocketsonde	-	-	Starute, Datasonde	-	-	ASC	-	-	-	-	61	-	-
1971-4735	2441098.14	1971 May 26 15:14:59	Rocketsonde	-	-	Starute, Datasonde	-	-	SHER	-	-	-	-	59	-	-
1971-4736	2441098.15	1971 May 26 15:50:00	Rocketsonde	-	-	Starute, Datasonde	-	-	THU	-	-	-	-	65	-	-
1971-4737	2441098.21	1971 May 26 16:55:59	Rocketsonde	-	-	Met. Para. AI/DMP-9	-	-	CC	LO43	-	-	-	91	-	-
1971-4738	2441098.25	1971 May 26 17:06:00	Rocketsonde	-	-	Starute, Datasonde	-	-	PRIM	-	-	-	-	68	-	-
1971-4739	2441098.25	1971 May 26 18:00:00	Rocketsonde	-	-	Starute, Datasonde	-	-	ASC	-	-	-	-	55	-	-
1971-4740	2441098.32	1971 May 26 19:41:00	Rocketsonde	-	-	Met. Sphere	-	-	WS	-	-	-	-	60	-	-
1971-4741	2441098.38	1971 May 26 21:00:00	Rocketsonde	-	-	Starute, Datasonde	-	-	VI	-	-	-	-	60	-	-
1971-4742	2441098.44	1971 May 26 21:14:59	Rocketsonde	-	-	Starute, Datasonde	-	-	KAU	-	-	-	-	60	-	-
1971-4743	2441098.44	1971 May 27 02:30:00	Rocketsonde	-	-	Starute, Datasonde	-	-	KAU	-	-	-	-	60	-	-
1971-4744	2441098.44	1971 May 27 02:30:00	Rocketsonde	-	-	Starute, Datasonde	-	-	GRLY	-	-	-	-	53	-	-
1971-4745	2441098.59	1971 May 27 14:15:00	Rocketsonde	-	-	Starute, Datasonde	-	-	KR	-	-	-	-	61	-	-
1971-4746	2441099.09	1971 May 27 14:52:00	Rocketsonde	-	-	Starute, Datasonde	-	-	WS	-	-	-	-	60	-	-
1971-4747	2441099.30	1971 May 27 19:10:59	Rocketsonde	-	-	Met. Para. Arcasonde	-	-	VI	-	-	-	-	59	-	-
1971-4748	2441099.40	1971 May 27 21:30:00	Rocketsonde	-	-	Starute, Datasonde	-	-	WS	-	-	-	-	59	-	-
1971-4749	2441100.09	1971 May 28 14:15:00	Rocketsonde	-	-	Starute, Datasonde	-	-	KAU	-	-	-	-	62	-	-
1971-4750	2441100.12	1971 May 28 15:00:00	Rocketsonde	-	-	Starute, Datasonde	-	-	ASC	-	-	-	-	55	-	-
1971-4751	2441100.15	1971 May 28 15:33:59	Rocketsonde	-	-	Starute, Datasonde	-	-	SHER	-	-	-	-	61	-	-
1971-4752	2441100.21	1971 May 28 17:00:00	Rocketsonde	-	-	Met. Para. AI/DMP-9	-	-	PH	-	-	-	-	39	-	-
1971-4753	2441100.29	1971 May 28 18:59:59	Rocketsonde	-	-	Starute, Datasonde	-	-	THU	-	-	-	-	64	-	-
1971-4754	2441100.29	1971 May 28 18:59:59	Rocketsonde	-	-	Starute, Datasonde	-	-	GRLY	-	-	-	-	66	-	-

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Mission	FlightCode	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee_Km	Range_Km	Dest
1971-4754	2441100.40	1971 May 28 21:30:00	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	KAU	-	-	-	62	-	-
1971-4755	2441100.63	1971 May 29 09:04:59	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	KMR	-	-	-	59	-	-
1971-4756	2441104.12	1971 Jun 1 14:53:00	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	PH	-	-	-	60	-	-
1971-4757	2441104.15	1971 Jun 1 15:30:00	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	SHER	-	-	-	65	-	-
1971-4758	2441104.15	1971 Jun 1 15:30:00	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	WS	-	-	-	63	-	-
1971-4759	2441104.15	1971 Jun 1 15:30:00	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	WS	-	-	-	68	-	-
1971-4760	2441104.19	1971 Jun 1 16:30:00	Rocketsonde	-	-	Met Para	-	-	-	WI	-	-	-	62	-	-
1971-4761	2441104.22	1971 Jun 1 17:20:00	Rocketsonde	-	-	Met Para	-	-	-	WI	-	-	-	66	-	-
1971-4762	2441104.25	1971 Jun 1 17:50:00	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	KAU	-	-	-	59	-	-
1971-4763	2441104.40	1971 Jun 1 21:30:00	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	CC	-	-	-	56	-	-
1971-4764	2441104.40	1971 Jun 1 21:30:00	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	ASC	-	-	-	61	-	-
1971-4765	2441105.07	1971 Jun 2 13:34:59	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	THU	-	-	-	63	-	-
1971-4766	2441105.08	1971 Jun 2 14:00:00	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	CC	-	-	-	60	-	-
1971-4767	2441105.14	1971 Jun 2 15:14:59	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	ASC	-	-	-	61	-	-
1971-4768	2441105.15	1971 Jun 2 15:30:00	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	THU	-	-	-	90	-	-
1971-4769	2441105.15	1971 Jun 2 15:30:00	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	THU	-	-	-	68	-	-
1971-4770	2441105.21	1971 Jun 2 17:09:00	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	PRIM	-	-	-	60	-	-
1971-4771	2441105.23	1971 Jun 2 17:30:00	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	WS	-	-	-	60	-	-
1971-4772	2441105.29	1971 Jun 2 17:30:00	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	PH	-	-	-	60	-	-
1971-4773	2441105.40	1971 Jun 2 21:33:00	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	KAU	-	-	-	63	-	-
1971-4774	2441105.56	1971 Jun 3 01:30:00	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	KMR	-	-	-	58	-	-
1971-4775	2441106.33	1971 Jun 3 20:00:00	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	KMR	-	-	-	61	-	-
1971-4776	2441106.38	1971 Jun 3 21:06:00	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	GRLY	-	-	-	63	-	-
1971-4777	2441106.56	1971 Jun 4 01:32:59	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	KAU	-	-	-	56	-	-
1971-4778	2441106.76	1971 Jun 4 06:12:59	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	GRLC	-	-	-	61	-	-
1971-4779	2441107.06	1971 Jun 4 13:30:00	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	WS	-	-	-	61	-	-
1971-4780	2441107.08	1971 Jun 4 14:00:00	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	ASC	-	-	-	61	-	-
1971-4781	2441107.12	1971 Jun 4 15:00:00	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	SHER	-	-	-	56	-	-
1971-4782	2441107.34	1971 Jun 4 20:06:00	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	GRLY	-	-	-	63	-	-
1971-4783	2441107.40	1971 Jun 4 21:30:00	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	WS	-	-	-	64	-	-
1971-4784	2441107.46	1971 Jun 4 23:00:00	Rocketsonde	-	-	Met Para	-	-	-	KAU	-	-	-	56	-	-
1971-4785	2441107.47	1971 Jun 4 23:15:00	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	KAU	-	-	-	56	-	-
1971-4786	2441110.10	1971 Jun 7 14:30:00	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	ASC	-	-	-	61	-	-
1971-4787	2441110.12	1971 Jun 7 15:00:00	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	SHER	-	-	-	61	-	-
1971-4788	2441110.19	1971 Jun 7 16:30:00	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	PH	-	-	-	57	-	-
1971-4789	2441110.24	1971 Jun 7 17:52:00	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	WI	-	-	-	59	-	-
1971-4790	2441110.27	1971 Jun 7 18:24:59	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	CC	-	-	-	61	-	-
1971-4791	2441110.36	1971 Jun 7 21:06:00	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	KAU	-	-	-	61	-	-
1971-4792	2441110.44	1971 Jun 7 22:30:00	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	GRLY	-	-	-	56	-	-
1971-4793	2441110.56	1971 Jun 8 01:30:00	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	KMR	-	-	-	59	-	-
1971-4794	2441111.13	1971 Jun 8 13:01:59	Rocketsonde	-	-	Met Para	-	-	-	PH	-	-	-	61	-	-
1971-4795	2441111.23	1971 Jun 8 17:30:00	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	WS	-	-	-	60	-	-
1971-4796	2441111.40	1971 Jun 8 21:32:00	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	KAU	-	-	-	60	-	-
1971-4797	2441112.52	1971 Jun 9 09:58:59	Rocketsonde	-	-	Met Para	-	-	-	ASC	-	-	-	62	-	-
1971-4798	2441112.56	1971 Jun 9 09:58:59	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	ASC	-	-	-	60	-	-
1971-4799	2441112.10	1971 Jun 9 14:21:00	Rocketsonde	-	-	Met Para	-	-	-	CC	-	-	-	60	-	-
1971-4800	2441112.10	1971 Jun 9 14:21:00	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	CC	-	-	-	60	-	-
1971-4801	2441112.12	1971 Jun 9 14:21:00	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	ASC	-	-	-	59	-	-
1971-4802	2441112.12	1971 Jun 9 14:21:00	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	WS	-	-	-	63	-	-
1971-4803	2441112.13	1971 Jun 9 15:20:59	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	SHER	-	-	-	62	-	-
1971-4804	2441112.13	1971 Jun 9 15:20:59	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	WI	-	-	-	62	-	-
1971-4805	2441112.15	1971 Jun 9 15:24:59	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	WI	-	-	-	66	-	-
1971-4806	2441112.15	1971 Jun 9 15:24:59	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	CC	-	-	-	60	-	-
1971-4807	2441112.23	1971 Jun 9 16:30:00	Rocketsonde	-	-	Met Para	-	-	-	WS	-	-	-	100	-	-
1971-4808	2441112.23	1971 Jun 9 16:30:00	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	PH	-	-	-	64	-	-
1971-4809	2441112.44	1971 Jun 9 20:31:59	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	GRLY	-	-	-	60	-	-
1971-4810	2441112.44	1971 Jun 9 20:31:59	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	KAU	-	-	-	75	-	-
1971-4811	2441112.56	1971 Jun 9 22:38:59	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	KMR	-	-	-	55	-	-
1971-4812	2441112.56	1971 Jun 10 01:30:00	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	PH	-	-	-	56	-	-
1971-4813	2441113.14	1971 Jun 10 01:30:00	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	PH	-	-	-	50	-	-
1971-4814	2441113.14	1971 Jun 10 01:30:00	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	GRLC	-	-	-	64	-	-
1971-4815	2441113.62	1971 Jun 11 02:46:00	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	CC	-	-	-	62	-	-
1971-4816	2441114.07	1971 Jun 11 03:46:59	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	ASC	-	-	-	58	-	-
1971-4817	2441114.08	1971 Jun 11 03:46:59	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	SHER	-	-	-	58	-	-
1971-4818	2441114.17	1971 Jun 11 04:00:00	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	WI	-	-	-	59	-	-
1971-4819	2441114.22	1971 Jun 11 04:00:00	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	WI	-	-	-	62	-	-
1971-4820	2441114.22	1971 Jun 11 04:00:00	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	WI	-	-	-	62	-	-
1971-4821	2441114.24	1971 Jun 11 04:00:00	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	WI	-	-	-	62	-	-
1971-4822	2441114.33	1971 Jun 11 04:00:00	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	GRLY	-	-	-	62	-	-
1971-4823	2441114.33	1971 Jun 11 04:00:00	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	PM	-	-	-	57	-	-
1971-4824	2441114.35	1971 Jun 11 04:00:00	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	NS	-	-	-	49	-	-
1971-4825	2441114.35	1971 Jun 11 04:00:00	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	NS	-	-	-	62	-	-
1971-4826	2441114.35	1971 Jun 11 04:00:00	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	KAU	-	-	-	62	-	-
1971-4827	2441114.38	1971 Jun 11 04:00:00	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	KMR	-	-	-	55	-	-
1971-4828	2441114.56	1971 Jun 12 01:30:00	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	SHER	-	-	-	59	-	-
1971-4829	2441117.12	1971 Jun 14 15:00:00	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	WI	-	-	-	60	-	-
1971-4830	2441117.23	1971 Jun 14 17:00:00	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	THU	-	-	-	60	-	-
1971-4831	2441117.23	1971 Jun 14 17:00:00	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	PM	-	-	-	60	-	-
1971-4832	2441117.34	1971 Jun 14 17:37:59	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	WI	-	-	-	60	-	-
1971-4833	2441117.34	1971 Jun 14 17:37:59	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	GRLY	-	-	-	65	-	-
1971-4834	2441117.60	1971 Jun 15 02:29:00	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	KMR	-	-	-	59	-	-
1971-4835	2441118.14	1971 Jun 15 15:25:59	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	PM	-	-	-	50	-	-
1971-4836	2441118.14	1971 Jun 15 15:25:59	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	PM	-	-	-	57	-	-
1971-4837	2441118.35	1971 Jun 15 20:30:00	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	KAU	-	-	-	60	-	-
1971-4838	2441119.11	1971 Jun 16 04:44:00	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	WI	-	-	-	60	-	-
1971-4839	2441119.11	1971 Jun 16 04:44:00	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	PM	-	-	-	56	-	-
1971-4840	2441119.14	1971 Jun 16 05:22:59	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	SHER	-	-	-	60	-	-
1971-4841	2441119.17	1971 Jun 16 05:59:59	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	THU	-	-	-	48	-	-
1971-4842	2441119.18	1971 Jun 16 06:14:59	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	NS	-	-	-	66	-	-
1971-4843	2441119.25	1971 Jun 16 18:02:59	Rocketsonde	-	-											

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Mission	FlightCode	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Approvee	Range	Dest
1971-8840	2441121.07	1971 Jun 18 13:46:59	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	CC	LO43	-	-	59	-	-
1971-8841	2441121.12	1971 Jun 18 15:00:00	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	SHER	-	-	-	62	-	-
1971-8843	2441123.40	1971 Jun 20 21:40:00	Rocketsonde	-	-	Met. Para, Arcasonde	-	-	-	WI	-	-	-	61	-	-
1971-8845	2441124.06	1971 Jun 21 13:30:00	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	CC	LO43	-	-	57	-	-
1971-8846	2441124.12	1971 Jun 21 15:00:00	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	PH	-	-	-	55	-	-
1971-8847	2441124.12	1971 Jun 21 15:00:00	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	SHER	-	-	-	62	-	-
1971-8848	2441124.19	1971 Jun 21 16:30:00	Rocketsonde	-	-	Met. Para, Datasonde	-	-	-	WS	-	-	-	59	-	-
1971-8849	2441124.23	1971 Jun 21 17:30:00	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	THU	-	-	-	61	-	-
1971-8850	2441124.38	1971 Jun 21 21:00:00	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	KAU	-	-	-	59	-	-
1971-8851	2441124.56	1971 Jun 22 01:30:00	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	KRR	-	-	-	58	-	-
1971-8852	2441125.17	1971 Jun 22 15:57:59	Rocketsonde	-	-	Met. Para	-	-	-	PH	-	-	-	51	-	-
1971-8853	2441126.08	1971 Jun 23 14:00:00	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	CC	LO43	-	-	61	-	-
1971-8854	2441126.13	1971 Jun 23 15:10:00	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	SHER	-	-	-	59	-	-
1971-8855	2441126.19	1971 Jun 23 16:30:59	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	PRIM	-	-	-	66	-	-
1971-8856	2441126.31	1971 Jun 23 19:20:59	Rocketsonde	-	-	Met. Sphere	-	-	-	PH	-	-	-	85	-	-
1971-8857	2441126.31	1971 Jun 23 19:30:00	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	WS	-	-	-	60	-	-
1971-8858	2441126.33	1971 Jun 23 19:51:00	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	PH	-	-	-	50	-	-
1971-8859	2441126.35	1971 Jun 24 01:30:00	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	KRR	-	-	-	58	-	-
1971-8860	2441126.58	1971 Jun 24 01:57:59	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	WS	-	-	-	65	-	-
1971-8861	2441127.16	1971 Jun 24 15:49:59	Rocketsonde	-	-	Met. Para, Arcasonde	-	-	-	WI	-	-	-	63	-	-
1971-8863	2441127.23	1971 Jun 24 17:27:59	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	PH	-	-	-	56	-	-
1971-8864	2441127.24	1971 Jun 24 17:51:00	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	WI	-	-	-	57	-	-
1971-8865	2441127.25	1971 Jun 24 18:04:59	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	WI	-	-	-	61	-	-
1971-8866	2441127.42	1971 Jun 24 22:06:00	Rocketsonde	-	-	Met. Sphere	-	-	-	KAU	-	-	-	90	-	-
1971-8867	2441128.10	1971 Jun 25 14:30:00	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	KAU	-	-	-	59	-	-
1971-8868	2441128.12	1971 Jun 25 15:00:00	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	CC	LO43	-	-	59	-	-
1971-8869	2441128.21	1971 Jun 25 17:00:00	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	SHER	-	-	-	56	-	-
1971-8869	2441128.29	1971 Jun 25 18:56:59	Rocketsonde	-	-	Met. Para, AI/DMP-9	-	-	-	THU	-	-	-	62	-	-
1971-8871	2441128.38	1971 Jun 25 21:00:00	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	PH	-	-	-	53	-	-
1971-8872	2441128.56	1971 Jun 25 01:30:00	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	KAU	-	-	-	60	-	-
1971-8873	2441131.06	1971 Jun 26 15:30:00	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	KRR	-	-	-	60	-	-
1971-8874	2441131.12	1971 Jun 26 15:30:00	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	PH	-	-	-	63	-	-
1971-8875	2441131.16	1971 Jun 26 15:46:00	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	SHER	-	-	-	59	-	-
1971-8876	2441131.29	1971 Jun 26 19:03:59	Rocketsonde	-	-	Met. Para, AI/DMP-9	-	-	-	THU	-	-	-	60	-	-
1971-8877	2441131.38	1971 Jun 26 21:00:00	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	WI	-	-	-	60	-	-
1971-8878	2441131.56	1971 Jun 26 01:30:00	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	KAU	-	-	-	58	-	-
1971-8879	2441131.77	1971 Jun 26 09:22:59	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	KRR	-	-	-	58	-	-
1971-8880	2441132.15	1971 Jun 26 15:52:00	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	PH	-	-	-	56	-	-
1971-8881	2441132.24	1971 Jun 26 17:46:00	Rocketsonde	-	-	Starvue	-	-	-	KAU	-	-	-	61	-	-
1971-8882	2441132.26	1971 Jun 26 21:00:00	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	ASC	-	-	-	60	-	-
1971-8883	2441133.09	1971 Jun 30 14:15:00	Rocketsonde	-	-	Met. Para, Arcasonde	-	-	-	ASC	-	-	-	62	-	-
1971-8886	2441133.13	1971 Jun 30 15:04:59	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	SHER	-	-	-	52	-	-
1971-8887	2441133.17	1971 Jun 30 15:06:59	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	SHER	-	-	-	62	-	-
1971-8889	2441133.19	1971 Jun 30 15:30:59	Rocketsonde	-	-	Met. Para, STS	-	-	-	WS	-	-	-	88	-	-
1971-8890	2441133.19	1971 Jun 30 15:30:59	Rocketsonde	-	-	Met. Para, AI/DMP-9	-	-	-	THU	-	-	-	59	-	-
1971-8891	2441133.21	1971 Jun 30 17:00:00	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	PRIM	-	-	-	64	-	-
1971-8892	2441133.23	1971 Jun 30 17:34:00	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	CC	LO43	-	-	61	-	-
1971-8893	2441133.28	1971 Jun 30 21:04:59	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	WS	-	-	-	64	-	-
1971-8893	2441133.36	1971 Jun 30 21:36:59	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	WI	-	-	-	61	-	-
1971-8894	2441133.40	1971 Jun 30 22:06:00	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	PH	-	-	-	54	-	-
1971-8896	2441134.39	1971 Jul 1 21:27:59	Rocketsonde	-	-	Met. Sphere	-	-	-	KAU	-	-	-	59	-	-
1971-8897	2441135.08	1971 Jul 2 14:00:00	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	ASC	-	-	-	58	-	-
1971-8898	2441135.12	1971 Jul 2 15:00:00	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	ASC	-	-	-	61	-	-
1971-8900	2441135.21	1971 Jul 2 17:00:00	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	SHER	-	-	-	61	-	-
1971-8901	2441135.25	1971 Jul 2 18:00:00	Rocketsonde	-	-	Met. Para, AI/DMP-9	-	-	-	THU	-	-	-	59	-	-
1971-8902	2441135.29	1971 Jul 2 18:50:59	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	CC	LO43	-	-	61	-	-
1971-8903	2441135.34	1971 Jul 2 20:03:00	Rocketsonde	-	-	Met. Sphere	-	-	-	VI	-	-	-	90	-	-
1971-8904	2441135.36	1971 Jul 2 20:32:00	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	PM	-	-	-	55	-	-
1971-8904	2441135.38	1971 Jul 2 21:00:00	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	PM	-	-	-	57	-	-
1971-8905	2441139.17	1971 Jul 6 16:59:59	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	KAU	-	-	-	58	-	-
1971-8905	2441139.17	1971 Jul 6 20:00:00	Rocketsonde	-	-	Met. Sphere	-	-	-	SHER	-	-	-	58	-	-
1971-8906	2441139.23	1971 Jul 6 21:00:00	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	PM	-	-	-	90	-	-
1971-8906	2441139.32	1971 Jul 7 09:59:59	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	KAU	-	-	-	87	-	-
1971-8907	2441140.08	1971 Jul 7 13:52:59	Rocketsonde	-	-	Met. Sphere	-	-	-	ASC	LO43	-	-	56	-	-
1971-8908	2441140.08	1971 Jul 7 14:00:00	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	CC	-	-	-	66	-	-
1971-8909	2441140.12	1971 Jul 7 15:00:00	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	ASC	LO43	-	-	68	-	-
1971-8910	2441140.12	1971 Jul 7 16:00:00	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	PM	-	-	-	57	-	-
1971-8911	2441140.16	1971 Jul 7 16:45:00	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	SHER	-	-	-	61	-	-
1971-8912	2441140.20	1971 Jul 7 18:44:59	Rocketsonde	-	-	Met. Sphere	-	-	-	CC	LO43	-	-	82	-	-
1971-8913	2441140.22	1971 Jul 7 19:46:59	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	WS	-	-	-	67	-	-
1971-8914	2441141.21	1971 Jul 8 17:07:59	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	VI	-	-	-	53	-	-
1971-8914	2441141.32	1971 Jul 8 17:07:59	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	PRIM	-	-	-	67	-	-
1971-8915	2441141.38	1971 Jul 8 21:01:59	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	PM	-	-	-	55	-	-
1971-8916	2441141.38	1971 Jul 8 21:17:00	Rocketsonde	-	-	Met. Sphere	-	-	-	KAU	-	-	-	75	-	-
1971-8918	2441142.05	1971 Jul 9 13:09:59	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	KAU	-	-	-	59	-	-
1971-8919	2441142.08	1971 Jul 9 14:00:00	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	ASC	LO43	-	-	64	-	-
1971-8920	2441142.12	1971 Jul 9 15:00:00	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	ASC	-	-	-	63	-	-
1971-8922	2441142.19	1971 Jul 9 16:30:00	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	SHER	-	-	-	57	-	-
1971-8922	2441142.31	1971 Jul 9 19:30:59	Rocketsonde	-	-	Met. Para, AI/DMP-9	-	-	-	THU	-	-	-	62	-	-
1971-8923	2441142.40	1971 Jul 9 21:30:00	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	PM	-	-	-	56	-	-
1971-8924	2441145.07	1971 Jul 12 13:46:59	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	KAU	-	-	-	54	-	-
1971-8925	2441145.08	1971 Jul 12 14:00:00	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	CC	LO43	-	-	62	-	-
1971-8926	2441145.13	1971 Jul 12 15:10:00	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	SHER	-	-	-	55	-	-

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Mission	FlightCode	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee_Km	Range_Km	Dest
1971-0927	2441146.14	1971 Jul 12 15:20:00	Rocketsonde	-	-	Met. Para. Arcsande	-	-	-	-	-	-	-	54	-	-
1971-0929	2441146.19	1971 Jul 12 16:30:00	Rocketsonde	-	-	Met. Para. AM/DMQ-9	-	-	-	-	-	-	-	59	-	-
1971-0930	2441146.19	1971 Jul 12 16:54:59	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	-	-	-	-	60	-	-
1971-0931	2441146.21	1971 Jul 12 17:03:59	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	-	-	-	-	58	-	-
1971-0932	2441146.38	1971 Jul 12 21:08:00	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	-	-	-	-	57	-	-
1971-0933	2441146.38	1971 Jul 13 21:00:00	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	-	-	-	-	55	-	-
1971-0934	2441146.38	1971 Jul 14 10:44:59	Rocketsonde	-	-	Met. Sphere	-	-	-	-	-	-	-	102	-	-
1971-0935	2441147.08	1971 Jul 14 13:49:59	Rocketsonde	-	-	Met. Para. Arcsande	-	-	-	-	-	-	-	60	-	-
1971-0936	2441147.08	1971 Jul 14 14:00:00	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	LO43	-	-	-	60	-	-
1971-0937	2441147.12	1971 Jul 14 15:00:00	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	-	-	-	-	62	-	-
1971-0938	2441147.15	1971 Jul 14 15:41:00	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	-	-	-	-	58	-	-
1971-0939	2441147.21	1971 Jul 14 17:00:00	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	-	-	-	-	63	-	-
1971-0940	2441147.21	1971 Jul 14 17:03:00	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	-	-	-	-	68	-	-
1971-7220	2441147.23	1971 Jul 14 17:35:00	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	-	-	-	-	68	-	-
1971-0941	2441147.23	1971 Jul 14 17:35:00	Rocketsonde	-	-	Met. Sphere	-	-	-	-	-	-	-	57	-	-
1971-0942	2441147.57	1971 Jul 15 01:41:59	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	-	-	-	-	59	-	-
1971-0944	2441148.21	1971 Jul 15 17:06:00	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	-	-	-	-	51	-	-
1971-7221	2441148.38	1971 Jul 15 21:30:00	Rocketsonde	-	-	Met. Sphere	-	-	-	-	-	-	-	61	-	-
1971-0946	2441148.40	1971 Jul 15 21:30:00	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	-	-	-	-	61	-	-
1971-0948	2441149.06	1971 Jul 16 13:30:00	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	LO43	-	-	-	56	-	-
1971-0947	2441149.08	1971 Jul 16 14:00:00	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	-	-	-	-	60	-	-
1971-0948	2441149.12	1971 Jul 16 14:00:00	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	-	-	-	-	60	-	-
1971-0949	2441149.25	1971 Jul 16 17:57:00	Rocketsonde	-	-	Met. Para. STS	-	-	-	-	-	-	-	60	-	-
1971-0950	2441149.31	1971 Jul 16 19:30:00	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	-	-	-	-	61	-	-
1971-0951	2441149.38	1971 Jul 16 19:30:00	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	-	-	-	-	61	-	-
1971-0952	2441149.56	1971 Jul 16 21:00:00	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	-	-	-	-	59	-	-
1971-0953	2441150.58	1971 Jul 16 01:52:59	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	LO43	-	-	-	57	-	-
1971-0954	2441150.61	1971 Jul 16 02:46:59	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	-	-	-	-	64	-	-
1971-0955	2441152.06	1971 Jul 16 14:20:00	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	LO43	-	-	-	64	-	-
1971-0956	2441152.10	1971 Jul 19 14:20:00	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	-	-	-	-	59	-	-
1971-0957	2441152.12	1971 Jul 19 15:00:00	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	-	-	-	-	63	-	-
1971-0958	2441152.15	1971 Jul 19 15:30:00	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	-	-	-	-	59	-	-
1971-0959	2441152.21	1971 Jul 19 17:04:59	Rocketsonde	-	-	Met. Para. AM/DMQ-9	-	-	-	-	-	-	-	64	-	-
1971-0960	2441152.23	1971 Jul 19 17:28:59	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	-	-	-	-	62	-	-
1971-0962	2441152.36	1971 Jul 19 21:00:00	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	-	-	-	-	56	-	-
1971-0963	2441152.60	1971 Jul 20 02:17:00	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	-	-	-	-	60	-	-
1971-0964	2441153.38	1971 Jul 20 21:01:59	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	-	-	-	-	57	-	-
1971-0965	2441153.58	1971 Jul 20 21:11:59	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	-	-	-	-	57	-	-
1971-7223	2441153.59	1971 Jul 21 10:14:59	Rocketsonde	-	-	Met. Sphere	-	-	-	LO43	-	-	-	55	-	-
1971-0966	2441154.06	1971 Jul 21 13:30:00	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	-	-	-	-	54	-	-
1971-0967	2441154.06	1971 Jul 21 14:00:00	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	-	-	-	-	59	-	-
1971-0968	2441154.10	1971 Jul 21 14:30:00	Rocketsonde	-	-	Met. Para. Arcsande	-	-	-	-	-	-	-	56	-	-
1971-0969	2441154.12	1971 Jul 21 15:00:00	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	-	-	-	-	61	-	-
1971-0970	2441154.12	1971 Jul 21 15:06:00	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	-	-	-	-	59	-	-
1971-0972	2441154.16	1971 Jul 21 16:13:59	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	-	-	-	-	61	-	-
1971-0973	2441154.19	1971 Jul 21 17:28:59	Rocketsonde	-	-	Met. Para. AM/DMQ-9	-	-	-	-	-	-	-	58	-	-
1971-0974	2441154.22	1971 Jul 21 17:46:59	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	-	-	-	-	56	-	-
1972-005	2441320.23	1972 Jan 3 15:01:00	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	-	-	-	-	60	-	-
1972-007	2441320.31	1972 Jan 3 17:24:00	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	-	-	-	-	60	-	-
1972-008	2441320.35	1972 Jan 3 18:54:59	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	-	-	-	-	60	-	-
1972-009	2441320.35	1972 Jan 3 20:30:59	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	-	-	-	-	59	-	-
1972-010	2441320.38	1972 Jan 3 21:00:00	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	-	-	-	-	59	-	-
1972-011	2441321.37	1972 Jan 4 2:05:00	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	-	-	-	-	58	-	-
1972-012	2441322.08	1972 Jan 5 14:00:00	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	LO43	-	-	-	58	-	-
1972-013	2441322.10	1972 Jan 5 14:30:00	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	-	-	-	-	58	-	-
1972-014	2441322.12	1972 Jan 5 15:00:00	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	-	-	-	-	61	-	-
1972-015	2441322.23	1972 Jan 5 17:35:00	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	-	-	-	-	60	-	-
1972-016	2441322.23	1972 Jan 5 17:35:00	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	-	-	-	-	60	-	-
1972-017	2441322.33	1972 Jan 5 19:56:59	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	-	-	-	-	60	-	-
1972-018	2441322.33	1972 Jan 5 21:00:00	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	-	-	-	-	60	-	-
1972-019	2441322.38	1972 Jan 5 21:34:59	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	-	-	-	-	59	-	-
1972-020	2441322.41	1972 Jan 5 21:44:00	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	-	-	-	-	51	-	-
1972-021	2441322.48	1972 Jan 5 23:35:00	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	-	-	-	-	59	-	-
1972-022	2441322.59	1972 Jan 6 02:03:59	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	-	-	-	-	62	-	-
1972-023	2441323.29	1972 Jan 6 18:59:59	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	-	-	-	-	58	-	-
1972-026	2441323.31	1972 Jan 6 19:30:00	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	-	-	-	-	58	-	-
1972-027	2441323.31	1972 Jan 6 19:30:00	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	-	-	-	-	60	-	-
1972-028	2441323.35	1972 Jan 6 20:30:00	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	-	-	-	-	60	-	-
1972-029	2441323.38	1972 Jan 6 21:07:00	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	-	-	-	-	59	-	-
1972-030	2441323.48	1972 Jan 6 23:24:00	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	-	-	-	-	59	-	-
1972-031	2441323.50	1972 Jan 7 0:00:00	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	-	-	-	-	61	-	-
1972-032	2441324.08	1972 Jan 7 14:00:00	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	-	-	-	-	61	-	-
1972-033	2441324.12	1972 Jan 7 15:00:00	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	-	-	-	-	61	-	-
1972-034	2441324.13	1972 Jan 7 16:44:59	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	-	-	-	-	61	-	-
1972-035	2441324.20	1972 Jan 7 16:44:59	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	-	-	-	-	62	-	-
1972-036	2441324.33	1972 Jan 7 20:00:00	Rocketsonde	-	-	Met. Para. Arcsande	-	-	-	LO43	-	-	-	53	-	-
1972-038	2441324.33	1972 Jan 7 16:49:59	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	-	-	-	-	56	-	-
1972-039	2441324.33	1972 Jan 7 20:02:00	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	-	-	-	-	59	-	-
1972-040	2441324.33	1972 Jan 7 21:30:00	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	-	-	-	-	61	-	-
1972-041	2441327.08	1972 Jan 10 14:00:00	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	-	-	-	-	61	-	-
1972-042	2441327.12	1972 Jan 10 15:00:00	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	-	-	-	-	49	-	-
1972-043	2441327.17	1972 Jan 10 15:57:59	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	-	-	-	-	57	-	-
1972-044	2441327.28	1972 Jan 10 16:54:59	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	-	-	-	-	67	-	-
1972-045	2441327.28	1972 Jan 10 18:46:00	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	-	-	-	-	58	-	-
1972-046	2441327.39	1972 Jan 10 21:15:59	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	-	-	-	-	62	-	-
1972-047	2441328.10	1972 Jan 11 14:30:00	Rocketsonde	-	-	Met. Sphere	-	-	-	-	-	-	-	79	-	-
1972-047	2441328.17	1972 Jan 11 16:10:59	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	LO43	-	-	-	56	-	-

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Mission	FlightCode	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee_Km	Range_Km	Dest
1972-048	2441328.24	1972 Jan 11 17:45:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	WS	-	-	-	59	-	-
1972-049	2441328.33	1972 Jan 11 20:00:00	Rocketsonde	-	-	Chaff	-	-	-	WS	-	-	-	91	-	-
1972-050	2441329.08	1972 Jan 12 14:00:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	ASC	-	-	-	61	-	-
1972-051	2441329.10	1972 Jan 12 14:30:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	CC	LO43	-	-	64	-	-
1972-052	2441329.12	1972 Jan 12 15:00:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	SHER	-	-	-	57	-	-
1972-053	2441329.13	1972 Jan 12 15:13:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	WI	-	-	-	83	-	-
1972-054	2441329.19	1972 Jan 12 17:28:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	CC	LO43	-	-	70	-	-
1972-055	2441329.23	1972 Jan 12 18:59:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PRIM	-	-	-	61	-	-
1972-056	2441329.29	1972 Jan 12 18:59:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	WS	-	-	-	59	-	-
1972-057	2441329.30	1972 Jan 12 19:13:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	WS	-	-	-	90	-	-
1972-058	2441329.34	1972 Jan 12 20:04:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PH	-	-	-	59	-	-
1972-059	2441329.38	1972 Jan 12 21:00:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	KAU	-	-	-	75	-	-
1972-060	2441329.39	1972 Jan 12 21:22:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	KAU	-	-	-	55	-	-
1972-061	2441330.16	1972 Jan 13 15:45:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	WS	-	-	-	71	-	-
1972-062	2441330.30	1972 Jan 13 19:14:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	WS	-	-	-	59	-	-
1972-063	2441330.31	1972 Jan 13 19:30:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PH	-	-	-	57	-	-
1972-064	2441330.38	1972 Jan 13 21:00:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	KAU	-	-	-	63	-	-
1972-065	2441331.08	1972 Jan 14 14:00:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	ASC	LO43	-	-	60	-	-
1972-066	2441331.10	1972 Jan 14 14:30:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	CC	-	-	-	61	-	-
1972-067	2441331.12	1972 Jan 14 15:29:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	SHER	-	-	-	65	-	-
1972-068	2441331.15	1972 Jan 14 16:57:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	WI	-	-	-	54	-	-
1972-069	2441331.21	1972 Jan 14 18:59:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PH	-	-	-	59	-	-
1972-070	2441331.29	1972 Jan 14 22:41:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	WS	-	-	-	61	-	-
1972-071	2441331.46	1972 Jan 17 14:00:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	KAU	-	-	-	56	-	-
1972-072	2441334.08	1972 Jan 17 14:30:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	ASC	-	-	-	55	-	-
1972-073	2441334.10	1972 Jan 17 14:30:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	AUT	-	-	-	56	-	-
1972-074	2441334.10	1972 Jan 17 14:30:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	CC	LO43	-	-	57	-	-
1972-075	2441334.12	1972 Jan 17 15:00:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	SHER	-	-	-	60	-	-
1972-076	2441334.19	1972 Jan 17 15:00:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PRIM	-	-	-	60	-	-
1972-077	2441334.23	1972 Jan 17 17:28:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PH	-	-	-	61	-	-
1972-078	2441334.25	1972 Jan 17 17:28:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	WI	-	-	-	51	-	-
1972-079	2441334.29	1972 Jan 17 19:02:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	WS	-	-	-	59	-	-
1972-080	2441334.38	1972 Jan 17 21:00:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	KAU	-	-	-	63	-	-
1972-081	2441334.46	1972 Jan 17 23:00:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PH	-	-	-	58	-	-
1972-082	2441335.18	1972 Jan 18 15:20:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	WS	-	-	-	60	-	-
1972-083	2441335.22	1972 Jan 18 17:22:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PH	-	-	-	56	-	-
1972-084	2441335.35	1972 Jan 18 20:30:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	WS	-	-	-	60	-	-
1972-085	2441335.37	1972 Jan 18 20:39:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	KAU	-	-	-	59	-	-
1972-086	2441336.10	1972 Jan 19 15:00:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	SHER	LO43	-	-	58	-	-
1972-087	2441336.12	1972 Jan 19 15:00:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	ASC	-	-	-	62	-	-
1972-088	2441336.18	1972 Jan 19 15:14:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	RELAT	-	-	-	63	-	-
1972-089	2441336.25	1972 Jan 19 17:00:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	WS	-	-	-	60	-	-
1972-090	2441336.36	1972 Jan 19 20:46:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	Met. Para	-	-	-	59	-	-
1972-091	2441336.45	1972 Jan 19 22:41:00	Rocketsonde	-	-	Chaff	-	-	-	WS	-	-	-	77	-	-
1972-092	2441336.46	1972 Jan 19 22:41:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	KAU	-	-	-	60	-	-
1972-093	2441336.46	1972 Jan 20 01:31:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	KNR	-	-	-	58	-	-
1972-094	2441336.46	1972 Jan 20 01:31:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	KNR	-	-	-	58	-	-
1972-095	2441337.13	1972 Jan 20 15:16:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	CUBI	-	-	-	64	-	-
1972-096	2441337.14	1972 Jan 20 15:16:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PH	-	-	-	58	-	-
1972-097	2441337.54	1972 Jan 21 01:06:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	WI	-	-	-	58	-	-
1972-098	2441338.08	1972 Jan 21 01:06:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	ASC	-	-	-	57	-	-
1972-099	2441338.09	1972 Jan 21 15:00:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	ASC	-	-	-	57	-	-
1972-100	2441338.21	1972 Jan 21 15:00:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	SHER	-	-	-	59	-	-
1972-101	2441338.25	1972 Jan 21 18:00:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	AUT	-	-	-	63	-	-
1972-102	2441338.26	1972 Jan 21 18:00:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	CC	LO43	-	-	55	-	-
1972-103	2441338.26	1972 Jan 21 18:00:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	CC	-	-	-	63	-	-
1972-104	2441338.26	1972 Jan 21 18:00:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	WS	-	-	-	55	-	-
1972-105	2441338.31	1972 Jan 21 19:30:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	WI	-	-	-	53	-	-
1972-106	2441338.31	1972 Jan 21 19:30:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	WI	-	-	-	61	-	-
1972-107	2441338.33	1972 Jan 21 19:30:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PH	-	-	-	54	-	-
1972-108	2441338.36	1972 Jan 21 20:52:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	KAU	-	-	-	60	-	-
1972-109	2441338.37	1972 Jan 21 20:52:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	GRLY	-	-	-	68	-	-
1972-110	2441338.37	1972 Jan 21 20:52:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	ASC	LO43	-	-	68	-	-
1972-111	2441338.37	1972 Jan 21 20:52:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	CC	-	-	-	62	-	-
1972-112	2441338.37	1972 Jan 21 20:52:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	SHER	-	-	-	60	-	-
1972-113	2441338.37	1972 Jan 21 20:52:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PRIM	-	-	-	59	-	-
1972-114	2441338.37	1972 Jan 21 20:52:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	WS	-	-	-	60	-	-
1972-115	2441338.36	1972 Jan 21 19:58:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PH	-	-	-	54	-	-
1972-116	2441338.36	1972 Jan 21 19:58:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	WI	-	-	-	53	-	-
1972-117	2441338.37	1972 Jan 21 21:00:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	WI	-	-	-	61	-	-
1972-118	2441338.37	1972 Jan 21 21:00:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	ASC	-	-	-	57	-	-
1972-119	2441338.37	1972 Jan 21 21:00:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	SHER	-	-	-	59	-	-
1972-120	2441341.07	1972 Jan 24 14:00:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	Met. Para, Arcasonde	-	-	-	63	-	-
1972-121	2441341.10	1972 Jan 24 14:30:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	CC	LO43	-	-	55	-	-
1972-122	2441341.12	1972 Jan 24 15:00:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	WS	-	-	-	53	-	-
1972-123	2441341.20	1972 Jan 24 16:47:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	WI	-	-	-	60	-	-
1972-124	2441341.29	1972 Jan 24 18:59:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	KAU	-	-	-	60	-	-
1972-125	2441341.46	1972 Jan 25 01:14:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PH	-	-	-	59	-	-
1972-126	2441341.55	1972 Jan 25 01:14:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	WS	-	-	-	60	-	-
1972-127	2441341.57	1972 Jan 25 01:47:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PH	-	-	-	61	-	-
1972-128	2441342.23	1972 Jan 25 17:30:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	GRLY	-	-	-	56	-	-
1972-129	2441342.23	1972 Jan 25 17:30:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	KNR	-	-	-	61	-	-
1972-130	2441342.23	1972 Jan 25 18:00:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	WS	-	-	-	60	-	-
1972-131	2441342.24	1972 Jan 25 20:04:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	WS	-	-	-	57	-	-
1972-132	2441342.24	1972 Jan 25 20:04:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	Met. Para	-	-	-	92	-	-
1972-133	2441343.08	1972 Jan 26 14:00:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	KAU	-	-	-	58	-	-
1972-134	2441343.10	1972 Jan 26 14:30:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	ASC	-	-	-	60	-	-
1972-135	2441343.12	1972 Jan 26 15:00:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	CC	LO43	-	-	64	-	-
1972-136	2441343.15	1972 Jan 26 16:13:59	Rocketsonde	-	-	Starute, Datasonde	-	-</								

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Mission	FlightCode	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee_Km	Range_Km	Dest
1972-W145	2441345.08	1972 Jan 28 14:00:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	ASC	-	-	-	60	-	-
1972-W146	2441345.12	1972 Jan 28 14:48:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	CC	LO43	-	-	61	-	-
1972-W147	2441345.12	1972 Jan 28 15:00:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	SHER	-	-	-	53	-	-
1972-W149	2441345.17	1972 Jan 28 15:58:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	MI	-	-	-	59	-	-
1972-W150	2441345.29	1972 Jan 28 18:55:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	MI	-	-	-	57	-	-
1972-W151	2441345.35	1972 Jan 28 20:30:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	GALY	-	-	-	58	-	-
1972-W152	2441345.56	1972 Jan 29 01:32:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	KMR	-	-	-	55	-	-
1972-W153	2441348.08	1972 Jan 31 14:00:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	ASC	-	-	-	52	-	-
1972-W154	2441348.12	1972 Jan 31 15:00:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	SHER	-	-	-	66	-	-
1972-W155	2441348.20	1972 Jan 31 16:51:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PRIM	-	-	-	53	-	-
1972-W157	2441348.30	1972 Jan 31 19:04:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	MI	-	-	-	57	-	-
1972-W158	2441348.31	1972 Jan 31 19:25:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PH	-	-	-	58	-	-
1972-W159	2441348.33	1972 Jan 31 20:00:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	WS	-	-	-	60	-	-
1972-W160	2441348.35	1972 Jan 31 20:30:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	GALY	-	-	-	64	-	-
1972-W161	2441348.46	1972 Jan 31 22:56:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	KAU	-	-	-	51	-	-
1972-W162	2441348.56	1972 Feb 1 01:30:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	KMR	-	-	-	55	-	-
1972-W164	2441349.23	1972 Feb 1 17:30:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	WS	-	-	-	60	-	-
1972-W166	2441349.27	1972 Feb 1 18:30:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	WS	-	-	-	69	-	-
1972-W167	2441349.27	1972 Feb 1 18:31:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	Met. Sphere	-	-	-	62	-	-
1972-W169	2441349.31	1972 Feb 1 19:22:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	MI	-	-	-	58	-	-
1972-W172	2441350.08	1972 Feb 2 14:00:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	ASC	LO43	-	-	62	-	-
1972-W173	2441350.09	1972 Feb 2 14:09:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	CC	-	-	-	63	-	-
1972-W15	2441350.16	1972 Feb 2 15:49:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	CELAT	-	-	-	49	-	-
1972-W175	2441350.31	1972 Feb 2 19:30:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PRIM	-	-	-	52	-	-
1972-W176	2441350.38	1972 Feb 2 19:41:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	WS	-	-	-	59	-	-
1972-W177	2441350.56	1972 Feb 3 01:30:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	KAU	-	-	-	62	-	-
1972-W178	2441351.29	1972 Feb 3 18:59:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	KMR	-	-	-	59	-	-
1972-W180	2441351.29	1972 Feb 3 18:59:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	WS	-	-	-	57	-	-
1972-W181	2441352.08	1972 Feb 4 14:00:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	ASC	-	-	-	59	-	-
1972-W182	2441352.12	1972 Feb 4 15:00:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	SHER	-	-	-	58	-	-
1972-W184	2441352.20	1972 Feb 4 16:46:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PRIM	-	-	-	63	-	-
1972-W185	2441352.25	1972 Feb 4 18:01:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PH	-	-	-	60	-	-
1972-W186	2441352.29	1972 Feb 4 18:59:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	WS	-	-	-	61	-	-
1972-W187	2441352.50	1972 Feb 5 01:30:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	MI	-	-	-	57	-	-
1972-W188	2441352.50	1972 Feb 5 00:00:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	GALY	-	-	-	63	-	-
1972-W189	2441352.56	1972 Feb 5 01:30:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	KMR	-	-	-	61	-	-
1972-W192	2441355.08	1972 Feb 7 14:00:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	ASC	LO43	-	-	59	-	-
1972-W193	2441355.10	1972 Feb 7 14:30:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	CC	-	-	-	65	-	-
1972-W194	2441355.12	1972 Feb 7 15:00:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	SHER	-	-	-	65	-	-
1972-W195	2441355.17	1972 Feb 7 16:45:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PH	-	-	-	60	-	-
1972-W196	2441355.20	1972 Feb 7 16:45:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PRIM	-	-	-	69	-	-
1972-W198	2441355.36	1972 Feb 7 19:10:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	Met. Para.	-	-	-	80	-	-
1972-W199	2441355.36	1972 Feb 7 20:51:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	KAU	-	-	-	61	-	-
1972-W201	2441355.50	1972 Feb 7 23:51:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	GALY	-	-	-	60	-	-
1972-W202	2441356.29	1972 Feb 8 18:56:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PH	-	-	-	58	-	-
1972-W203	2441356.38	1972 Feb 8 18:59:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	WS	-	-	-	59	-	-
1972-W205	2441356.58	1972 Feb 8 21:00:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	KAU	-	-	-	58	-	-
1972-W206	2441357.08	1972 Feb 8 14:30:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	ASC	LO43	-	-	56	-	-
1972-W207	2441357.10	1972 Feb 8 14:30:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	CC	-	-	-	64	-	-
1972-W208	2441357.17	1972 Feb 8 14:30:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	THU	-	-	-	66	-	-
1972-W209	2441357.27	1972 Feb 8 18:30:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	CC	LO43	-	-	57	-	-
1972-W210	2441357.30	1972 Feb 8 19:14:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	MI	-	-	-	57	-	-
1972-W211	2441357.30	1972 Feb 8 19:14:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	WS	-	-	-	60	-	-
1972-W212	2441357.35	1972 Feb 8 20:30:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	GALY	-	-	-	61	-	-
1972-W213	2441357.43	1972 Feb 8 21:57:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	SHER	-	-	-	59	-	-
1972-W214	2441357.44	1972 Feb 8 22:31:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PH	-	-	-	75	-	-
1972-W215	2441357.46	1972 Feb 8 23:01:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	KAU	-	-	-	60	-	-
1972-W218	2441357.56	1972 Feb 9 19:14:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	KAU	-	-	-	59	-	-
1972-W219	2441358.17	1972 Feb 9 19:14:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	KMR	-	-	-	61	-	-
1972-W220	2441358.29	1972 Feb 10 01:30:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PH	-	-	-	90	-	-
1972-W221	2441358.31	1972 Feb 10 19:30:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	WS	-	-	-	60	-	-
1972-W222	2441358.38	1972 Feb 10 15:57:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PH	-	-	-	63	-	-
1972-W223	2441358.93	1972 Feb 11 10:24:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	ASC	-	-	-	92	-	-
1972-W224	2441359.10	1972 Feb 11 14:00:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	CC	LO43	-	-	63	-	-
1972-W225	2441359.12	1972 Feb 11 14:30:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	CC	-	-	-	63	-	-
1972-W226	2441359.20	1972 Feb 11 16:44:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	SHER	-	-	-	51	-	-
1972-W227	2441359.23	1972 Feb 11 17:30:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PH	-	-	-	59	-	-
1972-W228	2441359.24	1972 Feb 11 17:48:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	WS	-	-	-	70	-	-
1972-W230	2441359.26	1972 Feb 11 18:14:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	WS	-	-	-	60	-	-
1972-W231	2441359.33	1972 Feb 11 19:14:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	Met. Sphere	-	-	-	85	-	-
1972-W232	2441359.38	1972 Feb 11 19:48:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	CHIFF	-	-	-	56	-	-
1972-W233	2441359.56	1972 Feb 12 01:30:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	KAU	-	-	-	55	-	-
1972-W234	2441359.66	1972 Feb 12 13:30:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	KMR	-	-	-	55	-	-
1972-W235	2441359.11	1972 Feb 14 14:35:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	ASC	LO43	-	-	63	-	-
1972-W236	2441362.12	1972 Feb 14 15:04:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	CC	-	-	-	56	-	-
1972-W238	2441362.13	1972 Feb 14 15:04:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	SHER	-	-	-	56	-	-
1972-W239	2441362.16	1972 Feb 14 15:56:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	THU	-	-	-	62	-	-
1972-W240	2441362.29	1972 Feb 14 18:59:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PH	-	-	-	57	-	-
1972-W241	2441362.38	1972 Feb 14 21:03:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	WS	-	-	-	62	-	-
1972-W242	2441363.10	1972 Feb 15 14:30:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	KAU	-	-	-	58	-	-
1972-W244	2441363.18	1972 Feb 15 16:22:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	CC	LO43	-	-	85	-	-
1972-W245	2441363.21	1972 Feb 15 17:00:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PH	-	-	-	85	-	-
1972-W246	2441363.24	1972 Feb 15 17:45:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	WS	-	-	-	52	-	-
1972-W247	2441363.27	1972 Feb 15 18:30:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	CC	LO43	-	-	84	-	-



Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Mission	FlightCode	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee_Km	Range_Km	Dest
1972-4247	2441363.50	1972 Feb 16 00:00:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	GRLY	-	-	-	61	-	-
1972-4249	2441364.08	1972 Feb 16 14:00:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	ASC	-	-	-	58	-	-
1972-4250	2441364.10	1972 Feb 16 14:30:00	Rocketsonde	-	-	Met. Para. AI/DMP-9	-	-	-	THU	-	-	-	64	-	-
1972-4251	2441364.11	1972 Feb 16 14:30:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	CC	LO43	-	-	63	-	-
1972-4252	2441364.11	1972 Feb 16 14:30:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	CLB1	-	-	-	62	-	-
1972-4253	2441364.12	1972 Feb 16 15:00:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	CELAT	-	-	-	61	-	-
1972-4255	2441364.17	1972 Feb 16 15:59:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PM	-	-	-	60	-	-
1972-4256	2441364.27	1972 Feb 16 18:30:00	Rocketsonde	-	-	Met. Sphere	-	-	-	CC	LO43	-	-	56	-	-
1972-4257	2441364.31	1972 Feb 16 19:20:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	WI	-	-	-	58	-	-
1972-4258	2441364.40	1972 Feb 16 21:30:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	GRLY	-	-	-	60	-	-
1972-4259	2441365.19	1972 Feb 17 16:34:59	Rocketsonde	-	-	Met. Sphere	-	-	-	CC	LO43	-	-	57	-	-
1972-4260	2441365.42	1972 Feb 17 21:59:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PM	-	-	-	58	-	-
1972-4261	2441365.43	1972 Feb 17 22:13:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	ASC	-	-	-	58	-	-
1972-4262	2441366.08	1972 Feb 18 14:00:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	ASC	-	-	-	58	-	-
1972-4263	2441366.10	1972 Feb 18 14:30:00	Rocketsonde	-	-	Met. Sphere	-	-	-	CC	LO43	-	-	58	-	-
1972-4264	2441366.12	1972 Feb 18 15:00:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	SHER	-	-	-	63	-	-
1972-4265	2441366.14	1972 Feb 18 15:24:59	Rocketsonde	-	-	Met. Para. AI/DMP-9	-	-	-	THU	-	-	-	51	-	-
1972-4266	2441366.16	1972 Feb 18 15:56:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PM	-	-	-	59	-	-
1972-4267	2441366.17	1972 Feb 18 15:59:59	Rocketsonde	-	-	Met. Sphere	-	-	-	CC	LO43	-	-	59	-	-
1972-4268	2441366.40	1972 Feb 18 21:30:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	GRLY	-	-	-	62	-	-
1972-4269	2441366.54	1972 Feb 19 00:59:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	WS	-	-	-	62	-	-
1972-4270	2441369.10	1972 Feb 21 14:30:00	Rocketsonde	-	-	Met. Para. AI/DMP-9	-	-	-	THU	-	-	-	62	-	-
1972-4271	2441370.12	1972 Feb 22 17:03:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	SHER	-	-	-	59	-	-
1972-4272	2441370.21	1972 Feb 22 17:03:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PM	-	-	-	59	-	-
1972-4273	2441370.36	1972 Feb 22 20:40:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	WS	-	-	-	61	-	-
1972-4274	2441370.52	1972 Feb 23 09:59:59	Rocketsonde	-	-	Met. Sphere	-	-	-	ASC	-	-	-	61	-	-
1972-4276	2441371.08	1972 Feb 23 14:00:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	ASC	-	-	-	59	-	-
1972-4278	2441371.12	1972 Feb 23 15:00:00	Rocketsonde	-	-	Met. Sphere	-	-	-	CC	LO43	-	-	57	-	-
1972-4279	2441371.12	1972 Feb 23 15:00:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	SHER	-	-	-	62	-	-
1972-4280	2441371.23	1972 Feb 23 17:31:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PM	-	-	-	60	-	-
1972-4281	2441371.25	1972 Feb 23 17:55:00	Rocketsonde	-	-	Met. Para. Arcasonde	-	-	-	AUT	-	-	-	46	-	-
1972-4282	2441371.29	1972 Feb 23 18:56:59	Rocketsonde	-	-	Met. Para. Arcasonde	-	-	-	WI	-	-	-	60	-	-
1972-4283	2441371.33	1972 Feb 23 20:00:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	GRLY	-	-	-	59	-	-
1972-4284	2441371.34	1972 Feb 23 20:15:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	WS	-	-	-	60	-	-
1972-4285	2441371.46	1972 Feb 23 23:32:00	Rocketsonde	-	-	Met. Sphere	-	-	-	RAU	-	-	-	55	-	-
1972-4286	2441371.56	1972 Feb 24 01:30:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	NS	-	-	-	59	-	-
1972-4287	2441372.16	1972 Feb 24 15:56:59	Rocketsonde	-	-	Met. Para.	-	-	-	NS	-	-	-	60	-	-
1972-4288	2441372.25	1972 Feb 24 18:00:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	NS	-	-	-	56	-	-
1972-4289	2441372.31	1972 Feb 24 19:30:00	Rocketsonde	-	-	Met. Para.	-	-	-	NS	-	-	-	61	-	-
1972-4290	2441372.38	1972 Feb 24 21:00:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	NS	-	-	-	60	-	-
1972-4291	2441373.05	1972 Feb 25 14:00:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	ASC	-	-	-	80	-	-
1972-4292	2441373.12	1972 Feb 25 15:00:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	SHER	-	-	-	61	-	-
1972-4293	2441373.15	1972 Feb 25 15:00:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	THU	-	-	-	51	-	-
1972-4294	2441373.22	1972 Feb 25 17:10:00	Rocketsonde	-	-	Met. Para. AI/DMP-9	-	-	-	PM	-	-	-	70	-	-
1972-4295	2441373.22	1972 Feb 25 17:10:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	NS	-	-	-	59	-	-
1972-4296	2441373.35	1972 Feb 25 21:00:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	KAU	-	-	-	51	-	-
1972-4297	2441373.36	1972 Feb 25 21:00:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	NS	-	-	-	54	-	-
1972-4298	2441373.55	1972 Feb 26 01:30:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	GRLY	-	-	-	54	-	-
1972-4299	2441373.56	1972 Feb 26 01:37:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	KBR	-	-	-	58	-	-
1972-4300	2441373.66	1972 Feb 26 04:17:00	Rocketsonde	-	-	Met. Para. AI/DMP-9	-	-	-	THU	-	-	-	57	-	-
1972-4301	2441373.66	1972 Feb 26 04:17:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	SHER	-	-	-	57	-	-
1972-4302	2441373.71	1972 Feb 26 16:09:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PM	-	-	-	55	-	-
1972-4303	2441373.71	1972 Feb 26 16:09:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	NS	-	-	-	61	-	-
1972-4304	2441373.73	1972 Feb 26 19:30:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	GRLY	-	-	-	60	-	-
1972-4305	2441373.73	1972 Feb 26 20:00:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	KBR	-	-	-	60	-	-
1972-4306	2441373.76	1972 Feb 26 21:30:00	Rocketsonde	-	-	Met. Para. AI/DMP-9	-	-	-	THU	-	-	-	67	-	-
1972-4307	2441373.77	1972 Feb 26 21:30:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	CELAT	-	-	-	58	-	-
1972-4308	2441373.78	1972 Feb 26 21:30:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	SHER	-	-	-	60	-	-
1972-4309	2441373.79	1972 Feb 26 21:30:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	NS	-	-	-	54	-	-
1972-4310	2441373.79	1972 Feb 26 21:30:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	NS	-	-	-	65	-	-
1972-4311	2441373.79	1972 Feb 26 21:30:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	GRLY	-	-	-	56	-	-
1972-4312	2441373.79	1972 Feb 26 21:30:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	KBR	-	-	-	57	-	-
1972-4313	2441373.79	1972 Feb 26 21:30:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PM	-	-	-	57	-	-
1972-4314	2441373.79	1972 Feb 26 21:30:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	CC	LO43	-	-	62	-	-
1972-4315	2441380.10	1972 Mar 3 14:30:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	NS	-	-	-	61	-	-
1972-4316	2441380.12	1972 Mar 3 15:00:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	SHER	-	-	-	66	-	-
1972-4317	2441380.15	1972 Mar 3 15:30:00	Rocketsonde	-	-	Met. Para. AI/DMP-9	-	-	-	THU	-	-	-	59	-	-
1972-4318	2441380.18	1972 Mar 3 16:24:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PM	-	-	-	51	-	-
1972-4319	2441380.26	1972 Mar 3 18:14:59	Rocketsonde	-	-	Met. Para. Arcasonde	-	-	-	AUT	-	-	-	62	-	-
1972-4320	2441380.29	1972 Mar 3 18:59:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	NS	-	-	-	58	-	-
1972-4321	2441380.29	1972 Mar 3 19:43:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	WI	-	-	-	60	-	-
1972-4322	2441380.32	1972 Mar 3 21:14:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	GRLY	-	-	-	45	-	-
1972-4323	2441380.39	1972 Mar 3 21:14:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	AUT	-	-	-	64	-	-
1972-4324	2441383.09	1972 Mar 6 14:00:00	Rocketsonde	-	-	Met. Para. Arcasonde	-	-	-	SHER	-	-	-	63	-	-
1972-4325	2441383.19	1972 Mar 6 16:32:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PRIM	-	-	-	62	-	-
1972-4326	2441383.19	1972 Mar 6 18:30:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	CC	LO43	-	-	60	-	-
1972-4327	2441383.27	1972 Mar 6 18:30:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	NS	-	-	-	55	-	-
1972-4328	2441383.29	1972 Mar 6 18:59:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	NS	-	-	-	60	-	-
1972-4329	2441383.33	1972 Mar 6 19:55:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	WI	-	-	-	55	-	-
1972-4330	2441383.37	1972 Mar 6 20:55:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	GRLY	-	-	-	55	-	-
1972-4331	2441383.37	1972 Mar 6 20:55:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PM	-	-	-	62	-	-
1972-4332	2441383.38	1972 Mar 6 21:00:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	THU	-	-	-	60	-	-
1972-4333	2441384.09	1972 Mar 7 14:15:00	Rocketsonde	-	-	Met. Para. AI/DMP-9	-	-	-	WI	-	-	-	62	-	-
1972-4334	2441385.08	1972 Mar 8 14:00:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	THU	-	-	-	62	-	-
1972-4335	2441385.12	1972 Mar 8 15:00:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	SHER	-	-	-	66	-	-
1972-4336	2441385.12	1972 Mar 8 15:00:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	CC	LO43	-	-	84	-	-
1972-4337	2441385.12	1972 Mar 8 16:30:00	Rocketsonde	-	-	Met. Sphere	-	-	-	PRIM	-	-	-	67	-	-
1972-4338	2441385.19	1972 Mar 8 16:31:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PRIM	-	-	-	67	-	-

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Mission	FlightCode	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee_Km	Range_Km	Dest
1972-798	2441385.27	1972 Mar 8 1831:00	Rocketsonde	-	-	Met. Sphere	-	-	-	PH	-	-	-	95	-	-
1972-799	2441385.28	1972 Mar 8 1845:00	Rocketsonde	-	-	Met. Sphere	-	-	-	CC	LO43	-	-	62	-	-
1972-800	2441385.29	1972 Mar 8 1856:00	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	PH	-	-	-	55	-	-
1972-801	2441385.29	1972 Mar 8 1859:59	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	WS	-	-	-	62	-	-
1972-802	2441385.29	1972 Mar 10 1400:00	Rocketsonde	-	-	Met. Para. Arcsonde	-	-	-	AIT	-	-	-	59	-	-
1972-803	2441387.08	1972 Mar 10 1400:00	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	ASC	-	-	-	62	-	-
1972-804	2441387.12	1972 Mar 10 1500:00	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	CC	LO43	-	-	64	-	-
1972-805	2441387.12	1972 Mar 10 1500:00	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	SHER	-	-	-	64	-	-
1972-806	2441387.15	1972 Mar 10 1540:00	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	MI	-	-	-	55	-	-
1972-807	2441387.19	1972 Mar 10 1604:59	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	PRIM	-	-	-	55	-	-
1972-808	2441387.22	1972 Mar 10 1710:00	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	WS	-	-	-	57	-	-
1972-809	2441387.40	1972 Mar 10 2134:59	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	WS	-	-	-	62	-	-
1972-810	2441387.56	1972 Mar 11 0130:00	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	KNR	-	-	-	58	-	-
1972-811	2441390.08	1972 Mar 13 1400:00	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	ASC	-	-	-	62	-	-
1972-812	2441390.12	1972 Mar 13 1400:00	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	SHER	-	-	-	58	-	-
1972-813	2441390.16	1972 Mar 13 1551:00	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	PH	-	-	-	59	-	-
1972-814	2441390.23	1972 Mar 13 1725:00	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	CC	LO43	-	-	64	-	-
1972-815	2441390.29	1972 Mar 15 1400:00	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	WS	-	-	-	61	-	-
1972-816	2441392.08	1972 Mar 15 1400:00	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	ASC	-	-	-	61	-	-
1972-817	2441392.10	1972 Mar 15 1430:00	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	CC	LO43	-	-	64	-	-
1972-818	2441392.12	1972 Mar 15 1500:00	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	SHER	-	-	-	64	-	-
1972-819	2441392.15	1972 Mar 15 1534:59	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	CELAT	-	-	-	50	-	-
1972-820	2441392.18	1972 Mar 15 1621:59	Rocketsonde	-	-	Met. Para. AI/DMP-9	-	-	-	THU	-	-	-	52	-	-
1972-821	2441392.21	1972 Mar 15 1708:00	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	PRIM	-	-	-	56	-	-
1972-822	2441392.29	1972 Mar 15 1859:59	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	WS	-	-	-	57	-	-
1972-823	2441392.33	1972 Mar 15 1951:00	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	MI	-	-	-	61	-	-
1972-824	2441392.34	1972 Mar 15 2010:00	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	GRLY	-	-	-	61	-	-
1972-825	2441392.36	1972 Mar 15 2010:00	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	MI	-	-	-	62	-	-
1972-826	2441392.51	1972 Mar 16 0014:59	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	MI	-	-	-	63	-	-
1972-827	2441392.56	1972 Mar 16 0219:00	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	KNR	-	-	-	57	-	-
1972-828	2441392.60	1972 Mar 16 0219:00	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	CC	-	-	-	60	-	-
1972-829	2441393.11	1972 Mar 16 1435:00	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	MI	LO43	-	-	58	-	-
1972-830	2441393.12	1972 Mar 16 1500:00	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	GRLC	-	-	-	58	-	-
1972-831	2441393.17	1972 Mar 16 1559:59	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	MI	-	-	-	63	-	-
1972-832	2441393.17	1972 Mar 16 1559:59	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	MI	-	-	-	63	-	-
1972-833	2441393.29	1972 Mar 17 1214:59	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	WS	-	-	-	61	-	-
1972-834	2441394.08	1972 Mar 17 1400:00	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	GRLC	-	-	-	46	-	-
1972-835	2441394.12	1972 Mar 17 1500:00	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	ASC	LO43	-	-	62	-	-
1972-836	2441394.14	1972 Mar 17 1522:59	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	CC	-	-	-	66	-	-
1972-837	2441394.14	1972 Mar 17 1522:59	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	SHER	-	-	-	59	-	-
1972-838	2441394.17	1972 Mar 17 1559:59	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	PH	-	-	-	58	-	-
1972-839	2441394.17	1972 Mar 17 1559:59	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	GRLC	-	-	-	62	-	-
1972-840	2441394.25	1972 Mar 17 1559:59	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	WS	-	-	-	61	-	-
1972-841	2441394.25	1972 Mar 17 1500:00	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	GRLY	-	-	-	61	-	-
1972-842	2441394.53	1972 Mar 18 0130:00	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	KNR	-	-	-	59	-	-
1972-843	2441394.56	1972 Mar 20 1400:00	Rocketsonde	-	-	Met. Para. Arcsonde	-	-	-	AIT	-	-	-	55	-	-
1972-844	2441394.56	1972 Mar 20 1400:00	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	ASC	-	-	-	61	-	-
1972-845	2441397.08	1972 Mar 20 1430:00	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	ASC	-	-	-	62	-	-
1972-846	2441397.10	1972 Mar 20 1500:00	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	PH	LO43	-	-	61	-	-
1972-847	2441397.23	1972 Mar 20 1724:00	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	SHER	-	-	-	62	-	-
1972-848	2441397.23	1972 Mar 20 1724:00	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	PH	-	-	-	57	-	-
1972-849	2441397.23	1972 Mar 20 1724:00	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	MI	-	-	-	56	-	-
1972-850	2441397.29	1972 Mar 20 1859:59	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	MI	-	-	-	59	-	-
1972-851	2441397.31	1972 Mar 20 1930:00	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	WS	-	-	-	63	-	-
1972-852	2441397.31	1972 Mar 20 2000:00	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	GRLY	-	-	-	54	-	-
1972-853	2441397.33	1972 Mar 22 1400:00	Rocketsonde	-	-	Met. Para. Arcsonde	-	-	-	AIT	-	-	-	50	-	-
1972-854	2441399.08	1972 Mar 22 1400:00	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	ASC	-	-	-	63	-	-
1972-855	2441399.08	1972 Mar 22 1400:00	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	CC	LO43	-	-	64	-	-
1972-856	2441399.10	1972 Mar 22 1430:00	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	CC	-	-	-	64	-	-
1972-857	2441399.12	1972 Mar 22 1500:00	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	SHER	-	-	-	60	-	-
1972-858	2441399.18	1972 Mar 22 1622:59	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	PH	-	-	-	64	-	-
1972-859	2441399.22	1972 Mar 22 1715:00	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	MI	-	-	-	61	-	-
1972-860	2441399.22	1972 Mar 22 1715:00	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	CC	LO43	-	-	92	-	-
1972-861	2441399.33	1972 Mar 22 1944:59	Rocketsonde	-	-	Met. Sphere	-	-	-	WS	-	-	-	59	-	-
1972-862	2441399.33	1972 Mar 22 1957:59	Rocketsonde	-	-	Met. Sphere	-	-	-	PM	-	-	-	56	-	-
1972-863	2441399.38	1972 Mar 23 0131:59	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	GRLY	-	-	-	57	-	-
1972-864	2441400.01	1972 Mar 23 0131:59	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	KNR	-	-	-	56	-	-
1972-865	2441401.03	1972 Mar 24 1241:00	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	MI	-	-	-	53	-	-
1972-866	2441401.08	1972 Mar 24 1400:00	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	MI	-	-	-	61	-	-
1972-867	2441401.10	1972 Mar 24 1430:00	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	ASC	LO43	-	-	62	-	-
1972-868	2441401.12	1972 Mar 24 1430:00	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	CC	-	-	-	64	-	-
1972-869	2441401.26	1972 Mar 24 1500:00	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	SHER	-	-	-	60	-	-
1972-870	2441401.26	1972 Mar 24 1500:00	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	PH	-	-	-	64	-	-
1972-871	2441401.33	1972 Mar 24 1818:00	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	MI	-	-	-	61	-	-
1972-872	2441401.33	1972 Mar 24 1859:59	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	WS	-	-	-	58	-	-
1972-873	2441401.33	1972 Mar 24 2000:00	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	PH	-	-	-	62	-	-
1972-874	2441401.33	1972 Mar 25 0144:59	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	GRLY	-	-	-	61	-	-
1972-875	2441404.01	1972 Mar 27 1219:00	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	MI	-	-	-	58	-	-
1972-876	2441404.08	1972 Mar 27 1500:00	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	KNR	-	-	-	61	-	-
1972-877	2441404.12	1972 Mar 27 1500:00	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	ASC	-	-	-	61	-	-
1972-878	2441404.20	1972 Mar 27 1652:00	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	PH	-	-	-	61	-	-
1972-879	2441404.28	1972 Mar 27 1845:00	Rocketsonde	-	-	Met. Para. AI/DMP-9	-	-	-	THU	-	-	-	51	-	-
1972-880	2441404.33	1972 Mar 27 1954:59	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	WS	-	-	-	62	-	-
1972-881	2441404.33	1972 Mar 27 2000:00	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	GRLY	-	-	-	58	-	-
1972-882	2441404.56	1972 Mar 28 0130:00	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	KNR	-	-	-	55	-	-
1972-883	2441406.00	1972 Mar 29 1202:59	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	MI	-	-	-	56	-	-
1972-884	2441406.08	1972 Mar 29 1400:00	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	ASC	-	-	-	60	-	-
1972-885	2441406.12	1972 Mar 29 1500:00	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	SHER	-	-	-	62	-	-

Launch

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Mission	FlightCode	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee_Km	Range_Km	Dest
1972-4485	2441406:23	1972 Mar 29 17:33:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PH	-	-	-	59	-	-
1972-428	2441406:24	1972 Mar 29 17:45:00	Rocketsonde	-	-	Met. Para./AI/DKQ-9	-	-	-	THU	-	-	-	41	-	-
1972-4486	2441406:28	1972 Mar 29 18:46:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	THU	-	-	-	61	-	-
1972-429	2441406:36	1972 Mar 29 20:35:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	GELY	-	-	-	45	-	-
1972-4437	2441406:36	1972 Mar 29 20:35:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	WS	-	-	-	63	-	-
1972-4438	2441406:40	1972 Mar 29 21:30:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	GELY	-	-	-	60	-	-
1972-4439	2441406:56	1972 Mar 30 01:30:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	KHR	-	-	-	60	-	-
1972-4441	2441407:12	1972 Mar 30 15:00:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	SHER	-	-	-	59	-	-
1972-4442	2441407:29	1972 Mar 30 18:59:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	GELY	-	-	-	57	-	-
1972-4443	2441407:32	1972 Mar 31 11:56:00	Rocketsonde	-	-	Met. Para./STS	-	-	-	WS	-	-	-	56	-	-
1972-4445	2441408:00	1972 Mar 31 11:56:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	MI	-	-	-	58	-	-
1972-4446	2441408:08	1972 Mar 31 14:00:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	ASC	-	-	-	63	-	-
1972-4447	2441408:11	1972 Mar 31 14:46:00	Rocketsonde	-	-	Met. Para./AI/DKQ-9	-	-	-	THU	-	-	-	58	-	-
1972-4448	2441408:33	1972 Mar 31 19:49:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PH	-	-	-	56	-	-
1972-4449	2441408:38	1972 Mar 31 21:00:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	WS	-	-	-	60	-	-
1972-4450	2441408:56	1972 Apr 1 01:30:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	KHR	-	-	-	58	-	-
1972-4451	2441411:00	1972 Apr 3 11:59:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	MI	-	-	-	60	-	-
1972-4452	2441411:08	1972 Apr 3 14:00:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	ASC	-	-	-	65	-	-
1972-4453	2441411:08	1972 Apr 3 14:00:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	CC	-	-	-	64	-	-
1972-4454	2441411:12	1972 Apr 3 15:00:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	SHER	-	-	-	63	-	-
1972-4455	2441411:16	1972 Apr 3 15:53:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PH	-	-	-	60	-	-
1972-4456	2441411:17	1972 Apr 3 16:01:59	Rocketsonde	-	-	Met. Para./AI/DKQ-9	-	-	-	THU	-	-	-	56	-	-
1972-4457	2441411:29	1972 Apr 3 16:59:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	WS	-	-	-	60	-	-
1972-4458	2441411:53	1972 Apr 4 01:47:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	GELY	-	-	-	57	-	-
1972-4459	2441412:30	1972 Apr 4 01:47:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	KHR	-	-	-	60	-	-
1972-4460	2441413:08	1972 Apr 5 14:00:00	Rocketsonde	-	-	Met. Para.	-	-	-	WS	-	-	-	50	-	-
1972-4462	2441413:10	1972 Apr 5 14:31:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	ASC	-	-	-	60	-	-
1972-4463	2441413:12	1972 Apr 5 15:00:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	THU	-	-	-	64	-	-
1972-4464	2441413:13	1972 Apr 5 15:02:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	SHER	-	-	-	65	-	-
1972-4465	2441413:16	1972 Apr 5 15:47:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	MI	-	-	-	56	-	-
1972-4466	2441413:21	1972 Apr 5 17:00:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	WS	-	-	-	60	-	-
1972-4467	2441413:51	1972 Apr 6 01:32:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	CC	-	-	-	55	-	-
1972-4468	2441413:56	1972 Apr 6 01:32:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	WS	-	-	-	59	-	-
1972-4471	2441414:22	1972 Apr 6 17:10:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	KHR	-	-	-	61	-	-
1972-4472	2441415:08	1972 Apr 7 14:00:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	CC	-	-	-	63	-	-
1972-4473	2441415:10	1972 Apr 7 14:50:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	ASC	-	-	-	63	-	-
1972-4474	2441415:11	1972 Apr 7 14:45:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	CC	-	-	-	63	-	-
1972-4475	2441415:12	1972 Apr 7 15:00:00	Rocketsonde	-	-	Met. Para./AI/DKQ-9	-	-	-	SHER	-	-	-	59	-	-
1972-4476	2441415:14	1972 Apr 7 15:17:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	SHER	-	-	-	55	-	-
1972-4477	2441415:29	1972 Apr 7 16:59:59	Rocketsonde	-	-	Met. Para./Arcasonde	-	-	-	MIT	-	-	-	53	-	-
1972-4478	2441415:56	1972 Apr 8 01:31:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	WS	-	-	-	55	-	-
1972-4480	2441418:08	1972 Apr 10 14:00:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	KHR	-	-	-	56	-	-
1972-4481	2441418:10	1972 Apr 10 14:50:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	ASC	-	-	-	60	-	-
1972-4482	2441418:12	1972 Apr 10 15:00:00	Rocketsonde	-	-	Met. Para./AI/DKQ-9	-	-	-	THU	-	-	-	64	-	-
1972-4483	2441418:12	1972 Apr 10 15:00:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	SHER	-	-	-	61	-	-
1972-4484	2441418:12	1972 Apr 10 15:31:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	THU	-	-	-	56	-	-
1972-4485	2441418:19	1972 Apr 10 15:31:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	SHER	-	-	-	59	-	-
1972-4486	2441418:24	1972 Apr 10 20:08:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PHM	-	-	-	51	-	-
1972-4487	2441418:34	1972 Apr 10 21:36:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	WS	-	-	-	51	-	-
1972-4488	2441418:56	1972 Apr 11 01:30:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	GELY	-	-	-	51	-	-
1972-4489	2441419:21	1972 Apr 11 07:30:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	KHR	-	-	-	51	-	-
1972-4490	2441420:08	1972 Apr 11 14:00:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	ASC	-	-	-	51	-	-
1972-4492	2441420:10	1972 Apr 11 14:00:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	ASC	-	-	-	62	-	-
1972-4493	2441420:12	1972 Apr 11 14:30:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	CC	-	-	-	64	-	-
1972-4494	2441420:19	1972 Apr 11 15:00:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	ASC	-	-	-	64	-	-
1972-430	2441420:20	1972 Apr 11 16:07:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	SHER	-	-	-	67	-	-
1972-4496	2441420:20	1972 Apr 11 16:52:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PHM	-	-	-	47	-	-
1972-4497	2441420:29	1972 Apr 11 18:59:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	WS	-	-	-	55	-	-
1972-4498	2441420:57	1972 Apr 11 01:38:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	WS	-	-	-	56	-	-
1972-4500	2441422:04	1972 Apr 12 12:59:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	KHR	-	-	-	60	-	-
1972-4501	2441422:14	1972 Apr 12 14:00:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	CC	-	-	-	64	-	-
1972-4502	2441422:16	1972 Apr 12 14:00:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	ASC	-	-	-	64	-	-
1972-4503	2441422:17	1972 Apr 12 14:04:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	SHER	-	-	-	64	-	-
1972-4504	2441422:17	1972 Apr 12 14:04:59	Rocketsonde	-	-	Met. Para./AI/DKQ-9	-	-	-	THU	-	-	-	57	-	-
1972-4505	2441422:28	1972 Apr 12 18:45:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	MI	-	-	-	54	-	-
1972-4506	2441422:33	1972 Apr 12 20:00:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PM	-	-	-	54	-	-
1972-4509	2441423:04	1972 Apr 12 16:59:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	GELY	-	-	-	56	-	-
1972-4510	2441425:08	1972 Apr 12 17:43:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	CC	-	-	-	63	-	-
1972-4511	2441425:10	1972 Apr 12 17:43:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	CC	-	-	-	63	-	-
1972-4512	2441425:12	1972 Apr 12 17:43:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	ASC	-	-	-	60	-	-
1972-4513	2441425:22	1972 Apr 12 17:15:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	CC	-	-	-	61	-	-
1972-4514	2441425:26	1972 Apr 12 17:15:00	Rocketsonde	-	-	Met. Para./Arcasonde	-	-	-	SHER	-	-	-	54	-	-
1972-4515	2441425:31	1972 Apr 12 18:08:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	MIT	-	-	-	54	-	-
1972-4516	2441425:31	1972 Apr 12 19:30:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PM	-	-	-	58	-	-
1972-4517	2441425:33	1972 Apr 12 20:01:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	WS	-	-	-	53	-	-
1972-4518	2441425:40	1972 Apr 12 21:29:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	MI	-	-	-	59	-	-
1972-4519	2441425:56	1972 Apr 12 18:01:30:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	KAU	-	-	-	56	-	-
1972-4520	2441426:14	1972 Apr 12 15:14:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	KHR	-	-	-	60	-	-
1972-4521	2441426:30	1972 Apr 12 19:09:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	WS	-	-	-	52	-	-
1972-4522	2441426:32	1972 Apr 12 19:09:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	WS	-	-	-	58	-	-
1972-4523	2441426:32	1972 Apr 12 19:09:59	Rocketsonde	-	-	Met. Sphere	-	-	-	ASC	-	-	-	103	-	-
1972-4524	2441427:08	1972 Apr 12 14:30:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	ASC	-	-	-	63	-	-
1972-4525	2441427:10	1972 Apr 12 14:30:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	CC	-	-	-	62	-	-
1972-4526	2441427:12	1972 Apr 12 16:03:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	SHER	-	-	-	61	-	-
1972-4527	2441427:17	1972 Apr 12 16:03:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	MI	-	-	-	59	-	-
1972-4528	2441427:19	1972 Apr 12 16:36:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PHM	-	-	-	66	-	-
1972-4529	2441427:20	1972 Apr 12 16:44:59	Rocketsonde	-	-	Met. Sphere	-	-	-	CC	-	-	-	92	-	-

Launch

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Mission	FlightCode	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee_Km	Range_Km	Dest
1972-Y132	2441427.29	1972 Apr 19 1859:59	Rocketsonde	-	-	Met. Sphere	-	-	-	PH	-	-	-	90	-	-
1972-M526	2441427.29	1972 Apr 19 1859:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	WS	-	-	-	56	-	-
1972-M527	2441427.31	1972 Apr 19 1922:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PH	-	-	-	56	-	-
1972-A33	2441427.34	1972 Apr 19 2015:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	GRLY	-	-	-	48	-	-
1972-A34	2441427.38	1972 Apr 19 2104:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	GRLY	-	-	-	46	-	-
1972-M528	2441427.50	1972 Apr 20 0000:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	GRLY	-	-	-	55	-	-
1972-M530	2441428.25	1972 Apr 20 1800:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	WS	-	-	-	56	-	-
1972-M531	2441429.08	1972 Apr 21 1400:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	ASC	-	-	-	62	-	-
1972-M532	2441429.10	1972 Apr 21 1430:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	CC	L043	-	-	62	-	-
1972-M533	2441429.12	1972 Apr 21 1500:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	SHER	-	-	-	62	-	-
1972-M534	2441429.25	1972 Apr 21 1800:00	Rocketsonde	-	-	Met. Para, Arcasonde	-	-	-	AIT	-	-	-	57	-	-
1972-M535	2441429.29	1972 Apr 21 1859:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	WS	-	-	-	59	-	-
1972-A36	2441429.34	1972 Apr 21 2004:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	GRLY	-	-	-	48	-	-
1972-M536	2441429.56	1972 Apr 22 0130:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	KMR	-	-	-	60	-	-
1972-M538	2441432.08	1972 Apr 24 1400:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	ASC	-	-	-	60	-	-
1972-A37	2441432.09	1972 Apr 24 1410:00	Rocketsonde	-	-	Met. Para	-	-	-	AIT	-	-	-	40	-	-
1972-M539	2441432.15	1972 Apr 24 1530:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	WS	-	-	-	63	-	-
1972-M540	2441432.17	1972 Apr 24 1604:59	Rocketsonde	-	-	Met. Para, AI/DMP-9	-	-	-	THU	-	-	-	59	-	-
1972-M541	2441432.19	1972 Apr 24 1630:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PRIM	-	-	-	64	-	-
1972-M542	2441432.23	1972 Apr 24 1730:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	CC	L043	-	-	62	-	-
1972-M543	2441432.31	1972 Apr 24 1930:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	WS	-	-	-	62	-	-
1972-M544	2441432.34	1972 Apr 24 2004:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	GRLY	-	-	-	63	-	-
1972-M545	2441432.35	1972 Apr 24 2021:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	MI	-	-	-	59	-	-
1972-A38	2441432.42	1972 Apr 25 0130:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	KAU	-	-	-	46	-	-
1972-M546	2441432.56	1972 Apr 25 1500:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	KMR	-	-	-	66	-	-
1972-M548	2441433.12	1972 Apr 25 1626:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	SHER	-	-	-	66	-	-
1972-M549	2441433.19	1972 Apr 25 1630:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PH	-	-	-	60	-	-
1972-M550	2441433.19	1972 Apr 25 1630:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	WS	-	-	-	59	-	-
1972-M551	2441434.10	1972 Apr 26 1430:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	CC	L043	-	-	63	-	-
1972-M552	2441434.12	1972 Apr 26 1500:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	SHER	-	-	-	63	-	-
1972-M553	2441434.15	1972 Apr 26 1531:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PRIM	-	-	-	62	-	-
1972-M554	2441434.20	1972 Apr 26 1647:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	MI	-	-	-	55	-	-
1972-M555	2441434.29	1972 Apr 26 1859:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	WS	-	-	-	57	-	-
1972-M556	2441434.42	1972 Apr 26 2206:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	KAU	-	-	-	60	-	-
1972-M557	2441434.54	1972 Apr 27 0039:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	KMR	-	-	-	61	-	-
1972-M558	2441434.57	1972 Apr 27 0144:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	GRLY	-	-	-	62	-	-
1972-M560	2441435.29	1972 Apr 27 1839:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	WS	-	-	-	60	-	-
1972-M561	2441435.31	1972 Apr 27 1930:00	Rocketsonde	-	-	Density gauge	-	-	-	KMR	-	-	-	85	-	-
1972-M562	2441435.08	1972 Apr 28 1400:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	ASC	-	-	-	61	-	-
1972-M563	2441436.10	1972 Apr 28 1430:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	CC	L043	-	-	89	-	-
1972-M564	2441436.12	1972 Apr 28 1500:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	SHER	-	-	-	61	-	-
1972-M565	2441436.15	1972 Apr 28 1536:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PRIM	-	-	-	51	-	-
1972-M566	2441436.19	1972 Apr 28 1539:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	MI	-	-	-	56	-	-
1972-M567	2441436.20	1972 Apr 28 1539:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PH	-	-	-	56	-	-
1972-M568	2441436.20	1972 Apr 28 1824:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	GRLY	-	-	-	62	-	-
1972-M569	2441436.29	1972 Apr 28 1839:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	WS	-	-	-	61	-	-
1972-M570	2441436.35	1972 Apr 28 2140:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	KAU	-	-	-	62	-	-
1972-M571	2441436.55	1972 Apr 29 1304:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	KMR	-	-	-	65	-	-
1972-M572	2441436.57	1972 Apr 29 1304:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	CC	L043	-	-	62	-	-
1972-M573	2441439.08	1972 May 1 1944:59	Rocketsonde	-	-	Met. Para, Arcasonde	-	-	-	AIT	-	-	-	52	-	-
1972-M574	2441439.08	1972 May 1 1400:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	ASC	-	-	-	62	-	-
1972-M575	2441439.15	1972 May 1 1500:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	SHER	-	-	-	64	-	-
1972-M576	2441439.15	1972 May 1 1537:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PRIM	-	-	-	63	-	-
1972-M577	2441439.28	1972 May 1 1845:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	WS	-	-	-	62	-	-
1972-M578	2441439.29	1972 May 1 1934:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	GRLY	-	-	-	55	-	-
1972-M579	2441439.30	1972 May 1 2101:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PH	-	-	-	55	-	-
1972-M580	2441439.46	1972 May 2 0130:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	KAU	-	-	-	53	-	-
1972-M581	2441439.56	1972 May 2 1656:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	KMR	-	-	-	56	-	-
1972-A42	2441440.21	1972 May 2 1856:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	MI	-	-	-	49	-	-
1972-Y134	2441440.94	1972 May 3 1030:00	Rocketsonde	-	-	Met. Sphere	-	-	-	ASC	-	-	-	102	-	-
1972-M584	2441441.08	1972 May 3 1400:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	ASC	-	-	-	60	-	-
1972-M583	2441441.11	1972 May 3 1432:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	CUBI	-	-	-	59	-	-
1972-A43	2441441.11	1972 May 3 1435:00	Rocketsonde	-	-	Met. Para, AI/DMP-9	-	-	-	THU	-	-	-	49	-	-
1972-M586	2441441.12	1972 May 3 1500:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	CC	L043	-	-	57	-	-
1972-M587	2441441.12	1972 May 3 1500:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	CC	-	-	-	63	-	-
1972-M588	2441441.15	1972 May 3 1530:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	GRLY	-	-	-	61	-	-
1972-M589	2441441.15	1972 May 3 1548:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PRIM	-	-	-	47	-	-
1972-A44	2441441.23	1972 May 3 1730:00	Rocketsonde	-	-	Met. Para, Arcasonde	-	-	-	AIT	-	-	-	64	-	-
1972-M589	2441441.29	1972 May 3 1730:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	WS	-	-	-	54	-	-
1972-M590	2441441.33	1972 May 3 1854:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PM	-	-	-	62	-	-
1972-M591	2441441.33	1972 May 3 2236:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PM	-	-	-	62	-	-
1972-M592	2441441.44	1972 May 4 0131:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	KAU	-	-	-	58	-	-
1972-M593	2441441.56	1972 May 4 1526:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	KMR	-	-	-	61	-	-
1972-M594	2441443.07	1972 May 5 1344:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	CC	L043	-	-	63	-	-
1972-M598	2441443.08	1972 May 5 1400:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	ASC	-	-	-	62	-	-
1972-M599	2441443.12	1972 May 5 1448:00	Rocketsonde	-	-	Met. Para, AI/DMP-9	-	-	-	THU	-	-	-	67	-	-
1972-M600	2441443.12	1972 May 5 1448:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	MI	-	-	-	60	-	-
1972-M601	2441443.15	1972 May 5 1459:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	SHER	-	-	-	63	-	-
1972-M602	2441443.15	1972 May 5 1530:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PRIM	-	-	-	68	-	-
1972-M603	2441443.15	1972 May 5 1530:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	WS	-	-	-	63	-	-
1972-M604	2441443.25	1972 May 5 1800:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	WS	-	-	-	47	-	-
1972-M605	2441443.29	1972 May 5 1900:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	GRLY	-	-	-	59	-	-
1972-Y136	2441443.30	1972 May 5 1907:59	Rocketsonde	-	-	Met. Sphere	-	-	-	PM	-	-	-	92	-	-
1972-A47	2441443.32	1972 May 5 1943:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	WS	-	-	-	46	-	-
1972-M605	2441443.32	1972 May 5 1943:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PM	-	-	-	56	-	-
1972-M607	2441443.39	1972 May 5 2117:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	KAU	-	-	-	59	-	-

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Mission	FlightCode	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee_Km	Range_Km	Dest
1972-6608	2441443.57	1972 May 6 01:38:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	KMR	-	-	-	55	-	-
1972-6609	2441446.07	1972 May 8 13:44:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	CC	LO43	-	-	63	-	-
1972-6610	2441446.08	1972 May 8 14:00:00	Rocketsonde	-	-	Met. Para, Arcasonde	-	-	-	AIT	-	-	-	55	-	-
1972-6611	2441446.08	1972 May 8 14:00:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	ASC	-	-	-	64	-	-
1972-6612	2441446.10	1972 May 8 14:31:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PRIM	-	-	-	68	-	-
1972-6613	2441446.11	1972 May 8 14:35:00	Rocketsonde	-	-	Met. Para, AI/DK-9	-	-	-	THU	-	-	-	57	-	-
1972-6614	2441446.12	1972 May 8 15:00:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	SHER	-	-	-	63	-	-
1972-6615	2441446.21	1972 May 8 17:00:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	WS	-	-	-	58	-	-
1972-6616	2441446.31	1972 May 8 19:25:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PH	-	-	-	58	-	-
1972-6617	2441446.31	1972 May 8 19:25:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	GELY	-	-	-	60	-	-
1972-6618	2441446.37	1972 May 8 20:54:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	KAU	-	-	-	60	-	-
1972-6620	2441446.56	1972 May 9 01:30:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	KMR	-	-	-	56	-	-
1972-6621	2441447.09	1972 May 9 14:03:59	Rocketsonde	-	-	Met. Para	-	-	-	MI	-	-	-	50	-	-
1972-6623	2441448.08	1972 May 10 13:54:59	Rocketsonde	-	-	Met. Para, Arcasonde	-	-	-	CC	LO43	-	-	52	-	-
1972-6624	2441448.08	1972 May 10 14:00:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	ASC	-	-	-	54	-	-
1972-6625	2441448.08	1972 May 10 14:00:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PRIM	-	-	-	61	-	-
1972-6626	2441448.11	1972 May 10 14:32:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	THU	-	-	-	48	-	-
1972-6628	2441448.19	1972 May 10 16:30:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	WS	-	-	-	63	-	-
1972-6628	2441448.21	1972 May 10 17:00:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	MI	-	-	-	60	-	-
1972-6629	2441448.29	1972 May 10 18:56:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PH	-	-	-	56	-	-
1972-6630	2441448.29	1972 May 10 18:56:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	MI	-	-	-	64	-	-
1972-6631	2441448.38	1972 May 10 21:00:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	KAU	-	-	-	59	-	-
1972-6632	2441448.57	1972 May 11 01:36:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	KMR	-	-	-	46	-	-
1972-6632	2441448.57	1972 May 11 01:36:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	WS	-	-	-	60	-	-
1972-6633	2441449.12	1972 May 11 14:00:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	SHER	-	-	-	63	-	-
1972-6634	2441449.21	1972 May 11 17:00:00	Rocketsonde	-	-	Met. Para	-	-	-	MI	-	-	-	46	-	-
1972-6635	2441450.07	1972 May 12 13:37:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	MI	-	-	-	56	-	-
1972-6635	2441450.08	1972 May 12 14:00:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	ASC	-	-	-	62	-	-
1972-6637	2441450.12	1972 May 12 14:47:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PRIM	-	-	-	62	-	-
1972-6639	2441450.12	1972 May 12 14:47:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	SHER	-	-	-	56	-	-
1972-6640	2441450.15	1972 May 12 15:00:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PH	-	-	-	59	-	-
1972-6641	2441450.15	1972 May 12 15:00:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	GELY	-	-	-	46	-	-
1972-6642	2441450.29	1972 May 12 15:30:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	ASC	-	-	-	59	-	-
1972-6642	2441450.41	1972 May 12 21:52:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	KAU	-	-	-	46	-	-
1972-6644	2441450.56	1972 May 13 01:30:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	KMR	-	-	-	60	-	-
1972-6644	2441450.58	1972 May 13 01:30:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	ASC	-	-	-	64	-	-
1972-6646	2441453.10	1972 May 15 14:30:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	THU	-	-	-	57	-	-
1972-6646	2441453.11	1972 May 15 14:46:00	Rocketsonde	-	-	Met. Para, AI/DK-9	-	-	-	PRIM	-	-	-	61	-	-
1972-6647	2441453.12	1972 May 15 14:46:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	SHER	-	-	-	62	-	-
1972-6648	2441453.12	1972 May 15 15:09:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PH	-	-	-	56	-	-
1972-6648	2441453.12	1972 May 15 15:09:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	MI	-	-	-	56	-	-
1972-6649	2441453.27	1972 May 15 18:01:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	GELY	-	-	-	47	-	-
1972-6650	2441453.27	1972 May 15 18:01:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	ASC	-	-	-	62	-	-
1972-6651	2441453.32	1972 May 15 18:30:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	KAU	-	-	-	56	-	-
1972-6651	2441453.38	1972 May 15 21:11:59	Rocketsonde	-	-	Met. Para	-	-	-	MI	-	-	-	61	-	-
1972-6652	2441453.44	1972 May 16 14:00:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	ASC	LO43	-	-	61	-	-
1972-6652	2441453.49	1972 May 16 14:00:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	THU	-	-	-	60	-	-
1972-6652	2441453.50	1972 May 16 14:00:00	Rocketsonde	-	-	Met. Para, AI/DK-9	-	-	-	PRIM	-	-	-	64	-	-
1972-6657	2441455.09	1972 May 17 14:15:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PRIM	-	-	-	74	-	-
1972-6658	2441455.11	1972 May 17 14:35:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	WS	-	-	-	61	-	-
1972-6659	2441455.11	1972 May 17 14:35:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	SHER	-	-	-	63	-	-
1972-6660	2441455.23	1972 May 17 17:35:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	MI	-	-	-	58	-	-
1972-6663	2441455.27	1972 May 17 18:30:00	Rocketsonde	-	-	Met. Para, Arcasonde	-	-	-	AIT	-	-	-	46	-	-
1972-6664	2441455.35	1972 May 17 20:30:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	GELY	-	-	-	50	-	-
1972-6665	2441455.39	1972 May 17 21:20:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PH	-	-	-	57	-	-
1972-6665	2441455.39	1972 May 17 21:20:00	Rocketsonde	-	-	Met. Sphere	-	-	-	KAU	-	-	-	50	-	-
1972-6666	2441455.44	1972 May 17 22:35:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	KAU	-	-	-	58	-	-
1972-6666	2441455.46	1972 May 17 22:35:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	GELY	-	-	-	60	-	-
1972-6667	2441455.47	1972 May 17 23:15:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	GELY	-	-	-	47	-	-
1972-6667	2441455.56	1972 May 18 14:32:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	KMR	-	-	-	62	-	-
1972-6668	2441456.12	1972 May 18 15:00:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	CUBI	-	-	-	64	-	-
1972-6669	2441456.12	1972 May 18 15:00:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	SHER	-	-	-	64	-	-
1972-6671	2441457.06	1972 May 19 13:30:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	CC	LO43	-	-	50	-	-
1972-6672	2441457.08	1972 May 19 14:00:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	ASC	-	-	-	69	-	-
1972-6673	2441457.10	1972 May 19 14:30:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PRIM	-	-	-	55	-	-
1972-6675	2441457.12	1972 May 19 15:00:00	Rocketsonde	-	-	Met. Para, Arcasonde	-	-	-	AIT	-	-	-	55	-	-
1972-6676	2441457.15	1972 May 19 15:29:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PM	-	-	-	90	-	-
1972-6676	2441457.17	1972 May 19 15:59:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	WS	-	-	-	62	-	-
1972-6677	2441457.38	1972 May 19 18:59:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	GELY	-	-	-	49	-	-
1972-6678	2441460.12	1972 May 22 14:49:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	KAU	-	-	-	57	-	-
1972-6679	2441460.12	1972 May 22 15:00:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PM	-	-	-	60	-	-
1972-6680	2441460.15	1972 May 22 15:34:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	SHER	-	-	-	63	-	-
1972-6681	2441460.21	1972 May 22 17:00:00	Rocketsonde	-	-	Met. Para	-	-	-	WS	-	-	-	61	-	-
1972-6682	2441460.29	1972 May 22 18:59:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	GELY	-	-	-	59	-	-
1972-6683	2441460.38	1972 May 22 21:04:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	KAU	-	-	-	60	-	-
1972-6684	2441460.56	1972 May 23 01:30:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	KMR	-	-	-	58	-	-
1972-6686	2441462.08	1972 May 24 14:36:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	ASC	-	-	-	61	-	-
1972-6688	2441462.11	1972 May 24 14:36:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PRIM	-	-	-	66	-	-
1972-6688	2441462.12	1972 May 24 14:49:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	ASC	-	-	-	61	-	-
1972-6690	2441462.18	1972 May 24 16:14:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	CC	LO43	-	-	61	-	-
1972-6691	2441462.18	1972 May 24 16:14:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	AIT	-	-	-	58	-	-
1972-6692	2441462.23	1972 May 24 17:33:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PM	-	-	-	60	-	-
1972-6692	2441462.27	1972 May 24 18:30:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	WS	-	-	-	63	-	-
1972-6693	2441462.31	1972 May 24 19:23:59	Rocketsonde	-	-	Met. Sphere	-	-	-	NS	-	-	-	46	-	-
1972-6695	2441464.08	1972 May 26 14:00:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	ASC	-	-	-	54	-	-

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Mission	FlightCode	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee_Km	Range_Km	Dest
1972-4696	2441464_08	1972 May 26 14:00:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	LO43	CC	-	-	63	-	-
1972-4697	2441464_10	1972 May 26 14:30:00	Rocketsonde	-	-	Met. Para, Arcasonde	-	-	-	-	AIT	-	-	53	-	-
1972-4698	2441464_11	1972 May 26 14:30:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	-	PRIM	-	-	70	-	-
1972-4700	2441464_12	1972 May 26 15:00:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	-	SHER	-	-	64	-	-
1972-4701	2441464_25	1972 May 26 18:04:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	-	WS	-	-	53	-	-
1972-4702	2441464_27	1972 May 26 18:53:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	-	PF	-	-	59	-	-
1972-4703	2441464_29	1972 May 26 18:57:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	-	PH	-	-	57	-	-
1972-4704	2441464_37	1972 May 26 20:53:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	-	KAU	-	-	61	-	-
1972-4706	2441468_12	1972 May 30 17:00:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	-	WS	-	-	65	-	-
1972-4707	2441468_21	1972 May 30 17:00:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	-	WS	-	-	51	-	-
1972-4708	2441468_28	1972 May 30 18:41:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	-	PH	-	-	58	-	-
1972-4709	2441468_39	1972 May 30 21:26:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	-	ASC	-	-	72	-	-
1972-4714	2441468_93	1972 May 31 10:14:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	-	AIT	-	-	57	-	-
1972-4715	2441468_06	1972 May 31 13:30:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	-	CC	-	-	62	-	-
1972-4716	2441468_07	1972 May 31 13:44:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	LO43	-	-	-	62	-	-
1972-4717	2441468_08	1972 May 31 14:00:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	-	ASC	-	-	62	-	-
1972-4718	2441468_09	1972 May 31 14:14:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	-	MI	-	-	57	-	-
1972-4719	2441468_11	1972 May 31 14:32:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	-	PRIM	-	-	65	-	-
1972-4721	2441468_11	1972 May 31 14:44:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	-	CLBI	-	-	60	-	-
1972-4722	2441468_12	1972 May 31 15:00:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	-	SHER	-	-	64	-	-
1972-4611	2441469_16	1972 May 31 15:49:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	-	THU	-	-	49	-	-
1972-4723	2441469_18	1972 May 31 16:22:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	-	PH	-	-	62	-	-
1972-4724	2441469_24	1972 May 31 17:49:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	-	WS	-	-	63	-	-
1972-4725	2441469_26	1972 May 31 18:20:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	-	WS	-	-	54	-	-
1972-4726	2441469_38	1972 May 31 21:12:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	-	KAU	-	-	60	-	-
1972-4727	2441469_40	1972 May 31 21:31:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	-	KRR	-	-	58	-	-
1972-4728	2441470_60	1972 Jun 1 00:00:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	-	ASC	-	-	62	-	-
1972-4729	2441470_66	1972 Jun 2 09:45:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	-	ASC	-	-	62	-	-
1972-4730	2441471_08	1972 Jun 2 08:32:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	-	ASC	-	-	63	-	-
1972-4731	2441471_08	1972 Jun 2 14:01:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	-	PH	-	-	60	-	-
1972-4732	2441471_12	1972 Jun 2 15:00:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	-	ASC	-	-	62	-	-
1972-4733	2441471_17	1972 Jun 2 15:59:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	LO43	-	-	-	62	-	-
1972-4734	2441471_29	1972 Jun 2 18:51:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	-	PH	-	-	62	-	-
1972-4735	2441471_36	1972 Jun 2 21:00:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	-	ASC	-	-	62	-	-
1972-4736	2441471_42	1972 Jun 2 21:59:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	-	ASC	-	-	62	-	-
1972-4737	2441471_56	1972 Jun 3 01:30:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	-	WS	-	-	65	-	-
1972-4738	2441471_69	1972 Jun 3 04:24:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	-	WS	-	-	60	-	-
1972-4739	2441473_07	1972 Jun 3 13:44:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	-	CC	-	-	63	-	-
1972-4740	2441473_08	1972 Jun 3 14:00:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	-	ASC	-	-	62	-	-
1972-4741	2441473_12	1972 Jun 3 15:00:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	-	SHER	-	-	63	-	-
1972-4742	2441473_13	1972 Jun 3 15:01:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	-	MI	-	-	62	-	-
1972-4743	2441473_14	1972 Jun 3 15:01:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	-	WS	-	-	62	-	-
1972-4744	2441473_15	1972 Jun 3 15:01:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	-	MI	-	-	57	-	-
1972-4745	2441473_31	1972 Jun 3 19:21:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	-	KAU	-	-	59	-	-
1972-4656	2441475_06	1972 Jun 8 23:50:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	-	PF	-	-	49	-	-
1972-4656	2441475_29	1972 Jun 7 13:53:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	-	CC	-	-	62	-	-
1972-4656	2441475_08	1972 Jun 7 13:53:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	-	CC	-	-	62	-	-
1972-4748	2441476_10	1972 Jun 7 14:26:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	-	ASC	-	-	61	-	-
1972-4749	2441476_10	1972 Jun 7 14:26:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	-	ASC	-	-	59	-	-
1972-4750	2441476_12	1972 Jun 7 17:33:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	-	PH	-	-	57	-	-
1972-4751	2441476_24	1972 Jun 7 17:33:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	-	PH	-	-	57	-	-
1972-4752	2441476_38	1972 Jun 7 21:00:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	-	WS	-	-	65	-	-
1972-4753	2441476_58	1972 Jun 7 21:00:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	-	KAU	-	-	59	-	-
1972-4754	2441476_50	1972 Jun 8 23:45:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	-	KRR	-	-	54	-	-
1972-4755	2441477_05	1972 Jun 8 23:45:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	-	WS	-	-	72	-	-
1972-4756	2441478_08	1972 Jun 9 14:00:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	-	AIT	-	-	61	-	-
1972-4757	2441478_08	1972 Jun 9 14:00:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	-	ASC	-	-	61	-	-
1972-4758	2441478_09	1972 Jun 9 14:10:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	-	MI	-	-	58	-	-
1972-4759	2441478_12	1972 Jun 9 14:48:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	-	PM	-	-	57	-	-
1972-4760	2441478_12	1972 Jun 9 15:00:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	-	PH	-	-	59	-	-
1972-4761	2441478_29	1972 Jun 9 19:01:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	-	SHER	-	-	62	-	-
1972-4762	2441478_38	1972 Jun 9 21:00:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	-	PF	-	-	62	-	-
1972-4763	2441478_41	1972 Jun 9 21:45:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	-	KAU	-	-	64	-	-
1972-4764	2441478_50	1972 Jun 9 23:59:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	-	WS	-	-	64	-	-
1972-4765	2441480_92	1972 Jun 9 23:59:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	-	KRR	-	-	61	-	-
1972-4766	2441481_04	1972 Jun 12 12:59:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	-	ASC	-	-	60	-	-
1972-4767	2441481_12	1972 Jun 12 15:00:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	LO43	-	-	-	60	-	-
1972-4768	2441481_14	1972 Jun 12 15:00:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	-	SHER	-	-	62	-	-
1972-4769	2441481_17	1972 Jun 12 15:59:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	-	AIT	-	-	61	-	-
1972-4770	2441481_17	1972 Jun 12 15:59:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	-	WS	-	-	63	-	-
1972-4771	2441481_26	1972 Jun 12 18:09:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	-	MI	-	-	57	-	-
1972-4772	2441481_29	1972 Jun 12 18:59:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	-	PF	-	-	54	-	-
1972-4773	2441481_39	1972 Jun 12 21:22:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	-	KAU	-	-	56	-	-
1972-4774	2441481_44	1972 Jun 12 22:36:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	-	PM	-	-	55	-	-
1972-4775	2441482_05	1972 Jun 13 13:14:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	-	WS	-	-	61	-	-
1972-4776	2441482_15	1972 Jun 13 15:37:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	-	WS	-	-	63	-	-
1972-4777	2441483_04	1972 Jun 14 12:59:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	-	CC	-	-	61	-	-
1972-4778	2441483_07	1972 Jun 14 13:40:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	LO43	-	-	-	60	-	-
1972-4779	2441483_08	1972 Jun 14 14:00:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	-	ASC	-	-	62	-	-
1972-4780	2441483_11	1972 Jun 14 14:34:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	-	CLBI	-	-	64	-	-
1972-4781	2441483_12	1972 Jun 14 15:00:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	-	SHER	-	-	63	-	-
1972-4782	2441483_17	1972 Jun 14 15:59:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	-	WS	-	-	60	-	-
1972-4783	2441483_40	1972 Jun 14 21:30:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	-	MI	-	-	90	-	-
1972-4784	2441483_41	1972 Jun 14 21:56:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	-	PH	-	-	58	-	-
1972-4785	2441483_42	1972 Jun 14 21:59:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	-	KAU	-	-	58	-	-
1972-4784	2441483_50	1972 Jun 14 23:54:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	-	KRR	-	-	54	-	-

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Mission	FlightCode	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee_Km	Range_Km	Dest
1972-4786	2441484.16	1972 Jun 15 15:46:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	CELAT	-	-	-	63	-	-
1972-4787	2441484.26	1972 Jun 15 18:09:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	WS	-	-	-	71	-	-
1972-4788	2441484.32	1972 Jun 15 19:44:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	WS	-	-	-	64	-	-
1972-4789	2441485.08	1972 Jun 16 14:00:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	ASC	-	-	-	58	-	-
1972-4790	2441485.12	1972 Jun 16 15:00:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	SHER	-	-	-	67	-	-
1972-4791	2441485.12	1972 Jun 16 15:00:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	WS	-	-	-	65	-	-
1972-4792	2441485.16	1972 Jun 16 15:49:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	WI	-	-	-	58	-	-
1972-4793	2441485.17	1972 Jun 16 15:59:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	WS	-	-	-	59	-	-
1972-4794	2441485.40	1972 Jun 16 21:30:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	KAU	-	-	-	58	-	-
1972-4795	2441485.42	1972 Jun 16 22:03:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	KAU	-	-	-	58	-	-
1972-4796	2441485.49	1972 Jun 16 23:48:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	KMR	-	-	-	58	-	-
1972-4797	2441485.53	1972 Jun 17 00:49:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	CC	-	-	-	63	-	-
1972-4798	2441485.53	1972 Jun 17 00:49:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	WS	-	-	-	65	-	-
1972-4799	2441486.12	1972 Jun 18 15:00:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	WS	-	-	-	67	-	-
1972-4800	2441486.12	1972 Jun 19 15:00:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	SHER	-	-	-	62	-	-
1972-4801	2441486.17	1972 Jun 19 15:58:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PH	-	-	-	60	-	-
1972-4802	2441486.19	1972 Jun 19 16:30:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	WS	-	-	-	61	-	-
1972-4803	2441486.22	1972 Jun 19 17:10:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	CC	-	-	-	61	-	-
1972-4804	2441486.29	1972 Jun 19 18:59:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PF	-	-	-	54	-	-
1972-4805	2441486.34	1972 Jun 19 20:03:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	WI	-	-	-	51	-	-
1972-4806	2441486.44	1972 Jun 19 22:30:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	KAU	-	-	-	58	-	-
1972-4807	2441486.49	1972 Jun 19 23:46:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	KMR	-	-	-	52	-	-
1972-4808	2441486.09	1972 Jun 20 14:04:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	CC	-	-	-	67	-	-
1972-4809	2441486.15	1972 Jun 20 15:30:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	CC	-	-	-	67	-	-
1972-4810	2441486.23	1972 Jun 20 17:30:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	CC	-	-	-	69	-	-
1972-4811	2441486.10	1972 Jun 21 14:30:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	CC	-	-	-	69	-	-
1972-4812	2441486.14	1972 Jun 21 15:17:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PH	-	-	-	61	-	-
1972-4813	2441486.16	1972 Jun 21 15:45:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	SHER	-	-	-	59	-	-
1972-4814	2441486.17	1972 Jun 21 15:59:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	CC	-	-	-	59	-	-
1972-4815	2441486.23	1972 Jun 21 17:30:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	WS	-	-	-	56	-	-
1972-4816	2441486.35	1972 Jun 21 22:47:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	KAU	-	-	-	61	-	-
1972-4817	2441486.50	1972 Jun 22 13:56:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	KMR	-	-	-	57	-	-
1972-4818	2441489.08	1972 Jun 22 13:54:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	CC	-	-	-	69	-	-
1972-4819	2441489.11	1972 Jun 22 14:36:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	WS	-	-	-	31	-	-
1972-4820	2441489.12	1972 Jun 22 15:00:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	WI	-	-	-	62	-	-
1972-4821	2441489.15	1972 Jun 22 15:40:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	WS	-	-	-	64	-	-
1972-4822	2441489.16	1972 Jun 22 15:47:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	CC	-	-	-	60	-	-
1972-4823	2441489.22	1972 Jun 22 17:20:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	CC	-	-	-	60	-	-
1972-4824	2441489.06	1972 Jun 23 13:30:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	CC	-	-	-	64	-	-
1972-4825	2441489.12	1972 Jun 23 14:55:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	CC	-	-	-	57	-	-
1972-4826	2441489.12	1972 Jun 23 15:00:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	SHER	-	-	-	61	-	-
1972-4827	2441489.15	1972 Jun 23 15:36:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	WS	-	-	-	59	-	-
1972-4828	2441489.28	1972 Jun 23 15:56:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	CC	-	-	-	45	-	-
1972-4829	2441489.45	1972 Jun 23 22:21:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PF	-	-	-	62	-	-
1972-4830	2441489.49	1972 Jun 23 23:46:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	KAU	-	-	-	56	-	-
1972-4831	2441489.52	1972 Jun 24 15:00:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	KMR	-	-	-	59	-	-
1972-4832	2441489.56	1972 Jun 24 15:00:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	WS	-	-	-	60	-	-
1972-4833	2441489.57	1972 Jun 24 15:04:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	WS	-	-	-	62	-	-
1972-4834	2441489.77	1972 Jun 26 18:30:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	SHER	-	-	-	60	-	-
1972-4835	2441489.77	1972 Jun 26 18:30:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	WS	-	-	-	62	-	-
1972-4836	2441489.77	1972 Jun 26 18:30:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	WS	-	-	-	62	-	-
1972-4837	2441489.50	1972 Jun 27 00:06:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PH	-	-	-	56	-	-
1972-4838	2441489.50	1972 Jun 27 03:44:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	KMR	-	-	-	53	-	-
1972-4839	2441489.07	1972 Jun 28 13:44:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	CC	-	-	-	63	-	-
1972-4840	2441489.12	1972 Jun 28 14:58:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PH	-	-	-	57	-	-
1972-4841	2441489.14	1972 Jun 28 15:20:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	SHER	-	-	-	63	-	-
1972-4842	2441489.15	1972 Jun 28 15:40:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	CELAT	-	-	-	61	-	-
1972-4843	2441489.19	1972 Jun 28 16:30:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	WS	-	-	-	63	-	-
1972-4844	2441489.22	1972 Jun 28 17:20:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	WS	-	-	-	49	-	-
1972-4845	2441489.27	1972 Jun 28 18:30:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PF	-	-	-	63	-	-
1972-4846	2441489.08	1972 Jun 29 14:00:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PH	-	-	-	60	-	-
1972-4847	2441489.09	1972 Jun 29 14:15:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	KMR	-	-	-	67	-	-
1972-4848	2441489.07	1972 Jun 30 13:44:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	CC	-	-	-	65	-	-
1972-4849	2441489.08	1972 Jun 30 14:02:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	VI	-	-	-	62	-	-
1972-4850	2441489.31	1972 Jun 30 19:23:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PF	-	-	-	64	-	-
1972-4851	2441489.34	1972 Jun 30 20:03:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PM	-	-	-	60	-	-
1972-4852	2441489.35	1972 Jun 30 20:30:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	KAU	-	-	-	90	-	-
1972-4853	2441489.37	1972 Jun 30 20:47:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	KAU	-	-	-	58	-	-
1972-4854	2441489.49	1972 Jun 30 23:46:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	KMR	-	-	-	55	-	-
1972-4855	2441502.06	1972 Jul 3 13:30:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	ASC	-	-	-	58	-	-
1972-4856	2441502.07	1972 Jul 3 13:34:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	CC	-	-	-	62	-	-
1972-4857	2441502.12	1972 Jul 3 15:00:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	CC	-	-	-	60	-	-
1972-4858	2441502.25	1972 Jul 3 18:00:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	ASC	-	-	-	56	-	-
1972-4859	2441504.06	1972 Jul 5 13:30:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	SHER	-	-	-	59	-	-
1972-4860	2441504.11	1972 Jul 5 14:32:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	ASC	-	-	-	63	-	-
1972-4861	2441504.12	1972 Jul 5 14:52:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	CLBT	-	-	-	65	-	-
1972-4862	2441504.12	1972 Jul 5 14:52:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PM	-	-	-	58	-	-
1972-4863	2441504.12	1972 Jul 5 15:00:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	SHER	-	-	-	30	-	-
1972-4864	2441504.12	1972 Jul 5 15:00:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	SHER	-	-	-	63	-	-
1972-4865	2441504.12	1972 Jul 5 15:00:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	WS	-	-	-	63	-	-
1972-4866	2441504.28	1972 Jul 5 18:45:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PF	-	-	-	65	-	-
1972-4867	2441504.38	1972 Jul 5 21:00:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	KAU	-	-	-	58	-	-
1972-4868	2441504.52	1972 Jul 6 00:24:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	KMR	-	-	-	58	-	-
1972-4869	2441505.09	1972 Jul 6 14:09:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	VI	-	-	-	60	-	-
1972-4870	2441505.12	1972 Jul 6 15:00:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	WS	-	-	-	60	-	-
1972-4871	2441506.06	1972 Jul 7 13:30:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	ASC	-	-	-	52	-	-

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Mission	FlightCode	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee_Km	Range_Km	Dest
1972-8872	2441506.07	1972 Jul 7 1347:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	CC	LO43	-	-	62	-	-
1972-8873	2441506.09	1972 Jul 7 1409:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	WI	-	-	-	59	-	-
1972-8874	2441506.10	1972 Jul 7 1430:00	Rocketsonde	-	-	Met. Para, Arcasonde	-	-	-	AIT	-	-	-	56	-	-
1972-8875	2441506.13	1972 Jul 7 1501:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	WS	-	-	-	65	-	-
1972-8876	2441506.14	1972 Jul 7 1514:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	SHER	-	-	-	62	-	-
1972-8877	2441506.17	1972 Jul 7 1601:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PH	-	-	-	58	-	-
1972-8878	2441506.21	1972 Jul 7 1700:00	Rocketsonde	-	-	Met. Para, Arcasonde	-	-	-	AIT	-	-	-	53	-	-
1972-8879	2441506.27	1972 Jul 7 1830:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PF	-	-	-	64	-	-
1972-8880	2441506.38	1972 Jul 7 2100:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	KAU	-	-	-	60	-	-
1972-8881	2441507.12	1972 Jul 8 1500:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	WS	-	-	-	62	-	-
1972-8882	2441509.06	1972 Jul 10 1330:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	ASC	-	-	-	62	-	-
1972-8883	2441509.07	1972 Jul 10 1344:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	CC	LO43	-	-	60	-	-
1972-8884	2441509.12	1972 Jul 10 1500:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	SHER	-	-	-	57	-	-
1972-8885	2441509.20	1972 Jul 10 1644:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	WS	-	-	-	65	-	-
1972-8886	2441509.21	1972 Jul 10 1700:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	WS	-	-	-	56	-	-
1972-8887	2441509.31	1972 Jul 10 1929:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	KAU	-	-	-	62	-	-
1972-8888	2441509.39	1972 Jul 10 2120:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	KAU	-	-	-	62	-	-
1972-8889	2441509.60	1972 Jul 11 0220:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	WS	-	-	-	74	-	-
1972-8890	2441510.27	1972 Jul 11 1830:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	CC	LO43	-	-	61	-	-
1972-8891	2441511.07	1972 Jul 12 1344:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	SHER	-	-	-	61	-	-
1972-8892	2441511.12	1972 Jul 12 1500:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PH	-	-	-	57	-	-
1972-8893	2441511.13	1972 Jul 12 1508:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	MI	-	-	-	57	-	-
1972-8894	2441511.14	1972 Jul 12 1522:59	Rocketsonde	-	-	Met. Para, Arcasonde	-	-	-	WS	-	-	-	63	-	-
1972-8895	2441511.20	1972 Jul 12 1644:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PF	-	-	-	59	-	-
1972-8896	2441511.27	1972 Jul 12 1830:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PH	-	-	-	62	-	-
1972-8897	2441511.42	1972 Jul 12 2159:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	KAU	-	-	-	59	-	-
1972-8898	2441511.44	1972 Jul 12 2238:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	KAU	-	-	-	56	-	-
1972-8902	2441512.31	1972 Jul 13 1930:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	CC	LO43	-	-	60	-	-
1972-8906	2441513.08	1972 Jul 14 1344:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	ASC	-	-	-	62	-	-
1972-8907	2441513.10	1972 Jul 14 1424:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	MI	-	-	-	57	-	-
1972-8910	2441513.12	1972 Jul 14 1500:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	SHER	-	-	-	63	-	-
1972-8912	2441513.42	1972 Jul 14 2159:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	KAU	-	-	-	60	-	-
1972-8915	2441513.49	1972 Jul 14 2346:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	RUR	-	-	-	46	-	-
1972-8916	2441513.59	1972 Jul 14 2359:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	CC	LO43	-	-	61	-	-
1972-8918	2441516.07	1972 Jul 17 1344:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	AIT	-	-	-	56	-	-
1972-8919	2441516.08	1972 Jul 17 1400:00	Rocketsonde	-	-	Met. Para, Arcasonde	-	-	-	ASC	-	-	-	60	-	-
1972-8915	2441516.08	1972 Jul 17 1400:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	SHER	-	-	-	56	-	-
1972-8916	2441516.12	1972 Jul 17 1500:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	ASC	-	-	-	60	-	-
1972-8917	2441516.19	1972 Jul 17 1530:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	SHER	-	-	-	56	-	-
1972-8918	2441516.24	1972 Jul 17 1744:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	MI	-	-	-	54	-	-
1972-8919	2441516.27	1972 Jul 17 1822:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PH	-	-	-	60	-	-
1972-8920	2441516.29	1972 Jul 17 1859:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PH	-	-	-	56	-	-
1972-8921	2441516.42	1972 Jul 18 1229:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	KAU	-	-	-	60	-	-
1972-8922	2441517.04	1972 Jul 18 1529:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	WS	-	-	-	59	-	-
1972-8923	2441517.09	1972 Jul 18 1652:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	CS	LO43	-	-	57	-	-
1972-8924	2441518.06	1972 Jul 19 1344:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	ASC	-	-	-	58	-	-
1972-8925	2441518.08	1972 Jul 19 1400:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	ASC	-	-	-	61	-	-
1972-8926	2441518.10	1972 Jul 19 1430:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	ALBI	-	-	-	58	-	-
1972-8927	2441518.12	1972 Jul 19 1500:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	WS	-	-	-	55	-	-
1972-8928	2441518.13	1972 Jul 19 1506:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	SHER	-	-	-	58	-	-
1972-8929	2441518.20	1972 Jul 19 1602:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	SHER	-	-	-	58	-	-
1972-8930	2441518.20	1972 Jul 19 1652:59	Rocketsonde	-	-	Met. Para, Arcasonde	-	-	-	THU	-	-	-	61	-	-
1972-8931	2441518.21	1972 Jul 19 1700:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PH	-	-	-	60	-	-
1972-8932	2441518.21	1972 Jul 19 1709:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PH	-	-	-	60	-	-
1972-8933	2441518.22	1972 Jul 19 1720:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	CELAT	-	-	-	61	-	-
1972-8934	2441518.25	1972 Jul 19 1800:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	WS	-	-	-	65	-	-
1972-8935	2441518.38	1972 Jul 19 2100:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	KAU	-	-	-	57	-	-
1972-8936	2441520.07	1972 Jul 21 1344:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	CC	LO43	-	-	62	-	-
1972-8937	2441520.08	1972 Jul 21 1400:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	AIT	-	-	-	51	-	-
1972-8938	2441520.08	1972 Jul 21 1400:00	Rocketsonde	-	-	Met. Para, Arcasonde	-	-	-	ASC	-	-	-	61	-	-
1972-8940	2441520.12	1972 Jul 21 1500:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	SHER	-	-	-	62	-	-
1972-8941	2441520.22	1972 Jul 21 1715:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	WS	-	-	-	70	-	-
1972-8942	2441520.26	1972 Jul 21 1811:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	VI	-	-	-	59	-	-
1972-8943	2441520.28	1972 Jul 21 1845:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PF	-	-	-	57	-	-
1972-8944	2441520.30	1972 Jul 21 1907:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PM	-	-	-	60	-	-
1972-8945	2441520.42	1972 Jul 21 2159:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	KAU	-	-	-	57	-	-
1972-8946	2441523.07	1972 Jul 24 1344:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	CC	LO43	-	-	62	-	-
1972-8947	2441523.08	1972 Jul 24 1400:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	ASC	-	-	-	61	-	-
1972-8948	2441523.12	1972 Jul 24 1500:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	SHER	-	-	-	62	-	-
1972-8949	2441523.19	1972 Jul 24 1630:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	WS	-	-	-	59	-	-
1972-8950	2441523.27	1972 Jul 24 1830:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	VI	-	-	-	61	-	-
1972-8951	2441523.30	1972 Jul 24 1913:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PM	-	-	-	60	-	-
1972-8952	2441523.42	1972 Jul 25 1400:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	KAU	-	-	-	61	-	-
1972-8953	2441524.08	1972 Jul 25 1400:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	ASC	-	-	-	60	-	-
1972-8954	2441524.12	1972 Jul 25 1500:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	CC	LO43	-	-	56	-	-
1972-8955	2441524.17	1972 Jul 25 1559:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	WS	-	-	-	60	-	-
1972-8956	2441524.17	1972 Jul 25 1559:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	CC	LO43	-	-	62	-	-
1972-8957	2441524.62	1972 Jul 26 0300:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	CC	LO43	-	-	57	-	-
1972-8958	2441525.06	1972 Jul 26 1330:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	WS	-	-	-	61	-	-
1972-8959	2441525.07	1972 Jul 26 1347:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	CC	LO43	-	-	60	-	-
1972-8960	2441525.09	1972 Jul 26 1404:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	ASC	-	-	-	61	-	-
1972-8961	2441525.09	1972 Jul 26 1414:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	VI	-	-	-	62	-	-
1972-8962	2441525.14	1972 Jul 26 1514:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	SHER	-	-	-	67	-	-
1972-1174	2441525.14	1972 Jul 26 1514:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	SHER	-	-	-	99	-	-



Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Mission	FlightCode	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Approve	Range	Dest
1972-#664	2441525.18	1972 Jul 26 16:15:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	CC	LC43	-	-	64	-	-
1972-#665	2441525.19	1972 Jul 26 16:32:59	Rocketsonde	-	-	Met. Sphere	-	-	-	PH	-	-	-	95	-	-
1972-#666	2441525.20	1972 Jul 26 16:54:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PM	-	-	-	60	-	-
1972-#667	2441525.25	1972 Jul 26 18:00:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	WS	-	-	-	61	-	-
1972-#668	2441525.27	1972 Jul 26 18:30:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PF	-	-	-	64	-	-
1972-#669	2441525.38	1972 Jul 26 21:00:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	KAU	-	-	-	59	-	-
1972-#670	2441525.50	1972 Jul 27 18:00:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	KMR	-	-	-	54	-	-
1972-#671	2441527.07	1972 Jul 28 13:44:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	CC	LC43	-	-	57	-	-
1972-#672	2441527.11	1972 Jul 28 14:32:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	THU	-	-	-	60	-	-
1972-#673	2441527.12	1972 Jul 28 15:00:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	SHER	-	-	-	61	-	-
1972-#674	2441527.17	1972 Jul 28 15:59:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	CC	LC43	-	-	69	-	-
1972-#675	2441527.24	1972 Jul 28 17:38:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PH	-	-	-	53	-	-
1972-#676	2441527.25	1972 Jul 28 18:00:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	WS	-	-	-	54	-	-
1972-#677	2441527.28	1972 Jul 28 18:45:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PF	-	-	-	63	-	-
1972-#678	2441527.30	1972 Jul 28 19:07:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	MI	-	-	-	58	-	-
1972-#679	2441527.42	1972 Jul 28 22:06:00	Rocketsonde	-	-	Met. Sphere	-	-	-	KAU	-	-	-	55	-	-
1972-#680	2441527.43	1972 Jul 28 22:24:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	KAU	-	-	-	57	-	-
1972-#681	2441530.08	1972 Jul 28 23:48:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	KMR	-	-	-	61	-	-
1972-#682	2441530.08	1972 Jul 28 23:48:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	ASC	-	-	-	62	-	-
1973-#006	2441686.29	1973 Jan 2 18:54:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PH	-	-	-	56	-	-
1973-#007	2441686.46	1973 Jan 2 23:00:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	KAU	-	-	-	61	-	-
1973-#008	2441686.51	1973 Jan 3 00:20:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	KMR	-	-	-	61	-	-
1973-#115	2441686.09	1973 Jan 3 14:15:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	CC	LC43	-	-	97	-	-
1973-#116	2441686.14	1973 Jan 3 15:14:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	THU	-	-	-	70	-	-
1973-#117	2441686.14	1973 Jan 3 16:24:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	SHER	-	-	-	53	-	-
1973-#118	2441686.18	1973 Jan 3 16:24:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	CC	LC43	-	-	53	-	-
1973-#119	2441686.19	1973 Jan 3 16:50:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PH	-	-	-	56	-	-
1973-#120	2441686.26	1973 Jan 3 18:12:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	KAU	-	-	-	54	-	-
1973-#121	2441686.29	1973 Jan 3 18:59:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	MI	-	-	-	61	-	-
1973-#122	2441686.31	1973 Jan 3 19:52:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	MI	-	-	-	61	-	-
1973-#123	2441686.40	1973 Jan 3 21:40:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PH	-	-	-	66	-	-
1973-#124	2441686.50	1973 Jan 3 23:53:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PH	-	-	-	69	-	-
1973-#125	2441686.50	1973 Jan 4 16:54:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	KAU	-	-	-	64	-	-
1973-#126	2441686.50	1973 Jan 4 17:14:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	KMR	-	-	-	58	-	-
1973-#127	2441687.22	1973 Jan 4 17:14:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PH	-	-	-	57	-	-
1973-#128	2441687.31	1973 Jan 4 19:30:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PH	-	-	-	58	-	-
1973-#129	2441687.38	1973 Jan 4 21:00:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PH	-	-	-	58	-	-
1973-#130	2441688.16	1973 Jan 5 18:54:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	KAU	-	-	-	58	-	-
1973-#131	2441688.16	1973 Jan 5 19:40:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	MI	-	-	-	61	-	-
1973-#132	2441688.23	1973 Jan 5 19:40:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	SHER	LC43	-	-	57	-	-
1973-#133	2441688.27	1973 Jan 5 18:50:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PH	-	-	-	59	-	-
1973-#134	2441688.29	1973 Jan 5 18:59:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	KAU	-	-	-	56	-	-
1973-#135	2441688.41	1973 Jan 5 21:55:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	KMR	-	-	-	61	-	-
1973-#136	2441689.15	1973 Jan 6 00:15:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PH	-	-	-	74	-	-
1973-#137	2441689.24	1973 Jan 6 17:43:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	CC	LC43	-	-	60	-	-
1973-#138	2441689.24	1973 Jan 6 17:43:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	WS	-	-	-	69	-	-
1973-#139	2441689.25	1973 Jan 6 18:04:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PREM	-	-	-	65	-	-
1973-#140	2441689.26	1973 Jan 6 18:04:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PH	-	-	-	62	-	-
1973-#141	2441689.34	1973 Jan 6 20:24:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	KAU	-	-	-	66	-	-
1973-#142	2441689.35	1973 Jan 6 21:04:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	KMR	-	-	-	64	-	-
1973-#143	2441689.49	1973 Jan 6 23:45:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PREM	-	-	-	64	-	-
1973-#144	2441689.49	1973 Jan 6 23:45:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PH	-	-	-	59	-	-
1973-#145	2441689.20	1973 Jan 9 19:15:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	KAU	-	-	-	57	-	-
1973-#146	2441689.25	1973 Jan 9 20:30:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	CC	LC43	-	-	65	-	-
1973-#147	2441689.10	1973 Jan 10 14:22:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	MI	-	-	-	60	-	-
1973-#148	2441689.16	1973 Jan 10 15:51:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	WS	-	-	-	60	-	-
1973-#149	2441689.19	1973 Jan 10 16:31:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	SHER	-	-	-	62	-	-
1973-#150	2441689.19	1973 Jan 10 16:31:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PH	-	-	-	60	-	-
1973-#151	2441689.20	1973 Jan 10 16:49:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PREM	-	-	-	60	-	-
1973-#152	2441689.20	1973 Jan 10 16:49:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PH	-	-	-	60	-	-
1973-#153	2441689.21	1973 Jan 10 17:00:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	CC	LC43	-	-	89	-	-
1973-#154	2441689.21	1973 Jan 10 17:00:00	Rocketsonde	-	-	Met. Sphere	-	-	-	THU	-	-	-	64	-	-
1973-#155	2441689.24	1973 Jan 10 17:49:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	MI	-	-	-	73	-	-
1973-#156	2441689.29	1973 Jan 10 18:59:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	WS	-	-	-	60	-	-
1973-#157	2441689.31	1973 Jan 10 19:22:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	MI	-	-	-	60	-	-
1973-#158	2441689.31	1973 Jan 10 20:00:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PM	-	-	-	60	-	-
1973-#159	2441689.33	1973 Jan 10 20:00:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PM	-	-	-	60	-	-
1973-#160	2441689.33	1973 Jan 10 20:00:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PF	-	-	-	57	-	-
1973-#161	2441689.35	1973 Jan 10 20:30:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PM	-	-	-	57	-	-
1973-#162	2441689.49	1973 Jan 10 23:45:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	KMR	-	-	-	60	-	-
1973-#163	2441689.24	1973 Jan 11 17:40:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PREM	-	-	-	60	-	-
1973-#164	2441689.35	1973 Jan 11 20:25:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PF	-	-	-	56	-	-
1973-#165	2441689.45	1973 Jan 11 23:46:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	KAU	-	-	-	61	-	-
1973-#166	2441689.71	1973 Jan 12 05:04:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	GRLC	-	-	-	75	-	-
1973-#167	2441689.86	1973 Jan 12 08:35:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	GRLC	-	-	-	75	-	-
1973-#168	2441689.86	1973 Jan 12 08:35:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	WS	-	-	-	72	-	-
1973-#169	2441689.94	1973 Jan 12 10:34:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	WS	-	-	-	71	-	-
1973-#170	2441689.10	1973 Jan 12 14:17:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	CC	LC43	-	-	73	-	-
1973-#171	2441689.15	1973 Jan 12 15:40:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	THU	-	-	-	76	-	-
1973-#172	2441689.20	1973 Jan 12 16:44:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	SHER	-	-	-	56	-	-
1973-#173	2441689.22	1973 Jan 12 17:23:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PREM	-	-	-	58	-	-
1973-#174	2441689.27	1973 Jan 12 18:26:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PM	-	-	-	56	-	-
1973-#175	2441689.28	1973 Jan 12 18:42:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	MI	-	-	-	63	-	-
1973-#176	2441689.35	1973 Jan 12 20:24:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PH	-	-	-	58	-	-
1973-#177	2441689.38	1973 Jan 12 21:08:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	KAU	-	-	-	56	-	-
1973-#178	2441689.49	1973 Jan 12 23:45:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	KMR	-	-	-	60	-	-
1973-#179	2441689.47	1973 Jan 13 23:10:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	CC	LC43	-	-	60	-	-

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Mission	FlightCode	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee_Km	Range_Km	Dest
1973-479	2441698.12	1973 Jan 15 15:00:00	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	SHER	-	-	-	61	-	-
1973-480	2441698.18	1973 Jan 15 16:19:59	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	THU	LO43	-	-	60	-	-
1973-481	2441698.20	1973 Jan 15 16:49:59	Rocketsonde	-	-	Starvue, AIV/DIQ-9	-	-	-	PRIM	-	-	-	46	-	-
1973-482	2441698.26	1973 Jan 15 18:14:59	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	WS	-	-	-	73	-	-
1973-483	2441698.27	1973 Jan 15 18:20:00	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	WI	-	-	-	61	-	-
1973-484	2441698.40	1973 Jan 15 18:30:00	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	KAU	-	-	-	56	-	-
1973-485	2441698.49	1973 Jan 15 21:30:00	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	KHR	-	-	-	61	-	-
1973-486	2441698.49	1973 Jan 15 23:45:00	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	PRIM	-	-	-	63	-	-
1973-487	2441698.20	1973 Jan 16 16:53:59	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	WI	-	-	-	59	-	-
1973-488	2441698.29	1973 Jan 16 18:54:00	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	WS	-	-	-	60	-	-
1973-489	2441699.29	1973 Jan 16 18:59:59	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	WS	-	-	-	61	-	-
1973-491	2441699.31	1973 Jan 16 19:30:59	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	KAU	-	-	-	59	-	-
1973-492	2441699.38	1973 Jan 16 21:00:00	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	CC	LO43	-	-	63	-	-
1973-493	2441700.09	1973 Jan 17 14:15:00	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	CELAT	-	-	-	59	-	-
1973-494	2441700.13	1973 Jan 17 15:10:00	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	PRIM	-	-	-	64	-	-
1973-495	2441700.19	1973 Jan 17 16:52:59	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	SHER	-	-	-	59	-	-
1973-496	2441700.20	1973 Jan 17 16:54:59	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	CC	LO43	-	-	59	-	-
1973-735	2441700.21	1973 Jan 17 17:00:00	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	WS	-	-	-	65	-	-
1973-736	2441700.29	1973 Jan 17 18:59:59	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	WS	-	-	-	66	-	-
1973-738	2441700.29	1973 Jan 17 18:59:59	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	PF	-	-	-	61	-	-
1973-739	2441700.33	1973 Jan 17 19:49:59	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	PH	-	-	-	88	-	-
1973-740	2441700.33	1973 Jan 17 20:00:00	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	PH	-	-	-	60	-	-
1973-736	2441700.33	1973 Jan 17 20:02:00	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	PH	-	-	-	88	-	-
1973-742	2441700.37	1973 Jan 17 20:49:59	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	KAU	-	-	-	58	-	-
1973-743	2441700.40	1973 Jan 17 21:33:59	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	KHR	-	-	-	61	-	-
1973-744	2441700.49	1973 Jan 17 23:40:00	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	PF	-	-	-	60	-	-
1973-745	2441701.32	1973 Jan 18 19:41:00	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	CC	LO43	-	-	61	-	-
1973-746	2441702.10	1973 Jan 19 14:30:00	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	PRIM	-	-	-	65	-	-
1973-747	2441702.20	1973 Jan 19 16:45:59	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	SHER	-	-	-	57	-	-
1973-748	2441702.21	1973 Jan 19 16:49:59	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	WS	-	-	-	63	-	-
1973-749	2441702.21	1973 Jan 19 17:00:00	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	PH	-	-	-	56	-	-
1973-741	2441702.28	1973 Jan 19 18:45:00	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	PF	-	-	-	61	-	-
1973-744	2441702.31	1973 Jan 19 19:30:00	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	PH	-	-	-	61	-	-
1973-745	2441702.38	1973 Jan 19 21:00:00	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	KAU	-	-	-	51	-	-
1973-741	2441702.49	1973 Jan 19 23:46:00	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	KHR	-	-	-	59	-	-
1973-741	2441705.18	1973 Jan 22 16:24:59	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	CC	LO43	-	-	63	-	-
1973-741	2441705.18	1973 Jan 22 16:24:59	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	SHER	-	-	-	59	-	-
1973-741	2441705.19	1973 Jan 22 16:24:59	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	PRIM	-	-	-	63	-	-
1973-742	2441705.19	1973 Jan 22 16:40:00	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	PF	-	-	-	58	-	-
1973-742	2441705.31	1973 Jan 22 19:30:00	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	WS	-	-	-	54	-	-
1973-742	2441705.31	1973 Jan 22 19:30:00	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	WS	-	-	-	54	-	-
1973-742	2441705.40	1973 Jan 22 21:34:59	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	KAU	-	-	-	59	-	-
1973-742	2441705.49	1973 Jan 22 23:45:00	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	KHR	-	-	-	54	-	-
1973-742	2441705.49	1973 Jan 22 23:45:00	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	VI	-	-	-	59	-	-
1973-742	2441706.15	1973 Jan 23 15:40:00	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	VI	-	-	-	59	-	-
1973-742	2441706.31	1973 Jan 23 19:46:00	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	WS	-	-	-	64	-	-
1973-742	2441706.38	1973 Jan 23 20:15:59	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	PH	-	-	-	61	-	-
1973-742	2441706.38	1973 Jan 23 20:15:59	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	PH	-	-	-	61	-	-
1973-742	2441706.44	1973 Jan 23 22:30:00	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	KAU	-	-	-	56	-	-
1973-742	2441706.44	1973 Jan 23 22:30:00	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	THU	-	-	-	61	-	-
1973-743	2441707.17	1973 Jan 24 16:38:59	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	VI	-	-	-	60	-	-
1973-743	2441707.19	1973 Jan 24 16:38:59	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	SHER	-	-	-	60	-	-
1973-743	2441707.21	1973 Jan 24 17:06:00	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	CC	LO43	-	-	60	-	-
1973-743	2441707.21	1973 Jan 24 17:07:00	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	CC	-	-	-	60	-	-
1973-743	2441707.25	1973 Jan 24 17:57:00	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	PH	-	-	-	59	-	-
1973-743	2441707.25	1973 Jan 24 18:20:00	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	WS	-	-	-	71	-	-
1973-743	2441707.29	1973 Jan 24 18:59:59	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	KAU	-	-	-	60	-	-
1973-743	2441707.44	1973 Jan 24 22:22:59	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	KHR	-	-	-	59	-	-
1973-743	2441707.49	1973 Jan 24 23:45:00	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	PF	-	-	-	57	-	-
1973-743	2441708.23	1973 Jan 26 14:45:00	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	CC	LO43	-	-	59	-	-
1973-743	2441708.11	1973 Jan 26 14:45:00	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	CC	-	-	-	63	-	-
1973-743	2441709.11	1973 Jan 26 15:00:00	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	SHER	-	-	-	57	-	-
1973-743	2441709.12	1973 Jan 26 15:00:00	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	VI	-	-	-	53	-	-
1973-743	2441709.13	1973 Jan 26 15:10:00	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	VI	-	-	-	57	-	-
1973-743	2441709.14	1973 Jan 26 15:20:00	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	MIT	-	-	-	57	-	-
1973-744	2441709.14	1973 Jan 26 15:20:00	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	PM	-	-	-	58	-	-
1973-745	2441709.28	1973 Jan 26 18:45:00	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	WS	-	-	-	73	-	-
1973-745	2441709.28	1973 Jan 26 18:45:00	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	WS	-	-	-	54	-	-
1973-746	2441709.30	1973 Jan 26 19:14:59	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	KAU	-	-	-	60	-	-
1973-747	2441709.49	1973 Jan 26 23:45:00	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	KHR	-	-	-	60	-	-
1973-749	2441711.77	1973 Jan 29 06:33:59	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	WS	-	-	-	84	-	-
1973-749	2441712.10	1973 Jan 29 14:17:00	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	WS	-	-	-	60	-	-
1973-749	2441712.10	1973 Jan 29 14:17:00	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	WS	-	-	-	64	-	-
1973-749	2441712.18	1973 Jan 29 16:24:59	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	CC	LO43	-	-	70	-	-
1973-749	2441712.18	1973 Jan 29 16:24:59	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	SHER	-	-	-	59	-	-
1973-749	2441712.35	1973 Jan 29 20:24:00	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	WS	-	-	-	68	-	-
1973-749	2441712.35	1973 Jan 29 20:24:00	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	VI	-	-	-	54	-	-
1973-749	2441712.40	1973 Jan 29 21:40:00	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	KAU	-	-	-	58	-	-
1973-749	2441712.40	1973 Jan 29 21:40:00	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	KHR	-	-	-	60	-	-
1973-749	2441713.26	1973 Jan 30 18:20:00	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	PM	-	-	-	80	-	-
1973-749	2441713.31	1973 Jan 30 19:30:00	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	WS	-	-	-	84	-	-
1973-749	2441713.31	1973 Jan 30 19:30:00	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	WS	-	-	-	64	-	-
1973-749	2441713.38	1973 Jan 30 21:00:00	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	KAU	-	-	-	57	-	-
1973-749	2441714.10	1973 Jan 31 14:20:00	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	CC	LO43	-	-	61	-	-
1973-749	2441714.12	1973 Jan 31 14:58:00	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	VI	-	-	-	58	-	-
1973-749	2441714.12	1973 Jan 31 14:58:00	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	CC	-	-	-	96	-	-
1973-749	2441714.21	1973 Jan 31 17:00:00	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	CC	LO43	-	-	73	-	-
1973-749	2441714.26	1973 Jan 31 18:14:59	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	WS	-	-	-	73	-	-
1973-749	2441714.28	1973 Jan 31 18:14:59	Rocketsonde	-	-	Starvue, Datasonde	-	-	-</							

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Mission	FlightCode	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee_Km	Range_Km	Dest
1973-M169	2441715-33	1973 Feb 1 2000:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PF	-	-	-	57	-	-
1973-M170	2441715-41	1973 Feb 1 2148:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	KAU	-	-	-	58	-	-
1973-M173	2441716-10	1973 Feb 2 1417:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	CC	LO43	-	-	64	-	-
1973-M174	2441716-12	1973 Feb 2 1500:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	SHER	-	-	-	65	-	-
1973-M175	2441716-29	1973 Feb 2 1901:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PH	-	-	-	62	-	-
1973-M176	2441716-30	1973 Feb 2 1914:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	WS	-	-	-	71	-	-
1973-M177	2441716-35	1973 Feb 2 2021:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	WS	-	-	-	65	-	-
1973-M181	2441716-35	1973 Feb 2 2026:59	Rocketsonde	-	-	Met. Sphere	-	-	-	PH	-	-	-	88	-	-
1973-M178	2441716-44	1973 Feb 2 2230:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	KAU	-	-	-	60	-	-
1973-M179	2441716-49	1973 Feb 2 2345:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	KAU	-	-	-	60	-	-
1973-M180	2441719-18	1973 Feb 5 1624:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	SHER	-	-	-	44	-	-
1973-M182	2441719-19	1973 Feb 5 1635:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	KAU	-	-	-	56	-	-
1973-M183	2441719-27	1973 Feb 5 1831:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PH	-	-	-	62	-	-
1973-M184	2441719-30	1973 Feb 5 1914:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	WS	LO43	-	-	69	-	-
1973-M185	2441719-34	1973 Feb 5 2007:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	WS	-	-	-	60	-	-
1973-M186	2441719-48	1973 Feb 5 2332:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	KAU	-	-	-	60	-	-
1973-M187	2441719-49	1973 Feb 5 2345:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	KAU	-	-	-	62	-	-
1973-M189	2441720-10	1973 Feb 6 1430:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	AIT	-	-	-	61	-	-
1973-M190	2441720-10	1973 Feb 6 1430:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	CC	LO43	-	-	62	-	-
1973-M191	2441720-27	1973 Feb 6 1630:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	WS	-	-	-	62	-	-
1973-M192	2441720-32	1973 Feb 6 1934:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PF	-	-	-	62	-	-
1973-M193	2441721-12	1973 Feb 7 1455:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	THU	-	-	-	62	-	-
1973-M196	2441721-20	1973 Feb 7 1644:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	SHER	-	-	-	63	-	-
1973-M199	2441721-21	1973 Feb 7 1700:00	Rocketsonde	-	-	Met. Sphere	-	-	-	CC	LO43	-	-	96	-	-
1973-M197	2441721-25	1973 Feb 7 1755:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	CC	LO43	-	-	70	-	-
1973-M198	2441721-27	1973 Feb 7 1834:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PH	-	-	-	56	-	-
1973-M199	2441721-29	1973 Feb 7 1859:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PH	-	-	-	90	-	-
1973-M200	2441721-31	1973 Feb 7 1930:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	WS	-	-	-	62	-	-
1973-M201	2441721-40	1973 Feb 7 1930:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PF	-	-	-	59	-	-
1973-M202	2441721-50	1973 Feb 7 2355:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	KAU	-	-	-	59	-	-
1973-M205	2441722-08	1973 Feb 8 1450:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	KAU	-	-	-	58	-	-
1973-M206	2441722-12	1973 Feb 8 1451:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	AIT	-	-	-	64	-	-
1973-M207	2441722-25	1973 Feb 8 1500:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	CC	LO43	-	-	62	-	-
1973-M208	2441722-25	1973 Feb 8 1755:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	WS	-	-	-	61	-	-
1973-M209	2441722-33	1973 Feb 8 1943:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PF	-	-	-	47	-	-
1973-M210	2441722-40	1973 Feb 8 2123:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	KAU	-	-	-	59	-	-
1973-M211	2441723-09	1973 Feb 9 1415:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	CC	LO43	-	-	69	-	-
1973-M212	2441723-10	1973 Feb 9 1430:00	Rocketsonde	-	-	Starute, AN/Dmg-9	-	-	-	THU	-	-	-	62	-	-
1973-M213	2441723-13	1973 Feb 9 1513:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	AI	-	-	-	60	-	-
1973-M214	2441723-21	1973 Feb 9 1700:00	Rocketsonde	-	-	Met. Sphere	-	-	-	CC	LO43	-	-	96	-	-
1973-M215	2441723-31	1973 Feb 9 1930:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PF	-	-	-	55	-	-
1973-M216	2441723-33	1973 Feb 9 2051:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	WS	-	-	-	72	-	-
1973-M217	2441723-35	1973 Feb 9 2051:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	KAU	-	-	-	62	-	-
1973-M218	2441723-42	1973 Feb 9 2351:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	KUR	-	-	-	62	-	-
1973-M219	2441723-49	1973 Feb 12 1431:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	CC	LO43	-	-	64	-	-
1973-M220	2441723-56	1973 Feb 12 1800:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	CC	-	-	-	58	-	-
1973-M221	2441723-56	1973 Feb 12 1814:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	SHER	-	-	-	63	-	-
1973-M222	2441723-56	1973 Feb 12 1814:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PH	-	-	-	53	-	-
1973-M223	2441723-56	1973 Feb 12 1814:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	AIT	-	-	-	61	-	-
1973-M224	2441723-56	1973 Feb 12 1914:59	Rocketsonde	-	-	Met. Para, Arcasonde	-	-	-	WS	-	-	-	61	-	-
1973-M225	2441723-56	1973 Feb 12 2032:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	AI	-	-	-	54	-	-
1973-M227	2441723-36	1973 Feb 12 2100:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	KAU	-	-	-	62	-	-
1973-M228	2441723-39	1973 Feb 12 2300:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	KUR	-	-	-	66	-	-
1973-M231	2441727-24	1973 Feb 13 1740:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	WS	-	-	-	60	-	-
1973-M232	2441727-29	1973 Feb 13 1856:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PH	-	-	-	60	-	-
1973-M233	2441727-33	1973 Feb 13 1952:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PF	-	-	-	55	-	-
1973-M234	2441727-39	1973 Feb 13 2117:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	KAU	-	-	-	62	-	-
1973-M235	2441728-08	1973 Feb 14 1400:00	Rocketsonde	-	-	Met. Para, Arcasonde	-	-	-	AIT	-	-	-	62	-	-
1973-M236	2441728-11	1973 Feb 14 1435:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	CELAT	-	-	-	60	-	-
1973-M237	2441728-14	1973 Feb 14 1508:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	CELAT	-	-	-	60	-	-
1973-M238	2441728-14	1973 Feb 14 1523:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	AI	-	-	-	62	-	-
1973-M239	2441728-14	1973 Feb 14 1609:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	WS	LO43	-	-	67	-	-
1973-M240	2441728-21	1973 Feb 14 1707:00	Rocketsonde	-	-	Met. Sphere	-	-	-	CC	-	-	-	95	-	-
1973-M241	2441728-27	1973 Feb 14 1830:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	WS	-	-	-	67	-	-
1973-M242	2441728-29	1973 Feb 14 1859:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	WS	-	-	-	63	-	-
1973-M243	2441728-31	1973 Feb 14 1927:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PM	-	-	-	50	-	-
1973-M244	2441728-33	1973 Feb 14 1954:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PF	-	-	-	50	-	-
1973-M245	2441728-38	1973 Feb 14 2100:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PH	-	-	-	63	-	-
1973-M246	2441728-38	1973 Feb 14 2112:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	Met. Sphere	-	-	-	85	-	-
1973-M248	2441729-00	1973 Feb 14 2355:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	KAU	-	-	-	63	-	-
1973-M249	2441729-05	1973 Feb 15 1755:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	KUR	-	-	-	61	-	-
1973-M250	2441729-09	1973 Feb 15 2100:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	WS	-	-	-	74	-	-
1973-M251	2441729-42	1973 Feb 15 2158:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	KAU	-	-	-	59	-	-
1973-M252	2441730-08	1973 Feb 16 1400:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PM	-	-	-	58	-	-
1973-M253	2441730-09	1973 Feb 16 1415:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	AIT	-	-	-	53	-	-
1973-M254	2441730-23	1973 Feb 16 1731:00	Rocketsonde	-	-	Met. Para, Arcasonde	-	-	-	CC	LO43	-	-	80	-	-
1973-M255	2441730-26	1973 Feb 16 1809:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PM	-	-	-	60	-	-
1973-M256	2441730-38	1973 Feb 16 2100:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PH	-	-	-	61	-	-
1973-M258	2441730-49	1973 Feb 16 2345:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	KUR	-	-	-	61	-	-
1973-M259	2441734-09	1973 Feb 20 1410:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	AIT	-	-	-	58	-	-
1973-M260	2441734-12	1973 Feb 20 1500:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	SHER	-	-	-	59	-	-
1973-M261	2441734-24	1973 Feb 20 1745:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	WS	-	-	-	73	-	-
1973-M262	2441734-28	1973 Feb 20 1845:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	WS	-	-	-	60	-	-
1973-M263	2441734-32	1973 Feb 20 1940:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PF	-	-	-	57	-	-
1973-M265	2441735-12	1973 Feb 21 1500:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	SHER	-	-	-	65	-	-

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Mission	FlightCode	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee_Km	Range_Km	Dest
1973-4266	2441735.15	1973 Feb 21 15:32:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	WI	-	-	-	64	-	-
1973-4267	2441735.27	1973 Feb 21 18:30:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	CC	LO43	-	-	60	-	-
1973-4268	2441735.29	1973 Feb 21 19:01:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PH	-	-	-	60	-	-
1973-4269	2441735.31	1973 Feb 21 19:30:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PF	-	-	-	56	-	-
1973-4270	2441735.35	1973 Feb 21 20:30:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	WS	-	-	-	70	-	-
1973-4271	2441735.44	1973 Feb 21 22:33:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	KAU	-	-	-	59	-	-
1973-4272	2441735.49	1973 Feb 21 23:45:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	KMR	-	-	-	60	-	-
1973-4273	2441736.29	1973 Feb 22 18:51:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PH	-	-	-	60	-	-
1973-4274	2441736.39	1973 Feb 22 21:14:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	WS	-	-	-	74	-	-
1973-4275	2441736.39	1973 Feb 22 21:20:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	KAU	-	-	-	59	-	-
1973-4276	2441737.12	1973 Feb 23 15:00:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	SHER	-	-	-	58	-	-
1973-4277	2441737.15	1973 Feb 23 15:40:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	WI	-	-	-	63	-	-
1973-4278	2441737.16	1973 Feb 23 15:54:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	WI	-	-	-	62	-	-
1973-4279	2441737.21	1973 Feb 23 17:03:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PH	-	-	-	90	-	-
1973-4280	2441737.21	1973 Feb 23 17:40:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PH	-	-	-	90	-	-
1973-4281	2441737.24	1973 Feb 23 20:23:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	WS	-	-	-	73	-	-
1973-4282	2441737.31	1973 Feb 23 19:19:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	Met. Sphere	-	-	-	61	-	-
1973-4283	2441737.35	1973 Feb 23 20:23:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	KAU	-	-	-	58	-	-
1973-4284	2441737.38	1973 Feb 23 21:00:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PF	-	-	-	58	-	-
1973-4285	2441737.49	1973 Feb 23 23:45:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	KMR	-	-	-	58	-	-
1973-4286	2441740.09	1973 Feb 26 14:15:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	CC	LO43	-	-	79	-	-
1973-4287	2441740.19	1973 Feb 26 16:40:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	SHER	-	-	-	63	-	-
1973-4288	2441740.27	1973 Feb 26 18:30:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	WS	-	-	-	74	-	-
1973-4289	2441740.36	1973 Feb 26 20:37:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PH	-	-	-	60	-	-
1973-4290	2441740.36	1973 Feb 26 21:00:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	KAU	-	-	-	61	-	-
1973-4291	2441741.24	1973 Feb 27 17:49:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	WS	-	-	-	72	-	-
1973-4292	2441741.29	1973 Feb 27 19:01:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PH	-	-	-	86	-	-
1973-4293	2441741.35	1973 Feb 27 20:23:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PF	-	-	-	86	-	-
1973-4294	2441741.35	1973 Feb 27 22:30:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	KAU	-	-	-	60	-	-
1973-4295	2441741.44	1973 Feb 27 23:52:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	KMR	-	-	-	65	-	-
1973-4296	2441742.12	1973 Feb 28 15:00:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	SHER	-	-	-	63	-	-
1973-4297	2441742.14	1973 Feb 28 15:27:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	WI	-	-	-	59	-	-
1973-4298	2441742.19	1973 Feb 28 16:31:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	Met. Sphere	-	-	-	56	-	-
1973-4299	2441742.21	1973 Feb 28 17:00:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PRIM	-	-	-	96	-	-
1973-4300	2441742.29	1973 Feb 28 18:59:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	CC	LO43	-	-	96	-	-
1973-4301	2441742.30	1973 Feb 28 19:07:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	WS	-	-	-	70	-	-
1973-4302	2441742.33	1973 Feb 28 20:00:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PH	-	-	-	70	-	-
1973-4303	2441742.36	1973 Feb 28 21:00:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PH	-	-	-	49	-	-
1973-4304	2441742.49	1973 Feb 28 23:45:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	KAU	-	-	-	61	-	-
1973-4305	2441743.10	1973 Mar 1 14:31:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	KMR	-	-	-	65	-	-
1973-4306	2441743.10	1973 Mar 1 14:31:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	WS	-	-	-	57	-	-
1973-4307	2441743.26	1973 Mar 1 16:31:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	Met. Sphere	-	-	-	59	-	-
1973-4308	2441743.39	1973 Mar 1 21:24:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	KAU	-	-	-	58	-	-
1973-4309	2441744.08	1973 Mar 2 14:00:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	Met. Para. Arcasoude	-	-	-	96	-	-
1973-4310	2441744.12	1973 Mar 2 15:00:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	SHER	-	-	-	96	-	-
1973-4311	2441744.13	1973 Mar 2 15:00:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	WI	-	-	-	90	-	-
1973-4312	2441744.15	1973 Mar 2 15:00:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PH	-	-	-	60	-	-
1973-4313	2441744.30	1973 Mar 2 19:40:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	WS	-	-	-	58	-	-
1973-4314	2441744.32	1973 Mar 2 21:38:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	KAU	-	-	-	57	-	-
1973-4315	2441744.35	1973 Mar 2 21:38:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	Met. Sphere	-	-	-	65	-	-
1973-4316	2441744.49	1973 Mar 2 23:43:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	KMR	-	-	-	62	-	-
1973-4317	2441747.08	1973 Mar 5 23:00:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	Met. Para. Arcasoude	-	-	-	96	-	-
1973-4318	2441747.08	1973 Mar 5 14:15:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	Met. Para. Arcasoude	-	-	-	96	-	-
1973-4319	2441747.08	1973 Mar 5 14:15:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	WS	-	-	-	64	-	-
1973-4320	2441747.20	1973 Mar 5 16:44:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	SHER	-	-	-	64	-	-
1973-4321	2441747.25	1973 Mar 5 17:54:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PH	-	-	-	59	-	-
1973-4322	2441747.25	1973 Mar 5 17:54:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	WS	-	-	-	64	-	-
1973-4323	2441747.30	1973 Mar 5 19:14:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	KAU	-	-	-	60	-	-
1973-4324	2441747.38	1973 Mar 5 21:00:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	KMR	-	-	-	66	-	-
1973-4325	2441747.49	1973 Mar 5 23:45:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	WS	-	-	-	71	-	-
1973-4326	2441748.21	1973 Mar 6 17:00:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	Met. Para. Arcasoude	-	-	-	30	-	-
1973-4327	2441748.27	1973 Mar 6 18:29:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PF	-	-	-	66	-	-
1973-4328	2441748.33	1973 Mar 6 19:49:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	KAU	-	-	-	62	-	-
1973-4329	2441748.39	1973 Mar 6 21:24:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	CC	LO43	-	-	76	-	-
1973-4330	2441748.58	1973 Mar 7 14:00:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	CC	LO43	-	-	62	-	-
1973-4331	2441749.08	1973 Mar 7 14:00:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	CC	LO43	-	-	59	-	-
1973-4332	2441749.08	1973 Mar 7 14:00:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	CC	LO43	-	-	53	-	-
1973-4333	2441749.09	1973 Mar 7 15:14:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	Met. Para. Arcasoude	-	-	-	79	-	-
1973-4334	2441749.14	1973 Mar 7 15:14:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	THU	-	-	-	66	-	-
1973-4335	2441749.16	1973 Mar 7 16:51:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	SHER	-	-	-	47	-	-
1973-4336	2441749.20	1973 Mar 7 16:51:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	Met. Para. Arcasoude	-	-	-	63	-	-
1973-4337	2441749.21	1973 Mar 7 16:55:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PRIM	-	-	-	63	-	-
1973-4338	2441749.30	1973 Mar 7 19:14:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	WS	-	-	-	74	-	-
1973-4339	2441749.31	1973 Mar 7 19:14:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	Met. Sphere	-	-	-	96	-	-
1973-4340	2441749.40	1973 Mar 7 21:30:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	CC	LO43	-	-	62	-	-
1973-4341	2441749.51	1973 Mar 8 00:10:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PF	-	-	-	61	-	-
1973-4342	2441750.08	1973 Mar 8 13:49:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	KAU	-	-	-	60	-	-
1973-4343	2441750.18	1973 Mar 8 16:14:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	THU	-	-	-	78	-	-
1973-4344	2441750.40	1973 Mar 8 21:37:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	SHER	-	-	-	60	-	-
1973-4345	2441751.09	1973 Mar 9 14:15:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	KAU	-	-	-	60	-	-
1973-4346	2441751.15	1973 Mar 9 15:31:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	CC	LO43	-	-	81	-	-
1973-4347	2441751.15	1973 Mar 9 15:31:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	THU	-	-	-	83	-	-
1973-4348	2441751.19	1973 Mar 9 16:30:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	Met. Para. Arcasoude	-	-	-	63	-	-
1973-4349	2441751.25	1973 Mar 9 17:58:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	THU	-	-	-	60	-	-
1973-4350	2441751.31	1973 Mar 9 19:30:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PM	-	-	-	78	-	-
1973-4351	2441751.33	1973 Mar 9 19:30:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	WS	-	-	-	60	-	-
1973-4352	2441751.40	1973 Mar 9 21:30:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PF	-	-	-	53	-	-
1973-4353	2441754.10	1973 Mar 12 14:19:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	KAU	-	-	-	56	-	-

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Mission	FlightCode	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee_Km	Range_Km	Dest
1973-A15	2441754.16	1973 Mar 12 15:49:59	Rocketsonde	-	-	Met. Para, Arcasonde	-	-	-	AIT	-	-	-	42	-	-
1973-W357	2441754.19	1973 Mar 12 16:36:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PRIM	-	-	-	66	-	-
1973-W358	2441754.29	1973 Mar 12 18:59:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	WS	-	-	-	72	-	-
1973-W359	2441754.31	1973 Mar 12 19:30:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PF	-	-	-	59	-	-
1973-W360	2441754.36	1973 Mar 12 20:43:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	WI	-	-	-	63	-	-
1973-W361	2441754.38	1973 Mar 12 21:00:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	KAU	-	-	-	62	-	-
1973-W362	2441754.42	1973 Mar 12 22:08:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PH	-	-	-	60	-	-
1973-A16	2441755.25	1973 Mar 13 17:55:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	WS	-	-	-	61	-	-
1973-W364	2441756.37	1973 Mar 13 20:56:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	KAU	-	-	-	66	-	-
1973-W365	2441756.12	1973 Mar 14 15:00:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	SHER	-	-	-	62	-	-
1973-W366	2441756.16	1973 Mar 14 15:46:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	WI	-	-	-	61	-	-
1973-W367	2441756.17	1973 Mar 14 15:59:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	WS	-	-	-	62	-	-
1973-W368	2441756.21	1973 Mar 14 17:00:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	WS	-	-	-	71	-	-
1973-W369	2441756.26	1973 Mar 14 18:14:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	CC	L043	-	-	63	-	-
1973-W370	2441756.28	1973 Mar 14 18:59:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	CC	L043	-	-	96	-	-
1973-W371	2441756.29	1973 Mar 14 19:00:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PH	-	-	-	89	-	-
1973-W372	2441756.31	1973 Mar 14 19:44:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PF	-	-	-	60	-	-
1973-W373	2441756.34	1973 Mar 14 20:09:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PH	-	-	-	59	-	-
1973-W374	2441756.38	1973 Mar 14 21:00:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	KAU	-	-	-	63	-	-
1973-W375	2441756.51	1973 Mar 15 09:14:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	KHR	-	-	-	63	-	-
1973-W376	2441757.15	1973 Mar 15 15:30:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	SHER	-	-	-	64	-	-
1973-W377	2441757.15	1973 Mar 15 15:38:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	CLBI	-	-	-	62	-	-
1973-W378	2441757.26	1973 Mar 15 19:14:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	WS	-	-	-	72	-	-
1973-W379	2441757.38	1973 Mar 15 21:09:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	KAU	-	-	-	59	-	-
1973-A17	2441758.08	1973 Mar 16 14:00:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	AIT	-	-	-	49	-	-
1973-W380	2441758.08	1973 Mar 16 14:00:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	THU	-	-	-	52	-	-
1973-W381	2441758.19	1973 Mar 16 16:30:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	CC	-	-	-	62	-	-
1973-W382	2441758.26	1973 Mar 16 18:14:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PH	-	-	-	64	-	-
1973-W383	2441758.29	1973 Mar 16 18:59:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PH	-	-	-	56	-	-
1973-W384	2441758.44	1973 Mar 16 19:14:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	WS	-	-	-	61	-	-
1973-W385	2441758.44	1973 Mar 16 22:30:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	KAU	-	-	-	60	-	-
1973-W386	2441758.49	1973 Mar 16 23:47:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	KHR	-	-	-	65	-	-
1973-W387	2441758.49	1973 Mar 16 23:47:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PRIM	-	-	-	89	-	-
1973-W388	2441761.27	1973 Mar 19 18:30:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	WS	-	-	-	76	-	-
1973-W389	2441761.27	1973 Mar 19 18:30:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PH	-	-	-	58	-	-
1973-W390	2441761.28	1973 Mar 19 18:46:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PH	-	-	-	58	-	-
1973-W391	2441761.32	1973 Mar 19 19:34:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	CC	L043	-	-	63	-	-
1973-W392	2441761.52	1973 Mar 19 19:44:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	WS	-	-	-	75	-	-
1973-W393	2441761.36	1973 Mar 19 20:46:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	LF	-	-	-	63	-	-
1973-W394	2441761.40	1973 Mar 19 21:35:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	WI	-	-	-	64	-	-
1973-W395	2441762.12	1973 Mar 20 15:00:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	KAU	-	-	-	91	-	-
1973-W396	2441762.24	1973 Mar 20 17:45:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	SHER	-	-	-	58	-	-
1973-W397	2441762.24	1973 Mar 20 17:45:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	WS	-	-	-	76	-	-
1973-W398	2441762.25	1973 Mar 20 19:04:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PRIM	-	-	-	66	-	-
1973-W399	2441762.40	1973 Mar 20 21:38:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	KAU	-	-	-	60	-	-
1973-W400	2441762.40	1973 Mar 20 21:38:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PRIM	-	-	-	89	-	-
1973-W401	2441763.11	1973 Mar 21 15:40:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	SHER	-	-	-	63	-	-
1973-W402	2441763.15	1973 Mar 21 15:40:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PRIM	-	-	-	67	-	-
1973-W403	2441763.21	1973 Mar 21 17:00:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	CC	L043	-	-	56	-	-
1973-W404	2441763.21	1973 Mar 21 17:00:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	AIT	-	-	-	72	-	-
1973-W405	2441763.24	1973 Mar 21 19:55:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	WS	-	-	-	69	-	-
1973-W406	2441763.29	1973 Mar 21 19:55:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PH	-	-	-	66	-	-
1973-A18	2441763.34	1973 Mar 21 20:15:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PH	-	-	-	68	-	-
1973-W408	2441763.34	1973 Mar 21 21:35:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	KAU	-	-	-	60	-	-
1973-W409	2441763.34	1973 Mar 21 21:35:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	WI	-	-	-	65	-	-
1973-W410	2441764.30	1973 Mar 22 19:37:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	KAU	-	-	-	62	-	-
1973-W411	2441764.30	1973 Mar 22 21:34:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	KAU	-	-	-	62	-	-
1973-W412	2441764.99	1973 Mar 23 14:15:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PF	-	-	-	66	-	-
1973-W413	2441765.09	1973 Mar 23 14:15:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	CC	L043	-	-	71	-	-
1973-W414	2441765.13	1973 Mar 23 15:12:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	CC	-	-	-	62	-	-
1973-W415	2441765.14	1973 Mar 23 15:20:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	VI	-	-	-	50	-	-
1973-W416	2441765.19	1973 Mar 23 16:30:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	THU	-	-	-	67	-	-
1973-W417	2441765.22	1973 Mar 23 17:10:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PRIM	-	-	-	67	-	-
1973-W418	2441765.22	1973 Mar 23 17:10:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	AIT	-	-	-	56	-	-
1973-W419	2441765.30	1973 Mar 23 19:33:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PH	-	-	-	63	-	-
1973-W420	2441765.30	1973 Mar 23 21:00:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PH	-	-	-	90	-	-
1973-W421	2441765.38	1973 Mar 23 21:11:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	KAU	-	-	-	59	-	-
1973-W422	2441765.40	1973 Mar 23 21:34:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	WS	-	-	-	73	-	-
1973-W423	2441765.40	1973 Mar 23 21:34:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	AIT	-	-	-	52	-	-
1973-W424	2441765.49	1973 Mar 26 14:15:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	THU	-	-	-	69	-	-
1973-W425	2441765.49	1973 Mar 26 14:15:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	CC	L043	-	-	62	-	-
1973-W426	2441765.49	1973 Mar 26 14:15:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	CC	-	-	-	70	-	-
1973-W427	2441765.29	1973 Mar 26 18:59:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	WS	-	-	-	77	-	-
1973-W428	2441765.30	1973 Mar 26 19:06:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PH	-	-	-	60	-	-
1973-W429	2441765.34	1973 Mar 26 20:15:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	WS	-	-	-	77	-	-
1973-W430	2441765.38	1973 Mar 26 21:00:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	KAU	-	-	-	60	-	-
1973-W431	2441765.40	1973 Mar 27 00:04:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	KHR	-	-	-	65	-	-
1973-W432	2441765.70	1973 Mar 27 04:44:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	SHER	-	-	-	67	-	-
1973-W433	2441765.91	1973 Mar 27 09:45:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PF	-	-	-	55	-	-
1973-W434	2441769.25	1973 Mar 27 27:00:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PRIM	-	-	-	70	-	-
1973-W435	2441769.25	1973 Mar 27 27:00:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	WS	-	-	-	61	-	-
1973-W436	2441769.30	1973 Mar 27 19:09:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	WS	-	-	-	81	-	-
1973-W437	2441769.39	1973 Mar 27 21:24:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	KAU	-	-	-	68	-	-
1973-W438	2441770.09	1973 Mar 28 14:15:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	CC	L043	-	-	58	-	-
1973-W439	2441770.10	1973 Mar 28 14:25:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	THU	-	-	-	67	-	-
1973-W440	2441770.11	1973 Mar 28 14:33:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	CC	-	-	-	61	-	-
1973-W441	2441770.12	1973 Mar 28 15:00:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	CLBI	-	-	-	64	-	-
1973-W442	2441770.19	1973 Mar 28 16:30:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	SHER	-	-	-	64	-	-
1973-W443	2441770.24	1973 Mar 28 17:49:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PRIM						

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Mission	FlightCode	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee_Km	Range_Km	Dest
1973-0447	2441770.44	1973 Mar 28 22:29:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	KAU	-	-	-	59	-	-
1973-0448	2441770.71	1973 Mar 29 04:55:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	SHER	-	-	-	67	-	-
1973-0449	2441771.18	1973 Mar 29 16:24:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	MI	-	-	-	65	-	-
1973-0451	2441771.33	1973 Mar 29 19:58:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	KAU	-	-	-	67	-	-
1973-0452	2441771.40	1973 Mar 29 21:40:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	-	-	-	-	60	-	-
1973-0453	2441771.74	1973 Mar 30 05:52:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	WS	-	-	-	71	-	-
1973-0454	2441772.09	1973 Mar 30 14:15:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	CC	LO43	-	-	68	-	-
1973-0456	2441772.28	1973 Mar 30 18:46:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	MI	-	-	-	56	-	-
1973-0457	2441772.31	1973 Mar 30 19:30:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PH	-	-	-	55	-	-
1973-0458	2441772.34	1973 Mar 30 20:13:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	KAU	-	-	-	60	-	-
1973-0459	2441772.42	1973 Mar 30 22:00:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	WS	-	-	-	62	-	-
1973-0460	2441772.44	1973 Mar 30 22:30:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	KAU	-	-	-	74	-	-
1973-0461	2441775.12	1973 Apr 2 14:49:59	Rocketsonde	-	-	Starute, AN/DWQ-9	-	-	-	THU	-	-	-	59	-	-
1973-0462	2441775.15	1973 Apr 2 15:41:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	MI	-	-	-	59	-	-
1973-0463	2441775.20	1973 Apr 2 16:53:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	MI	-	-	-	59	-	-
1973-0464	2441775.21	1973 Apr 2 17:04:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PH	-	-	-	67	-	-
1973-0465	2441775.22	1973 Apr 2 17:22:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	CC	-	-	-	58	-	-
1973-0466	2441775.23	1973 Apr 2 17:30:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	CC	LO43	-	-	67	-	-
1973-0467	2441775.24	1973 Apr 2 17:44:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PH	-	-	-	70	-	-
1973-0468	2441775.32	1973 Apr 2 19:58:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PH	-	-	-	53	-	-
1973-0469	2441775.34	1973 Apr 2 20:15:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	WS	-	-	-	73	-	-
1973-0470	2441775.39	1973 Apr 2 21:27:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	KAU	-	-	-	57	-	-
1973-0471	2441775.69	1973 Apr 3 04:54:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	SHER	-	-	-	62	-	-
1973-0472	2441776.06	1973 Apr 3 13:19:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	THU	-	-	-	76	-	-
1973-0473	2441776.41	1973 Apr 3 21:55:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	KAU	-	-	-	60	-	-
1973-0474	2441777.10	1973 Apr 4 14:21:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	CC	LO43	-	-	66	-	-
1973-1164	2441777.14	1973 Apr 4 15:20:00	Rocketsonde	-	-	Met. Sphere	-	-	-	CC	LO43	-	-	91	-	-
1973-0477	2441777.19	1973 Apr 4 16:40:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PRIM	-	-	-	53	-	-
1973-0478	2441777.24	1973 Apr 4 17:45:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	WS	-	-	-	70	-	-
1973-0479	2441777.24	1973 Apr 4 17:45:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	MI	-	-	-	64	-	-
1973-0479	2441777.28	1973 Apr 4 18:58:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PH	-	-	-	59	-	-
1973-0480	2441777.31	1973 Apr 4 19:19:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PH	-	-	-	59	-	-
1973-0481	2441777.35	1973 Apr 4 20:12:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PH	-	-	-	58	-	-
1973-0482	2441777.35	1973 Apr 4 20:20:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PH	-	-	-	58	-	-
1973-0483	2441778.14	1973 Apr 5 16:24:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	SHER	-	-	-	65	-	-
1973-0484	2441778.14	1973 Apr 5 16:50:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	SHER	LO43	-	-	68	-	-
1973-0485	2441779.09	1973 Apr 6 14:15:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	CC	-	-	-	68	-	-
1973-0486	2441779.25	1973 Apr 6 18:04:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PH	-	-	-	60	-	-
1973-0487	2441779.27	1973 Apr 6 18:50:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	MI	-	-	-	70	-	-
1973-0488	2441779.28	1973 Apr 6 19:45:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	MI	-	-	-	60	-	-
1973-0489	2441779.31	1973 Apr 6 19:50:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	KAU	-	-	-	69	-	-
1973-0490	2441779.46	1973 Apr 6 22:52:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PRIM	LO43	-	-	55	-	-
1973-0491	2441782.09	1973 Apr 9 14:15:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	WS	-	-	-	70	-	-
1973-0492	2441782.19	1973 Apr 9 16:50:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PH	-	-	-	60	-	-
1973-0493	2441782.19	1973 Apr 9 16:50:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PH	-	-	-	60	-	-
1973-0494	2441782.29	1973 Apr 9 18:50:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	KAU	-	-	-	60	-	-
1973-0495	2441782.31	1973 Apr 9 19:50:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	KAU	-	-	-	60	-	-
1973-0496	2441782.32	1973 Apr 9 19:50:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PH	-	-	-	60	-	-
1973-0497	2441782.32	1973 Apr 9 19:50:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PH	-	-	-	60	-	-
1973-0498	2441782.51	1973 Apr 10 04:50:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PRIM	-	-	-	55	-	-
1973-0499	2441782.51	1973 Apr 10 04:50:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	WS	-	-	-	55	-	-
1973-0500	2441782.51	1973 Apr 10 04:50:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	WS	-	-	-	55	-	-
1973-0501	2441782.51	1973 Apr 10 04:50:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PRIM	-	-	-	55	-	-
1973-0502	2441783.82	1973 Apr 11 07:34:59	Rocketsonde	-	-	Starute, AN/DWQ-9	-	-	-	KAU	-	-	-	61	-	-
1973-0504	2441784.15	1973 Apr 11 15:30:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	THU	-	-	-	61	-	-
1973-0505	2441784.15	1973 Apr 11 15:30:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	CC	-	-	-	68	-	-
1973-0507	2441784.19	1973 Apr 11 16:30:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	CC	LO43	-	-	68	-	-
1973-0508	2441784.25	1973 Apr 11 16:30:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	WS	-	-	-	72	-	-
1973-0509	2441784.26	1973 Apr 11 18:03:59	Rocketsonde	-	-	Met. Para.	-	-	-	MI	-	-	-	64	-	-
1973-0509	2441784.29	1973 Apr 11 18:54:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	MI	-	-	-	63	-	-
1973-0510	2441784.29	1973 Apr 11 18:58:59	Rocketsonde	-	-	Met. Sphere	-	-	-	PH	-	-	-	90	-	-
1973-0511	2441784.30	1973 Apr 11 19:09:59	Rocketsonde	-	-	Met. Sphere	-	-	-	CC	LO43	-	-	98	-	-
1973-0512	2441784.31	1973 Apr 11 19:22:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PH	-	-	-	58	-	-
1973-0513	2441784.32	1973 Apr 11 19:22:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PH	-	-	-	58	-	-
1973-0514	2441784.32	1973 Apr 11 19:33:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PH	-	-	-	63	-	-
1973-0515	2441784.32	1973 Apr 11 19:41:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	MI	-	-	-	58	-	-
1973-0516	2441784.38	1973 Apr 11 21:00:00	Rocketsonde	-	-	Met. Sphere	-	-	-	KAU	-	-	-	58	-	-
1973-0517	2441784.38	1973 Apr 11 21:00:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	KAU	-	-	-	62	-	-
1973-0518	2441784.50	1973 Apr 11 21:36:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	KAU	-	-	-	56	-	-
1973-0519	2441785.19	1973 Apr 12 00:00:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	KNR	-	-	-	62	-	-
1973-0520	2441785.49	1973 Apr 12 16:34:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	SHER	-	-	-	62	-	-
1973-0521	2441786.09	1973 Apr 12 23:45:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	KNR	-	-	-	59	-	-
1973-0522	2441786.24	1973 Apr 13 14:15:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	CC	LO43	-	-	61	-	-
1973-0523	2441786.24	1973 Apr 13 14:15:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	MI	-	-	-	61	-	-
1973-0524	2441786.31	1973 Apr 13 17:45:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	WS	-	-	-	72	-	-
1973-0525	2441786.51	1973 Apr 13 19:30:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PH	-	-	-	57	-	-
1973-0526	2441786.51	1973 Apr 13 21:03:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PH	-	-	-	57	-	-
1973-0527	2441786.58	1973 Apr 13 21:03:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	KAU	-	-	-	68	-	-
1973-0528	2441789.01	1973 Apr 16 12:14:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	WS	-	-	-	57	-	-
1973-0529	2441789.06	1973 Apr 16 13:30:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	WS	-	-	-	65	-	-
1973-0530	2441789.10	1973 Apr 16 14:30:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	WS	-	-	-	66	-	-
1973-0531	2441789.13	1973 Apr 16 15:03:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	WS	-	-	-	49	-	-
1973-0532	2441789.21	1973 Apr 16 17:00:00	Rocketsonde	-	-	Starute AN/DWQ-9	-	-	-	THU	-	-	-	74	-	-
1973-0533	2441789.29	1973 Apr 16 18:56:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	WS	-	-	-	59	-	-
1973-0534	2441789.32	1973 Apr 16 18:56:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PH	-	-	-	66	-	-
1973-0535	2441789.38	1973 Apr 16 19:35:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PH	-	-	-	60	-	-
1973-0536	2441789.39	1973 Apr 16 21:00:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	KAU	-	-	-	64	-	-
1973-0537	2441789.69	1973 Apr 17 04:34:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	SHER	-	-	-	60	-	-
1973-0538	2441790.40	1973 Apr 17														

Launch

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Mission	FlightCode	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee_Km	Range_Km	Dest
1973-4639	2441791.19	1973 Apr 18 16:31:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PRIM	-	-	-	58	-	-
1973-4640	2441791.21	1973 Apr 18 17:00:00	Rocketsonde	-	-	Met. Sphere	-	-	-	CC	LO43	-	-	88	-	-
1973-4641	2441791.21	1973 Apr 18 17:00:00	Rocketsonde	-	-	Met. Sphere	-	-	-	PH	-	-	-	88	-	-
1973-4642	2441791.24	1973 Apr 18 17:41:00	Rocketsonde	-	-	Met. Sphere	-	-	-	PH	-	-	-	90	-	-
1973-4643	2441791.25	1973 Apr 18 18:00:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	WS	-	-	-	77	-	-
1973-4644	2441791.26	1973 Apr 18 18:11:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PH	-	-	-	60	-	-
1973-4645	2441791.31	1973 Apr 18 19:30:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PF	-	-	-	64	-	-
1973-4646	2441791.42	1973 Apr 18 22:02:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	KAU	-	-	-	61	-	-
1973-4647	2441791.49	1973 Apr 18 23:46:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	KHR	-	-	-	55	-	-
1973-4648	2441792.18	1973 Apr 19 16:19:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	SHER	-	-	-	64	-	-
1973-4649	2441792.24	1973 Apr 19 17:51:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PH	-	-	-	57	-	-
1973-4650	2441793.03	1973 Apr 20 12:46:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	THU	-	-	-	70	-	-
1973-4651	2441793.24	1973 Apr 20 17:46:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	WS	-	-	-	64	-	-
1973-4652	2441793.32	1973 Apr 20 19:44:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PF	-	-	-	56	-	-
1973-4653	2441793.37	1973 Apr 20 20:05:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PH	-	-	-	62	-	-
1973-4654	2441793.43	1973 Apr 20 22:13:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	KAU	LO43	-	-	52	-	-
1973-4655	2441796.09	1973 Apr 23 14:15:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	WS	-	-	-	75	-	-
1973-4656	2441796.30	1973 Apr 23 19:44:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PH	-	-	-	64	-	-
1973-4657	2441796.31	1973 Apr 23 19:44:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PF	-	-	-	64	-	-
1973-4658	2441796.34	1973 Apr 23 19:30:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	MI	-	-	-	63	-	-
1973-4659	2441796.38	1973 Apr 23 21:00:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	KAU	-	-	-	61	-	-
1973-4660	2441796.49	1973 Apr 23 23:46:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	KHR	-	-	-	67	-	-
1973-4661	2441796.69	1973 Apr 24 04:40:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	SHER	-	-	-	59	-	-
1973-4662	2441797.40	1973 Apr 25 09:22:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	KAU	-	-	-	60	-	-
1973-4663	2441797.69	1973 Apr 25 14:04:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	KHR	-	-	-	63	-	-
1973-4664	2441798.09	1973 Apr 25 15:00:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	THU	-	-	-	61	-	-
1973-4665	2441798.12	1973 Apr 25 15:00:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	SHER	-	-	-	61	-	-
1973-4666	2441798.14	1973 Apr 25 15:20:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	CC	LO43	-	-	77	-	-
1973-4667	2441798.15	1973 Apr 25 15:43:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	MI	-	-	-	56	-	-
1973-4668	2441798.24	1973 Apr 25 17:40:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PRIM	-	-	-	66	-	-
1973-4669	2441798.27	1973 Apr 25 18:33:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PH	-	-	-	90	-	-
1973-4670	2441798.29	1973 Apr 25 18:59:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	WS	-	-	-	74	-	-
1973-4671	2441798.30	1973 Apr 25 19:14:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PH	-	-	-	69	-	-
1973-4672	2441798.31	1973 Apr 25 19:44:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PH	-	-	-	86	-	-
1973-4673	2441798.49	1973 Apr 26 04:40:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PH	-	-	-	65	-	-
1973-4674	2441799.19	1973 Apr 26 16:40:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	SHER	-	-	-	72	-	-
1973-4675	2441799.55	1973 Apr 27 01:14:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	THU	-	-	-	68	-	-
1973-4676	2441800.04	1973 Apr 27 12:05:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	CC	LO43	-	-	73	-	-
1973-4677	2441800.09	1973 Apr 27 14:15:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	WS	-	-	-	78	-	-
1973-4678	2441800.24	1973 Apr 27 17:49:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PRIM	-	-	-	73	-	-
1973-4679	2441800.25	1973 Apr 27 18:22:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PH	-	-	-	58	-	-
1973-4680	2441800.27	1973 Apr 27 19:48:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PH	-	-	-	65	-	-
1973-4681	2441800.33	1973 Apr 27 22:36:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	KAU	LO43	-	-	59	-	-
1973-4682	2441800.44	1973 Apr 29 09:23:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	THU	-	-	-	80	-	-
1973-4683	2441801.52	1973 Apr 30 15:15:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	CC	LO43	-	-	50	-	-
1973-4684	2441803.09	1973 Apr 30 15:41:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	MI	-	-	-	46	-	-
1973-4685	2441803.11	1973 Apr 30 17:07:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	WS	-	-	-	71	-	-
1973-4686	2441803.21	1973 Apr 30 18:30:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PH	-	-	-	66	-	-
1973-4687	2441803.27	1973 Apr 30 19:30:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	MI	-	-	-	66	-	-
1973-4688	2441803.39	1973 Apr 30 21:13:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PH	-	-	-	66	-	-
1973-4689	2441803.39	1973 Apr 30 21:13:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	KAU	-	-	-	61	-	-
1973-4690	2441805.07	1973 Apr 2 13:44:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	CC	LO43	-	-	61	-	-
1973-4691	2441805.10	1973 Apr 2 14:31:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	MI	-	-	-	60	-	-
1973-4692	2441805.12	1973 Apr 2 15:00:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	SHER	-	-	-	65	-	-
1973-4693	2441805.17	1973 Apr 2 15:59:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	CC	LO43	-	-	72	-	-
1973-4694	2441805.17	1973 Apr 2 17:00:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	WS	-	-	-	75	-	-
1973-4695	2441805.25	1973 Apr 2 17:59:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PRIM	-	-	-	65	-	-
1973-4696	2441805.26	1973 Apr 2 19:34:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PH	-	-	-	60	-	-
1973-4697	2441805.38	1973 Apr 2 21:00:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PH	-	-	-	60	-	-
1973-4698	2441805.38	1973 Apr 2 21:13:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PH	-	-	-	63	-	-
1973-4699	2441805.58	1973 Apr 3 01:52:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	KAU	-	-	-	63	-	-
1973-4700	2441806.20	1973 Apr 3 16:44:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	SHER	-	-	-	63	-	-
1973-4701	2441806.25	1973 Apr 3 18:00:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PH	-	-	-	56	-	-
1973-4702	2441806.26	1973 Apr 3 19:30:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	MI	-	-	-	66	-	-
1973-4703	2441807.06	1973 Apr 4 13:30:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	THU	-	-	-	77	-	-
1973-4704	2441807.07	1973 Apr 4 13:44:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	CC	LO43	-	-	71	-	-
1973-4705	2441807.09	1973 Apr 4 14:08:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	MI	-	-	-	63	-	-
1973-4706	2441807.25	1973 Apr 4 17:55:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	WS	-	-	-	75	-	-
1973-4707	2441807.25	1973 Apr 4 18:30:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	NS	-	-	-	61	-	-
1973-4708	2441807.39	1973 Apr 4 21:14:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PH	-	-	-	61	-	-
1973-4709	2441807.39	1973 Apr 4 21:22:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	KAU	-	-	-	56	-	-
1973-4710	2441810.08	1973 Apr 7 14:00:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PH	-	-	-	69	-	-
1973-4711	2441810.22	1973 Apr 7 17:13:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	CC	LO43	-	-	69	-	-
1973-4712	2441810.23	1973 Apr 7 17:30:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PH	-	-	-	71	-	-
1973-4713	2441810.30	1973 Apr 7 19:13:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	WS	-	-	-	59	-	-
1973-4714	2441810.31	1973 Apr 7 21:07:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	MI	-	-	-	63	-	-
1973-4715	2441810.38	1973 Apr 7 21:07:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PH	-	-	-	64	-	-
1973-4716	2441811.20	1973 Apr 8 09:45:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	KAU	-	-	-	76	-	-
1973-4717	2441811.20	1973 Apr 8 16:52:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	SHER	-	-	-	66	-	-
1973-4718	2441811.20	1973 Apr 8 19:06:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	KHR	-	-	-	66	-	-
1973-4719	2441812.12	1973 Apr 9 15:00:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PH	-	-	-	59	-	-
1973-4720	2441812.17	1973 Apr 9 15:59:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	SHER	-	-	-	69	-	-
1973-4721	2441812.24	1973 Apr 9 17:40:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	CC	LO43	-	-	73	-	-
1973-4722	2441812.24	1973 Apr 9 19:21:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	NS	-	-	-	61	-	-
1973-4723	2441812.31	1973 Apr 9 21:55:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PH	-	-	-	61	-	-
1973-4724	2441812.41	1973 Apr 9 21:55:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	WS	-	-	-	62	-	-
1973-4725	2441812.55	1973 Apr 10 01:04:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	CC	LO43	-	-	79	-	-
1973-4726	2441812.59	1973 Apr 10 02:03:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	KHR	-	-	-	74	-	-

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Mission	FlightCode	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee_Km	Range_Km	Dest
1973-4628	2441813.08	1973 May 10 14:00:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	CC	L043	-	-	87	-	-
1973-4629	2441813.09	1973 May 10 14:15:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	WI	-	-	-	60	-	-
1973-4630	2441813.23	1973 May 10 17:37:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PH	-	-	-	57	-	-
1973-4631	2441813.50	1973 May 11 00:00:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	KRR	-	-	-	78	-	-
1973-4632	2441814.12	1973 May 11 14:57:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	WI	-	-	-	65	-	-
1973-4633	2441814.13	1973 May 11 15:10:00	Rocketsonde	-	-	Met. Sphere	-	-	-	PH	-	-	-	90	-	-
1973-4634	2441814.15	1973 May 11 15:33:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PH	-	-	-	76	-	-
1973-4635	2441814.19	1973 May 11 16:35:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	CC	L043	-	-	70	-	-
1973-4636	2441814.25	1973 May 11 18:00:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	WS	-	-	-	70	-	-
1973-4637	2441814.27	1973 May 11 18:30:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PF	-	-	-	53	-	-
1973-4638	2441814.38	1973 May 11 21:00:00	Rocketsonde	-	-	Met. Sphere	-	-	-	KAU	-	-	-	85	-	-
1973-4639	2441814.39	1973 May 11 21:15:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	KAU	-	-	-	62	-	-
1973-4640	2441815.06	1973 May 13 13:30:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	CC	L043	-	-	79	-	-
1973-4641	2441817.06	1973 May 14 13:52:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	CC	L043	-	-	76	-	-
1973-4642	2441817.21	1973 May 14 17:00:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	WS	-	-	-	71	-	-
1973-4643	2441817.25	1973 May 14 18:00:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	CC	L043	-	-	64	-	-
1973-4644	2441817.27	1973 May 14 18:22:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PH	-	-	-	57	-	-
1973-4645	2441817.29	1973 May 14 19:02:59	Rocketsonde	-	-	Met. Para. Arcasonde	-	-	-	WI	-	-	-	55	-	-
1973-4646	2441817.38	1973 May 14 21:00:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	KAU	-	-	-	62	-	-
1973-4647	2441817.49	1973 May 15 23:52:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	KRR	-	-	-	59	-	-
1973-4648	2441818.19	1973 May 15 16:34:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	SHER	-	-	-	61	-	-
1973-4649	2441818.27	1973 May 15 18:29:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PH	-	-	-	53	-	-
1973-4650	2441818.29	1973 May 15 19:02:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PF	-	-	-	55	-	-
1973-4651	2441819.05	1973 May 16 13:04:59	Rocketsonde	-	-	Met. Para. Arcasonde	-	-	-	CC	L043	-	-	59	-	-
1973-4652	2441819.07	1973 May 16 13:44:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	CC	L043	-	-	61	-	-
1973-4653	2441819.09	1973 May 16 14:15:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	WI	-	-	-	61	-	-
1973-4654	2441819.09	1973 May 16 14:15:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	SHER	-	-	-	62	-	-
1973-4655	2441819.15	1973 May 16 15:30:00	Rocketsonde	-	-	Met. Sphere	-	-	-	CC	L043	-	-	86	-	-
1973-4656	2441819.17	1973 May 16 15:59:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	CELAT	-	-	-	66	-	-
1973-4657	2441819.17	1973 May 16 15:59:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	CELAT	-	-	-	66	-	-
1973-4658	2441819.24	1973 May 16 17:49:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PRIM	-	-	-	50	-	-
1973-4659	2441819.25	1973 May 16 17:57:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	WS	-	-	-	70	-	-
1973-4660	2441819.51	1973 May 16 19:21:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PH	-	-	-	57	-	-
1973-4661	2441819.51	1973 May 16 19:21:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PH	-	-	-	50	-	-
1973-4662	2441819.58	1973 May 17 02:00:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	KRR	-	-	-	73	-	-
1973-4663	2441819.58	1973 May 17 02:00:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PH	-	-	-	57	-	-
1973-4664	2441820.13	1973 May 17 15:11:00	Rocketsonde	-	-	Met. Sphere	-	-	-	KAU	-	-	-	61	-	-
1973-4665	2441820.36	1973 May 17 21:17:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	KAU	-	-	-	63	-	-
1973-4666	2441820.39	1973 May 17 21:17:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	KAU	-	-	-	63	-	-
1973-4667	2441821.08	1973 May 18 13:38:59	Rocketsonde	-	-	Met. Para. Arcasonde	-	-	-	MIT	-	-	-	53	-	-
1973-4668	2441821.08	1973 May 18 14:00:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	AIT	L043	-	-	60	-	-
1973-4669	2441821.13	1973 May 18 16:14:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PH	-	-	-	59	-	-
1973-4670	2441821.21	1973 May 18 16:38:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	NS	-	-	-	71	-	-
1973-4671	2441821.29	1973 May 18 18:00:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	NS	-	-	-	65	-	-
1973-4672	2441821.47	1973 May 18 19:30:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	KRR	-	-	-	54	-	-
1973-4673	2441821.55	1973 May 19 00:49:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	KAU	-	-	-	54	-	-
1973-4674	2441822.55	1973 May 20 01:17:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	KRR	-	-	-	61	-	-
1973-4675	2441822.59	1973 May 20 01:17:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	CC	L043	-	-	61	-	-
1973-4676	2441824.04	1973 May 21 15:22:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PH	-	-	-	62	-	-
1973-4677	2441824.21	1973 May 21 17:22:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	WI	-	-	-	74	-	-
1973-4678	2441824.27	1973 May 21 18:30:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PH	-	-	-	67	-	-
1973-4679	2441824.31	1973 May 21 19:31:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	KAU	-	-	-	64	-	-
1973-4680	2441824.38	1973 May 21 21:00:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	WI	-	-	-	63	-	-
1973-4681	2441825.11	1973 May 22 14:36:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	SHER	-	-	-	61	-	-
1973-4682	2441825.19	1973 May 22 16:00:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PH	-	-	-	59	-	-
1973-4683	2441825.26	1973 May 22 18:04:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	SHER	-	-	-	61	-	-
1973-4684	2441826.08	1973 May 23 13:09:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	AIT	-	-	-	60	-	-
1973-4685	2441826.09	1973 May 23 14:15:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	CC	L043	-	-	62	-	-
1973-4686	2441826.12	1973 May 23 15:00:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	CC	L043	-	-	60	-	-
1973-4687	2441826.15	1973 May 23 15:00:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	SHER	-	-	-	55	-	-
1973-4688	2441826.23	1973 May 23 17:26:59	Rocketsonde	-	-	Met. Sphere	-	-	-	CC	L043	-	-	93	-	-
1973-4689	2441826.24	1973 May 23 17:49:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PH	-	-	-	77	-	-
1973-4690	2441826.31	1973 May 23 19:21:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	NS	-	-	-	65	-	-
1973-4691	2441826.46	1973 May 23 23:07:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PH	-	-	-	62	-	-
1973-4692	2441826.62	1973 May 24 02:46:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	KRR	-	-	-	82	-	-
1973-4693	2441827.09	1973 May 24 14:15:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	CC	L043	-	-	76	-	-
1973-4694	2441827.12	1973 May 24 15:00:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	SHER	-	-	-	64	-	-
1973-4695	2441827.39	1973 May 24 21:22:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PM	-	-	-	59	-	-
1973-4696	2441828.10	1973 May 25 14:30:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PRIM	-	-	-	61	-	-
1973-4697	2441828.25	1973 May 25 18:04:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	NS	-	-	-	75	-	-
1973-4698	2441828.29	1973 May 25 18:56:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PH	-	-	-	61	-	-
1973-4699	2441828.29	1973 May 25 18:59:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PM	-	-	-	60	-	-
1973-4700	2441828.39	1973 May 25 21:18:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PF	-	-	-	61	-	-
1973-4701	2441828.53	1973 May 26 00:45:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	KAU	-	-	-	61	-	-
1973-4702	2441832.21	1973 May 29 17:00:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	SHER	-	-	-	43	-	-
1973-4703	2441832.21	1973 May 29 17:00:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	NS	-	-	-	72	-	-
1973-4704	2441832.29	1973 May 29 16:44:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	NS	-	-	-	63	-	-
1973-4705	2441832.31	1973 May 29 18:56:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	WI	-	-	-	63	-	-
1973-4706	2441832.34	1973 May 29 20:10:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PF	-	-	-	64	-	-
1973-4707	2441833.07	1973 May 30 13:44:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PM	-	-	-	59	-	-
1973-4708	2441833.07	1973 May 30 13:44:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PM	-	-	-	59	-	-
1973-4709	2441833.07	1973 May 30 13:44:59	Rocketsonde	-	-	Met. Para. Arcasonde	-	-	-	AIT	L043	-	-	61	-	-
1973-4710	2441833.11	1973 May 30 14:41:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	CC	-	-	-	64	-	-
1973-4711	2441833.15	1973 May 30 15:30:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	CELBI	-	-	-	61	-	-
1973-4712	2441833.17	1973 May 30 16:04:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	SHER	-	-	-	60	-	-
1973-4713	2441833.17	1973 May 30 16:11:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	CC	L043	-	-	62	-	-
1973-4714	2441833.17	1973 May 30 16:11:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	CELAT	-	-	-	65	-	-



Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Mission	FlightCode	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee_Km	Range_Km	Dest
1973-4726	2441833.19	1973 May 30 16:50:59	Rocketsonde	-	-	Met. Sphere	-	-	-	PH	-	-	-	90	-	-
1973-4715	2441833.21	1973 May 30 17:09:00	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	PH	-	-	-	79	-	-
1973-4716	2441833.25	1973 May 30 18:00:00	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	PRIM	-	-	-	62	-	-
1973-4717	2441833.31	1973 May 30 19:21:59	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	PF	-	-	-	67	-	-
1973-4718	2441833.39	1973 May 30 21:14:59	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	KAU	-	-	-	53	-	-
1973-4719	2441833.53	1973 May 31 00:46:00	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	KHR	-	-	-	67	-	-
1973-4720	2441834.51	1973 Jun 1 00:12:59	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	MI	-	-	-	67	-	-
1973-4721	2441835.09	1973 Jun 1 14:10:00	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	SHER	-	-	-	53	-	-
1973-4722	2441835.18	1973 Jun 1 16:11:59	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	CC	-	-	-	63	-	-
1973-4723	2441835.31	1973 Jun 1 19:13:59	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	PF	-	-	-	65	-	-
1973-4724	2441835.35	1973 Jun 1 19:13:59	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	PH	-	-	-	60	-	-
1973-4725	2441835.38	1973 Jun 1 20:29:00	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	KAU	-	-	-	60	-	-
1973-4726	2441835.38	1973 Jun 1 21:00:00	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	WS	-	-	-	70	-	-
1973-4727	2441838.01	1973 Jun 4 12:10:00	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	WS	-	-	-	70	-	-
1973-4728	2441838.08	1973 Jun 4 13:54:59	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	SHER	-	-	-	53	-	-
1973-4729	2441838.12	1973 Jun 4 15:00:00	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	MI	-	-	-	63	-	-
1973-4730	2441838.23	1973 Jun 4 17:28:00	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	PRIM	-	-	-	68	-	-
1973-4731	2441838.24	1973 Jun 4 17:48:59	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	WS	-	-	-	66	-	-
1973-4732	2441838.25	1973 Jun 4 18:00:59	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	PH	-	-	-	60	-	-
1973-4733	2441838.27	1973 Jun 4 18:26:59	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	PF	-	-	-	54	-	-
1973-4734	2441838.31	1973 Jun 4 19:13:59	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	KAU	-	-	-	63	-	-
1973-4735	2441838.38	1973 Jun 4 21:00:00	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	PH	-	-	-	57	-	-
1973-4736	2441839.39	1973 Jun 5 21:22:00	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	KHR	-	-	-	66	-	-
1973-4737	2441839.59	1973 Jun 6 00:06:00	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	WS	-	-	-	60	-	-
1973-4738	2441839.60	1973 Jun 6 11:40:00	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	WS	-	-	-	70	-	-
1973-4739	2441839.99	1973 Jun 6 12:36:59	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	CC	-	-	-	60	-	-
1973-4740	2441840.03	1973 Jun 6 13:30:00	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	WS	-	-	-	60	-	-
1973-4741	2441840.06	1973 Jun 6 13:44:59	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	CC	-	-	-	67	-	-
1973-4742	2441840.07	1973 Jun 6 14:00:00	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	AIT	-	-	-	50	-	-
1973-4743	2441840.08	1973 Jun 6 14:00:00	Rocketsonde	-	-	Met. Sphere, Arcasonde	-	-	-	MI	-	-	-	60	-	-
1973-4744	2441840.11	1973 Jun 6 14:36:00	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	SHER	-	-	-	65	-	-
1973-4745	2441840.12	1973 Jun 6 15:00:00	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	CC	-	-	-	62	-	-
1973-4746	2441840.21	1973 Jun 6 17:00:00	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	WS	-	-	-	70	-	-
1973-4747	2441840.25	1973 Jun 6 17:56:00	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	PRIM	-	-	-	76	-	-
1973-4748	2441840.25	1973 Jun 6 18:00:00	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	THU	-	-	-	62	-	-
1973-4749	2441840.27	1973 Jun 6 18:54:59	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	PH	-	-	-	65	-	-
1973-4750	2441840.31	1973 Jun 6 19:13:59	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	KAU	-	-	-	62	-	-
1973-4751	2441840.36	1973 Jun 6 21:00:00	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	PH	-	-	-	65	-	-
1973-4752	2441840.38	1973 Jun 7 01:00:00	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	KHR	-	-	-	62	-	-
1973-4753	2441840.55	1973 Jun 7 09:45:00	Rocketsonde	-	-	Starvue, AN/DWQ-9	-	-	-	SHER	-	-	-	59	-	-
1973-4754	2441841.22	1973 Jun 7 17:15:00	Rocketsonde	-	-	Starvue, AN/DWQ-9	-	-	-	THU	-	-	-	77	-	-
1973-4755	2441841.69	1973 Jun 8 04:34:59	Rocketsonde	-	-	Starvue, AN/DWQ-9	-	-	-	MI	-	-	-	64	-	-
1973-4756	2441842.08	1973 Jun 8 14:00:00	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	THU	-	-	-	76	-	-
1973-4757	2441842.09	1973 Jun 8 14:04:59	Rocketsonde	-	-	Starvue, AN/DWQ-9	-	-	-	SHER	-	-	-	62	-	-
1973-4758	2441842.15	1973 Jun 8 15:50:00	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	WS	-	-	-	74	-	-
1973-4759	2441842.18	1973 Jun 8 16:13:59	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	CC	-	-	-	60	-	-
1973-4760	2441842.18	1973 Jun 8 16:24:59	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	PH	-	-	-	66	-	-
1973-4761	2441842.21	1973 Jun 8 17:50:00	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	PH	-	-	-	61	-	-
1973-4762	2441842.21	1973 Jun 8 17:51:59	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	KAU	-	-	-	61	-	-
1973-4763	2441842.21	1973 Jun 8 18:51:59	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	WS	-	-	-	71	-	-
1973-4764	2441842.21	1973 Jun 8 19:51:59	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	KHR	-	-	-	62	-	-
1973-4765	2441842.21	1973 Jun 8 21:48:59	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	WS	-	-	-	66	-	-
1973-4766	2441842.58	1973 Jun 9 00:45:00	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	WS	-	-	-	71	-	-
1973-4767	2441842.60	1973 Jun 9 02:30:00	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	WS	-	-	-	71	-	-
1973-4768	2441843.31	1973 Jun 9 19:19:59	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	SHER	-	-	-	66	-	-
1973-4769	2441843.12	1973 Jun 11 15:00:00	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	PH	-	-	-	57	-	-
1973-4770	2441843.16	1973 Jun 11 15:56:59	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	WS	-	-	-	70	-	-
1973-4771	2441843.18	1973 Jun 11 16:19:59	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	MI	-	-	-	70	-	-
1973-4772	2441845.21	1973 Jun 11 17:00:00	Rocketsonde	-	-	Starvue, AN/DWQ-9	-	-	-	THU	-	-	-	77	-	-
1973-4773	2441845.23	1973 Jun 11 17:32:00	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	MI	-	-	-	70	-	-
1973-4774	2441845.31	1973 Jun 11 19:19:59	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	PH	-	-	-	59	-	-
1973-4775	2441845.38	1973 Jun 11 21:09:00	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	KAU	-	-	-	61	-	-
1973-4776	2441846.35	1973 Jun 12 18:00:00	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	PH	-	-	-	59	-	-
1973-4777	2441846.50	1973 Jun 13 00:00:00	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	WS	-	-	-	63	-	-
1973-4778	2441847.07	1973 Jun 13 13:44:59	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	CC	-	-	-	93	-	-
1973-4779	2441847.08	1973 Jun 13 13:48:59	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	CLBI	-	-	-	62	-	-
1973-4780	2441847.09	1973 Jun 13 14:11:00	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	THU	-	-	-	64	-	-
1973-4781	2441847.10	1973 Jun 13 14:30:00	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	MI	-	-	-	73	-	-
1973-4782	2441847.17	1973 Jun 13 16:09:59	Rocketsonde	-	-	Starvue, AN/DWQ-9	-	-	-	CC	-	-	-	61	-	-
1973-4783	2441847.25	1973 Jun 13 18:04:59	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	PRIM	-	-	-	60	-	-
1973-4784	2441847.27	1973 Jun 13 18:30:00	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	PF	-	-	-	70	-	-
1973-4785	2441847.29	1973 Jun 13 18:59:59	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	WS	-	-	-	65	-	-
1973-4786	2441847.35	1973 Jun 13 20:30:00	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	WS	-	-	-	61	-	-
1973-4787	2441847.42	1973 Jun 13 22:07:59	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	KAU	-	-	-	81	-	-
1973-4788	2441847.53	1973 Jun 14 00:45:00	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	PM	-	-	-	61	-	-
1973-4789	2441848.09	1973 Jun 14 14:08:00	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	MI	-	-	-	64	-	-
1973-4790	2441848.13	1973 Jun 14 15:04:59	Rocketsonde	-	-	Met. Para, Datasonde	-	-	-	SHER	-	-	-	64	-	-
1973-4791	2441848.69	1973 Jun 15 04:40:00	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	CC	-	-	-	56	-	-
1973-4792	2441849.07	1973 Jun 15 13:44:59	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	WS	-	-	-	60	-	-
1973-4793	2441849.08	1973 Jun 15 13:58:59	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	MI	-	-	-	61	-	-
1973-4794	2441849.18	1973 Jun 15 16:24:59	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	SHER	-	-	-	65	-	-
1973-4795	2441849.23	1973 Jun 15 17:30:00	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	WS	-	-	-	65	-	-
1973-4796	2441849.29	1973 Jun 15 18:52:00	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	MI	-	-	-	87	-	-
1973-4797	2441849.32	1973 Jun 15 19:40:00	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	PM	-	-	-	79	-	-
1973-4798	2441849.41	1973 Jun 15 21:44:00	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	KAU	-	-	-	57	-	-

Launch

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Mission	FlightCode	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee_Km	Range_Km	Dest
1973-4797	2441849-56	1973 Jun 16 01:23:59	Rocketsonde	-	-	Starute, Datasonde	-	-	KMR	-	-	-	-	52	-	-
1973-4798	2441852-07	1973 Jun 18 13:44:59	Rocketsonde	-	-	Starute, Datasonde	-	-	CC	LO43	-	-	-	61	-	-
1973-4799	2441852-10	1973 Jun 18 14:30:00	Rocketsonde	-	-	Starute, AI/DIAG-9	-	-	THU	-	-	-	-	76	-	-
1973-4800	2441852-21	1973 Jun 18 17:00:00	Rocketsonde	-	-	Starute, Datasonde	-	-	WS	-	-	-	-	54	-	-
1973-4801	2441852-25	1973 Jun 18 17:55:00	Rocketsonde	-	-	Starute, Datasonde	-	-	PRIM	-	-	-	-	72	-	-
1973-4802	2441852-31	1973 Jun 18 19:19:59	Rocketsonde	-	-	Starute, Datasonde	-	-	PH	-	-	-	-	64	-	-
1973-4803	2441852-32	1973 Jun 18 19:34:59	Rocketsonde	-	-	Starute, Datasonde	-	-	PH	-	-	-	-	58	-	-
1973-4804	2441852-38	1973 Jun 18 21:00:00	Rocketsonde	-	-	Starute, Datasonde	-	-	KAU	-	-	-	-	62	-	-
1973-4805	2441853-04	1973 Jun 19 12:59:59	Rocketsonde	-	-	Starute, Datasonde	-	-	WS	-	-	-	-	67	-	-
1973-4806	2441853-31	1973 Jun 19 19:30:00	Rocketsonde	-	-	Starute, Datasonde	-	-	WS	-	-	-	-	68	-	-
1973-4831	2441853-70	1973 Jun 20 00:08:00	Rocketsonde	-	-	Starute, Datasonde	-	-	KMR	-	-	-	-	66	-	-
1973-4808	2441853-70	1973 Jun 20 04:44:59	Rocketsonde	-	-	Starute, Datasonde	-	-	SHER	-	-	-	-	25	-	-
1973-4809	2441854-11	1973 Jun 20 04:44:59	Rocketsonde	-	-	Starute, Datasonde	-	-	SHER	-	-	-	-	67	-	-
1973-4810	2441854-14	1973 Jun 20 14:41:00	Rocketsonde	-	-	Starute, Datasonde	-	-	PRIM	-	-	-	-	70	-	-
1973-4811	2441854-18	1973 Jun 20 15:20:00	Rocketsonde	-	-	Starute, Datasonde	-	-	SHER	LO43	-	-	-	62	-	-
1973-7288	2441854-25	1973 Jun 20 16:14:59	Rocketsonde	-	-	Starute, Datasonde	-	-	CC	LO43	-	-	-	60	-	-
1973-4813	2441854-30	1973 Jun 20 18:00:00	Rocketsonde	-	-	Met. Sphere	-	-	CC	LO43	-	-	-	53	-	-
1973-4814	2441854-30	1973 Jun 20 19:09:59	Rocketsonde	-	-	Starute, Datasonde	-	-	PF	-	-	-	-	94	-	-
1973-4814	2441854-35	1973 Jun 20 20:30:00	Rocketsonde	-	-	Starute, Datasonde	-	-	WS	-	-	-	-	71	-	-
1973-4815	2441854-40	1973 Jun 20 21:30:00	Rocketsonde	-	-	Starute, Datasonde	-	-	KAU	-	-	-	-	63	-	-
1973-7289	2441854-56	1973 Jun 21 01:26:59	Rocketsonde	-	-	Starute, Datasonde	-	-	KMR	-	-	-	-	82	-	-
1973-4816	2441855-14	1973 Jun 21 15:25:59	Rocketsonde	-	-	Starute, Datasonde	-	-	MI	-	-	-	-	62	-	-
1973-4817	2441856-12	1973 Jun 22 14:47:00	Rocketsonde	-	-	Starute, Datasonde	-	-	MI	LO43	-	-	-	53	-	-
1973-4818	2441856-18	1973 Jun 22 16:21:59	Rocketsonde	-	-	Starute, Datasonde	-	-	CC	-	-	-	-	67	-	-
1973-4819	2441856-20	1973 Jun 22 16:44:59	Rocketsonde	-	-	Starute, Datasonde	-	-	SHER	-	-	-	-	82	-	-
1973-4820	2441856-21	1973 Jun 22 17:00:00	Rocketsonde	-	-	Starute, Datasonde	-	-	PH	-	-	-	-	57	-	-
1973-4821	2441856-21	1973 Jun 22 17:00:00	Rocketsonde	-	-	Starute, Datasonde	-	-	PH	-	-	-	-	86	-	-
1973-7260	2441856-31	1973 Jun 22 19:19:59	Rocketsonde	-	-	Starute, Datasonde	-	-	PF	-	-	-	-	90	-	-
1973-7261	2441856-38	1973 Jun 22 21:02:59	Rocketsonde	-	-	Met. Sphere	-	-	KAU	-	-	-	-	62	-	-
1973-4822	2441856-40	1973 Jun 23 01:40:00	Rocketsonde	-	-	Starute, Datasonde	-	-	KMR	-	-	-	-	69	-	-
1973-4823	2441856-53	1973 Jun 23 09:46:00	Rocketsonde	-	-	Starute, Datasonde	-	-	SHER	-	-	-	-	0	-	-
1973-4824	2441859-12	1973 Jun 25 15:00:00	Rocketsonde	-	-	Starute, Datasonde	-	-	CC	LO43	-	-	-	64	-	-
1973-4824	2441859-12	1973 Jun 25 15:00:00	Rocketsonde	-	-	Starute, Datasonde	-	-	CC	-	-	-	-	60	-	-
1973-4825	2441859-17	1973 Jun 25 16:04:59	Rocketsonde	-	-	Starute, Datasonde	-	-	PRIM	-	-	-	-	89	-	-
1973-4826	2441859-25	1973 Jun 25 18:00:00	Rocketsonde	-	-	Starute, Datasonde	-	-	PRIM	-	-	-	-	64	-	-
1973-4827	2441859-31	1973 Jun 25 19:19:59	Rocketsonde	-	-	Starute, Datasonde	-	-	PF	-	-	-	-	64	-	-
1973-4828	2441859-39	1973 Jun 25 21:14:59	Rocketsonde	-	-	Starute, Datasonde	-	-	KAU	-	-	-	-	63	-	-
1973-4829	2441860-35	1973 Jun 26 19:49:59	Rocketsonde	-	-	Starute, Datasonde	-	-	PH	-	-	-	-	82	-	-
1973-4830	2441860-68	1973 Jun 27 04:24:59	Rocketsonde	-	-	Starute, Datasonde	-	-	SHER	-	-	-	-	86	-	-
1973-4831	2441861-04	1973 Jun 27 13:03:59	Rocketsonde	-	-	Starute, Datasonde	-	-	WS	-	-	-	-	67	-	-
1973-4832	2441861-10	1973 Jun 27 14:36:00	Rocketsonde	-	-	Starute, Datasonde	-	-	PRIM	-	-	-	-	90	-	-
1973-4833	2441861-11	1973 Jun 27 14:36:00	Rocketsonde	-	-	Met. Para. Arcasonde	-	-	MI	-	-	-	-	54	-	-
1973-4834	2441861-18	1973 Jun 27 16:14:59	Rocketsonde	-	-	Starute, Datasonde	-	-	SHER	LO43	-	-	-	60	-	-
1973-4835	2441861-18	1973 Jun 27 16:14:59	Rocketsonde	-	-	Starute, Datasonde	-	-	WS	-	-	-	-	71	-	-
1973-4836	2441861-18	1973 Jun 27 16:14:59	Rocketsonde	-	-	Starute, Datasonde	-	-	GLBI	-	-	-	-	66	-	-
1973-4837	2441861-19	1973 Jun 27 16:19:59	Rocketsonde	-	-	Starute, Datasonde	-	-	CC	-	-	-	-	50	-	-
1973-4838	2441861-37	1973 Jun 28 15:16:59	Rocketsonde	-	-	Starute, Datasonde	-	-	CC	LO43	-	-	-	64	-	-
1973-4839	2441862-00	1973 Jun 28 13:41:59	Rocketsonde	-	-	Starute, Datasonde	-	-	MI	-	-	-	-	52	-	-
1973-4840	2441862-07	1973 Jun 29 16:30:00	Rocketsonde	-	-	Starute, Datasonde	-	-	PH	-	-	-	-	82	-	-
1973-4841	2441863-00	1973 Jun 29 17:31:00	Rocketsonde	-	-	Starute, Datasonde	-	-	SHER	-	-	-	-	65	-	-
1973-4842	2441863-07	1973 Jun 29 17:31:00	Rocketsonde	-	-	Starute, Datasonde	-	-	MI	-	-	-	-	52	-	-
1973-4843	2441863-25	1973 Jun 29 19:01:00	Rocketsonde	-	-	Starute, Datasonde	-	-	PH	-	-	-	-	60	-	-
1973-4844	2441863-54	1973 Jun 30 03:00:59	Rocketsonde	-	-	Starute, Datasonde	-	-	KMR	-	-	-	-	83	-	-
1973-4845	2441863-54	1973 Jun 30 03:00:59	Rocketsonde	-	-	Starute, Datasonde	-	-	MI	-	-	-	-	62	-	-
1973-4846	2441864-38	1973 Jun 30 21:06:00	Rocketsonde	-	-	Starute, Datasonde	-	-	PH	-	-	-	-	60	-	-
1973-4849	2441866-10	1973 Jul 1 14:59:00	Rocketsonde	-	-	Starute, Datasonde	-	-	WS	-	-	-	-	70	-	-
1973-4850	2441866-17	1973 Jul 1 15:59:59	Rocketsonde	-	-	Starute, Datasonde	-	-	CC	LO43	-	-	-	59	-	-
1973-4851	2441866-23	1973 Jul 1 17:25:00	Rocketsonde	-	-	Starute, Datasonde	-	-	CC	-	-	-	-	65	-	-
1973-4852	2441866-27	1973 Jul 1 18:30:00	Rocketsonde	-	-	Starute, Datasonde	-	-	PF	-	-	-	-	61	-	-
1973-4853	2441866-33	1973 Jul 1 21:34:59	Rocketsonde	-	-	Starute, Datasonde	-	-	KAU	-	-	-	-	80	-	-
1973-4854	2441866-53	1973 Jul 1 04:47:59	Rocketsonde	-	-	Starute, Datasonde	-	-	KMR	-	-	-	-	60	-	-
1973-4854	2441867-12	1973 Jul 1 3 14:59:00	Rocketsonde	-	-	Starute, Datasonde	-	-	WS	-	-	-	-	68	-	-
1973-4855	2441867-26	1973 Jul 1 3 18:14:59	Rocketsonde	-	-	Starute, Datasonde	-	-	MI	-	-	-	-	65	-	-
1973-4857	2441869-31	1973 Jul 1 5 19:19:59	Rocketsonde	-	-	Starute, Datasonde	-	-	KAU	-	-	-	-	62	-	-
1973-4858	2441869-48	1973 Jul 1 5 23:30:00	Rocketsonde	-	-	Starute, Datasonde	-	-	ASC	-	-	-	-	59	-	-
1973-4859	2441870-08	1973 Jul 1 6 14:00:00	Rocketsonde	-	-	Starute, Datasonde	-	-	MI	-	-	-	-	59	-	-
1973-4860	2441870-11	1973 Jul 1 6 14:40:00	Rocketsonde	-	-	Starute, Datasonde	-	-	PH	-	-	-	-	62	-	-
1973-4861	2441870-14	1973 Jul 1 6 15:21:00	Rocketsonde	-	-	Starute, Datasonde	-	-	CC	LO43	-	-	-	96	-	-
1973-4862	2441870-17	1973 Jul 1 6 15:59:59	Rocketsonde	-	-	Starute, Datasonde	-	-	CC	-	-	-	-	58	-	-
1973-4863	2441870-19	1973 Jul 1 6 17:30:00	Rocketsonde	-	-	Starute, Datasonde	-	-	CC	-	-	-	-	63	-	-
1973-4864	2441870-21	1973 Jul 1 6 17:30:00	Rocketsonde	-	-	Starute, Datasonde	-	-	CC	LO43	-	-	-	64	-	-
1973-4865	2441870-23	1973 Jul 1 6 17:30:00	Rocketsonde	-	-	Starute, Datasonde	-	-	WS	-	-	-	-	70	-	-
1973-4866	2441873-08	1973 Jul 9 14:00:00	Rocketsonde	-	-	Starute, Datasonde	-	-	ASC	-	-	-	-	67	-	-
1973-4866	2441873-23	1973 Jul 9 17:26:59	Rocketsonde	-	-	Starute, Datasonde	-	-	SHER	-	-	-	-	61	-	-
1973-4867	2441873-25	1973 Jul 9 17:26:59	Rocketsonde	-	-	Starute, Datasonde	-	-	WS	-	-	-	-	66	-	-
1973-4868	2441873-31	1973 Jul 9 19:19:59	Rocketsonde	-	-	Starute, Datasonde	-	-	PF	-	-	-	-	63	-	-
1973-4869	2441873-31	1973 Jul 9 19:19:59	Rocketsonde	-	-	Starute, Datasonde	-	-	WS	-	-	-	-	60	-	-
1973-4870	2441873-40	1973 Jul 9 21:34:59	Rocketsonde	-	-	Starute, Datasonde	-	-	CC	LO43	-	-	-	94	-	-
1973-4871	2441875-08	1973 Jul 11 13:49:59	Rocketsonde	-	-	Starute, Datasonde	-	-	ASC	-	-	-	-	70	-	-
1973-4872	2441875-10	1973 Jul 11 14:30:00	Rocketsonde	-	-	Starute, Datasonde	-	-	CC	-	-	-	-	63	-	-
1973-4873	2441875-18	1973 Jul 11 16:14:59	Rocketsonde	-	-	Starute, Datasonde	-	-	SHER	-	-	-	-	61	-	-
1973-4874	2441875-19	1973 Jul 11 16:30:00	Rocketsonde	-	-	Starute, Datasonde	-	-	WS	-	-	-	-	66	-	-
1973-4875	2441875-21	1973 Jul 11 17:00:00	Rocketsonde	-	-	Starute, Datasonde	-	-	PF	-	-	-	-	65	-	-
1973-4876	2441875-50	1973 Jul 11 19:09:59	Rocketsonde	-	-	Starute, Datasonde	-	-	MI	-	-	-	-	61	-	-
1973-4877	2441875-32	1973 Jul 11 19:36:59	Rocketsonde	-	-	Starute, Datasonde	-	-	MI	-	-	-	-	85	-	-
1973-4878	2441875-37	1973 Jul 11 20:55:00	Rocketsonde	-	-	Met. Sphere	-	-	PH	-	-	-	-	74	-	-
1973-4878	2441875-39	1973 Jul 11 21:21:00	Rocketsonde	-	-	Starute, Datasonde	-	-	PH	-	-	-	-	74	-	-

Launch

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Mission	FlightCode	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee_Km	Range_Km	Dest
1973-7286	2441875.58	1973 Jul 12 02:01:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	KMR	-	-	-	81	-	-
1973-8680	2441876.26	1973 Jul 12 18:14:59	Rocketsonde	-	-	Met. Para	-	-	-	WS	-	-	-	67	-	-
1973-8681	2441876.31	1973 Jul 12 19:19:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PF	-	-	-	55	-	-
1973-8682	2441876.69	1973 Jul 13 04:40:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	SHER	-	-	-	62	-	-
1973-8683	2441877.07	1973 Jul 13 13:44:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	CC	LO43	-	-	64	-	-
1973-8684	2441877.08	1973 Jul 13 14:00:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	ASC	-	-	-	65	-	-
1973-8685	2441877.09	1973 Jul 13 14:06:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	WI	-	-	-	59	-	-
1973-8686	2441877.21	1973 Jul 13 17:00:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	WS	-	-	-	56	-	-
1973-8687	2441877.37	1973 Jul 13 20:53:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	KAU	-	-	-	80	-	-
1973-7287	2441877.53	1973 Jul 14 00:45:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	KMR	-	-	-	62	-	-
1973-8688	2441880.04	1973 Jul 16 12:59:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	THU	-	-	-	74	-	-
1973-8689	2441880.18	1973 Jul 16 16:14:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	CC	LO43	-	-	62	-	-
1973-8690	2441880.23	1973 Jul 16 17:35:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PH	-	-	-	60	-	-
1973-8691	2441880.25	1973 Jul 16 17:55:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PRIM	-	-	-	67	-	-
1973-8692	2441880.25	1973 Jul 16 17:55:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	WS	-	-	-	70	-	-
1973-8693	2441880.31	1973 Jul 16 17:55:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PF	-	-	-	62	-	-
1973-8694	2441880.40	1973 Jul 16 21:34:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	KAU	-	-	-	80	-	-
1973-7289	2441881.05	1973 Jul 17 13:14:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	KMR	-	-	-	69	-	-
1973-8695	2441881.24	1973 Jul 17 17:45:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	WS	-	-	-	67	-	-
1973-8696	2441881.69	1973 Jul 18 04:40:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	WS	-	-	-	56	-	-
1973-8697	2441881.73	1973 Jul 18 05:31:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	SHER	-	-	-	52	-	-
1973-8698	2441882.07	1973 Jul 18 14:25:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	WI	-	-	-	60	-	-
1973-8699	2441882.10	1973 Jul 18 14:25:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	CLFI	-	-	-	66	-	-
1973-8700	2441882.14	1973 Jul 18 15:14:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	CC	LO43	-	-	62	-	-
1973-8701	2441882.19	1973 Jul 18 15:14:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	ASC	-	-	-	56	-	-
1973-8702	2441882.24	1973 Jul 18 16:30:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	SHER	-	-	-	63	-	-
1973-8703	2441882.30	1973 Jul 18 17:45:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	WS	-	-	-	68	-	-
1973-8704	2441882.50	1973 Jul 18 19:09:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PF	-	-	-	66	-	-
1973-8705	2441882.53	1973 Jul 19 00:45:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	KMR	-	-	-	66	-	-
1973-8706	2441883.51	1973 Jul 19 19:19:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PF	-	-	-	64	-	-
1973-8707	2441884.07	1973 Jul 20 14:00:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	CC	LO43	-	-	66	-	-
1973-8708	2441884.08	1973 Jul 20 14:00:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	ASC	-	-	-	66	-	-
1973-7305	2441884.17	1973 Jul 20 15:30:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	SHER	-	-	-	46	-	-
1973-8334	2441884.19	1973 Jul 20 17:30:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	WS	-	-	-	69	-	-
1973-8922	2441884.23	1973 Jul 20 18:41:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	KAU	-	-	-	80	-	-
1973-8923	2441884.28	1973 Jul 20 21:00:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	WI	-	-	-	59	-	-
1973-7306	2441884.36	1973 Jul 20 21:14:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	KAU	-	-	-	80	-	-
1973-8924	2441884.39	1973 Jul 23 05:15:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	Met. Sphere	-	-	-	61	-	-
1973-8336	2441885.72	1973 Jul 23 13:44:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	SHER	LO43	-	-	44	-	-
1973-8337	2441885.76	1973 Jul 23 15:08:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	ASC	-	-	-	66	-	-
1973-8925	2441887.06	1973 Jul 23 16:58:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PH	-	-	-	56	-	-
1973-8926	2441887.19	1973 Jul 23 18:59:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	WS	-	-	-	69	-	-
1973-8927	2441887.29	1973 Jul 23 19:29:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	KAU	-	-	-	80	-	-
1973-8928	2441887.53	1973 Jul 24 00:45:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	KMR	-	-	-	81	-	-
1973-8929	2441887.59	1973 Jul 25 12:29:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	WS	-	-	-	72	-	-
1973-8930	2441888.07	1973 Jul 25 15:59:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	CC	LO43	-	-	69	-	-
1973-8931	2441888.17	1973 Jul 25 16:59:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	CC	LO43	-	-	70	-	-
1973-8932	2441888.17	1973 Jul 25 16:59:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	VI	-	-	-	54	-	-
1973-8933	2441888.19	1973 Jul 25 16:59:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	SHER	-	-	-	54	-	-
1973-8934	2441888.21	1973 Jul 25 17:01:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	WS	-	-	-	64	-	-
1973-8935	2441888.25	1973 Jul 25 20:22:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PH	-	-	-	64	-	-
1973-7310	2441889.38	1973 Jul 25 21:00:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	KAU	-	-	-	81	-	-
1973-8936	2441889.38	1973 Jul 25 21:13:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	CC	LO43	-	-	64	-	-
1973-8937	2441890.04	1973 Jul 26 12:55:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	WS	-	-	-	70	-	-
1973-8938	2441890.05	1973 Jul 26 13:14:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	WS	-	-	-	73	-	-
1973-8939	2441890.25	1973 Jul 26 18:01:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PF	-	-	-	62	-	-
1973-8940	2441890.31	1973 Jul 26 19:19:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	VI	-	-	-	62	-	-
1973-8941	2441890.32	1973 Jul 26 19:36:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	VI	-	-	-	62	-	-
1973-8942	2441890.32	1973 Jul 26 21:00:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	SFS	-	-	-	65	-	-
1973-8943	2441890.34	1973 Jul 27 12:55:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	CC	LO43	-	-	74	-	-
1973-8944	2441891.08	1973 Jul 27 14:00:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	ASC	-	-	-	60	-	-
1973-8945	2441891.08	1973 Jul 27 14:00:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	ASC	-	-	-	60	-	-
1973-8946	2441891.10	1973 Jul 27 14:26:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	VI	-	-	-	50	-	-
1973-8947	2441891.11	1973 Jul 27 14:32:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	VI	-	-	-	61	-	-
1973-8948	2441891.12	1973 Jul 27 14:32:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	SHER	-	-	-	61	-	-
1974-410	2442050.27	1974 Jan 2 18:32:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	VI	-	-	-	54	-	-
1974-411	2442050.32	1974 Jan 2 19:41:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	VI	-	-	-	59	-	-
1974-412	2442050.39	1974 Jan 2 21:20:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	KAU	-	-	-	59	-	-
1974-705	2442050.53	1974 Jan 3 09:45:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	KMR	-	-	-	81	-	-
1974-413	2442051.15	1974 Jan 3 16:30:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	VI	-	-	-	60	-	-
1974-414	2442051.17	1974 Jan 3 18:07:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	VI	-	-	-	74	-	-
1974-415	2442051.33	1974 Jan 4 15:11:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PM	-	-	-	60	-	-
1974-416	2442052.13	1974 Jan 4 18:00:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PM	-	-	-	76	-	-
1974-417	2442052.25	1974 Jan 4 18:00:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PM	-	-	-	60	-	-
1974-419	2442052.38	1974 Jan 4 21:00:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	VI	-	-	-	54	-	-
1974-420	2442052.38	1974 Jan 4 21:00:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	VI	-	-	-	54	-	-
1974-421	2442052.38	1974 Jan 4 21:00:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PF	-	-	-	57	-	-
1974-422	2442052.43	1974 Jan 4 22:44:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	WS	-	-	-	72	-	-
1974-423	2442053.43	1974 Jan 5 22:17:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	WS	-	-	-	71	-	-
1974-424	2442055.08	1974 Jan 7 13:53:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	CC	LO43	-	-	61	-	-
1974-425	2442055.08	1974 Jan 7 14:00:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	ASC	-	-	-	66	-	-
1974-402	2442055.12	1974 Jan 7 15:00:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	ASC	-	-	-	48	-	-
1974-427	2442055.21	1974 Jan 7 17:00:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	ASC	-	-	-	72	-	-
1974-428	2442055.30	1974 Jan 7 19:18:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	VI	-	-	-	58	-	-
1974-429	2442055.33	1974 Jan 7 20:02:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PF	-	-	-	57	-	-

Launch

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Mission	FlightCode	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee_Km	Range_Km	Dest
1974-W30	2442056.21	1974 Jan 8 1706:00	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	WS	-	-	-	73	-	-
1974-W31	2442056.23	1974 Jan 8 1734:00	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	PH	-	-	-	62	-	-
1974-W32	2442057.08	1974 Jan 9 1351:00	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	CC	LO43	-	-	60	-	-
1974-Y11	2442057.16	1974 Jan 9 1555:00	Rocketsonde	-	-	Met. Sphere	-	-	-	PH	-	-	-	55	-	-
1974-W33	2442057.18	1974 Jan 9 1619:59	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	PH	-	-	-	56	-	-
1974-Y12	2442057.19	1974 Jan 9 1630:00	Rocketsonde	-	-	Met. Sphere	-	-	-	CC	LO43	-	-	63	-	-
1974-W34	2442057.21	1974 Jan 9 1700:00	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	AHT	-	-	-	63	-	-
1974-W35	2442057.29	1974 Jan 9 1901:59	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	WS	-	-	-	60	-	-
1974-W37	2442057.29	1974 Jan 9 1901:59	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	MI	-	-	-	60	-	-
1974-W38	2442057.33	1974 Jan 9 2000:00	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	PF	-	-	-	60	-	-
1974-W39	2442057.53	1974 Jan 10 0046:00	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	KMR	-	-	-	79	-	-
1974-W41	2442058.25	1974 Jan 10 1800:00	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	WS	-	-	-	71	-	-
1974-W42	2442058.27	1974 Jan 10 1822:00	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	PH	-	-	-	62	-	-
1974-W43	2442058.45	1974 Jan 10 2244:59	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	WS	-	-	-	73	-	-
1974-W45	2442059.06	1974 Jan 11 1330:00	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	ASC	-	-	-	66	-	-
1974-W46	2442059.07	1974 Jan 11 1344:59	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	CC	LO43	-	-	60	-	-
1974-W47	2442059.08	1974 Jan 11 1401:00	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	AHT	-	-	-	56	-	-
1974-W48	2442059.11	1974 Jan 11 1436:00	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	MI	-	-	-	61	-	-
1974-W50	2442059.27	1974 Jan 11 1825:59	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	PH	-	-	-	60	-	-
1974-W51	2442059.28	1974 Jan 11 1845:00	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	WS	-	-	-	69	-	-
1974-W52	2442059.32	1974 Jan 11 1933:59	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	WS	-	-	-	59	-	-
1974-W53	2442059.33	1974 Jan 11 2000:00	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	PF	-	-	-	59	-	-
1974-W54	2442060.46	1974 Jan 12 2300:00	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	WS	-	-	-	65	-	-
1974-W55	2442062.08	1974 Jan 14 1400:00	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	ASC	-	-	-	67	-	-
1974-W56	2442062.13	1974 Jan 14 1501:59	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	CC	LO43	-	-	60	-	-
1974-W57	2442062.18	1974 Jan 14 1614:59	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	WS	-	-	-	61	-	-
1974-W58	2442062.21	1974 Jan 14 1700:00	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	SHER	-	-	-	61	-	-
1974-W59	2442062.28	1974 Jan 14 1842:00	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	MI	-	-	-	58	-	-
1974-W60	2442062.35	1974 Jan 14 2030:00	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	PF	-	-	-	58	-	-
1974-W61	2442062.51	1974 Jan 15 0722:59	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	RAU	-	-	-	69	-	-
1974-W63	2442063.17	1974 Jan 15 1559:59	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	WS	-	-	-	68	-	-
1974-W64	2442064.06	1974 Jan 16 1330:00	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	ASC	-	-	-	69	-	-
1974-W65	2442064.07	1974 Jan 16 1344:59	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	CC	LO43	-	-	60	-	-
1974-W66	2442064.09	1974 Jan 16 1410:00	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	CC	-	-	-	60	-	-
1974-W67	2442064.12	1974 Jan 16 1500:00	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	SHER	-	-	-	61	-	-
1974-W68	2442064.19	1974 Jan 16 1630:00	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	MI	LO43	-	-	96	-	-
1974-W69	2442064.25	1974 Jan 16 1801:59	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	PH	-	-	-	74	-	-
1974-W70	2442064.29	1974 Jan 16 1854:00	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	WS	-	-	-	71	-	-
1974-W71	2442064.31	1974 Jan 16 1921:59	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	MI	-	-	-	61	-	-
1974-W72	2442064.34	1974 Jan 16 2004:59	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	RAU	-	-	-	55	-	-
1974-W73	2442064.38	1974 Jan 16 2100:00	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	MI	-	-	-	58	-	-
1974-W74	2442065.25	1974 Jan 17 1755:59	Rocketsonde	-	-	Met. Sphere	-	-	-	PH	-	-	-	76	-	-
1974-W75	2442065.25	1974 Jan 17 1839:59	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	WS	-	-	-	76	-	-
1974-W76	2442065.32	1974 Jan 17 1934:59	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	PH	-	-	-	61	-	-
1974-W77	2442066.07	1974 Jan 18 1344:59	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	SHER	-	-	-	60	-	-
1974-W78	2442066.13	1974 Jan 18 1504:59	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	MI	-	-	-	94	-	-
1974-W79	2442066.13	1974 Jan 18 1705:00	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	PH	-	-	-	75	-	-
1974-W80	2442066.33	1974 Jan 18 1928:00	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	WS	-	-	-	65	-	-
1974-W81	2442066.31	1974 Jan 18 1934:59	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	KAU	-	-	-	65	-	-
1974-W82	2442066.31	1974 Jan 18 1934:59	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	ASC	-	-	-	62	-	-
1974-W83	2442066.51	1974 Jan 21 0946:59	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	ASC	-	-	-	69	-	-
1974-W84	2442066.08	1974 Jan 21 1306:59	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	WS	-	-	-	72	-	-
1974-W85	2442066.08	1974 Jan 21 1306:59	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	AHT	-	-	-	67	-	-
1974-W86	2442066.11	1974 Jan 21 1445:00	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	SHER	-	-	-	75	-	-
1974-W87	2442066.14	1974 Jan 21 1514:59	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	ASC	-	-	-	58	-	-
1974-W88	2442066.17	1974 Jan 21 1559:59	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	CC	LO43	-	-	73	-	-
1974-W89	2442066.20	1974 Jan 21 1651:00	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	PH	-	-	-	71	-	-
1974-W90	2442066.23	1974 Jan 21 1730:00	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	WS	-	-	-	71	-	-
1974-W91	2442066.33	1974 Jan 21 1752:59	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	MI	-	-	-	67	-	-
1974-W92	2442066.10	1974 Jan 22 1430:00	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	WS	-	-	-	72	-	-
1974-W93	2442070.10	1974 Jan 22 1430:00	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	WS	-	-	-	70	-	-
1974-W94	2442070.25	1974 Jan 22 1800:00	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	WS	-	-	-	70	-	-
1974-W95	2442070.32	1974 Jan 22 1944:59	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	PF	-	-	-	58	-	-
1974-W96	2442070.32	1974 Jan 22 2000:00	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	KAU	-	-	-	56	-	-
1974-W97	2442070.32	1974 Jan 22 2000:00	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	ASC	-	-	-	56	-	-
1974-W98	2442071.06	1974 Jan 23 1344:59	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	SHER	-	-	-	57	-	-
1974-W99	2442071.07	1974 Jan 23 1344:59	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	CC	LO43	-	-	57	-	-
1974-H100	2442071.09	1974 Jan 23 1406:00	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	MI	-	-	-	57	-	-
1974-H101	2442071.09	1974 Jan 23 1406:00	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	ASC	-	-	-	57	-	-
1974-H102	2442071.11	1974 Jan 23 1630:00	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	CC	LO43	-	-	95	-	-
1974-H103	2442071.21	1974 Jan 23 1700:00	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	PH	-	-	-	70	-	-
1974-H104	2442071.22	1974 Jan 23 1715:00	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	WS	-	-	-	71	-	-
1974-H105	2442071.27	1974 Jan 23 1833:59	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	MI	-	-	-	77	-	-
1974-H106	2442071.28	1974 Jan 23 1845:00	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	PH	-	-	-	85	-	-
1974-H107	2442071.29	1974 Jan 23 1859:59	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	KAU	-	-	-	81	-	-
1974-H108	2442071.39	1974 Jan 23 2114:59	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	KAU	-	-	-	60	-	-
1974-H109	2442071.54	1974 Jan 24 0101:59	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	PF	-	-	-	59	-	-
1974-H110	2442071.88	1974 Jan 24 0900:00	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	KMR	-	-	-	79	-	-
1974-H111	2442072.34	1974 Jan 24 2003:59	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	ASC	-	-	-	66	-	-
1974-H112	2442073.08	1974 Jan 25 1354:59	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	KAU	-	-	-	60	-	-
1974-H113	2442073.09	1974 Jan 25 1415:00	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	CC	LO43	-	-	59	-	-
1974-H114	2442073.17	1974 Jan 25 1606:00	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	SHER	-	-	-	59	-	-
1974-H115	2442073.25	1974 Jan 25 1800:00	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	CC	-	-	-	60	-	-
1974-H116	2442073.32	1974 Jan 25 1941:00	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	PH	-	-	-	71	-	-
1974-H117	2442073.32	1974 Jan 25 1941:00	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	MI	-	-	-	57	-	-
1974-H118	2442073.33	1974 Jan 26 1000:59	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	PF	-	-	-	66	-	-
1974-H119	2442073.92	1974 Jan 26 1334:59	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	KMR	-	-	-	50	-	-
1974-H120	2442076.07	1974 Jan 28 1334:59	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	SHER	-	-	-	50	-	-
1974-H121	2442076.07	1974 Jan 28 1334:59	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	CC	LO43	-	-	57	-	-

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Mission	FlightCode	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee_Km	Range_Km	Dest
1974-W123	2442076.19	1974 Jan 28 1626:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PH	-	-	-	61	-	-
1974-W124	2442076.23	1974 Jan 28 1730:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	WS	-	-	-	72	-	-
1974-W125	2442076.30	1974 Jan 28 1917:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	WI	-	-	-	70	-	-
1974-W126	2442076.33	1974 Jan 28 2000:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PF	-	-	-	58	-	-
1974-W127	2442076.68	1974 Jan 29 0904:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	ASC	-	-	-	66	-	-
1974-W128	2442077.03	1974 Jan 29 1249:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	AIT	-	-	-	69	-	-
1974-W130	2442077.21	1974 Jan 29 1700:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	WS	-	-	-	70	-	-
1974-W131	2442077.29	1974 Jan 29 1869:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PH	-	-	-	62	-	-
1974-W132	2442077.30	1974 Jan 29 1917:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	WI	-	-	-	56	-	-
1974-W133	2442078.05	1974 Jan 30 1314:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	AIT	-	-	-	72	-	-
1974-W134	2442078.08	1974 Jan 30 1354:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	CC	LO43	-	-	63	-	-
1974-W135	2442078.10	1974 Jan 30 1422:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	WI	-	-	-	61	-	-
1974-W137	2442078.16	1974 Jan 30 1546:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	SHER	-	-	-	60	-	-
1974-W138	2442078.16	1974 Jan 30 1549:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	WS	-	-	-	72	-	-
1974-W139	2442078.19	1974 Jan 30 1630:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	CC	LO43	-	-	73	-	-
1974-W140	2442078.25	1974 Jan 30 1800:00	Rocketsonde	-	-	Met. Sphere	-	-	-	WS	-	-	-	60	-	-
1974-W141	2442078.29	1974 Jan 30 1869:59	Rocketsonde	-	-	Met. Para	-	-	-	WS	-	-	-	75	-	-
1974-W142	2442078.33	1974 Jan 30 2000:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	KAU	-	-	-	60	-	-
1974-W143	2442078.36	1974 Jan 30 2044:00	Rocketsonde	-	-	Met. Sphere	-	-	-	PH	-	-	-	58	-	-
1974-W144	2442078.38	1974 Jan 30 2106:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PH	-	-	-	57	-	-
1974-W146	2442078.51	1974 Jan 31 0914:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	RHR	-	-	-	75	-	-
1974-W151	2442079.22	1974 Jan 31 1720:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	WS	-	-	-	73	-	-
1974-W152	2442079.29	1974 Jan 31 1901:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PH	-	-	-	61	-	-
1974-W154	2442080.10	1974 Feb 1 1423:00	Rocketsonde	-	-	Met. Para, Arcasonde	-	-	-	WI	LO43	-	-	58	-	-
1974-W154	2442080.10	1974 Feb 1 1427:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	CC	-	-	-	63	-	-
1974-W155	2442080.12	1974 Feb 1 1500:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	SHER	-	-	-	53	-	-
1974-W156	2442080.17	1974 Feb 1 1558:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PH	-	-	-	56	-	-
1974-W157	2442080.21	1974 Feb 1 1700:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	WS	-	-	-	72	-	-
1974-W158	2442080.33	1974 Feb 1 2000:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PF	LO43	-	-	52	-	-
1974-W160	2442083.10	1974 Feb 4 1420:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	CC	-	-	-	63	-	-
1974-W161	2442083.14	1974 Feb 4 1514:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	WI	-	-	-	60	-	-
1974-W162	2442083.17	1974 Feb 4 1659:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	WS	-	-	-	72	-	-
1974-W164	2442083.33	1974 Feb 4 2000:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PH	-	-	-	56	-	-
1974-W166	2442083.36	1974 Feb 4 2109:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PH	-	-	-	59	-	-
1974-W168	2442084.23	1974 Feb 5 1734:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PH	-	-	-	62	-	-
1974-W168	2442084.30	1974 Feb 5 1916:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	KAU	-	-	-	61	-	-
1974-W169	2442085.03	1974 Feb 6 1241:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	AIT	-	-	-	68	-	-
1974-W170	2442085.06	1974 Feb 6 1330:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	ASC	-	-	-	58	-	-
1974-W171	2442085.09	1974 Feb 6 1403:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	ASC	-	-	-	58	-	-
1974-W172	2442085.12	1974 Feb 6 1500:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	SHER	-	-	-	73	-	-
1974-W174	2442085.29	1974 Feb 7 1353:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	SHER	-	-	-	58	-	-
1974-W175	2442086.07	1974 Feb 7 1554:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PH	-	-	-	60	-	-
1974-W176	2442086.17	1974 Feb 7 1851:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	SHER	-	-	-	58	-	-
1974-W177	2442086.26	1974 Feb 7 1851:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PH	-	-	-	62	-	-
1974-W178	2442086.26	1974 Feb 7 1851:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	NS	-	-	-	74	-	-
1974-W179	2442086.26	1974 Feb 7 1851:59	Rocketsonde	-	-	Met. Sphere	-	-	-	KAU	-	-	-	86	-	-
1974-W180	2442086.31	1974 Feb 8 1304:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	KAU	LO43	-	-	61	-	-
1974-W181	2442087.08	1974 Feb 8 1404:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	CC	-	-	-	62	-	-
1974-W182	2442087.08	1974 Feb 8 1404:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	AIT	-	-	-	48	-	-
1974-W183	2442087.29	1974 Feb 8 1856:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	WI	-	-	-	66	-	-
1974-W186	2442090.18	1974 Feb 11 1656:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PH	-	-	-	59	-	-
1974-W186	2442090.26	1974 Feb 11 1755:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	WI	-	-	-	59	-	-
1974-W187	2442090.55	1974 Feb 12 0115:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	KVR	-	-	-	72	-	-
1974-W194	2442090.64	1974 Feb 12 0324:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PHR	-	-	-	47	-	-
1974-W198	2442091.08	1974 Feb 12 1400:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	SHER	-	-	-	61	-	-
1974-W199	2442091.15	1974 Feb 12 1554:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	WI	-	-	-	64	-	-
1974-W199	2442091.16	1974 Feb 12 1554:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	WI	-	-	-	64	-	-
1974-W199	2442091.21	1974 Feb 12 1700:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	NS	-	-	-	67	-	-
1974-W193	2442091.32	1974 Feb 12 1934:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	KAU	-	-	-	61	-	-
1974-W194	2442091.51	1974 Feb 13 0010:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	KVR	-	-	-	79	-	-
1974-W195	2442091.81	1974 Feb 13 0730:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PH	-	-	-	59	-	-
1974-W196	2442092.07	1974 Feb 13 1340:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PF	-	-	-	76	-	-
1974-W197	2442092.08	1974 Feb 13 1352:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	AIT	-	-	-	61	-	-
1974-W198	2442092.12	1974 Feb 13 1500:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	CC	LO43	-	-	57	-	-
1974-W199	2442092.19	1974 Feb 13 1500:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	NS	-	-	-	75	-	-
1974-W200	2442092.21	1974 Feb 13 1700:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	SHER	-	-	-	57	-	-
1974-W200	2442092.74	1974 Feb 14 0540:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	NS	-	-	-	61	-	-
1974-W203	2442093.17	1974 Feb 14 1611:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PH	-	-	-	70	-	-
1974-W204	2442093.25	1974 Feb 14 1800:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	NS	-	-	-	63	-	-
1974-W206	2442094.07	1974 Feb 15 1344:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	CC	LO43	-	-	61	-	-
1974-W207	2442094.12	1974 Feb 15 1455:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	CC	-	-	-	73	-	-
1974-W208	2442094.13	1974 Feb 15 1504:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	AIT	-	-	-	60	-	-
1974-W209	2442094.17	1974 Feb 15 1559:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	SHER	-	-	-	71	-	-
1974-W210	2442094.19	1974 Feb 15 1626:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	NS	-	-	-	60	-	-
1974-W211	2442094.27	1974 Feb 15 1833:59	Rocketsonde	-	-	Met. Sphere	-	-	-	PM	-	-	-	84	-	-
1974-W211	2442094.30	1974 Feb 15 1911:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	KAU	-	-	-	60	-	-
1974-W212	2442094.30	1974 Feb 15 1917:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	WI	-	-	-	60	-	-
1974-W213	2442094.71	1974 Feb 16 0914:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	NS	-	-	-	71	-	-
1974-W214	2442094.89	1974 Feb 16 1044:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	NS	-	-	-	69	-	-
1974-W215	2442094.95	1974 Feb 16 0914:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	NS	-	-	-	69	-	-
1974-W216	2442096.73	1974 Feb 18 0530:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PF	-	-	-	64	-	-
1974-W217	2442097.78	1974 Feb 19 0645:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PF	-	-	-	62	-	-
1974-W220	2442097.85	1974 Feb 19 0827:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PF	-	-	-	62	-	-
1974-W221	2442098.10	1974 Feb 19 1420:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	CC	LO43	-	-	58	-	-
1974-W222	2442098.12	1974 Feb 19 1500:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	SHER	-	-	-	62	-	-
1974-W223	2442098.13	1974 Feb 19 1513:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PM	-	-	-	59	-	-
1974-W224	2442098.27	1974 Feb 19 1830:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	NS	-	-	-	69	-	-

Launch

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Mission	FlightCode	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee_Km	Range_Km	Dest
1974-W225	2442098:77	1974 Feb 20 0626:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PF	-	-	-	60	-	-
1974-W226	2442098:80	1974 Feb 20 0704:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	KAU	-	-	-	62	-	-
1974-W227	2442099:07	1974 Feb 20 1334:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	SHER	-	-	-	62	-	-
1974-W228	2442099:07	1974 Feb 20 1334:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	CC	LO43	-	-	51	-	-
1974-W229	2442099:10	1974 Feb 20 1417:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	WI	-	-	-	59	-	-
1974-W230	2442099:25	1974 Feb 20 1800:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	WS	-	-	-	57	-	-
1974-W231	2442099:28	1974 Feb 20 1840:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PH	-	-	-	73	-	-
1974-W232	2442099:62	1974 Feb 21 0237:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	KMR	-	-	-	72	-	-
1974-W233	2442100:25	1974 Feb 21 1800:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	WS	-	-	-	72	-	-
1974-W234	2442100:30	1974 Feb 21 1914:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	WI	-	-	-	59	-	-
1974-W235	2442100:33	1974 Feb 21 1956:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PH	-	-	-	58	-	-
1974-W236	2442100:43	1974 Feb 21 2218:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	KAU	-	-	-	56	-	-
1974-W237	2442101:04	1974 Feb 22 1251:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	AIT	-	-	-	32	-	-
1974-W238	2442101:08	1974 Feb 22 1354:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	SHER	-	-	-	61	-	-
1974-W239	2442101:15	1974 Feb 22 1540:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	WS	-	-	-	69	-	-
1974-W240	2442103:75	1974 Feb 25 0900:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PF	-	-	-	62	-	-
1974-W241	2442104:07	1974 Feb 25 1334:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	SHER	LO43	-	-	66	-	-
1974-W242	2442104:07	1974 Feb 25 1334:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	CC	-	-	-	59	-	-
1974-W243	2442104:20	1974 Feb 25 1644:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	WS	-	-	-	70	-	-
1974-W244	2442104:25	1974 Feb 25 1800:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	WI	-	-	-	63	-	-
1974-W245	2442104:25	1974 Feb 25 1800:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PH	-	-	-	58	-	-
1974-W246	2442104:25	1974 Feb 25 1800:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	WI	-	-	-	68	-	-
1974-W247	2442104:29	1974 Feb 26 0920:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	ASC	-	-	-	68	-	-
1974-W248	2442104:59	1974 Feb 26 1700:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	WS	-	-	-	69	-	-
1974-W249	2442105:21	1974 Feb 26 1813:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	WI	-	-	-	67	-	-
1974-W250	2442105:26	1974 Feb 26 1841:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PH	-	-	-	56	-	-
1974-W251	2442105:28	1974 Feb 26 1856:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PH	-	-	-	59	-	-
1974-W252	2442105:29	1974 Feb 27 0536:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	KMR	-	-	-	76	-	-
1974-W253	2442105:66	1974 Feb 27 0536:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	SHER	-	-	-	62	-	-
1974-W254	2442105:71	1974 Feb 27 1400:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	CC	LO43	-	-	70	-	-
1974-W255	2442106:08	1974 Feb 27 1534:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	WS	-	-	-	58	-	-
1974-W256	2442106:13	1974 Feb 27 1507:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	WI	-	-	-	58	-	-
1974-W257	2442106:17	1974 Feb 27 1609:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PH	-	-	-	73	-	-
1974-W258	2442106:27	1974 Feb 27 1826:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PF	-	-	-	64	-	-
1974-W259	2442106:35	1974 Feb 27 2000:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PH	-	-	-	94	-	-
1974-W260	2442106:40	1974 Feb 27 2137:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	KAU	-	-	-	84	-	-
1974-W261	2442106:55	1974 Feb 28 0114:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	KMR	-	-	-	58	-	-
1974-W262	2442106:58	1974 Feb 28 0636:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	ASC	-	-	-	55	-	-
1974-W263	2442106:78	1974 Feb 28 0930:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PH	-	-	-	72	-	-
1974-W264	2442107:52	1974 Feb 28 1944:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	AIT	-	-	-	75	-	-
1974-W265	2442108:02	1974 Mar 1 1230:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	WI	-	-	-	59	-	-
1974-W266	2442108:06	1974 Mar 1 1401:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	CC	LO43	-	-	62	-	-
1974-W267	2442108:09	1974 Mar 1 1401:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	SHER	-	-	-	64	-	-
1974-W268	2442108:13	1974 Mar 1 1500:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PH	-	-	-	75	-	-
1974-W269	2442108:13	1974 Mar 1 2100:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	KAU	-	-	-	60	-	-
1974-W270	2442108:38	1974 Mar 2 0610:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	KMR	-	-	-	80	-	-
1974-W271	2442108:38	1974 Mar 2 0610:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	KMR	-	-	-	80	-	-
1974-W272	2442108:50	1974 Mar 2 1334:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	ASC	-	-	-	66	-	-
1974-W273	2442108:58	1974 Mar 2 1334:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	CC	LO43	-	-	62	-	-
1974-W274	2442111:07	1974 Mar 4 1414:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	SHER	-	-	-	64	-	-
1974-W275	2442111:09	1974 Mar 4 1500:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	THU	-	-	-	64	-	-
1974-W276	2442111:15	1974 Mar 4 1534:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	WS	-	-	-	68	-	-
1974-W277	2442111:21	1974 Mar 4 1700:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	NS	-	-	-	58	-	-
1974-W278	2442111:21	1974 Mar 4 1945:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	WI	-	-	-	61	-	-
1974-W279	2442112:28	1974 Mar 5 1410:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	KMR	-	-	-	80	-	-
1974-W280	2442112:29	1974 Mar 5 1641:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PH	-	-	-	58	-	-
1974-W281	2442113:03	1974 Mar 6 1238:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	KMR	-	-	-	79	-	-
1974-W282	2442113:04	1974 Mar 6 1238:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	KMR	-	-	-	79	-	-
1974-W283	2442113:04	1974 Mar 6 1238:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	AIT	-	-	-	56	-	-
1974-W284	2442113:09	1974 Mar 6 1406:00	Rocketsonde	-	-	Met. Par. Arcasonde	-	-	-	AIT	-	-	-	56	-	-
1974-W285	2442113:10	1974 Mar 6 1430:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	CC	LO43	-	-	74	-	-
1974-W286	2442113:15	1974 Mar 6 1530:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	WS	-	-	-	59	-	-
1974-W287	2442113:17	1974 Mar 6 1630:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PH	-	-	-	65	-	-
1974-W288	2442113:19	1974 Mar 6 1630:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	NS	-	-	-	65	-	-
1974-W289	2442113:27	1974 Mar 6 1830:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	CC	LO43	-	-	96	-	-
1974-W290	2442113:33	1974 Mar 6 1954:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PF	-	-	-	60	-	-
1974-W291	2442114:08	1974 Mar 7 1400:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	SHER	-	-	-	61	-	-
1974-W292	2442114:35	1974 Mar 7 2030:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	KAU	-	-	-	58	-	-
1974-W293	2442115:07	1974 Mar 8 0920:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	SHER	-	-	-	61	-	-
1974-W294	2442115:07	1974 Mar 8 1344:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	ASC	-	-	-	69	-	-
1974-W295	2442115:12	1974 Mar 8 1447:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	CC	LO43	-	-	77	-	-
1974-W296	2442115:15	1974 Mar 8 1630:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	WI	-	-	-	60	-	-
1974-W297	2442115:19	1974 Mar 8 1715:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	NS	-	-	-	70	-	-
1974-W298	2442115:27	1974 Mar 8 1715:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	NS	-	-	-	75	-	-
1974-W299	2442115:33	1974 Mar 8 2207:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PF	-	-	-	65	-	-
1974-W300	2442115:42	1974 Mar 8 2207:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	KAU	-	-	-	61	-	-
1974-W301	2442115:52	1974 Mar 9 0201:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	KMR	-	-	-	78	-	-
1974-W302	2442115:58	1974 Mar 9 1230:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	AIT	-	-	-	74	-	-
1974-W303	2442118:02	1974 Mar 11 1429:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	CC	LO43	-	-	60	-	-
1974-W304	2442118:10	1974 Mar 11 1429:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	NS	-	-	-	70	-	-
1974-W305	2442118:16	1974 Mar 11 1549:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	NS	-	-	-	62	-	-
1974-W306	2442118:22	1974 Mar 11 1715:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PH	-	-	-	58	-	-
1974-W307	2442118:25	1974 Mar 11 1756:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	WI	-	-	-	57	-	-
1974-W308	2442119:07	1974 Mar 12 1344:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	SHER	-	-	-	61	-	-
1974-W309	2442119:33	1974 Mar 12 2000:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PF	-	-	-	63	-	-
1974-W310	2442119:88	1974 Mar 13 0910:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	ASC	-	-	-	70	-	-
1974-W311	2442120:06	1974 Mar 13 1330:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	AIT	-	-	-	74	-	-

Launch

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Mission	FlightCode	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee_Km	Range_Km	Dest
1974-W325	2442120.07	1974 Mar 13 13:44:59	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	CC	LO43	-	-	64	-	-
1974-W326	2442120.15	1974 Mar 13 15:31:00	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	WI	-	-	-	58	-	-
1974-W328	2442120.20	1974 Mar 13 16:52:59	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	SHER	-	-	-	63	-	-
1974-Y107	2442120.21	1974 Mar 13 17:00:00	Rocketsonde	-	-	Met. Sphere	-	-	-	CC	LO43	-	-	95	-	-
1974-W329	2442120.21	1974 Mar 13 17:00:00	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	WS	-	-	-	69	-	-
1974-W330	2442120.33	1974 Mar 13 20:00:00	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	PF	-	-	-	61	-	-
1974-W331	2442120.38	1974 Mar 13 21:07:00	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	KAU	-	-	-	60	-	-
1974-Y108	2442120.56	1974 Mar 14 01:30:00	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	KMR	-	-	-	51	-	-
1974-W352	2442120.57	1974 Mar 14 04:04:59	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	PM	-	-	-	72	-	-
1974-W353	2442121.10	1974 Mar 14 14:30:00	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	CC	LO43	-	-	63	-	-
1974-W354	2442121.16	1974 Mar 14 15:55:00	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	WS	-	-	-	66	-	-
1974-Y109	2442121.34	1974 Mar 14 20:00:00	Rocketsonde	-	-	Met. Sphere	-	-	-	KAU	-	-	-	63	-	-
1974-Y109	2442121.37	1974 Mar 14 20:59:00	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	KAU	-	-	-	55	-	-
1974-W357	2442121.39	1974 Mar 14 21:14:59	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	KAU	-	-	-	59	-	-
1974-W358	2442121.50	1974 Mar 15 07:09:59	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	KAU	-	-	-	60	-	-
1974-W359	2442122.04	1974 Mar 15 12:59:59	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	AUT	-	-	-	74	-	-
1974-W340	2442122.06	1974 Mar 15 13:30:00	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	ASC	-	-	-	59	-	-
1974-W341	2442122.11	1974 Mar 15 14:37:59	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	WI	-	-	-	66	-	-
1974-W342	2442122.12	1974 Mar 15 15:00:00	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	SHER	-	-	-	58	-	-
1974-W343	2442122.14	1974 Mar 15 15:27:59	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	PH	-	-	-	63	-	-
1974-W344	2442122.15	1974 Mar 15 15:37:59	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	WI	-	-	-	57	-	-
1974-W345	2442122.36	1974 Mar 15 20:35:00	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	WS	-	-	-	74	-	-
1974-W346	2442122.36	1974 Mar 15 20:35:00	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	WS	-	-	-	63	-	-
1974-W347	2442125.24	1974 Mar 16 17:44:00	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	WI	-	-	-	59	-	-
1974-W348	2442125.24	1974 Mar 16 17:44:00	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	WI	-	-	-	62	-	-
1974-W349	2442125.38	1974 Mar 16 21:00:00	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	KAU	-	-	-	59	-	-
1974-W350	2442125.41	1974 Mar 16 21:47:59	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	PH	-	-	-	59	-	-
1974-W352	2442125.52	1974 Mar 16 21:57:59	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	KMR	-	-	-	59	-	-
1974-W353	2442126.12	1974 Mar 19 00:30:00	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	CC	LO43	-	-	56	-	-
1974-W369	2442126.32	1974 Mar 19 14:49:59	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	PF	-	-	-	66	-	-
1974-W404	2442126.54	1974 Mar 19 08:03:00	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	KAU	-	-	-	59	-	-
1974-W421	2442127.07	1974 Mar 20 13:44:59	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	CC	LO43	-	-	59	-	-
1974-Y116	2442127.19	1974 Mar 20 15:30:00	Rocketsonde	-	-	Met. Sphere	-	-	-	CC	LO43	-	-	96	-	-
1974-W427	2442127.21	1974 Mar 20 17:00:00	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	WS	-	-	-	68	-	-
1974-W428	2442127.35	1974 Mar 20 20:30:00	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	KAU	-	-	-	57	-	-
1974-Y118	2442127.39	1974 Mar 20 21:18:00	Rocketsonde	-	-	Met. Sphere	-	-	-	KAU	-	-	-	55	-	-
1974-W429	2442127.57	1974 Mar 21 01:44:59	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	KAU	-	-	-	55	-	-
1974-A15	2442128.02	1974 Mar 21 12:34:59	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	AUT	-	-	-	40	-	-
1974-W430	2442128.21	1974 Mar 21 17:00:00	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	PF	-	-	-	57	-	-
1974-W451	2442128.25	1974 Mar 21 18:00:00	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	PF	-	-	-	56	-	-
1974-W452	2442128.57	1974 Mar 22 03:39:59	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	SHER	-	-	-	59	-	-
1974-W453	2442129.08	1974 Mar 22 13:48:59	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	WI	-	-	-	54	-	-
1974-W436	2442129.08	1974 Mar 22 15:58:59	Rocketsonde	-	-	Met. Para. Arcasonde	-	-	-	PH	-	-	-	54	-	-
1974-W437	2442129.21	1974 Mar 22 16:03:00	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	PH	-	-	-	53	-	-
1974-W438	2442129.29	1974 Mar 22 18:59:59	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	WS	-	-	-	74	-	-
1974-W439	2442129.35	1974 Mar 22 20:00:00	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	WS	-	-	-	62	-	-
1974-W440	2442129.51	1974 Mar 23 09:46:59	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	KMR	-	-	-	77	-	-
1974-W441	2442130.58	1974 Mar 24 02:00:00	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	KMR	-	-	-	68	-	-
1974-W442	2442130.58	1974 Mar 24 02:00:00	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	ASC	-	-	-	62	-	-
1974-W443	2442130.06	1974 Mar 25 13:27:59	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	SHER	-	-	-	56	-	-
1974-W444	2442130.07	1974 Mar 25 13:44:59	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	CC	-	-	-	60	-	-
1974-W445	2442130.23	1974 Mar 25 20:00:00	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	CC	LO43	-	-	60	-	-
1974-W446	2442130.26	1974 Mar 25 20:38:59	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	PF	-	-	-	60	-	-
1974-W447	2442130.36	1974 Mar 25 20:38:59	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	KAU	-	-	-	60	-	-
1974-W448	2442130.38	1974 Mar 25 21:00:59	Rocketsonde	-	-	Met. Para. Arcasonde	-	-	-	WS	-	-	-	69	-	-
1974-W449	2442130.11	1974 Mar 26 14:03:00	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	WI	-	-	-	58	-	-
1974-W450	2442130.11	1974 Mar 26 14:03:00	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	AUT	-	-	-	66	-	-
1974-W451	2442130.07	1974 Mar 27 13:54:59	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	SHER	-	-	-	60	-	-
1974-W452	2442130.09	1974 Mar 27 13:54:59	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	CC	LO43	-	-	67	-	-
1974-W453	2442130.09	1974 Mar 27 14:03:59	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	CLBT	-	-	-	67	-	-
1974-W454	2442130.16	1974 Mar 27 14:15:00	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	WS	-	-	-	72	-	-
1974-W455	2442130.42	1974 Mar 27 15:45:00	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	PM	-	-	-	71	-	-
1974-W456	2442130.50	1974 Mar 27 21:59:59	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	PM	-	-	-	77	-	-
1974-W457	2442130.40	1974 Mar 28 00:00:00	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	KMR	-	-	-	62	-	-
1974-W458	2442135.09	1974 Mar 28 14:15:59	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	WT	-	-	-	77	-	-
1974-W459	2442135.21	1974 Mar 28 17:00:00	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	PRIM	-	-	-	60	-	-
1974-W460	2442135.21	1974 Mar 28 17:00:00	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	PM	-	-	-	60	-	-
1974-W462	2442136.09	1974 Mar 29 14:15:00	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	CC	LO43	-	-	68	-	-
1974-W463	2442136.12	1974 Mar 29 15:00:00	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	CC	-	-	-	81	-	-
1974-W464	2442136.12	1974 Mar 29 15:00:00	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	WS	-	-	-	70	-	-
1974-W465	2442136.23	1974 Mar 29 16:04:59	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	SHER	-	-	-	85	-	-
1974-W466	2442136.41	1974 Mar 29 21:30:00	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	PM	-	-	-	57	-	-
1974-W466	2442136.41	1974 Mar 29 21:44:00	Rocketsonde	-	-	Met. Sphere	-	-	-	KAU	-	-	-	56	-	-
1974-W468	2442139.08	1974 Apr 1 13:45:59	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	CC	LO43	-	-	78	-	-
1974-W469	2442139.08	1974 Apr 1 14:00:00	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	CC	-	-	-	78	-	-
1974-W470	2442139.09	1974 Apr 1 14:04:59	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	SHER	-	-	-	58	-	-
1974-W471	2442139.23	1974 Apr 1 17:32:00	Rocketsonde	-	-	Met. Para. Arcasonde	-	-	-	WT	-	-	-	54	-	-
1974-W472	2442139.25	1974 Apr 1 17:58:00	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	PM	-	-	-	59	-	-
1974-W473	2442139.38	1974 Apr 1 21:00:00	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	PF	-	-	-	73	-	-
1974-W475	2442140.26	1974 Apr 2 18:15:59	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	CC	LO43	-	-	60	-	-
1974-W477	2442141.12	1974 Apr 3 14:15:00	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	CC	-	-	-	64	-	-
1974-Y145	2442141.21	1974 Apr 3 17:00:00	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	SHER	LO43	-	-	96	-	-
1974-W478	2442141.21	1974 Apr 3 17:06:00	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	CC	-	-	-	59	-	-
1974-W479	2442141.33	1974 Apr 3 19:45:59	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	WS	-	-	-	63	-	-
1974-W480	2442141.35	1974 Apr 3 20:31:00	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	PM	-	-	-	66	-	-
1974-W481	2442141.40	1974 Apr 3 21:23:00	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	KAU	-	-	-	59	-	-

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Mission	FlightCode	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee_Km	Range_Km	Dest
1974-4482	2442141.42	1974 Apr 3 2207:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	KMR	-	-	-	76	-	-
1974-4483	2442142.07	1974 Apr 4 1334:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	SHER	-	-	-	65	-	-
1974-4484	2442142.28	1974 Apr 4 1837:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	MI	-	-	-	62	-	-
1974-4485	2442142.36	1974 Apr 4 2043:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	KAU	-	-	-	55	-	-
1974-4486	2442142.42	1974 Apr 4 2159:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	KMR	-	-	-	74	-	-
1974-4487	2442143.07	1974 Apr 5 1344:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	CC	LO43	-	-	54	-	-
1974-4488	2442143.19	1974 Apr 5 1630:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PRIM	-	-	-	63	-	-
1974-4489	2442143.21	1974 Apr 5 1709:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PH	-	-	-	59	-	-
1974-4490	2442143.29	1974 Apr 5 1859:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	WS	-	-	-	64	-	-
1974-4491	2442143.33	1974 Apr 6 2000:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	WS	-	-	-	40	-	-
1974-4492	2442143.54	1974 Apr 6 0059:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	AIT	-	-	-	61	-	-
1974-4494	2442146.11	1974 Apr 8 1435:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	CC	LO43	-	-	63	-	-
1974-4495	2442146.25	1974 Apr 8 1804:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	WS	-	-	-	56	-	-
1974-4497	2442146.77	1974 Apr 9 0630:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PF	-	-	-	60	-	-
1974-4498	2442147.07	1974 Apr 9 1340:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	SHER	-	-	-	58	-	-
1974-4499	2442147.36	1974 Apr 9 2042:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	KAU	-	-	-	76	-	-
1974-4500	2442148.04	1974 Apr 10 1285:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	AIT	-	-	-	59	-	-
1974-4501	2442148.04	1974 Apr 10 1289:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	CC	LO43	-	-	59	-	-
1974-4502	2442148.12	1974 Apr 10 1489:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	MI	-	-	-	66	-	-
1974-4503	2442148.12	1974 Apr 10 1489:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	SHER	-	-	-	56	-	-
1974-4504	2442148.12	1974 Apr 10 1500:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	WS	-	-	-	61	-	-
1974-4505	2442148.28	1974 Apr 10 1846:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	WS	-	-	-	70	-	-
1974-4506	2442148.75	1974 Apr 11 0600:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PF	-	-	-	61	-	-
1974-4507	2442149.11	1974 Apr 11 1436:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	MI	-	-	-	60	-	-
1974-4508	2442149.12	1974 Apr 11 1500:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	SHER	-	-	-	64	-	-
1974-4509	2442150.21	1974 Apr 12 1700:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	WS	-	-	-	70	-	-
1974-4510	2442150.23	1974 Apr 12 1729:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PH	-	-	-	85	-	-
1974-4511	2442150.25	1974 Apr 12 1753:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	MI	-	-	-	68	-	-
1974-4512	2442150.25	1974 Apr 12 1803:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	MI	-	-	-	66	-	-
1974-4513	2442150.35	1974 Apr 12 2030:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PF	LO43	-	-	58	-	-
1974-4514	2442150.54	1974 Apr 13 0029:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	CC	LO43	-	-	58	-	-
1974-4515	2442150.58	1974 Apr 13 0135:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	CC	-	-	-	53	-	-
1974-4516	2442152.90	1974 Apr 15 0940:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	ASC	-	-	-	66	-	-
1974-4517	2442153.09	1974 Apr 15 1404:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	AIT	-	-	-	73	-	-
1974-4518	2442153.12	1974 Apr 15 1404:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	SHER	-	-	-	61	-	-
1974-4519	2442153.19	1974 Apr 15 1630:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	WS	-	-	-	68	-	-
1974-4520	2442153.21	1974 Apr 15 1657:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PH	-	-	-	60	-	-
1974-4521	2442153.27	1974 Apr 15 1822:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	MI	-	-	-	73	-	-
1974-4522	2442153.37	1974 Apr 15 2035:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	KAU	-	-	-	56	-	-
1974-4523	2442153.57	1974 Apr 16 0402:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PH	LO43	-	-	60	-	-
1974-4524	2442154.09	1974 Apr 16 1415:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	VC	-	-	-	59	-	-
1974-4525	2442154.12	1974 Apr 16 1500:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	VI	-	-	-	64	-	-
1974-4526	2442154.16	1974 Apr 16 1546:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	NS	-	-	-	64	-	-
1974-4527	2442154.22	1974 Apr 16 1846:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	NS	-	-	-	64	-	-
1974-4528	2442154.78	1974 Apr 17 0949:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	KAU	-	-	-	54	-	-
1974-4529	2442155.06	1974 Apr 17 1502:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	CC	LO43	-	-	56	-	-
1974-4530	2442155.12	1974 Apr 17 1505:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	SHER	-	-	-	66	-	-
1974-4531	2442155.23	1974 Apr 17 1725:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	VI	-	-	-	62	-	-
1974-4532	2442155.33	1974 Apr 17 1859:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	NS	-	-	-	67	-	-
1974-4533	2442155.33	1974 Apr 17 2035:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	NS	-	-	-	86	-	-
1974-4534	2442155.35	1974 Apr 17 2030:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PH	-	-	-	61	-	-
1974-4535	2442155.35	1974 Apr 17 2130:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	KAU	-	-	-	61	-	-
1974-4536	2442155.36	1974 Apr 17 2130:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PH	-	-	-	61	-	-
1974-4537	2442155.36	1974 Apr 17 2130:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PH	-	-	-	61	-	-
1974-4538	2442155.36	1974 Apr 18 1236:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	AIT	-	-	-	73	-	-
1974-4539	2442155.36	1974 Apr 18 2025:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PF	-	-	-	62	-	-
1974-4540	2442155.36	1974 Apr 18 2259:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	CC	LO43	-	-	60	-	-
1974-4541	2442157.04	1974 Apr 19 1259:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	SHER	-	-	-	60	-	-
1974-4542	2442157.08	1974 Apr 19 1309:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	VI	-	-	-	68	-	-
1974-4543	2442157.21	1974 Apr 19 1407:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	VI	-	-	-	68	-	-
1974-4544	2442157.27	1974 Apr 19 1700:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PRIM	-	-	-	62	-	-
1974-4545	2442157.27	1974 Apr 19 1834:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	THU	-	-	-	64	-	-
1974-4546	2442160.12	1974 Apr 22 1500:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PH	-	-	-	57	-	-
1974-4547	2442160.12	1974 Apr 22 1500:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	SHER	-	-	-	63	-	-
1974-4548	2442160.15	1974 Apr 22 1530:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	NS	LO43	-	-	63	-	-
1974-4549	2442160.19	1974 Apr 22 1630:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	NS	-	-	-	72	-	-
1974-4550	2442160.19	1974 Apr 22 1634:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PRIM	-	-	-	56	-	-
1974-4551	2442160.20	1974 Apr 22 1640:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	THU	-	-	-	66	-	-
1974-4552	2442160.23	1974 Apr 22 1649:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	NS	-	-	-	92	-	-
1974-4553	2442160.25	1974 Apr 22 1726:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	VI	-	-	-	60	-	-
1974-4554	2442160.25	1974 Apr 22 1800:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	NS	-	-	-	67	-	-
1974-4555	2442160.29	1974 Apr 22 1901:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	NS	-	-	-	97	-	-
1974-4556	2442160.33	1974 Apr 22 1949:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	NS	-	-	-	92	-	-
1974-4557	2442160.39	1974 Apr 22 2121:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	KAU	-	-	-	55	-	-
1974-4558	2442160.87	1974 Apr 23 0855:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	ASC	-	-	-	65	-	-
1974-4559	2442162.07	1974 Apr 24 1344:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	CC	LO43	-	-	59	-	-
1974-4560	2442162.09	1974 Apr 24 1404:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	SHER	-	-	-	57	-	-
1974-4561	2442162.23	1974 Apr 24 1630:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	CC	LO43	-	-	95	-	-
1974-4562	2442162.23	1974 Apr 24 1736:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PH	-	-	-	73	-	-
1974-4563	2442162.28	1974 Apr 24 1745:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	MI	-	-	-	70	-	-
1974-4564	2442162.35	1974 Apr 24 2030:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	NS	-	-	-	66	-	-
1974-4565	2442162.38	1974 Apr 24 2111:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PF	-	-	-	57	-	-
1974-4566	2442162.77	1974 Apr 25 0630:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	KAU	-	-	-	61	-	-
1974-4567	2442162.89	1974 Apr 25 0920:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	ASC	-	-	-	70	-	-
1974-4568	2442163.21	1974 Apr 25 1707:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PH	-	-	-	70	-	-



Launch

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Mission	FlightCode	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee_Km	Range_Km	Dest
1974-4568	2442163.25	1974 Apr 25 18:00:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	WS	-	-	-	66	-	-
1974-4569	2442163.68	1974 Apr 26 04:20:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PH	-	-	-	58	-	-
1974-4570	2442164.07	1974 Apr 26 13:44:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	AIT	-	-	-	76	-	-
1974-4571	2442164.09	1974 Apr 26 14:10:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	CC	LO43	-	-	56	-	-
1974-4572	2442164.10	1974 Apr 26 14:23:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	MI	-	-	-	62	-	-
1974-4573	2442164.12	1974 Apr 26 15:00:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	SHER	-	-	-	66	-	-
1974-4574	2442164.17	1974 Apr 26 16:04:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	WS	-	-	-	67	-	-
1974-4575	2442164.20	1974 Apr 26 16:51:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PH	-	-	-	61	-	-
1974-4576	2442164.32	1974 Apr 26 19:44:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PH	-	-	-	66	-	-
1974-4577	2442166.25	1974 Apr 27 18:00:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	WS	-	-	-	68	-	-
1974-4578	2442166.00	1974 Apr 28 12:00:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	WS	-	-	-	69	-	-
1974-4579	2442166.00	1974 Apr 28 12:00:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	CC	LO43	-	-	55	-	-
1974-4580	2442167.07	1974 Apr 29 13:44:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	SHER	-	-	-	63	-	-
1974-4581	2442167.08	1974 Apr 29 13:54:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	WS	-	-	-	68	-	-
1974-4582	2442167.16	1974 Apr 29 15:46:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	MI	-	-	-	60	-	-
1974-4583	2442167.25	1974 Apr 29 17:58:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PH	-	-	-	59	-	-
1974-4584	2442167.25	1974 Apr 29 17:59:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PH	-	-	-	61	-	-
1974-419	2442167.35	1974 Apr 29 20:30:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	KAU	-	-	-	51	-	-
1974-4586	2442167.38	1974 Apr 29 21:00:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	KRR	-	-	-	58	-	-
1974-4587	2442167.55	1974 Apr 30 01:14:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	KRR	-	-	-	78	-	-
1974-4588	2442168.31	1974 Apr 30 19:25:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PH	-	-	-	58	-	-
1974-4589	2442169.00	1974 May 1 12:07:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	KRR	-	-	-	77	-	-
1974-4590	2442169.08	1974 May 1 13:52:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	MI	-	-	-	62	-	-
1974-4591	2442169.10	1974 May 1 14:25:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	MI	-	-	-	69	-	-
1974-4592	2442169.11	1974 May 1 14:40:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PH	-	-	-	94	-	-
1974-4593	2442169.13	1974 May 1 15:13:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	SHER	-	-	-	67	-	-
1974-4594	2442169.14	1974 May 1 15:14:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	WS	-	-	-	66	-	-
1974-4595	2442169.19	1974 May 1 16:58:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	THU	-	-	-	43	-	-
1974-4600	2442169.24	1974 May 1 17:49:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PH	-	-	-	56	-	-
1974-420	2442169.32	1974 May 1 19:43:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PH	-	-	-	62	-	-
1974-4601	2442169.38	1974 May 1 21:00:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PH	-	-	-	69	-	-
1974-4602	2442169.38	1974 May 2 16:50:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	WS	-	-	-	66	-	-
1974-4603	2442170.19	1974 May 2 18:00:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	WS	-	-	-	66	-	-
1974-4604	2442170.25	1974 May 2 18:00:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	THU	-	-	-	86	-	-
1974-4605	2442171.00	1974 May 3 12:00:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	THU	-	-	-	86	-	-
1974-4606	2442171.16	1974 May 3 15:45:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PH	-	-	-	61	-	-
1974-4608	2442171.21	1974 May 3 17:06:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PH	-	-	-	70	-	-
1974-4609	2442171.25	1974 May 3 18:00:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	WS	-	-	-	62	-	-
1974-4610	2442171.25	1974 May 3 18:54:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PH	-	-	-	61	-	-
1974-4611	2442171.32	1974 May 3 19:34:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	KRR	-	-	-	78	-	-
1974-4612	2442171.77	1974 May 4 06:23:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	WS	-	-	-	69	-	-
1974-4613	2442172.25	1974 May 4 18:00:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	MI	-	-	-	60	-	-
1974-4614	2442172.59	1974 May 4 08:55:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PH	-	-	-	59	-	-
1974-4615	2442172.59	1974 May 4 08:55:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PH	-	-	-	66	-	-
1974-4616	2442172.86	1974 May 4 09:50:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	WS	-	-	-	60	-	-
1974-4617	2442172.86	1974 May 4 09:50:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	Met. Para	-	-	-	72	-	-
1974-4618	2442173.02	1974 May 4 09:52:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PH	-	-	-	60	-	-
1974-4619	2442173.00	1974 May 4 11:57:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	MI	-	-	-	65	-	-
1974-4620	2442173.04	1974 May 4 12:50:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	MI	-	-	-	60	-	-
1974-4621	2442173.04	1974 May 4 12:50:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	Met. Para	-	-	-	64	-	-
1974-4622	2442173.12	1974 May 4 14:56:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	MI	-	-	-	56	-	-
1974-4623	2442173.12	1974 May 4 15:09:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	WS	-	-	-	59	-	-
1974-4624	2442173.17	1974 May 4 15:09:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	MI	-	-	-	70	-	-
1974-4625	2442173.21	1974 May 4 15:59:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	WS	-	-	-	60	-	-
1974-4626	2442173.22	1974 May 4 17:14:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PH	-	-	-	60	-	-
1974-4627	2442173.20	1974 May 4 18:43:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	WS	-	-	-	69	-	-
1974-4628	2442173.20	1974 May 4 18:43:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	WS	-	-	-	69	-	-
1974-4629	2442173.30	1974 May 4 19:14:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	WS	-	-	-	69	-	-
1974-4630	2442173.33	1974 May 4 20:00:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	WS	-	-	-	62	-	-
1974-4631	2442173.33	1974 May 4 20:00:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	Met. Para	-	-	-	58	-	-
1974-4632	2442174.19	1974 May 4 14:55:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PH	-	-	-	62	-	-
1974-4633	2442174.33	1974 May 4 18:46:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PH	-	-	-	57	-	-
1974-4634	2442174.33	1974 May 4 18:46:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	SHER	-	-	-	67	-	-
1974-4635	2442175.18	1974 May 4 16:19:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	WS	-	-	-	69	-	-
1974-4636	2442175.20	1974 May 4 21:45:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	KAU	-	-	-	65	-	-
1974-4637	2442175.41	1974 May 7 16:44:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	WS	-	-	-	56	-	-
1974-4638	2442176.11	1974 May 7 21:45:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	WS	-	-	-	60	-	-
1974-4639	2442176.12	1974 May 8 15:04:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	SHER	-	-	-	56	-	-
1974-4640	2442176.13	1974 May 8 15:04:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	MI	-	-	-	60	-	-
1974-4641	2442176.13	1974 May 8 15:04:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	MI	-	-	-	65	-	-
1974-4642	2442176.20	1974 May 8 16:44:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PH	-	-	-	61	-	-
1974-4643	2442176.31	1974 May 8 19:24:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PH	-	-	-	77	-	-
1974-4644	2442176.55	1974 May 9 01:14:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	WS	-	-	-	65	-	-
1974-4645	2442177.19	1974 May 9 16:30:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	KRR	-	-	-	71	-	-
1974-4646	2442177.73	1974 May 9 16:34:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	SHER	-	-	-	78	-	-
1974-4647	2442177.73	1974 May 9 16:34:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	KRR	-	-	-	49	-	-
1974-421	2442178.17	1974 May 10 05:30:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	WS	-	-	-	71	-	-
1974-4649	2442178.17	1974 May 10 15:59:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	THU	-	-	-	67	-	-
1974-4650	2442178.24	1974 May 10 15:59:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	WS	-	-	-	71	-	-
1974-4651	2442178.29	1974 May 10 17:49:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	THU	-	-	-	67	-	-
1974-4652	2442178.31	1974 May 10 18:52:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PH	-	-	-	63	-	-
1974-4653	2442178.33	1974 May 10 19:19:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	MI	-	-	-	62	-	-
1974-4654	2442178.33	1974 May 10 19:57:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PM	-	-	-	54	-	-
1974-4655	2442178.38	1974 May 10 21:11:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	Met. Sphere	-	-	-	82	-	-
1974-4656	2442178.38	1974 May 10 21:11:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	KAU	-	-	-	60	-	-
1974-4657	2442181.17	1974 May 13 16:02:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PH	-	-	-	56	-	-
1974-4658	2442181.17	1974 May 13 16:09:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PH	-	-	-	71	-	-
1974-4659	2442181.21	1974 May 13 17:00:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	WS	-	-	-	67	-	-
1974-4660	2442181.24	1974 May 13 17:49:														

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Mission	FlightCode	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Approve	Range	Dest
1974-4662	2442183.04	1974 May 15 1259:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	WS	-	-	-	67	-	-
1974-4663	2442183.09	1974 May 15 1407:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	MI	-	-	-	55	-	-
1974-4665	2442183.12	1974 May 15 1500:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	SHER	-	-	-	64	-	-
1974-4667	2442183.15	1974 May 15 1530:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PRIM	-	-	-	68	-	-
1974-41196	2442183.16	1974 May 15 1548:59	Rocketsonde	-	-	Met. Sphere	-	-	-	PH	-	-	-	55	-	-
1974-41685	2442183.17	1974 May 15 1610:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PH	-	-	-	71	-	-
1974-4669	2442183.27	1974 May 15 1834:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	WS	-	-	-	58	-	-
1974-4670	2442183.40	1974 May 15 2143:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	KAU	-	-	-	58	-	-
1974-4671	2442183.55	1974 May 16 0114:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	KMR	-	-	-	76	-	-
1974-4672	2442184.24	1974 May 16 1744:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PH	-	-	-	58	-	-
1974-4673	2442184.29	1974 May 16 1859:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	WS	-	-	-	70	-	-
1974-4674	2442185.08	1974 May 17 1354:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	SHER	-	-	-	64	-	-
1974-4675	2442185.08	1974 May 17 1358:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	WS	-	-	-	70	-	-
1974-4676	2442185.24	1974 May 17 1745:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PRIM	-	-	-	71	-	-
1974-4678	2442185.25	1974 May 17 1807:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PF	-	-	-	62	-	-
1974-4679	2442185.32	1974 May 17 1944:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	KMR	-	-	-	73	-	-
1974-4680	2442185.51	1974 May 18 0730:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	WS	-	-	-	75	-	-
1974-4681	2442185.17	1974 May 20 1559:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	MI	-	-	-	55	-	-
1974-4682	2442185.25	1974 May 20 1755:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	WS	-	-	-	65	-	-
1974-4683	2442185.25	1974 May 20 1800:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PF	-	-	-	67	-	-
1974-4684	2442185.33	1974 May 20 2000:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PH	-	-	-	50	-	-
1974-4685	2442185.18	1974 May 21 1624:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	SHER	-	-	-	66	-	-
1974-4686	2442189.21	1974 May 21 1700:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	WS	-	-	-	63	-	-
1974-4687	2442189.25	1974 May 21 1800:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	Met. Para, STS	-	-	-	70	-	-
1974-4688	2442189.41	1974 May 21 2145:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	WS	-	-	-	55	-	-
1974-4689	2442190.14	1974 May 22 1524:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	KAU	-	-	-	63	-	-
1974-4690	2442190.16	1974 May 22 1545:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	SHER	-	-	-	55	-	-
1974-4691	2442190.17	1974 May 22 1604:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	MI	-	-	-	56	-	-
1974-4692	2442190.17	1974 May 22 1630:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PH	-	-	-	56	-	-
1974-4693	2442190.26	1974 May 22 1814:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	WS	-	-	-	65	-	-
1974-4694	2442190.31	1974 May 22 1930:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PF	-	-	-	53	-	-
1974-4695	2442190.58	1974 May 23 0135:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	WS	-	-	-	65	-	-
1974-4696	2442190.53	1974 May 23 1014:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	KMR	-	-	-	77	-	-
1974-4697	2442191.19	1974 May 23 1640:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	KAU	-	-	-	56	-	-
1974-4698	2442191.33	1974 May 23 2000:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	SHER	-	-	-	64	-	-
1974-4699	2442191.52	1974 May 24 0741:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	WS	-	-	-	50	-	-
1974-4700	2442192.09	1974 May 24 1409:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PH	-	-	-	58	-	-
1974-4702	2442192.24	1974 May 24 1749:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	MI	-	-	-	46	-	-
1974-4703	2442192.39	1974 May 24 2120:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	WS	-	-	-	69	-	-
1974-4705	2442195.15	1974 May 27 1533:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	KAU	-	-	-	62	-	-
1974-4706	2442196.19	1974 May 28 1530:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PRIM	-	-	-	64	-	-
1974-4707	2442196.23	1974 May 28 1730:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	SHER	-	-	-	65	-	-
1974-4709	2442196.35	1974 May 28 1730:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	WS	-	-	-	62	-	-
1974-4707	2442196.35	1974 May 28 1730:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PH	-	-	-	59	-	-
1974-4707	2442196.35	1974 May 28 1730:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	KAU	-	-	-	59	-	-
1974-4707	2442196.35	1974 May 28 1730:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	Met. Sphere	-	-	-	89	-	-
1974-4707	2442196.35	1974 May 28 1730:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	KAU	-	-	-	61	-	-
1974-4710	2442197.10	1974 May 29 0936:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	KMR	-	-	-	76	-	-
1974-4711	2442197.11	1974 May 29 0936:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PH	-	-	-	69	-	-
1974-4713	2442197.24	1974 May 29 1745:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	WS	-	-	-	62	-	-
1974-4714	2442197.24	1974 May 29 1745:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	SHER	-	-	-	68	-	-
1974-4715	2442197.29	1974 May 29 1855:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PRIM	-	-	-	66	-	-
1974-4716	2442197.55	1974 May 30 0114:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	WS	-	-	-	66	-	-
1974-4717	2442197.93	1974 May 30 0119:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	KMR	-	-	-	78	-	-
1974-4718	2442198.15	1974 May 30 1537:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	KAU	-	-	-	62	-	-
1974-4719	2442198.19	1974 May 30 1630:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PH	-	-	-	51	-	-
1974-4720	2442198.33	1974 May 30 2000:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	THU	-	-	-	72	-	-
1974-4725	2442198.33	1974 May 31 0741:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PF	-	-	-	64	-	-
1974-4726	2442198.82	1974 May 31 1500:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PK	-	-	-	53	-	-
1974-4727	2442199.13	1974 May 31 1508:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	SHER	-	-	-	63	-	-
1974-4728	2442199.13	1974 May 31 1508:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PH	-	-	-	55	-	-
1974-4728	2442199.25	1974 May 31 1540:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	WS	-	-	-	74	-	-
1974-4731	2442199.25	1974 May 31 1755:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PH	-	-	-	68	-	-
1974-4732	2442199.30	1974 May 31 2006:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	WS	-	-	-	66	-	-
1974-4733	2442200.08	1974 May 31 2124:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	KAU	-	-	-	56	-	-
1974-4734	2442200.13	1974 Jun 3 1400:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	Met. Para, STS	-	-	-	70	-	-
1974-4735	2442200.14	1974 Jun 3 1511:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PH	-	-	-	59	-	-
1974-4737	2442200.17	1974 Jun 3 1527:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PH	-	-	-	57	-	-
1974-4738	2442200.18	1974 Jun 3 1604:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	WS	-	-	-	66	-	-
1974-4739	2442200.31	1974 Jun 3 1614:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	THU	-	-	-	72	-	-
1974-4739	2442203.19	1974 Jun 3 1932:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PH	-	-	-	49	-	-
1974-4740	2442203.25	1974 Jun 4 1634:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	SHER	-	-	-	66	-	-
1974-4741	2442203.83	1974 Jun 4 1800:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PH	-	-	-	60	-	-
1974-4742	2442204.07	1974 Jun 5 0755:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	WS	-	-	-	56	-	-
1974-4743	2442204.08	1974 Jun 5 1340:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PH	-	-	-	60	-	-
1974-4744	2442204.12	1974 Jun 5 1600:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	CC	-	-	-	69	-	-
1974-4744	2442204.17	1974 Jun 5 1609:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	Met. Para, STS	-	-	-	57	-	-
1974-4744	2442204.24	1974 Jun 5 1749:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	THU	-	-	-	50	-	-
1974-4747	2442204.24	1974 Jun 5 1840:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	WS	-	-	-	57	-	-
1974-4748	2442204.28	1974 Jun 5 1940:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PH	-	-	-	64	-	-
1974-4749	2442204.33	1974 Jun 5 2000:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	WS	-	-	-	57	-	-
1974-4750	2442204.39	1974 Jun 5 2114:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PH	-	-	-	64	-	-
1974-4752	2442204.60	1974 Jun 6 0230:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	KAU	-	-	-	74	-	-
1974-4753	2442205.08	1974 Jun 6 1355:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	KMR	-	-	-	65	-	-
1974-4754	2442205.09	1974 Jun 6 1404:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	MI	-	-	-	66	-	-
1974-4755	2442205.13	1974 Jun 6 1504:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PH	-	-	-	55	-	-
1974-4756	2442205.25	1974 Jun 6 1800:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	Met. Para, STS	-	-	-	62	-	-
1974-4757	2442205.33	1974 Jun 6 2000:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	WS	-	-	-	57	-	-

LO43

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Mission	FlightCode	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee_Km	Range_Km	Dest
1974-W758	2442206.02	1974 Jun 7 12:24:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	ASC	-	-	-	66	-	-
1974-W759	2442206.07	1974 Jun 7 13:44:59	Met. Sphere	-	-	Met. Sphere	-	-	-	CC	LO43	-	-	95	-	-
1974-W760	2442206.12	1974 Jun 7 15:00:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	SHER	-	-	-	65	-	-
1974-W761	2442206.17	1974 Jun 7 16:00:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	CC	LO43	-	-	68	-	-
1974-W762	2442206.25	1974 Jun 7 18:00:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	WS	-	-	-	62	-	-
1974-W763	2442206.30	1974 Jun 7 19:07:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PH	-	-	-	59	-	-
1974-W764	2442206.33	1974 Jun 7 20:00:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PF	-	-	-	60	-	-
1974-W765	2442206.38	1974 Jun 7 21:00:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	KAU	-	-	-	60	-	-
1974-W766	2442207.07	1974 Jun 8 13:44:59	Rocketsonde	-	-	Starute, AN/DWQ-9	-	-	-	THU	-	-	-	74	-	-
1974-W767	2442209.04	1974 Jun 10 12:00:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	AIT	-	-	-	67	-	-
1974-W768	2442209.07	1974 Jun 10 13:44:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	ASC	LO43	-	-	62	-	-
1974-W769	2442209.08	1974 Jun 10 14:00:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	ASC	-	-	-	67	-	-
1974-W770	2442209.18	1974 Jun 10 16:19:59	Rocketsonde	-	-	Starute, AN/DWQ-9	-	-	-	THU	-	-	-	60	-	-
1974-W771	2442209.19	1974 Jun 10 16:35:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PRIM	-	-	-	66	-	-
1974-W772	2442209.21	1974 Jun 10 17:00:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	WS	-	-	-	68	-	-
1974-W773	2442209.24	1974 Jun 10 17:47:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PH	-	-	-	61	-	-
1974-W774	2442209.31	1974 Jun 10 19:24:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PF	-	-	-	61	-	-
1974-W775	2442209.38	1974 Jun 10 21:00:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	KAU	-	-	-	62	-	-
1974-W776	2442209.96	1974 Jun 11 11:00:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	KAU	-	-	-	62	-	-
1974-W777	2442210.19	1974 Jun 11 16:34:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	SHER	-	-	-	67	-	-
1974-W778	2442211.01	1974 Jun 12 12:00:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	ASC	-	-	-	60	-	-
1974-W779	2442211.07	1974 Jun 12 13:44:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	ASC	-	-	-	64	-	-
1974-W780	2442211.12	1974 Jun 12 15:00:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	CC	LO43	-	-	61	-	-
1974-W781	2442211.15	1974 Jun 12 15:33:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PH	-	-	-	85	-	-
1974-W782	2442211.19	1974 Jun 12 17:46:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	CC	LO43	-	-	97	-	-
1974-W783	2442211.24	1974 Jun 12 18:46:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	WS	-	-	-	66	-	-
1974-W784	2442211.34	1974 Jun 12 20:08:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PF	-	-	-	60	-	-
1974-W785	2442211.39	1974 Jun 12 21:15:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	KAU	-	-	-	85	-	-
1974-W786	2442211.40	1974 Jun 12 21:31:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	KAU	-	-	-	57	-	-
1974-W787	2442211.65	1974 Jun 13 09:30:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	KHR	-	-	-	76	-	-
1974-W788	2442212.13	1974 Jun 13 15:10:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	AIT	-	-	-	62	-	-
1974-W789	2442212.21	1974 Jun 13 17:30:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	WS	-	-	-	65	-	-
1974-W790	2442213.02	1974 Jun 14 12:30:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	ASC	-	-	-	60	-	-
1974-W791	2442213.12	1974 Jun 14 14:53:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PH	-	-	-	80	-	-
1974-W792	2442213.12	1974 Jun 14 15:00:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	SHER	-	-	-	94	-	-
1974-W793	2442213.17	1974 Jun 14 16:04:59	Rocketsonde	-	-	Starute, AN/DWQ-9	-	-	-	THU	-	-	-	91	-	-
1974-W794	2442213.18	1974 Jun 14 16:14:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	CC	LO43	-	-	64	-	-
1974-W795	2442213.35	1974 Jun 14 20:00:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PF	-	-	-	70	-	-
1974-W796	2442216.19	1974 Jun 17 19:40:00	Rocketsonde	-	-	Starute, AN/DWQ-9	-	-	-	THU	-	-	-	62	-	-
1974-W797	2442216.23	1974 Jun 17 19:30:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	WS	-	-	-	69	-	-
1974-W798	2442216.31	1974 Jun 17 19:30:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	KAU	-	-	-	82	-	-
1974-W799	2442216.36	1974 Jun 17 21:01:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	KAU	-	-	-	85	-	-
1974-W800	2442217.11	1974 Jun 18 14:46:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	WS	-	-	-	62	-	-
1974-W801	2442217.13	1974 Jun 18 17:46:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	SHER	-	-	-	65	-	-
1974-W802	2442218.17	1974 Jun 19 15:00:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	CC	-	-	-	67	-	-
1974-W803	2442218.17	1974 Jun 19 15:00:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	CC	-	-	-	67	-	-
1974-W804	2442218.17	1974 Jun 19 15:59:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	THU	-	-	-	69	-	-
1974-W805	2442218.17	1974 Jun 19 17:08:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PH	-	-	-	69	-	-
1974-W806	2442218.24	1974 Jun 19 17:46:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	WS	-	-	-	62	-	-
1974-W807	2442218.24	1974 Jun 19 17:46:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PRIM	-	-	-	67	-	-
1974-W808	2442218.24	1974 Jun 19 17:46:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	VI	-	-	-	69	-	-
1974-W809	2442218.26	1974 Jun 19 20:35:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PF	-	-	-	63	-	-
1974-W810	2442218.26	1974 Jun 19 20:35:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PF	-	-	-	63	-	-
1974-W811	2442218.41	1974 Jun 19 21:45:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	KHR	-	-	-	72	-	-
1974-W812	2442218.41	1974 Jun 19 21:45:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	VI	-	-	-	70	-	-
1974-W813	2442219.34	1974 Jun 20 01:14:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	THU	-	-	-	73	-	-
1974-W814	2442219.34	1974 Jun 20 01:14:59	Rocketsonde	-	-	Starute, AN/DWQ-9	-	-	-	THU	-	-	-	61	-	-
1974-W815	2442220.14	1974 Jun 21 15:15:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	SHER	-	-	-	66	-	-
1974-W816	2442220.14	1974 Jun 21 15:20:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	WS	-	-	-	64	-	-
1974-W817	2442220.17	1974 Jun 21 15:59:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PF	-	-	-	64	-	-
1974-W818	2442220.33	1974 Jun 21 20:00:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PM	-	-	-	59	-	-
1974-W819	2442220.39	1974 Jun 21 21:22:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	KAU	-	-	-	68	-	-
1974-W820	2442220.39	1974 Jun 21 21:22:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	KHR	-	-	-	67	-	-
1974-W821	2442223.23	1974 Jun 23 00:15:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	NS	-	-	-	69	-	-
1974-W822	2442223.23	1974 Jun 23 00:15:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	NS	-	-	-	69	-	-
1974-W823	2442223.34	1974 Jun 24 20:04:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PF	-	-	-	62	-	-
1974-W824	2442223.38	1974 Jun 24 21:00:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	KAU	-	-	-	61	-	-
1974-W825	2442224.20	1974 Jun 25 16:44:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	SHER	-	-	-	64	-	-
1974-W826	2442225.12	1974 Jun 26 14:57:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	VI	-	-	-	61	-	-
1974-W827	2442225.14	1974 Jun 26 15:15:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	SHER	-	-	-	56	-	-
1974-W828	2442225.18	1974 Jun 26 16:24:59	Rocketsonde	-	-	Starute, AN/DWQ-9	-	-	-	SHER	-	-	-	77	-	-
1974-W829	2442225.25	1974 Jun 26 17:55:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	THU	-	-	-	67	-	-
1974-W830	2442225.25	1974 Jun 26 18:00:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	NS	-	-	-	68	-	-
1974-W831	2442225.39	1974 Jun 26 20:29:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PF	-	-	-	62	-	-
1974-W832	2442225.39	1974 Jun 26 21:15:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PRIM	-	-	-	68	-	-
1974-W833	2442225.59	1974 Jun 27 01:14:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PF	-	-	-	58	-	-
1974-W834	2442226.18	1974 Jun 27 16:22:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	KAU	-	-	-	76	-	-
1974-W835	2442226.93	1974 Jun 28 10:17:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	KHR	-	-	-	59	-	-
1974-W836	2442227.16	1974 Jun 28 15:55:00	Rocketsonde	-	-	Starute, AN/DWQ-9	-	-	-	KHR	-	-	-	76	-	-
1974-W837	2442227.18	1974 Jun 28 16:14:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	THU	-	-	-	62	-	-
1974-W838	2442227.26	1974 Jun 28 18:10:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	SHER	-	-	-	67	-	-
1974-W839	2442227.33	1974 Jun 28 18:32:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	NS	-	-	-	62	-	-
1974-W840	2442227.33	1974 Jun 28 20:00:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PM	-	-	-	58	-	-
1974-W841	2442227.33	1974 Jun 28 20:00:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PM	-	-	-	56	-	-
1974-W842	2442230.07	1974 Jul 1 13:45:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PF	-	-	-	57	-	-
1974-W843	2442230.14	1974 Jul 1 15:24:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	CC	LO43	-	-	55	-	-
1974-W844	2442230.14	1974 Jul 1 15:24:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PM	-	-	-	55	-	-
1974-W845	2442230.22	1974 Jul 1 17:20:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	NS	-	-	-	68	-	-
1974-W846	2442230.29	1974 Jul 1 19:03:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-							

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Mission	FlightCode	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee_Km	Range_Km	Dest
1974-W681	2442230.33	1974 Jul 1 2002:00	Rocketsonde	-	-	Met. Para, Datasonde	-	-	-	PF	-	-	-	63	-	-
1974-W682	2442230.38	1974 Jul 1 2100:00	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	KAU	-	-	-	56	-	-
1974-W683	2442231.07	1974 Jul 2 1946:59	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	SHER	-	-	-	62	-	-
1974-W684	2442231.10	1974 Jul 2 1422:00	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	WI	-	-	-	70	-	-
1974-W685	2442231.88	1974 Jul 3 0913:59	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	ASC	-	-	-	65	-	-
1974-W686	2442232.07	1974 Jul 3 1344:59	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	AIT	-	-	-	61	-	-
1974-W687	2442232.12	1974 Jul 3 1500:00	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	CC	LO43	-	-	58	-	-
1974-W688	2442232.21	1974 Jul 3 1702:00	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	SHER	-	-	-	66	-	-
1974-W689	2442232.21	1974 Jul 3 1702:00	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	WS	-	-	-	66	-	-
1974-W690	2442232.36	1974 Jul 3 2034:00	Rocketsonde	-	-	Met. Para, Datasonde	-	-	-	PF	-	-	-	55	-	-
1974-W691	2442232.37	1974 Jul 3 2055:00	Rocketsonde	-	-	Met. Sphere	-	-	-	KAU	-	-	-	55	-	-
1974-W692	2442232.39	1974 Jul 3 2118:00	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	KAU	-	-	-	62	-	-
1974-W693	2442233.90	1974 Jul 5 0938:59	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	ASC	-	-	-	66	-	-
1974-W694	2442234.07	1974 Jul 5 1344:59	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	CC	LO43	-	-	67	-	-
1974-W695	2442234.08	1974 Jul 5 1348:59	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	AIT	-	-	-	52	-	-
1974-W696	2442234.12	1974 Jul 5 1500:00	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	SHER	-	-	-	67	-	-
1974-W697	2442236.59	1974 Jul 8 0918:00	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	ASC	-	-	-	64	-	-
1974-W698	2442237.23	1974 Jul 8 1733:00	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	WI	-	-	-	59	-	-
1974-W699	2442237.28	1974 Jul 8 1848:59	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	PH	-	-	-	56	-	-
1974-W700	2442237.53	1974 Jul 8 2000:00	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	PF	-	-	-	56	-	-
1974-W701	2442237.58	1974 Jul 8 2100:00	Rocketsonde	-	-	Met. Para, Datasonde	-	-	-	PF	-	-	-	58	-	-
1974-W702	2442238.09	1974 Jul 9 1410:00	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	KAU	LO43	-	-	61	-	-
1974-W703	2442238.09	1974 Jul 9 1410:00	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	CC	-	-	-	64	-	-
1974-W704	2442238.17	1974 Jul 9 1604:59	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	SHER	-	-	-	66	-	-
1974-W705	2442239.06	1974 Jul 10 1330:00	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	WS	-	-	-	64	-	-
1974-W706	2442239.06	1974 Jul 10 1348:59	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	ASC	-	-	-	64	-	-
1974-W707	2442239.11	1974 Jul 10 1443:00	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	CC	LO43	-	-	69	-	-
1974-W708	2442239.12	1974 Jul 10 1500:00	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	WI	-	-	-	65	-	-
1974-W709	2442239.19	1974 Jul 10 1630:00	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	SHER	-	-	-	69	-	-
1974-W710	2442239.22	1974 Jul 10 1715:00	Rocketsonde	-	-	Met. Sphere	-	-	-	CC	LO43	-	-	96	-	-
1974-W711	2442239.24	1974 Jul 10 1740:00	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	WS	-	-	-	44	-	-
1974-W712	2442239.36	1974 Jul 10 2000:00	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	PF	-	-	-	44	-	-
1974-W713	2442239.36	1974 Jul 10 2046:00	Rocketsonde	-	-	Met. Para, Datasonde	-	-	-	PF	-	-	-	55	-	-
1974-W714	2442239.46	1974 Jul 10 2107:00	Rocketsonde	-	-	Met. Sphere	-	-	-	PH	-	-	-	55	-	-
1974-W715	2442239.50	1974 Jul 10 2303:00	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	KAU	-	-	-	58	-	-
1974-W716	2442240.03	1974 Jul 11 1241:00	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	KAU	-	-	-	58	-	-
1974-W717	244240.11	1974 Jul 11 1435:00	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	AIT	-	-	-	62	-	-
1974-W718	244240.54	1974 Jul 11 2010:00	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	CC	LO43	-	-	62	-	-
1974-W719	244241.06	1974 Jul 11 2010:00	Rocketsonde	-	-	Met. Para, Datasonde	-	-	-	PF	-	-	-	60	-	-
1974-W720	244241.06	1974 Jul 11 2010:00	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	PF	-	-	-	60	-	-
1974-W721	244241.08	1974 Jul 12 1529:00	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	SHER	-	-	-	66	-	-
1974-W722	244241.11	1974 Jul 12 1537:00	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	VC	-	-	-	66	-	-
1974-W723	244241.11	1974 Jul 12 1537:00	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	VI	-	-	-	72	-	-
1974-W724	244241.14	1974 Jul 12 1523:59	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	PH	-	-	-	67	-	-
1974-W725	244241.26	1974 Jul 12 1814:59	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	WS	-	-	-	62	-	-
1974-W726	244241.32	1974 Jul 12 1516:59	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	PH	-	-	-	61	-	-
1974-W727	244241.15	1974 Jul 15 1606:59	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	SHER	-	-	-	59	-	-
1974-W728	244241.15	1974 Jul 15 1606:59	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	PH	-	-	-	59	-	-
1974-W729	244241.22	1974 Jul 15 1723:00	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	WS	-	-	-	67	-	-
1974-W730	244241.23	1974 Jul 15 1723:00	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	AIT	-	-	-	57	-	-
1974-W731	244241.34	1974 Jul 15 1725:00	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	ASC	-	-	-	56	-	-
1974-W732	244241.38	1974 Jul 15 1725:00	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	ASC	-	-	-	54	-	-
1974-W733	244241.53	1974 Jul 16 1702:00	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	AIT	-	-	-	72	-	-
1974-W734	244241.54	1974 Jul 16 1702:00	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	PH	-	-	-	57	-	-
1974-W735	244241.54	1974 Jul 16 1702:00	Rocketsonde	-	-	Met. Para, Datasonde	-	-	-	PF	-	-	-	61	-	-
1974-W736	244241.57	1974 Jul 16 1702:00	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	ASC	-	-	-	63	-	-
1974-W737	244241.57	1974 Jul 16 1702:00	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	ASC	-	-	-	63	-	-
1974-W738	244241.57	1974 Jul 16 1702:00	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	CC	LO43	-	-	57	-	-
1974-W739	244241.58	1974 Jul 16 1702:00	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	ASC	-	-	-	63	-	-
1974-W740	244241.58	1974 Jul 16 1702:00	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	ASC	-	-	-	63	-	-
1974-W741	244241.58	1974 Jul 16 1702:00	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	PH	-	-	-	57	-	-
1974-W742	244241.58	1974 Jul 16 1702:00	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	ASC	-	-	-	63	-	-
1974-W743	244241.58	1974 Jul 16 1702:00	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	ASC	-	-	-	63	-	-
1974-W744	244241.58	1974 Jul 16 1702:00	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	CC	LO43	-	-	57	-	-
1974-W745	244241.58	1974 Jul 16 1702:00	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	ASC	-	-	-	63	-	-
1974-W746	244241.58	1974 Jul 16 1702:00	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	ASC	-	-	-	63	-	-
1974-W747	244241.58	1974 Jul 16 1702:00	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	ASC	-	-	-	63	-	-
1974-W748	244241.58	1974 Jul 16 1702:00	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	ASC	-	-	-	63	-	-
1974-W749	244241.58	1974 Jul 16 1702:00	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	ASC	-	-	-	63	-	-
1974-W750	244241.58	1974 Jul 16 1702:00	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	ASC	-	-	-	63	-	-
1974-W751	244241.58	1974 Jul 16 1702:00	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	ASC	-	-	-	63	-	-
1974-W752	244241.58	1974 Jul 16 1702:00	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	ASC	-	-	-	63	-	-
1974-W753	244241.58	1974 Jul 16 1702:00	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	ASC	-	-	-	63	-	-
1974-W754	244241.58	1974 Jul 16 1702:00	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	ASC	-	-	-	63	-	-
1974-W755	244241.58	1974 Jul 16 1702:00	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	ASC	-	-	-	63	-	-
1974-W756	244241.58	1974 Jul 16 1702:00	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	ASC	-	-	-	63	-	-
1974-W757	244241.58	1974 Jul 16 1702:00	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	ASC	-	-	-	63	-	-
1974-W758	244241.58	1974 Jul 16 1702:00	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	ASC	-	-	-	63	-	-
1974-W759	244241.58	1974 Jul 16 1702:00	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	ASC	-	-	-	63	-	-
1974-W760	244241.58	1974 Jul 16 1702:00	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	ASC	-	-	-	63	-	-
1974-W761	244241.58	1974 Jul 16 1702:00	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	ASC	-	-	-	63	-	-
1974-W762	244241.58	1974 Jul 16 1702:00	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	ASC	-	-	-	63	-	-
1974-W763	244241.58	1974 Jul 16 1702:00	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	ASC	-	-	-	63	-	-
1974-W764	244241.58	1974 Jul 16 1702:00	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	ASC	-	-	-	63	-	-
1974-W765	244241.58	1974 Jul 16 1702:00	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	ASC	-	-	-	63	-	-
1974-W766	244241.58	1974 Jul 16 1702:00	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	ASC	-	-	-	63	-	-
1974-W767	244241.58	1974 Jul 16 1702:00	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	ASC	-	-	-	63	-	-
1974-W768	244241.58	1974 Jul 16 1702:00	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	ASC	-	-	-	63	-	-
1974-W769	244241.58	1974 Jul 16 1702:00	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	ASC	-	-	-	63	-	-
1974-W770	244241.58	1974 Jul 16 1702:00	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	ASC	-	-	-	63	-	-
1974-W771	244241.58	1974 Jul 16 1702:00	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	ASC						

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Mission	FlightCode	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee_Km	Range_Km	Dest
1974-4959	2442253.33	1974 Jul 24 20:00:00	Rocketsonde	-	-	Met_Para,Dataonde	-	-	-	PF	-	-	-	58	-	-
1974-7244	2442253.38	1974 Jul 24 21:04:59	Rocketsonde	-	-	Met_Sphere	-	-	-	KAU	-	-	-	55	-	-
1974-4960	2442253.40	1974 Jul 24 21:30:00	Rocketsonde	-	-	Starrue,Dataonde	-	-	-	KAU	-	-	-	59	-	-
1974-4962	2442255.06	1974 Jul 26 13:30:00	Rocketsonde	-	-	Starrue,Dataonde	-	-	-	ASC	-	-	-	60	-	-
1974-4963	2442255.12	1974 Jul 26 14:56:00	Rocketsonde	-	-	Starrue,Dataonde	-	-	-	PH	-	-	-	60	-	-
1974-4964	2442255.12	1974 Jul 26 15:00:00	Rocketsonde	-	-	Starrue,Dataonde	-	-	-	SHER	-	-	-	67	-	-
1974-4965	2442255.18	1974 Jul 26 15:00:00	Rocketsonde	-	-	Starrue,Dataonde	-	-	-	WS	-	-	-	67	-	-
1974-4966	2442255.35	1974 Jul 26 16:14:59	Rocketsonde	-	-	Starrue,Dataonde	-	-	-	ASC	-	-	-	68	-	-
1974-4967	2442255.08	1974 Jul 29 14:00:00	Rocketsonde	-	-	Starrue,Dataonde	-	-	-	ASC	-	-	-	66	-	-
1974-4968	2442258.13	1974 Jul 29 15:04:59	Rocketsonde	-	-	Starrue,Dataonde	-	-	-	SHER	-	-	-	62	-	-
1974-4969	2442258.18	1974 Jul 29 16:19:59	Rocketsonde	-	-	Starrue,Dataonde	-	-	-	WS	-	-	-	67	-	-
1974-4970	2442258.20	1974 Jul 29 16:44:59	Rocketsonde	-	-	Starrue,Dataonde	-	-	-	CC	-	-	-	63	-	-
1974-4971	2442258.34	1974 Jul 29 20:08:00	Rocketsonde	-	-	Starrue,Dataonde	-	-	-	PF	-	-	-	61	-	-
1974-4973	2442259.14	1974 Jul 30 15:14:59	Rocketsonde	-	-	Starrue,Dataonde	-	-	-	MI	-	-	-	70	-	-
1974-4976	2442259.36	1974 Jul 30 20:37:59	Rocketsonde	-	-	Starrue,Dataonde	-	-	-	KAU	-	-	-	60	-	-
1974-4984	2442259.68	1974 Jul 31 09:11:59	Rocketsonde	-	-	Starrue,Dataonde	-	-	-	ASC	-	-	-	67	-	-
1974-4985	2442260.07	1974 Jul 31 13:44:59	Rocketsonde	-	-	Starrue,Dataonde	-	-	-	CC	-	-	-	53	-	-
1974-4986	2442260.09	1974 Jul 31 14:03:00	Rocketsonde	-	-	Starrue,Dataonde	-	-	-	MI	-	-	-	61	-	-
1974-7247	2442260.12	1974 Jul 31 15:00:00	Rocketsonde	-	-	Met_Sphere	-	-	-	PH	-	-	-	76	-	-
1974-7248	2442260.15	1974 Jul 31 15:31:00	Rocketsonde	-	-	Starrue,Dataonde	-	-	-	PH	-	-	-	76	-	-
1974-7248	2442260.19	1974 Jul 31 16:30:00	Rocketsonde	-	-	Met_Sphere	-	-	-	CC	-	-	-	96	-	-
1974-4988	2442260.19	1974 Jul 31 16:30:00	Rocketsonde	-	-	Starrue,Dataonde	-	-	-	WS	-	-	-	60	-	-
1974-4989	2442260.36	1974 Jul 31 20:35:00	Rocketsonde	-	-	Starrue,Dataonde	-	-	-	PF	-	-	-	58	-	-
1974-7249	2442260.37	1974 Jul 31 20:35:00	Rocketsonde	-	-	Met_Para,Dataonde	-	-	-	PF	-	-	-	58	-	-
1974-4990	2442260.58	1974 Jul 31 21:09:00	Rocketsonde	-	-	Starrue,Dataonde	-	-	-	KAU	-	-	-	85	-	-
1974-4991	2442260.55	1974 Aug 1 01:14:59	Rocketsonde	-	-	Starrue,Dataonde	-	-	-	KAU	-	-	-	91	-	-
1974-4992	2442261.09	1974 Aug 1 14:09:59	Rocketsonde	-	-	Starrue,Dataonde	-	-	-	KHR	-	-	-	75	-	-
1974-4993	2442261.14	1974 Aug 1 15:24:59	Rocketsonde	-	-	Starrue,Dataonde	-	-	-	SHER	-	-	-	63	-	-
1974-4994	2442261.39	1974 Aug 1 21:20:00	Rocketsonde	-	-	Starrue,Dataonde	-	-	-	MI	-	-	-	67	-	-
1974-4995	2442262.07	1974 Aug 2 13:34:59	Rocketsonde	-	-	Starrue,Dataonde	-	-	-	KHR	-	-	-	76	-	-
1974-4996	2442262.07	1974 Aug 2 13:44:59	Rocketsonde	-	-	Starrue,Dataonde	-	-	-	MI	-	-	-	74	-	-
1974-4998	2442262.16	1974 Aug 2 15:55:59	Rocketsonde	-	-	Starrue,Dataonde	-	-	-	KHR	-	-	-	67	-	-
1974-4999	2442262.17	1974 Aug 2 15:55:59	Rocketsonde	-	-	Starrue,Dataonde	-	-	-	ASC	-	-	-	59	-	-
1974-41000	2442262.33	1974 Aug 2 19:56:59	Rocketsonde	-	-	Starrue,Dataonde	-	-	-	THU	-	-	-	67	-	-
1974-41001	2442262.35	1974 Aug 2 19:56:59	Rocketsonde	-	-	Starrue,Dataonde	-	-	-	WS	-	-	-	60	-	-
1974-41002	2442262.40	1974 Aug 2 20:00:00	Rocketsonde	-	-	Starrue,Dataonde	-	-	-	PH	-	-	-	62	-	-
1974-41003	2442263.42	1974 Aug 2 21:53:00	Rocketsonde	-	-	Met_Para,Dataonde	-	-	-	PH	-	-	-	62	-	-
1974-41004	2442264.35	1974 Aug 3 10:15:59	Rocketsonde	-	-	Starrue,Dataonde	-	-	-	KAU	-	-	-	62	-	-
1974-41005	2442265.04	1974 Aug 3 12:55:59	Rocketsonde	-	-	Starrue,Dataonde	-	-	-	KHR	-	-	-	77	-	-
1974-41006	2442265.13	1974 Aug 3 15:12:59	Rocketsonde	-	-	Met_Para,Dataonde	-	-	-	PF	-	-	-	66	-	-
1974-41007	2442265.16	1974 Aug 3 15:55:59	Rocketsonde	-	-	Starrue,Dataonde	-	-	-	ASC	-	-	-	75	-	-
1974-41008	2442265.19	1974 Aug 3 15:55:59	Rocketsonde	-	-	Starrue,Dataonde	-	-	-	PH	-	-	-	68	-	-
1974-41009	2442265.27	1974 Aug 3 15:55:59	Rocketsonde	-	-	Starrue,Dataonde	-	-	-	THU	-	-	-	59	-	-
1974-41010	2442265.41	1974 Aug 3 16:52:00	Rocketsonde	-	-	Met_Para	-	-	-	MI	-	-	-	57	-	-
1974-41011	2442265.49	1974 Aug 3 21:55:00	Rocketsonde	-	-	Starrue,Dataonde	-	-	-	KAU	-	-	-	59	-	-
1974-41012	2442266.50	1974 Aug 7 09:50:00	Rocketsonde	-	-	Starrue,Dataonde	-	-	-	SHER	-	-	-	56	-	-
1974-41013	2442266.56	1974 Aug 7 09:50:59	Rocketsonde	-	-	Starrue,Dataonde	-	-	-	ASC	-	-	-	63	-	-
1974-41014	2442267.56	1974 Aug 7 09:50:59	Rocketsonde	-	-	Starrue,Dataonde	-	-	-	PH	-	-	-	52	-	-
1974-41015	2442267.68	1974 Aug 7 14:00:00	Rocketsonde	-	-	Starrue,Dataonde	-	-	-	KHR	-	-	-	74	-	-
1974-41016	2442267.74	1974 Aug 7 14:00:59	Rocketsonde	-	-	Starrue,Dataonde	-	-	-	MI	-	-	-	73	-	-
1974-41017	2442267.74	1974 Aug 7 15:24:59	Rocketsonde	-	-	Starrue,Dataonde	-	-	-	THU	-	-	-	71	-	-
1974-41018	2442267.74	1974 Aug 7 15:24:59	Rocketsonde	-	-	Starrue,Dataonde	-	-	-	CC	-	-	-	59	-	-
1974-41019	2442267.81	1974 Aug 7 17:00:00	Rocketsonde	-	-	Starrue,Dataonde	-	-	-	WS	-	-	-	67	-	-
1974-41020	2442267.81	1974 Aug 7 19:00:00	Rocketsonde	-	-	Met_Sphere	-	-	-	PH	-	-	-	56	-	-
1974-41021	2442267.81	1974 Aug 7 19:20:59	Rocketsonde	-	-	Starrue,Dataonde	-	-	-	MI	-	-	-	75	-	-
1974-41022	2442267.85	1974 Aug 8 01:14:59	Rocketsonde	-	-	Starrue,Dataonde	-	-	-	KHR	-	-	-	73	-	-
1974-41023	2442267.92	1974 Aug 8 09:50:59	Rocketsonde	-	-	Starrue,Dataonde	-	-	-	PH	-	-	-	61	-	-
1974-41024	2442268.17	1974 Aug 8 11:15:00	Rocketsonde	-	-	Met_Para,Dataonde	-	-	-	PF	-	-	-	61	-	-
1974-41025	2442268.17	1974 Aug 8 11:15:00	Rocketsonde	-	-	Starrue,Dataonde	-	-	-	KHR	-	-	-	70	-	-
1974-41026	2442268.52	1974 Aug 8 15:55:59	Rocketsonde	-	-	Starrue,Dataonde	-	-	-	PH	-	-	-	73	-	-
1974-41027	2442268.96	1974 Aug 9 09:50:59	Rocketsonde	-	-	Met_Para,Dataonde	-	-	-	MI	-	-	-	64	-	-
1974-41028	2442268.96	1974 Aug 9 13:30:00	Rocketsonde	-	-	Starrue,Dataonde	-	-	-	ASC	-	-	-	62	-	-
1974-41029	2442269.08	1974 Aug 9 14:00:00	Rocketsonde	-	-	Starrue,Dataonde	-	-	-	MI	-	-	-	72	-	-
1974-41030	2442269.36	1974 Aug 9 16:52:59	Rocketsonde	-	-	Starrue,Dataonde	-	-	-	SHER	-	-	-	64	-	-
1974-41031	2442269.36	1974 Aug 9 20:32:00	Rocketsonde	-	-	Starrue,Dataonde	-	-	-	KAU	-	-	-	60	-	-
1974-41032	2442271.92	1974 Aug 9 21:15:00	Rocketsonde	-	-	Starrue,Dataonde	-	-	-	KAU	-	-	-	81	-	-
1974-41033	2442271.96	1974 Aug 12 09:59:59	Rocketsonde	-	-	Met_Para,Dataonde	-	-	-	PF	-	-	-	73	-	-
1974-41034	2442272.12	1974 Aug 12 11:00:00	Rocketsonde	-	-	Starrue,Dataonde	-	-	-	ASC	-	-	-	62	-	-
1974-41035	2442272.13	1974 Aug 12 15:00:00	Rocketsonde	-	-	Starrue,Dataonde	-	-	-	THU	-	-	-	60	-	-
1974-41036	2442272.27	1974 Aug 12 15:03:59	Rocketsonde	-	-	Starrue,Dataonde	-	-	-	SHER	-	-	-	60	-	-
1974-41037	2442272.58	1974 Aug 12 18:30:00	Rocketsonde	-	-	Starrue,Dataonde	-	-	-	WS	-	-	-	68	-	-
1974-41038	2442273.11	1974 Aug 12 21:01:59	Rocketsonde	-	-	Starrue,Dataonde	-	-	-	ASC	-	-	-	62	-	-
1974-41039	2442273.91	1974 Aug 13 14:35:00	Rocketsonde	-	-	Starrue,Dataonde	-	-	-	MI	-	-	-	62	-	-
1974-41040	2442274.06	1974 Aug 14 09:49:59	Rocketsonde	-	-	Starrue,Dataonde	-	-	-	CC	-	-	-	62	-	-
1974-41041	2442274.07	1974 Aug 14 13:44:59	Rocketsonde	-	-	Starrue,Dataonde	-	-	-	MI	-	-	-	58	-	-
1974-41042	2442274.07	1974 Aug 14 14:06:00	Rocketsonde	-	-	Starrue,Dataonde	-	-	-	CC	-	-	-	61	-	-
1974-41043	2442274.09	1974 Aug 14 14:06:00	Rocketsonde	-	-	Starrue,Dataonde	-	-	-	MI	-	-	-	61	-	-
1974-41044	2442274.19	1974 Aug 14 16:30:00	Rocketsonde	-	-	Met_Sphere	-	-	-	CC	-	-	-	96	-	-
1974-41045	2442274.23	1974 Aug 14 16:30:00	Rocketsonde	-	-	Starrue,Dataonde	-	-	-	WS	-	-	-	66	-	-
1974-41046	2442274.25	1974 Aug 15 01:14:59	Rocketsonde	-	-	Starrue,Dataonde	-	-	-	ASC	-	-	-	74	-	-
1974-41047	2442274.88	1974 Aug 15 09:00:00	Rocketsonde	-	-	Starrue,Dataonde	-	-	-	KHR	-	-	-	64	-	-
1974-41048	2442275.05	1974 Aug 15 13:07:00	Rocketsonde	-	-	Met_Para,Dataonde	-	-	-	PF	-	-	-	76	-	-
1974-41049	2442275.17	1974 Aug 15 15:59:59	Rocketsonde	-	-	Starrue,Dataonde	-	-	-	MI	-	-	-	69	-	-
1974-41050	2442275.93	1974 Aug 16 10:19:59	Rocketsonde	-	-	Starrue,Dataonde	-	-	-	WS	-	-	-	73	-	-
1974-41051	2442276.09	1974 Aug 16 14:14:00	Rocketsonde	-	-	Starrue,Dataonde	-	-	-	KHR	-	-	-	60	-	-
1974-41052	2442276.10	1974 Aug 16 14:29:00	Rocketsonde	-	-	Starrue,Dataonde	-	-	-	CC	-	-	-	58	-	-
1974-41053	2442276.14	1974 Aug 16 15:14:59	Rocketsonde	-	-	Starrue,Dataonde	-	-	-	MI	-	-	-	75	-	-
1974-41054	2442276.21	1974 Aug 16 16:56:59	Rocketsonde	-	-	Starrue,Dataonde	-	-	-	THU	-	-	-	63	-	-

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Mission	FlightCode	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee_Km	Range_Km	Dest
1974-41065	2442276.38	1974 Aug 16 21:11:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	KAU	-	-	-	56	-	-
1974-41066	2442277.25	1974 Aug 17 18:01:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	KMR	-	-	-	77	-	-
1974-41067	2442278.88	1974 Aug 19 09:00:00	Rocketsonde	-	-	Met. Para, Datasonde	-	-	-	PF	-	-	-	66	-	-
1974-41068	2442279.03	1974 Aug 19 12:47:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	ASC	-	-	-	63	-	-
1974-41069	2442279.12	1974 Aug 19 14:57:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PH	-	-	-	58	-	-
1974-41070	2442279.19	1974 Aug 19 16:27:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	SHER	-	-	-	63	-	-
1974-41062	2442279.22	1974 Aug 19 17:00:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PRIM	-	-	-	59	-	-
1974-41063	2442279.27	1974 Aug 19 18:24:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	WS	-	-	-	68	-	-
1974-41064	2442279.38	1974 Aug 19 21:00:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	KAU	-	-	-	54	-	-
1974-41065	2442280.05	1974 Aug 20 13:09:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	AUT	-	-	-	73	-	-
1974-41066	2442280.19	1974 Aug 20 16:54:59	Rocketsonde	-	-	Met. Para, STS-	-	-	-	WS	-	-	-	62	-	-
1974-41067	2442280.23	1974 Aug 20 17:30:00	Rocketsonde	-	-	Met. Sphere	-	-	-	WS	-	-	-	58	-	-
1974-41068	2442280.30	1974 Aug 20 19:08:59	Rocketsonde	-	-	Met. Para, Datasonde	-	-	-	PH	-	-	-	85	-	-
1974-41069	2442280.52	1974 Aug 21 09:59:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PF	-	-	-	57	-	-
1974-41070	2442281.07	1974 Aug 21 13:40:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	AUT	-	-	-	67	-	-
1974-41071	2442281.10	1974 Aug 21 14:18:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	CC	-	LO43	-	67	-	-
1974-41072	2442281.12	1974 Aug 21 14:47:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	VI	-	-	-	75	-	-
1974-41073	2442281.17	1974 Aug 21 16:04:59	Rocketsonde	-	-	Met. Sphere	-	-	-	THU	-	-	-	97	-	-
1974-41074	2442281.19	1974 Aug 21 16:30:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	CC	-	LO43	-	97	-	-
1974-41075	2442281.24	1974 Aug 21 16:43:59	Rocketsonde	-	-	Met. Para, STS-	-	-	-	SHER	-	-	-	61	-	-
1974-41076	2442281.24	1974 Aug 21 17:49:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	WS	-	-	-	66	-	-
1974-41077	2442281.27	1974 Aug 21 18:24:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	WS	-	-	-	70	-	-
1974-41078	2442281.35	1974 Aug 21 20:30:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	KAU	-	-	-	82	-	-
1974-41079	2442281.55	1974 Aug 22 01:15:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	KMR	-	-	-	72	-	-
1974-41080	2442282.07	1974 Aug 22 13:44:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	CC	-	LO43	-	69	-	-
1974-41081	2442282.58	1974 Aug 23 09:01:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	CC	-	-	-	70	-	-
1974-41082	2442283.07	1974 Aug 23 13:44:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	CC	-	LO43	-	69	-	-
1974-41083	2442283.08	1974 Aug 23 14:01:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	MI	-	-	-	61	-	-
1974-41084	2442283.09	1974 Aug 23 14:11:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	SHER	-	-	-	69	-	-
1975-407	2442416.38	1975 Jan 2 21:00:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	KAU	-	-	-	59	-	-
1975-408	2442416.14	1975 Jan 3 15:23:59	Rocketsonde	-	-	Arcasonde	-	-	-	MI	-	-	-	65	-	-
1975-409	2442416.15	1975 Jan 3 15:30:00	Rocketsonde	-	-	Met. Sphere	-	-	-	CC	-	LO43	-	60	-	-
1975-410	2442416.18	1975 Jan 3 16:22:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PH	-	-	-	87	-	-
1975-411	2442416.20	1975 Jan 3 16:22:59	Rocketsonde	-	-	Arcasonde	-	-	-	PH	-	-	-	82	-	-
1975-412	2442416.23	1975 Jan 3 17:30:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	CC	-	LO43	-	55	-	-
1975-414	2442416.36	1975 Jan 3 21:02:59	Rocketsonde	-	-	Met. Sphere	-	-	-	KAU	-	-	-	86	-	-
1975-415	2442416.55	1975 Jan 4 01:14:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	KAU	-	-	-	98	-	-
1975-416	2442416.59	1975 Jan 6 09:26:59	Rocketsonde	-	-	Arcasonde	-	-	-	KMR	-	-	-	78	-	-
1975-417	2442419.53	1975 Jan 7 09:00:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	ASC	-	-	-	68	-	-
1975-420	2442420.21	1975 Jan 7 12:00:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	MI	-	-	-	82	-	-
1975-421	2442420.25	1975 Jan 7 16:26:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	KAU	-	-	-	89	-	-
1975-422	2442420.56	1975 Jan 8 09:22:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	HS	-	-	-	86	-	-
1975-423	2442420.59	1975 Jan 8 15:00:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	KAU	-	-	-	82	-	-
1975-424	2442421.11	1975 Jan 8 15:00:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PH	-	-	-	89	-	-
1975-425	2442421.19	1975 Jan 8 15:00:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	ASC	-	-	-	82	-	-
1975-426	2442421.23	1975 Jan 8 17:30:00	Rocketsonde	-	-	Arcasonde	-	-	-	KAU	-	-	-	84	-	-
1975-427	2442421.57	1975 Jan 9 01:40:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	VI	-	-	-	64	-	-
1975-428	2442422.23	1975 Jan 9 17:30:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	ASC	-	-	-	82	-	-
1975-429	2442422.20	1975 Jan 9 19:13:59	Rocketsonde	-	-	Arcasonde	-	-	-	KAU	-	-	-	84	-	-
1975-431	2442422.89	1975 Jan 10 09:17:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	ASC	-	LO43	-	46	-	-
1975-432	2442423.10	1975 Jan 10 14:30:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	VI	-	-	-	60	-	-
1975-433	2442423.10	1975 Jan 10 14:30:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	CC	-	-	-	61	-	-
1975-434	2442423.20	1975 Jan 10 16:03:59	Rocketsonde	-	-	Met. Sphere	-	-	-	PH	-	-	-	85	-	-
1975-435	2442423.21	1975 Jan 10 17:04:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PH	-	-	-	74	-	-
1975-436	2442423.23	1975 Jan 10 17:30:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	VR	-	-	-	65	-	-
1975-437	2442423.30	1975 Jan 10 19:13:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	VI	-	-	-	65	-	-
1975-438	2442423.55	1975 Jan 11 01:14:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	KMR	-	-	-	74	-	-
1975-439	2442423.58	1975 Jan 11 14:00:00	Rocketsonde	-	-	Arcasonde	-	-	-	ASC	-	-	-	64	-	-
1975-440	2442426.33	1975 Jan 13 20:02:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	VI	-	-	-	58	-	-
1975-441	2442426.36	1975 Jan 13 20:00:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	KAU	-	-	-	62	-	-
1975-442	2442426.55	1975 Jan 14 01:14:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	KAU	-	-	-	74	-	-
1975-443	2442427.11	1975 Jan 14 16:44:59	Rocketsonde	-	-	Arcasonde	-	-	-	KMR	-	-	-	74	-	-
1975-444	2442427.20	1975 Jan 14 16:44:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	CC	-	LO43	-	60	-	-
1975-445	2442427.33	1975 Jan 14 20:00:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PM	-	-	-	69	-	-
1975-449	2442428.06	1975 Jan 15 13:30:00	Rocketsonde	-	-	Arcasonde	-	-	-	ASC	-	-	-	63	-	-
1975-450	2442428.11	1975 Jan 15 14:36:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	CC	-	LO43	-	68	-	-
1975-452	2442428.21	1975 Jan 15 17:00:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	NS	-	-	-	66	-	-
1975-453	2442428.23	1975 Jan 15 17:30:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	CC	-	LO43	-	96	-	-
1975-454	2442428.35	1975 Jan 15 20:30:00	Rocketsonde	-	-	Arcasonde	-	-	-	NS	-	-	-	58	-	-
1975-455	2442428.38	1975 Jan 15 21:00:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	KAU	-	-	-	90	-	-
1975-456	2442428.57	1975 Jan 16 01:44:59	Rocketsonde	-	-	Met. Sphere	-	-	-	VI	-	-	-	64	-	-
1975-457	2442429.11	1975 Jan 16 14:36:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	CC	-	-	-	72	-	-
1975-458	2442429.25	1975 Jan 16 18:00:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	KMR	-	-	-	72	-	-
1975-459	2442429.27	1975 Jan 16 18:30:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	CC	-	LO43	-	72	-	-
1975-460	2442429.35	1975 Jan 16 18:30:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PM	-	-	-	63	-	-
1975-462	2442430.08	1975 Jan 17 14:00:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	NS	-	-	-	60	-	-
1975-464	2442430.26	1975 Jan 17 17:34:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	KAU	-	-	-	57	-	-
1975-465	2442430.35	1975 Jan 17 18:17:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	ASC	-	-	-	67	-	-
1975-466	2442430.35	1975 Jan 17 20:30:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PM	-	-	-	59	-	-
1975-467	2442430.41	1975 Jan 17 21:49:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	NS	-	-	-	67	-	-
1975-470	2442430.55	1975 Jan 18 01:13:59	Rocketsonde	-	-	-	-	-	-	VI	-	-	-	60	-	-
1975-471	2442431.84	1975 Jan 19 08:12:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	VI	-	-	-	61	-	-
1975-471	2442431.84	1975 Jan 19 08:12:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	KMR	-	-	-	71	-	-

Launch

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Mission	FlightCode	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee_Km	Range_Km	Dest
1975-W72	2442433.10	1975 Jan 20 14:31:00	Rocketsonde	-	-	Arcasonde	-	-	-	CC	L043	-	-	72	-	-
1975-W74	2442433.21	1975 Jan 20 17:00:00	Rocketsonde	-	-	Starute, Dhtasonde	-	-	-	WS	-	-	-	64	-	-
1975-W75	2442433.23	1975 Jan 20 17:31:00	Rocketsonde	-	-	Starute, Dhtasonde	-	-	-	PH	-	-	-	57	-	-
1975-W76	2442433.41	1975 Jan 20 21:49:59	Rocketsonde	-	-	Starute, Dhtasonde	-	-	-	KAU	-	-	-	61	-	-
1975-W78	2442434.21	1975 Jan 21 17:00:00	Rocketsonde	-	-	Starute, Dhtasonde	-	-	-	WS	-	-	-	60	-	-
1975-W79	2442434.25	1975 Jan 21 18:02:59	Rocketsonde	-	-	Starute, Dhtasonde	-	-	-	PH	-	-	-	59	-	-
1975-W80	2442434.36	1975 Jan 21 20:36:00	Rocketsonde	-	-	Starute, Dhtasonde	-	-	-	KAU	-	-	-	60	-	-
1975-W81	2442435.07	1975 Jan 22 13:44:59	Rocketsonde	-	-	Arcasonde	-	-	-	ASC	-	-	-	68	-	-
1975-W82	2442435.10	1975 Jan 22 14:22:00	Rocketsonde	-	-	Arcasonde	-	-	-	CC	L043	-	-	67	-	-
1975-W83	2442435.13	1975 Jan 22 15:03:59	Rocketsonde	-	-	Starute, Dhtasonde	-	-	-	MI	-	-	-	87	-	-
1975-W85	2442435.23	1975 Jan 22 17:30:00	Rocketsonde	-	-	Arcasonde	-	-	-	CC	L043	-	-	91	-	-
1975-W86	2442435.27	1975 Jan 22 18:30:00	Rocketsonde	-	-	Starute, Dhtasonde	-	-	-	WS	-	-	-	87	-	-
1975-W88	2442435.36	1975 Jan 22 20:33:00	Rocketsonde	-	-	Met. Sphere	-	-	-	KAU	-	-	-	90	-	-
1975-W34	2442435.37	1975 Jan 22 20:46:00	Rocketsonde	-	-	Starute, Dhtasonde	-	-	-	KAU	-	-	-	56	-	-
1975-W87	2442435.47	1975 Jan 22 23:15:59	Rocketsonde	-	-	Starute, Dhtasonde	-	-	-	PH	-	-	-	75	-	-
1975-W89	2442435.55	1975 Jan 23 01:14:59	Rocketsonde	-	-	Starute, Dhtasonde	-	-	-	KHR	-	-	-	77	-	-
1975-W88	2442435.58	1975 Jan 23 09:42:00	Rocketsonde	-	-	Arcasonde	-	-	-	ASC	-	-	-	64	-	-
1975-W91	2442436.31	1975 Jan 23 19:30:00	Rocketsonde	-	-	Starute, Dhtasonde	-	-	-	WS	-	-	-	87	-	-
1975-W92	2442436.35	1975 Jan 23 20:25:00	Rocketsonde	-	-	Starute, Dhtasonde	-	-	-	KAU	-	-	-	59	-	-
1975-W93	2442436.78	1975 Jan 24 06:38:59	Rocketsonde	-	-	Starute, Dhtasonde	-	-	-	KHR	-	-	-	78	-	-
1975-W94	2442437.10	1975 Jan 24 14:22:00	Rocketsonde	-	-	Arcasonde	-	-	-	CC	L043	-	-	76	-	-
1975-W95	2442437.13	1975 Jan 24 15:03:59	Rocketsonde	-	-	Starute, Dhtasonde	-	-	-	MI	-	-	-	86	-	-
1975-W97	2442438.90	1975 Jan 27 09:32:00	Rocketsonde	-	-	Arcasonde	-	-	-	ASC	-	-	-	66	-	-
1975-W98	2442440.08	1975 Jan 27 14:00:00	Rocketsonde	-	-	Starute, Dhtasonde	-	-	-	CC	L043	-	-	55	-	-
1975-W99	2442440.20	1975 Jan 27 16:41:00	Rocketsonde	-	-	Starute, Dhtasonde	-	-	-	PH	-	-	-	74	-	-
1975-W100	2442440.29	1975 Jan 27 18:51:00	Rocketsonde	-	-	Starute, Dhtasonde	-	-	-	MI	-	-	-	63	-	-
1975-W101	2442440.29	1975 Jan 27 18:59:59	Rocketsonde	-	-	Starute, Dhtasonde	-	-	-	WS	-	-	-	87	-	-
1975-W102	2442440.38	1975 Jan 27 21:00:00	Rocketsonde	-	-	Starute, Dhtasonde	-	-	-	KAU	-	-	-	63	-	-
1975-W103	2442441.15	1975 Jan 28 15:37:59	Rocketsonde	-	-	Starute, Dhtasonde	-	-	-	PH	-	-	-	59	-	-
1975-W104	2442441.29	1975 Jan 28 18:59:59	Rocketsonde	-	-	Starute, Dhtasonde	-	-	-	WS	-	-	-	86	-	-
1975-W105	2442441.94	1975 Jan 28 20:13:00	Rocketsonde	-	-	Starute, Dhtasonde	-	-	-	KAU	-	-	-	61	-	-
1975-W107	2442441.99	1975 Jan 29 09:26:59	Rocketsonde	-	-	Arcasonde	-	-	-	ASC	-	-	-	65	-	-
1975-W108	2442441.98	1975 Jan 29 11:30:00	Rocketsonde	-	-	Starute, Dhtasonde	-	-	-	KHR	-	-	-	72	-	-
1975-W109	2442442.10	1975 Jan 29 14:30:00	Rocketsonde	-	-	Arcasonde	-	-	-	CC	L043	-	-	57	-	-
1975-W110	2442442.12	1975 Jan 29 15:00:00	Rocketsonde	-	-	Starute, Dhtasonde	-	-	-	MI	-	-	-	87	-	-
1975-W111	2442442.23	1975 Jan 29 17:30:00	Rocketsonde	-	-	Arcasonde	-	-	-	CC	L043	-	-	96	-	-
1975-W112	2442442.59	1975 Jan 30 02:04:59	Rocketsonde	-	-	Starute, Dhtasonde	-	-	-	KHR	-	-	-	76	-	-
1975-W113	2442443.29	1975 Jan 30 18:59:59	Rocketsonde	-	-	Starute, Dhtasonde	-	-	-	PH	-	-	-	49	-	-
1975-W114	2442443.59	1975 Jan 31 09:22:00	Rocketsonde	-	-	Starute, Dhtasonde	-	-	-	WS	-	-	-	89	-	-
1975-W117	2442444.10	1975 Jan 31 14:30:00	Rocketsonde	-	-	Arcasonde	-	-	-	ASC	L043	-	-	65	-	-
1975-W118	2442444.15	1975 Jan 31 15:37:59	Rocketsonde	-	-	Met. Sphere	-	-	-	SC	-	-	-	78	-	-
1975-W119	2442444.15	1975 Jan 31 15:37:59	Rocketsonde	-	-	Starute, Dhtasonde	-	-	-	PH	-	-	-	78	-	-
1975-W120	2442444.31	1975 Jan 31 19:30:00	Rocketsonde	-	-	Starute, Dhtasonde	-	-	-	WS	-	-	-	73	-	-
1975-W121	2442444.31	1975 Jan 31 19:30:00	Rocketsonde	-	-	Starute, Dhtasonde	-	-	-	MI	-	-	-	61	-	-
1975-W122	2442444.32	1975 Jan 31 19:34:59	Rocketsonde	-	-	Starute, Dhtasonde	-	-	-	KHR	-	-	-	72	-	-
1975-W123	2442444.55	1975 Feb 3 01:14:59	Rocketsonde	-	-	Starute, Dhtasonde	-	-	-	ASC	-	-	-	67	-	-
1975-W124	2442445.74	1975 Feb 3 08:04:59	Rocketsonde	-	-	Arcasonde	-	-	-	CC	L043	-	-	94	-	-
1975-W125	2442445.78	1975 Feb 3 14:30:00	Rocketsonde	-	-	Starute, Dhtasonde	-	-	-	ASC	-	-	-	67	-	-
1975-W126	2442447.05	1975 Feb 3 17:00:00	Rocketsonde	-	-	Arcasonde	-	-	-	CC	L043	-	-	74	-	-
1975-W127	2442447.21	1975 Feb 3 17:30:00	Rocketsonde	-	-	Starute, Dhtasonde	-	-	-	WS	-	-	-	63	-	-
1975-W128	2442447.28	1975 Feb 3 18:47:59	Rocketsonde	-	-	Starute, Dhtasonde	-	-	-	MI	-	-	-	60	-	-
1975-W129	2442447.35	1975 Feb 3 20:30:00	Rocketsonde	-	-	Starute, Dhtasonde	-	-	-	KAU	-	-	-	60	-	-
1975-W131	2442447.55	1975 Feb 4 01:14:59	Rocketsonde	-	-	Starute, Dhtasonde	-	-	-	KHR	-	-	-	74	-	-
1975-W132	2442448.19	1975 Feb 4 16:30:59	Rocketsonde	-	-	Starute, Dhtasonde	-	-	-	PH	-	-	-	76	-	-
1975-W133	2442448.29	1975 Feb 4 18:59:59	Rocketsonde	-	-	Starute, Dhtasonde	-	-	-	WS	-	-	-	68	-	-
1975-W136	2442448.06	1975 Feb 5 13:30:00	Rocketsonde	-	-	Arcasonde	-	-	-	ASC	-	-	-	67	-	-
1975-W137	2442448.21	1975 Feb 5 17:07:00	Rocketsonde	-	-	Met. Sphere	-	-	-	PH	-	-	-	87	-	-
1975-W138	2442448.23	1975 Feb 5 17:27:59	Rocketsonde	-	-	Starute, Dhtasonde	-	-	-	PH	-	-	-	76	-	-
1975-W139	2442448.29	1975 Feb 5 18:59:59	Rocketsonde	-	-	Starute, Dhtasonde	-	-	-	WS	-	-	-	64	-	-
1975-W143	2442449.37	1975 Feb 5 20:30:00	Rocketsonde	-	-	Met. Sphere	-	-	-	KAU	-	-	-	89	-	-
1975-W139	2442449.37	1975 Feb 5 20:30:00	Rocketsonde	-	-	Starute, Dhtasonde	-	-	-	KAU	-	-	-	72	-	-
1975-W140	2442449.55	1975 Feb 6 01:14:59	Rocketsonde	-	-	Starute, Dhtasonde	-	-	-	KHR	-	-	-	71	-	-
1975-W141	2442450.23	1975 Feb 6 17:32:00	Rocketsonde	-	-	Starute, Dhtasonde	-	-	-	PH	-	-	-	61	-	-
1975-W142	2442450.28	1975 Feb 6 18:45:00	Rocketsonde	-	-	Starute, Dhtasonde	-	-	-	MI	-	-	-	63	-	-
1975-W143	2442450.29	1975 Feb 6 18:59:59	Rocketsonde	-	-	Starute, Dhtasonde	-	-	-	WS	-	-	-	66	-	-
1975-W144	2442450.38	1975 Feb 6 21:01:59	Rocketsonde	-	-	Starute, Dhtasonde	-	-	-	KAU	-	-	-	56	-	-
1975-W148	2442451.08	1975 Feb 7 14:00:00	Rocketsonde	-	-	Arcasonde	-	-	-	ASC	L043	-	-	66	-	-
1975-W149	2442451.10	1975 Feb 7 14:30:00	Rocketsonde	-	-	Starute, Dhtasonde	-	-	-	CC	L043	-	-	78	-	-
1975-W47	2442451.14	1975 Feb 7 15:17:00	Rocketsonde	-	-	Arcasonde	-	-	-	MI	-	-	-	49	-	-
1975-W44	2442451.20	1975 Feb 7 16:41:00	Rocketsonde	-	-	Starute, Dhtasonde	-	-	-	CC	L043	-	-	96	-	-
1975-W150	2442451.31	1975 Feb 7 19:30:00	Rocketsonde	-	-	Starute, Dhtasonde	-	-	-	WS	-	-	-	67	-	-
1975-W151	2442451.35	1975 Feb 7 20:30:00	Rocketsonde	-	-	Starute, Dhtasonde	-	-	-	KAU	-	-	-	56	-	-
1975-W152	2442451.55	1975 Feb 8 01:14:59	Rocketsonde	-	-	Starute, Dhtasonde	-	-	-	KHR	-	-	-	71	-	-
1975-W153	2442451.94	1975 Feb 8 10:30:00	Rocketsonde	-	-	Starute, Dhtasonde	-	-	-	WS	-	-	-	68	-	-
1975-W154	2442454.08	1975 Feb 10 14:00:00	Rocketsonde	-	-	Arcasonde	-	-	-	ASC	-	-	-	56	-	-
1975-W155	2442454.12	1975 Feb 10 14:57:00	Rocketsonde	-	-	Starute, Dhtasonde	-	-	-	MI	-	-	-	63	-	-
1975-W156	2442454.14	1975 Feb 10 15:24:59	Rocketsonde	-	-	Starute, Dhtasonde	-	-	-	CC	L043	-	-	60	-	-
1975-W157	2442454.22	1975 Feb 10 17:15:00	Rocketsonde	-	-	Arcasonde	-	-	-	WS	-	-	-	64	-	-
1975-W158	2442454.38	1975 Feb 10 21:00:00	Rocketsonde	-	-	Starute, Dhtasonde	-	-	-	WS	-	-	-	60	-	-
1975-W159	2442454.55	1975 Feb 11 01:14:59	Rocketsonde	-	-	Starute, Dhtasonde	-	-	-	KHR	-	-	-	76	-	-
1975-W160	2442455.15	1975 Feb 11 15:30:00	Rocketsonde	-	-	Starute, Dhtasonde	-	-	-	THU	-	-	-	65	-	-
1975-W161	2442455.29	1975 Feb 11 18:59:59	Rocketsonde	-	-	Starute, Dhtasonde	-	-	-	PH	-	-	-	58	-	-
1975-W162	2442455.29	1975 Feb 11 18:59:59	Rocketsonde	-	-	Starute, Dhtasonde	-	-	-	WS	-	-	-	64	-	-
1975-W163	2442455.36	1975 Feb 11 20:36:00	Rocketsonde	-	-	Starute, Dhtasonde	-	-	-	KAU	-	-	-	62	-	-
1975-W165	2442456.17	1975 Feb 12 15:59:59	Rocketsonde	-	-	Arcasonde	-	-	-	CC	L043	-	-	64	-	-
1975-W166	2442456.24	1975 Feb 12 17:49:59	Rocketsonde	-	-	Starute, Dhtasonde	-	-	-	WS	-	-	-	65	-	-

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Mission	FlightCode	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee_Km	Range_Km	Dest
1975-M167	2442456.32	1975 Feb 12 1946:59	Rocketsonde	-	-	Starute, Datasonde	-	-	WI	-	-	-	-	61	-	-
1975-M168	2442456.33	1975 Feb 12 1988:59	Rocketsonde	-	-	Starute, Datasonde	-	-	PH	-	-	-	-	72	-	-
1975-M169	2442456.44	1975 Feb 12 2230:00	Rocketsonde	-	-	Starute, Datasonde	-	-	KAU	-	-	-	-	60	-	-
1975-M170	2442456.55	1975 Feb 13 01:14:59	Rocketsonde	-	-	Starute, Datasonde	-	-	KMR	-	-	-	-	75	-	-
1975-M171	2442456.56	1975 Feb 13 09:47:59	Rocketsonde	-	-	Arcasonde	-	-	ASC	-	-	-	-	66	-	-
1975-M172	2442456.91	1975 Feb 13 09:47:59	Rocketsonde	-	-	Starute, AN/DWQ-9	-	-	THU	-	-	-	-	72	-	-
1975-M173	2442457.14	1975 Feb 13 15:24:59	Rocketsonde	-	-	Starute, Datasonde	-	-	PH	-	-	-	-	74	-	-
1975-M174	2442457.23	1975 Feb 13 17:30:00	Rocketsonde	-	-	Starute, Datasonde	-	-	WS	-	-	-	-	64	-	-
1975-M175	2442457.31	1975 Feb 13 19:30:00	Rocketsonde	-	-	Starute, Datasonde	-	-	KAU	-	-	-	-	62	-	-
1975-M176	2442457.38	1975 Feb 13 21:00:00	Rocketsonde	-	-	Starute, Datasonde	-	-	CC	LO43	-	-	-	52	-	-
1975-M177	2442458.10	1975 Feb 14 14:42:00	Rocketsonde	-	-	Arcasonde	-	-	THU	-	-	-	-	72	-	-
1975-M178	2442458.11	1975 Feb 14 14:45:00	Rocketsonde	-	-	Starute, AN/DWQ-9	-	-	WI	-	-	-	-	70	-	-
1975-M179	2442458.13	1975 Feb 14 15:00:59	Rocketsonde	-	-	Starute, Datasonde	-	-	WS	-	-	-	-	67	-	-
1975-M180	2442458.21	1975 Feb 14 17:00:00	Rocketsonde	-	-	Starute, Datasonde	-	-	PH	-	-	-	-	57	-	-
1975-M181	2442458.26	1975 Feb 14 18:10:00	Rocketsonde	-	-	Starute, Datasonde	-	-	KAU	-	-	-	-	61	-	-
1975-M182	2442458.38	1975 Feb 14 21:00:00	Rocketsonde	-	-	Starute, AN/DWQ-9	-	-	THU	-	-	-	-	73	-	-
1975-M184	2442461.11	1975 Feb 17 14:45:00	Rocketsonde	-	-	Starute, Datasonde	-	-	WS	-	-	-	-	65	-	-
1975-M186	2442462.15	1975 Feb 18 15:40:00	Rocketsonde	-	-	Starute, Datasonde	-	-	PH	-	-	-	-	68	-	-
1975-M188	2442462.25	1975 Feb 18 16:14:59	Rocketsonde	-	-	Starute, Datasonde	-	-	KAU	-	-	-	-	60	-	-
1975-M189	2442462.45	1975 Feb 18 22:41:59	Rocketsonde	-	-	Starute, Datasonde	-	-	ASC	-	-	-	-	66	-	-
1975-M191	2442462.69	1975 Feb 19 09:26:59	Rocketsonde	-	-	Arcasonde	-	-	THU	-	-	-	-	67	-	-
1975-M192	2442463.14	1975 Feb 19 15:24:59	Rocketsonde	-	-	Starute, AN/DWQ-9	-	-	CC	LO43	-	-	-	54	-	-
1975-M193	2442463.19	1975 Feb 19 16:30:00	Rocketsonde	-	-	Arcasonde	-	-	PH	-	-	-	-	72	-	-
1975-M194	2442463.25	1975 Feb 19 18:06:00	Rocketsonde	-	-	Starute, Datasonde	-	-	WS	-	-	-	-	66	-	-
1975-M195	2442463.29	1975 Feb 19 18:59:59	Rocketsonde	-	-	Starute, Datasonde	-	-	WI	-	-	-	-	74	-	-
1975-M196	2442463.32	1975 Feb 19 19:35:59	Rocketsonde	-	-	Starute, Datasonde	-	-	KAU	-	-	-	-	60	-	-
1975-M197	2442463.43	1975 Feb 19 22:22:59	Rocketsonde	-	-	Starute, Datasonde	-	-	KMR	-	-	-	-	74	-	-
1975-M198	2442463.55	1975 Feb 20 01:14:59	Rocketsonde	-	-	Starute, Datasonde	-	-	WS	-	-	-	-	61	-	-
1975-M200	2442464.29	1975 Feb 20 18:59:59	Rocketsonde	-	-	Starute, Datasonde	-	-	PH	-	-	-	-	55	-	-
1975-M202	2442464.43	1975 Feb 20 22:19:59	Rocketsonde	-	-	Starute, Datasonde	-	-	KAU	-	-	-	-	54	-	-
1975-M203	2442464.45	1975 Feb 20 22:20:59	Rocketsonde	-	-	Starute, Datasonde	-	-	KMR	-	-	-	-	74	-	-
1975-M205	2442464.58	1975 Feb 21 01:06:59	Rocketsonde	-	-	Arcasonde	-	-	ASC	-	-	-	-	65	-	-
1975-M206	2442465.05	1975 Feb 21 13:13:59	Rocketsonde	-	-	Starute, Datasonde	-	-	CC	LO43	-	-	-	68	-	-
1975-M207	2442465.17	1975 Feb 21 15:59:59	Rocketsonde	-	-	Arcasonde	-	-	CC	-	-	-	-	66	-	-
1975-M208	2442465.19	1975 Feb 21 16:14:59	Rocketsonde	-	-	Starute, AN/DWQ-9	-	-	THU	-	-	-	-	69	-	-
1975-M209	2442465.21	1975 Feb 21 16:57:59	Rocketsonde	-	-	Starute, Datasonde	-	-	WI	-	-	-	-	68	-	-
1975-M210	2442465.29	1975 Feb 21 18:59:59	Rocketsonde	-	-	Starute, Datasonde	-	-	PH	-	-	-	-	59	-	-
1975-M212	2442465.31	1975 Feb 21 19:26:59	Rocketsonde	-	-	Starute, Datasonde	-	-	WS	-	-	-	-	58	-	-
1975-M214	2442465.37	1975 Feb 21 20:28:00	Rocketsonde	-	-	Met. Sphere	-	-	KAU	-	-	-	-	85	-	-
1975-M215	2442465.58	1975 Feb 21 21:09:00	Rocketsonde	-	-	Starute, Datasonde	-	-	KAU	-	-	-	-	61	-	-
1975-M218	2442466.25	1975 Feb 24 17:25:00	Rocketsonde	-	-	Arcasonde	-	-	CC	LO43	-	-	-	68	-	-
1975-M219	2442466.25	1975 Feb 24 18:06:59	Rocketsonde	-	-	Starute, Datasonde	-	-	VI	-	-	-	-	66	-	-
1975-M220	2442466.25	1975 Feb 24 18:06:59	Rocketsonde	-	-	Starute, Datasonde	-	-	PH	-	-	-	-	68	-	-
1975-M221	2442466.25	1975 Feb 24 18:06:59	Rocketsonde	-	-	Starute, Datasonde	-	-	PRIM	-	-	-	-	46	-	-
1975-M222	2442466.31	1975 Feb 24 21:46:59	Rocketsonde	-	-	Starute, Datasonde	-	-	KMR	-	-	-	-	59	-	-
1975-M223	2442466.56	1975 Feb 25 01:24:59	Rocketsonde	-	-	Starute, Datasonde	-	-	KMR	-	-	-	-	72	-	-
1975-M224	2442468.12	1975 Feb 25 17:10:00	Rocketsonde	-	-	Starute, AN/DWQ-9	-	-	THU	-	-	-	-	65	-	-
1975-M225	2442468.25	1975 Feb 25 18:59:59	Rocketsonde	-	-	Arcasonde	-	-	CC	LO43	-	-	-	72	-	-
1975-M226	2442468.43	1975 Feb 25 20:12:59	Rocketsonde	-	-	Starute, Datasonde	-	-	WS	-	-	-	-	60	-	-
1975-M227	2442470.06	1975 Feb 26 15:22:00	Rocketsonde	-	-	Starute, Datasonde	-	-	KAU	-	-	-	-	60	-	-
1975-M228	2442470.15	1975 Feb 26 15:22:00	Rocketsonde	-	-	Arcasonde	-	-	ASC	-	-	-	-	62	-	-
1975-M229	2442470.20	1975 Feb 26 16:52:00	Rocketsonde	-	-	Starute, AN/DWQ-9	-	-	THU	-	-	-	-	70	-	-
1975-M230	2442470.21	1975 Feb 26 16:52:00	Rocketsonde	-	-	Arcasonde	-	-	CC	LO43	-	-	-	70	-	-
1975-M231	2442470.24	1975 Feb 26 17:08:00	Rocketsonde	-	-	Starute, Datasonde	-	-	VI	-	-	-	-	63	-	-
1975-M232	2442470.24	1975 Feb 26 20:08:00	Rocketsonde	-	-	Starute, Datasonde	-	-	PH	-	-	-	-	85	-	-
1975-M233	2442470.36	1975 Feb 26 20:33:00	Rocketsonde	-	-	Met. Sphere	-	-	PH	-	-	-	-	64	-	-
1975-M234	2442470.45	1975 Feb 26 22:52:59	Rocketsonde	-	-	Starute, Datasonde	-	-	KAU	-	-	-	-	62	-	-
1975-M235	2442470.51	1975 Feb 27 00:12:59	Rocketsonde	-	-	Starute, Datasonde	-	-	KMR	-	-	-	-	75	-	-
1975-M236	2442471.04	1975 Feb 27 13:03:59	Rocketsonde	-	-	Arcasonde	-	-	ASC	-	-	-	-	65	-	-
1975-M237	2442471.13	1975 Feb 27 15:04:59	Rocketsonde	-	-	Starute, AN/DWQ-9	-	-	THU	-	-	-	-	75	-	-
1975-M238	2442471.21	1975 Feb 27 17:00:00	Rocketsonde	-	-	Starute, Datasonde	-	-	WS	-	-	-	-	58	-	-
1975-M239	2442471.31	1975 Feb 27 19:29:00	Rocketsonde	-	-	Starute, Datasonde	-	-	PH	-	-	-	-	61	-	-
1975-M240	2442471.57	1975 Feb 28 13:33:59	Rocketsonde	-	-	Starute, Datasonde	-	-	KMR	-	-	-	-	75	-	-
1975-M241	2442472.03	1975 Feb 28 12:45:59	Rocketsonde	-	-	Arcasonde	-	-	ASC	-	-	-	-	64	-	-
1975-M242	2442472.16	1975 Feb 28 15:49:59	Rocketsonde	-	-	Starute, AN/DWQ-9	-	-	THU	-	-	-	-	64	-	-
1975-M243	2442472.25	1975 Feb 28 17:00:00	Rocketsonde	-	-	Starute, Datasonde	-	-	WS	-	-	-	-	66	-	-
1975-M244	2442472.25	1975 Feb 28 18:03:59	Rocketsonde	-	-	Starute, Datasonde	-	-	PH	-	-	-	-	57	-	-
1975-M245	2442472.28	1975 Feb 28 18:45:59	Rocketsonde	-	-	Starute, Datasonde	-	-	PRIM	-	-	-	-	60	-	-
1975-M246	2442472.45	1975 Feb 28 22:24:59	Rocketsonde	-	-	Starute, Datasonde	-	-	PM	-	-	-	-	60	-	-
1975-M247	2442472.45	1975 Feb 28 22:54:59	Rocketsonde	-	-	Starute, Datasonde	-	-	KAU	-	-	-	-	57	-	-
1975-M248	2442472.63	1975 Mar 1 00:36:59	Rocketsonde	-	-	Starute, Datasonde	-	-	KAU	-	-	-	-	60	-	-
1975-M249	2442472.63	1975 Mar 1 00:36:59	Rocketsonde	-	-	Arcasonde	-	-	KMR	-	-	-	-	75	-	-
1975-M250	2442472.63	1975 Mar 1 00:36:59	Rocketsonde	-	-	Starute, Datasonde	-	-	ASC	-	-	-	-	68	-	-
1975-M251	2442472.66	1975 Mar 3 13:30:00	Rocketsonde	-	-	Arcasonde	-	-	CC	LO43	-	-	-	62	-	-
1975-M252	2442472.66	1975 Mar 3 16:09:59	Rocketsonde	-	-	Starute, Datasonde	-	-	VI	-	-	-	-	62	-	-
1975-M253	2442472.66	1975 Mar 3 17:02:00	Rocketsonde	-	-	Starute, Datasonde	-	-	WS	-	-	-	-	59	-	-
1975-M254	2442472.66	1975 Mar 3 18:30:00	Rocketsonde	-	-	Starute, Datasonde	-	-	PRIM	-	-	-	-	48	-	-
1975-M255	2442472.66	1975 Mar 3 18:48:59	Rocketsonde	-	-	Starute, Datasonde	-	-	PH	-	-	-	-	60	-	-
1975-M256	2442472.66	1975 Mar 3 20:14:00	Rocketsonde	-	-	Starute, Datasonde	-	-	KAU	-	-	-	-	58	-	-
1975-M257	2442472.66	1975 Mar 3 23:01:00	Rocketsonde	-	-	Starute, Datasonde	-	-	ASC	-	-	-	-	62	-	-
1975-M258	2442472.66	1975 Mar 4 13:12:59	Rocketsonde	-	-	Arcasonde	-	-	THU	-	-	-	-	66	-	-
1975-M259	2442472.66	1975 Mar 4 16:03:59	Rocketsonde	-	-	Starute, AN/DWQ-9	-	-	CC	LO43	-	-	-	78	-	-
1975-M260	2442472.66	1975 Mar 4 16:41:59	Rocketsonde	-	-	Arcasonde	-	-	PH	-	-	-	-	70	-	-
1975-M261	2442472.66	1975 Mar 4 16:57:59	Rocketsonde	-	-	Starute, Datasonde	-	-	Met. Parr. STS-	-	-	-	-	72	-	-
1975-M262	2442472.66	1975 Mar 4 18:00:00	Rocketsonde	-	-	Starute, Datasonde	-	-	WS	-	-	-	-	60	-	-
1975-M263	2442472.66	1975 Mar 5 01:12:59	Rocketsonde	-	-	Starute, Datasonde	-	-	KMR	-	-	-	-	73	-	-
1975-M264	2442472.66	1975 Mar 5 12:54:00	Rocketsonde	-	-	Arcasonde	-	-	ASC	-	-	-	-	64	-	-



Launch

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Mission	FlightCode	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee_Km	Range_Km	Dest
1975-4288	2442477.09	1975 Mar 5 1408:00	Rocketsonde	-	-	Arcasonde	-	-	-	CC	LO43	-	-	59	-	-
1975-4289	2442477.13	1975 Mar 5 1502:59	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	WI	-	-	-	67	-	-
1975-4290	2442477.16	1975 Mar 5 1555:00	Rocketsonde	-	-	Starvue, JAV/DIIG-9	-	-	-	THU	-	-	-	65	-	-
1975-4291	2442477.26	1975 Mar 5 1812:59	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	PRIM	-	-	-	58	-	-
1975-4292	2442477.27	1975 Mar 5 1830:00	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	WS	-	-	-	65	-	-
1975-4293	2442477.29	1975 Mar 5 1845:00	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	WI	-	-	-	72	-	-
1975-4294	2442477.53	1975 Mar 6 0042:59	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	KHR	-	-	-	77	-	-
1975-4295	2442477.70	1975 Mar 6 0442:59	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	KHR	-	-	-	65	-	-
1975-4296	2442478.02	1975 Mar 6 1235:59	Rocketsonde	-	-	Arcasonde	-	-	-	ASC	-	-	-	59	-	-
1975-4297	2442478.23	1975 Mar 6 1730:00	Rocketsonde	-	-	Arcasonde	-	-	-	CC	LO43	-	-	59	-	-
1975-4298	2442478.32	1975 Mar 6 1934:59	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	PH	-	-	-	64	-	-
1975-4299	2442478.32	1975 Mar 6 1934:59	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	PRIM	-	-	-	66	-	-
1975-4281	2442478.52	1975 Mar 7 0025:59	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	KHR	-	-	-	64	-	-
1975-4283	2442479.08	1975 Mar 7 1400:00	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	WI	-	-	-	73	-	-
1975-4284	2442479.20	1975 Mar 7 1645:59	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	WI	-	-	-	75	-	-
1975-4285	2442479.23	1975 Mar 7 1726:59	Rocketsonde	-	-	Arcasonde	-	-	-	CC	LO43	-	-	58	-	-
1975-4286	2442479.30	1975 Mar 7 1915:59	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	PRIM	-	-	-	61	-	-
1975-4287	2442479.31	1975 Mar 7 1930:00	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	PH	-	-	-	65	-	-
1975-4288	2442479.33	1975 Mar 7 2000:00	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	WS	-	-	-	66	-	-
1975-4289	2442479.44	1975 Mar 7 2230:00	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	KAU	-	-	-	61	-	-
1975-4291	2442482.04	1975 Mar 10 1715:00	Rocketsonde	-	-	Arcasonde	-	-	-	ASC	LO43	-	-	66	-	-
1975-4292	2442482.22	1975 Mar 10 1302:59	Rocketsonde	-	-	Arcasonde	-	-	-	CC	-	-	-	51	-	-
1975-4293	2442482.25	1975 Mar 10 1758:00	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	PH	-	-	-	74	-	-
1975-4294	2442482.27	1975 Mar 10 1830:00	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	PRIM	-	-	-	60	-	-
1975-4295	2442482.35	1975 Mar 10 2030:00	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	WS	-	-	-	65	-	-
1975-4296	2442482.47	1975 Mar 10 2315:00	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	KAU	-	-	-	60	-	-
1975-4298	2442485.03	1975 Mar 11 1244:00	Rocketsonde	-	-	Arcasonde	-	-	-	ASC	LO43	-	-	67	-	-
1975-4299	2442485.23	1975 Mar 11 1730:00	Rocketsonde	-	-	Arcasonde	-	-	-	CC	-	-	-	62	-	-
1975-4300	2442485.36	1975 Mar 11 2100:00	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	PH	-	-	-	63	-	-
1975-4302	2442484.02	1975 Mar 12 1225:59	Rocketsonde	-	-	Arcasonde	-	-	-	ASC	-	-	-	64	-	-
1975-4303	2442484.13	1975 Mar 12 1502:59	Rocketsonde	-	-	Arcasonde	-	-	-	WI	-	-	-	64	-	-
1975-4304	2442484.23	1975 Mar 12 1730:00	Rocketsonde	-	-	Arcasonde	-	-	-	CC	LO43	-	-	60	-	-
1975-4305	2442484.31	1975 Mar 12 1924:59	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	PRIM	-	-	-	70	-	-
1975-4306	2442484.32	1975 Mar 12 1949:59	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	WS	-	-	-	69	-	-
1975-4307	2442484.35	1975 Mar 12 2014:00	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	PH	-	-	-	79	-	-
1975-4308	2442484.34	1975 Mar 12 2014:00	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	PH	-	-	-	76	-	-
1975-4311	2442485.22	1975 Mar 13 1229:00	Rocketsonde	-	-	Arcasonde	-	-	-	ASC	LO43	-	-	66	-	-
1975-4313	2442485.29	1975 Mar 13 1717:00	Rocketsonde	-	-	Arcasonde	-	-	-	CC	-	-	-	68	-	-
1975-4314	2442485.39	1975 Mar 14 1619:59	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	WI	-	-	-	57	-	-
1975-4315	2442486.18	1975 Mar 14 1914:59	Rocketsonde	-	-	Arcasonde	-	-	-	CC	LO43	-	-	50	-	-
1975-4316	2442486.25	1975 Mar 14 1914:59	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	PH	LO43	-	-	58	-	-
1975-4317	2442486.56	1975 Mar 14 1800:00	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	PH	-	-	-	58	-	-
1975-4318	2442486.56	1975 Mar 14 1847:59	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	PRIM	-	-	-	66	-	-
1975-4319	2442486.56	1975 Mar 14 1859:59	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	WS	-	-	-	66	-	-
1975-4320	2442486.56	1975 Mar 14 2159:59	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	WS	-	-	-	66	-	-
1975-4321	2442486.42	1975 Mar 14 1800:00	Rocketsonde	-	-	Arcasonde	-	-	-	CC	LO43	-	-	60	-	-
1975-4322	2442489.21	1975 Mar 17 1715:00	Rocketsonde	-	-	Arcasonde	-	-	-	CC	-	-	-	51	-	-
1975-4323	2442489.21	1975 Mar 17 1715:00	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	WI	-	-	-	61	-	-
1975-4324	2442489.23	1975 Mar 17 1734:00	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	PH	-	-	-	69	-	-
1975-4325	2442489.23	1975 Mar 17 1734:00	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	WI	-	-	-	71	-	-
1975-4326	2442489.45	1975 Mar 17 2028:59	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	PH	-	-	-	60	-	-
1975-4327	2442489.45	1975 Mar 17 2028:59	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	KAU	-	-	-	60	-	-
1975-4329	2442489.90	1975 Mar 18 0929:00	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	WI	-	-	-	60	-	-
1975-4330	2442489.90	1975 Mar 18 0929:00	Rocketsonde	-	-	Arcasonde	-	-	-	ASC	-	-	-	64	-	-
1975-4331	2442490.12	1975 Mar 18 1500:00	Rocketsonde	-	-	Arcasonde	-	-	-	CC	LO43	-	-	65	-	-
1975-4332	2442490.12	1975 Mar 18 1500:00	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	WS	-	-	-	73	-	-
1975-4333	2442490.19	1975 Mar 18 1630:00	Rocketsonde	-	-	Starvue, STS-	-	-	-	PH	-	-	-	62	-	-
1975-4334	2442490.20	1975 Mar 18 1630:00	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	PH	-	-	-	62	-	-
1975-4335	2442490.23	1975 Mar 18 1654:59	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	WS	-	-	-	72	-	-
1975-4336	2442490.24	1975 Mar 18 1730:00	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	WS	-	-	-	59	-	-
1975-4337	2442490.24	1975 Mar 18 1730:00	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	PRIM	-	-	-	60	-	-
1975-4338	2442490.44	1975 Mar 18 2227:59	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	KAU	-	-	-	60	-	-
1975-4339	2442491.07	1975 Mar 19 1344:59	Rocketsonde	-	-	Arcasonde	-	-	-	ASC	-	-	-	63	-	-
1975-4340	2442491.21	1975 Mar 19 1700:00	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	WS	-	-	-	65	-	-
1975-4341	2442491.21	1975 Mar 19 1707:00	Rocketsonde	-	-	Arcasonde	-	-	-	CC	LO43	-	-	63	-	-
1975-4342	2442491.29	1975 Mar 19 1856:00	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	PRIM	-	-	-	69	-	-
1975-4343	2442492.05	1975 Mar 20 1318:59	Rocketsonde	-	-	Arcasonde	-	-	-	ASC	-	-	-	67	-	-
1975-4344	2442492.15	1975 Mar 20 1536:59	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	PH	-	-	-	56	-	-
1975-4345	2442492.17	1975 Mar 20 1600:59	Rocketsonde	-	-	Starvue, STS-	-	-	-	WI	-	-	-	70	-	-
1975-4346	2442492.21	1975 Mar 20 1700:00	Rocketsonde	-	-	Arcasonde	-	-	-	WS	-	-	-	33	-	-
1975-4347	2442493.04	1975 Mar 21 1300:59	Rocketsonde	-	-	Arcasonde	-	-	-	ASC	LO43	-	-	66	-	-
1975-4348	2442493.07	1975 Mar 21 1344:59	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	CC	-	-	-	58	-	-
1975-4349	2442493.07	1975 Mar 21 1344:59	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	WS	-	-	-	70	-	-
1975-4350	2442493.26	1975 Mar 21 1719:00	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	WS	-	-	-	51	-	-
1975-4351	2442493.26	1975 Mar 21 1814:59	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	WI	-	-	-	77	-	-
1975-4352	2442493.38	1975 Mar 21 1814:59	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	WS	-	-	-	65	-	-
1975-4353	2442493.55	1975 Mar 21 2107:00	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	PH	-	-	-	74	-	-
1975-4354	2442496.10	1975 Mar 22 0114:59	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	KHR	-	-	-	66	-	-
1975-4355	2442496.10	1975 Mar 22 0114:59	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	WI	-	-	-	66	-	-
1975-4356	2442496.21	1975 Mar 24 1702:00	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	WI	-	-	-	71	-	-
1975-4357	2442496.23	1975 Mar 24 1734:00	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	PRIM	-	-	-	62	-	-
1975-4358	2442496.25	1975 Mar 24 1800:00	Rocketsonde	-	-	Arcasonde	-	-	-	CC	LO43	-	-	62	-	-
1975-4359	2442496.25	1975 Mar 24 1800:00	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	WS	-	-	-	66	-	-
1975-4360	2442496.26	1975 Mar 24 1814:59	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	WS	-	-	-	74	-	-
1975-4361	2442497.11	1975 Mar 25 0114:59	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	KHR	-	-	-	69	-	-
1975-4362	2442497.11	1975 Mar 25 1433:00	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	WI	-	-	-	69	-	-
1975-4363	2442497.24	1975 Mar 25 1745:00	Rocketsonde	-	-	Arcasonde	-	-	-	CC	LO43	-	-	59	-	-
1975-4364	2442497.24	1975 Mar 25 1745:00	Rocketsonde	-	-	Starvue, STS-	-	-	-	WS	-	-	-	73	-	-
1975-4365	2442497.42	1975 Mar 25 2159:59	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	KAU	-	-	-	59	-	-

Launch

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Mission	FlightCode	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee_Km	Range_Km	Dest
1975-W367	2442498.08	1975 Mar 26 14:02:00	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	WI	-	-	-	73	-	-
1975-W368	2442498.19	1975 Mar 26 16:38:59	Arcasonde	-	-	Arcasonde	-	-	-	CC	LO43	-	-	61	-	-
1975-W370	2442498.22	1975 Mar 26 17:18:00	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	WS	-	-	-	67	-	-
1975-W371	2442498.37	1975 Mar 26 20:51:00	Rocketsonde	-	-	Met. Sphere	-	-	-	PH	-	-	-	65	-	-
1975-W372	2442498.43	1975 Mar 26 22:13:59	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	KAU	-	-	-	58	-	-
1975-W373	2442498.55	1975 Mar 27 01:14:59	Rocketsonde	-	-	Arcasonde	-	-	-	KMR	-	-	-	74	-	-
1975-W374	2442499.03	1975 Mar 27 12:49:59	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	ASC	-	-	-	64	-	-
1975-W375	2442499.23	1975 Mar 27 17:30:00	Rocketsonde	-	-	Arcasonde	-	-	-	CC	LO43	-	-	61	-	-
1975-W377	2442499.31	1975 Mar 27 19:30:59	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	PH	-	-	-	60	-	-
1975-W378	2442499.53	1975 Mar 28 00:46:00	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	KMR	-	-	-	67	-	-
1975-W379	2442500.02	1975 Mar 28 12:33:00	Rocketsonde	-	-	Arcasonde	-	-	-	ASC	-	-	-	62	-	-
1975-W380	2442500.22	1975 Mar 28 17:15:00	Rocketsonde	-	-	Arcasonde	-	-	-	CC	LO43	-	-	68	-	-
1975-W381	2442500.22	1975 Mar 28 17:15:00	Rocketsonde	-	-	Starvue, STS-	-	-	-	WS	-	-	-	60	-	-
1975-W382	2442500.30	1975 Mar 28 19:14:59	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	WS	-	-	-	60	-	-
1975-W386	2442503.05	1975 Mar 31 13:18:00	Rocketsonde	-	-	Arcasonde	-	-	-	ASC	-	-	-	67	-	-
1975-W387	2442503.17	1975 Mar 31 15:59:59	Rocketsonde	-	-	Arcasonde	-	-	-	CC	LO43	-	-	60	-	-
1975-W388	2442503.21	1975 Mar 31 16:57:59	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	WI	-	-	-	54	-	-
1975-W389	2442503.25	1975 Mar 31 17:27:59	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	PH	-	-	-	63	-	-
1975-W390	2442503.25	1975 Mar 31 18:00:00	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	WS	-	-	-	68	-	-
1975-W391	2442503.41	1975 Mar 31 21:52:00	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	KAU	-	-	-	63	-	-
1975-W392	2442503.56	1975 Apr 1 01:28:59	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	KMR	-	-	-	76	-	-
1975-W393	2442504.04	1975 Apr 1 12:58:59	Rocketsonde	-	-	Arcasonde	-	-	-	ASC	-	-	-	65	-	-
1975-W394	2442504.16	1975 Apr 1 15:45:00	Rocketsonde	-	-	Arcasonde	-	-	-	CC	LO43	-	-	77	-	-
1975-W395	2442504.28	1975 Apr 1 18:43:59	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	PH	-	-	-	61	-	-
1975-W396	2442504.47	1975 Apr 1 23:15:59	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	KAU	-	-	-	64	-	-
1975-W397	2442504.53	1975 Apr 2 00:49:59	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	KMR	-	-	-	77	-	-
1975-W398	2442505.03	1975 Apr 2 12:41:00	Rocketsonde	-	-	Arcasonde	-	-	-	ASC	-	-	-	66	-	-
1975-W399	2442505.24	1975 Apr 2 17:51:00	Rocketsonde	-	-	Arcasonde	-	-	-	CC	LO43	-	-	75	-	-
1975-W400	2442505.31	1975 Apr 2 19:22:59	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	WI	-	-	-	73	-	-
1975-W401	2442505.31	1975 Apr 2 19:23:59	Rocketsonde	-	-	Met. Sphere	-	-	-	PH	-	-	-	89	-	-
1975-W402	2442505.46	1975 Apr 2 22:52:59	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	WS	-	-	-	66	-	-
1975-W403	2442505.52	1975 Apr 2 23:29:00	Rocketsonde	-	-	Met. Sphere	-	-	-	KAU	-	-	-	66	-	-
1975-W404	2442506.02	1975 Apr 3 00:52:00	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	KMR	-	-	-	70	-	-
1975-W405	2442506.15	1975 Apr 3 12:22:59	Rocketsonde	-	-	Arcasonde	-	-	-	ASC	-	-	-	68	-	-
1975-W406	2442506.23	1975 Apr 3 15:29:00	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	PH	-	-	-	61	-	-
1975-W407	2442506.32	1975 Apr 3 19:43:59	Rocketsonde	-	-	Arcasonde	-	-	-	CC	LO43	-	-	64	-	-
1975-W408	2442506.44	1975 Apr 3 22:30:00	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	WS	-	-	-	62	-	-
1975-W410	2442507.07	1975 Apr 4 13:53:59	Rocketsonde	-	-	Arcasonde	-	-	-	KAU	-	-	-	66	-	-
1975-W411	2442507.22	1975 Apr 4 17:14:00	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	PH	-	-	-	72	-	-
1975-W412	2442507.52	1975 Apr 5 13:51:59	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	KMR	-	-	-	65	-	-
1975-W413	2442507.55	1975 Apr 5 11:14:59	Rocketsonde	-	-	Arcasonde	-	-	-	ASC	-	-	-	68	-	-
1975-W414	2442510.03	1975 Apr 7 17:31:59	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	WI	-	-	-	59	-	-
1975-W415	2442510.22	1975 Apr 7 17:31:59	Rocketsonde	-	-	Arcasonde	-	-	-	CC	LO43	-	-	74	-	-
1975-W416	2442510.25	1975 Apr 7 18:01:00	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	WS	-	-	-	69	-	-
1975-W417	2442510.35	1975 Apr 7 23:01:00	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	KAU	-	-	-	66	-	-
1975-W418	2442510.55	1975 Apr 8 01:07:59	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	KMR	-	-	-	66	-	-
1975-W420	2442511.24	1975 Apr 8 17:43:59	Rocketsonde	-	-	Arcasonde	-	-	-	CC	LO43	-	-	72	-	-
1975-W423	2442511.45	1975 Apr 8 20:54:59	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	WI	-	-	-	72	-	-
1975-W424	2442511.77	1975 Apr 8 22:54:59	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	KAU	-	-	-	55	-	-
1975-W425	2442511.85	1975 Apr 9 13:44:59	Rocketsonde	-	-	Arcasonde	-	-	-	ASC	-	-	-	69	-	-
1975-W426	2442512.07	1975 Apr 9 14:03:59	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	CC	LO43	-	-	75	-	-
1975-W429	2442512.09	1975 Apr 9 16:35:59	Rocketsonde	-	-	Arcasonde	-	-	-	CC	LO43	-	-	69	-	-
1975-W430	2442512.19	1975 Apr 9 17:33:00	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	PRIM	-	-	-	58	-	-
1975-W431	2442512.23	1975 Apr 9 20:00:00	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	WI	-	-	-	69	-	-
1975-W432	2442512.33	1975 Apr 9 20:30:00	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	KAU	-	-	-	62	-	-
1975-W433	2442512.35	1975 Apr 9 20:30:00	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	WS	-	-	-	65	-	-
1975-W434	2442512.53	1975 Apr 10 00:36:59	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	KMR	-	-	-	75	-	-
1975-W437	2442513.03	1975 Apr 10 12:33:59	Rocketsonde	-	-	Arcasonde	-	-	-	ASC	-	-	-	66	-	-
1975-W438	2442513.18	1975 Apr 10 16:18:00	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	CC	LO43	-	-	77	-	-
1975-W439	2442513.40	1975 Apr 10 21:37:59	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	KAU	-	-	-	62	-	-
1975-W441	2442514.09	1975 Apr 11 14:08:00	Rocketsonde	-	-	Met. Sphere	-	-	-	WI	-	-	-	82	-	-
1975-W442	2442514.17	1975 Apr 11 15:57:59	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	PM	-	-	-	74	-	-
1975-W443	2442514.19	1975 Apr 11 16:29:00	Rocketsonde	-	-	Arcasonde	-	-	-	ASC	-	-	-	66	-	-
1975-W444	2442514.31	1975 Apr 11 16:30:00	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	CC	LO43	-	-	77	-	-
1975-W445	2442514.31	1975 Apr 11 19:19:59	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	PM	-	-	-	47	-	-
1975-W446	2442517.08	1975 Apr 14 14:00:00	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	WS	-	-	-	65	-	-
1975-W447	2442517.15	1975 Apr 14 15:29:00	Rocketsonde	-	-	Arcasonde	-	-	-	CC	LO43	-	-	65	-	-
1975-W448	2442517.19	1975 Apr 14 16:30:00	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	PM	-	-	-	64	-	-
1975-W449	2442517.24	1975 Apr 14 17:38:59	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	PRIM	-	-	-	70	-	-
1975-W449	2442517.30	1975 Apr 14 19:04:59	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	WS	-	-	-	66	-	-
1975-W449	2442517.39	1975 Apr 14 21:27:59	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	WI	-	-	-	63	-	-
1975-W450	2442518.01	1975 Apr 15 12:21:00	Rocketsonde	-	-	Arcasonde	-	-	-	KAU	-	-	-	59	-	-
1975-W451	2442518.05	1975 Apr 15 18:01:59	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	ASC	-	-	-	63	-	-
1975-W453	2442519.06	1975 Apr 16 13:30:00	Rocketsonde	-	-	Arcasonde	-	-	-	CC	LO43	-	-	66	-	-
1975-W454	2442519.12	1975 Apr 16 14:58:00	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	CC	-	-	-	68	-	-
1975-W455	2442519.16	1975 Apr 16 15:49:59	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	WI	-	-	-	67	-	-
1975-W456	2442519.22	1975 Apr 16 17:12:00	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	PM	-	-	-	72	-	-
1975-W457	2442519.31	1975 Apr 16 19:30:00	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	WS	-	-	-	52	-	-
1975-W458	2442519.38	1975 Apr 16 21:00:00	Rocketsonde	-	-	Met. Sphere	-	-	-	KAU	-	-	-	85	-	-
1975-W459	2442520.18	1975 Apr 17 16:21:59	Rocketsonde	-	-	Arcasonde	-	-	-	CC	LO43	-	-	65	-	-
1975-W460	2442520.23	1975 Apr 17 17:24:00	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	PRIM	-	-	-	72	-	-
1975-W460	2442520.37	1975 Apr 17 20:52:00	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	KAU	-	-	-	61	-	-
1975-W462	2442521.06	1975 Apr 18 13:30:00	Rocketsonde	-	-	Arcasonde	-	-	-	ASC	-	-	-	69	-	-



Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Mission	FlightCode	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee_Km	Range_Km	Dest
1975-4654	2442545.93	1975 May 13 10:14:59	Rocketsonde	-	-	Starute, Datasonde	-	-	WS	-	-	-	-	88	-	-
1975-4655	2442546.14	1975 May 13 15:26:59	Rocketsonde	-	-	Arcasonde	-	-	CC	LO43	-	-	-	63	-	-
1975-4656	2442546.19	1975 May 13 16:30:00	Rocketsonde	-	-	Starute, Datasonde	-	-	WS	-	-	-	-	88	-	-
1975-4657	2442546.43	1975 May 13 22:24:59	Rocketsonde	-	-	Starute, Datasonde	-	-	SHEM	-	-	-	-	60	-	-
1975-4658	2442547.07	1975 May 14 13:44:59	Rocketsonde	-	-	Arcasonde	-	-	ASC	-	-	-	-	64	-	-
1975-4659	2442547.07	1975 May 14 13:44:59	Rocketsonde	-	-	Arcasonde	-	-	CC	LO43	-	-	-	58	-	-
1975-4660	2442547.08	1975 May 14 14:00:00	Rocketsonde	-	-	Starute, Datasonde	-	-	WS	-	-	-	-	69	-	-
1975-4662	2442547.21	1975 May 14 17:00:00	Rocketsonde	-	-	Starute, Datasonde	-	-	WS	-	-	-	-	63	-	-
1975-4663	2442547.22	1975 May 14 17:15:00	Rocketsonde	-	-	Starute, Datasonde	-	-	PRIM	-	-	-	-	68	-	-
1975-4664	2442547.29	1975 May 14 18:55:00	Rocketsonde	-	-	Met. Sphere	-	-	PH	-	-	-	-	55	-	-
1975-4664	2442547.31	1975 May 14 19:22:59	Rocketsonde	-	-	Starute, Datasonde	-	-	PH	-	-	-	-	73	-	-
1975-4665	2442547.38	1975 May 14 21:00:00	Rocketsonde	-	-	Met. Sphere	-	-	KAU	-	-	-	-	83	-	-
1975-4665	2442547.39	1975 May 14 21:24:59	Rocketsonde	-	-	Starute, Datasonde	-	-	KAU	-	-	-	-	68	-	-
1975-4666	2442547.55	1975 May 15 01:14:59	Rocketsonde	-	-	Starute, Datasonde	-	-	KMR	-	-	-	-	76	-	-
1975-4667	2442548.73	1975 May 16 05:30:00	Rocketsonde	-	-	Starute, Datasonde	-	-	KMR	-	-	-	-	73	-	-
1975-4668	2442549.07	1975 May 16 13:44:59	Rocketsonde	-	-	Arcasonde	-	-	CC	LO43	-	-	-	62	-	-
1975-4668	2442549.08	1975 May 16 13:58:59	Rocketsonde	-	-	Starute, Datasonde	-	-	MI	-	-	-	-	60	-	-
1975-4670	2442549.10	1975 May 16 14:18:00	Rocketsonde	-	-	Arcasonde	-	-	ASC	-	-	-	-	61	-	-
1975-4671	2442549.15	1975 May 16 15:34:59	Rocketsonde	-	-	Starute, ANI/DHQ-9	-	-	THU	-	-	-	-	65	-	-
1975-4672	2442549.21	1975 May 16 17:00:00	Rocketsonde	-	-	Starute, Datasonde	-	-	WS	-	-	-	-	68	-	-
1975-4673	2442549.23	1975 May 16 17:27:59	Rocketsonde	-	-	Starute, Datasonde	-	-	PRIM	-	-	-	-	60	-	-
1975-4674	2442549.25	1975 May 16 18:04:59	Rocketsonde	-	-	Starute, Datasonde	-	-	PH	-	-	-	-	57	-	-
1975-4675	2442549.37	1975 May 16 20:55:00	Rocketsonde	-	-	Starute, Datasonde	-	-	KAU	-	-	-	-	61	-	-
1975-4676	2442552.10	1975 May 19 14:42:00	Rocketsonde	-	-	Starute, ANI/DHQ-9	-	-	MI	-	-	-	-	63	-	-
1975-4677	2442552.11	1975 May 19 14:42:00	Rocketsonde	-	-	Starute, Datasonde	-	-	THU	-	-	-	-	70	-	-
1975-4679	2442552.17	1975 May 19 15:59:59	Rocketsonde	-	-	Starute, Datasonde	-	-	PH	-	-	-	-	62	-	-
1975-4680	2442552.38	1975 May 19 21:00:00	Rocketsonde	-	-	Starute, Datasonde	-	-	KAU	-	-	-	-	59	-	-
1975-4681	2442552.43	1975 May 19 22:14:59	Rocketsonde	-	-	Starute, Datasonde	-	-	SHEM	-	-	-	-	63	-	-
1975-4683	2442552.55	1975 May 20 01:14:59	Rocketsonde	-	-	Starute, Datasonde	-	-	KMR	-	-	-	-	74	-	-
1975-4684	2442552.57	1975 May 20 11:10:00	Rocketsonde	-	-	Starute, Datasonde	-	-	KMR	-	-	-	-	67	-	-
1975-4685	2442555.21	1975 May 20 11:10:00	Rocketsonde	-	-	Arcasonde	-	-	ASC	-	-	-	-	68	-	-
1975-4686	2442554.07	1975 May 21 13:44:59	Rocketsonde	-	-	Starute, Datasonde	-	-	PRIM	-	-	-	-	65	-	-
1975-4687	2442554.09	1975 May 21 14:14:00	Rocketsonde	-	-	Arcasonde	-	-	CC	LO43	-	-	-	58	-	-
1975-4688	2442554.09	1975 May 21 14:15:59	Rocketsonde	-	-	Starute, Datasonde	-	-	MI	-	-	-	-	55	-	-
1975-4689	2442554.11	1975 May 21 14:41:00	Rocketsonde	-	-	Starute, ANI/DHQ-9	-	-	THU	-	-	-	-	82	-	-
1975-4691	2442554.13	1975 May 21 15:10:00	Rocketsonde	-	-	Arcasonde	-	-	CC	LO43	-	-	-	81	-	-
1975-4694	2442554.15	1975 May 21 15:30:00	Rocketsonde	-	-	Starute, Datasonde	-	-	MI	-	-	-	-	69	-	-
1975-4694	2442554.17	1975 May 21 15:30:00	Rocketsonde	-	-	Starute, Datasonde	-	-	PH	-	-	-	-	57	-	-
1975-4695	2442554.33	1975 May 21 15:59:59	Rocketsonde	-	-	Starute, Datasonde	-	-	WS	-	-	-	-	73	-	-
1975-4696	2442554.43	1975 May 21 19:24:59	Rocketsonde	-	-	Starute, Datasonde	-	-	SHEM	-	-	-	-	66	-	-
1975-4697	2442554.56	1975 May 22 01:24:59	Rocketsonde	-	-	Starute, Datasonde	-	-	KMR	-	-	-	-	74	-	-
1975-4698	2442555.52	1975 May 23 07:46:59	Rocketsonde	-	-	Starute, Datasonde	-	-	KMR	-	-	-	-	70	-	-
1975-4699	2442555.57	1975 May 23 11:46:59	Rocketsonde	-	-	Arcasonde	-	-	CC	LO43	-	-	-	78	-	-
1975-4699	2442556.07	1975 May 23 11:46:59	Rocketsonde	-	-	Starute, Datasonde	-	-	CC	-	-	-	-	68	-	-
1975-4699	2442556.07	1975 May 23 11:46:59	Rocketsonde	-	-	Starute, ANI/DHQ-9	-	-	THU	-	-	-	-	66	-	-
1975-4699	2442556.13	1975 May 23 15:10:00	Rocketsonde	-	-	Starute, Datasonde	-	-	MI	-	-	-	-	69	-	-
1975-4699	2442556.13	1975 May 23 15:10:00	Rocketsonde	-	-	Starute, Datasonde	-	-	THU	-	-	-	-	72	-	-
1975-4699	2442556.25	1975 May 23 20:27:59	Rocketsonde	-	-	Starute, Datasonde	-	-	KAU	-	-	-	-	69	-	-
1975-4699	2442556.26	1975 May 23 20:27:59	Rocketsonde	-	-	Starute, Datasonde	-	-	PRIM	-	-	-	-	59	-	-
1975-4699	2442556.33	1975 May 23 22:14:59	Rocketsonde	-	-	Starute, Datasonde	-	-	SHEM	-	-	-	-	73	-	-
1975-4699	2442556.33	1975 May 23 22:14:59	Rocketsonde	-	-	Starute, Datasonde	-	-	PRIM	-	-	-	-	53	-	-
1975-4699	2442556.45	1975 May 26 15:30:00	Rocketsonde	-	-	Starute, Datasonde	-	-	SHEM	-	-	-	-	74	-	-
1975-4699	2442556.45	1975 May 26 15:30:00	Rocketsonde	-	-	Starute, Datasonde	-	-	CC	-	-	-	-	64	-	-
1975-4699	2442556.50	1975 May 27 13:44:59	Rocketsonde	-	-	Arcasonde	-	-	CC	LO43	-	-	-	57	-	-
1975-4699	2442556.57	1975 May 27 19:20:00	Rocketsonde	-	-	Starute, Datasonde	-	-	WS	-	-	-	-	68	-	-
1975-4699	2442556.57	1975 May 27 19:20:00	Rocketsonde	-	-	Starute, Datasonde	-	-	KAU	-	-	-	-	81	-	-
1975-4699	2442556.57	1975 May 27 20:17:00	Rocketsonde	-	-	Starute, Datasonde	-	-	KMR	-	-	-	-	74	-	-
1975-4699	2442556.59	1975 May 27 20:17:00	Rocketsonde	-	-	Starute, Datasonde	-	-	WS	-	-	-	-	67	-	-
1975-4699	2442556.69	1975 May 28 08:30:00	Rocketsonde	-	-	Starute, Datasonde	-	-	ASC	-	-	-	-	62	-	-
1975-4699	2442556.85	1975 May 28 09:20:00	Rocketsonde	-	-	Starute, Datasonde	-	-	ASC	-	-	-	-	64	-	-
1975-4699	2442556.89	1975 May 28 10:26:59	Rocketsonde	-	-	Starute, Datasonde	-	-	WS	-	-	-	-	64	-	-
1975-4699	2442556.94	1975 May 28 15:24:59	Rocketsonde	-	-	Starute, Datasonde	-	-	PRIM	-	-	-	-	63	-	-
1975-4699	2442561.14	1975 May 28 16:40:00	Rocketsonde	-	-	Starute, Datasonde	-	-	WS	-	-	-	-	71	-	-
1975-4699	2442561.19	1975 May 28 16:40:00	Rocketsonde	-	-	Starute, Datasonde	-	-	MI	-	-	-	-	70	-	-
1975-4699	2442561.24	1975 May 28 17:46:00	Rocketsonde	-	-	Starute, Datasonde	-	-	PH	-	-	-	-	73	-	-
1975-4699	2442561.25	1975 May 28 17:53:00	Rocketsonde	-	-	Starute, Datasonde	-	-	MI	-	-	-	-	70	-	-
1975-4699	2442561.40	1975 May 28 21:00:00	Rocketsonde	-	-	Starute, Datasonde	-	-	KAU	-	-	-	-	75	-	-
1975-4699	2442561.42	1975 May 28 22:07:59	Rocketsonde	-	-	Starute, Datasonde	-	-	KAU	-	-	-	-	64	-	-
1975-4699	2442561.43	1975 May 29 01:14:59	Rocketsonde	-	-	Starute, Datasonde	-	-	SHEM	-	-	-	-	72	-	-
1975-4699	2442562.07	1975 May 29 13:44:59	Rocketsonde	-	-	Arcasonde	-	-	ARC	-	-	-	-	62	-	-
1975-4699	2442562.07	1975 May 29 20:53:00	Rocketsonde	-	-	Starute, Datasonde	-	-	KMR	-	-	-	-	75	-	-
1975-4699	2442562.37	1975 May 29 21:40:00	Rocketsonde	-	-	Starute, Datasonde	-	-	KMR	-	-	-	-	62	-	-
1975-4699	2442562.40	1975 May 29 21:40:00	Rocketsonde	-	-	Starute, Datasonde	-	-	KMR	-	-	-	-	75	-	-
1975-4699	2442563.07	1975 May 30 13:44:59	Rocketsonde	-	-	Arcasonde	-	-	ASC	LO43	-	-	-	66	-	-
1975-4699	2442563.10	1975 May 30 14:30:00	Rocketsonde	-	-	Starute, Datasonde	-	-	MI	-	-	-	-	81	-	-
1975-4699	2442563.11	1975 May 30 14:37:59	Rocketsonde	-	-	Starute, Datasonde	-	-	CC	-	-	-	-	61	-	-
1975-4699	2442563.15	1975 May 30 15:30:00	Rocketsonde	-	-	Starute, Datasonde	-	-	PRIM	-	-	-	-	56	-	-
1975-4699	2442563.24	1975 May 30 17:45:00	Rocketsonde	-	-	Starute, Datasonde	-	-	WS	-	-	-	-	64	-	-
1975-4699	2442563.33	1975 May 30 19:58:59	Rocketsonde	-	-	Starute, Datasonde	-	-	PH	-	-	-	-	59	-	-
1975-4699	2442563.40	1975 May 30 21:33:59	Rocketsonde	-	-	Starute, Datasonde	-	-	SHEM	-	-	-	-	52	-	-
1975-4699	2442566.17	1975 Jun 2 16:00:59	Rocketsonde	-	-	Starute, Datasonde	-	-	PH	-	-	-	-	62	-	-
1975-4699	2442566.17	1975 Jun 2 16:34:59	Rocketsonde	-	-	Starute, ANI/DHQ-9	-	-	THU	-	-	-	-	70	-	-
1975-4699	2442566.23	1975 Jun 2 17:25:00	Rocketsonde	-	-	Starute, Datasonde	-	-	PRIM	-	-	-	-	59	-	-
1975-4699	2442566.33	1975 Jun 2 19:53:59	Rocketsonde	-	-	Starute, Datasonde	-	-	KAU	-	-	-	-	68	-	-
1975-4699	2442566.55	1975 Jun 3 01:14:59	Rocketsonde	-	-	Starute, Datasonde	-	-	KMR	-	-	-	-	54	-	-
1975-4699	2442567.04	1975 Jun 3 12:59:59	Rocketsonde	-	-	Starute, Datasonde	-	-	ARC	-	-	-	-	67	-	-
1975-4699	2442567.11	1975 Jun 3 14:38:59	Rocketsonde	-	-	Arcasonde	-	-	CC	LO43	-	-	-	69	-	-
1975-4699	2442567.21	1975 Jun 3 17:04:59	Rocketsonde	-	-	Starute, Datasonde	-	-	WS	-	-	-	-	66	-	-
1975-4699	2442568.07	1975														

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Mission	FlightCode	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee_Km	Range_Km	Dest
1975-4664	2442568.13	1975 Jun 4 15:11:59	Rocketsonde	-	-	Starvue, Datasonde	-	-	MI	-	-	-	-	64	-	-
1975-4665	2442568.23	1975 Jun 4 17:30:00	Rocketsonde	-	-	Starvue, Datasonde	-	-	PRIM	-	-	-	-	66	-	-
1975-4666	2442568.24	1975 Jun 4 17:45:00	Rocketsonde	-	-	Starvue, Datasonde	-	-	WS	-	-	-	-	67	-	-
1975-4667	2442568.33	1975 Jun 4 20:00:00	Rocketsonde	-	-	Starvue, Datasonde	-	-	KAU	-	-	-	-	60	-	-
1975-4668	2442568.54	1975 Jun 5 00:59:59	Rocketsonde	-	-	Starvue, Datasonde	-	-	KMR	-	-	-	-	66	-	-
1975-4669	2442569.13	1975 Jun 5 17:00:00	Rocketsonde	-	-	Arcasonde	-	-	CC	LO43	-	-	-	66	-	-
1975-4670	2442569.21	1975 Jun 5 17:00:00	Rocketsonde	-	-	Starvue, Datasonde	-	-	WS	-	-	-	-	67	-	-
1975-4671	2442569.31	1975 Jun 5 19:19:59	Rocketsonde	-	-	Starvue, Datasonde	-	-	WS	-	-	-	-	66	-	-
1975-4672	2442569.38	1975 Jun 5 21:11:59	Rocketsonde	-	-	Starvue, Datasonde	-	-	WS	-	-	-	-	66	-	-
1975-4673	2442569.42	1975 Jun 5 22:02:59	Rocketsonde	-	-	Starvue, Datasonde	-	-	SHM	-	-	-	-	65	-	-
1975-4674	2442569.55	1975 Jun 6 01:14:59	Rocketsonde	-	-	Arcasonde	-	-	KMR	-	-	-	-	62	-	-
1975-4675	2442570.07	1975 Jun 6 13:44:59	Rocketsonde	-	-	Starvue, Datasonde	-	-	MI	-	-	-	-	63	-	-
1975-4676	2442570.10	1975 Jun 6 14:25:00	Rocketsonde	-	-	Starvue, Datasonde	-	-	PH	-	-	-	-	63	-	-
1975-4677	2442570.19	1975 Jun 6 16:27:59	Rocketsonde	-	-	Starvue, Datasonde	-	-	WS	-	-	-	-	68	-	-
1975-4678	2442570.21	1975 Jun 6 17:00:00	Rocketsonde	-	-	Starvue, Datasonde	-	-	KAU	-	-	-	-	67	-	-
1975-4679	2442570.38	1975 Jun 6 21:00:00	Rocketsonde	-	-	Starvue, Datasonde	-	-	SHM	-	-	-	-	61	-	-
1975-4680	2442570.39	1975 Jun 6 21:00:00	Rocketsonde	-	-	Starvue, Datasonde	-	-	KAU	LO43	-	-	-	58	-	-
1975-4681	2442573.14	1975 Jun 9 15:19:00	Rocketsonde	-	-	Starvue, AN/DWQ-9	-	-	THU	-	-	-	-	64	-	-
1975-4682	2442573.15	1975 Jun 9 15:30:00	Rocketsonde	-	-	Starvue, Datasonde	-	-	PH	-	-	-	-	61	-	-
1975-4683	2442573.21	1975 Jun 9 16:57:59	Rocketsonde	-	-	Starvue, Datasonde	-	-	WS	-	-	-	-	67	-	-
1975-4684	2442573.22	1975 Jun 9 17:15:00	Rocketsonde	-	-	Starvue, Datasonde	-	-	MI	-	-	-	-	62	-	-
1975-4685	2442573.23	1975 Jun 9 17:29:00	Rocketsonde	-	-	Starvue, Datasonde	-	-	KAU	-	-	-	-	59	-	-
1975-4686	2442573.33	1975 Jun 11 08:52:00	Rocketsonde	-	-	Starvue, Datasonde	-	-	WS	-	-	-	-	66	-	-
1975-4687	2442574.57	1975 Jun 11 09:52:00	Rocketsonde	-	-	Starvue, Datasonde	-	-	KMR	-	-	-	-	74	-	-
1975-4688	2442574.91	1975 Jun 11 10:19:59	Rocketsonde	-	-	Starvue, Datasonde	-	-	WS	-	-	-	-	69	-	-
1975-4689	2442575.10	1975 Jun 11 14:19:00	Rocketsonde	-	-	Arcasonde	-	-	WS	LO43	-	-	-	66	-	-
1975-4690	2442575.10	1975 Jun 11 14:30:00	Rocketsonde	-	-	Starvue, Datasonde	-	-	WS	-	-	-	-	66	-	-
1975-4691	2442575.13	1975 Jun 11 15:07:00	Rocketsonde	-	-	Starvue, Datasonde	-	-	MI	-	-	-	-	67	-	-
1975-4692	2442575.36	1975 Jun 11 21:00:00	Rocketsonde	-	-	Starvue, Datasonde	-	-	SHM	-	-	-	-	60	-	-
1975-4693	2442575.57	1975 Jun 12 01:47:59	Rocketsonde	-	-	Starvue, Datasonde	-	-	KMR	-	-	-	-	74	-	-
1975-4694	2442577.07	1975 Jun 13 13:44:59	Rocketsonde	-	-	Arcasonde	-	-	ASC	-	-	-	-	62	-	-
1975-4695	2442577.08	1975 Jun 13 13:53:59	Rocketsonde	-	-	Starvue, Datasonde	-	-	MI	-	-	-	-	61	-	-
1975-4696	2442577.15	1975 Jun 13 15:30:00	Rocketsonde	-	-	Arcasonde	-	-	CC	LO43	-	-	-	67	-	-
1975-4700	2442577.52	1975 Jun 13 19:44:59	Rocketsonde	-	-	Starvue, Datasonde	-	-	PH	-	-	-	-	60	-	-
1975-4701	2442577.56	1975 Jun 13 21:00:00	Rocketsonde	-	-	Starvue, Datasonde	-	-	KAU	-	-	-	-	60	-	-
1975-4702	2442579.90	1975 Jun 16 09:51:00	Rocketsonde	-	-	Arcasonde	-	-	WS	-	-	-	-	67	-	-
1975-4703	2442581.15	1975 Jun 17 15:30:00	Rocketsonde	-	-	Starvue, Datasonde	-	-	KMR	-	-	-	-	76	-	-
1975-4704	2442581.41	1975 Jun 17 21:00:00	Rocketsonde	-	-	Starvue, Datasonde	-	-	KAU	-	-	-	-	69	-	-
1975-4705	2442581.91	1975 Jun 18 03:07:59	Rocketsonde	-	-	Arcasonde	-	-	ASC	LO43	-	-	-	66	-	-
1975-4706	2442581.99	1975 Jun 18 09:25:59	Rocketsonde	-	-	Starvue, Datasonde	-	-	ASC	-	-	-	-	62	-	-
1975-4707	2442582.09	1975 Jun 18 13:07:59	Rocketsonde	-	-	Starvue, Datasonde	-	-	MI	-	-	-	-	64	-	-
1975-4708	2442582.90	1975 Jun 18 15:44:59	Rocketsonde	-	-	Starvue, Datasonde	-	-	THU	-	-	-	-	64	-	-
1975-4710	2442585.16	1975 Jun 18 16:19:59	Rocketsonde	-	-	Starvue, Datasonde	-	-	MI	-	-	-	-	64	-	-
1975-4711	2442585.29	1975 Jun 18 19:03:59	Rocketsonde	-	-	Starvue, Datasonde	-	-	WS	-	-	-	-	76	-	-
1975-4712	2442585.31	1975 Jun 18 20:25:00	Rocketsonde	-	-	Starvue, Datasonde	-	-	WS	-	-	-	-	66	-	-
1975-4713	2442585.31	1975 Jun 18 20:25:00	Rocketsonde	-	-	Starvue, Datasonde	-	-	SHM	-	-	-	-	66	-	-
1975-4714	2442585.38	1975 Jun 18 21:04:59	Rocketsonde	-	-	Starvue, Datasonde	-	-	WS	-	-	-	-	66	-	-
1975-4715	2442585.55	1975 Jun 19 00:14:59	Rocketsonde	-	-	Starvue, Datasonde	-	-	KMR	-	-	-	-	66	-	-
1975-4716	2442585.59	1975 Jun 19 00:14:59	Rocketsonde	-	-	Starvue, Datasonde	-	-	KAU	-	-	-	-	72	-	-
1975-4717	2442585.89	1975 Jun 20 09:01:00	Rocketsonde	-	-	Arcasonde	-	-	ASC	-	-	-	-	61	-	-
1975-4718	2442584.04	1975 Jun 20 13:04:59	Rocketsonde	-	-	Starvue, Datasonde	-	-	ASC	-	-	-	-	61	-	-
1975-4719	2442584.07	1975 Jun 20 13:04:59	Rocketsonde	-	-	Arcasonde	-	-	CC	LO43	-	-	-	59	-	-
1975-4720	2442584.14	1975 Jun 20 15:00:00	Rocketsonde	-	-	Starvue, AN/DWQ-9	-	-	THU	-	-	-	-	64	-	-
1975-4721	2442584.28	1975 Jun 20 18:45:00	Rocketsonde	-	-	Starvue, Datasonde	-	-	WS	-	-	-	-	69	-	-
1975-4722	2442584.33	1975 Jun 20 19:56:59	Rocketsonde	-	-	Starvue, Datasonde	-	-	PH	-	-	-	-	86	-	-
1975-4723	2442584.38	1975 Jun 20 21:00:00	Rocketsonde	-	-	Starvue, Datasonde	-	-	KAU	-	-	-	-	97	-	-
1975-4724	2442584.38	1975 Jun 20 21:00:00	Rocketsonde	-	-	Starvue, Datasonde	-	-	SHM	-	-	-	-	65	-	-
1975-4725	2442584.38	1975 Jun 20 21:00:00	Rocketsonde	-	-	Starvue, Datasonde	-	-	SHM	-	-	-	-	65	-	-
1975-4726	2442584.56	1975 Jun 21 01:23:59	Rocketsonde	-	-	Starvue, Datasonde	-	-	KAU	-	-	-	-	59	-	-
1975-4727	2442587.07	1975 Jun 23 13:44:59	Rocketsonde	-	-	Arcasonde	-	-	ASC	-	-	-	-	76	-	-
1975-4728	2442587.13	1975 Jun 23 15:04:59	Rocketsonde	-	-	Starvue, Datasonde	-	-	PH	-	-	-	-	60	-	-
1975-4729	2442587.15	1975 Jun 23 15:04:59	Rocketsonde	-	-	Starvue, AN/DWQ-9	-	-	THU	-	-	-	-	64	-	-
1975-4730	2442587.25	1975 Jun 23 20:20:00	Rocketsonde	-	-	Starvue, Datasonde	-	-	KAU	-	-	-	-	64	-	-
1975-4731	2442587.35	1975 Jun 23 22:21:59	Rocketsonde	-	-	Starvue, Datasonde	-	-	KMR	-	-	-	-	69	-	-
1975-4732	2442588.04	1975 Jun 24 12:53:00	Rocketsonde	-	-	Arcasonde	-	-	CC	LO43	-	-	-	41	-	-
1975-4733	2442588.11	1975 Jun 24 14:37:59	Rocketsonde	-	-	Starvue, Datasonde	-	-	ASC	-	-	-	-	59	-	-
1975-4734	2442588.20	1975 Jun 24 16:41:00	Rocketsonde	-	-	Starvue, Datasonde	-	-	WS	-	-	-	-	63	-	-
1975-4735	2442588.42	1975 Jun 24 21:59:59	Rocketsonde	-	-	Starvue, Datasonde	-	-	SHM	-	-	-	-	67	-	-
1975-4736	2442588.45	1975 Jun 25 08:30:00	Rocketsonde	-	-	Starvue, Datasonde	-	-	WS	-	-	-	-	63	-	-
1975-4737	2442588.94	1975 Jun 25 10:30:00	Rocketsonde	-	-	Starvue, Datasonde	-	-	WS	-	-	-	-	57	-	-
1975-4738	2442589.06	1975 Jun 25 13:30:00	Rocketsonde	-	-	Arcasonde	-	-	ASC	LO43	-	-	-	60	-	-
1975-4739	2442589.12	1975 Jun 25 13:30:00	Rocketsonde	-	-	Starvue, Datasonde	-	-	CC	-	-	-	-	59	-	-
1975-4740	2442589.12	1975 Jun 25 14:57:00	Rocketsonde	-	-	Starvue, Datasonde	-	-	MI	-	-	-	-	68	-	-
1975-4741	2442589.20	1975 Jun 25 16:52:59	Rocketsonde	-	-	Starvue, Datasonde	-	-	THU	-	-	-	-	62	-	-
1975-4742	2442589.32	1975 Jun 25 19:35:59	Rocketsonde	-	-	Starvue, Datasonde	-	-	PM	-	-	-	-	67	-	-
1975-4743	2442589.33	1975 Jun 25 20:00:00	Rocketsonde	-	-	Starvue, Datasonde	-	-	WS	-	-	-	-	67	-	-
1975-4744	2442589.36	1975 Jun 25 20:04:00	Rocketsonde	-	-	Starvue, Datasonde	-	-	MI	-	-	-	-	87	-	-
1975-4745	2442589.38	1975 Jun 25 21:04:59	Rocketsonde	-	-	Starvue, Datasonde	-	-	PH	-	-	-	-	76	-	-
1975-4746	2442589.55	1975 Jun 26 01:14:59	Rocketsonde	-	-	Starvue, Datasonde	-	-	KAU	-	-	-	-	68	-	-
1975-4747	2442590.08	1975 Jun 26 14:00:00	Rocketsonde	-	-	Starvue, Datasonde	-	-	SHM	-	-	-	-	75	-	-
1975-4748	2442591.07	1975 Jun 27 13:44:59	Rocketsonde	-	-	Arcasonde	-	-	KMR	-	-	-	-	57	-	-
1975-4749	2442591.16	1975 Jun 27 15:45:00	Rocketsonde	-	-	Starvue, AN/DWQ-9	-	-	ASC	LO43	-	-	-	62	-	-
1975-4750	2442591.18	1975 Jun 27 16:13:59	Rocketsonde	-	-	Starvue, Datasonde	-	-	THU	-	-	-	-	70	-	-
1975-4751	2442591.36	1975 Jun 27 20:43:00	Rocketsonde	-	-	Starvue, Datasonde	-	-	PM	-	-	-	-	57	-	-

Launch

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Mission	FlightCode	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee_Km	Range_Km	Dest
1975-W748	2442591.55	1975 Jun 28 01:14:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	KMR	-	-	-	75	-	-
1975-W755	2442594.07	1975 Jun 30 13:44:59	Rocketsonde	-	-	Arcasode	-	-	-	CC	-	-	-	64	-	-
1975-W756	2442594.07	1975 Jun 30 13:44:59	Rocketsonde	-	-	Arcasode	-	-	-	CC	LO43	-	-	57	-	-
1975-W757	2442594.23	1975 Jun 30 17:00:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	WI	-	-	-	58	-	-
1975-W758	2442594.26	1975 Jun 30 18:15:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PH	-	-	-	58	-	-
1975-W759	2442594.55	1975 Jul 1 01:14:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	KMR	-	-	-	77	-	-
1975-W760	2442595.07	1975 Jul 1 13:44:59	Rocketsonde	-	-	Arcasode	-	-	-	ASC	-	-	-	71	-	-
1975-W761	2442596.07	1975 Jul 2 14:20:00	Rocketsonde	-	-	Arcasode	-	-	-	CC	LO43	-	-	55	-	-
1975-W762	2442596.24	1975 Jul 2 17:38:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	WI	-	-	-	47	-	-
1975-W763	2442596.24	1975 Jul 2 17:38:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	WI	-	-	-	55	-	-
1975-W764	2442596.32	1975 Jul 2 19:35:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PH	-	-	-	67	-	-
1975-W765	2442596.38	1975 Jul 2 19:35:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PH	-	-	-	87	-	-
1975-W766	2442596.38	1975 Jul 2 21:00:00	Rocketsonde	-	-	Met. Sphere	-	-	-	KAU	-	-	-	59	-	-
1975-W767	2442596.38	1975 Jul 2 21:12:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	KMR	-	-	-	76	-	-
1975-W768	2442596.57	1975 Jul 3 01:37:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	WS	-	-	-	66	-	-
1975-W769	2442597.33	1975 Jul 3 09:55:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	ASC	-	-	-	66	-	-
1975-W770	2442600.90	1975 Jul 7 09:55:59	Rocketsonde	-	-	Arcasode	-	-	-	CC	LO43	-	-	60	-	-
1975-W771	2442601.10	1975 Jul 7 14:18:00	Rocketsonde	-	-	Arcasode	-	-	-	CC	-	-	-	73	-	-
1975-W772	2442601.38	1975 Jul 7 14:20:00	Rocketsonde	-	-	Arcasode	-	-	-	AIT	-	-	-	71	-	-
1975-W773	2442601.48	1975 Jul 7 21:00:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	KAU	-	-	-	58	-	-
1975-W774	2442601.53	1975 Jul 7 23:00:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	SHEM	-	-	-	66	-	-
1975-W775	2442601.53	1975 Jul 8 00:38:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	KMR	-	-	-	75	-	-
1975-W776	2442602.15	1975 Jul 8 15:00:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	WS	-	-	-	68	-	-
1975-W777	2442602.90	1975 Jul 9 09:31:00	Rocketsonde	-	-	Arcasode	-	-	-	ASC	-	-	-	65	-	-
1975-W778	2442603.06	1975 Jul 9 13:04:59	Rocketsonde	-	-	Arcasode	-	-	-	AIT	-	-	-	60	-	-
1975-W780	2442603.23	1975 Jul 9 17:00:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	CC	LO43	-	-	63	-	-
1975-W781	2442603.29	1975 Jul 9 17:00:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PH	-	-	-	61	-	-
1975-W782	2442603.51	1975 Jul 9 19:00:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	WI	-	-	-	67	-	-
1975-W783	2442603.58	1975 Jul 10 01:57:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	WS	-	-	-	60	-	-
1975-W784	2442604.35	1975 Jul 10 19:36:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	KMR	-	-	-	60	-	-
1975-W785	2442604.51	1975 Jul 11 00:10:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	KAU	-	-	-	77	-	-
1975-W786	2442605.01	1975 Jul 11 12:11:00	Rocketsonde	-	-	Arcasode	-	-	-	ASC	-	-	-	64	-	-
1975-W787	2442605.10	1975 Jul 11 14:25:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	WI	-	-	-	68	-	-
1975-W788	2442605.17	1975 Jul 11 15:59:59	Rocketsonde	-	-	Arcasode	-	-	-	AIT	-	-	-	68	-	-
1975-W789	2442605.29	1975 Jul 11 18:59:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	WS	-	-	-	65	-	-
1975-W790	2442605.30	1975 Jul 11 19:14:59	Rocketsonde	-	-	Met. Sphere	-	-	-	PH	-	-	-	58	-	-
1975-W791	2442605.32	1975 Jul 11 19:42:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	KAU	-	-	-	59	-	-
1975-W792	2442605.40	1975 Jul 11 21:40:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	KAU	-	-	-	59	-	-
1975-W793	2442605.15	1975 Jul 12 15:30:00	Rocketsonde	-	-	Starute, AN/DWG-9	-	-	-	THU	LO43	-	-	65	-	-
1975-W794	2442607.04	1975 Jul 13 12:59:59	Rocketsonde	-	-	Arcasode	-	-	-	CC	LO43	-	-	62	-	-
1975-W795	2442608.09	1975 Jul 14 15:04:59	Rocketsonde	-	-	Arcasode	-	-	-	CC	-	-	-	65	-	-
1975-W796	2442608.10	1975 Jul 14 15:04:59	Rocketsonde	-	-	Arcasode	-	-	-	THU	-	-	-	70	-	-
1975-W797	2442608.10	1975 Jul 14 15:04:59	Rocketsonde	-	-	Starute, AN/DWG-9	-	-	-	WS	-	-	-	66	-	-
1975-W798	2442608.10	1975 Jul 14 15:04:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	WS	-	-	-	60	-	-
1975-W799	2442608.10	1975 Jul 14 15:04:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	SHEM	-	-	-	60	-	-
1975-W800	2442608.10	1975 Jul 14 15:04:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	KMR	-	-	-	59	-	-
1975-W801	2442608.10	1975 Jul 14 15:04:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	KMR	-	-	-	74	-	-
1975-W802	2442608.10	1975 Jul 14 15:04:59	Rocketsonde	-	-	Arcasode	-	-	-	ASC	-	-	-	65	-	-
1975-W803	2442609.12	1975 Jul 15 15:59:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PH	-	-	-	87	-	-
1975-W804	2442609.12	1975 Jul 15 15:59:59	Rocketsonde	-	-	Met. Sphere	-	-	-	CC	LO43	-	-	61	-	-
1975-W805	2442609.28	1975 Jul 15 21:04:59	Rocketsonde	-	-	Arcasode	-	-	-	ASC	-	-	-	68	-	-
1975-W806	2442610.10	1975 Jul 16 14:20:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	ASC	-	-	-	64	-	-
1975-W807	2442610.10	1975 Jul 16 14:20:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	VI	-	-	-	54	-	-
1975-W808	2442610.15	1975 Jul 16 15:40:00	Rocketsonde	-	-	Arcasode	-	-	-	CC	LO43	-	-	72	-	-
1975-W809	2442610.21	1975 Jul 16 19:30:00	Rocketsonde	-	-	Starute, AN/DWG-9	-	-	-	THU	-	-	-	51	-	-
1975-W810	2442610.48	1975 Jul 16 23:30:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	WS	-	-	-	68	-	-
1975-W811	2442611.53	1975 Jul 17 00:40:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	KMR	-	-	-	73	-	-
1975-W812	2442611.53	1975 Jul 17 00:40:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	SHEM	-	-	-	62	-	-
1975-W813	2442611.55	1975 Jul 17 06:31:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PH	-	-	-	56	-	-
1975-W814	2442612.10	1975 Jul 18 01:14:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	KMR	-	-	-	74	-	-
1975-W815	2442612.17	1975 Jul 18 14:31:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	VI	-	-	-	68	-	-
1975-W816	2442612.31	1975 Jul 18 15:59:59	Rocketsonde	-	-	Arcasode	-	-	-	CC	LO43	-	-	63	-	-
1975-W817	2442612.36	1975 Jul 18 20:42:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	WS	-	-	-	69	-	-
1975-W818	2442615.13	1975 Jul 21 15:10:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	KAU	-	-	-	59	-	-
1975-W819	2442615.15	1975 Jul 21 15:10:00	Rocketsonde	-	-	Starute, AN/DWG-9	-	-	-	THU	-	-	-	61	-	-
1975-W820	2442615.25	1975 Jul 21 15:30:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	CC	LO43	-	-	62	-	-
1975-W821	2442615.46	1975 Jul 21 18:01:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	WS	-	-	-	59	-	-
1975-W822	2442615.46	1975 Jul 21 23:00:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PM	-	-	-	87	-	-
1975-W823	2442616.39	1975 Jul 22 21:21:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	KAU	-	-	-	75	-	-
1975-W824	2442616.57	1975 Jul 23 01:40:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	KAU	-	-	-	58	-	-
1975-W825	2442617.17	1975 Jul 23 01:40:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	KMR	-	-	-	75	-	-
1975-W826	2442617.23	1975 Jul 23 16:11:59	Rocketsonde	-	-	Starute, AN/DWG-9	-	-	-	THU	-	-	-	73	-	-
1975-W827	2442617.24	1975 Jul 23 17:30:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	WS	-	-	-	66	-	-
1975-W828	2442617.26	1975 Jul 23 17:40:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PM	-	-	-	73	-	-
1975-W829	2442617.30	1975 Jul 23 18:21:00	Rocketsonde	-	-	Arcasode	-	-	-	CC	LO43	-	-	70	-	-
1975-W830	2442617.70	1975 Jul 24 04:43:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	CC	-	-	-	61	-	-
1975-W831	2442618.33	1975 Jul 24 19:49:59	Rocketsonde	-	-	Arcasode	-	-	-	Thermistor	Intercomp	-	-	77	-	-
1975-W832	2442618.52	1975 Jul 25 00:22:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	ASC	-	-	-	65	-	-
1975-W833	2442619.01	1975 Jul 25 12:21:00	Rocketsonde	-	-	Starute, AN/DWG-9	-	-	-	THU	-	-	-	71	-	-
1975-W834	2442619.17	1975 Jul 25 16:04:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	THU	-	-	-	63	-	-
1975-W835	2442619.22	1975 Jul 25 17:15:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	ASC	-	-	-	39	-	-
1975-W836	2442619.28	1975 Jul 25 18:40:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	AIT	-	-	-	56	-	-
1975-W837	2442619.42	1975 Jul 25 21:59:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	SHEM	-	-	-	60	-	-
1975-W838	2442619.44	1975 Jul 25 22:36:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	KAU	-	-	-	60	-	-

Launch

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Mission	FlightCode	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee_Km	Range_Km	Dest
1975-8638	2442621.90	1975 Jul 28 09:42:00	Rocketsonde	-	-	Arcasonde	-	-	-	ASC	-	-	-	66	-	-
1975-8639	2442622.15	1975 Jul 28 15:30:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	WS	-	-	-	60	-	-
1975-8640	2442622.17	1975 Jul 28 15:57:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PH	-	-	-	60	-	-
1975-8641	2442622.18	1975 Jul 28 16:14:59	Rocketsonde	-	-	Arcasonde	-	-	-	CC	LO43	-	-	64	-	-
1975-8643	2442622.49	1975 Jul 28 23:46:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	KAU	-	-	-	64	-	-
1975-8644	2442622.55	1975 Jul 29 01:09:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	KHR	-	-	-	77	-	-
1975-8645	2442623.15	1975 Jul 29 15:34:59	Rocketsonde	-	-	Starute, AN/DWQ-9	-	-	-	THU	-	-	-	58	-	-
1975-8647	2442623.25	1975 Jul 29 18:02:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	THU	-	-	-	78	-	-
1975-8649	2442623.31	1975 Jul 29 19:31:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	WI	-	-	-	79	-	-
1975-8650	2442624.03	1975 Jul 30 12:38:59	Rocketsonde	-	-	Arcasonde	-	-	-	ASC	-	-	-	64	-	-
1975-8651	2442624.09	1975 Jul 30 14:04:59	Rocketsonde	-	-	Arcasonde	-	-	-	AIT	-	-	-	71	-	-
1975-8652	2442624.12	1975 Jul 30 14:48:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	WI	-	-	-	67	-	-
1975-8653	2442624.14	1975 Jul 30 15:20:00	Rocketsonde	-	-	Starute, AN/DWQ-9	-	-	-	THU	-	-	-	68	-	-
1975-8654	2442624.23	1975 Jul 30 17:25:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	WS	-	-	-	66	-	-
1975-8656	2442624.41	1975 Jul 31 01:34:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	KAU	-	-	-	57	-	-
1975-8661	2442625.17	1975 Jul 31 01:59:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	KHR	-	-	-	77	-	-
1975-8662	2442625.57	1975 Jul 31 15:59:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	WS	-	-	-	64	-	-
1975-8663	2442625.62	1975 Aug 1 21:59:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	SHEM	-	-	-	68	-	-
1975-8664	2442625.90	1975 Aug 1 09:21:00	Rocketsonde	-	-	Arcasonde	-	-	-	ASC	-	-	-	61	-	-
1975-8665	2442626.10	1975 Aug 1 14:30:00	Rocketsonde	-	-	Arcasonde	-	-	-	CC	LO43	-	-	64	-	-
1975-8666	2442626.11	1975 Aug 1 14:45:00	Rocketsonde	-	-	Arcasonde	-	-	-	AIT	-	-	-	72	-	-
1975-8668	2442626.12	1975 Aug 1 14:53:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	WI	-	-	-	70	-	-
1975-8669	2442626.15	1975 Aug 1 16:31:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PH	-	-	-	59	-	-
1975-8670	2442626.18	1975 Aug 1 16:21:59	Rocketsonde	-	-	Met. Sphere	-	-	-	PH	-	-	-	88	-	-
1975-8671	2442626.43	1975 Aug 1 22:17:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	KAU	-	-	-	58	-	-
1975-8672	2442626.55	1975 Aug 2 01:14:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	KHR	-	-	-	76	-	-
1975-8673	2442629.06	1975 Aug 4 13:30:00	Rocketsonde	-	-	Arcasonde	-	-	-	CC	LO43	-	-	59	-	-
1975-8674	2442629.07	1975 Aug 4 13:44:59	Rocketsonde	-	-	Arcasonde	-	-	-	ASC	-	-	-	62	-	-
1975-8674	2442629.13	1975 Aug 4 15:01:00	Rocketsonde	-	-	Arcasonde	-	-	-	AIT	-	-	-	74	-	-
1975-8675	2442629.23	1975 Aug 4 17:30:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	WS	-	-	-	64	-	-
1975-8676	2442629.37	1975 Aug 4 20:55:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	KAU	-	-	-	56	-	-
1975-8677	2442629.38	1975 Aug 4 21:00:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	SHEM	-	-	-	56	-	-
1975-8678	2442629.55	1975 Aug 5 01:15:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	KHR	-	-	-	76	-	-
1975-8679	2442630.15	1975 Aug 5 17:00:00	Rocketsonde	-	-	Starute, AN/DWQ-9	-	-	-	THU	-	-	-	65	-	-
1975-8680	2442630.21	1975 Aug 5 17:00:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	WS	-	-	-	64	-	-
1975-8681	2442630.25	1975 Aug 5 18:00:59	Rocketsonde	-	-	Arcasonde	-	-	-	PH	-	-	-	59	-	-
1975-8682	2442630.32	1975 Aug 5 19:35:59	Rocketsonde	-	-	Arcasonde	-	-	-	ASC	-	-	-	63	-	-
1975-8683	2442631.02	1975 Aug 6 12:33:59	Rocketsonde	-	-	Arcasonde	-	-	-	AIT	-	-	-	68	-	-
1975-8684	2442631.03	1975 Aug 6 12:47:59	Rocketsonde	-	-	Arcasonde	-	-	-	AIT	-	-	-	68	-	-
1975-8685	2442631.13	1975 Aug 6 15:03:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	WI	-	-	-	71	-	-
1975-8685	2442631.16	1975 Aug 6 15:05:59	Rocketsonde	-	-	Met. Sphere	-	-	-	PH	-	-	-	66	-	-
1975-8686	2442631.16	1975 Aug 6 15:20:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PH	-	-	-	57	-	-
1975-8689	2442631.15	1975 Aug 6 17:13:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	WS	-	-	-	66	-	-
1975-8691	2442631.22	1975 Aug 6 17:13:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	WS	-	-	-	66	-	-
1975-8691	2442631.26	1975 Aug 6 18:24:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	KAU	-	-	-	66	-	-
1975-8691	2442631.37	1975 Aug 6 21:11:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	KAU	-	-	-	60	-	-
1975-8691	2442631.45	1975 Aug 7 05:14:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	SHEM	-	-	-	74	-	-
1975-8692	2442632.15	1975 Aug 7 05:14:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	KHR	-	-	-	63	-	-
1975-8694	2442632.15	1975 Aug 7 15:43:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	WS	-	-	-	77	-	-
1975-8695	2442632.25	1975 Aug 7 17:14:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	WI	-	-	-	69	-	-
1975-8695	2442632.26	1975 Aug 7 17:14:00	Rocketsonde	-	-	Met. Sphere	-	-	-	KAU	-	-	-	86	-	-
1975-8696	2442632.51	1975 Aug 8 09:21:59	Rocketsonde	-	-	Arcasonde	-	-	-	ASC	-	-	-	66	-	-
1975-8697	2442632.59	1975 Aug 8 09:22:59	Rocketsonde	-	-	Arcasonde	-	-	-	ASC	-	-	-	66	-	-
1975-8698	2442633.13	1975 Aug 8 15:10:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PH	-	-	-	71	-	-
1975-8699	2442633.40	1975 Aug 8 21:30:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	SHEM	-	-	-	60	-	-
1975-8699	2442633.55	1975 Aug 9 01:14:59	Rocketsonde	-	-	Arcasonde	-	-	-	ASC	-	-	-	75	-	-
1975-8700	2442633.63	1975 Aug 9 01:14:59	Rocketsonde	-	-	Arcasonde	-	-	-	ASC	-	-	-	60	-	-
1975-8701	2442636.03	1975 Aug 11 12:41:00	Rocketsonde	-	-	Rocketsonde	-	-	-	AIT	-	-	-	62	-	-
1975-8701	2442636.03	1975 Aug 11 15:30:00	Rocketsonde	-	-	Rocketsonde	-	-	-	PH	-	-	-	62	-	-
1975-8702	2442636.15	1975 Aug 11 15:30:00	Rocketsonde	-	-	Rocketsonde	-	-	-	ASC	-	-	-	66	-	-
1975-8703	2442636.16	1975 Aug 11 15:55:00	Rocketsonde	-	-	Rocketsonde	-	-	-	ASC	-	-	-	66	-	-
1975-8705	2442637.13	1975 Aug 12 15:11:00	Rocketsonde	-	-	Rocketsonde	-	-	-	THU	-	-	-	74	-	-
1975-8706	2442637.15	1975 Aug 12 15:30:00	Rocketsonde	-	-	Rocketsonde	-	-	-	CC	LO43	-	-	59	-	-
1975-8706	2442637.18	1975 Aug 12 16:14:59	Rocketsonde	-	-	Rocketsonde	-	-	-	AIT	-	-	-	40	-	-
1975-8707	2442637.18	1975 Aug 12 16:22:59	Rocketsonde	-	-	Rocketsonde	-	-	-	PH	-	-	-	62	-	-
1975-8708	2442637.27	1975 Aug 12 18:30:00	Rocketsonde	-	-	Rocketsonde	-	-	-	WS	-	-	-	64	-	-
1975-8709	2442637.41	1975 Aug 12 21:07:59	Rocketsonde	-	-	Rocketsonde	-	-	-	CC	LO43	-	-	59	-	-
1975-8710	2442637.42	1975 Aug 12 22:07:59	Rocketsonde	-	-	Rocketsonde	-	-	-	AIT	-	-	-	40	-	-
1975-8711	2442637.52	1975 Aug 13 00:22:59	Rocketsonde	-	-	Rocketsonde	-	-	-	PH	-	-	-	62	-	-
1975-8713	2442637.96	1975 Aug 13 11:03:00	Rocketsonde	-	-	Rocketsonde	-	-	-	WS	-	-	-	63	-	-
1975-8714	2442638.08	1975 Aug 13 15:30:00	Rocketsonde	-	-	Rocketsonde	-	-	-	PH	-	-	-	61	-	-
1975-8714	2442638.15	1975 Aug 13 15:30:00	Rocketsonde	-	-	Rocketsonde	-	-	-	PH	-	-	-	62	-	-
1975-8718	2442638.24	1975 Aug 13 17:01:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PH	-	-	-	62	-	-
1975-8718	2442638.24	1975 Aug 13 17:45:00	Rocketsonde	-	-	Datasonde	-	-	-	WS	-	-	-	63	-	-
1975-8719	2442638.27	1975 Aug 13 18:34:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	WS	-	-	-	66	-	-
1975-8719	2442638.40	1975 Aug 13 21:30:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	WS	-	-	-	63	-	-
1975-8720	2442638.45	1975 Aug 13 22:46:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	SHEM	-	-	-	63	-	-
1975-8721	2442638.58	1975 Aug 14 01:58:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	KAU	-	-	-	59	-	-
1975-8722	2442639.40	1975 Aug 14 01:58:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	KAU	-	-	-	79	-	-
1975-8723	2442639.40	1975 Aug 14 21:30:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	SHEM	-	-	-	60	-	-
1975-8725	2442639.66	1975 Aug 15 03:45:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PH	-	-	-	87	-	-
1975-8726	2442639.67	1975 Aug 15 04:09:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PH	-	-	-	74	-	-
1975-8729	2442639.72	1975 Aug 15 05:21:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PH	-	-	-	65	-	-
1975-8729	2442639.74	1975 Aug 15 05:51:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PH	-	-	-	75	-	-
1975-8751	2442639.77	1975 Aug 15 06:30:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PH	-	-	-	88	-	-
1975-8751	2442639.77	1975 Aug 15 13:42:59	Rocketsonde	-	-	Arcasonde	-	-	-	ASC	-	-	-	63	-	-
1975-8752	2442640.07	1975 Aug 15 15:25:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	WI	-	-	-	59	-	-
1975-8758	2442640.14	1975 Aug 15 15:25:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	WI	-	-	-	59	-	-

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Mission	FlightCode	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee_Km	Range_Km	Dest
1975-W929	2442640.15	1975 Aug 15 15:30:00	Rocketsonde	-	-	Arcasonde	-	-	-	AIT	-	-	-	75	-	-
1975-W930	2442640.15	1975 Aug 15 15:34:59	Rocketsonde	-	-	Arcasonde	-	-	-	CC	LO43	-	-	61	-	-
1975-W931	2442640.15	1975 Aug 15 17:00:00	Rocketsonde	-	-	Datasonde	-	-	-	WS	-	-	-	66	-	-
1975-W932	2442640.21	1975 Aug 15 17:00:00	Rocketsonde	-	-	Datasonde	-	-	-	WS	-	-	-	66	-	-
1975-W933	2442640.36	1975 Aug 16 20:43:00	Rocketsonde	-	-	Staruve, Datasonde	-	-	-	KAU	-	-	-	60	-	-
1975-W934	2442640.55	1975 Aug 16 01:14:59	Rocketsonde	-	-	Staruve, Datasonde	-	-	-	KMR	-	-	-	69	-	-
1975-W935	2442642.96	1975 Aug 18 11:00:00	Rocketsonde	-	-	Arcasonde	-	-	-	ASC	-	-	-	69	-	-
1975-W936	2442643.13	1975 Aug 18 15:10:00	Rocketsonde	-	-	Arcasonde	-	-	-	AIT	-	-	-	73	-	-
1975-W937	2442643.19	1975 Aug 18 16:31:59	Rocketsonde	-	-	Arcasonde	-	-	-	CC	LO43	-	-	58	-	-
1975-W938	2442643.23	1975 Aug 18 17:30:00	Rocketsonde	-	-	Staruve, Datasonde	-	-	-	WI	-	-	-	69	-	-
1975-W939	2442643.25	1975 Aug 18 18:02:59	Rocketsonde	-	-	Staruve, Datasonde	-	-	-	PH	-	-	-	60	-	-
1975-W940	2442643.25	1975 Aug 18 22:15:59	Rocketsonde	-	-	Staruve, Datasonde	-	-	-	KAU	-	-	-	58	-	-
1975-W941	2442644.43	1975 Aug 18 18:02:59	Rocketsonde	-	-	Staruve, Datasonde	-	-	-	WS	-	-	-	64	-	-
1975-W942	2442644.25	1975 Aug 19 18:00:00	Rocketsonde	-	-	Staruve, Datasonde	-	-	-	KMR	-	-	-	76	-	-
1975-W943	2442644.51	1975 Aug 20 00:14:59	Rocketsonde	-	-	Staruve, Datasonde	-	-	-	ASC	-	-	-	63	-	-
1975-W944	2442644.97	1975 Aug 20 11:14:00	Rocketsonde	-	-	Staruve, Datasonde	-	-	-	PH	-	-	-	68	-	-
1975-W945	2442645.20	1975 Aug 20 16:54:59	Rocketsonde	-	-	Staruve, Datasonde	-	-	-	WI	-	-	-	69	-	-
1975-W946	2442645.24	1975 Aug 20 17:42:00	Rocketsonde	-	-	Staruve, Datasonde	-	-	-	KAU	-	-	-	86	-	-
1975-W947	2442645.36	1975 Aug 20 20:42:00	Rocketsonde	-	-	Arcasonde	-	-	-	CC	LO43	-	-	62	-	-
1975-W948	2442645.38	1975 Aug 21 01:04:59	Rocketsonde	-	-	Arcasonde	-	-	-	KMR	-	-	-	75	-	-
1975-W949	2442645.51	1975 Aug 21 09:19:00	Rocketsonde	-	-	Staruve, Datasonde	-	-	-	WI	-	-	-	56	-	-
1975-W950	2442646.14	1975 Aug 21 15:23:59	Rocketsonde	-	-	Staruve, Datasonde	-	-	-	THU	-	-	-	61	-	-
1975-W951	2442647.08	1975 Aug 22 13:54:59	Rocketsonde	-	-	Staruve, Datasonde	-	-	-	KAU	-	-	-	64	-	-
1975-W952	2442647.12	1975 Aug 22 14:53:00	Rocketsonde	-	-	Arcasonde	-	-	-	ASC	-	-	-	69	-	-
1975-W953	2442647.14	1975 Aug 22 15:24:59	Rocketsonde	-	-	Staruve, Datasonde	-	-	-	WI	-	-	-	56	-	-
1975-W954	2442647.16	1975 Aug 22 15:55:00	Rocketsonde	-	-	Arcasonde	-	-	-	THU	-	-	-	61	-	-
1975-W955	2442647.42	1975 Aug 22 22:01:59	Rocketsonde	-	-	Staruve, Datasonde	-	-	-	KAU	-	-	-	61	-	-
1975-W956	2442650.02	1975 Aug 25 12:33:00	Rocketsonde	-	-	Arcasonde	-	-	-	ASC	-	-	-	64	-	-
1975-W957	2442650.12	1975 Aug 25 14:49:59	Rocketsonde	-	-	Arcasonde	-	-	-	AIT	-	-	-	59	-	-
1975-W958	2442650.24	1975 Aug 25 17:45:00	Rocketsonde	-	-	Staruve, Datasonde	-	-	-	WI	-	-	-	69	-	-
1975-W959	2442650.30	1975 Aug 25 19:14:59	Rocketsonde	-	-	Staruve, Datasonde	-	-	-	CC	LO43	-	-	73	-	-
1975-W960	2442650.36	1975 Aug 25 20:04:00	Rocketsonde	-	-	Staruve, Datasonde	-	-	-	KAU	-	-	-	56	-	-
1975-W961	2442651.12	1975 Aug 26 15:00:00	Rocketsonde	-	-	Arcasonde	-	-	-	CC	LO43	-	-	72	-	-
1975-W962	2442651.12	1975 Aug 27 15:14:59	Rocketsonde	-	-	Arcasonde	-	-	-	THU	-	-	-	63	-	-
1975-W963	2442652.05	1975 Aug 27 15:45:00	Rocketsonde	-	-	Datasonde	-	-	-	WS	-	-	-	64	-	-
1975-W964	2442652.16	1975 Aug 27 16:09:59	Rocketsonde	-	-	Staruve, JAI/DHQ-9	-	-	-	THU	-	-	-	54	-	-
1975-W965	2442652.17	1975 Aug 27 16:09:59	Rocketsonde	-	-	Arcasonde	-	-	-	ASC	-	-	-	63	-	-
1975-W966	2442652.18	1975 Aug 27 16:19:59	Rocketsonde	-	-	Arcasonde	-	-	-	WS	-	-	-	53	-	-
1975-W967	2442652.28	1975 Aug 27 18:49:59	Rocketsonde	-	-	Staruve, Datasonde	-	-	-	CC	LO43	-	-	73	-	-
1975-W968	2442652.28	1975 Aug 27 18:49:59	Rocketsonde	-	-	Staruve, Datasonde	-	-	-	PH	-	-	-	73	-	-
1975-W969	2442652.30	1975 Aug 27 19:13:59	Rocketsonde	-	-	Staruve, Datasonde	-	-	-	KAU	-	-	-	69	-	-
1975-W970	2442652.50	1975 Aug 27 20:36:59	Rocketsonde	-	-	Staruve, Datasonde	-	-	-	WI	-	-	-	59	-	-
1975-W971	2442652.57	1975 Aug 28 00:34:59	Rocketsonde	-	-	Staruve, Datasonde	-	-	-	KMR	-	-	-	64	-	-
1975-W972	2442652.52	1975 Aug 28 11:10:00	Rocketsonde	-	-	Arcasonde	-	-	-	ASC	-	-	-	64	-	-
1975-W973	2442652.57	1975 Aug 28 11:10:00	Rocketsonde	-	-	Datasonde	-	-	-	WS	-	-	-	64	-	-
1975-W974	2442653.27	1975 Aug 28 13:35:00	Rocketsonde	-	-	Arcasonde	-	-	-	AIT	-	-	-	74	-	-
1975-W975	2442654.11	1975 Aug 29 17:36:00	Rocketsonde	-	-	Staruve, Datasonde	-	-	-	WI	-	-	-	74	-	-
1975-W976	2442654.25	1975 Aug 29 22:46:59	Rocketsonde	-	-	Staruve, Datasonde	-	-	-	KAU	-	-	-	66	-	-
1975-W977	2442654.45	1975 Sep 2 12:51:59	Rocketsonde	-	-	Arcasonde	-	-	-	ASC	-	-	-	66	-	-
1975-W978	2442656.04	1975 Sep 2 15:11:59	Rocketsonde	-	-	Arcasonde	-	-	-	CC	LO43	-	-	64	-	-
1975-W979	2442656.14	1975 Sep 2 15:11:59	Rocketsonde	-	-	Arcasonde	-	-	-	AIT	-	-	-	64	-	-
1975-W980	2442658.25	1975 Sep 2 17:55:00	Rocketsonde	-	-	Met. Sphere	-	-	-	CC	-	-	-	58	-	-
1975-W981	2442658.25	1975 Sep 2 17:55:00	Rocketsonde	-	-	Met. Sphere	-	-	-	PH	-	-	-	58	-	-
1975-W982	2442658.25	1975 Sep 2 18:00:00	Rocketsonde	-	-	Arcasonde	-	-	-	WS	-	-	-	66	-	-
1975-W983	2442658.27	1975 Sep 2 18:00:00	Rocketsonde	-	-	Staruve, Datasonde	-	-	-	PH	-	-	-	66	-	-
1975-W984	2442658.27	1975 Sep 2 18:00:00	Rocketsonde	-	-	Staruve, Datasonde	-	-	-	PH	-	-	-	66	-	-
1975-W985	2442658.27	1975 Sep 2 18:00:00	Rocketsonde	-	-	Staruve, Datasonde	-	-	-	PH	-	-	-	66	-	-
1975-W986	2442658.27	1975 Sep 2 18:00:00	Rocketsonde	-	-	Staruve, Datasonde	-	-	-	PH	-	-	-	66	-	-
1975-W987	2442658.27	1975 Sep 2 18:00:00	Rocketsonde	-	-	Staruve, Datasonde	-	-	-	PH	-	-	-	66	-	-
1975-W988	2442658.27	1975 Sep 2 18:00:00	Rocketsonde	-	-	Staruve, Datasonde	-	-	-	PH	-	-	-	66	-	-
1975-W989	2442658.27	1975 Sep 2 18:00:00	Rocketsonde	-	-	Staruve, Datasonde	-	-	-	PH	-	-	-	66	-	-
1975-W990	2442658.27	1975 Sep 2 18:00:00	Rocketsonde	-	-	Staruve, Datasonde	-	-	-	PH	-	-	-	66	-	-
1975-W991	2442658.27	1975 Sep 2 18:00:00	Rocketsonde	-	-	Staruve, Datasonde	-	-	-	PH	-	-	-	66	-	-
1975-W992	2442658.27	1975 Sep 2 18:00:00	Rocketsonde	-	-	Staruve, Datasonde	-	-	-	PH	-	-	-	66	-	-
1975-W993	2442658.27	1975 Sep 2 18:00:00	Rocketsonde	-	-	Staruve, Datasonde	-	-	-	PH	-	-	-	66	-	-
1975-W994	2442658.27	1975 Sep 2 18:00:00	Rocketsonde	-	-	Staruve, Datasonde	-	-	-	PH	-	-	-	66	-	-
1975-W995	2442658.27	1975 Sep 2 18:00:00	Rocketsonde	-	-	Staruve, Datasonde	-	-	-	PH	-	-	-	66	-	-
1975-W996	2442658.27	1975 Sep 2 18:00:00	Rocketsonde	-	-	Staruve, Datasonde	-	-	-	PH	-	-	-	66	-	-
1975-W997	2442658.27	1975 Sep 2 18:00:00	Rocketsonde	-	-	Staruve, Datasonde	-	-	-	PH	-	-	-	66	-	-
1975-W998	2442658.27	1975 Sep 2 18:00:00	Rocketsonde	-	-	Staruve, Datasonde	-	-	-	PH	-	-	-	66	-	-
1975-W999	2442658.27	1975 Sep 2 18:00:00	Rocketsonde	-	-	Staruve, Datasonde	-	-	-	PH	-	-	-	66	-	-
1976-A50	2442659.14	1976 Sep 3 15:14:59	Rocketsonde	-	-	Arcasonde	-	-	-	AIT	-	-	-	50	-	-
1976-A51	2442659.14	1976 Sep 3 15:14:59	Rocketsonde	-	-	Arcasonde	-	-	-	CC	LO43	-	-	50	-	-
1976-A52	2442659.14	1976 Sep 3 15:14:59	Rocketsonde	-	-	Arcasonde	-	-	-	CC	LO43	-	-	50	-	-
1976-A53	2442659.14	1976 Sep 3 15:14:59	Rocketsonde	-	-	Arcasonde	-	-	-	CC	LO43	-	-	50	-	-
1976-A54	2442659.14	1976 Sep 3 15:14:59	Rocketsonde	-	-	Arcasonde	-	-	-	CC	LO43	-	-	50	-	-
1976-A55	2442659.14	1976 Sep 3 15:14:59	Rocketsonde	-	-	Arcasonde	-	-	-	CC	LO43	-	-	50	-	-
1976-A56	2442659.14	1976 Sep 3 15:14:59	Rocketsonde	-	-	Arcasonde	-	-	-	CC	LO43	-	-	50	-	-
1976-A57	2442659.14	1976 Sep 3 15:14:59	Rocketsonde	-	-	Arcasonde	-	-	-	CC	LO43	-	-	50	-	-
1976-A58	2442659.14	1976 Sep 3 15:14:59	Rocketsonde	-	-	Arcasonde	-	-	-	CC	LO43	-	-	50	-	-
1976-A59	2442659.14	1976 Sep 3 15:14:59	Rocketsonde	-	-	Arcasonde	-	-	-	CC	LO43	-	-	50	-	-
1976-A60	2442659.14	1976 Sep 3 15:14:59	Rocketsonde	-	-	Arcasonde	-	-	-	CC	LO43	-	-	50	-	-
1976-A61	2442659.14	1976 Sep 3 15:14:59	Rocketsonde	-	-	Arcasonde	-	-	-	CC	LO43	-	-	50	-	-
1976-A62	2442659.14	1976 Sep 3 15:14:59	Rocketsonde	-	-	Arcasonde	-	-	-	CC	LO43	-	-	50	-	-
1976-A63	2442659.14	1976 Sep 3 15:14:59	Rocketsonde	-	-	Arcasonde	-	-	-	CC	LO43	-	-	50	-	-
1976-A64	2442659.14	1976 Sep 3 15:14:59	Rocketsonde	-	-	Arcasonde	-	-	-	CC	LO43	-	-	50	-	-
1976-A65	2442659.14	1976 Sep 3 15:14:59	Rocketsonde	-	-	Arcasonde	-	-	-	CC	LO43	-	-	50	-	-
1976-A66	2442659.14	1976 Sep 3 15:14:59	Rocketsonde	-	-	Arcasonde	-	-	-	CC	LO43	-	-	50	-	-
1976-A67	2442659.14	1976 Sep 3 15:14:59	Rocketsonde	-	-	Arcasonde	-	-	-	CC	LO43	-	-	50	-	-
1976-A68	2442659.14	1976 Sep 3 15:14:59	Rocketsonde	-	-	Arcasonde	-	-	-	CC	LO43	-	-	50	-	-
1976-A69	2442659.14	1976 Sep 3 15:14:59	Rocketsonde	-	-	Arcasonde										



Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Mission	FlightCode	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee_Km	Range_Km	Dest
1976-W11	2442783.38	1976 Jan 5 2100:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	KAU	-	-	-	58	-	-
1976-W12	2442783.46	1976 Jan 5 2306:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PF	-	-	-	66	-	-
1976-W13	2442783.55	1976 Jan 6 0114:59	Rocketsonde	-	-	Arcasode	-	-	-	KHR	-	-	-	67	-	-
1976-W14	2442784.07	1976 Jan 6 1344:59	Rocketsonde	-	-	Arcasode	-	-	-	AUT	-	-	-	67	-	-
1976-W15	2442784.25	1976 Jan 6 1800:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	WS	-	-	-	67	-	-
1976-W16	2442784.29	1976 Jan 6 1857:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PH	-	-	-	57	-	-
1976-W17	2442785.07	1976 Jan 7 1344:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	ASC	-	-	-	61	-	-
1976-W18	2442785.26	1976 Jan 7 1810:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	WS	-	-	-	67	-	-
1976-W19	2442785.27	1976 Jan 7 1833:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	SHER	-	-	-	55	-	-
1976-W20	2442785.27	1976 Jan 7 1833:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	WI	-	-	-	89	-	-
1976-W21	2442785.32	1976 Jan 7 1933:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PH	-	-	-	87	-	-
1976-W22	2442785.33	1976 Jan 7 1957:59	Rocketsonde	-	-	Met. Sphere, MK-1	-	-	-	PH	-	-	-	62	-	-
1976-W23	2442785.34	1976 Jan 7 2007:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PH	-	-	-	70	-	-
1976-W24	2442785.35	1976 Jan 7 2031:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	KAU	-	-	-	60	-	-
1976-W25	2442785.42	1976 Jan 7 2159:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	KHR	-	-	-	73	-	-
1976-W26	2442785.58	1976 Jan 8 0149:59	Rocketsonde	-	-	Arcasode	-	-	-	SHER	-	-	-	60	-	-
1976-W27	2442786.10	1976 Jan 8 1421:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	THU	-	-	-	54	-	-
1976-W28	2442786.12	1976 Jan 8 1455:00	Rocketsonde	-	-	Arcasode	-	-	-	WS	-	-	-	64	-	-
1976-W29	2442786.19	1976 Jan 8 1630:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	ASC	-	-	-	65	-	-
1976-W30	2442787.07	1976 Jan 9 1344:59	Rocketsonde	-	-	Arcasode	-	-	-	CC	LC43	-	-	48	-	-
1976-W31	2442787.11	1976 Jan 9 1448:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	WS	-	-	-	60	-	-
1976-W32	2442787.25	1976 Jan 9 1800:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	KHR	-	-	-	77	-	-
1976-W33	2442787.40	1976 Jan 9 2142:00	Rocketsonde	-	-	Arcasode	-	-	-	PF	-	-	-	65	-	-
1976-W34	2442787.43	1976 Jan 9 2213:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	KAU	-	-	-	96	-	-
1976-W35	2442787.45	1976 Jan 9 2245:59	Rocketsonde	-	-	Met. Sphere, MK-1	-	-	-	KAU	-	-	-	76	-	-
1976-W36	2442787.45	1976 Jan 9 2245:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PH	-	-	-	57	-	-
1976-W37	2442787.45	1976 Jan 9 2245:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	WS	-	-	-	60	-	-
1976-W38	2442790.22	1976 Jan 12 1720:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	SHER	-	-	-	57	-	-
1976-W39	2442790.25	1976 Jan 12 1800:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	WI	-	-	-	58	-	-
1976-W40	2442790.30	1976 Jan 12 1906:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PF	-	-	-	94	-	-
1976-W41	2442790.33	1976 Jan 12 1906:00	Rocketsonde	-	-	Arcasode	-	-	-	KHR	-	-	-	75	-	-
1976-W42	2442790.41	1976 Jan 12 2152:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	KAU	-	-	-	62	-	-
1976-W43	2442790.44	1976 Jan 12 2230:00	Rocketsonde	-	-	Arcasode	-	-	-	AUT	-	-	-	60	-	-
1976-W44	2442791.05	1976 Jan 13 1308:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PH	-	-	-	85	-	-
1976-W45	2442791.07	1976 Jan 13 1336:59	Rocketsonde	-	-	Arcasode	-	-	-	ASC	-	-	-	63	-	-
1976-W46	2442791.22	1976 Jan 13 1723:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	WS	LC43	-	-	63	-	-
1976-W47	2442791.25	1976 Jan 13 1730:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	CC	-	-	-	76	-	-
1976-W48	2442791.25	1976 Jan 13 1800:00	Rocketsonde	-	-	Arcasode	-	-	-	PH	-	-	-	60	-	-
1976-W49	2442791.25	1976 Jan 13 1800:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	CC	LC43	-	-	63	-	-
1976-W50	2442792.03	1976 Jan 14 1249:59	Rocketsonde	-	-	Arcasode	-	-	-	ASC	-	-	-	64	-	-
1976-W51	2442792.09	1976 Jan 14 1403:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	SHER	LC43	-	-	94	-	-
1976-W52	2442792.19	1976 Jan 14 1600:00	Rocketsonde	-	-	Arcasode	-	-	-	CC	-	-	-	70	-	-
1976-W53	2442792.20	1976 Jan 14 1647:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	KRM	-	-	-	69	-	-
1976-W54	2442792.20	1976 Jan 14 1716:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	WS	-	-	-	87	-	-
1976-W55	2442792.20	1976 Jan 14 1716:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	KHR	-	-	-	86	-	-
1976-W56	2442792.20	1976 Jan 14 1916:59	Rocketsonde	-	-	Arcasode	-	-	-	PH	-	-	-	87	-	-
1976-W57	2442792.20	1976 Jan 14 1916:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	KAU	-	-	-	60	-	-
1976-W58	2442792.41	1976 Jan 14 2148:59	Rocketsonde	-	-	Met. Sphere, MK-1	-	-	-	PH	-	-	-	87	-	-
1976-W59	2442792.42	1976 Jan 14 2148:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	KAU	-	-	-	60	-	-
1976-W60	2442792.42	1976 Jan 14 2148:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PH	-	-	-	73	-	-
1976-W61	2442792.43	1976 Jan 14 2224:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	ASC	-	-	-	73	-	-
1976-W62	2442792.43	1976 Jan 14 2224:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	WS	-	-	-	62	-	-
1976-W63	2442792.89	1976 Jan 15 0425:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	WS	-	-	-	59	-	-
1976-W64	2442793.16	1976 Jan 15 1455:00	Rocketsonde	-	-	Arcasode	-	-	-	THU	-	-	-	71	-	-
1976-W65	2442793.16	1976 Jan 15 1455:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PRIM	-	-	-	69	-	-
1976-W66	2442793.20	1976 Jan 15 1634:59	Rocketsonde	-	-	Arcasode	-	-	-	ASC	-	-	-	61	-	-
1976-W67	2442793.44	1976 Jan 15 2221:59	Rocketsonde	-	-	Met. Sphere, MK-1	-	-	-	KAU	-	-	-	87	-	-
1976-W68	2442793.45	1976 Jan 15 2221:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	ASC	-	-	-	75	-	-
1976-W69	2442794.03	1976 Jan 16 1224:59	Rocketsonde	-	-	Arcasode	-	-	-	SHER	-	-	-	68	-	-
1976-W70	2442794.08	1976 Jan 16 1402:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	ASC	-	-	-	61	-	-
1976-W71	2442794.15	1976 Jan 16 1500:00	Rocketsonde	-	-	Arcasode	-	-	-	THU	-	-	-	51	-	-
1976-W72	2442794.19	1976 Jan 16 1633:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	CC	LC43	-	-	65	-	-
1976-W73	2442794.21	1976 Jan 16 1700:00	Rocketsonde	-	-	Arcasode	-	-	-	PH	-	-	-	69	-	-
1976-W74	2442794.25	1976 Jan 16 1800:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	WS	-	-	-	63	-	-
1976-W75	2442794.25	1976 Jan 16 1800:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	VI	-	-	-	70	-	-
1976-W76	2442794.40	1976 Jan 16 2142:00	Rocketsonde	-	-	Arcasode	-	-	-	VI	-	-	-	77	-	-
1976-W77	2442794.44	1976 Jan 16 2237:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PF	-	-	-	65	-	-
1976-W78	2442796.26	1976 Jan 18 1810:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	VI	-	-	-	70	-	-
1976-W79	2442796.35	1976 Jan 18 2026:00	Rocketsonde	-	-	Arcasode	-	-	-	VI	-	-	-	66	-	-
1976-W80	2442797.04	1976 Jan 19 1251:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	ASC	-	-	-	66	-	-
1976-W81	2442797.09	1976 Jan 19 1404:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	SHER	-	-	-	56	-	-
1976-W82	2442797.14	1976 Jan 19 1514:59	Rocketsonde	-	-	Arcasode	-	-	-	THU	-	-	-	62	-	-
1976-W83	2442797.23	1976 Jan 19 1638:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	AUT	-	-	-	48	-	-
1976-W84	2442797.23	1976 Jan 19 1730:00	Rocketsonde	-	-	Arcasode	-	-	-	PRIM	-	-	-	55	-	-
1976-W85	2442797.23	1976 Jan 19 1730:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	WS	-	-	-	70	-	-
1976-W86	2442797.35	1976 Jan 19 2023:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	VI	-	-	-	63	-	-
1976-W87	2442797.41	1976 Jan 19 2151:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	KAU	-	-	-	56	-	-
1976-W88	2442797.41	1976 Jan 19 2151:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PF	-	-	-	64	-	-
1976-W89	2442797.51	1976 Jan 20 0011:59	Rocketsonde	-	-	Arcasode	-	-	-	KHR	-	-	-	76	-	-
1976-W90	2442798.21	1976 Jan 20 0011:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	WS	-	-	-	63	-	-
1976-W91	2442798.32	1976 Jan 20 1700:00	Rocketsonde	-	-	Arcasode	-	-	-	PRIM	-	-	-	68	-	-
1976-W92	2442798.32	1976 Jan 20 1942:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	ASC	-	-	-	71	-	-
1976-W93	2442799.11	1976 Jan 21 1445:00	Rocketsonde	-	-	Arcasode	-	-	-	AUT	-	-	-	62	-	-
1976-W94	2442799.11	1976 Jan 21 1445:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	CC	LC43	-	-	62	-	-
1976-W95	2442799.17	1976 Jan 21 1557:59	Rocketsonde	-	-	Arcasode	-	-	-	SHER	-	-	-	59	-	-
1976-W96	2442799.20	1976 Jan 21 1652:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PRIM	-	-	-	67	-	-
1976-W97	2442799.23	1976 Jan 21 1653:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	WS	-	-	-	65	-	-
1976-W98	2442799.23	1976 Jan 21 1730:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	VI	-	-	-	69	-	-
1976-W99	2442799.31	1976 Jan 21 1930:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	KAU	-	-	-	75	-	-
1976-W100	2442799.42	1976 Jan 21 2211:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PF	-	-	-	63	-	-
1976-W101	2442799.42	1976 Jan 21 2211:59	Rocketsonde	-	-	Arcasode	-	-	-	KHR	-	-	-	79	-	-
1976-W102	2442799.54	1976 Jan 22 0059:59	Rocketsonde	-												

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Mission	FlightCode	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee_Km	Range_Km	Dest
1976-W104	2442800.12	1976 Jan 22 15:00:00	Rocketsonde			Arcasonde				THU				60		
1976-W106	2442800.21	1976 Jan 22 17:00:00	Rocketsonde			Starute, Dhataonde				WS				64		
1976-W1900	2442800.27	1976 Jan 22 18:35	Rocketsonde			Blunt Probe				WI				70?		
1976-W1901	2442800.35	1976 Jan 30 20:25	Rocketsonde			Gerdien Condenser				WI				70?		
1976-W107	2442800.25	1976 Jan 22 18:01:59	Rocketsonde			Starute, Dhataonde				PH				59		
1976-W108	2442800.25	1976 Jan 22 18:03:59	Rocketsonde			Starute, Dhataonde				SHER				58		
1976-W109	2442800.30	1976 Jan 22 19:14:59	Rocketsonde			Arcasonde				PRIM				70		
1976-W110	2442800.31	1976 Jan 22 19:30:00	Rocketsonde			Starute, Dhataonde				WI				68		
1976-W111	2442800.92	1976 Jan 23 10:03:59	Rocketsonde			Arcasonde				KHR				78		
1976-W112	2442801.07	1976 Jan 23 13:40:00	Rocketsonde			Arcasonde				ASC				64		
1976-W113	2442801.17	1976 Jan 23 15:59:59	Rocketsonde			Arcasonde				AIT				58		
1976-W114	2442801.18	1976 Jan 23 16:17:00	Rocketsonde			Arcasonde				CC	LO43			63		
1976-W116	2442801.28	1976 Jan 23 18:49:59	Rocketsonde			Starute, Dhataonde				WS				60		
1976-W117	2442801.40	1976 Jan 23 21:30:00	Rocketsonde			Starute, Dhataonde				WI				70		
1976-W118	2442801.40	1976 Jan 23 21:33:59	Rocketsonde			Starute, Dhataonde				KAU				60		
1976-W119	2442801.46	1976 Jan 23 23:02:00	Rocketsonde			Starute, Dhataonde				WI				70		
1976-W120	2442801.53	1976 Jan 24 00:36:59	Rocketsonde			Arcasonde				KHR				79		
1976-W121	2442803.71	1976 Jan 26 05:00:00	Rocketsonde			Starute, Dhataonde				PF				66		
1976-W122	2442804.07	1976 Jan 26 13:44:59	Rocketsonde			Arcasonde				AIT				56		
1976-W123	2442804.20	1976 Jan 26 16:53:59	Rocketsonde			Starute, Dhataonde				SHER				65		
1976-W124	2442804.21	1976 Jan 26 17:00:00	Rocketsonde			Starute, Dhataonde				WS				63		
1976-W125	2442804.21	1976 Jan 26 17:03:00	Rocketsonde			Arcasonde				CC	LO43			52		
1976-W126	2442804.24	1976 Jan 26 17:45:00	Rocketsonde			Arcasonde				PRIM				61		
1976-W127	2442804.31	1976 Jan 26 19:30:00	Rocketsonde			Starute, Dhataonde				WI				59		
1976-W128	2442804.37	1976 Jan 26 20:54:00	Rocketsonde			Starute, Dhataonde				PH				69		
1976-W129	2442804.47	1976 Jan 26 23:20:00	Rocketsonde			Arcasonde				KHR				59		
1976-W130	2442805.54	1976 Jan 27 17:00:00	Rocketsonde			Starute, Dhataonde				WS				65		
1976-W131	2442805.54	1976 Jan 27 20:08:00	Rocketsonde			Arcasonde				PRIM				68		
1976-W132	2442805.56	1976 Jan 28 01:30:00	Rocketsonde			Starute, Dhataonde				PF				62		
1976-W133	2442806.07	1976 Jan 28 13:41:59	Rocketsonde			Starute, Dhataonde				ASC				64		
1976-W134	2442806.12	1976 Jan 28 15:00:00	Rocketsonde			Starute, Dhataonde				AIT				62		
1976-W135	2442806.14	1976 Jan 28 15:14:59	Rocketsonde			Arcasonde				SHER				46		
1976-W136	2442806.19	1976 Jan 28 15:44:59	Rocketsonde			Arcasonde				AIT				62		
1976-W137	2442806.20	1976 Jan 28 16:52:00	Rocketsonde			Arcasonde				THU				65		
1976-W138	2442806.21	1976 Jan 28 17:00:00	Rocketsonde			Arcasonde				PRIM				68		
1976-W139	2442806.21	1976 Jan 28 17:00:00	Rocketsonde			Starute, Dhataonde				CC	LO43			56		
1976-W140	2442806.35	1976 Jan 28 20:26:00	Rocketsonde			Starute, Dhataonde				WS				64		
1976-W141	2442806.35	1976 Jan 28 21:00:59	Rocketsonde			Starute, Dhataonde				WI				67		
1976-W142	2442806.50	1976 Jan 28 23:05:00	Rocketsonde			Arcasonde				PH				61		
1976-W143	2442807.22	1976 Jan 29 17:15:00	Rocketsonde			Starute, Dhataonde				KHR				64		
1976-W144	2442807.51	1976 Jan 29 19:25:59	Rocketsonde			Starute, Dhataonde				WS				73		
1976-W145	2442807.33	1976 Jan 29 20:02:00	Rocketsonde			Starute, Dhataonde				PH				86		
1976-W146	2442807.51	1976 Jan 30 00:13:59	Rocketsonde			Starute, Dhataonde				Mei. Sphere, MR-1				78		
1976-W147	2442808.19	1976 Jan 30 01:44:59	Rocketsonde			Arcasonde				KHR				73		
1976-W148	2442808.19	1976 Jan 30 15:53:59	Rocketsonde			Starute, Dhataonde				PF				65		
1976-W149	2442808.21	1976 Jan 30 17:00:00	Rocketsonde			Arcasonde				PH				61		
1976-W150	2442808.24	1976 Jan 30 17:00:00	Rocketsonde			Starute, Dhataonde				WS	LO43			62		
1976-W151	2442808.24	1976 Jan 30 17:00:00	Rocketsonde			Starute, Dhataonde				SHER				64		
1976-W152	2442808.50	1976 Jan 30 19:07:00	Rocketsonde			Starute, Dhataonde				WI				64		
1976-W153	2442808.51	1976 Jan 31 07:30:00	Rocketsonde			Arcasonde				KHR				78		
1976-W154	2442811.01	1976 Feb 21 01:10:00	Rocketsonde			Arcasonde				CC	LO43			60		
1976-W155	2442811.07	1976 Feb 21 16:04:59	Rocketsonde			Arcasonde				THU				69		
1976-W156	2442811.17	1976 Feb 21 17:15:00	Rocketsonde			Arcasonde				PRIM				69		
1976-W157	2442811.29	1976 Feb 21 18:59:59	Rocketsonde			Starute, Dhataonde				WS				63		
1976-W158	2442811.34	1976 Feb 21 19:57:59	Rocketsonde			Starute, Dhataonde				PH				63		
1976-W159	2442811.38	1976 Feb 22 21:00:00	Rocketsonde			Starute, Dhataonde				WI				63		
1976-W160	2442811.47	1976 Feb 22 23:20:00	Rocketsonde			Starute, Dhataonde				KAU				60		
1976-W170	2442812.05	1976 Feb 3 13:13:59	Rocketsonde			Arcasonde				KHR				74		
1976-W171	2442812.16	1976 Feb 4 15:45:59	Rocketsonde			Arcasonde				AIT				69		
1976-W172	2442812.16	1976 Feb 4 15:45:59	Rocketsonde			Arcasonde				THU				61		
1976-W173	2442812.23	1976 Feb 4 17:31:00	Rocketsonde			Arcasonde				CC	LO43			61		
1976-W174	2442812.23	1976 Feb 4 18:00:00	Rocketsonde			Starute, Dhataonde				ASC				51		
1976-W175	2442812.24	1976 Feb 3 17:30:00	Rocketsonde			Starute, Dhataonde				WS				63		
1976-W176	2442812.24	1976 Feb 3 17:49:59	Rocketsonde			Starute, Dhataonde				PH				59		
1976-W177	2442813.01	1976 Feb 4 12:20:00	Rocketsonde			Arcasonde				ASC				61		
1976-W179	2442813.16	1976 Feb 4 15:45:59	Rocketsonde			Starute, Dhataonde				WI				61		
1976-W180	2442813.16	1976 Feb 4 15:45:59	Rocketsonde			Starute, Dhataonde				THU				67		
1976-W181	2442813.19	1976 Feb 4 16:30:00	Rocketsonde			Arcasonde				CC	LO43			61		
1976-W182	2442813.25	1976 Feb 4 17:31:00	Rocketsonde			Arcasonde				CC	LO43			95		
1976-W183	2442813.25	1976 Feb 4 18:00:00	Rocketsonde			Starute, Dhataonde				WS				63		
1976-W184	2442813.32	1976 Feb 4 19:41:59	Rocketsonde			Starute, Dhataonde				PM				67		
1976-W185	2442813.32	1976 Feb 4 19:44:59	Rocketsonde			Starute, Dhataonde				PF				62		
1976-W186	2442813.55	1976 Feb 5 01:14:59	Rocketsonde			Arcasonde				PH				78		
1976-W187	2442814.14	1976 Feb 5 15:17:00	Rocketsonde			Starute, Dhataonde				KHR				62		
1976-W188	2442814.20	1976 Feb 5 16:52:59	Rocketsonde			Arcasonde				AIT				74		
1976-W189	2442814.29	1976 Feb 5 18:59:59	Rocketsonde			Starute, Dhataonde				PM				74		
1976-W190	2442814.31	1976 Feb 5 19:27:59	Rocketsonde			Arcasonde				WS				66		
1976-W191	2442814.31	1976 Feb 5 19:27:59	Rocketsonde			Arcasonde				AIT				45		
1976-W192	2442815.02	1976 Feb 6 12:35:59	Rocketsonde			Arcasonde				ASC	LO43			64		
1976-W193	2442815.21	1976 Feb 6 17:00:00	Rocketsonde			Arcasonde				CC				59		
1976-W194	2442815.21	1976 Feb 6 17:00:00	Rocketsonde			Starute, Dhataonde				WS				67		
1976-W195	2442815.25	1976 Feb 6 18:00:00	Rocketsonde			Arcasonde				PM				65		
1976-W196	2442815.34	1976 Feb 6 20:00:00	Rocketsonde			Starute, Dhataonde				WS				65		
1976-W197	2442815.34	1976 Feb 6 20:00:00	Rocketsonde			Starute, Dhataonde				PF				67		
1976-W198	2442815.42	1976 Feb 7 07:32:59	Rocketsonde			Arcasonde				KHR				77		
1976-W199	2442815.61	1976 Feb 7 07:32:59	Rocketsonde			Arcasonde				KHR				77		
1976-W200	2442815.81	1976 Feb 9 14:30:00	Rocketsonde			Arcasonde				CC	LO43			61		
1976-W201	2442818.10	1976 Feb 9 17:30:00	Rocketsonde			Starute, Dhataonde				PRIM				70		
1976-W202	2442818.23	1976 Feb 9 17:30:00	Rocketsonde			Starute, Dhataonde				WI				62		
1976-W203	2442818.27	1976 Feb 9 18:35:59	Rocketsonde			Starute, Dhataonde				WS				65		
1976-W204	2442818.29	1976 Feb 9 18:35:59	Rocketsonde			Starute, Dhataonde				WS				65		

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Mission	FlightCode	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee_Km	Range_Km	Dest
1976-4206	2442818.38	1976 Feb 9 2111:59	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	PF	-	-	-	64	-	-
1976-4207	2442818.48	1976 Feb 9 2337:59	Rocketsonde	-	-	Arcasonde	-	-	-	KMR	-	-	-	76	-	-
1976-4209	2442818.99	1976 Feb 10 1146:00	Rocketsonde	-	-	Arcasonde	-	-	-	ASC	-	-	-	65	-	-
1976-4210	2442819.22	1976 Feb 10 1720:00	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	WS	-	-	-	66	-	-
1976-4211	2442819.43	1976 Feb 10 2214:59	Rocketsonde	-	-	Arcasonde	-	-	-	SHEM	-	-	-	52	-	-
1976-4212	2442820.02	1976 Feb 11 1223:59	Rocketsonde	-	-	Arcasonde	-	-	-	ASC	-	-	-	64	-	-
1976-4213	2442820.17	1976 Feb 11 1607:59	Rocketsonde	-	-	Arcasonde	-	-	-	CC	LO43	-	-	61	-	-
1976-4215	2442820.21	1976 Feb 11 1708:00	Rocketsonde	-	-	Arcasonde	-	-	-	CC	LO43	-	-	95	-	-
1976-4216	2442820.22	1976 Feb 11 1723:00	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	PH	-	-	-	63	-	-
1976-4217	2442820.27	1976 Feb 11 1820:00	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	MI	-	-	-	89	-	-
1976-4218	2442820.27	1976 Feb 11 1820:00	Rocketsonde	-	-	Arcasonde	-	-	-	PRIM	-	-	-	69	-	-
1976-4219	2442820.34	1976 Feb 11 2014:00	Rocketsonde	-	-	Arcasonde	-	-	-	PF	-	-	-	68	-	-
1976-4221	2442821.14	1976 Feb 12 1519:00	Rocketsonde	-	-	Arcasonde	-	-	-	THU	-	-	-	59	-	-
1976-4222	2442821.16	1976 Feb 12 1549:59	Rocketsonde	-	-	Arcasonde	-	-	-	THU	-	-	-	69	-	-
1976-4224	2442821.29	1976 Feb 12 1853:59	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	PH	-	-	-	59	-	-
1976-4225	2442821.29	1976 Feb 12 1859:59	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	WS	-	-	-	63	-	-
1976-4226	2442821.40	1976 Feb 12 2134:59	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	KAU	-	-	-	60	-	-
1976-4227	2442821.50	1976 Feb 12 2388:00	Rocketsonde	-	-	Arcasonde	-	-	-	KMR	-	-	-	76	-	-
1976-4228	2442821.74	1976 Feb 13 0530:00	Rocketsonde	-	-	Arcasonde	-	-	-	KMR	-	-	-	76	-	-
1976-4231	2442822.03	1976 Feb 13 1238:59	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	PF	-	-	-	72	-	-
1976-4232	2442822.13	1976 Feb 13 1503:59	Rocketsonde	-	-	Arcasonde	-	-	-	ASC	-	-	-	61	-	-
1976-4234	2442822.22	1976 Feb 13 1710:00	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	MI	-	-	-	57	-	-
1976-4235	2442822.26	1976 Feb 13 1914:59	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	PH	-	-	-	54	-	-
1976-4236	2442822.40	1976 Feb 13 1944:59	Rocketsonde	-	-	Met. Sphere	-	-	-	WS	-	-	-	63	-	-
1976-4237	2442822.42	1976 Feb 13 2138:59	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	KAU	-	-	-	76	-	-
1976-4238	2442822.53	1976 Feb 14 0036:59	Rocketsonde	-	-	Arcasonde	-	-	-	SHEM	LO43	-	-	52	-	-
1976-4239	2442823.48	1976 Feb 14 0326:59	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	CC	-	-	-	58	-	-
1976-4242	2442824.75	1976 Feb 16 0900:00	Rocketsonde	-	-	Arcasonde	-	-	-	PF	-	-	-	87	-	-
1976-4243	2442825.59	1976 Feb 17 1735:00	Rocketsonde	-	-	Arcasonde	-	-	-	PRIM	-	-	-	94	-	-
1976-4245	2442826.11	1976 Feb 17 1442:00	Rocketsonde	-	-	Arcasonde	-	-	-	THU	-	-	-	71	-	-
1976-4246	2442826.21	1976 Feb 17 1452:00	Rocketsonde	-	-	Arcasonde	-	-	-	ASC	-	-	-	62	-	-
1976-4247	2442826.25	1976 Feb 17 1555:59	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	CC	LO43	-	-	60	-	-
1976-4248	2442826.50	1976 Feb 17 2309:00	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	PH	-	-	-	80	-	-
1976-4249	2442826.60	1976 Feb 17 2359:00	Rocketsonde	-	-	Arcasonde	-	-	-	WS	-	-	-	86	-	-
1976-4250	2442827.02	1976 Feb 18 1226:59	Rocketsonde	-	-	Arcasonde	-	-	-	KMR	-	-	-	63	-	-
1976-4251	2442827.11	1976 Feb 18 1441:00	Rocketsonde	-	-	Arcasonde	-	-	-	ASC	-	-	-	89	-	-
1976-4255	2442827.17	1976 Feb 18 1501:59	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	MI	-	-	-	89	-	-
1976-4256	2442827.17	1976 Feb 18 1509:59	Rocketsonde	-	-	Met. Sphere	-	-	-	PH	-	-	-	85	-	-
1976-4257	2442827.16	1976 Feb 18 1611:59	Rocketsonde	-	-	Arcasonde	-	-	-	CC	LO43	-	-	62	-	-
1976-4258	2442827.21	1976 Feb 18 1621:59	Rocketsonde	-	-	Arcasonde	-	-	-	PH	-	-	-	74	-	-
1976-4259	2442827.26	1976 Feb 18 1656:59	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	PRIM	-	-	-	64	-	-
1976-4260	2442827.44	1976 Feb 18 2106:00	Rocketsonde	-	-	Arcasonde	-	-	-	WS	-	-	-	84	-	-
1976-4261	2442827.55	1976 Feb 18 2511:59	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	KAU	-	-	-	87	-	-
1976-4262	2442827.55	1976 Feb 18 2511:59	Rocketsonde	-	-	Met. Sphere	-	-	-	SHEM	-	-	-	65	-	-
1976-4263	2442828.14	1976 Feb 19 1626:59	Rocketsonde	-	-	Arcasonde	-	-	-	KAU	-	-	-	61	-	-
1976-4264	2442828.19	1976 Feb 19 1626:59	Rocketsonde	-	-	Arcasonde	-	-	-	SHEM	-	-	-	61	-	-
1976-4265	2442829.07	1976 Feb 19 1630:00	Rocketsonde	-	-	Arcasonde	-	-	-	THU	-	-	-	81	-	-
1976-4266	2442829.19	1976 Feb 20 1344:59	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	KMR	-	-	-	63	-	-
1976-4267	2442829.19	1976 Feb 20 1627:59	Rocketsonde	-	-	Arcasonde	-	-	-	WS	-	-	-	68	-	-
1976-4268	2442829.19	1976 Feb 20 1629:00	Rocketsonde	-	-	Arcasonde	-	-	-	MI	-	-	-	70	-	-
1976-4269	2442829.26	1976 Feb 20 1754:00	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	CC	LO43	-	-	61	-	-
1976-4270	2442829.37	1976 Feb 20 1914:59	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	PRIM	-	-	-	62	-	-
1976-4271	2442829.44	1976 Feb 20 2036:59	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	WS	-	-	-	65	-	-
1976-4272	2442829.52	1976 Feb 21 0024:59	Rocketsonde	-	-	Arcasonde	-	-	-	KAU	-	-	-	60	-	-
1976-4273	2442829.97	1976 Feb 21 1115:00	Rocketsonde	-	-	Arcasonde	-	-	-	SHEM	-	-	-	60	-	-
1976-4274	2442830.02	1976 Feb 21 1115:00	Rocketsonde	-	-	Arcasonde	-	-	-	THU	-	-	-	73	-	-
1976-4275	2442830.18	1976 Feb 21 1614:59	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	PF	-	-	-	62	-	-
1976-4276	2442830.22	1976 Feb 21 1614:59	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	PF	-	-	-	62	-	-
1976-4277	2442832.22	1976 Feb 23 1713:00	Rocketsonde	-	-	Arcasonde	-	-	-	CC	LO43	-	-	60	-	-
1976-4278	2442832.41	1976 Feb 23 2145:00	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	PRIM	-	-	-	66	-	-
1976-4279	2442832.43	1976 Feb 23 2214:59	Rocketsonde	-	-	Arcasonde	-	-	-	WS	-	-	-	69	-	-
1976-4280	2442832.67	1976 Feb 23 2320:00	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	PM	-	-	-	69	-	-
1976-4281	2442833.56	1976 Feb 24 0130:00	Rocketsonde	-	-	Arcasonde	-	-	-	SHEM	-	-	-	75	-	-
1976-4282	2442833.52	1976 Feb 24 0215:00	Rocketsonde	-	-	Arcasonde	-	-	-	KMR	-	-	-	68	-	-
1976-4283	2442833.22	1976 Feb 24 0215:00	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	PF	-	-	-	68	-	-
1976-4284	2442833.22	1976 Feb 24 1721:00	Rocketsonde	-	-	Arcasonde	-	-	-	WS	-	-	-	67	-	-
1976-4285	2442833.35	1976 Feb 24 1734:00	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	PRIM	-	-	-	63	-	-
1976-4286	2442833.94	1976 Feb 24 2030:00	Rocketsonde	-	-	Arcasonde	-	-	-	PM	-	-	-	73	-	-
1976-4287	2442833.52	1976 Feb 25 0030:00	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	THU	-	-	-	72	-	-
1976-4288	2442833.61	1976 Feb 25 0245:00	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	PF	-	-	-	69	-	-
1976-4289	2442833.94	1976 Feb 25 1030:00	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	PF	-	-	-	68	-	-
1976-4290	2442834.14	1976 Feb 25 1259:59	Rocketsonde	-	-	Arcasonde	-	-	-	ASC	-	-	-	62	-	-
1976-4291	2442834.16	1976 Feb 25 1514:59	Rocketsonde	-	-	Arcasonde	-	-	-	MI	-	-	-	71	-	-
1976-4292	2442834.19	1976 Feb 25 1640:00	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	THU	-	-	-	62	-	-
1976-4293	2442834.29	1976 Feb 25 1859:59	Rocketsonde	-	-	Arcasonde	-	-	-	WS	-	-	-	64	-	-
1976-4294	2442834.35	1976 Feb 25 2024:00	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	PRIM	-	-	-	62	-	-
1976-4295	2442834.37	1976 Feb 25 2055:00	Rocketsonde	-	-	Met. Sphere	-	-	-	PH	-	-	-	64	-	-
1976-4296	2442834.38	1976 Feb 25 2106:00	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	PM	-	-	-	72	-	-
1976-4296	2442834.38	1976 Feb 25 2112:59	Rocketsonde	-	-	Arcasonde	-	-	-	KAU	-	-	-	86	-	-
1976-4296	2442834.38	1976 Feb 25 2112:59	Rocketsonde	-	-	Arcasonde	-	-	-	SHEM	-	-	-	54	-	-

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Mission	FlightCode	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee_Km	Range_Km	Dest
1976-4297	2442834_40	1976 Feb 25 21:43:00	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	KAU	-	-	-	72	-	-
1976-798	2442834_56	1976 Feb 26 01:20:59	Rocketsonde	-	-	Arcasonde	-	-	-	KHR	-	-	-	81	-	-
1976-4298	2442834_59	1976 Feb 26 02:04:59	Rocketsonde	-	-	Arcasonde	-	-	-	THU	-	-	-	64	-	-
1976-4299	2442834_64	1976 Feb 26 03:14:59	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	WS	-	-	-	87	-	-
1976-4300	2442835_23	1976 Feb 26 17:30:00	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	KAU	-	-	-	61	-	-
1976-4301	2442835_37	1976 Feb 26 20:57:00	Rocketsonde	-	-	Arcasonde	-	-	-	THU	-	-	-	89	-	-
1976-4302	2442835_61	1976 Feb 27 02:40:00	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	PF	-	-	-	63	-	-
1976-4303	2442835_95	1976 Feb 27 10:44:59	Rocketsonde	-	-	Arcasonde	-	-	-	ASC	-	-	-	58	-	-
1976-4304	2442835_07	1976 Feb 27 13:44:59	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	MI	-	-	-	64	-	-
1976-4305	2442835_13	1976 Feb 27 15:01:59	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	WS	-	-	-	60	-	-
1976-4306	2442835_19	1976 Feb 27 16:30:00	Rocketsonde	-	-	Arcasonde	-	-	-	PRIM	-	-	-	60	-	-
1976-4307	2442835_25	1976 Feb 27 17:56:00	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	PH	-	-	-	52	-	-
1976-4308	2442835_29	1976 Feb 27 18:52:00	Rocketsonde	-	-	Arcasonde	-	-	-	SHEM	-	-	-	54	-	-
1976-4309	2442835_37	1976 Feb 27 20:58:00	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	KAU	-	-	-	77	-	-
1976-4310	2442835_41	1976 Feb 27 21:52:00	Rocketsonde	-	-	Arcasonde	-	-	-	KHR	-	-	-	65	-	-
1976-4311	2442835_46	1976 Feb 27 21:52:00	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	THU	-	-	-	65	-	-
1976-4312	2442835_42	1976 Feb 27 21:59:59	Rocketsonde	-	-	Arcasonde	-	-	-	PF	-	-	-	69	-	-
1976-4313	2442835_58	1976 Feb 28 01:49:59	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	PF	-	-	-	67	-	-
1976-4314	2442835_52	1976 Feb 28 07:40:00	Rocketsonde	-	-	Arcasonde	-	-	-	ASC	-	-	-	62	-	-
1976-4315	2442835_57	1976 Feb 29 11:15:00	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	ASC	-	-	-	56	-	-
1976-4316	2442835_73	1976 Mar 1 03:50:00	Rocketsonde	-	-	Arcasonde	-	-	-	MI	-	-	-	53	-	-
1976-4317	2442835_97	1976 Mar 1 11:17:00	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	SHEM	-	-	-	70	-	-
1976-4318	2442835_01	1976 Mar 1 12:17:00	Rocketsonde	-	-	Arcasonde	-	-	-	KHR	-	-	-	62	-	-
1976-4319	2442835_47	1976 Mar 2 03:21:00	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	THU	-	-	-	69	-	-
1976-4320	2442835_65	1976 Mar 2 03:21:00	Rocketsonde	-	-	Arcasonde	-	-	-	PF	-	-	-	65	-	-
1976-4321	2442835_73	1976 Mar 2 03:55:00	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	PF	-	-	-	65	-	-
1976-4322	2442835_96	1976 Mar 2 11:05:00	Rocketsonde	-	-	Arcasonde	-	-	-	ASC	-	-	-	56	-	-
1976-4323	2442835_24	1976 Mar 2 16:14:59	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	KAU	-	-	-	64	-	-
1976-4324	2442840_26	1976 Mar 2 21:52:00	Rocketsonde	-	-	Arcasonde	-	-	-	WS	-	-	-	57	-	-
1976-4325	2442840_41	1976 Mar 3 12:53:00	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	ASC	-	-	-	64	-	-
1976-4326	2442841_02	1976 Mar 3 12:53:00	Rocketsonde	-	-	Arcasonde	-	-	-	CC	-	-	-	57	-	-
1976-4327	2442841_18	1976 Mar 3 16:15:59	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	THU	-	-	-	70	-	-
1976-4328	2442841_19	1976 Mar 3 16:32:59	Rocketsonde	-	-	Arcasonde	-	-	-	MI	-	-	-	65	-	-
1976-4329	2442841_20	1976 Mar 3 16:44:59	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	SHEM	-	-	-	57	-	-
1976-4330	2442841_21	1976 Mar 3 16:48:59	Rocketsonde	-	-	Arcasonde	-	-	-	PH	-	-	-	67	-	-
1976-4331	2442841_20	1976 Mar 3 16:53:59	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	PH	-	-	-	73	-	-
1976-4332	2442841_21	1976 Mar 3 17:00:00	Rocketsonde	-	-	Arcasonde	-	-	-	WS	-	-	-	56	-	-
1976-4333	2442841_24	1976 Mar 3 17:45:00	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	SHEM	-	-	-	76	-	-
1976-4334	2442841_24	1976 Mar 3 17:52:00	Rocketsonde	-	-	Arcasonde	-	-	-	KHR	-	-	-	64	-	-
1976-4335	2442841_24	1976 Mar 3 18:13:59	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	ASC	-	-	-	59	-	-
1976-4336	2442841_26	1976 Mar 3 18:31:59	Rocketsonde	-	-	Arcasonde	-	-	-	MI	-	-	-	69	-	-
1976-4337	2442841_26	1976 Mar 3 18:51:59	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	PH	-	-	-	67	-	-
1976-4338	2442841_26	1976 Mar 3 18:51:59	Rocketsonde	-	-	Arcasonde	-	-	-	PH	-	-	-	64	-	-
1976-4339	2442841_26	1976 Mar 3 18:51:59	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	ASC	-	-	-	62	-	-
1976-4340	2442841_26	1976 Mar 3 18:51:59	Rocketsonde	-	-	Arcasonde	-	-	-	MI	-	-	-	69	-	-
1976-4341	2442841_26	1976 Mar 3 18:51:59	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	PH	-	-	-	67	-	-
1976-4342	2442841_26	1976 Mar 3 18:51:59	Rocketsonde	-	-	Arcasonde	-	-	-	ASC	-	-	-	62	-	-
1976-4343	2442841_26	1976 Mar 3 18:51:59	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	MI	-	-	-	69	-	-
1976-4344	2442841_26	1976 Mar 3 18:51:59	Rocketsonde	-	-	Arcasonde	-	-	-	PH	-	-	-	67	-	-
1976-4345	2442841_26	1976 Mar 3 18:51:59	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	ASC	-	-	-	62	-	-
1976-4346	2442841_26	1976 Mar 3 18:51:59	Rocketsonde	-	-	Arcasonde	-	-	-	MI	-	-	-	69	-	-
1976-4347	2442841_26	1976 Mar 3 18:51:59	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	PH	-	-	-	67	-	-
1976-4348	2442841_26	1976 Mar 3 18:51:59	Rocketsonde	-	-	Arcasonde	-	-	-	ASC	-	-	-	62	-	-
1976-4349	2442841_26	1976 Mar 3 18:51:59	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	MI	-	-	-	69	-	-
1976-4350	2442841_26	1976 Mar 3 18:51:59	Rocketsonde	-	-	Arcasonde	-	-	-	PH	-	-	-	67	-	-
1976-4351	2442841_26	1976 Mar 3 18:51:59	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	ASC	-	-	-	62	-	-
1976-4352	2442841_26	1976 Mar 3 18:51:59	Rocketsonde	-	-	Arcasonde	-	-	-	MI	-	-	-	69	-	-
1976-4353	2442841_26	1976 Mar 3 18:51:59	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	PH	-	-	-	67	-	-
1976-4354	2442841_26	1976 Mar 3 18:51:59	Rocketsonde	-	-	Arcasonde	-	-	-	ASC	-	-	-	62	-	-
1976-4355	2442841_26	1976 Mar 3 18:51:59	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	MI	-	-	-	69	-	-
1976-4356	2442841_26	1976 Mar 3 18:51:59	Rocketsonde	-	-	Arcasonde	-	-	-	PH	-	-	-	67	-	-
1976-4357	2442841_26	1976 Mar 3 18:51:59	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	ASC	-	-	-	62	-	-
1976-4358	2442841_26	1976 Mar 3 18:51:59	Rocketsonde	-	-	Arcasonde	-	-	-	MI	-	-	-	69	-	-
1976-4359	2442841_26	1976 Mar 3 18:51:59	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	PH	-	-	-	67	-	-
1976-4360	2442841_26	1976 Mar 3 18:51:59	Rocketsonde	-	-	Arcasonde	-	-	-	ASC	-	-	-	62	-	-
1976-4361	2442841_26	1976 Mar 3 18:51:59	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	MI	-	-	-	69	-	-
1976-4362	2442841_26	1976 Mar 3 18:51:59	Rocketsonde	-	-	Arcasonde	-	-	-	PH	-	-	-	67	-	-
1976-4363	2442841_26	1976 Mar 3 18:51:59	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	ASC	-	-	-	62	-	-
1976-4364	2442841_26	1976 Mar 3 18:51:59	Rocketsonde	-	-	Arcasonde	-	-	-	MI	-	-	-	69	-	-
1976-4365	2442841_26	1976 Mar 3 18:51:59	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	PH	-	-	-	67	-	-
1976-4366	2442841_26	1976 Mar 3 18:51:59	Rocketsonde	-	-	Arcasonde	-	-	-	ASC	-	-	-	62	-	-
1976-4367	2442841_26	1976 Mar 3 18:51:59	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	MI	-	-	-	69	-	-
1976-4368	2442841_26	1976 Mar 3 18:51:59	Rocketsonde	-	-	Arcasonde	-	-	-	PH	-	-	-	67	-	-
1976-4369	2442841_26	1976 Mar 3 18:51:59	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	ASC	-	-	-	62	-	-
1976-4370	2442841_26	1976 Mar 3 18:51:59	Rocketsonde	-	-	Arcasonde	-	-	-	MI	-	-	-	69	-	-
1976-4371	2442841_26	1976 Mar 3 18:51:59	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	PH	-	-	-	67	-	-
1976-4372	2442841_26	1976 Mar 3 18:51:59	Rocketsonde	-	-	Arcasonde	-	-	-	ASC	-	-	-	62	-	-
1976-4373	2442841_26	1976 Mar 3 18:51:59	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	MI	-	-	-	69	-	-
1976-4374	2442841_26	1976 Mar 3 18:51:59	Rocketsonde	-	-	Arcasonde	-	-	-	PH	-	-	-	67	-	-
1976-4375	2442841_26	1976 Mar 3 18:51:59	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	ASC	-	-	-	62	-	-
1976-4376	2442841_26	1976 Mar 3 18:51:59	Rocketsonde	-	-	Arcasonde	-	-	-	MI	-	-	-	69	-	-
1976-4377	2442841_26	1976 Mar 3 18:51:59	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	PH	-	-	-	67	-	-
1976-4378	2442841_26	1976 Mar 3 18:51:59	Rocketsonde	-	-	Arcasonde	-	-	-	ASC	-	-	-	62	-	-
1976-4379	2442841_26	1976 Mar 3 18:51:59	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	MI	-	-	-	69	-	-
1976-4380	2442841_26	1976 Mar 3 18:51:59	Rocketsonde	-	-	Arcasonde	-	-	-	PH	-	-	-	67	-	-
1976-4381	2442841_26	1976 Mar 3 18:51:59	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	ASC	-	-	-	62	-	-
1976-4382	2442841_26	1976 Mar 3 18:51:59	Rocketsonde	-	-	Arcasonde	-	-	-	MI	-	-	-	69	-	-
1976-4383	2442841_26	1976 Mar 3 18:51:59	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	PH	-	-	-	67	-	-
1976-4384	2442841_26	1976 Mar 3 18:51:59	Rocketsonde	-	-	Arcasonde	-	-	-	ASC	-	-	-	62	-	-
1976-4385	2442841_26	1976 Mar 3 18:51:59	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	MI	-	-	-	69	-	-
1976-4386	2442841_26	1976 Mar 3 18:51:59</														

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Mission	FlightCode	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee_Km	Range_Km	Dest
1976-W390	2442848.44	1976 Mar 10 22:31:59	Rocketsonde	-	-	Arcasonde	-	-	-	SHER	-	-	-	54	-	-
1976-W393	2442848.92	1976 Mar 11 10:04:59	Rocketsonde	-	-	Arcasonde	-	-	-	PF	-	-	-	67	-	-
1976-W395	2442849.15	1976 Mar 11 15:43:00	Rocketsonde	-	-	Arcasonde	-	-	-	AIT	-	-	-	65	-	-
1976-W396	2442849.19	1976 Mar 11 16:00:00	Rocketsonde	-	-	Arcasonde	-	-	-	PH	-	-	-	64	-	-
1976-W397	2442849.25	1976 Mar 11 18:00:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PH	-	-	-	74	-	-
1976-W398	2442850.03	1976 Mar 12 12:49:59	Rocketsonde	-	-	Arcasonde	-	-	-	ASC	-	-	-	47	-	-
1976-W399	2442850.14	1976 Mar 12 15:20:00	Rocketsonde	-	-	Arcasonde	-	-	-	THU	-	-	-	65	-	-
1976-W400	2442850.15	1976 Mar 12 15:33:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	WI	-	-	-	70	-	-
1976-W401	2442850.19	1976 Mar 12 16:00:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	SHER	-	-	-	59	-	-
1976-W402	2442850.23	1976 Mar 12 17:32:00	Rocketsonde	-	-	Arcasonde	-	-	-	CC	LO43	-	-	58	-	-
1976-W403	2442850.44	1976 Mar 12 22:30:00	Rocketsonde	-	-	Arcasonde	-	-	-	CC	LO43	-	-	96	-	-
1976-W403	2442850.49	1976 Mar 12 23:49:59	Rocketsonde	-	-	Arcasonde	-	-	-	SHER	-	-	-	53	-	-
1976-W404	2442852.86	1976 Mar 15 09:35:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PF	-	-	-	66	-	-
1976-W407	2442853.02	1976 Mar 15 12:23:59	Rocketsonde	-	-	Arcasonde	-	-	-	ASC	-	-	-	66	-	-
1976-W408	2442853.18	1976 Mar 15 15:00:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	SHER	-	-	-	53	-	-
1976-W409	2442853.18	1976 Mar 15 16:20:59	Rocketsonde	-	-	Arcasonde	-	-	-	CC	LO43	-	-	64	-	-
1976-W410	2442853.19	1976 Mar 15 16:30:00	Rocketsonde	-	-	Arcasonde	-	-	-	PRIM	-	-	-	66	-	-
1976-W411	2442853.19	1976 Mar 15 18:00:00	Rocketsonde	-	-	Arcasonde	-	-	-	WS	-	-	-	65	-	-
1976-W412	2442853.27	1976 Mar 15 18:30:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	WI	-	-	-	74	-	-
1976-W413	2442853.40	1976 Mar 15 21:30:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	KAU	-	-	-	58	-	-
1976-W414	2442853.46	1976 Mar 16 18:55:00	Rocketsonde	-	-	Arcasonde	-	-	-	SHER	-	-	-	53	-	-
1976-W415	2442854.15	1976 Mar 16 18:50:00	Rocketsonde	-	-	Arcasonde	-	-	-	AIT	-	-	-	75	-	-
1976-W416	2442854.29	1976 Mar 16 19:56:59	Rocketsonde	-	-	Arcasonde	-	-	-	PH	-	-	-	57	-	-
1976-W417	2442854.33	1976 Mar 17 17:32:00	Rocketsonde	-	-	Arcasonde	-	-	-	THU	-	-	-	60	-	-
1976-W419	2442855.16	1976 Mar 17 15:55:00	Rocketsonde	-	-	Arcasonde	-	-	-	AIT	-	-	-	61	-	-
1976-W420	2442855.16	1976 Mar 17 16:52:59	Rocketsonde	-	-	Arcasonde	-	-	-	CC	LO43	-	-	66	-	-
1976-W421	2442855.19	1976 Mar 17 17:00:00	Rocketsonde	-	-	Arcasonde	-	-	-	WS	-	-	-	66	-	-
1976-W422	2442855.21	1976 Mar 17 17:30:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	SHER	-	-	-	65	-	-
1976-W424	2442855.23	1976 Mar 17 17:32:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	WI	-	-	-	51	-	-
1976-W425	2442855.23	1976 Mar 17 17:32:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	MI	-	-	-	71	-	-
1976-W426	2442855.27	1976 Mar 17 18:30:00	Rocketsonde	-	-	Arcasonde	-	-	-	PRIM	-	-	-	67	-	-
1976-W427	2442855.30	1976 Mar 17 19:15:59	Rocketsonde	-	-	Arcasonde	-	-	-	RFR	-	-	-	76	-	-
1976-W428	2442855.50	1976 Mar 17 23:58:00	Rocketsonde	-	-	Arcasonde	-	-	-	PF	-	-	-	68	-	-
1976-W429	2442856.00	1976 Mar 18 09:00:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	THU	-	-	-	70	-	-
1976-W430	2442856.16	1976 Mar 18 15:35:00	Rocketsonde	-	-	Arcasonde	-	-	-	KAU	-	-	-	87	-	-
1976-W430	2442856.40	1976 Mar 18 21:38:59	Rocketsonde	-	-	Arcasonde	-	-	-	Met. Sphere	-	-	-	87	-	-
1976-W431	2442856.42	1976 Mar 18 22:02:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	KAU	-	-	-	87	-	-
1976-W432	2442856.54	1976 Mar 19 09:15:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PF	-	-	-	67	-	-
1976-W433	2442857.07	1976 Mar 19 13:44:59	Rocketsonde	-	-	Arcasonde	-	-	-	ASC	LO43	-	-	65	-	-
1976-W434	2442857.10	1976 Mar 19 14:20:00	Rocketsonde	-	-	Arcasonde	-	-	-	CC	-	-	-	65	-	-
1976-W435	2442857.16	1976 Mar 19 15:05:00	Rocketsonde	-	-	Arcasonde	-	-	-	PH	-	-	-	72	-	-
1976-W436	2442857.20	1976 Mar 19 15:44:59	Rocketsonde	-	-	Arcasonde	-	-	-	SHER	-	-	-	79	-	-
1976-W437	2442857.21	1976 Mar 19 17:00:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	NS	-	-	-	67	-	-
1976-W438	2442857.30	1976 Mar 19 19:14:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PRIM	-	-	-	66	-	-
1976-W439	2442857.32	1976 Mar 19 19:35:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	MI	-	-	-	70	-	-
1976-W440	2442857.42	1976 Mar 19 22:34:59	Rocketsonde	-	-	Arcasonde	-	-	-	SHER	-	-	-	64	-	-
1976-W441	2442857.42	1976 Mar 19 22:34:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	KAU	-	-	-	64	-	-
1976-W442	2442857.67	1976 Mar 20 03:59:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	ASC	-	-	-	64	-	-
1976-W443	2442858.03	1976 Mar 20 15:11:00	Rocketsonde	-	-	Arcasonde	-	-	-	SHER	-	-	-	64	-	-
1976-W444	2442858.16	1976 Mar 22 16:06:59	Rocketsonde	-	-	Arcasonde	-	-	-	CC	LO43	-	-	63	-	-
1976-W445	2442858.24	1976 Mar 22 17:40:00	Rocketsonde	-	-	Arcasonde	-	-	-	AIT	-	-	-	73	-	-
1976-W446	2442858.24	1976 Mar 22 17:40:00	Rocketsonde	-	-	Arcasonde	-	-	-	PH	-	-	-	58	-	-
1976-W448	2442858.26	1976 Mar 22 18:14:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	NS	-	-	-	64	-	-
1976-W449	2442858.29	1976 Mar 22 18:54:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	VI	-	-	-	59	-	-
1976-W450	2442858.29	1976 Mar 22 18:59:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PRIM	-	-	-	67	-	-
1976-W451	2442858.39	1976 Mar 22 21:00:00	Rocketsonde	-	-	Arcasonde	-	-	-	SHER	-	-	-	55	-	-
1976-W453	2442858.72	1976 Mar 22 05:20:00	Rocketsonde	-	-	Arcasonde	-	-	-	PF	-	-	-	65	-	-
1976-W454	2442861.72	1976 Mar 24 05:15:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	ASC	-	-	-	61	-	-
1976-W455	2442862.07	1976 Mar 24 13:44:59	Rocketsonde	-	-	Arcasonde	-	-	-	ASC	-	-	-	61	-	-
1976-W456	2442862.11	1976 Mar 24 14:41:00	Rocketsonde	-	-	Arcasonde	-	-	-	AIT	-	-	-	60	-	-
1976-W457	2442862.14	1976 Mar 24 15:14:59	Rocketsonde	-	-	Arcasonde	-	-	-	AIT	-	-	-	69	-	-
1976-W458	2442862.16	1976 Mar 24 15:45:00	Rocketsonde	-	-	Arcasonde	-	-	-	THU	-	-	-	57	-	-
1976-W459	2442862.17	1976 Mar 24 15:57:59	Rocketsonde	-	-	Arcasonde	-	-	-	VI	-	-	-	64	-	-
1976-W460	2442862.19	1976 Mar 24 16:29:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	CC	LO43	-	-	65	-	-
1976-W461	2442862.22	1976 Mar 24 17:15:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	SHER	-	-	-	61	-	-
1976-W462	2442862.27	1976 Mar 24 18:24:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	NS	-	-	-	65	-	-
1976-W463	2442862.29	1976 Mar 24 18:59:59	Rocketsonde	-	-	Arcasonde	-	-	-	PRIM	-	-	-	61	-	-
1976-W464	2442862.39	1976 Mar 24 21:14:59	Rocketsonde	-	-	Arcasonde	-	-	-	SHER	-	-	-	55	-	-
1976-W465	2442863.02	1976 Mar 24 21:22:59	Rocketsonde	-	-	Arcasonde	-	-	-	KAU	-	-	-	87	-	-
1976-W466	2442863.02	1976 Mar 25 12:35:59	Rocketsonde	-	-	Met. Sphere	-	-	-	ASC	-	-	-	61	-	-
1976-W467	2442863.16	1976 Mar 25 15:49:59	Rocketsonde	-	-	Arcasonde	-	-	-	THU	-	-	-	67	-	-
1976-W468	2442863.21	1976 Mar 25 17:00:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	NS	-	-	-	66	-	-
1976-W469	2442863.38	1976 Mar 25 21:04:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	KAU	-	-	-	56	-	-
1976-W471	2442863.74	1976 Mar 26 05:45:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PF	-	-	-	58	-	-
1976-W472	2442864.14	1976 Mar 26 15:30:00	Rocketsonde	-	-	Arcasonde	-	-	-	VI	-	-	-	70	-	-
1976-W473	2442864.15	1976 Mar 26 15:40:00	Rocketsonde	-	-	Arcasonde	-	-	-	AIT	-	-	-	69	-	-
1976-W474	2442864.15	1976 Mar 26 15:40:00	Rocketsonde	-	-	Arcasonde	-	-	-	THU	-	-	-	70	-	-
1976-W475	2442864.17	1976 Mar 26 15:59:59	Rocketsonde	-	-	Arcasonde	-	-	-	CC	LO43	-	-	95	-	-
1976-W476	2442864.19	1976 Mar 26 16:40:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	SHER	-	-	-	62	-	-
1976-W476	2442864.20	1976 Mar 26 16:46:59	Rocketsonde	-	-	Arcasonde	-	-	-	PRIM	-	-	-	67	-	-
1976-W477	2442864.31	1976 Mar 26 19:26:59	Rocketsonde	-	-	Met. Sphere	-	-	-	PH	-	-	-	88	-	-
1976-W477	2442864.34	1976 Mar 26 20:13:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PH	-	-	-	70	-	-
1976-W478	2442864.40	1976 Mar 26 21:30:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	KAU	-	-	-	60	-	-
1976-W479	2442864.41	1976 Mar 26 21:44:00	Rocketsonde	-	-	Arcasonde	-	-	-	SHER	-	-	-	56	-	-

Launch

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Mission	FlightCode	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee_Km	Range_Km	Dest
1976-A19	2442866.75	1976 Mar 29 06:00:00	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	PF	-	-	-	48	-	-
1976-W481	2442867.02	1976 Mar 29 12:31:00	Rocketsonde	-	-	Arcasonde	-	-	-	ASC	-	-	-	68	-	-
1976-W482	2442867.19	1976 Mar 29 16:34:59	Rocketsonde	-	-	Arcasonde	-	-	-	THU	-	-	-	68	-	-
1976-W483	2442867.23	1976 Mar 29 17:30:00	Rocketsonde	-	-	Arcasonde	-	-	-	AIT	-	-	-	71	-	-
1976-W484	2442867.24	1976 Mar 29 17:45:00	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	SHER	-	-	-	60	-	-
1976-W485	2442867.25	1976 Mar 29 18:00:00	Rocketsonde	-	-	Arcasonde	-	-	-	CC	L043	-	-	71	-	-
1976-W486	2442867.25	1976 Mar 29 18:00:00	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	WS	-	-	-	65	-	-
1976-W487	2442867.29	1976 Mar 29 18:56:00	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	PH	-	-	-	60	-	-
1976-W488	2442867.30	1976 Mar 29 19:14:59	Rocketsonde	-	-	Arcasonde	-	-	-	PRIM	-	-	-	70	-	-
1976-W489	2442867.35	1976 Mar 29 20:17:00	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	MI	-	-	-	59	-	-
1976-W491	2442868.19	1976 Mar 30 16:34:59	Rocketsonde	-	-	Arcasonde	-	-	-	THU	-	-	-	68	-	-
1976-W494	2442868.51	1976 Mar 31 07:30:00	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	PF	-	-	-	68	-	-
1976-W495	2442868.07	1976 Mar 31 13:44:59	Rocketsonde	-	-	Arcasonde	-	-	-	ASC	-	-	-	60	-	-
1976-A20	2442869.16	1976 Mar 31 15:49:59	Rocketsonde	-	-	Arcasonde	-	-	-	AIT	-	-	-	46	-	-
1976-W496	2442869.17	1976 Mar 31 15:49:59	Rocketsonde	-	-	Arcasonde	-	-	-	THU	-	-	-	66	-	-
1976-W497	2442869.19	1976 Mar 31 16:30:00	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	SHER	-	-	-	62	-	-
1976-W498	2442869.19	1976 Mar 31 16:32:59	Rocketsonde	-	-	Arcasonde	-	-	-	CC	L043	-	-	66	-	-
1976-W499	2442869.23	1976 Mar 31 17:26:00	Rocketsonde	-	-	Arcasonde	-	-	-	PRIM	-	-	-	67	-	-
1976-W147	2442869.24	1976 Mar 31 17:44:00	Rocketsonde	-	-	Arcasonde	-	-	-	CC	L043	-	-	96	-	-
1976-W500	2442869.25	1976 Mar 31 17:55:00	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	WS	-	-	-	67	-	-
1976-W501	2442869.45	1976 Mar 31 17:55:00	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	MI	-	-	-	68	-	-
1976-W502	2442870.23	1976 Apr 1 17:30:00	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	KAU	-	-	-	62	-	-
1976-W503	2442871.07	1976 Apr 1 22:02:59	Rocketsonde	-	-	Arcasonde	-	-	-	AIT	-	-	-	50	-	-
1976-W504	2442871.07	1976 Apr 2 13:44:59	Rocketsonde	-	-	Arcasonde	-	-	-	ASC	-	-	-	67	-	-
1976-W505	2442871.10	1976 Apr 2 14:50:00	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	CC	L043	-	-	56	-	-
1976-W506	2442871.14	1976 Apr 2 15:17:00	Rocketsonde	-	-	Arcasonde	-	-	-	MI	-	-	-	62	-	-
1976-W509	2442871.19	1976 Apr 2 16:40:00	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	SHER	-	-	-	56	-	-
1976-W510	2442871.29	1976 Apr 2 16:59:59	Rocketsonde	-	-	Arcasonde	-	-	-	PRIM	-	-	-	69	-	-
1976-W150	2442871.37	1976 Apr 2 20:55:00	Rocketsonde	-	-	Met. Sphere	-	-	-	KAU	-	-	-	59	-	-
1976-W511	2442871.39	1976 Apr 2 21:15:59	Rocketsonde	-	-	Arcasonde	-	-	-	SHER	-	-	-	52	-	-
1976-W512	2442871.42	1976 Apr 2 21:15:59	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	PH	-	-	-	65	-	-
1976-W513	2442871.42	1976 Apr 2 22:07:59	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	KAU	-	-	-	73	-	-
1976-W514	2442874.02	1976 Apr 5 12:34:59	Rocketsonde	-	-	Arcasonde	-	-	-	PH	-	-	-	57	-	-
1976-W515	2442874.24	1976 Apr 5 17:42:00	Rocketsonde	-	-	Arcasonde	-	-	-	ASC	-	-	-	66	-	-
1976-W516	2442874.26	1976 Apr 5 18:01:00	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	PRIM	-	-	-	65	-	-
1976-W517	2442874.29	1976 Apr 5 18:54:00	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	WS	-	-	-	67	-	-
1976-W518	2442874.33	1976 Apr 5 19:45:59	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	PH	-	-	-	65	-	-
1976-W519	2442874.46	1976 Apr 6 16:44:59	Rocketsonde	-	-	Arcasonde	-	-	-	SHER	-	-	-	62	-	-
1976-W520	2442875.20	1976 Apr 6 23:30:00	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	KAU	-	-	-	62	-	-
1976-W521	2442875.42	1976 Apr 7 22:10:59	Rocketsonde	-	-	Arcasonde	-	-	-	AIT	-	-	-	51	-	-
1976-W522	2442876.07	1976 Apr 7 13:34:59	Rocketsonde	-	-	Arcasonde	-	-	-	ASC	-	-	-	64	-	-
1976-W523	2442876.16	1976 Apr 7 17:03:59	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	MI	-	-	-	67	-	-
1976-W524	2442876.18	1976 Apr 7 18:44:59	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	SHER	-	-	-	59	-	-
1976-W525	2442876.19	1976 Apr 7 19:30:00	Rocketsonde	-	-	Arcasonde	-	-	-	PH	-	-	-	69	-	-
1976-W526	2442876.21	1976 Apr 7 17:03:59	Rocketsonde	-	-	Met. Sphere	-	-	-	AIT	-	-	-	64	-	-
1976-W527	2442876.21	1976 Apr 7 17:10:00	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	WS	-	-	-	66	-	-
1976-W528	2442876.23	1976 Apr 7 17:37:00	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	ASC	L043	-	-	62	-	-
1976-W529	2442876.28	1976 Apr 7 21:00:00	Rocketsonde	-	-	Arcasonde	-	-	-	CC	-	-	-	67	-	-
1976-W531	2442876.34	1976 Apr 7 22:29:00	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	PH	-	-	-	67	-	-
1976-W532	2442876.44	1976 Apr 8 01:25:59	Rocketsonde	-	-	Arcasonde	-	-	-	SHER	-	-	-	51	-	-
1976-W533	2442876.55	1976 Apr 8 12:45:59	Rocketsonde	-	-	Arcasonde	-	-	-	KNR	-	-	-	77	-	-
1976-W534	2442876.15	1976 Apr 9 15:30:00	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	ASC	-	-	-	64	-	-
1976-W535	2442876.17	1976 Apr 9 15:30:00	Rocketsonde	-	-	Arcasonde	-	-	-	MI	-	-	-	67	-	-
1976-W536	2442876.19	1976 Apr 9 16:30:00	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	THU	-	-	-	75	-	-
1976-W538	2442876.20	1976 Apr 9 16:50:59	Rocketsonde	-	-	Arcasonde	-	-	-	PRIM	-	-	-	66	-	-
1976-W539	2442876.25	1976 Apr 9 17:57:00	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	SHER	-	-	-	59	-	-
1976-W540	2442876.26	1976 Apr 9 18:20:00	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	PH	-	-	-	58	-	-
1976-W541	2442876.34	1976 Apr 9 20:15:00	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	WS	-	-	-	66	-	-
1976-W542	2442876.34	1976 Apr 9 21:42:00	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	PF	-	-	-	60	-	-
1976-W543	2442881.12	1976 Apr 12 15:00:00	Rocketsonde	-	-	Arcasonde	-	-	-	KAU	-	-	-	56	-	-
1976-W544	2442881.16	1976 Apr 12 15:45:00	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	SHER	-	-	-	62	-	-
1976-W545	2442881.16	1976 Apr 12 15:47:59	Rocketsonde	-	-	Arcasonde	-	-	-	PRIM	-	-	-	62	-	-
1976-W547	2442881.22	1976 Apr 12 17:13:00	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	THU	-	-	-	67	-	-
1976-W548	2442881.26	1976 Apr 12 18:10:00	Rocketsonde	-	-	Arcasonde	-	-	-	CC	L043	-	-	62	-	-
1976-W549	2442881.29	1976 Apr 12 18:52:00	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	NS	-	-	-	69	-	-
1976-W550	2442881.33	1976 Apr 12 20:00:00	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	PM	-	-	-	59	-	-
1976-W551	2442881.40	1976 Apr 12 21:33:59	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	PF	-	-	-	64	-	-
1976-W552	2442881.44	1976 Apr 12 22:29:00	Rocketsonde	-	-	Arcasonde	-	-	-	KAU	-	-	-	47	-	-
1976-W553	2442881.50	1976 Apr 13 00:06:00	Rocketsonde	-	-	Arcasonde	-	-	-	SHER	-	-	-	64	-	-
1976-W554	2442883.03	1976 Apr 13 11:44:00	Rocketsonde	-	-	Arcasonde	-	-	-	ASC	-	-	-	64	-	-
1976-W555	2442883.03	1976 Apr 13 15:14:59	Rocketsonde	-	-	Arcasonde	-	-	-	AIT	-	-	-	51	-	-
1976-W556	2442883.06	1976 Apr 13 15:14:59	Rocketsonde	-	-	Arcasonde	-	-	-	ASC	-	-	-	66	-	-
1976-W557	2442883.14	1976 Apr 14 12:48:59	Rocketsonde	-	-	Arcasonde	-	-	-	AIT	-	-	-	52	-	-
1976-W558	2442883.14	1976 Apr 14 15:20:00	Rocketsonde	-	-	Arcasonde	-	-	-	THU	-	-	-	67	-	-
1976-W559	2442883.16	1976 Apr 14 15:44:00	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	CC	L043	-	-	64	-	-
1976-W560	2442883.19	1976 Apr 14 16:34:59	Rocketsonde	-	-	Arcasonde	-	-	-	CC	-	-	-	62	-	-
1976-W561	2442883.19	1976 Apr 14 16:34:59	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	SHER	-	-	-	53	-	-
1976-W562	2442883.22	1976 Apr 14 17:22:00	Rocketsonde	-	-	Arcasonde	-	-	-	PRIM	-	-	-	68	-	-
1976-W171	2442883.23	1976 Apr 14 17:35:00	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	CC	L043	-	-	94	-	-
1976-W565	2442883.27	1976 Apr 14 18:30:00	Rocketsonde	-	-	Arcasonde	-	-	-	NS	-	-	-	67	-	-
1976-W566	2442883.35	1976 Apr 14 20:20:00	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	PF	-	-	-	63	-	-
1976-W567	2442883.38	1976 Apr 14 21:00:00	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	Met. Sphere	-	-	-	65	-	-
1976-W172	2442883.38	1976 Apr 14 21:11:00	Rocketsonde	-	-	Arcasonde	-	-	-	PM	-	-	-	85	-	-
1976-W568	2442883.40	1976 Apr 14 21:30:00	Rocketsonde	-	-	Arcasonde	-	-	-	SHER	-	-	-	57	-	-

Launch

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Mission	FlightCode	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee_Km	Range_Km	Dest
1976-4699	2442883.58	1976 Apr 15 01:54:59	Rocketsonde	-	-	Arcasonde	-	-	-	KNR	-	-	-	76	-	-
1976-4670	2442884.01	1976 Apr 15 12:10:00	Rocketsonde	-	-	Arcasonde	-	-	-	ASC	-	-	-	63	-	-
1976-4671	2442884.19	1976 Apr 15 16:30:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	WS	-	-	-	63	-	-
1976-4672	2442884.21	1976 Apr 15 16:56:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PH	-	-	-	61	-	-
1976-4673	2442885.11	1976 Apr 16 14:46:00	Rocketsonde	-	-	Arcasonde	-	-	-	AUT	-	-	-	54	-	-
1976-4674	2442885.16	1976 Apr 16 15:30:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	WI	-	-	-	57	-	-
1976-4675	2442885.16	1976 Apr 16 15:46:00	Rocketsonde	-	-	Arcasonde	-	-	-	THU	-	-	-	60	-	-
1976-4676	2442885.19	1976 Apr 16 16:37:59	Rocketsonde	-	-	Arcasonde	-	-	-	CC	LO43	-	-	74	-	-
1976-4677	2442885.28	1976 Apr 16 18:46:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PF	-	-	-	63	-	-
1976-4678	2442885.41	1976 Apr 16 21:46:59	Rocketsonde	-	-	Arcasonde	-	-	-	KNR	-	-	-	54	-	-
1976-4679	2442885.50	1976 Apr 16 23:59:00	Rocketsonde	-	-	Arcasonde	-	-	-	KNR	-	-	-	80	-	-
1976-4680	2442886.04	1976 Apr 19 12:52:00	Rocketsonde	-	-	Arcasonde	-	-	-	ASC	-	-	-	64	-	-
1976-4681	2442886.18	1976 Apr 19 16:19:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	SHER	-	-	-	57	-	-
1976-4682	2442886.19	1976 Apr 19 16:31:59	Rocketsonde	-	-	Arcasonde	-	-	-	CC	LO43	-	-	77	-	-
1976-4683	2442886.26	1976 Apr 19 18:20:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	WS	-	-	-	68	-	-
1976-4684	2442886.28	1976 Apr 19 18:42:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	WI	-	-	-	63	-	-
1976-4685	2442886.35	1976 Apr 19 20:20:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PF	-	-	-	66	-	-
1976-4686	2442886.41	1976 Apr 19 21:48:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	KNR	-	-	-	59	-	-
1976-4687	2442886.54	1976 Apr 20 00:55:00	Rocketsonde	-	-	Arcasonde	-	-	-	AUT	-	-	-	66	-	-
1976-4688	2442889.20	1976 Apr 20 16:49:59	Rocketsonde	-	-	Arcasonde	-	-	-	KNR	-	-	-	59	-	-
1976-4689	2442890.06	1976 Apr 21 13:30:00	Rocketsonde	-	-	Arcasonde	-	-	-	AUT	-	-	-	72	-	-
1976-4690	2442890.16	1976 Apr 21 15:49:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	THU	-	-	-	62	-	-
1976-4691	2442890.20	1976 Apr 21 16:44:59	Rocketsonde	-	-	Arcasonde	-	-	-	SHER	-	-	-	59	-	-
1976-4692	2442890.21	1976 Apr 21 17:00:00	Rocketsonde	-	-	Arcasonde	-	-	-	CC	LO43	-	-	74	-	-
1976-4693	2442890.22	1976 Apr 21 17:23:00	Rocketsonde	-	-	Arcasonde	-	-	-	CC	-	-	-	68	-	-
1976-4694	2442890.23	1976 Apr 21 17:30:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	WS	-	-	-	66	-	-
1976-4695	2442890.25	1976 Apr 21 18:00:00	Rocketsonde	-	-	Arcasonde	-	-	-	PRIM	-	-	-	66	-	-
1976-4696	2442890.25	1976 Apr 21 18:00:00	Rocketsonde	-	-	Arcasonde	-	-	-	CC	LO43	-	-	99	-	-
1976-4697	2442890.30	1976 Apr 21 19:06:00	Rocketsonde	-	-	Arcasonde	-	-	-	MI	-	-	-	66	-	-
1976-4698	2442890.38	1976 Apr 21 21:00:00	Rocketsonde	-	-	Arcasonde	-	-	-	SHER	-	-	-	52	-	-
1976-4699	2442890.38	1976 Apr 21 21:00:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PF	-	-	-	69	-	-
1976-4700	2442890.41	1976 Apr 21 21:49:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	KAU	-	-	-	87	-	-
1976-4701	2442890.45	1976 Apr 21 21:49:59	Rocketsonde	-	-	Met. Sphere	-	-	-	KAU	-	-	-	68	-	-
1976-4702	2442890.55	1976 Apr 22 01:14:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	KAU	-	-	-	68	-	-
1976-4703	2442891.02	1976 Apr 22 12:23:59	Rocketsonde	-	-	Arcasonde	-	-	-	KNR	-	-	-	62	-	-
1976-4704	2442891.17	1976 Apr 22 15:59:59	Rocketsonde	-	-	Arcasonde	-	-	-	ASC	-	-	-	70	-	-
1976-4705	2442891.25	1976 Apr 22 18:00:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	MI	-	-	-	68	-	-
1976-4706	2442891.35	1976 Apr 22 21:10:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	WS	-	-	-	86	-	-
1976-4707	2442891.38	1976 Apr 22 21:10:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	KAU	-	-	-	88	-	-
1976-4708	2442891.39	1976 Apr 22 21:23:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	KAU	-	-	-	63	-	-
1976-4709	2442892.12	1976 Apr 23 15:00:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	SHER	-	-	-	59	-	-
1976-4710	2442892.13	1976 Apr 23 15:12:59	Rocketsonde	-	-	Arcasonde	-	-	-	THU	-	-	-	71	-	-
1976-4711	2442892.16	1976 Apr 23 15:46:00	Rocketsonde	-	-	Arcasonde	-	-	-	HT	-	-	-	73	-	-
1976-4712	2442892.21	1976 Apr 23 17:06:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	WS	-	-	-	60	-	-
1976-4713	2442892.22	1976 Apr 23 17:16:00	Rocketsonde	-	-	Arcasonde	-	-	-	PRIM	-	-	-	87	-	-
1976-4714	2442892.50	1976 Apr 24 00:02:59	Rocketsonde	-	-	Arcasonde	-	-	-	KNR	-	-	-	50	-	-
1976-4715	2442895.12	1976 Apr 26 15:00:00	Rocketsonde	-	-	Arcasonde	-	-	-	SHER	-	-	-	60	-	-
1976-4716	2442895.15	1976 Apr 26 18:30:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PRIM	-	-	-	65	-	-
1976-4717	2442895.16	1976 Apr 26 18:30:00	Rocketsonde	-	-	Arcasonde	-	-	-	CC	LO43	-	-	60	-	-
1976-4718	2442895.24	1976 Apr 26 19:44:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PF	-	-	-	64	-	-
1976-4719	2442895.26	1976 Apr 26 19:44:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	SHER	-	-	-	64	-	-
1976-4720	2442895.36	1976 Apr 26 21:03:59	Rocketsonde	-	-	Arcasonde	-	-	-	KAU	-	-	-	52	-	-
1976-4721	2442895.41	1976 Apr 26 21:06:00	Rocketsonde	-	-	Arcasonde	-	-	-	KNR	-	-	-	81	-	-
1976-4722	2442895.47	1976 Apr 26 23:19:00	Rocketsonde	-	-	Arcasonde	-	-	-	WS	-	-	-	68	-	-
1976-4723	2442895.53	1976 Apr 27 17:31:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	ASC	-	-	-	64	-	-
1976-4724	2442897.07	1976 Apr 28 13:44:59	Rocketsonde	-	-	Arcasonde	-	-	-	CC	LO43	-	-	60	-	-
1976-4725	2442897.11	1976 Apr 28 14:44:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	VI	-	-	-	70	-	-
1976-4726	2442897.12	1976 Apr 28 14:52:00	Rocketsonde	-	-	Arcasonde	-	-	-	CC	LO43	-	-	97	-	-
1976-4727	2442897.15	1976 Apr 28 15:30:00	Rocketsonde	-	-	Arcasonde	-	-	-	PRIM	-	-	-	69	-	-
1976-4728	2442897.16	1976 Apr 28 15:46:00	Rocketsonde	-	-	Arcasonde	-	-	-	THU	-	-	-	61	-	-
1976-4729	2442897.19	1976 Apr 28 16:30:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	WS	-	-	-	62	-	-
1976-4730	2442897.31	1976 Apr 28 19:30:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	SHER	-	-	-	65	-	-
1976-4731	2442897.37	1976 Apr 28 20:59:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PF	-	-	-	63	-	-
1976-4732	2442897.37	1976 Apr 28 20:59:00	Rocketsonde	-	-	Met. Sphere	-	-	-	KAU	-	-	-	87	-	-
1976-4733	2442897.42	1976 Apr 28 21:27:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	KAU	-	-	-	75	-	-
1976-4734	2442897.51	1976 Apr 28 21:59:59	Rocketsonde	-	-	Arcasonde	-	-	-	SHER	-	-	-	54	-	-
1976-4735	2442898.03	1976 Apr 29 00:11:59	Rocketsonde	-	-	Arcasonde	-	-	-	KNR	-	-	-	77	-	-
1976-4736	2442898.03	1976 Apr 29 00:11:59	Rocketsonde	-	-	Arcasonde	-	-	-	ASC	-	-	-	64	-	-
1976-4737	2442898.16	1976 Apr 29 12:37:59	Rocketsonde	-	-	Arcasonde	-	-	-	CC	LO43	-	-	62	-	-
1976-4738	2442898.20	1976 Apr 29 15:46:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PF	-	-	-	67	-	-
1976-4739	2442898.26	1976 Apr 29 16:52:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	WS	-	-	-	67	-	-
1976-4740	2442898.28	1976 Apr 29 18:15:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	WS	-	-	-	57	-	-
1976-4741	2442898.38	1976 Apr 29 21:13:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	KAU	-	-	-	70	-	-
1976-4742	2442898.98	1976 Apr 30 14:53:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	VI	-	-	-	68	-	-
1976-4743	2442899.14	1976 Apr 30 15:20:00	Rocketsonde	-	-	Arcasonde	-	-	-	THU	-	-	-	71	-	-
1976-4744	2442899.14	1976 Apr 30 15:20:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	ANIT	-	-	-	59	-	-
1976-4745	2442899.15	1976 Apr 30 15:30:00	Rocketsonde	-	-	Arcasonde	-	-	-	SHER	-	-	-	61	-	-
1976-4746	2442899.15	1976 Apr 30 15:30:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PRIM	-	-	-	62	-	-
1976-4747	2442899.18	1976 Apr 30 16:14:59	Rocketsonde	-	-	Arcasonde	-	-	-	WS	-	-	-	61	-	-
1976-4748	2442899.23	1976 Apr 30 17:30:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PM	-	-	-	62	-	-
1976-4749	2442899.29	1976 Apr 30 19:02:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	KNR	-	-	-	77	-	-
1976-4750	2442899.55	1976 Apr 1 01:14:59	Rocketsonde	-	-	Arcasonde	-	-	-	MI	-	-	-	66	-	-
1976-4751	2442900.17	1976 Apr 1 15:59:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	ASC	-	-	-	76	-	-
1976-4752	2442900.17	1976 Apr 1 15:59:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	ANIT	-	-	-	48	-	-
1976-4753	2442902.13	1976 Apr 3 15:02:59	Rocketsonde	-	-	Arcasonde	-	-	-	THU	-	-	-	65	-	-
1976-4754	2442902.15	1976 Apr 3 15:34:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	WS	-	-	-	65	-	-
1976-4755	2442902.17	1976 Apr 3 15:59:59	Rocketsonde	-	-	Arcasonde	-	-	-	PRIM	-	-	-	69	-	-
1976-4756	2442902.19	1976 Apr 3 16:30:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	SHER	-	-	-	57	-	-

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Mission	FlightCode	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee_Km	Range_Km	Dest
1976-4663	2442902.19	1976 May 3 1637:59	Rocketsonde	-	-	Arcasonde	-	-	-	CC	LO43	-	-	65	-	-
1976-4666	2442902.23	1976 May 3 1724:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PH	-	-	-	59	-	-
1976-4668	2442902.34	1976 May 3 1730:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	MI	-	-	-	55	-	-
1976-4667	2442902.41	1976 May 3 2010:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PF	-	-	-	66	-	-
1976-4668	2442902.41	1976 May 3 2155:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	KAU	-	-	-	60	-	-
1976-4669	2442902.56	1976 May 4 0122:59	Rocketsonde	-	-	Arcasonde	-	-	-	KHR	-	-	-	81	-	-
1976-4669	2442902.56	1976 May 4 1144:00	Rocketsonde	-	-	Arcasonde	-	-	-	ASC	-	-	-	66	-	-
1976-4670	2442903.05	1976 May 4 1314:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	WS	-	-	-	64	-	-
1976-4671	2442903.12	1976 May 4 1500:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	WS	-	-	-	65	-	-
1976-4672	2442903.25	1976 May 4 1800:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	WS	-	-	-	67	-	-
1976-4673	2442904.08	1976 May 5 1400:00	Rocketsonde	-	-	Arcasonde	-	-	-	AIT	LO43	-	-	65	-	-
1976-4674	2442904.08	1976 May 5 1400:00	Rocketsonde	-	-	Arcasonde	-	-	-	CC	-	-	-	52	-	-
1976-4675	2442904.09	1976 May 5 1415:00	Rocketsonde	-	-	Arcasonde	-	-	-	MI	-	-	-	63	-	-
1976-4676	2442904.10	1976 May 5 1430:00	Rocketsonde	-	-	Arcasonde	-	-	-	THU	-	-	-	67	-	-
1976-4678	2442904.15	1976 May 5 1534:59	Rocketsonde	-	-	Arcasonde	-	-	-	PRIM	-	-	-	66	-	-
1976-4679	2442904.18	1976 May 5 1614:59	Rocketsonde	-	-	Arcasonde	-	-	-	PF	-	-	-	66	-	-
1976-4680	2442904.20	1976 May 5 1644:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PRIM	-	-	-	66	-	-
1976-4681	2442904.24	1976 May 5 1745:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	SHER	-	-	-	53	-	-
1976-4682	2442904.26	1976 May 5 1810:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PF	-	-	-	68	-	-
1976-4683	2442904.28	1976 May 5 1840:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	WS	-	-	-	67	-	-
1976-4684	2442904.28	1976 May 5 2021:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PH	-	-	-	62	-	-
1976-7201	2442904.35	1976 May 5 2153:00	Rocketsonde	-	-	Met. Sphere	-	-	-	PH	-	-	-	87	-	-
1976-4685	2442904.41	1976 May 5 2214:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	KAU	-	-	-	87	-	-
1976-4685	2442904.43	1976 May 6 0000:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	KAU	-	-	-	88	-	-
1976-4686	2442904.50	1976 May 6 1559:59	Rocketsonde	-	-	Arcasonde	-	-	-	KHR	-	-	-	76	-	-
1976-4687	2442905.17	1976 May 6 1704:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	WS	-	-	-	86	-	-
1976-4688	2442905.21	1976 May 6 1704:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	SHER	-	-	-	57	-	-
1976-4689	2442906.05	1976 May 7 1309:59	Rocketsonde	-	-	Arcasonde	-	-	-	ASC	-	-	-	65	-	-
1976-4690	2442906.05	1976 May 7 1311:59	Rocketsonde	-	-	Arcasonde	-	-	-	AIT	-	-	-	69	-	-
1976-4701	2442906.19	1976 May 7 1630:00	Rocketsonde	-	-	Arcasonde	-	-	-	THU	-	-	-	76	-	-
1976-4701	2442906.19	1976 May 7 1630:00	Rocketsonde	-	-	Arcasonde	-	-	-	CC	LO43	-	-	0	-	-
1976-4702	2442906.07	1976 May 7 1545:00	Rocketsonde	-	-	Arcasonde	-	-	-	CC	-	-	-	86	-	-
1976-4702	2442906.09	1976 May 7 1614:59	Rocketsonde	-	-	Arcasonde	-	-	-	PRIM	-	-	-	86	-	-
1976-4703	2442906.18	1976 May 7 1614:59	Rocketsonde	-	-	Arcasonde	-	-	-	WS	-	-	-	61	-	-
1976-4693	2442906.18	1976 May 7 1614:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	WS	-	-	-	61	-	-
1976-4694	2442906.19	1976 May 7 1630:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PH	-	-	-	62	-	-
1976-4695	2442906.23	1976 May 7 1757:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PF	-	-	-	64	-	-
1976-4696	2442906.32	1976 May 7 1940:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	KAU	-	-	-	62	-	-
1976-4697	2442906.42	1976 May 7 2204:59	Rocketsonde	-	-	Arcasonde	-	-	-	KHR	-	-	-	76	-	-
1976-4698	2442906.51	1976 May 8 0010:00	Rocketsonde	-	-	Arcasonde	-	-	-	KHR	-	-	-	68	-	-
1976-4708	2442907.19	1976 May 8 1630:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	WS	-	-	-	86	-	-
1976-4709	2442908.19	1976 May 9 1630:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	CC	LO43	-	-	56	-	-
1976-4710	2442908.19	1976 May 9 1630:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	SHER	-	-	-	50	-	-
1976-4711	2442909.07	1976 May 10 1344:59	Rocketsonde	-	-	Arcasonde	-	-	-	AIT	-	-	-	73	-	-
1976-4712	2442909.09	1976 May 10 1404:59	Rocketsonde	-	-	Arcasonde	-	-	-	PRIM	-	-	-	69	-	-
1976-4713	2442909.10	1976 May 10 1427:59	Rocketsonde	-	-	Arcasonde	-	-	-	WS	-	-	-	60	-	-
1976-4714	2442909.18	1976 May 10 1614:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	MI	-	-	-	70	-	-
1976-4715	2442909.19	1976 May 10 1631:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PH	-	-	-	62	-	-
1976-4716	2442909.25	1976 May 10 1734:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	KAU	-	-	-	61	-	-
1976-4717	2442909.43	1976 May 10 1754:00	Rocketsonde	-	-	Arcasonde	-	-	-	KHR	-	-	-	74	-	-
1976-4718	2442909.71	1976 May 10 2235:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PR	-	-	-	46	-	-
1976-426	2442909.99	1976 May 11 0504:00	Rocketsonde	-	-	Arcasonde	-	-	-	ASC	-	-	-	0	-	-
1976-426	2442909.99	1976 May 11 1715:00	Rocketsonde	-	-	Arcasonde	-	-	-	WS	-	-	-	65	-	-
1976-4714	2442910.23	1976 May 11 1715:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	ASC	-	-	-	65	-	-
1976-4714	2442910.23	1976 May 12 1048:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	SHER	-	-	-	64	-	-
1976-4715	2442911.08	1976 May 12 1400:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	MI	-	-	-	70	-	-
1976-4716	2442911.08	1976 May 12 1430:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	ASC	-	-	-	64	-	-
1976-4717	2442911.12	1976 May 12 1430:00	Rocketsonde	-	-	Arcasonde	-	-	-	AIT	-	-	-	67	-	-
1976-4718	2442911.14	1976 May 12 1455:00	Rocketsonde	-	-	Arcasonde	-	-	-	THU	-	-	-	69	-	-
1976-4719	2442911.14	1976 May 12 1515:59	Rocketsonde	-	-	Arcasonde	-	-	-	PRIM	-	-	-	69	-	-
1976-4720	2442911.18	1976 May 12 1614:59	Rocketsonde	-	-	Arcasonde	-	-	-	CC	-	-	-	60	-	-
1976-4722	2442911.21	1976 May 12 1700:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	WS	-	-	-	65	-	-
1976-4723	2442911.35	1976 May 12 2020:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PF	-	-	-	55	-	-
1976-4724	2442911.40	1976 May 13 0114:59	Rocketsonde	-	-	Arcasonde	-	-	-	PF	-	-	-	67	-	-
1976-4726	2442912.03	1976 May 13 0114:59	Rocketsonde	-	-	Arcasonde	-	-	-	KHR	-	-	-	76	-	-
1976-4726	2442912.03	1976 May 13 1222:59	Rocketsonde	-	-	Arcasonde	-	-	-	ASC	-	-	-	65	-	-
1976-4727	2442912.25	1976 May 13 1800:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	WS	-	-	-	65	-	-
1976-4729	2442912.37	1976 May 13 2017:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	ASC	-	-	-	67	-	-
1976-4729	2442912.38	1976 May 13 2111:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	ASC	-	-	-	65	-	-
1976-4729	2442912.38	1976 May 13 2111:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	WS	-	-	-	66	-	-
1976-4730	2442913.11	1976 May 14 1444:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	KAU	-	-	-	78	-	-
1976-4731	2442913.12	1976 May 14 1449:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	MI	-	-	-	67	-	-
1976-4731	2442913.16	1976 May 14 1556:59	Rocketsonde	-	-	Arcasonde	-	-	-	PH	-	-	-	60	-	-
1976-4732	2442913.20	1976 May 14 1649:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	SHER	-	-	-	65	-	-
1976-4734	2442913.30	1976 May 14 1909:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PF	-	-	-	66	-	-
1976-4734	2442913.54	1976 May 15 0051:00	Rocketsonde	-	-	Arcasonde	-	-	-	ASC	-	-	-	75	-	-
1976-4736	2442916.04	1976 May 17 1253:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	KHR	-	-	-	64	-	-
1976-4736	2442916.04	1976 May 17 1415:00	Rocketsonde	-	-	Arcasonde	-	-	-	AIT	-	-	-	73	-	-
1976-4738	2442916.15	1976 May 17 1537:59	Rocketsonde	-	-	Arcasonde	-	-	-	CC	LO43	-	-	54	-	-
1976-4739	2442916.17	1976 May 17 1559:59	Rocketsonde	-	-	Arcasonde	-	-	-	THU	-	-	-	61	-	-
1976-4741	2442916.21	1976 May 17 1658:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PM	-	-	-	62	-	-
1976-4742	2442916.23	1976 May 17 1729:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	SHER	-	-	-	56	-	-
1976-4744	2442916.27	1976 May 17 1830:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	MI	-	-	-	69	-	-
1976-4744	2442916.35	1976 May 17 1830:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	WS	-	-	-	67	-	-
1976-4745	2442916.41	1976 May 17 2020:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PF	-	-	-	61	-	-
1976-4746	2442916.41	1976 May 17 2153:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	ASC	-	-	-	60	-	-
1976-4747	2442916.56	1976 May 18 0840:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	WS	-	-	-	63	-	-
1976-4748	2442916.92	1976 May 18 0959:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	WS	-	-	-	65	-	-
1976-4750	2442917.40	1976 May 18 2134:59	Rocketsonde	-	-	Arcasonde	-	-	-	KHR	-	-	-	79	-	-
1976-4752	2442918.07	1976 May 19 1344:59	Rocketsonde	-	-	Arcasonde	-	-	-	ASC	-	-	-	63	-	-



Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Mission	FlightCode	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee_Km	Range_Km	Dest
1976-A30	2442918.11	1976 May 19 14:33:00	Rocketsonde	-	-	Arcasonde	-	-	-	CC	LO43	-	-	39	-	-
1976-W54	2442918.11	1976 May 19 14:45:00	Rocketsonde	-	-	Arcasonde	-	-	-	AIT	-	-	-	73	-	-
1976-W55	2442918.15	1976 May 19 15:30:00	Rocketsonde	-	-	Arcasonde	-	-	-	PRIM	-	-	-	69	-	-
1976-W56	2442918.18	1976 May 19 16:24:59	Rocketsonde	-	-	Arcasonde	-	-	-	THU	-	-	-	69	-	-
1976-W57	2442918.20	1976 May 19 16:54:59	Rocketsonde	-	-	Arcasonde	-	-	-	SHER	-	-	-	61	-	-
1976-W59	2442918.24	1976 May 19 17:49:59	Rocketsonde	-	-	Starute, Dhataosnde	-	-	-	WS	-	-	-	62	-	-
1976-W60	2442918.25	1976 May 19 18:00:00	Rocketsonde	-	-	Starute, Dhataosnde	-	-	-	WI	-	-	-	69	-	-
1976-W215	2442918.25	1976 May 19 18:02:59	Rocketsonde	-	-	Met. Sphere	-	-	-	PH	-	-	-	85	-	-
1976-W61	2442918.28	1976 May 19 18:49:59	Rocketsonde	-	-	Starute, Dhataosnde	-	-	-	WI	-	-	-	67	-	-
1976-W62	2442918.32	1976 May 19 19:36:59	Rocketsonde	-	-	Starute, EXP. Sonde	-	-	-	WI	-	-	-	67	-	-
1976-W216	2442918.40	1976 May 19 21:33:00	Rocketsonde	-	-	Met. Sphere	-	-	-	KAU	-	-	-	55	-	-
1976-W64	2442918.42	1976 May 19 22:00:59	Rocketsonde	-	-	Starute, Dhataosnde	-	-	-	KAU	-	-	-	62	-	-
1976-W65	2442918.54	1976 May 20 00:59:59	Rocketsonde	-	-	Starute, Dhataosnde	-	-	-	PF	-	-	-	62	-	-
1976-W66	2442918.55	1976 May 20 01:14:59	Rocketsonde	-	-	Arcasonde	-	-	-	KMR	-	-	-	66	-	-
1976-W67	2442919.02	1976 May 20 12:30:00	Rocketsonde	-	-	Arcasonde	-	-	-	ASC	-	-	-	70	-	-
1976-W69	2442919.26	1976 May 20 16:09:00	Rocketsonde	-	-	Starute, Dhataosnde	-	-	-	WI	-	-	-	56	-	-
1976-W70	2442919.40	1976 May 20 21:37:59	Rocketsonde	-	-	Starute, Dhataosnde	-	-	-	KAU	-	-	-	62	-	-
1976-W71	2442920.12	1976 May 21 15:00:00	Rocketsonde	-	-	Starute, Dhataosnde	-	-	-	SHER	LO43	-	-	60	-	-
1976-W72	2442920.17	1976 May 21 15:59:59	Rocketsonde	-	-	Arcasonde	-	-	-	CC	-	-	-	60	-	-
1976-W74	2442920.18	1976 May 21 16:14:59	Rocketsonde	-	-	Arcasonde	-	-	-	PRIM	-	-	-	51	-	-
1976-W75	2442920.19	1976 May 21 16:44:59	Rocketsonde	-	-	Starute, Dhataosnde	-	-	-	WS	-	-	-	65	-	-
1976-W76	2442920.21	1976 May 21 16:30:00	Rocketsonde	-	-	Arcasonde	-	-	-	CC	LO43	-	-	96	-	-
1976-W220	2442920.31	1976 May 21 17:00:00	Rocketsonde	-	-	Starute, Dhataosnde	-	-	-	PF	-	-	-	62	-	-
1976-W76	2442920.52	1976 May 22 00:35:59	Rocketsonde	-	-	Arcasonde	-	-	-	KMR	-	-	-	78	-	-
1976-W77	2442920.52	1976 May 22 00:35:59	Rocketsonde	-	-	Starute, Dhataosnde	-	-	-	PF	-	-	-	62	-	-
1976-W78	2442921.53	1976 May 23 09:00:00	Rocketsonde	-	-	Starute, Dhataosnde	-	-	-	PF	-	-	-	64	-	-
1976-W79	2442922.00	1976 May 23 12:04:59	Rocketsonde	-	-	Starute, Dhataosnde	-	-	-	PF	-	-	-	64	-	-
1976-W80	2442923.09	1976 May 24 14:04:59	Rocketsonde	-	-	Arcasonde	-	-	-	AIT	-	-	-	62	-	-
1976-W81	2442923.17	1976 May 24 15:59:59	Rocketsonde	-	-	Starute, Dhataosnde	-	-	-	CC	LO43	-	-	61	-	-
1976-W82	2442923.17	1976 May 24 16:04:59	Rocketsonde	-	-	Starute, Dhataosnde	-	-	-	PH	-	-	-	61	-	-
1976-W83	2442923.18	1976 May 24 16:24:59	Rocketsonde	-	-	Arcasonde	-	-	-	THU	-	-	-	68	-	-
1976-W84	2442923.21	1976 May 24 16:54:59	Rocketsonde	-	-	Starute, Dhataosnde	-	-	-	SHER	-	-	-	58	-	-
1976-W85	2442923.23	1976 May 24 17:30:00	Rocketsonde	-	-	Starute, Dhataosnde	-	-	-	WI	-	-	-	70	-	-
1976-W86	2442923.23	1976 May 24 20:49:59	Rocketsonde	-	-	Starute, Dhataosnde	-	-	-	PF	-	-	-	63	-	-
1976-W87	2442923.37	1976 May 24 21:00:00	Rocketsonde	-	-	Starute, Dhataosnde	-	-	-	KAU	-	-	-	49	-	-
1976-W88	2442923.38	1976 May 24 21:00:00	Rocketsonde	-	-	Starute, Dhataosnde	-	-	-	KMR	-	-	-	80	-	-
1976-W89	2442923.46	1976 May 24 23:34:00	Rocketsonde	-	-	Starute, Dhataosnde	-	-	-	WS	-	-	-	63	-	-
1976-W222	2442924.15	1976 May 25 15:30:00	Rocketsonde	-	-	Arcasonde	-	-	-	CC	LO43	-	-	61	-	-
1976-W86	2442924.49	1976 May 25 23:40:00	Rocketsonde	-	-	Arcasonde	-	-	-	ASC	-	-	-	68	-	-
1976-W90	2442925.07	1976 May 26 13:44:59	Rocketsonde	-	-	Arcasonde	-	-	-	CC	LO43	-	-	60	-	-
1976-W91	2442925.07	1976 May 26 13:44:59	Rocketsonde	-	-	Starute, Dhataosnde	-	-	-	ASC	-	-	-	89	-	-
1976-W92	2442925.11	1976 May 26 14:34:00	Rocketsonde	-	-	Starute, Dhataosnde	-	-	-	SHER	-	-	-	59	-	-
1976-W93	2442925.12	1976 May 26 15:00:00	Rocketsonde	-	-	Arcasonde	-	-	-	AIT	-	-	-	70	-	-
1976-W94	2442925.14	1976 May 26 15:14:59	Rocketsonde	-	-	Arcasonde	-	-	-	THU	-	-	-	69	-	-
1976-W95	2442925.14	1976 May 26 15:14:59	Rocketsonde	-	-	Arcasonde	-	-	-	PRIM	-	-	-	85	-	-
1976-W96	2442925.16	1976 May 26 16:06:00	Rocketsonde	-	-	Met. Sphere	-	-	-	PF	-	-	-	64	-	-
1976-W97	2442925.16	1976 May 26 16:06:00	Rocketsonde	-	-	Starute, Dhataosnde	-	-	-	PF	-	-	-	64	-	-
1976-W98	2442925.24	1976 May 26 17:44:00	Rocketsonde	-	-	Starute, Dhataosnde	-	-	-	WS	-	-	-	64	-	-
1976-W99	2442925.24	1976 May 26 18:16:00	Rocketsonde	-	-	Starute, Dhataosnde	-	-	-	WS	-	-	-	64	-	-
1976-W799	2442925.26	1976 May 26 18:16:00	Rocketsonde	-	-	Starute, Dhataosnde	-	-	-	KMR	-	-	-	64	-	-
1976-W230	2442925.51	1976 May 27 00:16:59	Rocketsonde	-	-	Arcasonde	-	-	-	ASC	-	-	-	66	-	-
1976-W801	2442925.51	1976 May 27 02:30:00	Rocketsonde	-	-	Arcasonde	-	-	-	CC	-	-	-	66	-	-
1976-W802	2442925.52	1976 May 27 17:35:00	Rocketsonde	-	-	Starute, Dhataosnde	-	-	-	ASC	-	-	-	60	-	-
1976-W803	2442925.52	1976 May 27 17:35:00	Rocketsonde	-	-	Starute, Dhataosnde	-	-	-	KAU	-	-	-	60	-	-
1976-W804	2442927.04	1976 May 28 12:59:59	Rocketsonde	-	-	Starute, Dhataosnde	-	-	-	SHER	-	-	-	60	-	-
1976-W805	2442927.04	1976 May 28 14:30:00	Rocketsonde	-	-	Starute, Dhataosnde	-	-	-	WI	-	-	-	69	-	-
1976-W231	2442927.12	1976 May 28 15:00:00	Rocketsonde	-	-	Arcasonde	-	-	-	CC	LO43	-	-	68	-	-
1976-W806	2442927.14	1976 May 28 15:14:59	Rocketsonde	-	-	Arcasonde	-	-	-	THU	-	-	-	71	-	-
1976-W808	2442927.18	1976 May 28 16:14:59	Rocketsonde	-	-	Arcasonde	-	-	-	AIT	-	-	-	62	-	-
1976-W809	2442927.33	1976 May 28 20:00:00	Rocketsonde	-	-	Starute, Dhataosnde	-	-	-	PF	-	-	-	87	-	-
1976-W232	2442927.38	1976 May 28 21:00:00	Rocketsonde	-	-	Met. Sphere	-	-	-	KAU	-	-	-	79	-	-
1976-W810	2442927.40	1976 May 28 21:31:00	Rocketsonde	-	-	Starute, Dhataosnde	-	-	-	KAU	-	-	-	60	-	-
1976-W811	2442927.40	1976 May 28 21:31:00	Rocketsonde	-	-	Starute, Dhataosnde	-	-	-	KMR	-	-	-	79	-	-
1976-W817	2442930.17	1976 May 31 15:59:59	Rocketsonde	-	-	Arcasonde	-	-	-	THU	-	-	-	68	-	-
1976-W818	2442931.05	1976 Jun 1 13:07:59	Rocketsonde	-	-	Arcasonde	-	-	-	AIT	-	-	-	68	-	-
1976-W819	2442931.11	1976 Jun 1 14:36:00	Rocketsonde	-	-	Starute, Dhataosnde	-	-	-	WI	-	-	-	63	-	-
1976-W820	2442931.16	1976 Jun 1 14:36:00	Rocketsonde	-	-	Starute, Dhataosnde	-	-	-	CC	LO43	-	-	60	-	-
1976-W821	2442931.16	1976 Jun 1 15:54:00	Rocketsonde	-	-	Arcasonde	-	-	-	PM	-	-	-	61	-	-
1976-W822	2442931.19	1976 Jun 1 16:30:00	Rocketsonde	-	-	Starute, Dhataosnde	-	-	-	WS	-	-	-	62	-	-
1976-W823	2442931.20	1976 Jun 1 16:44:59	Rocketsonde	-	-	Starute, Dhataosnde	-	-	-	SHER	-	-	-	63	-	-
1976-W824	2442931.33	1976 Jun 1 19:54:59	Rocketsonde	-	-	Starute, Dhataosnde	-	-	-	PF	-	-	-	62	-	-
1976-W825	2442932.05	1976 Jun 2 13:14:59	Rocketsonde	-	-	Starute, Dhataosnde	-	-	-	WS	-	-	-	65	-	-
1976-W826	2442932.07	1976 Jun 2 13:44:59	Rocketsonde	-	-	Starute, Dhataosnde	-	-	-	ASC	-	-	-	65	-	-
1976-W827	2442932.09	1976 Jun 2 14:15:00	Rocketsonde	-	-	Arcasonde	-	-	-	CC	LO43	-	-	70	-	-
1976-W828	2442932.12	1976 Jun 2 15:00:00	Rocketsonde	-	-	Arcasonde	-	-	-	AIT	-	-	-	95	-	-
1976-W238	2442932.14	1976 Jun 2 15:14:59	Rocketsonde	-	-	Arcasonde	-	-	-	CC	LO43	-	-	69	-	-
1976-W829	2442932.14	1976 Jun 2 15:14:59	Rocketsonde	-	-	Starute, Dhataosnde	-	-	-	THU	-	-	-	60	-	-
1976-W830	2442932.14	1976 Jun 2 15:24:59	Rocketsonde	-	-	Starute, Dhataosnde	-	-	-	SHER	-	-	-	69	-	-
1976-W831	2442932.16	1976 Jun 2 15:45:00	Rocketsonde	-	-	Starute, Dhataosnde	-	-	-	PRIM	-	-	-	70	-	-
1976-W832	2442932.16	1976 Jun 2 15:49:59	Rocketsonde	-	-	Starute, Dhataosnde	-	-	-	WI	-	-	-	69	-	-
1976-W833	2442932.22	1976 Jun 2 17:12:00	Rocketsonde	-	-	Starute, Dhataosnde	-	-	-	WS	-	-	-	66	-	-
1976-W834	2442932.22	1976 Jun 2 17:12:00	Rocketsonde	-	-	Starute, Dhataosnde	-	-	-	WS	-	-	-	66	-	-
1976-W835	2442932.31	1976 Jun 2 19:30:00	Rocketsonde	-	-	Starute, Dhataosnde	-	-	-	PF	-	-	-	69	-	-
1976-W836	2442932.31	1976 Jun 2 22:35:59	Rocketsonde	-	-	Starute, Dhataosnde	-	-	-	PF	-	-	-	59	-	-
1976-W837	2442933.44	1976 Jun 3 15:14:59	Rocketsonde	-	-	Starute, Dhataosnde	-	-	-	KAU	-	-	-	74	-	-
1976-W838	2442933.44	1976 Jun 3 22:30:00	Rocketsonde	-	-	Starute, Dhataosnde	-	-	-	AIT	-	-	-	74	-	-
1976-W239	2442933.51	1976 Jun 4 00:20:00	Rocketsonde	-	-	Arcasonde	-	-	-	KMR	-	-	-	81	-	-
1976-W840	2442934.03	1976 Jun 4 12:47:59	Rocketsonde	-	-	Arcasonde	-	-	-	ASC	-	-	-	66	-	-

Launch

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Mission	FlightCode	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee_Km	Range_Km	Dest
1976-8841	2442894.10	1976 Jun 4 1430:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	WI	-	-	-	70	-	-
1976-8842	2442894.17	1976 Jun 4 1604:59	Rocketsonde	-	-	Arcasonde	-	-	-	THU	-	-	-	70	-	-
1976-8843	2442894.17	1976 Jun 4 1609:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PH	-	-	-	61	-	-
1976-8844	2442894.23	1976 Jun 4 1730:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	WS	-	-	-	65	-	-
1976-8845	2442897.11	1976 Jun 7 1443:00	Rocketsonde	-	-	Arcasonde	-	-	-	AIT	-	-	-	73	-	-
1976-8846	2442897.12	1976 Jun 7 1500:00	Rocketsonde	-	-	Arcasonde	-	-	-	CC	LO43	-	-	77	-	-
1976-8847	2442897.15	1976 Jun 7 1534:59	Rocketsonde	-	-	Arcasonde	-	-	-	THU	-	-	-	69	-	-
1976-8848	2442897.23	1976 Jun 7 1725:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	SHER	-	-	-	59	-	-
1976-8849	2442897.48	1976 Jun 7 2337:00	Rocketsonde	-	-	Arcasonde	-	-	-	KMR	-	-	-	79	-	-
1976-8850	2442898.23	1976 Jun 8 1735:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	WS	-	-	-	63	-	-
1976-8851	2442898.04	1976 Jun 8 1735:00	Rocketsonde	-	-	Arcasonde	-	-	-	ASC	-	-	-	67	-	-
1976-8852	2442898.06	1976 Jun 9 1330:00	Rocketsonde	-	-	Arcasonde	-	-	-	CC	LO43	-	-	65	-	-
1976-8853	2442898.13	1976 Jun 9 1504:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	AIT	-	-	-	72	-	-
1976-8854	2442898.13	1976 Jun 9 1656:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PH	-	-	-	57	-	-
1976-8857	2442898.21	1976 Jun 9 1700:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	SHER	-	-	-	63	-	-
1976-8858	2442898.23	1976 Jun 9 1730:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	WS	-	-	-	65	-	-
1976-8859	2442898.29	1976 Jun 9 1901:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	WI	-	-	-	66	-	-
1976-8860	2442898.47	1976 Jun 9 2337:00	Rocketsonde	-	-	Met. Sphere	-	-	-	KAU	-	-	-	88	-	-
1976-8861	2442898.48	1976 Jun 9 2337:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	KMR	-	-	-	63	-	-
1976-8862	2442899.51	1976 Jun 10 0011:00	Rocketsonde	-	-	Arcasonde	-	-	-	AIT	-	-	-	66	-	-
1976-8863	2442899.51	1976 Jun 10 0011:00	Rocketsonde	-	-	Arcasonde	-	-	-	AIT	-	-	-	66	-	-
1976-8864	2442941.07	1976 Jun 11 1344:59	Rocketsonde	-	-	Arcasonde	-	-	-	ASC	-	-	-	68	-	-
1976-8865	2442941.11	1976 Jun 11 1438:59	Rocketsonde	-	-	Arcasonde	-	-	-	ASC	-	-	-	68	-	-
1976-8866	2442941.15	1976 Jun 11 1534:59	Rocketsonde	-	-	Arcasonde	-	-	-	THU	LO43	-	-	68	-	-
1976-8867	2442941.16	1976 Jun 11 1548:59	Rocketsonde	-	-	Arcasonde	-	-	-	CC	-	-	-	86	-	-
1976-8868	2442941.18	1976 Jun 11 1614:59	Rocketsonde	-	-	Arcasonde	-	-	-	CC	LO43	-	-	86	-	-
1976-8869	2442941.19	1976 Jun 11 1630:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	WS	-	-	-	64	-	-
1976-8870	2442941.20	1976 Jun 11 1654:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	SHER	-	-	-	64	-	-
1976-8871	2442944.04	1976 Jun 14 1257:59	Rocketsonde	-	-	Arcasonde	-	-	-	ASC	-	-	-	66	-	-
1976-8872	2442944.11	1976 Jun 14 1443:00	Rocketsonde	-	-	Arcasonde	-	-	-	AIT	LO43	-	-	61	-	-
1976-8873	2442944.18	1976 Jun 14 1618:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	CC	-	-	-	71	-	-
1976-8874	2442944.21	1976 Jun 14 1618:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	SHER	-	-	-	50	-	-
1976-8875	2442944.49	1976 Jun 14 2338:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	KMR	-	-	-	76	-	-
1976-8876	2442946.40	1976 Jun 15 2130:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	KAU	LO43	-	-	66	-	-
1976-8877	2442946.40	1976 Jun 15 2130:00	Rocketsonde	-	-	Arcasonde	-	-	-	CC	-	-	-	0	-	-
1976-8878	2442946.12	1976 Jun 16 1449:59	Rocketsonde	-	-	Arcasonde	-	-	-	ASC	LO43	-	-	66	-	-
1976-8880	2442946.13	1976 Jun 16 1510:00	Rocketsonde	-	-	Arcasonde	-	-	-	ASC	-	-	-	66	-	-
1976-8881	2442946.15	1976 Jun 16 1530:00	Rocketsonde	-	-	Arcasonde	-	-	-	AIT	-	-	-	72	-	-
1976-8882	2442946.21	1976 Jun 16 1700:00	Rocketsonde	-	-	Arcasonde	-	-	-	CC	LO43	-	-	96	-	-
1976-8884	2442946.26	1976 Jun 16 1850:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PHLM	-	-	-	70	-	-
1976-8885	2442946.42	1976 Jun 17 0912:39	Rocketsonde	-	-	Starute, Datasonde	-	-	-	SHER	-	-	-	62	-	-
1976-8886	2442946.51	1976 Jun 17 0912:39	Rocketsonde	-	-	Starute, Datasonde	-	-	-	WS	-	-	-	65	-	-
1976-8887	2442947.03	1976 Jun 17 1238:59	Rocketsonde	-	-	Arcasonde	-	-	-	KMR	-	-	-	70	-	-
1976-8888	2442947.03	1976 Jun 17 1238:59	Rocketsonde	-	-	Arcasonde	-	-	-	ASC	-	-	-	67	-	-
1976-8889	2442947.22	1976 Jun 17 1716:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	SHER	-	-	-	80	-	-
1976-8890	2442947.22	1976 Jun 17 1716:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	WS	-	-	-	84	-	-
1976-8891	2442947.26	1976 Jun 17 1716:00	Rocketsonde	-	-	Met. Sphere	-	-	-	KAU	-	-	-	86	-	-
1976-8892	2442947.26	1976 Jun 17 1716:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	KAU	-	-	-	82	-	-
1976-8893	2442947.26	1976 Jun 17 1716:00	Rocketsonde	-	-	Arcasonde	-	-	-	CC	-	-	-	74	-	-
1976-8894	2442948.16	1976 Jun 18 0034:59	Rocketsonde	-	-	Arcasonde	-	-	-	CC	LO43	-	-	72	-	-
1976-8895	2442948.16	1976 Jun 18 0034:59	Rocketsonde	-	-	Arcasonde	-	-	-	CC	-	-	-	75	-	-
1976-8896	2442951.08	1976 Jun 21 1410:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	WS	LO43	-	-	64	-	-
1976-8897	2442951.17	1976 Jun 21 1559:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	SHER	-	-	-	66	-	-
1976-8898	2442951.21	1976 Jun 21 1704:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	THU	-	-	-	70	-	-
1976-8899	2442951.27	1976 Jun 21 1730:00	Rocketsonde	-	-	Arcasonde	-	-	-	ASC	-	-	-	64	-	-
1976-8900	2442951.47	1976 Jun 21 2317:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	THU	-	-	-	79	-	-
1976-8901	2442952.40	1976 Jun 22 2142:00	Rocketsonde	-	-	Arcasonde	-	-	-	KMR	-	-	-	70	-	-
1976-8902	2442953.07	1976 Jun 22 2142:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	ASC	-	-	-	61	-	-
1976-8903	2442953.09	1976 Jun 23 1344:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	KAU	-	-	-	46	-	-
1976-8904	2442953.15	1976 Jun 23 1410:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	SHER	-	-	-	65	-	-
1976-8905	2442953.16	1976 Jun 23 1530:00	Rocketsonde	-	-	Arcasonde	-	-	-	THU	-	-	-	70	-	-
1976-8906	2442953.16	1976 Jun 23 1545:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	AIT	-	-	-	60	-	-
1976-8907	2442953.27	1976 Jun 23 1609:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	WS	-	-	-	67	-	-
1976-8909	2442953.27	1976 Jun 23 1830:00	Rocketsonde	-	-	Arcasonde	-	-	-	PRELM	-	-	-	86	-	-
1976-8910	2442953.38	1976 Jun 23 2100:00	Rocketsonde	-	-	Met. Sphere	-	-	-	KAU	-	-	-	59	-	-
1976-8911	2442953.38	1976 Jun 23 2100:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	KAU	-	-	-	52	-	-
1976-8912	2442953.39	1976 Jun 23 2122:00	Rocketsonde	-	-	Arcasonde	-	-	-	SHER	-	-	-	80	-	-
1976-8913	2442953.55	1976 Jun 24 0117:00	Rocketsonde	-	-	Arcasonde	-	-	-	AIT	-	-	-	55	-	-
1976-8914	2442954.20	1976 Jun 24 1344:59	Rocketsonde	-	-	Arcasonde	-	-	-	CC	LO43	-	-	74	-	-
1976-8915	2442954.31	1976 Jun 24 1641:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	WS	-	-	-	66	-	-
1976-8916	2442954.40	1976 Jun 24 2141:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	KAU	-	-	-	63	-	-
1976-8917	2442955.09	1976 Jun 25 1404:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	SHER	-	-	-	63	-	-
1976-8918	2442955.15	1976 Jun 25 1430:00	Rocketsonde	-	-	Arcasonde	-	-	-	THU	-	-	-	70	-	-
1976-8919	2442955.41	1976 Jun 25 2153:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	KMR	-	-	-	76	-	-
1976-8920	2442958.15	1976 Jun 28 1531:00	Rocketsonde	-	-	Arcasonde	-	-	-	AIT	-	-	-	46	-	-
1976-8921	2442958.21	1976 Jun 28 1700:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	THU	-	-	-	70	-	-
1976-8922	2442958.38	1976 Jun 28 2100:00	Rocketsonde	-	-	Arcasonde	-	-	-	KAU	-	-	-	46	-	-
1976-8923	2442958.50	1976 Jun 28 2146:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	SHER	-	-	-	58	-	-
1976-8924	2442958.50	1976 Jun 28 2336:00	Rocketsonde	-	-	Arcasonde	-	-	-	KMR	-	-	-	80	-	-
1976-8925	2442958.97	1976 Jun 29 1115:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	ASC	-	-	-	66	-	-
1976-8926	2442959.10	1976 Jun 29 1426:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	WS	-	-	-	64	-	-
1976-8927	2442959.13	1976 Jun 29 1511:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	WS	-	-	-	68	-	-
1976-8928	2442959.18	1976 Jun 29 1622:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	WI	-	-	-	70	-	-
1976-8929	2442959.25	1976 Jun 29 1755:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	WS	-	-	-	68	-	-
1976-8928	2442960.12	1976 Jun 30 1446:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	WI	-	-	-	68	-	-

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Mission	FlightCode	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee_Km	Range_Km	Dest
1976-1264	2442960.17	1976 Jun 30 1559:59	Rocketsonde	-	-	Arcasonde	-	-	-	CC	LO43	-	-	95	-	-
1976-A38	2442960.21	1976 Jun 30 1703:59	Rocketsonde	-	-	Straube, Datensonde	-	-	-	SHER	-	-	-	49	-	-
1976-B930	2442960.25	1976 Jun 30 1755:00	Rocketsonde	-	-	Straube, Datensonde	-	-	-	WS	-	-	-	65	-	-
1976-B931	2442960.29	1976 Jun 30 1854:00	Rocketsonde	-	-	Arcasonde	-	-	-	PRIM	-	-	-	89	-	-
1976-B932	2442960.30	1976 Jun 30 1914:59	Rocketsonde	-	-	Straube, Datensonde	-	-	-	WS	-	-	-	63	-	-
1976-B933	2442960.39	1976 Jun 30 21:21:00	Rocketsonde	-	-	Straube, Datensonde	-	-	-	KAU	-	-	-	61	-	-
1976-B934	2442961.16	1976 Jul 1 1545:00	Rocketsonde	-	-	Chaff, Arcasonde	-	-	-	WS	-	-	-	64	-	-
1976-B935	2442961.21	1976 Jul 1 1704:59	Rocketsonde	-	-	Arcasonde	-	-	-	SHER	-	-	-	61	-	-
1976-B936	2442961.39	1976 Jul 1 2119:00	Rocketsonde	-	-	Arcasonde	-	-	-	KHR	-	-	-	79	-	-
1976-B937	2442962.07	1976 Jul 2 1347:59	Rocketsonde	-	-	Arcasonde	-	-	-	CC	LO43	-	-	61	-	-
1976-B938	2442962.08	1976 Jul 2 1400:00	Rocketsonde	-	-	Arcasonde	-	-	-	AIT	-	-	-	70	-	-
1976-B939	2442962.11	1976 Jul 2 1440:00	Rocketsonde	-	-	Arcasonde	-	-	-	VI	-	-	-	72	-	-
1976-B940	2442962.13	1976 Jul 2 1510:00	Rocketsonde	-	-	Arcasonde	-	-	-	THU	-	-	-	72	-	-
1976-B941	2442962.29	1976 Jul 2 1857:59	Rocketsonde	-	-	AH/DIM-9	-	-	-	PH	-	-	-	88	-	-
1976-B942	2442962.31	1976 Jul 2 1931:59	Rocketsonde	-	-	Arcasonde	-	-	-	PH	-	-	-	59	-	-
1976-B943	2442966.14	1976 Jul 5 1524:59	Rocketsonde	-	-	Arcasonde	-	-	-	THU	-	-	-	72	-	-
1976-B944	2442966.16	1976 Jul 6 1655:00	Rocketsonde	-	-	Arcasonde	-	-	-	AIT	-	-	-	51	-	-
1976-B945	2442966.27	1976 Jul 6 1830:00	Rocketsonde	-	-	Chaff, Arcasonde	-	-	-	WS	-	-	-	63	-	-
1976-B946	2442966.40	1976 Jul 6 2130:00	Rocketsonde	-	-	Arcasonde	-	-	-	KAU	-	-	-	58	-	-
1976-B947	2442967.03	1976 Jul 7 0203:00	Rocketsonde	-	-	Arcasonde	-	-	-	KHR	LO43	-	-	79	-	-
1976-B948	2442967.05	1976 Jul 7 1241:00	Rocketsonde	-	-	Arcasonde	-	-	-	ASC	-	-	-	74	-	-
1976-B949	2442967.06	1976 Jul 7 1313:59	Rocketsonde	-	-	Arcasonde	-	-	-	ASC	-	-	-	67	-	-
1976-B950	2442967.14	1976 Jul 7 1514:59	Rocketsonde	-	-	Arcasonde	-	-	-	AIT	-	-	-	70	-	-
1976-B952	2442967.21	1976 Jul 7 1700:00	Rocketsonde	-	-	Arcasonde	-	-	-	SHER	-	-	-	63	-	-
1976-1272	2442967.22	1976 Jul 7 1722:00	Rocketsonde	-	-	AH/DIM-9	-	-	-	PH	-	-	-	86	-	-
1976-B953	2442967.26	1976 Jul 7 1820:00	Rocketsonde	-	-	Arcasonde	-	-	-	WS	-	-	-	66	-	-
1976-B954	2442967.27	1976 Jul 7 1830:00	Rocketsonde	-	-	Chaff, Arcasonde	-	-	-	WS	-	-	-	65	-	-
1976-1274	2442967.40	1976 Jul 7 2132:00	Rocketsonde	-	-	Arcasonde	-	-	-	KAU	-	-	-	55	-	-
1976-B956	2442967.42	1976 Jul 7 2204:59	Rocketsonde	-	-	Arcasonde	-	-	-	KAU	-	-	-	55	-	-
1976-B955	2442967.55	1976 Jul 8 0114:59	Rocketsonde	-	-	Arcasonde	-	-	-	KHR	-	-	-	64	-	-
1976-B956	2442966.18	1976 Jul 8 1619:59	Rocketsonde	-	-	Arcasonde	-	-	-	WS	-	-	-	64	-	-
1976-B957	2442966.40	1976 Jul 8 2130:00	Rocketsonde	-	-	Arcasonde	-	-	-	KAU	-	-	-	56	-	-
1976-B958	2442966.07	1976 Jul 9 1418:00	Rocketsonde	-	-	Arcasonde	-	-	-	ASC	-	-	-	62	-	-
1976-B959	2442966.10	1976 Jul 9 1451:00	Rocketsonde	-	-	Arcasonde	-	-	-	AIT	-	-	-	71	-	-
1976-B960	2442966.10	1976 Jul 9 1430:00	Rocketsonde	-	-	Arcasonde	-	-	-	CC	LO43	-	-	76	-	-
1976-B961	2442966.10	1976 Jul 9 1430:00	Rocketsonde	-	-	Arcasonde	-	-	-	AIT	-	-	-	70	-	-
1976-B962	2442966.21	1976 Jul 9 1700:00	Rocketsonde	-	-	Arcasonde	-	-	-	SHER	-	-	-	61	-	-
1976-A39	2442966.36	1976 Jul 9 2035:00	Rocketsonde	-	-	Arcasonde	-	-	-	KHR	-	-	-	47	-	-
1976-B964	2442966.55	1976 Jul 10 0114:59	Rocketsonde	-	-	Arcasonde	-	-	-	ASC	-	-	-	58	-	-
1976-B965	2442972.04	1976 Jul 12 1239:59	Rocketsonde	-	-	Arcasonde	-	-	-	ASC	-	-	-	56	-	-
1976-B966	2442972.10	1976 Jul 12 1430:00	Rocketsonde	-	-	Arcasonde	-	-	-	AIT	-	-	-	59	-	-
1976-B967	2442972.12	1976 Jul 12 1511:00	Rocketsonde	-	-	Arcasonde	-	-	-	AIT	-	-	-	57	-	-
1976-B968	2442975.14	1976 Jul 12 1524:59	Rocketsonde	-	-	Arcasonde	-	-	-	THU	-	-	-	51	-	-
1976-B971	2442975.29	1976 Jul 12 1946:59	Rocketsonde	-	-	Arcasonde	-	-	-	CC	LO43	-	-	73	-	-
1976-B972	2442975.30	1976 Jul 12 1733:59	Rocketsonde	-	-	Arcasonde	-	-	-	VI	-	-	-	72	-	-
1976-A42	2442975.39	1976 Jul 12 2114:59	Rocketsonde	-	-	Arcasonde	-	-	-	PH	-	-	-	49	-	-
1976-B973	2442975.42	1976 Jul 12 2206:00	Rocketsonde	-	-	Arcasonde	-	-	-	SHER	-	-	-	49	-	-
1976-B974	2442975.52	1976 Jul 13 0035:59	Rocketsonde	-	-	Arcasonde	-	-	-	KAU	-	-	-	50	-	-
1976-B975	2442974.06	1976 Jul 14 1435:59	Rocketsonde	-	-	Arcasonde	-	-	-	KHR	-	-	-	76	-	-
1976-B976	2442974.06	1976 Jul 14 1435:59	Rocketsonde	-	-	Arcasonde	-	-	-	AIT	-	-	-	78	-	-
1976-B976	2442974.17	1976 Jul 14 1559:59	Rocketsonde	-	-	Arcasonde	-	-	-	CLEI	-	-	-	96	-	-
1976-B977	2442974.17	1976 Jul 14 1609:59	Rocketsonde	-	-	AH/DIM-9	-	-	-	WS	-	-	-	66	-	-
1976-B978	2442974.17	1976 Jul 14 1609:59	Rocketsonde	-	-	Arcasonde	-	-	-	WS	-	-	-	69	-	-
1976-B979	2442974.19	1976 Jul 14 1626:59	Rocketsonde	-	-	Arcasonde	-	-	-	PRIM	-	-	-	68	-	-
1976-B980	2442974.21	1976 Jul 14 1700:00	Rocketsonde	-	-	Arcasonde	-	-	-	SHER	-	-	-	57	-	-
1976-B982	2442974.28	1976 Jul 14 1902:00	Rocketsonde	-	-	Arcasonde	-	-	-	VI	-	-	-	70	-	-
1976-B983	2442974.30	1976 Jul 14 1914:59	Rocketsonde	-	-	Arcasonde	-	-	-	VI	-	-	-	57	-	-
1976-B984	2442974.38	1976 Jul 14 2107:00	Rocketsonde	-	-	AH/DIM-9	-	-	-	KAU	-	-	-	59	-	-
1976-B985	2442974.39	1976 Jul 14 2119:00	Rocketsonde	-	-	Arcasonde	-	-	-	KAU	-	-	-	58	-	-
1976-A43	2442974.39	1976 Jul 14 2119:00	Rocketsonde	-	-	Arcasonde	-	-	-	SHER	-	-	-	46	-	-
1976-B284	2442974.51	1976 Jul 15 0013:59	Rocketsonde	-	-	Arcasonde	-	-	-	WS	-	-	-	83	-	-
1976-B986	2442975.26	1976 Jul 15 1820:00	Rocketsonde	-	-	Arcasonde	-	-	-	WS	-	-	-	63	-	-
1976-B987	2442975.37	1976 Jul 15 2054:00	Rocketsonde	-	-	Arcasonde	-	-	-	KAU	-	-	-	61	-	-
1976-B988	2442976.01	1976 Jul 16 1210:00	Rocketsonde	-	-	Arcasonde	-	-	-	ASC	-	-	-	61	-	-
1976-B989	2442976.10	1976 Jul 16 1430:00	Rocketsonde	-	-	Arcasonde	-	-	-	VI	-	-	-	56	-	-
1976-A43	2442976.12	1976 Jul 16 1455:00	Rocketsonde	-	-	Arcasonde	-	-	-	THU	-	-	-	69	-	-
1976-B285	2442976.40	1976 Jul 16 2143:00	Rocketsonde	-	-	Arcasonde	-	-	-	SHER	-	-	-	49	-	-
1976-B987	2442976.57	1976 Jul 16 2237:59	Rocketsonde	-	-	AH/DIM-9	-	-	-	PM	-	-	-	87	-	-
1976-B287	2442976.57	1976 Jul 17 0138:59	Rocketsonde	-	-	Arcasonde	-	-	-	KHR	-	-	-	88	-	-
1977-H14	2443147.22	1977 Jan 3 1717:00	Rocketsonde	-	-	Arcasonde	-	-	-	THU	-	-	-	48	-	-
1977-H15	2443147.25	1977 Jan 3 1830:00	Rocketsonde	-	-	Arcasonde	-	-	-	VI	-	-	-	70	-	-
1977-H16	2443147.35	1977 Jan 3 2019:00	Rocketsonde	-	-	Arcasonde	-	-	-	PM	-	-	-	71	-	-
1977-H17	2443147.51	1977 Jan 4 0108:59	Rocketsonde	-	-	Arcasonde	-	-	-	KHR	-	-	-	77	-	-
1977-H18	2443148.02	1977 Jan 4 0108:59	Rocketsonde	-	-	Arcasonde	-	-	-	SHER	-	-	-	46	-	-
1977-H20	2443148.19	1977 Jan 4 1630:00	Rocketsonde	-	-	Arcasonde	-	-	-	ASC	-	-	-	60	-	-
1977-H21	2443148.20	1977 Jan 4 1644:59	Rocketsonde	-	-	Arcasonde	-	-	-	WS	-	-	-	61	-	-
1977-H22	2443148.23	1977 Jan 4 1731:00	Rocketsonde	-	-	Arcasonde	-	-	-	PM	-	-	-	60	-	-
1977-H23	2443148.35	1977 Jan 4 2025:00	Rocketsonde	-	-	Arcasonde	-	-	-	PF	-	-	-	53	-	-
1977-H24	2443148.40	1977 Jan 4 2130:00	Rocketsonde	-	-	Arcasonde	-	-	-	KAU	-	-	-	56	-	-
1977-H25	2443148.40	1977 Jan 4 2130:00	Rocketsonde	-	-	Arcasonde	-	-	-	PF	-	-	-	64	-	-
1977-H29	2443149.07	1977 Jan 5 1344:59	Rocketsonde	-	-	Arcasonde	-	-	-	ASC	-	-	-	74	-	-
1977-H30	2443149.09	1977 Jan 5 1414:00	Rocketsonde	-	-	Arcasonde	-	-	-	CC	LO43	-	-	61	-	-
1977-H31	2443149.10	1977 Jan 5 1420:00	Rocketsonde	-	-	Arcasonde	-	-	-	SHER	-	-	-	61	-	-

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Mission	FlightCode	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee_Km	Range_Km	Dest
1977-#32	2443149.10	1977 Jan 5 1430:00	Rocketsonde	-	-	Arcasonde	-	-	-	THU	-	-	-	70	-	-
1977-#33	2443149.12	1977 Jan 5 1500:00	Rocketsonde	-	-	-	-	-	-	AIT	-	-	-	53	-	-
1977-#34	2443149.15	1977 Jan 5 1530:00	Rocketsonde	-	-	Arcasonde	-	-	-	CC	LC43	-	-	72	-	-
1977-#35	2443149.21	1977 Jan 5 1700:00	Rocketsonde	-	-	AI/DNR-9	-	-	-	WS	-	-	-	99	-	-
1977-#36	2443149.22	1977 Jan 5 1710:00	Rocketsonde	-	-	Arcasonde	-	-	-	WS	-	-	-	67	-	-
1977-#37	2443149.22	1977 Jan 5 1711:00	Rocketsonde	-	-	Arcasonde	-	-	-	PRIM	-	-	-	57	-	-
1977-#38	2443149.31	1977 Jan 5 1930:00	Rocketsonde	-	-	Arcasonde	-	-	-	PF	-	-	-	55	-	-
1977-#39	2443149.33	1977 Jan 5 1952:59	Rocketsonde	-	-	Arcasonde	-	-	-	PH	-	-	-	74	-	-
1977-#40	2443149.39	1977 Jan 5 2127:59	Rocketsonde	-	-	Arcasonde	-	-	-	KHR	-	-	-	76	-	-
1977-#41	2443149.58	1977 Jan 6 0200:00	Rocketsonde	-	-	Arcasonde	-	-	-	SHEM	-	-	-	58	-	-
1977-#42	2443150.10	1977 Jan 6 1430:00	Rocketsonde	-	-	Arcasonde	-	-	-	CC	LC43	-	-	74	-	-
1977-#43	2443150.14	1977 Jan 6 1524:59	Rocketsonde	-	-	-	-	-	-	AIT	-	-	-	71	-	-
1977-#44	2443150.16	1977 Jan 6 1549:59	Rocketsonde	-	-	Arcasonde	-	-	-	SHER	-	-	-	63	-	-
1977-#45	2443150.29	1977 Jan 6 1659:59	Rocketsonde	-	-	Arcasonde	-	-	-	WS	-	-	-	60	-	-
1977-#46	2443151.15	1977 Jan 7 1534:59	Rocketsonde	-	-	Arcasonde	-	-	-	THU	-	-	-	64	-	-
1977-#47	2443151.21	1977 Jan 7 1704:59	Rocketsonde	-	-	Arcasonde	-	-	-	MI	-	-	-	65	-	-
1977-#48	2443151.28	1977 Jan 7 1845:00	Rocketsonde	-	-	Arcasonde	-	-	-	WS	-	-	-	67	-	-
1977-#49	2443151.36	1977 Jan 7 2040:00	Rocketsonde	-	-	Arcasonde	-	-	-	KAU	-	-	-	62	-	-
1977-#50	2443151.38	1977 Jan 7 2101:59	Rocketsonde	-	-	Arcasonde	-	-	-	KHR	-	-	-	77	-	-
1977-#51	2443151.39	1977 Jan 7 2122:59	Rocketsonde	-	-	Arcasonde	-	-	-	MI	-	-	-	64	-	-
1977-#52	2443152.21	1977 Jan 8 1700:00	Rocketsonde	-	-	Arcasonde	-	-	-	MI	-	-	-	70	-	-
1977-#53	2443152.21	1977 Jan 8 1754:00	Rocketsonde	-	-	Arcasonde	-	-	-	MI	-	-	-	64	-	-
1977-#54	2443152.25	1977 Jan 8 1754:00	Rocketsonde	-	-	-	-	-	-	MI	-	-	-	67	-	-
1977-#55	2443152.40	1977 Jan 8 2132:00	Rocketsonde	-	-	Arcasonde	-	-	-	MI	-	-	-	70	-	-
1977-#56	2443152.40	1977 Jan 8 2142:00	Rocketsonde	-	-	Arcasonde	-	-	-	MI	-	-	-	65	-	-
1977-#57	2443154.02	1977 Jan 10 1229:00	Rocketsonde	-	-	Arcasonde	-	-	-	ASC	-	-	-	62	-	-
1977-#58	2443154.11	1977 Jan 10 1437:59	Rocketsonde	-	-	Arcasonde	-	-	-	AIT	-	-	-	72	-	-
1977-#59	2443154.19	1977 Jan 10 1636:59	Rocketsonde	-	-	Arcasonde	-	-	-	PRIM	-	-	-	61	-	-
1977-#60	2443154.21	1977 Jan 10 1700:00	Rocketsonde	-	-	Arcasonde	-	-	-	SHER	-	-	-	66	-	-
1977-#61	2443154.22	1977 Jan 10 1740:00	Rocketsonde	-	-	Arcasonde	-	-	-	WS	-	-	-	70	-	-
1977-#62	2443154.29	1977 Jan 10 1902:59	Rocketsonde	-	-	Arcasonde	-	-	-	MI	-	-	-	60	-	-
1977-#63	2443154.35	1977 Jan 10 2020:00	Rocketsonde	-	-	Arcasonde	-	-	-	PF	-	-	-	77	-	-
1977-#64	2443154.51	1977 Jan 11 0039:59	Rocketsonde	-	-	Arcasonde	-	-	-	KHR	-	-	-	46	-	-
1977-#65	2443154.54	1977 Jan 11 0059:59	Rocketsonde	-	-	Arcasonde	-	-	-	SHER	-	-	-	65	-	-
1977-#66	2443155.15	1977 Jan 11 1530:00	Rocketsonde	-	-	Arcasonde	-	-	-	THU	-	-	-	81	-	-
1977-#67	2443155.19	1977 Jan 11 1636:59	Rocketsonde	-	-	Arcasonde	-	-	-	WS	-	-	-	61	-	-
1977-#68	2443155.22	1977 Jan 11 1745:00	Rocketsonde	-	-	Arcasonde	-	-	-	KAU	-	-	-	61	-	-
1977-#69	2443155.37	1977 Jan 11 2035:00	Rocketsonde	-	-	Arcasonde	-	-	-	ASC	-	-	-	64	-	-
1977-#70	2443155.37	1977 Jan 11 2035:00	Rocketsonde	-	-	Arcasonde	-	-	-	ASC	-	-	-	64	-	-
1977-#71	2443156.04	1977 Jan 12 1252:00	Rocketsonde	-	-	Arcasonde	-	-	-	THU	-	-	-	89	-	-
1977-#72	2443156.14	1977 Jan 12 1520:00	Rocketsonde	-	-	Arcasonde	-	-	-	THU	-	-	-	89	-	-
1977-#73	2443156.14	1977 Jan 12 1520:00	Rocketsonde	-	-	Arcasonde	-	-	-	AIT	-	-	-	54	-	-
1977-#74	2443156.14	1977 Jan 12 1524:59	Rocketsonde	-	-	AI/DNR-9?	-	-	-	VC	LC43	-	-	53	-	-
1977-#75	2443156.16	1977 Jan 12 1546:00	Rocketsonde	-	-	Arcasonde	-	-	-	VC	-	-	-	70	-	-
1977-#76	2443156.17	1977 Jan 12 1559:59	Rocketsonde	-	-	Arcasonde	-	-	-	PRIM	-	-	-	61	-	-
1977-#77	2443156.19	1977 Jan 12 1600:00	Rocketsonde	-	-	Arcasonde	-	-	-	PRIM	-	-	-	87	-	-
1977-#78	2443156.21	1977 Jan 12 1644:59	Rocketsonde	-	-	AI/DNR-9	-	-	-	SHER	-	-	-	82	-	-
1977-#79	2443156.21	1977 Jan 12 1700:00	Rocketsonde	-	-	Arcasonde	-	-	-	PH	-	-	-	61	-	-
1977-#80	2443156.25	1977 Jan 12 1811:59	Rocketsonde	-	-	AI/DNR-9	-	-	-	WS	-	-	-	86	-	-
1977-#81	2443156.29	1977 Jan 12 1859:59	Rocketsonde	-	-	Arcasonde	-	-	-	WS	-	-	-	64	-	-
1977-#82	2443156.34	1977 Jan 12 2015:00	Rocketsonde	-	-	Arcasonde	-	-	-	PF	-	-	-	64	-	-
1977-#83	2443156.34	1977 Jan 12 2015:00	Rocketsonde	-	-	Arcasonde	-	-	-	SHEM	-	-	-	77	-	-
1977-#84	2443156.55	1977 Jan 13 0124:59	Rocketsonde	-	-	Arcasonde	-	-	-	KHR	-	-	-	78	-	-
1977-#85	2443156.55	1977 Jan 13 0124:59	Rocketsonde	-	-	Arcasonde	-	-	-	CC	LC43	-	-	67	-	-
1977-#86	2443157.20	1977 Jan 13 1604:59	Rocketsonde	-	-	Arcasonde	-	-	-	WS	-	-	-	66	-	-
1977-#87	2443157.20	1977 Jan 13 1604:59	Rocketsonde	-	-	Arcasonde	-	-	-	KAU	-	-	-	69	-	-
1977-#88	2443157.40	1977 Jan 13 2133:00	Rocketsonde	-	-	Arcasonde	-	-	-	AIT	-	-	-	49	-	-
1977-#89	2443158.06	1977 Jan 14 1319:59	Rocketsonde	-	-	Arcasonde	-	-	-	ASC	-	-	-	64	-	-
1977-#90	2443158.07	1977 Jan 14 1344:59	Rocketsonde	-	-	Arcasonde	-	-	-	ASC	-	-	-	69	-	-
1977-#91	2443158.14	1977 Jan 14 1524:59	Rocketsonde	-	-	Arcasonde	-	-	-	THU	-	-	-	70	-	-
1977-#92	2443158.17	1977 Jan 14 1559:59	Rocketsonde	-	-	Arcasonde	-	-	-	MI	-	-	-	71	-	-
1977-#93	2443158.19	1977 Jan 14 1630:00	Rocketsonde	-	-	Arcasonde	-	-	-	WS	-	-	-	73	-	-
1977-#94	2443158.21	1977 Jan 14 1700:00	Rocketsonde	-	-	Arcasonde	-	-	-	PM	-	-	-	59	-	-
1977-#95	2443158.23	1977 Jan 14 1730:00	Rocketsonde	-	-	Arcasonde	-	-	-	PM	-	-	-	60	-	-
1977-#96	2443158.35	1977 Jan 14 2026:00	Rocketsonde	-	-	Arcasonde	-	-	-	PF	-	-	-	77	-	-
1977-#97	2443158.39	1977 Jan 14 2120:00	Rocketsonde	-	-	Arcasonde	-	-	-	KHR	-	-	-	70	-	-
1977-#98	2443159.06	1977 Jan 15 1330:00	Rocketsonde	-	-	Arcasonde	-	-	-	CC	LC43	-	-	61	-	-
1977-#99	2443161.10	1977 Jan 17 1417:00	Rocketsonde	-	-	Arcasonde	-	-	-	THU	-	-	-	70	-	-
1977-#100	2443161.17	1977 Jan 17 1600:59	Rocketsonde	-	-	Winter Strato	-	-	-	MI	-	-	-	70	-	-
1977-#101	2443161.19	1977 Jan 17 1630:00	Rocketsonde	-	-	Arcasonde	-	-	-	SHER	-	-	-	54	-	-
1977-#102	2443161.21	1977 Jan 17 1644:59	Rocketsonde	-	-	Arcasonde	-	-	-	AIT	-	-	-	73	-	-
1977-#103	2443161.21	1977 Jan 17 1700:00	Rocketsonde	-	-	Arcasonde	-	-	-	PRIM	-	-	-	62	-	-
1977-#104	2443161.31	1977 Jan 17 1930:00	Rocketsonde	-	-	Arcasonde	-	-	-	WS	-	-	-	66	-	-
1977-#105	2443161.34	1977 Jan 17 2006:00	Rocketsonde	-	-	Arcasonde	-	-	-	PM	-	-	-	60	-	-
1977-#106	2443161.36	1977 Jan 17 2037:00	Rocketsonde	-	-	Arcasonde	-	-	-	PF	-	-	-	62	-	-
1977-#107	2443161.48	1977 Jan 17 2334:00	Rocketsonde	-	-	Arcasonde	-	-	-	KHR	-	-	-	78	-	-
1977-#108	2443161.59	1977 Jan 18 0210:00	Rocketsonde	-	-	Arcasonde	-	-	-	SHEM	-	-	-	86	-	-
1977-#109	2443162.02	1977 Jan 18 1224:59	Rocketsonde	-	-	Arcasonde	-	-	-	ASC	-	-	-	64	-	-
1977-#110	2443162.20	1977 Jan 18 1607:00	Rocketsonde	-	-	Arcasonde	-	-	-	MI	-	-	-	70	-	-
1977-#111	2443162.22	1977 Jan 18 1644:59	Rocketsonde	-	-	Arcasonde	-	-	-	WS	-	-	-	66	-	-
1977-#112	2443162.26	1977 Jan 18 1711:00	Rocketsonde	-	-	Arcasonde	-	-	-	Chaff	-	-	-	70	-	-
1977-#113	2443162.31	1977 Jan 18 1810:00	Rocketsonde	-	-	Arcasonde	-	-	-	MI	-	-	-	69	-	-
1977-#114	2443162.33	1977 Jan 18 1930:00	Rocketsonde	-	-	Arcasonde	-	-	-	PM	-	-	-	73	-	-
1977-#115	2443162.44	1977 Jan 18 1949:59	Rocketsonde	-	-	Arcasonde	-	-	-	PF	-	-	-	62	-	-
1977-#116	2443162.50	1977 Jan 19 0000:59	Rocketsonde	-	-	Arcasonde	-	-	-	ASC	-	-	-	64	-	-
1977-#117	2443162.56	1977 Jan 19 0130:00	Rocketsonde	-	-	Arcasonde	-	-	-	KHR	-	-	-	80	-	-
1977-#118	2443163.07	1977 Jan 19 1344:59	Rocketsonde	-	-	Arcasonde	-	-	-	SHEM	-	-	-	100	-	-
1977-#119	2443163.07	1977 Jan 19 1344:59	Rocketsonde	-	-	Arcasonde	-	-	-	ASC	-	-	-	67	-	-

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Mission	FlightCode	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee_Km	Range_Km	Dest
1977-1227	2443163.12	1977 Jan 19 15:00:00	Rocketsonde	-	-	AI/DMP-9?	-	-	-	CC	LO43	-	-	95	-	-
1977-1117	2443163.14	1977 Jan 19 15:22:00	Rocketsonde	-	-	-	-	-	-	AIT	-	-	-	74	-	-
1977-A06	2443163.17	1977 Jan 19 15:59:59	Rocketsonde	-	-	Arcasonde	-	-	-	CC	LO43	-	-	48	-	-
1977-4119	2443163.19	1977 Jan 19 16:33:59	Rocketsonde	-	-	Arcasonde	-	-	-	PRIM	-	-	-	56	-	-
1977-4120	2443163.19	1977 Jan 19 16:34:59	Rocketsonde	-	-	Chaff	-	-	-	WI	-	-	-	70	-	-
1977-4121	2443163.21	1977 Jan 19 17:02:00	Rocketsonde	-	-	Arcasonde	-	-	-	CC	LO43	-	-	62	-	-
1977-4124	2443163.23	1977 Jan 19 17:30:00	Rocketsonde	-	-	Arcasonde	-	-	-	SHER	-	-	-	65	-	-
1977-4125	2443163.26	1977 Jan 19 18:09:00	Rocketsonde	-	-	Arcasonde	-	-	-	WI	-	-	-	66	-	-
1977-728	2443163.26	1977 Jan 19 18:21:00	Rocketsonde	-	-	AI/DMP-9	-	-	-	PH	-	-	-	88	-	-
1977-729	2443163.34	1977 Jan 19 20:04:59	Rocketsonde	-	-	AI/DMP-9	-	-	-	PH	-	-	-	99	-	-
1977-4126	2443163.34	1977 Jan 19 20:15:00	Rocketsonde	-	-	Arcasonde	-	-	-	WS	-	-	-	62	-	-
1977-4127	2443163.38	1977 Jan 19 21:07:00	Rocketsonde	-	-	Arcasonde	-	-	-	PF	-	-	-	65	-	-
1977-4128	2443163.40	1977 Jan 19 21:32:00	Rocketsonde	-	-	Arcasonde	-	-	-	KRR	-	-	-	75	-	-
1977-4129	2443163.40	1977 Jan 19 21:33:00	Rocketsonde	-	-	Arcasonde	-	-	-	KAU	-	-	-	74	-	-
1977-4130	2443163.41	1977 Jan 19 21:53:00	Rocketsonde	-	-	Arcasonde	-	-	-	PH	-	-	-	71	-	-
1977-4131	2443163.54	1977 Jan 20 00:59:59	Rocketsonde	-	-	Arcasonde	-	-	-	SHEM	-	-	-	66	-	-
1977-4132	2443164.03	1977 Jan 20 12:37:59	Rocketsonde	-	-	Arcasonde	-	-	-	ASC	-	-	-	65	-	-
1977-4133	2443164.12	1977 Jan 20 15:00:00	Rocketsonde	-	-	Arcasonde	-	-	-	SHER	-	-	-	62	-	-
1977-4134	2443164.14	1977 Jan 20 15:20:00	Rocketsonde	-	-	Arcasonde	-	-	-	WI	-	-	-	63	-	-
1977-4136	2443164.23	1977 Jan 20 17:25:00	Rocketsonde	-	-	Arcasonde	-	-	-	WS	-	-	-	65	-	-
1977-4137	2443164.31	1977 Jan 20 19:24:59	Rocketsonde	-	-	Arcasonde	-	-	-	PH	-	-	-	71	-	-
1977-4138	2443164.47	1977 Jan 20 23:15:00	Rocketsonde	-	-	Arcasonde	-	-	-	KRR	-	-	-	74	-	-
1977-4140	2443166.09	1977 Jan 21 14:15:00	Rocketsonde	-	-	Arcasonde	-	-	-	SHER	-	-	-	62	-	-
1977-4142	2443166.14	1977 Jan 21 15:14:59	Rocketsonde	-	-	Arcasonde	-	-	-	WI	-	-	-	70	-	-
1977-4144	2443166.16	1977 Jan 21 15:45:00	Rocketsonde	-	-	Arcasonde	-	-	-	AIT	-	-	-	74	-	-
1977-4145	2443166.17	1977 Jan 21 15:59:59	Rocketsonde	-	-	Arcasonde	-	-	-	WS	-	-	-	67	-	-
1977-4146	2443166.21	1977 Jan 21 16:00:59	Rocketsonde	-	-	Arcasonde	-	-	-	CC	LO43	-	-	59	-	-
1977-A07	2443166.29	1977 Jan 21 17:09:00	Rocketsonde	-	-	Arcasonde	-	-	-	PRIM	-	-	-	59	-	-
1977-4147	2443166.31	1977 Jan 21 18:59:59	Rocketsonde	-	-	Arcasonde	-	-	-	PF	-	-	-	46	-	-
1977-4148	2443166.36	1977 Jan 21 19:29:00	Rocketsonde	-	-	Arcasonde	-	-	-	PH	-	-	-	64	-	-
1977-4149	2443166.46	1977 Jan 21 20:34:00	Rocketsonde	-	-	Arcasonde	-	-	-	PF	-	-	-	63	-	-
1977-4150	2443166.55	1977 Jan 22 01:14:59	Rocketsonde	-	-	Arcasonde	-	-	-	KAU	-	-	-	63	-	-
1977-4151	2443166.15	1977 Jan 22 15:00:00	Rocketsonde	-	-	Arcasonde	-	-	-	KRR	-	-	-	76	-	-
1977-4152	2443166.20	1977 Jan 22 15:04:59	Rocketsonde	-	-	Arcasonde	-	-	-	WI	-	-	-	70	-	-
1977-4153	2443166.21	1977 Jan 22 17:00:00	Rocketsonde	-	-	Arcasonde	-	-	-	WS	-	-	-	64	-	-
1977-4154	2443166.42	1977 Jan 22 21:59:59	Rocketsonde	-	-	Arcasonde	-	-	-	SHER	-	-	-	59	-	-
1977-4155	2443166.42	1977 Jan 22 23:10:00	Rocketsonde	-	-	Arcasonde	-	-	-	PF	-	-	-	68	-	-
1977-4156	2443166.47	1977 Jan 22 23:15:00	Rocketsonde	-	-	Arcasonde	-	-	-	KRR	-	-	-	69	-	-
1977-4158	2443167.16	1977 Jan 23 15:46:59	Rocketsonde	-	-	Arcasonde	-	-	-	WI	-	-	-	67	-	-
1977-4159	2443167.21	1977 Jan 23 17:00:00	Rocketsonde	-	-	Arcasonde	-	-	-	SHER	-	-	-	60	-	-
1977-4160	2443167.25	1977 Jan 23 18:00:00	Rocketsonde	-	-	Arcasonde	-	-	-	WS	-	-	-	81	-	-
1977-4161	2443167.42	1977 Jan 23 22:06:59	Rocketsonde	-	-	Arcasonde	-	-	-	PR	-	-	-	64	-	-
1977-4162	2443167.50	1977 Jan 23 23:15:00	Rocketsonde	-	-	Arcasonde	-	-	-	KRR	-	-	-	74	-	-
1977-4163	2443168.10	1977 Jan 24 14:35:00	Rocketsonde	-	-	Arcasonde	-	-	-	AIT	-	-	-	64	-	-
1977-4164	2443168.11	1977 Jan 24 14:35:00	Rocketsonde	-	-	Arcasonde	-	-	-	THU	-	-	-	66	-	-
1977-4166	2443168.11	1977 Jan 24 15:11:00	Rocketsonde	-	-	Arcasonde	-	-	-	AIT	-	-	-	67	-	-
1977-4167	2443168.15	1977 Jan 24 15:41:00	Rocketsonde	-	-	Arcasonde	-	-	-	AIT	-	-	-	67	-	-
1977-4168	2443168.17	1977 Jan 24 15:51:00	Rocketsonde	-	-	Arcasonde	-	-	-	CC	LO43	-	-	70	-	-
1977-4169	2443168.19	1977 Jan 24 15:55:59	Rocketsonde	-	-	Arcasonde	-	-	-	CC	LO43	-	-	60	-	-
1977-4170	2443168.21	1977 Jan 24 16:31:59	Rocketsonde	-	-	Arcasonde	-	-	-	PRIM	-	-	-	62	-	-
1977-4171	2443168.25	1977 Jan 24 19:00:00	Rocketsonde	-	-	Arcasonde	-	-	-	SHER	-	-	-	62	-	-
1977-4172	2443168.26	1977 Jan 24 19:00:00	Rocketsonde	-	-	Arcasonde	-	-	-	WS	-	-	-	65	-	-
1977-4173	2443168.46	1977 Jan 24 22:56:59	Rocketsonde	-	-	Arcasonde	-	-	-	KRR	-	-	-	78	-	-
1977-4174	2443168.46	1977 Jan 24 23:00:00	Rocketsonde	-	-	Arcasonde	-	-	-	PF	-	-	-	65	-	-
1977-4175	2443168.50	1977 Jan 25 00:00:59	Rocketsonde	-	-	Arcasonde	-	-	-	SHEM	-	-	-	73	-	-
1977-4176	2443169.02	1977 Jan 25 12:34:59	Rocketsonde	-	-	Arcasonde	-	-	-	ASC	-	-	-	63	-	-
1977-4177	2443169.14	1977 Jan 25 15:14:59	Rocketsonde	-	-	Arcasonde	-	-	-	WI	-	-	-	70	-	-
1977-4178	2443169.21	1977 Jan 25 17:00:00	Rocketsonde	-	-	Arcasonde	-	-	-	SHER	-	-	-	61	-	-
1977-4179	2443169.35	1977 Jan 25 20:20:00	Rocketsonde	-	-	Arcasonde	-	-	-	PF	-	-	-	62	-	-
1977-4180	2443169.47	1977 Jan 25 23:15:00	Rocketsonde	-	-	Arcasonde	-	-	-	KRR	-	-	-	78	-	-
1977-4181	2443170.07	1977 Jan 26 13:44:59	Rocketsonde	-	-	Arcasonde	-	-	-	ASC	LO43	-	-	74	-	-
1977-4182	2443170.10	1977 Jan 26 15:30:00	Rocketsonde	-	-	Arcasonde	-	-	-	CC	LO43	-	-	69	-	-
1977-4183	2443170.15	1977 Jan 26 15:42:00	Rocketsonde	-	-	Arcasonde	-	-	-	AIT	-	-	-	67	-	-
1977-4185	2443170.21	1977 Jan 26 17:00:00	Rocketsonde	-	-	Arcasonde	-	-	-	SHER	-	-	-	65	-	-
1977-4186	2443170.32	1977 Jan 26 19:44:59	Rocketsonde	-	-	Arcasonde	-	-	-	PF	-	-	-	65	-	-
1977-4187	2443170.36	1977 Jan 26 20:36:00	Rocketsonde	-	-	Arcasonde	-	-	-	WS	-	-	-	65	-	-
1977-4188	2443170.40	1977 Jan 26 20:47:00	Rocketsonde	-	-	Arcasonde	-	-	-	NS	-	-	-	98	-	-
1977-4189	2443170.41	1977 Jan 26 21:33:59	Rocketsonde	-	-	Arcasonde	-	-	-	NS	-	-	-	72	-	-
1977-4190	2443170.41	1977 Jan 26 21:45:59	Rocketsonde	-	-	Arcasonde	-	-	-	KRR	-	-	-	76	-	-
1977-4191	2443170.58	1977 Jan 26 21:45:59	Rocketsonde	-	-	Arcasonde	-	-	-	PM	-	-	-	73	-	-
1977-4192	2443171.14	1977 Jan 27 15:14:59	Rocketsonde	-	-	Arcasonde	-	-	-	SHEM	-	-	-	54	-	-
1977-4193	2443171.17	1977 Jan 27 15:26:59	Rocketsonde	-	-	Arcasonde	-	-	-	WI	-	-	-	70	-	-
1977-4194	2443171.17	1977 Jan 27 16:09:59	Rocketsonde	-	-	Arcasonde	-	-	-	THU	-	-	-	66	-	-
1977-4195	2443171.25	1977 Jan 27 16:30:00	Rocketsonde	-	-	Arcasonde	-	-	-	SHER	-	-	-	63	-	-
1977-4196	2443171.32	1977 Jan 27 19:42:59	Rocketsonde	-	-	Arcasonde	-	-	-	PRIM	-	-	-	63	-	-
1977-4197	2443171.36	1977 Jan 27 20:33:00	Rocketsonde	-	-	Arcasonde	-	-	-	NS	-	-	-	70	-	-
1977-4198	2443171.40	1977 Jan 27 21:29:00	Rocketsonde	-	-	Arcasonde	-	-	-	PM	-	-	-	75	-	-
1977-4199	2443171.58	1977 Jan 28 02:00:00	Rocketsonde	-	-	Arcasonde	-	-	-	PF	-	-	-	74	-	-
1977-4200	2443172.07	1977 Jan 28 13:44:59	Rocketsonde	-	-	Arcasonde	-	-	-	KRR	-	-	-	54	-	-
1977-4201	2443172.12	1977 Jan 28 14:49:59	Rocketsonde	-	-	Arcasonde	-	-	-	SHEM	-	-	-	68	-	-
1977-4203	2443172.17	1977 Jan 28 15:59:59	Rocketsonde	-	-	Arcasonde	-	-	-	ASC	-	-	-	68	-	-
1977-4204	2443172.17	1977 Jan 28 15:59:59	Rocketsonde	-	-	Arcasonde	-	-	-	THU	-	-	-	68	-	-
1977-4205	2443172.18	1977 Jan 28 16:23:59	Rocketsonde	-	-	Arcasonde	-	-	-	AIT	-	-	-	73	-	-
1977-4206	2443172.18	1977 Jan 28 16:23:59	Rocketsonde	-	-	Arcasonde	-	-	-	CC	LO43	-	-	72	-	-
1977-4207	2443172.18	1977 Jan 28 16:23:59	Rocketsonde	-	-	Arcasonde	-	-	-	WI	-	-	-	69	-	-

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Mission	FlightCode	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_L_Pad	Apogee_Km	Range_Km	Dest
1977-4206	2443172.19	1977 Jan 28 1630:59	Rocketsonde	-	-	Arcasonde	-	-	-	PRIM	-	-	-	65	-	-
1977-4207	2443172.25	1977 Jan 28 1800:00	Rocketsonde	-	Winter Strato	Arcasonde	-	-	-	WS	-	-	-	67	-	-
1977-4208	2443172.32	1977 Jan 28 1944:59	Rocketsonde	-	-	Arcasonde	-	-	-	PF	-	-	-	73	-	-
1977-4209	2443172.36	1977 Jan 28 2041:00	Rocketsonde	-	-	Arcasonde	-	-	-	PH	-	-	-	69	-	-
1977-4210	2443172.38	1977 Jan 28 2100:00	Rocketsonde	-	-	Arcasonde	-	-	-	PF	-	-	-	73	-	-
1977-4211	2443172.42	1977 Jan 28 2159:59	Rocketsonde	-	-	Arcasonde	-	-	-	PF	-	-	-	57	-	-
1977-4212	2443172.48	1977 Jan 28 2325:00	Rocketsonde	-	-	Arcasonde	-	-	-	KHR	-	-	-	60	-	-
1977-4213	2443172.50	1977 Jan 29 0001:59	Rocketsonde	-	-	Arcasonde	-	-	-	SHEM	-	-	-	64	-	-
1977-4214	2443173.16	1977 Jan 29 1544:00	Rocketsonde	-	Winter Strato	Arcasonde	-	-	-	MI	-	-	-	59	-	-
1977-4215	2443173.21	1977 Jan 29 1700:00	Rocketsonde	-	-	Arcasonde	-	-	-	SHER	-	-	-	62	-	-
1977-4216	2443173.25	1977 Jan 29 1800:00	Rocketsonde	-	Winter Strato	Arcasonde	-	-	-	WS	-	-	-	50	-	-
1977-4217	2443173.42	1977 Jan 29 2207:00	Rocketsonde	-	-	Arcasonde	-	-	-	PF	-	-	-	50	-	-
1977-4218	2443173.47	1977 Jan 29 2315:00	Rocketsonde	-	-	Arcasonde	-	-	-	KHR	-	-	-	66	-	-
1977-4219	2443173.48	1977 Jan 29 2330:00	Rocketsonde	-	-	Arcasonde	-	-	-	PF	-	-	-	64	-	-
1977-4220	2443174.15	1977 Jan 30 1536:59	Rocketsonde	-	Winter Strato	Arcasonde	-	-	-	MI	-	-	-	70	-	-
1977-4221	2443174.21	1977 Jan 30 1700:00	Rocketsonde	-	-	Arcasonde	-	-	-	SHER	-	-	-	64	-	-
1977-4222	2443174.25	1977 Jan 30 1800:00	Rocketsonde	-	Winter Strato	Arcasonde	-	-	-	WS	-	-	-	67	-	-
1977-4223	2443174.42	1977 Jan 30 2159:59	Rocketsonde	-	-	Arcasonde	-	-	-	PF	-	-	-	53	-	-
1977-4224	2443174.47	1977 Jan 30 2315:00	Rocketsonde	-	-	Arcasonde	-	-	-	KHR	-	-	-	77	-	-
1977-4225	2443175.08	1977 Jan 31 1400:00	Rocketsonde	-	-	Arcasonde	-	-	-	AUT	-	-	-	70	-	-
1977-4226	2443175.11	1977 Jan 31 1440:00	Rocketsonde	-	-	Arcasonde	-	-	-	CC	-	-	-	57	-	-
1977-4227	2443175.11	1977 Jan 31 1630:00	Rocketsonde	-	-	Arcasonde	-	-	-	PRIM	-	-	-	53	-	-
1977-4228	2443175.19	1977 Jan 31 1630:00	Rocketsonde	-	-	Arcasonde	-	-	-	THU	-	-	-	65	-	-
1977-4229	2443175.19	1977 Jan 31 1640:00	Rocketsonde	-	-	Arcasonde	-	-	-	WS	-	-	-	63	-	-
1977-4230	2443175.21	1977 Jan 31 1700:00	Rocketsonde	-	Winter Strato	Arcasonde	-	-	-	MI	-	-	-	66	-	-
1977-4231	2443175.23	1977 Jan 31 1730:00	Rocketsonde	-	-	Arcasonde	-	-	-	SHER	-	-	-	70	-	-
1977-4232	2443175.27	1977 Jan 31 1830:00	Rocketsonde	-	Winter Strato	Arcasonde	-	-	-	MI	-	-	-	58	-	-
1977-4233	2443175.32	1977 Jan 31 1940:00	Rocketsonde	-	-	Arcasonde	-	-	-	PF	-	-	-	76	-	-
1977-4234	2443175.32	1977 Jan 31 2005:59	Rocketsonde	-	-	Arcasonde	-	-	-	KHR	-	-	-	64	-	-
1977-4235	2443176.19	1977 Feb 1 1626:59	Rocketsonde	-	Winter Strato	Arcasonde	-	-	-	MI	-	-	-	66	-	-
1977-4236	2443176.21	1977 Feb 1 1700:00	Rocketsonde	-	-	Arcasonde	-	-	-	SHER	-	-	-	66	-	-
1977-4237	2443176.29	1977 Feb 1 1859:59	Rocketsonde	-	Winter Strato	Arcasonde	-	-	-	WS	-	-	-	68	-	-
1977-4238	2443176.37	1977 Feb 1 2045:59	Rocketsonde	-	-	Arcasonde	-	-	-	PH	-	-	-	55	-	-
1977-4239	2443176.40	1977 Feb 1 2132:00	Rocketsonde	-	-	Arcasonde	-	-	-	KHR	-	-	-	77	-	-
1977-4240	2443176.42	1977 Feb 1 2201:59	Rocketsonde	-	-	Arcasonde	-	-	-	ASC	-	-	-	67	-	-
1977-4241	2443176.52	1977 Feb 1 2219:59	Rocketsonde	-	-	Arcasonde	-	-	-	ASC	-	-	-	65	-	-
1977-4242	2443177.02	1977 Feb 2 1221:59	Rocketsonde	-	-	Arcasonde	-	-	-	CC	-	-	-	77	-	-
1977-4243	2443177.07	1977 Feb 2 1344:59	Rocketsonde	-	-	Arcasonde	-	-	-	AUT	-	-	-	72	-	-
1977-4244	2443177.10	1977 Feb 2 1426:59	Rocketsonde	-	-	Arcasonde	-	-	-	CC	-	-	-	67	-	-
1977-4245	2443177.17	1977 Feb 2 1601:59	Rocketsonde	-	-	Arcasonde	-	-	-	PRIM	-	-	-	66	-	-
1977-4246	2443177.17	1977 Feb 2 1630:00	Rocketsonde	-	-	Arcasonde	-	-	-	THU	-	-	-	60	-	-
1977-4247	2443177.19	1977 Feb 2 1705:00	Rocketsonde	-	Winter Strato	Arcasonde	-	-	-	SHER	-	-	-	70	-	-
1977-4248	2443177.21	1977 Feb 2 1702:00	Rocketsonde	-	-	Arcasonde	-	-	-	MI	-	-	-	99	-	-
1977-4249	2443177.25	1977 Feb 2 1800:00	Rocketsonde	-	-	Arcasonde	-	-	-	NS	-	-	-	73	-	-
1977-4250	2443177.44	1977 Feb 2 2240:00	Rocketsonde	-	-	Arcasonde	-	-	-	KHR	-	-	-	74	-	-
1977-4251	2443177.49	1977 Feb 2 2345:00	Rocketsonde	-	-	Arcasonde	-	-	-	SHER	-	-	-	64	-	-
1977-4252	2443177.54	1977 Feb 3 0859:59	Rocketsonde	-	-	Arcasonde	-	-	-	NS	-	-	-	65	-	-
1977-4253	2443177.67	1977 Feb 3 0959:59	Rocketsonde	-	-	Arcasonde	-	-	-	MI	-	-	-	70	-	-
1977-4254	2443178.18	1977 Feb 3 1626:59	Rocketsonde	-	Winter Strato	Arcasonde	-	-	-	NS	-	-	-	62	-	-
1977-4255	2443178.18	1977 Feb 3 1626:59	Rocketsonde	-	-	Arcasonde	-	-	-	PRIM	-	-	-	64	-	-
1977-4256	2443178.21	1977 Feb 3 1700:00	Rocketsonde	-	-	Arcasonde	-	-	-	SHER	-	-	-	64	-	-
1977-4257	2443178.21	1977 Feb 3 1700:00	Rocketsonde	-	Winter Strato	Arcasonde	-	-	-	NS	-	-	-	57	-	-
1977-4258	2443178.31	1977 Feb 3 1931:59	Rocketsonde	-	-	Arcasonde	-	-	-	PF	-	-	-	60	-	-
1977-4259	2443178.31	1977 Feb 3 2134:59	Rocketsonde	-	-	Arcasonde	-	-	-	SHEM	-	-	-	53	-	-
1977-4260	2443178.50	1977 Feb 4 0024:59	Rocketsonde	-	-	Arcasonde	-	-	-	KHR	-	-	-	79	-	-
1977-4261	2443178.59	1977 Feb 4 0148:59	Rocketsonde	-	-	Arcasonde	-	-	-	ASC	-	-	-	62	-	-
1977-4262	2443179.03	1977 Feb 4 1227:59	Rocketsonde	-	-	Arcasonde	-	-	-	ASC	-	-	-	67	-	-
1977-4263	2443179.11	1977 Feb 4 1445:00	Rocketsonde	-	-	Arcasonde	-	-	-	MI	-	-	-	70	-	-
1977-4264	2443179.16	1977 Feb 4 1545:59	Rocketsonde	-	Winter Strato	Arcasonde	-	-	-	THU	-	-	-	64	-	-
1977-4265	2443179.19	1977 Feb 4 1631:59	Rocketsonde	-	-	Arcasonde	-	-	-	MI	-	-	-	64	-	-
1977-4266	2443179.20	1977 Feb 4 1636:59	Rocketsonde	-	-	Arcasonde	-	-	-	PRIM	-	-	-	67	-	-
1977-4267	2443179.20	1977 Feb 4 1649:59	Rocketsonde	-	-	Arcasonde	-	-	-	CC	-	-	-	64	-	-
1977-4268	2443179.27	1977 Feb 4 1834:59	Rocketsonde	-	-	Arcasonde	-	-	-	MI	-	-	-	67	-	-
1977-4269	2443179.30	1977 Feb 4 1913:59	Rocketsonde	-	Winter Strato	Arcasonde	-	-	-	SHER	-	-	-	62	-	-
1977-4270	2443179.37	1977 Feb 4 2119:00	Rocketsonde	-	-	Arcasonde	-	-	-	NS	-	-	-	67	-	-
1977-4271	2443179.39	1977 Feb 4 2142:59	Rocketsonde	-	-	Arcasonde	-	-	-	MI	-	-	-	75	-	-
1977-4272	2443179.49	1977 Feb 4 2345:00	Rocketsonde	-	-	Arcasonde	-	-	-	PM	-	-	-	68	-	-
1977-4273	2443179.53	1977 Feb 5 0049:59	Rocketsonde	-	-	Arcasonde	-	-	-	PM	-	-	-	75	-	-
1977-4274	2443179.59	1977 Feb 5 0945:59	Rocketsonde	-	-	Arcasonde	-	-	-	KAU	-	-	-	63	-	-
1977-4275	2443179.59	1977 Feb 5 2345:00	Rocketsonde	-	-	Arcasonde	-	-	-	PF	-	-	-	78	-	-
1977-4276	2443179.59	1977 Feb 5 2345:00	Rocketsonde	-	-	Arcasonde	-	-	-	SHEM	-	-	-	55	-	-
1977-4277	2443179.59	1977 Feb 5 2345:00	Rocketsonde	-	-	Arcasonde	-	-	-	SHEM	-	-	-	68	-	-
1977-4278	2443180.49	1977 Feb 6 0945:59	Rocketsonde	-	-	Arcasonde	-	-	-	KHR	-	-	-	78	-	-
1977-4279	2443181.49	1977 Feb 6 2345:00	Rocketsonde	-	-	Arcasonde	-	-	-	KHR	-	-	-	63	-	-
1977-4280	2443182.02	1977 Feb 7 1232:00	Rocketsonde	-	-	Arcasonde	-	-	-	ASC	-	-	-	63	-	-
1977-4281	2443182.14	1977 Feb 7 1515:59	Rocketsonde	-	-	Arcasonde	-	-	-	ASC	-	-	-	75	-	-
1977-4282	2443182.15	1977 Feb 7 1530:00	Rocketsonde	-	Winter Strato	Arcasonde	-	-	-	MI	-	-	-	76	-	-
1977-4283	2443182.17	1977 Feb 7 1559:59	Rocketsonde	-	-	Arcasonde	-	-	-	CC	-	-	-	67	-	-
1977-4284	2443182.21	1977 Feb 7 1700:00	Rocketsonde	-	-	Arcasonde	-	-	-	CC	-	-	-	63	-	-
1977-4285	2443182.21	1977 Feb 7 1704:59	Rocketsonde	-	-	Arcasonde	-	-	-	SHER	-	-	-	66	-	-
1977-4286	2443182.26	1977 Feb 7 1814:59	Rocketsonde	-	Winter Strato	Arcasonde	-	-	-	CC	-	-	-	65	-	-
1977-4287	2443182.30	1977 Feb 7 1907:59	Rocketsonde	-	-	Arcasonde	-	-	-	PM	-	-	-	60	-	-
1977-4288	2443182.38	1977 Feb 7 2100:00	Rocketsonde	-	-	Arcasonde	-	-	-	NS	-	-	-	59	-	-
1977-4289	2443182.40	1977 Feb 7 2134:59	Rocketsonde	-	-	Arcasonde	-	-	-	PM	-	-	-	68	-	-
1977-4290	2443182.48	1977 Feb 7 2337:00	Rocketsonde	-	-	Arcasonde	-	-	-	KAU	-	-	-	63	-	-
1977-4291	2443183.11	1977 Feb 8 1443:00	Rocketsonde	-	-	Arcasonde	-	-	-	PF	-	-	-	74	-	-
1977-4292	2443183.13	1977 Feb 8 1541:00	Rocketsonde	-	-	Arcasonde	-	-	-	CC	-	-	-	75	-	-
1977-4293	2443183.13	1977 Feb 8 1541:00	Rocketsonde	-	-	Arcasonde	-	-	-	THU	-	-	-	67	-	-
1977-4294	2443183.15	1977 Feb 8 1541:00	Rocketsonde	-	Winter Strato	Arcasonde	-	-	-	MI	-	-	-	71	-	-
1977-4295	2443183.17	1977 Feb 8 1559:59	Rocketsonde	-	-	Arcasonde	-	-	-	CC	-	-	-	56	-	-
1977-4296	2443183.19	1977 Feb 8 1630:00	Rocketsonde	-	-	Arcasonde	-	-	-	PRIM	-	-	-	61	-	-

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Mission	FlightCode	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee_Km	Range_Km	Dest
1977-#304	2443183.21	1977 Feb 8 1700:00	Rocketsonde	-	-	Arcasonde	-	-	-	SHER	-	-	-	59	-	-
1977-#305	2443183.26	1977 Feb 8 1810:00	Rocketsonde	-	Winter Strato	Arcasonde	-	-	-	WS	-	-	-	66	-	-
1977-#306	2443183.29	1977 Feb 8 1857:59	Rocketsonde	-	-	Arcasonde	-	-	-	PH	-	-	-	53	-	-
1977-#307	2443183.42	1977 Feb 8 2159:59	Rocketsonde	-	-	Arcasonde	-	-	-	KHR	-	-	-	70	-	-
1977-#308	2443183.49	1977 Feb 8 2345:00	Rocketsonde	-	-	Arcasonde	-	-	-	PRM	-	-	-	77	-	-
1977-#309	2443183.49	1977 Feb 8 2352:00	Rocketsonde	-	-	Arcasonde	-	-	-	SHEM	-	-	-	58	-	-
1977-#310	2443184.09	1977 Feb 9 1415:00	Rocketsonde	-	-	-	-	-	-	ASC	-	-	-	63	-	-
1977-#311	2443184.14	1977 Feb 9 1525:59	Rocketsonde	-	-	Arcasonde	-	-	-	THU	-	-	-	67	-	-
1977-#312	2443184.17	1977 Feb 9 1559:59	Rocketsonde	-	Winter Strato	Arcasonde	-	-	-	WI	-	-	-	77	-	-
1977-#313	2443184.19	1977 Feb 9 1700:00	Rocketsonde	-	-	Arcasonde	-	-	-	AIT	-	-	-	74	-	-
1977-#314	2443184.21	1977 Feb 9 1700:00	Rocketsonde	-	-	Arcasonde	-	-	-	CC	LO43	-	-	56	-	-
1977-#315	2443184.21	1977 Feb 9 1830:00	Rocketsonde	-	-	Arcasonde	-	-	-	SHER	-	-	-	63	-	-
1977-#316	2443184.27	1977 Feb 9 1840:00	Rocketsonde	-	-	Arcasonde	-	-	-	WS	-	-	-	97	-	-
1977-#317	2443184.28	1977 Feb 9 1912:59	Rocketsonde	-	-	Arcasonde	-	-	-	WS	-	-	-	68	-	-
1977-#318	2443184.30	1977 Feb 9 1914:59	Rocketsonde	-	-	Arcasonde	-	-	-	PH	-	-	-	96	-	-
1977-#319	2443184.30	1977 Feb 9 1938:59	Rocketsonde	-	-	Arcasonde	-	-	-	PH	-	-	-	88	-	-
1977-#320	2443184.40	1977 Feb 9 2100:00	Rocketsonde	-	-	Arcasonde	-	-	-	KAU	-	-	-	74	-	-
1977-#321	2443184.40	1977 Feb 9 2130:00	Rocketsonde	-	-	Arcasonde	-	-	-	KAU	-	-	-	88	-	-
1977-#322	2443184.43	1977 Feb 9 2131:00	Rocketsonde	-	-	Arcasonde	-	-	-	PF	-	-	-	70	-	-
1977-#323	2443186.17	1977 Feb 10 1588:59	Rocketsonde	-	Winter Strato	Arcasonde	-	-	-	KHR	-	-	-	77	-	-
1977-#324	2443186.19	1977 Feb 10 1588:59	Rocketsonde	-	-	Arcasonde	-	-	-	WI	-	-	-	69	-	-
1977-#325	2443186.21	1977 Feb 10 1700:00	Rocketsonde	-	-	Arcasonde	-	-	-	PRM	-	-	-	88	-	-
1977-#326	2443186.28	1977 Feb 10 1849:59	Rocketsonde	-	-	Arcasonde	-	-	-	SHER	-	-	-	64	-	-
1977-#327	2443186.29	1977 Feb 10 1849:59	Rocketsonde	-	Winter Strato	Arcasonde	-	-	-	PH	-	-	-	56	-	-
1977-#328	2443186.40	1977 Feb 10 2136:59	Rocketsonde	-	-	Arcasonde	-	-	-	WS	-	-	-	66	-	-
1977-#329	2443186.49	1977 Feb 10 2345:00	Rocketsonde	-	-	Arcasonde	-	-	-	PF	-	-	-	80	-	-
1977-#330	2443186.56	1977 Feb 11 0130:00	Rocketsonde	-	-	Arcasonde	-	-	-	KHR	-	-	-	61	-	-
1977-#331	2443186.10	1977 Feb 11 1207:00	Rocketsonde	-	-	Arcasonde	-	-	-	ASC	-	-	-	96	-	-
1977-#332	2443186.15	1977 Feb 11 1430:00	Rocketsonde	-	Winter Strato	Arcasonde	-	-	-	AIT	-	-	-	74	-	-
1977-#333	2443186.16	1977 Feb 11 1543:59	Rocketsonde	-	-	Arcasonde	-	-	-	WI	-	-	-	72	-	-
1977-#334	2443186.21	1977 Feb 11 1700:00	Rocketsonde	-	-	Arcasonde	-	-	-	THU	-	-	-	63	-	-
1977-#335	2443186.29	1977 Feb 11 1859:59	Rocketsonde	-	Winter Strato	Arcasonde	-	-	-	SHER	-	-	-	82	-	-
1977-#336	2443186.32	1977 Feb 11 1934:59	Rocketsonde	-	-	Arcasonde	-	-	-	WS	-	-	-	65	-	-
1977-#337	2443186.37	1977 Feb 11 2035:00	Rocketsonde	-	-	Arcasonde	-	-	-	PRM	-	-	-	89	-	-
1977-#338	2443186.57	1977 Feb 11 2035:00	Rocketsonde	-	-	Arcasonde	-	-	-	KAU	-	-	-	94	-	-
1977-#339	2443186.62	1977 Feb 11 2000:59	Rocketsonde	-	-	Arcasonde	-	-	-	PH	-	-	-	80	-	-
1977-#340	2443186.60	1977 Feb 12 0000:59	Rocketsonde	-	-	Arcasonde	-	-	-	SHEM	-	-	-	64	-	-
1977-#341	2443186.50	1977 Feb 12 0003:59	Rocketsonde	-	-	Arcasonde	-	-	-	KHR	-	-	-	50	-	-
1977-#342	2443187.49	1977 Feb 12 2346:00	Rocketsonde	-	-	Arcasonde	-	-	-	KHR	-	-	-	79	-	-
1977-#343	2443188.17	1977 Feb 13 2346:00	Rocketsonde	-	-	Arcasonde	-	-	-	KCC	-	-	-	62	-	-
1977-#344	2443188.17	1977 Feb 14 1544:59	Rocketsonde	-	-	Arcasonde	-	-	-	ASC	-	-	-	71	-	-
1977-#345	2443188.19	1977 Feb 14 1609:59	Rocketsonde	-	-	Arcasonde	-	-	-	PRM	-	-	-	69	-	-
1977-#346	2443188.28	1977 Feb 14 1609:59	Rocketsonde	-	-	Arcasonde	-	-	-	SHER	-	-	-	82	-	-
1977-#347	2443188.28	1977 Feb 14 1640:00	Rocketsonde	-	-	Arcasonde	-	-	-	PH	-	-	-	62	-	-
1977-#348	2443188.27	1977 Feb 14 1640:00	Rocketsonde	-	-	Arcasonde	-	-	-	WI	-	-	-	66	-	-
1977-#349	2443188.27	1977 Feb 14 1830:00	Rocketsonde	-	-	Arcasonde	-	-	-	PH	-	-	-	70	-	-
1977-#350	2443188.25	1977 Feb 14 1830:00	Rocketsonde	-	-	Arcasonde	-	-	-	PF	-	-	-	62	-	-
1977-#351	2443188.31	1977 Feb 14 2030:00	Rocketsonde	-	-	Arcasonde	-	-	-	KAU	-	-	-	62	-	-
1977-#352	2443188.31	1977 Feb 14 2116:59	Rocketsonde	-	-	Arcasonde	-	-	-	KAU	-	-	-	79	-	-
1977-#353	2443188.31	1977 Feb 14 2116:59	Rocketsonde	-	-	Arcasonde	-	-	-	KHR	-	-	-	69	-	-
1977-#354	2443188.31	1977 Feb 14 2116:59	Rocketsonde	-	-	Arcasonde	-	-	-	PH	-	-	-	79	-	-
1977-#355	2443188.31	1977 Feb 14 2116:59	Rocketsonde	-	-	Arcasonde	-	-	-	PH	-	-	-	57	-	-
1977-#356	2443188.29	1977 Feb 15 1859:59	Rocketsonde	-	-	Arcasonde	-	-	-	CC	LO43	-	-	58	-	-
1977-#357	2443188.29	1977 Feb 15 1859:59	Rocketsonde	-	-	Arcasonde	-	-	-	CC	LO43	-	-	67	-	-
1977-#358	2443189.02	1977 Feb 16 0034:59	Rocketsonde	-	-	Arcasonde	-	-	-	ASC	-	-	-	64	-	-
1977-#359	2443191.07	1977 Feb 16 1444:59	Rocketsonde	-	-	Arcasonde	-	-	-	CC	LO43	-	-	75	-	-
1977-#360	2443191.14	1977 Feb 16 1446:00	Rocketsonde	-	-	Arcasonde	-	-	-	CC	LO43	-	-	64	-	-
1977-#361	2443191.14	1977 Feb 16 1500:00	Rocketsonde	-	-	Arcasonde	-	-	-	THU	-	-	-	64	-	-
1977-#362	2443191.23	1977 Feb 16 1630:00	Rocketsonde	-	-	Arcasonde	-	-	-	PRM	-	-	-	64	-	-
1977-#363	2443191.23	1977 Feb 16 1630:00	Rocketsonde	-	-	Arcasonde	-	-	-	SHER	-	-	-	59	-	-
1977-#364	2443191.27	1977 Feb 16 1640:00	Rocketsonde	-	-	Arcasonde	-	-	-	NS	-	-	-	72	-	-
1977-#365	2443191.40	1977 Feb 16 1824:59	Rocketsonde	-	-	Arcasonde	-	-	-	KHR	-	-	-	70	-	-
1977-#366	2443191.50	1977 Feb 17 0000:59	Rocketsonde	-	-	Arcasonde	-	-	-	SHEM	-	-	-	64	-	-
1977-#367	2443192.26	1977 Feb 17 1814:59	Rocketsonde	-	-	Arcasonde	-	-	-	NS	-	-	-	68	-	-
1977-#368	2443192.33	1977 Feb 17 2001:00	Rocketsonde	-	-	Arcasonde	-	-	-	PH	-	-	-	54	-	-
1977-#369	2443192.40	1977 Feb 17 2130:00	Rocketsonde	-	-	Arcasonde	-	-	-	CC	LO43	-	-	67	-	-
1977-#370	2443192.41	1977 Feb 17 2130:00	Rocketsonde	-	-	Arcasonde	-	-	-	CC	LO43	-	-	75	-	-
1977-#371	2443192.50	1977 Feb 17 2152:00	Rocketsonde	-	-	Arcasonde	-	-	-	THU	-	-	-	64	-	-
1977-#372	2443192.50	1977 Feb 17 2353:00	Rocketsonde	-	-	Arcasonde	-	-	-	PRM	-	-	-	64	-	-
1977-#373	2443193.14	1977 Feb 18 1500:00	Rocketsonde	-	-	Arcasonde	-	-	-	SHER	-	-	-	68	-	-
1977-#374	2443193.15	1977 Feb 18 1500:00	Rocketsonde	-	-	Arcasonde	-	-	-	NS	-	-	-	72	-	-
1977-#375	2443193.15	1977 Feb 18 1500:00	Rocketsonde	-	-	Arcasonde	-	-	-	NS	-	-	-	68	-	-
1977-#376	2443193.15	1977 Feb 18 1500:00	Rocketsonde	-	-	Arcasonde	-	-	-	PH	-	-	-	54	-	-
1977-#377	2443193.19	1977 Feb 18 1637:59	Rocketsonde	-	-	Arcasonde	-	-	-	CC	LO43	-	-	66	-	-
1977-#378	2443193.27	1977 Feb 18 1830:00	Rocketsonde	-	-	Arcasonde	-	-	-	CC	LO43	-	-	66	-	-
1977-#379	2443193.27	1977 Feb 18 1830:00	Rocketsonde	-	-	Arcasonde	-	-	-	NS	-	-	-	86	-	-
1977-#380	2443193.31	1977 Feb 18 1923:59	Rocketsonde	-	-	Arcasonde	-	-	-	PH	-	-	-	73	-	-
1977-#381	2443196.20	1977 Feb 21 1444:00	Rocketsonde	-	-	Arcasonde	-	-	-	THU	-	-	-	69	-	-
1977-#382	2443197.03	1977 Feb 22 1245:00	Rocketsonde	-	-	Arcasonde	-	-	-	PRM	-	-	-	70	-	-
1977-#383	2443197.17	1977 Feb 22 1559:59	Rocketsonde	-	-	Arcasonde	-	-	-	ASC	LO43	-	-	67	-	-
1977-#384	2443197.18	1977 Feb 22 1619:59	Rocketsonde	-	-	Arcasonde	-	-	-	SHER	-	-	-	53	-	-
1977-#385	2443197.26	1977 Feb 22 1820:00	Rocketsonde	-	-	Arcasonde	-	-	-	NS	-	-	-	68	-	-
1977-#386	2443197.31	1977 Feb 22 1930:00	Rocketsonde	-	-	Arcasonde	-	-	-	PH	-	-	-	55	-	-
1977-#387	2443197.40	1977 Feb 22 2136:59	Rocketsonde	-	-	Arcasonde	-	-	-	KHR	-	-	-	78	-	-
1977-#388	2443198.07	1977 Feb 23 1344:59	Rocketsonde	-	-	Arcasonde	-	-	-	ASC	-	-	-	62	-	-
1977-#389	2443198.11	1977 Feb 23 1432:00	Rocketsonde	-	-	Arcasonde	-	-	-	THU	-	-	-	65	-	-
1977-#391	2443198.12	1977 Feb 23 1500:00	Rocketsonde	-	-	Arcasonde	-	-	-	CC	LO43	-	-	68	-	-

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Mission	FlightCode	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee_Km	Range_Km	Dest
1977-4392	2443198.15	1977 Feb 23 15:30:00	Rocketsonde	-	-	-	-	-	-	-	-	-	-	70	-	-
1977-4394	2443198.21	1977 Feb 23 17:00:00	Rocketsonde	-	-	-	-	-	AHT	SHER	-	-	-	64	-	-
1977-4395	2443198.24	1977 Feb 23 17:40:00	Rocketsonde	-	-	-	-	-	WS	-	-	-	-	67	-	-
1977-4396	2443198.27	1977 Feb 23 18:33:59	Rocketsonde	-	-	-	-	-	PH	-	-	-	-	60	-	-
1977-4397	2443198.33	1977 Feb 23 20:02:00	Rocketsonde	-	-	-	-	-	PRIM	-	-	-	-	55	-	-
1977-4398	2443198.38	1977 Feb 23 21:03:59	Rocketsonde	-	-	-	-	-	AI/DMP-9?	-	-	-	-	89	-	-
1977-4399	2443198.43	1977 Feb 23 21:31:00	Rocketsonde	-	-	-	-	-	KAU	-	-	-	-	74	-	-
1977-4400	2443198.49	1977 Feb 24 02:06:00	Rocketsonde	-	-	-	-	-	PF	-	-	-	-	65	-	-
1977-4401	2443198.59	1977 Feb 24 16:24:59	Rocketsonde	-	-	-	-	-	KMR	-	-	-	-	87	-	-
1977-4402	2443198.20	1977 Feb 24 16:44:59	Rocketsonde	-	-	-	-	-	WS	-	-	-	-	86	-	-
1977-4403	2443198.35	1977 Feb 24 20:26:59	Rocketsonde	-	-	-	-	-	SHER	-	-	-	-	64	-	-
1977-4405	2443198.42	1977 Feb 24 22:07:59	Rocketsonde	-	-	-	-	-	PH	-	-	-	-	72	-	-
1977-4406	2443198.49	1977 Feb 24 23:48:00	Rocketsonde	-	-	-	-	-	KAU	-	-	-	-	60	-	-
1977-4407	2443200.01	1977 Feb 25 12:20:00	Rocketsonde	-	-	-	-	-	KMR	-	-	-	-	82	-	-
1977-4408	2443200.07	1977 Feb 25 13:44:59	Rocketsonde	-	-	-	-	-	ASC	-	-	-	-	66	-	-
1977-4412	2443200.12	1977 Feb 25 14:55:00	Rocketsonde	-	-	-	-	-	AHT	-	-	-	-	47	-	-
1977-4409	2443200.14	1977 Feb 25 15:14:59	Rocketsonde	-	-	-	-	-	THU	-	-	-	-	70	-	-
1977-4410	2443200.27	1977 Feb 25 15:44:59	Rocketsonde	-	-	-	-	-	CC	LO43	-	-	-	66	-	-
1977-4411	2443200.27	1977 Feb 25 18:24:59	Rocketsonde	-	-	-	-	-	MI	-	-	-	-	74	-	-
1977-4412	2443200.28	1977 Feb 25 18:27:59	Rocketsonde	-	-	-	-	-	PH	-	-	-	-	56	-	-
1977-4413	2443200.28	1977 Feb 25 18:46:00	Rocketsonde	-	-	-	-	-	WS	-	-	-	-	64	-	-
1977-4414	2443200.35	1977 Feb 25 20:27:59	Rocketsonde	-	-	-	-	-	PF	LO43	-	-	-	62	-	-
1977-4415	2443203.10	1977 Feb 28 14:20:00	Rocketsonde	-	-	-	-	-	CC	-	-	-	-	65	-	-
1977-4416	2443203.11	1977 Feb 28 14:33:00	Rocketsonde	-	-	-	-	-	THU	-	-	-	-	70	-	-
1977-4417	2443203.19	1977 Feb 28 16:30:00	Rocketsonde	-	-	-	-	-	PRIM	-	-	-	-	65	-	-
1977-4418	2443203.21	1977 Feb 28 16:55:59	Rocketsonde	-	-	-	-	-	PH	-	-	-	-	65	-	-
1977-4419	2443203.27	1977 Feb 28 18:34:59	Rocketsonde	-	-	-	-	-	MI	-	-	-	-	73	-	-
1977-4420	2443203.28	1977 Feb 28 18:46:00	Rocketsonde	-	-	-	-	-	WS	-	-	-	-	64	-	-
1977-4421	2443203.47	1977 Feb 28 23:20:00	Rocketsonde	-	-	-	-	-	PF	-	-	-	-	59	-	-
1977-4431	2443203.46	1977 Feb 28 23:37:59	Rocketsonde	-	-	-	-	-	KMR	-	-	-	-	79	-	-
1977-4432	2443204.19	1977 Mar 1 16:40:00	Rocketsonde	-	-	-	-	-	SHER	-	-	-	-	63	-	-
1977-4433	2443205.07	1977 Mar 2 12:15:59	Rocketsonde	-	-	-	-	-	ASC	-	-	-	-	65	-	-
1977-4436	2443205.08	1977 Mar 2 14:00:00	Rocketsonde	-	-	-	-	-	AHT	-	-	-	-	60	-	-
1977-4437	2443205.11	1977 Mar 2 14:45:00	Rocketsonde	-	-	-	-	-	SHER	-	-	-	-	74	-	-
1977-4438	2443205.14	1977 Mar 2 15:15:00	Rocketsonde	-	-	-	-	-	AHT	-	-	-	-	60	-	-
1977-4440	2443205.19	1977 Mar 2 16:30:00	Rocketsonde	-	-	-	-	-	THU	-	-	-	-	71	-	-
1977-4441	2443205.25	1977 Mar 2 18:04:59	Rocketsonde	-	-	-	-	-	PRIM	-	-	-	-	70	-	-
1977-4442	2443205.26	1977 Mar 2 18:14:59	Rocketsonde	-	-	-	-	-	WS	-	-	-	-	97	-	-
1977-4443	2443205.27	1977 Mar 2 18:28:00	Rocketsonde	-	-	-	-	-	NS	-	-	-	-	64	-	-
1977-4444	2443205.30	1977 Mar 2 20:11:00	Rocketsonde	-	-	-	-	-	MI	-	-	-	-	66	-	-
1977-4445	2443205.34	1977 Mar 2 20:50:00	Rocketsonde	-	-	-	-	-	THU	-	-	-	-	66	-	-
1977-4446	2443205.36	1977 Mar 2 20:54:59	Rocketsonde	-	-	-	-	-	PH	-	-	-	-	89	-	-
1977-4447	2443205.39	1977 Mar 2 21:11:00	Rocketsonde	-	-	-	-	-	PH	-	-	-	-	61	-	-
1977-4448	2443205.41	1977 Mar 2 21:46:59	Rocketsonde	-	-	-	-	-	KMR	-	-	-	-	73	-	-
1977-4449	2443205.44	1977 Mar 2 22:32:00	Rocketsonde	-	-	-	-	-	CC	LO43	-	-	-	76	-	-
1977-4450	2443205.47	1977 Mar 2 23:20:00	Rocketsonde	-	-	-	-	-	CC	LO43	-	-	-	72	-	-
1977-4451	2443206.15	1977 Mar 3 23:57:00	Rocketsonde	-	-	-	-	-	AHT	-	-	-	-	65	-	-
1977-4452	2443206.16	1977 Mar 4 14:13:59	Rocketsonde	-	-	-	-	-	KMR	-	-	-	-	66	-	-
1977-4453	2443207.02	1977 Mar 4 14:31:59	Rocketsonde	-	-	-	-	-	ASC	-	-	-	-	66	-	-
1977-4454	2443207.02	1977 Mar 4 14:31:59	Rocketsonde	-	-	-	-	-	THU	-	-	-	-	66	-	-
1977-4455	2443207.14	1977 Mar 4 15:25:59	Rocketsonde	-	-	-	-	-	CC	LO43	-	-	-	96	-	-
1977-4456	2443207.18	1977 Mar 4 15:18:00	Rocketsonde	-	-	-	-	-	CC	LO43	-	-	-	72	-	-
1977-4457	2443207.23	1977 Mar 4 17:30:00	Rocketsonde	-	-	-	-	-	PRIM	-	-	-	-	69	-	-
1977-4458	2443207.28	1977 Mar 4 18:42:00	Rocketsonde	-	-	-	-	-	NS	-	-	-	-	66	-	-
1977-4460	2443207.32	1977 Mar 4 19:44:59	Rocketsonde	-	-	-	-	-	MI	-	-	-	-	66	-	-
1977-4461	2443210.02	1977 Mar 4 19:44:59	Rocketsonde	-	-	-	-	-	PF	-	-	-	-	55	-	-
1977-4462	2443210.09	1977 Mar 7 14:12:00	Rocketsonde	-	-	-	-	-	ASC	-	-	-	-	64	-	-
1977-4463	2443210.09	1977 Mar 7 14:12:00	Rocketsonde	-	-	-	-	-	AHT	-	-	-	-	73	-	-
1977-4464	2443210.18	1977 Mar 7 14:15:00	Rocketsonde	-	-	-	-	-	SHER	-	-	-	-	56	-	-
1977-4465	2443210.18	1977 Mar 7 16:21:59	Rocketsonde	-	-	-	-	-	CC	LO43	-	-	-	60	-	-
1977-4466	2443210.19	1977 Mar 7 16:30:00	Rocketsonde	-	-	-	-	-	PRIM	-	-	-	-	70	-	-
1977-4467	2443210.25	1977 Mar 7 18:00:00	Rocketsonde	-	-	-	-	-	NS	-	-	-	-	63	-	-
1977-4468	2443210.31	1977 Mar 7 19:30:00	Rocketsonde	-	-	-	-	-	MI	-	-	-	-	67	-	-
1977-4469	2443210.32	1977 Mar 7 19:44:59	Rocketsonde	-	-	-	-	-	PF	-	-	-	-	71	-	-
1977-4470	2443210.32	1977 Mar 8 00:03:59	Rocketsonde	-	-	-	-	-	KMR	-	-	-	-	63	-	-
1977-4471	2443210.50	1977 Mar 8 18:04:59	Rocketsonde	-	-	-	-	-	NS	-	-	-	-	78	-	-
1977-4472	2443211.25	1977 Mar 8 18:04:59	Supp. Loks	-	-	-	-	-	NS	-	-	-	-	68	-	-
1977-4473	2443212.02	1977 Mar 9 12:32:00	Rocketsonde	-	-	-	-	-	ASC	-	-	-	-	63	-	-
1977-4474	2443212.05	1977 Mar 9 13:14:59	Rocketsonde	-	-	-	-	-	AHT	-	-	-	-	58	-	-
1977-4475	2443212.16	1977 Mar 9 15:44:59	Rocketsonde	-	-	-	-	-	MI	-	-	-	-	72	-	-
1977-4476	2443212.19	1977 Mar 9 16:40:00	Rocketsonde	-	-	-	-	-	SHER	-	-	-	-	64	-	-
1977-4477	2443212.22	1977 Mar 9 17:14:00	Rocketsonde	-	-	-	-	-	THU	LO43	-	-	-	62	-	-
1977-4478	2443212.22	1977 Mar 9 17:15:00	Rocketsonde	-	-	-	-	-	CC	-	-	-	-	69	-	-
1977-4479	2443212.26	1977 Mar 9 18:00:00	Rocketsonde	-	-	-	-	-	NS	-	-	-	-	98	-	-
1977-4480	2443212.26	1977 Mar 9 18:00:00	Rocketsonde	-	-	-	-	-	WS	-	-	-	-	67	-	-
1977-4481	2443212.31	1977 Mar 9 19:37:59	Rocketsonde	-	-	-	-	-	PRIM	-	-	-	-	61	-	-
1977-4482	2443212.32	1977 Mar 9 19:37:59	Rocketsonde	-	-	-	-	-	PM	-	-	-	-	73	-	-
1977-4483	2443212.55	1977 Mar 10 01:14:59	Rocketsonde	-	-	-	-	-	KMR	-	-	-	-	79	-	-
1977-4484	2443212.55	1977 Mar 10 06:00:00	Rocketsonde	-	-	-	-	-	PF	-	-	-	-	59	-	-
1977-4485	2443212.75	1977 Mar 10 06:00:00	Rocketsonde	-	-	-	-	-	ASC	-	-	-	-	79	-	-
1977-4486	2443213.50	1977 Mar 11 23:54:00	Rocketsonde	-	-	-	-	-	KMR	-	-	-	-	65	-	-
1977-4487	2443214.01	1977 Mar 11 12:20:00	Rocketsonde	-	-	-	-	-	ASC	-	-	-	-	65	-	-
1977-4488	2443214.13	1977 Mar 11 15:13:59	Rocketsonde	-	-	-	-	-	THU	-	-	-	-	70	-	-
1977-4489	2443214.17	1977 Mar 11 16:06:00	Rocketsonde	-	-	-	-	-	CC	LO43	-	-	-	61	-	-
1977-4490	2443214.18	1977 Mar 11 16:18:00	Rocketsonde	-	-	-	-	-	MI	-	-	-	-	72	-	-
1977-4491	2443214.19	1977 Mar 11 16:30:00	Rocketsonde	-	-	-	-	-	PRIM	-	-	-	-	63	-	-



Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Mission	FlightCode	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee_Km	Range_Km	Dest
1977-4496	2443214_20	1977 Mar 11 16:49:59	Rocketsonde	-	-	-	-	-	-	AHT	-	-	-	71	-	-
1977-4497	2443214_21	1977 Mar 11 17:00:00	Rocketsonde	-	-	Arcasonde	-	-	-	SHER	-	-	-	63	-	-
1977-4498	2443214_25	1977 Mar 11 17:53:00	Rocketsonde	-	-	Arcasonde	-	-	-	WS	-	-	-	64	-	-
1977-4499	2443214_36	1977 Mar 11 20:40:00	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	PF	-	-	-	68	-	-
1977-4501	2443217_07	1977 Mar 14 13:44:59	Rocketsonde	-	-	Arcasonde	-	-	-	ASC	-	-	-	60	-	-
1977-4502	2443217_13	1977 Mar 14 15:00:00	Rocketsonde	-	-	Arcasonde	-	-	-	THU	-	-	-	73	-	-
1977-4503	2443217_14	1977 Mar 14 15:20:00	Rocketsonde	-	-	Arcasonde	-	-	-	AHT	-	-	-	73	-	-
1977-4505	2443217_20	1977 Mar 14 16:44:59	Rocketsonde	-	-	Arcasonde	-	-	-	SHER	-	-	-	57	-	-
1977-4506	2443217_22	1977 Mar 14 16:48:59	Rocketsonde	-	-	Arcasonde	-	-	-	CC	LO43	-	-	37	-	-
1977-4507	2443217_30	1977 Mar 14 18:00:00	Rocketsonde	-	-	Arcasonde	-	-	-	WI	-	-	-	68	-	-
1977-4508	2443217_35	1977 Mar 14 19:18:59	Rocketsonde	-	-	Arcasonde	-	-	-	PH	-	-	-	72	-	-
1977-4509	2443218_21	1977 Mar 15 17:00:00	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	PF	-	-	-	53	-	-
1977-4510	2443218_50	1977 Mar 16 00:00:59	Rocketsonde	-	-	Arcasonde	-	-	-	WS	-	-	-	65	-	-
1977-4512	2443219_00	1977 Mar 16 12:07:00	Rocketsonde	-	-	Arcasonde	-	-	-	KHR	-	-	-	77	-	-
1977-4513	2443219_11	1977 Mar 16 14:45:00	Rocketsonde	-	-	Arcasonde	-	-	-	ASC	LO43	-	-	64	-	-
1977-4514	2443219_12	1977 Mar 16 14:45:00	Rocketsonde	-	-	Arcasonde	-	-	-	CC	-	-	-	63	-	-
1977-4516	2443219_14	1977 Mar 16 15:20:00	Rocketsonde	-	-	Arcasonde	-	-	-	THU	-	-	-	70	-	-
1977-4517	2443219_15	1977 Mar 16 15:30:00	Rocketsonde	-	-	Arcasonde	-	-	-	AHT	-	-	-	73	-	-
1977-4519	2443219_19	1977 Mar 16 16:30:00	Rocketsonde	-	-	Arcasonde	-	-	-	WI	-	-	-	60	-	-
1977-4521	2443219_21	1977 Mar 16 17:00:00	Rocketsonde	-	-	Arcasonde	-	-	-	PRIM	-	-	-	70	-	-
1977-4522	2443219_27	1977 Mar 16 18:00:00	Rocketsonde	-	-	Arcasonde	-	-	-	PRIM	-	-	-	60	-	-
1977-4523	2443219_28	1977 Mar 16 18:40:00	Rocketsonde	-	-	Arcasonde	-	-	-	WS	-	-	-	98	-	-
1977-4524	2443219_47	1977 Mar 16 23:15:00	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	WS	-	-	-	67	-	-
1977-4526	2443220_14	1977 Mar 17 15:24:59	Rocketsonde	-	-	Arcasonde	-	-	-	PF	-	-	-	58	-	-
1977-4528	2443220_26	1977 Mar 17 18:20:00	Rocketsonde	-	-	Arcasonde	-	-	-	KHR	-	-	-	91	-	-
1977-4529	2443220_50	1977 Mar 17 23:55:00	Rocketsonde	-	-	Arcasonde	-	-	-	SHER	-	-	-	54	-	-
1977-4532	2443221_02	1977 Mar 18 12:27:59	Rocketsonde	-	-	Arcasonde	-	-	-	WS	-	-	-	65	-	-
1977-4533	2443221_11	1977 Mar 18 14:40:00	Rocketsonde	-	-	Arcasonde	-	-	-	KHR	-	-	-	66	-	-
1977-4534	2443221_16	1977 Mar 18 15:14:59	Rocketsonde	-	-	Arcasonde	-	-	-	ASC	-	-	-	70	-	-
1977-4535	2443221_17	1977 Mar 18 15:46:59	Rocketsonde	-	-	Arcasonde	-	-	-	KHR	-	-	-	66	-	-
1977-4536	2443221_19	1977 Mar 18 16:08:59	Rocketsonde	-	-	Arcasonde	-	-	-	ASC	-	-	-	66	-	-
1977-4537	2443221_27	1977 Mar 18 18:29:00	Rocketsonde	-	-	Arcasonde	-	-	-	THU	-	-	-	70	-	-
1977-4538	2443221_30	1977 Mar 18 19:07:59	Rocketsonde	-	-	Arcasonde	-	-	-	AHT	-	-	-	74	-	-
1977-4539	2443221_36	1977 Mar 18 20:45:00	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	WI	LO43	-	-	61	-	-
1977-4541	2443224_09	1977 Mar 21 14:14:00	Rocketsonde	-	-	Arcasonde	-	-	-	THU	-	-	-	56	-	-
1977-4542	2443224_12	1977 Mar 21 15:00:00	Rocketsonde	-	-	Arcasonde	-	-	-	AHT	-	-	-	71	-	-
1977-4543	2443224_19	1977 Mar 21 15:30:00	Rocketsonde	-	-	Arcasonde	-	-	-	PRIM	-	-	-	51	-	-
1977-4544	2443224_27	1977 Mar 21 16:30:00	Rocketsonde	-	-	Arcasonde	-	-	-	PRIM	-	-	-	64	-	-
1977-4545	2443224_31	1977 Mar 21 19:27:59	Rocketsonde	-	-	Arcasonde	-	-	-	WI	-	-	-	57	-	-
1977-4546	2443225_03	1977 Mar 22 12:46:59	Rocketsonde	-	-	Arcasonde	-	-	-	ASC	-	-	-	68	-	-
1977-4547	2443225_19	1977 Mar 22 16:49:59	Rocketsonde	-	-	Arcasonde	-	-	-	CC	LO43	-	-	68	-	-
1977-4548	2443225_20	1977 Mar 22 19:14:59	Rocketsonde	-	-	Arcasonde	-	-	-	WS	-	-	-	76	-	-
1977-4549	2443225_31	1977 Mar 23 09:20:00	Rocketsonde	-	-	Arcasonde	-	-	-	KHR	-	-	-	68	-	-
1977-4552	2443226_01	1977 Mar 23 11:11:00	Rocketsonde	-	-	Arcasonde	-	-	-	ASC	-	-	-	65	-	-
1977-4554	2443226_04	1977 Mar 23 15:11:00	Rocketsonde	-	-	Arcasonde	-	-	-	AHT	-	-	-	70	-	-
1977-4555	2443226_15	1977 Mar 23 15:50:00	Rocketsonde	-	-	Arcasonde	-	-	-	WI	LO43	-	-	69	-	-
1977-4556	2443226_16	1977 Mar 23 16:50:00	Rocketsonde	-	-	Arcasonde	-	-	-	CC	-	-	-	74	-	-
1977-4557	2443226_19	1977 Mar 23 18:30:59	Rocketsonde	-	-	Arcasonde	-	-	-	PRIM	-	-	-	64	-	-
1977-4558	2443226_20	1977 Mar 23 18:44:59	Rocketsonde	-	-	Arcasonde	-	-	-	SHER	-	-	-	64	-	-
1977-4559	2443226_32	1977 Mar 23 18:50:00	Rocketsonde	-	-	Arcasonde	-	-	-	CC	LO43	-	-	96	-	-
1977-4560	2443226_38	1977 Mar 23 17:45:00	Rocketsonde	-	-	Arcasonde	-	-	-	WS	-	-	-	98	-	-
1977-4561	2443226_40	1977 Mar 23 17:55:00	Rocketsonde	-	-	Arcasonde	-	-	-	ASC	-	-	-	72	-	-
1977-4562	2443226_45	1977 Mar 23 19:00:59	Rocketsonde	-	-	Arcasonde	-	-	-	PH	-	-	-	66	-	-
1977-4563	2443226_52	1977 Mar 23 19:00:59	Rocketsonde	-	-	Arcasonde	-	-	-	PF	-	-	-	53	-	-
1977-4564	2443226_53	1977 Mar 23 19:07:59	Rocketsonde	-	-	Arcasonde	-	-	-	PM	-	-	-	71	-	-
1977-4565	2443226_58	1977 Mar 23 21:11:00	Rocketsonde	-	-	Arcasonde	-	-	-	KHR	-	-	-	77	-	-
1977-4566	2443227_13	1977 Mar 24 15:03:59	Rocketsonde	-	-	Arcasonde	-	-	-	THU	-	-	-	60	-	-
1977-4567	2443227_20	1977 Mar 24 16:49:59	Rocketsonde	-	-	Arcasonde	-	-	-	SHER	-	-	-	60	-	-
1977-4568	2443227_28	1977 Mar 24 18:45:00	Rocketsonde	-	-	Arcasonde	-	-	-	WS	-	-	-	99	-	-
1977-4569	2443227_62	1977 Mar 25 03:00:00	Super Loki	-	-	-	-	-	-	WS	-	-	-	67	-	-
1977-4570	2443228_02	1977 Mar 25 12:27:59	Rocketsonde	-	-	Arcasonde	-	-	-	ASC	-	-	-	62	-	-
1977-4571	2443228_10	1977 Mar 25 14:20:00	Rocketsonde	-	-	Arcasonde	-	-	-	THU	-	-	-	70	-	-
1977-4572	2443228_14	1977 Mar 25 15:27:59	Rocketsonde	-	-	Arcasonde	-	-	-	HT	-	-	-	75	-	-
1977-4573	2443228_17	1977 Mar 25 16:11:59	Rocketsonde	-	-	Arcasonde	-	-	-	CC	LO43	-	-	66	-	-
1977-4574	2443228_25	1977 Mar 25 18:00:00	Rocketsonde	-	-	Arcasonde	-	-	-	WS	-	-	-	75	-	-
1977-4575	2443228_48	1977 Mar 25 23:30:00	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	PF	-	-	-	77	-	-
1977-4576	2443228_55	1977 Mar 26 01:14:59	Rocketsonde	-	-	Arcasonde	-	-	-	KHR	-	-	-	66	-	-
1977-4577	2443231_05	1977 Mar 28 13:09:59	Rocketsonde	-	-	Arcasonde	-	-	-	SHER	-	-	-	66	-	-
1977-4578	2443231_10	1977 Mar 28 14:26:00	Rocketsonde	-	-	Arcasonde	-	-	-	THU	-	-	-	67	-	-
1977-4579	2443231_11	1977 Mar 28 14:26:00	Rocketsonde	-	-	Arcasonde	-	-	-	HT	-	-	-	73	-	-
1977-4581	2443231_22	1977 Mar 28 17:17:00	Rocketsonde	-	-	Arcasonde	-	-	-	WI	-	-	-	73	-	-
1977-4582	2443231_22	1977 Mar 28 17:17:00	Rocketsonde	-	-	Arcasonde	-	-	-	AHT	-	-	-	73	-	-
1977-4583	2443231_25	1977 Mar 28 17:30:00	Rocketsonde	-	-	Arcasonde	-	-	-	CC	LO43	-	-	74	-	-
1977-4584	2443231_25	1977 Mar 28 18:00:00	Rocketsonde	-	-	Arcasonde	-	-	-	ASC	-	-	-	64	-	-
1977-4585	2443231_29	1977 Mar 28 18:59:59	Rocketsonde	-	-	Arcasonde	-	-	-	PM	-	-	-	59	-	-
1977-4586	2443231_31	1977 Mar 28 19:30:00	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	PF	-	-	-	64	-	-
1977-4587	2443232_14	1977 Mar 29 15:14:59	Rocketsonde	-	-	Arcasonde	-	-	-	CC	LO43	-	-	70	-	-
1977-4588	2443232_19	1977 Mar 29 16:30:00	Rocketsonde	-	-	Arcasonde	-	-	-	CC	-	-	-	68	-	-
1977-4589	2443232_21	1977 Mar 29 17:00:00	Rocketsonde	-	-	Arcasonde	-	-	-	WS	-	-	-	67	-	-
1977-4590	2443232_50	1977 Mar 29 23:58:00	Rocketsonde	-	-	Arcasonde	-	-	-	KHR	-	-	-	79	-	-
1977-4592	2443233_02	1977 Mar 30 12:24:59	Rocketsonde	-	-	Arcasonde	-	-	-	ASC	-	-	-	63	-	-
1977-4593	2443233_09	1977 Mar 30 14:10:00	Rocketsonde	-	-	Arcasonde	-	-	-	AHT	-	-	-	73	-	-

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Mission	FlightCode	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee_Km	Range_Km	Dest
1977-4654	2443233.11	1977 Mar 30 14:43:00	Rocketsonde	-	-	Arcasonde	-	-	-	THU	-	-	-	71	-	-
1977-4655	2443233.15	1977 Mar 30 15:30:00	Rocketsonde	-	-	Arcasonde	-	-	-	CC	LO43	-	-	67	-	-
1977-4137	2443233.19	1977 Mar 30 16:31:59	Rocketsonde	-	-	AI/DMP-9?	-	-	-	CC	LO43	-	-	67	-	-
1977-4657	2443233.21	1977 Mar 30 17:00:00	Rocketsonde	-	-	Arcasonde	-	-	-	CC	LO43	-	-	68	-	-
1977-4658	2443233.26	1977 Mar 30 18:10:00	Rocketsonde	-	-	Arcasonde	-	-	-	WS	-	-	-	72	-	-
1977-4659	2443233.28	1977 Mar 30 18:48:59	Rocketsonde	-	-	Arcasonde	-	-	-	PH	-	-	-	73	-	-
1977-4600	2443233.33	1977 Mar 30 19:49:59	Rocketsonde	-	-	Arcasonde	-	-	-	WI	-	-	-	74	-	-
1977-4601	2443233.35	1977 Mar 30 20:19:00	Rocketsonde	-	-	Staartve, Datasonde	-	-	-	PF	-	-	-	70	-	-
1977-4138	2443233.50	1977 Mar 31 16:44:59	Rocketsonde	-	-	Arcasonde	-	-	-	KMR	-	-	-	80	-	-
1977-4604	2443234.20	1977 Mar 31 17:30:00	Rocketsonde	-	-	Arcasonde	-	-	-	CC	LO43	-	-	64	-	-
1977-4605	2443234.23	1977 Mar 31 17:30:00	Rocketsonde	-	-	Arcasonde	-	-	-	SHER	-	-	-	62	-	-
1977-4606	2443235.07	1977 Apr 1 13:44:59	Rocketsonde	-	-	Arcasonde	-	-	-	ASC	-	-	-	63	-	-
1977-4608	2443235.12	1977 Apr 1 14:49:59	Rocketsonde	-	-	Arcasonde	-	-	-	THU	-	-	-	68	-	-
1977-4609	2443235.15	1977 Apr 1 15:53:00	Rocketsonde	-	-	Arcasonde	-	-	-	WI	-	-	-	71	-	-
1977-4610	2443235.16	1977 Apr 1 15:53:00	Rocketsonde	-	-	Arcasonde	-	-	-	CC	LO43	-	-	64	-	-
1977-4611	2443235.17	1977 Apr 1 16:03:59	Rocketsonde	-	-	Arcasonde	-	-	-	AIT	-	-	-	76	-	-
1977-4613	2443235.25	1977 Apr 1 16:02:59	Rocketsonde	-	-	Arcasonde	-	-	-	WS	-	-	-	67	-	-
1977-4140	2443235.29	1977 Apr 1 18:51:00	Rocketsonde	-	-	AI/DMP-9	-	-	-	PH	-	-	-	59	-	-
1977-4614	2443235.30	1977 Apr 1 19:17:00	Rocketsonde	-	-	Arcasonde	-	-	-	PH	-	-	-	74	-	-
1977-4615	2443235.35	1977 Apr 1 20:26:59	Rocketsonde	-	-	Staartve, Datasonde	-	-	-	PF	-	-	-	67	-	-
1977-4141	2443235.40	1977 Apr 1 21:30:00	Rocketsonde	-	-	AI/DMP-9?	-	-	-	KAU	-	-	-	87	-	-
1977-4616	2443235.42	1977 Apr 1 21:30:59	Rocketsonde	-	-	Arcasonde	-	-	-	KAU	-	-	-	61	-	-
1977-4617	2443235.55	1977 Apr 2 01:14:59	Rocketsonde	-	-	Arcasonde	-	-	-	KMR	-	-	-	76	-	-
1977-4620	2443235.01	1977 Apr 4 14:30:00	Rocketsonde	-	-	Arcasonde	-	-	-	ASC	LO43	-	-	63	-	-
1977-4621	2443235.10	1977 Apr 4 14:30:00	Rocketsonde	-	-	Arcasonde	-	-	-	CC	-	-	-	68	-	-
1977-4622	2443235.11	1977 Apr 4 14:45:00	Rocketsonde	-	-	Arcasonde	-	-	-	AIT	-	-	-	72	-	-
1977-4623	2443235.12	1977 Apr 4 14:45:00	Rocketsonde	-	-	Arcasonde	-	-	-	THU	-	-	-	65	-	-
1977-4624	2443235.19	1977 Apr 4 16:30:00	Rocketsonde	-	-	Arcasonde	-	-	-	PRIM	-	-	-	70	-	-
1977-4625	2443235.21	1977 Apr 4 17:00:00	Rocketsonde	-	-	Arcasonde	-	-	-	SHER	-	-	-	58	-	-
1977-4626	2443235.25	1977 Apr 4 17:55:00	Rocketsonde	-	-	Arcasonde	-	-	-	WS	-	-	-	66	-	-
1977-4627	2443235.28	1977 Apr 4 18:58:59	Rocketsonde	-	-	Arcasonde	-	-	-	PH	-	-	-	57	-	-
1977-4628	2443235.33	1977 Apr 4 20:00:00	Rocketsonde	-	-	Arcasonde	-	-	-	PF	-	-	-	70	-	-
1977-4629	2443235.49	1977 Apr 5 2:35:20	Rocketsonde	-	-	Staartve, Datasonde	-	-	-	KMR	-	-	-	71	-	-
1977-4630	2443240.01	1977 Apr 6 12:17:00	Rocketsonde	-	-	Arcasonde	-	-	-	KMR	-	-	-	62	-	-
1977-4631	2443240.12	1977 Apr 6 14:53:00	Rocketsonde	-	-	Arcasonde	-	-	-	ASC	-	-	-	68	-	-
1977-4632	2443240.12	1977 Apr 6 14:55:00	Rocketsonde	-	-	Arcasonde	-	-	-	AIT	-	-	-	69	-	-
1977-4146	2443240.14	1977 Apr 6 15:25:59	Rocketsonde	-	-	AI/DMP-9?	-	-	-	THU	LO43	-	-	96	-	-
1977-4633	2443240.18	1977 Apr 6 16:24:59	Rocketsonde	-	-	Arcasonde	-	-	-	CC	-	-	-	72	-	-
1977-4634	2443240.18	1977 Apr 6 16:25:59	Rocketsonde	-	-	Arcasonde	-	-	-	VI	-	-	-	66	-	-
1977-4635	2443240.19	1977 Apr 6 16:50:59	Rocketsonde	-	-	Arcasonde	-	-	-	CC	LO43	-	-	70	-	-
1977-4636	2443240.23	1977 Apr 6 17:21:59	Rocketsonde	-	-	Arcasonde	-	-	-	PRIM	-	-	-	72	-	-
1977-4637	2443240.23	1977 Apr 6 17:21:59	Rocketsonde	-	-	Arcasonde	-	-	-	SHER	-	-	-	65	-	-
1977-4638	2443240.24	1977 Apr 6 17:35:00	Rocketsonde	-	-	Arcasonde	-	-	-	NS	-	-	-	69	-	-
1977-4639	2443240.35	1977 Apr 6 20:15:00	Rocketsonde	-	-	AI/DMP-9	-	-	-	NS	-	-	-	72	-	-
1977-4640	2443240.39	1977 Apr 6 20:51:00	Rocketsonde	-	-	Arcasonde	-	-	-	KMR	-	-	-	70	-	-
1977-4641	2443240.42	1977 Apr 6 21:21:59	Rocketsonde	-	-	Arcasonde	-	-	-	KMR	-	-	-	61	-	-
1977-4642	2443241.11	1977 Apr 7 21:31:00	Rocketsonde	-	-	Arcasonde	-	-	-	SHER	-	-	-	70	-	-
1977-4643	2443241.09	1977 Apr 7 21:31:00	Rocketsonde	-	-	Arcasonde	-	-	-	KMR	-	-	-	61	-	-
1977-4644	2443241.09	1977 Apr 7 21:31:00	Rocketsonde	-	-	Arcasonde	-	-	-	ASC	-	-	-	64	-	-
1977-4645	2443241.11	1977 Apr 8 14:03:59	Rocketsonde	-	-	Arcasonde	-	-	-	AIT	-	-	-	67	-	-
1977-4646	2443241.11	1977 Apr 8 14:03:59	Rocketsonde	-	-	Arcasonde	-	-	-	VI	-	-	-	59	-	-
1977-4647	2443241.18	1977 Apr 8 15:25:59	Rocketsonde	-	-	Arcasonde	-	-	-	CC	LO43	-	-	75	-	-
1977-4648	2443241.26	1977 Apr 8 18:10:00	Rocketsonde	-	-	Arcasonde	-	-	-	NS	-	-	-	62	-	-
1977-4151	2443241.27	1977 Apr 8 18:30:00	Rocketsonde	-	-	AI/DMP-9	-	-	-	NS	LO43	-	-	99	-	-
1977-4649	2443241.27	1977 Apr 8 18:30:00	Rocketsonde	-	-	Arcasonde	-	-	-	NS	-	-	-	66	-	-
1977-4650	2443241.29	1977 Apr 8 21:25:59	Rocketsonde	-	-	Arcasonde	-	-	-	KAU	-	-	-	64	-	-
1977-4651	2443241.31	1977 Apr 8 21:25:59	Rocketsonde	-	-	Arcasonde	-	-	-	ASC	-	-	-	71	-	-
1977-4652	2443241.31	1977 Apr 11 12:04:59	Rocketsonde	-	-	Arcasonde	-	-	-	AIT	-	-	-	67	-	-
1977-4653	2443241.11	1977 Apr 11 14:05:00	Rocketsonde	-	-	Arcasonde	-	-	-	NS	-	-	-	61	-	-
1977-4654	2443241.17	1977 Apr 11 16:04:59	Rocketsonde	-	-	Arcasonde	-	-	-	THU	-	-	-	70	-	-
1977-4655	2443241.20	1977 Apr 11 16:44:59	Rocketsonde	-	-	Arcasonde	-	-	-	SHER	-	-	-	61	-	-
1977-4656	2443241.26	1977 Apr 11 18:11:59	Rocketsonde	-	-	Arcasonde	-	-	-	VI	-	-	-	67	-	-
1977-4657	2443241.28	1977 Apr 11 18:11:59	Rocketsonde	-	-	Arcasonde	-	-	-	PM	-	-	-	58	-	-
1977-4658	2443241.23	1977 Apr 11 18:41:00	Rocketsonde	-	-	Arcasonde	-	-	-	NS	-	-	-	62	-	-
1977-4659	2443241.23	1977 Apr 12 17:30:00	Rocketsonde	-	-	Arcasonde	-	-	-	NS	-	-	-	79	-	-
1977-4660	2443241.50	1977 Apr 12 23:59:00	Rocketsonde	-	-	Arcasonde	-	-	-	KMR	-	-	-	65	-	-
1977-4661	2443241.02	1977 Apr 13 12:27:59	Rocketsonde	-	-	Arcasonde	-	-	-	ASC	-	-	-	69	-	-
1977-4662	2443241.12	1977 Apr 13 14:58:00	Rocketsonde	-	-	Arcasonde	-	-	-	THU	LO43	-	-	89	-	-
1977-4156	2443241.12	1977 Apr 13 15:00:00	Rocketsonde	-	-	AI/DMP-9?	-	-	-	CC	LO43	-	-	72	-	-
1977-4663	2443241.15	1977 Apr 13 15:03:00	Rocketsonde	-	-	Arcasonde	-	-	-	VI	-	-	-	82	-	-
1977-4664	2443241.17	1977 Apr 13 15:39:00	Rocketsonde	-	-	Arcasonde	-	-	-	CC	LO43	-	-	73	-	-
1977-4665	2443241.19	1977 Apr 13 16:30:00	Rocketsonde	-	-	Arcasonde	-	-	-	PRIM	-	-	-	70	-	-
1977-4666	2443241.21	1977 Apr 13 17:00:00	Rocketsonde	-	-	Arcasonde	-	-	-	SHER	-	-	-	62	-	-
1977-4667	2443241.23	1977 Apr 13 17:00:00	Rocketsonde	-	-	Arcasonde	-	-	-	AIT	-	-	-	72	-	-
1977-4157	2443241.25	1977 Apr 13 17:55:00	Rocketsonde	-	-	AI/DMP-9	-	-	-	NS	-	-	-	97	-	-
1977-4668	2443241.31	1977 Apr 13 17:55:00	Rocketsonde	-	-	Arcasonde	-	-	-	NS	-	-	-	72	-	-
1977-4158	2443241.25	1977 Apr 13 19:05:59	Rocketsonde	-	-	AI/DMP-9	-	-	-	NS	-	-	-	85	-	-
1977-4669	2443241.33	1977 Apr 13 19:52:59	Rocketsonde	-	-	Arcasonde	-	-	-	PM	-	-	-	72	-	-
1977-4670	2443241.34	1977 Apr 13 20:09:00	Rocketsonde	-	-	Arcasonde	-	-	-	KAU	-	-	-	69	-	-
1977-4671	2443241.36	1977 Apr 13 20:34:00	Rocketsonde	-	-	Arcasonde	-	-	-	KAU	-	-	-	72	-	-
1977-4672	2443241.52	1977 Apr 14 00:32:00	Rocketsonde	-	-	Arcasonde	-	-	-	KMR	-	-	-	76	-	-
1977-4673	2443248.03	1977 Apr 14 12:47:59	Rocketsonde	-	-	Arcasonde	-	-	-	ASC	-	-	-	62	-	-
1977-4674	2443248.14	1977 Apr 14 15:14:59	Rocketsonde	-	-	Arcasonde	-	-	-	AIT	-	-	-	71	-	-
1977-420	2443248.54	1977 Apr 15 14:47:00	Rocketsonde	-	-	Arcasonde	-	-	-	SHEM	-	-	-	47	-	-
1977-4675	2443249.12	1977 Apr 15 00:59:59	Rocketsonde	-	-	Arcasonde	-	-	-	THU	-	-	-	71	-	-
1977-4676	2443249.17	1977 Apr 15 16:04:59	Rocketsonde	-	-	Arcasonde	-	-	-	VI	-	-	-	60	-	-
1977-4677	2443249.18	1977 Apr 15 16:14:59	Rocketsonde	-	-	Arcasonde	-	-	-	SHER	-	-	-	67	-	-
1977-4678	2443249.18	1977 Apr 15 16:22:59	Rocketsonde	-	-	Arcasonde	-	-	-	CC	LO43	-	-	67	-	-
1977-4680	2443249.19	1977 Apr 15 16:34:59	Rocketsonde	-	-	Arcasonde	-	-	-	NS	-	-	-	66	-	-

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Mission	FlightCode	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee_Km	Range_Km	Dest
1977-4681	2443249.38	1977 Apr 15 21:11:59	Rocketsonde	-	-	Arcasonde	-	-	-	KMR	-	-	-	78	-	-
1977-4682	2443249.40	1977 Apr 15 21:35:59	Rocketsonde	-	-	Arcasonde	-	-	-	KAU	-	-	-	60	-	-
1977-4683	2443252.00	1977 Apr 18 12:06:00	Rocketsonde	-	-	Arcasonde	-	-	-	ASC	-	-	-	64	-	-
1977-4684	2443252.12	1977 Apr 18 14:49:59	Rocketsonde	-	-	Arcasonde	-	-	-	THU	-	-	-	68	-	-
1977-4685	2443252.18	1977 Apr 18 16:21:59	Rocketsonde	-	-	Arcasonde	-	-	-	WI	-	-	-	74	-	-
1977-4686	2443252.21	1977 Apr 18 17:00:00	Rocketsonde	-	-	-	-	-	-	AUT	-	-	-	67	-	-
1977-4687	2443252.23	1977 Apr 18 17:30:00	Rocketsonde	-	-	Arcasonde	-	-	-	CC	LO43	-	-	66	-	-
1977-4688	2443252.25	1977 Apr 18 18:00:00	Rocketsonde	-	-	Arcasonde	-	-	-	WS	-	-	-	66	-	-
1977-4689	2443252.32	1977 Apr 18 19:46:59	Rocketsonde	-	-	Arcasonde	-	-	-	PH	-	-	-	54	-	-
1977-4690	2443252.46	1977 Apr 18 23:08:00	Rocketsonde	-	-	Arcasonde	-	-	-	KMR	-	-	-	59	-	-
1977-4691	2443253.42	1977 Apr 19 21:58:59	Rocketsonde	-	-	Arcasonde	-	-	-	ASC	-	-	-	63	-	-
1977-4692	2443254.02	1977 Apr 20 12:25:59	Rocketsonde	-	-	Arcasonde	-	-	-	ASC	-	-	-	70	-	-
1977-4693	2443254.07	1977 Apr 20 13:44:59	Rocketsonde	-	-	Arcasonde	-	-	-	AUT	-	-	-	69	-	-
1977-4694	2443254.15	1977 Apr 20 15:40:00	Rocketsonde	-	-	Arcasonde	-	-	-	THU	-	-	-	64	-	-
1977-4695	2443254.16	1977 Apr 20 15:52:00	Rocketsonde	-	-	Arcasonde	-	-	-	WI	-	-	-	55	-	-
1977-4701	2443254.23	1977 Apr 20 17:30:00	Super Lok1	-	-	-	-	-	-	WS	-	-	-	51	-	-
1977-4702	2443254.23	1977 Apr 20 17:37:00	Rocketsonde	-	-	Arcasonde	-	-	-	PH	-	-	-	70	-	-
1977-4703	2443254.25	1977 Apr 20 18:02:59	Rocketsonde	-	-	Arcasonde	-	-	-	PH	-	-	-	97	-	-
1977-4704	2443254.26	1977 Apr 20 18:14:59	Rocketsonde	-	-	Arcasonde	-	-	-	WS	-	-	-	72	-	-
1977-4705	2443254.27	1977 Apr 20 18:30:00	Rocketsonde	-	-	Arcasonde	-	-	-	WS	-	-	-	60	-	-
1977-4706	2443254.32	1977 Apr 20 19:34:59	Rocketsonde	-	-	Arcasonde	-	-	-	SHER	-	-	-	68	-	-
1977-4707	2443254.36	1977 Apr 21 01:23:59	Rocketsonde	-	-	Arcasonde	-	-	-	KMR	-	-	-	68	-	-
1977-4709	2443255.15	1977 Apr 21 15:40:00	Rocketsonde	-	-	Arcasonde	-	-	-	AUT	-	-	-	55	-	-
1977-4710	2443256.02	1977 Apr 22 12:33:00	Rocketsonde	-	-	Arcasonde	-	-	-	ASC	-	-	-	68	-	-
1977-4711	2443256.40	1977 Apr 22 14:49:59	Rocketsonde	-	-	Arcasonde	-	-	-	THU	-	-	-	68	-	-
1977-4712	2443256.12	1977 Apr 22 15:14:59	Rocketsonde	-	-	Arcasonde	-	-	-	MI	-	-	-	65	-	-
1977-4713	2443256.14	1977 Apr 22 15:19:59	Rocketsonde	-	-	Arcasonde	-	-	-	SHER	-	-	-	65	-	-
1977-4715	2443256.18	1977 Apr 22 16:19:59	Rocketsonde	-	-	Arcasonde	-	-	-	PH	-	-	-	73	-	-
1977-4716	2443256.19	1977 Apr 22 16:35:59	Rocketsonde	-	-	Arcasonde	-	-	-	CC	LO43	-	-	94	-	-
1977-4717	2443256.23	1977 Apr 22 17:30:00	Rocketsonde	-	-	Arcasonde	-	-	-	WS	-	-	-	65	-	-
1977-4718	2443256.26	1977 Apr 22 18:09:00	Rocketsonde	-	-	Arcasonde	-	-	-	PF	-	-	-	70	-	-
1977-4719	2443256.35	1977 Apr 23 01:14:59	Rocketsonde	-	-	Arcasonde	-	-	-	KMR	-	-	-	74	-	-
1977-4721	2443259.01	1977 Apr 25 12:11:00	Rocketsonde	-	-	Arcasonde	-	-	-	ASC	LO43	-	-	63	-	-
1977-4722	2443259.13	1977 Apr 25 15:03:59	Rocketsonde	-	-	Arcasonde	-	-	-	CC	-	-	-	67	-	-
1977-4724	2443259.15	1977 Apr 25 18:06:00	Rocketsonde	-	-	Arcasonde	-	-	-	MI	-	-	-	89	-	-
1977-4726	2443259.26	1977 Apr 25 18:10:00	Rocketsonde	-	-	Arcasonde	-	-	-	THU	-	-	-	94	-	-
1977-4728	2443259.27	1977 Apr 25 18:31:00	Rocketsonde	-	-	Arcasonde	-	-	-	PH	-	-	-	70	-	-
1977-4729	2443259.34	1977 Apr 25 20:10:00	Rocketsonde	-	-	Arcasonde	-	-	-	PH	-	-	-	65	-	-
1977-4730	2443260.15	1977 Apr 26 15:42:00	Rocketsonde	-	-	Arcasonde	-	-	-	AUT	-	-	-	70	-	-
1977-4731	2443260.19	1977 Apr 26 16:40:00	Rocketsonde	-	-	Arcasonde	-	-	-	WS	-	-	-	72	-	-
1977-4732	2443260.21	1977 Apr 26 17:00:00	Rocketsonde	-	-	Arcasonde	-	-	-	SHER	-	-	-	56	-	-
1977-4733	2443260.38	1977 Apr 26 21:09:00	Rocketsonde	-	-	Arcasonde	-	-	-	KAU	-	-	-	60	-	-
1977-4734	2443261.02	1977 Apr 27 12:35:00	Rocketsonde	-	-	Arcasonde	-	-	-	ASC	-	-	-	63	-	-
1977-4735	2443261.10	1977 Apr 27 15:29:00	Rocketsonde	-	-	Arcasonde	-	-	-	MI	-	-	-	70	-	-
1977-4736	2443261.14	1977 Apr 27 15:14:59	Rocketsonde	-	-	Arcasonde	-	-	-	THU	-	-	-	73	-	-
1977-4738	2443261.16	1977 Apr 27 18:46:00	Rocketsonde	-	-	Arcasonde	-	-	-	PRIM	-	-	-	68	-	-
1977-4739	2443261.21	1977 Apr 27 19:00:00	Rocketsonde	-	-	Arcasonde	-	-	-	SHER	-	-	-	68	-	-
1977-4740	2443261.21	1977 Apr 27 19:04:59	Rocketsonde	-	-	Arcasonde	-	-	-	ASC	-	-	-	58	-	-
1977-4741	2443261.25	1977 Apr 27 18:14:59	Rocketsonde	-	-	Arcasonde	-	-	-	WS	-	-	-	72	-	-
1977-4742	2443261.26	1977 Apr 27 20:16:00	Rocketsonde	-	-	Arcasonde	-	-	-	PH	-	-	-	85	-	-
1977-4743	2443261.36	1977 Apr 27 21:35:59	Rocketsonde	-	-	Arcasonde	-	-	-	KAU	-	-	-	63	-	-
1977-4744	2443261.40	1977 Apr 27 23:12:00	Rocketsonde	-	-	Arcasonde	-	-	-	KMR	-	-	-	54	-	-
1977-4746	2443262.40	1977 Apr 28 21:40:00	Rocketsonde	-	-	Arcasonde	-	-	-	ASC	-	-	-	64	-	-
1977-4748	2443263.07	1977 Apr 29 13:44:59	Rocketsonde	-	-	Arcasonde	-	-	-	MI	-	-	-	70	-	-
1977-4749	2443263.12	1977 Apr 29 14:57:00	Rocketsonde	-	-	Arcasonde	-	-	-	CC	LO43	-	-	66	-	-
1977-4750	2443263.16	1977 Apr 29 15:17:59	Rocketsonde	-	-	Arcasonde	-	-	-	THU	-	-	-	72	-	-
1977-4751	2443263.19	1977 Apr 29 15:55:00	Rocketsonde	-	-	Arcasonde	-	-	-	WS	-	-	-	69	-	-
1977-4752	2443263.33	1977 Apr 29 16:30:00	Rocketsonde	-	-	Arcasonde	-	-	-	ASC	-	-	-	64	-	-
1977-4753	2443263.33	1977 Apr 29 18:00:00	Rocketsonde	-	-	Arcasonde	-	-	-	PH	-	-	-	73	-	-
1977-4754	2443263.33	1977 Apr 29 19:58:59	Rocketsonde	-	-	Arcasonde	-	-	-	ASC	-	-	-	72	-	-
1977-4755	2443263.44	1977 Apr 29 20:00:00	Rocketsonde	-	-	Arcasonde	-	-	-	PH	-	-	-	61	-	-
1977-4756	2443263.44	1977 Apr 29 22:34:59	Rocketsonde	-	-	Arcasonde	-	-	-	KAU	-	-	-	70	-	-
1977-4759	2443265.08	1977 May 2 14:00:00	Rocketsonde	-	-	Arcasonde	-	-	-	AUT	-	-	-	68	-	-
1977-4760	2443265.15	1977 May 2 15:30:00	Rocketsonde	-	-	Arcasonde	-	-	-	PRIM	-	-	-	60	-	-
1977-4761	2443265.18	1977 May 2 16:13:59	Rocketsonde	-	-	Arcasonde	-	-	-	CC	LO43	-	-	70	-	-
1977-4762	2443265.18	1977 May 2 16:13:59	Rocketsonde	-	-	Arcasonde	-	-	-	THU	-	-	-	72	-	-
1977-4764	2443265.21	1977 May 2 17:00:00	Rocketsonde	-	-	Arcasonde	-	-	-	WS	-	-	-	69	-	-
1977-4765	2443265.25	1977 May 2 17:58:00	Rocketsonde	-	-	Arcasonde	-	-	-	MI	-	-	-	73	-	-
1977-4766	2443265.27	1977 May 2 18:32:00	Rocketsonde	-	-	Arcasonde	-	-	-	PM	-	-	-	65	-	-
1977-4767	2443265.33	1977 May 2 20:00:00	Rocketsonde	-	-	Arcasonde	-	-	-	PH	-	-	-	59	-	-
1977-4768	2443265.38	1977 May 3 02:00:00	Rocketsonde	-	-	Arcasonde	-	-	-	KAU	-	-	-	75	-	-
1977-4769	2443265.58	1977 May 3 13:14:59	Rocketsonde	-	-	Arcasonde	-	-	-	KMR	-	-	-	64	-	-
1977-4771	2443267.05	1977 May 3 18:30:00	Rocketsonde	-	-	Arcasonde	-	-	-	WS	-	-	-	64	-	-
1977-4772	2443267.27	1977 May 3 18:30:00	Rocketsonde	-	-	Arcasonde	-	-	-	WS	-	-	-	64	-	-
1977-4773	2443268.07	1977 May 4 13:54:59	Rocketsonde	-	-	Arcasonde	-	-	-	ASC	-	-	-	27	-	-
1977-4774	2443268.08	1977 May 4 13:54:59	Rocketsonde	-	-	Arcasonde	-	-	-	AUT	-	-	-	72	-	-
1977-4775	2443268.11	1977 May 4 14:35:00	Rocketsonde	-	-	Arcasonde	-	-	-	MI	-	-	-	71	-	-
1977-4776	2443268.12	1977 May 4 14:48:00	Rocketsonde	-	-	Arcasonde	-	-	-	THU	-	-	-	65	-	-
1977-4778	2443268.15	1977 May 4 15:30:00	Rocketsonde	-	-	Arcasonde	-	-	-	CC	LO43	-	-	95	-	-
1977-4779	2443268.15	1977 May 4 15:30:00	Rocketsonde	-	-	Arcasonde	-	-	-	ASC	-	-	-	65	-	-
1977-4780	2443268.17	1977 May 4 16:09:59	Rocketsonde	-	-	Arcasonde	-	-	-	WS	-	-	-	56	-	-
1977-4781	2443268.19	1977 May 4 16:34:59	Rocketsonde	-	-	Arcasonde	-	-	-	CC	LO43	-	-	65	-	-
1977-4782	2443268.22	1977 May 4 17:15:00	Rocketsonde	-	-	Arcasonde	-	-	-	SHER	-	-	-	58	-	-
1977-4782	2443268.29	1977 May 4 18:56:59	Rocketsonde	-	-	Arcasonde	-	-	-	PH	-	-	-	57	-	-

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Mission	FlightCode	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee_Km	Range_Km	Dest
1977-4783	2443268.37	1977 May 4 2048:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PF	-	-	-	70	-	-
1977-4784	2443268.50	1977 May 5 0000:59	Rocketsonde	-	-	Arcasonde	-	-	-	SHER	-	-	-	51	-	-
1977-4785	2443268.56	1977 May 5 0132:59	Rocketsonde	-	-	Arcasonde	-	-	-	KMR	-	-	-	74	-	-
1977-4786	2443269.14	1977 May 5 1520:00	Rocketsonde	-	-	Arcasonde	-	-	-	SHER	-	-	-	63	-	-
1977-4787	2443269.25	1977 May 5 1800:00	Rocketsonde	-	-	Arcasonde	-	-	-	WS	-	-	-	68	-	-
1977-4789	2443270.07	1977 May 6 1344:59	Rocketsonde	-	-	Arcasonde	-	-	-	ASC	-	-	-	61	-	-
1977-4790	2443270.12	1977 May 6 1446:00	Rocketsonde	-	-	Arcasonde	-	-	-	CC	LO43	-	-	62	-	-
1977-4791	2443270.12	1977 May 6 1452:00	Rocketsonde	-	-	Arcasonde	-	-	-	WI	-	-	-	71	-	-
1977-4792	2443270.14	1977 May 6 1514:59	Rocketsonde	-	-	Arcasonde	-	-	-	THU	-	-	-	65	-	-
1977-4793	2443270.17	1977 May 6 1559:59	Super Lok1	-	-	Arcasonde	-	-	-	WS	-	-	-	68	-	-
1977-4794	2443270.18	1977 May 6 1624:59	Rocketsonde	-	-	Arcasonde	-	-	-	SHER	-	-	-	61	-	-
1977-4796	2443270.19	1977 May 6 1640:00	Rocketsonde	-	-	Arcasonde	-	-	-	AIT	-	-	-	73	-	-
1977-4797	2443270.30	1977 May 6 1913:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PI	-	-	-	73	-	-
1977-4798	2443270.35	1977 May 6 2021:00	Rocketsonde	-	-	Arcasonde	-	-	-	PF	-	-	-	53	-	-
1977-4799	2443270.38	1977 May 6 2100:00	Rocketsonde	-	-	Arcasonde	-	-	-	KAU	-	-	-	58	-	-
1977-4800	2443270.38	1977 May 6 2100:00	Rocketsonde	-	-	Arcasonde	-	-	-	SHER	-	-	-	54	-	-
1977-4801	2443270.55	1977 May 7 0114:59	Rocketsonde	-	-	Arcasonde	-	-	-	KMR	-	-	-	77	-	-
1977-4823	2443273.01	1977 May 9 1218:00	Rocketsonde	-	-	Arcasonde	-	-	-	ASC	-	-	-	46	-	-
1977-4802	2443273.12	1977 May 9 1500:00	Rocketsonde	-	-	Arcasonde	-	-	-	AIT	-	-	-	70	-	-
1977-4803	2443273.14	1977 May 9 1514:59	Rocketsonde	-	-	Arcasonde	-	-	-	SHER	-	-	-	73	-	-
1977-4805	2443273.20	1977 May 9 1649:59	Rocketsonde	-	-	Arcasonde	-	-	-	THU	-	-	-	56	-	-
1977-4806	2443273.22	1977 May 9 1715:00	Rocketsonde	-	-	Arcasonde	-	-	-	WI	-	-	-	69	-	-
1977-4807	2443273.28	1977 May 9 1842:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PF	-	-	-	63	-	-
1977-4808	2443273.33	1977 May 9 2000:00	Rocketsonde	-	-	Arcasonde	-	-	-	KAU	-	-	-	58	-	-
1977-4810	2443274.25	1977 May 10 1800:00	Rocketsonde	-	-	Arcasonde	-	-	-	WS	-	-	-	72	-	-
1977-4811	2443275.10	1977 May 11 1417:00	Rocketsonde	-	-	Arcasonde	-	-	-	KMR	-	-	-	63	-	-
1977-4814	2443275.11	1977 May 11 1435:00	Rocketsonde	-	-	Arcasonde	-	-	-	MI	-	-	-	76	-	-
1977-4815	2443275.13	1977 May 11 1507:00	Rocketsonde	-	-	Arcasonde	-	-	-	MI	-	-	-	63	-	-
1977-4816	2443275.14	1977 May 11 1514:59	Rocketsonde	-	-	Arcasonde	-	-	-	PRIM	-	-	-	66	-	-
1977-4865	2443275.14	1977 May 11 1514:59	Rocketsonde	-	-	Arcasonde	-	-	-	CC	LO43	-	-	86	-	-
1977-4866	2443275.14	1977 May 11 1514:59	Rocketsonde	-	-	Arcasonde	-	-	-	PH	-	-	-	76	-	-
1977-4867	2443275.14	1977 May 11 1521:00	Rocketsonde	-	-	Arcasonde	-	-	-	CC	LO43	-	-	77	-	-
1977-4817	2443275.18	1977 May 11 1617:00	Rocketsonde	-	-	Arcasonde	-	-	-	CC	-	-	-	63	-	-
1977-4818	2443275.18	1977 May 11 1619:59	Rocketsonde	-	-	Arcasonde	-	-	-	AIT	-	-	-	57	-	-
1977-4819	2443275.20	1977 May 11 1644:59	Rocketsonde	-	-	Arcasonde	-	-	-	SHER	-	-	-	96	-	-
1977-4820	2443275.20	1977 May 11 1644:59	Rocketsonde	-	-	Arcasonde	-	-	-	NS	-	-	-	72	-	-
1977-4821	2443275.26	1977 May 11 1814:59	Rocketsonde	-	-	Arcasonde	-	-	-	NS	-	-	-	70	-	-
1977-4822	2443275.27	1977 May 11 1824:59	Rocketsonde	-	-	Arcasonde	-	-	-	PF	-	-	-	73	-	-
1977-4823	2443275.36	1977 May 12 2038:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PF	LO43	-	-	46	-	-
1977-4825	2443276.19	1977 May 12 1636:59	Rocketsonde	-	-	Arcasonde	-	-	-	SHER	-	-	-	46	-	-
1977-4826	2443276.50	1977 May 13 0000:59	Rocketsonde	-	-	Arcasonde	-	-	-	AIT	-	-	-	49	-	-
1977-4827	2443277.07	1977 May 13 1534:59	Rocketsonde	-	-	Arcasonde	-	-	-	MIT	-	-	-	62	-	-
1977-4828	2443277.11	1977 May 13 1535:00	Rocketsonde	-	-	Arcasonde	-	-	-	THU	-	-	-	69	-	-
1977-4829	2443277.13	1977 May 13 1511:59	Rocketsonde	-	-	Arcasonde	-	-	-	PRIM	-	-	-	70	-	-
1977-4830	2443277.14	1977 May 13 1520:59	Rocketsonde	-	-	Arcasonde	-	-	-	THU	-	-	-	72	-	-
1977-4831	2443277.16	1977 May 13 1620:59	Rocketsonde	-	-	Arcasonde	-	-	-	NS	-	-	-	74	-	-
1977-4832	2443277.16	1977 May 13 1620:59	Rocketsonde	-	-	Arcasonde	-	-	-	SHER	-	-	-	71	-	-
1977-4833	2443277.29	1977 May 13 1600:59	Rocketsonde	-	-	Arcasonde	-	-	-	PH	-	-	-	61	-	-
1977-4834	2443277.34	1977 May 13 2010:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PF	-	-	-	62	-	-
1977-4835	2443277.59	1977 May 13 2340:00	Rocketsonde	-	-	Arcasonde	-	-	-	KMR	-	-	-	76	-	-
1977-4836	2443277.65	1977 May 16 0501:59	Rocketsonde	-	-	Arcasonde	-	-	-	SHER	-	-	-	48	-	-
1977-4837	2443280.14	1977 May 16 1514:59	Rocketsonde	-	-	Arcasonde	-	-	-	AIT	-	-	-	39	-	-
1977-4838	2443280.16	1977 May 16 1556:00	Rocketsonde	-	-	Arcasonde	-	-	-	PH	-	-	-	76	-	-
1977-4839	2443280.17	1977 May 16 1607:00	Rocketsonde	-	-	Arcasonde	-	-	-	CC	LO43	-	-	63	-	-
1977-4840	2443280.23	1977 May 16 1735:00	Rocketsonde	-	-	Arcasonde	-	-	-	VI	-	-	-	72	-	-
1977-4841	2443280.23	1977 May 16 1735:00	Rocketsonde	-	-	Arcasonde	-	-	-	THU	-	-	-	68	-	-
1977-4842	2443280.27	1977 May 16 1835:59	Rocketsonde	-	-	Arcasonde	-	-	-	PRIM	-	-	-	51	-	-
1977-4843	2443280.27	1977 May 16 1835:59	Rocketsonde	-	-	Arcasonde	-	-	-	KAU	-	-	-	56	-	-
1977-4844	2443280.39	1977 May 16 2100:00	Rocketsonde	-	-	Arcasonde	-	-	-	PF	-	-	-	64	-	-
1977-4845	2443280.39	1977 May 16 2100:00	Rocketsonde	-	-	Arcasonde	-	-	-	PF	-	-	-	77	-	-
1977-4846	2443281.05	1977 May 17 1314:59	Rocketsonde	-	-	Arcasonde	-	-	-	NS	-	-	-	72	-	-
1977-4847	2443281.05	1977 May 17 1624:59	Rocketsonde	-	-	Arcasonde	-	-	-	NS	-	-	-	71	-	-
1977-4848	2443281.19	1977 May 17 1650:00	Rocketsonde	-	-	Arcasonde	-	-	-	NS	-	-	-	72	-	-
1977-4849	2443281.29	1977 May 17 1859:59	Rocketsonde	-	-	Arcasonde	-	-	-	NS	-	-	-	64	-	-
1977-4850	2443282.07	1977 May 18 1344:59	Rocketsonde	-	-	Arcasonde	-	-	-	AIT	-	-	-	60	-	-
1977-4851	2443282.08	1977 May 18 1402:00	Rocketsonde	-	-	Arcasonde	-	-	-	ASC	-	-	-	78	-	-
1977-4852	2443282.14	1977 May 18 1514:59	Rocketsonde	-	-	Arcasonde	-	-	-	CC	LO43	-	-	96	-	-
1977-4853	2443282.15	1977 May 18 1541:00	Rocketsonde	-	-	Arcasonde	-	-	-	VI	-	-	-	70	-	-
1977-4854	2443282.17	1977 May 18 1600:59	Super Lok1	-	-	Arcasonde	-	-	-	NS	-	-	-	63	-	-
1977-4855	2443282.18	1977 May 18 1619:59	Rocketsonde	-	-	Arcasonde	-	-	-	SHER	-	-	-	71	-	-
1977-4856	2443282.19	1977 May 18 1623:59	Rocketsonde	-	-	Arcasonde	-	-	-	CC	LO43	-	-	69	-	-
1977-4857	2443282.21	1977 May 18 1702:00	Rocketsonde	-	-	Arcasonde	-	-	-	VI	-	-	-	70	-	-
1977-4858	2443282.25	1977 May 18 1800:00	Rocketsonde	-	-	Arcasonde	-	-	-	NS	-	-	-	100	-	-
1977-4859	2443282.26	1977 May 18 1810:00	Rocketsonde	-	-	Arcasonde	-	-	-	NS	-	-	-	68	-	-
1977-4860	2443282.28	1977 May 18 1838:59	Rocketsonde	-	-	Arcasonde	-	-	-	PM	-	-	-	86	-	-
1977-4861	2443282.29	1977 May 18 1859:59	Rocketsonde	-	-	Arcasonde	-	-	-	PM	-	-	-	76	-	-
1977-4862	2443282.31	1977 May 18 1921:59	Rocketsonde	-	-	Arcasonde	-	-	-	PRIM	-	-	-	64	-	-
1977-4863	2443282.38	1977 May 18 2110:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PF	-	-	-	51	-	-
1977-4864	2443284.10	1977 May 20 1420:00	Rocketsonde	-	-	Arcasonde	-	-	-	AIT	-	-	-	72	-	-
1977-4865	2443284.11	1977 May 20 1444:00	Rocketsonde	-	-	Arcasonde	-	-	-	THU	-	-	-	66	-	-
1977-4866	2443284.11	1977 May 20 1444:00	Rocketsonde	-	-	Arcasonde	-	-	-	VI	-	-	-	72	-	-
1977-4867	2443284.13	1977 May 20 1503:59	Rocketsonde	-	-	Arcasonde	-	-	-	PRIM	-	-	-	65	-	-

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Mission	FlightCode	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee_Km	Range_Km	Dest
1977-8688	2443284.18	1977 May 20 16:22:59	Rocketsonde	-	-	Arcasonde	-	-	-	CC	L043	-	-	76	-	-
1977-8689	2443284.19	1977 May 20 16:30:00	Rocketsonde	-	-	Arcasonde	-	-	-	SHER	-	-	-	63	-	-
1977-8690	2443284.25	1977 May 20 17:08:00	Rocketsonde	-	-	Arcasonde	-	-	-	PM	-	-	-	70	-	-
1977-8671	2443284.26	1977 May 20 18:10:00	Rocketsonde	-	-	Arcasonde	-	-	-	WS	-	-	-	72	-	-
1977-7200	2443284.38	1977 May 20 21:00:00	Rocketsonde	-	-	Arcasonde	-	-	-	KAU	-	-	-	89	-	-
1977-8672	2443284.39	1977 May 20 21:00:00	Rocketsonde	-	-	Arcasonde	-	-	-	PF	-	-	-	66	-	-
1977-8673	2443284.53	1977 May 21 00:36:59	Rocketsonde	-	-	Arcasonde	-	-	-	KAU	-	-	-	68	-	-
1977-8674	2443284.54	1977 May 21 00:58:59	Rocketsonde	-	-	Arcasonde	-	-	-	KHR	-	-	-	73	-	-
1977-8675	2443284.54	1977 May 21 00:58:59	Rocketsonde	-	-	Arcasonde	-	-	-	SHER	-	-	-	52	-	-
1977-8676	2443287.02	1977 May 23 12:24:59	Rocketsonde	-	-	Arcasonde	-	-	-	ASC	-	-	-	61	-	-
1977-8677	2443287.23	1977 May 23 17:30:00	Rocketsonde	-	-	Arcasonde	-	-	-	MI	-	-	-	59	-	-
1977-8678	2443287.25	1977 May 23 18:00:00	Rocketsonde	-	-	Arcasonde	-	-	-	WS	-	-	-	69	-	-
1977-8679	2443287.30	1977 May 23 19:18:00	Rocketsonde	-	-	Arcasonde	-	-	-	PH	-	-	-	57	-	-
1977-8680	2443287.35	1977 May 23 20:20:00	Rocketsonde	-	-	Arcasonde	-	-	-	PF	-	-	-	71	-	-
1977-8681	2443287.46	1977 May 23 23:04:59	Rocketsonde	-	-	Arcasonde	-	-	-	KHR	-	-	-	62	-	-
1977-8682	2443288.13	1977 May 24 15:10:00	Rocketsonde	-	-	Arcasonde	-	-	-	CC	L043	-	-	61	-	-
1977-8684	2443288.03	1977 May 25 12:41:00	Rocketsonde	-	-	Arcasonde	-	-	-	ASC	-	-	-	62	-	-
1977-8685	2443288.07	1977 May 25 13:44:59	Rocketsonde	-	-	Arcasonde	-	-	-	AIT	-	-	-	69	-	-
1977-8686	2443288.10	1977 May 25 14:30:00	Rocketsonde	-	-	Arcasonde	-	-	-	MI	-	-	-	69	-	-
1977-8688	2443288.12	1977 May 25 15:00:00	Rocketsonde	-	-	Arcasonde	-	-	-	PRIM	-	-	-	69	-	-
1977-7206	2443288.15	1977 May 25 15:30:00	Rocketsonde	-	-	Arcasonde	-	-	-	CC	L043	-	-	96	-	-
1977-8689	2443288.18	1977 May 25 16:19:59	Rocketsonde	-	-	Arcasonde	-	-	-	SHER	-	-	-	66	-	-
1977-7208	2443288.25	1977 May 25 18:04:59	Rocketsonde	-	-	Arcasonde	-	-	-	CC	L043	-	-	63	-	-
1977-7209	2443288.26	1977 May 25 18:15:59	Rocketsonde	-	-	Arcasonde	-	-	-	WS	-	-	-	102	-	-
1977-8691	2443288.29	1977 May 25 18:45:59	Rocketsonde	-	-	Arcasonde	-	-	-	PH	-	-	-	89	-	-
1977-8692	2443288.34	1977 May 25 20:00:00	Rocketsonde	-	-	Arcasonde	-	-	-	WS	-	-	-	72	-	-
1977-7210	2443288.38	1977 May 25 21:00:00	Rocketsonde	-	-	Arcasonde	-	-	-	PF	-	-	-	66	-	-
1977-8693	2443288.40	1977 May 25 21:30:00	Rocketsonde	-	-	Arcasonde	-	-	-	KAU	-	-	-	97	-	-
1977-8694	2443288.51	1977 May 26 00:16:00	Rocketsonde	-	-	Arcasonde	-	-	-	KAU	-	-	-	73	-	-
1977-8695	2443289.14	1977 May 26 15:20:00	Rocketsonde	-	-	Arcasonde	-	-	-	KHR	-	-	-	62	-	-
1977-8696	2443289.38	1977 May 26 21:00:00	Rocketsonde	-	-	Arcasonde	-	-	-	SHER	-	-	-	86	-	-
1977-8697	2443291.07	1977 May 27 13:44:59	Rocketsonde	-	-	Arcasonde	-	-	-	PF	-	-	-	66	-	-
1977-8690	2443291.12	1977 May 27 14:53:00	Rocketsonde	-	-	Arcasonde	-	-	-	ASC	-	-	-	61	-	-
1977-8692	2443291.12	1977 May 27 15:00:00	Rocketsonde	-	-	Arcasonde	-	-	-	AIT	-	-	-	71	-	-
1977-8693	2443291.16	1977 May 27 15:46:00	Rocketsonde	-	-	Arcasonde	-	-	-	PRIM	-	-	-	87	-	-
1977-8694	2443291.19	1977 May 27 15:46:00	Rocketsonde	-	-	Arcasonde	-	-	-	WS	-	-	-	68	-	-
1977-8695	2443291.24	1977 May 27 16:40:00	Rocketsonde	-	-	Arcasonde	-	-	-	SHER	-	-	-	62	-	-
1977-8696	2443291.29	1977 May 27 17:40:00	Rocketsonde	-	-	Arcasonde	-	-	-	WS	-	-	-	70	-	-
1977-8699	2443291.35	1977 May 27 18:56:59	Rocketsonde	-	-	Arcasonde	-	-	-	WS	-	-	-	74	-	-
1977-8910	2443291.38	1977 May 27 20:30:00	Rocketsonde	-	-	Arcasonde	-	-	-	ASC	-	-	-	86	-	-
1977-7213	2443291.38	1977 May 27 21:09:00	Rocketsonde	-	-	Arcasonde	-	-	-	KAU	-	-	-	87	-	-
1977-8911	2443291.38	1977 May 27 21:13:59	Rocketsonde	-	-	Arcasonde	-	-	-	KHR	-	-	-	61	-	-
1977-8914	2443291.59	1977 May 27 23:47:00	Rocketsonde	-	-	Arcasonde	-	-	-	KHR	-	-	-	69	-	-
1977-8915	2443291.59	1977 May 28 00:46:00	Rocketsonde	-	-	Arcasonde	-	-	-	MI	-	-	-	72	-	-
1977-8918	2443291.95	1977 May 28 10:41:59	Rocketsonde	-	-	Arcasonde	-	-	-	WS	-	-	-	79	-	-
1977-8919	2443291.95	1977 May 28 10:46:59	Rocketsonde	-	-	Arcasonde	-	-	-	PRIM	-	-	-	70	-	-
1977-8920	2443294.15	1977 May 30 15:02:59	Rocketsonde	-	-	Arcasonde	-	-	-	SHER	-	-	-	66	-	-
1977-8922	2443294.15	1977 May 31 00:00:00	Rocketsonde	-	-	Arcasonde	-	-	-	CC	-	-	-	83	-	-
1977-8923	2443294.15	1977 May 31 00:00:00	Rocketsonde	-	-	Arcasonde	-	-	-	ASC	-	-	-	61	-	-
1977-8924	2443294.18	1977 May 31 15:45:00	Rocketsonde	-	-	Arcasonde	-	-	-	AIT	-	-	-	69	-	-
1977-8925	2443295.22	1977 May 31 17:46:00	Rocketsonde	-	-	Arcasonde	-	-	-	KAU	-	-	-	72	-	-
1977-8926	2443295.22	1977 May 31 17:46:00	Rocketsonde	-	-	Arcasonde	-	-	-	WS	-	-	-	69	-	-
1977-8927	2443295.42	1977 May 31 21:38:59	Rocketsonde	-	-	Arcasonde	-	-	-	KAU	-	-	-	57	-	-
1977-8927	2443295.42	1977 May 31 21:38:59	Rocketsonde	-	-	Arcasonde	-	-	-	WS	-	-	-	49	-	-
1977-831	2443295.65	1977 Jun 1 13:14:59	Rocketsonde	-	-	Arcasonde	-	-	-	ASC	-	-	-	63	-	-
1977-8929	2443295.67	1977 Jun 1 13:44:59	Rocketsonde	-	-	Arcasonde	-	-	-	CC	-	-	-	63	-	-
1977-8930	2443295.67	1977 Jun 1 14:22:00	Rocketsonde	-	-	Arcasonde	-	-	-	CC	-	-	-	63	-	-
1977-8931	2443295.13	1977 Jun 1 15:12:59	Rocketsonde	-	-	Arcasonde	-	-	-	MI	-	-	-	72	-	-
1977-8932	2443295.14	1977 Jun 1 15:12:59	Rocketsonde	-	-	Arcasonde	-	-	-	WS	-	-	-	69	-	-
1977-7200	2443295.15	1977 Jun 1 15:30:00	Rocketsonde	-	-	Arcasonde	-	-	-	CC	L043	-	-	94	-	-
1977-8933	2443295.15	1977 Jun 1 15:30:00	Rocketsonde	-	-	Arcasonde	-	-	-	ASC	-	-	-	68	-	-
1977-8934	2443295.15	1977 Jun 1 15:30:00	Rocketsonde	-	-	Arcasonde	-	-	-	PRIM	-	-	-	65	-	-
1977-7221	2443295.25	1977 Jun 1 18:00:00	Rocketsonde	-	-	Arcasonde	-	-	-	SHER	-	-	-	100	-	-
1977-8935	2443295.25	1977 Jun 1 18:01:59	Rocketsonde	-	-	Arcasonde	-	-	-	WS	-	-	-	74	-	-
1977-8936	2443295.26	1977 Jun 1 18:01:59	Rocketsonde	-	-	Arcasonde	-	-	-	PH	-	-	-	70	-	-
1977-8937	2443295.26	1977 Jun 1 18:10:00	Rocketsonde	-	-	Arcasonde	-	-	-	PF	-	-	-	71	-	-
1977-8938	2443295.35	1977 Jun 1 21:59:59	Rocketsonde	-	-	Arcasonde	-	-	-	WS	-	-	-	89	-	-
1977-7222	2443295.42	1977 Jun 1 21:59:59	Rocketsonde	-	-	Arcasonde	-	-	-	ASC	-	-	-	74	-	-
1977-8939	2443295.44	1977 Jun 2 00:00:59	Rocketsonde	-	-	Arcasonde	-	-	-	CC	-	-	-	74	-	-
1977-8940	2443295.60	1977 Jun 2 00:00:59	Rocketsonde	-	-	Arcasonde	-	-	-	MI	-	-	-	74	-	-
1977-8941	2443295.66	1977 Jun 2 01:20:59	Rocketsonde	-	-	Arcasonde	-	-	-	WS	-	-	-	54	-	-
1977-8943	2443297.19	1977 Jun 2 16:30:00	Rocketsonde	-	-	Arcasonde	-	-	-	KHR	-	-	-	60	-	-
1977-8944	2443297.38	1977 Jun 3 14:17:00	Rocketsonde	-	-	Arcasonde	-	-	-	SHER	-	-	-	57	-	-
1977-8946	2443298.10	1977 Jun 3 21:00:00	Rocketsonde	-	-	Arcasonde	-	-	-	PF	-	-	-	64	-	-
1977-8947	2443298.12	1977 Jun 3 15:00:00	Rocketsonde	-	-	Arcasonde	-	-	-	CC	L043	-	-	64	-	-
1977-8948	2443298.21	1977 Jun 3 16:55:59	Rocketsonde	-	-	Arcasonde	-	-	-	AIT	-	-	-	72	-	-
1977-8949	2443298.25	1977 Jun 3 18:04:59	Rocketsonde	-	-	Arcasonde	-	-	-	PM	-	-	-	73	-	-
1977-8950	2443298.34	1977 Jun 3 20:10:00	Rocketsonde	-	-	Arcasonde	-	-	-	WS	-	-	-	68	-	-
1977-8951	2443298.38	1977 Jun 3 21:00:00	Rocketsonde	-	-	Arcasonde	-	-	-	PF	-	-	-	70	-	-
1977-8952	2443298.55	1977 Jun 4 01:14:59	Rocketsonde	-	-	Arcasonde	-	-	-	KAU	-	-	-	60	-	-
1977-8954	2443301.04	1977 Jun 6 12:59:59	Rocketsonde	-	-	Arcasonde	-	-	-	KHR	-	-	-	78	-	-
1977-8955	2443301.18	1977 Jun 6 16:17:00	Rocketsonde	-	-	Arcasonde	-	-	-	AIT	-	-	-	72	-	-
1977-8956	2443301.19	1977 Jun 6 16:30:00	Rocketsonde	-	-	Arcasonde	-	-	-	CC	-	-	-	72	-	-
1977-8957	2443301.34	1977 Jun 6 20:06:00	Rocketsonde	-	-	Arcasonde	-	-	-	CC	L043	-	-	59	-	-
1977-8958	2443301.36	1977 Jun 6 20:38:59	Rocketsonde	-	-	Arcasonde	-	-	-	PM	-	-	-	58	-	-
1977-8959	2443301.55	1977 Jun 7 01:14:59	Rocketsonde	-	-	Arcasonde	-	-	-	PF	-	-	-	56	-	-
1977-8960	2443302.02	1977 Jun 7 12:34:59	Rocketsonde	-	-	Arcasonde	-	-	-	KHR	-	-	-	78	-	-
1977-8963	2443303.07	1977 Jun 8 13:44:59	Rocketsonde	-	-	Arcasonde	-	-	-	ASC	-	-	-	57	-	-

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Mission	FlightCode	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee_Km	Range_Km	Dest
1977-#965	2443303.11	1977 Jun 8 1442:00	Rocketsonde	-	-	Arcasonde	-	-	-	WI	-	-	-	77	-	-
1977-#966	2443303.17	1977 Jun 8 1559:59	Rocketsonde	-	-	AI/DMP-9?	-	-	-	CC	L043	-	-	64	-	-
1977-#967	2443303.17	1977 Jun 8 1559:59	Rocketsonde	-	-	AI/DMP-9?	-	-	-	CC	L043	-	-	64	-	-
1977-#968	2443303.17	1977 Jun 8 1604:59	Rocketsonde	-	-	-	-	-	-	AIT	-	-	-	51	-	-
1977-#969	2443303.19	1977 Jun 8 1630:00	Rocketsonde	-	-	Arcasonde	-	-	-	SHER	-	-	-	89	-	-
1977-#970	2443303.21	1977 Jun 8 1700:00	Rocketsonde	-	-	-	-	-	-	AIT	-	-	-	65	-	-
1977-#971	2443303.26	1977 Jun 8 1810:00	Rocketsonde	-	-	Arcasonde	-	-	-	WS	-	-	-	68	-	-
1977-#972	2443303.27	1977 Jun 8 1822:00	Rocketsonde	-	-	Startur, Datasonde	-	-	-	PRIM	-	-	-	69	-	-
1977-#973	2443303.36	1977 Jun 8 2032:00	Rocketsonde	-	-	Arcasonde	-	-	-	PF	-	-	-	70	-	-
1977-#974	2443303.55	1977 Jun 9 0114:59	Rocketsonde	-	-	Arcasonde	-	-	-	SHER	-	-	-	54	-	-
1977-#975	2443304.00	1977 Jun 9 1202:59	Rocketsonde	-	-	Arcasonde	-	-	-	ASC	-	-	-	63	-	-
1977-#976	2443304.19	1977 Jun 9 1634:59	Rocketsonde	-	-	Arcasonde	-	-	-	SHER	-	-	-	65	-	-
1977-#977	2443304.27	1977 Jun 9 1630:00	Rocketsonde	-	-	Arcasonde	-	-	-	WS	-	-	-	69	-	-
1977-#978	2443305.10	1977 Jun 10 1420:00	Rocketsonde	-	-	Arcasonde	-	-	-	CC	L043	-	-	64	-	-
1977-#979	2443305.12	1977 Jun 10 1459:00	Rocketsonde	-	-	-	-	-	-	AIT	-	-	-	70	-	-
1977-#980	2443305.32	1977 Jun 10 1934:59	Rocketsonde	-	-	AI/DMP-9?	-	-	-	PH	-	-	-	89	-	-
1977-#981	2443305.35	1977 Jun 10 2030:00	Rocketsonde	-	-	Startur, Datasonde	-	-	-	PF	-	-	-	61	-	-
1977-#982	2443305.55	1977 Jun 11 0114:59	Rocketsonde	-	-	Arcasonde	-	-	-	KR	-	-	-	78	-	-
1977-#983	2443306.47	1977 Jun 11 2315:00	Rocketsonde	-	-	Arcasonde	-	-	-	KR	-	-	-	67	-	-
1977-#984	2443306.48	1977 Jun 12 2325:00	Rocketsonde	-	-	Arcasonde	-	-	-	KR	-	-	-	66	-	-
1977-#985	2443306.07	1977 Jun 13 1344:59	Rocketsonde	-	-	Arcasonde	-	-	-	ASC	-	-	-	65	-	-
1977-#986	2443306.08	1977 Jun 13 1362:00	Rocketsonde	-	-	Arcasonde	-	-	-	CC	L043	-	-	66	-	-
1977-#987	2443306.13	1977 Jun 13 1512:59	Rocketsonde	-	-	Arcasonde	-	-	-	PRIM	-	-	-	67	-	-
1977-#988	2443306.15	1977 Jun 13 1530:00	Rocketsonde	-	-	Arcasonde	-	-	-	CC	L043	-	-	68	-	-
1977-#989	2443306.15	1977 Jun 13 1534:59	Rocketsonde	-	-	-	-	-	-	AIT	-	-	-	75	-	-
1977-#990	2443306.17	1977 Jun 13 1559:59	Rocketsonde	-	-	Arcasonde	-	-	-	PH	-	-	-	74	-	-
1977-#991	2443306.25	1977 Jun 13 1600:00	Rocketsonde	-	-	Arcasonde	-	-	-	SHER	-	-	-	65	-	-
1977-#992	2443306.40	1977 Jun 13 2152:00	Rocketsonde	-	-	Arcasonde	-	-	-	KAU	-	-	-	41	-	-
1977-#993	2443306.46	1977 Jun 13 2324:00	Rocketsonde	-	-	Arcasonde	-	-	-	KR	-	-	-	63	-	-
1977-#994	2443309.11	1977 Jun 14 1314:59	Rocketsonde	-	-	Arcasonde	-	-	-	WS	L043	-	-	65	-	-
1977-#995	2443309.13	1977 Jun 14 1446:00	Rocketsonde	-	-	Arcasonde	-	-	-	CC	L043	-	-	68	-	-
1977-#996	2443309.15	1977 Jun 14 1512:59	Rocketsonde	-	-	Arcasonde	-	-	-	WS	L043	-	-	67	-	-
1977-#997	2443309.16	1977 Jun 14 1549:59	Rocketsonde	-	-	Arcasonde	-	-	-	CC	L043	-	-	66	-	-
1977-#998	2443309.27	1977 Jun 14 1830:00	Rocketsonde	-	-	Arcasonde	-	-	-	WS	-	-	-	86	-	-
1977-#999	2443309.47	1977 Jun 14 2321:00	Rocketsonde	-	-	Arcasonde	-	-	-	KR	-	-	-	66	-	-
1977-#1000	2443310.07	1977 Jun 15 1344:59	Rocketsonde	-	-	Arcasonde	-	-	-	AIT	-	-	-	68	-	-
1977-#1001	2443310.07	1977 Jun 15 1344:59	Rocketsonde	-	-	Arcasonde	-	-	-	ASC	-	-	-	85	-	-
1977-#1002	2443310.11	1977 Jun 15 1432:00	Rocketsonde	-	-	Arcasonde	-	-	-	CC	L043	-	-	67	-	-
1977-#1003	2443310.14	1977 Jun 15 1445:00	Rocketsonde	-	-	Arcasonde	-	-	-	CC	-	-	-	74	-	-
1977-#1004	2443310.14	1977 Jun 15 1514:59	Rocketsonde	-	-	Arcasonde	-	-	-	PRIM	-	-	-	71	-	-
1977-#1005	2443310.15	1977 Jun 15 1536:00	Rocketsonde	-	-	Arcasonde	-	-	-	VI	L043	-	-	64	-	-
1977-#1006	2443310.15	1977 Jun 15 1536:00	Rocketsonde	-	-	Arcasonde	-	-	-	CC	L043	-	-	64	-	-
1977-#1007	2443310.19	1977 Jun 15 1556:59	Rocketsonde	-	-	Arcasonde	-	-	-	VI	L043	-	-	65	-	-
1977-#1008	2443310.16	1977 Jun 15 1559:59	Rocketsonde	-	-	AI/DMP-9?	-	-	-	CC	L043	-	-	95	-	-
1977-#1009	2443310.18	1977 Jun 15 1614:59	Rocketsonde	-	-	AI/DMP-9?	-	-	-	CC	L043	-	-	101	-	-
1977-#1010	2443310.19	1977 Jun 15 1624:59	Rocketsonde	-	-	Arcasonde	-	-	-	WS	-	-	-	72	-	-
1977-#1011	2443310.20	1977 Jun 15 1700:00	Rocketsonde	-	-	Arcasonde	-	-	-	SHER	-	-	-	63	-	-
1977-#1012	2443310.25	1977 Jun 15 1721:00	Rocketsonde	-	-	AI/DMP-9?	-	-	-	PH	-	-	-	62	-	-
1977-#1013	2443310.26	1977 Jun 15 1757:00	Rocketsonde	-	-	Arcasonde	-	-	-	PH	-	-	-	74	-	-
1977-#1014	2443310.26	1977 Jun 15 1920:00	Rocketsonde	-	-	Startur, Datasonde	-	-	-	PF	-	-	-	70	-	-
1977-#1015	2443310.32	1977 Jun 15 2137:59	Rocketsonde	-	-	Arcasonde	-	-	-	KAU	-	-	-	66	-	-
1977-#1016	2443310.37	1977 Jun 16 0315:00	Rocketsonde	-	-	Arcasonde	-	-	-	KR	-	-	-	77	-	-
1977-#1017	2443311.04	1977 Jun 16 1410:00	Rocketsonde	-	-	Arcasonde	-	-	-	CC	L043	-	-	67	-	-
1977-#1018	2443311.09	1977 Jun 16 1410:00	Rocketsonde	-	-	Arcasonde	-	-	-	CC	L043	-	-	67	-	-
1977-#1019	2443311.14	1977 Jun 16 1520:00	Rocketsonde	-	-	Arcasonde	-	-	-	PRIM	-	-	-	64	-	-
1977-#1020	2443311.21	1977 Jun 16 1700:00	Rocketsonde	-	-	Arcasonde	-	-	-	SHER	-	-	-	68	-	-
1977-#1021	2443311.38	1977 Jun 16 2100:00	Rocketsonde	-	-	Startur, Datasonde	-	-	-	PH	-	-	-	58	-	-
1977-#1022	2443311.47	1977 Jun 16 2315:00	Rocketsonde	-	-	Arcasonde	-	-	-	KR	-	-	-	78	-	-
1977-#1023	2443312.03	1977 Jun 17 0000:59	Rocketsonde	-	-	Arcasonde	-	-	-	SHER	-	-	-	64	-	-
1977-#1024	2443312.03	1977 Jun 17 0238:59	Rocketsonde	-	-	Arcasonde	-	-	-	SHER	-	-	-	78	-	-
1977-#1025	2443312.07	1977 Jun 17 1238:59	Rocketsonde	-	-	Arcasonde	-	-	-	SHER	-	-	-	65	-	-
1977-#1026	2443312.07	1977 Jun 17 1238:59	Rocketsonde	-	-	Arcasonde	-	-	-	ASC	-	-	-	66	-	-
1977-#1027	2443312.12	1977 Jun 17 1449:59	Rocketsonde	-	-	Arcasonde	-	-	-	CC	L043	-	-	65	-	-
1977-#1028	2443312.15	1977 Jun 17 1540:00	Rocketsonde	-	-	Arcasonde	-	-	-	CC	L043	-	-	70	-	-
1977-#1029	2443312.26	1977 Jun 17 1814:59	Rocketsonde	-	-	Arcasonde	-	-	-	PRIM	-	-	-	67	-	-
1977-#1030	2443312.26	1977 Jun 17 1814:59	Rocketsonde	-	-	Arcasonde	-	-	-	AIT	-	-	-	69	-	-
1978-#002	2443351.02	1978 Jun 3 1700:00	Rocketsonde	-	-	Arcasonde	-	-	-	NS	-	-	-	65	-	-
1978-#003	2443351.02	1978 Jun 3 1700:00	Rocketsonde	-	-	Arcasonde	-	-	-	SHER	-	-	-	62	-	-
1978-#004	2443351.02	1978 Jun 3 1859:59	Rocketsonde	-	-	Arcasonde	-	-	-	NS	-	-	-	63	-	-
1978-#005	2443351.02	1978 Jun 3 2102:59	Rocketsonde	-	-	Arcasonde	-	-	-	KAU	-	-	-	81	-	-
1978-#006	2443351.12	1978 Jun 3 2145:00	Rocketsonde	-	-	Arcasonde	-	-	-	KR	-	-	-	78	-	-
1978-#007	2443351.12	1978 Jun 4 1451:00	Rocketsonde	-	-	Arcasonde	-	-	-	THU	-	-	-	65	-	-
1978-#008	2443351.15	1978 Jun 4 1629:00	Rocketsonde	-	-	Arcasonde	-	-	-	VI	-	-	-	66	-	-
1978-#009	2443351.20	1978 Jun 4 1649:59	Rocketsonde	-	-	Arcasonde	-	-	-	PRIM	-	-	-	98	-	-
1978-#010	2443351.23	1978 Jun 4 1730:00	Rocketsonde	-	-	AI/DMP-9?	-	-	-	NS	-	-	-	65	-	-
1978-#011	2443351.23	1978 Jun 4 1730:00	Rocketsonde	-	-	Arcasonde	-	-	-	NS	-	-	-	98	-	-
1978-#012	2443351.24	1978 Jun 4 1730:00	Rocketsonde	-	-	Arcasonde	-	-	-	NS	-	-	-	77	-	-
1978-#013	2443351.38	1978 Jun 4 2100:00	Rocketsonde	-	-	Arcasonde	-	-	-	KAU	-	-	-	69	-	-
1978-#014	2443351.39	1978 Jun 4 2126:59	Rocketsonde	-	-	Startur, Datasonde	-	-	-	PF	-	-	-	62	-	-
1978-#015	2443351.40	1978 Jun 4 2130:00	Rocketsonde	-	-	Arcasonde	-	-	-	NS	-	-	-	80	-	-
1978-#016	2443351.45	1978 Jun 5 1800:00	Rocketsonde	-	-	Arcasonde	-	-	-	NS	-	-	-	66	-	-
1978-#017	2443351.45	1978 Jun 5 1800:00	Rocketsonde	-	-	Arcasonde	-	-	-	NS	-	-	-	66	-	-
1978-#018	2443351.25	1978 Jun 6 1440:00	Rocketsonde	-	-	Arcasonde	-	-	-	THU	-	-	-	68	-	-
1978-#019	2443351.15	1978 Jun 6 1530:00	Rocketsonde	-	-	Arcasonde	-	-	-	VI	-	-	-	71	-	-
1978-#020	2443351.21	1978 Jun 6 1700:00	Rocketsonde	-	-	Arcasonde	-	-	-	SHER	-	-	-	60	-	-
1978-#021	2443351.27	1978 Jun 6 1826:59	Rocketsonde	-	-	Arcasonde	-	-	-	PM	-	-	-	71	-	-
1978-#022	2443351.29	1978 Jun 6 1859:59	Rocketsonde	-	-	Arcasonde	-	-	-	NS	-	-	-	62	-	-
1978-#023	2443351.44	1978 Jun 6 2230:00	Rocketsonde	-	-	Startur, Datasonde	-	-	-	PF	-	-	-	64	-	-

Launch

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Mission	FlightCode	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee_Km	Range_Km	Dest
1978-W24	2443515.46	1978 Jan 6 2300:00	Rocketsonde	-	-	Arcasonde	-	-	-	KMR	-	-	-	73	-	-
1978-W25	2443518.15	1978 Jan 9 1537:59	Rocketsonde	-	-	Arcasonde	-	-	-	MI	-	-	-	73	-	-
1978-W26	2443518.20	1978 Jan 9 1649:59	Rocketsonde	-	-	Arcasonde	-	-	-	SHER	-	-	-	63	-	-
1978-W27	2443518.25	1978 Jan 9 1800:00	Rocketsonde	-	-	Arcasonde	-	-	-	WS	-	-	-	69	-	-
1978-W28	2443518.42	1978 Jan 9 2204:59	Rocketsonde	-	-	Arcasonde	-	-	-	PF	-	-	-	67	-	-
1978-W29	2443518.45	1978 Jan 9 2246:59	Rocketsonde	-	-	Arcasonde	-	-	-	PF	-	-	-	63	-	-
1978-W30	2443518.50	1978 Jan 9 2359:00	Rocketsonde	-	-	Arcasonde	-	-	-	KMR	-	-	-	77	-	-
1978-W31	2443519.17	1978 Jan 10 1609:59	Rocketsonde	-	-	Arcasonde	-	-	-	THU	-	-	-	66	-	-
1978-W32	2443519.25	1978 Jan 10 1800:00	Rocketsonde	-	-	Arcasonde	-	-	-	WS	-	-	-	89	-	-
1978-W33	2443520.13	1978 Jan 11 1508:00	Rocketsonde	-	-	Arcasonde	-	-	-	THU	-	-	-	64	-	-
1978-W34	2443520.16	1978 Jan 11 1555:00	Rocketsonde	-	-	Arcasonde	-	-	-	MI	-	-	-	63	-	-
1978-W35	2443520.20	1978 Jan 11 1652:59	Rocketsonde	-	-	Arcasonde	-	-	-	PRIM	-	-	-	62	-	-
1978-W36	2443520.21	1978 Jan 11 1700:00	Rocketsonde	-	-	Arcasonde	-	-	-	SHER	-	-	-	69	-	-
1978-W37	2443520.33	1978 Jan 11 2002:00	Rocketsonde	-	-	Arcasonde	-	-	-	AI/DMP-9	-	-	-	98	-	-
1978-W38	2443520.34	1978 Jan 11 2012:00	Rocketsonde	-	-	Arcasonde	-	-	-	WS	-	-	-	70	-	-
1978-W39	2443520.42	1978 Jan 11 2211:59	Rocketsonde	-	-	Arcasonde	-	-	-	PF	-	-	-	78	-	-
1978-W40	2443520.44	1978 Jan 11 2233:59	Rocketsonde	-	-	Arcasonde	-	-	-	AI/DMP-9	-	-	-	88	-	-
1978-W41	2443520.46	1978 Jan 11 2302:00	Rocketsonde	-	-	Arcasonde	-	-	-	PH	-	-	-	70	-	-
1978-W42	2443521.27	1978 Jan 12 1830:00	Rocketsonde	-	-	Arcasonde	-	-	-	KMR	-	-	-	73	-	-
1978-W43	2443521.30	1978 Jan 12 1915:59	Rocketsonde	-	-	Arcasonde	-	-	-	WS	-	-	-	67	-	-
1978-W44	2443521.41	1978 Jan 12 2152:00	Rocketsonde	-	-	Arcasonde	-	-	-	PH	-	-	-	72	-	-
1978-W45	2443522.21	1978 Jan 13 1700:00	Rocketsonde	-	-	Arcasonde	-	-	-	KAU	-	-	-	61	-	-
1978-W46	2443522.22	1978 Jan 13 1742:00	Rocketsonde	-	-	Arcasonde	-	-	-	SHER	-	-	-	67	-	-
1978-W47	2443522.34	1978 Jan 13 2003:59	Rocketsonde	-	-	Arcasonde	-	-	-	PRIM	-	-	-	68	-	-
1978-W48	2443522.36	1978 Jan 13 2040:00	Rocketsonde	-	-	Arcasonde	-	-	-	PH	-	-	-	70	-	-
1978-W49	2443522.41	1978 Jan 13 2147:59	Rocketsonde	-	-	Arcasonde	-	-	-	WS	-	-	-	89	-	-
1978-W50	2443522.56	1978 Jan 14 0122:59	Rocketsonde	-	-	Arcasonde	-	-	-	PF	-	-	-	65	-	-
1978-W51	2443525.09	1978 Jan 16 1410:00	Rocketsonde	-	-	Arcasonde	-	-	-	KMR	-	-	-	79	-	-
1978-W52	2443525.19	1978 Jan 16 1630:00	Rocketsonde	-	-	Arcasonde	-	-	-	SHER	-	-	-	62	-	-
1978-W53	2443525.35	1978 Jan 16 1955:59	Rocketsonde	-	-	Arcasonde	-	-	-	PRIM	-	-	-	67	-	-
1978-W54	2443525.42	1978 Jan 16 2159:59	Rocketsonde	-	-	Arcasonde	-	-	-	WS	-	-	-	63	-	-
1978-W55	2443525.56	1978 Jan 17 0129:00	Rocketsonde	-	-	Arcasonde	-	-	-	PF	-	-	-	66	-	-
1978-W56	2443526.08	1978 Jan 17 1354:59	Rocketsonde	-	-	Arcasonde	-	-	-	KMR	-	-	-	69	-	-
1978-W57	2443526.19	1978 Jan 17 1626:59	Rocketsonde	-	-	Arcasonde	-	-	-	WS	-	-	-	70	-	-
1978-W58	2443526.27	1978 Jan 17 1830:00	Rocketsonde	-	-	Arcasonde	-	-	-	PH	-	-	-	65	-	-
1978-W59	2443527.16	1978 Jan 18 1502:00	Rocketsonde	-	-	Arcasonde	-	-	-	WS	-	-	-	69	-	-
1978-W60	2443527.20	1978 Jan 18 1649:59	Rocketsonde	-	-	Arcasonde	-	-	-	PRIM	-	-	-	69	-	-
1978-W61	2443527.21	1978 Jan 18 1700:00	Rocketsonde	-	-	Arcasonde	-	-	-	SHER	-	-	-	57	-	-
1978-W62	2443527.22	1978 Jan 18 1711:00	Rocketsonde	-	-	Arcasonde	-	-	-	WS	-	-	-	89	-	-
1978-W63	2443527.29	1978 Jan 18 1809:59	Rocketsonde	-	-	Arcasonde	-	-	-	AI/DMP-9	-	-	-	72	-	-
1978-W64	2443527.37	1978 Jan 18 1909:59	Rocketsonde	-	-	Arcasonde	-	-	-	AI/DMP-9	-	-	-	69	-	-
1978-W65	2443527.38	1978 Jan 18 2004:00	Rocketsonde	-	-	Arcasonde	-	-	-	KAU	-	-	-	72	-	-
1978-W66	2443527.56	1978 Jan 18 2110:00	Rocketsonde	-	-	Arcasonde	-	-	-	PH	-	-	-	69	-	-
1978-W67	2443528.10	1978 Jan 19 1925:59	Rocketsonde	-	-	Arcasonde	-	-	-	KMR	-	-	-	72	-	-
1978-W68	2443528.14	1978 Jan 19 2134:00	Rocketsonde	-	-	Arcasonde	-	-	-	KMR	-	-	-	67	-	-
1978-W69	2443528.14	1978 Jan 19 2134:00	Rocketsonde	-	-	Arcasonde	-	-	-	THU	-	-	-	67	-	-
1978-W70	2443529.11	1978 Jan 20 1700:00	Rocketsonde	-	-	Arcasonde	-	-	-	SHER	-	-	-	65	-	-
1978-W71	2443529.21	1978 Jan 20 1700:00	Rocketsonde	-	-	Arcasonde	-	-	-	WS	-	-	-	67	-	-
1978-W72	2443529.26	1978 Jan 20 2130:00	Rocketsonde	-	-	Arcasonde	-	-	-	PH	-	-	-	72	-	-
1978-W73	2443529.35	1978 Jan 20 2130:00	Rocketsonde	-	-	Arcasonde	-	-	-	WS	-	-	-	60	-	-
1978-W74	2443529.36	1978 Jan 20 2130:00	Rocketsonde	-	-	Arcasonde	-	-	-	KAU	-	-	-	59	-	-
1978-W75	2443529.37	1978 Jan 22 1340:00	Rocketsonde	-	-	Arcasonde	-	-	-	WS	-	-	-	60	-	-
1978-W76	2443531.07	1978 Jan 22 1447:00	Rocketsonde	-	-	Arcasonde	-	-	-	THU	-	-	-	63	-	-
1978-W77	2443532.12	1978 Jan 23 1700:00	Rocketsonde	-	-	Arcasonde	-	-	-	SHER	-	-	-	72	-	-
1978-W78	2443532.21	1978 Jan 23 1703:00	Rocketsonde	-	-	Arcasonde	-	-	-	PH	-	-	-	62	-	-
1978-W79	2443532.24	1978 Jan 23 1859:59	Rocketsonde	-	-	Arcasonde	-	-	-	WS	-	-	-	66	-	-
1978-W80	2443532.29	1978 Jan 23 2030:00	Rocketsonde	-	-	Arcasonde	-	-	-	PF	-	-	-	65	-	-
1978-W81	2443532.35	1978 Jan 23 2038:00	Rocketsonde	-	-	Arcasonde	-	-	-	PF	-	-	-	61	-	-
1978-W82	2443532.37	1978 Jan 23 2058:00	Rocketsonde	-	-	Arcasonde	-	-	-	KAU	-	-	-	81	-	-
1978-W83	2443533.34	1978 Jan 24 2009:00	Rocketsonde	-	-	Arcasonde	-	-	-	PM	-	-	-	73	-	-
1978-W84	2443533.34	1978 Jan 24 2030:00	Rocketsonde	-	-	Arcasonde	-	-	-	WS	-	-	-	66	-	-
1978-W85	2443533.50	1978 Jan 24 2357:00	Rocketsonde	-	-	Arcasonde	-	-	-	THU	-	-	-	71	-	-
1978-W86	2443534.13	1978 Jan 25 1503:59	Rocketsonde	-	-	Arcasonde	-	-	-	KMR	-	-	-	66	-	-
1978-W87	2443534.15	1978 Jan 25 1533:00	Rocketsonde	-	-	Arcasonde	-	-	-	MI	-	-	-	69	-	-
1978-W88	2443534.18	1978 Jan 25 1620:59	Rocketsonde	-	-	Arcasonde	-	-	-	PM	-	-	-	86	-	-
1978-W89	2443534.19	1978 Jan 25 1636:59	Rocketsonde	-	-	Arcasonde	-	-	-	AI/DMP-9	-	-	-	70	-	-
1978-W90	2443534.20	1978 Jan 25 1645:59	Rocketsonde	-	-	Arcasonde	-	-	-	PRIM	-	-	-	73	-	-
1978-W91	2443534.21	1978 Jan 25 1700:00	Rocketsonde	-	-	Arcasonde	-	-	-	WS	-	-	-	63	-	-
1978-W92	2443534.26	1978 Jan 25 1814:59	Rocketsonde	-	-	Arcasonde	-	-	-	SHER	-	-	-	98	-	-
1978-W93	2443534.27	1978 Jan 25 1824:59	Rocketsonde	-	-	Arcasonde	-	-	-	WS	-	-	-	63	-	-
1978-W94	2443534.38	1978 Jan 25 2108:00	Rocketsonde	-	-	Arcasonde	-	-	-	KAU	-	-	-	81	-	-
1978-W95	2443534.42	1978 Jan 25 2207:00	Rocketsonde	-	-	Arcasonde	-	-	-	PF	-	-	-	64	-	-
1978-W96	2443534.55	1978 Jan 26 0114:59	Rocketsonde	-	-	Arcasonde	-	-	-	KMR	-	-	-	71	-	-
1978-W97	2443535.18	1978 Jan 26 1618:59	Rocketsonde	-	-	Arcasonde	-	-	-	PM	-	-	-	72	-	-
1978-W98	2443535.25	1978 Jan 26 1800:00	Rocketsonde	-	-	Arcasonde	-	-	-	WS	-	-	-	44	-	-
1978-W99	2443536.13	1978 Jan 27 1512:59	Rocketsonde	-	-	Arcasonde	-	-	-	THU	-	-	-	66	-	-
1978-W100	2443536.20	1978 Jan 27 1644:59	Rocketsonde	-	-	Arcasonde	-	-	-	SHER	-	-	-	66	-	-
1978-W101	2443536.29	1978 Jan 27 1649:59	Rocketsonde	-	-	Arcasonde	-	-	-	THU	-	-	-	46	-	-
1978-W102	2443536.38	1978 Jan 27 2111:00	Rocketsonde	-	-	Arcasonde	-	-	-	PRIM	-	-	-	60	-	-
1978-W103	2443536.38	1978 Jan 27 2111:00	Rocketsonde	-	-	Arcasonde	-	-	-	WS	-	-	-	49	-	-
1978-W104	2443536.38	1978 Jan 27 2111:00	Rocketsonde	-	-	Arcasonde	-	-	-	PF	-	-	-	60	-	-
1978-W105	2443536.40	1978 Jan 30 1429:00	Rocketsonde	-	-	Arcasonde	-	-	-	KAU	-	-	-	81	-	-
1978-W106	2443539.10	1978 Jan 30 1559:59	Rocketsonde	-	-	Arcasonde	-	-	-	KMR	-	-	-	67	-	-
1978-W107	2443539.17	1978 Jan 30 1644:59	Rocketsonde	-	-	Arcasonde	-	-	-	THU	-	-	-	67	-	-
1978-W108	2443539.20	1978 Jan 30 1644:59	Rocketsonde	-	-	Arcasonde	-	-	-	PRIM	-	-	-	70	-	-

Launch

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Mission	FlightCode	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee_Km	Range_Km	Dest
1978-W111	2443559.20	1978 Jan 30 1649:59	Rocketsonde	-	-	Arcasonde	-	-	-	PH	-	-	-	72	-	-
1978-W112	2443559.21	1978 Jan 30 1700:00	Rocketsonde	-	-	Arcasonde	-	-	-	SHER	-	-	-	58	-	-
1978-W113	2443559.43	1978 Jan 30 2222:59	Rocketsonde	-	-	Arcasonde	-	-	-	KAU	-	-	-	59	-	-
1978-W477	2443559.55	1978 Jan 31 01:18:00	Rocketsonde	-	-	Arcasonde	-	-	-	KHR	-	-	-	56	-	-
1978-W114	2443559.62	1978 Jan 31 03:00:00	Rocketsonde	-	-	Arcasonde	-	-	-	PF	-	-	-	67	-	-
1978-W115	2443540.07	1978 Jan 31 13:40:00	Rocketsonde	-	-	Arcasonde	-	-	-	WS	-	-	-	60	-	-
1978-W117	2443541.15	1978 Feb 1 15:33:00	Rocketsonde	-	-	Arcasonde	-	-	-	WS	-	-	-	72	-	-
1978-W119	2443541.15	1978 Feb 1 15:33:00	Rocketsonde	-	-	Arcasonde	-	-	-	MI	-	-	-	63	-	-
1978-W120	2443541.20	1978 Feb 1 16:45:59	Rocketsonde	-	-	Arcasonde	-	-	-	SHER	-	-	-	69	-	-
1978-W121	2443541.21	1978 Feb 1 17:00:00	Rocketsonde	-	-	Arcasonde	-	-	-	THU	-	-	-	69	-	-
1978-W122	2443541.21	1978 Feb 1 17:00:00	Rocketsonde	-	-	Arcasonde	-	-	-	PH	-	-	-	70	-	-
1978-W123	2443541.31	1978 Feb 1 19:30:00	Rocketsonde	-	-	Arcasonde	-	-	-	PRIM	-	-	-	98	-	-
1978-W124	2443541.34	1978 Feb 1 20:07:00	Rocketsonde	-	-	Arcasonde	-	-	-	WS	-	-	-	69	-	-
1978-W125	2443541.35	1978 Feb 1 20:17:00	Rocketsonde	-	-	Arcasonde	-	-	-	WS	-	-	-	56	-	-
1978-W126	2443542.25	1978 Feb 2 18:06:00	Rocketsonde	-	-	Arcasonde	-	-	-	WS	-	-	-	67	-	-
1978-W129	2443543.13	1978 Feb 3 15:03:59	Rocketsonde	-	-	Arcasonde	-	-	-	THU	-	-	-	68	-	-
1978-W130	2443543.15	1978 Feb 3 15:43:00	Rocketsonde	-	-	Arcasonde	-	-	-	MI	-	-	-	68	-	-
1978-W131	2443543.19	1978 Feb 3 16:30:00	Rocketsonde	-	-	Arcasonde	-	-	-	WS	-	-	-	65	-	-
1978-W132	2443543.21	1978 Feb 3 17:00:00	Rocketsonde	-	-	Arcasonde	-	-	-	SHER	-	-	-	58	-	-
1978-W133	2443543.35	1978 Feb 3 20:24:00	Rocketsonde	-	-	Arcasonde	-	-	-	PH	-	-	-	73	-	-
1978-W134	2443543.37	1978 Feb 3 20:51:00	Rocketsonde	-	-	Arcasonde	-	-	-	KHR	-	-	-	68	-	-
1978-W135	2443543.55	1978 Feb 4 01:14:59	Rocketsonde	-	-	Arcasonde	-	-	-	THU	-	-	-	65	-	-
1978-W136	2443546.12	1978 Feb 6 14:52:00	Rocketsonde	-	-	Arcasonde	-	-	-	WS	-	-	-	71	-	-
1978-W138	2443546.17	1978 Feb 6 15:21:00	Rocketsonde	-	-	Arcasonde	-	-	-	MI	-	-	-	56	-	-
1978-W139	2443546.17	1978 Feb 6 15:21:00	Rocketsonde	-	-	Arcasonde	-	-	-	PRIM	-	-	-	59	-	-
1978-W138	2443546.17	1978 Feb 6 15:21:00	Rocketsonde	-	-	Arcasonde	-	-	-	SHER	-	-	-	61	-	-
1978-W139	2443546.20	1978 Feb 6 16:46:59	Rocketsonde	-	-	Arcasonde	-	-	-	THU	-	-	-	68	-	-
1978-W140	2443546.20	1978 Feb 6 16:46:59	Rocketsonde	-	-	Arcasonde	-	-	-	WS	-	-	-	55	-	-
1978-W141	2443546.30	1978 Feb 6 19:04:59	Rocketsonde	-	-	Arcasonde	-	-	-	KAU	-	-	-	70	-	-
1978-W142	2443546.37	1978 Feb 6 20:55:00	Rocketsonde	-	-	Arcasonde	-	-	-	PH	-	-	-	66	-	-
1978-W143	2443547.29	1978 Feb 7 18:02:59	Rocketsonde	-	-	Arcasonde	-	-	-	WS	-	-	-	68	-	-
1978-W144	2443547.29	1978 Feb 7 18:02:59	Rocketsonde	-	-	Arcasonde	-	-	-	THU	-	-	-	73	-	-
1978-W146	2443548.15	1978 Feb 8 15:31:00	Rocketsonde	-	-	Arcasonde	-	-	-	MI	-	-	-	86	-	-
1978-W163	2443548.19	1978 Feb 8 16:34:59	Rocketsonde	-	-	Arcasonde	-	-	-	WS	-	-	-	67	-	-
1978-W160	2443548.20	1978 Feb 8 16:44:59	Rocketsonde	-	-	Arcasonde	-	-	-	PH	-	-	-	73	-	-
1978-W151	2443548.20	1978 Feb 8 16:44:59	Rocketsonde	-	-	Arcasonde	-	-	-	WS	-	-	-	70	-	-
1978-W152	2443548.21	1978 Feb 8 17:00:00	Rocketsonde	-	-	Arcasonde	-	-	-	PRIM	-	-	-	65	-	-
1978-W153	2443548.21	1978 Feb 8 17:00:00	Rocketsonde	-	-	Arcasonde	-	-	-	SHER	-	-	-	70	-	-
1978-W155	2443548.21	1978 Feb 8 17:00:00	Rocketsonde	-	-	Arcasonde	-	-	-	THU	-	-	-	65	-	-
1978-W164	2443548.38	1978 Feb 8 21:02:59	Rocketsonde	-	-	Arcasonde	-	-	-	KAU	-	-	-	72	-	-
1978-W154	2443548.40	1978 Feb 8 21:50:00	Rocketsonde	-	-	Arcasonde	-	-	-	WS	-	-	-	71	-	-
1978-W156	2443549.29	1978 Feb 9 18:53:59	Rocketsonde	-	-	Arcasonde	-	-	-	KHR	-	-	-	79	-	-
1978-W157	2443549.41	1978 Feb 9 21:49:59	Rocketsonde	-	-	Arcasonde	-	-	-	KAU	-	-	-	57	-	-
1978-W158	2443549.42	1978 Feb 9 22:15:59	Rocketsonde	-	-	Arcasonde	-	-	-	THU	-	-	-	64	-	-
1978-W162	2443550.14	1978 Feb 10 15:15:59	Rocketsonde	-	-	Arcasonde	-	-	-	PRIM	-	-	-	65	-	-
1978-W162	2443550.20	1978 Feb 10 15:04:59	Rocketsonde	-	-	Arcasonde	-	-	-	SHER	-	-	-	64	-	-
1978-W163	2443550.21	1978 Feb 10 17:00:00	Rocketsonde	-	-	Arcasonde	-	-	-	THU	-	-	-	64	-	-
1978-W164	2443550.23	1978 Feb 10 18:09:59	Rocketsonde	-	-	Arcasonde	-	-	-	WS	-	-	-	64	-	-
1978-W165	2443550.23	1978 Feb 10 18:09:59	Rocketsonde	-	-	Arcasonde	-	-	-	THU	-	-	-	64	-	-
1978-W167	2443553.21	1978 Feb 13 17:07:00	Rocketsonde	-	-	Arcasonde	-	-	-	SHER	-	-	-	65	-	-
1978-W168	2443553.23	1978 Feb 13 20:00:00	Rocketsonde	-	-	Arcasonde	-	-	-	WS	-	-	-	66	-	-
1978-W169	2443553.23	1978 Feb 13 20:00:00	Rocketsonde	-	-	Arcasonde	-	-	-	PRIM	-	-	-	78	-	-
1978-W170	2443553.23	1978 Feb 13 21:14:59	Rocketsonde	-	-	Arcasonde	-	-	-	KHR	-	-	-	67	-	-
1978-W171	2443553.23	1978 Feb 13 21:14:59	Rocketsonde	-	-	Arcasonde	-	-	-	WS	-	-	-	71	-	-
1978-W172	2443554.17	1978 Feb 14 15:59:59	Rocketsonde	-	-	Arcasonde	-	-	-	PH	-	-	-	56	-	-
1978-W173	2443554.25	1978 Feb 14 17:54:00	Rocketsonde	-	-	Arcasonde	-	-	-	KAU	-	-	-	69	-	-
1978-W174	2443554.25	1978 Feb 14 22:10:59	Rocketsonde	-	-	Arcasonde	-	-	-	THU	-	-	-	69	-	-
1978-W177	2443555.13	1978 Feb 15 15:01:59	Rocketsonde	-	-	Arcasonde	-	-	-	MI	-	-	-	69	-	-
1978-W178	2443555.15	1978 Feb 15 15:38:59	Rocketsonde	-	-	Arcasonde	-	-	-	THU	-	-	-	69	-	-
1978-W180	2443555.19	1978 Feb 15 16:40:00	Rocketsonde	-	-	Arcasonde	-	-	-	WS	-	-	-	69	-	-
1978-W181	2443555.21	1978 Feb 15 16:55:59	Rocketsonde	-	-	Arcasonde	-	-	-	PRIM	-	-	-	69	-	-
1978-W182	2443555.21	1978 Feb 15 16:55:59	Rocketsonde	-	-	Arcasonde	-	-	-	WS	-	-	-	52	-	-
1978-W183	2443555.23	1978 Feb 15 17:00:00	Rocketsonde	-	-	Arcasonde	-	-	-	SHER	-	-	-	52	-	-
1978-W185	2443555.29	1978 Feb 15 18:59:59	Rocketsonde	-	-	Arcasonde	-	-	-	WS	-	-	-	64	-	-
1978-W186	2443555.30	1978 Feb 15 19:09:59	Rocketsonde	-	-	Arcasonde	-	-	-	WS	-	-	-	77	-	-
1978-W187	2443555.37	1978 Feb 16 01:34:59	Rocketsonde	-	-	Arcasonde	-	-	-	KHR	-	-	-	69	-	-
1978-W188	2443556.17	1978 Feb 16 15:59:59	Rocketsonde	-	-	Arcasonde	-	-	-	MI	-	-	-	62	-	-
1978-W190	2443556.17	1978 Feb 16 16:27:59	Rocketsonde	-	-	Arcasonde	-	-	-	WS	-	-	-	63	-	-
1978-W191	2443556.20	1978 Feb 16 16:27:59	Rocketsonde	-	-	Arcasonde	-	-	-	PRIM	-	-	-	79	-	-
1978-W194	2443556.50	1978 Feb 17 00:02:59	Rocketsonde	-	-	Arcasonde	-	-	-	KHR	-	-	-	66	-	-
1978-W195	2443557.14	1978 Feb 17 15:27:59	Rocketsonde	-	-	Arcasonde	-	-	-	THU	-	-	-	69	-	-
1978-W196	2443557.14	1978 Feb 17 15:27:59	Rocketsonde	-	-	Arcasonde	-	-	-	MI	-	-	-	46	-	-
1978-W197	2443557.19	1978 Feb 17 16:30:00	Rocketsonde	-	-	Arcasonde	-	-	-	WS	-	-	-	72	-	-
1978-W198	2443557.21	1978 Feb 17 16:51:00	Rocketsonde	-	-	Arcasonde	-	-	-	PM	-	-	-	63	-	-
1978-W199	2443558.15	1978 Feb 18 15:33:00	Rocketsonde	-	-	Arcasonde	-	-	-	SHER	-	-	-	68	-	-
1978-W200	2443558.50	1978 Feb 18 15:33:00	Rocketsonde	-	-	Arcasonde	-	-	-	MI	-	-	-	79	-	-
1978-W201	2443559.14	1978 Feb 19 00:00:59	Rocketsonde	-	-	Arcasonde	-	-	-	KHR	-	-	-	63	-	-
1978-W202	2443559.14	1978 Feb 19 15:14:59	Rocketsonde	-	-	Arcasonde	-	-	-	MI	-	-	-	77	-	-
1978-W203	2443560.11	1978 Feb 20 00:00:59	Rocketsonde	-	-	Arcasonde	-	-	-	KHR	-	-	-	65	-	-
1978-W204	2443560.16	1978 Feb 20 14:32:00	Rocketsonde	-	-	Arcasonde	-	-	-	THU	-	-	-	67	-	-
1978-W205	2443560.20	1978 Feb 20 15:48:59	Rocketsonde	-	-	Arcasonde	-	-	-	MI	-	-	-	65	-	-
1978-W206	2443560.20	1978 Feb 20 16:43:59	Rocketsonde	-	-	Arcasonde	-	-	-	PRIM	-	-	-	69	-	-
1978-W76	2443560.50	1978 Feb 21 00:00:59	Rocketsonde	-	-	Arcasonde	-	-	-	KHR	-	-	-	80	-	-
1978-W207	2443561.07	1978 Feb 21 13:40:00	Rocketsonde	-	-	Arcasonde	-	-	-	WS	-	-	-	64	-	-
1978-W208	2443561.17	1978 Feb 21 16:02:59	Rocketsonde	-	-	Arcasonde	-	-	-	MI	-	-	-	70	-	-
1978-W209	2443561.19	1978 Feb 21 16:30:00	Rocketsonde	-	-	Arcasonde	-	-	-	PRIM	-	-	-	67	-	-
1978-W210	2443561.21	1978 Feb 21 17:00:00	Rocketsonde	-	-	Arcasonde	-	-	-	SHER	-	-	-	59	-	-
1978-W211	2443561.23	1978 Feb 21 17:24:00	Rocketsonde	-	-	Arcasonde	-	-	-	PM	-	-	-	70	-	-



Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Mission	FlightCode	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee_Km	Range_Km	Dest
1978-4212	2443561.29	1978 Feb 21 1859:59	Rocketsonde	-	-	Arcasonde	-	-	-	WS	-	-	-	62	-	-
1978-4213	2443561.37	1978 Feb 21 2048:59	Rocketsonde	-	-	Arcasonde	-	-	-	KAU	-	-	-	57	-	-
1978-4214	2443561.50	1978 Feb 22 0000:59	Rocketsonde	-	-	Arcasonde	-	-	-	KMR	-	-	-	80	-	-
1978-4215	2443561.13	1978 Feb 22 1502:59	Rocketsonde	-	-	Arcasonde	-	-	-	THU	-	-	-	63	-	-
1978-4216	2443562.15	1978 Feb 22 1541:00	Rocketsonde	-	-	Arcasonde	-	-	-	WI	-	-	-	66	-	-
1978-4217	2443562.17	1978 Feb 22 1604:59	Rocketsonde	-	-	Arcasonde	-	-	-	AI/DMP-9	-	-	-	98	-	-
1978-4218	2443562.18	1978 Feb 22 1614:59	Rocketsonde	-	-	Arcasonde	-	-	-	WS	-	-	-	66	-	-
1978-4219	2443562.19	1978 Feb 22 1630:59	Rocketsonde	-	-	Arcasonde	-	-	-	PRIM	-	-	-	70	-	-
1978-4220	2443562.20	1978 Feb 22 1651:00	Rocketsonde	-	-	Arcasonde	-	-	-	PH	-	-	-	70	-	-
1978-4221	2443562.21	1978 Feb 22 1748:00	Rocketsonde	-	-	Arcasonde	-	-	-	SHER	-	-	-	63	-	-
1978-4222	2443562.24	1978 Feb 23 0000:59	Rocketsonde	-	-	Arcasonde	-	-	-	PH	-	-	-	58	-	-
1978-4223	2443562.50	1978 Feb 23 0000:59	Rocketsonde	-	-	Arcasonde	-	-	-	KMR	-	-	-	69	-	-
1978-4224	2443563.15	1978 Feb 23 1543:00	Rocketsonde	-	-	Arcasonde	-	-	-	WI	-	-	-	73	-	-
1978-4225	2443563.21	1978 Feb 23 1703:59	Rocketsonde	-	-	Arcasonde	-	-	-	PRIM	-	-	-	70	-	-
1978-4226	2443563.25	1978 Feb 23 1800:00	Rocketsonde	-	-	Arcasonde	-	-	-	WS	-	-	-	60	-	-
1978-4227	2443563.38	1978 Feb 23 2100:00	Rocketsonde	-	-	Arcasonde	-	-	-	KAU	-	-	-	66	-	-
1978-4228	2443563.42	1978 Feb 24 0000:59	Rocketsonde	-	-	Arcasonde	-	-	-	PH	-	-	-	66	-	-
1978-4229	2443563.50	1978 Feb 24 0000:59	Rocketsonde	-	-	Arcasonde	-	-	-	KMR	-	-	-	78	-	-
1978-4230	2443564.15	1978 Feb 24 1529:00	Rocketsonde	-	-	Arcasonde	-	-	-	WI	-	-	-	58	-	-
1978-4231	2443564.18	1978 Feb 24 1624:59	Rocketsonde	-	-	Arcasonde	-	-	-	WS	-	-	-	65	-	-
1978-4232	2443564.19	1978 Feb 24 1630:00	Rocketsonde	-	-	Arcasonde	-	-	-	SHER	-	-	-	53	-	-
1978-4233	2443564.20	1978 Feb 24 1654:59	Rocketsonde	-	-	Arcasonde	-	-	-	PRIM	-	-	-	69	-	-
1978-4234	2443564.21	1978 Feb 24 1703:00	Rocketsonde	-	-	Arcasonde	-	-	-	KMR	-	-	-	91	-	-
1978-4235	2443564.50	1978 Feb 25 0000:59	Rocketsonde	-	-	Arcasonde	-	-	-	WI	-	-	-	71	-	-
1978-4236	2443565.15	1978 Feb 25 1529:00	Rocketsonde	-	-	Arcasonde	-	-	-	WS	-	-	-	64	-	-
1978-4237	2443565.56	1978 Feb 26 0130:59	Rocketsonde	-	-	Arcasonde	-	-	-	KMR	-	-	-	64	-	-
1978-4238	2443566.15	1978 Feb 26 1532:00	Rocketsonde	-	-	Arcasonde	-	-	-	WI	-	-	-	64	-	-
1978-4239	2443566.50	1978 Feb 27 0000:59	Rocketsonde	-	-	Arcasonde	-	-	-	WS	-	-	-	64	-	-
1978-4240	2443566.57	1978 Feb 27 1614:59	Rocketsonde	-	-	Arcasonde	-	-	-	KMR	-	-	-	64	-	-
1978-4241	2443567.18	1978 Feb 27 1700:00	Rocketsonde	-	-	Arcasonde	-	-	-	WS	-	-	-	64	-	-
1978-4242	2443567.21	1978 Feb 27 1830:00	Rocketsonde	-	-	Arcasonde	-	-	-	SHER	-	-	-	94	-	-
1978-4243	2443567.27	1978 Feb 27 1930:00	Rocketsonde	-	-	Arcasonde	-	-	-	WI	-	-	-	74	-	-
1978-4244	2443567.31	1978 Feb 27 1930:00	Rocketsonde	-	-	Arcasonde	-	-	-	PRIM	-	-	-	62	-	-
1978-4245	2443567.42	1978 Feb 27 2159:59	Rocketsonde	-	-	Arcasonde	-	-	-	KAU	-	-	-	55	-	-
1978-4246	2443567.95	1978 Feb 28 0113:59	Rocketsonde	-	-	Arcasonde	-	-	-	KMR	-	-	-	91	-	-
1978-4247	2443568.15	1978 Feb 28 1859:59	Rocketsonde	-	-	Arcasonde	-	-	-	WS	-	-	-	65	-	-
1978-4248	2443568.29	1978 Feb 28 1859:59	Rocketsonde	-	-	Arcasonde	-	-	-	KMR	-	-	-	71	-	-
1978-4249	2443568.51	1978 Feb 28 1922:59	Rocketsonde	-	-	Arcasonde	-	-	-	PH	-	-	-	71	-	-
1978-4250	2443568.57	1978 Feb 28 1922:59	Rocketsonde	-	-	Arcasonde	-	-	-	KMR	-	-	-	64	-	-
1978-4251	2443569.15	1978 Feb 28 1922:59	Rocketsonde	-	-	Arcasonde	-	-	-	THU	-	-	-	64	-	-
1978-4252	2443569.15	1978 Feb 28 1922:59	Rocketsonde	-	-	Arcasonde	-	-	-	PRIM	-	-	-	62	-	-
1978-4253	2443569.20	1978 Feb 28 1922:59	Rocketsonde	-	-	Arcasonde	-	-	-	SHER	-	-	-	70	-	-
1978-4254	2443569.21	1978 Feb 28 1922:59	Rocketsonde	-	-	Arcasonde	-	-	-	WS	-	-	-	68	-	-
1978-4255	2443569.29	1978 Feb 28 1922:59	Rocketsonde	-	-	Arcasonde	-	-	-	WS	-	-	-	68	-	-
1978-4256	2443569.56	1978 Feb 28 1922:59	Rocketsonde	-	-	Arcasonde	-	-	-	KMR	-	-	-	69	-	-
1978-4257	2443569.56	1978 Feb 28 1922:59	Rocketsonde	-	-	Arcasonde	-	-	-	THU	-	-	-	71	-	-
1978-4258	2443571.11	1978 Feb 28 1922:59	Rocketsonde	-	-	Arcasonde	-	-	-	KMR	-	-	-	66	-	-
1978-4259	2443571.11	1978 Feb 28 1922:59	Rocketsonde	-	-	Arcasonde	-	-	-	THU	-	-	-	66	-	-
1978-4260	2443571.11	1978 Feb 28 1922:59	Rocketsonde	-	-	Arcasonde	-	-	-	PRIM	-	-	-	66	-	-
1978-4261	2443571.21	1978 Feb 28 1922:59	Rocketsonde	-	-	Arcasonde	-	-	-	SHER	-	-	-	68	-	-
1978-4262	2443571.25	1978 Feb 28 1922:59	Rocketsonde	-	-	Arcasonde	-	-	-	WS	-	-	-	69	-	-
1978-4263	2443571.37	1978 Feb 28 1922:59	Rocketsonde	-	-	Arcasonde	-	-	-	PH	-	-	-	71	-	-
1978-4264	2443571.44	1978 Feb 28 1922:59	Rocketsonde	-	-	Arcasonde	-	-	-	KMR	-	-	-	77	-	-
1978-4265	2443571.55	1978 Feb 28 1922:59	Rocketsonde	-	-	Arcasonde	-	-	-	THU	-	-	-	67	-	-
1978-4266	2443571.94	1978 Feb 28 1922:59	Rocketsonde	-	-	Arcasonde	-	-	-	WS	-	-	-	67	-	-
1978-4267	2443574.19	1978 Feb 28 1922:59	Rocketsonde	-	-	Arcasonde	-	-	-	KMR	-	-	-	67	-	-
1978-4268	2443574.21	1978 Feb 28 1922:59	Rocketsonde	-	-	Arcasonde	-	-	-	SHER	-	-	-	57	-	-
1978-4269	2443574.31	1978 Feb 28 1922:59	Rocketsonde	-	-	Arcasonde	-	-	-	WS	-	-	-	70	-	-
1978-4270	2443574.53	1978 Feb 28 1922:59	Rocketsonde	-	-	Arcasonde	-	-	-	PRIM	-	-	-	48	-	-
1978-4271	2443574.53	1978 Feb 28 1922:59	Rocketsonde	-	-	Arcasonde	-	-	-	SHER	-	-	-	80	-	-
1978-4272	2443574.54	1978 Feb 28 1922:59	Rocketsonde	-	-	Arcasonde	-	-	-	KMR	-	-	-	58	-	-
1978-4273	2443575.54	1978 Feb 28 1922:59	Rocketsonde	-	-	Arcasonde	-	-	-	SHER	-	-	-	58	-	-
1978-4274	2443576.12	1978 Feb 28 1922:59	Rocketsonde	-	-	Arcasonde	-	-	-	THU	-	-	-	66	-	-
1978-4275	2443576.15	1978 Feb 28 1922:59	Rocketsonde	-	-	Arcasonde	-	-	-	WI	-	-	-	66	-	-
1978-4276	2443576.21	1978 Feb 28 1922:59	Rocketsonde	-	-	Arcasonde	-	-	-	WS	-	-	-	63	-	-
1978-4277	2443576.21	1978 Feb 28 1922:59	Rocketsonde	-	-	Arcasonde	-	-	-	SHER	-	-	-	69	-	-
1978-4278	2443576.23	1978 Feb 28 1922:59	Rocketsonde	-	-	Arcasonde	-	-	-	PRIM	-	-	-	69	-	-
1978-4279	2443576.24	1978 Feb 28 1922:59	Rocketsonde	-	-	Arcasonde	-	-	-	WS	-	-	-	71	-	-
1978-4280	2443576.27	1978 Feb 28 1922:59	Rocketsonde	-	-	Arcasonde	-	-	-	PH	-	-	-	63	-	-
1978-4281	2443576.27	1978 Feb 28 1922:59	Rocketsonde	-	-	Arcasonde	-	-	-	KMR	-	-	-	62	-	-
1978-4282	2443576.31	1978 Feb 28 1922:59	Rocketsonde	-	-	Arcasonde	-	-	-	PM	-	-	-	69	-	-
1978-4283	2443576.31	1978 Feb 28 1922:59	Rocketsonde	-	-	Arcasonde	-	-	-	PM	-	-	-	70	-	-
1978-4284	2443576.37	1978 Feb 28 1922:59	Rocketsonde	-	-	Arcasonde	-	-	-	PM	-	-	-	70	-	-
1978-4285	2443576.40	1978 Feb 28 1922:59	Rocketsonde	-	-	Arcasonde	-	-	-	KAU	-	-	-	74	-	-
1978-4286	2443576.42	1978 Feb 28 1922:59	Rocketsonde	-	-	Arcasonde	-	-	-	KAU	-	-	-	76	-	-
1978-4287	2443576.42	1978 Feb 28 1922:59	Rocketsonde	-	-	Arcasonde	-	-	-	KMR	-	-	-	76	-	-
1978-4288	2443576.42	1978 Feb 28 1922:59	Rocketsonde	-	-	Arcasonde	-	-	-	WS	-	-	-	50	-	-
1978-4289	2443576.42	1978 Feb 28 1922:59	Rocketsonde	-	-	Arcasonde	-	-	-	SHER	-	-	-	64	-	-
1978-4290	2443576.42	1978 Feb 28 1922:59	Rocketsonde	-	-	Arcasonde	-	-	-	THU	-	-	-	69	-	-
1978-4291	2443576.53	1978 Feb 28 1922:59	Rocketsonde	-	-	Arcasonde	-	-	-	WS	-	-	-	67	-	-
1978-4292	2443576.53	1978 Feb 28 1922:59	Rocketsonde	-	-	Arcasonde	-	-	-	THU	-	-	-	57	-	-
1978-4293	2443576.53	1978 Feb 28 1922:59	Rocketsonde	-	-	Arcasonde	-	-	-	WS	-	-	-	67	-	-
1978-4294	2443576.58	1978 Feb 28 1922:59	Rocketsonde	-	-	Arcasonde	-	-	-	PM	-	-	-	64	-	-
1978-4295	2443576.58	1978 Feb 28 1922:59	Rocketsonde	-	-	Arcasonde	-	-	-	PM	-	-	-	64	-	-
1978-4296	2443576.58	1978 Feb 28 1922:59	Rocketsonde	-	-	Arcasonde	-	-	-	PM	-	-	-	62	-	-
1978-4297	2443576.58	1978 Feb 28 1922:59	Rocketsonde	-	-	Arcasonde	-	-	-	PM	-	-	-	69	-	-
1978-4298	2443576.58	1978 Feb 28 1922:59	Rocketsonde	-	-	Arcasonde	-	-	-	PM	-	-	-	69	-	-
1978-4299	2443576.58	1978 Feb 28 1922:59	Rocketsonde	-	-	Arcasonde	-	-	-	PM	-	-	-	70	-	-
1978-4300	2443576.58	1978 Feb 28 1922:59	Rocketsonde	-	-	Arcasonde	-	-	-	KAU	-	-	-	74	-	-
1978-4301	2443576.58	1978 Feb 28 1922:59	Rocketsonde	-	-	Arcasonde	-	-	-	KAU	-	-	-	76	-	-
1978-4302	2443576.58	1978 Feb 28 1922:59	Rocketsonde	-	-	Arcasonde	-	-	-	KMR	-	-	-	73	-	-
1978-4303	2443576.58	1978 Feb 28 1922:59	Rocketsonde	-	-											

Launch

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Mission	FlightCode	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee_Km	Range_Km	Dest
1978-W309	2443551.42	1978 Mar 13 22:09:59	Rocketsonde	-	-	Arcasonde	-	-	-	KMR	-	-	-	77	-	-
1978-W311	2443553.10	1978 Mar 15 14:20:00	Rocketsonde	-	-	Arcasonde	-	-	-	SHER	-	-	-	65	-	-
1978-W312	2443553.10	1978 Mar 15 14:20:00	Rocketsonde	-	-	Arcasonde	-	-	-	THU	-	-	-	66	-	-
1978-W313	2443553.15	1978 Mar 15 15:33:00	Rocketsonde	-	-	Arcasonde	-	-	-	WI	-	-	-	73	-	-
1978-W114	2443553.19	1978 Mar 15 16:30:00	Rocketsonde	-	-	Arcasonde	-	-	-	WS	-	-	-	98	-	-
1978-W314	2443553.19	1978 Mar 15 16:30:00	Rocketsonde	-	-	Arcasonde	-	-	-	WS	-	-	-	68	-	-
1978-W315	2443553.20	1978 Mar 15 16:49:59	Rocketsonde	-	-	Arcasonde	-	-	-	PRIM	-	-	-	88	-	-
1978-W115	2443553.25	1978 Mar 15 18:03:59	Rocketsonde	-	-	Arcasonde	-	-	-	PH	-	-	-	88	-	-
1978-W317	2443553.27	1978 Mar 15 18:25:59	Rocketsonde	-	-	Arcasonde	-	-	-	PH	-	-	-	67	-	-
1978-W117	2443553.38	1978 Mar 15 21:00:00	Rocketsonde	-	-	Arcasonde	-	-	-	KAU	-	-	-	90	-	-
1978-W318	2443553.38	1978 Mar 15 21:38:59	Rocketsonde	-	-	Arcasonde	-	-	-	KAU	-	-	-	54	-	-
1978-W320	2443553.58	1978 Mar 16 01:52:00	Rocketsonde	-	-	Arcasonde	-	-	-	KMR	-	-	-	80	-	-
1978-W119	2443554.39	1978 Mar 16 21:21:00	Rocketsonde	-	-	Arcasonde	-	-	-	KMR	-	-	-	63	-	-
1978-W323	2443555.09	1978 Mar 17 14:03:59	Rocketsonde	-	-	Arcasonde	-	-	-	THU	-	-	-	62	-	-
1978-W324	2443555.21	1978 Mar 17 17:00:00	Rocketsonde	-	-	Arcasonde	-	-	-	PRIM	-	-	-	62	-	-
1978-W325	2443555.21	1978 Mar 17 17:00:00	Rocketsonde	-	-	Arcasonde	-	-	-	SHER	-	-	-	57	-	-
1978-W326	2443555.25	1978 Mar 17 18:00:00	Rocketsonde	-	-	Arcasonde	-	-	-	WS	-	-	-	51	-	-
1978-W329	2443556.10	1978 Mar 20 14:17:00	Rocketsonde	-	-	Arcasonde	-	-	-	THU	-	-	-	64	-	-
1978-W330	2443556.21	1978 Mar 20 17:00:00	Rocketsonde	-	-	Arcasonde	-	-	-	SHER	-	-	-	64	-	-
1978-W331	2443556.21	1978 Mar 20 17:03:00	Rocketsonde	-	-	Arcasonde	-	-	-	WS	-	-	-	65	-	-
1978-W332	2443556.23	1978 Mar 20 17:26:00	Rocketsonde	-	-	Arcasonde	-	-	-	PH	-	-	-	52	-	-
1978-W333	2443556.38	1978 Mar 20 21:00:00	Rocketsonde	-	-	Arcasonde	-	-	-	PH	-	-	-	59	-	-
1978-W334	2443556.38	1978 Mar 20 21:00:00	Rocketsonde	-	-	Arcasonde	-	-	-	PH	-	-	-	59	-	-
1978-W339	2443559.40	1978 Mar 21 13:31:59	Rocketsonde	-	-	Arcasonde	-	-	-	SHER	-	-	-	79	-	-
1978-W340	2443559.10	1978 Mar 21 14:31:00	Rocketsonde	-	-	Arcasonde	-	-	-	THU	-	-	-	66	-	-
1978-W341	2443559.16	1978 Mar 22 15:46:59	Rocketsonde	-	-	Arcasonde	-	-	-	KMR	-	-	-	66	-	-
1978-W343	2443590.21	1978 Mar 22 17:00:00	Rocketsonde	-	-	Arcasonde	-	-	-	THU	-	-	-	71	-	-
1978-W344	2443590.21	1978 Mar 22 17:01:00	Rocketsonde	-	-	Arcasonde	-	-	-	SHER	-	-	-	65	-	-
1978-W122	2443590.25	1978 Mar 22 18:00:00	Rocketsonde	-	-	Arcasonde	-	-	-	PRIM	-	-	-	69	-	-
1978-W346	2443590.26	1978 Mar 22 18:00:00	Rocketsonde	-	-	Arcasonde	-	-	-	WS	-	-	-	96	-	-
1978-W346	2443590.26	1978 Mar 22 18:00:00	Rocketsonde	-	-	Arcasonde	-	-	-	WS	-	-	-	96	-	-
1978-W346	2443590.36	1978 Mar 22 18:04:00	Rocketsonde	-	-	Arcasonde	-	-	-	PH	-	-	-	68	-	-
1978-W126	2443590.37	1978 Mar 22 20:34:00	Rocketsonde	-	-	Arcasonde	-	-	-	PH	-	-	-	73	-	-
1978-W349	2443590.38	1978 Mar 22 20:35:00	Rocketsonde	-	-	Arcasonde	-	-	-	PH	-	-	-	90	-	-
1978-W349	2443590.38	1978 Mar 22 20:35:00	Rocketsonde	-	-	Arcasonde	-	-	-	PH	-	-	-	90	-	-
1978-W349	2443590.38	1978 Mar 22 21:29:00	Rocketsonde	-	-	Arcasonde	-	-	-	SHER	-	-	-	59	-	-
1978-W351	2443590.55	1978 Mar 23 01:14:59	Rocketsonde	-	-	Arcasonde	-	-	-	KMR	-	-	-	71	-	-
1978-W352	2443591.37	1978 Mar 23 20:38:00	Rocketsonde	-	-	Arcasonde	-	-	-	KAU	-	-	-	55	-	-
1978-W354	2443591.95	1978 Mar 24 09:19:00	Rocketsonde	-	-	Arcasonde	-	-	-	KAU	-	-	-	55	-	-
1978-W355	2443592.11	1978 Mar 24 14:37:00	Rocketsonde	-	-	Arcasonde	-	-	-	KMR	-	-	-	68	-	-
1978-W355	2443592.23	1978 Mar 24 14:37:00	Rocketsonde	-	-	Arcasonde	-	-	-	KMR	-	-	-	68	-	-
1978-W357	2443592.42	1978 Mar 24 17:30:00	Rocketsonde	-	-	Arcasonde	-	-	-	PH	-	-	-	65	-	-
1978-W358	2443592.55	1978 Mar 25 01:16:59	Rocketsonde	-	-	Arcasonde	-	-	-	SHER	-	-	-	52	-	-
1978-W358	2443592.55	1978 Mar 25 01:16:59	Rocketsonde	-	-	Arcasonde	-	-	-	SHER	-	-	-	52	-	-
1978-W363	2443595.13	1978 Mar 27 17:00:00	Rocketsonde	-	-	Arcasonde	-	-	-	PH	-	-	-	66	-	-
1978-W363	2443595.21	1978 Mar 27 17:00:00	Rocketsonde	-	-	Arcasonde	-	-	-	PH	-	-	-	66	-	-
1978-W365	2443595.35	1978 Mar 27 17:26:59	Rocketsonde	-	-	Arcasonde	-	-	-	NS	-	-	-	70	-	-
1978-W365	2443595.35	1978 Mar 27 17:26:59	Rocketsonde	-	-	Arcasonde	-	-	-	NS	-	-	-	70	-	-
1978-W371	2443597.10	1978 Mar 29 15:26:59	Rocketsonde	-	-	Arcasonde	-	-	-	SHER	-	-	-	46	-	-
1978-W372	2443597.18	1978 Mar 29 15:26:59	Rocketsonde	-	-	Arcasonde	-	-	-	THU	-	-	-	52	-	-
1978-W372	2443597.18	1978 Mar 29 15:26:59	Rocketsonde	-	-	Arcasonde	-	-	-	THU	-	-	-	52	-	-
1978-W372	2443597.24	1978 Mar 29 16:34:59	Rocketsonde	-	-	Arcasonde	-	-	-	PRIM	-	-	-	69	-	-
1978-W134	2443597.24	1978 Mar 29 17:40:59	Rocketsonde	-	-	Arcasonde	-	-	-	NS	-	-	-	98	-	-
1978-W134	2443597.24	1978 Mar 29 17:40:59	Rocketsonde	-	-	Arcasonde	-	-	-	NS	-	-	-	98	-	-
1978-W375	2443597.31	1978 Mar 29 19:34:59	Rocketsonde	-	-	Arcasonde	-	-	-	NS	-	-	-	66	-	-
1978-W375	2443597.31	1978 Mar 29 19:34:59	Rocketsonde	-	-	Arcasonde	-	-	-	NS	-	-	-	66	-	-
1978-W380	2443598.03	1978 Mar 30 15:00:00	Rocketsonde	-	-	Arcasonde	-	-	-	NS	-	-	-	67	-	-
1978-W380	2443598.03	1978 Mar 30 15:00:00	Rocketsonde	-	-	Arcasonde	-	-	-	NS	-	-	-	67	-	-
1978-W385	2443599.12	1978 Mar 31 14:08:00	Rocketsonde	-	-	Arcasonde	-	-	-	THU	-	-	-	69	-	-
1978-W385	2443599.12	1978 Mar 31 14:08:00	Rocketsonde	-	-	Arcasonde	-	-	-	THU	-	-	-	69	-	-
1978-W387	2443599.18	1978 Mar 31 16:18:59	Rocketsonde	-	-	Arcasonde	-	-	-	NS	-	-	-	68	-	-
1978-W387	2443599.18	1978 Mar 31 16:18:59	Rocketsonde	-	-	Arcasonde	-	-	-	NS	-	-	-	68	-	-
1978-W389	2443599.22	1978 Mar 31 20:30:00	Rocketsonde	-	-	Arcasonde	-	-	-	NS	-	-	-	68	-	-
1978-W389	2443599.22	1978 Mar 31 20:30:00	Rocketsonde	-	-	Arcasonde	-	-	-	NS	-	-	-	68	-	-
1978-W133	2443599.39	1978 Mar 31 21:31:00	Rocketsonde	-	-	Arcasonde	-	-	-	KAU	-	-	-	73	-	-
1978-W133	2443599.39	1978 Mar 31 21:31:00	Rocketsonde	-	-	Arcasonde	-	-	-	KAU	-	-	-	73	-	-
1978-W392	2443602.10	1978 Apr 3 14:21:00	Rocketsonde	-	-	Arcasonde	-	-	-	NS	-	-	-	45	-	-
1978-W392	2443602.10	1978 Apr 3 14:21:00	Rocketsonde	-	-	Arcasonde	-	-	-	NS	-	-	-	45	-	-
1978-W393	2443602.19	1978 Apr 3 16:37:59	Rocketsonde	-	-	Arcasonde	-	-	-	THU	-	-	-	67	-	-
1978-W393	2443602.19	1978 Apr 3 16:37:59	Rocketsonde	-	-	Arcasonde	-	-	-	THU	-	-	-	67	-	-
1978-W394	2443602.30	1978 Apr 3 19:12:59	Rocketsonde	-	-	Arcasonde	-	-	-	NS	-	-	-	70	-	-
1978-W143	2443604.18	1978 Apr 5 16:14:59	Rocketsonde	-	-	Arcasonde	-	-	-	NS	-	-	-	98	-	-
1978-W395	2443604.18	1978 Apr 5 16:20:59	Rocketsonde	-	-	Arcasonde	-	-	-	NS	-	-	-	67	-	-
1978-W395	2443604.18	1978 Apr 5 16:20:59	Rocketsonde	-	-	Arcasonde	-	-	-	NS	-	-	-	67	-	-
1978-W144	2443604.23	1978 Apr 5 17:27:59	Rocketsonde	-	-	Arcasonde	-	-	-	NS	-	-	-	67	-	-
1978-W144	2443604.23	1978 Apr 5 17:27:59	Rocketsonde	-	-	Arcasonde	-	-	-	NS	-	-	-	67	-	-
1978-W397	2443604.24	1978 Apr 5 17:52:00	Rocketsonde	-	-	Arcasonde	-	-	-	PM	-	-	-	90	-	-
1978-W397	2443604.24	1978 Apr 5 17:52:00	Rocketsonde	-	-	Arcasonde	-	-	-	PM	-	-	-	90	-	-
1978-W398	2443604.35	1978 Apr 5 20:00:00	Rocketsonde	-	-	Arcasonde	-	-	-	PRIM	-	-	-	66	-	-
1978-W398	2443604.35	1978 Apr 5 20:00:00	Rocketsonde	-	-	Arcasonde	-	-	-	PRIM	-	-	-	66	-	-
1978-W399	2443604.35	1978 Apr 5 20:26:00	Rocketsonde	-	-	Arcasonde	-	-	-	KAU	-	-	-	89	-	-
1978-W399	2443604.35	1978 Apr 5 20:26:00	Rocketsonde	-	-	Arcasonde	-	-	-	KAU	-	-	-	89	-	-
1978-W401	2443605.05	1978 Apr 6 22:52:59	Rocketsonde	-	-	Arcasonde	-	-	-	KAU	-	-	-	72	-	-
1978-W401	2443605.05	1978 Apr 6 22:52:59	Rocketsonde	-	-	Arcasonde	-	-	-	KAU	-	-	-	72	-	-
1978-W402	2443606.17	1978 Apr 7 16:00:59	Rocketsonde	-	-	Arcasonde	-	-	-	THU	-	-	-	66	-	-
1978-W402	2443606.17	1978 Apr 7 16:00:59	Rocketsonde	-	-	Arcasonde	-	-	-	THU	-	-	-	66	-	-
1978-W403	2443606.20	1978 Apr 7 16:54:59	Rocketsonde	-	-	Arcasonde	-	-	-	THU	-	-	-	66	-	-
1978-W403	2443606.20	1978 Apr 7 16:54:59	Rocketsonde	-	-	Arcasonde	-	-	-	THU	-	-	-	66	-	-
1978-W404	2443606.25	1978 Apr 7 17:00:00	Rocketsonde	-	-	Arcasonde	-	-	-	PRIM	-	-	-	73	-	-
1978-W404	2443606.25	1978 Apr 7 17:00:00	Rocketsonde	-	-	Arcasonde	-	-	-	PRIM	-	-	-	73	-	-
1978-W405	2443606.38	1978 Apr 7 21:00:00	Rocketsonde	-	-	Arcasonde	-	-	-	NS	-	-	-	54	-	-
1978-W405	2443606.38	1978 Apr 7 21:00:00														

Launch

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Mission	FlightCode	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_L_Pad	Apogee_Km	Range_Km	Dest
1978-W425	2443611.26	1978 Apr 12 1821:00	Rocketsonde	-	-	Arcasonde	-	-	-	PH	-	-	-	70	-	-
1978-Y155	2443611.27	1978 Apr 12 1830:00	Rocketsonde	-	-	AI/DMP-9	-	-	-	WS	-	-	-	97	-	-
1978-W426	2443611.28	1978 Apr 12 1840:00	Rocketsonde	-	-	Arcasonde	-	-	-	WS	-	-	-	52	-	-
1978-W427	2443611.32	1978 Apr 12 1946:59	Rocketsonde	-	-	Arcasonde	-	-	-	PRLM	-	-	-	70	-	-
1978-Y156	2443611.38	1978 Apr 12 2100:00	Rocketsonde	-	-	AI/DMP-9?	-	-	-	KAU	-	-	-	90	-	-
1978-W428	2443611.39	1978 Apr 12 2122:59	Rocketsonde	-	-	Arcasonde	-	-	-	KAU	-	-	-	62	-	-
1978-W429	2443611.54	1978 Apr 13 0059:59	Rocketsonde	-	-	Arcasonde	-	-	-	SHER	-	-	-	64	-	-
1978-W430	2443612.21	1978 Apr 13 1700:00	Rocketsonde	-	-	Arcasonde	-	-	-	SHER	-	-	-	69	-	-
1978-W431	2443613.13	1978 Apr 14 1507:00	Rocketsonde	-	-	Arcasonde	-	-	-	THU	-	-	-	69	-	-
1978-W432	2443613.19	1978 Apr 14 1640:00	Rocketsonde	-	-	Arcasonde	-	-	-	PRLM	-	-	-	69	-	-
1978-W433	2443613.21	1978 Apr 14 1657:59	Rocketsonde	-	-	Arcasonde	-	-	-	PH	-	-	-	73	-	-
1978-W434	2443613.21	1978 Apr 14 1700:00	Rocketsonde	-	-	Arcasonde	-	-	-	WS	-	-	-	69	-	-
1978-W435	2443613.23	1978 Apr 14 1730:00	Rocketsonde	-	-	Arcasonde	-	-	-	SHER	-	-	-	63	-	-
1978-W436	2443613.34	1978 Apr 14 2009:00	Rocketsonde	-	-	Arcasonde	-	-	-	KAU	-	-	-	61	-	-
1978-A15	2443613.54	1978 Apr 15 0059:59	Rocketsonde	-	-	Arcasonde	-	-	-	SHER	-	-	-	46	-	-
1978-W437	2443616.11	1978 Apr 17 1437:00	Rocketsonde	-	-	Arcasonde	-	-	-	THU	-	-	-	58	-	-
1978-W438	2443616.21	1978 Apr 17 1700:00	Rocketsonde	-	-	Arcasonde	-	-	-	SHER	-	-	-	66	-	-
1978-W439	2443616.25	1978 Apr 17 1800:00	Rocketsonde	-	-	Arcasonde	-	-	-	WS	-	-	-	68	-	-
1978-W440	2443616.25	1978 Apr 17 1926:59	Rocketsonde	-	-	Arcasonde	-	-	-	PH	-	-	-	68	-	-
1978-W442	2443617.21	1978 Apr 18 1700:00	Rocketsonde	-	-	Arcasonde	-	-	-	SHER	-	-	-	64	-	-
1978-W443	2443617.21	1978 Apr 19 0119:59	Rocketsonde	-	-	Arcasonde	-	-	-	SHER	-	-	-	49	-	-
1978-A16	2443617.56	1978 Apr 19 1349:59	Rocketsonde	-	-	Arcasonde	-	-	-	SHER	-	-	-	59	-	-
1978-W446	2443618.08	1978 Apr 19 1437:59	Rocketsonde	-	-	Arcasonde	-	-	-	THU	-	-	-	67	-	-
1978-W448	2443618.11	1978 Apr 19 1457:59	Rocketsonde	-	-	Arcasonde	-	-	-	MI	-	-	-	69	-	-
1978-W448	2443618.17	1978 Apr 19 1557:59	Rocketsonde	-	-	Arcasonde	-	-	-	WS	-	-	-	86	-	-
1978-W448	2443618.26	1978 Apr 19 1814:59	Rocketsonde	-	-	AI/DMP-9	-	-	-	WS	-	-	-	69	-	-
1978-T160	2443618.27	1978 Apr 19 1830:00	Rocketsonde	-	-	Arcasonde	-	-	-	WS	-	-	-	69	-	-
1978-W449	2443618.28	1978 Apr 19 1840:00	Rocketsonde	-	-	Arcasonde	-	-	-	WS	-	-	-	69	-	-
1978-T162	2443618.34	1978 Apr 19 2031:00	Rocketsonde	-	-	AI/DMP-9?	-	-	-	WS	-	-	-	69	-	-
1978-W450	2443618.36	1978 Apr 20 1700:00	Rocketsonde	-	-	Arcasonde	-	-	-	KAU	-	-	-	59	-	-
1978-W451	2443619.21	1978 Apr 20 2100:00	Rocketsonde	-	-	Arcasonde	-	-	-	KAU	-	-	-	73	-	-
1978-A17	2443619.38	1978 Apr 21 1420:00	Rocketsonde	-	-	Arcasonde	-	-	-	SHER	-	-	-	65	-	-
1978-W452	2443620.10	1978 Apr 21 1533:59	Rocketsonde	-	-	Arcasonde	-	-	-	SHER	-	-	-	48	-	-
1978-W453	2443620.15	1978 Apr 21 1554:59	Rocketsonde	-	-	Arcasonde	-	-	-	SHER	-	-	-	63	-	-
1978-A18	2443620.39	1978 Apr 21 2114:59	Rocketsonde	-	-	Arcasonde	-	-	-	THU	-	-	-	69	-	-
1978-W455	2443620.55	1978 Apr 22 0114:59	Rocketsonde	-	-	Arcasonde	-	-	-	SHER	-	-	-	47	-	-
1978-W457	2443623.21	1978 Apr 24 1404:59	Rocketsonde	-	-	Arcasonde	-	-	-	THU	-	-	-	69	-	-
1978-W458	2443623.57	1978 Apr 24 2038:00	Rocketsonde	-	-	Arcasonde	-	-	-	SHER	-	-	-	80	-	-
1978-W459	2443623.57	1978 Apr 25 0114:59	Rocketsonde	-	-	Arcasonde	-	-	-	WS	-	-	-	69	-	-
1978-W460	2443625.15	1978 Apr 26 1533:00	Rocketsonde	-	-	Arcasonde	-	-	-	KAU	-	-	-	78	-	-
1978-T175	2443625.19	1978 Apr 26 1630:00	Rocketsonde	-	-	Arcasonde	-	-	-	KR	-	-	-	70	-	-
1978-T175	2443625.19	1978 Apr 26 1630:00	Rocketsonde	-	-	Arcasonde	-	-	-	MI	-	-	-	86	-	-
1978-T175	2443625.19	1978 Apr 26 1630:00	Rocketsonde	-	-	Arcasonde	-	-	-	WS	-	-	-	89	-	-
1978-W462	2443625.20	1978 Apr 26 1654:59	Rocketsonde	-	-	Arcasonde	-	-	-	SHER	-	-	-	64	-	-
1978-W463	2443625.20	1978 Apr 26 1700:00	Rocketsonde	-	-	Arcasonde	-	-	-	WS	-	-	-	65	-	-
1978-W464	2443625.25	1978 Apr 27 1536:59	Rocketsonde	-	-	Arcasonde	-	-	-	KR	-	-	-	79	-	-
1978-W465	2443625.40	1978 Apr 28 1520:00	Rocketsonde	-	-	Arcasonde	-	-	-	THU	-	-	-	69	-	-
1978-W466	2443627.14	1978 Apr 28 2035:00	Rocketsonde	-	-	Arcasonde	-	-	-	SHER	-	-	-	65	-	-
1978-W469	2443627.14	1978 Apr 28 2035:00	Rocketsonde	-	-	Arcasonde	-	-	-	KR	-	-	-	67	-	-
1978-W470	2443627.27	1978 Apr 28 2035:00	Rocketsonde	-	-	Arcasonde	-	-	-	THU	-	-	-	67	-	-
1978-W474	2443630.12	1978 Apr 29 1455:00	Rocketsonde	-	-	Arcasonde	-	-	-	THU	-	-	-	56	-	-
1978-W476	2443630.21	1978 Apr 29 1700:00	Rocketsonde	-	-	Arcasonde	-	-	-	SHER	-	-	-	68	-	-
1978-W477	2443630.24	1978 Apr 29 1755:00	Rocketsonde	-	-	Arcasonde	-	-	-	PH	-	-	-	68	-	-
1978-W478	2443630.28	1978 Apr 29 2100:00	Rocketsonde	-	-	Arcasonde	-	-	-	KAU	-	-	-	61	-	-
1978-W479	2443631.21	1978 Apr 29 2100:00	Rocketsonde	-	-	Arcasonde	-	-	-	WS	-	-	-	57	-	-
1978-W480	2443631.41	1978 Apr 29 2147:59	Rocketsonde	-	-	Arcasonde	-	-	-	WS	-	-	-	79	-	-
1978-W482	2443632.11	1978 Apr 30 1445:00	Rocketsonde	-	-	Arcasonde	-	-	-	KR	-	-	-	73	-	-
1978-W483	2443632.12	1978 Apr 30 1455:00	Rocketsonde	-	-	Arcasonde	-	-	-	THU	-	-	-	70	-	-
1978-W483	2443632.12	1978 Apr 30 1455:00	Rocketsonde	-	-	Arcasonde	-	-	-	THU	-	-	-	73	-	-
1978-W483	2443632.17	1978 Apr 30 1859:59	Rocketsonde	-	-	Arcasonde	-	-	-	PH	-	-	-	89	-	-
1978-W484	2443632.17	1978 Apr 30 1859:59	Rocketsonde	-	-	Arcasonde	-	-	-	PH	-	-	-	88	-	-
1978-W485	2443632.25	1978 Apr 30 1800:00	Rocketsonde	-	-	Arcasonde	-	-	-	PM	-	-	-	63	-	-
1978-W486	2443632.26	1978 Apr 30 1800:00	Rocketsonde	-	-	Arcasonde	-	-	-	SHER	-	-	-	63	-	-
1978-W487	2443632.56	1978 Apr 31 0124:59	Rocketsonde	-	-	Arcasonde	-	-	-	WS	-	-	-	64	-	-
1978-W488	2443633.18	1978 Apr 4 1619:59	Rocketsonde	-	-	Arcasonde	-	-	-	WS	-	-	-	79	-	-
1978-W489	2443633.18	1978 Apr 4 1619:59	Rocketsonde	-	-	Arcasonde	-	-	-	KR	-	-	-	67	-	-
1978-W490	2443633.33	1978 Apr 5 1511:00	Rocketsonde	-	-	Arcasonde	-	-	-	WS	-	-	-	47	-	-
1978-W491	2443634.11	1978 Apr 5 1434:00	Rocketsonde	-	-	Arcasonde	-	-	-	MI	-	-	-	71	-	-
1978-W492	2443634.16	1978 Apr 5 1553:00	Rocketsonde	-	-	Arcasonde	-	-	-	THU	-	-	-	70	-	-
1978-W493	2443634.21	1978 Apr 5 1700:00	Rocketsonde	-	-	Arcasonde	-	-	-	PM	-	-	-	57	-	-
1978-W494	2443634.41	1978 Apr 5 2145:59	Rocketsonde	-	-	Arcasonde	-	-	-	SHER	-	-	-	61	-	-
1978-W496	2443637.10	1978 Apr 8 1431:00	Rocketsonde	-	-	Arcasonde	-	-	-	THU	-	-	-	62	-	-
1978-W497	2443637.11	1978 Apr 8 1440:00	Rocketsonde	-	-	Arcasonde	-	-	-	MI	-	-	-	70	-	-
1978-W498	2443637.23	1978 Apr 8 1730:00	Rocketsonde	-	-	Arcasonde	-	-	-	THU	-	-	-	69	-	-
1978-W499	2443637.23	1978 Apr 8 1754:00	Rocketsonde	-	-	Arcasonde	-	-	-	SHER	-	-	-	62	-	-
1978-W500	2443637.33	1978 Apr 8 2001:00	Rocketsonde	-	-	Arcasonde	-	-	-	PM	-	-	-	62	-	-
1978-W501	2443637.55	1978 Apr 9 0114:59	Rocketsonde	-	-	Arcasonde	-	-	-	WS	-	-	-	75	-	-
1978-W502	2443639.21	1978 Apr 9 1700:00	Rocketsonde	-	-	Arcasonde	-	-	-	KR	-	-	-	68	-	-
1978-W503	2443639.33	1978 Apr 9 2000:00	Rocketsonde	-	-	Arcasonde	-	-	-	WS	-	-	-	50	-	-
1978-W506	2443639.41	1978 Apr 10 1442:00	Rocketsonde	-	-	Arcasonde	-	-	-	MI	-	-	-	71	-	-
1978-Y182	2443639.24	1978 Apr 10 1749:59	Rocketsonde	-	-	Arcasonde	-	-	-	WS	-	-	-	98	-	-
1978-W508	2443639.25	1978 Apr 10 1801:59	Rocketsonde	-	-	Arcasonde	-	-	-	WS	-	-	-	68	-	-
1978-Y183	2443639.31	1978 Apr 10 1926:59	Rocketsonde	-	-	Arcasonde	-	-	-	WS	-	-	-	90	-	-
1978-W509	2443639.33	1978 Apr 10 1949:59	Rocketsonde	-	-	Arcasonde	-	-	-	PM	-	-	-	74	-	-
1978-Y184	2443639.33	1978 Apr 10 2000:00	Rocketsonde	-	-	Arcasonde	-	-	-	PM	-	-	-	90	-	-
1978-W510	2443639.33	1978 Apr 10 2000:00	Rocketsonde	-	-	Arcasonde	-	-	-	KAU	-	-	-	50	-	-
1978-W511	2443639.36	1978 Apr 10 2033:00	Rocketsonde	-	-	Arcasonde	-	-	-	SHER	-	-	-	60	-	-
1978-W512	2443639.41	1978 Apr 10 2147:59	Rocketsonde	-	-	Arcasonde	-	-	-	KAU	-	-	-	76	-	-
1978-W513	2443640.29	1978 Apr 11 1859:59	Rocketsonde	-	-	Arcasonde	-	-	-	WS	-	-	-	66	-	-

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Mission	FlightCode	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee_Km	Range_Km	Dest
1978-4514	2443641.11	1978 May 12 14:54:00	Rocketsonde	-	-	Arcasonde	-	-	-	WI	-	-	-	71	-	-
1978-4515	2443641.17	1978 May 12 16:02:59	Rocketsonde	-	-	Arcasonde	-	-	-	THU	-	-	-	69	-	-
1978-4517	2443641.19	1978 May 12 16:57:59	Rocketsonde	-	-	Arcasonde	-	-	-	PH	-	-	-	56	-	-
1978-4518	2443641.24	1978 May 12 17:46:00	Rocketsonde	-	-	Arcasonde	-	-	-	SHER	-	-	-	51	-	-
1978-4519	2443641.38	1978 May 12 21:04:59	Rocketsonde	-	-	Arcasonde	-	-	-	KAU	-	-	-	55	-	-
1978-4520	2443641.55	1978 May 13 01:14:59	Rocketsonde	-	-	Arcasonde	-	-	-	KHR	-	-	-	74	-	-
1978-4521	2443641.21	1978 May 15 17:00:00	Rocketsonde	-	-	Arcasonde	-	-	-	PH	-	-	-	71	-	-
1978-4522	2443644.21	1978 May 15 17:00:00	Rocketsonde	-	-	Arcasonde	-	-	-	SHER	-	-	-	59	-	-
1978-4523	2443644.27	1978 May 15 18:00:00	Rocketsonde	-	-	Arcasonde	-	-	-	WS	-	-	-	71	-	-
1978-4524	2443644.33	1978 May 15 20:00:00	Rocketsonde	-	-	Arcasonde	-	-	-	WS	-	-	-	98	-	-
1978-4525	2443644.34	1978 May 15 20:15:00	Rocketsonde	-	-	Arcasonde	-	-	-	SHER	-	-	-	54	-	-
1978-4526	2443644.37	1978 May 15 20:52:00	Rocketsonde	-	-	Arcasonde	-	-	-	WS	-	-	-	96	-	-
1978-4527	2443644.38	1978 May 15 21:00:00	Rocketsonde	-	-	Arcasonde	-	-	-	WS	-	-	-	58	-	-
1978-4528	2443644.57	1978 May 16 01:40:00	Rocketsonde	-	-	Arcasonde	-	-	-	KAU	-	-	-	79	-	-
1978-4529	2443646.12	1978 May 17 14:57:00	Rocketsonde	-	-	Arcasonde	-	-	-	KHR	-	-	-	69	-	-
1978-4530	2443646.13	1978 May 17 15:02:59	Rocketsonde	-	-	Arcasonde	-	-	-	THU	-	-	-	65	-	-
1978-4531	2443646.14	1978 May 17 15:14:59	Rocketsonde	-	-	Arcasonde	-	-	-	WI	-	-	-	65	-	-
1978-4532	2443646.14	1978 May 17 15:14:59	Rocketsonde	-	-	Arcasonde	-	-	-	WI	-	-	-	65	-	-
1978-4533	2443646.14	1978 May 17 15:14:59	Rocketsonde	-	-	Arcasonde	-	-	-	WI	-	-	-	69	-	-
1978-4534	2443646.18	1978 May 17 16:14:59	Rocketsonde	-	-	Arcasonde	-	-	-	WI	-	-	-	69	-	-
1978-4535	2443646.18	1978 May 17 16:14:59	Rocketsonde	-	-	Arcasonde	-	-	-	WS	-	-	-	98	-	-
1978-4536	2443646.19	1978 May 17 16:35:59	Rocketsonde	-	-	Arcasonde	-	-	-	WS	-	-	-	65	-	-
1978-4537	2443646.19	1978 May 17 16:35:59	Rocketsonde	-	-	Arcasonde	-	-	-	PH	-	-	-	56	-	-
1978-4538	2443646.21	1978 May 17 17:00:00	Rocketsonde	-	-	Arcasonde	-	-	-	SHER	-	-	-	59	-	-
1978-4539	2443646.21	1978 May 17 17:02:00	Rocketsonde	-	-	Arcasonde	-	-	-	WI	-	-	-	65	-	-
1978-4540	2443646.22	1978 May 17 17:15:00	Rocketsonde	-	-	Arcasonde	-	-	-	PH	-	-	-	74	-	-
1978-4541	2443646.28	1978 May 17 18:43:00	Rocketsonde	-	-	Arcasonde	-	-	-	WI	-	-	-	66	-	-
1978-4542	2443646.30	1978 May 17 19:04:59	Rocketsonde	-	-	Arcasonde	-	-	-	WI	-	-	-	64	-	-
1978-4543	2443646.32	1978 May 17 19:47:59	Rocketsonde	-	-	Arcasonde	-	-	-	WI	-	-	-	87	-	-
1978-4544	2443646.32	1978 May 17 19:47:59	Rocketsonde	-	-	Arcasonde	-	-	-	WI	-	-	-	94	-	-
1978-4545	2443646.33	1978 May 17 20:00:00	Rocketsonde	-	-	Arcasonde	-	-	-	WI	-	-	-	94	-	-
1978-4546	2443646.35	1978 May 18 01:14:59	Rocketsonde	-	-	Arcasonde	-	-	-	KHR	-	-	-	65	-	-
1978-4547	2443646.35	1978 May 18 11:40:00	Rocketsonde	-	-	Arcasonde	-	-	-	WS	-	-	-	65	-	-
1978-4548	2443646.39	1978 May 18 14:26:00	Rocketsonde	-	-	Arcasonde	-	-	-	WS	-	-	-	76	-	-
1978-4549	2443647.10	1978 May 18 15:26:59	Rocketsonde	-	-	Arcasonde	-	-	-	WI	-	-	-	74	-	-
1978-4550	2443647.14	1978 May 18 15:26:59	Rocketsonde	-	-	Arcasonde	-	-	-	WI	-	-	-	70	-	-
1978-4551	2443647.15	1978 May 18 15:31:00	Rocketsonde	-	-	Arcasonde	-	-	-	WI	-	-	-	55	-	-
1978-4552	2443647.25	1978 May 18 17:00:00	Rocketsonde	-	-	Arcasonde	-	-	-	WI	-	-	-	76	-	-
1978-4553	2443647.25	1978 May 18 17:00:00	Rocketsonde	-	-	Arcasonde	-	-	-	WI	-	-	-	61	-	-
1978-4554	2443647.33	1978 May 18 18:03:59	Rocketsonde	-	-	Arcasonde	-	-	-	SHER	-	-	-	50	-	-
1978-4555	2443647.33	1978 May 18 20:00:00	Rocketsonde	-	-	Arcasonde	-	-	-	KHR	-	-	-	77	-	-
1978-4556	2443647.43	1978 May 18 22:13:59	Rocketsonde	-	-	Arcasonde	-	-	-	THU	-	-	-	71	-	-
1978-4557	2443647.43	1978 May 18 22:13:59	Rocketsonde	-	-	Arcasonde	-	-	-	THU	-	-	-	69	-	-
1978-4558	2443648.13	1978 May 19 15:04:59	Rocketsonde	-	-	Arcasonde	-	-	-	SHER	-	-	-	60	-	-
1978-4559	2443648.20	1978 May 19 15:49:59	Rocketsonde	-	-	Arcasonde	-	-	-	THU	-	-	-	66	-	-
1978-4560	2443648.20	1978 May 19 17:25:00	Rocketsonde	-	-	Arcasonde	-	-	-	NS	-	-	-	80	-	-
1978-4561	2443648.24	1978 May 19 17:51:00	Rocketsonde	-	-	Arcasonde	-	-	-	SHER	-	-	-	58	-	-
1978-4562	2443648.24	1978 May 19 17:51:00	Rocketsonde	-	-	Arcasonde	-	-	-	PH	-	-	-	81	-	-
1978-4563	2443651.09	1978 May 22 14:06:00	Rocketsonde	-	-	Arcasonde	-	-	-	KAU	-	-	-	57	-	-
1978-4564	2443651.09	1978 May 22 14:06:00	Rocketsonde	-	-	Arcasonde	-	-	-	WI	-	-	-	71	-	-
1978-4565	2443651.09	1978 May 22 14:15:00	Rocketsonde	-	-	Arcasonde	-	-	-	WI	-	-	-	71	-	-
1978-4566	2443651.13	1978 May 22 15:03:59	Rocketsonde	-	-	Arcasonde	-	-	-	WI	-	-	-	69	-	-
1978-4567	2443651.13	1978 May 22 15:03:59	Rocketsonde	-	-	Arcasonde	-	-	-	THU	-	-	-	71	-	-
1978-4568	2443651.13	1978 May 22 15:03:59	Rocketsonde	-	-	Arcasonde	-	-	-	THU	-	-	-	69	-	-
1978-4569	2443651.20	1978 May 22 17:04:59	Rocketsonde	-	-	Arcasonde	-	-	-	SHER	-	-	-	60	-	-
1978-4570	2443651.22	1978 May 22 17:04:59	Rocketsonde	-	-	Arcasonde	-	-	-	PH	-	-	-	59	-	-
1978-4571	2443651.32	1978 May 22 19:16:00	Rocketsonde	-	-	Arcasonde	-	-	-	KHR	-	-	-	72	-	-
1978-4572	2443651.32	1978 May 22 19:16:00	Rocketsonde	-	-	Arcasonde	-	-	-	WI	-	-	-	71	-	-
1978-4573	2443651.35	1978 May 23 01:14:59	Rocketsonde	-	-	Arcasonde	-	-	-	WI	-	-	-	74	-	-
1978-4574	2443651.35	1978 May 23 01:14:59	Rocketsonde	-	-	Arcasonde	-	-	-	NS	-	-	-	68	-	-
1978-4575	2443651.11	1978 May 23 14:27:00	Rocketsonde	-	-	Arcasonde	-	-	-	NS	-	-	-	68	-	-
1978-4576	2443651.17	1978 May 23 16:09:59	Rocketsonde	-	-	Arcasonde	-	-	-	THU	-	-	-	68	-	-
1978-4577	2443652.17	1978 May 23 20:00:00	Rocketsonde	-	-	Arcasonde	-	-	-	WI	-	-	-	77	-	-
1978-4578	2443652.17	1978 May 23 20:00:00	Rocketsonde	-	-	Arcasonde	-	-	-	WI	-	-	-	77	-	-
1978-4579	2443652.12	1978 May 24 14:46:00	Rocketsonde	-	-	Arcasonde	-	-	-	NS	-	-	-	68	-	-
1978-4580	2443652.13	1978 May 24 15:13:59	Rocketsonde	-	-	Arcasonde	-	-	-	SHER	-	-	-	69	-	-
1978-4581	2443652.14	1978 May 24 15:22:00	Rocketsonde	-	-	Arcasonde	-	-	-	NS	-	-	-	72	-	-
1978-4582	2443652.28	1978 May 24 17:10:00	Rocketsonde	-	-	Arcasonde	-	-	-	PH	-	-	-	61	-	-
1978-4583	2443652.28	1978 May 24 18:36:59	Rocketsonde	-	-	Arcasonde	-	-	-	SHER	-	-	-	67	-	-
1978-4584	2443652.28	1978 May 24 18:36:59	Rocketsonde	-	-	Arcasonde	-	-	-	NS	-	-	-	67	-	-
1978-4585	2443652.30	1978 May 24 18:59:59	Rocketsonde	-	-	Arcasonde	-	-	-	NS	-	-	-	99	-	-
1978-4586	2443652.30	1978 May 24 19:09:59	Rocketsonde	-	-	Arcasonde	-	-	-	NS	-	-	-	47	-	-
1978-424	2443652.35	1978 May 24 20:26:00	Rocketsonde	-	-	Arcasonde	-	-	-	SHER	-	-	-	70	-	-
1978-4587	2443654.09	1978 May 25 14:03:59	Rocketsonde	-	-	Arcasonde	-	-	-	WI	-	-	-	74	-	-
1978-4588	2443654.09	1978 May 25 14:09:59	Rocketsonde	-	-	Arcasonde	-	-	-	WI	-	-	-	66	-	-
1978-4589	2443654.19	1978 May 25 16:30:00	Rocketsonde	-	-	Arcasonde	-	-	-	NS	-	-	-	66	-	-
1978-4590	2443655.09	1978 May 26 14:14:00	Rocketsonde	-	-	Arcasonde	-	-	-	WI	-	-	-	70	-	-
1978-4591	2443655.09	1978 May 26 14:14:00	Rocketsonde	-	-	Arcasonde	-	-	-	WI	-	-	-	67	-	-
1978-4592	2443655.11	1978 May 26 14:19:00	Rocketsonde	-	-	Arcasonde	-	-	-	WI	-	-	-	70	-	-
1978-4593	2443655.11	1978 May 26 14:38:59	Rocketsonde	-	-	Arcasonde	-	-	-	THU	-	-	-	69	-	-
1978-4594	2443655.21	1978 May 26 17:00:00	Rocketsonde	-	-	Arcasonde	-	-	-	SHER	-	-	-	59	-	-
1978-4595	2443655.26	1978 May 26 18:12:59	Rocketsonde	-	-	Arcasonde	-	-	-	PM	-	-	-	73	-	-
1978-4596	2443655.26	1978 May 26 18:37:59	Rocketsonde	-	-	Arcasonde	-	-	-	PM	-	-	-	73	-	-
1978-425	2443655.33	1978 May 26 20:00:00	Rocketsonde	-	-	Arcasonde	-	-	-	PM	-	-	-	47	-	-
1978-4597	2443655.40	1978 May 26 21:40:00	Rocketsonde	-	-	Arcasonde	-	-	-	SHER	-	-	-	78	-	-
1978-4598	2443655.40	1978 May 29 14:30:00	Rocketsonde	-	-	Arcasonde	-	-	-	KHR	-	-	-	60	-	-
1978-4599	2443659.21	1978 May 30 17:00:00	Rocketsonde	-	-	Arcasonde	-	-	-	THU	-	-	-	67	-	-
1978-4600	2443659.25	1978 May 30 18:00:59	Rocketsonde	-	-	Arcasonde	-	-	-	NS	-	-	-	83	-	-
1978-4601	2443659.25	1978 May 30 18:06:00	Rocketsonde	-	-	Arcasonde	-	-	-	WI	-	-	-	64	-	-
1978-4602	2443660.09	1978 May 31 14:07:00	Rocketsonde	-	-	Arcasonde	-	-	-	WI	-	-	-	61	-	-
1978-4603	2443660.11	1978 May 31 14:35:00	Rocketsonde	-	-	Arcasonde	-	-	-	SHER	-	-	-	69	-	

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Mission	FlightCode	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_L_Pad	Apogee_Km	Range_Km	Dest
1978-4610	2443660.35	1978 May 31 20:26:00	Rocketsonde	-	-	Arcasonde	-	-	-	KAU	-	-	-	72	-	-
1978-4611	2443661.25	1978 Jun 1 17:59:00	Rocketsonde	-	-	Arcasonde	-	-	-	WI	-	-	-	74	-	-
1978-4612	2443662.10	1978 Jun 2 14:30:00	Rocketsonde	-	-	Arcasonde	-	-	-	THU	-	-	-	71	-	-
1978-4613	2443662.12	1978 Jun 2 14:55:00	Rocketsonde	-	-	Arcasonde	-	-	-	WI	-	-	-	74	-	-
1978-4614	2443662.12	1978 Jun 2 15:00:00	Rocketsonde	-	-	Arcasonde	-	-	-	WI	-	-	-	75	-	-
1978-4615	2443662.25	1978 Jun 2 18:00:00	Rocketsonde	-	-	Arcasonde	-	-	-	PH	-	-	-	53	-	-
1978-426	2443662.25	1978 Jun 2 18:00:00	Rocketsonde	-	-	Arcasonde	-	-	-	SHER	-	-	-	47	-	-
1978-4616	2443662.25	1978 Jun 2 18:00:00	Rocketsonde	-	-	Arcasonde	-	-	-	WS	-	-	-	68	-	-
1978-4617	2443662.55	1978 Jun 3 01:14:59	Rocketsonde	-	-	Arcasonde	-	-	-	KHR	-	-	-	77	-	-
1978-4618	2443665.10	1978 Jun 5 14:20:00	Rocketsonde	-	-	Arcasonde	-	-	-	SHER	-	-	-	61	-	-
1978-4619	2443665.16	1978 Jun 5 15:52:00	Rocketsonde	-	-	Arcasonde	-	-	-	PRIM	-	-	-	64	-	-
1978-4620	2443665.17	1978 Jun 5 16:09:59	Rocketsonde	-	-	Arcasonde	-	-	-	WS	-	-	-	66	-	-
1978-4621	2443665.26	1978 Jun 5 18:20:00	Rocketsonde	-	-	Arcasonde	-	-	-	PH	-	-	-	57	-	-
1978-4622	2443665.37	1978 Jun 5 20:53:00	Rocketsonde	-	-	Arcasonde	-	-	-	KAU	-	-	-	54	-	-
1978-4625	2443667.11	1978 Jun 7 14:36:00	Rocketsonde	-	-	Arcasonde	-	-	-	THU	-	-	-	65	-	-
1978-4626	2443667.12	1978 Jun 7 14:52:00	Rocketsonde	-	-	Arcasonde	-	-	-	WI	-	-	-	72	-	-
1978-4627	2443667.18	1978 Jun 7 16:19:59	Rocketsonde	-	-	Arcasonde	-	-	-	PH	-	-	-	90	-	-
1978-4628	2443667.19	1978 Jun 7 16:30:00	Rocketsonde	-	-	Arcasonde	-	-	-	WS	-	-	-	99	-	-
1978-4629	2443667.20	1978 Jun 7 16:42:59	Rocketsonde	-	-	Arcasonde	-	-	-	PH	-	-	-	73	-	-
1978-4628	2443667.20	1978 Jun 7 16:42:59	Rocketsonde	-	-	Arcasonde	-	-	-	WS	-	-	-	72	-	-
1978-4630	2443667.21	1978 Jun 7 17:00:00	Rocketsonde	-	-	Arcasonde	-	-	-	SHER	-	-	-	61	-	-
1978-4631	2443667.33	1978 Jun 9 15:02:59	Rocketsonde	-	-	Arcasonde	-	-	-	SHER	-	-	-	56	-	-
1978-4632	2443669.13	1978 Jun 9 17:00:00	Rocketsonde	-	-	Arcasonde	-	-	-	THU	-	-	-	62	-	-
1978-4634	2443669.25	1978 Jun 9 18:00:00	Rocketsonde	-	-	Arcasonde	-	-	-	PH	-	-	-	59	-	-
1978-4635	2443669.25	1978 Jun 9 18:00:00	Rocketsonde	-	-	Arcasonde	-	-	-	WS	-	-	-	53	-	-
1978-4636	2443669.27	1978 Jun 9 18:00:00	Rocketsonde	-	-	Arcasonde	-	-	-	THU	-	-	-	69	-	-
1978-4637	2443672.19	1978 Jun 12 16:32:59	Rocketsonde	-	-	Arcasonde	-	-	-	PRIM	-	-	-	59	-	-
1978-4638	2443672.21	1978 Jun 12 17:00:00	Rocketsonde	-	-	Arcasonde	-	-	-	SHER	-	-	-	56	-	-
1978-4639	2443672.24	1978 Jun 12 17:52:00	Rocketsonde	-	-	Arcasonde	-	-	-	PH	-	-	-	67	-	-
1978-4640	2443672.27	1978 Jun 12 18:30:00	Rocketsonde	-	-	Arcasonde	-	-	-	PRIM	-	-	-	60	-	-
1978-4641	2443672.39	1978 Jun 13 15:09:59	Rocketsonde	-	-	Arcasonde	-	-	-	WS	-	-	-	65	-	-
1978-4642	2443673.17	1978 Jun 14 15:11:00	Rocketsonde	-	-	Arcasonde	-	-	-	THU	-	-	-	68	-	-
1978-4645	2443674.13	1978 Jun 14 17:00:00	Rocketsonde	-	-	Arcasonde	-	-	-	SHER	-	-	-	60	-	-
1978-4646	2443674.21	1978 Jun 14 17:11:00	Rocketsonde	-	-	Arcasonde	-	-	-	WI	-	-	-	57	-	-
1978-4648	2443674.22	1978 Jun 14 18:00:00	Rocketsonde	-	-	Arcasonde	-	-	-	WS	-	-	-	86	-	-
1978-4649	2443674.25	1978 Jun 14 18:02:59	Rocketsonde	-	-	Arcasonde	-	-	-	MI	-	-	-	80	-	-
1978-4650	2443674.26	1978 Jun 14 18:10:00	Rocketsonde	-	-	Arcasonde	-	-	-	WS	-	-	-	86	-	-
1978-4652	2443674.27	1978 Jun 14 18:32:00	Rocketsonde	-	-	Arcasonde	-	-	-	MI	-	-	-	86	-	-
1978-4654	2443674.27	1978 Jun 14 18:33:00	Rocketsonde	-	-	Arcasonde	-	-	-	PRIM	-	-	-	56	-	-
1978-4655	2443675.36	1978 Jun 16 20:30:00	Rocketsonde	-	-	Arcasonde	-	-	-	PRIM	-	-	-	74	-	-
1978-4656	2443675.58	1978 Jun 16 20:30:00	Rocketsonde	-	-	Arcasonde	-	-	-	SHER	-	-	-	56	-	-
1978-4659	2443676.06	1978 Jun 16 14:49:59	Rocketsonde	-	-	Arcasonde	-	-	-	SHER	-	-	-	66	-	-
1978-4658	2443676.12	1978 Jun 16 15:48:59	Rocketsonde	-	-	Arcasonde	-	-	-	THU	-	-	-	69	-	-
1978-4659	2443676.17	1978 Jun 16 15:48:59	Rocketsonde	-	-	Arcasonde	-	-	-	PH	-	-	-	59	-	-
1978-4660	2443676.25	1978 Jun 16 15:58:59	Rocketsonde	-	-	Arcasonde	-	-	-	WS	-	-	-	60	-	-
1978-4661	2443676.35	1978 Jun 17 00:27:59	Rocketsonde	-	-	Arcasonde	-	-	-	PH	-	-	-	57	-	-
1978-4662	2443676.50	1978 Jun 17 00:27:59	Rocketsonde	-	-	Arcasonde	-	-	-	SHER	-	-	-	57	-	-
1978-4653	2443676.52	1978 Jun 17 04:27:59	Rocketsonde	-	-	Arcasonde	-	-	-	KHR	-	-	-	64	-	-
1978-4654	2443676.71	1978 Jun 19 17:50:00	Rocketsonde	-	-	Arcasonde	-	-	-	THU	-	-	-	67	-	-
1978-4655	2443679.24	1978 Jun 19 18:30:00	Rocketsonde	-	-	Arcasonde	-	-	-	SHER	-	-	-	73	-	-
1978-4656	2443679.27	1978 Jun 19 18:30:00	Rocketsonde	-	-	Arcasonde	-	-	-	PH	-	-	-	70	-	-
1978-4657	2443679.35	1978 Jun 19 19:56:59	Rocketsonde	-	-	Arcasonde	-	-	-	PRIM	-	-	-	56	-	-
1978-4658	2443679.35	1978 Jun 19 20:18:00	Rocketsonde	-	-	Arcasonde	-	-	-	KAU	-	-	-	54	-	-
1978-4659	2443680.21	1978 Jun 20 17:00:00	Rocketsonde	-	-	Arcasonde	-	-	-	WS	-	-	-	65	-	-
1978-4670	2443680.23	1978 Jun 20 20:00:00	Rocketsonde	-	-	Arcasonde	-	-	-	SHER	-	-	-	50	-	-
1978-4671	2443681.09	1978 Jun 21 14:15:00	Rocketsonde	-	-	Arcasonde	-	-	-	SHER	-	-	-	61	-	-
1978-4672	2443681.13	1978 Jun 21 15:04:59	Rocketsonde	-	-	Arcasonde	-	-	-	THU	-	-	-	66	-	-
1978-4675	2443681.18	1978 Jun 21 16:14:59	Rocketsonde	-	-	Arcasonde	-	-	-	WS	-	-	-	66	-	-
1978-4676	2443681.19	1978 Jun 21 16:26:59	Rocketsonde	-	-	Arcasonde	-	-	-	PRIM	-	-	-	69	-	-
1978-4677	2443681.25	1978 Jun 21 17:55:00	Rocketsonde	-	-	Arcasonde	-	-	-	WS	-	-	-	71	-	-
1978-4677	2443681.25	1978 Jun 21 17:55:00	Rocketsonde	-	-	Arcasonde	-	-	-	MI	-	-	-	75	-	-
1978-4678	2443681.55	1978 Jun 22 01:14:59	Rocketsonde	-	-	Arcasonde	-	-	-	PH	-	-	-	80	-	-
1978-4678	2443683.13	1978 Jun 23 15:10:00	Rocketsonde	-	-	Arcasonde	-	-	-	KHR	-	-	-	70	-	-
1978-4679	2443683.15	1978 Jun 23 15:40:00	Rocketsonde	-	-	Arcasonde	-	-	-	THU	-	-	-	68	-	-
1978-4680	2443683.19	1978 Jun 23 16:30:00	Rocketsonde	-	-	Arcasonde	-	-	-	PRIM	-	-	-	68	-	-
1978-4681	2443683.21	1978 Jun 23 17:00:00	Rocketsonde	-	-	Arcasonde	-	-	-	WS	-	-	-	59	-	-
1978-4682	2443683.24	1978 Jun 23 17:52:00	Rocketsonde	-	-	Arcasonde	-	-	-	SHER	-	-	-	71	-	-
1978-4683	2443683.37	1978 Jun 26 20:59:00	Rocketsonde	-	-	Arcasonde	-	-	-	PM	-	-	-	56	-	-
1978-4684	2443686.12	1978 Jun 26 14:53:00	Rocketsonde	-	-	Arcasonde	-	-	-	KAU	-	-	-	67	-	-
1978-4685	2443686.25	1978 Jun 26 17:00:00	Rocketsonde	-	-	Arcasonde	-	-	-	SHER	-	-	-	64	-	-
1978-4686	2443686.25	1978 Jun 26 18:00:00	Rocketsonde	-	-	Arcasonde	-	-	-	WS	-	-	-	72	-	-
1978-4687	2443686.26	1978 Jun 26 18:13:59	Rocketsonde	-	-	Arcasonde	-	-	-	PM	-	-	-	59	-	-
1978-428	2443686.34	1978 Jun 26 20:04:59	Rocketsonde	-	-	Arcasonde	-	-	-	SHER	-	-	-	47	-	-
1978-4688	2443687.42	1978 Jun 27 15:46:59	Rocketsonde	-	-	Arcasonde	-	-	-	PRIM	-	-	-	68	-	-
1978-4689	2443687.42	1978 Jun 27 22:09:59	Rocketsonde	-	-	Arcasonde	-	-	-	KHR	-	-	-	76	-	-
1978-4692	2443688.12	1978 Jun 28 15:09:00	Rocketsonde	-	-	Arcasonde	-	-	-	THU	-	-	-	67	-	-
1978-4693	2443688.13	1978 Jun 28 15:09:00	Rocketsonde	-	-	Arcasonde	-	-	-	KHR	-	-	-	70	-	-
1978-4694	2443688.15	1978 Jun 28 15:34:59	Rocketsonde	-	-	Arcasonde	-	-	-	MI	-	-	-	67	-	-
1978-4694	2443688.15	1978 Jun 28 17:00:00	Rocketsonde	-	-	Arcasonde	-	-	-	THU	-	-	-	70	-	-
1978-4697	2443688.21	1978 Jun 28 17:15:00	Rocketsonde	-	-	Arcasonde	-	-	-	WS	-	-	-	63	-	-
1978-4698	2443688.22	1978 Jun 28 17:15:00	Rocketsonde	-	-	Arcasonde	-	-	-	SHER	-	-	-	62	-	-
1978-4237	2443688.29	1978 Jun 28 18:53:00	Rocketsonde	-	-	Arcasonde	-	-	-	PM	-	-	-	89	-	-
1978-430	2443688.34	1978 Jun 28 20:04:59	Rocketsonde	-	-	Arcasonde	-	-	-	SHER	-	-	-	47	-	-

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Mission	FlightCode	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee_Km	Range_Km	Dest
1978-7238	2443688-38	1978 Jun 28 21:00:00	Rocketsonde	-	-	AI/DMP-9?	-	-	-	KAU	-	-	-	90	-	-
1978-7689	2443688-39	1978 Jun 28 21:18:00	Rocketsonde	-	-	Arcasonde	-	-	-	PH	-	-	-	73	-	-
1978-4700	2443688-39	1978 Jun 28 21:25:59	Rocketsonde	-	-	Arcasonde	-	-	-	KAU	-	-	-	70	-	-
1978-4701	2443688-55	1978 Jun 29 01:14:59	Rocketsonde	-	-	Arcasonde	-	-	-	KMR	-	-	-	78	-	-
1978-4703	2443690-13	1978 Jun 30 15:10:00	Rocketsonde	-	-	Arcasonde	-	-	-	THU	-	-	-	66	-	-
1978-4704	2443690-25	1978 Jun 30 17:58:00	Rocketsonde	-	-	Arcasonde	-	-	-	PH	-	-	-	68	-	-
1978-4705	2443690-25	1978 Jun 30 18:00:00	Rocketsonde	-	-	Arcasonde	-	-	-	WS	-	-	-	68	-	-
1978-4706	2443690-38	1978 Jun 30 21:00:00	Rocketsonde	-	-	Arcasonde	-	-	-	KAU	-	-	-	53	-	-
1978-4707	2443690-59	1978 Jul 1 02:04:59	Rocketsonde	-	-	Arcasonde	-	-	-	KMR	-	-	-	68	-	-
1978-4708	2443693-11	1978 Jul 3 14:45:00	Rocketsonde	-	-	Arcasonde	-	-	-	THU	-	-	-	68	-	-
1978-4709	2443693-25	1978 Jul 3 18:00:00	Rocketsonde	-	-	Arcasonde	-	-	-	WS	-	-	-	68	-	-
1978-4710	2443693-93	1978 Jul 4 01:14:59	Rocketsonde	-	-	Arcasonde	-	-	-	KMR	-	-	-	72	-	-
1978-4711	2443693-93	1978 Jul 4 01:15:59	Rocketsonde	-	-	Arcasonde	-	-	-	KMR	-	-	-	60	-	-
1978-4713	2443695-11	1978 Jul 5 14:43:00	Rocketsonde	-	-	Arcasonde	-	-	-	KMR	-	-	-	63	-	-
1978-4714	2443695-15	1978 Jul 5 15:53:00	Rocketsonde	-	-	Arcasonde	-	-	-	VI	-	-	-	68	-	-
1978-4715	2443695-15	1978 Jul 5 15:40:00	Rocketsonde	-	-	Arcasonde	-	-	-	PRIM	-	-	-	60	-	-
1978-4716	2443695-18	1978 Jul 5 16:19:59	Rocketsonde	-	-	Arcasonde	-	-	-	PH	-	-	-	74	-	-
1978-7243	2443695-21	1978 Jul 5 17:00:00	Rocketsonde	-	-	AI/DMP-9	-	-	-	WS	-	-	-	96	-	-
1978-7248	2443695-21	1978 Jul 5 17:00:00	Rocketsonde	-	-	Arcasonde	-	-	-	SHER	-	-	-	59	-	-
1978-4718	2443695-22	1978 Jul 5 17:15:00	Rocketsonde	-	-	Arcasonde	-	-	-	WS	-	-	-	60	-	-
1978-7244	2443695-22	1978 Jul 5 17:22:00	Rocketsonde	-	-	AI/DMP-9	-	-	-	PH	-	-	-	90	-	-
1978-7245	2443695-33	1978 Jul 5 19:57:59	Rocketsonde	-	-	AI/DMP-9?	-	-	-	WS	-	-	-	60	-	-
1978-7245	2443695-35	1978 Jul 5 20:30:00	Rocketsonde	-	-	Arcasonde	-	-	-	KAU	-	-	-	89	-	-
1978-4720	2443695-39	1978 Jul 5 21:26:59	Rocketsonde	-	-	Arcasonde	-	-	-	KAU	-	-	-	71	-	-
1978-4721	2443695-21	1978 Jul 6 17:00:00	Rocketsonde	-	-	Arcasonde	-	-	-	KMR	-	-	-	79	-	-
1978-4722	2443697-09	1978 Jul 7 14:10:00	Rocketsonde	-	-	Arcasonde	-	-	-	WS	-	-	-	71	-	-
1978-4724	2443697-13	1978 Jul 7 15:10:00	Rocketsonde	-	-	Arcasonde	-	-	-	SHER	-	-	-	56	-	-
1978-4726	2443697-52	1978 Jul 7 19:53:59	Rocketsonde	-	-	Arcasonde	-	-	-	THU	-	-	-	67	-	-
1978-4726	2443697-56	1978 Jul 7 19:53:59	Rocketsonde	-	-	Arcasonde	-	-	-	PH	-	-	-	72	-	-
1978-4727	2443700-08	1978 Jul 8 01:20:59	Rocketsonde	-	-	Arcasonde	-	-	-	KMR	-	-	-	79	-	-
1978-4729	2443700-11	1978 Jul 10 13:54:59	Rocketsonde	-	-	Arcasonde	-	-	-	SHER	-	-	-	62	-	-
1978-4730	2443700-25	1978 Jul 10 14:33:00	Rocketsonde	-	-	Arcasonde	-	-	-	THU	-	-	-	62	-	-
1978-4731	2443700-25	1978 Jul 10 17:55:00	Rocketsonde	-	-	Arcasonde	-	-	-	PH	-	-	-	69	-	-
1978-4731	2443700-27	1978 Jul 10 17:55:00	Rocketsonde	-	-	Arcasonde	-	-	-	WS	-	-	-	72	-	-
1978-483	2443700-28	1978 Jul 10 18:45:00	Rocketsonde	-	-	Arcasonde	-	-	-	WS	-	-	-	68	-	-
1978-4752	2443700-43	1978 Jul 10 22:23:59	Rocketsonde	-	-	Arcasonde	-	-	-	PRIM	-	-	-	47	-	-
1978-4753	2443702-11	1978 Jul 12 14:45:00	Rocketsonde	-	-	Arcasonde	-	-	-	THU	-	-	-	67	-	-
1978-4754	2443702-12	1978 Jul 12 14:46:00	Rocketsonde	-	-	Arcasonde	-	-	-	PRIM	-	-	-	63	-	-
1978-4755	2443702-15	1978 Jul 12 15:00:00	Rocketsonde	-	-	Arcasonde	-	-	-	THU	-	-	-	72	-	-
1978-4756	2443702-17	1978 Jul 12 15:09:59	Rocketsonde	-	-	Arcasonde	-	-	-	WS	-	-	-	86	-	-
1978-7284	2443702-18	1978 Jul 12 15:14:59	Rocketsonde	-	-	Arcasonde	-	-	-	WS	-	-	-	86	-	-
1978-7285	2443702-19	1978 Jul 12 15:20:00	Rocketsonde	-	-	Arcasonde	-	-	-	SHER	-	-	-	61	-	-
1978-7286	2443702-21	1978 Jul 12 16:15:00	Rocketsonde	-	-	Arcasonde	-	-	-	WS	-	-	-	86	-	-
1978-7287	2443702-22	1978 Jul 12 17:00:00	Rocketsonde	-	-	AI/DMP-9	-	-	-	PH	-	-	-	90	-	-
1978-7289	2443702-22	1978 Jul 12 17:00:00	Rocketsonde	-	-	Arcasonde	-	-	-	PH	-	-	-	86	-	-
1978-4741	2443702-29	1978 Jul 12 18:15:00	Rocketsonde	-	-	Arcasonde	-	-	-	PH	-	-	-	74	-	-
1978-4742	2443702-55	1978 Jul 13 01:14:59	Rocketsonde	-	-	Arcasonde	-	-	-	KMR	-	-	-	79	-	-
1978-4743	2443703-14	1978 Jul 13 01:14:59	Rocketsonde	-	-	Arcasonde	-	-	-	KMR	-	-	-	67	-	-
1978-4749	2443703-14	1978 Jul 13 01:14:59	Rocketsonde	-	-	Arcasonde	-	-	-	THU	-	-	-	72	-	-
1978-4749	2443703-14	1978 Jul 13 01:14:59	Rocketsonde	-	-	Arcasonde	-	-	-	THU	-	-	-	67	-	-
1978-4745	2443704-26	1978 Jul 14 16:52:59	Rocketsonde	-	-	Arcasonde	-	-	-	PH	-	-	-	71	-	-
1978-4746	2443704-21	1978 Jul 14 17:02:59	Rocketsonde	-	-	Arcasonde	-	-	-	SHER	-	-	-	62	-	-
1978-4747	2443704-37	1978 Jul 14 20:56:00	Rocketsonde	-	-	Arcasonde	-	-	-	KAU	-	-	-	62	-	-
1978-4749	2443707-14	1978 Jul 17 16:20:00	Rocketsonde	-	-	Arcasonde	-	-	-	THU	-	-	-	57	-	-
1978-4749	2443707-14	1978 Jul 17 16:20:00	Rocketsonde	-	-	Arcasonde	-	-	-	WS	-	-	-	59	-	-
1978-4751	2443707-21	1978 Jul 17 17:00:00	Rocketsonde	-	-	Arcasonde	-	-	-	SHER	-	-	-	52	-	-
1978-4751	2443707-25	1978 Jul 17 17:57:00	Rocketsonde	-	-	Arcasonde	-	-	-	PH	-	-	-	52	-	-
1978-4752	2443708-46	1978 Jul 18 23:00:00	Rocketsonde	-	-	Arcasonde	-	-	-	KMR	-	-	-	78	-	-
1978-4753	2443708-75	1978 Jul 19 05:55:00	Rocketsonde	-	-	Arcasonde	-	-	-	KMR	-	-	-	76	-	-
1978-4754	2443708-96	1978 Jul 19 11:00:00	Rocketsonde	-	-	Arcasonde	-	-	-	KMR	-	-	-	74	-	-
1978-4755	2443709-08	1978 Jul 19 14:44:00	Rocketsonde	-	-	Arcasonde	-	-	-	VI	-	-	-	68	-	-
1978-4756	2443709-11	1978 Jul 19 14:44:00	Rocketsonde	-	-	Arcasonde	-	-	-	THU	-	-	-	71	-	-
1978-4757	2443709-12	1978 Jul 19 15:00:00	Rocketsonde	-	-	Arcasonde	-	-	-	THU	-	-	-	67	-	-
1978-4758	2443709-14	1978 Jul 19 15:23:59	Rocketsonde	-	-	Arcasonde	-	-	-	PH	-	-	-	74	-	-
1978-4759	2443709-16	1978 Jul 19 15:49:59	Rocketsonde	-	-	Arcasonde	-	-	-	PH	-	-	-	63	-	-
1978-4761	2443709-23	1978 Jul 19 17:35:00	Rocketsonde	-	-	Arcasonde	-	-	-	WS	-	-	-	57	-	-
1978-4762	2443709-25	1978 Jul 19 18:00:00	Rocketsonde	-	-	AI/DMP-9	-	-	-	WS	-	-	-	98	-	-
1978-4762	2443709-26	1978 Jul 19 18:00:00	Rocketsonde	-	-	Arcasonde	-	-	-	WS	-	-	-	75	-	-
1978-4763	2443709-26	1978 Jul 19 18:15:59	Rocketsonde	-	-	Arcasonde	-	-	-	WS	-	-	-	63	-	-
1978-4764	2443709-49	1978 Jul 19 23:46:00	Rocketsonde	-	-	Arcasonde	-	-	-	KMR	-	-	-	78	-	-
1978-4766	2443709-75	1978 Jul 20 06:00:00	Rocketsonde	-	-	Arcasonde	-	-	-	KMR	-	-	-	75	-	-
1978-4766	2443709-98	1978 Jul 20 11:30:00	Rocketsonde	-	-	Arcasonde	-	-	-	KMR	-	-	-	68	-	-
1978-4767	2443710-17	1978 Jul 20 16:00:59	Rocketsonde	-	-	Arcasonde	-	-	-	WS	-	-	-	68	-	-
1978-4768	2443710-40	1978 Jul 20 21:40:00	Rocketsonde	-	-	Arcasonde	-	-	-	WS	-	-	-	74	-	-
1978-4769	2443710-58	1978 Jul 21 02:00:00	Rocketsonde	-	-	Arcasonde	-	-	-	KMR	-	-	-	76	-	-
1978-4771	2443711-21	1978 Jul 21 17:00:00	Rocketsonde	-	-	Arcasonde	-	-	-	SHER	-	-	-	61	-	-
1978-4772	2443711-42	1978 Jul 21 22:04:59	Rocketsonde	-	-	Arcasonde	-	-	-	THU	-	-	-	77	-	-
1978-4774	2443714-12	1978 Jul 24 14:57:00	Rocketsonde	-	-	Arcasonde	-	-	-	THU	-	-	-	61	-	-
1978-4775	2443714-23	1978 Jul 24 17:37:00	Rocketsonde	-	-	Arcasonde	-	-	-	PH	-	-	-	72	-	-
1978-4777	2443714-55	1978 Jul 25 01:14:59	Rocketsonde	-	-	Arcasonde	-	-	-	KMR	-	-	-	77	-	-
1978-4778	2443715-26	1978 Jul 25 18:20:00	Rocketsonde	-	-	Arcasonde	-	-	-	WS	-	-	-	52	-	-
1978-4779	2443715-62	1978 Jul 26 02:49:59	Rocketsonde	-	-	Arcasonde	-	-	-	KMR	-	-	-	76	-	-
1978-4780	2443716-08	1978 Jul 26 13:49:59	Rocketsonde	-	-	Arcasonde	-	-	-	SHER	-	-	-	62	-	-
1978-4781	2443716-11	1978 Jul 26 14:43:00	Rocketsonde	-	-	Arcasonde	-	-	-	VI	-	-	-	67	-	-
1978-4782	2443716-13	1978 Jul 26 15:08:00	Rocketsonde	-	-	Arcasonde	-	-	-	THU	-	-	-	70	-	-
1978-4783	2443716-20	1978 Jul 26 16:52:00	Rocketsonde	-	-	AI/DMP-9	-	-	-	PH	-	-	-	85	-	-
1978-4784	2443716-22	1978 Jul 26 17:23:00	Rocketsonde	-	-	Arcasonde	-	-	-	PH	-	-	-	59	-	-
1978-483	2443716-34	1978 Jul 26 20:15:00	Rocketsonde	-	-	Arcasonde	-	-	-	WS	-	-	-	39	-	-

Launch

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Mission	FlightCode	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee_Km	Range_Km	Dest
1978-1273	2443716.35	1978 Jul 26 20:18:00	Rocketsonde	-	-	AI/DMP-9?	-	-	-	KAU	-	-	-	90	-	-
1978-4795	2443716.37	1978 Jul 26 20:51:00	Rocketsonde	-	-	Arcasonde	-	-	-	KAU	-	-	-	72	-	-
1978-4796	2443716.42	1978 Jul 26 22:10:59	Rocketsonde	-	-	Arcasonde	-	-	-	KMR	-	-	-	68	-	-
1978-1274	2443716.44	1978 Jul 26 22:30:00	Rocketsonde	-	-	AI/DMP-9	-	-	-	WS	-	-	-	98	-	-
1978-4797	2443718.09	1978 Jul 28 14:15:00	Rocketsonde	-	-	Arcasonde	-	-	-	SHER	-	-	-	62	-	-
1978-4791	2443718.20	1978 Jul 28 16:46:59	Rocketsonde	-	-	Arcasonde	-	-	-	PH	-	-	-	55	-	-
1978-4792	2443718.25	1978 Jul 28 18:04:59	Rocketsonde	-	-	Arcasonde	-	-	-	WS	-	-	-	60	-	-
1978-4793	2443718.27	1978 Jul 28 18:54:59	Rocketsonde	-	-	Arcasonde	-	-	-	THU	-	-	-	64	-	-
1978-4794	2443718.55	1978 Jul 29 01:14:59	Rocketsonde	-	-	Arcasonde	-	-	-	THU	-	-	-	64	-	-
1978-4798	2443721.15	1978 Jul 31 15:33:00	Rocketsonde	-	-	Arcasonde	-	-	-	THU	-	-	-	70	-	-
1978-4799	2443721.21	1978 Jul 31 17:00:00	Rocketsonde	-	-	Arcasonde	-	-	-	WS	-	-	-	62	-	-
1978-4800	2443721.21	1978 Jul 31 17:00:00	Rocketsonde	-	-	Arcasonde	-	-	-	WS	-	-	-	61	-	-
1978-4801	2443721.41	1978 Jul 31 21:46:59	Rocketsonde	-	-	Arcasonde	-	-	-	KMR	-	-	-	75	-	-
1978-4802	2443723.11	1978 Aug 2 14:37:59	Rocketsonde	-	-	AI/DMP-9	-	-	-	WS	-	-	-	98	-	-
1978-1279	2443723.18	1978 Aug 2 16:14:59	Rocketsonde	-	-	AI/DMP-9	-	-	-	PH	-	-	-	59	-	-
1978-1280	2443723.18	1978 Aug 2 16:24:59	Rocketsonde	-	-	Arcasonde	-	-	-	WS	-	-	-	62	-	-
1978-4803	2443723.19	1978 Aug 2 16:50:00	Rocketsonde	-	-	Arcasonde	-	-	-	PH	-	-	-	74	-	-
1978-4804	2443723.20	1978 Aug 2 16:48:59	Rocketsonde	-	-	Arcasonde	-	-	-	SHER	-	-	-	62	-	-
1978-4805	2443723.21	1978 Aug 2 17:00:00	Rocketsonde	-	-	Arcasonde	-	-	-	WS	-	-	-	66	-	-
1978-1281	2443723.35	1978 Aug 2 20:20:00	Rocketsonde	-	-	AI/DMP-9	-	-	-	KAU	-	-	-	96	-	-
1978-1282	2443723.40	1978 Aug 2 21:56:59	Rocketsonde	-	-	AI/DMP-9?	-	-	-	KAU	-	-	-	89	-	-
1978-4807	2443723.43	1978 Aug 2 22:12:59	Rocketsonde	-	-	Arcasonde	-	-	-	KAU	-	-	-	68	-	-
1978-4808	2443723.60	1978 Aug 3 02:29:00	Rocketsonde	-	-	Arcasonde	-	-	-	KMR	-	-	-	66	-	-
1978-4809	2443724.43	1978 Aug 3 22:25:59	Rocketsonde	-	-	Arcasonde	-	-	-	KMR	-	-	-	66	-	-
1978-4810	2443725.13	1978 Aug 4 15:07:00	Rocketsonde	-	-	Arcasonde	-	-	-	THU	-	-	-	62	-	-
1978-4811	2443725.21	1978 Aug 4 18:00:00	Rocketsonde	-	-	Arcasonde	-	-	-	THU	-	-	-	62	-	-
1978-4812	2443725.25	1978 Aug 4 17:00:00	Rocketsonde	-	-	Arcasonde	-	-	-	SHER	-	-	-	67	-	-
1978-4813	2443725.15	1978 Aug 7 16:30:00	Rocketsonde	-	-	Arcasonde	-	-	-	WS	-	-	-	62	-	-
1978-4814	2443725.19	1978 Aug 7 15:37:59	Rocketsonde	-	-	Arcasonde	-	-	-	WS	-	-	-	66	-	-
1978-4815	2443725.19	1978 Aug 7 16:30:00	Rocketsonde	-	-	Arcasonde	-	-	-	SHER	-	-	-	51	-	-
1978-4816	2443725.21	1978 Aug 7 17:04:59	Rocketsonde	-	-	Arcasonde	-	-	-	PH	-	-	-	57	-	-
1978-4817	2443725.25	1978 Aug 7 17:53:00	Rocketsonde	-	-	Arcasonde	-	-	-	KAU	-	-	-	71	-	-
1978-4818	2443725.38	1978 Aug 7 21:00:00	Rocketsonde	-	-	Arcasonde	-	-	-	KAU	-	-	-	60	-	-
1978-4819	2443725.36	1978 Aug 8 20:43:00	Rocketsonde	-	-	Arcasonde	-	-	-	KMR	-	-	-	60	-	-
1978-4820	2443725.41	1978 Aug 8 21:44:00	Rocketsonde	-	-	Arcasonde	-	-	-	THU	-	-	-	71	-	-
1978-4821	2443730.12	1978 Aug 9 14:53:00	Rocketsonde	-	-	Arcasonde	-	-	-	THU	-	-	-	60	-	-
1978-4823	2443730.13	1978 Aug 9 15:12:59	Rocketsonde	-	-	Arcasonde	-	-	-	SHER	-	-	-	64	-	-
1978-4824	2443730.21	1978 Aug 9 17:00:00	Rocketsonde	-	-	AI/DMP-9	-	-	-	PH	-	-	-	89	-	-
1978-1289	2443730.23	1978 Aug 9 17:31:00	Rocketsonde	-	-	Arcasonde	-	-	-	PH	-	-	-	74	-	-
1978-1290	2443730.24	1978 Aug 9 17:51:00	Rocketsonde	-	-	AI/DMP-9	-	-	-	WS	-	-	-	96	-	-
1978-4826	2443730.25	1978 Aug 9 18:00:00	Rocketsonde	-	-	Arcasonde	-	-	-	WS	-	-	-	72	-	-
1978-4827	2443730.27	1978 Aug 9 18:50:00	Rocketsonde	-	-	Arcasonde	-	-	-	PRIM	-	-	-	54	-	-
1978-4828	2443730.42	1978 Aug 9 21:59:59	Rocketsonde	-	-	Arcasonde	-	-	-	WS	-	-	-	68	-	-
1978-4829	2443730.55	1978 Aug 10 01:14:59	Rocketsonde	-	-	Arcasonde	-	-	-	KMR	-	-	-	66	-	-
1978-4830	2443731.18	1978 Aug 10 16:14:59	Rocketsonde	-	-	Arcasonde	-	-	-	THU	-	-	-	68	-	-
1978-4831	2443731.12	1978 Aug 11 15:00:00	Rocketsonde	-	-	Arcasonde	-	-	-	THU	-	-	-	68	-	-
1978-4832	2443732.21	1978 Aug 11 17:00:00	Rocketsonde	-	-	Arcasonde	-	-	-	SHER	-	-	-	65	-	-
1978-4833	2443732.21	1978 Aug 11 17:00:00	Rocketsonde	-	-	Arcasonde	-	-	-	PH	-	-	-	72	-	-
1978-4834	2443732.24	1978 Aug 11 20:04:59	Rocketsonde	-	-	Arcasonde	-	-	-	KAU	-	-	-	53	-	-
1978-4835	2443732.26	1978 Aug 11 21:29:00	Rocketsonde	-	-	Arcasonde	-	-	-	KMR	-	-	-	68	-	-
1978-4836	2443732.26	1978 Aug 11 21:48:59	Rocketsonde	-	-	Arcasonde	-	-	-	THU	-	-	-	68	-	-
1978-4837	2443732.27	1978 Aug 14 17:48:59	Rocketsonde	-	-	Arcasonde	-	-	-	THU	-	-	-	68	-	-
1978-4838	2443732.27	1978 Aug 14 18:30:00	Rocketsonde	-	-	Arcasonde	-	-	-	SHER	-	-	-	69	-	-
1978-4839	2443732.27	1978 Aug 14 21:00:00	Rocketsonde	-	-	Arcasonde	-	-	-	PRIM	-	-	-	69	-	-
1978-4840	2443732.58	1978 Aug 15 01:14:59	Rocketsonde	-	-	Arcasonde	-	-	-	KAU	-	-	-	57	-	-
1978-4841	2443732.58	1978 Aug 15 01:14:59	Rocketsonde	-	-	Arcasonde	-	-	-	KMR	-	-	-	70	-	-
1978-4842	2443732.51	1978 Aug 15 17:00:00	Rocketsonde	-	-	Arcasonde	-	-	-	WS	-	-	-	67	-	-
1978-4843	2443732.53	1978 Aug 15 20:00:00	Rocketsonde	-	-	Arcasonde	-	-	-	WS	-	-	-	67	-	-
1978-4844	2443732.53	1978 Aug 15 20:00:00	Rocketsonde	-	-	Arcasonde	-	-	-	SHER	-	-	-	48	-	-
1978-4845	2443732.08	1978 Aug 16 13:54:59	Rocketsonde	-	-	Arcasonde	-	-	-	SHER	-	-	-	63	-	-
1978-4846	2443732.10	1978 Aug 16 14:30:00	Rocketsonde	-	-	Arcasonde	-	-	-	THU	-	-	-	71	-	-
1978-4303	2443732.21	1978 Aug 16 16:58:59	Rocketsonde	-	-	Arcasonde	-	-	-	PH	-	-	-	69	-	-
1978-4851	2443732.27	1978 Aug 16 18:29:59	Rocketsonde	-	-	Arcasonde	-	-	-	VI	-	-	-	68	-	-
1978-4305	2443732.33	1978 Aug 16 20:00:00	Rocketsonde	-	-	AI/DMP-9?	-	-	-	PRIM	-	-	-	90	-	-
1978-4852	2443732.33	1978 Aug 16 20:12:00	Rocketsonde	-	-	Arcasonde	-	-	-	WS	-	-	-	64	-	-
1978-4853	2443732.34	1978 Aug 16 20:12:00	Rocketsonde	-	-	Arcasonde	-	-	-	WS	-	-	-	71	-	-
1978-4854	2443732.35	1978 Aug 16 20:30:00	Rocketsonde	-	-	Arcasonde	-	-	-	WS	-	-	-	67	-	-
1978-4306	2443732.38	1978 Aug 16 21:00:00	Rocketsonde	-	-	AI/DMP-9	-	-	-	WS	-	-	-	79	-	-
1978-4855	2443732.40	1978 Aug 16 21:00:00	Rocketsonde	-	-	Arcasonde	-	-	-	KMR	-	-	-	65	-	-
1978-4856	2443732.14	1978 Aug 18 15:14:59	Rocketsonde	-	-	Arcasonde	-	-	-	THU	-	-	-	65	-	-
1978-4858	2443732.19	1978 Aug 18 16:30:00	Rocketsonde	-	-	Arcasonde	-	-	-	WS	-	-	-	68	-	-
1978-4859	2443732.20	1978 Aug 18 16:43:59	Rocketsonde	-	-	Arcasonde	-	-	-	WS	-	-	-	69	-	-
1978-4860	2443732.21	1978 Aug 18 17:00:00	Rocketsonde	-	-	Arcasonde	-	-	-	PRIM	-	-	-	64	-	-
1978-4861	2443732.34	1978 Aug 18 20:06:00	Rocketsonde	-	-	Arcasonde	-	-	-	SHER	-	-	-	64	-	-
1978-4337	2443732.39	1978 Aug 18 21:20:00	Rocketsonde	-	-	Arcasonde	-	-	-	PM	-	-	-	45	-	-
1978-4862	2443732.55	1978 Aug 19 01:14:59	Rocketsonde	-	-	Arcasonde	-	-	-	SHER	-	-	-	76	-	-
1978-4863	2443742.09	1978 Aug 21 14:10:00	Rocketsonde	-	-	Arcasonde	-	-	-	KMR	-	-	-	64	-	-
1978-4864	2443742.17	1978 Aug 21 15:35:59	Rocketsonde	-	-	Arcasonde	-	-	-	THU	-	-	-	72	-	-
1978-4865	2443742.27	1978 Aug 21 15:59:59	Rocketsonde	-	-	Arcasonde	-	-	-	WS	-	-	-	67	-	-
1978-438	2443742.27	1978 Aug 21 18:30:00	Rocketsonde	-	-	Arcasonde	-	-	-	WS	-	-	-	44	-	-
1978-4867	2443742.27	1978 Aug 21 18:32:00	Rocketsonde	-	-	Arcasonde	-	-	-	PRIM	-	-	-	64	-	-
1978-4868	2443742.38	1978 Aug 21 21:00:00	Rocketsonde	-	-	Arcasonde	-	-	-	PM	-	-	-	60	-	-
1978-4869	2443742.58	1978 Aug 22 01:14:59	Rocketsonde	-	-	Arcasonde	-	-	-	KAU	-	-	-	75	-	-
1978-4871	2443744.12	1978 Aug 23 14:57:00	Rocketsonde	-	-	Arcasonde	-	-	-	KMR	-	-	-	72	-	-
1978-4315	2443744.19	1978 Aug 23 16:30:00	Rocketsonde	-	-	AI/DMP-9	-	-	-	THU	-	-	-	98	-	-
1978-4873	2443744.20	1978 Aug 23 16:44:59	Rocketsonde	-	-	Arcasonde	-	-	-	WS	-	-	-	70	-	-
1978-4874	2443744.23	1978 Aug 23 17:30:00	Rocketsonde	-	-	Arcasonde	-	-	-	SHER	-	-	-	61	-	-
1978-439	2443744.23	1978 Aug 23 17:31:00	Rocketsonde	-	-	-	-	-	-	VI	-	-	-	39	-	-

Launch

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Mission	FlightCode	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_L_Pad	Apogee_Km	Range_Km	Dest
1978-8676	2443744.26	1978 Aug 23 1820:00	Rocketsonde	-	-	Arcasonde	-	-	-	PH	-	-	-	70	-	-
1978-8677	2443744.28	1978 Aug 23 1840:00	Rocketsonde	-	-	Arcasonde	-	-	-	WI	-	-	-	64	-	-
1978-8678	2443744.34	1978 Aug 23 2008:00	Rocketsonde	-	-	Arcasonde	-	-	-	PRIM	-	-	-	67	-	-
1978-7317	2443744.36	1978 Aug 23 2034:00	Rocketsonde	-	-	Arcasonde	-	-	-	WS	-	-	-	99	-	-
1978-8679	2443744.49	1978 Aug 23 2338:59	Rocketsonde	-	-	Arcasonde	-	-	-	KMR	-	-	-	67	-	-
1978-8682	2443745.22	1978 Aug 24 17:15:00	Rocketsonde	-	-	Arcasonde	-	-	-	WS	-	-	-	68	-	-
1978-440	2443745.34	1978 Aug 24 20:15:00	Rocketsonde	-	-	Arcasonde	-	-	-	SHEM	-	-	-	49	-	-
1978-8683	2443745.40	1978 Aug 24 21:38:59	Rocketsonde	-	-	Arcasonde	-	-	-	KMR	-	-	-	68	-	-
1978-8684	2443746.12	1978 Aug 25 14:54:00	Rocketsonde	-	-	Arcasonde	-	-	-	THU	-	-	-	68	-	-
1978-8686	2443746.21	1978 Aug 25 17:00:00	Rocketsonde	-	-	Arcasonde	-	-	-	SHER	-	-	-	64	-	-
1978-8688	2443746.25	1978 Aug 25 18:06:00	Rocketsonde	-	-	Arcasonde	-	-	-	WI	-	-	-	70	-	-
1978-441	2443749.16	1978 Aug 28 15:47:59	Rocketsonde	-	-	Arcasonde	-	-	-	THU	-	-	-	48	-	-
1978-8691	2443749.17	1978 Aug 28 16:09:59	Rocketsonde	-	-	Arcasonde	-	-	-	PRIM	-	-	-	48	-	-
1978-8692	2443749.18	1978 Aug 28 16:21:59	Rocketsonde	-	-	Arcasonde	-	-	-	PH	-	-	-	71	-	-
1978-8694	2443749.21	1978 Aug 28 17:00:00	Rocketsonde	-	-	Arcasonde	-	-	-	SHER	-	-	-	64	-	-
1978-8695	2443749.25	1978 Aug 28 18:00:00	Rocketsonde	-	-	Arcasonde	-	-	-	WS	-	-	-	66	-	-
1978-442	2443749.54	1978 Aug 29 00:59:59	Rocketsonde	-	-	Arcasonde	-	-	-	SHEM	-	-	-	49	-	-
1978-8696	2443749.55	1978 Aug 29 01:14:59	Rocketsonde	-	-	Arcasonde	-	-	-	KMR	-	-	-	63	-	-
1978-8698	2443751.11	1978 Aug 30 14:37:59	Rocketsonde	-	-	Arcasonde	-	-	-	WI	-	-	-	62	-	-
1978-8690	2443751.13	1978 Aug 30 15:09:00	Rocketsonde	-	-	Arcasonde	-	-	-	THU	-	-	-	61	-	-
1978-8691	2443751.21	1978 Aug 30 17:00:00	Rocketsonde	-	-	Arcasonde	-	-	-	SHER	-	-	-	64	-	-
1978-7326	2443751.29	1978 Aug 30 18:59:59	Rocketsonde	-	-	Arcasonde	-	-	-	WS	-	-	-	96	-	-
1978-8693	2443751.30	1978 Aug 30 19:44:59	Rocketsonde	-	-	Arcasonde	-	-	-	AN/DMP-9	-	-	-	70	-	-
1978-8694	2443751.32	1978 Aug 30 19:38:59	Rocketsonde	-	-	Arcasonde	-	-	-	WS	-	-	-	63	-	-
1978-8695	2443751.36	1978 Aug 30 20:45:00	Rocketsonde	-	-	Arcasonde	-	-	-	PRIM	-	-	-	63	-	-
1978-8696	2443751.46	1978 Aug 30 23:07:00	Rocketsonde	-	-	Arcasonde	-	-	-	SHEM	-	-	-	55	-	-
1978-8697	2443752.04	1978 Aug 31 13:03:59	Rocketsonde	-	-	Arcasonde	-	-	-	KMR	-	-	-	63	-	-
1978-8699	2443752.08	1978 Aug 31 13:56:59	Rocketsonde	-	-	Arcasonde	-	-	-	WI	-	-	-	56	-	-
1978-8911	2443752.25	1978 Aug 31 18:02:59	Rocketsonde	-	-	Arcasonde	-	-	-	WI	-	-	-	57	-	-
1978-8912	2443752.36	1978 Aug 31 20:36:00	Rocketsonde	-	-	Arcasonde	-	-	-	SHEM	-	-	-	56	-	-
1978-8914	2443753.08	1978 Sep 1 14:50:00	Rocketsonde	-	-	Arcasonde	-	-	-	SHEM	-	-	-	61	-	-
1978-8916	2443753.16	1978 Sep 1 15:45:00	Rocketsonde	-	-	Arcasonde	-	-	-	THU	-	-	-	66	-	-
1978-8918	2443753.25	1978 Sep 1 18:00:00	Rocketsonde	-	-	Arcasonde	-	-	-	PRIM	-	-	-	66	-	-
1978-8919	2443753.25	1978 Sep 1 18:05:00	Rocketsonde	-	-	Arcasonde	-	-	-	WS	-	-	-	66	-	-
1978-8920	2443753.26	1978 Sep 1 21:13:59	Rocketsonde	-	-	Arcasonde	-	-	-	PH	-	-	-	71	-	-
1978-8921	2443753.26	1978 Sep 1 21:13:59	Rocketsonde	-	-	Arcasonde	-	-	-	KMR	-	-	-	59	-	-
1978-8922	2443753.56	1978 Sep 2 01:25:59	Rocketsonde	-	-	Arcasonde	-	-	-	SHEM	-	-	-	53	-	-
1978-8923	2443756.13	1978 Sep 4 16:00:59	Rocketsonde	-	-	Arcasonde	-	-	-	KMR	-	-	-	77	-	-
1978-445	2443757.35	1978 Sep 5 2:51:59	Rocketsonde	-	-	Arcasonde	-	-	-	THU	-	-	-	65	-	-
1978-8924	2443757.42	1978 Sep 6 2:59:59	Rocketsonde	-	-	Arcasonde	-	-	-	SHEM	-	-	-	60	-	-
1978-8925	2443758.06	1978 Sep 6 14:50:00	Rocketsonde	-	-	Arcasonde	-	-	-	THU	-	-	-	64	-	-
1978-8926	2443758.12	1978 Sep 6 14:56:00	Rocketsonde	-	-	Arcasonde	-	-	-	SHEM	-	-	-	66	-	-
1978-8928	2443758.15	1978 Sep 6 16:34:59	Rocketsonde	-	-	Arcasonde	-	-	-	THU	-	-	-	66	-	-
1978-8929	2443758.19	1978 Sep 6 17:00:00	Rocketsonde	-	-	Arcasonde	-	-	-	AN/DMP-9	-	-	-	66	-	-
1978-8930	2443758.21	1978 Sep 6 17:13:00	Rocketsonde	-	-	Arcasonde	-	-	-	WS	-	-	-	62	-	-
1978-8931	2443758.26	1978 Sep 6 21:43:59	Rocketsonde	-	-	Arcasonde	-	-	-	KAU	-	-	-	63	-	-
1978-8932	2443758.41	1978 Sep 6 22:20:59	Rocketsonde	-	-	Arcasonde	-	-	-	KAU	-	-	-	63	-	-
1978-8933	2443758.63	1978 Sep 7 03:10:59	Rocketsonde	-	-	Arcasonde	-	-	-	KAU	-	-	-	61	-	-
1978-8934	2443758.65	1978 Sep 7 03:10:00	Rocketsonde	-	-	Arcasonde	-	-	-	KMR	-	-	-	66	-	-
1978-8935	2443758.65	1978 Sep 8 18:24:59	Rocketsonde	-	-	Arcasonde	-	-	-	WS	-	-	-	66	-	-
1978-8937	2443760.18	1978 Sep 8 17:00:00	Rocketsonde	-	-	Arcasonde	-	-	-	THU	-	-	-	68	-	-
1978-444	2443760.27	1978 Sep 8 17:00:00	Rocketsonde	-	-	Arcasonde	-	-	-	SHER	-	-	-	44	-	-
1978-8938	2443760.27	1978 Sep 8 18:26:59	Rocketsonde	-	-	Arcasonde	-	-	-	AN/DMP-9	-	-	-	61	-	-
1978-8939	2443760.27	1978 Sep 8 18:32:00	Rocketsonde	-	-	Arcasonde	-	-	-	PRIM	-	-	-	68	-	-
1978-8940	2443763.09	1978 Sep 9 01:14:59	Rocketsonde	-	-	Arcasonde	-	-	-	KMR	-	-	-	69	-	-
1978-8941	2443763.09	1978 Sep 11 14:15:00	Rocketsonde	-	-	Arcasonde	-	-	-	SHER	-	-	-	64	-	-
1978-8943	2443763.26	1978 Sep 11 18:18:00	Rocketsonde	-	-	Arcasonde	-	-	-	AN/DMP-9	-	-	-	62	-	-
1978-8944	2443763.29	1978 Sep 11 18:54:00	Rocketsonde	-	-	Arcasonde	-	-	-	WS	-	-	-	76	-	-
1978-8945	2443763.35	1978 Sep 11 20:30:00	Rocketsonde	-	-	Arcasonde	-	-	-	THU	-	-	-	62	-	-
1978-8946	2443763.65	1978 Sep 12 03:30:00	Rocketsonde	-	-	Arcasonde	-	-	-	SHEM	-	-	-	59	-	-
1978-8947	2443764.40	1978 Sep 12 21:33:00	Rocketsonde	-	-	Arcasonde	-	-	-	KMR	-	-	-	73	-	-
1978-8951	2443765.13	1978 Sep 13 15:04:59	Rocketsonde	-	-	Arcasonde	-	-	-	WI	-	-	-	67	-	-
1978-8952	2443765.15	1978 Sep 13 15:30:00	Rocketsonde	-	-	Arcasonde	-	-	-	PRIM	-	-	-	68	-	-
1978-8953	2443765.15	1978 Sep 13 15:30:00	Rocketsonde	-	-	Arcasonde	-	-	-	THU	-	-	-	71	-	-
1978-8954	2443765.21	1978 Sep 13 17:00:00	Rocketsonde	-	-	Arcasonde	-	-	-	SHER	-	-	-	56	-	-
1978-8954	2443765.24	1978 Sep 13 17:02:00	Rocketsonde	-	-	Arcasonde	-	-	-	AN/DMP-9	-	-	-	98	-	-
1978-8955	2443765.25	1978 Sep 13 17:57:00	Rocketsonde	-	-	Arcasonde	-	-	-	WS	-	-	-	71	-	-
1978-8956	2443765.40	1978 Sep 13 21:30:00	Rocketsonde	-	-	Arcasonde	-	-	-	KAU	-	-	-	89	-	-
1978-8956	2443765.42	1978 Sep 13 22:01:59	Rocketsonde	-	-	Arcasonde	-	-	-	KAU	-	-	-	58	-	-
1978-8957	2443765.49	1978 Sep 13 23:40:00	Rocketsonde	-	-	Arcasonde	-	-	-	KMR	-	-	-	65	-	-
1978-8958	2443766.41	1978 Sep 14 21:45:59	Rocketsonde	-	-	Arcasonde	-	-	-	KMR	-	-	-	65	-	-
1978-8961	2443767.16	1978 Sep 15 15:46:59	Rocketsonde	-	-	Arcasonde	-	-	-	PRIM	-	-	-	68	-	-
1978-8962	2443767.21	1978 Sep 15 17:00:00	Rocketsonde	-	-	Arcasonde	-	-	-	SHER	-	-	-	64	-	-
1978-8963	2443767.28	1978 Sep 15 18:45:00	Rocketsonde	-	-	Arcasonde	-	-	-	WS	-	-	-	68	-	-
1978-8964	2443767.17	1978 Sep 15 21:22:00	Rocketsonde	-	-	Arcasonde	-	-	-	AN/DMP-9	-	-	-	89	-	-
1978-8965	2443770.17	1978 Sep 18 15:59:59	Rocketsonde	-	-	Arcasonde	-	-	-	PM	-	-	-	70	-	-
1978-8966	2443770.19	1978 Sep 18 16:34:59	Rocketsonde	-	-	Arcasonde	-	-	-	PRIM	-	-	-	69	-	-
1978-8967	2443770.21	1978 Sep 18 17:00:00	Rocketsonde	-	-	Arcasonde	-	-	-	THU	-	-	-	60	-	-
1978-8968	2443770.25	1978 Sep 18 17:55:00	Rocketsonde	-	-	Arcasonde	-	-	-	SHER	-	-	-	76	-	-
1978-448	2443770.35	1978 Sep 18 20:31:00	Rocketsonde	-	-	Arcasonde	-	-	-	PM	-	-	-	49	-	-
1978-8969	2443770.56	1978 Sep 19 01:25:59	Rocketsonde	-	-	Arcasonde	-	-	-	SHEM	-	-	-	79	-	-
1978-4970	2443771.17	1978 Sep 19 15:59:59	Rocketsonde	-	-	Arcasonde	-	-	-	KMR	-	-	-	49	-	-
1978-4973	2443772.10	1978 Sep 20 14:26:00	Rocketsonde	-	-	Arcasonde	-	-	-	WS	-	-	-	68	-	-
1978-4974	2443772.15	1978 Sep 20 15:29:00	Rocketsonde	-	-	Arcasonde	-	-	-	WI	-	-	-	62	-	-



Launch

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Mission	FlightCode	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee_Km	Range_Km	Dest
1978-4975	2443772.16	1978 Sep 20 15:51:00	Rocketsonde	-	-	Arcasonde	-	-	-	PRIM	-	-	-	58	-	-
1978-7351	2443772.16	1978 Sep 20 15:56:00	Rocketsonde	-	-	AI/DMP-9	-	-	-	WI	-	-	-	90	-	-
1978-4977	2443772.21	1978 Sep 20 17:00:00	Rocketsonde	-	-	Arcasonde	-	-	-	SHER	-	-	-	53	-	-
1978-4979	2443772.23	1978 Sep 20 17:03:00	Rocketsonde	-	-	Arcasonde	-	-	-	THU	-	-	-	68	-	-
1978-4981	2443772.27	1978 Sep 20 18:25:59	Rocketsonde	-	-	Arcasonde	-	-	-	WI	-	-	-	68	-	-
1978-7353	2443772.28	1978 Sep 20 18:45:00	Rocketsonde	-	-	AI/DMP-9	-	-	-	WS	-	-	-	97	-	-
1978-4982	2443772.29	1978 Sep 20 18:59:59	Rocketsonde	-	-	Arcasonde	-	-	-	WS	-	-	-	54	-	-
1978-4984	2443772.35	1978 Sep 20 20:30:00	Rocketsonde	-	-	Arcasonde	-	-	-	SHEM	-	-	-	89	-	-
1978-4986	2443772.39	1978 Sep 20 21:19:00	Rocketsonde	-	-	AI/DMP-9?	-	-	-	WI	-	-	-	89	-	-
1978-7354	2443772.40	1978 Sep 20 21:32:00	Rocketsonde	-	-	Arcasonde	-	-	-	KAU	-	-	-	54	-	-
1978-4988	2443772.41	1978 Sep 22 14:00:00	Rocketsonde	-	-	Arcasonde	-	-	-	SHER	-	-	-	62	-	-
1978-4990	2443774.12	1978 Sep 22 14:46:00	Rocketsonde	-	-	Arcasonde	-	-	-	THU	-	-	-	69	-	-
1978-4992	2443774.14	1978 Sep 22 15:22:00	Rocketsonde	-	-	Arcasonde	-	-	-	PRIM	-	-	-	55	-	-
1978-7356	2443774.16	1978 Sep 22 15:53:00	Rocketsonde	-	-	AI/DMP-9	-	-	-	PH	-	-	-	89	-	-
1978-4994	2443774.19	1978 Sep 22 16:34:59	Rocketsonde	-	-	Arcasonde	-	-	-	WS	-	-	-	65	-	-
1978-4996	2443774.35	1978 Sep 22 20:31:00	Rocketsonde	-	-	Arcasonde	-	-	-	SHEM	-	-	-	55	-	-
1978-4998	2443774.40	1978 Sep 22 21:43:00	Rocketsonde	-	-	Arcasonde	-	-	-	KMR	-	-	-	74	-	-
1979-427	2443877.06	1979 Jan 3 13:30:00	Rocketsonde	-	-	Arcasonde	-	-	-	AUT	-	-	-	65	-	-
1979-428	2443877.06	1979 Jan 3 13:30:00	Rocketsonde	-	-	Arcasonde	-	-	-	ASC	-	-	-	66	-	-
1979-429	2443877.12	1979 Jan 3 14:48:59	Rocketsonde	-	-	AI/DMP-9	-	-	-	THU	-	-	-	66	-	-
1979-104	2443877.16	1979 Jan 3 15:48:59	Rocketsonde	-	-	Arcasonde	-	-	-	WI	-	-	-	90	-	-
1979-430	2443877.18	1979 Jan 3 16:12:59	Rocketsonde	-	-	Arcasonde	-	-	-	WI	-	-	-	53	-	-
1979-461	2443877.31	1979 Jan 3 19:20:59	Rocketsonde	-	-	Arcasonde	-	-	-	PH	-	-	-	72	-	-
1979-106	2443877.32	1979 Jan 3 19:44:59	Rocketsonde	-	-	AI/DMP-9	-	-	-	WS	-	-	-	96	-	-
1979-462	2443877.33	1979 Jan 3 20:00:00	Rocketsonde	-	-	Arcasonde	-	-	-	WS	-	-	-	94	-	-
1979-463	2443876.41	1979 Jan 4 21:52:00	Rocketsonde	-	-	Arcasonde	-	-	-	PH	-	-	-	76	-	-
1979-464	2443879.05	1979 Jan 5 13:14:59	Rocketsonde	-	-	Arcasonde	-	-	-	ASC	-	-	-	65	-	-
1979-465	2443879.07	1979 Jan 5 13:44:59	Rocketsonde	-	-	Arcasonde	-	-	-	AUT	-	-	-	49	-	-
1979-401	2443879.11	1979 Jan 5 14:45:00	Rocketsonde	-	-	Arcasonde	-	-	-	CC	-	LC43	-	67	-	-
1979-466	2443879.12	1979 Jan 5 14:48:59	Rocketsonde	-	-	Arcasonde	-	-	-	THU	-	-	-	94	-	-
1979-467	2443879.16	1979 Jan 5 15:45:59	Rocketsonde	-	-	AI/DMP-9?	-	-	-	CC	-	LC43	-	72	-	-
1979-468	2443879.19	1979 Jan 5 16:56:59	Rocketsonde	-	-	Arcasonde	-	-	-	PH	-	-	-	86	-	-
1979-440	2443881.19	1979 Jan 7 16:51:59	Rocketsonde	-	-	Arcasonde	-	-	-	WS	-	-	-	91	-	-
1979-443	2443882.09	1979 Jan 8 14:15:00	Rocketsonde	-	-	Arcasonde	-	-	-	WI	-	-	-	76	-	-
1979-444	2443882.11	1979 Jan 8 14:45:00	Rocketsonde	-	-	Arcasonde	-	-	-	AUT	-	-	-	61	-	-
1979-446	2443882.12	1979 Jan 8 15:00:00	Rocketsonde	-	-	Arcasonde	-	-	-	CC	-	-	-	65	-	-
1979-447	2443882.20	1979 Jan 8 16:43:59	Rocketsonde	-	-	Arcasonde	-	-	-	PH	-	-	-	71	-	-
1979-447	2443882.21	1979 Jan 8 17:00:00	Rocketsonde	-	-	Arcasonde	-	-	-	SHER	-	-	-	59	-	-
1979-450	2443882.55	1979 Jan 8 20:30:00	Rocketsonde	-	-	Arcasonde	-	-	-	NS	-	-	-	63	-	-
1979-451	2443882.55	1979 Jan 9 01:14:59	Rocketsonde	-	-	Arcasonde	-	-	-	KMR	-	-	-	79	-	-
1979-452	2443882.75	1979 Jan 9 06:30:00	Rocketsonde	-	-	Arcasonde	-	-	-	KMR	-	-	-	79	-	-
1979-455	2443883.15	1979 Jan 9 15:31:59	Rocketsonde	-	-	Arcasonde	-	-	-	WI	-	-	-	59	-	-
1979-456	2443883.29	1979 Jan 9 19:01:59	Rocketsonde	-	-	Arcasonde	-	-	-	PH	-	-	-	74	-	-
1979-457	2443883.33	1979 Jan 9 20:00:00	Rocketsonde	-	-	Arcasonde	-	-	-	NS	-	-	-	62	-	-
1979-458	2443884.11	1979 Jan 10 15:46:00	Rocketsonde	-	-	Arcasonde	-	-	-	ASC	-	-	-	94	-	-
1979-459	2443884.12	1979 Jan 10 15:46:00	Rocketsonde	-	-	Arcasonde	-	-	-	ASC	-	-	-	62	-	-
1979-413	2443884.12	1979 Jan 10 15:46:00	Rocketsonde	-	-	AI/DMP-9	-	-	-	WI	-	-	-	94	-	-
1979-459	2443884.15	1979 Jan 10 15:33:59	Rocketsonde	-	-	Arcasonde	-	-	-	WI	-	-	-	66	-	-
1979-460	2443884.16	1979 Jan 10 15:56:59	Rocketsonde	-	-	Arcasonde	-	-	-	THU	-	-	-	68	-	-
1979-461	2443884.20	1979 Jan 10 16:58:59	Rocketsonde	-	-	Arcasonde	-	-	-	AUT	-	-	-	70	-	-
1979-462	2443884.20	1979 Jan 10 17:15:00	Rocketsonde	-	-	Arcasonde	-	-	-	PRIM	-	-	-	70	-	-
1979-415	2443884.29	1979 Jan 10 18:59:59	Rocketsonde	-	-	AI/DMP-9	-	-	-	NS	-	-	-	97	-	-
1979-464	2443884.30	1979 Jan 10 19:14:59	Rocketsonde	-	-	Arcasonde	-	-	-	ASC	-	-	-	74	-	-
1979-416	2443884.37	1979 Jan 10 20:51:00	Rocketsonde	-	-	AI/DMP-9	-	-	-	PH	-	-	-	89	-	-
1979-465	2443884.38	1979 Jan 10 21:11:00	Rocketsonde	-	-	Arcasonde	-	-	-	SHEM	-	-	-	50	-	-
1979-466	2443884.39	1979 Jan 10 21:17:00	Rocketsonde	-	-	Arcasonde	-	-	-	PH	-	-	-	72	-	-
1979-467	2443884.46	1979 Jan 10 23:03:59	Rocketsonde	-	-	Arcasonde	-	-	-	KMR	-	-	-	79	-	-
1979-470	2443885.30	1979 Jan 11 19:10:59	Rocketsonde	-	-	Arcasonde	-	-	-	NS	-	-	-	75	-	-
1979-471	2443885.32	1979 Jan 11 19:44:59	Rocketsonde	-	-	Arcasonde	-	-	-	NS	-	-	-	67	-	-
1979-472	2443885.57	1979 Jan 12 01:38:59	Rocketsonde	-	-	Arcasonde	-	-	-	KMR	-	-	-	78	-	-
1979-473	2443886.06	1979 Jan 12 03:24:59	Rocketsonde	-	-	Arcasonde	-	-	-	AUT	-	-	-	54	-	-
1979-474	2443886.07	1979 Jan 12 13:44:59	Rocketsonde	-	-	Arcasonde	-	-	-	ASC	-	-	-	67	-	-
1979-475	2443886.15	1979 Jan 12 15:33:59	Rocketsonde	-	-	Arcasonde	-	-	-	THU	-	-	-	54	-	-
1979-476	2443886.23	1979 Jan 12 17:30:00	Rocketsonde	-	-	Arcasonde	-	-	-	THU	-	-	-	54	-	-
1979-477	2443886.29	1979 Jan 12 18:54:00	Rocketsonde	-	-	Arcasonde	-	-	-	PRIM	-	-	-	67	-	-
1979-478	2443886.29	1979 Jan 12 18:59:59	Rocketsonde	-	-	Arcasonde	-	-	-	PM	-	-	-	74	-	-
1979-480	2443889.06	1979 Jan 15 13:30:00	Rocketsonde	-	-	Arcasonde	-	-	-	NS	-	-	-	68	-	-
1979-481	2443889.10	1979 Jan 15 14:22:00	Rocketsonde	-	-	Arcasonde	-	-	-	NS	-	-	-	71	-	-
1979-482	2443889.11	1979 Jan 15 13:30:00	Rocketsonde	-	-	Arcasonde	-	-	-	THU	-	-	-	66	-	-
1979-483	2443889.20	1979 Jan 15 14:45:00	Rocketsonde	-	-	Arcasonde	-	-	-	CC	-	LC43	-	68	-	-
1979-484	2443889.40	1979 Jan 16 21:03:59	Rocketsonde	-	-	Arcasonde	-	-	-	PRIM	-	-	-	68	-	-
1979-485	2443889.40	1979 Jan 16 21:45:00	Rocketsonde	-	-	Arcasonde	-	-	-	KAU	-	-	-	56	-	-
1979-487	2443890.38	1979 Jan 16 21:03:59	Rocketsonde	-	-	Arcasonde	-	-	-	NS	-	-	-	58	-	-
1979-488	2443891.04	1979 Jan 17 12:59:59	Rocketsonde	-	-	Arcasonde	-	-	-	NS	-	-	-	67	-	-
1979-489	2443891.04	1979 Jan 17 13:44:59	Rocketsonde	-	-	Arcasonde	-	-	-	AUT	-	-	-	74	-	-
1979-490	2443891.10	1979 Jan 17 14:20:00	Rocketsonde	-	-	Arcasonde	-	-	-	THU	-	-	-	69	-	-
1979-491	2443891.11	1979 Jan 17 14:45:00	Rocketsonde	-	-	Arcasonde	-	-	-	NS	-	-	-	55	-	-
1979-492	2443891.11	1979 Jan 17 14:45:00	Rocketsonde	-	-	Arcasonde	-	-	-	CC	-	-	-	66	-	-
1979-493	2443891.19	1979 Jan 17 16:31:59	Rocketsonde	-	-	AI/DMP-9	-	-	-	THU	-	-	-	59	-	-
1979-494	2443891.20	1979 Jan 17 16:44:59	Rocketsonde	-	-	Arcasonde	-	-	-	CC	-	-	-	62	-	-
1979-495	2443891.20	1979 Jan 17 16:52:59	Rocketsonde	-	-	Arcasonde	-	-	-	PRIM	-	-	-	70	-	-
1979-496	2443891.27	1979 Jan 17 18:30:00	Rocketsonde	-	-	Arcasonde	-	-	-	WI	-	-	-	60	-	-
1979-497	2443891.31	1979 Jan 17 19:21:59	Rocketsonde	-	-	Arcasonde	-	-	-	SHER	-	-	-	64	-	-
1979-498	2443891.32	1979 Jan 17 19:43:59	Rocketsonde	-	-	AI/DMP-9	-	-	-	PM	-	-	-	89	-	-
1979-499	2443891.33	1979 Jan 17 19:54:59	Rocketsonde	-	-	Arcasonde	-	-	-	NS	-	-	-	75	-	-
1979-130	2443891.33	1979 Jan 17 19:54:59	Rocketsonde	-	-	AI/DMP-9	-	-	-	NS	-	-	-	90	-	-

Launch

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Mission	FlightCode	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee_Km	Range_Km	Dest
1979-W99	2443891.34	1979 Jan 17 20:10:00	Rocketsonde	-	-	Arcasonde	-	-	-	WS	-	-	-	72	-	-
1979-W31	2443891.38	1979 Jan 17 21:01:59	Rocketsonde	-	-	AI/DMP-9?	-	-	-	KAU	-	-	-	90	-	-
1979-W100	2443891.40	1979 Jan 17 21:43:00	Rocketsonde	-	-	Arcasonde	-	-	-	KAU	-	-	-	73	-	-
1979-W101	2443891.57	1979 Jan 18 01:42:59	Rocketsonde	-	-	Arcasonde	-	-	-	WS	-	-	-	58	-	-
1979-W102	2443892.22	1979 Jan 18 17:20:00	Rocketsonde	-	-	Arcasonde	-	-	-	WS	-	-	-	77	-	-
1979-W104	2443892.75	1979 Jan 19 06:00:00	Rocketsonde	-	-	Arcasonde	-	-	-	AIT	-	-	-	77	-	-
1979-W105	2443893.11	1979 Jan 19 14:40:00	Rocketsonde	-	-	Arcasonde	-	-	-	AIT	-	-	-	57	-	-
1979-W106	2443893.11	1979 Jan 19 14:46:00	Rocketsonde	-	-	Arcasonde	-	-	-	CC	-	-	-	64	-	-
1979-W107	2443893.12	1979 Jan 19 15:00:00	Rocketsonde	-	-	Arcasonde	-	-	-	ASC	-	-	-	64	-	-
1979-W109	2443893.20	1979 Jan 19 16:49:59	Rocketsonde	-	-	Arcasonde	-	-	-	PRIM	-	-	-	70	-	-
1979-W110	2443893.31	1979 Jan 19 19:30:00	Rocketsonde	-	-	Arcasonde	-	-	-	WS	-	-	-	62	-	-
1979-W111	2443893.37	1979 Jan 19 19:30:00	Rocketsonde	-	-	Arcasonde	-	-	-	WS	-	-	-	51	-	-
1979-W112	2443893.41	1979 Jan 19 20:58:00	Rocketsonde	-	-	Arcasonde	-	-	-	KAU	-	-	-	72	-	-
1979-W113	2443893.57	1979 Jan 19 21:53:00	Rocketsonde	-	-	Arcasonde	-	-	-	PH	-	-	-	75	-	-
1979-W114	2443893.57	1979 Jan 20 03:59:59	Rocketsonde	-	-	Arcasonde	-	-	-	KMR	-	-	-	74	-	-
1979-W115	2443893.71	1979 Jan 20 05:00:00	Rocketsonde	-	-	Arcasonde	-	-	-	KMR	-	-	-	73	-	-
1979-W116	2443893.75	1979 Jan 20 06:00:00	Rocketsonde	-	-	Arcasonde	-	-	-	KMR	-	-	-	75	-	-
1979-W117	2443893.90	1979 Jan 20 07:02:59	Rocketsonde	-	-	Arcasonde	-	-	-	KMR	-	-	-	73	-	-
1979-W118	2443893.97	1979 Jan 20 09:30:00	Rocketsonde	-	-	Arcasonde	-	-	-	KMR	-	-	-	86	-	-
1979-W119	2443896.07	1979 Jan 22 13:44:59	Rocketsonde	-	-	AI/DMP-9	-	-	-	ASC	-	-	-	59	-	-
1979-W120	2443896.12	1979 Jan 22 14:46:59	Rocketsonde	-	-	Arcasonde	-	-	-	CC	-	-	-	66	-	-
1979-W121	2443896.19	1979 Jan 22 15:00:00	Rocketsonde	-	-	Arcasonde	-	-	-	AIT	-	-	-	75	-	-
1979-W122	2443896.20	1979 Jan 22 16:40:00	Rocketsonde	-	-	Arcasonde	-	-	-	PRIM	-	-	-	66	-	-
1979-W123	2443896.23	1979 Jan 22 17:32:00	Rocketsonde	-	-	Arcasonde	-	-	-	PH	-	-	-	72	-	-
1979-W124	2443897.20	1979 Jan 23 16:49:59	Rocketsonde	-	-	Arcasonde	-	-	-	THU	-	-	-	65	-	-
1979-W125	2443897.22	1979 Jan 23 17:15:00	Rocketsonde	-	-	AI/DMP-9	-	-	-	ASC	-	-	-	69	-	-
1979-W126	2443897.26	1979 Jan 23 18:21:00	Rocketsonde	-	-	Arcasonde	-	-	-	CC	-	-	-	69	-	-
1979-W127	2443897.27	1979 Jan 23 18:34:59	Rocketsonde	-	-	Arcasonde	-	-	-	PH	-	-	-	67	-	-
1979-W128	2443897.28	1979 Jan 23 18:46:00	Rocketsonde	-	-	Arcasonde	-	-	-	WS	-	-	-	74	-	-
1979-W129	2443897.72	1979 Jan 24 05:20:00	Rocketsonde	-	-	Arcasonde	-	-	-	ASC	-	-	-	69	-	-
1979-W130	2443897.75	1979 Jan 24 05:56:00	Rocketsonde	-	-	Arcasonde	-	-	-	KMR	-	-	-	76	-	-
1979-W131	2443897.88	1979 Jan 24 09:02:59	Rocketsonde	-	-	Arcasonde	-	-	-	KMR	-	-	-	73	-	-
1979-W132	2443898.06	1979 Jan 24 13:00:00	Rocketsonde	-	-	Arcasonde	-	-	-	KMR	-	-	-	68	-	-
1979-W133	2443898.08	1979 Jan 24 13:51:00	Rocketsonde	-	-	Arcasonde	-	-	-	THU	-	-	-	73	-	-
1979-W134	2443898.09	1979 Jan 24 14:13:00	Rocketsonde	-	-	Arcasonde	-	-	-	ASC	-	-	-	65	-	-
1979-W135	2443898.11	1979 Jan 24 14:46:00	Rocketsonde	-	-	Arcasonde	-	-	-	THU	-	-	-	66	-	-
1979-W136	2443898.20	1979 Jan 24 16:52:59	Rocketsonde	-	-	Arcasonde	-	-	-	CC	-	-	-	86	-	-
1979-W137	2443898.29	1979 Jan 24 18:09:59	Rocketsonde	-	-	AI/DMP-9	-	-	-	PRIM	-	-	-	86	-	-
1979-W138	2443898.30	1979 Jan 24 19:14:59	Rocketsonde	-	-	Arcasonde	-	-	-	NS	-	-	-	84	-	-
1979-W139	2443898.31	1979 Jan 24 19:19:59	Rocketsonde	-	-	Arcasonde	-	-	-	NS	-	-	-	77	-	-
1979-W140	2443898.46	1979 Jan 24 20:03:59	Rocketsonde	-	-	Arcasonde	-	-	-	KMR	-	-	-	70	-	-
1979-W141	2443899.13	1979 Jan 25 15:10:00	Rocketsonde	-	-	AI/DMP-9	-	-	-	VI	-	-	-	70	-	-
1979-W142	2443899.19	1979 Jan 25 16:22:59	Rocketsonde	-	-	Arcasonde	-	-	-	VI	-	-	-	61	-	-
1979-W143	2443899.26	1979 Jan 25 16:22:00	Rocketsonde	-	-	Arcasonde	-	-	-	PH	-	-	-	74	-	-
1979-W144	2443899.36	1979 Jan 25 20:33:00	Rocketsonde	-	-	AI/DMP-9?	-	-	-	KAU	-	-	-	67	-	-
1979-W145	2443899.38	1979 Jan 25 21:00:59	Rocketsonde	-	-	Arcasonde	-	-	-	SHER	-	-	-	55	-	-
1979-W146	2443900.00	1979 Jan 26 13:30:00	Rocketsonde	-	-	Arcasonde	-	-	-	ASC	-	-	-	76	-	-
1979-W147	2443900.07	1979 Jan 26 13:45:59	Rocketsonde	-	-	Arcasonde	-	-	-	ASC	-	-	-	65	-	-
1979-W148	2443900.11	1979 Jan 26 14:45:00	Rocketsonde	-	-	Arcasonde	-	-	-	ASC	-	-	-	62	-	-
1979-W149	2443900.23	1979 Jan 26 17:46:59	Rocketsonde	-	-	Arcasonde	-	-	-	THU	-	-	-	70	-	-
1979-W150	2443900.25	1979 Jan 26 19:06:00	Rocketsonde	-	-	Arcasonde	-	-	-	PRIM	-	-	-	60	-	-
1979-W151	2443900.29	1979 Jan 26 21:23:59	Rocketsonde	-	-	Arcasonde	-	-	-	NS	-	-	-	64	-	-
1979-W152	2443903.08	1979 Jan 29 14:00:00	Rocketsonde	-	-	Arcasonde	-	-	-	KAU	-	-	-	54	-	-
1979-W153	2443903.10	1979 Jan 29 14:25:00	Rocketsonde	-	-	Arcasonde	-	-	-	ASC	-	-	-	64	-	-
1979-W154	2443903.15	1979 Jan 29 15:30:00	Rocketsonde	-	-	Arcasonde	-	-	-	THU	-	-	-	72	-	-
1979-W155	2443903.21	1979 Jan 29 17:00:00	Rocketsonde	-	-	Arcasonde	-	-	-	ASC	-	-	-	65	-	-
1979-W156	2443903.21	1979 Jan 29 17:00:00	Rocketsonde	-	-	Arcasonde	-	-	-	NS	-	-	-	64	-	-
1979-W157	2443903.21	1979 Jan 29 17:09:00	Rocketsonde	-	-	Arcasonde	-	-	-	PRIM	-	-	-	65	-	-
1979-W158	2443903.21	1979 Jan 29 21:21:00	Rocketsonde	-	-	Arcasonde	-	-	-	NS	-	-	-	74	-	-
1979-W159	2443903.59	1979 Jan 30 01:14:59	Rocketsonde	-	-	Arcasonde	-	-	-	PM	-	-	-	70	-	-
1979-W160	2443904.29	1979 Jan 30 18:59:59	Rocketsonde	-	-	Arcasonde	-	-	-	NS	-	-	-	54	-	-
1979-W161	2443905.08	1979 Jan 31 13:54:59	Rocketsonde	-	-	Arcasonde	-	-	-	ASC	-	-	-	65	-	-
1979-W162	2443905.11	1979 Jan 31 14:45:00	Rocketsonde	-	-	Arcasonde	-	-	-	ASC	-	-	-	61	-	-
1979-W163	2443905.12	1979 Jan 31 14:55:00	Rocketsonde	-	-	Arcasonde	-	-	-	CC	-	-	-	81	-	-
1979-W164	2443905.13	1979 Jan 31 15:10:00	Rocketsonde	-	-	Arcasonde	-	-	-	THU	-	-	-	71	-	-
1979-W165	2443905.15	1979 Jan 31 15:30:00	Rocketsonde	-	-	AI/DMP-9	-	-	-	AIT	-	-	-	91	-	-
1979-W166	2443905.15	1979 Jan 31 15:30:00	Rocketsonde	-	-	Arcasonde	-	-	-	ASC	-	-	-	72	-	-
1979-W167	2443905.15	1979 Jan 31 15:33:00	Rocketsonde	-	-	Arcasonde	-	-	-	VI	-	-	-	62	-	-
1979-W168	2443905.20	1979 Jan 31 16:44:59	Rocketsonde	-	-	AI/DMP-9	-	-	-	NS	-	-	-	98	-	-
1979-W169	2443905.20	1979 Jan 31 16:47:59	Rocketsonde	-	-	Arcasonde	-	-	-	NS	-	-	-	70	-	-
1979-W170	2443905.21	1979 Jan 31 17:00:00	Rocketsonde	-	-	Arcasonde	-	-	-	PRIM	-	-	-	73	-	-
1979-W171	2443905.22	1979 Jan 31 17:10:00	Rocketsonde	-	-	Arcasonde	-	-	-	NS	-	-	-	61	-	-
1979-W172	2443905.28	1979 Jan 31 18:43:00	Rocketsonde	-	-	Arcasonde	-	-	-	PM	-	-	-	73	-	-
1979-W173	2443905.37	1979 Jan 31 20:56:00	Rocketsonde	-	-	Arcasonde	-	-	-	ASC	-	-	-	88	-	-
1979-W174	2443905.39	1979 Jan 31 21:26:59	Rocketsonde	-	-	Arcasonde	-	-	-	KAU	-	-	-	69	-	-
1979-W175	2443905.49	1979 Jan 31 23:46:00	Rocketsonde	-	-	Arcasonde	-	-	-	KMR	-	-	-	74	-	-
1979-W176	2443906.09	1979 Feb 1 18:59:59	Rocketsonde	-	-	Arcasonde	-	-	-	NS	-	-	-	71	-	-
1979-W177	2443906.29	1979 Feb 1 21:59:59	Rocketsonde	-	-	Arcasonde	-	-	-	PF	-	-	-	61	-	-
1979-W178	2443907.05	1979 Feb 2 13:14:59	Rocketsonde	-	-	Starute Datasonde	-	-	-	ASC	-	-	-	66	-	-
1979-W179	2443907.08	1979 Feb 2 14:00:00	Rocketsonde	-	-	Arcasonde	-	-	-	ASC	-	-	-	66	-	-
1979-W180	2443907.12	1979 Feb 2 14:57:00	Rocketsonde	-	-	Arcasonde	-	-	-	AIT	-	-	-	57	-	-
1979-W181	2443907.20	1979 Feb 2 16:54:59	Rocketsonde	-	-	Arcasonde	-	-	-	THU	-	-	-	71	-	-
1979-W182	2443907.26	1979 Feb 2 20:45:00	Rocketsonde	-	-	Arcasonde	-	-	-	PRIM	-	-	-	65	-	-
1979-W183	2443907.36	1979 Feb 5 13:30:00	Rocketsonde	-	-	Arcasonde	-	-	-	SHER	-	-	-	65	-	-
1979-W184	2443910.06	1979 Feb 5 13:57:59	Rocketsonde	-	-	Arcasonde	-	-	-	AIT	-	-	-	67	-	-
1979-W185	2443910.11	1979 Feb 5 14:33:00	Rocketsonde	-	-	Arcasonde	-	-	-	ASC	-	-	-	60	-	-
1979-W186	2443910.21	1979 Feb 5 17:00:00	Rocketsonde	-	-	Arcasonde	-	-	-	THU	-	-	-	68	-	-
1979-W187	2443910.21	1979 Feb 5 17:00:00	Rocketsonde	-	-	Arcasonde	-	-	-	SHER	-	-	-	64	-	-

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Mission	FlightCode	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee_Km	Range_Km	Dest
1979-W194	2443910.21	1979 Feb 5 1706:00	Rocketsonde	-	-	Arcasonde	-	-	-	PRIM	-	-	-	65	-	-
1979-W195	2443910.25	1979 Feb 5 1800:00	Rocketsonde	-	-	Arcasonde	-	-	-	WS	-	-	-	63	-	-
1979-W196	2443910.39	1979 Feb 5 2122:59	Rocketsonde	-	-	Arcasonde	-	-	-	PH	-	-	-	75	-	-
1979-W197	2443910.48	1979 Feb 5 2325:59	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	PF	-	-	-	48	-	-
1979-W198	2443910.55	1979 Feb 6 0114:59	Rocketsonde	-	-	Arcasonde	-	-	-	KHR	-	-	-	76	-	-
1979-W199	2443911.29	1979 Feb 6 1856:59	Rocketsonde	-	-	Arcasonde	-	-	-	PH	-	-	-	73	-	-
1979-W200	2443911.29	1979 Feb 6 1900:59	Rocketsonde	-	-	Arcasonde	-	-	-	WS	-	-	-	87	-	-
1979-W201	2443912.06	1979 Feb 7 1330:00	Rocketsonde	-	-	Arcasonde	-	-	-	AIT	-	-	-	71	-	-
1979-W202	2443912.11	1979 Feb 7 1445:00	Rocketsonde	-	-	Arcasonde	-	-	-	CC	LO43	-	-	58	-	-
1979-W203	2443912.12	1979 Feb 7 1500:00	Rocketsonde	-	-	Arcasonde	-	-	-	THU	-	-	-	68	-	-
1979-W204	2443912.13	1979 Feb 7 1506:00	Rocketsonde	-	-	Arcasonde	-	-	-	ASC	-	-	-	68	-	-
1979-W205	2443912.16	1979 Feb 7 1549:59	Rocketsonde	-	-	Arcasonde	-	-	-	CC	LO43	-	-	51	-	-
1979-W206	2443912.21	1979 Feb 7 1657:59	Rocketsonde	-	-	Arcasonde	-	-	-	PRIM	-	-	-	65	-	-
1979-W207	2443912.25	1979 Feb 7 1800:00	Rocketsonde	-	-	Arcasonde	-	-	-	SHER	-	-	-	65	-	-
1979-W208	2443912.30	1979 Feb 7 1914:59	Rocketsonde	-	-	Arcasonde	-	-	-	WS	-	-	-	72	-	-
1979-W209	2443912.31	1979 Feb 7 1930:00	Rocketsonde	-	-	Arcasonde	-	-	-	WS	-	-	-	66	-	-
1979-W210	2443912.31	1979 Feb 7 1930:00	Rocketsonde	-	-	Arcasonde	-	-	-	MI	-	-	-	56	-	-
1979-W211	2443912.42	1979 Feb 7 2210:59	Rocketsonde	-	-	Arcasonde	-	-	-	KAU	-	-	-	72	-	-
1979-W212	2443912.45	1979 Feb 7 2247:59	Rocketsonde	-	-	Arcasonde	-	-	-	KHR	-	-	-	75	-	-
1979-W213	2443912.47	1979 Feb 7 2320:00	Rocketsonde	-	-	Arcasonde	-	-	-	PF	-	-	-	65	-	-
1979-W214	2443913.29	1979 Feb 8 1859:59	Rocketsonde	-	-	Arcasonde	-	-	-	WS	-	-	-	94	-	-
1979-W215	2443913.56	1979 Feb 9 0130:59	Rocketsonde	-	-	Arcasonde	-	-	-	AIT	-	-	-	64	-	-
1979-W216	2443914.06	1979 Feb 9 1300:00	Rocketsonde	-	-	Arcasonde	-	-	-	CC	LO43	-	-	68	-	-
1979-W217	2443914.16	1979 Feb 9 1548:59	Rocketsonde	-	-	Arcasonde	-	-	-	SHER	-	-	-	57	-	-
1979-W218	2443914.21	1979 Feb 9 1700:00	Rocketsonde	-	-	Arcasonde	-	-	-	PRIM	-	-	-	70	-	-
1979-W219	2443914.24	1979 Feb 9 1749:59	Rocketsonde	-	-	Arcasonde	-	-	-	THU	-	-	-	68	-	-
1979-W220	2443914.24	1979 Feb 9 1859:59	Rocketsonde	-	-	Arcasonde	-	-	-	WS	-	-	-	41	-	-
1979-W221	2443914.45	1979 Feb 9 1859:59	Rocketsonde	-	-	Arcasonde	-	-	-	KHR	-	-	-	79	-	-
1979-W222	2443914.45	1979 Feb 10 0345:59	Rocketsonde	-	-	Arcasonde	-	-	-	ASC	-	-	-	66	-	-
1979-W223	2443917.07	1979 Feb 12 1347:59	Rocketsonde	-	-	Arcasonde	-	-	-	PRIM	-	-	-	69	-	-
1979-W224	2443917.20	1979 Feb 12 1649:59	Rocketsonde	-	-	Arcasonde	-	-	-	PH	-	-	-	65	-	-
1979-W225	2443917.22	1979 Feb 12 1711:00	Rocketsonde	-	-	Arcasonde	-	-	-	SHER	-	-	-	74	-	-
1979-W226	2443917.25	1979 Feb 12 1800:00	Rocketsonde	-	-	Arcasonde	-	-	-	THU	-	-	-	65	-	-
1979-W227	2443917.26	1979 Feb 12 1811:59	Rocketsonde	-	-	Arcasonde	-	-	-	SHER	-	-	-	46	-	-
1979-W228	2443917.39	1979 Feb 12 2230:00	Rocketsonde	-	-	Arcasonde	-	-	-	KHR	-	-	-	67	-	-
1979-W229	2443917.55	1979 Feb 13 0114:59	Rocketsonde	-	-	Arcasonde	-	-	-	ASC	-	-	-	65	-	-
1979-W230	2443918.09	1979 Feb 14 1410:00	Rocketsonde	-	-	Arcasonde	-	-	-	THU	LO43	-	-	59	-	-
1979-W231	2443918.12	1979 Feb 14 1446:00	Rocketsonde	-	-	Arcasonde	-	-	-	CC	-	-	-	70	-	-
1979-W232	2443918.15	1979 Feb 14 1540:00	Rocketsonde	-	-	Arcasonde	-	-	-	ASC	-	-	-	75	-	-
1979-W233	2443918.15	1979 Feb 14 1540:00	Rocketsonde	-	-	Arcasonde	-	-	-	AIT	-	-	-	80	-	-
1979-W234	2443918.19	1979 Feb 14 1624:59	Rocketsonde	-	-	Arcasonde	-	-	-	MI	-	-	-	96	-	-
1979-W235	2443918.20	1979 Feb 14 1624:59	Rocketsonde	-	-	Arcasonde	-	-	-	WS	-	-	-	94	-	-
1979-W236	2443918.20	1979 Feb 14 1624:59	Rocketsonde	-	-	Arcasonde	-	-	-	PRIM	-	-	-	68	-	-
1979-W237	2443918.32	1979 Feb 14 1914:59	Rocketsonde	-	-	Arcasonde	-	-	-	SHER	-	-	-	65	-	-
1979-W238	2443918.32	1979 Feb 14 1914:59	Rocketsonde	-	-	Arcasonde	-	-	-	KHR	-	-	-	89	-	-
1979-W239	2443918.32	1979 Feb 14 2007:59	Rocketsonde	-	-	Arcasonde	-	-	-	KAU	-	-	-	72	-	-
1979-W240	2443918.36	1979 Feb 14 2127:59	Rocketsonde	-	-	Arcasonde	-	-	-	PR	-	-	-	75	-	-
1979-W241	2443919.06	1979 Feb 14 2307:00	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	KHR	-	-	-	74	-	-
1979-W242	2443919.56	1979 Feb 15 0305:59	Rocketsonde	-	-	Arcasonde	-	-	-	MI	-	-	-	70	-	-
1979-W243	2443920.13	1979 Feb 15 0508:00	Rocketsonde	-	-	Arcasonde	-	-	-	PH	-	-	-	74	-	-
1979-W244	2443920.24	1979 Feb 15 1751:00	Rocketsonde	-	-	Arcasonde	-	-	-	WS	-	-	-	65	-	-
1979-W245	2443920.24	1979 Feb 15 2114:59	Rocketsonde	-	-	Arcasonde	-	-	-	KHR	-	-	-	77	-	-
1979-W246	2443920.57	1979 Feb 16 0145:59	Rocketsonde	-	-	Arcasonde	-	-	-	ASC	-	-	-	66	-	-
1979-W247	2443921.07	1979 Feb 16 1347:59	Rocketsonde	-	-	Arcasonde	-	-	-	AIT	-	-	-	73	-	-
1979-W248	2443921.07	1979 Feb 16 1347:59	Rocketsonde	-	-	Arcasonde	-	-	-	ASC	-	-	-	66	-	-
1979-W249	2443921.11	1979 Feb 16 1444:00	Rocketsonde	-	-	Arcasonde	-	-	-	THU	-	-	-	81	-	-
1979-W250	2443921.11	1979 Feb 16 1445:00	Rocketsonde	-	-	Arcasonde	-	-	-	CC	LO43	-	-	62	-	-
1979-W251	2443921.21	1979 Feb 16 1700:00	Rocketsonde	-	-	Arcasonde	-	-	-	SHER	-	-	-	63	-	-
1979-W252	2443921.33	1979 Feb 16 2000:00	Rocketsonde	-	-	Arcasonde	-	-	-	WS	-	-	-	65	-	-
1979-W253	2443921.46	1979 Feb 16 2300:00	Rocketsonde	-	-	Arcasonde	-	-	-	PF	-	-	-	67	-	-
1979-W254	2443924.05	1979 Feb 19 1314:59	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	ASC	-	-	-	67	-	-
1979-W255	2443924.07	1979 Feb 19 1458:00	Rocketsonde	-	-	Arcasonde	-	-	-	AIT	-	-	-	73	-	-
1979-W256	2443924.07	1979 Feb 19 1458:00	Rocketsonde	-	-	Arcasonde	-	-	-	CC	LO43	-	-	69	-	-
1979-W257	2443924.12	1979 Feb 19 1458:00	Rocketsonde	-	-	Arcasonde	-	-	-	CC	-	-	-	45	-	-
1979-W258	2443924.12	1979 Feb 19 1458:00	Rocketsonde	-	-	Arcasonde	-	-	-	THU	-	-	-	69	-	-
1979-W259	2443924.20	1979 Feb 19 1646:59	Rocketsonde	-	-	Arcasonde	-	-	-	PRIM	-	-	-	79	-	-
1979-W260	2443924.66	1979 Feb 20 0344:00	Rocketsonde	-	-	Arcasonde	-	-	-	KHR	-	-	-	72	-	-
1979-W261	2443925.21	1979 Feb 20 1702:00	Rocketsonde	-	-	Arcasonde	-	-	-	PM	-	-	-	63	-	-
1979-W262	2443925.52	1979 Feb 20 1944:59	Rocketsonde	-	-	Arcasonde	-	-	-	WS	-	-	-	62	-	-
1979-W263	2443925.52	1979 Feb 20 2249:59	Rocketsonde	-	-	Arcasonde	-	-	-	PF	-	-	-	77	-	-
1979-W264	2443925.62	1979 Feb 21 0246:00	Rocketsonde	-	-	Arcasonde	-	-	-	KHR	-	-	-	65	-	-
1979-W265	2443926.06	1979 Feb 21 1400:00	Rocketsonde	-	-	Arcasonde	-	-	-	ASC	-	-	-	67	-	-
1979-W266	2443926.08	1979 Feb 21 1400:00	Rocketsonde	-	-	Arcasonde	-	-	-	AIT	-	-	-	72	-	-
1979-W267	2443926.13	1979 Feb 21 1503:59	Rocketsonde	-	-	Arcasonde	-	-	-	THU	-	-	-	70	-	-
1979-W268	2443926.18	1979 Feb 21 1614:59	Rocketsonde	-	-	Arcasonde	-	-	-	AIT	-	-	-	60	-	-
1979-W269	2443926.23	1979 Feb 21 1652:59	Rocketsonde	-	-	Arcasonde	-	-	-	PRIM	-	-	-	64	-	-
1979-W270	2443926.23	1979 Feb 21 1730:00	Rocketsonde	-	-	Arcasonde	-	-	-	SHER	-	-	-	97	-	-
1979-W271	2443926.26	1979 Feb 21 1814:59	Rocketsonde	-	-	Arcasonde	-	-	-	WS	-	-	-	71	-	-
1979-W272	2443926.26	1979 Feb 21 1814:59	Rocketsonde	-	-	Arcasonde	-	-	-	ASC	-	-	-	68	-	-
1979-W273	2443926.45	1979 Feb 21 2244:59	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	PF	-	-	-	74	-	-
1979-W274	2443926.45	1979 Feb 21 2244:59	Rocketsonde	-	-	Arcasonde	-	-	-	CC	LO43	-	-	73	-	-
1979-W275	2443927.18	1979 Feb 22 1622:59	Rocketsonde	-	-	Arcasonde	-	-	-	KHR	-	-	-	65	-	-
1979-W276	2443927.18	1979 Feb 22 1845:00	Rocketsonde	-	-	Arcasonde	-	-	-	ASC	-	-	-	73	-	-
1979-W277	2443928.06	1979 Feb 23 1330:00	Rocketsonde	-	-	Arcasonde	-	-	-	AIT	-	-	-	73	-	-
1979-W278	2443928.09	1979 Feb 23 1408:00	Rocketsonde	-	-	Arcasonde	-	-	-	THU	-	-	-	71	-	-

Launch

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Mission	FlightCode	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee_Km	Range_Km	Dest
1979-4288	2443928.12	1979 Feb 23 1457:00	Rocketsonde	-	-	Arcasonde	-	-	-	CC	LO43	-	-	87	-	-
1979-4289	2443928.21	1979 Feb 23 17:00:00	Rocketsonde	-	-	Arcasonde	-	-	-	PRIM	-	-	-	89	-	-
1979-4290	2443928.23	1979 Feb 23 17:00:00	Rocketsonde	-	-	Arcasonde	-	-	-	WS	-	-	-	86	-	-
1979-4291	2443928.34	1979 Feb 23 20:15:00	Rocketsonde	-	-	Arcasonde	-	-	-	SHER	-	-	-	65	-	-
1979-4292	2443928.37	1979 Feb 23 20:48:59	Rocketsonde	-	-	Arcasonde	-	-	-	PH	-	-	-	87	-	-
1979-4293	2443928.50	1979 Feb 23 23:05:00	Rocketsonde	-	-	Arcasonde	-	-	-	KAU	-	-	-	63	-	-
1979-4294	2443928.55	1979 Feb 24 01:14:59	Rocketsonde	-	-	Arcasonde	-	-	-	PF	-	-	-	63	-	-
1979-4295	2443928.58	1979 Feb 26 12:45:00	Rocketsonde	-	-	Arcasonde	-	-	-	KMR	-	-	-	65	-	-
1979-4296	2443931.03	1979 Feb 26 13:30:00	Rocketsonde	-	-	Arcasonde	-	-	-	ASC	-	-	-	65	-	-
1979-4297	2443931.06	1979 Feb 26 14:45:00	Rocketsonde	-	-	Arcasonde	-	-	-	AUT	-	-	-	75	-	-
1979-4298	2443931.11	1979 Feb 26 16:48:59	Rocketsonde	-	-	Arcasonde	-	-	-	CC	LO43	-	-	54	-	-
1979-4299	2443931.20	1979 Feb 26 17:00:00	Rocketsonde	-	-	Arcasonde	-	-	-	PRIM	-	-	-	71	-	-
1979-4300	2443931.21	1979 Feb 26 17:49:59	Rocketsonde	-	-	Arcasonde	-	-	-	SHER	-	-	-	64	-	-
1979-4301	2443931.24	1979 Feb 26 20:57:00	Rocketsonde	-	-	Arcasonde	-	-	-	PH	-	-	-	74	-	-
1979-4302	2443931.37	1979 Feb 26 21:30:00	Rocketsonde	-	-	Arcasonde	-	-	-	KAU	-	-	-	55	-	-
1979-4303	2443931.40	1979 Feb 26 23:00:00	Rocketsonde	-	-	Arcasonde	-	-	-	WS	-	-	-	64	-	-
1979-4304	2443931.57	1979 Feb 27 01:35:59	Rocketsonde	-	-	Arcasonde	-	-	-	PF	-	-	-	68	-	-
1979-4305	2443932.15	1979 Feb 27 18:15:59	Rocketsonde	-	-	Arcasonde	-	-	-	KMR	-	-	-	76	-	-
1979-4306	2443932.26	1979 Feb 27 18:49:59	Rocketsonde	-	-	Arcasonde	-	-	-	THU	-	-	-	89	-	-
1979-4307	2443932.28	1979 Feb 27 18:49:59	Rocketsonde	-	-	Arcasonde	-	-	-	PH	-	-	-	73	-	-
1979-4308	2443933.06	1979 Feb 28 13:30:00	Rocketsonde	-	-	Arcasonde	-	-	-	WS	-	-	-	68	-	-
1979-4309	2443933.10	1979 Feb 28 14:20:00	Rocketsonde	-	-	Arcasonde	-	-	-	AUT	-	-	-	72	-	-
1979-4310	2443933.11	1979 Feb 28 14:45:00	Rocketsonde	-	-	Arcasonde	-	-	-	ASC	-	-	-	65	-	-
1979-4311	2443933.15	1979 Feb 28 15:42:00	Rocketsonde	-	-	Arcasonde	-	-	-	CC	LO43	-	-	94	-	-
1979-4312	2443933.19	1979 Feb 28 16:26:59	Rocketsonde	-	-	Arcasonde	-	-	-	THU	-	-	-	90	-	-
1979-4313	2443933.21	1979 Feb 28 17:00:00	Rocketsonde	-	-	Arcasonde	-	-	-	MI	-	-	-	71	-	-
1979-4314	2443933.25	1979 Feb 28 17:54:00	Rocketsonde	-	-	Arcasonde	-	-	-	MI	-	-	-	70	-	-
1979-4315	2443933.27	1979 Feb 28 18:30:00	Rocketsonde	-	-	Arcasonde	-	-	-	SHER	-	-	-	64	-	-
1979-4316	2443933.44	1979 Feb 28 22:30:00	Rocketsonde	-	-	Arcasonde	-	-	-	PRIM	-	-	-	86	-	-
1979-4317	2443933.45	1979 Feb 28 22:30:00	Rocketsonde	-	-	Arcasonde	-	-	-	WS	-	-	-	86	-	-
1979-4318	2443934.24	1979 Mar 1 17:51:00	Rocketsonde	-	-	Arcasonde	-	-	-	KMR	-	-	-	75	-	-
1979-4319	2443934.52	1979 Mar 1 19:50:59	Rocketsonde	-	-	Arcasonde	-	-	-	PH	-	-	-	73	-	-
1979-4320	2443935.26	1979 Mar 2 18:11:00	Rocketsonde	-	-	Arcasonde	-	-	-	WS	-	-	-	86	-	-
1979-4321	2443935.29	1979 Mar 2 18:59:59	Rocketsonde	-	-	Arcasonde	-	-	-	SHER	-	-	-	63	-	-
1979-4322	2443935.37	1979 Mar 2 20:59:00	Rocketsonde	-	-	Arcasonde	-	-	-	WS	-	-	-	63	-	-
1979-4323	2443935.39	1979 Mar 2 21:24:59	Rocketsonde	-	-	Arcasonde	-	-	-	KAU	-	-	-	62	-	-
1979-4324	2443935.41	1979 Mar 2 21:52:00	Rocketsonde	-	-	Arcasonde	-	-	-	PH	-	-	-	90	-	-
1979-4325	2443935.44	1979 Mar 2 22:00:00	Rocketsonde	-	-	Arcasonde	-	-	-	PH	-	-	-	76	-	-
1979-4326	2443935.44	1979 Mar 2 22:00:00	Rocketsonde	-	-	Arcasonde	-	-	-	PH	-	-	-	88	-	-
1979-4327	2443935.44	1979 Mar 2 22:00:00	Rocketsonde	-	-	Arcasonde	-	-	-	THU	-	-	-	65	-	-
1979-4328	2443934.24	1979 Mar 6 17:00:00	Rocketsonde	-	-	Arcasonde	-	-	-	SHER	-	-	-	82	-	-
1979-4329	2443934.52	1979 Mar 6 17:00:00	Rocketsonde	-	-	Arcasonde	-	-	-	PH	-	-	-	78	-	-
1979-4330	2443935.26	1979 Mar 6 19:25:59	Rocketsonde	-	-	Arcasonde	-	-	-	WS	-	-	-	69	-	-
1979-4331	2443935.31	1979 Mar 6 21:59:59	Rocketsonde	-	-	Arcasonde	-	-	-	NS	-	-	-	68	-	-
1979-4332	2443935.42	1979 Mar 6 23:59:59	Rocketsonde	-	-	Arcasonde	-	-	-	PH	-	-	-	53	-	-
1979-4333	2443936.47	1979 Mar 7 18:50:59	Rocketsonde	-	-	Arcasonde	-	-	-	PH	-	-	-	77	-	-
1979-4334	2443936.57	1979 Mar 7 18:50:59	Rocketsonde	-	-	Arcasonde	-	-	-	KMR	-	-	-	70	-	-
1979-4335	2443940.12	1979 Mar 7 15:30:00	Rocketsonde	-	-	Arcasonde	-	-	-	THU	-	-	-	67	-	-
1979-4336	2443940.16	1979 Mar 7 15:30:00	Rocketsonde	-	-	Arcasonde	-	-	-	MI	-	-	-	67	-	-
1979-4337	2443940.25	1979 Mar 7 18:50:59	Rocketsonde	-	-	Arcasonde	-	-	-	SHER	-	-	-	56	-	-
1979-4338	2443940.31	1979 Mar 7 18:50:59	Rocketsonde	-	-	Arcasonde	-	-	-	NS	-	-	-	56	-	-
1979-4339	2443940.31	1979 Mar 7 19:30:00	Rocketsonde	-	-	Arcasonde	-	-	-	NS	-	-	-	58	-	-
1979-4340	2443940.31	1979 Mar 7 19:30:00	Rocketsonde	-	-	Arcasonde	-	-	-	PH	-	-	-	73	-	-
1979-4341	2443940.32	1979 Mar 7 19:44:59	Rocketsonde	-	-	Arcasonde	-	-	-	NS	-	-	-	68	-	-
1979-4342	2443940.35	1979 Mar 7 22:52:00	Rocketsonde	-	-	Arcasonde	-	-	-	KMR	-	-	-	76	-	-
1979-4343	2443940.48	1979 Mar 7 23:00:00	Rocketsonde	-	-	Arcasonde	-	-	-	PF	-	-	-	69	-	-
1979-4344	2443941.39	1979 Mar 8 20:01:00	Rocketsonde	-	-	Arcasonde	-	-	-	PRIM	-	-	-	65	-	-
1979-4345	2443942.11	1979 Mar 9 14:41:00	Rocketsonde	-	-	Arcasonde	-	-	-	THU	-	-	-	68	-	-
1979-4346	2443942.24	1979 Mar 9 17:40:00	Rocketsonde	-	-	Arcasonde	-	-	-	SHER	-	-	-	62	-	-
1979-4347	2443942.39	1979 Mar 9 21:00:00	Rocketsonde	-	-	Arcasonde	-	-	-	KAU	-	-	-	56	-	-
1979-4348	2443942.39	1979 Mar 9 21:24:59	Rocketsonde	-	-	Arcasonde	-	-	-	SHEM	-	-	-	59	-	-
1979-4349	2443942.47	1979 Mar 9 21:00:00	Rocketsonde	-	-	Arcasonde	-	-	-	PH	-	-	-	51	-	-
1979-4350	2443942.56	1979 Mar 10 01:29:00	Rocketsonde	-	-	Arcasonde	-	-	-	KMR	-	-	-	77	-	-
1979-4351	2443945.13	1979 Mar 12 15:03:59	Rocketsonde	-	-	Arcasonde	-	-	-	THU	-	-	-	69	-	-
1979-4352	2443945.24	1979 Mar 12 17:48:59	Rocketsonde	-	-	Arcasonde	-	-	-	PM	-	-	-	74	-	-
1979-4353	2443945.25	1979 Mar 12 18:00:00	Rocketsonde	-	-	Arcasonde	-	-	-	SHER	-	-	-	64	-	-
1979-4354	2443945.31	1979 Mar 12 19:30:00	Rocketsonde	-	-	Arcasonde	-	-	-	NS	-	-	-	66	-	-
1979-4355	2443945.42	1979 Mar 12 21:59:59	Rocketsonde	-	-	Arcasonde	-	-	-	PF	-	-	-	50	-	-
1979-4356	2443945.55	1979 Mar 13 01:14:59	Rocketsonde	-	-	Arcasonde	-	-	-	KMR	-	-	-	75	-	-
1979-4357	2443947.14	1979 Mar 14 15:14:59	Rocketsonde	-	-	Arcasonde	-	-	-	MI	-	-	-	90	-	-
1979-4358	2443947.15	1979 Mar 14 15:36:59	Rocketsonde	-	-	Arcasonde	-	-	-	MI	-	-	-	72	-	-
1979-4359	2443947.29	1979 Mar 14 18:59:59	Rocketsonde	-	-	Arcasonde	-	-	-	NS	-	-	-	98	-	-
1979-4360	2443947.30	1979 Mar 14 19:14:59	Rocketsonde	-	-	Arcasonde	-	-	-	NS	-	-	-	57	-	-
1979-4361	2443947.31	1979 Mar 14 19:30:00	Rocketsonde	-	-	Arcasonde	-	-	-	PM	-	-	-	87	-	-
1979-4362	2443947.31	1979 Mar 14 19:52:59	Rocketsonde	-	-	Arcasonde	-	-	-	PM	-	-	-	78	-	-
1979-4363	2443947.33	1979 Mar 14 20:20:00	Rocketsonde	-	-	Arcasonde	-	-	-	SHER	-	-	-	65	-	-
1979-4364	2443947.35	1979 Mar 14 21:56:59	Rocketsonde	-	-	Arcasonde	-	-	-	KAU	-	-	-	88	-	-
1979-4365	2443947.42	1979 Mar 14 21:59:59	Rocketsonde	-	-	Arcasonde	-	-	-	KAU	-	-	-	68	-	-
1979-4366	2443947.47	1979 Mar 14 23:23:00	Rocketsonde	-	-	Arcasonde	-	-	-	PF	-	-	-	73	-	-
1979-4367	2443947.48	1979 Mar 14 23:29:00	Rocketsonde	-	-	Arcasonde	-	-	-	PH	-	-	-	71	-	-
1979-4368	2443948.38	1979 Mar 15 21:10:00	Rocketsonde	-	-	Arcasonde	-	-	-	KMR	-	-	-	72	-	-
1979-4369	2443948.40	1979 Mar 15 21:32:00	Rocketsonde	-	-	Arcasonde	-	-	-	KAU	-	-	-	77	-	-
1979-4370	2443949.21	1979 Mar 16 17:00:00	Rocketsonde	-	-	Arcasonde	-	-	-	SHEM	-	-	-	66	-	-
1979-4371	2443949.21	1979 Mar 16 17:00:00	Rocketsonde	-	-	Arcasonde	-	-	-	SHER	-	-	-	60	-	-
1979-4372	2443949.38	1979 Mar 16 21:00:00	Rocketsonde	-	-	Arcasonde	-	-	-	KAU	-	-	-	55	-	-
1979-4373	2443949.39	1979 Mar 16 21:00:00	Rocketsonde	-	-	Arcasonde	-	-	-	KAU	-	-	-	55	-	-
1979-4374	2443949.41	1979 Mar 16 21:49:59	Rocketsonde	-	-	Arcasonde	-	-	-	NS	-	-	-	65	-	-
1979-4375	2443952.13	1979 Mar 19 15:03:59	Rocketsonde	-	-	Arcasonde	-	-	-	THU	-	-	-	70	-	-

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Mission	FlightCode	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee_Km	Range_Km	Dest
1979-W389	2443952.14	1979 Mar 19 15:15:59	Rocketsonde	-	-	Arcasonde	-	-	-	WI	-	-	-	68	-	-
1979-A15	2443952.26	1979 Mar 19 18:10:00	Rocketsonde	-	-	Arcasonde	-	-	-	SHER	-	-	-	22	-	-
1979-W392	2443952.29	1979 Mar 19 18:59:59	Rocketsonde	-	-	Arcasonde	-	-	-	WS	-	-	-	65	-	-
1979-W393	2443952.37	1979 Mar 19 20:53:00	Rocketsonde	-	-	Arcasonde	-	-	-	KAU	-	-	-	62	-	-
1979-W394	2443952.38	1979 Mar 19 21:00:00	Rocketsonde	-	-	Arcasonde	-	-	-	SHEM	-	-	-	57	-	-
1979-W395	2443952.55	1979 Mar 20 01:14:59	Rocketsonde	-	-	Arcasonde	-	-	-	KHR	-	-	-	77	-	-
1979-W396	2443952.75	1979 Mar 20 06:00:00	Rocketsonde	-	-	Arcasonde	-	-	-	PF	-	-	-	57	-	-
1979-W398	2443954.12	1979 Mar 21 14:47:00	Rocketsonde	-	-	Arcasonde	-	-	-	THU	-	-	-	67	-	-
1979-W399	2443954.21	1979 Mar 21 16:57:59	Rocketsonde	-	-	Arcasonde	-	-	-	PRIM	-	-	-	60	-	-
1979-W400	2443954.24	1979 Mar 21 17:49:59	Rocketsonde	-	-	Arcasonde	-	-	-	SHER	-	-	-	59	-	-
1979-W401	2443954.29	1979 Mar 21 18:59:59	Rocketsonde	-	-	Arcasonde	-	-	-	WS	-	-	-	98	-	-
1979-W402	2443954.31	1979 Mar 21 19:31:59	Rocketsonde	-	-	Arcasonde	-	-	-	WI	-	-	-	91	-	-
1979-W403	2443954.33	1979 Mar 21 19:53:59	Rocketsonde	-	-	Arcasonde	-	-	-	AI/DNQ-9	-	-	-	70	-	-
1979-W404	2443954.33	1979 Mar 21 19:53:59	Rocketsonde	-	-	Arcasonde	-	-	-	AI/DNQ-9	-	-	-	70	-	-
1979-W405	2443954.40	1979 Mar 21 21:32:00	Rocketsonde	-	-	Arcasonde	-	-	-	PH	-	-	-	73	-	-
1979-W406	2443954.42	1979 Mar 21 21:32:00	Rocketsonde	-	-	Arcasonde	-	-	-	AI/DNQ-9	-	-	-	90	-	-
1979-W407	2443954.57	1979 Mar 22 01:41:00	Rocketsonde	-	-	Arcasonde	-	-	-	KAU	-	-	-	72	-	-
1979-W408	2443954.75	1979 Mar 22 06:00:00	Rocketsonde	-	-	Arcasonde	-	-	-	KHR	-	-	-	80	-	-
1979-W409	2443956.11	1979 Mar 23 14:35:00	Rocketsonde	-	-	Arcasonde	-	-	-	PF	-	-	-	48	-	-
1979-W410	2443956.27	1979 Mar 23 18:24:59	Rocketsonde	-	-	Arcasonde	-	-	-	THU	-	-	-	67	-	-
1979-W411	2443956.29	1979 Mar 23 18:24:59	Rocketsonde	-	-	Arcasonde	-	-	-	PH	-	-	-	73	-	-
1979-W412	2443956.31	1979 Mar 23 18:59:59	Rocketsonde	-	-	Arcasonde	-	-	-	WS	-	-	-	64	-	-
1979-W413	2443956.37	1979 Mar 23 19:30:00	Rocketsonde	-	-	Arcasonde	-	-	-	PRIM	-	-	-	57	-	-
1979-W414	2443956.55	1979 Mar 24 01:14:59	Rocketsonde	-	-	Arcasonde	-	-	-	KAU	-	-	-	76	-	-
1979-W415	2443956.71	1979 Mar 24 05:00:00	Rocketsonde	-	-	Arcasonde	-	-	-	KHR	-	-	-	55	-	-
1979-W416	2443956.13	1979 Mar 26 15:07:00	Rocketsonde	-	-	Arcasonde	-	-	-	PF	-	-	-	68	-	-
1979-W417	2443956.23	1979 Mar 26 17:31:00	Rocketsonde	-	-	Arcasonde	-	-	-	THU	-	-	-	64	-	-
1979-W418	2443956.35	1979 Mar 26 20:30:00	Rocketsonde	-	-	Arcasonde	-	-	-	SHER	-	-	-	65	-	-
1979-W419	2443956.38	1979 Mar 26 21:07:00	Rocketsonde	-	-	Arcasonde	-	-	-	WS	-	-	-	65	-	-
1979-W420	2443956.59	1979 Mar 27 02:15:00	Rocketsonde	-	-	Arcasonde	-	-	-	PH	-	-	-	76	-	-
1979-W421	2443956.60	1979 Mar 27 07:14:59	Rocketsonde	-	-	Arcasonde	-	-	-	KHR	-	-	-	60	-	-
1979-W422	2443956.60	1979 Mar 27 07:14:59	Rocketsonde	-	-	Arcasonde	-	-	-	SHEM	-	-	-	50	-	-
1979-W423	2443960.38	1979 Mar 27 21:04:59	Rocketsonde	-	-	Arcasonde	-	-	-	THU	-	-	-	46	-	-
1979-W424	2443961.11	1979 Mar 28 14:40:00	Rocketsonde	-	-	Arcasonde	-	-	-	AI/DNQ-9	-	-	-	71	-	-
1979-W425	2443961.17	1979 Mar 28 16:09:59	Rocketsonde	-	-	Arcasonde	-	-	-	WI	-	-	-	59	-	-
1979-W426	2443961.19	1979 Mar 28 16:54:59	Rocketsonde	-	-	Arcasonde	-	-	-	SHER	-	-	-	64	-	-
1979-W427	2443961.21	1979 Mar 28 17:00:00	Rocketsonde	-	-	Arcasonde	-	-	-	WS	-	-	-	86	-	-
1979-W428	2443961.30	1979 Mar 28 19:09:59	Rocketsonde	-	-	Arcasonde	-	-	-	PH	-	-	-	86	-	-
1979-W429	2443961.33	1979 Mar 28 19:22:00	Rocketsonde	-	-	Arcasonde	-	-	-	SHER	-	-	-	53	-	-
1979-W430	2443961.38	1979 Mar 28 21:00:00	Rocketsonde	-	-	Arcasonde	-	-	-	KHR	-	-	-	65	-	-
1979-W431	2443961.45	1979 Mar 28 22:31:59	Rocketsonde	-	-	Arcasonde	-	-	-	PF	-	-	-	51	-	-
1979-W432	2443961.51	1979 Mar 29 07:30:00	Rocketsonde	-	-	Arcasonde	-	-	-	THU	-	-	-	66	-	-
1979-W433	2443962.38	1979 Mar 29 21:01:59	Rocketsonde	-	-	Arcasonde	-	-	-	AI/DNQ-9	-	-	-	70	-	-
1979-W434	2443963.11	1979 Mar 30 14:34:00	Rocketsonde	-	-	Arcasonde	-	-	-	SHER	-	-	-	66	-	-
1979-W435	2443963.25	1979 Mar 30 15:59:59	Rocketsonde	-	-	Arcasonde	-	-	-	WS	-	-	-	62	-	-
1979-W436	2443963.29	1979 Mar 30 21:06:00	Rocketsonde	-	-	Arcasonde	-	-	-	SHER	-	-	-	59	-	-
1979-W437	2443963.31	1979 Mar 31 13:11:59	Rocketsonde	-	-	Arcasonde	-	-	-	PH	-	-	-	63	-	-
1979-W438	2443963.56	1979 Apr 2 13:30:00	Rocketsonde	-	-	Arcasonde	-	-	-	ASC	-	-	-	64	-	-
1979-W439	2443965.00	1979 Apr 2 18:54:59	Rocketsonde	-	-	Arcasonde	-	-	-	AI/DNQ-9	-	-	-	74	-	-
1979-W440	2443965.07	1979 Apr 2 20:52:59	Rocketsonde	-	-	Arcasonde	-	-	-	AI/DNQ-9	-	-	-	64	-	-
1979-W441	2443965.27	1979 Apr 2 21:00:00	Rocketsonde	-	-	Arcasonde	-	-	-	KAU	-	-	-	64	-	-
1979-W442	2443965.37	1979 Apr 2 21:00:00	Rocketsonde	-	-	Arcasonde	-	-	-	SHEM	-	-	-	66	-	-
1979-W443	2443965.44	1979 Apr 2 22:40:00	Rocketsonde	-	-	Arcasonde	-	-	-	PF	-	-	-	68	-	-
1979-W444	2443965.58	1979 Apr 4 13:30:00	Rocketsonde	-	-	Arcasonde	-	-	-	AI/DNQ-9	-	-	-	76	-	-
1979-W445	2443965.66	1979 Apr 4 15:10:00	Rocketsonde	-	-	Arcasonde	-	-	-	ASC	-	-	-	63	-	-
1979-W446	2443965.13	1979 Apr 4 15:45:00	Rocketsonde	-	-	Arcasonde	-	-	-	AI/DNQ-9	-	-	-	86	-	-
1979-W447	2443965.16	1979 Apr 4 16:19:59	Rocketsonde	-	-	Arcasonde	-	-	-	WI	-	-	-	75	-	-
1979-W448	2443965.18	1979 Apr 4 16:19:59	Rocketsonde	-	-	Arcasonde	-	-	-	WI	-	-	-	70	-	-
1979-W449	2443965.29	1979 Apr 4 18:59:59	Rocketsonde	-	-	Arcasonde	-	-	-	WS	-	-	-	62	-	-
1979-W450	2443965.29	1979 Apr 4 19:14:59	Rocketsonde	-	-	Arcasonde	-	-	-	PH	-	-	-	89	-	-
1979-W451	2443965.33	1979 Apr 4 19:49:59	Rocketsonde	-	-	Arcasonde	-	-	-	AI/DNQ-9	-	-	-	74	-	-
1979-W452	2443965.38	1979 Apr 4 20:19:00	Rocketsonde	-	-	Arcasonde	-	-	-	PH	-	-	-	74	-	-
1979-W453	2443965.38	1979 Apr 4 21:00:00	Rocketsonde	-	-	Arcasonde	-	-	-	KAU	-	-	-	64	-	-
1979-W454	2443965.40	1979 Apr 4 21:31:00	Rocketsonde	-	-	Arcasonde	-	-	-	KHR	-	-	-	73	-	-
1979-W455	2443965.45	1979 Apr 4 22:45:59	Rocketsonde	-	-	Arcasonde	-	-	-	PF	-	-	-	53	-	-
1979-W456	2443965.65	1979 Apr 5 01:14:59	Rocketsonde	-	-	Arcasonde	-	-	-	CC	-	-	-	72	-	-
1979-W457	2443965.69	1979 Apr 5 01:44:59	Rocketsonde	-	-	Arcasonde	-	-	-	AI/DNQ-9	-	-	-	73	-	-
1979-W458	2443965.72	1979 Apr 5 17:21:00	Rocketsonde	-	-	Arcasonde	-	-	-	PRIM	-	-	-	61	-	-
1979-W459	2443965.88	1979 Apr 5 21:00:00	Rocketsonde	-	-	Arcasonde	-	-	-	SHEM	-	-	-	55	-	-
1979-W460	2443965.94	1979 Apr 6 14:45:59	Rocketsonde	-	-	Arcasonde	-	-	-	WI	-	-	-	51	-	-
1979-W461	2443969.44	1979 Apr 6 13:14:59	Rocketsonde	-	-	Arcasonde	-	-	-	ASC	-	-	-	64	-	-
1979-W462	2443970.05	1979 Apr 6 14:45:00	Rocketsonde	-	-	Arcasonde	-	-	-	CC	-	-	-	67	-	-
1979-W463	2443970.11	1979 Apr 6 15:52:00	Rocketsonde	-	-	Arcasonde	-	-	-	AI/DNQ-9	-	-	-	64	-	-
1979-W464	2443970.16	1979 Apr 6 17:40:00	Rocketsonde	-	-	Arcasonde	-	-	-	THU	-	-	-	69	-	-
1979-W465	2443970.24	1979 Apr 6 17:40:00	Rocketsonde	-	-	Arcasonde	-	-	-	AI/DNQ-9	-	-	-	73	-	-
1979-W466	2443970.32	1979 Apr 6 19:40:00	Rocketsonde	-	-	Arcasonde	-	-	-	WS	-	-	-	64	-	-
1979-W467	2443970.37	1979 Apr 6 20:47:00	Rocketsonde	-	-	Arcasonde	-	-	-	KAU	-	-	-	57	-	-
1979-W468	2443970.55	1979 Apr 7 01:14:59	Rocketsonde	-	-	Arcasonde	-	-	-	SHER	-	-	-	75	-	-
1979-W469	2443970.04	1979 Apr 9 12:59:59	Rocketsonde	-	-	Arcasonde	-	-	-	AI/DNQ-9	-	-	-	72	-	-
1979-W470	2443973.04	1979 Apr 9 15:11:59	Rocketsonde	-	-	Arcasonde	-	-	-	AI/DNQ-9	-	-	-	68	-	-
1979-W471	2443973.13	1979 Apr 9 20:59:00	Rocketsonde	-	-	Arcasonde	-	-	-	THU	-	-	-	55	-	-
1979-W472	2443973.41	1979 Apr 9 21:59:59	Rocketsonde	-	-	Arcasonde	-	-	-	KAU	-	-	-	73	-	-
1979-W473	2443973.42	1979 Apr 9 21:59:59	Rocketsonde	-	-	Arcasonde	-	-	-	PF	-	-	-	55	-	-
1979-W474	2443973.55	1979 Apr 10 01:14:59	Rocketsonde	-	-	Arcasonde	-	-	-	KHR	-	-	-	69	-	-
1979-W475	2443973.06	1979 Apr 11 13:19:59	Rocketsonde	-	-	Arcasonde	-	-	-	ASC	-	-	-	65	-	-

Launch

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Mission	FlightCode	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee_Km	Range_Km	Dest
1979-4483	2443975.07	1979 Apr 11 13:44:59	Rocketsonde	-	-	Arcasonde	-	-	-	AIT	-	-	-	74	-	-
1979-4484	2443975.12	1979 Apr 11 14:53:00	Rocketsonde	-	-	Arcasonde	-	-	-	THU	-	-	-	89	-	-
1979-4245	2443975.13	1979 Apr 11 15:10:00	Rocketsonde	-	-	AI/DMP-9	-	-	-	WI	-	-	-	90	-	-
1979-4486	2443975.15	1979 Apr 11 15:40:00	Rocketsonde	-	-	Arcasonde	-	-	-	WI	-	-	-	89	-	-
1979-4488	2443975.28	1979 Apr 11 18:56:59	Rocketsonde	-	-	Arcasonde	-	-	-	PRIM	-	-	-	68	-	-
1979-4489	2443975.32	1979 Apr 11 19:44:59	Rocketsonde	-	-	Arcasonde	-	-	-	WS	-	-	-	68	-	-
1979-4490	2443975.42	1979 Apr 11 22:03:59	Rocketsonde	-	-	Startur, Datasonde	-	-	-	PF	-	-	-	69	-	-
1979-4491	2443975.45	1979 Apr 11 22:49:59	Rocketsonde	-	-	Arcasonde	-	-	-	KMR	-	-	-	72	-	-
1979-4492	2443976.31	1979 Apr 12 19:30:59	Rocketsonde	-	-	Arcasonde	-	-	-	WS	-	-	-	87	-	-
1979-4493	2443977.06	1979 Apr 13 13:19:59	Rocketsonde	-	-	Arcasonde	-	-	-	ASC	-	-	-	64	-	-
1979-4495	2443977.13	1979 Apr 13 15:13:59	Rocketsonde	-	-	Arcasonde	-	-	-	AIT	-	-	-	89	-	-
1979-4497	2443977.27	1979 Apr 13 18:22:59	Rocketsonde	-	-	Arcasonde	-	-	-	THU	-	-	-	64	-	-
1979-4498	2443977.47	1979 Apr 13 23:15:00	Rocketsonde	-	-	Arcasonde	-	-	-	CC	LO43	-	-	62	-	-
1979-4499	2443980.06	1979 Apr 16 14:49:59	Rocketsonde	-	-	Startur, Datasonde	-	-	-	PF	-	-	-	64	-	-
1979-4500	2443980.12	1979 Apr 16 16:52:00	Rocketsonde	-	-	Arcasonde	-	-	-	AIT	-	-	-	73	-	-
1979-4501	2443980.20	1979 Apr 16 16:52:00	Rocketsonde	-	-	Arcasonde	-	-	-	ASC	-	-	-	59	-	-
1979-4502	2443980.29	1979 Apr 16 18:59:59	Rocketsonde	-	-	Arcasonde	-	-	-	PH	-	-	-	67	-	-
1979-4503	2443980.42	1979 Apr 16 18:59:59	Rocketsonde	-	-	Arcasonde	-	-	-	WS	-	-	-	59	-	-
1979-4504	2443980.55	1979 Apr 17 01:14:59	Rocketsonde	-	-	Arcasonde	-	-	-	KAU	-	-	-	77	-	-
1979-4505	2443980.77	1979 Apr 17 08:30:00	Rocketsonde	-	-	Startur, Datasonde	-	-	-	KMR	-	-	-	63	-	-
1979-4506	2443982.06	1979 Apr 18 13:19:59	Rocketsonde	-	-	Arcasonde	-	-	-	PF	-	-	-	63	-	-
1979-4507	2443982.06	1979 Apr 18 13:19:59	Rocketsonde	-	-	Arcasonde	-	-	-	ASC	-	-	-	63	-	-
1979-4508	2443982.10	1979 Apr 18 14:30:00	Rocketsonde	-	-	Arcasonde	-	-	-	AIT	-	-	-	73	-	-
1979-4509	2443982.11	1979 Apr 18 14:35:00	Rocketsonde	-	-	Arcasonde	-	-	-	CC	LO43	-	-	64	-	-
1979-4510	2443982.14	1979 Apr 18 15:20:00	Rocketsonde	-	-	Arcasonde	-	-	-	THU	-	-	-	69	-	-
1979-4511	2443982.16	1979 Apr 18 15:51:00	Rocketsonde	-	-	Arcasonde	-	-	-	WI	-	-	-	91	-	-
1979-4512	2443982.21	1979 Apr 18 17:04:59	Rocketsonde	-	-	Arcasonde	-	-	-	MI	-	-	-	64	-	-
1979-4513	2443982.29	1979 Apr 18 18:59:59	Rocketsonde	-	-	Arcasonde	-	-	-	PRIM	-	-	-	64	-	-
1979-4514	2443982.31	1979 Apr 18 18:59:59	Rocketsonde	-	-	Arcasonde	-	-	-	WS	-	-	-	86	-	-
1979-4515	2443982.57	1979 Apr 18 20:54:00	Rocketsonde	-	-	Arcasonde	-	-	-	WS	-	-	-	86	-	-
1979-4516	2443983.42	1979 Apr 19 01:09:59	Rocketsonde	-	-	Arcasonde	-	-	-	KAU	-	-	-	85	-	-
1979-4517	2443983.42	1979 Apr 19 21:59:59	Rocketsonde	-	-	Arcasonde	-	-	-	KMR	-	-	-	89	-	-
1979-4518	2443984.08	1979 Apr 20 14:00:00	Rocketsonde	-	-	Arcasonde	-	-	-	ASC	-	-	-	85	-	-
1979-4519	2443984.09	1979 Apr 20 14:15:59	Rocketsonde	-	-	Arcasonde	-	-	-	ASC	-	-	-	86	-	-
1979-4520	2443984.11	1979 Apr 20 14:45:00	Rocketsonde	-	-	Arcasonde	-	-	-	THU	-	-	-	88	-	-
1979-4521	2443984.21	1979 Apr 20 17:06:00	Rocketsonde	-	-	Arcasonde	-	-	-	CC	LO43	-	-	85	-	-
1979-4522	2443984.37	1979 Apr 20 20:56:00	Rocketsonde	-	-	Arcasonde	-	-	-	PRIM	-	-	-	89	-	-
1979-4523	2443984.46	1979 Apr 20 23:00:00	Rocketsonde	-	-	Arcasonde	-	-	-	WS	-	-	-	85	-	-
1979-4524	2443984.56	1979 Apr 21 01:14:59	Rocketsonde	-	-	Arcasonde	-	-	-	KAU	-	-	-	85	-	-
1979-4525	2443987.59	1979 Apr 21 01:30:00	Rocketsonde	-	-	Arcasonde	-	-	-	KMR	-	-	-	85	-	-
1979-4526	2443987.07	1979 Apr 23 13:34:59	Rocketsonde	-	-	Arcasonde	-	-	-	SHER	-	-	-	54	-	-
1979-4529	2443987.11	1979 Apr 23 14:30:00	Rocketsonde	-	-	Arcasonde	-	-	-	AIT	-	-	-	72	-	-
1979-4530	2443987.23	1979 Apr 23 15:56:59	Rocketsonde	-	-	Arcasonde	-	-	-	THU	-	-	-	63	-	-
1979-4531	2443987.33	1979 Apr 23 16:26:59	Rocketsonde	-	-	Arcasonde	-	-	-	PRIM	-	-	-	73	-	-
1979-4532	2443987.42	1979 Apr 23 23:05:00	Rocketsonde	-	-	Arcasonde	-	-	-	PH	-	-	-	68	-	-
1979-4533	2443987.42	1979 Apr 23 23:05:00	Rocketsonde	-	-	Arcasonde	-	-	-	WS	-	-	-	68	-	-
1979-4534	2443987.42	1979 Apr 23 23:05:00	Rocketsonde	-	-	Startur, Datasonde	-	-	-	PF	-	-	-	61	-	-
1979-4535	2443989.09	1979 Apr 25 14:37:00	Rocketsonde	-	-	Arcasonde	-	-	-	ASC	-	-	-	71	-	-
1979-4536	2443989.11	1979 Apr 25 15:17:00	Rocketsonde	-	-	Arcasonde	-	-	-	ASC	-	-	-	71	-	-
1979-4537	2443989.11	1979 Apr 25 15:17:00	Rocketsonde	-	-	Arcasonde	-	-	-	THU	-	-	-	00	-	-
1979-4538	2443989.11	1979 Apr 25 16:25:59	Rocketsonde	-	-	AI/DMP-9	-	-	-	MI	-	-	-	53	-	-
1979-4539	2443989.18	1979 Apr 25 16:25:59	Rocketsonde	-	-	Arcasonde	-	-	-	MI	-	-	-	53	-	-
1979-4540	2443989.20	1979 Apr 25 16:25:59	Rocketsonde	-	-	Arcasonde	-	-	-	MI	-	-	-	53	-	-
1979-4541	2443989.23	1979 Apr 25 17:30:00	Rocketsonde	-	-	Arcasonde	-	-	-	PRIM	-	-	-	66	-	-
1979-4542	2443989.23	1979 Apr 25 17:30:00	Rocketsonde	-	-	Arcasonde	-	-	-	CC	LO43	-	-	71	-	-
1979-4543	2443989.29	1979 Apr 25 21:14:59	Rocketsonde	-	-	Arcasonde	-	-	-	SHER	-	-	-	61	-	-
1979-4544	2443989.29	1979 Apr 25 21:14:59	Rocketsonde	-	-	Arcasonde	-	-	-	WS	-	-	-	98	-	-
1979-4545	2443989.40	1979 Apr 25 21:40:00	Rocketsonde	-	-	Arcasonde	-	-	-	WS	-	-	-	66	-	-
1979-4546	2443989.45	1979 Apr 25 22:48:59	Rocketsonde	-	-	Arcasonde	-	-	-	ASC	-	-	-	70	-	-
1979-4547	2443989.47	1979 Apr 25 23:10:00	Rocketsonde	-	-	Arcasonde	-	-	-	KMR	-	-	-	66	-	-
1979-4548	2443990.39	1979 Apr 26 21:22:59	Rocketsonde	-	-	Startur, Datasonde	-	-	-	PF	-	-	-	59	-	-
1979-4549	2443990.39	1979 Apr 26 21:22:59	Rocketsonde	-	-	Arcasonde	-	-	-	KAU	-	-	-	73	-	-
1979-4550	2443991.06	1979 Apr 27 13:30:00	Rocketsonde	-	-	Arcasonde	-	-	-	AIT	-	-	-	75	-	-
1979-4551	2443991.10	1979 Apr 27 14:30:00	Rocketsonde	-	-	Arcasonde	-	-	-	CC	LO43	-	-	65	-	-
1979-4552	2443991.10	1979 Apr 27 14:30:00	Rocketsonde	-	-	Arcasonde	-	-	-	THU	-	-	-	72	-	-
1979-4553	2443991.31	1979 Apr 27 19:21:59	Rocketsonde	-	-	Arcasonde	-	-	-	PM	-	-	-	66	-	-
1979-4554	2443991.33	1979 Apr 27 20:00:00	Rocketsonde	-	-	Arcasonde	-	-	-	PRIM	-	-	-	66	-	-
1979-4555	2443991.47	1979 Apr 27 23:10:00	Rocketsonde	-	-	Arcasonde	-	-	-	PF	-	-	-	67	-	-
1979-4556	2443991.55	1979 Apr 28 01:14:59	Rocketsonde	-	-	Startur, Datasonde	-	-	-	KMR	-	-	-	75	-	-
1979-4557	2443994.11	1979 Apr 30 14:41:00	Rocketsonde	-	-	Arcasonde	-	-	-	THU	-	-	-	69	-	-
1979-4558	2443994.16	1979 Apr 30 15:45:00	Rocketsonde	-	-	Arcasonde	-	-	-	PRIM	-	-	-	63	-	-
1979-4559	2443994.24	1979 Apr 30 17:40:00	Rocketsonde	-	-	Arcasonde	-	-	-	SHER	-	-	-	56	-	-
1979-4560	2443994.25	1979 Apr 30 18:00:00	Rocketsonde	-	-	Arcasonde	-	-	-	WS	-	-	-	67	-	-
1979-4561	2443994.37	1979 Apr 30 20:51:00	Rocketsonde	-	-	Arcasonde	-	-	-	PM	-	-	-	59	-	-
1979-4562	2443994.38	1979 Apr 30 21:03:59	Rocketsonde	-	-	Arcasonde	-	-	-	KAU	-	-	-	59	-	-
1979-4563	2443994.44	1979 Apr 30 22:40:00	Rocketsonde	-	-	Startur, Datasonde	-	-	-	PF	-	-	-	66	-	-
1979-4564	2443996.06	1979 Apr 2 13:19:59	Rocketsonde	-	-	Arcasonde	-	-	-	AIT	-	-	-	75	-	-
1979-4565	2443996.06	1979 Apr 2 13:30:00	Rocketsonde	-	-	Arcasonde	-	-	-	CC	LO43	-	-	65	-	-
1979-4566	2443996.09	1979 Apr 2 14:09:00	Rocketsonde	-	-	Arcasonde	-	-	-	WI	-	-	-	90	-	-
1979-4567	2443996.13	1979 Apr 2 14:35:00	Rocketsonde	-	-	Arcasonde	-	-	-	MI	-	-	-	52	-	-
1979-4568	2443996.13	1979 Apr 2 15:00:59	Rocketsonde	-	-	Arcasonde	-	-	-	THU	-	-	-	69	-	-
1979-4569	2443996.16	1979 Apr 2 15:47:59	Rocketsonde	-	-	Arcasonde	-	-	-	PRIM	-	-	-	51	-	-
1979-4570	2443996.23	1979 Apr 2 17:31:00	Rocketsonde	-	-	Arcasonde	-	-	-	PRIM	-	-	-	85	-	-
1979-4571	2443996.23	1979 Apr 2 17:31:00	Rocketsonde	-	-	Arcasonde	-	-	-	PM	-	-	-	75	-	-
1979-4572	2443996.25	1979 Apr 2 17:56:00	Rocketsonde	-	-	Arcasonde	-	-	-	PH	-	-	-	85	-	-
1979-4573	2443996.31	1979 Apr 2 19:31:59	Rocketsonde	-	-	Arcasonde	-	-	-	WS	-	-	-	98	-	-
1979-4574	2443996.32	1979 Apr 2 19:46:59	Rocketsonde	-	-	Arcasonde	-	-	-	WS	-	-	-	70	-	-
1979-4571	2443996.33	1979 Apr 2 20:00:00	Rocketsonde	-	-	Arcasonde	-	-	-	SHER	-	-	-	63	-	-

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Mission	FlightCode	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee_Km	Range_Km	Dest
1979-4572	2443996_45	1979 May 2 2243:59	Rocketsonde	-	-	Arcasonde	-	-	-	KMR	-	-	-	74	-	-
1979-4573	2443996_50	1979 May 2 2356:00	Rocketsonde	-	-	Structure, Datazone	-	-	-	PF	-	-	-	62	-	-
1979-4574	2443997_15	1979 May 3 1540:00	Rocketsonde	-	-	Arcasonde	-	-	-	WI	-	-	-	59	-	-
1979-4575	2443997_19	1979 May 3 1635:59	Rocketsonde	-	-	-	-	-	-	WI	-	-	-	59	-	-
1979-4576	2443997_31	1979 May 3 1930:00	Rocketsonde	-	-	Arcasonde	-	-	-	PRIM	-	-	-	60	-	-
1979-4577	2443997_42	1979 May 3 2202:59	Rocketsonde	-	-	AI/DMP-9?	-	-	-	KAU	-	-	-	96	-	-
1979-4579	2443997_46	1979 May 3 2241:00	Rocketsonde	-	-	Arcasonde	-	-	-	KAU	-	-	-	74	-	-
1979-4580	2443998_05	1979 May 4 1314:59	Rocketsonde	-	-	Arcasonde	-	-	-	AIT	-	-	-	71	-	-
1979-4581	2443998_06	1979 May 4 1330:00	Rocketsonde	-	-	Arcasonde	-	-	-	CC	-	-	-	71	-	-
1979-4582	2443998_10	1979 May 4 1431:00	Rocketsonde	-	-	Arcasonde	-	-	-	THU	-	-	-	50	-	-
1979-4583	2443998_11	1979 May 4 1437:00	Rocketsonde	-	-	Arcasonde	-	-	-	WI	-	-	-	56	-	-
1979-4584	2443998_14	1979 May 4 1522:00	Rocketsonde	-	-	Arcasonde	-	-	-	ASC	-	-	-	68	-	-
1979-4585	2443998_21	1979 May 4 1700:00	Rocketsonde	-	-	Arcasonde	-	-	-	SHER	-	-	-	62	-	-
1979-4586	2443998_25	1979 May 4 1806:00	Rocketsonde	-	-	Arcasonde	-	-	-	PH	-	-	-	60	-	-
1979-4587	2443998_30	1979 May 4 1912:59	Rocketsonde	-	-	Arcasonde	-	-	-	PRIM	-	-	-	64	-	-
1979-4588	2443998_33	1979 May 4 2000:00	Rocketsonde	-	-	Arcasonde	-	-	-	SHER	-	-	-	53	-	-
1979-4589	2443998_45	1979 May 4 2245:59	Rocketsonde	-	-	Arcasonde	-	-	-	KAU	-	-	-	52	-	-
1979-4590	2443998_50	1979 May 5 0000:00	Rocketsonde	-	-	Structure, Datazone	-	-	-	PF	-	-	-	60	-	-
1979-4591	2444001_05	1979 May 7 1314:59	Rocketsonde	-	-	Arcasonde	-	-	-	ASC	-	-	-	66	-	-
1979-4592	2444001_10	1979 May 7 1418:00	Rocketsonde	-	-	Arcasonde	-	-	-	THU	-	-	-	72	-	-
1979-4593	2444001_16	1979 May 7 1552:00	Rocketsonde	-	-	Arcasonde	-	-	-	PRIM	-	-	-	68	-	-
1979-4594	2444001_21	1979 May 7 1700:00	Rocketsonde	-	-	Arcasonde	-	-	-	SHER	-	-	-	63	-	-
1979-4595	2444001_26	1979 May 7 1813:59	Rocketsonde	-	-	Arcasonde	-	-	-	PH	-	-	-	74	-	-
1979-4596	2444001_33	1979 May 7 2000:00	Rocketsonde	-	-	Arcasonde	-	-	-	SHER	-	-	-	54	-	-
1979-4597	2444002_33	1979 May 8 2000:00	Rocketsonde	-	-	Arcasonde	-	-	-	SHER	-	-	-	55	-	-
1979-4598	2444002_51	1979 May 9 0240:00	Rocketsonde	-	-	Arcasonde	-	-	-	KMR	-	-	-	75	-	-
1979-4599	2444003_10	1979 May 9 1422:00	Rocketsonde	-	-	Arcasonde	-	-	-	THU	-	-	-	70	-	-
1979-4600	2444003_21	1979 May 9 1700:00	Rocketsonde	-	-	Arcasonde	-	-	-	SHER	-	-	-	56	-	-
1979-4601	2444003_22	1979 May 9 1710:00	Rocketsonde	-	-	Arcasonde	-	-	-	WI	-	-	-	90	-	-
1979-4602	2444003_23	1979 May 9 1733:00	Rocketsonde	-	-	Arcasonde	-	-	-	WI	-	-	-	53	-	-
1979-4603	2444003_24	1979 May 9 1757:59	Rocketsonde	-	-	Arcasonde	-	-	-	WI	-	-	-	46	-	-
1979-4604	2444003_25	1979 May 9 1743:00	Rocketsonde	-	-	Arcasonde	-	-	-	WI	-	-	-	57	-	-
1979-4605	2444003_26	1979 May 9 1814:59	Rocketsonde	-	-	Arcasonde	-	-	-	WS	-	-	-	73	-	-
1979-4606	2444003_27	1979 May 9 1850:00	Rocketsonde	-	-	Arcasonde	-	-	-	WS	-	-	-	73	-	-
1979-4607	2444003_29	1979 May 9 1916:59	Rocketsonde	-	-	Arcasonde	-	-	-	AIT	-	-	-	90	-	-
1979-4608	2444003_30	1979 May 9 1918:59	Rocketsonde	-	-	Arcasonde	-	-	-	PH	-	-	-	76	-	-
1979-4609	2444003_31	1979 May 9 1925:00	Rocketsonde	-	-	Arcasonde	-	-	-	PH	-	-	-	90	-	-
1979-4610	2444003_33	1979 May 9 2000:00	Rocketsonde	-	-	Arcasonde	-	-	-	CC	-	-	-	69	-	-
1979-4611	2444003_44	1979 May 9 2200:00	Rocketsonde	-	-	Arcasonde	-	-	-	SHER	-	-	-	68	-	-
1979-4612	2444003_45	1979 May 9 2251:00	Rocketsonde	-	-	Structure, Datazone	-	-	-	PF	-	-	-	58	-	-
1979-4613	2444004_57	1979 May 11 0141:59	Rocketsonde	-	-	Arcasonde	-	-	-	KMR	-	-	-	74	-	-
1979-4614	2444005_04	1979 May 11 1259:59	Rocketsonde	-	-	Arcasonde	-	-	-	KMR	-	-	-	74	-	-
1979-4615	2444005_06	1979 May 11 1530:00	Rocketsonde	-	-	Arcasonde	-	-	-	ASC	-	-	-	65	-	-
1979-4616	2444005_10	1979 May 11 1520:00	Rocketsonde	-	-	Arcasonde	-	-	-	ASC	-	-	-	65	-	-
1979-4617	2444005_12	1979 May 11 1520:00	Rocketsonde	-	-	Arcasonde	-	-	-	THU	-	-	-	70	-	-
1979-4618	2444005_15	1979 May 11 1536:59	Rocketsonde	-	-	Arcasonde	-	-	-	THU	-	-	-	69	-	-
1979-4619	2444005_21	1979 May 11 1906:59	Rocketsonde	-	-	Arcasonde	-	-	-	PRIM	-	-	-	68	-	-
1979-4620	2444005_23	1979 May 11 2311:59	Rocketsonde	-	-	Arcasonde	-	-	-	WI	-	-	-	66	-	-
1979-4621	2444005_27	1979 May 12 0621:59	Rocketsonde	-	-	Structure, Datazone	-	-	-	PF	-	-	-	66	-	-
1979-4622	2444005_28	1979 May 12 1321:00	Rocketsonde	-	-	Arcasonde	-	-	-	AIT	-	-	-	75	-	-
1979-4623	2444005_29	1979 May 14 1415:59	Rocketsonde	-	-	Arcasonde	-	-	-	AIT	-	-	-	72	-	-
1979-4624	2444005_33	1979 May 14 1500:00	Rocketsonde	-	-	Arcasonde	-	-	-	THU	-	-	-	56	-	-
1979-4625	2444005_35	1979 May 14 1538:59	Rocketsonde	-	-	Arcasonde	-	-	-	ASC	-	-	-	66	-	-
1979-4626	2444005_37	1979 May 14 1800:00	Rocketsonde	-	-	Arcasonde	-	-	-	PRIM	-	-	-	57	-	-
1979-4627	2444005_38	1979 May 14 1822:00	Rocketsonde	-	-	Arcasonde	-	-	-	SHER	-	-	-	66	-	-
1979-4628	2444005_39	1979 May 14 2055:00	Rocketsonde	-	-	Arcasonde	-	-	-	PH	-	-	-	77	-	-
1979-4629	2444005_48	1979 May 14 2330:00	Rocketsonde	-	-	Structure, Datazone	-	-	-	KAU	-	-	-	55	-	-
1979-4630	2444005_53	1979 May 15 0109:59	Rocketsonde	-	-	Arcasonde	-	-	-	PF	-	-	-	68	-	-
1979-4631	2444005_58	1979 May 15 1419:59	Rocketsonde	-	-	Arcasonde	-	-	-	KMR	-	-	-	77	-	-
1979-4632	2444010_06	1979 May 16 1319:59	Rocketsonde	-	-	Arcasonde	-	-	-	SHER	-	-	-	56	-	-
1979-4633	2444010_12	1979 May 16 1455:00	Rocketsonde	-	-	Arcasonde	-	-	-	CC	-	-	-	60	-	-
1979-4634	2444010_17	1979 May 16 1558:59	Rocketsonde	-	-	Arcasonde	-	-	-	THU	-	-	-	69	-	-
1979-4635	2444010_21	1979 May 16 1700:00	Rocketsonde	-	-	Arcasonde	-	-	-	PRIM	-	-	-	55	-	-
1979-4636	2444010_26	1979 May 16 1814:59	Rocketsonde	-	-	Arcasonde	-	-	-	SHER	-	-	-	54	-	-
1979-4637	2444010_30	1979 May 16 1904:59	Rocketsonde	-	-	Arcasonde	-	-	-	NS	-	-	-	91	-	-
1979-4638	2444010_32	1979 May 16 1934:59	Rocketsonde	-	-	AI/DMP-9	-	-	-	WI	-	-	-	71	-	-
1979-4639	2444010_33	1979 May 16 2000:00	Rocketsonde	-	-	Arcasonde	-	-	-	WI	-	-	-	56	-	-
1979-4640	2444010_47	1979 May 16 2310:00	Rocketsonde	-	-	Arcasonde	-	-	-	AIT	-	-	-	67	-	-
1979-4641	2444010_57	1979 May 17 0137:59	Rocketsonde	-	-	Structure, Datazone	-	-	-	PF	-	-	-	56	-	-
1979-4642	2444011_62	1979 May 18 0247:00	Rocketsonde	-	-	Arcasonde	-	-	-	KMR	-	-	-	73	-	-
1979-4643	2444012_11	1979 May 18 1419:00	Rocketsonde	-	-	Arcasonde	-	-	-	THU	-	-	-	71	-	-
1979-4644	2444012_13	1979 May 18 1502:59	Rocketsonde	-	-	Arcasonde	-	-	-	WI	-	-	-	55	-	-
1979-4645	2444012_23	1979 May 18 1730:00	Rocketsonde	-	-	Arcasonde	-	-	-	THU	-	-	-	75	-	-
1979-4646	2444012_24	1979 May 18 1749:59	Rocketsonde	-	-	Arcasonde	-	-	-	KMR	-	-	-	52	-	-
1979-4647	2444012_25	1979 May 18 1749:59	Rocketsonde	-	-	Arcasonde	-	-	-	SHER	-	-	-	71	-	-
1979-4648	2444012_26	1979 May 18 1800:00	Rocketsonde	-	-	Arcasonde	-	-	-	THU	-	-	-	55	-	-
1979-4649	2444012_28	1979 May 18 1845:00	Rocketsonde	-	-	Arcasonde	-	-	-	WI	-	-	-	71	-	-
1979-4650	2444012_33	1979 May 18 1845:00	Rocketsonde	-	-	Arcasonde	-	-	-	THU	-	-	-	55	-	-
1979-4651	2444012_61	1979 May 19 0237:00	Rocketsonde	-	-	Arcasonde	-	-	-	CC	-	-	-	44	-	-
1979-4652	2444015_07	1979 May 21 1344:59	Rocketsonde	-	-	Structure, Datazone	-	-	-	SHER	-	-	-	59	-	-
1979-4653	2444015_09	1979 May 21 1415:00	Rocketsonde	-	-	Arcasonde	-	-	-	NS	-	-	-	66	-	-
1979-4654	2444015_14	1979 May 21 1523:59	Rocketsonde	-	-	Arcasonde	-	-	-	NS	-	-	-	68	-	-
1979-4655	2444015_20	1979 May 21 1651:00	Rocketsonde	-	-	Arcasonde	-	-	-	NS	-	-	-	67	-	-
1979-4656	2444015_25	1979 May 21 1800:00	Rocketsonde	-	-	Arcasonde	-	-	-	NS	-	-	-	64	-	-





Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Mission	FlightCode	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee_Km	Range_Km	Dest
1979-4749	2444036.09	1979 Jun 11 14:10:00	Rocketsonde	-	-	Arcasonde	-	-	-	AIT	-	-	-	64	-	-
1979-4750	2444036.10	1979 Jun 11 14:31:00	Rocketsonde	-	-	Arcasonde	-	-	-	THU	-	-	-	68	-	-
1979-4751	2444036.14	1979 Jun 11 15:14:59	Rocketsonde	-	-	Arcasonde	-	-	-	ASC	-	-	-	65	-	-
1979-4752	2444036.17	1979 Jun 11 16:00:59	Rocketsonde	-	-	Arcasonde	-	-	-	PH	-	-	-	69	-	-
1979-4753	2444036.26	1979 Jun 11 18:10:00	Rocketsonde	-	-	Arcasonde	-	-	-	SHER	-	-	-	65	-	-
1979-4754	2444036.29	1979 Jun 11 18:59:59	Rocketsonde	-	-	Arcasonde	-	-	-	PRIM	-	-	-	63	-	-
1979-4755	2444036.56	1979 Jun 12 01:20:59	Rocketsonde	-	-	Arcasonde	-	-	-	KMR	-	-	-	67	-	-
1979-4757	2444038.07	1979 Jun 13 13:33:59	Rocketsonde	-	-	Arcasonde	-	-	-	ASC	LO43	-	-	49	-	-
1979-4759	2444038.07	1979 Jun 13 13:44:59	Rocketsonde	-	-	Arcasonde	-	-	-	CC	-	-	-	65	-	-
1979-4760	2444038.11	1979 Jun 13 14:29:00	Rocketsonde	-	-	Arcasonde	-	-	-	MI	-	-	-	56	-	-
1979-4761	2444038.15	1979 Jun 13 15:31:00	Rocketsonde	-	-	Arcasonde	-	-	-	CC	LO43	-	-	55	-	-
1979-4762	2444038.17	1979 Jun 13 16:09:59	Rocketsonde	-	-	Arcasonde	-	-	-	THU	-	-	-	70	-	-
1979-4763	2444038.21	1979 Jun 13 17:00:00	Rocketsonde	-	-	Arcasonde	-	-	-	PRIM	-	-	-	63	-	-
1979-4764	2444038.25	1979 Jun 13 18:00:00	Rocketsonde	-	-	Arcasonde	-	-	-	SHER	-	-	-	98	-	-
1979-4765	2444038.28	1979 Jun 13 18:14:59	Rocketsonde	-	-	Arcasonde	-	-	-	WS	-	-	-	71	-	-
1979-4766	2444038.62	1979 Jun 14 03:00:00	Rocketsonde	-	-	Arcasonde	-	-	-	PH	-	-	-	74	-	-
1979-4767	2444039.62	1979 Jun 15 02:49:59	Rocketsonde	-	-	Arcasonde	-	-	-	KMR	-	-	-	77	-	-
1979-4769	2444040.06	1979 Jun 15 13:30:00	Rocketsonde	-	-	Arcasonde	-	-	-	KMR	-	-	-	77	-	-
1979-4770	2444040.06	1979 Jun 15 13:30:00	Rocketsonde	-	-	Arcasonde	-	-	-	ASC	-	-	-	67	-	-
1979-4771	2444040.07	1979 Jun 15 13:44:59	Rocketsonde	-	-	Arcasonde	-	-	-	CC	LO43	-	-	54	-	-
1979-4772	2444040.16	1979 Jun 15 15:46:59	Rocketsonde	-	-	Arcasonde	-	-	-	THU	-	-	-	70	-	-
1979-4773	2444040.21	1979 Jun 15 17:00:00	Rocketsonde	-	-	Arcasonde	-	-	-	SHER	-	-	-	63	-	-
1979-4774	2444040.24	1979 Jun 15 17:51:00	Rocketsonde	-	-	Arcasonde	-	-	-	PH	-	-	-	74	-	-
1979-4775	2444040.33	1979 Jun 15 20:00:00	Rocketsonde	-	-	Arcasonde	-	-	-	SHER	-	-	-	64	-	-
1979-4776	2444040.38	1979 Jun 15 21:00:00	Rocketsonde	-	-	Arcasonde	-	-	-	PF	-	-	-	54	-	-
1979-4777	2444043.06	1979 Jun 16 14:38:59	Rocketsonde	-	-	Arcasonde	-	-	-	CC	LO43	-	-	61	-	-
1979-4778	2444043.11	1979 Jun 16 14:38:59	Rocketsonde	-	-	Arcasonde	-	-	-	THU	-	-	-	70	-	-
1979-4779	2444043.12	1979 Jun 16 14:48:00	Rocketsonde	-	-	Arcasonde	-	-	-	PH	-	-	-	75	-	-
1979-4781	2444043.18	1979 Jun 16 16:14:59	Rocketsonde	-	-	Arcasonde	-	-	-	AIT	-	-	-	74	-	-
1979-4782	2444043.31	1979 Jun 16 19:19:59	Rocketsonde	-	-	Arcasonde	-	-	-	SHER	-	-	-	62	-	-
1979-4783	2444043.39	1979 Jun 16 21:14:59	Rocketsonde	-	-	Arcasonde	-	-	-	WS	-	-	-	66	-	-
1979-4784	2444043.43	1979 Jun 16 22:24:59	Rocketsonde	-	-	Arcasonde	-	-	-	PH	-	-	-	64	-	-
1979-4785	2444044.56	1979 Jun 20 01:09:59	Rocketsonde	-	-	Arcasonde	-	-	-	SHER	-	-	-	53	-	-
1979-4786	2444044.58	1979 Jun 20 14:00:00	Rocketsonde	-	-	Arcasonde	-	-	-	ASC	-	-	-	53	-	-
1979-4788	2444046.10	1979 Jun 20 14:26:59	Rocketsonde	-	-	Arcasonde	-	-	-	MI	-	-	-	55	-	-
1979-4789	2444046.12	1979 Jun 20 14:44:00	Rocketsonde	-	-	Arcasonde	-	-	-	THU	-	-	-	56	-	-
1979-4790	2444046.12	1979 Jun 20 14:55:00	Rocketsonde	-	-	Arcasonde	-	-	-	ASC	-	-	-	58	-	-
1979-4791	2444046.21	1979 Jun 20 17:04:59	Rocketsonde	-	-	Arcasonde	-	-	-	THU	-	-	-	58	-	-
1979-4792	2444046.24	1979 Jun 20 19:21:00	Rocketsonde	-	-	Arcasonde	-	-	-	SHER	-	-	-	63	-	-
1979-4793	2444046.26	1979 Jun 20 19:27:59	Rocketsonde	-	-	Arcasonde	-	-	-	PH	-	-	-	69	-	-
1979-4794	2444046.36	1979 Jun 20 23:02:59	Rocketsonde	-	-	Arcasonde	-	-	-	PH	-	-	-	76	-	-
1979-4795	2444046.49	1979 Jun 22 15:44:59	Rocketsonde	-	-	Arcasonde	-	-	-	KMR	-	-	-	74	-	-
1979-4796	2444047.03	1979 Jun 22 18:02:59	Rocketsonde	-	-	Arcasonde	-	-	-	THU	-	-	-	71	-	-
1979-4797	2444047.28	1979 Jun 22 18:23:59	Rocketsonde	-	-	Arcasonde	-	-	-	SHER	-	-	-	60	-	-
1979-4798	2444047.27	1979 Jun 22 19:23:59	Rocketsonde	-	-	Arcasonde	-	-	-	PH	-	-	-	71	-	-
1979-4799	2444047.31	1979 Jun 22 19:30:00	Rocketsonde	-	-	Arcasonde	-	-	-	ASC	-	-	-	53	-	-
1979-4800	2444047.37	1979 Jun 22 20:56:00	Rocketsonde	-	-	Arcasonde	-	-	-	PRIM	-	-	-	53	-	-
1979-4801	2444047.47	1979 Jun 22 23:26:00	Rocketsonde	-	-	Arcasonde	-	-	-	KMR	-	-	-	66	-	-
1979-4802	2444047.55	1979 Jun 22 01:14:59	Rocketsonde	-	-	Arcasonde	-	-	-	PH	-	-	-	67	-	-
1979-4803	2444050.07	1979 Jun 25 13:44:59	Rocketsonde	-	-	Arcasonde	-	-	-	KMR	-	-	-	75	-	-
1979-4804	2444050.07	1979 Jun 25 13:30:00	Rocketsonde	-	-	Arcasonde	-	-	-	ASC	-	-	-	62	-	-
1979-4805	2444050.12	1979 Jun 25 14:59:00	Rocketsonde	-	-	Arcasonde	-	-	-	CC	LO43	-	-	61	-	-
1979-4806	2444050.13	1979 Jun 25 15:00:00	Rocketsonde	-	-	Arcasonde	-	-	-	THU	-	-	-	72	-	-
1979-4807	2444050.21	1979 Jun 25 17:00:00	Rocketsonde	-	-	Arcasonde	-	-	-	PRIM	-	-	-	61	-	-
1979-4809	2444050.21	1979 Jun 25 17:08:00	Rocketsonde	-	-	Arcasonde	-	-	-	SHER	-	-	-	49	-	-
1979-4808	2444050.24	1979 Jun 25 17:49:59	Rocketsonde	-	-	Arcasonde	-	-	-	PH	-	-	-	75	-	-
1979-4809	2444050.25	1979 Jun 25 18:00:00	Rocketsonde	-	-	Arcasonde	-	-	-	WS	-	-	-	67	-	-
1979-4810	2444050.25	1979 Jun 25 19:00:00	Rocketsonde	-	-	Arcasonde	-	-	-	AIT	-	-	-	47	-	-
1979-4811	2444050.37	1979 Jun 25 20:55:00	Rocketsonde	-	-	Arcasonde	-	-	-	KMR	-	-	-	60	-	-
1979-4812	2444050.45	1979 Jun 26 01:14:59	Rocketsonde	-	-	Arcasonde	-	-	-	SHER	-	-	-	63	-	-
1979-4813	2444050.55	1979 Jun 26 11:44:59	Rocketsonde	-	-	Arcasonde	-	-	-	KMR	-	-	-	76	-	-
1979-4814	2444050.08	1979 Jun 27 13:14:59	Rocketsonde	-	-	Arcasonde	-	-	-	ASC	-	-	-	65	-	-
1979-4815	2444050.08	1979 Jun 27 14:00:00	Rocketsonde	-	-	Arcasonde	-	-	-	AIT	-	-	-	72	-	-
1979-4816	2444050.09	1979 Jun 27 14:29:00	Rocketsonde	-	-	Arcasonde	-	-	-	THU	-	-	-	50	-	-
1979-4818	2444050.11	1979 Jun 27 14:15:59	Rocketsonde	-	-	Arcasonde	-	-	-	HT	-	-	-	70	-	-
1979-4819	2444050.16	1979 Jun 27 14:45:00	Rocketsonde	-	-	Arcasonde	-	-	-	CC	LO43	-	-	84	-	-
1979-4820	2444050.25	1979 Jun 27 16:17:00	Rocketsonde	-	-	Arcasonde	-	-	-	VI	-	-	-	55	-	-
1979-4821	2444050.25	1979 Jun 27 18:00:00	Rocketsonde	-	-	Arcasonde	-	-	-	ASC	-	-	-	63	-	-
1979-4822	2444050.25	1979 Jun 27 18:56:59	Rocketsonde	-	-	Arcasonde	-	-	-	SHER	-	-	-	63	-	-
1979-4823	2444050.31	1979 Jun 27 19:21:59	Rocketsonde	-	-	Arcasonde	-	-	-	PH	-	-	-	87	-	-
1979-4824	2444050.33	1979 Jun 27 19:49:59	Rocketsonde	-	-	Arcasonde	-	-	-	PM	-	-	-	86	-	-
1979-4825	2444050.34	1979 Jun 27 20:04:59	Rocketsonde	-	-	Arcasonde	-	-	-	WS	-	-	-	98	-	-
1979-4826	2444050.38	1979 Jun 27 21:00:00	Rocketsonde	-	-	Arcasonde	-	-	-	NS	-	-	-	55	-	-
1979-4827	2444050.07	1979 Jun 29 13:44:59	Rocketsonde	-	-	Arcasonde	-	-	-	PF	-	-	-	75	-	-
1979-4828	2444050.07	1979 Jun 29 13:44:59	Rocketsonde	-	-	Arcasonde	-	-	-	KMR	-	-	-	89	-	-
1979-4829	2444050.11	1979 Jun 29 14:40:00	Rocketsonde	-	-	Arcasonde	-	-	-	ASC	LO43	-	-	60	-	-
1979-4830	2444050.15	1979 Jun 29 15:30:00	Rocketsonde	-	-	Arcasonde	-	-	-	THU	-	-	-	68	-	-
1979-4831	2444050.19	1979 Jun 29 16:30:00	Rocketsonde	-	-	Arcasonde	-	-	-	PRIM	-	-	-	57	-	-
1979-4832	2444050.23	1979 Jun 29 17:30:00	Rocketsonde	-	-	Arcasonde	-	-	-	AIT	-	-	-	73	-	-
1979-4833	2444050.23	1979 Jun 29 17:30:00	Rocketsonde	-	-	Arcasonde	-	-	-	NS	-	-	-	71	-	-

Launch

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Mission	FlightCode	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee_Km	Range_Km	Dest
1979-8681	2444054.24	1979 Jun 29 17:40:00	Rocketsonde	-	-	Arcasonde	-	-	-	SHER	-	-	-	64	-	-
1979-831	2444054.33	1979 Jun 29 20:00:00	Rocketsonde	-	-	Arcasonde	-	-	-	SHER	-	-	-	46	-	-
1979-8682	2444054.37	1979 Jun 29 20:04:00	Rocketsonde	-	-	Arcasonde	-	-	-	KAU	-	-	-	57	-	-
1979-8683	2444054.44	1979 Jun 29 22:30:59	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	PF	-	-	-	65	-	-
1979-8684	2444054.55	1979 Jun 30 01:14:59	Rocketsonde	-	-	Arcasonde	-	-	-	KMR	-	-	-	69	-	-
1979-8685	2444057.06	1979 Jul 2 13:15:59	Rocketsonde	-	-	Arcasonde	-	-	-	ASC	-	-	-	62	-	-
1979-8686	2444057.14	1979 Jul 2 15:20:00	Rocketsonde	-	-	Arcasonde	-	-	-	THU	-	-	-	69	-	-
1979-8687	2444057.21	1979 Jul 2 17:00:00	Rocketsonde	-	-	Arcasonde	-	-	-	SHER	-	-	-	63	-	-
1979-8688	2444057.30	1979 Jul 2 19:14:59	Rocketsonde	-	-	Arcasonde	-	-	-	WS	-	-	-	65	-	-
1979-8689	2444057.37	1979 Jul 2 20:55:00	Rocketsonde	-	-	Arcasonde	-	-	-	KAU	-	-	-	52	-	-
1979-8690	2444057.47	1979 Jul 2 23:10:00	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	PF	-	-	-	57	-	-
1979-8691	2444057.53	1979 Jul 3 00:37:59	Rocketsonde	-	-	Arcasonde	-	-	-	KMR	-	-	-	57	-	-
1979-8692	2444058.11	1979 Jul 3 14:45:00	Rocketsonde	-	-	Arcasonde	-	-	-	MI	-	-	-	79	-	-
1979-832	2444058.33	1979 Jul 3 20:00:00	Rocketsonde	-	-	Arcasonde	-	-	-	SHER	-	-	-	45	-	-
1979-8694	2444058.62	1979 Jul 4 02:49:59	Rocketsonde	-	-	Arcasonde	-	-	-	KMR	-	-	-	76	-	-
1979-8695	2444059.26	1979 Jul 4 15:14:59	Rocketsonde	-	-	Arcasonde	-	-	-	PRIM	-	-	-	62	-	-
1979-8696	2444059.62	1979 Jul 5 02:59:00	Rocketsonde	-	-	Arcasonde	-	-	-	CC	LO43	-	-	69	-	-
1979-8697	2444060.62	1979 Jul 6 02:58:00	Rocketsonde	-	-	Arcasonde	-	-	-	ASC	-	-	-	75	-	-
1979-8698	2444061.08	1979 Jul 6 14:21:00	Rocketsonde	-	-	Arcasonde	-	-	-	THU	-	-	-	90	-	-
1979-8699	2444061.10	1979 Jul 6 17:00:00	Rocketsonde	-	-	Arcasonde	-	-	-	AIT	-	-	-	74	-	-
1979-8700	2444061.21	1979 Jul 6 17:10:00	Rocketsonde	-	-	Arcasonde	-	-	-	CC	LO43	-	-	87	-	-
1979-8680	2444061.22	1979 Jul 6 17:10:00	Rocketsonde	-	-	Arcasonde	-	-	-	SHER	-	-	-	63	-	-
1979-8681	2444061.26	1979 Jul 6 18:14:59	Rocketsonde	-	-	Arcasonde	-	-	-	AIT	-	-	-	70	-	-
1979-8682	2444061.27	1979 Jul 6 18:25:59	Rocketsonde	-	-	Arcasonde	-	-	-	PH	-	-	-	74	-	-
1979-833	2444061.29	1979 Jul 6 18:57:59	Rocketsonde	-	-	Arcasonde	-	-	-	PRIM	-	-	-	46	-	-
1979-8683	2444061.29	1979 Jul 6 18:59:59	Rocketsonde	-	-	Arcasonde	-	-	-	KMR	-	-	-	66	-	-
1979-8684	2444061.37	1979 Jul 6 20:54:00	Rocketsonde	-	-	Arcasonde	-	-	-	KAU	-	-	-	50	-	-
1979-8685	2444061.57	1979 Jul 7 01:35:59	Rocketsonde	-	-	Arcasonde	-	-	-	KMR	-	-	-	61	-	-
1979-8686	2444064.06	1979 Jul 9 13:00:00	Rocketsonde	-	-	Arcasonde	-	-	-	ASC	LO43	-	-	56	-	-
1979-8687	2444064.07	1979 Jul 9 13:44:59	Rocketsonde	-	-	Arcasonde	-	-	-	CC	-	-	-	90	-	-
1979-8688	2444064.09	1979 Jul 9 14:04:59	Rocketsonde	-	-	Arcasonde	-	-	-	THU	-	-	-	74	-	-
1979-8689	2444064.09	1979 Jul 9 14:15:00	Rocketsonde	-	-	Arcasonde	-	-	-	AIT	-	-	-	74	-	-
1979-8690	2444064.25	1979 Jul 9 17:04:59	Rocketsonde	-	-	Arcasonde	-	-	-	SHER	-	-	-	63	-	-
1979-8691	2444064.27	1979 Jul 9 18:04:59	Rocketsonde	-	-	Arcasonde	-	-	-	PH	-	-	-	74	-	-
1979-8692	2444064.49	1979 Jul 10 01:14:59	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	PRIM	-	-	-	62	-	-
1979-8683	2444064.55	1979 Jul 10 14:00:00	Rocketsonde	-	-	Arcasonde	-	-	-	CC	LO43	-	-	63	-	-
1979-8684	2444065.08	1979 Jul 11 13:30:00	Rocketsonde	-	-	Arcasonde	-	-	-	ASC	-	-	-	70	-	-
1979-8685	2444066.06	1979 Jul 11 13:44:59	Rocketsonde	-	-	Arcasonde	-	-	-	KMR	-	-	-	65	-	-
1979-8686	2444066.07	1979 Jul 11 14:03:00	Rocketsonde	-	-	Arcasonde	-	-	-	CC	-	-	-	71	-	-
1979-8687	2444066.09	1979 Jul 11 14:05:59	Rocketsonde	-	-	Arcasonde	-	-	-	THU	-	-	-	61	-	-
1979-8688	2444066.10	1979 Jul 11 14:06:00	Rocketsonde	-	-	Arcasonde	-	-	-	AIT	-	-	-	57	-	-
1979-8689	2444066.16	1979 Jul 11 14:08:59	Rocketsonde	-	-	Arcasonde	-	-	-	PRIM	-	-	-	61	-	-
1979-8690	2444066.21	1979 Jul 11 17:00:00	Rocketsonde	-	-	Arcasonde	-	-	-	SHER	-	-	-	58	-	-
1979-8691	2444066.22	1979 Jul 11 17:14:00	Rocketsonde	-	-	Arcasonde	-	-	-	US	-	-	-	73	-	-
1979-8366	2444066.27	1979 Jul 11 18:25:00	Rocketsonde	-	-	Arcasonde	-	-	-	PH	-	-	-	59	-	-
1979-8692	2444066.27	1979 Jul 11 18:31:59	Rocketsonde	-	-	Arcasonde	-	-	-	PF	-	-	-	63	-	-
1979-8693	2444066.67	1979 Jul 12 03:15:59	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	KMR	-	-	-	74	-	-
1979-8694	2444066.67	1979 Jul 12 03:30:00	Rocketsonde	-	-	Arcasonde	-	-	-	ASC	-	-	-	66	-	-
1979-834	2444067.32	1979 Jul 12 09:00:00	Rocketsonde	-	-	Arcasonde	-	-	-	THU	-	-	-	45	-	-
1979-8390	2444067.37	1979 Jul 12 20:56:00	Rocketsonde	-	-	Arcasonde	-	-	-	SHER	-	-	-	60	-	-
1979-8695	2444067.39	1979 Jul 12 21:18:00	Rocketsonde	-	-	Arcasonde	-	-	-	KAU	-	-	-	59	-	-
1979-8696	2444067.62	1979 Jul 13 02:55:00	Rocketsonde	-	-	Arcasonde	-	-	-	KMR	-	-	-	66	-	-
1979-8697	2444068.07	1979 Jul 13 13:44:59	Rocketsonde	-	-	Arcasonde	-	-	-	ASC	LO43	-	-	85	-	-
1979-8698	2444068.07	1979 Jul 13 13:44:59	Rocketsonde	-	-	Arcasonde	-	-	-	CC	-	-	-	66	-	-
1979-8699	2444068.14	1979 Jul 13 15:18:00	Rocketsonde	-	-	Arcasonde	-	-	-	THU	-	-	-	63	-	-
1979-8692	2444068.21	1979 Jul 13 17:00:00	Rocketsonde	-	-	Arcasonde	-	-	-	SHER	-	-	-	72	-	-
1979-8693	2444068.25	1979 Jul 13 18:00:00	Rocketsonde	-	-	Arcasonde	-	-	-	AIT	-	-	-	60	-	-
1979-8694	2444068.26	1979 Jul 13 19:44:59	Rocketsonde	-	-	Arcasonde	-	-	-	US	-	-	-	65	-	-
1979-8695	2444068.37	1979 Jul 13 20:56:00	Rocketsonde	-	-	Arcasonde	-	-	-	ASC	-	-	-	65	-	-
1979-8696	2444068.38	1979 Jul 13 21:00:00	Rocketsonde	-	-	Arcasonde	-	-	-	KAU	-	-	-	65	-	-
1979-8697	2444068.39	1979 Jul 14 18:59:59	Rocketsonde	-	-	Arcasonde	-	-	-	PF	-	-	-	76	-	-
1979-8698	2444068.39	1979 Jul 14 21:14:59	Rocketsonde	-	-	Arcasonde	-	-	-	ASC	-	-	-	84	-	-
1979-8699	2444071.06	1979 Jul 16 13:30:00	Rocketsonde	-	-	Arcasonde	-	-	-	ASC	-	-	-	70	-	-
1979-8690	2444071.07	1979 Jul 16 13:44:59	Rocketsonde	-	-	Arcasonde	-	-	-	AIT	-	-	-	67	-	-
1979-8691	2444071.10	1979 Jul 16 14:30:00	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	PF	-	-	-	59	-	-
1979-8692	2444071.14	1979 Jul 16 15:24:59	Rocketsonde	-	-	Arcasonde	-	-	-	THU	-	-	-	70	-	-
1979-8693	2444071.19	1979 Jul 16 16:26:59	Rocketsonde	-	-	Arcasonde	-	-	-	PM	LO43	-	-	73	-	-
1979-8694	2444071.21	1979 Jul 16 17:00:00	Rocketsonde	-	-	Arcasonde	-	-	-	CC	-	-	-	65	-	-
1979-8695	2444071.27	1979 Jul 16 18:30:00	Rocketsonde	-	-	Arcasonde	-	-	-	ASC	-	-	-	60	-	-
1979-8696	2444071.31	1979 Jul 16 19:30:00	Rocketsonde	-	-	Arcasonde	-	-	-	US	-	-	-	65	-	-
1979-8697	2444071.31	1979 Jul 17 01:14:59	Rocketsonde	-	-	Arcasonde	-	-	-	SHER	-	-	-	66	-	-
1979-8698	2444071.55	1979 Jul 17 10:52:59	Rocketsonde	-	-	Arcasonde	-	-	-	KMR	-	-	-	62	-	-
1979-8699	2444072.27	1979 Jul 17 18:30:00	Rocketsonde	-	-	Arcasonde	-	-	-	PRIM	-	-	-	62	-	-
1979-9000	2444072.53	1979 Jul 18 00:41:00	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	SHER	-	-	-	62	-	-
1979-9001	2444073.06	1979 Jul 18 13:30:00	Rocketsonde	-	-	Arcasonde	-	-	-	PRIM	-	-	-	51	-	-
1979-9002	2444073.09	1979 Jul 18 14:10:00	Rocketsonde	-	-	Arcasonde	-	-	-	SHER	-	-	-	65	-	-
1979-9003	2444073.10	1979 Jul 18 14:29:00	Rocketsonde	-	-	Arcasonde	-	-	-	CC	-	-	-	66	-	-
1979-9004	2444073.10	1979 Jul 18 14:30:00	Rocketsonde	-	-	Arcasonde	-	-	-	ASC	-	-	-	65	-	-
1979-9005	2444073.10	1979 Jul 18 14:30:00	Rocketsonde	-	-	Arcasonde	-	-	-	VT	-	-	-	53	-	-
1979-9400	2444073.10	1979 Jul 18 14:30:00	Rocketsonde	-	-	Arcasonde	-	-	-	CC	LO43	-	-	84	-	-
1979-9007	2444073.11	1979 Jul 18 14:37:00	Rocketsonde	-	-	Arcasonde	-	-	-	CC	-	-	-	69	-	-
1979-9008	2444073.15	1979 Jul 18 15:30:00	Rocketsonde	-	-	Arcasonde	-	-	-	THU	-	-	-	71	-	-
1979-9401	2444073.25	1979 Jul 18 18:00:00	Rocketsonde	-	-	Arcasonde	-	-	-	AIT	-	-	-	69	-	-
1979-9009	2444073.26	1979 Jul 18 18:14:59	Rocketsonde	-	-	Arcasonde	-	-	-	US	-	-	-	74	-	-
1979-9010	2444073.27	1979 Jul 18 18:34:59	Rocketsonde	-	-	Arcasonde	-	-	-	PRIM	-	-	-	58	-	-
1979-9011	2444073.29	1979 Jul 18 18:56:00	Rocketsonde	-	-	Arcasonde	-	-	-	PH	-	-	-	74	-	-

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Mission	FlightCode	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Approvee	Range	Dest
1979-4912	2444073_51	1979 Jul 19 0951:00	Rocketsonde	-	-	Straute, Datasonde	-	-	-	PF	-	-	-	61	-	-
1979-4913	2444075_06	1979 Jul 20 1330:00	Rocketsonde	-	-	Arcasonde	-	-	-	AIT	-	-	-	73	-	-
1979-4914	2444075_06	1979 Jul 20 1330:00	Rocketsonde	-	-	Arcasonde	-	-	-	AIT	LO43	-	-	66	-	-
1979-4915	2444075_10	1979 Jul 20 1429:00	Rocketsonde	-	-	Arcasonde	-	-	-	THU	LO43	-	-	66	-	-
1979-4916	2444075_55	1979 Jul 21 0118:00	Rocketsonde	-	-	Arcasonde	-	-	-	KMR	-	-	-	75	-	-
1979-4917	2444077_29	1979 Jul 22 1859:59	Rocketsonde	-	-	Arcasonde	-	-	-	AI/DMP-9	-	-	-	94	-	-
1979-4918	2444077_38	1979 Jul 22 2110:00	Rocketsonde	-	-	Arcasonde	-	-	-	ASC	-	-	-	61	-	-
1979-4919	2444078_07	1979 Jul 23 1344:59	Rocketsonde	-	-	Arcasonde	-	-	-	THU	LO43	-	-	60	-	-
1979-4920	2444078_09	1979 Jul 23 1407:00	Rocketsonde	-	-	Arcasonde	-	-	-	THU	-	-	-	89	-	-
1979-4921	2444078_25	1979 Jul 23 1800:00	Rocketsonde	-	-	Arcasonde	-	-	-	WS	-	-	-	67	-	-
1979-4922	2444078_27	1979 Jul 23 1801:59	Rocketsonde	-	-	Arcasonde	-	-	-	PH	-	-	-	73	-	-
1979-4923	2444078_37	1979 Jul 23 1894:59	Rocketsonde	-	-	Arcasonde	-	-	-	AIT	-	-	-	74	-	-
1979-4924	2444078_52	1979 Jul 23 2058:00	Rocketsonde	-	-	Arcasonde	-	-	-	KAU	-	-	-	62	-	-
1979-4925	2444080_06	1979 Jul 25 1330:00	Rocketsonde	-	-	Arcasonde	-	-	-	KMR	-	-	-	68	-	-
1979-4926	2444080_06	1979 Jul 25 1330:00	Rocketsonde	-	-	Arcasonde	-	-	-	CC	LO43	-	-	59	-	-
1979-4927	2444080_10	1979 Jul 25 1426:00	Rocketsonde	-	-	Arcasonde	-	-	-	MI	-	-	-	56	-	-
1979-4928	2444080_11	1979 Jul 25 1430:00	Rocketsonde	-	-	Arcasonde	-	-	-	CC	LO43	-	-	78	-	-
1979-4929	2444080_11	1979 Jul 25 1443:00	Rocketsonde	-	-	Arcasonde	-	-	-	THU	LO43	-	-	69	-	-
1979-4930	2444080_11	1979 Jul 25 1446:00	Rocketsonde	-	-	Arcasonde	-	-	-	AIT	-	-	-	71	-	-
1979-4931	2444080_25	1979 Jul 25 1800:00	Rocketsonde	-	-	Arcasonde	-	-	-	WS	-	-	-	96	-	-
1979-4932	2444080_26	1979 Jul 25 1814:59	Rocketsonde	-	-	Arcasonde	-	-	-	WS	-	-	-	57	-	-
1979-4933	2444080_33	1979 Jul 25 2000:00	Rocketsonde	-	-	Arcasonde	-	-	-	SHERA	-	-	-	53	-	-
1979-4934	2444080_33	1979 Jul 25 2000:00	Rocketsonde	-	-	Arcasonde	-	-	-	SHERA	-	-	-	59	-	-
1979-4935	2444080_38	1979 Jul 25 2104:59	Rocketsonde	-	-	Arcasonde	-	-	-	PF	-	-	-	62	-	-
1979-4936	2444080_39	1979 Jul 25 2121:00	Rocketsonde	-	-	Arcasonde	-	-	-	KAU	-	-	-	59	-	-
1979-4937	2444080_46	1979 Jul 25 2302:00	Rocketsonde	-	-	Arcasonde	-	-	-	KMR	-	-	-	61	-	-
1979-4938	2444081_35	1979 Jul 26 2020:00	Rocketsonde	-	-	Arcasonde	-	-	-	PF	-	-	-	62	-	-
1979-4939	2444082_06	1979 Jul 27 1330:00	Rocketsonde	-	-	Arcasonde	-	-	-	ASC	LO43	-	-	66	-	-
1979-4940	2444082_07	1979 Jul 27 1344:59	Rocketsonde	-	-	Arcasonde	-	-	-	CC	-	-	-	61	-	-
1979-4941	2444082_08	1979 Jul 27 1400:00	Rocketsonde	-	-	Arcasonde	-	-	-	AIT	-	-	-	66	-	-
1979-4942	2444082_11	1979 Jul 27 1437:59	Rocketsonde	-	-	Arcasonde	-	-	-	THU	-	-	-	68	-	-
1979-4943	2444082_21	1979 Jul 27 1700:00	Rocketsonde	-	-	Arcasonde	-	-	-	SHERA	-	-	-	61	-	-
1979-4944	2444082_27	1979 Jul 27 2058:00	Rocketsonde	-	-	Arcasonde	-	-	-	KAU	-	-	-	58	-	-
1979-4945	2444082_55	1979 Jul 28 0114:59	Rocketsonde	-	-	Arcasonde	-	-	-	KMR	-	-	-	75	-	-
1979-4946	2444085_07	1979 Jul 30 1344:59	Rocketsonde	-	-	Arcasonde	-	-	-	AIT	-	-	-	61	-	-
1979-4947	2444085_13	1979 Jul 30 1506:00	Rocketsonde	-	-	Arcasonde	-	-	-	THU	-	-	-	71	-	-
1979-4948	2444085_15	1979 Jul 30 1541:00	Rocketsonde	-	-	Arcasonde	-	-	-	PH	-	-	-	74	-	-
1979-4949	2444085_16	1979 Jul 30 1551:00	Rocketsonde	-	-	Arcasonde	-	-	-	SHERA	-	-	-	60	-	-
1979-4950	2444085_21	1979 Jul 30 1700:00	Rocketsonde	-	-	Arcasonde	-	-	-	WS	-	-	-	66	-	-
1979-4951	2444085_25	1979 Jul 30 1800:00	Rocketsonde	-	-	Arcasonde	-	-	-	KMR	-	-	-	60	-	-
1979-4952	2444085_44	1979 Jul 31 0230:00	Rocketsonde	-	-	Arcasonde	-	-	-	PF	-	-	-	67	-	-
1979-4953	2444085_71	1979 Jul 31 0500:00	Rocketsonde	-	-	Arcasonde	-	-	-	KMR	LO43	-	-	76	-	-
1979-4954	2444087_09	1979 Aug 1 1330:00	Rocketsonde	-	-	Arcasonde	-	-	-	CC	-	-	-	63	-	-
1979-4955	2444087_06	1979 Aug 1 1344:59	Rocketsonde	-	-	Arcasonde	-	-	-	ASC	-	-	-	63	-	-
1979-4956	2444087_08	1979 Aug 1 1427:59	Rocketsonde	-	-	Arcasonde	-	-	-	AIT	-	-	-	72	-	-
1979-4957	2444087_10	1979 Aug 1 1430:00	Rocketsonde	-	-	Arcasonde	-	-	-	CC	LO43	-	-	56	-	-
1979-4958	2444087_11	1979 Aug 1 1432:00	Rocketsonde	-	-	Arcasonde	-	-	-	THU	-	-	-	66	-	-
1979-4959	2444087_11	1979 Aug 1 1443:00	Rocketsonde	-	-	Arcasonde	-	-	-	MI	-	-	-	64	-	-
1979-4960	2444087_21	1979 Aug 1 1700:00	Rocketsonde	-	-	Arcasonde	-	-	-	CC	LO43	-	-	58	-	-
1979-4961	2444087_25	1979 Aug 1 1800:00	Rocketsonde	-	-	Arcasonde	-	-	-	WS	-	-	-	65	-	-
1979-4962	2444087_26	1979 Aug 1 1814:59	Rocketsonde	-	-	Arcasonde	-	-	-	WS	-	-	-	65	-	-
1979-4963	2444087_37	1979 Aug 1 2057:00	Rocketsonde	-	-	Arcasonde	-	-	-	KAU	-	-	-	87	-	-
1979-4964	2444087_39	1979 Aug 1 2124:59	Rocketsonde	-	-	Arcasonde	-	-	-	KAU	-	-	-	62	-	-
1979-4965	2444087_56	1979 Aug 2 0130:00	Rocketsonde	-	-	Arcasonde	-	-	-	KMR	-	-	-	60	-	-
1979-4966	2444088_06	1979 Aug 2 1330:00	Rocketsonde	-	-	Arcasonde	-	-	-	CC	LO43	-	-	60	-	-
1979-4967	2444088_10	1979 Aug 2 1430:00	Rocketsonde	-	-	Arcasonde	-	-	-	CC	LO43	-	-	61	-	-
1979-4968	2444088_10	1979 Aug 2 1430:00	Rocketsonde	-	-	Arcasonde	-	-	-	CC	-	-	-	61	-	-
1979-4969	2444088_59	1979 Aug 3 0440:00	Rocketsonde	-	-	Arcasonde	-	-	-	KMR	-	-	-	72	-	-
1979-4970	2444088_81	1979 Aug 3 0719:59	Rocketsonde	-	-	Arcasonde	-	-	-	KMR	-	-	-	79	-	-
1979-4971	2444088_87	1979 Aug 3 0849:59	Rocketsonde	-	-	Arcasonde	-	-	-	KMR	-	-	-	65	-	-
1979-4972	2444088_96	1979 Aug 3 1330:00	Rocketsonde	-	-	Arcasonde	-	-	-	ASC	-	-	-	65	-	-
1979-4973	2444088_96	1979 Aug 3 1330:00	Rocketsonde	-	-	Arcasonde	-	-	-	CC	LO43	-	-	59	-	-
1979-4974	2444088_10	1979 Aug 3 1520:00	Rocketsonde	-	-	Arcasonde	-	-	-	THU	-	-	-	70	-	-
1979-4975	2444088_14	1979 Aug 3 1520:00	Rocketsonde	-	-	Arcasonde	-	-	-	THU	-	-	-	70	-	-
1979-4976	2444088_38	1979 Aug 4 0114:59	Rocketsonde	-	-	Arcasonde	-	-	-	KAU	-	-	-	56	-	-
1979-4977	2444088_55	1979 Aug 4 0114:59	Rocketsonde	-	-	Arcasonde	-	-	-	KAU	-	-	-	76	-	-
1979-4978	2444089_07	1979 Aug 6 1344:59	Rocketsonde	-	-	Arcasonde	-	-	-	AIT	-	-	-	72	-	-
1979-4979	2444089_07	1979 Aug 6 1344:59	Rocketsonde	-	-	Arcasonde	-	-	-	CC	LO43	-	-	57	-	-
1979-4980	2444089_24	1979 Aug 6 1424:00	Rocketsonde	-	-	Arcasonde	-	-	-	THU	-	-	-	52	-	-
1979-4981	2444089_34	1979 Aug 6 2010:00	Rocketsonde	-	-	Arcasonde	-	-	-	SHERA	-	-	-	59	-	-
1979-4982	2444089_41	1979 Aug 6 2156:00	Rocketsonde	-	-	Arcasonde	-	-	-	KMR	-	-	-	75	-	-
1979-4983	2444089_41	1979 Aug 7 0241:00	Rocketsonde	-	-	Arcasonde	-	-	-	KMR	-	-	-	67	-	-
1979-4984	2444089_18	1979 Aug 7 1617:00	Rocketsonde	-	-	Arcasonde	-	-	-	PRIM	-	-	-	72	-	-
1979-4985	2444089_18	1979 Aug 8 1330:00	Rocketsonde	-	-	Arcasonde	-	-	-	KMR	-	-	-	68	-	-
1979-4986	2444089_06	1979 Aug 8 1330:00	Rocketsonde	-	-	Arcasonde	-	-	-	AIT	-	-	-	67	-	-
1979-4987	2444089_06	1979 Aug 8 1330:00	Rocketsonde	-	-	Arcasonde	-	-	-	ASC	LO43	-	-	65	-	-
1979-4988	2444089_17	1979 Aug 8 1430:00	Rocketsonde	-	-	Arcasonde	-	-	-	CC	-	-	-	62	-	-
1979-4989	2444089_17	1979 Aug 8 1559:59	Rocketsonde	-	-	Arcasonde	-	-	-	MI	-	-	-	67	-	-
1979-4990	2444089_45	1979 Aug 9 0114:59	Rocketsonde	-	-	Arcasonde	-	-	-	PRIM	-	-	-	77	-	-
1979-4991	2444089_54	1979 Aug 9 0114:59	Rocketsonde	-	-	Arcasonde	-	-	-	KMR	-	-	-	51	-	-
1979-4992	2444089_34	1979 Aug 9 2010:00	Rocketsonde	-	-	Arcasonde	-	-	-	SHERA	-	-	-	68	-	-
1979-4993	2444089_17	1979 Aug 10 1559:59	Rocketsonde	-	-	Arcasonde	-	-	-	PRIM	-	-	-	71	-	-
1979-4994	2444089_28	1979 Aug 10 1845:00	Rocketsonde	-	-	Arcasonde	-	-	-	SHERA	-	-	-	76	-	-
1979-4995	2444089_55	1979 Aug 11 0114:59	Rocketsonde	-	-	Arcasonde	-	-	-	KMR	-	-	-	76	-	-
1979-4996	2444089_06	1979 Aug 13 1330:00	Rocketsonde	-	-	Arcasonde	-	-	-	AIT	-	-	-	73	-	-
1979-4997	2444089_07	1979 Aug 13 1334:59	Rocketsonde	-	-	Arcasonde	-	-	-	CC	LO43	-	-	56	-	-

Launch

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Mission	FlightCode	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee_Km	Range_Km	Dest
1979-W993	2444099.14	1979 Aug 13 15:21:00	Rocketsonde	-	-	Arcasonde	-	-	-	THU	-	-	-	71	-	-
1979-W994	2444099.18	1979 Aug 13 16:15:59	Rocketsonde	-	-	Arcasonde	-	-	-	PRIM	-	-	-	51	-	-
1979-W995	2444099.55	1979 Aug 14 01:14:59	Rocketsonde	-	-	Arcasonde	-	-	-	KNR	-	-	-	76	-	-
1979-W996	2444100.30	1979 Aug 14 19:09:59	Rocketsonde	-	-	Arcasonde	-	-	-	WS	-	-	-	60	-	-
1979-A36	2444100.55	1979 Aug 15 01:14:59	Rocketsonde	-	-	Arcasonde	-	-	-	SHEM	-	-	-	46	-	-
1979-W998	2444101.06	1979 Aug 15 13:30:00	Rocketsonde	-	-	Arcasonde	-	-	-	CC	LC43	-	-	57	-	-
1979-W999	2444101.07	1979 Aug 15 13:44:59	Rocketsonde	-	-	Arcasonde	-	-	-	AIT	-	-	-	72	-	-
1979-W1000	2444101.08	1979 Aug 15 13:55:59	Rocketsonde	-	-	Arcasonde	-	-	-	WI	-	-	-	58	-	-
1979-W437	2444101.10	1979 Aug 15 14:30:00	Rocketsonde	-	-	Arcasonde	-	-	-	CC	LC43	-	-	89	-	-
1979-W438	2444101.11	1979 Aug 15 14:32:00	Rocketsonde	-	-	Arcasonde	-	-	-	THU	-	-	-	70	-	-
1979-W1002	2444101.25	1979 Aug 15 18:12:59	Rocketsonde	-	-	Arcasonde	-	-	-	PH	-	-	-	64	-	-
1980-W01	2444241.06	1980 Jan 2 13:30:00	Rocketsonde	-	-	Arcasonde	-	-	-	PRIM	-	-	-	64	-	-
1980-W02	2444241.07	1980 Jan 2 14:30:00	Rocketsonde	-	-	Arcasonde	-	-	-	ASC	-	-	-	64	-	-
1980-W03	2444241.10	1980 Jan 2 14:50:59	Rocketsonde	-	-	Arcasonde	-	-	-	AIT	-	-	-	58	-	-
1980-W04	2444241.13	1980 Jan 2 15:12:59	Rocketsonde	-	-	Arcasonde	-	-	-	THU	LC43	-	-	90	-	-
1980-W06	2444241.15	1980 Jan 2 15:50:00	Rocketsonde	-	-	Arcasonde	-	-	-	CC	LC43	-	-	66	-	-
1980-W05	2444241.25	1980 Jan 3 01:01:00	Rocketsonde	-	-	Arcasonde	-	-	-	PH	-	-	-	68	-	-
1980-W06	2444241.51	1980 Jan 3 01:01:00	Rocketsonde	-	-	Arcasonde	-	-	-	KNR	-	-	-	68	-	-
1980-W07	2444241.56	1980 Jan 3 01:30:00	Rocketsonde	-	-	Arcasonde	-	-	-	SHEM	-	-	-	51	-	-
1980-W08	2444242.20	1980 Jan 3 01:30:00	Rocketsonde	-	-	Arcasonde	-	-	-	PRIM	-	-	-	65	-	-
1980-W09	2444243.06	1980 Jan 4 16:48:59	Rocketsonde	-	-	Arcasonde	-	-	-	ASC	-	-	-	64	-	-
1980-W10	2444243.08	1980 Jan 4 13:00:00	Rocketsonde	-	-	Arcasonde	-	-	-	AIT	LC43	-	-	67	-	-
1980-W11	2444243.11	1980 Jan 4 14:45:00	Rocketsonde	-	-	Arcasonde	-	-	-	CC	-	-	-	53	-	-
1980-W12	2444243.16	1980 Jan 4 15:44:59	Rocketsonde	-	-	Arcasonde	-	-	-	THU	-	-	-	70	-	-
1980-W13	2444243.20	1980 Jan 4 16:48:59	Rocketsonde	-	-	Arcasonde	-	-	-	PRIM	-	-	-	59	-	-
1980-W14	2444243.30	1980 Jan 4 19:08:59	Rocketsonde	-	-	Arcasonde	-	-	-	PH	-	-	-	64	-	-
1980-W15	2444243.55	1980 Jan 5 01:09:59	Rocketsonde	-	-	Arcasonde	-	-	-	WI	-	-	-	90	-	-
1980-W13	2444243.55	1980 Jan 5 01:17:00	Rocketsonde	-	-	Arcasonde	-	-	-	MI	-	-	-	73	-	-
1980-W17	2444246.11	1980 Jan 7 14:40:00	Rocketsonde	-	-	Arcasonde	-	-	-	KNR	-	-	-	50	-	-
1980-W16	2444246.11	1980 Jan 7 14:45:00	Rocketsonde	-	-	Arcasonde	-	-	-	AIT	LC43	-	-	70	-	-
1980-W19	2444246.14	1980 Jan 7 15:25:59	Rocketsonde	-	-	Arcasonde	-	-	-	CC	-	-	-	58	-	-
1980-W20	2444246.23	1980 Jan 7 17:50:00	Rocketsonde	-	-	Arcasonde	-	-	-	THU	-	-	-	68	-	-
1980-W21	2444246.25	1980 Jan 7 17:50:00	Rocketsonde	-	-	Arcasonde	-	-	-	PRIM	-	-	-	59	-	-
1980-W16	2444246.26	1980 Jan 7 18:10:00	Rocketsonde	-	-	Arcasonde	-	-	-	PH	-	-	-	64	-	-
1980-W22	2444246.27	1980 Jan 7 18:34:59	Rocketsonde	-	-	Arcasonde	-	-	-	WI	-	-	-	90	-	-
1980-W23	2444246.32	1980 Jan 7 19:37:59	Rocketsonde	-	-	Arcasonde	-	-	-	MI	-	-	-	62	-	-
1980-W25	2444246.36	1980 Jan 7 21:00:00	Rocketsonde	-	-	Arcasonde	-	-	-	KNR	-	-	-	51	-	-
1980-W26	2444246.39	1980 Jan 7 21:24:59	Rocketsonde	-	-	Arcasonde	-	-	-	WI	-	-	-	70	-	-
1980-W27	2444246.55	1980 Jan 8 01:14:59	Rocketsonde	-	-	Arcasonde	-	-	-	SHEM	-	-	-	50	-	-
1980-W28	2444248.09	1980 Jan 9 13:30:00	Rocketsonde	-	-	Arcasonde	-	-	-	KNR	-	-	-	72	-	-
1980-W30	2444248.09	1980 Jan 9 13:30:00	Rocketsonde	-	-	Arcasonde	-	-	-	ASC	-	-	-	65	-	-
1980-W31	2444248.07	1980 Jan 9 13:44:59	Rocketsonde	-	-	Arcasonde	-	-	-	AIT	-	-	-	74	-	-
1980-W32	2444248.20	1980 Jan 9 18:50:00	Rocketsonde	-	-	Arcasonde	-	-	-	PRIM	LC43	-	-	56	-	-
1980-W33	2444248.25	1980 Jan 9 18:50:00	Rocketsonde	-	-	Arcasonde	-	-	-	KNR	-	-	-	59	-	-
1980-W34	2444248.56	1980 Jan 9 22:51:59	Rocketsonde	-	-	Arcasonde	-	-	-	SHEM	-	-	-	77	-	-
1980-W35	2444248.56	1980 Jan 10 01:19:59	Rocketsonde	-	-	Arcasonde	-	-	-	ASC	-	-	-	52	-	-
1980-W36	2444250.10	1980 Jan 11 14:30:00	Rocketsonde	-	-	Arcasonde	-	-	-	CC	LC43	-	-	72	-	-
1980-W37	2444250.11	1980 Jan 11 14:37:59	Rocketsonde	-	-	Arcasonde	-	-	-	AIT	-	-	-	64	-	-
1980-W38	2444250.13	1980 Jan 11 15:37:59	Rocketsonde	-	-	Arcasonde	-	-	-	THU	LC43	-	-	69	-	-
1980-W39	2444250.17	1980 Jan 11 16:00:00	Rocketsonde	-	-	Arcasonde	-	-	-	MI	-	-	-	71	-	-
1980-W40	2444250.19	1980 Jan 11 16:09:59	Rocketsonde	-	-	Arcasonde	-	-	-	WI	-	-	-	75	-	-
1980-W41	2444250.23	1980 Jan 11 17:07:59	Rocketsonde	-	-	Arcasonde	-	-	-	PRIM	-	-	-	70	-	-
1980-W42	2444250.63	1980 Jan 12 01:14:59	Rocketsonde	-	-	Arcasonde	-	-	-	SHEM	-	-	-	46	-	-
1980-W43	2444253.07	1980 Jan 12 03:44:59	Rocketsonde	-	-	Arcasonde	-	-	-	KNR	-	-	-	74	-	-
1980-W44	2444253.11	1980 Jan 14 14:26:00	Rocketsonde	-	-	Arcasonde	-	-	-	AIT	-	-	-	69	-	-
1980-W45	2444253.10	1980 Jan 14 14:45:00	Rocketsonde	-	-	Arcasonde	-	-	-	THU	LC43	-	-	66	-	-
1980-W46	2444253.55	1980 Jan 15 01:14:59	Rocketsonde	-	-	Arcasonde	-	-	-	CC	-	-	-	74	-	-
1980-W50	2444254.30	1980 Jan 15 01:14:59	Rocketsonde	-	-	Arcasonde	-	-	-	PRIM	-	-	-	68	-	-
1980-W51	2444254.40	1980 Jan 15 21:30:00	Rocketsonde	-	-	Arcasonde	-	-	-	SHEM	-	-	-	51	-	-
1980-W55	2444255.07	1980 Jan 16 13:44:59	Rocketsonde	-	-	Arcasonde	-	-	-	AIT	-	-	-	74	-	-
1980-W56	2444255.10	1980 Jan 16 14:30:00	Rocketsonde	-	-	Arcasonde	-	-	-	CC	LC43	-	-	66	-	-
1980-W57	2444255.12	1980 Jan 16 14:59:00	Rocketsonde	-	-	Arcasonde	-	-	-	THU	-	-	-	69	-	-
1980-W31	2444255.15	1980 Jan 16 15:30:00	Rocketsonde	-	-	Arcasonde	-	-	-	CC	LC43	-	-	84	-	-
1980-W59	2444255.30	1980 Jan 16 19:13:59	Rocketsonde	-	-	Arcasonde	-	-	-	PM	-	-	-	71	-	-
1980-W60	2444255.30	1980 Jan 16 19:18:00	Rocketsonde	-	-	Arcasonde	-	-	-	PRIM	-	-	-	58	-	-
1980-W61	2444255.39	1980 Jan 16 21:14:59	Rocketsonde	-	-	Arcasonde	-	-	-	SHEM	-	-	-	51	-	-
1980-W62	2444255.68	1980 Jan 16 23:30:00	Rocketsonde	-	-	Arcasonde	-	-	-	PRIM	-	-	-	74	-	-
1980-W33	2444256.14	1980 Jan 17 15:24:59	Rocketsonde	-	-	Arcasonde	-	-	-	KNR	-	-	-	90	-	-
1980-W63	2444257.05	1980 Jan 18 13:14:59	Rocketsonde	-	-	Arcasonde	-	-	-	VT	-	-	-	65	-	-
1980-W64	2444257.10	1980 Jan 18 14:27:59	Rocketsonde	-	-	Arcasonde	-	-	-	THU	LC43	-	-	68	-	-
1980-W65	2444257.11	1980 Jan 18 14:45:00	Rocketsonde	-	-	Arcasonde	-	-	-	CC	-	-	-	65	-	-
1980-W66	2444257.72	1980 Jan 18 21:14:59	Rocketsonde	-	-	Arcasonde	-	-	-	NS	-	-	-	67	-	-
1980-W69	2444260.05	1980 Jan 21 05:15:00	Rocketsonde	-	-	Arcasonde	-	-	-	SHEM	-	-	-	53	-	-
1980-W70	2444260.07	1980 Jan 21 13:14:59	Rocketsonde	-	-	Arcasonde	-	-	-	ASC	-	-	-	63	-	-
1980-W43	2444260.15	1980 Jan 21 13:44:59	Rocketsonde	-	-	Arcasonde	-	-	-	AIT	-	-	-	70	-	-
1980-W72	2444260.28	1980 Jan 21 16:49:59	Rocketsonde	-	-	Arcasonde	-	-	-	CC	LC43	-	-	96	-	-
1980-W73	2444260.28	1980 Jan 21 18:41:00	Rocketsonde	-	-	Arcasonde	-	-	-	PRIM	-	-	-	67	-	-
1980-W74	2444260.39	1980 Jan 21 21:14:59	Rocketsonde	-	-	Arcasonde	-	-	-	PM	-	-	-	76	-	-
1980-W02	2444260.55	1980 Jan 22 01:14:59	Rocketsonde	-	-	Arcasonde	-	-	-	SHEM	-	-	-	49	-	-
1980-W44	2444261.11	1980 Jan 22 14:45:00	Rocketsonde	-	-	Arcasonde	-	-	-	KNR	-	-	-	75	-	-
1980-W45	2444261.25	1980 Jan 22 18:00:00	Rocketsonde	-	-	Arcasonde	-	-	-	CC	LC43	-	-	92	-	-
1980-W77	2444262.06	1980 Jan 23 13:30:00	Rocketsonde	-	-	Arcasonde	-	-	-	NS	-	-	-	66	-	-
1980-W78	2444262.08	1980 Jan 23 14:00:00	Rocketsonde	-	-	Arcasonde	-	-	-	AIT	-	-	-	73	-	-

Launch

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Mission	FlightCode	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee_Km	Range_Km	Dest
1980-W79	2444262.11	1980 Jan 23 14:32:00	Rocketsonde	-	-	Arcasonde	-	-	-	CC	LO43	-	-	65	-	-
1980-W80	2444262.22	1980 Jan 23 17:11:00	Rocketsonde	-	-	Arcasonde	-	-	-	PH	-	-	-	74	-	-
1980-W81	2444262.22	1980 Jan 23 17:11:00	Rocketsonde	-	-	Arcasonde	-	-	-	PRIM	-	-	-	56	-	-
1980-W82	2444262.46	1980 Jan 23 22:52:59	Rocketsonde	-	-	Arcasonde	-	-	-	KHR	-	-	-	55	-	-
1980-W83	2444262.58	1980 Jan 24 01:58:59	Rocketsonde	-	-	Arcasonde	-	-	-	SHEM	-	-	-	55	-	-
1980-W84	2444263.21	1980 Jan 24 17:01:00	Rocketsonde	-	-	Arcasonde	-	-	-	THU	-	-	-	68	-	-
1980-W85	2444264.03	1980 Jan 25 12:46:00	Rocketsonde	-	-	Arcasonde	-	-	-	ASC	-	-	-	64	-	-
1980-W86	2444264.07	1980 Jan 25 13:44:59	Rocketsonde	-	-	Arcasonde	-	-	-	AUT	-	-	-	55	-	-
1980-W87	2444264.10	1980 Jan 25 14:30:00	Rocketsonde	-	-	Arcasonde	-	-	-	CC	LO43	-	-	69	-	-
1980-W88	2444264.14	1980 Jan 25 15:15:59	Rocketsonde	-	-	Arcasonde	-	-	-	THU	-	-	-	55	-	-
1980-W89	2444264.21	1980 Jan 25 16:56:59	Rocketsonde	-	-	Arcasonde	-	-	-	PRIM	-	-	-	55	-	-
1980-W90	2444264.38	1980 Jan 26 21:00:00	Rocketsonde	-	-	Arcasonde	-	-	-	KAU	-	-	-	55	-	-
1980-W91	2444264.55	1980 Jan 26 01:14:59	Rocketsonde	-	-	Arcasonde	-	-	-	KHR	-	-	-	74	-	-
1980-W92	2444267.06	1980 Jan 28 13:30:00	Rocketsonde	-	-	Arcasonde	-	-	-	ASC	-	-	-	63	-	-
1980-W93	2444267.07	1980 Jan 28 13:44:59	Rocketsonde	-	-	Arcasonde	-	-	-	AUT	-	-	-	54	-	-
1980-W94	2444267.10	1980 Jan 28 14:24:00	Rocketsonde	-	-	Arcasonde	-	-	-	CC	LO43	-	-	69	-	-
1980-W95	2444267.11	1980 Jan 28 14:36:00	Rocketsonde	-	-	Arcasonde	-	-	-	THU	-	-	-	69	-	-
1980-W96	2444267.14	1980 Jan 28 15:24:59	Rocketsonde	-	-	Arcasonde	-	-	-	WI	-	-	-	59	-	-
1980-W97	2444267.31	1980 Jan 28 19:27:59	Rocketsonde	-	-	Arcasonde	-	-	-	PH	-	-	-	75	-	-
1980-W98	2444267.51	1980 Jan 28 19:30:00	Rocketsonde	-	-	Arcasonde	-	-	-	PRIM	-	-	-	59	-	-
1980-W99	2444267.58	1980 Jan 28 21:00:00	Rocketsonde	-	-	Arcasonde	-	-	-	KAU	-	-	-	48	-	-
1980-W00	2444267.58	1980 Jan 29 01:22:59	Rocketsonde	-	-	Arcasonde	-	-	-	KHR	-	-	-	73	-	-
1980-A04	2444268.41	1980 Jan 29 21:49:59	Rocketsonde	-	-	Arcasonde	-	-	-	SHEM	-	-	-	46	-	-
1980-W99	2444269.06	1980 Jan 30 13:30:00	Rocketsonde	-	-	Arcasonde	-	-	-	ASC	-	-	-	64	-	-
1980-W100	2444269.07	1980 Jan 30 13:44:59	Rocketsonde	-	-	Arcasonde	-	-	-	AUT	-	-	-	86	-	-
1980-W101	2444269.31	1980 Jan 30 15:14:59	Rocketsonde	-	-	Arcasonde	-	-	-	CC	LO43	-	-	86	-	-
1980-W102	2444269.45	1980 Jan 30 22:49:59	Rocketsonde	-	-	Arcasonde	-	-	-	PRIM	-	-	-	75	-	-
1980-W103	2444270.11	1980 Jan 31 11:10:00	Rocketsonde	-	-	Arcasonde	-	-	-	KHR	-	-	-	79	-	-
1980-W104	2444270.12	1980 Jan 31 14:45:00	Rocketsonde	-	-	Arcasonde	-	-	-	KHR	-	-	-	69	-	-
1980-W105	2444270.12	1980 Jan 31 14:45:00	Rocketsonde	-	-	Arcasonde	-	-	-	THU	-	-	-	69	-	-
1980-W106	2444270.39	1980 Feb 1 21:14:59	Rocketsonde	-	-	Arcasonde	-	-	-	SHEM	-	-	-	53	-	-
1980-W107	2444270.50	1980 Feb 1 00:04:59	Rocketsonde	-	-	Arcasonde	-	-	-	WI	-	-	-	69	-	-
1980-W108	2444270.51	1980 Feb 1 00:10:00	Rocketsonde	-	-	Arcasonde	-	-	-	WI	-	-	-	69	-	-
1980-W109	2444270.51	1980 Feb 1 00:14:59	Rocketsonde	-	-	Arcasonde	-	-	-	WI	-	-	-	77	-	-
1980-W110	2444271.09	1980 Feb 1 14:15:00	Rocketsonde	-	-	Arcasonde	-	-	-	CC	LO43	-	-	62	-	-
1980-A05	2444271.16	1980 Feb 1 19:46:59	Rocketsonde	-	-	Arcasonde	-	-	-	THU	-	-	-	46	-	-
1980-W111	2444271.20	1980 Feb 1 16:44:59	Rocketsonde	-	-	Arcasonde	-	-	-	PRIM	-	-	-	65	-	-
1980-W112	2444271.35	1980 Feb 1 20:31:00	Rocketsonde	-	-	Arcasonde	-	-	-	PH	-	-	-	73	-	-
1980-W113	2444274.10	1980 Feb 4 13:44:59	Rocketsonde	-	-	Arcasonde	-	-	-	AUT	-	-	-	69	-	-
1980-W114	2444274.10	1980 Feb 4 14:30:00	Rocketsonde	-	-	Arcasonde	-	-	-	CC	LO43	-	-	62	-	-
1980-W115	2444274.11	1980 Feb 4 14:45:00	Rocketsonde	-	-	Arcasonde	-	-	-	THU	-	-	-	61	-	-
1980-W116	2444274.24	1980 Feb 4 17:45:00	Rocketsonde	-	-	Arcasonde	-	-	-	CC	LO43	-	-	69	-	-
1980-W117	2444274.35	1980 Feb 4 19:55:59	Rocketsonde	-	-	Arcasonde	-	-	-	KHR	-	-	-	59	-	-
1980-W118	2444274.36	1980 Feb 4 21:06:00	Rocketsonde	-	-	Arcasonde	-	-	-	KAU	-	-	-	50	-	-
1980-W119	2444274.40	1980 Feb 4 21:30:00	Rocketsonde	-	-	Arcasonde	-	-	-	SHEM	-	-	-	50	-	-
1980-W120	2444274.66	1980 Feb 6 13:30:00	Rocketsonde	-	-	Arcasonde	-	-	-	KHR	-	-	-	68	-	-
1980-W121	2444274.66	1980 Feb 6 13:30:00	Rocketsonde	-	-	Arcasonde	-	-	-	ASC	-	-	-	68	-	-
1980-W122	2444274.66	1980 Feb 6 13:30:00	Rocketsonde	-	-	Arcasonde	-	-	-	CC	LO43	-	-	61	-	-
1980-W123	2444274.66	1980 Feb 6 14:30:00	Rocketsonde	-	-	Arcasonde	-	-	-	THU	-	-	-	61	-	-
1980-W124	2444274.66	1980 Feb 6 15:30:00	Rocketsonde	-	-	Arcasonde	-	-	-	CC	LO43	-	-	72	-	-
1980-W125	2444275.07	1980 Feb 8 13:44:59	Rocketsonde	-	-	Arcasonde	-	-	-	THU	-	-	-	66	-	-
1980-W126	2444275.11	1980 Feb 8 14:34:59	Rocketsonde	-	-	Arcasonde	-	-	-	AUT	-	-	-	69	-	-
1980-W127	2444275.40	1980 Feb 8 14:34:59	Rocketsonde	-	-	Arcasonde	-	-	-	KAU	-	-	-	59	-	-
1980-W128	2444275.40	1980 Feb 8 14:34:59	Rocketsonde	-	-	Arcasonde	-	-	-	KHR	-	-	-	67	-	-
1980-W129	2444275.40	1980 Feb 8 14:34:59	Rocketsonde	-	-	Arcasonde	-	-	-	AUT	-	-	-	67	-	-
1980-W130	2444281.11	1980 Feb 11 13:44:59	Rocketsonde	-	-	Arcasonde	-	-	-	THU	-	-	-	69	-	-
1980-W131	2444281.11	1980 Feb 11 14:37:00	Rocketsonde	-	-	Arcasonde	-	-	-	CC	LO43	-	-	62	-	-
1980-W132	2444281.23	1980 Feb 11 17:36:00	Rocketsonde	-	-	Arcasonde	-	-	-	CC	LO43	-	-	62	-	-
1980-W133	2444281.29	1980 Feb 11 18:54:00	Rocketsonde	-	-	Arcasonde	-	-	-	PRIM	-	-	-	70	-	-
1980-W134	2444281.39	1980 Feb 11 21:14:59	Rocketsonde	-	-	Arcasonde	-	-	-	PM	-	-	-	74	-	-
1980-W135	2444281.56	1980 Feb 12 01:19:59	Rocketsonde	-	-	Arcasonde	-	-	-	SHEM	-	-	-	50	-	-
1980-W136	2444282.24	1980 Feb 12 17:45:00	Rocketsonde	-	-	Arcasonde	-	-	-	KHR	-	-	-	76	-	-
1980-W137	2444282.24	1980 Feb 12 17:45:00	Rocketsonde	-	-	Arcasonde	-	-	-	CC	LO43	-	-	76	-	-
1980-W138	2444283.06	1980 Feb 13 13:30:00	Rocketsonde	-	-	Arcasonde	-	-	-	ASC	-	-	-	63	-	-
1980-W139	2444283.12	1980 Feb 13 14:55:00	Rocketsonde	-	-	Arcasonde	-	-	-	THU	-	-	-	70	-	-
1980-W140	2444283.12	1980 Feb 13 14:55:00	Rocketsonde	-	-	Arcasonde	-	-	-	CC	LO43	-	-	60	-	-
1980-W141	2444283.21	1980 Feb 13 17:03:59	Rocketsonde	-	-	Arcasonde	-	-	-	PRIM	-	-	-	60	-	-
1980-W80	2444283.28	1980 Feb 13 18:45:59	Rocketsonde	-	-	Arcasonde	-	-	-	HS	-	-	-	98	-	-
1980-W142	2444283.38	1980 Feb 13 21:00:00	Rocketsonde	-	-	Arcasonde	-	-	-	SHEM	-	-	-	53	-	-
1980-W143	2444283.46	1980 Feb 13 23:00:00	Rocketsonde	-	-	Arcasonde	-	-	-	KHR	-	-	-	75	-	-
1980-W144	2444284.20	1980 Feb 14 16:42:59	Rocketsonde	-	-	Arcasonde	-	-	-	WI	-	-	-	72	-	-
1980-W81	2444284.47	1980 Feb 14 23:11:00	Rocketsonde	-	-	Arcasonde	-	-	-	WI	-	-	-	91	-	-
1980-W146	2444284.50	1980 Feb 14 23:53:00	Rocketsonde	-	-	Arcasonde	-	-	-	WI	-	-	-	76	-	-
1980-W147	2444284.50	1980 Feb 14 23:58:00	Rocketsonde	-	-	Arcasonde	-	-	-	WI	-	-	-	72	-	-
1980-W148	2444284.50	1980 Feb 15 00:02:59	Rocketsonde	-	-	Arcasonde	-	-	-	WI	-	-	-	54	-	-
1980-W150	2444285.06	1980 Feb 15 13:30:00	Rocketsonde	-	-	Arcasonde	-	-	-	ASC	-	-	-	64	-	-
1980-W151	2444285.07	1980 Feb 15 13:44:59	Rocketsonde	-	-	Arcasonde	-	-	-	AUT	-	-	-	71	-	-
1980-W152	2444285.10	1980 Feb 15 14:30:00	Rocketsonde	-	-	Arcasonde	-	-	-	CC	LO43	-	-	62	-	-
1980-W153	2444285.12	1980 Feb 15 14:58:00	Rocketsonde	-	-	Arcasonde	-	-	-	CC	LO43	-	-	69	-	-
1980-W154	2444285.15	1980 Feb 15 15:30:00	Rocketsonde	-	-	Arcasonde	-	-	-	THU	-	-	-	71	-	-
1980-W155	2444285.19	1980 Feb 15 16:34:59	Rocketsonde	-	-	Arcasonde	-	-	-	PRIM	-	-	-	62	-	-
1980-W156	2444285.56	1980 Feb 16 01:19:59	Rocketsonde	-	-	Arcasonde	-	-	-	KHR	-	-	-	74	-	-
1980-W158	2444288.12	1980 Feb 18 14:48:59	Rocketsonde	-	-	Arcasonde	-	-	-	THU	-	-	-	70	-	-
1980-W159	2444288.20	1980 Feb 18 16:44:59	Rocketsonde	-	-	Arcasonde	-	-	-	PRIM	-	-	-	61	-	-
1980-W161	2444288.38	1980 Feb 18 21:00:00	Rocketsonde	-	-	Arcasonde	-	-	-	SHEM	-	-	-	51	-	-

Launch

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Mission	FlightCode	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee_Km	Range_Km	Dest
1980-M163	2444289.42	1980 Feb 19 21:59:59	Rocketsonde	-	-	Arcasonde	-	-	-	KAU	-	-	-	59	-	-
1980-M166	2444290.06	1980 Feb 20 13:30:00	Rocketsonde	-	-	Arcasonde	-	-	-	CC	-	-	-	64	-	-
1980-M167	2444290.10	1980 Feb 20 14:30:00	Rocketsonde	-	-	Arcasonde	-	-	-	THU	LO43	-	-	62	-	-
1980-M168	2444290.13	1980 Feb 20 15:00:59	Rocketsonde	-	-	Arcasonde	-	-	-	AIT	-	-	-	69	-	-
1980-M169	2444290.13	1980 Feb 20 15:10:00	Rocketsonde	-	-	Arcasonde	-	-	-	CC	LO43	-	-	67	-	-
1980-M170	2444290.15	1980 Feb 20 15:30:00	Rocketsonde	-	-	Arcasonde	-	-	-	PRIM	-	-	-	55	-	-
1980-M170	2444290.32	1980 Feb 20 19:44:59	Rocketsonde	-	-	Arcasonde	-	-	-	KHR	-	-	-	85	-	-
1980-M171	2444290.50	1980 Feb 21 00:00:59	Rocketsonde	-	-	Arcasonde	-	-	-	KHR	-	-	-	75	-	-
1980-M172	2444292.07	1980 Feb 22 13:44:59	Rocketsonde	-	-	Arcasonde	-	-	-	AIT	-	-	-	72	-	-
1980-M173	2444292.10	1980 Feb 22 14:30:00	Rocketsonde	-	-	Arcasonde	-	-	-	CC	LO43	-	-	48	-	-
1980-M173	2444292.10	1980 Feb 22 14:31:00	Rocketsonde	-	-	Arcasonde	-	-	-	THU	-	-	-	69	-	-
1980-M174	2444292.31	1980 Feb 22 19:31:59	Rocketsonde	-	-	Arcasonde	-	-	-	PRIM	-	-	-	70	-	-
1980-M175	2444292.55	1980 Feb 23 01:14:59	Rocketsonde	-	-	Arcasonde	-	-	-	KHR	-	-	-	71	-	-
1980-M178	2444295.05	1980 Feb 25 13:14:59	Rocketsonde	-	-	Arcasonde	-	-	-	AIT	-	-	-	68	-	-
1980-M179	2444295.06	1980 Feb 25 13:30:00	Rocketsonde	-	-	Arcasonde	-	-	-	ASC	-	-	-	61	-	-
1980-M181	2444295.10	1980 Feb 25 14:26:59	Rocketsonde	-	-	Arcasonde	-	-	-	THU	-	-	-	70	-	-
1980-M182	2444295.12	1980 Feb 25 15:00:00	Rocketsonde	-	-	Arcasonde	-	-	-	CC	LO43	-	-	62	-	-
1980-M182	2444295.30	1980 Feb 25 19:14:59	Rocketsonde	-	-	Arcasonde	-	-	-	WI	-	-	-	90	-	-
1980-M185	2444295.55	1980 Feb 26 01:14:59	Rocketsonde	-	-	Arcasonde	-	-	-	WI	-	-	-	95	-	-
1980-M186	2444297.11	1980 Feb 27 14:42:00	Rocketsonde	-	-	Arcasonde	-	-	-	KHR	-	-	-	76	-	-
1980-M193	2444297.45	1980 Feb 27 22:54:59	Rocketsonde	-	-	Arcasonde	-	-	-	THU	-	-	-	55	-	-
1980-M193	2444297.45	1980 Feb 27 22:54:59	Rocketsonde	-	-	Arcasonde	-	-	-	PRIM	-	-	-	70	-	-
1980-M199	2444298.39	1980 Feb 28 19:35:59	Rocketsonde	-	-	Arcasonde	-	-	-	KHR	-	-	-	70	-	-
1980-M200	2444298.46	1980 Feb 28 23:08:00	Rocketsonde	-	-	Arcasonde	-	-	-	PRIM	-	-	-	46	-	-
1980-M200	2444298.46	1980 Feb 28 23:08:00	Rocketsonde	-	-	Arcasonde	-	-	-	SHEN	-	-	-	46	-	-
1980-M201	2444298.50	1980 Feb 28 23:53:00	Rocketsonde	-	-	Arcasonde	-	-	-	WI	-	-	-	72	-	-
1980-M202	2444298.50	1980 Feb 28 23:58:00	Rocketsonde	-	-	Arcasonde	-	-	-	WI	-	-	-	80	-	-
1980-M207	2444299.05	1980 Feb 29 13:14:59	Rocketsonde	-	-	Arcasonde	-	-	-	WI	-	-	-	63	-	-
1980-M208	2444299.07	1980 Feb 29 13:44:59	Rocketsonde	-	-	Arcasonde	-	-	-	ASC	LO43	-	-	62	-	-
1980-M209	2444299.14	1980 Feb 29 14:30:00	Rocketsonde	-	-	Arcasonde	-	-	-	AIT	-	-	-	67	-	-
1980-M210	2444299.14	1980 Feb 29 15:15:59	Rocketsonde	-	-	Arcasonde	-	-	-	CC	-	-	-	63	-	-
1980-M211	2444299.14	1980 Feb 29 15:26:59	Rocketsonde	-	-	Arcasonde	-	-	-	WI	-	-	-	88	-	-
1980-M211	2444299.31	1980 Feb 29 19:22:59	Rocketsonde	-	-	Arcasonde	-	-	-	WI	-	-	-	78	-	-
1980-M212	2444299.40	1980 Feb 29 21:30:00	Rocketsonde	-	-	Arcasonde	-	-	-	PHEN	-	-	-	73	-	-
1980-M212	2444299.55	1980 Mar 1 01:14:59	Rocketsonde	-	-	Arcasonde	-	-	-	SHEN	-	-	-	53	-	-
1980-M216	2444302.08	1980 Mar 3 14:00:00	Rocketsonde	-	-	Arcasonde	-	-	-	KHR	-	-	-	73	-	-
1980-M218	2444302.09	1980 Mar 3 14:15:00	Rocketsonde	-	-	Arcasonde	-	-	-	AIT	LO43	-	-	61	-	-
1980-M218	2444302.12	1980 Mar 3 14:15:00	Rocketsonde	-	-	Arcasonde	-	-	-	ASC	-	-	-	85	-	-
1980-M220	2444302.13	1980 Mar 3 16:55:00	Rocketsonde	-	-	Arcasonde	-	-	-	SHEN	-	-	-	50	-	-
1980-M221	2444302.55	1980 Mar 3 19:53:59	Rocketsonde	-	-	Arcasonde	-	-	-	SHEN	-	-	-	73	-	-
1980-M222	2444303.12	1980 Mar 4 01:41:59	Rocketsonde	-	-	Arcasonde	-	-	-	CC	LO43	-	-	60	-	-
1980-M222	2444303.12	1980 Mar 4 01:41:59	Rocketsonde	-	-	Arcasonde	-	-	-	CC	-	-	-	71	-	-
1980-M225	2444304.12	1980 Mar 5 14:50:00	Rocketsonde	-	-	Arcasonde	-	-	-	KAU	-	-	-	90	-	-
1980-M225	2444304.12	1980 Mar 5 14:50:00	Rocketsonde	-	-	Arcasonde	-	-	-	SHEN	-	-	-	90	-	-
1980-M225	2444304.36	1980 Mar 5 20:55:00	Rocketsonde	-	-	Arcasonde	-	-	-	KHR	-	-	-	56	-	-
1980-M227	2444304.36	1980 Mar 5 21:00:00	Rocketsonde	-	-	Arcasonde	-	-	-	SHEN	-	-	-	56	-	-
1980-M227	2444304.36	1980 Mar 5 21:00:00	Rocketsonde	-	-	Arcasonde	-	-	-	SHEN	-	-	-	72	-	-
1980-M228	2444304.36	1980 Mar 5 21:00:00	Rocketsonde	-	-	Arcasonde	-	-	-	PRIM	-	-	-	67	-	-
1980-M229	2444305.35	1980 Mar 6 19:15:00	Rocketsonde	-	-	Arcasonde	-	-	-	SHEN	-	-	-	57	-	-
1980-M230	2444305.38	1980 Mar 6 21:00:00	Rocketsonde	-	-	Arcasonde	-	-	-	KHR	-	-	-	77	-	-
1980-M231	2444305.53	1980 Mar 7 04:17:59	Rocketsonde	-	-	Arcasonde	-	-	-	AIT	-	-	-	65	-	-
1980-M232	2444305.68	1980 Mar 7 14:00:00	Rocketsonde	-	-	Arcasonde	-	-	-	ASC	-	-	-	67	-	-
1980-M233	2444306.14	1980 Mar 7 15:26:59	Rocketsonde	-	-	Arcasonde	-	-	-	ASC	-	-	-	67	-	-
1980-M234	2444306.40	1980 Mar 7 18:41:00	Rocketsonde	-	-	Arcasonde	-	-	-	PRIM	-	-	-	69	-	-
1980-M236	2444306.37	1980 Mar 7 20:53:00	Rocketsonde	-	-	Arcasonde	-	-	-	KAU	LO43	-	-	56	-	-
1980-M236	2444306.38	1980 Mar 7 21:00:00	Rocketsonde	-	-	Arcasonde	-	-	-	SHEN	-	-	-	53	-	-
1980-M237	2444309.06	1980 Mar 10 13:30:00	Rocketsonde	-	-	Arcasonde	-	-	-	ASC	-	-	-	64	-	-
1980-M238	2444309.07	1980 Mar 10 13:44:59	Rocketsonde	-	-	Arcasonde	-	-	-	AIT	-	-	-	72	-	-
1980-M239	2444309.12	1980 Mar 10 15:00:00	Rocketsonde	-	-	Arcasonde	-	-	-	THU	-	-	-	70	-	-
1980-M240	2444309.13	1980 Mar 10 15:11:00	Rocketsonde	-	-	Arcasonde	-	-	-	WI	-	-	-	90	-	-
1980-M241	2444309.20	1980 Mar 10 16:49:59	Rocketsonde	-	-	Arcasonde	-	-	-	PRIM	-	-	-	75	-	-
1980-M241	2444309.28	1980 Mar 10 18:44:00	Rocketsonde	-	-	Arcasonde	-	-	-	CC	LO43	-	-	69	-	-
1980-M242	2444309.41	1980 Mar 10 19:03:59	Rocketsonde	-	-	Arcasonde	-	-	-	CC	-	-	-	70	-	-
1980-M243	2444309.66	1980 Mar 11 03:52:00	Rocketsonde	-	-	Arcasonde	-	-	-	KAU	-	-	-	59	-	-
1980-M244	2444310.30	1980 Mar 11 19:14:59	Rocketsonde	-	-	Arcasonde	-	-	-	KHR	-	-	-	63	-	-
1980-M245	2444310.52	1980 Mar 12 00:30:00	Rocketsonde	-	-	Arcasonde	-	-	-	PRIM	-	-	-	77	-	-
1980-M249	2444311.06	1980 Mar 12 13:30:00	Rocketsonde	-	-	Arcasonde	-	-	-	KHR	-	-	-	69	-	-
1980-M251	2444311.11	1980 Mar 12 14:40:00	Rocketsonde	-	-	Arcasonde	-	-	-	ASC	-	-	-	64	-	-
1980-M252	2444311.12	1980 Mar 12 14:54:00	Rocketsonde	-	-	Arcasonde	-	-	-	AIT	-	-	-	65	-	-
1980-M149	2444311.19	1980 Mar 12 14:54:00	Rocketsonde	-	-	Arcasonde	-	-	-	THU	-	-	-	97	-	-
1980-M253	2444311.25	1980 Mar 12 16:30:00	Rocketsonde	-	-	Arcasonde	-	-	-	NS	-	-	-	52	-	-
1980-M254	2444311.30	1980 Mar 12 18:00:00	Rocketsonde	-	-	Arcasonde	-	-	-	CC	LO43	-	-	74	-	-
1980-M255	2444311.39	1980 Mar 12 19:18:00	Rocketsonde	-	-	Arcasonde	-	-	-	PM	-	-	-	48	-	-
1980-M256	2444311.51	1980 Mar 13 00:04:59	Rocketsonde	-	-	Arcasonde	-	-	-	SHEN	-	-	-	78	-	-
1980-M257	2444311.51	1980 Mar 13 00:14:59	Rocketsonde	-	-	Arcasonde	-	-	-	WI	-	-	-	74	-	-
1980-M258	2444311.61	1980 Mar 13 02:32:00	Rocketsonde	-	-	Arcasonde	-	-	-	WI	-	-	-	78	-	-
1980-M259	2444312.20	1980 Mar 13 16:45:59	Rocketsonde	-	-	Arcasonde	-	-	-	KHR	-	-	-	74	-	-
1980-M261	2444313.06	1980 Mar 14 13:30:00	Rocketsonde	-	-	Arcasonde	-	-	-	PRIM	-	-	-	69	-	-
1980-M10	2444313.07	1980 Mar 14 13:44:59	Rocketsonde	-	-	Arcasonde	-	-	-	ASC	-	-	-	24	-	-
1980-M262	2444313.11	1980 Mar 14 14:45:00	Rocketsonde	-	-	Arcasonde	-	-	-	AIT	-	-	-	65	-	-
1980-M11	2444313.38	1980 Mar 14 21:00:00	Rocketsonde	-	-	Arcasonde	-	-	-	CC	LO43	-	-	58	-	-
1980-M263	2444313.55	1980 Mar 15 01:14:59	Rocketsonde	-	-	Arcasonde	-	-	-	SHEN	-	-	-	47	-	-
1980-M264	2444313.75	1980 Mar 15 06:04:59	Rocketsonde	-	-	Arcasonde	-	-	-	KHR	-	-	-	77	-	-

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Mission	FlightCode	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee_Km	Range_Km	Dest
1980-W285	2444316.11	1980 Mar 17 14:33:00	Rocketsonde	-	-	Arcasonde	-	-	-	THU	-	-	-	69	-	-
1980-W286	2444316.11	1980 Mar 17 14:45:00	Rocketsonde	-	-	Arcasonde	-	-	-	CC	LO43	-	-	57	-	-
1980-W287	2444316.18	1980 Mar 17 16:15:59	Rocketsonde	-	-	Arcasonde	-	-	-	ASC	-	-	-	65	-	-
1980-W288	2444316.19	1980 Mar 17 16:52:59	Rocketsonde	-	-	Arcasonde	-	-	-	PRIM	-	-	-	70	-	-
1980-W289	2444316.24	1980 Mar 17 17:44:00	Rocketsonde	-	-	Arcasonde	-	-	-	AUT	-	-	-	71	-	-
1980-W270	2444316.29	1980 Mar 17 18:54:00	Rocketsonde	-	-	Arcasonde	-	-	-	PH	-	-	-	52	-	-
1980-W271	2444316.39	1980 Mar 17 21:24:59	Rocketsonde	-	-	Arcasonde	-	-	-	SHEM	-	-	-	59	-	-
1980-W272	2444316.50	1980 Mar 17 23:56:00	Rocketsonde	-	-	Arcasonde	-	-	-	WI	-	-	-	51	-	-
1980-W150	2444316.50	1980 Mar 18 00:00:59	Rocketsonde	-	-	Arcasonde	-	-	-	WI	-	-	-	81	-	-
1980-W274	2444316.68	1980 Mar 18 04:14:59	Rocketsonde	-	-	Arcasonde	-	-	-	KHR	-	-	-	88	-	-
1980-W151	2444317.31	1980 Mar 18 19:30:00	Rocketsonde	-	-	Arcasonde	-	-	-	WI	-	-	-	76	-	-
1980-W275	2444317.34	1980 Mar 18 20:10:00	Rocketsonde	-	-	Arcasonde	-	-	-	WI	-	-	-	77	-	-
1980-W278	2444317.67	1980 Mar 19 04:04:59	Rocketsonde	-	-	Arcasonde	-	-	-	KHR	-	-	-	65	-	-
1980-W280	2444318.11	1980 Mar 19 14:45:00	Rocketsonde	-	-	Arcasonde	-	-	-	ASC	-	-	-	71	-	-
1980-W281	2444318.15	1980 Mar 19 15:29:00	Rocketsonde	-	-	Arcasonde	-	-	-	THU	-	-	-	60	-	-
1980-W282	2444318.21	1980 Mar 19 17:07:00	Rocketsonde	-	-	Arcasonde	-	-	-	PRIM	-	-	-	57	-	-
1980-W283	2444318.25	1980 Mar 19 18:00:00	Rocketsonde	-	-	Arcasonde	-	-	-	CC	LO43	-	-	94	-	-
1980-W157	2444318.25	1980 Mar 19 18:00:00	Rocketsonde	-	-	Arcasonde	-	-	-	CC	LO43	-	-	87	-	-
1980-W284	2444318.29	1980 Mar 19 18:59:59	Rocketsonde	-	-	Arcasonde	-	-	-	AUT	-	-	-	75	-	-
1980-W285	2444318.34	1980 Mar 19 18:59:59	Rocketsonde	-	-	Arcasonde	-	-	-	WI	-	-	-	90	-	-
1980-W159	2444318.37	1980 Mar 19 20:04:59	Rocketsonde	-	-	Arcasonde	-	-	-	KAU	-	-	-	54	-	-
1980-W286	2444318.39	1980 Mar 19 21:14:59	Rocketsonde	-	-	Arcasonde	-	-	-	WI/DMP-9?	-	-	-	62	-	-
1980-W287	2444318.66	1980 Mar 19 20:52:00	Rocketsonde	-	-	Arcasonde	-	-	-	KHR	-	-	-	72	-	-
1980-W288	2444320.06	1980 Mar 20 03:52:00	Rocketsonde	-	-	Arcasonde	-	-	-	ASC	-	-	-	69	-	-
1980-W290	2444320.07	1980 Mar 21 13:44:59	Rocketsonde	-	-	Arcasonde	-	-	-	ASC	-	-	-	70	-	-
1980-W291	2444320.22	1980 Mar 21 17:10:00	Rocketsonde	-	-	Arcasonde	-	-	-	PRIM	-	-	-	53	-	-
1980-W292	2444320.36	1980 Mar 21 21:00:00	Rocketsonde	-	-	Arcasonde	-	-	-	KAU	-	-	-	94	-	-
1980-W293	2444320.40	1980 Mar 21 21:33:00	Rocketsonde	-	-	Arcasonde	-	-	-	ASC	LO43	-	-	78	-	-
1980-W294	2444320.54	1980 Mar 22 01:02:59	Rocketsonde	-	-	Arcasonde	-	-	-	CC	-	-	-	65	-	-
1980-W295	2444320.55	1980 Mar 22 01:14:59	Rocketsonde	-	-	Arcasonde	-	-	-	WS	-	-	-	59	-	-
1980-W296	2444320.51	1980 Mar 22 07:30:00	Rocketsonde	-	-	Arcasonde	-	-	-	ASC	-	-	-	66	-	-
1980-W297	2444323.07	1980 Mar 24 14:45:00	Rocketsonde	-	-	Arcasonde	-	-	-	AUT	LO43	-	-	58	-	-
1980-W298	2444323.11	1980 Mar 24 14:47:00	Rocketsonde	-	-	Arcasonde	-	-	-	THU	-	-	-	80	-	-
1980-W163	2444323.12	1980 Mar 24 14:47:00	Rocketsonde	-	-	Arcasonde	-	-	-	WI	-	-	-	94	-	-
1980-W165	2444323.12	1980 Mar 24 15:00:00	Rocketsonde	-	-	Arcasonde	-	-	-	ASC	-	-	-	73	-	-
1980-W600	2444323.15	1980 Mar 24 15:37:59	Rocketsonde	-	-	Arcasonde	-	-	-	PRIM	-	-	-	69	-	-
1980-W601	2444323.25	1980 Mar 24 18:00:00	Rocketsonde	-	-	Arcasonde	-	-	-	THU	-	-	-	58	-	-
1980-W602	2444323.31	1980 Mar 24 19:30:00	Rocketsonde	-	-	Arcasonde	-	-	-	ASC	-	-	-	90	-	-
1980-W112	2444323.38	1980 Mar 24 21:00:00	Rocketsonde	-	-	Arcasonde	-	-	-	KHR	-	-	-	56	-	-
1980-W603	2444323.58	1980 Mar 24 21:00:00	Rocketsonde	-	-	Arcasonde	-	-	-	SHEM	-	-	-	79	-	-
1980-W604	2444323.55	1980 Mar 25 01:14:59	Rocketsonde	-	-	Arcasonde	-	-	-	KHR	-	-	-	63	-	-
1980-W137	2444325.10	1980 Mar 26 14:30:00	Rocketsonde	-	-	Arcasonde	-	-	-	AUT	-	-	-	57	-	-
1980-W606	2444325.12	1980 Mar 26 14:30:00	Rocketsonde	-	-	Arcasonde	-	-	-	ASC	-	-	-	64	-	-
1980-W608	2444325.29	1980 Mar 26 18:22:00	Rocketsonde	-	-	Arcasonde	-	-	-	PH	-	-	-	68	-	-
1980-W610	2444325.29	1980 Mar 26 18:22:00	Rocketsonde	-	-	Arcasonde	-	-	-	ASC	-	-	-	82	-	-
1980-W111	2444325.29	1980 Mar 26 18:22:00	Rocketsonde	-	-	Arcasonde	-	-	-	PH	-	-	-	68	-	-
1980-W611	2444325.38	1980 Mar 26 19:15:59	Rocketsonde	-	-	Arcasonde	-	-	-	ASC	-	-	-	72	-	-
1980-W613	2444325.68	1980 Mar 26 21:03:59	Rocketsonde	-	-	Arcasonde	-	-	-	THU	-	-	-	64	-	-
1980-W171	2444325.66	1980 Mar 27 04:13:59	Rocketsonde	-	-	Arcasonde	-	-	-	CC	LO43	-	-	52	-	-
1980-W172	2444325.66	1980 Mar 27 07:15:59	Rocketsonde	-	-	Arcasonde	-	-	-	CC	LO43	-	-	75	-	-
1980-W314	2444325.66	1980 Mar 27 07:15:59	Rocketsonde	-	-	Arcasonde	-	-	-	KHR	-	-	-	80	-	-
1980-W315	2444325.66	1980 Mar 27 07:15:59	Rocketsonde	-	-	Arcasonde	-	-	-	KHR	-	-	-	78	-	-
1980-W316	2444325.67	1980 Mar 28 04:02:59	Rocketsonde	-	-	Arcasonde	-	-	-	KHR	-	-	-	62	-	-
1980-W314	2444327.05	1980 Mar 28 13:14:59	Rocketsonde	-	-	Arcasonde	-	-	-	ASC	-	-	-	78	-	-
1980-W316	2444327.07	1980 Mar 28 14:27:59	Rocketsonde	-	-	Arcasonde	-	-	-	THU	-	-	-	64	-	-
1980-W318	2444327.10	1980 Mar 28 14:30:00	Rocketsonde	-	-	Arcasonde	-	-	-	ASC	LO43	-	-	56	-	-
1980-W173	2444327.10	1980 Mar 28 14:30:00	Rocketsonde	-	-	Arcasonde	-	-	-	CC	LO43	-	-	92	-	-
1980-W319	2444327.15	1980 Mar 28 15:30:00	Rocketsonde	-	-	Arcasonde	-	-	-	CC	LO43	-	-	67	-	-
1980-W320	2444327.19	1980 Mar 28 16:32:59	Rocketsonde	-	-	Arcasonde	-	-	-	PRIM	-	-	-	75	-	-
1980-W321	2444327.30	1980 Mar 28 19:09:59	Rocketsonde	-	-	Arcasonde	-	-	-	KHR	-	-	-	66	-	-
1980-W322	2444327.53	1980 Mar 29 00:37:59	Rocketsonde	-	-	Arcasonde	-	-	-	AUT	-	-	-	75	-	-
1980-W323	2444330.05	1980 Mar 31 13:14:59	Rocketsonde	-	-	Arcasonde	-	-	-	ASC	-	-	-	62	-	-
1980-W324	2444330.11	1980 Mar 31 13:14:59	Rocketsonde	-	-	Arcasonde	-	-	-	THU	-	-	-	68	-	-
1980-W325	2444330.19	1980 Mar 31 16:40:00	Rocketsonde	-	-	Arcasonde	-	-	-	PRIM	-	-	-	65	-	-
1980-W326	2444330.20	1980 Mar 31 16:51:00	Rocketsonde	-	-	Arcasonde	-	-	-	PM	-	-	-	76	-	-
1980-W176	2444330.38	1980 Mar 31 21:00:00	Rocketsonde	-	-	Arcasonde	-	-	-	KAU	-	-	-	49	-	-
1980-W177	2444330.47	1980 Mar 31 23:12:00	Rocketsonde	-	-	Arcasonde	-	-	-	WI	-	-	-	91	-	-
1980-W327	2444330.49	1980 Mar 31 23:51:00	Rocketsonde	-	-	Arcasonde	-	-	-	WI	-	-	-	82	-	-
1980-W328	2444330.50	1980 Mar 31 23:56:00	Rocketsonde	-	-	Arcasonde	-	-	-	WI	-	-	-	79	-	-
1980-W329	2444330.55	1980 Mar 31 23:56:00	Rocketsonde	-	-	Arcasonde	-	-	-	WI	-	-	-	79	-	-
1980-W115	2444331.39	1980 Mar 1 01:14:59	Rocketsonde	-	-	Arcasonde	-	-	-	WI	-	-	-	45	-	-
1980-W330	2444332.15	1980 Mar 2 15:30:00	Rocketsonde	-	-	Arcasonde	-	-	-	KHR	-	-	-	74	-	-
1980-W331	2444332.15	1980 Mar 2 15:41:00	Rocketsonde	-	-	Arcasonde	-	-	-	SHEM	-	-	-	74	-	-
1980-W332	2444332.15	1980 Mar 2 15:41:00	Rocketsonde	-	-	Arcasonde	-	-	-	AUT	-	-	-	61	-	-
1980-W182	2444332.25	1980 Mar 2 18:40:00	Rocketsonde	-	-	Arcasonde	-	-	-	THU	-	-	-	70	-	-
1980-W116	2444332.25	1980 Mar 2 18:40:00	Rocketsonde	-	-	Arcasonde	-	-	-	CC	LO43	-	-	89	-	-
1980-W333	2444332.52	1980 Mar 3 00:30:00	Rocketsonde	-	-	Arcasonde	-	-	-	PRIM	-	-	-	49	-	-
1980-W334	2444333.15	1980 Mar 3 16:30:00	Rocketsonde	-	-	Arcasonde	-	-	-	KHR	-	-	-	79	-	-
1980-W335	2444333.19	1980 Mar 3 16:34:59	Rocketsonde	-	-	Arcasonde	-	-	-	CC	LO43	-	-	66	-	-
1980-W336	2444333.38	1980 Mar 3 21:00:00	Rocketsonde	-	-	Arcasonde	-	-	-	PRIM	-	-	-	65	-	-
1980-W337	2444334.13	1980 Mar 4 15:06:00	Rocketsonde	-	-	Arcasonde	-	-	-	SHEM	-	-	-	54	-	-
1980-W338	2444334.14	1980 Mar 4 15:18:00	Rocketsonde	-	-	Arcasonde	-	-	-	THU	-	-	-	71	-	-
1980-W339	2444334.14	1980 Mar 4 21:45:00	Rocketsonde	-	-	Arcasonde	-	-	-	ASC	-	-	-	61	-	-
1980-W340	2444334.64	1980 Mar 5 03:27:00	Rocketsonde	-	-	Arcasonde	-	-	-	SHEM	-	-	-	54	-	-
1980-W341	2444337.06	1980 Mar 7 13:30:00	Rocketsonde	-	-	Arcasonde	-	-	-	KHR	-	-	-	67	-	-
1980-W341	2444337.06	1980 Mar 7 13:30:00	Rocketsonde	-	-	Arcasonde	-	-	-	ASC	-	-	-	62	-	-

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Mission	FlightCode	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee_Km	Range_Km	Dest
1980-W342	2444337.14	1980 Apr 7 1520:00	Rocketsonde	-	-	Arcasonde	-	-	-	THU	-	-	-	68	-	-
1980-W343	2444337.26	1980 Apr 7 1820:00	Rocketsonde	-	-	Arcasonde	-	-	-	AIT	-	-	-	72	-	-
1980-W344	2444337.71	1980 Apr 8 0806:00	Rocketsonde	-	-	Arcasonde	-	-	-	KMR	-	-	-	66	-	-
1980-W345	2444338.56	1980 Apr 9 0127:59	Rocketsonde	-	-	Arcasonde	-	-	-	KMR	-	-	-	71	-	-
1980-W347	2444339.06	1980 Apr 9 1319:59	Rocketsonde	-	-	Arcasonde	-	-	-	AIT	-	-	-	64	-	-
1980-W348	2444339.09	1980 Apr 9 1404:59	Rocketsonde	-	-	Arcasonde	-	-	-	ASC	-	-	-	68	-	-
1980-W349	2444339.10	1980 Apr 9 1422:00	Rocketsonde	-	-	Arcasonde	-	-	-	THU	-	-	-	65	-	-
1980-W350	2444339.10	1980 Apr 9 1430:00	Rocketsonde	-	-	Arcasonde	-	-	-	CC	-	-	-	73	-	-
1980-W351	2444339.13	1980 Apr 9 1513:59	Rocketsonde	-	-	Arcasonde	-	-	-	AI/DMP-9?	-	-	-	82	-	-
1980-W191	2444339.28	1980 Apr 9 1945:00	Rocketsonde	-	-	Arcasonde	-	-	-	CC	-	-	-	53	-	-
1980-W353	2444339.38	1980 Apr 9 2110:00	Rocketsonde	-	-	Arcasonde	-	-	-	SHEM	-	-	-	76	-	-
1980-W354	2444339.45	1980 Apr 9 2249:59	Rocketsonde	-	-	Arcasonde	-	-	-	KMR	-	-	-	75	-	-
1980-W355	2444339.50	1980 Apr 9 2354:00	Rocketsonde	-	-	Arcasonde	-	-	-	MI	-	-	-	73	-	-
1980-W356	2444339.50	1980 Apr 10 0003:59	Rocketsonde	-	-	Arcasonde	-	-	-	MI	-	-	-	68	-	-
1980-W357	2444340.32	1980 Apr 10 1944:59	Rocketsonde	-	-	Arcasonde	-	-	-	PRIM	-	-	-	74	-	-
1980-W358	2444340.58	1980 Apr 11 0154:59	Rocketsonde	-	-	Arcasonde	-	-	-	CC	-	-	-	59	-	-
1980-W359	2444340.60	1980 Apr 11 0230:00	Rocketsonde	-	-	Arcasonde	-	-	-	AIT	-	-	-	76	-	-
1980-W360	2444340.71	1980 Apr 11 0500:00	Rocketsonde	-	-	Arcasonde	-	-	-	KMR	-	-	-	70	-	-
1980-W361	2444340.75	1980 Apr 11 0600:00	Rocketsonde	-	-	Arcasonde	-	-	-	KMR	-	-	-	69	-	-
1980-W362	2444340.79	1980 Apr 11 0659:59	Rocketsonde	-	-	Arcasonde	-	-	-	KMR	-	-	-	70	-	-
1980-W363	2444340.85	1980 Apr 11 0920:00	Rocketsonde	-	-	Arcasonde	-	-	-	KMR	-	-	-	69	-	-
1980-W364	2444341.11	1980 Apr 11 1446:00	Rocketsonde	-	-	Arcasonde	-	-	-	THU	-	-	-	63	-	-
1980-W365	2444341.15	1980 Apr 11 1540:00	Rocketsonde	-	-	Arcasonde	-	-	-	ASC	-	-	-	64	-	-
1980-W366	2444341.19	1980 Apr 11 1630:00	Rocketsonde	-	-	Arcasonde	-	-	-	PRIM	-	-	-	46	-	-
1980-W368	2444341.30	1980 Apr 11 1914:59	Rocketsonde	-	-	Arcasonde	-	-	-	SHEM	-	-	-	61	-	-
1980-A17	2444341.38	1980 Apr 11 2100:00	Rocketsonde	-	-	Arcasonde	-	-	-	KMR	-	-	-	61	-	-
1980-W369	2444341.55	1980 Apr 12 0114:59	Rocketsonde	-	-	Arcasonde	-	-	-	ASC	-	-	-	59	-	-
1980-W370	2444344.06	1980 Apr 14 1330:00	Rocketsonde	-	-	Arcasonde	-	-	-	CC	-	-	-	61	-	-
1980-W371	2444344.11	1980 Apr 14 1446:00	Rocketsonde	-	-	Arcasonde	-	-	-	MI	-	-	-	61	-	-
1980-W372	2444344.13	1980 Apr 14 1510:00	Rocketsonde	-	-	Arcasonde	-	-	-	THU	-	-	-	59	-	-
1980-W373	2444344.17	1980 Apr 14 1510:00	Rocketsonde	-	-	Arcasonde	-	-	-	THU	-	-	-	53	-	-
1980-W374	2444344.38	1980 Apr 14 1609:59	Rocketsonde	-	-	Arcasonde	-	-	-	SHEM	-	-	-	56	-	-
1980-W375	2444344.66	1980 Apr 14 2100:00	Rocketsonde	-	-	Arcasonde	-	-	-	PRIM	-	-	-	56	-	-
1980-W376	2444345.19	1980 Apr 15 0335:00	Rocketsonde	-	-	Arcasonde	-	-	-	KMR	-	-	-	61	-	-
1980-W377	2444345.62	1980 Apr 15 1640:00	Rocketsonde	-	-	Arcasonde	-	-	-	THU	-	-	-	67	-	-
1980-W378	2444346.11	1980 Apr 16 1432:00	Rocketsonde	-	-	Arcasonde	-	-	-	CC	-	-	-	61	-	-
1980-W379	2444346.11	1980 Apr 16 1446:00	Rocketsonde	-	-	Arcasonde	-	-	-	ASC	-	-	-	63	-	-
1980-W380	2444346.12	1980 Apr 16 1635:00	Rocketsonde	-	-	Arcasonde	-	-	-	PRIM	-	-	-	63	-	-
1980-W381	2444346.19	1980 Apr 16 1840:00	Rocketsonde	-	-	Arcasonde	-	-	-	THU	-	-	-	69	-	-
1980-W382	2444346.28	1980 Apr 16 1949:59	Rocketsonde	-	-	Arcasonde	-	-	-	PRIM	-	-	-	71	-	-
1980-W383	2444346.60	1980 Apr 16 2130:00	Rocketsonde	-	-	Arcasonde	-	-	-	SHEM	-	-	-	56	-	-
1980-W384	2444346.65	1980 Apr 17 0114:59	Rocketsonde	-	-	Arcasonde	-	-	-	SHEM	-	-	-	66	-	-
1980-W385	2444347.11	1980 Apr 17 1546:00	Rocketsonde	-	-	Arcasonde	-	-	-	KMR	-	-	-	71	-	-
1980-W386	2444348.04	1980 Apr 18 1330:00	Rocketsonde	-	-	Arcasonde	-	-	-	CC	-	-	-	61	-	-
1980-W387	2444348.11	1980 Apr 18 1432:00	Rocketsonde	-	-	Arcasonde	-	-	-	ASC	-	-	-	62	-	-
1980-W388	2444348.19	1980 Apr 18 1540:00	Rocketsonde	-	-	Arcasonde	-	-	-	PRIM	-	-	-	56	-	-
1980-W389	2444348.39	1980 Apr 18 1640:00	Rocketsonde	-	-	Arcasonde	-	-	-	SHEM	-	-	-	59	-	-
1980-W390	2444348.58	1980 Apr 19 0114:59	Rocketsonde	-	-	Arcasonde	-	-	-	SHEM	-	-	-	71	-	-
1980-W391	2444348.58	1980 Apr 19 0114:59	Rocketsonde	-	-	Arcasonde	-	-	-	CC	-	-	-	65	-	-
1980-W392	2444348.58	1980 Apr 19 0114:59	Rocketsonde	-	-	Arcasonde	-	-	-	ASC	-	-	-	65	-	-
1980-W393	2444351.11	1980 Apr 21 1527:59	Rocketsonde	-	-	Arcasonde	-	-	-	THU	-	-	-	67	-	-
1980-W394	2444351.19	1980 Apr 21 1556:59	Rocketsonde	-	-	Arcasonde	-	-	-	PRIM	-	-	-	67	-	-
1980-W395	2444351.19	1980 Apr 21 1556:59	Rocketsonde	-	-	Arcasonde	-	-	-	SHEM	-	-	-	54	-	-
1980-W396	2444351.38	1980 Apr 21 2100:00	Rocketsonde	-	-	Arcasonde	-	-	-	SHEM	-	-	-	54	-	-
1980-W397	2444352.39	1980 Apr 22 2114:59	Rocketsonde	-	-	Arcasonde	-	-	-	MI	-	-	-	77	-	-
1980-W398	2444352.47	1980 Apr 22 2320:00	Rocketsonde	-	-	Arcasonde	-	-	-	MI	-	-	-	75	-	-
1980-W399	2444352.51	1980 Apr 22 0010:00	Rocketsonde	-	-	Arcasonde	-	-	-	MI	-	-	-	75	-	-
1980-W400	2444352.51	1980 Apr 23 0020:00	Rocketsonde	-	-	Arcasonde	-	-	-	MI	-	-	-	75	-	-
1980-W401	2444352.52	1980 Apr 23 0027:59	Rocketsonde	-	-	Arcasonde	-	-	-	KMR	-	-	-	78	-	-
1980-W402	2444352.52	1980 Apr 23 0417:00	Rocketsonde	-	-	Arcasonde	-	-	-	ASC	-	-	-	72	-	-
1980-W403	2444353.68	1980 Apr 23 0417:00	Rocketsonde	-	-	Arcasonde	-	-	-	AIT	-	-	-	72	-	-
1980-W404	2444353.09	1980 Apr 23 1344:59	Rocketsonde	-	-	Arcasonde	-	-	-	ASC	-	-	-	61	-	-
1980-W405	2444353.11	1980 Apr 23 1415:00	Rocketsonde	-	-	Arcasonde	-	-	-	THU	-	-	-	71	-	-
1980-W406	2444353.20	1980 Apr 23 1432:00	Rocketsonde	-	-	Arcasonde	-	-	-	PRIM	-	-	-	62	-	-
1980-W210	2444353.21	1980 Apr 23 1611:00	Rocketsonde	-	-	Arcasonde	-	-	-	HS	-	-	-	98	-	-
1980-W407	2444353.21	1980 Apr 23 1700:00	Rocketsonde	-	-	Arcasonde	-	-	-	MI	-	-	-	98	-	-
1980-W408	2444353.22	1980 Apr 23 1710:00	Rocketsonde	-	-	Arcasonde	-	-	-	CC	-	-	-	73	-	-
1980-W409	2444353.38	1980 Apr 23 2100:00	Rocketsonde	-	-	Arcasonde	-	-	-	SHEM	-	-	-	53	-	-
1980-W410	2444353.63	1980 Apr 24 0303:59	Rocketsonde	-	-	Arcasonde	-	-	-	KMR	-	-	-	78	-	-
1980-W411	2444354.08	1980 Apr 24 1400:00	Rocketsonde	-	-	Arcasonde	-	-	-	HS	-	-	-	69	-	-
1980-W412	2444354.38	1980 Apr 24 2100:00	Rocketsonde	-	-	Arcasonde	-	-	-	HS	-	-	-	75	-	-
1980-W414	2444354.55	1980 Apr 25 0117:00	Rocketsonde	-	-	Arcasonde	-	-	-	KMR	-	-	-	64	-	-
1980-W415	2444355.06	1980 Apr 25 1330:00	Rocketsonde	-	-	Arcasonde	-	-	-	ASC	-	-	-	64	-	-
1980-W416	2444355.10	1980 Apr 25 1430:00	Rocketsonde	-	-	Arcasonde	-	-	-	CC	-	-	-	66	-	-
1980-W417	2444355.32	1980 Apr 25 1934:59	Rocketsonde	-	-	Arcasonde	-	-	-	PRIM	-	-	-	66	-	-
1980-W418	2444355.38	1980 Apr 25 2100:00	Rocketsonde	-	-	Arcasonde	-	-	-	SHEM	-	-	-	63	-	-
1980-W419	2444358.07	1980 Apr 28 1344:59	Rocketsonde	-	-	Arcasonde	-	-	-	CC	-	-	-	64	-	-
1980-W420	2444358.15	1980 Apr 28 1542:00	Rocketsonde	-	-	Arcasonde	-	-	-	ASC	-	-	-	67	-	-
1980-W421	2444358.35	1980 Apr 28 2020:00	Rocketsonde	-	-	Arcasonde	-	-	-	PRIM	-	-	-	52	-	-
1980-W422	2444358.55	1980 Apr 29 0114:59	Rocketsonde	-	-	Arcasonde	-	-	-	SHEM	-	-	-	75	-	-
1980-W423	2444358.55	1980 Apr 29 2040:00	Rocketsonde	-	-	Arcasonde	-	-	-	KMR	-	-	-	56	-	-
1980-W424	2444359.36	1980 Apr 30 1330:00	Rocketsonde	-	-	Arcasonde	-	-	-	SHEM	-	-	-	65	-	-
1980-W425	2444360.06	1980 Apr 30 1430:00	Rocketsonde	-	-	Arcasonde	-	-	-	CC	-	-	-	85	-	-
1980-W221	2444360.10	1980 Apr 30 1526:59	Rocketsonde	-	-	Arcasonde	-	-	-	AI/DMP-9?	-	-	-	62	-	-
1980-W426	2444360.14	1980 Apr 30 1526:59	Rocketsonde	-	-	Arcasonde	-	-	-	ASC	-	-	-	66	-	-
1980-W427	2444360.16	1980 Apr 30 1545:00	Rocketsonde	-	-	Arcasonde	-	-	-	PRIM	-	-	-	66	-	-
1980-W428	2444360.51	1980 May 1 0014:59	Rocketsonde	-	-	Arcasonde	-	-	-	KMR	-	-	-	79	-	-
1980-W429	2444360.64	1980 May 1 0325:59	Rocketsonde	-	-	Arcasonde	-	-	-	KMR	-	-	-	77	-	-



Launch

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Mission	FlightCode	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee_Km	Range_Km	Dest
1980-W490	2444361.34	1980 May 1 20:10:00	Rocketsonde	-	-	Arcasonde	-	-	-	SHEM	-	-	-	50	-	-
1980-W225	2444361.48	1980 May 1 23:27:59	Rocketsonde	-	-	AI/DMP-9	-	-	-	WI	-	-	-	91	-	-
1980-W451	2444361.51	1980 May 2 00:18:00	Rocketsonde	-	-	Arcasonde	-	-	-	WI	-	-	-	76	-	-
1980-W452	2444361.52	1980 May 2 00:22:59	Rocketsonde	-	-	Arcasonde	-	-	-	WI	-	-	-	74	-	-
1980-W453	2444361.52	1980 May 2 00:27:59	Rocketsonde	-	-	Arcasonde	-	-	-	WI	-	-	-	78	-	-
1980-W454	2444362.04	1980 May 2 12:58:59	Rocketsonde	-	-	Arcasonde	-	-	-	ASC	-	-	-	60	-	-
1980-W455	2444362.07	1980 May 2 13:44:59	Rocketsonde	-	-	Arcasonde	-	-	-	CC	LO43	-	-	65	-	-
1980-W456	2444362.08	1980 May 2 14:00:00	Rocketsonde	-	-	Arcasonde	-	-	-	AIT	-	-	-	72	-	-
1980-W457	2444362.28	1980 May 2 19:45:00	Rocketsonde	-	-	Arcasonde	-	-	-	PRIM	-	-	-	65	-	-
1980-A18	2444362.36	1980 May 2 20:45:00	Rocketsonde	-	-	Arcasonde	-	-	-	PH	-	-	-	49	-	-
1980-W458	2444362.39	1980 May 2 21:26:59	Rocketsonde	-	-	Arcasonde	-	-	-	KNR	-	-	-	74	-	-
1980-W459	2444362.62	1980 May 3 03:00:00	Rocketsonde	-	-	Arcasonde	-	-	-	ASC	-	-	-	58	-	-
1980-W440	2444365.06	1980 May 5 13:30:00	Rocketsonde	-	-	Arcasonde	-	-	-	CC	LO43	-	-	57	-	-
1980-W441	2444365.10	1980 May 5 14:25:00	Rocketsonde	-	-	Arcasonde	-	-	-	THU	-	-	-	67	-	-
1980-W442	2444365.12	1980 May 5 14:46:59	Rocketsonde	-	-	Arcasonde	-	-	-	PRIM	-	-	-	65	-	-
1980-W443	2444365.15	1980 May 5 15:34:59	Rocketsonde	-	-	Arcasonde	-	-	-	AIT	-	-	-	72	-	-
1980-W444	2444365.15	1980 May 5 15:40:00	Rocketsonde	-	-	Arcasonde	-	-	-	PRIM	-	-	-	51	-	-
1980-W445	2444365.34	1980 May 5 20:15:00	Rocketsonde	-	-	Arcasonde	-	-	-	KAU	-	-	-	65	-	-
1980-W446	2444365.37	1980 May 5 20:56:00	Rocketsonde	-	-	Arcasonde	-	-	-	ASC	-	-	-	54	-	-
1980-W447	2444367.06	1980 May 7 12:49:59	Rocketsonde	-	-	Arcasonde	-	-	-	ASC	-	-	-	65	-	-
1980-W448	2444367.13	1980 May 7 13:13:59	Rocketsonde	-	-	Arcasonde	-	-	-	AIT	-	-	-	72	-	-
1980-W449	2444367.16	1980 May 7 15:01:59	Rocketsonde	-	-	Arcasonde	-	-	-	THU	-	-	-	69	-	-
1980-W450	2444367.21	1980 May 7 17:00:00	Rocketsonde	-	-	Arcasonde	-	-	-	PRIM	-	-	-	64	-	-
1980-W451	2444367.25	1980 May 7 18:00:00	Rocketsonde	-	-	Arcasonde	-	-	-	CC	LO43	-	-	73	-	-
1980-W452	2444367.33	1980 May 7 20:50:00	Rocketsonde	-	-	Arcasonde	-	-	-	WS	-	-	-	26	-	-
1980-W453	2444367.37	1980 May 7 20:58:00	Rocketsonde	-	-	Arcasonde	-	-	-	PH	-	-	-	53	-	-
1980-W454	2444367.39	1980 May 7 21:22:00	Rocketsonde	-	-	Arcasonde	-	-	-	SHEM	-	-	-	90	-	-
1980-W455	2444366.33	1980 May 8 20:00:00	Rocketsonde	-	-	Arcasonde	-	-	-	PH	-	-	-	73	-	-
1980-W456	2444366.33	1980 May 8 20:00:00	Rocketsonde	-	-	Arcasonde	-	-	-	SHEM	-	-	-	55	-	-
1980-W457	2444366.10	1980 May 9 13:30:00	Rocketsonde	-	-	Arcasonde	-	-	-	AIT	-	-	-	76	-	-
1980-W458	2444366.15	1980 May 9 16:14:59	Rocketsonde	-	-	Arcasonde	-	-	-	ASC	-	-	-	68	-	-
1980-W459	2444366.18	1980 May 9 16:31:00	Rocketsonde	-	-	Arcasonde	-	-	-	ASC	-	-	-	67	-	-
1980-W244	2444366.25	1980 May 9 16:00:00	Rocketsonde	-	-	Arcasonde	-	-	-	PH	LO43	-	-	90	-	-
1980-W460	2444366.35	1980 May 9 20:25:00	Rocketsonde	-	-	Arcasonde	-	-	-	CC	-	-	-	64	-	-
1980-W461	2444369.40	1980 May 9 21:23:00	Rocketsonde	-	-	Arcasonde	-	-	-	KAU	-	-	-	60	-	-
1980-W462	2444372.07	1980 May 12 13:44:59	Rocketsonde	-	-	Arcasonde	-	-	-	KNR	-	-	-	57	-	-
1980-W463	2444372.12	1980 May 12 14:47:00	Rocketsonde	-	-	Arcasonde	-	-	-	ASC	-	-	-	72	-	-
1980-W464	2444372.19	1980 May 12 16:30:00	Rocketsonde	-	-	Arcasonde	-	-	-	THU	-	-	-	76	-	-
1980-W465	2444372.26	1980 May 12 18:20:00	Rocketsonde	-	-	Arcasonde	-	-	-	PRIM	-	-	-	57	-	-
1980-A18	2444372.26	1980 May 12 18:20:00	Rocketsonde	-	-	Arcasonde	-	-	-	AIT	-	-	-	76	-	-
1980-W466	2444372.28	1980 May 12 18:26:59	Rocketsonde	-	-	Arcasonde	-	-	-	ASC	-	-	-	36	-	-
1980-W467	2444372.28	1980 May 12 18:20:00	Rocketsonde	-	-	Arcasonde	-	-	-	ASC	-	-	-	52	-	-
1980-W468	2444372.28	1980 May 12 18:20:00	Rocketsonde	-	-	Arcasonde	-	-	-	ASC	-	-	-	52	-	-
1980-W469	2444372.37	1980 May 12 20:00:00	Rocketsonde	-	-	Arcasonde	-	-	-	SHEM	-	-	-	91	-	-
1980-W470	2444372.37	1980 May 12 20:00:00	Rocketsonde	-	-	Arcasonde	-	-	-	KNR	-	-	-	60	-	-
1980-W471	2444372.37	1980 May 12 20:00:00	Rocketsonde	-	-	Arcasonde	-	-	-	KAU	-	-	-	54	-	-
1980-W472	2444373.33	1980 May 13 03:08:00	Rocketsonde	-	-	Arcasonde	-	-	-	SHEM	-	-	-	74	-	-
1980-W473	2444373.41	1980 May 13 20:00:00	Rocketsonde	-	-	Arcasonde	-	-	-	SHEM	-	-	-	71	-	-
1980-W474	2444374.07	1980 May 14 13:44:59	Rocketsonde	-	-	Arcasonde	-	-	-	THU	-	-	-	70	-	-
1980-W475	2444374.17	1980 May 14 15:07:59	Rocketsonde	-	-	Arcasonde	-	-	-	PRIM	-	-	-	63	-	-
1980-W476	2444374.21	1980 May 14 15:07:59	Rocketsonde	-	-	Arcasonde	-	-	-	CC	-	-	-	63	-	-
1980-W254	2444374.26	1980 May 14 18:00:00	Rocketsonde	-	-	Arcasonde	-	-	-	CC	LO43	-	-	70	-	-
1980-W255	2444374.26	1980 May 14 18:00:00	Rocketsonde	-	-	Arcasonde	-	-	-	VS	-	-	-	58	-	-
1980-W256	2444374.26	1980 May 14 18:00:00	Rocketsonde	-	-	Arcasonde	-	-	-	PH	-	-	-	86	-	-
1980-W257	2444374.31	1980 May 14 19:05:59	Rocketsonde	-	-	Arcasonde	-	-	-	PH	-	-	-	86	-	-
1980-W477	2444374.31	1980 May 14 19:05:59	Rocketsonde	-	-	Arcasonde	-	-	-	KNR	-	-	-	71	-	-
1980-W478	2444374.46	1980 May 14 22:56:59	Rocketsonde	-	-	Arcasonde	-	-	-	PH	-	-	-	77	-	-
1980-W479	2444375.21	1980 May 15 17:00:00	Rocketsonde	-	-	Arcasonde	-	-	-	CC	LO43	-	-	70	-	-
1980-W480	2444375.50	1980 May 16 00:07:00	Rocketsonde	-	-	Arcasonde	-	-	-	CC	-	-	-	78	-	-
1980-W266	2444375.51	1980 May 16 00:11:59	Rocketsonde	-	-	Arcasonde	-	-	-	VI	-	-	-	82	-	-
1980-W481	2444375.51	1980 May 16 00:17:00	Rocketsonde	-	-	Arcasonde	-	-	-	VI	-	-	-	77	-	-
1980-W482	2444375.66	1980 May 16 13:30:00	Rocketsonde	-	-	Arcasonde	-	-	-	VI	-	-	-	63	-	-
1980-W483	2444376.06	1980 May 16 14:30:00	Rocketsonde	-	-	Arcasonde	-	-	-	ASC	-	-	-	66	-	-
1980-W484	2444376.11	1980 May 16 14:30:00	Rocketsonde	-	-	Arcasonde	-	-	-	CC	LO43	-	-	70	-	-
1980-W485	2444376.17	1980 May 16 16:00:59	Rocketsonde	-	-	Arcasonde	-	-	-	THU	-	-	-	53	-	-
1980-W486	2444376.37	1980 May 16 20:53:00	Rocketsonde	-	-	Arcasonde	-	-	-	PRIM	-	-	-	58	-	-
1980-W487	2444376.37	1980 May 16 20:53:00	Rocketsonde	-	-	Arcasonde	-	-	-	KAU	-	-	-	58	-	-
1980-W488	2444379.10	1980 May 19 14:27:59	Rocketsonde	-	-	Arcasonde	-	-	-	THU	-	-	-	73	-	-
1980-W489	2444379.14	1980 May 19 15:19:00	Rocketsonde	-	-	Arcasonde	-	-	-	ASC	-	-	-	63	-	-
1980-W490	2444379.18	1980 May 19 16:21:59	Rocketsonde	-	-	Arcasonde	-	-	-	PH	-	-	-	73	-	-
1980-W491	2444379.21	1980 May 19 17:00:00	Rocketsonde	-	-	Arcasonde	-	-	-	CC	LO43	-	-	68	-	-
1980-W492	2444379.27	1980 May 19 18:30:00	Rocketsonde	-	-	Arcasonde	-	-	-	CC	-	-	-	58	-	-
1980-W493	2444379.37	1980 May 19 20:53:00	Rocketsonde	-	-	Arcasonde	-	-	-	PRIM	-	-	-	68	-	-
1980-W494	2444379.59	1980 May 20 02:04:59	Rocketsonde	-	-	Arcasonde	-	-	-	KAU	-	-	-	58	-	-
1980-W495	2444379.67	1980 May 20 02:45:00	Rocketsonde	-	-	Arcasonde	-	-	-	CC	LO43	-	-	72	-	-
1980-W262	2444380.07	1980 May 20 13:44:59	Rocketsonde	-	-	Arcasonde	-	-	-	CC	-	-	-	90	-	-
1980-W496	2444380.09	1980 May 21 03:03:59	Rocketsonde	-	-	Arcasonde	-	-	-	VI	-	-	-	76	-	-
1980-W497	2444380.63	1980 May 21 13:44:59	Rocketsonde	-	-	Arcasonde	-	-	-	KNR	-	-	-	73	-	-
1980-W500	2444381.07	1980 May 21 14:30:00	Rocketsonde	-	-	Arcasonde	-	-	-	ASC	-	-	-	65	-	-
1980-W501	2444381.12	1980 May 21 14:30:00	Rocketsonde	-	-	Arcasonde	-	-	-	CC	LO43	-	-	60	-	-
1980-W502	2444381.12	1980 May 21 14:30:00	Rocketsonde	-	-	Arcasonde	-	-	-	CC	-	-	-	69	-	-
1980-W503	2444381.27	1980 May 21 14:48:59	Rocketsonde	-	-	Arcasonde	-	-	-	THU	-	-	-	74	-	-
1980-W504	2444381.41	1980 May 21 18:17:00	Rocketsonde	-	-	Arcasonde	-	-	-	PH	-	-	-	76	-	-
1980-W505	2444381.41	1980 May 21 21:45:00	Rocketsonde	-	-	Arcasonde	-	-	-	AIT	-	-	-	73	-	-
1980-W506	2444382.00	1980 May 22 12:00:00	Rocketsonde	-	-	Arcasonde	-	-	-	KNR	-	-	-	65	-	-
1980-W507	2444382.41	1980 May 22 21:45:00	Rocketsonde	-	-	Arcasonde	-	-	-	WS	-	-	-	76	-	-
1980-W508	2444383.06	1980 May 23 13:30:00	Rocketsonde	-	-	Arcasonde	-	-	-	KNR	-	-	-	62	-	-
1980-W509	2444383.07	1980 May 23 13:44:59	Rocketsonde	-	-	Arcasonde	-	-	-	ASC	-	-	-	61	-	-
1980-W510	2444383.08	1980 May 23 13:49:59	Rocketsonde	-	-	Arcasonde	-	-	-	CC	LO43	-	-	75	-	-
1980-W511	2444383.08	1980 May 23 14:00:00	Rocketsonde	-	-	Arcasonde	-	-	-	AIT	-	-	-	64	-	-

Launch

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Mission	FlightCode	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_L_Pad	Apogee_Km	Range_Km	Dest
1980-4511	2444383.11	1980 May 23 1435:00	Rocketsonde	-	-	Arcasonde	-	-	-	THU	-	-	-	62	-	-
1980-4513	2444386.28	1980 May 26 1847:59	Rocketsonde	-	-	Arcasonde	-	-	-	PRIM	-	-	-	67	-	-
1980-4514	2444386.35	1980 May 26 2030:00	Rocketsonde	-	-	AI/DMP-9	-	-	-	WI	-	-	-	90	-	-
1980-4514	2444386.38	1980 May 26 2104:59	Rocketsonde	-	-	Arcasonde	-	-	-	WI	-	-	-	74	-	-
1980-4514	2444387.04	1980 May 27 1259:59	Rocketsonde	-	-	AI/DMP-9	-	-	-	ASC	-	-	-	86	-	-
1980-4516	2444387.10	1980 May 27 1430:00	Rocketsonde	-	-	Arcasonde	-	-	-	AIT	-	-	-	70	-	-
1980-4518	2444387.38	1980 May 27 2100:00	Rocketsonde	-	-	Arcasonde	-	-	-	KAU	-	-	-	54	-	-
1980-4521	2444387.62	1980 May 28 0247:00	Rocketsonde	-	-	Arcasonde	-	-	-	KHR	-	-	-	75	-	-
1980-4522	2444388.06	1980 May 28 1330:00	Rocketsonde	-	-	Arcasonde	-	-	-	AIT	-	-	-	74	-	-
1980-4523	2444388.07	1980 May 28 1344:59	Rocketsonde	-	-	Arcasonde	-	-	-	WI	-	-	-	60	-	-
1980-4524	2444388.10	1980 May 28 1423:00	Rocketsonde	-	-	Arcasonde	-	-	-	CC	LO43	-	-	73	-	-
1980-4525	2444388.11	1980 May 28 1430:00	Rocketsonde	-	-	Arcasonde	-	-	-	AIT	-	-	-	73	-	-
1980-4526	2444388.11	1980 May 28 1437:59	Rocketsonde	-	-	Arcasonde	-	-	-	THU	-	-	-	54	-	-
1980-4526	2444388.15	1980 May 28 1530:00	Rocketsonde	-	-	AI/DMP-9	-	-	-	PH	-	-	-	90	-	-
1980-4527	2444388.16	1980 May 28 1556:00	Rocketsonde	-	-	Arcasonde	-	-	-	PH	-	-	-	70	-	-
1980-4528	2444388.19	1980 May 28 1640:00	Rocketsonde	-	-	Arcasonde	-	-	-	Arcasonde	-	-	-	66	-	-
1980-4530	2444389.15	1980 May 29 1540:00	Rocketsonde	-	-	Arcasonde	-	-	-	PRIM	-	-	-	53	-	-
1980-4531	2444389.29	1980 May 29 1859:59	Rocketsonde	-	-	AI/DMP-9	-	-	-	WS	-	-	-	98	-	-
1980-4532	2444390.61	1980 May 30 0245:00	Rocketsonde	-	-	Arcasonde	-	-	-	KHR	-	-	-	74	-	-
1980-4532	2444390.06	1980 May 30 0245:00	Rocketsonde	-	-	Arcasonde	-	-	-	ASC	-	-	-	63	-	-
1980-4533	2444390.11	1980 May 30 1400:00	Rocketsonde	-	-	Arcasonde	-	-	-	WI	-	-	-	90	-	-
1980-4533	2444390.13	1980 May 30 1438:59	Rocketsonde	-	-	Arcasonde	-	-	-	THU	LO43	-	-	72	-	-
1980-4534	2444390.26	1980 May 30 1510:00	Rocketsonde	-	-	Arcasonde	-	-	-	CC	-	-	-	37	-	-
1980-4534	2444390.26	1980 May 30 1510:00	Rocketsonde	-	-	Arcasonde	-	-	-	AIT	-	-	-	70	-	-
1980-4534	2444392.53	1980 Jun 2 1015:59	Rocketsonde	-	-	Arcasonde	-	-	-	ASC	-	-	-	64	-	-
1980-4534	2444393.52	1980 Jun 2 1534:59	Rocketsonde	-	-	AI/DMP-9	-	-	-	WI	-	-	-	91	-	-
1980-4534	2444394.35	1980 Jun 2 1944:59	Rocketsonde	-	-	Arcasonde	-	-	-	CC	LO43	-	-	62	-	-
1980-4534	2444395.07	1980 Jun 2 1426:00	Rocketsonde	-	-	Arcasonde	-	-	-	WI	-	-	-	75	-	-
1980-4540	2444393.16	1980 Jun 2 1549:59	Rocketsonde	-	-	Arcasonde	-	-	-	AIT	-	-	-	72	-	-
1980-4541	2444395.16	1980 Jun 2 1549:59	Rocketsonde	-	-	Arcasonde	-	-	-	PH	-	-	-	74	-	-
1980-4542	2444395.17	1980 Jun 2 1659:59	Rocketsonde	-	-	Arcasonde	-	-	-	KHR	-	-	-	53	-	-
1980-4542	2444395.52	1980 Jun 2 2050:00	Rocketsonde	-	-	Arcasonde	-	-	-	SHEM	-	-	-	78	-	-
1980-4543	2444396.40	1980 Jun 2 1531:00	Rocketsonde	-	-	Arcasonde	-	-	-	ASC	-	-	-	62	-	-
1980-4544	2444396.44	1980 Jun 2 1635:59	Rocketsonde	-	-	Arcasonde	-	-	-	PH	-	-	-	88	-	-
1980-4544	2444396.54	1980 Jun 2 1531:00	Rocketsonde	-	-	Arcasonde	-	-	-	ASC	LO43	-	-	49	-	-
1980-4549	2444397.06	1980 Jun 4 1265:00	Rocketsonde	-	-	Arcasonde	-	-	-	CC	-	-	-	70	-	-
1980-4551	2444396.21	1980 Jun 4 1700:00	Rocketsonde	-	-	Arcasonde	-	-	-	AIT	-	-	-	74	-	-
1980-4551	2444396.23	1980 Jun 4 1700:00	Rocketsonde	-	-	Arcasonde	-	-	-	THU	-	-	-	64	-	-
1980-4552	2444396.28	1980 Jun 4 1400:00	Rocketsonde	-	-	Arcasonde	-	-	-	PRIM	-	-	-	58	-	-
1980-4552	2444396.33	1980 Jun 4 1501:59	Rocketsonde	-	-	Arcasonde	-	-	-	CC	LO43	-	-	84	-	-
1980-4552	2444396.35	1980 Jun 4 2000:00	Rocketsonde	-	-	Arcasonde	-	-	-	THU	-	-	-	53	-	-
1980-4551	2444396.36	1980 Jun 4 2100:00	Rocketsonde	-	-	Arcasonde	-	-	-	SHEM	-	-	-	82	-	-
1980-4554	2444396.40	1980 Jun 4 1531:00	Rocketsonde	-	-	Arcasonde	-	-	-	KAU	-	-	-	60	-	-
1980-4554	2444396.44	1980 Jun 4 1635:59	Rocketsonde	-	-	Arcasonde	-	-	-	KHR	-	-	-	88	-	-
1980-4559	2444397.04	1980 Jun 6 1330:00	Rocketsonde	-	-	Arcasonde	-	-	-	ASC	-	-	-	65	-	-
1980-4559	2444397.06	1980 Jun 6 1522:00	Rocketsonde	-	-	Arcasonde	-	-	-	CC	LO43	-	-	52	-	-
1980-4559	2444397.08	1980 Jun 6 1522:00	Rocketsonde	-	-	Arcasonde	-	-	-	AIT	-	-	-	70	-	-
1980-4559	2444397.23	1980 Jun 6 2115:59	Rocketsonde	-	-	Arcasonde	-	-	-	THU	-	-	-	54	-	-
1980-4561	2444397.33	1980 Jun 6 2000:00	Rocketsonde	-	-	Arcasonde	-	-	-	KHR	-	-	-	77	-	-
1980-4561	2444397.35	1980 Jun 6 2130:00	Rocketsonde	-	-	Arcasonde	-	-	-	KAU	-	-	-	60	-	-
1980-4562	2444397.35	1980 Jun 6 2130:00	Rocketsonde	-	-	Arcasonde	-	-	-	KHR	-	-	-	70	-	-
1980-4562	2444397.69	1980 Jun 7 0307:00	Rocketsonde	-	-	Arcasonde	-	-	-	ASC	-	-	-	61	-	-
1980-4564	2444400.03	1980 Jun 9 1245:59	Rocketsonde	-	-	Arcasonde	-	-	-	CC	LO43	-	-	74	-	-
1980-4564	2444400.07	1980 Jun 9 1344:59	Rocketsonde	-	-	Arcasonde	-	-	-	THU	-	-	-	67	-	-
1980-4566	2444400.13	1980 Jun 9 1503:59	Rocketsonde	-	-	Arcasonde	-	-	-	WI	-	-	-	62	-	-
1980-4566	2444400.14	1980 Jun 9 1517:00	Rocketsonde	-	-	Arcasonde	-	-	-	PRIM	-	-	-	70	-	-
1980-4567	2444400.14	1980 Jun 9 1617:00	Rocketsonde	-	-	Arcasonde	-	-	-	PM	-	-	-	65	-	-
1980-4569	2444400.19	1980 Jun 9 1630:00	Rocketsonde	-	-	Arcasonde	-	-	-	AIT	-	-	-	73	-	-
1980-4570	2444400.23	1980 Jun 9 1730:00	Rocketsonde	-	-	Arcasonde	-	-	-	SHEM	-	-	-	46	-	-
1980-4571	2444400.26	1980 Jun 9 1811:59	Rocketsonde	-	-	Arcasonde	-	-	-	KAU	-	-	-	44	-	-
1980-4573	2444400.33	1980 Jun 9 2059:00	Rocketsonde	-	-	Arcasonde	-	-	-	ASC	-	-	-	62	-	-
1980-423	2444400.37	1980 Jun 11 1077:59	Rocketsonde	-	-	Arcasonde	-	-	-	AIT	-	-	-	73	-	-
1980-4575	2444401.94	1980 Jun 11 1330:00	Rocketsonde	-	-	Arcasonde	-	-	-	WI	-	-	-	74	-	-
1980-424	2444402.06	1980 Jun 11 1330:00	Rocketsonde	-	-	Arcasonde	-	-	-	CC	LO43	-	-	65	-	-
1980-4576	2444402.07	1980 Jun 11 1345:59	Rocketsonde	-	-	Arcasonde	-	-	-	AIT	-	-	-	62	-	-
1980-4577	2444402.07	1980 Jun 11 1345:59	Rocketsonde	-	-	Arcasonde	-	-	-	THU	-	-	-	68	-	-
1980-4578	2444402.10	1980 Jun 11 1430:00	Rocketsonde	-	-	AI/DMP-97	-	-	-	CC	LO43	-	-	70	-	-
1980-4579	2444402.11	1980 Jun 11 1435:00	Rocketsonde	-	-	Arcasonde	-	-	-	THU	-	-	-	68	-	-
1980-4580	2444402.15	1980 Jun 11 1536:59	Rocketsonde	-	-	Arcasonde	-	-	-	PM	-	-	-	90	-	-
1980-4580	2444402.19	1980 Jun 11 1627:59	Rocketsonde	-	-	AI/DMP-9	-	-	-	PM	-	-	-	70	-	-
1980-4581	2444402.20	1980 Jun 11 1910:59	Rocketsonde	-	-	AI/DMP-9	-	-	-	WS	-	-	-	98	-	-
1980-4581	2444402.33	1980 Jun 11 2000:00	Rocketsonde	-	-	Arcasonde	-	-	-	SHEM	-	-	-	54	-	-
1980-4581	2444402.39	1980 Jun 11 2122:59	Rocketsonde	-	-	AI/DMP-97	-	-	-	KAU	-	-	-	90	-	-
1980-4582	2444402.41	1980 Jun 11 2146:59	Rocketsonde	-	-	Arcasonde	-	-	-	KHR	-	-	-	56	-	-
1980-4584	2444403.12	1980 Jun 12 1500:00	Rocketsonde	-	-	Arcasonde	-	-	-	PRIM	-	-	-	75	-	-
1980-4586	2444404.07	1980 Jun 13 1344:59	Rocketsonde	-	-	Arcasonde	-	-	-	CC	LO43	-	-	60	-	-
1980-4587	2444404.13	1980 Jun 13 1501:59	Rocketsonde	-	-	Arcasonde	-	-	-	THU	-	-	-	70	-	-
1980-4588	2444404.14	1980 Jun 13 1526:59	Rocketsonde	-	-	Arcasonde	-	-	-	ASC	-	-	-	62	-	-
1980-4588	2444404.15	1980 Jun 13 1530:00	Rocketsonde	-	-	Arcasonde	-	-	-	AIT	-	-	-	72	-	-
1980-4589	2444404.29	1980 Jun 13 1901:59	Rocketsonde	-	-	Arcasonde	-	-	-	PM	-	-	-	71	-	-
1980-4590	2444404.38	1980 Jun 13 2100:00	Rocketsonde	-	-	Arcasonde	-	-	-	KAU	-	-	-	52	-	-
1980-4591	2444404.52	1980 Jun 14 0032:00	Rocketsonde	-	-	Arcasonde	-	-	-	KHR	-	-	-	76	-	-
1980-4592	2444404.71	1980 Jun 14 0500:00	Rocketsonde	-	-	Arcasonde	-	-	-	WS	-	-	-	67	-	-
1980-4593	2444407.06	1980 Jun 16 1330:00	Rocketsonde	-	-	Arcasonde	-	-	-	ASC	-	-	-	64	-	-
1980-4594	2444407.07	1980 Jun 16 1344:59	Rocketsonde	-	-	Arcasonde	-	-	-	CC	LO43	-	-	61	-	-

Launch

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Mission	FlightCode	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee_Km	Range_Km	Dest
1980-4595	2444407.11	1980 Jun 16 14:38:59	Rocketsonde	-	-	Arcasonde	-	-	-	THU	-	-	-	71	-	-
1980-4596	2444407.19	1980 Jun 16 16:30:00	Rocketsonde	-	-	Arcasonde	-	-	-	PRM	-	-	-	55	-	-
1980-4597	2444407.22	1980 Jun 16 17:12:00	Rocketsonde	-	-	Arcasonde	-	-	-	PH	-	-	-	75	-	-
1980-4598	2444407.38	1980 Jun 16 21:00:00	Rocketsonde	-	-	Arcasonde	-	-	-	KAU	-	-	-	57	-	-
1980-4599	2444407.58	1980 Jun 17 02:01:00	Rocketsonde	-	-	Arcasonde	-	-	-	KHR	-	-	-	58	-	-
1980-4600	2444408.20	1980 Jun 17 16:46:59	Rocketsonde	-	-	Arcasonde	-	-	-	PRM	-	-	-	58	-	-
1980-4601	2444409.06	1980 Jun 18 13:30:00	Rocketsonde	-	-	Arcasonde	-	-	-	CC	L043	-	-	61	-	-
1980-4602	2444409.07	1980 Jun 18 13:44:59	Rocketsonde	-	-	Arcasonde	-	-	-	ASC	-	-	-	61	-	-
1980-4603	2444409.10	1980 Jun 18 14:30:00	Rocketsonde	-	-	Arcasonde	-	-	-	CC	L043	-	-	74	-	-
1980-4604	2444409.11	1980 Jun 18 14:43:00	Rocketsonde	-	-	Arcasonde	-	-	-	THU	-	-	-	73	-	-
1980-4605	2444409.17	1980 Jun 18 15:59:59	Rocketsonde	-	-	Arcasonde	-	-	-	WS	-	-	-	98	-	-
1980-4606	2444409.33	1980 Jun 18 19:56:59	Rocketsonde	-	-	Arcasonde	-	-	-	AIT	-	-	-	72	-	-
1980-4607	2444409.36	1980 Jun 18 20:35:00	Rocketsonde	-	-	Arcasonde	-	-	-	PH	-	-	-	66	-	-
1980-4608	2444410.53	1980 Jun 20 00:40:00	Rocketsonde	-	-	Arcasonde	-	-	-	PH	-	-	-	71	-	-
1980-4609	2444410.53	1980 Jun 20 00:40:00	Rocketsonde	-	-	Arcasonde	-	-	-	KHR	-	-	-	74	-	-
1980-4610	2444410.93	1980 Jun 20 02:25:59	Rocketsonde	-	-	Arcasonde	-	-	-	ASC	-	-	-	62	-	-
1980-4611	2444411.07	1980 Jun 20 13:41:00	Rocketsonde	-	-	Arcasonde	-	-	-	AIT	-	-	-	66	-	-
1980-4612	2444411.07	1980 Jun 20 13:44:59	Rocketsonde	-	-	Arcasonde	-	-	-	CC	L043	-	-	61	-	-
1980-4613	2444411.09	1980 Jun 20 14:05:00	Rocketsonde	-	-	Arcasonde	-	-	-	WI	-	-	-	91	-	-
1980-4614	2444411.10	1980 Jun 20 14:23:00	Rocketsonde	-	-	Arcasonde	-	-	-	THU	-	-	-	75	-	-
1980-4615	2444411.25	1980 Jun 20 18:05:00	Rocketsonde	-	-	Arcasonde	-	-	-	THU	-	-	-	69	-	-
1980-4616	2444413.07	1980 Jun 23 13:44:59	Rocketsonde	-	-	Arcasonde	-	-	-	CC	L043	-	-	60	-	-
1980-4617	2444414.13	1980 Jun 23 15:03:59	Rocketsonde	-	-	Arcasonde	-	-	-	THU	-	-	-	71	-	-
1980-4618	2444414.14	1980 Jun 23 15:23:59	Rocketsonde	-	-	Arcasonde	-	-	-	ASC	-	-	-	63	-	-
1980-4619	2444414.35	1980 Jun 25 14:10:00	Rocketsonde	-	-	Arcasonde	-	-	-	PH	-	-	-	72	-	-
1980-4620	2444414.41	1980 Jun 25 21:44:00	Rocketsonde	-	-	Arcasonde	-	-	-	KHR	-	-	-	76	-	-
1980-4621	2444414.60	1980 Jun 24 02:22:00	Rocketsonde	-	-	Arcasonde	-	-	-	KHR	-	-	-	77	-	-
1980-4622	2444415.12	1980 Jun 24 15:00:00	Rocketsonde	-	-	Arcasonde	-	-	-	PRM	-	-	-	56	-	-
1980-4623	2444415.52	1980 Jun 25 00:30:00	Rocketsonde	-	-	Arcasonde	-	-	-	KHR	-	-	-	77	-	-
1980-4624	2444415.93	1980 Jun 25 10:15:59	Rocketsonde	-	-	Arcasonde	-	-	-	ASC	L043	-	-	61	-	-
1980-4625	2444416.05	1980 Jun 25 13:14:59	Rocketsonde	-	-	Arcasonde	-	-	-	CC	L043	-	-	85	-	-
1980-4626	2444416.09	1980 Jun 25 14:10:00	Rocketsonde	-	-	Arcasonde	-	-	-	CC	-	-	-	61	-	-
1980-4627	2444416.10	1980 Jun 25 14:21:00	Rocketsonde	-	-	Arcasonde	-	-	-	THU	-	-	-	71	-	-
1980-4628	2444416.18	1980 Jun 25 16:17:00	Rocketsonde	-	-	Arcasonde	-	-	-	PRM	-	-	-	65	-	-
1980-4629	2444416.35	1980 Jun 25 20:19:00	Rocketsonde	-	-	Arcasonde	-	-	-	PH	-	-	-	70	-	-
1980-4630	2444416.52	1980 Jun 26 09:00:00	Rocketsonde	-	-	Arcasonde	-	-	-	PRM	-	-	-	77	-	-
1980-4631	2444417.13	1980 Jun 26 15:11:59	Rocketsonde	-	-	Arcasonde	-	-	-	PRM	-	-	-	64	-	-
1980-4632	2444417.51	1980 Jun 27 07:30:00	Rocketsonde	-	-	Arcasonde	-	-	-	ASC	L043	-	-	85	-	-
1980-4633	2444417.57	1980 Jun 27 09:49:59	Rocketsonde	-	-	Arcasonde	-	-	-	THU	-	-	-	71	-	-
1980-4634	2444418.08	1980 Jun 27 14:00:00	Rocketsonde	-	-	Arcasonde	-	-	-	CC	-	-	-	60	-	-
1980-4635	2444418.13	1980 Jun 27 15:03:59	Rocketsonde	-	-	Arcasonde	-	-	-	THU	-	-	-	71	-	-
1980-4636	2444418.24	1980 Jun 27 17:40:00	Rocketsonde	-	-	Arcasonde	-	-	-	SHEN	-	-	-	72	-	-
1980-4637	2444418.54	1980 Jun 30 15:29:00	Rocketsonde	-	-	Arcasonde	-	-	-	CCU	-	-	-	56	-	-
1980-4638	2444421.10	1980 Jun 30 15:29:00	Rocketsonde	-	-	Arcasonde	-	-	-	ASC	-	-	-	58	-	-
1980-4639	2444421.16	1980 Jun 30 16:10:00	Rocketsonde	-	-	Arcasonde	-	-	-	PH	-	-	-	63	-	-
1980-4640	2444421.16	1980 Jun 30 16:10:00	Rocketsonde	-	-	Arcasonde	-	-	-	ASC	-	-	-	63	-	-
1980-4641	2444421.34	1980 Jun 30 20:00:00	Rocketsonde	-	-	Arcasonde	-	-	-	SHEN	-	-	-	52	-	-
1980-4642	2444421.34	1980 Jun 30 20:00:00	Rocketsonde	-	-	Arcasonde	-	-	-	KHR	-	-	-	52	-	-
1980-4643	2444421.53	1980 Jun 30 08:45:00	Rocketsonde	-	-	Arcasonde	-	-	-	SHEN	-	-	-	55	-	-
1980-4644	2444422.24	1980 Jun 1 20:45:59	Rocketsonde	-	-	Arcasonde	-	-	-	SHEN	-	-	-	55	-	-
1980-4645	2444422.26	1980 Jun 1 20:30:00	Rocketsonde	-	-	Arcasonde	-	-	-	CC	-	-	-	60	-	-
1980-4646	2444423.06	1980 Jun 2 13:24:59	Rocketsonde	-	-	Arcasonde	-	-	-	CC	L043	-	-	48	-	-
1980-4647	2444423.07	1980 Jun 2 13:24:59	Rocketsonde	-	-	Arcasonde	-	-	-	AIT	-	-	-	67	-	-
1980-4648	2444423.10	1980 Jun 2 14:30:00	Rocketsonde	-	-	Arcasonde	-	-	-	CC	L043	-	-	67	-	-
1980-4649	2444423.13	1980 Jun 2 15:10:00	Rocketsonde	-	-	Arcasonde	-	-	-	THU	-	-	-	70	-	-
1980-4650	2444423.14	1980 Jun 2 15:20:59	Rocketsonde	-	-	Arcasonde	-	-	-	ASC	-	-	-	59	-	-
1980-4651	2444423.17	1980 Jun 2 15:50:59	Rocketsonde	-	-	Arcasonde	-	-	-	WS	-	-	-	68	-	-
1980-4652	2444423.24	1980 Jun 2 17:43:00	Rocketsonde	-	-	Arcasonde	-	-	-	PH	-	-	-	98	-	-
1980-4653	2444423.40	1980 Jun 2 22:00:59	Rocketsonde	-	-	Arcasonde	-	-	-	ASC	-	-	-	68	-	-
1980-4654	2444423.50	1980 Jun 3 09:00:59	Rocketsonde	-	-	Arcasonde	-	-	-	SHEN	-	-	-	73	-	-
1980-4655	2444424.39	1980 Jun 3 21:27:00	Rocketsonde	-	-	Arcasonde	-	-	-	SHEN	-	-	-	77	-	-
1980-4656	2444424.35	1980 Jun 4 20:30:00	Rocketsonde	-	-	Arcasonde	-	-	-	SHEN	-	-	-	52	-	-
1980-4657	2444428.04	1980 Jun 7 12:53:00	Rocketsonde	-	-	Arcasonde	-	-	-	KHR	-	-	-	55	-	-
1980-4658	2444428.06	1980 Jun 7 13:24:59	Rocketsonde	-	-	Arcasonde	-	-	-	ASC	-	-	-	62	-	-
1980-4659	2444428.07	1980 Jun 7 13:24:59	Rocketsonde	-	-	Arcasonde	-	-	-	AIT	-	-	-	67	-	-
1980-4660	2444428.07	1980 Jun 7 14:26:00	Rocketsonde	-	-	Arcasonde	-	-	-	CC	L043	-	-	59	-	-
1980-4661	2444428.10	1980 Jun 7 14:26:00	Rocketsonde	-	-	Arcasonde	-	-	-	THU	-	-	-	70	-	-
1980-4662	2444428.12	1980 Jun 7 15:00:00	Rocketsonde	-	-	Arcasonde	-	-	-	PRM	-	-	-	66	-	-
1980-4663	2444428.25	1980 Jun 7 17:57:00	Rocketsonde	-	-	Arcasonde	-	-	-	PM	-	-	-	70	-	-
1980-4664	2444428.38	1980 Jun 7 21:04:59	Rocketsonde	-	-	Arcasonde	-	-	-	SHEN	-	-	-	54	-	-
1980-4665	2444428.40	1980 Jun 7 21:33:59	Rocketsonde	-	-	Arcasonde	-	-	-	KHR	-	-	-	76	-	-
1980-4666	2444430.07	1980 Jun 9 13:44:59	Rocketsonde	-	-	Arcasonde	-	-	-	AIT	-	-	-	70	-	-
1980-4667	2444430.07	1980 Jun 9 13:44:59	Rocketsonde	-	-	Arcasonde	-	-	-	CC	L043	-	-	58	-	-
1980-4668	2444430.09	1980 Jun 9 14:03:00	Rocketsonde	-	-	Arcasonde	-	-	-	VI	-	-	-	90	-	-
1980-4669	2444430.12	1980 Jun 9 14:48:00	Rocketsonde	-	-	Arcasonde	-	-	-	THU	-	-	-	73	-	-
1980-4670	2444430.16	1980 Jun 9 15:52:00	Rocketsonde	-	-	Arcasonde	-	-	-	PM	-	-	-	72	-	-
1980-4671	2444430.18	1980 Jun 9 16:19:59	Rocketsonde	-	-	Arcasonde	-	-	-	ASC	-	-	-	53	-	-
1980-4672	2444430.33	1980 Jun 10 20:00:00	Rocketsonde	-	-	Arcasonde	-	-	-	SHEN	-	-	-	49	-	-
1980-4673	2444431.33	1980 Jun 11 13:30:00	Rocketsonde	-	-	Arcasonde	-	-	-	CC	L043	-	-	55	-	-
1980-4674	2444432.06	1980 Jun 11 14:30:00	Rocketsonde	-	-	Arcasonde	-	-	-	CC	-	-	-	59	-	-
1980-4675	2444432.10	1980 Jun 11 14:42:00	Rocketsonde	-	-	Arcasonde	-	-	-	PH	-	-	-	73	-	-
1980-4676	2444432.11	1980 Jun 11 15:21:00	Rocketsonde	-	-	Arcasonde	-	-	-	AIT	-	-	-	42	-	-
1980-4677	2444432.14	1980 Jun 11 15:21:00	Rocketsonde	-	-	Arcasonde	-	-	-	CC	L043	-	-	63	-	-
1980-4678	2444432.14	1980 Jun 11 16:13:59	Rocketsonde	-	-	Arcasonde	-	-	-	THU	-	-	-	60	-	-
1980-4679	2444432.25	1980 Jun 11 18:07:00	Rocketsonde	-	-	Arcasonde	-	-	-	PM	-	-	-	71	-	-
1980-4680	2444432.33	1980 Jun 11 20:00:00	Rocketsonde	-	-	Arcasonde	-	-	-	SHEN	-	-	-	45	-	-
1980-4681	2444432.55	1980 Jun 12 01:15:59	Rocketsonde	-	-	Arcasonde	-	-	-	KHR	-	-	-	76	-	-

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Mission	FlightCode	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee_Km	Range_Km	Dest
1980-4677	2444435.07	1980 Jul 14 13:44:59	Rocketsonde	-	-	Arcasonde	-	-	-	ASC	-	-	-	63	-	-
1980-4678	2444435.07	1980 Jul 14 13:44:59	Rocketsonde	-	-	Arcasonde	-	-	-	CC	LO43	-	-	60	-	-
1980-4679	2444435.10	1980 Jul 14 14:30:00	Rocketsonde	-	-	Arcasonde	-	-	-	AIT	-	-	-	72	-	-
1980-4680	2444435.13	1980 Jul 14 15:08:00	Rocketsonde	-	-	Arcasonde	-	-	-	THU	-	-	-	69	-	-
1980-4681	2444435.17	1980 Jul 14 15:59:59	Rocketsonde	-	-	Arcasonde	-	-	-	PRIM	-	-	-	65	-	-
1980-4682	2444435.24	1980 Jul 14 17:38:59	Rocketsonde	-	-	Arcasonde	-	-	-	VI	-	-	-	49	-	-
1980-4239	2444436.33	1980 Jul 15 20:00:00	Rocketsonde	-	-	Arcasonde	-	-	-	SHEM	-	-	-	55	-	-
1980-4683	2444436.33	1980 Jul 15 20:00:00	Rocketsonde	-	-	Arcasonde	-	-	-	SHEM	-	-	-	55	-	-
1980-4684	2444437.06	1980 Jul 16 13:30:00	Rocketsonde	-	-	Arcasonde	-	-	-	ASC	-	-	-	64	-	-
1980-4686	2444437.10	1980 Jul 16 14:21:00	Rocketsonde	-	-	Arcasonde	-	-	-	THU	-	-	-	67	-	-
1980-4687	2444437.14	1980 Jul 16 15:20:00	Rocketsonde	-	-	Arcasonde	-	-	-	AIT	-	-	-	71	-	-
1980-4688	2444437.17	1980 Jul 16 16:07:59	Rocketsonde	-	-	Arcasonde	-	-	-	WS	-	-	-	98	-	-
1980-7344	2444437.29	1980 Jul 16 18:59:59	Rocketsonde	-	-	Arcasonde	-	-	-	SHEM	-	-	-	51	-	-
1980-4689	2444437.36	1980 Jul 16 20:45:00	Rocketsonde	-	-	Arcasonde	-	-	-	KNR	-	-	-	74	-	-
1980-4690	2444437.52	1980 Jul 17 00:27:59	Rocketsonde	-	-	Arcasonde	-	-	-	PRIM	-	-	-	68	-	-
1980-4692	2444438.17	1980 Jul 17 00:59:59	Rocketsonde	-	-	Arcasonde	-	-	-	SHEM	-	-	-	55	-	-
1980-4693	2444438.33	1980 Jul 17 20:00:00	Rocketsonde	-	-	Arcasonde	-	-	-	AIT	-	-	-	60	-	-
1980-4694	2444438.10	1980 Jul 18 14:30:00	Rocketsonde	-	-	Arcasonde	-	-	-	PRIM	-	-	-	58	-	-
1980-4695	2444439.16	1980 Jul 18 15:55:00	Rocketsonde	-	-	Arcasonde	-	-	-	PH	-	-	-	74	-	-
1980-4696	2444439.30	1980 Jul 18 19:08:59	Rocketsonde	-	-	Arcasonde	-	-	-	SHEM	-	-	-	52	-	-
1980-4697	2444439.33	1980 Jul 18 20:00:00	Rocketsonde	-	-	Arcasonde	-	-	-	ASC	-	-	-	62	-	-
1980-4698	2444442.06	1980 Jul 21 13:30:00	Rocketsonde	-	-	Arcasonde	-	-	-	AIT	-	-	-	68	-	-
1980-4699	2444442.14	1980 Jul 21 13:30:00	Rocketsonde	-	-	Arcasonde	-	-	-	SHEM	-	-	-	47	-	-
1980-430	2444442.33	1980 Jul 21 20:00:00	Rocketsonde	-	-	Arcasonde	-	-	-	ASC	LO43	-	-	64	-	-
1980-4700	2444442.43	1980 Jul 21 22:14:59	Rocketsonde	-	-	Arcasonde	-	-	-	CC	LO43	-	-	64	-	-
1980-4702	2444444.06	1980 Jul 23 13:30:00	Rocketsonde	-	-	Arcasonde	-	-	-	THU	-	-	-	68	-	-
1980-1351	2444444.11	1980 Jul 23 14:40:00	Rocketsonde	-	-	Arcasonde	-	-	-	VI	-	-	-	74	-	-
1980-4704	2444444.12	1980 Jul 23 14:47:00	Rocketsonde	-	-	Arcasonde	-	-	-	WI	-	-	-	61	-	-
1980-4705	2444444.14	1980 Jul 23 15:17:00	Rocketsonde	-	-	Arcasonde	-	-	-	AIT	-	-	-	67	-	-
1980-4706	2444444.18	1980 Jul 23 16:14:59	Rocketsonde	-	-	Arcasonde	-	-	-	WS	-	-	-	86	-	-
1980-4708	2444444.25	1980 Jul 23 18:00:00	Rocketsonde	-	-	Arcasonde	-	-	-	PH	-	-	-	85	-	-
1980-1353	2444444.25	1980 Jul 23 18:04:59	Rocketsonde	-	-	Arcasonde	-	-	-	PH	-	-	-	85	-	-
1980-1354	2444444.29	1980 Jul 23 18:56:59	Rocketsonde	-	-	Arcasonde	-	-	-	SHEM	-	-	-	94	-	-
1980-4709	2444444.32	1980 Jul 23 19:54:59	Rocketsonde	-	-	Arcasonde	-	-	-	SHEM	-	-	-	94	-	-
1980-4710	2444444.33	1980 Jul 23 20:00:00	Rocketsonde	-	-	Arcasonde	-	-	-	SHEM	-	-	-	94	-	-
1980-4712	2444445.34	1980 Jul 24 20:04:59	Rocketsonde	-	-	Arcasonde	-	-	-	ASC	-	-	-	64	-	-
1980-4715	2444446.06	1980 Jul 25 13:30:00	Rocketsonde	-	-	Arcasonde	-	-	-	AIT	-	-	-	72	-	-
1980-4716	2444446.09	1980 Jul 25 14:15:00	Rocketsonde	-	-	Arcasonde	-	-	-	THU	-	-	-	52	-	-
1980-4717	2444446.11	1980 Jul 25 14:42:00	Rocketsonde	-	-	Arcasonde	-	-	-	CC	LO43	-	-	70	-	-
1980-4718	2444446.21	1980 Jul 25 17:00:00	Rocketsonde	-	-	Arcasonde	-	-	-	SHEM	-	-	-	84	-	-
1980-4719	2444446.35	1980 Jul 25 20:00:00	Rocketsonde	-	-	Arcasonde	-	-	-	ASC	-	-	-	94	-	-
1980-1357	2444446.52	1980 Jul 28 09:59:59	Rocketsonde	-	-	Arcasonde	-	-	-	AI/DNM-9	-	-	-	67	-	-
1980-4720	2444446.58	1980 Jul 28 09:59:59	Rocketsonde	-	-	Arcasonde	-	-	-	CC	LO43	-	-	67	-	-
1980-4721	2444446.06	1980 Jul 28 14:00:00	Rocketsonde	-	-	Arcasonde	-	-	-	AIT	-	-	-	69	-	-
1980-4722	2444446.19	1980 Jul 28 15:45:00	Rocketsonde	-	-	Arcasonde	-	-	-	THU	-	-	-	89	-	-
1980-4723	2444446.22	1980 Jul 28 15:45:00	Rocketsonde	-	-	Arcasonde	-	-	-	PH	-	-	-	74	-	-
1980-431	2444446.32	1980 Jul 30 05:06:59	Rocketsonde	-	-	Arcasonde	-	-	-	SHEM	-	-	-	45	-	-
1980-4725	2444450.13	1980 Jul 30 05:06:59	Rocketsonde	-	-	Arcasonde	-	-	-	THU	-	-	-	70	-	-
1980-4726	2444450.13	1980 Jul 30 05:06:59	Rocketsonde	-	-	Arcasonde	-	-	-	CC	LO43	-	-	69	-	-
1980-4727	2444451.21	1980 Jul 30 17:35:00	Rocketsonde	-	-	Arcasonde	-	-	-	VS	-	-	-	59	-	-
1980-4728	2444451.23	1980 Jul 30 17:35:00	Rocketsonde	-	-	Arcasonde	-	-	-	CC	LO43	-	-	59	-	-
1980-1360	2444451.25	1980 Jul 30 19:35:00	Rocketsonde	-	-	Arcasonde	-	-	-	ASC	-	-	-	84	-	-
1980-1362	2444451.25	1980 Jul 30 19:35:00	Rocketsonde	-	-	Arcasonde	-	-	-	CC	LO43	-	-	84	-	-
1980-4729	2444451.38	1980 Jul 30 21:30:00	Rocketsonde	-	-	Arcasonde	-	-	-	ASC	-	-	-	85	-	-
1980-4730	2444451.38	1980 Jul 30 21:30:00	Rocketsonde	-	-	Arcasonde	-	-	-	SHEM	-	-	-	85	-	-
1980-4731	2444451.40	1980 Jul 30 21:31:00	Rocketsonde	-	-	Arcasonde	-	-	-	KNR	-	-	-	53	-	-
1980-4732	2444452.02	1980 Jul 31 12:32:00	Rocketsonde	-	-	Arcasonde	-	-	-	VI	-	-	-	71	-	-
1980-4733	2444452.06	1980 Aug 1 13:30:00	Rocketsonde	-	-	Arcasonde	-	-	-	ASC	-	-	-	62	-	-
1980-4734	2444453.07	1980 Aug 1 13:44:59	Rocketsonde	-	-	Arcasonde	-	-	-	CC	LO43	-	-	68	-	-
1980-4735	2444453.11	1980 Aug 1 14:40:00	Rocketsonde	-	-	Arcasonde	-	-	-	THU	-	-	-	70	-	-
1980-4736	2444453.22	1980 Aug 1 17:15:59	Rocketsonde	-	-	Arcasonde	-	-	-	CC	-	-	-	73	-	-
1980-4737	2444453.24	1980 Aug 1 17:15:59	Rocketsonde	-	-	Arcasonde	-	-	-	PH	-	-	-	67	-	-
1980-4738	2444453.34	1980 Aug 1 18:00:00	Rocketsonde	-	-	Arcasonde	-	-	-	AIT	-	-	-	55	-	-
1980-4739	2444453.34	1980 Aug 1 20:04:59	Rocketsonde	-	-	Arcasonde	-	-	-	SHEM	-	-	-	62	-	-
1980-4740	2444453.04	1980 Aug 4 12:53:59	Rocketsonde	-	-	Arcasonde	-	-	-	ASC	-	-	-	58	-	-
1980-4741	2444456.07	1980 Aug 4 13:43:59	Rocketsonde	-	-	Arcasonde	-	-	-	CC	LO43	-	-	58	-	-
1980-4742	2444456.11	1980 Aug 4 14:35:00	Rocketsonde	-	-	Arcasonde	-	-	-	THU	-	-	-	70	-	-
1980-4743	2444456.33	1980 Aug 4 20:00:00	Rocketsonde	-	-	Arcasonde	-	-	-	THU	-	-	-	67	-	-
1980-4744	2444456.38	1980 Aug 4 21:02:59	Rocketsonde	-	-	Arcasonde	-	-	-	PM	-	-	-	71	-	-
1980-4745	2444457.03	1980 Aug 5 13:36:59	Rocketsonde	-	-	Arcasonde	-	-	-	CC	LO43	-	-	56	-	-
1980-4746	2444457.33	1980 Aug 5 20:00:00	Rocketsonde	-	-	Arcasonde	-	-	-	CC	-	-	-	52	-	-
1980-4747	2444458.08	1980 Aug 6 13:30:00	Rocketsonde	-	-	Arcasonde	-	-	-	SHEM	-	-	-	54	-	-
1980-4748	2444458.14	1980 Aug 6 14:22:00	Rocketsonde	-	-	Arcasonde	-	-	-	VI	-	-	-	90	-	-
1980-4749	2444458.14	1980 Aug 6 15:26:59	Rocketsonde	-	-	Arcasonde	-	-	-	THU	-	-	-	67	-	-
1980-4750	2444458.25	1980 Aug 6 18:00:00	Rocketsonde	-	-	Arcasonde	-	-	-	ASC	-	-	-	64	-	-
1980-4751	2444458.33	1980 Aug 6 20:00:00	Rocketsonde	-	-	Arcasonde	-	-	-	VS	-	-	-	53	-	-
1980-4752	2444459.14	1980 Aug 6 19:27:59	Rocketsonde	-	-	Arcasonde	-	-	-	SHEM	-	-	-	64	-	-
1980-4753	2444459.33	1980 Aug 7 15:27:59	Rocketsonde	-	-	Arcasonde	-	-	-	PRIM	-	-	-	84	-	-
1980-4754	2444459.33	1980 Aug 7 20:00:00	Rocketsonde	-	-	Arcasonde	-	-	-	SHEM	-	-	-	73	-	-
1980-4755	2444460.13	1980 Aug 8 15:01:59	Rocketsonde	-	-	Arcasonde	-	-	-	KNR	-	-	-	65	-	-
1980-4756	2444460.25	1980 Aug 8 20:00:00	Rocketsonde	-	-	Arcasonde	-	-	-	AIT	-	-	-	65	-	-
1980-4757	2444460.33	1980 Aug 8 19:04:59	Rocketsonde	-	-	Arcasonde	-	-	-	PRIM	-	-	-	54	-	-
1980-4758	2444460.69	1980 Aug 9 04:30:00	Rocketsonde	-	-	Arcasonde	-	-	-	SHEM	-	-	-	65	-	-
1980-4759	2444463.07	1980 Aug 11 13:44:59	Rocketsonde	-	-	Arcasonde	-	-	-	NS	-	-	-	72	-	-
1980-4760	2444463.07	1980 Aug 11 13:44:59	Rocketsonde	-	-	Arcasonde	-	-	-	NS	-	-	-	72	-	-
1980-4761	2444463.07	1980 Aug 11 13:44:59	Rocketsonde	-	-	Arcasonde	-	-	-	AIT	-	-	-	65	-	-
1980-4762	2444463.07	1980 Aug 11 13:44:59	Rocketsonde	-	-	Arcasonde	-	-	-	THU	LO43	-	-	70	-	-
1980-4763	2444463.18	1980 Aug 11 14:26:59	Rocketsonde	-	-	Arcasonde	-	-	-	CC	-	-	-	59	-	-
1980-4764	2444463.18	1980 Aug 11 16:14:59	Rocketsonde	-	-	Arcasonde	-	-	-	PRIM	-	-	-	59	-	-
1980-4765	2444463.21	1980 Aug 11 17:07:00	Rocketsonde	-	-	Arcasonde	-	-	-	PH	-	-	-	63	-	-

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Mission	FlightCode	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee_Km	Range_Km	Dest
1980-4761	2444463.33	1980 Aug 11 20:00:00	Rocketsonde	-	-	Arcasonde	-	-	-	SHEM	-	-	-	54	-	-
1980-4762	2444464.33	1980 Aug 12 20:00:00	Rocketsonde	-	-	Arcasonde	-	-	-	SHEM	-	-	-	56	-	-
1980-4763	2444465.11	1980 Aug 13 14:42:00	Rocketsonde	-	-	Arcasonde	-	-	-	THU	-	-	-	67	-	-
1980-4764	2444466.14	1980 Aug 13 15:24:59	Rocketsonde	-	-	Arcasonde	-	-	-	AIT	-	-	-	66	-	-
1980-4765	2444466.18	1980 Aug 13 16:21:59	Rocketsonde	-	-	Arcasonde	-	-	-	PRIM	-	-	-	66	-	-
1980-4766	2444466.27	1980 Aug 13 18:22:00	Rocketsonde	-	-	Arcasonde	-	-	-	CC	LO43	-	-	58	-	-
1980-4767	2444466.37	1980 Aug 13 20:38:00	Rocketsonde	-	-	Arcasonde	-	-	-	PH	-	-	-	90	-	-
1980-4768	2444466.41	1980 Aug 13 21:44:00	Rocketsonde	-	-	Arcasonde	-	-	-	PH	-	-	-	74	-	-
1980-4769	2444466.50	1980 Aug 13 23:04:59	Rocketsonde	-	-	Arcasonde	-	-	-	WI	-	-	-	80	-	-
1980-4770	2444466.51	1980 Aug 14 00:19:00	Rocketsonde	-	-	Arcasonde	-	-	-	KHR	-	-	-	73	-	-
1980-4771	2444466.65	1980 Aug 14 03:42:00	Rocketsonde	-	-	Arcasonde	-	-	-	WI	-	-	-	59	-	-
1980-4772	2444466.98	1980 Aug 14 11:37:59	Rocketsonde	-	-	Arcasonde	-	-	-	WS	-	-	-	69	-	-
1980-4773	2444466.33	1980 Aug 14 20:00:00	Rocketsonde	-	-	Arcasonde	-	-	-	SHEM	-	-	-	56	-	-
1980-4774	2444467.07	1980 Aug 15 13:44:59	Rocketsonde	-	-	Arcasonde	-	-	-	CC	LO43	-	-	73	-	-
1980-4775	2444467.09	1980 Aug 15 14:15:00	Rocketsonde	-	-	Arcasonde	-	-	-	AIT	-	-	-	63	-	-
1980-4776	2444467.10	1980 Aug 15 14:18:00	Rocketsonde	-	-	Arcasonde	-	-	-	THU	-	-	-	69	-	-
1980-4777	2444467.18	1980 Aug 15 16:19:59	Rocketsonde	-	-	Arcasonde	-	-	-	PRIM	-	-	-	65	-	-
1980-4778	2444467.41	1980 Aug 15 16:31:59	Rocketsonde	-	-	Arcasonde	-	-	-	PH	-	-	-	71	-	-
1980-4779	2444470.05	1980 Aug 16 13:13:59	Rocketsonde	-	-	Arcasonde	-	-	-	KAU	-	-	-	69	-	-
1980-4780	2444470.10	1980 Aug 16 14:30:00	Rocketsonde	-	-	Arcasonde	-	-	-	CC	LO43	-	-	62	-	-
1980-4781	2444470.12	1980 Aug 16 14:46:00	Rocketsonde	-	-	Arcasonde	-	-	-	AIT	-	-	-	69	-	-
1980-4782	2444470.28	1980 Aug 16 14:46:59	Rocketsonde	-	-	Arcasonde	-	-	-	PRIM	-	-	-	62	-	-
1980-4783	2444470.40	1980 Aug 16 18:46:59	Rocketsonde	-	-	Arcasonde	-	-	-	PH	-	-	-	71	-	-
1980-4784	2444471.53	1980 Aug 16 21:30:00	Rocketsonde	-	-	Arcasonde	-	-	-	SHEM	-	-	-	94	-	-
1980-4785	2444471.53	1980 Aug 16 21:30:00	Rocketsonde	-	-	Arcasonde	-	-	-	SHEM	-	-	-	94	-	-
1980-4786	2444471.53	1980 Aug 16 21:30:00	Rocketsonde	-	-	Arcasonde	-	-	-	SHEM	-	-	-	94	-	-
1980-4787	2444472.10	1980 Aug 20 00:32:00	Rocketsonde	-	-	Arcasonde	-	-	-	KHR	-	-	-	77	-	-
1980-4788	2444472.11	1980 Aug 20 00:32:00	Rocketsonde	-	-	Arcasonde	-	-	-	THU	-	-	-	69	-	-
1980-4789	2444472.12	1980 Aug 20 04:47:00	Rocketsonde	-	-	Arcasonde	-	-	-	WI	-	-	-	90	-	-
1980-4790	2444472.14	1980 Aug 20 14:47:00	Rocketsonde	-	-	Arcasonde	-	-	-	AIT	-	-	-	74	-	-
1980-4791	2444472.18	1980 Aug 20 15:27:59	Rocketsonde	-	-	Arcasonde	-	-	-	WI	-	-	-	72	-	-
1980-4792	2444472.19	1980 Aug 20 15:44:59	Rocketsonde	-	-	Arcasonde	-	-	-	WI	-	-	-	82	-	-
1980-4793	2444472.23	1980 Aug 20 15:30:00	Rocketsonde	-	-	Arcasonde	-	-	-	PRIM	LO43	-	-	67	-	-
1980-4794	2444473.40	1980 Aug 21 21:37:59	Rocketsonde	-	-	Arcasonde	-	-	-	CC	LO43	-	-	71	-	-
1980-4795	2444474.06	1980 Aug 22 13:24:59	Rocketsonde	-	-	Arcasonde	-	-	-	CC	LO43	-	-	72	-	-
1980-4796	2444474.07	1980 Aug 22 13:24:59	Rocketsonde	-	-	Arcasonde	-	-	-	AIT	-	-	-	67	-	-
1980-4797	2444474.10	1980 Aug 22 14:25:00	Rocketsonde	-	-	Arcasonde	-	-	-	CC	LO43	-	-	70	-	-
1980-4798	2444474.11	1980 Aug 22 14:25:00	Rocketsonde	-	-	Arcasonde	-	-	-	THU	-	-	-	52	-	-
1980-4800	2444474.35	1980 Aug 22 20:00:00	Rocketsonde	-	-	Arcasonde	-	-	-	SHEM	-	-	-	62	-	-
1980-4801	2444474.40	1980 Aug 22 21:34:59	Rocketsonde	-	-	Arcasonde	-	-	-	KHR	-	-	-	67	-	-
1980-4802	2444477.09	1980 Aug 25 13:14:59	Rocketsonde	-	-	Arcasonde	-	-	-	ASC	LO43	-	-	65	-	-
1980-4803	2444477.21	1980 Aug 25 13:44:59	Rocketsonde	-	-	Arcasonde	-	-	-	CC	-	-	-	73	-	-
1980-4804	2444477.24	1980 Aug 25 15:04:59	Rocketsonde	-	-	Arcasonde	-	-	-	CC	-	-	-	72	-	-
1980-4805	2444477.34	1980 Aug 25 20:04:59	Rocketsonde	-	-	Arcasonde	-	-	-	SHEM	-	-	-	66	-	-
1980-4806	2444477.39	1980 Aug 25 21:28:59	Rocketsonde	-	-	Arcasonde	-	-	-	PH	-	-	-	66	-	-
1980-4807	2444478.32	1980 Aug 26 02:08:00	Rocketsonde	-	-	Arcasonde	-	-	-	KHR	-	-	-	69	-	-
1980-4808	2444478.54	1980 Aug 27 03:49:59	Rocketsonde	-	-	Arcasonde	-	-	-	SHEM	-	-	-	53	-	-
1980-4809	2444478.64	1980 Aug 27 03:49:59	Rocketsonde	-	-	Arcasonde	-	-	-	ASC	-	-	-	66	-	-
1980-4810	2444478.64	1980 Aug 27 03:49:59	Rocketsonde	-	-	Arcasonde	-	-	-	ASC	LO43	-	-	70	-	-
1980-4811	2444479.25	1980 Aug 27 17:55:00	Rocketsonde	-	-	Arcasonde	-	-	-	CC	-	-	-	67	-	-
1980-4812	2444479.25	1980 Aug 27 17:55:00	Rocketsonde	-	-	Arcasonde	-	-	-	CC	-	-	-	67	-	-
1980-4813	2444479.23	1980 Aug 27 20:00:00	Rocketsonde	-	-	Arcasonde	-	-	-	AIT	-	-	-	65	-	-
1980-4814	2444480.18	1980 Aug 28 16:19:59	Rocketsonde	-	-	Arcasonde	-	-	-	SHEM	-	-	-	66	-	-
1980-4815	2444481.06	1980 Aug 28 16:19:59	Rocketsonde	-	-	Arcasonde	-	-	-	PRIM	-	-	-	66	-	-
1980-4816	2444481.16	1980 Aug 29 13:20:00	Rocketsonde	-	-	Arcasonde	-	-	-	CC	LO43	-	-	58	-	-
1980-4817	2444481.16	1980 Aug 29 14:27:59	Rocketsonde	-	-	Arcasonde	-	-	-	THU	-	-	-	69	-	-
1980-4818	2444481.33	1980 Aug 29 15:51:00	Rocketsonde	-	-	Arcasonde	-	-	-	SHEM	-	-	-	53	-	-
1980-4819	2444484.12	1980 Sep 1 14:49:59	Rocketsonde	-	-	Arcasonde	-	-	-	THU	-	-	-	67	-	-
1980-4820	2444485.14	1980 Sep 2 15:24:59	Rocketsonde	-	-	Arcasonde	-	-	-	ASC	-	-	-	51	-	-
1980-4821	2444485.20	1980 Sep 2 19:24:59	Rocketsonde	-	-	Arcasonde	-	-	-	ASC	-	-	-	55	-	-
1980-4822	2444485.64	1980 Sep 3 03:23:59	Rocketsonde	-	-	Arcasonde	-	-	-	PRIM	-	-	-	75	-	-
1980-4823	2444485.93	1980 Sep 3 10:14:59	Rocketsonde	-	-	Arcasonde	-	-	-	KHR	-	-	-	69	-	-
1980-4824	2444486.06	1980 Sep 3 13:30:00	Rocketsonde	-	-	Arcasonde	-	-	-	ASC	-	-	-	69	-	-
1980-4825	2444486.08	1980 Sep 3 13:57:59	Rocketsonde	-	-	Arcasonde	-	-	-	CC	LO43	-	-	54	-	-
1980-4826	2444486.11	1980 Sep 3 14:35:00	Rocketsonde	-	-	Arcasonde	-	-	-	VI	-	-	-	90	-	-
1980-4827	2444486.18	1980 Sep 3 16:22:59	Rocketsonde	-	-	Arcasonde	-	-	-	THU	-	-	-	65	-	-
1980-4828	2444486.28	1980 Sep 3 18:00:00	Rocketsonde	-	-	Arcasonde	-	-	-	ASC	-	-	-	60	-	-
1980-4829	2444486.28	1980 Sep 3 18:00:00	Rocketsonde	-	-	Arcasonde	-	-	-	NS	-	-	-	98	-	-
1980-4830	2444486.35	1980 Sep 3 20:24:00	Rocketsonde	-	-	Arcasonde	-	-	-	AIT	-	-	-	72	-	-
1980-4831	2444486.35	1980 Sep 4 03:17:59	Rocketsonde	-	-	Arcasonde	-	-	-	PM	-	-	-	73	-	-
1980-4832	2444487.52	1980 Sep 5 00:31:00	Rocketsonde	-	-	Arcasonde	-	-	-	KHR	-	-	-	77	-	-
1980-4833	2444487.89	1980 Sep 5 09:21:00	Rocketsonde	-	-	Arcasonde	-	-	-	KHR	-	-	-	73	-	-
1980-4834	2444488.05	1980 Sep 5 13:14:59	Rocketsonde	-	-	Arcasonde	-	-	-	ASC	-	-	-	52	-	-
1980-4835	2444488.10	1980 Sep 5 14:22:00	Rocketsonde	-	-	Arcasonde	-	-	-	CC	LO43	-	-	70	-	-
1980-4836	2444488.27	1980 Sep 5 18:30:00	Rocketsonde	-	-	Arcasonde	-	-	-	THU	-	-	-	69	-	-
1980-4837	2444488.29	1980 Sep 5 18:59:59	Rocketsonde	-	-	Arcasonde	-	-	-	PRIM	-	-	-	66	-	-
1980-4838	2444488.33	1980 Sep 5 19:51:00	Rocketsonde	-	-	Arcasonde	-	-	-	AIT	-	-	-	41	-	-
1980-4839	2444488.35	1980 Sep 5 20:16:00	Rocketsonde	-	-	Arcasonde	-	-	-	PM	-	-	-	79	-	-
1980-4840	2444488.35	1980 Sep 5 20:30:00	Rocketsonde	-	-	Arcasonde	-	-	-	PM	-	-	-	71	-	-
1980-4841	2444491.02	1980 Sep 8 12:30:00	Rocketsonde	-	-	Arcasonde	-	-	-	PH	-	-	-	55	-	-
1980-4842	2444491.04	1980 Sep 8 12:59:59	Rocketsonde	-	-	Arcasonde	-	-	-	SHEM	-	-	-	48	-	-
1980-4843	2444491.07	1980 Sep 8 13:44:59	Rocketsonde	-	-	Arcasonde	-	-	-	AIT	-	-	-	72	-	-
1980-4844	2444491.14	1980 Sep 8 15:22:00	Rocketsonde	-	-	Arcasonde	-	-	-	CC	LO43	-	-	56	-	-
1980-4844	2444491.26	1980 Sep 8 18:06:00	Rocketsonde	-	-	Arcasonde	-	-	-	THU	-	-	-	72	-	-
1980-4844	2444491.26	1980 Sep 8 18:06:00	Rocketsonde	-	-	Arcasonde	-	-	-	PM	-	-	-	68	-	-

Launch

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Mission	FlightCode	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee_Km	Range_Km	Dest
1980-8845	2444491.40	1980 Sep 8 2138:59	Rocketsonde	-	-	Arcasonde	-	-	-	KNR	-	-	-	72	-	-
1980-8848	2444492.27	1980 Sep 9 1830:00	Rocketsonde	-	-	Arcasonde	-	-	-	PRIM	-	-	-	67	-	-
1980-8849	2444492.42	1980 Sep 9 2209:59	Rocketsonde	-	-	Arcasonde	-	-	-	KAU	-	-	-	65	-	-
1980-8851	2444493.05	1980 Sep 10 1307:00	Rocketsonde	-	-	Arcasonde	-	-	-	ASC	-	-	-	71	ASC	-
1980-8852	2444493.05	1980 Sep 10 1310:59	Rocketsonde	-	-	Arcasonde	-	-	-	CC	LO43	-	-	72	CC	-
1980-8853	2444493.07	1980 Sep 10 1344:59	Rocketsonde	-	-	Arcasonde	-	-	-	AIT	-	-	-	71	AIT	-
1980-7403	2444493.09	1980 Sep 10 1404:59	Rocketsonde	-	-	Arcasonde	-	-	-	CC	LO43	-	-	86	CC	-
1980-8854	2444493.19	1980 Sep 10 1626:59	Rocketsonde	-	-	Arcasonde	-	-	-	PH	-	-	-	70	PH	-
1980-8855	2444493.25	1980 Sep 10 1800:00	Rocketsonde	-	-	Arcasonde	-	-	-	WS	-	-	-	97	WS	-
1980-8856	2444493.28	1980 Sep 10 1846:00	Rocketsonde	-	-	Arcasonde	-	-	-	PRIM	-	-	-	65	PRIM	-
1980-8857	2444494.41	1980 Sep 11 2155:00	Rocketsonde	-	-	Arcasonde	-	-	-	WS	-	-	-	67	WS	-
1980-8859	2444495.07	1980 Sep 12 0406:00	Rocketsonde	-	-	Arcasonde	-	-	-	CC	LO43	-	-	63	CC	-
1980-8860	2444495.14	1980 Sep 12 1344:59	Rocketsonde	-	-	Arcasonde	-	-	-	THU	-	-	-	69	THU	-
1980-8861	2444495.14	1980 Sep 12 1518:00	Rocketsonde	-	-	Arcasonde	-	-	-	AIT	-	-	-	66	AIT	-
1980-8863	2444495.28	1980 Sep 12 1846:00	Rocketsonde	-	-	Arcasonde	-	-	-	KNR	-	-	-	79	KNR	-
1980-8865	2444495.06	1980 Sep 15 1330:00	Rocketsonde	-	-	Arcasonde	-	-	-	ASC	-	-	-	65	ASC	-
1980-8866	2444498.07	1980 Sep 15 1344:59	Rocketsonde	-	-	Arcasonde	-	-	-	CC	LO43	-	-	72	CC	-
1980-8867	2444498.09	1980 Sep 15 1403:00	Rocketsonde	-	-	Arcasonde	-	-	-	WS	-	-	-	64	WS	-
1980-8868	2444498.13	1980 Sep 15 1508:00	Rocketsonde	-	-	Arcasonde	-	-	-	THU	-	-	-	69	THU	-
1980-8869	2444498.15	1980 Sep 15 1530:00	Rocketsonde	-	-	Arcasonde	-	-	-	AIT	-	-	-	66	AIT	-
1980-8870	2444498.18	1980 Sep 15 1614:59	Rocketsonde	-	-	Arcasonde	-	-	-	PRIM	-	-	-	96	PRIM	-
1980-8871	2444498.30	1980 Sep 15 1909:59	Rocketsonde	-	-	Arcasonde	-	-	-	PH	-	-	-	73	PH	-
1980-8872	2444498.34	1980 Sep 15 2004:59	Rocketsonde	-	-	Arcasonde	-	-	-	SHEM	-	-	-	94	SHEM	-
1980-8873	2444498.67	1980 Sep 16 0411:59	Rocketsonde	-	-	Arcasonde	-	-	-	KNR	-	-	-	58	KNR	-
1980-8875	2444500.02	1980 Sep 17 1230:00	Rocketsonde	-	-	Arcasonde	-	-	-	AIT	-	-	-	58	AIT	-
1980-7408	2444500.08	1980 Sep 17 1400:00	Rocketsonde	-	-	Arcasonde	-	-	-	MI	-	-	-	90	MI	-
1980-8876	2444500.11	1980 Sep 17 1437:59	Rocketsonde	-	-	Arcasonde	-	-	-	THU	-	-	-	66	THU	-
1980-8877	2444500.19	1980 Sep 17 1630:00	Rocketsonde	-	-	Arcasonde	-	-	-	PRIM	-	-	-	69	PRIM	-
1980-7410	2444500.21	1980 Sep 17 1700:00	Rocketsonde	-	-	Arcasonde	-	-	-	CC	LO43	-	-	86	CC	-
1980-8878	2444500.25	1980 Sep 17 1800:00	Rocketsonde	-	-	Arcasonde	-	-	-	CC	LO43	-	-	82	CC	-
1980-8879	2444500.40	1980 Sep 17 2140:00	Rocketsonde	-	-	Arcasonde	-	-	-	WS	-	-	-	76	WS	-
1980-8880	2444501.12	1980 Sep 18 1500:00	Rocketsonde	-	-	Arcasonde	-	-	-	WS	-	-	-	82	WS	-
1980-8881	2444501.39	1980 Sep 18 2121:00	Rocketsonde	-	-	Arcasonde	-	-	-	CC	LO43	-	-	63	CC	-
1980-8883	2444502.05	1980 Sep 19 1304:59	Rocketsonde	-	-	Arcasonde	-	-	-	CC	-	-	-	52	CC	-
1980-8884	2444502.07	1980 Sep 19 1344:59	Rocketsonde	-	-	Arcasonde	-	-	-	AIT	-	-	-	61	AIT	-
1980-8885	2444502.12	1980 Sep 19 1447:00	Rocketsonde	-	-	Arcasonde	-	-	-	THU	-	-	-	89	THU	-
1980-8886	2444502.15	1980 Sep 19 1533:00	Rocketsonde	-	-	Arcasonde	-	-	-	PRIM	-	-	-	61	PRIM	-
1980-8887	2444502.16	1980 Sep 19 1546:00	Rocketsonde	-	-	Arcasonde	-	-	-	ASC	-	-	-	81	ASC	-
1980-7412	2444502.17	1980 Sep 19 1559:59	Rocketsonde	-	-	Arcasonde	-	-	-	PH	-	-	-	97	PH	-
1980-8888	2444502.19	1980 Sep 19 1626:59	Rocketsonde	-	-	Arcasonde	-	-	-	MI	-	-	-	74	MI	-
1980-8889	2444502.21	1980 Sep 19 1700:00	Rocketsonde	-	-	Arcasonde	-	-	-	ASC	-	-	-	68	ASC	-
1980-8890	2444502.31	1980 Sep 19 2000:00	Rocketsonde	-	-	Arcasonde	-	-	-	SHEM	-	-	-	55	SHEM	-
1980-8891	2444502.33	1980 Sep 19 2022:00	Rocketsonde	-	-	Arcasonde	-	-	-	KNR	-	-	-	54	KNR	-
1980-8892	2444502.41	1980 Sep 20 0232:00	Rocketsonde	-	-	Arcasonde	-	-	-	THU	-	-	-	75	THU	-
1980-8893	2444505.11	1980 Sep 22 1446:59	Rocketsonde	-	-	Arcasonde	-	-	-	ASC	-	-	-	62	ASC	-
1980-8894	2444505.20	1980 Sep 22 1654:59	Rocketsonde	-	-	Arcasonde	-	-	-	THU	-	-	-	76	THU	-
1980-8895	2444505.48	1980 Sep 22 2218:59	Rocketsonde	-	-	Arcasonde	-	-	-	KNR	-	-	-	73	KNR	-
1980-8896	2444506.16	1980 Sep 23 0019:59	Rocketsonde	-	-	Arcasonde	-	-	-	PRIM	-	-	-	72	PRIM	-
1980-8897	2444506.33	1980 Sep 23 0603:00	Rocketsonde	-	-	Arcasonde	-	-	-	SHEM	-	-	-	47	SHEM	-
1980-8898	2444507.05	1980 Sep 23 1314:59	Rocketsonde	-	-	Arcasonde	-	-	-	ASC	-	-	-	60	ASC	-
1980-8899	2444507.08	1980 Sep 24 1314:59	Rocketsonde	-	-	Arcasonde	-	-	-	WS	-	-	-	60	WS	-
1980-8899	2444507.11	1980 Sep 24 1416:00	Rocketsonde	-	-	Arcasonde	-	-	-	AIT	-	-	-	60	AIT	-
1980-8900	2444507.13	1980 Sep 24 1507:00	Rocketsonde	-	-	Arcasonde	-	-	-	THU	-	-	-	72	THU	-
1980-8901	2444507.27	1980 Sep 24 1820:00	Rocketsonde	-	-	Arcasonde	-	-	-	PRIM	-	-	-	69	PRIM	-
1980-7417	2444507.30	1980 Sep 24 1907:00	Rocketsonde	-	-	Arcasonde	-	-	-	PH	-	-	-	90	PH	-
1980-8902	2444507.33	1980 Sep 24 2000:00	Rocketsonde	-	-	Arcasonde	-	-	-	SHEM	-	-	-	54	SHEM	-
1980-8903	2444508.28	1980 Sep 25 1800:00	Rocketsonde	-	-	Arcasonde	-	-	-	PRIM	-	-	-	65	PRIM	-
1980-8904	2444508.33	1980 Sep 25 2000:00	Rocketsonde	-	-	Arcasonde	-	-	-	SHEM	-	-	-	54	SHEM	-
1980-8905	2444509.00	1980 Sep 26 1200:00	Rocketsonde	-	-	Arcasonde	-	-	-	AIT	-	-	-	52	AIT	-
1980-8906	2444509.04	1980 Sep 26 1259:59	Rocketsonde	-	-	Arcasonde	-	-	-	CC	LO43	-	-	53	CC	-
1980-8907	2444509.12	1980 Sep 26 1451:00	Rocketsonde	-	-	Arcasonde	-	-	-	ASC	-	-	-	67	ASC	-
1980-8908	2444509.16	1980 Sep 26 1554:00	Rocketsonde	-	-	Arcasonde	-	-	-	THU	-	-	-	61	THU	-
1980-8909	2444509.21	1980 Sep 26 1704:59	Rocketsonde	-	-	Arcasonde	-	-	-	PH	-	-	-	74	PH	-
1980-8910	2444509.34	1980 Sep 26 2015:00	Rocketsonde	-	-	Arcasonde	-	-	-	ASC	-	-	-	62	ASC	-
1980-8911	2444510.06	1980 Sep 29 1330:00	Rocketsonde	-	-	Arcasonde	-	-	-	CC	LO43	-	-	68	CC	-
1980-8912	2444510.10	1980 Sep 29 1430:00	Rocketsonde	-	-	Arcasonde	-	-	-	THU	-	-	-	73	THU	-
1980-8913	2444510.25	1980 Sep 29 1448:59	Rocketsonde	-	-	Arcasonde	-	-	-	PM	-	-	-	67	PM	-
1980-8914	2444510.26	1980 Sep 29 1757:00	Rocketsonde	-	-	Arcasonde	-	-	-	PRIM	-	-	-	69	PRIM	-
1980-8915	2444510.26	1980 Sep 29 1820:00	Rocketsonde	-	-	Arcasonde	-	-	-	AIT	-	-	-	53	AIT	-
1980-8916	2444510.27	1980 Sep 29 1830:00	Rocketsonde	-	-	Arcasonde	-	-	-	KAU	-	-	-	63	KAU	-
1980-8917	2444510.38	1980 Sep 29 2112:59	Rocketsonde	-	-	Arcasonde	-	-	-	SHEM	-	-	-	49	SHEM	-
1980-837	2444510.54	1980 Sep 30 0055:00	Rocketsonde	-	-	Arcasonde	-	-	-	KNR	-	-	-	71	KNR	-
1980-8918	2444510.60	1980 Sep 30 0218:00	Rocketsonde	-	-	Arcasonde	-	-	-	SHEM	-	-	-	51	SHEM	-
1980-8919	2444510.33	1980 Sep 30 2000:00	Rocketsonde	-	-	Arcasonde	-	-	-	ASC	-	-	-	61	ASC	-
1980-7419	2444510.07	1980 Oct 1 1344:59	Rocketsonde	-	-	Arcasonde	-	-	-	MI/DMP-9	LO43	-	-	96	MI	-
1980-7421	2444510.17	1980 Oct 1 1559:59	Rocketsonde	-	-	Arcasonde	-	-	-	WS	-	-	-	97	WS	-
1980-8924	2444510.20	1980 Oct 1 1644:59	Rocketsonde	-	-	Arcasonde	-	-	-	PM	-	-	-	61	PM	-
1980-8925	2444510.31	1980 Oct 1 1930:00	Rocketsonde	-	-	Arcasonde	-	-	-	ASC	-	-	-	74	ASC	-
1980-8926	2444510.43	1980 Oct 1 2226:59	Rocketsonde	-	-	Arcasonde	-	-	-	KAU	-	-	-	61	KAU	-
1980-8927	2444510.44	1980 Oct 1 2226:59	Rocketsonde	-	-	Arcasonde	-	-	-	PRIM	-	-	-	75	PRIM	-
1980-8928	2444510.10	1980 Oct 2 1419:00	Rocketsonde	-	-	Arcasonde	-	-	-	CC	LO43	-	-	61	CC	-
1980-8929	2444510.26	1980 Oct 2 1820:00	Rocketsonde	-	-	Arcasonde	-	-	-	ASC	-	-	-	64	ASC	-
1980-8930	2444510.33	1980 Oct 2 2000:00	Rocketsonde	-	-	Arcasonde	-	-	-	SHEM	-	-	-	55	SHEM	-
1980-8932	2444510.04	1980 Oct 3 1259:59	Rocketsonde	-	-	Arcasonde	-	-	-	ASC	-	-	-	60	ASC	-
1980-8933	2444510.26	1980 Oct 3 1810:00	Rocketsonde	-	-	Arcasonde	-	-	-	PRIM	-	-	-	65	PRIM	-
1980-8934	2444510.10	1980 Oct 6 1431:00	Rocketsonde	-	-	Arcasonde	-	-	-	CC	LO43	-	-	60	CC	-

Launch

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Mission	FlightCode	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee_Km	Range_Km	Dest
1980-W956	2444519.15	1980 Oct 6 1540:00	Rocketsonde	-	-	Arcasonde	-	-	ASC	-	-	-	-	64	-	-
1980-W957	2444519.39	1980 Oct 6 2122:00	Rocketsonde	-	-	Arcasonde	-	-	RNR	-	-	-	-	78	-	-
1980-W958	2444520.12	1980 Oct 7 1449:59	Rocketsonde	-	-	Arcasonde	-	-	CC	L043	-	-	-	56	-	-
1980-W940	2444520.14	1980 Oct 7 1527:59	Rocketsonde	-	-	Arcasonde	-	-	ASC	-	-	-	-	63	-	-
1980-W941	2444520.27	1980 Oct 7 1830:00	Rocketsonde	-	-	Arcasonde	-	-	PRIM	-	-	-	-	67	-	-
1980-W942	2444520.52	1980 Oct 8 0026:59	Rocketsonde	-	-	Arcasonde	-	-	RNR	-	-	-	-	77	-	-
1980-W944	2444520.74	1980 Oct 8 0838:59	Rocketsonde	-	-	Arcasonde	-	-	RNR	-	-	-	-	68	-	-
1980-W946	2444520.90	1980 Oct 8 0938:59	Rocketsonde	-	-	Arcasonde	-	-	PRIM	-	-	-	-	80	-	-
1980-W948	2444521.15	1980 Oct 8 1540:00	Rocketsonde	-	-	Arcasonde	-	-	RNR	-	-	-	-	62	-	-
1980-W430	2444521.60	1980 Oct 9 0222:00	Rocketsonde	-	-	Arcasonde	-	-	ASC	-	-	-	-	61	-	-
1980-W949	2444522.03	1980 Oct 9 1249:59	Rocketsonde	-	-	Arcasonde	-	-	PRIM	-	-	-	-	77	-	-
1980-W950	2444522.15	1980 Oct 9 1540:00	Rocketsonde	-	-	Arcasonde	-	-	CC	L043	-	-	-	63	-	-
1980-W952	2444523.43	1980 Oct 10 2214:59	Rocketsonde	-	-	Arcasonde	-	-	ASC	-	-	-	-	61	-	-
1980-W955	2444527.07	1980 Oct 14 1344:59	Rocketsonde	-	-	Arcasonde	-	-	ASC	-	-	-	-	66	-	-
1980-W956	2444527.15	1980 Oct 14 1540:00	Rocketsonde	-	-	Arcasonde	-	-	PRIM	-	-	-	-	61	-	-
1980-W957	2444527.16	1980 Oct 14 1548:59	Rocketsonde	-	-	Arcasonde	-	-	ASC	-	-	-	-	65	-	-
1980-W959	2444528.04	1980 Oct 15 1288:59	Rocketsonde	-	-	Arcasonde	-	-	ASC	-	-	-	-	61	-	-
1980-W960	2444528.05	1980 Oct 15 1314:59	Rocketsonde	-	-	Arcasonde	-	-	WS	-	-	-	-	65	-	-
1980-W961	2444528.10	1980 Oct 15 1431:00	Rocketsonde	-	-	Arcasonde	-	-	WS	-	-	-	-	71	-	-
1980-W962	2444528.12	1980 Oct 15 1500:00	Rocketsonde	-	-	Arcasonde	-	-	CC	L043	-	-	-	63	-	-
1980-W963	2444528.15	1980 Oct 15 1530:00	Rocketsonde	-	-	Arcasonde	-	-	PRIM	-	-	-	-	67	-	-
1980-W964	2444528.29	1980 Oct 15 1694:00	Rocketsonde	-	-	Arcasonde	-	-	PH	-	-	-	-	69	-	-
1980-W966	2444528.39	1980 Oct 15 2127:59	Rocketsonde	-	-	Arcasonde	-	-	RNR	-	-	-	-	79	-	-
1980-W967	2444528.65	1980 Oct 16 0918:00	Rocketsonde	-	-	Arcasonde	-	-	WI	-	-	-	-	75	-	-
1980-W440	2444529.12	1980 Oct 16 1500:00	Rocketsonde	-	-	Arcasonde	-	-	WI	-	-	-	-	89	-	-
1980-W968	2444529.14	1980 Oct 16 1523:59	Rocketsonde	-	-	Arcasonde	-	-	WI	-	-	-	-	76	-	-
1980-W971	2444529.31	1980 Oct 16 1921:59	Rocketsonde	-	-	Arcasonde	-	-	WI	-	-	-	-	76	-	-
1980-W973	2444530.06	1980 Oct 17 1324:59	Rocketsonde	-	-	Arcasonde	-	-	ASC	-	-	-	-	61	-	-
1980-W974	2444530.07	1980 Oct 17 1344:59	Rocketsonde	-	-	Arcasonde	-	-	CC	L043	-	-	-	69	-	-
1980-W975	2444530.28	1980 Oct 17 1846:00	Rocketsonde	-	-	Arcasonde	-	-	AIT	-	-	-	-	61	-	-
1980-W976	2444530.59	1980 Oct 18 0213:00	Rocketsonde	-	-	Arcasonde	-	-	RNR	-	-	-	-	66	-	-
1980-W980	2444533.03	1980 Oct 20 1246:59	Rocketsonde	-	-	Arcasonde	-	-	ASC	-	-	-	-	62	-	-
1980-W981	2444533.07	1980 Oct 20 1344:59	Rocketsonde	-	-	Arcasonde	-	-	CC	L043	-	-	-	69	-	-
1980-W982	2444533.15	1980 Oct 20 1530:00	Rocketsonde	-	-	Arcasonde	-	-	PRIM	-	-	-	-	66	-	-
1980-W443	2444535.08	1980 Oct 22 152:59	Rocketsonde	-	-	Arcasonde	-	-	WI	-	-	-	-	90	-	-
1980-W986	2444535.17	1980 Oct 22 152:59	Rocketsonde	-	-	Arcasonde	-	-	ASC	-	-	-	-	80	-	-
1980-W446	2444535.23	1980 Oct 22 1527:59	Rocketsonde	-	-	Arcasonde	-	-	CC	-	-	-	-	86	-	-
1980-W988	2444535.26	1980 Oct 22 1730:00	Rocketsonde	-	-	Arcasonde	-	-	PRIM	-	-	-	-	60	-	-
1980-W989	2444535.34	1980 Oct 22 1846:00	Rocketsonde	-	-	Arcasonde	-	-	PRIM	-	-	-	-	60	-	-
1980-W990	2444535.34	1980 Oct 22 2005:00	Rocketsonde	-	-	Arcasonde	-	-	PRIM	-	-	-	-	67	-	-
1980-W991	2444536.16	1980 Oct 23 1614:59	Rocketsonde	-	-	Arcasonde	-	-	RNR	-	-	-	-	79	-	-
1980-W992	2444536.11	1980 Oct 23 2146:00	Rocketsonde	-	-	Arcasonde	-	-	CC	L043	-	-	-	57	-	-
1980-W993	2444537.11	1980 Oct 24 1432:00	Rocketsonde	-	-	Arcasonde	-	-	AIT	-	-	-	-	66	-	-
1980-W994	2444537.12	1980 Oct 24 1535:00	Rocketsonde	-	-	Arcasonde	-	-	ASC	-	-	-	-	59	-	-
1980-W995	2444537.15	1980 Oct 24 1534:59	Rocketsonde	-	-	Arcasonde	-	-	PH	-	-	-	-	90	-	-
1980-W996	2444537.15	1980 Oct 24 1534:59	Rocketsonde	-	-	Arcasonde	-	-	PH	-	-	-	-	90	-	-
1980-W998	2444537.29	1980 Oct 24 1902:59	Rocketsonde	-	-	Arcasonde	-	-	PH	-	-	-	-	61	-	-
1980-W999	2444537.32	1980 Oct 24 1908:59	Rocketsonde	-	-	Arcasonde	-	-	SHEN	-	-	-	-	77	-	-
1980-W997	2444537.35	1980 Oct 24 2000:00	Rocketsonde	-	-	Arcasonde	-	-	RNR	-	-	-	-	65	-	-
1980-W998	2444537.40	1980 Oct 24 2131:00	Rocketsonde	-	-	Arcasonde	-	-	KUI	-	-	-	-	65	-	-
1980-W999	2444537.40	1980 Oct 24 2131:00	Rocketsonde	-	-	Arcasonde	-	-	KUI	-	-	-	-	65	-	-
1980-W1000	2444540.05	1980 Oct 27 1311:59	Rocketsonde	-	-	Arcasonde	-	-	ASC	-	-	-	-	61	-	-
1980-W1001	2444540.11	1980 Oct 27 1445:00	Rocketsonde	-	-	Arcasonde	-	-	CC	-	-	-	-	61	-	-
1980-W1002	2444540.26	1980 Oct 27 2035:00	Rocketsonde	-	-	Arcasonde	-	-	PRIM	-	-	-	-	72	-	-
1980-W1003	2444541.31	1980 Oct 28 1703:00	Rocketsonde	-	-	Arcasonde	-	-	PRIM	-	-	-	-	60	-	-
1980-W1004	2444541.31	1980 Oct 28 1922:59	Rocketsonde	-	-	Arcasonde	-	-	NS	-	-	-	-	59	-	-
1980-W1005	2444541.31	1980 Oct 28 2100:00	Rocketsonde	-	-	Arcasonde	-	-	NS	-	-	-	-	63	-	-
1980-W1006	2444542.06	1980 Oct 28 2100:00	Rocketsonde	-	-	Arcasonde	-	-	KUI	-	-	-	-	64	-	-
1980-W1008	2444542.06	1980 Oct 28 2100:00	Rocketsonde	-	-	Arcasonde	-	-	KUI	-	-	-	-	64	-	-
1980-W1009	2444542.06	1980 Oct 28 1319:59	Rocketsonde	-	-	Arcasonde	-	-	ASC	-	-	-	-	59	-	-
1980-W1010	2444542.06	1980 Oct 28 1635:59	Rocketsonde	-	-	Arcasonde	-	-	ASC	-	-	-	-	59	-	-
1980-W1011	2444542.29	1980 Oct 29 1859:59	Rocketsonde	-	-	Arcasonde	-	-	CC	-	-	-	-	59	-	-
1980-W1012	2444542.29	1980 Oct 29 1910:59	Rocketsonde	-	-	Arcasonde	-	-	CC	L043	-	-	-	68	-	-
1980-W1013	2444542.32	1980 Oct 29 1941:00	Rocketsonde	-	-	Arcasonde	-	-	PH	-	-	-	-	67	-	-
1980-W1014	2444543.42	1980 Oct 30 2159:59	Rocketsonde	-	-	Arcasonde	-	-	SHEN	-	-	-	-	52	-	-
1980-W1015	2444543.43	1980 Oct 30 2159:59	Rocketsonde	-	-	Arcasonde	-	-	SHEN	-	-	-	-	52	-	-
1980-W1016	2444543.53	1980 Oct 31 0042:00	Rocketsonde	-	-	Arcasonde	-	-	RNR	-	-	-	-	80	-	-
1980-W1017	2444544.03	1980 Oct 31 1246:59	Rocketsonde	-	-	Arcasonde	-	-	ASC	-	-	-	-	64	-	-
1980-W1018	2444544.19	1980 Oct 31 1632:59	Rocketsonde	-	-	Arcasonde	-	-	ASC	-	-	-	-	64	-	-
1981-W01	2444544.05	1981 Jan 2 1314:59	Rocketsonde	-	-	Arcasonde	-	-	PRIM	-	-	-	-	57	-	-
1981-W02	2444547.05	1981 Jan 2 1314:59	Rocketsonde	-	-	Arcasonde	-	-	ASC	-	-	-	-	63	-	-
1981-W03	2444607.16	1981 Jan 2 1551:00	Rocketsonde	-	-	Arcasonde	-	-	CC	L043	-	-	-	67	-	-
1981-W04	2444610.11	1981 Jan 5 1445:00	Rocketsonde	-	-	Arcasonde	-	-	CC	L043	-	-	-	72	-	-
1981-W05	2444612.06	1981 Jan 7 1330:00	Rocketsonde	-	-	Arcasonde	-	-	ASC	-	-	-	-	61	-	-
1981-W06	2444613.04	1981 Jan 8 1301:59	Rocketsonde	-	-	Arcasonde	-	-	AIT	-	-	-	-	64	-	-
1981-W07	2444614.10	1981 Jan 9 1417:00	Rocketsonde	-	-	Arcasonde	-	-	CC	-	-	-	-	58	-	-
1981-W08	2444617.05	1981 Jan 12 1314:59	Rocketsonde	-	-	Arcasonde	-	-	CC	L043	-	-	-	60	-	-
1981-W09	2444617.11	1981 Jan 12 1445:00	Rocketsonde	-	-	Arcasonde	-	-	CC	-	-	-	-	73	-	-
1981-W10	2444617.28	1981 Jan 12 1840:00	Rocketsonde	-	-	Arcasonde	-	-	AIT	-	-	-	-	73	-	-
1981-W11	2444619.06	1981 Jan 14 1330:00	Rocketsonde	-	-	Arcasonde	-	-	ASC	-	-	-	-	60	-	-
1981-W12	2444621.11	1981 Jan 14 2100:59	Rocketsonde	-	-	Arcasonde	-	-	KUI	-	-	-	-	94	-	-
1981-W13	2444621.11	1981 Jan 16 1445:00	Rocketsonde	-	-	Arcasonde	-	-	CC	L043	-	-	-	60	-	-
1981-W14	2444621.11	1981 Jan 16 1500:00	Rocketsonde	-	-	Arcasonde	-	-	ASC	-	-	-	-	61	-	-
1981-W15	2444621.12	1981 Jan 16 1500:00	Rocketsonde	-	-	Arcasonde	-	-	ASC	-	-	-	-	59	-	-
1981-W16	2444624.06	1981 Jan 19 1330:00	Rocketsonde	-	-	Arcasonde	-	-	ASC	-	-	-	-	75	-	-
1981-W17	2444624.50	1981 Jan 19 2358:00	Rocketsonde	-	-	Arcasonde	-	-	VT	-	-	-	-	60	-	-
1981-W18	2444626.06	1981 Jan 21 1330:00	Rocketsonde	-	-	Arcasonde	-	-	ASC	-	-	-	-	60	-	-
1981-W19	2444626.06	1981 Jan 21 1840:00	Rocketsonde	-	-	Arcasonde	-	-	ASC	-	-	-	-	71	-	-
1981-W20	2444626.28	1981 Jan 21 1840:00	Rocketsonde	-	-	Arcasonde	-	-	AIT	-	-	-	-	95	-	-
1981-W21	2444626.33	1981 Jan 22 1508:00	Rocketsonde	-	-	Arcasonde	-	-	AIT	-	-	-	-	62	-	-
1981-W22	2444627.13	1981 Jan 22 1508:00	Rocketsonde	-	-	Arcasonde	-	-	VT	-	-	-	-	62	-	-
1981-W23	2444628.04	1981 Jan 23 1259:59	Rocketsonde	-	-	Arcasonde	-	-	ASC	-	-	-	-	62		

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Mission	FlightCode	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee_Km	Range_Km	Dest
1981-W38	2444631.15	1981 Jan 26 15:30:00	Rocketsonde	-	-	Arcasonde	-	-	-	CC	LC43	-	-	59	-	-
1981-W39	2444631.15	1981 Jan 26 15:42:00	Rocketsonde	-	-	Arcasonde	-	-	-	ASC	-	-	-	58	-	-
1981-W41	2444633.03	1981 Jan 28 12:49:59	Rocketsonde	-	-	Arcasonde	-	-	-	ASC	-	-	-	60	-	-
1981-W36	2444633.11	1981 Jan 28 14:46:00	Rocketsonde	-	-	Arcasonde	-	-	-	CC	LC43	-	-	58	-	-
1981-W42	2444633.23	1981 Jan 28 17:30:00	Rocketsonde	-	-	Arcasonde	-	-	-	WS	-	-	-	58	-	-
1981-W43	2444633.50	1981 Jan 28 23:53:00	Rocketsonde	-	-	Arcasonde	-	-	-	WI	-	-	-	73	-	-
1981-W44	2444635.06	1981 Jan 30 13:30:00	Rocketsonde	-	-	Arcasonde	-	-	-	ASC	-	-	-	61	-	-
1981-W45	2444635.15	1981 Jan 30 15:40:00	Rocketsonde	-	-	Arcasonde	-	-	-	CC	LC43	-	-	57	-	-
1981-W46	2444638.11	1981 Feb 2 14:45:00	Rocketsonde	-	-	Arcasonde	-	-	-	CC	-	-	-	56	-	-
1981-W48	2444638.33	1981 Feb 2 19:55:59	Rocketsonde	-	-	Arcasonde	-	-	-	PRIM	-	-	-	67	-	-
1981-W49	2444639.04	1981 Feb 3 12:57:59	Rocketsonde	-	-	Arcasonde	-	-	-	ASC	-	-	-	60	-	-
1981-W53	2444640.20	1981 Feb 4 17:00:00	Rocketsonde	-	-	Arcasonde	-	-	-	PRIM	-	-	-	62	-	-
1981-W54	2444640.21	1981 Feb 4 17:00:00	Rocketsonde	-	-	Arcasonde	-	-	-	CC	LC43	-	-	72	-	-
1981-W55	2444640.26	1981 Feb 4 21:00:00	Rocketsonde	-	-	Arcasonde	-	-	-	PH	-	-	-	71	-	-
1981-W56	2444640.38	1981 Feb 4 21:00:00	Rocketsonde	-	-	Arcasonde	-	-	-	SHEM	-	-	-	52	-	-
1981-W45	2444640.40	1981 Feb 4 21:00:00	Rocketsonde	-	-	Arcasonde	-	-	-	KAU	-	-	-	52	-	-
1981-W67	2444640.42	1981 Feb 4 21:00:00	Rocketsonde	-	-	Arcasonde	-	-	-	KMR	-	-	-	63	-	-
1981-W58	2444640.44	1981 Feb 4 21:00:00	Rocketsonde	-	-	Arcasonde	-	-	-	KMR	-	-	-	74	-	-
1981-W59	2444640.52	1981 Feb 5 09:59:59	Rocketsonde	-	-	Arcasonde	-	-	-	ASC	-	-	-	61	-	-
1981-W60	2444641.09	1981 Feb 5 14:15:59	Rocketsonde	-	-	Arcasonde	-	-	-	CC	-	-	-	57	-	-
1981-W61	2444641.19	1981 Feb 5 16:30:00	Rocketsonde	-	-	Arcasonde	-	-	-	PRIM	-	-	-	68	-	-
1981-W64	2444642.15	1981 Feb 6 15:30:00	Rocketsonde	-	-	Arcasonde	-	-	-	CC	LC43	-	-	61	-	-
1981-W65	2444642.37	1981 Feb 6 20:54:00	Rocketsonde	-	-	Arcasonde	-	-	-	AIT	-	-	-	61	-	-
1981-W66	2444642.38	1981 Feb 6 21:00:00	Rocketsonde	-	-	Arcasonde	-	-	-	KAU	-	-	-	71	-	-
1981-W67	2444642.43	1981 Feb 6 22:14:59	Rocketsonde	-	-	Arcasonde	-	-	-	PH	-	-	-	56	-	-
1981-W68	2444644.94	1981 Feb 9 10:32:59	Rocketsonde	-	-	Arcasonde	-	-	-	SHEM	-	-	-	59	-	-
1981-W69	2444645.20	1981 Feb 9 19:41:59	Rocketsonde	-	-	Arcasonde	-	-	-	ASC	-	-	-	46	-	-
1981-W70	2444645.24	1981 Feb 9 17:40:00	Rocketsonde	-	-	Arcasonde	-	-	-	PRIM	-	-	-	57	-	-
1981-W71	2444645.40	1981 Feb 9 21:30:00	Rocketsonde	-	-	Arcasonde	-	-	-	KAU	-	-	-	50	-	-
1981-W72	2444645.43	1981 Feb 9 22:21:59	Rocketsonde	-	-	Arcasonde	-	-	-	KMR	-	-	-	77	-	-
1981-W73	2444646.09	1981 Feb 10 14:15:00	Rocketsonde	-	-	Arcasonde	-	-	-	CC	LC43	-	-	61	-	-
1981-W74	2444646.49	1981 Feb 10 23:46:00	Rocketsonde	-	-	Arcasonde	-	-	-	WI	-	-	-	67	-	-
1981-W75	2444647.06	1981 Feb 11 13:30:00	Rocketsonde	-	-	Arcasonde	-	-	-	ASC	-	-	-	60	-	-
1981-W76	2444647.11	1981 Feb 11 14:46:00	Rocketsonde	-	-	Arcasonde	-	-	-	CC	LC43	-	-	86	-	-
1981-W54	2444647.23	1981 Feb 11 17:30:00	Rocketsonde	-	-	Arcasonde	-	-	-	WS	-	-	-	86	-	-
1981-W77	2444647.33	1981 Feb 11 19:46:59	Rocketsonde	-	-	Arcasonde	-	-	-	WS	-	-	-	87	-	-
1981-W78	2444647.35	1981 Feb 11 20:00:00	Rocketsonde	-	-	Arcasonde	-	-	-	PRIM	-	-	-	58	-	-
1981-W60	2444648.12	1981 Feb 12 14:49:59	Rocketsonde	-	-	Arcasonde	-	-	-	PRIM	-	-	-	70	-	-
1981-W81	2444648.41	1981 Feb 12 19:43:59	Rocketsonde	-	-	Arcasonde	-	-	-	AIT	-	-	-	61	-	-
1981-W82	2444648.59	1981 Feb 13 10:43:59	Rocketsonde	-	-	Arcasonde	-	-	-	SHEM	-	-	-	86	-	-
1981-W83	2444649.21	1981 Feb 13 17:06:00	Rocketsonde	-	-	Arcasonde	-	-	-	ASC	-	-	-	61	-	-
1981-W84	2444649.41	1981 Feb 13 21:46:00	Rocketsonde	-	-	Arcasonde	-	-	-	SHEM	-	-	-	94	-	-
1981-W85	2444649.43	1981 Feb 13 21:46:00	Rocketsonde	-	-	Arcasonde	-	-	-	SHEM	-	-	-	94	-	-
1981-W87	2444650.12	1981 Feb 17 15:00:00	Rocketsonde	-	-	Arcasonde	-	-	-	KMR	-	-	-	71	-	-
1981-W88	2444650.12	1981 Feb 17 15:00:00	Rocketsonde	-	-	Arcasonde	-	-	-	AIT	-	-	-	72	-	-
1981-W89	2444650.34	1981 Feb 18 03:31:59	Rocketsonde	-	-	Arcasonde	-	-	-	ASC	-	-	-	69	-	-
1981-W90	2444650.34	1981 Feb 18 03:31:59	Rocketsonde	-	-	Arcasonde	-	-	-	PRIM	-	-	-	65	-	-
1981-W91	2444650.34	1981 Feb 18 03:31:59	Rocketsonde	-	-	Arcasonde	-	-	-	SHEM	-	-	-	62	-	-
1981-W92	2444650.34	1981 Feb 18 03:31:59	Rocketsonde	-	-	Arcasonde	-	-	-	SHEM	-	-	-	56	-	-
1981-W93	2444650.34	1981 Feb 18 03:31:59	Rocketsonde	-	-	Arcasonde	-	-	-	KMR	-	-	-	70	-	-
1981-W94	2444650.38	1981 Feb 18 03:31:59	Rocketsonde	-	-	Arcasonde	-	-	-	PRIM	-	-	-	64	-	-
1981-W95	2444650.38	1981 Feb 18 03:31:59	Rocketsonde	-	-	Arcasonde	-	-	-	ASC	-	-	-	65	-	-
1981-W97	2444650.38	1981 Feb 18 03:31:59	Rocketsonde	-	-	Arcasonde	-	-	-	CC	-	-	-	65	-	-
1981-W98	2444650.38	1981 Feb 18 03:31:59	Rocketsonde	-	-	Arcasonde	-	-	-	PRIM	-	-	-	64	-	-
1981-W99	2444650.38	1981 Feb 18 03:31:59	Rocketsonde	-	-	Arcasonde	-	-	-	ASC	-	-	-	66	-	-
1981-W67	2444650.38	1981 Feb 18 03:31:59	Rocketsonde	-	-	Arcasonde	-	-	-	PR	-	-	-	66	-	-
1981-W102	2444650.38	1981 Feb 20 18:02:59	Rocketsonde	-	-	Arcasonde	-	-	-	VR	-	-	-	98	-	-
1981-W68	2444650.38	1981 Feb 20 21:00:00	Rocketsonde	-	-	Arcasonde	-	-	-	WS	-	-	-	63	-	-
1981-W103	2444650.38	1981 Feb 20 21:30:00	Rocketsonde	-	-	Arcasonde	-	-	-	KAU	-	-	-	63	-	-
1981-W104	2444650.40	1981 Feb 20 21:30:59	Rocketsonde	-	-	Arcasonde	-	-	-	ASC	-	-	-	60	-	-
1981-W106	2444650.43	1981 Feb 23 10:19:59	Rocketsonde	-	-	Arcasonde	-	-	-	ASC	-	-	-	60	-	-
1981-W108	2444650.93	1981 Feb 23 15:52:00	Rocketsonde	-	-	Arcasonde	-	-	-	AIT	-	-	-	65	-	-
1981-W109	2444650.20	1981 Feb 23 15:52:00	Rocketsonde	-	-	Arcasonde	-	-	-	PRIM	-	-	-	62	-	-
1981-W110	2444650.37	1981 Feb 23 20:51:00	Rocketsonde	-	-	Arcasonde	-	-	-	KAU	-	-	-	50	-	-
1981-W111	2444650.37	1981 Feb 23 21:00:00	Rocketsonde	-	-	Arcasonde	-	-	-	SHEM	-	-	-	77	-	-
1981-W112	2444650.37	1981 Feb 23 21:00:00	Rocketsonde	-	-	Arcasonde	-	-	-	KMR	-	-	-	70	-	-
1981-W114	2444650.38	1981 Feb 24 00:30:00	Rocketsonde	-	-	Arcasonde	-	-	-	PR	-	-	-	72	-	-
1981-W115	2444650.38	1981 Feb 24 18:00:00	Rocketsonde	-	-	Arcasonde	-	-	-	VT	-	-	-	75	-	-
1981-W117	2444650.50	1981 Feb 25 00:01:59	Rocketsonde	-	-	Arcasonde	-	-	-	CC	-	-	-	84	-	-
1981-W118	2444651.04	1981 Feb 25 12:54:00	Rocketsonde	-	-	Arcasonde	-	-	-	ASC	LC43	-	-	84	-	-
1981-W119	2444651.10	1981 Feb 25 14:30:00	Rocketsonde	-	-	Arcasonde	-	-	-	PRIM	-	-	-	65	-	-
1981-W120	2444651.20	1981 Feb 25 16:44:59	Rocketsonde	-	-	Arcasonde	-	-	-	SHEM	-	-	-	65	-	-
1981-W121	2444651.57	1981 Feb 26 01:44:59	Rocketsonde	-	-	Arcasonde	-	-	-	PRIM	-	-	-	65	-	-
1981-W122	2444652.14	1981 Feb 26 15:77:59	Rocketsonde	-	-	Arcasonde	-	-	-	VT	-	-	-	67	-	-
1981-W123	2444652.32	1981 Feb 26 19:36:59	Rocketsonde	-	-	Arcasonde	-	-	-	VT	-	-	-	75	-	-
1981-W124	2444652.33	1981 Feb 26 19:54:59	Rocketsonde	-	-	Arcasonde	-	-	-	VT	-	-	-	76	-	-
1981-W126	2444652.44	1981 Feb 26 22:36:59	Rocketsonde	-	-	Arcasonde	-	-	-	KMR	-	-	-	76	-	-
1981-W80	2444652.45	1981 Feb 26 23:15:00	Rocketsonde	-	-	Arcasonde	-	-	-	PM	-	-	-	85	-	-
1981-W81	2444652.47	1981 Feb 26 23:15:00	Rocketsonde	-	-	Arcasonde	-	-	-	PM	-	-	-	90	-	-
1981-W82	2444652.94	1981 Feb 27 10:30:59	Rocketsonde	-	-	Arcasonde	-	-	-	ASC	-	-	-	67	-	-
1981-W127	2444653.10	1981 Feb 27 14:24:00	Rocketsonde	-	-	Arcasonde	-	-	-	CC	LC43	-	-	78	-	-
1981-W129	2444653.22	1981 Feb 27 17:15:00	Rocketsonde	-	-	Arcasonde	-	-	-	PRIM	-	-	-	65	-	-
1981-W83	2444653.39	1981 Feb 27 21:25:59	Rocketsonde	-	-	Arcasonde	-	-	-	KAU	-	-	-	90	-	-
1981-W130	2444653.41	1981 Feb 27 21:52:00	Rocketsonde	-	-	Arcasonde	-	-	-	KAU	-	-	-	65	-	-
1981-W131	2444653.42	1981 Feb 27 21:59:59	Rocketsonde	-	-	Arcasonde	-	-	-	SHEM	-	-	-	55	-	-
1981-W133	2444656.15	1981 Mar 2 15:43:00	Rocketsonde	-	-	Arcasonde	-	-	-	ASC	-	-	-	64	-	-
1981-W134	2444656.21	1981 Mar 2 17:00:00	Rocketsonde	-	-	Arcasonde	-	-	-	PRIM	-	-	-	59	-	-
1981-W135	2444656.38	1981 Mar 2 21:02:59	Rocketsonde	-	-	Arcasonde	-	-	-	KAU	-	-	-	66	-	-
1981-W136	2444656.38	1981 Mar 2 21:10:00	Rocketsonde	-	-	Arcasonde	-	-	-	SHEM	-	-	-	57	-	-



Launch

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Mission	FlightCode	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee_Km	Range_Km	Dest
1981-M137	2444666.41	1981 Mar 2 21:46:59	Rocketsonde	-	-	Arcasonde	-	-	-	KNR	-	-	-	77	-	-
1981-M138	2444667.04	1981 Mar 3 13:01:59	Rocketsonde	-	-	Arcasonde	-	-	-	ASC	-	-	-	62	-	-
1981-M140	2444668.14	1981 Mar 4 15:17:00	Rocketsonde	-	-	Arcasonde	-	-	-	CC	LO43	-	-	60	-	-
1981-M141	2444668.21	1981 Mar 4 17:09:00	Rocketsonde	-	-	Arcasonde	-	-	-	PRIM	-	-	-	66	-	-
1981-M143	2444668.38	1981 Mar 4 17:15:00	Rocketsonde	-	-	Arcasonde	-	-	-	WS	-	-	-	49	-	-
1981-M142	2444668.38	1981 Mar 5 21:00:00	Rocketsonde	-	-	Arcasonde	-	-	-	KAU	-	-	-	66	-	-
1981-M143	2444669.38	1981 Mar 5 21:00:00	Rocketsonde	-	-	Arcasonde	-	-	-	SHEM	-	-	-	66	-	-
1981-M144	2444670.05	1981 Mar 6 13:14:59	Rocketsonde	-	-	Arcasonde	-	-	-	ASC	-	-	-	62	-	-
1981-M145	2444670.10	1981 Mar 6 14:30:00	Rocketsonde	-	-	Arcasonde	-	-	-	CC	LO43	-	-	61	-	-
1981-M146	2444670.15	1981 Mar 6 15:30:00	Rocketsonde	-	-	Arcasonde	-	-	-	AIT	-	-	-	73	-	-
1981-M147	2444670.23	1981 Mar 6 17:30:00	Rocketsonde	-	-	Arcasonde	-	-	-	PRIM	-	-	-	65	-	-
1981-M148	2444670.26	1981 Mar 6 18:11:59	Rocketsonde	-	-	Arcasonde	-	-	-	PH	-	-	-	57	-	-
1981-M148	2444670.28	1981 Mar 6 19:40:00	Rocketsonde	-	-	Arcasonde	-	-	-	SHEM	-	-	-	73	-	-
1981-M149	2444670.39	1981 Mar 6 21:14:59	Rocketsonde	-	-	Arcasonde	-	-	-	PH	-	-	-	54	-	-
1981-M150	2444670.52	1981 Mar 7 00:27:59	Rocketsonde	-	-	Arcasonde	-	-	-	KNR	-	-	-	78	-	-
1981-M152	2444673.11	1981 Mar 9 14:45:00	Rocketsonde	-	-	Arcasonde	-	-	-	CC	LO43	-	-	62	-	-
1981-M153	2444673.16	1981 Mar 9 15:45:00	Rocketsonde	-	-	Arcasonde	-	-	-	ASC	-	-	-	61	-	-
1981-M154	2444673.20	1981 Mar 9 16:53:59	Rocketsonde	-	-	Arcasonde	-	-	-	PRIM	-	-	-	66	-	-
1981-M155	2444673.37	1981 Mar 9 20:59:00	Rocketsonde	-	-	Arcasonde	-	-	-	KAU	-	-	-	58	-	-
1981-M156	2444673.38	1981 Mar 9 21:00:00	Rocketsonde	-	-	Arcasonde	-	-	-	SHEM	-	-	-	53	-	-
1981-M157	2444673.51	1981 Mar 10 00:08:00	Rocketsonde	-	-	Arcasonde	-	-	-	MI	-	-	-	55	-	-
1981-M158	2444674.25	1981 Mar 10 17:59:00	Rocketsonde	-	-	Arcasonde	-	-	-	PH	-	-	-	55	-	-
1981-M160	2444675.16	1981 Mar 11 17:59:00	Rocketsonde	-	-	Arcasonde	-	-	-	ASC	-	-	-	62	-	-
1981-M161	2444675.16	1981 Mar 11 19:45:00	Rocketsonde	-	-	Arcasonde	-	-	-	AIT	-	-	-	42	-	-
1981-M161	2444675.21	1981 Mar 11 17:00:00	Rocketsonde	-	-	Arcasonde	-	-	-	PRIM	-	-	-	68	-	-
1981-M162	2444675.38	1981 Mar 11 21:04:59	Rocketsonde	-	-	Arcasonde	-	-	-	SHEM	-	-	-	53	-	-
1981-M163	2444675.41	1981 Mar 11 21:45:59	Rocketsonde	-	-	Arcasonde	-	-	-	KNR	-	-	-	76	-	-
1981-M164	2444676.29	1981 Mar 12 16:55:00	Rocketsonde	-	-	Arcasonde	-	-	-	PH	-	-	-	69	-	-
1981-M165	2444676.39	1981 Mar 12 21:22:59	Rocketsonde	-	-	Arcasonde	-	-	-	KNR	-	-	-	73	-	-
1981-M166	2444677.06	1981 Mar 13 13:30:00	Rocketsonde	-	-	Arcasonde	-	-	-	ASC	LO43	-	-	62	-	-
1981-M167	2444677.10	1981 Mar 13 14:20:00	Rocketsonde	-	-	Arcasonde	-	-	-	CC	-	-	-	46	-	-
1981-M168	2444677.40	1981 Mar 15 09:09:00	Rocketsonde	-	-	Arcasonde	-	-	-	SHEM	-	-	-	74	-	-
1981-M168	2444676.76	1981 Mar 15 17:15:00	Rocketsonde	-	-	Arcasonde	-	-	-	ASC	-	-	-	62	-	-
1981-M169	2444676.69	1981 Mar 15 09:21:00	Rocketsonde	-	-	Arcasonde	-	-	-	KNR	-	-	-	74	-	-
1981-M170	2444679.13	1981 Mar 16 15:08:00	Rocketsonde	-	-	Arcasonde	-	-	-	WS	-	-	-	64	-	-
1981-M171	2444680.06	1981 Mar 16 15:30:00	Rocketsonde	-	-	Arcasonde	-	-	-	ASC	-	-	-	60	-	-
1981-M172	2444680.40	1981 Mar 16 21:33:59	Rocketsonde	-	-	Arcasonde	-	-	-	KNR	-	-	-	75	-	-
1981-M173	2444681.10	1981 Mar 17 14:24:00	Rocketsonde	-	-	Arcasonde	-	-	-	CC	LO43	-	-	74	-	-
1981-M174	2444681.35	1981 Mar 17 20:25:00	Rocketsonde	-	-	Arcasonde	-	-	-	CC	-	-	-	63	-	-
1981-M174	2444681.39	1981 Mar 17 21:24:59	Rocketsonde	-	-	Arcasonde	-	-	-	SHEM	-	-	-	49	-	-
1981-M176	2444682.16	1981 Mar 18 15:06:00	Rocketsonde	-	-	Arcasonde	-	-	-	ASC	-	-	-	62	-	-
1981-M177	2444682.16	1981 Mar 18 17:15:00	Rocketsonde	-	-	Arcasonde	-	-	-	PRIM	-	-	-	67	-	-
1981-M178	2444682.22	1981 Mar 18 20:25:00	Rocketsonde	-	-	Arcasonde	-	-	-	KAU	-	-	-	61	-	-
1981-M179	2444682.26	1981 Mar 18 20:25:00	Rocketsonde	-	-	Arcasonde	-	-	-	KAU	-	-	-	67	-	-
1981-M180	2444682.39	1981 Mar 18 21:25:59	Rocketsonde	-	-	Arcasonde	-	-	-	PRIM	-	-	-	67	-	-
1981-M182	2444682.31	1981 Mar 19 19:19:59	Rocketsonde	-	-	Arcasonde	-	-	-	AIT	-	-	-	73	-	-
1981-M183	2444682.31	1981 Mar 20 21:03:59	Rocketsonde	-	-	Arcasonde	-	-	-	KNR	-	-	-	54	-	-
1981-M184	2444682.35	1981 Mar 20 21:14:59	Rocketsonde	-	-	Arcasonde	-	-	-	SHEM	-	-	-	62	-	-
1981-M186	2444682.39	1981 Mar 20 21:44:00	Rocketsonde	-	-	Arcasonde	-	-	-	KNR	-	-	-	61	-	-
1981-M187	2444687.11	1981 Mar 23 14:45:00	Rocketsonde	-	-	Arcasonde	-	-	-	CC	LO43	-	-	61	-	-
1981-M189	2444687.28	1981 Mar 23 15:05:00	Rocketsonde	-	-	Arcasonde	-	-	-	KAU	-	-	-	60	-	-
1981-M190	2444689.04	1981 Mar 24 20:58:00	Rocketsonde	-	-	Arcasonde	-	-	-	KAU	-	-	-	64	-	-
1981-M196	2444689.29	1981 Mar 24 21:45:59	Rocketsonde	-	-	Arcasonde	-	-	-	PM	-	-	-	86	-	-
1981-M191	2444689.31	1981 Mar 25 12:56:59	Rocketsonde	-	-	Arcasonde	-	-	-	ASC	-	-	-	62	-	-
1981-M192	2444689.07	1981 Mar 25 13:44:59	Rocketsonde	-	-	Arcasonde	-	-	-	AIT	-	-	-	72	-	-
1981-M193	2444689.11	1981 Mar 25 14:45:00	Rocketsonde	-	-	Arcasonde	-	-	-	CC	LO43	-	-	85	-	-
1981-M194	2444689.19	1981 Mar 25 16:30:00	Rocketsonde	-	-	Arcasonde	-	-	-	WS	-	-	-	60	-	-
1981-M194	2444689.25	1981 Mar 25 18:00:00	Rocketsonde	-	-	Arcasonde	-	-	-	VT	-	-	-	98	-	-
1981-M195	2444689.27	1981 Mar 25 18:33:59	Rocketsonde	-	-	Arcasonde	-	-	-	VT	-	-	-	63	-	-
1981-M196	2444689.40	1981 Mar 25 21:30:00	Rocketsonde	-	-	Arcasonde	-	-	-	KAU	-	-	-	65	-	-
1981-M197	2444689.43	1981 Mar 25 22:18:59	Rocketsonde	-	-	Arcasonde	-	-	-	VT	-	-	-	62	-	-
1981-M200	2444690.13	1981 Mar 26 15:03:59	Rocketsonde	-	-	Arcasonde	-	-	-	KAU	-	-	-	75	-	-
1981-M202	2444690.37	1981 Mar 26 20:58:00	Rocketsonde	-	-	Arcasonde	-	-	-	VT	-	-	-	64	-	-
1981-M203	2444690.38	1981 Mar 26 21:00:00	Rocketsonde	-	-	Arcasonde	-	-	-	KAU	-	-	-	56	-	-
1981-M205	2444691.12	1981 Mar 27 15:00:00	Rocketsonde	-	-	Arcasonde	-	-	-	CC	LO43	-	-	58	-	-
1981-M206	2444691.16	1981 Mar 27 15:09:59	Rocketsonde	-	-	Arcasonde	-	-	-	ASC	-	-	-	62	-	-
1981-M207	2444691.20	1981 Mar 27 16:44:59	Rocketsonde	-	-	Arcasonde	-	-	-	PRIM	-	-	-	59	-	-
1981-M208	2444691.38	1981 Mar 27 21:00:00	Rocketsonde	-	-	Arcasonde	-	-	-	KAU	-	-	-	66	-	-
1981-M119	2444694.03	1981 Mar 30 12:46:59	Rocketsonde	-	-	Arcasonde	-	-	-	ASC	-	-	-	86	-	-
1981-M209	2444694.19	1981 Mar 30 16:31:59	Rocketsonde	-	-	Arcasonde	-	-	-	PRIM	-	-	-	63	-	-
1981-M210	2444694.30	1981 Mar 30 19:14:59	Rocketsonde	-	-	Arcasonde	-	-	-	ASC	-	-	-	70	-	-
1981-M211	2444694.38	1981 Mar 30 21:00:00	Rocketsonde	-	-	Arcasonde	-	-	-	KAU	-	-	-	64	-	-
1981-M212	2444694.40	1981 Mar 30 21:30:00	Rocketsonde	-	-	Arcasonde	-	-	-	SHEM	-	-	-	46	-	-
1981-M212	2444694.43	1981 Mar 30 22:15:59	Rocketsonde	-	-	Arcasonde	-	-	-	KNR	-	-	-	76	-	-
1981-M213	2444695.32	1981 Mar 31 19:41:59	Rocketsonde	-	-	Arcasonde	-	-	-	PM	-	-	-	70	-	-
1981-M124	2444695.51	1981 Apr 1 00:15:59	Rocketsonde	-	-	Arcasonde	-	-	-	VT	-	-	-	73	-	-
1981-M124	2444695.92	1981 Apr 1 00:15:59	Rocketsonde	-	-	Arcasonde	-	-	-	ASC	-	-	-	86	-	-
1981-M215	2444695.99	1981 Apr 1 11:40:00	Rocketsonde	-	-	Arcasonde	-	-	-	ASC	-	-	-	72	-	-
1981-M216	2444696.26	1981 Apr 1 18:03:00	Rocketsonde	-	-	Arcasonde	-	-	-	PRIM	-	-	-	65	-	-
1981-M129	2444696.31	1981 Apr 1 19:26:59	Rocketsonde	-	-	Arcasonde	-	-	-	PM	-	-	-	90	-	-
1981-M217	2444696.46	1981 Apr 1 23:04:59	Rocketsonde	-	-	Arcasonde	-	-	-	KAU	-	-	-	63	-	-
1981-M218	2444697.11	1981 Apr 2 14:45:00	Rocketsonde	-	-	Arcasonde	-	-	-	CC	LO43	-	-	67	-	-
1981-M220	2444698.16	1981 Apr 3 15:45:00	Rocketsonde	-	-	Arcasonde	-	-	-	ASC	-	-	-	60	-	-
1981-M221	2444698.20	1981 Apr 3 16:46:59	Rocketsonde	-	-	Arcasonde	-	-	-	PRIM	-	-	-	66	-	-
1981-M222	2444698.30	1981 Apr 3 19:14:59	Rocketsonde	-	-	Arcasonde	-	-	-	CC	LO43	-	-	69	-	-

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Mission	FlightCode	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee_Km	Range_Km	Dest
1981-4223	2444698.35	1981 apr 3 2029:00	Rocketsonde	-	-	Arcasonde	-	-	-	KNR	-	-	-	78	-	-
1981-4224	2444698.37	1981 apr 3 2056:00	Rocketsonde	-	-	Arcasonde	-	-	-	KAU	-	-	-	60	-	-
1981-4226	2444701.07	1981 apr 6 1344:59	Rocketsonde	-	-	Arcasonde	-	-	-	ASC	-	-	-	60	-	-
1981-4227	2444701.11	1981 apr 6 1445:59	Rocketsonde	-	-	Arcasonde	-	-	-	CC	LO43	-	-	61	-	-
1981-4228	2444701.33	1981 apr 6 1952:00	Rocketsonde	-	-	Arcasonde	-	-	-	KAU	LO43	-	-	63	-	-
1981-4229	2444702.15	1981 apr 7 1540:00	Rocketsonde	-	-	Arcasonde	-	-	-	CC	LO43	-	-	71	-	-
1981-4230	2444702.35	1981 apr 7 2030:00	Rocketsonde	-	-	Arcasonde	-	-	-	PH	-	-	-	55	-	-
1981-4231	2444702.38	1981 apr 7 2100:00	Rocketsonde	-	-	Arcasonde	-	-	-	SHEM	-	-	-	56	-	-
1981-4234	2444703.10	1981 apr 8 1420:00	Rocketsonde	-	-	Arcasonde	-	-	-	ASC	-	-	-	63	-	-
1981-4236	2444703.26	1981 apr 8 2014:59	Rocketsonde	-	-	Arcasonde	-	-	-	PH	-	-	-	69	-	-
1981-4237	2444703.35	1981 apr 8 2017:00	Rocketsonde	-	-	Arcasonde	-	-	-	KNR	LO43	-	-	89	-	-
1981-4238	2444704.15	1981 apr 9 1530:00	Rocketsonde	-	-	Arcasonde	-	-	-	CC	-	-	-	75	-	-
1981-4239	2444704.19	1981 apr 9 1637:59	Rocketsonde	-	-	Arcasonde	-	-	-	PRIM	-	-	-	55	-	-
1981-4240	2444704.71	1981 apr 10 0506:00	Rocketsonde	-	-	Arcasonde	-	-	-	PH	-	-	-	69	-	-
1981-4241	2444705.04	1981 apr 10 1259:59	Rocketsonde	-	-	Arcasonde	-	-	-	ASC	-	-	-	52	-	-
1981-4242	2444705.19	1981 apr 10 1630:00	Rocketsonde	-	-	Arcasonde	-	-	-	PRIM	-	-	-	60	-	-
1981-4243	2444705.52	1981 apr 10 1946:59	Rocketsonde	-	-	Arcasonde	-	-	-	PH	-	-	-	69	-	-
1981-4244	2444705.53	1981 apr 10 2000:00	Rocketsonde	-	-	Arcasonde	-	-	-	ASC	LO43	-	-	60	-	-
1981-4245	2444705.59	1981 apr 10 2114:59	Rocketsonde	-	-	Arcasonde	-	-	-	PH	-	-	-	66	-	-
1981-4246	2444706.75	1981 apr 12 0536:00	Rocketsonde	-	-	Arcasonde	-	-	-	SHEM	-	-	-	54	-	-
1981-4247	2444707.03	1981 apr 12 1245:00	Rocketsonde	-	-	Arcasonde	-	-	-	PH	-	-	-	70	-	-
1981-4248	2444707.06	1981 apr 12 1430:00	Rocketsonde	-	-	Arcasonde	-	-	-	KAU	LO43	-	-	58	-	-
1981-4248	2444707.10	1981 apr 12 1430:00	Rocketsonde	-	-	Arcasonde	-	-	-	ASC	-	-	-	58	-	-
1981-4249	2444707.12	1981 apr 12 1500:00	Rocketsonde	-	-	Arcasonde	-	-	-	CC	LO43	-	-	53	-	-
1981-4250	2444707.21	1981 apr 12 1700:00	Rocketsonde	-	-	Arcasonde	-	-	-	PH	-	-	-	66	-	-
1981-4251	2444707.21	1981 apr 12 1704:59	Rocketsonde	-	-	Arcasonde	-	-	-	WI	-	-	-	89	-	-
1981-4252	2444707.38	1981 apr 12 2100:00	Rocketsonde	-	-	Arcasonde	-	-	-	WI	-	-	-	72	-	-
1981-4253	2444707.42	1981 apr 12 2200:59	Rocketsonde	-	-	Arcasonde	-	-	-	PRIM	-	-	-	62	-	-
1981-4254	2444707.50	1981 apr 13 0000:59	Rocketsonde	-	-	Arcasonde	-	-	-	SHEM	LO43	-	-	53	-	-
1981-4255	2444707.57	1981 apr 13 1115:00	Rocketsonde	-	-	Arcasonde	-	-	-	KAU	LO43	-	-	94	-	-
1981-4256	2444708.00	1981 apr 13 1200:00	Rocketsonde	-	-	Arcasonde	-	-	-	PH	-	-	-	52	-	-
1981-4256	2444708.12	1981 apr 13 1500:00	Rocketsonde	-	-	Arcasonde	-	-	-	ASC	-	-	-	63	-	-
1981-4257	2444708.12	1981 apr 13 1500:00	Rocketsonde	-	-	Arcasonde	-	-	-	WI	-	-	-	88	-	-
1981-4258	2444708.15	1981 apr 13 1509:00	Rocketsonde	-	-	Arcasonde	-	-	-	CC	LO43	-	-	87	-	-
1981-4258	2444708.14	1981 apr 13 1516:00	Rocketsonde	-	-	Arcasonde	-	-	-	WI	-	-	-	70	-	-
1981-4259	2444708.17	1981 apr 13 1557:59	Rocketsonde	-	-	Arcasonde	-	-	-	PRIM	-	-	-	74	-	-
1981-4260	2444708.21	1981 apr 13 1708:00	Rocketsonde	-	-	Arcasonde	-	-	-	SHEM	LO43	-	-	69	-	-
1981-4261	2444708.37	1981 apr 13 2035:00	Rocketsonde	-	-	Arcasonde	-	-	-	KAU	-	-	-	94	-	-
1981-4262	2444708.38	1981 apr 13 2100:00	Rocketsonde	-	-	Arcasonde	-	-	-	PH	-	-	-	77	-	-
1981-4263	2444708.54	1981 apr 14 0925:59	Rocketsonde	-	-	Arcasonde	-	-	-	PH	-	-	-	69	-	-
1981-4264	2444708.59	1981 apr 14 1017:00	Rocketsonde	-	-	Arcasonde	-	-	-	PH	-	-	-	77	-	-
1981-4265	2444708.55	1981 apr 14 1025:59	Rocketsonde	-	-	Arcasonde	-	-	-	PH	-	-	-	69	-	-
1981-4266	2444709.00	1981 apr 14 1200:00	Rocketsonde	-	-	Arcasonde	-	-	-	ASC	-	-	-	63	-	-
1981-4266	2444709.08	1981 apr 14 1500:00	Rocketsonde	-	-	Arcasonde	-	-	-	CC	LO43	-	-	70	-	-
1981-4267	2444709.12	1981 apr 14 1514:59	Rocketsonde	-	-	Arcasonde	-	-	-	PH	-	-	-	69	-	-
1981-4268	2444709.13	1981 apr 14 1514:59	Rocketsonde	-	-	Arcasonde	-	-	-	CC	-	-	-	72	-	-
1981-4268	2444709.21	1981 apr 14 1704:59	Rocketsonde	-	-	Arcasonde	-	-	-	WI	-	-	-	66	-	-
1981-4143	2444709.23	1981 apr 14 1731:00	Rocketsonde	-	-	Arcasonde	-	-	-	KAU	-	-	-	95	-	-
1981-4269	2444709.23	1981 apr 14 1731:00	Rocketsonde	-	-	Arcasonde	-	-	-	PH	-	-	-	92	-	-
1981-4270	2444709.23	1981 apr 14 1737:00	Rocketsonde	-	-	Arcasonde	-	-	-	PH	-	-	-	72	-	-
1981-4144	2444709.26	1981 apr 14 1820:00	Rocketsonde	-	-	Arcasonde	-	-	-	PH	-	-	-	56	-	-
1981-4271	2444709.26	1981 apr 14 1820:00	Rocketsonde	-	-	Arcasonde	-	-	-	PH	-	-	-	90	-	-
1981-4145	2444709.28	1981 apr 14 1908:59	Rocketsonde	-	-	Arcasonde	-	-	-	PH	-	-	-	90	-	-
1981-4272	2444709.30	1981 apr 14 1908:59	Rocketsonde	-	-	Arcasonde	-	-	-	PH	-	-	-	67	-	-
1981-4273	2444709.33	1981 apr 14 1919:59	Rocketsonde	-	-	Arcasonde	-	-	-	KAU	-	-	-	72	-	-
1981-4146	2444709.35	1981 apr 14 1955:59	Rocketsonde	-	-	Arcasonde	-	-	-	PH	-	-	-	95	-	-
1981-4146	2444709.35	1981 apr 14 2017:00	Rocketsonde	-	-	Arcasonde	-	-	-	PH	-	-	-	95	-	-
1981-4275	2444709.38	1981 apr 14 2100:00	Rocketsonde	-	-	Arcasonde	-	-	-	PH	-	-	-	55	-	-
1981-4276	2444709.50	1981 apr 15 0000:59	Rocketsonde	-	-	Arcasonde	-	-	-	SHEM	-	-	-	76	-	-
1981-4278	2444710.06	1981 apr 15 1330:00	Rocketsonde	-	-	Arcasonde	-	-	-	KNR	-	-	-	61	-	-
1981-4149	2444710.11	1981 apr 15 1445:00	Rocketsonde	-	-	Arcasonde	-	-	-	ASC	LO43	-	-	84	-	-
1981-4279	2444710.27	1981 apr 15 1830:00	Rocketsonde	-	-	Arcasonde	-	-	-	CC	-	-	-	72	-	-
1981-4280	2444710.37	1981 apr 15 2056:00	Rocketsonde	-	-	Arcasonde	-	-	-	PH	-	-	-	46	-	-
1981-4281	2444710.38	1981 apr 15 2110:00	Rocketsonde	-	-	Arcasonde	-	-	-	PH	-	-	-	55	-	-
1981-4281	2444710.38	1981 apr 15 2110:00	Rocketsonde	-	-	Arcasonde	-	-	-	PH	-	-	-	55	-	-
1981-4282	2444710.38	1981 apr 15 2110:00	Rocketsonde	-	-	Arcasonde	-	-	-	PH	-	-	-	55	-	-
1981-4283	2444710.38	1981 apr 15 2110:00	Rocketsonde	-	-	Arcasonde	-	-	-	PH	-	-	-	55	-	-
1981-4284	2444710.37	1981 apr 15 2048:00	Rocketsonde	-	-	Arcasonde	-	-	-	SHEM	-	-	-	46	-	-
1981-4151	2444715.37	1981 apr 20 2055:00	Rocketsonde	-	-	Arcasonde	-	-	-	KAU	-	-	-	63	-	-
1981-4285	2444715.38	1981 apr 20 2100:00	Rocketsonde	-	-	Arcasonde	-	-	-	SHEM	-	-	-	77	-	-
1981-4286	2444715.38	1981 apr 20 2100:00	Rocketsonde	-	-	Arcasonde	-	-	-	KAU	-	-	-	56	-	-
1981-4287	2444716.11	1981 apr 21 1434:00	Rocketsonde	-	-	Arcasonde	-	-	-	KNR	LO43	-	-	95	-	-
1981-4287	2444716.35	1981 apr 21 2025:00	Rocketsonde	-	-	Arcasonde	-	-	-	SHEM	-	-	-	55	-	-
1981-4156	2444717.09	1981 apr 22 1411:00	Rocketsonde	-	-	Arcasonde	-	-	-	CC	LO43	-	-	67	-	-
1981-4291	2444717.19	1981 apr 22 1626:59	Rocketsonde	-	-	Arcasonde	-	-	-	CC	LO43	-	-	85	-	-
1981-4292	2444717.20	1981 apr 22 1644:59	Rocketsonde	-	-	Arcasonde	-	-	-	ASC	-	-	-	59	-	-
1981-4157	2444717.37	1981 apr 22 2052:00	Rocketsonde	-	-	Arcasonde	-	-	-	PRIM	-	-	-	63	-	-
1981-4293	2444717.37	1981 apr 22 2117:00	Rocketsonde	-	-	Arcasonde	-	-	-	KAU	-	-	-	87	-	-
1981-4294	2444718.12	1981 apr 23 1500:00	Rocketsonde	-	-	Arcasonde	-	-	-	KAU	-	-	-	71	-	-
1981-4295	2444719.07	1981 apr 24 1344:59	Rocketsonde	-	-	Arcasonde	-	-	-	ANT	-	-	-	62	-	-
1981-4296	2444719.11	1981 apr 24 1445:00	Rocketsonde	-	-	Arcasonde	-	-	-	KAU	-	-	-	67	-	-
1981-4297	2444719.21	1981 apr 24 1700:00	Rocketsonde	-	-	Arcasonde	-	-	-	CC	LO43	-	-	73	-	-
1981-4298	2444719.38	1981 apr 24 2100:00	Rocketsonde	-	-	Arcasonde	-	-	-	PRIM	-	-	-	67	-	-
1981-4298	2444721.38	1981 apr 26 2101:59	Rocketsonde	-	-	Arcasonde	-	-	-	KAU	-	-	-	64	-	-
1981-4301	2444722.06	1981 apr 27 1330:00	Rocketsonde	-	-	Arcasonde	-	-	-	KAU	-	-	-	63	-	-
1981-4302	2444722.07	1981 apr 27 1344:59	Rocketsonde	-	-	Arcasonde	-	-	-	CC	LO43	-	-	72	-	-

Launch

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Mission	FlightCode	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee_Km	Range_Km	Dest
1981-W304	2444722.16	1981 Apr 27 15:45:59	Rocketsonde	-	-	Arcasonde	-	-	-	PRIM	-	-	-	66	-	-
1981-W307	2444722.34	1981 Apr 27 20:13:00	Rocketsonde	-	-	Arcasonde	-	-	-	KAU	-	-	-	63	-	-
1981-W309	2444724.08	1981 Apr 29 13:49:59	Rocketsonde	-	-	Arcasonde	-	-	-	AUT	-	-	-	61	-	-
1981-Y162	2444724.09	1981 Apr 29 14:15:00	Rocketsonde	-	-	Arcasonde	-	-	-	CC	LO43	-	-	85	-	-
1981-W310	2444724.16	1981 Apr 29 15:46:00	Rocketsonde	-	-	Arcasonde	-	-	-	ASC	-	-	-	61	-	-
1981-W311	2444724.18	1981 Apr 29 16:19:59	Rocketsonde	-	-	Arcasonde	-	-	-	PRIM	-	-	-	69	-	-
1981-W312	2444724.25	1981 Apr 29 18:04:59	Rocketsonde	-	-	Arcasonde	-	-	-	WS	-	-	-	58	-	-
1981-W313	2444724.33	1981 Apr 29 20:00:00	Rocketsonde	-	-	Arcasonde	-	-	-	SHEM	-	-	-	54	-	-
1981-W314	2444724.37	1981 Apr 29 20:46:00	Rocketsonde	-	-	Arcasonde	-	-	-	KHR	-	-	-	77	-	-
1981-W315	2444726.37	1981 Apr 30 20:55:00	Rocketsonde	-	-	Arcasonde	-	-	-	KHR	-	-	-	74	-	-
1981-W317	2444726.15	1981 May 1 15:41:00	Rocketsonde	-	-	Arcasonde	-	-	-	PRIM	-	-	-	44	-	-
1981-W318	2444726.53	1981 May 2 00:38:59	Rocketsonde	-	-	Arcasonde	-	-	-	KHR	-	-	-	76	-	-
1981-W319	2444729.16	1981 May 4 15:44:00	Rocketsonde	-	-	Arcasonde	-	-	-	PRIM	-	-	-	57	-	-
1981-W320	2444729.29	1981 May 4 18:54:00	Rocketsonde	-	-	Arcasonde	-	-	-	PH	-	-	-	73	-	-
1981-W321	2444729.43	1981 May 4 22:19:59	Rocketsonde	-	-	Arcasonde	-	-	-	KHR	-	-	-	70	-	-
1981-W322	2444729.93	1981 May 5 10:23:59	Rocketsonde	-	-	Arcasonde	-	-	-	ASC	LO43	-	-	65	-	-
1981-W324	2444730.10	1981 May 5 14:17:00	Rocketsonde	-	-	Arcasonde	-	-	-	CC	-	-	-	73	-	-
1981-W325	2444732.16	1981 May 7 15:45:00	Rocketsonde	-	-	Arcasonde	-	-	-	PRIM	-	-	-	63	-	-
1981-W326	2444732.19	1981 May 7 16:30:00	Rocketsonde	-	-	Arcasonde	-	-	-	WS	-	-	-	98	-	-
1981-W328	2444732.53	1981 May 8 00:42:00	Rocketsonde	-	-	Arcasonde	-	-	-	WS	-	-	-	61	-	-
1981-W329	2444733.07	1981 May 8 13:44:59	Rocketsonde	-	-	Arcasonde	-	-	-	RHR	LO43	-	-	57	-	-
1981-W329	2444733.15	1981 May 8 13:44:59	Rocketsonde	-	-	Arcasonde	-	-	-	CC	-	-	-	75	-	-
1981-W330	2444733.35	1981 May 8 15:30:00	Rocketsonde	-	-	Arcasonde	-	-	-	PRIM	-	-	-	59	-	-
1981-W331	2444733.37	1981 May 8 20:24:00	Rocketsonde	-	-	Arcasonde	-	-	-	KAU	-	-	-	65	-	-
1981-W331	2444733.37	1981 May 8 20:51:00	Rocketsonde	-	-	Arcasonde	-	-	-	AUT	-	-	-	79	-	-
1981-W333	2444736.07	1981 May 11 13:44:59	Rocketsonde	-	-	Arcasonde	-	-	-	ASC	LO43	-	-	52	-	-
1981-W334	2444736.17	1981 May 11 15:27:59	Rocketsonde	-	-	Arcasonde	-	-	-	CC	-	-	-	68	-	-
1981-W335	2444736.19	1981 May 11 16:27:59	Rocketsonde	-	-	Arcasonde	-	-	-	PH	-	-	-	59	-	-
1981-W335	2444736.19	1981 May 13 10:43:59	Rocketsonde	-	-	Arcasonde	-	-	-	ASC	LO43	-	-	62	-	-
1981-W336	2444737.95	1981 May 13 15:30:00	Rocketsonde	-	-	Arcasonde	-	-	-	CC	-	-	-	61	-	-
1981-W339	2444738.06	1981 May 13 15:30:00	Rocketsonde	-	-	Arcasonde	-	-	-	AUT	-	-	-	60	-	-
1981-W340	2444738.14	1981 May 13 15:24:59	Rocketsonde	-	-	Arcasonde	-	-	-	WS	-	-	-	53	-	-
1981-W341	2444738.16	1981 May 13 15:46:00	Rocketsonde	-	-	Arcasonde	-	-	-	PRIM	-	-	-	44	-	-
1981-W341	2444738.16	1981 May 13 15:56:59	Rocketsonde	-	-	Arcasonde	-	-	-	WS	-	-	-	54	-	-
1981-W341	2444738.16	1981 May 13 16:30:00	Rocketsonde	-	-	Arcasonde	-	-	-	PH	-	-	-	92	-	-
1981-W342	2444738.27	1981 May 13 18:22:59	Rocketsonde	-	-	Arcasonde	-	-	-	ASC	-	-	-	61	-	-
1981-W343	2444738.29	1981 May 13 18:57:59	Rocketsonde	-	-	Arcasonde	-	-	-	PH	-	-	-	71	-	-
1981-W344	2444739.04	1981 May 14 12:35:00	Rocketsonde	-	-	Arcasonde	-	-	-	ASC	-	-	-	57	-	-
1981-W344	2444739.50	1981 May 14 19:11:59	Rocketsonde	-	-	Arcasonde	-	-	-	PRIM	-	-	-	61	-	-
1981-W345	2444739.53	1981 May 14 19:56:59	Rocketsonde	-	-	Arcasonde	-	-	-	KHR	-	-	-	54	-	-
1981-W346	2444740.34	1981 May 15 20:04:59	Rocketsonde	-	-	Arcasonde	-	-	-	SHEM	-	-	-	94	-	-
1981-W346	2444740.39	1981 May 15 21:26:59	Rocketsonde	-	-	Arcasonde	-	-	-	KAU	-	-	-	66	-	-
1981-W349	2444742.94	1981 May 16 10:00:59	Rocketsonde	-	-	Arcasonde	-	-	-	ASC	-	-	-	60	-	-
1981-W350	2444742.94	1981 May 16 15:04:59	Rocketsonde	-	-	Arcasonde	-	-	-	CC	-	-	-	59	-	-
1981-W352	2444744.21	1981 May 19 17:00:59	Rocketsonde	-	-	Arcasonde	-	-	-	PRIM	LO43	-	-	58	-	-
1981-W352	2444745.17	1981 May 20 15:34:59	Rocketsonde	-	-	Arcasonde	-	-	-	ASC	-	-	-	60	-	-
1981-W356	2444745.15	1981 May 20 15:34:59	Rocketsonde	-	-	Arcasonde	-	-	-	CC	-	-	-	55	-	-
1981-W358	2444745.15	1981 May 20 17:36:00	Rocketsonde	-	-	Arcasonde	-	-	-	PRIM	-	-	-	65	-	-
1981-W359	2444745.33	1981 May 20 20:56:00	Rocketsonde	-	-	Arcasonde	-	-	-	SHEM	-	-	-	54	-	-
1981-W360	2444745.33	1981 May 20 20:56:00	Rocketsonde	-	-	Arcasonde	-	-	-	KHR	-	-	-	73	-	-
1981-W361	2444747.01	1981 May 21 13:14:59	Rocketsonde	-	-	Arcasonde	-	-	-	CC	-	-	-	46	-	-
1981-W361	2444747.05	1981 May 21 13:14:59	Rocketsonde	-	-	Arcasonde	-	-	-	PH	-	-	-	66	-	-
1981-W362	2444747.17	1981 May 22 15:59:59	Rocketsonde	-	-	Arcasonde	-	-	-	ASC	LO43	-	-	61	-	-
1981-W363	2444747.17	1981 May 22 15:59:59	Rocketsonde	-	-	Arcasonde	-	-	-	CC	-	-	-	59	-	-
1981-W365	2444747.39	1981 May 22 21:17:00	Rocketsonde	-	-	Arcasonde	-	-	-	PRIM	-	-	-	67	-	-
1981-W365	2444747.39	1981 May 22 21:17:00	Rocketsonde	-	-	Arcasonde	-	-	-	PM	-	-	-	70	-	-
1981-W366	2444750.15	1981 May 25 15:34:59	Rocketsonde	-	-	Arcasonde	-	-	-	KAU	-	-	-	74	-	-
1981-W367	2444750.24	1981 May 25 20:15:00	Rocketsonde	-	-	Arcasonde	-	-	-	PRIM	-	-	-	59	-	-
1981-W370	2444751.35	1981 May 26 20:26:00	Rocketsonde	-	-	Arcasonde	-	-	-	SHEM	-	-	-	56	-	-
1981-W370	2444751.35	1981 May 26 20:26:00	Rocketsonde	-	-	Arcasonde	-	-	-	KAU	-	-	-	66	-	-
1981-W371	2444751.40	1981 May 26 21:34:59	Rocketsonde	-	-	Arcasonde	-	-	-	ASC	-	-	-	73	-	-
1981-W374	2444751.94	1981 May 27 10:27:59	Rocketsonde	-	-	Arcasonde	-	-	-	CC	LO43	-	-	61	-	-
1981-W376	2444752.10	1981 May 27 14:22:00	Rocketsonde	-	-	Arcasonde	-	-	-	ASC	-	-	-	59	-	-
1981-W378	2444752.17	1981 May 27 15:59:59	Rocketsonde	-	-	Arcasonde	-	-	-	WS	-	-	-	99	-	-
1981-W378	2444752.17	1981 May 27 15:59:59	Rocketsonde	-	-	Arcasonde	-	-	-	PRIM	-	-	-	56	-	-
1981-W379	2444752.24	1981 May 27 17:40:00	Rocketsonde	-	-	Arcasonde	-	-	-	PM	-	-	-	73	-	-
1981-W380	2444752.27	1981 May 27 18:26:59	Rocketsonde	-	-	Arcasonde	-	-	-	PM	-	-	-	67	-	-
1981-W381	2444752.54	1981 May 28 00:55:00	Rocketsonde	-	-	Arcasonde	-	-	-	KAU	-	-	-	55	-	-
1981-W381	2444752.54	1981 May 28 00:55:00	Rocketsonde	-	-	Arcasonde	-	-	-	SHEM	-	-	-	65	-	-
1981-W382	2444753.12	1981 May 28 15:00:00	Rocketsonde	-	-	Arcasonde	-	-	-	AUT	-	-	-	60	-	-
1981-W384	2444754.04	1981 May 29 12:59:59	Rocketsonde	-	-	Arcasonde	-	-	-	ASC	-	-	-	60	-	-
1981-W385	2444754.07	1981 May 29 13:44:59	Rocketsonde	-	-	Arcasonde	-	-	-	CC	LO43	-	-	54	-	-
1981-W386	2444754.14	1981 May 29 15:24:59	Rocketsonde	-	-	Arcasonde	-	-	-	PM	-	-	-	68	-	-
1981-W387	2444754.15	1981 May 29 15:30:00	Rocketsonde	-	-	Arcasonde	-	-	-	PRIM	-	-	-	57	-	-
1981-W388	2444754.53	1981 May 30 00:36:59	Rocketsonde	-	-	Arcasonde	-	-	-	KHR	-	-	-	76	-	-
1981-W389	2444754.53	1981 May 30 00:36:59	Rocketsonde	-	-	Arcasonde	-	-	-	SHEM	-	-	-	50	-	-
1981-W390	2444757.06	1981 Jun 1 13:30:00	Rocketsonde	-	-	Arcasonde	-	-	-	ASC	-	-	-	59	-	-
1981-W391	2444757.07	1981 Jun 1 13:44:59	Rocketsonde	-	-	Arcasonde	-	-	-	CC	LO43	-	-	60	-	-
1981-W392	2444757.17	1981 Jun 1 16:00:59	Rocketsonde	-	-	Arcasonde	-	-	-	PRIM	-	-	-	55	-	-
1981-W393	2444757.33	1981 Jun 1 20:57:00	Rocketsonde	-	-	Arcasonde	-	-	-	SHEM	-	-	-	53	-	-
1981-W394	2444757.37	1981 Jun 1 20:57:00	Rocketsonde	-	-	Arcasonde	-	-	-	KAU	-	-	-	67	-	-
1981-W395	2444758.16	1981 Jun 2 15:30:00	Rocketsonde	-	-	Arcasonde	-	-	-	WS	-	-	-	71	-	-
1981-W396	2444759.15	1981 Jun 3 15:30:00	Rocketsonde	-	-	Arcasonde	-	-	-	PM	-	-	-	98	-	-
1981-W397	2444759.21	1981 Jun 3 17:00:00	Rocketsonde	-	-	Arcasonde	-	-	-	WS	-	-	-	67	-	-
1981-W398	2444759.31	1981 Jun 3 19:31:59	Rocketsonde	-	-	Arcasonde	-	-	-	PM	-	-	-	62	-	-
1981-W399	2444759.41	1981 Jun 3 21:49:59	Rocketsonde	-	-	Arcasonde	-	-	-	KHR	-	-	-	76	-	-
1981-W400	2444759.42	1981 Jun 3 22:04:59	Rocketsonde	-	-	Arcasonde	-	-	-	SHEM	-	-	-	56	-	-

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Mission	FlightCode	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee_Km	Range_Km	Dest
1981-1401	2444759.90	1981 Jun 4 0943:00	Rocketsonde	-	-	Arcasonde	-	-	-	ASC	-	-	-	61	-	-
1981-1402	2444760.10	1981 Jun 4 1430:00	Rocketsonde	-	-	Arcasonde	-	-	-	CC	LO43	-	-	61	-	-
1981-1403	2444761.03	1981 Jun 5 1246:59	Rocketsonde	-	-	Arcasonde	-	-	-	ASC	-	-	-	64	-	-
1981-1404	2444761.09	1981 Jun 5 1414:00	Rocketsonde	-	-	Arcasonde	-	-	-	CC	LO43	-	-	59	-	-
1981-1405	2444761.31	1981 Jun 5 1929:00	Rocketsonde	-	-	Arcasonde	-	-	-	KAU	-	-	-	89	-	-
1981-1406	2444761.33	1981 Jun 5 1954:59	Rocketsonde	-	-	Arcasonde	-	-	-	KAU	-	-	-	87	-	-
1981-1407	2444761.33	1981 Jun 5 2000:00	Rocketsonde	-	-	Arcasonde	-	-	-	SHEM	-	-	-	55	-	-
1981-1408	2444764.40	1981 Jun 8 2136:59	Rocketsonde	-	-	Arcasonde	-	-	-	KNR	-	-	-	73	-	-
1981-1409	2444764.90	1981 Jun 9 0930:00	Rocketsonde	-	-	Arcasonde	-	-	-	ASC	-	-	-	61	-	-
1981-1410	2444765.10	1981 Jun 9 1423:00	Rocketsonde	-	-	Arcasonde	-	-	-	CC	LO43	-	-	57	-	-
1981-1411	2444765.23	1981 Jun 9 1726:59	Rocketsonde	-	-	Arcasonde	-	-	-	PH	-	-	-	62	-	-
1981-1412	2444766.06	1981 Jun 10 1331:59	Rocketsonde	-	-	Arcasonde	-	-	-	ASC	-	-	-	61	-	-
1981-1413	2444766.08	1981 Jun 10 1349:59	Rocketsonde	-	-	Arcasonde	-	-	-	CC	LO43	-	-	85	-	-
1981-1414	2444766.22	1981 Jun 10 1711:00	Rocketsonde	-	-	Arcasonde	-	-	-	PRIM	-	-	-	68	-	-
1981-1415	2444766.33	1981 Jun 10 1953:59	Rocketsonde	-	-	Arcasonde	-	-	-	PH	-	-	-	70	-	-
1981-1416	2444766.53	1981 Jun 11 1256:59	Rocketsonde	-	-	Arcasonde	-	-	-	ASC	-	-	-	62	-	-
1981-1417	2444767.04	1981 Jun 11 2058:00	Rocketsonde	-	-	Arcasonde	-	-	-	KAU	-	-	-	68	-	-
1981-1418	2444767.37	1981 Jun 12 2134:59	Rocketsonde	-	-	Arcasonde	-	-	-	KNR	-	-	-	67	-	-
1981-1419	2444768.40	1981 Jun 16 0041:00	Rocketsonde	-	-	Arcasonde	-	-	-	ASC	-	-	-	61	-	-
1981-1420	2444771.53	1981 Jun 16 1246:59	Rocketsonde	-	-	Arcasonde	-	-	-	CC	-	-	-	61	-	-
1981-1421	2444772.03	1981 Jun 16 1759:00	Rocketsonde	-	-	Arcasonde	-	-	-	PH	-	-	-	41	-	-
1981-1422	2444772.25	1981 Jun 17 1303:59	Rocketsonde	-	-	Arcasonde	-	-	-	ASC	-	-	-	61	-	-
1981-1423	2444773.04	1981 Jun 17 1344:59	Rocketsonde	-	-	Arcasonde	-	-	-	PH	-	-	-	46	-	-
1981-1424	2444773.35	1981 Jun 17 2000:00	Rocketsonde	-	-	Arcasonde	-	-	-	CC	LO43	-	-	86	-	-
1981-1425	2444773.35	1981 Jun 17 2027:59	Rocketsonde	-	-	Arcasonde	-	-	-	KAU	-	-	-	90	-	-
1981-1426	2444773.40	1981 Jun 17 2133:00	Rocketsonde	-	-	Arcasonde	-	-	-	KAU	-	-	-	96	-	-
1981-1427	2444773.59	1981 Jun 18 0926:59	Rocketsonde	-	-	Arcasonde	-	-	-	KNR	-	-	-	73	-	-
1981-1428	2444774.17	1981 Jun 18 1559:59	Rocketsonde	-	-	Arcasonde	-	-	-	ASC	-	-	-	62	-	-
1981-1429	2444774.20	1981 Jun 18 1653:59	Rocketsonde	-	-	Arcasonde	-	-	-	WS	-	-	-	96	-	-
1981-1430	2444774.34	1981 Jun 18 2012:00	Rocketsonde	-	-	Arcasonde	-	-	-	ASC	-	-	-	65	-	-
1981-1431	2444775.07	1981 Jun 19 1344:59	Rocketsonde	-	-	Arcasonde	-	-	-	CC	LO43	-	-	59	-	-
1981-1432	2444775.04	1981 Jun 22 1253:00	Rocketsonde	-	-	Arcasonde	-	-	-	ASC	-	-	-	59	-	-
1981-1433	2444775.35	1981 Jun 22 1427:59	Rocketsonde	-	-	Arcasonde	-	-	-	CC	LO43	-	-	58	-	-
1981-1434	2444775.59	1981 Jun 22 1956:59	Rocketsonde	-	-	Arcasonde	-	-	-	KAU	-	-	-	52	-	-
1981-1435	2444776.10	1981 Jun 22 2119:00	Rocketsonde	-	-	Arcasonde	-	-	-	ASC	-	-	-	62	-	-
1981-1436	2444776.39	1981 Jun 22 2119:00	Rocketsonde	-	-	Arcasonde	-	-	-	ASC	-	-	-	62	-	-
1981-1437	2444776.59	1981 Jun 24 1406:00	Rocketsonde	-	-	Arcasonde	-	-	-	PRIM	-	-	-	69	-	-
1981-1438	2444780.09	1981 Jun 24 1416:00	Rocketsonde	-	-	Arcasonde	-	-	-	ASC	-	-	-	65	-	-
1981-1439	2444780.10	1981 Jun 24 1430:00	Rocketsonde	-	-	Arcasonde	-	-	-	CC	-	-	-	64	-	-
1981-1440	2444780.17	1981 Jun 24 1606:00	Rocketsonde	-	-	Arcasonde	-	-	-	PRIM	-	-	-	58	-	-
1981-1441	2444780.19	1981 Jun 24 1649:59	Rocketsonde	-	-	Arcasonde	-	-	-	ASC	-	-	-	58	-	-
1981-1442	2444780.20	1981 Jun 24 1716:00	Rocketsonde	-	-	Arcasonde	-	-	-	WS	-	-	-	96	-	-
1981-1443	2444780.22	1981 Jun 24 1735:00	Rocketsonde	-	-	Arcasonde	-	-	-	ASC	-	-	-	70	-	-
1981-1444	2444780.23	1981 Jun 24 1756:00	Rocketsonde	-	-	Arcasonde	-	-	-	PH	-	-	-	69	-	-
1981-1445	2444781.53	1981 Jun 25 1932:00	Rocketsonde	-	-	Arcasonde	-	-	-	ASC	-	-	-	71	-	-
1981-1446	2444781.91	1981 Jun 26 0944:00	Rocketsonde	-	-	Arcasonde	-	-	-	ASC	-	-	-	60	-	-
1981-1447	2444782.10	1981 Jun 26 1430:00	Rocketsonde	-	-	Arcasonde	-	-	-	PRIM	-	-	-	64	-	-
1981-1448	2444782.19	1981 Jun 26 1530:00	Rocketsonde	-	-	Arcasonde	-	-	-	ASC	-	-	-	62	-	-
1981-1449	2444782.19	1981 Jun 29 1304:59	Rocketsonde	-	-	Arcasonde	-	-	-	CC	-	-	-	61	-	-
1981-1450	2444783.07	1981 Jun 29 1509:59	Rocketsonde	-	-	Arcasonde	-	-	-	KAU	-	-	-	67	-	-
1981-1451	2444783.07	1981 Jun 29 1509:59	Rocketsonde	-	-	Arcasonde	-	-	-	PRIM	-	-	-	67	-	-
1981-1452	2444783.07	1981 Jun 30 0141:00	Rocketsonde	-	-	Arcasonde	-	-	-	ASC	-	-	-	73	-	-
1981-1453	2444783.59	1981 Jun 30 1530:00	Rocketsonde	-	-	Arcasonde	-	-	-	ASC	-	-	-	61	-	-
1981-1454	2444783.59	1981 Jun 30 1530:00	Rocketsonde	-	-	Arcasonde	-	-	-	KAU	-	-	-	90	-	-
1981-1455	2444783.59	1981 Jun 31 0924:59	Rocketsonde	-	-	Arcasonde	-	-	-	ASC	-	-	-	62	-	-
1981-1456	2444783.59	1981 Jun 31 0924:59	Rocketsonde	-	-	Arcasonde	-	-	-	KAU	-	-	-	90	-	-
1981-1457	2444783.59	1981 Jun 31 1211:59	Rocketsonde	-	-	Arcasonde	-	-	-	PRIM	-	-	-	67	-	-
1981-1458	2444783.59	1981 Jun 31 1211:59	Rocketsonde	-	-	Arcasonde	-	-	-	ASC	-	-	-	62	-	-
1981-1459	2444783.59	1981 Jun 31 1211:59	Rocketsonde	-	-	Arcasonde	-	-	-	KAU	-	-	-	90	-	-
1981-1460	2444783.59	1981 Jun 31 1211:59	Rocketsonde	-	-	Arcasonde	-	-	-	ASC	-	-	-	62	-	-
1981-1461	2444783.59	1981 Jun 31 1211:59	Rocketsonde	-	-	Arcasonde	-	-	-	KAU	-	-	-	90	-	-
1981-1462	2444783.59	1981 Jun 31 1211:59	Rocketsonde	-	-	Arcasonde	-	-	-	ASC	-	-	-	62	-	-
1981-1463	2444783.59	1981 Jun 31 1211:59	Rocketsonde	-	-	Arcasonde	-	-	-	KAU	-	-	-	90	-	-
1981-1464	2444783.59	1981 Jun 31 1211:59	Rocketsonde	-	-	Arcasonde	-	-	-	ASC	-	-	-	62	-	-
1981-1465	2444783.59	1981 Jun 31 1211:59	Rocketsonde	-	-	Arcasonde	-	-	-	KAU	-	-	-	90	-	-
1981-1466	2444783.59	1981 Jun 31 1211:59	Rocketsonde	-	-	Arcasonde	-	-	-	ASC	-	-	-	62	-	-
1981-1467	2444783.59	1981 Jun 31 1211:59	Rocketsonde	-	-	Arcasonde	-	-	-	KAU	-	-	-	90	-	-
1981-1468	2444783.59	1981 Jun 31 1211:59	Rocketsonde	-	-	Arcasonde	-	-	-	ASC	-	-	-	62	-	-
1981-1469	2444783.59	1981 Jun 31 1211:59	Rocketsonde	-	-	Arcasonde	-	-	-	KAU	-	-	-	90	-	-
1981-1470	2444783.59	1981 Jun 31 1211:59	Rocketsonde	-	-	Arcasonde	-	-	-	ASC	-	-	-	62	-	-
1981-1471	2444783.59	1981 Jun 31 1211:59	Rocketsonde	-	-	Arcasonde	-	-	-	KAU	-	-	-	90	-	-
1981-1472	2444783.59	1981 Jun 31 1211:59	Rocketsonde	-	-	Arcasonde	-	-	-	ASC	-	-	-	62	-	-
1981-1473	2444783.59	1981 Jun 31 1211:59	Rocketsonde	-	-	Arcasonde	-	-	-	KAU	-	-	-	90	-	-
1981-1474	2444783.59	1981 Jun 31 1211:59	Rocketsonde	-	-	Arcasonde	-	-	-	ASC	-	-	-	62	-	-
1981-1475	2444783.59	1981 Jun 31 1211:59	Rocketsonde	-	-	Arcasonde	-	-	-	KAU	-	-	-	90	-	-
1981-1476	2444783.59	1981 Jun 31 1211:59	Rocketsonde	-	-	Arcasonde	-	-	-	ASC	-	-	-	62	-	-
1981-1477	2444783.59	1981 Jun 31 1211:59	Rocketsonde	-	-	Arcasonde	-	-	-	KAU	-	-	-	90	-	-
1981-1478	2444783.59	1981 Jun 31 1211:59	Rocketsonde	-	-	Arcasonde	-	-	-	ASC	-	-	-	62	-	-
1981-1479	2444783.59	1981 Jun 31 1211:59	Rocketsonde	-	-	Arcasonde	-	-	-	KAU	-	-	-	90	-	-
1981-1480	2444783.59	1981 Jun 31 1211:59	Rocketsonde	-	-	Arcasonde	-	-	-	ASC	-	-	-	62	-	-
1981-1481	2444783.59	1981 Jun 31 1211:59	Rocketsonde	-	-	Arcasonde	-	-	-	KAU	-	-	-	90	-	-
1981-1482	2444783.59	1981 Jun 31 1211:59	Rocketsonde	-	-	Arcasonde	-	-	-	ASC	-	-	-	62	-	-
1981-1483	2444783.59	1981 Jun 31 1211:59	Rocketsonde	-	-	Arcasonde	-	-	-	KAU	-	-	-	90	-	-
1981-1484	2444783.59	1981 Jun 31 1211:59	Rocketsonde	-	-	Arcasonde	-	-	-	ASC	-	-	-	62	-	-
1981-1485	2444783.59	1981 Jun 31 1211:59	Rocketsonde	-	-	Arcasonde	-	-	-	KAU	-	-	-	90	-	-
1981-1486	2444783.59	1981 Jun 31 1211:59	Rocketsonde	-	-	Arcasonde	-	-	-	ASC	-	-	-	62	-	-
1981-1487	2444783.59	1981 Jun 31 1211:59	Rocketsonde	-	-	Arcasonde	-	-	-	KAU	-	-	-	90	-	-
1981-1488	2444783.59	1981 Jun 31 1211:59	Rocketsonde	-	-	Arcasonde	-	-	-	ASC	-	-	-	62	-	-
1981-1489	2444783.59	1981 Jun 31 1211:59	Rocketsonde	-	-	Arcasonde	-	-	-	KAU	-	-	-	90	-	-
1981-1490	2444783.59	1981 Jun 31 1211:59	Rocketsonde	-	-	Arcasonde	-	-	-	ASC	-	-	-	62	-	-
1981-1491	2444783.59	1981 Jun 31 1211:59	Rocketsonde	-	-	Arcasonde	-	-	-	KAU	-	-	-	90	-	-
1981-1492	2444783.59	1981 Jun 31 121														

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Mission	FlightCode	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee_Km	Range_Km	Dest
1981-1495	2444803.41	1981 Jul 17 21:45:59	Rocketsonde	-	-	Arcasonde	-	-	-	KMR	-	-	-	70	-	-
1981-1496	2444806.04	1981 Jul 20 12:55:00	Rocketsonde	-	-	Arcasonde	-	-	-	CC	-	-	-	60	-	-
1981-1497	2444806.07	1981 Jul 20 13:44:59	Rocketsonde	-	-	Arcasonde	-	-	-	CC	LO43	-	-	60	-	-
1981-1498	2444806.37	1981 Jul 20 20:56:00	Rocketsonde	-	-	Arcasonde	-	-	-	KAU	-	-	-	68	-	-
1981-1499	2444807.91	1981 Jul 22 09:47:59	Rocketsonde	-	-	Arcasonde	-	-	-	KAU	-	-	-	65	-	-
1981-1500	2444808.08	1981 Jul 22 14:00:00	Rocketsonde	-	-	Arcasonde	-	-	-	AUT	-	-	-	69	-	-
1981-1501	2444808.19	1981 Jul 22 16:30:00	Rocketsonde	-	-	Arcasonde	-	-	-	WS	-	-	-	57	-	-
1981-1502	2444808.40	1981 Jul 22 21:32:00	Rocketsonde	-	-	Arcasonde	-	-	-	KMR	-	-	-	84	-	-
1981-1503	2444809.10	1981 Jul 23 14:18:00	Rocketsonde	-	-	Arcasonde	-	-	-	CC	LO43	-	-	56	-	-
1981-1504	2444809.35	1981 Jul 23 20:00:00	Rocketsonde	-	-	Arcasonde	-	-	-	PH	-	-	-	72	-	-
1981-1505	2444809.35	1981 Jul 23 20:00:00	Rocketsonde	-	-	Arcasonde	-	-	-	PH	-	-	-	63	-	-
1981-1506	2444810.07	1981 Jul 24 13:44:59	Rocketsonde	-	-	Arcasonde	-	-	-	CC	LO43	-	-	59	-	-
1981-1507	2444810.07	1981 Jul 24 13:44:59	Rocketsonde	-	-	Arcasonde	-	-	-	CC	LO43	-	-	59	-	-
1981-1508	2444810.07	1981 Jul 24 13:44:59	Rocketsonde	-	-	Arcasonde	-	-	-	CC	LO43	-	-	90	-	-
1981-1509	2444810.39	1981 Jul 24 21:25:59	Rocketsonde	-	-	Arcasonde	-	-	-	KAU	-	-	-	67	-	-
1981-1510	2444810.42	1981 Jul 24 22:02:59	Rocketsonde	-	-	Arcasonde	-	-	-	KMR	-	-	-	69	-	-
1981-1511	2444810.53	1981 Jul 25 09:40:00	Rocketsonde	-	-	Arcasonde	-	-	-	KMR	-	-	-	61	-	-
1981-1512	2444812.90	1981 Jul 27 09:33:59	Rocketsonde	-	-	Arcasonde	-	-	-	CC	LO43	-	-	49	-	-
1981-1513	2444813.10	1981 Jul 27 14:26:59	Rocketsonde	-	-	Arcasonde	-	-	-	CC	LO43	-	-	56	-	-
1981-1514	2444813.33	1981 Jul 27 20:00:00	Rocketsonde	-	-	Arcasonde	-	-	-	SHEM	-	-	-	56	-	-
1981-1515	2444813.35	1981 Jul 27 20:25:00	Rocketsonde	-	-	Arcasonde	-	-	-	KAU	-	-	-	66	-	-
1981-1516	2444813.39	1981 Jul 27 21:18:00	Rocketsonde	-	-	Arcasonde	-	-	-	KMR	-	-	-	71	-	-
1981-1517	2444815.08	1981 Jul 29 14:00:00	Rocketsonde	-	-	Arcasonde	-	-	-	ASC	-	-	-	62	-	-
1981-1518	2444815.19	1981 Jul 29 16:30:00	Rocketsonde	-	-	Arcasonde	-	-	-	WS	-	-	-	61	-	-
1981-1519	2444815.27	1981 Jul 29 18:30:00	Rocketsonde	-	-	Arcasonde	-	-	-	PH	-	-	-	70	-	-
1981-1520	2444815.55	1981 Jul 30 01:04:59	Rocketsonde	-	-	Arcasonde	-	-	-	KMR	-	-	-	73	-	-
1981-1521	2444816.44	1981 Jul 30 22:30:00	Rocketsonde	-	-	Arcasonde	-	-	-	KMR	-	-	-	68	-	-
1981-1522	2444817.04	1981 Jul 31 12:22:00	Rocketsonde	-	-	Arcasonde	-	-	-	ASC	-	-	-	61	-	-
1981-1523	2444817.08	1981 Jul 31 13:57:59	Rocketsonde	-	-	Arcasonde	-	-	-	AUT	-	-	-	69	-	-
1981-1524	2444817.11	1981 Jul 31 14:35:00	Rocketsonde	-	-	Arcasonde	-	-	-	CC	LO43	-	-	59	-	-
1981-1525	2444817.35	1981 Jul 31 20:17:00	Rocketsonde	-	-	Arcasonde	-	-	-	KAU	-	-	-	66	-	-
1981-1526	2444817.39	1981 Jul 31 21:25:59	Rocketsonde	-	-	Arcasonde	-	-	-	KMR	-	-	-	77	-	-
1981-1527	2444820.07	1981 Aug 3 13:44:59	Rocketsonde	-	-	Arcasonde	-	-	-	KMR	-	-	-	61	-	-
1981-1528	2444821.22	1981 Aug 4 17:19:00	Rocketsonde	-	-	Arcasonde	-	-	-	ASC	-	-	-	55	-	-
1981-1529	2444821.36	1981 Aug 4 20:35:59	Rocketsonde	-	-	Arcasonde	-	-	-	ASC	-	-	-	55	-	-
1981-1530	2444822.03	1981 Aug 5 12:46:59	Rocketsonde	-	-	Arcasonde	-	-	-	ASC	-	-	-	59	-	-
1981-1531	2444822.06	1981 Aug 5 13:24:59	Rocketsonde	-	-	Arcasonde	-	-	-	ASC	-	-	-	57	-	-
1981-1532	2444822.21	1981 Aug 5 17:00:00	Rocketsonde	-	-	Arcasonde	-	-	-	AUT	-	-	-	57	-	-
1981-1533	2444822.23	1981 Aug 6 17:26:59	Rocketsonde	-	-	Arcasonde	-	-	-	CC	LO43	-	-	56	-	-
1981-1534	2444823.33	1981 Aug 6 17:26:59	Rocketsonde	-	-	Arcasonde	-	-	-	WS	-	-	-	56	-	-
1981-1535	2444823.35	1981 Aug 7 20:00:00	Rocketsonde	-	-	Arcasonde	-	-	-	PH	-	-	-	57	-	-
1981-1536	2444824.07	1981 Aug 7 19:44:59	Rocketsonde	-	-	Arcasonde	-	-	-	SHEM	-	-	-	57	-	-
1981-1537	2444824.35	1981 Aug 7 20:30:00	Rocketsonde	-	-	Arcasonde	-	-	-	SHEM	-	-	-	52	-	-
1981-1538	2444824.42	1981 Aug 7 22:01:59	Rocketsonde	-	-	Arcasonde	-	-	-	PH	-	-	-	58	-	-
1981-1539	2444827.05	1981 Aug 10 13:11:59	Rocketsonde	-	-	Arcasonde	-	-	-	ASC	-	-	-	68	-	-
1981-1540	2444827.05	1981 Aug 10 15:00:00	Rocketsonde	-	-	Arcasonde	-	-	-	ASC	-	-	-	68	-	-
1981-1541	2444827.19	1981 Aug 10 21:06:59	Rocketsonde	-	-	Arcasonde	-	-	-	ASC	-	-	-	64	-	-
1981-1542	2444827.35	1981 Aug 11 17:06:59	Rocketsonde	-	-	Arcasonde	-	-	-	ASC	-	-	-	64	-	-
1981-1543	2444829.21	1981 Aug 12 17:00:00	Rocketsonde	-	-	Arcasonde	-	-	-	ASC	-	-	-	85	-	-
1981-1544	2444829.21	1981 Aug 12 17:00:00	Rocketsonde	-	-	Arcasonde	-	-	-	ASC	-	-	-	85	-	-
1981-1545	2444829.24	1981 Aug 13 03:22:59	Rocketsonde	-	-	Arcasonde	-	-	-	ASC	-	-	-	85	-	-
1981-1546	2444829.54	1981 Aug 13 03:22:59	Rocketsonde	-	-	Arcasonde	-	-	-	ASC	-	-	-	85	-	-
1981-1547	2444829.74	1981 Aug 13 03:22:59	Rocketsonde	-	-	Arcasonde	-	-	-	ASC	-	-	-	90	-	-
1981-1548	2444830.24	1981 Aug 13 19:09:00	Rocketsonde	-	-	Arcasonde	-	-	-	PH	-	-	-	69	-	-
1981-1549	2444830.26	1981 Aug 13 19:09:00	Rocketsonde	-	-	Arcasonde	-	-	-	PH	-	-	-	69	-	-
1981-1550	2444830.40	1981 Aug 13 21:30:00	Rocketsonde	-	-	Arcasonde	-	-	-	KMR	-	-	-	69	-	-
1981-1551	2444830.91	1981 Aug 14 09:45:00	Rocketsonde	-	-	Arcasonde	-	-	-	ASC	-	-	-	61	-	-
1981-1552	2444831.06	1981 Aug 14 13:20:59	Rocketsonde	-	-	Arcasonde	-	-	-	CC	LO43	-	-	56	-	-
1981-1553	2444831.20	1981 Aug 14 16:09:59	Rocketsonde	-	-	Arcasonde	-	-	-	ASC	-	-	-	71	-	-
1981-1554	2444831.20	1981 Aug 17 12:56:59	Rocketsonde	-	-	Arcasonde	-	-	-	ASC	-	-	-	57	-	-
1981-1555	2444834.19	1981 Aug 17 21:11:59	Rocketsonde	-	-	Arcasonde	-	-	-	PH	-	-	-	65	-	-
1981-1556	2444834.38	1981 Aug 18 09:43:00	Rocketsonde	-	-	Arcasonde	-	-	-	ASC	-	-	-	68	-	-
1981-1557	2444834.90	1981 Aug 18 16:30:00	Rocketsonde	-	-	Arcasonde	-	-	-	ASC	-	-	-	64	-	-
1981-1558	2444835.19	1981 Aug 18 16:30:00	Rocketsonde	-	-	Arcasonde	-	-	-	ASC	-	-	-	68	-	-
1981-1559	2444835.35	1981 Aug 18 20:20:00	Rocketsonde	-	-	Arcasonde	-	-	-	ASC	-	-	-	64	-	-
1981-1560	2444836.21	1981 Aug 19 17:00:00	Rocketsonde	-	-	Arcasonde	-	-	-	CC	LO43	-	-	72	-	-
1981-1561	2444836.26	1981 Aug 19 18:14:59	Rocketsonde	-	-	Arcasonde	-	-	-	CC	LO43	-	-	86	-	-
1981-1562	2444838.07	1981 Aug 21 13:42:59	Rocketsonde	-	-	Arcasonde	-	-	-	NS	-	-	-	69	-	-
1981-1563	2444838.19	1981 Aug 21 16:36:59	Rocketsonde	-	-	Arcasonde	-	-	-	ASC	-	-	-	60	-	-
1981-1564	2444838.37	1981 Aug 21 20:53:00	Rocketsonde	-	-	Arcasonde	-	-	-	ASC	-	-	-	65	-	-
1981-1565	2444838.53	1981 Aug 22 00:42:00	Rocketsonde	-	-	Arcasonde	-	-	-	KAU	-	-	-	75	-	-
1981-1566	2444841.07	1981 Aug 24 13:44:59	Rocketsonde	-	-	Arcasonde	-	-	-	KMR	-	-	-	70	-	-
1981-1567	2444841.07	1981 Aug 24 13:44:59	Rocketsonde	-	-	Arcasonde	-	-	-	CC	LO43	-	-	56	-	-
1981-1568	2444841.43	1981 Aug 24 22:13:59	Rocketsonde	-	-	Arcasonde	-	-	-	PM	-	-	-	70	-	-
1981-1569	2444843.10	1981 Aug 26 14:30:00	Rocketsonde	-	-	Arcasonde	-	-	-	ASC	-	-	-	65	-	-
1981-1570	2444843.28	1981 Aug 26 18:45:00	Rocketsonde	-	-	Arcasonde	-	-	-	ASC	-	-	-	84	-	-
1981-1571	2444843.33	1981 Aug 26 20:02:00	Rocketsonde	-	-	Arcasonde	-	-	-	NS	-	-	-	98	-	-
1981-1572	2444843.33	1981 Aug 26 20:02:00	Rocketsonde	-	-	Arcasonde	-	-	-	PM	-	-	-	90	-	-
1981-1573	2444843.33	1981 Aug 26 20:02:00	Rocketsonde	-	-	Arcasonde	-	-	-	PM	-	-	-	53	-	-
1981-1574	2444843.36	1981 Aug 26 20:07:59	Rocketsonde	-	-	Arcasonde	-	-	-	PM	-	-	-	70	-	-
1981-1575	2444843.39	1981 Aug 26 21:21:00	Rocketsonde	-	-	Arcasonde	-	-	-	KMR	-	-	-	60	-	-
1981-1576	2444844.59	1981 Aug 28 02:04:59	Rocketsonde	-	-	Arcasonde	-	-	-	KAU	-	-	-	69	-	-
1981-1577	2444844.07	1981 Aug 28 13:44:59	Rocketsonde	-	-	Arcasonde	-	-	-	ASC	-	-	-	55	-	-
1981-1578	2444847.91	1981 Aug 31 09:55:00	Rocketsonde	-	-	Arcasonde	-	-	-	CC	LO43	-	-	68	-	-
1981-1579	2444848.07	1981 Aug 31 13:45:59	Rocketsonde	-	-	Arcasonde	-	-	-	CC	LO43	-	-	62	-	-
1981-1580	2444848.22	1981 Aug 31 17:21:00	Rocketsonde	-	-	Arcasonde	-	-	-	PM	-	-	-	71	-	-
1981-1581	2444848.35	1981 Aug 31 20:24:00	Rocketsonde	-	-	Arcasonde	-	-	-	KMR	-	-	-	76	-	-

Launch

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variants	Flight_ID	Flight	Mission	FlightCode	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee_Km	Range_Km	Dest
1981-16576	2444848-36	1981 Aug 31 20:34:00	Rocketsonde	-	-	Arcasonde	-	-	-	KAU	-	-	-	61	-	-
1981-16577	2444849-35	1981 Sep 1 20:30:00	Rocketsonde	-	-	Arcasonde	-	-	-	KAU	-	-	-	63	-	-
1981-16578	2444849-56	1981 Sep 2 01:32:59	Rocketsonde	-	-	Arcasonde	-	-	-	KMR	-	-	-	74	-	-
1981-17330	2444850-05	1981 Sep 2 13:14:59	Rocketsonde	-	-	Arcasonde	-	-	-	CC	LO43	-	-	84	-	-
1981-16580	2444850-07	1981 Sep 2 13:34:59	Rocketsonde	-	-	Arcasonde	-	-	-	ASC	-	-	-	69	-	-
1981-17352	2444850-25	1981 Sep 2 17:54:00	Rocketsonde	-	-	Arcasonde	-	-	-	PH	-	-	-	90	-	-
1981-16583	2444850-27	1981 Sep 2 18:26:59	Rocketsonde	-	-	Arcasonde	-	-	-	PH	-	-	-	72	-	-
1981-16585	2444852-06	1981 Sep 4 13:30:00	Rocketsonde	-	-	Arcasonde	-	-	-	ASC	LO43	-	-	63	-	-
1981-16586	2444852-11	1981 Sep 4 14:45:00	Rocketsonde	-	-	Arcasonde	-	-	-	CC	-	-	-	58	-	-
1981-16587	2444852-12	1981 Sep 4 15:00:00	Rocketsonde	-	-	Arcasonde	-	-	-	PRIM	-	-	-	18	-	-
1981-16588	2444852-23	1981 Sep 4 17:32:00	Rocketsonde	-	-	Arcasonde	-	-	-	WI	-	-	-	70	-	-
1981-16589	2444852-23	1981 Sep 4 17:32:00	Rocketsonde	-	-	Arcasonde	-	-	-	WI	-	-	-	90	-	-
1981-17335	2444852-40	1981 Sep 4 21:40:00	Rocketsonde	-	-	Arcasonde	-	-	-	KAU	-	-	-	74	-	-
1981-16589	2444852-42	1981 Sep 4 21:59:59	Rocketsonde	-	-	Arcasonde	-	-	-	KMR	-	-	-	63	-	-
1981-16590	2444852-42	1981 Sep 4 22:09:59	Rocketsonde	-	-	Arcasonde	-	-	-	KAU	-	-	-	72	-	-
1981-16591	2444856-04	1981 Sep 8 13:02:59	Rocketsonde	-	-	Arcasonde	-	-	-	ASC	-	-	-	48	-	-
1981-16592	2444856-31	1981 Sep 8 19:24:59	Rocketsonde	-	-	Arcasonde	-	-	-	PRIM	-	-	-	72	-	-
1981-16593	2444856-35	1981 Sep 8 20:30:00	Rocketsonde	-	-	Arcasonde	-	-	-	AI/DMP-97	-	-	-	72	-	-
1981-16594	2444856-37	1981 Sep 8 20:54:00	Rocketsonde	-	-	Arcasonde	-	-	-	KAU	-	-	-	94	-	-
1981-16594	2444856-43	1981 Sep 8 22:18:00	Rocketsonde	-	-	Arcasonde	-	-	-	KMR	-	-	-	71	-	-
1981-16594	2444856-90	1981 Sep 9 09:34:59	Rocketsonde	-	-	Arcasonde	-	-	-	ASC	-	-	-	55	-	-
1981-16598	2444857-25	1981 Sep 9 17:55:00	Rocketsonde	-	-	Arcasonde	-	-	-	PRIM	-	-	-	65	-	-
1981-16598	2444858-30	1981 Sep 10 19:14:59	Rocketsonde	-	-	Arcasonde	-	-	-	WS	-	-	-	68	-	-
1981-16600	2444858-43	1981 Sep 10 20:30:00	Rocketsonde	-	-	Arcasonde	-	-	-	KAU	-	-	-	68	-	-
1981-16602	2444859-07	1981 Sep 11 13:44:59	Rocketsonde	-	-	Arcasonde	-	-	-	ASC	-	-	-	62	-	-
1981-16603	2444859-17	1981 Sep 11 16:09:59	Rocketsonde	-	-	Arcasonde	-	-	-	PRIM	-	-	-	73	-	-
1981-16604	2444859-32	1981 Sep 11 19:42:59	Rocketsonde	-	-	Arcasonde	-	-	-	PH	-	-	-	71	-	-
1981-16605	2444859-74	1981 Sep 12 09:54:00	Rocketsonde	-	-	Arcasonde	-	-	-	KMR	-	-	-	67	-	-
1981-16606	2444859-07	1981 Sep 12 09:54:00	Rocketsonde	-	-	Arcasonde	-	-	-	KMR	-	-	-	0	-	-
1981-16607	2444861-17	1981 Sep 13 10:04:59	Rocketsonde	-	-	Arcasonde	-	-	-	WI	-	-	-	61	-	-
1981-16609	2444862-04	1981 Sep 14 12:28:59	Rocketsonde	-	-	Arcasonde	-	-	-	ASC	LO43	-	-	70	-	-
1981-16610	2444862-07	1981 Sep 14 13:44:59	Rocketsonde	-	-	Arcasonde	-	-	-	CC	-	-	-	61	-	-
1981-16611	2444862-16	1981 Sep 14 15:35:00	Rocketsonde	-	-	Arcasonde	-	-	-	PRIM	-	-	-	46	-	-
1981-16612	2444863-12	1981 Sep 15 15:00:00	Rocketsonde	-	-	Arcasonde	-	-	-	PRIM	-	-	-	66	-	-
1981-16613	2444863-14	1981 Sep 15 15:23:59	Rocketsonde	-	-	Arcasonde	-	-	-	KAU	-	-	-	53	-	-
1981-16614	2444863-42	1981 Sep 16 22:07:00	Rocketsonde	-	-	Arcasonde	-	-	-	PH	-	-	-	71	-	-
1981-16616	2444864-07	1981 Sep 16 13:44:59	Rocketsonde	-	-	Arcasonde	-	-	-	KMR	-	-	-	69	-	-
1981-16617	2444864-22	1981 Sep 16 17:15:00	Rocketsonde	-	-	Arcasonde	-	-	-	KAU	LO43	-	-	67	-	-
1981-16618	2444865-25	1981 Sep 17 10:03:59	Rocketsonde	-	-	Arcasonde	-	-	-	CC	-	-	-	61	-	-
1981-16619	2444865-40	1981 Sep 17 23:36:59	Rocketsonde	-	-	Arcasonde	-	-	-	PRIM	-	-	-	85	-	-
1981-16620	2444866-07	1981 Sep 18 15:14:59	Rocketsonde	-	-	Arcasonde	-	-	-	KMR	LO43	-	-	71	-	-
1981-16621	2444869-14	1981 Sep 21 15:14:59	Rocketsonde	-	-	Arcasonde	-	-	-	KAU	-	-	-	58	-	-
1981-16622	2444869-44	1981 Sep 21 22:14:59	Rocketsonde	-	-	Arcasonde	-	-	-	WS	-	-	-	66	-	-
1981-16623	2444869-56	1981 Sep 22 03:38:59	Rocketsonde	-	-	Arcasonde	-	-	-	KMR	-	-	-	73	-	-
1981-16624	2444870-06	1981 Sep 22 13:31:59	Rocketsonde	-	-	Arcasonde	-	-	-	ASC	-	-	-	64	-	-
1981-16625	2444870-35	1981 Sep 22 15:05:00	Rocketsonde	-	-	Arcasonde	-	-	-	WS	LO43	-	-	62	-	-
1981-17346	2444870-35	1981 Sep 22 15:05:00	Rocketsonde	-	-	Arcasonde	-	-	-	PH	-	-	-	72	-	-
1981-16627	2444870-39	1981 Sep 22 21:25:59	Rocketsonde	-	-	Arcasonde	-	-	-	KMR	-	-	-	56	-	-
1981-16628	2444870-39	1981 Sep 22 21:25:59	Rocketsonde	-	-	Arcasonde	-	-	-	KMR	-	-	-	74	-	-
1981-16629	2444871-05	1981 Sep 23 13:09:59	Rocketsonde	-	-	Arcasonde	-	-	-	CC	LO43	-	-	62	-	-
1981-16630	2444871-29	1981 Sep 23 18:51:00	Rocketsonde	-	-	Arcasonde	-	-	-	CC	-	-	-	56	-	-
1981-16631	2444871-50	1981 Sep 23 00:11:59	Rocketsonde	-	-	Arcasonde	-	-	-	PH	-	-	-	74	-	-
1981-16632	2444872-05	1981 Sep 25 13:07:00	Rocketsonde	-	-	Arcasonde	-	-	-	KMR	-	-	-	75	-	-
1981-16634	2444875-05	1981 Sep 28 13:14:59	Rocketsonde	-	-	Arcasonde	-	-	-	ASC	-	-	-	62	-	-
1981-16635	2444875-08	1981 Sep 28 13:54:59	Rocketsonde	-	-	Arcasonde	-	-	-	ASC	-	-	-	63	-	-
1981-16636	2444875-19	1981 Sep 28 14:55:00	Rocketsonde	-	-	Arcasonde	-	-	-	CC	LO43	-	-	60	-	-
1981-16637	2444875-33	1981 Sep 28 18:59:59	Rocketsonde	-	-	Arcasonde	-	-	-	CC	LO43	-	-	63	-	-
1981-16638	2444875-33	1981 Sep 28 18:59:59	Rocketsonde	-	-	Arcasonde	-	-	-	PH	-	-	-	71	-	-
1981-16639	2444877-08	1981 Sep 29 20:00:00	Rocketsonde	-	-	Arcasonde	-	-	-	SHEN	-	-	-	52	-	-
1981-16640	2444877-54	1981 Sep 29 14:00:00	Rocketsonde	-	-	Arcasonde	-	-	-	CC	LO43	-	-	64	-	-
1981-17360	2444878-07	1981 Sep 30 13:44:59	Rocketsonde	-	-	Arcasonde	-	-	-	KMR	-	-	-	76	-	-
1981-16643	2444878-08	1981 Sep 30 14:00:00	Rocketsonde	-	-	Arcasonde	-	-	-	ASC	LO43	-	-	83	-	-
1981-16644	2444878-15	1981 Sep 30 15:33:00	Rocketsonde	-	-	Arcasonde	-	-	-	CC	-	-	-	59	-	-
1981-16645	2444878-42	1981 Sep 30 21:59:59	Rocketsonde	-	-	Arcasonde	-	-	-	PRIM	-	-	-	73	-	-
1981-17364	2444879-13	1981 Oct 1 15:04:59	Rocketsonde	-	-	Arcasonde	-	-	-	NS	-	-	-	98	-	-
1981-16646	2444879-16	1981 Oct 1 15:43:59	Rocketsonde	-	-	Arcasonde	-	-	-	NS	-	-	-	67	-	-
1981-16647	2444879-33	1981 Oct 1 20:00:00	Rocketsonde	-	-	Arcasonde	-	-	-	NS	-	-	-	87	-	-
1981-16648	2444879-39	1981 Oct 1 21:27:59	Rocketsonde	-	-	Arcasonde	-	-	-	SHEN	-	-	-	54	-	-
1981-16650	2444880-06	1981 Oct 2 13:30:00	Rocketsonde	-	-	Arcasonde	-	-	-	KAU	-	-	-	63	-	-
1981-16651	2444880-06	1981 Oct 2 13:30:00	Rocketsonde	-	-	Arcasonde	-	-	-	ASC	LO43	-	-	57	-	-
1981-16652	2444880-12	1981 Oct 2 14:46:00	Rocketsonde	-	-	Arcasonde	-	-	-	CC	-	-	-	62	-	-
1981-16653	2444880-36	1981 Oct 2 20:34:00	Rocketsonde	-	-	Arcasonde	-	-	-	CC	LO43	-	-	60	-	-
1981-16654	2444881-73	1981 Oct 4 05:35:00	Rocketsonde	-	-	Arcasonde	-	-	-	KAU	-	-	-	74	-	-
1981-16655	2444881-89	1981 Oct 4 09:22:00	Rocketsonde	-	-	Arcasonde	-	-	-	KMR	-	-	-	69	-	-
1981-16656	2444882-90	1981 Oct 5 09:41:00	Rocketsonde	-	-	Arcasonde	-	-	-	KMR	-	-	-	60	-	-
1981-16657	2444883-10	1981 Oct 5 14:20:00	Rocketsonde	-	-	Arcasonde	-	-	-	CC	LO43	-	-	81	-	-
1981-16659	2444883-19	1981 Oct 5 16:30:00	Rocketsonde	-	-	Arcasonde	-	-	-	CC	-	-	-	73	-	-
1981-16660	2444883-35	1981 Oct 5 20:30:00	Rocketsonde	-	-	Arcasonde	-	-	-	KAU	-	-	-	65	-	-
1981-16661	2444884-04	1981 Oct 6 12:52:00	Rocketsonde	-	-	Arcasonde	-	-	-	ASC	-	-	-	62	-	-
1981-16662	2444884-38	1981 Oct 6 21:10:00	Rocketsonde	-	-	Arcasonde	-	-	-	KAU	-	-	-	65	-	-
1981-16665	2444885-31	1981 Oct 7 19:30:59	Rocketsonde	-	-	Arcasonde	-	-	-	PH	-	-	-	68	-	-
1981-16666	2444885-33	1981 Oct 7 19:30:59	Rocketsonde	-	-	Arcasonde	-	-	-	SHEN	-	-	-	55	-	-
1981-16667	2444887-07	1981 Oct 9 13:44:59	Rocketsonde	-	-	Arcasonde	-	-	-	CC	LO43	-	-	59	-	-

Launch

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Mission	FlightCode	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee_Km	Range_Km	Dest
1981-16668	2444887.15	1981 Oct 9 15:50:00	Rocketsonde	-	-	Arcasonde	-	-	-	PRIM	-	-	-	54	-	-
1981-16669	2444887.33	1981 Oct 9 20:00:00	Rocketsonde	-	-	Arcasonde	-	-	-	SHEM	-	-	-	55	-	-
1981-16670	2444890.04	1981 Oct 12 12:59:59	Rocketsonde	-	-	Arcasonde	-	-	-	ASC	-	-	-	59	-	-
1981-16671	2444891.07	1981 Oct 13 13:44:59	Rocketsonde	-	-	Arcasonde	-	-	-	CC	LO43	-	-	63	-	-
1981-16672	2444891.14	1981 Oct 13 15:24:59	Rocketsonde	-	-	Arcasonde	-	-	-	WS	-	-	-	62	-	-
1981-16673	2444891.15	1981 Oct 13 15:24:59	Rocketsonde	-	-	Arcasonde	-	-	-	PRIM	-	-	-	63	-	-
1981-16674	2444891.40	1981 Oct 13 21:43:00	Rocketsonde	-	-	Arcasonde	-	-	-	KHR	-	-	-	72	-	-
1981-16675	2444891.90	1981 Oct 14 09:35:59	Rocketsonde	-	-	Arcasonde	-	-	-	ASC	-	-	-	59	-	-
1981-16676	2444892.01	1981 Oct 14 12:14:59	Rocketsonde	-	-	Arcasonde	-	-	-	AUT	-	-	-	84	-	-
1981-16677	2444892.10	1981 Oct 14 14:29:00	Rocketsonde	-	-	Arcasonde	-	-	-	CC	LO43	-	-	51	-	-
1981-16678	2444892.45	1981 Oct 14 22:44:59	Rocketsonde	-	-	Arcasonde	-	-	-	KHR	-	-	-	71	-	-
1981-16679	2444892.48	1981 Oct 14 23:25:00	Rocketsonde	-	-	Arcasonde	-	-	-	ASC	-	-	-	59	-	-
1981-16680	2444894.06	1981 Oct 16 13:30:00	Rocketsonde	-	-	Arcasonde	-	-	-	KAU	-	-	-	90	-	-
1981-16681	2444894.35	1981 Oct 16 20:26:59	Rocketsonde	-	-	Arcasonde	-	-	-	PRIM	-	-	-	63	-	-
1981-16682	2444894.37	1981 Oct 16 20:26:59	Rocketsonde	-	-	Arcasonde	-	-	-	PRIM	-	-	-	60	-	-
1981-16683	2444897.22	1981 Oct 19 17:15:00	Rocketsonde	-	-	Arcasonde	-	-	-	CC	LO43	-	-	59	-	-
1981-16684	2444898.09	1981 Oct 20 14:15:00	Rocketsonde	-	-	Arcasonde	-	-	-	PH	-	-	-	65	-	-
1981-16685	2444898.28	1981 Oct 20 18:41:00	Rocketsonde	-	-	Arcasonde	-	-	-	WS	-	-	-	61	-	-
1981-16686	2444899.05	1981 Oct 21 13:14:59	Rocketsonde	-	-	Arcasonde	-	-	-	CC	LO43	-	-	55	-	-
1981-16687	2444899.12	1981 Oct 21 14:49:59	Rocketsonde	-	-	Arcasonde	-	-	-	WS	-	-	-	60	-	-
1981-16688	2444899.15	1981 Oct 21 15:30:00	Super Lok1	-	-	Arcasonde	-	-	-	AUT	-	-	-	89	-	-
1981-16689	2444899.30	1981 Oct 21 19:12:59	Rocketsonde	-	-	Arcasonde	-	-	-	PH	-	-	-	50	-	-
1981-16690	2444900.21	1981 Oct 22 17:03:59	Rocketsonde	-	-	Arcasonde	-	-	-	PRIM	-	-	-	61	-	-
1981-16691	2444901.04	1981 Oct 23 12:56:00	Rocketsonde	-	-	Arcasonde	-	-	-	ASC	-	-	-	60	-	-
1981-16692	2444901.10	1981 Oct 23 14:24:00	Rocketsonde	-	-	Arcasonde	-	-	-	CC	LO43	-	-	86	-	-
1981-16693	2444901.24	1981 Oct 23 17:45:00	Rocketsonde	-	-	Arcasonde	-	-	-	WS	-	-	-	72	-	-
1981-16694	2444904.27	1981 Oct 26 16:30:00	Rocketsonde	-	-	Arcasonde	-	-	-	PH	-	-	-	69	-	-
1981-16695	2444904.41	1981 Oct 26 21:45:59	Rocketsonde	-	-	Arcasonde	-	-	-	KHR	-	-	-	64	-	-
1981-16696	2444905.11	1981 Oct 27 14:32:00	Rocketsonde	-	-	Arcasonde	-	-	-	CC	LO43	-	-	62	-	-
1981-16697	2444906.52	1981 Oct 28 10:04:59	Rocketsonde	-	-	Arcasonde	-	-	-	ASC	-	-	-	62	-	-
1981-16698	2444906.09	1981 Oct 28 14:10:00	Rocketsonde	-	-	Arcasonde	-	-	-	CC	LO43	-	-	82	-	-
1981-16699	2444906.25	1981 Oct 28 18:18:00	Rocketsonde	-	-	Arcasonde	-	-	-	WS	-	-	-	62	-	-
1981-16700	2444906.26	1981 Oct 28 18:18:00	Rocketsonde	-	-	Arcasonde	-	-	-	PRIM	-	-	-	62	-	-
1981-16701	2444906.27	1981 Oct 28 18:18:00	Rocketsonde	-	-	Arcasonde	-	-	-	WS	-	-	-	93	-	-
1981-16702	2444906.38	1981 Oct 28 21:00:00	Rocketsonde	-	-	Arcasonde	-	-	-	KHR	-	-	-	74	-	-
1981-16703	2444906.46	1981 Oct 30 14:45:00	Rocketsonde	-	-	Arcasonde	-	-	-	ASC	-	-	-	59	-	-
1981-16704	2444906.11	1981 Oct 30 17:12:00	Rocketsonde	-	-	Arcasonde	-	-	-	CC	LO43	-	-	71	-	-
1981-16705	2444906.22	1981 Oct 30 17:12:00	Rocketsonde	-	-	Arcasonde	-	-	-	KHR	-	-	-	65	-	-
1981-16706	2444906.58	1981 Oct 30 17:12:00	Rocketsonde	-	-	Arcasonde	-	-	-	KAU	-	-	-	82	-	-
1981-16707	2444911.26	1981 Nov 2 02:26:59	Rocketsonde	-	-	Arcasonde	-	-	-	PRIM	-	-	-	73	-	-
1981-16708	2444911.34	1981 Nov 2 02:26:59	Rocketsonde	-	-	Arcasonde	-	-	-	SHEM	-	-	-	57	-	-
1981-16709	2444911.43	1981 Nov 2 02:26:59	Rocketsonde	-	-	Arcasonde	-	-	-	ASC	-	-	-	62	-	-
1981-16710	2444912.04	1981 Nov 2 02:26:59	Rocketsonde	-	-	Arcasonde	-	-	-	ASC	-	-	-	62	-	-
1981-16711	2444913.07	1981 Nov 2 02:26:59	Rocketsonde	-	-	Arcasonde	-	-	-	PRIM	-	-	-	72	-	-
1981-16712	2444913.19	1981 Nov 2 02:26:59	Rocketsonde	-	-	Arcasonde	-	-	-	ASC	-	-	-	62	-	-
1981-16713	2444913.19	1981 Nov 2 02:26:59	Rocketsonde	-	-	Arcasonde	-	-	-	PRIM	-	-	-	59	-	-
1981-16714	2444913.44	1981 Nov 2 02:26:59	Rocketsonde	-	-	Arcasonde	-	-	-	KHR	-	-	-	73	-	-
1981-16715	2444913.59	1981 Nov 2 02:26:59	Rocketsonde	-	-	Arcasonde	-	-	-	ASC	-	-	-	61	-	-
1981-16716	2444913.59	1981 Nov 2 02:26:59	Rocketsonde	-	-	Arcasonde	-	-	-	ASC	-	-	-	59	-	-
1981-16717	2444913.59	1981 Nov 2 02:26:59	Rocketsonde	-	-	Arcasonde	-	-	-	PRIM	-	-	-	61	-	-
1981-16718	2444915.08	1981 Nov 6 15:14:59	Rocketsonde	-	-	Arcasonde	-	-	-	ASC	-	-	-	95	-	-
1981-16719	2444915.08	1981 Nov 6 15:14:59	Rocketsonde	-	-	Arcasonde	-	-	-	KAU	-	-	-	95	-	-
1981-16720	2444915.40	1981 Nov 6 21:00:00	Rocketsonde	-	-	Arcasonde	-	-	-	ASC	-	-	-	63	-	-
1981-16721	2444915.40	1981 Nov 6 21:00:00	Rocketsonde	-	-	Arcasonde	-	-	-	ASC	-	-	-	58	-	-
1981-16722	2444915.04	1981 Nov 9 12:59:59	Rocketsonde	-	-	Arcasonde	-	-	-	CC	LO43	-	-	59	-	-
1981-16723	2444915.08	1981 Nov 9 14:00:00	Rocketsonde	-	-	Arcasonde	-	-	-	ASC	-	-	-	63	-	-
1981-16724	2444915.26	1981 Nov 10 18:14:59	Rocketsonde	-	-	Arcasonde	-	-	-	SHEM	-	-	-	48	-	-
1981-16725	2444920.40	1981 Nov 11 21:30:00	Rocketsonde	-	-	Arcasonde	-	-	-	ASC	-	-	-	94	-	-
1981-16726	2444921.08	1981 Nov 12 13:51:00	Rocketsonde	-	-	Arcasonde	-	-	-	PRIM	-	-	-	71	-	-
1981-16727	2444921.08	1981 Nov 12 14:21:00	Rocketsonde	-	-	Arcasonde	-	-	-	PRIM	-	-	-	68	-	-
1981-16728	2444921.27	1981 Nov 12 18:34:59	Rocketsonde	-	-	Arcasonde	-	-	-	ASC	-	-	-	63	-	-
1981-16729	2444921.27	1981 Nov 12 18:34:59	Rocketsonde	-	-	Arcasonde	-	-	-	ASC	-	-	-	93	-	-
1981-16730	2444921.29	1981 Nov 12 18:55:00	Rocketsonde	-	-	Arcasonde	-	-	-	KAU	-	-	-	62	-	-
1981-16731	2444921.33	1981 Nov 12 19:14:59	Rocketsonde	-	-	Arcasonde	-	-	-	ASC	-	-	-	56	-	-
1981-16732	2444922.10	1981 Nov 13 20:00:00	Rocketsonde	-	-	Arcasonde	-	-	-	ASC	-	-	-	85	-	-
1981-16733	2444922.18	1981 Nov 13 16:14:59	Rocketsonde	-	-	Arcasonde	-	-	-	PRIM	-	-	-	65	-	-
1981-16734	2444922.27	1981 Nov 13 18:22:00	Rocketsonde	-	-	Arcasonde	-	-	-	PRIM	-	-	-	70	-	-
1981-16735	2444922.30	1981 Nov 13 19:15:59	Rocketsonde	-	-	Arcasonde	-	-	-	PM	-	-	-	90	-	-
1981-16736	2444922.35	1981 Nov 13 20:26:59	Rocketsonde	-	-	Arcasonde	-	-	-	KHR	-	-	-	74	-	-
1981-16737	2444922.40	1981 Nov 13 21:36:59	Rocketsonde	-	-	Arcasonde	-	-	-	KAU	-	-	-	66	-	-
1981-16738	2444923.17	1981 Nov 14 18:44:00	Rocketsonde	-	-	Arcasonde	-	-	-	PM	-	-	-	73	-	-
1981-16739	2444923.28	1981 Nov 14 16:02:59	Rocketsonde	-	-	Arcasonde	-	-	-	KAU	-	-	-	66	-	-
1981-16740	2444923.35	1981 Nov 14 20:30:00	Rocketsonde	-	-	Arcasonde	-	-	-	PM	-	-	-	90	-	-
1981-16741	2444923.35	1981 Nov 14 20:31:00	Rocketsonde	-	-	Arcasonde	-	-	-	CC	LO43	-	-	85	-	-
1981-16742	2444923.35	1981 Nov 14 20:31:00	Rocketsonde	-	-	Arcasonde	-	-	-	CC	-	-	-	71	-	-
1981-16743	2444923.36	1981 Nov 14 20:43:00	Rocketsonde	-	-	Arcasonde	-	-	-	PM	-	-	-	71	-	-
1981-16744	2444923.37	1981 Nov 14 20:48:00	Rocketsonde	-	-	Arcasonde	-	-	-	PRIM	-	-	-	73	-	-
1981-16745	2444923.37	1981 Nov 14 20:48:00	Rocketsonde	-	-	Arcasonde	-	-	-	PRIM	-	-	-	93	-	-
1981-16746	2444923.37	1981 Nov 14 20:48:00	Rocketsonde	-	-	Arcasonde	-	-	-	KAU	-	-	-	64	-	-
1981-16747	2444923.38	1981 Nov 14 21:10:00	Rocketsonde	-	-	Arcasonde	-	-	-	AUT	-	-	-	66	-	-
1981-16748	2444923.40	1981 Nov 14 21:30:00	Rocketsonde	-	-	Arcasonde	-	-	-	ASC	-	-	-	65	-	-
1981-16749	2444923.40	1981 Nov 14 21:37:59	Rocketsonde	-	-	Arcasonde	-	-	-	KAU	-	-	-	65	-	-
1981-16744	2444923.41	1981 Nov 14 21:49:59	Rocketsonde	-	-	Arcasonde	-	-	-	PRIM	-	-	-	65	-	-

Launch

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Mission	FlightCode	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee_Km	Range_Km	Dest
1981-4745	2444923.42	1981 Nov 14 21:59:59	Rocketsonde	-	-	Arcasonde	-	-	-	ASC	-	-	-	66	-	-
1981-4746	2444923.43	1981 Nov 14 22:21:59	Rocketsonde	-	-	AI/DMP-97	-	-	-	KAU	-	-	-	63	-	-
1981-4746	2444923.47	1981 Nov 14 23:12:00	Rocketsonde	-	-	Arcasonde	-	-	-	KAU	-	-	-	93	-	-
1981-4746	2444923.47	1981 Nov 14 23:12:00	Rocketsonde	-	-	Arcasonde	-	-	-	KAU	-	-	-	63	-	-
1981-4747	2444925.18	1981 Nov 16 16:19:59	Rocketsonde	-	-	Arcasonde	-	-	-	PRIM	-	-	-	65	-	-
1981-4748	2444925.38	1981 Nov 16 21:00:00	Rocketsonde	-	-	Arcasonde	-	-	-	SHEM	-	-	-	54	-	-
1981-4749	2444926.19	1981 Nov 17 16:30:00	Rocketsonde	-	-	Arcasonde	-	-	-	PRIM	-	-	-	62	-	-
1981-4751	2444926.59	1981 Nov 18 09:27:59	Rocketsonde	-	-	Arcasonde	-	-	-	ASC	-	-	-	61	-	-
1981-4752	2444927.09	1981 Nov 18 14:15:00	Rocketsonde	-	-	Arcasonde	-	-	-	CC	-	-	-	58	-	-
1981-4753	2444927.14	1981 Nov 18 15:14:59	Rocketsonde	-	-	Arcasonde	-	-	-	AIT	-	-	-	73	-	-
1981-4754	2444927.29	1981 Nov 18 18:59:59	Rocketsonde	-	-	Arcasonde	-	-	-	PH	-	-	-	54	-	-
1981-4755	2444927.44	1981 Nov 18 22:40:00	Rocketsonde	-	-	Arcasonde	-	-	-	KHR	-	-	-	58	-	-
1981-4757	2444929.04	1981 Nov 20 12:56:00	Rocketsonde	-	-	Arcasonde	-	-	-	ASC	-	-	-	60	-	-
1981-4758	2444929.11	1981 Nov 20 14:45:00	Rocketsonde	-	-	Arcasonde	-	-	-	CC	-	-	-	56	-	-
1981-4759	2444929.19	1981 Nov 20 16:30:00	Rocketsonde	-	-	Arcasonde	-	-	-	PRIM	-	-	-	62	-	-
1981-4760	2444929.38	1981 Nov 20 21:00:00	Rocketsonde	-	-	Arcasonde	-	-	-	SHEM	-	-	-	55	-	-
1981-4761	2444932.06	1981 Nov 20 21:00:00	Rocketsonde	-	-	Arcasonde	-	-	-	ASC	-	-	-	59	-	-
1981-430	2444932.10	1981 Nov 23 13:30:00	Rocketsonde	-	-	Arcasonde	-	-	-	AIT	-	-	-	46	-	-
1981-4762	2444932.11	1981 Nov 23 14:30:00	Rocketsonde	-	-	Arcasonde	-	-	-	CC	-	-	-	54	-	-
1981-4763	2444932.11	1981 Nov 23 14:45:00	Rocketsonde	-	-	Arcasonde	-	-	-	PRIM	-	-	-	54	-	-
1981-4763	2444932.19	1981 Nov 23 16:33:59	Rocketsonde	-	-	Arcasonde	-	-	-	PH	-	-	-	69	-	-
1981-4764	2444932.34	1981 Nov 23 20:10:00	Rocketsonde	-	-	Arcasonde	-	-	-	KAU	-	-	-	90	-	-
1981-1414	2444932.37	1981 Nov 23 20:56:00	Rocketsonde	-	-	AI/DMP-97	-	-	-	KAU	-	-	-	66	-	-
1981-4765	2444932.39	1981 Nov 23 21:22:59	Rocketsonde	-	-	Arcasonde	-	-	-	KAU	-	-	-	66	-	-
1981-4768	2444934.06	1981 Nov 25 13:30:00	Rocketsonde	-	-	Arcasonde	-	-	-	ASC	-	-	-	61	-	-
1981-4769	2444934.11	1981 Nov 25 14:45:00	Rocketsonde	-	-	Arcasonde	-	-	-	CC	-	-	-	58	-	-
1981-431	2444934.21	1981 Nov 25 17:00:00	Rocketsonde	-	-	Arcasonde	-	-	-	PH	-	-	-	46	-	-
1981-1418	2444934.23	1981 Nov 25 17:58:00	Rocketsonde	-	-	Arcasonde	-	-	-	PRIM	-	-	-	90	-	-
1981-4770	2444934.25	1981 Nov 25 17:58:00	Rocketsonde	-	-	Arcasonde	-	-	-	PH	-	-	-	72	-	-
1981-4771	2444934.58	1981 Nov 26 01:54:59	Rocketsonde	-	-	Arcasonde	-	-	-	SHEM	-	-	-	59	-	-
1981-4772	2444936.19	1981 Nov 27 16:30:00	Rocketsonde	-	-	Arcasonde	-	-	-	PRIM	-	-	-	58	-	-
1981-4773	2444939.11	1981 Nov 30 14:45:00	Rocketsonde	-	-	Arcasonde	-	-	-	CC	-	-	-	58	-	-
1981-4774	2444939.19	1981 Nov 30 16:34:59	Rocketsonde	-	-	Arcasonde	-	-	-	AIT	-	-	-	65	-	-
1981-4775	2444939.36	1981 Nov 30 20:37:59	Rocketsonde	-	-	Arcasonde	-	-	-	KAU	-	-	-	57	-	-
1981-4776	2444939.38	1981 Nov 30 21:00:00	Rocketsonde	-	-	Arcasonde	-	-	-	KAU	-	-	-	55	-	-
1981-4777	2444940.04	1981 Dec 1 12:53:00	Rocketsonde	-	-	Arcasonde	-	-	-	ASC	-	-	-	64	-	-
1981-4778	2444941.06	1981 Dec 2 13:30:00	Rocketsonde	-	-	Arcasonde	-	-	-	NS	-	-	-	65	-	-
1981-1423	2444941.09	1981 Dec 2 14:00:00	Rocketsonde	-	-	Arcasonde	-	-	-	PRIM	-	-	-	62	-	-
1981-4779	2444941.27	1981 Dec 2 16:23:59	Rocketsonde	-	-	Arcasonde	-	-	-	CC	-	-	-	52	-	-
1981-4780	2444941.38	1981 Dec 2 21:00:00	Rocketsonde	-	-	Arcasonde	-	-	-	ASC	-	-	-	61	-	-
1981-4781	2444941.45	1981 Dec 2 22:43:59	Rocketsonde	-	-	Arcasonde	-	-	-	AI/DMP-97	-	-	-	50	-	-
1981-4783	2444942.27	1981 Dec 3 16:30:00	Rocketsonde	-	-	Arcasonde	-	-	-	NS	-	-	-	64	-	-
1981-4784	2444942.30	1981 Dec 3 19:15:00	Rocketsonde	-	-	Arcasonde	-	-	-	ASC	-	-	-	65	-	-
1981-4785	2444942.30	1981 Dec 4 16:30:00	Rocketsonde	-	-	Arcasonde	-	-	-	PRIM	-	-	-	62	-	-
1981-4786	2444943.39	1981 Dec 4 16:30:00	Rocketsonde	-	-	Arcasonde	-	-	-	CC	-	-	-	52	-	-
1981-4787	2444943.58	1981 Dec 4 16:30:00	Rocketsonde	-	-	Arcasonde	-	-	-	KAU	-	-	-	64	-	-
1981-4788	2444943.58	1981 Dec 4 21:00:00	Rocketsonde	-	-	Arcasonde	-	-	-	KAU	-	-	-	64	-	-
1981-4789	2444943.60	1981 Dec 7 21:59:59	Rocketsonde	-	-	Arcasonde	-	-	-	KHR	-	-	-	75	-	-
1981-4790	2444943.64	1981 Dec 7 14:38:59	Rocketsonde	-	-	Arcasonde	-	-	-	ASC	-	-	-	59	-	-
1981-4791	2444946.14	1981 Dec 7 14:38:59	Rocketsonde	-	-	Arcasonde	-	-	-	CC	-	-	-	52	-	-
1981-4792	2444946.15	1981 Dec 8 16:30:00	Rocketsonde	-	-	Arcasonde	-	-	-	PRIM	-	-	-	52	-	-
1981-4793	2444947.22	1981 Dec 8 17:15:00	Rocketsonde	-	-	Arcasonde	-	-	-	AIT	-	-	-	48	-	-
1981-4329	2444947.22	1981 Dec 9 17:15:00	Rocketsonde	-	-	Arcasonde	-	-	-	PH	-	-	-	71	-	-
1981-4796	2444948.25	1981 Dec 9 19:45:59	Rocketsonde	-	-	Arcasonde	-	-	-	NS	-	-	-	64	-	-
1981-4797	2444948.28	1981 Dec 9 19:45:59	Rocketsonde	-	-	Arcasonde	-	-	-	ASC	-	-	-	61	-	-
1981-4798	2444948.30	1981 Dec 9 19:45:59	Rocketsonde	-	-	Arcasonde	-	-	-	NS	-	-	-	64	-	-
1981-4799	2444948.39	1981 Dec 10 09:21:00	Rocketsonde	-	-	Arcasonde	-	-	-	ASC	-	-	-	62	-	-
1981-4800	2444949.09	1981 Dec 10 14:10:00	Rocketsonde	-	-	Arcasonde	-	-	-	CC	-	-	-	53	-	-
1981-4802	2444950.21	1981 Dec 11 16:57:59	Rocketsonde	-	-	Arcasonde	-	-	-	ASC	-	-	-	63	-	-
1981-4333	2444950.38	1981 Dec 11 21:11:59	Rocketsonde	-	-	AI/DMP-97	-	-	-	KAU	-	-	-	57	-	-
1981-4803	2444950.40	1981 Dec 11 21:35:59	Rocketsonde	-	-	Arcasonde	-	-	-	PRIM	-	-	-	59	-	-
1981-4804	2444953.08	1981 Dec 14 14:00:00	Rocketsonde	-	-	Arcasonde	-	-	-	KAU	-	-	-	68	-	-
1981-4805	2444953.38	1981 Dec 14 15:45:59	Rocketsonde	-	-	Arcasonde	-	-	-	CC	-	-	-	55	-	-
1981-4806	2444953.38	1981 Dec 14 21:00:00	Rocketsonde	-	-	Arcasonde	-	-	-	ASC	-	-	-	61	-	-
1981-4807	2444955.14	1981 Dec 15 16:30:00	Rocketsonde	-	-	Arcasonde	-	-	-	KAU	-	-	-	64	-	-
1981-4810	2444955.14	1981 Dec 16 14:45:00	Rocketsonde	-	-	Arcasonde	-	-	-	CC	-	-	-	62	-	-
1981-4811	2444955.36	1981 Dec 16 15:22:59	Rocketsonde	-	-	Arcasonde	-	-	-	ASC	-	-	-	62	-	-
1981-4812	2444955.38	1981 Dec 16 20:03:00	Rocketsonde	-	-	Arcasonde	-	-	-	PM	-	-	-	55	-	-
1981-4813	2444955.39	1981 Dec 16 21:00:00	Rocketsonde	-	-	Arcasonde	-	-	-	KAU	-	-	-	94	-	-
1981-4814	2444955.44	1981 Dec 16 21:26:59	Rocketsonde	-	-	Arcasonde	-	-	-	KAU	-	-	-	52	-	-
1981-4814	2444956.22	1981 Dec 17 17:10:00	Rocketsonde	-	-	Arcasonde	-	-	-	SHEM	-	-	-	58	-	-
1981-4815	2444956.36	1981 Dec 17 20:43:00	Rocketsonde	-	-	Arcasonde	-	-	-	PRIM	-	-	-	63	-	-
1981-134	2444957.11	1981 Dec 18 14:45:00	Rocketsonde	-	-	Arcasonde	-	-	-	CC	-	-	-	74	-	-
1981-135	2444957.42	1981 Dec 18 21:59:59	Rocketsonde	-	-	Arcasonde	-	-	-	KHR	-	-	-	46	-	-
1981-4816	2444960.11	1981 Dec 21 14:45:00	Rocketsonde	-	-	Arcasonde	-	-	-	SHEM	-	-	-	48	-	-
1981-4817	2444960.16	1981 Dec 21 15:53:00	Rocketsonde	-	-	Arcasonde	-	-	-	CC	-	-	-	59	-	-
1981-4818	2444960.19	1981 Dec 21 16:30:00	Rocketsonde	-	-	Arcasonde	-	-	-	ASC	-	-	-	62	-	-
1981-4819	2444960.42	1981 Dec 21 16:30:00	Rocketsonde	-	-	Arcasonde	-	-	-	PM	-	-	-	74	-	-
1981-4820	2444961.23	1981 Dec 22 17:30:00	Rocketsonde	-	-	Arcasonde	-	-	-	SHEM	-	-	-	59	-	-
1981-4442	2444962.10	1981 Dec 22 17:30:00	Rocketsonde	-	-	AI/DMP-97	-	-	-	PRIM	-	-	-	56	-	-
1981-4822	2444962.15	1981 Dec 23 14:30:00	Rocketsonde	-	-	Arcasonde	-	-	-	CC	-	-	-	85	-	-
1981-4823	2444962.45	1981 Dec 23 15:41:00	Rocketsonde	-	-	Arcasonde	-	-	-	ASC	-	-	-	59	-	-
1981-4824	2444963.15	1981 Dec 24 15:30:00	Rocketsonde	-	-	Arcasonde	-	-	-	KHR	-	-	-	75	-	-
1981-4825	2444968.04	1981 Dec 29 12:52:00	Rocketsonde	-	-	Arcasonde	-	-	-	ASC	-	-	-	62	-	-
1981-4826	2444969.44	1981 Dec 30 22:37:59	Rocketsonde	-	-	Arcasonde	-	-	-	KHR	-	-	-	59	-	-
1981-4449	2444970.11	1981 Dec 31 14:45:00	Rocketsonde	-	-	AI/DMP-97	-	-	-	CC	-	-	-	86	-	-
1981-4827	2444970.16	1981 Dec 31 15:47:59	Rocketsonde	-	-	Arcasonde	-	-	-	ASC	-	-	-	62	-	-





Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Mission	FlightCode	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee_Km	Range_Km	Dest
1982-M117	2445017.12	1982 Feb 16 15:00:00	Rocketsonde	-	-	Arcasonde	-	-	-	CC	LO43	-	-	61	-	-
1982-M118	2445017.35	1982 Feb 16 20:28:00	Rocketsonde	-	-	Arcasonde	-	-	-	RNR	-	-	-	77	-	-
1982-M119	2445017.36	1982 Feb 16 20:35:00	Rocketsonde	-	-	Arcasonde	-	-	-	PM	-	-	-	72	-	-
1982-M120	2445017.38	1982 Feb 16 21:07:00	Rocketsonde	-	-	Arcasonde	-	-	-	KAU	-	-	-	65	-	-
1982-M123	2445017.69	1982 Feb 17 09:19:00	Rocketsonde	-	-	Arcasonde	-	-	-	ASC	-	-	-	62	-	-
1982-M125	2445018.38	1982 Feb 17 21:10:00	Rocketsonde	-	-	Arcasonde	-	-	-	SHEM	-	-	-	54	-	-
1982-M126	2445018.44	1982 Feb 17 22:30:00	Rocketsonde	-	-	Arcasonde	-	-	-	RNR	-	-	-	73	-	-
1982-M128	2445019.27	1982 Feb 18 18:00:00	Rocketsonde	-	-	Arcasonde	-	-	-	ASC	-	-	-	62	-	-
1982-M128	2445019.27	1982 Feb 18 18:00:00	Rocketsonde	-	-	Arcasonde	-	-	-	WS	-	-	-	66	-	-
1982-M130	2445020.08	1982 Feb 19 13:49:59	Rocketsonde	-	-	Arcasonde	-	-	-	CC	LO43	-	-	57	-	-
1982-M131	2445020.13	1982 Feb 19 15:00:59	Rocketsonde	-	-	Arcasonde	-	-	-	CC	LO43	-	-	63	-	-
1982-M132	2445020.25	1982 Feb 19 18:02:59	Rocketsonde	-	-	Arcasonde	-	-	-	PM	-	-	-	59	-	-
1982-M133	2445020.30	1982 Feb 19 19:14:59	Rocketsonde	-	-	Arcasonde	-	-	-	CC	LO43	-	-	53	-	-
1982-M137	2445023.11	1982 Feb 22 14:45:00	Rocketsonde	-	-	Arcasonde	-	-	-	CC	LO43	-	-	56	-	-
1982-M138	2445023.38	1982 Feb 22 21:00:00	Rocketsonde	-	-	Arcasonde	-	-	-	SHEM	-	-	-	56	-	-
1982-M139	2445023.38	1982 Feb 22 21:00:00	Rocketsonde	-	-	Arcasonde	-	-	-	ASC	-	-	-	56	-	-
1982-M142	2445024.06	1982 Feb 24 16:14:59	Rocketsonde	-	-	Arcasonde	-	-	-	CC	LO43	-	-	73	-	-
1982-M142	2445024.06	1982 Feb 24 16:14:59	Rocketsonde	-	-	Arcasonde	-	-	-	WS	-	-	-	98	-	-
1982-M143	2445025.27	1982 Feb 24 18:00:00	Rocketsonde	-	-	Arcasonde	-	-	-	RNR	-	-	-	73	-	-
1982-M143	2445025.45	1982 Feb 24 22:47:59	Rocketsonde	-	-	Arcasonde	-	-	-	ASC	-	-	-	62	-	-
1982-M144	2445026.21	1982 Feb 25 09:32:00	Rocketsonde	-	-	Arcasonde	-	-	-	ASC	-	-	-	61	-	-
1982-M145	2445026.21	1982 Feb 25 17:00:00	Rocketsonde	-	-	Arcasonde	-	-	-	AHT	-	-	-	56	-	-
1982-M146	2445026.38	1982 Feb 25 21:00:00	Rocketsonde	-	-	Arcasonde	-	-	-	SHEM	-	-	-	56	-	-
1982-M148	2445026.38	1982 Feb 25 21:00:00	Rocketsonde	-	-	Arcasonde	-	-	-	WT	-	-	-	47	-	-
1982-M148	2445026.38	1982 Feb 26 19:18:59	Rocketsonde	-	-	Arcasonde	-	-	-	KAU	-	-	-	57	-	-
1982-M154	2445030.33	1982 Mar 1 20:01:00	Rocketsonde	-	-	Arcasonde	-	-	-	RNR	-	-	-	76	-	-
1982-M155	2445030.35	1982 Mar 1 20:26:00	Rocketsonde	-	-	Arcasonde	-	-	-	SHEM	-	-	-	51	-	-
1982-M156	2445032.38	1982 Mar 3 21:00:00	Rocketsonde	-	-	Arcasonde	-	-	-	PRIM	-	-	-	65	-	-
1982-M157	2445033.19	1982 Mar 4 16:50:59	Rocketsonde	-	-	Arcasonde	-	-	-	PRIM	-	-	-	60	-	-
1982-M159	2445034.18	1982 Mar 5 16:19:59	Rocketsonde	-	-	Arcasonde	-	-	-	WT	-	-	-	82	-	-
1982-M160	2445034.29	1982 Mar 5 19:02:59	Rocketsonde	-	-	Arcasonde	-	-	-	KAU	-	-	-	82	-	-
1982-M161	2445034.39	1982 Mar 6 21:25:59	Rocketsonde	-	-	Arcasonde	-	-	-	WT	-	-	-	73	-	-
1982-M166	2445037.30	1982 Mar 6 19:05:59	Rocketsonde	-	-	Arcasonde	-	-	-	PRIM	-	-	-	69	-	-
1982-M167	2445038.21	1982 Mar 9 17:00:00	Rocketsonde	-	-	Arcasonde	-	-	-	RNR	-	-	-	86	-	-
1982-M169	2445038.57	1982 Mar 9 20:45:00	Rocketsonde	-	-	Arcasonde	-	-	-	WT	-	-	-	80	-	-
1982-M170	2445039.18	1982 Mar 10 16:14:59	Rocketsonde	-	-	Arcasonde	-	-	-	WS	-	-	-	86	-	-
1982-M170	2445039.20	1982 Mar 10 16:44:59	Rocketsonde	-	-	Arcasonde	-	-	-	ASC	-	-	-	86	-	-
1982-M172	2445039.42	1982 Mar 10 21:59:59	Rocketsonde	-	-	Arcasonde	-	-	-	SHEM	-	-	-	96	-	-
1982-M180	2445044.57	1982 Mar 15 20:54:00	Rocketsonde	-	-	Arcasonde	-	-	-	PRIM	-	-	-	74	-	-
1982-M181	2445044.60	1982 Mar 16 02:30:00	Rocketsonde	-	-	Arcasonde	-	-	-	SHEM	-	-	-	63	-	-
1982-M183	2445046.27	1982 Mar 17 15:32:00	Rocketsonde	-	-	Arcasonde	-	-	-	ASC	-	-	-	64	-	-
1982-M185	2445046.38	1982 Mar 17 21:00:00	Rocketsonde	-	-	Arcasonde	-	-	-	SHEM	-	-	-	56	-	-
1982-M185	2445046.38	1982 Mar 17 21:00:00	Rocketsonde	-	-	Arcasonde	-	-	-	WT	-	-	-	80	-	-
1982-M194	2445051.18	1982 Mar 22 18:15:59	Rocketsonde	-	-	Arcasonde	-	-	-	PRIM	-	-	-	73	-	-
1982-M191	2445051.25	1982 Mar 22 18:00:00	Rocketsonde	-	-	Arcasonde	-	-	-	ASC	-	-	-	75	-	-
1982-M192	2445051.25	1982 Mar 22 18:00:00	Rocketsonde	-	-	Arcasonde	-	-	-	PRIM	-	-	-	50	-	-
1982-M192	2445051.25	1982 Mar 22 18:00:00	Rocketsonde	-	-	Arcasonde	-	-	-	PRIM	-	-	-	96	-	-
1982-M196	2445051.30	1982 Mar 22 19:10:59	Rocketsonde	-	-	Arcasonde	-	-	-	KAU	-	-	-	86	-	-
1982-M196	2445051.34	1982 Mar 22 20:04:59	Rocketsonde	-	-	Arcasonde	-	-	-	KAU	-	-	-	86	-	-
1982-M199	2445052.21	1982 Mar 23 17:01:00	Rocketsonde	-	-	Arcasonde	-	-	-	PRIM	-	-	-	70	-	-
1982-M199	2445052.21	1982 Mar 23 19:31:59	Rocketsonde	-	-	Arcasonde	-	-	-	KAU	-	-	-	72	-	-
1982-M198	2445052.25	1982 Mar 23 19:04:59	Rocketsonde	-	-	Arcasonde	-	-	-	KAU	-	-	-	83	-	-
1982-M198	2445052.25	1982 Mar 23 19:04:59	Rocketsonde	-	-	Arcasonde	-	-	-	ASC	-	-	-	86	-	-
1982-M199	2445052.25	1982 Mar 23 19:04:59	Rocketsonde	-	-	Arcasonde	-	-	-	WS	-	-	-	66	-	-
1982-M200	2445052.25	1982 Mar 23 19:04:59	Rocketsonde	-	-	Arcasonde	-	-	-	PRIM	-	-	-	70	-	-
1982-M200	2445052.25	1982 Mar 23 19:04:59	Rocketsonde	-	-	Arcasonde	-	-	-	ASC	-	-	-	66	-	-
1982-M203	2445052.29	1982 Mar 24 18:59:59	Rocketsonde	-	-	Arcasonde	-	-	-	PRIM	-	-	-	72	-	-
1982-M203	2445052.29	1982 Mar 24 18:59:59	Rocketsonde	-	-	Arcasonde	-	-	-	ASC	-	-	-	66	-	-
1982-M204	2445053.30	1982 Mar 24 19:04:59	Rocketsonde	-	-	Arcasonde	-	-	-	PRIM	-	-	-	91	-	-
1982-M206	2445053.33	1982 Mar 24 20:02:00	Rocketsonde	-	-	Arcasonde	-	-	-	KAU	-	-	-	66	-	-
1982-M206	2445054.20	1982 Mar 25 16:51:00	Rocketsonde	-	-	Arcasonde	-	-	-	PRIM	-	-	-	92	-	-
1982-M207	2445054.22	1982 Mar 25 17:17:00	Rocketsonde	-	-	Arcasonde	-	-	-	PM	-	-	-	95	-	-
1982-M207	2445054.22	1982 Mar 25 17:17:00	Rocketsonde	-	-	Arcasonde	-	-	-	ASC	-	-	-	66	-	-
1982-M208	2445054.32	1982 Mar 25 19:35:59	Rocketsonde	-	-	Arcasonde	-	-	-	KAU	-	-	-	95	-	-
1982-M208	2445054.32	1982 Mar 25 19:35:59	Rocketsonde	-	-	Arcasonde	-	-	-	ASC	-	-	-	66	-	-
1982-M209	2445055.23	1982 Mar 26 17:07:00	Rocketsonde	-	-	Arcasonde	-	-	-	PM	-	-	-	92	-	-
1982-M210	2445055.23	1982 Mar 26 17:31:00	Rocketsonde	-	-	Arcasonde	-	-	-	PRIM	-	-	-	70	-	-
1982-M210	2445055.30	1982 Mar 26 19:18:00	Rocketsonde	-	-	Arcasonde	-	-	-	KAU	-	-	-	95	-	-
1982-M210	2445055.35	1982 Mar 26 20:27:59	Rocketsonde	-	-	Arcasonde	-	-	-	KAU	-	-	-	67	-	-
1982-M211	2445055.21	1982 Mar 27 16:57:59	Rocketsonde	-	-	Arcasonde	-	-	-	PM	-	-	-	78	-	-
1982-M211	2445056.24	1982 Mar 27 17:51:00	Rocketsonde	-	-	Arcasonde	-	-	-	PM	-	-	-	72	-	-
1982-M211	2445056.24	1982 Mar 27 17:51:00	Rocketsonde	-	-	Arcasonde	-	-	-	ASC	-	-	-	66	-	-
1982-M213	2445056.31	1982 Mar 27 19:05:59	Rocketsonde	-	-	Arcasonde	-	-	-	KAU	-	-	-	94	-	-
1982-M213	2445056.31	1982 Mar 27 19:05:59	Rocketsonde	-	-	Arcasonde	-	-	-	ASC	-	-	-	63	-	-
1982-M214	2445057.23	1982 Mar 28 17:30:00	Rocketsonde	-	-	Arcasonde	-	-	-	PM	-	-	-	94	-	-
1982-M214	2445057.23	1982 Mar 28 17:30:00	Rocketsonde	-	-	Arcasonde	-	-	-	ASC	-	-	-	66	-	-
1982-M215	2445057.34	1982 Mar 28 20:04:59	Rocketsonde	-	-	Arcasonde	-	-	-	PM	-	-	-	71	-	-
1982-M215	2445057.34	1982 Mar 28 20:04:59	Rocketsonde	-	-	Arcasonde	-	-	-	WS	-	-	-	66	-	-
1982-M216	2445058.01	1982 Mar 29 12:10:00	Rocketsonde	-	-	Arcasonde	-	-	-	PM	-	-	-	62	-	-
1982-M220	2445058.14	1982 Mar 29 13:49:59	Rocketsonde	-	-	Arcasonde	-	-	-	PM	-	-	-	66	-	-
1982-M220	2445058.14	1982 Mar 29 13:49:59	Rocketsonde	-	-	Arcasonde	-	-	-	ASC	-	-	-	62	-	-
1982-M221	2445058.34	1982 Mar 29 20:04:59	Rocketsonde	-	-	Arcasonde	-	-	-	PRIM	-	-	-	51	-	-
1982-M222	2445058.34	1982 Mar 29 20:04:59	Rocketsonde	-	-	Arcasonde	-	-	-	SHEM	-	-	-	91	-	-
1982-M223	2445058.92	1982 Mar 29 20:06:00	Rocketsonde	-	-	Arcasonde	-	-	-	KAU	-	-	-	64	-	-
1982-M223	2445058.92	1982 Mar 29 20:06:00	Rocketsonde	-	-	Arcasonde	-	-	-	PM	-	-	-	67	-	-
1982-M223	2445058.92	1982 Mar 29 20:06:00	Rocketsonde	-	-	Arcasonde	-	-	-	WT	-	-	-	90	-	-
1982-M223	2445058.92	1982 Mar 29 20:06:00	Rocketsonde	-	-	Arcasonde	-	-	-	ASC	-	-	-	66	-	-
1982-M224	2445059.07	1982 Mar 30 13:30:00	Rocketsonde	-	-	Arcasonde	-	-	-	PM	-	-	-	94	-	-
1982-M224	2445059.07	1982 Mar 30 13:30:00	Rocketsonde	-	-	Arcasonde	-	-	-	WT	-	-	-	90	-	-
1982-M224	2445059.09	1982 Mar 30 14:15:59	Rocketsonde	-	-	Arcasonde	-	-	-	PM	-	-	-	68	-	-
1982-M224	2445059.12	1982 Mar 30 14:59:00	Rocketsonde	-	-	Arcasonde	-	-	-	PM	-	-	-	93	-	-
1982-M226	2445059.14	1982 Mar 30 15:22:59	Rocketsonde													

Launch

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variat	Flight_ID	Flight	Mission	FlightCode	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee_Km	Range_Km	Dest
1982-Y126	2445059.20	1982 Mar 30 1654:59	Rocketsonde	-	-	AI/DMP-9?	-	-	-	KAU	-	-	-	91	-	-
1982-W229	2445059.22	1982 Mar 30 1719:00	Rocketsonde	-	-	Arcasoude	-	-	-	KAU	-	-	-	66	-	-
1982-W231	2445060.36	1982 Mar 31 2040:00	Rocketsonde	-	-	Arcasoude	-	-	-	KMR	-	-	-	74	-	-
1982-W232	2445060.42	1982 Mar 31 2200:59	Rocketsonde	-	-	Arcasoude	-	-	-	SHEM	-	-	-	57	-	-
1982-W233	2445062.42	1982 Apr 2 2159:59	Rocketsonde	-	-	Arcasoude	-	-	-	SHEM	-	-	-	58	-	-
1982-Y131	2445066.33	1982 Apr 5 2000:00	Rocketsonde	-	-	AI/DMP-9?	-	-	-	KAU	-	-	-	63	-	-
1982-W234	2445066.35	1982 Apr 5 2029:00	Rocketsonde	-	-	Arcasoude	-	-	-	KAU	-	-	-	63	-	-
1982-W235	2445066.42	1982 Apr 6 2201:59	Rocketsonde	-	-	Arcasoude	-	-	-	SHEM	-	-	-	64	-	-
1982-W236	2445067.17	1982 Apr 7 1610:59	Rocketsonde	-	-	Arcasoude	-	-	-	PRIM	-	-	-	64	-	-
1982-W239	2445067.38	1982 Apr 7 2104:59	Rocketsonde	-	-	Arcasoude	-	-	-	SHEM	-	-	-	66	-	-
1982-W241	2445069.17	1982 Apr 9 1559:59	Rocketsonde	-	-	Arcasoude	-	-	-	WS	-	-	-	63	-	-
1982-W244	2445074.18	1982 Apr 14 1614:59	Rocketsonde	-	-	Arcasoude	-	-	-	PRIM	-	-	-	60	-	-
1982-Y141	2445074.27	1982 Apr 14 1830:00	Rocketsonde	-	-	AI/DMP-9	-	-	-	WS	-	-	-	97	-	-
1982-W245	2445074.31	1982 Apr 14 1930:00	Rocketsonde	-	-	Arcasoude	-	-	-	WS	-	-	-	64	-	-
1982-W246	2445074.44	1982 Apr 14 2238:59	Rocketsonde	-	-	Arcasoude	-	-	-	KMR	-	-	-	74	-	-
1982-W247	2445075.39	1982 Apr 15 2124:59	Rocketsonde	-	-	Arcasoude	-	-	-	KAU	-	-	-	63	-	-
1982-W248	2445075.60	1982 Apr 16 0221:00	Rocketsonde	-	-	Arcasoude	-	-	-	KAU	-	-	-	56	-	-
1982-Y144	2445079.37	1982 Apr 19 2054:00	Rocketsonde	-	-	AI/DMP-9?	-	-	-	KAU	-	-	-	94	-	-
1982-W250	2445079.38	1982 Apr 19 2100:00	Rocketsonde	-	-	Arcasoude	-	-	-	KAU	-	-	-	57	-	-
1982-W251	2445079.39	1982 Apr 19 2115:59	Rocketsonde	-	-	Arcasoude	-	-	-	SHEM	-	-	-	57	-	-
1982-W252	2445080.12	1982 Apr 20 1457:00	Rocketsonde	-	-	Arcasoude	-	-	-	KAU	-	-	-	63	-	-
1982-W257	2445080.23	1982 Apr 20 1737:00	Rocketsonde	-	-	Arcasoude	-	-	-	WI	-	-	-	69	-	-
1982-Y149	2445081.25	1982 Apr 21 1800:00	Rocketsonde	-	-	AI/DMP-9	-	-	-	WS	-	-	-	97	-	-
1982-W260	2445081.26	1982 Apr 21 1800:00	Rocketsonde	-	-	Arcasoude	-	-	-	PRIM	-	-	-	64	-	-
1982-W261	2445081.27	1982 Apr 21 1800:00	Rocketsonde	-	-	Arcasoude	-	-	-	WS	-	-	-	63	-	-
1982-A09	2445081.38	1982 Apr 21 1830:00	Rocketsonde	-	-	Arcasoude	-	-	-	SHEM	-	-	-	46	-	-
1982-Y150	2445082.37	1982 Apr 22 2047:00	Rocketsonde	-	-	AI/DMP-9	-	-	-	PH	-	-	-	90	-	-
1982-W262	2445082.33	1982 Apr 22 2000:00	Rocketsonde	-	-	Arcasoude	-	-	-	PH	-	-	-	89	-	-
1982-W263	2445083.61	1982 Apr 23 0243:00	Rocketsonde	-	-	Arcasoude	-	-	-	KAU	-	-	-	71	-	-
1982-W265	2445083.38	1982 Apr 23 2100:00	Rocketsonde	-	-	Arcasoude	-	-	-	KAU	-	-	-	64	-	-
1982-W266	2445086.35	1982 Apr 26 2000:00	Rocketsonde	-	-	Arcasoude	-	-	-	SHEM	-	-	-	57	-	-
1982-W268	2445086.21	1982 Apr 26 1658:59	Rocketsonde	-	-	Arcasoude	-	-	-	PH	-	-	-	86	-	-
1982-Y165	2445086.21	1982 Apr 28 1730:00	Rocketsonde	-	-	AI/DMP-9	-	-	-	PH	-	-	-	90	-	-
1982-W267	2445086.23	1982 Apr 28 1730:00	Rocketsonde	-	-	Arcasoude	-	-	-	PH	-	-	-	89	-	-
1982-Y157	2445086.25	1982 Apr 28 1800:00	Rocketsonde	-	-	AI/DMP-9	-	-	-	WS	-	-	-	94	-	-
1982-W268	2445086.27	1982 Apr 28 1830:00	Rocketsonde	-	-	Arcasoude	-	-	-	WS	-	-	-	60	-	-
1982-W269	2445086.54	1982 Apr 28 2015:00	Rocketsonde	-	-	Arcasoude	-	-	-	SHEM	-	-	-	59	-	-
1982-W270	2445089.22	1982 Apr 29 1715:00	Rocketsonde	-	-	Arcasoude	-	-	-	PRIM	-	-	-	85	-	-
1982-W272	2445090.37	1982 Apr 30 2005:00	Rocketsonde	-	-	Arcasoude	-	-	-	KAU	-	-	-	85	-	-
1982-W273	2445090.38	1982 Apr 30 2100:00	Rocketsonde	-	-	Arcasoude	-	-	-	SHEM	-	-	-	90	-	-
1982-W276	2445093.33	1982 May 8 2000:00	Rocketsonde	-	-	Arcasoude	-	-	-	SHEM	-	-	-	55	-	-
1982-Y161	2445095.14	1982 May 8 1526:59	Rocketsonde	-	-	AI/DMP-9	-	-	-	PRIM	-	-	-	86	-	-
1982-W274	2445095.24	1982 May 8 1745:00	Rocketsonde	-	-	Arcasoude	-	-	-	WS	-	-	-	53	-	-
1982-W275	2445095.25	1982 May 8 2030:00	Rocketsonde	-	-	Arcasoude	-	-	-	SHEM	-	-	-	70	-	-
1982-W276	2445095.44	1982 May 7 2356:59	Rocketsonde	-	-	Arcasoude	-	-	-	SHEM	-	-	-	53	-	-
1982-W281	2445099.33	1982 May 7 2000:00	Rocketsonde	-	-	Arcasoude	-	-	-	KAU	-	-	-	70	-	-
1982-W283	2445100.36	1982 May 10 2100:00	Rocketsonde	-	-	Arcasoude	-	-	-	WS	-	-	-	58	-	-
1982-W284	2445100.26	1982 May 11 0226:00	Rocketsonde	-	-	Arcasoude	-	-	-	KMR	-	-	-	43	-	-
1982-Y170	2445102.20	1982 May 12 1859:59	Rocketsonde	-	-	AI/DMP-9	-	-	-	WS	-	-	-	94	-	-
1982-W287	2445102.21	1982 May 12 1926:59	Rocketsonde	-	-	Arcasoude	-	-	-	PH	-	-	-	71	-	-
1982-W288	2445103.31	1982 May 13 0015:00	Rocketsonde	-	-	Arcasoude	-	-	-	SHEM	-	-	-	51	-	-
1982-W289	2445104.33	1982 May 13 2005:00	Rocketsonde	-	-	Arcasoude	-	-	-	SHEM	-	-	-	55	-	-
1982-W290	2445107.33	1982 May 17 2000:00	Rocketsonde	-	-	Arcasoude	-	-	-	WS	-	-	-	63	-	-
1982-W292	2445108.12	1982 May 19 1500:00	Rocketsonde	-	-	Arcasoude	-	-	-	PRIM	-	-	-	68	-	-
1982-W284	2445108.15	1982 May 19 1530:00	Rocketsonde	-	-	Arcasoude	-	-	-	PRIM	-	-	-	70	-	-
1982-W172	2445108.23	1982 May 19 1726:00	Rocketsonde	-	-	Arcasoude	-	-	-	PH	-	-	-	89	-	-
1982-W295	2445109.15	1982 May 19 1800:00	Rocketsonde	-	-	Arcasoude	-	-	-	WS	-	-	-	61	-	-
1982-W175	2445109.18	1982 May 19 1530:00	Rocketsonde	-	-	Arcasoude	-	-	-	WS	-	-	-	97	-	-
1982-W296	2445109.18	1982 May 19 1614:59	Rocketsonde	-	-	Arcasoude	-	-	-	WS	-	-	-	65	-	-
1982-W298	2445111.35	1982 May 21 2031:00	Rocketsonde	-	-	Arcasoude	-	-	-	KAU	-	-	-	65	-	-
1982-W301	2445115.40	1982 May 25 2134:59	Rocketsonde	-	-	Arcasoude	-	-	-	WS	-	-	-	69	-	-
1982-W302	2445116.21	1982 May 26 1700:00	Rocketsonde	-	-	Arcasoude	-	-	-	WS	-	-	-	65	-	-
1982-W305	2445116.25	1982 May 26 1755:00	Rocketsonde	-	-	Arcasoude	-	-	-	WS	-	-	-	66	-	-
1982-Y181	2445116.37	1982 May 26 2057:00	Rocketsonde	-	-	AI/DMP-9?	-	-	-	KAU	-	-	-	90	-	-
1982-W306	2445116.39	1982 May 26 2126:59	Rocketsonde	-	-	Arcasoude	-	-	-	KAU	-	-	-	67	-	-
1982-W307	2445116.46	1982 May 26 2304:59	Rocketsonde	-	-	Arcasoude	-	-	-	KMR	-	-	-	66	-	-
1982-W308	2445117.11	1982 May 27 1438:59	Rocketsonde	-	-	Arcasoude	-	-	-	PRIM	-	-	-	66	-	-
1982-W309	2445117.59	1982 May 27 2114:59	Rocketsonde	-	-	Arcasoude	-	-	-	SHEM	-	-	-	66	-	-
1982-W310	2445118.19	1982 May 28 1630:00	Rocketsonde	-	-	Arcasoude	-	-	-	WS	-	-	-	65	-	-
1982-W311	2445118.38	1982 May 28 2100:00	Rocketsonde	-	-	Arcasoude	-	-	-	WS	-	-	-	55	-	-
1982-W312	2445121.38	1982 May 31 2100:00	Rocketsonde	-	-	Arcasoude	-	-	-	SHEM	-	-	-	42	-	-
1982-W314	2445123.13	1982 Jun 2 1508:00	Rocketsonde	-	-	AI/DMP-9	-	-	-	WS	-	-	-	63	-	-
1982-Y188	2445123.21	1982 Jun 2 1700:00	Rocketsonde	-	-	Arcasoude	-	-	-	WS	-	-	-	97	-	-
1982-W315	2445123.47	1982 Jun 2 2310:00	Rocketsonde	-	-	Arcasoude	-	-	-	KMR	-	-	-	78	-	-
1982-W316	2445124.38	1982 Jun 3 2100:00	Rocketsonde	-	-	Arcasoude	-	-	-	KMR	-	-	-	70	-	-
1982-Y192	2445125.29	1982 Jun 3 1855:00	Rocketsonde	-	-	AI/DMP-9	-	-	-	PM	-	-	-	93	-	-
1982-W317	2445125.31	1982 Jun 4 1920:59	Rocketsonde	-	-	Arcasoude	-	-	-	PM	-	-	-	73	-	-
1982-W318	2445128.36	1982 Jun 7 2037:59	Rocketsonde	-	-	Arcasoude	-	-	-	KMR	-	-	-	73	-	-
1982-W319	2445128.39	1982 Jun 7 2121:00	Rocketsonde	-	-	Arcasoude	-	-	-	KAU	-	-	-	64	-	-
1982-W321	2445129.38	1982 Jun 8 2101:59	Rocketsonde	-	-	Arcasoude	-	-	-	WS	-	-	-	54	-	-
1982-Y198	2445130.29	1982 Jun 9 1859:59	Rocketsonde	-	-	AI/DMP-9	-	-	-	WS	-	-	-	97	-	-
1982-W322	2445130.29	1982 Jun 9 2100:00	Rocketsonde	-	-	Arcasoude	-	-	-	WS	-	-	-	53	-	-
1982-W323	2445130.46	1982 Jun 9 2304:59	Rocketsonde	-	-	Arcasoude	-	-	-	SHEM	-	-	-	76	-	-
1982-W325	2445135.38	1982 Jun 14 2110:00	Rocketsonde	-	-	Arcasoude	-	-	-	SHEM	-	-	-	57	-	-
1982-W326	2445137.15	1982 Jun 16 1530:00	Rocketsonde	-	-	Arcasoude	-	-	-	PRIM	-	-	-	44	-	-
1982-W326	2445137.21	1982 Jun 16 1702:00	Rocketsonde	-	-	Arcasoude	-	-	-	WS	-	-	-	63	-	-

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Mission	FlightCode	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee_Km	Range_Km	Dest
1982-W327	2445138.43	1982 Jun 17 22:14:59	Rocketsonde	-	-	Arcasonde	-	-	-	SHEM	-	-	-	56	-	-
1982-W328	2445139.40	1982 Jun 18 21:30:00	Rocketsonde	-	-	Arcasonde	-	-	-	SHEM	-	-	-	54	-	-
1982-W329	2445142.38	1982 Jun 21 21:04:59	Rocketsonde	-	-	Arcasonde	-	-	-	SHEM	-	-	-	56	-	-
1982-W330	2445143.15	1982 Jun 22 15:29:00	Rocketsonde	-	-	Arcasonde	-	-	-	PHLM	-	-	-	50	-	-
1982-W332	2445144.39	1982 Jun 23 21:14:59	Rocketsonde	-	-	Arcasonde	-	-	-	SHEM	-	-	-	54	-	-
1982-W333	2445144.46	1982 Jun 23 22:43:59	Rocketsonde	-	-	Arcasonde	-	-	-	KUR	-	-	-	74	-	-
1982-W334	2445145.39	1982 Jun 24 21:22:00	Rocketsonde	-	-	Arcasonde	-	-	-	KAU	-	-	-	65	-	-
1982-W335	2445148.16	1982 Jun 27 14:21:00	Rocketsonde	-	-	Arcasonde	-	-	-	PH	-	-	-	72	-	-
1982-W336	2445148.21	1982 Jun 27 15:52:00	Rocketsonde	-	-	Arcasonde	-	-	-	AI/DMP-9?	-	-	-	95	-	-
1982-W337	2445149.15	1982 Jun 27 16:55:59	Rocketsonde	-	-	Arcasonde	-	-	-	KAU	-	-	-	66	-	-
1982-W338	2445149.93	1982 Jun 28 15:31:00	Rocketsonde	-	-	Arcasonde	-	-	-	PHLM	-	-	-	60	-	-
1982-W339	2445150.08	1982 Jun 29 10:14:59	Rocketsonde	-	-	Arcasonde	-	-	-	WI	-	-	-	90	-	-
1982-W340	2445150.10	1982 Jun 29 13:49:59	Rocketsonde	-	-	Arcasonde	-	-	-	AI/DMP-9	-	-	-	87	-	-
1982-W341	2445150.12	1982 Jun 29 14:25:00	Rocketsonde	-	-	Arcasonde	-	-	-	AI/DMP-9	-	-	-	53	-	-
1982-W342	2445150.16	1982 Jun 29 14:55:00	Rocketsonde	-	-	Arcasonde	-	-	-	PH	-	-	-	73	-	-
1982-W343	2445150.18	1982 Jun 29 15:48:59	Rocketsonde	-	-	Arcasonde	-	-	-	AI/DMP-9?	-	-	-	90	-	-
1982-W344	2445150.18	1982 Jun 29 16:12:59	Rocketsonde	-	-	Arcasonde	-	-	-	PH	-	-	-	53	-	-
1982-W345	2445150.18	1982 Jun 29 16:13:59	Rocketsonde	-	-	Arcasonde	-	-	-	AI/DMP-9	-	-	-	68	-	-
1982-W346	2445151.44	1982 Jun 30 17:35:00	Rocketsonde	-	-	Arcasonde	-	-	-	WS	-	-	-	56	-	-
1982-W347	2445151.46	1982 Jun 30 22:30:00	Rocketsonde	-	-	Arcasonde	-	-	-	SHEM	-	-	-	97	-	-
1982-W348	2445152.08	1982 Jul 1 13:51:00	Rocketsonde	-	-	Arcasonde	-	-	-	KUR	-	-	-	75	-	-
1982-W349	2445152.16	1982 Jul 1 15:48:59	Rocketsonde	-	-	Arcasonde	-	-	-	PH	-	-	-	74	-	-
1982-W350	2445152.20	1982 Jul 1 16:41:59	Rocketsonde	-	-	Arcasonde	-	-	-	AI/DMP-9?	-	-	-	95	-	-
1982-W351	2445152.40	1982 Jul 1 16:41:59	Rocketsonde	-	-	Arcasonde	-	-	-	KAU	-	-	-	70	-	-
1982-W352	2445154.08	1982 Jul 3 13:53:59	Rocketsonde	-	-	Arcasonde	-	-	-	PH	-	-	-	85	-	-
1982-W353	2445154.11	1982 Jul 3 14:43:00	Rocketsonde	-	-	Arcasonde	-	-	-	PH	-	-	-	85	-	-
1982-W354	2445154.13	1982 Jul 3 15:11:59	Rocketsonde	-	-	Arcasonde	-	-	-	PH	-	-	-	85	-	-
1982-W355	2445154.16	1982 Jul 3 15:48:59	Rocketsonde	-	-	Arcasonde	-	-	-	AI/DMP-9?	-	-	-	59	-	-
1982-W356	2445154.18	1982 Jul 3 16:13:59	Rocketsonde	-	-	Arcasonde	-	-	-	KAU	-	-	-	70	-	-
1982-W357	2445154.19	1982 Jul 3 16:26:59	Rocketsonde	-	-	Arcasonde	-	-	-	PH	-	-	-	71	-	-
1982-W358	2445154.93	1982 Jul 4 10:14:59	Rocketsonde	-	-	Arcasonde	-	-	-	PH	-	-	-	73	-	-
1982-W359	2445154.96	1982 Jul 4 11:09:00	Rocketsonde	-	-	Arcasonde	-	-	-	PH	-	-	-	85	-	-
1982-W360	2445155.05	1982 Jul 4 13:12:59	Rocketsonde	-	-	Arcasonde	-	-	-	WS	-	-	-	87	-	-
1982-W361	2445155.07	1982 Jul 4 13:47:59	Rocketsonde	-	-	Arcasonde	-	-	-	WS	-	-	-	86	-	-
1982-W362	2445155.09	1982 Jul 4 14:09:00	Rocketsonde	-	-	Arcasonde	-	-	-	KAU	-	-	-	85	-	-
1982-W363	2445155.09	1982 Jul 4 14:21:00	Rocketsonde	-	-	Arcasonde	-	-	-	PH	-	-	-	85	-	-
1982-W364	2445155.12	1982 Jul 4 14:26:00	Rocketsonde	-	-	Arcasonde	-	-	-	KUR	-	-	-	77	-	-
1982-W365	2445155.13	1982 Jul 4 14:59:00	Rocketsonde	-	-	Arcasonde	-	-	-	PH	-	-	-	87	-	-
1982-W366	2445155.14	1982 Jul 4 15:23:59	Rocketsonde	-	-	Arcasonde	-	-	-	KAU	-	-	-	94	-	-
1982-W367	2445155.16	1982 Jul 4 15:48:59	Rocketsonde	-	-	Arcasonde	-	-	-	KAU	-	-	-	94	-	-
1982-W368	2445155.18	1982 Jul 4 16:31:59	Rocketsonde	-	-	Arcasonde	-	-	-	PH	-	-	-	84	-	-
1982-W369	2445155.19	1982 Jul 4 16:31:59	Rocketsonde	-	-	Arcasonde	-	-	-	PH	-	-	-	72	-	-
1982-W370	2445156.22	1982 Jul 4 17:11:00	Rocketsonde	-	-	Arcasonde	-	-	-	SHEM	-	-	-	56	-	-
1982-W371	2445156.24	1982 Jul 7 17:00:00	Rocketsonde	-	-	Arcasonde	-	-	-	WS	-	-	-	88	-	-
1982-W372	2445156.25	1982 Jul 7 17:30:00	Rocketsonde	-	-	Arcasonde	-	-	-	AI/DMP-9	-	-	-	85	-	-
1982-W373	2445156.25	1982 Jul 7 17:30:00	Rocketsonde	-	-	Arcasonde	-	-	-	PH	-	-	-	89	-	-
1982-W374	2445156.26	1982 Jul 7 23:40:00	Rocketsonde	-	-	Arcasonde	-	-	-	KUR	-	-	-	77	-	-
1982-W375	2445156.34	1982 Jul 9 14:59:00	Rocketsonde	-	-	Arcasonde	-	-	-	PH	-	-	-	85	-	-
1982-W376	2445156.35	1982 Jul 9 21:23:59	Rocketsonde	-	-	Arcasonde	-	-	-	KAU	-	-	-	84	-	-
1982-W377	2445156.41	1982 Jul 9 21:45:00	Rocketsonde	-	-	Arcasonde	-	-	-	SHEM	-	-	-	84	-	-
1982-W378	2445156.44	1982 Jul 14 22:38:59	Rocketsonde	-	-	Arcasonde	-	-	-	SHEM	-	-	-	84	-	-
1982-W379	2445156.58	1982 Jul 15 21:00:00	Rocketsonde	-	-	Arcasonde	-	-	-	SHEM	-	-	-	63	-	-
1982-W380	2445156.58	1982 Jul 15 21:00:00	Rocketsonde	-	-	Arcasonde	-	-	-	KUR	-	-	-	67	-	-
1982-W381	2445156.59	1982 Jul 16 20:26:00	Rocketsonde	-	-	Arcasonde	-	-	-	SHEM	-	-	-	56	-	-
1982-W382	2445156.59	1982 Jul 16 21:22:00	Rocketsonde	-	-	Arcasonde	-	-	-	KUR	-	-	-	76	-	-
1982-W383	2445156.59	1982 Jul 16 21:22:00	Rocketsonde	-	-	Arcasonde	-	-	-	PH	-	-	-	94	-	-
1982-W384	2445156.59	1982 Jul 16 21:30:00	Rocketsonde	-	-	Arcasonde	-	-	-	SHEM	-	-	-	53	-	-
1982-W385	2445157.42	1982 Jul 16 22:04:59	Rocketsonde	-	-	Arcasonde	-	-	-	PH	-	-	-	72	-	-
1982-W386	2445170.15	1982 Jul 19 15:29:00	Rocketsonde	-	-	Arcasonde	-	-	-	PH	-	-	-	95	-	-
1982-W387	2445170.18	1982 Jul 19 16:20:59	Rocketsonde	-	-	Arcasonde	-	-	-	PH	-	-	-	70	-	-
1982-W388	2445170.41	1982 Jul 19 21:44:00	Rocketsonde	-	-	Arcasonde	-	-	-	KAU	-	-	-	66	-	-
1982-W389	2445170.42	1982 Jul 19 22:09:59	Rocketsonde	-	-	Arcasonde	-	-	-	KAU	-	-	-	66	-	-
1982-W390	2445170.44	1982 Jul 19 22:30:00	Rocketsonde	-	-	Arcasonde	-	-	-	SHEM	-	-	-	56	-	-
1982-W391	2445171.36	1982 Jul 20 20:36:00	Rocketsonde	-	-	Arcasonde	-	-	-	KUR	-	-	-	76	-	-
1982-W392	2445172.24	1982 Jul 21 17:45:00	Rocketsonde	-	-	Arcasonde	-	-	-	WS	-	-	-	81	-	-
1982-W393	2445172.40	1982 Jul 21 21:30:00	Rocketsonde	-	-	Arcasonde	-	-	-	SHEM	-	-	-	97	-	-
1982-W394	2445172.46	1982 Jul 21 22:58:59	Rocketsonde	-	-	Arcasonde	-	-	-	KUR	-	-	-	76	-	-
1982-W395	2445177.37	1982 Jul 26 20:52:00	Rocketsonde	-	-	Arcasonde	-	-	-	KAU	-	-	-	66	-	-
1982-W396	2445177.39	1982 Jul 26 21:17:00	Rocketsonde	-	-	Arcasonde	-	-	-	KAU	-	-	-	66	-	-
1982-W397	2445179.23	1982 Jul 28 17:30:00	Rocketsonde	-	-	Arcasonde	-	-	-	WS	-	-	-	73	-	-
1982-W398	2445180.38	1982 Jul 29 21:10:00	Rocketsonde	-	-	Arcasonde	-	-	-	KUR	-	-	-	57	-	-
1982-W399	2445186.21	1982 Aug 4 17:00:00	Rocketsonde	-	-	Arcasonde	-	-	-	SHEM	-	-	-	97	-	-
1982-W400	2445187.40	1982 Aug 5 20:57:00	Rocketsonde	-	-	Arcasonde	-	-	-	KAU	-	-	-	95	-	-
1982-W401	2445188.36	1982 Aug 6 20:32:00	Rocketsonde	-	-	Arcasonde	-	-	-	KAU	-	-	-	66	-	-
1982-W402	2445191.29	1982 Aug 9 18:53:00	Rocketsonde	-	-	Arcasonde	-	-	-	KUR	-	-	-	77	-	-
1982-W403	2445191.31	1982 Aug 9 19:19:59	Rocketsonde	-	-	Arcasonde	-	-	-	PH	-	-	-	95	-	-
1982-W404	2445191.39	1982 Aug 9 21:24:59	Rocketsonde	-	-	Arcasonde	-	-	-	PH	-	-	-	72	-	-
1982-W405	2445191.41	1982 Aug 9 21:48:59	Rocketsonde	-	-	Arcasonde	-	-	-	KAU	-	-	-	94	-	-
1982-W406	2445193.21	1982 Aug 11 17:00:00	Rocketsonde	-	-	Arcasonde	-	-	-	KAU	-	-	-	98	-	-
1982-W407	2445193.23	1982 Aug 11 17:30:00	Rocketsonde	-	-	Arcasonde	-	-	-	WS	-	-	-	64	-	-
1982-W408	2445200.21	1982 Aug 18 17:00:00	Rocketsonde	-	-	Arcasonde	-	-	-	WS	-	-	-	97	-	-

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Mission	FlightCode	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee_Km	Range_Km	Dest
1982-W385	2445200.23	1982 Aug 18 17:30:00	Rocketsonde	-	-	Arcasonde	-	-	-	WS	-	-	-	62	-	-
1982-W386	2445200.29	1982 Aug 18 18:59:59	Rocketsonde	-	-	Arcasonde	-	-	-	WI	-	-	-	66	-	-
1982-W387	2445200.45	1982 Aug 18 22:44:59	Rocketsonde	-	-	Arcasonde	-	-	-	KR	-	-	-	64	-	-
1982-W388	2445201.46	1982 Aug 19 23:04:59	Rocketsonde	-	-	Arcasonde	-	-	-	KAU	-	-	-	60	-	-
1982-7303	2445202.15	1982 Aug 20 15:33:59	Rocketsonde	-	-	Arcasonde	-	-	-	PH	-	-	-	95	-	-
1982-W389	2445202.17	1982 Aug 20 16:07:59	Rocketsonde	-	-	Arcasonde	-	-	-	PH	-	-	-	60	-	-
1982-A18	2445205.60	1982 Aug 24 02:30:00	Rocketsonde	-	-	Arcasonde	-	-	-	SHEM	-	-	-	47	-	-
1982-W390	2445206.27	1982 Aug 24 18:27:59	Rocketsonde	-	-	Arcasonde	-	-	-	WS	-	-	-	55	-	-
1982-W391	2445207.31	1982 Aug 25 19:30:00	Rocketsonde	-	-	Arcasonde	-	-	-	PH	-	-	-	95	-	-
1982-W309	2445207.38	1982 Aug 25 19:52:59	Rocketsonde	-	-	Arcasonde	-	-	-	PH	-	-	-	95	-	-
1982-7310	2445207.44	1982 Aug 25 21:04:59	Rocketsonde	-	-	Arcasonde	-	-	-	SHEM	-	-	-	50	-	-
1982-W392	2445209.23	1982 Aug 27 17:30:00	Rocketsonde	-	-	Arcasonde	-	-	-	KR	-	-	-	80	-	-
1982-W393	2445209.37	1982 Aug 27 17:30:00	Rocketsonde	-	-	Arcasonde	-	-	-	KR	-	-	-	85	-	-
1982-W394	2445209.42	1982 Aug 27 21:59:59	Rocketsonde	-	-	Arcasonde	-	-	-	SHEM	-	-	-	73	-	-
1982-W395	2445212.41	1982 Aug 30 21:59:59	Rocketsonde	-	-	Arcasonde	-	-	-	KAU	-	-	-	50	-	-
1982-W397	2445214.14	1982 Sep 1 15:14:59	Rocketsonde	-	-	Arcasonde	-	-	-	WS	-	-	-	69	-	-
1982-W398	2445214.22	1982 Sep 1 17:13:00	Rocketsonde	-	-	Arcasonde	-	-	-	WS	-	-	-	65	-	-
1982-W399	2445214.47	1982 Sep 1 23:10:00	Rocketsonde	-	-	Arcasonde	-	-	-	KR	-	-	-	63	-	-
1982-7318	2445220.37	1982 Sep 7 20:53:00	Rocketsonde	-	-	Arcasonde	-	-	-	KAU	-	-	-	96	-	-
1982-W402	2445220.39	1982 Sep 7 21:17:00	Rocketsonde	-	-	Arcasonde	-	-	-	KAU	-	-	-	66	-	-
1982-7323	2445221.23	1982 Sep 8 17:32:00	Rocketsonde	-	-	Arcasonde	-	-	-	PH	-	-	-	82	-	-
1982-7325	2445222.21	1982 Sep 9 17:00:00	Rocketsonde	-	-	Arcasonde	-	-	-	WS	-	-	-	82	-	-
1982-W404	2445222.23	1982 Sep 9 17:00:00	Rocketsonde	-	-	Arcasonde	-	-	-	WS	-	-	-	65	-	-
1982-A19	2445226.45	1982 Sep 15 22:44:59	Rocketsonde	-	-	Arcasonde	-	-	-	SHEM	-	-	-	42	-	-
1982-W420	2445228.45	1982 Sep 16 00:06:00	Rocketsonde	-	-	Arcasonde	-	-	-	SHEM	-	-	-	46	-	-
1982-W407	2445228.50	1982 Sep 16 17:45:00	Rocketsonde	-	-	Arcasonde	-	-	-	KR	-	-	-	79	-	-
1982-W409	2445229.24	1982 Sep 16 19:09:59	Rocketsonde	-	-	Arcasonde	-	-	-	PH	-	-	-	63	-	-
1982-W410	2445229.30	1982 Sep 16 19:09:59	Rocketsonde	-	-	Arcasonde	-	-	-	PH	-	-	-	49	-	-
1982-W411	2445233.60	1982 Sep 17 23:00:00	Rocketsonde	-	-	Arcasonde	-	-	-	SHEM	-	-	-	49	-	-
1982-7331	2445234.40	1982 Sep 21 21:42:00	Rocketsonde	-	-	Arcasonde	-	-	-	SHEM	-	-	-	50	-	-
1982-W412	2445234.42	1982 Sep 21 22:04:59	Rocketsonde	-	-	Arcasonde	-	-	-	KAU	-	-	-	80	-	-
1982-7335	2445235.21	1982 Sep 22 17:00:00	Rocketsonde	-	-	Arcasonde	-	-	-	WS	-	-	-	97	-	-
1982-W413	2445235.50	1982 Sep 23 00:04:59	Rocketsonde	-	-	Arcasonde	-	-	-	WS	-	-	-	77	-	-
1982-W414	2445237.06	1982 Sep 24 13:21:59	Rocketsonde	-	-	Arcasonde	-	-	-	KR	-	-	-	71	-	-
1982-W415	2445240.10	1982 Sep 24 14:31:00	Rocketsonde	-	-	Arcasonde	-	-	-	WS	-	-	-	63	-	-
1982-W416	2445240.35	1982 Sep 27 20:00:00	Rocketsonde	-	-	Arcasonde	-	-	-	SHEM	-	-	-	53	-	-
1982-W417	2445240.41	1982 Sep 27 21:53:00	Rocketsonde	-	-	Arcasonde	-	-	-	KR	-	-	-	86	-	-
1982-7340	2445242.21	1982 Sep 29 17:00:00	Rocketsonde	-	-	Arcasonde	-	-	-	KAU	-	-	-	64	-	-
1982-W422	2445242.35	1982 Sep 29 20:20:00	Rocketsonde	-	-	Arcasonde	-	-	-	WS	-	-	-	46	-	-
1982-W423	2445242.45	1982 Sep 29 22:41:59	Rocketsonde	-	-	Arcasonde	-	-	-	WS	-	-	-	72	-	-
1982-W424	2445244.10	1982 Oct 1 14:26:00	Rocketsonde	-	-	Arcasonde	-	-	-	PH	-	-	-	61	-	-
1982-W425	2445244.10	1982 Oct 1 14:26:00	Rocketsonde	-	-	Arcasonde	-	-	-	PH	-	-	-	61	-	-
1982-W426	2445247.60	1982 Oct 2 9:23:00	Rocketsonde	-	-	Arcasonde	-	-	-	SHEM	-	-	-	51	-	-
1982-W427	2445247.66	1982 Oct 2 21:34:59	Rocketsonde	-	-	Arcasonde	-	-	-	KR	-	-	-	66	-	-
1982-W428	2445247.66	1982 Oct 2 21:34:59	Rocketsonde	-	-	Arcasonde	-	-	-	KR	-	-	-	66	-	-
1982-W429	2445247.66	1982 Oct 2 21:34:59	Rocketsonde	-	-	Arcasonde	-	-	-	SHEM	-	-	-	50	-	-
1982-W430	2445248.21	1982 Oct 5 03:30:00	Rocketsonde	-	-	Arcasonde	-	-	-	KR	-	-	-	95	-	-
1982-W431	2445248.21	1982 Oct 5 03:30:00	Rocketsonde	-	-	Arcasonde	-	-	-	SHEM	-	-	-	62	-	-
1982-W432	2445248.21	1982 Oct 5 17:00:00	Rocketsonde	-	-	Arcasonde	-	-	-	WS	-	-	-	82	-	-
1982-W433	2445249.21	1982 Oct 6 17:00:00	Rocketsonde	-	-	Arcasonde	-	-	-	PREM	-	-	-	48	-	-
1982-W434	2445249.21	1982 Oct 6 17:00:00	Rocketsonde	-	-	Arcasonde	-	-	-	PREM	-	-	-	48	-	-
1982-W435	2445250.35	1982 Oct 8 10:54:59	Rocketsonde	-	-	Arcasonde	-	-	-	SHEM	-	-	-	73	-	-
1982-W436	2445250.35	1982 Oct 8 10:54:59	Rocketsonde	-	-	Arcasonde	-	-	-	SHEM	-	-	-	49	-	-
1982-W437	2445250.35	1982 Oct 8 21:00:00	Rocketsonde	-	-	Arcasonde	-	-	-	WS	-	-	-	95	-	-
1982-W438	2445250.35	1982 Oct 8 21:00:00	Rocketsonde	-	-	Arcasonde	-	-	-	WS	-	-	-	97	-	-
1982-W439	2445255.30	1982 Oct 12 19:15:59	Rocketsonde	-	-	Arcasonde	-	-	-	WS	-	-	-	60	-	-
1982-W440	2445255.30	1982 Oct 12 19:15:59	Rocketsonde	-	-	Arcasonde	-	-	-	WS	-	-	-	60	-	-
1982-W441	2445255.30	1982 Oct 13 17:00:00	Rocketsonde	-	-	Arcasonde	-	-	-	WS	-	-	-	60	-	-
1982-W442	2445255.30	1982 Oct 13 17:00:00	Rocketsonde	-	-	Arcasonde	-	-	-	WS	-	-	-	60	-	-
1982-W443	2445255.30	1982 Oct 13 17:31:00	Rocketsonde	-	-	Arcasonde	-	-	-	WS	-	-	-	60	-	-
1982-W444	2445255.30	1982 Oct 13 20:30:00	Rocketsonde	-	-	Arcasonde	-	-	-	SHEM	-	-	-	44	-	-
1982-W445	2445255.30	1982 Oct 15 21:33:59	Rocketsonde	-	-	Arcasonde	-	-	-	KAU	-	-	-	65	-	-
1982-W446	2445255.30	1982 Oct 15 21:33:59	Rocketsonde	-	-	Arcasonde	-	-	-	KAU	-	-	-	65	-	-
1982-W447	2445261.33	1982 Oct 18 19:58:59	Rocketsonde	-	-	Arcasonde	-	-	-	PM	-	-	-	94	-	-
1982-W448	2445261.33	1982 Oct 18 19:58:59	Rocketsonde	-	-	Arcasonde	-	-	-	PM	-	-	-	94	-	-
1982-W449	2445263.16	1982 Oct 18 21:00:00	Rocketsonde	-	-	Arcasonde	-	-	-	SHEM	-	-	-	48	-	-
1982-W450	2445263.16	1982 Oct 18 21:00:00	Rocketsonde	-	-	Arcasonde	-	-	-	PREM	-	-	-	48	-	-
1982-W451	2445263.21	1982 Oct 20 15:53:00	Rocketsonde	-	-	Arcasonde	-	-	-	WS	-	-	-	68	-	-
1982-W452	2445263.24	1982 Oct 20 17:45:00	Rocketsonde	-	-	Arcasonde	-	-	-	WS	-	-	-	61	-	-
1982-W453	2445263.34	1982 Oct 20 20:15:00	Rocketsonde	-	-	Arcasonde	-	-	-	WS	-	-	-	61	-	-
1982-W454	2445263.41	1982 Oct 22 00:34:59	Rocketsonde	-	-	Arcasonde	-	-	-	KAU	-	-	-	76	-	-
1982-W455	2445264.52	1982 Oct 22 03:34:59	Rocketsonde	-	-	Arcasonde	-	-	-	SHEM	-	-	-	45	-	-
1982-W456	2445268.33	1982 Oct 25 20:00:00	Rocketsonde	-	-	Arcasonde	-	-	-	KR	-	-	-	76	-	-
1982-W457	2445268.33	1982 Oct 25 20:00:00	Rocketsonde	-	-	Arcasonde	-	-	-	SHEM	-	-	-	45	-	-
1982-W458	2445268.64	1982 Oct 27 03:26:59	Rocketsonde	-	-	Arcasonde	-	-	-	SHEM	-	-	-	77	-	-
1982-W459	2445270.21	1982 Oct 27 17:00:00	Rocketsonde	-	-	Arcasonde	-	-	-	WS	-	-	-	97	-	-
1982-W460	2445270.23	1982 Oct 27 17:00:00	Rocketsonde	-	-	Arcasonde	-	-	-	WS	-	-	-	97	-	-
1982-W461	2445272.42	1982 Oct 27 23:04:59	Rocketsonde	-	-	Arcasonde	-	-	-	WS	-	-	-	74	-	-
1982-A30	2445275.33	1982 Nov 1 19:55:59	Rocketsonde	-	-	Arcasonde	-	-	-	WS	-	-	-	61	-	-
1982-W463	2445275.35	1982 Nov 1 20:30:00	Rocketsonde	-	-	Arcasonde	-	-	-	WS	-	-	-	70	-	-
1982-W464	2445277.67	1982 Nov 4 03:55:59	Rocketsonde	-	-	Arcasonde	-	-	-	PM	-	-	-	46	-	-
1982-A31	2445277.67	1982 Nov 4 03:55:59	Rocketsonde	-	-	Arcasonde	-	-	-	PM	-	-	-	46	-	-
1982-A32	2445283.24	1982 Nov 9 17:43:00	Rocketsonde	-	-	Arcasonde	-	-	-	WS	-	-	-	48	-	-
1982-W465	2445284.38	1982 Nov 10 21:00:00	Rocketsonde	-	-	Arcasonde	-	-	-	PREM	-	-	-	51	-	-
1982-W466	2445284.44	1982 Nov 10 22:30:00	Rocketsonde	-	-	Arcasonde	-	-	-	PREM	-	-	-	48	-	-
1982-W467	2445285.03	1982 Nov 11 12:45:00	Rocketsonde	-	-	Arcasonde	-	-	-	SHEM	-	-	-	68	-	-
1982-W468	2445285.07	1982 Nov 11 13:37:59	Rocketsonde	-	-	Arcasonde	-	-	-	KR	-	-	-	89	-	-
1982-W469	2445285.10	1982 Nov 11 14:30:00	Rocketsonde	-	-	Arcasonde	-	-	-	PM	-	-	-	71	-	-
1982-W470	2445285.10	1982 Nov 11 14:30:00	Rocketsonde	-	-	Arcasonde	-	-	-	PM	-	-	-	91	-	-
1982-W471	2445285.12	1982 Nov 11 14:52:00	Rocketsonde	-	-	Arcasonde	-	-	-	KAU	-	-	-	62	-	-
1982-A33	2445286.38	1982 Nov 12 21:00:00	Rocketsonde	-	-	Arcasonde	-	-	-	KAU	-	-	-	40	-	-
1982-W472	2445286.38	1982 Nov 12 21:12:59	Rocketsonde	-	-	Arcasonde	-	-	-							

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Mission	FlightCode	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_L_Pad	Approvee	Range	Dest
1982-7372	2445287_07	1982 Nov 13 1336:59	Rocketsonde	-	-	AI/DMP-9	-	-	-	PH	-	-	-	94	-	-
1982-7468	2445287_09	1982 Nov 13 1406:00	Rocketsonde	-	-	Arcasonde	-	-	-	PH	-	-	-	72	-	-
1982-7373	2445287_11	1982 Nov 13 1443:00	Rocketsonde	-	-	AI/DMP-9?	-	-	-	KAU	-	-	-	90	-	-
1982-7469	2445287_15	1982 Nov 13 1530:00	Rocketsonde	-	-	Arcasonde	-	-	-	KAU	-	-	-	63	-	-
1982-7374	2445289_06	1982 Nov 15 1326:59	Rocketsonde	-	-	AI/DMP-9	-	-	-	PH	-	-	-	93	-	-
1982-7375	2445289_09	1982 Nov 15 1404:59	Rocketsonde	-	-	AI/DMP-9?	-	-	-	KAU	-	-	-	89	-	-
1982-7461	2445289_10	1982 Nov 15 1440:00	Rocketsonde	-	-	Arcasonde	-	-	-	KAU	-	-	-	65	-	-
1982-7462	2445289_12	1982 Nov 15 1446:00	Rocketsonde	-	-	Arcasonde	-	-	-	PH	-	-	-	71	-	-
1982-7464	2445289_57	1982 Nov 16 0855:00	Rocketsonde	-	-	Arcasonde	-	-	-	PH	-	-	-	94	-	-
1982-7380	2445289_98	1982 Nov 16 1109:00	Rocketsonde	-	-	AI/DMP-9	-	-	-	WS	-	-	-	98	-	-
1982-7381	2445289_98	1982 Nov 16 1133:00	Rocketsonde	-	-	AI/DMP-9	-	-	-	WS	-	-	-	94	-	-
1982-7382	2445290_00	1982 Nov 16 1194:00	Rocketsonde	-	-	AI/DMP-9	-	-	-	WS	-	-	-	64	-	-
1982-7466	2445290_00	1982 Nov 16 1204:59	Rocketsonde	-	-	Arcasonde	-	-	-	WS	-	-	-	94	-	-
1982-7383	2445290_01	1982 Nov 16 1211:59	Rocketsonde	-	-	AI/DMP-9	-	-	-	PH	-	-	-	67	-	-
1982-7467	2445290_02	1982 Nov 16 1224:59	Rocketsonde	-	-	AI/DMP-9	-	-	-	KAU	-	-	-	73	-	-
1982-7468	2445290_07	1982 Nov 16 1333:59	Rocketsonde	-	-	Arcasonde	-	-	-	PH	-	-	-	94	-	-
1982-7469	2445290_08	1982 Nov 16 1349:59	Rocketsonde	-	-	Arcasonde	-	-	-	PH	-	-	-	68	-	-
1982-7386	2445290_10	1982 Nov 16 1408:00	Rocketsonde	-	-	AI/DMP-9?	-	-	-	KAU	-	-	-	93	-	-
1982-7387	2445290_12	1982 Nov 16 1431:00	Rocketsonde	-	-	AI/DMP-9?	-	-	-	KAU	-	-	-	93	-	-
1982-7470	2445290_36	1982 Nov 16 2035:00	Rocketsonde	-	-	Arcasonde	-	-	-	KAU	-	-	-	94	-	-
1982-7471	2445291_48	1982 Nov 17 2327:59	Rocketsonde	-	-	Arcasonde	-	-	-	KRR	-	-	-	57	-	-
1982-7472	2445293_17	1982 Nov 17 2327:59	Rocketsonde	-	-	Arcasonde	-	-	-	KRR	-	-	-	61	-	-
1982-7479	2445296_21	1982 Nov 19 1589:59	Rocketsonde	-	-	Arcasonde	-	-	-	WS	-	-	-	59	-	-
1982-7480	2445296_57	1982 Nov 24 1700:00	Rocketsonde	-	-	Arcasonde	-	-	-	PRIM	-	-	-	75	-	-
1982-7482	2445300_65	1982 Nov 25 0141:00	Rocketsonde	-	-	Arcasonde	-	-	-	SHEM	-	-	-	50	-	-
1982-7484	2445300_65	1982 Nov 27 0330:00	Rocketsonde	-	-	Arcasonde	-	-	-	SHEM	-	-	-	51	-	-
1982-7486	2445303_38	1982 Nov 29 2100:00	Rocketsonde	-	-	Arcasonde	-	-	-	WS	-	-	-	66	-	-
1982-7488	2445305_16	1982 Dec 1 1852:00	Rocketsonde	-	-	Arcasonde	-	-	-	KRR	-	-	-	75	-	-
1982-7487	2445305_44	1982 Dec 1 2240:00	Rocketsonde	-	-	Arcasonde	-	-	-	KRR	-	-	-	74	-	-
1982-7493	2445311_36	1982 Dec 7 1600:00	Rocketsonde	-	-	AI/DMP-9	-	-	-	WS	-	-	-	97	-	-
1982-7414	2445312_25	1982 Dec 8 1800:00	Rocketsonde	-	-	Arcasonde	-	-	-	WS	-	-	-	94	-	-
1982-7497	2445312_25	1982 Dec 8 1800:00	Rocketsonde	-	-	Arcasonde	-	-	-	PRIM	-	-	-	94	-	-
1982-7498	2445312_35	1982 Dec 8 2017:00	Rocketsonde	-	-	Arcasonde	-	-	-	PRIM	-	-	-	46	-	-
1982-7485	2445314_62	1982 Dec 11 0300:00	Rocketsonde	-	-	Arcasonde	-	-	-	SHEM	-	-	-	60	-	-
1982-7489	2445317_38	1982 Dec 13 2100:00	Rocketsonde	-	-	Arcasonde	-	-	-	PRIM	-	-	-	60	-	-
1982-7486	2445317_39	1982 Dec 13 2100:00	Rocketsonde	-	-	Arcasonde	-	-	-	PRIM	-	-	-	49	-	-
1982-7603	2445319_27	1982 Dec 15 1630:00	Rocketsonde	-	-	Arcasonde	-	-	-	WS	-	-	-	52	-	-
1982-7604	2445320_35	1982 Dec 16 2029:00	Rocketsonde	-	-	Arcasonde	-	-	-	SHEM	-	-	-	75	-	-
1982-7607	2445324_36	1982 Dec 16 2035:00	Rocketsonde	-	-	Arcasonde	-	-	-	KRR	-	-	-	76	-	-
1982-7608	2445325_37	1982 Dec 21 0304:59	Rocketsonde	-	-	Arcasonde	-	-	-	PRIM	-	-	-	46	-	-
1982-7609	2445325_37	1982 Dec 21 0302:00	Rocketsonde	-	-	Arcasonde	-	-	-	PRIM	-	-	-	59	-	-
1982-7610	2445326_44	1982 Dec 22 2240:00	Rocketsonde	-	-	Arcasonde	-	-	-	SHEM	-	-	-	44	-	-
1982-7613	2445334_35	1982 Dec 29 2110:00	Rocketsonde	-	-	Arcasonde	-	-	-	SHEM	-	-	-	76	-	-
1982-7614	2445335_40	1982 Dec 31 0044:00	Rocketsonde	-	-	Arcasonde	-	-	-	SHEM	-	-	-	60	-	-
1982-7615	2445335_40	1982 Dec 31 0345:00	Rocketsonde	-	-	Arcasonde	-	-	-	SHEM	-	-	-	49	-	-
1982-7616	2445336_27	1983 Jan 5 1830:00	Rocketsonde	-	-	Arcasonde	-	-	-	WS	-	-	-	59	-	-
1982-7617	2445336_27	1983 Jan 5 1830:00	Rocketsonde	-	-	Arcasonde	-	-	-	KAU	-	-	-	59	-	-
1982-7618	2445340_38	1983 Jan 5 2100:00	Rocketsonde	-	-	Arcasonde	-	-	-	KAU	-	-	-	51	-	-
1982-7619	2445340_38	1983 Jan 5 2100:00	Rocketsonde	-	-	Arcasonde	-	-	-	KAU	-	-	-	54	-	-
1982-7620	2445340_38	1983 Jan 5 2120:59	Rocketsonde	-	-	Arcasonde	-	-	-	KAU	-	-	-	54	-	-
1982-7621	2445340_52	1983 Jan 6 0035:59	Rocketsonde	-	-	Arcasonde	-	-	-	KRR	-	-	-	47	-	-
1982-7622	2445340_52	1983 Jan 6 0035:59	Rocketsonde	-	-	Arcasonde	-	-	-	SHEM	-	-	-	47	-	-
1982-7623	2445342_38	1983 Jan 7 2100:00	Rocketsonde	-	-	Arcasonde	-	-	-	WS	-	-	-	53	-	-
1982-7624	2445347_26	1983 Jan 12 1800:00	Rocketsonde	-	-	Arcasonde	-	-	-	WS	-	-	-	50	-	-
1982-7625	2445349_64	1983 Jan 15 0314:59	Rocketsonde	-	-	Arcasonde	-	-	-	PRIM	-	-	-	67	-	-
1982-7626	2445352_33	1983 Jan 17 1948:59	Rocketsonde	-	-	Arcasonde	-	-	-	KRR	-	-	-	77	-	-
1982-7627	2445352_33	1983 Jan 17 1948:59	Rocketsonde	-	-	Arcasonde	-	-	-	KRR	-	-	-	77	-	-
1982-7628	2445352_60	1983 Jan 19 1914:59	Rocketsonde	-	-	Arcasonde	-	-	-	WS	-	-	-	65	-	-
1982-7629	2445354_37	1983 Jan 19 2323:00	Rocketsonde	-	-	Arcasonde	-	-	-	WS	-	-	-	73	-	-
1982-7630	2445356_19	1983 Jan 21 1631:59	Rocketsonde	-	-	Arcasonde	-	-	-	WS	-	-	-	62	-	-
1982-7631	2445359_62	1983 Jan 25 0257:00	Rocketsonde	-	-	Arcasonde	-	-	-	KRR	-	-	-	78	-	-
1982-7632	2445360_27	1983 Jan 26 1630:00	Rocketsonde	-	-	AI/DMP-9	-	-	-	PM	-	-	-	77	-	-
1982-7633	2445361_21	1983 Jan 28 1700:00	Rocketsonde	-	-	Arcasonde	-	-	-	WS	-	-	-	59	-	-
1982-7634	2445363_38	1983 Jan 28 2100:00	Rocketsonde	-	-	Arcasonde	-	-	-	WS	-	-	-	44	-	-
1982-7635	2445368_25	1983 Feb 2 1800:00	Rocketsonde	-	-	Arcasonde	-	-	-	PRIM	-	-	-	46	-	-
1982-7636	2445368_25	1983 Feb 2 2338:59	Rocketsonde	-	-	Arcasonde	-	-	-	SHEM	-	-	-	65	-	-
1982-7637	2445370_42	1983 Feb 4 2150:59	Rocketsonde	-	-	Arcasonde	-	-	-	PRIM	-	-	-	48	-	-
1982-7638	2445370_88	1983 Feb 7 0910:00	Rocketsonde	-	-	Arcasonde	-	-	-	PRIM	-	-	-	92	-	-
1982-7639	2445375_45	1983 Feb 9 1630:00	Rocketsonde	-	-	AI/DMP-9	-	-	-	VT	-	-	-	64	-	-
1982-7640	2445375_45	1983 Feb 9 1630:00	Rocketsonde	-	-	Arcasonde	-	-	-	PRIM	-	-	-	64	-	-
1982-7641	2445376_28	1983 Feb 10 1837:59	Rocketsonde	-	-	Arcasonde	-	-	-	KRR	-	-	-	62	-	-
1982-7642	2445376_29	1983 Feb 10 1903:59	Rocketsonde	-	-	Arcasonde	-	-	-	WS	-	-	-	94	-	-
1982-7643	2445376_29	1983 Feb 10 1903:59	Rocketsonde	-	-	Arcasonde	-	-	-	WS	-	-	-	62	-	-
1982-7644	2445380_39	1983 Feb 14 2115:59	Rocketsonde	-	-	AI/DMP-9	-	-	-	PM	-	-	-	63	-	-
1982-7645	2445382_34	1983 Feb 16 2003:00	Rocketsonde	-	-	Arcasonde	-	-	-	PM	-	-	-	72	-	-
1982-7646	2445382_34	1983 Feb 16 2100:00	Rocketsonde	-	-	Arcasonde	-	-	-	PM	-	-	-	63	-	-
1982-7647	2445382_34	1983 Feb 16 2100:00	Rocketsonde	-	-	Arcasonde	-	-	-	PM	-	-	-	46	-	-
1982-7648	2445383_54	1983 Feb 18 0056:59	Rocketsonde	-	-	Arcasonde	-	-	-	SHEM	-	-	-	65	-	-
1982-7649	2445383_54	1983 Feb 18 0056:59	Rocketsonde	-	-	Arcasonde	-	-	-	SHEM	-	-	-	65	-	-
1982-7650	2445387_29	1983 Feb 18 1859:59	Rocketsonde	-	-	Arcasonde	-	-	-	WS	-	-	-	63	-	-
1982-7651	2445387_38	1983 Feb 21 2110:00	Rocketsonde	-	-	Arcasonde	-	-	-	WS	-	-	-	47	-	-
1982-7652	2445388_52	1983 Feb 23 0027:59	Rocketsonde	-	-	Arcasonde	-	-	-	SHEM	-	-	-	76	-	-
1982-7653	2445388_85	1983 Feb 23 0822:00	Rocketsonde	-	-	Arcasonde	-	-	-	KRR	-	-	-	56	-	-
1982-7654	2445389_19	1983 Feb 23 1630:00	Rocketsonde	-	-	Arcasonde	-	-	-	VT	-	-	-	66	-	-
1982-7655	2445391_62	1983 Feb 26 0248:00	Rocketsonde	-	-	Arcasonde	-	-	-	PRIM	-	-	-	76	-	-
1982-7656	2445392_12	1983 Feb 26 1500:00	Rocketsonde	-	-	Arcasonde	-	-	-	WS	-	-	-	62	-	-

Launch

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Mission	FlightCode	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee_Km	Range_Km	Dest
1983-453	2445394.38	1983 Feb 28 21:10:00	Rocketsonde	-	-	Arcasonde	-	-	-	SHEM	-	-	-	50	-	-
1983-454	2445394.54	1983 Mar 1 0054:00	Rocketsonde	-	-	Arcasonde	-	-	-	KHR	-	-	-	74	-	-
1983-455	2445396.19	1983 Mar 2 1630:00	Rocketsonde	-	-	Arcasonde	-	-	-	PRIM	-	-	-	65	-	-
1983-456	2445396.35	1983 Mar 2 2030:00	Rocketsonde	-	-	Arcasonde	-	-	-	KHR	-	-	-	79	-	-
1983-457	2445397.38	1983 Mar 3 2100:00	Rocketsonde	-	-	Arcasonde	-	-	-	SHEM	-	-	-	53	-	-
1983-458	2445398.38	1983 Mar 4 2100:00	Rocketsonde	-	-	Arcasonde	-	-	-	SHEM	-	-	-	49	-	-
1983-459	2445401.38	1983 Mar 7 2113:59	Rocketsonde	-	-	Arcasonde	-	-	-	KAU	-	-	-	48	-	-
1983-460	2445401.46	1983 Mar 7 2300:00	Rocketsonde	-	-	Arcasonde	-	-	-	SHEM	-	-	-	49	-	-
1983-461	2445403.40	1983 Mar 9 2130:00	Rocketsonde	-	-	Arcasonde	-	-	-	SHEM	-	-	-	48	-	-
1983-462	2445403.24	1983 Mar 10 1749:59	Rocketsonde	-	-	Arcasonde	-	-	-	AI/DMP-9	-	-	-	97	-	-
1983-463	2445404.26	1983 Mar 10 1821:00	Rocketsonde	-	-	Arcasonde	-	-	-	WS	-	-	-	59	-	-
1983-464	2445404.36	1983 Mar 10 2038:59	Rocketsonde	-	-	Arcasonde	-	-	-	KHR	-	-	-	74	-	-
1983-465	2445406.35	1983 Mar 11 2020:00	Rocketsonde	-	-	Arcasonde	-	-	-	PH	-	-	-	86	-	-
1983-466	2445406.39	1983 Mar 11 2114:59	Rocketsonde	-	-	Arcasonde	-	-	-	SHEM	-	-	-	50	-	-
1983-467	2445407.12	1983 Mar 13 1500:00	Rocketsonde	-	-	Arcasonde	-	-	-	WS	-	-	-	54	-	-
1983-468	2445407.12	1983 Mar 14 2114:59	Rocketsonde	-	-	Arcasonde	-	-	-	SHEM	-	-	-	51	-	-
1983-469	2445408.39	1983 Mar 15 1632:59	Rocketsonde	-	-	Arcasonde	-	-	-	PRIM	-	-	-	59	-	-
1983-470	2445409.19	1983 Mar 15 2021:00	Rocketsonde	-	-	Arcasonde	-	-	-	KHR	-	-	-	79	-	-
1983-471	2445410.27	1983 Mar 16 1830:00	Rocketsonde	-	-	Arcasonde	-	-	-	WS	-	-	-	96	-	-
1983-472	2445410.29	1983 Mar 16 1839:59	Rocketsonde	-	-	Arcasonde	-	-	-	AI/DMP-9	-	-	-	64	-	-
1983-473	2445410.39	1983 Mar 16 1849:59	Rocketsonde	-	-	Arcasonde	-	-	-	SHEM	-	-	-	66	-	-
1983-474	2445412.39	1983 Mar 18 2119:00	Rocketsonde	-	-	Arcasonde	-	-	-	KAU	-	-	-	66	-	-
1983-475	2445412.65	1983 Mar 19 0330:00	Rocketsonde	-	-	Arcasonde	-	-	-	SHEM	-	-	-	48	-	-
1983-476	2445415.38	1983 Mar 21 2111:59	Rocketsonde	-	-	Arcasonde	-	-	-	SHEM	-	-	-	56	-	-
1983-477	2445416.19	1983 Mar 22 1924:59	Rocketsonde	-	-	Arcasonde	-	-	-	SHEM	-	-	-	61	-	-
1983-478	2445416.51	1983 Mar 22 1934:59	Rocketsonde	-	-	Arcasonde	-	-	-	PRIM	-	-	-	61	-	-
1983-479	2445417.27	1983 Mar 23 1634:59	Rocketsonde	-	-	Arcasonde	-	-	-	WS	-	-	-	52	-	-
1983-480	2445417.27	1983 Mar 23 1634:59	Rocketsonde	-	-	Arcasonde	-	-	-	WS	-	-	-	56	-	-
1983-481	2445417.58	1983 Mar 24 0041:00	Rocketsonde	-	-	Arcasonde	-	-	-	SHEM	-	-	-	94	-	-
1983-482	2445419.38	1983 Mar 25 2110:00	Rocketsonde	-	-	Arcasonde	-	-	-	KHR	-	-	-	94	-	-
1983-483	2445419.38	1983 Mar 25 2110:00	Rocketsonde	-	-	Arcasonde	-	-	-	SHEM	-	-	-	41	-	-
1983-484	2445422.27	1983 Mar 26 1824:59	Rocketsonde	-	-	Arcasonde	-	-	-	AI/DMP-9	-	-	-	94	-	-
1983-485	2445422.28	1983 Mar 26 1848:59	Rocketsonde	-	-	Arcasonde	-	-	-	PH	-	-	-	61	-	-
1983-486	2445422.52	1983 Mar 26 2110:00	Rocketsonde	-	-	Arcasonde	-	-	-	SHEM	-	-	-	46	-	-
1983-487	2445422.52	1983 Mar 29 0029:00	Rocketsonde	-	-	Arcasonde	-	-	-	PRIM	-	-	-	59	-	-
1983-488	2445423.19	1983 Mar 29 1830:00	Rocketsonde	-	-	Arcasonde	-	-	-	KHR	-	-	-	53	-	-
1983-489	2445424.31	1983 Mar 30 1924:59	Rocketsonde	-	-	Arcasonde	-	-	-	SHEM	-	-	-	46	-	-
1983-490	2445424.43	1983 Mar 30 2214:59	Rocketsonde	-	-	Arcasonde	-	-	-	SHEM	-	-	-	46	-	-
1983-491	2445425.36	1983 Mar 31 2041:00	Rocketsonde	-	-	Arcasonde	-	-	-	KHR	-	-	-	78	-	-
1983-492	2445426.38	1983 Apr 1 2100:00	Rocketsonde	-	-	Arcasonde	-	-	-	WS	-	-	-	96	-	-
1983-493	2445426.38	1983 Apr 1 2100:00	Rocketsonde	-	-	Arcasonde	-	-	-	SHEM	-	-	-	39	-	-
1983-494	2445426.38	1983 Apr 1 2100:00	Rocketsonde	-	-	Arcasonde	-	-	-	PH	-	-	-	94	-	-
1983-495	2445429.16	1983 Apr 4 1623:59	Rocketsonde	-	-	Arcasonde	-	-	-	PH	-	-	-	62	-	-
1983-496	2445429.21	1983 Apr 4 1650:00	Rocketsonde	-	-	Arcasonde	-	-	-	KAU	-	-	-	64	-	-
1983-497	2445429.26	1983 Apr 4 1821:00	Rocketsonde	-	-	Arcasonde	-	-	-	KAU	-	-	-	86	-	-
1983-498	2445429.26	1983 Apr 6 1755:00	Rocketsonde	-	-	Arcasonde	-	-	-	KAU	-	-	-	86	-	-
1983-499	2445431.25	1983 Apr 7 1755:00	Rocketsonde	-	-	Arcasonde	-	-	-	SHEM	-	-	-	84	-	-
1983-500	2445431.25	1983 Apr 7 1755:00	Rocketsonde	-	-	Arcasonde	-	-	-	PH	-	-	-	66	-	-
1983-501	2445432.02	1983 Apr 8 0300:00	Rocketsonde	-	-	Arcasonde	-	-	-	PH	-	-	-	66	-	-
1983-502	2445432.24	1983 Apr 8 1716:59	Rocketsonde	-	-	Arcasonde	-	-	-	PH	-	-	-	68	-	-
1983-503	2445433.24	1983 Apr 8 1716:59	Rocketsonde	-	-	Arcasonde	-	-	-	KAU	-	-	-	68	-	-
1983-504	2445433.24	1983 Apr 8 1851:00	Rocketsonde	-	-	Arcasonde	-	-	-	PH	-	-	-	94	-	-
1983-505	2445433.29	1983 Apr 8 1923:59	Rocketsonde	-	-	Arcasonde	-	-	-	PH	-	-	-	68	-	-
1983-506	2445434.02	1983 Apr 9 1302:59	Rocketsonde	-	-	Arcasonde	-	-	-	PH	-	-	-	71	-	-
1983-507	2445434.04	1983 Apr 9 1517:00	Rocketsonde	-	-	Arcasonde	-	-	-	PH	-	-	-	68	-	-
1983-508	2445434.14	1983 Apr 9 1537:59	Rocketsonde	-	-	Arcasonde	-	-	-	WS	-	-	-	68	-	-
1983-509	2445434.15	1983 Apr 9 1537:59	Rocketsonde	-	-	Arcasonde	-	-	-	PH	-	-	-	93	-	-
1983-510	2445434.16	1983 Apr 9 1549:59	Rocketsonde	-	-	Arcasonde	-	-	-	PH	-	-	-	61	-	-
1983-511	2445434.17	1983 Apr 9 1559:59	Rocketsonde	-	-	Arcasonde	-	-	-	PRIM	-	-	-	93	-	-
1983-512	2445434.18	1983 Apr 9 1623:59	Rocketsonde	-	-	Arcasonde	-	-	-	PH	-	-	-	60	-	-
1983-513	2445434.20	1983 Apr 9 1643:59	Rocketsonde	-	-	Arcasonde	-	-	-	KAU	-	-	-	65	-	-
1983-514	2445434.20	1983 Apr 9 1653:59	Rocketsonde	-	-	Arcasonde	-	-	-	PH	-	-	-	73	-	-
1983-515	2445434.25	1983 Apr 9 1759:00	Rocketsonde	-	-	Arcasonde	-	-	-	KAU	-	-	-	93	-	-
1983-516	2445434.25	1983 Apr 9 1759:00	Rocketsonde	-	-	Arcasonde	-	-	-	PRIM	-	-	-	61	-	-
1983-517	2445434.26	1983 Apr 9 1810:00	Rocketsonde	-	-	Arcasonde	-	-	-	PH	-	-	-	61	-	-
1983-518	2445434.28	1983 Apr 9 1843:59	Rocketsonde	-	-	Arcasonde	-	-	-	KAU	-	-	-	65	-	-
1983-519	2445434.38	1983 Apr 11 2100:00	Rocketsonde	-	-	Arcasonde	-	-	-	KAU	-	-	-	92	-	-
1983-520	2445438.19	1983 Apr 13 1630:00	Rocketsonde	-	-	Arcasonde	-	-	-	PRIM	-	-	-	64	-	-
1983-521	2445438.29	1983 Apr 13 1900:59	Rocketsonde	-	-	Arcasonde	-	-	-	NS	-	-	-	96	-	-
1983-522	2445438.31	1983 Apr 13 1900:59	Rocketsonde	-	-	Arcasonde	-	-	-	NS	-	-	-	64	-	-
1983-523	2445443.12	1983 Apr 18 1500:00	Rocketsonde	-	-	Arcasonde	-	-	-	NS	-	-	-	52	-	-
1983-524	2445443.42	1983 Apr 18 2159:59	Rocketsonde	-	-	Arcasonde	-	-	-	NS	-	-	-	45	-	-
1983-525	2445445.19	1983 Apr 20 1630:00	Rocketsonde	-	-	Arcasonde	-	-	-	SHEM	-	-	-	64	-	-
1983-526	2445445.27	1983 Apr 20 1830:00	Rocketsonde	-	-	Arcasonde	-	-	-	PRIM	-	-	-	64	-	-
1983-527	2445445.59	1983 Apr 20 2145:59	Rocketsonde	-	-	Arcasonde	-	-	-	NS	-	-	-	93	-	-
1983-528	2445445.61	1983 Apr 20 2145:59	Rocketsonde	-	-	Arcasonde	-	-	-	KAU	-	-	-	65	-	-
1983-529	2445445.62	1983 Apr 20 2159:59	Rocketsonde	-	-	Arcasonde	-	-	-	KAU	-	-	-	65	-	-
1983-530	2445450.27	1983 Apr 24 1344:59	Rocketsonde	-	-	Arcasonde	-	-	-	NS	-	-	-	64	-	-
1983-531	2445450.33	1983 Apr 25 1830:00	Rocketsonde	-	-	Arcasonde	-	-	-	VI	-	-	-	84	-	-
1983-532	2445450.36	1983 Apr 25 1955:59	Rocketsonde	-	-	Arcasonde	-	-	-	PM	-	-	-	50	-	-
1983-533	2445452.19	1983 Apr 27 1635:59	Rocketsonde	-	-	Arcasonde	-	-	-	NS	-	-	-	95	-	-
1983-534	2445452.38	1983 Apr 27 2100:00	Rocketsonde	-	-	Arcasonde	-	-	-	NS	-	-	-	46	-	-
1983-535	2445453.14	1983 Apr 28 1577:59	Rocketsonde	-	-	Arcasonde	-	-	-	SHEM	-	-	-	58	-	-
1983-536	2445459.17	1983 May 4 1559:59	Rocketsonde	-	-	Arcasonde	-	-	-	PRIM	-	-	-	58	-	-
1983-537	2445459.37	1983 May 4 2052:00	Rocketsonde	-	-	Arcasonde	-	-	-	NS	-	-	-	70	-	-
1983-538	2445460.01	1983 May 5 1217:00	Rocketsonde	-	-	Arcasonde	-	-	-	KHR	-	-	-	69	-	-
1983-539	2445460.07	1983 May 5 1335:59	Rocketsonde	-	-	Arcasonde	-	-	-	KHR	-	-	-	46	-	-
1983-540	2445460.22	1983 May 5 1713:00	Rocketsonde	-	-	Arcasonde	-	-	-	PM	-	-	-	88	-	-
1983-541	2445460.24	1983 May 5 1747:00	Rocketsonde	-	-	Arcasonde	-	-	-	PM	-	-	-	70	-	-

Launch

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Mission	FlightCode	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Site	Ascent_L_Pad	Apogee_Km	Range_Km	Dest
1983-Y170	2445460_40	1983 May 5 2132:00	Rocketsonde	-	-	AM/DMP-97	-	-	-	KAU	-	-	-	-	92	-	-
1983-Y140	2445460_41	1983 May 5 2155:00	Rocketsonde	-	-	Arcasonde	-	-	-	KAU	-	-	-	-	65	-	-
1983-Y142	2445461_20	1983 May 6 1644:59	Rocketsonde	-	-	Arcasonde	-	-	-	WS	-	-	-	-	54	-	-
1983-Y143	2445464_35	1983 May 9 2017:00	Rocketsonde	-	-	Arcasonde	-	-	-	KMR	-	-	-	-	61	-	-
1983-Y144	2445465_01	1983 May 10 1221:00	Rocketsonde	-	-	Arcasonde	-	-	-	WS	-	-	-	-	60	-	-
1983-Y149	2445466_10	1983 May 11 1430:00	Rocketsonde	-	-	Arcasonde	-	-	-	PRIM	-	-	-	-	61	-	-
1983-Y151	2445466_35	1983 May 11 2030:00	Rocketsonde	-	-	Arcasonde	-	-	-	PRIM	-	-	-	-	60	-	-
1983-Y152	2445467_52	1983 May 13 0925:59	Rocketsonde	-	-	Arcasonde	-	-	-	SHEM	-	-	-	-	73	-	-
1983-Y154	2445468_35	1983 May 13 2022:00	Rocketsonde	-	-	Arcasonde	-	-	-	KMR	-	-	-	-	73	-	-
1983-Y155	2445468_35	1983 May 13 2030:00	Rocketsonde	-	-	Arcasonde	-	-	-	SHEM	-	-	-	-	52	-	-
1983-Y157	2445471_38	1983 May 16 2100:00	Rocketsonde	-	-	Arcasonde	-	-	-	PRIM	-	-	-	-	67	-	-
1983-Y161	2445473_10	1983 May 18 1430:00	Rocketsonde	-	-	Arcasonde	-	-	-	WS	-	-	-	-	64	-	-
1983-Y163	2445475_25	1983 May 20 1800:00	Rocketsonde	-	-	Arcasonde	-	-	-	SHEM	-	-	-	-	46	-	-
1983-Y168	2445479_35	1983 May 24 2030:00	Rocketsonde	-	-	Arcasonde	-	-	-	PRIM	-	-	-	-	53	-	-
1983-Y169	2445480_37	1983 May 25 2058:00	Rocketsonde	-	-	Arcasonde	-	-	-	KMR	-	-	-	-	75	-	-
1983-Y170	2445480_38	1983 May 25 2100:00	Rocketsonde	-	-	Arcasonde	-	-	-	SHEM	-	-	-	-	53	-	-
1983-Y176	2445481_20	1983 May 26 1644:59	Rocketsonde	-	-	AM/DMP-97	-	-	-	WS	-	-	-	-	97	-	-
1983-Y172	2445481_34	1983 May 26 2013:00	Rocketsonde	-	-	Arcasonde	-	-	-	PRIM	-	-	-	-	76	-	-
1983-Y175	2445487_28	1983 Jun 1 1530:00	Rocketsonde	-	-	Arcasonde	-	-	-	PRIM	-	-	-	-	61	-	-
1983-Y191	2445487_52	1983 Jun 1 1945:00	Rocketsonde	-	-	AM/DMP-97	-	-	-	WS	-	-	-	-	97	-	-
1983-Y176	2445487_52	1983 Jun 1 1944:59	Rocketsonde	-	-	Arcasonde	-	-	-	WS	-	-	-	-	65	-	-
1983-Y178	2445493_39	1983 Jun 7 2114:59	Rocketsonde	-	-	Arcasonde	-	-	-	KMR	-	-	-	-	78	-	-
1983-Y169	2445494_23	1983 Jun 8 1730:00	Rocketsonde	-	-	Arcasonde	-	-	-	WS	-	-	-	-	96	-	-
1983-Y180	2445494_26	1983 Jun 8 1814:59	Rocketsonde	-	-	Arcasonde	-	-	-	WS	-	-	-	-	94	-	-
1983-Y183	2445495_15	1983 Jun 9 1630:00	Rocketsonde	-	-	Arcasonde	-	-	-	PRIM	-	-	-	-	64	-	-
1983-Y185	2445499_30	1983 Jun 13 1914:59	Rocketsonde	-	-	Arcasonde	-	-	-	PRIM	-	-	-	-	68	-	-
1983-Y186	2445501_15	1983 Jun 15 1531:00	Rocketsonde	-	-	Arcasonde	-	-	-	MI	-	-	-	-	51	-	-
1983-Y196	2445502_16	1983 Jun 16 1556:59	Rocketsonde	-	-	Arcasonde	-	-	-	PRIM	-	-	-	-	68	-	-
1983-Y189	2445503_09	1983 Jun 17 1415:00	Rocketsonde	-	-	Arcasonde	-	-	-	PH	-	-	-	-	93	-	-
1983-Y197	2445503_13	1983 Jun 17 1506:00	Rocketsonde	-	-	Arcasonde	-	-	-	WS	-	-	-	-	97	-	-
1983-Y201	2445506_37	1983 Jun 20 2047:00	Rocketsonde	-	-	Arcasonde	-	-	-	WS	-	-	-	-	63	-	-
1983-Y193	2445507_52	1983 Jun 22 0933:59	Rocketsonde	-	-	Arcasonde	-	-	-	AM/DMP-97	-	-	-	-	97	-	-
1983-Y194	2445508_15	1983 Jun 22 1530:00	Rocketsonde	-	-	Arcasonde	-	-	-	KMR	-	-	-	-	71	-	-
1983-Y208	2445508_37	1983 Jun 22 2053:00	Rocketsonde	-	-	Arcasonde	-	-	-	PRIM	-	-	-	-	85	-	-
1983-Y195	2445509_53	1983 Jun 24 0732:59	Rocketsonde	-	-	Arcasonde	-	-	-	PH	-	-	-	-	89	-	-
1983-Y196	2445509_59	1983 Jun 24 0914:59	Rocketsonde	-	-	Arcasonde	-	-	-	PRIM	-	-	-	-	87	-	-
1983-Y211	2445510_06	1983 Jun 24 1323:59	Rocketsonde	-	-	Arcasonde	-	-	-	PRIM	-	-	-	-	86	-	-
1983-Y212	2445510_07	1983 Jun 24 1335:59	Rocketsonde	-	-	Arcasonde	-	-	-	KAU	-	-	-	-	93	-	-
1983-Y213	2445510_08	1983 Jun 24 1356:59	Rocketsonde	-	-	Arcasonde	-	-	-	WS	-	-	-	-	97	-	-
1983-Y214	2445510_09	1983 Jun 24 1424:59	Rocketsonde	-	-	Arcasonde	-	-	-	PR	-	-	-	-	93	-	-
1983-Y215	2445510_10	1983 Jun 24 1456:59	Rocketsonde	-	-	Arcasonde	-	-	-	KAU	-	-	-	-	88	-	-
1983-Y198	2445510_11	1983 Jun 24 1437:00	Rocketsonde	-	-	Arcasonde	-	-	-	WS	-	-	-	-	89	-	-
1983-Y207	2445510_14	1983 Jun 24 1536:59	Rocketsonde	-	-	Arcasonde	-	-	-	KMR	-	-	-	-	74	-	-
1983-Y209	2445510_14	1983 Jun 24 1537:00	Rocketsonde	-	-	Arcasonde	-	-	-	PR	-	-	-	-	86	-	-
1983-Y210	2445510_18	1983 Jun 24 1529:00	Rocketsonde	-	-	Arcasonde	-	-	-	KMR	-	-	-	-	74	-	-
1983-Y205	2445514_35	1983 Jun 28 1937:59	Rocketsonde	-	-	Arcasonde	-	-	-	MI	-	-	-	-	52	-	-
1983-Y206	2445516_17	1983 Jun 29 1520:00	Rocketsonde	-	-	Arcasonde	-	-	-	PRIM	-	-	-	-	68	-	-
1983-Y206	2445516_17	1983 Jun 30 1559:59	Rocketsonde	-	-	Arcasonde	-	-	-	WS	-	-	-	-	88	-	-
1983-Y207	2445521_22	1983 Jun 30 1630:00	Rocketsonde	-	-	Arcasonde	-	-	-	MI	-	-	-	-	98	-	-
1983-Y208	2445521_24	1983 Jun 5 1715:00	Rocketsonde	-	-	Arcasonde	-	-	-	WS	-	-	-	-	98	-	-
1983-Y209	2445521_39	1983 Jun 5 1745:00	Rocketsonde	-	-	Arcasonde	-	-	-	WS	-	-	-	-	55	-	-
1983-Y209	2445521_41	1983 Jun 5 2126:59	Rocketsonde	-	-	Arcasonde	-	-	-	AM/DMP-97	-	-	-	-	93	-	-
1983-Y212	2445529_20	1983 Jun 5 2154:00	Rocketsonde	-	-	Arcasonde	-	-	-	KAU	-	-	-	-	60	-	-
1983-Y214	2445531_30	1983 Jun 13 1644:59	Rocketsonde	-	-	Arcasonde	-	-	-	WS	-	-	-	-	58	-	-
1983-Y216	2445532_07	1983 Jun 15 1937:59	Rocketsonde	-	-	Arcasonde	-	-	-	MI	-	-	-	-	56	-	-
1983-Y216	2445532_07	1983 Jun 16 1344:59	Rocketsonde	-	-	Arcasonde	-	-	-	WS	-	-	-	-	67	-	-
1983-Y217	2445534_39	1983 Jun 18 2122:59	Rocketsonde	-	-	Arcasonde	-	-	-	KAU	-	-	-	-	66	-	-
1983-Y237	2445535_35	1983 Jun 19 2026:00	Rocketsonde	-	-	Arcasonde	-	-	-	PM	-	-	-	-	94	-	-
1983-Y218	2445535_37	1983 Jun 19 2051:00	Rocketsonde	-	-	Arcasonde	-	-	-	PM	-	-	-	-	73	-	-
1983-Y220	2445541_21	1983 Jun 25 1658:59	Rocketsonde	-	-	Arcasonde	-	-	-	PM	-	-	-	-	70	-	-
1983-Y221	2445541_25	1983 Jun 25 1801:59	Rocketsonde	-	-	Arcasonde	-	-	-	PM	-	-	-	-	70	-	-
1983-Y244	2445543_31	1983 Jun 27 1730:00	Rocketsonde	-	-	Arcasonde	-	-	-	WS	-	-	-	-	63	-	-
1983-Y246	2445549_30	1983 Jun 27 1930:00	Rocketsonde	-	-	Arcasonde	-	-	-	WS	-	-	-	-	90	-	-
1983-Y226	2445549_32	1983 Jun 2 1909:59	Rocketsonde	-	-	Arcasonde	-	-	-	AM/DMP-97	-	-	-	-	90	-	-
1983-Y228	2445550_25	1983 Jun 2 1941:00	Rocketsonde	-	-	Arcasonde	-	-	-	AM/DMP-97	-	-	-	-	71	-	-
1983-Y229	2445551_10	1983 Jun 3 1800:00	Rocketsonde	-	-	Arcasonde	-	-	-	WS	-	-	-	-	66	-	-
1983-Y257	2445557_25	1983 Jun 4 2136:59	Rocketsonde	-	-	Arcasonde	-	-	-	WS	-	-	-	-	64	-	-
1983-Y235	2445558_53	1983 Jun 12 0800:00	Rocketsonde	-	-	Arcasonde	-	-	-	WS	-	-	-	-	72	-	-
1983-Y237	2445559_21	1983 Jun 12 1538:59	Rocketsonde	-	-	Arcasonde	-	-	-	PRIM	-	-	-	-	59	-	-
1983-Y238	2445563_15	1983 Jun 16 1708:00	Rocketsonde	-	-	Arcasonde	-	-	-	PRIM	-	-	-	-	64	-	-
1983-Y280	2445564_18	1983 Jun 17 1614:59	Rocketsonde	-	-	Arcasonde	-	-	-	WS	-	-	-	-	91	-	-
1983-Y240	2445566_52	1983 Jun 23 0029:00	Rocketsonde	-	-	Arcasonde	-	-	-	PRIM	-	-	-	-	62	-	-
1983-Y265	2445571_17	1983 Jun 23 1614:59	Rocketsonde	-	-	Arcasonde	-	-	-	WS	-	-	-	-	74	-	-
1983-Y246	2445576_56	1983 Jun 30 0838:59	Rocketsonde	-	-	Arcasonde	-	-	-	PRIM	-	-	-	-	88	-	-
1983-Y247	2445577_15	1983 Jun 30 1044:59	Rocketsonde	-	-	Arcasonde	-	-	-	PM	-	-	-	-	88	-	-
1983-Y269	2445578_83	1983 Jun 30 1530:00	Rocketsonde	-	-	Arcasonde	-	-	-	PM	-	-	-	-	62	-	-
1983-Y270	2445578_83	1983 Sep 1 0801:00	Rocketsonde	-	-	Arcasonde	-	-	-	PRIM	-	-	-	-	94	-	-
1983-Y248	2445578_85	1983 Sep 1 0822:00	Rocketsonde	-	-	Arcasonde	-	-	-	PM	-	-	-	-	94	-	-
1983-Y271	2445580_24	1983 Sep 2 1748:59	Rocketsonde	-	-	Arcasonde	-	-	-	PM	-	-	-	-	71	-	-
1983-Y250	2445580_26	1983 Sep 2 1820:00	Rocketsonde	-	-	Arcasonde	-	-	-	WS	-	-	-	-	97	-	-
1983-Y251	2445580_66	1983 Sep 3 0345:00	Rocketsonde	-	-	Arcasonde	-	-	-	SHEM	-	-	-	-	51	-	-



Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Mission	FlightCode	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee_Km	Range_Km	Dest
1983-1272	2445660.51	1983 Sep 3 0725:59	Rocketsonde	-	-	AI/DMP-9	-	-	-	PH	-	-	-	94	-	-
1983-1252	2445660.59	1983 Sep 3 0924:59	Rocketsonde	-	-	Arcasonde	-	-	-	PH	-	-	-	72	-	-
1983-1274	2445662.76	1983 Sep 5 0613:59	Rocketsonde	-	-	AI/DMP-9	-	-	-	PH	-	-	-	94	-	-
1983-1254	2445662.78	1983 Sep 5 0641:00	Rocketsonde	-	-	Arcasonde	-	-	-	PH	-	-	-	69	-	-
1983-1276	2445662.82	1983 Sep 5 0741:59	Rocketsonde	-	-	AI/DMP-9?	-	-	-	KAU	-	-	-	92	-	-
1983-1277	2445662.83	1983 Sep 5 0802:00	Rocketsonde	-	-	AI/DMP-9?	-	-	-	KAU	-	-	-	93	-	-
1983-1256	2445662.85	1983 Sep 5 0826:59	Rocketsonde	-	-	Arcasonde	-	-	-	KAU	-	-	-	67	-	-
1983-1257	2445662.87	1983 Sep 5 0855:00	Rocketsonde	-	-	Arcasonde	-	-	-	SHEM	-	-	-	50	-	-
1983-1258	2445662.89	1983 Sep 5 0914:59	Rocketsonde	-	-	Arcasonde	-	-	-	KAU	-	-	-	65	-	-
1983-1260	2445664.16	1983 Sep 6 1553:00	Rocketsonde	-	-	Arcasonde	-	-	-	PRIM	-	-	-	62	-	-
1983-1261	2445666.25	1983 Sep 7 1800:00	Rocketsonde	-	-	Arcasonde	-	-	-	KAU	-	-	-	65	-	-
1983-1262	2445666.27	1983 Sep 7 1830:00	Rocketsonde	-	-	Arcasonde	-	-	-	WS	-	-	-	98	-	-
1983-1263	2445666.49	1983 Sep 7 2949:59	Rocketsonde	-	-	Arcasonde	-	-	-	WS	-	-	-	64	-	-
1983-1264	2445690.31	1983 Sep 12 1922:59	Rocketsonde	-	-	Arcasonde	-	-	-	KHR	-	-	-	67	-	-
1983-1281	2445690.40	1983 Sep 12 2131:00	Rocketsonde	-	-	AI/DMP-9?	-	-	-	PH	-	-	-	73	-	-
1983-1285	2445692.42	1983 Sep 12 2159:59	Rocketsonde	-	-	Arcasonde	-	-	-	KAU	-	-	-	90	-	-
1983-1267	2445692.15	1983 Sep 14 1540:00	Rocketsonde	-	-	Arcasonde	-	-	-	PRIM	-	-	-	65	-	-
1983-1268	2445692.23	1983 Sep 14 1730:00	Rocketsonde	-	-	Arcasonde	-	-	-	WS	-	-	-	66	-	-
1983-1269	2445692.46	1983 Sep 14 2326:00	Rocketsonde	-	-	Arcasonde	-	-	-	WS	-	-	-	64	-	-
1983-1271	2445694.37	1983 Sep 16 2049:59	Rocketsonde	-	-	Arcasonde	-	-	-	KHR	-	-	-	55	-	-
1983-1272	2445696.07	1983 Sep 18 1344:59	Rocketsonde	-	-	Arcasonde	-	-	-	SHEM	-	-	-	55	-	-
1983-1273	2445697.30	1983 Sep 19 1913:59	Rocketsonde	-	-	Arcasonde	-	-	-	WS	-	-	-	63	-	-
1983-1274	2445697.30	1983 Sep 19 1913:59	Rocketsonde	-	-	Arcasonde	-	-	-	MI	-	-	-	51	-	-
1983-1275	2445697.99	1983 Sep 20 1146:00	Rocketsonde	-	-	Arcasonde	-	-	-	MI	-	-	-	48	-	-
1983-1286	2445698.38	1983 Sep 20 2100:00	Rocketsonde	-	-	AI/DMP-9?	-	-	-	KAU	-	-	-	89	-	-
1983-1288	2445698.39	1983 Sep 20 2123:59	Rocketsonde	-	-	Arcasonde	-	-	-	KAU	-	-	-	65	-	-
1983-1276	2445699.12	1983 Sep 21 1500:00	Rocketsonde	-	-	Arcasonde	-	-	-	WS	-	-	-	64	-	-
1983-1278	2445699.15	1983 Sep 21 1530:00	Rocketsonde	-	-	Arcasonde	-	-	-	WS	-	-	-	64	-	-
1983-1279	2445699.36	1983 Sep 22 2041:00	Rocketsonde	-	-	Arcasonde	-	-	-	PRIM	-	-	-	91	-	-
1983-1280	2445690.36	1983 Sep 22 2041:00	Rocketsonde	-	-	Arcasonde	-	-	-	KHR	-	-	-	47	-	-
1983-1281	2445694.35	1983 Sep 26 2030:00	Rocketsonde	-	-	Arcasonde	-	-	-	WS	-	-	-	59	-	-
1983-1282	2445696.19	1983 Sep 26 2030:00	Rocketsonde	-	-	Arcasonde	-	-	-	WS	-	-	-	42	-	-
1983-1284	2445696.19	1983 Sep 26 2030:00	Rocketsonde	-	-	Arcasonde	-	-	-	PRIM	-	-	-	49	-	-
1983-1285	2445621.25	1983 Oct 12 1800:00	Rocketsonde	-	-	Arcasonde	-	-	-	PRIM	-	-	-	46	-	-
1983-1286	2445621.25	1983 Oct 12 1800:00	Rocketsonde	-	-	Arcasonde	-	-	-	SHEM	-	-	-	46	-	-
1983-1287	2445622.35	1983 Oct 13 2030:00	Rocketsonde	-	-	Arcasonde	-	-	-	SHEM	-	-	-	42	-	-
1983-1288	2445622.35	1983 Oct 13 2030:00	Rocketsonde	-	-	Arcasonde	-	-	-	KHER	-	-	-	47	-	-
1983-1289	2445625.41	1983 Oct 17 2149:59	Rocketsonde	-	-	Arcasonde	-	-	-	SHEM	-	-	-	68	-	-
1983-1290	2445625.41	1983 Oct 18 0230:00	Rocketsonde	-	-	Arcasonde	-	-	-	PRIM	-	-	-	68	-	-
1983-1291	2445627.05	1983 Oct 19 2030:00	Rocketsonde	-	-	Arcasonde	-	-	-	SHEM	-	-	-	47	-	-
1983-1292	2445627.25	1983 Oct 19 2030:00	Rocketsonde	-	-	Arcasonde	-	-	-	WS	-	-	-	97	-	-
1983-1293	2445629.15	1983 Oct 20 1630:00	Rocketsonde	-	-	Arcasonde	-	-	-	WS	-	-	-	60	-	-
1983-1294	2445629.23	1983 Oct 20 1733:00	Rocketsonde	-	-	Arcasonde	-	-	-	PH	-	-	-	52	-	-
1983-1295	2445629.27	1983 Oct 21 1933:59	Rocketsonde	-	-	Arcasonde	-	-	-	PH	-	-	-	47	-	-
1983-1296	2445629.28	1983 Oct 21 2100:00	Rocketsonde	-	-	Arcasonde	-	-	-	SHEM	-	-	-	45	-	-
1983-144	2445632.40	1983 Oct 24 2130:00	Rocketsonde	-	-	Arcasonde	-	-	-	WS	-	-	-	65	-	-
1983-144	2445632.40	1983 Oct 24 2130:00	Rocketsonde	-	-	Arcasonde	-	-	-	KHR	-	-	-	76	-	-
1983-1298	2445634.23	1983 Oct 26 2027:59	Rocketsonde	-	-	Arcasonde	-	-	-	WS	-	-	-	65	-	-
1983-1299	2445634.23	1983 Oct 26 2027:59	Rocketsonde	-	-	Arcasonde	-	-	-	PH	-	-	-	65	-	-
1983-1300	2445634.23	1983 Oct 26 2027:59	Rocketsonde	-	-	Arcasonde	-	-	-	SHEM	-	-	-	42	-	-
1983-1303	2445636.32	1983 Oct 28 2033:00	Rocketsonde	-	-	Arcasonde	-	-	-	SHEM	-	-	-	44	-	-
1983-145	2445639.35	1983 Oct 31 2030:00	Rocketsonde	-	-	Arcasonde	-	-	-	WS	-	-	-	66	-	-
1983-146	2445639.35	1983 Oct 31 2030:00	Rocketsonde	-	-	Arcasonde	-	-	-	WS	-	-	-	44	-	-
1983-1305	2445640.38	1983 Oct 1 2112:59	Rocketsonde	-	-	Arcasonde	-	-	-	WS	-	-	-	98	-	-
1983-1306	2445640.38	1983 Oct 1 2112:59	Rocketsonde	-	-	Arcasonde	-	-	-	WS	-	-	-	66	-	-
1983-1307	2445641.25	1983 Oct 2 1800:00	Rocketsonde	-	-	Arcasonde	-	-	-	WS	-	-	-	42	-	-
1983-1308	2445641.25	1983 Oct 2 1859:59	Rocketsonde	-	-	Arcasonde	-	-	-	WS	-	-	-	42	-	-
1983-1309	2445641.41	1983 Oct 2 2145:00	Rocketsonde	-	-	Arcasonde	-	-	-	SHEM	-	-	-	72	-	-
1983-1310	2445643.19	1983 Oct 4 1630:00	Rocketsonde	-	-	Arcasonde	-	-	-	PM	-	-	-	63	-	-
1983-1311	2445647.21	1983 Oct 7 1923:59	Rocketsonde	-	-	Arcasonde	-	-	-	PM	-	-	-	64	-	-
1983-1312	2445647.26	1983 Oct 8 1701:00	Rocketsonde	-	-	Arcasonde	-	-	-	WS	-	-	-	70	-	-
1983-1313	2445648.26	1983 Oct 8 1814:59	Rocketsonde	-	-	Arcasonde	-	-	-	WS	-	-	-	65	-	-
1983-1314	2445648.36	1983 Oct 9 1800:00	Rocketsonde	-	-	Arcasonde	-	-	-	WS	-	-	-	65	-	-
1983-1315	2445648.37	1983 Oct 9 2058:00	Rocketsonde	-	-	Arcasonde	-	-	-	WS	-	-	-	46	-	-
1983-1316	2445648.36	1983 Oct 9 2058:00	Rocketsonde	-	-	Arcasonde	-	-	-	SHEM	-	-	-	60	-	-
1983-1318	2445655.18	1983 Oct 16 1619:59	Rocketsonde	-	-	Arcasonde	-	-	-	WS	-	-	-	46	-	-
1983-1319	2445655.26	1983 Oct 16 1814:59	Rocketsonde	-	-	Arcasonde	-	-	-	WS	-	-	-	60	-	-
1983-148	2445655.35	1983 Oct 16 2030:00	Rocketsonde	-	-	Arcasonde	-	-	-	WS	-	-	-	46	-	-
1983-1320	2445655.36	1983 Oct 16 2037:00	Rocketsonde	-	-	Arcasonde	-	-	-	WS	-	-	-	75	-	-
1983-1321	2445657.14	1983 Oct 17 2033:00	Rocketsonde	-	-	Arcasonde	-	-	-	KHR	-	-	-	62	-	-
1983-1322	2445660.30	1983 Oct 18 1514:59	Rocketsonde	-	-	Arcasonde	-	-	-	WS	-	-	-	90	-	-
1983-1323	2445660.53	1983 Oct 21 1931:59	Rocketsonde	-	-	Arcasonde	-	-	-	PM	-	-	-	66	-	-
1983-1324	2445660.50	1983 Oct 21 1931:59	Rocketsonde	-	-	Arcasonde	-	-	-	PM	-	-	-	76	-	-
1983-1325	2445660.53	1983 Oct 22 0042:00	Rocketsonde	-	-	Arcasonde	-	-	-	KHR	-	-	-	50	-	-
1983-1326	2445662.27	1983 Oct 23 1830:00	Rocketsonde	-	-	Arcasonde	-	-	-	PM	-	-	-	66	-	-
1983-1327	2445662.29	1983 Oct 23 1859:59	Rocketsonde	-	-	Arcasonde	-	-	-	PRIM	-	-	-	97	-	-
1983-1328	2445662.31	1983 Oct 23 1930:00	Rocketsonde	-	-	Arcasonde	-	-	-	WS	-	-	-	61	-	-
1983-1329	2445667.17	1983 Oct 28 1609:59	Rocketsonde	-	-	Arcasonde	-	-	-	PM	-	-	-	71	-	-
1983-1330	2445667.21	1983 Oct 28 1658:59	Rocketsonde	-	-	Arcasonde	-	-	-	PM	-	-	-	74	-	-
1983-1331	2445669.15	1983 Oct 30 1537:59	Rocketsonde	-	-	Arcasonde	-	-	-	PM	-	-	-	71	-	-
1983-1332	2445669.19	1983 Oct 30 1630:00	Rocketsonde	-	-	Arcasonde	-	-	-	PRIM	-	-	-	65	-	-

Launch

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Mission	FlightCode	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee_Km	Range_Km	Dest
1983-W334	2445669_46	1983 Nov 30 23:08:00	Rocketsonde	-	-	Arcasonde	-	-	-	KMR	-	-	-	75	-	-
1983-W296	2445671_14	1983 Dec 2 15:22:59	Rocketsonde	-	-	AI/DMP-9	-	-	-	PH	-	-	-	90	-	-
1983-W335	2445671_18	1983 Dec 2 16:18:59	Rocketsonde	-	-	Arcasonde	-	-	-	PH	-	-	-	74	-	-
1983-W449	2445671_00	1983 Dec 3 02:30:00	Rocketsonde	-	-	Arcasonde	-	-	-	SHEM	-	-	-	38	-	-
1983-W298	2445673_13	1983 Dec 4 15:01:59	Rocketsonde	-	-	Arcasonde	-	-	-	PH	-	-	-	90	-	-
1983-W338	2445673_15	1983 Dec 4 15:34:59	Rocketsonde	-	-	Arcasonde	-	-	-	PH	-	-	-	70	-	-
1983-W341	2445675_16	1983 Dec 6 15:55:00	Rocketsonde	-	-	Arcasonde	-	-	-	KMR	-	-	-	69	-	-
1983-W342	2445675_38	1983 Dec 6 21:13:59	Rocketsonde	-	-	Arcasonde	-	-	-	PRIM	-	-	-	76	-	-
1983-W345	2445676_19	1983 Dec 7 16:30:00	Rocketsonde	-	-	Arcasonde	-	-	-	SHEM	-	-	-	63	-	-
1983-W50	2445676_35	1983 Dec 7 20:30:00	Rocketsonde	-	-	Arcasonde	-	-	-	KMR	-	-	-	40	-	-
1983-W349	2445676_47	1983 Dec 7 23:23:00	Rocketsonde	-	-	Arcasonde	-	-	-	PH	-	-	-	60	-	-
1983-W302	2445676_92	1983 Dec 8 10:02:59	Rocketsonde	-	-	AI/DMP-9	-	-	-	PH	-	-	-	90	-	-
1983-W350	2445676_95	1983 Dec 8 10:44:59	Rocketsonde	-	-	Arcasonde	-	-	-	PH	-	-	-	73	-	-
1983-W51	2445677_20	1983 Dec 8 16:46:59	Rocketsonde	-	-	Arcasonde	-	-	-	PRIM	-	-	-	48	-	-
1983-W351	2445677_21	1983 Dec 8 17:07:00	Rocketsonde	-	-	Arcasonde	-	-	-	PH	-	-	-	74	-	-
1983-W305	2445677_38	1983 Dec 8 21:06:00	Rocketsonde	-	-	AI/DMP-9	-	-	-	PH	-	-	-	90	-	-
1983-W306	2445677_42	1983 Dec 8 22:09:59	Rocketsonde	-	-	Arcasonde	-	-	-	PH	-	-	-	89	-	-
1983-W353	2445677_43	1983 Dec 8 22:21:00	Rocketsonde	-	-	Arcasonde	-	-	-	KAU	-	-	-	66	-	-
1983-W354	2445677_47	1983 Dec 8 23:21:00	Rocketsonde	-	-	Arcasonde	-	-	-	PH	-	-	-	68	-	-
1983-W355	2445677_49	1983 Dec 8 23:44:00	Rocketsonde	-	-	AI/DMP-9	-	-	-	KAU	-	-	-	66	-	-
1983-W356	2445677_50	1983 Dec 9 00:00:59	Rocketsonde	-	-	Arcasonde	-	-	-	PH	-	-	-	72	-	-
1983-W357	2445677_50	1983 Dec 9 00:07:59	Rocketsonde	-	-	Arcasonde	-	-	-	PH	-	-	-	52	-	-
1983-W358	2445677_50	1983 Dec 9 00:21:59	Rocketsonde	-	-	Arcasonde	-	-	-	PH	-	-	-	79	-	-
1983-W359	2445677_52	1983 Dec 9 00:24:59	Rocketsonde	-	-	Arcasonde	-	-	-	PH	-	-	-	70	-	-
1983-W360	2445682_17	1983 Dec 9 02:24:59	Rocketsonde	-	-	Arcasonde	-	-	-	KAU	-	-	-	63	-	-
1983-W369	2445682_19	1983 Dec 9 02:28:59	Rocketsonde	-	-	Arcasonde	-	-	-	PH	-	-	-	90	-	-
1983-W363	2445682_24	1983 Dec 9 16:26:59	Rocketsonde	-	-	Arcasonde	-	-	-	PH	-	-	-	76	-	-
1983-W370	2445686_26	1983 Dec 9 18:17:00	Rocketsonde	-	-	Arcasonde	-	-	-	PH	-	-	-	97	-	-
1983-W365	2445685_25	1983 Dec 14 16:00:00	Rocketsonde	-	-	Arcasonde	-	-	-	WS	-	-	-	74	-	-
1983-W368	2445685_25	1983 Dec 15 01:17:00	Rocketsonde	-	-	Arcasonde	-	-	-	KMR	-	-	-	73	-	-
1983-W368	2445686_16	1983 Dec 17 15:56:59	Rocketsonde	-	-	Arcasonde	-	-	-	PH	-	-	-	74	-	-
1983-W369	2445686_26	1983 Dec 17 18:51:00	Rocketsonde	-	-	AI/DMP-9	-	-	-	PH	-	-	-	90	-	-
1983-W316	2445686_24	1983 Dec 19 17:02:00	Rocketsonde	-	-	Arcasonde	-	-	-	PH	-	-	-	74	-	-
1983-W371	2445688_26	1983 Dec 19 18:17:00	Rocketsonde	-	-	Arcasonde	-	-	-	PH	-	-	-	74	-	-
1983-W352	2445688_52	1983 Dec 20 00:29:00	Rocketsonde	-	-	Arcasonde	-	-	-	KMR	-	-	-	39	-	-
1983-W376	2445690_38	1983 Dec 21 21:00:00	Rocketsonde	-	-	Arcasonde	-	-	-	SHEM	-	-	-	64	-	-
1983-W377	2445690_49	1983 Dec 21 23:46:00	Rocketsonde	-	-	Arcasonde	-	-	-	KMR	-	-	-	66	-	-
1983-W377	2445691_17	1983 Dec 22 15:58:59	Rocketsonde	-	-	Arcasonde	-	-	-	PH	-	-	-	62	-	-
1983-W378	2445691_27	1983 Dec 22 15:35:59	Rocketsonde	-	-	Arcasonde	-	-	-	SHEM	-	-	-	52	-	-
1983-W353	2445699_35	1983 Dec 30 20:30:00	Rocketsonde	-	-	Arcasonde	-	-	-	SHEM	-	-	-	59	-	-
1984-W01	2445703_14	1984 Jan 3 15:14:59	Rocketsonde	-	-	Arcasonde	-	-	-	ASC	-	-	-	59	-	-
1984-W02	2445704_21	1984 Jan 4 17:05:00	Rocketsonde	-	-	AI/DMP-9	-	-	-	ASC	-	-	-	56	-	-
1984-W01	2445704_35	1984 Jan 4 20:50:00	Rocketsonde	-	-	Arcasonde	-	-	-	SHEM	-	-	-	40	-	-
1984-W04	2445704_42	1984 Jan 4 21:59:59	Rocketsonde	-	-	Arcasonde	-	-	-	KMR	-	-	-	67	-	-
1984-W05	2445709_35	1984 Jan 9 23:21:00	Rocketsonde	-	-	Arcasonde	-	-	-	SHEM	-	-	-	49	-	-
1984-W02	2445709_35	1984 Jan 9 23:50:00	Rocketsonde	-	-	Arcasonde	-	-	-	SHEM	-	-	-	47	-	-
1984-W06	2445709_41	1984 Jan 10 14:35:00	Rocketsonde	-	-	Arcasonde	-	-	-	KAU	-	-	-	64	-	-
1984-W06	2445710_50	1984 Jan 10 19:06:59	Rocketsonde	-	-	Arcasonde	-	-	-	PH	-	-	-	64	-	-
1984-W12	2445710_32	1984 Jan 11 15:16:00	Rocketsonde	-	-	Arcasonde	-	-	-	ASC	-	-	-	61	-	-
1984-W12	2445711_33	1984 Jan 11 15:11:00	Rocketsonde	-	-	Arcasonde	-	-	-	ASC	-	-	-	61	-	-
1984-W03	2445711_35	1984 Jan 11 20:30:00	Rocketsonde	-	-	Arcasonde	-	-	-	SHEM	-	-	-	43	-	-
1984-W04	2445714_35	1984 Jan 11 20:30:00	Rocketsonde	-	-	Arcasonde	-	-	-	SHEM	-	-	-	43	-	-
1984-W04	2445716_39	1984 Jan 16 21:20:00	Rocketsonde	-	-	Arcasonde	-	-	-	KMR	-	-	-	74	-	-
1984-W10	2445716_39	1984 Jan 16 21:20:00	Rocketsonde	-	-	Arcasonde	-	-	-	KAU	-	-	-	74	-	-
1984-W20	2445717_25	1984 Jan 17 18:03:59	Rocketsonde	-	-	AI/DMP-9	-	-	-	WS	-	-	-	97	-	-
1984-W21	2445717_28	1984 Jan 17 18:36:59	Rocketsonde	-	-	Arcasonde	-	-	-	PH	-	-	-	60	-	-
1984-W01	2445718_03	1984 Jan 17 19:06:59	Rocketsonde	-	-	Arcasonde	-	-	-	ASC	-	-	-	49	-	-
1984-W01	2445718_09	1984 Jan 18 12:15:59	Rocketsonde	-	-	Arcasonde	-	-	-	ASC	-	-	-	60	-	-
1984-W24	2445718_14	1984 Jan 18 14:10:00	Rocketsonde	-	-	Arcasonde	-	-	-	AIT	-	-	-	60	-	-
1984-W24	2445718_14	1984 Jan 18 15:14:59	Rocketsonde	-	-	Arcasonde	-	-	-	CC	-	-	-	62	-	-
1984-W06	2445718_35	1984 Jan 18 15:14:59	Rocketsonde	-	-	Arcasonde	-	-	-	LO43	-	-	-	62	-	-
1984-W27	2445719_35	1984 Jan 18 20:30:00	Rocketsonde	-	-	Arcasonde	-	-	-	SHEM	-	-	-	43	-	-
1984-W29	2445720_35	1984 Jan 20 20:30:00	Rocketsonde	-	-	Arcasonde	-	-	-	SHEM	-	-	-	50	-	-
1984-W30	2445721_19	1984 Jan 21 16:37:59	Rocketsonde	-	-	Arcasonde	-	-	-	PH	-	-	-	70	-	-
1984-W30	2445721_26	1984 Jan 21 18:17:00	Rocketsonde	-	-	Arcasonde	-	-	-	PH	-	-	-	75	-	-
1984-W31	2445721_33	1984 Jan 21 20:02:00	Rocketsonde	-	-	Arcasonde	-	-	-	PH	-	-	-	64	-	-
1984-W32	2445723_12	1984 Jan 23 15:00:00	Rocketsonde	-	-	Arcasonde	-	-	-	PH	-	-	-	64	-	-
1984-W32	2445723_35	1984 Jan 23 20:30:00	Rocketsonde	-	-	Arcasonde	-	-	-	SHEM	-	-	-	52	-	-
1984-W36	2445725_14	1984 Jan 25 15:14:59	Rocketsonde	-	-	Arcasonde	-	-	-	CC	-	-	-	76	-	-
1984-W36	2445726_35	1984 Jan 26 20:24:00	Rocketsonde	-	-	Arcasonde	-	-	-	LO43	-	-	-	60	-	-
1984-W39	2445726_35	1984 Jan 26 20:30:00	Rocketsonde	-	-	Arcasonde	-	-	-	SHEM	-	-	-	50	-	-
1984-W40	2445727_15	1984 Jan 26 15:30:00	Rocketsonde	-	-	Arcasonde	-	-	-	SHEM	-	-	-	70	-	-
1984-W41	2445727_40	1984 Jan 27 21:30:00	Rocketsonde	-	-	Arcasonde	-	-	-	SHEM	-	-	-	55	-	-
1984-W41	2445727_40	1984 Jan 27 21:30:00	Rocketsonde	-	-	Arcasonde	-	-	-	SHEM	-	-	-	44	-	-
1984-W41	2445730_04	1984 Jan 30 18:02:59	Rocketsonde	-	-	AI/DMP-9	-	-	-	WS	-	-	-	98	-	-
1984-W37	2445730_25	1984 Jan 30 18:02:59	Rocketsonde	-	-	Arcasonde	-	-	-	PH	-	-	-	49	-	-
1984-W40	2445730_60	1984 Feb 1 02:30:00	Rocketsonde	-	-	Arcasonde	-	-	-	PH	-	-	-	98	-	-
1984-W42	2445732_25	1984 Feb 1 18:00:00	Rocketsonde	-	-	Arcasonde	-	-	-	WS	-	-	-	53	-	-
1984-W44	2445732_35	1984 Feb 1 20:30:00	Rocketsonde	-	-	Arcasonde	-	-	-	PH	-	-	-	76	-	-
1984-W45	2445732_51	1984 Feb 2 00:10:00	Rocketsonde	-	-	Arcasonde	-	-	-	SHEM	-	-	-	53	-	-
1984-W43	2445734_03	1984 Feb 3 12:44:00	Rocketsonde	-	-	Arcasonde	-	-	-	KMR	-	-	-	76	-	-
1984-W46	2445734_05	1984 Feb 3 13:06:00	Rocketsonde	-	-	Arcasonde	-	-	-	PH	-	-	-	89	-	-
1984-W47	2445734_12	1984 Feb 3 15:00:00	Rocketsonde	-	-	Arcasonde	-	-	-	PH	-	-	-	76	-	-
1984-W48	2445734_19	1984 Feb 3 16:30:00	Rocketsonde	-	-	Arcasonde	-	-	-	CC	-	-	-	71	-	-
1984-W49	2445734_39	1984 Feb 3 21:18:00	Rocketsonde	-	-	Arcasonde	-	-	-	CC	-	-	-	65	-	-
1984-W49	2445734_39	1984 Feb 3 21:18:00	Rocketsonde	-	-	Arcasonde	-	-	-	KAU	-	-	-	90	-	-
1984-W50	2445736_01	1984 Feb 5 12:38:59	Rocketsonde	-	-	Arcasonde	-	-	-	PH	-	-	-	76	-	-
1984-W50	2445736_03	1984 Feb 5 12:38:59	Rocketsonde	-	-	Arcasonde	-	-	-	SHEM	-	-	-	50	-	-
1984-W52	2445737_35	1984 Feb 6 20:30:00	Rocketsonde	-	-	AI/DMP-9	-	-	-	PH	-	-	-	90	-	-
1984-W47	2445738_01	1984 Feb 7 12:14:59	Rocketsonde	-	-	AI/DMP-9	-	-	-	PH	-	-	-	90	-	-

Launch

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Mission	FlightCode	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee_Km	Range_Km	Dest
1984-W53	2445738.03	1984 Feb 7 1244:00	Rocketsonde	-	-	Datasonde	-	-	-	PH	-	-	-	74	-	-
1984-Y49	2445739.29	1984 Feb 8 1855:59	Rocketsonde	-	-	AI/DMP-9	-	-	-	WS	-	-	-	98	-	-
1984-W55	2445739.46	1984 Feb 8 2305:00	Rocketsonde	-	-	Datasonde	-	-	-	RMR	-	-	-	70	-	-
1984-Y52	2445740.03	1984 Feb 9 1245:59	Rocketsonde	-	-	AI/DMP-9	-	-	-	PH	-	-	-	93	-	-
1984-W57	2445740.05	1984 Feb 9 1305:59	Rocketsonde	-	-	Datasonde	-	-	-	PH	-	-	-	74	-	-
1984-W60	2445740.41	1984 Feb 9 2144:00	Rocketsonde	-	-	Datasonde	-	-	-	KAU	-	-	-	52	-	-
1984-W62	2445741.04	1984 Feb 10 1252:00	Rocketsonde	-	-	Datasonde	-	-	-	ASC	-	-	-	65	-	-
1984-W63	2445741.20	1984 Feb 10 1641:59	Rocketsonde	-	-	Datasonde	-	-	-	PRIM	-	-	-	59	-	-
1984-W64	2445741.79	1984 Feb 11 0703:59	Rocketsonde	-	-	Datasonde	-	-	-	PH	-	-	-	69	-	-
1984-W65	2445742.02	1984 Feb 11 1224:59	Rocketsonde	-	-	Datasonde	-	-	-	WS	-	-	-	67	-	-
1984-W67	2445742.02	1984 Feb 11 1224:59	Rocketsonde	-	-	Datasonde	-	-	-	RMR	-	-	-	71	-	-
1984-W69	2445742.06	1984 Feb 11 1319:59	Rocketsonde	-	-	Datasonde	-	-	-	CC	LO43	-	-	85	-	-
1984-W69	2445742.10	1984 Feb 11 1425:00	Rocketsonde	-	-	Datasonde	-	-	-	CC	LO43	-	-	68	-	-
1984-W70	2445742.20	1984 Feb 11 1644:59	Rocketsonde	-	-	Datasonde	-	-	-	AIT	-	-	-	71	-	-
1984-W72	2445744.13	1984 Feb 13 1510:00	Rocketsonde	-	-	Datasonde	-	-	-	AIT	-	-	-	69	-	-
1984-W74	2445744.36	1984 Feb 13 2036:00	Rocketsonde	-	-	Datasonde	-	-	-	RMR	LO43	-	-	61	-	-
1984-W74	2445744.43	1984 Feb 13 2214:59	Rocketsonde	-	-	Datasonde	-	-	-	RMR	-	-	-	77	-	-
1984-W76	2445746.48	1984 Feb 15 2335:00	Rocketsonde	-	-	Datasonde	-	-	-	WS	-	-	-	59	-	-
1984-W78	2445747.19	1984 Feb 16 1630:00	Rocketsonde	-	-	Datasonde	-	-	-	RMR	-	-	-	56	-	-
1984-W79	2445748.36	1984 Feb 17 2035:00	Rocketsonde	-	-	Datasonde	-	-	-	CC	LO43	-	-	56	-	-
1984-W83	2445751.35	1984 Feb 20 2030:00	Rocketsonde	-	-	Datasonde	-	-	-	ASC	-	-	-	62	-	-
1984-W84	2445752.04	1984 Feb 21 1285:00	Rocketsonde	-	-	Datasonde	-	-	-	PRIM	-	-	-	63	-	-
1984-W86	2445752.38	1984 Feb 22 1800:00	Rocketsonde	-	-	Datasonde	-	-	-	PRIM	-	-	-	53	-	-
1984-W75	2445753.25	1984 Feb 22 1830:00	Rocketsonde	-	-	Datasonde	-	-	-	WS	-	-	-	62	-	-
1984-W88	2445753.27	1984 Feb 23 0002:59	Rocketsonde	-	-	Datasonde	-	-	-	WS	-	-	-	62	-	-
1984-W89	2445753.50	1984 Feb 23 1514:59	Rocketsonde	-	-	Datasonde	-	-	-	RMR	LO43	-	-	76	-	-
1984-W90	2445754.14	1984 Feb 23 2020:00	Rocketsonde	-	-	Datasonde	-	-	-	CC	-	-	-	61	-	-
1984-W91	2445754.35	1984 Feb 23 2020:00	Rocketsonde	-	-	Datasonde	-	-	-	RMR	-	-	-	77	-	-
1984-W92	2445755.21	1984 Feb 24 1700:00	Rocketsonde	-	-	Datasonde	-	-	-	AIT	-	-	-	70	-	-
1984-W93	2445755.12	1984 Feb 27 1452:00	Rocketsonde	-	-	Datasonde	-	-	-	WS	-	-	-	59	-	-
1984-W94	2445755.39	1984 Feb 27 1534:59	Rocketsonde	-	-	Datasonde	-	-	-	SHEN	LO43	-	-	46	-	-
1984-W94	2445755.99	1984 Feb 28 2114:59	Rocketsonde	-	-	Datasonde	-	-	-	SHEN	-	-	-	66	-	-
1984-W95	2445760.14	1984 Feb 29 1651:00	Rocketsonde	-	-	Datasonde	-	-	-	ASC	-	-	-	62	-	-
1984-W96	2445760.20	1984 Feb 29 1651:00	Rocketsonde	-	-	Datasonde	-	-	-	PRIM	-	-	-	63	-	-
1984-W79	2445760.25	1984 Feb 29 1651:00	Rocketsonde	-	-	Datasonde	-	-	-	PRIM	-	-	-	63	-	-
1984-W97	2445760.35	1984 Feb 29 2027:59	Rocketsonde	-	-	Datasonde	-	-	-	WS	-	-	-	37	-	-
1984-W98	2445760.35	1984 Feb 29 2030:00	Rocketsonde	-	-	Datasonde	-	-	-	SHEN	-	-	-	50	-	-
1984-W100	2445762.38	1984 Mar 2 2100:00	Rocketsonde	-	-	Datasonde	-	-	-	RMR	-	-	-	70	-	-
1984-W11	2445765.35	1984 Mar 8 2030:00	Rocketsonde	-	-	Datasonde	-	-	-	SHEN	-	-	-	49	-	-
1984-W102	2445765.19	1984 Mar 8 1650:00	Rocketsonde	-	-	Datasonde	-	-	-	PRIM	-	-	-	59	-	-
1984-W103	2445765.04	1984 Mar 8 1451:00	Rocketsonde	-	-	Datasonde	-	-	-	ASC	-	-	-	44	-	-
1984-W103	2445772.15	1984 Mar 12 1530:00	Rocketsonde	-	-	Datasonde	-	-	-	KCA	LO47	-	-	68	-	-
1984-W104	2445772.40	1984 Mar 12 2130:00	Rocketsonde	-	-	Datasonde	-	-	-	KCA	-	-	-	66	-	-
1984-W106	2445772.60	1984 Mar 13 0231:00	Rocketsonde	-	-	Datasonde	-	-	-	SHEN	-	-	-	49	-	-
1984-W109	2445772.24	1984 Mar 14 1251:00	Rocketsonde	-	-	Datasonde	-	-	-	ASC	-	-	-	62	-	-
1984-W109	2445772.61	1984 Mar 14 1512:00	Rocketsonde	-	-	Datasonde	-	-	-	PRIM	-	-	-	61	-	-
1984-W109	2445772.35	1984 Mar 15 1612:00	Rocketsonde	-	-	Datasonde	-	-	-	PRIM	-	-	-	61	-	-
1984-W109	2445772.35	1984 Mar 15 1612:00	Rocketsonde	-	-	Datasonde	-	-	-	ASC	-	-	-	53	-	-
1984-W110	2445773.35	1984 Mar 15 2036:00	Rocketsonde	-	-	Datasonde	-	-	-	ASC	-	-	-	61	-	-
1984-W110	2445773.35	1984 Mar 15 2036:00	Rocketsonde	-	-	Datasonde	-	-	-	ASC	-	-	-	61	-	-
1984-W111	2445781.04	1984 Mar 21 1656:59	Rocketsonde	-	-	Datasonde	-	-	-	PRIM	-	-	-	56	-	-
1984-W111	2445781.26	1984 Mar 21 1821:00	Rocketsonde	-	-	Datasonde	-	-	-	CC	LO47	-	-	70	-	-
1984-W111	2445781.26	1984 Mar 21 1821:00	Rocketsonde	-	-	Datasonde	-	-	-	CC	LO47	-	-	70	-	-
1984-W115	2445781.35	1984 Mar 21 2030:00	Rocketsonde	-	-	Datasonde	-	-	-	SHEN	-	-	-	55	-	-
1984-W116	2445782.15	1984 Mar 22 1530:00	Rocketsonde	-	-	Datasonde	-	-	-	SHEN	-	-	-	55	-	-
1984-W117	2445783.10	1984 Mar 22 1430:00	Rocketsonde	-	-	Datasonde	-	-	-	CC	LO47	-	-	70	-	-
1984-W118	2445786.03	1984 Mar 26 1245:00	Rocketsonde	-	-	Datasonde	-	-	-	CC	LO47	-	-	61	-	-
1984-W119	2445786.00	1984 Mar 26 2130:00	Rocketsonde	-	-	Datasonde	-	-	-	ASC	-	-	-	61	-	-
1984-W121	2445789.17	1984 Mar 28 1609:59	Rocketsonde	-	-	Datasonde	-	-	-	SHEN	-	-	-	51	-	-
1984-W82	2445789.33	1984 Mar 28 2000:00	Rocketsonde	-	-	Datasonde	-	-	-	PRIM	-	-	-	62	-	-
1984-W82	2445789.33	1984 Mar 28 2000:00	Rocketsonde	-	-	Datasonde	-	-	-	WS	-	-	-	44	-	-
1984-W122	2445793.33	1984 Apr 2 2056:59	Rocketsonde	-	-	AI/DMP-9	-	-	-	WS	-	-	-	44	-	-
1984-W123	2445789.40	1984 Mar 28 2130:00	Rocketsonde	-	-	Datasonde	-	-	-	SHEN	LO47	-	-	72	-	-
1984-W124	2445790.15	1984 Mar 28 2130:00	Rocketsonde	-	-	Datasonde	-	-	-	CC	LO47	-	-	71	-	-
1984-W125	2445790.32	1984 Mar 30 1530:00	Rocketsonde	-	-	Datasonde	-	-	-	CC	LO47	-	-	71	-	-
1984-W126	2445790.32	1984 Mar 30 1942:59	Rocketsonde	-	-	Datasonde	-	-	-	KAU	-	-	-	64	-	-
1984-W127	2445793.33	1984 Apr 3 2056:59	Rocketsonde	-	-	Datasonde	-	-	-	PM	-	-	-	66	-	-
1984-W128	2445795.19	1984 Apr 4 1630:00	Rocketsonde	-	-	Datasonde	-	-	-	KAU	-	-	-	63	-	-
1984-W115	2445796.35	1984 Apr 5 2030:00	Rocketsonde	-	-	Datasonde	-	-	-	KAU	-	-	-	45	-	-
1984-W129	2445797.08	1984 Apr 6 1355:59	Rocketsonde	-	-	Datasonde	-	-	-	PRIM	-	-	-	51	-	-
1984-W130	2445797.08	1984 Apr 6 1409:59	Rocketsonde	-	-	Datasonde	-	-	-	SHEN	-	-	-	60	-	-
1984-W131	2445797.14	1984 Apr 6 1429:59	Rocketsonde	-	-	Datasonde	-	-	-	KAU	-	-	-	65	-	-
1984-W81	2445797.14	1984 Apr 6 1527:59	Rocketsonde	-	-	Datasonde	-	-	-	PM	-	-	-	63	-	-
1984-W132	2445797.17	1984 Apr 6 1657:59	Rocketsonde	-	-	Datasonde	-	-	-	CC	LO47	-	-	85	-	-
1984-W82	2445797.23	1984 Apr 6 1657:59	Rocketsonde	-	-	Datasonde	-	-	-	CC	LO47	-	-	85	-	-
1984-W133	2445797.23	1984 Apr 6 1727:59	Rocketsonde	-	-	Datasonde	-	-	-	CC	LO47	-	-	70	-	-
1984-W134	2445799.10	1984 Apr 8 1403:59	Rocketsonde	-	-	Datasonde	-	-	-	CC	LO47	-	-	70	-	-
1984-W136	2445799.09	1984 Apr 8 1420:59	Rocketsonde	-	-	Datasonde	-	-	-	SHEN	-	-	-	52	-	-
1984-W137	2445799.10	1984 Apr 8 1431:00	Rocketsonde	-	-	Datasonde	-	-	-	PM	LO47	-	-	72	-	-
1984-W138	2445800.36	1984 Apr 9 2040:00	Rocketsonde	-	-	Datasonde	-	-	-	PM	-	-	-	64	-	-
1984-W83	2445801.05	1984 Apr 10 1311:59	Rocketsonde	-	-	Datasonde	-	-	-	PM	-	-	-	51	-	-
1984-W139	2445801.05	1984 Apr 10 1311:59	Rocketsonde	-	-	Datasonde	-	-	-	SHEN	-	-	-	66	-	-
1984-W84	2445801.06	1984 Apr 10 1330:00	Rocketsonde	-	-	Datasonde	-	-	-	KAU	-	-	-	86	-	-
1984-W140	2445801.07	1984 Apr 10 1334:59	Rocketsonde	-	-	Datasonde	-	-	-	CC	LO47	-	-	71	-	-
1984-W141	2445801.09	1984 Apr 10 1410:00	Rocketsonde	-	-	Datasonde	-	-	-	CC	LO47	-	-	69	-	-
1984-W85	2445803.00	1984 Apr 12 1207:00	Rocketsonde	-	-	AI/DMP-9?	-	-	-	CC	LO47	-	-	84	-	-

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Mission	FlightCode	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee_Km	Range_Km	Dest
1984-W143	2445803.00	1984 apr 12 12:07:00	Rocketsonde	-	-	Datasonde	-	-	-	KAU	-	-	-	65	-	-
1984-W144	2445803.04	1984 apr 12 12:59:59	Rocketsonde	-	-	Datasonde	-	-	-	CCA	LO47	-	-	63	-	-
1984-W145	2445803.05	1984 apr 12 13:09:59	Rocketsonde	-	-	Datasonde	-	-	-	PH	-	-	-	62	-	-
1984-W146	2445803.78	1984 apr 13 06:38:59	Rocketsonde	-	-	Datasonde	-	-	-	PH	-	-	-	67	-	-
1984-W147	2445804.03	1984 apr 13 12:40:00	Rocketsonde	-	-	Datasonde	-	-	-	PH	-	-	-	94	-	-
1984-W148	2445804.05	1984 apr 13 13:07:59	Rocketsonde	-	-	Datasonde	-	-	-	PH	-	-	-	75	-	-
1984-W149	2445804.06	1984 apr 13 13:13:59	Rocketsonde	-	-	Datasonde	-	-	-	WI	-	-	-	93	-	-
1984-W150	2445804.07	1984 apr 13 13:37:59	Rocketsonde	-	-	Datasonde	-	-	-	KAU	-	-	-	93	-	-
1984-W151	2445804.08	1984 apr 13 14:00:00	Rocketsonde	-	-	Datasonde	-	-	-	WI	-	-	-	68	-	-
1984-W152	2445804.08	1984 apr 13 14:00:00	Rocketsonde	-	-	Datasonde	-	-	-	AIT	-	-	-	71	-	-
1984-W153	2445804.09	1984 apr 13 14:03:00	Rocketsonde	-	-	Datasonde	-	-	-	KMR	-	-	-	67	-	-
1984-W154	2445804.12	1984 apr 13 14:10:00	Rocketsonde	-	-	Datasonde	-	-	-	KAU	LO47	-	-	80	-	-
1984-W155	2445804.12	1984 apr 13 14:49:59	Rocketsonde	-	-	Datasonde	-	-	-	CCA	LO47	-	-	72	-	-
1984-W156	2445807.35	1984 apr 16 20:31:00	Rocketsonde	-	-	Datasonde	-	-	-	SHEM	-	-	-	51	-	-
1984-W157	2445809.03	1984 apr 18 12:49:59	Rocketsonde	-	-	Datasonde	-	-	-	ASC	-	-	-	60	-	-
1984-W158	2445809.27	1984 apr 18 18:30:00	Rocketsonde	-	-	Datasonde	-	-	-	CCA	LO47	-	-	59	-	-
1984-W159	2445809.33	1984 apr 18 20:00:00	Rocketsonde	-	-	Datasonde	-	-	-	SHEM	-	-	-	52	-	-
1984-W160	2445811.38	1984 apr 20 21:00:00	Rocketsonde	-	-	Datasonde	-	-	-	SHEM	-	-	-	52	-	-
1984-W161	2445811.38	1984 apr 20 21:07:00	Rocketsonde	-	-	Datasonde	-	-	-	SHEM	-	-	-	66	-	-
1984-W162	2445814.33	1984 apr 23 20:00:00	Rocketsonde	-	-	Datasonde	-	-	-	KAU	-	-	-	51	-	-
1984-W163	2445815.15	1984 apr 24 15:30:00	Rocketsonde	-	-	Datasonde	-	-	-	SHEM	-	-	-	65	-	-
1984-W164	2445816.07	1984 apr 25 13:44:59	Rocketsonde	-	-	Datasonde	-	-	-	CCA	LO47	-	-	60	-	-
1984-W165	2445816.27	1984 apr 25 18:31:00	Rocketsonde	-	-	Datasonde	-	-	-	ASC	-	-	-	70	-	-
1984-W166	2445816.27	1984 apr 25 20:31:00	Rocketsonde	-	-	Datasonde	-	-	-	CCA	LO47	-	-	80	-	-
1984-W167	2445817.27	1984 apr 26 18:30:00	Rocketsonde	-	-	Datasonde	-	-	-	SHEM	-	-	-	68	-	-
1984-W168	2445818.29	1984 apr 27 19:02:59	Rocketsonde	-	-	Datasonde	-	-	-	CCA	LO47	-	-	66	-	-
1984-W169	2445818.35	1984 apr 27 20:00:00	Rocketsonde	-	-	Datasonde	-	-	-	PH	-	-	-	68	-	-
1984-W170	2445821.29	1984 apr 30 18:59:59	Rocketsonde	-	-	Datasonde	-	-	-	SHEM	-	-	-	46	-	-
1984-W171	2445822.08	1984 may 1 14:00:00	Rocketsonde	-	-	Datasonde	-	-	-	AIT	-	-	-	63	-	-
1984-W172	2445822.39	1984 may 1 21:14:59	Rocketsonde	-	-	Datasonde	-	-	-	KAU	-	-	-	62	-	-
1984-W173	2445823.16	1984 may 2 18:51:00	Rocketsonde	-	-	Datasonde	-	-	-	ASC	-	-	-	59	-	-
1984-W174	2445823.52	1984 may 2 19:34:59	Rocketsonde	-	-	Datasonde	-	-	-	SHEM	-	-	-	51	-	-
1984-W175	2445825.32	1984 may 4 20:00:00	Rocketsonde	-	-	Datasonde	-	-	-	SHEM	-	-	-	46	-	-
1984-W176	2445825.39	1984 may 7 21:24:59	Rocketsonde	-	-	Datasonde	-	-	-	KAU	-	-	-	64	-	-
1984-W177	2445825.03	1984 may 8 12:49:59	Rocketsonde	-	-	Datasonde	-	-	-	ASC	-	-	-	60	-	-
1984-W178	2445825.29	1984 may 8 19:00:59	Rocketsonde	-	-	Datasonde	-	-	-	SHEM	-	-	-	46	-	-
1984-W179	2445830.08	1984 may 9 14:00:00	Rocketsonde	-	-	Datasonde	-	-	-	CCA	LO47	-	-	70	-	-
1984-W180	2445830.31	1984 may 9 19:30:00	Rocketsonde	-	-	Datasonde	-	-	-	SHEM	-	-	-	46	-	-
1984-W181	2445830.90	1984 may 10 09:30:00	Rocketsonde	-	-	Datasonde	-	-	-	KAU	-	-	-	73	-	-
1984-W182	2445832.53	1984 may 11 20:00:00	Rocketsonde	-	-	Datasonde	-	-	-	SHEM	-	-	-	51	-	-
1984-W183	2445835.53	1984 may 14 20:00:00	Rocketsonde	-	-	Datasonde	-	-	-	SHEM	-	-	-	49	-	-
1984-W184	2445837.03	1984 may 16 12:44:00	Rocketsonde	-	-	Datasonde	-	-	-	ASC	-	-	-	59	-	-
1984-W185	2445837.15	1984 may 16 12:44:00	Rocketsonde	-	-	Datasonde	-	-	-	ASC	LO47	-	-	86	-	-
1984-W186	2445837.26	1984 may 17 02:06:00	Rocketsonde	-	-	Datasonde	-	-	-	SHEM	-	-	-	51	-	-
1984-W187	2445837.34	1984 may 21 20:16:00	Rocketsonde	-	-	Datasonde	-	-	-	SHEM	-	-	-	37	-	-
1984-W188	2445837.34	1984 may 21 20:16:00	Rocketsonde	-	-	Datasonde	-	-	-	PH	-	-	-	71	-	-
1984-W189	2445838.06	1984 may 23 10:07:00	Rocketsonde	-	-	Datasonde	-	-	-	CCA	LO47	-	-	61	-	-
1984-W190	2445838.36	1984 may 25 03:23:00	Rocketsonde	-	-	Datasonde	-	-	-	KMR	-	-	-	61	-	-
1984-W191	2445838.36	1984 may 25 03:23:00	Rocketsonde	-	-	Datasonde	-	-	-	CCA	LO47	-	-	61	-	-
1984-W192	2445838.36	1984 may 25 03:23:00	Rocketsonde	-	-	Datasonde	-	-	-	KMR	-	-	-	49	-	-
1984-W193	2445838.36	1984 may 25 03:23:00	Rocketsonde	-	-	Datasonde	-	-	-	SHEM	-	-	-	60	-	-
1984-W194	2445838.36	1984 may 25 03:23:00	Rocketsonde	-	-	Datasonde	-	-	-	ASC	-	-	-	62	-	-
1984-W195	2445838.36	1984 may 25 03:23:00	Rocketsonde	-	-	Datasonde	-	-	-	CCA	LO47	-	-	73	-	-
1984-W196	2445838.36	1984 may 25 03:23:00	Rocketsonde	-	-	Datasonde	-	-	-	CCA	LO47	-	-	67	-	-
1984-W197	2445838.36	1984 may 25 03:23:00	Rocketsonde	-	-	Datasonde	-	-	-	AIT	-	-	-	71	-	-
1984-W198	2445838.36	1984 may 25 03:23:00	Rocketsonde	-	-	Datasonde	-	-	-	AIT	-	-	-	71	-	-
1984-W199	2445838.36	1984 may 25 03:23:00	Rocketsonde	-	-	Datasonde	-	-	-	KMR	-	-	-	39	-	-
1984-W200	2445838.36	1984 may 25 03:23:00	Rocketsonde	-	-	Datasonde	-	-	-	SHEM	-	-	-	43	-	-
1984-W201	2445838.36	1984 may 25 03:23:00	Rocketsonde	-	-	Datasonde	-	-	-	SHEM	-	-	-	70	-	-
1984-W202	2445838.36	1984 may 25 03:23:00	Rocketsonde	-	-	Datasonde	-	-	-	KMR	-	-	-	60	-	-
1984-W203	2445838.36	1984 may 25 03:23:00	Rocketsonde	-	-	Datasonde	-	-	-	ASC	LO47	-	-	63	-	-
1984-W204	2445838.36	1984 may 25 03:23:00	Rocketsonde	-	-	Datasonde	-	-	-	CCA	LO47	-	-	66	-	-
1984-W205	2445838.36	1984 may 25 03:23:00	Rocketsonde	-	-	Datasonde	-	-	-	AIT	-	-	-	70	-	-
1984-W206	2445838.36	1984 may 25 03:23:00	Rocketsonde	-	-	Datasonde	-	-	-	CCA	LO47	-	-	59	-	-
1984-W207	2445838.36	1984 may 25 03:23:00	Rocketsonde	-	-	Datasonde	-	-	-	AIT	-	-	-	60	-	-
1984-W208	2445838.36	1984 may 25 03:23:00	Rocketsonde	-	-	Datasonde	-	-	-	ASC	-	-	-	60	-	-
1984-W209	2445838.36	1984 may 25 03:23:00	Rocketsonde	-	-	Datasonde	-	-	-	CCA	LO47	-	-	72	-	-
1984-W210	2445838.36	1984 may 25 03:23:00	Rocketsonde	-	-	Datasonde	-	-	-	CCA	LO47	-	-	92	-	-
1984-W211	2445837.03	1984 may 25 12:43:00	Rocketsonde	-	-	Datasonde	-	-	-	PM	-	-	-	73	-	-
1984-W212	2445837.05	1984 may 25 13:07:59	Rocketsonde	-	-	Datasonde	-	-	-	PM	-	-	-	50	-	-
1984-W213	2445837.03	1984 may 25 19:30:00	Rocketsonde	-	-	Datasonde	-	-	-	SHEM	-	-	-	60	-	-
1984-W214	2445837.03	1984 may 26 12:43:00	Rocketsonde	-	-	Datasonde	-	-	-	PM	-	-	-	75	-	-
1984-W215	2445837.10	1984 may 26 13:14:59	Rocketsonde	-	-	Datasonde	-	-	-	PM	-	-	-	68	-	-
1984-W216	2445837.33	1984 may 27 14:30:00	Rocketsonde	-	-	Datasonde	-	-	-	CCA	LO47	-	-	49	-	-
1984-W217	2445837.47	1984 may 27 19:54:59	Rocketsonde	-	-	Datasonde	-	-	-	SHEM	-	-	-	59	-	-
1984-W218	2445838.16	1984 may 28 15:52:00	Rocketsonde	-	-	Datasonde	-	-	-	KMR	-	-	-	64	-	-
1984-W219	2445838.32	1984 may 29 19:34:59	Rocketsonde	-	-	Datasonde	-	-	-	ASC	-	-	-	51	-	-
1984-W220	2445838.10	1984 jul 2 14:29:00	Rocketsonde	-	-	Datasonde	-	-	-	AIT	-	-	-	72	-	-
1984-W221	2445838.22	1984 jul 3 19:30:00	Rocketsonde	-	-	Datasonde	-	-	-	CCA	LO47	-	-	55	-	-
1984-W222	2445838.31	1984 jul 3 19:30:00	Rocketsonde	-	-	Datasonde	-	-	-	SHEM	-	-	-	51	-	-
1984-W223	2445837.10	1984 jul 5 14:25:00	Rocketsonde	-	-	Datasonde	-	-	-	AIT	-	-	-	71	-	-
1984-W224	2445837.34	1984 jul 5 20:03:00	Rocketsonde	-	-	Datasonde	-	-	-	SHEM	-	-	-	53	-	-
1984-W225	2445838.03	1984 jul 6 12:43:00	Rocketsonde	-	-	Datasonde	-	-	-	ASC	-	-	-	61	-	-
1984-W226	2445838.10	1984 jul 6 14:30:00	Rocketsonde	-	-	Datasonde	-	-	-	CCA	LO47	-	-	73	-	-

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Mission	FlightCode	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee_Km	Range_Km	Dest
1984-W226	2445888-35	1984 Jul 6 2025:00	Rocketsonde	-	-	Datasonde	-	-	-	KMR	-	-	-	63	-	-
1984-W227	2445891-39	1984 Jul 9 2114:59	Rocketsonde	-	-	Datasonde	-	-	-	KAU	-	-	-	58	-	-
1984-W228	2445893-03	1984 Jul 11 1248:59	Rocketsonde	-	-	Datasonde	-	-	-	ASC	-	-	-	50	-	-
1984-W229	2445893-06	1984 Jul 11 1325:59	Rocketsonde	-	-	Datasonde	-	-	-	CCA	LO47	-	-	67	-	-
1984-W230	2445893-46	1984 Jul 11 2247:59	Rocketsonde	-	-	Datasonde	-	-	-	KMR	-	-	-	60	-	-
1984-W231	2445898-03	1984 Jul 16 1249:59	Rocketsonde	-	-	Datasonde	-	-	-	AUT	-	-	-	60	-	-
1984-W232	2445898-09	1984 Jul 16 1415:00	Rocketsonde	-	-	Datasonde	-	-	-	CCA	LO47	-	-	60	-	-
1984-W234	2445900-10	1984 Jul 18 1430:00	Rocketsonde	-	-	Datasonde	-	-	-	CCA	LO47	-	-	62	-	-
1984-W235	2445902-09	1984 Jul 20 1415:00	Rocketsonde	-	-	Datasonde	-	-	-	CCA	LO47	-	-	60	-	-
1984-W236	2445902-31	1984 Jul 20 1930:00	Rocketsonde	-	-	Datasonde	-	-	-	SHEM	-	-	-	50	-	-
1984-W237	2445906-31	1984 Jul 23 1930:00	Rocketsonde	-	-	Datasonde	-	-	-	KAU	-	-	-	63	-	-
1984-W238	2445906-37	1984 Jul 23 2126:59	Rocketsonde	-	-	Datasonde	-	-	-	KMR	-	-	-	51	-	-
1984-W239	2445907-04	1984 Jul 25 1259:59	Rocketsonde	-	-	Datasonde	-	-	-	AUT	-	-	-	72	-	-
1984-W240	2445907-10	1984 Jul 25 1430:00	Rocketsonde	-	-	Datasonde	-	-	-	CCA	LO47	-	-	53	-	-
1984-W241	2445909-32	1984 Jul 27 1944:59	Rocketsonde	-	-	Datasonde	-	-	-	PH	-	-	-	66	-	-
1984-W243	2445914-10	1984 Aug 1 1430:00	Rocketsonde	-	-	Datasonde	-	-	-	CCA	LO47	-	-	53	-	-
1984-W244	2445914-15	1984 Aug 1 1533:59	Rocketsonde	-	-	Datasonde	-	-	-	ASC	-	-	-	50	-	-
1984-W245	2445914-24	1984 Aug 1 1742:00	Rocketsonde	-	-	Datasonde	-	-	-	PH	-	-	-	59	-	-
1984-W246	2445916-28	1984 Aug 3 1949:59	Rocketsonde	-	-	Datasonde	-	-	-	AUT	-	-	-	60	-	-
1984-W247	2445920-04	1984 Aug 7 1259:59	Rocketsonde	-	-	Datasonde	-	-	-	CCA	LO47	-	-	60	-	-
1984-W248	2445920-14	1984 Aug 7 1514:59	Rocketsonde	-	-	Datasonde	-	-	-	AUT	-	-	-	56	-	-
1984-W249	2445921-38	1984 Aug 8 1548:59	Rocketsonde	-	-	Datasonde	-	-	-	ASC	-	-	-	42	-	-
1984-W250	2445921-46	1984 Aug 8 2103:59	Rocketsonde	-	-	AI/DMP-97	-	-	-	KAU	-	-	-	86	-	-
1984-W251	2445921-48	1984 Aug 8 2332:00	Rocketsonde	-	-	Datasonde	-	-	-	KMR	-	-	-	53	-	-
1984-W252	2445926-11	1984 Aug 13 1445:00	Rocketsonde	-	-	Datasonde	-	-	-	KMR	-	-	-	64	-	-
1984-W253	2445926-52	1984 Aug 15 0904:59	Rocketsonde	-	-	Datasonde	-	-	-	MI	-	-	-	71	-	-
1984-W254	2445927-88	1984 Aug 15 0904:59	Rocketsonde	-	-	Datasonde	-	-	-	ASC	-	-	-	58	-	-
1984-W255	2445928-03	1984 Aug 15 1247:59	Rocketsonde	-	-	Datasonde	-	-	-	RMR	-	-	-	63	-	-
1984-W256	2445928-46	1984 Aug 15 2304:59	Rocketsonde	-	-	Datasonde	-	-	-	CCA	-	-	-	59	-	-
1984-W257	2445930-10	1984 Aug 17 1430:00	Rocketsonde	-	-	Datasonde	-	-	-	PH	LO47	-	-	65	-	-
1984-W258	2445930-35	1984 Aug 17 2020:00	Rocketsonde	-	-	Datasonde	-	-	-	CCA	-	-	-	54	-	-
1984-W259	2445934-15	1984 Aug 21 1530:00	Rocketsonde	-	-	Datasonde	-	-	-	PRM	-	-	-	60	-	-
1984-W260	2445934-35	1984 Aug 21 2031:00	Rocketsonde	-	-	Datasonde	-	-	-	RMR	LO47	-	-	64	-	-
1984-W261	2445936-20	1984 Aug 22 1651:00	Rocketsonde	-	-	Datasonde	-	-	-	CCA	LO47	-	-	60	-	-
1984-W262	2445936-10	1984 Aug 23 1430:00	Rocketsonde	-	-	Datasonde	-	-	-	CCA	-	-	-	60	-	-
1984-W264	2445937-22	1984 Aug 24 1715:00	Rocketsonde	-	-	Datasonde	-	-	-	AUT	-	-	-	71	-	-
1984-W265	2445937-29	1984 Aug 24 1901:59	Rocketsonde	-	-	Datasonde	-	-	-	AUT	-	-	-	65	-	-
1984-W266	2445937-31	1984 Aug 24 1930:00	Rocketsonde	-	-	Datasonde	-	-	-	SHEM	-	-	-	48	-	-
1984-W268	2445939-11	1984 Aug 26 1435:00	Rocketsonde	-	-	Datasonde	-	-	-	CCA	LO47	-	-	60	-	-
1984-W267	2445940-11	1984 Aug 27 1435:00	Rocketsonde	-	-	Datasonde	-	-	-	RMR	LO47	-	-	60	-	-
1984-W269	2445942-32	1984 Aug 29 0344:59	Rocketsonde	-	-	Datasonde	-	-	-	PRM	-	-	-	59	-	-
1984-W270	2445942-46	1984 Aug 29 2326:59	Rocketsonde	-	-	Datasonde	-	-	-	PRM	-	-	-	90	-	-
1984-W271	2445943-02	1984 Aug 30 1243:59	Rocketsonde	-	-	AI/DMP-98	-	-	-	PH	-	-	-	94	-	-
1984-W272	2445943-09	1984 Aug 30 1111:00	Rocketsonde	-	-	Datasonde	-	-	-	KAU	-	-	-	74	-	-
1984-W273	2445943-10	1984 Aug 30 1414:00	Rocketsonde	-	-	Datasonde	-	-	-	AUT	-	-	-	62	-	-
1984-W274	2445943-19	1984 Aug 30 1454:00	Rocketsonde	-	-	Datasonde	-	-	-	CCA	LO47	-	-	67	-	-
1984-W275	2445943-32	1984 Aug 30 1454:00	Rocketsonde	-	-	Datasonde	-	-	-	SHEM	-	-	-	50	-	-
1984-W276	2445943-52	1984 Aug 31 0029:00	Rocketsonde	-	-	Datasonde	-	-	-	KMR	-	-	-	59	-	-
1984-W277	2445943-52	1984 Aug 31 0529:00	Rocketsonde	-	-	Datasonde	-	-	-	ASC	-	-	-	54	-	-
1984-W278	2445944-20	1984 Aug 31 1653:59	Rocketsonde	-	-	Datasonde	-	-	-	PRM	-	-	-	55	-	-
1984-W280	2445945-06	1984 Sep 1 1330:59	Rocketsonde	-	-	AI/DMP-97	-	-	-	KAU	-	-	-	85	-	-
1984-W281	2445945-09	1984 Sep 1 1330:59	Rocketsonde	-	-	Datasonde	-	-	-	CCA	LO47	-	-	84	-	-
1984-W282	2445945-09	1984 Sep 1 1415:59	Rocketsonde	-	-	Datasonde	-	-	-	PM	-	-	-	90	-	-
1984-W283	2445945-10	1984 Sep 1 1421:00	Rocketsonde	-	-	Datasonde	-	-	-	CCA	-	-	-	64	-	-
1984-W284	2445945-10	1984 Sep 1 1431:00	Rocketsonde	-	-	Datasonde	-	-	-	KAU	LO47	-	-	67	-	-
1984-W285	2445945-11	1984 Sep 1 1438:59	Rocketsonde	-	-	Datasonde	-	-	-	PM	-	-	-	64	-	-
1984-W286	2445947-06	1984 Sep 3 1330:59	Rocketsonde	-	-	Datasonde	-	-	-	KAU	-	-	-	86	-	-
1984-W287	2445947-07	1984 Sep 3 1330:59	Rocketsonde	-	-	Datasonde	-	-	-	PM	-	-	-	90	-	-
1984-W288	2445947-07	1984 Sep 3 1406:00	Rocketsonde	-	-	Datasonde	-	-	-	CCA	LO47	-	-	86	-	-
1984-W289	2445947-11	1984 Sep 3 1406:00	Rocketsonde	-	-	Datasonde	-	-	-	CCA	LO47	-	-	72	-	-
1984-W290	2445948-85	1984 Sep 5 0826:00	Rocketsonde	-	-	Datasonde	-	-	-	PM	-	-	-	75	-	-
1984-W291	2445948-95	1984 Sep 5 0826:00	Rocketsonde	-	-	Datasonde	-	-	-	PM	-	-	-	93	-	-
1984-W292	2445949-06	1984 Sep 5 1324:59	Rocketsonde	-	-	Datasonde	-	-	-	VT	-	-	-	65	-	-
1984-W293	2445949-06	1984 Sep 5 1330:00	Rocketsonde	-	-	Datasonde	-	-	-	PREM	-	-	-	89	-	-
1984-W294	2445949-07	1984 Sep 5 1336:59	Rocketsonde	-	-	Datasonde	-	-	-	KAU	-	-	-	73	-	-
1984-W295	2445949-07	1984 Sep 5 1337:59	Rocketsonde	-	-	Datasonde	-	-	-	KMR	-	-	-	85	-	-
1984-W296	2445949-07	1984 Sep 5 1338:59	Rocketsonde	-	-	Datasonde	-	-	-	CCA	LO47	-	-	86	-	-
1984-W297	2445949-07	1984 Sep 5 1338:59	Rocketsonde	-	-	Datasonde	-	-	-	AUT	-	-	-	67	-	-
1984-W298	2445949-09	1984 Sep 5 1407:00	Rocketsonde	-	-	Datasonde	-	-	-	KAU	-	-	-	68	-	-
1984-W299	2445949-10	1984 Sep 5 1422:00	Rocketsonde	-	-	Datasonde	-	-	-	CCA	LO47	-	-	90	-	-
1984-W300	2445949-11	1984 Sep 5 1434:00	Rocketsonde	-	-	Datasonde	-	-	-	PM	-	-	-	74	-	-
1984-W301	2445949-11	1984 Sep 5 1445:00	Rocketsonde	-	-	Datasonde	-	-	-	SHEM	-	-	-	49	-	-
1984-W302	2445949-13	1984 Sep 5 1508:00	Rocketsonde	-	-	Datasonde	-	-	-	PM	-	-	-	52	-	-
1984-W303	2445951-41	1984 Sep 7 2145:00	Rocketsonde	-	-	Datasonde	-	-	-	SHEM	-	-	-	67	-	-
1984-W304	2445954-03	1984 Sep 10 1245:00	Rocketsonde	-	-	Datasonde	-	-	-	SHEM	-	-	-	57	-	-
1984-W305	2445954-17	1984 Sep 10 1610:59	Rocketsonde	-	-	Datasonde	-	-	-	PM	-	-	-	76	-	-
1984-W306	2445954-31	1984 Sep 10 1930:00	Rocketsonde	-	-	Datasonde	-	-	-	SHEM	-	-	-	50	-	-
1984-W307	2445955-53	1984 Sep 12 0036:59	Rocketsonde	-	-	Datasonde	-	-	-	KMR	-	-	-	76	-	-
1984-W308	2445956-07	1984 Sep 12 1344:59	Rocketsonde	-	-	Datasonde	-	-	-	CCA	LO47	-	-	51	-	-
1984-W309	2445957-32	1984 Sep 13 1944:59	Rocketsonde	-	-	Datasonde	-	-	-	SHEM	-	-	-	52	-	-
1984-W310	2445958-40	1984 Sep 14 2143:00	Rocketsonde	-	-	Datasonde	-	-	-	KAU	-	-	-	67	-	-
1984-W312	2445962-03	1984 Sep 18 1246:59	Rocketsonde	-	-	Datasonde	-	-	-	ASC	-	-	-	55	-	-

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Mission	FlightCode	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee_Km	Range_Km	Dest
1984-W305	2445963.07	1984 Sep 19 13:44:59	Rocketsonde	-	-	Datasonde	-	-	-	-	-	-	-	53	-	-
1984-W306	2445964.15	1984 Sep 20 15:30:00	Rocketsonde	-	-	Datasonde	-	-	-	AIT	-	-	-	68	-	-
1984-Y113	2445964.37	1984 Sep 20 20:54:00	Rocketsonde	-	-	AI/DMP-9?	-	-	-	CCA	LO47	-	-	88	-	-
1984-W307	2445964.41	1984 Sep 20 21:46:59	Rocketsonde	-	-	Datasonde	-	-	-	KAU	-	-	-	62	-	-
1984-W308	2445969.31	1984 Sep 25 19:30:00	Rocketsonde	-	-	Datasonde	-	-	-	SHEM	-	-	-	53	-	-
1984-W309	2445970.16	1984 Sep 26 15:46:59	Rocketsonde	-	-	Datasonde	-	-	-	ASC	-	-	-	59	-	-
1984-Y115	2445970.37	1984 Sep 26 15:46:59	Rocketsonde	-	-	AI/DMP-9?	-	-	-	KAU	-	-	-	85	-	-
1984-W311	2445970.41	1984 Sep 26 21:51:00	Rocketsonde	-	-	Datasonde	-	-	-	KAU	-	-	-	65	-	-
1984-W312	2445970.48	1984 Sep 26 23:35:00	Rocketsonde	-	-	Datasonde	-	-	-	KMR	-	-	-	77	-	-
1984-W313	2445971.52	1984 Sep 27 19:38:59	Rocketsonde	-	-	Datasonde	-	-	-	PH	-	-	-	69	-	-
1984-W314	2445971.52	1984 Sep 29 00:35:59	Rocketsonde	-	-	Datasonde	-	-	-	KMR	-	-	-	68	-	-
1984-W315	2445977.14	1984 Oct 3 17:00:00	Rocketsonde	-	-	Datasonde	-	-	-	CCA	LO47	-	-	59	-	-
1984-W316	2445977.21	1984 Oct 3 15:22:00	Rocketsonde	-	-	Datasonde	-	-	-	AIT	-	-	-	66	-	-
1984-W317	2445978.05	1984 Oct 4 13:11:59	Rocketsonde	-	-	AI/DMP-9	-	-	-	ASC	-	-	-	86	-	-
1984-Y116	2445978.07	1984 Oct 4 13:44:59	Rocketsonde	-	-	AI/DMP-9?	-	-	-	ASC	-	-	-	69	-	-
1984-Y118	2445978.96	1984 Oct 5 11:03:00	Rocketsonde	-	-	AI/DMP-9	-	-	-	KAU	-	-	-	90	-	-
1984-W320	2445978.96	1984 Oct 5 11:03:00	Rocketsonde	-	-	Datasonde	-	-	-	PH	-	-	-	0	-	-
1984-W321	2445978.96	1984 Oct 5 11:03:00	Rocketsonde	-	-	Datasonde	-	-	-	KAU	-	-	-	63	-	-
1984-W322	2445983.22	1984 Oct 9 17:15:00	Rocketsonde	-	-	Datasonde	-	-	-	PH	-	-	-	69	-	-
1984-W323	2445983.33	1984 Oct 9 20:00:00	Rocketsonde	-	-	Datasonde	-	-	-	SHEM	-	-	-	51	-	-
1984-W324	2445981.18	1984 Oct 7 16:18:00	Rocketsonde	-	-	Datasonde	-	-	-	PH	-	-	-	73	-	-
1984-W325	2445981.18	1984 Oct 7 16:18:00	Rocketsonde	-	-	Datasonde	-	-	-	CCA	LO47	-	-	63	-	-
1984-W326	2445983.15	1984 Oct 7 16:21:59	Rocketsonde	-	-	Datasonde	-	-	-	CCA	LO47	-	-	70	-	-
1984-W327	2445983.15	1984 Oct 9 16:21:59	Rocketsonde	-	-	Datasonde	-	-	-	KAU	-	-	-	63	-	-
1984-W328	2445983.22	1984 Oct 9 16:21:59	Rocketsonde	-	-	Datasonde	-	-	-	PH	-	-	-	69	-	-
1984-W329	2445983.33	1984 Oct 9 17:15:00	Rocketsonde	-	-	Datasonde	-	-	-	PH	-	-	-	60	-	-
1984-W330	2445986.18	1984 Oct 11 16:16:59	Rocketsonde	-	-	Datasonde	-	-	-	CCA	LO47	-	-	73	-	-
1984-W331	2445986.18	1984 Oct 11 16:21:59	Rocketsonde	-	-	Datasonde	-	-	-	KAU	-	-	-	66	-	-
1984-W332	2445986.21	1984 Oct 11 16:21:59	Rocketsonde	-	-	Datasonde	-	-	-	PRIM	-	-	-	51	-	-
1984-W333	2445986.21	1984 Oct 11 17:00:00	Rocketsonde	-	-	AI/DMP-9	-	-	-	PH	-	-	-	89	-	-
1984-W334	2445986.35	1984 Oct 13 10:25:59	Rocketsonde	-	-	Datasonde	-	-	-	PH	-	-	-	61	-	-
1984-W335	2445987.18	1984 Oct 13 10:25:59	Rocketsonde	-	-	Datasonde	-	-	-	AI	-	-	-	66	-	-
1984-W336	2445987.19	1984 Oct 13 10:25:59	Rocketsonde	-	-	AI/DMP-9	-	-	-	PH	-	-	-	94	-	-
1984-W337	2445987.19	1984 Oct 13 10:25:59	Rocketsonde	-	-	AI/DMP-9	-	-	-	PH	-	-	-	85	-	-
1984-W338	2445987.20	1984 Oct 13 10:25:59	Rocketsonde	-	-	AI/DMP-9?	-	-	-	KAU	-	-	-	85	-	-
1984-W339	2445987.21	1984 Oct 13 10:25:59	Rocketsonde	-	-	Datasonde	-	-	-	PH	-	-	-	73	-	-
1984-W340	2445987.21	1984 Oct 13 17:06:00	Rocketsonde	-	-	Datasonde	-	-	-	PH	-	-	-	69	-	-
1984-W341	2445987.22	1984 Oct 13 17:11:00	Rocketsonde	-	-	Datasonde	-	-	-	CCA	LO47	-	-	71	-	-
1984-W342	2445987.22	1984 Oct 13 17:11:00	Rocketsonde	-	-	Datasonde	-	-	-	KMR	-	-	-	64	-	-
1984-W343	2445987.25	1984 Oct 13 17:04:00	Rocketsonde	-	-	AI/DMP-9?	-	-	-	CCA	LO47	-	-	86	-	-
1984-W344	2445989.35	1984 Oct 15 21:11:59	Rocketsonde	-	-	Datasonde	-	-	-	KAU	-	-	-	64	-	-
1984-W345	2445991.07	1984 Oct 17 13:44:59	Rocketsonde	-	-	Datasonde	-	-	-	ASC	-	-	-	56	-	-
1984-W346	2445991.08	1984 Oct 17 13:44:59	Rocketsonde	-	-	Datasonde	-	-	-	ASC	-	-	-	60	-	-
1984-W347	2445991.08	1984 Oct 17 13:44:59	Rocketsonde	-	-	AI/DMP-9	-	-	-	CCA	-	-	-	62	-	-
1984-W348	2445991.08	1984 Oct 17 16:01:00	Rocketsonde	-	-	Datasonde	-	-	-	PRIM	-	-	-	57	-	-
1984-W349	2445991.20	1984 Oct 17 16:01:00	Rocketsonde	-	-	Datasonde	-	-	-	PH	-	-	-	57	-	-
1984-W350	2445991.20	1984 Oct 17 16:01:00	Rocketsonde	-	-	Datasonde	-	-	-	KMR	-	-	-	65	-	-
1984-W351	2445993.03	1984 Oct 18 10:53:00	Rocketsonde	-	-	Datasonde	-	-	-	ASC	-	-	-	66	-	-
1984-W352	2445993.03	1984 Oct 18 10:53:00	Rocketsonde	-	-	Datasonde	-	-	-	CCA	-	-	-	56	-	-
1984-W353	2445993.07	1984 Oct 22 15:05:59	Rocketsonde	-	-	Datasonde	-	-	-	CCA	LO47	-	-	59	-	-
1984-W354	2445993.07	1984 Oct 24 13:44:59	Rocketsonde	-	-	Datasonde	-	-	-	AIT	-	-	-	59	-	-
1984-W355	2445993.07	1984 Oct 24 13:44:59	Rocketsonde	-	-	Datasonde	-	-	-	KAU	-	-	-	61	-	-
1984-W356	2445993.11	1984 Oct 24 21:56:00	Rocketsonde	-	-	Datasonde	-	-	-	PRIM	-	-	-	65	-	-
1984-W357	2446000.16	1984 Oct 26 15:51:00	Rocketsonde	-	-	Datasonde	-	-	-	PM	-	-	-	61	-	-
1984-W358	2446000.17	1984 Oct 26 16:04:59	Rocketsonde	-	-	Datasonde	-	-	-	PM	-	-	-	61	-	-
1984-W359	2446000.25	1984 Oct 26 20:30:00	Rocketsonde	-	-	Datasonde	-	-	-	SHEM	-	-	-	47	-	-
1984-W360	2446000.35	1984 Oct 27 00:39:00	Rocketsonde	-	-	Datasonde	-	-	-	KMR	-	-	-	74	-	-
1984-W361	2446003.39	1984 Oct 29 20:30:00	Rocketsonde	-	-	Datasonde	-	-	-	SHEM	-	-	-	47	-	-
1984-W362	2446003.39	1984 Oct 29 21:27:59	Rocketsonde	-	-	Datasonde	-	-	-	KMR	-	-	-	72	-	-
1984-W363	2446005.07	1984 Oct 31 13:44:59	Rocketsonde	-	-	Datasonde	-	-	-	ASC	-	-	-	60	-	-
1984-W364	2446005.08	1984 Oct 31 14:00:00	Rocketsonde	-	-	Datasonde	-	-	-	CCA	LO47	-	-	71	-	-
1984-W365	2446005.11	1984 Oct 31 14:45:00	Rocketsonde	-	-	Datasonde	-	-	-	AIT	-	-	-	51	-	-
1984-W366	2446005.19	1984 Oct 31 16:30:00	Rocketsonde	-	-	Datasonde	-	-	-	PM	-	-	-	61	-	-
1984-W367	2446005.29	1984 Oct 31 18:57:59	Rocketsonde	-	-	Datasonde	-	-	-	PM	-	-	-	73	-	-
1984-W368	2446005.46	1984 Oct 31 23:09:00	Rocketsonde	-	-	Datasonde	-	-	-	KMR	-	-	-	76	-	-
1984-W369	2446007.39	1984 Oct 31 23:09:00	Rocketsonde	-	-	Datasonde	-	-	-	PM	-	-	-	48	-	-
1984-W370	2446010.16	1984 Oct 5 20:30:00	Rocketsonde	-	-	Datasonde	-	-	-	SHEM	-	-	-	54	-	-
1984-W371	2446011.35	1984 Oct 6 15:43:59	Rocketsonde	-	-	Datasonde	-	-	-	AIT	-	-	-	61	-	-
1984-W372	2446012.38	1984 Oct 7 21:08:00	Rocketsonde	-	-	Datasonde	-	-	-	PRIM	-	-	-	90	-	-
1984-W373	2446013.03	1984 Oct 8 12:14:59	Rocketsonde	-	-	Datasonde	-	-	-	KAU	-	-	-	53	-	-
1984-W374	2446013.03	1984 Oct 8 12:38:59	Rocketsonde	-	-	Datasonde	-	-	-	KAU	-	-	-	58	-	-
1984-W375	2446013.06	1984 Oct 8 13:14:59	Rocketsonde	-	-	AI/DMP-9?	-	-	-	CCA	LO47	-	-	84	-	-
1984-W376	2446013.06	1984 Oct 8 13:27:59	Rocketsonde	-	-	Datasonde	-	-	-	CCA	-	-	-	65	-	-
1984-W377	2446014.33	1984 Oct 9 13:55:59	Rocketsonde	-	-	Datasonde	-	-	-	PM	-	-	-	65	-	-
1984-W378	2446015.01	1984 Oct 10 12:14:59	Rocketsonde	-	-	Datasonde	-	-	-	SHEM	-	-	-	52	-	-
1984-W379	2446015.01	1984 Oct 10 12:19:00	Rocketsonde	-	-	Datasonde	-	-	-	SHEM	-	-	-	74	-	-
1984-W380	2446015.04	1984 Oct 10 12:21:00	Rocketsonde	-	-	Datasonde	-	-	-	PM	-	-	-	65	-	-
1984-W381	2446017.04	1984 Oct 10 12:54:00	Rocketsonde	-	-	Datasonde	-	-	-	KAU	-	-	-	61	-	-
1984-W382	2446017.00	1984 Oct 12 11:54:00	Rocketsonde	-	-	Datasonde	-	-	-	CCA	LO47	-	-	70	-	-
1984-W383	2446017.02	1984 Oct 12 12:26:59	Rocketsonde	-	-	Datasonde	-	-	-	CCA	LO47	-	-	66	-	-
1984-W384	2446018.20	1984 Oct 13 16:48:59	Rocketsonde	-	-	Datasonde	-	-	-	PM	-	-	-	69	-	-
1984-W384	2446018.32	1984 Oct 13 19:42:59	Rocketsonde	-	-	Datasonde	-	-	-	PH	-	-	-	68	-	-

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Mission	FlightCode	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee_Km	Range_Km	Dest
1984-W385	2446018.41	1984 Nov 13 21:49:59	Rocketsonde	-	-	Datasonde	-	-	-	PH	-	-	-	58	-	-
1984-W387	2446019.00	1984 Nov 14 11:54:00	Rocketsonde	-	-	Datasonde	-	-	-	CCA	LO47	-	-	73	-	-
1984-W388	2446019.00	1984 Nov 14 11:57:00	Rocketsonde	-	-	Datasonde	-	-	-	KAU	-	-	-	63	-	-
1984-W389	2446019.01	1984 Nov 14 12:14:59	Rocketsonde	-	-	Datasonde	-	-	-	PH	-	-	-	72	-	-
1984-W390	2446019.04	1984 Nov 14 12:51:00	Rocketsonde	-	-	Datasonde	-	-	-	ASC	-	-	-	59	-	-
1984-W391	2446019.04	1984 Nov 14 12:54:00	Rocketsonde	-	-	Datasonde	-	-	-	CCA	LO47	-	-	73	-	-
1984-W392	2446019.36	1984 Nov 14 20:45:00	Rocketsonde	-	-	Datasonde	-	-	-	PRIM	-	-	-	56	-	-
1984-Y128	2446020.75	1984 Nov 16 05:59:00	Rocketsonde	-	-	AI/DHM-9	-	-	-	PH	-	-	-	90	-	-
1984-W393	2446020.77	1984 Nov 16 06:33:00	Rocketsonde	-	-	Datasonde	-	-	-	PH	-	-	-	67	-	-
1984-W394	2446020.99	1984 Nov 16 11:45:00	Rocketsonde	-	-	Datasonde	-	-	-	SHEM	-	-	-	53	-	-
1984-W395	2446021.00	1984 Nov 16 11:57:00	Rocketsonde	-	-	Datasonde	-	-	-	PRIM	-	-	-	63	-	-
1984-A36	2446021.00	1984 Nov 16 12:00:00	Rocketsonde	-	-	Datasonde	-	-	-	AIT	-	-	-	47	-	-
1984-Y130	2446021.01	1984 Nov 16 12:12:59	Rocketsonde	-	-	AI/DHM-9?	-	-	-	KAU	-	-	-	87	-	-
1984-Y131	2446021.01	1984 Nov 16 12:14:59	Rocketsonde	-	-	AI/DHM-9?	-	-	-	CCA	LO47	-	-	94	-	-
1984-W396	2446021.01	1984 Nov 16 12:15:59	Rocketsonde	-	-	Datasonde	-	-	-	KRR	-	-	-	76	-	-
1984-W397	2446021.01	1984 Nov 16 12:17:00	Rocketsonde	-	-	Datasonde	-	-	-	WI	-	-	-	71	-	-
1984-W398	2446021.02	1984 Nov 16 12:22:59	Rocketsonde	-	-	Datasonde	-	-	-	PH	-	-	-	66	-	-
1984-W399	2446021.02	1984 Nov 16 12:35:59	Rocketsonde	-	-	Datasonde	-	-	-	KAU	-	-	-	59	-	-
1984-W400	2446021.03	1984 Nov 16 13:30:00	Rocketsonde	-	-	Datasonde	-	-	-	CCA	LO47	-	-	65	-	-
1984-W401	2446021.06	1984 Nov 16 13:45:00	Rocketsonde	-	-	Datasonde	-	-	-	AIT	-	-	-	52	-	-
1984-W402	2446024.13	1984 Nov 19 15:10:00	Rocketsonde	-	-	Datasonde	-	-	-	CCA	LO47	-	-	72	-	-
1984-W403	2446025.04	1984 Nov 20 12:56:59	Rocketsonde	-	-	Datasonde	-	-	-	ASC	-	-	-	58	-	-
1984-W404	2446025.29	1984 Nov 20 18:59:59	Rocketsonde	-	-	Datasonde	-	-	-	PH	-	-	-	84	-	-
1984-W405	2446025.33	1984 Nov 20 20:00:00	Rocketsonde	-	-	Datasonde	-	-	-	SHEM	-	-	-	63	-	-
1984-W406	2446025.07	1984 Nov 21 13:44:59	Rocketsonde	-	-	Datasonde	-	-	-	PRIM	-	-	-	67	-	-
1984-W408	2446026.20	1984 Nov 21 16:44:59	Rocketsonde	-	-	Datasonde	-	-	-	KRR	-	-	-	63	-	-
1984-W409	2446026.46	1984 Nov 21 23:00:00	Rocketsonde	-	-	Datasonde	-	-	-	PH	-	-	-	59	-	-
1984-W410	2446031.33	1984 Nov 26 20:00:00	Rocketsonde	-	-	Datasonde	-	-	-	SHEM	-	-	-	60	-	-
1984-W411	2446033.11	1984 Nov 26 22:45:00	Rocketsonde	-	-	Datasonde	-	-	-	ASC	-	-	-	90	-	-
1984-W412	2446033.39	1984 Nov 26 21:21:00	Rocketsonde	-	-	Datasonde	-	-	-	KAU	-	-	-	74	-	-
1984-W413	2446033.45	1984 Nov 26 22:27:59	Rocketsonde	-	-	Datasonde	-	-	-	KRR	-	-	-	62	-	-
1984-W414	2446034.15	1984 Nov 29 15:30:00	Rocketsonde	-	-	Datasonde	-	-	-	AIT	-	-	-	82	-	-
1984-W415	2446034.19	1984 Nov 29 15:30:00	Rocketsonde	-	-	Datasonde	-	-	-	PRIM	-	-	-	97	-	-
1984-W416	2446035.25	1984 Nov 30 10:00:00	Rocketsonde	-	-	Datasonde	-	-	-	PH	-	-	-	71	-	-
1984-Y132	2446035.07	1984 Dec 3 13:44:59	Rocketsonde	-	-	Datasonde	-	-	-	ASC	-	-	-	94	-	-
1984-W417	2446035.31	1984 Dec 4 19:27:59	Rocketsonde	-	-	AI/DHM-9	-	-	-	PH	-	-	-	72	-	-
1984-W418	2446035.36	1984 Dec 4 20:45:00	Rocketsonde	-	-	Datasonde	-	-	-	ASC	-	-	-	85	-	-
1984-Y133	2446035.38	1984 Dec 4 21:00:00	Rocketsonde	-	-	AI/DHM-9	-	-	-	SHEM	-	-	-	52	-	-
1984-W419	2446035.43	1984 Dec 4 22:14:59	Rocketsonde	-	-	Datasonde	-	-	-	ASC	-	-	-	70	-	-
1984-W421	2446040.04	1984 Dec 5 12:59:59	Rocketsonde	-	-	Datasonde	-	-	-	AIT	-	-	-	68	-	-
1984-W422	2446040.12	1984 Dec 5 16:54:00	Rocketsonde	-	-	Datasonde	-	-	-	CCA	LO47	-	-	70	-	-
1984-W423	2446040.12	1984 Dec 5 22:57:59	Rocketsonde	-	-	Datasonde	-	-	-	KAU	-	-	-	64	-	-
1984-W424	2446045.13	1984 Dec 10 15:10:00	Rocketsonde	-	-	Datasonde	-	-	-	PH	-	-	-	71	-	-
1984-W425	2446045.15	1984 Dec 10 15:10:00	Rocketsonde	-	-	Datasonde	-	-	-	AIT	-	-	-	61	-	-
1984-W426	2446045.35	1984 Dec 10 15:41:59	Rocketsonde	-	-	Datasonde	-	-	-	SHEM	-	-	-	55	-	-
1984-W427	2446045.35	1984 Dec 10 20:00:00	Rocketsonde	-	-	Datasonde	-	-	-	CCA	-	-	-	70	-	-
1984-W428	2446046.10	1984 Dec 11 17:17:00	Rocketsonde	-	-	Datasonde	-	-	-	VI	-	-	-	62	-	-
1984-W429	2446047.14	1984 Dec 12 15:24:59	Rocketsonde	-	-	Datasonde	-	-	-	PRIM	-	-	-	72	-	-
1984-W430	2446047.14	1984 Dec 12 15:24:59	Rocketsonde	-	-	Datasonde	-	-	-	KRR	-	-	-	62	-	-
1984-W431	2446047.07	1984 Dec 12 19:48:00	Rocketsonde	-	-	Datasonde	-	-	-	PRIM	-	-	-	77	-	-
1984-Y134	2446048.07	1984 Dec 14 13:44:59	Rocketsonde	-	-	AI/DHM-9	-	-	-	ASC	-	-	-	56	-	-
1984-W432	2446048.40	1984 Dec 14 13:44:59	Rocketsonde	-	-	Datasonde	-	-	-	PH	-	-	-	66	-	-
1984-W433	2446048.40	1984 Dec 14 13:44:59	Rocketsonde	-	-	Datasonde	-	-	-	ASC	-	-	-	61	-	-
1984-W434	2446050.41	1984 Dec 15 11:49:59	Rocketsonde	-	-	Datasonde	-	-	-	PRIM	-	-	-	64	-	-
1984-Y135	2446050.41	1984 Dec 15 21:49:59	Rocketsonde	-	-	AI/DHM-9	-	-	-	SHEM	-	-	-	48	-	-
1984-W436	2446050.49	1984 Dec 15 23:45:00	Rocketsonde	-	-	Datasonde	-	-	-	ASC	-	-	-	56	-	-
1984-W437	2446052.39	1984 Dec 17 18:59:59	Rocketsonde	-	-	Datasonde	-	-	-	PH	-	-	-	66	-	-
1984-W438	2446052.36	1984 Dec 18 20:45:00	Rocketsonde	-	-	Datasonde	-	-	-	ASC	-	-	-	61	-	-
1984-W439	2446052.38	1984 Dec 18 21:00:00	Rocketsonde	-	-	Datasonde	-	-	-	PRIM	-	-	-	64	-	-
1984-W440	2446054.05	1984 Dec 19 13:06:00	Rocketsonde	-	-	Datasonde	-	-	-	SHEM	-	-	-	43	-	-
1984-W441	2446054.10	1984 Dec 19 14:30:00	Rocketsonde	-	-	Datasonde	-	-	-	AIT	-	-	-	54	-	-
1984-W442	2446054.45	1984 Dec 19 21:30:00	Rocketsonde	-	-	Datasonde	-	-	-	CCA	LO47	-	-	71	-	-
1984-A39	2446054.45	1984 Dec 19 21:30:00	Rocketsonde	-	-	Datasonde	-	-	-	KAU	-	-	-	68	-	-
1984-W443	2446055.35	1984 Dec 21 20:30:00	Rocketsonde	-	-	Datasonde	-	-	-	KRR	-	-	-	69	-	-
1984-W444	2446059.04	1984 Dec 24 12:56:00	Rocketsonde	-	-	Datasonde	-	-	-	SHEM	-	-	-	61	-	-
1984-W445	2446059.04	1984 Dec 24 12:57:59	Rocketsonde	-	-	Datasonde	-	-	-	ASC	-	-	-	58	-	-
1984-W446	2446059.35	1984 Dec 24 20:30:00	Rocketsonde	-	-	Datasonde	-	-	-	AIT	-	-	-	56	-	-
1984-W446	2446059.35	1984 Dec 31 20:30:00	Rocketsonde	-	-	Datasonde	-	-	-	SHEM	-	-	-	56	-	-
1985-W01	2446068.06	1985 Jan 2 13:30:00	Rocketsonde	-	-	Datasonde	-	-	-	ASC	-	-	-	59	-	-
1985-W02	2446068.07	1985 Jan 2 13:44:59	Rocketsonde	-	-	Datasonde	-	-	-	AIT	-	-	-	57	-	-
1985-W03	2446068.23	1985 Jan 2 17:30:00	Rocketsonde	-	-	Datasonde	-	-	-	PRIM	-	-	-	64	-	-
1985-W04	2446068.19	1985 Jan 3 15:31:00	Rocketsonde	-	-	Datasonde	-	-	-	CCA	LO47	-	-	73	-	-
1985-W05	2446074.06	1985 Jan 8 16:30:00	Rocketsonde	-	-	Datasonde	-	-	-	AIT	-	-	-	66	-	-
1985-W06	2446075.10	1985 Jan 9 16:30:00	Rocketsonde	-	-	Datasonde	-	-	-	PRIM	-	-	-	81	-	-
1985-W07	2446076.10	1985 Jan 10 14:30:00	Rocketsonde	-	-	Datasonde	-	-	-	CCA	LO47	-	-	72	-	-
1985-W08	2446076.16	1985 Jan 10 15:56:00	Rocketsonde	-	-	Datasonde	-	-	-	ASC	-	-	-	60	-	-
1985-W09	2446076.35	1985 Jan 10 20:30:00	Rocketsonde	-	-	Datasonde	-	-	-	SHEM	-	-	-	56	-	-
1985-W10	2446076.35	1985 Jan 10 20:30:00	Rocketsonde	-	-	Datasonde	-	-	-	ASC	-	-	-	60	-	-
1985-W11	2446081.03	1985 Jan 15 12:43:00	Rocketsonde	-	-	Datasonde	-	-	-	ASC	-	-	-	73	-	-
1985-W12	2446081.15	1985 Jan 15 15:30:00	Rocketsonde	-	-	Datasonde	-	-	-	CCA	LO47	-	-	63	-	-
1985-W14	2446082.25	1985 Jan 16 17:58:00	Rocketsonde	-	-	Datasonde	-	-	-	PM	-	-	-	76	-	-
1985-W15	2446082.25	1985 Jan 16 20:30:00	Rocketsonde	-	-	Datasonde	-	-	-	SHEM	-	-	-	56	-	-
1985-W16	2446082.69	1985 Jan 16 23:49:59	Rocketsonde	-	-	Datasonde	-	-	-	KRR	-	-	-	63	-	-
1985-W17	2446083.07	1985 Jan 17 13:44:59	Rocketsonde	-	-	Datasonde	-	-	-	AIT	-	-	-	71	-	-
1985-W18	2446084.20	1985 Jan 18 16:44:59	Rocketsonde	-	-	Datasonde	-	-	-	PRIM	-	-	-	62	-	-
1985-W19	2446084.39	1985 Jan 18 21:24:59	Rocketsonde	-	-	Datasonde	-	-	-	KAU	-	-	-	68	-	-
1985-W20	2446087.03	1985 Jan 21 12:48:59	Rocketsonde	-	-	Datasonde	-	-	-	ASC	-	-	-	57	-	-
1985-W21	2446087.35	1985 Jan 21 20:21:00	Rocketsonde	-	-	Datasonde	-	-	-	KRR	-	-	-	65	-	-

Launch

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Mission	FlightCode	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee_Km	Range_Km	Dest
1985-W22	2446087.35	1985 Jan 21 20:30:00	Rocketsonde	-	-	Datasonde	-	-	-	SHEM	-	-	-	55	-	-
1985-W24	2446089.19	1985 Jan 23 16:30:00	Rocketsonde	-	-	Datasonde	-	-	-	PRIM	-	-	-	67	-	-
1985-W01	2446090.08	1985 Jan 24 13:57:59	Rocketsonde	-	-	AI/DMP-9	-	-	-	PH	-	-	-	90	-	-
1985-W25	2446090.08	1985 Jan 24 14:00:00	Rocketsonde	-	-	Datasonde	-	-	-	KAU	-	-	-	68	-	-
1985-W26	2446090.10	1985 Jan 24 14:26:59	Rocketsonde	-	-	Datasonde	-	-	-	PH	-	-	-	75	-	-
1985-W02	2446090.37	1985 Jan 24 20:49:59	Rocketsonde	-	-	AI/DMP-9?	-	-	-	CCA	LC47	-	-	86	-	-
1985-A01	2446090.39	1985 Jan 24 21:20:00	Rocketsonde	-	-	Datasonde	-	-	-	CCA	LC47	-	-	47	-	-
1985-W27	2446092.08	1985 Jan 26 14:00:00	Rocketsonde	-	-	Datasonde	-	-	-	PH	-	-	-	71	-	-
1985-W28	2446092.08	1985 Jan 26 14:00:00	Rocketsonde	-	-	Datasonde	-	-	-	PH	-	-	-	73	-	-
1985-W29	2446092.09	1985 Jan 26 14:00:00	Rocketsonde	-	-	Datasonde	-	-	-	KAU	-	-	-	68	-	-
1985-W03	2446093.17	1985 Jan 27 16:07:00	Rocketsonde	-	-	AI/DMP-9	-	-	-	PH	-	-	-	84	-	-
1985-W30	2446093.19	1985 Jan 27 16:31:59	Rocketsonde	-	-	Datasonde	-	-	-	PH	-	-	-	72	-	-
1985-W31	2446093.35	1985 Jan 27 20:30:00	Rocketsonde	-	-	Datasonde	-	-	-	SHEM	-	-	-	54	-	-
1985-W04	2446093.39	1985 Jan 27 21:22:59	Rocketsonde	-	-	AI/DMP-9	-	-	-	PH	-	-	-	84	-	-
1985-W32	2446093.39	1985 Jan 27 21:23:59	Rocketsonde	-	-	Datasonde	-	-	-	KAU	-	-	-	66	-	-
1985-W34	2446093.40	1985 Jan 27 21:30:00	Rocketsonde	-	-	Datasonde	-	-	-	AIT	-	-	-	52	-	-
1985-W35	2446093.41	1985 Jan 27 21:51:00	Rocketsonde	-	-	Datasonde	-	-	-	PH	-	-	-	72	-	-
1985-W36	2446093.41	1985 Jan 27 21:51:00	Rocketsonde	-	-	Datasonde	-	-	-	CCA	LC47	-	-	71	-	-
1985-W37	2446093.43	1985 Jan 27 22:14:59	Rocketsonde	-	-	Datasonde	-	-	-	AIT	-	-	-	56	-	-
1985-W38	2446093.44	1985 Jan 27 22:30:00	Rocketsonde	-	-	Datasonde	-	-	-	CCA	LC47	-	-	55	-	-
1985-W05	2446093.47	1985 Jan 27 23:15:00	Rocketsonde	-	-	AI/DMP-9?	-	-	-	CCR	-	-	-	85	-	-
1985-W39	2446096.33	1985 Jan 29 20:00:00	Rocketsonde	-	-	Datasonde	-	-	-	CCR	-	-	-	72	-	-
1985-W40	2446096.04	1985 Jan 30 12:59:59	Rocketsonde	-	-	Datasonde	-	-	-	ASC	-	-	-	61	-	-
1985-W41	2446102.10	1985 Feb 5 14:30:00	Rocketsonde	-	-	Datasonde	-	-	-	CCA	LC47	-	-	87	-	-
1985-W42	2446102.52	1985 Feb 6 00:25:59	Rocketsonde	-	-	Datasonde	-	-	-	CCR	LC47	-	-	56	-	-
1985-W45	2446104.03	1985 Feb 7 12:47:59	Rocketsonde	-	-	Datasonde	-	-	-	AIT	-	-	-	62	-	-
1985-W46	2446104.07	1985 Feb 7 13:44:59	Rocketsonde	-	-	Datasonde	-	-	-	AIT	-	-	-	62	-	-
1985-W47	2446104.78	1985 Feb 8 09:40:00	Rocketsonde	-	-	Datasonde	-	-	-	PH	-	-	-	74	-	-
1985-W48	2446104.62	1985 Feb 8 07:44:59	Rocketsonde	-	-	Datasonde	-	-	-	PH	-	-	-	58	-	-
1985-W49	2446104.57	1985 Feb 8 09:49:59	Rocketsonde	-	-	Datasonde	-	-	-	SHEM	-	-	-	53	-	-
1985-W50	2446105.36	1985 Feb 8 20:33:00	Rocketsonde	-	-	Datasonde	-	-	-	KAU	-	-	-	69	-	-
1985-W51	2446105.39	1985 Feb 8 21:25:59	Rocketsonde	-	-	Datasonde	-	-	-	KAU	-	-	-	67	-	-
1985-W52	2446105.41	1985 Feb 8 21:51:00	Rocketsonde	-	-	Datasonde	-	-	-	SHEM	-	-	-	59	-	-
1985-W02	2446106.35	1985 Feb 11 21:00:00	Rocketsonde	-	-	Datasonde	-	-	-	CCR	-	-	-	49	-	-
1985-A02	2446106.52	1985 Feb 12 00:32:00	Rocketsonde	-	-	Datasonde	-	-	-	CCR	-	-	-	76	-	-
1985-W55	2446110.04	1985 Feb 13 12:54:59	Rocketsonde	-	-	Datasonde	-	-	-	RKR	-	-	-	55	-	-
1985-W56	2446110.08	1985 Feb 13 13:54:59	Rocketsonde	-	-	Datasonde	-	-	-	RKR	-	-	-	55	-	-
1985-W57	2446110.36	1985 Feb 13 20:45:00	Rocketsonde	-	-	Datasonde	-	-	-	AIT	-	-	-	62	-	-
1985-W58	2446111.34	1985 Feb 14 20:14:00	Rocketsonde	-	-	Datasonde	-	-	-	PH	-	-	-	64	-	-
1985-W59	2446111.37	1985 Feb 14 20:54:00	Rocketsonde	-	-	Datasonde	-	-	-	PH	-	-	-	64	-	-
1985-W60	2446112.35	1985 Feb 15 20:30:00	Rocketsonde	-	-	Datasonde	-	-	-	SHEM	-	-	-	50	-	-
1985-W61	2446115.59	1985 Feb 16 12:32:00	Rocketsonde	-	-	Datasonde	-	-	-	ASC	-	-	-	58	-	-
1985-W62	2446115.59	1985 Feb 16 20:30:00	Rocketsonde	-	-	Datasonde	-	-	-	SHEM	-	-	-	58	-	-
1985-W63	2446116.59	1985 Feb 18 12:32:00	Rocketsonde	-	-	Datasonde	-	-	-	SHEM	-	-	-	53	-	-
1985-W64	2446116.59	1985 Feb 18 20:30:00	Rocketsonde	-	-	Datasonde	-	-	-	SHEM	-	-	-	53	-	-
1985-W65	2446116.59	1985 Feb 19 13:14:59	Rocketsonde	-	-	Datasonde	-	-	-	AIT	-	-	-	60	-	-
1985-W66	2446116.59	1985 Feb 20 21:09:59	Rocketsonde	-	-	Datasonde	-	-	-	KR	-	-	-	79	-	-
1985-W67	2446117.42	1985 Feb 22 10:05:00	Rocketsonde	-	-	Datasonde	-	-	-	KR	-	-	-	67	-	-
1985-W68	2446117.42	1985 Feb 22 10:05:00	Rocketsonde	-	-	Datasonde	-	-	-	KR	-	-	-	67	-	-
1985-W69	2446120.21	1985 Feb 25 19:41:59	Rocketsonde	-	-	Datasonde	-	-	-	CCA	LC47	-	-	60	-	-
1985-W70	2446124.07	1985 Feb 27 15:30:00	Rocketsonde	-	-	Datasonde	-	-	-	CCA	LC47	-	-	62	-	-
1985-W71	2446124.15	1985 Feb 27 15:30:00	Rocketsonde	-	-	Datasonde	-	-	-	ASC	-	-	-	62	-	-
1985-W72	2446124.19	1985 Feb 27 15:33:59	Rocketsonde	-	-	Datasonde	-	-	-	PRIM	-	-	-	63	-	-
1985-W73	2446124.38	1985 Feb 28 21:09:59	Rocketsonde	-	-	Datasonde	-	-	-	SHEM	-	-	-	54	-	-
1985-W74	2446132.39	1985 Feb 28 21:09:59	Rocketsonde	-	-	Datasonde	-	-	-	PH	-	-	-	54	-	-
1985-W75	2446132.39	1985 Feb 27 21:00:00	Rocketsonde	-	-	Datasonde	-	-	-	SHEM	-	-	-	67	-	-
1985-W76	2446133.35	1985 Feb 8 20:30:00	Rocketsonde	-	-	Datasonde	-	-	-	SHEM	-	-	-	66	-	-
1985-W77	2446136.21	1985 Feb 11 17:00:00	Rocketsonde	-	-	Datasonde	-	-	-	PRIM	-	-	-	72	-	-
1985-W78	2446137.35	1985 Feb 11 19:27:59	Rocketsonde	-	-	Datasonde	-	-	-	PM	-	-	-	54	-	-
1985-W79	2446138.15	1985 Feb 12 20:30:00	Rocketsonde	-	-	Datasonde	-	-	-	SHEM	-	-	-	54	-	-
1985-W80	2446138.15	1985 Feb 12 20:30:00	Rocketsonde	-	-	Datasonde	-	-	-	CCA	LC47	-	-	59	-	-
1985-W81	2446140.36	1985 Feb 15 20:40:00	Rocketsonde	-	-	Datasonde	-	-	-	SHEM	-	-	-	50	-	-
1985-W82	2446144.33	1985 Feb 19 20:00:00	Rocketsonde	-	-	Datasonde	-	-	-	PM	-	-	-	64	-	-
1985-W83	2446145.15	1985 Feb 20 15:30:00	Rocketsonde	-	-	Datasonde	-	-	-	CCA	LC47	-	-	63	-	-
1985-W84	2446145.19	1985 Feb 20 15:30:00	Rocketsonde	-	-	Datasonde	-	-	-	CCA	LC47	-	-	66	-	-
1985-W85	2446146.36	1985 Feb 21 20:44:00	Rocketsonde	-	-	Datasonde	-	-	-	PRIM	-	-	-	70	-	-
1985-W86	2446151.19	1985 Feb 26 16:30:00	Rocketsonde	-	-	Datasonde	-	-	-	KR	-	-	-	64	-	-
1985-W87	2446151.36	1985 Feb 26 20:00:00	Rocketsonde	-	-	Datasonde	-	-	-	SHEM	-	-	-	71	-	-
1985-W88	2446151.36	1985 Feb 26 21:00:00	Rocketsonde	-	-	Datasonde	-	-	-	PM	-	-	-	71	-	-
1985-W89	2446153.15	1985 Feb 28 15:30:00	Rocketsonde	-	-	Datasonde	-	-	-	CCA	LC47	-	-	70	-	-
1985-W90	2446153.53	1985 Feb 29 00:45:00	Rocketsonde	-	-	Datasonde	-	-	-	KR	-	-	-	60	-	-
1985-W91	2446159.15	1985 Feb 3 15:30:00	Rocketsonde	-	-	Datasonde	-	-	-	CCA	LC47	-	-	63	-	-
1985-W92	2446159.15	1985 Feb 3 15:30:00	Rocketsonde	-	-	Datasonde	-	-	-	CCA	LC47	-	-	67	-	-
1985-W93	2446164.36	1985 Feb 8 20:40:00	Rocketsonde	-	-	Datasonde	-	-	-	PRIM	-	-	-	67	-	-
1985-W94	2446164.36	1985 Feb 9 17:30:00	Rocketsonde	-	-	Datasonde	-	-	-	SHEM	-	-	-	52	-	-
1985-W95	2446165.23	1985 Feb 9 17:30:00	Rocketsonde	-	-	Datasonde	-	-	-	PRIM	-	-	-	66	-	-
1985-W96	2446166.06	1985 Feb 10 13:30:00	Rocketsonde	-	-	Datasonde	-	-	-	ASC	-	-	-	62	-	-
1985-W97	2446166.15	1985 Feb 10 15:30:00	Rocketsonde	-	-	Datasonde	-	-	-	CCA	LC47	-	-	69	-	-
1985-W98	2446168.08	1985 Feb 12 13:58:59	Rocketsonde	-	-	AI/DMP-9?	-	-	-	CCA	-	-	-	89	-	-
1985-Y09	2446168.11	1985 Feb 12 14:43:00	Rocketsonde	-	-	AI/DMP-9-	-	-	-	PM	-	-	-	86	-	-
1985-W101	2446168.12	1985 Feb 12 14:54:00	Rocketsonde	-	-	Datasonde	-	-	-	PM	-	-	-	62	-	-
1985-W103	2446168.14	1985 Feb 12 15:20:00	Rocketsonde	-	-	Datasonde	-	-	-	PM	-	-	-	70	-	-
1985-W104	2446170.08	1985 Feb 12 15:59:59	Rocketsonde	-	-	Datasonde	-	-	-	CCA	LC47	-	-	64	-	-
1985-W105	2446170.09	1985 Feb 14 13:58:59	Rocketsonde	-	-	Datasonde	-	-	-	PM	-	-	-	64	-	-
1985-W106	2446170.09	1985 Feb 14 14:08:00	Rocketsonde	-	-	Datasonde	-	-	-	CCA	LC47	-	-	70	-	-
1985-W107	2446170.09	1985 Feb 14 14:13:00	Rocketsonde	-	-	Datasonde	-	-	-	CCA	LC47	-	-	63	-	-
1985-W108	2446172.01	1985 Feb 16 12:07:00	Rocketsonde	-	-	Datasonde	-	-	-	KAU	-	-	-	77	-	-
1985-W109	2446172.01	1985 Feb 16 12:17:00	Rocketsonde	-	-	Datasonde	-	-	-	CCA	LC47	-	-	65	-	-
1985-W110	2446172.09	1985 Feb 16 14:13:00	Rocketsonde	-	-	Datasonde	-	-	-	KAU	-	-	-	63	-	-
1985-W111	2446173.38	1985 Feb 17 21:00:00	Rocketsonde	-	-	Datasonde	-	-	-	SHEM	-	-	-	50	-	-



Launch

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Mission	FlightCode	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee_Km	Range_Km	Dest
1985-W112	2446174_01	1985 Apr 18 12:12:59	Rocketsonde	-	-	Datasonde	-	-	-	CCA	LO47	-	-	56	-	-
1985-W113	2446174_01	1985 Apr 18 12:19:00	Rocketsonde	-	-	Datasonde	-	-	-	PH	-	-	-	77	-	-
1985-W114	2446174_03	1985 Apr 18 12:46:59	Rocketsonde	-	-	Datasonde	-	-	-	KAU	-	-	-	60	-	-
1985-Y10	2446174_76	1985 Apr 19 06:20:00	Rocketsonde	-	-	AI/DMP-9	-	-	-	PH	-	-	-	64	-	-
1985-W115	2446174_78	1985 Apr 19 06:45:00	Rocketsonde	-	-	Datasonde	-	-	-	PH	-	-	-	90	-	-
1985-Y12	2446175_07	1985 Apr 19 13:47:59	Rocketsonde	-	-	AI/DMP-9	-	-	-	PH	-	-	-	58	-	-
1985-W116	2446175_08	1985 Apr 19 13:53:59	Rocketsonde	-	-	Datasonde	-	-	-	AIT	-	-	-	64	-	-
1985-W117	2446175_08	1985 Apr 19 13:53:59	Rocketsonde	-	-	Datasonde	-	-	-	PRIM	-	-	-	64	-	-
1985-W118	2446175_08	1985 Apr 19 14:00:00	Rocketsonde	-	-	Datasonde	-	-	-	KAU	-	-	-	54	-	-
1985-W119	2446175_08	1985 Apr 19 14:01:00	Rocketsonde	-	-	Datasonde	-	-	-	SHEM	-	-	-	76	-	-
1985-W120	2446175_09	1985 Apr 19 14:11:00	Rocketsonde	-	-	Datasonde	-	-	-	KHR	-	-	-	70	-	-
1985-W121	2446175_09	1985 Apr 19 14:12:00	Rocketsonde	-	-	Datasonde	-	-	-	PH	-	-	-	85	-	-
1985-Y13	2446175_11	1985 Apr 19 14:37:00	Rocketsonde	-	-	AI/DMP-9?	-	-	-	CCA	LO47	-	-	50	-	-
1985-W122	2446175_12	1985 Apr 19 15:00:00	Rocketsonde	-	-	Datasonde	-	-	-	CCA	LO47	-	-	50	-	-
1985-W123	2446175_17	1985 Apr 19 15:59:59	Rocketsonde	-	-	Datasonde	-	-	-	SHEM	-	-	-	55	-	-
1985-W124	2446178_35	1985 Apr 22 20:30:00	Rocketsonde	-	-	Datasonde	-	-	-	PRIM	-	-	-	57	-	-
1985-W126	2446180_19	1985 Apr 24 16:40:00	Rocketsonde	-	-	Datasonde	-	-	-	CCA	LO47	-	-	63	-	-
1985-W128	2446183_16	1985 Apr 27 15:54:00	Rocketsonde	-	-	Datasonde	-	-	-	KAU	-	-	-	90	-	-
1985-Y14	2446185_17	1985 Apr 27 15:54:00	Rocketsonde	-	-	AI/DMP-9?	-	-	-	KAU	-	-	-	87	-	-
1985-W129	2446186_20	1985 Apr 29 16:52:59	Rocketsonde	-	-	Datasonde	-	-	-	KAU	-	-	-	86	-	-
1985-W130	2446186_21	1985 Apr 29 17:00:00	Rocketsonde	-	-	AI/DMP-9?	-	-	-	CCA	LO47	-	-	61	-	-
1985-W131	2446186_23	1985 Apr 29 17:38:59	Rocketsonde	-	-	Datasonde	-	-	-	CCA	LO47	-	-	58	-	-
1985-W132	2446186_24	1985 Apr 29 17:38:59	Rocketsonde	-	-	Datasonde	-	-	-	KAU	-	-	-	53	-	-
1985-W133	2446186_31	1985 Apr 29 19:30:00	Rocketsonde	-	-	Datasonde	-	-	-	SHEM	-	-	-	53	-	-
1985-W134	2446186_34	1985 Apr 29 20:03:00	Rocketsonde	-	-	Datasonde	-	-	-	KAU	-	-	-	61	-	-
1985-W135	2446187_17	1985 May 1 16:07:59	Rocketsonde	-	-	Datasonde	-	-	-	CCA	LO47	-	-	91	-	-
1985-W136	2446187_17	1985 May 1 16:07:59	Rocketsonde	-	-	Datasonde	-	-	-	PH	-	-	-	71	-	-
1985-W137	2446189_16	1985 May 3 15:59:59	Rocketsonde	-	-	Datasonde	-	-	-	PH	-	-	-	64	-	-
1985-W138	2446189_17	1985 May 3 15:59:59	Rocketsonde	-	-	Datasonde	-	-	-	KAU	-	-	-	64	-	-
1985-W139	2446189_19	1985 May 3 16:05:59	Rocketsonde	-	-	Datasonde	-	-	-	KAU	-	-	-	63	-	-
1985-W140	2446189_31	1985 May 3 16:23:00	Rocketsonde	-	-	Datasonde	-	-	-	KAU	-	-	-	61	-	-
1985-W141	2446189_31	1985 May 3 16:23:00	Rocketsonde	-	-	Datasonde	-	-	-	SHEM	-	-	-	51	-	-
1985-W142	2446191_17	1985 May 5 15:57:59	Rocketsonde	-	-	Datasonde	-	-	-	PH	-	-	-	82	-	-
1985-W143	2446191_17	1985 May 5 15:59:59	Rocketsonde	-	-	Datasonde	-	-	-	KAU	-	-	-	85	-	-
1985-W144	2446191_52	1985 May 6 10:05:00	Rocketsonde	-	-	Datasonde	-	-	-	CCA	LO47	-	-	90	-	-
1985-W145	2446192_12	1985 May 6 16:10:59	Rocketsonde	-	-	Datasonde	-	-	-	PH	-	-	-	72	-	-
1985-W146	2446192_17	1985 May 6 16:10:59	Rocketsonde	-	-	Datasonde	-	-	-	PRIM	-	-	-	87	-	-
1985-W147	2446192_17	1985 May 6 16:10:59	Rocketsonde	-	-	AI/DMP-9	-	-	-	KAU	-	-	-	94	-	-
1985-W148	2446192_18	1985 May 6 16:13:59	Rocketsonde	-	-	Datasonde	-	-	-	KAU	-	-	-	89	-	-
1985-W149	2446195_19	1985 May 6 16:31:59	Rocketsonde	-	-	Datasonde	-	-	-	PH	-	-	-	93	-	-
1985-W150	2446195_22	1985 May 6 17:11:00	Rocketsonde	-	-	Datasonde	-	-	-	KAU	-	-	-	64	-	-
1985-W151	2446195_22	1985 May 6 17:11:00	Rocketsonde	-	-	Datasonde	-	-	-	PH	-	-	-	75	-	-
1985-W152	2446195_24	1985 May 6 17:20:00	Rocketsonde	-	-	Datasonde	-	-	-	KHR	-	-	-	77	-	-
1985-W153	2446195_21	1985 May 6 17:45:00	Rocketsonde	-	-	Datasonde	-	-	-	CCA	LO47	-	-	62	-	-
1985-W154	2446195_21	1985 May 6 17:45:00	Rocketsonde	-	-	Datasonde	-	-	-	CCA	-	-	-	64	-	-
1985-W155	2446201_06	1985 May 15 15:44:59	Rocketsonde	-	-	Datasonde	-	-	-	PRIM	-	-	-	55	-	-
1985-W156	2446201_31	1985 May 15 15:44:59	Rocketsonde	-	-	Datasonde	-	-	-	ASC	-	-	-	55	-	-
1985-W157	2446202_31	1985 May 15 17:00:00	Rocketsonde	-	-	Datasonde	-	-	-	PH	-	-	-	72	-	-
1985-W158	2446202_36	1985 May 16 20:32:00	Rocketsonde	-	-	Datasonde	-	-	-	SHEM	-	-	-	53	-	-
1985-W159	2446204_54	1985 May 16 20:32:00	Rocketsonde	-	-	Datasonde	-	-	-	PRIM	-	-	-	61	-	-
1985-W160	2446205_00	1985 May 16 20:32:00	Rocketsonde	-	-	Datasonde	-	-	-	KHR	-	-	-	71	-	-
1985-W161	2446205_03	1985 May 20 09:20:00	Rocketsonde	-	-	Datasonde	-	-	-	CCA	LO47	-	-	68	-	-
1985-W162	2446205_09	1985 May 20 09:20:00	Rocketsonde	-	-	Datasonde	-	-	-	CCA	LO47	-	-	58	-	-
1985-W163	2446205_16	1985 May 20 09:20:00	Rocketsonde	-	-	Datasonde	-	-	-	ASC	-	-	-	89	-	-
1985-W164	2446208_16	1985 May 22 15:45:59	Rocketsonde	-	-	AI/DMP-9	-	-	-	PH	-	-	-	66	-	-
1985-W165	2446208_20	1985 May 22 17:19:00	Rocketsonde	-	-	Datasonde	-	-	-	KHR	-	-	-	85	-	-
1985-W166	2446208_31	1985 May 22 19:30:00	Rocketsonde	-	-	Datasonde	-	-	-	KHR	-	-	-	65	-	-
1985-W167	2446210_52	1985 May 22 19:30:00	Rocketsonde	-	-	Datasonde	-	-	-	SHEM	-	-	-	55	-	-
1985-W168	2446214_52	1985 May 22 19:30:00	Rocketsonde	-	-	Datasonde	-	-	-	KHR	-	-	-	72	-	-
1985-W169	2446214_51	1985 May 28 15:44:00	Rocketsonde	-	-	Datasonde	-	-	-	SHEM	-	-	-	61	-	-
1985-W170	2446215_11	1985 May 28 15:44:00	Rocketsonde	-	-	Datasonde	-	-	-	ASC	-	-	-	64	-	-
1985-W171	2446215_21	1985 May 29 14:45:00	Rocketsonde	-	-	Datasonde	-	-	-	CCA	LO47	-	-	66	-	-
1985-W172	2446216_14	1985 May 29 17:00:00	Rocketsonde	-	-	Datasonde	-	-	-	PRIM	-	-	-	64	-	-
1985-W173	2446220_10	1985 May 30 15:14:59	Rocketsonde	-	-	Datasonde	-	-	-	AIT	-	-	-	84	-	-
1985-W174	2446220_10	1985 May 4 00:33:00	Rocketsonde	-	-	Datasonde	-	-	-	KHR	-	-	-	64	-	-
1985-W175	2446222_30	1985 Jun 5 19:14:59	Rocketsonde	-	-	Datasonde	-	-	-	CCA	LO47	-	-	70	-	-
1985-W176	2446222_30	1985 Jun 5 19:30:00	Rocketsonde	-	-	Datasonde	-	-	-	SHEM	-	-	-	54	-	-
1985-W177	2446226_93	1985 Jun 10 10:05:59	Rocketsonde	-	-	Datasonde	-	-	-	PRIM	-	-	-	63	-	-
1985-W178	2446226_94	1985 Jun 10 10:30:00	Rocketsonde	-	-	Datasonde	-	-	-	SHEM	-	-	-	64	-	-
1985-W179	2446229_21	1985 Jun 11 17:00:00	Rocketsonde	-	-	Datasonde	-	-	-	CCA	LO47	-	-	64	-	-
1985-W180	2446229_31	1985 Jun 11 20:00:00	Rocketsonde	-	-	Datasonde	-	-	-	PRIM	-	-	-	71	-	-
1985-W181	2446233_98	1985 Jun 17 11:33:00	Rocketsonde	-	-	Datasonde	-	-	-	PRIM	-	-	-	67	-	-
1985-W182	2446234_02	1985 Jun 17 12:33:00	Rocketsonde	-	-	AI/DMP-9?	-	-	-	SHEM	-	-	-	94	-	-
1985-W183	2446234_06	1985 Jun 17 12:45:59	Rocketsonde	-	-	Datasonde	-	-	-	KAU	-	-	-	66	-	-
1985-W184	2446234_10	1985 Jun 17 13:32:59	Rocketsonde	-	-	Datasonde	-	-	-	CCA	LO47	-	-	68	-	-
1985-W185	2446234_77	1985 Jun 18 06:30:00	Rocketsonde	-	-	Datasonde	-	-	-	PM	-	-	-	62	-	-
1985-W186	2446235_62	1985 Jun 18 06:30:00	Rocketsonde	-	-	Datasonde	-	-	-	KAU	-	-	-	69	-	-
1985-W187	2446236_21	1985 Jun 19 03:00:00	Rocketsonde	-	-	Datasonde	-	-	-	CCA	LO47	-	-	72	-	-
1985-W188	2446236_31	1985 Jun 19 17:00:00	Rocketsonde	-	-	Datasonde	-	-	-	ASC	-	-	-	67	-	-
1985-W189	2446236_31	1985 Jun 19 19:30:00	Rocketsonde	-	-	Datasonde	-	-	-	KHR	-	-	-	77	-	-
1985-W190	2446241_05	1985 Jun 24 13:07:59	Rocketsonde	-	-	Datasonde	-	-	-	PRIM	-	-	-	64	-	-
1985-W191	2446241_05	1985 Jun 24 13:07:59	Rocketsonde	-	-	Datasonde	-	-	-	SHEM	-	-	-	52	-	-
1985-W192	2446241_05	1985 Jun 24 13:08:59	Rocketsonde	-	-	Datasonde	-	-	-	AIT	-	-	-	68	-	-
1985-W193	2446241_05	1985 Jun 24 13:11:59	Rocketsonde	-	-	AI/DMP-9?	-	-	-	PH	-	-	-	68	-	-
1985-W194	2446241_07	1985 Jun 24 13:35:59	Rocketsonde	-	-	Datasonde	-	-	-	CCA	LO47	-	-	85	-	-
1985-W195	2446241_09	1985 Jun 24 14:06:00	Rocketsonde	-	-	Datasonde	-	-	-	KAU	-	-	-	66	-	-
1985-W196	2446241_09	1985 Jun 24 14:12:00	Rocketsonde	-	-	Datasonde	-	-	-	CCA	LO47	-	-	58	-	-
1985-W197	2446241_09	1985 Jun 24 14:12:00	Rocketsonde	-	-	Datasonde	-	-	-	CCA	LO47	-	-	71	-	-

Launch

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Mission	FlightCode	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee_Km	Range_Km	Dest
1985-W196	2446241.11	1985 Jun 24 14:45:00	Rocketsonde	-	-	Datasonde	-	-	-	SHEM	-	-	-	50	-	-
1985-W197	2446241.17	1985 Jun 24 15:59:59	Rocketsonde	-	-	Datasonde	-	-	-	PRIM	-	-	-	58	-	-
1985-W199	2446250.15	1985 Jul 3 15:30:00	Rocketsonde	-	-	Datasonde	-	-	-	PRIM	-	-	-	56	-	-
1985-W202	2446255.19	1985 Jul 8 16:30:00	Rocketsonde	-	-	Datasonde	-	-	-	PRIM	-	-	-	61	-	-
1985-W203	2446256.62	1985 Jul 10 02:58:00	Rocketsonde	-	-	Datasonde	-	-	-	KHR	-	-	-	74	-	-
1985-W205	2446257.34	1985 Jul 10 20:03:00	Rocketsonde	-	-	Datasonde	-	-	-	SHEM	-	-	-	69	-	-
1985-W207	2446258.10	1985 Jul 11 14:30:00	Rocketsonde	-	-	Datasonde	-	-	-	CCM	LO47	-	-	69	-	-
1985-W322	2446259.35	1985 Jul 12 20:30:00	Rocketsonde	-	-	Datasonde	-	-	-	KAU	-	-	-	94	-	-
1985-W208	2446263.31	1985 Jul 16 19:30:00	Rocketsonde	-	-	Datasonde	-	-	-	PRIM	-	-	-	56	-	-
1985-W211	2446273.10	1985 Jul 24 19:30:00	Rocketsonde	-	-	Datasonde	-	-	-	CCM	LO47	-	-	53	-	-
1985-W212	2446276.39	1985 Jul 29 21:23:59	Rocketsonde	-	-	Datasonde	-	-	-	PH	-	-	-	60	-	-
1985-W213	2446276.39	1985 Jul 29 21:23:59	Rocketsonde	-	-	Datasonde	-	-	-	KAU	-	-	-	63	-	-
1985-W214	2446276.41	1985 Jul 29 21:52:00	Rocketsonde	-	-	Datasonde	-	-	-	CCM	LO47	-	-	96	-	-
1985-W45	2446276.46	1985 Jul 29 23:00:00	Rocketsonde	-	-	Datasonde	-	-	-	CCM	LO47	-	-	71	-	-
1985-W215	2446276.50	1985 Jul 30 00:00:00	Rocketsonde	-	-	Datasonde	-	-	-	PRIM	-	-	-	63	-	-
1985-W217	2446277.21	1985 Jul 30 17:00:00	Rocketsonde	-	-	Datasonde	-	-	-	KAU	-	-	-	89	-	-
1985-W68	2446312.05	1985 Sep 3 13:14:59	Rocketsonde	-	-	Datasonde	-	-	-	CCM	LO47	-	-	84	-	-
1985-W69	2446312.06	1985 Sep 3 13:21:59	Rocketsonde	-	-	Datasonde	-	-	-	CCM	-	-	-	64	-	-
1985-W228	2446312.06	1985 Sep 3 13:24:59	Rocketsonde	-	-	Datasonde	-	-	-	PH	-	-	-	59	-	-
1985-W229	2446312.07	1985 Sep 3 13:56:59	Rocketsonde	-	-	Datasonde	-	-	-	CCM	-	-	-	55	-	-
1985-W230	2446312.08	1985 Sep 3 13:54:59	Rocketsonde	-	-	Datasonde	-	-	-	AUT	-	-	-	69	-	-
1985-W231	2446312.10	1985 Sep 3 14:18:00	Rocketsonde	-	-	Datasonde	-	-	-	CCM	LO47	-	-	66	-	-
1985-W233	2446313.08	1985 Sep 4 13:54:59	Rocketsonde	-	-	Datasonde	-	-	-	KHR	-	-	-	56	-	-
1985-W235	2446313.31	1985 Sep 4 19:50:00	Rocketsonde	-	-	Datasonde	-	-	-	PRIM	-	-	-	68	-	-
1985-W241	2446321.00	1985 Sep 12 11:55:00	Rocketsonde	-	-	Datasonde	-	-	-	PRIM	-	-	-	68	-	-
1985-W242	2446322.00	1985 Sep 13 12:06:00	Rocketsonde	-	-	Datasonde	-	-	-	KHR	-	-	-	72	-	-
1985-W243	2446322.21	1985 Sep 13 17:06:00	Rocketsonde	-	-	Datasonde	-	-	-	PH	-	-	-	61	-	-
1985-W244	2446322.33	1985 Sep 13 19:57:59	Rocketsonde	-	-	Datasonde	-	-	-	PH	-	-	-	70	-	-
1985-W245	2446322.44	1985 Sep 13 22:38:59	Rocketsonde	-	-	Datasonde	-	-	-	PH	-	-	-	47	-	-
1985-W246	2446327.31	1985 Sep 16 19:30:00	Rocketsonde	-	-	Datasonde	-	-	-	SHEM	-	-	-	58	-	-
1985-W253	2446332.34	1985 Sep 23 20:15:59	Rocketsonde	-	-	Datasonde	-	-	-	KHR	-	-	-	67	-	-
1985-W254	2446334.21	1985 Sep 25 17:00:00	Rocketsonde	-	-	Datasonde	-	-	-	CCM	LO47	-	-	57	-	-
1985-W255	2446334.35	1985 Sep 25 20:30:00	Rocketsonde	-	-	Datasonde	-	-	-	SHEM	-	-	-	82	-	-
1985-W260	2446340.21	1985 Oct 1 17:00:00	Rocketsonde	-	-	Datasonde	-	-	-	CCM	LO47	-	-	65	-	-
1985-W189	2446342.18	1985 Oct 3 16:15:59	Rocketsonde	-	-	Datasonde	-	-	-	CCM	LO47	-	-	65	-	-
1985-W261	2446342.22	1985 Oct 3 17:15:59	Rocketsonde	-	-	Datasonde	-	-	-	CCM	LO47	-	-	90	-	-
1985-W262	2446346.36	1985 Oct 9 09:00:59	Rocketsonde	-	-	Datasonde	-	-	-	SHT	-	-	-	80	-	-
1985-W267	2446356.21	1985 Oct 9 02:25:59	Rocketsonde	-	-	Datasonde	-	-	-	SHT	-	-	-	80	-	-
1985-W191	2446347.64	1985 Oct 9 08:55:59	Rocketsonde	-	-	Datasonde	-	-	-	PRIM	-	-	-	60	-	-
1985-W193	2446347.67	1985 Oct 9 08:55:59	Rocketsonde	-	-	Datasonde	-	-	-	PRIM	-	-	-	60	-	-
1985-W261	2446349.29	1985 Oct 9 04:35:59	Rocketsonde	-	-	Datasonde	-	-	-	PRIM	-	-	-	60	-	-
1985-W262	2446349.36	1985 Oct 9 04:35:59	Rocketsonde	-	-	Datasonde	-	-	-	PRIM	-	-	-	60	-	-
1985-W263	2446350.36	1985 Oct 9 17:00:00	Rocketsonde	-	-	Datasonde	-	-	-	PRIM	-	-	-	60	-	-
1985-W264	2446356.21	1985 Oct 11 21:08:00	Rocketsonde	-	-	Datasonde	-	-	-	KHR	-	-	-	74	-	-
1985-W267	2446356.32	1985 Oct 17 19:46:59	Rocketsonde	-	-	Datasonde	-	-	-	CCM	-	-	-	68	-	-
1985-W271	2446356.35	1985 Oct 25 21:11:59	Rocketsonde	-	-	Datasonde	-	-	-	CCM	-	-	-	68	-	-
1985-W272	2446356.35	1985 Oct 25 21:11:59	Rocketsonde	-	-	Datasonde	-	-	-	CCM	-	-	-	68	-	-
1985-W273	2446356.35	1985 Oct 25 21:11:59	Rocketsonde	-	-	Datasonde	-	-	-	CCM	-	-	-	68	-	-
1985-W274	2446356.35	1985 Oct 25 21:11:59	Rocketsonde	-	-	Datasonde	-	-	-	CCM	-	-	-	68	-	-
1985-W275	2446356.35	1985 Oct 25 21:11:59	Rocketsonde	-	-	Datasonde	-	-	-	CCM	-	-	-	68	-	-
1985-W276	2446356.21	1985 Oct 30 17:01:00	Rocketsonde	-	-	Datasonde	-	-	-	CCM	LO47	-	-	74	-	-
1985-W279	2446356.21	1985 Oct 30 19:22:00	Rocketsonde	-	-	Datasonde	-	-	-	CCM	LO47	-	-	66	-	-
1985-W196	2446356.25	1985 Oct 30 19:22:00	Rocketsonde	-	-	Datasonde	-	-	-	CCM	LO47	-	-	66	-	-
1985-W281	2446356.25	1985 Oct 30 19:22:00	Rocketsonde	-	-	Datasonde	-	-	-	CCM	LO47	-	-	66	-	-
1985-W283	2446356.25	1985 Oct 30 19:22:00	Rocketsonde	-	-	Datasonde	-	-	-	CCM	LO47	-	-	66	-	-
1985-W284	2446356.25	1985 Oct 30 19:22:00	Rocketsonde	-	-	Datasonde	-	-	-	CCM	LO47	-	-	66	-	-
1985-W285	2446356.25	1985 Oct 30 19:22:00	Rocketsonde	-	-	Datasonde	-	-	-	CCM	LO47	-	-	66	-	-
1985-W286	2446356.25	1985 Oct 30 19:22:00	Rocketsonde	-	-	Datasonde	-	-	-	CCM	LO47	-	-	66	-	-
1985-W287	2446356.25	1985 Oct 30 19:22:00	Rocketsonde	-	-	Datasonde	-	-	-	CCM	LO47	-	-	66	-	-
1985-W288	2446356.25	1985 Oct 30 19:22:00	Rocketsonde	-	-	Datasonde	-	-	-	CCM	LO47	-	-	66	-	-
1985-W289	2446356.25	1985 Oct 30 19:22:00	Rocketsonde	-	-	Datasonde	-	-	-	CCM	LO47	-	-	66	-	-
1985-W111	2446375.34	1985 Nov 6 17:44:00	Rocketsonde	-	-	Datasonde	-	-	-	AUT	-	-	-	73	-	-
1985-W290	2446375.34	1985 Nov 6 17:44:00	Rocketsonde	-	-	Datasonde	-	-	-	KAU	-	-	-	69	-	-
1985-W291	2446375.34	1985 Nov 6 17:44:00	Rocketsonde	-	-	Datasonde	-	-	-	KHR	-	-	-	88	-	-
1985-W292	2446375.34	1985 Nov 6 17:44:00	Rocketsonde	-	-	Datasonde	-	-	-	KHR	-	-	-	88	-	-
1985-W293	2446375.34	1985 Nov 6 17:44:00	Rocketsonde	-	-	Datasonde	-	-	-	KHR	-	-	-	88	-	-
1985-W113	2446375.38	1985 Nov 6 18:40:00	Rocketsonde	-	-	Datasonde	-	-	-	CCM	LO47	-	-	73	-	-
1985-W114	2446375.38	1985 Nov 6 18:40:00	Rocketsonde	-	-	Datasonde	-	-	-	CCM	LO47	-	-	69	-	-
1985-W115	2446375.38	1985 Nov 6 18:40:00	Rocketsonde	-	-	Datasonde	-	-	-	CCM	LO47	-	-	69	-	-
1985-W116	2446375.38	1985 Nov 6 18:40:00	Rocketsonde	-	-	Datasonde	-	-	-	CCM	LO47	-	-	69	-	-
1985-W117	2446375.38	1985 Nov 6 18:40:00	Rocketsonde	-	-	Datasonde	-	-	-	CCM	LO47	-	-	69	-	-
1985-W118	2446375.38	1985 Nov 6 18:40:00	Rocketsonde	-	-	Datasonde	-	-	-	CCM	LO47	-	-	69	-	-
1985-W119	2446375.38	1985 Nov 6 18:40:00	Rocketsonde	-	-	Datasonde	-	-	-	CCM	LO47	-	-	69	-	-
1985-W120	2446375.38	1985 Nov 6 18:40:00	Rocketsonde	-	-	Datasonde	-	-	-	CCM	LO47	-	-	69	-	-
1985-W121	2446375.38	1985 Nov 6 18:40:00	Rocketsonde	-	-	Datasonde	-	-	-	CCM	LO47	-	-	69	-	-
1985-W122	2446375.38	1985 Nov 6 18:40:00	Rocketsonde	-	-	Datasonde	-	-	-	CCM	LO47	-	-	69	-	-
1985-W123	2446375.38	1985 Nov 6 18:40:00	Rocketsonde	-	-	Datasonde	-	-	-	CCM	LO47	-	-	69	-	-
1985-W124	2446375.38	1985 Nov 6 18:40:00	Rocketsonde	-	-	Datasonde	-	-	-	CCM	LO47	-	-	69	-	-
1985-W125	2446375.38	1985 Nov 6 18:40:00	Rocketsonde	-	-	Datasonde	-	-	-	CCM	LO47	-	-	69	-	-
1985-W126	2446375.38	1985 Nov 6 18:40:00	Rocketsonde	-	-	Datasonde	-	-	-	CCM	LO47	-	-	69	-	-
1985-W127	2446375.38	1985 Nov 6 18:40:00	Rocketsonde	-	-	Datasonde	-	-	-	CCM	LO47	-	-	69	-	-
1985-W128	2446375.38	1985 Nov 6 18:40:00	Rocketsonde	-	-	Datasonde	-	-	-	CCM	LO47	-	-	69	-	-
1985-W129	2446375.38	1985 Nov 6 18:40:00	Rocketsonde	-	-	Datasonde	-	-	-	CCM	LO47	-	-	69	-	-
1985-W130	2446375.38	1985 Nov 6 18:40:00	Rocketsonde	-	-	Datasonde	-	-	-	CCM	LO47	-	-	69	-	-
1985-W131	2446375.38	1985 Nov 6 18:40:00	Rocketsonde	-	-	Datasonde	-	-	-	CCM	LO47	-	-	69	-	-
1985-W132	2446375.38	1985 Nov 6 18:40:00	Rocketsonde	-	-	Datasonde	-	-	-	CCM	LO47	-	-	69	-	-
1985-W133	2446375.38	1985 Nov 6 18:40:00	Rocketsonde	-	-	Datasonde	-	-	-	CCM	LO47	-	-	69	-	-
1985-W134	2446375.38	1985 Nov 6 18:40:00	Rocketsonde	-	-	Datasonde	-	-	-	CCM	LO47	-	-	69	-	-
1985-W135	2446375.38	1985 Nov 6 18:40:00	Rocketsonde	-	-	Datasonde	-	-	-	CCM	LO47	-	-	69	-	-
1985-W136	2446375.38	1985 Nov 6 18:40:00	Rocketsonde	-	-	Datasonde	-	-	-	CCM	LO47	-	-	69	-	-
1985-W137	2446375.38	1985 Nov 6 18:40:00	Rocketsonde	-	-	Datasonde	-	-	-	CCM	LO47	-	-	69		

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Mission	FlightCode	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee_Km	Range_Km	Dest
1985-W345	2446423_30	1985 Dec 23 19:14:59	Rocketsonde	-	-	Datasonde	-	-	-	WI	-	-	-	51	-	-
1986-A01	2446431_92	1986 Jan 1 09:50:59	Rocketsonde	-	-	Datasonde	-	-	-	SHEM	-	-	-	44	-	-
1986-A01	2446431_92	1986 Jan 3 16:34:59	Rocketsonde	-	-	Datasonde	-	-	-	CCA	LO47	-	-	69	-	-
1986-A01	2446431_92	1986 Jan 6 15:30:00	Rocketsonde	-	-	Datasonde	-	-	-	CCA	LO47	-	-	58	-	-
1986-A02	2446439_38	1986 Jan 8 21:00:00	Rocketsonde	-	-	Datasonde	-	-	-	SHEM	-	-	-	40	-	-
1986-A06	2446440_12	1986 Jan 9 15:00:00	Rocketsonde	-	-	Datasonde	-	-	-	CCA	LO47	-	-	65	-	-
1986-A07	2446440_13	1986 Jan 9 15:11:59	Rocketsonde	-	-	Datasonde	-	-	-	WI	-	-	-	51	-	-
1986-A08	2446443_02	1986 Jan 12 12:33:00	Rocketsonde	-	-	Datasonde	-	-	-	KAU	-	-	-	64	-	-
1986-A09	2446443_03	1986 Jan 12 12:45:59	Rocketsonde	-	-	Datasonde	-	-	-	PH	-	-	-	50	-	-
1986-A10	2446443_06	1986 Jan 12 13:24:59	Rocketsonde	-	-	Datasonde	-	-	-	CCA	LO47	-	-	72	-	-
1986-A11	2446445_47	1986 Jan 14 23:10:00	Rocketsonde	-	-	Datasonde	-	-	-	WI	-	-	-	53	-	-
1986-A14	2446449_08	1986 Jan 18 13:57:59	Rocketsonde	-	-	Datasonde	-	-	-	AUT	-	-	-	61	-	-
1986-A15	2446449_08	1986 Jan 18 13:57:59	Rocketsonde	-	-	Datasonde	-	-	-	CCA	LO47	-	-	65	-	-
1986-A16	2446449_08	1986 Jan 18 14:00:00	Rocketsonde	-	-	Datasonde	-	-	-	KAU	-	-	-	64	-	-
1986-A18	2446453_07	1986 Jan 22 13:44:59	Rocketsonde	-	-	Datasonde	-	-	-	ASC	-	-	-	60	-	-
1986-A03	2446455_13	1986 Jan 22 15:09:00	Rocketsonde	-	-	Datasonde	-	-	-	WI	-	-	-	47	-	-
1986-A19	2446455_17	1986 Jan 24 15:59:59	Rocketsonde	-	-	Datasonde	-	-	-	CCA	LO47	-	-	71	-	-
1986-A20	2446458_30	1986 Jan 27 19:14:59	Rocketsonde	-	-	Datasonde	-	-	-	CCA	LO47	-	-	74	-	-
1986-A21	2446459_19	1986 Jan 28 16:40:00	Rocketsonde	-	-	Datasonde	-	-	-	PH	-	-	-	64	-	-
1986-A22	2446460_30	1986 Jan 29 19:04:59	Rocketsonde	-	-	Datasonde	-	-	-	WI	-	-	-	50	-	-
1986-A24	2446466_46	1986 Feb 4 23:04:59	Rocketsonde	-	-	Datasonde	-	-	-	MI	-	-	-	52	-	-
1986-A28	2446469_30	1986 Feb 7 19:10:59	Rocketsonde	-	-	Datasonde	-	-	-	PH	-	-	-	71	-	-
1986-A29	2446469_31	1986 Feb 7 19:25:59	Rocketsonde	-	-	Datasonde	-	-	-	WI	-	-	-	53	-	-
1986-A32	2446474_38	1986 Feb 12 21:10:00	Rocketsonde	-	-	Datasonde	-	-	-	SHEM	-	-	-	51	-	-
1986-A33	2446474_47	1986 Feb 12 21:10:00	Rocketsonde	-	-	Datasonde	-	-	-	WI	-	-	-	52	-	-
1986-A39	2446482_07	1986 Feb 20 13:44:59	Rocketsonde	-	-	Datasonde	-	-	-	ASC	-	-	-	59	-	-
1986-A40	2446482_14	1986 Feb 20 15:14:59	Rocketsonde	-	-	Datasonde	-	-	-	CCA	LO47	-	-	65	-	-
1986-A44	2446482_60	1986 Feb 21 02:20:00	Rocketsonde	-	-	Datasonde	-	-	-	KHR	-	-	-	74	-	-
1986-A45	2446483_18	1986 Feb 21 16:14:59	Rocketsonde	-	-	Datasonde	-	-	-	CCA	LO47	-	-	94	-	-
1986-A46	2446488_30	1986 Feb 26 19:04:59	Rocketsonde	-	-	Datasonde	-	-	-	WI	-	-	-	55	-	-
1986-A45	2446488_30	1986 Feb 26 19:04:59	Rocketsonde	-	-	Datasonde	-	-	-	SHEM	-	-	-	54	-	-
1986-A52	2446495_35	1986 Mar 5 20:30:00	Rocketsonde	-	-	Datasonde	-	-	-	PH	-	-	-	49	-	-
1986-A04	2446497_40	1986 Mar 7 21:43:00	Rocketsonde	-	-	Datasonde	-	-	-	PH	-	-	-	63	-	-
1986-A54	2446497_44	1986 Mar 7 22:30:00	Rocketsonde	-	-	Datasonde	-	-	-	PH	-	-	-	74	-	-
1986-A55	2446500_56	1986 Mar 11 01:30:00	Rocketsonde	-	-	Datasonde	-	-	-	WI	-	-	-	50	-	-
1986-A57	2446503_47	1986 Mar 13 23:15:00	Rocketsonde	-	-	Datasonde	-	-	-	PH	-	-	-	72	-	-
1986-A60	2446507_53	1986 Mar 18 07:58:59	Rocketsonde	-	-	Datasonde	-	-	-	PH	-	-	-	71	-	-
1986-A61	2446507_58	1986 Mar 18 09:11:00	Rocketsonde	-	-	Datasonde	-	-	-	WI	-	-	-	50	-	-
1986-A62	2446507_52	1986 Mar 18 09:59:59	Rocketsonde	-	-	Datasonde	-	-	-	KHR	-	-	-	74	-	-
1986-A05	2446509_38	1986 Mar 19 21:00:00	Rocketsonde	-	-	Datasonde	-	-	-	KHR	-	-	-	55	-	-
1986-A06	2446516_10	1986 Mar 26 14:30:00	Rocketsonde	-	-	Datasonde	-	-	-	SHEM	-	-	-	94	-	-
1986-A66	2446516_10	1986 Mar 26 14:30:00	Rocketsonde	-	-	Datasonde	-	-	-	AUT	-	-	-	69	-	-
1986-A69	2446516_16	1986 Mar 26 15:30:00	Rocketsonde	-	-	Datasonde	-	-	-	ASC	LO47	-	-	63	-	-
1986-A70	2446516_15	1986 Mar 26 15:30:00	Rocketsonde	-	-	Datasonde	-	-	-	CCA	-	-	-	61	-	-
1986-A71	2446516_29	1986 Mar 26 18:53:00	Rocketsonde	-	-	Datasonde	-	-	-	VCA	-	-	-	49	-	-
1986-A76	2446542_19	1986 Apr 21 16:34:59	Rocketsonde	-	-	Datasonde	-	-	-	CCA	LO47	-	-	69	-	-
1986-A78	2446544_12	1986 Apr 23 15:46:00	Rocketsonde	-	-	Datasonde	-	-	-	ASC	-	-	-	62	-	-
1986-A81	2446545_16	1986 Apr 24 15:35:00	Rocketsonde	-	-	Datasonde	-	-	-	ASC	-	-	-	66	-	-
1986-A82	2446545_52	1986 Apr 25 09:27:59	Rocketsonde	-	-	Datasonde	-	-	-	KHR	-	-	-	59	-	-
1986-A84	2446548_57	1986 Apr 28 01:19:00	Rocketsonde	-	-	Datasonde	-	-	-	PH	-	-	-	72	-	-
1986-A85	2446548_58	1986 Apr 28 11:35:00	Rocketsonde	-	-	Datasonde	-	-	-	PH	-	-	-	66	-	-
1986-A86	2446548_58	1986 Apr 28 14:30:00	Rocketsonde	-	-	Datasonde	-	-	-	KHR	-	-	-	64	-	-
1986-A88	2446551_39	1986 Apr 28 14:30:00	Rocketsonde	-	-	Datasonde	-	-	-	CCA	LO47	-	-	62	-	-
1986-A89	2446551_39	1986 Apr 28 18:50:59	Rocketsonde	-	-	Datasonde	-	-	-	CCA	-	-	-	62	-	-
1986-A92	2446560_20	1986 May 9 19:04:59	Rocketsonde	-	-	Datasonde	-	-	-	PREM	-	-	-	58	-	-
1986-A95	2446564_09	1986 May 13 14:03:00	Rocketsonde	-	-	Datasonde	-	-	-	ASC	-	-	-	68	-	-
1986-A96	2446564_29	1986 May 13 18:59:59	Rocketsonde	-	-	Datasonde	-	-	-	ASC	-	-	-	68	-	-
1986-A101	2446572_29	1986 May 17 18:59:59	Rocketsonde	-	-	Datasonde	-	-	-	PREM	-	-	-	63	-	-
1986-A102	2446572_38	1986 May 22 21:02:59	Rocketsonde	-	-	Datasonde	-	-	-	PREM	-	-	-	64	-	-
1986-A105	2446580_29	1986 May 25 19:02:59	Rocketsonde	-	-	Datasonde	-	-	-	PREM	-	-	-	69	-	-
1986-A107	2446590_38	1986 Jun 16 21:00:00	Rocketsonde	-	-	Datasonde	-	-	-	KHR	-	-	-	56	-	-
1986-A108	2446590_38	1986 Jun 17 21:00:00	Rocketsonde	-	-	Datasonde	-	-	-	KHR	-	-	-	72	-	-
1986-A109	2446590_41	1986 Jun 17 21:09:59	Rocketsonde	-	-	Datasonde	-	-	-	KHR	-	-	-	71	-	-
1986-A110	2446590_41	1986 Jun 18 19:19:59	Rocketsonde	-	-	Datasonde	-	-	-	KHR	-	-	-	74	-	-
1986-A111	2446590_38	1986 Jun 18 19:19:59	Rocketsonde	-	-	Datasonde	-	-	-	PREM	-	-	-	61	-	-
1986-A112	2446602_38	1986 Jun 20 21:00:00	Rocketsonde	-	-	Datasonde	-	-	-	KHR	-	-	-	67	-	-
1986-A113	2446605_08	1986 Jun 23 14:00:00	Rocketsonde	-	-	Datasonde	-	-	-	CCA	LO47	-	-	70	-	-
1986-A115	2446608_24	1986 Jun 24 17:40:00	Rocketsonde	-	-	Datasonde	-	-	-	CCA	LO47	-	-	66	-	-
1986-A116	2446609_21	1986 Jun 26 18:00:00	Rocketsonde	-	-	Datasonde	-	-	-	CCA	-	-	-	66	-	-
1986-A121	2446620_43	1986 Jun 27 17:00:00	Rocketsonde	-	-	Datasonde	-	-	-	PM	-	-	-	64	-	-
1986-A122	2446622_43	1986 Jul 10 22:15:59	Rocketsonde	-	-	Datasonde	-	-	-	PM	-	-	-	61	-	-
1986-A123	2446623_43	1986 Jul 11 22:13:59	Rocketsonde	-	-	Datasonde	-	-	-	KAU	-	-	-	65	-	-
1986-A125	2446629_46	1986 Jul 11 22:41:59	Rocketsonde	-	-	Datasonde	-	-	-	KAU	-	-	-	63	-	-
1986-A126	2446629_46	1986 Jul 12 23:02:00	Rocketsonde	-	-	Datasonde	-	-	-	PM	-	-	-	69	-	-
1986-A128	2446634_41	1986 Jul 22 21:51:00	Rocketsonde	-	-	Datasonde	-	-	-	KAU	-	-	-	56	-	-
1986-A129	2446636_50	1986 Jul 22 21:51:00	Rocketsonde	-	-	Datasonde	-	-	-	PM	-	-	-	70	-	-
1986-A130	2446637_70	1986 Jul 26 03:59:59	Rocketsonde	-	-	Datasonde	-	-	-	WI	-	-	-	65	-	-
1986-A131	2446640_43	1986 Jul 26 04:42:59	Rocketsonde	-	-	Datasonde	-	-	-	CCA	LO47	-	-	57	-	-
1986-A132	2446640_43	1986 Jul 28 22:12:59	Rocketsonde	-	-	Datasonde	-	-	-	KAU	-	-	-	64	-	-
1986-A133	2446644_65	1986 Jul 28 22:42:59	Rocketsonde	-	-	Datasonde	-	-	-	KAU	-	-	-	64	-	-
1986-A134	2446644_67	1986 Aug 2 03:30:00	Rocketsonde	-	-	Datasonde	-	-	-	AUT	-	-	-	68	-	-
1986-A135	2446648_44	1986 Aug 2 03:59:59	Rocketsonde	-	-	Datasonde	-	-	-	CCA	-	-	-	64	-	-
1986-A138	2446656_23	1986 Aug 5 22:27:59	Rocketsonde	-	-	Datasonde	-	-	-	CCA	LO47	-	-	70	-	-
1986-A139	2446658_30	1986 Aug 13 17:34:00	Rocketsonde	-	-	Datasonde	-	-	-	PM	-	-	-	65	-	-
1986-A141	2446664_25	1986 Aug 15 19:09:59	Rocketsonde	-	-	Datasonde	-	-	-	KHR	-	-	-	59	-	-
1986-A142	2446664_25	1986 Aug 21 18:01:59	Rocketsonde	-	-	Datasonde	-	-	-	PM	-	-	-	72	-	-
1986-A143	2446664_25	1986 Aug 22 10:44:59	Rocketsonde	-	-	Datasonde	-	-	-	PM	-	-	-	69	-	-
1986-A144	2446665_17	1986 Aug 22 16:10:59	Rocketsonde	-	-	Datasonde	-	-	-	PM	-	-	-	53	-	-

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Mission	FlightCode	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee_Km	Range_Km	Dest
1986-W145	2446866.27	1986 Aug 23 1825:59	Rocketsonde	-	-	Datasonde	-	-	-	PH	-	-	-	63	-	-
1986-W146	2446866.34	1986 Aug 23 2011:00	Rocketsonde	-	-	Datasonde	-	-	-	KAU	-	-	-	65	-	-
1986-W147	2446866.42	1986 Aug 25 2206:00	Rocketsonde	-	-	Datasonde	-	-	-	PH	-	-	-	64	-	-
1986-W149	2446871.09	1986 Aug 28 1404:59	Rocketsonde	-	-	Datasonde	-	-	-	ASC	-	-	-	60	-	-
1986-W150	2446874.30	1986 Aug 31 1914:59	Rocketsonde	-	-	Datasonde	-	-	-	AI/DMP-9	-	-	-	69	-	-
1986-W151	2446874.39	1986 Aug 31 2114:59	Rocketsonde	-	-	Datasonde	-	-	-	ASC	-	-	-	62	-	-
1986-W152	2446878.21	1986 Sep 4 1700:00	Rocketsonde	-	-	Datasonde	-	-	-	LO47	-	-	-	68	-	-
1986-W155	2446886.22	1986 Sep 12 1710:00	Rocketsonde	-	-	Datasonde	-	-	-	PH	-	-	-	65	-	-
1986-W156	2446886.44	1986 Sep 12 2230:59	Rocketsonde	-	-	Datasonde	-	-	-	KHR	-	-	-	69	-	-
1986-W158	2446892.08	1986 Sep 18 1400:00	Rocketsonde	-	-	Datasonde	-	-	-	PH	-	-	-	71	-	-
1986-W160	2446893.57	1986 Sep 20 0854:00	Rocketsonde	-	-	Datasonde	-	-	-	PH	-	-	-	68	-	-
1986-W161	2446893.95	1986 Sep 20 1043:59	Rocketsonde	-	-	Datasonde	-	-	-	PH	-	-	-	69	-	-
1986-W164	2446896.43	1986 Sep 22 2223:59	Rocketsonde	-	-	Datasonde	-	-	-	KAU	-	-	-	63	-	-
1986-W165	2446896.44	1986 Sep 22 2230:00	Rocketsonde	-	-	Datasonde	-	-	-	PH	-	-	-	73	-	-
1986-W168	2446897.86	1986 Sep 24 0945:00	Rocketsonde	-	-	Datasonde	-	-	-	ASC	-	-	-	67	-	-
1986-W169	2446898.06	1986 Sep 24 1330:00	Rocketsonde	-	-	Datasonde	-	-	-	CCA	-	-	-	63	-	-
1986-W171	2446899.09	1986 Sep 25 1415:00	Rocketsonde	-	-	Datasonde	-	-	-	AIT	-	-	-	66	-	-
1986-W173	2446703.51	1986 Sep 30 0729:00	Rocketsonde	-	-	Datasonde	-	-	-	PH	-	-	-	57	-	-
1986-W174	2446703.51	1986 Sep 30 0951:00	Rocketsonde	-	-	Datasonde	-	-	-	PH	-	-	-	67	-	-
1986-W175	2446703.96	1986 Sep 30 1057:59	Rocketsonde	-	-	Datasonde	-	-	-	PH	-	-	-	67	-	-
1986-W176	2446704.02	1986 Sep 30 1233:00	Rocketsonde	-	-	Datasonde	-	-	-	PH	-	-	-	74	-	-
1986-W177	2446704.19	1986 Sep 30 1614:59	Rocketsonde	-	-	Datasonde	-	-	-	PH	-	-	-	74	-	-
1986-W178	2446704.27	1986 Sep 30 1833:00	Rocketsonde	-	-	Datasonde	-	-	-	ASC	-	-	-	94	-	-
1986-W179	2446705.29	1986 Oct 1 1859:59	Rocketsonde	-	-	Datasonde	-	-	-	AIT	-	-	-	69	-	-
1986-W180	2446712.03	1986 Oct 3 1641:00	Rocketsonde	-	-	Datasonde	-	-	-	AIT	-	-	-	52	-	-
1986-W181	2446713.15	1986 Oct 9 1530:00	Rocketsonde	-	-	Datasonde	-	-	-	ASC	-	-	-	70	-	-
1986-W182	2446713.43	1986 Oct 9 2213:59	Rocketsonde	-	-	Datasonde	-	-	-	AIT	-	-	-	71	-	-
1986-W183	2446714.25	1986 Oct 10 1804:59	Rocketsonde	-	-	Datasonde	-	-	-	AIT	-	-	-	63	-	-
1986-W184	2446716.20	1986 Oct 14 1643:59	Rocketsonde	-	-	Datasonde	-	-	-	CCA	-	-	-	62	-	-
1986-W185	2446718.42	1986 Oct 14 2159:59	Rocketsonde	-	-	Datasonde	-	-	-	KAU	-	-	-	69	-	-
1986-W187	2446720.14	1986 Oct 16 1514:59	Rocketsonde	-	-	Datasonde	-	-	-	ASC	-	-	-	67	-	-
1986-W188	2446721.12	1986 Oct 17 1500:00	Rocketsonde	-	-	Datasonde	-	-	-	AIT	-	-	-	68	-	-
1986-W189	2446725.19	1986 Oct 21 1640:00	Rocketsonde	-	-	Datasonde	-	-	-	CCA	-	-	-	62	-	-
1986-W190	2446725.42	1986 Oct 21 2207:59	Rocketsonde	-	-	Datasonde	-	-	-	LO47	-	-	-	68	-	-
1986-W191	2446726.08	1986 Oct 22 1349:59	Rocketsonde	-	-	Datasonde	-	-	-	CCA	-	-	-	46	-	-
1986-W192	2446726.11	1986 Oct 22 1349:59	Rocketsonde	-	-	Datasonde	-	-	-	ASC	-	-	-	46	-	-
1986-W194	2446726.29	1986 Oct 22 1900:59	Rocketsonde	-	-	Datasonde	-	-	-	AIT	-	-	-	69	-	-
1986-W195	2446732.34	1986 Oct 26 2004:59	Rocketsonde	-	-	Datasonde	-	-	-	PH	-	-	-	71	-	-
1986-W196	2446733.12	1986 Oct 28 1500:00	Rocketsonde	-	-	Datasonde	-	-	-	PH	-	-	-	68	-	-
1986-W197	2446734.05	1986 Oct 29 1506:00	Rocketsonde	-	-	Datasonde	-	-	-	CCA	-	-	-	63	-	-
1986-W198	2446740.04	1986 Nov 8 1301:59	Rocketsonde	-	-	Datasonde	-	-	-	ASC	-	-	-	69	-	-
1986-W199	2446740.11	1986 Nov 8 1451:59	Rocketsonde	-	-	Datasonde	-	-	-	ASC	-	-	-	67	-	-
1986-W200	2446741.19	1986 Nov 7 1637:59	Rocketsonde	-	-	Datasonde	-	-	-	CCA	-	-	-	69	-	-
1986-W201	2446742.29	1986 Nov 7 1659:59	Rocketsonde	-	-	Datasonde	-	-	-	CCA	-	-	-	66	-	-
1986-W203	2446742.37	1986 Nov 12 1346:00	Rocketsonde	-	-	Datasonde	-	-	-	ASC	-	-	-	62	-	-
1986-W204	2446742.70	1986 Nov 12 1436:59	Rocketsonde	-	-	Datasonde	-	-	-	CCA	-	-	-	62	-	-
1986-W205	2446748.20	1986 Nov 13 0959:59	Rocketsonde	-	-	Datasonde	-	-	-	ASC	-	-	-	47	-	-
1986-W206	2446753.52	1986 Nov 19 1430:00	Rocketsonde	-	-	Datasonde	-	-	-	AIT	-	-	-	67	-	-
1986-W207	2446753.52	1986 Nov 19 1430:00	Rocketsonde	-	-	Datasonde	-	-	-	AIT	-	-	-	67	-	-
1986-W208	2446755.24	1986 Nov 21 1507:00	Rocketsonde	-	-	Datasonde	-	-	-	CCA	-	-	-	69	-	-
1986-W209	2446755.24	1986 Nov 21 1514:59	Rocketsonde	-	-	Datasonde	-	-	-	CCA	-	-	-	60	-	-
1986-W210	2446763.05	1986 Nov 26 1317:00	Rocketsonde	-	-	Datasonde	-	-	-	AIT	-	-	-	58	-	-
1986-W211	2446766.12	1986 Dec 1 1600:00	Rocketsonde	-	-	Datasonde	-	-	-	PH	-	-	-	71	-	-
1986-W212	2446766.30	1986 Dec 1 1600:00	Rocketsonde	-	-	Datasonde	-	-	-	PH	-	-	-	71	-	-
1986-W214	2446769.12	1986 Dec 3 1457:00	Rocketsonde	-	-	Datasonde	-	-	-	ASC	-	-	-	62	-	-
1986-W215	2446769.12	1986 Dec 3 1800:00	Rocketsonde	-	-	Datasonde	-	-	-	CCA	-	-	-	63	-	-
1986-W216	2446769.42	1986 Dec 5 0954:59	Rocketsonde	-	-	Datasonde	-	-	-	CCA	-	-	-	94	-	-
1986-W217	2446770.45	1986 Dec 5 2254:59	Rocketsonde	-	-	Datasonde	-	-	-	CCA	-	-	-	94	-	-
1986-W218	2446774.41	1986 Dec 9 2153:00	Rocketsonde	-	-	Datasonde	-	-	-	KHR	-	-	-	71	-	-
1986-W219	2446777.31	1986 Dec 12 1924:59	Rocketsonde	-	-	Datasonde	-	-	-	KAU	-	-	-	70	-	-
1986-W220	2446780.05	1986 Dec 15 1307:00	Rocketsonde	-	-	Datasonde	-	-	-	ASC	-	-	-	54	-	-
1986-W221	2446781.20	1986 Dec 16 1641:59	Rocketsonde	-	-	Datasonde	-	-	-	CCA	-	-	-	64	-	-
1986-W224	2446782.17	1986 Dec 17 1607:59	Rocketsonde	-	-	Datasonde	-	-	-	NS	-	-	-	97	-	-
1986-W223	2446787.31	1986 Dec 22 1930:59	Rocketsonde	-	-	Datasonde	-	-	-	AIT	-	-	-	55	-	-
1986-W224	2446788.15	1986 Dec 22 1930:59	Rocketsonde	-	-	Datasonde	-	-	-	CCA	-	-	-	63	-	-
1986-W226	2446789.03	1986 Dec 24 1247:59	Rocketsonde	-	-	Datasonde	-	-	-	ASC	-	-	-	65	-	-
1986-W227	2446794.03	1986 Dec 29 1240:00	Rocketsonde	-	-	Datasonde	-	-	-	ASC	-	-	-	59	-	-
1987-W10	2446803.25	1987 Jan 7 1248:59	Rocketsonde	-	-	Datasonde	-	-	-	ASC	-	-	-	57	-	-
1987-W12	2446803.27	1987 Jan 7 1834:59	Rocketsonde	-	-	Datasonde	-	-	-	CCA	-	-	-	57	-	-
1987-W13	2446803.27	1987 Jan 7 1834:59	Rocketsonde	-	-	Datasonde	-	-	-	CCA	-	-	-	72	-	-
1987-W14	2446804.16	1987 Jan 8 1545:00	Rocketsonde	-	-	Datasonde	-	-	-	CCA	-	-	-	75	-	-
1987-W15	2446804.16	1987 Jan 8 1545:00	Rocketsonde	-	-	Datasonde	-	-	-	KAU	-	-	-	63	-	-
1987-W21	2446808.26	1987 Jan 12 1814:59	Rocketsonde	-	-	Datasonde	-	-	-	AIT	-	-	-	76	-	-
1987-W25	2446810.14	1987 Jan 14 1514:59	Rocketsonde	-	-	Datasonde	-	-	-	CCA	-	-	-	64	-	-
1987-W26	2446810.25	1987 Jan 14 1804:59	Rocketsonde	-	-	Datasonde	-	-	-	CCA	-	-	-	70	-	-
1987-W27	2446811.25	1987 Jan 15 1753:00	Rocketsonde	-	-	Datasonde	-	-	-	CCA	-	-	-	94	-	-
1987-W18	2446811.25	1987 Jan 15 1830:00	Rocketsonde	-	-	Datasonde	-	-	-	ASC	-	-	-	69	-	-
1987-W28	2446812.14	1987 Jan 16 1520:00	Rocketsonde	-	-	Datasonde	-	-	-	CCA	-	-	-	96	-	-
1987-W29	2446812.14	1987 Jan 16 1520:00	Rocketsonde	-	-	Datasonde	-	-	-	CCA	-	-	-	95	-	-
1987-W24	2446816.10	1987 Jan 20 1430:00	Rocketsonde	-	-	Datasonde	-	-	-	CCA	-	-	-	95	-	-
1987-W25	2446816.15	1987 Jan 20 1530:00	Rocketsonde	-	-	Datasonde	-	-	-	CCA	-	-	-	95	-	-
1987-W32	2446817.04	1987 Jan 21 1259:59	Rocketsonde	-	-	Datasonde	-	-	-	ASC	-	-	-	56	-	-
1987-W02	2446817.34	1987 Jan 21 2015:00	Rocketsonde	-	-	Datasonde	-	-	-	PH	-	-	-	46	-	-
1987-W34	2446819.05	1987 Jan 23 1312:59	Rocketsonde	-	-	Datasonde	-	-	-	AIT	-	-	-	71	-	-
1987-W35	2446823.88	1987 Jan 28 0900:00	Rocketsonde	-	-	Datasonde	-	-	-	KHR	-	-	-	74	-	-

Launch

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Mission	FlightCode	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee_Km	Range_Km	Dest
1987-W36	2446823.88	1987 Jan 28 09:04:59	Rocketsonde	-	-	Datasonde	-	-	-	PH	-	-	-	58	-	-
1987-A03	2446824.14	1987 Jan 28 15:15:59	Rocketsonde	-	-	Datasonde	-	-	-	RNR	-	-	-	43	-	-
1987-W37	2446825.02	1987 Jan 29 12:35:59	Rocketsonde	-	-	Datasonde	-	-	-	ASC	-	-	-	53	-	-
1987-W38	2446826.16	1987 Jan 30 15:47:59	Rocketsonde	-	-	Datasonde	-	-	-	CCA	LO47	-	-	59	-	-
1987-W40	2446831.04	1987 Feb 4 12:53:00	Rocketsonde	-	-	Datasonde	-	-	-	ASC	LO47	-	-	62	-	-
1987-W43	2446832.16	1987 Feb 5 15:45:59	Rocketsonde	-	-	Datasonde	-	-	-	CCA	LO47	-	-	64	-	-
1987-W44	2446838.02	1987 Feb 11 12:30:00	Rocketsonde	-	-	Datasonde	-	-	-	ASC	LO47	-	-	50	-	-
1987-W45	2446838.16	1987 Feb 11 15:45:00	Rocketsonde	-	-	Datasonde	-	-	-	CCA	LO47	-	-	61	-	-
1987-A04	2446840.21	1987 Feb 13 17:01:00	Rocketsonde	-	-	Datasonde	-	-	-	RNR	-	-	-	43	-	-
1987-W46	2446840.26	1987 Feb 13 18:10:00	Rocketsonde	-	-	Datasonde	-	-	-	RNR	-	-	-	70	-	-
1987-W48	2446845.04	1987 Feb 18 12:59:59	Rocketsonde	-	-	Datasonde	-	-	-	ASC	-	-	-	61	-	-
1987-W49	2446845.23	1987 Feb 18 17:30:00	Rocketsonde	-	-	Datasonde	-	-	-	CCA	LO47	-	-	58	-	-
1987-W50	2446850.15	1987 Feb 23 15:30:00	Rocketsonde	-	-	Datasonde	-	-	-	CCA	LO47	-	-	63	-	-
1987-W53	2446854.06	1987 Feb 27 13:21:59	Rocketsonde	-	-	Datasonde	-	-	-	ASC	-	-	-	56	-	-
1987-W54	2446854.44	1987 Feb 27 23:34:59	Rocketsonde	-	-	Datasonde	-	-	-	PH	-	-	-	53	-	-
1987-W56	2446857.34	1987 Mar 2 20:11:00	Rocketsonde	-	-	Datasonde	-	-	-	PH	-	-	-	72	-	-
1987-W60	2446859.15	1987 Mar 4 15:30:00	Rocketsonde	-	-	Datasonde	-	-	-	CCA	LO47	-	-	61	-	-
1987-W61	2446860.07	1987 Mar 5 13:37:59	Rocketsonde	-	-	Datasonde	-	-	-	ASC	-	-	-	57	-	-
1987-W66	2446866.14	1987 Mar 11 15:44:59	Rocketsonde	-	-	Datasonde	-	-	-	AIT	-	-	-	66	-	-
1987-W67	2446870.88	1987 Mar 16 09:06:00	Rocketsonde	-	-	Datasonde	-	-	-	PH	-	-	-	85	-	-
1987-W103	2446872.30	1987 Mar 17 19:07:00	Rocketsonde	-	-	Datasonde	-	-	-	CCA	LO47	-	-	62	-	-
1987-W70	2446873.38	1987 Mar 18 21:00:00	Rocketsonde	-	-	Datasonde	-	-	-	RNR	LO47	-	-	65	-	-
1987-W71	2446874.15	1987 Mar 19 15:30:00	Rocketsonde	-	-	Datasonde	-	-	-	CCA	LO47	-	-	62	-	-
1987-W73	2446876.14	1987 Mar 21 15:17:00	Rocketsonde	-	-	Datasonde	-	-	-	PH	LO47	-	-	69	-	-
1987-W74	2446876.16	1987 Mar 23 15:49:59	Rocketsonde	-	-	Datasonde	-	-	-	CCA	LO47	-	-	62	-	-
1987-W75	2446879.08	1987 Mar 24 14:00:00	Rocketsonde	-	-	Datasonde	-	-	-	ASC	LO47	-	-	60	-	-
1987-W76	2446879.23	1987 Mar 24 17:30:00	Rocketsonde	-	-	Datasonde	-	-	-	CCA	LO47	-	-	66	-	-
1987-W80	2446880.17	1987 Mar 25 16:07:00	Rocketsonde	-	-	Datasonde	-	-	-	PH	-	-	-	59	-	-
1987-W84	2446887.94	1987 Apr 2 10:55:59	Rocketsonde	-	-	Datasonde	-	-	-	RNR	-	-	-	70	-	-
1987-W85	2446887.97	1987 Apr 2 12:25:00	Rocketsonde	-	-	Datasonde	-	-	-	RNR	LO47	-	-	62	-	-
1987-W86	2446888.03	1987 Apr 2 12:45:59	Rocketsonde	-	-	Datasonde	-	-	-	CCA	LO47	-	-	96	-	-
1987-W122	2446888.10	1987 Apr 2 14:30:00	Rocketsonde	-	-	Datasonde	-	-	-	CCA	LO47	-	-	64	-	-
1987-W89	2446892.26	1987 Apr 6 18:09:00	Rocketsonde	-	-	Datasonde	-	-	-	PH	LO47	-	-	55	-	-
1987-W92	2446894.10	1987 Apr 8 14:30:00	Rocketsonde	-	-	Datasonde	-	-	-	CCA	LO47	-	-	55	-	-
1987-W93	2446895.10	1987 Apr 9 14:30:00	Rocketsonde	-	-	Datasonde	-	-	-	CCA	LO47	-	-	59	-	-
1987-W94	2446896.15	1987 Apr 9 15:34:59	Rocketsonde	-	-	Datasonde	-	-	-	ASC	LO47	-	-	75	-	-
1987-W96	2446891.85	1987 Apr 10 14:37:00	Rocketsonde	-	-	Datasonde	-	-	-	CCA	LO47	-	-	46	-	-
1987-A06	2446901.95	1987 Apr 16 10:54:59	Rocketsonde	-	-	Datasonde	-	-	-	ASC	LO47	-	-	78	-	-
1987-W98	2446902.02	1987 Apr 16 11:35:00	Rocketsonde	-	-	Datasonde	-	-	-	CCA	LO47	-	-	46	-	-
1987-W99	2446902.06	1987 Apr 16 12:30:00	Rocketsonde	-	-	Datasonde	-	-	-	AIT	LO47	-	-	57	-	-
1987-A07	2446902.08	1987 Apr 16 14:00:00	Rocketsonde	-	-	Datasonde	-	-	-	RNR	-	-	-	85	-	-
1987-W100	2446903.32	1987 Apr 16 22:02:59	Rocketsonde	-	-	Datasonde	-	-	-	KUJ	-	-	-	71	-	-
1987-W101	2446903.31	1987 Apr 17 13:19:59	Rocketsonde	-	-	Datasonde	-	-	-	PH	LO47	-	-	68	-	-
1987-W102	2446903.73	1987 Apr 18 05:36:59	Rocketsonde	-	-	Datasonde	-	-	-	CCA	LO47	-	-	64	-	-
1987-W103	2446903.73	1987 Apr 18 05:36:59	Rocketsonde	-	-	Datasonde	-	-	-	CCA	LO47	-	-	74	-	-
1987-W104	2446903.73	1987 Apr 18 05:36:59	Rocketsonde	-	-	Datasonde	-	-	-	VI	-	-	-	51	-	-
1987-W107	2446908.26	1987 Apr 22 18:15:59	Rocketsonde	-	-	Datasonde	-	-	-	PH	-	-	-	52	-	-
1987-W107	2446908.27	1987 Apr 22 18:14:59	Rocketsonde	-	-	Datasonde	-	-	-	VI	-	-	-	72	-	-
1987-W108	2446909.27	1987 Apr 22 18:14:59	Rocketsonde	-	-	Datasonde	-	-	-	CCA	LO47	-	-	75	-	-
1987-W113	2446909.24	1987 Apr 23 17:40:59	Rocketsonde	-	-	Datasonde	-	-	-	VI	-	-	-	64	-	-
1987-W113	2446909.24	1987 Apr 23 17:40:59	Rocketsonde	-	-	Datasonde	-	-	-	VI	-	-	-	73	-	-
1987-W111	2446910.25	1987 Apr 23 17:40:59	Rocketsonde	-	-	Datasonde	-	-	-	CCA	LO47	-	-	73	-	-
1987-W113	2446910.09	1987 Apr 24 14:03:59	Rocketsonde	-	-	Datasonde	-	-	-	AIT	-	-	-	58	-	-
1987-W114	2446910.09	1987 Apr 24 14:03:59	Rocketsonde	-	-	Datasonde	-	-	-	CCA	LO47	-	-	73	-	-
1987-W114	2446911.00	1987 Apr 24 14:30:00	Rocketsonde	-	-	Datasonde	-	-	-	AIT	-	-	-	58	-	-
1987-W118	2446914.08	1987 Apr 26 14:30:00	Rocketsonde	-	-	Datasonde	-	-	-	CCA	LO47	-	-	73	-	-
1987-W118	2446915.00	1987 Apr 26 14:30:00	Rocketsonde	-	-	Datasonde	-	-	-	CCA	LO47	-	-	73	-	-
1987-W119	2446916.03	1987 Apr 30 21:57:59	Rocketsonde	-	-	Datasonde	-	-	-	CCA	LO47	-	-	73	-	-
1987-W119	2446916.03	1987 Apr 30 21:57:59	Rocketsonde	-	-	Datasonde	-	-	-	CCA	LO47	-	-	73	-	-
1987-W151	2446916.03	1987 Apr 30 21:57:59	Rocketsonde	-	-	Datasonde	-	-	-	ASC	-	-	-	84	-	-
1987-W120	2446916.07	1987 Apr 30 23:15:00	Rocketsonde	-	-	Datasonde	-	-	-	ASC	-	-	-	69	-	-
1987-W121	2446920.02	1987 May 4 21:59:59	Rocketsonde	-	-	Datasonde	-	-	-	KUJ	-	-	-	70	-	-
1987-W123	2446920.04	1987 May 4 21:59:59	Rocketsonde	-	-	Datasonde	-	-	-	ASC	-	-	-	61	-	-
1987-W157	2446924.24	1987 May 8 17:33:00	Rocketsonde	-	-	Datasonde	-	-	-	VI	-	-	-	90	-	-
1987-W124	2446924.24	1987 May 8 17:33:00	Rocketsonde	-	-	Datasonde	-	-	-	VI	-	-	-	65	-	-
1987-W125	2446926.00	1987 May 10 11:54:00	Rocketsonde	-	-	Datasonde	-	-	-	CCA	LO47	-	-	71	-	-
1987-W125	2446926.04	1987 May 10 12:59:59	Rocketsonde	-	-	Datasonde	-	-	-	AIT	-	-	-	65	-	-
1987-W127	2446926.04	1987 May 10 13:36:59	Rocketsonde	-	-	Datasonde	-	-	-	CCA	LO47	-	-	74	-	-
1987-W128	2446928.00	1987 May 12 12:00:00	Rocketsonde	-	-	Datasonde	-	-	-	ASC	-	-	-	63	-	-
1987-W131	2446929.21	1987 May 13 17:00:00	Rocketsonde	-	-	Datasonde	-	-	-	CCA	LO47	-	-	73	-	-
1987-W132	2446931.30	1987 May 15 19:07:59	Rocketsonde	-	-	Datasonde	-	-	-	CCA	LO47	-	-	59	-	-
1987-W133	2446935.12	1987 May 19 14:55:00	Rocketsonde	-	-	Datasonde	-	-	-	PM	-	-	-	73	-	-
1987-W134	2446935.13	1987 May 19 15:10:00	Rocketsonde	-	-	Datasonde	-	-	-	CCA	LO47	-	-	59	-	-
1987-W137	2446936.29	1987 May 20 18:59:59	Rocketsonde	-	-	Datasonde	-	-	-	ASC	-	-	-	60	-	-
1987-W138	2446936.74	1987 May 21 05:41:00	Rocketsonde	-	-	Datasonde	-	-	-	PRIM	-	-	-	67	-	-
1987-W139	2446937.29	1987 May 21 19:03:59	Rocketsonde	-	-	Datasonde	-	-	-	CCA	LO47	-	-	72	-	-
1987-W142	2446945.04	1987 May 29 12:59:59	Rocketsonde	-	-	Datasonde	-	-	-	PM	-	-	-	87	-	-
1987-W144	2446950.01	1987 Jun 3 12:14:59	Rocketsonde	-	-	Datasonde	-	-	-	ASC	-	-	-	54	-	-
1987-W145	2446950.08	1987 Jun 3 14:00:00	Rocketsonde	-	-	Datasonde	-	-	-	ASC	-	-	-	61	-	-
1987-W147	2446950.22	1987 Jun 3 17:20:00	Rocketsonde	-	-	Datasonde	-	-	-	CCA	LO47	-	-	53	-	-
1987-W148	2446950.23	1987 Jun 3 17:30:00	Rocketsonde	-	-	Datasonde	-	-	-	CCA	LO47	-	-	51	-	-
1987-W150	2446956.03	1987 Jun 9 12:38:59	Rocketsonde	-	-	Datasonde	-	-	-	AIT	-	-	-	61	-	-
1987-W181	2446957.25	1987 Jun 10 17:37:59	Rocketsonde	-	-	Datasonde	-	-	-	CCA	LO47	-	-	57	-	-
1987-W181	2446957.25	1987 Jun 10 18:07:00	Rocketsonde	-	-	Datasonde	-	-	-	VI	-	-	-	87	-	-
1987-W154	2446957.25	1987 Jun 11 14:00:00	Rocketsonde	-	-	Datasonde	-	-	-	VI	-	-	-	74	-	-
1987-W155	2446958.08	1987 Jun 13 00:14:59	Rocketsonde	-	-	Datasonde	-	-	-	CCA	LO47	-	-	58	-	-
1987-W157	2446959.51	1987 Jun 15 13:30:00	Rocketsonde	-	-	Datasonde	-	-	-	CCA	LO47	-	-	70	-	-
1987-W159	2446962.06	1987 Jun 15 13:30:00	Rocketsonde	-	-	Datasonde	-	-	-	CCA	LO47	-	-	71	-	-
1987-W160	2446962.10	1987 Jun 15 14:30:00	Rocketsonde	-	-	Datasonde	-	-	-	CCA	LO47	-	-	69	-	-



Launch

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Mission	FlightCode	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee_Km	Range_Km	Dest
1988-423	2447194.08	1988 Feb 2 1402:00	Rocketsonde	-	-	Datasonde	-	-	-	CCA	LC47	-	-	87	-	-
1988-445	2447197.09	1988 Feb 5 1410:00	Rocketsonde	-	-	AI/DMP-9	-	-	-	ASC	-	-	-	81	-	-
1988-425	2447198.36	1988 Feb 6 2040:00	Rocketsonde	-	-	Datasonde	-	-	-	CCA	LC47	-	-	86	-	-
1988-426	2447200.44	1988 Feb 8 2230:00	Rocketsonde	-	-	AI/DMP-9?	-	-	-	CCA	LC47	-	-	88	-	-
1988-427	2447200.46	1988 Feb 8 2300:00	Rocketsonde	-	-	Datasonde	-	-	-	CCA	LC47	-	-	85	-	-
1988-429	2447204.10	1988 Feb 12 1430:00	Rocketsonde	-	-	Datasonde	-	-	-	CCA	LC47	-	-	73	-	-
1988-431	2447207.21	1988 Feb 15 1701:00	Rocketsonde	-	-	Datasonde	-	-	-	KMR	-	-	-	87	-	-
1988-439	2447216.21	1988 Feb 24 1708:00	Rocketsonde	-	-	Datasonde	-	-	-	CCA	LC47	-	-	86	-	-
1988-442	2447217.16	1988 Feb 25 1546:00	Rocketsonde	-	-	AI/DMP-9	-	-	-	ASC	-	-	-	85	-	-
1988-446	2447218.06	1988 Feb 26 1330:00	Rocketsonde	-	-	AI/DMP-9	-	-	-	ASC	-	-	-	84	-	-
1988-461	2447219.19	1988 Feb 27 1630:00	Rocketsonde	-	-	Datasonde	-	-	-	CCA	LC47	-	-	87	-	-
1988-452	2447229.10	1988 Mar 8 1430:00	Rocketsonde	-	-	Datasonde	-	-	-	ASC	-	-	-	84	-	-
1988-462	2447229.10	1988 Mar 10 1432:00	Rocketsonde	-	-	Datasonde	-	-	-	CCA	LC47	-	-	87	-	-
1988-465	2447231.11	1988 Mar 16 1500:00	Rocketsonde	-	-	Datasonde	-	-	-	MI	-	-	-	51	-	-
1988-467	2447237.12	1988 Mar 16 1500:00	Rocketsonde	-	-	Datasonde	-	-	-	CCA	LC47	-	-	51	-	-
1988-461	2447239.10	1988 Mar 18 1430:00	Rocketsonde	-	-	Datasonde	-	-	-	CCA	LC47	-	-	57	-	-
1988-463	2447242.25	1988 Mar 21 1753:00	Rocketsonde	-	-	Datasonde	-	-	-	ASC	-	-	-	57	-	-
1988-466	2447246.10	1988 Mar 25 1430:00	Rocketsonde	-	-	Datasonde	-	-	-	MI	-	-	-	72	-	-
1988-469	2447251.05	1988 Mar 30 1309:59	Rocketsonde	-	-	Datasonde	-	-	-	MI	-	-	-	73	-	-
1988-476	2447260.05	1988 Apr 8 1309:59	Rocketsonde	-	-	Datasonde	-	-	-	MI	-	-	-	96	-	-
1988-480	2447263.36	1988 Apr 11 2037:00	Rocketsonde	-	-	Datasonde	-	-	-	MI	-	-	-	71	-	-
1988-483	2447265.04	1988 Apr 13 1289:59	Rocketsonde	-	-	Datasonde	-	-	-	MI	-	-	-	96	-	-
1988-485	2447265.54	1988 Apr 14 0100:59	Rocketsonde	-	-	Datasonde	-	-	-	MI	-	-	-	96	-	-
1988-487	2447266.13	1988 Apr 14 1501:59	Rocketsonde	-	-	Datasonde	-	-	-	MI	-	-	-	87	-	-
1988-488	2447267.27	1988 Apr 15 1830:00	Rocketsonde	-	-	Datasonde	-	-	-	MI	-	-	-	85	-	-
1988-469	2447268.14	1988 Apr 16 1514:59	Rocketsonde	-	-	Datasonde	-	-	-	MI	-	-	-	48	-	-
1988-405	2447268.36	1988 Apr 16 2046:00	Rocketsonde	-	-	Datasonde	-	-	-	PH	-	-	-	56	-	-
1988-496	2447276.54	1988 Apr 26 2015:59	Rocketsonde	-	-	Datasonde	-	-	-	MI	-	-	-	73	-	-
1988-498	2447279.07	1988 Apr 27 1341:00	Rocketsonde	-	-	Datasonde	-	-	-	MI	-	-	-	73	-	-
1988-4104	2447285.05	1988 May 6 1304:59	Rocketsonde	-	-	Datasonde	-	-	-	MI	-	-	-	73	-	-
1988-4106	2447285.04	1988 May 11 1289:59	Rocketsonde	-	-	Datasonde	-	-	-	MI	-	-	-	73	-	-
1988-4109	2447306.05	1988 May 24 1309:59	Rocketsonde	-	-	Datasonde	-	-	-	MI	-	-	-	66	-	-
1988-4110	2447306.07	1988 May 24 1336:59	Rocketsonde	-	-	Datasonde	-	-	-	MI	-	-	-	66	-	-
1988-4118	2447316.16	1988 Jun 3 1946:59	Rocketsonde	-	-	Datasonde	-	-	-	PH	-	-	-	94	-	-
1988-4119	2447319.06	1988 Jun 3 1952:59	Rocketsonde	-	-	Datasonde	-	-	-	MI	-	-	-	94	-	-
1988-4120	2447320.41	1988 Jun 7 2146:59	Rocketsonde	-	-	Datasonde	-	-	-	MI	-	-	-	64	-	-
1988-4124	2447326.35	1988 Jun 16 2002:00	Rocketsonde	-	-	Datasonde	-	-	-	RMR	-	-	-	88	-	-
1988-4125	2447329.42	1988 Jun 16 2209:59	Rocketsonde	-	-	Datasonde	-	-	-	PH	-	-	-	82	-	-
1988-4127	2447330.14	1988 Jun 17 1517:00	Rocketsonde	-	-	Datasonde	-	-	-	PH	-	-	-	86	-	-
1988-4129	2447335.05	1988 Jun 22 1304:59	Rocketsonde	-	-	Datasonde	-	-	-	MI	-	-	-	94	-	-
1988-4134	2447343.26	1988 Jun 30 1921:00	Rocketsonde	-	-	Datasonde	-	-	-	MI	-	-	-	86	-	-
1988-4137	2447351.42	1988 Jul 14 2109:59	Rocketsonde	-	-	Datasonde	-	-	-	KMR	-	-	-	70	-	-
1988-4142	2447355.23	1988 Jul 11 1737:00	Rocketsonde	-	-	Datasonde	-	-	-	MI	-	-	-	68	-	-
1988-4144	2447394.04	1988 Aug 17 1209:59	Rocketsonde	-	-	Datasonde	-	-	-	MI	-	-	-	88	-	-
1988-4147	2447398.31	1988 Aug 24 1217:00	Rocketsonde	-	-	Datasonde	-	-	-	PH	-	-	-	88	-	-
1988-4149	2447398.31	1988 Aug 24 2035:00	Rocketsonde	-	-	Datasonde	-	-	-	PH	-	-	-	89	-	-
1988-4150	2447398.31	1988 Aug 25 1519:59	Rocketsonde	-	-	Datasonde	-	-	-	PH	-	-	-	84	-	-
1988-4159	2447403.01	1988 Aug 31 2004:59	Rocketsonde	-	-	Datasonde	-	-	-	MI	-	-	-	64	-	-
1988-4165	2447419.92	1988 Sep 14 1650:59	Rocketsonde	-	-	Datasonde	-	-	-	KMR	-	-	-	58	-	-
1988-4161	2447420.42	1988 Sep 15 1516:59	Rocketsonde	-	-	AI/DMP-9?	-	-	-	MI	-	-	-	58	-	-
1988-4162	2447420.42	1988 Sep 15 2136:00	Rocketsonde	-	-	Datasonde	-	-	-	KAU	-	-	-	68	-	-
1988-4165	2447426.05	1988 Sep 15 1311:59	Rocketsonde	-	-	Datasonde	-	-	-	KAU	-	-	-	68	-	-
1988-4167	2447427.04	1988 Sep 21 2229:00	Rocketsonde	-	-	Datasonde	-	-	-	MI	-	-	-	68	-	-
1988-4169	2447428.92	1988 Sep 24 1009:59	Rocketsonde	-	-	Datasonde	-	-	-	KAU	-	-	-	70	-	-
1988-4171	2447433.31	1988 Sep 24 1009:59	Rocketsonde	-	-	Datasonde	-	-	-	PH	-	-	-	67	-	-
1988-4173	2447434.01	1988 Sep 26 1930:00	Rocketsonde	-	-	AI/DMP-9?	-	-	-	MI	-	-	-	71	-	-
1988-4174	2447434.03	1988 Sep 26 1220:00	Rocketsonde	-	-	Datasonde	-	-	-	KAU	-	-	-	69	-	-
1988-4176	2447434.03	1988 Sep 29 1245:00	Rocketsonde	-	-	Datasonde	-	-	-	KAU	-	-	-	68	-	-
1988-4175	2447434.06	1988 Sep 29 1329:00	Rocketsonde	-	-	Datasonde	-	-	-	PM	-	-	-	63	-	-
1988-4176	2447434.09	1988 Sep 29 1333:59	Rocketsonde	-	-	Datasonde	-	-	-	KAU	-	-	-	84	-	-
1988-4176	2447434.11	1988 Sep 29 1415:00	Rocketsonde	-	-	AI/DMP-9?	-	-	-	KAU	-	-	-	84	-	-
1988-4177	2447436.04	1988 Sep 29 1577:59	Rocketsonde	-	-	Datasonde	-	-	-	KAU	-	-	-	69	-	-
1988-4178	2447436.04	1988 Oct 1 1457:00	Rocketsonde	-	-	AI/DMP-9	-	-	-	PM	-	-	-	69	-	-
1988-4179	2447438.04	1988 Oct 3 1300:59	Rocketsonde	-	-	AI/DMP-9	-	-	-	PM	-	-	-	62	-	-
1988-4180	2447438.21	1988 Oct 3 1329:00	Rocketsonde	-	-	AI/DMP-9	-	-	-	PM	-	-	-	71	-	-
1988-4181	2447440.01	1988 Oct 3 1708:00	Rocketsonde	-	-	Datasonde	-	-	-	PM	-	-	-	52	-	-
1988-4183	2447454.91	1988 Oct 5 1255:59	Rocketsonde	-	-	Datasonde	-	-	-	MI	-	-	-	68	-	-
1988-4186	2447463.44	1988 Oct 20 0956:00	Rocketsonde	-	-	Datasonde	-	-	-	KMR	-	-	-	69	-	-
1988-4205	2447467.49	1988 Oct 28 2237:59	Rocketsonde	-	-	AI/DMP-9?	-	-	-	KMR	-	-	-	94	-	-
1988-4206	2447469.43	1988 Nov 1 2357:00	Rocketsonde	-	-	Datasonde	-	-	-	KMR	-	-	-	69	-	-
1988-4209	2447498.11	1988 Nov 29 2218:59	Rocketsonde	-	-	AI/DMP-9?	-	-	-	KMR	-	-	-	88	-	-
1988-4275	2447498.13	1988 Dec 2 1433:00	Rocketsonde	-	-	AI/DMP-9?	-	-	-	KMR	-	-	-	84	-	-
1988-4276	2447498.15	1988 Dec 2 1503:59	Rocketsonde	-	-	AI/DMP-9	-	-	-	PM	-	-	-	84	-	-
1988-4207	2447498.18	1988 Dec 2 1613:59	Rocketsonde	-	-	AI/DMP-9	-	-	-	PM	-	-	-	85	-	-
1988-4208	2447498.21	1988 Dec 2 1657:59	Rocketsonde	-	-	Datasonde	-	-	-	PM	-	-	-	67	-	-
1988-4277	2447498.21	1988 Dec 2 1702:00	Rocketsonde	-	-	Datasonde	-	-	-	PM	-	-	-	72	-	-
1988-4278	2447500.09	1988 Dec 4 1404:59	Rocketsonde	-	-	AI/DMP-9?	-	-	-	PM	-	-	-	90	-	-
1988-4209	2447500.22	1988 Dec 4 1715:59	Rocketsonde	-	-	AI/DMP-9	-	-	-	PM	-	-	-	93	-	-
1988-4210	2447500.27	1988 Dec 4 1830:00	Rocketsonde	-	-	Datasonde	-	-	-	PM	-	-	-	71	-	-
1988-4279	2447502.09	1988 Dec 6 1410:00	Rocketsonde	-	-	AI/DMP-9	-	-	-	PM	-	-	-	90	-	-
1988-4280	2447502.11	1988 Dec 6 1442:00	Rocketsonde	-	-	AI/DMP-9	-	-	-	PM	-	-	-	91	-	-
1988-4211	2447502.13	1988 Dec 6 1511:00	Rocketsonde	-	-	Datasonde	-	-	-	PM	-	-	-	54	-	-
1988-4212	2447502.18	1988 Dec 6 1622:59	Rocketsonde	-	-	Datasonde	-	-	-	PM	-	-	-	63	-	-

Launch

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Mission	FlightCode	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee_Km	Range_Km	Dest
1988-W213	2447502.52	1988 Dec 7 0031:00	Rocketsonde	-	-	Datasonde	-	-	-	RNR	-	-	-	74	-	-
1988-W218	2447510.33	1988 Dec 14 1957:59	Rocketsonde	-	-	Datasonde	-	-	-	WI	-	-	-	72	-	-
1989-406	2447531.12	1989 Jan 4 1500:00	Rocketsonde	-	-	Datasonde	-	-	-	WI	LO47	-	-	65	-	-
1989-408	2447531.14	1989 Jan 4 1514:59	Rocketsonde	-	-	Datasonde	-	-	-	WI	LO47	-	-	71	-	-
1989-W14	2447536.12	1989 Jan 8 1500:00	Rocketsonde	-	-	Datasonde	-	-	-	WI	LO47	-	-	62	-	-
1989-W17	2447536.99	1989 Jan 9 1442:00	Rocketsonde	-	-	Datasonde	-	-	-	ASC	LO47	-	-	63	-	-
1989-W17	2447536.03	1989 Jan 9 1246:59	Rocketsonde	-	-	Datasonde	-	-	-	WI	-	-	-	67	-	-
1989-W23	2447538.13	1989 Jan 11 1509:00	Rocketsonde	-	-	Datasonde	-	-	-	WI	-	-	-	69	-	-
1989-W29	2447538.12	1989 Jan 11 1509:00	Rocketsonde	-	-	Datasonde	-	-	-	WI	-	-	-	69	-	-
1989-W30	2447546.15	1989 Jan 19 1529:00	Rocketsonde	-	-	Datasonde	-	-	-	WI	-	-	-	67	-	-
1989-W32	2447550.06	1989 Jan 23 1332:59	Rocketsonde	-	-	Datasonde	-	-	-	ASC	-	-	-	67	-	-
1989-W36	2447552.10	1989 Jan 25 1430:00	Rocketsonde	-	-	Datasonde	-	-	-	WI	LO47	-	-	63	-	-
1989-W37	2447552.10	1989 Jan 25 1431:00	Rocketsonde	-	-	Datasonde	-	-	-	WI	-	-	-	66	-	-
1989-W39	2447552.92	1989 Jan 26 0958:59	Rocketsonde	-	-	Datasonde	-	-	-	WI	LO47	-	-	71	-	-
1989-W24	2447552.95	1989 Jan 26 1046:59	Rocketsonde	-	-	Datasonde	-	-	-	ASC	-	-	-	85	-	-
1989-W42	2447553.51	1989 Jan 27 0011:59	Rocketsonde	-	-	Datasonde	-	-	-	RNR	-	-	-	64	-	-
1989-W46	2447559.32	1989 Feb 1 1942:59	Rocketsonde	-	-	Datasonde	-	-	-	WI	-	-	-	68	-	-
1989-W53	2447567.17	1989 Feb 9 1559:59	Rocketsonde	-	-	Datasonde	-	-	-	WI	-	-	-	71	-	-
1989-W55	2447568.34	1989 Feb 10 2012:00	Rocketsonde	-	-	Datasonde	-	-	-	WI	-	-	-	64	-	-
1989-W56	2447569.10	1989 Feb 11 1430:00	Rocketsonde	-	-	Datasonde	-	-	-	WI	LO47	-	-	62	-	-
1989-W58	2447573.13	1989 Feb 15 1509:00	Rocketsonde	-	-	Datasonde	-	-	-	WI	-	-	-	74	-	-
1989-W61	2447580.03	1989 Feb 22 1244:00	Rocketsonde	-	-	Datasonde	-	-	-	RNR	-	-	-	71	-	-
1989-W63	2447580.12	1989 Feb 22 1500:00	Rocketsonde	-	-	Datasonde	-	-	-	WI	-	-	-	63	-	-
1989-W65	2447581.15	1989 Feb 23 1530:00	Rocketsonde	-	-	Datasonde	-	-	-	ASC	LO47	-	-	65	-	-
1989-W66	2447583.99	1989 Feb 26 1146:00	Rocketsonde	-	-	Datasonde	-	-	-	ASC	-	-	-	66	-	-
1989-W69	2447585.15	1989 Feb 27 1529:00	Rocketsonde	-	-	Datasonde	-	-	-	ASC	-	-	-	66	-	-
1989-W70	2447587.12	1989 Feb 1 1500:00	Rocketsonde	-	-	Datasonde	-	-	-	WI	-	-	-	67	-	-
1989-W71	2447587.15	1989 Feb 1 1500:00	Rocketsonde	-	-	Datasonde	-	-	-	WI	LO47	-	-	71	-	-
1989-W73	2447594.11	1989 Feb 6 1443:00	Rocketsonde	-	-	Datasonde	-	-	-	ASC	-	-	-	65	-	-
1989-W74	2447594.15	1989 Feb 6 1530:00	Rocketsonde	-	-	Datasonde	-	-	-	WI	-	-	-	51	-	-
1989-W76	2447598.12	1989 Feb 12 1500:00	Rocketsonde	-	-	Datasonde	-	-	-	WI	LO47	-	-	72	-	-
1989-W76	2447598.96	1989 Feb 13 1103:59	Rocketsonde	-	-	Datasonde	-	-	-	PH	-	-	-	95	-	-
1989-W75	2447599.06	1989 Feb 13 1154:00	Rocketsonde	-	-	Datasonde	-	-	-	PH	-	-	-	90	-	-
1989-W77	2447599.02	1989 Feb 13 1225:59	Rocketsonde	-	-	Datasonde	-	-	-	PH	-	-	-	63	-	-
1989-W77	2447599.06	1989 Feb 13 1329:00	Rocketsonde	-	-	Datasonde	-	-	-	PH	-	-	-	53	-	-
1989-W76	2447599.06	1989 Feb 14 1540:00	Rocketsonde	-	-	Datasonde	-	-	-	PH	-	-	-	70	-	-
1989-W80	2447600.15	1989 Feb 15 1033:59	Rocketsonde	-	-	Datasonde	-	-	-	CCA	LO47	-	-	68	-	-
1989-W81	2447600.94	1989 Feb 15 1033:59	Rocketsonde	-	-	Datasonde	-	-	-	PH	-	-	-	76	-	-
1989-W82	2447600.96	1989 Feb 15 1102:00	Rocketsonde	-	-	Datasonde	-	-	-	PH	-	-	-	70	-	-
1989-W83	2447601.00	1989 Feb 15 1201:59	Rocketsonde	-	-	Datasonde	-	-	-	PH	-	-	-	65	-	-
1989-W84	2447601.05	1989 Feb 15 1506:00	Rocketsonde	-	-	Datasonde	-	-	-	WI	-	-	-	70	-	-
1989-W86	2447604.12	1989 Feb 16 1500:00	Rocketsonde	-	-	Datasonde	-	-	-	WI	-	-	-	66	-	-
1989-W89	2447602.21	1989 Feb 16 1700:00	Rocketsonde	-	-	Datasonde	-	-	-	CCA	LO47	-	-	84	-	-
1989-W89	2447602.97	1989 Feb 17 1120:00	Rocketsonde	-	-	Datasonde	-	-	-	PH	-	-	-	91	-	-
1989-W89	2447603.01	1989 Feb 17 1137:00	Rocketsonde	-	-	Datasonde	-	-	-	PH	-	-	-	94	-	-
1989-W82	2447603.11	1989 Feb 18 0932:00	Rocketsonde	-	-	Datasonde	-	-	-	PH	-	-	-	59	-	-
1989-W81	2447603.91	1989 Feb 18 0936:00	Rocketsonde	-	-	Datasonde	-	-	-	PH	-	-	-	57	-	-
1989-W82	2447603.95	1989 Feb 18 0936:00	Rocketsonde	-	-	Datasonde	-	-	-	PH	-	-	-	84	-	-
1989-W82	2447603.95	1989 Feb 18 1136:00	Rocketsonde	-	-	Datasonde	-	-	-	PH	-	-	-	84	-	-
1989-W84	2447603.98	1989 Feb 18 1136:00	Rocketsonde	-	-	Datasonde	-	-	-	KAU	-	-	-	64	-	-
1989-W84	2447603.99	1989 Feb 18 1136:00	Rocketsonde	-	-	Datasonde	-	-	-	PH	-	-	-	67	-	-
1989-W85	2447603.91	1989 Feb 18 1434:00	Rocketsonde	-	-	Datasonde	-	-	-	CCA	LO47	-	-	86	-	-
1989-W85	2447604.11	1989 Feb 18 1509:00	Rocketsonde	-	-	Datasonde	-	-	-	CCA	LO47	-	-	86	-	-
1989-W85	2447604.14	1989 Feb 18 1509:00	Rocketsonde	-	-	Datasonde	-	-	-	KVR	LO47	-	-	75	-	-
1989-W87	2447604.14	1989 Feb 18 1509:00	Rocketsonde	-	-	Datasonde	-	-	-	CCA	LO47	-	-	70	-	-
1989-W89	2447606.12	1989 Feb 20 1500:00	Rocketsonde	-	-	Datasonde	-	-	-	WI	-	-	-	65	-	-
1989-W89	2447606.12	1989 Feb 20 1500:00	Rocketsonde	-	-	Datasonde	-	-	-	CCA	LO47	-	-	65	-	-
1989-W90	2447609.14	1989 Feb 22 1522:59	Rocketsonde	-	-	Datasonde	-	-	-	CCA	LO47	-	-	73	-	-
1989-W90	2447609.15	1989 Feb 22 1522:59	Rocketsonde	-	-	Datasonde	-	-	-	WI	-	-	-	63	-	-
1989-W90	2447609.15	1989 Feb 22 1530:00	Rocketsonde	-	-	Datasonde	-	-	-	WI	-	-	-	70	-	-
1989-W90	2447609.15	1989 Feb 22 1530:00	Rocketsonde	-	-	Datasonde	-	-	-	WI	-	-	-	63	-	-
1989-W90	2447611.00	1989 Feb 22 1530:00	Rocketsonde	-	-	Datasonde	-	-	-	WI	-	-	-	70	-	-
1989-W90	2447611.00	1989 Feb 22 1530:00	Rocketsonde	-	-	Datasonde	-	-	-	WI	-	-	-	63	-	-
1989-W90	2447611.00	1989 Feb 22 1530:00	Rocketsonde	-	-	Datasonde	-	-	-	WI	-	-	-	70	-	-
1989-W90	2447611.00	1989 Feb 22 1530:00	Rocketsonde	-	-	Datasonde	-	-	-	WI	-	-	-	63	-	-
1989-W90	2447611.00	1989 Feb 22 1530:00	Rocketsonde	-	-	Datasonde	-	-	-	WI	-	-	-	70	-	-
1989-W90	2447611.00	1989 Feb 22 1530:00	Rocketsonde	-	-	Datasonde	-	-	-	WI	-	-	-	63	-	-
1989-W90	2447611.00	1989 Feb 22 1530:00	Rocketsonde	-	-	Datasonde	-	-	-	WI	-	-	-	70	-	-
1989-W90	2447611.00	1989 Feb 22 1530:00	Rocketsonde	-	-	Datasonde	-	-	-	WI	-	-	-	63	-	-
1989-W90	2447611.00	1989 Feb 22 1530:00	Rocketsonde	-	-	Datasonde	-	-	-	WI	-	-	-	70	-	-
1989-W90	2447611.00	1989 Feb 22 1530:00	Rocketsonde	-	-	Datasonde	-	-	-	WI	-	-	-	63	-	-
1989-W90	2447611.00	1989 Feb 22 1530:00	Rocketsonde	-	-	Datasonde	-	-	-	WI	-	-	-	70	-	-
1989-W90	2447611.00	1989 Feb 22 1530:00	Rocketsonde	-	-	Datasonde	-	-	-	WI	-	-	-	63	-	-
1989-W90	2447611.00	1989 Feb 22 1530:00	Rocketsonde	-	-	Datasonde	-	-	-	WI	-	-	-	70	-	-
1989-W90	2447611.00	1989 Feb 22 1530:00	Rocketsonde	-	-	Datasonde	-	-	-	WI	-	-	-	63	-	-
1989-W90	2447611.00	1989 Feb 22 1530:00	Rocketsonde	-	-	Datasonde	-	-	-	WI	-	-	-	70	-	-
1989-W90	2447611.00	1989 Feb 22 1530:00	Rocketsonde	-	-	Datasonde	-	-	-	WI	-	-	-	63	-	-
1989-W90	2447611.00	1989 Feb 22 1530:00	Rocketsonde	-	-	Datasonde	-	-	-	WI	-	-	-	70	-	-
1989-W90	2447611.00	1989 Feb 22 1530:00	Rocketsonde	-	-	Datasonde	-	-	-	WI	-	-	-	63	-	-
1989-W90	2447611.00	1989 Feb 22 1530:00	Rocketsonde	-	-	Datasonde	-	-	-	WI	-	-	-	70	-	-
1989-W90	2447611.00	1989 Feb 22 1530:00	Rocketsonde	-	-	Datasonde	-	-	-	WI	-	-	-	63	-	-
1989-W90	2447611.00	1989 Feb 22 1530:00	Rocketsonde	-	-	Datasonde	-	-	-	WI	-	-	-	70	-	-
1989-W90	2447611.00	1989 Feb 22 1530:00	Rocketsonde	-	-	Datasonde	-	-	-	WI	-	-	-	63	-	-
1989-W90	2447611.00	1989 Feb 22 1530:00	Rocketsonde	-	-	Datasonde	-	-	-	WI	-	-	-	70	-	-
1989-W90	2447611.00	1989 Feb 22 1530:00	Rocketsonde	-	-	Datasonde	-	-	-	WI	-	-	-	63	-	-
1989-W90	2447611.00	1989 Feb 22 1530:00	Rocketsonde	-	-	Datasonde	-	-	-	WI	-	-	-	70	-	-
1989-W90	2447611.00	1989 Feb 22 1530:00	Rocketsonde	-	-	Datasonde	-	-	-	WI	-	-	-	63	-	-
1989-W90	2447611.00	1989 Feb 22 1530:00	Rocketsonde	-	-	Datasonde	-	-	-	WI	-	-	-	70	-	-
1989-W90	2447611.00	1989 Feb 22 1530:00	Rocketsonde	-	-	Datasonde	-	-	-	WI	-	-	-	63	-	-
1989-W90	2447611.00	1989 Feb 22 1530:00	Rocketsonde	-	-	Datasonde	-	-	-	WI	-	-	-	70	-	-
1989-W90	2447611.00	1989 Feb 22 1530:00	Rocketsonde	-	-	Datasonde	-	-	-	WI	-	-	-	63	-	-
1989-W90	2447611.00	1989 Feb 22 1530:00	Rocketsonde	-	-	Datasonde	-	-	-	WI	-	-	-	70	-	-
1989-W90	2447611.00	1989 Feb 22 1530:00	Rocketsonde</													



Launch

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Mission	FlightCode	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee_Km	Range_Km	Dest
1989-Y114	2447655.21	1989 May 8 17:00:00	Rocketsonde	-	-	AI/DMP-97	-	-	-	KAU	-	-	-	88	-	-
1989-Y115	2447656.32	1989 May 8 1943:59	Rocketsonde	-	-	AI/DMP-97	-	-	-	CCA	LO47	-	-	85	-	-
1989-M132	2447656.32	1989 May 8 1943:59	Rocketsonde	-	-	Datasonde	-	-	-	AIT	-	-	-	57	-	-
1989-M133	2447656.34	1989 May 8 2014:00	Rocketsonde	-	-	Datasonde	-	-	-	CCR	LO47	-	-	71	-	-
1989-M134	2447656.38	1989 May 8 2100:00	Rocketsonde	-	-	Datasonde	-	-	-	KMR	-	-	-	70	-	-
1989-M138	2447658.07	1989 May 11 1340:00	Rocketsonde	-	-	Datasonde	-	-	-	WI	-	-	-	72	-	-
1989-A04	2447662.12	1989 May 15 1500:00	Rocketsonde	-	-	Datasonde	-	-	-	CCA	LO47	-	-	49	-	-
1989-M142	2447662.21	1989 May 15 1703:59	Rocketsonde	-	-	Datasonde	-	-	-	CCA	LO47	-	-	70	-	-
1989-M143	2447665.08	1989 May 18 1400:00	Rocketsonde	-	-	Datasonde	-	-	-	CCA	LO47	-	-	71	-	-
1989-M145	2447666.14	1989 May 18 1514:59	Rocketsonde	-	-	Datasonde	-	-	-	CCA	LO47	-	-	65	-	-
1989-M146	2447666.08	1989 May 19 1400:00	Rocketsonde	-	-	Datasonde	-	-	-	CCA	LO47	-	-	62	-	-
1989-M150	2447671.09	1989 May 22 1443:00	Rocketsonde	-	-	Datasonde	-	-	-	WI	-	-	-	62	-	-
1989-M157	2447684.12	1989 Jun 6 1500:00	Rocketsonde	-	-	Datasonde	-	-	-	CCA	LO47	-	-	65	-	-
1989-M160	2447686.12	1989 Jun 8 1500:00	Rocketsonde	-	-	Datasonde	-	-	-	CCA	LO47	-	-	73	-	-
1989-M162	2447691.21	1989 Jun 13 1700:00	Rocketsonde	-	-	Datasonde	-	-	-	WI	-	-	-	62	-	-
1989-M164	2447692.09	1989 Jun 14 1411:00	Rocketsonde	-	-	Datasonde	-	-	-	CCA	LO47	-	-	62	-	-
1989-M168	2447694.09	1989 Jun 16 1407:00	Rocketsonde	-	-	Datasonde	-	-	-	WI	-	-	-	66	-	-
1989-M169	2447697.21	1989 Jun 19 1700:00	Rocketsonde	-	-	AI/DMP-97	-	-	-	CCA	LO47	-	-	85	-	-
1989-M170	2447698.28	1989 Jun 20 1700:00	Rocketsonde	-	-	AI/DMP-97	-	-	-	CCA	LO47	-	-	85	-	-
1989-M175	2447699.28	1989 Jun 21 1849:59	Rocketsonde	-	-	Datasonde	-	-	-	CCA	LO47	-	-	86	-	-
1989-M176	2447700.45	1989 Jun 22 2252:00	Rocketsonde	-	-	Datasonde	-	-	-	CCA	LO47	-	-	87	-	-
1989-M178	2447704.21	1989 Jun 26 1700:00	Rocketsonde	-	-	Datasonde	-	-	-	PH	-	-	-	91	-	-
1989-M181	2447706.08	1989 Jun 28 1400:00	Rocketsonde	-	-	Datasonde	-	-	-	CCA	LO47	-	-	64	-	-
1989-M189	2447719.06	1989 Jul 11 1330:00	Rocketsonde	-	-	Datasonde	-	-	-	WI	-	-	-	86	-	-
1989-M149	2447721.08	1989 Jul 11 1401:00	Rocketsonde	-	-	AI/DMP-97	-	-	-	CCA	LO47	-	-	85	-	-
1989-M157	2447741.17	1989 Aug 2 1609:59	Rocketsonde	-	-	Datasonde	-	-	-	CCA	LO47	-	-	86	-	-
1989-M166	2447746.08	1989 Aug 7 1400:00	Rocketsonde	-	-	Datasonde	-	-	-	PH	-	-	-	91	-	-
1989-M190	2447747.09	1989 Aug 8 1256:59	Rocketsonde	-	-	Datasonde	-	-	-	PH	-	-	-	89	-	-
1989-M167	2447747.10	1989 Aug 8 1420:00	Rocketsonde	-	-	Datasonde	-	-	-	CCA	LO47	-	-	85	-	-
1989-M152	2447748.12	1989 Aug 9 1600:00	Rocketsonde	-	-	Datasonde	-	-	-	CCA	LO47	-	-	86	-	-
1989-M194	2447748.26	1989 Aug 9 1613:59	Rocketsonde	-	-	Datasonde	-	-	-	CCA	LO47	-	-	87	-	-
1989-M195	2447748.02	1989 Aug 10 1233:00	Rocketsonde	-	-	AI/DMP-98	-	-	-	CCA	LO47	-	-	82	-	-
1989-M196	2447749.06	1989 Aug 10 1322:59	Rocketsonde	-	-	Datasonde	-	-	-	CCA	LO47	-	-	85	-	-
1989-A05	2447749.10	1989 Aug 10 1427:59	Rocketsonde	-	-	Datasonde	-	-	-	PH	-	-	-	85	-	-
1989-M197	2447750.10	1989 Aug 11 1430:00	Rocketsonde	-	-	Datasonde	-	-	-	PH	-	-	-	86	-	-
1989-M172	2447751.53	1989 Aug 13 1020:59	Rocketsonde	-	-	AI/DMP-98	-	-	-	CCA	LO47	-	-	82	-	-
1989-M198	2447751.96	1989 Aug 13 1057:59	Rocketsonde	-	-	Datasonde	-	-	-	PH	-	-	-	89	-	-
1989-M199	2447751.96	1989 Aug 13 1100:00	Rocketsonde	-	-	Datasonde	-	-	-	KAU	-	-	-	80	-	-
1989-M200	2447752.00	1989 Aug 13 1154:00	Rocketsonde	-	-	Datasonde	-	-	-	KAU	-	-	-	80	-	-
1989-M201	2447752.00	1989 Aug 13 1358:59	Rocketsonde	-	-	AI/DMP-97	-	-	-	CCA	LO47	-	-	82	-	-
1989-M203	2447752.07	1989 Aug 13 1356:59	Rocketsonde	-	-	Datasonde	-	-	-	CCA	LO47	-	-	85	-	-
1989-M202	2447752.09	1989 Aug 13 1336:59	Rocketsonde	-	-	Datasonde	-	-	-	CCA	LO47	-	-	89	-	-
1989-M204	2447752.14	1989 Aug 13 1516:59	Rocketsonde	-	-	Datasonde	-	-	-	KMR	-	-	-	84	-	-
1989-M205	2447755.20	1989 Aug 16 1634:59	Rocketsonde	-	-	Datasonde	-	-	-	CCA	LO47	-	-	88	-	-
1989-M208	2447763.20	1989 Aug 24 1624:59	Rocketsonde	-	-	Datasonde	-	-	-	PRIM	-	-	-	61	-	-
1989-M209	2447763.06	1989 Aug 25 1330:00	Rocketsonde	-	-	Datasonde	-	-	-	CCA	LO47	-	-	66	-	-
1989-M213	2447771.06	1989 Sep 6 1030:00	Rocketsonde	-	-	Datasonde	-	-	-	PH	-	-	-	66	-	-
1989-M214	2447771.08	1989 Sep 6 0923:00	Rocketsonde	-	-	Datasonde	-	-	-	CCA	LO47	-	-	74	-	-
1989-M224	2447785.21	1989 Sep 15 1700:00	Rocketsonde	-	-	Datasonde	-	-	-	CCA	LO47	-	-	68	-	-
1989-M225	2447789.21	1989 Sep 26 1700:00	Rocketsonde	-	-	Datasonde	-	-	-	CCA	LO47	-	-	68	-	-
1989-M226	2447796.23	1989 Sep 26 1735:00	Rocketsonde	-	-	Datasonde	-	-	-	KMR	-	-	-	74	-	-
1989-M227	2447798.19	1989 Sep 28 1634:59	Rocketsonde	-	-	Datasonde	-	-	-	PRIM	-	-	-	66	-	-
1989-M229	2447804.10	1989 Oct 4 1430:00	Rocketsonde	-	-	Datasonde	-	-	-	CCA	LO47	-	-	69	-	-
1989-M235	2447811.18	1989 Oct 11 1635:59	Rocketsonde	-	-	Datasonde	-	-	-	VT	-	-	-	71	-	-
1989-M238	2447816.10	1989 Oct 16 1430:00	Rocketsonde	-	-	Datasonde	-	-	-	CCA	LO47	-	-	60	-	-
1989-M239	2447817.09	1989 Oct 17 1410:00	Rocketsonde	-	-	Datasonde	-	-	-	ASC	-	-	-	60	-	-
1989-M251	2447818.27	1989 Oct 18 1826:59	Rocketsonde	-	-	Datasonde	-	-	-	CCA	LO47	-	-	84	-	-
1989-M243	2447818.29	1989 Oct 18 1859:59	Rocketsonde	-	-	Datasonde	-	-	-	CCA	LO47	-	-	66	-	-
1989-M244	2447818.39	1989 Oct 18 2114:59	Rocketsonde	-	-	Datasonde	-	-	-	VT	-	-	-	66	-	-
1989-M252	2447818.40	1989 Oct 18 2130:00	Rocketsonde	-	-	AI/DMP-98	-	-	-	WI	-	-	-	91	-	-
1989-M245	2447819.10	1989 Oct 19 1420:00	Rocketsonde	-	-	Datasonde	-	-	-	ASC	-	-	-	66	-	-
1989-M246	2447820.08	1989 Oct 20 1400:00	Rocketsonde	-	-	Datasonde	-	-	-	CCA	LO47	-	-	62	-	-
1989-M09	2447823.21	1989 Oct 23 1700:00	Rocketsonde	-	-	Datasonde	-	-	-	AIT	-	-	-	49	-	-
1989-M251	2447823.22	1989 Oct 23 1712:00	Rocketsonde	-	-	Datasonde	-	-	-	CCA	LO47	-	-	63	-	-
1989-M252	2447823.26	1989 Oct 23 1814:59	Rocketsonde	-	-	Datasonde	-	-	-	AIT	-	-	-	58	-	-
1989-M253	2447823.33	1989 Oct 23 1948:59	Rocketsonde	-	-	Datasonde	-	-	-	KMR	-	-	-	69	-	-
1989-M255	2447825.06	1989 Oct 25 1330:00	Rocketsonde	-	-	Datasonde	-	-	-	ASC	-	-	-	70	-	-
1989-M256	2447825.06	1989 Oct 25 1403:59	Rocketsonde	-	-	Datasonde	-	-	-	VT	-	-	-	68	-	-
1989-M258	2447830.04	1989 Oct 31 1259:59	Rocketsonde	-	-	Datasonde	-	-	-	AIT	-	-	-	69	-	-
1989-M259	2447831.23	1989 Oct 31 1730:00	Rocketsonde	-	-	Datasonde	-	-	-	PRIM	-	-	-	69	-	-
1989-M260	2447832.09	1989 Nov 1 1403:00	Rocketsonde	-	-	Datasonde	-	-	-	VT	-	-	-	73	-	-
1989-Y272	2447832.12	1989 Nov 1 1500:00	Rocketsonde	-	-	AI/DMP-97	-	-	-	CCA	LO47	-	-	84	-	-
1989-M261	2447833.24	1989 Nov 2 1745:00	Rocketsonde	-	-	Datasonde	-	-	-	PRIM	-	-	-	61	-	-
1989-M263	2447838.23	1989 Nov 7 1731:00	Rocketsonde	-	-	Datasonde	-	-	-	PRIM	-	-	-	66	-	-
1989-M267	2447839.13	1989 Nov 8 1506:00	Rocketsonde	-	-	Datasonde	-	-	-	VT	-	-	-	71	-	-
1989-M270	2447846.44	1989 Nov 15 2236:59	Rocketsonde	-	-	Datasonde	-	-	-	WI	-	-	-	67	-	-
1989-M272	2447852.09	1989 Nov 21 1415:00	Rocketsonde	-	-	Datasonde	-	-	-	CCA	LO47	-	-	62	-	-
1989-M273	2447852.25	1989 Nov 21 1758:00	Rocketsonde	-	-	Datasonde	-	-	-	PRIM	-	-	-	67	-	-
1989-M276	2447853.08	1989 Nov 22 1401:00	Rocketsonde	-	-	Datasonde	-	-	-	PH	-	-	-	67	-	-
1989-M277	2447853.17	1989 Nov 22 1603:59	Rocketsonde	-	-	Datasonde	-	-	-	VT	-	-	-	63	-	-
1989-M278	2447853.34	1989 Nov 22 2006:00	Rocketsonde	-	-	Datasonde	-	-	-	WI	-	-	-	73	-	-
1989-Y289	2447853.54	1989 Nov 23 0102:59	Rocketsonde	-	-	AI/DMP-97	-	-	-	CCA	LO47	-	-	85	-	-



Launch

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Mission	FlightCode	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee_Km	Range_Km	Dest
1990-M167	2448174_51	1990 Oct 10 0953:00	Rocketsonde	-	-	Datasonde	-	-	-	KAU	-	-	-	59	-	-
1990-M168	2448174_94	1990 Oct 10 1033:59	Rocketsonde	-	-	Datasonde	-	-	-	PH	-	-	-	55	-	-
1990-M169	2448174_95	1990 Oct 10 1042:59	Rocketsonde	-	-	Datasonde	-	-	-	KAU	-	-	-	59	-	-
1990-M170	2448174_98	1990 Oct 10 1137:59	Rocketsonde	-	-	Datasonde	-	-	-	PH	-	-	-	62	-	-
1990-M173	2448182_06	1990 Oct 17 1330:00	Rocketsonde	-	-	Datasonde	-	-	-	CCA	LC47	-	-	67	-	-
1990-M177	2448182_39	1990 Oct 17 2114:59	Rocketsonde	-	-	Datasonde	-	-	-	WI	-	-	-	94	-	-
1990-M178	2448189_40	1990 Oct 21 21:35:59	Rocketsonde	-	-	Datasonde	-	-	-	AI/DMP-9	-	-	-	93	-	-
1990-M175	2448194_12	1990 Oct 29 15:00:00	Rocketsonde	-	-	Datasonde	-	-	-	WI	LC47	-	-	66	-	-
1990-M179	2448196_43	1990 Oct 31 22:14:59	Rocketsonde	-	-	Datasonde	-	-	-	AI/DMP-9	-	-	-	94	-	-
1991-M22	2448263_12	1991 Jan 6 15:00:00	Rocketsonde	-	-	Datasonde	-	-	-	CCA	LC47	-	-	55	-	-
1991-M21	2448266_43	1991 Jan 9 22:14:59	Rocketsonde	-	-	Datasonde	-	-	-	WI	-	-	-	94	-	-
1991-M23	2448273_23	1991 Jan 16 17:30:00	Rocketsonde	-	-	Datasonde	-	-	-	PRIM	-	-	-	73	-	-
1991-M24	2448274_12	1991 Jan 17 15:00:00	Rocketsonde	-	-	Datasonde	-	-	-	CCA	LC47	-	-	72	-	-
1991-M25	2448280_43	1991 Jan 23 22:20:59	Rocketsonde	-	-	Datasonde	-	-	-	WI	-	-	-	95	-	-
1991-M28	2448285_91	1991 Jan 29 09:45:00	Rocketsonde	-	-	Datasonde	-	-	-	AI/DMP-9	-	-	-	77	-	-
1991-M25	2448287_12	1991 Jan 30 15:00:00	Rocketsonde	-	-	Datasonde	-	-	-	CCA	LC47	-	-	71	-	-
1991-M27	2448292_69	1991 Feb 5 09:14:59	Rocketsonde	-	-	Datasonde	-	-	-	ASC	-	-	-	63	-	-
1991-M28	2448293_12	1991 Feb 5 15:00:00	Rocketsonde	-	-	Datasonde	-	-	-	CCA	LC47	-	-	60	-	-
1991-M31	2448301_12	1991 Feb 13 15:00:00	Rocketsonde	-	-	Datasonde	-	-	-	CCA	LC47	-	-	71	-	-
1991-M32	2448301_23	1991 Feb 13 17:30:00	Rocketsonde	-	-	Datasonde	-	-	-	PRIM	-	-	-	76	-	-
1991-M33	2448306_68	1991 Feb 19 09:00:00	Rocketsonde	-	-	Datasonde	-	-	-	CCA	LC47	-	-	53	-	-
1991-M33	2448308_43	1991 Feb 20 22:14:59	Rocketsonde	-	-	Datasonde	-	-	-	ASC	-	-	-	94	-	-
1991-M34	2448315_13	1991 Feb 27 15:10:00	Rocketsonde	-	-	Datasonde	-	-	-	WI	LC47	-	-	94	-	-
1991-M34	2448315_43	1991 Feb 27 22:14:59	Rocketsonde	-	-	Datasonde	-	-	-	CCA	-	-	-	73	-	-
1991-M35	2448322_23	1991 Feb 6 17:35:00	Rocketsonde	-	-	Datasonde	-	-	-	WI	-	-	-	94	-	-
1991-M35	2448323_12	1991 Feb 7 15:00:00	Rocketsonde	-	-	Datasonde	-	-	-	AI/DMP-9	-	-	-	70	-	-
1991-M37	2448329_23	1991 Feb 13 17:31:00	Rocketsonde	-	-	Datasonde	-	-	-	PRIM	LC47	-	-	77	-	-
1991-M38	2448329_42	1991 Feb 13 21:59:59	Rocketsonde	-	-	Datasonde	-	-	-	WI	-	-	-	62	-	-
1991-M39	2448335_66	1991 Feb 20 09:32:00	Rocketsonde	-	-	Datasonde	-	-	-	ASC	-	-	-	67	-	-
1991-M39	2448336_43	1991 Feb 20 22:14:59	Rocketsonde	-	-	Datasonde	-	-	-	WI	-	-	-	93	-	-
1991-M36	2448336_44	1991 Feb 20 22:30:00	Rocketsonde	-	-	Datasonde	-	-	-	WI	-	-	-	94	-	-
1991-M36	2448343_23	1991 Feb 27 17:30:00	Rocketsonde	-	-	Datasonde	-	-	-	PRIM	-	-	-	62	-	-
1991-M40	2448343_26	1991 Feb 27 19:14:59	Rocketsonde	-	-	Datasonde	-	-	-	WI	LC47	-	-	61	-	-
1991-M41	2448343_43	1991 Feb 27 22:14:59	Rocketsonde	-	-	Datasonde	-	-	-	ASC	-	-	-	67	-	-
1991-M42	2448348_68	1991 Feb 27 22:14:59	Rocketsonde	-	-	Datasonde	-	-	-	AI/DMP-9	-	-	-	86	-	-
1991-M43	2448349_11	1991 Feb 2 14:45:00	Rocketsonde	-	-	Datasonde	-	-	-	WI	-	-	-	71	-	-
1991-M44	2448350_12	1991 Feb 3 16:00:00	Rocketsonde	-	-	Datasonde	-	-	-	PH	-	-	-	70	-	-
1991-M44	2448350_17	1991 Feb 3 16:03:59	Rocketsonde	-	-	Datasonde	-	-	-	AI/DMP-9	LC47	-	-	88	-	-
1991-M46	2448351_12	1991 Feb 4 15:00:00	Rocketsonde	-	-	Datasonde	-	-	-	CCA	LC47	-	-	68	-	-
1991-M46	2448352_13	1991 Feb 5 15:10:00	Rocketsonde	-	-	Datasonde	-	-	-	WI	-	-	-	91	-	-
1991-M47	2448352_23	1991 Feb 5 17:30:00	Rocketsonde	-	-	Datasonde	-	-	-	CCA	LC47	-	-	70	-	-
1991-M47	2448356_56	1991 Feb 10 11:00:00	Rocketsonde	-	-	Datasonde	-	-	-	AI/DMP-9	LC47	-	-	86	-	-
1991-M48	2448356_58	1991 Feb 10 11:30:00	Rocketsonde	-	-	Datasonde	-	-	-	CCA	-	-	-	68	-	-
1991-M46	2448357_00	1991 Feb 10 12:00:00	Rocketsonde	-	-	Datasonde	-	-	-	KAU	-	-	-	93	-	-
1991-M46	2448357_04	1991 Feb 10 13:01:59	Rocketsonde	-	-	Datasonde	-	-	-	KAU	-	-	-	91	-	-
1991-M50	2448357_06	1991 Feb 10 13:26:59	Rocketsonde	-	-	Datasonde	-	-	-	PH	-	-	-	64	-	-
1991-M51	2448357_24	1991 Feb 10 13:44:59	Rocketsonde	-	-	Datasonde	-	-	-	WI	-	-	-	66	-	-
1991-M11	2448357_34	1991 Feb 11 10:02:00	Rocketsonde	-	-	Datasonde	-	-	-	AI/DMP-9	-	-	-	94	-	-
1991-M52	2448357_56	1991 Feb 11 11:35:00	Rocketsonde	-	-	Datasonde	-	-	-	WI	-	-	-	64	-	-
1991-M51	2448357_58	1991 Feb 11 11:35:00	Rocketsonde	-	-	Datasonde	-	-	-	KAU	-	-	-	84	-	-
1991-M52	2448358_00	1991 Feb 11 11:36:00	Rocketsonde	-	-	Datasonde	-	-	-	WI	-	-	-	66	-	-
1991-M52	2448358_01	1991 Feb 11 11:36:00	Rocketsonde	-	-	Datasonde	-	-	-	KAU	-	-	-	84	-	-
1991-M52	2448358_09	1991 Feb 11 14:00:00	Rocketsonde	-	-	Datasonde	-	-	-	PH	-	-	-	66	-	-
1991-M54	2448358_69	1991 Feb 11 14:00:00	Rocketsonde	-	-	Datasonde	-	-	-	CCA	LC47	-	-	59	-	-
1991-M54	2448358_69	1991 Feb 11 14:00:00	Rocketsonde	-	-	Datasonde	-	-	-	KWR	-	-	-	64	-	-
1991-M55	2448362_65	1991 Feb 16 01:14:59	Rocketsonde	-	-	Datasonde	-	-	-	ASC	-	-	-	66	-	-
1991-M57	2448364_08	1991 Feb 17 14:00:00	Rocketsonde	-	-	Datasonde	-	-	-	CCA	LC47	-	-	71	-	-
1991-M57	2448364_39	1991 Feb 17 21:22:00	Rocketsonde	-	-	Datasonde	-	-	-	WI	-	-	-	94	-	-
1991-M14	2448369_12	1991 Feb 22 15:00:00	Rocketsonde	-	-	Datasonde	-	-	-	CCA	LC47	-	-	72	-	-
1991-M58	2448369_12	1991 Feb 22 15:00:00	Rocketsonde	-	-	Datasonde	-	-	-	CCA	-	-	-	74	-	-
1991-M15	2448371_39	1991 Feb 24 21:23:59	Rocketsonde	-	-	Datasonde	-	-	-	WI	-	-	-	94	-	-
1991-M59	2448373_17	1991 Feb 26 15:59:59	Rocketsonde	-	-	Datasonde	-	-	-	CCA	LC47	-	-	64	-	-
1991-M16	2448375_01	1991 Feb 28 12:18:00	Rocketsonde	-	-	Datasonde	-	-	-	CCA	LC47	-	-	85	-	-
1991-M60	2448375_05	1991 Feb 28 13:04:59	Rocketsonde	-	-	Datasonde	-	-	-	CCA	LC47	-	-	70	-	-
1991-M17	2448376_16	1991 Feb 29 16:30:00	Rocketsonde	-	-	Datasonde	-	-	-	PRIM	-	-	-	81	-	-
1991-M61	2448380_08	1991 Feb 3 14:00:00	Rocketsonde	-	-	Datasonde	-	-	-	CCA	LC47	-	-	66	-	-
1991-M62	2448383_08	1991 Feb 6 14:00:00	Rocketsonde	-	-	Datasonde	-	-	-	KAU	-	-	-	70	-	-
1991-M63	2448383_13	1991 Feb 6 15:06:00	Rocketsonde	-	-	Datasonde	-	-	-	PH	-	-	-	69	-	-
1991-M63	2448383_14	1991 Feb 6 15:21:59	Rocketsonde	-	-	Datasonde	-	-	-	KAU	-	-	-	95	-	-
1991-M64	2448383_17	1991 Feb 6 16:02:59	Rocketsonde	-	-	Datasonde	-	-	-	KAU	-	-	-	66	-	-
1991-M65	2448383_27	1991 Feb 6 18:27:59	Rocketsonde	-	-	Datasonde	-	-	-	WI	-	-	-	71	-	-
1991-M19	2448383_35	1991 Feb 6 19:09:59	Rocketsonde	-	-	Datasonde	-	-	-	CCA	LC47	-	-	86	-	-
1991-M66	2448392_19	1991 Feb 15 16:30:00	Rocketsonde	-	-	Datasonde	-	-	-	CCA	LC47	-	-	70	-	-
1991-M67	2448392_19	1991 Feb 15 16:30:00	Rocketsonde	-	-	Datasonde	-	-	-	PRIM	-	-	-	72	-	-
1991-M68	2448404_19	1991 Feb 27 16:32:59	Rocketsonde	-	-	Datasonde	-	-	-	PRIM	-	-	-	79	-	-
1991-M68	2448405_08	1991 Feb 27 14:00:00	Rocketsonde	-	-	Datasonde	-	-	-	CCA	LC47	-	-	70	-	-
1991-M68	2448405_74	1991 Feb 29 05:49:59	Rocketsonde	-	-	Datasonde	-	-	-	KWR	-	-	-	52	-	-
1991-M70	2448408_07	1991 Feb 31 13:34:59	Rocketsonde	-	-	Datasonde	-	-	-	CCA	LC47	-	-	69	-	-
1991-M71	2448412_06	1991 Jun 4 13:30:00	Rocketsonde	-	-	Datasonde	-	-	-	CCA	LC47	-	-	52	-	-
1991-M72	2448413_10	1991 Jun 5 14:25:00	Rocketsonde	-	-	Datasonde	-	-	-	CCA	LC47	-	-	66	-	-
1991-M73	2448415_07	1991 Jun 7 13:33:59	Rocketsonde	-	-	Datasonde	-	-	-	CCA	LC47	-	-	69	-	-
1991-M74	2448415_07	1991 Jun 7 13:33:59	Rocketsonde	-	-	Datasonde	-	-	-	CCA	LC47	-	-	70	-	-
1991-M75	2448422_04	1991 Jun 14 12:59:59	Rocketsonde	-	-	Datasonde	-	-	-	CCA	LC47	-	-	71	-	-
1991-M76	2448422_04	1991 Jun 14 12:59:59	Rocketsonde	-	-	Datasonde	-	-	-	KAU	-	-	-	66	-	-
1991-M77	2448422_05	1991 Jun 14 13:18:00	Rocketsonde	-	-	Datasonde	-	-	-	KAU	-	-	-	69	-	-
1991-M78	2448422_10	1991 Jun 14 14:20:00	Rocketsonde	-	-	Datasonde	-	-	-	PH	-	-	-	58	-	-
1991-M79	2448425_08	1991 Jun 17 14:00:00	Rocketsonde	-	-	Datasonde	-	-	-	CCA	LC47	-	-	67	-	-
1991-M80	2448434_20	1991 Jun 26 16:43:59	Rocketsonde	-	-	Datasonde	-	-	-	PRIM	-	-	-	70	-	-

Launch

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Mission	FlightCode	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee_Km	Range_Km	Dest
1991-181	2448435.57	1991 Jun 28 01:38:59	Rocketsonde	-	-	Datasonde	-	-	-	PH	-	-	-	67	-	-
1991-182	2448436.30	1991 Jun 28 19:07:00	Rocketsonde	-	-	Datasonde	-	-	-	PH	-	-	-	65	-	-
1991-183	2448439.08	1991 Jul 1 14:00:00	Rocketsonde	-	-	Datasonde	-	-	-	CA	LO47	-	-	72	-	-
1991-184	2448439.27	1991 Jul 1 18:25:00	Rocketsonde	-	-	Datasonde	-	-	-	PH	LO47	-	-	63	-	-
1991-185	2448455.08	1991 Jul 17 14:00:00	Rocketsonde	-	-	Datasonde	-	-	-	CA	LO47	-	-	69	-	-
1991-186	2448455.21	1991 Jul 17 17:02:00	Rocketsonde	-	-	Datasonde	-	-	-	PRIM	LO47	-	-	50	-	-
1991-187	2448461.12	1991 Jul 23 14:00:00	Rocketsonde	-	-	Datasonde	-	-	-	ASC	LO47	-	-	67	-	-
1991-188	2448467.43	1991 Jul 29 22:14:59	Rocketsonde	-	-	Datasonde	-	-	-	ASC	LO47	-	-	67	-	-
1991-189	2448469.11	1991 Jul 31 14:45:00	Rocketsonde	-	-	Datasonde	-	-	-	CA	LO47	-	-	86	-	-
1991-190	2448471.17	1991 Aug 2 16:02:59	Rocketsonde	-	-	Datasonde	-	-	-	CA	LO47	-	-	86	-	-
1991-191	2448471.20	1991 Aug 2 16:44:59	Rocketsonde	-	-	Datasonde	-	-	-	CAU	-	-	-	92	-	-
1991-192	2448479.51	1991 Aug 11 07:30:00	Rocketsonde	-	-	Datasonde	-	-	-	CAU	-	-	-	95	-	-
1991-193	2448479.53	1991 Aug 11 08:00:00	Rocketsonde	-	-	Datasonde	-	-	-	CAU	-	-	-	66	-	-
1991-194	2448479.85	1991 Aug 11 09:30:00	Rocketsonde	-	-	Datasonde	-	-	-	CAU	-	-	-	69	-	-
1991-195	2448479.90	1991 Aug 11 09:33:00	Rocketsonde	-	-	Datasonde	-	-	-	CAU	-	-	-	69	-	-
1991-196	2448479.93	1991 Aug 11 10:21:59	Rocketsonde	-	-	Datasonde	-	-	-	PH	-	-	-	50	-	-
1991-197	2448479.94	1991 Aug 11 10:30:00	Rocketsonde	-	-	Datasonde	-	-	-	CAU	-	-	-	66	-	-
1991-198	2448479.99	1991 Aug 11 11:52:00	Rocketsonde	-	-	Datasonde	-	-	-	CAU	-	-	-	66	-	-
1991-199	2448480.03	1991 Aug 11 12:37:59	Rocketsonde	-	-	Datasonde	-	-	-	PH	LO47	-	-	53	-	-
1991-200	2448480.05	1991 Aug 11 13:12:59	Rocketsonde	-	-	Datasonde	-	-	-	CA	LO47	-	-	66	-	-
1991-201	2448480.07	1991 Aug 11 13:21:59	Rocketsonde	-	-	Datasonde	-	-	-	CA	LO47	-	-	66	-	-
1991-202	2448485.56	1991 Aug 17 01:30:00	Rocketsonde	-	-	Datasonde	-	-	-	AIT	-	-	-	58	-	-
1991-203	2448485.58	1991 Aug 17 01:30:00	Rocketsonde	-	-	Datasonde	-	-	-	CAU	LO47	-	-	61	-	-
1991-204	2448485.58	1991 Aug 19 14:00:00	Rocketsonde	-	-	Datasonde	-	-	-	CAU	-	-	-	65	-	-
1991-205	2448487.47	1991 Aug 26 23:20:00	Rocketsonde	-	-	Datasonde	-	-	-	CAU	-	-	-	65	-	-
1991-206	2448489.53	1991 Aug 31 09:41:00	Rocketsonde	-	-	Datasonde	-	-	-	ASC	LO47	-	-	84	-	-
1991-207	2448489.61	1991 Aug 31 09:41:00	Rocketsonde	-	-	Datasonde	-	-	-	ASC	LO47	-	-	87	-	-
1991-208	2448499.01	1991 Sep 1 02:45:00	Rocketsonde	-	-	Datasonde	-	-	-	CA	LO47	-	-	69	-	-
1991-209	2448501.08	1991 Sep 1 14:00:00	Rocketsonde	-	-	Datasonde	-	-	-	CA	LO47	-	-	65	-	-
1991-210	2448511.14	1991 Sep 1 15:14:59	Rocketsonde	-	-	Datasonde	-	-	-	PRIM	-	-	-	74	-	-
1991-211	2448511.22	1991 Sep 1 17:22:00	Rocketsonde	-	-	Datasonde	-	-	-	CAU	-	-	-	70	-	-
1991-212	2448511.44	1991 Sep 1 22:33:59	Rocketsonde	-	-	Datasonde	-	-	-	CAU	LO47	-	-	85	-	-
1991-213	2448512.51	1991 Sep 13 00:10:00	Rocketsonde	-	-	Datasonde	-	-	-	CA	LO47	-	-	62	-	-
1991-214	2448512.53	1991 Sep 13 00:10:00	Rocketsonde	-	-	Datasonde	-	-	-	CA	LO47	-	-	62	-	-
1991-215	2448523.59	1991 Sep 15 09:45:00	Rocketsonde	-	-	Datasonde	-	-	-	ASC	-	-	-	69	-	-
1991-216	2448525.59	1991 Sep 24 09:22:00	Rocketsonde	-	-	Datasonde	-	-	-	WI	-	-	-	73	-	-
1991-217	2448525.57	1991 Oct 2 20:47:00	Rocketsonde	-	-	Datasonde	-	-	-	WI	-	-	-	71	-	-
1991-218	2448529.22	1991 Oct 9 17:11:00	Rocketsonde	-	-	Datasonde	-	-	-	CA	-	-	-	63	-	-
1991-219	2448539.43	1991 Oct 9 22:14:59	Rocketsonde	-	-	Datasonde	-	-	-	CA	LO47	-	-	67	-	-
1991-220	2448543.12	1991 Oct 13 14:49:59	Rocketsonde	-	-	Datasonde	-	-	-	CA	-	-	-	72	-	-
1991-221	2448546.09	1991 Oct 16 14:00:00	Rocketsonde	-	-	Datasonde	-	-	-	CA	-	-	-	61	-	-
1991-222	2448546.51	1991 Oct 17 00:08:00	Rocketsonde	-	-	Datasonde	-	-	-	CA	-	-	-	70	-	-
1991-223	2448553.08	1991 Oct 23 14:00:00	Rocketsonde	-	-	Datasonde	-	-	-	WI	-	-	-	66	-	-
1991-224	2448560.12	1991 Oct 23 15:00:00	Rocketsonde	-	-	Datasonde	-	-	-	WI	-	-	-	67	-	-
1991-225	2448560.42	1991 Oct 30 21:39:59	Rocketsonde	-	-	Datasonde	-	-	-	CAU	-	-	-	81	-	-
1991-226	2448561.92	1991 Nov 4 09:59:59	Rocketsonde	-	-	Datasonde	-	-	-	CAU	-	-	-	61	-	-
1991-227	2448567.14	1991 Nov 6 15:14:59	Rocketsonde	-	-	Datasonde	-	-	-	CAU	-	-	-	81	-	-
1991-228	2448571.05	1991 Nov 6 15:14:59	Rocketsonde	-	-	Datasonde	-	-	-	ASC	-	-	-	57	-	-
1991-229	2448571.25	1991 Nov 11 20:30:00	Rocketsonde	-	-	Datasonde	-	-	-	CA	LO47	-	-	66	-	-
1991-230	2448572.34	1991 Nov 11 20:30:00	Rocketsonde	-	-	Datasonde	-	-	-	CA	LO47	-	-	66	-	-
1991-231	2448573.44	1991 Nov 13 15:21:00	Rocketsonde	-	-	Datasonde	-	-	-	CA	-	-	-	73	-	-
1991-232	2448573.44	1991 Nov 13 15:21:00	Rocketsonde	-	-	Datasonde	-	-	-	CA	-	-	-	73	-	-
1991-233	2448573.44	1991 Nov 13 15:21:00	Rocketsonde	-	-	Datasonde	-	-	-	CA	-	-	-	69	-	-
1991-234	2448573.44	1991 Nov 20 15:11:59	Rocketsonde	-	-	Datasonde	-	-	-	CA	LO47	-	-	70	-	-
1991-235	2448583.14	1991 Nov 27 15:14:59	Rocketsonde	-	-	Datasonde	-	-	-	CA	LO47	-	-	73	-	-
1991-236	2448589.14	1991 Nov 27 15:14:59	Rocketsonde	-	-	Datasonde	-	-	-	CA	-	-	-	68	-	-
1991-237	2448596.42	1991 Dec 5 20:31:59	Rocketsonde	-	-	Datasonde	-	-	-	CAU	-	-	-	71	-	-
1991-238	2448597.28	1991 Dec 6 18:44:00	Rocketsonde	-	-	Datasonde	-	-	-	CAU	-	-	-	68	-	-
1991-239	2448597.28	1991 Dec 6 18:44:00	Rocketsonde	-	-	Datasonde	-	-	-	CAU	-	-	-	71	-	-
1991-240	2448605.25	1991 Dec 14 17:45:00	Rocketsonde	-	-	Datasonde	-	-	-	CAU	LO47	-	-	92	-	-
1991-241	2448609.09	1991 Dec 17 14:04:59	Rocketsonde	-	-	Datasonde	-	-	-	CAU	LO47	-	-	83	-	-
1991-242	2448609.44	1991 Dec 18 22:30:00	Rocketsonde	-	-	Datasonde	-	-	-	CAU	LO47	-	-	66	-	-
1991-243	2448612.20	1991 Dec 21 16:44:59	Rocketsonde	-	-	Datasonde	-	-	-	CAU	LO47	-	-	92	-	-
1991-244	2448614.12	1991 Dec 23 15:00:00	Rocketsonde	-	-	Datasonde	-	-	-	CAU	LO47	-	-	85	-	-
1991-245	2448614.16	1991 Dec 23 15:00:00	Rocketsonde	-	-	Datasonde	-	-	-	CAU	LO47	-	-	85	-	-
1991-246	2448624.34	1992 Jan 2 20:08:00	Rocketsonde	-	-	Datasonde	-	-	-	CAU	LO47	-	-	73	-	-
1991-247	2448643.12	1992 Jan 2 22:30:00	Rocketsonde	-	-	Datasonde	-	-	-	CAU	LO47	-	-	65	-	-
1991-248	2448644.44	1992 Jan 22 22:30:00	Rocketsonde	-	-	Datasonde	-	-	-	CAU	LO47	-	-	66	-	-
1991-249	2448644.46	1992 Jan 22 22:30:00	Rocketsonde	-	-	Datasonde	-	-	-	CAU	LO47	-	-	74	-	-
1991-250	2448658.25	1992 Feb 5 18:00:00	Rocketsonde	-	-	Datasonde	-	-	-	CAU	LO47	-	-	57	-	-
1991-251	2448660.25	1992 Feb 7 18:00:00	Rocketsonde	-	-	Datasonde	-	-	-	CAU	LO47	-	-	68	-	-
1991-252	2448664.32	1992 Feb 11 19:14:59	Rocketsonde	-	-	Datasonde	-	-	-	CAU	LO47	-	-	95	-	-
1991-253	2448664.32	1992 Feb 11 19:14:59	Rocketsonde	-	-	Datasonde	-	-	-	CAU	LO47	-	-	68	-	-
1991-254	2448666.44	1992 Feb 13 22:34:59	Rocketsonde	-	-	Datasonde	-	-	-	CAU	LO47	-	-	68	-	-
1991-255	2448666.48	1992 Feb 13 23:35:00	Rocketsonde	-	-	Datasonde	-	-	-	CAU	LO47	-	-	89	-	-
1991-256	2448667.25	1992 Feb 14 17:55:00	Rocketsonde	-	-	Datasonde	-	-	-	CAU	LO47	-	-	93	-	-
1991-257	2448667.26	1992 Feb 14 18:17:00	Rocketsonde	-	-	Datasonde	-	-	-	CAU	LO47	-	-	68	-	-
1991-258	2448670.12	1992 Feb 17 15:00:00	Rocketsonde	-	-	Datasonde	-	-	-	CAU	LO47	-	-	62	-	-
1991-259	2448674.12	1992 Feb 17 15:00:00	Rocketsonde	-	-	Datasonde	-	-	-	CAU	LO47	-	-	62	-	-
1991-260	2448674.70	1992 Feb 22 04:44:59	Rocketsonde	-	-	Datasonde	-	-	-	ASC	-	-	-	68	-	-
1991-261	2448679.47	1992 Feb 26 23:00:00	Rocketsonde	-	-	Datasonde	-	-	-	CAU	-	-	-	90	-	-
1991-262	2448685.12	1992 Mar 3 15:00:00	Rocketsonde	-	-	Datasonde	-	-	-	CAU	LO47	-	-	49	-	-
1991-263	2448693.15	1992 Mar 11 15:34:59	Rocketsonde	-	-	Datasonde	-	-	-	CAU	LO47	-	-	70	-	-
1991-264	2448693.89	1992 Mar 12 09:24:59	Rocketsonde	-	-	Datasonde	-	-	-	CAU	-	-	-	94	-	-
1991-265	2448699.08	1992 Mar 17 13:49:59	Rocketsonde	-	-	Datasonde	-	-	-	CAU	-	-	-	94	-	-
1991-266	2448700.08	1992 Mar 18 13:54:59	Rocketsonde	-	-	Datasonde	-	-	-	CAU	-	-	-	95	-	-
1991-267	2448700.42	1992 Mar 18 21:59:59	Rocketsonde	-	-	Datasonde	-	-	-	CAU	-	-	-	90	-	-
1991-268	2448700.48	1992 Mar 18 23:25:00	Rocketsonde	-	-	Datasonde	-	-	-	CAU	-	-	-	70	-	-
1991-269	2448701.08	1992 Mar 19 14:00:00	Rocketsonde	-	-	Datasonde	-	-	-	CAU	-	-	-	94	-	-

Launch

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Mission	FlightCode	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee_Km	Range_Km	Dest
1992-W31	2448703.25	1992 Mar 21 18:00:00	Rocketsonde	-	-	Datasonde	-	-	-	CCA	LO47	-	-	71	-	-
1992-Y10	2448707.17	1992 Mar 25 15:59:59	Rocketsonde	-	-	AI/DMP-9	-	-	-	WI	-	-	-	92	-	-
1992-Y11	2448712.11	1992 Mar 30 14:45:00	Rocketsonde	-	-	AI/DMP-9	-	-	-	RMR	-	-	-	94	-	-
1992-Y12	2448714.42	1992 Apr 1 21:59:59	Rocketsonde	-	-	Datasonde	-	-	-	RMR	-	-	-	85	-	-
1992-W37	2448714.44	1992 Apr 1 22:30:00	Rocketsonde	-	-	Datasonde	-	-	-	CCA	LO47	-	-	63	-	-
1992-A06	2448715.12	1992 Apr 2 18:00:00	Rocketsonde	-	-	Datasonde	-	-	-	CCA	LO47	-	-	49	-	-
1992-K38	2448715.25	1992 Apr 2 18:00:00	Rocketsonde	-	-	Datasonde	-	-	-	ASC	-	-	-	66	-	-
1992-W40	2448719.09	1992 Apr 6 14:07:00	Rocketsonde	-	-	Datasonde	-	-	-	ASC	-	-	-	54	-	-
1992-W41	2448720.52	1992 Apr 6 14:07:00	Rocketsonde	-	-	Datasonde	-	-	-	CCA	LO47	-	-	65	-	-
1992-W42	2448721.25	1992 Apr 8 18:00:00	Rocketsonde	-	-	Datasonde	-	-	-	WI	-	-	-	94	-	-
1992-Y13	2448721.40	1992 Apr 8 21:30:00	Rocketsonde	-	-	AI/DMP-9	-	-	-	WI	-	-	-	94	-	-
1992-Y14	2448728.40	1992 Apr 15 21:38:59	Rocketsonde	-	-	AI/DMP-9	-	-	-	WI	LO47	-	-	83	-	-
1992-Y15	2448729.09	1992 Apr 16 14:03:00	Rocketsonde	-	-	AI/DMP-9	-	-	-	WI	LO47	-	-	83	-	-
1992-Y16	2448735.29	1992 Apr 22 19:02:59	Rocketsonde	-	-	AI/DMP-9	-	-	-	WI	LO47	-	-	84	-	-
1992-Y17	2448736.08	1992 Apr 23 14:00:00	Rocketsonde	-	-	AI/DMP-9	-	-	-	CCA	LO47	-	-	85	-	-
1992-Y18	2448741.08	1992 Apr 28 14:00:00	Rocketsonde	-	-	AI/DMP-9	-	-	-	WI	-	-	-	94	-	-
1992-Y19	2448741.24	1992 Apr 28 17:40:00	Rocketsonde	-	-	AI/DMP-9	-	-	-	RMR	-	-	-	90	-	-
1992-W20	2448748.55	1992 May 6 01:32:59	Rocketsonde	-	-	Datasonde	-	-	-	RMR	-	-	-	72	-	-
1992-W48	2448748.58	1992 May 6 01:56:59	Rocketsonde	-	-	Datasonde	-	-	-	CCA	LO47	-	-	72	-	-
1992-W49	2448749.21	1992 May 6 17:00:00	Rocketsonde	-	-	Datasonde	-	-	-	CCA	LO47	-	-	71	-	-
1992-W50	2448755.06	1992 May 12 13:27:59	Rocketsonde	-	-	Datasonde	-	-	-	CCA	LO47	-	-	71	-	-
1992-W51	2448762.08	1992 May 19 14:00:00	Rocketsonde	-	-	Datasonde	-	-	-	CCA	LO47	-	-	65	-	-
1992-W53	2448771.09	1992 May 28 14:08:00	Rocketsonde	-	-	Datasonde	-	-	-	WI	-	-	-	86	-	-
1992-T21	2448775.06	1992 Jun 2 13:30:00	Rocketsonde	-	-	AI/DMP-9	-	-	-	WI	LO47	-	-	87	-	-
1992-W56	2448779.08	1992 Jun 5 14:00:00	Rocketsonde	-	-	Datasonde	-	-	-	CCA	LO47	-	-	55	-	-
1992-W59	2448790.90	1992 Jun 8 14:00:00	Rocketsonde	-	-	Datasonde	-	-	-	CCA	LO47	-	-	55	-	-
1992-T22	2448791.08	1992 Jun 17 09:32:00	Rocketsonde	-	-	AI/DMP-9	-	-	-	CCA	LO47	-	-	85	-	-
1992-W60	2448791.36	1992 Jun 17 14:00:00	Rocketsonde	-	-	Datasonde	-	-	-	CCA	LO47	-	-	85	-	-
1992-W61	2448793.17	1992 Jun 18 20:34:00	Rocketsonde	-	-	Datasonde	-	-	-	CCA	LO47	-	-	71	-	-
1992-W64	2448796.10	1992 Jun 24 14:30:00	Rocketsonde	-	-	Datasonde	-	-	-	CCA	LO47	-	-	70	-	-
1992-W65	2448800.25	1992 Jun 26 18:00:00	Rocketsonde	-	-	Datasonde	-	-	-	CCA	LO47	-	-	70	-	-
1992-T23	2448803.39	1992 Jun 29 14:03:59	Rocketsonde	-	-	AI/DMP-9	-	-	-	WI	-	-	-	85	-	-
1992-T24	2448804.08	1992 Jun 30 09:24:59	Rocketsonde	-	-	Datasonde	-	-	-	ASC	-	-	-	51	-	-
1992-W66	2448805.50	1992 Jun 30 14:00:00	Rocketsonde	-	-	Datasonde	-	-	-	CCA	LO47	-	-	82	-	-
1992-W69	2448806.09	1992 Jul 2 16:05:00	Rocketsonde	-	-	Datasonde	-	-	-	RMR	-	-	-	71	-	-
1992-W70	2448806.27	1992 Jul 2 16:27:59	Rocketsonde	-	-	Datasonde	-	-	-	CCA	LO47	-	-	68	-	-
1992-W71	2448810.08	1992 Jul 6 14:00:00	Rocketsonde	-	-	Datasonde	-	-	-	PH	-	-	-	87	-	-
1992-W72	2448810.23	1992 Jul 6 17:35:00	Rocketsonde	-	-	Datasonde	-	-	-	PH	LO47	-	-	81	-	-
1992-W75	2448814.08	1992 Jul 10 14:00:00	Rocketsonde	-	-	AI/DMP-9	-	-	-	PH	-	-	-	84	-	-
1992-W76	2448815.08	1992 Jul 15 14:00:00	Rocketsonde	-	-	AI/DMP-9	-	-	-	CCA	LO47	-	-	88	-	-
1992-W77	2448825.04	1992 Jul 22 15:40:00	Rocketsonde	-	-	AI/DMP-9	-	-	-	CCA	LO47	-	-	83	-	-
1992-W78	2448826.04	1992 Jul 28 15:00:00	Rocketsonde	-	-	AI/DMP-9	-	-	-	CCA	LO47	-	-	81	-	-
1992-W79	2448828.24	1992 Jul 28 15:00:00	Rocketsonde	-	-	AI/DMP-9	-	-	-	WI	-	-	-	94	-	-
1992-W80	2448833.42	1992 Jul 29 14:15:59	Rocketsonde	-	-	AI/DMP-9	-	-	-	ASC	-	-	-	89	-	-
1992-W81	2448834.41	1992 Jul 29 14:30:00	Rocketsonde	-	-	Datasonde	-	-	-	ASC	-	-	-	84	-	-
1992-W82	2448838.41	1992 Aug 4 21:45:00	Rocketsonde	-	-	Datasonde	-	-	-	ASC	LO47	-	-	51	-	-
1992-W83	2448838.47	1992 Aug 5 15:50:00	Rocketsonde	-	-	Datasonde	-	-	-	ASC	-	-	-	66	-	-
1992-W25	2448841.17	1992 Aug 6 14:03:59	Rocketsonde	-	-	AI/DMP-9	-	-	-	CCA	LO47	-	-	82	-	-
1992-W84	2448841.21	1992 Aug 6 14:04:59	Rocketsonde	-	-	AI/DMP-9	-	-	-	WI	-	-	-	84	-	-
1992-W84	2448842.21	1992 Aug 7 17:04:59	Rocketsonde	-	-	Datasonde	-	-	-	KAU	-	-	-	87	-	-
1992-W84	2448845.26	1992 Aug 10 18:20:00	Rocketsonde	-	-	AI/DMP-9	-	-	-	WI	-	-	-	94	-	-
1992-W30	2448847.08	1992 Aug 12 14:00:00	Rocketsonde	-	-	AI/DMP-9	-	-	-	CCA	LO47	-	-	86	-	-
1992-W86	2448854.08	1992 Aug 15 14:00:00	Rocketsonde	-	-	Datasonde	-	-	-	CCA	LO47	-	-	86	-	-
1992-W86	2448854.16	1992 Aug 15 15:44:00	Rocketsonde	-	-	Datasonde	-	-	-	CCA	LO47	-	-	83	-	-
1992-W34	2448859.09	1992 Aug 24 14:09:00	Rocketsonde	-	-	AI/DMP-9	-	-	-	WI	-	-	-	93	-	-
1992-W87	2448865.08	1992 Sep 3 20:45:00	Rocketsonde	-	-	Datasonde	-	-	-	CCA	LO47	-	-	83	-	-
1992-W88	2448869.36	1992 Sep 6 14:30:00	Rocketsonde	-	-	Datasonde	-	-	-	CCA	LO47	-	-	65	-	-
1992-W89	2448874.10	1992 Sep 8 14:00:00	Rocketsonde	-	-	Datasonde	-	-	-	ASC	-	-	-	69	-	-
1992-W92	2448877.08	1992 Sep 11 14:00:00	Rocketsonde	-	-	Datasonde	-	-	-	CCA	LO47	-	-	67	-	-
1992-W94	2448890.09	1992 Sep 24 14:10:00	Rocketsonde	-	-	AI/DMP-9	-	-	-	WI	-	-	-	96	-	-
1992-W95	2448903.17	1992 Oct 7 15:50:59	Rocketsonde	-	-	Datasonde	-	-	-	CCA	LO47	-	-	69	-	-
1992-W96	2448905.08	1992 Oct 9 14:00:00	Rocketsonde	-	-	Datasonde	-	-	-	CCA	LO47	-	-	68	-	-
1992-W98	2448910.12	1992 Oct 14 15:00:00	Rocketsonde	-	-	Datasonde	-	-	-	CCA	LO47	-	-	68	-	-
1992-W99	2448912.07	1992 Oct 16 13:42:59	Rocketsonde	-	-	Datasonde	-	-	-	CCA	LO47	-	-	66	-	-
1992-W100	2448915.38	1992 Oct 19 21:00:00	Rocketsonde	-	-	Datasonde	-	-	-	ASC	-	-	-	84	-	-
1992-Y36	2448916.12	1992 Oct 20 15:00:00	Rocketsonde	-	-	AI/DMP-9	-	-	-	CCA	LO47	-	-	86	-	-
1992-H101	2448917.05	1992 Oct 21 13:14:59	Rocketsonde	-	-	Datasonde	-	-	-	CCA	LO47	-	-	70	-	-
1992-H104	2448932.12	1992 Nov 5 16:00:00	Rocketsonde	-	-	Datasonde	-	-	-	CCA	LO47	-	-	68	-	-
1992-Y37	2448933.05	1992 Nov 6 13:09:59	Rocketsonde	-	-	AI/DMP-9	-	-	-	WI	-	-	-	93	-	-
1992-H105	2448937.32	1992 Nov 10 19:44:59	Rocketsonde	-	-	Datasonde	-	-	-	ASC	-	-	-	68	-	-
1992-H107	2448947.12	1992 Nov 20 15:00:00	Rocketsonde	-	-	Datasonde	-	-	-	CCA	LO47	-	-	64	-	-
1992-H109	2448958.12	1992 Dec 1 16:00:00	Rocketsonde	-	-	Datasonde	-	-	-	CCA	LO47	-	-	71	-	-
1992-A19	2448972.12	1992 Dec 15 15:00:00	Rocketsonde	-	-	Datasonde	-	-	-	CCA	LO47	-	-	47	-	-
1992-Y40	2448973.17	1992 Dec 16 16:09:59	Rocketsonde	-	-	AI/DMP-9	-	-	-	WI	-	-	-	93	-	-
1992-H112	2448975.08	1992 Dec 18 14:00:00	Rocketsonde	-	-	Datasonde	-	-	-	CCA	LO47	-	-	53	-	-
1992-H113	2448978.15	1992 Dec 21 15:30:00	Rocketsonde	-	-	Datasonde	-	-	-	CCA	LO47	-	-	53	-	-
1993-Y01	2449000.27	1993 Jan 5 15:00:00	Rocketsonde	-	-	Datasonde	-	-	-	CCA	LO47	-	-	88	-	-
1993-Y02	2449002.59	1993 Jan 12 18:30:00	Rocketsonde	-	-	Datasonde	-	-	-	CCA	LO47	-	-	53	-	-
1993-Y02	2449020.29	1993 Feb 1 18:59:59	Rocketsonde	-	-	AI/DMP-9	-	-	-	ASC	-	-	-	91	-	-
1993-Y03	2449036.15	1993 Feb 17 15:40:00	Rocketsonde	-	-	AI/DMP-9	-	-	-	CCA	LO47	-	-	94	-	-
1993-Y04	2449043.04	1993 Feb 24 13:01:59	Rocketsonde	-	-	AI/DMP-9	-	-	-	ASC	-	-	-	88	-	-

Launch

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Mission	FlightCode	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee_Km	Range_Km	Dest
1993-105	2449056.74	1993 Mar 10 05:40:00	Rocketsonde	-	-	AI/DNR-9?	-	-	-	RNR	-	-	-	90	-	-
1993-110	2449064.12	1993 Mar 17 15:00:00	Rocketsonde	-	-	Datasonde	-	-	-	CCA	LO47	-	-	66	-	-
1993-111	2449068.09	1993 Mar 21 14:15:00	Rocketsonde	-	-	Datasonde	-	-	-	CCA	LO47	-	-	66	-	-
1993-112	2449071.14	1993 Mar 24 15:19:00	Rocketsonde	-	-	Datasonde	-	-	-	WI	-	-	-	67	-	-
1993-113	2449071.16	1993 Mar 24 15:46:00	Rocketsonde	-	-	Datasonde	-	-	-	CCA	LO47	-	-	70	-	-
1993-114	2449073.15	1993 Mar 26 15:40:00	Rocketsonde	-	-	Datasonde	-	-	-	CCA	LO47	-	-	64	-	-
1993-115	2449076.27	1993 Mar 29 18:00:00	Rocketsonde	-	-	AI/DNR-9?	-	-	-	CCA	LO47	-	-	55	-	-
1993-116	2449082.12	1993 Apr 4 15:00:00	Rocketsonde	-	-	AI/DNR-9?	-	-	-	CCA	LO47	-	-	79	-	-
1993-117	2449084.33	1993 Apr 6 20:00:00	Rocketsonde	-	-	AI/DNR-9?	-	-	-	CCA	LO47	-	-	85	-	-
1993-118	2449101.08	1993 Apr 23 14:00:00	Rocketsonde	-	-	AI/DNR-9?	-	-	-	CCA	LO47	-	-	84	-	-
1993-119	2449103.05	1993 Apr 25 13:14:59	Rocketsonde	-	-	AI/DNR-9?	-	-	-	WI	-	-	-	94	-	-
1993-120	2449107.17	1993 Apr 29 16:00:59	Rocketsonde	-	-	Datasonde	-	-	-	RNR	-	-	-	71	-	-
1993-121	2449114.62	1993 May 7 02:45:59	Rocketsonde	-	-	AI/DNR-9?	-	-	-	CCA	LO47	-	-	82	-	-
1993-122	2449119.08	1993 May 11 16:00:00	Rocketsonde	-	-	AI/DNR-9?	-	-	-	WI	-	-	-	93	-	-
1993-123	2449119.31	1993 May 11 19:30:00	Rocketsonde	-	-	AI/DNR-9?	-	-	-	CCA	LO47	-	-	85	-	-
1993-124	2449121.10	1993 May 13 14:30:00	Rocketsonde	-	-	Datasonde	-	-	-	WI	-	-	-	70	-	-
1993-125	2449128.07	1993 May 20 13:44:59	Rocketsonde	-	-	Datasonde	-	-	-	WI	-	-	-	84	-	-
1993-126	2449133.99	1993 May 21 14:00:00	Rocketsonde	-	-	Datasonde	-	-	-	CCA	LO47	-	-	54	-	-
1993-127	2449135.08	1993 May 27 11:46:00	Rocketsonde	-	-	Datasonde	-	-	-	WI	-	-	-	68	-	-
1993-128	2449139.97	1993 Jun 1 11:23:00	Rocketsonde	-	-	AI/DNR-9?	-	-	-	WI	-	-	-	57	-	-
1993-129	2449157.11	1993 Jun 18 14:40:00	Rocketsonde	-	-	Datasonde	-	-	-	WI	-	-	-	70	-	-
1993-130	2449164.08	1993 Jun 25 14:00:00	Rocketsonde	-	-	Datasonde	-	-	-	CCA	LO47	-	-	85	-	-
1993-131	2449171.11	1993 Jun 30 02:43:59	Rocketsonde	-	-	AI/DNR-9?	-	-	-	CCA	LO47	-	-	71	-	-
1993-132	2449171.61	1993 Jul 2 14:37:59	Rocketsonde	-	-	AI/DNR-9?	-	-	-	ASC	-	-	-	85	-	-
1993-133	2449175.36	1993 Jul 6 20:45:00	Rocketsonde	-	-	AI/DNR-9?	-	-	-	RNR	-	-	-	85	-	-
1993-134	2449176.36	1993 Jul 7 22:45:59	Rocketsonde	-	-	Datasonde	-	-	-	WI	-	-	-	93	-	-
1993-135	2449181.31	1993 Jul 12 19:25:59	Rocketsonde	-	-	Datasonde	-	-	-	ASC	-	-	-	70	-	-
1993-136	2449183.11	1993 Jul 14 14:37:00	Rocketsonde	-	-	AI/DNR-9?	-	-	-	WI	-	-	-	94	-	-
1993-137	2449185.08	1993 Jul 16 14:00:00	Rocketsonde	-	-	Datasonde	-	-	-	WI	-	-	-	68	-	-
1993-138	2449185.08	1993 Jul 16 14:00:00	Rocketsonde	-	-	Datasonde	-	-	-	CCA	LO47	-	-	69	-	-
1993-139	2449192.09	1993 Jul 23 14:10:00	Rocketsonde	-	-	AI/DNR-9?	-	-	-	WI	-	-	-	94	-	-
1993-140	2449203.29	1993 Aug 3 16:59:59	Rocketsonde	-	-	Datasonde	-	-	-	WI	-	-	-	90	-	-
1993-141	2449211.17	1993 Aug 11 15:59:59	Rocketsonde	-	-	Datasonde	-	-	-	CCA	LO47	-	-	93	-	-
1993-142	2449220.06	1993 Aug 20 13:24:59	Rocketsonde	-	-	AI/DNR-9?	-	-	-	WI	-	-	-	85	-	-
1993-143	2449224.97	1993 Aug 25 11:11:00	Rocketsonde	-	-	AI/DNR-9?	-	-	-	RNR	-	-	-	90	-	-
1993-144	2449226.31	1993 Aug 26 19:19:59	Rocketsonde	-	-	Datasonde	-	-	-	WI	-	-	-	72	-	-
1993-145	2449232.10	1993 Sep 1 14:30:00	Rocketsonde	-	-	Datasonde	-	-	-	CCA	LO47	-	-	74	-	-
1993-146	2449241.08	1993 Sep 10 14:00:00	Rocketsonde	-	-	AI/DNR-9?	-	-	-	WI	-	-	-	85	-	-
1993-147	2449246.23	1993 Sep 16 17:35:00	Rocketsonde	-	-	AI/DNR-9?	-	-	-	CCA	LO47	-	-	85	-	-
1993-148	2449246.23	1993 Sep 16 17:35:00	Rocketsonde	-	-	AI/DNR-9?	-	-	-	WI	-	-	-	85	-	-
1993-149	2449252.22	1993 Oct 1 17:13:00	Rocketsonde	-	-	AI/DNR-9?	-	-	-	WI	-	-	-	94	-	-
1993-150	2449271.06	1993 Oct 13 14:00:00	Rocketsonde	-	-	Datasonde	-	-	-	CCA	LO47	-	-	66	-	-
1993-151	2449276.11	1993 Oct 17 15:38:59	Rocketsonde	-	-	AI/DNR-9?	-	-	-	CCA	LO47	-	-	93	-	-
1993-152	2449310.45	1993 Nov 18 22:19:59	Rocketsonde	-	-	Datasonde	-	-	-	CCA	LO47	-	-	94	-	-
1993-153	2449310.45	1993 Nov 18 22:19:59	Rocketsonde	-	-	Datasonde	-	-	-	ASC	-	-	-	94	-	-
1993-154	2449310.46	1993 Nov 18 22:19:59	Rocketsonde	-	-	Datasonde	-	-	-	CCA	LO47	-	-	94	-	-
1993-155	2449320.16	1993 Dec 14 16:04:59	Rocketsonde	-	-	AI/DNR-9?	-	-	-	WI	-	-	-	94	-	-
1993-156	2449320.16	1993 Dec 14 16:04:59	Rocketsonde	-	-	AI/DNR-9?	-	-	-	WI	-	-	-	94	-	-
1993-157	2449320.16	1993 Dec 17 19:24:59	Rocketsonde	-	-	AI/DNR-9?	-	-	-	WI	-	-	-	94	-	-
1993-158	2449343.59	1993 Dec 20 16:34:59	Rocketsonde	-	-	AI/DNR-9?	-	-	-	CCA	LO47	-	-	94	-	-
1993-159	2449343.59	1993 Dec 20 16:34:59	Rocketsonde	-	-	AI/DNR-9?	-	-	-	CCA	LO47	-	-	94	-	-
1993-160	2449359.26	1993 Jan 7 23:45:00	Rocketsonde	-	-	Datasonde	-	-	-	CCA	LO47	-	-	99	-	-
1993-161	2449374.17	1995 Jan 20 16:09:59	Rocketsonde	-	-	Datasonde	-	-	-	CCA	LO47	-	-	89	-	-
1993-162	2450059.29	1996 Feb 9 18:54:59	Rocketsonde	-	-	Datasonde	-	-	-	CCA	LO47	-	-	71	-	-
1993-163	2450101.06	1996 Feb 9 18:54:59	Rocketsonde	-	-	Datasonde	-	-	-	ASC	-	-	-	71	-	-
1993-164	2450113.29	1996 Mar 18 13:30:00	Rocketsonde	-	-	Datasonde	-	-	-	CCA	LO47	-	-	61	-	-
1993-165	2450113.29	1996 Mar 30 18:59:59	Rocketsonde	-	-	Datasonde	-	-	-	CCA	LO47	-	-	92	-	-
1993-166	2450428.27	1996 Mar 10 18:31:00	Rocketsonde	-	-	AI/DNR-9?	-	-	-	CCA	LO47	-	-	53	-	-
1993-167	2450437.14	1996 Dec 19 15:20:00	Rocketsonde	-	-	Datasonde	-	-	-	CCA	LO47	-	-	67	-	-
1993-168	2450459.17	1997 Jan 10 15:59:59	Rocketsonde	-	-	Datasonde	-	-	-	CCA	LO47	-	-	99	-	-
1993-169	2450489.12	1997 Feb 9 14:49:59	Rocketsonde	-	-	Datasonde	-	-	-	ASC	-	-	-	49	-	-
1993-170	2450500.48	1997 Feb 20 23:30:00	Rocketsonde	-	-	Datasonde	-	-	-	CCA	LO47	-	-	67	-	-
1993-171	2450507.12	1997 Feb 27 15:00:00	Rocketsonde	-	-	Datasonde	-	-	-	CCA	LO47	-	-	99	-	-
1993-172	2450527.12	1997 Mar 2 15:00:00	Rocketsonde	-	-	Datasonde	-	-	-	CCA	LO47	-	-	60	-	-
1993-173	2450564.12	1997 Mar 19 14:00:00	Rocketsonde	-	-	Datasonde	-	-	-	WI	-	-	-	67	-	-
1993-174	2450564.37	1997 Mar 8 21:14:59	Rocketsonde	-	-	Datasonde	-	-	-	ASC	-	-	-	45	-	-
1993-175	2450564.99	1997 Mar 10 13:40:00	Rocketsonde	-	-	Datasonde	-	-	-	CCA	LO47	-	-	60	-	-
1993-176	2450565.08	1997 Mar 11 14:00:00	Rocketsonde	-	-	Datasonde	-	-	-	CCA	LO47	-	-	59	-	-
1993-177	2450565.26	1997 Mar 22 18:15:59	Rocketsonde	-	-	Datasonde	-	-	-	CCA	LO47	-	-	64	-	-
1993-178	2450582.08	1997 Mar 13 14:00:00	Rocketsonde	-	-	Datasonde	-	-	-	ASC	-	-	-	58	-	-
1993-179	2450598.11	1997 Mar 29 14:40:00	Rocketsonde	-	-	Datasonde	-	-	-	CCA	LO47	-	-	99	-	-
1993-180	2450606.08	1997 Jun 6 14:03:00	Rocketsonde	-	-	Datasonde	-	-	-	CCA	LO47	-	-	65	-	-
1993-181	2450619.08	1997 Jun 19 14:00:00	Rocketsonde	-	-	Datasonde	-	-	-	CCA	LO47	-	-	55	-	-
1993-182	2450630.08	1997 Jun 30 14:00:00	Rocketsonde	-	-	Datasonde	-	-	-	ASC	-	-	-	42	-	-
1993-183	2450633.06	1997 Jul 3 13:30:00	Rocketsonde	-	-	Datasonde	-	-	-	WI	-	-	-	63	-	-
1993-184	2450641.24	1997 Jul 11 17:44:00	Rocketsonde	-	-	Datasonde	-	-	-	ASC	-	-	-	54	-	-
1993-185	2450645.06	1997 Jul 15 13:30:00	Rocketsonde	-	-	Datasonde	-	-	-	CCA	LO47	-	-	99	-	-
1993-186	2450659.94	1997 Jul 29 12:59:59	Rocketsonde	-	-	Datasonde	-	-	-	CCA	LO47	-	-	59	-	-
1993-187	2450661.45	1997 Jul 31 22:49:59	Rocketsonde	-	-	Datasonde	-	-	-	WI	-	-	-	60	-	-
1993-188	2450666.43	1997 Aug 5 22:14:59	Rocketsonde	-	-	Datasonde	-	-	-	CCA	LO47	-	-	64	-	-
1993-189	2450667.03	1997 Aug 6 13:14:59	Rocketsonde	-	-	Datasonde	-	-	-	WI	-	-	-	66	-	-
1993-190	2450667.42	1997 Aug 6 22:04:59	Rocketsonde	-	-	Datasonde	-	-	-	WI	-	-	-	57	-	-
1993-191	2450667.45	1997 Aug 6 22:49:59	Rocketsonde	-	-	Datasonde	-	-	-	WI	-	-	-	66	-	-
1993-192	2450669.05	1997 Aug 8 13:18:59	Rocketsonde	-	-	AI/DNR-9?	-	-	-	WI	-	-	-	96	-	-
1993-193	2450670.05	1997 Aug 10 09:35:59	Rocketsonde	-	-	-	-	-	-	WI	-	-	-	95	-	-
1993-194	2450671.39	1997 Aug 10 21:22:00	Rocketsonde	-	-	AI/DNR-9?	-	-	-	WI	-	-	-	70	-	-
1993-195	2450671.40	1997 Aug 10 21:31:00	Rocketsonde	-	-	AI/DNR-9?	-	-	-	WI	-	-	-	94	-	-

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Mission	FlightCode	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee_Km	Range_Km	Dest
1997-A32	2450673.06	1997 Aug 12 13:30:00	Rocketsonde	-	-	Datasonde	-	-	-	ASC	-	-	-	33	-	-
1997-A64	2450688.34	1997 Aug 22 20:10:00	Rocketsonde	-	-	Datasonde	-	-	-	WI	-	-	-	70	-	-
1997-A66	2450688.31	1997 Aug 27 19:30:00	Rocketsonde	-	-	Datasonde	-	-	-	ASC	-	-	-	54	-	-
1997-W71	2450704.06	1997 Sep 12 13:30:00	Rocketsonde	-	-	Datasonde	-	-	-	CCR	LO47	-	-	64	-	-
1997-731	2450716.08	1997 Sep 24 14:00:00	Rocketsonde	-	-	Datasonde	-	-	-	CCR	-	-	-	99	-	-
1997-732	2450731.08	1997 Oct 9 14:00:00	Rocketsonde	-	-	Datasonde	-	-	-	CCR	LO47	-	-	99	-	-
1997-W75	2450732.05	1997 Oct 10 13:06:00	Rocketsonde	-	-	Datasonde	-	-	-	CCR	-	-	-	99	-	-
1997-733	2450732.43	1997 Oct 10 22:24:59	Rocketsonde	-	-	Datasonde	-	-	-	CCR	LO47	-	-	99	-	-
1997-734	2450743.12	1997 Oct 21 15:00:00	Rocketsonde	-	-	AI/DNQ-97	-	-	-	CCR	LO47	-	-	83	-	-
1997-735	2450771.12	1997 Nov 18 15:00:00	Rocketsonde	-	-	Datasonde	-	-	-	CCR	LO47	-	-	99	-	-
1997-A66	2450801.47	1997 Dec 18 23:15:00	Rocketsonde	-	-	Datasonde	-	-	-	CCR	LO47	-	-	49	-	-
1998-T10	2450835.09	1998 Jan 21 14:08:00	Rocketsonde	-	-	Datasonde	-	-	-	CCR	-	-	-	99	-	-
1998-W05	2450855.48	1998 Feb 10 23:30:00	Rocketsonde	-	-	Datasonde	-	-	-	CCR	LO47	-	-	60	-	-
1998-W08	2450869.12	1998 Feb 24 15:00:00	Rocketsonde	-	-	Datasonde	-	-	-	CCR	LO47	-	-	62	-	-
1998-T28	2450878.12	1998 Mar 6 15:00:00	Rocketsonde	-	-	AI/DNQ-97	-	-	-	CCR	LO47	-	-	84	-	-
1998-T29	2450900.12	1998 Mar 27 15:00:00	Rocketsonde	-	-	AI/DNQ-97	-	-	-	CCR	LO47	-	-	82	-	-
1998-W13	2450919.08	1998 Apr 15 14:00:00	Rocketsonde	-	-	Datasonde	-	-	-	CCR	LO47	-	-	58	-	-
1998-T30	2450939.08	1998 May 5 14:00:00	Rocketsonde	-	-	AI/DNQ-97	-	-	-	CCR	LO47	-	-	85	-	-
1998-W19	2450966.08	1998 Jun 1 14:00:00	Rocketsonde	-	-	Datasonde	-	-	-	CCR	LO47	-	-	67	-	-
1998-T31	2451025.08	1998 Jun 30 14:00:00	Rocketsonde	-	-	Met Sphere	-	-	-	CCR	LO47	-	-	84	-	-
1998-W35	2451102.09	1998 Oct 15 14:12:00	Rocketsonde	-	-	Datasonde	-	-	-	CCR	LO47	-	-	99	-	-
1998-T32	2451109.39	1998 Oct 22 21:21:00	Rocketsonde	-	-	Datasonde	-	-	-	CCR	LO47	-	-	99	-	-
1998-T33	2451109.54	1998 Oct 23 01:01:59	Rocketsonde	-	-	Datasonde	-	-	-	CCR	LO47	-	-	99	-	-
1998-T34	2451169.19	1998 Dec 21 16:30:00	Rocketsonde	-	-	AI/DNQ-97	-	-	-	CCR	LO47	-	-	85	-	-
1999-W01	2451194.10	1999 Jan 15 14:30:00	Rocketsonde	-	-	Datasonde	-	-	-	CCR	-	-	-	55	-	-
1999-W02	2451219.43	1999 Feb 9 22:14:59	Rocketsonde	-	-	Datasonde	-	-	-	ASC	-	-	-	72	-	-
1999-W03	2451262.51	1999 Feb 25 02:45:00	Rocketsonde	-	-	Datasonde	-	-	-	ASC	-	-	-	69	-	-
1999-T01	2451346.21	1999 Jun 16 17:00:00	Rocketsonde	-	-	AI/DNQ-97	-	-	-	CCR	LO47	-	-	84	-	-
1999-T02	2451466.12	1999 Jun 16 17:00:00	Rocketsonde	-	-	Datasonde	-	-	-	CCR	-	-	-	99	-	-
1999-T04	2451522.12	1999 Dec 9 16:00:00	Rocketsonde	-	-	Datasonde	-	-	-	CCR	LO47	-	-	99	-	-
2000-T01	2451501.51	2000 Feb 27 00:14:59	Rocketsonde	-	-	Datasonde	-	-	-	CCR	-	-	-	99	-	-
2000-T02	2451711.12	2000 Jun 15 15:00:00	Rocketsonde	-	-	Datasonde	-	-	-	CCR	LO47	-	-	99	-	-







Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Launch_e	Agency	Launch_Code	Group	Category	LT_Cite	Cite	Notes
1969-H92	2440239_17	1969 Jan 17 1600:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5650	-	-
1969-H93	2440239_19	1969 Jan 17 1630:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5650	-	-
1969-H94	2440239_23	1969 Jan 17 1737:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5650	-	-
1969-H95	2440239_27	1969 Jan 17 1835:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5650	-	-
1969-H96	2440239_33	1969 Jan 17 2000:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5650	-	-
1969-H97	2440239_37	1969 Jan 17 2058:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5650	-	-
1969-H98	2440239_42	1969 Jan 17 2205:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5650	-	-
1969-H99	2440239_46	1969 Jan 17 2231:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5650	-	-
1969-H100	2440242_11	1969 Jan 20 1445:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5650	-	-
1969-H101	2440242_12	1969 Jan 20 1455:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5650	-	-
1969-H102	2440242_15	1969 Jan 20 1530:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5650	-	-
1969-H103	2440242_16	1969 Jan 20 1545:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5650	-	-
1969-H104	2440242_25	1969 Jan 20 1802:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5650	-	-
1969-H105	2440242_26	1969 Jan 20 1859:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5650	-	-
1969-H106	2440242_29	1969 Jan 20 1859:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5650	-	-
1969-H107	2440242_35	1969 Jan 20 2025:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5650	-	-
1969-H108	2440242_38	1969 Jan 20 2100:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5650	-	-
1969-H109	2440243_21	1969 Jan 21 1700:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5650	-	-
1969-H110	2440243_25	1969 Jan 21 1800:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5650	-	-
1969-H111	2440243_29	1969 Jan 21 1859:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5650	-	-
1969-H112	2440243_36	1969 Jan 21 2102:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5650	-	-
1969-H113	2440243_41	1969 Jan 21 2145:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5650	-	-
1969-H114	2440244_11	1969 Jan 22 1430:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5650	-	-
1969-H115	2440244_12	1969 Jan 22 1500:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5650	-	-
1969-H116	2440244_17	1969 Jan 22 1559:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5650	-	-
1969-H117	2440244_24	1969 Jan 22 1740:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5650	-	-
1969-H118	2440244_31	1969 Jan 22 1924:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5650	-	-
1969-H119	2440244_33	1969 Jan 22 2000:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5650	-	-
1969-H120	2440245_12	1969 Jan 23 1500:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5650	-	-
1969-H121	2440245_27	1969 Jan 23 1630:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5650	-	-
1969-H122	2440245_31	1969 Jan 23 1927:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5650	-	-
1969-H123	2440245_49	1969 Jan 23 2345:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5650	-	-
1969-H124	2440246_01	1969 Jan 24 0233:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5650	-	-
1969-H125	2440246_11	1969 Jan 24 1445:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5650	-	-
1969-H126	2440246_13	1969 Jan 24 1504:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5650	-	-
1969-H127	2440246_15	1969 Jan 24 1530:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5650	-	-
1969-H128	2440246_28	1969 Jan 24 1800:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5650	-	-
1969-H129	2440246_28	1969 Jan 24 1814:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5650	-	-
1969-H130	2440246_28	1969 Jan 24 1842:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5650	-	-
1969-H131	2440246_33	1969 Jan 24 2000:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5650	-	-
1969-H132	2440246_36	1969 Jan 24 2009:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5650	-	-
1969-H133	2440246_39	1969 Jan 24 2037:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5650	-	-
1969-H134	2440246_42	1969 Jan 24 2047:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5650	-	-
1969-H135	2440249_11	1969 Jan 27 1445:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5650	-	-
1969-H136	2440249_12	1969 Jan 27 1457:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5650	-	-
1969-H137	2440249_14	1969 Jan 27 1708:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5650	-	-
1969-H138	2440249_24	1969 Jan 27 1903:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5650	-	-
1969-H139	2440249_33	1969 Jan 27 2001:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5650	-	-
1969-H140	2440249_37	1969 Jan 27 2055:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5650	-	-
1969-H141	2440250_01	1969 Jan 28 1500:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5650	-	-
1969-H142	2440250_01	1969 Jan 28 1700:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5650	-	-
1969-H143	2440250_40	1969 Jan 28 2133:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5650	-	-
1969-H144	2440251_11	1969 Jan 29 1435:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5650	-	-
1969-H145	2440251_12	1969 Jan 29 1500:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5650	-	-
1969-H146	2440251_14	1969 Jan 29 1515:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5650	-	-
1969-H147	2440251_17	1969 Jan 29 1559:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5650	-	-
1969-H148	2440251_25	1969 Jan 29 1800:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5650	-	-
1969-H149	2440251_28	1969 Jan 29 1837:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5650	-	-
1969-H150	2440251_29	1969 Jan 29 1859:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5650	-	-
1969-H151	2440251_31	1969 Jan 29 1931:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5650	-	-
1969-H152	2440251_32	1969 Jan 29 1944:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5650	-	-
1969-H153	2440251_33	1969 Jan 29 2000:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5650	-	-
1969-H154	2440251_34	1969 Jan 29 2012:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5650	-	-
1969-H155	2440251_36	1969 Jan 29 2044:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5650	-	-
1969-H156	2440251_36	1969 Jan 29 2045:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5650	-	-
1969-H157	2440251_66	1969 Jan 30 0345:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5650	-	-
1969-H158	2440252_12	1969 Jan 30 1500:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5650	-	-
1969-H159	2440252_35	1969 Jan 30 2030:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5650	-	-
1969-H160	2440252_42	1969 Jan 30 2204:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5650	-	-
1969-H161	2440253_11	1969 Jan 31 0359:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5650	-	-
1969-H162	2440253_11	1969 Jan 31 1435:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5650	-	-
1969-H163	2440253_14	1969 Jan 31 1445:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5650	-	-
1969-H164	2440253_14	1969 Jan 31 1518:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5650	-	-
1969-H165	2440253_25	1969 Jan 31 1830:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5650	-	-
1969-H166	2440253_27	1969 Jan 31 1830:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5650	-	-
1969-H167	2440253_33	1969 Jan 31 2000:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5650	-	-
1969-H168	2440253_37	1969 Jan 31 2047:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5650	-	-
1969-H169	2440254_33	1969 Feb 1 2000:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5650	-	-
1969-H170	2440254_35	1969 Feb 1 2017:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5650	-	-
1969-H171	2440254_35	1969 Feb 2 2017:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5650	-	-
1969-H172	2440256_09	1969 Feb 3 1404:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5650	-	-
1969-H173	2440256_11	1969 Feb 3 1445:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5650	-	-
1969-H174	2440256_12	1969 Feb 3 1500:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5650	-	-

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Launch_e	Agency	Launch_Code	Group	Category	LT_Cite	Cite	Notes
1969-1193	2440256.22	1969 Feb 3 1715:59	Rocketsonde	-	-	0.000	MRI	SS	-	Metro	DSI-5850	-	-
1969-1194	2440256.29	1969 Feb 3 1859:59	Rocketsonde	-	-	0.000	MRI	SS	-	Metro	DSI-5850	-	-
1969-1195	2440256.33	1969 Feb 3 2000:00	Rocketsonde	-	-	0.000	MRI	SS	-	Metro	DSI-5850	-	-
1969-1196	2440256.36	1969 Feb 3 2034:00	Rocketsonde	-	-	0.000	MRI	SS	-	Metro	DSI-5850	-	-
1969-1197	2440256.38	1969 Feb 3 2100:00	Rocketsonde	-	-	0.000	MRI	SS	-	Metro	DSI-5850	-	-
1969-1198	2440256.46	1969 Feb 3 2245:59	Rocketsonde	-	-	0.000	MRI	SS	-	Metro	DSI-5850	-	-
1969-1411	2440257.12	1969 Feb 4 1500:00	Rocketsonde	-	-	0.000	MRI	SS	-	Metro	DSI-5850	-	-
1969-1199	2440257.29	1969 Feb 4 1855:00	Rocketsonde	-	-	0.000	MRI	SS	-	Metro	DSI-5850	-	-
1969-1200	2440257.29	1969 Feb 4 1901:59	Rocketsonde	-	-	0.000	MRI	SS	-	Metro	DSI-5850	-	-
1969-1201	2440257.33	1969 Feb 4 1949:59	Rocketsonde	-	-	0.000	MRI	SS	-	Metro	DSI-5850	-	-
1969-1202	2440257.33	1969 Feb 4 2000:00	Rocketsonde	-	-	0.000	MRI	SS	-	Metro	DSI-5850	-	-
1969-1203	2440257.36	1969 Feb 4 2045:00	Rocketsonde	-	-	0.000	MRI	SS	-	Metro	DSI-5850	-	-
1969-1204	2440257.46	1969 Feb 4 2252:00	Rocketsonde	-	-	0.000	MRI	SS	-	Metro	DSI-5850	-	-
1969-1205	2440258.07	1969 Feb 5 1344:59	Rocketsonde	-	-	0.000	MRI	SS	-	Metro	DSI-5850	-	-
1969-1206	2440258.11	1969 Feb 5 1445:00	Rocketsonde	-	-	0.000	MRI	SS	-	Metro	DSI-5850	-	-
1969-1207	2440258.11	1969 Feb 5 1500:00	Rocketsonde	-	-	0.000	MRI	SS	-	Metro	DSI-5850	-	-
1969-1208	2440258.24	1969 Feb 5 1751:00	Rocketsonde	-	-	0.000	MRI	SS	-	Metro	DSI-5850	-	-
1969-1209	2440258.24	1969 Feb 5 1859:59	Rocketsonde	-	-	0.000	MRI	SS	-	Metro	DSI-5850	-	-
1969-1210	2440258.29	1969 Feb 5 1904:59	Rocketsonde	-	-	0.000	MRI	SS	-	Metro	DSI-5850	-	-
1969-1211	2440258.30	1969 Feb 5 2015:59	Rocketsonde	-	-	0.000	MRI	SS	-	Metro	DSI-5850	-	-
1969-1212	2440258.38	1969 Feb 5 2100:00	Rocketsonde	-	-	0.000	MRI	SS	-	Metro	DSI-5850	-	-
1969-1213	2440258.40	1969 Feb 5 2141:00	Rocketsonde	-	-	0.000	MRI	SS	-	Metro	DSI-5850	-	-
1969-1214	2440258.45	1969 Feb 5 2219:59	Rocketsonde	-	-	0.000	MRI	SS	-	Metro	DSI-5850	-	-
1969-1216	2440259.11	1969 Feb 6 1438:59	Rocketsonde	-	-	0.000	MRI	SS	-	Metro	DSI-5850	-	-
1969-1218	2440259.29	1969 Feb 6 1859:59	Rocketsonde	-	-	0.000	MRI	SS	-	Metro	DSI-5850	-	-
1969-1219	2440259.33	1969 Feb 6 1953:59	Rocketsonde	-	-	0.000	MRI	SS	-	Metro	DSI-5850	-	-
1969-1220	2440259.33	1969 Feb 6 2000:00	Rocketsonde	-	-	0.000	MRI	SS	-	Metro	DSI-5850	-	-
1969-1221	2440259.41	1969 Feb 6 2156:59	Rocketsonde	-	-	0.000	MRI	SS	-	Metro	DSI-5850	-	-
1969-1222	2440260.06	1969 Feb 7 1400:00	Rocketsonde	-	-	0.000	MRI	SS	-	Metro	DSI-5850	-	-
1969-1223	2440260.12	1969 Feb 7 1447:00	Rocketsonde	-	-	0.000	MRI	SS	-	Metro	DSI-5850	-	-
1969-1224	2440260.12	1969 Feb 7 1455:00	Rocketsonde	-	-	0.000	MRI	SS	-	Metro	DSI-5850	-	-
1969-1226	2440260.17	1969 Feb 7 1610:59	Rocketsonde	-	-	0.000	MRI	SS	-	Metro	DSI-5850	-	-
1969-1228	2440260.54	1969 Feb 7 2013:00	Rocketsonde	-	-	0.000	MRI	SS	-	Metro	DSI-5850	-	-
1969-1227	2440260.58	1969 Feb 7 2100:59	Rocketsonde	-	-	0.000	MRI	SS	-	Metro	DSI-5850	-	-
1969-1229	2440260.40	1969 Feb 7 2130:00	Rocketsonde	-	-	0.000	MRI	SS	-	Metro	DSI-5850	-	-
1969-1231	2440260.47	1969 Feb 7 2315:00	Rocketsonde	-	-	0.000	MRI	SS	-	Metro	DSI-5850	-	-
1969-1232	2440263.09	1969 Feb 10 1406:00	Rocketsonde	-	-	0.000	MRI	SS	-	Metro	DSI-5850	-	-
1969-1233	2440263.11	1969 Feb 10 1445:00	Rocketsonde	-	-	0.000	MRI	SS	-	Metro	DSI-5850	-	-
1969-1234	2440263.12	1969 Feb 10 1500:00	Rocketsonde	-	-	0.000	MRI	SS	-	Metro	DSI-5850	-	-
1969-1235	2440263.29	1969 Feb 10 1859:59	Rocketsonde	-	-	0.000	MRI	SS	-	Metro	DSI-5850	-	-
1969-1236	2440263.31	1969 Feb 10 1924:59	Rocketsonde	-	-	0.000	MRI	SS	-	Metro	DSI-5850	-	-
1969-1237	2440263.33	1969 Feb 10 2001:00	Rocketsonde	-	-	0.000	MRI	SS	-	Metro	DSI-5850	-	-
1969-1238	2440263.54	1969 Feb 10 2007:00	Rocketsonde	-	-	0.000	MRI	SS	-	Metro	DSI-5850	-	-
1969-1239	2440263.96	1969 Feb 10 2401:00	Rocketsonde	-	-	0.000	MRI	SS	-	Metro	DSI-5850	-	-
1969-1240	2440264.26	1969 Feb 11 1750:00	Rocketsonde	-	-	0.000	MRI	SS	-	Metro	DSI-5850	-	-
1969-1241	2440264.26	1969 Feb 11 1845:00	Rocketsonde	-	-	0.000	MRI	SS	-	Metro	DSI-5850	-	-
1969-1242	2440264.26	1969 Feb 11 1850:00	Rocketsonde	-	-	0.000	MRI	SS	-	Metro	DSI-5850	-	-
1969-1243	2440265.02	1969 Feb 12 1404:59	Rocketsonde	-	-	0.000	MRI	SS	-	Metro	DSI-5850	-	-
1969-1244	2440265.04	1969 Feb 12 1445:00	Rocketsonde	-	-	0.000	MRI	SS	-	Metro	DSI-5850	-	-
1969-1245	2440265.11	1969 Feb 12 1500:00	Rocketsonde	-	-	0.000	MRI	SS	-	Metro	DSI-5850	-	-
1969-1246	2440265.17	1969 Feb 12 1600:59	Rocketsonde	-	-	0.000	MRI	SS	-	Metro	DSI-5850	-	-
1969-1247	2440265.19	1969 Feb 12 1630:00	Rocketsonde	-	-	0.000	MRI	SS	-	Metro	DSI-5850	-	-
1969-1248	2440265.27	1969 Feb 12 1829:00	Rocketsonde	-	-	0.000	MRI	SS	-	Metro	DSI-5850	-	-
1969-1249	2440265.28	1969 Feb 12 1838:59	Rocketsonde	-	-	0.000	MRI	SS	-	Metro	DSI-5850	-	-
1969-1250	2440265.28	1969 Feb 12 1938:59	Rocketsonde	-	-	0.000	MRI	SS	-	Metro	DSI-5850	-	-
1969-1251	2440265.38	1969 Feb 12 2100:00	Rocketsonde	-	-	0.000	MRI	SS	-	Metro	DSI-5850	-	-
1969-1252	2440265.40	1969 Feb 12 2142:00	Rocketsonde	-	-	0.000	MRI	SS	-	Metro	DSI-5850	-	-
1969-1253	2440266.12	1969 Feb 13 1500:00	Rocketsonde	-	-	0.000	MRI	SS	-	Metro	DSI-5850	-	-
1969-1254	2440266.12	1969 Feb 13 2020:00	Rocketsonde	-	-	0.000	MRI	SS	-	Metro	DSI-5850	-	-
1969-1255	2440266.35	1969 Feb 13 2036:00	Rocketsonde	-	-	0.000	MRI	SS	-	Metro	DSI-5850	-	-
1969-1256	2440266.36	1969 Feb 13 2059:00	Rocketsonde	-	-	0.000	MRI	SS	-	Metro	DSI-5850	-	-
1969-1257	2440266.37	1969 Feb 13 2059:00	Rocketsonde	-	-	0.000	MRI	SS	-	Metro	DSI-5850	-	-
1969-1258	2440266.39	1969 Feb 13 2121:00	Rocketsonde	-	-	0.000	MRI	SS	-	Metro	DSI-5850	-	-
1969-1259	2440266.82	1969 Feb 14 0300:00	Rocketsonde	-	-	0.000	MRI	SS	-	Metro	DSI-5850	-	-
1969-1260	2440266.86	1969 Feb 14 0349:59	Rocketsonde	-	-	0.000	MRI	SS	-	Metro	DSI-5850	-	-
1969-1261	2440266.87	1969 Feb 14 0409:59	Rocketsonde	-	-	0.000	MRI	SS	-	Metro	DSI-5850	-	-
1969-1262	2440267.14	1969 Feb 14 1514:59	Rocketsonde	-	-	0.000	MRI	SS	-	Metro	DSI-5850	-	-
1969-1263	2440267.19	1969 Feb 14 1632:59	Rocketsonde	-	-	0.000	MRI	SS	-	Metro	DSI-5850	-	-
1969-1264	2440267.21	1969 Feb 14 1700:00	Rocketsonde	-	-	0.000	MRI	SS	-	Metro	DSI-5850	-	-
1969-1265	2440267.25	1969 Feb 14 1755:00	Rocketsonde	-	-	0.000	MRI	SS	-	Metro	DSI-5850	-	-
1969-1266	2440267.27	1969 Feb 14 1837:59	Rocketsonde	-	-	0.000	MRI	SS	-	Metro	DSI-5850	-	-
1969-1267	2440267.28	1969 Feb 14 1859:59	Rocketsonde	-	-	0.000	MRI	SS	-	Metro	DSI-5850	-	-
1969-1268	2440267.29	1969 Feb 14 2000:00	Rocketsonde	-	-	0.000	MRI	SS	-	Metro	DSI-5850	-	-
1969-1269	2440267.33	1969 Feb 14 2100:00	Rocketsonde	-	-	0.000	MRI	SS	-	Metro	DSI-5850	-	-
1969-1270	2440270.11	1969 Feb 17 1445:00	Rocketsonde	-	-	0.000	MRI	SS	-	Metro	DSI-5850	-	-
1969-1271	2440270.15	1969 Feb 17 1538:59	Rocketsonde	-	-	0.000	MRI	SS	-	Metro	DSI-5850	-	-
1969-1272	2440270.17	1969 Feb 17 1602:59	Rocketsonde	-	-	0.000	MRI	SS	-	Metro	DSI-5850	-	-
1969-1273	2440270.21	1969 Feb 17 1703:59	Rocketsonde	-	-	0.000	MRI	SS	-	Metro	DSI-5850	-	-
1969-1274	2440270.29	1969 Feb 17 1856:00	Rocketsonde	-	-	0.000	MRI	SS	-	Metro	DSI-5850	-	-
1969-1275	2440270.29	1969 Feb 17 1859:59	Rocketsonde	-	-	0.000	MRI	SS	-	Metro	DSI-5850	-	-
1969-1276	2440270.36	1969 Feb 17 2035:00	Rocketsonde	-	-	0.000	MRI	SS	-	Metro	DSI-5850	-	-
1969-1277	2440270.37	1969 Feb 17 2055:00	Rocketsonde	-	-	0.000	MRI	SS	-	Metro	DSI-5850	-	-
1969-1278	2440271.21	1969 Feb 18 1700:00	Rocketsonde	-	-	0.000	MRI	SS	-	Metro	DSI-5850	-	-
1969-1279	2440271.39	1969 Feb 18 2124:59	Rocketsonde	-	-	0.000	MRI	SS	-	Metro	DSI-5850	-	-
1969-1281	2440272.07	1969 Feb 19 1334:59	Rocketsonde	-	-	0.000	MRI	SS	-	Metro	DSI-5850	-	-

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Launch_e	Agency	Launch_Code	Group	Category	LT_Cite	Cite	Notes
1969-W282	2440272.11	1969 Feb 19 1445:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1969-W283	2440272.15	1969 Feb 19 1530:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1969-W284	2440272.19	1969 Feb 19 1630:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1969-W285	2440272.19	1969 Feb 19 1640:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1969-W286	2440272.26	1969 Feb 19 1819:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1969-W287	2440272.27	1969 Feb 19 1829:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1969-W288	2440272.28	1969 Feb 19 1838:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1969-W290	2440273.17	1969 Feb 20 1559:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1969-W291	2440273.29	1969 Feb 20 1859:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1969-W292	2440273.30	1969 Feb 20 1914:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1969-W293	2440273.33	1969 Feb 20 2000:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1969-W294	2440273.35	1969 Feb 20 2030:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1969-W295	2440273.40	1969 Feb 20 2137:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1969-W297	2440274.25	1969 Feb 21 1800:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1969-W298	2440277.11	1969 Feb 24 1445:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1969-W299	2440277.12	1969 Feb 24 1500:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1969-W300	2440277.25	1969 Feb 24 1800:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1969-W301	2440277.29	1969 Feb 24 1859:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1969-W302	2440277.34	1969 Feb 24 2015:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1969-W303	2440277.37	1969 Feb 24 2047:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1969-W304	2440278.13	1969 Feb 25 1501:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1969-W305	2440278.40	1969 Feb 25 2129:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1969-W306	2440279.15	1969 Feb 26 1530:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1969-W307	2440279.22	1969 Feb 26 1710:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1969-W308	2440279.25	1969 Feb 26 1800:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1969-W309	2440279.33	1969 Feb 26 2000:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1969-W311	2440280.12	1969 Feb 27 1940:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1969-W312	2440280.32	1969 Feb 27 2145:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1969-W313	2440280.41	1969 Feb 27 2145:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1969-W314	2440281.11	1969 Feb 28 1445:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1969-W315	2440281.12	1969 Feb 28 1500:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1969-W316	2440281.12	1969 Feb 28 1500:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1969-W317	2440281.25	1969 Feb 28 1804:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1969-W318	2440281.31	1969 Feb 28 1926:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1969-W319	2440281.31	1969 Feb 28 1930:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1969-W320	2440281.33	1969 Feb 28 2000:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1969-W321	2440281.34	1969 Feb 28 2014:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1969-W322	2440281.39	1969 Feb 28 2014:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1969-W324	2440282.09	1969 Feb 28 2120:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1969-W325	2440282.09	1969 Mar 1 1404:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1969-W326	2440282.11	1969 Mar 3 1445:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1969-W327	2440284.11	1969 Mar 3 1559:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1969-W328	2440284.15	1969 Mar 3 1922:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1969-W329	2440284.19	1969 Mar 3 1930:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1969-W330	2440284.25	1969 Mar 3 1800:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1969-W331	2440284.27	1969 Mar 3 1820:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1969-W332	2440284.33	1969 Mar 3 1823:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1969-W333	2440284.36	1969 Mar 3 2042:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1969-W334	2440285.36	1969 Mar 3 2042:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1969-W335	2440285.36	1969 Mar 4 2111:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1969-W336	2440286.13	1969 Mar 4 1445:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1969-W337	2440286.13	1969 Mar 5 1650:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1969-W338	2440286.19	1969 Mar 5 1640:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1969-W340	2440286.23	1969 Mar 5 1725:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1969-W341	2440286.25	1969 Mar 5 1800:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1969-W342	2440286.31	1969 Mar 5 1921:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1969-W343	2440286.33	1969 Mar 5 2000:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1969-W344	2440286.36	1969 Mar 5 2038:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1969-W345	2440286.36	1969 Mar 5 2100:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1969-W347	2440287.33	1969 Mar 6 1949:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1969-W348	2440287.38	1969 Mar 6 2104:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1969-W350	2440288.11	1969 Mar 7 1445:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1969-W351	2440288.13	1969 Mar 7 1511:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1969-W352	2440288.21	1969 Mar 7 1704:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1969-W353	2440288.23	1969 Mar 7 1731:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1969-W354	2440288.27	1969 Mar 7 1826:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1969-W355	2440288.31	1969 Mar 7 1930:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1969-W357	2440288.33	1969 Mar 7 2002:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1969-W358	2440288.37	1969 Mar 7 2056:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1969-W359	2440291.09	1969 Mar 10 1404:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1969-W360	2440291.11	1969 Mar 10 1445:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1969-W361	2440291.12	1969 Mar 10 1500:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1969-W362	2440291.17	1969 Mar 10 1609:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1969-W363	2440291.22	1969 Mar 10 1711:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1969-W364	2440291.25	1969 Mar 10 1800:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1969-W365	2440291.33	1969 Mar 10 2000:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1969-W366	2440291.34	1969 Mar 10 2004:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1969-W367	2440291.37	1969 Mar 10 2055:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1969-W368	2440291.40	1969 Mar 10 2141:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1969-W370	2440292.35	1969 Mar 11 2024:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1969-W371	2440292.40	1969 Mar 11 2129:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1969-W372	2440293.11	1969 Mar 12 1445:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1969-W373	2440293.14	1969 Mar 12 1514:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1969-W374	2440293.15	1969 Mar 12 1542:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-



Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Launch_e	Agency	Launch_Code	Group	Category	LT_Cite	Cite	Notes
1969-H463	2440309_18	1969 Mar 28 16:14:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1969-H464	2440309_27	1969 Mar 28 18:29:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1969-H465	2440309_27	1969 Mar 28 18:50:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1969-H466	2440309_28	1969 Mar 28 18:40:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1969-H467	2440309_28	1969 Mar 28 18:59:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1969-H468	2440309_33	1969 Mar 28 20:00:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1969-H469	2440309_41	1969 Mar 28 21:49:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1969-H471	2440309_70	1969 Mar 29 04:42:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1969-H474	2440312_09	1969 Mar 31 14:15:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1969-H476	2440313_10	1969 Apr 1 14:30:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1969-H477	2440313_29	1969 Apr 1 18:59:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1969-H478	2440314_12	1969 Apr 2 15:00:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1969-H479	2440314_15	1969 Apr 2 15:40:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1969-H480	2440314_16	1969 Apr 2 16:53:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1969-H481	2440314_17	1969 Apr 2 16:58:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1969-H482	2440314_19	1969 Apr 2 16:26:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1969-H483	2440314_25	1969 Apr 2 18:00:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1969-H484	2440314_31	1969 Apr 2 19:30:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1969-H485	2440314_35	1969 Apr 2 20:29:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1969-H486	2440314_36	1969 Apr 2 20:43:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1969-H487	2440315_08	1969 Apr 3 13:58:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1969-H488	2440315_26	1969 Apr 3 18:13:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1969-H489	2440315_40	1969 Apr 3 21:30:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1969-H490	2440316_10	1969 Apr 4 14:30:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1969-H491	2440316_11	1969 Apr 4 14:45:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1969-H492	2440316_12	1969 Apr 4 15:00:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1969-H493	2440316_19	1969 Apr 4 16:35:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1969-H494	2440316_21	1969 Apr 4 17:02:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1969-H495	2440316_22	1969 Apr 4 17:15:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1969-H496	2440316_34	1969 Apr 4 20:10:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1969-H497	2440319_09	1969 Apr 7 14:15:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1969-H498	2440319_12	1969 Apr 7 15:00:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1969-H499	2440319_12	1969 Apr 7 15:00:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1969-H500	2440319_17	1969 Apr 7 16:04:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1969-H501	2440319_17	1969 Apr 7 16:11:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1969-H502	2440319_29	1969 Apr 7 18:59:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1969-H503	2440319_36	1969 Apr 7 20:40:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1969-H504	2440319_38	1969 Apr 7 21:00:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1969-H505	2440320_08	1969 Apr 8 13:27:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1969-H506	2440320_27	1969 Apr 8 18:27:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1969-H507	2440320_29	1969 Apr 8 18:59:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1969-H508	2440321_11	1969 Apr 9 14:45:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1969-H509	2440321_11	1969 Apr 9 14:45:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1969-H510	2440321_12	1969 Apr 9 15:00:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1969-H511	2440321_13	1969 Apr 9 16:20:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1969-H512	2440321_24	1969 Apr 9 17:24:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1969-H513	2440321_34	1969 Apr 9 17:42:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1969-H514	2440321_35	1969 Apr 9 18:00:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1969-H515	2440321_37	1969 Apr 9 18:30:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1969-H516	2440321_36	1969 Apr 9 18:34:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1969-H517	2440321_37	1969 Apr 9 20:45:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1969-H518	2440321_36	1969 Apr 9 20:29:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1969-H520	2440322_12	1969 Apr 10 15:00:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1969-H521	2440322_19	1969 Apr 10 16:38:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1969-H522	2440322_23	1969 Apr 10 17:20:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1969-H523	2440322_30	1969 Apr 11 09:34:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1969-H524	2440323_11	1969 Apr 11 14:45:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1969-H525	2440323_12	1969 Apr 11 15:00:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1969-H526	2440323_17	1969 Apr 11 15:59:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1969-H527	2440323_17	1969 Apr 11 16:04:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1969-H528	2440323_23	1969 Apr 11 17:20:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1969-H529	2440323_26	1969 Apr 11 18:11:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1969-H530	2440323_27	1969 Apr 11 18:50:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1969-H531	2440323_33	1969 Apr 11 20:00:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1969-H532	2440323_36	1969 Apr 11 20:35:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1969-H533	2440326_12	1969 Apr 14 14:49:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1969-H534	2440326_20	1969 Apr 14 16:51:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1969-H535	2440326_22	1969 Apr 14 17:19:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1969-H536	2440326_25	1969 Apr 14 18:00:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1969-H537	2440326_28	1969 Apr 14 18:36:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1969-H538	2440326_32	1969 Apr 14 19:44:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1969-H539	2440326_33	1969 Apr 14 20:01:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1969-H541	2440326_42	1969 Apr 14 22:07:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1969-H542	2440327_12	1969 Apr 15 14:46:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1969-H544	2440327_18	1969 Apr 15 16:14:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1969-H545	2440327_39	1969 Apr 15 21:17:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1969-H546	2440327_42	1969 Apr 15 21:57:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1969-H548	2440328_09	1969 Apr 16 14:04:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1969-H549	2440328_11	1969 Apr 16 14:45:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1969-H550	2440328_12	1969 Apr 16 15:00:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1969-H551	2440328_13	1969 Apr 16 15:03:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1969-H552	2440328_18	1969 Apr 16 16:21:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1969-H553	2440328_18	1969 Apr 16 16:22:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1969-H554	2440328_21	1969 Apr 16 16:56:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1969-H555	2440328_29	1969 Apr 16 18:59:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-







Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Launch_e	Agency	Launch_Code	Group	Category	LT_Cite	Cite	Notes
1969-W727	2440361.08	1969 May 19 14:00:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1969-W728	2440361.11	1969 May 19 14:45:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1969-W729	2440361.15	1969 May 19 15:31:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1969-W730	2440361.21	1969 May 19 17:01:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1969-W731	2440361.42	1969 May 19 22:06:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1969-W732	2440362.26	1969 May 20 18:13:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1969-W733	2440362.35	1969 May 20 20:30:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1969-W734	2440362.42	1969 May 20 21:59:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1969-W735	2440363.08	1969 May 21 14:00:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1969-W736	2440363.11	1969 May 21 14:45:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1969-W737	2440363.13	1969 May 21 15:04:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1969-W738	2440363.13	1969 May 21 15:10:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1969-W739	2440363.19	1969 May 21 16:34:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1969-W740	2440363.25	1969 May 21 18:00:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1969-W741	2440363.29	1969 May 21 18:59:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1969-W742	2440363.36	1969 May 21 20:32:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1969-W743	2440363.42	1969 May 21 21:57:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1969-W744	2440364.26	1969 May 22 17:56:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1969-W745	2440364.26	1969 May 22 18:05:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1969-W746	2440364.28	1969 May 22 18:57:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1969-W747	2440364.29	1969 May 22 18:57:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1969-W748	2440364.38	1969 May 22 21:01:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1969-W749	2440365.10	1969 May 23 14:21:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1969-W750	2440365.11	1969 May 23 14:50:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1969-W751	2440365.16	1969 May 23 14:45:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1969-W752	2440365.23	1969 May 23 15:46:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1969-W753	2440365.24	1969 May 23 17:50:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1969-W754	2440365.27	1969 May 23 17:45:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1969-W755	2440365.35	1969 May 23 18:29:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1969-W756	2440365.38	1969 May 23 20:30:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1969-W757	2440366.50	1969 May 24 23:55:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1969-W758	2440366.50	1969 May 24 23:55:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1969-W759	2440368.12	1969 May 26 14:00:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1969-W760	2440368.12	1969 May 26 14:46:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1969-W761	2440368.25	1969 May 26 17:03:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1969-W762	2440368.25	1969 May 26 18:01:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1969-W763	2440368.52	1969 May 26 18:59:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1969-W764	2440368.52	1969 May 26 21:56:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1969-W765	2440369.29	1969 May 27 18:59:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1969-W766	2440369.35	1969 May 27 20:26:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1969-W767	2440370.09	1969 May 28 14:15:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1969-W768	2440370.11	1969 May 28 14:15:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1969-W769	2440370.20	1969 May 28 15:39:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1969-W770	2440370.20	1969 May 28 16:41:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1969-W771	2440370.51	1969 May 28 17:04:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1969-W772	2440370.51	1969 May 28 18:02:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1969-W773	2440370.51	1969 May 28 19:26:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1969-W774	2440370.51	1969 May 28 21:12:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1969-W775	2440371.12	1969 May 29 14:59:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1969-W776	2440371.12	1969 May 29 15:00:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1969-W777	2440371.17	1969 May 29 15:59:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1969-W778	2440371.19	1969 May 29 16:30:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1969-W779	2440371.25	1969 May 29 18:00:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1969-W780	2440371.29	1969 May 29 18:55:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1969-W781	2440371.39	1969 May 29 21:17:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1969-W782	2440372.13	1969 May 30 15:07:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1969-W783	2440372.26	1969 May 30 18:15:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1969-W784	2440375.13	1969 Jun 2 16:09:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1969-W785	2440375.19	1969 Jun 2 16:14:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1969-W786	2440375.29	1969 Jun 2 18:59:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1969-W787	2440375.35	1969 Jun 2 20:29:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1969-W788	2440375.38	1969 Jun 2 21:10:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1969-W789	2440376.38	1969 Jun 3 21:07:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1969-W790	2440377.02	1969 Jun 4 12:26:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1969-W791	2440377.08	1969 Jun 4 14:40:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1969-W792	2440377.12	1969 Jun 4 14:49:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1969-W793	2440377.25	1969 Jun 4 18:20:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1969-W794	2440377.27	1969 Jun 4 18:24:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1969-W795	2440377.43	1969 Jun 4 22:24:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1969-W796	2440378.23	1969 Jun 5 17:34:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1969-W797	2440378.38	1969 Jun 6 05:04:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1969-W798	2440378.71	1969 Jun 6 06:59:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1969-W799	2440379.11	1969 Jun 6 16:17:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1969-W800	2440379.18	1969 Jun 6 17:35:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1969-W801	2440379.23	1969 Jun 6 21:00:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1969-W802	2440379.33	1969 Jun 6 21:49:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1969-W803	2440379.41	1969 Jun 6 21:59:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1969-W804	2440379.42	1969 Jun 6 22:49:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1969-W805	2440379.45	1969 Jun 9 11:36:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1969-W806	2440382.11	1969 Jun 9 11:59:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1969-W807	2440382.17	1969 Jun 9 17:45:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1969-W808	2440382.24	1969 Jun 9 18:59:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1969-W811	2440382.29	1969 Jun 9 18:59:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-



Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Launch_e	Agency	Launch_Code	Group	Category	LT_Cite	Cite	Notes
1969-H897	2440389.12	1969 Jun 26 15:00:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1969-H898	2440389.13	1969 Jun 26 15:12:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1969-A107	2440389.38	1969 Jun 26 21:00:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1969-H899	2440389.41	1969 Jun 26 21:46:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1969-H900	2440400.09	1969 Jun 27 14:07:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1969-H902	2440400.25	1969 Jun 27 18:00:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1969-H904	2440400.29	1969 Jun 27 18:51:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1969-H905	2440400.33	1969 Jun 27 20:00:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1969-H906	2440400.39	1969 Jun 27 21:22:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1969-A108	2440400.40	1969 Jun 27 21:35:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1969-H907	2440400.46	1969 Jun 27 22:55:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1969-H908	2440403.11	1969 Jun 30 14:45:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1969-H909	2440403.11	1969 Jun 30 14:45:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1969-H910	2440403.11	1969 Jun 30 14:45:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1969-H911	2440403.12	1969 Jun 30 15:22:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1969-H912	2440403.14	1969 Jun 30 15:22:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1969-H913	2440403.38	1969 Jun 30 21:01:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1969-H914	2440403.74	1969 Jun 1 05:46:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1969-H915	2440404.11	1969 Jun 1 14:45:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1969-H916	2440404.27	1969 Jun 1 18:31:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1969-H917	2440404.38	1969 Jun 1 21:00:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1969-H918	2440404.52	1969 Jun 1 20:03:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1969-H919	2440405.09	1969 Jun 1 14:46:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1969-H920	2440405.11	1969 Jun 1 14:46:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1969-H921	2440405.13	1969 Jun 1 15:04:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1969-H922	2440405.13	1969 Jun 1 15:04:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1969-H923	2440405.17	1969 Jun 1 15:59:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1969-H924	2440405.23	1969 Jun 1 16:59:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1969-H925	2440405.23	1969 Jun 1 17:30:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1969-H926	2440405.29	1969 Jun 1 18:59:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1969-H927	2440406.26	1969 Jun 1 19:44:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1969-H928	2440406.26	1969 Jun 1 20:29:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1969-H929	2440406.31	1969 Jun 1 20:29:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1969-H930	2440406.38	1969 Jun 1 21:24:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1969-H931	2440406.59	1969 Jun 1 14:40:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1969-H932	2440410.09	1969 Jun 1 14:46:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1969-H933	2440410.11	1969 Jun 1 14:46:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1969-H934	2440410.12	1969 Jun 1 14:49:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1969-H935	2440410.15	1969 Jun 1 14:19:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1969-H936	2440410.22	1969 Jun 1 17:15:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1969-H937	2440410.22	1969 Jun 1 17:15:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1969-H938	2440411.38	1969 Jun 1 16:33:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1969-H939	2440411.38	1969 Jun 1 16:33:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1969-H940	2440411.38	1969 Jun 1 16:33:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1969-H941	2440412.24	1969 Jun 1 21:00:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1969-H942	2440412.24	1969 Jun 1 21:00:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1969-H943	2440412.38	1969 Jun 1 18:00:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1969-H944	2440412.38	1969 Jun 1 21:00:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1969-H945	2440413.30	1969 Jun 1 19:07:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1969-H946	2440413.32	1969 Jun 1 19:41:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1969-H947	2440413.56	1969 Jun 1 01:19:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1969-H948	2440414.08	1969 Jun 1 14:00:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1969-H949	2440414.11	1969 Jun 1 14:45:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1969-H950	2440414.12	1969 Jun 1 15:00:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1969-H951	2440414.23	1969 Jun 1 17:34:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1969-H952	2440414.30	1969 Jun 1 19:14:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1969-H953	2440414.47	1969 Jun 1 23:22:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1969-H954	2440417.11	1969 Jun 14 14:45:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1969-H955	2440417.13	1969 Jun 14 15:02:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1969-H956	2440417.28	1969 Jun 14 18:45:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1969-H957	2440417.29	1969 Jun 14 19:02:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1969-H958	2440417.30	1969 Jun 14 19:07:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1969-H959	2440417.30	1969 Jun 1 01:30:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1970-H14	2440458.46	1970 Jan 1 23:00:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1970-H15	2440458.46	1970 Jan 2 14:30:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1970-H16	2440458.10	1970 Jan 2 14:30:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1970-H17	2440458.13	1970 Jan 2 15:08:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1970-H18	2440458.18	1970 Jan 2 16:24:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1970-H19	2440458.29	1970 Jan 2 18:59:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1970-H20	2440458.42	1970 Jan 2 21:59:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1970-H21	2440458.55	1970 Jan 3 01:15:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1970-H22	2440459.31	1970 Jan 3 19:30:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1970-H23	2440459.33	1970 Jan 3 20:01:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1970-H24	2440459.27	1970 Jan 4 18:29:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1970-H25	2440459.31	1970 Jan 4 19:30:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1970-H26	2440459.12	1970 Jan 4 20:20:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1970-H27	2440459.35	1970 Jan 5 14:30:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1970-H28	2440459.10	1970 Jan 5 14:30:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1970-H29	2440459.12	1970 Jan 5 15:00:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Launch_e	Agency	Launch_Code	Group	Category	LT_Cite	Cite	Notes
1970-H38	2440592.17	1970 Jan 5 1608:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1970-H40	2440592.32	1970 Jan 5 1944:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1970-H41	2440592.33	1970 Jan 5 2000:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1970-H42	2440592.40	1970 Jan 5 2142:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1970-A03	2440592.42	1970 Jan 5 2159:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1970-H44	2440592.55	1970 Jan 6 0114:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1970-H46	2440593.12	1970 Jan 6 1500:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1970-H47	2440593.17	1970 Jan 6 1611:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1970-A04	2440593.40	1970 Jan 6 2130:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1970-H48	2440593.46	1970 Jan 6 2306:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1970-H51	2440594.10	1970 Jan 7 1430:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1970-H52	2440594.17	1970 Jan 7 1607:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1970-H53	2440594.25	1970 Jan 7 1800:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1970-H54	2440594.28	1970 Jan 7 1848:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1970-H55	2440594.34	1970 Jan 7 2015:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1970-H56	2440594.37	1970 Jan 7 2053:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1970-H57	2440594.40	1970 Jan 7 2133:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1970-A05	2440594.46	1970 Jan 7 2255:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1970-H59	2440594.55	1970 Jan 8 0114:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1970-H60	2440595.26	1970 Jan 8 1820:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1970-H62	2440595.28	1970 Jan 8 1837:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1970-H61	2440595.33	1970 Jan 8 2000:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1970-H64	2440596.22	1970 Jan 9 1430:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1970-H65	2440596.24	1970 Jan 9 1715:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1970-H66	2440596.24	1970 Jan 9 1749:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1970-H67	2440596.25	1970 Jan 9 1800:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1970-A06	2440596.31	1970 Jan 9 1930:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1970-H68	2440596.38	1970 Jan 9 2100:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1970-H69	2440596.55	1970 Jan 10 0114:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1970-H70	2440596.60	1970 Jan 10 0226:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1970-H72	2440599.11	1970 Jan 12 1456:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1970-H74	2440599.17	1970 Jan 12 1559:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1970-H75	2440599.18	1970 Jan 12 1614:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1970-H76	2440599.30	1970 Jan 12 1910:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1970-H77	2440599.38	1970 Jan 12 2103:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1970-H78	2440599.44	1970 Jan 12 2227:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1970-H79	2440599.56	1970 Jan 13 0119:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1970-H80	2440600.22	1970 Jan 13 1722:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1970-H82	2440601.10	1970 Jan 14 1430:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1970-H85	2440601.10	1970 Jan 14 1500:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1970-H87	2440601.17	1970 Jan 14 1559:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1970-H89	2440601.17	1970 Jan 14 1634:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1970-H86	2440601.20	1970 Jan 14 1721:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1970-H90	2440601.25	1970 Jan 14 1801:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1970-H93	2440601.27	1970 Jan 14 1822:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1970-H95	2440601.55	1970 Jan 15 0114:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1970-H96	2440601.55	1970 Jan 15 1614:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1970-H97	2440602.15	1970 Jan 15 1904:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1970-H98	2440602.30	1970 Jan 15 2130:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1970-H100	2440603.10	1970 Jan 16 1430:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1970-H102	2440603.15	1970 Jan 16 1500:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1970-H104	2440603.17	1970 Jan 16 1538:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1970-H105	2440603.20	1970 Jan 16 1652:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1970-H106	2440603.26	1970 Jan 16 1811:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1970-H107	2440603.30	1970 Jan 16 1907:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1970-H108	2440603.33	1970 Jan 16 2000:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1970-H109	2440603.33	1970 Jan 16 2000:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1970-H110	2440603.41	1970 Jan 16 2145:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1970-H112	2440603.55	1970 Jan 17 0114:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1970-H111	2440606.17	1970 Jan 19 1559:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1970-H116	2440606.20	1970 Jan 19 1604:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1970-H117	2440606.21	1970 Jan 19 1700:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1970-H118	2440606.25	1970 Jan 19 1800:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1970-H119	2440606.27	1970 Jan 19 1830:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1970-H120	2440606.29	1970 Jan 19 1859:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1970-H121	2440606.33	1970 Jan 19 2000:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1970-H122	2440606.42	1970 Jan 19 2159:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1970-H123	2440606.55	1970 Jan 20 0114:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1970-H125	2440607.12	1970 Jan 20 1500:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1970-H126	2440607.23	1970 Jan 20 1725:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1970-H127	2440607.42	1970 Jan 20 2202:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1970-H130	2440608.12	1970 Jan 21 1500:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1970-H132	2440608.24	1970 Jan 21 1740:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1970-H134	2440608.26	1970 Jan 21 1814:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1970-H135	2440608.36	1970 Jan 21 2040:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1970-H136	2440608.37	1970 Jan 21 2058:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1970-H137	2440608.40	1970 Jan 21 2150:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1970-H138	2440608.42	1970 Jan 21 2206:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1970-H139	2440608.45	1970 Jan 21 2254:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Launch_e	Agency	Launch_Code	Group	Category	LT_Cite	Cite	Notes
1970-H140	2440608.55	1970 Jan 22 01:14:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1970-H143	2440609.12	1970 Jan 22 15:00:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1970-H144	2440609.24	1970 Jan 22 17:46:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1970-A14	2440609.42	1970 Jan 23 21:59:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1970-H147	2440610.12	1970 Jan 23 15:00:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1970-H148	2440610.15	1970 Jan 23 15:35:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1970-H149	2440610.25	1970 Jan 23 18:00:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1970-H150	2440610.30	1970 Jan 23 18:20:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1970-H151	2440610.31	1970 Jan 23 19:14:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1970-H152	2440610.34	1970 Jan 23 19:27:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1970-H153	2440610.40	1970 Jan 23 20:15:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1970-H154	2440610.44	1970 Jan 23 21:37:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1970-H155	2440613.10	1970 Jan 26 14:50:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1970-H156	2440613.12	1970 Jan 26 15:00:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1970-H158	2440613.26	1970 Jan 26 18:11:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1970-H159	2440613.35	1970 Jan 26 20:23:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1970-H160	2440614.38	1970 Jan 26 21:00:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1970-H162	2440614.20	1970 Jan 27 15:31:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1970-A17	2440614.15	1970 Jan 27 16:54:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1970-H164	2440615.12	1970 Jan 28 14:50:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1970-H165	2440615.12	1970 Jan 28 15:00:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1970-H166	2440615.12	1970 Jan 28 15:00:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1970-H168	2440615.25	1970 Jan 28 18:00:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1970-H169	2440615.30	1970 Jan 28 19:14:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1970-H169	2440615.32	1970 Jan 28 19:42:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1970-H170	2440615.33	1970 Jan 28 20:00:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1970-H171	2440615.34	1970 Jan 28 20:15:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1970-H172	2440615.35	1970 Jan 28 20:21:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1970-H173	2440615.42	1970 Jan 28 22:10:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1970-H174	2440615.59	1970 Jan 29 02:12:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1970-H176	2440616.41	1970 Jan 29 21:59:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1970-H177	2440616.44	1970 Jan 29 22:57:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1970-H179	2440617.23	1970 Jan 30 17:51:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1970-H180	2440617.26	1970 Jan 30 18:14:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1970-H181	2440617.31	1970 Jan 30 19:50:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1970-A18	2440617.35	1970 Jan 30 20:59:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1970-H182	2440617.42	1970 Jan 30 21:59:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1970-H183	2440617.56	1970 Jan 31 01:50:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1970-H188	2440620.25	1970 Feb 2 15:00:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1970-H189	2440620.45	1970 Feb 2 22:41:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1970-H191	2440620.46	1970 Feb 3 01:31:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1970-H192	2440621.54	1970 Feb 3 11:46:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1970-H193	2440621.54	1970 Feb 3 11:46:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1970-H194	2440621.54	1970 Feb 3 11:46:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1970-H195	2440621.55	1970 Feb 3 20:25:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1970-H196	2440621.55	1970 Feb 3 21:59:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1970-H198	2440621.56	1970 Feb 4 14:03:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1970-H199	2440622.09	1970 Feb 4 14:15:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1970-H200	2440622.95	1970 Feb 4 18:27:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1970-H201	2440622.98	1970 Feb 4 18:27:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1970-H202	2440623.97	1970 Feb 4 20:55:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1970-H203	2440623.97	1970 Feb 4 21:59:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1970-H19	2440623.45	1970 Feb 4 22:44:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1970-H204	2440623.49	1970 Feb 4 23:45:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1970-H205	2440623.55	1970 Feb 4 01:30:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1970-H207	2440623.19	1970 Feb 5 16:30:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1970-H208	2440623.25	1970 Feb 5 18:01:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1970-H209	2440623.97	1970 Feb 5 18:27:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1970-H210	2440623.97	1970 Feb 5 21:06:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1970-H211	2440624.10	1970 Feb 6 14:20:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1970-H212	2440624.20	1970 Feb 6 14:20:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1970-H213	2440624.25	1970 Feb 6 16:45:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1970-H214	2440624.29	1970 Feb 6 18:00:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1970-H215	2440624.38	1970 Feb 6 18:59:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1970-H216	2440624.80	1970 Feb 6 21:11:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1970-H218	2440626.05	1970 Feb 7 02:17:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1970-H218	2440627.08	1970 Feb 8 13:18:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1970-H218	2440627.13	1970 Feb 9 14:00:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1970-H220	2440627.15	1970 Feb 9 15:10:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1970-H221	2440627.21	1970 Feb 9 15:37:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1970-H222	2440627.21	1970 Feb 9 17:06:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1970-H223	2440627.25	1970 Feb 9 18:00:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1970-H225	2440627.29	1970 Feb 9 19:02:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1970-H226	2440627.31	1970 Feb 9 19:30:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1970-H227	2440627.33	1970 Feb 9 19:34:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1970-H228	2440627.35	1970 Feb 9 20:00:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1970-H229	2440627.36	1970 Feb 9 20:30:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1970-H230	2440627.38	1970 Feb 9 21:01:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1970-H231	2440627.42	1970 Feb 9 21:59:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1970-H232	2440627.56	1970 Feb 10 01:50:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1970-H234	2440628.13	1970 Feb 10 15:07:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Launch_e	Agency	Launch_Code	Group	Category	LT_Cite	Cite	Notes
1970-H235	2440628.23	1970 Feb 10 17:25:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1970-H237	2440628.37	1970 Feb 10 20:57:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1970-H239	2440629.05	1970 Feb 11 13:04:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1970-H241	2440629.08	1970 Feb 11 14:00:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1970-H242	2440629.13	1970 Feb 11 15:06:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1970-H243	2440629.28	1970 Feb 11 18:45:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1970-H244	2440629.30	1970 Feb 11 19:14:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1970-H245	2440629.38	1970 Feb 11 21:03:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1970-H246	2440629.42	1970 Feb 11 22:01:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1970-H248	2440629.57	1970 Feb 12 01:34:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1970-H249	2440630.12	1970 Feb 12 15:00:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1970-H250	2440630.19	1970 Feb 12 16:29:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1970-H251	2440630.42	1970 Feb 12 21:59:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1970-H252	2440630.48	1970 Feb 12 23:50:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1970-H253	2440631.08	1970 Feb 13 14:00:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1970-H254	2440631.13	1970 Feb 13 15:06:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1970-H255	2440631.31	1970 Feb 13 19:23:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1970-H256	2440631.35	1970 Feb 13 20:50:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1970-H257	2440631.44	1970 Feb 13 22:50:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1970-H258	2440631.56	1970 Feb 14 01:50:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1970-H259	2440634.12	1970 Feb 16 15:00:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1970-H260	2440634.14	1970 Feb 16 15:20:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1970-H261	2440634.17	1970 Feb 16 16:11:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1970-H262	2440634.25	1970 Feb 16 18:06:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1970-H263	2440634.35	1970 Feb 16 20:00:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1970-H264	2440634.35	1970 Feb 16 20:20:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1970-H265	2440634.40	1970 Feb 16 21:51:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1970-H267	2440634.57	1970 Feb 17 01:55:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1970-H268	2440635.14	1970 Feb 17 15:14:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1970-H269	2440635.38	1970 Feb 17 21:03:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1970-H270	2440635.52	1970 Feb 17 22:11:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1970-H272	2440636.09	1970 Feb 18 14:15:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1970-H274	2440636.10	1970 Feb 18 14:50:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1970-H275	2440636.12	1970 Feb 18 15:00:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1970-H276	2440636.26	1970 Feb 18 16:11:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1970-H277	2440636.26	1970 Feb 18 16:14:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1970-H278	2440636.36	1970 Feb 18 18:15:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1970-H279	2440636.36	1970 Feb 18 20:43:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1970-H280	2440636.51	1970 Feb 18 21:06:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1970-H281	2440636.57	1970 Feb 19 01:41:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1970-H282	2440636.57	1970 Feb 19 15:00:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1970-H283	2440637.12	1970 Feb 19 15:00:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1970-H284	2440638.08	1970 Feb 20 15:10:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1970-H285	2440638.13	1970 Feb 20 15:00:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1970-H286	2440638.55	1970 Feb 20 20:00:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1970-H287	2440638.59	1970 Feb 21 03:59:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1970-H288	2440639.19	1970 Feb 21 15:10:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1970-H289	2440642.13	1970 Feb 24 17:57:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1970-H290	2440642.13	1970 Feb 24 17:57:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1970-H291	2440642.23	1970 Feb 24 18:50:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1970-H292	2440642.23	1970 Feb 24 18:50:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1970-H293	2440642.40	1970 Feb 24 21:43:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1970-H294	2440642.40	1970 Feb 25 15:00:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1970-H296	2440643.12	1970 Feb 25 15:20:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1970-H297	2440643.15	1970 Feb 25 15:36:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1970-H298	2440643.15	1970 Feb 25 18:00:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1970-H300	2440643.25	1970 Feb 25 18:05:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1970-H301	2440643.28	1970 Feb 25 19:45:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1970-H302	2440643.33	1970 Feb 25 20:00:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1970-H303	2440643.34	1970 Feb 25 20:15:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1970-H304	2440643.36	1970 Feb 25 20:45:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1970-H305	2440643.38	1970 Feb 25 21:00:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1970-H307	2440643.81	1970 Feb 26 02:57:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1970-H308	2440644.12	1970 Feb 26 15:00:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1970-H309	2440644.23	1970 Feb 26 17:30:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1970-H310	2440644.25	1970 Feb 26 18:02:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1970-H311	2440644.38	1970 Feb 26 21:00:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1970-H313	2440645.08	1970 Feb 27 14:00:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1970-H314	2440645.11	1970 Feb 27 14:37:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1970-H315	2440645.11	1970 Feb 27 14:42:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1970-H316	2440645.25	1970 Feb 27 18:00:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1970-H317	2440645.25	1970 Feb 27 18:07:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1970-H318	2440645.25	1970 Feb 27 20:00:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1970-H319	2440645.33	1970 Feb 27 21:47:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1970-H320	2440645.41	1970 Feb 28 01:50:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1970-H322	2440648.08	1970 Mar 2 14:00:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1970-H323	2440648.12	1970 Mar 2 15:00:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1970-H324	2440648.17	1970 Mar 2 16:01:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1970-H325	2440648.27	1970 Mar 2 18:22:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1970-H326	2440648.29	1970 Mar 2 18:59:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1970-H330	2440648.38	1970 Mar 2 21:00:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1970-H331	2440648.56	1970 Mar 3 01:30:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1970-H332	2440648.10	1970 Mar 3 14:30:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1970-H333	2440649.35	1970 Mar 3 20:29:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1970-H334	2440649.36	1970 Mar 3 20:36:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Launch_e	Agency	Launch_Code	Group	Category	LT_Cite	Cite	Notes
1970-#335	2440649.40	1970 Mar 3 21:41:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1970-#337	2440650.08	1970 Mar 4 14:00:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1970-#338	2440650.12	1970 Mar 4 15:00:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1970-#339	2440650.15	1970 Mar 4 16:30:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1970-#340	2440650.21	1970 Mar 4 16:56:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1970-#341	2440650.26	1970 Mar 4 18:00:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1970-#342	2440650.31	1970 Mar 4 19:30:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1970-#343	2440650.37	1970 Mar 4 20:49:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1970-#344	2440650.44	1970 Mar 4 22:30:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1970-#345	2440650.55	1970 Mar 5 01:14:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1970-#346	2440650.57	1970 Mar 5 01:40:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1970-#347	2440651.41	1970 Mar 5 21:48:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1970-#348	2440651.43	1970 Mar 5 22:18:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1970-#351	2440652.08	1970 Mar 6 14:00:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1970-#352	2440652.12	1970 Mar 6 15:00:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1970-#353	2440652.14	1970 Mar 6 15:14:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1970-#354	2440652.38	1970 Mar 6 21:00:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1970-#355	2440652.57	1970 Mar 7 01:47:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1970-#356	2440655.08	1970 Mar 9 14:00:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1970-#427	2440655.12	1970 Mar 9 14:48:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1970-#367	2440655.12	1970 Mar 9 15:00:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1970-#368	2440655.15	1970 Mar 9 15:33:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1970-#369	2440655.19	1970 Mar 9 16:30:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1970-#370	2440655.29	1970 Mar 9 18:59:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1970-#371	2440655.38	1970 Mar 9 21:00:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1970-#428	2440655.43	1970 Mar 9 22:14:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1970-#372	2440655.56	1970 Mar 10 01:30:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1970-#373	2440656.14	1970 Mar 10 15:26:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1970-#374	2440656.39	1970 Mar 10 21:15:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1970-#375	2440657.09	1970 Mar 11 14:03:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1970-#376	2440657.12	1970 Mar 11 15:00:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1970-#378	2440657.14	1970 Mar 11 15:22:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1970-#380	2440657.19	1970 Mar 11 16:30:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1970-#429	2440657.25	1970 Mar 11 18:00:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1970-#383	2440657.27	1970 Mar 11 18:53:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1970-#384	2440657.35	1970 Mar 11 19:54:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1970-#385	2440657.46	1970 Mar 11 23:35:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1970-#386	2440657.56	1970 Mar 12 01:30:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1970-#388	2440658.23	1970 Mar 12 17:30:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1970-#390	2440659.03	1970 Mar 13 12:40:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1970-#391	2440659.06	1970 Mar 13 14:00:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1970-#392	2440659.11	1970 Mar 13 14:45:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1970-#393	2440659.20	1970 Mar 13 15:59:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1970-#394	2440659.24	1970 Mar 13 16:39:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1970-#395	2440659.54	1970 Mar 13 20:00:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1970-#397	2440659.58	1970 Mar 13 20:30:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1970-#398	2440659.58	1970 Mar 13 21:00:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1970-#399	2440659.58	1970 Mar 13 21:30:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1970-#400	2440659.58	1970 Mar 13 22:00:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1970-#402	2440662.09	1970 Mar 16 14:00:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1970-#403	2440662.14	1970 Mar 16 15:00:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1970-#404	2440662.27	1970 Mar 16 15:18:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1970-#405	2440662.38	1970 Mar 16 18:30:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1970-#406	2440662.38	1970 Mar 16 21:03:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1970-#408	2440662.38	1970 Mar 16 21:04:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1970-#410	2440662.56	1970 Mar 17 01:30:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1970-#411	2440663.97	1970 Mar 17 18:33:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1970-#435	2440663.38	1970 Mar 17 21:02:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1970-#412	2440664.08	1970 Mar 18 14:00:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1970-#413	2440664.12	1970 Mar 18 15:00:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1970-#414	2440664.17	1970 Mar 18 15:59:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1970-#415	2440664.25	1970 Mar 18 18:00:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1970-#416	2440664.29	1970 Mar 18 18:59:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1970-#417	2440664.57	1970 Mar 19 01:37:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1970-#419	2440665.13	1970 Mar 19 15:11:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1970-#421	2440665.31	1970 Mar 19 19:30:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1970-#423	2440666.08	1970 Mar 20 14:00:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1970-#424	2440666.12	1970 Mar 20 14:00:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1970-#436	2440666.26	1970 Mar 20 15:00:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1970-#426	2440666.33	1970 Mar 20 18:20:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1970-#428	2440669.08	1970 Mar 20 20:00:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1970-#429	2440669.12	1970 Mar 20 24:00:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1970-#430	2440669.13	1970 Mar 23 15:00:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1970-#432	2440669.30	1970 Mar 23 19:04:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1970-#433	2440669.36	1970 Mar 23 20:45:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1970-#434	2440669.40	1970 Mar 23 21:34:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1970-#435	2440669.42	1970 Mar 23 21:59:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1970-#436	2440669.43	1970 Mar 23 22:24:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1970-#437	2440669.56	1970 Mar 24 01:31:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1970-#439	2440669.58	1970 Mar 24 02:00:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1970-#437	2440670.04	1970 Mar 24 13:02:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1970-#440	2440670.15	1970 Mar 24 18:40:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1970-#438	2440670.28	1970 Mar 24 18:40:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1970-#440	2440670.31	1970 Mar 24 19:27:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1970-#441	2440670.34	1970 Mar 24 20:03:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1970-#442	2440671.05	1970 Mar 25 13:04:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1970-#442	2440671.08	1970 Mar 25 14:00:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Launch_e	Agency	Launch_Code	Group	Category	LT_Cite	Cite	Notes
1970-W443	2440671.12	1970 Mar 25 1500:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1970-W441	2440671.16	1970 Mar 25 1551:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1970-W445	2440671.17	1970 Mar 25 1606:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1970-W446	2440671.20	1970 Mar 25 1652:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1970-W447	2440671.29	1970 Mar 25 1901:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1970-W448	2440671.30	1970 Mar 25 1904:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1970-W442	2440671.33	1970 Mar 25 2000:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1970-W449	2440671.33	1970 Mar 25 2000:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1970-W443	2440671.34	1970 Mar 25 2003:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1970-W450	2440671.57	1970 Mar 26 0135:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1970-W451	2440671.91	1970 Mar 26 0945:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1970-W452	2440672.38	1970 Mar 26 2100:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1970-W454	2440673.10	1970 Mar 27 1420:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1970-W455	2440673.12	1970 Mar 27 1420:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1970-W456	2440673.17	1970 Mar 27 1611:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1970-W458	2440673.29	1970 Mar 27 1659:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1970-W459	2440673.56	1970 Mar 28 0130:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1970-W444	2440676.08	1970 Mar 30 1400:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1970-W445	2440676.10	1970 Mar 30 1420:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1970-W461	2440676.12	1970 Mar 30 1500:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1970-W462	2440676.18	1970 Mar 30 1625:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1970-W463	2440676.24	1970 Mar 30 1749:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1970-W446	2440676.34	1970 Mar 30 2010:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1970-W464	2440676.38	1970 Mar 31 0111:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1970-W465	2440676.57	1970 Mar 31 0136:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1970-W467	2440677.30	1970 Mar 31 1910:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1970-W468	2440677.39	1970 Mar 31 2127:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1970-W469	2440678.08	1970 Apr 1 1400:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1970-W448	2440678.09	1970 Apr 1 1404:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1970-W470	2440678.12	1970 Apr 1 1500:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1970-W471	2440678.15	1970 Apr 1 1531:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1970-W472	2440678.19	1970 Apr 1 1651:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1970-W473	2440678.19	1970 Apr 1 1640:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1970-W474	2440678.20	1970 Apr 1 1652:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1970-W475	2440678.29	1970 Apr 1 1859:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1970-W476	2440678.33	1970 Apr 1 2000:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1970-W477	2440678.42	1970 Apr 1 2159:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1970-W479	2440678.56	1970 Apr 2 0130:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1970-W480	2440679.33	1970 Apr 2 1951:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1970-W481	2440679.74	1970 Apr 3 0946:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1970-W482	2440680.10	1970 Apr 3 1420:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1970-W483	2440680.10	1970 Apr 3 1420:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1970-W484	2440680.22	1970 Apr 3 1109:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1970-W485	2440680.25	1970 Apr 3 1801:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1970-W486	2440680.29	1970 Apr 3 1859:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1970-W487	2440680.40	1970 Apr 3 2133:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1970-W450	2440680.42	1970 Apr 3 2139:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1970-W488	2440680.47	1970 Apr 3 0216:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1970-W489	2440680.59	1970 Apr 4 0210:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1970-W490	2440683.12	1970 Apr 6 1410:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1970-W491	2440683.12	1970 Apr 6 1450:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1970-W492	2440683.21	1970 Apr 6 1650:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1970-W493	2440683.31	1970 Apr 6 1656:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1970-W494	2440683.31	1970 Apr 6 1930:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1970-W495	2440683.33	1970 Apr 6 2000:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1970-W496	2440683.40	1970 Apr 6 2159:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1970-W497	2440684.03	1970 Apr 7 1327:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1970-W498	2440684.10	1970 Apr 7 1427:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1970-W500	2440684.25	1970 Apr 7 1800:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1970-W501	2440684.35	1970 Apr 7 2026:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1970-W502	2440685.12	1970 Apr 8 1459:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1970-W503	2440685.13	1970 Apr 8 1504:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1970-W505	2440685.21	1970 Apr 8 1707:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1970-W506	2440685.25	1970 Apr 8 1800:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1970-W507	2440685.27	1970 Apr 8 1830:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1970-W509	2440685.29	1970 Apr 8 1859:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1970-W510	2440685.34	1970 Apr 8 2012:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1970-W511	2440685.48	1970 Apr 8 2330:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1970-W512	2440685.56	1970 Apr 9 0130:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1970-W513	2440686.13	1970 Apr 9 1504:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1970-W514	2440686.15	1970 Apr 9 1511:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1970-W515	2440686.15	1970 Apr 9 1530:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1970-W516	2440686.17	1970 Apr 9 1559:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1970-W517	2440686.19	1970 Apr 9 1630:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1970-W518	2440686.20	1970 Apr 9 1641:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1970-W519	2440686.28	1970 Apr 9 1845:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1970-W520	2440686.33	1970 Apr 9 2000:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1970-W521	2440686.35	1970 Apr 9 2030:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1970-W522	2440687.08	1970 Apr 10 1400:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1970-W523	2440687.22	1970 Apr 10 1720:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1970-W524	2440687.24	1970 Apr 10 1748:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1970-W525	2440687.26	1970 Apr 10 1808:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1970-W526	2440687.33	1970 Apr 10 2000:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1970-W527	2440687.38	1970 Apr 10 2110:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-



Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Launch	Agency	Launch_Code	Group	Category	LT_Cite	Cite	Notes
						DrpPay							
1970-H523	2440687.46	1970 Apr 10 2300:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1970-H524	2440687.50	1970 Apr 11 0000:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1970-H525	2440688.37	1970 Apr 11 2065:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1970-H527	2440690.08	1970 Apr 13 1400:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1970-H528	2440690.10	1970 Apr 13 1420:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1970-H529	2440690.12	1970 Apr 13 1500:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1970-H530	2440690.26	1970 Apr 13 1800:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1970-H531	2440690.29	1970 Apr 13 1859:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1970-H532	2440690.31	1970 Apr 13 1932:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1970-H533	2440690.33	1970 Apr 13 2000:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1970-H534	2440690.38	1970 Apr 13 2110:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1970-H536	2440691.02	1970 Apr 14 1235:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1970-H538	2440691.33	1970 Apr 14 1641:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1970-H537	2440691.42	1970 Apr 14 2159:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1970-H539	2440691.42	1970 Apr 15 1324:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1970-H541	2440692.06	1970 Apr 15 1400:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1970-H543	2440692.12	1970 Apr 15 1500:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1970-H545	2440692.26	1970 Apr 15 1809:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1970-H546	2440692.29	1970 Apr 15 1859:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1970-H547	2440692.33	1970 Apr 15 2000:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1970-H548	2440692.34	1970 Apr 15 2029:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1970-H549	2440692.37	1970 Apr 15 2063:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1970-H551	2440693.49	1970 Apr 15 2346:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1970-H553	2440693.21	1970 Apr 16 0150:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1970-H555	2440693.22	1970 Apr 16 1655:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1970-H556	2440693.30	1970 Apr 16 1713:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1970-H557	2440693.38	1970 Apr 16 2107:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1970-H559	2440693.42	1970 Apr 17 1401:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1970-H561	2440694.12	1970 Apr 17 1500:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1970-H563	2440694.27	1970 Apr 17 1859:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1970-H564	2440694.29	1970 Apr 17 1859:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1970-H566	2440694.30	1970 Apr 17 1914:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1970-H568	2440694.32	1970 Apr 17 1936:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1970-H567	2440694.34	1970 Apr 17 2000:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1970-H569	2440694.54	1970 Apr 17 2015:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1970-H566	2440694.42	1970 Apr 17 2169:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1970-H566	2440694.42	1970 Apr 20 1413:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1970-H566	2440694.42	1970 Apr 20 1500:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1970-H569	2440694.12	1970 Apr 20 1824:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1970-H571	2440697.25	1970 Apr 20 1859:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1970-H572	2440697.29	1970 Apr 20 1859:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1970-H573	2440697.31	1970 Apr 20 1825:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1970-H574	2440698.24	1970 Apr 21 1800:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1970-H575	2440698.38	1970 Apr 21 1400:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1970-H577	2440699.19	1970 Apr 22 1458:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1970-H578	2440699.12	1970 Apr 22 1558:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1970-H579	2440699.40	1970 Apr 22 1751:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1970-H580	2440699.54	1970 Apr 22 1814:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1970-H581	2440699.56	1970 Apr 22 1810:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1970-H582	2440699.96	1970 Apr 22 1831:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1970-H577	2440699.97	1970 Apr 22 1845:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1970-H583	2440699.98	1970 Apr 22 2000:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1970-H584	2440699.93	1970 Apr 22 2206:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1970-H586	2440699.40	1970 Apr 23 0130:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1970-H586	2440699.46	1970 Apr 23 1913:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1970-H587	2440700.30	1970 Apr 23 2034:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1970-H588	2440700.36	1970 Apr 23 2192:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1970-H589	2440700.39	1970 Apr 24 0334:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1970-H590	2440700.85	1970 Apr 24 0845:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1970-H591	2440701.08	1970 Apr 24 1400:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1970-H593	2440701.12	1970 Apr 24 1514:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1970-H594	2440701.14	1970 Apr 24 1803:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1970-H595	2440701.25	1970 Apr 24 1829:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1970-H597	2440701.29	1970 Apr 24 2002:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1970-H598	2440701.33	1970 Apr 24 2130:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1970-H599	2440701.40	1970 Apr 24 2200:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1970-H600	2440704.08	1970 Apr 27 1400:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1970-H601	2440704.11	1970 Apr 27 1434:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1970-H603	2440704.15	1970 Apr 27 1540:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1970-H604	2440704.24	1970 Apr 27 1748:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1970-H605	2440704.25	1970 Apr 27 1802:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1970-H606	2440704.29	1970 Apr 27 1859:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1970-H607	2440704.45	1970 Apr 27 2244:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1970-H608	2440705.14	1970 Apr 28 1525:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1970-H609	2440705.23	1970 Apr 28 1730:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1970-H610	2440705.32	1970 Apr 28 1944:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1970-H611	2440705.42	1970 Apr 28 2206:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1970-H612	2440706.00	1970 Apr 29 1200:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1970-H613	2440706.13	1970 Apr 29 1507:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1970-H615	2440706.22	1970 Apr 29 1720:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-









Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Launch_e	Agency	Launch_Code	Group	Category	LT_Cite	Cite	Notes
1970-H971	2440769.34	1970 Jul 1 2012:00	Rocketsonde	-	-	0.000	HRH	SS	-	Metro	DSI-5850	-	-
1970-H972	2440769.38	1970 Jul 1 2112:59	Rocketsonde	-	-	0.000	HRH	SS	-	Metro	DSI-5850	-	-
1970-H973	2440769.52	1970 Jul 2 0034:59	Rocketsonde	-	-	0.000	HRH	SS	-	Metro	DSI-5850	-	-
1970-H974	2440769.56	1970 Jul 2 0130:00	Rocketsonde	-	-	0.000	HRH	SS	-	Metro	DSI-5850	-	-
1970-H975	2440770.12	1970 Jul 2 1500:00	Rocketsonde	-	-	0.000	HRH	SS	-	Metro	DSI-5850	-	-
1970-H976	2440770.16	1970 Jul 2 1547:59	Rocketsonde	-	-	0.000	HRH	SS	-	Metro	DSI-5850	-	-
1970-H977	2440770.33	1970 Jul 2 2000:00	Rocketsonde	-	-	0.000	HRH	SS	-	Metro	DSI-5850	-	-
1970-H978	2440770.42	1970 Jul 2 2200:59	Rocketsonde	-	-	0.000	HRH	SS	-	Metro	DSI-5850	-	-
1970-H979	2440771.56	1970 Jul 4 0130:00	Rocketsonde	-	-	0.000	HRH	SS	-	Metro	DSI-5850	-	-
1970-H980	2440774.04	1970 Jul 6 1259:59	Rocketsonde	-	-	0.000	HRH	SS	-	Metro	DSI-5850	-	-
1970-H981	2440774.10	1970 Jul 6 1400:00	Rocketsonde	-	-	0.000	HRH	SS	-	Metro	DSI-5850	-	-
1970-H982	2440774.12	1970 Jul 6 1500:00	Rocketsonde	-	-	0.000	HRH	SS	-	Metro	DSI-5850	-	-
1970-H983	2440774.17	1970 Jul 6 1609:59	Rocketsonde	-	-	0.000	HRH	SS	-	Metro	DSI-5850	-	-
1970-H984	2440774.19	1970 Jul 6 1630:00	Rocketsonde	-	-	0.000	HRH	SS	-	Metro	DSI-5850	-	-
1970-H985	2440774.21	1970 Jul 6 1700:00	Rocketsonde	-	-	0.000	HRH	SS	-	Metro	DSI-5850	-	-
1970-H986	2440774.28	1970 Jul 6 1845:00	Rocketsonde	-	-	0.000	HRH	SS	-	Metro	DSI-5850	-	-
1970-H987	2440774.42	1970 Jul 6 2159:59	Rocketsonde	-	-	0.000	HRH	SS	-	Metro	DSI-5850	-	-
1970-H988	2440775.15	1970 Jul 7 0533:59	Rocketsonde	-	-	0.000	HRH	SS	-	Metro	DSI-5850	-	-
1970-H989	2440775.46	1970 Jul 7 2302:00	Rocketsonde	-	-	0.000	HRH	SS	-	Metro	DSI-5850	-	-
1970-H990	2440776.04	1970 Jul 8 1259:59	Rocketsonde	-	-	0.000	HRH	SS	-	Metro	DSI-5850	-	-
1970-H991	2440776.08	1970 Jul 8 1400:00	Rocketsonde	-	-	0.000	HRH	SS	-	Metro	DSI-5850	-	-
1970-H992	2440776.12	1970 Jul 8 1500:00	Rocketsonde	-	-	0.000	HRH	SS	-	Metro	DSI-5850	-	-
1970-H993	2440776.16	1970 Jul 8 1556:59	Rocketsonde	-	-	0.000	HRH	SS	-	Metro	DSI-5850	-	-
1970-H994	2440776.18	1970 Jul 8 1625:59	Rocketsonde	-	-	0.000	HRH	SS	-	Metro	DSI-5850	-	-
1970-H995	2440776.23	1970 Jul 8 1730:00	Rocketsonde	-	-	0.000	HRH	SS	-	Metro	DSI-5850	-	-
1970-H996	2440776.25	1970 Jul 8 1800:59	Rocketsonde	-	-	0.000	HRH	SS	-	Metro	DSI-5850	-	-
1970-H997	2440776.29	1970 Jul 8 1855:00	Rocketsonde	-	-	0.000	HRH	SS	-	Metro	DSI-5850	-	-
1970-H998	2440776.40	1970 Jul 8 2142:00	Rocketsonde	-	-	0.000	HRH	SS	-	Metro	DSI-5850	-	-
1970-H1000	2440776.59	1970 Jul 9 0208:00	Rocketsonde	-	-	0.000	HRH	SS	-	Metro	DSI-5850	-	-
1970-H1001	2440777.16	1970 Jul 9 1545:59	Rocketsonde	-	-	0.000	HRH	SS	-	Metro	DSI-5850	-	-
1970-H1002	2440777.42	1970 Jul 9 2159:59	Rocketsonde	-	-	0.000	HRH	SS	-	Metro	DSI-5850	-	-
1970-H1003	2440778.04	1970 Jul 10 1259:59	Rocketsonde	-	-	0.000	HRH	SS	-	Metro	DSI-5850	-	-
1970-H1004	2440778.08	1970 Jul 10 1400:00	Rocketsonde	-	-	0.000	HRH	SS	-	Metro	DSI-5850	-	-
1970-H1005	2440778.12	1970 Jul 10 1500:00	Rocketsonde	-	-	0.000	HRH	SS	-	Metro	DSI-5850	-	-
1970-H1006	2440778.20	1970 Jul 10 1644:59	Rocketsonde	-	-	0.000	HRH	SS	-	Metro	DSI-5850	-	-
1970-H1007	2440778.21	1970 Jul 10 1657:59	Rocketsonde	-	-	0.000	HRH	SS	-	Metro	DSI-5850	-	-
1970-H1008	2440778.21	1970 Jul 10 1700:00	Rocketsonde	-	-	0.000	HRH	SS	-	Metro	DSI-5850	-	-
1970-H1009	2440778.24	1970 Jul 10 1700:00	Rocketsonde	-	-	0.000	HRH	SS	-	Metro	DSI-5850	-	-
1970-H1010	2440778.86	1970 Jul 11 0130:00	Rocketsonde	-	-	0.000	HRH	SS	-	Metro	DSI-5850	-	-
1970-H1011	2440781.04	1970 Jul 13 1259:59	Rocketsonde	-	-	0.000	HRH	SS	-	Metro	DSI-5850	-	-
1970-H1011	2440781.08	1970 Jul 13 1400:00	Rocketsonde	-	-	0.000	HRH	SS	-	Metro	DSI-5850	-	-
1970-H1012	2440781.18	1970 Jul 13 1619:59	Rocketsonde	-	-	0.000	HRH	SS	-	Metro	DSI-5850	-	-
1970-H1013	2440781.18	1970 Jul 13 1621:59	Rocketsonde	-	-	0.000	HRH	SS	-	Metro	DSI-5850	-	-
1970-H1014	2440781.19	1970 Jul 13 1740:00	Rocketsonde	-	-	0.000	HRH	SS	-	Metro	DSI-5850	-	-
1970-H1015	2440781.21	1970 Jul 13 1700:00	Rocketsonde	-	-	0.000	HRH	SS	-	Metro	DSI-5850	-	-
1970-H1016	2440781.21	1970 Jul 13 1707:00	Rocketsonde	-	-	0.000	HRH	SS	-	Metro	DSI-5850	-	-
1970-H1017	2440781.21	1970 Jul 13 1859:59	Rocketsonde	-	-	0.000	HRH	SS	-	Metro	DSI-5850	-	-
1970-H1018	2440781.24	1970 Jul 13 1707:00	Rocketsonde	-	-	0.000	HRH	SS	-	Metro	DSI-5850	-	-
1970-H1019	2440781.38	1970 Jul 13 1859:59	Rocketsonde	-	-	0.000	HRH	SS	-	Metro	DSI-5850	-	-
1970-H1020	2440783.06	1970 Jul 14 0130:00	Rocketsonde	-	-	0.000	HRH	SS	-	Metro	DSI-5850	-	-
1970-H1021	2440783.06	1970 Jul 14 1415:00	Rocketsonde	-	-	0.000	HRH	SS	-	Metro	DSI-5850	-	-
1970-H1022	2440783.19	1970 Jul 14 1639:00	Rocketsonde	-	-	0.000	HRH	SS	-	Metro	DSI-5850	-	-
1970-H1023	2440783.38	1970 Jul 14 2100:00	Rocketsonde	-	-	0.000	HRH	SS	-	Metro	DSI-5850	-	-
1970-H1024	2440783.44	1970 Jul 14 2234:59	Rocketsonde	-	-	0.000	HRH	SS	-	Metro	DSI-5850	-	-
1970-H1025	2440783.59	1970 Jul 15 0215:00	Rocketsonde	-	-	0.000	HRH	SS	-	Metro	DSI-5850	-	-
1970-H1026	2440783.85	1970 Jul 15 1311:59	Rocketsonde	-	-	0.000	HRH	SS	-	Metro	DSI-5850	-	-
1970-H1027	2440783.10	1970 Jul 15 1430:00	Rocketsonde	-	-	0.000	HRH	SS	-	Metro	DSI-5850	-	-
1970-H1028	2440783.12	1970 Jul 15 1500:00	Rocketsonde	-	-	0.000	HRH	SS	-	Metro	DSI-5850	-	-
1970-H1030	2440783.24	1970 Jul 15 1745:00	Rocketsonde	-	-	0.000	HRH	SS	-	Metro	DSI-5850	-	-
1970-H1031	2440783.29	1970 Jul 15 1859:59	Rocketsonde	-	-	0.000	HRH	SS	-	Metro	DSI-5850	-	-
1970-H1032	2440783.38	1970 Jul 15 2100:00	Rocketsonde	-	-	0.000	HRH	SS	-	Metro	DSI-5850	-	-
1970-H1033	2440783.68	1970 Jul 16 0153:59	Rocketsonde	-	-	0.000	HRH	SS	-	Metro	DSI-5850	-	-
1970-H1034	2440784.18	1970 Jul 16 1639:59	Rocketsonde	-	-	0.000	HRH	SS	-	Metro	DSI-5850	-	-
1970-H1035	2440784.22	1970 Jul 16 1719:00	Rocketsonde	-	-	0.000	HRH	SS	-	Metro	DSI-5850	-	-
1970-H1037	2440784.24	1970 Jul 16 1746:00	Rocketsonde	-	-	0.000	HRH	SS	-	Metro	DSI-5850	-	-
1970-H1038	2440784.38	1970 Jul 16 2100:00	Rocketsonde	-	-	0.000	HRH	SS	-	Metro	DSI-5850	-	-
1970-H1039	2440785.04	1970 Jul 17 1259:59	Rocketsonde	-	-	0.000	HRH	SS	-	Metro	DSI-5850	-	-
1971-H003	2440956.08	1971 Jan 4 1400:00	Rocketsonde	-	-	0.000	HRH	SS	-	Metro	DSI-5850	-	-
1971-H004	2440956.08	1971 Jan 4 1400:00	Rocketsonde	-	-	0.000	HRH	SS	-	Metro	DSI-5850	-	-
1971-H006	2440956.31	1971 Jan 4 1830:00	Rocketsonde	-	-	0.000	HRH	SS	-	Metro	DSI-5850	-	-
1971-H007	2440956.68	1971 Jan 5 0156:59	Rocketsonde	-	-	0.000	HRH	SS	-	Metro	DSI-5850	-	-
1971-H009	2440957.33	1971 Jan 5 2000:00	Rocketsonde	-	-	0.000	HRH	SS	-	Metro	DSI-5850	-	-
1971-H010	2440957.92	1971 Jan 6 0959:59	Rocketsonde	-	-	0.000	HRH	SS	-	Metro	DSI-5850	-	-
1971-H011	2440958.08	1971 Jan 6 1400:00	Rocketsonde	-	-	0.000	HRH	SS	-	Metro	DSI-5850	-	-
1971-H011	2440958.09	1971 Jan 6 1403:59	Rocketsonde	-	-	0.000	HRH	SS	-	Metro	DSI-5850	-	-
1971-H012	2440958.12	1971 Jan 6 1455:00	Rocketsonde	-	-	0.000	HRH	SS	-	Metro	DSI-5850	-	-
1971-H012	2440958.25	1971 Jan 6 1800:59	Rocketsonde	-	-	0.000	HRH	SS	-	Metro	DSI-5850	-	-
1971-H013	2440958.34	1971 Jan 6 1941:59	Rocketsonde	-	-	0.000	HRH	SS	-	Metro	DSI-5850	-	-
1971-H014	2440958.32	1971 Jan 6 2015:00	Rocketsonde	-	-	0.000	HRH	SS	-	Metro	DSI-5850	-	-
1971-H014	2440958.34	1971 Jan 7 0138:59	Rocketsonde	-	-	0.000	HRH	SS	-	Metro	DSI-5850	-	-
1971-H015	2440958.57	1971 Jan 7 0138:59	Rocketsonde	-	-	0.000	HRH	SS	-	Metro	DSI-5850	-	-
1971-H016	2440959.29	1971 Jan 7 1859:59	Rocketsonde	-	-	0.000	HRH	SS	-	Metro	DSI-5850	-	-
1971-H016	2440959.38	1971 Jan 7 2100:00	Rocketsonde	-	-	0.000	HRH	SS	-	Metro	DSI-5850	-	-
1971-H018	2440959.38	1971 Jan 7 2102:59	Rocketsonde	-	-	0.000	HRH	SS	-	Metro	DSI-5850	-	-
1971-H019	2440960.08	1971 Jan 8 1400:00	Rocketsonde	-	-	0.000	HRH	SS	-	Metro	DSI-5850	-	-



Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Launch	Agency	Launch_Code	Group	Category	LT_Cite	Cite	Notes
						DrpPay							
1971-H122	2440974.17	1971 Jan 22 1559:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1971-H123	2440974.27	1971 Jan 22 1822:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1971-H126	2440974.50	1971 Jan 23 0000:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1971-A11	2440974.51	1971 Jan 23 0044:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1971-H139	2440974.52	1971 Jan 23 0027:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1971-H128	2440974.56	1971 Jan 23 0130:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1971-H132	2440977.08	1971 Jan 25 1400:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1971-H134	2440977.17	1971 Jan 25 1559:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1971-H136	2440977.19	1971 Jan 25 1630:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1971-H137	2440977.22	1971 Jan 25 1715:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1971-H138	2440977.25	1971 Jan 25 1800:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1971-H139	2440977.30	1971 Jan 25 1911:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1971-H139	2440977.33	1971 Jan 25 1966:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1971-H140	2440977.37	1971 Jan 25 2066:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1971-H143	2440977.56	1971 Jan 26 0130:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1971-H144	2440978.22	1971 Jan 26 1723:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1971-H146	2440978.34	1971 Jan 26 2015:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1971-H144	2440978.44	1971 Jan 26 2230:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1971-H144	2440978.92	1971 Jan 27 1004:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1971-H149	2440979.08	1971 Jan 27 1400:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1971-H150	2440979.10	1971 Jan 27 1422:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1971-H151	2440979.15	1971 Jan 27 1534:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1971-H153	2440979.25	1971 Jan 27 1800:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1971-H154	2440979.27	1971 Jan 27 1829:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1971-H155	2440979.27	1971 Jan 27 1830:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1971-H156	2440979.29	1971 Jan 27 1859:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1971-H157	2440979.34	1971 Jan 27 2010:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1971-H158	2440979.34	1971 Jan 27 2015:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1971-H160	2440979.57	1971 Jan 28 0153:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1971-H161	2440980.27	1971 Jan 28 1624:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1971-H162	2440980.30	1971 Jan 28 1904:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1971-H163	2440980.34	1971 Jan 28 2013:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1971-H164	2440980.35	1971 Jan 28 2026:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1971-H166	2440980.37	1971 Jan 28 2069:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1971-H166	2440980.39	1971 Jan 28 2114:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1971-H167	2440981.05	1971 Jan 29 1402:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1971-H168	2440981.12	1971 Jan 29 1509:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1971-H169	2440981.15	1971 Jan 29 1537:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1971-H170	2440981.16	1971 Jan 29 1551:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1971-H171	2440981.16	1971 Jan 29 1631:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1971-H172	2440981.19	1971 Jan 29 1849:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1971-H174	2440981.25	1971 Jan 30 0415:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1971-H175	2440981.57	1971 Jan 30 1402:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1971-H176	2440982.08	1971 Jan 31 2309:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1971-H178	2440983.46	1971 Feb 1 1400:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1971-H182	2440984.12	1971 Feb 1 1705:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1971-H182	2440984.15	1971 Feb 1 1755:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1971-H184	2440984.25	1971 Feb 1 1759:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1971-H184	2440984.30	1971 Feb 1 1911:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1971-H186	2440984.39	1971 Feb 1 1914:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1971-H188	2440984.41	1971 Feb 1 2140:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1971-H189	2440984.41	1971 Feb 1 2140:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1971-H189	2440984.47	1971 Feb 2 0134:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1971-H189	2440985.19	1971 Feb 2 1631:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1971-H191	2440985.22	1971 Feb 2 1715:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1971-H192	2440985.38	1971 Feb 2 2100:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1971-H193	2440985.97	1971 Feb 3 1120:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1971-H193	2440986.08	1971 Feb 3 1400:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1971-H196	2440986.12	1971 Feb 3 1449:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1971-H199	2440986.17	1971 Feb 3 1559:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1971-H200	2440986.24	1971 Feb 3 1658:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1971-H202	2440986.26	1971 Feb 3 1747:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1971-H203	2440986.32	1971 Feb 3 1812:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1971-H204	2440986.35	1971 Feb 3 1943:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1971-H205	2440986.39	1971 Feb 3 2025:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1971-H205	2440986.41	1971 Feb 3 2125:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1971-H207	2440986.56	1971 Feb 4 0130:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1971-H208	2440987.21	1971 Feb 4 1700:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1971-H209	2440987.27	1971 Feb 4 1827:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1971-H210	2440987.29	1971 Feb 4 1859:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1971-H211	2440987.33	1971 Feb 4 2000:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1971-H212	2440987.38	1971 Feb 4 2100:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1971-H215	2440987.51	1971 Feb 5 0010:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1971-H216	2440988.08	1971 Feb 5 1400:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1971-H216	2440988.25	1971 Feb 5 1400:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1971-H218	2440988.29	1971 Feb 5 1755:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1971-H218	2440988.37	1971 Feb 5 1859:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1971-H219	2440988.37	1971 Feb 5 2058:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1971-H220	2440988.40	1971 Feb 5 2143:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1971-H223	2440991.08	1971 Feb 8 1400:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1971-H224	2440991.08	1971 Feb 8 1400:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1971-H225	2440991.19	1971 Feb 8 1626:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1971-H226	2440991.26	1971 Feb 8 1814:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-





Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Launch_e	Agency	Launch_Code	Group	Category	LT_Cite	Cite	Notes
1971-#315	2441009.35	1971 Feb 26 2030:00	Rocketsonde	-	-	0.000	HRM	SS	-	Meteo	DSI-5850	-	-
1971-#316	2441009.56	1971 Feb 27 0130:59	Rocketsonde	-	-	0.000	HRM	SS	-	Meteo	DSI-5850	-	-
1971-#317	2441012.08	1971 Mar 1 1400:00	Rocketsonde	-	-	0.000	HRM	SS	-	Meteo	DSI-5850	-	-
1971-#318	2441012.08	1971 Mar 1 1400:00	Rocketsonde	-	-	0.000	HRM	SS	-	Meteo	DSI-5850	-	-
1971-#319	2441012.23	1971 Mar 1 1732:00	Rocketsonde	-	-	0.000	HRM	SS	-	Meteo	DSI-5850	-	-
1971-#320	2441012.26	1971 Mar 1 1800:00	Rocketsonde	-	-	0.000	HRM	SS	-	Meteo	DSI-5850	-	-
1971-#321	2441012.36	1971 Mar 1 2032:00	Rocketsonde	-	-	0.000	HRM	SS	-	Meteo	DSI-5850	-	-
1971-#322	2441012.40	1971 Mar 1 2130:00	Rocketsonde	-	-	0.000	HRM	SS	-	Meteo	DSI-5850	-	-
1971-#323	2441012.56	1971 Mar 2 0130:00	Rocketsonde	-	-	0.000	HRM	SS	-	Meteo	DSI-5850	-	-
1971-#324	2441013.09	1971 Mar 2 1410:00	Rocketsonde	-	-	0.000	HRM	SS	-	Meteo	DSI-5850	-	-
1971-#325	2441013.42	1971 Mar 2 2159:59	Rocketsonde	-	-	0.000	HRM	SS	-	Meteo	DSI-5850	-	-
1971-#326	2441013.92	1971 Mar 3 0959:59	Rocketsonde	-	-	0.000	HRM	SS	-	Meteo	DSI-5850	-	-
1971-#327	2441014.08	1971 Mar 3 1400:00	Rocketsonde	-	-	0.000	HRM	SS	-	Meteo	DSI-5850	-	-
1971-#328	2441014.09	1971 Mar 3 1410:00	Rocketsonde	-	-	0.000	HRM	SS	-	Meteo	DSI-5850	-	-
1971-#329	2441014.25	1971 Mar 3 1800:00	Rocketsonde	-	-	0.000	HRM	SS	-	Meteo	DSI-5850	-	-
1971-#330	2441014.42	1971 Mar 3 1944:59	Rocketsonde	-	-	0.000	HRM	SS	-	Meteo	DSI-5850	-	-
1971-#331	2441014.52	1971 Mar 3 2020:00	Rocketsonde	-	-	0.000	HRM	SS	-	Meteo	DSI-5850	-	-
1971-#332	2441014.56	1971 Mar 4 0130:00	Rocketsonde	-	-	0.000	HRM	SS	-	Meteo	DSI-5850	-	-
1971-#333	2441015.23	1971 Mar 4 1730:00	Rocketsonde	-	-	0.000	HRM	SS	-	Meteo	DSI-5850	-	-
1971-#334	2441015.23	1971 Mar 4 1730:00	Rocketsonde	-	-	0.000	HRM	SS	-	Meteo	DSI-5850	-	-
1971-#335	2441015.27	1971 Mar 4 1830:00	Rocketsonde	-	-	0.000	HRM	SS	-	Meteo	DSI-5850	-	-
1971-#336	2441015.42	1971 Mar 4 2159:59	Rocketsonde	-	-	0.000	HRM	SS	-	Meteo	DSI-5850	-	-
1971-#337	2441016.08	1971 Mar 5 1400:00	Rocketsonde	-	-	0.000	HRM	SS	-	Meteo	DSI-5850	-	-
1971-#338	2441016.13	1971 Mar 5 1511:59	Rocketsonde	-	-	0.000	HRM	SS	-	Meteo	DSI-5850	-	-
1971-#339	2441016.15	1971 Mar 5 1540:00	Rocketsonde	-	-	0.000	HRM	SS	-	Meteo	DSI-5850	-	-
1971-#340	2441016.26	1971 Mar 5 1814:59	Rocketsonde	-	-	0.000	HRM	SS	-	Meteo	DSI-5850	-	-
1971-#341	2441016.26	1971 Mar 5 1859:59	Rocketsonde	-	-	0.000	HRM	SS	-	Meteo	DSI-5850	-	-
1971-#342	2441016.31	1971 Mar 5 1920:59	Rocketsonde	-	-	0.000	HRM	SS	-	Meteo	DSI-5850	-	-
1971-#343	2441016.42	1971 Mar 5 2209:59	Rocketsonde	-	-	0.000	HRM	SS	-	Meteo	DSI-5850	-	-
1971-#344	2441016.56	1971 Mar 6 0130:00	Rocketsonde	-	-	0.000	HRM	SS	-	Meteo	DSI-5850	-	-
1971-#345	2441016.56	1971 Mar 6 1400:00	Rocketsonde	-	-	0.000	HRM	SS	-	Meteo	DSI-5850	-	-
1971-#346	2441019.23	1971 Mar 6 1735:00	Rocketsonde	-	-	0.000	HRM	SS	-	Meteo	DSI-5850	-	-
1971-#347	2441019.23	1971 Mar 6 1735:00	Rocketsonde	-	-	0.000	HRM	SS	-	Meteo	DSI-5850	-	-
1971-#348	2441019.25	1971 Mar 6 1859:59	Rocketsonde	-	-	0.000	HRM	SS	-	Meteo	DSI-5850	-	-
1971-#349	2441019.29	1971 Mar 6 1936:59	Rocketsonde	-	-	0.000	HRM	SS	-	Meteo	DSI-5850	-	-
1971-#350	2441019.32	1971 Mar 6 2100:00	Rocketsonde	-	-	0.000	HRM	SS	-	Meteo	DSI-5850	-	-
1971-#351	2441019.38	1971 Mar 6 2130:00	Rocketsonde	-	-	0.000	HRM	SS	-	Meteo	DSI-5850	-	-
1971-#352	2441019.56	1971 Mar 6 2130:00	Rocketsonde	-	-	0.000	HRM	SS	-	Meteo	DSI-5850	-	-
1971-#353	2441020.28	1971 Mar 6 0650:00	Rocketsonde	-	-	0.000	HRM	SS	-	Meteo	DSI-5850	-	-
1971-#354	2441021.08	1971 Mar 10 1400:00	Rocketsonde	-	-	0.000	HRM	SS	-	Meteo	DSI-5850	-	-
1971-#355	2441021.11	1971 Mar 10 1445:00	Rocketsonde	-	-	0.000	HRM	SS	-	Meteo	DSI-5850	-	-
1971-#356	2441021.25	1971 Mar 10 1807:00	Rocketsonde	-	-	0.000	HRM	SS	-	Meteo	DSI-5850	-	-
1971-#357	2441021.27	1971 Mar 10 1827:59	Rocketsonde	-	-	0.000	HRM	SS	-	Meteo	DSI-5850	-	-
1971-#358	2441021.57	1971 Mar 11 0751:00	Rocketsonde	-	-	0.000	HRM	SS	-	Meteo	DSI-5850	-	-
1971-#359	2441021.91	1971 Mar 11 1721:59	Rocketsonde	-	-	0.000	HRM	SS	-	Meteo	DSI-5850	-	-
1971-#360	2441022.54	1971 Mar 11 1743:00	Rocketsonde	-	-	0.000	HRM	SS	-	Meteo	DSI-5850	-	-
1971-#361	2441022.54	1971 Mar 12 0730:00	Rocketsonde	-	-	0.000	HRM	SS	-	Meteo	DSI-5850	-	-
1971-#362	2441022.61	1971 Mar 12 0730:00	Rocketsonde	-	-	0.000	HRM	SS	-	Meteo	DSI-5850	-	-
1971-#363	2441023.04	1971 Mar 12 1524:00	Rocketsonde	-	-	0.000	HRM	SS	-	Meteo	DSI-5850	-	-
1971-#364	2441023.06	1971 Mar 12 1524:00	Rocketsonde	-	-	0.000	HRM	SS	-	Meteo	DSI-5850	-	-
1971-#365	2441023.11	1971 Mar 12 1901:00	Rocketsonde	-	-	0.000	HRM	SS	-	Meteo	DSI-5850	-	-
1971-#366	2441023.38	1971 Mar 12 2112:59	Rocketsonde	-	-	0.000	HRM	SS	-	Meteo	DSI-5850	-	-
1971-#367	2441023.41	1971 Mar 12 2146:59	Rocketsonde	-	-	0.000	HRM	SS	-	Meteo	DSI-5850	-	-
1971-#368	2441023.57	1971 Mar 13 0133:59	Rocketsonde	-	-	0.000	HRM	SS	-	Meteo	DSI-5850	-	-
1971-#369	2441026.20	1971 Mar 15 1634:59	Rocketsonde	-	-	0.000	HRM	SS	-	Meteo	DSI-5850	-	-
1971-#370	2441026.29	1971 Mar 15 1859:59	Rocketsonde	-	-	0.000	HRM	SS	-	Meteo	DSI-5850	-	-
1971-#371	2441026.30	1971 Mar 15 1914:59	Rocketsonde	-	-	0.000	HRM	SS	-	Meteo	DSI-5850	-	-
1971-#372	2441026.37	1971 Mar 15 2051:00	Rocketsonde	-	-	0.000	HRM	SS	-	Meteo	DSI-5850	-	-
1971-#373	2441026.42	1971 Mar 15 2159:59	Rocketsonde	-	-	0.000	HRM	SS	-	Meteo	DSI-5850	-	-
1971-#374	2441026.56	1971 Mar 16 0119:59	Rocketsonde	-	-	0.000	HRM	SS	-	Meteo	DSI-5850	-	-
1971-#375	2441026.56	1971 Mar 16 0130:00	Rocketsonde	-	-	0.000	HRM	SS	-	Meteo	DSI-5850	-	-
1971-#376	2441027.39	1971 Mar 16 1808:00	Rocketsonde	-	-	0.000	HRM	SS	-	Meteo	DSI-5850	-	-
1971-#377	2441027.39	1971 Mar 16 2124:59	Rocketsonde	-	-	0.000	HRM	SS	-	Meteo	DSI-5850	-	-
1971-#378	2441028.13	1971 Mar 17 1502:59	Rocketsonde	-	-	0.000	HRM	SS	-	Meteo	DSI-5850	-	-
1971-#379	2441028.18	1971 Mar 17 1623:59	Rocketsonde	-	-	0.000	HRM	SS	-	Meteo	DSI-5850	-	-
1971-#380	2441028.29	1971 Mar 17 1859:59	Rocketsonde	-	-	0.000	HRM	SS	-	Meteo	DSI-5850	-	-
1971-#381	2441028.33	1971 Mar 17 1956:59	Rocketsonde	-	-	0.000	HRM	SS	-	Meteo	DSI-5850	-	-
1971-#382	2441028.44	1971 Mar 17 2218:00	Rocketsonde	-	-	0.000	HRM	SS	-	Meteo	DSI-5850	-	-
1971-#383	2441028.44	1971 Mar 17 2232:59	Rocketsonde	-	-	0.000	HRM	SS	-	Meteo	DSI-5850	-	-
1971-#384	2441028.57	1971 Mar 18 0134:59	Rocketsonde	-	-	0.000	HRM	SS	-	Meteo	DSI-5850	-	-
1971-#385	2441029.07	1971 Mar 18 1334:59	Rocketsonde	-	-	0.000	HRM	SS	-	Meteo	DSI-5850	-	-
1971-#386	2441029.38	1971 Mar 18 2100:00	Rocketsonde	-	-	0.000	HRM	SS	-	Meteo	DSI-5850	-	-
1971-#387	2441030.09	1971 Mar 19 1413:00	Rocketsonde	-	-	0.000	HRM	SS	-	Meteo	DSI-5850	-	-
1971-#388	2441030.21	1971 Mar 19 1700:00	Rocketsonde	-	-	0.000	HRM	SS	-	Meteo	DSI-5850	-	-
1971-#389	2441030.24	1971 Mar 19 1747:00	Rocketsonde	-	-	0.000	HRM	SS	-	Meteo	DSI-5850	-	-
1971-#390	2441030.33	1971 Mar 19 2000:00	Rocketsonde	-	-	0.000	HRM	SS	-	Meteo	DSI-5850	-	-
1971-#391	2441030.56	1971 Mar 20 0130:00	Rocketsonde	-	-	0.000	HRM	SS	-	Meteo	DSI-5850	-	-
1971-#392	2441033.08	1971 Mar 20 1400:00	Rocketsonde	-	-	0.000	HRM	SS	-	Meteo	DSI-5850	-	-
1971-#393	2441033.08	1971 Mar 22 1401:00	Rocketsonde	-	-	0.000	HRM	SS	-	Meteo	DSI-5850	-	-
1971-#394	2441033.14	1971 Mar 22 1519:00	Rocketsonde	-	-	0.000	HRM	SS	-	Meteo	DSI-5850	-	-
1971-#395	2441033.26	1971 Mar 22 1838:59	Rocketsonde	-	-	0.000	HRM	SS	-	Meteo	DSI-5850	-	-
1971-#396	2441033.29	1971 Mar 22 1859:59	Rocketsonde	-	-	0.000	HRM	SS	-	Meteo	DSI-5850	-	-
1971-#397	2441033.33	1971 Mar 23 0150:00	Rocketsonde	-	-	0.000	HRM	SS	-	Meteo	DSI-5850	-	-
1971-#398	2441033.56	1971 Mar 23 0150:00	Rocketsonde	-	-	0.000	HRM	SS	-	Meteo	DSI-5850	-	-
1971-#399	2441035.12	1971 Mar 24 1453:00	Rocketsonde	-	-	0.000	HRM	SS	-	Meteo	DSI-5850	-	-
1971-#400	2441035.12	1971 Mar 24 1454:00	Rocketsonde	-	-	0.000	HRM	SS	-	Meteo	DSI-5850	-	-

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Launch_e	Agency	Launch_Code	Group	Category	LT_Cite	Cite	Notes
1971-W409	2441035_20	1971 Mar 24 1644:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1971-W410	2441035_23	1971 Mar 24 1730:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1971-W411	2441035_33	1971 Mar 24 2000:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1971-W412	2441035_37	1971 Mar 24 2056:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1971-Y105	2441035_38	1971 Mar 24 2111:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1971-W413	2441035_49	1971 Mar 25 0215:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1971-W414	2441035_59	1971 Mar 25 0215:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1971-W416	2441036_27	1971 Mar 25 1830:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1971-W417	2441036_30	1971 Mar 25 1914:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1971-W419	2441037_08	1971 Mar 26 1400:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1971-W420	2441037_09	1971 Mar 26 1404:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1971-Y106	2441037_17	1971 Mar 26 1606:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1971-W421	2441037_26	1971 Mar 26 1808:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1971-W422	2441037_35	1971 Mar 26 2030:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1971-W423	2441037_38	1971 Mar 26 2100:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1971-W425	2441037_56	1971 Mar 27 0130:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1971-W426	2441040_21	1971 Mar 29 1700:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1971-W428	2441040_27	1971 Mar 29 1830:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1971-W429	2441040_38	1971 Mar 29 2103:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1971-W430	2441040_44	1971 Mar 29 2230:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1971-W431	2441040_58	1971 Mar 30 0154:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1971-W432	2441041_27	1971 Mar 30 1633:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1971-W433	2441041_38	1971 Mar 30 2100:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1971-Y111	2441041_92	1971 Mar 31 1004:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1971-W434	2441042_06	1971 Mar 31 1330:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1971-W435	2441042_08	1971 Mar 31 1404:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1971-W436	2441042_09	1971 Mar 31 1569:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1971-Y112	2441042_17	1971 Mar 31 1847:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1971-W439	2441042_28	1971 Mar 31 1859:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1971-W440	2441042_29	1971 Mar 31 1859:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1971-W441	2441042_36	1971 Mar 31 2300:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1971-W442	2441042_56	1971 Apr 1 0130:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1971-W443	2441043_27	1971 Apr 1 0325:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1971-Y114	2441043_38	1971 Apr 1 2100:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1971-W444	2441043_39	1971 Apr 1 2126:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1971-Y115	2441043_46	1971 Apr 1 2226:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1971-W446	2441044_08	1971 Apr 2 1400:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1971-W447	2441044_08	1971 Apr 2 1600:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1971-W448	2441044_12	1971 Apr 2 1824:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1971-W449	2441044_29	1971 Apr 2 1859:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1971-W450	2441044_29	1971 Apr 2 1904:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1971-W451	2441044_38	1971 Apr 2 2126:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1971-W452	2441044_49	1971 Apr 2 2326:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1971-W453	2441045_07	1971 Apr 3 0138:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1971-W454	2441045_09	1971 Apr 3 1146:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1971-W455	2441045_23	1971 Apr 3 1741:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1971-W456	2441046_24	1971 Apr 3 1802:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1971-W457	2441046_71	1971 Apr 5 0508:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1971-W458	2441046_71	1971 Apr 5 0508:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1971-W459	2441047_08	1971 Apr 5 0930:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1971-W460	2441047_08	1971 Apr 5 1400:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1971-W461	2441047_12	1971 Apr 5 1500:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1971-W462	2441047_24	1971 Apr 5 1751:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1971-W463	2441047_24	1971 Apr 5 1802:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1971-W464	2441047_35	1971 Apr 5 1802:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1971-W465	2441047_39	1971 Apr 5 1926:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1971-W466	2441047_31	1971 Apr 5 1926:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1971-W467	2441047_34	1971 Apr 5 2015:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1971-W468	2441047_37	1971 Apr 5 2058:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1971-W469	2441047_56	1971 Apr 6 0130:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1971-W470	2441048_38	1971 Apr 6 2100:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1971-Y121	2441048_92	1971 Apr 7 1011:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1971-W472	2441049_08	1971 Apr 7 1400:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1971-W473	2441049_08	1971 Apr 7 1400:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1971-W474	2441049_09	1971 Apr 7 1415:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1971-W475	2441049_12	1971 Apr 7 1500:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1971-W476	2441049_16	1971 Apr 7 1545:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1971-W477	2441049_17	1971 Apr 7 1604:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1971-W478	2441049_25	1971 Apr 7 1758:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1971-W479	2441049_29	1971 Apr 7 1859:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1971-W480	2441049_30	1971 Apr 7 1914:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1971-W481	2441049_34	1971 Apr 7 2015:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1971-W482	2441049_39	1971 Apr 7 2114:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1971-W483	2441049_63	1971 Apr 8 0304:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1971-W484	2441050_12	1971 Apr 8 1500:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1971-W485	2441050_25	1971 Apr 8 1759:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1971-Y122	2441050_25	1971 Apr 8 1800:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1971-W486	2441050_42	1971 Apr 8 2209:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1971-W487	2441050_49	1971 Apr 8 2338:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1971-W488	2441051_08	1971 Apr 9 1400:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1971-W489	2441051_13	1971 Apr 9 1503:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1971-W490	2441051_13	1971 Apr 9 1511:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1971-W491	2441051_19	1971 Apr 9 1627:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1971-W492	2441051_25	1971 Apr 9 1800:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1971-W493	2441051_29	1971 Apr 9 1859:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-



Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Launch	Agency	Launch_Code	Group	Category	LT_Cite	Cite	Notes
						DrpPay							
1971-H581	2441069.28	1971 Apr 27 1840:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1971-H582	2441069.31	1971 Apr 27 1921:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1971-H583	2441069.32	1971 Apr 27 1935:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1971-H584	2441069.42	1971 Apr 27 1940:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1971-H585	2441069.42	1971 Apr 27 2159:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1971-Y134	2441069.92	1971 Apr 28 0959:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1971-H587	2441070.04	1971 Apr 28 1259:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1971-H588	2441070.12	1971 Apr 28 1500:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1971-H589	2441070.13	1971 Apr 28 1500:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1971-H590	2441070.15	1971 Apr 28 1500:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1971-H591	2441070.17	1971 Apr 28 1530:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1971-H593	2441070.26	1971 Apr 28 1558:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1971-Y136	2441070.38	1971 Apr 28 1814:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1971-H594	2441070.39	1971 Apr 28 2100:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1971-H595	2441070.59	1971 Apr 28 2114:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1971-H596	2441070.58	1971 Apr 29 0158:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1971-H597	2441071.09	1971 Apr 29 1415:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1971-H598	2441071.23	1971 Apr 29 1726:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1971-H599	2441071.38	1971 Apr 29 2100:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1971-H600	2441072.08	1971 Apr 30 1400:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1971-H602	2441072.12	1971 Apr 30 1500:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1971-H603	2441072.13	1971 Apr 30 1500:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1971-H443	2441072.21	1971 Apr 30 1700:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1971-H604	2441072.27	1971 Apr 30 1826:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1971-H605	2441072.38	1971 May 1 0130:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1971-H606	2441072.56	1971 May 1 0322:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1971-H608	2441075.08	1971 May 3 1400:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1971-H610	2441075.12	1971 May 3 1500:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1971-H611	2441075.13	1971 May 3 1503:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1971-H612	2441075.26	1971 May 3 1820:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1971-H613	2441075.27	1971 May 3 1823:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1971-H614	2441075.34	1971 May 3 2004:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1971-H615	2441075.38	1971 May 3 2100:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1971-H616	2441075.61	1971 May 4 0232:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1971-H617	2441076.25	1971 May 4 1800:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1971-H618	2441076.37	1971 May 4 2053:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1971-Y140	2441076.52	1971 May 5 1009:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1971-H620	2441077.12	1971 May 5 1448:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1971-H621	2441077.12	1971 May 5 1500:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1971-H622	2441077.23	1971 May 5 1730:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1971-H623	2441077.25	1971 May 5 1736:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1971-H624	2441077.25	1971 May 5 1807:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1971-H625	2441077.33	1971 May 5 2000:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1971-H627	2441077.41	1971 May 5 2106:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1971-H628	2441078.12	1971 May 6 0130:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1971-H629	2441078.12	1971 May 6 1806:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1971-H630	2441078.28	1971 May 6 2100:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1971-H631	2441078.34	1971 May 7 0330:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1971-H632	2441078.36	1971 May 7 1100:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1971-H633	2441078.59	1971 May 7 1642:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1971-H634	2441079.23	1971 May 7 2126:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1971-H635	2441079.42	1971 May 7 2159:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1971-H636	2441079.44	1971 May 7 2230:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1971-H638	2441079.56	1971 May 8 0130:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1971-H639	2441082.06	1971 May 10 1330:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1971-H640	2441082.08	1971 May 10 1400:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1971-H641	2441082.08	1971 May 10 1400:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1971-H643	2441082.12	1971 May 10 1500:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1971-H644	2441082.24	1971 May 10 1740:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1971-H645	2441082.25	1971 May 10 1758:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1971-H646	2441082.27	1971 May 10 1824:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1971-H648	2441082.29	1971 May 10 1901:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1971-H649	2441082.50	1971 May 10 2355:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1971-H650	2441083.37	1971 May 11 2230:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1971-H651	2441083.44	1971 May 11 2230:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1971-Y145	2441083.55	1971 May 12 0114:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1971-H653	2441083.93	1971 May 12 1024:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1971-H654	2441084.06	1971 May 12 1330:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1971-H655	2441084.08	1971 May 12 1400:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1971-H656	2441084.09	1971 May 12 1404:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1971-H657	2441084.10	1971 May 12 1430:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1971-Y146	2441084.12	1971 May 12 1500:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1971-H659	2441084.13	1971 May 12 1507:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1971-H660	2441084.17	1971 May 12 1603:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1971-H661	2441084.21	1971 May 12 1656:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1971-H662	2441084.22	1971 May 12 1711:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1971-H663	2441084.26	1971 May 12 1811:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1971-H664	2441084.31	1971 May 12 1921:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1971-H665	2441084.35	1971 May 12 2030:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1971-H666	2441084.53	1971 May 13 0045:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1971-H667	2441084.58	1971 May 13 0153:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1971-H668	2441085.20	1971 May 13 1642:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1971-H669	2441085.24	1971 May 13 1740:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1971-H668	2441086.08	1971 May 14 1400:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Launch_e	Agency	Launch_Code	Group	Category	LT_Cite	Cite	Notes
1971-H669	2441086.09	1971 May 14 1404:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1971-H670	2441086.12	1971 May 14 1500:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1971-H672	2441086.20	1971 May 14 1644:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1971-H673	2441086.29	1971 May 14 1859:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1971-H674	2441086.35	1971 May 14 2026:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1971-Y147	2441086.42	1971 May 14 2201:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1971-H675	2441086.44	1971 May 14 2227:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1971-H676	2441086.53	1971 May 15 0045:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1971-H677	2441086.57	1971 May 15 0142:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1971-H678	2441086.70	1971 May 15 0441:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1971-H679	2441088.21	1971 May 16 1701:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1971-H680	2441089.08	1971 May 17 1400:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1971-H681	2441089.09	1971 May 17 1410:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1971-H682	2441089.11	1971 May 17 1440:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1971-H683	2441089.12	1971 May 17 1466:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1971-H684	2441089.12	1971 May 17 1500:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1971-H685	2441089.16	1971 May 17 1549:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1971-H687	2441089.21	1971 May 17 1700:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1971-H688	2441089.26	1971 May 17 1821:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1971-H689	2441089.42	1971 May 17 2202:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1971-H691	2441089.49	1971 May 17 2346:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1971-H692	2441090.12	1971 May 18 1466:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1971-H693	2441090.38	1971 May 18 2101:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1971-H150	2441090.92	1971 May 19 1004:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1971-H695	2441091.07	1971 May 19 1346:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1971-H696	2441091.08	1971 May 19 1400:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1971-H697	2441091.09	1971 May 19 1500:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1971-H698	2441091.12	1971 May 19 1549:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1971-H153	2441091.16	1971 May 19 1665:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1971-H700	2441091.21	1971 May 19 1700:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1971-H701	2441091.21	1971 May 19 1700:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1971-H702	2441091.25	1971 May 19 1800:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1971-H703	2441091.25	1971 May 19 1800:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1971-H704	2441091.34	1971 May 19 2032:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1971-H705	2441091.34	1971 May 19 2032:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1971-H706	2441091.37	1971 May 19 2153:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1971-H155	2441091.40	1971 May 19 2153:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1971-H707	2441091.41	1971 May 19 2156:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1971-H708	2441091.56	1971 May 20 0150:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1971-H709	2441092.13	1971 May 20 1506:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1971-H710	2441093.06	1971 May 21 1330:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1971-H711	2441093.06	1971 May 21 1341:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1971-H712	2441093.06	1971 May 21 1400:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1971-H713	2441093.12	1971 May 21 1500:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1971-H714	2441093.27	1971 May 21 1623:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1971-H715	2441093.31	1971 May 21 1659:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1971-H716	2441093.31	1971 May 21 1659:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1971-H717	2441093.32	1971 May 21 1659:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1971-H718	2441093.37	1971 May 22 0118:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1971-H719	2441094.31	1971 May 22 1657:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1971-H720	2441094.31	1971 May 22 1715:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1971-H721	2441094.31	1971 May 23 1701:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1971-H722	2441094.31	1971 May 23 1701:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1971-H723	2441096.04	1971 May 24 1259:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1971-H724	2441096.04	1971 May 24 1454:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1971-H725	2441096.12	1971 May 24 1500:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1971-H726	2441096.21	1971 May 24 1700:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1971-H727	2441096.38	1971 May 24 2100:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1971-H728	2441096.35	1971 May 24 2244:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1971-H729	2441096.56	1971 May 25 0130:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1971-H730	2441097.31	1971 May 25 1925:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1971-H731	2441098.06	1971 May 25 2119:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1971-H732	2441098.06	1971 May 26 1330:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1971-H733	2441098.08	1971 May 26 1400:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1971-H734	2441098.12	1971 May 26 1500:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1971-H735	2441098.14	1971 May 26 1514:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1971-Y164	2441098.15	1971 May 26 1553:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1971-H736	2441098.21	1971 May 26 1655:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1971-H737	2441098.21	1971 May 26 1706:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1971-H738	2441098.25	1971 May 26 1800:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1971-H739	2441098.32	1971 May 26 1941:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1971-H740	2441098.38	1971 May 26 2114:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1971-H741	2441098.39	1971 May 26 2114:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1971-H742	2441098.44	1971 May 26 2230:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1971-H743	2441098.59	1971 May 27 0209:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1971-H744	2441099.09	1971 May 27 1415:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1971-H745	2441099.12	1971 May 27 1452:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1971-H746	2441099.30	1971 May 27 1910:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1971-H747	2441099.40	1971 May 27 2130:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1971-H748	2441100.09	1971 May 28 1415:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1971-H749	2441100.12	1971 May 28 1500:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1971-H750	2441100.15	1971 May 28 1530:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1971-H751	2441100.15	1971 May 28 1533:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1971-H752	2441100.21	1971 May 28 1700:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1971-H753	2441100.29	1971 May 28 1859:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Launch	Agency	Launch_Code	Group	Category	LT_Cite	Cite	Notes
						DrpPay							
1971-W754	2441100.40	1971 May 28 2130:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1971-W755	2441100.63	1971 May 29 0304:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1971-W756	2441104.12	1971 Jun 1 1453:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1971-W759	2441104.15	1971 Jun 1 1630:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1971-W760	2441104.15	1971 Jun 1 1630:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1971-W761	2441104.19	1971 Jun 1 1630:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1971-W762	2441104.22	1971 Jun 1 1720:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1971-W763	2441104.25	1971 Jun 1 1756:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1971-W764	2441104.40	1971 Jun 1 2130:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1971-W765	2441105.07	1971 Jun 2 1334:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1971-W766	2441105.08	1971 Jun 2 1400:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1971-W768	2441105.14	1971 Jun 2 1514:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1971-W771	2441105.15	1971 Jun 2 1530:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1971-W769	2441105.15	1971 Jun 2 1530:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1971-W770	2441105.21	1971 Jun 2 1709:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1971-W771	2441105.23	1971 Jun 2 1730:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1971-W772	2441105.29	1971 Jun 2 1658:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1971-W773	2441105.40	1971 Jun 3 0130:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1971-W774	2441105.56	1971 Jun 3 2000:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1971-W775	2441106.33	1971 Jun 3 2106:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1971-W776	2441106.38	1971 Jun 3 2106:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1971-W777	2441106.56	1971 Jun 4 0132:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1971-W778	2441106.76	1971 Jun 4 0612:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1971-W779	2441107.06	1971 Jun 4 1400:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1971-W780	2441107.12	1971 Jun 4 1500:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1971-W781	2441107.34	1971 Jun 4 2006:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1971-W783	2441107.40	1971 Jun 4 2300:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1971-W784	2441107.47	1971 Jun 4 2315:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1971-W785	2441110.10	1971 Jun 7 1430:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1971-W786	2441110.12	1971 Jun 7 1500:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1971-W787	2441110.19	1971 Jun 7 1630:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1971-W788	2441110.24	1971 Jun 7 1752:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1971-W789	2441110.27	1971 Jun 7 1624:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1971-W790	2441110.38	1971 Jun 7 2106:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1971-W791	2441110.44	1971 Jun 7 2230:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1971-W792	2441111.13	1971 Jun 8 0130:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1971-W793	2441111.23	1971 Jun 8 1501:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1971-W794	2441111.23	1971 Jun 8 2132:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1971-W795	2441111.40	1971 Jun 8 0959:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1971-W796	2441112.06	1971 Jun 8 1330:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1971-W797	2441112.06	1971 Jun 8 1400:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1971-W798	2441112.10	1971 Jun 8 1427:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1971-W799	2441112.10	1971 Jun 8 1507:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1971-W800	2441112.11	1971 Jun 8 1500:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1971-W801	2441112.14	1971 Jun 8 1502:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1971-W804	2441112.14	1971 Jun 8 1524:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1971-W815	2441112.15	1971 Jun 8 1537:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1971-W805	2441112.19	1971 Jun 8 1630:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1971-W806	2441112.32	1971 Jun 8 1630:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1971-W807	2441112.33	1971 Jun 8 2000:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1971-W808	2441112.40	1971 Jun 8 2211:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1971-W809	2441112.44	1971 Jun 8 2239:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1971-W810	2441112.56	1971 Jun 10 0130:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1971-W811	2441113.14	1971 Jun 10 1514:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1971-W812	2441113.62	1971 Jun 11 0246:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1971-W813	2441114.07	1971 Jun 11 1346:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1971-W814	2441114.08	1971 Jun 11 1400:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1971-W815	2441114.17	1971 Jun 11 1559:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1971-W816	2441114.22	1971 Jun 11 1711:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1971-W817	2441114.23	1971 Jun 11 1737:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1971-W818	2441114.24	1971 Jun 11 1749:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1971-W819	2441114.33	1971 Jun 11 2000:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1971-W820	2441114.35	1971 Jun 11 2029:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1971-W821	2441114.38	1971 Jun 11 2030:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1971-W822	2441114.56	1971 Jun 11 2100:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1971-W823	2441117.12	1971 Jun 12 0130:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1971-W824	2441117.21	1971 Jun 14 1500:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1971-W825	2441117.23	1971 Jun 14 1700:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1971-W826	2441117.23	1971 Jun 14 1726:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1971-W827	2441117.34	1971 Jun 14 1737:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1971-W828	2441117.60	1971 Jun 14 2015:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1971-W829	2441118.14	1971 Jun 15 0229:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1971-W830	2441118.35	1971 Jun 15 1525:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1971-W831	2441118.35	1971 Jun 15 2030:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1971-W832	2441119.11	1971 Jun 16 1444:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1971-W833	2441119.14	1971 Jun 16 1522:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1971-W834	2441119.17	1971 Jun 16 1559:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1971-W835	2441119.18	1971 Jun 16 1614:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1971-W836	2441119.25	1971 Jun 16 1802:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1971-W837	2441119.40	1971 Jun 16 2130:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1971-W838	2441120.23	1971 Jun 17 0230:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1971-W839	2441120.58	1971 Jun 18 0201:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Launch_e	Agency	Launch_Code	Group	Category	LT_Cite	Cite	Notes
1971-H840	2441121.07	1971 Jun 18 1346:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1971-H841	2441121.12	1971 Jun 18 1500:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1971-H842	2441123.40	1971 Jun 20 2140:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1971-H843	2441124.06	1971 Jun 21 1330:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1971-H844	2441124.12	1971 Jun 21 1500:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1971-H845	2441124.12	1971 Jun 21 1500:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1971-H846	2441124.19	1971 Jun 21 1630:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1971-H847	2441124.23	1971 Jun 21 1730:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1971-H848	2441124.23	1971 Jun 21 1730:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1971-H849	2441124.38	1971 Jun 21 2100:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1971-H850	2441124.56	1971 Jun 22 0130:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1971-H851	2441125.17	1971 Jun 22 1557:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1971-H852	2441126.08	1971 Jun 23 1400:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1971-H853	2441126.13	1971 Jun 23 1510:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1971-H854	2441126.13	1971 Jun 23 1630:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1971-H855	2441126.19	1971 Jun 23 1920:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1971-H856	2441126.31	1971 Jun 23 1920:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1971-H857	2441126.31	1971 Jun 23 1930:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1971-H858	2441126.33	1971 Jun 23 1951:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1971-H859	2441126.56	1971 Jun 24 0130:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1971-H860	2441126.58	1971 Jun 24 0157:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1971-H861	2441127.16	1971 Jun 24 1549:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1971-H862	2441127.23	1971 Jun 24 1727:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1971-H863	2441127.24	1971 Jun 24 1751:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1971-H864	2441127.25	1971 Jun 24 1804:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1971-H865	2441127.42	1971 Jun 24 2206:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1971-H866	2441127.43	1971 Jun 24 2216:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1971-H867	2441128.10	1971 Jun 25 1430:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1971-H868	2441128.12	1971 Jun 25 1500:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1971-H869	2441128.21	1971 Jun 25 1700:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1971-H870	2441128.29	1971 Jun 25 1856:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1971-H871	2441128.38	1971 Jun 25 2100:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1971-H872	2441128.56	1971 Jun 26 0130:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1971-H873	2441131.06	1971 Jun 28 1530:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1971-H874	2441131.12	1971 Jun 28 1545:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1971-H875	2441131.16	1971 Jun 28 1546:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1971-H876	2441131.29	1971 Jun 28 1903:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1971-H877	2441131.38	1971 Jun 28 2100:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1971-H878	2441131.56	1971 Jun 29 0130:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1971-H879	2441131.77	1971 Jun 29 0622:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1971-H880	2441132.15	1971 Jun 29 1532:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1971-H881	2441132.24	1971 Jun 29 1745:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1971-H882	2441132.58	1971 Jun 29 2100:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1971-H883	2441133.09	1971 Jun 30 1513:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1971-H884	2441133.13	1971 Jun 30 1516:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1971-H885	2441133.13	1971 Jun 30 1516:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1971-H886	2441133.17	1971 Jun 30 1526:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1971-H887	2441133.17	1971 Jun 30 1526:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1971-H888	2441133.19	1971 Jun 30 1539:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1971-H889	2441133.19	1971 Jun 30 1531:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1971-H890	2441133.31	1971 Jun 30 1700:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1971-H891	2441133.33	1971 Jun 30 1724:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1971-H892	2441133.53	1971 Jun 30 1730:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1971-H893	2441133.58	1971 Jun 30 2134:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1971-H894	2441133.58	1971 Jun 30 2135:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1971-H895	2441133.44	1971 Jun 30 2206:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1971-H896	2441134.36	1971 Jul 1 2127:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1971-H897	2441135.08	1971 Jul 2 1400:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1971-H898	2441135.12	1971 Jul 2 1500:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1971-H899	2441135.21	1971 Jul 2 1700:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1971-H900	2441135.25	1971 Jul 2 1800:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1971-H901	2441135.29	1971 Jul 2 1859:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1971-H902	2441135.34	1971 Jul 2 2003:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1971-H903	2441135.36	1971 Jul 2 2032:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1971-H904	2441135.38	1971 Jul 2 2100:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1971-H905	2441139.17	1971 Jul 6 1559:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1971-H906	2441139.33	1971 Jul 6 2000:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1971-H907	2441139.38	1971 Jul 6 2100:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1971-H908	2441139.82	1971 Jul 7 0959:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1971-H909	2441140.08	1971 Jul 7 1352:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1971-H910	2441140.08	1971 Jul 7 1400:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1971-H911	2441140.12	1971 Jul 7 1500:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1971-H912	2441140.12	1971 Jul 7 1500:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1971-H913	2441140.16	1971 Jul 7 1545:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1971-H914	2441140.20	1971 Jul 7 1644:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1971-H915	2441140.32	1971 Jul 7 1946:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1971-H916	2441141.21	1971 Jul 8 1707:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1971-H917	2441141.38	1971 Jul 8 2101:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1971-H918	2441141.39	1971 Jul 8 2117:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1971-H919	2441142.05	1971 Jul 9 1309:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1971-H920	2441142.08	1971 Jul 9 1400:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1971-H921	2441142.12	1971 Jul 9 1500:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1971-H922	2441142.19	1971 Jul 9 1630:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1971-H923	2441142.31	1971 Jul 9 1830:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1971-H924	2441142.40	1971 Jul 9 2130:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1971-H925	2441145.07	1971 Jul 12 1345:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1971-H926	2441145.08	1971 Jul 12 1400:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1971-H926	2441145.13	1971 Jul 12 1510:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-





Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Launch_e	Agency	Launch_Code	Group	Category	LT_Cite	Cite	Notes
1972-H48	2441328.24	1972 Jan 11 1745:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1972-Y11	2441328.33	1972 Jan 11 2000:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1972-H49	2441329.08	1972 Jan 12 1400:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1972-H50	2441329.10	1972 Jan 12 1450:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1972-H51	2441329.12	1972 Jan 12 1500:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1972-H52	2441329.13	1972 Jan 12 1513:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1972-Y19	2441329.19	1972 Jan 12 1630:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1972-H53	2441329.23	1972 Jan 12 1726:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1972-H54	2441329.29	1972 Jan 12 1859:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1972-H55	2441329.29	1972 Jan 12 1859:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1972-Y20	2441329.30	1972 Jan 12 1913:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1972-H56	2441329.34	1972 Jan 12 2004:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1972-H57	2441329.38	1972 Jan 12 2100:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1972-H58	2441329.39	1972 Jan 12 2122:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1972-H60	2441330.16	1972 Jan 13 1545:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1972-H61	2441330.30	1972 Jan 13 1914:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1972-H62	2441330.31	1972 Jan 13 1930:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1972-H63	2441330.38	1972 Jan 13 2100:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1972-H64	2441331.08	1972 Jan 14 1400:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1972-H65	2441331.10	1972 Jan 14 1450:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1972-H66	2441331.12	1972 Jan 14 1500:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1972-H67	2441331.15	1972 Jan 14 1529:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1972-H68	2441331.21	1972 Jan 14 1657:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1972-H69	2441331.29	1972 Jan 14 1859:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1972-H70	2441331.46	1972 Jan 14 2241:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1972-H74	2441334.08	1972 Jan 17 1400:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1972-H75	2441334.10	1972 Jan 17 1450:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1972-H76	2441334.12	1972 Jan 17 1500:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1972-H77	2441334.12	1972 Jan 17 1500:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1972-H79	2441334.19	1972 Jan 17 1650:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1972-H80	2441334.23	1972 Jan 17 1726:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1972-H81	2441334.29	1972 Jan 17 1902:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1972-H82	2441334.38	1972 Jan 17 2300:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1972-H83	2441334.46	1972 Jan 18 1620:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1972-H85	2441335.16	1972 Jan 18 1722:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1972-H86	2441335.22	1972 Jan 18 2059:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1972-H87	2441335.35	1972 Jan 18 2059:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1972-H88	2441335.37	1972 Jan 18 2059:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1972-H90	2441336.10	1972 Jan 19 1450:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1972-H91	2441336.12	1972 Jan 19 1500:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1972-H93	2441336.18	1972 Jan 19 1514:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1972-H94	2441336.25	1972 Jan 19 1800:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1972-H96	2441336.28	1972 Jan 19 1800:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1972-H98	2441336.36	1972 Jan 19 2045:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1972-H99	2441336.46	1972 Jan 19 2241:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1972-H101	2441337.06	1972 Jan 20 151:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1972-H102	2441337.13	1972 Jan 20 1515:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1972-H104	2441337.14	1972 Jan 20 0100:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1972-H105	2441337.54	1972 Jan 21 1400:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1972-H106	2441338.08	1972 Jan 21 1400:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1972-H107	2441338.09	1972 Jan 21 1500:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1972-H109	2441338.11	1972 Jan 21 1700:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1972-H110	2441338.12	1972 Jan 21 1800:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1972-H111	2441338.15	1972 Jan 21 1800:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1972-H112	2441338.29	1972 Jan 21 1859:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1972-H113	2441338.31	1972 Jan 21 1930:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1972-H114	2441338.33	1972 Jan 21 1958:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1972-H115	2441338.36	1972 Jan 21 2040:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1972-H116	2441338.37	1972 Jan 21 2052:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1972-H117	2441338.38	1972 Jan 21 2100:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1972-H118	2441338.47	1972 Jan 21 2310:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1972-H120	2441341.08	1972 Jan 24 1400:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1972-H121	2441341.10	1972 Jan 24 1430:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1972-H122	2441341.12	1972 Jan 24 1500:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1972-H124	2441341.20	1972 Jan 24 1647:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1972-H125	2441341.29	1972 Jan 24 1859:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1972-H127	2441341.45	1972 Jan 24 2300:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1972-H129	2441341.57	1972 Jan 25 0114:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1972-H129	2441342.23	1972 Jan 25 1730:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1972-H129	2441342.25	1972 Jan 25 1800:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1972-H30	2441342.34	1972 Jan 25 2004:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1972-H31	2441342.42	1972 Jan 25 2201:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1972-H33	2441343.08	1972 Jan 26 1400:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1972-H34	2441343.10	1972 Jan 26 1430:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1972-H35	2441343.12	1972 Jan 26 1500:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1972-H36	2441343.15	1972 Jan 26 1541:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1972-H37	2441343.18	1972 Jan 26 1613:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1972-H37	2441343.22	1972 Jan 26 1710:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1972-H41	2441343.23	1972 Jan 26 1730:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1972-H39	2441343.41	1972 Jan 26 2149:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1972-H40	2441343.43	1972 Jan 26 2223:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1972-H41	2441343.57	1972 Jan 27 0138:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1972-H42	2441344.17	1972 Jan 27 1559:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1972-H43	2441344.29	1972 Jan 27 1859:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1972-H44	2441344.31	1972 Jan 27 1930:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Launch	Agency	Launch_Code	Group	Category	LT_Cite	Cite	Notes
						DrpPay							
1972-1145	2441345.08	1972 Jan 28 14:00:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1972-1146	2441345.12	1972 Jan 28 14:48:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1972-1147	2441345.12	1972 Jan 28 15:00:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1972-1149	2441345.17	1972 Jan 28 15:58:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1972-1150	2441345.29	1972 Jan 28 18:55:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1972-1151	2441345.35	1972 Jan 29 20:30:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1972-1152	2441345.56	1972 Jan 29 01:32:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1972-1153	2441348.08	1972 Jan 31 14:00:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1972-1154	2441348.12	1972 Jan 31 15:00:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1972-1156	2441348.20	1972 Jan 31 16:51:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1972-1157	2441348.30	1972 Jan 31 19:04:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1972-1158	2441348.31	1972 Jan 31 19:25:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1972-1159	2441348.33	1972 Jan 31 20:00:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1972-1160	2441348.35	1972 Jan 31 20:50:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1972-1161	2441348.46	1972 Jan 31 22:56:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1972-1162	2441348.56	1972 Feb 1 01:30:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1972-1164	2441349.23	1972 Feb 1 17:30:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1972-1166	2441349.27	1972 Feb 1 18:30:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1972-1167	2441349.31	1972 Feb 1 18:31:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1972-1169	2441349.31	1972 Feb 1 19:22:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1972-1172	2441350.08	1972 Feb 2 14:00:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1972-1173	2441350.09	1972 Feb 2 14:09:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1972-1175	2441350.16	1972 Feb 2 15:49:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1972-1176	2441350.20	1972 Feb 2 16:41:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1972-1177	2441350.38	1972 Feb 2 21:00:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1972-1178	2441350.56	1972 Feb 3 01:30:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1972-1180	2441351.29	1972 Feb 3 18:59:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1972-1181	2441352.08	1972 Feb 4 14:00:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1972-1182	2441352.12	1972 Feb 4 15:00:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1972-1184	2441352.20	1972 Feb 4 16:46:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1972-1186	2441352.25	1972 Feb 4 18:01:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1972-1188	2441352.29	1972 Feb 4 18:59:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1972-1187	2441352.30	1972 Feb 4 19:18:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1972-1188	2441352.50	1972 Feb 5 00:00:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1972-1189	2441352.86	1972 Feb 5 01:30:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1972-1192	2441355.08	1972 Feb 7 14:00:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1972-1193	2441355.10	1972 Feb 7 14:30:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1972-1194	2441355.12	1972 Feb 7 15:00:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1972-1196	2441355.20	1972 Feb 7 16:48:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1972-1197	2441355.30	1972 Feb 7 18:01:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1972-1198	2441355.56	1972 Feb 7 20:31:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1972-1199	2441355.50	1972 Feb 8 18:56:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1972-1201	2441356.29	1972 Feb 8 18:59:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1972-1202	2441356.29	1972 Feb 8 21:00:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1972-1203	2441355.38	1972 Feb 8 14:00:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1972-1206	2441357.08	1972 Feb 8 19:14:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1972-1207	2441357.12	1972 Feb 8 14:30:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1972-1208	2441357.17	1972 Feb 8 15:59:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1972-1209	2441357.27	1972 Feb 8 16:48:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1972-1210	2441357.30	1972 Feb 8 19:14:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1972-1211	2441357.30	1972 Feb 8 20:30:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1972-1212	2441357.35	1972 Feb 8 21:57:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1972-1213	2441357.44	1972 Feb 8 23:35:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1972-1214	2441357.46	1972 Feb 8 23:01:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1972-1215	2441357.56	1972 Feb 10 01:30:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1972-1218	2441358.17	1972 Feb 10 15:57:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1972-1219	2441358.17	1972 Feb 10 19:01:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1972-1220	2441358.29	1972 Feb 10 19:30:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1972-1223	2441358.93	1972 Feb 11 10:24:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1972-1224	2441359.10	1972 Feb 11 14:00:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1972-1225	2441359.12	1972 Feb 11 14:30:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1972-1226	2441359.20	1972 Feb 11 16:44:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1972-1227	2441359.23	1972 Feb 11 17:30:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1972-1228	2441359.24	1972 Feb 11 17:48:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1972-1230	2441359.26	1972 Feb 11 18:14:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1972-1231	2441359.30	1972 Feb 11 19:14:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1972-1231	2441359.33	1972 Feb 11 19:48:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1972-1233	2441359.38	1972 Feb 11 21:11:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1972-1233	2441359.56	1972 Feb 12 01:30:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1972-1235	2441362.06	1972 Feb 14 13:30:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1972-1236	2441362.11	1972 Feb 14 14:35:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1972-1238	2441362.12	1972 Feb 14 15:00:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1972-1238	2441362.13	1972 Feb 14 15:04:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1972-1239	2441362.16	1972 Feb 14 15:56:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1972-1240	2441362.29	1972 Feb 14 18:59:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1972-1241	2441362.38	1972 Feb 14 21:03:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1972-1242	2441363.10	1972 Feb 15 14:30:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1972-1243	2441363.18	1972 Feb 15 16:22:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1972-1244	2441363.21	1972 Feb 15 17:00:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1972-1245	2441363.24	1972 Feb 15 17:45:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1972-1245	2441363.27	1972 Feb 15 18:30:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Launch_e	Agency	Launch_Code	Group	Category	LT_Cite	Cite	Notes
1972-W247	2441363.50	1972 Feb 16 00:00:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1972-W249	2441364.08	1972 Feb 16 14:00:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1972-W250	2441364.10	1972 Feb 16 14:30:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1972-W251	2441364.11	1972 Feb 16 14:30:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1972-W252	2441364.12	1972 Feb 16 15:00:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1972-W253	2441364.17	1972 Feb 16 15:59:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1972-W254	2441364.27	1972 Feb 16 18:30:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1972-W255	2441364.31	1972 Feb 16 19:20:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1972-W256	2441364.40	1972 Feb 16 21:30:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1972-W257	2441364.44	1972 Feb 17 16:34:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1972-W258	2441365.19	1972 Feb 17 21:59:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1972-W259	2441365.42	1972 Feb 17 22:13:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1972-W260	2441365.43	1972 Feb 18 14:00:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1972-W262	2441366.08	1972 Feb 18 14:00:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1972-W263	2441366.10	1972 Feb 18 14:00:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1972-W264	2441366.12	1972 Feb 18 15:00:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1972-W265	2441366.14	1972 Feb 18 15:24:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1972-W266	2441366.16	1972 Feb 18 15:56:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1972-W267	2441366.40	1972 Feb 18 15:59:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1972-W268	2441366.54	1972 Feb 19 00:59:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1972-W269	2441369.10	1972 Feb 21 14:30:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1972-W270	2441370.12	1972 Feb 22 15:00:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1972-W272	2441370.21	1972 Feb 22 17:03:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1972-W273	2441370.36	1972 Feb 22 20:40:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1972-W274	2441370.82	1972 Feb 23 09:59:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1972-W276	2441371.08	1972 Feb 23 14:00:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1972-W277	2441371.12	1972 Feb 23 15:00:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1972-W279	2441371.23	1972 Feb 23 17:31:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1972-W280	2441371.25	1972 Feb 23 17:55:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1972-W281	2441371.29	1972 Feb 23 18:56:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1972-W282	2441371.33	1972 Feb 23 20:00:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1972-W283	2441371.34	1972 Feb 23 20:15:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1972-W284	2441371.46	1972 Feb 23 23:22:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1972-W285	2441371.56	1972 Feb 24 01:50:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1972-W286	2441372.15	1972 Feb 24 15:56:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1972-W287	2441372.16	1972 Feb 24 15:51:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1972-W288	2441372.23	1972 Feb 24 18:00:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1972-W289	2441372.31	1972 Feb 24 19:30:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1972-W290	2441372.38	1972 Feb 24 21:00:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1972-W291	2441373.05	1972 Feb 25 15:00:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1972-W292	2441373.12	1972 Feb 25 17:00:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1972-W293	2441373.15	1972 Feb 25 18:00:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1972-W294	2441373.18	1972 Feb 25 19:00:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1972-W295	2441373.38	1972 Feb 25 21:00:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1972-W296	2441373.45	1972 Feb 26 01:30:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1972-W297	2441373.56	1972 Feb 26 14:47:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1972-W298	2441374.15	1972 Feb 28 15:00:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1972-W299	2441374.16	1972 Feb 28 15:52:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1972-W300	2441374.17	1972 Feb 28 16:09:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1972-W301	2441374.31	1972 Feb 28 19:30:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1972-W302	2441374.33	1972 Feb 28 20:00:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1972-W303	2441374.33	1972 Feb 29 01:30:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1972-W304	2441374.56	1972 Mar 1 14:45:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1972-W305	2441374.11	1972 Mar 1 15:00:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1972-W306	2441374.12	1972 Mar 1 18:11:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1972-W307	2441374.26	1972 Mar 1 19:19:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1972-W310	2441378.31	1972 Mar 1 20:30:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1972-W311	2441378.35	1972 Mar 2 01:30:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1972-W314	2441379.42	1972 Mar 2 21:58:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1972-W315	2441380.10	1972 Mar 3 14:30:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1972-W316	2441380.12	1972 Mar 3 15:00:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1972-W317	2441380.15	1972 Mar 3 16:24:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1972-W319	2441380.18	1972 Mar 3 18:14:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1972-W320	2441380.26	1972 Mar 3 18:59:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1972-W321	2441380.29	1972 Mar 3 19:43:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1972-W322	2441380.32	1972 Mar 3 21:14:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1972-W323	2441380.39	1972 Mar 6 14:04:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1972-W325	2441383.09	1972 Mar 6 16:30:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1972-W326	2441383.19	1972 Mar 6 16:32:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1972-W328	2441383.27	1972 Mar 6 18:30:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1972-W329	2441383.29	1972 Mar 6 18:59:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1972-W330	2441383.33	1972 Mar 6 19:55:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1972-W331	2441383.37	1972 Mar 6 20:55:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1972-W332	2441383.38	1972 Mar 6 21:00:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1972-W333	2441384.09	1972 Mar 7 14:15:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1972-W335	2441385.08	1972 Mar 8 14:00:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1972-W336	2441385.12	1972 Mar 8 15:00:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1972-W337	2441385.12	1972 Mar 8 16:30:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1972-W338	2441385.19	1972 Mar 8 16:31:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-















Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Launch_e	Agency	Launch_Code	Group	Category	LT_Cite	Cite	Notes
1972-H872	2441506.07	1972 Jul 7 1347:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1972-H873	2441506.09	1972 Jul 7 1409:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1972-H874	2441506.10	1972 Jul 7 1430:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1972-H875	2441506.13	1972 Jul 7 1501:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1972-H876	2441506.14	1972 Jul 7 1514:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1972-H877	2441506.17	1972 Jul 7 1601:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1972-H878	2441506.21	1972 Jul 7 1700:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1972-H879	2441506.27	1972 Jul 7 1830:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1972-H880	2441506.38	1972 Jul 7 2100:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1972-H881	2441507.12	1972 Jul 8 1500:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1972-H882	2441509.06	1972 Jul 10 1330:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1972-H883	2441509.07	1972 Jul 10 1344:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1972-H884	2441509.12	1972 Jul 10 1500:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1972-H885	2441509.20	1972 Jul 10 1644:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1972-H886	2441509.21	1972 Jul 10 1700:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1972-H887	2441509.31	1972 Jul 10 1929:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1972-H888	2441509.39	1972 Jul 10 2120:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1972-H889	2441509.60	1972 Jul 11 0220:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1972-H890	2441510.27	1972 Jul 11 1850:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1972-H891	2441511.07	1972 Jul 12 1344:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1972-H892	2441511.12	1972 Jul 12 1500:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1972-H893	2441511.13	1972 Jul 12 1522:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1972-H894	2441511.14	1972 Jul 12 1644:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1972-H895	2441511.20	1972 Jul 12 2159:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1972-H896	2441511.27	1972 Jul 12 2236:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1972-H897	2441511.44	1972 Jul 13 1950:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1972-H898	2441512.31	1972 Jul 14 1344:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1972-H899	2441513.07	1972 Jul 14 1400:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1972-H900	2441513.08	1972 Jul 14 1424:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1972-H901	2441513.10	1972 Jul 14 1500:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1972-H902	2441513.12	1972 Jul 14 2159:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1972-H903	2441513.42	1972 Jul 14 2346:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1972-H904	2441513.49	1972 Jul 17 1344:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1972-H905	2441516.07	1972 Jul 17 1400:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1972-H906	2441516.08	1972 Jul 17 1500:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1972-H907	2441516.12	1972 Jul 17 1550:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1972-H908	2441516.19	1972 Jul 17 1744:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1972-H909	2441516.24	1972 Jul 17 1822:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1972-H910	2441516.29	1972 Jul 17 1839:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1972-H911	2441516.42	1972 Jul 17 2157:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1972-H912	2441517.04	1972 Jul 18 1259:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1972-H923	2441517.08	1972 Jul 18 1300:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1972-H924	2441518.07	1972 Jul 19 1346:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1972-H925	2441518.08	1972 Jul 19 1400:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1972-H926	2441518.10	1972 Jul 19 1430:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1972-H927	2441518.12	1972 Jul 19 1450:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1972-H928	2441518.13	1972 Jul 19 1500:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1972-H929	2441518.20	1972 Jul 19 1622:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1972-H930	2441518.20	1972 Jul 19 1652:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1972-H931	2441518.21	1972 Jul 19 1700:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1972-H932	2441518.21	1972 Jul 19 1709:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1972-H933	2441518.22	1972 Jul 19 1720:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1972-H934	2441518.25	1972 Jul 19 1800:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1972-H935	2441518.38	1972 Jul 19 2100:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1972-H936	2441520.07	1972 Jul 21 1344:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1972-H937	2441520.08	1972 Jul 21 1400:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1972-H938	2441520.12	1972 Jul 21 1500:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1972-H939	2441520.22	1972 Jul 21 1715:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1972-H940	2441520.26	1972 Jul 21 1811:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1972-H941	2441520.28	1972 Jul 21 1845:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1972-H942	2441520.30	1972 Jul 21 1907:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1972-H943	2441520.40	1972 Jul 21 2159:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1972-H944	2441523.07	1972 Jul 24 1344:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1972-H945	2441523.08	1972 Jul 24 1400:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1972-H946	2441523.12	1972 Jul 24 1500:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1972-H947	2441523.19	1972 Jul 24 1630:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1972-H948	2441523.27	1972 Jul 24 1830:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1972-H949	2441523.30	1972 Jul 24 1913:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1972-H950	2441523.42	1972 Jul 25 1400:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1972-H951	2441524.08	1972 Jul 25 1559:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1972-H952	2441524.12	1972 Jul 25 1600:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1972-H953	2441524.17	1972 Jul 26 0300:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1972-H954	2441524.62	1972 Jul 26 1330:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1972-H955	2441525.06	1972 Jul 26 1347:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1972-H956	2441525.09	1972 Jul 26 1404:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1972-H957	2441525.14	1972 Jul 26 1514:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1972-H958	2441525.14	1972 Jul 26 1514:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1972-H959	2441525.14	1972 Jul 26 1514:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Launch_e	Agency	Launch_Code	Group	Category	LT_Cite	Cite	Notes
1972-H964	2441525-18	1972 Jul 26 1615:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1972-H965	2441525-19	1972 Jul 26 1632:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1972-H966	2441525-20	1972 Jul 26 1654:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1972-H967	2441525-21	1972 Jul 26 1800:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1972-H968	2441525-22	1972 Jul 26 1830:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1972-H969	2441525-23	1972 Jul 26 1850:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1972-H970	2441525-24	1972 Jul 27 0007:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1972-H971	2441526-25	1972 Jul 27 1800:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1972-H972	2441527-07	1972 Jul 28 1344:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1972-H973	2441527-11	1972 Jul 28 1432:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1972-H974	2441527-12	1972 Jul 28 1500:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1972-H975	2441527-17	1972 Jul 28 1559:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1972-H976	2441527-24	1972 Jul 28 1738:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1972-H977	2441527-25	1972 Jul 28 1800:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1972-H978	2441527-28	1972 Jul 28 1845:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1972-H979	2441527-30	1972 Jul 28 1907:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1972-H980	2441527-42	1972 Jul 28 2206:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1972-H981	2441527-43	1972 Jul 28 2224:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1972-H982	2441530-08	1972 Jul 28 2346:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1973-H00	2441685-29	1973 Jan 2 1654:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1973-H01	2441685-46	1973 Jan 2 2300:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1973-H02	2441685-51	1973 Jan 3 0020:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1973-H03	2441686-09	1973 Jan 3 1415:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1973-H04	2441686-14	1973 Jan 3 1514:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1973-H05	2441686-18	1973 Jan 3 1624:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1973-H06	2441686-19	1973 Jan 3 1650:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1973-H07	2441686-26	1973 Jan 3 1812:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1973-H08	2441686-29	1973 Jan 3 1859:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1973-H09	2441686-31	1973 Jan 3 1903:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1973-H10	2441686-31	1973 Jan 3 1932:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1973-H11	2441686-40	1973 Jan 3 2140:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1973-H12	2441686-50	1973 Jan 3 2355:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1973-H13	2441687-20	1973 Jan 4 1654:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1973-H14	2441687-22	1973 Jan 4 1714:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1973-H15	2441687-31	1973 Jan 4 1930:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1973-H16	2441687-38	1973 Jan 4 2100:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1973-H17	2441688-16	1973 Jan 5 1654:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1973-H18	2441688-19	1973 Jan 5 1640:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1973-H19	2441688-23	1973 Jan 5 1737:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1973-H20	2441688-27	1973 Jan 5 1850:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1973-H21	2441688-29	1973 Jan 5 1859:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1973-H22	2441688-41	1973 Jan 5 2155:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1973-H23	2441688-51	1973 Jan 6 0039:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1973-H24	2441691-08	1973 Jan 6 1440:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1973-H25	2441691-15	1973 Jan 6 1745:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1973-H26	2441691-24	1973 Jan 6 1745:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1973-H27	2441691-24	1973 Jan 6 1746:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1973-H28	2441691-25	1973 Jan 6 1804:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1973-H29	2441691-34	1973 Jan 6 1810:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1973-H30	2441691-34	1973 Jan 6 2004:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1973-H31	2441691-39	1973 Jan 6 2126:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1973-H32	2441691-39	1973 Jan 6 2345:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1973-H33	2441692-19	1973 Jan 6 1630:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1973-H34	2441692-30	1973 Jan 6 1919:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1973-H35	2441692-35	1973 Jan 6 2030:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1973-H36	2441693-10	1973 Jan 6 1432:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1973-H37	2441693-16	1973 Jan 6 1551:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1973-H38	2441693-19	1973 Jan 6 1631:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1973-H39	2441693-20	1973 Jan 6 1649:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1973-H40	2441693-21	1973 Jan 6 1700:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1973-H41	2441693-21	1973 Jan 6 1700:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1973-H42	2441693-24	1973 Jan 6 1749:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1973-H43	2441693-29	1973 Jan 6 1859:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1973-H44	2441693-31	1973 Jan 6 1922:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1973-H45	2441693-33	1973 Jan 6 2000:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1973-H46	2441693-35	1973 Jan 6 2030:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1973-H47	2441693-49	1973 Jan 6 2345:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1973-H48	2441694-24	1973 Jan 6 1740:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1973-H49	2441694-35	1973 Jan 6 2025:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1973-H50	2441694-35	1973 Jan 6 2346:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1973-H51	2441694-49	1973 Jan 6 0504:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1973-H52	2441694-71	1973 Jan 6 0835:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1973-H53	2441694-86	1973 Jan 6 1034:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1973-H54	2441694-94	1973 Jan 6 1417:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1973-H55	2441695-15	1973 Jan 6 1540:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1973-H56	2441695-20	1973 Jan 6 1644:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1973-H57	2441695-22	1973 Jan 6 1723:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1973-H58	2441695-27	1973 Jan 6 1826:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1973-H59	2441695-28	1973 Jan 6 1842:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1973-H60	2441695-35	1973 Jan 6 2024:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1973-H61	2441695-38	1973 Jan 6 2108:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1973-H62	2441695-49	1973 Jan 6 2345:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1973-H63	2441696-47	1973 Jan 13 2310:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-



Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Launch_e	Agency	Launch_Code	Group	Category	LT_Cite	Cite	Notes
1973-1169	2441715_33	1973 Feb 1 2000:00	Rocketsonde	-	-	0.000	HRM	SS	-	Meteo	DSI-5850	-	-
1973-1170	2441715_41	1973 Feb 1 2148:59	Rocketsonde	-	-	0.000	HRM	SS	-	Meteo	DSI-5850	-	-
1973-1171	2441716_10	1973 Feb 2 1417:00	Rocketsonde	-	-	0.000	HRM	SS	-	Meteo	DSI-5850	-	-
1973-1174	2441716_12	1973 Feb 2 1500:00	Rocketsonde	-	-	0.000	HRM	SS	-	Meteo	DSI-5850	-	-
1973-1175	2441716_29	1973 Feb 2 1901:59	Rocketsonde	-	-	0.000	HRM	SS	-	Meteo	DSI-5850	-	-
1973-1176	2441716_30	1973 Feb 2 1914:59	Rocketsonde	-	-	0.000	HRM	SS	-	Meteo	DSI-5850	-	-
1973-1177	2441716_35	1973 Feb 2 2021:00	Rocketsonde	-	-	0.000	HRM	SS	-	Meteo	DSI-5850	-	-
1973-1161	2441716_35	1973 Feb 2 2026:59	Rocketsonde	-	-	0.000	HRM	SS	-	Meteo	DSI-5850	-	-
1973-1178	2441716_44	1973 Feb 2 2230:00	Rocketsonde	-	-	0.000	HRM	SS	-	Meteo	DSI-5850	-	-
1973-1179	2441716_49	1973 Feb 2 2346:59	Rocketsonde	-	-	0.000	HRM	SS	-	Meteo	DSI-5850	-	-
1973-1182	2441719_18	1973 Feb 5 1624:59	Rocketsonde	-	-	0.000	HRM	SS	-	Meteo	DSI-5850	-	-
1973-1183	2441719_19	1973 Feb 5 1636:59	Rocketsonde	-	-	0.000	HRM	SS	-	Meteo	DSI-5850	-	-
1973-1184	2441719_27	1973 Feb 5 1631:00	Rocketsonde	-	-	0.000	HRM	SS	-	Meteo	DSI-5850	-	-
1973-1185	2441719_30	1973 Feb 5 1914:59	Rocketsonde	-	-	0.000	HRM	SS	-	Meteo	DSI-5850	-	-
1973-1186	2441719_34	1973 Feb 5 2007:00	Rocketsonde	-	-	0.000	HRM	SS	-	Meteo	DSI-5850	-	-
1973-1187	2441719_48	1973 Feb 5 2332:00	Rocketsonde	-	-	0.000	HRM	SS	-	Meteo	DSI-5850	-	-
1973-1188	2441719_49	1973 Feb 5 2346:00	Rocketsonde	-	-	0.000	HRM	SS	-	Meteo	DSI-5850	-	-
1973-1189	2441720_10	1973 Feb 6 1430:00	Rocketsonde	-	-	0.000	HRM	SS	-	Meteo	DSI-5850	-	-
1973-1190	2441720_10	1973 Feb 6 1430:00	Rocketsonde	-	-	0.000	HRM	SS	-	Meteo	DSI-5850	-	-
1973-1191	2441720_27	1973 Feb 6 1630:00	Rocketsonde	-	-	0.000	HRM	SS	-	Meteo	DSI-5850	-	-
1973-1192	2441720_32	1973 Feb 6 1934:59	Rocketsonde	-	-	0.000	HRM	SS	-	Meteo	DSI-5850	-	-
1973-1196	2441721_12	1973 Feb 7 1456:00	Rocketsonde	-	-	0.000	HRM	SS	-	Meteo	DSI-5850	-	-
1973-1197	2441721_21	1973 Feb 7 1600:00	Rocketsonde	-	-	0.000	HRM	SS	-	Meteo	DSI-5850	-	-
1973-1197	2441721_25	1973 Feb 7 1756:00	Rocketsonde	-	-	0.000	HRM	SS	-	Meteo	DSI-5850	-	-
1973-1198	2441721_29	1973 Feb 7 1854:59	Rocketsonde	-	-	0.000	HRM	SS	-	Meteo	DSI-5850	-	-
1973-1170	2441721_29	1973 Feb 7 1856:59	Rocketsonde	-	-	0.000	HRM	SS	-	Meteo	DSI-5850	-	-
1973-1199	2441721_31	1973 Feb 7 1859:59	Rocketsonde	-	-	0.000	HRM	SS	-	Meteo	DSI-5850	-	-
1973-1200	2441721_31	1973 Feb 7 1930:00	Rocketsonde	-	-	0.000	HRM	SS	-	Meteo	DSI-5850	-	-
1973-1201	2441721_40	1973 Feb 7 2133:00	Rocketsonde	-	-	0.000	HRM	SS	-	Meteo	DSI-5850	-	-
1973-1202	2441721_50	1973 Feb 7 2356:00	Rocketsonde	-	-	0.000	HRM	SS	-	Meteo	DSI-5850	-	-
1973-1206	2441722_08	1973 Feb 8 1461:00	Rocketsonde	-	-	0.000	HRM	SS	-	Meteo	DSI-5850	-	-
1973-1207	2441722_12	1973 Feb 8 1461:00	Rocketsonde	-	-	0.000	HRM	SS	-	Meteo	DSI-5850	-	-
1973-1208	2441722_25	1973 Feb 8 1500:00	Rocketsonde	-	-	0.000	HRM	SS	-	Meteo	DSI-5850	-	-
1973-1206	2441722_25	1973 Feb 8 1756:00	Rocketsonde	-	-	0.000	HRM	SS	-	Meteo	DSI-5850	-	-
1973-1206	2441722_35	1973 Feb 8 1949:59	Rocketsonde	-	-	0.000	HRM	SS	-	Meteo	DSI-5850	-	-
1973-1209	2441722_40	1973 Feb 8 2129:00	Rocketsonde	-	-	0.000	HRM	SS	-	Meteo	DSI-5850	-	-
1973-1211	2441723_09	1973 Feb 9 1416:00	Rocketsonde	-	-	0.000	HRM	SS	-	Meteo	DSI-5850	-	-
1973-1212	2441723_10	1973 Feb 9 1430:00	Rocketsonde	-	-	0.000	HRM	SS	-	Meteo	DSI-5850	-	-
1973-1213	2441723_13	1973 Feb 9 1513:59	Rocketsonde	-	-	0.000	HRM	SS	-	Meteo	DSI-5850	-	-
1973-1213	2441723_21	1973 Feb 9 1700:00	Rocketsonde	-	-	0.000	HRM	SS	-	Meteo	DSI-5850	-	-
1973-1218	2441723_31	1973 Feb 9 1930:00	Rocketsonde	-	-	0.000	HRM	SS	-	Meteo	DSI-5850	-	-
1973-1219	2441723_31	1973 Feb 9 2151:00	Rocketsonde	-	-	0.000	HRM	SS	-	Meteo	DSI-5850	-	-
1973-1219	2441723_35	1973 Feb 9 2151:00	Rocketsonde	-	-	0.000	HRM	SS	-	Meteo	DSI-5850	-	-
1973-1218	2441723_42	1973 Feb 9 2159:59	Rocketsonde	-	-	0.000	HRM	SS	-	Meteo	DSI-5850	-	-
1973-1219	2441723_49	1973 Feb 9 2346:00	Rocketsonde	-	-	0.000	HRM	SS	-	Meteo	DSI-5850	-	-
1973-1219	2441726_10	1973 Feb 12 1431:00	Rocketsonde	-	-	0.000	HRM	SS	-	Meteo	DSI-5850	-	-
1973-1220	2441726_10	1973 Feb 12 1500:00	Rocketsonde	-	-	0.000	HRM	SS	-	Meteo	DSI-5850	-	-
1973-1221	2441726_15	1973 Feb 12 1814:59	Rocketsonde	-	-	0.000	HRM	SS	-	Meteo	DSI-5850	-	-
1973-1222	2441726_15	1973 Feb 12 1814:59	Rocketsonde	-	-	0.000	HRM	SS	-	Meteo	DSI-5850	-	-
1973-1223	2441726_15	1973 Feb 12 1914:59	Rocketsonde	-	-	0.000	HRM	SS	-	Meteo	DSI-5850	-	-
1973-1224	2441726_15	1973 Feb 12 2052:00	Rocketsonde	-	-	0.000	HRM	SS	-	Meteo	DSI-5850	-	-
1973-1225	2441726_15	1973 Feb 12 2100:00	Rocketsonde	-	-	0.000	HRM	SS	-	Meteo	DSI-5850	-	-
1973-1227	2441726_15	1973 Feb 12 2340:00	Rocketsonde	-	-	0.000	HRM	SS	-	Meteo	DSI-5850	-	-
1973-1228	2441726_15	1973 Feb 12 2340:00	Rocketsonde	-	-	0.000	HRM	SS	-	Meteo	DSI-5850	-	-
1973-1229	2441727_24	1973 Feb 13 1740:00	Rocketsonde	-	-	0.000	HRM	SS	-	Meteo	DSI-5850	-	-
1973-1231	2441727_29	1973 Feb 13 1856:59	Rocketsonde	-	-	0.000	HRM	SS	-	Meteo	DSI-5850	-	-
1973-1232	2441727_33	1973 Feb 13 1952:00	Rocketsonde	-	-	0.000	HRM	SS	-	Meteo	DSI-5850	-	-
1973-1234	2441727_39	1973 Feb 13 2117:00	Rocketsonde	-	-	0.000	HRM	SS	-	Meteo	DSI-5850	-	-
1973-1236	2441728_08	1973 Feb 14 1400:00	Rocketsonde	-	-	0.000	HRM	SS	-	Meteo	DSI-5850	-	-
1973-1236	2441728_11	1973 Feb 14 1435:00	Rocketsonde	-	-	0.000	HRM	SS	-	Meteo	DSI-5850	-	-
1973-1237	2441728_13	1973 Feb 14 1508:00	Rocketsonde	-	-	0.000	HRM	SS	-	Meteo	DSI-5850	-	-
1973-1238	2441728_14	1973 Feb 14 1523:59	Rocketsonde	-	-	0.000	HRM	SS	-	Meteo	DSI-5850	-	-
1973-1240	2441728_20	1973 Feb 14 1649:59	Rocketsonde	-	-	0.000	HRM	SS	-	Meteo	DSI-5850	-	-
1973-1241	2441728_21	1973 Feb 14 1707:00	Rocketsonde	-	-	0.000	HRM	SS	-	Meteo	DSI-5850	-	-
1973-1242	2441728_27	1973 Feb 14 1830:00	Rocketsonde	-	-	0.000	HRM	SS	-	Meteo	DSI-5850	-	-
1973-1243	2441728_29	1973 Feb 14 1859:59	Rocketsonde	-	-	0.000	HRM	SS	-	Meteo	DSI-5850	-	-
1973-1244	2441728_31	1973 Feb 14 1927:59	Rocketsonde	-	-	0.000	HRM	SS	-	Meteo	DSI-5850	-	-
1973-1244	2441728_33	1973 Feb 14 1954:59	Rocketsonde	-	-	0.000	HRM	SS	-	Meteo	DSI-5850	-	-
1973-1245	2441728_38	1973 Feb 14 2100:00	Rocketsonde	-	-	0.000	HRM	SS	-	Meteo	DSI-5850	-	-
1973-1246	2441728_50	1973 Feb 14 2112:59	Rocketsonde	-	-	0.000	HRM	SS	-	Meteo	DSI-5850	-	-
1973-1248	2441729_05	1973 Feb 15 1755:00	Rocketsonde	-	-	0.000	HRM	SS	-	Meteo	DSI-5850	-	-
1973-1249	2441729_39	1973 Feb 15 2120:00	Rocketsonde	-	-	0.000	HRM	SS	-	Meteo	DSI-5850	-	-
1973-1250	2441729_42	1973 Feb 15 2158:59	Rocketsonde	-	-	0.000	HRM	SS	-	Meteo	DSI-5850	-	-
1973-1251	2441730_09	1973 Feb 16 1415:00	Rocketsonde	-	-	0.000	HRM	SS	-	Meteo	DSI-5850	-	-
1973-1252	2441730_09	1973 Feb 16 1415:00	Rocketsonde	-	-	0.000	HRM	SS	-	Meteo	DSI-5850	-	-
1973-1254	2441730_23	1973 Feb 16 1731:00	Rocketsonde	-	-	0.000	HRM	SS	-	Meteo	DSI-5850	-	-
1973-1256	2441730_38	1973 Feb 16 1809:00	Rocketsonde	-	-	0.000	HRM	SS	-	Meteo	DSI-5850	-	-
1973-1256	2441730_38	1973 Feb 16 2346:00	Rocketsonde	-	-	0.000	HRM	SS	-	Meteo	DSI-5850	-	-
1973-1258	2441734_09	1973 Feb 20 1410:00	Rocketsonde	-	-	0.000	HRM	SS	-	Meteo	DSI-5850	-	-
1973-1259	2441734_12	1973 Feb 20 1500:00	Rocketsonde	-	-	0.000	HRM	SS	-	Meteo	DSI-5850	-	-
1973-1261	2441734_24	1973 Feb 20 1745:00	Rocketsonde	-	-	0.000	HRM	SS	-	Meteo	DSI-5850	-	-
1973-1262	2441734_28	1973 Feb 20 1845:59	Rocketsonde	-	-	0.000	HRM	SS	-	Meteo	DSI-5850	-	-
1973-1263	2441734_32	1973 Feb 20 1940:00	Rocketsonde	-	-	0.000	HRM	SS	-	Meteo	DSI-5850	-	-
1973-1265	2441735_12	1973 Feb 21 1500:00	Rocketsonde	-	-	0.000	HRM	SS	-	Meteo	DSI-5850	-	-

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Launch_e	Agency	Launch_Code	Group	Category	LT_Cite	Cite	Notes
1973-#266	2441735..15	1973 Feb 21 1532:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1973-#267	2441735.27	1973 Feb 21 1830:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1973-#268	2441735.29	1973 Feb 21 1901:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1973-#269	2441735.31	1973 Feb 21 1930:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1973-#270	2441735.35	1973 Feb 21 2030:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1973-#271	2441735.44	1973 Feb 21 2233:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1973-#272	2441735.48	1973 Feb 21 2345:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1973-#274	2441736.29	1973 Feb 22 1851:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1973-#275	2441736.39	1973 Feb 22 2114:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1973-#276	2441736.39	1973 Feb 22 2120:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1973-#278	2441737.12	1973 Feb 23 1500:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1973-#279	2441737.15	1973 Feb 23 1540:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1973-#280	2441737.16	1973 Feb 23 1554:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1973-#281	2441737.21	1973 Feb 23 1703:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1973-#282	2441737.24	1973 Feb 23 1740:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1973-#283	2441737.31	1973 Feb 23 1919:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1973-#284	2441737.35	1973 Feb 23 2023:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1973-#285	2441737.38	1973 Feb 23 2100:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1973-#286	2441737.49	1973 Feb 23 2345:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1973-#287	2441740.09	1973 Feb 26 1415:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1973-#288	2441740.19	1973 Feb 26 1640:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1973-#289	2441740.27	1973 Feb 26 1630:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1973-#290	2441740.36	1973 Feb 26 2037:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1973-#291	2441740.38	1973 Feb 26 2100:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1973-#292	2441741.24	1973 Feb 27 1749:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1973-#293	2441741.29	1973 Feb 27 1901:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1973-#294	2441741.35	1973 Feb 27 2023:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1973-#295	2441741.44	1973 Feb 27 2250:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1973-#296	2441741.49	1973 Feb 27 2352:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1973-#297	2441742.12	1973 Feb 28 1500:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1973-#298	2441742.14	1973 Feb 28 1527:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1973-#299	2441742.19	1973 Feb 28 1631:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1973-#300	2441742.21	1973 Feb 28 1700:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1973-#301	2441742.29	1973 Feb 28 1859:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1973-#302	2441742.30	1973 Feb 28 1907:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1973-#303	2441742.35	1973 Feb 28 2000:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1973-#304	2441742.38	1973 Feb 28 2100:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1973-#305	2441742.49	1973 Feb 28 2345:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1973-#307	2441743.26	1973 Mar 1 1831:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1973-#308	2441743.39	1973 Mar 1 1914:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1973-#309	2441744.08	1973 Mar 1 2124:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1973-#310	2441744.08	1973 Mar 2 1400:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1973-#311	2441744.12	1973 Mar 2 1500:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1973-#312	2441744.15	1973 Mar 2 1508:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1973-#313	2441744.30	1973 Mar 2 1806:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1973-#314	2441744.32	1973 Mar 2 1840:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1973-#315	2441744.35	1973 Mar 2 2139:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1973-#316	2441744.40	1973 Mar 2 2345:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1973-#317	2441744.49	1973 Mar 2 2347:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1973-#318	2441747.08	1973 Mar 5 1400:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1973-#319	2441747.09	1973 Mar 5 1415:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1973-#320	2441747.30	1973 Mar 5 1645:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1973-#321	2441747.35	1973 Mar 5 1754:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1973-#322	2441747.38	1973 Mar 5 1914:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1973-#323	2441747.38	1973 Mar 5 2100:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1973-#324	2441747.39	1973 Mar 5 2345:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1973-#325	2441748.01	1973 Mar 6 1829:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1973-#326	2441748.01	1973 Mar 6 1949:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1973-#327	2441748.07	1973 Mar 6 1929:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1973-#328	2441748.33	1973 Mar 6 2124:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1973-#329	2441748.39	1973 Mar 7 0200:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1973-#330	2441748.88	1973 Mar 7 1400:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1973-#331	2441749.08	1973 Mar 7 1404:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1973-#332	2441749.14	1973 Mar 7 1514:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1973-#333	2441749.16	1973 Mar 7 1545:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1973-#334	2441749.20	1973 Mar 7 1651:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1973-#335	2441749.21	1973 Mar 7 1855:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1973-#336	2441749.30	1973 Mar 7 1914:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1973-#337	2441749.31	1973 Mar 7 1919:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1973-#338	2441749.31	1973 Mar 7 1919:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1973-#339	2441749.31	1973 Mar 7 1930:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1973-#340	2441749.40	1973 Mar 7 2130:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1973-#341	2441749.51	1973 Mar 8 0010:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1973-#342	2441750.08	1973 Mar 8 1349:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1973-#343	2441750.18	1973 Mar 8 1614:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1973-#344	2441750.40	1973 Mar 8 2137:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1973-#345	2441751.09	1973 Mar 9 1415:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1973-#346	2441751.15	1973 Mar 9 1531:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1973-#347	2441751.19	1973 Mar 9 1630:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1973-#348	2441751.25	1973 Mar 9 1758:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1973-#349	2441751.31	1973 Mar 9 1830:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1973-#350	2441751.33	1973 Mar 9 1949:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1973-#351	2441751.40	1973 Mar 9 2130:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1973-#352	2441754.10	1973 Mar 12 1419:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1973-#353	2441754.10	1973 Mar 12 1530:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1973-#354	2441754.15	1973 Mar 12 1530:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1973-#355	2441754.15	1973 Mar 12 1530:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Launch_e	Agency	Launch_Code	Group	Category	LT_Cite	Cite	Notes
1973-A15	2441754.16	1973 Mar 12 1549:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1973-N357	2441754.19	1973 Mar 12 1636:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1973-N358	2441754.29	1973 Mar 12 1859:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1973-N359	2441754.31	1973 Mar 12 1930:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1973-N360	2441754.36	1973 Mar 12 2043:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1973-N361	2441754.38	1973 Mar 12 2100:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1973-A16	2441754.42	1973 Mar 12 2208:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1973-N364	2441755.25	1973 Mar 13 1765:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1973-N365	2441755.37	1973 Mar 13 2056:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1973-N366	2441756.12	1973 Mar 14 1500:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1973-N367	2441756.16	1973 Mar 14 1545:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1973-N368	2441756.17	1973 Mar 14 1559:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1973-N369	2441756.21	1973 Mar 14 1700:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1973-N370	2441756.26	1973 Mar 14 1814:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1973-Y133	2441756.29	1973 Mar 14 1859:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1973-Y134	2441756.31	1973 Mar 14 1930:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1973-N371	2441756.32	1973 Mar 14 1944:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1973-N372	2441756.34	1973 Mar 14 2009:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1973-N373	2441756.38	1973 Mar 14 2100:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1973-N374	2441756.51	1973 Mar 15 0014:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1973-N375	2441757.15	1973 Mar 15 1530:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1973-N376	2441757.15	1973 Mar 15 1538:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1973-N378	2441757.26	1973 Mar 15 1814:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1973-N379	2441757.26	1973 Mar 15 2109:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1973-A17	2441758.08	1973 Mar 16 1400:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1973-N380	2441758.08	1973 Mar 16 1400:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1973-N382	2441758.19	1973 Mar 16 1630:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1973-N383	2441758.26	1973 Mar 16 1614:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1973-N384	2441758.29	1973 Mar 16 1659:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1973-N385	2441758.30	1973 Mar 16 1914:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1973-N386	2441758.44	1973 Mar 16 2230:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1973-N387	2441758.49	1973 Mar 16 2347:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1973-N389	2441761.19	1973 Mar 19 1631:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1973-N390	2441761.27	1973 Mar 19 1830:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1973-N391	2441761.28	1973 Mar 19 1846:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1973-N392	2441761.32	1973 Mar 19 1934:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1973-N393	2441761.32	1973 Mar 19 1944:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1973-N394	2441761.36	1973 Mar 19 2046:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1973-N395	2441761.40	1973 Mar 19 2135:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1973-N396	2441762.12	1973 Mar 20 1500:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1973-N397	2441762.24	1973 Mar 20 1746:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1973-N399	2441762.25	1973 Mar 20 1834:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1973-N400	2441762.25	1973 Mar 20 1838:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1973-N401	2441763.11	1973 Mar 21 1540:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1973-N402	2441763.15	1973 Mar 21 1551:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1973-N404	2441763.19	1973 Mar 21 1624:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1973-Y167	2441763.21	1973 Mar 21 1700:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1973-N405	2441763.24	1973 Mar 21 1856:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1973-N406	2441763.29	1973 Mar 21 1915:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1973-N407	2441763.34	1973 Mar 21 2015:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1973-A18	2441763.34	1973 Mar 21 2130:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1973-N408	2441763.34	1973 Mar 21 2130:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1973-N410	2441764.30	1973 Mar 22 1937:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1973-N411	2441764.30	1973 Mar 22 2134:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1973-N412	2441764.95	1973 Mar 23 1044:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1973-N413	2441765.09	1973 Mar 23 1415:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1973-N414	2441765.13	1973 Mar 23 1512:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1973-N415	2441765.14	1973 Mar 23 1520:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1973-N417	2441765.19	1973 Mar 23 1630:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1973-N418	2441765.22	1973 Mar 23 1710:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1973-N419	2441765.30	1973 Mar 23 1912:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1973-Y160	2441765.32	1973 Mar 23 1933:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1973-N421	2441765.38	1973 Mar 23 2111:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1973-N422	2441765.38	1973 Mar 23 2111:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1973-N423	2441765.40	1973 Mar 26 1410:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1973-N424	2441768.09	1973 Mar 26 1415:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1973-N425	2441768.09	1973 Mar 26 1415:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1973-N427	2441768.29	1973 Mar 26 1859:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1973-N428	2441768.30	1973 Mar 26 1906:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1973-N429	2441768.34	1973 Mar 26 2015:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1973-N430	2441768.38	1973 Mar 26 2100:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1973-N431	2441768.50	1973 Mar 27 0004:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1973-N432	2441768.70	1973 Mar 27 0444:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1973-N433	2441768.91	1973 Mar 27 0945:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1973-N435	2441769.25	1973 Mar 27 1800:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1973-N436	2441769.30	1973 Mar 27 1909:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1973-N437	2441769.39	1973 Mar 27 2124:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1973-N438	2441770.09	1973 Mar 28 1415:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1973-N439	2441770.10	1973 Mar 28 1415:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1973-N440	2441770.11	1973 Mar 28 1433:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1973-N441	2441770.12	1973 Mar 28 1500:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1973-N443	2441770.19	1973 Mar 28 1630:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1973-N444	2441770.24	1973 Mar 28 1749:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1973-N445	2441770.30	1973 Mar 28 1913:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1973-N446	2441770.30	1973 Mar 28 1914:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-



Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Launch_e	Agency	Launch_Code	Group	Category	LT_Cite	Cite	Notes
1973-4447	2441770.44	1973 Mar 28 2229:00	Rocketsonde	-	-	0.000	HRM	SS	-	Meteo	DSI-5850	-	-
1973-4448	2441770.71	1973 Mar 29 0455:59	Rocketsonde	-	-	0.000	HRM	SS	-	Meteo	DSI-5850	-	-
1973-4449	2441771.18	1973 Mar 29 1624:59	Rocketsonde	-	-	0.000	HRM	SS	-	Meteo	DSI-5850	-	-
1973-4451	2441771.33	1973 Mar 29 1965:59	Rocketsonde	-	-	0.000	HRM	SS	-	Meteo	DSI-5850	-	-
1973-4452	2441771.40	1973 Mar 29 2140:00	Rocketsonde	-	-	0.000	HRM	SS	-	Meteo	DSI-5850	-	-
1973-4453	2441771.74	1973 Mar 30 0552:00	Rocketsonde	-	-	0.000	HRM	SS	-	Meteo	DSI-5850	-	-
1973-4454	2441772.09	1973 Mar 30 1415:00	Rocketsonde	-	-	0.000	HRM	SS	-	Meteo	DSI-5850	-	-
1973-4456	2441772.28	1973 Mar 30 1845:00	Rocketsonde	-	-	0.000	HRM	SS	-	Meteo	DSI-5850	-	-
1973-4457	2441772.31	1973 Mar 30 1950:00	Rocketsonde	-	-	0.000	HRM	SS	-	Meteo	DSI-5850	-	-
1973-4458	2441772.42	1973 Mar 30 2013:00	Rocketsonde	-	-	0.000	HRM	SS	-	Meteo	DSI-5850	-	-
1973-4459	2441772.44	1973 Mar 30 2250:00	Rocketsonde	-	-	0.000	HRM	SS	-	Meteo	DSI-5850	-	-
1973-4460	2441775.12	1973 Apr 2 1449:59	Rocketsonde	-	-	0.000	HRM	SS	-	Meteo	DSI-5850	-	-
1973-4462	2441775.15	1973 Apr 2 1541:00	Rocketsonde	-	-	0.000	HRM	SS	-	Meteo	DSI-5850	-	-
1973-4463	2441775.20	1973 Apr 2 1653:59	Rocketsonde	-	-	0.000	HRM	SS	-	Meteo	DSI-5850	-	-
1973-4464	2441775.21	1973 Apr 2 1704:59	Rocketsonde	-	-	0.000	HRM	SS	-	Meteo	DSI-5850	-	-
1973-4465	2441775.22	1973 Apr 2 1722:00	Rocketsonde	-	-	0.000	HRM	SS	-	Meteo	DSI-5850	-	-
1973-4466	2441775.23	1973 Apr 2 1730:00	Rocketsonde	-	-	0.000	HRM	SS	-	Meteo	DSI-5850	-	-
1973-4467	2441775.24	1973 Apr 2 1744:00	Rocketsonde	-	-	0.000	HRM	SS	-	Meteo	DSI-5850	-	-
1973-4468	2441775.32	1973 Apr 2 1955:59	Rocketsonde	-	-	0.000	HRM	SS	-	Meteo	DSI-5850	-	-
1973-4469	2441775.34	1973 Apr 2 2015:00	Rocketsonde	-	-	0.000	HRM	SS	-	Meteo	DSI-5850	-	-
1973-4470	2441775.39	1973 Apr 2 2127:59	Rocketsonde	-	-	0.000	HRM	SS	-	Meteo	DSI-5850	-	-
1973-4471	2441775.69	1973 Apr 3 0434:59	Rocketsonde	-	-	0.000	HRM	SS	-	Meteo	DSI-5850	-	-
1973-4472	2441776.06	1973 Apr 3 1319:59	Rocketsonde	-	-	0.000	HRM	SS	-	Meteo	DSI-5850	-	-
1973-4474	2441776.41	1973 Apr 3 2155:00	Rocketsonde	-	-	0.000	HRM	SS	-	Meteo	DSI-5850	-	-
1973-4475	2441777.10	1973 Apr 4 1421:00	Rocketsonde	-	-	0.000	HRM	SS	-	Meteo	DSI-5850	-	-
1973-4476	2441777.14	1973 Apr 4 1520:00	Rocketsonde	-	-	0.000	HRM	SS	-	Meteo	DSI-5850	-	-
1973-4477	2441777.19	1973 Apr 4 1640:00	Rocketsonde	-	-	0.000	HRM	SS	-	Meteo	DSI-5850	-	-
1973-4478	2441777.24	1973 Apr 4 1745:00	Rocketsonde	-	-	0.000	HRM	SS	-	Meteo	DSI-5850	-	-
1973-4479	2441777.26	1973 Apr 4 1838:59	Rocketsonde	-	-	0.000	HRM	SS	-	Meteo	DSI-5850	-	-
1973-4480	2441777.31	1973 Apr 4 1919:59	Rocketsonde	-	-	0.000	HRM	SS	-	Meteo	DSI-5850	-	-
1973-4481	2441777.34	1973 Apr 4 2012:00	Rocketsonde	-	-	0.000	HRM	SS	-	Meteo	DSI-5850	-	-
1973-4482	2441777.35	1973 Apr 4 2020:00	Rocketsonde	-	-	0.000	HRM	SS	-	Meteo	DSI-5850	-	-
1973-4483	2441778.14	1973 Apr 5 1524:59	Rocketsonde	-	-	0.000	HRM	SS	-	Meteo	DSI-5850	-	-
1973-4484	2441778.19	1973 Apr 5 1650:00	Rocketsonde	-	-	0.000	HRM	SS	-	Meteo	DSI-5850	-	-
1973-4485	2441778.24	1973 Apr 6 1415:00	Rocketsonde	-	-	0.000	HRM	SS	-	Meteo	DSI-5850	-	-
1973-4487	2441779.25	1973 Apr 6 1804:59	Rocketsonde	-	-	0.000	HRM	SS	-	Meteo	DSI-5850	-	-
1973-4488	2441779.27	1973 Apr 6 1830:00	Rocketsonde	-	-	0.000	HRM	SS	-	Meteo	DSI-5850	-	-
1973-4489	2441779.28	1973 Apr 6 1845:59	Rocketsonde	-	-	0.000	HRM	SS	-	Meteo	DSI-5850	-	-
1973-4490	2441779.31	1973 Apr 6 1920:59	Rocketsonde	-	-	0.000	HRM	SS	-	Meteo	DSI-5850	-	-
1973-4491	2441779.46	1973 Apr 6 2252:59	Rocketsonde	-	-	0.000	HRM	SS	-	Meteo	DSI-5850	-	-
1973-4492	2441782.09	1973 Apr 9 1145:00	Rocketsonde	-	-	0.000	HRM	SS	-	Meteo	DSI-5850	-	-
1973-4493	2441782.19	1973 Apr 9 1650:00	Rocketsonde	-	-	0.000	HRM	SS	-	Meteo	DSI-5850	-	-
1973-4494	2441782.29	1973 Apr 9 1859:59	Rocketsonde	-	-	0.000	HRM	SS	-	Meteo	DSI-5850	-	-
1973-4495	2441782.32	1973 Apr 9 1922:59	Rocketsonde	-	-	0.000	HRM	SS	-	Meteo	DSI-5850	-	-
1973-4496	2441782.34	1973 Apr 9 2135:59	Rocketsonde	-	-	0.000	HRM	SS	-	Meteo	DSI-5850	-	-
1973-4497	2441782.41	1973 Apr 9 2149:59	Rocketsonde	-	-	0.000	HRM	SS	-	Meteo	DSI-5850	-	-
1973-4498	2441782.44	1973 Apr 10 0434:00	Rocketsonde	-	-	0.000	HRM	SS	-	Meteo	DSI-5850	-	-
1973-4499	2441782.61	1973 Apr 10 0434:59	Rocketsonde	-	-	0.000	HRM	SS	-	Meteo	DSI-5850	-	-
1973-4501	2441783.44	1973 Apr 10 2153:00	Rocketsonde	-	-	0.000	HRM	SS	-	Meteo	DSI-5850	-	-
1973-4502	2441783.52	1973 Apr 11 0715:59	Rocketsonde	-	-	0.000	HRM	SS	-	Meteo	DSI-5850	-	-
1973-4504	2441784.15	1973 Apr 11 1530:00	Rocketsonde	-	-	0.000	HRM	SS	-	Meteo	DSI-5850	-	-
1973-4505	2441784.16	1973 Apr 11 1630:00	Rocketsonde	-	-	0.000	HRM	SS	-	Meteo	DSI-5850	-	-
1973-4507	2441784.19	1973 Apr 11 1803:59	Rocketsonde	-	-	0.000	HRM	SS	-	Meteo	DSI-5850	-	-
1973-4509	2441784.25	1973 Apr 11 1854:00	Rocketsonde	-	-	0.000	HRM	SS	-	Meteo	DSI-5850	-	-
1973-4509	2441784.29	1973 Apr 11 1858:59	Rocketsonde	-	-	0.000	HRM	SS	-	Meteo	DSI-5850	-	-
1973-4511	2441784.30	1973 Apr 11 1909:59	Rocketsonde	-	-	0.000	HRM	SS	-	Meteo	DSI-5850	-	-
1973-4512	2441784.31	1973 Apr 11 1922:59	Rocketsonde	-	-	0.000	HRM	SS	-	Meteo	DSI-5850	-	-
1973-4514	2441784.32	1973 Apr 11 1933:59	Rocketsonde	-	-	0.000	HRM	SS	-	Meteo	DSI-5850	-	-
1973-4515	2441784.38	1973 Apr 11 1941:59	Rocketsonde	-	-	0.000	HRM	SS	-	Meteo	DSI-5850	-	-
1973-4517	2441784.39	1973 Apr 11 2100:00	Rocketsonde	-	-	0.000	HRM	SS	-	Meteo	DSI-5850	-	-
1973-4518	2441784.40	1973 Apr 11 2126:59	Rocketsonde	-	-	0.000	HRM	SS	-	Meteo	DSI-5850	-	-
1973-4514	2441784.50	1973 Apr 12 0000:59	Rocketsonde	-	-	0.000	HRM	SS	-	Meteo	DSI-5850	-	-
1973-4515	2441785.19	1973 Apr 12 1634:59	Rocketsonde	-	-	0.000	HRM	SS	-	Meteo	DSI-5850	-	-
1973-4516	2441785.49	1973 Apr 12 2345:00	Rocketsonde	-	-	0.000	HRM	SS	-	Meteo	DSI-5850	-	-
1973-4517	2441786.09	1973 Apr 13 1415:00	Rocketsonde	-	-	0.000	HRM	SS	-	Meteo	DSI-5850	-	-
1973-4518	2441786.12	1973 Apr 13 1500:00	Rocketsonde	-	-	0.000	HRM	SS	-	Meteo	DSI-5850	-	-
1973-4520	2441786.24	1973 Apr 13 1745:00	Rocketsonde	-	-	0.000	HRM	SS	-	Meteo	DSI-5850	-	-
1973-4521	2441786.31	1973 Apr 13 1930:00	Rocketsonde	-	-	0.000	HRM	SS	-	Meteo	DSI-5850	-	-
1973-4522	2441786.38	1973 Apr 13 2103:59	Rocketsonde	-	-	0.000	HRM	SS	-	Meteo	DSI-5850	-	-
1973-4523	2441789.01	1973 Apr 16 1214:59	Rocketsonde	-	-	0.000	HRM	SS	-	Meteo	DSI-5850	-	-
1973-4524	2441789.06	1973 Apr 16 1330:00	Rocketsonde	-	-	0.000	HRM	SS	-	Meteo	DSI-5850	-	-
1973-4525	2441789.10	1973 Apr 16 1430:00	Rocketsonde	-	-	0.000	HRM	SS	-	Meteo	DSI-5850	-	-
1973-4526	2441789.13	1973 Apr 16 1503:59	Rocketsonde	-	-	0.000	HRM	SS	-	Meteo	DSI-5850	-	-
1973-4527	2441789.21	1973 Apr 16 1700:00	Rocketsonde	-	-	0.000	HRM	SS	-	Meteo	DSI-5850	-	-
1973-4528	2441789.29	1973 Apr 16 1856:00	Rocketsonde	-	-	0.000	HRM	SS	-	Meteo	DSI-5850	-	-
1973-4529	2441789.32	1973 Apr 16 1935:59	Rocketsonde	-	-	0.000	HRM	SS	-	Meteo	DSI-5850	-	-
1973-4530	2441789.38	1973 Apr 16 2100:00	Rocketsonde	-	-	0.000	HRM	SS	-	Meteo	DSI-5850	-	-
1973-4530	2441789.69	1973 Apr 17 0434:59	Rocketsonde	-	-	0.000	HRM	SS	-	Meteo	DSI-5850	-	-
1973-4532	2441790.40	1973 Apr 17 2133:00	Rocketsonde	-	-	0.000	HRM	SS	-	Meteo	DSI-5850	-	-
1973-4533	2441791.09	1973 Apr 18 1404:59	Rocketsonde	-	-	0.000	HRM	SS	-	Meteo	DSI-5850	-	-
1973-4534	2441791.09	1973 Apr 18 1415:00	Rocketsonde	-	-	0.000	HRM	SS	-	Meteo	DSI-5850	-	-
1973-4535	2441791.10	1973 Apr 18 1421:00	Rocketsonde	-	-	0.000	HRM	SS	-	Meteo	DSI-5850	-	-
1973-4536	2441791.12	1973 Apr 18 1500:00	Rocketsonde	-	-	0.000	HRM	SS	-	Meteo	DSI-5850	-	-
1973-4538	2441791.16	1973 Apr 18 1556:59	Rocketsonde	-	-	0.000	HRM	SS	-	Meteo	DSI-5850	-	-

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Launch_e	Agency	Launch_Code	Group	Category	LT_Cite	Cite	Notes
1973-H539	2441791.19	1973 Apr 18 1651:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1973-Y180	2441791.21	1973 Apr 18 1700:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1973-Y181	2441791.22	1973 Apr 18 1701:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1973-Y182	2441791.24	1973 Apr 18 1741:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1973-H540	2441791.25	1973 Apr 18 1800:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1973-H541	2441791.26	1973 Apr 18 1811:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1973-H542	2441791.31	1973 Apr 18 1930:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1973-H543	2441791.42	1973 Apr 18 2202:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1973-H544	2441791.49	1973 Apr 18 2345:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1973-H545	2441792.18	1973 Apr 19 1619:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1973-H547	2441792.24	1973 Apr 19 1751:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1973-H548	2441793.03	1973 Apr 20 1245:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1973-H549	2441793.24	1973 Apr 20 1745:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1973-H550	2441793.32	1973 Apr 20 1944:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1973-H551	2441793.37	1973 Apr 20 2065:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1973-H552	2441793.43	1973 Apr 20 2213:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1973-H553	2441796.09	1973 Apr 23 1415:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1973-H554	2441796.31	1973 Apr 23 1944:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1973-H555	2441796.30	1973 Apr 23 1930:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1973-H556	2441796.34	1973 Apr 23 2009:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1973-H557	2441796.38	1973 Apr 23 2100:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1973-H558	2441796.49	1973 Apr 23 2345:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1973-H559	2441796.69	1973 Apr 24 0440:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1973-H560	2441797.40	1973 Apr 24 0940:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1973-H561	2441797.69	1973 Apr 25 0922:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1973-H562	2441798.09	1973 Apr 25 1404:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1973-H563	2441798.12	1973 Apr 25 1500:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1973-H564	2441798.14	1973 Apr 25 1543:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1973-H565	2441798.15	1973 Apr 25 1520:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1973-H567	2441798.24	1973 Apr 25 1740:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1973-H568	2441798.27	1973 Apr 25 1853:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1973-H569	2441798.29	1973 Apr 25 1859:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1973-H570	2441798.30	1973 Apr 25 1914:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1973-H571	2441798.31	1973 Apr 25 1930:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1973-H572	2441799.65	1973 Apr 27 0144:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1973-H573	2441800.04	1973 Apr 27 1255:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1973-H574	2441800.09	1973 Apr 27 1415:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1973-H575	2441800.24	1973 Apr 27 1749:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1973-H576	2441800.25	1973 Apr 27 1755:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1973-H577	2441800.27	1973 Apr 27 1822:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1973-H578	2441800.27	1973 Apr 27 1849:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1973-H579	2441800.33	1973 Apr 27 2259:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1973-H580	2441800.44	1973 Apr 29 0423:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1973-H582	2441801.52	1973 Apr 30 0415:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1973-H581	2441803.09	1973 Apr 30 1541:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1973-H583	2441803.15	1973 Apr 30 1737:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1973-H584	2441803.21	1973 Apr 30 1759:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1973-H585	2441803.27	1973 Apr 30 1853:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1973-H586	2441803.33	1973 Apr 30 1939:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1973-H587	2441803.33	1973 Apr 30 2114:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1973-H588	2441803.37	1973 May 2 1344:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1973-H589	2441805.10	1973 May 2 1434:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1973-H590	2441805.12	1973 May 2 1500:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1973-H591	2441805.17	1973 May 2 1559:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1973-H592	2441805.21	1973 May 2 1700:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1973-H593	2441805.25	1973 May 2 1759:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1973-H594	2441805.32	1973 May 2 1934:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1973-H595	2441805.38	1973 May 2 2100:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1973-H597	2441805.38	1973 May 2 2113:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1973-H598	2441805.38	1973 May 3 0152:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1973-H599	2441806.20	1973 May 3 1644:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1973-H600	2441806.25	1973 May 3 1830:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1973-H601	2441807.06	1973 May 4 1330:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1973-H602	2441807.07	1973 May 4 1344:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1973-H603	2441807.25	1973 May 4 1408:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1973-H605	2441807.97	1973 May 4 1755:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1973-H606	2441807.97	1973 May 4 1830:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1973-H607	2441807.39	1973 May 4 2114:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1973-H608	2441807.39	1973 May 4 2122:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1973-H609	2441810.08	1973 May 7 1400:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1973-H610	2441810.22	1973 May 7 1713:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1973-H611	2441810.23	1973 May 7 1730:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1973-H612	2441810.30	1973 May 7 1913:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1973-H613	2441810.31	1973 May 7 1921:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1973-H614	2441810.38	1973 May 7 2107:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1973-H615	2441810.53	1973 May 8 0945:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1973-H616	2441811.20	1973 May 8 1652:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1973-H618	2441811.30	1973 May 8 1906:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1973-H620	2441812.12	1973 May 9 1500:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1973-H622	2441812.17	1973 May 9 1559:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1973-H623	2441812.24	1973 May 9 1740:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1973-H624	2441812.31	1973 May 9 1921:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1973-H625	2441812.41	1973 May 9 2155:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1973-H626	2441812.55	1973 May 10 0104:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1973-H627	2441812.59	1973 May 10 0203:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Launch_e	Agency	Launch_Code	Group	Category	LT_Cite	Cite	Notes
1973-0628	2441813.08	1973 May 10 1400:00	Rocketsonde	-	-	0.000	MRU	SS	-	Metco	DSI-5850	-	-
1973-0629	2441813.09	1973 May 10 1415:59	Rocketsonde	-	-	0.000	MRU	SS	-	Metco	DSI-5850	-	-
1973-0630	2441813.23	1973 May 10 1737:59	Rocketsonde	-	-	0.000	MRU	SS	-	Metco	DSI-5850	-	-
1973-0631	2441813.50	1973 May 11 0000:00	Rocketsonde	-	-	0.000	MRU	SS	-	Metco	DSI-5850	-	-
1973-0632	2441814.12	1973 May 11 1457:00	Rocketsonde	-	-	0.000	MRU	SS	-	Metco	DSI-5850	-	-
1973-0633	2441814.13	1973 May 11 1510:00	Rocketsonde	-	-	0.000	MRU	SS	-	Metco	DSI-5850	-	-
1973-0634	2441814.15	1973 May 11 1533:00	Rocketsonde	-	-	0.000	MRU	SS	-	Metco	DSI-5850	-	-
1973-0635	2441814.19	1973 May 11 1635:59	Rocketsonde	-	-	0.000	MRU	SS	-	Metco	DSI-5850	-	-
1973-0636	2441814.25	1973 May 11 1800:00	Rocketsonde	-	-	0.000	MRU	SS	-	Metco	DSI-5850	-	-
1973-0637	2441814.27	1973 May 11 1830:00	Rocketsonde	-	-	0.000	MRU	SS	-	Metco	DSI-5850	-	-
1973-0638	2441814.38	1973 May 11 2100:00	Rocketsonde	-	-	0.000	MRU	SS	-	Metco	DSI-5850	-	-
1973-0639	2441814.39	1973 May 11 2115:59	Rocketsonde	-	-	0.000	MRU	SS	-	Metco	DSI-5850	-	-
1973-0640	2441816.06	1973 May 13 1330:00	Rocketsonde	-	-	0.000	MRU	SS	-	Metco	DSI-5850	-	-
1973-0641	2441817.06	1973 May 14 1332:59	Rocketsonde	-	-	0.000	MRU	SS	-	Metco	DSI-5850	-	-
1973-0642	2441817.21	1973 May 14 1700:00	Rocketsonde	-	-	0.000	MRU	SS	-	Metco	DSI-5850	-	-
1973-0643	2441817.25	1973 May 14 1800:00	Rocketsonde	-	-	0.000	MRU	SS	-	Metco	DSI-5850	-	-
1973-0644	2441817.27	1973 May 14 1822:00	Rocketsonde	-	-	0.000	MRU	SS	-	Metco	DSI-5850	-	-
1973-0645	2441817.29	1973 May 14 1902:59	Rocketsonde	-	-	0.000	MRU	SS	-	Metco	DSI-5850	-	-
1973-0646	2441817.38	1973 May 14 2100:00	Rocketsonde	-	-	0.000	MRU	SS	-	Metco	DSI-5850	-	-
1973-0647	2441817.49	1973 May 14 2352:00	Rocketsonde	-	-	0.000	MRU	SS	-	Metco	DSI-5850	-	-
1973-0648	2441818.19	1973 May 15 1634:59	Rocketsonde	-	-	0.000	MRU	SS	-	Metco	DSI-5850	-	-
1973-0649	2441818.27	1973 May 15 1629:00	Rocketsonde	-	-	0.000	MRU	SS	-	Metco	DSI-5850	-	-
1973-0650	2441818.29	1973 May 15 1902:59	Rocketsonde	-	-	0.000	MRU	SS	-	Metco	DSI-5850	-	-
1973-0652	2441819.05	1973 May 16 1304:59	Rocketsonde	-	-	0.000	MRU	SS	-	Metco	DSI-5850	-	-
1973-0653	2441819.07	1973 May 16 1344:59	Rocketsonde	-	-	0.000	MRU	SS	-	Metco	DSI-5850	-	-
1973-0654	2441819.09	1973 May 16 1404:59	Rocketsonde	-	-	0.000	MRU	SS	-	Metco	DSI-5850	-	-
1973-0655	2441819.15	1973 May 16 1415:00	Rocketsonde	-	-	0.000	MRU	SS	-	Metco	DSI-5850	-	-
1973-0656	2441819.17	1973 May 16 1550:00	Rocketsonde	-	-	0.000	MRU	SS	-	Metco	DSI-5850	-	-
1973-0657	2441819.17	1973 May 16 1559:59	Rocketsonde	-	-	0.000	MRU	SS	-	Metco	DSI-5850	-	-
1973-0658	2441819.24	1973 May 16 1749:59	Rocketsonde	-	-	0.000	MRU	SS	-	Metco	DSI-5850	-	-
1973-0659	2441819.25	1973 May 16 1757:00	Rocketsonde	-	-	0.000	MRU	SS	-	Metco	DSI-5850	-	-
1973-0660	2441819.31	1973 May 16 1921:59	Rocketsonde	-	-	0.000	MRU	SS	-	Metco	DSI-5850	-	-
1973-0662	2441819.33	1973 May 17 0200:00	Rocketsonde	-	-	0.000	MRU	SS	-	Metco	DSI-5850	-	-
1973-0664	2441820.13	1973 May 17 1511:00	Rocketsonde	-	-	0.000	MRU	SS	-	Metco	DSI-5850	-	-
1973-0665	2441820.38	1973 May 17 2109:00	Rocketsonde	-	-	0.000	MRU	SS	-	Metco	DSI-5850	-	-
1973-0666	2441820.39	1973 May 17 2117:00	Rocketsonde	-	-	0.000	MRU	SS	-	Metco	DSI-5850	-	-
1973-0667	2441821.08	1973 May 18 1336:59	Rocketsonde	-	-	0.000	MRU	SS	-	Metco	DSI-5850	-	-
1973-0668	2441821.16	1973 May 18 1400:00	Rocketsonde	-	-	0.000	MRU	SS	-	Metco	DSI-5850	-	-
1973-0669	2441821.21	1973 May 18 1614:59	Rocketsonde	-	-	0.000	MRU	SS	-	Metco	DSI-5850	-	-
1973-0670	2441821.51	1973 May 18 1658:59	Rocketsonde	-	-	0.000	MRU	SS	-	Metco	DSI-5850	-	-
1973-0671	2441821.52	1973 May 18 1800:00	Rocketsonde	-	-	0.000	MRU	SS	-	Metco	DSI-5850	-	-
1973-0672	2441821.47	1973 May 18 1839:00	Rocketsonde	-	-	0.000	MRU	SS	-	Metco	DSI-5850	-	-
1973-0673	2441821.47	1973 May 18 2314:59	Rocketsonde	-	-	0.000	MRU	SS	-	Metco	DSI-5850	-	-
1973-0674	2441821.53	1973 May 19 0147:59	Rocketsonde	-	-	0.000	MRU	SS	-	Metco	DSI-5850	-	-
1973-0675	2441822.09	1973 May 20 1344:59	Rocketsonde	-	-	0.000	MRU	SS	-	Metco	DSI-5850	-	-
1973-0676	2441824.14	1973 May 21 1703:55	Rocketsonde	-	-	0.000	MRU	SS	-	Metco	DSI-5850	-	-
1973-0677	2441824.51	1973 May 21 1522:00	Rocketsonde	-	-	0.000	MRU	SS	-	Metco	DSI-5850	-	-
1973-0678	2441824.97	1973 May 21 1830:00	Rocketsonde	-	-	0.000	MRU	SS	-	Metco	DSI-5850	-	-
1973-0679	2441824.91	1973 May 21 1931:59	Rocketsonde	-	-	0.000	MRU	SS	-	Metco	DSI-5850	-	-
1973-0680	2441824.98	1973 May 21 2100:00	Rocketsonde	-	-	0.000	MRU	SS	-	Metco	DSI-5850	-	-
1973-0682	2441825.11	1973 May 22 1436:00	Rocketsonde	-	-	0.000	MRU	SS	-	Metco	DSI-5850	-	-
1973-0683	2441825.19	1973 May 22 1630:00	Rocketsonde	-	-	0.000	MRU	SS	-	Metco	DSI-5850	-	-
1973-0684	2441826.08	1973 May 22 1904:59	Rocketsonde	-	-	0.000	MRU	SS	-	Metco	DSI-5850	-	-
1973-0685	2441826.09	1973 May 23 1309:59	Rocketsonde	-	-	0.000	MRU	SS	-	Metco	DSI-5850	-	-
1973-0686	2441826.12	1973 May 23 1415:00	Rocketsonde	-	-	0.000	MRU	SS	-	Metco	DSI-5850	-	-
1973-0688	2441826.15	1973 May 23 1500:00	Rocketsonde	-	-	0.000	MRU	SS	-	Metco	DSI-5850	-	-
1973-0689	2441826.23	1973 May 23 1540:00	Rocketsonde	-	-	0.000	MRU	SS	-	Metco	DSI-5850	-	-
1973-0690	2441826.31	1973 May 23 1726:59	Rocketsonde	-	-	0.000	MRU	SS	-	Metco	DSI-5850	-	-
1973-0691	2441826.34	1973 May 23 1921:59	Rocketsonde	-	-	0.000	MRU	SS	-	Metco	DSI-5850	-	-
1973-0692	2441826.36	1973 May 23 2307:00	Rocketsonde	-	-	0.000	MRU	SS	-	Metco	DSI-5850	-	-
1973-0693	2441826.62	1973 May 24 0246:00	Rocketsonde	-	-	0.000	MRU	SS	-	Metco	DSI-5850	-	-
1973-0694	2441827.09	1973 May 24 1415:00	Rocketsonde	-	-	0.000	MRU	SS	-	Metco	DSI-5850	-	-
1973-0695	2441827.12	1973 May 24 1500:00	Rocketsonde	-	-	0.000	MRU	SS	-	Metco	DSI-5850	-	-
1973-0696	2441827.39	1973 May 24 2122:00	Rocketsonde	-	-	0.000	MRU	SS	-	Metco	DSI-5850	-	-
1973-0697	2441828.10	1973 May 25 1430:00	Rocketsonde	-	-	0.000	MRU	SS	-	Metco	DSI-5850	-	-
1973-0698	2441828.25	1973 May 25 1804:59	Rocketsonde	-	-	0.000	MRU	SS	-	Metco	DSI-5850	-	-
1973-0699	2441828.29	1973 May 25 1856:00	Rocketsonde	-	-	0.000	MRU	SS	-	Metco	DSI-5850	-	-
1973-0700	2441828.29	1973 May 25 1859:59	Rocketsonde	-	-	0.000	MRU	SS	-	Metco	DSI-5850	-	-
1973-0701	2441828.39	1973 May 25 2118:00	Rocketsonde	-	-	0.000	MRU	SS	-	Metco	DSI-5850	-	-
1973-0702	2441828.53	1973 May 26 0045:00	Rocketsonde	-	-	0.000	MRU	SS	-	Metco	DSI-5850	-	-
1973-0703	2441832.20	1973 May 29 1644:59	Rocketsonde	-	-	0.000	MRU	SS	-	Metco	DSI-5850	-	-
1973-0704	2441832.21	1973 May 29 1700:00	Rocketsonde	-	-	0.000	MRU	SS	-	Metco	DSI-5850	-	-
1973-0705	2441832.29	1973 May 29 1856:59	Rocketsonde	-	-	0.000	MRU	SS	-	Metco	DSI-5850	-	-
1973-0706	2441832.31	1973 May 29 1921:59	Rocketsonde	-	-	0.000	MRU	SS	-	Metco	DSI-5850	-	-
1973-0707	2441832.34	1973 May 29 2010:00	Rocketsonde	-	-	0.000	MRU	SS	-	Metco	DSI-5850	-	-
1973-0708	2441833.07	1973 May 30 1344:59	Rocketsonde	-	-	0.000	MRU	SS	-	Metco	DSI-5850	-	-
1973-0709	2441833.07	1973 May 30 1344:59	Rocketsonde	-	-	0.000	MRU	SS	-	Metco	DSI-5850	-	-
1973-0710	2441833.11	1973 May 30 1441:00	Rocketsonde	-	-	0.000	MRU	SS	-	Metco	DSI-5850	-	-
1973-0711	2441833.15	1973 May 30 1530:00	Rocketsonde	-	-	0.000	MRU	SS	-	Metco	DSI-5850	-	-
1973-0712	2441833.17	1973 May 30 1604:59	Rocketsonde	-	-	0.000	MRU	SS	-	Metco	DSI-5850	-	-
1973-0713	2441833.17	1973 May 30 1611:59	Rocketsonde	-	-	0.000	MRU	SS	-	Metco	DSI-5850	-	-

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Launch_e	Agency	Launch_Code	Group	Category	LT_Cite	Cite	Notes
1973-1726	2441833.19	1973 May 30 1650:59	Rocketsonde	-	-	0.000	HRM	SS	-	Metco	DSI-5850	-	-
1973-1715	2441833.21	1973 May 30 1709:00	Rocketsonde	-	-	0.000	HRM	SS	-	Metco	DSI-5850	-	-
1973-1716	2441833.25	1973 May 30 1800:00	Rocketsonde	-	-	0.000	HRM	SS	-	Metco	DSI-5850	-	-
1973-1717	2441833.31	1973 May 30 1921:59	Rocketsonde	-	-	0.000	HRM	SS	-	Metco	DSI-5850	-	-
1973-1718	2441833.39	1973 May 30 2114:59	Rocketsonde	-	-	0.000	HRM	SS	-	Metco	DSI-5850	-	-
1973-1719	2441833.53	1973 May 31 0045:00	Rocketsonde	-	-	0.000	HRM	SS	-	Metco	DSI-5850	-	-
1973-1720	2441834.51	1973 Jun 1 0012:59	Rocketsonde	-	-	0.000	HRM	SS	-	Metco	DSI-5850	-	-
1973-1721	2441835.09	1973 Jun 1 1410:00	Rocketsonde	-	-	0.000	HRM	SS	-	Metco	DSI-5850	-	-
1973-1722	2441835.18	1973 Jun 1 1614:59	Rocketsonde	-	-	0.000	HRM	SS	-	Metco	DSI-5850	-	-
1973-1723	2441835.31	1973 Jun 1 1619:59	Rocketsonde	-	-	0.000	HRM	SS	-	Metco	DSI-5850	-	-
1973-1724	2441835.38	1973 Jun 1 2029:00	Rocketsonde	-	-	0.000	HRM	SS	-	Metco	DSI-5850	-	-
1973-1725	2441835.38	1973 Jun 1 2100:00	Rocketsonde	-	-	0.000	HRM	SS	-	Metco	DSI-5850	-	-
1973-1727	2441838.01	1973 Jun 4 1210:00	Rocketsonde	-	-	0.000	HRM	SS	-	Metco	DSI-5850	-	-
1973-1728	2441838.08	1973 Jun 4 1354:59	Rocketsonde	-	-	0.000	HRM	SS	-	Metco	DSI-5850	-	-
1973-1729	2441838.12	1973 Jun 4 1500:00	Rocketsonde	-	-	0.000	HRM	SS	-	Metco	DSI-5850	-	-
1973-1730	2441838.23	1973 Jun 4 1729:00	Rocketsonde	-	-	0.000	HRM	SS	-	Metco	DSI-5850	-	-
1973-1731	2441838.24	1973 Jun 4 1748:59	Rocketsonde	-	-	0.000	HRM	SS	-	Metco	DSI-5850	-	-
1973-1732	2441838.25	1973 Jun 4 1800:59	Rocketsonde	-	-	0.000	HRM	SS	-	Metco	DSI-5850	-	-
1973-1733	2441838.27	1973 Jun 4 1826:59	Rocketsonde	-	-	0.000	HRM	SS	-	Metco	DSI-5850	-	-
1973-1734	2441838.31	1973 Jun 4 1919:59	Rocketsonde	-	-	0.000	HRM	SS	-	Metco	DSI-5850	-	-
1973-1735	2441838.38	1973 Jun 4 2100:00	Rocketsonde	-	-	0.000	HRM	SS	-	Metco	DSI-5850	-	-
1973-1737	2441839.39	1973 Jun 5 2122:00	Rocketsonde	-	-	0.000	HRM	SS	-	Metco	DSI-5850	-	-
1973-1738	2441839.50	1973 Jun 6 0006:00	Rocketsonde	-	-	0.000	HRM	SS	-	Metco	DSI-5850	-	-
1973-1739	2441839.59	1973 Jun 6 1140:00	Rocketsonde	-	-	0.000	HRM	SS	-	Metco	DSI-5850	-	-
1973-1741	2441840.03	1973 Jun 6 1236:59	Rocketsonde	-	-	0.000	HRM	SS	-	Metco	DSI-5850	-	-
1973-1742	2441840.06	1973 Jun 6 1330:00	Rocketsonde	-	-	0.000	HRM	SS	-	Metco	DSI-5850	-	-
1973-1743	2441840.07	1973 Jun 6 1344:59	Rocketsonde	-	-	0.000	HRM	SS	-	Metco	DSI-5850	-	-
1973-1744	2441840.08	1973 Jun 6 1400:00	Rocketsonde	-	-	0.000	HRM	SS	-	Metco	DSI-5850	-	-
1973-1745	2441840.11	1973 Jun 6 1436:00	Rocketsonde	-	-	0.000	HRM	SS	-	Metco	DSI-5850	-	-
1973-1746	2441840.12	1973 Jun 6 1500:00	Rocketsonde	-	-	0.000	HRM	SS	-	Metco	DSI-5850	-	-
1973-1747	2441840.21	1973 Jun 6 1700:00	Rocketsonde	-	-	0.000	HRM	SS	-	Metco	DSI-5850	-	-
1973-1748	2441840.25	1973 Jun 6 1756:00	Rocketsonde	-	-	0.000	HRM	SS	-	Metco	DSI-5850	-	-
1973-1749	2441840.25	1973 Jun 6 1800:00	Rocketsonde	-	-	0.000	HRM	SS	-	Metco	DSI-5850	-	-
1973-1750	2441840.27	1973 Jun 6 1834:59	Rocketsonde	-	-	0.000	HRM	SS	-	Metco	DSI-5850	-	-
1973-1751	2441840.31	1973 Jun 6 1919:59	Rocketsonde	-	-	0.000	HRM	SS	-	Metco	DSI-5850	-	-
1973-1752	2441840.38	1973 Jun 6 2100:00	Rocketsonde	-	-	0.000	HRM	SS	-	Metco	DSI-5850	-	-
1973-1753	2441840.55	1973 Jun 7 0446:00	Rocketsonde	-	-	0.000	HRM	SS	-	Metco	DSI-5850	-	-
1973-1754	2441841.22	1973 Jun 7 1715:00	Rocketsonde	-	-	0.000	HRM	SS	-	Metco	DSI-5850	-	-
1973-1754	2441841.69	1973 Jun 8 0434:59	Rocketsonde	-	-	0.000	HRM	SS	-	Metco	DSI-5850	-	-
1973-1755	2441842.06	1973 Jun 8 1400:00	Rocketsonde	-	-	0.000	HRM	SS	-	Metco	DSI-5850	-	-
1973-1756	2441842.09	1973 Jun 8 1504:59	Rocketsonde	-	-	0.000	HRM	SS	-	Metco	DSI-5850	-	-
1973-1757	2441842.15	1973 Jun 8 1530:00	Rocketsonde	-	-	0.000	HRM	SS	-	Metco	DSI-5850	-	-
1973-1758	2441842.18	1973 Jun 8 1619:59	Rocketsonde	-	-	0.000	HRM	SS	-	Metco	DSI-5850	-	-
1973-1759	2441842.18	1973 Jun 8 1624:59	Rocketsonde	-	-	0.000	HRM	SS	-	Metco	DSI-5850	-	-
1973-1760	2441842.21	1973 Jun 8 1726:00	Rocketsonde	-	-	0.000	HRM	SS	-	Metco	DSI-5850	-	-
1973-1761	2441842.21	1973 Jun 8 1921:59	Rocketsonde	-	-	0.000	HRM	SS	-	Metco	DSI-5850	-	-
1973-1762	2441842.31	1973 Jun 8 2100:00	Rocketsonde	-	-	0.000	HRM	SS	-	Metco	DSI-5850	-	-
1973-1763	2441842.31	1973 Jun 8 2106:59	Rocketsonde	-	-	0.000	HRM	SS	-	Metco	DSI-5850	-	-
1973-1764	2441842.31	1973 Jun 8 2110:00	Rocketsonde	-	-	0.000	HRM	SS	-	Metco	DSI-5850	-	-
1973-1765	2441842.53	1973 Jun 8 0046:00	Rocketsonde	-	-	0.000	HRM	SS	-	Metco	DSI-5850	-	-
1973-1766	2441842.58	1973 Jun 8 0155:00	Rocketsonde	-	-	0.000	HRM	SS	-	Metco	DSI-5850	-	-
1973-1767	2441842.60	1973 Jun 8 0230:00	Rocketsonde	-	-	0.000	HRM	SS	-	Metco	DSI-5850	-	-
1973-1768	2441843.31	1973 Jun 8 1919:59	Rocketsonde	-	-	0.000	HRM	SS	-	Metco	DSI-5850	-	-
1973-1769	2441845.12	1973 Jun 11 1500:00	Rocketsonde	-	-	0.000	HRM	SS	-	Metco	DSI-5850	-	-
1973-1770	2441845.16	1973 Jun 11 1556:59	Rocketsonde	-	-	0.000	HRM	SS	-	Metco	DSI-5850	-	-
1973-1771	2441845.19	1973 Jun 11 1619:59	Rocketsonde	-	-	0.000	HRM	SS	-	Metco	DSI-5850	-	-
1973-1772	2441845.21	1973 Jun 11 1700:00	Rocketsonde	-	-	0.000	HRM	SS	-	Metco	DSI-5850	-	-
1973-1773	2441845.23	1973 Jun 11 1732:00	Rocketsonde	-	-	0.000	HRM	SS	-	Metco	DSI-5850	-	-
1973-1774	2441845.31	1973 Jun 11 1919:59	Rocketsonde	-	-	0.000	HRM	SS	-	Metco	DSI-5850	-	-
1973-1775	2441845.38	1973 Jun 11 2109:00	Rocketsonde	-	-	0.000	HRM	SS	-	Metco	DSI-5850	-	-
1973-1776	2441846.25	1973 Jun 12 1800:00	Rocketsonde	-	-	0.000	HRM	SS	-	Metco	DSI-5850	-	-
1973-1777	2441846.50	1973 Jun 13 0000:00	Rocketsonde	-	-	0.000	HRM	SS	-	Metco	DSI-5850	-	-
1973-1778	2441847.07	1973 Jun 13 1344:59	Rocketsonde	-	-	0.000	HRM	SS	-	Metco	DSI-5850	-	-
1973-1779	2441847.08	1973 Jun 13 1348:59	Rocketsonde	-	-	0.000	HRM	SS	-	Metco	DSI-5850	-	-
1973-1780	2441847.09	1973 Jun 13 1411:00	Rocketsonde	-	-	0.000	HRM	SS	-	Metco	DSI-5850	-	-
1973-1781	2441847.10	1973 Jun 13 1430:00	Rocketsonde	-	-	0.000	HRM	SS	-	Metco	DSI-5850	-	-
1973-1782	2441847.17	1973 Jun 13 1609:59	Rocketsonde	-	-	0.000	HRM	SS	-	Metco	DSI-5850	-	-
1973-1783	2441847.25	1973 Jun 13 1804:59	Rocketsonde	-	-	0.000	HRM	SS	-	Metco	DSI-5850	-	-
1973-1784	2441847.27	1973 Jun 13 1830:00	Rocketsonde	-	-	0.000	HRM	SS	-	Metco	DSI-5850	-	-
1973-1785	2441847.29	1973 Jun 13 1859:59	Rocketsonde	-	-	0.000	HRM	SS	-	Metco	DSI-5850	-	-
1973-1786	2441847.35	1973 Jun 13 2030:00	Rocketsonde	-	-	0.000	HRM	SS	-	Metco	DSI-5850	-	-
1973-1787	2441847.42	1973 Jun 13 2201:59	Rocketsonde	-	-	0.000	HRM	SS	-	Metco	DSI-5850	-	-
1973-1788	2441847.42	1973 Jun 13 2207:59	Rocketsonde	-	-	0.000	HRM	SS	-	Metco	DSI-5850	-	-
1973-1789	2441847.53	1973 Jun 14 0045:00	Rocketsonde	-	-	0.000	HRM	SS	-	Metco	DSI-5850	-	-
1973-1790	2441848.09	1973 Jun 14 1408:00	Rocketsonde	-	-	0.000	HRM	SS	-	Metco	DSI-5850	-	-
1973-1791	2441848.13	1973 Jun 14 1504:59	Rocketsonde	-	-	0.000	HRM	SS	-	Metco	DSI-5850	-	-
1973-1792	2441849.07	1973 Jun 15 0440:00	Rocketsonde	-	-	0.000	HRM	SS	-	Metco	DSI-5850	-	-
1973-1793	2441849.08	1973 Jun 15 1344:59	Rocketsonde	-	-	0.000	HRM	SS	-	Metco	DSI-5850	-	-
1973-1794	2441849.18	1973 Jun 15 1358:59	Rocketsonde	-	-	0.000	HRM	SS	-	Metco	DSI-5850	-	-
1973-1795	2441849.23	1973 Jun 15 1624:59	Rocketsonde	-	-	0.000	HRM	SS	-	Metco	DSI-5850	-	-
1973-1796	2441849.29	1973 Jun 15 1730:00	Rocketsonde	-	-	0.000	HRM	SS	-	Metco	DSI-5850	-	-
1973-1797	2441849.32	1973 Jun 15 1852:00	Rocketsonde	-	-	0.000	HRM	SS	-	Metco	DSI-5850	-	-
1973-1798	2441849.41	1973 Jun 15 1940:00	Rocketsonde	-	-	0.000	HRM	SS	-	Metco	DSI-5850	-	-
1973-1799	2441849.41	1973 Jun 15 2144:00	Rocketsonde	-	-	0.000	HRM	SS	-	Metco	DSI-5850	-	-

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Launch_e	Agency	Launch_Code	Group	Category	LT_Cite	Cite	Notes
1973-W797	2441849.56	1973 Jun 16 01:23:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1973-W798	2441852.07	1973 Jun 18 13:44:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1973-W799	2441852.10	1973 Jun 18 14:50:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1973-H800	2441852.21	1973 Jun 18 17:00:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1973-H801	2441852.25	1973 Jun 18 17:55:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1973-H802	2441852.31	1973 Jun 18 19:19:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1973-H803	2441852.32	1973 Jun 18 19:34:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1973-H804	2441852.38	1973 Jun 18 21:00:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1973-H805	2441853.04	1973 Jun 19 12:59:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1973-H806	2441853.31	1973 Jun 19 19:30:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1973-H807	2441853.51	1973 Jun 20 00:05:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1973-A31	2441853.70	1973 Jun 20 04:44:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1973-H808	2441853.70	1973 Jun 20 04:44:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1973-H809	2441854.11	1973 Jun 20 14:41:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1973-H810	2441854.14	1973 Jun 20 15:20:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1973-H811	2441854.18	1973 Jun 20 16:14:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1973-T268	2441854.25	1973 Jun 20 18:00:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1973-H813	2441854.30	1973 Jun 20 19:09:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1973-H814	2441854.35	1973 Jun 20 20:50:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1973-H815	2441854.40	1973 Jun 20 21:50:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1973-T269	2441854.56	1973 Jun 21 01:26:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1973-H816	2441855.14	1973 Jun 21 15:25:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1973-H817	2441855.12	1973 Jun 22 14:47:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1973-H818	2441856.18	1973 Jun 22 16:21:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1973-H819	2441856.20	1973 Jun 22 16:44:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1973-H820	2441856.21	1973 Jun 22 17:00:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1973-H821	2441856.21	1973 Jun 22 17:00:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1973-T260	2441856.31	1973 Jun 22 19:19:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1973-T261	2441856.38	1973 Jun 22 21:02:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1973-H822	2441856.40	1973 Jun 22 21:40:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1973-H823	2441856.53	1973 Jun 23 00:45:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1973-H824	2441859.12	1973 Jun 25 15:00:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1973-H825	2441859.12	1973 Jun 25 15:00:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1973-H826	2441859.17	1973 Jun 25 16:04:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1973-H827	2441859.25	1973 Jun 25 18:00:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1973-H828	2441859.31	1973 Jun 25 19:19:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1973-H829	2441859.39	1973 Jun 25 21:14:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1973-H830	2441860.35	1973 Jun 26 19:49:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1973-H831	2441860.68	1973 Jun 27 04:24:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1973-H832	2441861.04	1973 Jun 27 13:03:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1973-H833	2441861.10	1973 Jun 27 14:50:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1973-H834	2441861.11	1973 Jun 27 15:59:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1973-H835	2441861.18	1973 Jun 27 16:14:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1973-H836	2441861.18	1973 Jun 27 16:52:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1973-H837	2441861.19	1973 Jun 27 16:59:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1973-H838	2441861.30	1973 Jun 28 19:19:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1973-H839	2441862.31	1973 Jun 28 19:49:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1973-H840	2441862.37	1973 Jun 29 13:44:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1973-H841	2441863.07	1973 Jun 29 16:30:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1973-H842	2441863.19	1973 Jun 29 16:30:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1973-H843	2441863.33	1973 Jun 29 17:31:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1973-H844	2441863.35	1973 Jun 29 17:31:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1973-T268	2441863.54	1973 Jun 30 01:00:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1973-H845	2441864.38	1973 Jun 30 21:06:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1973-H846	2441864.38	1973 Jun 30 21:06:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1973-H847	2441866.12	1973 Jul 2 14:59:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1973-H848	2441866.17	1973 Jul 2 15:59:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1973-H849	2441866.23	1973 Jul 2 17:25:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1973-H850	2441866.27	1973 Jul 2 18:30:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1973-H851	2441866.27	1973 Jul 2 18:30:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1973-H852	2441866.40	1973 Jul 2 21:34:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1973-H853	2441866.40	1973 Jul 2 21:34:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1973-T272	2441866.53	1973 Jul 3 00:47:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1973-H854	2441867.12	1973 Jul 3 14:59:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1973-H855	2441867.26	1973 Jul 3 18:14:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1973-H856	2441869.31	1973 Jul 5 19:19:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1973-H857	2441869.48	1973 Jul 5 23:30:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1973-H858	2441870.08	1973 Jul 6 14:40:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1973-H859	2441870.11	1973 Jul 6 14:40:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1973-H860	2441870.14	1973 Jul 6 15:21:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1973-T279	2441870.17	1973 Jul 6 15:59:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1973-H861	2441870.19	1973 Jul 6 16:30:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1973-H862	2441870.21	1973 Jul 6 17:00:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1973-H863	2441870.23	1973 Jul 6 17:30:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1973-H864	2441873.08	1973 Jul 9 14:00:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1973-H865	2441873.12	1973 Jul 9 14:00:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1973-H866	2441873.23	1973 Jul 9 15:00:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1973-H867	2441873.25	1973 Jul 9 17:26:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1973-H868	2441873.31	1973 Jul 9 19:19:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1973-H869	2441873.31	1973 Jul 9 19:19:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1973-H870	2441873.40	1973 Jul 9 21:34:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1973-T282	2441875.08	1973 Jul 11 13:49:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1973-H871	2441875.10	1973 Jul 11 14:30:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1973-H872	2441875.18	1973 Jul 11 16:14:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1973-H873	2441875.19	1973 Jul 11 16:50:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1973-H874	2441875.21	1973 Jul 11 17:00:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1973-H875	2441875.30	1973 Jul 11 19:09:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1973-H876	2441875.32	1973 Jul 11 19:36:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1973-H877	2441875.37	1973 Jul 11 20:55:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1973-T285	2441875.37	1973 Jul 11 20:55:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1973-H878	2441875.39	1973 Jul 11 21:21:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-



Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Launch_e	Agency	Launch_Code	Group	Category	LT_Cite	Cite	Notes
1974-H30	2442056.21	1974 Jan 8 1706:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1974-H31	2442056.23	1974 Jan 8 1734:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1974-H32	2442057.08	1974 Jan 9 1351:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1974-H33	2442057.16	1974 Jan 9 1556:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1974-H34	2442057.19	1974 Jan 9 1619:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1974-H35	2442057.21	1974 Jan 9 1630:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1974-H36	2442057.21	1974 Jan 9 1700:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1974-H37	2442057.29	1974 Jan 9 1901:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1974-H38	2442057.33	1974 Jan 9 2000:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1974-H39	2442057.53	1974 Jan 10 0045:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1974-H41	2442058.25	1974 Jan 10 1800:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1974-H42	2442058.27	1974 Jan 10 1822:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1974-H43	2442058.46	1974 Jan 10 2244:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1974-H45	2442059.06	1974 Jan 11 1350:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1974-H46	2442059.07	1974 Jan 11 1344:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1974-H47	2442059.08	1974 Jan 11 1401:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1974-H48	2442059.11	1974 Jan 11 1436:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1974-H50	2442059.27	1974 Jan 11 1825:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1974-H51	2442059.28	1974 Jan 11 1845:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1974-H52	2442059.32	1974 Jan 11 1953:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1974-H53	2442059.33	1974 Jan 11 2000:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1974-H54	2442060.46	1974 Jan 12 2300:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1974-H55	2442062.08	1974 Jan 14 1400:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1974-H56	2442062.13	1974 Jan 14 1501:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1974-H57	2442062.16	1974 Jan 14 1614:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1974-H58	2442062.21	1974 Jan 14 1700:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1974-H59	2442062.28	1974 Jan 14 1842:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1974-H60	2442062.35	1974 Jan 14 2050:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1974-H61	2442062.61	1974 Jan 15 0722:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1974-H63	2442063.17	1974 Jan 15 1559:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1974-H64	2442064.06	1974 Jan 16 1330:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1974-H65	2442064.07	1974 Jan 16 1344:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1974-H66	2442064.09	1974 Jan 16 1410:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1974-H67	2442064.12	1974 Jan 16 1500:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1974-H18	2442064.19	1974 Jan 16 1630:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1974-H69	2442064.25	1974 Jan 16 1801:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1974-H70	2442064.29	1974 Jan 16 1854:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1974-H71	2442064.31	1974 Jan 16 1921:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1974-H72	2442064.34	1974 Jan 16 2004:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1974-H73	2442064.36	1974 Jan 16 2100:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1974-H74	2442064.38	1974 Jan 17 0559:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1974-H75	2442065.25	1974 Jan 17 1639:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1974-H76	2442065.32	1974 Jan 17 1834:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1974-H77	2442066.07	1974 Jan 18 1344:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1974-H78	2442066.09	1974 Jan 18 1344:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1974-H79	2442066.13	1974 Jan 18 1504:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1974-H80	2442066.23	1974 Jan 18 1735:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1974-H81	2442066.31	1974 Jan 18 1924:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1974-H83	2442068.01	1974 Jan 21 1349:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1974-H84	2442068.06	1974 Jan 21 1349:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1974-H85	2442068.11	1974 Jan 21 1445:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1974-H86	2442068.14	1974 Jan 21 1514:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1974-H87	2442069.17	1974 Jan 21 1559:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1974-H88	2442069.20	1974 Jan 21 1651:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1974-H89	2442069.23	1974 Jan 21 1730:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1974-H91	2442069.33	1974 Jan 21 1952:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1974-H93	2442070.10	1974 Jan 22 1430:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1974-H94	2442070.25	1974 Jan 22 1800:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1974-H95	2442070.32	1974 Jan 22 1944:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1974-H96	2442070.33	1974 Jan 22 2000:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1974-H98	2442071.06	1974 Jan 23 1330:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1974-H99	2442071.07	1974 Jan 23 1334:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1974-H100	2442071.09	1974 Jan 23 1406:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1974-H101	2442071.09	1974 Jan 23 1415:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1974-H102	2442071.21	1974 Jan 23 1630:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1974-H103	2442071.22	1974 Jan 23 1715:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1974-H104	2442071.27	1974 Jan 23 1833:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1974-H105	2442071.28	1974 Jan 23 1845:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1974-H106	2442071.29	1974 Jan 23 1859:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1974-H107	2442071.30	1974 Jan 23 1914:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1974-H108	2442071.39	1974 Jan 23 2114:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1974-H109	2442071.88	1974 Jan 24 0101:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1974-H111	2442072.34	1974 Jan 24 0900:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1974-H112	2442073.08	1974 Jan 24 2003:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1974-H113	2442073.09	1974 Jan 25 1354:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1974-H114	2442073.17	1974 Jan 25 1415:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1974-H116	2442073.25	1974 Jan 25 1800:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1974-H117	2442073.32	1974 Jan 25 1941:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1974-H118	2442073.33	1974 Jan 25 2000:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1974-H119	2442073.92	1974 Jan 26 1000:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1974-H120	2442076.07	1974 Jan 28 1334:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1974-H121	2442076.07	1974 Jan 28 1344:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Launch	Agency	Launch_Code	Group	Category	LT_Cite	Cite	Notes
						DrpPay							
1974-H123	2442076.19	1974 Jan 28 1626:59	Rocketsonde	-	-	0.000	MRI	SS	-	Metro	DSI-5850	-	-
1974-H124	2442076.23	1974 Jan 28 1730:00	Rocketsonde	-	-	0.000	MRI	SS	-	Metro	DSI-5850	-	-
1974-H125	2442076.30	1974 Jan 28 1917:00	Rocketsonde	-	-	0.000	MRI	SS	-	Metro	DSI-5850	-	-
1974-H126	2442076.33	1974 Jan 29 0000:00	Rocketsonde	-	-	0.000	MRI	SS	-	Metro	DSI-5850	-	-
1974-H127	2442076.88	1974 Jan 29 0904:59	Rocketsonde	-	-	0.000	MRI	SS	-	Metro	DSI-5850	-	-
1974-H128	2442077.03	1974 Jan 29 1249:59	Rocketsonde	-	-	0.000	MRI	SS	-	Metro	DSI-5850	-	-
1974-H130	2442077.21	1974 Jan 29 1700:00	Rocketsonde	-	-	0.000	MRI	SS	-	Metro	DSI-5850	-	-
1974-H131	2442077.29	1974 Jan 29 1859:59	Rocketsonde	-	-	0.000	MRI	SS	-	Metro	DSI-5850	-	-
1974-H132	2442077.30	1974 Jan 29 1917:00	Rocketsonde	-	-	0.000	MRI	SS	-	Metro	DSI-5850	-	-
1974-H134	2442078.05	1974 Jan 30 1354:59	Rocketsonde	-	-	0.000	MRI	SS	-	Metro	DSI-5850	-	-
1974-H135	2442078.10	1974 Jan 30 1422:00	Rocketsonde	-	-	0.000	MRI	SS	-	Metro	DSI-5850	-	-
1974-H137	2442078.16	1974 Jan 30 1545:00	Rocketsonde	-	-	0.000	MRI	SS	-	Metro	DSI-5850	-	-
1974-H138	2442078.16	1974 Jan 30 1549:59	Rocketsonde	-	-	0.000	MRI	SS	-	Metro	DSI-5850	-	-
1974-H139	2442078.19	1974 Jan 30 1630:00	Rocketsonde	-	-	0.000	MRI	SS	-	Metro	DSI-5850	-	-
1974-H140	2442078.25	1974 Jan 30 1800:00	Rocketsonde	-	-	0.000	MRI	SS	-	Metro	DSI-5850	-	-
1974-H141	2442078.29	1974 Jan 30 1859:59	Rocketsonde	-	-	0.000	MRI	SS	-	Metro	DSI-5850	-	-
1974-H142	2442078.33	1974 Jan 30 2000:00	Rocketsonde	-	-	0.000	MRI	SS	-	Metro	DSI-5850	-	-
1974-H143	2442078.36	1974 Jan 30 2044:00	Rocketsonde	-	-	0.000	MRI	SS	-	Metro	DSI-5850	-	-
1974-H146	2442078.38	1974 Jan 31 2106:00	Rocketsonde	-	-	0.000	MRI	SS	-	Metro	DSI-5850	-	-
1974-H151	2442079.51	1974 Jan 31 0914:59	Rocketsonde	-	-	0.000	MRI	SS	-	Metro	DSI-5850	-	-
1974-H152	2442079.22	1974 Jan 31 1720:00	Rocketsonde	-	-	0.000	MRI	SS	-	Metro	DSI-5850	-	-
1974-H153	2442079.29	1974 Jan 31 1901:59	Rocketsonde	-	-	0.000	MRI	SS	-	Metro	DSI-5850	-	-
1974-H154	2442080.10	1974 Feb 1 1423:00	Rocketsonde	-	-	0.000	MRI	SS	-	Metro	DSI-5850	-	-
1974-H155	2442080.10	1974 Feb 1 1500:00	Rocketsonde	-	-	0.000	MRI	SS	-	Metro	DSI-5850	-	-
1974-H156	2442080.12	1974 Feb 1 1558:59	Rocketsonde	-	-	0.000	MRI	SS	-	Metro	DSI-5850	-	-
1974-H157	2442080.21	1974 Feb 1 1700:00	Rocketsonde	-	-	0.000	MRI	SS	-	Metro	DSI-5850	-	-
1974-H158	2442080.33	1974 Feb 1 2000:00	Rocketsonde	-	-	0.000	MRI	SS	-	Metro	DSI-5850	-	-
1974-H160	2442083.10	1974 Feb 4 1420:00	Rocketsonde	-	-	0.000	MRI	SS	-	Metro	DSI-5850	-	-
1974-H161	2442083.14	1974 Feb 4 1514:59	Rocketsonde	-	-	0.000	MRI	SS	-	Metro	DSI-5850	-	-
1974-H162	2442083.17	1974 Feb 4 1559:59	Rocketsonde	-	-	0.000	MRI	SS	-	Metro	DSI-5850	-	-
1974-H164	2442083.33	1974 Feb 4 2000:00	Rocketsonde	-	-	0.000	MRI	SS	-	Metro	DSI-5850	-	-
1974-H166	2442084.23	1974 Feb 5 2109:00	Rocketsonde	-	-	0.000	MRI	SS	-	Metro	DSI-5850	-	-
1974-H168	2442084.30	1974 Feb 5 1916:59	Rocketsonde	-	-	0.000	MRI	SS	-	Metro	DSI-5850	-	-
1974-H169	2442085.03	1974 Feb 6 1241:00	Rocketsonde	-	-	0.000	MRI	SS	-	Metro	DSI-5850	-	-
1974-H170	2442085.06	1974 Feb 6 1330:00	Rocketsonde	-	-	0.000	MRI	SS	-	Metro	DSI-5850	-	-
1974-H171	2442085.09	1974 Feb 6 1403:00	Rocketsonde	-	-	0.000	MRI	SS	-	Metro	DSI-5850	-	-
1974-H172	2442085.12	1974 Feb 6 1500:00	Rocketsonde	-	-	0.000	MRI	SS	-	Metro	DSI-5850	-	-
1974-H174	2442085.29	1974 Feb 7 1347:59	Rocketsonde	-	-	0.000	MRI	SS	-	Metro	DSI-5850	-	-
1974-H175	2442086.07	1974 Feb 7 1524:59	Rocketsonde	-	-	0.000	MRI	SS	-	Metro	DSI-5850	-	-
1974-H177	2442086.17	1974 Feb 7 1837:59	Rocketsonde	-	-	0.000	MRI	SS	-	Metro	DSI-5850	-	-
1974-H178	2442086.26	1974 Feb 7 1856:00	Rocketsonde	-	-	0.000	MRI	SS	-	Metro	DSI-5850	-	-
1974-H179	2442086.31	1974 Feb 7 1949:59	Rocketsonde	-	-	0.000	MRI	SS	-	Metro	DSI-5850	-	-
1974-H180	2442087.01	1974 Feb 8 1344:59	Rocketsonde	-	-	0.000	MRI	SS	-	Metro	DSI-5850	-	-
1974-H181	2442087.08	1974 Feb 8 1406:00	Rocketsonde	-	-	0.000	MRI	SS	-	Metro	DSI-5850	-	-
1974-H182	2442087.39	1974 Feb 8 1659:59	Rocketsonde	-	-	0.000	MRI	SS	-	Metro	DSI-5850	-	-
1974-H186	2442093.18	1974 Feb 11 1755:59	Rocketsonde	-	-	0.000	MRI	SS	-	Metro	DSI-5850	-	-
1974-H188	2442093.25	1974 Feb 11 1811:59	Rocketsonde	-	-	0.000	MRI	SS	-	Metro	DSI-5850	-	-
1974-H189	2442093.35	1974 Feb 11 1914:59	Rocketsonde	-	-	0.000	MRI	SS	-	Metro	DSI-5850	-	-
1974-H191	2442093.42	1974 Feb 11 1934:59	Rocketsonde	-	-	0.000	MRI	SS	-	Metro	DSI-5850	-	-
1974-H193	2442093.51	1974 Feb 11 1941:59	Rocketsonde	-	-	0.000	MRI	SS	-	Metro	DSI-5850	-	-
1974-H197	2442093.84	1974 Feb 12 0324:59	Rocketsonde	-	-	0.000	MRI	SS	-	Metro	DSI-5850	-	-
1974-H198	2442093.84	1974 Feb 12 1400:00	Rocketsonde	-	-	0.000	MRI	SS	-	Metro	DSI-5850	-	-
1974-H199	2442093.98	1974 Feb 12 1530:00	Rocketsonde	-	-	0.000	MRI	SS	-	Metro	DSI-5850	-	-
1974-H199	2442093.15	1974 Feb 12 1554:00	Rocketsonde	-	-	0.000	MRI	SS	-	Metro	DSI-5850	-	-
1974-H199	2442093.16	1974 Feb 12 1700:00	Rocketsonde	-	-	0.000	MRI	SS	-	Metro	DSI-5850	-	-
1974-H191	2442093.21	1974 Feb 12 1934:59	Rocketsonde	-	-	0.000	MRI	SS	-	Metro	DSI-5850	-	-
1974-H193	2442093.32	1974 Feb 12 1934:59	Rocketsonde	-	-	0.000	MRI	SS	-	Metro	DSI-5850	-	-
1974-H194	2442093.51	1974 Feb 13 0010:00	Rocketsonde	-	-	0.000	MRI	SS	-	Metro	DSI-5850	-	-
1974-H195	2442093.81	1974 Feb 13 0730:00	Rocketsonde	-	-	0.000	MRI	SS	-	Metro	DSI-5850	-	-
1974-H196	2442093.07	1974 Feb 13 1340:00	Rocketsonde	-	-	0.000	MRI	SS	-	Metro	DSI-5850	-	-
1974-H197	2442093.08	1974 Feb 13 1352:00	Rocketsonde	-	-	0.000	MRI	SS	-	Metro	DSI-5850	-	-
1974-H198	2442093.09	1974 Feb 13 1412:00	Rocketsonde	-	-	0.000	MRI	SS	-	Metro	DSI-5850	-	-
1974-H198	2442093.12	1974 Feb 13 1500:00	Rocketsonde	-	-	0.000	MRI	SS	-	Metro	DSI-5850	-	-
1974-H200	2442093.21	1974 Feb 13 1700:00	Rocketsonde	-	-	0.000	MRI	SS	-	Metro	DSI-5850	-	-
1974-H202	2442093.74	1974 Feb 14 0540:00	Rocketsonde	-	-	0.000	MRI	SS	-	Metro	DSI-5850	-	-
1974-H203	2442093.17	1974 Feb 14 1611:59	Rocketsonde	-	-	0.000	MRI	SS	-	Metro	DSI-5850	-	-
1974-H204	2442093.25	1974 Feb 14 1800:00	Rocketsonde	-	-	0.000	MRI	SS	-	Metro	DSI-5850	-	-
1974-H206	2442094.07	1974 Feb 15 1344:59	Rocketsonde	-	-	0.000	MRI	SS	-	Metro	DSI-5850	-	-
1974-H207	2442094.12	1974 Feb 15 1455:00	Rocketsonde	-	-	0.000	MRI	SS	-	Metro	DSI-5850	-	-
1974-H208	2442094.13	1974 Feb 15 1504:59	Rocketsonde	-	-	0.000	MRI	SS	-	Metro	DSI-5850	-	-
1974-H209	2442094.17	1974 Feb 15 1559:59	Rocketsonde	-	-	0.000	MRI	SS	-	Metro	DSI-5850	-	-
1974-H210	2442094.19	1974 Feb 15 1626:59	Rocketsonde	-	-	0.000	MRI	SS	-	Metro	DSI-5850	-	-
1974-H211	2442094.27	1974 Feb 15 1833:59	Rocketsonde	-	-	0.000	MRI	SS	-	Metro	DSI-5850	-	-
1974-H211	2442094.30	1974 Feb 15 1917:00	Rocketsonde	-	-	0.000	MRI	SS	-	Metro	DSI-5850	-	-
1974-H213	2442094.71	1974 Feb 16 0500:00	Rocketsonde	-	-	0.000	MRI	SS	-	Metro	DSI-5850	-	-
1974-H214	2442094.69	1974 Feb 16 0914:59	Rocketsonde	-	-	0.000	MRI	SS	-	Metro	DSI-5850	-	-
1974-H215	2442094.95	1974 Feb 16 1044:59	Rocketsonde	-	-	0.000	MRI	SS	-	Metro	DSI-5850	-	-
1974-H217	2442096.73	1974 Feb 18 0530:00	Rocketsonde	-	-	0.000	MRI	SS	-	Metro	DSI-5850	-	-
1974-H219	2442097.78	1974 Feb 19 0645:59	Rocketsonde	-	-	0.000	MRI	SS	-	Metro	DSI-5850	-	-
1974-H220	2442097.85	1974 Feb 19 0827:59	Rocketsonde	-	-	0.000	MRI	SS	-	Metro	DSI-5850	-	-
1974-H221	2442098.10	1974 Feb 19 1450:00	Rocketsonde	-	-	0.000	MRI	SS	-	Metro	DSI-5850	-	-
1974-H222	2442098.12	1974 Feb 19 1500:00	Rocketsonde	-	-	0.000	MRI	SS	-	Metro	DSI-5850	-	-
1974-H223	2442098.13	1974 Feb 19 1513:59	Rocketsonde	-	-	0.000	MRI	SS	-	Metro	DSI-5850	-	-
1974-H224	2442098.27	1974 Feb 19 1830:00	Rocketsonde	-	-	0.000	MRI	SS	-	Metro	DSI-5850	-	-





Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Launch_e	Agency	Launch_Code	Group	Category	LT_Cite	Cite	Notes
1974-H325	2442120.07	1974 Mar 13 1344:59	Rocketsonde	-	-	0.000	MRM	SS	-	Meteo	DSI-5850	-	-
1974-H326	2442120.15	1974 Mar 13 1531:00	Rocketsonde	-	-	0.000	MRM	SS	-	Meteo	DSI-5850	-	-
1974-H328	2442120.20	1974 Mar 13 1652:59	Rocketsonde	-	-	0.000	MRM	SS	-	Meteo	DSI-5850	-	-
1974-Y107	2442120.21	1974 Mar 13 1700:00	Rocketsonde	-	-	0.000	MRM	SS	-	Meteo	DSI-5850	-	-
1974-H329	2442120.21	1974 Mar 13 1700:00	Rocketsonde	-	-	0.000	MRM	SS	-	Meteo	DSI-5850	-	-
1974-H330	2442120.33	1974 Mar 13 2000:00	Rocketsonde	-	-	0.000	MRM	SS	-	Meteo	DSI-5850	-	-
1974-H331	2442120.38	1974 Mar 13 2107:00	Rocketsonde	-	-	0.000	MRM	SS	-	Meteo	DSI-5850	-	-
1974-Y108	2442120.56	1974 Mar 14 0130:00	Rocketsonde	-	-	0.000	MRM	SS	-	Meteo	DSI-5850	-	-
1974-H332	2442120.67	1974 Mar 14 0404:59	Rocketsonde	-	-	0.000	MRM	SS	-	Meteo	DSI-5850	-	-
1974-H333	2442121.10	1974 Mar 14 1430:00	Rocketsonde	-	-	0.000	MRM	SS	-	Meteo	DSI-5850	-	-
1974-H334	2442121.16	1974 Mar 14 1555:00	Rocketsonde	-	-	0.000	MRM	SS	-	Meteo	DSI-5850	-	-
1974-H336	2442121.34	1974 Mar 14 2010:00	Rocketsonde	-	-	0.000	MRM	SS	-	Meteo	DSI-5850	-	-
1974-Y109	2442121.37	1974 Mar 14 2059:00	Rocketsonde	-	-	0.000	MRM	SS	-	Meteo	DSI-5850	-	-
1974-H337	2442121.80	1974 Mar 14 2114:59	Rocketsonde	-	-	0.000	MRM	SS	-	Meteo	DSI-5850	-	-
1974-H338	2442121.80	1974 Mar 15 0709:59	Rocketsonde	-	-	0.000	MRM	SS	-	Meteo	DSI-5850	-	-
1974-H339	2442122.04	1974 Mar 15 1259:59	Rocketsonde	-	-	0.000	MRM	SS	-	Meteo	DSI-5850	-	-
1974-H340	2442122.06	1974 Mar 15 1330:00	Rocketsonde	-	-	0.000	MRM	SS	-	Meteo	DSI-5850	-	-
1974-H341	2442122.11	1974 Mar 15 1437:59	Rocketsonde	-	-	0.000	MRM	SS	-	Meteo	DSI-5850	-	-
1974-H342	2442122.12	1974 Mar 15 1500:00	Rocketsonde	-	-	0.000	MRM	SS	-	Meteo	DSI-5850	-	-
1974-H343	2442122.14	1974 Mar 15 1527:59	Rocketsonde	-	-	0.000	MRM	SS	-	Meteo	DSI-5850	-	-
1974-H344	2442122.15	1974 Mar 15 1537:59	Rocketsonde	-	-	0.000	MRM	SS	-	Meteo	DSI-5850	-	-
1974-H346	2442122.36	1974 Mar 15 2035:00	Rocketsonde	-	-	0.000	MRM	SS	-	Meteo	DSI-5850	-	-
1974-H347	2442125.24	1974 Mar 16 0149:59	Rocketsonde	-	-	0.000	MRM	SS	-	Meteo	DSI-5850	-	-
1974-H348	2442125.24	1974 Mar 16 1744:00	Rocketsonde	-	-	0.000	MRM	SS	-	Meteo	DSI-5850	-	-
1974-H349	2442125.38	1974 Mar 18 2100:00	Rocketsonde	-	-	0.000	MRM	SS	-	Meteo	DSI-5850	-	-
1974-H350	2442125.41	1974 Mar 18 2147:59	Rocketsonde	-	-	0.000	MRM	SS	-	Meteo	DSI-5850	-	-
1974-H352	2442126.52	1974 Mar 19 0030:00	Rocketsonde	-	-	0.000	MRM	SS	-	Meteo	DSI-5850	-	-
1974-H353	2442126.12	1974 Mar 19 1449:59	Rocketsonde	-	-	0.000	MRM	SS	-	Meteo	DSI-5850	-	-
1974-H354	2442126.32	1974 Mar 19 1940:00	Rocketsonde	-	-	0.000	MRM	SS	-	Meteo	DSI-5850	-	-
1974-H356	2442126.64	1974 Mar 20 0805:00	Rocketsonde	-	-	0.000	MRM	SS	-	Meteo	DSI-5850	-	-
1974-H404	2442127.07	1974 Mar 20 1344:59	Rocketsonde	-	-	0.000	MRM	SS	-	Meteo	DSI-5850	-	-
1974-Y116	2442127.19	1974 Mar 20 1630:00	Rocketsonde	-	-	0.000	MRM	SS	-	Meteo	DSI-5850	-	-
1974-H427	2442127.21	1974 Mar 20 1700:00	Rocketsonde	-	-	0.000	MRM	SS	-	Meteo	DSI-5850	-	-
1974-H428	2442127.35	1974 Mar 20 2050:00	Rocketsonde	-	-	0.000	MRM	SS	-	Meteo	DSI-5850	-	-
1974-H429	2442127.59	1974 Mar 20 2116:00	Rocketsonde	-	-	0.000	MRM	SS	-	Meteo	DSI-5850	-	-
1974-Y118	2442127.57	1974 Mar 21 0144:59	Rocketsonde	-	-	0.000	MRM	SS	-	Meteo	DSI-5850	-	-
1974-H430	2442128.02	1974 Mar 21 1254:59	Rocketsonde	-	-	0.000	MRM	SS	-	Meteo	DSI-5850	-	-
1974-H431	2442128.24	1974 Mar 21 1700:00	Rocketsonde	-	-	0.000	MRM	SS	-	Meteo	DSI-5850	-	-
1974-H432	2442128.25	1974 Mar 21 1800:00	Rocketsonde	-	-	0.000	MRM	SS	-	Meteo	DSI-5850	-	-
1974-H433	2442128.67	1974 Mar 22 0369:59	Rocketsonde	-	-	0.000	MRM	SS	-	Meteo	DSI-5850	-	-
1974-H434	2442129.08	1974 Mar 22 1349:59	Rocketsonde	-	-	0.000	MRM	SS	-	Meteo	DSI-5850	-	-
1974-H436	2442129.24	1974 Mar 22 1759:59	Rocketsonde	-	-	0.000	MRM	SS	-	Meteo	DSI-5850	-	-
1974-H437	2442129.29	1974 Mar 22 1859:59	Rocketsonde	-	-	0.000	MRM	SS	-	Meteo	DSI-5850	-	-
1974-H438	2442129.35	1974 Mar 22 2000:00	Rocketsonde	-	-	0.000	MRM	SS	-	Meteo	DSI-5850	-	-
1974-H439	2442129.51	1974 Mar 23 0044:59	Rocketsonde	-	-	0.000	MRM	SS	-	Meteo	DSI-5850	-	-
1974-H440	2442129.51	1974 Mar 23 0240:00	Rocketsonde	-	-	0.000	MRM	SS	-	Meteo	DSI-5850	-	-
1974-H441	2442132.56	1974 Mar 25 1327:59	Rocketsonde	-	-	0.000	MRM	SS	-	Meteo	DSI-5850	-	-
1974-H442	2442132.06	1974 Mar 25 1330:00	Rocketsonde	-	-	0.000	MRM	SS	-	Meteo	DSI-5850	-	-
1974-H443	2442132.07	1974 Mar 25 1324:59	Rocketsonde	-	-	0.000	MRM	SS	-	Meteo	DSI-5850	-	-
1974-H444	2442132.33	1974 Mar 25 2000:00	Rocketsonde	-	-	0.000	MRM	SS	-	Meteo	DSI-5850	-	-
1974-H446	2442132.36	1974 Mar 25 2038:59	Rocketsonde	-	-	0.000	MRM	SS	-	Meteo	DSI-5850	-	-
1974-H447	2442132.38	1974 Mar 25 2100:00	Rocketsonde	-	-	0.000	MRM	SS	-	Meteo	DSI-5850	-	-
1974-H449	2442133.11	1974 Mar 26 1443:00	Rocketsonde	-	-	0.000	MRM	SS	-	Meteo	DSI-5850	-	-
1974-H450	2442133.07	1974 Mar 26 1344:59	Rocketsonde	-	-	0.000	MRM	SS	-	Meteo	DSI-5850	-	-
1974-H451	2442134.08	1974 Mar 27 1354:59	Rocketsonde	-	-	0.000	MRM	SS	-	Meteo	DSI-5850	-	-
1974-H452	2442134.09	1974 Mar 27 1403:59	Rocketsonde	-	-	0.000	MRM	SS	-	Meteo	DSI-5850	-	-
1974-H453	2442134.09	1974 Mar 27 1415:00	Rocketsonde	-	-	0.000	MRM	SS	-	Meteo	DSI-5850	-	-
1974-H454	2442134.16	1974 Mar 27 1545:00	Rocketsonde	-	-	0.000	MRM	SS	-	Meteo	DSI-5850	-	-
1974-H455	2442134.42	1974 Mar 27 2159:59	Rocketsonde	-	-	0.000	MRM	SS	-	Meteo	DSI-5850	-	-
1974-H458	2442135.09	1974 Mar 28 0000:00	Rocketsonde	-	-	0.000	MRM	SS	-	Meteo	DSI-5850	-	-
1974-H459	2442135.21	1974 Mar 28 1700:00	Rocketsonde	-	-	0.000	MRM	SS	-	Meteo	DSI-5850	-	-
1974-H460	2442135.21	1974 Mar 28 1700:00	Rocketsonde	-	-	0.000	MRM	SS	-	Meteo	DSI-5850	-	-
1974-H462	2442136.09	1974 Mar 29 1415:00	Rocketsonde	-	-	0.000	MRM	SS	-	Meteo	DSI-5850	-	-
1974-H463	2442136.12	1974 Mar 29 1500:00	Rocketsonde	-	-	0.000	MRM	SS	-	Meteo	DSI-5850	-	-
1974-H464	2442136.17	1974 Mar 29 1604:59	Rocketsonde	-	-	0.000	MRM	SS	-	Meteo	DSI-5850	-	-
1974-H465	2442136.23	1974 Mar 29 1732:00	Rocketsonde	-	-	0.000	MRM	SS	-	Meteo	DSI-5850	-	-
1974-Y136	2442136.40	1974 Mar 29 2130:00	Rocketsonde	-	-	0.000	MRM	SS	-	Meteo	DSI-5850	-	-
1974-H466	2442136.41	1974 Mar 29 2144:00	Rocketsonde	-	-	0.000	MRM	SS	-	Meteo	DSI-5850	-	-
1974-H468	2442139.08	1974 Apr 1 1349:59	Rocketsonde	-	-	0.000	MRM	SS	-	Meteo	DSI-5850	-	-
1974-H469	2442139.08	1974 Apr 1 1400:00	Rocketsonde	-	-	0.000	MRM	SS	-	Meteo	DSI-5850	-	-
1974-H470	2442139.09	1974 Apr 1 1404:59	Rocketsonde	-	-	0.000	MRM	SS	-	Meteo	DSI-5850	-	-
1974-H471	2442139.23	1974 Apr 1 1732:00	Rocketsonde	-	-	0.000	MRM	SS	-	Meteo	DSI-5850	-	-
1974-H472	2442139.25	1974 Apr 1 1758:00	Rocketsonde	-	-	0.000	MRM	SS	-	Meteo	DSI-5850	-	-
1974-H473	2442140.26	1974 Apr 2 1815:00	Rocketsonde	-	-	0.000	MRM	SS	-	Meteo	DSI-5850	-	-
1974-H475	2442141.09	1974 Apr 3 1415:00	Rocketsonde	-	-	0.000	MRM	SS	-	Meteo	DSI-5850	-	-
1974-H477	2442141.12	1974 Apr 3 1500:00	Rocketsonde	-	-	0.000	MRM	SS	-	Meteo	DSI-5850	-	-
1974-Y145	2442141.21	1974 Apr 3 1700:00	Rocketsonde	-	-	0.000	MRM	SS	-	Meteo	DSI-5850	-	-
1974-H478	2442141.21	1974 Apr 3 1706:00	Rocketsonde	-	-	0.000	MRM	SS	-	Meteo	DSI-5850	-	-
1974-H479	2442141.33	1974 Apr 3 1949:59	Rocketsonde	-	-	0.000	MRM	SS	-	Meteo	DSI-5850	-	-
1974-H480	2442141.35	1974 Apr 3 2031:00	Rocketsonde	-	-	0.000	MRM	SS	-	Meteo	DSI-5850	-	-
1974-H481	2442141.40	1974 Apr 3 2129:00	Rocketsonde	-	-	0.000	MRM	SS	-	Meteo	DSI-5850	-	-

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Launch_e	Agency	Launch_Code	Group	Category	LT_Cite	Cite	Notes
1974-W482	2442141.42	1974 Apr 3 2207:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1974-W483	2442142.07	1974 Apr 4 1834:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1974-W484	2442142.28	1974 Apr 4 1837:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1974-W485	2442142.36	1974 Apr 4 2043:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1974-W486	2442142.42	1974 Apr 4 2159:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1974-W487	2442143.07	1974 Apr 5 1344:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1974-W488	2442143.19	1974 Apr 5 1630:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1974-W489	2442143.21	1974 Apr 5 1709:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1974-W490	2442143.29	1974 Apr 5 1859:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1974-W491	2442143.33	1974 Apr 5 2000:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1974-W492	2442143.54	1974 Apr 6 0059:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1974-W494	2442146.02	1974 Apr 8 1230:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1974-W495	2442146.11	1974 Apr 8 1435:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1974-W496	2442146.25	1974 Apr 8 1804:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1974-W497	2442146.77	1974 Apr 9 0630:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1974-W498	2442147.07	1974 Apr 9 1340:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1974-W499	2442147.36	1974 Apr 9 2042:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1974-W500	2442148.04	1974 Apr 10 1265:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1974-W501	2442148.04	1974 Apr 10 1269:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1974-W502	2442148.12	1974 Apr 10 1459:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1974-W503	2442148.12	1974 Apr 10 1500:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1974-W504	2442148.28	1974 Apr 10 1845:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1974-W505	2442148.75	1974 Apr 11 0600:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1974-W507	2442149.11	1974 Apr 11 1436:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1974-W508	2442149.12	1974 Apr 11 1500:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1974-W509	2442150.21	1974 Apr 12 1729:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1974-W510	2442150.23	1974 Apr 12 1753:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1974-W511	2442150.25	1974 Apr 12 1803:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1974-W512	2442150.25	1974 Apr 12 2030:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1974-W513	2442150.35	1974 Apr 13 0639:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1974-W514	2442150.54	1974 Apr 13 0155:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1974-W515	2442152.30	1974 Apr 15 0940:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1974-W516	2442152.30	1974 Apr 15 1404:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1974-W517	2442153.12	1974 Apr 15 1500:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1974-W518	2442153.19	1974 Apr 15 1630:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1974-W519	2442153.21	1974 Apr 15 1637:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1974-W520	2442153.27	1974 Apr 15 1822:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1974-W521	2442153.37	1974 Apr 15 2065:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1974-W522	2442153.67	1974 Apr 16 0422:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1974-W523	2442154.09	1974 Apr 16 1415:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1974-W524	2442154.12	1974 Apr 16 1545:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1974-W525	2442154.16	1974 Apr 16 1545:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1974-W526	2442154.32	1974 Apr 16 1640:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1974-W527	2442154.78	1974 Apr 17 0840:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1974-W528	2442155.08	1974 Apr 17 1352:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1974-W529	2442155.12	1974 Apr 17 1519:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1974-W530	2442155.14	1974 Apr 17 1519:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1974-W531	2442155.23	1974 Apr 17 1725:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1974-W532	2442155.33	1974 Apr 17 1859:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1974-W533	2442155.35	1974 Apr 17 2000:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1974-W534	2442155.35	1974 Apr 17 2130:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1974-W535	2442155.35	1974 Apr 17 2130:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1974-W536	2442156.03	1974 Apr 18 1236:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1974-W537	2442156.35	1974 Apr 18 2025:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1974-W538	2442157.04	1974 Apr 19 1259:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1974-W539	2442157.08	1974 Apr 19 1349:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1974-W540	2442157.09	1974 Apr 19 1407:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1974-W541	2442157.19	1974 Apr 19 1630:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1974-W542	2442157.21	1974 Apr 19 1700:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1974-W543	2442157.27	1974 Apr 19 1830:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1974-W544	2442157.97	1974 Apr 19 1834:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1974-W545	2442160.12	1974 Apr 22 1500:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1974-W546	2442160.12	1974 Apr 22 1500:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1974-W547	2442160.15	1974 Apr 22 1530:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1974-W548	2442160.15	1974 Apr 22 1634:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1974-W549	2442160.19	1974 Apr 22 1640:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1974-W550	2442160.19	1974 Apr 22 1649:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1974-W551	2442160.20	1974 Apr 22 1726:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1974-W552	2442160.25	1974 Apr 22 1800:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1974-W553	2442160.29	1974 Apr 22 1901:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1974-W554	2442160.33	1974 Apr 22 1949:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1974-W555	2442160.39	1974 Apr 22 2121:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1974-W556	2442160.87	1974 Apr 23 0855:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1974-W557	2442162.07	1974 Apr 24 1344:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1974-W558	2442162.09	1974 Apr 24 1404:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1974-W559	2442162.19	1974 Apr 24 1450:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1974-W560	2442162.23	1974 Apr 24 1736:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1974-W561	2442162.24	1974 Apr 24 1745:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1974-W562	2442162.28	1974 Apr 24 1843:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1974-W563	2442162.35	1974 Apr 24 2030:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1974-W564	2442162.38	1974 Apr 24 2111:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1974-W565	2442162.77	1974 Apr 25 0630:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1974-W566	2442162.89	1974 Apr 25 0920:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1974-W567	2442163.21	1974 Apr 25 1707:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Launch_e	Agency	Launch_Code	Group	Category	LT_Cite	Cite	Notes
1974-H688	2442163.25	1974 Apr 25 1800:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1974-H689	2442163.68	1974 Apr 26 0420:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1974-H690	2442164.07	1974 Apr 26 1344:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1974-H671	2442164.09	1974 Apr 26 1410:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1974-H672	2442164.10	1974 Apr 26 1423:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1974-H673	2442164.12	1974 Apr 26 1500:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1974-H674	2442164.17	1974 Apr 26 1604:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1974-H675	2442164.20	1974 Apr 26 1651:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1974-H676	2442164.32	1974 Apr 26 1944:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1974-H677	2442164.52	1974 Apr 27 1800:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1974-H678	2442165.25	1974 Apr 28 1200:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1974-H679	2442166.00	1974 Apr 29 1344:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1974-H680	2442167.07	1974 Apr 29 1354:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1974-H681	2442167.08	1974 Apr 29 1545:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1974-H682	2442167.16	1974 Apr 29 1756:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1974-H683	2442167.25	1974 Apr 29 2030:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1974-H684	2442167.25	1974 Apr 29 2030:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1974-H685	2442167.35	1974 Apr 29 2100:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1974-H686	2442167.38	1974 Apr 30 0114:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1974-H691	2442168.55	1974 Apr 30 1925:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1974-H692	2442169.31	1974 May 1 1207:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1974-H693	2442169.00	1974 May 1 1352:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1974-H694	2442169.08	1974 May 1 1425:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1974-H695	2442169.10	1974 May 1 1440:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1974-H696	2442169.11	1974 May 1 1513:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1974-H697	2442169.13	1974 May 1 1514:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1974-H698	2442169.14	1974 May 1 1538:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1974-H699	2442169.19	1974 May 1 1749:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1974-H600	2442169.24	1974 May 1 1944:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1974-H601	2442169.32	1974 May 1 2100:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1974-H602	2442169.38	1974 May 2 1630:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1974-H603	2442170.19	1974 May 2 1800:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1974-H604	2442170.25	1974 May 2 1800:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1974-H605	2442171.00	1974 May 3 1200:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1974-H606	2442171.16	1974 May 3 1545:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1974-H607	2442171.21	1974 May 3 1706:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1974-H608	2442171.25	1974 May 3 1800:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1974-H609	2442171.25	1974 May 3 1800:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1974-H610	2442171.25	1974 May 3 1834:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1974-H611	2442171.32	1974 May 4 0629:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1974-H612	2442171.77	1974 May 4 0829:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1974-H613	2442172.28	1974 May 4 1800:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1974-H614	2442172.86	1974 May 5 0845:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1974-H615	2442172.87	1974 May 5 0857:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1974-H616	2442172.86	1974 May 5 0900:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1974-H617	2442172.82	1974 May 5 0959:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1974-H618	2442173.00	1974 May 5 1157:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1974-H619	2442173.00	1974 May 5 1200:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1974-H620	2442173.04	1974 May 5 1259:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1974-H621	2442173.13	1974 May 5 1456:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1974-H622	2442173.13	1974 May 5 1509:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1974-H623	2442173.17	1974 May 5 1559:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1974-H624	2442173.21	1974 May 5 1716:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1974-H625	2442173.22	1974 May 5 1716:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1974-H626	2442173.35	1974 May 5 1800:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1974-H627	2442173.38	1974 May 5 1849:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1974-H628	2442173.30	1974 May 5 1914:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1974-H629	2442173.33	1974 May 5 2000:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1974-H630	2442173.42	1974 May 6 1455:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1974-H631	2442174.28	1974 May 6 1846:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1974-H632	2442174.33	1974 May 6 2000:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1974-H633	2442174.33	1974 May 7 1619:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1974-H634	2442175.20	1974 May 7 1644:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1974-H635	2442175.41	1974 May 8 1500:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1974-H636	2442176.12	1974 May 8 1504:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1974-H637	2442176.13	1974 May 8 1510:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1974-H638	2442176.20	1974 May 8 1646:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1974-H639	2442176.31	1974 May 8 1924:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1974-H640	2442176.55	1974 May 9 0114:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1974-H641	2442177.19	1974 May 9 1630:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1974-H642	2442177.73	1974 May 10 0530:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1974-H643	2442178.17	1974 May 10 1559:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1974-H644	2442178.24	1974 May 10 1749:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1974-H645	2442178.29	1974 May 10 1852:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1974-H646	2442178.31	1974 May 10 1919:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1974-H647	2442178.33	1974 May 10 1957:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1974-H648	2442178.38	1974 May 10 2111:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1974-H649	2442178.39	1974 May 10 2125:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1974-H650	2442181.17	1974 May 13 1602:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1974-H651	2442181.17	1974 May 13 1609:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1974-H652	2442181.21	1974 May 13 1700:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1974-H653	2442181.24	1974 May 13 1749:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1974-H654	2442181.29	1974 May 13 1859:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1974-H655	2442182.18	1974 May 14 1619:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Launch_e	Agency	Launch_Code	Group	Category	LT_Cite	Cite	Notes
1974-H662	2442183.04	1974 May 15 1259:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1974-H663	2442183.09	1974 May 15 1407:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1974-H664	2442183.12	1974 May 15 1500:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1974-H665	2442183.15	1974 May 15 1530:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1974-H666	2442183.16	1974 May 15 1548:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1974-H667	2442183.17	1974 May 15 1610:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1974-H668	2442183.27	1974 May 15 1634:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1974-H669	2442183.40	1974 May 15 1743:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1974-H670	2442183.55	1974 May 16 01:14:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1974-H671	2442184.24	1974 May 16 17:44:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1974-H672	2442184.29	1974 May 16 1859:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1974-H673	2442185.08	1974 May 17 1354:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1974-H674	2442185.08	1974 May 17 1358:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1974-H675	2442185.24	1974 May 17 1745:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1974-H676	2442185.25	1974 May 17 1807:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1974-H677	2442185.32	1974 May 17 1944:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1974-H678	2442185.61	1974 May 18 07:30:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1974-H679	2442185.17	1974 May 20 1559:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1974-H680	2442186.25	1974 May 20 1756:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1974-H681	2442186.25	1974 May 20 1800:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1974-H682	2442186.33	1974 May 20 2000:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1974-H683	2442186.53	1974 May 21 1624:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1974-H684	2442189.16	1974 May 21 1700:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1974-H685	2442189.21	1974 May 21 1800:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1974-H686	2442189.41	1974 May 21 2145:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1974-H687	2442189.41	1974 May 22 1524:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1974-H688	2442190.14	1974 May 22 1545:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1974-H689	2442190.16	1974 May 22 1604:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1974-H690	2442190.17	1974 May 22 1650:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1974-H691	2442190.19	1974 May 22 1659:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1974-H692	2442190.26	1974 May 22 1814:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1974-H693	2442190.31	1974 May 22 1950:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1974-H694	2442190.31	1974 May 23 01:45:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1974-H695	2442190.58	1974 May 23 0155:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1974-H696	2442190.95	1974 May 23 10:44:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1974-H697	2442191.19	1974 May 23 1640:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1974-H698	2442191.33	1974 May 23 2000:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1974-H699	2442191.52	1974 May 24 07:41:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1974-H700	2442192.09	1974 May 24 17:09:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1974-H701	2442192.24	1974 May 24 1749:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1974-H702	2442192.59	1974 May 24 2120:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1974-H703	2442195.15	1974 May 25 1553:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1974-H704	2442196.19	1974 May 25 1500:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1974-H705	2442196.23	1974 May 25 1500:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1974-H706	2442196.53	1974 May 25 20:00:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1974-H707	2442196.58	1974 May 25 21:07:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1974-H708	2442196.59	1974 May 25 23:10:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1974-H709	2442196.90	1974 May 25 23:10:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1974-H710	2442196.90	1974 May 25 23:10:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1974-H711	2442197.11	1974 May 25 14:36:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1974-H712	2442197.24	1974 May 25 15:24:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1974-H713	2442197.54	1974 May 25 17:45:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1974-H714	2442197.59	1974 May 25 1859:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1974-H715	2442197.55	1974 May 25 01:44:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1974-H716	2442197.83	1974 May 25 10:19:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1974-H717	2442198.15	1974 May 25 15:37:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1974-H718	2442198.19	1974 May 25 16:30:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1974-H719	2442198.33	1974 May 25 20:00:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1974-H720	2442198.82	1974 May 31 07:41:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1974-H721	2442198.82	1974 May 31 15:00:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1974-H722	2442199.12	1974 May 31 15:08:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1974-H723	2442199.15	1974 May 31 15:40:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1974-H724	2442199.25	1974 May 31 17:55:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1974-H725	2442199.34	1974 May 31 20:06:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1974-H726	2442199.39	1974 May 31 21:24:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1974-H727	2442200.08	1974 Jun 3 14:00:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1974-H728	2442200.13	1974 Jun 3 15:11:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1974-H729	2442200.14	1974 Jun 3 15:27:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1974-H730	2442200.17	1974 Jun 3 16:04:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1974-H731	2442200.18	1974 Jun 3 16:14:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1974-H732	2442200.31	1974 Jun 3 19:32:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1974-H733	2442200.31	1974 Jun 4 16:34:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1974-H734	2442200.25	1974 Jun 4 18:00:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1974-H735	2442200.83	1974 Jun 4 07:55:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1974-H736	2442204.07	1974 Jun 5 13:44:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1974-H737	2442204.12	1974 Jun 5 14:00:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1974-H738	2442204.12	1974 Jun 5 15:00:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1974-H739	2442204.24	1974 Jun 5 16:09:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1974-H740	2442204.24	1974 Jun 5 17:49:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1974-H741	2442204.28	1974 Jun 5 18:40:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1974-H742	2442204.33	1974 Jun 5 20:00:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1974-H743	2442204.39	1974 Jun 5 21:14:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1974-H744	2442204.60	1974 Jun 6 02:30:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1974-H745	2442205.08	1974 Jun 6 13:55:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1974-H746	2442205.09	1974 Jun 6 14:04:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1974-H747	2442205.13	1974 Jun 6 15:04:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1974-H748	2442205.25	1974 Jun 6 18:00:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1974-H749	2442205.33	1974 Jun 6 20:00:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Launch	Agency	Launch_Code	Group	Category	LT_Cite	Cite	Notes
						DrpPay							
1974-W758	2442206.02	1974 Jun 7 1224:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1974-W759	2442206.07	1974 Jun 7 1344:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1974-W760	2442206.12	1974 Jun 7 1500:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1974-W761	2442206.17	1974 Jun 7 1609:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1974-W762	2442206.25	1974 Jun 7 1800:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1974-W763	2442206.30	1974 Jun 7 1907:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1974-W764	2442206.33	1974 Jun 7 2000:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1974-W765	2442206.38	1974 Jun 7 2100:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1974-W766	2442207.07	1974 Jun 8 1344:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1974-W767	2442209.04	1974 Jun 10 1285:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1974-W768	2442209.07	1974 Jun 10 1344:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1974-W769	2442209.08	1974 Jun 10 1400:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1974-W770	2442209.18	1974 Jun 10 1619:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1974-W771	2442209.19	1974 Jun 10 1635:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1974-W772	2442209.21	1974 Jun 10 1700:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1974-W773	2442209.24	1974 Jun 10 1747:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1974-W774	2442209.31	1974 Jun 10 1924:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1974-W775	2442209.38	1974 Jun 10 2100:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1974-W776	2442209.96	1974 Jun 11 1100:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1974-W777	2442210.19	1974 Jun 11 1634:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1974-W778	2442211.01	1974 Jun 12 1210:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1974-W779	2442211.07	1974 Jun 12 1344:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1974-W780	2442211.07	1974 Jun 12 1500:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1974-W781	2442211.12	1974 Jun 12 1583:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1974-W782	2442211.15	1974 Jun 12 1650:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1974-W783	2442211.19	1974 Jun 12 1746:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1974-W784	2442211.24	1974 Jun 12 2006:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1974-W785	2442211.34	1974 Jun 12 2115:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1974-W786	2442211.40	1974 Jun 13 0550:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1974-W787	2442211.65	1974 Jun 13 1510:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1974-W788	2442212.13	1974 Jun 13 1700:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1974-W789	2442212.21	1974 Jun 14 1259:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1974-W790	2442213.02	1974 Jun 14 1453:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1974-W791	2442213.12	1974 Jun 14 1500:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1974-W792	2442213.12	1974 Jun 14 1604:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1974-W793	2442213.17	1974 Jun 14 1614:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1974-W794	2442213.18	1974 Jun 14 2000:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1974-W795	2442213.53	1974 Jun 17 1640:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1974-W796	2442216.19	1974 Jun 17 1750:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1974-W797	2442216.23	1974 Jun 17 1809:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1974-W798	2442216.31	1974 Jun 17 1812:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1974-W799	2442216.38	1974 Jun 18 1446:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1974-W800	2442217.11	1974 Jun 18 1749:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1974-W801	2442217.19	1974 Jun 18 1749:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1974-W802	2442217.24	1974 Jun 19 1559:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1974-W803	2442218.17	1974 Jun 19 1749:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1974-W804	2442218.24	1974 Jun 19 1749:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1974-W805	2442218.34	1974 Jun 19 2000:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1974-W806	2442218.34	1974 Jun 19 2000:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1974-W807	2442218.36	1974 Jun 19 2035:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1974-W810	2442218.81	1974 Jun 19 2146:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1974-W811	2442218.81	1974 Jun 20 0114:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1974-W813	2442219.55	1974 Jun 20 0114:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1974-W814	2442219.94	1974 Jun 20 2014:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1974-W815	2442220.14	1974 Jun 21 1515:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1974-W816	2442220.14	1974 Jun 21 1520:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1974-W817	2442220.17	1974 Jun 21 1559:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1974-W818	2442220.33	1974 Jun 21 2000:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1974-W819	2442220.33	1974 Jun 21 2114:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1974-W820	2442220.39	1974 Jun 21 2152:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1974-W821	2442221.51	1974 Jun 23 0015:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1974-W822	2442223.23	1974 Jun 24 1730:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1974-W823	2442223.34	1974 Jun 24 2100:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1974-W824	2442224.20	1974 Jun 24 2100:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1974-W825	2442224.20	1974 Jun 26 1457:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1974-W826	2442225.12	1974 Jun 26 1515:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1974-W827	2442225.14	1974 Jun 26 1624:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1974-W828	2442225.18	1974 Jun 26 1755:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1974-W829	2442225.25	1974 Jun 26 1800:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1974-W830	2442225.25	1974 Jun 26 2029:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1974-W831	2442225.35	1974 Jun 26 2115:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1974-W832	2442225.39	1974 Jun 27 0114:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1974-W833	2442226.18	1974 Jun 27 1652:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1974-W834	2442226.93	1974 Jun 28 1017:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1974-W835	2442227.16	1974 Jun 28 1555:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1974-W836	2442227.18	1974 Jun 28 1614:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1974-W837	2442227.26	1974 Jun 28 1810:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1974-W838	2442227.27	1974 Jun 28 1832:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1974-W839	2442227.33	1974 Jun 28 2000:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1974-W841	2442227.33	1974 Jun 28 2000:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1974-W842	2442230.07	1974 Jul 1 1345:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1974-W877	2442230.14	1974 Jul 1 1524:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1974-W878	2442230.22	1974 Jul 1 1720:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1974-W879	2442230.22	1974 Jul 1 1903:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1974-W880	2442230.29	1974 Jul 1 1903:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-



Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Launch_e	Agency	Launch_Code	Group	Category	LT_Cite	Cite	Notes
1974-H959	2442253.33	1974 Jul 24 2000:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1974-T244	2442253.38	1974 Jul 24 2104:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1974-H960	2442253.40	1974 Jul 24 2130:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1974-H962	2442255.06	1974 Jul 26 1330:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1974-H963	2442255.12	1974 Jul 26 1456:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1974-H964	2442255.12	1974 Jul 26 1500:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1974-H965	2442255.18	1974 Jul 26 1614:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1974-H966	2442255.35	1974 Jul 26 2030:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1974-H967	2442258.08	1974 Jul 29 1400:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1974-H968	2442258.13	1974 Jul 29 1504:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1974-H969	2442258.18	1974 Jul 29 1619:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1974-H970	2442258.20	1974 Jul 29 2008:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1974-H971	2442258.34	1974 Jul 29 2008:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1974-H972	2442259.14	1974 Jul 30 2037:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1974-H973	2442259.36	1974 Jul 30 2037:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1974-H974	2442259.68	1974 Jul 31 0911:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1974-H975	2442260.07	1974 Jul 31 1344:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1974-H976	2442260.09	1974 Jul 31 1403:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1974-H977	2442260.12	1974 Jul 31 1500:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1974-H978	2442260.15	1974 Jul 31 1531:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1974-T248	2442260.19	1974 Jul 31 1630:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1974-H988	2442260.19	1974 Jul 31 1630:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1974-H989	2442260.36	1974 Jul 31 2035:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1974-T249	2442260.37	1974 Jul 31 2035:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1974-H990	2442260.38	1974 Jul 31 2109:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1974-H991	2442260.55	1974 Aug 1 0114:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1974-H992	2442261.09	1974 Aug 1 1409:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1974-H993	2442261.14	1974 Aug 1 1524:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1974-H994	2442261.39	1974 Aug 1 2120:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1974-H995	2442262.07	1974 Aug 2 1334:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1974-H996	2442262.07	1974 Aug 2 1344:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1974-H997	2442262.16	1974 Aug 2 1856:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1974-H998	2442262.17	1974 Aug 2 1859:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1974-H999	2442262.33	1974 Aug 2 1956:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1974-H1000	2442262.33	1974 Aug 2 2000:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1974-H1001	2442262.35	1974 Aug 2 2000:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1974-H1002	2442262.40	1974 Aug 2 2133:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1974-H1003	2442263.42	1974 Aug 3 2159:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1974-H1004	2442264.93	1974 Aug 5 1019:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1974-H1005	2442265.04	1974 Aug 5 1258:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1974-H1006	2442265.13	1974 Aug 5 1512:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1974-H1007	2442265.16	1974 Aug 5 1856:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1974-H1008	2442265.27	1974 Aug 5 1859:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1974-H1009	2442265.27	1974 Aug 5 1859:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1974-H1010	2442265.41	1974 Aug 5 2156:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1974-H1011	2442266.61	1974 Aug 5 2156:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1974-H1012	2442266.69	1974 Aug 5 2342:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1974-H1013	2442266.80	1974 Aug 5 2342:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1974-H1014	2442266.82	1974 Aug 5 0959:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1974-H1015	2442267.86	1974 Aug 7 1300:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1974-H1016	2442267.94	1974 Aug 7 1400:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1974-H1017	2442267.94	1974 Aug 7 1524:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1974-H1018	2442267.91	1974 Aug 7 1700:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1974-H1019	2442267.91	1974 Aug 7 1700:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1974-H1020	2442267.30	1974 Aug 7 1906:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1974-H1021	2442267.31	1974 Aug 7 1939:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1974-H1022	2442267.55	1974 Aug 8 0114:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1974-H1023	2442267.92	1974 Aug 8 0959:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1974-H1024	2442267.97	1974 Aug 8 1115:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1974-H1025	2442268.17	1974 Aug 8 1559:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1974-H1026	2442268.92	1974 Aug 9 0959:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1974-H1027	2442269.06	1974 Aug 9 1330:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1974-H1028	2442269.08	1974 Aug 9 1400:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1974-H1029	2442269.36	1974 Aug 9 1852:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1974-H1030	2442269.36	1974 Aug 9 1852:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1974-H1031	2442269.39	1974 Aug 9 2032:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1974-H1032	2442271.92	1974 Aug 9 2119:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1974-H1033	2442271.96	1974 Aug 9 2059:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1974-H1034	2442272.12	1974 Aug 9 1100:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1974-H1035	2442272.13	1974 Aug 9 1500:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1974-H1036	2442272.27	1974 Aug 9 1830:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1974-H1037	2442272.38	1974 Aug 9 2101:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1974-H1038	2442273.11	1974 Aug 13 1435:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1974-H1039	2442273.91	1974 Aug 14 0949:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1974-H1040	2442274.06	1974 Aug 14 1406:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1974-H1041	2442274.07	1974 Aug 14 1344:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1974-H1042	2442274.19	1974 Aug 14 1630:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1974-H1043	2442274.23	1974 Aug 14 1730:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1974-H1044	2442274.55	1974 Aug 15 0114:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1974-H1045	2442274.88	1974 Aug 15 0900:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1974-H1046	2442275.05	1974 Aug 15 1307:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1974-H1047	2442275.17	1974 Aug 15 1559:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1974-H1048	2442275.93	1974 Aug 16 1019:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1974-H1049	2442276.09	1974 Aug 16 1414:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1974-H1050	2442276.10	1974 Aug 16 1459:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1974-H1051	2442276.14	1974 Aug 16 1514:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1974-H1052	2442276.14	1974 Aug 16 1514:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1974-H1054	2442276.21	1974 Aug 16 1656:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-

















Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Launch_e	Agency	Launch_Code	Group	Category	LT_Cite	Cite	Notes
1975-H664	2442568.13	1975 Jun 4 1511:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1975-H665	2442568.23	1975 Jun 4 1730:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1975-H666	2442568.24	1975 Jun 4 1745:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1975-H667	2442568.33	1975 Jun 4 2000:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1975-H668	2442568.54	1975 Jun 5 0059:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1975-H669	2442569.13	1975 Jun 5 1504:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1975-H670	2442569.21	1975 Jun 5 1700:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1975-H671	2442569.31	1975 Jun 5 1919:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1975-H672	2442569.38	1975 Jun 5 2111:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1975-H673	2442569.42	1975 Jun 6 0114:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1975-H674	2442570.07	1975 Jun 6 1344:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1975-H675	2442570.10	1975 Jun 6 1426:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1975-H676	2442570.19	1975 Jun 6 1627:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1975-H677	2442570.21	1975 Jun 6 1700:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1975-H678	2442570.38	1975 Jun 6 2100:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1975-H679	2442570.38	1975 Jun 6 2100:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1975-H680	2442570.39	1975 Jun 6 2123:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1975-H681	2442573.14	1975 Jun 9 1519:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1975-H682	2442573.15	1975 Jun 9 1530:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1975-H683	2442573.21	1975 Jun 9 1657:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1975-H684	2442573.22	1975 Jun 9 1715:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1975-H685	2442573.23	1975 Jun 9 1729:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1975-H686	2442573.33	1975 Jun 9 2000:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1975-H687	2442574.87	1975 Jun 11 0952:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1975-H688	2442574.91	1975 Jun 11 1019:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1975-H689	2442575.10	1975 Jun 11 1419:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1975-H691	2442575.10	1975 Jun 11 1430:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1975-H692	2442575.13	1975 Jun 11 1507:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1975-H694	2442575.38	1975 Jun 11 2100:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1975-H695	2442575.57	1975 Jun 12 0147:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1975-H697	2442577.07	1975 Jun 13 1344:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1975-H698	2442577.08	1975 Jun 13 1353:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1975-H699	2442577.15	1975 Jun 13 1530:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1975-H700	2442577.32	1975 Jun 13 1944:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1975-H701	2442577.38	1975 Jun 13 2100:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1975-H702	2442579.90	1975 Jun 16 0931:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1975-H704	2442581.15	1975 Jun 17 2000:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1975-H706	2442581.33	1975 Jun 17 2151:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1975-H709	2442581.41	1975 Jun 18 0931:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1975-H710	2442581.69	1975 Jun 18 1307:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1975-H716	2442582.00	1975 Jun 18 1344:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1975-H717	2442582.00	1975 Jun 18 1613:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1975-H718	2442582.16	1975 Jun 18 1903:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1975-H719	2442582.29	1975 Jun 18 2051:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1975-H721	2442582.31	1975 Jun 18 2051:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1975-H722	2442582.38	1975 Jun 18 2114:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1975-H723	2442582.55	1975 Jun 18 2122:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1975-H714	2442583.93	1975 Jun 19 0901:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1975-H715	2442583.93	1975 Jun 19 2000:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1975-H716	2442583.93	1975 Jun 19 2000:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1975-H717	2442583.93	1975 Jun 20 0901:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1975-H718	2442583.93	1975 Jun 20 1302:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1975-H719	2442584.04	1975 Jun 20 1344:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1975-H720	2442584.07	1975 Jun 20 1520:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1975-H721	2442584.14	1975 Jun 20 1845:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1975-H722	2442584.28	1975 Jun 20 1956:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1975-H723	2442584.33	1975 Jun 20 2100:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1975-H724	2442584.38	1975 Jun 20 2100:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1975-H725	2442584.38	1975 Jun 20 2100:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1975-H726	2442584.38	1975 Jun 20 2100:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1975-H727	2442584.38	1975 Jun 20 2100:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1975-H728	2442584.39	1975 Jun 20 2122:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1975-H729	2442584.43	1975 Jun 23 2221:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1975-H730	2442584.43	1975 Jun 23 2221:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1975-H731	2442584.43	1975 Jun 24 1253:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1975-H732	2442584.43	1975 Jun 24 1437:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1975-H733	2442584.43	1975 Jun 24 1641:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1975-H734	2442584.43	1975 Jun 24 2159:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1975-H735	2442584.85	1975 Jun 25 0830:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1975-H736	2442584.94	1975 Jun 25 1030:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1975-H737	2442589.06	1975 Jun 25 1330:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1975-H738	2442589.12	1975 Jun 25 1330:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1975-H739	2442589.20	1975 Jun 25 1652:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1975-H740	2442589.32	1975 Jun 25 1935:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1975-H741	2442589.33	1975 Jun 25 2000:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1975-H742	2442589.36	1975 Jun 25 2043:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1975-H743	2442589.55	1975 Jun 25 2104:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1975-H744	2442590.08	1975 Jun 26 0114:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1975-H745	2442591.07	1975 Jun 26 1400:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1975-H746	2442591.16	1975 Jun 27 1344:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1975-H747	2442591.18	1975 Jun 27 1545:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1975-H748	2442591.36	1975 Jun 27 2043:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-



Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Launch_e	Agency	Launch_Code	Group	Category	LT_Cite	Cite	Notes
1975-W748	2442591.55	1975 Jun 28 01:14:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1975-W765	2442594.07	1975 Jun 30 13:44:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1975-W766	2442594.07	1975 Jun 30 13:44:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1975-W767	2442594.23	1975 Jun 30 17:30:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1975-W768	2442594.26	1975 Jun 30 18:15:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1975-W769	2442594.55	1975 Jul 1 01:14:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1975-W760	2442595.07	1975 Jul 1 13:44:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1975-W761	2442596.10	1975 Jul 2 14:20:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1975-W763	2442596.24	1975 Jul 2 17:38:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1975-W764	2442596.32	1975 Jul 2 19:38:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1975-W765	2442596.32	1975 Jul 2 19:38:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1975-W766	2442596.38	1975 Jul 2 21:00:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1975-W766	2442596.38	1975 Jul 2 21:12:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1975-W767	2442596.57	1975 Jul 3 01:37:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1975-W768	2442597.33	1975 Jul 3 09:55:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1975-W769	2442600.90	1975 Jul 7 09:55:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1975-W770	2442601.10	1975 Jul 7 14:18:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1975-W771	2442601.10	1975 Jul 7 14:20:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1975-W772	2442601.38	1975 Jul 7 21:00:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1975-W773	2442601.48	1975 Jul 7 23:30:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1975-W774	2442601.53	1975 Jul 8 00:38:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1975-W775	2442602.15	1975 Jul 8 00:38:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1975-W776	2442602.15	1975 Jul 9 09:31:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1975-W777	2442603.05	1975 Jul 9 09:31:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1975-W778	2442603.06	1975 Jul 9 13:30:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1975-W780	2442603.23	1975 Jul 9 17:30:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1975-W782	2442603.31	1975 Jul 9 19:30:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1975-W783	2442603.58	1975 Jul 10 01:57:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1975-W783	2442604.35	1975 Jul 10 19:56:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1975-W784	2442604.51	1975 Jul 11 00:10:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1975-W786	2442605.01	1975 Jul 11 12:11:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1975-W787	2442605.17	1975 Jul 11 14:25:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1975-W788	2442605.17	1975 Jul 11 15:59:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1975-W789	2442605.29	1975 Jul 11 18:59:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1975-W790	2442605.30	1975 Jul 11 19:14:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1975-W791	2442605.32	1975 Jul 11 19:42:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1975-W792	2442605.40	1975 Jul 11 21:40:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1975-W793	2442606.15	1975 Jul 12 15:30:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1975-W793	2442607.04	1975 Jul 13 12:39:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1975-W794	2442608.09	1975 Jul 14 14:41:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1975-W796	2442608.16	1975 Jul 14 15:46:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1975-W797	2442608.31	1975 Jul 14 19:19:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1975-W798	2442608.42	1975 Jul 14 21:39:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1975-W799	2442608.57	1975 Jul 15 00:46:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1975-W800	2442608.95	1975 Jul 15 10:04:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1975-W801	2442609.14	1975 Jul 15 15:59:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1975-W802	2442609.38	1975 Jul 15 21:04:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1975-W803	2442609.98	1975 Jul 16 10:58:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1975-W804	2442610.90	1975 Jul 16 14:20:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1975-W805	2442610.10	1975 Jul 16 14:22:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1975-W806	2442610.15	1975 Jul 16 15:40:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1975-W808	2442610.31	1975 Jul 16 19:30:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1975-W809	2442610.48	1975 Jul 16 23:30:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1975-W810	2442611.19	1975 Jul 17 00:40:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1975-W811	2442611.55	1975 Jul 17 16:31:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1975-W812	2442612.10	1975 Jul 18 01:14:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1975-W813	2442612.17	1975 Jul 18 14:31:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1975-W814	2442612.31	1975 Jul 18 15:59:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1975-W815	2442612.36	1975 Jul 18 19:30:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1975-W816	2442615.07	1975 Jul 18 20:42:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1975-W817	2442615.13	1975 Jul 21 13:40:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1975-W818	2442615.15	1975 Jul 21 15:10:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1975-W819	2442615.15	1975 Jul 21 15:30:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1975-W820	2442615.25	1975 Jul 21 18:01:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1975-W821	2442615.46	1975 Jul 21 23:00:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1975-W822	2442616.39	1975 Jul 21 23:30:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1975-W823	2442616.57	1975 Jul 22 21:21:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1975-W824	2442617.17	1975 Jul 23 01:40:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1975-W825	2442617.23	1975 Jul 23 17:30:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1975-W826	2442617.24	1975 Jul 23 17:30:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1975-W827	2442617.26	1975 Jul 23 18:21:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1975-W828	2442617.30	1975 Jul 24 04:43:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1975-W829	2442617.70	1975 Jul 24 19:49:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1975-W830	2442618.33	1975 Jul 25 00:22:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1975-W831	2442618.52	1975 Jul 25 12:21:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1975-W832	2442619.01	1975 Jul 25 16:04:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1975-W833	2442619.17	1975 Jul 25 17:15:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1975-W835	2442619.22	1975 Jul 25 18:40:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1975-W837	2442619.28	1975 Jul 25 21:59:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1975-W836	2442619.42	1975 Jul 25 22:36:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1975-W837	2442619.44	1975 Jul 25 22:36:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-

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Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Launch_e	Agency	Launch_Code	Group	Category	LT_Cite	Cite	Notes
1975-H838	2442621.90	1975 Jul 28 0942:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1975-H839	2442622.15	1975 Jul 28 1530:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1975-H840	2442622.17	1975 Jul 28 1557:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1975-H841	2442622.18	1975 Jul 28 1614:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1975-H842	2442622.48	1975 Jul 29 0109:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1975-H843	2442622.55	1975 Jul 29 1534:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1975-H844	2442623.15	1975 Jul 29 1802:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1975-H847	2442623.31	1975 Jul 29 1931:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1975-H850	2442624.03	1975 Jul 30 1238:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1975-H851	2442624.09	1975 Jul 30 1404:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1975-H852	2442624.12	1975 Jul 30 1448:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1975-H853	2442624.14	1975 Jul 30 1520:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1975-H854	2442624.23	1975 Jul 30 1726:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1975-H856	2442624.41	1975 Jul 30 2144:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1975-H861	2442625.17	1975 Jul 31 0134:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1975-H862	2442625.57	1975 Jul 31 1559:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1975-H863	2442625.42	1975 Aug 1 0932:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1975-H864	2442625.90	1975 Aug 1 1430:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1975-H865	2442626.10	1975 Aug 1 1446:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1975-H866	2442626.11	1975 Aug 1 1453:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1975-H868	2442626.12	1975 Aug 1 1631:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1975-H869	2442626.18	1975 Aug 1 1621:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1975-H870	2442626.45	1975 Aug 2 0114:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1975-H871	2442626.55	1975 Aug 2 0130:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1975-H872	2442629.07	1975 Aug 4 1344:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1975-H874	2442629.13	1975 Aug 4 1510:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1975-H875	2442629.23	1975 Aug 4 1730:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1975-H876	2442629.37	1975 Aug 4 2056:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1975-H877	2442629.58	1975 Aug 4 2100:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1975-H878	2442629.58	1975 Aug 5 0118:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1975-H879	2442630.15	1975 Aug 5 1530:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1975-H880	2442630.21	1975 Aug 5 1700:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1975-H881	2442630.25	1975 Aug 5 1800:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1975-H882	2442630.32	1975 Aug 5 1936:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1975-H883	2442631.02	1975 Aug 6 1233:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1975-H884	2442631.03	1975 Aug 6 1247:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1975-H885	2442631.13	1975 Aug 6 1503:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1975-H886	2442631.16	1975 Aug 6 1656:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1975-H887	2442631.15	1975 Aug 6 1920:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1975-H889	2442631.22	1975 Aug 6 1916:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1975-H890	2442631.29	1975 Aug 6 1924:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1975-H891	2442631.47	1975 Aug 6 2117:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1975-H892	2442631.55	1975 Aug 6 2116:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1975-H893	2442632.15	1975 Aug 7 1543:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1975-H894	2442632.15	1975 Aug 7 1643:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1975-H895	2442632.22	1975 Aug 7 1714:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1975-H896	2442632.44	1975 Aug 7 2032:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1975-H897	2442632.51	1975 Aug 8 0912:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1975-H898	2442632.99	1975 Aug 8 0922:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1975-H899	2442633.13	1975 Aug 8 1510:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1975-H900	2442633.40	1975 Aug 8 2130:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1975-H901	2442633.55	1975 Aug 8 2130:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1975-H902	2442636.03	1975 Aug 9 0114:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1975-H903	2442636.15	1975 Aug 11 1530:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1975-H904	2442636.16	1975 Aug 11 1535:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1975-H905	2442637.13	1975 Aug 12 1511:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1975-H906	2442637.15	1975 Aug 12 1530:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1975-H907	2442637.19	1975 Aug 12 1622:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1975-H908	2442637.27	1975 Aug 12 1830:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1975-H909	2442637.41	1975 Aug 12 2145:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1975-H910	2442637.42	1975 Aug 12 2207:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1975-H911	2442637.46	1975 Aug 12 2300:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1975-H912	2442637.52	1975 Aug 13 0022:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1975-H913	2442637.96	1975 Aug 13 1103:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1975-H914	2442638.08	1975 Aug 13 1400:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1975-H915	2442638.15	1975 Aug 13 1530:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1975-H916	2442638.21	1975 Aug 13 1701:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1975-H917	2442638.24	1975 Aug 13 1738:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1975-H918	2442638.24	1975 Aug 13 1745:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1975-H919	2442638.27	1975 Aug 13 1834:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1975-H920	2442638.40	1975 Aug 13 2130:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1975-H921	2442638.45	1975 Aug 14 0158:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1975-H922	2442638.58	1975 Aug 14 0158:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1975-H923	2442639.40	1975 Aug 14 2130:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1975-H924	2442639.66	1975 Aug 15 0345:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1975-H925	2442639.67	1975 Aug 15 0409:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1975-H926	2442639.72	1975 Aug 15 0521:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1975-H927	2442639.74	1975 Aug 15 0551:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1975-H928	2442639.77	1975 Aug 15 0630:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1975-H929	2442640.07	1975 Aug 15 1342:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1975-H928	2442640.14	1975 Aug 15 1525:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Launch_e	Agency	Launch_Code	Group	Category	LT_Cite	Cite	Notes
1975-H929	2442640..15	1975 Aug 15 1530:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1975-H930	2442640..15	1975 Aug 15 1534:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1975-H932	2442640..21	1975 Aug 15 1700:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1975-H933	2442640..36	1975 Aug 15 2043:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1975-H934	2442640..55	1975 Aug 16 01:14:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1975-H935	2442642..96	1975 Aug 18 11:00:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1975-H936	2442643..13	1975 Aug 18 15:10:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1975-H937	2442643..19	1975 Aug 18 16:31:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1975-H938	2442643..23	1975 Aug 18 17:30:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1975-H940	2442643..43	1975 Aug 18 18:02:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1975-H942	2442643..25	1975 Aug 18 22:15:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1975-H943	2442644..25	1975 Aug 19 18:00:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1975-H944	2442644..25	1975 Aug 20 00:14:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1975-H944	2442644..97	1975 Aug 20 11:14:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1975-H945	2442645..20	1975 Aug 20 16:54:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1975-H946	2442645..24	1975 Aug 20 17:42:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1975-H946	2442645..36	1975 Aug 20 20:42:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1975-H947	2442645..38	1975 Aug 20 21:04:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1975-H948	2442645..51	1975 Aug 21 00:19:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1975-H949	2442646..14	1975 Aug 21 15:23:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1975-H950	2442646..57	1975 Aug 22 01:53:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1975-H951	2442647..08	1975 Aug 22 13:54:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1975-H952	2442647..12	1975 Aug 22 14:53:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1975-H954	2442647..14	1975 Aug 22 15:24:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1975-H955	2442647..16	1975 Aug 22 15:55:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1975-H957	2442647..42	1975 Aug 22 22:01:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1975-H958	2442650..02	1975 Aug 25 12:53:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1975-H960	2442650..12	1975 Aug 25 14:49:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1975-H960	2442650..24	1975 Aug 25 17:45:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1975-H961	2442650..30	1975 Aug 25 19:14:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1975-H962	2442650..36	1975 Aug 25 20:44:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1975-H963	2442651..12	1975 Aug 27 13:14:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1975-H964	2442652..05	1975 Aug 27 15:14:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1975-H966	2442652..16	1975 Aug 27 15:45:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1975-H966	2442652..17	1975 Aug 27 16:09:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1975-H967	2442652..18	1975 Aug 27 16:19:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1975-H969	2442652..28	1975 Aug 27 18:49:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1975-H970	2442652..30	1975 Aug 27 19:13:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1975-H971	2442652..37	1975 Aug 27 20:46:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1975-H972	2442652..52	1975 Aug 28 00:94:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1975-H973	2442652..97	1975 Aug 28 11:10:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1975-H974	2442653..27	1975 Aug 28 15:59:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1975-H975	2442654..11	1975 Aug 29 17:39:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1975-H977	2442654..23	1975 Aug 29 20:49:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1975-H978	2442654..46	1975 Sep 2 12:56:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1975-H983	2442658..04	1975 Sep 2 15:14:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1975-H984	2442658..14	1975 Sep 2 15:47:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1975-H985	2442658..15	1975 Sep 2 17:45:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1975-H986	2442658..25	1975 Sep 2 18:00:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1975-H987	2442658..55	1975 Sep 2 19:24:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1975-H988	2442658..97	1975 Sep 2 20:47:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1975-H989	2442659..07	1975 Sep 3 13:47:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1975-H990	2442659..14	1975 Sep 3 15:14:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1975-H992	2442659..19	1975 Sep 3 16:13:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1975-H992	2442659..21	1975 Sep 3 17:30:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1975-H993	2442659..23	1975 Sep 3 17:30:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1975-H994	2442659..27	1975 Sep 3 18:24:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1975-H995	2442659..43	1975 Sep 3 22:22:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1975-H996	2442659..45	1975 Sep 3 22:47:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1975-H996	2442659..48	1975 Sep 3 23:35:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1975-H997	2442660..00	1975 Sep 4 12:00:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1975-H998	2442660..19	1975 Sep 4 16:30:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1975-H999	2442660..35	1975 Sep 4 20:17:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1975-H1000	2442661..12	1975 Sep 5 14:47:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1975-H1002	2442661..23	1975 Sep 5 17:37:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1975-H1003	2442661..29	1975 Sep 5 18:54:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1975-H1004	2442661..52	1975 Sep 6 03:30:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1975-H1006	2442664..03	1975 Sep 8 12:34:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1975-H1007	2442664..43	1975 Sep 8 22:23:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1975-H1007	2442664..47	1975 Sep 8 23:20:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1975-H1008	2442665..42	1975 Sep 9 21:59:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1975-H1010	2442665..61	1975 Sep 10 02:43:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1975-H1011	2442665..77	1975 Sep 10 06:34:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1975-H1012	2442666..11	1975 Sep 10 09:27:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1975-H1013	2442666..15	1975 Sep 10 14:36:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1975-H1014	2442666..17	1975 Sep 10 15:59:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1976-Y01	2442780..15	1976 Jan 2 15:33:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1976-H02	2442780..55	1976 Jan 3 01:14:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1976-H03	2442783..07	1976 Jan 5 13:44:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1976-H05	2442783..12	1976 Jan 5 15:00:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1976-H06	2442783..12	1976 Jan 5 15:00:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1976-H07	2442783..15	1976 Jan 5 15:30:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1976-H08	2442783..19	1976 Jan 5 16:31:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1976-H09	2442783..27	1976 Jan 5 18:25:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1976-H10	2442783..27	1976 Jan 5 18:30:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-



Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Launch_DrPay	Agency	Launch_Code	Group	Category	LT_Cite	Cite	Notes
1976-H104	2442800.12	1976 Jan 22 1500:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1976-H106	2442800.21	1976 Jan 22 1700:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1976-H1900	2442800.27	1976 Jan 22 1835	Rocketsonde	-	-	0.000	GSFC	SS	-	Meteo	SR19-143	-	-
1976-H1901	2442800.35	1976 Jan 30 2025	Rocketsonde	-	-	0.000	GSFC	SS	-	Ionos	SR19-143	-	-
1976-H107	2442800.25	1976 Jan 22 1801:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1976-H108	2442800.30	1976 Jan 22 1803:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1976-H109	2442800.30	1976 Jan 22 1914:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1976-H110	2442800.31	1976 Jan 22 1930:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1976-H111	2442800.92	1976 Jan 23 1003:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1976-H112	2442801.07	1976 Jan 23 1340:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1976-H113	2442801.17	1976 Jan 23 1559:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1976-H114	2442801.18	1976 Jan 23 1617:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1976-H116	2442801.28	1976 Jan 23 1849:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1976-H117	2442801.40	1976 Jan 23 2130:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1976-H118	2442801.40	1976 Jan 23 2153:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1976-H119	2442801.46	1976 Jan 24 2302:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1976-H120	2442801.53	1976 Jan 24 0036:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1976-H121	2442803.71	1976 Jan 26 0500:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1976-H122	2442804.07	1976 Jan 26 1344:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1976-H123	2442804.20	1976 Jan 26 1653:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1976-H124	2442804.21	1976 Jan 26 1700:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1976-H125	2442804.21	1976 Jan 26 1703:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1976-H126	2442804.24	1976 Jan 26 1745:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1976-H127	2442804.31	1976 Jan 26 1930:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1976-H128	2442804.37	1976 Jan 26 2054:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1976-H129	2442804.47	1976 Jan 26 2320:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1976-H130	2442805.21	1976 Jan 27 1700:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1976-H131	2442805.94	1976 Jan 28 0150:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1976-H132	2442805.96	1976 Jan 28 0150:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1976-H133	2442806.07	1976 Jan 28 1341:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1976-H134	2442806.14	1976 Jan 28 1500:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1976-H135	2442806.14	1976 Jan 28 1514:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1976-H136	2442806.19	1976 Jan 28 1654:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1976-H137	2442806.20	1976 Jan 28 1652:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1976-H138	2442806.21	1976 Jan 28 1700:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1976-H139	2442806.35	1976 Jan 28 2026:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1976-H140	2442806.38	1976 Jan 28 2109:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1976-H141	2442806.50	1976 Jan 28 2355:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1976-H143	2442807.22	1976 Jan 29 1715:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1976-H144	2442807.31	1976 Jan 29 1923:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1976-H145	2442807.85	1976 Jan 30 2002:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1976-H146	2442807.81	1976 Jan 30 01:31:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1976-H147	2442807.57	1976 Jan 30 0433:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1976-H148	2442808.19	1976 Jan 30 1700:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1976-H149	2442808.21	1976 Jan 30 1730:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1976-H150	2442808.24	1976 Jan 30 1907:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1976-H151	2442808.54	1976 Jan 31 0730:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1976-H152	2442808.91	1976 Feb 2 1411:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1976-H164	2442811.17	1976 Feb 2 1601:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1976-H165	2442811.22	1976 Feb 2 1715:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1976-H166	2442811.29	1976 Feb 2 1855:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1976-H167	2442811.34	1976 Feb 2 1957:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1976-H168	2442811.38	1976 Feb 2 2100:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1976-H169	2442811.97	1976 Feb 2 2320:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1976-H170	2442812.05	1976 Feb 3 1313:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1976-H171	2442812.05	1976 Feb 3 1549:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1976-H172	2442812.16	1976 Feb 3 1648:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1976-H173	2442812.23	1976 Feb 3 1730:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1976-H175	2442812.24	1976 Feb 3 1749:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1976-H177	2442813.01	1976 Feb 4 1545:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1976-H179	2442813.16	1976 Feb 4 1549:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1976-H180	2442813.19	1976 Feb 4 1630:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1976-H181	2442813.23	1976 Feb 4 1731:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1976-H182	2442813.25	1976 Feb 4 1800:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1976-H183	2442813.32	1976 Feb 4 1941:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1976-H184	2442813.32	1976 Feb 4 1944:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1976-H185	2442813.55	1976 Feb 5 0114:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1976-H186	2442814.14	1976 Feb 5 1517:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1976-H188	2442814.20	1976 Feb 5 1652:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1976-H189	2442814.29	1976 Feb 5 1859:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1976-H193	2442815.02	1976 Feb 6 1235:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1976-H196	2442815.25	1976 Feb 6 1700:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1976-H197	2442815.21	1976 Feb 6 1800:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1976-H198	2442815.34	1976 Feb 6 2006:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1976-H199	2442815.42	1976 Feb 7 0732:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1976-H200	2442815.81	1976 Feb 7 0732:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1976-H201	2442818.10	1976 Feb 9 1430:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1976-H203	2442818.23	1976 Feb 9 1730:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1976-H204	2442818.27	1976 Feb 9 1835:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1976-H205	2442818.29	1976 Feb 9 1859:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Launch_e	Agency	Launch_Code	Group	Category	LT_Cite	Cite	Notes
1976-W206	2442818.38	1976 Feb 9 21:11:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1976-W207	2442818.48	1976 Feb 9 23:37:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1976-W209	2442818.99	1976 Feb 10 11:45:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1976-W210	2442819.22	1976 Feb 10 17:20:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1976-W211	2442819.43	1976 Feb 10 22:14:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1976-W212	2442820.02	1976 Feb 11 12:23:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1976-W213	2442820.17	1976 Feb 11 16:07:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1976-W216	2442820.21	1976 Feb 11 17:08:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1976-W218	2442820.22	1976 Feb 11 17:23:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1976-W219	2442820.26	1976 Feb 11 18:20:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1976-W217	2442820.27	1976 Feb 11 18:50:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1976-W218	2442820.29	1976 Feb 11 19:02:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1976-W219	2442820.34	1976 Feb 11 20:14:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1976-W221	2442821.14	1976 Feb 12 15:19:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1976-W222	2442821.16	1976 Feb 12 15:49:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1976-W224	2442821.29	1976 Feb 12 18:53:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1976-W226	2442821.29	1976 Feb 12 18:59:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1976-W228	2442821.40	1976 Feb 12 21:34:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1976-W227	2442821.50	1976 Feb 12 23:55:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1976-W228	2442821.74	1976 Feb 13 05:40:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1976-W229	2442821.77	1976 Feb 13 06:30:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1976-W231	2442822.03	1976 Feb 13 12:38:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1976-W232	2442822.13	1976 Feb 13 15:03:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1976-W234	2442822.22	1976 Feb 13 17:10:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1976-W235	2442822.26	1976 Feb 13 18:14:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1976-W236	2442822.40	1976 Feb 13 21:36:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1976-W237	2442822.42	1976 Feb 13 22:07:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1976-W238	2442822.53	1976 Feb 14 00:36:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1976-W239	2442823.46	1976 Feb 14 23:25:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1976-W240	2442824.75	1976 Feb 16 06:00:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1976-W242	2442825.23	1976 Feb 16 17:35:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1976-W243	2442825.60	1976 Feb 17 02:50:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1976-W246	2442825.99	1976 Feb 17 11:45:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1976-W247	2442826.11	1976 Feb 17 14:52:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1976-W248	2442826.23	1976 Feb 17 16:55:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1976-W249	2442826.23	1976 Feb 17 17:50:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1976-W250	2442827.02	1976 Feb 17 23:59:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1976-W251	2442827.11	1976 Feb 18 12:26:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1976-W252	2442827.15	1976 Feb 18 14:1:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1976-W253	2442827.17	1976 Feb 18 15:01:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1976-W254	2442827.17	1976 Feb 18 15:59:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1976-W255	2442827.16	1976 Feb 18 16:21:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1976-W256	2442827.17	1976 Feb 18 16:24:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1976-W257	2442827.21	1976 Feb 18 16:56:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1976-W258	2442827.21	1976 Feb 18 16:59:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1976-W259	2442827.38	1976 Feb 18 18:09:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1976-W260	2442827.40	1976 Feb 18 21:09:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1976-W261	2442827.44	1976 Feb 18 22:14:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1976-W262	2442827.54	1976 Feb 19 00:59:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1976-W263	2442828.14	1976 Feb 19 01:44:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1976-W264	2442828.19	1976 Feb 19 15:22:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1976-W265	2442828.19	1976 Feb 19 16:26:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1976-W266	2442828.19	1976 Feb 19 16:50:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1976-W267	2442829.07	1976 Feb 20 13:04:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1976-W268	2442829.19	1976 Feb 20 16:27:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1976-W269	2442829.25	1976 Feb 20 16:59:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1976-W270	2442829.36	1976 Feb 20 17:54:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1976-W271	2442829.37	1976 Feb 20 20:58:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1976-W272	2442829.34	1976 Feb 20 22:36:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1976-W273	2442829.52	1976 Feb 21 00:24:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1976-W274	2442829.97	1976 Feb 21 11:15:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1976-W275	2442830.62	1976 Feb 22 02:48:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1976-W276	2442832.18	1976 Feb 23 16:14:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1976-W277	2442832.20	1976 Feb 23 16:54:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1976-W278	2442832.22	1976 Feb 23 17:13:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1976-W279	2442832.43	1976 Feb 23 21:45:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1976-W280	2442832.47	1976 Feb 23 22:14:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1976-W281	2442832.56	1976 Feb 24 01:30:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1976-W282	2442832.59	1976 Feb 24 02:15:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1976-W283	2442833.22	1976 Feb 24 02:51:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1976-W284	2442833.23	1976 Feb 24 03:00:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1976-W285	2442833.35	1976 Feb 24 03:34:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1976-W286	2442833.52	1976 Feb 24 20:30:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1976-W287	2442833.61	1976 Feb 25 00:30:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1976-W288	2442833.94	1976 Feb 25 10:30:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1976-W289	2442834.14	1976 Feb 25 12:59:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1976-W290	2442834.14	1976 Feb 25 15:14:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1976-W291	2442834.16	1976 Feb 25 15:51:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1976-W292	2442834.19	1976 Feb 25 16:40:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1976-W293	2442834.29	1976 Feb 25 18:59:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1976-W294	2442834.35	1976 Feb 25 20:24:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1976-W295	2442834.37	1976 Feb 25 20:55:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1976-W296	2442834.38	1976 Feb 25 21:06:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1976-W296	2442834.38	1976 Feb 25 21:12:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Launch_e	Agency	Launch_Code	Group	Category	LT_Cite	Cite	Notes
1976-W297	2442834_40	1976 Feb 25 21:43:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1976-198	2442834_56	1976 Feb 26 01:20:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1976-W298	2442834_59	1976 Feb 26 02:04:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1976-W299	2442834_64	1976 Feb 26 03:14:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1976-W300	2442835_23	1976 Feb 26 17:30:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1976-W301	2442835_37	1976 Feb 26 20:57:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1976-W302	2442835_61	1976 Feb 27 02:40:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1976-W303	2442835_95	1976 Feb 27 10:44:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1976-W304	2442836_07	1976 Feb 27 13:44:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1976-W305	2442836_13	1976 Feb 27 15:01:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1976-W306	2442836_19	1976 Feb 27 16:30:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1976-W307	2442836_25	1976 Feb 27 17:56:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1976-W308	2442836_26	1976 Feb 27 18:52:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1976-W309	2442836_29	1976 Feb 27 20:56:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1976-W310	2442836_37	1976 Feb 27 21:52:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1976-W311	2442836_41	1976 Feb 27 21:59:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1976-W312	2442836_42	1976 Feb 28 01:49:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1976-W313	2442836_56	1976 Feb 28 07:40:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1976-W314	2442836_62	1976 Feb 28 11:16:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1976-W324	2442838_73	1976 Mar 1 06:30:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1976-W325	2442838_97	1976 Mar 1 11:17:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1976-W326	2442839_01	1976 Mar 1 12:17:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1976-W327	2442839_22	1976 Mar 1 17:40:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1976-W328	2442839_24	1976 Mar 1 17:56:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1976-W329	2442839_25	1976 Mar 1 17:56:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1976-W330	2442839_27	1976 Mar 1 18:30:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1976-W331	2442839_40	1976 Mar 1 21:34:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1976-W332	2442839_47	1976 Mar 1 23:20:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1976-W333	2442839_65	1976 Mar 2 03:32:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1976-W334	2442839_73	1976 Mar 2 06:56:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1976-W335	2442839_96	1976 Mar 2 11:00:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1976-W336	2442840_26	1976 Mar 2 15:14:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1976-W337	2442840_41	1976 Mar 2 21:52:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1976-W338	2442841_02	1976 Mar 3 12:33:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1976-W339	2442841_16	1976 Mar 3 16:16:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1976-W340	2442841_18	1976 Mar 3 16:32:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1976-W341	2442841_19	1976 Mar 3 16:44:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1976-W342	2442841_20	1976 Mar 3 16:49:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1976-W343	2442841_21	1976 Mar 3 17:00:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1976-W344	2442841_24	1976 Mar 3 17:46:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1976-W345	2442841_24	1976 Mar 3 17:52:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1976-W346	2442841_24	1976 Mar 3 18:13:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1976-W347	2442841_26	1976 Mar 3 18:46:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1976-W348	2442841_26	1976 Mar 3 19:14:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1976-W349	2442841_30	1976 Mar 3 21:14:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1976-W350	2442841_39	1976 Mar 3 21:41:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1976-W351	2442841_41	1976 Mar 3 21:46:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1976-W352	2442841_50	1976 Mar 3 23:56:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1976-W353	2442842_01	1976 Mar 4 02:04:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1976-W354	2442842_16	1976 Mar 4 15:30:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1976-W355	2442842_22	1976 Mar 4 17:16:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1976-W356	2442842_22	1976 Mar 4 21:36:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1976-W357	2442842_43	1976 Mar 4 22:16:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1976-W358	2442842_49	1976 Mar 4 02:10:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1976-W359	2442842_84	1976 Mar 4 10:30:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1976-W360	2442842_97	1976 Mar 4 13:44:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1976-W361	2442843_15	1976 Mar 4 15:30:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1976-W362	2442843_19	1976 Mar 4 16:30:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1976-W363	2442843_19	1976 Mar 4 16:34:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1976-W364	2442843_29	1976 Mar 4 18:59:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1976-W365	2442843_29	1976 Mar 4 18:59:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1976-W366	2442843_41	1976 Mar 4 21:52:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1976-W367	2442843_41	1976 Mar 4 21:56:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1976-W368	2442843_95	1976 Mar 4 10:44:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1976-W369	2442846_01	1976 Mar 4 12:20:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1976-W370	2442846_14	1976 Mar 4 15:14:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1976-W371	2442846_17	1976 Mar 4 16:07:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1976-W372	2442846_24	1976 Mar 4 17:49:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1976-W373	2442846_29	1976 Mar 4 18:30:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1976-W374	2442846_30	1976 Mar 4 19:14:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1976-W375	2442846_30	1976 Mar 4 19:54:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1976-W376	2442846_39	1976 Mar 4 21:27:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1976-W377	2442846_43	1976 Mar 4 22:19:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1976-W378	2442847_04	1976 Mar 4 12:59:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1976-W379	2442847_17	1976 Mar 4 15:59:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1976-W380	2442847_20	1976 Mar 4 16:49:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1976-W381	2442847_33	1976 Mar 4 20:00:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1976-W382	2442848_03	1976 Mar 10 12:36:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1976-W383	2442848_11	1976 Mar 10 14:41:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1976-W384	2442848_14	1976 Mar 10 15:14:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1976-W385	2442848_15	1976 Mar 10 15:40:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1976-W386	2442848_17	1976 Mar 10 15:59:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1976-W387	2442848_18	1976 Mar 10 16:21:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1976-W388	2442848_19	1976 Mar 10 16:33:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1976-W389	2442848_25	1976 Mar 10 18:01:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1976-W390	2442848_28	1976 Mar 10 18:45:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1976-W391	2442848_41	1976 Mar 10 21:56:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-





Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Launch_e	Agency	Launch_Code	Group	Category	LT_Cite	Cite	Notes
1976-A19	2442866.75	1976 Mar 29 0600:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1976-W481	2442867.02	1976 Mar 29 1231:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1976-W482	2442867.19	1976 Mar 29 1634:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1976-W483	2442867.23	1976 Mar 29 1730:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1976-W484	2442867.24	1976 Mar 29 1745:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1976-W485	2442867.25	1976 Mar 29 1800:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1976-W486	2442867.26	1976 Mar 29 1800:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1976-W487	2442867.29	1976 Mar 29 1856:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1976-W488	2442867.30	1976 Mar 29 1914:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1976-W489	2442867.35	1976 Mar 29 2017:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1976-W491	2442868.19	1976 Mar 30 1634:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1976-W494	2442868.61	1976 Mar 31 0730:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1976-W495	2442869.07	1976 Mar 31 1344:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1976-W420	2442869.16	1976 Mar 31 1549:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1976-W496	2442869.17	1976 Mar 31 1559:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1976-W497	2442869.19	1976 Mar 31 1630:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1976-W498	2442869.19	1976 Mar 31 1632:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1976-W499	2442869.23	1976 Mar 31 1726:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1976-W147	2442869.24	1976 Mar 31 1744:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1976-W500	2442869.25	1976 Mar 31 1765:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1976-W501	2442869.45	1976 Mar 31 2252:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1976-W502	2442870.23	1976 Apr 1 1730:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1976-W503	2442870.42	1976 Apr 1 2202:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1976-W504	2442871.07	1976 Apr 2 1344:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1976-W505	2442871.07	1976 Apr 2 1450:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1976-W506	2442871.10	1976 Apr 2 1517:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1976-W507	2442871.14	1976 Apr 2 1640:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1976-W509	2442871.19	1976 Apr 2 1659:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1976-W510	2442871.29	1976 Apr 2 2055:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1976-W150	2442871.37	1976 Apr 2 2115:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1976-W511	2442871.39	1976 Apr 2 2118:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1976-W512	2442871.42	1976 Apr 2 2207:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1976-W513	2442871.42	1976 Apr 5 1234:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1976-W514	2442874.02	1976 Apr 5 1742:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1976-W515	2442874.24	1976 Apr 5 1810:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1976-W516	2442874.26	1976 Apr 5 1854:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1976-W517	2442874.28	1976 Apr 5 1949:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1976-W518	2442874.33	1976 Apr 5 1949:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1976-W519	2442874.46	1976 Apr 5 1949:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1976-W520	2442875.20	1976 Apr 6 1644:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1976-W521	2442875.42	1976 Apr 6 2230:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1976-W522	2442876.07	1976 Apr 7 1334:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1976-W523	2442876.07	1976 Apr 7 1334:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1976-W524	2442876.10	1976 Apr 7 1637:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1976-W525	2442876.16	1976 Apr 7 1637:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1976-W526	2442876.19	1976 Apr 7 1703:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1976-W158	2442876.21	1976 Apr 7 1717:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1976-W528	2442876.22	1976 Apr 7 1717:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1976-W529	2442876.24	1976 Apr 7 1727:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1976-W530	2442876.28	1976 Apr 7 2100:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1976-W531	2442876.34	1976 Apr 7 2129:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1976-W532	2442876.35	1976 Apr 8 0126:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1976-W533	2442878.03	1976 Apr 8 1246:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1976-W534	2442878.15	1976 Apr 8 1536:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1976-W535	2442878.17	1976 Apr 8 1559:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1976-W536	2442878.19	1976 Apr 8 1630:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1976-W538	2442878.20	1976 Apr 8 1644:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1976-W539	2442878.25	1976 Apr 8 1757:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1976-W540	2442878.26	1976 Apr 8 1820:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1976-W541	2442878.34	1976 Apr 8 2015:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1976-W542	2442878.40	1976 Apr 8 2142:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1976-W543	2442881.12	1976 Apr 12 1500:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1976-W544	2442881.16	1976 Apr 12 1545:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1976-W545	2442881.16	1976 Apr 12 1547:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1976-W547	2442881.22	1976 Apr 12 1713:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1976-W548	2442881.26	1976 Apr 12 1810:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1976-W549	2442881.33	1976 Apr 12 2000:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1976-W550	2442881.33	1976 Apr 12 2229:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1976-W421	2442881.44	1976 Apr 13 1144:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1976-W552	2442881.50	1976 Apr 13 0006:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1976-W553	2442881.99	1976 Apr 13 1144:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1976-W554	2442882.14	1976 Apr 13 1514:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1976-W555	2442882.03	1976 Apr 13 1248:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1976-W557	2442883.06	1976 Apr 14 1330:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1976-W558	2442883.14	1976 Apr 14 1520:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1976-W559	2442883.16	1976 Apr 14 1544:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1976-W560	2442883.19	1976 Apr 14 1634:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1976-W561	2442883.19	1976 Apr 14 1722:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1976-W564	2442883.22	1976 Apr 14 1735:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1976-W171	2442883.23	1976 Apr 14 1830:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1976-W565	2442883.27	1976 Apr 14 2020:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1976-W566	2442883.35	1976 Apr 14 2100:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1976-W567	2442883.38	1976 Apr 14 2111:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1976-W172	2442883.38	1976 Apr 14 2111:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1976-W568	2442883.40	1976 Apr 14 2130:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Launch_e	Agency	Launch_Code	Group	Category	LT_Cite	Cite	Notes
1976-H569	2442883.58	1976 Apr 15 0154:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1976-H570	2442884.01	1976 Apr 15 1210:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1976-H571	2442884.19	1976 Apr 15 1630:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1976-H572	2442884.21	1976 Apr 15 1656:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1976-H573	2442885.11	1976 Apr 16 1445:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1976-H574	2442885.16	1976 Apr 16 1530:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1976-H575	2442885.16	1976 Apr 16 1545:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1976-H576	2442885.16	1976 Apr 16 1637:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1976-H577	2442885.28	1976 Apr 16 1845:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1976-H578	2442885.41	1976 Apr 16 2146:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1976-H579	2442885.50	1976 Apr 16 2359:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1976-H580	2442888.04	1976 Apr 19 1252:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1976-H581	2442888.18	1976 Apr 19 1619:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1976-H582	2442888.19	1976 Apr 19 1631:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1976-H583	2442888.26	1976 Apr 19 1820:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1976-H584	2442888.28	1976 Apr 19 1842:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1976-H585	2442888.35	1976 Apr 19 2020:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1976-H586	2442888.41	1976 Apr 19 2146:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1976-H588	2442888.54	1976 Apr 20 0065:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1976-H589	2442889.20	1976 Apr 20 1649:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1976-H590	2442890.06	1976 Apr 21 1330:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1976-H591	2442890.16	1976 Apr 21 1549:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1976-H592	2442890.21	1976 Apr 21 1644:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1976-H593	2442890.22	1976 Apr 21 1700:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1976-H594	2442890.22	1976 Apr 21 1723:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1976-H595	2442890.23	1976 Apr 21 1730:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1976-H596	2442890.25	1976 Apr 21 1800:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1976-H597	2442890.30	1976 Apr 21 1906:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1976-H598	2442890.38	1976 Apr 21 2100:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1976-H599	2442890.38	1976 Apr 21 2149:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1976-H600	2442890.41	1976 Apr 21 2220:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1976-H601	2442890.45	1976 Apr 22 0114:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1976-H602	2442891.02	1976 Apr 22 1223:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1976-H603	2442891.28	1976 Apr 22 1559:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1976-H604	2442891.38	1976 Apr 22 1800:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1976-H605	2442891.39	1976 Apr 22 2123:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1976-H606	2442892.12	1976 Apr 23 1500:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1976-H607	2442892.13	1976 Apr 23 1512:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1976-H608	2442892.16	1976 Apr 23 1545:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1976-H609	2442892.21	1976 Apr 23 1700:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1976-H610	2442892.21	1976 Apr 23 1715:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1976-H611	2442892.22	1976 Apr 23 1720:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1976-H612	2442892.50	1976 Apr 24 0020:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1976-H613	2442895.12	1976 Apr 26 1500:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1976-H614	2442895.15	1976 Apr 26 1530:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1976-H615	2442895.19	1976 Apr 26 1707:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1976-H616	2442895.24	1976 Apr 26 1944:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1976-H617	2442895.32	1976 Apr 26 2103:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1976-H618	2442895.38	1976 Apr 26 2145:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1976-H619	2442895.41	1976 Apr 26 2319:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1976-H620	2442895.47	1976 Apr 27 1731:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1976-H621	2442896.23	1976 Apr 28 1344:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1976-H622	2442897.07	1976 Apr 28 1344:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1976-H623	2442897.11	1976 Apr 28 1437:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1976-H624	2442897.11	1976 Apr 28 1452:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1976-H625	2442897.12	1976 Apr 28 1452:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1976-H626	2442897.15	1976 Apr 28 1530:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1976-H627	2442897.16	1976 Apr 28 1535:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1976-H628	2442897.19	1976 Apr 28 1630:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1976-H629	2442897.19	1976 Apr 28 1640:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1976-H630	2442897.31	1976 Apr 28 1930:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1976-H631	2442897.37	1976 Apr 28 2059:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1976-H632	2442897.39	1976 Apr 28 2159:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1976-H633	2442897.42	1976 Apr 29 0011:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1976-H634	2442898.03	1976 Apr 29 1237:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1976-H635	2442898.03	1976 Apr 29 1545:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1976-H636	2442898.16	1976 Apr 29 1652:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1976-H637	2442898.20	1976 Apr 29 1815:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1976-H638	2442898.26	1976 Apr 29 2113:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1976-H639	2442898.38	1976 Apr 30 1453:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1976-H640	2442899.12	1976 Apr 30 1520:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1976-H641	2442899.15	1976 Apr 30 1530:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1976-H642	2442899.15	1976 Apr 30 1530:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1976-H643	2442899.18	1976 Apr 30 1614:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1976-H644	2442899.23	1976 Apr 30 1730:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1976-H645	2442899.29	1976 Apr 30 1902:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1976-H646	2442899.55	1976 May 1 0114:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1976-H647	2442899.55	1976 May 1 1559:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1976-H648	2442900.17	1976 May 3 1502:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1976-H649	2442900.13	1976 May 3 1534:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1976-H650	2442902.15	1976 May 3 1559:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1976-H651	2442902.17	1976 May 3 1630:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1976-H652	2442902.19	1976 May 3 1630:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-



Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Launch_e	Agency	Launch_Code	Group	Category	LT_Cite	Cite	Notes
1976-A30	2442918.11	1976 May 19 14:33:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1976-4764	2442918.11	1976 May 19 14:45:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1976-4765	2442918.15	1976 May 19 15:30:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1976-4766	2442918.18	1976 May 19 16:24:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1976-4767	2442918.20	1976 May 19 16:54:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1976-4769	2442918.24	1976 May 19 17:49:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1976-4760	2442918.25	1976 May 19 18:00:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1976-4761	2442918.25	1976 May 19 18:02:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1976-4762	2442918.28	1976 May 19 18:49:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1976-4762	2442918.32	1976 May 19 19:36:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1976-4764	2442918.40	1976 May 19 21:33:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1976-4765	2442918.42	1976 May 19 22:00:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1976-4765	2442918.54	1976 May 20 00:59:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1976-4766	2442918.55	1976 May 20 01:14:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1976-4767	2442919.02	1976 May 20 12:50:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1976-4769	2442919.26	1976 May 20 16:09:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1976-4770	2442919.40	1976 May 20 21:37:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1976-4771	2442920.12	1976 May 21 15:00:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1976-4772	2442920.17	1976 May 21 15:59:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1976-4774	2442920.18	1976 May 21 16:14:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1976-4775	2442920.19	1976 May 21 16:30:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1976-4720	2442920.21	1976 May 21 17:00:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1976-4776	2442920.31	1976 May 21 19:24:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1976-4777	2442920.52	1976 May 22 08:55:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1976-4778	2442921.63	1976 May 23 08:00:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1976-4779	2442922.00	1976 May 24 12:04:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1976-4780	2442923.09	1976 May 24 14:04:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1976-4781	2442923.17	1976 May 24 16:04:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1976-4782	2442923.16	1976 May 24 16:24:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1976-4783	2442923.21	1976 May 24 16:55:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1976-4784	2442923.23	1976 May 24 17:30:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1976-4785	2442923.27	1976 May 24 20:49:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1976-432	2442923.38	1976 May 24 21:00:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1976-4722	2442923.46	1976 May 24 23:44:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1976-4788	2442924.15	1976 May 25 15:30:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1976-4789	2442924.49	1976 May 25 23:40:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1976-4791	2442925.07	1976 May 26 13:44:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1976-4792	2442925.11	1976 May 26 14:54:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1976-4793	2442925.12	1976 May 26 15:00:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1976-4794	2442925.14	1976 May 26 15:14:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1976-4795	2442925.17	1976 May 26 15:44:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1976-4796	2442925.18	1976 May 26 16:06:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1976-4797	2442925.18	1976 May 26 17:14:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1976-4798	2442925.24	1976 May 26 18:14:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1976-4799	2442925.26	1976 May 26 18:15:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1976-4801	2442925.27	1976 May 27 00:14:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1976-4802	2442925.32	1976 May 27 17:25:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1976-4803	2442925.33	1976 May 27 21:55:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1976-4804	2442927.00	1976 May 28 12:59:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1976-4805	2442927.04	1976 May 28 14:30:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1976-47231	2442927.12	1976 May 28 15:00:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1976-4806	2442927.14	1976 May 28 15:14:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1976-4808	2442927.19	1976 May 28 16:14:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1976-4809	2442927.33	1976 May 28 20:00:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1976-47232	2442927.38	1976 May 28 21:00:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1976-4810	2442927.40	1976 May 28 21:31:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1976-4811	2442927.55	1976 May 29 01:14:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1976-4817	2442930.17	1976 May 31 15:59:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1976-4818	2442931.05	1976 Jun 1 20:27:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1976-4819	2442931.11	1976 Jun 1 14:36:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1976-4820	2442931.16	1976 Jun 1 15:44:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1976-4822	2442931.19	1976 Jun 1 16:30:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1976-4823	2442931.20	1976 Jun 1 16:44:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1976-4824	2442931.33	1976 Jun 1 19:54:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1976-4825	2442932.05	1976 Jun 2 13:14:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1976-4826	2442932.07	1976 Jun 2 13:44:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1976-4827	2442932.09	1976 Jun 2 14:15:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1976-4828	2442932.12	1976 Jun 2 15:00:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1976-47238	2442932.14	1976 Jun 2 15:14:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1976-4829	2442932.14	1976 Jun 2 15:14:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1976-4830	2442932.14	1976 Jun 2 15:24:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1976-4832	2442932.16	1976 Jun 2 15:45:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1976-4833	2442932.16	1976 Jun 2 15:59:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1976-4834	2442932.17	1976 Jun 2 17:12:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1976-4835	2442932.22	1976 Jun 2 19:30:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1976-4837	2442932.44	1976 Jun 2 22:35:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1976-4838	2442933.14	1976 Jun 3 15:14:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1976-4839	2442933.44	1976 Jun 3 22:30:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1976-47239	2442933.51	1976 Jun 4 00:20:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1976-4840	2442934.03	1976 Jun 4 12:47:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-



Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Launch_e	Agency	Launch_Code	Group	Category	LT_Cite	Cite	Notes
1976-1264	2442960.17	1976 Jun 30 1559:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1976-A38	2442960.21	1976 Jun 30 1703:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1976-#930	2442960.25	1976 Jun 30 1755:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1976-#931	2442960.29	1976 Jun 30 1854:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1976-#932	2442960.30	1976 Jun 30 1914:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1976-#933	2442960.39	1976 Jun 30 2121:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1976-#934	2442961.16	1976 Jul 1 1545:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1976-#935	2442961.21	1976 Jul 1 1704:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1976-#936	2442961.39	1976 Jul 1 2119:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1976-#937	2442962.07	1976 Jul 2 1347:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1976-#938	2442962.08	1976 Jul 2 1400:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1976-#939	2442962.11	1976 Jul 2 1440:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1976-#940	2442962.13	1976 Jul 2 1510:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1976-#941	2442962.29	1976 Jul 2 1857:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1976-#942	2442962.31	1976 Jul 2 1931:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1976-#943	2442966.16	1976 Jul 6 1524:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1976-#944	2442966.27	1976 Jul 6 1655:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1976-#945	2442966.40	1976 Jul 6 1830:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1976-#946	2442966.59	1976 Jul 6 2130:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1976-#947	2442967.03	1976 Jul 7 0203:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1976-#948	2442967.05	1976 Jul 7 1241:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1976-#949	2442967.06	1976 Jul 7 1313:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1976-#950	2442967.14	1976 Jul 7 1514:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1976-#952	2442967.21	1976 Jul 7 1700:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1976-1272	2442967.22	1976 Jul 7 1722:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1976-#953	2442967.26	1976 Jul 7 1820:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1976-#954	2442967.27	1976 Jul 7 1830:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1976-1274	2442967.40	1976 Jul 7 2132:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1976-#954	2442967.42	1976 Jul 7 2204:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1976-#955	2442967.55	1976 Jul 8 0114:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1976-#956	2442968.16	1976 Jul 8 1619:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1976-#957	2442968.40	1976 Jul 8 2130:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1976-#958	2442969.07	1976 Jul 9 1344:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1976-#959	2442969.10	1976 Jul 9 1418:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1976-#960	2442969.10	1976 Jul 9 1430:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1976-#961	2442969.10	1976 Jul 9 1430:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1976-#963	2442969.21	1976 Jul 9 1700:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1976-#339	2442969.36	1976 Jul 9 2035:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1976-#964	2442969.85	1976 Jul 10 0114:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1976-#966	2442972.04	1976 Jul 12 1259:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1976-#967	2442972.10	1976 Jul 12 1439:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1976-#967	2442972.12	1976 Jul 12 1511:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1976-#968	2442972.14	1976 Jul 12 1541:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1976-#970	2442972.14	1976 Jul 12 1541:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1976-#971	2442972.20	1976 Jul 12 1745:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1976-#972	2442972.23	1976 Jul 12 1753:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1976-#972	2442972.30	1976 Jul 12 1931:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1976-#974	2442972.39	1976 Jul 12 2117:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1976-#974	2442972.49	1976 Jul 12 2206:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1976-#974	2442972.55	1976 Jul 12 2209:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1976-#974	2442972.56	1976 Jul 12 2209:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1976-#976	2442974.06	1976 Jul 14 1435:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1976-#976	2442974.10	1976 Jul 14 1435:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1976-#977	2442974.17	1976 Jul 14 1559:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1976-#984	2442974.17	1976 Jul 14 1609:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1976-#977	2442974.17	1976 Jul 14 1609:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1976-#979	2442974.19	1976 Jul 14 1626:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1976-#980	2442974.21	1976 Jul 14 1700:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1976-#980	2442974.28	1976 Jul 14 1821:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1976-#982	2442974.30	1976 Jul 14 1914:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1976-#983	2442974.38	1976 Jul 14 2107:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1976-#984	2442974.38	1976 Jul 14 2107:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1976-#985	2442974.39	1976 Jul 14 2119:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1976-442	2442974.39	1976 Jul 14 2119:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1976-#284	2442974.51	1976 Jul 15 0013:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1976-#986	2442975.26	1976 Jul 15 1820:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1976-#987	2442975.37	1976 Jul 15 2054:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1976-#988	2442976.01	1976 Jul 16 1210:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1976-#988	2442976.10	1976 Jul 16 1430:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1976-#989	2442976.12	1976 Jul 16 1455:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1976-443	2442976.40	1976 Jul 16 2143:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1976-#287	2442976.44	1976 Jul 16 2237:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1976-#287	2442976.57	1976 Jul 17 0138:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1977-#114	2443147.22	1977 Jan 3 1717:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1977-#114	2443147.25	1977 Jan 3 1800:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1977-#115	2443147.27	1977 Jan 3 1830:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1977-#116	2443147.35	1977 Jan 3 2019:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1977-#117	2443147.51	1977 Jan 4 0009:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1977-#117	2443147.55	1977 Jan 4 0108:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1977-#118	2443148.02	1977 Jan 4 1232:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1977-#20	2443148.19	1977 Jan 4 1630:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1977-#21	2443148.20	1977 Jan 4 1644:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1977-#22	2443148.23	1977 Jan 4 1731:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1977-#23	2443148.35	1977 Jan 4 2025:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1977-#24	2443148.40	1977 Jan 4 2130:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1977-#25	2443148.40	1977 Jan 4 2130:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1977-#29	2443149.07	1977 Jan 5 1344:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1977-#30	2443149.09	1977 Jan 5 1414:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1977-#31	2443149.10	1977 Jan 5 1420:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Launch	Agency	Launch_Code	Group	Category	LT_Cite	Cite	Notes
						DrpPay							
1977-H32	2443149.10	1977 Jan 5 1430:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5650	-	-
1977-H33	2443149.12	1977 Jan 5 1500:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5650	-	-
1977-H34	2443149.15	1977 Jan 5 1530:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5650	-	-
1977-Y11	2443149.21	1977 Jan 5 1700:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5650	-	-
1977-H36	2443149.22	1977 Jan 5 1710:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5650	-	-
1977-H37	2443149.31	1977 Jan 5 1711:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5650	-	-
1977-H38	2443149.31	1977 Jan 5 1930:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5650	-	-
1977-H39	2443149.33	1977 Jan 5 1952:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5650	-	-
1977-H40	2443149.39	1977 Jan 5 2127:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5650	-	-
1977-H41	2443149.58	1977 Jan 6 0200:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5650	-	-
1977-H42	2443150.10	1977 Jan 6 1430:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5650	-	-
1977-H43	2443150.14	1977 Jan 6 1524:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5650	-	-
1977-H44	2443150.16	1977 Jan 6 1549:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5650	-	-
1977-H45	2443150.29	1977 Jan 6 1659:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5650	-	-
1977-H47	2443151.15	1977 Jan 7 1534:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5650	-	-
1977-H48	2443151.21	1977 Jan 7 1704:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5650	-	-
1977-H49	2443151.28	1977 Jan 7 1846:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5650	-	-
1977-H50	2443151.36	1977 Jan 7 2040:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5650	-	-
1977-H51	2443151.38	1977 Jan 7 2101:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5650	-	-
1977-H52	2443151.39	1977 Jan 7 2122:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5650	-	-
1977-H53	2443152.21	1977 Jan 8 1700:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5650	-	-
1977-H54	2443152.25	1977 Jan 8 1754:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5650	-	-
1977-H55	2443152.40	1977 Jan 8 2132:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5650	-	-
1977-H56	2443152.40	1977 Jan 8 2142:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5650	-	-
1977-H57	2443154.02	1977 Jan 10 1229:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5650	-	-
1977-H58	2443154.11	1977 Jan 10 1457:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5650	-	-
1977-H59	2443154.19	1977 Jan 10 1636:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5650	-	-
1977-H60	2443154.21	1977 Jan 10 1700:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5650	-	-
1977-H61	2443154.22	1977 Jan 10 1710:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5650	-	-
1977-H62	2443154.29	1977 Jan 10 1902:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5650	-	-
1977-H63	2443154.35	1977 Jan 10 2020:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5650	-	-
1977-H64	2443154.51	1977 Jan 11 0059:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5650	-	-
1977-H65	2443154.54	1977 Jan 11 1550:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5650	-	-
1977-H66	2443155.15	1977 Jan 11 1656:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5650	-	-
1977-H67	2443155.22	1977 Jan 11 1715:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5650	-	-
1977-H68	2443155.37	1977 Jan 11 2065:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5650	-	-
1977-H72	2443156.04	1977 Jan 12 1252:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5650	-	-
1977-H73	2443156.14	1977 Jan 12 1520:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5650	-	-
1977-H74	2443156.14	1977 Jan 12 1524:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5650	-	-
1977-H76	2443156.16	1977 Jan 12 1546:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5650	-	-
1977-H75	2443156.17	1977 Jan 12 1639:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5650	-	-
1977-H77	2443156.19	1977 Jan 12 1740:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5650	-	-
1977-H77	2443156.21	1977 Jan 12 1700:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5650	-	-
1977-H77	2443156.21	1977 Jan 12 1700:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5650	-	-
1977-H78	2443156.24	1977 Jan 12 1751:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5650	-	-
1977-H78	2443156.29	1977 Jan 12 1829:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5650	-	-
1977-H79	2443156.30	1977 Jan 12 1901:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5650	-	-
1977-H82	2443156.34	1977 Jan 12 2051:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5650	-	-
1977-H82	2443156.34	1977 Jan 12 2059:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5650	-	-
1977-H84	2443157.15	1977 Jan 13 0104:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5650	-	-
1977-H84	2443157.19	1977 Jan 13 1634:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5650	-	-
1977-H85	2443157.20	1977 Jan 13 1634:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5650	-	-
1977-H85	2443157.20	1977 Jan 13 1634:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5650	-	-
1977-H85	2443157.40	1977 Jan 13 2133:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5650	-	-
1977-H84	2443158.06	1977 Jan 14 1319:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5650	-	-
1977-H87	2443158.07	1977 Jan 14 1344:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5650	-	-
1977-H88	2443158.14	1977 Jan 14 1524:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5650	-	-
1977-H89	2443158.17	1977 Jan 14 1559:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5650	-	-
1977-H90	2443158.19	1977 Jan 14 1630:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5650	-	-
1977-H92	2443158.21	1977 Jan 14 1700:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5650	-	-
1977-H93	2443158.23	1977 Jan 14 1720:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5650	-	-
1977-H94	2443158.35	1977 Jan 14 2026:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5650	-	-
1977-H95	2443158.39	1977 Jan 14 2026:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5650	-	-
1977-H96	2443159.06	1977 Jan 15 1330:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5650	-	-
1977-H97	2443161.10	1977 Jan 17 1417:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5650	-	-
1977-H98	2443161.17	1977 Jan 17 1600:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5650	-	-
1977-H100	2443161.19	1977 Jan 17 1630:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5650	-	-
1977-H100	2443161.20	1977 Jan 17 1634:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5650	-	-
1977-H103	2443161.31	1977 Jan 17 1700:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5650	-	-
1977-H104	2443161.34	1977 Jan 17 1930:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5650	-	-
1977-H105	2443161.36	1977 Jan 17 2037:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5650	-	-
1977-H106	2443161.48	1977 Jan 17 2334:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5650	-	-
1977-H107	2443162.02	1977 Jan 18 0210:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5650	-	-
1977-H108	2443162.02	1977 Jan 18 1224:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5650	-	-
1977-H109	2443162.17	1977 Jan 18 1607:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5650	-	-
1977-H110	2443162.20	1977 Jan 18 1644:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5650	-	-
1977-H111	2443162.22	1977 Jan 18 1644:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5650	-	-
1977-H112	2443162.26	1977 Jan 18 1711:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5650	-	-
1977-H113	2443162.31	1977 Jan 18 1810:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5650	-	-
1977-H114	2443162.33	1977 Jan 18 1930:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5650	-	-
1977-H115	2443162.44	1977 Jan 18 1949:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5650	-	-
1977-Y23	2443162.50	1977 Jan 19 0000:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5650	-	-
1977-Y24	2443162.56	1977 Jan 19 0130:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5650	-	-
1977-H116	2443163.07	1977 Jan 19 1344:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5650	-	-

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Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Launch	Agency	Launch_Code	Group	Category	LT_Cite	Cite	Notes
						DrpPay							
1977-1127	2443163.12	1977 Jan 19 1500:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5650	-	-
1977-1117	2443163.14	1977 Jan 19 1522:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5650	-	-
1977-1117	2443163.17	1977 Jan 19 1559:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5650	-	-
1977-1119	2443163.19	1977 Jan 19 1633:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5650	-	-
1977-1120	2443163.21	1977 Jan 19 1634:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5650	-	-
1977-1121	2443163.21	1977 Jan 19 1702:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5650	-	-
1977-1121	2443163.21	1977 Jan 19 1730:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5650	-	-
1977-1125	2443163.26	1977 Jan 19 1809:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5650	-	-
1977-1125	2443163.26	1977 Jan 19 1821:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5650	-	-
1977-1129	2443163.34	1977 Jan 19 2004:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5650	-	-
1977-1126	2443163.34	1977 Jan 19 2015:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5650	-	-
1977-1127	2443163.38	1977 Jan 19 2107:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5650	-	-
1977-1128	2443163.40	1977 Jan 19 2132:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5650	-	-
1977-1129	2443163.40	1977 Jan 19 2153:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5650	-	-
1977-1130	2443163.41	1977 Jan 20 0069:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5650	-	-
1977-1131	2443163.64	1977 Jan 20 0069:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5650	-	-
1977-1132	2443164.03	1977 Jan 20 1237:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5650	-	-
1977-1133	2443164.12	1977 Jan 20 1500:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5650	-	-
1977-1134	2443164.14	1977 Jan 20 1520:00	Rocketsonde	-	Winter Strato	0.000	MRI	SS	-	Meteo	DSI-5650	-	-
1977-1136	2443164.23	1977 Jan 20 1726:59	Rocketsonde	-	Winter Strato	0.000	MRI	SS	-	Meteo	DSI-5650	-	-
1977-1137	2443164.31	1977 Jan 20 1924:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5650	-	-
1977-1138	2443164.47	1977 Jan 20 2315:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5650	-	-
1977-1140	2443165.09	1977 Jan 21 1415:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5650	-	-
1977-1141	2443165.14	1977 Jan 21 1514:59	Rocketsonde	-	Winter Strato	0.000	MRI	SS	-	Meteo	DSI-5650	-	-
1977-1142	2443165.16	1977 Jan 21 1546:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5650	-	-
1977-1144	2443165.17	1977 Jan 21 1559:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5650	-	-
1977-1145	2443165.17	1977 Jan 21 1600:59	Rocketsonde	-	Winter Strato	0.000	MRI	SS	-	Meteo	DSI-5650	-	-
1977-1146	2443165.21	1977 Jan 21 1709:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5650	-	-
1977-1147	2443165.29	1977 Jan 21 1859:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5650	-	-
1977-1147	2443165.31	1977 Jan 21 1929:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5650	-	-
1977-1148	2443165.36	1977 Jan 21 2094:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5650	-	-
1977-1149	2443165.46	1977 Jan 21 2300:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5650	-	-
1977-1150	2443165.55	1977 Jan 22 0114:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5650	-	-
1977-1151	2443166.15	1977 Jan 22 1559:00	Rocketsonde	-	Winter Strato	0.000	MRI	SS	-	Meteo	DSI-5650	-	-
1977-1152	2443166.20	1977 Jan 22 1654:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5650	-	-
1977-1153	2443166.21	1977 Jan 22 1700:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5650	-	-
1977-1154	2443166.42	1977 Jan 22 2159:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5650	-	-
1977-1155	2443166.47	1977 Jan 22 2310:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5650	-	-
1977-1156	2443166.47	1977 Jan 22 2315:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5650	-	-
1977-1156	2443167.16	1977 Jan 23 1546:59	Rocketsonde	-	Winter Strato	0.000	MRI	SS	-	Meteo	DSI-5650	-	-
1977-1159	2443167.21	1977 Jan 23 1700:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5650	-	-
1977-1160	2443167.25	1977 Jan 23 1900:00	Rocketsonde	-	Winter Strato	0.000	MRI	SS	-	Meteo	DSI-5650	-	-
1977-1161	2443167.42	1977 Jan 23 2300:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5650	-	-
1977-1162	2443167.47	1977 Jan 23 2315:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5650	-	-
1977-1163	2443167.50	1977 Jan 24 0000:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5650	-	-
1977-1164	2443168.10	1977 Jan 24 1459:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5650	-	-
1977-1165	2443168.11	1977 Jan 24 1530:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5650	-	-
1977-1166	2443168.15	1977 Jan 24 1531:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5650	-	-
1977-1167	2443168.17	1977 Jan 24 1559:59	Rocketsonde	-	Winter Strato	0.000	MRI	SS	-	Meteo	DSI-5650	-	-
1977-1168	2443168.19	1977 Jan 24 1634:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5650	-	-
1977-1170	2443168.21	1977 Jan 24 1900:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5650	-	-
1977-1171	2443168.25	1977 Jan 24 2256:59	Rocketsonde	-	Winter Strato	0.000	MRI	SS	-	Meteo	DSI-5650	-	-
1977-1172	2443168.26	1977 Jan 24 2300:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5650	-	-
1977-1173	2443168.46	1977 Jan 25 0000:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5650	-	-
1977-1174	2443168.50	1977 Jan 25 1234:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5650	-	-
1977-1175	2443168.92	1977 Jan 25 1514:59	Rocketsonde	-	Winter Strato	0.000	MRI	SS	-	Meteo	DSI-5650	-	-
1977-1176	2443169.14	1977 Jan 25 1700:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5650	-	-
1977-1177	2443169.21	1977 Jan 25 2020:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5650	-	-
1977-1179	2443169.35	1977 Jan 26 1700:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5650	-	-
1977-1180	2443170.07	1977 Jan 26 1944:59	Rocketsonde	-	Winter Strato	0.000	MRI	SS	-	Meteo	DSI-5650	-	-
1977-1181	2443170.10	1977 Jan 26 1421:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5650	-	-
1977-1182	2443170.15	1977 Jan 26 1530:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5650	-	-
1977-1183	2443170.15	1977 Jan 26 1542:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5650	-	-
1977-1185	2443170.21	1977 Jan 26 1700:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5650	-	-
1977-1186	2443170.32	1977 Jan 26 1944:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5650	-	-
1977-1187	2443170.37	1977 Jan 26 2036:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5650	-	-
1977-1188	2443170.40	1977 Jan 26 2047:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5650	-	-
1977-1189	2443170.41	1977 Jan 26 2153:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5650	-	-
1977-1190	2443170.58	1977 Jan 27 0200:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5650	-	-
1977-1191	2443171.14	1977 Jan 27 1514:59	Rocketsonde	-	Winter Strato	0.000	MRI	SS	-	Meteo	DSI-5650	-	-
1977-1192	2443171.14	1977 Jan 27 1529:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5650	-	-
1977-1193	2443171.17	1977 Jan 27 1609:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5650	-	-
1977-1194	2443171.19	1977 Jan 27 1630:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5650	-	-
1977-1195	2443171.25	1977 Jan 27 1800:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5650	-	-
1977-1196	2443171.32	1977 Jan 27 1942:59	Rocketsonde	-	Winter Strato	0.000	MRI	SS	-	Meteo	DSI-5650	-	-
1977-1197	2443171.36	1977 Jan 27 2033:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5650	-	-
1977-1198	2443171.40	1977 Jan 27 2129:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5650	-	-
1977-1199	2443171.58	1977 Jan 28 0200:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5650	-	-
1977-1200	2443172.07	1977 Jan 28 1344:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5650	-	-
1977-1201	2443172.12	1977 Jan 28 1449:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5650	-	-
1977-1203	2443172.17	1977 Jan 28 1559:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5650	-	-
1977-1204	2443172.17	1977 Jan 28 1559:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5650	-	-
1977-1205	2443172.18	1977 Jan 28 1623:59	Rocketsonde	-	Winter Strato	0.000	MRI	SS	-	Meteo	DSI-5650	-	-



Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Launch_D	Agency	Launch_Code	Group	Category	LT_Cite	Cite	Notes
1977-4206	2443172.19	1977 Jan 28 1630:59	Rocketsonde	-	-	0.000	MRN	SS	-	Meteo	DSI-5850	-	-
1977-4207	2443172.25	1977 Jan 28 1800:00	Rocketsonde	-	Winter Strato	0.000	MRN	SS	-	Meteo	DSI-5850	-	-
1977-4208	2443172.32	1977 Jan 28 1944:59	Rocketsonde	-	-	0.000	MRN	SS	-	Meteo	DSI-5850	-	-
1977-4209	2443172.36	1977 Jan 28 2041:00	Rocketsonde	-	-	0.000	MRN	SS	-	Meteo	DSI-5850	-	-
1977-4210	2443172.38	1977 Jan 28 2100:00	Rocketsonde	-	-	0.000	MRN	SS	-	Meteo	DSI-5850	-	-
1977-4211	2443172.42	1977 Jan 28 2159:59	Rocketsonde	-	-	0.000	MRN	SS	-	Meteo	DSI-5850	-	-
1977-4212	2443172.48	1977 Jan 28 2325:00	Rocketsonde	-	-	0.000	MRN	SS	-	Meteo	DSI-5850	-	-
1977-4213	2443172.50	1977 Jan 29 0001:59	Rocketsonde	-	-	0.000	MRN	SS	-	Meteo	DSI-5850	-	-
1977-4214	2443173.16	1977 Jan 29 1544:00	Rocketsonde	-	Winter Strato	0.000	MRN	SS	-	Meteo	DSI-5850	-	-
1977-4215	2443173.21	1977 Jan 29 1700:00	Rocketsonde	-	-	0.000	MRN	SS	-	Meteo	DSI-5850	-	-
1977-4216	2443173.25	1977 Jan 29 1800:00	Rocketsonde	-	Winter Strato	0.000	MRN	SS	-	Meteo	DSI-5850	-	-
1977-4217	2443173.42	1977 Jan 29 2207:00	Rocketsonde	-	-	0.000	MRN	SS	-	Meteo	DSI-5850	-	-
1977-4218	2443173.47	1977 Jan 29 2315:00	Rocketsonde	-	-	0.000	MRN	SS	-	Meteo	DSI-5850	-	-
1977-4219	2443173.48	1977 Jan 29 2350:00	Rocketsonde	-	-	0.000	MRN	SS	-	Meteo	DSI-5850	-	-
1977-4220	2443174.15	1977 Jan 30 1536:59	Rocketsonde	-	Winter Strato	0.000	MRN	SS	-	Meteo	DSI-5850	-	-
1977-4221	2443174.21	1977 Jan 30 1700:00	Rocketsonde	-	-	0.000	MRN	SS	-	Meteo	DSI-5850	-	-
1977-4222	2443174.25	1977 Jan 30 1800:00	Rocketsonde	-	Winter Strato	0.000	MRN	SS	-	Meteo	DSI-5850	-	-
1977-4223	2443174.42	1977 Jan 30 2159:59	Rocketsonde	-	-	0.000	MRN	SS	-	Meteo	DSI-5850	-	-
1977-4224	2443174.47	1977 Jan 30 2315:00	Rocketsonde	-	-	0.000	MRN	SS	-	Meteo	DSI-5850	-	-
1977-4225	2443175.08	1977 Jan 31 1400:00	Rocketsonde	-	-	0.000	MRN	SS	-	Meteo	DSI-5850	-	-
1977-4226	2443175.11	1977 Jan 31 1440:00	Rocketsonde	-	-	0.000	MRN	SS	-	Meteo	DSI-5850	-	-
1977-4228	2443175.19	1977 Jan 31 1630:00	Rocketsonde	-	-	0.000	MRN	SS	-	Meteo	DSI-5850	-	-
1977-4229	2443175.19	1977 Jan 31 1640:00	Rocketsonde	-	-	0.000	MRN	SS	-	Meteo	DSI-5850	-	-
1977-4240	2443175.21	1977 Jan 31 1700:00	Rocketsonde	-	Winter Strato	0.000	MRN	SS	-	Meteo	DSI-5850	-	-
1977-4241	2443175.23	1977 Jan 31 1730:00	Rocketsonde	-	-	0.000	MRN	SS	-	Meteo	DSI-5850	-	-
1977-4242	2443175.27	1977 Jan 31 1840:00	Rocketsonde	-	Winter Strato	0.000	MRN	SS	-	Meteo	DSI-5850	-	-
1977-4243	2443175.32	1977 Jan 31 1940:00	Rocketsonde	-	-	0.000	MRN	SS	-	Meteo	DSI-5850	-	-
1977-4244	2443175.46	1977 Feb 1 0205:59	Rocketsonde	-	-	0.000	MRN	SS	-	Meteo	DSI-5850	-	-
1977-4245	2443176.19	1977 Feb 1 1626:59	Rocketsonde	-	Winter Strato	0.000	MRN	SS	-	Meteo	DSI-5850	-	-
1977-4246	2443176.21	1977 Feb 1 1700:00	Rocketsonde	-	-	0.000	MRN	SS	-	Meteo	DSI-5850	-	-
1977-4247	2443176.29	1977 Feb 1 1859:59	Rocketsonde	-	Winter Strato	0.000	MRN	SS	-	Meteo	DSI-5850	-	-
1977-4248	2443176.37	1977 Feb 1 2046:59	Rocketsonde	-	-	0.000	MRN	SS	-	Meteo	DSI-5850	-	-
1977-4249	2443176.40	1977 Feb 1 2132:00	Rocketsonde	-	-	0.000	MRN	SS	-	Meteo	DSI-5850	-	-
1977-4250	2443176.42	1977 Feb 1 2201:59	Rocketsonde	-	-	0.000	MRN	SS	-	Meteo	DSI-5850	-	-
1977-4252	2443177.02	1977 Feb 2 1327:59	Rocketsonde	-	-	0.000	MRN	SS	-	Meteo	DSI-5850	-	-
1977-4253	2443177.07	1977 Feb 2 1344:59	Rocketsonde	-	-	0.000	MRN	SS	-	Meteo	DSI-5850	-	-
1977-4254	2443177.10	1977 Feb 2 1426:59	Rocketsonde	-	-	0.000	MRN	SS	-	Meteo	DSI-5850	-	-
1977-4255	2443177.17	1977 Feb 2 1601:59	Rocketsonde	-	-	0.000	MRN	SS	-	Meteo	DSI-5850	-	-
1977-4256	2443177.19	1977 Feb 2 1650:00	Rocketsonde	-	-	0.000	MRN	SS	-	Meteo	DSI-5850	-	-
1977-4257	2443177.21	1977 Feb 2 1700:00	Rocketsonde	-	-	0.000	MRN	SS	-	Meteo	DSI-5850	-	-
1977-4258	2443177.24	1977 Feb 2 1702:00	Rocketsonde	-	Winter Strato	0.000	MRN	SS	-	Meteo	DSI-5850	-	-
1977-4259	2443177.25	1977 Feb 2 1800:00	Rocketsonde	-	-	0.000	MRN	SS	-	Meteo	DSI-5850	-	-
1977-4260	2443177.25	1977 Feb 2 1900:00	Rocketsonde	-	-	0.000	MRN	SS	-	Meteo	DSI-5850	-	-
1977-4261	2443177.44	1977 Feb 2 2240:00	Rocketsonde	-	-	0.000	MRN	SS	-	Meteo	DSI-5850	-	-
1977-4262	2443177.49	1977 Feb 3 0046:00	Rocketsonde	-	-	0.000	MRN	SS	-	Meteo	DSI-5850	-	-
1977-4263	2443177.54	1977 Feb 3 0359:59	Rocketsonde	-	-	0.000	MRN	SS	-	Meteo	DSI-5850	-	-
1977-4264	2443178.14	1977 Feb 3 1236:59	Rocketsonde	-	-	0.000	MRN	SS	-	Meteo	DSI-5850	-	-
1977-4265	2443178.19	1977 Feb 3 1326:59	Rocketsonde	-	Winter Strato	0.000	MRN	SS	-	Meteo	DSI-5850	-	-
1977-4266	2443178.31	1977 Feb 3 1700:00	Rocketsonde	-	-	0.000	MRN	SS	-	Meteo	DSI-5850	-	-
1977-4267	2443178.31	1977 Feb 3 1700:00	Rocketsonde	-	Winter Strato	0.000	MRN	SS	-	Meteo	DSI-5850	-	-
1977-4268	2443178.31	1977 Feb 3 1831:59	Rocketsonde	-	-	0.000	MRN	SS	-	Meteo	DSI-5850	-	-
1977-4269	2443178.50	1977 Feb 3 2131:59	Rocketsonde	-	-	0.000	MRN	SS	-	Meteo	DSI-5850	-	-
1977-4270	2443178.55	1977 Feb 3 0204:59	Rocketsonde	-	-	0.000	MRN	SS	-	Meteo	DSI-5850	-	-
1977-4271	2443178.55	1977 Feb 3 0149:59	Rocketsonde	-	-	0.000	MRN	SS	-	Meteo	DSI-5850	-	-
1977-4272	2443179.02	1977 Feb 3 1227:59	Rocketsonde	-	-	0.000	MRN	SS	-	Meteo	DSI-5850	-	-
1977-4273	2443179.11	1977 Feb 3 1445:00	Rocketsonde	-	-	0.000	MRN	SS	-	Meteo	DSI-5850	-	-
1977-4274	2443179.16	1977 Feb 3 1545:59	Rocketsonde	-	Winter Strato	0.000	MRN	SS	-	Meteo	DSI-5850	-	-
1977-4275	2443179.19	1977 Feb 3 1631:59	Rocketsonde	-	-	0.000	MRN	SS	-	Meteo	DSI-5850	-	-
1977-4276	2443179.19	1977 Feb 3 1636:59	Rocketsonde	-	-	0.000	MRN	SS	-	Meteo	DSI-5850	-	-
1977-4277	2443179.20	1977 Feb 3 1649:59	Rocketsonde	-	-	0.000	MRN	SS	-	Meteo	DSI-5850	-	-
1977-4278	2443179.27	1977 Feb 3 1834:59	Rocketsonde	-	-	0.000	MRN	SS	-	Meteo	DSI-5850	-	-
1977-4279	2443179.30	1977 Feb 3 1913:59	Rocketsonde	-	Winter Strato	0.000	MRN	SS	-	Meteo	DSI-5850	-	-
1977-4280	2443179.37	1977 Feb 3 2046:00	Rocketsonde	-	-	0.000	MRN	SS	-	Meteo	DSI-5850	-	-
1977-4281	2443179.39	1977 Feb 3 2112:59	Rocketsonde	-	-	0.000	MRN	SS	-	Meteo	DSI-5850	-	-
1977-4282	2443179.40	1977 Feb 3 2130:00	Rocketsonde	-	-	0.000	MRN	SS	-	Meteo	DSI-5850	-	-
1977-4283	2443179.49	1977 Feb 3 2345:00	Rocketsonde	-	-	0.000	MRN	SS	-	Meteo	DSI-5850	-	-
1977-4284	2443180.49	1977 Feb 3 0049:59	Rocketsonde	-	-	0.000	MRN	SS	-	Meteo	DSI-5850	-	-
1977-4285	2443181.49	1977 Feb 3 2345:00	Rocketsonde	-	-	0.000	MRN	SS	-	Meteo	DSI-5850	-	-
1977-4286	2443181.49	1977 Feb 3 2345:00	Rocketsonde	-	-	0.000	MRN	SS	-	Meteo	DSI-5850	-	-
1977-4288	2443182.02	1977 Feb 7 1232:00	Rocketsonde	-	-	0.000	MRN	SS	-	Meteo	DSI-5850	-	-
1977-4289	2443182.14	1977 Feb 7 1515:59	Rocketsonde	-	-	0.000	MRN	SS	-	Meteo	DSI-5850	-	-
1977-4290	2443182.15	1977 Feb 7 1530:00	Rocketsonde	-	Winter Strato	0.000	MRN	SS	-	Meteo	DSI-5850	-	-
1977-4291	2443182.17	1977 Feb 7 1559:59	Rocketsonde	-	-	0.000	MRN	SS	-	Meteo	DSI-5850	-	-
1977-4292	2443182.21	1977 Feb 7 1700:00	Rocketsonde	-	-	0.000	MRN	SS	-	Meteo	DSI-5850	-	-
1977-4293	2443182.21	1977 Feb 7 1704:59	Rocketsonde	-	-	0.000	MRN	SS	-	Meteo	DSI-5850	-	-
1977-4294	2443182.26	1977 Feb 7 1814:59	Rocketsonde	-	Winter Strato	0.000	MRN	SS	-	Meteo	DSI-5850	-	-
1977-4295	2443182.30	1977 Feb 7 1907:59	Rocketsonde	-	-	0.000	MRN	SS	-	Meteo	DSI-5850	-	-
1977-4296	2443182.38	1977 Feb 7 2100:00	Rocketsonde	-	-	0.000	MRN	SS	-	Meteo	DSI-5850	-	-
1977-4297	2443182.40	1977 Feb 7 2134:59	Rocketsonde	-	-	0.000	MRN	SS	-	Meteo	DSI-5850	-	-
1977-4298	2443182.48	1977 Feb 7 2337:00	Rocketsonde	-	-	0.000	MRN	SS	-	Meteo	DSI-5850	-	-
1977-4299	2443183.11	1977 Feb 8 1443:00	Rocketsonde	-	-	0.000	MRN	SS	-	Meteo	DSI-5850	-	-
1977-4300	2443183.13	1977 Feb 8 1508:00	Rocketsonde	-	-	0.000	MRN	SS	-	Meteo	DSI-5850	-	-
1977-4301	2443183.15	1977 Feb 8 1541:00	Rocketsonde	-	Winter Strato	0.000	MRN	SS	-	Meteo	DSI-5850	-	-
1977-4302	2443183.17	1977 Feb 8 1559:59	Rocketsonde	-	-	0.000	MRN	SS	-	Meteo	DSI-5850	-	-
1977-4303	2443183.19	1977 Feb 8 1630:00	Rocketsonde	-	-	0.000	MRN	SS	-	Meteo	DSI-5850	-	-

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Launch_ID	Agency	Launch_Code	Group	Category	LT_Cite	Cite	Notes
1977-#304	2443183.21	1977 Feb 8 1700:00	Rocketsonde	-	-	SS	HRH	SS	-	Meteo	DSI-5850	-	-
1977-#305	2443183.26	1977 Feb 8 1810:00	Rocketsonde	-	Winter Strato	SS	HRH	SS	-	Meteo	DSI-5850	-	-
1977-#306	2443183.29	1977 Feb 8 1857:59	Rocketsonde	-	-	SS	HRH	SS	-	Meteo	DSI-5850	-	-
1977-#307	2443183.42	1977 Feb 8 2159:59	Rocketsonde	-	-	SS	HRH	SS	-	Meteo	DSI-5850	-	-
1977-#308	2443183.48	1977 Feb 8 2346:00	Rocketsonde	-	-	SS	HRH	SS	-	Meteo	DSI-5850	-	-
1977-#309	2443183.49	1977 Feb 8 2352:00	Rocketsonde	-	-	SS	HRH	SS	-	Meteo	DSI-5850	-	-
1977-#310	2443184.09	1977 Feb 9 1415:00	Rocketsonde	-	-	SS	HRH	SS	-	Meteo	DSI-5850	-	-
1977-#311	2443184.14	1977 Feb 9 1525:59	Rocketsonde	-	-	SS	HRH	SS	-	Meteo	DSI-5850	-	-
1977-#312	2443184.17	1977 Feb 9 1559:59	Rocketsonde	-	-	SS	HRH	SS	-	Meteo	DSI-5850	-	-
1977-#313	2443184.19	1977 Feb 9 1630:00	Rocketsonde	-	Winter Strato	SS	HRH	SS	-	Meteo	DSI-5850	-	-
1977-#314	2443184.21	1977 Feb 9 1700:00	Rocketsonde	-	-	SS	HRH	SS	-	Meteo	DSI-5850	-	-
1977-#315	2443184.21	1977 Feb 9 1707:00	Rocketsonde	-	-	SS	HRH	SS	-	Meteo	DSI-5850	-	-
1977-#316	2443184.27	1977 Feb 9 1830:00	Rocketsonde	-	-	SS	HRH	SS	-	Meteo	DSI-5850	-	-
1977-#317	2443184.28	1977 Feb 9 1840:00	Rocketsonde	-	-	SS	HRH	SS	-	Meteo	DSI-5850	-	-
1977-#318	2443184.30	1977 Feb 9 1912:59	Rocketsonde	-	-	SS	HRH	SS	-	Meteo	DSI-5850	-	-
1977-#319	2443184.30	1977 Feb 9 1914:59	Rocketsonde	-	-	SS	HRH	SS	-	Meteo	DSI-5850	-	-
1977-#320	2443184.32	1977 Feb 9 1938:59	Rocketsonde	-	-	SS	HRH	SS	-	Meteo	DSI-5850	-	-
1977-#321	2443184.38	1977 Feb 9 2100:00	Rocketsonde	-	-	SS	HRH	SS	-	Meteo	DSI-5850	-	-
1977-#322	2443184.40	1977 Feb 9 2130:00	Rocketsonde	-	-	SS	HRH	SS	-	Meteo	DSI-5850	-	-
1977-#323	2443184.43	1977 Feb 9 2131:00	Rocketsonde	-	-	SS	HRH	SS	-	Meteo	DSI-5850	-	-
1977-#324	2443185.17	1977 Feb 10 1566:59	Rocketsonde	-	Winter Strato	SS	HRH	SS	-	Meteo	DSI-5850	-	-
1977-#325	2443185.19	1977 Feb 10 1630:00	Rocketsonde	-	-	SS	HRH	SS	-	Meteo	DSI-5850	-	-
1977-#326	2443185.21	1977 Feb 10 1700:00	Rocketsonde	-	-	SS	HRH	SS	-	Meteo	DSI-5850	-	-
1977-#327	2443185.28	1977 Feb 10 1849:59	Rocketsonde	-	-	SS	HRH	SS	-	Meteo	DSI-5850	-	-
1977-#328	2443185.29	1977 Feb 10 1859:59	Rocketsonde	-	Winter Strato	SS	HRH	SS	-	Meteo	DSI-5850	-	-
1977-#329	2443185.40	1977 Feb 10 2156:59	Rocketsonde	-	-	SS	HRH	SS	-	Meteo	DSI-5850	-	-
1977-#330	2443185.49	1977 Feb 10 2346:00	Rocketsonde	-	-	SS	HRH	SS	-	Meteo	DSI-5850	-	-
1977-#331	2443185.56	1977 Feb 11 0130:00	Rocketsonde	-	-	SS	HRH	SS	-	Meteo	DSI-5850	-	-
1977-#332	2443186.00	1977 Feb 11 1207:00	Rocketsonde	-	-	SS	HRH	SS	-	Meteo	DSI-5850	-	-
1977-#333	2443186.10	1977 Feb 11 1450:00	Rocketsonde	-	Winter Strato	SS	HRH	SS	-	Meteo	DSI-5850	SR19,141	-
1977-#334	2443186.15	1977 Feb 11 1553:59	Rocketsonde	-	-	SS	HRH	SS	-	Meteo	DSI-5850	-	-
1977-#335	2443186.16	1977 Feb 11 1549:59	Rocketsonde	-	-	SS	HRH	SS	-	Meteo	DSI-5850	-	-
1977-#336	2443186.21	1977 Feb 11 1700:00	Rocketsonde	-	-	SS	HRH	SS	-	Meteo	DSI-5850	-	-
1977-#337	2443186.29	1977 Feb 11 1859:59	Rocketsonde	-	Winter Strato	SS	HRH	SS	-	Meteo	DSI-5850	SR19,141	-
1977-#338	2443186.32	1977 Feb 11 1954:59	Rocketsonde	-	-	SS	HRH	SS	-	Meteo	DSI-5850	-	-
1977-#339	2443186.37	1977 Feb 11 2065:00	Rocketsonde	-	-	SS	HRH	SS	-	Meteo	DSI-5850	-	-
1977-#340	2443186.42	1977 Feb 11 2200:59	Rocketsonde	-	-	SS	HRH	SS	-	Meteo	DSI-5850	-	-
1977-#341	2443186.50	1977 Feb 12 0005:59	Rocketsonde	-	-	SS	HRH	SS	-	Meteo	DSI-5850	-	-
1977-#342	2443186.50	1977 Feb 12 2346:00	Rocketsonde	-	-	SS	HRH	SS	-	Meteo	DSI-5850	-	-
1977-#343	2443187.49	1977 Feb 13 2346:00	Rocketsonde	-	-	SS	HRH	SS	-	Meteo	DSI-5850	-	-
1977-#344	2443188.49	1977 Feb 14 1346:00	Rocketsonde	-	-	SS	HRH	SS	-	Meteo	DSI-5850	-	-
1977-#345	2443189.07	1977 Feb 14 1609:59	Rocketsonde	-	-	SS	HRH	SS	-	Meteo	DSI-5850	-	-
1977-#346	2443189.19	1977 Feb 14 1637:59	Rocketsonde	-	-	SS	HRH	SS	-	Meteo	DSI-5850	-	-
1977-#347	2443189.35	1977 Feb 14 1747:00	Rocketsonde	-	-	SS	HRH	SS	-	Meteo	DSI-5850	-	-
1977-#348	2443189.37	1977 Feb 14 1757:00	Rocketsonde	-	-	SS	HRH	SS	-	Meteo	DSI-5850	-	-
1977-#349	2443189.37	1977 Feb 14 1830:00	Rocketsonde	-	-	SS	HRH	SS	-	Meteo	DSI-5850	-	-
1977-#350	2443189.35	1977 Feb 14 1830:00	Rocketsonde	-	-	SS	HRH	SS	-	Meteo	DSI-5850	-	-
1977-#351	2443189.35	1977 Feb 14 1830:00	Rocketsonde	-	-	SS	HRH	SS	-	Meteo	DSI-5850	-	-
1977-#352	2443189.44	1977 Feb 15 0114:59	Rocketsonde	-	-	SS	HRH	SS	-	Meteo	DSI-5850	-	-
1977-#353	2443190.39	1977 Feb 15 1859:59	Rocketsonde	-	-	SS	HRH	SS	-	Meteo	DSI-5850	-	-
1977-#354	2443190.39	1977 Feb 15 1859:59	Rocketsonde	-	-	SS	HRH	SS	-	Meteo	DSI-5850	-	-
1977-#355	2443190.52	1977 Feb 16 0034:59	Rocketsonde	-	-	SS	HRH	SS	-	Meteo	DSI-5850	-	-
1977-#356	2443191.07	1977 Feb 16 1344:59	Rocketsonde	-	-	SS	HRH	SS	-	Meteo	DSI-5850	-	-
1977-#357	2443191.12	1977 Feb 16 1456:00	Rocketsonde	-	-	SS	HRH	SS	-	Meteo	DSI-5850	-	-
1977-#358	2443191.14	1977 Feb 16 1520:00	Rocketsonde	-	-	SS	HRH	SS	-	Meteo	DSI-5850	-	-
1977-#359	2443191.19	1977 Feb 16 1630:00	Rocketsonde	-	-	SS	HRH	SS	-	Meteo	DSI-5850	-	-
1977-#360	2443191.23	1977 Feb 16 1720:00	Rocketsonde	-	-	SS	HRH	SS	-	Meteo	DSI-5850	-	-
1977-#361	2443191.27	1977 Feb 16 1824:59	Rocketsonde	-	-	SS	HRH	SS	-	Meteo	DSI-5850	-	-
1977-#362	2443191.40	1977 Feb 16 2140:00	Rocketsonde	-	-	SS	HRH	SS	-	Meteo	DSI-5850	-	-
1977-#363	2443191.50	1977 Feb 17 0000:59	Rocketsonde	-	-	SS	HRH	SS	-	Meteo	DSI-5850	-	-
1977-#364	2443192.26	1977 Feb 17 1814:59	Rocketsonde	-	-	SS	HRH	SS	-	Meteo	DSI-5850	-	-
1977-#365	2443192.33	1977 Feb 17 2001:00	Rocketsonde	-	-	SS	HRH	SS	-	Meteo	DSI-5850	-	-
1977-#366	2443192.40	1977 Feb 17 2150:00	Rocketsonde	-	-	SS	HRH	SS	-	Meteo	DSI-5850	-	-
1977-#367	2443192.41	1977 Feb 17 2152:00	Rocketsonde	-	-	SS	HRH	SS	-	Meteo	DSI-5850	-	-
1977-#368	2443192.50	1977 Feb 17 2353:00	Rocketsonde	-	-	SS	HRH	SS	-	Meteo	DSI-5850	-	-
1977-#369	2443193.14	1977 Feb 18 1520:00	Rocketsonde	-	-	SS	HRH	SS	-	Meteo	DSI-5850	-	-
1977-#370	2443193.15	1977 Feb 18 1530:00	Rocketsonde	-	-	SS	HRH	SS	-	Meteo	DSI-5850	-	-
1977-#371	2443193.15	1977 Feb 18 1530:00	Rocketsonde	-	-	SS	HRH	SS	-	Meteo	DSI-5850	-	-
1977-#372	2443193.19	1977 Feb 18 1637:59	Rocketsonde	-	-	SS	HRH	SS	-	Meteo	DSI-5850	-	-
1977-#373	2443193.27	1977 Feb 18 1830:00	Rocketsonde	-	-	SS	HRH	SS	-	Meteo	DSI-5850	-	-
1977-#374	2443193.27	1977 Feb 18 1835:59	Rocketsonde	-	-	SS	HRH	SS	-	Meteo	DSI-5850	-	-
1977-#375	2443193.31	1977 Feb 18 1923:59	Rocketsonde	-	-	SS	HRH	SS	-	Meteo	DSI-5850	-	-
1977-#376	2443196.20	1977 Feb 21 1444:00	Rocketsonde	-	-	SS	HRH	SS	-	Meteo	DSI-5850	-	-
1977-#377	2443197.03	1977 Feb 21 1644:59	Rocketsonde	-	-	SS	HRH	SS	-	Meteo	DSI-5850	-	-
1977-#378	2443197.17	1977 Feb 22 1245:00	Rocketsonde	-	-	SS	HRH	SS	-	Meteo	DSI-5850	-	-
1977-#379	2443197.18	1977 Feb 22 1559:59	Rocketsonde	-	-	SS	HRH	SS	-	Meteo	DSI-5850	-	-
1977-#380	2443197.26	1977 Feb 22 1820:00	Rocketsonde	-	-	SS	HRH	SS	-	Meteo	DSI-5850	-	-
1977-#381	2443197.31	1977 Feb 22 1930:00	Rocketsonde	-	-	SS	HRH	SS	-	Meteo	DSI-5850	-	-
1977-#382	2443197.40	1977 Feb 22 2136:59	Rocketsonde	-	-	SS	HRH	SS	-	Meteo	DSI-5850	-	-
1977-#383	2443198.07	1977 Feb 23 1344:59	Rocketsonde	-	-	SS	HRH	SS	-	Meteo	DSI-5850	-	-
1977-#384	2443198.11	1977 Feb 23 1432:00	Rocketsonde	-	-	SS	HRH	SS	-	Meteo	DSI-5850	-	-
1977-#385	2443198.12	1977 Feb 23 1500:00	Rocketsonde	-	-	SS	HRH	SS	-	Meteo	DSI-5850	-	-



Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Launch_e	Agency	Launch_Code	Group	Category	LT_Cite	Cite	Notes
1977-4896	2443214.20	1977 Mar 11 1649:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1977-4897	2443214.21	1977 Mar 11 1700:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1977-4898	2443214.25	1977 Mar 11 1763:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1977-4899	2443214.36	1977 Mar 11 2040:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1977-4901	2443217.07	1977 Mar 14 1344:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1977-4902	2443217.13	1977 Mar 14 1510:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1977-4903	2443217.14	1977 Mar 14 1520:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1977-4905	2443217.20	1977 Mar 14 1644:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1977-4915	2443217.20	1977 Mar 14 1648:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1977-4907	2443217.27	1977 Mar 14 1918:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1977-4908	2443217.30	1977 Mar 14 1918:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1977-4909	2443218.21	1977 Mar 15 1700:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1977-4911	2443218.60	1977 Mar 16 0000:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1977-4912	2443219.00	1977 Mar 16 1207:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1977-4913	2443219.11	1977 Mar 16 1446:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1977-4914	2443219.12	1977 Mar 16 1465:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1977-4917	2443219.14	1977 Mar 16 1520:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1977-4918	2443219.15	1977 Mar 16 1530:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1977-4919	2443219.19	1977 Mar 16 1630:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1977-4921	2443219.21	1977 Mar 16 1700:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1977-4923	2443219.27	1977 Mar 16 1830:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1977-4924	2443219.47	1977 Mar 16 1840:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1977-4925	2443219.55	1977 Mar 16 2315:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1977-4926	2443220.14	1977 Mar 17 0114:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1977-4927	2443220.26	1977 Mar 17 1524:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1977-4928	2443220.26	1977 Mar 17 1620:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1977-4929	2443220.50	1977 Mar 17 2356:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1977-4932	2443221.02	1977 Mar 18 1227:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1977-4933	2443221.11	1977 Mar 18 1440:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1977-4934	2443221.14	1977 Mar 18 1514:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1977-4935	2443221.16	1977 Mar 18 1546:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1977-4936	2443221.17	1977 Mar 18 1606:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1977-4937	2443221.19	1977 Mar 18 1630:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1977-4938	2443221.27	1977 Mar 18 1639:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1977-4939	2443221.30	1977 Mar 18 1907:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1977-4940	2443221.36	1977 Mar 18 2046:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1977-4941	2443224.09	1977 Mar 21 1414:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1977-4942	2443224.12	1977 Mar 21 1500:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1977-4943	2443224.19	1977 Mar 21 1630:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1977-4944	2443224.27	1977 Mar 21 1639:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1977-4945	2443224.31	1977 Mar 21 1747:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1977-4946	2443225.05	1977 Mar 22 1246:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1977-4947	2443225.19	1977 Mar 22 1649:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1977-4948	2443225.20	1977 Mar 22 1649:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1977-4949	2443225.81	1977 Mar 23 0740:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1977-4950	2443226.01	1977 Mar 23 1211:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1977-4951	2443226.15	1977 Mar 23 1530:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1977-4952	2443226.15	1977 Mar 23 1630:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1977-4953	2443226.15	1977 Mar 23 1644:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1977-4954	2443226.20	1977 Mar 23 1745:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1977-4955	2443226.24	1977 Mar 23 1755:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1977-4956	2443226.26	1977 Mar 23 1920:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1977-4957	2443226.32	1977 Mar 23 1940:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1977-4958	2443226.32	1977 Mar 23 1947:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1977-4959	2443226.38	1977 Mar 23 2111:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1977-4960	2443227.13	1977 Mar 24 1503:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1977-4961	2443227.20	1977 Mar 24 1649:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1977-4962	2443227.28	1977 Mar 24 1845:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1977-4963	2443227.68	1977 Mar 25 0200:00	Super Loki	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1977-4964	2443227.82	1977 Mar 25 0300:00	Super Loki	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1977-4965	2443228.02	1977 Mar 25 1227:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1977-4966	2443228.02	1977 Mar 25 1420:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1977-4967	2443228.14	1977 Mar 25 1527:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1977-4968	2443228.17	1977 Mar 25 1611:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1977-4969	2443228.25	1977 Mar 25 1800:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1977-4970	2443228.48	1977 Mar 25 2330:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1977-4971	2443228.55	1977 Mar 26 0114:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1977-4972	2443231.05	1977 Mar 28 1309:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1977-4973	2443231.10	1977 Mar 28 1420:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1977-4974	2443231.10	1977 Mar 28 1420:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1977-4975	2443231.17	1977 Mar 28 1495:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1977-4976	2443231.22	1977 Mar 28 1717:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1977-4977	2443231.23	1977 Mar 28 1730:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1977-4978	2443231.25	1977 Mar 28 1800:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1977-4979	2443231.29	1977 Mar 28 1859:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1977-4980	2443231.31	1977 Mar 28 1930:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1977-4981	2443232.14	1977 Mar 29 1514:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1977-4982	2443232.19	1977 Mar 29 1630:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1977-4983	2443232.21	1977 Mar 29 1700:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1977-4984	2443232.50	1977 Mar 29 2356:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1977-4985	2443233.02	1977 Mar 30 1224:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1977-4986	2443233.09	1977 Mar 30 1410:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Launch_e	Agency	Launch_Code	Group	Category	LT_Cite	Cite	Notes
1977-H694	2443233.11	1977 Mar 30 1443:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1977-H695	2443233.15	1977 Mar 30 1530:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1977-Y137	2443233.19	1977 Mar 30 1631:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1977-H697	2443233.21	1977 Mar 30 1700:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1977-H698	2443233.26	1977 Mar 30 1810:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1977-H699	2443233.28	1977 Mar 30 1838:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1977-H600	2443233.33	1977 Mar 30 1949:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1977-H601	2443233.35	1977 Mar 30 2019:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1977-Y138	2443233.50	1977 Mar 30 2358:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1977-H604	2443234.20	1977 Mar 31 1644:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1977-H605	2443234.23	1977 Mar 31 1730:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1977-H606	2443235.07	1977 Apr 1 1344:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1977-H608	2443235.12	1977 Apr 1 1449:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1977-H609	2443235.15	1977 Apr 1 1533:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1977-H610	2443235.16	1977 Apr 1 1645:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1977-H611	2443235.17	1977 Apr 1 1609:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1977-H613	2443235.25	1977 Apr 1 1802:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1977-Y140	2443235.29	1977 Apr 1 1951:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1977-H614	2443235.30	1977 Apr 1 1917:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1977-H615	2443235.35	1977 Apr 1 2026:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1977-Y141	2443235.40	1977 Apr 1 2130:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1977-H616	2443235.42	1977 Apr 1 2203:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1977-H617	2443235.55	1977 Apr 2 0114:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1977-H620	2443238.01	1977 Apr 4 1220:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1977-H621	2443238.11	1977 Apr 4 1430:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1977-H622	2443238.12	1977 Apr 4 1445:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1977-H623	2443238.12	1977 Apr 4 1449:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1977-H624	2443238.19	1977 Apr 4 1630:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1977-H625	2443238.21	1977 Apr 4 1700:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1977-H626	2443238.25	1977 Apr 4 1756:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1977-H627	2443238.29	1977 Apr 4 1858:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1977-H628	2443238.33	1977 Apr 4 2000:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1977-H629	2443239.49	1977 Apr 5 2352:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1977-H630	2443240.01	1977 Apr 6 1217:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1977-H631	2443240.12	1977 Apr 6 1453:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1977-H632	2443240.12	1977 Apr 6 1456:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1977-H633	2443240.14	1977 Apr 6 1525:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1977-H634	2443240.18	1977 Apr 6 1624:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1977-H635	2443240.18	1977 Apr 6 1626:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1977-H636	2443240.19	1977 Apr 6 1650:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1977-H637	2443240.23	1977 Apr 6 1727:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1977-H638	2443240.34	1977 Apr 6 1730:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1977-H639	2443240.35	1977 Apr 6 2031:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1977-H640	2443240.39	1977 Apr 6 2031:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1977-H641	2443240.42	1977 Apr 6 2159:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1977-H642	2443241.21	1977 Apr 7 1700:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1977-H643	2443243.09	1977 Apr 7 2131:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1977-H644	2443243.09	1977 Apr 8 1440:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1977-H645	2443243.11	1977 Apr 8 1444:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1977-H646	2443243.14	1977 Apr 8 1520:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1977-H647	2443243.16	1977 Apr 8 1616:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1977-Y151	2443243.26	1977 Apr 8 1816:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1977-Y151	2443243.27	1977 Apr 8 1830:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1977-H648	2443243.30	1977 Apr 8 2125:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1977-H649	2443245.00	1977 Apr 11 1204:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1977-H650	2443245.11	1977 Apr 11 1445:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1977-H651	2443245.17	1977 Apr 11 1604:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1977-H652	2443245.20	1977 Apr 11 1634:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1977-H653	2443245.26	1977 Apr 11 1811:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1977-H654	2443245.28	1977 Apr 11 1841:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1977-H655	2443246.23	1977 Apr 12 1730:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1977-H656	2443246.50	1977 Apr 12 2359:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1977-H658	2443247.02	1977 Apr 13 1227:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1977-H659	2443247.12	1977 Apr 13 1458:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1977-Y156	2443247.12	1977 Apr 13 1500:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1977-H660	2443247.15	1977 Apr 13 1533:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1977-H662	2443247.17	1977 Apr 13 1606:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1977-H663	2443247.19	1977 Apr 13 1630:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1977-H664	2443247.21	1977 Apr 13 1700:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1977-H665	2443247.23	1977 Apr 13 1730:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1977-Y157	2443247.25	1977 Apr 13 1755:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1977-H666	2443247.25	1977 Apr 13 1804:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1977-Y158	2443247.31	1977 Apr 13 1925:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1977-H667	2443247.33	1977 Apr 13 1952:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1977-H668	2443247.34	1977 Apr 13 2009:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1977-H669	2443247.36	1977 Apr 13 2034:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1977-H670	2443247.52	1977 Apr 14 0032:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1977-H673	2443248.03	1977 Apr 14 1247:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1977-H674	2443248.14	1977 Apr 14 1514:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1977-Y420	2443248.54	1977 Apr 15 0059:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1977-H675	2443249.12	1977 Apr 15 1447:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1977-H676	2443249.17	1977 Apr 15 1604:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1977-H677	2443249.18	1977 Apr 15 1614:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1977-H678	2443249.18	1977 Apr 15 1622:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1977-H680	2443249.19	1977 Apr 15 1634:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Launch_e	Agency	Launch_Code	Group	Category	LT_Cite	Cite	Notes
1977-0681	2443249.38	1977 Apr 15 21:11:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1977-0682	2443249.40	1977 Apr 15 21:35:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1977-0683	2443252.00	1977 Apr 18 12:06:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1977-0684	2443252.12	1977 Apr 18 14:49:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1977-0685	2443252.18	1977 Apr 18 16:21:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1977-0686	2443252.21	1977 Apr 18 17:00:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1977-0687	2443252.23	1977 Apr 18 17:30:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1977-0688	2443252.25	1977 Apr 18 18:00:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1977-0689	2443252.32	1977 Apr 18 19:46:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1977-0690	2443253.42	1977 Apr 19 21:59:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1977-0694	2443254.07	1977 Apr 20 13:44:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1977-0695	2443254.15	1977 Apr 20 15:40:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1977-0696	2443254.16	1977 Apr 20 15:52:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1977-0701	2443254.23	1977 Apr 20 17:30:00	Shiper Lok1	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1977-0703	2443254.25	1977 Apr 20 18:02:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1977-0704	2443254.26	1977 Apr 20 18:14:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1977-0705	2443254.27	1977 Apr 20 18:30:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1977-0706	2443254.32	1977 Apr 20 19:34:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1977-0707	2443254.36	1977 Apr 21 01:23:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1977-0709	2443255.15	1977 Apr 21 15:40:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1977-0710	2443256.02	1977 Apr 22 12:33:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1977-0712	2443256.12	1977 Apr 22 14:49:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1977-0713	2443256.14	1977 Apr 22 15:14:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1977-0715	2443256.16	1977 Apr 22 16:19:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1977-0716	2443256.19	1977 Apr 22 16:35:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1977-0717	2443256.23	1977 Apr 22 17:30:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1977-0718	2443256.26	1977 Apr 22 18:09:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1977-0719	2443256.40	1977 Apr 23 01:14:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1977-0721	2443259.01	1977 Apr 25 12:11:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1977-0722	2443259.13	1977 Apr 25 15:03:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1977-0724	2443259.25	1977 Apr 25 18:06:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1977-0726	2443259.27	1977 Apr 25 18:10:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1977-0727	2443259.34	1977 Apr 25 20:10:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1977-0729	2443260.15	1977 Apr 26 15:42:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1977-0730	2443260.19	1977 Apr 26 16:40:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1977-0731	2443260.24	1977 Apr 26 17:00:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1977-0732	2443260.35	1977 Apr 26 21:09:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1977-0733	2443261.02	1977 Apr 27 12:53:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1977-0734	2443261.10	1977 Apr 27 14:29:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1977-0735	2443261.14	1977 Apr 27 15:15:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1977-0736	2443261.16	1977 Apr 27 15:45:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1977-0738	2443261.31	1977 Apr 27 17:00:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1977-0739	2443261.31	1977 Apr 27 18:04:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1977-0740	2443261.36	1977 Apr 27 18:14:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1977-0741	2443261.36	1977 Apr 27 20:40:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1977-0742	2443261.39	1977 Apr 27 21:14:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1977-0743	2443261.47	1977 Apr 27 23:12:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1977-0744	2443262.40	1977 Apr 29 21:40:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1977-0746	2443263.07	1977 Apr 29 13:44:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1977-0748	2443263.12	1977 Apr 29 14:57:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1977-0749	2443263.16	1977 Apr 29 15:37:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1977-0750	2443263.16	1977 Apr 29 15:55:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1977-0751	2443263.19	1977 Apr 29 16:30:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1977-0752	2443263.25	1977 Apr 29 18:00:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1977-0753	2443263.33	1977 Apr 29 19:58:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1977-0754	2443263.34	1977 Apr 29 20:00:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1977-0755	2443263.44	1977 Apr 29 22:34:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1977-0759	2443266.08	1977 May 2 14:00:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1977-0760	2443266.15	1977 May 2 15:30:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1977-0761	2443266.18	1977 May 2 16:13:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1977-0762	2443266.21	1977 May 2 17:00:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1977-0763	2443266.25	1977 May 2 17:58:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1977-0764	2443266.27	1977 May 2 18:32:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1977-0765	2443266.33	1977 May 2 20:00:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1977-0766	2443266.37	1977 May 2 18:32:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1977-0767	2443266.38	1977 May 2 20:00:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1977-0768	2443266.58	1977 May 3 02:01:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1977-0771	2443267.05	1977 May 3 13:14:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1977-0772	2443267.27	1977 May 3 18:30:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1977-0774	2443268.07	1977 May 4 13:44:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1977-0775	2443268.08	1977 May 4 14:35:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1977-0776	2443268.11	1977 May 4 14:48:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1977-0777	2443268.12	1977 May 4 14:48:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1977-0778	2443268.15	1977 May 4 15:30:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1977-0779	2443268.15	1977 May 4 15:30:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1977-0780	2443268.17	1977 May 4 16:09:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1977-0781	2443268.19	1977 May 4 16:34:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1977-0782	2443268.22	1977 May 4 17:15:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1977-0782	2443268.29	1977 May 4 18:56:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-



Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Launch_e	Agency	Launch_Code	Group	Category	LT_Cite	Cite	Notes
1977-H868	2443284.18	1977 May 20 1622:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1977-H869	2443284.19	1977 May 20 1630:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1977-H870	2443284.25	1977 May 20 1755:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1977-H871	2443284.26	1977 May 20 1810:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1977-H872	2443284.38	1977 May 20 2100:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1977-H873	2443284.39	1977 May 20 2117:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1977-H874	2443284.53	1977 May 21 0056:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1977-H875	2443284.54	1977 May 21 0056:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1977-H876	2443287.02	1977 May 23 1224:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1977-H877	2443287.23	1977 May 23 1730:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1977-H878	2443287.25	1977 May 23 1800:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1977-H879	2443287.30	1977 May 23 1918:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1977-H880	2443287.35	1977 May 23 2020:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1977-H881	2443287.46	1977 May 23 2020:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1977-H882	2443288.13	1977 May 24 1510:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1977-H884	2443288.03	1977 May 25 1241:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1977-H885	2443289.07	1977 May 25 1344:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1977-H886	2443289.10	1977 May 25 1430:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1977-H888	2443289.12	1977 May 25 1500:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1977-H889	2443289.15	1977 May 25 1530:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1977-H890	2443289.18	1977 May 25 1619:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1977-H891	2443289.25	1977 May 25 1804:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1977-H892	2443289.26	1977 May 25 1815:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1977-H893	2443289.29	1977 May 25 1865:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1977-H894	2443289.34	1977 May 25 2010:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1977-H895	2443289.38	1977 May 25 2100:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1977-H896	2443289.40	1977 May 25 2150:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1977-H897	2443289.51	1977 May 26 0016:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1977-H898	2443290.14	1977 May 26 1520:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1977-H899	2443290.38	1977 May 26 2100:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1977-H900	2443291.07	1977 May 27 1344:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1977-H902	2443291.12	1977 May 27 1453:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1977-H903	2443291.16	1977 May 27 1500:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1977-H904	2443291.19	1977 May 27 1546:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1977-H906	2443291.24	1977 May 27 1740:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1977-H909	2443291.29	1977 May 27 1866:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1977-H910	2443291.38	1977 May 27 2030:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1977-H911	2443291.38	1977 May 27 2109:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1977-H914	2443291.49	1977 May 27 2313:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1977-H915	2443291.56	1977 May 28 0045:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1977-H916	2443291.96	1977 May 28 1044:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1977-H919	2443294.15	1977 May 30 1505:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1977-H920	2443294.15	1977 May 30 1505:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1977-H923	2443295.19	1977 May 31 1510:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1977-H924	2443295.19	1977 May 31 1510:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1977-H925	2443295.22	1977 May 31 1720:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1977-H926	2443295.22	1977 May 31 1720:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1977-H927	2443295.40	1977 May 31 2159:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1977-H929	2443296.05	1977 Jun 1 1344:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1977-H930	2443296.07	1977 Jun 1 1344:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1977-H931	2443296.10	1977 Jun 1 1425:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1977-H932	2443296.13	1977 Jun 1 1515:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1977-H933	2443296.14	1977 Jun 1 1515:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1977-H934	2443296.15	1977 Jun 1 1530:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1977-H935	2443296.15	1977 Jun 1 1530:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1977-H936	2443296.15	1977 Jun 1 1634:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1977-H937	2443296.19	1977 Jun 1 1800:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1977-H938	2443296.25	1977 Jun 1 1800:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1977-H939	2443296.25	1977 Jun 1 1810:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1977-H940	2443296.25	1977 Jun 1 2020:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1977-H941	2443296.35	1977 Jun 1 2159:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1977-H942	2443296.44	1977 Jun 2 0000:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1977-H943	2443296.50	1977 Jun 2 0000:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1977-H944	2443296.56	1977 Jun 2 0120:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1977-H945	2443297.19	1977 Jun 2 1630:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1977-H946	2443297.38	1977 Jun 3 2100:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1977-H947	2443298.10	1977 Jun 3 1417:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1977-H948	2443298.12	1977 Jun 3 1500:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1977-H949	2443298.21	1977 Jun 3 1655:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1977-H950	2443298.25	1977 Jun 3 1804:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1977-H951	2443298.34	1977 Jun 3 2010:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1977-H952	2443298.38	1977 Jun 3 2100:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1977-H953	2443298.55	1977 Jun 4 0114:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1977-H954	2443301.04	1977 Jun 6 1259:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1977-H955	2443301.18	1977 Jun 6 1617:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1977-H956	2443301.19	1977 Jun 6 1630:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1977-H957	2443301.34	1977 Jun 6 2006:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1977-H958	2443301.36	1977 Jun 6 2038:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1977-H959	2443301.55	1977 Jun 7 0114:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1977-H960	2443302.02	1977 Jun 7 1234:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1977-H963	2443303.07	1977 Jun 8 1344:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-





Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Launch_e	Agency	Launch_Code	Group	Category	LT_Cite	Cite	Notes
1978-H24	2443515.46	1978 Jan 6 2300:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1978-H25	2443518.15	1978 Jan 9 1537:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1978-H26	2443518.20	1978 Jan 9 1649:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1978-H27	2443518.25	1978 Jan 9 1800:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1978-H28	2443518.42	1978 Jan 9 2204:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1978-H29	2443518.46	1978 Jan 9 2246:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1978-H30	2443518.50	1978 Jan 9 2359:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1978-H31	2443519.17	1978 Jan 10 1609:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1978-H32	2443519.25	1978 Jan 10 1800:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1978-H33	2443520.13	1978 Jan 11 1508:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1978-H34	2443520.16	1978 Jan 11 1555:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1978-H35	2443520.20	1978 Jan 11 1652:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1978-H36	2443520.21	1978 Jan 11 1700:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1978-H37	2443520.33	1978 Jan 11 2002:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1978-H38	2443520.34	1978 Jan 11 2012:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1978-H39	2443520.42	1978 Jan 11 2233:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1978-H40	2443520.44	1978 Jan 11 2302:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1978-H41	2443520.46	1978 Jan 11 2355:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1978-H42	2443520.50	1978 Jan 12 1850:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1978-H43	2443521.27	1978 Jan 12 1915:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1978-H44	2443521.30	1978 Jan 12 2152:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1978-H45	2443521.41	1978 Jan 13 1712:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1978-H46	2443522.21	1978 Jan 13 1700:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1978-H47	2443522.22	1978 Jan 13 2003:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1978-H48	2443522.34	1978 Jan 13 2040:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1978-H49	2443522.36	1978 Jan 13 2147:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1978-H50	2443522.41	1978 Jan 14 0122:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1978-H51	2443522.56	1978 Jan 16 1410:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1978-H52	2443525.09	1978 Jan 16 1650:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1978-H53	2443525.19	1978 Jan 16 1955:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1978-H54	2443525.33	1978 Jan 16 2159:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1978-H55	2443525.42	1978 Jan 17 0129:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1978-H56	2443525.56	1978 Jan 17 1354:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1978-H57	2443526.08	1978 Jan 17 1626:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1978-H58	2443526.19	1978 Jan 17 1850:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1978-H59	2443526.27	1978 Jan 18 1552:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1978-H60	2443527.16	1978 Jan 18 1649:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1978-H61	2443527.21	1978 Jan 18 1700:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1978-H62	2443527.22	1978 Jan 18 1711:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1978-H63	2443527.28	1978 Jan 18 1869:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1978-H64	2443527.30	1978 Jan 18 1909:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1978-H65	2443527.39	1978 Jan 18 2064:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1978-H66	2443527.57	1978 Jan 18 2110:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1978-H67	2443527.58	1978 Jan 19 0521:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1978-H68	2443528.08	1978 Jan 19 1425:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1978-H69	2443528.31	1978 Jan 19 1634:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1978-H70	2443528.40	1978 Jan 20 1434:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1978-H71	2443529.11	1978 Jan 20 1700:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1978-H72	2443529.31	1978 Jan 20 1700:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1978-H73	2443529.36	1978 Jan 20 1810:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1978-H74	2443529.55	1978 Jan 20 2000:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1978-H75	2443529.56	1978 Jan 20 2130:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1978-H76	2443529.90	1978 Jan 20 2130:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1978-H77	2443531.07	1978 Jan 23 1447:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1978-H78	2443532.12	1978 Jan 23 1700:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1978-H79	2443532.21	1978 Jan 23 1743:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1978-H80	2443532.24	1978 Jan 23 1859:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1978-H81	2443532.29	1978 Jan 23 2030:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1978-H82	2443532.35	1978 Jan 23 2030:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1978-H83	2443532.36	1978 Jan 23 2058:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1978-H84	2443532.37	1978 Jan 24 2009:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1978-H85	2443533.34	1978 Jan 24 2030:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1978-H86	2443533.35	1978 Jan 24 2357:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1978-H87	2443533.50	1978 Jan 25 1503:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1978-H88	2443534.13	1978 Jan 25 1533:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1978-H89	2443534.15	1978 Jan 25 1620:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1978-H90	2443534.18	1978 Jan 25 1636:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1978-H91	2443534.19	1978 Jan 25 1700:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1978-H92	2443534.20	1978 Jan 25 1824:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1978-H93	2443534.21	1978 Jan 25 1814:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1978-H94	2443534.26	1978 Jan 25 2108:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1978-H95	2443534.27	1978 Jan 25 2108:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1978-H96	2443534.38	1978 Jan 25 2207:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1978-H97	2443534.42	1978 Jan 26 0114:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1978-H98	2443534.55	1978 Jan 26 1618:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1978-H101	2443535.18	1978 Jan 26 1800:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1978-H102	2443535.25	1978 Jan 27 1512:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1978-H103	2443536.13	1978 Jan 27 1644:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1978-H104	2443536.20	1978 Jan 27 1649:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1978-H105	2443536.29	1978 Jan 27 1859:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1978-H106	2443536.38	1978 Jan 27 2111:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1978-H107	2443536.40	1978 Jan 27 2156:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1978-H108	2443539.10	1978 Jan 30 1429:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1978-H109	2443539.17	1978 Jan 30 1559:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1978-H110	2443539.20	1978 Jan 30 1644:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Launch_e	Agency	Launch_Code	Group	Category	LT_Cite	Cite	Notes
1978-H111	2443539_20	1978 Jan 30 1649:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1978-H112	2443539_21	1978 Jan 30 1700:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1978-H113	2443539_43	1978 Jan 30 2222:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1978-H147	2443539_55	1978 Jan 31 0118:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1978-H114	2443539_62	1978 Jan 31 0300:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1978-H117	2443540_07	1978 Jan 31 1340:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1978-H119	2443541_15	1978 Feb 1 1533:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1978-H120	2443541_20	1978 Feb 1 1649:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1978-H121	2443541_21	1978 Feb 1 1700:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1978-H124	2443541_31	1978 Feb 1 1894:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1978-H163	2443541_34	1978 Feb 1 1930:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1978-H125	2443541_35	1978 Feb 1 2017:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1978-H126	2443542_25	1978 Feb 2 1806:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1978-H129	2443543_13	1978 Feb 3 1503:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1978-H130	2443543_15	1978 Feb 3 1543:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1978-H131	2443543_19	1978 Feb 3 1630:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1978-H132	2443543_21	1978 Feb 3 1700:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1978-H133	2443543_35	1978 Feb 3 2024:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1978-H134	2443543_37	1978 Feb 4 0114:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1978-H138	2443546_12	1978 Feb 6 1452:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1978-H136	2443546_15	1978 Feb 6 1532:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1978-H138	2443546_17	1978 Feb 6 1559:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1978-H139	2443546_20	1978 Feb 6 1646:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1978-H140	2443546_20	1978 Feb 6 1654:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1978-H141	2443546_30	1978 Feb 6 1904:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1978-H142	2443546_37	1978 Feb 6 2055:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1978-H143	2443547_25	1978 Feb 7 1800:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1978-H144	2443547_29	1978 Feb 7 1902:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1978-H146	2443548_13	1978 Feb 8 1506:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1978-H146	2443548_15	1978 Feb 8 1531:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1978-H163	2443548_19	1978 Feb 8 1634:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1978-H150	2443548_20	1978 Feb 8 1644:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1978-H151	2443548_20	1978 Feb 8 1646:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1978-H152	2443548_21	1978 Feb 8 1700:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1978-H153	2443548_21	1978 Feb 8 1700:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1978-H164	2443548_35	1978 Feb 8 2102:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1978-H164	2443548_40	1978 Feb 8 2130:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1978-H166	2443549_23	1978 Feb 8 1859:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1978-H167	2443549_41	1978 Feb 8 2149:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1978-H167	2443549_42	1978 Feb 8 2151:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1978-H168	2443550_14	1978 Feb 10 1519:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1978-H162	2443550_20	1978 Feb 10 1764:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1978-H163	2443550_21	1978 Feb 10 1700:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1978-H164	2443550_21	1978 Feb 10 1507:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1978-H165	2443553_19	1978 Feb 13 1537:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1978-H167	2443553_31	1978 Feb 13 1700:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1978-H168	2443553_33	1978 Feb 13 1700:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1978-H169	2443553_38	1978 Feb 13 2100:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1978-H170	2443553_38	1978 Feb 13 2100:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1978-H171	2443553_19	1978 Feb 14 0114:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1978-H171	2443553_19	1978 Feb 14 1559:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1978-H173	2443554_25	1978 Feb 14 1754:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1978-H174	2443554_42	1978 Feb 14 2201:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1978-H177	2443555_13	1978 Feb 15 1501:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1978-H178	2443555_15	1978 Feb 15 1538:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1978-H180	2443555_19	1978 Feb 15 1630:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1978-H181	2443555_21	1978 Feb 15 1655:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1978-H181	2443555_21	1978 Feb 15 1700:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1978-H183	2443555_23	1978 Feb 15 1720:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1978-H186	2443555_30	1978 Feb 15 1859:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1978-H186	2443555_30	1978 Feb 15 1909:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1978-H187	2443555_57	1978 Feb 16 0134:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1978-H188	2443556_15	1978 Feb 16 1530:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1978-H188	2443556_17	1978 Feb 16 1559:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1978-H190	2443556_19	1978 Feb 16 1627:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1978-H191	2443556_50	1978 Feb 17 0002:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1978-H194	2443557_14	1978 Feb 17 1522:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1978-H195	2443557_14	1978 Feb 17 1527:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1978-H197	2443557_19	1978 Feb 17 1630:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1978-H197	2443557_20	1978 Feb 17 1651:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1978-H198	2443557_21	1978 Feb 17 1700:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1978-H199	2443558_15	1978 Feb 18 1533:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1978-H200	2443558_50	1978 Feb 19 0000:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1978-H201	2443559_14	1978 Feb 19 1514:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1978-H202	2443559_50	1978 Feb 20 0000:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1978-H203	2443560_11	1978 Feb 20 1432:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1978-H204	2443560_16	1978 Feb 20 1548:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1978-H205	2443560_20	1978 Feb 20 1643:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1978-H206	2443560_50	1978 Feb 21 0000:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1978-H206	2443561_07	1978 Feb 21 1340:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1978-H207	2443561_17	1978 Feb 21 1602:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1978-H208	2443561_19	1978 Feb 21 1630:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1978-H210	2443561_21	1978 Feb 21 1700:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1978-H211	2443561_23	1978 Feb 21 1724:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Launch_e	Agency	Launch_Code	Group	Category	LT_Cite	Cite	Notes
1978-W212	2443561.29	1978 Feb 21 1859:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1978-W213	2443561.37	1978 Feb 21 2048:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1978-W178	2443561.50	1978 Feb 22 0000:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1978-W216	2443562.13	1978 Feb 22 1502:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1978-W217	2443562.15	1978 Feb 22 1541:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1978-W183	2443562.17	1978 Feb 22 1604:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1978-W218	2443562.18	1978 Feb 22 1614:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1978-W219	2443562.19	1978 Feb 22 1630:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1978-W220	2443562.20	1978 Feb 22 1651:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1978-W222	2443562.21	1978 Feb 22 1700:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1978-W223	2443562.24	1978 Feb 22 1748:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1978-W224	2443562.50	1978 Feb 23 0000:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1978-W225	2443563.15	1978 Feb 23 1543:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1978-W226	2443563.21	1978 Feb 23 1703:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1978-W227	2443563.25	1978 Feb 23 1800:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1978-W228	2443563.38	1978 Feb 23 2100:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1978-W229	2443563.42	1978 Feb 23 2204:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1978-W230	2443563.50	1978 Feb 24 0000:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1978-W233	2443564.15	1978 Feb 24 1529:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1978-W234	2443564.18	1978 Feb 24 1624:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1978-W235	2443564.19	1978 Feb 24 1630:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1978-W236	2443564.20	1978 Feb 24 1654:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1978-W237	2443564.21	1978 Feb 24 1703:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1978-W188	2443564.50	1978 Feb 25 0000:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1978-W238	2443565.15	1978 Feb 25 1529:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1978-W239	2443565.96	1978 Feb 26 0130:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1978-W240	2443566.15	1978 Feb 26 1532:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1978-W189	2443566.50	1978 Feb 27 0000:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1978-W242	2443567.16	1978 Feb 27 1614:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1978-W243	2443567.21	1978 Feb 27 1700:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1978-W244	2443567.27	1978 Feb 27 1830:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1978-W245	2443567.31	1978 Feb 27 1930:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1978-W246	2443567.42	1978 Feb 28 0113:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1978-W191	2443567.95	1978 Feb 28 1530:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1978-W257	2443568.15	1978 Feb 28 1859:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1978-W258	2443568.29	1978 Feb 28 1859:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1978-W259	2443568.31	1978 Feb 28 1922:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1978-W261	2443568.57	1978 Mar 1 0140:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1978-W262	2443569.15	1978 Mar 1 1511:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1978-W263	2443569.20	1978 Mar 1 1549:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1978-W264	2443569.21	1978 Mar 1 1600:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1978-W265	2443569.21	1978 Mar 1 1609:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1978-W266	2443569.29	1978 Mar 2 0139:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1978-W268	2443571.11	1978 Mar 3 1433:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1978-W269	2443571.11	1978 Mar 3 1500:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1978-W271	2443571.30	1978 Mar 3 1859:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1978-W272	2443571.94	1978 Mar 4 0114:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1978-W273	2443571.94	1978 Mar 4 1524:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1978-W274	2443571.94	1978 Mar 6 1626:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1978-W275	2443574.19	1978 Mar 6 1700:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1978-W276	2443574.21	1978 Mar 6 1700:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1978-W277	2443574.31	1978 Mar 6 1930:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1978-W109	2443574.53	1978 Mar 7 0345:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1978-W104	2443574.55	1978 Mar 7 0114:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1978-W278	2443575.54	1978 Mar 8 0059:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1978-W280	2443576.12	1978 Mar 8 1448:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1978-W281	2443576.15	1978 Mar 8 1530:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1978-W282	2443576.21	1978 Mar 8 1700:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1978-W283	2443576.23	1978 Mar 8 1724:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1978-W284	2443576.23	1978 Mar 8 1737:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1978-W111	2443576.24	1978 Mar 8 1749:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1978-W285	2443576.24	1978 Mar 8 1834:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1978-W287	2443576.29	1978 Mar 8 1859:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1978-W288	2443576.31	1978 Mar 8 1931:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1978-W289	2443576.37	1978 Mar 8 2059:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1978-W290	2443576.40	1978 Mar 8 2132:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1978-W291	2443576.42	1978 Mar 8 2157:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1978-W292	2443576.53	1978 Mar 9 0045:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1978-W294	2443577.38	1978 Mar 9 2100:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1978-W296	2443578.08	1978 Mar 10 1400:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1978-W297	2443578.09	1978 Mar 10 1415:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1978-W299	2443578.20	1978 Mar 10 1644:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1978-W300	2443578.21	1978 Mar 10 1700:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1978-W301	2443578.31	1978 Mar 10 1919:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1978-W302	2443578.33	1978 Mar 10 1952:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1978-W303	2443578.34	1978 Mar 10 2007:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1978-W304	2443578.55	1978 Mar 11 0114:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1978-W305	2443581.09	1978 Mar 13 1404:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1978-W306	2443581.10	1978 Mar 13 1427:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1978-W307	2443581.25	1978 Mar 13 1800:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1978-W308	2443581.29	1978 Mar 13 1901:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1978-W410	2443581.38	1978 Mar 13 2100:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Launch_e	Agency	Launch_Code	Group	Category	LT_Cite	Cite	Notes
1978-H309	2443581.42	1978 Mar 13 2209:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1978-H311	2443583.10	1978 Mar 15 1420:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1978-H312	2443583.10	1978 Mar 15 1426:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1978-H313	2443583.15	1978 Mar 15 1533:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1978-Y114	2443583.19	1978 Mar 15 1630:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1978-H314	2443583.19	1978 Mar 15 1640:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1978-H315	2443583.20	1978 Mar 15 1649:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1978-H316	2443583.25	1978 Mar 15 1803:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1978-Y115	2443583.27	1978 Mar 15 1825:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1978-Y117	2443583.38	1978 Mar 15 2100:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1978-H318	2443583.40	1978 Mar 15 2136:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1978-H320	2443583.58	1978 Mar 16 0152:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1978-Y119	2443584.39	1978 Mar 16 2121:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1978-H323	2443585.09	1978 Mar 17 1403:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1978-H324	2443585.21	1978 Mar 17 1700:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1978-H326	2443585.21	1978 Mar 17 1800:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1978-H329	2443585.25	1978 Mar 17 1700:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1978-H330	2443588.10	1978 Mar 20 1417:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1978-H331	2443588.21	1978 Mar 20 1700:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1978-H332	2443588.21	1978 Mar 20 1703:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1978-H333	2443588.23	1978 Mar 20 1726:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1978-H334	2443588.38	1978 Mar 20 2100:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1978-H338	2443588.38	1978 Mar 20 2100:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1978-H340	2443589.40	1978 Mar 21 1533:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1978-H341	2443590.16	1978 Mar 22 1451:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1978-H343	2443590.21	1978 Mar 22 1546:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1978-H344	2443590.21	1978 Mar 22 1700:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1978-H346	2443590.25	1978 Mar 22 1800:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1978-H348	2443590.26	1978 Mar 22 1810:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1978-H349	2443590.36	1978 Mar 22 2069:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1978-H350	2443590.37	1978 Mar 22 2065:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1978-H351	2443590.38	1978 Mar 22 2129:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1978-H352	2443591.57	1978 Mar 23 0114:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1978-H354	2443591.65	1978 Mar 24 0619:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1978-H356	2443592.11	1978 Mar 24 1457:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1978-H358	2443592.23	1978 Mar 24 1730:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1978-H357	2443592.52	1978 Mar 24 2206:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1978-H358	2443592.65	1978 Mar 25 0115:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1978-H359	2443595.16	1978 Mar 27 1916:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1978-H364	2443595.21	1978 Mar 27 1700:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1978-H365	2443595.23	1978 Mar 27 1728:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1978-H366	2443595.23	1978 Mar 27 1728:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1978-H367	2443595.35	1978 Mar 27 2106:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1978-H371	2443597.10	1978 Mar 29 1436:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1978-H372	2443597.18	1978 Mar 29 1534:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1978-H373	2443597.18	1978 Mar 29 1534:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1978-Y134	2443597.24	1978 Mar 29 1740:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1978-H374	2443597.24	1978 Mar 29 1740:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1978-H375	2443597.31	1978 Mar 29 1934:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1978-H376	2443598.03	1978 Mar 30 1240:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1978-H380	2443598.38	1978 Mar 30 2100:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1978-H382	2443599.12	1978 Mar 31 1448:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1978-H387	2443599.19	1978 Mar 31 1618:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1978-H388	2443599.22	1978 Mar 31 1715:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1978-H389	2443599.35	1978 Mar 31 2030:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1978-H392	2443599.39	1978 Mar 31 2121:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1978-H393	2443602.10	1978 Apr 3 1637:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1978-H394	2443602.30	1978 Apr 3 1912:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1978-Y143	2443604.18	1978 Apr 5 1614:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1978-H395	2443604.18	1978 Apr 5 1620:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1978-H396	2443604.18	1978 Apr 5 1624:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1978-Y144	2443604.23	1978 Apr 5 1727:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1978-H397	2443604.24	1978 Apr 5 1752:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1978-H398	2443604.53	1978 Apr 5 2000:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1978-Y146	2443604.35	1978 Apr 5 2026:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1978-H399	2443604.37	1978 Apr 5 2058:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1978-H401	2443605.45	1978 Apr 6 2252:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1978-H402	2443606.17	1978 Apr 7 1600:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1978-H403	2443606.20	1978 Apr 7 1654:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1978-H404	2443606.21	1978 Apr 7 1700:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1978-H405	2443606.25	1978 Apr 7 1753:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1978-H406	2443606.38	1978 Apr 7 2100:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1978-H407	2443606.53	1978 Apr 8 0945:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1978-H410	2443609.19	1978 Apr 10 1640:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1978-H411	2443609.21	1978 Apr 10 1700:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1978-H412	2443609.21	1978 Apr 10 1700:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1978-H413	2443609.38	1978 Apr 10 2100:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1978-H414	2443609.40	1978 Apr 10 2140:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1978-H416	2443610.08	1978 Apr 11 1400:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1978-H419	2443611.15	1978 Apr 12 1533:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1978-H420	2443611.17	1978 Apr 12 1557:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1978-H423	2443611.21	1978 Apr 12 1700:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1978-H424	2443611.21	1978 Apr 12 1700:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Launch_e	Agency	Launch_Code	Group	Category	LT_Cite	Cite	Notes
1978-W425	2443611.26	1978 Apr 12 1821:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1978-W155	2443611.27	1978 Apr 12 1830:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1978-W426	2443611.28	1978 Apr 12 1840:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1978-W427	2443611.32	1978 Apr 12 1946:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1978-Y156	2443611.38	1978 Apr 12 2100:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1978-W428	2443611.39	1978 Apr 12 2122:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1978-W429	2443611.54	1978 Apr 13 0059:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1978-W430	2443612.21	1978 Apr 13 1700:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1978-W431	2443613.13	1978 Apr 14 1507:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1978-W432	2443613.19	1978 Apr 14 1640:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1978-W433	2443613.21	1978 Apr 14 1657:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1978-W434	2443613.23	1978 Apr 14 1730:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1978-W435	2443613.24	1978 Apr 14 2009:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1978-W436	2443613.34	1978 Apr 15 0059:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1978-W437	2443613.54	1978 Apr 15 0059:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1978-W438	2443616.11	1978 Apr 17 1437:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1978-W439	2443616.21	1978 Apr 17 1700:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1978-W440	2443616.26	1978 Apr 17 1800:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1978-W441	2443616.31	1978 Apr 17 1926:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1978-W443	2443617.21	1978 Apr 18 1700:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1978-W416	2443617.56	1978 Apr 19 0119:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1978-W445	2443618.08	1978 Apr 19 1349:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1978-W446	2443618.11	1978 Apr 19 1457:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1978-W448	2443618.17	1978 Apr 19 1557:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1978-W449	2443618.26	1978 Apr 19 1614:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1978-T161	2443618.27	1978 Apr 19 1650:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1978-W449	2443618.28	1978 Apr 19 1640:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1978-T162	2443618.34	1978 Apr 19 2007:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1978-W450	2443618.35	1978 Apr 19 2031:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1978-W451	2443619.21	1978 Apr 20 1700:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1978-W452	2443620.10	1978 Apr 20 2100:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1978-W453	2443620.15	1978 Apr 21 1420:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1978-W454	2443620.59	1978 Apr 21 1553:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1978-W455	2443620.85	1978 Apr 21 2114:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1978-W456	2443620.85	1978 Apr 22 0114:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1978-W457	2443623.09	1978 Apr 24 1404:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1978-W457	2443623.21	1978 Apr 24 1700:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1978-W458	2443623.57	1978 Apr 24 2058:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1978-W459	2443623.95	1978 Apr 25 0114:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1978-W460	2443625.15	1978 Apr 26 1659:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1978-W461	2443625.19	1978 Apr 26 1754:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1978-T173	2443625.20	1978 Apr 26 1904:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1978-W462	2443625.51	1978 Apr 27 1309:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1978-W464	2443626.25	1978 Apr 27 1509:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1978-W465	2443626.40	1978 Apr 28 1720:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1978-W469	2443627.14	1978 Apr 28 1759:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1978-W470	2443627.37	1978 Apr 28 2029:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1978-W474	2443630.12	1978 May 1 1456:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1978-W476	2443630.31	1978 May 1 1752:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1978-W477	2443630.54	1978 May 1 2100:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1978-W478	2443631.91	1978 May 2 1700:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1978-W480	2443631.41	1978 May 2 2147:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1978-W482	2443632.11	1978 May 3 1440:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1978-W483	2443632.12	1978 May 3 1455:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1978-Y178	2443632.17	1978 May 3 1559:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1978-W484	2443632.19	1978 May 3 1636:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1978-W485	2443632.25	1978 May 3 1800:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1978-W486	2443632.26	1978 May 3 1810:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1978-W487	2443632.56	1978 May 4 0124:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1978-W488	2443633.18	1978 May 4 1619:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1978-W490	2443633.33	1978 May 4 2000:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1978-W491	2443634.13	1978 May 5 1434:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1978-W492	2443634.16	1978 May 5 1511:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1978-W493	2443634.21	1978 May 5 1700:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1978-W494	2443634.41	1978 May 5 2145:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1978-W495	2443637.10	1978 May 8 1431:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1978-W497	2443637.11	1978 May 8 1440:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1978-W498	2443637.23	1978 May 8 1730:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1978-W499	2443637.25	1978 May 8 1754:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1978-W500	2443637.33	1978 May 8 2001:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1978-H501	2443637.55	1978 May 9 0114:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1978-H502	2443638.21	1978 May 9 1700:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1978-H503	2443638.33	1978 May 9 2000:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1978-H506	2443639.11	1978 May 10 1442:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1978-Y182	2443639.24	1978 May 10 1749:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1978-H508	2443639.25	1978 May 10 1801:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1978-Y183	2443639.31	1978 May 10 1926:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1978-H509	2443639.33	1978 May 10 1949:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1978-Y184	2443639.33	1978 May 10 2000:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1978-H510	2443639.33	1978 May 10 2003:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1978-H511	2443639.36	1978 May 10 2033:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1978-H512	2443639.41	1978 May 10 2147:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1978-H513	2443640.29	1978 May 11 1859:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-



Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Launch_e	Agency	Launch_Code	Group	Category	LT_Cite	Cite	Notes
1978-H610	2443660.35	1978 May 31 2026:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1978-H611	2443661.25	1978 Jun 1 1759:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1978-H612	2443662.10	1978 Jun 2 1430:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1978-H613	2443662.12	1978 Jun 2 1456:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1978-H614	2443662.12	1978 Jun 2 1500:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1978-H615	2443662.25	1978 Jun 2 1800:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1978-H616	2443662.25	1978 Jun 2 1800:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1978-H617	2443662.55	1978 Jun 3 0114:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1978-H618	2443665.10	1978 Jun 5 1420:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1978-H619	2443665.16	1978 Jun 5 1552:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1978-H620	2443665.17	1978 Jun 5 1609:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1978-H621	2443665.26	1978 Jun 5 1820:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1978-H622	2443665.37	1978 Jun 5 2053:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1978-H625	2443667.11	1978 Jun 7 1436:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1978-H626	2443667.12	1978 Jun 7 1462:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1978-H628	2443667.18	1978 Jun 7 1619:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1978-H629	2443667.19	1978 Jun 7 1630:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1978-H627	2443667.20	1978 Jun 7 1642:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1978-H628	2443667.21	1978 Jun 7 1700:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1978-H630	2443667.21	1978 Jun 7 2000:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1978-H631	2443667.33	1978 Jun 9 1502:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1978-H632	2443669.13	1978 Jun 9 1700:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1978-H633	2443669.21	1978 Jun 9 1800:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1978-H634	2443669.25	1978 Jun 9 1800:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1978-H635	2443669.25	1978 Jun 9 1800:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1978-H636	2443669.27	1978 Jun 9 1830:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1978-H637	2443672.19	1978 Jun 12 1632:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1978-H638	2443672.21	1978 Jun 12 1700:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1978-H639	2443672.24	1978 Jun 12 1752:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1978-H640	2443672.27	1978 Jun 12 2116:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1978-H641	2443672.39	1978 Jun 13 1559:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1978-H642	2443673.17	1978 Jun 14 1511:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1978-H645	2443674.13	1978 Jun 14 1700:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1978-H646	2443674.21	1978 Jun 14 1711:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1978-H648	2443674.22	1978 Jun 14 1800:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1978-H649	2443674.25	1978 Jun 14 1802:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1978-H650	2443674.25	1978 Jun 14 1810:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1978-H652	2443674.26	1978 Jun 14 1810:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1978-H653	2443674.27	1978 Jun 14 1832:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1978-H654	2443674.52	1978 Jun 14 1832:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1978-H655	2443675.05	1978 Jun 15 2000:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1978-H659	2443676.12	1978 Jun 16 1446:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1978-H658	2443676.12	1978 Jun 16 1546:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1978-H659	2443676.19	1978 Jun 16 1556:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1978-H660	2443676.25	1978 Jun 16 1800:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1978-H661	2443676.25	1978 Jun 17 0027:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1978-H662	2443676.31	1978 Jun 19 1700:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1978-H664	2443676.34	1978 Jun 19 1752:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1978-H665	2443676.34	1978 Jun 19 1830:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1978-H666	2443676.37	1978 Jun 19 1956:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1978-H667	2443676.33	1978 Jun 19 2018:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1978-H669	2443676.35	1978 Jun 20 1700:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1978-H670	2443680.33	1978 Jun 20 2000:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1978-H671	2443681.09	1978 Jun 21 1415:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1978-H672	2443681.13	1978 Jun 21 1504:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1978-H675	2443681.18	1978 Jun 21 1614:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1978-H676	2443681.19	1978 Jun 21 1626:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1978-H677	2443681.19	1978 Jun 21 1650:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1978-H677	2443681.25	1978 Jun 21 1756:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1978-H678	2443681.25	1978 Jun 22 0114:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1978-H678	2443681.33	1978 Jun 23 1510:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1978-H678	2443683.13	1978 Jun 23 1540:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1978-H680	2443683.19	1978 Jun 23 1630:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1978-H681	2443683.21	1978 Jun 23 1700:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1978-H682	2443683.24	1978 Jun 23 1752:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1978-H683	2443683.37	1978 Jun 23 2059:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1978-H684	2443686.12	1978 Jun 26 1453:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1978-H685	2443686.21	1978 Jun 26 1700:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1978-H686	2443686.25	1978 Jun 26 1800:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1978-H686	2443686.26	1978 Jun 26 1813:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1978-H687	2443686.34	1978 Jun 26 2004:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1978-H688	2443687.16	1978 Jun 27 1546:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1978-H689	2443687.42	1978 Jun 27 2209:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1978-H692	2443688.12	1978 Jun 28 1500:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1978-H693	2443688.13	1978 Jun 28 1509:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1978-H694	2443688.15	1978 Jun 28 1534:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1978-H695	2443688.21	1978 Jun 28 1700:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1978-H697	2443688.21	1978 Jun 28 1715:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1978-H698	2443688.22	1978 Jun 28 1853:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1978-H737	2443688.29	1978 Jun 28 1853:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1978-H430	2443688.34	1978 Jun 28 2004:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-



Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Launch_e	Agency	Launch_Code	Group	Category	LT_Cite	Cite	Notes
1978-4738	2443688.38	1978 Jun 28 21:00:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1978-4699	2443688.39	1978 Jun 28 21:18:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1978-4700	2443688.50	1978 Jun 28 21:25:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1978-4701	2443688.55	1978 Jun 29 01:14:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1978-4702	2443690.13	1978 Jun 30 15:10:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1978-4703	2443690.25	1978 Jun 30 17:55:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1978-4704	2443690.26	1978 Jun 30 18:00:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1978-4705	2443690.38	1978 Jun 30 21:00:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1978-4706	2443690.59	1978 Jul 1 02:04:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1978-4707	2443693.11	1978 Jul 3 14:45:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1978-4708	2443693.25	1978 Jul 3 18:00:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1978-4709	2443693.55	1978 Jul 4 01:14:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1978-4710	2443693.93	1978 Jul 4 10:15:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1978-4711	2443695.11	1978 Jul 5 14:43:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1978-4712	2443695.15	1978 Jul 5 15:33:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1978-4713	2443695.16	1978 Jul 5 15:40:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1978-4714	2443695.18	1978 Jul 5 16:19:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1978-4715	2443695.21	1978 Jul 5 17:00:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1978-4716	2443695.22	1978 Jul 5 17:15:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1978-4717	2443695.22	1978 Jul 5 17:22:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1978-4718	2443695.22	1978 Jul 5 17:22:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1978-4719	2443695.22	1978 Jul 5 17:22:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1978-4720	2443695.33	1978 Jul 5 19:57:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1978-4721	2443695.39	1978 Jul 5 20:30:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1978-4722	2443696.21	1978 Jul 6 17:00:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1978-4723	2443697.09	1978 Jul 7 14:10:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1978-4724	2443697.13	1978 Jul 7 15:10:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1978-4725	2443697.32	1978 Jul 7 19:53:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1978-4726	2443697.56	1978 Jul 6 01:20:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1978-4727	2443700.06	1978 Jul 10 13:44:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1978-4728	2443700.11	1978 Jul 10 14:53:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1978-4729	2443700.25	1978 Jul 10 17:55:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1978-4730	2443700.27	1978 Jul 10 18:50:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1978-4731	2443700.28	1978 Jul 10 18:45:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1978-4732	2443700.43	1978 Jul 10 22:23:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1978-4733	2443702.11	1978 Jul 12 14:45:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1978-4734	2443702.12	1978 Jul 12 14:46:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1978-4735	2443702.15	1978 Jul 12 15:50:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1978-4736	2443702.17	1978 Jul 12 15:59:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1978-4737	2443702.18	1978 Jul 12 16:14:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1978-4738	2443702.19	1978 Jul 12 16:30:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1978-4739	2443702.21	1978 Jul 12 17:00:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1978-4740	2443702.22	1978 Jul 12 17:15:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1978-4741	2443702.29	1978 Jul 12 18:58:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1978-4742	2443702.50	1978 Jul 12 19:18:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1978-4743	2443703.85	1978 Jul 13 02:14:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1978-4744	2443703.94	1978 Jul 13 02:14:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1978-4745	2443704.14	1978 Jul 14 15:14:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1978-4746	2443704.20	1978 Jul 14 16:52:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1978-4747	2443704.31	1978 Jul 14 17:52:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1978-4748	2443704.37	1978 Jul 14 20:56:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1978-4749	2443707.14	1978 Jul 17 16:50:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1978-4750	2443707.19	1978 Jul 17 18:00:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1978-4751	2443707.21	1978 Jul 17 17:00:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1978-4752	2443707.35	1978 Jul 17 17:57:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1978-4753	2443708.46	1978 Jul 19 23:00:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1978-4754	2443708.75	1978 Jul 19 05:55:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1978-4755	2443709.06	1978 Jul 19 11:00:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1978-4756	2443709.11	1978 Jul 19 14:44:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1978-4757	2443709.12	1978 Jul 19 14:44:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1978-4758	2443709.14	1978 Jul 19 15:00:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1978-4759	2443709.16	1978 Jul 19 15:23:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1978-4760	2443709.23	1978 Jul 19 17:35:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1978-4761	2443709.25	1978 Jul 19 18:00:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1978-4762	2443709.26	1978 Jul 19 18:08:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1978-4763	2443709.26	1978 Jul 19 18:15:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1978-4764	2443709.49	1978 Jul 19 23:46:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1978-4765	2443709.75	1978 Jul 20 06:00:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1978-4766	2443710.17	1978 Jul 20 11:30:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1978-4767	2443710.40	1978 Jul 20 16:00:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1978-4768	2443710.40	1978 Jul 20 21:40:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1978-4769	2443710.59	1978 Jul 21 02:00:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1978-4770	2443711.21	1978 Jul 21 17:00:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1978-4771	2443711.42	1978 Jul 21 22:04:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1978-4772	2443714.12	1978 Jul 24 14:57:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1978-4773	2443714.21	1978 Jul 24 17:00:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1978-4774	2443714.23	1978 Jul 24 17:00:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1978-4775	2443714.55	1978 Jul 25 01:14:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1978-4776	2443715.26	1978 Jul 25 18:20:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1978-4777	2443715.62	1978 Jul 26 02:49:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1978-4778	2443716.08	1978 Jul 26 13:49:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1978-4779	2443716.11	1978 Jul 26 14:43:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1978-4780	2443716.13	1978 Jul 26 15:08:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1978-4781	2443716.20	1978 Jul 26 16:52:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1978-4782	2443716.22	1978 Jul 26 17:23:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1978-4783	2443716.34	1978 Jul 26 20:15:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-



Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Launch_e	Agency	Launch_Code	Group	Category	LT_Cite	Cite	Notes
1978-H876	2443744.26	1978 Aug 23 1820:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1978-H877	2443744.28	1978 Aug 23 1840:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1978-H878	2443744.34	1978 Aug 23 2008:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1978-H879	2443744.36	1978 Aug 23 2034:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1978-H882	2443744.48	1978 Aug 24 1715:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1978-H883	2443745.34	1978 Aug 24 1715:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1978-H884	2443745.40	1978 Aug 24 1715:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1978-H886	2443746.12	1978 Aug 25 1454:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1978-H888	2443746.21	1978 Aug 25 1700:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1978-H889	2443746.25	1978 Aug 25 1806:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1978-H891	2443749.17	1978 Aug 28 1609:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1978-H892	2443749.18	1978 Aug 28 1621:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1978-H894	2443749.21	1978 Aug 28 1700:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1978-H895	2443749.25	1978 Aug 28 1800:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1978-H896	2443749.54	1978 Aug 29 0059:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1978-H898	2443749.55	1978 Aug 29 0114:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1978-H900	2443751.11	1978 Aug 30 1457:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1978-H901	2443751.13	1978 Aug 30 1509:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1978-H902	2443751.21	1978 Aug 30 1700:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1978-H903	2443751.29	1978 Aug 30 1859:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1978-H904	2443751.32	1978 Aug 30 1914:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1978-H905	2443751.36	1978 Aug 30 1938:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1978-H907	2443751.46	1978 Aug 30 2307:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1978-H908	2443752.04	1978 Aug 31 1303:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1978-H909	2443752.08	1978 Aug 31 1356:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1978-H911	2443752.25	1978 Aug 31 1802:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1978-H912	2443752.36	1978 Aug 31 2036:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1978-H914	2443753.08	1978 Sep 1 1400:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1978-H916	2443753.10	1978 Sep 1 1430:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1978-H917	2443753.16	1978 Sep 1 1545:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1978-H918	2443753.25	1978 Sep 1 1808:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1978-H919	2443753.28	1978 Sep 1 1859:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1978-H920	2443753.36	1978 Sep 1 2113:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1978-H921	2443753.50	1978 Sep 2 0702:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1978-H922	2443753.56	1978 Sep 2 0726:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1978-H923	2443756.13	1978 Sep 4 1500:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1978-H43	2443757.35	1978 Sep 5 2031:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1978-H45	2443757.72	1978 Sep 5 2159:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1978-H924	2443758.05	1978 Sep 6 1400:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1978-H927	2443758.12	1978 Sep 6 1456:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1978-H928	2443758.15	1978 Sep 6 1530:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1978-H929	2443758.19	1978 Sep 6 1554:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1978-H930	2443758.21	1978 Sep 6 1716:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1978-H931	2443758.24	1978 Sep 6 2106:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1978-H932	2443758.33	1978 Sep 7 0222:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1978-H933	2443758.43	1978 Sep 7 0310:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1978-H936	2443760.18	1978 Sep 8 1620:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1978-H937	2443760.19	1978 Sep 8 1700:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1978-H44	2443760.21	1978 Sep 8 1826:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1978-H938	2443760.27	1978 Sep 8 1833:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1978-H939	2443760.55	1978 Sep 8 1833:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1978-H940	2443763.09	1978 Sep 11 1415:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1978-H941	2443763.26	1978 Sep 11 1818:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1978-H943	2443763.29	1978 Sep 11 1854:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1978-H944	2443763.35	1978 Sep 11 2030:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1978-H946	2443763.85	1978 Sep 12 0330:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1978-H947	2443764.40	1978 Sep 12 2133:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1978-H951	2443765.13	1978 Sep 13 1504:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1978-H952	2443765.15	1978 Sep 13 1532:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1978-H953	2443765.15	1978 Sep 13 1532:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1978-H954	2443765.21	1978 Sep 13 1700:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1978-H955	2443765.24	1978 Sep 13 1742:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1978-H956	2443765.25	1978 Sep 13 1757:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1978-H957	2443765.40	1978 Sep 13 2130:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1978-H958	2443765.42	1978 Sep 13 2201:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1978-H959	2443765.49	1978 Sep 13 2340:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1978-H968	2443766.41	1978 Sep 14 2145:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1978-H961	2443767.16	1978 Sep 15 1546:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1978-H962	2443767.21	1978 Sep 15 1700:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1978-H963	2443767.28	1978 Sep 15 1845:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1978-H964	2443767.39	1978 Sep 15 2122:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1978-H965	2443770.17	1978 Sep 18 1634:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1978-H966	2443770.19	1978 Sep 18 1559:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1978-H967	2443770.21	1978 Sep 18 1700:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1978-H968	2443770.25	1978 Sep 18 1755:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1978-H48	2443770.35	1978 Sep 18 2031:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1978-H969	2443770.56	1978 Sep 19 0125:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1978-H970	2443771.17	1978 Sep 19 1559:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1978-H973	2443772.10	1978 Sep 20 1426:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1978-H974	2443772.15	1978 Sep 20 1529:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Launch_e	Agency	Launch_Code	Group	Category	LT_Cite	Cite	Notes
1978-N975	2443772.16	1978 Sep 20 1551:00	Rocketsonde	-	-	0.000	HRM	SS	-	Meteo	DSI-5850	-	-
1978-1351	2443772.16	1978 Sep 20 1556:00	Rocketsonde	-	-	0.000	HRM	SS	-	Meteo	DSI-5850	-	-
1978-N977	2443772.21	1978 Sep 20 1700:00	Rocketsonde	-	-	0.000	HRM	SS	-	Meteo	DSI-5850	-	-
1978-N979	2443772.23	1978 Sep 20 1733:00	Rocketsonde	-	-	0.000	HRM	SS	-	Meteo	DSI-5850	-	-
1978-N981	2443772.27	1978 Sep 20 1825:59	Rocketsonde	-	-	0.000	HRM	SS	-	Meteo	DSI-5850	-	-
1978-1353	2443772.28	1978 Sep 20 1845:00	Rocketsonde	-	-	0.000	HRM	SS	-	Meteo	DSI-5850	-	-
1978-N982	2443772.29	1978 Sep 20 1859:59	Rocketsonde	-	-	0.000	HRM	SS	-	Meteo	DSI-5850	-	-
1978-N984	2443772.35	1978 Sep 20 2030:00	Rocketsonde	-	-	0.000	HRM	SS	-	Meteo	DSI-5850	-	-
1978-N985	2443772.39	1978 Sep 20 2119:00	Rocketsonde	-	-	0.000	HRM	SS	-	Meteo	DSI-5850	-	-
1978-N986	2443772.40	1978 Sep 20 2132:00	Rocketsonde	-	-	0.000	HRM	SS	-	Meteo	DSI-5850	-	-
1978-N988	2443772.41	1978 Sep 20 2156:59	Rocketsonde	-	-	0.000	HRM	SS	-	Meteo	DSI-5850	-	-
1978-N989	2443774.08	1978 Sep 22 1400:00	Rocketsonde	-	-	0.000	HRM	SS	-	Meteo	DSI-5850	-	-
1978-N990	2443774.12	1978 Sep 22 1446:00	Rocketsonde	-	-	0.000	HRM	SS	-	Meteo	DSI-5850	-	-
1978-N991	2443774.14	1978 Sep 22 1522:00	Rocketsonde	-	-	0.000	HRM	SS	-	Meteo	DSI-5850	-	-
1978-1356	2443774.16	1978 Sep 22 1553:00	Rocketsonde	-	-	0.000	HRM	SS	-	Meteo	DSI-5850	-	-
1978-N992	2443774.19	1978 Sep 22 1634:59	Rocketsonde	-	-	0.000	HRM	SS	-	Meteo	DSI-5850	-	-
1978-N993	2443774.35	1978 Sep 22 2031:00	Rocketsonde	-	-	0.000	HRM	SS	-	Meteo	DSI-5850	-	-
1978-N994	2443774.40	1978 Sep 22 2143:00	Rocketsonde	-	-	0.000	HRM	SS	-	Meteo	DSI-5850	-	-
1979-427	2443877.06	1979 Jan 3 1330:00	Rocketsonde	-	-	0.000	HRM	SS	-	Meteo	DSI-5850	-	-
1979-428	2443877.06	1979 Jan 3 1330:00	Rocketsonde	-	-	0.000	HRM	SS	-	Meteo	DSI-5850	-	-
1979-429	2443877.12	1979 Jan 3 1448:59	Rocketsonde	-	-	0.000	HRM	SS	-	Meteo	DSI-5850	-	-
1979-104	2443877.16	1979 Jan 3 1548:59	Rocketsonde	-	-	0.000	HRM	SS	-	Meteo	DSI-5850	-	-
1979-N30	2443877.18	1979 Jan 3 1612:59	Rocketsonde	-	-	0.000	HRM	SS	-	Meteo	DSI-5850	-	-
1979-N31	2443877.31	1979 Jan 3 1920:59	Rocketsonde	-	-	0.000	HRM	SS	-	Meteo	DSI-5850	-	-
1979-106	2443877.32	1979 Jan 3 1944:59	Rocketsonde	-	-	0.000	HRM	SS	-	Meteo	DSI-5850	-	-
1979-N32	2443877.33	1979 Jan 3 2000:00	Rocketsonde	-	-	0.000	HRM	SS	-	Meteo	DSI-5850	-	-
1979-N33	2443878.41	1979 Jan 4 2152:00	Rocketsonde	-	-	0.000	HRM	SS	-	Meteo	DSI-5850	-	-
1979-N34	2443879.05	1979 Jan 5 1314:59	Rocketsonde	-	-	0.000	HRM	SS	-	Meteo	DSI-5850	-	-
1979-N35	2443879.07	1979 Jan 5 1344:59	Rocketsonde	-	-	0.000	HRM	SS	-	Meteo	DSI-5850	-	-
1979-401	2443879.11	1979 Jan 5 1446:00	Rocketsonde	-	-	0.000	HRM	SS	-	Meteo	DSI-5850	-	-
1979-N36	2443879.12	1979 Jan 5 1448:59	Rocketsonde	-	-	0.000	HRM	SS	-	Meteo	DSI-5850	-	-
1979-108	2443879.16	1979 Jan 5 1548:59	Rocketsonde	-	-	0.000	HRM	SS	-	Meteo	DSI-5850	-	-
1979-N37	2443879.19	1979 Jan 5 1656:59	Rocketsonde	-	-	0.000	HRM	SS	-	Meteo	DSI-5850	-	-
1979-N38	2443879.29	1979 Jan 5 1859:59	Rocketsonde	-	-	0.000	HRM	SS	-	Meteo	DSI-5850	-	-
1979-440	2443881.19	1979 Jan 7 1651:59	Rocketsonde	-	-	0.000	HRM	SS	-	Meteo	DSI-5850	-	-
1979-443	2443882.09	1979 Jan 8 1416:00	Rocketsonde	-	-	0.000	HRM	SS	-	Meteo	DSI-5850	-	-
1979-444	2443882.11	1979 Jan 8 1446:00	Rocketsonde	-	-	0.000	HRM	SS	-	Meteo	DSI-5850	-	-
1979-445	2443882.12	1979 Jan 8 1500:00	Rocketsonde	-	-	0.000	HRM	SS	-	Meteo	DSI-5850	-	-
1979-446	2443882.20	1979 Jan 8 1649:59	Rocketsonde	-	-	0.000	HRM	SS	-	Meteo	DSI-5850	-	-
1979-447	2443882.21	1979 Jan 8 1700:00	Rocketsonde	-	-	0.000	HRM	SS	-	Meteo	DSI-5850	-	-
1979-449	2443882.55	1979 Jan 8 2030:00	Rocketsonde	-	-	0.000	HRM	SS	-	Meteo	DSI-5850	-	-
1979-450	2443882.55	1979 Jan 8 2104:59	Rocketsonde	-	-	0.000	HRM	SS	-	Meteo	DSI-5850	-	-
1979-451	2443882.75	1979 Jan 9 0104:59	Rocketsonde	-	-	0.000	HRM	SS	-	Meteo	DSI-5850	-	-
1979-452	2443883.15	1979 Jan 9 1535:59	Rocketsonde	-	-	0.000	HRM	SS	-	Meteo	DSI-5850	-	-
1979-453	2443883.29	1979 Jan 9 1901:59	Rocketsonde	-	-	0.000	HRM	SS	-	Meteo	DSI-5850	-	-
1979-454	2443883.33	1979 Jan 9 2040:00	Rocketsonde	-	-	0.000	HRM	SS	-	Meteo	DSI-5850	-	-
1979-455	2443884.11	1979 Jan 10 1446:00	Rocketsonde	-	-	0.000	HRM	SS	-	Meteo	DSI-5850	-	-
1979-456	2443884.11	1979 Jan 10 1511:59	Rocketsonde	-	-	0.000	HRM	SS	-	Meteo	DSI-5850	-	-
1979-113	2443884.13	1979 Jan 10 1511:59	Rocketsonde	-	-	0.000	HRM	SS	-	Meteo	DSI-5850	-	-
1979-457	2443884.15	1979 Jan 10 1523:59	Rocketsonde	-	-	0.000	HRM	SS	-	Meteo	DSI-5850	-	-
1979-458	2443884.16	1979 Jan 10 1556:00	Rocketsonde	-	-	0.000	HRM	SS	-	Meteo	DSI-5850	-	-
1979-459	2443884.16	1979 Jan 10 1603:00	Rocketsonde	-	-	0.000	HRM	SS	-	Meteo	DSI-5850	-	-
1979-460	2443884.16	1979 Jan 10 1715:00	Rocketsonde	-	-	0.000	HRM	SS	-	Meteo	DSI-5850	-	-
1979-461	2443884.20	1979 Jan 10 1859:59	Rocketsonde	-	-	0.000	HRM	SS	-	Meteo	DSI-5850	-	-
1979-462	2443884.22	1979 Jan 10 1910:59	Rocketsonde	-	-	0.000	HRM	SS	-	Meteo	DSI-5850	-	-
1979-115	2443884.30	1979 Jan 10 1914:59	Rocketsonde	-	-	0.000	HRM	SS	-	Meteo	DSI-5850	-	-
1979-464	2443884.30	1979 Jan 10 2051:00	Rocketsonde	-	-	0.000	HRM	SS	-	Meteo	DSI-5850	-	-
1979-116	2443884.37	1979 Jan 10 2111:00	Rocketsonde	-	-	0.000	HRM	SS	-	Meteo	DSI-5850	-	-
1979-465	2443884.38	1979 Jan 10 2117:00	Rocketsonde	-	-	0.000	HRM	SS	-	Meteo	DSI-5850	-	-
1979-466	2443884.39	1979 Jan 10 2303:59	Rocketsonde	-	-	0.000	HRM	SS	-	Meteo	DSI-5850	-	-
1979-467	2443884.36	1979 Jan 11 1910:59	Rocketsonde	-	-	0.000	HRM	SS	-	Meteo	DSI-5850	-	-
1979-470	2443885.30	1979 Jan 11 1944:59	Rocketsonde	-	-	0.000	HRM	SS	-	Meteo	DSI-5850	-	-
1979-471	2443885.32	1979 Jan 11 1944:59	Rocketsonde	-	-	0.000	HRM	SS	-	Meteo	DSI-5850	-	-
1979-472	2443885.57	1979 Jan 12 0138:59	Rocketsonde	-	-	0.000	HRM	SS	-	Meteo	DSI-5850	-	-
1979-473	2443886.06	1979 Jan 12 1324:59	Rocketsonde	-	-	0.000	HRM	SS	-	Meteo	DSI-5850	-	-
1979-474	2443886.07	1979 Jan 12 1344:59	Rocketsonde	-	-	0.000	HRM	SS	-	Meteo	DSI-5850	-	-
1979-475	2443886.15	1979 Jan 12 1533:59	Rocketsonde	-	-	0.000	HRM	SS	-	Meteo	DSI-5850	-	-
1979-476	2443886.23	1979 Jan 12 1730:00	Rocketsonde	-	-	0.000	HRM	SS	-	Meteo	DSI-5850	-	-
1979-478	2443886.29	1979 Jan 12 1854:00	Rocketsonde	-	-	0.000	HRM	SS	-	Meteo	DSI-5850	-	-
1979-479	2443886.29	1979 Jan 12 1859:59	Rocketsonde	-	-	0.000	HRM	SS	-	Meteo	DSI-5850	-	-
1979-480	2443889.06	1979 Jan 15 1330:00	Rocketsonde	-	-	0.000	HRM	SS	-	Meteo	DSI-5850	-	-
1979-481	2443889.10	1979 Jan 15 1422:00	Rocketsonde	-	-	0.000	HRM	SS	-	Meteo	DSI-5850	-	-
1979-482	2443889.11	1979 Jan 15 1445:00	Rocketsonde	-	-	0.000	HRM	SS	-	Meteo	DSI-5850	-	-
1979-483	2443889.20	1979 Jan 15 1654:59	Rocketsonde	-	-	0.000	HRM	SS	-	Meteo	DSI-5850	-	-
1979-485	2443889.40	1979 Jan 16 2103:00	Rocketsonde	-	-	0.000	HRM	SS	-	Meteo	DSI-5850	-	-
1979-487	2443890.38	1979 Jan 16 2103:59	Rocketsonde	-	-	0.000	HRM	SS	-	Meteo	DSI-5850	-	-
1979-488	2443891.04	1979 Jan 16 2145:00	Rocketsonde	-	-	0.000	HRM	SS	-	Meteo	DSI-5850	-	-
1979-489	2443891.07	1979 Jan 17 1259:59	Rocketsonde	-	-	0.000	HRM	SS	-	Meteo	DSI-5850	-	-
1979-491	2443891.10	1979 Jan 17 1344:59	Rocketsonde	-	-	0.000	HRM	SS	-	Meteo	DSI-5850	-	-
1979-492	2443891.11	1979 Jan 17 1420:00	Rocketsonde	-	-	0.000	HRM	SS	-	Meteo	DSI-5850	-	-
1979-493	2443891.11	1979 Jan 17 1445:00	Rocketsonde	-	-	0.000	HRM	SS	-	Meteo	DSI-5850	-	-
1979-494	2443891.19	1979 Jan 17 1631:59	Rocketsonde	-	-	0.000	HRM	SS	-	Meteo	DSI-5850	-	-
1979-495	2443891.20	1979 Jan 17 1644:59	Rocketsonde	-	-	0.000	HRM	SS	-	Meteo	DSI-5850	-	-
1979-496	2443891.20	1979 Jan 17 1652:59	Rocketsonde	-	-	0.000	HRM	SS	-	Meteo	DSI-5850	-	-
1979-497	2443891.27	1979 Jan 17 1830:00	Rocketsonde	-	-	0.000	HRM	SS	-	Meteo	DSI-5850	-	-
1979-498	2443891.31	1979 Jan 17 1921:59	Rocketsonde	-	-	0.000	HRM	SS	-	Meteo	DSI-5850	-	-
1979-499	2443891.32	1979 Jan 17 1943:59	Rocketsonde	-	-	0.000	HRM	SS	-	Meteo	DSI-5850	-	-
1979-130	2443891.33	1979 Jan 17 1954:59	Rocketsonde	-	-	0.000	HRM	SS	-	Meteo	DSI-5850	-	-





Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Launch_e	Agency	Launch_Code	Group	Category	LT_Cite	Cite	Notes
1979-W288	2443928.12	1979 Feb 23 1457:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1979-W289	2443928.21	1979 Feb 23 1700:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1979-W290	2443928.23	1979 Feb 23 1730:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1979-W291	2443928.34	1979 Feb 23 2015:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1979-W292	2443928.37	1979 Feb 23 2048:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1979-W293	2443928.37	1979 Feb 23 2053:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1979-W294	2443928.50	1979 Feb 23 2355:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1979-W295	2443928.55	1979 Feb 24 0114:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1979-W296	2443928.03	1979 Feb 26 1245:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1979-W297	2443931.03	1979 Feb 26 1350:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1979-W298	2443931.06	1979 Feb 26 1445:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1979-W299	2443931.11	1979 Feb 26 1648:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1979-W300	2443931.20	1979 Feb 26 1700:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1979-W302	2443931.21	1979 Feb 26 1749:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1979-W303	2443931.24	1979 Feb 26 2057:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1979-W305	2443931.37	1979 Feb 26 2130:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1979-W307	2443931.40	1979 Feb 26 2300:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1979-W308	2443931.46	1979 Feb 27 0135:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1979-W313	2443932.15	1979 Feb 27 1854:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1979-W314	2443932.26	1979 Feb 27 1815:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1979-W315	2443932.28	1979 Feb 27 1849:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1979-W317	2443933.06	1979 Feb 28 1330:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1979-W320	2443933.10	1979 Feb 28 1420:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1979-W321	2443933.11	1979 Feb 28 1445:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1979-W323	2443933.15	1979 Feb 28 1542:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1979-W324	2443933.19	1979 Feb 28 1626:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1979-W325	2443933.20	1979 Feb 28 1651:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1979-W327	2443933.25	1979 Feb 28 1700:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1979-W328	2443933.27	1979 Feb 28 1830:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1979-W329	2443933.44	1979 Feb 28 2230:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1979-W331	2443934.24	1979 Mar 1 1751:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1979-W332	2443934.52	1979 Mar 1 1936:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1979-W334	2443935.26	1979 Mar 2 1811:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1979-W335	2443935.29	1979 Mar 2 1859:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1979-W336	2443935.37	1979 Mar 2 2059:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1979-W338	2443935.39	1979 Mar 2 2124:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1979-W337	2443935.41	1979 Mar 2 2152:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1979-W338	2443935.44	1979 Mar 2 2230:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1979-W339	2443935.44	1979 Mar 5 1441:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1979-W340	2443938.21	1979 Mar 9 1900:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1979-W341	2443938.31	1979 Mar 9 2139:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1979-W343	2443938.74	1979 Mar 9 2139:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1979-W345	2443938.89	1979 Mar 9 2137:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1979-W347	2443940.12	1979 Mar 11 146:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1979-W348	2443940.15	1979 Mar 7 1530:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1979-W349	2443940.15	1979 Mar 7 1530:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1979-W350	2443940.25	1979 Mar 7 1800:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1979-W351	2443940.31	1979 Mar 7 1930:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1979-W352	2443940.32	1979 Mar 7 1944:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1979-W353	2443940.36	1979 Mar 7 2052:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1979-W354	2443940.48	1979 Mar 7 2030:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1979-W356	2443941.33	1979 Mar 8 2001:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1979-W357	2443942.11	1979 Mar 8 1441:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1979-W358	2443942.24	1979 Mar 8 1740:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1979-W359	2443942.38	1979 Mar 8 2100:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1979-W360	2443942.38	1979 Mar 8 2100:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1979-W361	2443942.39	1979 Mar 8 2124:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1979-W362	2443942.37	1979 Mar 8 2310:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1979-W363	2443942.56	1979 Mar 10 0129:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1979-W364	2443945.13	1979 Mar 12 1503:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1979-W365	2443945.24	1979 Mar 12 1748:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1979-W366	2443945.24	1979 Mar 12 1800:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1979-W367	2443945.31	1979 Mar 12 1800:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1979-W368	2443945.42	1979 Mar 12 2119:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1979-W369	2443945.55	1979 Mar 13 0114:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1979-W370	2443947.14	1979 Mar 14 1514:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1979-W372	2443947.15	1979 Mar 14 1536:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1979-W373	2443947.29	1979 Mar 14 1859:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1979-W374	2443947.30	1979 Mar 14 1914:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1979-W375	2443947.31	1979 Mar 14 1930:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1979-W376	2443947.33	1979 Mar 14 1952:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1979-W377	2443947.35	1979 Mar 14 2020:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1979-W378	2443947.41	1979 Mar 14 2156:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1979-W379	2443947.42	1979 Mar 14 2159:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1979-W380	2443947.47	1979 Mar 14 2323:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1979-W381	2443948.38	1979 Mar 14 2329:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1979-W382	2443948.40	1979 Mar 15 2110:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1979-W383	2443949.21	1979 Mar 15 2132:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1979-W385	2443949.38	1979 Mar 16 1700:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1979-W386	2443949.39	1979 Mar 16 2100:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1979-W387	2443949.41	1979 Mar 16 2149:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1979-W388	2443952.13	1979 Mar 19 1503:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Launch_e	Agency	Launch_Code	Group	Category	LT_Cite	Cite	Notes
1979-W389	2443952.14	1979 Mar 19 15:15:59	Rocketsonde	-	-	0.000	HRU	SS	-	Meteo	DSI-5850	-	-
1979-A15	2443952.26	1979 Mar 19 18:10:00	Rocketsonde	-	-	0.000	HRU	SS	-	Meteo	DSI-5850	-	-
1979-K392	2443952.29	1979 Mar 19 18:59:59	Rocketsonde	-	-	0.000	HRU	SS	-	Meteo	DSI-5850	-	-
1979-K393	2443952.37	1979 Mar 19 20:53:00	Rocketsonde	-	-	0.000	HRU	SS	-	Meteo	DSI-5850	-	-
1979-K394	2443952.38	1979 Mar 19 21:00:00	Rocketsonde	-	-	0.000	HRU	SS	-	Meteo	DSI-5850	-	-
1979-K395	2443952.55	1979 Mar 20 01:14:59	Rocketsonde	-	-	0.000	HRU	SS	-	Meteo	DSI-5850	-	-
1979-K396	2443952.75	1979 Mar 20 06:00:00	Rocketsonde	-	-	0.000	HRU	SS	-	Meteo	DSI-5850	-	-
1979-K398	2443954.12	1979 Mar 21 14:47:00	Rocketsonde	-	-	0.000	HRU	SS	-	Meteo	DSI-5850	-	-
1979-K399	2443954.21	1979 Mar 21 16:57:59	Rocketsonde	-	-	0.000	HRU	SS	-	Meteo	DSI-5850	-	-
1979-W400	2443954.24	1979 Mar 21 17:49:59	Rocketsonde	-	-	0.000	HRU	SS	-	Meteo	DSI-5850	-	-
1979-Y172	2443954.29	1979 Mar 21 18:59:59	Rocketsonde	-	-	0.000	HRU	SS	-	Meteo	DSI-5850	-	-
1979-Y173	2443954.31	1979 Mar 21 19:30:00	Rocketsonde	-	-	0.000	HRU	SS	-	Meteo	DSI-5850	-	-
1979-W402	2443954.31	1979 Mar 21 19:31:59	Rocketsonde	-	-	0.000	HRU	SS	-	Meteo	DSI-5850	-	-
1979-W403	2443954.33	1979 Mar 21 19:53:59	Rocketsonde	-	-	0.000	HRU	SS	-	Meteo	DSI-5850	-	-
1979-W404	2443954.33	1979 Mar 21 19:54:59	Rocketsonde	-	-	0.000	HRU	SS	-	Meteo	DSI-5850	-	-
1979-Y174	2443954.40	1979 Mar 21 21:32:00	Rocketsonde	-	-	0.000	HRU	SS	-	Meteo	DSI-5850	-	-
1979-W405	2443954.42	1979 Mar 21 22:10:59	Rocketsonde	-	-	0.000	HRU	SS	-	Meteo	DSI-5850	-	-
1979-Y175	2443954.57	1979 Mar 22 01:41:00	Rocketsonde	-	-	0.000	HRU	SS	-	Meteo	DSI-5850	-	-
1979-A17	2443954.75	1979 Mar 22 06:00:00	Rocketsonde	-	-	0.000	HRU	SS	-	Meteo	DSI-5850	-	-
1979-W407	2443956.11	1979 Mar 23 14:35:00	Rocketsonde	-	-	0.000	HRU	SS	-	Meteo	DSI-5850	-	-
1979-W408	2443956.27	1979 Mar 23 18:24:59	Rocketsonde	-	-	0.000	HRU	SS	-	Meteo	DSI-5850	-	-
1979-W409	2443956.29	1979 Mar 23 18:59:59	Rocketsonde	-	-	0.000	HRU	SS	-	Meteo	DSI-5850	-	-
1979-W410	2443956.31	1979 Mar 23 19:30:00	Rocketsonde	-	-	0.000	HRU	SS	-	Meteo	DSI-5850	-	-
1979-W412	2443956.55	1979 Mar 23 20:55:00	Rocketsonde	-	-	0.000	HRU	SS	-	Meteo	DSI-5850	-	-
1979-W414	2443956.71	1979 Mar 24 01:14:59	Rocketsonde	-	-	0.000	HRU	SS	-	Meteo	DSI-5850	-	-
1979-W416	2443959.13	1979 Mar 26 15:07:00	Rocketsonde	-	-	0.000	HRU	SS	-	Meteo	DSI-5850	-	-
1979-W417	2443959.23	1979 Mar 26 17:31:00	Rocketsonde	-	-	0.000	HRU	SS	-	Meteo	DSI-5850	-	-
1979-W419	2443959.35	1979 Mar 26 20:30:00	Rocketsonde	-	-	0.000	HRU	SS	-	Meteo	DSI-5850	-	-
1979-W420	2443959.38	1979 Mar 26 21:07:00	Rocketsonde	-	-	0.000	HRU	SS	-	Meteo	DSI-5850	-	-
1979-W421	2443959.59	1979 Mar 27 02:15:00	Rocketsonde	-	-	0.000	HRU	SS	-	Meteo	DSI-5850	-	-
1979-W422	2443959.80	1979 Mar 27 07:14:59	Rocketsonde	-	-	0.000	HRU	SS	-	Meteo	DSI-5850	-	-
1979-A16	2443960.38	1979 Mar 27 21:04:59	Rocketsonde	-	-	0.000	HRU	SS	-	Meteo	DSI-5850	-	-
1979-W424	2443961.11	1979 Mar 28 14:40:00	Rocketsonde	-	-	0.000	HRU	SS	-	Meteo	DSI-5850	-	-
1979-W425	2443961.17	1979 Mar 28 16:09:59	Rocketsonde	-	-	0.000	HRU	SS	-	Meteo	DSI-5850	-	-
1979-W426	2443961.19	1979 Mar 28 16:54:59	Rocketsonde	-	-	0.000	HRU	SS	-	Meteo	DSI-5850	-	-
1979-W428	2443961.21	1979 Mar 28 17:00:00	Rocketsonde	-	-	0.000	HRU	SS	-	Meteo	DSI-5850	-	-
1979-Y200	2443961.30	1979 Mar 28 19:39:59	Rocketsonde	-	-	0.000	HRU	SS	-	Meteo	DSI-5850	-	-
1979-W430	2443961.33	1979 Mar 28 19:52:00	Rocketsonde	-	-	0.000	HRU	SS	-	Meteo	DSI-5850	-	-
1979-W431	2443961.38	1979 Mar 28 21:00:00	Rocketsonde	-	-	0.000	HRU	SS	-	Meteo	DSI-5850	-	-
1979-W432	2443961.46	1979 Mar 28 22:41:59	Rocketsonde	-	-	0.000	HRU	SS	-	Meteo	DSI-5850	-	-
1979-W433	2443961.51	1979 Mar 29 01:30:00	Rocketsonde	-	-	0.000	HRU	SS	-	Meteo	DSI-5850	-	-
1979-W434	2443962.38	1979 Mar 29 21:01:59	Rocketsonde	-	-	0.000	HRU	SS	-	Meteo	DSI-5850	-	-
1979-W435	2443963.11	1979 Mar 30 18:44:00	Rocketsonde	-	-	0.000	HRU	SS	-	Meteo	DSI-5850	-	-
1979-W437	2443963.25	1979 Mar 30 18:59:59	Rocketsonde	-	-	0.000	HRU	SS	-	Meteo	DSI-5850	-	-
1979-W438	2443963.29	1979 Mar 30 18:59:59	Rocketsonde	-	-	0.000	HRU	SS	-	Meteo	DSI-5850	-	-
1979-W439	2443963.38	1979 Mar 30 19:10:00	Rocketsonde	-	-	0.000	HRU	SS	-	Meteo	DSI-5850	-	-
1979-W441	2443963.51	1979 Mar 31 07:19:59	Rocketsonde	-	-	0.000	HRU	SS	-	Meteo	DSI-5850	-	-
1979-W443	2443963.61	1979 Apr 2 13:14:59	Rocketsonde	-	-	0.000	HRU	SS	-	Meteo	DSI-5850	-	-
1979-W444	2443963.66	1979 Apr 2 13:20:00	Rocketsonde	-	-	0.000	HRU	SS	-	Meteo	DSI-5850	-	-
1979-W445	2443963.90	1979 Apr 2 18:59:59	Rocketsonde	-	-	0.000	HRU	SS	-	Meteo	DSI-5850	-	-
1979-W446	2443963.97	1979 Apr 2 20:56:00	Rocketsonde	-	-	0.000	HRU	SS	-	Meteo	DSI-5850	-	-
1979-W447	2443963.98	1979 Apr 2 21:00:00	Rocketsonde	-	-	0.000	HRU	SS	-	Meteo	DSI-5850	-	-
1979-A19	2443966.34	1979 Apr 2 22:40:00	Rocketsonde	-	-	0.000	HRU	SS	-	Meteo	DSI-5850	-	-
1979-W449	2443966.44	1979 Apr 4 13:30:00	Rocketsonde	-	-	0.000	HRU	SS	-	Meteo	DSI-5850	-	-
1979-W450	2443968.06	1979 Apr 4 13:30:00	Rocketsonde	-	-	0.000	HRU	SS	-	Meteo	DSI-5850	-	-
1979-Y218	2443968.13	1979 Apr 4 15:10:00	Rocketsonde	-	-	0.000	HRU	SS	-	Meteo	DSI-5850	-	-
1979-W452	2443968.16	1979 Apr 4 15:45:00	Rocketsonde	-	-	0.000	HRU	SS	-	Meteo	DSI-5850	-	-
1979-W463	2443968.19	1979 Apr 4 16:18:59	Rocketsonde	-	-	0.000	HRU	SS	-	Meteo	DSI-5850	-	-
1979-Y220	2443968.29	1979 Apr 4 18:59:59	Rocketsonde	-	-	0.000	HRU	SS	-	Meteo	DSI-5850	-	-
1979-W464	2443968.30	1979 Apr 4 19:14:59	Rocketsonde	-	-	0.000	HRU	SS	-	Meteo	DSI-5850	-	-
1979-Y221	2443968.33	1979 Apr 4 19:49:59	Rocketsonde	-	-	0.000	HRU	SS	-	Meteo	DSI-5850	-	-
1979-W465	2443968.35	1979 Apr 4 20:19:00	Rocketsonde	-	-	0.000	HRU	SS	-	Meteo	DSI-5850	-	-
1979-W466	2443968.38	1979 Apr 4 21:00:00	Rocketsonde	-	-	0.000	HRU	SS	-	Meteo	DSI-5850	-	-
1979-W467	2443968.40	1979 Apr 4 21:31:00	Rocketsonde	-	-	0.000	HRU	SS	-	Meteo	DSI-5850	-	-
1979-W468	2443968.45	1979 Apr 4 22:49:59	Rocketsonde	-	-	0.000	HRU	SS	-	Meteo	DSI-5850	-	-
1979-W469	2443968.49	1979 Apr 4 23:46:00	Rocketsonde	-	-	0.000	HRU	SS	-	Meteo	DSI-5850	-	-
1979-W470	2443968.55	1979 Apr 5 01:14:59	Rocketsonde	-	-	0.000	HRU	SS	-	Meteo	DSI-5850	-	-
1979-W471	2443968.57	1979 Apr 5 01:44:59	Rocketsonde	-	-	0.000	HRU	SS	-	Meteo	DSI-5850	-	-
1979-W472	2443969.22	1979 Apr 5 17:21:00	Rocketsonde	-	-	0.000	HRU	SS	-	Meteo	DSI-5850	-	-
1979-W473	2443969.38	1979 Apr 5 21:00:59	Rocketsonde	-	-	0.000	HRU	SS	-	Meteo	DSI-5850	-	-
1979-W474	2443969.44	1979 Apr 5 22:33:59	Rocketsonde	-	-	0.000	HRU	SS	-	Meteo	DSI-5850	-	-
1979-W475	2443970.05	1979 Apr 6 13:14:59	Rocketsonde	-	-	0.000	HRU	SS	-	Meteo	DSI-5850	-	-
1979-W476	2443970.11	1979 Apr 6 14:45:00	Rocketsonde	-	-	0.000	HRU	SS	-	Meteo	DSI-5850	-	-
1979-W477	2443970.16	1979 Apr 6 15:52:00	Rocketsonde	-	-	0.000	HRU	SS	-	Meteo	DSI-5850	-	-
1979-W478	2443970.24	1979 Apr 6 17:40:00	Rocketsonde	-	-	0.000	HRU	SS	-	Meteo	DSI-5850	-	-
1979-W479	2443970.32	1979 Apr 6 19:40:00	Rocketsonde	-	-	0.000	HRU	SS	-	Meteo	DSI-5850	-	-
1979-W480	2443970.37	1979 Apr 6 20:47:00	Rocketsonde	-	-	0.000	HRU	SS	-	Meteo	DSI-5850	-	-
1979-W481	2443970.55	1979 Apr 7 01:14:59	Rocketsonde	-	-	0.000	HRU	SS	-	Meteo	DSI-5850	-	-
1979-W482	2443973.04	1979 Apr 9 12:59:59	Rocketsonde	-	-	0.000	HRU	SS	-	Meteo	DSI-5850	-	-
1979-W483	2443973.13	1979 Apr 9 15:11:59	Rocketsonde	-	-	0.000	HRU	SS	-	Meteo	DSI-5850	-	-
1979-W484	2443973.37	1979 Apr 9 20:59:00	Rocketsonde	-	-	0.000	HRU	SS	-	Meteo	DSI-5850	-	-
1979-W485	2443973.41	1979 Apr 9 21:52:00	Rocketsonde	-	-	0.000	HRU	SS	-	Meteo	DSI-5850	-	-
1979-W486	2443973.42	1979 Apr 9 21:59:59	Rocketsonde	-	-	0.000	HRU	SS	-	Meteo	DSI-5850	-	-
1979-W487	2443973.55	1979 Apr 10 01:14:59	Rocketsonde	-	-	0.000	HRU	SS	-	Meteo	DSI-5850	-	-
1979-W488	2443975.06	1979 Apr 11 13:19:59	Rocketsonde	-	-	0.000	HRU	SS	-	Meteo	DSI-5850	-	-





Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Launch_e	Agency	Launch_Code	Group	Category	LT_Cite	Cite	Notes
1979-4572	2443986.45	1979 May 2 2248:59	Rocketsonde	-	-	0.000	HRM	SS	-	Meteo	DSI-5850	-	-
1979-4573	2443986.50	1979 May 2 2356:00	Rocketsonde	-	-	0.000	HRM	SS	-	Meteo	DSI-5850	-	-
1979-4574	2443987.15	1979 May 3 1540:00	Rocketsonde	-	-	0.000	HRM	SS	-	Meteo	DSI-5850	-	-
1979-4575	2443987.19	1979 May 3 1635:59	Rocketsonde	-	-	0.000	HRM	SS	-	Meteo	DSI-5850	-	-
1979-4576	2443987.31	1979 May 3 1930:00	Rocketsonde	-	-	0.000	HRM	SS	-	Meteo	DSI-5850	-	-
1979-4577	2443987.42	1979 May 3 2202:59	Rocketsonde	-	-	0.000	HRM	SS	-	Meteo	DSI-5850	-	-
1979-4578	2443987.46	1979 May 3 2241:00	Rocketsonde	-	-	0.000	HRM	SS	-	Meteo	DSI-5850	-	-
1979-4580	2443988.05	1979 May 4 1314:59	Rocketsonde	-	-	0.000	HRM	SS	-	Meteo	DSI-5850	-	-
1979-4581	2443988.06	1979 May 4 1330:00	Rocketsonde	-	-	0.000	HRM	SS	-	Meteo	DSI-5850	-	-
1979-4582	2443988.10	1979 May 4 1431:00	Rocketsonde	-	-	0.000	HRM	SS	-	Meteo	DSI-5850	-	-
1979-4583	2443988.11	1979 May 4 1437:00	Rocketsonde	-	-	0.000	HRM	SS	-	Meteo	DSI-5850	-	-
1979-4584	2443988.14	1979 May 4 1522:00	Rocketsonde	-	-	0.000	HRM	SS	-	Meteo	DSI-5850	-	-
1979-4585	2443988.21	1979 May 4 1700:00	Rocketsonde	-	-	0.000	HRM	SS	-	Meteo	DSI-5850	-	-
1979-4586	2443988.25	1979 May 4 1806:00	Rocketsonde	-	-	0.000	HRM	SS	-	Meteo	DSI-5850	-	-
1979-4587	2443988.30	1979 May 4 1912:59	Rocketsonde	-	-	0.000	HRM	SS	-	Meteo	DSI-5850	-	-
1979-4588	2443988.33	1979 May 4 2000:00	Rocketsonde	-	-	0.000	HRM	SS	-	Meteo	DSI-5850	-	-
1979-4589	2443988.45	1979 May 4 2245:59	Rocketsonde	-	-	0.000	HRM	SS	-	Meteo	DSI-5850	-	-
1979-4590	2443988.50	1979 May 5 0000:00	Rocketsonde	-	-	0.000	HRM	SS	-	Meteo	DSI-5850	-	-
1979-4591	2444001.05	1979 May 7 1314:59	Rocketsonde	-	-	0.000	HRM	SS	-	Meteo	DSI-5850	-	-
1979-4592	2444001.10	1979 May 7 1418:00	Rocketsonde	-	-	0.000	HRM	SS	-	Meteo	DSI-5850	-	-
1979-4593	2444001.16	1979 May 7 1552:00	Rocketsonde	-	-	0.000	HRM	SS	-	Meteo	DSI-5850	-	-
1979-4594	2444001.21	1979 May 7 1700:00	Rocketsonde	-	-	0.000	HRM	SS	-	Meteo	DSI-5850	-	-
1979-4595	2444001.26	1979 May 7 1813:59	Rocketsonde	-	-	0.000	HRM	SS	-	Meteo	DSI-5850	-	-
1979-4597	2444001.33	1979 May 8 2000:00	Rocketsonde	-	-	0.000	HRM	SS	-	Meteo	DSI-5850	-	-
1979-4598	2444002.61	1979 May 9 0240:00	Rocketsonde	-	-	0.000	HRM	SS	-	Meteo	DSI-5850	-	-
1979-4599	2444003.10	1979 May 9 1422:00	Rocketsonde	-	-	0.000	HRM	SS	-	Meteo	DSI-5850	-	-
1979-4600	2444003.21	1979 May 9 1700:00	Rocketsonde	-	-	0.000	HRM	SS	-	Meteo	DSI-5850	-	-
1979-4601	2444003.22	1979 May 9 1710:00	Rocketsonde	-	-	0.000	HRM	SS	-	Meteo	DSI-5850	-	-
1979-4602	2444003.23	1979 May 9 1735:00	Rocketsonde	-	-	0.000	HRM	SS	-	Meteo	DSI-5850	-	-
1979-4603	2444003.24	1979 May 9 1757:59	Rocketsonde	-	-	0.000	HRM	SS	-	Meteo	DSI-5850	-	-
1979-4604	2444003.26	1979 May 9 1745:00	Rocketsonde	-	-	0.000	HRM	SS	-	Meteo	DSI-5850	-	-
1979-4605	2444003.27	1979 May 9 1814:59	Rocketsonde	-	-	0.000	HRM	SS	-	Meteo	DSI-5850	-	-
1979-4606	2444003.29	1979 May 9 1850:00	Rocketsonde	-	-	0.000	HRM	SS	-	Meteo	DSI-5850	-	-
1979-4607	2444003.31	1979 May 9 1918:59	Rocketsonde	-	-	0.000	HRM	SS	-	Meteo	DSI-5850	-	-
1979-4608	2444003.33	1979 May 9 2000:00	Rocketsonde	-	-	0.000	HRM	SS	-	Meteo	DSI-5850	-	-
1979-4609	2444003.44	1979 May 9 2230:00	Rocketsonde	-	-	0.000	HRM	SS	-	Meteo	DSI-5850	-	-
1979-4610	2444004.67	1979 May 9 2251:00	Rocketsonde	-	-	0.000	HRM	SS	-	Meteo	DSI-5850	-	-
1979-4611	2444004.87	1979 May 11 0141:59	Rocketsonde	-	-	0.000	HRM	SS	-	Meteo	DSI-5850	-	-
1979-4612	2444005.04	1979 May 11 1259:59	Rocketsonde	-	-	0.000	HRM	SS	-	Meteo	DSI-5850	-	-
1979-4613	2444005.06	1979 May 11 1350:00	Rocketsonde	-	-	0.000	HRM	SS	-	Meteo	DSI-5850	-	-
1979-4614	2444005.10	1979 May 11 1420:00	Rocketsonde	-	-	0.000	HRM	SS	-	Meteo	DSI-5850	-	-
1979-4615	2444005.12	1979 May 11 1500:00	Rocketsonde	-	-	0.000	HRM	SS	-	Meteo	DSI-5850	-	-
1979-4616	2444005.15	1979 May 11 1536:59	Rocketsonde	-	-	0.000	HRM	SS	-	Meteo	DSI-5850	-	-
1979-4617	2444005.23	1979 May 11 1919:59	Rocketsonde	-	-	0.000	HRM	SS	-	Meteo	DSI-5850	-	-
1979-4618	2444005.31	1979 May 11 2310:00	Rocketsonde	-	-	0.000	HRM	SS	-	Meteo	DSI-5850	-	-
1979-4619	2444005.47	1979 May 15 0621:59	Rocketsonde	-	-	0.000	HRM	SS	-	Meteo	DSI-5850	-	-
1979-4620	2444005.68	1979 May 14 1822:00	Rocketsonde	-	-	0.000	HRM	SS	-	Meteo	DSI-5850	-	-
1979-4621	2444005.69	1979 May 14 1930:00	Rocketsonde	-	-	0.000	HRM	SS	-	Meteo	DSI-5850	-	-
1979-4622	2444005.69	1979 May 14 1930:00	Rocketsonde	-	-	0.000	HRM	SS	-	Meteo	DSI-5850	-	-
1979-4623	2444005.92	1979 May 14 1515:00	Rocketsonde	-	-	0.000	HRM	SS	-	Meteo	DSI-5850	-	-
1979-4624	2444005.92	1979 May 14 1538:59	Rocketsonde	-	-	0.000	HRM	SS	-	Meteo	DSI-5850	-	-
1979-4625	2444005.95	1979 May 14 1800:00	Rocketsonde	-	-	0.000	HRM	SS	-	Meteo	DSI-5850	-	-
1979-4626	2444005.97	1979 May 14 1822:00	Rocketsonde	-	-	0.000	HRM	SS	-	Meteo	DSI-5850	-	-
1979-4627	2444005.97	1979 May 14 1925:00	Rocketsonde	-	-	0.000	HRM	SS	-	Meteo	DSI-5850	-	-
1979-4628	2444005.98	1979 May 14 2330:00	Rocketsonde	-	-	0.000	HRM	SS	-	Meteo	DSI-5850	-	-
1979-4629	2444005.98	1979 May 15 0149:59	Rocketsonde	-	-	0.000	HRM	SS	-	Meteo	DSI-5850	-	-
1979-4630	2444005.93	1979 May 15 2000:00	Rocketsonde	-	-	0.000	HRM	SS	-	Meteo	DSI-5850	-	-
1979-4631	2444010.06	1979 May 16 1319:59	Rocketsonde	-	-	0.000	HRM	SS	-	Meteo	DSI-5850	-	-
1979-4632	2444010.12	1979 May 16 1455:00	Rocketsonde	-	-	0.000	HRM	SS	-	Meteo	DSI-5850	-	-
1979-4633	2444010.17	1979 May 16 1558:59	Rocketsonde	-	-	0.000	HRM	SS	-	Meteo	DSI-5850	-	-
1979-4634	2444010.21	1979 May 16 1700:00	Rocketsonde	-	-	0.000	HRM	SS	-	Meteo	DSI-5850	-	-
1979-4635	2444010.26	1979 May 16 1814:59	Rocketsonde	-	-	0.000	HRM	SS	-	Meteo	DSI-5850	-	-
1979-4636	2444010.30	1979 May 16 1904:59	Rocketsonde	-	-	0.000	HRM	SS	-	Meteo	DSI-5850	-	-
1979-4637	2444010.32	1979 May 16 1934:59	Rocketsonde	-	-	0.000	HRM	SS	-	Meteo	DSI-5850	-	-
1979-4638	2444010.33	1979 May 16 2000:00	Rocketsonde	-	-	0.000	HRM	SS	-	Meteo	DSI-5850	-	-
1979-4639	2444010.47	1979 May 16 2310:00	Rocketsonde	-	-	0.000	HRM	SS	-	Meteo	DSI-5850	-	-
1979-4640	2444010.57	1979 May 17 0137:59	Rocketsonde	-	-	0.000	HRM	SS	-	Meteo	DSI-5850	-	-
1979-4641	2444011.82	1979 May 17 2000:00	Rocketsonde	-	-	0.000	HRM	SS	-	Meteo	DSI-5850	-	-
1979-4642	2444011.82	1979 May 18 0247:00	Rocketsonde	-	-	0.000	HRM	SS	-	Meteo	DSI-5850	-	-
1979-4643	2444012.10	1979 May 18 1419:00	Rocketsonde	-	-	0.000	HRM	SS	-	Meteo	DSI-5850	-	-
1979-4644	2444012.11	1979 May 18 1441:00	Rocketsonde	-	-	0.000	HRM	SS	-	Meteo	DSI-5850	-	-
1979-4645	2444012.13	1979 May 18 1502:59	Rocketsonde	-	-	0.000	HRM	SS	-	Meteo	DSI-5850	-	-
1979-4646	2444012.23	1979 May 18 1730:00	Rocketsonde	-	-	0.000	HRM	SS	-	Meteo	DSI-5850	-	-
1979-4647	2444012.24	1979 May 18 1749:59	Rocketsonde	-	-	0.000	HRM	SS	-	Meteo	DSI-5850	-	-
1979-4648	2444012.25	1979 May 18 1800:00	Rocketsonde	-	-	0.000	HRM	SS	-	Meteo	DSI-5850	-	-
1979-4649	2444012.28	1979 May 18 1845:00	Rocketsonde	-	-	0.000	HRM	SS	-	Meteo	DSI-5850	-	-
1979-4650	2444012.33	1979 May 18 1954:59	Rocketsonde	-	-	0.000	HRM	SS	-	Meteo	DSI-5850	-	-
1979-4651	2444012.61	1979 May 19 0237:00	Rocketsonde	-	-	0.000	HRM	SS	-	Meteo	DSI-5850	-	-
1979-4652	2444015.07	1979 May 21 1344:59	Rocketsonde	-	-	0.000	HRM	SS	-	Meteo	DSI-5850	-	-
1979-4653	2444015.09	1979 May 21 1415:00	Rocketsonde	-	-	0.000	HRM	SS	-	Meteo	DSI-5850	-	-
1979-4654	2444015.14	1979 May 21 1523:59	Rocketsonde	-	-	0.000	HRM	SS	-	Meteo	DSI-5850	-	-
1979-4655	2444015.20	1979 May 21 1651:00	Rocketsonde	-	-	0.000	HRM	SS	-	Meteo	DSI-5850	-	-
1979-4656	2444015.25	1979 May 21 1800:00	Rocketsonde	-	-	0.000	HRM	SS	-	Meteo	DSI-5850	-	-
1979-4657	2444015.25	1979 May 21 1800:00	Rocketsonde	-	-	0.000	HRM	SS	-	Meteo	DSI-5850	-	-

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Launch_e	Agency	Launch_Code	Group	Category	LT_Cite	Cite	Notes
1979-H658	2444015.31	1979 May 21 19:19:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1979-H660	2444015.33	1979 May 21 20:00:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1979-H662	2444015.37	1979 May 21 20:56:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1979-H661	2444015.38	1979 May 21 21:00:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1979-H662	2444015.56	1979 May 22 01:27:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1979-H664	2444017.04	1979 May 23 12:59:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1979-H665	2444017.10	1979 May 23 14:30:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1979-H667	2444017.11	1979 May 23 14:32:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1979-H668	2444017.14	1979 May 23 14:45:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1979-H307	2444017.16	1979 May 23 15:47:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1979-H669	2444017.20	1979 May 23 16:52:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1979-H670	2444017.21	1979 May 23 17:00:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1979-H671	2444017.22	1979 May 23 17:18:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1979-H672	2444017.30	1979 May 23 19:15:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1979-H674	2444017.46	1979 May 23 22:53:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1979-H675	2444017.48	1979 May 24 00:45:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1979-H676	2444017.53	1979 May 24 00:45:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1979-H678	2444019.07	1979 May 25 13:44:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1979-H679	2444019.07	1979 May 25 13:44:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1979-H680	2444019.10	1979 May 25 14:31:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1979-H681	2444019.11	1979 May 25 14:37:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1979-H682	2444019.19	1979 May 25 16:33:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1979-H683	2444019.25	1979 May 25 18:00:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1979-H684	2444019.26	1979 May 25 18:06:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1979-H685	2444019.33	1979 May 25 20:00:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1979-H687	2444019.41	1979 May 25 21:55:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1979-H688	2444019.47	1979 May 25 23:15:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1979-H689	2444019.62	1979 May 26 03:00:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1979-H689	2444022.12	1979 May 26 14:53:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1979-H697	2444023.06	1979 May 29 14:54:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1979-H698	2444023.11	1979 May 29 17:30:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1979-H701	2444023.40	1979 May 29 21:30:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1979-H702	2444023.41	1979 May 29 21:47:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1979-H703	2444024.06	1979 May 30 13:30:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1979-H704	2444024.06	1979 May 30 13:30:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1979-H708	2444024.26	1979 May 30 18:55:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1979-H710	2444024.31	1979 May 30 19:19:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1979-H711	2444024.35	1979 May 30 21:19:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1979-H712	2444024.45	1979 May 30 22:52:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1979-H713	2444025.35	1979 May 31 20:00:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1979-H715	2444026.06	1979 Jun 1 14:30:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1979-H716	2444026.10	1979 Jun 1 14:30:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1979-H717	2444026.21	1979 Jun 1 17:20:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1979-H718	2444026.22	1979 Jun 1 17:20:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1979-H719	2444026.38	1979 Jun 1 21:00:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1979-H720	2444026.41	1979 Jun 2 01:25:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1979-H721	2444026.56	1979 Jun 2 01:25:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1979-H722	2444029.06	1979 Jun 4 13:30:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1979-H723	2444029.07	1979 Jun 4 13:44:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1979-H724	2444029.10	1979 Jun 4 14:17:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1979-H726	2444029.10	1979 Jun 4 14:30:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1979-H725	2444029.21	1979 Jun 4 17:00:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1979-H726	2444029.25	1979 Jun 4 18:00:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1979-H727	2444029.27	1979 Jun 4 18:30:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1979-H728	2444029.30	1979 Jun 4 19:14:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1979-H729	2444029.38	1979 Jun 4 21:00:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1979-H731	2444031.05	1979 Jun 6 01:14:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1979-H732	2444031.06	1979 Jun 6 13:14:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1979-H733	2444031.07	1979 Jun 6 13:30:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1979-H734	2444031.10	1979 Jun 6 13:44:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1979-H735	2444031.10	1979 Jun 6 14:23:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1979-H736	2444031.10	1979 Jun 6 14:27:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1979-H737	2444031.19	1979 Jun 6 14:30:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1979-H738	2444031.20	1979 Jun 6 16:51:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1979-H739	2444031.21	1979 Jun 6 17:00:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1979-H740	2444031.23	1979 Jun 6 17:32:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1979-H741	2444031.44	1979 Jun 6 18:14:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1979-H742	2444032.57	1979 Jun 8 01:34:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1979-H743	2444033.11	1979 Jun 8 13:24:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1979-H745	2444033.11	1979 Jun 8 14:44:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1979-H746	2444033.25	1979 Jun 8 18:03:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1979-H747	2444033.31	1979 Jun 8 19:24:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1979-H427	2444033.40	1979 Jun 8 21:34:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-



Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Launch	Agency	Launch_Code	Group	Category	LT_Cite	Cite	Notes
						DrpPay							
1979-H831	2444054.24	1979 Jun 29 17:40:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1979-H831	2444054.33	1979 Jun 29 20:00:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1979-H832	2444054.37	1979 Jun 29 20:54:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1979-H833	2444054.44	1979 Jun 29 22:50:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1979-H834	2444054.55	1979 Jun 30 01:14:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1979-H835	2444057.06	1979 Jul 2 13:19:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1979-H835	2444057.14	1979 Jul 2 15:20:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1979-H837	2444057.21	1979 Jul 2 17:00:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1979-H838	2444057.30	1979 Jul 2 19:14:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1979-H839	2444057.37	1979 Jul 2 20:56:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1979-H840	2444057.47	1979 Jul 2 23:10:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1979-H841	2444058.53	1979 Jul 3 00:37:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1979-H842	2444058.11	1979 Jul 3 14:46:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1979-H832	2444058.33	1979 Jul 3 20:00:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1979-H844	2444058.62	1979 Jul 4 02:49:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1979-H846	2444059.26	1979 Jul 4 18:14:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1979-H847	2444059.62	1979 Jul 5 02:59:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1979-H848	2444060.62	1979 Jul 6 02:58:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1979-H848	2444061.08	1979 Jul 6 14:00:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1979-H849	2444061.10	1979 Jul 6 14:21:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1979-H849	2444061.21	1979 Jul 6 17:00:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1979-H850	2444061.22	1979 Jul 6 17:10:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1979-H851	2444061.26	1979 Jul 6 18:14:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1979-H852	2444061.27	1979 Jul 6 18:26:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1979-H853	2444061.29	1979 Jul 6 18:57:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1979-H854	2444061.29	1979 Jul 6 18:59:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1979-H855	2444061.37	1979 Jul 6 20:54:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1979-H856	2444061.57	1979 Jul 7 01:36:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1979-H856	2444064.06	1979 Jul 9 13:30:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1979-H857	2444064.07	1979 Jul 9 13:44:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1979-H857	2444064.09	1979 Jul 9 14:04:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1979-H858	2444064.09	1979 Jul 9 14:15:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1979-H859	2444064.21	1979 Jul 9 17:04:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1979-H860	2444064.25	1979 Jul 9 18:04:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1979-H861	2444064.27	1979 Jul 9 18:30:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1979-H862	2444064.49	1979 Jul 9 23:40:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1979-H863	2444064.58	1979 Jul 10 01:14:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1979-H864	2444065.06	1979 Jul 10 14:00:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1979-H866	2444066.07	1979 Jul 11 13:30:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1979-H867	2444066.07	1979 Jul 11 13:44:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1979-H868	2444066.09	1979 Jul 11 14:03:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1979-H869	2444066.09	1979 Jul 11 14:23:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1979-H870	2444066.17	1979 Jul 11 16:01:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1979-H871	2444066.19	1979 Jul 11 16:31:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1979-H871	2444066.21	1979 Jul 11 17:00:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1979-H872	2444066.22	1979 Jul 11 17:15:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1979-H873	2444066.22	1979 Jul 11 18:53:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1979-H874	2444066.27	1979 Jul 11 23:15:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1979-H874	2444066.67	1979 Jul 12 03:00:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1979-H875	2444067.32	1979 Jul 12 20:00:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1979-H876	2444067.37	1979 Jul 12 20:56:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1979-H879	2444067.39	1979 Jul 12 21:18:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1979-H880	2444067.80	1979 Jul 13 02:55:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1979-H881	2444068.07	1979 Jul 13 13:44:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1979-H881	2444068.07	1979 Jul 13 13:44:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1979-H882	2444068.14	1979 Jul 13 15:18:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1979-H882	2444068.21	1979 Jul 13 17:00:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1979-H884	2444068.25	1979 Jul 13 18:00:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1979-H885	2444068.32	1979 Jul 13 19:44:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1979-H886	2444068.37	1979 Jul 13 20:56:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1979-H887	2444068.38	1979 Jul 13 21:00:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1979-H888	2444069.29	1979 Jul 14 18:59:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1979-H889	2444071.06	1979 Jul 14 21:14:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1979-H890	2444071.07	1979 Jul 16 13:30:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1979-H891	2444071.10	1979 Jul 16 14:30:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1979-H892	2444071.14	1979 Jul 16 15:24:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1979-H894	2444071.19	1979 Jul 16 16:26:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1979-H895	2444071.21	1979 Jul 16 17:00:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1979-H896	2444071.27	1979 Jul 16 18:30:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1979-H897	2444071.31	1979 Jul 16 19:30:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1979-H898	2444071.55	1979 Jul 17 01:14:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1979-H899	2444071.95	1979 Jul 17 10:52:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1979-H900	2444072.27	1979 Jul 17 18:30:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1979-H901	2444072.53	1979 Jul 18 00:41:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1979-H904	2444073.06	1979 Jul 18 13:30:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1979-H905	2444073.09	1979 Jul 18 14:10:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1979-H906	2444073.10	1979 Jul 18 14:59:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1979-H907	2444073.11	1979 Jul 18 14:59:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1979-H908	2444073.15	1979 Jul 18 15:30:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1979-H909	2444073.25	1979 Jul 18 18:00:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1979-H910	2444073.26	1979 Jul 18 18:14:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1979-H911	2444073.27	1979 Jul 18 18:34:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1979-H911	2444073.29	1979 Jul 18 18:56:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Launch_e	Agency	Launch_Code	Group	Category	LT_Cite	Cite	Notes
1979-H912	2444073.91	1979 Jul 19 0951:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1979-H913	2444075.06	1979 Jul 20 1330:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1979-H914	2444075.06	1979 Jul 20 1330:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1979-H915	2444075.10	1979 Jul 21 1429:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1979-H916	2444075.55	1979 Jul 21 0118:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1979-H917	2444077.29	1979 Jul 22 1859:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1979-H918	2444077.38	1979 Jul 22 2110:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1979-H919	2444078.07	1979 Jul 23 1344:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1979-H920	2444078.09	1979 Jul 23 1407:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1979-H921	2444078.25	1979 Jul 23 1800:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1979-H922	2444078.27	1979 Jul 23 1834:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1979-H923	2444078.37	1979 Jul 23 2058:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1979-H924	2444079.52	1979 Jul 25 0035:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1979-H925	2444080.06	1979 Jul 25 1330:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1979-H926	2444080.06	1979 Jul 25 1330:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1979-H927	2444080.10	1979 Jul 25 1426:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1979-H928	2444080.11	1979 Jul 25 1443:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1979-H929	2444080.11	1979 Jul 25 1445:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1979-H930	2444080.25	1979 Jul 25 1446:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1979-H931	2444080.26	1979 Jul 25 1614:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1979-H932	2444080.33	1979 Jul 25 2000:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1979-H933	2444080.33	1979 Jul 25 2104:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1979-H934	2444080.38	1979 Jul 25 2104:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1979-H935	2444080.39	1979 Jul 25 2121:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1979-H936	2444080.46	1979 Jul 25 2302:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1979-H937	2444081.35	1979 Jul 26 2020:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1979-H938	2444082.06	1979 Jul 27 1330:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1979-H939	2444082.07	1979 Jul 27 1344:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1979-H940	2444082.11	1979 Jul 27 1400:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1979-H941	2444082.21	1979 Jul 27 1437:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1979-H942	2444082.57	1979 Jul 27 1700:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1979-H943	2444082.85	1979 Jul 27 2058:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1979-H944	2444085.07	1979 Jul 30 1344:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1979-H945	2444085.13	1979 Jul 30 1506:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1979-H946	2444085.15	1979 Jul 30 1541:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1979-H947	2444085.16	1979 Jul 30 1551:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1979-H948	2444085.21	1979 Jul 30 1700:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1979-H949	2444085.23	1979 Jul 30 1800:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1979-H950	2444085.44	1979 Jul 30 2250:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1979-H951	2444085.74	1979 Jul 31 0000:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1979-H952	2444087.00	1979 Aug 1 1330:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1979-H953	2444087.00	1979 Aug 1 1344:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1979-H954	2444087.06	1979 Aug 1 1427:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1979-H955	2444087.10	1979 Aug 1 1430:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1979-H956	2444087.11	1979 Aug 1 1432:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1979-H957	2444087.11	1979 Aug 1 1442:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1979-H958	2444087.11	1979 Aug 1 1442:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1979-H959	2444087.31	1979 Aug 1 1700:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1979-H960	2444087.35	1979 Aug 1 1800:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1979-H961	2444087.36	1979 Aug 1 1814:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1979-H962	2444087.37	1979 Aug 1 2057:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1979-H963	2444087.39	1979 Aug 1 2124:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1979-H964	2444087.56	1979 Aug 1 2130:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1979-H965	2444088.06	1979 Aug 2 1330:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1979-H966	2444088.10	1979 Aug 2 1430:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1979-H967	2444088.69	1979 Aug 2 0440:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1979-H968	2444088.81	1979 Aug 2 0719:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1979-H969	2444088.97	1979 Aug 2 0849:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1979-H970	2444089.06	1979 Aug 2 1330:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1979-H971	2444089.10	1979 Aug 2 1430:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1979-H972	2444089.14	1979 Aug 2 1520:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1979-H973	2444089.38	1979 Aug 2 2100:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1979-H974	2444089.55	1979 Aug 2 0114:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1979-H975	2444092.07	1979 Aug 6 1344:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1979-H976	2444092.10	1979 Aug 6 1344:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1979-H977	2444092.10	1979 Aug 6 1424:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1979-H978	2444092.34	1979 Aug 6 2010:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1979-H979	2444092.41	1979 Aug 6 2156:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1979-H980	2444092.61	1979 Aug 7 0241:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1979-H981	2444093.18	1979 Aug 7 1617:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1979-H982	2444094.06	1979 Aug 8 1330:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1979-H983	2444094.06	1979 Aug 8 1330:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1979-H984	2444094.06	1979 Aug 8 1330:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1979-H985	2444094.17	1979 Aug 8 1430:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1979-H986	2444094.55	1979 Aug 8 1559:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1979-H987	2444095.34	1979 Aug 9 0114:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1979-H988	2444095.17	1979 Aug 9 2010:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1979-H989	2444096.28	1979 Aug 10 1845:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1979-H990	2444096.55	1979 Aug 11 0114:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1979-H991	2444099.06	1979 Aug 13 1330:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1979-H992	2444099.07	1979 Aug 13 1344:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Launch_e	Agency	Launch_Code	Group	Category	LT_Cite	Cite	Notes
1979-#993	2444099.14	1979 Aug 13 15:21:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1979-#994	2444099.18	1979 Aug 13 16:15:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1979-#995	2444099.55	1979 Aug 14 01:14:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1979-#996	2444100.30	1979 Aug 14 19:09:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1979-#36	2444100.55	1979 Aug 15 01:14:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1979-#998	2444101.06	1979 Aug 15 13:50:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1979-#999	2444101.07	1979 Aug 15 13:54:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1979-#1000	2444101.08	1979 Aug 15 13:55:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1979-#1001	2444101.10	1979 Aug 15 14:30:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1979-#1001	2444101.11	1979 Aug 15 14:32:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1979-#1002	2444101.25	1979 Aug 15 17:54:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1980-#01	2444281.06	1980 Jan 2 13:30:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1980-#02	2444281.07	1980 Jan 2 13:44:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1980-#03	2444281.10	1980 Jan 2 14:30:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1980-#04	2444281.13	1980 Jan 2 15:12:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1980-#106	2444281.15	1980 Jan 2 15:30:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1980-#05	2444281.25	1980 Jan 2 17:55:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1980-#06	2444281.51	1980 Jan 3 00:10:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1980-#07	2444281.56	1980 Jan 3 01:30:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1980-#08	2444282.20	1980 Jan 3 16:49:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1980-#09	2444283.06	1980 Jan 4 13:30:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1980-#10	2444283.08	1980 Jan 4 14:00:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1980-#11	2444283.11	1980 Jan 4 14:45:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1980-#12	2444283.16	1980 Jan 4 15:44:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1980-#13	2444283.20	1980 Jan 4 16:48:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1980-#14	2444283.30	1980 Jan 4 19:08:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1980-#15	2444283.55	1980 Jan 5 01:09:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1980-#13	2444283.55	1980 Jan 5 01:17:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1980-#17	2444286.11	1980 Jan 7 14:40:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1980-#18	2444286.11	1980 Jan 7 14:45:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1980-#19	2444286.14	1980 Jan 7 15:25:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1980-#20	2444286.23	1980 Jan 7 17:30:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1980-#21	2444286.26	1980 Jan 7 17:58:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1980-#18	2444286.26	1980 Jan 7 18:10:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1980-#22	2444286.27	1980 Jan 7 18:34:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1980-#23	2444286.52	1980 Jan 7 19:37:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1980-#25	2444286.58	1980 Jan 7 21:00:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1980-#26	2444286.59	1980 Jan 7 21:24:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1980-#27	2444286.59	1980 Jan 8 01:34:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1980-#29	2444288.06	1980 Jan 9 13:30:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1980-#30	2444288.07	1980 Jan 9 13:44:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1980-#31	2444288.10	1980 Jan 9 16:00:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1980-#32	2444288.42	1980 Jan 9 16:59:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1980-#33	2444288.46	1980 Jan 9 23:34:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1980-#34	2444288.46	1980 Jan 10 11:19:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1980-#35	2444290.10	1980 Jan 11 14:30:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1980-#37	2444290.11	1980 Jan 11 14:37:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1980-#38	2444290.11	1980 Jan 11 15:10:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1980-#39	2444290.17	1980 Jan 11 16:09:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1980-#40	2444290.19	1980 Jan 11 16:19:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1980-#41	2444290.23	1980 Jan 11 17:27:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1980-#41	2444290.42	1980 Jan 11 22:09:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1980-#42	2444290.55	1980 Jan 12 01:14:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1980-#46	2444293.07	1980 Jan 14 13:44:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1980-#47	2444293.10	1980 Jan 14 14:26:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1980-#48	2444293.11	1980 Jan 14 14:45:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1980-#49	2444293.55	1980 Jan 15 01:14:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1980-#50	2444294.30	1980 Jan 15 19:14:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1980-#51	2444294.40	1980 Jan 15 21:30:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1980-#55	2444295.07	1980 Jan 16 13:44:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1980-#56	2444295.10	1980 Jan 16 14:30:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1980-#57	2444295.12	1980 Jan 16 14:59:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1980-#58	2444295.15	1980 Jan 16 15:30:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1980-#31	2444295.30	1980 Jan 16 19:13:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1980-#61	2444295.39	1980 Jan 16 21:14:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1980-#61	2444295.48	1980 Jan 16 23:30:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1980-#73	2444296.14	1980 Jan 17 15:24:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1980-#63	2444297.05	1980 Jan 18 13:14:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1980-#64	2444297.10	1980 Jan 18 14:57:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1980-#65	2444297.11	1980 Jan 18 14:45:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1980-#68	2444297.39	1980 Jan 18 21:14:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1980-#69	2444297.72	1980 Jan 21 05:15:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1980-#70	2444297.05	1980 Jan 21 13:14:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1980-#71	2444297.07	1980 Jan 21 13:44:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1980-#43	2444297.15	1980 Jan 21 15:30:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1980-#72	2444297.20	1980 Jan 21 16:49:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1980-#73	2444297.28	1980 Jan 21 18:41:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1980-#74	2444297.39	1980 Jan 21 21:14:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1980-#402	2444297.55	1980 Jan 22 01:14:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1980-#44	2444297.11	1980 Jan 22 14:45:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1980-#45	2444297.25	1980 Jan 22 18:00:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1980-#47	2444297.06	1980 Jan 23 13:30:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1980-#478	2444297.08	1980 Jan 23 14:00:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Launch	Agency	Launch_Code	Group	Category	LT_Cite	Cite	Notes
						DrpPay							
1980-W79	2444282.11	1980 Jan 23 1432:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1980-W80	2444282.22	1980 Jan 23 1711:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1980-W81	2444282.22	1980 Jan 23 1711:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1980-W82	2444282.46	1980 Jan 23 2252:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1980-W83	2444282.58	1980 Jan 24 0156:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1980-W84	2444283.21	1980 Jan 24 1701:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1980-W85	2444284.03	1980 Jan 25 1245:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1980-W86	2444284.07	1980 Jan 25 1344:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1980-W87	2444284.10	1980 Jan 25 1450:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1980-W88	2444284.14	1980 Jan 25 1515:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1980-W89	2444284.21	1980 Jan 25 1515:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1980-W90	2444284.38	1980 Jan 25 2100:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1980-W91	2444284.55	1980 Jan 26 0114:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1980-W92	2444284.06	1980 Jan 28 1350:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1980-W93	2444287.07	1980 Jan 28 1344:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1980-W94	2444287.11	1980 Jan 28 1424:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1980-W95	2444287.11	1980 Jan 28 1456:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1980-W96	2444287.14	1980 Jan 28 1524:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1980-W97	2444287.31	1980 Jan 28 1927:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1980-W98	2444287.31	1980 Jan 28 1950:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1980-W99	2444287.38	1980 Jan 28 2100:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1980-W100	2444287.56	1980 Jan 29 0122:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1980-W101	2444288.41	1980 Jan 29 2149:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1980-W102	2444289.06	1980 Jan 30 1350:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1980-W103	2444289.07	1980 Jan 30 1344:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1980-W104	2444289.14	1980 Jan 30 1514:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1980-W105	2444289.46	1980 Jan 30 1950:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1980-W106	2444289.97	1980 Jan 30 2249:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1980-W107	2444270.11	1980 Jan 31 1110:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1980-W108	2444270.12	1980 Jan 31 1440:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1980-W109	2444270.59	1980 Jan 31 2114:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1980-W110	2444270.81	1980 Feb 1 0004:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1980-W111	2444270.81	1980 Feb 1 0014:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1980-W112	2444271.09	1980 Feb 1 1415:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1980-W113	2444271.16	1980 Feb 1 1546:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1980-W114	2444271.20	1980 Feb 1 1644:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1980-W115	2444274.07	1980 Feb 1 2031:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1980-W116	2444274.11	1980 Feb 4 1344:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1980-W117	2444274.41	1980 Feb 4 1456:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1980-W118	2444274.53	1980 Feb 4 1746:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1980-W119	2444274.58	1980 Feb 4 1953:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1980-W120	2444274.40	1980 Feb 4 2106:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1980-W121	2444274.46	1980 Feb 6 0130:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1980-W122	2444276.06	1980 Feb 6 1930:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1980-W123	2444276.10	1980 Feb 6 1430:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1980-W124	2444276.15	1980 Feb 6 1630:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1980-W125	2444278.15	1980 Feb 8 2265:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1980-W126	2444278.07	1980 Feb 8 1344:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1980-W127	2444278.11	1980 Feb 8 1436:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1980-W128	2444278.40	1980 Feb 8 2139:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1980-W129	2444281.07	1980 Feb 8 0114:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1980-W130	2444281.11	1980 Feb 11 1437:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1980-W131	2444281.11	1980 Feb 11 1445:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1980-W132	2444281.23	1980 Feb 11 1726:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1980-W133	2444281.29	1980 Feb 11 1854:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1980-W134	2444281.39	1980 Feb 11 2114:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1980-W135	2444281.56	1980 Feb 12 0119:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1980-W136	2444282.24	1980 Feb 12 1745:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1980-W137	2444283.06	1980 Feb 13 1330:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1980-W138	2444283.12	1980 Feb 13 1455:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1980-W139	2444283.12	1980 Feb 13 1500:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1980-W140	2444283.21	1980 Feb 13 1703:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1980-W141	2444283.28	1980 Feb 13 1845:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1980-W142	2444283.38	1980 Feb 13 2100:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1980-W143	2444283.46	1980 Feb 13 2300:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1980-W144	2444284.20	1980 Feb 14 1642:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1980-W145	2444284.47	1980 Feb 14 1642:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1980-W146	2444284.50	1980 Feb 14 2311:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1980-W147	2444284.50	1980 Feb 14 2358:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1980-W148	2444284.50	1980 Feb 15 0002:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1980-W149	2444285.06	1980 Feb 15 1330:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1980-W150	2444285.07	1980 Feb 15 1344:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1980-W151	2444285.10	1980 Feb 15 1430:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1980-W152	2444285.12	1980 Feb 15 1458:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1980-W153	2444285.15	1980 Feb 15 1530:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1980-W154	2444285.19	1980 Feb 15 1634:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1980-W155	2444285.56	1980 Feb 16 0119:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1980-W156	2444286.12	1980 Feb 18 1448:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1980-W157	2444286.20	1980 Feb 18 1644:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1980-W158	2444286.38	1980 Feb 18 2100:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1980-W159	2444286.38	1980 Feb 18 2100:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-



Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Launch_e	Agency	Launch_Code	Group	Category	LT_Cite	Cite	Notes
1980-1163	2444289_42	1980 Feb 19 2159:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1980-1166	2444290_06	1980 Feb 20 1330:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1980-1167	2444290_10	1980 Feb 20 1450:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1980-1168	2444290_13	1980 Feb 20 1500:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1980-1169	2444290_13	1980 Feb 20 1510:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1980-1190	2444290_15	1980 Feb 20 1530:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1980-1170	2444290_32	1980 Feb 20 1944:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1980-1171	2444290_50	1980 Feb 21 0000:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1980-1172	2444292_07	1980 Feb 22 1344:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1980-1173	2444292_10	1980 Feb 22 1430:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1980-1174	2444292_31	1980 Feb 22 1931:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1980-1175	2444292_55	1980 Feb 23 0114:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1980-1178	2444295_05	1980 Feb 25 1314:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1980-1179	2444295_06	1980 Feb 25 1330:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1980-1181	2444295_10	1980 Feb 25 1426:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1980-1182	2444295_12	1980 Feb 25 1500:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1980-1103	2444295_30	1980 Feb 25 1914:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1980-1185	2444295_32	1980 Feb 25 1935:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1980-1186	2444295_55	1980 Feb 26 0114:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1980-1190	2444297_11	1980 Feb 27 1715:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1980-1193	2444297_45	1980 Feb 27 2254:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1980-1199	2444298_32	1980 Feb 28 1935:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1980-1200	2444298_39	1980 Feb 28 2114:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1980-1128	2444298_46	1980 Feb 28 2306:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1980-1201	2444298_49	1980 Feb 28 2346:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1980-1202	2444298_50	1980 Feb 28 2355:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1980-1206	2444299_07	1980 Feb 29 1314:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1980-1209	2444299_14	1980 Feb 29 1450:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1980-1136	2444299_14	1980 Feb 29 1515:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1980-1211	2444299_31	1980 Feb 29 1526:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1980-1212	2444299_40	1980 Feb 29 1922:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1980-1213	2444299_55	1980 Feb 29 2130:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1980-1216	2444302_08	1980 Mar 3 0114:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1980-1217	2444302_09	1980 Mar 3 1400:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1980-1218	2444302_12	1980 Mar 3 1415:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1980-1219	2444302_15	1980 Mar 3 1455:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1980-1220	2444302_29	1980 Mar 3 2114:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1980-1222	2444302_55	1980 Mar 4 0114:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1980-1225	2444304_12	1980 Mar 4 1455:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1980-1145	2444304_12	1980 Mar 4 1455:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1980-1226	2444304_36	1980 Mar 4 1455:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1980-1227	2444304_38	1980 Mar 4 2125:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1980-1228	2444304_38	1980 Mar 4 2125:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1980-1229	2444305_38	1980 Mar 4 1918:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1980-1230	2444305_59	1980 Mar 4 2117:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1980-1231	2444306_08	1980 Mar 7 0347:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1980-1232	2444306_14	1980 Mar 7 1526:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1980-1234	2444306_20	1980 Mar 7 1641:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1980-1236	2444306_37	1980 Mar 7 2055:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1980-1238	2444306_38	1980 Mar 7 2100:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1980-1237	2444309_06	1980 Mar 10 1330:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1980-1239	2444309_07	1980 Mar 10 1344:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1980-1240	2444309_12	1980 Mar 10 1500:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1980-1146	2444309_13	1980 Mar 10 1511:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1980-1241	2444309_20	1980 Mar 10 1619:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1980-1242	2444309_28	1980 Mar 10 1844:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1980-1243	2444309_29	1980 Mar 10 1903:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1980-1244	2444309_41	1980 Mar 10 2155:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1980-1245	2444309_66	1980 Mar 11 0352:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1980-1246	2444310_30	1980 Mar 11 1914:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1980-1249	2444310_52	1980 Mar 12 0030:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1980-1251	2444311_11	1980 Mar 12 1330:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1980-1252	2444311_12	1980 Mar 12 1440:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1980-1149	2444311_19	1980 Mar 12 1454:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1980-1253	2444311_12	1980 Mar 12 1630:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1980-1254	2444311_25	1980 Mar 12 1800:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1980-1255	2444311_30	1980 Mar 12 1918:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1980-1256	2444311_39	1980 Mar 13 0004:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1980-1257	2444311_50	1980 Mar 13 0014:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1980-1258	2444311_51	1980 Mar 13 0014:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1980-1259	2444312_20	1980 Mar 13 0252:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1980-1261	2444313_06	1980 Mar 14 1344:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1980-110	2444313_07	1980 Mar 14 1344:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1980-111	2444313_11	1980 Mar 14 1445:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1980-111	2444313_38	1980 Mar 14 2100:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1980-1263	2444313_55	1980 Mar 15 0114:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1980-1264	2444313_75	1980 Mar 15 0604:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Launch_e	Agency	Launch_Code	Group	Category	LT_Cite	Cite	Notes
1980-W265	2444316.11	1980 Mar 17 1433:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1980-W266	2444316.11	1980 Mar 17 1445:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1980-W267	2444316.18	1980 Mar 17 1615:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1980-W268	2444316.19	1980 Mar 17 1632:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1980-W269	2444316.24	1980 Mar 17 1744:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1980-W270	2444316.29	1980 Mar 17 1854:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1980-W271	2444316.39	1980 Mar 17 2124:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1980-W272	2444316.50	1980 Mar 17 2356:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1980-W150	2444316.50	1980 Mar 18 0000:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1980-W274	2444316.68	1980 Mar 18 0414:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1980-W151	2444317.31	1980 Mar 18 1930:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1980-W275	2444317.34	1980 Mar 18 2010:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1980-W276	2444317.67	1980 Mar 19 0404:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1980-W280	2444318.11	1980 Mar 19 1445:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1980-W281	2444318.15	1980 Mar 19 1529:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1980-W282	2444318.21	1980 Mar 19 1707:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1980-W283	2444318.25	1980 Mar 19 1800:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1980-W157	2444318.29	1980 Mar 19 1859:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1980-W284	2444318.29	1980 Mar 19 1859:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1980-W285	2444318.34	1980 Mar 19 2004:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1980-W159	2444318.37	1980 Mar 19 2056:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1980-W286	2444318.39	1980 Mar 19 2114:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1980-W287	2444318.66	1980 Mar 20 0352:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1980-W288	2444320.06	1980 Mar 21 1334:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1980-W290	2444320.07	1980 Mar 21 1350:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1980-W291	2444320.22	1980 Mar 21 1710:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1980-W292	2444320.40	1980 Mar 21 2100:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1980-W293	2444320.40	1980 Mar 21 2153:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1980-W294	2444320.54	1980 Mar 22 0102:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1980-W295	2444320.85	1980 Mar 22 0114:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1980-W296	2444320.81	1980 Mar 22 0730:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1980-W297	2444323.07	1980 Mar 24 1344:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1980-W298	2444323.11	1980 Mar 24 1445:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1980-W299	2444323.12	1980 Mar 24 1447:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1980-W163	2444323.12	1980 Mar 24 1500:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1980-W168	2444323.15	1980 Mar 24 1537:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1980-W300	2444323.25	1980 Mar 24 1600:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1980-W301	2444323.25	1980 Mar 24 1600:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1980-W302	2444323.31	1980 Mar 24 1930:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1980-W112	2444323.38	1980 Mar 24 2100:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1980-W303	2444323.38	1980 Mar 24 2100:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1980-W304	2444323.58	1980 Mar 25 11:4:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1980-W305	2444323.58	1980 Mar 25 11:4:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1980-W306	2444325.10	1980 Mar 26 1439:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1980-W307	2444325.12	1980 Mar 26 1453:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1980-W308	2444325.12	1980 Mar 26 1500:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1980-W309	2444325.12	1980 Mar 26 1500:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1980-W310	2444325.29	1980 Mar 26 1822:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1980-W311	2444325.29	1980 Mar 26 1918:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1980-W312	2444325.38	1980 Mar 26 2100:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1980-W313	2444325.38	1980 Mar 27 0413:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1980-W314	2444325.95	1980 Mar 27 0714:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1980-W171	2444325.95	1980 Mar 27 0714:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1980-W315	2444326.87	1980 Mar 28 1044:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1980-W316	2444326.87	1980 Mar 28 1044:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1980-W317	2444327.05	1980 Mar 28 1314:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1980-W318	2444327.10	1980 Mar 28 1427:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1980-W319	2444327.10	1980 Mar 28 1450:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1980-W173	2444327.15	1980 Mar 28 1530:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1980-W320	2444327.19	1980 Mar 28 1632:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1980-W321	2444327.30	1980 Mar 28 1909:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1980-W322	2444327.53	1980 Mar 29 0037:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1980-W323	2444330.05	1980 Mar 31 1314:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1980-W324	2444330.11	1980 Mar 31 1437:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1980-W325	2444330.19	1980 Mar 31 1630:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1980-W326	2444330.20	1980 Mar 31 1651:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1980-W327	2444330.38	1980 Mar 31 2100:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1980-W114	2444330.38	1980 Mar 31 2312:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1980-W176	2444330.47	1980 Mar 31 2351:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1980-W177	2444330.49	1980 Mar 31 2351:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1980-W327	2444330.50	1980 Apr 1 0000:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1980-W328	2444330.55	1980 Apr 1 0114:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1980-W329	2444331.39	1980 Apr 1 2114:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1980-W330	2444332.15	1980 Apr 2 1530:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1980-W331	2444332.15	1980 Apr 2 1541:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1980-W332	2444332.15	1980 Apr 2 1640:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1980-W182	2444332.25	1980 Apr 2 1800:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1980-W183	2444332.25	1980 Apr 2 1800:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1980-W184	2444332.39	1980 Apr 2 2124:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1980-W333	2444332.52	1980 Apr 3 0030:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1980-W334	2444333.15	1980 Apr 3 1634:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1980-W335	2444333.19	1980 Apr 3 1634:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1980-W336	2444333.38	1980 Apr 3 2100:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1980-W337	2444334.13	1980 Apr 4 1506:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1980-W338	2444334.14	1980 Apr 4 1518:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1980-W339	2444334.41	1980 Apr 4 2145:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1980-W340	2444334.64	1980 Apr 5 0322:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1980-W341	2444337.06	1980 Apr 7 1330:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Launch_e	Agency	Launch_Code	Group	Category	LT_Cite	Cite	Notes
1980-4342	2444337.14	1980 Apr 7 1520:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1980-4343	2444337.26	1980 Apr 7 1820:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1980-4344	2444337.71	1980 Apr 8 0606:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1980-4345	2444338.56	1980 Apr 9 0127:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1980-4346	2444339.06	1980 Apr 9 1319:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1980-4347	2444339.09	1980 Apr 9 1404:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1980-4348	2444339.09	1980 Apr 9 1422:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1980-4349	2444339.10	1980 Apr 9 1430:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1980-4350	2444339.13	1980 Apr 9 1513:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1980-4351	2444339.28	1980 Apr 9 1846:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1980-4352	2444339.38	1980 Apr 9 2110:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1980-4353	2444339.46	1980 Apr 9 2249:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1980-4354	2444339.50	1980 Apr 10 0003:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1980-4355	2444339.50	1980 Apr 10 0944:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1980-4356	2444340.32	1980 Apr 11 0154:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1980-4357	2444340.58	1980 Apr 11 0230:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1980-4358	2444340.60	1980 Apr 11 0500:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1980-4359	2444340.71	1980 Apr 11 0600:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1980-4360	2444340.75	1980 Apr 11 0659:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1980-4361	2444340.79	1980 Apr 11 0659:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1980-4362	2444340.85	1980 Apr 11 0820:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1980-4363	2444341.11	1980 Apr 11 1446:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1980-4364	2444341.15	1980 Apr 11 1540:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1980-4365	2444341.19	1980 Apr 11 1630:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1980-4366	2444341.30	1980 Apr 11 1914:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1980-4367	2444341.30	1980 Apr 11 2100:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1980-4368	2444341.38	1980 Apr 12 0114:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1980-4369	2444341.55	1980 Apr 14 1330:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1980-4370	2444344.11	1980 Apr 14 1446:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1980-4371	2444344.13	1980 Apr 14 1510:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1980-4372	2444344.17	1980 Apr 14 1609:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1980-4373	2444344.38	1980 Apr 14 2100:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1980-4374	2444344.66	1980 Apr 15 0355:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1980-4375	2444345.19	1980 Apr 15 1640:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1980-4376	2444345.62	1980 Apr 16 0254:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1980-4377	2444346.11	1980 Apr 16 1452:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1980-4378	2444346.11	1980 Apr 16 1446:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1980-4379	2444346.12	1980 Apr 16 1455:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1980-4380	2444346.19	1980 Apr 16 1640:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1980-4381	2444346.28	1980 Apr 16 1849:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1980-4382	2444346.60	1980 Apr 16 2150:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1980-4383	2444347.95	1980 Apr 17 1114:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1980-4384	2444347.11	1980 Apr 17 1446:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1980-4385	2444348.00	1980 Apr 18 1330:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1980-4386	2444348.11	1980 Apr 18 1452:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1980-4387	2444348.19	1980 Apr 18 1610:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1980-4388	2444348.58	1980 Apr 18 1714:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1980-4389	2444348.95	1980 Apr 19 1415:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1980-4390	2444351.11	1980 Apr 21 1527:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1980-4391	2444351.14	1980 Apr 21 1559:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1980-4392	2444351.17	1980 Apr 21 1650:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1980-4393	2444351.19	1980 Apr 21 1650:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1980-4394	2444351.38	1980 Apr 21 2100:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1980-4395	2444351.38	1980 Apr 21 2114:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1980-4396	2444352.30	1980 Apr 22 2114:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1980-4397	2444352.97	1980 Apr 22 2320:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1980-4398	2444352.51	1980 Apr 23 0010:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1980-4399	2444352.51	1980 Apr 23 0020:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1980-4400	2444352.52	1980 Apr 23 0027:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1980-4401	2444352.88	1980 Apr 23 0417:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1980-4402	2444353.07	1980 Apr 23 1344:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1980-4403	2444353.07	1980 Apr 23 1415:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1980-4404	2444353.09	1980 Apr 23 1432:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1980-4405	2444353.20	1980 Apr 23 1641:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1980-4406	2444353.21	1980 Apr 23 1700:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1980-4407	2444353.22	1980 Apr 23 1710:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1980-4408	2444353.38	1980 Apr 23 2100:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1980-4409	2444353.63	1980 Apr 24 0303:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1980-4410	2444354.08	1980 Apr 24 1400:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1980-4411	2444354.38	1980 Apr 24 2100:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1980-4412	2444354.55	1980 Apr 25 0117:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1980-4413	2444355.06	1980 Apr 25 1330:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1980-4414	2444355.10	1980 Apr 25 1430:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1980-4415	2444355.32	1980 Apr 25 1934:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1980-4416	2444355.38	1980 Apr 25 2100:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1980-4417	2444358.06	1980 Apr 28 1330:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1980-4418	2444358.07	1980 Apr 28 1344:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1980-4419	2444358.15	1980 Apr 28 1542:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1980-4420	2444358.35	1980 Apr 28 2020:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1980-4421	2444358.55	1980 Apr 29 0114:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1980-4422	2444359.36	1980 Apr 29 2040:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1980-4423	2444360.06	1980 Apr 30 1330:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1980-4424	2444360.10	1980 Apr 30 1430:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1980-4425	2444360.14	1980 Apr 30 1526:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1980-4426	2444360.16	1980 Apr 30 1545:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1980-4427	2444360.51	1980 May 1 0014:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1980-4428	2444360.64	1980 May 1 0325:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Launch_e	Agency	Launch_Code	Group	Category	LT_Cite	Cite	Notes
1980-H430	2444361.34	1980 May 1 20:10:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1980-H431	2444361.48	1980 May 1 23:27:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1980-H432	2444361.51	1980 May 2 00:18:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1980-H433	2444361.52	1980 May 2 00:22:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1980-H434	2444362.04	1980 May 2 1:26:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1980-H435	2444362.07	1980 May 2 1:34:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1980-H436	2444362.08	1980 May 2 1:40:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1980-H437	2444362.28	1980 May 2 18:45:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1980-H438	2444362.36	1980 May 2 20:45:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1980-H439	2444362.39	1980 May 2 21:26:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1980-H440	2444362.62	1980 May 3 03:00:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1980-H441	2444365.06	1980 May 5 13:30:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1980-H442	2444365.10	1980 May 5 14:25:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1980-H443	2444365.12	1980 May 5 14:48:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1980-H444	2444365.15	1980 May 5 15:34:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1980-H445	2444365.15	1980 May 5 15:40:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1980-H446	2444365.34	1980 May 5 20:15:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1980-H447	2444365.37	1980 May 5 20:56:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1980-H448	2444367.03	1980 May 7 12:49:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1980-H449	2444367.13	1980 May 7 13:19:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1980-H450	2444367.16	1980 May 7 15:01:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1980-H451	2444367.21	1980 May 7 17:00:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1980-H452	2444367.25	1980 May 7 20:00:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1980-H453	2444367.33	1980 May 7 20:58:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1980-H454	2444367.37	1980 May 7 20:58:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1980-H455	2444367.39	1980 May 7 21:22:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1980-H456	2444368.33	1980 May 8 20:00:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1980-H457	2444369.06	1980 May 9 13:30:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1980-H458	2444369.10	1980 May 9 14:29:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1980-H459	2444369.15	1980 May 9 15:31:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1980-H460	2444369.18	1980 May 9 16:14:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1980-H461	2444369.25	1980 May 9 18:00:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1980-H462	2444369.35	1980 May 9 20:26:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1980-H463	2444372.06	1980 May 9 21:29:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1980-H464	2444372.07	1980 May 12 13:44:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1980-H465	2444372.12	1980 May 12 14:47:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1980-H466	2444372.19	1980 May 12 16:50:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1980-H467	2444372.26	1980 May 12 18:20:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1980-H468	2444372.28	1980 May 12 18:20:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1980-H469	2444372.37	1980 May 12 20:00:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1980-H470	2444372.39	1980 May 13 00:06:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1980-H471	2444373.33	1980 May 13 00:00:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1980-H472	2444374.07	1980 May 14 14:42:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1980-H473	2444374.11	1980 May 14 14:42:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1980-H474	2444374.11	1980 May 14 15:57:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1980-H475	2444374.21	1980 May 14 17:00:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1980-H476	2444374.26	1980 May 14 18:54:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1980-H477	2444374.31	1980 May 14 19:05:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1980-H478	2444374.36	1980 May 14 20:56:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1980-H479	2444375.21	1980 May 15 17:00:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1980-H480	2444375.50	1980 May 16 00:07:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1980-H481	2444375.51	1980 May 16 00:11:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1980-H482	2444375.51	1980 May 16 00:17:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1980-H483	2444376.06	1980 May 16 13:30:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1980-H484	2444376.10	1980 May 16 14:30:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1980-H485	2444376.11	1980 May 16 14:40:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1980-H486	2444376.37	1980 May 16 16:00:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1980-H487	2444379.10	1980 May 16 20:53:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1980-H488	2444379.14	1980 May 19 14:27:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1980-H489	2444379.14	1980 May 19 15:19:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1980-H490	2444379.18	1980 May 19 16:21:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1980-H491	2444379.21	1980 May 19 17:00:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1980-H492	2444379.27	1980 May 19 18:30:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1980-H493	2444379.37	1980 May 19 20:53:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1980-H494	2444379.59	1980 May 20 02:04:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1980-H495	2444379.81	1980 May 20 02:45:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1980-H496	2444380.07	1980 May 20 13:44:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1980-H497	2444380.09	1980 May 20 14:04:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1980-H498	2444380.63	1980 May 21 03:03:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1980-H499	2444381.07	1980 May 21 13:44:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1980-H500	2444381.10	1980 May 21 14:30:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1980-H501	2444381.12	1980 May 21 14:48:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1980-H502	2444381.27	1980 May 21 18:17:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1980-H503	2444381.27	1980 May 21 18:26:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1980-H504	2444381.41	1980 May 21 21:45:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1980-H505	2444382.00	1980 May 22 12:00:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1980-H506	2444382.41	1980 May 22 21:45:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1980-H507	2444383.06	1980 May 23 13:30:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1980-H508	2444383.07	1980 May 23 13:44:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1980-H509	2444383.08	1980 May 23 13:49:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1980-H510	2444383.08	1980 May 23 14:00:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Launch_e	Agency	Launch_Code	Group	Category	LT_Cite	Cite	Notes
1980-H511	2444383.11	1980 May 23 1435:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1980-H513	2444386.28	1980 May 26 1847:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1980-H514	2444386.35	1980 May 26 2050:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1980-H515	2444386.38	1980 May 27 1259:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1980-H516	2444387.04	1980 May 27 1450:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1980-H517	2444387.10	1980 May 27 1450:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1980-H518	2444387.38	1980 May 27 2100:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1980-H521	2444387.62	1980 May 28 0247:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1980-H522	2444388.06	1980 May 28 1350:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1980-H523	2444388.07	1980 May 28 1344:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1980-H524	2444388.10	1980 May 28 1423:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1980-H525	2444388.11	1980 May 28 1450:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1980-H526	2444388.15	1980 May 28 1457:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1980-H527	2444388.16	1980 May 28 1550:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1980-H528	2444388.19	1980 May 28 1640:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1980-H530	2444389.15	1980 May 29 1540:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1980-H531	2444389.61	1980 May 29 1859:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1980-H532	2444389.61	1980 May 30 0245:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1980-H533	2444390.06	1980 May 30 1350:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1980-H534	2444390.11	1980 May 30 1400:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1980-H535	2444390.13	1980 May 30 1436:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1980-H536	2444390.26	1980 May 30 1506:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1980-H537	2444392.95	1980 May 30 1610:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1980-H538	2444393.07	1980 Jun 2 1018:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1980-H539	2444393.07	1980 Jun 2 1344:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1980-H540	2444393.10	1980 Jun 2 1426:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1980-H541	2444393.16	1980 Jun 2 1549:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1980-H542	2444393.17	1980 Jun 2 1659:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1980-H543	2444393.52	1980 Jun 3 0053:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1980-H544	2444394.35	1980 Jun 4 1236:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1980-H546	2444395.04	1980 Jun 4 1350:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1980-H547	2444395.06	1980 Jun 4 1400:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1980-H548	2444395.17	1980 Jun 4 1558:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1980-H549	2444395.19	1980 Jun 4 1658:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1980-H550	2444395.27	1980 Jun 4 1853:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1980-H551	2444396.21	1980 Jun 5 1700:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1980-H552	2444396.28	1980 Jun 5 1847:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1980-H553	2444396.53	1980 Jun 5 2000:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1980-H554	2444396.58	1980 Jun 5 2132:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1980-H555	2444396.90	1980 Jun 5 2141:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1980-H556	2444397.94	1980 Jun 6 1330:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1980-H557	2444397.94	1980 Jun 6 1330:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1980-H558	2444397.94	1980 Jun 6 1330:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1980-H559	2444397.94	1980 Jun 6 1330:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1980-H560	2444397.94	1980 Jun 6 1330:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1980-H561	2444397.94	1980 Jun 6 1330:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1980-H562	2444397.94	1980 Jun 6 1330:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1980-H563	2444397.94	1980 Jun 6 1330:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1980-H564	2444400.03	1980 Jun 6 1344:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1980-H565	2444400.07	1980 Jun 6 1344:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1980-H566	2444400.13	1980 Jun 6 1509:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1980-H567	2444400.14	1980 Jun 6 1519:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1980-H568	2444400.19	1980 Jun 8 1617:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1980-H569	2444400.19	1980 Jun 8 1630:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1980-H570	2444400.23	1980 Jun 8 1730:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1980-H571	2444400.26	1980 Jun 8 1811:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1980-H572	2444400.33	1980 Jun 8 2000:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1980-H573	2444400.37	1980 Jun 8 2059:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1980-H574	2444401.94	1980 Jun 11 1027:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1980-H575	2444402.06	1980 Jun 11 1350:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1980-H576	2444402.07	1980 Jun 11 1357:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1980-H577	2444402.07	1980 Jun 11 1357:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1980-H578	2444402.10	1980 Jun 11 1430:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1980-H579	2444402.11	1980 Jun 11 1435:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1980-H580	2444402.15	1980 Jun 11 1536:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1980-H581	2444402.19	1980 Jun 11 1627:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1980-H582	2444402.30	1980 Jun 11 1910:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1980-H583	2444402.33	1980 Jun 11 2000:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1980-H584	2444402.39	1980 Jun 11 2122:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1980-H585	2444402.41	1980 Jun 11 2146:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1980-H586	2444402.45	1980 Jun 11 2254:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1980-H587	2444403.12	1980 Jun 12 1500:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1980-H588	2444404.07	1980 Jun 13 1344:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1980-H589	2444404.13	1980 Jun 13 1501:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1980-H590	2444404.14	1980 Jun 13 1526:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1980-H591	2444404.15	1980 Jun 13 1536:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1980-H592	2444404.29	1980 Jun 13 1901:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1980-H593	2444404.38	1980 Jun 13 2100:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1980-H594	2444404.52	1980 Jun 14 0032:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1980-H595	2444404.71	1980 Jun 14 0500:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1980-H596	2444407.06	1980 Jun 16 1330:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1980-H597	2444407.07	1980 Jun 16 1344:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Launch_e	Agency	Launch_Code	Group	Category	LT_Cite	Cite	Notes
1980-N595	2444407.11	1980 Jun 16 1438:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1980-N596	2444407.19	1980 Jun 16 1650:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1980-N597	2444407.22	1980 Jun 16 1712:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1980-N598	2444407.38	1980 Jun 16 2100:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1980-N599	2444407.58	1980 Jun 17 0201:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1980-N600	2444408.20	1980 Jun 17 1646:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1980-N601	2444409.06	1980 Jun 18 1350:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1980-N602	2444409.07	1980 Jun 18 1344:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1980-N603	2444409.10	1980 Jun 18 1450:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1980-N604	2444409.17	1980 Jun 18 1443:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1980-N605	2444409.33	1980 Jun 18 1559:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1980-N606	2444409.33	1980 Jun 18 1966:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1980-N607	2444409.36	1980 Jun 18 2035:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1980-N608	2444410.53	1980 Jun 20 0040:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1980-N609	2444410.93	1980 Jun 20 1025:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1980-N610	2444411.07	1980 Jun 20 1341:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1980-N611	2444411.07	1980 Jun 20 1341:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1980-N612	2444411.07	1980 Jun 20 1345:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1980-N613	2444411.09	1980 Jun 20 1405:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1980-N614	2444411.10	1980 Jun 20 1423:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1980-N615	2444411.25	1980 Jun 20 1805:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1980-N616	2444414.07	1980 Jun 23 1344:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1980-N617	2444414.13	1980 Jun 23 1503:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1980-N618	2444414.14	1980 Jun 23 1523:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1980-N619	2444414.35	1980 Jun 23 2021:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1980-N620	2444414.41	1980 Jun 23 2144:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1980-N621	2444414.60	1980 Jun 24 0222:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1980-N622	2444415.12	1980 Jun 24 1500:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1980-N623	2444415.52	1980 Jun 25 0050:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1980-N624	2444415.95	1980 Jun 25 1015:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1980-N625	2444416.05	1980 Jun 25 1314:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1980-N626	2444416.09	1980 Jun 25 1410:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1980-N627	2444416.18	1980 Jun 25 1617:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1980-N628	2444416.18	1980 Jun 25 1617:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1980-N629	2444416.35	1980 Jun 25 2019:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1980-N630	2444416.52	1980 Jun 26 0300:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1980-N631	2444417.13	1980 Jun 27 0511:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1980-N632	2444417.81	1980 Jun 27 0750:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1980-N633	2444417.87	1980 Jun 27 0849:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1980-N634	2444418.08	1980 Jun 27 1400:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1980-N635	2444418.13	1980 Jun 27 1503:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1980-N636	2444418.24	1980 Jun 27 1703:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1980-N637	2444418.54	1980 Jun 27 2001:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1980-N638	2444418.54	1980 Jun 27 2001:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1980-N639	2444421.05	1980 Jun 30 1348:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1980-N640	2444421.10	1980 Jun 30 1429:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1980-N641	2444421.15	1980 Jun 30 1514:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1980-N642	2444421.15	1980 Jun 30 1514:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1980-N643	2444421.33	1980 Jun 30 2020:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1980-N644	2444421.54	1980 Jun 30 2020:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1980-N645	2444423.04	1980 Jul 1 0046:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1980-N646	2444423.04	1980 Jul 1 2010:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1980-N647	2444423.04	1980 Jul 1 1340:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1980-N648	2444423.10	1980 Jul 2 1430:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1980-N649	2444423.13	1980 Jul 2 1510:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1980-N650	2444423.14	1980 Jul 2 1529:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1980-N651	2444423.24	1980 Jul 2 1555:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1980-N652	2444423.41	1980 Jul 2 1743:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1980-N653	2444423.42	1980 Jul 2 2200:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1980-N654	2444423.50	1980 Jul 3 0000:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1980-N655	2444424.39	1980 Jul 3 2122:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1980-N656	2444425.35	1980 Jul 4 2030:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1980-N657	2444428.04	1980 Jul 7 1253:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1980-N658	2444428.06	1980 Jul 7 1324:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1980-N659	2444428.07	1980 Jul 7 1344:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1980-N660	2444428.10	1980 Jul 7 1426:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1980-N661	2444428.12	1980 Jul 7 1500:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1980-N662	2444428.25	1980 Jul 7 1757:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1980-N663	2444428.38	1980 Jul 7 2104:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1980-N664	2444428.40	1980 Jul 7 2133:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1980-N665	2444430.07	1980 Jul 9 1344:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1980-N666	2444430.07	1980 Jul 9 1344:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1980-N667	2444430.09	1980 Jul 9 1403:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1980-N668	2444430.12	1980 Jul 9 1448:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1980-N669	2444430.16	1980 Jul 9 1619:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1980-N670	2444430.33	1980 Jul 9 2000:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1980-N671	2444432.06	1980 Jul 10 2000:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1980-N672	2444432.10	1980 Jul 11 1330:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1980-N673	2444432.11	1980 Jul 11 1430:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1980-N674	2444432.14	1980 Jul 11 1442:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1980-N675	2444432.18	1980 Jul 11 1521:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1980-N676	2444432.25	1980 Jul 11 1613:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1980-N677	2444432.25	1980 Jul 11 1807:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1980-N678	2444432.33	1980 Jul 11 2000:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1980-N679	2444432.55	1980 Jul 12 0115:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Launch_e	Agency	Launch_Code	Group	Category	LT_Cite	Cite	Notes
1980-N677	2444435.07	1980 Jul 14 1344:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1980-N678	2444435.07	1980 Jul 14 1344:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1980-N679	2444435.10	1980 Jul 14 1450:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1980-N680	2444435.13	1980 Jul 14 1508:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1980-N681	2444435.17	1980 Jul 14 1559:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1980-N682	2444435.24	1980 Jul 14 1738:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1980-N683	2444435.33	1980 Jul 14 2000:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1980-N684	2444436.33	1980 Jul 15 2000:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1980-N686	2444437.06	1980 Jul 16 1350:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1980-N687	2444437.10	1980 Jul 16 1421:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1980-N688	2444437.14	1980 Jul 16 1520:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1980-N689	2444437.17	1980 Jul 16 1607:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1980-N690	2444437.29	1980 Jul 16 1859:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1980-N691	2444437.36	1980 Jul 16 2045:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1980-N692	2444437.52	1980 Jul 17 0027:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1980-N693	2444438.17	1980 Jul 17 1609:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1980-N694	2444438.33	1980 Jul 17 2000:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1980-N695	2444439.10	1980 Jul 18 1450:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1980-N696	2444439.16	1980 Jul 18 1565:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1980-N697	2444439.30	1980 Jul 18 1908:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1980-N698	2444439.33	1980 Jul 18 2000:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1980-N699	2444442.06	1980 Jul 21 1514:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1980-N700	2444442.14	1980 Jul 21 1514:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1980-N701	2444442.33	1980 Jul 21 2000:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1980-N702	2444442.43	1980 Jul 21 2214:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1980-N703	2444444.06	1980 Jul 23 1350:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1980-N704	2444444.11	1980 Jul 23 1440:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1980-N705	2444444.12	1980 Jul 23 1447:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1980-N706	2444444.14	1980 Jul 23 1517:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1980-N707	2444444.18	1980 Jul 23 1614:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1980-N708	2444444.25	1980 Jul 23 1800:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1980-N709	2444444.29	1980 Jul 23 1804:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1980-N710	2444444.32	1980 Jul 23 1856:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1980-N711	2444444.53	1980 Jul 23 1934:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1980-N712	2444445.34	1980 Jul 24 2004:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1980-N713	2444446.06	1980 Jul 25 1350:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1980-N714	2444446.09	1980 Jul 25 1415:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1980-N715	2444446.21	1980 Jul 25 1422:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1980-N716	2444446.11	1980 Jul 25 1700:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1980-N717	2444446.21	1980 Jul 25 2000:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1980-N718	2444446.35	1980 Jul 25 2009:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1980-N719	2444446.82	1980 Jul 28 0939:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1980-N720	2444449.08	1980 Jul 28 1415:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1980-N721	2444449.15	1980 Jul 28 1943:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1980-N722	2444449.22	1980 Jul 28 1943:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1980-N723	2444450.22	1980 Jul 30 0609:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1980-N724	2444450.19	1980 Jul 30 1506:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1980-N725	2444451.11	1980 Jul 30 1700:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1980-N726	2444451.31	1980 Jul 30 1735:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1980-N727	2444451.35	1980 Jul 30 1900:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1980-N728	2444451.38	1980 Jul 30 2100:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1980-N729	2444451.40	1980 Jul 30 2131:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1980-N730	2444452.02	1980 Jul 31 1232:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1980-N731	2444453.06	1980 Aug 1 1330:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1980-N732	2444453.07	1980 Aug 1 1344:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1980-N733	2444453.11	1980 Aug 1 1440:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1980-N734	2444453.22	1980 Aug 1 1715:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1980-N735	2444453.25	1980 Aug 1 1800:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1980-N736	2444453.34	1980 Aug 1 2004:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1980-N737	2444456.04	1980 Aug 4 1259:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1980-N738	2444456.07	1980 Aug 4 1344:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1980-N739	2444456.11	1980 Aug 4 1435:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1980-N740	2444456.38	1980 Aug 4 2000:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1980-N741	2444456.38	1980 Aug 4 2102:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1980-N742	2444457.07	1980 Aug 5 1336:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1980-N743	2444457.33	1980 Aug 5 2000:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1980-N744	2444458.06	1980 Aug 6 1330:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1980-N745	2444458.08	1980 Aug 6 1356:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1980-N746	2444458.10	1980 Aug 6 1422:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1980-N747	2444458.14	1980 Aug 6 1526:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1980-N748	2444458.25	1980 Aug 6 1800:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1980-N749	2444458.33	1980 Aug 6 2000:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1980-N750	2444459.14	1980 Aug 7 1527:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1980-N751	2444459.33	1980 Aug 7 2000:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1980-N752	2444459.41	1980 Aug 7 2146:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1980-N753	2444460.13	1980 Aug 8 1501:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1980-N754	2444460.25	1980 Aug 8 1804:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1980-N755	2444460.33	1980 Aug 8 2000:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1980-N756	2444460.69	1980 Aug 9 0430:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1980-N757	2444463.07	1980 Aug 11 1344:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1980-N758	2444463.07	1980 Aug 11 1344:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1980-N759	2444463.10	1980 Aug 11 1426:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1980-N760	2444463.18	1980 Aug 11 1614:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1980-N761	2444463.21	1980 Aug 11 1707:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Launch_e	Agency	Launch_Code	Group	Category	LT_Cite	Cite	Notes
1980-W761	2444463.33	1980 Aug 11 2000:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1980-W762	2444464.33	1980 Aug 12 2000:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1980-W763	2444465.11	1980 Aug 13 1442:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1980-W764	2444465.14	1980 Aug 13 1524:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1980-W765	2444465.18	1980 Aug 13 1621:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1980-W766	2444465.27	1980 Aug 13 1822:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1980-W767	2444465.37	1980 Aug 13 2065:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1980-W768	2444465.41	1980 Aug 13 2144:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1980-W769	2444465.46	1980 Aug 13 2304:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1980-W769	2444465.50	1980 Aug 14 0004:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1980-W770	2444465.51	1980 Aug 14 0019:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1980-W771	2444465.65	1980 Aug 14 0342:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1980-W772	2444465.98	1980 Aug 14 1137:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1980-W772	2444466.33	1980 Aug 14 2000:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1980-W773	2444467.07	1980 Aug 15 1344:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1980-W774	2444467.09	1980 Aug 15 1415:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1980-W775	2444467.10	1980 Aug 15 1418:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1980-W776	2444467.18	1980 Aug 15 1619:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1980-W777	2444467.19	1980 Aug 15 1631:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1980-W778	2444467.41	1980 Aug 15 2149:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1980-W779	2444470.05	1980 Aug 18 1313:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1980-W780	2444470.10	1980 Aug 18 1450:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1980-W781	2444470.12	1980 Aug 18 1446:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1980-W782	2444470.28	1980 Aug 18 1846:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1980-W783	2444470.40	1980 Aug 18 2150:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1980-W784	2444471.33	1980 Aug 19 2000:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1980-W785	2444471.53	1980 Aug 20 0042:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1980-W787	2444472.10	1980 Aug 20 1450:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1980-W788	2444472.11	1980 Aug 20 1445:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1980-W788	2444472.12	1980 Aug 20 1447:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1980-W789	2444472.14	1980 Aug 20 1527:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1980-W790	2444472.18	1980 Aug 20 1614:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1980-W792	2444472.19	1980 Aug 20 1650:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1980-W793	2444472.23	1980 Aug 21 1750:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1980-W796	2444473.40	1980 Aug 22 1324:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1980-W797	2444474.06	1980 Aug 22 1344:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1980-W798	2444474.07	1980 Aug 22 1423:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1980-W798	2444474.11	1980 Aug 22 1443:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1980-W800	2444474.33	1980 Aug 22 2000:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1980-W801	2444474.40	1980 Aug 22 2154:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1980-W803	2444477.05	1980 Aug 25 1314:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1980-W803	2444477.06	1980 Aug 25 1344:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1980-W803	2444477.51	1980 Aug 25 1500:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1980-W804	2444477.54	1980 Aug 25 2104:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1980-W806	2444477.59	1980 Aug 25 2348:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1980-W807	2444478.84	1980 Aug 26 2026:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1980-W809	2444478.84	1980 Aug 27 0300:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1980-W810	2444478.94	1980 Aug 27 0449:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1980-W810	2444478.96	1980 Aug 27 1330:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1980-W811	2444479.95	1980 Aug 27 1755:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1980-W811	2444479.95	1980 Aug 27 2000:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1980-W812	2444479.93	1980 Aug 27 2000:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1980-W813	2444480.18	1980 Aug 29 1619:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1980-W814	2444481.06	1980 Aug 29 1330:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1980-W815	2444481.10	1980 Aug 29 1427:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1980-W816	2444481.16	1980 Aug 29 1551:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1980-W817	2444481.33	1980 Aug 29 2000:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1980-W818	2444484.12	1980 Sep 1 1449:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1980-W819	2444485.14	1980 Sep 2 1824:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1980-W820	2444485.32	1980 Sep 2 1934:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1980-W820	2444485.64	1980 Sep 3 0323:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1980-W823	2444485.93	1980 Sep 3 1014:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1980-W824	2444486.06	1980 Sep 3 1330:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1980-W393	2444486.08	1980 Sep 3 1352:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1980-W826	2444486.11	1980 Sep 3 1435:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1980-W397	2444486.18	1980 Sep 3 1800:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1980-W828	2444486.25	1980 Sep 3 1840:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1980-W828	2444486.28	1980 Sep 3 1840:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1980-W830	2444486.35	1980 Sep 4 0202:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1980-W831	2444486.63	1980 Sep 4 0312:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1980-W832	2444487.52	1980 Sep 5 0031:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1980-W834	2444487.89	1980 Sep 5 0921:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1980-W835	2444488.05	1980 Sep 5 1314:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1980-W836	2444488.10	1980 Sep 5 1422:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1980-W837	2444488.27	1980 Sep 5 1830:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1980-W838	2444488.29	1980 Sep 5 1859:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1980-W839	2444488.33	1980 Sep 5 1951:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1980-W839	2444488.35	1980 Sep 5 2018:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1980-W840	2444488.35	1980 Sep 5 2030:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1980-W841	2444491.02	1980 Sep 8 1230:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1980-W842	2444491.04	1980 Sep 8 1259:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1980-W843	2444491.07	1980 Sep 8 1344:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1980-W843	2444491.14	1980 Sep 8 1522:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1980-W844	2444491.26	1980 Sep 8 1808:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-



Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Launch	Agency	Launch_Code	Group	Category	LT_Cite	Cite	Notes
						DrPay							
1980-H845	2444491.40	1980 Sep 8 2138:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1980-H846	2444492.27	1980 Sep 9 1830:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1980-H848	2444492.42	1980 Sep 9 2209:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1980-H851	2444493.05	1980 Sep 10 1307:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1980-H852	2444493.05	1980 Sep 10 1310:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1980-H853	2444493.07	1980 Sep 10 1344:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1980-H854	2444493.09	1980 Sep 10 1404:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1980-H854	2444493.19	1980 Sep 10 1626:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1980-H854	2444493.25	1980 Sep 10 1800:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1980-H855	2444493.28	1980 Sep 10 1845:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1980-H856	2444494.41	1980 Sep 11 2155:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1980-H857	2444494.67	1980 Sep 12 0406:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1980-H859	2444495.14	1980 Sep 12 1344:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1980-H860	2444495.14	1980 Sep 12 1518:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1980-H861	2444495.28	1980 Sep 12 1845:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1980-H863	2444497.56	1980 Sep 15 0119:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1980-H865	2444498.06	1980 Sep 15 1350:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1980-H866	2444498.07	1980 Sep 15 1344:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1980-H867	2444498.09	1980 Sep 15 1403:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1980-H868	2444498.13	1980 Sep 15 1506:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1980-H869	2444498.15	1980 Sep 15 1530:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1980-H870	2444498.18	1980 Sep 15 1614:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1980-H871	2444498.30	1980 Sep 15 1909:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1980-H872	2444498.34	1980 Sep 15 2004:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1980-H873	2444498.67	1980 Sep 16 0411:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1980-H875	2444500.02	1980 Sep 17 1230:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1980-H875	2444500.06	1980 Sep 17 1400:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1980-H876	2444500.11	1980 Sep 17 1457:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1980-H877	2444500.19	1980 Sep 17 1630:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1980-H878	2444500.21	1980 Sep 17 1700:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1980-H878	2444500.25	1980 Sep 17 1800:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1980-H879	2444500.40	1980 Sep 17 2140:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1980-H880	2444501.12	1980 Sep 18 1500:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1980-H881	2444501.59	1980 Sep 18 2121:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1980-H883	2444502.05	1980 Sep 19 1304:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1980-H884	2444502.07	1980 Sep 19 1344:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1980-H885	2444502.12	1980 Sep 19 1547:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1980-H886	2444502.15	1980 Sep 19 1547:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1980-H887	2444502.16	1980 Sep 19 1553:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1980-H888	2444502.17	1980 Sep 19 1546:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1980-H888	2444502.19	1980 Sep 19 1526:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1980-H889	2444502.21	1980 Sep 19 2000:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1980-H890	2444502.35	1980 Sep 19 2000:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1980-H891	2444502.61	1980 Sep 20 0422:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1980-H892	2444505.11	1980 Sep 22 1449:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1980-H893	2444505.20	1980 Sep 22 2018:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1980-H894	2444505.46	1980 Sep 22 2219:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1980-H895	2444506.33	1980 Sep 23 2000:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1980-H896	2444506.33	1980 Sep 23 1314:55	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1980-H897	2444507.36	1980 Sep 24 1400:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1980-H898	2444507.66	1980 Sep 24 1400:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1980-H898	2444507.91	1980 Sep 24 1445:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1980-H899	2444507.91	1980 Sep 24 1507:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1980-H900	2444507.97	1980 Sep 24 1830:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1980-H901	2444507.97	1980 Sep 24 1907:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1980-H917	2444507.30	1980 Sep 24 2000:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1980-H902	2444508.38	1980 Sep 25 1840:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1980-H903	2444508.38	1980 Sep 25 1900:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1980-H904	2444509.00	1980 Sep 26 1200:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1980-H905	2444509.04	1980 Sep 26 1259:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1980-H906	2444509.04	1980 Sep 26 1259:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1980-H907	2444509.12	1980 Sep 26 1451:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1980-H908	2444509.16	1980 Sep 26 1554:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1980-H909	2444509.21	1980 Sep 26 1704:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1980-H910	2444509.34	1980 Sep 26 2015:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1980-H911	2444512.06	1980 Sep 29 1430:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1980-H912	2444512.10	1980 Sep 29 1448:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1980-H913	2444512.12	1980 Sep 29 1757:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1980-H914	2444512.25	1980 Sep 29 1820:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1980-H915	2444512.26	1980 Sep 29 1830:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1980-H916	2444512.27	1980 Sep 29 2112:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1980-H917	2444512.38	1980 Sep 30 0055:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1980-H918	2444512.54	1980 Sep 30 0218:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1980-H918	2444513.33	1980 Sep 30 2000:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1980-H919	2444513.33	1980 Sep 30 2000:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1980-H921	2444514.07	1980 Oct 1 1344:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1980-H922	2444514.17	1980 Oct 1 1559:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1980-H923	2444514.20	1980 Oct 1 1644:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1980-H925	2444514.31	1980 Oct 1 1930:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1980-H926	2444514.43	1980 Oct 1 2223:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1980-H927	2444514.44	1980 Oct 1 2226:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1980-H928	2444515.10	1980 Oct 2 1419:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1980-H929	2444515.26	1980 Oct 2 1820:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1980-H930	2444515.33	1980 Oct 3 2000:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1980-H931	2444516.04	1980 Oct 3 1259:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1980-H932	2444516.26	1980 Oct 3 1810:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1980-H934	2444519.10	1980 Oct 6 1431:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Launch	Agency	Launch_Code	Group	Category	LT_Cite	Cite	Notes
						DrpPay							
1980-H935	2444519.15	1980 Oct 6 1540:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1980-H937	2444519.39	1980 Oct 6 2122:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1980-H939	2444520.12	1980 Oct 7 1449:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1980-H940	2444520.14	1980 Oct 7 1527:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1980-H941	2444520.27	1980 Oct 7 1830:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1980-H942	2444520.52	1980 Oct 8 0026:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1980-H944	2444520.74	1980 Oct 8 0538:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1980-H946	2444520.90	1980 Oct 8 0938:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1980-H948	2444521.15	1980 Oct 8 1540:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1980-H430	2444521.60	1980 Oct 9 0222:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1980-H949	2444522.03	1980 Oct 9 1249:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1980-H950	2444522.15	1980 Oct 9 1540:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1980-H952	2444523.43	1980 Oct 10 2214:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1980-H956	2444527.07	1980 Oct 14 1344:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1980-H958	2444527.15	1980 Oct 14 1540:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1980-H957	2444527.16	1980 Oct 14 1546:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1980-H959	2444528.04	1980 Oct 15 1256:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1980-H960	2444528.05	1980 Oct 15 1314:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1980-H961	2444528.10	1980 Oct 15 1431:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1980-H962	2444528.12	1980 Oct 15 1500:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1980-H963	2444528.15	1980 Oct 15 1550:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1980-H964	2444528.18	1980 Oct 15 1654:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1980-H966	2444528.39	1980 Oct 15 2127:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1980-H967	2444528.65	1980 Oct 16 0816:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1980-H440	2444529.12	1980 Oct 16 1523:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1980-H968	2444529.14	1980 Oct 16 1500:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1980-H969	2444529.31	1980 Oct 16 1921:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1980-H971	2444529.31	1980 Oct 17 1344:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1980-H973	2444530.06	1980 Oct 17 1845:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1980-H974	2444530.28	1980 Oct 18 0213:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1980-H975	2444530.28	1980 Oct 18 0213:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1980-H977	2444530.59	1980 Oct 20 1246:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1980-H980	2444533.03	1980 Oct 20 1544:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1980-H981	2444533.07	1980 Oct 20 1550:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1980-H982	2444533.15	1980 Oct 20 1550:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1980-H443	2444535.08	1980 Oct 22 1352:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1980-H986	2444535.17	1980 Oct 22 1557:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1980-H446	2444535.23	1980 Oct 22 1750:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1980-H988	2444535.28	1980 Oct 22 1845:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1980-H989	2444535.34	1980 Oct 22 2003:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1980-H990	2444536.18	1980 Oct 23 1614:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1980-H991	2444536.41	1980 Oct 23 2145:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1980-H993	2444537.11	1980 Oct 24 1432:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1980-H994	2444537.11	1980 Oct 24 1432:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1980-H995	2444537.12	1980 Oct 24 1554:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1980-H448	2444537.15	1980 Oct 24 1924:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1980-H996	2444537.29	1980 Oct 24 1924:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1980-H998	2444537.32	1980 Oct 24 1924:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1980-H999	2444537.40	1980 Oct 24 2100:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1980-H1000	2444537.40	1980 Oct 24 2100:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1980-H1001	2444540.11	1980 Oct 27 1415:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1980-H1002	2444540.32	1980 Oct 27 1943:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1980-H1003	2444540.36	1980 Oct 27 2035:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1980-H1004	2444541.31	1980 Oct 28 1922:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1980-H1005	2444541.38	1980 Oct 28 2100:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1980-H1008	2444542.06	1980 Oct 29 1319:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1980-H1009	2444542.19	1980 Oct 29 1635:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1980-H1010	2444542.29	1980 Oct 29 1859:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1980-H1011	2444542.30	1980 Oct 29 1910:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1980-H1012	2444542.32	1980 Oct 29 1941:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1980-H1013	2444543.42	1980 Oct 30 2159:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1980-H454	2444544.03	1980 Oct 31 0042:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1980-H1014	2444544.03	1980 Oct 31 1246:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1980-H1015	2444544.19	1980 Oct 31 1632:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1981-H011	2444607.05	1981 Jan 2 1314:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1981-H012	2444607.16	1981 Jan 2 1651:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1981-H013	2444610.11	1981 Jan 5 1445:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1981-H014	2444612.06	1981 Jan 7 1930:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1981-H015	2444613.04	1981 Jan 8 1301:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1981-H016	2444614.10	1981 Jan 9 1417:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1981-H017	2444617.05	1981 Jan 12 1314:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1981-H018	2444617.11	1981 Jan 12 1445:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1981-H019	2444619.06	1981 Jan 14 1330:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1981-H020	2444619.38	1981 Jan 14 2100:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1981-H021	2444621.11	1981 Jan 16 1445:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1981-H022	2444624.06	1981 Jan 19 1330:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1981-H023	2444624.50	1981 Jan 19 2358:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1981-H024	2444626.06	1981 Jan 21 1330:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1981-H025	2444626.28	1981 Jan 21 1840:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1981-H026	2444626.33	1981 Jan 21 2000:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1981-H027	2444627.13	1981 Jan 22 1508:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1981-H028	2444628.04	1981 Jan 23 1259:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1981-H029	2444628.12	1981 Jan 23 1500:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Launch_e	Agency	Launch_Code	Group	Category	LT_Cite	Cite	Notes
1981-H38	2444631..15	1981 Jan 26 1530:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1981-H39	2444631..15	1981 Jan 26 1542:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1981-H41	2444633.03	1981 Jan 28 1249:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1981-H36	2444633.11	1981 Jan 28 1445:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1981-H42	2444633.23	1981 Jan 28 1730:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1981-H43	2444633.50	1981 Jan 28 2353:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1981-H44	2444635.06	1981 Jan 30 1330:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1981-H45	2444635..15	1981 Jan 30 1540:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1981-H46	2444635..11	1981 Feb 2 1445:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1981-H48	2444638.33	1981 Feb 3 1257:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1981-H49	2444639.04	1981 Feb 4 1643:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1981-H53	2444640.20	1981 Feb 4 1700:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1981-H54	2444640.21	1981 Feb 4 1811:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1981-H55	2444640.26	1981 Feb 4 2100:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1981-H56	2444640.38	1981 Feb 4 2133:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1981-H45	2444640.40	1981 Feb 4 2203:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1981-H57	2444640.42	1981 Feb 4 2231:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1981-H58	2444640.44	1981 Feb 5 0959:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1981-H59	2444640.92	1981 Feb 5 1415:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1981-H60	2444641.09	1981 Feb 5 1630:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1981-H61	2444641.19	1981 Feb 5 1650:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1981-H62	2444642.15	1981 Feb 6 2054:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1981-H65	2444642.37	1981 Feb 6 2108:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1981-H66	2444642.38	1981 Feb 6 2214:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1981-H67	2444642.43	1981 Feb 9 1032:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1981-H68	2444644.94	1981 Feb 9 1641:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1981-H02	2444645.20	1981 Feb 9 1740:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1981-H69	2444645.24	1981 Feb 9 2130:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1981-H70	2444645.40	1981 Feb 9 2221:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1981-H71	2444645.43	1981 Feb 10 1415:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1981-H72	2444646.09	1981 Feb 10 2345:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1981-H74	2444646.49	1981 Feb 11 1330:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1981-H75	2444647.06	1981 Feb 11 1445:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1981-H76	2444647.11	1981 Feb 11 1730:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1981-H54	2444647.20	1981 Feb 11 1966:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1981-H77	2444647.33	1981 Feb 11 2000:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1981-H78	2444647.53	1981 Feb 12 1449:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1981-H60	2444648.12	1981 Feb 12 2155:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1981-H61	2444648.41	1981 Feb 13 1043:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1981-H63	2444648.95	1981 Feb 13 2145:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1981-H64	2444649.21	1981 Feb 13 2145:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1981-H85	2444649.41	1981 Feb 13 2145:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1981-H89	2444649.45	1981 Feb 13 2145:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1981-H89	2444653.12	1981 Feb 17 1507:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1981-H89	2444653.38	1981 Feb 18 1631:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1981-H93	2444653.94	1981 Feb 18 1631:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1981-H94	2444654.14	1981 Feb 18 2110:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1981-H95	2444654.38	1981 Feb 18 2110:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1981-H96	2444654.58	1981 Feb 18 2115:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1981-H97	2444655.19	1981 Feb 19 1635:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1981-H98	2444655.05	1981 Feb 20 1318:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1981-H99	2444656.05	1981 Feb 20 1500:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1981-H02	2444656.12	1981 Feb 20 1802:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1981-H02	2444656.25	1981 Feb 20 2015:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1981-H03	2444656.34	1981 Feb 20 2130:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1981-H103	2444656.40	1981 Feb 20 2135:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1981-H104	2444658.10	1981 Feb 23 1019:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1981-H106	2444658.93	1981 Feb 23 1552:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1981-H108	2444659.16	1981 Feb 23 1652:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1981-H109	2444659.20	1981 Feb 23 2051:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1981-H110	2444659.37	1981 Feb 24 0030:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1981-H111	2444659.38	1981 Feb 24 1800:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1981-H112	2444659.52	1981 Feb 25 0001:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1981-H114	2444660.25	1981 Feb 25 1254:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1981-H115	2444660.50	1981 Feb 25 1430:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1981-H117	2444661.04	1981 Feb 25 1644:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1981-H118	2444661.10	1981 Feb 26 0144:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1981-H119	2444661.20	1981 Feb 26 1527:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1981-H120	2444662.14	1981 Feb 26 1956:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1981-H121	2444662.32	1981 Feb 26 1956:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1981-H122	2444662.33	1981 Feb 26 2236:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1981-H126	2444662.44	1981 Feb 26 2315:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1981-H80	2444662.45	1981 Feb 26 2315:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1981-H81	2444662.47	1981 Feb 27 1030:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1981-H128	2444662.94	1981 Feb 27 1424:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1981-H129	2444663.22	1981 Feb 27 1715:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1981-H130	2444663.39	1981 Feb 27 2125:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1981-H131	2444663.41	1981 Feb 27 2152:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1981-H133	2444663.42	1981 Mar 2 1543:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1981-H134	2444666.15	1981 Mar 2 1700:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1981-H135	2444666.38	1981 Mar 2 2102:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1981-H136	2444666.38	1981 Mar 2 2110:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Launch	Agency	Launch_Code	Group	Category	LT_Cite	Cite	Notes
						DrbPay							
1981-1137	2444666.41	1981 Mar 2 2146:59	Rocketsonde	-	-	0.000	HRH	SS	-	Metro	DSI-5850	-	-
1981-1138	2444667.04	1981 Mar 3 1301:59	Rocketsonde	-	-	0.000	HRH	SS	-	Metro	DSI-5850	-	-
1981-1140	2444668.14	1981 Mar 4 1517:00	Rocketsonde	-	-	0.000	HRH	SS	-	Metro	DSI-5850	-	-
1981-1141	2444668.21	1981 Mar 4 1709:00	Rocketsonde	-	-	0.000	HRH	SS	-	Metro	DSI-5850	-	-
1981-1142	2444668.22	1981 Mar 4 1715:00	Rocketsonde	-	-	0.000	HRH	SS	-	Metro	DSI-5850	-	-
1981-1143	2444668.38	1981 Mar 4 2100:00	Rocketsonde	-	-	0.000	HRH	SS	-	Metro	DSI-5850	-	-
1981-1144	2444670.05	1981 Mar 5 2100:00	Rocketsonde	-	-	0.000	HRH	SS	-	Metro	DSI-5850	-	-
1981-1145	2444670.10	1981 Mar 6 1314:59	Rocketsonde	-	-	0.000	HRH	SS	-	Metro	DSI-5850	-	-
1981-1146	2444670.15	1981 Mar 6 1430:00	Rocketsonde	-	-	0.000	HRH	SS	-	Metro	DSI-5850	-	-
1981-1147	2444670.23	1981 Mar 6 1530:00	Rocketsonde	-	-	0.000	HRH	SS	-	Metro	DSI-5850	-	-
1981-1148	2444670.26	1981 Mar 6 1811:59	Rocketsonde	-	-	0.000	HRH	SS	-	Metro	DSI-5850	-	-
1981-1148	2444670.28	1981 Mar 6 1840:00	Rocketsonde	-	-	0.000	HRH	SS	-	Metro	DSI-5850	-	-
1981-1149	2444670.39	1981 Mar 6 2114:59	Rocketsonde	-	-	0.000	HRH	SS	-	Metro	DSI-5850	-	-
1981-1150	2444670.52	1981 Mar 7 0027:59	Rocketsonde	-	-	0.000	HRH	SS	-	Metro	DSI-5850	-	-
1981-1152	2444673.11	1981 Mar 9 1445:00	Rocketsonde	-	-	0.000	HRH	SS	-	Metro	DSI-5850	-	-
1981-1153	2444673.16	1981 Mar 9 1545:00	Rocketsonde	-	-	0.000	HRH	SS	-	Metro	DSI-5850	-	-
1981-1154	2444673.20	1981 Mar 9 1653:59	Rocketsonde	-	-	0.000	HRH	SS	-	Metro	DSI-5850	-	-
1981-1156	2444673.37	1981 Mar 9 2059:00	Rocketsonde	-	-	0.000	HRH	SS	-	Metro	DSI-5850	-	-
1981-1157	2444673.51	1981 Mar 9 2100:00	Rocketsonde	-	-	0.000	HRH	SS	-	Metro	DSI-5850	-	-
1981-1158	2444674.25	1981 Mar 10 0008:00	Rocketsonde	-	-	0.000	HRH	SS	-	Metro	DSI-5850	-	-
1981-1160	2444674.25	1981 Mar 10 1759:00	Rocketsonde	-	-	0.000	HRH	SS	-	Metro	DSI-5850	-	-
1981-1161	2444675.16	1981 Mar 11 1545:00	Rocketsonde	-	-	0.000	HRH	SS	-	Metro	DSI-5850	-	-
1981-1161	2444675.21	1981 Mar 11 1700:00	Rocketsonde	-	-	0.000	HRH	SS	-	Metro	DSI-5850	-	-
1981-1162	2444675.38	1981 Mar 11 2104:59	Rocketsonde	-	-	0.000	HRH	SS	-	Metro	DSI-5850	-	-
1981-1163	2444675.41	1981 Mar 11 2145:59	Rocketsonde	-	-	0.000	HRH	SS	-	Metro	DSI-5850	-	-
1981-1164	2444676.29	1981 Mar 12 1855:00	Rocketsonde	-	-	0.000	HRH	SS	-	Metro	DSI-5850	-	-
1981-1165	2444676.39	1981 Mar 12 2122:59	Rocketsonde	-	-	0.000	HRH	SS	-	Metro	DSI-5850	-	-
1981-1166	2444677.06	1981 Mar 13 1330:00	Rocketsonde	-	-	0.000	HRH	SS	-	Metro	DSI-5850	-	-
1981-1167	2444677.10	1981 Mar 13 1420:00	Rocketsonde	-	-	0.000	HRH	SS	-	Metro	DSI-5850	-	-
1981-1168	2444677.40	1981 Mar 13 2140:00	Rocketsonde	-	-	0.000	HRH	SS	-	Metro	DSI-5850	-	-
1981-1168	2444678.76	1981 Mar 15 0609:00	Rocketsonde	-	-	0.000	HRH	SS	-	Metro	DSI-5850	-	-
1981-1169	2444678.89	1981 Mar 15 0921:00	Rocketsonde	-	-	0.000	HRH	SS	-	Metro	DSI-5850	-	-
1981-1170	2444679.13	1981 Mar 15 1506:00	Rocketsonde	-	-	0.000	HRH	SS	-	Metro	DSI-5850	-	-
1981-1171	2444680.06	1981 Mar 16 1330:00	Rocketsonde	-	-	0.000	HRH	SS	-	Metro	DSI-5850	-	-
1981-1172	2444680.40	1981 Mar 16 2153:59	Rocketsonde	-	-	0.000	HRH	SS	-	Metro	DSI-5850	-	-
1981-1173	2444681.10	1981 Mar 17 1454:00	Rocketsonde	-	-	0.000	HRH	SS	-	Metro	DSI-5850	-	-
1981-1174	2444681.35	1981 Mar 17 2023:00	Rocketsonde	-	-	0.000	HRH	SS	-	Metro	DSI-5850	-	-
1981-1174	2444681.35	1981 Mar 17 2124:59	Rocketsonde	-	-	0.000	HRH	SS	-	Metro	DSI-5850	-	-
1981-1177	2444682.16	1981 Mar 18 1566:00	Rocketsonde	-	-	0.000	HRH	SS	-	Metro	DSI-5850	-	-
1981-1178	2444682.22	1981 Mar 18 2051:00	Rocketsonde	-	-	0.000	HRH	SS	-	Metro	DSI-5850	-	-
1981-1179	2444682.36	1981 Mar 18 2059:00	Rocketsonde	-	-	0.000	HRH	SS	-	Metro	DSI-5850	-	-
1981-1182	2444683.39	1981 Mar 18 2123:59	Rocketsonde	-	-	0.000	HRH	SS	-	Metro	DSI-5850	-	-
1981-1182	2444684.31	1981 Mar 19 2019:00	Rocketsonde	-	-	0.000	HRH	SS	-	Metro	DSI-5850	-	-
1981-1184	2444684.38	1981 Mar 20 1913:59	Rocketsonde	-	-	0.000	HRH	SS	-	Metro	DSI-5850	-	-
1981-1186	2444684.39	1981 Mar 20 2114:59	Rocketsonde	-	-	0.000	HRH	SS	-	Metro	DSI-5850	-	-
1981-1187	2444687.11	1981 Mar 23 1445:00	Rocketsonde	-	-	0.000	HRH	SS	-	Metro	DSI-5850	-	-
1981-1189	2444687.38	1981 Mar 23 2100:00	Rocketsonde	-	-	0.000	HRH	SS	-	Metro	DSI-5850	-	-
1981-1189	2444688.97	1981 Mar 24 2058:00	Rocketsonde	-	-	0.000	HRH	SS	-	Metro	DSI-5850	-	-
1981-1196	2444688.98	1981 Mar 24 2120:00	Rocketsonde	-	-	0.000	HRH	SS	-	Metro	DSI-5850	-	-
1981-1199	2444689.04	1981 Mar 24 2145:59	Rocketsonde	-	-	0.000	HRH	SS	-	Metro	DSI-5850	-	-
1981-1199	2444689.04	1981 Mar 25 1256:59	Rocketsonde	-	-	0.000	HRH	SS	-	Metro	DSI-5850	-	-
1981-1199	2444689.07	1981 Mar 25 1304:59	Rocketsonde	-	-	0.000	HRH	SS	-	Metro	DSI-5850	-	-
1981-1199	2444689.11	1981 Mar 25 1445:00	Rocketsonde	-	-	0.000	HRH	SS	-	Metro	DSI-5850	-	-
1981-1199	2444689.19	1981 Mar 25 1630:00	Rocketsonde	-	-	0.000	HRH	SS	-	Metro	DSI-5850	-	-
1981-1199	2444689.25	1981 Mar 25 1800:00	Rocketsonde	-	-	0.000	HRH	SS	-	Metro	DSI-5850	-	-
1981-1195	2444689.27	1981 Mar 25 1833:59	Rocketsonde	-	-	0.000	HRH	SS	-	Metro	DSI-5850	-	-
1981-1196	2444689.40	1981 Mar 25 2130:00	Rocketsonde	-	-	0.000	HRH	SS	-	Metro	DSI-5850	-	-
1981-1197	2444689.43	1981 Mar 25 2218:59	Rocketsonde	-	-	0.000	HRH	SS	-	Metro	DSI-5850	-	-
1981-1200	2444690.13	1981 Mar 26 1503:59	Rocketsonde	-	-	0.000	HRH	SS	-	Metro	DSI-5850	-	-
1981-1202	2444690.37	1981 Mar 26 2058:00	Rocketsonde	-	-	0.000	HRH	SS	-	Metro	DSI-5850	-	-
1981-1203	2444690.38	1981 Mar 26 2100:00	Rocketsonde	-	-	0.000	HRH	SS	-	Metro	DSI-5850	-	-
1981-1205	2444691.16	1981 Mar 27 1549:59	Rocketsonde	-	-	0.000	HRH	SS	-	Metro	DSI-5850	-	-
1981-1205	2444691.12	1981 Mar 27 1500:00	Rocketsonde	-	-	0.000	HRH	SS	-	Metro	DSI-5850	-	-
1981-1208	2444691.38	1981 Mar 27 2100:00	Rocketsonde	-	-	0.000	HRH	SS	-	Metro	DSI-5850	-	-
1981-1209	2444694.03	1981 Mar 30 1246:59	Rocketsonde	-	-	0.000	HRH	SS	-	Metro	DSI-5850	-	-
1981-1210	2444694.19	1981 Mar 30 1631:59	Rocketsonde	-	-	0.000	HRH	SS	-	Metro	DSI-5850	-	-
1981-1210	2444694.30	1981 Mar 30 1914:59	Rocketsonde	-	-	0.000	HRH	SS	-	Metro	DSI-5850	-	-
1981-1211	2444694.38	1981 Mar 30 2100:00	Rocketsonde	-	-	0.000	HRH	SS	-	Metro	DSI-5850	-	-
1981-1212	2444694.40	1981 Mar 30 2130:00	Rocketsonde	-	-	0.000	HRH	SS	-	Metro	DSI-5850	-	-
1981-1213	2444694.43	1981 Mar 30 2215:59	Rocketsonde	-	-	0.000	HRH	SS	-	Metro	DSI-5850	-	-
1981-1214	2444695.32	1981 Mar 31 1941:59	Rocketsonde	-	-	0.000	HRH	SS	-	Metro	DSI-5850	-	-
1981-1215	2444695.92	1981 Apr 1 0015:59	Rocketsonde	-	-	0.000	HRH	SS	-	Metro	DSI-5850	-	-
1981-1216	2444695.99	1981 Apr 1 1009:59	Rocketsonde	-	-	0.000	HRH	SS	-	Metro	DSI-5850	-	-
1981-1216	2444696.26	1981 Apr 1 1140:00	Rocketsonde	-	-	0.000	HRH	SS	-	Metro	DSI-5850	-	-
1981-1219	2444696.31	1981 Apr 1 1808:00	Rocketsonde	-	-	0.000	HRH	SS	-	Metro	DSI-5850	-	-
1981-1217	2444696.46	1981 Apr 1 1926:59	Rocketsonde	-	-	0.000	HRH	SS	-	Metro	DSI-5850	-	-
1981-1218	2444697.11	1981 Apr 1 2304:59	Rocketsonde	-	-	0.000	HRH	SS	-	Metro	DSI-5850	-	-
1981-1220	2444698.16	1981 Apr 2 1445:00	Rocketsonde	-	-	0.000	HRH	SS	-	Metro	DSI-5850	-	-
1981-1221	2444698.20	1981 Apr 3 1646:59	Rocketsonde	-	-	0.000	HRH	SS	-	Metro	DSI-5850	-	-
1981-1222	2444698.30	1981 Apr 3 1914:59	Rocketsonde	-	-	0.000	HRH	SS	-	Metro	DSI-5850	-	-

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Launch	Agency	Launch_Code	Group	Category	LT_Cite	Cite	Notes
						DrPay							
1981-4223	2444698.35	1981 Apr 3 2029:00	Rocketsonde			0.000	HRH	SS		Metco	DSI-5850		
1981-4224	2444698.37	1981 Apr 3 2056:00	Rocketsonde			0.000	HRH	SS		Metco	DSI-5850		
1981-4225	2444701.07	1981 Apr 6 1344:59	Rocketsonde			0.000	HRH	SS		Metco	DSI-5850		
1981-4227	2444701.11	1981 Apr 6 1445:00	Rocketsonde			0.000	HRH	SS		Metco	DSI-5850		
1981-4228	2444701.33	1981 Apr 6 1952:00	Rocketsonde			0.000	HRH	SS		Metco	DSI-5850		
1981-4229	2444702.15	1981 Apr 7 1540:00	Rocketsonde			0.000	HRH	SS		Metco	DSI-5850		
1981-4230	2444702.35	1981 Apr 7 2030:00	Rocketsonde			0.000	HRH	SS		Metco	DSI-5850		
1981-4231	2444703.38	1981 Apr 7 2100:00	Rocketsonde			0.000	HRH	SS		Metco	DSI-5850		
1981-4234	2444703.10	1981 Apr 8 1420:00	Rocketsonde			0.000	HRH	SS		Metco	DSI-5850		
1981-4236	2444703.26	1981 Apr 8 1814:59	Rocketsonde			0.000	HRH	SS		Metco	DSI-5850		
1981-4237	2444703.35	1981 Apr 8 2017:00	Rocketsonde			0.000	HRH	SS		Metco	DSI-5850		
1981-4238	2444704.15	1981 Apr 9 1530:00	Rocketsonde			0.000	HRH	SS		Metco	DSI-5850		
1981-4239	2444704.19	1981 Apr 9 1637:59	Rocketsonde			0.000	HRH	SS		Metco	DSI-5850		
1981-4240	2444704.71	1981 Apr 10 0506:00	Rocketsonde			0.000	HRH	SS		Metco	DSI-5850		
1981-4241	2444705.04	1981 Apr 10 1259:59	Rocketsonde			0.000	HRH	SS		Metco	DSI-5850		
1981-4242	2444705.19	1981 Apr 10 1630:00	Rocketsonde			0.000	HRH	SS		Metco	DSI-5850		
1981-4243	2444705.32	1981 Apr 10 1946:59	Rocketsonde			0.000	HRH	SS		Metco	DSI-5850		
1981-4245	2444705.53	1981 Apr 10 2000:00	Rocketsonde			0.000	HRH	SS		Metco	DSI-5850		
1981-4246	2444706.39	1981 Apr 10 2114:59	Rocketsonde			0.000	HRH	SS		Metco	DSI-5850		
1981-4248	2444706.75	1981 Apr 12 0556:00	Rocketsonde			0.000	HRH	SS		Metco	DSI-5850		
1981-4249	2444707.15	1981 Apr 12 1245:00	Rocketsonde			0.000	HRH	SS		Metco	DSI-5850		
1981-4247	2444707.03	1981 Apr 12 1330:00	Rocketsonde			0.000	HRH	SS		Metco	DSI-5850		
1981-4248	2444707.10	1981 Apr 12 1430:00	Rocketsonde			0.000	HRH	SS		Metco	DSI-5850		
1981-4249	2444707.12	1981 Apr 12 1500:00	Rocketsonde			0.000	HRH	SS		Metco	DSI-5850		
1981-4250	2444707.16	1981 Apr 12 1545:59	Rocketsonde			0.000	HRH	SS		Metco	DSI-5850		
1981-4251	2444707.21	1981 Apr 12 1700:00	Rocketsonde			0.000	HRH	SS		Metco	DSI-5850		
1981-4252	2444707.21	1981 Apr 12 1704:59	Rocketsonde			0.000	HRH	SS		Metco	DSI-5850		
1981-4253	2444707.38	1981 Apr 12 2100:00	Rocketsonde			0.000	HRH	SS		Metco	DSI-5850		
1981-4254	2444707.42	1981 Apr 12 2200:59	Rocketsonde			0.000	HRH	SS		Metco	DSI-5850		
1981-4255	2444707.50	1981 Apr 13 0000:59	Rocketsonde			0.000	HRH	SS		Metco	DSI-5850		
1981-4256	2444707.87	1981 Apr 13 1115:00	Rocketsonde			0.000	HRH	SS		Metco	DSI-5850		
1981-4258	2444708.00	1981 Apr 13 1200:00	Rocketsonde			0.000	HRH	SS		Metco	DSI-5850		
1981-4259	2444708.12	1981 Apr 13 1500:00	Rocketsonde			0.000	HRH	SS		Metco	DSI-5850		
1981-4257	2444708.12	1981 Apr 13 1509:00	Rocketsonde			0.000	HRH	SS		Metco	DSI-5850		
1981-4258	2444708.13	1981 Apr 13 1509:00	Rocketsonde			0.000	HRH	SS		Metco	DSI-5850		
1981-4256	2444708.14	1981 Apr 13 1516:00	Rocketsonde			0.000	HRH	SS		Metco	DSI-5850		
1981-4259	2444708.17	1981 Apr 13 1557:59	Rocketsonde			0.000	HRH	SS		Metco	DSI-5850		
1981-4260	2444708.21	1981 Apr 13 1706:00	Rocketsonde			0.000	HRH	SS		Metco	DSI-5850		
1981-4261	2444708.37	1981 Apr 13 2065:00	Rocketsonde			0.000	HRH	SS		Metco	DSI-5850		
1981-4262	2444708.38	1981 Apr 13 2100:00	Rocketsonde			0.000	HRH	SS		Metco	DSI-5850		
1981-4263	2444708.54	1981 Apr 14 0622:00	Rocketsonde			0.000	HRH	SS		Metco	DSI-5850		
1981-4264	2444708.89	1981 Apr 14 0945:59	Rocketsonde			0.000	HRH	SS		Metco	DSI-5850		
1981-4265	2444708.95	1981 Apr 14 1017:00	Rocketsonde			0.000	HRH	SS		Metco	DSI-5850		
1981-4266	2444709.00	1981 Apr 14 1200:00	Rocketsonde			0.000	HRH	SS		Metco	DSI-5850		
1981-4267	2444709.05	1981 Apr 14 1400:00	Rocketsonde			0.000	HRH	SS		Metco	DSI-5850		
1981-4268	2444709.12	1981 Apr 14 1501:00	Rocketsonde			0.000	HRH	SS		Metco	DSI-5850		
1981-4269	2444709.15	1981 Apr 14 1504:59	Rocketsonde			0.000	HRH	SS		Metco	DSI-5850		
1981-4270	2444709.21	1981 Apr 14 1702:59	Rocketsonde			0.000	HRH	SS		Metco	DSI-5850		
1981-4271	2444709.31	1981 Apr 14 1721:00	Rocketsonde			0.000	HRH	SS		Metco	DSI-5850		
1981-4272	2444709.33	1981 Apr 14 1731:00	Rocketsonde			0.000	HRH	SS		Metco	DSI-5850		
1981-4273	2444709.33	1981 Apr 14 1731:00	Rocketsonde			0.000	HRH	SS		Metco	DSI-5850		
1981-4274	2444709.35	1981 Apr 14 1737:00	Rocketsonde			0.000	HRH	SS		Metco	DSI-5850		
1981-4275	2444709.38	1981 Apr 14 1820:00	Rocketsonde			0.000	HRH	SS		Metco	DSI-5850		
1981-4276	2444709.38	1981 Apr 14 1849:59	Rocketsonde			0.000	HRH	SS		Metco	DSI-5850		
1981-4277	2444709.38	1981 Apr 14 1908:59	Rocketsonde			0.000	HRH	SS		Metco	DSI-5850		
1981-4278	2444709.30	1981 Apr 14 1919:59	Rocketsonde			0.000	HRH	SS		Metco	DSI-5850		
1981-4279	2444709.31	1981 Apr 14 1919:59	Rocketsonde			0.000	HRH	SS		Metco	DSI-5850		
1981-4280	2444710.06	1981 Apr 15 1330:00	Rocketsonde			0.000	HRH	SS		Metco	DSI-5850		
1981-4281	2444710.11	1981 Apr 15 1445:00	Rocketsonde			0.000	HRH	SS		Metco	DSI-5850		
1981-4282	2444710.27	1981 Apr 15 1830:00	Rocketsonde			0.000	HRH	SS		Metco	DSI-5850		
1981-4283	2444710.37	1981 Apr 15 2056:00	Rocketsonde			0.000	HRH	SS		Metco	DSI-5850		
1981-4284	2444711.37	1981 Apr 15 2110:00	Rocketsonde			0.000	HRH	SS		Metco	DSI-5850		
1981-4285	2444711.37	1981 Apr 15 2110:00	Rocketsonde			0.000	HRH	SS		Metco	DSI-5850		
1981-4286	2444711.38	1981 Apr 15 2026:59	Rocketsonde			0.000	HRH	SS		Metco	DSI-5850		
1981-4287	2444711.38	1981 Apr 17 1319:59	Rocketsonde			0.000	HRH	SS		Metco	DSI-5850		
1981-4288	2444711.06	1981 Apr 17 2026:59	Rocketsonde			0.000	HRH	SS		Metco	DSI-5850		
1981-4289	2444712.38	1981 Apr 17 2100:00	Rocketsonde			0.000	HRH	SS		Metco	DSI-5850		
1981-4290	2444712.38	1981 Apr 17 2100:00	Rocketsonde			0.000	HRH	SS		Metco	DSI-5850		
1981-4291	2444715.37	1981 Apr 20 2048:00	Rocketsonde			0.000	HRH	SS		Metco	DSI-5850		
1981-4292	2444715.37	1981 Apr 20 2056:00	Rocketsonde			0.000	HRH	SS		Metco	DSI-5850		
1981-4293	2444715.37	1981 Apr 20 2056:00	Rocketsonde			0.000	HRH	SS		Metco	DSI-5850		
1981-4294	2444715.38	1981 Apr 20 2100:00	Rocketsonde			0.000	HRH	SS		Metco	DSI-5850		
1981-4295	2444716.11	1981 Apr 21 1434:00	Rocketsonde			0.000	HRH	SS		Metco	DSI-5850		
1981-4296	2444716.35	1981 Apr 21 2025:00	Rocketsonde			0.000	HRH	SS		Metco	DSI-5850		
1981-4297	2444717.09	1981 Apr 22 1411:00	Rocketsonde			0.000	HRH	SS		Metco	DSI-5850		
1981-4298	2444717.19	1981 Apr 22 1626:59	Rocketsonde			0.000	HRH	SS		Metco	DSI-5850		
1981-4299	2444717.20	1981 Apr 22 1644:59	Rocketsonde			0.000	HRH	SS		Metco	DSI-5850		
1981-4300	2444717.37	1981 Apr 22 2052:00	Rocketsonde			0.000	HRH	SS		Metco	DSI-5850		
1981-4301	2444717.39	1981 Apr 22 2117:00	Rocketsonde			0.000	HRH	SS		Metco	DSI-5850		
1981-4302	2444718.12	1981 Apr 23 1500:00	Rocketsonde			0.000	HRH	SS		Metco	DSI-5850		
1981-4303	2444719.07	1981 Apr 24 1344:59	Rocketsonde			0.000	HRH	SS		Metco	DSI-5850		
1981-4304	2444719.11	1981 Apr 24 1445:00	Rocketsonde			0.000	HRH	SS		Metco	DSI-5850		
1981-4305	2444719.21	1981 Apr 24 1700:00	Rocketsonde			0.000	HRH	SS		Metco	DSI-5850		
1981-4306	2444719.38	1981 Apr 24 2100:00	Rocketsonde			0.000	HRH	SS		Metco	DSI-5850		
1981-4307	2444721.38	1981 Apr 26 2101:59	Rocketsonde			0.000	HRH	SS		Metco	DSI-5850		
1981-4308	2444722.06	1981 Apr 27 1330:00	Rocketsonde			0.000	HRH	SS		Metco	DSI-5850		
1981-4309	2444722.07	1981 Apr 27 1344:59	Rocketsonde			0.000	HRH	SS		Metco	DSI-5850		

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Launch_e	Agency	Launch_Code	Group	Category	LT_Cite	Cite	Notes
1981-H304	2444722.16	1981 Apr 27 1545:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1981-H307	2444722.34	1981 Apr 27 2013:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1981-H309	2444724.08	1981 Apr 29 1349:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1981-H162	2444724.09	1981 Apr 29 1415:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1981-H310	2444724.16	1981 Apr 29 1545:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1981-H311	2444724.18	1981 Apr 29 1619:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1981-H312	2444724.25	1981 Apr 29 1804:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1981-H313	2444724.33	1981 Apr 29 2000:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1981-H314	2444724.37	1981 Apr 29 2046:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1981-H315	2444725.37	1981 Apr 30 2055:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1981-H09	2444726.15	1981 May 1 1541:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1981-H317	2444726.53	1981 May 2 0038:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1981-H318	2444729.16	1981 May 4 1544:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1981-H319	2444729.29	1981 May 4 1654:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1981-H320	2444729.43	1981 May 4 2219:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1981-H321	2444729.93	1981 May 5 1023:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1981-H322	2444730.10	1981 May 5 1417:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1981-H324	2444731.16	1981 May 6 1545:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1981-H325	2444732.19	1981 May 7 1650:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1981-H326	2444732.53	1981 May 8 0042:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1981-H328	2444733.07	1981 May 8 1344:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1981-H329	2444733.15	1981 May 8 1550:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1981-H330	2444733.35	1981 May 8 2024:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1981-H331	2444733.37	1981 May 8 2051:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1981-H332	2444736.07	1981 May 11 1344:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1981-H333	2444736.17	1981 May 11 1557:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1981-H334	2444736.19	1981 May 11 1627:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1981-H335	2444736.19	1981 May 13 1043:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1981-H336	2444736.06	1981 May 13 1550:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1981-H340	2444738.14	1981 May 13 1524:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1981-H176	2444738.16	1981 May 13 1545:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1981-H341	2444738.16	1981 May 13 1556:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1981-H10	2444738.19	1981 May 13 1650:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1981-H178	2444738.27	1981 May 13 1822:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1981-H342	2444738.29	1981 May 13 1857:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1981-H343	2444739.04	1981 May 14 1255:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1981-H344	2444739.30	1981 May 14 1911:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1981-H345	2444739.33	1981 May 14 1966:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1981-H346	2444740.34	1981 May 15 2004:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1981-H347	2444740.39	1981 May 15 2126:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1981-H348	2444742.84	1981 May 18 1909:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1981-H349	2444743.05	1981 May 18 1904:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1981-H350	2444744.61	1981 May 19 1700:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1981-H351	2444745.07	1981 May 20 1344:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1981-H352	2444745.15	1981 May 20 1530:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1981-H353	2444745.23	1981 May 20 1726:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1981-H354	2444745.33	1981 May 20 2000:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1981-H359	2444745.35	1981 May 20 2046:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1981-H361	2444747.05	1981 May 21 2107:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1981-H166	2444747.17	1981 May 21 2159:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1981-H362	2444747.37	1981 May 22 2056:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1981-H363	2444747.39	1981 May 22 2117:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1981-H364	2444747.39	1981 May 22 2154:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1981-H367	2444750.34	1981 May 25 1534:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1981-H370	2444750.34	1981 May 25 2015:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1981-H371	2444751.35	1981 May 26 2026:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1981-H372	2444751.40	1981 May 26 2134:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1981-H374	2444751.94	1981 May 27 1027:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1981-H376	2444752.10	1981 May 27 1422:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1981-H378	2444752.17	1981 May 27 1559:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1981-H379	2444752.24	1981 May 27 1740:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1981-H380	2444752.24	1981 May 27 1826:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1981-H381	2444752.37	1981 May 27 2057:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1981-H381	2444752.54	1981 May 28 0055:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1981-H382	2444753.12	1981 May 28 1500:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1981-H384	2444754.04	1981 May 29 1259:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1981-H385	2444754.07	1981 May 29 1344:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1981-H386	2444754.14	1981 May 29 1524:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1981-H387	2444754.15	1981 May 29 1550:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1981-H388	2444754.53	1981 May 30 0036:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1981-H389	2444754.53	1981 May 30 0045:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1981-H390	2444757.06	1981 Jun 1 1330:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1981-H391	2444757.07	1981 Jun 1 1344:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1981-H392	2444757.17	1981 Jun 1 1600:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1981-H393	2444757.33	1981 Jun 1 2000:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1981-H394	2444757.37	1981 Jun 1 2057:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1981-H395	2444758.16	1981 Jun 2 1552:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1981-H205	2444759.15	1981 Jun 3 1530:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1981-H397	2444759.21	1981 Jun 3 1700:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1981-H398	2444759.31	1981 Jun 3 1831:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1981-H399	2444759.41	1981 Jun 3 2149:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1981-H400	2444759.42	1981 Jun 3 2204:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Launch_e	Agency	Launch_Code	Group	Category	LT_Cite	Cite	Notes
1981-W401	2444759.90	1981 Jun 4 0943:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1981-W402	2444760.10	1981 Jun 4 1430:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1981-W404	2444761.03	1981 Jun 5 1248:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1981-W405	2444761.09	1981 Jun 5 1414:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1981-W208	2444761.31	1981 Jun 5 1929:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1981-W406	2444761.33	1981 Jun 5 1954:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1981-W407	2444761.33	1981 Jun 5 2000:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1981-W408	2444764.40	1981 Jun 6 2136:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1981-W409	2444764.90	1981 Jun 9 0930:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1981-W410	2444765.10	1981 Jun 9 1423:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1981-W411	2444765.23	1981 Jun 9 1726:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1981-W414	2444766.06	1981 Jun 10 1331:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1981-W215	2444766.08	1981 Jun 10 1349:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1981-W415	2444766.22	1981 Jun 10 1711:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1981-W416	2444766.33	1981 Jun 10 1963:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1981-W417	2444767.04	1981 Jun 11 1266:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1981-W418	2444767.37	1981 Jun 11 2066:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1981-W420	2444768.40	1981 Jun 12 2134:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1981-W421	2444771.53	1981 Jun 16 0041:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1981-W422	2444772.03	1981 Jun 16 1246:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1981-W412	2444772.25	1981 Jun 16 1759:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1981-W413	2444773.04	1981 Jun 17 1303:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1981-W238	2444773.07	1981 Jun 17 1344:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1981-W423	2444773.33	1981 Jun 17 2000:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1981-W424	2444773.35	1981 Jun 17 2027:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1981-W425	2444773.40	1981 Jun 17 2153:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1981-W426	2444773.69	1981 Jun 18 0926:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1981-W427	2444774.17	1981 Jun 18 1659:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1981-W240	2444774.20	1981 Jun 18 1659:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1981-W428	2444774.34	1981 Jun 18 2012:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1981-W430	2444775.07	1981 Jun 19 1344:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1981-W433	2444775.07	1981 Jun 22 1253:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1981-W436	2444778.10	1981 Jun 22 1427:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1981-W437	2444778.33	1981 Jun 22 1965:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1981-W438	2444778.59	1981 Jun 22 2119:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1981-W444	2444780.09	1981 Jun 24 1415:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1981-W445	2444780.10	1981 Jun 24 1450:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1981-W446	2444780.17	1981 Jun 24 1606:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1981-W447	2444780.19	1981 Jun 24 1630:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1981-W235	2444780.20	1981 Jun 24 1649:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1981-W448	2444780.22	1981 Jun 24 1715:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1981-W449	2444780.23	1981 Jun 25 1029:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1981-W450	2444781.33	1981 Jun 25 1652:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1981-W452	2444782.10	1981 Jun 26 0444:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1981-W454	2444782.18	1981 Jun 26 1507:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1981-W456	2444785.07	1981 Jun 29 1304:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1981-W475	2444785.07	1981 Jun 29 2209:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1981-W457	2444785.42	1981 Jun 29 1630:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1981-W458	2444785.42	1981 Jun 30 2141:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1981-W459	2444786.10	1981 Jun 30 0926:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1981-W460	2444786.89	1981 Jun 31 2115:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1981-W263	2444787.30	1981 Jun 31 2135:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1981-W464	2444787.41	1981 Jun 31 2144:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1981-W462	2444787.42	1981 Jun 31 2201:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1981-W463	2444787.52	1981 Jun 2 0027:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1981-W465	2444788.08	1981 Jun 2 1400:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1981-W466	2444788.19	1981 Jun 2 1630:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1981-W467	2444789.04	1981 Jun 3 1251:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1981-W468	2444792.07	1981 Jun 6 1344:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1981-W469	2444792.09	1981 Jun 6 1406:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1981-W470	2444792.19	1981 Jun 6 1640:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1981-W471	2444792.37	1981 Jun 6 2058:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1981-W472	2444793.52	1981 Jun 8 0034:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1981-W475	2444794.16	1981 Jun 8 1545:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1981-W476	2444794.19	1981 Jun 8 1630:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1981-W477	2444794.22	1981 Jun 8 1710:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1981-W478	2444794.40	1981 Jun 8 1807:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1981-W479	2444794.55	1981 Jun 8 2134:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1981-W480	2444795.04	1981 Jun 9 1257:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1981-W481	2444795.06	1981 Jun 9 1319:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1981-W482	2444795.11	1981 Jun 9 1437:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1981-W483	2444796.06	1981 Jun 9 2129:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1981-W484	2444796.21	1981 Jun 10 1330:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1981-W485	2444800.10	1981 Jun 10 1700:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1981-W486	2444800.19	1981 Jun 14 1430:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1981-W487	2444801.06	1981 Jun 15 1330:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1981-W488	2444801.07	1981 Jun 15 1344:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1981-W278	2444802.27	1981 Jun 16 1822:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1981-W489	2444802.43	1981 Jun 16 1853:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1981-W490	2444802.43	1981 Jun 16 2218:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1981-W491	2444803.07	1981 Jun 17 1344:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1981-W493	2444803.37	1981 Jun 17 2052:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1981-W494	2444803.39	1981 Jun 17 2120:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-





Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Launch_e	Agency	Launch_Code	Group	Category	LT_Cite	Cite	Notes
1981-1676	2444848_36	1981 Aug 31 2034:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1981-1677	2444849_35	1981 Sep 1 2030:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1981-1678	2444849_56	1981 Sep 2 0132:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1981-1730	2444850_05	1981 Sep 2 1314:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1981-1680	2444850_07	1981 Sep 2 1334:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1981-1732	2444850_27	1981 Sep 2 1754:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1981-1683	2444850_27	1981 Sep 2 1826:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1981-1686	2444852_06	1981 Sep 4 1330:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1981-1688	2444852_11	1981 Sep 4 1445:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1981-1687	2444852_12	1981 Sep 4 1500:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1981-1688	2444852_23	1981 Sep 4 1732:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1981-1688	2444852_23	1981 Sep 4 1732:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1981-1735	2444852_40	1981 Sep 4 2140:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1981-1689	2444852_42	1981 Sep 4 2159:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1981-1690	2444852_42	1981 Sep 4 2209:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1981-1691	2444856_04	1981 Sep 8 1924:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1981-1691	2444856_31	1981 Sep 8 1924:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1981-1692	2444856_35	1981 Sep 8 2030:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1981-1693	2444856_37	1981 Sep 8 2054:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1981-1694	2444856_43	1981 Sep 8 2218:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1981-1696	2444856_90	1981 Sep 9 0934:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1981-1698	2444857_25	1981 Sep 9 1755:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1981-1699	2444858_30	1981 Sep 10 1914:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1981-1600	2444858_43	1981 Sep 10 2213:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1981-1602	2444859_07	1981 Sep 11 1344:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1981-1603	2444859_17	1981 Sep 11 1609:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1981-1604	2444859_32	1981 Sep 11 1942:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1981-1605	2444859_74	1981 Sep 12 0544:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1981-1606	2444859_87	1981 Sep 12 0544:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1981-1607	2444861_17	1981 Sep 13 1604:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1981-1609	2444862_04	1981 Sep 14 1256:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1981-1610	2444862_07	1981 Sep 14 1344:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1981-1611	2444862_35	1981 Sep 14 1555:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1981-1612	2444863_12	1981 Sep 15 1500:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1981-1613	2444863_14	1981 Sep 15 1523:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1981-1614	2444863_42	1981 Sep 16 2207:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1981-1616	2444864_07	1981 Sep 16 1344:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1981-1617	2444864_22	1981 Sep 16 1715:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1981-1618	2444865_25	1981 Sep 17 1303:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1981-1619	2444865_40	1981 Sep 17 1359:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1981-1620	2444866_07	1981 Sep 18 1544:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1981-1622	2444869_43	1981 Sep 21 0514:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1981-1623	2444869_44	1981 Sep 21 0514:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1981-1624	2444870_06	1981 Sep 22 0253:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1981-1625	2444870_35	1981 Sep 22 0905:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1981-1626	2444870_35	1981 Sep 22 0905:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1981-1627	2444870_39	1981 Sep 22 2152:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1981-1628	2444870_39	1981 Sep 22 2152:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1981-1629	2444871_05	1981 Sep 23 1309:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1981-1630	2444871_26	1981 Sep 23 1851:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1981-1631	2444871_50	1981 Sep 24 0001:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1981-1633	2444873_05	1981 Sep 25 1307:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1981-1634	2444876_05	1981 Sep 28 1314:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1981-1636	2444876_12	1981 Sep 28 1354:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1981-1637	2444876_12	1981 Sep 28 1455:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1981-1638	2444876_29	1981 Sep 28 1859:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1981-1639	2444876_33	1981 Sep 28 2000:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1981-1640	2444877_08	1981 Sep 29 1400:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1981-1643	2444877_54	1981 Sep 30 0051:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1981-1644	2444878_07	1981 Sep 30 1344:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1981-1644	2444878_08	1981 Sep 30 1400:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1981-1645	2444878_15	1981 Sep 30 1533:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1981-1646	2444879_13	1981 Sep 30 2159:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1981-1647	2444879_16	1981 Oct 1 1504:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1981-1648	2444879_33	1981 Oct 1 2000:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1981-1649	2444879_39	1981 Oct 1 2127:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1981-1650	2444880_06	1981 Oct 2 1330:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1981-1651	2444880_06	1981 Oct 2 1330:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1981-1652	2444880_12	1981 Oct 2 1446:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1981-1653	2444880_36	1981 Oct 2 2034:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1981-1654	2444881_73	1981 Oct 4 0535:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1981-1655	2444881_89	1981 Oct 4 0922:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1981-1656	2444882_90	1981 Oct 5 0941:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1981-1657	2444883_10	1981 Oct 5 1420:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1981-1659	2444883_19	1981 Oct 5 1630:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1981-1660	2444883_35	1981 Oct 5 2030:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1981-1661	2444884_04	1981 Oct 6 1252:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1981-1662	2444884_38	1981 Oct 6 2110:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1981-1665	2444885_31	1981 Oct 7 1930:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1981-1666	2444885_33	1981 Oct 7 2000:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1981-1667	2444887_07	1981 Oct 9 1344:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Launch_e	Agency	Launch_Code	Group	Category	LT_Cite	Cite	Notes
1981-H0688	2444887.15	1981 Oct 9 1530:00	Rocketsonde			0.000	HRH	SS		Metco	DSI-5850	-	-
1981-H0689	2444887.33	1981 Oct 9 2000:00	Rocketsonde			0.000	HRH	SS		Metco	DSI-5850	-	-
1981-H0690	2444890.04	1981 Oct 12 1259:59	Rocketsonde			0.000	HRH	SS		Metco	DSI-5850	-	-
1981-H0691	2444891.07	1981 Oct 13 1344:59	Rocketsonde			0.000	HRH	SS		Metco	DSI-5850	-	-
1981-H0692	2444891.14	1981 Oct 13 1524:59	Rocketsonde			0.000	HRH	SS		Metco	DSI-5850	-	-
1981-H0693	2444891.15	1981 Oct 13 1530:00	Rocketsonde			0.000	HRH	SS		Metco	DSI-5850	-	-
1981-H0694	2444891.40	1981 Oct 13 2143:00	Rocketsonde			0.000	HRH	SS		Metco	DSI-5850	-	-
1981-H0695	2444891.90	1981 Oct 14 0935:59	Rocketsonde			0.000	HRH	SS		Metco	DSI-5850	-	-
1981-H0696	2444892.01	1981 Oct 14 1214:59	Rocketsonde			0.000	HRH	SS		Metco	DSI-5850	-	-
1981-H363	2444892.10	1981 Oct 14 1429:00	Rocketsonde			0.000	HRH	SS		Metco	DSI-5850	-	-
1981-H0697	2444892.46	1981 Oct 14 2244:59	Rocketsonde			0.000	HRH	SS		Metco	DSI-5850	-	-
1981-H0698	2444892.48	1981 Oct 14 2325:00	Rocketsonde			0.000	HRH	SS		Metco	DSI-5850	-	-
1981-H0699	2444894.06	1981 Oct 16 1330:00	Rocketsonde			0.000	HRH	SS		Metco	DSI-5850	-	-
1981-H367	2444894.35	1981 Oct 16 2026:59	Rocketsonde			0.000	HRH	SS		Metco	DSI-5850	-	-
1981-H0680	2444894.37	1981 Oct 16 2026:59	Rocketsonde			0.000	HRH	SS		Metco	DSI-5850	-	-
1981-H0681	2444897.22	1981 Oct 19 1715:00	Rocketsonde			0.000	HRH	SS		Metco	DSI-5850	-	-
1981-H0682	2444898.09	1981 Oct 20 1415:00	Rocketsonde			0.000	HRH	SS		Metco	DSI-5850	-	-
1981-H0683	2444898.28	1981 Oct 20 1841:00	Rocketsonde			0.000	HRH	SS		Metco	DSI-5850	-	-
1981-H0685	2444899.05	1981 Oct 21 1314:59	Rocketsonde			0.000	HRH	SS		Metco	DSI-5850	-	-
1981-H0686	2444899.12	1981 Oct 21 1449:59	Rocketsonde			0.000	HRH	SS		Metco	DSI-5850	-	-
1981-H0687	2444899.12	1981 Oct 21 1500:00	Super Loki			0.000	HRH	SS		Metco	DSI-5850	-	-
1981-H0688	2444899.15	1981 Oct 21 1500:00	Rocketsonde			0.000	HRH	SS		Metco	DSI-5850	-	-
1981-H374	2444899.30	1981 Oct 21 1912:59	Rocketsonde			0.000	HRH	SS		Metco	DSI-5850	-	-
1981-H0689	2444900.21	1981 Oct 22 1703:59	Rocketsonde			0.000	HRH	SS		Metco	DSI-5850	-	-
1981-H0691	2444901.04	1981 Oct 23 1256:00	Rocketsonde			0.000	HRH	SS		Metco	DSI-5850	-	-
1981-H375	2444901.10	1981 Oct 23 1424:00	Rocketsonde			0.000	HRH	SS		Metco	DSI-5850	-	-
1981-H0692	2444904.27	1981 Oct 26 1630:00	Rocketsonde			0.000	HRH	SS		Metco	DSI-5850	-	-
1981-H0693	2444904.41	1981 Oct 26 1850:00	Rocketsonde			0.000	HRH	SS		Metco	DSI-5850	-	-
1981-H0694	2444905.11	1981 Oct 27 1452:00	Rocketsonde			0.000	HRH	SS		Metco	DSI-5850	-	-
1981-H0695	2444905.52	1981 Oct 28 1004:59	Rocketsonde			0.000	HRH	SS		Metco	DSI-5850	-	-
1981-H0696	2444906.09	1981 Oct 28 1410:00	Rocketsonde			0.000	HRH	SS		Metco	DSI-5850	-	-
1981-H381	2444906.26	1981 Oct 28 1600:00	Rocketsonde			0.000	HRH	SS		Metco	DSI-5850	-	-
1981-H700	2444906.27	1981 Oct 28 1616:00	Rocketsonde			0.000	HRH	SS		Metco	DSI-5850	-	-
1981-H0697	2444906.38	1981 Oct 28 1630:00	Rocketsonde			0.000	HRH	SS		Metco	DSI-5850	-	-
1981-H702	2444906.46	1981 Oct 28 2100:00	Rocketsonde			0.000	HRH	SS		Metco	DSI-5850	-	-
1981-H703	2444908.06	1981 Oct 28 2326:00	Rocketsonde			0.000	HRH	SS		Metco	DSI-5850	-	-
1981-H704	2444908.11	1981 Oct 30 1330:00	Rocketsonde			0.000	HRH	SS		Metco	DSI-5850	-	-
1981-H706	2444908.22	1981 Oct 30 1745:00	Rocketsonde			0.000	HRH	SS		Metco	DSI-5850	-	-
1981-H707	2444908.59	1981 Oct 30 1712:00	Rocketsonde			0.000	HRH	SS		Metco	DSI-5850	-	-
1981-H708	2444911.26	1981 Oct 30 2326:59	Rocketsonde			0.000	HRH	SS		Metco	DSI-5850	-	-
1981-H709	2444911.34	1981 Nov 2 1620:00	Rocketsonde			0.000	HRH	SS		Metco	DSI-5850	-	-
1981-H710	2444911.43	1981 Nov 2 2016:00	Rocketsonde			0.000	HRH	SS		Metco	DSI-5850	-	-
1981-H711	2444912.07	1981 Nov 3 1322:00	Rocketsonde			0.000	HRH	SS		Metco	DSI-5850	-	-
1981-H712	2444913.07	1981 Nov 4 1134:59	Rocketsonde			0.000	HRH	SS		Metco	DSI-5850	-	-
1981-H713	2444913.10	1981 Nov 4 1430:00	Rocketsonde			0.000	HRH	SS		Metco	DSI-5850	-	-
1981-H714	2444913.14	1981 Nov 4 1630:00	Rocketsonde			0.000	HRH	SS		Metco	DSI-5850	-	-
1981-H715	2444913.50	1981 Nov 4 2028:59	Rocketsonde			0.000	HRH	SS		Metco	DSI-5850	-	-
1981-H716	2444915.06	1981 Nov 5 0928:59	Rocketsonde			0.000	HRH	SS		Metco	DSI-5850	-	-
1981-H717	2444915.18	1981 Nov 6 1406:59	Rocketsonde			0.000	HRH	SS		Metco	DSI-5850	-	-
1981-H389	2444915.38	1981 Nov 6 1614:59	Rocketsonde			0.000	HRH	SS		Metco	DSI-5850	-	-
1981-H720	2444915.40	1981 Nov 6 2130:00	Rocketsonde			0.000	HRH	SS		Metco	DSI-5850	-	-
1981-H721	2444918.04	1981 Nov 8 1259:59	Rocketsonde			0.000	HRH	SS		Metco	DSI-5850	-	-
1981-H722	2444918.08	1981 Nov 8 1409:00	Rocketsonde			0.000	HRH	SS		Metco	DSI-5850	-	-
1981-H723	2444919.06	1981 Nov 10 1914:59	Rocketsonde			0.000	HRH	SS		Metco	DSI-5850	-	-
1981-H397	2444920.40	1981 Nov 11 2150:00	Rocketsonde			0.000	HRH	SS		Metco	DSI-5850	-	-
1981-H725	2444921.08	1981 Nov 12 1351:00	Rocketsonde			0.000	HRH	SS		Metco	DSI-5850	-	-
1981-H726	2444921.10	1981 Nov 12 1421:00	Rocketsonde			0.000	HRH	SS		Metco	DSI-5850	-	-
1981-H398	2444921.19	1981 Nov 12 1630:00	Rocketsonde			0.000	HRH	SS		Metco	DSI-5850	-	-
1981-H728	2444921.26	1981 Nov 12 1810:00	Rocketsonde			0.000	HRH	SS		Metco	DSI-5850	-	-
1981-H729	2444921.27	1981 Nov 12 1834:59	Rocketsonde			0.000	HRH	SS		Metco	DSI-5850	-	-
1981-H399	2444921.29	1981 Nov 12 1855:00	Rocketsonde			0.000	HRH	SS		Metco	DSI-5850	-	-
1981-H730	2444921.30	1981 Nov 12 1914:59	Rocketsonde			0.000	HRH	SS		Metco	DSI-5850	-	-
1981-H731	2444921.33	1981 Nov 12 2000:00	Rocketsonde			0.000	HRH	SS		Metco	DSI-5850	-	-
1981-H400	2444922.10	1981 Nov 13 1425:00	Rocketsonde			0.000	HRH	SS		Metco	DSI-5850	-	-
1981-H732	2444922.18	1981 Nov 13 1614:59	Rocketsonde			0.000	HRH	SS		Metco	DSI-5850	-	-
1981-H733	2444922.27	1981 Nov 13 1822:00	Rocketsonde			0.000	HRH	SS		Metco	DSI-5850	-	-
1981-H401	2444922.30	1981 Nov 13 1915:59	Rocketsonde			0.000	HRH	SS		Metco	DSI-5850	-	-
1981-H402	2444922.35	1981 Nov 13 2026:59	Rocketsonde			0.000	HRH	SS		Metco	DSI-5850	-	-
1981-H734	2444922.39	1981 Nov 13 2117:00	Rocketsonde			0.000	HRH	SS		Metco	DSI-5850	-	-
1981-H403	2444922.40	1981 Nov 13 2156:59	Rocketsonde			0.000	HRH	SS		Metco	DSI-5850	-	-
1981-H735	2444923.17	1981 Nov 14 1602:59	Rocketsonde			0.000	HRH	SS		Metco	DSI-5850	-	-
1981-H736	2444923.28	1981 Nov 14 1844:00	Rocketsonde			0.000	HRH	SS		Metco	DSI-5850	-	-
1981-H404	2444923.35	1981 Nov 14 2030:00	Rocketsonde			0.000	HRH	SS		Metco	DSI-5850	-	-
1981-H405	2444923.35	1981 Nov 14 2031:00	Rocketsonde			0.000	HRH	SS		Metco	DSI-5850	-	-
1981-H738	2444923.36	1981 Nov 14 2043:00	Rocketsonde			0.000	HRH	SS		Metco	DSI-5850	-	-
1981-H740	2444923.37	1981 Nov 14 2048:00	Rocketsonde			0.000	HRH	SS		Metco	DSI-5850	-	-
1981-H406	2444923.37	1981 Nov 14 2049:59	Rocketsonde			0.000	HRH	SS		Metco	DSI-5850	-	-
1981-H741	2444923.38	1981 Nov 14 2110:00	Rocketsonde			0.000	HRH	SS		Metco	DSI-5850	-	-
1981-H742	2444923.40	1981 Nov 14 2130:00	Rocketsonde			0.000	HRH	SS		Metco	DSI-5850	-	-
1981-H743	2444923.40	1981 Nov 14 2137:59	Rocketsonde			0.000	HRH	SS		Metco	DSI-5850	-	-
1981-H744	2444923.41	1981 Nov 14 2149:59	Rocketsonde			0.000	HRH	SS		Metco	DSI-5850	-	-

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Launch	Agency	Launch_Code	Group	Category	LT_Cite	Cite	Notes
						DrpPay							
1981-W745	2444923.42	1981 Nov 14 2159:59	Rocketsonde	-	-	0.000	MRI	SS	-	Metro	DSI-5850	-	-
1981-W406	2444923.43	1981 Nov 14 2221:59	Rocketsonde	-	-	0.000	MRI	SS	-	Metro	DSI-5850	-	-
1981-W746	2444923.47	1981 Nov 14 2312:00	Rocketsonde	-	-	0.000	MRI	SS	-	Metro	DSI-5850	-	-
1981-W747	2444925.18	1981 Nov 16 1619:59	Rocketsonde	-	-	0.000	MRI	SS	-	Metro	DSI-5850	-	-
1981-W748	2444925.38	1981 Nov 16 2100:00	Rocketsonde	-	-	0.000	MRI	SS	-	Metro	DSI-5850	-	-
1981-W749	2444926.19	1981 Nov 17 1630:00	Rocketsonde	-	-	0.000	MRI	SS	-	Metro	DSI-5850	-	-
1981-W751	2444926.89	1981 Nov 18 0927:59	Rocketsonde	-	-	0.000	MRI	SS	-	Metro	DSI-5850	-	-
1981-W752	2444927.09	1981 Nov 18 1415:00	Rocketsonde	-	-	0.000	MRI	SS	-	Metro	DSI-5850	-	-
1981-W753	2444927.14	1981 Nov 18 1514:59	Rocketsonde	-	-	0.000	MRI	SS	-	Metro	DSI-5850	-	-
1981-W754	2444927.29	1981 Nov 18 1859:59	Rocketsonde	-	-	0.000	MRI	SS	-	Metro	DSI-5850	-	-
1981-W755	2444927.44	1981 Nov 18 2240:00	Rocketsonde	-	-	0.000	MRI	SS	-	Metro	DSI-5850	-	-
1981-W757	2444929.04	1981 Nov 20 1256:00	Rocketsonde	-	-	0.000	MRI	SS	-	Metro	DSI-5850	-	-
1981-W758	2444929.11	1981 Nov 20 1445:00	Rocketsonde	-	-	0.000	MRI	SS	-	Metro	DSI-5850	-	-
1981-W759	2444929.19	1981 Nov 20 1630:00	Rocketsonde	-	-	0.000	MRI	SS	-	Metro	DSI-5850	-	-
1981-W760	2444929.38	1981 Nov 20 2100:00	Rocketsonde	-	-	0.000	MRI	SS	-	Metro	DSI-5850	-	-
1981-W761	2444932.06	1981 Nov 23 1330:00	Rocketsonde	-	-	0.000	MRI	SS	-	Metro	DSI-5850	-	-
1981-W762	2444932.10	1981 Nov 23 1450:00	Rocketsonde	-	-	0.000	MRI	SS	-	Metro	DSI-5850	-	-
1981-W763	2444932.11	1981 Nov 23 1445:00	Rocketsonde	-	-	0.000	MRI	SS	-	Metro	DSI-5850	-	-
1981-W764	2444932.19	1981 Nov 23 1633:59	Rocketsonde	-	-	0.000	MRI	SS	-	Metro	DSI-5850	-	-
1981-W764	2444932.34	1981 Nov 23 2010:00	Rocketsonde	-	-	0.000	MRI	SS	-	Metro	DSI-5850	-	-
1981-W744	2444932.37	1981 Nov 23 2066:00	Rocketsonde	-	-	0.000	MRI	SS	-	Metro	DSI-5850	-	-
1981-W765	2444932.39	1981 Nov 23 2122:59	Rocketsonde	-	-	0.000	MRI	SS	-	Metro	DSI-5850	-	-
1981-W766	2444934.06	1981 Nov 25 1330:00	Rocketsonde	-	-	0.000	MRI	SS	-	Metro	DSI-5850	-	-
1981-W768	2444934.11	1981 Nov 25 1445:00	Rocketsonde	-	-	0.000	MRI	SS	-	Metro	DSI-5850	-	-
1981-W769	2444934.23	1981 Nov 25 1700:00	Rocketsonde	-	-	0.000	MRI	SS	-	Metro	DSI-5850	-	-
1981-W718	2444934.25	1981 Nov 25 1756:00	Rocketsonde	-	-	0.000	MRI	SS	-	Metro	DSI-5850	-	-
1981-W770	2444934.26	1981 Nov 26 0154:59	Rocketsonde	-	-	0.000	MRI	SS	-	Metro	DSI-5850	-	-
1981-W771	2444934.58	1981 Nov 27 1630:00	Rocketsonde	-	-	0.000	MRI	SS	-	Metro	DSI-5850	-	-
1981-W772	2444936.19	1981 Nov 30 1445:00	Rocketsonde	-	-	0.000	MRI	SS	-	Metro	DSI-5850	-	-
1981-W773	2444939.11	1981 Nov 30 1634:59	Rocketsonde	-	-	0.000	MRI	SS	-	Metro	DSI-5850	-	-
1981-W774	2444939.19	1981 Nov 30 2037:59	Rocketsonde	-	-	0.000	MRI	SS	-	Metro	DSI-5850	-	-
1981-W775	2444939.36	1981 Nov 30 2100:00	Rocketsonde	-	-	0.000	MRI	SS	-	Metro	DSI-5850	-	-
1981-W776	2444939.38	1981 Dec 1 1253:00	Rocketsonde	-	-	0.000	MRI	SS	-	Metro	DSI-5850	-	-
1981-W777	2444940.04	1981 Dec 1 1330:00	Rocketsonde	-	-	0.000	MRI	SS	-	Metro	DSI-5850	-	-
1981-W778	2444941.06	1981 Dec 2 1629:00	Rocketsonde	-	-	0.000	MRI	SS	-	Metro	DSI-5850	-	-
1981-W779	2444941.27	1981 Dec 2 2100:00	Rocketsonde	-	-	0.000	MRI	SS	-	Metro	DSI-5850	-	-
1981-W780	2444941.38	1981 Dec 2 2243:59	Rocketsonde	-	-	0.000	MRI	SS	-	Metro	DSI-5850	-	-
1981-W781	2444941.46	1981 Dec 3 1630:00	Rocketsonde	-	-	0.000	MRI	SS	-	Metro	DSI-5850	-	-
1981-W783	2444942.27	1981 Dec 3 1918:00	Rocketsonde	-	-	0.000	MRI	SS	-	Metro	DSI-5850	-	-
1981-W784	2444942.30	1981 Dec 4 1630:00	Rocketsonde	-	-	0.000	MRI	SS	-	Metro	DSI-5850	-	-
1981-W785	2444943.19	1981 Dec 4 1636:59	Rocketsonde	-	-	0.000	MRI	SS	-	Metro	DSI-5850	-	-
1981-W786	2444943.28	1981 Dec 4 2100:00	Rocketsonde	-	-	0.000	MRI	SS	-	Metro	DSI-5850	-	-
1981-W426	2444943.38	1981 Dec 4 2139:00	Rocketsonde	-	-	0.000	MRI	SS	-	Metro	DSI-5850	-	-
1981-W789	2444943.40	1981 Dec 7 1328:59	Rocketsonde	-	-	0.000	MRI	SS	-	Metro	DSI-5850	-	-
1981-W790	2444946.04	1981 Dec 7 1429:59	Rocketsonde	-	-	0.000	MRI	SS	-	Metro	DSI-5850	-	-
1981-W791	2444946.11	1981 Dec 7 1630:00	Rocketsonde	-	-	0.000	MRI	SS	-	Metro	DSI-5850	-	-
1981-W792	2444947.19	1981 Dec 8 1630:00	Rocketsonde	-	-	0.000	MRI	SS	-	Metro	DSI-5850	-	-
1981-W793	2444947.22	1981 Dec 8 1716:00	Rocketsonde	-	-	0.000	MRI	SS	-	Metro	DSI-5850	-	-
1981-W796	2444948.35	1981 Dec 8 1826:00	Rocketsonde	-	-	0.000	MRI	SS	-	Metro	DSI-5850	-	-
1981-W797	2444948.38	1981 Dec 8 1946:59	Rocketsonde	-	-	0.000	MRI	SS	-	Metro	DSI-5850	-	-
1981-W798	2444948.30	1981 Dec 8 1915:59	Rocketsonde	-	-	0.000	MRI	SS	-	Metro	DSI-5850	-	-
1981-W799	2444948.89	1981 Dec 10 0921:00	Rocketsonde	-	-	0.000	MRI	SS	-	Metro	DSI-5850	-	-
1981-W800	2444949.89	1981 Dec 10 1410:00	Rocketsonde	-	-	0.000	MRI	SS	-	Metro	DSI-5850	-	-
1981-W802	2444950.21	1981 Dec 11 1657:59	Rocketsonde	-	-	0.000	MRI	SS	-	Metro	DSI-5850	-	-
1981-W433	2444950.38	1981 Dec 11 2111:59	Rocketsonde	-	-	0.000	MRI	SS	-	Metro	DSI-5850	-	-
1981-W803	2444950.50	1981 Dec 11 2135:59	Rocketsonde	-	-	0.000	MRI	SS	-	Metro	DSI-5850	-	-
1981-W804	2444953.08	1981 Dec 14 1400:00	Rocketsonde	-	-	0.000	MRI	SS	-	Metro	DSI-5850	-	-
1981-W805	2444953.16	1981 Dec 14 1545:59	Rocketsonde	-	-	0.000	MRI	SS	-	Metro	DSI-5850	-	-
1981-W806	2444953.38	1981 Dec 14 2100:00	Rocketsonde	-	-	0.000	MRI	SS	-	Metro	DSI-5850	-	-
1981-W810	2444954.19	1981 Dec 15 1630:00	Rocketsonde	-	-	0.000	MRI	SS	-	Metro	DSI-5850	-	-
1981-W436	2444955.11	1981 Dec 16 1445:00	Rocketsonde	-	-	0.000	MRI	SS	-	Metro	DSI-5850	-	-
1981-W811	2444955.36	1981 Dec 16 1522:59	Rocketsonde	-	-	0.000	MRI	SS	-	Metro	DSI-5850	-	-
1981-W812	2444955.56	1981 Dec 16 2043:00	Rocketsonde	-	-	0.000	MRI	SS	-	Metro	DSI-5850	-	-
1981-W437	2444955.38	1981 Dec 16 2100:00	Rocketsonde	-	-	0.000	MRI	SS	-	Metro	DSI-5850	-	-
1981-W813	2444955.39	1981 Dec 16 2126:59	Rocketsonde	-	-	0.000	MRI	SS	-	Metro	DSI-5850	-	-
1981-W814	2444955.44	1981 Dec 16 2230:00	Rocketsonde	-	-	0.000	MRI	SS	-	Metro	DSI-5850	-	-
1981-W814	2444956.22	1981 Dec 17 1710:00	Rocketsonde	-	-	0.000	MRI	SS	-	Metro	DSI-5850	-	-
1981-W815	2444956.36	1981 Dec 17 2043:00	Rocketsonde	-	-	0.000	MRI	SS	-	Metro	DSI-5850	-	-
1981-W434	2444957.11	1981 Dec 18 1445:00	Rocketsonde	-	-	0.000	MRI	SS	-	Metro	DSI-5850	-	-
1981-W435	2444957.42	1981 Dec 18 2159:59	Rocketsonde	-	-	0.000	MRI	SS	-	Metro	DSI-5850	-	-
1981-W816	2444960.11	1981 Dec 21 1445:00	Rocketsonde	-	-	0.000	MRI	SS	-	Metro	DSI-5850	-	-
1981-W817	2444960.16	1981 Dec 21 1553:00	Rocketsonde	-	-	0.000	MRI	SS	-	Metro	DSI-5850	-	-
1981-W818	2444960.19	1981 Dec 21 1630:59	Rocketsonde	-	-	0.000	MRI	SS	-	Metro	DSI-5850	-	-
1981-W819	2444960.42	1981 Dec 21 2159:59	Rocketsonde	-	-	0.000	MRI	SS	-	Metro	DSI-5850	-	-
1981-W820	2444961.23	1981 Dec 22 1730:00	Rocketsonde	-	-	0.000	MRI	SS	-	Metro	DSI-5850	-	-
1981-W442	2444962.10	1981 Dec 23 1430:00	Rocketsonde	-	-	0.000	MRI	SS	-	Metro	DSI-5850	-	-
1981-W822	2444962.15	1981 Dec 23 1541:00	Rocketsonde	-	-	0.000	MRI	SS	-	Metro	DSI-5850	-	-
1981-W823	2444962.45	1981 Dec 23 2252:00	Rocketsonde	-	-	0.000	MRI	SS	-	Metro	DSI-5850	-	-
1981-W824	2444963.15	1981 Dec 24 1530:00	Rocketsonde	-	-	0.000	MRI	SS	-	Metro	DSI-5850	-	-
1981-W825	2444968.04	1981 Dec 29 1252:00	Rocketsonde	-	-	0.000	MRI	SS	-	Metro	DSI-5850	-	-
1981-W826	2444969.44	1981 Dec 30 2237:59	Rocketsonde	-	-	0.000	MRI	SS	-	Metro	DSI-5850	-	-
1981-W449	2444970.11	1981 Dec 31 1445:00	Rocketsonde	-	-	0.000	MRI	SS	-	Metro	DSI-5850	-	-
1981-W827	2444970.16	1981 Dec 31 1547:59	Rocketsonde	-	-	0.000	MRI	SS	-	Metro	DSI-5850	-	-

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Launch_e	Agency	Launch_Code	Group	Category	LT_Cite	Cite	Notes
1982-002	2444974.04	1982 Jan 4 1257:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1982-003	2444974.30	1982 Jan 4 1910:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1982-004	2444974.42	1982 Jan 4 2159:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1982-005	2444974.89	1982 Jan 5 0919:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1982-107	2444976.31	1982 Jan 6 1930:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1982-108	2444976.38	1982 Jan 6 2100:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1982-109	2444976.42	1982 Jan 6 2202:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1982-110	2444976.44	1982 Jan 6 2235:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1982-111	2444976.47	1982 Jan 6 2320:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1982-113	2444978.12	1982 Jan 8 1452:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1982-114	2444981.04	1982 Jan 11 1259:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1982-115	2444981.11	1982 Jan 11 1445:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1982-116	2444981.31	1982 Jan 11 1924:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1982-117	2444981.38	1982 Jan 11 2100:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1982-118	2444981.38	1982 Jan 11 2107:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1982-119	2444982.21	1982 Jan 12 1656:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1982-122	2444982.90	1982 Jan 13 0933:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1982-111	2444983.10	1982 Jan 13 1426:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1982-123	2444983.19	1982 Jan 13 1650:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1982-112	2444983.26	1982 Jan 13 1810:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1982-124	2444983.33	1982 Jan 13 2000:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1982-125	2444983.36	1982 Jan 13 2035:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1982-126	2444983.38	1982 Jan 13 2100:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1982-127	2444983.38	1982 Jan 13 2237:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1982-128	2444983.44	1982 Jan 13 2237:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1982-116	2444985.06	1982 Jan 15 1530:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1982-117	2444987.15	1982 Jan 17 1534:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1982-103	2444987.19	1982 Jan 17 1634:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1982-105	2444988.10	1982 Jan 18 1420:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1982-106	2444988.15	1982 Jan 18 1537:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1982-107	2444988.29	1982 Jan 18 1653:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1982-108	2444988.36	1982 Jan 18 2102:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1982-109	2444989.14	1982 Jan 19 1526:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1982-144	2444990.33	1982 Jan 20 1630:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1982-145	2444990.35	1982 Jan 20 2000:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1982-146	2444990.49	1982 Jan 20 2345:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1982-146	2444991.39	1982 Jan 21 2154:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1982-150	2444991.90	1982 Jan 22 0929:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1982-161	2444992.11	1982 Jan 22 1445:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1982-160	2444995.31	1982 Jan 25 1930:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1982-161	2444995.39	1982 Jan 25 2119:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1982-162	2444996.12	1982 Jan 26 1500:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1982-163	2444996.10	1982 Jan 26 1544:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1982-168	2444997.11	1982 Jan 27 1534:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1982-169	2444997.15	1982 Jan 27 1537:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1982-170	2444997.47	1982 Jan 27 1937:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1982-171	2444998.24	1982 Jan 28 1724:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1982-172	2444998.06	1982 Jan 28 1930:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1982-173	2444998.95	1982 Jan 29 1758:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1982-174	2444999.97	1982 Jan 29 1937:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1982-175	2444999.36	1982 Jan 29 2045:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1982-177	2444999.90	1982 Jan 29 2159:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1982-178	2445000.28	1982 Jan 30 1810:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1982-179	2445000.31	1982 Jan 30 1919:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1982-180	2445002.04	1982 Feb 1 1257:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1982-181	2445002.34	1982 Feb 1 2005:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1982-184	2445002.38	1982 Feb 1 2100:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1982-185	2445002.31	1982 Feb 2 1920:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1982-192	2445003.34	1982 Feb 2 2003:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1982-197	2445003.16	1982 Feb 3 1552:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1982-190	2445004.19	1982 Feb 3 1640:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1982-191	2445004.27	1982 Feb 3 1830:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1982-192	2445004.30	1982 Feb 3 1904:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1982-193	2445004.38	1982 Feb 3 2100:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1982-194	2445004.41	1982 Feb 3 2123:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1982-195	2445004.45	1982 Feb 3 2241:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1982-196	2445005.09	1982 Feb 4 1415:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1982-197	2445005.19	1982 Feb 4 1636:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1982-198	2445005.30	1982 Feb 4 1913:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1982-199	2445006.14	1982 Feb 5 1527:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1982-200	2445006.22	1982 Feb 5 1720:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1982-100	2445006.40	1982 Feb 5 2130:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1982-101	2445008.89	1982 Feb 8 0927:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1982-102	2445009.35	1982 Feb 8 2025:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1982-105	2445011.06	1982 Feb 10 1335:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1982-106	2445011.11	1982 Feb 10 1445:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1982-107	2445011.35	1982 Feb 10 2029:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1982-108	2445011.45	1982 Feb 10 2243:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1982-110	2445012.37	1982 Feb 11 2051:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1982-111	2445013.07	1982 Feb 12 1344:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1982-112	2445013.10	1982 Feb 12 1427:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1982-113	2445013.38	1982 Feb 12 2100:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1982-116	2445016.42	1982 Feb 15 2159:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Launch_e	Agency	Launch_Code	Group	Category	LT_Cite	Cite	Notes
1982-H117	2445017.12	1982 Feb 16 15:00:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1982-H118	2445017.35	1982 Feb 16 20:26:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1982-H119	2445017.36	1982 Feb 16 20:35:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1982-H120	2445017.38	1982 Feb 16 21:07:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1982-H121	2445017.89	1982 Feb 17 09:19:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1982-H122	2445018.44	1982 Feb 17 21:10:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1982-H123	2445018.44	1982 Feb 17 22:30:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1982-H124	2445019.04	1982 Feb 18 13:00:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1982-H125	2445019.27	1982 Feb 18 13:50:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1982-H126	2445020.08	1982 Feb 19 13:49:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1982-H127	2445020.13	1982 Feb 19 15:00:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1982-H128	2445020.25	1982 Feb 19 18:02:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1982-H129	2445020.30	1982 Feb 19 19:44:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1982-H130	2445023.11	1982 Feb 22 14:45:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1982-H131	2445023.38	1982 Feb 22 21:00:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1982-H132	2445024.06	1982 Feb 23 13:19:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1982-H133	2445024.16	1982 Feb 24 16:14:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1982-H134	2445025.27	1982 Feb 24 16:50:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1982-H135	2445025.46	1982 Feb 24 22:47:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1982-H136	2445025.90	1982 Feb 25 09:32:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1982-H137	2445026.21	1982 Feb 25 17:00:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1982-H138	2445026.38	1982 Feb 25 21:00:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1982-H139	2445029.30	1982 Feb 28 19:16:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1982-H140	2445029.30	1982 Mar 1 20:01:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1982-H141	2445030.33	1982 Mar 3 21:00:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1982-H142	2445032.38	1982 Mar 4 16:30:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1982-H143	2445033.19	1982 Mar 5 16:19:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1982-H144	2445034.16	1982 Mar 5 19:02:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1982-H145	2445034.29	1982 Mar 5 21:26:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1982-H146	2445037.30	1982 Mar 6 19:06:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1982-H147	2445038.21	1982 Mar 9 17:00:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1982-H148	2445038.57	1982 Mar 9 20:46:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1982-H149	2445039.16	1982 Mar 10 16:14:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1982-H150	2445039.20	1982 Mar 10 16:44:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1982-H151	2445039.42	1982 Mar 10 21:59:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1982-H152	2445044.37	1982 Mar 15 20:54:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1982-H153	2445044.60	1982 Mar 16 02:30:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1982-H154	2445046.27	1982 Mar 17 18:32:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1982-H155	2445046.38	1982 Mar 17 21:00:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1982-H156	2445051.16	1982 Mar 22 16:15:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1982-H157	2445051.20	1982 Mar 22 16:43:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1982-H158	2445051.20	1982 Mar 22 18:00:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1982-H159	2445051.26	1982 Mar 22 18:42:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1982-H160	2445051.30	1982 Mar 22 19:01:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1982-H161	2445051.34	1982 Mar 23 00:14:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1982-H162	2445052.11	1982 Mar 23 17:01:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1982-H163	2445052.30	1982 Mar 23 19:44:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1982-H164	2445052.30	1982 Mar 23 20:30:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1982-H165	2445052.32	1982 Mar 23 19:44:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1982-H166	2445053.91	1982 Mar 24 16:59:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1982-H167	2445053.91	1982 Mar 24 17:05:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1982-H168	2445053.99	1982 Mar 24 18:50:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1982-H169	2445053.99	1982 Mar 24 19:04:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1982-H170	2445053.99	1982 Mar 24 20:02:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1982-H171	2445054.30	1982 Mar 25 16:51:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1982-H172	2445054.30	1982 Mar 25 17:17:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1982-H173	2445054.30	1982 Mar 25 19:04:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1982-H174	2445054.32	1982 Mar 25 19:35:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1982-H175	2445055.21	1982 Mar 26 17:07:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1982-H176	2445055.23	1982 Mar 26 17:31:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1982-H177	2445055.30	1982 Mar 26 19:18:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1982-H178	2445055.35	1982 Mar 26 20:27:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1982-H179	2445056.21	1982 Mar 27 16:57:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1982-H180	2445056.24	1982 Mar 27 17:51:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1982-H181	2445056.30	1982 Mar 27 19:04:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1982-H182	2445056.31	1982 Mar 27 19:25:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1982-H183	2445057.23	1982 Mar 28 16:57:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1982-H184	2445057.30	1982 Mar 28 17:30:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1982-H185	2445058.01	1982 Mar 28 20:04:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1982-H186	2445058.14	1982 Mar 29 12:10:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1982-H187	2445058.14	1982 Mar 29 13:49:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1982-H188	2445058.32	1982 Mar 29 15:18:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1982-H189	2445058.32	1982 Mar 29 19:37:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1982-H190	2445058.34	1982 Mar 29 20:06:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1982-H191	2445058.92	1982 Mar 30 13:30:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1982-H192	2445059.06	1982 Mar 30 13:47:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1982-H193	2445059.07	1982 Mar 30 13:47:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1982-H194	2445059.12	1982 Mar 30 14:15:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1982-H195	2445059.12	1982 Mar 30 14:59:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1982-H196	2445059.14	1982 Mar 30 15:22:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1982-H197	2445059.16	1982 Mar 30 15:45:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1982-H198	2445059.17	1982 Mar 30 16:09:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1982-H199	2445059.17	1982 Mar 30 16:11:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Launch_e	Agency	Launch_Code	Group	Category	LT_Cite	Cite	Notes
1982-Y126	2445059.20	1982 Mar 30 1654:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1982-W229	2445059.22	1982 Mar 30 1719:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1982-W231	2445060.36	1982 Mar 31 2040:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1982-W233	2445060.42	1982 Mar 31 2200:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1982-Y131	2445065.33	1982 Apr 5 2000:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1982-W234	2445065.35	1982 Apr 5 2029:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1982-W235	2445066.42	1982 Apr 6 2201:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1982-W238	2445067.17	1982 Apr 7 1610:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1982-W239	2445067.38	1982 Apr 7 2104:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1982-W241	2445069.17	1982 Apr 9 1559:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1982-W244	2445074.18	1982 Apr 14 1614:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1982-Y141	2445074.27	1982 Apr 14 1830:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1982-W245	2445074.31	1982 Apr 14 1930:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1982-W246	2445074.44	1982 Apr 14 2236:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1982-W247	2445075.39	1982 Apr 15 2124:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1982-W248	2445075.60	1982 Apr 16 0221:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1982-Y144	2445079.37	1982 Apr 19 2064:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1982-W250	2445079.38	1982 Apr 19 2100:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1982-W251	2445079.39	1982 Apr 19 2115:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1982-W252	2445080.12	1982 Apr 20 1457:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1982-W257	2445080.23	1982 Apr 20 1737:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1982-Y149	2445081.25	1982 Apr 21 1800:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1982-W261	2445081.27	1982 Apr 21 1805:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1982-W262	2445081.38	1982 Apr 21 2100:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1982-Y150	2445082.33	1982 Apr 22 2000:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1982-W263	2445082.61	1982 Apr 23 0243:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1982-W265	2445083.38	1982 Apr 23 2100:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1982-W266	2445086.33	1982 Apr 26 2000:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1982-Y155	2445088.21	1982 Apr 28 1655:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1982-W267	2445088.23	1982 Apr 28 1730:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1982-Y157	2445088.25	1982 Apr 28 1800:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1982-W268	2445088.27	1982 Apr 28 1850:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1982-W269	2445089.54	1982 Apr 28 2015:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1982-W270	2445089.22	1982 Apr 29 1715:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1982-W272	2445090.37	1982 Apr 30 2065:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1982-W273	2445090.38	1982 Apr 30 2100:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1982-W276	2445093.33	1982 May 3 2000:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1982-Y110	2445095.14	1982 May 5 1326:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1982-W278	2445095.24	1982 May 9 1746:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1982-W279	2445095.33	1982 May 9 2030:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1982-W281	2445095.44	1982 May 9 2238:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1982-W283	2445097.33	1982 May 11 2010:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1982-Y113	2445100.36	1982 May 10 2010:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1982-W284	2445102.50	1982 May 11 1826:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1982-Y170	2445102.52	1982 May 12 1859:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1982-W286	2445103.34	1982 May 12 1915:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1982-W289	2445103.34	1982 May 13 2015:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1982-W292	2445107.33	1982 May 17 2000:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1982-W293	2445108.12	1982 May 19 1500:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1982-Y294	2445108.15	1982 May 19 1530:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1982-Y172	2445108.23	1982 May 19 1726:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1982-W295	2445109.25	1982 May 19 1800:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1982-Y175	2445109.15	1982 May 19 1530:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1982-W296	2445109.19	1982 May 19 1614:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1982-W298	2445111.35	1982 May 21 2031:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1982-W301	2445115.40	1982 May 25 2134:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1982-W304	2445116.21	1982 May 26 1700:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1982-W305	2445116.25	1982 May 26 1755:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1982-Y181	2445116.37	1982 May 26 2057:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1982-W307	2445116.39	1982 May 26 2126:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1982-W309	2445117.11	1982 May 27 1438:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1982-W309	2445117.39	1982 May 27 2114:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1982-W310	2445118.19	1982 May 28 1630:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1982-W311	2445118.38	1982 May 28 2100:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1982-Y113	2445121.38	1982 May 31 2100:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1982-W314	2445123.13	1982 Jun 2 1508:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1982-Y188	2445123.21	1982 Jun 2 1700:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1982-W316	2445123.47	1982 Jun 3 2100:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1982-Y192	2445124.38	1982 Jun 4 1855:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1982-W317	2445125.29	1982 Jun 4 1920:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1982-W317	2445125.31	1982 Jun 7 2037:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1982-W318	2445128.36	1982 Jun 7 2121:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1982-W319	2445129.38	1982 Jun 8 2101:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1982-Y198	2445130.29	1982 Jun 9 1859:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1982-W323	2445130.38	1982 Jun 9 2100:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1982-W324	2445130.46	1982 Jun 9 2304:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1982-W325	2445135.38	1982 Jun 14 2110:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1982-Y114	2445137.15	1982 Jun 16 1530:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1982-W326	2445137.21	1982 Jun 16 1702:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-







Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Launch_e	Agency	Launch_Code	Group	Category	LT_Cite	Cite	Notes
1982-1372	2445287.07	1982 Nov 13 1336:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1982-1458	2445287.09	1982 Nov 13 1406:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1982-1473	2445287.11	1982 Nov 13 1443:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1982-1469	2445287.15	1982 Nov 13 1530:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1982-1374	2445289.06	1982 Nov 15 1326:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1982-1375	2445289.09	1982 Nov 15 1404:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1982-1461	2445289.10	1982 Nov 15 1430:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1982-1462	2445289.12	1982 Nov 15 1446:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1982-1464	2445289.87	1982 Nov 16 0855:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1982-1380	2445289.96	1982 Nov 16 1109:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1982-1381	2445289.98	1982 Nov 16 1133:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1982-1382	2445290.00	1982 Nov 16 1154:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1982-1466	2445290.00	1982 Nov 16 1204:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1982-1383	2445290.01	1982 Nov 16 1211:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1982-1467	2445290.02	1982 Nov 16 1224:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1982-1468	2445290.02	1982 Nov 16 1235:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1982-1385	2445290.07	1982 Nov 16 1353:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1982-1469	2445290.08	1982 Nov 16 1349:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1982-1386	2445290.09	1982 Nov 16 1406:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1982-1387	2445290.10	1982 Nov 16 1431:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1982-1470	2445290.12	1982 Nov 16 1462:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1982-1471	2445290.36	1982 Nov 16 2035:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1982-1472	2445291.48	1982 Nov 17 2327:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1982-1475	2445293.17	1982 Nov 19 1559:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1982-1479	2445298.21	1982 Nov 24 1700:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1982-1480	2445298.57	1982 Nov 25 0141:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1982-1482	2445300.65	1982 Nov 27 0330:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1982-1484	2445303.38	1982 Nov 29 2100:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1982-1486	2445305.16	1982 Dec 1 1552:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1982-1487	2445305.44	1982 Dec 1 2240:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1982-1493	2445311.36	1982 Dec 7 2041:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1982-1414	2445312.25	1982 Dec 8 1800:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1982-1497	2445312.25	1982 Dec 8 1800:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1982-1496	2445312.35	1982 Dec 8 2017:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1982-1435	2445314.52	1982 Dec 11 0300:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1982-1499	2445317.38	1982 Dec 13 2100:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1982-1436	2445317.38	1982 Dec 13 2100:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1982-1602	2445319.27	1982 Dec 15 1830:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1982-1603	2445319.38	1982 Dec 15 1830:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1982-1604	2445320.38	1982 Dec 16 2029:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1982-1607	2445324.36	1982 Dec 20 2059:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1982-1608	2445325.37	1982 Dec 21 0324:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1982-1439	2445325.44	1982 Dec 22 2240:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1982-1613	2445324.55	1982 Dec 23 2110:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1982-1614	2445328.44	1982 Dec 31 0144:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1983-1401	2445328.44	1982 Dec 31 0143:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1983-1402	2445328.97	1983 Jan 8 1930:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1983-1404	2445340.38	1983 Jan 8 1830:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1983-1405	2445340.38	1983 Jan 8 2100:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1983-1406	2445340.52	1983 Jan 8 0135:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1983-1402	2445342.38	1983 Jan 7 2100:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1983-1408	2445347.95	1983 Jan 12 1800:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1983-1411	2445349.64	1983 Jan 15 0314:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1983-1412	2445352.93	1983 Jan 17 1948:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1983-1413	2445352.60	1983 Jan 19 0230:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1983-1415	2445354.30	1983 Jan 19 1914:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1983-1416	2445354.47	1983 Jan 19 2323:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1983-1418	2445356.19	1983 Jan 21 1631:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1983-1419	2445359.62	1983 Jan 25 0257:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1983-1420	2445360.97	1983 Jan 26 1830:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1983-1423	2445361.19	1983 Jan 26 1630:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1983-1424	2445361.21	1983 Jan 26 1700:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1983-1403	2445363.38	1983 Jan 28 2100:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1983-1404	2445368.25	1983 Feb 2 1800:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1983-1405	2445368.49	1983 Feb 2 2338:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1983-1405	2445370.42	1983 Feb 4 2159:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1983-1431	2445372.88	1983 Feb 7 0910:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1983-1429	2445375.19	1983 Feb 9 1630:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1983-1431	2445376.28	1983 Feb 9 2246:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1983-1432	2445376.29	1983 Feb 10 1837:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1983-1434	2445376.29	1983 Feb 10 1903:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1983-1433	2445382.31	1983 Feb 14 2115:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1983-1434	2445382.34	1983 Feb 16 1926:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1983-1436	2445382.34	1983 Feb 16 2100:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1983-1438	2445382.38	1983 Feb 16 2003:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1983-1439	2445383.54	1983 Feb 18 0056:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1983-1441	2445384.29	1983 Feb 18 1859:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1983-1444	2445387.38	1983 Feb 21 2110:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1983-1447	2445388.52	1983 Feb 23 0027:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1983-1449	2445388.85	1983 Feb 23 0822:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1983-1449	2445389.19	1983 Feb 23 1630:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1983-1450	2445391.62	1983 Feb 26 0248:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1983-1451	2445392.12	1983 Feb 26 1500:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Launch_e	Agency	Launch_Code	Group	Category	LT_Cite	Cite	Notes
1983-H53	2445394.38	1983 Feb 28 21:10:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1983-H54	2445394.64	1983 Mar 1 0054:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1983-H57	2445396.19	1983 Mar 2 1630:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1983-H58	2445396.35	1983 Mar 3 2030:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1983-H59	2445397.38	1983 Mar 5 2100:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1983-H60	2445398.38	1983 Mar 7 2113:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1983-H63	2445401.38	1983 Mar 7 2300:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1983-A09	2445403.40	1983 Mar 9 2130:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1983-H89	2445404.24	1983 Mar 10 1749:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1983-H68	2445404.26	1983 Mar 10 1821:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1983-H69	2445404.36	1983 Mar 10 2038:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1983-H92	2445405.35	1983 Mar 11 2020:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1983-H72	2445405.39	1983 Mar 11 2114:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1983-H74	2445407.12	1983 Mar 13 1500:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1983-H77	2445408.39	1983 Mar 14 2114:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1983-H78	2445409.19	1983 Mar 15 1632:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1983-H79	2445409.35	1983 Mar 15 2021:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1983-Y100	2445410.27	1983 Mar 16 1850:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1983-H63	2445410.29	1983 Mar 16 1859:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1983-H11	2445410.39	1983 Mar 16 2114:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1983-H65	2445412.39	1983 Mar 18 2119:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1983-H12	2445412.65	1983 Mar 19 0330:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1983-H67	2445416.38	1983 Mar 21 2111:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1983-H66	2445416.19	1983 Mar 22 1924:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1983-H68	2445416.31	1983 Mar 22 1630:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1983-H62	2445417.27	1983 Mar 23 1834:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1983-H94	2445417.38	1983 Mar 23 2110:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1983-H95	2445417.53	1983 Mar 24 0041:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1983-H13	2445419.38	1983 Mar 25 2110:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1983-Y123	2445422.27	1983 Mar 26 1824:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1983-H14	2445422.28	1983 Mar 28 1846:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1983-H99	2445422.52	1983 Mar 29 0029:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1983-H100	2445423.19	1983 Mar 29 1630:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1983-H101	2445424.31	1983 Mar 30 1924:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1983-H15	2445424.43	1983 Mar 30 2214:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1983-H103	2445425.38	1983 Mar 31 2041:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1983-H131	2445426.38	1983 Apr 1 2100:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1983-H16	2445426.38	1983 Apr 1 2110:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1983-H132	2445429.16	1983 Apr 4 1923:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1983-H104	2445429.27	1983 Apr 4 1926:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1983-H105	2445429.57	1983 Apr 4 1822:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1983-H133	2445429.58	1983 Apr 4 1124:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1983-H17	2445431.25	1983 Apr 9 1736:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1983-H10	2445433.24	1983 Apr 9 1746:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1983-H11	2445433.24	1983 Apr 9 1746:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1983-H12	2445433.29	1983 Apr 9 1821:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1983-Y138	2445433.02	1983 Apr 9 1931:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1983-H113	2445434.14	1983 Apr 9 1303:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1983-Y141	2445434.15	1983 Apr 9 1517:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1983-H142	2445434.15	1983 Apr 9 1527:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1983-H14	2445434.16	1983 Apr 9 1546:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1983-H143	2445434.17	1983 Apr 9 1559:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1983-Y144	2445434.19	1983 Apr 9 1629:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1983-H144	2445434.20	1983 Apr 9 1643:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1983-H115	2445434.20	1983 Apr 9 1643:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1983-H116	2445434.20	1983 Apr 9 1643:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1983-Y145	2445434.25	1983 Apr 9 1759:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1983-H117	2445434.25	1983 Apr 9 1759:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1983-H118	2445434.26	1983 Apr 9 1810:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1983-H119	2445434.28	1983 Apr 9 1848:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1983-Y146	2445438.19	1983 Apr 11 2100:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1983-H121	2445438.19	1983 Apr 13 1630:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1983-Y149	2445438.29	1983 Apr 13 1900:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1983-H122	2445438.31	1983 Apr 13 1930:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1983-H124	2445443.12	1983 Apr 18 1500:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1983-H18	2445443.40	1983 Apr 18 2159:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1983-H126	2445445.19	1983 Apr 20 1630:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1983-Y153	2445445.27	1983 Apr 20 1830:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1983-Y156	2445445.39	1983 Apr 20 2145:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1983-H127	2445445.41	1983 Apr 20 2145:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1983-H128	2445445.42	1983 Apr 20 2159:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1983-H129	2445449.07	1983 Apr 24 1344:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1983-Y158	2445450.27	1983 Apr 25 1830:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1983-Y159	2445450.33	1983 Apr 25 1955:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1983-H130	2445450.36	1983 Apr 25 2035:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1983-Y164	2445452.19	1983 Apr 27 1635:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1983-H132	2445452.38	1983 Apr 27 2100:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1983-H133	2445453.14	1983 Apr 28 1527:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1983-H137	2445459.17	1983 May 4 1559:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1983-H138	2445460.01	1983 May 5 1217:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1983-H421	2445460.07	1983 May 5 1335:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1983-Y169	2445460.22	1983 May 5 1713:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1983-H139	2445460.24	1983 May 5 1747:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Launch_e	Agency	Launch_Code	Group	Category	LT_Cite	Cite	Notes
1983-Y170	2445460.40	1983 May 5 2132:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1983-Y140	2445460.41	1983 May 5 2156:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1983-Y142	2445461.20	1983 May 6 1644:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1983-Y143	2445464.35	1983 May 9 2017:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1983-Y144	2445465.01	1983 May 10 1221:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1983-Y149	2445466.10	1983 May 11 1430:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1983-Y151	2445466.35	1983 May 11 2030:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1983-Y152	2445467.52	1983 May 13 0025:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1983-Y154	2445468.35	1983 May 13 2022:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1983-Y155	2445468.35	1983 May 13 2030:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1983-Y157	2445471.38	1983 May 16 2100:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1983-Y161	2445473.10	1983 May 18 1430:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1983-Y163	2445475.25	1983 May 20 1800:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1983-Y165	2445479.35	1983 May 24 2030:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1983-Y168	2445480.10	1983 May 25 2066:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1983-Y169	2445480.37	1983 May 25 2100:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1983-Y170	2445480.38	1983 May 25 2100:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1983-Y172	2445481.34	1983 May 26 1644:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1983-Y175	2445487.15	1983 May 26 2013:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1983-Y181	2445487.28	1983 Jun 1 1530:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1983-Y176	2445487.32	1983 Jun 1 1944:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1983-Y178	2445493.39	1983 Jun 7 2114:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1983-Y169	2445494.23	1983 Jun 8 1730:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1983-Y180	2445494.26	1983 Jun 8 1814:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1983-Y183	2445495.15	1983 Jun 9 1530:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1983-Y185	2445499.30	1983 Jun 13 1914:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1983-Y186	2445501.15	1983 Jun 16 1531:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1983-Y196	2445502.16	1983 Jun 16 1556:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1983-Y169	2445503.09	1983 Jun 17 1415:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1983-Y197	2445503.13	1983 Jun 17 1506:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1983-Y191	2445505.07	1983 Jun 20 2047:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1983-Y193	2445507.52	1983 Jun 22 1530:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1983-Y194	2445508.15	1983 Jun 22 2053:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1983-Y206	2445508.37	1983 Jun 24 0752:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1983-Y208	2445509.83	1983 Jun 24 0914:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1983-Y196	2445509.89	1983 Jun 24 1322:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1983-Y211	2445510.06	1983 Jun 24 1356:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1983-Y212	2445510.07	1983 Jun 24 1356:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1983-Y213	2445510.08	1983 Jun 24 1406:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1983-Y214	2445510.09	1983 Jun 24 1414:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1983-Y216	2445510.10	1983 Jun 24 1445:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1983-Y197	2445510.11	1983 Jun 24 1457:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1983-Y198	2445510.11	1983 Jun 24 1456:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1983-Y209	2445510.11	1983 Jun 24 1517:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1983-Y210	2445510.11	1983 Jun 24 1517:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1983-Y217	2445514.32	1983 Jun 26 1520:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1983-Y202	2445515.32	1983 Jun 26 1520:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1983-Y203	2445516.17	1983 Jun 26 1520:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1983-Y206	2445516.19	1983 Jun 30 1630:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1983-Y207	2445501.22	1983 Jun 8 1715:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1983-Y208	2445501.24	1983 Jun 8 1715:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1983-Y209	2445501.30	1983 Jun 8 2126:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1983-Y209	2445501.31	1983 Jun 8 2126:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1983-Y211	2445509.20	1983 Jun 13 1644:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1983-Y214	2445531.32	1983 Jun 15 1937:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1983-Y216	2445532.07	1983 Jun 16 1344:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1983-Y217	2445534.39	1983 Jun 18 2122:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1983-Y237	2445535.35	1983 Jun 19 2026:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1983-Y218	2445535.37	1983 Jun 19 2026:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1983-Y220	2445541.21	1983 Jun 25 1658:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1983-Y221	2445541.25	1983 Jun 25 1801:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1983-Y234	2445543.23	1983 Jun 27 1730:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1983-Y233	2445543.31	1983 Jun 27 1930:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1983-Y236	2445549.30	1983 Aug 2 1909:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1983-Y236	2445549.32	1983 Aug 2 1941:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1983-Y226	2445550.25	1983 Aug 3 1800:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1983-Y229	2445551.40	1983 Aug 4 2136:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1983-Y257	2445557.25	1983 Aug 12 1800:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1983-Y235	2445558.53	1983 Aug 12 1538:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1983-Y238	2445563.21	1983 Aug 16 1708:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1983-Y240	2445564.18	1983 Aug 17 1614:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1983-Y242	2445569.52	1983 Aug 23 0029:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1983-Y246	2445571.17	1983 Aug 24 1600:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1983-Y265	2445576.86	1983 Aug 30 0838:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1983-Y247	2445577.15	1983 Aug 30 1530:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1983-Y269	2445578.83	1983 Sep 1 0801:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1983-Y270	2445578.85	1983 Sep 1 0822:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1983-Y248	2445578.90	1983 Sep 1 0832:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1983-Y271	2445580.24	1983 Sep 2 1748:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1983-Y250	2445580.26	1983 Sep 2 1820:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1983-Y251	2445580.66	1983 Sep 3 0345:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-



Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Launch_e	Agency	Launch_Code	Group	Category	LT_Cite	Cite	Notes
1983-W334	2445669.46	1983 Nov 30 23:08:00	Rocketsonde	-	-	0.000	HRM	SS	-	Meteo	DSI-5850	-	-
1983-W296	2445671.14	1983 Dec 2 15:22:59	Rocketsonde	-	-	0.000	HRM	SS	-	Meteo	DSI-5850	-	-
1983-W335	2445671.18	1983 Dec 2 16:18:59	Rocketsonde	-	-	0.000	HRM	SS	-	Meteo	DSI-5850	-	-
1983-W419	2445671.60	1983 Dec 3 02:30:00	Rocketsonde	-	-	0.000	HRM	SS	-	Meteo	DSI-5850	-	-
1983-W298	2445673.13	1983 Dec 4 15:01:59	Rocketsonde	-	-	0.000	HRM	SS	-	Meteo	DSI-5850	-	-
1983-W338	2445673.15	1983 Dec 4 15:54:59	Rocketsonde	-	-	0.000	HRM	SS	-	Meteo	DSI-5850	-	-
1983-W341	2445675.16	1983 Dec 6 15:56:00	Rocketsonde	-	-	0.000	HRM	SS	-	Meteo	DSI-5850	-	-
1983-W342	2445675.38	1983 Dec 6 21:13:59	Rocketsonde	-	-	0.000	HRM	SS	-	Meteo	DSI-5850	-	-
1983-W345	2445676.19	1983 Dec 7 16:30:00	Rocketsonde	-	-	0.000	HRM	SS	-	Meteo	DSI-5850	-	-
1983-W450	2445676.35	1983 Dec 7 20:30:00	Rocketsonde	-	-	0.000	HRM	SS	-	Meteo	DSI-5850	-	-
1983-W349	2445676.47	1983 Dec 7 23:23:00	Rocketsonde	-	-	0.000	HRM	SS	-	Meteo	DSI-5850	-	-
1983-W302	2445676.92	1983 Dec 8 10:02:59	Rocketsonde	-	-	0.000	HRM	SS	-	Meteo	DSI-5850	-	-
1983-W350	2445676.95	1983 Dec 8 10:44:59	Rocketsonde	-	-	0.000	HRM	SS	-	Meteo	DSI-5850	-	-
1983-W451	2445677.20	1983 Dec 8 16:46:59	Rocketsonde	-	-	0.000	HRM	SS	-	Meteo	DSI-5850	-	-
1983-W351	2445677.21	1983 Dec 8 17:07:00	Rocketsonde	-	-	0.000	HRM	SS	-	Meteo	DSI-5850	-	-
1983-W306	2445677.38	1983 Dec 8 21:06:00	Rocketsonde	-	-	0.000	HRM	SS	-	Meteo	DSI-5850	-	-
1983-W305	2445677.42	1983 Dec 8 22:09:59	Rocketsonde	-	-	0.000	HRM	SS	-	Meteo	DSI-5850	-	-
1983-W353	2445677.43	1983 Dec 8 22:18:00	Rocketsonde	-	-	0.000	HRM	SS	-	Meteo	DSI-5850	-	-
1983-W354	2445677.47	1983 Dec 8 23:22:00	Rocketsonde	-	-	0.000	HRM	SS	-	Meteo	DSI-5850	-	-
1983-W355	2445677.49	1983 Dec 8 23:44:00	Rocketsonde	-	-	0.000	HRM	SS	-	Meteo	DSI-5850	-	-
1983-W356	2445677.50	1983 Dec 9 00:00:59	Rocketsonde	-	-	0.000	HRM	SS	-	Meteo	DSI-5850	-	-
1983-W357	2445677.50	1983 Dec 9 00:02:59	Rocketsonde	-	-	0.000	HRM	SS	-	Meteo	DSI-5850	-	-
1983-W358	2445677.50	1983 Dec 9 00:07:00	Rocketsonde	-	-	0.000	HRM	SS	-	Meteo	DSI-5850	-	-
1983-W359	2445677.52	1983 Dec 9 00:24:59	Rocketsonde	-	-	0.000	HRM	SS	-	Meteo	DSI-5850	-	-
1983-W360	2445677.52	1983 Dec 9 00:24:59	Rocketsonde	-	-	0.000	HRM	SS	-	Meteo	DSI-5850	-	-
1983-W369	2445682.17	1983 Dec 13 15:59:59	Rocketsonde	-	-	0.000	HRM	SS	-	Meteo	DSI-5850	-	-
1983-W363	2445682.19	1983 Dec 13 16:26:59	Rocketsonde	-	-	0.000	HRM	SS	-	Meteo	DSI-5850	-	-
1983-W310	2445683.25	1983 Dec 14 18:00:00	Rocketsonde	-	-	0.000	HRM	SS	-	Meteo	DSI-5850	-	-
1983-W365	2445683.25	1983 Dec 15 01:17:00	Rocketsonde	-	-	0.000	HRM	SS	-	Meteo	DSI-5850	-	-
1983-W368	2445686.16	1983 Dec 17 15:56:59	Rocketsonde	-	-	0.000	HRM	SS	-	Meteo	DSI-5850	-	-
1983-W368	2445686.26	1983 Dec 17 18:41:00	Rocketsonde	-	-	0.000	HRM	SS	-	Meteo	DSI-5850	-	-
1983-W316	2445688.24	1983 Dec 19 17:52:00	Rocketsonde	-	-	0.000	HRM	SS	-	Meteo	DSI-5850	-	-
1983-W370	2445688.26	1983 Dec 19 18:17:00	Rocketsonde	-	-	0.000	HRM	SS	-	Meteo	DSI-5850	-	-
1983-W371	2445688.52	1983 Dec 20 00:29:00	Rocketsonde	-	-	0.000	HRM	SS	-	Meteo	DSI-5850	-	-
1983-W372	2445690.38	1983 Dec 21 21:00:00	Rocketsonde	-	-	0.000	HRM	SS	-	Meteo	DSI-5850	-	-
1983-W376	2445690.49	1983 Dec 21 23:46:00	Rocketsonde	-	-	0.000	HRM	SS	-	Meteo	DSI-5850	-	-
1983-W377	2445691.17	1983 Dec 22 15:56:59	Rocketsonde	-	-	0.000	HRM	SS	-	Meteo	DSI-5850	-	-
1983-W378	2445691.27	1983 Dec 22 18:35:59	Rocketsonde	-	-	0.000	HRM	SS	-	Meteo	DSI-5850	-	-
1983-W463	2445699.35	1983 Dec 30 20:30:00	Rocketsonde	-	-	0.000	HRM	SS	-	Meteo	DSI-5850	-	-
1984-W01	2445703.14	1984 Jan 3 15:14:59	Rocketsonde	-	-	0.000	HRM	SS	-	Meteo	DSI-5850	-	-
1984-W02	2445704.21	1984 Jan 4 17:03:00	Rocketsonde	-	-	0.000	HRM	SS	-	Meteo	DSI-5850	-	-
1984-W01	2445704.21	1984 Jan 4 17:03:00	Rocketsonde	-	-	0.000	HRM	SS	-	Meteo	DSI-5850	-	-
1984-W01	2445704.35	1984 Jan 4 21:59:59	Rocketsonde	-	-	0.000	HRM	SS	-	Meteo	DSI-5850	-	-
1984-W04	2445704.72	1984 Jan 4 23:21:00	Rocketsonde	-	-	0.000	HRM	SS	-	Meteo	DSI-5850	-	-
1984-W05	2445709.35	1984 Jan 8 20:20:00	Rocketsonde	-	-	0.000	HRM	SS	-	Meteo	DSI-5850	-	-
1984-W02	2445709.35	1984 Jan 8 20:20:00	Rocketsonde	-	-	0.000	HRM	SS	-	Meteo	DSI-5850	-	-
1984-W06	2445709.41	1984 Jan 9 21:52:00	Rocketsonde	-	-	0.000	HRM	SS	-	Meteo	DSI-5850	-	-
1984-W07	2445710.10	1984 Jan 10 14:45:00	Rocketsonde	-	-	0.000	HRM	SS	-	Meteo	DSI-5850	-	-
1984-W08	2445710.30	1984 Jan 10 19:41:59	Rocketsonde	-	-	0.000	HRM	SS	-	Meteo	DSI-5850	-	-
1984-W12	2445711.32	1984 Jan 11 20:00:00	Rocketsonde	-	-	0.000	HRM	SS	-	Meteo	DSI-5850	-	-
1984-W12	2445711.33	1984 Jan 11 20:00:00	Rocketsonde	-	-	0.000	HRM	SS	-	Meteo	DSI-5850	-	-
1984-W12	2445711.35	1984 Jan 11 20:00:00	Rocketsonde	-	-	0.000	HRM	SS	-	Meteo	DSI-5850	-	-
1984-W03	2445716.35	1984 Jan 16 20:30:00	Rocketsonde	-	-	0.000	HRM	SS	-	Meteo	DSI-5850	-	-
1984-W19	2445716.39	1984 Jan 16 21:00:00	Rocketsonde	-	-	0.000	HRM	SS	-	Meteo	DSI-5850	-	-
1984-W20	2445716.39	1984 Jan 16 21:00:00	Rocketsonde	-	-	0.000	HRM	SS	-	Meteo	DSI-5850	-	-
1984-W20	2445716.39	1984 Jan 16 21:00:00	Rocketsonde	-	-	0.000	HRM	SS	-	Meteo	DSI-5850	-	-
1984-W20	2445717.35	1984 Jan 17 18:03:59	Rocketsonde	-	-	0.000	HRM	SS	-	Meteo	DSI-5850	-	-
1984-W21	2445717.35	1984 Jan 17 18:36:59	Rocketsonde	-	-	0.000	HRM	SS	-	Meteo	DSI-5850	-	-
1984-W05	2445718.03	1984 Jan 19 12:05:59	Rocketsonde	-	-	0.000	HRM	SS	-	Meteo	DSI-5850	-	-
1984-W23	2445718.09	1984 Jan 19 14:10:00	Rocketsonde	-	-	0.000	HRM	SS	-	Meteo	DSI-5850	-	-
1984-W24	2445718.14	1984 Jan 19 15:14:59	Rocketsonde	-	-	0.000	HRM	SS	-	Meteo	DSI-5850	-	-
1984-W24	2445718.35	1984 Jan 19 20:30:00	Rocketsonde	-	-	0.000	HRM	SS	-	Meteo	DSI-5850	-	-
1984-W27	2445720.35	1984 Jan 20 20:30:00	Rocketsonde	-	-	0.000	HRM	SS	-	Meteo	DSI-5850	-	-
1984-W29	2445721.19	1984 Jan 21 16:37:59	Rocketsonde	-	-	0.000	HRM	SS	-	Meteo	DSI-5850	-	-
1984-W30	2445721.26	1984 Jan 21 18:17:00	Rocketsonde	-	-	0.000	HRM	SS	-	Meteo	DSI-5850	-	-
1984-W31	2445721.33	1984 Jan 21 20:02:00	Rocketsonde	-	-	0.000	HRM	SS	-	Meteo	DSI-5850	-	-
1984-W32	2445723.12	1984 Jan 23 20:30:00	Rocketsonde	-	-	0.000	HRM	SS	-	Meteo	DSI-5850	-	-
1984-W33	2445723.35	1984 Jan 23 20:30:00	Rocketsonde	-	-	0.000	HRM	SS	-	Meteo	DSI-5850	-	-
1984-W36	2445725.14	1984 Jan 25 15:14:59	Rocketsonde	-	-	0.000	HRM	SS	-	Meteo	DSI-5850	-	-
1984-W36	2445726.35	1984 Jan 26 20:24:00	Rocketsonde	-	-	0.000	HRM	SS	-	Meteo	DSI-5850	-	-
1984-W39	2445726.35	1984 Jan 26 20:30:00	Rocketsonde	-	-	0.000	HRM	SS	-	Meteo	DSI-5850	-	-
1984-W40	2445727.15	1984 Jan 27 15:30:00	Rocketsonde	-	-	0.000	HRM	SS	-	Meteo	DSI-5850	-	-
1984-W41	2445727.40	1984 Jan 27 21:30:00	Rocketsonde	-	-	0.000	HRM	SS	-	Meteo	DSI-5850	-	-
1984-W07	2445730.04	1984 Jan 30 12:57:59	Rocketsonde	-	-	0.000	HRM	SS	-	Meteo	DSI-5850	-	-
1984-W27	2445730.25	1984 Jan 30 18:02:59	Rocketsonde	-	-	0.000	HRM	SS	-	Meteo	DSI-5850	-	-
1984-W08	2445730.60	1984 Jan 31 02:30:00	Rocketsonde	-	-	0.000	HRM	SS	-	Meteo	DSI-5850	-	-
1984-W42	2445732.25	1984 Feb 1 18:00:00	Rocketsonde	-	-	0.000	HRM	SS	-	Meteo	DSI-5850	-	-
1984-W44	2445732.35	1984 Feb 1 20:30:00	Rocketsonde	-	-	0.000	HRM	SS	-	Meteo	DSI-5850	-	-
1984-W45	2445732.51	1984 Feb 1 20:30:00	Rocketsonde	-	-	0.000	HRM	SS	-	Meteo	DSI-5850	-	-
1984-W43	2445734.03	1984 Feb 2 00:10:00	Rocketsonde	-	-	0.000	HRM	SS	-	Meteo	DSI-5850	-	-
1984-W46	2445734.05	1984 Feb 3 12:44:00	Rocketsonde	-	-	0.000	HRM	SS	-	Meteo	DSI-5850	-	-
1984-W47	2445734.12	1984 Feb 3 13:06:00	Rocketsonde	-	-	0.000	HRM	SS	-	Meteo	DSI-5850	-	-
1984-W48	2445734.19	1984 Feb 3 15:00:00	Rocketsonde	-	-	0.000	HRM	SS	-	Meteo	DSI-5850	-	-
1984-W49	2445734.39	1984 Feb 3 21:18:00	Rocketsonde	-	-	0.000	HRM	SS	-	Meteo	DSI-5850	-	-
1984-W45	2445736.01	1984 Feb 5 12:14:59	Rocketsonde	-	-	0.000	HRM	SS	-	Meteo	DSI-5850	-	-
1984-W50	2445736.03	1984 Feb 5 12:38:59	Rocketsonde	-	-	0.000	HRM	SS	-	Meteo	DSI-5850	-	-
1984-W52	2445737.35	1984 Feb 6 20:30:00	Rocketsonde	-	-	0.000	HRM	SS	-	Meteo	DSI-5850	-	-
1984-W47	2445738.01	1984 Feb 7 12:14:59	Rocketsonde	-	-	0.000	HRM	SS	-	Meteo	DSI-5850	-	-

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Launch_e	Agency	Launch_Code	Group	Category	LT_Cite	Cite	Notes
1984-H53	2445738.03	1984 Feb 7 1244:00	Rocketsonde	-	-	0.000	HRH	SS	-	Metco	DSI-5850	-	-
1984-H59	2445739.29	1984 Feb 8 1859:59	Rocketsonde	-	-	0.000	HRH	SS	-	Metco	DSI-5850	-	-
1984-H65	2445739.46	1984 Feb 8 2308:00	Rocketsonde	-	-	0.000	HRH	SS	-	Metco	DSI-5850	-	-
1984-H52	2445740.03	1984 Feb 9 1245:59	Rocketsonde	-	-	0.000	HRH	SS	-	Metco	DSI-5850	-	-
1984-H57	2445740.05	1984 Feb 9 1309:59	Rocketsonde	-	-	0.000	HRH	SS	-	Metco	DSI-5850	-	-
1984-H60	2445740.41	1984 Feb 9 2144:00	Rocketsonde	-	-	0.000	HRH	SS	-	Metco	DSI-5850	-	-
1984-H62	2445741.04	1984 Feb 10 1252:00	Rocketsonde	-	-	0.000	HRH	SS	-	Metco	DSI-5850	-	-
1984-H63	2445741.20	1984 Feb 10 1641:59	Rocketsonde	-	-	0.000	HRH	SS	-	Metco	DSI-5850	-	-
1984-H64	2445741.79	1984 Feb 11 0703:59	Rocketsonde	-	-	0.000	HRH	SS	-	Metco	DSI-5850	-	-
1984-H65	2445742.02	1984 Feb 11 1224:59	Rocketsonde	-	-	0.000	HRH	SS	-	Metco	DSI-5850	-	-
1984-H66	2445742.02	1984 Feb 11 1224:59	Rocketsonde	-	-	0.000	HRH	SS	-	Metco	DSI-5850	-	-
1984-H67	2445742.06	1984 Feb 11 1319:59	Rocketsonde	-	-	0.000	HRH	SS	-	Metco	DSI-5850	-	-
1984-H69	2445742.10	1984 Feb 11 1425:00	Rocketsonde	-	-	0.000	HRH	SS	-	Metco	DSI-5850	-	-
1984-H70	2445742.20	1984 Feb 11 1644:59	Rocketsonde	-	-	0.000	HRH	SS	-	Metco	DSI-5850	-	-
1984-H72	2445744.13	1984 Feb 13 1510:00	Rocketsonde	-	-	0.000	HRH	SS	-	Metco	DSI-5850	-	-
1984-H74	2445744.36	1984 Feb 13 2036:00	Rocketsonde	-	-	0.000	HRH	SS	-	Metco	DSI-5850	-	-
1984-H09	2445744.43	1984 Feb 13 2214:59	Rocketsonde	-	-	0.000	HRH	SS	-	Metco	DSI-5850	-	-
1984-H76	2445746.48	1984 Feb 15 2335:00	Rocketsonde	-	-	0.000	HRH	SS	-	Metco	DSI-5850	-	-
1984-H78	2445747.19	1984 Feb 16 1630:00	Rocketsonde	-	-	0.000	HRH	SS	-	Metco	DSI-5850	-	-
1984-H79	2445748.36	1984 Feb 17 2035:00	Rocketsonde	-	-	0.000	HRH	SS	-	Metco	DSI-5850	-	-
1984-H63	2445751.35	1984 Feb 20 2030:00	Rocketsonde	-	-	0.000	HRH	SS	-	Metco	DSI-5850	-	-
1984-H64	2445752.04	1984 Feb 21 1265:00	Rocketsonde	-	-	0.000	HRH	SS	-	Metco	DSI-5850	-	-
1984-H66	2445752.38	1984 Feb 21 2100:00	Rocketsonde	-	-	0.000	HRH	SS	-	Metco	DSI-5850	-	-
1984-H75	2445753.25	1984 Feb 22 1800:00	Rocketsonde	-	-	0.000	HRH	SS	-	Metco	DSI-5850	-	-
1984-H68	2445753.27	1984 Feb 22 1830:00	Rocketsonde	-	-	0.000	HRH	SS	-	Metco	DSI-5850	-	-
1984-H69	2445753.50	1984 Feb 23 0002:59	Rocketsonde	-	-	0.000	HRH	SS	-	Metco	DSI-5850	-	-
1984-H90	2445754.14	1984 Feb 23 1514:59	Rocketsonde	-	-	0.000	HRH	SS	-	Metco	DSI-5850	-	-
1984-H91	2445754.35	1984 Feb 23 2020:00	Rocketsonde	-	-	0.000	HRH	SS	-	Metco	DSI-5850	-	-
1984-H92	2445755.21	1984 Feb 24 1700:00	Rocketsonde	-	-	0.000	HRH	SS	-	Metco	DSI-5850	-	-
1984-H93	2445756.12	1984 Feb 27 1452:00	Rocketsonde	-	-	0.000	HRH	SS	-	Metco	DSI-5850	-	-
1984-H94	2445756.15	1984 Feb 27 1534:59	Rocketsonde	-	-	0.000	HRH	SS	-	Metco	DSI-5850	-	-
1984-H10	2445759.39	1984 Feb 28 2114:59	Rocketsonde	-	-	0.000	HRH	SS	-	Metco	DSI-5850	-	-
1984-H95	2445760.14	1984 Feb 29 1651:00	Rocketsonde	-	-	0.000	HRH	SS	-	Metco	DSI-5850	-	-
1984-H96	2445760.20	1984 Feb 29 1800:00	Rocketsonde	-	-	0.000	HRH	SS	-	Metco	DSI-5850	-	-
1984-H79	2445760.25	1984 Feb 29 2027:59	Rocketsonde	-	-	0.000	HRH	SS	-	Metco	DSI-5850	-	-
1984-H96	2445760.35	1984 Feb 29 2030:00	Rocketsonde	-	-	0.000	HRH	SS	-	Metco	DSI-5850	-	-
1984-H100	2445762.38	1984 Mar 2 2100:00	Rocketsonde	-	-	0.000	HRH	SS	-	Metco	DSI-5850	-	-
1984-H11	2445766.35	1984 Mar 5 2030:00	Rocketsonde	-	-	0.000	HRH	SS	-	Metco	DSI-5850	-	-
1984-H102	2445766.19	1984 Mar 6 1630:00	Rocketsonde	-	-	0.000	HRH	SS	-	Metco	DSI-5850	-	-
1984-H12	2445769.04	1984 Mar 9 1251:00	Rocketsonde	-	-	0.000	HRH	SS	-	Metco	DSI-5850	-	-
1984-H103	2445772.15	1984 Mar 12 1330:00	Rocketsonde	-	-	0.000	HRH	SS	-	Metco	DSI-5850	-	-
1984-H14	2445772.40	1984 Mar 12 2130:00	Rocketsonde	-	-	0.000	HRH	SS	-	Metco	DSI-5850	-	-
1984-H13	2445772.60	1984 Mar 13 0231:00	Rocketsonde	-	-	0.000	HRH	SS	-	Metco	DSI-5850	-	-
1984-H16	2445774.04	1984 Mar 14 1251:00	Rocketsonde	-	-	0.000	HRH	SS	-	Metco	DSI-5850	-	-
1984-H109	2445774.25	1984 Mar 15 2118:00	Rocketsonde	-	-	0.000	HRH	SS	-	Metco	DSI-5850	-	-
1984-H107	2445774.28	1984 Mar 15 2118:00	Rocketsonde	-	-	0.000	HRH	SS	-	Metco	DSI-5850	-	-
1984-H110	2445780.38	1984 Mar 20 2030:00	Rocketsonde	-	-	0.000	HRH	SS	-	Metco	DSI-5850	-	-
1984-H111	2445780.84	1984 Mar 21 1256:59	Rocketsonde	-	-	0.000	HRH	SS	-	Metco	DSI-5850	-	-
1984-H112	2445781.19	1984 Mar 21 1630:00	Rocketsonde	-	-	0.000	HRH	SS	-	Metco	DSI-5850	-	-
1984-H113	2445781.35	1984 Mar 21 1831:00	Rocketsonde	-	-	0.000	HRH	SS	-	Metco	DSI-5850	-	-
1984-H114	2445781.39	1984 Mar 21 1859:59	Rocketsonde	-	-	0.000	HRH	SS	-	Metco	DSI-5850	-	-
1984-H115	2445781.35	1984 Mar 21 2030:00	Rocketsonde	-	-	0.000	HRH	SS	-	Metco	DSI-5850	-	-
1984-H116	2445782.15	1984 Mar 22 1530:00	Rocketsonde	-	-	0.000	HRH	SS	-	Metco	DSI-5850	-	-
1984-H117	2445783.10	1984 Mar 23 1430:00	Rocketsonde	-	-	0.000	HRH	SS	-	Metco	DSI-5850	-	-
1984-H118	2445786.03	1984 Mar 26 1205:00	Rocketsonde	-	-	0.000	HRH	SS	-	Metco	DSI-5850	-	-
1984-H119	2445786.40	1984 Mar 26 2130:00	Rocketsonde	-	-	0.000	HRH	SS	-	Metco	DSI-5850	-	-
1984-H120	2445788.17	1984 Mar 28 1609:59	Rocketsonde	-	-	0.000	HRH	SS	-	Metco	DSI-5850	-	-
1984-H21	2445788.33	1984 Mar 28 2000:00	Rocketsonde	-	-	0.000	HRH	SS	-	Metco	DSI-5850	-	-
1984-H14	2445788.40	1984 Mar 28 2130:00	Rocketsonde	-	-	0.000	HRH	SS	-	Metco	DSI-5850	-	-
1984-H123	2445789.15	1984 Mar 29 1530:00	Rocketsonde	-	-	0.000	HRH	SS	-	Metco	DSI-5850	-	-
1984-H124	2445790.15	1984 Mar 30 1530:00	Rocketsonde	-	-	0.000	HRH	SS	-	Metco	DSI-5850	-	-
1984-H125	2445790.32	1984 Mar 30 1942:59	Rocketsonde	-	-	0.000	HRH	SS	-	Metco	DSI-5850	-	-
1984-H126	2445793.33	1984 Apr 2 1956:59	Rocketsonde	-	-	0.000	HRH	SS	-	Metco	DSI-5850	-	-
1984-H127	2445794.33	1984 Apr 3 2000:00	Rocketsonde	-	-	0.000	HRH	SS	-	Metco	DSI-5850	-	-
1984-H128	2445795.19	1984 Apr 4 1630:00	Rocketsonde	-	-	0.000	HRH	SS	-	Metco	DSI-5850	-	-
1984-H15	2445796.35	1984 Apr 5 2030:00	Rocketsonde	-	-	0.000	HRH	SS	-	Metco	DSI-5850	-	-
1984-H129	2445797.08	1984 Apr 6 1358:59	Rocketsonde	-	-	0.000	HRH	SS	-	Metco	DSI-5850	-	-
1984-H130	2445797.09	1984 Apr 6 1409:00	Rocketsonde	-	-	0.000	HRH	SS	-	Metco	DSI-5850	-	-
1984-H131	2445797.10	1984 Apr 6 1429:00	Rocketsonde	-	-	0.000	HRH	SS	-	Metco	DSI-5850	-	-
1984-H81	2445797.14	1984 Apr 6 1527:59	Rocketsonde	-	-	0.000	HRH	SS	-	Metco	DSI-5850	-	-
1984-H132	2445797.17	1984 Apr 6 1557:59	Rocketsonde	-	-	0.000	HRH	SS	-	Metco	DSI-5850	-	-
1984-H82	2445797.21	1984 Apr 6 1657:59	Rocketsonde	-	-	0.000	HRH	SS	-	Metco	DSI-5850	-	-
1984-H133	2445797.23	1984 Apr 6 1727:59	Rocketsonde	-	-	0.000	HRH	SS	-	Metco	DSI-5850	-	-
1984-H134	2445797.40	1984 Apr 6 2130:00	Rocketsonde	-	-	0.000	HRH	SS	-	Metco	DSI-5850	-	-
1984-H135	2445799.09	1984 Apr 8 1403:59	Rocketsonde	-	-	0.000	HRH	SS	-	Metco	DSI-5850	-	-
1984-H136	2445799.10	1984 Apr 8 1420:00	Rocketsonde	-	-	0.000	HRH	SS	-	Metco	DSI-5850	-	-
1984-H137	2445799.10	1984 Apr 8 1431:00	Rocketsonde	-	-	0.000	HRH	SS	-	Metco	DSI-5850	-	-
1984-H138	2445800.36	1984 Apr 9 2040:00	Rocketsonde	-	-	0.000	HRH	SS	-	Metco	DSI-5850	-	-
1984-H83	2445801.05	1984 Apr 10 1311:59	Rocketsonde	-	-	0.000	HRH	SS	-	Metco	DSI-5850	-	-
1984-H139	2445801.05	1984 Apr 10 1311:59	Rocketsonde	-	-	0.000	HRH	SS	-	Metco	DSI-5850	-	-
1984-H84	2445801.06	1984 Apr 10 1330:00	Rocketsonde	-	-	0.000	HRH	SS	-	Metco	DSI-5850	-	-
1984-H140	2445801.07	1984 Apr 10 1334:59	Rocketsonde	-	-	0.000	HRH	SS	-	Metco	DSI-5850	-	-
1984-H141	2445801.09	1984 Apr 10 1410:00	Rocketsonde	-	-	0.000	HRH	SS	-	Metco	DSI-5850	-	-
1984-H85	2445803.00	1984 Apr 12 1207:00	Rocketsonde	-	-	0.000	HRH	SS	-	Metco	DSI-5850	-	-

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Launch	Agency	Launch_Code	Group	Category	LT_Cite	Cite	Notes
						DrbPay							
1984-1143	2445803.00	1984 Apr 12 1207:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1984-1144	2445803.04	1984 Apr 12 1259:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1984-1145	2445803.05	1984 Apr 12 1309:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1984-1146	2445803.78	1984 Apr 13 0638:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1984-1147	2445804.03	1984 Apr 13 1240:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1984-1148	2445804.05	1984 Apr 13 1307:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1984-1149	2445804.07	1984 Apr 13 1337:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1984-1150	2445804.08	1984 Apr 13 1400:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1984-1151	2445804.08	1984 Apr 13 1400:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1984-1152	2445804.09	1984 Apr 13 1403:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1984-1153	2445804.12	1984 Apr 13 1449:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1984-1154	2445807.35	1984 Apr 16 2031:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1984-1155	2445809.03	1984 Apr 18 1249:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1984-1156	2445809.27	1984 Apr 18 1630:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1984-1157	2445809.33	1984 Apr 18 2000:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1984-1158	2445811.38	1984 Apr 20 2100:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1984-1159	2445811.38	1984 Apr 20 2107:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1984-1160	2445814.33	1984 Apr 23 2000:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1984-1161	2445815.15	1984 Apr 24 1530:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1984-1162	2445816.07	1984 Apr 25 1344:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1984-1164	2445816.27	1984 Apr 25 1631:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1984-1165	2445816.35	1984 Apr 25 2031:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1984-1167	2445817.27	1984 Apr 26 1630:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1984-1168	2445818.29	1984 Apr 27 1902:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1984-1169	2445818.33	1984 Apr 27 2000:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1984-117	2445821.29	1984 Apr 30 1659:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1984-1170	2445822.08	1984 May 1 1400:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1984-1171	2445822.39	1984 May 1 2114:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1984-1172	2445823.16	1984 May 2 1951:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1984-1173	2445823.32	1984 May 2 1934:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1984-118	2445825.33	1984 May 4 2000:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1984-1174	2445826.39	1984 May 7 2124:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1984-1176	2445829.03	1984 May 8 1249:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1984-1179	2445829.29	1984 May 8 1900:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1984-1178	2445830.08	1984 May 9 1400:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1984-120	2445830.31	1984 May 9 1930:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1984-1179	2445830.90	1984 May 10 0930:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1984-1180	2445832.33	1984 May 11 2000:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1984-1181	2445835.33	1984 May 14 2000:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1984-1182	2445837.03	1984 May 16 1544:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1984-1184	2445837.98	1984 May 16 1530:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1984-1204	2445842.34	1984 May 17 0200:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1984-1185	2445842.39	1984 May 21 2015:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1984-1187	2445844.59	1984 May 23 1926:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1984-1188	2445846.98	1984 May 25 1407:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1984-1189	2445846.98	1984 May 25 2033:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1984-1203	2445849.07	1984 May 28 1933:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1984-1201	2445851.09	1984 May 28 1344:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1984-1192	2445851.09	1984 May 30 1415:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1984-1194	2445851.35	1984 May 30 2005:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1984-1194	2445853.09	1984 May 31 1415:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1984-1195	2445858.11	1984 Jun 6 1435:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1984-1196	2445858.26	1984 Jun 6 1814:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1984-1198	2445859.61	1984 Jun 8 0935:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1984-1205	2445860.31	1984 Jun 8 1930:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1984-124	2445864.31	1984 Jun 12 1924:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1984-1199	2445864.36	1984 Jun 12 2044:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1984-1201	2445865.15	1984 Jun 13 1535:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1984-1202	2445867.10	1984 Jun 15 1430:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1984-1203	2445867.25	1984 Jun 15 1804:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1984-1204	2445867.26	1984 Jun 15 1820:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1984-1205	2445870.10	1984 Jun 18 1430:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1984-1208	2445872.10	1984 Jun 20 1425:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1984-1209	2445872.16	1984 Jun 20 1549:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1984-1210	2445874.11	1984 Jun 22 1445:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1984-1211	2445877.03	1984 Jun 25 1243:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1984-1211	2445877.05	1984 Jun 25 1307:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1984-1212	2445877.31	1984 Jun 25 1930:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1984-1213	2445878.03	1984 Jun 26 1243:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1984-1214	2445879.05	1984 Jun 26 1314:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1984-1215	2445879.10	1984 Jun 27 1430:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1984-1216	2445879.33	1984 Jun 27 1954:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1984-1218	2445879.47	1984 Jun 28 1552:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1984-1219	2445880.16	1984 Jun 28 1934:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1984-1220	2445881.32	1984 Jun 29 1429:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1984-1221	2445884.10	1984 Jul 2 1129:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1984-1221	2445884.22	1984 Jul 3 1930:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1984-1222	2445885.31	1984 Jul 3 1930:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1984-1223	2445887.10	1984 Jul 5 1425:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1984-1224	2445887.34	1984 Jul 5 2003:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1984-1225	2445888.03	1984 Jul 6 1243:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1984-1225	2445888.10	1984 Jul 6 1430:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Launch_e	Agency	Launch_Code	Group	Category	LT_Cite	Cite	Notes
1984-W226	2445888-35	1984 Jul 6 2025:00	Rocketsonde	-	-	0.000	HRH	SS	-	Metro	DSI-5850	-	-
1984-W227	2445891-39	1984 Jul 9 2114:59	Rocketsonde	-	-	0.000	HRH	SS	-	Metro	DSI-5850	-	-
1984-W228	2445893-03	1984 Jul 11 1248:59	Rocketsonde	-	-	0.000	HRH	SS	-	Metro	DSI-5850	-	-
1984-W229	2445893-06	1984 Jul 11 1325:59	Rocketsonde	-	-	0.000	HRH	SS	-	Metro	DSI-5850	-	-
1984-W230	2445893-46	1984 Jul 11 2247:59	Rocketsonde	-	-	0.000	HRH	SS	-	Metro	DSI-5850	-	-
1984-W231	2445898-03	1984 Jul 16 1249:59	Rocketsonde	-	-	0.000	HRH	SS	-	Metro	DSI-5850	-	-
1984-W232	2445898-09	1984 Jul 16 1415:00	Rocketsonde	-	-	0.000	HRH	SS	-	Metro	DSI-5850	-	-
1984-W234	2445900-10	1984 Jul 18 1450:00	Rocketsonde	-	-	0.000	HRH	SS	-	Metro	DSI-5850	-	-
1984-W236	2445902-09	1984 Jul 20 1415:00	Rocketsonde	-	-	0.000	HRH	SS	-	Metro	DSI-5850	-	-
1984-W237	2445902-31	1984 Jul 23 1930:00	Rocketsonde	-	-	0.000	HRH	SS	-	Metro	DSI-5850	-	-
1984-W238	2445905-39	1984 Jul 23 1930:00	Rocketsonde	-	-	0.000	HRH	SS	-	Metro	DSI-5850	-	-
1984-W239	2445906-37	1984 Jul 23 2126:59	Rocketsonde	-	-	0.000	HRH	SS	-	Metro	DSI-5850	-	-
1984-W240	2445907-04	1984 Jul 25 1259:59	Rocketsonde	-	-	0.000	HRH	SS	-	Metro	DSI-5850	-	-
1984-W241	2445907-10	1984 Jul 25 1450:00	Rocketsonde	-	-	0.000	HRH	SS	-	Metro	DSI-5850	-	-
1984-W242	2445909-32	1984 Jul 27 1944:59	Rocketsonde	-	-	0.000	HRH	SS	-	Metro	DSI-5850	-	-
1984-W243	2445914-10	1984 Aug 1 1430:00	Rocketsonde	-	-	0.000	HRH	SS	-	Metro	DSI-5850	-	-
1984-W244	2445914-15	1984 Aug 1 1533:59	Rocketsonde	-	-	0.000	HRH	SS	-	Metro	DSI-5850	-	-
1984-W245	2445914-24	1984 Aug 1 1742:00	Rocketsonde	-	-	0.000	HRH	SS	-	Metro	DSI-5850	-	-
1984-W246	2445916-28	1984 Aug 3 1649:59	Rocketsonde	-	-	0.000	HRH	SS	-	Metro	DSI-5850	-	-
1984-W247	2445920-04	1984 Aug 7 1259:59	Rocketsonde	-	-	0.000	HRH	SS	-	Metro	DSI-5850	-	-
1984-W248	2445920-14	1984 Aug 7 1514:59	Rocketsonde	-	-	0.000	HRH	SS	-	Metro	DSI-5850	-	-
1984-W249	2445921-38	1984 Aug 8 1548:59	Rocketsonde	-	-	0.000	HRH	SS	-	Metro	DSI-5850	-	-
1984-W250	2445921-40	1984 Aug 8 2103:59	Rocketsonde	-	-	0.000	HRH	SS	-	Metro	DSI-5850	-	-
1984-W251	2445921-46	1984 Aug 8 2133:00	Rocketsonde	-	-	0.000	HRH	SS	-	Metro	DSI-5850	-	-
1984-W252	2445926-11	1984 Aug 8 2332:00	Rocketsonde	-	-	0.000	HRH	SS	-	Metro	DSI-5850	-	-
1984-W253	2445926-52	1984 Aug 13 1445:00	Rocketsonde	-	-	0.000	HRH	SS	-	Metro	DSI-5850	-	-
1984-W254	2445928-03	1984 Aug 14 0024:59	Rocketsonde	-	-	0.000	HRH	SS	-	Metro	DSI-5850	-	-
1984-W256	2445928-46	1984 Aug 15 0904:59	Rocketsonde	-	-	0.000	HRH	SS	-	Metro	DSI-5850	-	-
1984-W257	2445930-10	1984 Aug 15 1247:59	Rocketsonde	-	-	0.000	HRH	SS	-	Metro	DSI-5850	-	-
1984-W258	2445930-35	1984 Aug 15 2304:59	Rocketsonde	-	-	0.000	HRH	SS	-	Metro	DSI-5850	-	-
1984-W259	2445934-15	1984 Aug 17 1450:00	Rocketsonde	-	-	0.000	HRH	SS	-	Metro	DSI-5850	-	-
1984-W260	2445934-35	1984 Aug 17 2020:00	Rocketsonde	-	-	0.000	HRH	SS	-	Metro	DSI-5850	-	-
1984-W261	2445935-20	1984 Aug 21 1550:00	Rocketsonde	-	-	0.000	HRH	SS	-	Metro	DSI-5850	-	-
1984-W263	2445936-10	1984 Aug 22 1651:00	Rocketsonde	-	-	0.000	HRH	SS	-	Metro	DSI-5850	-	-
1984-W264	2445936-22	1984 Aug 24 1450:00	Rocketsonde	-	-	0.000	HRH	SS	-	Metro	DSI-5850	-	-
1984-W265	2445937-22	1984 Aug 24 1715:00	Rocketsonde	-	-	0.000	HRH	SS	-	Metro	DSI-5850	-	-
1984-W266	2445937-31	1984 Aug 24 1901:59	Rocketsonde	-	-	0.000	HRH	SS	-	Metro	DSI-5850	-	-
1984-W267	2445939-11	1984 Aug 24 1950:00	Rocketsonde	-	-	0.000	HRH	SS	-	Metro	DSI-5850	-	-
1984-W268	2445940-11	1984 Aug 26 1459:00	Rocketsonde	-	-	0.000	HRH	SS	-	Metro	DSI-5850	-	-
1984-W269	2445940-31	1984 Aug 27 1951:00	Rocketsonde	-	-	0.000	HRH	SS	-	Metro	DSI-5850	-	-
1984-W270	2445942-32	1984 Aug 29 1944:59	Rocketsonde	-	-	0.000	HRH	SS	-	Metro	DSI-5850	-	-
1984-W271	2445943-06	1984 Aug 29 2324:59	Rocketsonde	-	-	0.000	HRH	SS	-	Metro	DSI-5850	-	-
1984-W272	2445943-07	1984 Aug 30 1243:59	Rocketsonde	-	-	0.000	HRH	SS	-	Metro	DSI-5850	-	-
1984-W273	2445943-09	1984 Aug 30 1319:59	Rocketsonde	-	-	0.000	HRH	SS	-	Metro	DSI-5850	-	-
1984-W274	2445943-10	1984 Aug 30 1410:00	Rocketsonde	-	-	0.000	HRH	SS	-	Metro	DSI-5850	-	-
1984-W275	2445943-32	1984 Aug 30 1424:00	Rocketsonde	-	-	0.000	HRH	SS	-	Metro	DSI-5850	-	-
1984-W276	2445943-52	1984 Aug 31 0029:00	Rocketsonde	-	-	0.000	HRH	SS	-	Metro	DSI-5850	-	-
1984-W277	2445943-54	1984 Aug 31 1550:00	Rocketsonde	-	-	0.000	HRH	SS	-	Metro	DSI-5850	-	-
1984-W278	2445944-20	1984 Aug 31 1653:59	Rocketsonde	-	-	0.000	HRH	SS	-	Metro	DSI-5850	-	-
1984-W279	2445945-06	1984 Sep 1 1320:59	Rocketsonde	-	-	0.000	HRH	SS	-	Metro	DSI-5850	-	-
1984-W280	2445945-07	1984 Sep 1 1329:59	Rocketsonde	-	-	0.000	HRH	SS	-	Metro	DSI-5850	-	-
1984-W281	2445945-09	1984 Sep 1 1415:59	Rocketsonde	-	-	0.000	HRH	SS	-	Metro	DSI-5850	-	-
1984-W282	2445945-10	1984 Sep 1 1421:00	Rocketsonde	-	-	0.000	HRH	SS	-	Metro	DSI-5850	-	-
1984-W283	2445945-11	1984 Sep 1 1431:00	Rocketsonde	-	-	0.000	HRH	SS	-	Metro	DSI-5850	-	-
1984-W284	2445945-11	1984 Sep 1 1436:59	Rocketsonde	-	-	0.000	HRH	SS	-	Metro	DSI-5850	-	-
1984-W285	2445947-06	1984 Sep 3 1330:59	Rocketsonde	-	-	0.000	HRH	SS	-	Metro	DSI-5850	-	-
1984-W286	2445947-07	1984 Sep 3 1334:59	Rocketsonde	-	-	0.000	HRH	SS	-	Metro	DSI-5850	-	-
1984-W287	2445947-09	1984 Sep 3 1339:59	Rocketsonde	-	-	0.000	HRH	SS	-	Metro	DSI-5850	-	-
1984-W288	2445947-11	1984 Sep 3 1406:00	Rocketsonde	-	-	0.000	HRH	SS	-	Metro	DSI-5850	-	-
1984-W289	2445947-11	1984 Sep 3 1433:00	Rocketsonde	-	-	0.000	HRH	SS	-	Metro	DSI-5850	-	-
1984-W290	2445948-83	1984 Sep 5 0756:59	Rocketsonde	-	-	0.000	HRH	SS	-	Metro	DSI-5850	-	-
1984-W291	2445948-85	1984 Sep 5 0826:00	Rocketsonde	-	-	0.000	HRH	SS	-	Metro	DSI-5850	-	-
1984-W292	2445949-06	1984 Sep 5 1324:59	Rocketsonde	-	-	0.000	HRH	SS	-	Metro	DSI-5850	-	-
1984-W293	2445949-06	1984 Sep 5 1330:00	Rocketsonde	-	-	0.000	HRH	SS	-	Metro	DSI-5850	-	-
1984-W294	2445949-07	1984 Sep 5 1336:59	Rocketsonde	-	-	0.000	HRH	SS	-	Metro	DSI-5850	-	-
1984-W295	2445949-07	1984 Sep 5 1337:59	Rocketsonde	-	-	0.000	HRH	SS	-	Metro	DSI-5850	-	-
1984-W296	2445949-07	1984 Sep 5 1339:59	Rocketsonde	-	-	0.000	HRH	SS	-	Metro	DSI-5850	-	-
1984-W297	2445949-07	1984 Sep 5 1339:59	Rocketsonde	-	-	0.000	HRH	SS	-	Metro	DSI-5850	-	-
1984-W298	2445949-09	1984 Sep 5 1407:00	Rocketsonde	-	-	0.000	HRH	SS	-	Metro	DSI-5850	-	-
1984-W299	2445949-10	1984 Sep 5 1422:00	Rocketsonde	-	-	0.000	HRH	SS	-	Metro	DSI-5850	-	-
1984-W300	2445949-11	1984 Sep 5 1434:00	Rocketsonde	-	-	0.000	HRH	SS	-	Metro	DSI-5850	-	-
1984-W301	2445949-13	1984 Sep 5 1508:00	Rocketsonde	-	-	0.000	HRH	SS	-	Metro	DSI-5850	-	-
1984-W302	2445951-41	1984 Sep 7 2145:00	Rocketsonde	-	-	0.000	HRH	SS	-	Metro	DSI-5850	-	-
1984-W303	2445954-03	1984 Sep 10 1245:00	Rocketsonde	-	-	0.000	HRH	SS	-	Metro	DSI-5850	-	-
1984-W304	2445954-17	1984 Sep 10 1610:59	Rocketsonde	-	-	0.000	HRH	SS	-	Metro	DSI-5850	-	-
1984-W305	2445954-31	1984 Sep 10 1930:00	Rocketsonde	-	-	0.000	HRH	SS	-	Metro	DSI-5850	-	-
1984-W306	2445955-53	1984 Sep 12 0036:59	Rocketsonde	-	-	0.000	HRH	SS	-	Metro	DSI-5850	-	-
1984-W307	2445956-07	1984 Sep 12 1344:59	Rocketsonde	-	-	0.000	HRH	SS	-	Metro	DSI-5850	-	-
1984-W308	2445957-30	1984 Sep 13 1944:59	Rocketsonde	-	-	0.000	HRH	SS	-	Metro	DSI-5850	-	-
1984-W309	2445958-40	1984 Sep 14 2143:00	Rocketsonde	-	-	0.000	HRH	SS	-	Metro	DSI-5850	-	-
1984-W310	2445962-03	1984 Sep 18 1246:59	Rocketsonde	-	-	0.000	HRH	SS	-	Metro	DSI-5850	-	-



Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Launch_e	Agency	Launch_Code	Group	Category	LT_Cite	Cite	Notes
1984-H305	2445963.07	1984 Sep 19 13:44:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1984-H306	2445964.15	1984 Sep 20 15:30:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1984-Y113	2445964.37	1984 Sep 20 20:54:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1984-H307	2445964.41	1984 Sep 20 21:45:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1984-H308	2445969.31	1984 Sep 25 19:50:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1984-H309	2445970.16	1984 Sep 26 15:45:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1984-Y115	2445970.37	1984 Sep 26 20:59:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1984-H311	2445970.41	1984 Sep 26 21:51:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1984-H312	2445970.48	1984 Sep 26 23:35:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1984-H313	2445971.32	1984 Sep 27 19:38:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1984-H314	2445971.52	1984 Sep 29 00:35:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1984-H315	2445977.14	1984 Oct 3 15:22:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1984-H316	2445978.05	1984 Oct 4 13:11:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1984-Y116	2445978.07	1984 Oct 4 13:44:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1984-Y118	2445978.96	1984 Oct 5 11:03:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1984-H318	2445978.98	1984 Oct 5 12:07:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1984-Y119	2445979.00	1984 Oct 5 12:15:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1984-H319	2445979.01	1984 Oct 5 14:03:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1984-H320	2445979.09	1984 Oct 5 19:50:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1984-H321	2445979.31	1984 Oct 7 16:18:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1984-H322	2445981.18	1984 Oct 7 16:18:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1984-H323	2445981.18	1984 Oct 7 16:21:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1984-H324	2445981.18	1984 Oct 7 16:21:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1984-H325	2445983.15	1984 Oct 9 15:42:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1984-H326	2445983.15	1984 Oct 9 16:21:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1984-H327	2445983.22	1984 Oct 9 17:15:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1984-H328	2445983.53	1984 Oct 9 20:00:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1984-H329	2445985.18	1984 Oct 11 16:16:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1984-H330	2445985.18	1984 Oct 11 16:21:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1984-H331	2445985.18	1984 Oct 11 16:21:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1984-H332	2445985.21	1984 Oct 11 17:00:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1984-H333	2445985.21	1984 Oct 13 10:25:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1984-H334	2445986.95	1984 Oct 13 10:25:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1984-H335	2445987.18	1984 Oct 13 16:21:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1984-Y121	2445987.19	1984 Oct 13 16:36:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1984-Y122	2445987.20	1984 Oct 13 16:40:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1984-H336	2445987.21	1984 Oct 13 16:52:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1984-H337	2445987.22	1984 Oct 13 16:56:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1984-H338	2445987.22	1984 Oct 13 17:06:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1984-H339	2445987.52	1984 Oct 13 17:11:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1984-Y123	2445987.52	1984 Oct 13 17:14:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1984-H340	2445989.38	1984 Oct 15 13:11:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1984-H341	2445991.07	1984 Oct 17 13:49:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1984-H342	2445991.08	1984 Oct 17 13:49:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1984-H343	2445991.08	1984 Oct 17 16:31:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1984-H344	2445991.08	1984 Oct 17 16:31:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1984-H345	2445991.08	1984 Oct 17 16:53:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1984-H346	2445991.20	1984 Oct 19 12:03:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1984-H347	2445992.00	1984 Oct 25 12:05:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1984-H348	2445992.03	1984 Oct 25 12:05:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1984-H349	2445992.03	1984 Oct 24 13:44:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1984-H350	2445998.07	1984 Oct 24 18:33:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1984-H351	2445998.27	1984 Oct 24 18:33:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1984-H352	2445998.41	1984 Oct 24 21:56:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1984-H353	2446000.16	1984 Oct 26 15:51:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1984-H354	2446000.17	1984 Oct 26 16:04:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1984-H355	2446000.35	1984 Oct 26 20:30:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1984-H356	2446000.52	1984 Oct 27 00:29:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1984-H357	2446000.52	1984 Oct 27 00:29:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1984-H358	2446003.35	1984 Oct 29 20:30:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1984-H359	2446003.39	1984 Oct 29 21:27:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1984-H360	2446005.07	1984 Oct 31 13:44:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1984-H361	2446005.08	1984 Oct 31 14:00:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1984-H362	2446005.11	1984 Oct 31 14:45:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1984-H363	2446005.19	1984 Oct 31 16:30:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1984-H364	2446005.29	1984 Oct 31 18:57:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1984-H365	2446005.46	1984 Oct 31 23:09:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1984-H366	2446007.39	1984 Nov 2 21:20:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1984-H367	2446010.35	1984 Nov 6 20:30:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1984-H368	2446011.16	1984 Nov 6 15:49:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1984-H370	2446012.38	1984 Nov 7 21:08:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1984-Y126	2446013.01	1984 Nov 8 12:14:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1984-H371	2446013.03	1984 Nov 8 12:38:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1984-H372	2446013.05	1984 Nov 8 13:14:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1984-Y127	2446013.06	1984 Nov 8 13:27:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1984-H373	2446013.06	1984 Nov 8 13:55:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1984-H374	2446014.33	1984 Nov 9 20:00:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1984-H375	2446015.00	1984 Nov 10 11:54:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1984-H376	2446015.01	1984 Nov 10 12:19:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1984-H377	2446015.01	1984 Nov 10 12:21:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1984-H378	2446015.04	1984 Nov 10 12:54:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1984-H379	2446017.00	1984 Nov 12 11:54:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1984-H380	2446017.02	1984 Nov 12 12:25:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1984-H381	2446018.20	1984 Nov 13 16:48:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1984-H383	2446018.20	1984 Nov 13 19:42:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1984-H384	2446018.32	1984 Nov 13 19:42:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Launch_e	Agency	Launch_Code	Group	Category	LT_Cite	Cite	Notes
1984-H385	2446018.41	1984 Nov 13 2149:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1984-H387	2446019.00	1984 Nov 14 1154:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1984-H388	2446019.00	1984 Nov 14 1157:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1984-H389	2446019.01	1984 Nov 14 1214:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1984-H390	2446019.04	1984 Nov 14 1251:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1984-H391	2446019.04	1984 Nov 14 1254:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1984-H392	2446019.36	1984 Nov 14 2045:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1984-H393	2446020.75	1984 Nov 16 0559:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1984-H394	2446020.77	1984 Nov 16 0633:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1984-H395	2446020.99	1984 Nov 16 1145:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1984-H396	2446021.00	1984 Nov 16 1157:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1984-H397	2446021.01	1984 Nov 16 1200:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1984-H400	2446021.01	1984 Nov 16 1212:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1984-H401	2446021.01	1984 Nov 16 1214:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1984-H402	2446021.01	1984 Nov 16 1215:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1984-H403	2446021.01	1984 Nov 16 1217:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1984-H404	2446021.02	1984 Nov 16 1222:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1984-H405	2446021.02	1984 Nov 16 1230:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1984-H406	2446021.02	1984 Nov 16 1235:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1984-H407	2446021.02	1984 Nov 16 1245:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1984-H408	2446021.06	1984 Nov 16 1350:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1984-H409	2446024.13	1984 Nov 20 1256:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1984-H410	2446025.04	1984 Nov 20 1259:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1984-H411	2446025.29	1984 Nov 20 2000:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1984-H412	2446025.33	1984 Nov 21 1344:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1984-H413	2446026.07	1984 Nov 21 1644:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1984-H414	2446026.20	1984 Nov 21 2300:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1984-H415	2446026.46	1984 Nov 28 2000:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1984-H416	2446031.33	1984 Nov 28 1445:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1984-H417	2446033.11	1984 Nov 28 2121:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1984-H418	2446033.59	1984 Nov 28 2247:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1984-H419	2446033.46	1984 Nov 29 1530:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1984-H420	2446034.15	1984 Nov 29 1530:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1984-H421	2446034.19	1984 Nov 29 1630:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1984-H422	2446035.25	1984 Nov 30 1800:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1984-H423	2446038.07	1984 Dec 1 1344:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1984-H424	2446039.31	1984 Dec 4 1327:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1984-H425	2446039.36	1984 Dec 4 2045:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1984-H426	2446039.36	1984 Dec 4 2100:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1984-H427	2446040.04	1984 Dec 4 2214:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1984-H428	2446040.12	1984 Dec 5 1454:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1984-H429	2446045.15	1984 Dec 5 2127:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1984-H430	2446045.15	1984 Dec 10 1810:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1984-H431	2446045.20	1984 Dec 10 1810:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1984-H432	2446045.20	1984 Dec 10 2009:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1984-H433	2446046.10	1984 Dec 11 1541:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1984-H434	2446046.10	1984 Dec 12 1541:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1984-H435	2446047.19	1984 Dec 12 1630:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1984-H436	2446047.49	1984 Dec 12 1944:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1984-H437	2446049.07	1984 Dec 14 1344:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1984-H438	2446049.40	1984 Dec 14 2133:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1984-H439	2446049.40	1984 Dec 15 2149:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1984-H440	2446050.41	1984 Dec 15 2149:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1984-H441	2446050.40	1984 Dec 15 2345:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1984-H442	2446050.40	1984 Dec 17 1859:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1984-H443	2446052.29	1984 Dec 18 2045:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1984-H444	2446053.36	1984 Dec 18 2100:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1984-H445	2446053.36	1984 Dec 19 1306:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1984-H446	2446054.05	1984 Dec 19 1430:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1984-H447	2446054.10	1984 Dec 19 1430:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1984-H448	2446054.45	1984 Dec 19 2130:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1984-H449	2446056.35	1984 Dec 21 2030:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1984-H450	2446059.04	1984 Dec 24 1256:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1984-H451	2446059.04	1984 Dec 24 1257:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1984-H452	2446059.35	1984 Dec 24 2030:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1984-H453	2446059.35	1984 Dec 31 2030:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1984-H454	2446068.06	1985 Jan 2 1330:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1984-H455	2446068.07	1985 Jan 2 1344:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1984-H456	2446069.23	1985 Jan 2 1730:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1984-H457	2446069.15	1985 Jan 3 1531:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1984-H458	2446074.06	1985 Jan 8 1630:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1984-H459	2446075.19	1985 Jan 9 1630:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1984-H460	2446076.10	1985 Jan 10 1430:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1984-H461	2446076.16	1985 Jan 10 1556:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1984-H462	2446076.35	1985 Jan 10 2030:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1984-H463	2446081.03	1985 Jan 15 1243:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1984-H464	2446081.15	1985 Jan 15 1530:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1984-H465	2446082.25	1985 Jan 16 1758:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1984-H466	2446082.35	1985 Jan 16 2030:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1984-H467	2446082.49	1985 Jan 17 1344:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1984-H468	2446083.07	1985 Jan 17 1344:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1984-H469	2446084.20	1985 Jan 18 1644:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1984-H470	2446084.39	1985 Jan 18 2124:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1984-H471	2446087.03	1985 Jan 21 1248:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1984-H472	2446087.35	1985 Jan 21 2021:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Launch_e	Agency	Launch_Code	Group	Category	LT_Cite	Cite	Notes
1985-W22	2446087.35	1985 Jan 21 2030:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1985-W24	2446089.19	1985 Jan 23 1630:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1985-T01	2446090.08	1985 Jan 24 1357:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1985-W25	2446090.08	1985 Jan 24 1400:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1985-W26	2446090.10	1985 Jan 24 1426:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1985-T02	2446090.37	1985 Jan 24 2049:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1985-A01	2446090.39	1985 Jan 24 2120:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1985-W27	2446092.08	1985 Jan 26 1400:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1985-W28	2446092.08	1985 Jan 26 1400:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1985-W29	2446092.09	1985 Jan 26 1403:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1985-T03	2446093.17	1985 Jan 27 1607:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1985-W30	2446093.19	1985 Jan 27 1631:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1985-W31	2446093.35	1985 Jan 27 2030:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1985-T04	2446093.39	1985 Jan 27 2122:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1985-W32	2446093.39	1985 Jan 27 2123:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1985-W33	2446093.40	1985 Jan 27 2130:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1985-W34	2446093.41	1985 Jan 27 2151:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1985-W35	2446093.43	1985 Jan 27 2214:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1985-W36	2446093.43	1985 Jan 27 2214:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1985-W37	2446093.44	1985 Jan 27 2250:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1985-T05	2446093.47	1985 Jan 27 2315:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1985-W38	2446093.53	1985 Jan 29 2000:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1985-W39	2446096.04	1985 Jan 30 1259:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1985-W40	2446096.31	1985 Jan 30 1930:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1985-W41	2446102.10	1985 Feb 5 1430:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1985-W42	2446102.52	1985 Feb 5 1430:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1985-W45	2446104.03	1985 Feb 7 1347:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1985-W46	2446104.07	1985 Feb 7 1344:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1985-W47	2446104.78	1985 Feb 8 0640:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1985-W48	2446104.82	1985 Feb 8 0744:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1985-W49	2446104.87	1985 Feb 8 0649:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1985-W50	2446105.36	1985 Feb 8 2033:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1985-W51	2446105.39	1985 Feb 8 2125:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1985-W52	2446105.41	1985 Feb 8 2151:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1985-W53	2446105.41	1985 Feb 11 2100:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1985-W54	2446105.41	1985 Feb 11 2100:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1985-W55	2446108.52	1985 Feb 12 0032:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1985-W56	2446110.04	1985 Feb 13 1254:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1985-W57	2446110.08	1985 Feb 13 1354:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1985-W58	2446110.36	1985 Feb 13 2045:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1985-W59	2446111.34	1985 Feb 14 2044:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1985-W60	2446111.37	1985 Feb 14 2064:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1985-W61	2446112.38	1985 Feb 15 2030:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1985-W62	2446115.92	1985 Feb 15 2030:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1985-W63	2446115.92	1985 Feb 18 1242:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1985-W64	2446116.98	1985 Feb 19 1314:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1985-W65	2446116.98	1985 Feb 20 2100:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1985-W66	2446117.42	1985 Feb 20 1639:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1985-W67	2446119.32	1985 Feb 25 2000:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1985-W68	2446122.32	1985 Feb 27 1344:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1985-W71	2446124.07	1985 Feb 27 1530:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1985-W72	2446124.19	1985 Feb 27 1530:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1985-W73	2446125.38	1985 Feb 28 2100:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1985-W74	2446132.38	1985 Mar 7 2100:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1985-W75	2446133.35	1985 Mar 8 2030:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1985-W76	2446136.91	1985 Mar 11 1700:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1985-W77	2446136.97	1985 Mar 11 1927:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1985-W78	2446137.35	1985 Mar 12 2030:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1985-W79	2446138.15	1985 Mar 13 1530:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1985-W81	2446140.36	1985 Mar 15 2040:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1985-W82	2446144.33	1985 Mar 19 2000:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1985-W83	2446145.15	1985 Mar 20 1530:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1985-W84	2446145.19	1985 Mar 20 1630:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1985-W85	2446146.36	1985 Mar 21 2044:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1985-W86	2446151.19	1985 Mar 26 1630:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1985-W87	2446151.36	1985 Mar 26 2040:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1985-W88	2446151.38	1985 Mar 28 1530:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1985-W90	2446153.15	1985 Mar 29 0045:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1985-W91	2446153.13	1985 Mar 29 0045:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1985-W92	2446159.15	1985 Apr 3 1630:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1985-W93	2446159.19	1985 Apr 3 1630:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1985-W94	2446164.36	1985 Apr 8 2040:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1985-W95	2446165.23	1985 Apr 9 1730:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1985-W96	2446166.06	1985 Apr 10 1330:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1985-W100	2446166.15	1985 Apr 10 1530:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1985-W08	2446168.08	1985 Apr 12 1358:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1985-W09	2446168.11	1985 Apr 12 1443:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1985-H101	2446168.12	1985 Apr 12 1454:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1985-H102	2446168.14	1985 Apr 12 1520:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1985-H103	2446168.17	1985 Apr 12 1559:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1985-H104	2446170.08	1985 Apr 14 1358:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1985-H105	2446170.09	1985 Apr 14 1408:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1985-H106	2446170.09	1985 Apr 14 1413:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1985-H107	2446172.00	1985 Apr 16 1207:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1985-H108	2446172.01	1985 Apr 16 1217:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1985-H109	2446172.09	1985 Apr 16 1413:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1985-H111	2446173.38	1985 Apr 17 2100:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Launch_e	Agency	Launch_Code	Group	Category	LT_Cite	Cite	Notes
1985-H112	2446174.01	1985 Apr 18 12:12:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1985-H113	2446174.01	1985 Apr 18 12:19:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1985-H114	2446174.03	1985 Apr 18 12:46:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1985-Y110	2446174.76	1985 Apr 19 06:20:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1985-H115	2446174.78	1985 Apr 19 06:45:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1985-Y112	2446175.07	1985 Apr 19 13:47:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1985-H116	2446175.08	1985 Apr 19 13:53:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1985-H117	2446175.08	1985 Apr 19 13:53:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1985-H118	2446175.08	1985 Apr 19 14:00:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1985-H119	2446175.08	1985 Apr 19 14:01:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1985-H120	2446175.09	1985 Apr 19 14:12:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1985-H121	2446175.11	1985 Apr 19 14:37:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1985-Y113	2446175.12	1985 Apr 19 15:00:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1985-H122	2446175.17	1985 Apr 19 15:59:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1985-H123	2446175.35	1985 Apr 22 20:50:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1985-H124	2446178.35	1985 Apr 24 16:40:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1985-H125	2446180.19	1985 Apr 27 15:54:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1985-H126	2446183.16	1985 Apr 27 16:02:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1985-H127	2446185.17	1985 Apr 29 16:22:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1985-H128	2446185.20	1985 Apr 29 16:52:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1985-H129	2446185.21	1985 Apr 29 17:00:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1985-H130	2446185.23	1985 Apr 29 17:30:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1985-H131	2446185.24	1985 Apr 29 17:36:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1985-H132	2446185.31	1985 Apr 29 19:30:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1985-H133	2446185.34	1985 Apr 29 20:03:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1985-H134	2446187.17	1985 May 1 16:06:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1985-H135	2446187.17	1985 May 1 16:07:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1985-H136	2446189.16	1985 May 3 15:59:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1985-H137	2446189.17	1985 May 3 15:59:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1985-H138	2446189.17	1985 May 3 16:06:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1985-H139	2446189.19	1985 May 3 16:29:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1985-H140	2446191.17	1985 May 5 15:57:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1985-H141	2446191.17	1985 May 5 15:59:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1985-H142	2446191.17	1985 May 5 16:06:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1985-H143	2446191.17	1985 May 5 16:06:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1985-H144	2446191.52	1985 May 6 10:06:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1985-H145	2446192.12	1985 May 6 10:42:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1985-H146	2446192.17	1985 May 6 16:10:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1985-H147	2446192.18	1985 May 6 16:10:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1985-H148	2446192.19	1985 May 6 15:24:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1985-H149	2446192.22	1985 May 6 17:21:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1985-H150	2446192.24	1985 May 6 17:26:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1985-H151	2446195.07	1985 May 8 17:00:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1985-H152	2446201.17	1985 May 15 15:41:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1985-H153	2446201.17	1985 May 15 15:41:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1985-H154	2446201.17	1985 May 15 15:41:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1985-H155	2446201.31	1985 May 15 15:41:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1985-H156	2446201.31	1985 May 15 15:41:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1985-H157	2446202.31	1985 May 16 17:00:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1985-H158	2446202.34	1985 May 16 20:21:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1985-H159	2446202.34	1985 May 16 20:21:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1985-H160	2446205.90	1985 May 20 12:45:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1985-H161	2446206.93	1985 May 20 12:45:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1985-H162	2446208.16	1985 May 22 15:45:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1985-H163	2446208.22	1985 May 22 17:19:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1985-H164	2446208.31	1985 May 22 19:30:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1985-H165	2446210.52	1985 May 25 03:30:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1985-H166	2446210.52	1985 May 25 03:30:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1985-H167	2446214.16	1985 May 28 15:44:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1985-H168	2446215.11	1985 May 29 14:45:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1985-H169	2446215.21	1985 May 29 17:00:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1985-H170	2446216.14	1985 May 30 15:14:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1985-H171	2446220.52	1985 Jun 4 03:33:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1985-H172	2446221.10	1985 Jun 4 14:30:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1985-H173	2446222.30	1985 Jun 5 19:14:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1985-H174	2446222.31	1985 Jun 5 19:30:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1985-H175	2446226.93	1985 Jun 10 10:25:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1985-H176	2446226.94	1985 Jun 10 10:30:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1985-H177	2446228.21	1985 Jun 11 17:00:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1985-H178	2446229.33	1985 Jun 12 20:00:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1985-H179	2446233.98	1985 Jun 17 11:33:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1985-H180	2446234.02	1985 Jun 17 12:33:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1985-H181	2446234.03	1985 Jun 17 12:42:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1985-H182	2446234.03	1985 Jun 17 12:45:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1985-H183	2446234.06	1985 Jun 17 13:32:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1985-H184	2446234.10	1985 Jun 17 14:30:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1985-H185	2446234.77	1985 Jun 18 06:30:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1985-H186	2446235.62	1985 Jun 18 09:00:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1985-H187	2446236.21	1985 Jun 19 17:00:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1985-H188	2446236.31	1985 Jun 19 19:30:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1985-H189	2446241.05	1985 Jun 24 13:08:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1985-H190	2446241.05	1985 Jun 24 13:11:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1985-H191	2446241.05	1985 Jun 24 13:15:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1985-H192	2446241.07	1985 Jun 24 14:06:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1985-H193	2446241.09	1985 Jun 24 14:12:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1985-H194	2446241.09	1985 Jun 24 14:12:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1985-H195	2446241.09	1985 Jun 24 14:12:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Launch_e	Agency	Launch_Code	Group	Category	LT_Cite	Cite	Notes
1985-W196	2446241.11	1985 Jun 24 1445:00	Rocketsonde	-	-	0.000	HRH	SS	-	Metro	DSI-5850	-	-
1985-W197	2446241.17	1985 Jun 24 1559:59	Rocketsonde	-	-	0.000	HRH	SS	-	Metro	DSI-5850	-	-
1985-W199	2446250.15	1985 Jul 3 1530:00	Rocketsonde	-	-	0.000	HRH	SS	-	Metro	DSI-5850	-	-
1985-W202	2446255.19	1985 Jul 6 1630:00	Rocketsonde	-	-	0.000	HRH	SS	-	Metro	DSI-5850	-	-
1985-W203	2446256.62	1985 Jul 10 0258:00	Rocketsonde	-	-	0.000	HRH	SS	-	Metro	DSI-5850	-	-
1985-W205	2446257.34	1985 Jul 10 2003:00	Rocketsonde	-	-	0.000	HRH	SS	-	Metro	DSI-5850	-	-
1985-W207	2446258.10	1985 Jul 11 1430:00	Rocketsonde	-	-	0.000	HRH	SS	-	Metro	DSI-5850	-	-
1985-W208	2446259.35	1985 Jul 12 2030:00	Rocketsonde	-	-	0.000	HRH	SS	-	Metro	DSI-5850	-	-
1985-W210	2446263.31	1985 Jul 16 1930:00	Rocketsonde	-	-	0.000	HRH	SS	-	Metro	DSI-5850	-	-
1985-W211	2446271.31	1985 Jul 24 1930:00	Rocketsonde	-	-	0.000	HRH	SS	-	Metro	DSI-5850	-	-
1985-W212	2446273.10	1985 Jul 26 1430:00	Rocketsonde	-	-	0.000	HRH	SS	-	Metro	DSI-5850	-	-
1985-W213	2446276.39	1985 Jul 29 2123:59	Rocketsonde	-	-	0.000	HRH	SS	-	Metro	DSI-5850	-	-
1985-W214	2446276.41	1985 Jul 29 2152:00	Rocketsonde	-	-	0.000	HRH	SS	-	Metro	DSI-5850	-	-
1985-W45	2446276.46	1985 Jul 29 2300:00	Rocketsonde	-	-	0.000	HRH	SS	-	Metro	DSI-5850	-	-
1985-W215	2446276.50	1985 Jul 30 0000:00	Rocketsonde	-	-	0.000	HRH	SS	-	Metro	DSI-5850	-	-
1985-W217	2446277.21	1985 Jul 30 1700:00	Rocketsonde	-	-	0.000	HRH	SS	-	Metro	DSI-5850	-	-
1985-W168	2446312.05	1985 Sep 3 1314:59	Rocketsonde	-	-	0.000	HRH	SS	-	Metro	DSI-5850	-	-
1985-W169	2446312.06	1985 Sep 3 1321:59	Rocketsonde	-	-	0.000	HRH	SS	-	Metro	DSI-5850	-	-
1985-W228	2446312.07	1985 Sep 3 1324:59	Rocketsonde	-	-	0.000	HRH	SS	-	Metro	DSI-5850	-	-
1985-W229	2446312.07	1985 Sep 3 1336:59	Rocketsonde	-	-	0.000	HRH	SS	-	Metro	DSI-5850	-	-
1985-W230	2446312.08	1985 Sep 3 1354:59	Rocketsonde	-	-	0.000	HRH	SS	-	Metro	DSI-5850	-	-
1985-W231	2446312.10	1985 Sep 3 1418:00	Rocketsonde	-	-	0.000	HRH	SS	-	Metro	DSI-5850	-	-
1985-W235	2446313.31	1985 Sep 4 1354:59	Rocketsonde	-	-	0.000	HRH	SS	-	Metro	DSI-5850	-	-
1985-W241	2446321.00	1985 Sep 12 1155:00	Rocketsonde	-	-	0.000	HRH	SS	-	Metro	DSI-5850	-	-
1985-W242	2446322.00	1985 Sep 13 1206:00	Rocketsonde	-	-	0.000	HRH	SS	-	Metro	DSI-5850	-	-
1985-W243	2446322.21	1985 Sep 13 1706:00	Rocketsonde	-	-	0.000	HRH	SS	-	Metro	DSI-5850	-	-
1985-W244	2446322.33	1985 Sep 13 1957:59	Rocketsonde	-	-	0.000	HRH	SS	-	Metro	DSI-5850	-	-
1985-W245	2446322.44	1985 Sep 13 2236:59	Rocketsonde	-	-	0.000	HRH	SS	-	Metro	DSI-5850	-	-
1985-W246	2446327.31	1985 Sep 18 1950:00	Rocketsonde	-	-	0.000	HRH	SS	-	Metro	DSI-5850	-	-
1985-W253	2446332.94	1985 Sep 23 2015:59	Rocketsonde	-	-	0.000	HRH	SS	-	Metro	DSI-5850	-	-
1985-W254	2446334.21	1985 Sep 25 1700:00	Rocketsonde	-	-	0.000	HRH	SS	-	Metro	DSI-5850	-	-
1985-W255	2446334.35	1985 Sep 25 2030:00	Rocketsonde	-	-	0.000	HRH	SS	-	Metro	DSI-5850	-	-
1985-W256	2446340.21	1985 Oct 1 1700:00	Rocketsonde	-	-	0.000	HRH	SS	-	Metro	DSI-5850	-	-
1985-W169	2446342.18	1985 Oct 3 1615:59	Rocketsonde	-	-	0.000	HRH	SS	-	Metro	DSI-5850	-	-
1985-W260	2446342.22	1985 Oct 3 1715:59	Rocketsonde	-	-	0.000	HRH	SS	-	Metro	DSI-5850	-	-
1985-W191	2446347.63	1985 Oct 8 0300:59	Rocketsonde	-	-	0.000	HRH	SS	-	Metro	DSI-5850	-	-
1985-W192	2446347.64	1985 Oct 8 0325:59	Rocketsonde	-	-	0.000	HRH	SS	-	Metro	DSI-5850	-	-
1985-W193	2446347.67	1985 Oct 8 0358:59	Rocketsonde	-	-	0.000	HRH	SS	-	Metro	DSI-5850	-	-
1985-W261	2446347.69	1985 Oct 8 0435:59	Rocketsonde	-	-	0.000	HRH	SS	-	Metro	DSI-5850	-	-
1985-W262	2446348.24	1985 Oct 8 1700:00	Rocketsonde	-	-	0.000	HRH	SS	-	Metro	DSI-5850	-	-
1985-W264	2446350.95	1985 Oct 9 1700:00	Rocketsonde	-	-	0.000	HRH	SS	-	Metro	DSI-5850	-	-
1985-W267	2446355.21	1985 Oct 16 1700:00	Rocketsonde	-	-	0.000	HRH	SS	-	Metro	DSI-5850	-	-
1985-W271	2446356.32	1985 Oct 25 1111:59	Rocketsonde	-	-	0.000	HRH	SS	-	Metro	DSI-5850	-	-
1985-W272	2446357.58	1985 Oct 25 1500:00	Rocketsonde	-	-	0.000	HRH	SS	-	Metro	DSI-5850	-	-
1985-W273	2446357.15	1985 Oct 26 1500:00	Rocketsonde	-	-	0.000	HRH	SS	-	Metro	DSI-5850	-	-
1985-W278	2446359.21	1985 Oct 30 1701:00	Rocketsonde	-	-	0.000	HRH	SS	-	Metro	DSI-5850	-	-
1985-W279	2446359.21	1985 Oct 30 1721:00	Rocketsonde	-	-	0.000	HRH	SS	-	Metro	DSI-5850	-	-
1985-W106	2446359.25	1985 Oct 30 1821:00	Rocketsonde	-	-	0.000	HRH	SS	-	Metro	DSI-5850	-	-
1985-W281	2446359.52	1985 Oct 30 1944:59	Rocketsonde	-	-	0.000	HRH	SS	-	Metro	DSI-5850	-	-
1985-W283	2446359.87	1985 Oct 31 0359:59	Rocketsonde	-	-	0.000	HRH	SS	-	Metro	DSI-5850	-	-
1985-W288	2446376.24	1985 Nov 6 1740:00	Rocketsonde	-	-	0.000	HRH	SS	-	Metro	DSI-5850	-	-
1985-W289	2446376.24	1985 Nov 6 1744:00	Rocketsonde	-	-	0.000	HRH	SS	-	Metro	DSI-5850	-	-
1985-W111	2446376.24	1985 Nov 6 1744:00	Rocketsonde	-	-	0.000	HRH	SS	-	Metro	DSI-5850	-	-
1985-W290	2446376.24	1985 Nov 6 1754:00	Rocketsonde	-	-	0.000	HRH	SS	-	Metro	DSI-5850	-	-
1985-W291	2446376.25	1985 Nov 6 1810:00	Rocketsonde	-	-	0.000	HRH	SS	-	Metro	DSI-5850	-	-
1985-W292	2446376.26	1985 Nov 6 1840:00	Rocketsonde	-	-	0.000	HRH	SS	-	Metro	DSI-5850	-	-
1985-W293	2446376.28	1985 Nov 6 1840:00	Rocketsonde	-	-	0.000	HRH	SS	-	Metro	DSI-5850	-	-
1985-W11	2446376.38	1985 Nov 6 2100:00	Rocketsonde	-	-	0.000	HRH	SS	-	Metro	DSI-5850	-	-
1985-W13	2446385.29	1985 Nov 15 1859:59	Rocketsonde	-	-	0.000	HRH	SS	-	Metro	DSI-5850	-	-
1985-W302	2446395.12	1985 Nov 25 1500:00	Rocketsonde	-	-	0.000	HRH	SS	-	Metro	DSI-5850	-	-
1985-W303	2446396.52	1985 Nov 27 0030:00	Rocketsonde	-	-	0.000	HRH	SS	-	Metro	DSI-5850	-	-
1985-W304	2446396.57	1985 Nov 27 0137:59	Rocketsonde	-	-	0.000	HRH	SS	-	Metro	DSI-5850	-	-
1985-W305	2446396.59	1985 Nov 27 0210:00	Rocketsonde	-	-	0.000	HRH	SS	-	Metro	DSI-5850	-	-
1985-W307	2446397.35	1985 Nov 27 2030:00	Rocketsonde	-	-	0.000	HRH	SS	-	Metro	DSI-5850	-	-
1985-W312	2446403.40	1985 Dec 3 2132:00	Rocketsonde	-	-	0.000	HRH	SS	-	Metro	DSI-5850	-	-
1985-W313	2446403.40	1985 Dec 3 2133:00	Rocketsonde	-	-	0.000	HRH	SS	-	Metro	DSI-5850	-	-
1985-W314	2446403.40	1985 Dec 3 2133:59	Rocketsonde	-	-	0.000	HRH	SS	-	Metro	DSI-5850	-	-
1985-W315	2446403.40	1985 Dec 3 2134:59	Rocketsonde	-	-	0.000	HRH	SS	-	Metro	DSI-5850	-	-
1985-W316	2446403.40	1985 Dec 3 2135:00	Rocketsonde	-	-	0.000	HRH	SS	-	Metro	DSI-5850	-	-
1985-W317	2446403.41	1985 Dec 3 2155:00	Rocketsonde	-	-	0.000	HRH	SS	-	Metro	DSI-5850	-	-
1985-W318	2446403.44	1985 Dec 3 2233:59	Rocketsonde	-	-	0.000	HRH	SS	-	Metro	DSI-5850	-	-
1985-W319	2446404.48	1985 Dec 4 1859:59	Rocketsonde	-	-	0.000	HRH	SS	-	Metro	DSI-5850	-	-
1985-W320	2446404.29	1985 Dec 4 1859:59	Rocketsonde	-	-	0.000	HRH	SS	-	Metro	DSI-5850	-	-
1985-W116	2446404.38	1985 Dec 4 2110:00	Rocketsonde	-	-	0.000	HRH	SS	-	Metro	DSI-5850	-	-
1985-W323	2446406.15	1985 Dec 6 1530:00	Rocketsonde	-	-	0.000	HRH	SS	-	Metro	DSI-5850	-	-
1985-W325	2446409.15	1985 Dec 9 1530:00	Rocketsonde	-	-	0.000	HRH	SS	-	Metro	DSI-5850	-	-
1985-W331	2446411.38	1985 Dec 11 2110:00	Rocketsonde	-	-	0.000	HRH	SS	-	Metro	DSI-5850	-	-
1985-W333	2446413.15	1985 Dec 13 1530:00	Rocketsonde	-	-	0.000	HRH	SS	-	Metro	DSI-5850	-	-
1985-W334	2446416.09	1985 Dec 16 1403:00	Rocketsonde	-	-	0.000	HRH	SS	-	Metro	DSI-5850	-	-
1985-W335	2446416.15	1985 Dec 16 1530:00	Rocketsonde	-	-	0.000	HRH	SS	-	Metro	DSI-5850	-	-
1985-W337	2446416.46	1985 Dec 16 2300:00	Rocketsonde	-	-	0.000	HRH	SS	-	Metro	DSI-5850	-	-
1985-W340	2446417.49	1985 Dec 17 2352:00	Rocketsonde	-	-	0.000	HRH	SS	-	Metro	DSI-5850	-	-
1985-W343	2446418.35	1985 Dec 18 2025:00	Rocketsonde	-	-	0.000	HRH	SS	-	Metro	DSI-5850	-	-

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Launch_e	Agency	Launch_Code	Group	Category	LT_Cite	Cite	Notes
1985-W345	2446423.30	1985 Dec 23 1914:59	Rocketsonde	-	-	0.000	MRI	SS	-	Metro	DSI-5850	-	-
1986-A01	2446431.92	1986 Jan 1 0959:59	Rocketsonde	-	-	0.000	MRI	SS	-	Metro	DSI-5850	-	-
1986-A01	2446434.19	1986 Jan 3 1634:59	Rocketsonde	-	-	0.000	MRI	SS	-	Metro	DSI-5850	-	-
1986-A02	2446437.15	1986 Jan 6 1530:00	Rocketsonde	-	-	0.000	MRI	SS	-	Metro	DSI-5850	-	-
1986-A02	2446439.38	1986 Jan 8 2100:00	Rocketsonde	-	-	0.000	MRI	SS	-	Metro	DSI-5850	-	-
1986-A06	2446440.12	1986 Jan 9 1500:00	Rocketsonde	-	-	0.000	MRI	SS	-	Metro	DSI-5850	-	-
1986-A07	2446440.13	1986 Jan 9 1511:59	Rocketsonde	-	-	0.000	MRI	SS	-	Metro	DSI-5850	-	-
1986-A08	2446443.02	1986 Jan 12 1233:00	Rocketsonde	-	-	0.000	MRI	SS	-	Metro	DSI-5850	-	-
1986-A09	2446443.03	1986 Jan 12 1245:59	Rocketsonde	-	-	0.000	MRI	SS	-	Metro	DSI-5850	-	-
1986-A10	2446443.06	1986 Jan 12 1324:59	Rocketsonde	-	-	0.000	MRI	SS	-	Metro	DSI-5850	-	-
1986-A11	2446445.47	1986 Jan 14 2310:00	Rocketsonde	-	-	0.000	MRI	SS	-	Metro	DSI-5850	-	-
1986-A14	2446449.08	1986 Jan 18 1357:59	Rocketsonde	-	-	0.000	MRI	SS	-	Metro	DSI-5850	-	-
1986-A15	2446449.08	1986 Jan 18 1357:59	Rocketsonde	-	-	0.000	MRI	SS	-	Metro	DSI-5850	-	-
1986-A16	2446449.08	1986 Jan 18 1400:00	Rocketsonde	-	-	0.000	MRI	SS	-	Metro	DSI-5850	-	-
1986-A18	2446453.07	1986 Jan 22 1344:59	Rocketsonde	-	-	0.000	MRI	SS	-	Metro	DSI-5850	-	-
1986-A03	2446453.13	1986 Jan 24 1509:00	Rocketsonde	-	-	0.000	MRI	SS	-	Metro	DSI-5850	-	-
1986-A19	2446455.17	1986 Jan 24 1509:59	Rocketsonde	-	-	0.000	MRI	SS	-	Metro	DSI-5850	-	-
1986-A20	2446458.30	1986 Jan 27 1914:59	Rocketsonde	-	-	0.000	MRI	SS	-	Metro	DSI-5850	-	-
1986-A21	2446459.19	1986 Jan 28 1640:00	Rocketsonde	-	-	0.000	MRI	SS	-	Metro	DSI-5850	-	-
1986-A22	2446460.30	1986 Jan 29 1904:59	Rocketsonde	-	-	0.000	MRI	SS	-	Metro	DSI-5850	-	-
1986-A24	2446466.46	1986 Feb 4 2304:59	Rocketsonde	-	-	0.000	MRI	SS	-	Metro	DSI-5850	-	-
1986-A28	2446469.30	1986 Feb 7 1910:59	Rocketsonde	-	-	0.000	MRI	SS	-	Metro	DSI-5850	-	-
1986-A29	2446469.31	1986 Feb 7 1926:59	Rocketsonde	-	-	0.000	MRI	SS	-	Metro	DSI-5850	-	-
1986-A32	2446474.38	1986 Feb 12 2110:00	Rocketsonde	-	-	0.000	MRI	SS	-	Metro	DSI-5850	-	-
1986-A33	2446474.47	1986 Feb 12 2310:00	Rocketsonde	-	-	0.000	MRI	SS	-	Metro	DSI-5850	-	-
1986-A39	2446482.07	1986 Feb 20 1344:59	Rocketsonde	-	-	0.000	MRI	SS	-	Metro	DSI-5850	-	-
1986-A40	2446482.14	1986 Feb 20 1514:59	Rocketsonde	-	-	0.000	MRI	SS	-	Metro	DSI-5850	-	-
1986-A41	2446482.60	1986 Feb 21 0220:00	Rocketsonde	-	-	0.000	MRI	SS	-	Metro	DSI-5850	-	-
1986-A43	2446483.18	1986 Feb 21 1614:59	Rocketsonde	-	-	0.000	MRI	SS	-	Metro	DSI-5850	-	-
1986-A45	2446488.30	1986 Feb 26 1904:59	Rocketsonde	-	-	0.000	MRI	SS	-	Metro	DSI-5850	-	-
1986-A45	2446488.30	1986 Feb 26 1904:59	Rocketsonde	-	-	0.000	MRI	SS	-	Metro	DSI-5850	-	-
1986-A52	2446495.35	1986 Mar 5 2030:00	Rocketsonde	-	-	0.000	MRI	SS	-	Metro	DSI-5850	-	-
1986-A04	2446497.40	1986 Mar 7 2143:00	Rocketsonde	-	-	0.000	MRI	SS	-	Metro	DSI-5850	-	-
1986-A54	2446497.44	1986 Mar 7 2230:00	Rocketsonde	-	-	0.000	MRI	SS	-	Metro	DSI-5850	-	-
1986-A55	2446500.86	1986 Mar 11 0150:00	Rocketsonde	-	-	0.000	MRI	SS	-	Metro	DSI-5850	-	-
1986-A57	2446503.47	1986 Mar 13 2315:00	Rocketsonde	-	-	0.000	MRI	SS	-	Metro	DSI-5850	-	-
1986-A60	2446507.83	1986 Mar 18 0756:59	Rocketsonde	-	-	0.000	MRI	SS	-	Metro	DSI-5850	-	-
1986-A61	2446507.88	1986 Mar 18 0911:00	Rocketsonde	-	-	0.000	MRI	SS	-	Metro	DSI-5850	-	-
1986-A62	2446507.82	1986 Mar 18 0959:59	Rocketsonde	-	-	0.000	MRI	SS	-	Metro	DSI-5850	-	-
1986-A05	2446509.38	1986 Mar 19 2100:00	Rocketsonde	-	-	0.000	MRI	SS	-	Metro	DSI-5850	-	-
1986-A66	2446516.10	1986 Mar 26 1450:00	Rocketsonde	-	-	0.000	MRI	SS	-	Metro	DSI-5850	-	-
1986-A69	2446516.15	1986 Mar 26 1530:00	Rocketsonde	-	-	0.000	MRI	SS	-	Metro	DSI-5850	-	-
1986-A07	2446516.29	1986 Mar 26 1831:59	Rocketsonde	-	-	0.000	MRI	SS	-	Metro	DSI-5850	-	-
1986-A78	2446542.19	1986 Apr 21 1044:59	Rocketsonde	-	-	0.000	MRI	SS	-	Metro	DSI-5850	-	-
1986-A79	2446544.12	1986 Apr 21 1044:59	Rocketsonde	-	-	0.000	MRI	SS	-	Metro	DSI-5850	-	-
1986-A81	2446545.15	1986 Apr 24 1559:59	Rocketsonde	-	-	0.000	MRI	SS	-	Metro	DSI-5850	-	-
1986-A82	2446545.52	1986 Apr 26 0927:59	Rocketsonde	-	-	0.000	MRI	SS	-	Metro	DSI-5850	-	-
1986-A89	2446548.97	1986 Apr 28 1119:00	Rocketsonde	-	-	0.000	MRI	SS	-	Metro	DSI-5850	-	-
1986-A95	2446548.98	1986 Apr 28 1135:00	Rocketsonde	-	-	0.000	MRI	SS	-	Metro	DSI-5850	-	-
1986-A98	2446548.98	1986 Apr 28 1430:00	Rocketsonde	-	-	0.000	MRI	SS	-	Metro	DSI-5850	-	-
1986-A99	2446553.20	1986 May 7 1850:59	Rocketsonde	-	-	0.000	MRI	SS	-	Metro	DSI-5850	-	-
1986-A94	2446553.30	1986 May 8 1902:59	Rocketsonde	-	-	0.000	MRI	SS	-	Metro	DSI-5850	-	-
1986-A96	2446564.09	1986 May 9 1403:00	Rocketsonde	-	-	0.000	MRI	SS	-	Metro	DSI-5850	-	-
1986-A96	2446564.29	1986 May 13 1859:59	Rocketsonde	-	-	0.000	MRI	SS	-	Metro	DSI-5850	-	-
1986-A101	2446573.38	1986 May 21 1902:59	Rocketsonde	-	-	0.000	MRI	SS	-	Metro	DSI-5850	-	-
1986-A102	2446573.38	1986 May 21 1902:59	Rocketsonde	-	-	0.000	MRI	SS	-	Metro	DSI-5850	-	-
1986-A105	2446590.39	1986 May 29 1902:59	Rocketsonde	-	-	0.000	MRI	SS	-	Metro	DSI-5850	-	-
1986-A107	2446598.38	1986 Jun 16 2100:00	Rocketsonde	-	-	0.000	MRI	SS	-	Metro	DSI-5850	-	-
1986-A108	2446598.38	1986 Jun 17 2100:00	Rocketsonde	-	-	0.000	MRI	SS	-	Metro	DSI-5850	-	-
1986-A109	2446599.41	1986 Jun 17 2149:59	Rocketsonde	-	-	0.000	MRI	SS	-	Metro	DSI-5850	-	-
1986-A110	2446600.31	1986 Jun 19 1919:59	Rocketsonde	-	-	0.000	MRI	SS	-	Metro	DSI-5850	-	-
1986-A110	2446602.38	1986 Jun 20 2100:00	Rocketsonde	-	-	0.000	MRI	SS	-	Metro	DSI-5850	-	-
1986-A112	2446605.08	1986 Jun 23 1400:00	Rocketsonde	-	-	0.000	MRI	SS	-	Metro	DSI-5850	-	-
1986-A113	2446606.24	1986 Jun 24 1740:00	Rocketsonde	-	-	0.000	MRI	SS	-	Metro	DSI-5850	-	-
1986-A115	2446608.25	1986 Jun 26 1800:00	Rocketsonde	-	-	0.000	MRI	SS	-	Metro	DSI-5850	-	-
1986-A116	2446609.21	1986 Jun 27 1700:00	Rocketsonde	-	-	0.000	MRI	SS	-	Metro	DSI-5850	-	-
1986-A121	2446622.43	1986 Jul 10 2215:59	Rocketsonde	-	-	0.000	MRI	SS	-	Metro	DSI-5850	-	-
1986-A122	2446623.43	1986 Jul 11 2241:59	Rocketsonde	-	-	0.000	MRI	SS	-	Metro	DSI-5850	-	-
1986-A125	2446629.46	1986 Jul 17 2302:00	Rocketsonde	-	-	0.000	MRI	SS	-	Metro	DSI-5850	-	-
1986-A126	2446634.41	1986 Jul 21 2151:00	Rocketsonde	-	-	0.000	MRI	SS	-	Metro	DSI-5850	-	-
1986-A128	2446636.30	1986 Jul 24 1914:59	Rocketsonde	-	-	0.000	MRI	SS	-	Metro	DSI-5850	-	-
1986-A129	2446637.67	1986 Jul 26 0359:59	Rocketsonde	-	-	0.000	MRI	SS	-	Metro	DSI-5850	-	-
1986-A130	2446640.43	1986 Jul 26 0442:59	Rocketsonde	-	-	0.000	MRI	SS	-	Metro	DSI-5850	-	-
1986-A132	2446640.45	1986 Jul 28 2212:59	Rocketsonde	-	-	0.000	MRI	SS	-	Metro	DSI-5850	-	-
1986-A133	2446644.65	1986 Aug 2 0330:00	Rocketsonde	-	-	0.000	MRI	SS	-	Metro	DSI-5850	-	-
1986-A134	2446644.67	1986 Aug 2 0359:59	Rocketsonde	-	-	0.000	MRI	SS	-	Metro	DSI-5850	-	-
1986-A135	2446648.44	1986 Aug 5 2227:59	Rocketsonde	-	-	0.000	MRI	SS	-	Metro	DSI-5850	-	-
1986-A138	2446656.23	1986 Aug 13 1734:00	Rocketsonde	-	-	0.000	MRI	SS	-	Metro	DSI-5850	-	-
1986-A139	2446658.30	1986 Aug 15 1909:59	Rocketsonde	-	-	0.000	MRI	SS	-	Metro	DSI-5850	-	-
1986-A141	2446664.25	1986 Aug 21 1801:59	Rocketsonde	-	-	0.000	MRI	SS	-	Metro	DSI-5850	-	-
1986-A142	2446664.95	1986 Aug 22 1044:59	Rocketsonde	-	-	0.000	MRI	SS	-	Metro	DSI-5850	-	-
1986-A143	2446665.06	1986 Aug 22 1327:59	Rocketsonde	-	-	0.000	MRI	SS	-	Metro	DSI-5850	-	-
1986-A144	2446665.17	1986 Aug 22 1610:59	Rocketsonde	-	-	0.000	MRI	SS	-	Metro	DSI-5850	-	-

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Launch	Agency	Launch_Code	Group	Category	LT_Cite	Cite	Notes
						DrPay							
1986-1145	2446666.27	1986 Aug 23 1825:59	Rocketsonde	-	-	0.000	MRI	SS	-	Metro	DSI-5850	-	-
1986-1146	2446666.34	1986 Aug 23 2011:00	Rocketsonde	-	-	0.000	MRI	SS	-	Metro	DSI-5850	-	-
1986-1147	2446668.42	1986 Aug 25 2206:00	Rocketsonde	-	-	0.000	MRI	SS	-	Metro	DSI-5850	-	-
1986-1149	2446671.09	1986 Aug 28 1404:59	Rocketsonde	-	-	0.000	MRI	SS	-	Metro	DSI-5850	-	-
1986-1150	2446674.30	1986 Aug 31 1914:59	Rocketsonde	-	-	0.000	MRI	SS	-	Metro	DSI-5850	-	-
1986-1151	2446674.39	1986 Aug 31 2114:59	Rocketsonde	-	-	0.000	MRI	SS	-	Metro	DSI-5850	-	-
1986-1152	2446678.21	1986 Sep 4 1700:00	Rocketsonde	-	-	0.000	MRI	SS	-	Metro	DSI-5850	-	-
1986-1156	2446686.22	1986 Sep 12 1710:00	Rocketsonde	-	-	0.000	MRI	SS	-	Metro	DSI-5850	-	-
1986-1158	2446686.44	1986 Sep 12 2230:59	Rocketsonde	-	-	0.000	MRI	SS	-	Metro	DSI-5850	-	-
1986-1160	2446692.08	1986 Sep 18 1400:00	Rocketsonde	-	-	0.000	MRI	SS	-	Metro	DSI-5850	-	-
1986-1161	2446693.87	1986 Sep 20 0854:00	Rocketsonde	-	-	0.000	MRI	SS	-	Metro	DSI-5850	-	-
1986-1161	2446693.95	1986 Sep 20 1043:59	Rocketsonde	-	-	0.000	MRI	SS	-	Metro	DSI-5850	-	-
1986-1164	2446696.43	1986 Sep 22 2223:59	Rocketsonde	-	-	0.000	MRI	SS	-	Metro	DSI-5850	-	-
1986-1165	2446696.44	1986 Sep 22 2230:00	Rocketsonde	-	-	0.000	MRI	SS	-	Metro	DSI-5850	-	-
1986-1168	2446697.86	1986 Sep 24 0845:00	Rocketsonde	-	-	0.000	MRI	SS	-	Metro	DSI-5850	-	-
1986-1169	2446698.06	1986 Sep 24 1350:00	Rocketsonde	-	-	0.000	MRI	SS	-	Metro	DSI-5850	-	-
1986-1171	2446699.09	1986 Sep 25 1415:00	Rocketsonde	-	-	0.000	MRI	SS	-	Metro	DSI-5850	-	-
1986-1173	2446703.81	1986 Sep 30 0729:00	Rocketsonde	-	-	0.000	MRI	SS	-	Metro	DSI-5850	-	-
1986-1174	2446703.91	1986 Sep 30 0951:00	Rocketsonde	-	-	0.000	MRI	SS	-	Metro	DSI-5850	-	-
1986-1175	2446703.96	1986 Sep 30 1057:59	Rocketsonde	-	-	0.000	MRI	SS	-	Metro	DSI-5850	-	-
1986-1176	2446704.02	1986 Sep 30 1253:00	Rocketsonde	-	-	0.000	MRI	SS	-	Metro	DSI-5850	-	-
1986-1178	2446704.18	1986 Sep 30 1619:59	Rocketsonde	-	-	0.000	MRI	SS	-	Metro	DSI-5850	-	-
1986-1178	2446704.27	1986 Sep 30 1633:00	Rocketsonde	-	-	0.000	MRI	SS	-	Metro	DSI-5850	-	-
1986-1179	2446705.29	1986 Oct 1 1858:59	Rocketsonde	-	-	0.000	MRI	SS	-	Metro	DSI-5850	-	-
1986-1180	2446707.20	1986 Oct 3 1641:00	Rocketsonde	-	-	0.000	MRI	SS	-	Metro	DSI-5850	-	-
1986-1181	2446712.05	1986 Oct 8 1245:00	Rocketsonde	-	-	0.000	MRI	SS	-	Metro	DSI-5850	-	-
1986-1182	2446713.15	1986 Oct 9 2213:59	Rocketsonde	-	-	0.000	MRI	SS	-	Metro	DSI-5850	-	-
1986-1183	2446714.25	1986 Oct 10 1804:59	Rocketsonde	-	-	0.000	MRI	SS	-	Metro	DSI-5850	-	-
1986-1184	2446716.20	1986 Oct 14 1643:59	Rocketsonde	-	-	0.000	MRI	SS	-	Metro	DSI-5850	-	-
1986-1185	2446716.42	1986 Oct 14 2159:59	Rocketsonde	-	-	0.000	MRI	SS	-	Metro	DSI-5850	-	-
1986-1187	2446720.14	1986 Oct 16 1514:59	Rocketsonde	-	-	0.000	MRI	SS	-	Metro	DSI-5850	-	-
1986-1188	2446721.12	1986 Oct 17 1500:00	Rocketsonde	-	-	0.000	MRI	SS	-	Metro	DSI-5850	-	-
1986-1189	2446725.19	1986 Oct 21 1640:00	Rocketsonde	-	-	0.000	MRI	SS	-	Metro	DSI-5850	-	-
1986-1190	2446725.42	1986 Oct 21 2207:59	Rocketsonde	-	-	0.000	MRI	SS	-	Metro	DSI-5850	-	-
1986-110	2446726.08	1986 Oct 22 1349:59	Rocketsonde	-	-	0.000	MRI	SS	-	Metro	DSI-5850	-	-
1986-1191	2446726.11	1986 Oct 22 1445:00	Rocketsonde	-	-	0.000	MRI	SS	-	Metro	DSI-5850	-	-
1986-1192	2446726.29	1986 Oct 22 1900:59	Rocketsonde	-	-	0.000	MRI	SS	-	Metro	DSI-5850	-	-
1986-1194	2446732.94	1986 Oct 28 2004:59	Rocketsonde	-	-	0.000	MRI	SS	-	Metro	DSI-5850	-	-
1986-1196	2446733.12	1986 Oct 29 1500:00	Rocketsonde	-	-	0.000	MRI	SS	-	Metro	DSI-5850	-	-
1986-1197	2446734.05	1986 Oct 29 1500:00	Rocketsonde	-	-	0.000	MRI	SS	-	Metro	DSI-5850	-	-
1986-1198	2446740.04	1986 Nov 5 1301:59	Rocketsonde	-	-	0.000	MRI	SS	-	Metro	DSI-5850	-	-
1986-1199	2446740.11	1986 Nov 5 1445:00	Rocketsonde	-	-	0.000	MRI	SS	-	Metro	DSI-5850	-	-
1986-1200	2446741.19	1986 Nov 9 1637:59	Rocketsonde	-	-	0.000	MRI	SS	-	Metro	DSI-5850	-	-
1986-1201	2446742.29	1986 Nov 9 1659:59	Rocketsonde	-	-	0.000	MRI	SS	-	Metro	DSI-5850	-	-
1986-1203	2446747.07	1986 Nov 12 1346:59	Rocketsonde	-	-	0.000	MRI	SS	-	Metro	DSI-5850	-	-
1986-1204	2446747.20	1986 Nov 12 1446:59	Rocketsonde	-	-	0.000	MRI	SS	-	Metro	DSI-5850	-	-
1986-1205	2446748.40	1986 Nov 15 0959:59	Rocketsonde	-	-	0.000	MRI	SS	-	Metro	DSI-5850	-	-
1986-110	2446753.92	1986 Nov 19 1450:00	Rocketsonde	-	-	0.000	MRI	SS	-	Metro	DSI-5850	-	-
1986-1207	2446755.92	1986 Nov 21 1007:00	Rocketsonde	-	-	0.000	MRI	SS	-	Metro	DSI-5850	-	-
1986-1208	2446755.92	1986 Nov 21 1007:00	Rocketsonde	-	-	0.000	MRI	SS	-	Metro	DSI-5850	-	-
1986-1209	2446755.94	1986 Nov 25 1514:59	Rocketsonde	-	-	0.000	MRI	SS	-	Metro	DSI-5850	-	-
1986-1210	2446763.05	1986 Nov 28 1317:00	Rocketsonde	-	-	0.000	MRI	SS	-	Metro	DSI-5850	-	-
1986-1211	2446766.12	1986 Dec 1 1600:00	Rocketsonde	-	-	0.000	MRI	SS	-	Metro	DSI-5850	-	-
1986-1212	2446766.30	1986 Dec 1 1904:59	Rocketsonde	-	-	0.000	MRI	SS	-	Metro	DSI-5850	-	-
1986-1214	2446768.12	1986 Dec 3 1457:00	Rocketsonde	-	-	0.000	MRI	SS	-	Metro	DSI-5850	-	-
1986-1215	2446768.12	1986 Dec 3 1500:00	Rocketsonde	-	-	0.000	MRI	SS	-	Metro	DSI-5850	-	-
1986-1223	2446769.62	1986 Dec 8 0255:00	Rocketsonde	-	-	0.000	MRI	SS	-	Metro	DSI-5850	-	-
1986-1216	2446770.35	1986 Dec 8 2254:59	Rocketsonde	-	-	0.000	MRI	SS	-	Metro	DSI-5850	-	-
1986-1217	2446774.41	1986 Dec 9 2153:00	Rocketsonde	-	-	0.000	MRI	SS	-	Metro	DSI-5850	-	-
1986-1219	2446777.31	1986 Dec 12 1924:59	Rocketsonde	-	-	0.000	MRI	SS	-	Metro	DSI-5850	-	-
1986-1220	2446780.05	1986 Dec 15 1307:00	Rocketsonde	-	-	0.000	MRI	SS	-	Metro	DSI-5850	-	-
1986-1221	2446781.20	1986 Dec 16 1631:59	Rocketsonde	-	-	0.000	MRI	SS	-	Metro	DSI-5850	-	-
1986-1224	2446782.17	1986 Dec 17 1607:59	Rocketsonde	-	-	0.000	MRI	SS	-	Metro	DSI-5850	-	-
1986-1223	2446787.31	1986 Dec 22 1930:59	Rocketsonde	-	-	0.000	MRI	SS	-	Metro	DSI-5850	-	-
1986-1224	2446788.15	1986 Dec 23 1530:00	Rocketsonde	-	-	0.000	MRI	SS	-	Metro	DSI-5850	-	-
1986-1226	2446789.03	1986 Dec 24 1247:59	Rocketsonde	-	-	0.000	MRI	SS	-	Metro	DSI-5850	-	-
1986-1227	2446794.03	1986 Dec 29 1240:00	Rocketsonde	-	-	0.000	MRI	SS	-	Metro	DSI-5850	-	-
1987-110	2446803.03	1987 Jan 7 1248:59	Rocketsonde	-	-	0.000	MRI	SS	-	Metro	DSI-5850	-	-
1987-112	2446803.25	1987 Jan 7 1800:00	Rocketsonde	-	-	0.000	MRI	SS	-	Metro	DSI-5850	-	-
1987-115	2446804.16	1987 Jan 8 1545:00	Rocketsonde	-	-	0.000	MRI	SS	-	Metro	DSI-5850	-	-
1987-116	2446804.42	1987 Jan 8 2204:59	Rocketsonde	-	-	0.000	MRI	SS	-	Metro	DSI-5850	-	-
1987-121	2446808.26	1987 Jan 12 1814:59	Rocketsonde	-	-	0.000	MRI	SS	-	Metro	DSI-5850	-	-
1987-125	2446810.14	1987 Jan 14 1514:59	Rocketsonde	-	-	0.000	MRI	SS	-	Metro	DSI-5850	-	-
1987-126	2446810.25	1987 Jan 14 1804:59	Rocketsonde	-	-	0.000	MRI	SS	-	Metro	DSI-5850	-	-
1987-127	2446811.20	1987 Jan 15 1654:59	Rocketsonde	-	-	0.000	MRI	SS	-	Metro	DSI-5850	-	-
1987-118	2446811.25	1987 Jan 15 1753:00	Rocketsonde	-	-	0.000	MRI	SS	-	Metro	DSI-5850	-	-
1987-128	2446811.27	1987 Jan 15 1830:00	Rocketsonde	-	-	0.000	MRI	SS	-	Metro	DSI-5850	-	-
1987-120	2446812.14	1987 Jan 16 1520:00	Rocketsonde	-	-	0.000	MRI	SS	-	Metro	DSI-5850	-	-
1987-124	2446816.10	1987 Jan 20 1430:00	Rocketsonde	-	-	0.000	MRI	SS	-	Metro	DSI-5850	-	-
1987-125	2446816.15	1987 Jan 20 1530:00	Rocketsonde	-	-	0.000	MRI	SS	-	Metro	DSI-5850	-	-
1987-132	2446817.04	1987 Jan 21 1259:59	Rocketsonde	-	-	0.000	MRI	SS	-	Metro	DSI-5850	-	-
1987-133	2446817.34	1987 Jan 21 2015:00	Rocketsonde	-	-	0.000	MRI	SS	-	Metro	DSI-5850	-	-
1987-134	2446819.05	1987 Jan 23 1312:59	Rocketsonde	-	-	0.000	MRI	SS	-	Metro	DSI-5850	-	-
1987-135	2446823.88	1987 Jan 28 0900:00	Rocketsonde	-	-	0.000	MRI	SS	-	Metro	DSI-5850	-	-

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Launch_e	Agency	Launch_Code	Group	Category	LT_Cite	Cite	Notes
1987-H36	2446823.88	1987 Jan 28 0904:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1987-A03	2446824.14	1987 Jan 28 1515:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1987-H37	2446825.02	1987 Jan 29 1235:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1987-H38	2446826.16	1987 Jan 30 1547:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1987-H40	2446831.04	1987 Feb 4 1253:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1987-H43	2446832.16	1987 Feb 5 1549:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1987-H44	2446838.02	1987 Feb 11 1230:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1987-H45	2446838.16	1987 Feb 11 1545:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1987-A04	2446840.21	1987 Feb 13 1701:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1987-H46	2446840.26	1987 Feb 13 1810:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1987-H48	2446845.04	1987 Feb 18 1259:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1987-H49	2446845.23	1987 Feb 18 1730:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1987-H50	2446850.15	1987 Feb 23 1530:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1987-H53	2446854.06	1987 Feb 27 1321:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1987-H54	2446854.44	1987 Feb 27 2234:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1987-H56	2446857.34	1987 Mar 2 2011:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1987-H60	2446859.15	1987 Mar 4 1530:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1987-H61	2446860.07	1987 Mar 5 1337:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1987-H66	2446866.14	1987 Mar 11 1514:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1987-H103	2446870.88	1987 Mar 16 0906:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1987-H67	2446872.30	1987 Mar 17 1907:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1987-H70	2446873.38	1987 Mar 18 2100:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1987-H71	2446874.15	1987 Mar 19 1530:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1987-H73	2446876.14	1987 Mar 21 1517:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1987-H74	2446878.16	1987 Mar 23 1549:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1987-H75	2446879.08	1987 Mar 24 1400:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1987-H76	2446879.23	1987 Mar 24 1730:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1987-H60	2446880.17	1987 Mar 25 1607:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1987-H64	2446887.94	1987 Apr 2 1036:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1987-H65	2446887.97	1987 Apr 2 1123:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1987-H66	2446888.03	1987 Apr 2 1245:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1987-H122	2446888.10	1987 Apr 2 1430:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1987-H67	2446888.15	1987 Apr 2 1530:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1987-H69	2446892.26	1987 Apr 6 1809:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1987-H92	2446894.10	1987 Apr 6 1430:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1987-H93	2446895.10	1987 Apr 9 1430:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1987-H94	2446896.11	1987 Apr 9 1534:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1987-H96	2446901.95	1987 Apr 10 1437:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1987-H99	2446902.00	1987 Apr 16 1064:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1987-H90	2446902.02	1987 Apr 16 1155:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1987-H91	2446902.05	1987 Apr 16 1230:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1987-H102	2446903.31	1987 Apr 16 2202:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1987-H103	2446903.51	1987 Apr 17 1342:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1987-H104	2446903.69	1987 Apr 18 0535:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1987-H105	2446908.26	1987 Apr 22 1313:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1987-H107	2446908.26	1987 Apr 22 1834:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1987-H108	2446908.97	1987 Apr 23 1740:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1987-H110	2446909.24	1987 Apr 23 1749:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1987-H113	2446909.55	1987 Apr 23 1800:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1987-H111	2446909.55	1987 Apr 24 1403:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1987-H113	2446910.09	1987 Apr 24 1430:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1987-H114	2446910.10	1987 Apr 29 1430:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1987-H116	2446914.08	1987 Apr 29 1430:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1987-H118	2446915.10	1987 Apr 29 1430:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1987-H119	2446916.43	1987 Apr 30 2157:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1987-H151	2446916.43	1987 Apr 30 2157:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1987-H120	2446916.47	1987 May 4 2159:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1987-H121	2446920.43	1987 May 4 1259:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1987-H123	2446924.04	1987 May 8 1723:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1987-H124	2446924.24	1987 May 8 1748:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1987-H125	2446926.00	1987 May 10 1154:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1987-H126	2446926.04	1987 May 10 1259:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1987-H127	2446926.07	1987 May 10 1336:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1987-H128	2446928.00	1987 May 12 1200:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1987-H131	2446929.21	1987 May 13 1700:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1987-H132	2446931.30	1987 May 15 1907:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1987-H133	2446935.12	1987 May 19 1455:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1987-H134	2446935.13	1987 May 19 1510:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1987-H137	2446936.29	1987 May 20 1859:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1987-H138	2446936.74	1987 May 21 0541:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1987-H139	2446937.29	1987 May 21 1903:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1987-H142	2446945.04	1987 May 29 1259:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1987-H145	2446950.08	1987 Jun 3 1140:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1987-H147	2446950.22	1987 Jun 3 1720:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1987-H148	2446956.03	1987 Jun 3 1238:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1987-H150	2446957.23	1987 Jun 10 1737:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1987-H181	2446957.25	1987 Jun 10 1807:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1987-H154	2446957.25	1987 Jun 11 1400:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1987-H155	2446959.51	1987 Jun 13 0014:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1987-H157	2446962.06	1987 Jun 15 1330:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1987-H160	2446962.10	1987 Jun 15 1430:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-



Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Launch_e	Agency	Launch_Code	Group	Category	LT_Cite	Cite	Notes
1987-1163	2446964.00	1987 Jun 17 12:00:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1987-1166	2446966.62	1987 Jun 20 02:57:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1987-1167	2446969.46	1987 Jun 22 23:06:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1987-1168	2446970.06	1987 Jun 23 13:26:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1987-1172	2446971.17	1987 Jun 24 15:57:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1987-1193	2446972.05	1987 Jun 25 13:14:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1987-1173	2446972.10	1987 Jun 25 14:19:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1987-1179	2446984.70	1987 Jul 8 04:54:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1987-1111	2446984.79	1987 Jul 8 06:59:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1987-1182	2446986.40	1987 Jul 9 21:30:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1987-1186	2446992.06	1987 Jul 15 13:30:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1987-1188	2446992.42	1987 Jul 15 22:01:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1987-1190	2446994.10	1987 Jul 17 14:50:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1987-1192	2446997.43	1987 Jul 20 22:24:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1987-1196	2447001.11	1987 Jul 24 14:57:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1987-1202	2447012.09	1987 Aug 4 14:16:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1987-1204	2447014.41	1987 Aug 6 21:49:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1987-1205	2447018.32	1987 Aug 10 19:40:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1987-1206	2447019.03	1987 Aug 11 12:46:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1987-1208	2447020.41	1987 Aug 12 21:54:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1987-1209	2447020.43	1987 Aug 12 22:23:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1987-1210	2447021.10	1987 Aug 13 14:20:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1987-1211	2447025.21	1987 Aug 17 17:04:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1987-1214	2447028.12	1987 Aug 20 15:00:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1987-1215	2447029.31	1987 Aug 21 19:50:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1987-1216	2447031.74	1987 Aug 24 05:46:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1987-1217	2447035.09	1987 Aug 27 14:16:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1987-112	2447036.27	1987 Aug 28 16:50:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1987-113	2447037.57	1987 Aug 30 01:44:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1987-1219	2447041.22	1987 Sep 2 17:11:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1987-114	2447042.09	1987 Sep 3 14:03:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1987-1262	2447046.10	1987 Sep 7 14:50:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1987-1222	2447047.46	1987 Sep 8 22:46:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1987-1223	2447047.49	1987 Sep 8 23:40:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1987-1224	2447047.53	1987 Sep 9 04:46:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1987-1227	2447054.21	1987 Sep 15 17:00:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1987-1228	2447054.21	1987 Sep 16 14:00:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1987-1230	2447055.33	1987 Sep 16 20:00:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1987-1232	2447059.88	1987 Sep 21 09:13:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1987-1233	2447060.01	1987 Sep 21 12:18:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1987-1234	2447061.09	1987 Sep 22 14:16:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1987-1235	2447061.11	1987 Sep 22 14:45:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1987-1236	2447061.76	1987 Sep 22 22:01:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1987-1240	2447068.06	1987 Sep 29 17:40:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1987-1241	2447068.24	1987 Sep 29 17:40:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1987-1243	2447071.56	1987 Oct 2 17:00:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1987-1246	2447072.92	1987 Oct 4 13:49:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1987-1249	2447075.20	1987 Oct 6 18:36:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1987-1251	2447077.97	1987 Oct 9 14:08:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1987-1252	2447082.11	1987 Oct 9 11:14:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1987-1254	2447084.10	1987 Oct 9 14:45:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1987-1255	2447084.11	1987 Oct 15 14:30:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1987-1256	2447091.07	1987 Oct 15 13:40:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1987-1262	2447091.11	1987 Oct 22 14:45:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1987-1268	2447095.45	1987 Oct 26 22:49:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1987-118	2447097.59	1987 Oct 29 02:06:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1987-1266	2447098.10	1987 Oct 29 02:06:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1987-119	2447102.16	1987 Nov 3 15:49:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1987-1267	2447102.96	1987 Nov 3 08:37:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1987-1268	2447104.35	1987 Nov 4 22:46:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1987-1270	2447105.10	1987 Nov 5 14:30:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1987-1271	2447105.12	1987 Nov 5 14:48:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1987-1281	2447118.77	1987 Nov 19 06:34:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1987-1282	2447120.15	1987 Nov 20 15:30:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1987-1287	2447127.15	1987 Nov 27 15:30:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1987-1288	2447128.68	1987 Nov 29 04:18:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1987-121	2447131.10	1987 Dec 1 14:30:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1987-1291	2447131.33	1987 Dec 1 20:01:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1987-1292	2447131.47	1987 Dec 1 23:21:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1987-1297	2447133.19	1987 Dec 3 16:27:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1987-1305	2447139.25	1987 Dec 9 18:00:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1987-1308	2447141.07	1987 Dec 11 13:35:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1987-1309	2447141.12	1987 Dec 11 13:55:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1987-1322	2447147.12	1987 Dec 17 15:00:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1988-103	2447173.19	1988 Jan 12 16:34:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1988-402	2447174.22	1988 Jan 13 17:20:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1988-401	2447175.08	1988 Jan 14 14:00:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1988-410	2447181.13	1988 Jan 20 15:07:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1988-402	2447181.14	1988 Jan 20 15:20:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1988-413	2447181.96	1988 Jan 21 11:37:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1988-414	2447182.03	1988 Jan 21 12:45:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1988-417	2447183.49	1988 Jan 22 23:41:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1988-421	2447189.10	1988 Jan 28 14:30:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1988-141	2447190.18	1988 Jan 29 16:17:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Launch_e	Agency	Launch_Code	Group	Category	LT_Cite	Cite	Notes
1988-423	2447194.08	1988 Feb 2 1402:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1988-445	2447197.09	1988 Feb 5 1410:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1988-425	2447198.36	1988 Feb 6 2040:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1988-426	2447200.44	1988 Feb 8 2230:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1988-427	2447200.46	1988 Feb 8 2300:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1988-429	2447204.10	1988 Feb 12 1430:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1988-431	2447207.21	1988 Feb 15 1701:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1988-439	2447216.21	1988 Feb 24 1706:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1988-442	2447217.16	1988 Feb 25 1545:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1988-160	2447218.06	1988 Feb 26 1330:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1988-161	2447219.19	1988 Feb 27 1630:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1988-446	2447219.24	1988 Feb 27 1740:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1988-462	2447229.10	1988 Mar 6 1430:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1988-462	2447229.10	1988 Mar 10 1432:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1988-465	2447231.11	1988 Mar 16 1500:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1988-467	2447237.12	1988 Mar 18 1450:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1988-461	2447239.10	1988 Mar 21 1753:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1988-466	2447242.25	1988 Mar 25 1430:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1988-466	2447251.05	1988 Mar 30 1309:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1988-476	2447260.05	1988 Apr 8 1309:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1988-460	2447263.36	1988 Apr 11 2037:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1988-463	2447265.04	1988 Apr 13 1259:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1988-465	2447265.54	1988 Apr 14 0100:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1988-467	2447266.13	1988 Apr 15 1630:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1988-468	2447267.27	1988 Apr 15 2045:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1988-405	2447268.14	1988 Apr 16 1514:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1988-496	2447278.34	1988 Apr 26 2015:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1988-498	2447279.07	1988 Apr 27 1341:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1988-1104	2447288.05	1988 May 6 1304:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1988-1106	2447283.04	1988 May 11 1259:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1988-1109	2447306.05	1988 May 24 1309:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1988-1110	2447306.07	1988 May 24 1336:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1988-1118	2447316.16	1988 Jun 3 1546:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1988-1119	2447319.06	1988 Jun 6 1352:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1988-1120	2447320.41	1988 Jun 7 2146:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1988-1124	2447328.33	1988 Jun 15 2002:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1988-1125	2447329.42	1988 Jun 16 2209:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1988-1127	2447330.14	1988 Jun 17 1517:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1988-1129	2447335.06	1988 Jun 22 1304:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1988-1134	2447335.26	1988 Jun 30 1621:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1988-1137	2447357.32	1988 Jul 14 1757:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1988-1142	2447385.23	1988 Aug 17 1639:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1988-1144	2447393.04	1988 Aug 24 1259:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1988-1147	2447398.01	1988 Aug 24 1259:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1988-1149	2447398.57	1988 Aug 25 1259:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1988-1150	2447398.57	1988 Aug 25 1259:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1988-1154	2447403.01	1988 Aug 25 1259:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1988-1156	2447407.36	1988 Sep 4 2020:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1988-1161	2447419.36	1988 Sep 4 1632:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1988-1162	2447420.44	1988 Sep 15 2156:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1988-1164	2447420.44	1988 Sep 15 2201:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1988-1165	2447426.05	1988 Sep 21 1311:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1988-1167	2447427.44	1988 Sep 22 2220:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1988-1169	2447428.92	1988 Sep 24 1009:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1988-1171	2447433.31	1988 Sep 28 1930:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1988-1173	2447434.01	1988 Sep 29 1220:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1988-1173	2447434.03	1988 Sep 29 1245:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1988-1174	2447434.06	1988 Sep 29 1329:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1988-1175	2447434.07	1988 Sep 29 1333:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1988-1179	2447434.07	1988 Sep 29 1415:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1988-1176	2447434.11	1988 Sep 29 1445:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1988-1177	2447434.14	1988 Sep 29 1527:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1988-1178	2447436.09	1988 Oct 1 1415:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1988-1178	2447436.12	1988 Oct 1 1452:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1988-1179	2447438.04	1988 Oct 3 1320:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1988-1180	2447438.06	1988 Oct 3 1708:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1988-1181	2447440.04	1988 Oct 5 1259:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1988-1183	2447454.91	1988 Oct 20 0956:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1988-1186	2447463.44	1988 Oct 28 2237:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1988-1251	2447467.49	1988 Nov 1 2352:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1988-1205	2447495.43	1988 Nov 29 2218:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1988-1274	2447498.11	1988 Dec 2 1433:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1988-1275	2447498.13	1988 Dec 2 1503:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1988-1276	2447498.15	1988 Dec 2 1534:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1988-1207	2447498.18	1988 Dec 2 1613:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1988-1208	2447498.21	1988 Dec 2 1657:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1988-1277	2447498.21	1988 Dec 2 1702:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1988-1278	2447500.09	1988 Dec 4 1404:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1988-1209	2447500.22	1988 Dec 4 1715:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1988-1210	2447500.27	1988 Dec 4 1830:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1988-1279	2447502.09	1988 Dec 6 1410:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1988-1280	2447502.11	1988 Dec 6 1442:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1988-1211	2447502.13	1988 Dec 6 1511:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1988-1212	2447502.18	1988 Dec 6 1622:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Launch_e	Agency	Launch_Code	Group	Category	LT_Cite	Cite	Notes
1988-W213	2447502.52	1988 Dec 7 0031:00	Rocketsonde	-	-	0.000	HRM	SS	-	Meteo	DSI-5850	-	-
1988-W218	2447510.33	1988 Dec 14 1957:59	Rocketsonde	-	-	0.000	HRM	SS	-	Meteo	DSI-5850	-	-
1989-H06	2447531.12	1989 Jan 4 1500:00	Rocketsonde	-	-	0.000	HRM	SS	-	Meteo	DSI-5850	-	-
1989-H08	2447531.14	1989 Jan 4 1514:59	Rocketsonde	-	-	0.000	HRM	SS	-	Meteo	DSI-5850	-	-
1989-H14	2447535.12	1989 Jan 8 1500:00	Rocketsonde	-	-	0.000	HRM	SS	-	Meteo	DSI-5850	-	-
1989-H16	2447535.99	1989 Jan 9 1142:00	Rocketsonde	-	-	0.000	HRM	SS	-	Meteo	DSI-5850	-	-
1989-H17	2447536.03	1989 Jan 9 1246:59	Rocketsonde	-	-	0.000	HRM	SS	-	Meteo	DSI-5850	-	-
1989-H23	2447538.13	1989 Jan 11 1509:00	Rocketsonde	-	-	0.000	HRM	SS	-	Meteo	DSI-5850	-	-
1989-H29	2447545.12	1989 Jan 18 1500:00	Rocketsonde	-	-	0.000	HRM	SS	-	Meteo	DSI-5850	-	-
1989-H30	2447546.15	1989 Jan 19 1529:00	Rocketsonde	-	-	0.000	HRM	SS	-	Meteo	DSI-5850	-	-
1989-H32	2447550.06	1989 Jan 23 1332:59	Rocketsonde	-	-	0.000	HRM	SS	-	Meteo	DSI-5850	-	-
1989-H36	2447552.10	1989 Jan 25 1430:00	Rocketsonde	-	-	0.000	HRM	SS	-	Meteo	DSI-5850	-	-
1989-H37	2447552.10	1989 Jan 25 1431:00	Rocketsonde	-	-	0.000	HRM	SS	-	Meteo	DSI-5850	-	-
1989-H39	2447552.92	1989 Jan 26 0956:59	Rocketsonde	-	-	0.000	HRM	SS	-	Meteo	DSI-5850	-	-
1989-H24	2447552.95	1989 Jan 26 1046:59	Rocketsonde	-	-	0.000	HRM	SS	-	Meteo	DSI-5850	-	-
1989-H42	2447553.51	1989 Jan 27 0011:59	Rocketsonde	-	-	0.000	HRM	SS	-	Meteo	DSI-5850	-	-
1989-H46	2447559.32	1989 Feb 1 1942:59	Rocketsonde	-	-	0.000	HRM	SS	-	Meteo	DSI-5850	-	-
1989-H63	2447567.17	1989 Feb 9 1659:59	Rocketsonde	-	-	0.000	HRM	SS	-	Meteo	DSI-5850	-	-
1989-H65	2447568.34	1989 Feb 10 2012:00	Rocketsonde	-	-	0.000	HRM	SS	-	Meteo	DSI-5850	-	-
1989-H66	2447569.10	1989 Feb 11 1430:00	Rocketsonde	-	-	0.000	HRM	SS	-	Meteo	DSI-5850	-	-
1989-H68	2447573.13	1989 Feb 15 1509:00	Rocketsonde	-	-	0.000	HRM	SS	-	Meteo	DSI-5850	-	-
1989-H61	2447580.03	1989 Feb 22 1244:00	Rocketsonde	-	-	0.000	HRM	SS	-	Meteo	DSI-5850	-	-
1989-H63	2447580.12	1989 Feb 22 1500:00	Rocketsonde	-	-	0.000	HRM	SS	-	Meteo	DSI-5850	-	-
1989-H65	2447581.15	1989 Feb 23 1530:00	Rocketsonde	-	-	0.000	HRM	SS	-	Meteo	DSI-5850	-	-
1989-H68	2447583.99	1989 Feb 26 1146:00	Rocketsonde	-	-	0.000	HRM	SS	-	Meteo	DSI-5850	-	-
1989-H69	2447585.15	1989 Feb 27 1529:00	Rocketsonde	-	-	0.000	HRM	SS	-	Meteo	DSI-5850	-	-
1989-H70	2447587.12	1989 Mar 1 1600:00	Rocketsonde	-	-	0.000	HRM	SS	-	Meteo	DSI-5850	-	-
1989-H71	2447587.15	1989 Mar 1 1630:00	Rocketsonde	-	-	0.000	HRM	SS	-	Meteo	DSI-5850	-	-
1989-H73	2447594.11	1989 Mar 6 1443:00	Rocketsonde	-	-	0.000	HRM	SS	-	Meteo	DSI-5850	-	-
1989-H74	2447594.15	1989 Mar 6 1530:00	Rocketsonde	-	-	0.000	HRM	SS	-	Meteo	DSI-5850	-	-
1989-H76	2447598.12	1989 Mar 12 1500:00	Rocketsonde	-	-	0.000	HRM	SS	-	Meteo	DSI-5850	-	-
1989-H75	2447598.96	1989 Mar 13 1103:59	Rocketsonde	-	-	0.000	HRM	SS	-	Meteo	DSI-5850	-	-
1989-H76	2447599.00	1989 Mar 13 1226:59	Rocketsonde	-	-	0.000	HRM	SS	-	Meteo	DSI-5850	-	-
1989-H77	2447599.02	1989 Mar 13 1228:59	Rocketsonde	-	-	0.000	HRM	SS	-	Meteo	DSI-5850	-	-
1989-H78	2447599.06	1989 Mar 13 1329:00	Rocketsonde	-	-	0.000	HRM	SS	-	Meteo	DSI-5850	-	-
1989-H60	2447600.15	1989 Mar 14 1540:00	Rocketsonde	-	-	0.000	HRM	SS	-	Meteo	DSI-5850	-	-
1989-H61	2447600.94	1989 Mar 15 1033:59	Rocketsonde	-	-	0.000	HRM	SS	-	Meteo	DSI-5850	-	-
1989-H62	2447600.96	1989 Mar 15 1102:00	Rocketsonde	-	-	0.000	HRM	SS	-	Meteo	DSI-5850	-	-
1989-H63	2447601.00	1989 Mar 15 1201:59	Rocketsonde	-	-	0.000	HRM	SS	-	Meteo	DSI-5850	-	-
1989-H64	2447601.05	1989 Mar 15 1306:00	Rocketsonde	-	-	0.000	HRM	SS	-	Meteo	DSI-5850	-	-
1989-H66	2447601.12	1989 Mar 15 1500:00	Rocketsonde	-	-	0.000	HRM	SS	-	Meteo	DSI-5850	-	-
1989-H69	2447602.61	1989 Mar 16 1700:00	Rocketsonde	-	-	0.000	HRM	SS	-	Meteo	DSI-5850	-	-
1989-H79	2447602.97	1989 Mar 17 1129:00	Rocketsonde	-	-	0.000	HRM	SS	-	Meteo	DSI-5850	-	-
1989-H91	2447603.00	1989 Mar 17 1632:00	Rocketsonde	-	-	0.000	HRM	SS	-	Meteo	DSI-5850	-	-
1989-H92	2447603.11	1989 Mar 17 1632:00	Rocketsonde	-	-	0.000	HRM	SS	-	Meteo	DSI-5850	-	-
1989-H91	2447603.90	1989 Mar 18 0959:00	Rocketsonde	-	-	0.000	HRM	SS	-	Meteo	DSI-5850	-	-
1989-H91	2447603.90	1989 Mar 18 0959:00	Rocketsonde	-	-	0.000	HRM	SS	-	Meteo	DSI-5850	-	-
1989-H92	2447603.95	1989 Mar 18 0959:00	Rocketsonde	-	-	0.000	HRM	SS	-	Meteo	DSI-5850	-	-
1989-H94	2447603.98	1989 Mar 18 1130:00	Rocketsonde	-	-	0.000	HRM	SS	-	Meteo	DSI-5850	-	-
1989-H95	2447603.98	1989 Mar 18 1130:00	Rocketsonde	-	-	0.000	HRM	SS	-	Meteo	DSI-5850	-	-
1989-H93	2447604.11	1989 Mar 18 1434:00	Rocketsonde	-	-	0.000	HRM	SS	-	Meteo	DSI-5850	-	-
1989-H93	2447604.13	1989 Mar 18 1509:00	Rocketsonde	-	-	0.000	HRM	SS	-	Meteo	DSI-5850	-	-
1989-H94	2447604.14	1989 Mar 18 1519:00	Rocketsonde	-	-	0.000	HRM	SS	-	Meteo	DSI-5850	-	-
1989-H97	2447604.14	1989 Mar 20 1500:00	Rocketsonde	-	-	0.000	HRM	SS	-	Meteo	DSI-5850	-	-
1989-H99	2447606.12	1989 Mar 22 1522:59	Rocketsonde	-	-	0.000	HRM	SS	-	Meteo	DSI-5850	-	-
1989-H100	2447608.14	1989 Mar 23 1530:00	Rocketsonde	-	-	0.000	HRM	SS	-	Meteo	DSI-5850	-	-
1989-H101	2447609.15	1989 Mar 23 1530:00	Rocketsonde	-	-	0.000	HRM	SS	-	Meteo	DSI-5850	-	-
1989-H102	2447615.13	1989 Mar 29 1507:00	Rocketsonde	-	-	0.000	HRM	SS	-	Meteo	DSI-5850	-	-
1989-H104	2447621.32	1989 Apr 1 1940:00	Rocketsonde	-	-	0.000	HRM	SS	-	Meteo	DSI-5850	-	-
1989-H108	2447628.09	1989 Apr 11 1411:00	Rocketsonde	-	-	0.000	HRM	SS	-	Meteo	DSI-5850	-	-
1989-H108	2447628.09	1989 Apr 19 0959:59	Rocketsonde	-	-	0.000	HRM	SS	-	Meteo	DSI-5850	-	-
1989-H111	2447635.92	1989 Apr 19 1400:00	Rocketsonde	-	-	0.000	HRM	SS	-	Meteo	DSI-5850	-	-
1989-H114	2447636.08	1989 Apr 19 1400:00	Rocketsonde	-	-	0.000	HRM	SS	-	Meteo	DSI-5850	-	-
1989-H115	2447636.09	1989 Apr 19 1404:59	Rocketsonde	-	-	0.000	HRM	SS	-	Meteo	DSI-5850	-	-
1989-H117	2447643.22	1989 Apr 26 1711:00	Rocketsonde	-	-	0.000	HRM	SS	-	Meteo	DSI-5850	-	-
1989-H118	2447644.97	1989 Apr 27 1834:59	Rocketsonde	-	-	0.000	HRM	SS	-	Meteo	DSI-5850	-	-
1989-H118	2447645.14	1989 Apr 28 1518:00	Rocketsonde	-	-	0.000	HRM	SS	-	Meteo	DSI-5850	-	-
1989-H119	2447645.19	1989 Apr 28 1638:59	Rocketsonde	-	-	0.000	HRM	SS	-	Meteo	DSI-5850	-	-
1989-H120	2447649.38	1989 May 2 2100:00	Rocketsonde	-	-	0.000	HRM	SS	-	Meteo	DSI-5850	-	-
1989-H122	2447650.05	1989 May 3 1310:59	Rocketsonde	-	-	0.000	HRM	SS	-	Meteo	DSI-5850	-	-
1989-H123	2447650.22	1989 May 3 1713:00	Rocketsonde	-	-	0.000	HRM	SS	-	Meteo	DSI-5850	-	-
1989-H107	2447651.32	1989 May 4 1935:59	Rocketsonde	-	-	0.000	HRM	SS	-	Meteo	DSI-5850	-	-
1989-H125	2447651.34	1989 May 4 2013:00	Rocketsonde	-	-	0.000	HRM	SS	-	Meteo	DSI-5850	-	-
1989-H108	2447651.38	1989 May 4 2130:00	Rocketsonde	-	-	0.000	HRM	SS	-	Meteo	DSI-5850	-	-
1989-H109	2447651.40	1989 May 4 2130:00	Rocketsonde	-	-	0.000	HRM	SS	-	Meteo	DSI-5850	-	-
1989-H110	2447651.42	1989 May 4 2159:59	Rocketsonde	-	-	0.000	HRM	SS	-	Meteo	DSI-5850	-	-
1989-H110	2447652.15	1989 May 5 1610:59	Rocketsonde	-	-	0.000	HRM	SS	-	Meteo	DSI-5850	-	-
1989-H127	2447652.17	1989 May 5 1722:00	Rocketsonde	-	-	0.000	HRM	SS	-	Meteo	DSI-5850	-	-
1989-H128	2447652.22	1989 May 8 1430:00	Rocketsonde	-	-	0.000	HRM	SS	-	Meteo	DSI-5850	-	-
1989-H111	2447655.10	1989 May 8 1437:59	Rocketsonde	-	-	0.000	HRM	SS	-	Meteo	DSI-5850	-	-
1989-H112	2447655.11	1989 May 8 1500:00	Rocketsonde	-	-	0.000	HRM	SS	-	Meteo	DSI-5850	-	-
1989-H129	2447655.12	1989 May 8 1503:59	Rocketsonde	-	-	0.000	HRM	SS	-	Meteo	DSI-5850	-	-
1989-H113	2447655.13	1989 May 8 1509:59	Rocketsonde	-	-	0.000	HRM	SS	-	Meteo	DSI-5850	-	-
1989-H130	2447655.17	1989 May 8 1559:59	Rocketsonde	-	-	0.000	HRM	SS	-	Meteo	DSI-5850	-	-
1989-H131	2447655.19	1989 May 8 1633:59	Rocketsonde	-	-	0.000	HRM	SS	-	Meteo	DSI-5850	-	-

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Launch_e	Agency	Launch_Code	Group	Category	LT_Cite	Cite	Notes
1989-Y114	2447655.21	1989 May 8 17:00:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1989-Y115	2447655.32	1989 May 8 19:43:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1989-Y132	2447655.32	1989 May 8 19:43:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1989-Y133	2447655.34	1989 May 8 20:14:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1989-Y134	2447655.38	1989 May 8 21:00:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1989-Y138	2447658.07	1989 May 11 13:40:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1989-A04	2447662.12	1989 May 15 15:00:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1989-Y140	2447662.21	1989 May 15 17:03:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1989-Y142	2447665.08	1989 May 18 14:00:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1989-Y143	2447665.14	1989 May 18 15:14:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1989-Y146	2447669.08	1989 May 22 14:00:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1989-Y150	2447671.09	1989 May 24 14:13:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1989-Y157	2447684.12	1989 Jun 6 16:00:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1989-Y160	2447691.21	1989 Jun 8 15:00:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1989-Y162	2447692.09	1989 Jun 13 17:00:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1989-Y168	2447694.09	1989 Jun 14 14:11:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1989-Y169	2447697.21	1989 Jun 16 14:07:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1989-Y170	2447698.21	1989 Jun 20 17:00:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1989-Y175	2447699.28	1989 Jun 21 18:49:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1989-Y176	2447700.46	1989 Jun 22 22:52:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1989-Y178	2447704.21	1989 Jun 26 17:00:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1989-Y181	2447706.08	1989 Jun 28 14:00:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1989-Y149	2447719.06	1989 Jul 11 13:30:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1989-Y154	2447727.08	1989 Jul 19 14:01:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1989-Y169	2447741.17	1989 Aug 2 16:09:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1989-Y166	2447746.06	1989 Aug 7 14:00:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1989-Y166	2447747.04	1989 Aug 8 12:56:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1989-Y190	2447747.09	1989 Aug 8 14:15:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1989-Y167	2447747.10	1989 Aug 8 14:20:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1989-Y191	2447747.12	1989 Aug 8 15:00:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1989-Y192	2447748.12	1989 Aug 9 03:14:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1989-Y196	2447748.26	1989 Aug 10 12:53:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1989-Y196	2447749.06	1989 Aug 10 13:22:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1989-A05	2447749.10	1989 Aug 10 14:27:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1989-Y197	2447750.10	1989 Aug 11 14:50:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1989-Y198	2447751.98	1989 Aug 13 10:20:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1989-Y196	2447751.96	1989 Aug 13 10:37:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1989-Y200	2447752.00	1989 Aug 13 11:00:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1989-Y191	2447752.00	1989 Aug 13 11:54:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1989-Y173	2447752.07	1989 Aug 13 13:56:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1989-Y202	2447752.09	1989 Aug 13 13:59:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1989-Y203	2447752.14	1989 Aug 13 14:51:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1989-Y204	2447752.14	1989 Aug 13 15:15:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1989-Y205	2447753.10	1989 Aug 14 16:24:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1989-Y208	2447753.06	1989 Aug 15 13:30:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1989-Y213	2447771.06	1989 Sep 4 14:00:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1989-Y213	2447771.06	1989 Sep 4 14:00:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1989-Y224	2447785.91	1989 Sep 6 09:20:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1989-Y224	2447785.91	1989 Sep 6 09:20:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1989-Y225	2447792.21	1989 Sep 22 17:00:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1989-Y226	2447796.23	1989 Sep 26 17:25:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1989-Y227	2447798.19	1989 Sep 28 16:34:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1989-Y229	2447804.10	1989 Oct 4 14:30:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1989-Y235	2447811.19	1989 Oct 11 16:25:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1989-Y236	2447816.10	1989 Oct 16 14:30:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1989-Y239	2447817.09	1989 Oct 17 14:10:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1989-Y251	2447818.27	1989 Oct 18 18:26:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1989-Y243	2447818.29	1989 Oct 18 18:59:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1989-Y244	2447818.39	1989 Oct 18 21:14:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1989-Y262	2447818.40	1989 Oct 18 21:50:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1989-Y245	2447819.10	1989 Oct 19 14:20:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1989-Y246	2447820.08	1989 Oct 20 14:00:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1989-Y251	2447823.21	1989 Oct 23 17:00:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1989-Y251	2447823.21	1989 Oct 23 17:12:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1989-Y263	2447823.26	1989 Oct 23 18:14:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1989-Y263	2447823.33	1989 Oct 23 19:48:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1989-Y265	2447825.06	1989 Oct 25 13:30:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1989-Y265	2447825.09	1989 Oct 25 14:03:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1989-Y268	2447830.04	1989 Oct 30 12:59:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1989-Y269	2447831.23	1989 Oct 31 17:30:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1989-Y260	2447832.09	1989 Nov 1 14:03:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1989-Y272	2447832.12	1989 Nov 1 15:00:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1989-Y261	2447833.24	1989 Nov 2 17:45:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1989-Y263	2447838.23	1989 Nov 7 17:31:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1989-Y267	2447839.13	1989 Nov 8 15:06:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1989-Y270	2447846.44	1989 Nov 15 22:36:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1989-Y273	2447852.09	1989 Nov 21 14:15:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1989-Y276	2447852.08	1989 Nov 22 14:01:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1989-Y277	2447853.17	1989 Nov 22 16:03:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1989-Y278	2447853.34	1989 Nov 22 20:06:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1989-Y289	2447853.54	1989 Nov 23 01:02:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Launch_e	Agency	Launch_Code	Group	Category	LT_Cite	Cite	Notes
1989-W279	2447853.60	1989 Nov 23 0230:00	Rocketsonde	-	-	0.000	HRH	SS	-	Metro	DSI-5850	-	-
1989-W280	2447857.09	1989 Nov 26 1407:00	Rocketsonde	-	-	0.000	HRH	SS	-	Metro	DSI-5850	-	-
1989-W281	2447857.10	1989 Nov 26 1424:00	Rocketsonde	-	-	0.000	HRH	SS	-	Metro	DSI-5850	-	-
1989-W282	2447857.13	1989 Nov 26 1504:59	Rocketsonde	-	-	0.000	HRH	SS	-	Metro	DSI-5850	-	-
1989-W283	2447857.13	1989 Nov 26 1509:00	Rocketsonde	-	-	0.000	HRH	SS	-	Metro	DSI-5850	-	-
1989-W284	2447858.52	1989 Nov 28 0030:00	Rocketsonde	-	-	0.000	HRH	SS	-	Metro	DSI-5850	-	-
1989-W285	2447858.54	1989 Nov 28 0059:59	Rocketsonde	-	-	0.000	HRH	SS	-	Metro	DSI-5850	-	-
1989-W286	2447858.55	1989 Nov 28 0106:00	Rocketsonde	-	-	0.000	HRH	SS	-	Metro	DSI-5850	-	-
1989-W287	2447858.56	1989 Nov 28 0150:00	Rocketsonde	-	-	0.000	HRH	SS	-	Metro	DSI-5850	-	-
1989-W288	2447858.58	1989 Nov 28 0158:59	Rocketsonde	-	-	0.000	HRH	SS	-	Metro	DSI-5850	-	-
1989-W289	2447858.59	1989 Nov 28 0210:00	Rocketsonde	-	-	0.000	HRH	SS	-	Metro	DSI-5850	-	-
1989-W290	2447858.61	1989 Nov 28 0245:00	Rocketsonde	-	-	0.000	HRH	SS	-	Metro	DSI-5850	-	-
1989-W291	2447860.28	1989 Nov 29 1500:00	Rocketsonde	-	-	0.000	HRH	SS	-	Metro	DSI-5850	-	-
1989-W292	2447860.28	1989 Nov 29 1849:59	Rocketsonde	-	-	0.000	HRH	SS	-	Metro	DSI-5850	-	-
1989-W293	2447865.23	1989 Dec 4 1735:00	Rocketsonde	-	-	0.000	HRH	SS	-	Metro	DSI-5850	-	-
1989-W294	2447865.31	1989 Dec 4 1930:00	Rocketsonde	-	-	0.000	HRH	SS	-	Metro	DSI-5850	-	-
1989-W295	2447867.12	1989 Dec 6 1500:00	Rocketsonde	-	-	0.000	HRH	SS	-	Metro	DSI-5850	-	-
1989-W296	2447867.15	1989 Dec 6 1530:00	Rocketsonde	-	-	0.000	HRH	SS	-	Metro	DSI-5850	-	-
1989-W297	2447869.49	1989 Dec 8 2345:00	Rocketsonde	-	-	0.000	HRH	SS	-	Metro	DSI-5850	-	-
1989-W298	2447874.11	1989 Dec 13 1435:00	Rocketsonde	-	-	0.000	HRH	SS	-	Metro	DSI-5850	-	-
1989-W299	2447874.13	1989 Dec 13 1504:59	Rocketsonde	-	-	0.000	HRH	SS	-	Metro	DSI-5850	-	-
1989-W300	2447874.14	1989 Dec 13 1526:59	Rocketsonde	-	-	0.000	HRH	SS	-	Metro	DSI-5850	-	-
1989-W301	2447874.18	1989 Dec 13 1619:59	Rocketsonde	-	-	0.000	HRH	SS	-	Metro	DSI-5850	-	-
1989-W302	2447874.20	1989 Dec 13 1644:59	Rocketsonde	-	-	0.000	HRH	SS	-	Metro	DSI-5850	-	-
1989-W303	2447876.11	1989 Dec 15 1457:00	Rocketsonde	-	-	0.000	HRH	SS	-	Metro	DSI-5850	-	-
1989-W304	2447876.17	1989 Dec 15 1559:59	Rocketsonde	-	-	0.000	HRH	SS	-	Metro	DSI-5850	-	-
1989-W305	2447876.19	1989 Dec 15 1650:00	Rocketsonde	-	-	0.000	HRH	SS	-	Metro	DSI-5850	-	-
1989-W306	2447876.22	1989 Dec 15 1715:00	Rocketsonde	-	-	0.000	HRH	SS	-	Metro	DSI-5850	-	-
1989-W307	2447879.19	1989 Dec 17 1650:00	Rocketsonde	-	-	0.000	HRH	SS	-	Metro	DSI-5850	-	-
1989-W308	2447879.45	1989 Dec 18 2214:59	Rocketsonde	-	-	0.000	HRH	SS	-	Metro	DSI-5850	-	-
1989-W309	2447889.27	1989 Dec 28 1850:00	Rocketsonde	-	-	0.000	HRH	SS	-	Metro	DSI-5850	-	-
1989-W310	2447889.44	1989 Dec 28 2250:00	Rocketsonde	-	-	0.000	HRH	SS	-	Metro	DSI-5850	-	-
1989-W311	2447909.13	1990 Jan 17 1507:00	Rocketsonde	-	-	0.000	HRH	SS	-	Metro	DSI-5850	-	-
1989-W312	2447910.75	1990 Jan 19 0657:00	Rocketsonde	-	-	0.000	HRH	SS	-	Metro	DSI-5850	-	-
1989-W313	2447910.75	1990 Jan 19 0604:59	Rocketsonde	-	-	0.000	HRH	SS	-	Metro	DSI-5850	-	-
1989-W314	2447910.77	1990 Jan 19 0650:00	Rocketsonde	-	-	0.000	HRH	SS	-	Metro	DSI-5850	-	-
1989-W315	2447911.67	1990 Jan 20 0401:59	Rocketsonde	-	-	0.000	HRH	SS	-	Metro	DSI-5850	-	-
1989-W316	2447916.45	1990 Jan 24 2214:59	Rocketsonde	-	-	0.000	HRH	SS	-	Metro	DSI-5850	-	-
1989-W317	2447916.46	1990 Jan 24 2302:00	Rocketsonde	-	-	0.000	HRH	SS	-	Metro	DSI-5850	-	-
1989-W318	2447923.12	1990 Jan 31 1300:00	Rocketsonde	-	-	0.000	HRH	SS	-	Metro	DSI-5850	-	-
1989-W319	2447937.43	1990 Feb 7 2124:59	Rocketsonde	-	-	0.000	HRH	SS	-	Metro	DSI-5850	-	-
1989-W320	2447937.01	1990 Feb 14 1512:59	Rocketsonde	-	-	0.000	HRH	SS	-	Metro	DSI-5850	-	-
1989-W321	2447955.14	1990 Mar 4 1157:59	Rocketsonde	-	-	0.000	HRH	SS	-	Metro	DSI-5850	-	-
1989-W322	2447955.15	1990 Mar 4 1547:59	Rocketsonde	-	-	0.000	HRH	SS	-	Metro	DSI-5850	-	-
1989-W323	2447955.10	1990 Mar 4 1647:59	Rocketsonde	-	-	0.000	HRH	SS	-	Metro	DSI-5850	-	-
1989-W324	2447955.44	1990 Mar 7 2029:59	Rocketsonde	-	-	0.000	HRH	SS	-	Metro	DSI-5850	-	-
1989-W325	2447958.45	1990 Mar 7 2057:59	Rocketsonde	-	-	0.000	HRH	SS	-	Metro	DSI-5850	-	-
1989-W326	2447978.98	1990 Mar 28 1152:00	Rocketsonde	-	-	0.000	HRH	SS	-	Metro	DSI-5850	-	-
1989-W327	2447979.46	1990 Mar 31 2300:00	Rocketsonde	-	-	0.000	HRH	SS	-	Metro	DSI-5850	-	-
1989-W328	2448007.42	1990 Apr 29 1041:59	Rocketsonde	-	-	0.000	HRH	SS	-	Metro	DSI-5850	-	-
1989-W329	2448010.95	1990 Apr 29 1137:00	Rocketsonde	-	-	0.000	HRH	SS	-	Metro	DSI-5850	-	-
1989-W330	2448010.98	1990 Apr 29 1137:00	Rocketsonde	-	-	0.000	HRH	SS	-	Metro	DSI-5850	-	-
1989-W331	2448020.38	1990 May 8 2152:00	Rocketsonde	-	-	0.000	HRH	SS	-	Metro	DSI-5850	-	-
1989-W332	2448020.44	1990 May 8 2033:59	Rocketsonde	-	-	0.000	HRH	SS	-	Metro	DSI-5850	-	-
1989-W333	2448020.53	1990 May 9 0045:00	Rocketsonde	-	-	0.000	HRH	SS	-	Metro	DSI-5850	-	-
1989-W334	2448035.40	1990 May 23 2130:00	Rocketsonde	-	-	0.000	HRH	SS	-	Metro	DSI-5850	-	-
1989-W335	2448069.06	1990 Jun 26 1330:00	Rocketsonde	-	-	0.000	HRH	SS	-	Metro	DSI-5850	-	-
1989-W336	2448090.15	1990 Jul 17 1537:59	Rocketsonde	-	-	0.000	HRH	SS	-	Metro	DSI-5850	-	-
1989-W337	2448092.08	1990 Jul 19 1400:00	Rocketsonde	-	-	0.000	HRH	SS	-	Metro	DSI-5850	-	-
1989-W338	2448096.00	1990 Jul 23 1200:00	Rocketsonde	-	-	0.000	HRH	SS	-	Metro	DSI-5850	-	-
1989-W339	2448104.06	1990 Jul 31 1330:00	Rocketsonde	-	-	0.000	HRH	SS	-	Metro	DSI-5850	-	-
1989-W340	2448111.08	1990 Aug 7 1400:00	Rocketsonde	-	-	0.000	HRH	SS	-	Metro	DSI-5850	-	-
1989-W341	2448120.08	1990 Aug 16 1400:00	Rocketsonde	-	-	0.000	HRH	SS	-	Metro	DSI-5850	-	-
1989-W342	2448125.19	1990 Aug 21 1630:00	Rocketsonde	-	-	0.000	HRH	SS	-	Metro	DSI-5850	-	-
1989-W343	2448125.90	1990 Aug 22 0930:00	Rocketsonde	-	-	0.000	HRH	SS	-	Metro	DSI-5850	-	-
1989-W344	2448127.08	1990 Aug 23 1400:00	Rocketsonde	-	-	0.000	HRH	SS	-	Metro	DSI-5850	-	-
1989-W345	2448134.10	1990 Aug 30 1430:00	Rocketsonde	-	-	0.000	HRH	SS	-	Metro	DSI-5850	-	-
1989-W346	2448152.05	1990 Sep 17 1314:59	Rocketsonde	-	-	0.000	HRH	SS	-	Metro	DSI-5850	-	-
1989-W347	2448154.08	1990 Sep 19 1400:00	Rocketsonde	-	-	0.000	HRH	SS	-	Metro	DSI-5850	-	-
1989-W348	2448154.11	1990 Sep 19 1445:00	Rocketsonde	-	-	0.000	HRH	SS	-	Metro	DSI-5850	-	-
1989-W349	2448154.39	1990 Sep 19 2126:59	Rocketsonde	-	-	0.000	HRH	SS	-	Metro	DSI-5850	-	-
1989-W350	2448156.24	1990 Sep 21 1745:00	Rocketsonde	-	-	0.000	HRH	SS	-	Metro	DSI-5850	-	-
1989-W351	2448160.39	1990 Sep 25 2114:59	Rocketsonde	-	-	0.000	HRH	SS	-	Metro	DSI-5850	-	-
1989-W352	2448161.28	1990 Sep 26 1845:00	Rocketsonde	-	-	0.000	HRH	SS	-	Metro	DSI-5850	-	-
1989-W353	2448162.08	1990 Sep 27 1400:00	Rocketsonde	-	-	0.000	HRH	SS	-	Metro	DSI-5850	-	-
1989-W354	2448166.04	1990 Oct 1 1259:59	Rocketsonde	-	-	0.000	HRH	SS	-	Metro	DSI-5850	-	-
1989-W355	2448170.07	1990 Oct 5 1344:59	Rocketsonde	-	-	0.000	HRH	SS	-	Metro	DSI-5850	-	-
1989-W356	2448171.03	1990 Oct 6 1245:00	Rocketsonde	-	-	0.000	HRH	SS	-	Metro	DSI-5850	-	-
1989-W357	2448171.08	1990 Oct 6 1400:00	Rocketsonde	-	-	0.000	HRH	SS	-	Metro	DSI-5850	-	-
1989-W358	2448174.86	1990 Oct 10 0833:00	Rocketsonde	-	-	0.000	HRH	SS	-	Metro	DSI-5850	-	-
1989-W359	2448174.90	1990 Oct 10 0931:00	Rocketsonde	-	-	0.000	HRH	SS	-	Metro	DSI-5850	-	-

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Launch_e	Agency	Launch_Code	Group	Category	LT_Cite	Cite	Notes
1990-1167	2446174.91	1990 Oct 10 09:53:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1990-1168	2446174.94	1990 Oct 10 10:33:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1990-1169	2446174.95	1990 Oct 10 10:42:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1990-1170	2446174.98	1990 Oct 10 11:37:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1990-1171	2446182.06	1990 Oct 17 13:50:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1990-1172	2446182.39	1990 Oct 17 21:14:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1990-1173	2446189.40	1990 Oct 24 21:35:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1990-1174	2446194.12	1990 Oct 29 15:00:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1990-1175	2446196.43	1990 Oct 31 22:14:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1991-421	2446263.12	1991 Jan 6 15:00:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1991-422	2446266.43	1991 Jan 9 22:14:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1991-423	2446273.23	1991 Jan 16 17:30:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1991-424	2446274.12	1991 Jan 17 15:00:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1991-102	2446280.43	1991 Jan 23 22:20:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1991-425	2446285.91	1991 Jan 29 09:45:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1991-426	2446287.12	1991 Jan 30 15:00:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1991-427	2446292.69	1991 Feb 5 09:14:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1991-428	2446293.12	1991 Feb 5 15:00:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1991-431	2446301.12	1991 Feb 13 15:00:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1991-432	2446301.23	1991 Feb 13 17:30:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1991-433	2446306.88	1991 Feb 19 09:00:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1991-103	2446308.43	1991 Feb 20 22:14:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1991-434	2446315.13	1991 Feb 27 15:10:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1991-435	2446315.43	1991 Feb 27 22:14:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1991-436	2446322.23	1991 Mar 6 17:36:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1991-437	2446323.12	1991 Mar 7 15:00:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1991-438	2446329.42	1991 Mar 13 17:31:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1991-439	2446329.82	1991 Mar 13 21:59:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1991-439	2446336.43	1991 Mar 20 08:32:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1991-105	2446336.44	1991 Mar 20 22:14:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1991-106	2446343.23	1991 Mar 27 17:50:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1991-441	2446343.26	1991 Mar 27 18:14:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1991-107	2446343.43	1991 Mar 27 22:14:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1991-442	2446346.88	1991 Apr 2 09:50:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1991-443	2446349.11	1991 Apr 2 14:45:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1991-444	2446350.12	1991 Apr 3 15:00:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1991-445	2446350.17	1991 Apr 3 16:03:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1991-446	2446351.12	1991 Apr 4 15:00:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1991-108	2446352.13	1991 Apr 5 15:10:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1991-447	2446352.23	1991 Apr 5 17:30:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1991-109	2446356.86	1991 Apr 10 11:00:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1991-110	2446356.96	1991 Apr 10 13:00:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1991-111	2446357.00	1991 Apr 10 13:01:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1991-448	2446357.04	1991 Apr 10 13:41:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1991-450	2446357.06	1991 Apr 10 14:14:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1991-112	2446357.34	1991 Apr 11 11:02:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1991-451	2446357.86	1991 Apr 11 11:35:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1991-113	2446357.88	1991 Apr 11 12:08:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1991-452	2446358.01	1991 Apr 11 12:11:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1991-453	2446358.07	1991 Apr 11 12:11:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1991-454	2446358.08	1991 Apr 11 14:00:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1991-455	2446358.09	1991 Apr 11 23:40:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1991-456	2446362.85	1991 Apr 16 01:14:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1991-457	2446364.08	1991 Apr 17 14:00:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1991-114	2446364.39	1991 Apr 17 21:22:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1991-458	2446369.12	1991 Apr 22 15:00:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1991-115	2446371.39	1991 Apr 24 21:23:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1991-459	2446373.17	1991 Apr 26 15:59:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1991-116	2446375.01	1991 Apr 28 12:18:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1991-460	2446375.05	1991 Apr 28 13:04:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1991-117	2446376.19	1991 Apr 29 16:30:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1991-461	2446380.08	1991 May 3 14:00:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1991-462	2446383.08	1991 May 6 16:06:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1991-463	2446383.13	1991 May 6 16:21:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1991-118	2446383.14	1991 May 6 16:21:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1991-464	2446383.17	1991 May 6 16:02:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1991-465	2446383.27	1991 May 6 18:27:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1991-119	2446383.30	1991 May 6 19:09:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1991-466	2446383.35	1991 May 6 20:23:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1991-467	2446392.19	1991 May 15 16:30:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1991-468	2446404.19	1991 May 28 14:00:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1991-469	2446405.08	1991 May 28 14:00:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1991-470	2446405.74	1991 May 29 05:49:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1991-471	2446408.07	1991 May 31 13:34:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1991-472	2446412.06	1991 Jun 4 13:30:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1991-120	2446413.10	1991 Jun 5 14:25:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1991-473	2446413.13	1991 Jun 5 15:00:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1991-474	2446415.07	1991 Jun 7 13:33:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1991-475	2446422.04	1991 Jun 14 12:00:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1991-476	2446422.04	1991 Jun 14 12:59:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1991-477	2446422.05	1991 Jun 14 13:18:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1991-478	2446422.10	1991 Jun 14 14:20:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1991-479	2446425.08	1991 Jun 17 14:00:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1991-480	2446434.20	1991 Jun 26 16:43:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Launch_e	Agency	Launch_Code	Group	Category	LT_Cite	Cite	Notes
1991-H81	2446435.57	1991 Jun 28 01:59:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1991-H82	2446436.30	1991 Jun 28 19:07:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1991-H83	2446439.08	1991 Jul 1 14:00:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1991-H84	2446439.27	1991 Jul 1 18:29:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1991-H85	2446455.08	1991 Jul 17 14:00:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1991-H86	2446455.21	1991 Jul 17 17:02:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1991-H87	2446461.12	1991 Jul 23 14:55:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1991-H88	2446467.43	1991 Jul 29 22:14:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1991-H89	2446469.11	1991 Jul 31 14:45:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1991-H90	2446471.17	1991 Aug 2 16:02:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1991-H91	2446471.20	1991 Aug 2 16:44:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1991-H92	2446479.81	1991 Aug 11 07:30:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1991-H93	2446479.83	1991 Aug 11 08:00:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1991-H94	2446479.85	1991 Aug 11 08:30:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1991-H95	2446479.90	1991 Aug 11 09:33:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1991-H96	2446479.93	1991 Aug 11 10:21:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1991-H97	2446479.94	1991 Aug 11 10:50:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1991-H98	2446479.99	1991 Aug 11 11:52:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1991-H99	2446480.03	1991 Aug 11 12:37:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1991-H99	2446480.05	1991 Aug 11 13:12:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1991-H99	2446480.07	1991 Aug 11 13:44:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1991-H99	2446485.56	1991 Aug 17 01:30:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1991-H100	2446485.58	1991 Aug 19 14:00:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1991-H101	2446497.47	1991 Aug 28 23:20:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1991-H102	2446499.53	1991 Aug 31 09:41:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1991-H103	2446501.06	1991 Sep 1 14:00:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1991-H104	2446511.14	1991 Sep 1 15:14:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1991-H105	2446511.22	1991 Sep 11 17:22:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1991-H107	2446511.44	1991 Sep 11 22:53:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1991-H108	2446512.51	1991 Sep 13 00:10:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1991-H109	2446512.53	1991 Sep 13 09:45:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1991-H110	2446523.89	1991 Sep 24 09:22:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1991-H111	2446532.37	1991 Oct 2 20:47:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1991-H112	2446539.22	1991 Oct 9 17:11:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1991-H113	2446539.43	1991 Oct 9 22:14:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1991-H114	2446543.12	1991 Oct 13 14:49:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1991-H115	2446546.06	1991 Oct 16 14:00:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1991-H116	2446546.51	1991 Oct 17 00:06:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1991-H117	2446553.08	1991 Oct 23 15:00:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1991-H18	2446560.12	1991 Oct 30 15:00:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1991-H19	2446560.44	1991 Oct 30 21:59:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1991-H20	2446561.92	1991 Nov 4 09:59:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1991-H20	2446565.74	1991 Nov 4 22:09:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1991-H21	2446567.14	1991 Nov 6 15:14:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1991-H22	2446572.06	1991 Nov 6 19:31:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1991-H23	2446572.95	1991 Nov 11 20:30:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1991-H24	2446576.14	1991 Nov 13 15:21:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1991-H25	2446576.15	1991 Nov 16 15:30:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1991-H26	2446579.13	1991 Nov 16 15:11:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1991-H27	2446583.14	1991 Nov 22 15:14:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1991-H28	2446588.14	1991 Nov 27 15:24:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1991-H29	2446596.40	1991 Dec 6 20:05:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1991-H30	2446597.28	1991 Dec 8 18:44:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1991-H30	2446605.25	1991 Dec 14 17:55:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1991-H30	2446608.09	1991 Dec 17 14:04:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1991-H31	2446609.34	1991 Dec 19 22:30:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1991-H41	2448612.20	1991 Dec 21 16:44:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1991-H42	2448614.12	1991 Dec 23 15:00:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1991-H42	2448614.16	1991 Dec 23 15:45:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1992-H01	2448624.34	1992 Jan 2 20:08:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1992-H01	2448624.34	1992 Jan 21 15:00:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1992-H01	2448644.44	1992 Jan 22 22:30:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1992-H05	2448644.46	1992 Jan 22 23:00:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1992-H05	2448658.25	1992 Feb 5 18:00:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1992-H08	2448660.25	1992 Feb 7 18:00:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1992-H10	2448664.30	1992 Feb 11 19:14:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1992-H10	2448664.32	1992 Feb 11 19:58:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1992-H10	2448666.44	1992 Feb 13 22:34:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1992-H10	2448666.48	1992 Feb 13 23:35:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1992-H10	2448667.25	1992 Feb 14 17:55:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1992-H10	2448667.26	1992 Feb 14 18:17:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1992-H13	2448670.12	1992 Feb 17 15:00:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1992-H17	2448674.12	1992 Feb 21 15:00:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1992-H18	2448674.70	1992 Feb 22 04:44:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1992-H18	2448679.47	1992 Feb 26 23:20:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1992-H20	2448685.12	1992 Mar 3 15:00:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1992-H26	2448693.15	1992 Mar 11 15:34:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1992-H27	2448693.89	1992 Mar 12 09:24:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1992-H27	2448699.08	1992 Mar 17 13:49:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1992-H27	2448700.08	1992 Mar 18 13:54:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1992-H28	2448700.42	1992 Mar 18 21:59:59	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1992-H29	2448700.48	1992 Mar 18 23:25:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-
1992-H29	2448701.08	1992 Mar 19 14:00:00	Rocketsonde	-	-	0.000	MRI	SS	-	Meteo	DSI-5850	-	-

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Launch_e	Agency	Launch_Code	Group	Category	LT_Cite	Cite	Notes
1992-H31	2446703.25	1992 Mar 21 1800:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1992-Y10	2446707.17	1992 Mar 25 1559:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1992-Y11	2446712.11	1992 Mar 30 1445:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1992-Y12	2446714.42	1992 Apr 1 2159:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1992-H37	2446714.44	1992 Apr 1 2230:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1992-A06	2446715.12	1992 Apr 2 1500:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1992-H38	2446715.25	1992 Apr 2 1800:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1992-H40	2446719.09	1992 Apr 6 1407:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1992-H41	2446720.52	1992 Apr 6 1800:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1992-H42	2446721.25	1992 Apr 6 1800:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1992-Y13	2446721.40	1992 Apr 6 2130:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1992-Y14	2446728.40	1992 Apr 15 2136:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1992-Y15	2446729.09	1992 Apr 16 1403:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1992-Y16	2446735.29	1992 Apr 22 1902:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1992-Y17	2446736.08	1992 Apr 23 1400:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1992-Y18	2446741.08	1992 Apr 28 1740:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1992-Y19	2446741.24	1992 Apr 28 1740:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1992-Y20	2446746.56	1992 May 6 0132:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1992-H48	2446748.58	1992 May 6 0156:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1992-H49	2446749.21	1992 May 6 1700:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1992-H50	2446755.06	1992 May 12 1327:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1992-H51	2446762.08	1992 May 19 1400:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1992-H52	2446771.09	1992 May 28 1406:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1992-Y21	2446776.06	1992 Jun 2 1330:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1992-H55	2446779.08	1992 Jun 5 1400:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1992-H56	2446782.08	1992 Jun 6 1400:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1992-H59	2446790.90	1992 Jun 17 0932:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1992-Y22	2446791.36	1992 Jun 17 1400:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1992-H60	2446792.36	1992 Jun 18 2054:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1992-H61	2446793.17	1992 Jun 19 1559:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1992-H62	2446797.04	1992 Jun 23 1259:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1992-H64	2446798.10	1992 Jun 24 1430:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1992-H65	2446800.25	1992 Jun 26 1800:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1992-H66	2446803.09	1992 Jun 29 1403:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1992-Y23	2446803.89	1992 Jun 29 2115:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1992-Y24	2446804.08	1992 Jun 30 0924:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1992-H69	2446805.50	1992 Jun 30 1400:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1992-H70	2446806.08	1992 Jul 1 0000:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1992-H71	2446806.27	1992 Jul 1 1400:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1992-Y25	2446810.08	1992 Jul 1 1827:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1992-Y26	2446810.23	1992 Jul 1 1900:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1992-Y27	2446814.08	1992 Jul 1 1900:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1992-Y28	2446819.05	1992 Jul 1 1900:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1992-Y29	2446819.12	1992 Jul 1 1900:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1992-Y30	2446825.07	1992 Jul 22 1340:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1992-Y31	2446825.07	1992 Jul 28 1919:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1992-Y32	2446832.04	1992 Jul 28 1919:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1992-Y33	2446832.04	1992 Jul 29 2024:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1992-H80	2446833.72	1992 Jul 30 1430:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1992-H81	2446833.72	1992 Jul 30 1430:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1992-H82	2446839.11	1992 Aug 4 2145:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1992-Y34	2446839.11	1992 Aug 4 2145:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1992-Y35	2446841.17	1992 Aug 6 1559:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1992-Y36	2446841.17	1992 Aug 6 1559:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1992-Y39	2446842.21	1992 Aug 7 1704:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1992-Y40	2446845.96	1992 Aug 10 1820:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1992-Y41	2446847.08	1992 Aug 12 1400:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1992-H86	2446854.08	1992 Aug 19 1400:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1992-Y42	2446854.16	1992 Aug 19 1544:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1992-Y43	2446859.09	1992 Aug 24 1409:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1992-H87	2446865.08	1992 Aug 30 1400:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1992-H88	2446869.96	1992 Sep 3 2045:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1992-H89	2446874.10	1992 Sep 3 2045:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1992-H90	2446877.08	1992 Sep 11 1400:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1992-H94	2446890.09	1992 Sep 24 1410:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1992-Y37	2446903.17	1992 Oct 7 1859:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1992-Y38	2446905.08	1992 Oct 9 1400:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1992-H98	2446910.12	1992 Oct 14 1500:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1992-H99	2446912.07	1992 Oct 16 1342:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1992-H100	2446915.38	1992 Oct 19 2100:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1992-Y36	2446916.12	1992 Oct 19 2100:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1992-H101	2446917.05	1992 Oct 21 1314:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1992-H102	2446932.12	1992 Nov 5 1500:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1992-Y37	2446933.05	1992 Nov 6 1309:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1992-H105	2446937.32	1992 Nov 10 1944:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1992-H107	2446947.12	1992 Dec 1 1500:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1992-H109	2446958.12	1992 Dec 1 1500:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1992-Y40	2446972.12	1992 Dec 15 1500:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1992-Y41	2446973.17	1992 Dec 16 1609:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1992-H112	2446975.08	1992 Dec 18 1400:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1992-H113	2446978.15	1992 Dec 21 1530:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1993-Y01	2446993.12	1993 Jan 5 1500:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1993-Y02	2446993.12	1993 Jan 5 1500:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1993-Y02	2446993.12	1993 Jan 12 1830:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1993-Y02	2446993.12	1993 Jan 15 0924:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1993-Y02	2446993.12	1993 Feb 1 1859:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1993-Y03	2446993.15	1993 Feb 17 1540:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1993-Y04	2446993.04	1993 Feb 24 1301:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-



Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Launch_e	Agency	Launch_Code	Group	Category	LT_Cite	Cite	Notes
1993-Y05	2445056.74	1993 Mar 10 05:40:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1993-Y10	2445064.12	1993 Mar 17 15:00:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1993-Y11	2445068.09	1993 Mar 21 14:15:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1993-Y13	2445071.14	1993 Mar 24 15:19:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1993-Y14	2445073.15	1993 Mar 28 15:40:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1993-Y06	2445076.27	1993 Mar 29 18:50:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1993-Y16	2445082.12	1993 Apr 4 15:00:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1993-Y07	2445084.33	1993 Apr 6 20:00:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1993-Y09	2445101.08	1993 Apr 23 14:00:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1993-Y10	2445103.05	1993 Apr 25 13:44:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1993-Y10	2445107.17	1993 Apr 29 16:00:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1993-Y20	2445114.62	1993 May 7 02:49:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1993-Y11	2445119.08	1993 May 11 14:00:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1993-Y11	2445119.19	1993 May 11 16:30:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1993-Y13	2445119.31	1993 May 11 19:30:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1993-Y22	2445121.10	1993 May 13 14:50:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1993-Y14	2445128.07	1993 May 20 13:44:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1993-Y24	2445129.08	1993 May 21 14:00:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1993-Y26	2445133.99	1993 May 26 11:45:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1993-Y27	2445136.08	1993 May 27 14:00:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1993-Y15	2445139.97	1993 Jun 1 11:23:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1993-Y20	2445157.11	1993 Jun 18 14:40:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1993-Y01	2445164.08	1993 Jun 25 14:00:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1993-Y16	2445171.11	1993 Jul 2 14:57:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1993-Y18	2445175.36	1993 Jul 3 02:45:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1993-Y03	2445176.45	1993 Jul 7 22:49:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1993-Y04	2445181.31	1993 Jul 12 19:25:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1993-Y19	2445183.11	1993 Jul 14 14:37:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1993-Y06	2445186.08	1993 Jul 16 14:00:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1993-Y07	2445192.09	1993 Jul 23 14:10:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1993-Y20	2445203.29	1993 Aug 3 18:59:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1993-Y09	2445211.17	1993 Aug 11 15:59:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1993-Y21	2445220.06	1993 Aug 20 13:24:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1993-Y22	2445224.97	1993 Aug 25 11:11:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1993-Y41	2445226.31	1993 Aug 26 19:19:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1993-Y43	2445232.10	1993 Sep 1 14:30:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1993-Y44	2445241.08	1993 Sep 10 14:00:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1993-Y24	2445246.23	1993 Sep 15 17:35:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1993-Y25	2445247.12	1993 Sep 16 15:00:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1993-Y26	2445247.22	1993 Oct 1 17:15:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1993-Y46	2445274.08	1993 Oct 13 14:00:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1993-Y27	2445278.11	1993 Oct 15 13:35:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1993-Y50	2445278.17	1993 Oct 17 03:36:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1993-Y28	2445310.45	1993 Nov 18 22:19:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1993-Y29	2445310.50	1993 Nov 18 22:19:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1993-Y35	2445321.17	1993 Nov 29 15:00:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1993-Y29	2445329.26	1993 Dec 17 18:12:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1993-Y30	2445332.19	1993 Dec 20 16:34:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1993-Y31	2445342.15	1993 Dec 20 16:34:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1993-Y32	2445342.17	1993 Dec 20 16:34:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1993-Y02	2445059.49	1996 Dec 7 23:42:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1996-Y01	2445092.29	1996 Dec 8 18:59:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1996-Y04	2445101.06	1996 Jan 18 13:30:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1996-Y06	2445113.29	1996 Jan 20 18:59:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1996-Y02	24450428.97	1996 Dec 10 18:31:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1996-Y12	24450437.14	1996 Dec 19 15:20:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1997-Y03	24450459.17	1997 Jan 9 15:59:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1997-Y02	24450489.12	1997 Feb 9 14:49:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1997-Y09	24450500.48	1997 Feb 20 23:30:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1997-Y04	24450507.12	1997 Feb 27 15:00:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1997-Y13	24450527.12	1997 Mar 2 15:00:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1997-Y14	24450541.12	1997 Mar 2 15:00:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1997-Y14	24450547.39	1997 Mar 8 21:14:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1997-Y28	24450549.07	1997 Apr 10 13:40:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1997-Y16	24450550.08	1997 Apr 11 14:00:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1997-Y18	24450561.26	1997 Apr 22 18:15:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1997-Y20	24450562.08	1997 May 13 14:00:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1997-Y05	24450598.11	1997 May 29 14:40:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1997-Y06	24450606.09	1997 Jun 6 14:03:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1997-Y28	24450619.08	1997 Jun 19 14:00:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1997-Y30	24450630.08	1997 Jun 30 14:00:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1997-Y30	24450633.06	1997 Jul 3 13:30:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1997-Y32	24450641.24	1997 Jul 11 17:44:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1997-Y06	24450645.06	1997 Jul 15 13:30:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1997-Y36	24450659.04	1997 Jul 29 12:59:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1997-Y38	24450661.45	1997 Jul 31 22:49:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1997-Y43	24450666.43	1997 Aug 5 22:14:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1997-Y43	24450667.05	1997 Aug 6 13:14:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1997-Y44	24450667.42	1997 Aug 6 22:04:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1997-Y45	24450667.45	1997 Aug 6 22:49:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1997-Y07	24450669.05	1997 Aug 8 13:18:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1997-Y11	24450670.90	1997 Aug 10 09:35:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1997-Y61	24450671.39	1997 Aug 10 21:22:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1997-Y14	24450671.40	1997 Aug 10 21:31:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	DrbPay	Agency	Launch_Code	Group	Category	LT_Cite	Cite	Notes
1997-A32	2450673.06	1997 Aug 12 1330:00	Rocketsonde	-	-	0.000	HRM	SS	-	Meteo	DSI-5850	-	-
1997-M64	2450683.34	1997 Aug 22 2010:00	Rocketsonde	-	-	0.000	HRM	SS	-	Meteo	DSI-5850	-	-
1997-M66	2450688.31	1997 Aug 27 1930:00	Rocketsonde	-	-	0.000	HRM	SS	-	Meteo	DSI-5850	-	-
1997-W71	2450704.06	1997 Sep 12 1330:00	Rocketsonde	-	-	0.000	HRM	SS	-	Meteo	DSI-5850	-	-
1997-131	2450716.08	1997 Sep 24 1400:00	Rocketsonde	-	-	0.000	HRM	SS	-	Meteo	DSI-5850	-	-
1997-132	2450731.08	1997 Oct 9 1400:00	Rocketsonde	-	-	0.000	HRM	SS	-	Meteo	DSI-5850	-	-
1997-W75	2450732.05	1997 Oct 10 1306:00	Rocketsonde	-	-	0.000	HRM	SS	-	Meteo	DSI-5850	-	-
1997-133	2450732.43	1997 Oct 10 2224:59	Rocketsonde	-	-	0.000	HRM	SS	-	Meteo	DSI-5850	-	-
1997-134	2450743.12	1997 Oct 21 1500:00	Rocketsonde	-	-	0.000	HRM	SS	-	Meteo	DSI-5850	-	-
1997-135	2450771.12	1997 Nov 18 1500:00	Rocketsonde	-	-	0.000	HRM	SS	-	Meteo	DSI-5850	-	-
1997-A66	2450801.47	1997 Dec 18 2315:00	Rocketsonde	-	-	0.000	HRM	SS	-	Meteo	DSI-5850	-	-
1998-Y10	2450835.09	1998 Jan 21 1408:00	Rocketsonde	-	-	0.000	HRM	SS	-	Meteo	DSI-5850	-	-
1998-M05	2450855.48	1998 Feb 10 2330:00	Rocketsonde	-	-	0.000	HRM	SS	-	Meteo	DSI-5850	-	-
1998-M08	2450869.12	1998 Feb 24 1500:00	Rocketsonde	-	-	0.000	HRM	SS	-	Meteo	DSI-5850	-	-
1998-W28	2450878.12	1998 Mar 5 1500:00	Rocketsonde	-	-	0.000	HRM	SS	-	Meteo	DSI-5850	-	-
1998-W29	2450900.12	1998 Mar 27 1500:00	Rocketsonde	-	-	0.000	HRM	SS	-	Meteo	DSI-5850	-	-
1998-W13	2450919.08	1998 Apr 15 1400:00	Rocketsonde	-	-	0.000	HRM	SS	-	Meteo	DSI-5850	-	-
1998-130	2450959.08	1998 May 5 1400:00	Rocketsonde	-	-	0.000	HRM	SS	-	Meteo	DSI-5850	-	-
1998-W19	2450966.08	1998 Jun 1 1400:00	Rocketsonde	-	-	0.000	HRM	SS	-	Meteo	DSI-5850	-	-
1998-131	2451025.08	1998 Jul 30 1400:00	Rocketsonde	-	-	0.000	HRM	SS	-	Meteo	DSI-5850	-	-
1998-W35	2451102.09	1998 Oct 15 1412:00	Rocketsonde	-	-	0.000	HRM	SS	-	Meteo	DSI-5850	-	-
1998-132	2451109.39	1998 Oct 22 2121:00	Rocketsonde	-	-	0.000	HRM	SS	-	Meteo	DSI-5850	-	-
1998-133	2451109.54	1998 Oct 23 0101:59	Rocketsonde	-	-	0.000	HRM	SS	-	Meteo	DSI-5850	-	-
1998-134	2451169.19	1998 Dec 21 1630:00	Rocketsonde	-	-	0.000	HRM	SS	-	Meteo	DSI-5850	-	-
1999-M01	2451194.10	1999 Jan 15 1430:00	Rocketsonde	-	-	0.000	HRM	SS	-	Meteo	DSI-5850	-	-
1999-M02	2451219.43	1999 Feb 9 2214:59	Rocketsonde	-	-	0.000	HRM	SS	-	Meteo	DSI-5850	-	-
1999-102	2451262.61	1999 Mar 25 0245:00	Rocketsonde	-	-	0.000	HRM	SS	-	Meteo	DSI-5850	-	-
1999-101	2451346.21	1999 Jun 16 1700:00	Rocketsonde	-	-	0.000	HRM	SS	-	Meteo	DSI-5850	-	-
1999-102	2451466.12	1999 Oct 14 1500:00	Rocketsonde	-	-	0.000	HRM	SS	-	Meteo	DSI-5850	-	-
1999-104	2451522.12	1999 Dec 9 1500:00	Rocketsonde	-	-	0.000	HRM	SS	-	Meteo	DSI-5850	-	-
2000-101	2451601.51	2000 Feb 27 0014:59	Rocketsonde	-	-	0.000	HRM	SS	-	Meteo	DSI-5850	-	-
2000-102	2451711.12	2000 Jun 15 1500:00	Rocketsonde	-	-	0.000	HRM	SS	-	Meteo	DSI-5850	-	-



Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Mission	FlightCode	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee_Km	Range_Km	Dest
1969-1960	2440417-30	1969 Jul 14 1907:00	Rocketsonde	-	-	Met Para	-	-	-	PH	-	-	-	56	-	-
1969-1961	2440418-08	1969 Jul 15 1400:00	Rocketsonde	-	-	Starute	-	-	-	CC	LC43	-	-	62	-	-
1969-1962	2440418-12	1969 Jul 15 1500:00	Rocketsonde	-	-	Met Para,Arconsode	-	-	-	THU	-	-	-	59	-	-
1969-1963	2440418-15	1969 Jul 15 1530:00	Rocketsonde	-	-	Starute,Dataosode	-	-	-	CC	LC43	-	-	57	-	-
1969-1964	2440418-38	1969 Jul 15 2104:59	Rocketsonde	-	-	Met Para	-	-	-	KAU	-	-	-	50	-	-
1969-1126	2440419-08	1969 Jul 16 1400:00	Rocketsonde	-	-	Met Para,Arconsode	-	-	-	ANT	-	-	-	47	-	-
1969-1967	2440419-11	1969 Jul 16 1445:00	Rocketsonde	-	-	Met Para,Arconsode	-	-	-	ASC	-	-	-	61	-	-
1969-1969	2440419-14	1969 Jul 16 1514:59	Rocketsonde	-	-	Met Para,Arconsode	-	-	-	WI	-	-	-	53	-	-
1969-1970	2440419-17	1969 Jul 16 1559:59	Rocketsonde	-	-	Met Sphere,Dataosode	-	-	-	WS	-	-	-	63	-	-
1969-1972	2440419-25	1969 Jul 16 1800:59	Rocketsonde	-	-	Met Para,Arconsode	-	-	-	WS	-	-	-	63	-	-
1969-1974	2440419-41	1969 Jul 16 2156:00	Rocketsonde	-	-	Met Para,Arconsode	-	-	-	PRIM	-	-	-	58	-	-
1969-1975	2440420-11	1969 Jul 17 1443:00	Rocketsonde	-	-	Met Para	-	-	-	PH	LC43	-	-	54	-	-
1969-1976	2440420-24	1969 Jul 17 1740:00	Rocketsonde	-	-	Met Para,Arconsode	-	-	-	PH	-	-	-	59	-	-
1969-1977	2440420-25	1969 Jul 17 1800:00	Rocketsonde	-	-	Starute	-	-	-	CC	-	-	-	54	-	-
1969-1978	2440420-28	1969 Jul 17 1914:59	Rocketsonde	-	-	Met Para,Arconsode	-	-	-	WS	-	-	-	68	-	-
1969-1979	2440420-30	1969 Jul 17 2111:59	Rocketsonde	-	-	Met Para	-	-	-	GRLY	-	-	-	46	-	-
1969-1127	2440420-38	1969 Jul 17 2111:59	Rocketsonde	-	-	Met Para,Arconsode	-	-	-	CC	LC43	-	-	59	-	-
1969-1979	2440421-08	1969 Jul 18 1400:00	Rocketsonde	-	-	Starute,Dataosode	-	-	-	ASC	-	-	-	60	-	-
1969-1980	2440421-11	1969 Jul 18 1445:00	Rocketsonde	-	-	Met Para,Arconsode	-	-	-	SHER	-	-	-	60	-	-
1969-1980	2440421-16	1969 Jul 18 1551:00	Rocketsonde	-	-	Met Sphere	-	-	-	ANT	-	-	-	57	-	-
1969-1981	2440421-17	1969 Jul 18 1559:59	Rocketsonde	-	-	Met Sphere,Dataosode	-	-	-	KAU	-	-	-	53	-	-
1969-1982	2440421-21	1969 Jul 18 1700:00	Rocketsonde	-	-	Met Para,Arconsode	-	-	-	PH	-	-	-	59	-	-
1969-1983	2440421-29	1969 Jul 18 1859:59	Rocketsonde	-	-	Met Para,Arconsode	-	-	-	PH	-	-	-	59	-	-
1969-1984	2440421-29	1969 Jul 18 1859:59	Rocketsonde	-	-	Starute,Dataosode	-	-	-	GRLY	-	-	-	48	-	-
1969-1128	2440421-29	1969 Jul 18 1859:59	Rocketsonde	-	-	Met Para,Dataosode	-	-	-	KAU	-	-	-	50	-	-
1969-1985	2440421-38	1969 Jul 18 2100:00	Rocketsonde	-	-	Met Sphere,Dataosode	-	-	-	WS	-	-	-	69	-	-
1969-1986	2440425-30	1969 Jul 22 1914:59	Rocketsonde	-	-	Met Para	-	-	-	KAU	-	-	-	52	-	-
1969-1987	2440425-38	1969 Jul 22 2100:00	Rocketsonde	-	-	Starute,Dataosode	-	-	-	PH	-	-	-	63	-	-
1969-1988	2440425-40	1969 Jul 22 2137:59	Rocketsonde	-	-	Starute,Dataosode	-	-	-	CC	LC43	-	-	60	-	-
1969-1990	2440426-08	1969 Jul 23 1400:00	Rocketsonde	-	-	Met Para,Arconsode	-	-	-	ASC	-	-	-	60	-	-
1969-1991	2440426-15	1969 Jul 23 1530:00	Rocketsonde	-	-	Met Para,Arconsode	-	-	-	SHER	-	-	-	60	-	-
1969-1992	2440426-17	1969 Jul 23 1602:59	Rocketsonde	-	-	Met Para,Arconsode	-	-	-	ANT	-	-	-	57	-	-
1969-1993	2440426-24	1969 Jul 23 1742:00	Rocketsonde	-	-	Met Para,Arconsode	-	-	-	KAU	-	-	-	53	-	-
1969-1994	2440426-25	1969 Jul 23 1800:59	Rocketsonde	-	-	Met Para,Arconsode	-	-	-	PH	-	-	-	59	-	-
1969-1995	2440426-29	1969 Jul 23 1859:59	Rocketsonde	-	-	Met Para,Arconsode	-	-	-	KAU	-	-	-	56	-	-
1969-1996	2440426-35	1969 Jul 23 2026:59	Rocketsonde	-	-	Met Para,Arconsode	-	-	-	WS	-	-	-	67	-	-
1969-1997	2440426-38	1969 Jul 23 2106:00	Rocketsonde	-	-	Met Para,Arconsode	-	-	-	VI	-	-	-	60	-	-
1969-1998	2440426-40	1969 Jul 23 2148:00	Rocketsonde	-	-	Met Para,Arconsode	-	-	-	WS	-	-	-	70	-	-
1969-1999	2440427-10	1969 Jul 24 1430:00	Rocketsonde	-	-	Met Sphere,Dataosode	-	-	-	PH	-	-	-	64	-	-
1969-1100	2440427-17	1969 Jul 24 1430:00	Rocketsonde	-	-	Starute,Dataosode	-	-	-	GRLY	-	-	-	60	-	-
1969-1101	2440427-32	1969 Jul 24 1940:00	Rocketsonde	-	-	Starute	-	-	-	PH	-	-	-	85	-	-
1969-1102	2440427-35	1969 Jul 24 2024:00	Rocketsonde	-	-	Met Para	-	-	-	VI	-	-	-	81	-	-
1969-1103	2440427-51	1969 Jul 25 2354:00	Rocketsonde	-	-	Starute	-	-	-	KAU	-	-	-	81	-	-
1969-1104	2440427-51	1969 Jul 25 2354:00	Rocketsonde	-	-	Met Para	-	-	-	VI	-	-	-	83	-	-
1969-1105	2440428-02	1969 Jul 25 1956:00	Rocketsonde	-	-	Met Para,Arconsode	-	-	-	VI	-	-	-	63	-	-
1969-1106	2440428-02	1969 Jul 25 1324:00	Rocketsonde	-	-	Met Para,Arconsode	-	-	-	CC	LC43	-	-	60	-	-
1969-1107	2440428-11	1969 Jul 25 1445:00	Rocketsonde	-	-	Met Para,Arconsode	-	-	-	ASC	-	-	-	59	-	-
1969-1108	2440428-11	1969 Jul 25 1445:00	Rocketsonde	-	-	Met Para,Arconsode	-	-	-	WS	-	-	-	87	-	-
1969-1109	2440428-11	1969 Jul 25 1604:59	Rocketsonde	-	-	Chief	-	-	-	PH	-	-	-	61	-	-
1969-1108	2440428-21	1969 Jul 25 1729:00	Rocketsonde	-	-	Met Para,Arconsode	-	-	-	WS	-	-	-	59	-	-
1969-1109	2440428-21	1969 Jul 25 1729:00	Rocketsonde	-	-	Starute,Dataosode	-	-	-	SHER	-	-	-	59	-	-
1969-1108	2440428-22	1969 Jul 25 2114:59	Rocketsonde	-	-	Met Para,Arconsode	-	-	-	KAU	-	-	-	56	-	-
1969-1102	2440428-39	1969 Jul 28 1330:00	Rocketsonde	-	-	Met Para,Dataosode	-	-	-	CC	LC43	-	-	63	-	-
1969-1103	2440431-01	1969 Jul 28 1345:00	Rocketsonde	-	-	Starute,Dataosode	-	-	-	ASC	-	-	-	63	-	-
1969-1104	2440431-01	1969 Jul 28 1345:00	Rocketsonde	-	-	Met Sphere	-	-	-	WS	-	-	-	81	-	-
1969-1105	2440431-23	1969 Jul 28 1730:00	Rocketsonde	-	-	Chief	-	-	-	WS	-	-	-	56	-	-
1969-1105	2440431-23	1969 Jul 28 2000:00	Rocketsonde	-	-	Chief	-	-	-	WS	-	-	-	56	-	-
1969-1106	2440431-36	1969 Jul 28 2034:00	Rocketsonde	-	-	Met Para,Arconsode	-	-	-	PH	-	-	-	59	-	-
1969-1107	2440431-41	1969 Jul 28 2148:59	Rocketsonde	-	-	Met Para,Dataosode	-	-	-	KAU	-	-	-	50	-	-
1969-1108	2440432-25	1969 Jul 29 1601:59	Rocketsonde	-	-	Met Para,Dataosode	-	-	-	PH	-	-	-	52	-	-
1969-1109	2440432-25	1969 Jul 29 2200:59	Rocketsonde	-	-	Starute,Arconsode	-	-	-	PRIM	-	-	-	56	-	-
1969-1132	2440433-02	1969 Jul 30 1409:00	Rocketsonde	-	-	Met Para,Arconsode	-	-	-	VI	-	-	-	41	-	-
1969-1102	2440433-09	1969 Jul 30 1430:00	Rocketsonde	-	-	Met Para,Arconsode	-	-	-	VI	-	-	-	41	-	-
1969-1100	2440433-10	1969 Jul 30 1430:00	Rocketsonde	-	-	Starute,Dataosode	-	-	-	ANT	-	-	-	50	-	-
1969-1102	2440433-15	1969 Jul 30 1530:00	Rocketsonde	-	-	Met Para,Arconsode	-	-	-	CC	LC43	-	-	60	-	-
1969-1103	2440433-15	1969 Jul 30 1630:00	Rocketsonde	-	-	Met Para,Arconsode	-	-	-	ASC	-	-	-	60	-	-
1969-1104	2440433-27	1969 Jul 30 1830:00	Rocketsonde	-	-	Met Para,Arconsode	-	-	-	PH	-	-	-	59	-	-
1969-1133	2440433-27	1969 Jul 30 1830:00	Rocketsonde	-	-	Met Para,Arconsode	-	-	-	WS	-	-	-	45	-	-
1969-1134	2440433-31	1969 Jul 30 1930:00	Rocketsonde	-	-	Met Para	-	-	-	WS	-	-	-	45	-	-
1969-1106	2440433-38	1969 Jul 30 2103:59	Rocketsonde	-	-	Met Para,Dataosode	-	-	-	KAU	-	-	-	59	-	-
1969-1102	2440434-20	1969 Jul 31 1651:00	Rocketsonde	-	-	Starute,Dataosode	-	-	-	PH	-	-	-	61	-	-
1969-1102	2440434-38	1969 Jul 31 2112:59	Rocketsonde	-	-	Met Para	-	-	-	KAU	-	-	-	51	-	-
1969-1102	2440434-44	1969 Jul 31 2227:59	Rocketsonde	-	-	Met Para,Arconsode	-	-	-	ASC	-	-	-	63	-	-
1969-1103	2440435-08	1969 Aug 1 1400:00	Rocketsonde	-	-	Starute,Dataosode	-	-	-	CC	LC43	-	-	46	-	-
1969-1135	2440435-13	1969 Aug 1 1437:59	Rocketsonde	-	-	Met Para,Arconsode	-	-	-	VI	-	-	-	66	-	-
1969-1103	2440435-13	1969 Aug 1 1512:59	Rocketsonde	-	-	Met Para	-	-	-	SHER	-	-	-	61	-	-
1969-1103	2440435-13	1969 Aug 1 1600:59	Rocketsonde	-	-	Met Para,Arconsode	-	-	-	PRIM	-	-	-	51	-	-
1969-1103	2440435-27	1969 Aug 1 1829:00	Rocketsonde	-	-	Starute,Dataosode	-	-	-	PH	-	-	-	62	-	-
1969-1103	2440435-27	1969 Aug 1 1829:00	Rocketsonde	-	-	Starute,Dataosode	-	-	-	WS	-	-	-	57	-	-
1969-1103	2440435-37	1969 Aug 1 2052:00	Rocketsonde	-	-	Starute,Dataosode	-	-	-	WS	-	-	-	62	-	-
1969-1103	2440435-37	1969 Aug 1 2052:00	Rocketsonde	-	-	Starute,Dataosode	-	-	-	CC	LC43	-	-	63	-	-
1969-1103	2440438-08	1969 Aug 4 1400:00	Rocketsonde	-	-	Met Sphere	-	-	-	CC	-	-	-	61	-	-
1969-1103	2440438-08	1969 Aug 4 1421:00	Rocketsonde	-	-	Met Sphere	-	-	-	CC	LC43	-	-	61	-	-
1969-1103	2440438-11	1969 Aug 4 1445:00	Rocketsonde	-	-	Met Para	-	-	-	ASC	-	-	-	65	-	-
1969-1104	2440438-11	1969 Aug 4 1445:00	Rocketsonde	-	-	Met Para,Arconsode	-	-	-	ASC	-	-	-	65	-	-
1969-1104	2440438-32	1969 Aug 4 1623:59	Rocketsonde	-	-	Met Para,Dataosode	-	-	-	WS	-	-	-	65	-	-
1969-1104	2440438-39	1969 Aug 4 1944:59	Rocketsonde	-	-	Met Para,Dataosode	-	-	-	KAU	-	-	-	50	-	-
1969-1104	2440439-08	1969 Aug 5 2123:59	Rocketsonde	-	-	Met Sphere	-	-	-	CC	LC43	-	-	70	-	-
1969-1104	2440439-38	1969 Aug 5 1400:00	Rocketsonde	-	-	Met Sphere	-	-	-	PH	-	-	-	59	-	-
1969-1104	2440439-40	1969 Aug 5 2136:59	Rocketsonde													

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Mission	FlightCode	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee_Km	Range_Km	Dest
1969-H1049	2440440-10	1969 Aug 6 1422:00	Rocketsonde	-	-	Met Para, Arcasonde	-	-	-	WI	-	-	-	56	-	-
1969-H1050	2440440-11	1969 Aug 6 1445:00	Rocketsonde	-	-	Met Para, Arcasonde	-	-	-	ASC	-	-	-	51	-	-
1969-H1051	2440440-12	1969 Aug 6 1500:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	CC	LC43	-	-	57	-	-
1969-H1336	2440440-19	1969 Aug 6 1629:00	Rocketsonde	-	-	Met Para	-	-	-	WI	-	-	-	30	-	-
1969-H1052	2440440-19	1969 Aug 6 1630:00	Rocketsonde	-	-	Met Para	-	-	-	SHER	-	-	-	52	-	-
1969-H1053	2440440-21	1969 Aug 6 1700:00	Rocketsonde	-	-	Chaff	-	-	-	WS	-	-	-	81	-	-
1969-H1054	2440440-29	1969 Aug 6 1859:59	Rocketsonde	-	-	Met Para, Arcasonde	-	-	-	WS	-	-	-	63	-	-
1969-H1337	2440440-34	1969 Aug 6 2015:00	Rocketsonde	-	-	Met Para	-	-	-	WI	-	-	-	30	-	-
1969-H1055	2440440-40	1969 Aug 6 2129:00	Rocketsonde	-	-	Met Para, Arcasonde	-	-	-	RAU	-	-	-	59	-	-
1969-H1056	2440440-55	1969 Aug 7 0114:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	KRR	-	-	-	58	-	-
1969-H1057	2440441-36	1969 Aug 7 2032:00	Rocketsonde	-	-	Met Para	-	-	-	RAU	-	-	-	52	-	-
1969-H1058	2440442-08	1969 Aug 8 1400:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	WI	LC43	-	-	60	-	-
1969-H1059	2440442-09	1969 Aug 8 1404:59	Rocketsonde	-	-	Met Para, Arcasonde	-	-	-	ASC	-	-	-	59	-	-
1969-H1060	2440442-11	1969 Aug 8 1445:00	Rocketsonde	-	-	Met Para, Arcasonde	-	-	-	ASC	-	-	-	64	-	-
1969-H1061	2440442-11	1969 Aug 8 1445:00	Rocketsonde	-	-	Met Sphere	-	-	-	AIT	-	-	-	59	-	-
1969-H1062	2440442-25	1969 Aug 8 1800:00	Rocketsonde	-	-	Met Para, Arcasonde	-	-	-	PR1H	-	-	-	64	-	-
1969-H1063	2440442-31	1969 Aug 8 1930:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	WS	-	-	-	61	-	-
1969-H1064	2440442-42	1969 Aug 8 2204:59	Rocketsonde	-	-	Met Para, Datasonde	-	-	-	RAU	-	-	-	58	-	-
1969-H1065	2440442-56	1969 Aug 8 2204:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	KRR	-	-	-	58	-	-
1969-H1066	2440445-12	1969 Aug 11 1449:59	Rocketsonde	-	-	Met Para, Arcasonde	-	-	-	ASC	-	-	-	61	-	-
1969-H1067	2440445-18	1969 Aug 11 1619:59	Rocketsonde	-	-	Met Para, Arcasonde	-	-	-	SHER	-	-	-	62	-	-
1969-H1339	2440445-23	1969 Aug 11 1735:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	CC	LC43	-	-	49	-	-
1969-H1068	2440445-25	1969 Aug 11 1800:59	Rocketsonde	-	-	Met Para, Datasonde	-	-	-	PR1H	-	-	-	66	-	-
1969-H1069	2440445-43	1969 Aug 11 2212:59	Rocketsonde	-	-	Met Para, Arcasonde	-	-	-	RAU	-	-	-	56	-	-
1969-H1070	2440446-38	1969 Aug 12 2102:59	Rocketsonde	-	-	Met Para	-	-	-	RAU	-	-	-	57	-	-
1969-H1071	2440446-42	1969 Aug 12 2203:59	Rocketsonde	-	-	Met Para, Arcasonde	-	-	-	PH	-	-	-	57	-	-
1969-H1072	2440447-02	1969 Aug 13 1203:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	ASC	-	-	-	55	-	-
1969-H1073	2440447-06	1969 Aug 13 1400:00	Rocketsonde	-	-	Met Para, Datasonde	-	-	-	CC	LC43	-	-	57	-	-
1969-H1074	2440447-10	1969 Aug 13 1430:00	Rocketsonde	-	-	Met Sphere	-	-	-	AIT	-	-	-	62	-	-
1969-H1075	2440447-17	1969 Aug 13 1559:59	Rocketsonde	-	-	Met Para, Arcasonde	-	-	-	SHER	-	-	-	55	-	-
1969-H1076	2440447-25	1969 Aug 13 1800:00	Rocketsonde	-	-	Met Para, Arcasonde	-	-	-	PR1H	-	-	-	64	-	-
1969-H1077	2440447-28	1969 Aug 13 1830:59	Rocketsonde	-	-	Met Para, Arcasonde	-	-	-	PH	-	-	-	61	-	-
1969-H1078	2440447-31	1969 Aug 13 1930:00	Rocketsonde	-	-	Met Para, Arcasonde	-	-	-	WS	-	-	-	60	-	-
1969-H1079	2440448-09	1969 Aug 14 1404:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	VI	-	-	-	58	-	-
1969-H1080	2440448-19	1969 Aug 14 1630:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PH	-	-	-	61	-	-
1969-H1081	2440448-25	1969 Aug 15 1200:00	Rocketsonde	-	-	Met Sphere	-	-	-	ASC	LC43	-	-	49	-	-
1969-H1082	2440449-02	1969 Aug 15 1455:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	CC	-	-	-	63	-	-
1969-H1083	2440449-11	1969 Aug 15 1559:59	Rocketsonde	-	-	Met Para, Arcasonde	-	-	-	SHER	-	-	-	71	-	-
1969-H141	2440449-11	1969 Aug 15 1559:59	Rocketsonde	-	-	Met Para, Arcasonde	-	-	-	PR1H	-	-	-	61	-	-
1969-H1084	2440449-25	1969 Aug 15 1800:59	Rocketsonde	-	-	Met Para, Arcasonde	-	-	-	PH	-	-	-	60	-	-
1969-H1085	2440449-25	1969 Aug 15 1830:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	VI	-	-	-	58	-	-
1969-H1086	2440449-27	1969 Aug 15 1859:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PH	-	-	-	67	-	-
1969-H1089	2440449-29	1969 Aug 15 1859:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	RAU	-	-	-	57	-	-
1969-H1090	2440449-35	1969 Aug 15 2129:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	KRR	-	-	-	52	-	-
1969-H1091	2440449-35	1969 Aug 15 2129:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	KRR	-	-	-	61	-	-
1969-H1092	2440451-78	1969 Aug 18 0247:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	THU	-	-	-	60	-	-
1969-H1093	2440452-06	1969 Aug 18 1400:00	Rocketsonde	-	-	Met Sphere	-	-	-	ASC	LC43	-	-	60	-	-
1969-H1094	2440452-06	1969 Aug 18 1400:00	Rocketsonde	-	-	Met Sphere	-	-	-	ASC	-	-	-	65	-	-
1969-H1095	2440452-11	1969 Aug 18 1559:59	Rocketsonde	-	-	Met Para, Arcasonde	-	-	-	SHER	-	-	-	64	-	-
1969-H1096	2440452-20	1969 Aug 18 1859:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	VI	-	-	-	62	-	-
1969-H143	2440452-20	1969 Aug 18 1859:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	VI	-	-	-	62	-	-
1969-H1097	2440452-25	1969 Aug 18 1930:00	Rocketsonde	-	-	Met Para	-	-	-	PR1H	-	-	-	67	-	-
1969-H1098	2440452-25	1969 Aug 18 1930:00	Rocketsonde	-	-	Met Para, Arcasonde	-	-	-	WS	-	-	-	68	-	-
1969-H1099	2440452-31	1969 Aug 18 2143:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	ASC	-	-	-	67	-	-
1969-H1100	2440452-40	1969 Aug 19 0129:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	KRR	-	-	-	59	-	-
1969-H1101	2440452-56	1969 Aug 19 0129:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	KRR	-	-	-	61	-	-
1969-H1102	2440453-03	1969 Aug 19 1413:00	Rocketsonde	-	-	Met Para, Arcasonde	-	-	-	VI	-	-	-	55	-	-
1969-H143	2440453-03	1969 Aug 19 1413:00	Rocketsonde	-	-	Met Para, Arcasonde	-	-	-	VI	-	-	-	31	-	-
1969-H1103	2440453-21	1969 Aug 19 1709:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PH	-	-	-	59	-	-
1969-H1104	2440453-26	1969 Aug 19 1819:00	Rocketsonde	-	-	Met Para, Arcasonde	-	-	-	PH	-	-	-	59	-	-
1969-H1105	2440453-26	1969 Aug 19 1830:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	CC	LC43	-	-	61	-	-
1969-H1106	2440454-08	1969 Aug 20 1400:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	KRR	-	-	-	61	-	-
1969-H1107	2440454-11	1969 Aug 20 1434:00	Rocketsonde	-	-	Met Para, Arcasonde	-	-	-	ASC	-	-	-	61	-	-
1969-H1108	2440454-11	1969 Aug 20 1455:00	Rocketsonde	-	-	Met Para, Arcasonde	-	-	-	ASC	-	-	-	61	-	-
1969-H1109	2440454-15	1969 Aug 20 1529:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	THU	-	-	-	60	-	-
1969-H1110	2440454-15	1969 Aug 20 1540:00	Rocketsonde	-	-	Met Para, Arcasonde	-	-	-	PH	-	-	-	62	-	-
1969-H1111	2440454-17	1969 Aug 20 1559:59	Rocketsonde	-	-	Met Para, Arcasonde	-	-	-	SHER	-	-	-	59	-	-
1969-H1112	2440454-23	1969 Aug 20 1730:00	Rocketsonde	-	-	Chaff	-	-	-	WS	-	-	-	77	-	-
1969-H1113	2440454-27	1969 Aug 20 1830:00	Rocketsonde	-	-	Met Para, Arcasonde	-	-	-	WS	-	-	-	54	-	-
1969-H1114	2440454-27	1969 Aug 21 0000:00	Rocketsonde	-	-	Met Para, Arcasonde	-	-	-	WS	-	-	-	54	-	-
1969-H1115	2440454-56	1969 Aug 21 0127:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	KRR	-	-	-	56	-	-
1969-H1116	2440454-56	1969 Aug 21 0127:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	KRR	-	-	-	60	-	-
1969-H1117	2440455-17	1969 Aug 21 1524:59	Rocketsonde	-	-	Met Para	-	-	-	PH	-	-	-	54	-	-
1969-H1118	2440455-33	1969 Aug 21 1607:00	Rocketsonde	-	-	Met Para, Arcasonde	-	-	-	VI	-	-	-	54	-	-
1969-H144	2440455-33	1969 Aug 21 2001:00	Rocketsonde	-	-	Met Para, Arcasonde	-	-	-	VI	-	-	-	33	-	-
1969-H1119	2440455-54	1969 Aug 21 2136:59	Rocketsonde	-	-	Met Para	-	-	-	WI	-	-	-	48	-	-
1969-H1118	2440455-54	1969 Aug 21 2136:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	CC	LC43	-	-	61	-	-
1969-H1120	2440455-73	1969 Aug 22 0527:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	KRR	-	-	-	59	-	-
1969-H1121	2440456-02	1969 Aug 22 1230:00	Rocketsonde	-	-	Met Sphere	-	-	-	ASC	-	-	-	65	-	-
1969-H1122	2440456-08	1969 Aug 22 1358:59	Rocketsonde	-	-	Met Para, Arcasonde	-	-	-	ASC	-	-	-	60	-	-
1969-H1123	2440456-25	1969 Aug 22 1400:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	CC	LC43	-	-	62	-	-
1969-H1124	2440456-25	1969 Aug 22 1800:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	CC	-	-	-	66	-	-
1969-H1125	2440456-26	1969 Aug 22 1810:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	WS	-	-	-	66	-	-
1969-H1126	2440456-30	1969 Aug 22 1904:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PH	-	-	-	59	-	-
1969-H1128	2440456-50	1969 Aug 23 0000:00	Rocketsonde	-	-	Met Para, Arcasonde	-	-	-	CHAFF	-	-	-	58	-	-
1969-H1129	2440456-56	1969 Aug 23 0120:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	KRR	-	-	-	54	-	-
1969-H1131	2440459-21	1969 Aug 25 1702:00	Rocketsonde	-	-	Met Para, Arcasonde	-	-	-	PH	-	-	-	60	-	-
1969-H1130	2440459-24	1969 Aug 25 1745:00	Rocketsonde	-	-	Met Para, Datasonde	-	-	-	SHER	-	-	-	62	-	-
1969-H1133	2440459-25	1969 Aug 25 1800:00	Rocketsonde	-	-	Met Para, Arcasonde	-	-	-	PR1H	-	-	-	68	-	-

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Mission	FlightCode	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee_Km	Range_Km	Dest
1969-H1134	2440469-31	1969 Aug 25 19:19:59	Rocketsonde	-	-	Chaff	-	-	-	GRLY	-	-	-	57	-	-
1969-H1135	2440469-52	1969 Aug 26 00:27:59	Rocketsonde	-	-	Met. Para, Datasonde	-	-	-	RAU	-	-	-	55	-	-
1969-H1136	2440469-57	1969 Aug 26 01:34:59	Rocketsonde	-	-	Sturruv, Datasonde	-	-	-	KRR	-	-	-	58	-	-
1969-H1137	2440460-11	1969 Aug 26 14:37:00	Rocketsonde	-	-	Chaff	-	-	-	WI	-	-	-	62	-	-
1969-H1138	2440460-14	1969 Aug 26 15:19:00	Rocketsonde	-	-	Chaff	-	-	-	WI	-	-	-	59	-	-
1969-H1139	2440460-19	1969 Aug 26 16:50:00	Rocketsonde	-	-	Chaff	-	-	-	SHER	-	-	-	58	-	-
1969-H147	2440460-20	1969 Aug 26 16:47:59	Rocketsonde	-	-	Chaff	-	-	-	WI	-	-	-	46	-	-
1969-H140	2440460-26	1969 Aug 26 18:11:59	Rocketsonde	-	-	Chaff	-	-	-	WI	-	-	-	57	-	-
1969-H141	2440460-50	1969 Aug 27 00:02:59	Rocketsonde	-	-	Met. Para	-	-	-	RAU	-	-	-	58	-	-
1969-H142	2440460-64	1969 Aug 27 03:26:59	Rocketsonde	-	-	Met. Para, Datasonde	-	-	-	KRR	-	-	-	61	-	-
1969-H143	2440461-08	1969 Aug 27 14:06:00	Rocketsonde	-	-	Met. Para, Datasonde	-	-	-	THU	-	-	-	60	-	-
1969-H144	2440461-08	1969 Aug 27 14:06:00	Rocketsonde	-	-	Sturruv, Datasonde	-	-	-	CC	-	-	-	63	-	-
1969-H146	2440461-15	1969 Aug 27 15:00:00	Rocketsonde	-	-	Met. Para, Arcasonde	-	-	-	WI	-	-	-	53	-	-
1969-H147	2440461-17	1969 Aug 27 15:00:59	Rocketsonde	-	-	Met. Para, Arcasonde	-	-	-	ASC	-	-	-	63	-	-
1969-H149	2440461-29	1969 Aug 27 16:59:59	Rocketsonde	-	-	Chaff	-	-	-	SHER	-	-	-	61	-	-
1969-H150	2440461-29	1969 Aug 27 16:59:59	Rocketsonde	-	-	Chaff	-	-	-	GRLY	-	-	-	58	-	-
1969-H151	2440461-31	1969 Aug 27 19:19:59	Rocketsonde	-	-	Met. Para, Arcasonde	-	-	-	WS	-	-	-	55	-	-
1969-H152	2440461-58	1969 Aug 28 04:48:59	Rocketsonde	-	-	Met. Para, Arcasonde	-	-	-	PH	-	-	-	59	-	-
1969-H153	2440462-27	1969 Aug 28 16:29:00	Rocketsonde	-	-	Sturruv, Datasonde	-	-	-	KRR	-	-	-	62	-	-
1969-H154	2440462-51	1969 Aug 29 00:08:00	Rocketsonde	-	-	Sturruv, Datasonde	-	-	-	PH	-	-	-	64	-	-
1969-H155	2440462-99	1969 Aug 29 00:08:00	Rocketsonde	-	-	Met. Para	-	-	-	RAU	-	-	-	50	-	-
1969-H156	2440463-08	1969 Aug 29 14:00:00	Rocketsonde	-	-	Met. Para, Arcasonde	-	-	-	WI	-	-	-	60	-	-
1969-H157	2440463-11	1969 Aug 29 14:45:00	Rocketsonde	-	-	Met. Sphere	-	-	-	CC	-	-	-	64	-	-
1969-H158	2440463-17	1969 Aug 29 16:59:59	Rocketsonde	-	-	Met. Para, Arcasonde	-	-	-	SHER	-	-	-	62	-	-
1969-H160	2440463-26	1969 Aug 29 21:00:59	Rocketsonde	-	-	Sturruv, Datasonde	-	-	-	WS	-	-	-	61	-	-
1969-H161	2440463-28	1969 Aug 29 21:00:00	Rocketsonde	-	-	Sturruv, Datasonde	-	-	-	KRR	-	-	-	61	-	-
1969-H162	2440463-51	1969 Aug 30 00:09:00	Rocketsonde	-	-	Met. Para, Datasonde	-	-	-	RAU	-	-	-	58	-	-
1969-H166	2440467-04	1969 Sep 2 12:59:59	Rocketsonde	-	-	Met. Para	-	-	-	WS	-	-	-	66	-	-
1969-H167	2440467-29	1969 Sep 3 18:59:59	Rocketsonde	-	-	Chaff	-	-	-	WS	-	-	-	57	-	-
1969-H168	2440467-50	1969 Sep 3 00:00:00	Rocketsonde	-	-	Met. Para	-	-	-	RAU	-	-	-	54	-	-
1969-H169	2440467-65	1969 Sep 3 03:41:00	Rocketsonde	-	-	Met. Para, Datasonde	-	-	-	RAU	-	-	-	61	-	-
1969-H170	2440468-07	1969 Sep 3 13:44:59	Rocketsonde	-	-	Met. Para, Arcasonde	-	-	-	KRR	-	-	-	67	-	-
1969-H171	2440468-08	1969 Sep 3 14:00:00	Rocketsonde	-	-	Sturruv, Datasonde	-	-	-	WS	-	-	-	62	-	-
1969-H172	2440468-08	1969 Sep 3 14:00:00	Rocketsonde	-	-	Sturruv, Datasonde	-	-	-	CC	-	-	-	62	-	-
1969-H173	2440468-17	1969 Sep 3 16:09:59	Rocketsonde	-	-	Met. Para	-	-	-	ASC	-	-	-	59	-	-
1969-H175	2440468-24	1969 Sep 3 17:40:00	Rocketsonde	-	-	Met. Para	-	-	-	PH	-	-	-	55	-	-
1969-H176	2440468-40	1969 Sep 3 17:40:00	Rocketsonde	-	-	Met. Para, Arcasonde	-	-	-	WS	-	-	-	50	-	-
1969-H177	2440468-60	1969 Sep 3 21:41:00	Rocketsonde	-	-	Met. Para, Arcasonde	-	-	-	RAU	-	-	-	58	-	-
1969-H178	2440468-60	1969 Sep 4 02:24:00	Rocketsonde	-	-	Sturruv, Datasonde	-	-	-	KRR	-	-	-	60	-	-
1969-H179	2440469-10	1969 Sep 4 14:24:00	Rocketsonde	-	-	Met. Para, Arcasonde	-	-	-	WI	-	-	-	55	-	-
1969-H179	2440469-26	1969 Sep 4 16:02:59	Rocketsonde	-	-	Met. Para	-	-	-	PH	-	-	-	61	-	-
1969-H180	2440469-26	1969 Sep 4 16:02:59	Rocketsonde	-	-	Met. Para, Arcasonde	-	-	-	PH	-	-	-	61	-	-
1969-H181	2440469-50	1969 Sep 5 00:03:59	Rocketsonde	-	-	Met. Para	-	-	-	RAU	-	-	-	55	-	-
1969-H182	2440470-11	1969 Sep 5 14:45:00	Rocketsonde	-	-	Met. Para, Arcasonde	-	-	-	WI	-	-	-	55	-	-
1969-H183	2440470-11	1969 Sep 5 14:45:00	Rocketsonde	-	-	Met. Para	-	-	-	WI	-	-	-	55	-	-
1969-H184	2440470-11	1969 Sep 5 17:00:00	Rocketsonde	-	-	Met. Para, Arcasonde	-	-	-	RAU	-	-	-	59	-	-
1969-H185	2440470-24	1969 Sep 5 17:00:00	Rocketsonde	-	-	Met. Para, Arcasonde	-	-	-	PH	-	-	-	59	-	-
1969-H186	2440470-24	1969 Sep 5 18:00:59	Rocketsonde	-	-	Met. Sphere, Datasonde	-	-	-	SHER	-	-	-	59	-	-
1969-H187	2440470-25	1969 Sep 5 18:00:59	Rocketsonde	-	-	Chaff	-	-	-	GRLY	-	-	-	61	-	-
1969-H188	2440470-38	1969 Sep 5 18:59:59	Rocketsonde	-	-	Met. Para, Arcasonde	-	-	-	WS	-	-	-	55	-	-
1969-H189	2440470-39	1969 Sep 5 21:34:59	Rocketsonde	-	-	Met. Para, Datasonde	-	-	-	KRR	-	-	-	58	-	-
1969-H190	2440470-50	1969 Sep 6 01:14:59	Rocketsonde	-	-	Sturruv, Datasonde	-	-	-	WS	-	-	-	68	-	-
1969-H191	2440470-50	1969 Sep 6 01:14:59	Rocketsonde	-	-	Sturruv, Datasonde	-	-	-	WS	-	-	-	68	-	-
1969-H193	2440471-25	1969 Sep 6 18:00:00	Rocketsonde	-	-	Met. Para, Datasonde	-	-	-	CC	-	-	-	60	-	-
1969-H196	2440473-17	1969 Sep 8 14:45:00	Rocketsonde	-	-	Met. Sphere	-	-	-	ASC	-	-	-	64	-	-
1969-H197	2440473-11	1969 Sep 8 14:45:00	Rocketsonde	-	-	Met. Sphere, Datasonde	-	-	-	SHER	-	-	-	59	-	-
1969-H198	2440473-15	1969 Sep 8 16:14:59	Rocketsonde	-	-	Met. Para, Arcasonde	-	-	-	PH	-	-	-	56	-	-
1969-H199	2440473-20	1969 Sep 8 18:59:59	Rocketsonde	-	-	Met. Para, Arcasonde	-	-	-	PH	-	-	-	56	-	-
1969-H200	2440473-29	1969 Sep 8 18:59:59	Rocketsonde	-	-	Sturruv, Datasonde	-	-	-	WS	-	-	-	63	-	-
1969-H201	2440473-32	1969 Sep 8 19:40:00	Rocketsonde	-	-	Sturruv, Datasonde	-	-	-	GRLY	-	-	-	53	-	-
1969-H202	2440473-32	1969 Sep 8 19:40:00	Rocketsonde	-	-	Sturruv, Datasonde	-	-	-	GRLY	-	-	-	53	-	-
1969-H203	2440473-57	1969 Sep 9 01:33:59	Rocketsonde	-	-	Chaff	-	-	-	KRR	-	-	-	59	-	-
1969-H204	2440474-15	1969 Sep 9 15:10:00	Rocketsonde	-	-	Sturruv, Datasonde	-	-	-	THU	-	-	-	63	-	-
1969-H205	2440474-15	1969 Sep 9 15:31:00	Rocketsonde	-	-	Met. Para, Datasonde	-	-	-	WI	-	-	-	58	-	-
1969-H206	2440474-18	1969 Sep 9 16:25:59	Rocketsonde	-	-	Met. Para, Datasonde	-	-	-	WI	-	-	-	62	-	-
1969-H207	2440474-21	1969 Sep 9 17:03:59	Rocketsonde	-	-	Sturruv, Datasonde	-	-	-	PH	-	-	-	63	-	-
1969-H209	2440474-22	1969 Sep 9 17:20:00	Rocketsonde	-	-	Met. Para, Arcasonde	-	-	-	PH	-	-	-	59	-	-
1969-H209	2440474-78	1969 Sep 10 06:42:00	Rocketsonde	-	-	Met. Para, Arcasonde	-	-	-	WS	-	-	-	65	-	-
1969-H209	2440475-08	1969 Sep 10 14:00:00	Rocketsonde	-	-	Sturruv, Datasonde	-	-	-	CC	-	-	-	62	-	-
1969-H211	2440475-11	1969 Sep 10 14:00:00	Rocketsonde	-	-	Sturruv, Datasonde	-	-	-	ASC	-	-	-	64	-	-
1969-H212	2440475-29	1969 Sep 10 14:45:00	Rocketsonde	-	-	Met. Para, Arcasonde	-	-	-	WS	-	-	-	60	-	-
1969-H213	2440475-31	1969 Sep 10 18:59:59	Rocketsonde	-	-	Met. Para, Arcasonde	-	-	-	WS	-	-	-	55	-	-
1969-H214	2440475-31	1969 Sep 10 19:30:00	Rocketsonde	-	-	Met. Para, Arcasonde	-	-	-	WI	-	-	-	51	-	-
1969-H215	2440476-15	1969 Sep 10 21:29:00	Rocketsonde	-	-	Met. Para, Arcasonde	-	-	-	WI	-	-	-	63	-	-
1969-H215	2440476-58	1969 Sep 11 01:48:59	Rocketsonde	-	-	Sturruv, Datasonde	-	-	-	KRR	-	-	-	61	-	-
1969-H218	2440476-15	1969 Sep 11 15:30:00	Rocketsonde	-	-	Sturruv, Datasonde	-	-	-	THU	-	-	-	63	-	-
1969-H219	2440476-38	1969 Sep 11 21:04:59	Rocketsonde	-	-	Sturruv, Datasonde	-	-	-	WS	-	-	-	64	-	-
1969-H220	2440476-38	1969 Sep 11 21:04:59	Rocketsonde	-	-	Met. Para	-	-	-	WI	-	-	-	52	-	-
1969-H222	2440476-42	1969 Sep 12 22:04:59	Rocketsonde	-	-	Sturruv, Datasonde	-	-	-	PH	-	-	-	64	-	-
1969-H223	2440477-08	1969 Sep 12 14:02:00	Rocketsonde	-	-	Sturruv, Datasonde	-	-	-	CC	-	-	-	60	-	-
1969-H224	2440477-11	1969 Sep 12 14:45:00	Rocketsonde	-	-	Met. Sphere	-	-	-	ASC	-	-	-	64	-	-
1969-H225	2440477-13	1969 Sep 12 15:08:00	Rocketsonde	-	-	Met. Para, Arcasonde	-	-	-	WI	-	-	-	55	-	-
1969-H226	2440477-17	1969 Sep 12 15:59:59	Rocketsonde	-	-	Sturruv, Datasonde	-	-	-	THU	-	-	-	61	-	-
1969-H227	2440477-18	1969 Sep 12 16:14:59	Rocketsonde	-	-	Met. Sphere, Datasonde	-	-	-	SHER	-	-	-	64	-	-
1969-H228	2440477-21	1969 Sep 12 17:00:00	Rocketsonde	-	-	Sturruv, Arcasonde	-	-	-	WS	-	-	-	68	-	-
1969-H230	2440477-25	1969 Sep 12 18:00:59	Rocketsonde	-	-	Met. Para, Arcasonde	-	-	-	PRIM	-	-	-	54	-	-
1969-H230	2440477-30	1969 Sep 12 19:09:59	Rocketsonde	-	-	Chaff	-	-	-	GRLY	-	-	-	58	-	-
1969-H151	2440477-38	1969 Sep 12 21:02:59	Rocketsonde	-	-	Met. Para, Datasonde	-	-	-	RAU	-	-	-	47	-	-

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Mission	FlightCode	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee_Km	Range_Km	Dest
1969-H1231	2440477.45	1969 Sep 12 2244:59	Rocketsonde			Met. Para, Arcasonde				PH				61		
1969-H1232	2440477.55	1969 Sep 13 0118:59	Rocketsonde			Starute, Datasonde				KRR				61		
1969-H1233	2440477.98	1969 Sep 13 1127:59	Rocketsonde			Starute, Datasonde				KRR				63		
1969-H1234	2440478.25	1969 Sep 13 1800:00	Rocketsonde			Starute, Datasonde				WS				64		
1969-H1235	2440479.54	1969 Sep 15 0059:59	Rocketsonde			Starute, Datasonde				WS				67		
1969-H1236	2440480.04	1969 Sep 15 1259:59	Rocketsonde			Met. Para, STS				WS				60		
1969-H1237	2440480.08	1969 Sep 15 1400:00	Rocketsonde			Starute, Datasonde				CC	LC43			61		
1969-H1238	2440480.11	1969 Sep 15 1445:00	Rocketsonde			Met. Sphere				ASC				61		
1969-H1239	2440480.12	1969 Sep 15 1500:00	Rocketsonde			Starute, Datasonde				THU				58		
1969-H1240	2440480.17	1969 Sep 15 1725:00	Rocketsonde			Met. Sphere, Datasonde				SHER				57		
1969-H1241	2440480.23	1969 Sep 15 1800:00	Rocketsonde			Starute, Datasonde				PH				62		
1969-H1242	2440480.25	1969 Sep 15 1800:00	Rocketsonde			Met. Para, Arcasonde				PRLM				66		
1969-H1243	2440480.31	1969 Sep 15 2138:59	Rocketsonde			Met. Para, Arcasonde				WS				66		
1969-H1244	2440480.40	1969 Sep 16 0418:00	Rocketsonde			Starute, Datasonde				KAU				62		
1969-H1245	2440480.68	1969 Sep 16 0418:00	Rocketsonde			Starute, Datasonde				PH				56		
1969-H1247	2440481.04	1969 Sep 16 1259:59	Rocketsonde			Met. Para, STS				WS				57		
1969-H1248	2440481.10	1969 Sep 16 1431:00	Rocketsonde			Starute, Datasonde				THU				57		
1969-H1250	2440481.23	1969 Sep 16 1727:59	Rocketsonde			Starute, Datasonde				PH				63		
1969-H1251	2440481.30	1969 Sep 16 1914:59	Rocketsonde			Met. Para, Arcasonde				WS				60		
1969-H1252	2440481.33	1969 Sep 16 1954:59	Rocketsonde			Met. Para, Arcasonde				WS				54		
1969-H1253	2440482.10	1969 Sep 17 1430:00	Rocketsonde			Met. Para, Arcasonde				WI				51		
1969-H1254	2440482.11	1969 Sep 17 1445:00	Rocketsonde			Met. Para, Arcasonde				ASC				63		
1969-H1256	2440482.20	1969 Sep 17 1649:59	Rocketsonde			Met. Sphere, Datasonde				SHER				64		
1969-H1257	2440482.21	1969 Sep 17 2042:00	Rocketsonde			Starute, Datasonde				CC	LC43			59		
1969-H1258	2440482.25	1969 Sep 17 1703:59	Rocketsonde			Starute, Datasonde				PH				48		
1969-H1259	2440482.28	1969 Sep 17 1859:59	Rocketsonde			Starute, Datasonde				PH				53		
1969-H1260	2440482.29	1969 Sep 17 1859:59	Rocketsonde			Met. Para, Arcasonde				PRLM				62		
1969-H1261	2440482.29	1969 Sep 17 1859:59	Rocketsonde			Met. Para, Arcasonde				ORLY				59		
1969-H1262	2440482.36	1969 Sep 17 2042:00	Rocketsonde			Met. Sphere				WS				67		
1969-H1263	2440482.44	1969 Sep 17 2235:59	Rocketsonde			Starute, Datasonde				KRR				61		
1969-H1264	2440482.66	1969 Sep 18 0424:59	Rocketsonde			Met. Para, Arcasonde				CELAT				59		
1969-H1265	2440483.07	1969 Sep 18 1344:59	Rocketsonde			Met. Para, STS				WS				59		
1969-H1266	2440483.10	1969 Sep 18 1344:59	Rocketsonde			Starute				WS				59		
1969-H1267	2440483.25	1969 Sep 18 1800:00	Rocketsonde			Starute				THU				68		
1969-H1268	2440483.32	1969 Sep 18 1940:00	Rocketsonde			Starute, Datasonde				PH				63		
1969-H1269	2440483.41	1969 Sep 18 2149:59	Rocketsonde			Met. Para, Arcasonde				KAU				48		
1969-H1270	2440483.44	1969 Sep 18 2200:00	Rocketsonde			Starute, Datasonde				WS				68		
1969-H1271	2440484.10	1969 Sep 19 1429:00	Rocketsonde			Met. Para, Met. Sphere				ASC				61		
1969-H1272	2440484.11	1969 Sep 19 1445:00	Rocketsonde			Starute, Datasonde				CC	LC43			61		
1969-H1273	2440484.21	1969 Sep 19 1700:00	Rocketsonde			Met. Para, Arcasonde				CC				61		
1969-H1274	2440484.29	1969 Sep 19 1859:59	Rocketsonde			Met. Para, Datasonde				KAU				63		
1969-H1275	2440484.40	1969 Sep 20 2130:00	Rocketsonde			Met. Para, Arcasonde				WS				96		
1969-H1276	2440485.05	1969 Sep 20 1314:59	Rocketsonde			Starute, Datasonde				WS				70		
1969-H1277	2440485.06	1969 Sep 20 1400:00	Rocketsonde			Starute, Datasonde				ASC	LC43			63		
1969-H1279	2440487.11	1969 Sep 22 1455:00	Rocketsonde			Met. Sphere				ASC				68		
1969-H1280	2440487.11	1969 Sep 22 1559:59	Rocketsonde			Starute, Datasonde				SHER				63		
1969-H1281	2440487.21	1969 Sep 22 1504:59	Rocketsonde			Met. Sphere, Datasonde				SHER				65		
1969-H1282	2440487.25	1969 Sep 22 1504:59	Rocketsonde			Met. Para, Arcasonde				PRLM				65		
1969-H1283	2440487.25	1969 Sep 22 1504:59	Rocketsonde			Starute, Datasonde				PRLM				65		
1969-H1285	2440487.30	1969 Sep 22 1314:59	Rocketsonde			Met. Para, Arcasonde				CC	LC43			44		
1969-H1286	2440487.30	1969 Sep 22 2114:59	Rocketsonde			Met. Para, Datasonde				KAU				58		
1969-H1287	2440487.32	1969 Sep 22 2206:00	Rocketsonde			Met. Para, Datasonde				CC	LC43			54		
1969-H1288	2440487.42	1969 Sep 22 2214:59	Rocketsonde			Starute, Datasonde				WS				50		
1969-H1289	2440487.53	1969 Sep 23 0045:00	Rocketsonde			Met. Para, Datasonde				CC	LC43			55		
1969-H1290	2440487.55	1969 Sep 23 0114:59	Rocketsonde			Starute, Datasonde				KRR				62		
1969-H1291	2440488.15	1969 Sep 23 1530:00	Rocketsonde			Met. Para, STS				PH				60		
1969-H1292	2440488.15	1969 Sep 23 1530:00	Rocketsonde			Met. Para, Arcasonde				PH				60		
1969-H1293	2440488.38	1969 Sep 23 2130:00	Rocketsonde			Starute, Datasonde				ASC				60		
1969-H1294	2440488.38	1969 Sep 23 2130:00	Rocketsonde			Starute, Datasonde				KAU				53		
1969-H1295	2440489.09	1969 Sep 24 1406:00	Rocketsonde			Met. Para, Arcasonde				VI				67		
1969-H1296	2440489.11	1969 Sep 24 1445:00	Rocketsonde			Met. Para, Arcasonde				ASC				63		
1969-H1297	2440489.13	1969 Sep 24 1814:59	Rocketsonde			Met. Para, Arcasonde				PH				58		
1969-H1298	2440489.18	1969 Sep 24 1814:59	Rocketsonde			Starute, Datasonde				ASC				63		
1969-H1299	2440489.24	1969 Sep 24 1748:00	Rocketsonde			Met. Para, Arcasonde				PH				64		
1969-H1300	2440489.26	1969 Sep 24 1809:00	Rocketsonde			Met. Para, Arcasonde				AUT				64		
1969-H1301	2440489.30	1969 Sep 24 1909:59	Rocketsonde			Starute, Datasonde				PRLM				64		
1969-H1302	2440489.30	1969 Sep 24 2130:00	Rocketsonde			Met. Para, Arcasonde				GREY				45		
1969-H1303	2440489.55	1969 Sep 25 0114:59	Rocketsonde			Met. Para, Arcasonde				WS				63		
1969-H1304	2440490.15	1969 Sep 25 1534:59	Rocketsonde			Met. Para, Arcasonde				PH				64		
1969-H1305	2440490.25	1969 Sep 25 1800:00	Rocketsonde			Starute, Datasonde				PH				36		
1969-H1306	2440490.38	1969 Sep 25 2111:00	Rocketsonde			Met. Para, Arcasonde				PRLM				49		
1969-H1307	2440490.68	1969 Sep 26 0424:59	Rocketsonde			Met. Para, Arcasonde				KAU				63		
1969-H1308	2440491.09	1969 Sep 26 1412:00	Rocketsonde			Chaff				VI				33		
1969-H1309	2440491.18	1969 Sep 26 1429:00	Rocketsonde			Chaff				VI				40		
1969-H1310	2440491.24	1969 Sep 26 1744:00	Rocketsonde			Met. Para, Arcasonde				PH				56		
1969-H1311	2440491.24	1969 Sep 26 1756:00	Rocketsonde			Starute				VI				55		
1969-H1312	2440491.29	1969 Sep 26 1859:59	Rocketsonde			Starute, Datasonde				VI				60		
1969-H1313	2440491.31	1969 Sep 26 1918:59	Rocketsonde			Starute, Datasonde				WS				73		
1969-H1314	2440491.32	1969 Sep 26 1927:59	Rocketsonde			Starute, Datasonde				VI				60		
1969-H1315	2440491.31	1969 Sep 26 1946:59	Rocketsonde			Chaff				VI				56		
1969-H1316	2440491.34	1969 Sep 26 2008:00	Rocketsonde			Starute				VI				56		
1969-H1317	2440491.40	1969 Sep 26 2133:00	Rocketsonde			Starute, Datasonde				KAU				60		
1969-H1318	2440491.59	1969 Sep 27 0209:00	Rocketsonde			Starute, Datasonde				KRR				63		
1969-H1319	2440494.11	1969 Sep 29 1445:00	Rocketsonde			Met. Sphere				ASC				63		

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Mission	FlightCode	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee_Km	Range_Km	Dest
1969-H1318	2440494.15	1969 Sep 29 15:50:00	Rocketsonde	-	-	Met. Para, Arcasonde	-	-	-	AIT	-	-	-	59	-	-
1969-H1319	2440494.18	1969 Sep 29 16:14:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	CC	LC43	-	-	62	-	-
1969-H1321	2440494.25	1969 Sep 29 18:02:59	Rocketsonde	-	-	Met. Para, Arcasonde	-	-	-	PRLM	-	-	-	67	-	-
1969-H1322	2440494.32	1969 Sep 29 19:40:00	Rocketsonde	-	-	Met. Para, Datasonde	-	-	-	WS	-	-	-	64	-	-
1969-H1323	2440494.36	1969 Sep 29 20:45:00	Rocketsonde	-	-	Met. Para, Datasonde	-	-	-	KAU	-	-	-	61	-	-
1969-H1324	2440494.38	1969 Sep 29 21:04:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PH	-	-	-	61	-	-
1969-H1326	2440495.35	1969 Sep 30 20:47:00	Rocketsonde	-	-	Met. Para	-	-	-	KAU	-	-	-	54	-	-
1969-H1327	2440495.37	1969 Sep 30 22:38:59	Rocketsonde	-	-	Met. Para	-	-	-	WI	-	-	-	54	-	-
1969-H1328	2440495.44	1969 Oct 1 00:26:59	Rocketsonde	-	-	Met. Para, Arcasonde	-	-	-	WS	-	-	-	58	-	-
1969-H1329	2440495.52	1969 Oct 1 15:18:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PH	-	-	-	60	-	-
1969-H1330	2440496.14	1969 Oct 1 15:18:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PH	LC43	-	-	100	-	-
1969-H1331	2440496.16	1969 Oct 1 15:47:59	Rocketsonde	-	-	Met. Sphere	-	-	-	SHER	-	-	-	62	-	-
1969-H1332	2440496.24	1969 Oct 1 17:42:00	Rocketsonde	-	-	Met. Para, Arcasonde	-	-	-	WS	-	-	-	65	-	-
1969-H1333	2440496.30	1969 Oct 1 21:04:59	Rocketsonde	-	-	Met. Para, Arcasonde	-	-	-	WI	-	-	-	65	-	-
1969-H1334	2440496.38	1969 Oct 1 19:04:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	MIR	-	-	-	65	-	-
1969-H1335	2440496.52	1969 Oct 2 02:38:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PH	-	-	-	62	-	-
1969-H1336	2440496.61	1969 Oct 2 18:45:00	Rocketsonde	-	-	Met. Para, Arcasonde	-	-	-	WS	-	-	-	76	-	-
1969-H1337	2440497.17	1969 Oct 2 18:45:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PH	-	-	-	62	-	-
1969-H1338	2440497.28	1969 Oct 2 20:50:00	Rocketsonde	-	-	Met. Para	-	-	-	KAU	-	-	-	56	-	-
1969-H1339	2440497.35	1969 Oct 2 20:50:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	MIR	-	-	-	67	-	-
1969-H1340	2440497.62	1969 Oct 3 02:46:00	Rocketsonde	-	-	Met. Para, Arcasonde	-	-	-	MIR	-	-	-	42	-	-
1969-H1341	2440498.05	1969 Oct 3 13:04:59	Rocketsonde	-	-	Met. Para, Arcasonde	-	-	-	CC	LC43	-	-	64	-	-
1969-H1342	2440498.08	1969 Oct 3 14:40:00	Rocketsonde	-	-	Met. Sphere	-	-	-	ASC	-	-	-	57	-	-
1969-H1343	2440498.11	1969 Oct 3 14:40:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PH	-	-	-	59	-	-
1969-H1344	2440498.19	1969 Oct 3 16:54:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	SHER	-	-	-	63	-	-
1969-H1345	2440498.22	1969 Oct 3 17:20:00	Rocketsonde	-	-	Met. Para, Arcasonde	-	-	-	PRLM	-	-	-	63	-	-
1969-H1346	2440498.25	1969 Oct 3 18:00:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	WS	-	-	-	70	-	-
1969-H1347	2440498.28	1969 Oct 3 18:59:59	Rocketsonde	-	-	Met. Para, Arcasonde	-	-	-	KAU	-	-	-	50	-	-
1969-H1348	2440498.36	1969 Oct 3 21:02:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	MIR	-	-	-	64	-	-
1969-H1349	2440498.56	1969 Oct 4 01:23:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PH	-	-	-	60	-	-
1969-H1350	2440501.06	1969 Oct 6 14:00:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	CC	LC43	-	-	60	-	-
1969-H1351	2440501.11	1969 Oct 6 14:45:00	Rocketsonde	-	-	Met. Para, Arcasonde	-	-	-	ASC	-	-	-	63	-	-
1969-H1352	2440501.17	1969 Oct 6 16:04:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	SHER	-	-	-	62	-	-
1969-H1353	2440501.19	1969 Oct 6 16:10:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PH	-	-	-	63	-	-
1969-H1354	2440501.39	1969 Oct 6 16:50:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PH	-	-	-	59	-	-
1969-H1355	2440501.59	1969 Oct 6 21:21:00	Rocketsonde	-	-	Met. Para, Datasonde	-	-	-	KAU	-	-	-	63	-	-
1969-H1356	2440502.57	1969 Oct 7 03:37:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	MIR	-	-	-	63	-	-
1969-H1357	2440502.57	1969 Oct 7 20:51:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PH	-	-	-	60	-	-
1969-H1358	2440503.06	1969 Oct 8 14:00:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	CC	LC43	-	-	57	-	-
1969-H1359	2440503.17	1969 Oct 8 15:09:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	SHER	-	-	-	60	-	-
1969-H1360	2440503.21	1969 Oct 8 17:34:59	Rocketsonde	-	-	Met. Para, Arcasonde	-	-	-	PH	-	-	-	62	-	-
1969-H1361	2440503.23	1969 Oct 8 17:34:59	Rocketsonde	-	-	Met. Para, Arcasonde	-	-	-	VI	-	-	-	60	-	-
1969-H1362	2440503.26	1969 Oct 8 18:14:59	Rocketsonde	-	-	Met. Para, Arcasonde	-	-	-	AIT	-	-	-	60	-	-
1969-H1363	2440503.27	1969 Oct 8 18:14:59	Rocketsonde	-	-	Met. Para, Arcasonde	-	-	-	VI	-	-	-	61	-	-
1969-H1364	2440503.39	1969 Oct 8 21:14:59	Rocketsonde	-	-	Met. Para, Arcasonde	-	-	-	KVI	-	-	-	38	-	-
1969-H1365	2440503.42	1969 Oct 9 14:59:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	ASC	-	-	-	43	-	-
1969-H1366	2440503.42	1969 Oct 9 14:59:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	VI	-	-	-	43	-	-
1969-H1367	2440503.42	1969 Oct 10 18:30:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	VI	-	-	-	62	-	-
1969-H1368	2440505.10	1969 Oct 10 14:25:00	Rocketsonde	-	-	Met. Para	-	-	-	VI	-	-	-	51	-	-
1969-H1369	2440505.11	1969 Oct 10 14:45:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	ASC	-	-	-	59	-	-
1969-H1370	2440505.13	1969 Oct 10 15:00:59	Rocketsonde	-	-	Met. Para	-	-	-	VI	-	-	-	61	-	-
1969-H1371	2440505.13	1969 Oct 10 15:09:00	Rocketsonde	-	-	Met. Para	-	-	-	VI	-	-	-	61	-	-
1969-H1372	2440505.14	1969 Oct 10 15:19:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	VI	-	-	-	54	-	-
1969-H1373	2440505.14	1969 Oct 10 15:27:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	VI	-	-	-	56	-	-
1969-H1374	2440505.20	1969 Oct 10 16:34:59	Rocketsonde	-	-	Met. Para, Arcasonde	-	-	-	AIT	-	-	-	60	-	-
1969-H1375	2440505.21	1969 Oct 10 17:04:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	SHER	-	-	-	61	-	-
1969-H1376	2440505.21	1969 Oct 10 17:23:00	Rocketsonde	-	-	Met. Para, Datasonde	-	-	-	PH	-	-	-	65	-	-
1969-H1377	2440505.31	1969 Oct 10 17:34:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PH	-	-	-	62	-	-
1969-H1378	2440505.31	1969 Oct 10 19:30:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	WS	-	-	-	62	-	-
1969-H1379	2440505.38	1969 Oct 10 21:11:00	Rocketsonde	-	-	Met. Para, Datasonde	-	-	-	KAU	-	-	-	49	-	-
1969-H1380	2440508.08	1969 Oct 13 14:00:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	CC	LC43	-	-	60	-	-
1969-H1381	2440508.09	1969 Oct 13 14:15:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	ASC	-	-	-	55	-	-
1969-H1382	2440508.10	1969 Oct 13 14:25:00	Rocketsonde	-	-	Met. Para, Arcasonde	-	-	-	AIT	-	-	-	63	-	-
1969-H1383	2440508.12	1969 Oct 13 14:49:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	THU	-	-	-	59	-	-
1969-H1384	2440508.12	1969 Oct 13 15:59:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	SHER	-	-	-	60	-	-
1969-H1385	2440508.21	1969 Oct 13 17:00:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PH	-	-	-	59	-	-
1969-H1386	2440508.28	1969 Oct 13 21:04:59	Rocketsonde	-	-	Met. Para, Datasonde	-	-	-	KAU	-	-	-	59	-	-
1969-H1387	2440508.46	1969 Oct 14 15:59:59	Rocketsonde	-	-	Met. Para	-	-	-	WS	-	-	-	62	-	-
1969-H1388	2440509.17	1969 Oct 14 15:59:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	WS	-	-	-	55	-	-
1969-H1389	2440509.38	1969 Oct 14 18:20:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	THU	-	-	-	46	-	-
1969-H1390	2440509.38	1969 Oct 14 21:00:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PH	-	-	-	64	-	-
1969-H1391	2440510.01	1969 Oct 15 12:09:00	Rocketsonde	-	-	Met. Para, Arcasonde	-	-	-	KAU	-	-	-	67	-	-
1969-H1392	2440510.10	1969 Oct 15 14:30:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	AIT	-	-	-	60	-	-
1969-H1393	2440510.12	1969 Oct 15 15:00:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	ASC	-	-	-	57	-	-
1969-H1394	2440510.17	1969 Oct 15 15:59:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	SHER	-	-	-	61	-	-
1969-H1395	2440510.18	1969 Oct 15 16:22:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PH	-	-	-	63	-	-
1969-H1396	2440510.19	1969 Oct 15 16:40:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PH	-	-	-	58	-	-
1969-H1397	2440510.21	1969 Oct 15 17:04:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PH	-	-	-	55	-	-
1969-H1398	2440510.22	1969 Oct 15 17:44:00	Rocketsonde	-	-	Met. Para, Arcasonde	-	-	-	CELAT	-	-	-	63	-	-
1969-H1399	2440510.25	1969 Oct 15 18:03:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	AIT	-	-	-	59	-	-
1969-H1400	2440510.29	1969 Oct 15 18:23:59	Rocketsonde	-	-	Met. Para, Arcasonde	-	-	-	PRLM	-	-	-	40	-	-
1969-H1402	2440511.08	1969 Oct 16 14:00:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	WS	-	-	-	50	-	-
1969-H1402	2440511.08	1969 Oct 16 14:00:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	THU	-	-	-	53	-	-



Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Mission	FlightCode	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee_Km	Range_Km	Dest
1969-1262	2440511.17	1969 Oct 16 1559:59	Rocketsonde	-	-	Chaff	-	-	-	WS	-	-	-	82	-	-
1969-H1403	2440511.17	1969 Oct 16 1559:59	Rocketsonde	-	-	Met Sphere	-	-	-	PH	-	-	-	64	-	-
1969-H1404	2440511.19	1969 Oct 16 1630:00	Rocketsonde	-	-	Met Sphere	-	-	-	WS	-	-	-	69	-	-
1969-H1405	2440511.21	1969 Oct 16 1700:00	Rocketsonde	-	-	Met Sphere	-	-	-	WS	-	-	-	60	-	-
1969-H1406	2440511.24	1969 Oct 16 1745:00	Rocketsonde	-	-	Met Sphere	-	-	-	WS	-	-	-	69	-	-
1969-H1407	2440511.29	1969 Oct 16 1859:59	Rocketsonde	-	-	Starvue, Dataonide	-	-	-	WS	-	-	-	71	-	-
1969-H1408	2440512.09	1969 Oct 17 1413:00	Rocketsonde	-	-	Starvue, Dataonide	-	-	-	CC	LC43	-	-	60	-	-
1969-H1409	2440512.09	1969 Oct 17 1415:00	Rocketsonde	-	-	Starvue, Dataonide	-	-	-	ASC	-	-	-	59	-	-
1969-H1410	2440512.12	1969 Oct 17 1500:00	Rocketsonde	-	-	Met Para, AM/DQM-9	-	-	-	ANT	-	-	-	54	-	-
1969-H1411	2440512.12	1969 Oct 17 1500:00	Rocketsonde	-	-	Starvue, Dataonide	-	-	-	THU	-	-	-	60	-	-
1969-H1412	2440512.25	1969 Oct 17 1830:00	Rocketsonde	-	-	Starvue, Dataonide	-	-	-	PRUH	-	-	-	64	-	-
1969-H1413	2440512.25	1969 Oct 17 1859:59	Rocketsonde	-	-	Starvue, Dataonide	-	-	-	PH	-	-	-	52	-	-
1969-H1414	2440512.28	1969 Oct 17 1859:59	Rocketsonde	-	-	Starvue, Dataonide	-	-	-	WS	-	-	-	59	-	-
1969-H179	2440512.30	1969 Oct 17 1918:00	Rocketsonde	-	-	Chaff	-	-	-	WI	-	-	-	47	-	-
1969-H1415	2440512.31	1969 Oct 17 1927:59	Rocketsonde	-	-	Met Para	-	-	-	WI	-	-	-	59	-	-
1969-H1416	2440512.32	1969 Oct 17 1942:59	Rocketsonde	-	-	Met Para	-	-	-	WI	-	-	-	56	-	-
1969-H1417	2440512.32	1969 Oct 17 1942:59	Rocketsonde	-	-	Starvue, Dataonide	-	-	-	WI	-	-	-	59	-	-
1969-H1418	2440512.43	1969 Oct 17 2223:59	Rocketsonde	-	-	Met Para	-	-	-	WI	-	-	-	61	-	-
1969-H1419	2440515.09	1969 Oct 20 1415:00	Rocketsonde	-	-	Starvue, Dataonide	-	-	-	KAU	-	-	-	61	-	-
1969-H1420	2440515.10	1969 Oct 20 1430:00	Rocketsonde	-	-	Starvue, Dataonide	-	-	-	ASC	-	-	-	56	-	-
1969-H1421	2440515.12	1969 Oct 20 1449:59	Rocketsonde	-	-	Starvue, Dataonide	-	-	-	CC	LC43	-	-	64	-	-
1969-H1422	2440515.40	1969 Oct 20 2142:00	Rocketsonde	-	-	Met Para, AM/DQM-9	-	-	-	ANT	-	-	-	50	-	-
1969-H1424	2440516.17	1969 Oct 21 1559:59	Rocketsonde	-	-	Met Para, Arcasonide	-	-	-	KAU	-	-	-	64	-	-
1969-H1425	2440516.38	1969 Oct 21 2109:00	Rocketsonde	-	-	Met Para	-	-	-	WS	-	-	-	55	-	-
1969-H1426	2440516.67	1969 Oct 22 0357:59	Rocketsonde	-	-	Starvue, Dataonide	-	-	-	PH	-	-	-	62	-	-
1969-H1427	2440517.08	1969 Oct 22 1400:00	Rocketsonde	-	-	Starvue, Dataonide	-	-	-	KHR	-	-	-	61	-	-
1969-H1428	2440517.08	1969 Oct 22 1401:00	Rocketsonde	-	-	Starvue, Dataonide	-	-	-	CC	LC43	-	-	59	-	-
1969-H1430	2440517.09	1969 Oct 22 1410:00	Rocketsonde	-	-	Met Para, Arcasonide	-	-	-	WI	-	-	-	61	-	-
1969-H1431	2440517.12	1969 Oct 22 1503:59	Rocketsonde	-	-	Starvue, Dataonide	-	-	-	CC	LC43	-	-	60	-	-
1969-H1432	2440517.13	1969 Oct 22 1503:59	Rocketsonde	-	-	Starvue, Dataonide	-	-	-	THU	-	-	-	57	-	-
1969-H1433	2440517.16	1969 Oct 22 1549:59	Rocketsonde	-	-	Starvue, Dataonide	-	-	-	ASC	-	-	-	58	-	-
1969-H1434	2440517.23	1969 Oct 22 1732:00	Rocketsonde	-	-	Starvue, Dataonide	-	-	-	PH	-	-	-	61	-	-
1969-H1435	2440517.30	1969 Oct 22 1904:59	Rocketsonde	-	-	Met Para, Arcasonide	-	-	-	PH	-	-	-	67	-	-
1969-1274	2440517.32	1969 Oct 22 1935:59	Rocketsonde	-	-	Chaff	-	-	-	WS	-	-	-	61	-	-
1969-H1436	2440517.45	1969 Oct 22 2217:00	Rocketsonde	-	-	Met Para, Arcasonide	-	-	-	KAU	-	-	-	52	-	-
1969-H1438	2440518.10	1969 Oct 23 1431:00	Rocketsonde	-	-	Starvue, Dataonide	-	-	-	THU	-	-	-	62	-	-
1969-H1439	2440518.17	1969 Oct 23 1600:59	Rocketsonde	-	-	Starvue, Dataonide	-	-	-	PH	-	-	-	62	-	-
1969-H1440	2440519.08	1969 Oct 24 1400:00	Rocketsonde	-	-	Starvue, Dataonide	-	-	-	CC	LC43	-	-	60	-	-
1969-H1441	2440519.09	1969 Oct 24 1415:00	Rocketsonde	-	-	Starvue, Dataonide	-	-	-	ASC	-	-	-	58	-	-
1969-H1442	2440519.15	1969 Oct 24 1529:00	Rocketsonde	-	-	Starvue, Dataonide	-	-	-	ASC	-	-	-	55	-	-
1969-H181	2440522.10	1969 Oct 27 1430:00	Rocketsonde	-	-	Starvue, Dataonide	-	-	-	ASC	-	-	-	49	-	-
1969-H1443	2440522.11	1969 Oct 27 1455:00	Rocketsonde	-	-	Starvue, Dataonide	-	-	-	THU	-	-	-	64	-	-
1969-H1446	2440522.12	1969 Oct 27 1454:00	Rocketsonde	-	-	Starvue, Dataonide	-	-	-	CC	-	-	-	65	-	-
1969-H1447	2440522.15	1969 Oct 27 1557:59	Rocketsonde	-	-	Met Para, Arcasonide	-	-	-	WI	-	-	-	61	-	-
1969-H1448	2440522.22	1969 Oct 27 1624:59	Rocketsonde	-	-	Starvue, Dataonide	-	-	-	WI	-	-	-	59	-	-
1969-H1449	2440522.27	1969 Oct 27 1720:00	Rocketsonde	-	-	Met Sphere, Dataonide	-	-	-	ANT	-	-	-	61	-	-
1969-H1451	2440522.29	1969 Oct 27 1859:59	Rocketsonde	-	-	Met Para, Arcasonide	-	-	-	PRUH	-	-	-	63	-	-
1969-H1452	2440522.30	1969 Oct 27 1917:59	Rocketsonde	-	-	Starvue, Dataonide	-	-	-	PH	-	-	-	61	-	-
1969-H1453	2440523.10	1969 Oct 28 1445:00	Rocketsonde	-	-	Starvue, Dataonide	-	-	-	THU	-	-	-	66	-	-
1969-H1454	2440523.11	1969 Oct 28 1445:00	Rocketsonde	-	-	Starvue, Dataonide	-	-	-	PH	-	-	-	66	-	-
1969-H1455	2440523.42	1969 Oct 28 2004:59	Rocketsonde	-	-	Starvue, Dataonide	-	-	-	ASC	-	-	-	53	-	-
1969-H1456	2440524.09	1969 Oct 29 1500:00	Rocketsonde	-	-	Met Para	-	-	-	KAU	-	-	-	64	-	-
1969-H1457	2440524.12	1969 Oct 29 1600:59	Rocketsonde	-	-	Starvue, Dataonide	-	-	-	CC	LC43	-	-	64	-	-
1969-H1459	2440524.17	1969 Oct 29 1820:00	Rocketsonde	-	-	Starvue, Dataonide	-	-	-	SHER	-	-	-	69	-	-
1969-H1461	2440524.26	1969 Oct 29 1920:00	Rocketsonde	-	-	Starvue, Dataonide	-	-	-	PH	-	-	-	62	-	-
1969-H1462	2440524.31	1969 Oct 29 1920:00	Rocketsonde	-	-	Starvue, Dataonide	-	-	-	VI	-	-	-	51	-	-
1969-H1463	2440524.33	1969 Oct 29 1947:59	Rocketsonde	-	-	Starvue, Dataonide	-	-	-	VI	-	-	-	66	-	-
1969-H189	2440524.33	1969 Oct 29 2000:00	Rocketsonde	-	-	Met Para, Arcasonide	-	-	-	KHR	-	-	-	48	-	-
1969-H1464	2440524.35	1969 Oct 30 0206:00	Rocketsonde	-	-	Starvue, Dataonide	-	-	-	ASC	LC43	-	-	57	-	-
1969-H1465	2440525.25	1969 Oct 30 1759:00	Rocketsonde	-	-	Met Para	-	-	-	VI	-	-	-	63	-	-
1969-H1466	2440525.25	1969 Oct 30 2001:59	Rocketsonde	-	-	Starvue, Dataonide	-	-	-	KHR	-	-	-	65	-	-
1969-H1467	2440525.96	1969 Oct 30 2201:59	Rocketsonde	-	-	Met Para	-	-	-	PH	-	-	-	53	-	-
1969-H183	2440526.07	1969 Oct 31 1107:00	Rocketsonde	-	-	Starvue, Dataonide	-	-	-	KAU	-	-	-	68	-	-
1969-H1468	2440526.10	1969 Oct 31 1344:59	Rocketsonde	-	-	Met Para, AM/DQM-9	-	-	-	ANT	-	-	-	48	-	-
1969-H1470	2440526.12	1969 Oct 31 1430:00	Rocketsonde	-	-	Starvue, Dataonide	-	-	-	ASC	-	-	-	50	-	-
1969-H1471	2440526.13	1969 Oct 31 1508:00	Rocketsonde	-	-	Starvue, Dataonide	-	-	-	CC	LC43	-	-	57	-	-
1969-H1472	2440526.16	1969 Oct 31 1607:59	Rocketsonde	-	-	Met Para	-	-	-	VI	-	-	-	60	-	-
1969-H1473	2440526.17	1969 Oct 31 1645:00	Rocketsonde	-	-	Starvue, Dataonide	-	-	-	CC	LC43	-	-	65	-	-
1969-H1474	2440526.18	1969 Oct 31 1620:59	Rocketsonde	-	-	Starvue, Dataonide	-	-	-	VI	-	-	-	61	-	-
1969-H1475	2440526.33	1969 Oct 31 2000:00	Rocketsonde	-	-	Chaff	-	-	-	SHER	-	-	-	63	-	-
1969-H184	2440526.36	1969 Oct 31 2040:00	Rocketsonde	-	-	Starvue, Dataonide	-	-	-	WS	-	-	-	36	-	-
1969-H1476	2440526.42	1969 Oct 31 2208:59	Rocketsonde	-	-	Starvue, Dataonide	-	-	-	GRLY	-	-	-	63	-	-
1969-H1482	2440529.04	1969 Oct 31 1259:59	Rocketsonde	-	-	Starvue, Dataonide	-	-	-	KAU	-	-	-	63	-	-
1969-H1486	2440529.19	1969 Nov 3 1630:00	Rocketsonde	-	-	Met Para, AM/DQM-9	-	-	-	ANT	-	-	-	58	-	-
1969-H1488	2440529.22	1969 Nov 3 1715:00	Rocketsonde	-	-	Starvue, Dataonide	-	-	-	CC	LC43	-	-	62	-	-
1969-H1489	2440529.26	1969 Nov 3 1808:00	Rocketsonde	-	-	Met Para, Arcasonide	-	-	-	CC	LC43	-	-	61	-	-
1969-H1492	2440530.21	1969 Nov 4 1700:00	Rocketsonde	-	-	Starvue, Dataonide	-	-	-	WS	-	-	-	58	-	-
1969-H1493	2440530.25	1969 Nov 4 1800:00	Rocketsonde	-	-	Starvue, Dataonide	-	-	-	CC	LC43	-	-	62	-	-
1969-H1494	2440530.33	1969 Nov 4 2000:00	Rocketsonde	-	-	Starvue, Dataonide	-	-	-	CC	LC43	-	-	63	-	-
1969-H1495	2440530.35	1969 Nov 4 2019:00	Rocketsonde	-	-	Starvue, Dataonide	-	-	-	PH	-	-	-	67	-	-
1969-H1499	2440531.12	1969 Nov 5 1500:00	Rocketsonde	-	-	Starvue, Dataonide	-	-	-	CC	LC43	-	-	57	-	-
1969-H1500	2440531.16	1969 Nov 5 1549:59	Rocketsonde	-	-	Met Para, Arcasonide	-	-	-	VI	-	-	-	51	-	-
1969-H1501	2440531.16	1969 Nov 5 1555:00	Rocketsonde	-	-	Starvue, Dataonide	-	-	-	ASC	-	-	-	63	-	-

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Mission	FlightCode	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee_Km	Range_Km	Dest
1969-H1502	2440531-17	1969 Nov 5 1601:59	Rocketsonde	-	-	Starute, Dataosnde	-	-	-	SHER	-	-	-	62	-	-
1969-H1503	2440531-25	1969 Nov 5 1800:00	Rocketsonde	-	-	Met Para, Arcasosnde	-	-	-	WS	-	-	-	61	-	-
1969-H1504	2440531-27	1969 Nov 5 1830:00	Rocketsonde	-	-	Met Para, Arcasosnde	-	-	-	ANT	-	-	-	62	-	-
1969-H1506	2440531-39	1969 Nov 5 2117:00	Rocketsonde	-	-	Met Para, Arcasosnde	-	-	-	RAU	-	-	-	59	-	-
1969-H1507	2440531-42	1969 Nov 5 2159:59	Rocketsonde	-	-	Met Para, Arcasosnde	-	-	-	GRLY	-	-	-	62	-	-
1969-H1508	2440531-55	1969 Nov 6 0118:59	Rocketsonde	-	-	Starute, Dataosnde	-	-	-	MHR	-	-	-	61	-	-
1969-H1509	2440532-31	1969 Nov 6 1930:59	Rocketsonde	-	-	Met Para, Dataosnde	-	-	-	PH	-	-	-	57	-	-
1969-H1511	2440533-13	1969 Nov 7 1503:59	Rocketsonde	-	-	Starute, Dataosnde	-	-	-	CC	LC43	-	-	62	-	-
1969-H1512	2440533-16	1969 Nov 7 1545:00	Rocketsonde	-	-	Starute, Dataosnde	-	-	-	CC	LC43	-	-	54	-	-
1969-H1513	2440533-18	1969 Nov 7 1700:00	Rocketsonde	-	-	Met Para, Arcasosnde	-	-	-	WI	-	-	-	65	-	-
1969-H1514	2440533-21	1969 Nov 7 1809:00	Rocketsonde	-	-	Starute, Dataosnde	-	-	-	SHER	-	-	-	66	-	-
1969-H1515	2440533-26	1969 Nov 7 1935:59	Rocketsonde	-	-	Met Para, Arcasosnde	-	-	-	PRLM	-	-	-	68	-	-
1969-H1516	2440533-32	1969 Nov 7 1935:59	Rocketsonde	-	-	Starute, Dataosnde	-	-	-	PH	-	-	-	36	-	-
1969-H188	2440533-33	1969 Nov 7 2002:00	Rocketsonde	-	-	Starute, Dataosnde	-	-	-	GRLY	-	-	-	54	-	-
1969-H1517	2440536-12	1969 Nov 10 1500:00	Rocketsonde	-	-	Starute, Dataosnde	-	-	-	CC	LC43	-	-	63	-	-
1969-H1518	2440536-22	1969 Nov 10 1710:00	Rocketsonde	-	-	Starute, Dataosnde	-	-	-	SHER	-	-	-	50	-	-
1969-H1519	2440536-29	1969 Nov 10 1658:59	Rocketsonde	-	-	Chaff	-	-	-	WS	-	-	-	63	-	-
1969-H1520	2440536-40	1969 Nov 10 2128:00	Rocketsonde	-	-	Starute, Dataosnde	-	-	-	PH	-	-	-	57	-	-
1969-H1522	2440536-08	1969 Nov 12 1400:00	Rocketsonde	-	-	Starute, Dataosnde	-	-	-	CC	LC43	-	-	58	-	-
1969-H1523	2440536-14	1969 Nov 12 1514:59	Rocketsonde	-	-	Met Para, Arcasosnde	-	-	-	ANT	-	-	-	89	-	-
1969-1282	2440536-14	1969 Nov 12 1514:59	Rocketsonde	-	-	Met Para, Arcasosnde	-	-	-	CC	LC43	-	-	58	-	-
1969-H1524	2440536-25	1969 Nov 12 1800:00	Rocketsonde	-	-	Met Para, Arcasosnde	-	-	-	WS	-	-	-	63	-	-
1969-H1526	2440536-30	1969 Nov 12 1913:59	Rocketsonde	-	-	Starute, Dataosnde	-	-	-	PH	-	-	-	54	-	-
1969-H1527	2440536-33	1969 Nov 12 1953:59	Rocketsonde	-	-	Met Sphere	-	-	-	CELAT	-	-	-	60	-	-
1969-H1528	2440536-59	1969 Nov 13 0214:00	Rocketsonde	-	-	Starute, Dataosnde	-	-	-	MHR	-	-	-	66	-	-
1969-H1530	2440539-11	1969 Nov 13 1445:00	Rocketsonde	-	-	Starute, Dataosnde	-	-	-	PH	-	-	-	61	-	-
1969-H1531	2440539-13	1969 Nov 13 1507:00	Rocketsonde	-	-	Met Para, Arcasosnde	-	-	-	CC	LC43	-	-	62	-	-
1969-H1532	2440539-37	1969 Nov 13 2055:00	Rocketsonde	-	-	Starute, Dataosnde	-	-	-	WI	-	-	-	52	-	-
1969-1283	2440539-40	1969 Nov 13 2131:00	Rocketsonde	-	-	Met Sphere	-	-	-	RAU	-	-	-	93	-	-
1969-H1533	2440540-21	1969 Nov 14 1700:00	Rocketsonde	-	-	Starute, Dataosnde	-	-	-	SHER	-	-	-	54	-	-
1969-H1534	2440540-26	1969 Nov 14 1806:00	Rocketsonde	-	-	Starute, Dataosnde	-	-	-	CC	LC43	-	-	60	-	-
1969-H1535	2440540-31	1969 Nov 14 1930:00	Rocketsonde	-	-	Met Para	-	-	-	WS	-	-	-	94	-	-
1969-H1536	2440540-35	1969 Nov 14 2002:00	Rocketsonde	-	-	Met Para, Dataosnde	-	-	-	ORLY	-	-	-	94	-	-
1969-H1538	2440543-09	1969 Nov 17 1412:00	Rocketsonde	-	-	Starute, Dataosnde	-	-	-	CC	LC43	-	-	62	-	-
1969-H1539	2440543-13	1969 Nov 17 1503:59	Rocketsonde	-	-	Starute, Dataosnde	-	-	-	CC	LC43	-	-	62	-	-
1969-H1540	2440543-15	1969 Nov 17 1506:00	Rocketsonde	-	-	Met Para, Arcasosnde	-	-	-	CC	LC43	-	-	59	-	-
1969-H1541	2440543-17	1969 Nov 17 1530:59	Rocketsonde	-	-	Met Para, Arcasosnde	-	-	-	VI	-	-	-	52	-	-
1969-H1542	2440543-22	1969 Nov 17 1715:00	Rocketsonde	-	-	Chaff	-	-	-	SHER	-	-	-	66	-	-
1969-H1544	2440543-25	1969 Nov 17 1806:00	Rocketsonde	-	-	Starute, Dataosnde	-	-	-	PH	-	-	-	61	-	-
1969-H1546	2440543-26	1969 Nov 17 1826:00	Rocketsonde	-	-	Met Para, Arcasosnde	-	-	-	PRLM	-	-	-	39	-	-
1969-H1547	2440543-39	1969 Nov 17 1859:59	Rocketsonde	-	-	Starute, Dataosnde	-	-	-	WS	-	-	-	68	-	-
1969-H1549	2440543-38	1969 Nov 17 2100:00	Rocketsonde	-	-	Starute, Dataosnde	-	-	-	KAU	-	-	-	39	-	-
1969-H1546	2440544-09	1969 Nov 18 1410:00	Rocketsonde	-	-	Starute, Dataosnde	-	-	-	CC	LC43	-	-	64	-	-
1969-H1550	2440544-12	1969 Nov 18 1600:00	Rocketsonde	-	-	Starute, Dataosnde	-	-	-	CC	LC43	-	-	64	-	-
1969-H1551	2440544-23	1969 Nov 18 1730:00	Rocketsonde	-	-	Starute, Dataosnde	-	-	-	CC	LC43	-	-	68	-	-
1969-H1552	2440544-23	1969 Nov 18 1730:00	Rocketsonde	-	-	Starute, Dataosnde	-	-	-	THU	-	-	-	47	-	-
1969-H1554	2440545-12	1969 Nov 19 1500:00	Rocketsonde	-	-	Met Para, Arcasosnde	-	-	-	THU	-	-	-	65	-	-
1969-H1555	2440545-12	1969 Nov 19 1559:59	Rocketsonde	-	-	Starute, Dataosnde	-	-	-	CC	LC43	-	-	65	-	-
1969-H1556	2440545-15	1969 Nov 19 1830:00	Rocketsonde	-	-	Chaff	-	-	-	SHER	-	-	-	56	-	-
1969-H1557	2440545-23	1969 Nov 19 1730:00	Rocketsonde	-	-	Starute, Dataosnde	-	-	-	CC	LC43	-	-	61	-	-
1969-H1558	2440545-24	1969 Nov 19 1747:00	Rocketsonde	-	-	Met Para, Arcasosnde	-	-	-	ANT	-	-	-	59	-	-
1969-H1560	2440545-24	1969 Nov 19 1900:00	Rocketsonde	-	-	Met Para, Arcasosnde	-	-	-	PRLM	-	-	-	65	-	-
1969-H1562	2440545-46	1969 Nov 19 2017:00	Rocketsonde	-	-	Met Para, Arcasosnde	-	-	-	KAU	-	-	-	60	-	-
1969-H1563	2440545-46	1969 Nov 19 2017:00	Rocketsonde	-	-	Starute, Dataosnde	-	-	-	GRLY	-	-	-	53	-	-
1969-H1565	2440545-56	1969 Nov 20 0131:59	Rocketsonde	-	-	Dataosnde	-	-	-	MHR	-	-	-	54	-	-
1969-H1566	2440546-12	1969 Nov 20 1500:00	Rocketsonde	-	-	Starute, Dataosnde	-	-	-	CC	LC43	-	-	52	-	-
1969-H1567	2440546-14	1969 Nov 20 1500:59	Rocketsonde	-	-	Met Para, Arcasosnde	-	-	-	THU	-	-	-	49	-	-
1969-H193	2440546-14	1969 Nov 20 1522:59	Rocketsonde	-	-	Starute, Dataosnde	-	-	-	WS	-	-	-	63	-	-
1969-H1568	2440546-24	1969 Nov 20 1749:59	Rocketsonde	-	-	Starute, Dataosnde	-	-	-	WS	-	-	-	68	-	-
1969-H1569	2440546-38	1969 Nov 20 2104:59	Rocketsonde	-	-	Met Para, Arcasosnde	-	-	-	KAU	-	-	-	58	-	-
1969-H1570	2440546-42	1969 Nov 20 2159:59	Rocketsonde	-	-	Starute, Dataosnde	-	-	-	CC	LC43	-	-	55	-	-
1969-H1571	2440547-12	1969 Nov 21 1500:00	Rocketsonde	-	-	Starute, Dataosnde	-	-	-	CC	LC43	-	-	57	-	-
1969-H1572	2440547-27	1969 Nov 21 1802:59	Rocketsonde	-	-	Met Para, Arcasosnde	-	-	-	VI	-	-	-	66	-	-
1969-H1573	2440547-43	1969 Nov 21 2159:59	Rocketsonde	-	-	Starute, Dataosnde	-	-	-	KAU	-	-	-	63	-	-
1969-H1574	2440547-43	1969 Nov 21 2219:59	Rocketsonde	-	-	Starute, Dataosnde	-	-	-	PH	-	-	-	60	-	-
1969-H1575	2440547-59	1969 Nov 22 0130:00	Rocketsonde	-	-	Starute, Dataosnde	-	-	-	WS	-	-	-	62	-	-
1969-H1577	2440550-26	1969 Nov 24 1859:59	Rocketsonde	-	-	Starute, Dataosnde	-	-	-	WS	-	-	-	61	-	-
1969-H1578	2440550-42	1969 Nov 24 2068:00	Rocketsonde	-	-	Starute, Dataosnde	-	-	-	KAU	-	-	-	60	-	-
1969-H1580	2440551-27	1969 Nov 25 1822:59	Rocketsonde	-	-	Met Para, Dataosnde	-	-	-	WI	-	-	-	62	-	-
1969-H1581	2440551-34	1969 Nov 25 2012:00	Rocketsonde	-	-	Starute, Dataosnde	-	-	-	PH	-	-	-	58	-	-
1969-H1582	2440551-34	1969 Nov 25 2014:00	Rocketsonde	-	-	Met Para, Dataosnde	-	-	-	VI	-	-	-	68	-	-
1969-H1583	2440551-44	1969 Nov 25 2231:59	Rocketsonde	-	-	Met Para	-	-	-	VI	-	-	-	57	-	-
1969-H1584	2440551-44	1969 Nov 25 2231:59	Rocketsonde	-	-	Met Para	-	-	-	KAU	-	-	-	57	-	-
1969-H1585	2440551-76	1969 Nov 26 0611:59	Rocketsonde	-	-	Starute, Dataosnde	-	-	-	MHR	-	-	-	62	-	-
1969-H1587	2440552-16	1969 Nov 26 1548:59	Rocketsonde	-	-	Starute, Dataosnde	-	-	-	VI	-	-	-	53	-	-
1969-H1588	2440552-25	1969 Nov 26 1753:00	Rocketsonde	-	-	Met Para, Arcasosnde	-	-	-	WS	-	-	-	61	-	-
1969-H1590	2440552-35	1969 Nov 26 2022:00	Rocketsonde	-	-	Met Para, Arcasosnde	-	-	-	ANT	-	-	-	55	-	-
1969-H1593	2440552-35	1969 Nov 26 2152:00	Rocketsonde	-	-	Starute, Dataosnde	-	-	-	CC	LC43	-	-	60	-	-
1969-H1594	2440552-42	1969 Nov 26 2202:59	Rocketsonde	-	-	Starute, Dataosnde	-	-	-	CC	LC43	-	-	62	-	-
1969-H1595	2440552-42	1969 Nov 27 0213:00	Rocketsonde	-	-	Starute, Dataosnde	-	-	-	KAU	-	-	-	63	-	-
1969-H195	2440554-15	1969 Nov 28 1532:00	Rocketsonde	-	-	Met Para, Arcasosnde	-	-	-	MHR	-	-	-	62	-	-
1969-H1597	2440554-25	1969 Nov 28 1800:00	Rocketsonde	-	-	Chaff	-	-	-	ANT	-	-	-	47	-	-
1969-H1597	2440554-25	1969 Nov 28 1800:00	Rocketsonde	-	-	Chaff	-	-	-	WS	-	-	-	62	-	-

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Mission	FlightCode	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee_Km	Range_Km	Dest
1969-A196	2440554.25	1969 Nov 28 1803:59	Rocketsonde	-	-	Met. Para, Arcasonde	-	-	-	PRIM	-	-	-	44	-	-
1969-A197	2440554.42	1969 Nov 28 2204:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	KAU	-	-	-	45	-	-
1969-H1598	2440554.55	1969 Nov 29 0114:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	KHR	-	-	-	60	-	-
1969-H1601	2440557.08	1969 Dec 1 1400:00	Rocketsonde	-	-	Met. Para, AM/DMP-9	-	-	-	AUT	-	-	-	57	-	-
1969-H1602	2440557.10	1969 Dec 1 1430:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	ASC	-	-	-	62	-	-
1969-H1603	2440557.12	1969 Dec 1 1500:00	Rocketsonde	-	-	Met. Para	-	-	-	WS	-	-	-	59	-	-
1969-H1604	2440557.14	1969 Dec 1 1521:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	CC	LC43	-	-	62	-	-
1969-H1605	2440557.19	1969 Dec 1 1627:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PH	-	-	-	54	-	-
1969-H1606	2440557.36	1969 Dec 1 2040:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	WS	-	-	-	72	-	-
1969-H1607	2440557.42	1969 Dec 1 2159:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	KAU	-	-	-	57	-	-
1969-A199	2440558.15	1969 Dec 2 1530:00	Rocketsonde	-	-	Met. Para, Arcasonde	-	-	-	THU	-	-	-	42	-	-
1969-H1610	2440558.44	1969 Dec 2 2230:00	Rocketsonde	-	-	Met. Para	-	-	-	KAU	-	-	-	57	-	-
1969-H1611	2440558.44	1969 Dec 2 2240:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PH	-	-	-	63	-	-
1969-H1612	2440558.91	1969 Dec 3 0956:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	KHR	-	-	-	63	-	-
1969-H1613	2440558.91	1969 Dec 3 1430:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	ASC	-	-	-	61	-	-
1969-H1614	2440559.11	1969 Dec 3 1433:00	Rocketsonde	-	-	Met. Para, Arcasonde	-	-	-	AUT	-	-	-	59	-	-
1969-A200	2440559.13	1969 Dec 3 1504:59	Rocketsonde	-	-	Met. Para, Arcasonde	-	-	-	ASC	-	-	-	48	-	-
1969-H1615	2440559.14	1969 Dec 3 1518:00	Rocketsonde	-	-	Met. Para, Datasonde	-	-	-	WI	-	-	-	53	-	-
1969-H1616	2440559.17	1969 Dec 3 1607:00	Rocketsonde	-	-	Met. Para, Arcasonde	-	-	-	PH	-	-	-	57	-	-
1969-H1617	2440559.34	1969 Dec 3 2030:00	Rocketsonde	-	-	Met. Para, Arcasonde	-	-	-	WS	-	-	-	58	-	-
1969-A201	2440559.55	1969 Dec 3 2030:00	Rocketsonde	-	-	Met. Para, Arcasonde	-	-	-	KAU	-	-	-	66	-	-
1969-H1618	2440560.20	1969 Dec 4 0114:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	KHR	-	-	-	66	-	-
1969-H1619	2440560.20	1969 Dec 4 1654:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PH	-	-	-	62	-	-
1969-H1620	2440560.22	1969 Dec 4 1713:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	ASC	-	-	-	62	-	-
1969-H1623	2440560.39	1969 Dec 4 2122:59	Rocketsonde	-	-	Met. Para, Arcasonde	-	-	-	ASC	-	-	-	60	-	-
1969-H1624	2440560.50	1969 Dec 5 0000:00	Rocketsonde	-	-	Met. Para, Arcasonde	-	-	-	WS	-	-	-	64	-	-
1969-H1625	2440561.08	1969 Dec 5 1400:00	Rocketsonde	-	-	Met. Para, Arcasonde	-	-	-	ASC	-	-	-	61	-	-
1969-H1626	2440561.13	1969 Dec 5 1510:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	WI	LC43	-	-	63	-	-
1969-H1628	2440561.25	1969 Dec 5 1800:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	CC	-	-	-	60	-	-
1969-H1629	2440561.31	1969 Dec 5 1930:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PH	-	-	-	60	-	-
1969-H1630	2440561.38	1969 Dec 5 2100:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	KAU	-	-	-	60	-	-
1969-H1632	2440561.62	1969 Dec 6 0249:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	KHR	-	-	-	61	-	-
1969-H1633	2440561.62	1969 Dec 6 1430:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	ASC	-	-	-	58	-	-
1969-H1634	2440561.12	1969 Dec 6 1500:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	CC	LC43	-	-	53	-	-
1969-H1635	2440561.20	1969 Dec 6 1654:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PH	-	-	-	59	-	-
1969-H1636	2440561.21	1969 Dec 6 1657:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	ASC	-	-	-	64	-	-
1969-H1638	2440561.31	1969 Dec 6 1930:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PH	-	-	-	64	-	-
1969-H1639	2440561.42	1969 Dec 6 2204:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	WS	-	-	-	64	-	-
1969-H1640	2440561.56	1969 Dec 9 0121:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	KAU	-	-	-	64	-	-
1969-H1641	2440565.12	1969 Dec 9 1500:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	KHR	-	-	-	62	-	-
1969-H1642	2440565.31	1969 Dec 9 1930:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	CC	LC43	-	-	61	-	-
1969-H1643	2440565.47	1969 Dec 10 2312:00	Rocketsonde	-	-	Met. Para, Datasonde	-	-	-	PH	-	-	-	95	-	-
1969-H1644	2440566.10	1969 Dec 10 1450:00	Rocketsonde	-	-	Met. Para	-	-	-	KAU	-	-	-	47	-	-
1969-H1645	2440566.13	1969 Dec 10 1531:59	Rocketsonde	-	-	Met. Para, Arcasonde	-	-	-	ASC	-	-	-	63	-	-
1969-H1646	2440566.17	1969 Dec 10 1634:59	Rocketsonde	-	-	Met. Para, Arcasonde	-	-	-	ASC	-	-	-	65	-	-
1969-H1647	2440566.22	1969 Dec 10 1745:00	Rocketsonde	-	-	Met. Para, Arcasonde	-	-	-	AUT	-	-	-	64	-	-
1969-A202	2440566.22	1969 Dec 10 1800:00	Rocketsonde	-	-	Met. Para, Datasonde	-	-	-	PH	-	-	-	40	-	-
1969-H1648	2440566.23	1969 Dec 10 1959:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	CC	LC43	-	-	55	-	-
1969-H1649	2440566.28	1969 Dec 10 2059:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	WS	-	-	-	62	-	-
1969-H1650	2440566.29	1969 Dec 11 0148:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	KAU	-	-	-	61	-	-
1969-H1652	2440566.29	1969 Dec 11 0348:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	KHR	-	-	-	61	-	-
1969-H1653	2440567.13	1969 Dec 11 2145:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	CC	LC43	-	-	61	-	-
1969-H1655	2440567.41	1969 Dec 12 1412:00	Rocketsonde	-	-	Met. Para	-	-	-	KAU	-	-	-	55	-	-
1969-H1659	2440568.09	1969 Dec 12 1415:00	Rocketsonde	-	-	Met. Para, Arcasonde	-	-	-	AUT	-	-	-	61	-	-
1969-H1660	2440568.09	1969 Dec 12 1415:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	CC	LC43	-	-	63	-	-
1969-H1661	2440568.10	1969 Dec 12 1430:00	Rocketsonde	-	-	Met. Para, Arcasonde	-	-	-	ASC	-	-	-	58	-	-
1969-H1662	2440568.11	1969 Dec 12 1439:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	KHR	-	-	-	59	-	-
1969-H1663	2440568.21	1969 Dec 12 1807:00	Rocketsonde	-	-	Met. Para, Arcasonde	-	-	-	PH	-	-	-	54	-	-
1969-H1664	2440568.22	1969 Dec 12 1829:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PH	-	-	-	61	-	-
1969-H1665	2440568.33	1969 Dec 12 2000:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	WS	-	-	-	66	-	-
1969-H1666	2440568.34	1969 Dec 13 0059:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	WS	-	-	-	64	-	-
1969-H1668	2440568.62	1969 Dec 13 0300:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	WS	-	-	-	57	-	-
1969-H1669	2440571.11	1969 Dec 15 1445:00	Rocketsonde	-	-	Met. Para, Arcasonde	-	-	-	ASC	-	-	-	62	-	-
1969-H1670	2440571.14	1969 Dec 15 1527:59	Rocketsonde	-	-	Met. Para, Arcasonde	-	-	-	VI	-	-	-	61	-	-
1969-H1671	2440571.17	1969 Dec 15 1607:00	Rocketsonde	-	-	Met. Para, Arcasonde	-	-	-	VI	-	-	-	60	-	-
1969-H1672	2440571.19	1969 Dec 15 1629:00	Rocketsonde	-	-	Met. Para, Arcasonde	-	-	-	VI	-	-	-	64	-	-
1969-H1673	2440571.24	1969 Dec 15 1745:00	Rocketsonde	-	-	Met. Para, Arcasonde	-	-	-	SHER	-	-	-	56	-	-
1969-H1675	2440571.25	1969 Dec 15 1806:00	Rocketsonde	-	-	Met. Para, Arcasonde	-	-	-	PH	-	-	-	51	-	-
1969-H1676	2440571.26	1969 Dec 15 1814:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PH	-	-	-	64	-	-
1969-H1677	2440571.27	1969 Dec 15 1826:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PH	-	-	-	63	-	-
1969-H1678	2440571.38	1969 Dec 15 2109:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PH	-	-	-	68	-	-
1969-H1679	2440571.56	1969 Dec 16 0130:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	KAU	-	-	-	58	-	-
1969-H1680	2440572.23	1969 Dec 16 1726:00	Rocketsonde	-	-	Met. Para	-	-	-	PH	-	-	-	52	-	-
1969-H1681	2440572.24	1969 Dec 16 1745:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	CC	LC43	-	-	58	-	-
1969-H1683	2440572.36	1969 Dec 16 2045:00	Rocketsonde	-	-	Met. Para, Arcasonde	-	-	-	WS	-	-	-	63	-	-
1969-H1684	2440572.38	1969 Dec 16 2111:59	Rocketsonde	-	-	Met. Para	-	-	-	KAU	-	-	-	50	-	-
1969-H1686	2440573.09	1969 Dec 17 1412:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	CC	LC43	-	-	62	-	-
1969-Y294	2440573.14	1969 Dec 17 1514:59	Rocketsonde	-	-	M6-1	-	-	-	CC	LC43	-	-	91	-	-
1969-H1687	2440573.14	1969 Dec 17 1514:59	Rocketsonde	-	-	Met. Para, Arcasonde	-	-	-	AUT	-	-	-	59	-	-
1969-H1688	2440573.15	1969 Dec 17 1530:00	Rocketsonde	-	-	Met. Para, Arcasonde	-	-	-	ASC	-	-	-	63	-	-
1969-H1689	2440573.17	1969 Dec 17 1559:59	Rocketsonde	-	-	Met. Para, Arcasonde	-	-	-	WS	-	-	-	55	-	-
1969-H1690	2440573.24	1969 Dec 17 1738:59	Rocketsonde	-	-	Met. Para, Arcasonde	-	-	-	VI	-	-	-	52	-	-
1969-H1692	2440573.33	1969 Dec 17 1948:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PH	-	-	-	62	-	-
1969-H1693	2440573.43	1969 Dec 17 2217:00	Rocketsonde	-	-	Met. Sphere	-	-	-	KAU	-	-	-	58	-	-
1969-H1694	2440573.55	1969 Dec 18 0114:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	KHR	-	-	-	60	-	-
1969-H1695	2440574.12	1969 Dec 18 1500:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	CC	LC43	-	-	63	-	-

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Mission	FlightCode	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee_Km	Range_Km	Dest
1969-H1696	2440574-18	1969 Dec 18 1617:00	Rocketsonde	-	-	Starute, Dataosnde	-	-	-	CELAT	-	-	-	53	-	-
1969-H209	2440574-34	1969 Dec 18 2010:00	Rocketsonde	-	-	Met Para	-	-	-	GRLY	-	-	-	45	-	-
1969-H1698	2440574-38	1969 Dec 18 2104:59	Rocketsonde	-	-	Met Para, Arcasnde	-	-	-	RAU	-	-	-	55	-	-
1969-H1700	2440575-10	1969 Dec 19 1430:00	Rocketsonde	-	-	Met Para, Arcasnde	-	-	-	ASC	-	-	-	59	-	-
1969-H1701	2440575-12	1969 Dec 19 1500:00	Rocketsonde	-	-	Starute, Dataosnde	-	-	-	CC	LC43	-	-	57	-	-
1969-H1702	2440575-16	1969 Dec 19 1546:59	Rocketsonde	-	-	Met Para, Dataosnde	-	-	-	WI	-	-	-	58	-	-
1969-H1703	2440575-21	1969 Dec 19 1703:00	Rocketsonde	-	-	Starute, Dataosnde	-	-	-	PH	-	-	-	59	-	-
1969-H1706	2440575-28	1969 Dec 19 1836:59	Rocketsonde	-	-	Starute, Dataosnde	-	-	-	WS	-	-	-	55	-	-
1969-H1707	2440575-34	1969 Dec 19 2015:00	Rocketsonde	-	-	Met Para	-	-	-	WS	-	-	-	56	-	-
1969-H1708	2440575-59	1969 Dec 20 0215:00	Rocketsonde	-	-	Starute, Dataosnde	-	-	-	ASC	-	-	-	61	-	-
1969-H1709	2440578-17	1969 Dec 22 1559:59	Rocketsonde	-	-	Met Para, Arcasnde	-	-	-	RRC	-	-	-	64	-	-
1969-H1711	2440578-27	1969 Dec 22 1829:59	Rocketsonde	-	-	Starute, Dataosnde	-	-	-	PH	-	-	-	59	-	-
1969-H1712	2440578-28	1969 Dec 22 1859:59	Rocketsonde	-	-	Chaff	-	-	-	WS	-	-	-	50	-	-
1969-H1713	2440578-38	1969 Dec 22 2101:59	Rocketsonde	-	-	Starute, Dataosnde	-	-	-	RAU	-	-	-	39	-	-
1969-H210	2440578-47	1969 Dec 22 2310:00	Rocketsonde	-	-	Starute, Dataosnde	-	-	-	GRLY	-	-	-	62	-	-
1969-H1714	2440578-57	1969 Dec 23 0400:00	Rocketsonde	-	-	Starute, Dataosnde	-	-	-	RRC	LC43	-	-	56	-	-
1969-H1715	2440579-12	1969 Dec 23 1500:00	Rocketsonde	-	-	Met Para	-	-	-	CC	-	-	-	60	-	-
1969-H1717	2440579-39	1969 Dec 23 2124:59	Rocketsonde	-	-	Starute, Dataosnde	-	-	-	PH	-	-	-	54	-	-
1969-H1718	2440580-10	1969 Dec 24 1430:00	Rocketsonde	-	-	Met Para, Arcasnde	-	-	-	ASC	-	-	-	62	-	-
1969-H1719	2440580-12	1969 Dec 24 1500:00	Rocketsonde	-	-	Starute, Dataosnde	-	-	-	CC	LC43	-	-	61	-	-
1969-H1720	2440580-17	1969 Dec 24 1601:59	Rocketsonde	-	-	Starute, Dataosnde	-	-	-	PH	-	-	-	60	-	-
1969-H1722	2440580-29	1969 Dec 24 1859:59	Rocketsonde	-	-	Starute, Dataosnde	-	-	-	WS	-	-	-	62	-	-
1969-H1723	2440580-39	1969 Dec 24 2118:00	Rocketsonde	-	-	Met Para, Arcasnde	-	-	-	RAU	-	-	-	60	-	-
1969-H1724	2440580-57	1969 Dec 26 0444:59	Rocketsonde	-	-	Starute, Dataosnde	-	-	-	RRC	-	-	-	61	-	-
1969-H1725	2440582-12	1969 Dec 26 1500:00	Rocketsonde	-	-	Met Para, Arcasnde	-	-	-	ASC	LC43	-	-	61	-	-
1969-H1726	2440582-12	1969 Dec 26 1500:00	Rocketsonde	-	-	Met Para, Arcasnde	-	-	-	ASC	-	-	-	67	-	-
1969-H1728	2440585-10	1969 Dec 28 1430:00	Rocketsonde	-	-	Starute, Dataosnde	-	-	-	CC	LC43	-	-	60	-	-
1969-H1729	2440585-12	1969 Dec 28 1500:00	Rocketsonde	-	-	Chaff	-	-	-	WS	-	-	-	64	-	-
1969-H1731	2440585-29	1969 Dec 29 1859:59	Rocketsonde	-	-	Starute, Dataosnde	-	-	-	PH	-	-	-	60	-	-
1969-H1732	2440585-43	1969 Dec 29 2220:59	Rocketsonde	-	-	Starute, Dataosnde	-	-	-	RRC	-	-	-	58	-	-
1969-H1733	2440585-56	1969 Dec 30 0124:59	Rocketsonde	-	-	Met Para, Arcasnde	-	-	-	RRC	-	-	-	65	-	-
1969-H1735	2440586-32	1969 Dec 30 1944:59	Rocketsonde	-	-	Starute, Dataosnde	-	-	-	GRLY	-	-	-	57	-	-
1969-H1736	2440586-47	1969 Dec 30 2315:00	Rocketsonde	-	-	Starute, Dataosnde	-	-	-	THU	-	-	-	58	-	-
1969-H1737	2440586-77	1969 Dec 31 0653:00	Rocketsonde	-	-	Met Para, Arcasnde	-	-	-	SHER	-	-	-	57	-	-
1969-H1739	2440587-10	1969 Dec 31 1430:00	Rocketsonde	-	-	Starute, Dataosnde	-	-	-	CC	LC43	-	-	39	-	-
1969-H1740	2440587-19	1969 Dec 31 1658:59	Rocketsonde	-	-	Starute, Dataosnde	-	-	-	WS	-	-	-	62	-	-
1969-H1742	2440587-29	1969 Dec 31 1859:59	Rocketsonde	-	-	Starute, Dataosnde	-	-	-	PH	-	-	-	55	-	-
1969-H1743	2440587-29	1969 Dec 31 1859:59	Rocketsonde	-	-	Starute, Dataosnde	-	-	-	ASC	-	-	-	57	-	-
1969-H1745	2440587-37	1969 Dec 31 2048:00	Rocketsonde	-	-	Starute, Dataosnde	-	-	-	CC	-	-	-	62	-	-
1969-H1744	2440587-41	1969 Dec 31 2146:59	Rocketsonde	-	-	Starute, Dataosnde	-	-	-	WS	-	-	-	60	-	-
1970-H1040	2440788-06	1970 Jul 17 1600:00	Rocketsonde	-	-	Met Para, Arcasnde	-	-	-	RAU	-	-	-	80	-	-
1970-H1042	2440788-14	1970 Jul 17 1924:59	Rocketsonde	-	-	Starute, Dataosnde	-	-	-	SHER	-	-	-	64	-	-
1970-H1043	2440788-22	1970 Jul 17 1724:00	Rocketsonde	-	-	Starute	-	-	-	VI	-	-	-	65	-	-
1970-H1044	2440788-24	1970 Jul 17 1751:00	Rocketsonde	-	-	Starute, Dataosnde	-	-	-	PH	-	-	-	59	-	-
1970-H1045	2440788-25	1970 Jul 17 1759:00	Rocketsonde	-	-	Chaff	-	-	-	WS	-	-	-	39	-	-
1970-H1046	2440788-26	1970 Jul 17 1803:59	Rocketsonde	-	-	Starute, Dataosnde	-	-	-	PH	-	-	-	58	-	-
1970-H1048	2440788-39	1970 Jul 18 0136:00	Rocketsonde	-	-	Starute, Dataosnde	-	-	-	PH	-	-	-	68	-	-
1970-H1049	2440788-56	1970 Jul 18 1155:00	Rocketsonde	-	-	Starute, Dataosnde	-	-	-	KAU	-	-	-	61	-	-
1970-H1050	2440788-04	1970 Jul 20 1359:59	Rocketsonde	-	-	Starute, Dataosnde	-	-	-	RRC	-	-	-	63	-	-
1970-H1051	2440788-04	1970 Jul 20 1359:59	Rocketsonde	-	-	Starute, Dataosnde	-	-	-	ASC	-	-	-	62	-	-
1970-H1052	2440788-12	1970 Jul 20 1500:00	Rocketsonde	-	-	Starute, Dataosnde	-	-	-	ASC	LC43	-	-	59	-	-
1970-H1053	2440788-13	1970 Jul 20 1512:59	Rocketsonde	-	-	Met Para, Arcasnde	-	-	-	ASC	-	-	-	64	-	-
1970-H1054	2440788-14	1970 Jul 20 1524:59	Rocketsonde	-	-	Met Para, Arcasnde	-	-	-	ASC	-	-	-	62	-	-
1970-H1055	2440788-19	1970 Jul 20 1830:00	Rocketsonde	-	-	Starute, Dataosnde	-	-	-	SHER	-	-	-	60	-	-
1970-H1056	2440788-21	1970 Jul 20 1849:59	Rocketsonde	-	-	Met Para	-	-	-	PH	-	-	-	64	-	-
1970-H1057	2440788-21	1970 Jul 20 1700:00	Rocketsonde	-	-	Met Para, Arcasnde	-	-	-	VI	-	-	-	70	-	-
1970-H1058	2440788-23	1970 Jul 20 1839:59	Rocketsonde	-	-	Met Para, Arcasnde	-	-	-	WS	-	-	-	63	-	-
1970-H1059	2440788-28	1970 Jul 20 2119:00	Rocketsonde	-	-	Starute, Dataosnde	-	-	-	WS	-	-	-	70	-	-
1970-H1060	2440788-39	1970 Jul 20 2119:00	Rocketsonde	-	-	Starute, Dataosnde	-	-	-	WS	-	-	-	63	-	-
1970-H1061	2440788-58	1970 Jul 21 0149:59	Rocketsonde	-	-	Starute, Dataosnde	-	-	-	KAU	-	-	-	58	-	-
1970-H1062	2440789-02	1970 Jul 21 1415:00	Rocketsonde	-	-	Starute, Dataosnde	-	-	-	RRC	LC43	-	-	60	-	-
1970-H1063	2440789-19	1970 Jul 21 1459:00	Rocketsonde	-	-	Starute, Dataosnde	-	-	-	PH	-	-	-	62	-	-
1970-H1064	2440789-35	1970 Jul 21 1530:00	Rocketsonde	-	-	Met Para	-	-	-	CC	LC43	-	-	62	-	-
1970-H1065	2440789-35	1970 Jul 21 2030:00	Rocketsonde	-	-	Starute, Dataosnde	-	-	-	CC	-	-	-	54	-	-
1970-H1066	2440789-40	1970 Jul 21 2135:59	Rocketsonde	-	-	Starute, Dataosnde	-	-	-	GRLY	-	-	-	58	-	-
1970-H1067	2440790-08	1970 Jul 21 2135:59	Rocketsonde	-	-	Met Para	-	-	-	KAU	-	-	-	57	-	-
1970-H1068	2440790-08	1970 Jul 21 2135:59	Rocketsonde	-	-	Starute, Dataosnde	-	-	-	ASC	-	-	-	62	-	-
1970-H1069	2440790-18	1970 Jul 22 1814:59	Rocketsonde	-	-	Starute, Dataosnde	-	-	-	CC	LC43	-	-	45	-	-
1970-H1070	2440790-23	1970 Jul 22 1622:59	Rocketsonde	-	-	Starute, Dataosnde	-	-	-	SHER	-	-	-	56	-	-
1970-H1071	2440790-23	1970 Jul 22 1622:59	Rocketsonde	-	-	Starute, Dataosnde	-	-	-	PH	-	-	-	59	-	-
1970-H1072	2440790-23	1970 Jul 22 1730:00	Rocketsonde	-	-	Met Sphere	-	-	-	WS	-	-	-	62	-	-
1970-H1073	2440790-25	1970 Jul 22 1755:00	Rocketsonde	-	-	Starute, Dataosnde	-	-	-	CC	LC43	-	-	58	-	-
1970-H1074	2440790-25	1970 Jul 22 1755:00	Rocketsonde	-	-	Starute, Dataosnde	-	-	-	VI	-	-	-	64	-	-
1970-H1075	2440790-30	1970 Jul 22 1800:00	Rocketsonde	-	-	Chaff	-	-	-	WS	-	-	-	77	-	-
1970-H1076	2440790-33	1970 Jul 22 1910:59	Rocketsonde	-	-	Starute, Dataosnde	-	-	-	WS	-	-	-	66	-	-
1970-H1077	2440790-33	1970 Jul 22 2000:00	Rocketsonde	-	-	Starute, Dataosnde	-	-	-	GRLY	-	-	-	52	-	-
1970-H1078	2440791-15	1970 Jul 23 0202:00	Rocketsonde	-	-	Starute, Dataosnde	-	-	-	RRC	-	-	-	62	-	-
1970-H1079	2440791-16	1970 Jul 23 1532:59	Rocketsonde	-	-	Chaff	-	-	-	WS	-	-	-	79	-	-
1970-H1080	2440791-19	1970 Jul 23 1549:59	Rocketsonde	-	-	Met Para, Arcasnde	-	-	-	VI	-	-	-	53	-	-
1970-H1081	2440791-21	1970 Jul 23 1630:00	Rocketsonde	-	-	Starute, Dataosnde	-	-	-	WS	-	-	-	69	-	-
1970-H1082	2440791-21	1970 Jul 23 1701:00	Rocketsonde	-	-	Met Para	-	-	-	PH	-	-	-	52	-	-
1970-H1083	2440791-26	1970 Jul 23 1808:00	Rocketsonde	-	-	Starute, Dataosnde	-	-	-	PRIM	-	-	-	63	-	-
1970-H1084	2440791-40	1970 Jul 23 2131:00	Rocketsonde	-	-	Starute, Dataosnde	-	-	-	WS	-	-	-	53	-	-
1970-H89	2440792-05	1970 Jul 24 1306:00	Rocketsonde	-	-	Met Para, Arcasnde	-	-	-	KAU	-	-	-	47	-	-

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Mission	FlightCode	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee_Km	Range_Km	Dest
1970-1490	2440792-06	1970 Jul 24 1330:00	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	CC	LC43	-	-	48	-	-
1970-1491	2440792-08	1970 Jul 24 1400:00	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	ASC	-	-	-	60	-	-
1970-1492	2440792-09	1970 Jul 24 1403:59	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	WI	-	-	-	61	-	-
1970-1493	2440792-10	1970 Jul 24 1500:00	Rocketsonde	-	-	Met. Para, Arcasonde	-	-	-	SHER	-	-	-	60	-	-
1970-1494	2440792-11	1970 Jul 24 1530:00	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	PH	-	-	-	59	-	-
1970-1495	2440792-12	1970 Jul 24 1745:00	Rocketsonde	-	-	Chaff	-	-	-	WS	-	-	-	63	-	-
1970-1496	2440792-29	1970 Jul 24 1859:59	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	GRLY	-	-	-	59	-	-
1970-1497	2440792-38	1970 Jul 24 2100:00	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	KAU	-	-	-	61	-	-
1970-1498	2440792-37	1970 Jul 25 0334:59	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	KR	-	-	-	60	-	-
1970-1499	2440795-04	1970 Jul 27 1259:59	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	CC	LC43	-	-	60	-	-
1970-1500	2440795-08	1970 Jul 27 1400:00	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	ASC	-	-	-	59	-	-
1970-1501	2440795-12	1970 Jul 27 1500:00	Rocketsonde	-	-	Met. Para, Arcasonde	-	-	-	SHER	-	-	-	67	-	-
1970-1502	2440795-10	1970 Jul 27 1642:59	Rocketsonde	-	-	Starvue	-	-	-	PH	-	-	-	66	-	-
1970-1503	2440795-22	1970 Jul 27 1711:00	Rocketsonde	-	-	Met. Para, Arcasonde	-	-	-	WI	-	-	-	58	-	-
1970-1504	2440795-20	1970 Jul 28 1642:59	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	GRLY	-	-	-	56	-	-
1970-1505	2440796-20	1970 Jul 28 2138:59	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	KAU	-	-	-	61	-	-
1970-1506	2440796-59	1970 Jul 29 0207:00	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	KR	-	-	-	60	-	-
1970-1507	2440797-04	1970 Jul 29 1259:59	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	CC	LC43	-	-	62	-	-
1970-1508	2440797-08	1970 Jul 29 1400:00	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	ASC	-	-	-	62	-	-
1970-1509	2440797-10	1970 Jul 29 1420:00	Rocketsonde	-	-	Chaff	-	-	-	CLBI	-	-	-	66	-	-
1970-1510	2440797-12	1970 Jul 29 1500:00	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	SHER	-	-	-	66	-	-
1970-1511	2440797-13	1970 Jul 29 1513:59	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	PH	-	-	-	61	-	-
1970-1512	2440797-15	1970 Jul 29 1614:59	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	WI	-	-	-	60	-	-
1970-1513	2440797-24	1970 Jul 29 1740:00	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	WS	-	-	-	63	-	-
1970-1514	2440797-31	1970 Jul 29 1930:00	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	GRLY	-	-	-	55	-	-
1970-1515	2440797-41	1970 Jul 29 2148:59	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	KAU	-	-	-	62	-	-
1970-1516	2440797-56	1970 Jul 30 0130:00	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	KR	-	-	-	56	-	-
1970-1517	2440798-14	1970 Jul 30 1519:00	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	VI	-	-	-	61	-	-
1970-1518	2440798-18	1970 Jul 30 1619:59	Rocketsonde	-	-	Starvue	-	-	-	PH	-	-	-	52	-	-
1970-1519	2440798-21	1970 Jul 30 1707:00	Rocketsonde	-	-	Starvue	-	-	-	PH	-	-	-	58	-	-
1970-1520	2440798-21	1970 Jul 30 1707:00	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	CC	LC43	-	-	58	-	-
1970-1521	2440799-04	1970 Jul 31 1400:00	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	ASC	-	-	-	58	-	-
1970-1522	2440799-08	1970 Jul 31 1605:00	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	PH	-	-	-	68	-	-
1970-1523	2440799-08	1970 Jul 31 1605:00	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	ASC	-	-	-	58	-	-
1970-1524	2440799-15	1970 Jul 31 1838:59	Rocketsonde	-	-	Starvue	-	-	-	PH	-	-	-	68	-	-
1970-1525	2440799-20	1970 Jul 31 1944:59	Rocketsonde	-	-	Met. Para, Arcasonde	-	-	-	SHER	-	-	-	66	-	-
1970-1526	2440799-21	1970 Jul 31 1700:00	Rocketsonde	-	-	Starvue	-	-	-	PH	-	-	-	52	-	-
1970-1527	2440799-21	1970 Jul 31 1700:00	Rocketsonde	-	-	Chaff	-	-	-	WS	-	-	-	61	-	-
1970-1528	2440799-29	1970 Jul 31 1859:59	Rocketsonde	-	-	Met. Para, Arcasonde	-	-	-	ASC	-	-	-	58	-	-
1970-1529	2440799-50	1970 Jul 31 2129:59	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	GRLY	-	-	-	68	-	-
1970-1530	2440799-56	1970 Aug 1 0430:00	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	ASC	-	-	-	67	-	-
1970-1531	2440802-05	1970 Aug 3 1500:00	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	PH	-	-	-	65	-	-
1970-1532	2440802-12	1970 Aug 3 1520:00	Rocketsonde	-	-	Met. Para, Arcasonde	-	-	-	VI	-	-	-	61	-	-
1970-1533	2440802-16	1970 Aug 3 1559:00	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	SHER	-	-	-	67	-	-
1970-1534	2440802-17	1970 Aug 3 1559:00	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	VI	-	-	-	59	-	-
1970-1535	2440802-17	1970 Aug 3 1559:00	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	PH	-	-	-	56	-	-
1970-1536	2440802-21	1970 Aug 3 1700:00	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	WS	-	-	-	62	-	-
1970-1537	2440802-21	1970 Aug 3 1700:00	Rocketsonde	-	-	Chaff	-	-	-	CC	LC43	-	-	59	-	-
1970-1538	2440802-23	1970 Aug 3 1750:00	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	GRLY	-	-	-	63	-	-
1970-1539	2440802-38	1970 Aug 3 1800:59	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	ASC	-	-	-	59	-	-
1970-1540	2440802-38	1970 Aug 3 1800:59	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	KAU	-	-	-	59	-	-
1970-1541	2440802-38	1970 Aug 3 1800:59	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	KR	-	-	-	66	-	-
1970-1542	2440803-02	1970 Aug 4 1415:00	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	VI	-	-	-	67	-	-
1970-1543	2440803-02	1970 Aug 4 1415:00	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	VI	-	-	-	66	-	-
1970-1544	2440803-02	1970 Aug 4 1947:59	Rocketsonde	-	-	Met. Para, Arcasonde	-	-	-	KAU	-	-	-	60	-	-
1970-1545	2440803-36	1970 Aug 4 2100:00	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	CC	LC43	-	-	60	-	-
1970-1546	2440804-04	1970 Aug 5 1259:59	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	VI	-	-	-	68	-	-
1970-1547	2440804-07	1970 Aug 5 1337:59	Rocketsonde	-	-	Met. Para, Arcasonde	-	-	-	ASC	-	-	-	58	-	-
1970-1548	2440804-07	1970 Aug 5 1337:59	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	VI	-	-	-	68	-	-
1970-1549	2440804-08	1970 Aug 5 1400:00	Rocketsonde	-	-	Met. Para, Arcasonde	-	-	-	ASC	-	-	-	59	-	-
1970-1550	2440804-08	1970 Aug 5 1400:00	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	SHER	-	-	-	62	-	-
1970-1551	2440804-25	1970 Aug 5 1800:00	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	WS	-	-	-	56	-	-
1970-1552	2440804-25	1970 Aug 5 1806:00	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	PRIM	-	-	-	64	-	-
1970-1553	2440804-28	1970 Aug 5 1840:00	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	PH	-	-	-	59	-	-
1970-1554	2440804-29	1970 Aug 5 1901:59	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	GRLY	-	-	-	59	-	-
1970-1555	2440804-56	1970 Aug 5 2100:00	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	KAU	-	-	-	60	-	-
1970-1556	2440804-56	1970 Aug 5 2100:00	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	KR	-	-	-	61	-	-
1970-1557	2440805-14	1970 Aug 6 1522:59	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	PH	-	-	-	55	-	-
1970-1558	2440805-16	1970 Aug 6 1544:59	Rocketsonde	-	-	Met. Para, Arcasonde	-	-	-	SHER	-	-	-	59	-	-
1970-1559	2440805-20	1970 Aug 6 2107:00	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	KAU	-	-	-	64	-	-
1970-1560	2440805-38	1970 Aug 6 2107:00	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	CC	LC43	-	-	61	-	-
1970-1561	2440806-04	1970 Aug 7 1404:59	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	ASC	-	-	-	64	-	-
1970-1562	2440806-09	1970 Aug 7 1404:59	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	VI	-	-	-	55	-	-
1970-1563	2440806-23	1970 Aug 7 1414:00	Rocketsonde	-	-	Met. Para, Arcasonde	-	-	-	CC	LC43	-	-	64	-	-
1970-1564	2440806-23	1970 Aug 7 1732:00	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	VI	-	-	-	55	-	-
1970-1565	2440806-25	1970 Aug 7 1800:00	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	PRIM	-	-	-	71	-	-
1970-1566	2440806-25	1970 Aug 7 1804:59	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	WS	-	-	-	60	-	-
1970-1567	2440806-25	1970 Aug 7 1859:59	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	ASC	-	-	-	62	-	-
1970-1568	2440806-56	1970 Aug 8 0130:00	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	GRLY	-	-	-	56	-	-
1970-1569	2440806-56	1970 Aug 8 0130:00	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	KR	-	-	-	62	-	-
1970-1570	2440809-04	1970 Aug 10 1259:59	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	PH	-	-	-	61	-	-
1970-1571	2440809-08	1970 Aug 10 1402:00	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	ASC	LC43	-	-	61	-	-
1970-1572	2440809-15	1970 Aug 10 1530:00	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	CC	-	-	-	52	-	-
1970-1573	2440809-19	1970 Aug 10 1630:00	Rocketsonde	-	-	Met. Para, Arcasonde	-	-	-	ASC	-	-	-	56	-	-
1970-1574	2440809-25	1970 Aug 10 1800:59	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	SHER	-	-	-	57	-	-
1970-1575	2440809-29	1970 Aug 10 1903:59	Rocketsonde	-	-	Starvue, Datasonde	-	-	-	GRLY	-	-	-	58	-	-

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Mission	FlightCode	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee_Km	Range_Km	Dest
1970-H1176	2440809-56	1970 Aug 11 0130:00	Rocketsonde			Starute, Dataosnde				KHR				61		
1970-H1178	2440810-40	1970 Aug 11 2341:00	Rocketsonde			Met. Para				KAU				54		
1970-H1179	2440811-06	1970 Aug 12 1307:00	Rocketsonde			Starute, Dataosnde				LC43				59		
1970-H1180	2440811-08	1970 Aug 12 1400:00	Rocketsonde			Met. Para				WS				59		
1970-H1181	2440811-08	1970 Aug 12 1400:00	Rocketsonde			Starute, Dataosnde				ASC				59		
1970-H1182	2440811-10	1970 Aug 12 1428:00	Rocketsonde			Met. Para, Arcasonde				WI				52		
1970-H1183	2440811-11	1970 Aug 12 1434:00	Rocketsonde			Chaff				CLBI				62		
1970-H1184	2440811-11	1970 Aug 12 1438:00	Rocketsonde			Starute, Dataosnde				ASC				60		
1970-H1185	2440811-12	1970 Aug 12 1500:00	Rocketsonde			Starute, Dataosnde				CC	LC43			57		
1970-H1186	2440811-13	1970 Aug 12 1504:59	Rocketsonde			Met. Para, Arcasonde				AMT				57		
1970-H1187	2440811-14	1970 Aug 12 1523:59	Rocketsonde			Starute, Dataosnde				PH				59		
1970-H1188	2440811-14	1970 Aug 12 1524:59	Rocketsonde			Starute, Dataosnde				WS				52		
1970-H1189	2440811-20	1970 Aug 12 1654:59	Rocketsonde			Met. Para, Arcasonde				PRIH				67		
1970-H1190	2440811-25	1970 Aug 12 1802:59	Rocketsonde			Starute, Dataosnde				GRLY				61		
1970-H1191	2440811-27	1970 Aug 12 1853:59	Rocketsonde			Starute, Dataosnde				KAU				57		
1970-H1192	2440811-38	1970 Aug 12 2100:00	Rocketsonde			Starute, Dataosnde				KHR				60		
1970-H1194	2440811-57	1970 Aug 13 0137:59	Rocketsonde			Met. Para				WS				60		
1970-H1195	2440812-12	1970 Aug 13 1448:59	Rocketsonde			Starute				PH				62		
1970-H1196	2440812-15	1970 Aug 13 1531:00	Rocketsonde			Met. Para				KAU				53		
1970-H1197	2440812-38	1970 Aug 13 2100:00	Rocketsonde			Starute, Dataosnde				KHR				61		
1970-H1198	2440812-93	1970 Aug 14 1028:59	Rocketsonde			Starute, Dataosnde				CC	LC43			59		
1970-H1199	2440813-04	1970 Aug 14 1258:59	Rocketsonde			Starute, Dataosnde				ASC				56		
1970-H1200	2440813-08	1970 Aug 14 1400:00	Rocketsonde			Starute, Dataosnde				WI				61		
1970-H1201	2440813-09	1970 Aug 14 1415:00	Rocketsonde			Starute, Dataosnde				PH				58		
1970-H1202	2440813-12	1970 Aug 14 1487:00	Rocketsonde			Starute, Dataosnde				SHER				60		
1970-H1203	2440813-15	1970 Aug 14 1530:00	Rocketsonde			Met. Para, Arcasonde				AMT				44		
1970-H1204	2440813-21	1970 Aug 14 1640:00	Rocketsonde			Starute, Dataosnde				WS				57		
1970-H1205	2440813-28	1970 Aug 14 1700:00	Rocketsonde			Starute, Dataosnde				PRIH				67		
1970-H1206	2440813-34	1970 Aug 14 1840:00	Rocketsonde			Starute, Dataosnde				GRLY				58		
1970-H1207	2440813-38	1970 Aug 14 2003:00	Rocketsonde			Starute, Dataosnde				KAU				58		
1970-H1208	2440816-08	1970 Aug 17 1400:00	Rocketsonde			Starute, Dataosnde				SHER				59		
1970-H1209	2440816-13	1970 Aug 17 1500:59	Rocketsonde			Met. Para, Arcasonde				PH				64		
1970-H1210	2440816-16	1970 Aug 17 1506:00	Rocketsonde			Starute, Dataosnde				WS				58		
1970-H1211	2440816-21	1970 Aug 17 1700:00	Rocketsonde			Chaff				WS				59		
1970-H1212	2440816-24	1970 Aug 17 1745:00	Rocketsonde			Met. Para, Arcasonde				AMT				57		
1970-H1213	2440816-25	1970 Aug 17 1802:59	Rocketsonde			Starute, Dataosnde				CC	LC43			58		
1970-H1214	2440816-28	1970 Aug 17 1846:00	Rocketsonde			Starute, Dataosnde				GRLY				58		
1970-H1215	2440816-28	1970 Aug 17 1846:59	Rocketsonde			Starute, Dataosnde				KAU				56		
1970-H1216	2440816-56	1970 Aug 18 2100:00	Rocketsonde			Starute, Dataosnde				KHR				57		
1970-H1217	2440816-56	1970 Aug 18 0130:00	Rocketsonde			Starute, Dataosnde				CC	LC43			59		
1970-H1218	2440817-06	1970 Aug 18 1836:59	Rocketsonde			Met. Para				PH				62		
1970-H1219	2440817-23	1970 Aug 18 1935:00	Rocketsonde			Met. Para, Arcasonde				PH				59		
1970-H1220	2440817-33	1970 Aug 18 1730:00	Rocketsonde			Starute, Dataosnde				KAU	LC43			69		
1970-H1221	2440817-38	1970 Aug 18 2107:00	Rocketsonde			Met. Para				ASC				66		
1970-H1222	2440818-06	1970 Aug 19 1440:00	Rocketsonde			Starute, Dataosnde				ASC				60		
1970-H1223	2440818-11	1970 Aug 19 1405:00	Rocketsonde			Starute, Dataosnde				CC	LC43			65		
1970-H1224	2440818-11	1970 Aug 19 1506:00	Rocketsonde			Starute, Dataosnde				SHER				59		
1970-H1225	2440818-12	1970 Aug 19 1545:00	Rocketsonde			Starute, Dataosnde				CC	LC43			73		
1970-H1226	2440818-15	1970 Aug 19 1625:59	Rocketsonde			Starute, Dataosnde				WS				56		
1970-H1227	2440818-22	1970 Aug 19 1725:59	Rocketsonde			Met. Para, Arcasonde				VI				50		
1970-H1228	2440818-24	1970 Aug 19 1743:00	Rocketsonde			Starute, Dataosnde				VI				68		
1970-H1229	2440818-24	1970 Aug 19 1826:59	Rocketsonde			Starute, Dataosnde				PRIH				59		
1970-H1230	2440818-26	1970 Aug 19 1929:59	Rocketsonde			Met. Para, Arcasonde				VI				61		
1970-H1231	2440818-26	1970 Aug 19 1859:59	Rocketsonde			Starute, Dataosnde				GRLY				66		
1970-H1232	2440818-30	1970 Aug 19 2030:00	Rocketsonde			Starute, Dataosnde				KAU				57		
1970-H1233	2440818-43	1970 Aug 19 2138:59	Rocketsonde			Starute, Dataosnde				PH				55		
1970-H1234	2440818-43	1970 Aug 19 2138:59	Rocketsonde			Starute, Dataosnde				KHR				58		
1970-H1235	2440818-56	1970 Aug 20 0130:00	Rocketsonde			Starute, Dataosnde				SHER				59		
1970-H1237	2440819-12	1970 Aug 20 1500:00	Rocketsonde			Starute, Dataosnde				VI				45		
1970-H1238	2440819-16	1970 Aug 20 1545:59	Rocketsonde			Met. Para, Arcasonde				VI				61		
1970-H1239	2440819-18	1970 Aug 20 1623:59	Rocketsonde			Met. Para, Arcasonde				KAU				54		
1970-H1240	2440819-18	1970 Aug 20 2136:59	Rocketsonde			Starute, Dataosnde				VI				67		
1970-H1241	2440820-05	1970 Aug 21 1304:59	Rocketsonde			Starute, Dataosnde				ASC	LC43			58		
1970-H1242	2440820-08	1970 Aug 21 1400:00	Rocketsonde			Chaff				WS				60		
1970-H1243	2440820-35	1970 Aug 21 2030:00	Rocketsonde			Starute, Dataosnde				KAU				62		
1970-H1244	2440820-40	1970 Aug 21 2130:00	Rocketsonde			Starute, Dataosnde				KHR				57		
1970-H1246	2440820-56	1970 Aug 22 0130:00	Rocketsonde			Starute, Dataosnde				CC	LC43			56		
1970-H1247	2440823-04	1970 Aug 24 1259:59	Rocketsonde			Starute, Dataosnde				ASC				56		
1970-H1248	2440823-12	1970 Aug 24 1400:00	Rocketsonde			Starute, Dataosnde				SHER				62		
1970-H1249	2440823-18	1970 Aug 24 1500:00	Rocketsonde			Met. Para, Arcasonde				VI				51		
1970-H1250	2440823-19	1970 Aug 24 1629:00	Rocketsonde			Met. Para, Arcasonde				KAU				57		
1970-H1251	2440823-21	1970 Aug 24 1841:00	Rocketsonde			Chaff				WS				63		
1970-H1253	2440823-25	1970 Aug 24 1800:59	Rocketsonde			Starute, Dataosnde				PRIH				60		
1970-H1254	2440823-21	1970 Aug 24 1700:00	Rocketsonde			Starute, Dataosnde				KAU				63		
1970-H1255	2440823-38	1970 Aug 25 2114:59	Rocketsonde			Met. Para				KAU				54		
1970-H1256	2440824-39	1970 Aug 26 1114:59	Rocketsonde			Starute, Dataosnde				CC	LC43			57		
1970-H1257	2440825-04	1970 Aug 26 1259:59	Rocketsonde			Starute, Dataosnde				ASC				41		
1970-H1259	2440825-09	1970 Aug 26 1415:00	Rocketsonde			Starute, Dataosnde				VI				60		
1970-H1260	2440825-13	1970 Aug 26 1455:00	Rocketsonde			Met. Para, Arcasonde				SHER				66		
1970-H1261	2440825-12	1970 Aug 26 1504:59	Rocketsonde			Starute, Dataosnde				PRIH				66		
1970-H1262	2440825-25	1970 Aug 26 1802:59	Rocketsonde			Starute, Dataosnde				KAU				61		
1970-H1263	2440825-53	1970 Aug 27 0040:00	Rocketsonde			Starute, Dataosnde				GRLY				57		
1970-H1264	2440825-58	1970 Aug 27 0154:59	Rocketsonde			Starute, Dataosnde				KHR				60		

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Mission	FlightCode	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee_Km	Range_Km	Dest
1970-H1285	2440826-17	1970 Aug 27 1559:59	Rocketsonde	-	-	Met. Para, Arcasonde	-	-	-	WI	-	-	-	55	-	-
1970-H1286	2440826-17	1970 Aug 27 1609:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	WI	-	-	-	61	-	-
1970-H1287	2440826-29	1970 Aug 27 1859:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	GRLY	-	-	-	64	-	-
1970-H1288	2440827-08	1970 Aug 28 1259:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	CC	LC43	-	-	60	-	-
1970-H1289	2440827-08	1970 Aug 28 1400:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	ASC	-	-	-	56	-	-
1970-H1290	2440827-08	1970 Aug 28 1401:00	Rocketsonde	-	-	Met. Para, Arcasonde	-	-	-	WI	-	-	-	55	-	-
1970-H1291	2440827-12	1970 Aug 28 1446:00	Rocketsonde	-	-	Met. Para, Arcasonde	-	-	-	MIT	-	-	-	47	-	-
1970-H1292	2440827-12	1970 Aug 28 1500:00	Rocketsonde	-	-	Met. Para, Arcasonde	-	-	-	SHER	-	-	-	60	-	-
1970-H1293	2440827-25	1970 Aug 28 1800:00	Rocketsonde	-	-	Chaff	-	-	-	WS	-	-	-	60	-	-
1970-H1294	2440827-25	1970 Aug 28 1800:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	GRLY	-	-	-	64	-	-
1970-H1295	2440827-38	1970 Aug 28 1804:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PRIM	-	-	-	65	-	-
1970-H1296	2440830-12	1970 Aug 31 1500:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	RAU	-	-	-	61	-	-
1970-H1297	2440830-18	1970 Aug 31 1620:59	Rocketsonde	-	-	Met. Para, Arcasonde	-	-	-	SHER	-	-	-	56	-	-
1970-H1298	2440830-19	1970 Aug 31 1653:59	Rocketsonde	-	-	Met. Para, Arcasonde	-	-	-	WI	-	-	-	55	-	-
1970-H1299	2440830-20	1970 Aug 31 1658:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	WI	-	-	-	56	-	-
1970-H1300	2440830-29	1970 Aug 31 1859:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	GRLY	-	-	-	60	-	-
1970-H1301	2440830-32	1970 Aug 31 1944:59	Rocketsonde	-	-	Chaff	-	-	-	WS	-	-	-	61	-	-
1970-H1302	2440830-38	1970 Aug 31 2102:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	RAU	-	-	-	60	-	-
1970-H1303	2440831-12	1970 Sep 1 1500:00	Rocketsonde	-	-	Met. Para	-	-	-	WS	-	-	-	64	-	-
1970-H1304	2440831-12	1970 Sep 1 1400:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	ASC	-	-	-	63	-	-
1970-H1305	2440832-08	1970 Sep 2 1400:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	CC	LC43	-	-	59	-	-
1970-H1306	2440832-10	1970 Sep 2 1422:00	Rocketsonde	-	-	Met. Para	-	-	-	WS	-	-	-	65	-	-
1970-H1307	2440832-12	1970 Sep 2 1456:00	Rocketsonde	-	-	Met. Sphere	-	-	-	MIT	-	-	-	47	-	-
1970-H1308	2440832-22	1970 Sep 2 1723:00	Rocketsonde	-	-	Met. Para, Arcasonde	-	-	-	WI	-	-	-	104	-	-
1970-H1309	2440832-22	1970 Sep 2 1800:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	WS	-	-	-	67	-	-
1970-H1310	2440832-31	1970 Sep 2 1930:00	Rocketsonde	-	-	Met. Sphere	-	-	-	GRLY	-	-	-	56	-	-
1970-H1311	2440832-36	1970 Sep 2 2104:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	RAU	-	-	-	85	-	-
1970-H1312	2440832-44	1970 Sep 2 2209:59	Rocketsonde	-	-	Met. Sphere	-	-	-	RAU	-	-	-	62	-	-
1970-H1313	2440832-44	1970 Sep 2 2209:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	GRLY	-	-	-	67	-	-
1970-H1314	2440832-56	1970 Sep 3 0130:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	NRK	-	-	-	62	-	-
1970-H1315	2440833-23	1970 Sep 3 0130:00	Rocketsonde	-	-	Met. Para	-	-	-	NRK	-	-	-	62	-	-
1970-H1316	2440833-23	1970 Sep 3 0130:00	Rocketsonde	-	-	Met. Para	-	-	-	RAU	-	-	-	52	-	-
1970-H1317	2440833-45	1970 Sep 3 2251:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	CC	LC43	-	-	60	-	-
1970-H1318	2440834-04	1970 Sep 4 1259:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	ASC	-	-	-	64	-	-
1970-H1319	2440834-09	1970 Sep 4 1415:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	SHER	-	-	-	61	-	-
1970-H1320	2440834-14	1970 Sep 4 1514:59	Rocketsonde	-	-	Met. Para, Arcasonde	-	-	-	MIT	-	-	-	56	-	-
1970-H1321	2440834-15	1970 Sep 4 1540:00	Rocketsonde	-	-	Met. Para, Arcasonde	-	-	-	GRLY	-	-	-	52	-	-
1970-H1322	2440834-29	1970 Sep 4 1859:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	RAU	-	-	-	56	-	-
1970-H1323	2440834-36	1970 Sep 4 2122:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	NRK	-	-	-	60	-	-
1970-H1324	2440834-56	1970 Sep 9 0130:00	Rocketsonde	-	-	Met. Para, Arcasonde	-	-	-	CC	LC43	-	-	64	-	-
1970-H1325	2440835-14	1970 Sep 6 1921:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	SHER	-	-	-	58	-	-
1970-H1326	2440835-23	1970 Sep 8 1730:00	Rocketsonde	-	-	Chaff	-	-	-	WS	-	-	-	59	-	-
1970-H1327	2440835-23	1970 Sep 8 1730:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	GRLY	-	-	-	62	-	-
1970-H1328	2440835-30	1970 Sep 8 1735:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	CC	LC43	-	-	60	-	-
1970-H1329	2440835-30	1970 Sep 8 2110:59	Rocketsonde	-	-	Met. Para, Datasonde	-	-	-	GRLY	-	-	-	62	-	-
1970-H1330	2440835-42	1970 Sep 9 0959:59	Rocketsonde	-	-	Met. Para	-	-	-	RAU	-	-	-	64	-	-
1970-H1331	2440835-42	1970 Sep 9 0959:59	Rocketsonde	-	-	Met. Sphere	-	-	-	ASC	-	-	-	58	-	-
1970-H1332	2440835-92	1970 Sep 9 1259:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	CC	LC43	-	-	63	-	-
1970-H1333	2440835-04	1970 Sep 9 1301:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	MIT	-	-	-	59	-	-
1970-H1334	2440835-04	1970 Sep 9 1400:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	ASC	-	-	-	62	-	-
1970-H1335	2440835-08	1970 Sep 9 1500:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	CC	LC43	-	-	78	-	-
1970-H1336	2440835-12	1970 Sep 9 1500:00	Rocketsonde	-	-	Met. Sphere	-	-	-	ASC	-	-	-	60	-	-
1970-H1337	2440835-17	1970 Sep 9 1559:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	SHER	-	-	-	85	-	-
1970-H1338	2440835-21	1970 Sep 9 1700:00	Rocketsonde	-	-	Met. Sphere	-	-	-	PH	-	-	-	62	-	-
1970-H1339	2440835-21	1970 Sep 9 1837:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	WS	-	-	-	63	-	-
1970-H1340	2440835-26	1970 Sep 9 2159:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PRIM	-	-	-	63	-	-
1970-H1341	2440835-45	1970 Sep 9 2338:59	Rocketsonde	-	-	Met. Para, Arcasonde	-	-	-	VI	-	-	-	57	-	-
1970-H1342	2440835-57	1970 Sep 10 0146:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	RAU	-	-	-	63	-	-
1970-H1343	2440835-57	1970 Sep 10 0146:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	KHR	-	-	-	60	-	-
1970-H1344	2440835-57	1970 Sep 10 0146:00	Rocketsonde	-	-	Met. Para, Datasonde	-	-	-	GRLY	-	-	-	63	-	-
1970-H1345	2440840-29	1970 Sep 10 1859:59	Rocketsonde	-	-	Chaff	-	-	-	RAU	-	-	-	65	-	-
1970-H1346	2440840-41	1970 Sep 10 2147:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	CC	LC43	-	-	62	-	-
1970-H1347	2440841-06	1970 Sep 11 1330:00	Rocketsonde	-	-	Met. Para, Arcasonde	-	-	-	MIT	-	-	-	47	-	-
1970-H1348	2440841-06	1970 Sep 11 1357:59	Rocketsonde	-	-	Met. Para, Arcasonde	-	-	-	VI	-	-	-	63	-	-
1970-H1349	2440841-08	1970 Sep 11 1400:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	ASC	-	-	-	59	-	-
1970-H1350	2440841-16	1970 Sep 11 1530:00	Rocketsonde	-	-	Met. Para	-	-	-	WS	-	-	-	59	-	-
1970-H1351	2440841-16	1970 Sep 11 1545:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	SHER	-	-	-	59	-	-
1970-H1352	2440841-29	1970 Sep 11 1859:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	GRLY	-	-	-	62	-	-
1970-H1353	2440841-38	1970 Sep 11 2100:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	RAU	-	-	-	69	-	-
1970-H1354	2440841-47	1970 Sep 12 0146:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	KHR	-	-	-	60	-	-
1970-H1355	2440842-26	1970 Sep 12 1810:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PRIM	-	-	-	68	-	-
1970-H1356	2440844-05	1970 Sep 14 1314:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	CC	LC43	-	-	60	-	-
1970-H1357	2440844-10	1970 Sep 14 1430:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	ASC	-	-	-	60	-	-
1970-H1358	2440844-11	1970 Sep 14 1445:00	Rocketsonde	-	-	Met. Para, Arcasonde	-	-	-	MIT	-	-	-	55	-	-
1970-H1359	2440844-16	1970 Sep 14 1544:00	Rocketsonde	-	-	Met. Para, Arcasonde	-	-	-	VI	-	-	-	56	-	-
1970-H1360	2440844-17	1970 Sep 14 1557:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PH	-	-	-	57	-	-
1970-H1361	2440844-17	1970 Sep 14 1611:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	VI	-	-	-	59	-	-
1970-H1362	2440844-21	1970 Sep 14 1636:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	WS	-	-	-	62	-	-
1970-H1363	2440844-21	1970 Sep 14 1700:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	VI	-	-	-	59	-	-
1970-H1364	2440844-25	1970 Sep 14 1801:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PRIM	-	-	-	70	-	-
1970-H1365	2440844-38	1970 Sep 14 2100:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	RAU	-	-	-	60	-	-
1970-H1366	2440844-44	1970 Sep 15 2300:00	Rocketsonde	-	-	Met. Para, Datasonde	-	-	-	GRLY	-	-	-	61	-	-
1970-H1367	2440844-56	1970 Sep 15 0130:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	KHR	-	-	-	60	-	-
1970-H1368	2440845-10	1970 Sep 15 1424:00	Rocketsonde	-	-	Starute	-	-	-	VI	-	-	-	61	-	-
1970-H1369	2440845-12	1970 Sep 15 1456:00	Rocketsonde	-	-	Met. Para	-	-	-	PH	-	-	-	52	-	-

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Mission	FlightCode	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee_Km	Range_Km	Dest
1970-H1353	2440845-15	1970 Sep 15 1532:00	Rocketsonde	-	-	Starute	-	-	-	WI	-	-	-	59	-	-
1970-H1354	2440845-26	1970 Sep 15 1814:59	Rocketsonde	-	-	Met Para, Arcasonde	-	-	-	WS	-	-	-	53	-	-
1970-H1355	2440845-39	1970 Sep 15 2122:00	Rocketsonde	-	-	Chaff	-	-	-	KAU	-	-	-	61	-	-
1970-H1356	2440845-44	1970 Sep 15 2230:00	Rocketsonde	-	-	Met Para, Arcasonde	-	-	-	WS	-	-	-	55	-	-
1970-H1358	2440846-08	1970 Sep 16 1400:00	Rocketsonde	-	-	Met Para, Arcasonde	-	-	-	MIT	-	-	-	57	-	-
1970-H1359	2440846-12	1970 Sep 16 1500:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	SHER	-	-	-	53	-	-
1970-H1361	2440846-15	1970 Sep 16 1534:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	ASC	-	-	-	61	-	-
1970-H1362	2440846-19	1970 Sep 16 1636:59	Rocketsonde	-	-	Met Para, Arcasonde	-	-	-	WI	-	-	-	50	-	-
1970-H1363	2440846-20	1970 Sep 16 1644:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	WS	-	-	-	58	-	-
1970-H1364	2440846-21	1970 Sep 16 1656:59	Rocketsonde	-	-	Met Para, Arcasonde	-	-	-	WI	-	-	-	55	-	-
1970-H1365	2440846-22	1970 Sep 16 1721:00	Rocketsonde	-	-	Met Para, Arcasonde	-	-	-	WI	-	-	-	67	-	-
1970-H1366	2440846-23	1970 Sep 16 1730:00	Rocketsonde	-	-	Met Sphere	-	-	-	PH	-	-	-	85	-	-
1970-H1367	2440846-27	1970 Sep 16 1822:59	Rocketsonde	-	-	Starute	-	-	-	WI	-	-	-	60	-	-
1970-H1368	2440846-28	1970 Sep 16 1827:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PRIM	-	-	-	66	-	-
1970-H1369	2440846-28	1970 Sep 16 1836:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	SMT	-	-	-	56	-	-
1970-H1370	2440846-30	1970 Sep 16 1904:59	Rocketsonde	-	-	Met Para	-	-	-	WI	-	-	-	54	-	-
1970-H1371	2440846-30	1970 Sep 16 1914:59	Rocketsonde	-	-	Met Para	-	-	-	WS	-	-	-	66	-	-
1970-H1372	2440846-32	1970 Sep 16 2000:59	Rocketsonde	-	-	Met Para, Datasonde	-	-	-	GRLY	-	-	-	61	-	-
1970-H1373	2440846-42	1970 Sep 16 2200:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	KAU	-	-	-	56	-	-
1970-H1374	2440847-14	1970 Sep 17 0214:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	KHR	-	-	-	61	-	-
1970-H1375	2440847-14	1970 Sep 17 0214:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	WI	-	-	-	57	-	-
1970-H1377	2440847-19	1970 Sep 17 0259:00	Rocketsonde	-	-	Met Sphere	-	-	-	WI	-	-	-	58	-	-
1970-H1378	2440847-21	1970 Sep 17 0657:59	Rocketsonde	-	-	Met Para, Arcasonde	-	-	-	WI	-	-	-	59	-	-
1970-H1381	2440847-35	1970 Sep 17 2030:00	Rocketsonde	-	-	Met Para, Arcasonde	-	-	-	WS	-	-	-	58	-	-
1970-H1382	2440847-38	1970 Sep 17 2106:00	Rocketsonde	-	-	Chaff	-	-	-	KAU	-	-	-	66	-	-
1970-H1383	2440848-04	1970 Sep 18 1239:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	CC	LC43	-	-	61	-	-
1970-H1384	2440848-11	1970 Sep 18 1435:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	ASC	-	-	-	59	-	-
1970-H1385	2440848-11	1970 Sep 18 1445:00	Rocketsonde	-	-	Met Para	-	-	-	WS	-	-	-	59	-	-
1970-H1387	2440848-32	1970 Sep 18 2106:00	Rocketsonde	-	-	Met Para, Datasonde	-	-	-	GRLY	-	-	-	57	-	-
1970-H1388	2440848-36	1970 Sep 18 2106:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	KAU	-	-	-	63	-	-
1970-H1389	2440849-15	1970 Sep 19 1531:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	WI	-	-	-	48	-	-
1970-H1390	2440849-16	1970 Sep 19 1549:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	WI	-	-	-	52	-	-
1970-H1391	2440849-16	1970 Sep 19 1614:59	Rocketsonde	-	-	Met Para, Arcasonde	-	-	-	WI	-	-	-	62	-	-
1970-H1394	2440851-12	1970 Sep 21 1500:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	ASC	-	-	-	64	-	-
1970-H1396	2440851-16	1970 Sep 21 1545:00	Rocketsonde	-	-	Met Para, Arcasonde	-	-	-	MIT	-	-	-	58	-	-
1970-H1397	2440851-16	1970 Sep 21 1851:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PH	-	-	-	58	-	-
1970-H1398	2440851-19	1970 Sep 21 1852:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	WI	-	-	-	58	-	-
1970-H1399	2440851-20	1970 Sep 21 1856:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	CC	LC43	-	-	57	-	-
1970-H1400	2440851-20	1970 Sep 21 1852:59	Rocketsonde	-	-	Met Para, Arcasonde	-	-	-	WI	-	-	-	57	-	-
1970-H1401	2440851-25	1970 Sep 21 1753:00	Rocketsonde	-	-	Met Sphere	-	-	-	WI	-	-	-	64	-	-
1970-H1401	2440851-25	1970 Sep 21 1753:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PRIM	-	-	-	69	-	-
1970-H1402	2440851-25	1970 Sep 21 1825:59	Rocketsonde	-	-	Met Para, Datasonde	-	-	-	GRLY	-	-	-	61	-	-
1970-H1403	2440851-33	1970 Sep 21 2000:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	WS	-	-	-	67	-	-
1970-H1404	2440851-36	1970 Sep 21 0100:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	KAU	-	-	-	61	-	-
1970-H1406	2440851-36	1970 Sep 21 0100:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	KHR	-	-	-	62	-	-
1970-H1406	2440851-36	1970 Sep 21 0100:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PH	-	-	-	62	-	-
1970-H1407	2440852-33	1970 Sep 22 2153:59	Rocketsonde	-	-	Met Para	-	-	-	KAU	-	-	-	53	-	-
1970-H1408	2440852-33	1970 Sep 22 2153:59	Rocketsonde	-	-	Chaff	-	-	-	WI	-	-	-	57	-	-
1970-H1408	2440852-33	1970 Sep 22 2153:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	CC	LC43	-	-	46	-	-
1970-H1409	2440853-04	1970 Sep 23 1349:59	Rocketsonde	-	-	Met Para, Arcasonde	-	-	-	MIT	-	-	-	46	-	-
1970-H1409	2440853-08	1970 Sep 23 1349:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	ASC	-	-	-	67	-	-
1970-H1409	2440853-08	1970 Sep 23 1429:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	CELI	-	-	-	67	-	-
1970-H1410	2440853-12	1970 Sep 23 1631:00	Rocketsonde	-	-	Chaff	-	-	-	CELI	-	-	-	104	-	-
1970-H1412	2440853-12	1970 Sep 23 1641:00	Rocketsonde	-	-	Met Sphere	-	-	-	WI	-	-	-	51	-	-
1970-H1414	2440853-20	1970 Sep 23 1800:00	Rocketsonde	-	-	Met Para, Arcasonde	-	-	-	WS	-	-	-	63	-	-
1970-H1414	2440853-20	1970 Sep 23 1800:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PRIM	-	-	-	51	-	-
1970-H1415	2440853-20	1970 Sep 23 1845:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PH	-	-	-	85	-	-
1970-H1416	2440853-31	1970 Sep 23 1931:59	Rocketsonde	-	-	Met Sphere	-	-	-	WI	-	-	-	58	-	-
1970-H1417	2440853-33	1970 Sep 23 2000:00	Rocketsonde	-	-	Met Para, Datasonde	-	-	-	GRLY	-	-	-	55	-	-
1970-H1418	2440853-46	1970 Sep 23 2300:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	KAU	-	-	-	59	-	-
1970-H1419	2440854-39	1970 Sep 24 0154:59	Rocketsonde	-	-	Chaff	-	-	-	KHR	-	-	-	63	-	-
1970-H1419	2440854-39	1970 Sep 24 2129:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	ASC	LC43	-	-	61	-	-
1970-H1421	2440855-08	1970 Sep 25 1400:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PRIM	-	-	-	62	-	-
1970-H1422	2440855-08	1970 Sep 25 1415:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	WS	-	-	-	62	-	-
1970-H1423	2440855-25	1970 Sep 25 1924:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	WI	-	-	-	62	-	-
1970-H1425	2440855-36	1970 Sep 26 0130:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	KAU	-	-	-	60	-	-
1970-H1426	2440855-36	1970 Sep 26 0130:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	KHR	-	-	-	58	-	-
1970-H1428	2440858-04	1970 Sep 28 1259:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	CC	LC43	-	-	62	-	-
1970-H1429	2440858-10	1970 Sep 28 1422:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	ASC	-	-	-	62	-	-
1970-H1430	2440858-16	1970 Sep 28 1544:00	Rocketsonde	-	-	Met Para, Arcasonde	-	-	-	PH	-	-	-	62	-	-
1970-H1431	2440858-17	1970 Sep 28 1559:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	WS	-	-	-	60	-	-
1970-H1432	2440858-25	1970 Sep 28 1806:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PRIM	-	-	-	61	-	-
1970-H1433	2440858-25	1970 Sep 28 1806:00	Rocketsonde	-	-	Met Para, Datasonde	-	-	-	GRLY	-	-	-	45	-	-
1970-H1433	2440858-57	1970 Sep 29 0146:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	KHR	-	-	-	61	-	-
1970-H1433	2440858-57	1970 Sep 29 0146:59	Rocketsonde	-	-	Met Para, AN/DML-9	-	-	-	THU	-	-	-	48	-	-
1970-H1434	2440859-26	1970 Sep 29 1737:59	Rocketsonde	-	-	Met Para, Arcasonde	-	-	-	WS	-	-	-	65	-	-
1970-H1436	2440859-41	1970 Sep 29 2149:59	Rocketsonde	-	-	Met Para, Arcasonde	-	-	-	WS	-	-	-	60	-	-
1970-H1437	2440859-41	1970 Sep 29 2149:59	Rocketsonde	-	-	Chaff	-	-	-	KAU	-	-	-	64	-	-
1970-H1437	2440859-92	1970 Sep 30 0959:59	Rocketsonde	-	-	Met Sphere	-	-	-	ASC	-	-	-	63	-	-
1970-H1439	2440860-04	1970 Sep 30 1259:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	CC	LC43	-	-	60	-	-
1970-H1440	2440860-11	1970 Sep 30 1440:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	ASC	-	-	-	85	-	-
1970-H1442	2440860-12	1970 Sep 30 1500:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	CC	LC43	-	-	85	-	-
1970-H1442	2440860-27	1970 Sep 30 1831:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PRIM	-	-	-	53	-	-
1970-H1443	2440860-33	1970 Sep 30 2000:00	Rocketsonde	-	-	Met Para, Datasonde	-	-	-	GRLY	-	-	-	65	-	-



Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Mission	FlightCode	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee_Km	Range_Km	Dest
1970-H1444	2440860-59	1970 Oct 1 0204:59	Rocketsonde	-	-	Starute, Dataosnde	-	-	-	RNR	-	-	-	61	-	-
1970-H1445	2440861-42	1970 Oct 1 2201:59	Rocketsonde	-	-	Met. Para, Arcosonde	-	-	-	BERM	-	-	-	56	-	-
1970-H1446	2440862-04	1970 Oct 2 1259:59	Rocketsonde	-	-	Starute, Dataosnde	-	-	-	CC	LC43	-	-	63	-	-
1970-H1447	2440862-07	1970 Oct 2 1344:59	Rocketsonde	-	-	Met. Para, Arcosonde	-	-	-	AIT	-	-	-	52	-	-
1970-H1448	2440862-08	1970 Oct 2 1400:00	Rocketsonde	-	-	Starute, Dataosnde	-	-	-	ASC	-	-	-	58	-	-
1970-H1449	2440862-12	1970 Oct 2 1455:00	Rocketsonde	-	-	Starute, Dataosnde	-	-	-	PH	-	-	-	59	-	-
1970-H1450	2440862-12	1970 Oct 2 1500:00	Rocketsonde	-	-	Starute, Dataosnde	-	-	-	WS	-	-	-	59	-	-
1970-H1451	2440862-23	1970 Oct 2 1730:00	Rocketsonde	-	-	Chaff	-	-	-	RNR	-	-	-	60	-	-
1970-H1452	2440862-56	1970 Oct 3 0130:00	Rocketsonde	-	-	Starute, Dataosnde	-	-	-	RNR	-	-	-	61	-	-
1970-H1453	2440865-08	1970 Oct 5 1400:00	Rocketsonde	-	-	Starute, Dataosnde	-	-	-	ASC	LC43	-	-	55	-	-
1970-H1454	2440865-15	1970 Oct 5 1541:00	Rocketsonde	-	-	Starute, Dataosnde	-	-	-	CC	-	-	-	57	-	-
1970-H1455	2440865-17	1970 Oct 5 1859:59	Rocketsonde	-	-	Met. Para, Arcosonde	-	-	-	AIT	-	-	-	48	-	-
1970-H1456	2440865-27	1970 Oct 5 1825:59	Rocketsonde	-	-	Starute, Dataosnde	-	-	-	PH	-	-	-	59	-	-
1970-H1457	2440865-38	1970 Oct 5 2100:00	Rocketsonde	-	-	Starute, Dataosnde	-	-	-	WS	-	-	-	71	-	-
1970-H1458	2440865-42	1970 Oct 5 2159:59	Rocketsonde	-	-	Starute, Dataosnde	-	-	-	RNR	-	-	-	67	-	-
1970-H1459	2440865-54	1970 Oct 6 0059:59	Rocketsonde	-	-	Starute, Dataosnde	-	-	-	RNR	-	-	-	61	-	-
1970-H1460	2440865-54	1970 Oct 6 0059:59	Rocketsonde	-	-	Starute, Dataosnde	-	-	-	RNR	-	-	-	46	-	-
1970-H1461	2440865-62	1970 Oct 6 0300:00	Rocketsonde	-	-	Starute, Dataosnde	-	-	-	WS	-	-	-	77	-	-
1970-H1462	2440865-62	1970 Oct 6 0430:00	Rocketsonde	-	-	Met. Para	-	-	-	PH	-	-	-	50	-	-
1970-H1463	2440865-69	1970 Oct 6 0430:00	Rocketsonde	-	-	Starute, Dataosnde	-	-	-	CC	LC43	-	-	61	-	-
1970-H1464	2440865-12	1970 Oct 6 1465:00	Rocketsonde	-	-	Chaff	-	-	-	RNR	-	-	-	64	-	-
1970-H1465	2440865-19	1970 Oct 6 1640:00	Rocketsonde	-	-	Starute, Dataosnde	-	-	-	ASC	-	-	-	62	-	-
1970-H1466	2440865-42	1970 Oct 6 2159:59	Rocketsonde	-	-	Met. Sphere	-	-	-	WS	-	-	-	91	-	-
1970-H1467	2440865-54	1970 Oct 7 0059:59	Rocketsonde	-	-	Starute, Dataosnde	-	-	-	ASC	LC43	-	-	61	-	-
1970-H1468	2440867-04	1970 Oct 7 1259:59	Rocketsonde	-	-	Starute, Dataosnde	-	-	-	CC	-	-	-	61	-	-
1970-H1469	2440867-10	1970 Oct 7 1400:00	Rocketsonde	-	-	Met. Para, Arcosonde	-	-	-	AIT	-	-	-	43	-	-
1970-H1470	2440867-10	1970 Oct 7 1400:00	Rocketsonde	-	-	Starute, Dataosnde	-	-	-	SHER	-	-	-	56	-	-
1970-H1471	2440867-12	1970 Oct 7 1500:00	Rocketsonde	-	-	Starute, Dataosnde	-	-	-	CLBI	LC43	-	-	66	-	-
1970-H1472	2440867-13	1970 Oct 7 1506:00	Rocketsonde	-	-	Met. Sphere	-	-	-	ASC	-	-	-	93	-	-
1970-H1473	2440867-15	1970 Oct 7 1506:00	Rocketsonde	-	-	Met. Para, Arcosonde	-	-	-	AIT	-	-	-	53	-	-
1970-H1474	2440867-15	1970 Oct 7 1553:00	Rocketsonde	-	-	Met. Sphere	-	-	-	PH	-	-	-	85	-	-
1970-H1475	2440867-15	1970 Oct 7 1553:00	Rocketsonde	-	-	Starute, Dataosnde	-	-	-	PH	-	-	-	54	-	-
1970-H1476	2440867-22	1970 Oct 7 1623:59	Rocketsonde	-	-	Starute, Dataosnde	-	-	-	WS	-	-	-	62	-	-
1970-H1477	2440867-27	1970 Oct 7 1720:00	Rocketsonde	-	-	Starute, Dataosnde	-	-	-	PRIM	-	-	-	64	-	-
1970-H1478	2440867-43	1970 Oct 7 1823:59	Rocketsonde	-	-	Met. Sphere	-	-	-	KRU	-	-	-	39	-	-
1970-H1479	2440867-61	1970 Oct 8 0235:00	Rocketsonde	-	-	Starute, Dataosnde	-	-	-	VI	-	-	-	37	-	-
1970-H1480	2440868-23	1970 Oct 8 1724:00	Rocketsonde	-	-	Met. Para, Arcosonde	-	-	-	THU	-	-	-	64	-	-
1970-H1481	2440868-25	1970 Oct 8 1765:00	Rocketsonde	-	-	Met. Para, Arcosonde	-	-	-	KRU	-	-	-	64	-	-
1970-H1482	2440868-25	1970 Oct 8 1765:00	Rocketsonde	-	-	Met. Para, Arcosonde	-	-	-	THU	-	-	-	64	-	-
1970-H1483	2440868-25	1970 Oct 8 1765:00	Rocketsonde	-	-	Met. Para, Arcosonde	-	-	-	THU	-	-	-	64	-	-
1970-H1484	2440868-42	1970 Oct 8 1859:59	Rocketsonde	-	-	Chaff	-	-	-	KRU	LC43	-	-	64	-	-
1970-H1485	2440869-04	1970 Oct 9 1259:59	Rocketsonde	-	-	Starute, Dataosnde	-	-	-	ASC	-	-	-	50	-	-
1970-H1486	2440869-06	1970 Oct 9 1430:00	Rocketsonde	-	-	Starute, Dataosnde	-	-	-	ASC	-	-	-	53	-	-
1970-H1487	2440869-10	1970 Oct 9 1430:00	Rocketsonde	-	-	Met. Para, Arcosonde	-	-	-	ASC	-	-	-	53	-	-
1970-H1488	2440869-12	1970 Oct 9 1507:59	Rocketsonde	-	-	Starute, Dataosnde	-	-	-	SHER	-	-	-	60	-	-
1970-H1489	2440869-12	1970 Oct 9 1507:59	Rocketsonde	-	-	Starute, Dataosnde	-	-	-	PH	-	-	-	66	-	-
1970-H1490	2440869-21	1970 Oct 9 1703:59	Rocketsonde	-	-	Starute, Dataosnde	-	-	-	WS	-	-	-	63	-	-
1970-H1491	2440869-21	1970 Oct 9 1703:59	Rocketsonde	-	-	Starute, Dataosnde	-	-	-	PRIM	-	-	-	63	-	-
1970-H1492	2440869-27	1970 Oct 9 1804:59	Rocketsonde	-	-	Met. Para, Arcosonde	-	-	-	GRLY	-	-	-	57	-	-
1970-H1493	2440869-27	1970 Oct 9 1859:59	Rocketsonde	-	-	Met. Para, Dataosnde	-	-	-	GRLY	-	-	-	57	-	-
1970-H1494	2440869-37	1970 Oct 9 2002:00	Rocketsonde	-	-	Met. Para, Arcosonde	-	-	-	GRLY	-	-	-	54	-	-
1970-H1495	2440869-37	1970 Oct 9 2002:00	Rocketsonde	-	-	Starute, Dataosnde	-	-	-	KRU	-	-	-	60	-	-
1970-H1496	2440869-38	1970 Oct 9 2102:00	Rocketsonde	-	-	Starute, Dataosnde	-	-	-	KRU	-	-	-	59	-	-
1970-H1497	2440869-38	1970 Oct 9 2102:00	Rocketsonde	-	-	Starute, Dataosnde	-	-	-	WS	-	-	-	64	-	-
1970-H1498	2440872-13	1970 Oct 10 0221:00	Rocketsonde	-	-	Met. Para, Arcosonde	-	-	-	PH	-	-	-	64	-	-
1970-H1499	2440872-13	1970 Oct 10 1509:00	Rocketsonde	-	-	Starute, Dataosnde	-	-	-	PH	-	-	-	59	-	-
1970-H1500	2440872-20	1970 Oct 12 1301:59	Rocketsonde	-	-	Starute, Dataosnde	-	-	-	KRU	-	-	-	61	-	-
1970-H1501	2440872-27	1970 Oct 13 0144:59	Rocketsonde	-	-	Starute, Dataosnde	-	-	-	PH	-	-	-	61	-	-
1970-H1502	2440873-12	1970 Oct 13 1500:00	Rocketsonde	-	-	Starute, Dataosnde	-	-	-	SHER	-	-	-	58	-	-
1970-H1503	2440873-25	1970 Oct 13 1859:59	Rocketsonde	-	-	Starute, Dataosnde	-	-	-	GRLY	-	-	-	58	-	-
1970-H1504	2440873-38	1970 Oct 13 2100:00	Rocketsonde	-	-	Met. Para, Dataosnde	-	-	-	GRLY	-	-	-	62	-	-
1970-H1505	2440873-55	1970 Oct 14 0114:59	Rocketsonde	-	-	Chaff	-	-	-	KRU	-	-	-	67	-	-
1970-H1506	2440873-60	1970 Oct 14 0225:00	Rocketsonde	-	-	Met. Para, Arcosonde	-	-	-	WS	-	-	-	69	-	-
1970-H1507	2440873-65	1970 Oct 14 0336:59	Rocketsonde	-	-	Met. Para, Arcosonde	-	-	-	WS	-	-	-	59	-	-
1970-H1508	2440874-04	1970 Oct 14 1259:59	Rocketsonde	-	-	Starute, Dataosnde	-	-	-	WS	-	-	-	57	-	-
1970-H1509	2440874-08	1970 Oct 14 1400:00	Rocketsonde	-	-	Starute, Dataosnde	-	-	-	ASC	LC43	-	-	62	-	-
1970-H1510	2440874-12	1970 Oct 14 1500:00	Rocketsonde	-	-	Starute, Dataosnde	-	-	-	ASC	-	-	-	65	-	-
1970-H1511	2440874-12	1970 Oct 14 1500:00	Rocketsonde	-	-	Met. Sphere	-	-	-	CLBI	LC43	-	-	61	-	-
1970-H1512	2440874-12	1970 Oct 14 1500:00	Rocketsonde	-	-	Starute, Dataosnde	-	-	-	CC	LC43	-	-	64	-	-
1970-H1513	2440874-22	1970 Oct 14 1717:00	Rocketsonde	-	-	Met. Para, Arcosonde	-	-	-	SHER	-	-	-	62	-	-
1970-H1514	2440874-25	1970 Oct 14 1758:00	Rocketsonde	-	-	Starute, Dataosnde	-	-	-	AIT	-	-	-	70	-	-
1970-H1515	2440874-26	1970 Oct 14 1809:00	Rocketsonde	-	-	Starute, Dataosnde	-	-	-	PRIM	-	-	-	58	-	-
1970-H1516	2440874-32	1970 Oct 14 1814:59	Rocketsonde	-	-	Met. Para, Arcosonde	-	-	-	VI	-	-	-	65	-	-
1970-H1517	2440874-32	1970 Oct 14 1814:59	Rocketsonde	-	-	Starute, Dataosnde	-	-	-	WS	-	-	-	68	-	-
1970-H1518	2440874-36	1970 Oct 14 1937:59	Rocketsonde	-	-	Starute, Dataosnde	-	-	-	PH	-	-	-	58	-	-
1970-H1519	2440874-33	1970 Oct 14 2000:00	Rocketsonde	-	-	Starute, Dataosnde	-	-	-	GRLY	-	-	-	63	-	-
1970-H1520	2440874-34	1970 Oct 14 2015:00	Rocketsonde	-	-	Met. Para	-	-	-	WS	-	-	-	61	-	-
1970-H1521	2440874-43	1970 Oct 14 2215:59	Rocketsonde	-	-	Met. Sphere	-	-	-	Met. Para	-	-	-	59	-	-
1970-H1522	2440874-46	1970 Oct 14 2307:00	Rocketsonde	-	-	Starute, Dataosnde	-	-	-	KRU	-	-	-	59	-	-
1970-H1523	2440874-56	1970 Oct 15 0130:00	Rocketsonde	-	-	Starute, Dataosnde	-	-	-	KRU	-	-	-	57	-	-
1970-H1524	2440875-14	1970 Oct 15 1514:59	Rocketsonde	-	-	Starute, Dataosnde	-	-	-	THU	-	-	-	60	-	-
1970-H1525	2440875-14	1970 Oct 15 1527:59	Rocketsonde	-	-	Starute, Dataosnde	-	-	-	PH	-	-	-	50	-	-
1970-H1526	2440876-04	1970 Oct 16 1259:59	Rocketsonde	-	-	Starute, Dataosnde	-	-	-	CC	LC43	-	-	61	-	-
1970-H1527	2440876-06	1970 Oct 16 1330:00	Rocketsonde	-	-	Starute, Dataosnde	-	-	-	ASC	-	-	-	51	-	-
1970-H1528	2440876-08	1970 Oct 16 1400:00	Rocketsonde	-	-	Starute, Dataosnde	-	-	-	AIT	-	-	-	59	-	-
1970-H1529	2440876-08	1970 Oct 16 1458:00	Rocketsonde	-	-	Starute, Dataosnde	-	-	-	PH	-	-	-	58	-	-
1970-H1530	2440876-12	1970 Oct 16 1517:00	Rocketsonde	-	-	Met. Para, Arcosonde	-	-	-	THU	-	-	-	55	-	-
1970-H1531	2440876-14	1970 Oct 16 1517:00	Rocketsonde	-	-	Starute, Dataosnde	-	-	-	SHER	-	-	-	57	-	-
1970-H1532	2440876-16	1970 Oct 16 1545:00	Rocketsonde	-	-	Starute, Dataosnde	-	-	-	WS	-	-	-	66	-	-
1970-H1533	24408															

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Mission	FlightCode	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee_Km	Range_Km	Dest
1970-H1534	2440876-25	1970 Oct 16 1802:59	Rocketsonde	-	-	Met. Para, Arcasonde	-	-	-	PRIH	-	-	-	54	-	-
1970-H1535	2440876-32	1970 Oct 16 1934:59	Rocketsonde	-	-	Met. Para, Datasonde	-	-	-	GRLY	-	-	-	56	-	-
1970-H1536	2440876-38	1970 Oct 16 2100:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	RAU	-	-	-	59	-	-
1970-H1537	2440876-56	1970 Oct 17 0433:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	KRR	-	-	-	61	-	-
1970-H1539	2440879-11	1970 Oct 19 1433:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	WI	-	-	-	58	-	-
1970-H1540	2440879-11	1970 Oct 19 1445:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	ASC	-	-	-	56	-	-
1970-H1541	2440879-15	1970 Oct 19 1530:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	SHER	-	-	-	61	-	-
1970-H1542	2440879-18	1970 Oct 19 1618:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PH	-	-	-	58	-	-
1970-H1543	2440879-21	1970 Oct 19 1700:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	WS	-	-	-	64	-	-
1970-H1544	2440879-34	1970 Oct 19 2015:00	Rocketsonde	-	-	Met. Para, Datasonde	-	-	-	GRLY	-	-	-	59	-	-
1970-H1546	2440879-56	1970 Oct 20 0130:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	KRR	-	-	-	59	-	-
1970-H1547	2440880-16	1970 Oct 20 1558:59	Rocketsonde	-	-	Met. Para	-	-	-	PH	-	-	-	51	-	-
1970-H1548	2440881-06	1970 Oct 21 1330:00	Rocketsonde	-	-	Met. Para, Arcasonde	-	-	-	AIT	-	-	-	56	-	-
1970-H1549	2440881-06	1970 Oct 21 1400:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	ASC	-	-	-	53	-	-
1970-H1550	2440881-11	1970 Oct 21 1432:00	Rocketsonde	-	-	Chaff	-	-	-	CEBI	-	-	-	66	-	-
1970-H1551	2440881-12	1970 Oct 21 1500:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	CC	LC43	-	-	58	-	-
1970-H1552	2440881-14	1970 Oct 21 1520:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	SHER	-	-	-	61	-	-
1970-H1553	2440881-15	1970 Oct 21 1543:00	Rocketsonde	-	-	Met. Sphere	-	-	-	PH	-	-	-	86	-	-
1970-H1554	2440881-26	1970 Oct 21 1815:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PRIH	-	-	-	51	-	-
1970-H1555	2440881-26	1970 Oct 21 1859:59	Rocketsonde	-	-	Met. Para, Datasonde	-	-	-	GRLY	-	-	-	58	-	-
1970-H1556	2440881-33	1970 Oct 21 1958:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PH	-	-	-	56	-	-
1970-H1557	2440881-38	1970 Oct 21 2100:00	Rocketsonde	-	-	Met. Sphere	-	-	-	RAU	-	-	-	86	-	-
1970-H1558	2440881-41	1970 Oct 21 2156:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	RAU	-	-	-	59	-	-
1970-H1559	2440881-56	1970 Oct 22 0130:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	KRR	-	-	-	59	-	-
1970-H1560	2440882-16	1970 Oct 22 1629:00	Rocketsonde	-	-	Met. Para, AM/DQM-9	-	-	-	THU	-	-	-	67	-	-
1970-H1561	2440882-19	1970 Oct 22 2100:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PH	-	-	-	59	-	-
1970-H1562	2440883-09	1970 Oct 23 1404:59	Rocketsonde	-	-	Met. Para	-	-	-	RAU	-	-	-	50	-	-
1970-H1563	2440883-11	1970 Oct 23 1442:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	ASC	-	-	-	57	-	-
1970-H1564	2440883-12	1970 Oct 23 1500:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	WI	-	-	-	61	-	-
1970-H1565	2440883-12	1970 Oct 23 1500:00	Rocketsonde	-	-	Met. Para, Arcasonde	-	-	-	AIT	-	-	-	46	-	-
1970-H1566	2440883-21	1970 Oct 23 1700:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	SHER	-	-	-	54	-	-
1970-H1567	2440883-25	1970 Oct 23 1859:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	MS	-	-	-	63	-	-
1970-H1568	2440883-35	1970 Oct 23 2022:00	Rocketsonde	-	-	Met. Para, Datasonde	-	-	-	GRLY	-	-	-	90	-	-
1970-H1569	2440883-35	1970 Oct 23 2225:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PH	LC43	-	-	57	-	-
1970-H1568	2440883-36	1970 Oct 24 0158:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	KRR	-	-	-	61	-	-
1970-H1570	2440884-06	1970 Oct 26 1400:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	ASC	-	-	-	57	-	-
1970-H1571	2440884-12	1970 Oct 26 1700:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	SHER	-	-	-	39	-	-
1970-H1572	2440884-21	1970 Oct 26 1701:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	CC	LC43	-	-	61	-	-
1970-H1573	2440884-21	1970 Oct 26 1807:00	Rocketsonde	-	-	Met. Para	-	-	-	PH	-	-	-	58	-	-
1970-H1574	2440884-25	1970 Oct 26 1907:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	AIT	-	-	-	54	-	-
1970-H1575	2440884-33	1970 Oct 26 1949:59	Rocketsonde	-	-	Met. Para, Arcasonde	-	-	-	MS	-	-	-	64	-	-
1970-H1576	2440884-33	1970 Oct 26 2001:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	GRLY	-	-	-	63	-	-
1970-H1577	2440884-36	1970 Oct 26 2101:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	KRR	-	-	-	59	-	-
1970-H1578	2440884-36	1970 Oct 27 0120:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	RAU	-	-	-	62	-	-
1970-H1579	2440884-38	1970 Oct 27 0232:00	Rocketsonde	-	-	Met. Sphere	-	-	-	ASC	-	-	-	50	-	-
1970-H1581	2440887-43	1970 Oct 27 2314:59	Rocketsonde	-	-	Met. Para	-	-	-	AIT	-	-	-	61	-	-
1970-H1581	2440887-94	1970 Oct 28 1030:00	Rocketsonde	-	-	Met. Sphere	-	-	-	ASC	-	-	-	61	-	-
1970-H1583	2440888-04	1970 Oct 28 1430:00	Rocketsonde	-	-	Met. Para, Arcasonde	-	-	-	AIT	-	-	-	59	-	-
1970-H1584	2440888-09	1970 Oct 28 1430:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	ASC	-	-	-	58	-	-
1970-H1585	2440888-09	1970 Oct 28 1413:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	CEBI	-	-	-	68	-	-
1970-H1586	2440888-12	1970 Oct 28 1500:00	Rocketsonde	-	-	Chaff	-	-	-	SHER	-	-	-	62	-	-
1970-H1588	2440888-17	1970 Oct 28 1609:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	MS	-	-	-	62	-	-
1970-H1589	2440888-18	1970 Oct 28 1614:59	Rocketsonde	-	-	Met. Sphere	-	-	-	CC	LC43	-	-	94	-	-
1970-H1590	2440888-21	1970 Oct 28 1700:00	Rocketsonde	-	-	Met. Para	-	-	-	WS	-	-	-	55	-	-
1970-H1590	2440888-21	1970 Oct 28 1715:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	CC	-	-	-	62	-	-
1970-H1591	2440888-25	1970 Oct 28 1853:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PRIM	LC43	-	-	63	-	-
1970-H1592	2440888-33	1970 Oct 28 1952:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	CELAT	-	-	-	63	-	-
1970-H1593	2440888-35	1970 Oct 28 2030:00	Rocketsonde	-	-	Met. Para, Datasonde	-	-	-	GRLY	-	-	-	58	-	-
1970-H1594	2440888-40	1970 Oct 28 2141:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	KRR	-	-	-	52	-	-
1970-H1595	2440888-44	1970 Oct 29 0130:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PH	-	-	-	58	-	-
1970-H1596	2440888-56	1970 Oct 29 0130:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	KRR	-	-	-	62	-	-
1970-H1597	2440889-17	1970 Oct 29 1645:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PH	-	-	-	61	-	-
1970-H1598	2440889-20	1970 Oct 29 1645:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PH	-	-	-	60	-	-
1970-H1599	2440889-22	1970 Oct 29 1710:00	Rocketsonde	-	-	Starute	-	-	-	PH	-	-	-	62	-	-
1970-H1600	2440889-25	1970 Oct 29 1754:00	Rocketsonde	-	-	Starute	-	-	-	PH	-	-	-	61	-	-
1970-H1601	2440890-05	1970 Oct 29 1914:59	Rocketsonde	-	-	Met. Para, Arcasonde	-	-	-	PH	-	-	-	62	-	-
1970-H1602	2440890-05	1970 Oct 30 1314:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	AIT	-	-	-	61	-	-
1970-H1603	2440890-08	1970 Oct 30 1400:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	ASC	-	-	-	61	-	-
1970-H1604	2440890-08	1970 Oct 30 1400:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	CC	LC43	-	-	63	-	-
1970-H1605	2440890-12	1970 Oct 30 1500:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	WS	-	-	-	50	-	-
1970-H1607	2440890-21	1970 Oct 30 1700:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	SHER	-	-	-	58	-	-
1970-H1608	2440890-33	1970 Oct 30 1952:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PH	-	-	-	59	-	-
1970-H1609	2440890-34	1970 Oct 30 2009:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PH	-	-	-	59	-	-
1970-H1610	2440890-35	1970 Oct 30 2026:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PH	-	-	-	58	-	-
1970-H1611	2440890-38	1970 Oct 30 2100:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PH	-	-	-	58	-	-
1970-H1613	2440891-33	1970 Oct 31 0232:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	KRR	-	-	-	63	-	-
1970-H1614	2440891-33	1970 Oct 31 2000:00	Rocketsonde	-	-	Met. Para, Datasonde	-	-	-	GRLY	-	-	-	54	-	-
1970-H1616	2440893-12	1970 Nov 2 1400:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	SHER	-	-	-	55	-	-
1970-H1616	2440893-18	1970 Nov 2 1500:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	ASC	-	-	-	60	-	-
1970-H115	2440893-15	1970 Nov 2 1534:59	Rocketsonde	-	-	Met. Para, Arcasonde	-	-	-	SHER	-	-	-	48	-	-
1970-H1618	2440893-17	1970 Nov 2 1559:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	AIT	-	-	-	61	-	-
1970-H1619	2440893-19	1970 Nov 2 1630:00	Rocketsonde	-	-	Met. Para, AM/DQM-9	-	-	-	THU	LC43	-	-	72	-	-
1970-H1620	2440893-21	1970 Nov 2 1704:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PH	-	-	-	61	-	-

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Mission	FlightCode	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee_Km	Range_Km	Dest
1970-H1621	2440893.32	1970 Nov 2 1941:59	Rocketsonde	-	-	-	Met. Para, Arcasonde	-	-	WS	-	-	-	59	-	-
1970-H1622	2440893.33	1970 Nov 2 2000:00	Rocketsonde	-	-	-	-	-	-	GRLY	-	-	-	63	-	-
1970-H1623	2440893.36	1970 Nov 2 2044:00	Rocketsonde	-	-	-	Starute, Datasonde	-	-	KAU	-	-	-	57	-	-
1970-H1625	2440894.29	1970 Nov 3 1859:59	Rocketsonde	-	-	-	Met. Para, AM/DQM-9	-	-	THU	-	-	-	61	-	-
1970-H1626	2440894.40	1970 Nov 3 2129:00	Rocketsonde	-	-	-	Met. Para	-	-	PH	-	-	-	51	-	-
1970-H1627	2440895.08	1970 Nov 4 1200:00	Rocketsonde	-	-	-	Met. Sphere	-	-	ASC	-	-	-	93	-	-
1970-H1628	2440895.08	1970 Nov 4 1400:00	Rocketsonde	-	-	-	Starute, Datasonde	-	-	ASC	-	-	-	61	-	-
1970-H1629	2440895.08	1970 Nov 4 1404:59	Rocketsonde	-	-	-	Starute, Datasonde	-	-	CC	-	LC43	-	59	-	-
1970-H1630	2440895.12	1970 Nov 4 1500:00	Rocketsonde	-	-	-	Met. Para, Arcasonde	-	-	AIT	-	-	-	60	-	-
1970-H1631	2440895.14	1970 Nov 4 1523:59	Rocketsonde	-	-	-	Starute, Datasonde	-	-	SHER	-	-	-	57	-	-
1970-H1632	2440895.17	1970 Nov 4 1559:59	Rocketsonde	-	-	-	Met. Sphere	-	-	WI	-	-	-	53	-	-
1970-H1633	2440895.23	1970 Nov 4 1732:00	Rocketsonde	-	-	-	Met. Para, AM/DQM-9	-	-	THU	-	LC43	-	91	-	-
1970-H1634	2440895.35	1970 Nov 4 2030:00	Rocketsonde	-	-	-	Met. Para, Datasonde	-	-	GRLY	-	-	-	46	-	-
1970-H1635	2440895.42	1970 Nov 4 2159:59	Rocketsonde	-	-	-	Met. Para, Datasonde	-	-	GRLY	-	-	-	58	-	-
1970-H1636	2440895.45	1970 Nov 4 2244:59	Rocketsonde	-	-	-	Starute, Datasonde	-	-	KAU	-	-	-	57	-	-
1970-H1637	2440895.57	1970 Nov 5 0200:00	Rocketsonde	-	-	-	Met. Para, Arcasonde	-	-	WS	-	-	-	64	-	-
1970-H1638	2440895.58	1970 Nov 5 0530:00	Rocketsonde	-	-	-	Starute, Datasonde	-	-	KHR	-	-	-	60	-	-
1970-H1639	2440895.73	1970 Nov 5 1800:00	Rocketsonde	-	-	-	Met. Para, Arcasonde	-	-	WS	-	-	-	59	-	-
1970-H1640	2440895.73	1970 Nov 5 2200:59	Rocketsonde	-	-	-	Met. Para, AM/DQM-9	-	-	THU	-	-	-	66	-	-
1970-H1641	2440897.02	1970 Nov 6 1230:00	Rocketsonde	-	-	-	Met. Para	-	-	KAU	-	-	-	49	-	-
1970-H1642	2440897.02	1970 Nov 6 1400:00	Rocketsonde	-	-	-	Starute, Datasonde	-	-	ASC	-	-	-	57	-	-
1970-H1643	2440897.14	1970 Nov 6 1520:00	Rocketsonde	-	-	-	Met. Para, SIS	-	-	SHER	-	-	-	56	-	-
1970-H1644	2440897.33	1970 Nov 6 2000:00	Rocketsonde	-	-	-	Met. Para, AM/DQM-9	-	-	THU	-	-	-	59	-	-
1970-H1645	2440897.35	1970 Nov 6 2030:00	Rocketsonde	-	-	-	Met. Para, Datasonde	-	-	GRLY	-	-	-	48	-	-
1970-H1646	2440897.40	1970 Nov 6 2030:00	Rocketsonde	-	-	-	Met. Para, Arcasonde	-	-	WS	-	-	-	62	-	-
1970-H1647	2440897.42	1970 Nov 6 2130:00	Rocketsonde	-	-	-	Met. Sphere	-	-	WS	-	-	-	74	-	-
1970-H1648	2440897.62	1970 Nov 7 0255:59	Rocketsonde	-	-	-	Starute, Datasonde	-	-	KAU	-	-	-	61	-	-
1970-H1649	2440897.62	1970 Nov 7 0255:59	Rocketsonde	-	-	-	Starute, Datasonde	-	-	KHR	-	-	-	57	-	-
1970-H1650	2440900.07	1970 Nov 9 1344:59	Rocketsonde	-	-	-	Met. Para, Arcasonde	-	-	AIT	-	-	-	57	-	-
1970-H1651	2440900.08	1970 Nov 9 1400:00	Rocketsonde	-	-	-	Starute, Datasonde	-	-	ASC	-	-	-	59	-	-
1970-H1652	2440900.21	1970 Nov 9 1703:59	Rocketsonde	-	-	-	Starute, Datasonde	-	-	CC	-	LC43	-	60	-	-
1970-H1653	2440900.28	1970 Nov 9 1857:59	Rocketsonde	-	-	-	Starute, Datasonde	-	-	PH	-	-	-	61	-	-
1970-H1654	2440900.28	1970 Nov 9 1857:59	Rocketsonde	-	-	-	Starute, Datasonde	-	-	PRLM	-	-	-	58	-	-
1970-H1655	2440900.28	1970 Nov 9 1859:59	Rocketsonde	-	-	-	Starute, Datasonde	-	-	WS	-	-	-	57	-	-
1970-H1656	2440900.34	1970 Nov 9 2015:00	Rocketsonde	-	-	-	Met. Para, Datasonde	-	-	GRLY	-	-	-	54	-	-
1970-H1657	2440900.36	1970 Nov 9 2100:00	Rocketsonde	-	-	-	Starute, Datasonde	-	-	KAU	-	-	-	57	-	-
1970-H1658	2440900.56	1970 Nov 10 0130:00	Rocketsonde	-	-	-	Starute, Datasonde	-	-	KHR	-	-	-	63	-	-
1970-H1659	2440901.21	1970 Nov 10 1709:00	Rocketsonde	-	-	-	Met. Para	-	-	PH	-	-	-	50	-	-
1970-H1660	2440901.29	1970 Nov 10 1855:00	Rocketsonde	-	-	-	Met. Para, SIS	-	-	SHER	-	-	-	53	-	-
1970-H1661	2440901.29	1970 Nov 10 1855:00	Rocketsonde	-	-	-	Met. Para	-	-	KAU	-	-	-	49	-	-
1970-H1662	2440901.54	1970 Nov 11 0559:59	Rocketsonde	-	-	-	Met. Para, SIS	-	-	SHER	-	-	-	57	-	-
1970-H1663	2440903.11	1970 Nov 12 1456:00	Rocketsonde	-	-	-	Met. Para, AM/DQM-9	-	-	THU	-	-	-	62	-	-
1970-H1664	2440903.17	1970 Nov 12 1556:00	Rocketsonde	-	-	-	Met. Para	-	-	PH	-	-	-	55	-	-
1970-H1665	2440903.38	1970 Nov 12 1558:59	Rocketsonde	-	-	-	Met. Para	-	-	KAU	-	-	-	45	-	-
1970-H1666	2440903.38	1970 Nov 12 2100:00	Rocketsonde	-	-	-	Met. Sphere	-	-	GRLY	-	-	-	52	-	-
1970-H1667	2440903.38	1970 Nov 13 0350:00	Rocketsonde	-	-	-	Met. Sphere	-	-	ASC	-	-	-	64	-	-
1970-H1668	2440903.44	1970 Nov 13 1400:00	Rocketsonde	-	-	-	Starute, Datasonde	-	-	ASC	-	-	-	60	-	-
1970-H1669	2440904.08	1970 Nov 13 1400:00	Rocketsonde	-	-	-	Starute, Datasonde	-	-	CC	-	LC43	-	63	-	-
1970-H1670	2440904.17	1970 Nov 13 1559:59	Rocketsonde	-	-	-	Met. Sphere	-	-	PRLM	-	LC43	-	71	-	-
1970-H1671	2440904.25	1970 Nov 13 1759:59	Rocketsonde	-	-	-	Starute, Datasonde	-	-	SHER	-	-	-	65	-	-
1970-H1672	2440904.29	1970 Nov 13 1851:00	Rocketsonde	-	-	-	Starute, Datasonde	-	-	WS	-	-	-	62	-	-
1970-H1673	2440904.23	1970 Nov 13 1859:59	Rocketsonde	-	-	-	Starute, Datasonde	-	-	GRLY	-	-	-	50	-	-
1970-H1674	2440904.33	1970 Nov 13 2000:00	Rocketsonde	-	-	-	Met. Para, Datasonde	-	-	ASC	-	-	-	63	-	-
1970-H1675	2440907.08	1970 Nov 16 1400:00	Rocketsonde	-	-	-	Starute, Datasonde	-	-	CC	-	LC43	-	53	-	-
1970-H1676	2440907.08	1970 Nov 16 1400:00	Rocketsonde	-	-	-	Starute, Datasonde	-	-	ASC	-	-	-	65	-	-
1970-H1677	2440907.12	1970 Nov 16 1500:00	Rocketsonde	-	-	-	Starute, Datasonde	-	-	SHER	-	-	-	64	-	-
1970-H1679	2440907.16	1970 Nov 16 1545:00	Rocketsonde	-	-	-	Met. Para, AM/DQM-9	-	-	THU	-	-	-	59	-	-
1970-H1680	2440907.30	1970 Nov 16 1626:59	Rocketsonde	-	-	-	Starute, Datasonde	-	-	PH	-	-	-	60	-	-
1970-H1681	2440907.30	1970 Nov 16 1915:59	Rocketsonde	-	-	-	Starute, Datasonde	-	-	VI	-	-	-	60	-	-
1970-H1682	2440907.32	1970 Nov 16 1944:59	Rocketsonde	-	-	-	Met. Para, Datasonde	-	-	GRLY	-	-	-	60	-	-
1970-H1683	2440907.36	1970 Nov 16 2100:00	Rocketsonde	-	-	-	Starute, Datasonde	-	-	KAU	-	-	-	70	-	-
1970-H1684	2440908.27	1970 Nov 17 1830:00	Rocketsonde	-	-	-	Met. Sphere	-	-	VI	-	-	-	72	-	-
1970-H1685	2440908.33	1970 Nov 17 2000:00	Rocketsonde	-	-	-	Met. Sphere	-	-	VI	-	-	-	52	-	-
1970-H1686	2440908.92	1970 Nov 18 0959:59	Rocketsonde	-	-	-	Met. Sphere	-	-	ASC	-	-	-	56	-	-
1970-H1688	2440909.08	1970 Nov 18 1400:00	Rocketsonde	-	-	-	Starute, Datasonde	-	-	CC	-	LC43	-	59	-	-
1970-H1689	2440909.16	1970 Nov 18 1400:00	Rocketsonde	-	-	-	Starute, Datasonde	-	-	ASC	-	-	-	52	-	-
1970-H1691	2440909.17	1970 Nov 18 1559:59	Rocketsonde	-	-	-	Met. Para, Arcasonde	-	-	CC	-	LC43	-	59	-	-
1970-H1692	2440909.28	1970 Nov 18 1840:00	Rocketsonde	-	-	-	Met. Sphere	-	-	VI	-	-	-	91	-	-
1970-H1693	2440909.36	1970 Nov 18 2030:00	Rocketsonde	-	-	-	Starute, Datasonde	-	-	CC	-	LC43	-	63	-	-
1970-H1694	2440909.36	1970 Nov 18 2045:00	Rocketsonde	-	-	-	Starute, Datasonde	-	-	PM	-	-	-	59	-	-
1970-H1695	2440909.44	1970 Nov 18 2234:59	Rocketsonde	-	-	-	Met. Sphere	-	-	WS	-	-	-	85	-	-
1970-H1696	2440909.44	1970 Nov 18 2330:00	Rocketsonde	-	-	-	Starute, Datasonde	-	-	KAU	-	-	-	57	-	-
1970-H1697	2440909.60	1970 Nov 19 0230:00	Rocketsonde	-	-	-	Met. Para, Datasonde	-	-	GRLY	-	-	-	56	-	-
1970-H1698	2440910.13	1970 Nov 19 1511:00	Rocketsonde	-	-	-	Starute, Datasonde	-	-	KHR	-	-	-	55	-	-
1970-H1699	2440910.17	1970 Nov 19 1559:59	Rocketsonde	-	-	-	Starute, Datasonde	-	-	CELAT	-	-	-	49	-	-
1970-H1700	2440910.24	1970 Nov 19 1738:59	Rocketsonde	-	-	-	Met. Para, Arcasonde	-	-	PH	-	-	-	59	-	-
1970-H1701	2440910.24	1970 Nov 19 1747:00	Rocketsonde	-	-	-	Starute, Datasonde	-	-	WS	-	-	-	54	-	-
1970-H1702	2440911.08	1970 Nov 20 1400:00	Rocketsonde	-	-	-	Starute, Datasonde	-	-	ASC	-	-	-	61	-	-
1970-H1703	2440911.08	1970 Nov 20 1400:00	Rocketsonde	-	-	-	Starute, Datasonde	-	-	CC	-	LC43	-	66	-	-
1970-H1704	2440911.12	1970 Nov 20 1500:00	Rocketsonde	-	-	-	Met. Sphere	-	-	SHER	-	-	-	71	-	-
1970-H1705	2440911.15	1970 Nov 20 1626:59	Rocketsonde	-	-	-	Starute, Datasonde	-	-	PH	-	-	-	59	-	-
1970-H1707	2440911.19	1970 Nov 20 1914:59	Rocketsonde	-	-	-	Starute, Datasonde	-	-	WS	-	-	-	61	-	-

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Mission	FlightCode	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee_Km	Range_Km	Dest
1970-H1709	24409111-58	1970 Nov 21 0152:00	Rocketsonde	-	-	Starute, Dataosonde	-	-	-	RNR	-	-	-	61	-	-
1970-H1710	2440912-36	1970 Nov 21 2045:00	Rocketsonde	-	-	Met Para, Dataosonde	-	-	-	GRLY	-	-	-	59	-	-
1970-H1711	2440914-08	1970 Nov 23 1400:00	Rocketsonde	-	-	Starute, Dataosonde	-	-	-	ASC	-	-	-	64	-	-
1970-H1712	2440914-09	1970 Nov 23 1406:00	Rocketsonde	-	-	Starute, Dataosonde	-	-	-	CC	LC43	-	-	58	-	-
1970-H1713	2440914-11	1970 Nov 23 1448:00	Rocketsonde	-	-	Met Para, Arcosonde	-	-	-	ANT	-	-	-	64	-	-
1970-H1714	2440914-12	1970 Nov 23 1500:00	Rocketsonde	-	-	Met Para, Arcosonde	-	-	-	SHER	-	-	-	73	-	-
1970-H1715	2440914-18	1970 Nov 23 1614:59	Rocketsonde	-	-	Met Para, AM/DQM-9	-	-	-	THU	-	-	-	61	-	-
1970-H1717	2440914-30	1970 Nov 23 1914:59	Rocketsonde	-	-	Met Para, Arcosonde	-	-	-	WS	-	-	-	57	-	-
1970-H1718	2440914-32	1970 Nov 23 1942:59	Rocketsonde	-	-	Starute, Dataosonde	-	-	-	WI	-	-	-	64	-	-
1970-H1719	2440914-34	1970 Nov 23 2010:00	Rocketsonde	-	-	Met Para, Dataosonde	-	-	-	GRLY	-	-	-	60	-	-
1970-H1720	2440914-46	1970 Nov 23 2300:00	Rocketsonde	-	-	Met Para, Arcosonde	-	-	-	WS	-	-	-	68	-	-
1970-H1721	2440914-56	1970 Nov 24 0130:00	Rocketsonde	-	-	Starute, Dataosonde	-	-	-	RNR	-	-	-	60	-	-
1970-H1723	2440915-28	1970 Nov 24 1848:59	Rocketsonde	-	-	Starute, Dataosonde	-	-	-	WI	-	-	-	46	-	-
1970-H123	2440915-38	1970 Nov 24 2100:00	Rocketsonde	-	-	Met Para	-	-	-	KAU	-	-	-	54	-	-
1970-H1724	2440915-38	1970 Nov 24 2101:59	Rocketsonde	-	-	Met Para	-	-	-	PH	-	-	-	93	-	-
1970-1300	2440915-92	1970 Nov 25 0958:59	Rocketsonde	-	-	Met Sphere	-	-	-	ASC	-	-	-	59	-	-
1970-H1726	2440916-08	1970 Nov 25 1400:00	Rocketsonde	-	-	Starute, Dataosonde	-	-	-	CC	LC43	-	-	59	-	-
1970-H1727	2440916-12	1970 Nov 25 1500:00	Rocketsonde	-	-	Starute, Dataosonde	-	-	-	CC	LC43	-	-	59	-	-
1970-H1729	2440916-13	1970 Nov 25 1511:59	Rocketsonde	-	-	Starute	-	-	-	WI	-	-	-	59	-	-
1970-H1730	2440916-13	1970 Nov 25 1558:59	Rocketsonde	-	-	Starute	-	-	-	WI	-	-	-	54	-	-
1970-H1731	2440916-17	1970 Nov 25 1559:59	Rocketsonde	-	-	Met Para, Arcosonde	-	-	-	WS	-	-	-	60	-	-
1970-H1732	2440916-20	1970 Nov 25 1644:59	Rocketsonde	-	-	Starute, Dataosonde	-	-	-	ANT	-	-	-	58	-	-
1970-H1733	2440916-21	1970 Nov 25 1657:59	Rocketsonde	-	-	Starute, Dataosonde	-	-	-	PH	-	-	-	60	-	-
1970-H1735	2440916-29	1970 Nov 25 1859:59	Rocketsonde	-	-	Starute, Dataosonde	-	-	-	WS	-	-	-	60	-	-
1970-H1736	2440916-50	1970 Nov 25 2306:00	Rocketsonde	-	-	Met Para, Dataosonde	-	-	-	KAU	-	-	-	54	-	-
1970-H1737	2440916-50	1970 Nov 25 0000:00	Rocketsonde	-	-	Starute, Dataosonde	-	-	-	GRLY	-	-	-	57	-	-
1970-H1738	2440916-10	1970 Nov 27 1425:00	Rocketsonde	-	-	Starute, Dataosonde	-	-	-	ASC	-	-	-	64	-	-
1970-H1739	2440916-14	1970 Nov 27 1514:59	Rocketsonde	-	-	Met Para, Arcosonde	-	-	-	WS	-	-	-	59	-	-
1970-H1740	2440916-17	1970 Nov 27 1559:59	Rocketsonde	-	-	Met Para, SIS	-	-	-	CC	LC43	-	-	59	-	-
1970-H1741	2440916-17	1970 Nov 27 1559:59	Rocketsonde	-	-	Met Para, Dataosonde	-	-	-	GRLY	-	-	-	59	-	-
1970-H1742	2440916-46	1970 Nov 27 2304:59	Rocketsonde	-	-	Met Para, Dataosonde	-	-	-	CC	LC43	-	-	59	-	-
1970-H1743	2440916-49	1970 Nov 27 2342:00	Rocketsonde	-	-	Starute, Dataosonde	-	-	-	ASC	-	-	-	61	-	-
1970-H1744	2440916-48	1970 Nov 30 1400:00	Rocketsonde	-	-	Starute, Dataosonde	-	-	-	SHER	-	-	-	64	-	-
1970-H1746	2440921-13	1970 Nov 30 1504:59	Rocketsonde	-	-	Met Para, Arcosonde	-	-	-	PH	-	-	-	60	-	-
1970-H1747	2440921-15	1970 Nov 30 1504:59	Rocketsonde	-	-	Starute, Dataosonde	-	-	-	ASC	-	-	-	63	-	-
1970-H1750	2440921-26	1970 Nov 30 1816:00	Rocketsonde	-	-	Starute, Dataosonde	-	-	-	SHER	-	-	-	58	-	-
1970-H1751	2440921-27	1970 Nov 30 1830:00	Rocketsonde	-	-	Met Para, Arcosonde	-	-	-	PH	-	-	-	60	-	-
1970-H1752	2440921-28	1970 Nov 30 1846:59	Rocketsonde	-	-	Met Para, Arcosonde	-	-	-	ANT	-	-	-	56	-	-
1970-H1753	2440921-29	1970 Nov 30 1859:59	Rocketsonde	-	-	Met Sphere	-	-	-	WI	-	-	-	65	-	-
1970-H1754	2440921-37	1970 Nov 30 2055:00	Rocketsonde	-	-	Starute, Dataosonde	-	-	-	WS	-	-	-	57	-	-
1970-H1755	2440921-38	1970 Nov 30 2100:00	Rocketsonde	-	-	Starute, Dataosonde	-	-	-	WI	-	-	-	56	-	-
1970-H1756	2440921-38	1970 Nov 30 2110:00	Rocketsonde	-	-	Starute, Dataosonde	-	-	-	KAU	-	-	-	57	-	-
1970-H1757	2440921-57	1970 Dec 1 1640:50	Rocketsonde	-	-	Met Para, Dataosonde	-	-	-	GRLY	-	-	-	56	-	-
1970-H1759	2440922-20	1970 Dec 1 1854:59	Rocketsonde	-	-	Starute, Dataosonde	-	-	-	RNR	-	-	-	62	-	-
1970-1300	2440922-32	1970 Dec 2 0929:59	Rocketsonde	-	-	Starute, Dataosonde	-	-	-	PH	-	-	-	59	-	-
1970-H1760	2440923-04	1970 Dec 2 1259:59	Rocketsonde	-	-	Met Sphere	-	-	-	ASC	-	-	-	59	-	-
1970-H1761	2440923-12	1970 Dec 2 1450:00	Rocketsonde	-	-	Starute, Dataosonde	-	-	-	ANT	-	-	-	58	-	-
1970-H1762	2440923-12	1970 Dec 2 1450:00	Rocketsonde	-	-	Starute, Dataosonde	-	-	-	ASC	-	-	-	58	-	-
1970-H1763	2440923-12	1970 Dec 2 1450:00	Rocketsonde	-	-	Starute, Dataosonde	-	-	-	WS	-	-	-	62	-	-
1970-H1765	2440923-20	1970 Dec 2 1559:59	Rocketsonde	-	-	Starute, Dataosonde	-	-	-	SHER	-	-	-	56	-	-
1970-H1766	2440923-20	1970 Dec 2 1559:59	Rocketsonde	-	-	Starute, Dataosonde	-	-	-	WS	-	-	-	56	-	-
1970-H1767	2440924-10	1970 Dec 2 0130:00	Rocketsonde	-	-	Met Para, Dataosonde	-	-	-	GRLY	-	-	-	61	-	-
1970-H1768	2440924-16	1970 Dec 3 1453:00	Rocketsonde	-	-	Starute, Dataosonde	-	-	-	RNR	-	-	-	62	-	-
1970-H1770	2440924-22	1970 Dec 3 1730:00	Rocketsonde	-	-	Starute, Dataosonde	-	-	-	CELAT	-	-	-	70	-	-
1970-1310	2440924-22	1970 Dec 3 1730:00	Rocketsonde	-	-	Met Para	-	-	-	WS	-	-	-	70	-	-
1970-H1771	2440924-22	1970 Dec 3 1833:59	Rocketsonde	-	-	Met Sphere	-	-	-	PH	-	-	-	58	-	-
1970-H1772	2440924-30	1970 Dec 3 1909:59	Rocketsonde	-	-	Starute, Dataosonde	-	-	-	PH	-	-	-	58	-	-
1970-H1773	2440925-08	1970 Dec 3 2015:00	Rocketsonde	-	-	Starute, Dataosonde	-	-	-	WS	-	-	-	61	-	-
1970-H1774	2440925-08	1970 Dec 4 1400:00	Rocketsonde	-	-	Starute, Dataosonde	-	-	-	ASC	-	-	-	63	-	-
1970-H1775	2440925-08	1970 Dec 4 1400:00	Rocketsonde	-	-	Starute, Dataosonde	-	-	-	CC	LC43	-	-	60	-	-
1970-H1776	2440925-08	1970 Dec 4 1404:59	Rocketsonde	-	-	Met Para, Arcosonde	-	-	-	ANT	-	-	-	56	-	-
1970-H1777	2440925-16	1970 Dec 4 1545:00	Rocketsonde	-	-	Starute, Dataosonde	-	-	-	SHER	-	-	-	59	-	-
1970-H1778	2440925-22	1970 Dec 4 1715:00	Rocketsonde	-	-	Starute, Dataosonde	-	-	-	PH	-	-	-	59	-	-
1970-H1779	2440925-27	1970 Dec 4 1830:00	Rocketsonde	-	-	Starute, Dataosonde	-	-	-	PRIM	-	-	-	59	-	-
1970-H1780	2440925-31	1970 Dec 4 1930:00	Rocketsonde	-	-	Starute, Dataosonde	-	-	-	WS	-	-	-	57	-	-
1970-H1781	2440925-48	1970 Dec 4 2330:00	Rocketsonde	-	-	Met Para, Dataosonde	-	-	-	GRLY	-	-	-	60	-	-
1970-H1782	2440928-08	1970 Dec 7 1400:00	Rocketsonde	-	-	Starute, Dataosonde	-	-	-	CC	LC43	-	-	60	-	-
1970-H1783	2440928-09	1970 Dec 7 1415:00	Rocketsonde	-	-	Met Para, Arcosonde	-	-	-	ANT	-	-	-	64	-	-
1970-H1784	2440928-29	1970 Dec 7 1643:59	Rocketsonde	-	-	Starute, Dataosonde	-	-	-	PH	-	-	-	60	-	-
1970-H1785	2440928-29	1970 Dec 7 1859:59	Rocketsonde	-	-	Starute, Dataosonde	-	-	-	WS	-	-	-	53	-	-
1970-H1786	2440928-39	1970 Dec 7 2122:59	Rocketsonde	-	-	Starute, Dataosonde	-	-	-	KAU	-	-	-	63	-	-
1970-H1787	2440928-56	1970 Dec 8 0131:59	Rocketsonde	-	-	Starute, Dataosonde	-	-	-	WI	-	-	-	63	-	-
1970-H1788	2440929-12	1970 Dec 8 1500:00	Rocketsonde	-	-	Starute, Dataosonde	-	-	-	SHER	-	-	-	60	-	-
1970-H1790	2440929-38	1970 Dec 8 2100:00	Rocketsonde	-	-	Starute, Dataosonde	-	-	-	KAU	-	-	-	58	-	-
1970-H1791	2440929-38	1970 Dec 8 2100:00	Rocketsonde	-	-	Starute, Dataosonde	-	-	-	PH	-	-	-	61	-	-
1970-H1792	2440930-08	1970 Dec 9 1400:00	Rocketsonde	-	-	Met Para, Arcosonde	-	-	-	ANT	-	-	-	58	-	-
1970-H1793	2440930-08	1970 Dec 9 1430:00	Rocketsonde	-	-	Starute, Dataosonde	-	-	-	CC	LC43	-	-	57	-	-
1970-H1794	2440930-12	1970 Dec 9 1430:00	Rocketsonde	-	-	Starute, Dataosonde	-	-	-	ASC	-	-	-	62	-	-
1970-H1795	2440930-12	1970 Dec 9 1500:00	Rocketsonde	-	-	Starute, Dataosonde	-	-	-	SHER	-	-	-	60	-	-
1970-1320	2440930-21	1970 Dec 9 1700:00	Rocketsonde	-	-	Met Sphere	-	-	-	CC	LC43	-	-	91	-	-
1970-H1798	2440930-27	1970 Dec 9 1824:59	Rocketsonde	-	-	Starute, Dataosonde	-	-	-	CC	LC43	-	-	68	-	-
1970-H1799	2440930-27	1970 Dec 9 1834:59	Rocketsonde	-	-	Starute, Dataosonde	-	-	-	PRIM	-	-	-	60	-	-
1970-H126	2440930-29	1970 Dec 9 1859:59	Rocketsonde	-	-	Met Sphere	-	-	-	WI	-	-	-	42	-	-
1970-H1800	2440930-38	1970 Dec 9 2107:00	Rocketsonde	-	-	Starute, Dataosonde	-	-	-	WS	-	-	-	63	-	-
1970-H1802	2440931-33	1970 Dec 10 2002:00	Rocketsonde	-	-	Starute, Dataosonde	-	-	-	PH	-	-	-	58	-	-
1970-H1803	2440932-08	1970 Dec 11 1400:00	Rocketsonde	-	-	Starute, Dataosonde	-	-	-	CC	LC43	-	-	64	-	-

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Mission	FlightCode	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee_Km	Range_Km	Dest
1970-H1804	2440932.12	1970 Dec 11 15:00:00	Rocketsonde	-	-	Starute, Dataosnde	-	-	-	SHER	-	-	-	63	-	-
1970-A127	2440932.16	1970 Dec 11 15:45:00	Rocketsonde	-	-	Met. Para, SIS	-	-	-	WI	-	-	-	47	-	-
1970-H1805	2440932.17	1970 Dec 11 16:01:59	Rocketsonde	-	-	Starute	-	-	-	PH	-	-	-	56	-	-
1970-H1806	2440932.18	1970 Dec 11 16:28:59	Rocketsonde	-	-	Starute, Dataosnde	-	-	-	PH	-	-	-	59	-	-
1970-H1807	2440932.22	1970 Dec 11 17:15:00	Rocketsonde	-	-	Met. Para, SIS	-	-	-	WS	-	-	-	56	-	-
1970-H1808	2440932.22	1970 Dec 11 17:23:00	Rocketsonde	-	-	Starute	-	-	-	THU	-	-	-	72	-	-
1970-H1809	2440932.23	1970 Dec 11 17:30:00	Rocketsonde	-	-	Met. Para, AM/DMQ-9	-	-	-	PH	-	-	-	58	-	-
1970-H1811	2440932.26	1970 Dec 11 18:09:00	Rocketsonde	-	-	Starute	-	-	-	PH	-	-	-	59	-	-
1970-H1812	2440932.27	1970 Dec 11 18:38:59	Rocketsonde	-	-	Met. Para, SIS	-	-	-	WI	-	-	-	61	-	-
1970-H1813	2440932.30	1970 Dec 11 19:04:59	Rocketsonde	-	-	Starute	-	-	-	PH	-	-	-	70	-	-
1970-A128	2440932.32	1970 Dec 11 19:41:00	Rocketsonde	-	-	Met. Para, SIS	-	-	-	WI	-	-	-	41	-	-
1970-H1814	2440932.34	1970 Dec 12 03:00:00	Rocketsonde	-	-	Met. Para, SIS	-	-	-	WI	-	-	-	60	-	-
1970-H1815	2440932.56	1970 Dec 12 03:30:00	Rocketsonde	-	-	Starute, Dataosnde	-	-	-	KRR	-	-	-	60	-	-
1970-A129	2440935.08	1970 Dec 14 14:00:00	Rocketsonde	-	-	Starute, Dataosnde	-	-	-	ASC	-	-	-	43	-	-
1970-H1816	2440935.12	1970 Dec 14 15:00:00	Rocketsonde	-	-	Starute, Dataosnde	-	-	-	SHER	-	-	-	60	-	-
1970-H1817	2440935.22	1970 Dec 14 17:21:00	Rocketsonde	-	-	Starute, Dataosnde	-	-	-	PH	-	-	-	60	-	-
1970-H1818	2440935.25	1970 Dec 14 18:07:00	Rocketsonde	-	-	Starute, Dataosnde	-	-	-	WI	-	-	-	57	-	-
1970-H1819	2440935.27	1970 Dec 14 18:52:00	Rocketsonde	-	-	Starute, Dataosnde	-	-	-	CC	-	-	-	62	-	-
1970-H1820	2440935.28	1970 Dec 14 18:59:59	Rocketsonde	-	-	Starute, Dataosnde	-	-	-	WS	-	-	-	61	-	-
1970-H1821	2440935.40	1970 Dec 14 21:30:00	Rocketsonde	-	-	Starute, Dataosnde	-	-	-	KAO	-	-	-	56	-	-
1970-H1822	2440935.47	1970 Dec 14 23:15:00	Rocketsonde	-	-	Met. Para, Dataosnde	-	-	-	GRLY	-	-	-	58	-	-
1970-H1823	2440935.61	1970 Dec 15 02:33:00	Rocketsonde	-	-	Starute, Dataosnde	-	-	-	KRR	-	-	-	62	-	-
1970-H1824	2440935.61	1970 Dec 15 16:28:59	Rocketsonde	-	-	Met. Para, AM/DMQ-9	-	-	-	THU	-	-	-	54	-	-
1970-H1825	2440935.26	1970 Dec 15 18:18:00	Rocketsonde	-	-	Starute, Dataosnde	-	-	-	PH	-	-	-	60	-	-
1970-H1827	2440937.08	1970 Dec 16 14:00:00	Rocketsonde	-	-	Starute, Dataosnde	-	-	-	ASC	-	-	-	60	-	-
1970-H1828	2440937.12	1970 Dec 16 14:51:00	Rocketsonde	-	-	Chaff	-	-	-	CLBI	-	-	-	69	-	-
1970-H1829	2440937.12	1970 Dec 16 15:00:00	Rocketsonde	-	-	Starute, Dataosnde	-	-	-	SHER	-	-	-	62	-	-
1970-H131	2440937.13	1970 Dec 16 15:04:59	Rocketsonde	-	-	Met. Para, Arcosnde	-	-	-	WI	-	-	-	47	-	-
1970-H1830	2440937.16	1970 Dec 16 15:19:59	Rocketsonde	-	-	Starute, Dataosnde	-	-	-	CC	-	-	-	62	-	-
1970-H1831	2440937.21	1970 Dec 16 17:04:59	Rocketsonde	-	-	Met. Para, Arcosnde	-	-	-	AUT	-	-	-	54	-	-
1970-H1832	2440937.23	1970 Dec 16 17:30:00	Rocketsonde	-	-	Met. Sphere	-	-	-	CC	-	-	-	53	-	-
1970-H1833	2440937.23	1970 Dec 16 17:35:00	Rocketsonde	-	-	Met. Sphere	-	-	-	THU	-	-	-	70	-	-
1970-H134	2440937.25	1970 Dec 16 17:35:00	Rocketsonde	-	-	Met. Sphere	-	-	-	WS	-	-	-	45	-	-
1970-H1835	2440937.32	1970 Dec 16 19:44:59	Rocketsonde	-	-	Starute, Dataosnde	-	-	-	WS	-	-	-	63	-	-
1970-H136	2440937.32	1970 Dec 16 21:00:00	Rocketsonde	-	-	Starute, Dataosnde	-	-	-	GRLY	-	-	-	46	-	-
1970-H1837	2440937.38	1970 Dec 16 21:00:00	Rocketsonde	-	-	Met. Sphere	-	-	-	KAO	-	-	-	71	-	-
1970-H1838	2440937.38	1970 Dec 16 21:00:00	Rocketsonde	-	-	Starute, Dataosnde	-	-	-	KAO	-	-	-	61	-	-
1970-H1839	2440937.47	1970 Dec 16 23:15:00	Rocketsonde	-	-	Starute, Dataosnde	-	-	-	GRLY	-	-	-	60	-	-
1970-H1836	2440937.47	1970 Dec 16 23:15:00	Rocketsonde	-	-	Starute, Dataosnde	-	-	-	KRR	-	-	-	64	-	-
1970-H1837	2440937.56	1970 Dec 16 15:00:00	Rocketsonde	-	-	Starute, Dataosnde	-	-	-	WI	-	-	-	61	-	-
1970-H1838	2440938.14	1970 Dec 17 12:26:59	Rocketsonde	-	-	Starute, Dataosnde	-	-	-	SHER	-	-	-	62	-	-
1970-H1840	2440938.16	1970 Dec 17 15:45:00	Rocketsonde	-	-	Chaff	-	-	-	WS	-	-	-	76	-	-
1970-H1841	2440938.17	1970 Dec 17 15:59:59	Rocketsonde	-	-	Met. Para, AM/DMQ-9	-	-	-	THU	-	-	-	65	-	-
1970-H1842	2440938.22	1970 Dec 17 17:15:00	Rocketsonde	-	-	Starute, Dataosnde	-	-	-	PH	-	-	-	64	-	-
1970-H1843	2440938.08	1970 Dec 18 14:00:00	Rocketsonde	-	-	Starute, Dataosnde	-	-	-	ASC	-	-	-	61	-	-
1970-H1844	2440939.09	1970 Dec 18 14:00:00	Rocketsonde	-	-	Starute, Dataosnde	-	-	-	ASC	-	-	-	62	-	-
1970-H1845	2440939.09	1970 Dec 18 16:54:59	Rocketsonde	-	-	Met. Para, Arcosnde	-	-	-	CELAT	-	-	-	57	-	-
1970-H1847	2440939.09	1970 Dec 18 17:45:59	Rocketsonde	-	-	Met. Para, SIS	-	-	-	THU	-	-	-	57	-	-
1970-H1848	2440939.20	1970 Dec 18 17:45:59	Rocketsonde	-	-	Met. Para, SIS	-	-	-	WS	-	-	-	59	-	-
1970-H1849	2440939.30	1970 Dec 18 19:09:59	Rocketsonde	-	-	Starute, Dataosnde	-	-	-	GRLY	-	-	-	49	-	-
1970-H1850	2440939.30	1970 Dec 18 21:45:00	Rocketsonde	-	-	Starute, Dataosnde	-	-	-	KAO	-	-	-	55	-	-
1970-H1851	2440939.56	1970 Dec 19 01:30:59	Rocketsonde	-	-	Starute, Dataosnde	-	-	-	KRR	-	-	-	45	-	-
1970-H138	2440940.20	1970 Dec 19 18:59:59	Rocketsonde	-	-	Starute, Dataosnde	-	-	-	GRLY	-	-	-	58	-	-
1970-H1852	2440942.12	1970 Dec 21 15:00:00	Rocketsonde	-	-	Starute, Dataosnde	-	-	-	THU	-	-	-	57	-	-
1970-H1853	2440942.12	1970 Dec 21 15:00:00	Rocketsonde	-	-	Starute, Dataosnde	-	-	-	WS	-	-	-	60	-	-
1970-H1854	2440942.20	1970 Dec 21 18:59:59	Rocketsonde	-	-	Starute, Dataosnde	-	-	-	WS	-	-	-	56	-	-
1970-H1855	2440942.38	1970 Dec 21 21:00:00	Rocketsonde	-	-	Starute, Dataosnde	-	-	-	KAO	-	-	-	56	-	-
1970-H1856	2440942.57	1970 Dec 21 21:36:59	Rocketsonde	-	-	Starute, Dataosnde	-	-	-	KRR	-	-	-	63	-	-
1970-H1857	2440943.02	1970 Dec 22 02:30:00	Rocketsonde	-	-	Starute, Dataosnde	-	-	-	KRR	-	-	-	62	-	-
1970-H1858	2440943.02	1970 Dec 22 02:30:00	Rocketsonde	-	-	Starute, Dataosnde	-	-	-	SHER	-	-	-	64	-	-
1970-H1859	2440943.15	1970 Dec 22 15:56:59	Rocketsonde	-	-	Starute, Dataosnde	-	-	-	PH	-	-	-	62	-	-
1970-H1861	2440943.16	1970 Dec 22 19:14:59	Rocketsonde	-	-	Starute, Dataosnde	-	-	-	GRLY	-	-	-	46	-	-
1970-H1862	2440943.38	1970 Dec 22 21:08:00	Rocketsonde	-	-	Met. Para, Dataosnde	-	-	-	KAO	-	-	-	61	-	-
1970-H1863	2440943.50	1970 Dec 23 00:00:00	Rocketsonde	-	-	Starute, Dataosnde	-	-	-	GRLY	-	-	-	61	-	-
1970-H1864	2440944.08	1970 Dec 23 14:00:00	Rocketsonde	-	-	Starute, Dataosnde	-	-	-	CC	-	-	-	62	-	-
1970-H1865	2440944.21	1970 Dec 23 15:00:00	Rocketsonde	-	-	Starute, Dataosnde	-	-	-	SHER	-	-	-	54	-	-
1970-Y339	2440944.21	1970 Dec 23 17:05:00	Rocketsonde	-	-	Starute, Dataosnde	-	-	-	PH	-	-	-	85	-	-
1970-H1867	2440944.24	1970 Dec 23 17:47:00	Rocketsonde	-	-	Met. Sphere	-	-	-	PH	-	-	-	60	-	-
1970-H1868	2440944.27	1970 Dec 23 18:30:00	Rocketsonde	-	-	Starute, Dataosnde	-	-	-	PRIM	-	-	-	66	-	-
1970-H1869	2440944.29	1970 Dec 23 18:59:59	Rocketsonde	-	-	Starute, Dataosnde	-	-	-	WS	-	-	-	58	-	-
1970-H1870	2440944.31	1970 Dec 23 19:30:00	Rocketsonde	-	-	Starute, Dataosnde	-	-	-	WS	-	-	-	58	-	-
1970-H1871	2440944.34	1970 Dec 23 20:15:00	Rocketsonde	-	-	Starute, Dataosnde	-	-	-	GRLY	-	-	-	64	-	-
1970-H1872	2440944.42	1970 Dec 23 21:59:59	Rocketsonde	-	-	Starute, Dataosnde	-	-	-	WS	-	-	-	62	-	-
1970-H1873	2440944.42	1970 Dec 24 01:40:00	Rocketsonde	-	-	Starute, Dataosnde	-	-	-	KAO	-	-	-	60	-	-
1970-H1874	2440944.57	1970 Dec 24 01:40:00	Rocketsonde	-	-	Starute, Dataosnde	-	-	-	GRLY	-	-	-	61	-	-
1970-H1876	2440949.12	1970 Dec 28 15:00:00	Rocketsonde	-	-	Starute, Dataosnde	-	-	-	SHER	-	-	-	61	-	-
1970-H1879	2440949.27	1970 Dec 28 18:32:00	Rocketsonde	-	-	Starute, Dataosnde	-	-	-	PH	-	-	-	62	-	-
1970-H1880	2440949.49	1970 Dec 28 18:59:59	Rocketsonde	-	-	Starute, Dataosnde	-	-	-	WS	-	-	-	61	-	-
1970-H1881	2440949.56	1970 Dec 28 23:30:00	Rocketsonde	-	-	Met. Para, Dataosnde	-	-	-	GRLY	-	-	-	61	-	-
1970-H1882	2440949.56	1970 Dec 29 01:30:00	Rocketsonde	-	-	Starute, Dataosnde	-	-	-	KRR	-	-	-	64	-	-
1970-H1883	2440950.12	1970 Dec 29 15:30:00	Rocketsonde	-	-	Starute, Dataosnde	-	-	-	SHER	-	-	-	63	-	-
1970-H1885	2440950.32	1970 Dec 29 19:37:59	Rocketsonde	-	-	Starute, Dataosnde	-	-	-	PH	-	-	-	59	-	-
1970-H1886	2440950.39	1970 Dec 29 21:24:59	Rocketsonde	-	-	Starute, Dataosnde	-	-	-	KAO	-	-	-	58	-	-
1970-H1887	2440951.08	1970 Dec 30 14:00:00	Rocketsonde	-	-	Starute, Dataosnde	-	-	-	CC	-	-	-	59	-	-
1970-H1888	2440951.12	1970 Dec 30 15:00:00	Rocketsonde	-	-	Starute, Dataosnde	-	-	-	SHER	-	-	-	65	-	-
1970-H1891	2440951.29	1970 Dec 30 18:59:59	Rocketsonde	-	-	Starute, Dataosnde	-	-	-	WS	-	-	-	58	-	-



Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Mission	FlightCode	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee_Km	Range_Km	Dest
1971-1239	2441168-38	1971 Aug 4 2100:00	Rocketsonde	-	-	Met. Sphere	-	-	-	KAU	-	-	-	85	-	-
1971-1240	2441168-39	1971 Aug 4 2114:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	KAU	-	-	-	56	-	-
1971-1241	2441168-56	1971 Aug 5 0130:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	KHR	-	-	-	61	-	-
1971-1242	2441169-21	1971 Aug 5 1656:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PH	-	-	-	60	-	-
1971-1243	2441169-22	1971 Aug 5 1745:59	Rocketsonde	-	-	Met. Para.	-	-	-	WS	-	-	-	69	-	-
1971-1244	2441169-38	1971 Aug 5 2100:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	KAU	-	-	-	58	-	-
1971-1245	2441170-07	1971 Aug 6 1341:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	CC	LC43	-	-	61	-	-
1971-1246	2441170-08	1971 Aug 6 1400:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	ASC	-	-	-	58	-	-
1971-1247	2441170-09	1971 Aug 6 1410:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	WI	-	-	-	58	-	-
1971-1248	2441170-12	1971 Aug 6 1500:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	SHER	-	-	-	58	-	-
1971-1249	2441170-13	1971 Aug 6 1504:59	Rocketsonde	-	-	Chaff	-	-	-	WS	-	-	-	64	-	-
1971-1250	2441170-16	1971 Aug 6 1556:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PH	-	-	-	62	-	-
1971-1251	2441170-20	1971 Aug 6 1556:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PRIM	-	-	-	62	-	-
1971-1252	2441170-24	1971 Aug 6 1641:59	Rocketsonde	-	-	Met. Para., Arcasonde	-	-	-	THU	-	-	-	67	-	-
1971-1253	2441170-28	1971 Aug 6 1752:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	KAU	-	-	-	56	-	-
1971-1254	2441170-38	1971 Aug 6 2100:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	KHR	-	-	-	58	-	-
1971-1255	2441170-56	1971 Aug 7 0130:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	KAU	-	-	-	58	-	-
1971-1256	2441171-38	1971 Aug 7 2106:00	Rocketsonde	-	-	Met. Sphere	-	-	-	KAU	-	-	-	90	-	-
1971-1257	2441171-40	1971 Aug 7 2130:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	ASC	-	-	-	59	-	-
1971-1258	2441173-08	1971 Aug 9 1400:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	ASC	-	-	-	63	-	-
1971-1259	2441173-11	1971 Aug 9 1444:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	WI	-	-	-	62	-	-
1971-1260	2441173-13	1971 Aug 9 1510:00	Rocketsonde	-	-	Met. Para., Arcasonde	-	-	-	ANT	-	-	-	44	-	-
1971-1261	2441173-17	1971 Aug 9 1604:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PRIM	-	-	-	66	-	-
1971-1262	2441173-24	1971 Aug 9 1740:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	GRLY	-	-	-	47	-	-
1971-1263	2441173-31	1971 Aug 9 1830:00	Rocketsonde	-	-	Chaff	-	-	-	WS	-	-	-	60	-	-
1971-1264	2441173-34	1971 Aug 9 1930:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	KAU	-	-	-	58	-	-
1971-1265	2441173-44	1971 Aug 9 2230:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	KHR	-	-	-	60	-	-
1971-1266	2441174-47	1971 Aug 10 0130:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	KAU	-	-	-	60	-	-
1971-1267	2441174-56	1971 Aug 10 2316:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	KAU	-	-	-	60	-	-
1971-1268	2441174-94	1971 Aug 11 1034:59	Rocketsonde	-	-	Met. Sphere	-	-	-	ASC	-	-	-	90	-	-
1971-1269	2441175-06	1971 Aug 11 1400:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	ASC	-	-	-	57	-	-
1971-1270	2441175-11	1971 Aug 11 1438:59	Rocketsonde	-	-	Met. Sphere	-	-	-	WI	-	-	-	60	-	-
1971-1271	2441175-15	1971 Aug 11 1551:00	Rocketsonde	-	-	Met. Sphere	-	-	-	THU	-	-	-	90	-	-
1971-1272	2441175-16	1971 Aug 11 1551:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PH	-	-	-	59	-	-
1971-1273	2441175-18	1971 Aug 11 1622:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PRIM	-	-	-	68	-	-
1971-1274	2441175-18	1971 Aug 11 1622:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	WS	-	-	-	67	-	-
1971-1275	2441175-33	1971 Aug 11 2000:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	GRLY	-	-	-	62	-	-
1971-1276	2441175-44	1971 Aug 11 2230:00	Rocketsonde	-	-	Met. Sphere	-	-	-	KAU	-	-	-	85	-	-
1971-1277	2441175-46	1971 Aug 11 2231:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PH	-	-	-	57	-	-
1971-1278	2441175-56	1971 Aug 12 0154:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	KHR	-	-	-	56	-	-
1971-1279	2441176-12	1971 Aug 12 1456:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PH	-	-	-	57	-	-
1971-1280	2441176-16	1971 Aug 12 1634:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	SHER	-	-	-	61	-	-
1971-1281	2441176-39	1971 Aug 12 2124:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	ASC	-	-	-	61	-	-
1971-1282	2441177-01	1971 Aug 13 1334:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	KAU	-	-	-	85	-	-
1971-1283	2441177-06	1971 Aug 13 1330:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PH	-	-	-	57	-	-
1971-1284	2441177-09	1971 Aug 13 1404:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	ASC	-	-	-	62	-	-
1971-1285	2441177-10	1971 Aug 13 1415:00	Rocketsonde	-	-	Met. Para., Arcasonde	-	-	-	ANT	-	-	-	56	-	-
1971-1286	2441177-10	1971 Aug 13 1415:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	WI	-	-	-	59	-	-
1971-1287	2441177-12	1971 Aug 13 1500:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	SHER	-	-	-	60	-	-
1971-1288	2441177-12	1971 Aug 13 1520:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PH	-	-	-	56	-	-
1971-1289	2441177-13	1971 Aug 13 1520:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PRIM	-	-	-	67	-	-
1971-1290	2441177-15	1971 Aug 13 1520:59	Rocketsonde	-	-	Chaff	-	-	-	GRLY	-	-	-	62	-	-
1971-1291	2441177-20	1971 Aug 14 0130:00	Rocketsonde	-	-	Met. Para., Arcasonde	-	-	-	WS	-	-	-	62	-	-
1971-1292	2441177-20	1971 Aug 14 0130:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	KHR	-	-	-	60	-	-
1971-1293	2441177-50	1971 Aug 14 1445:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	GRLY	-	-	-	60	-	-
1971-1294	2441180-11	1971 Aug 16 1500:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	THU	-	-	-	59	-	-
1971-1295	2441180-12	1971 Aug 16 1500:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PH	-	-	-	61	-	-
1971-1296	2441180-12	1971 Aug 16 1519:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	SHER	-	-	-	60	-	-
1971-1297	2441180-20	1971 Aug 16 1645:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PRIM	-	-	-	63	-	-
1971-1298	2441180-21	1971 Aug 16 1700:00	Rocketsonde	-	-	Chaff	-	-	-	WS	-	-	-	59	-	-
1971-1299	2441180-25	1971 Aug 16 1757:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	CC	LC43	-	-	64	-	-
1971-1300	2441180-38	1971 Aug 16 2100:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	KAU	-	-	-	58	-	-
1971-1301	2441180-38	1971 Aug 16 2100:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	GRLY	-	-	-	58	-	-
1971-1302	2441180-56	1971 Aug 16 2300:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	KHR	-	-	-	60	-	-
1971-1303	2441180-56	1971 Aug 17 0131:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PH	-	-	-	61	-	-
1971-1304	2441181-20	1971 Aug 17 1654:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	KAU	-	-	-	61	-	-
1971-1305	2441181-38	1971 Aug 17 2107:00	Rocketsonde	-	-	Met. Para., Arcasonde	-	-	-	ANT	-	-	-	49	-	-
1971-1306	2441182-08	1971 Aug 18 1400:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	ASC	-	-	-	51	-	-
1971-1307	2441182-08	1971 Aug 18 1400:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	WI	-	-	-	56	-	-
1971-1308	2441182-10	1971 Aug 18 1401:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	CC	LC43	-	-	62	-	-
1971-1309	2441182-12	1971 Aug 18 1417:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	THU	-	-	-	61	-	-
1971-1310	2441182-12	1971 Aug 18 1500:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	SHER	-	-	-	66	-	-
1971-1311	2441182-17	1971 Aug 18 1559:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	WS	-	-	-	62	-	-
1971-1312	2441182-21	1971 Aug 18 1700:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	GRLY	-	-	-	60	-	-
1971-1313	2441182-33	1971 Aug 18 2000:00	Rocketsonde	-	-	Met. Sphere	-	-	-	KAU	-	-	-	90	-	-
1971-1314	2441182-43	1971 Aug 18 2159:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	KAU	-	-	-	56	-	-
1971-1315	2441183-16	1971 Aug 19 0157:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	KHR	-	-	-	60	-	-
1971-1316	2441183-40	1971 Aug 19 2132:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PH	-	-	-	58	-	-
1971-1317	2441183-96	1971 Aug 20 1102:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	KAU	-	-	-	57	-	-
1971-1318	2441183-97	1971 Aug 20 1111:00	Rocketsonde	-	-	Chaff	-	-	-	GRLY	-	-	-	62	-	-
1971-1319	2441184-06	1971 Aug 20 1330:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	WI	-	-	-	60	-	-
1971-1320	2441184-08	1971 Aug 20 1400:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	CC	LC43	-	-	63	-	-
1971-1321	2441184-12	1971 Aug 20 1500:00	Rocketsonde	-	-	Met. Para., Arcasonde	-	-	-	ASC	-	-	-	62	-	-
1971-1322	2441184-12	1971 Aug 20 1500:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	WS	-	-	-	57	-	-
1971-1323	2441184-12	1971 Aug 20 1500:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	SHER	-	-	-	57	-	-

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Mission	FlightCode	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee_Km	Range_Km	Dest
1971-H1138	2441184.15	1971 Aug 20 1530:00	Rocketsonde	-	-	Met. Para./M/DK-9	-	-	-	THU	-	-	-	65	-	-
1971-H1139	2441184.15	1971 Aug 20 1533:00	Rocketsonde	-	-	Met. Sphere	-	-	-	CC	LC43	-	-	66	-	-
1971-H1140	2441184.17	1971 Aug 20 1600:59	Rocketsonde	-	-	Starute, Dataonide	-	-	-	PRUH	-	-	-	71	-	-
1971-H1141	2441184.21	1971 Aug 20 1658:59	Rocketsonde	-	-	Starute, Dataonide	-	-	-	PH	-	-	-	61	-	-
1971-H1142	2441184.33	1971 Aug 20 2000:00	Rocketsonde	-	-	Starute, Dataonide	-	-	-	GRLY	-	-	-	65	-	-
1971-H1143	2441184.38	1971 Aug 20 2100:00	Rocketsonde	-	-	Starute, Dataonide	-	-	-	KAU	-	-	-	59	-	-
1971-H1144	2441184.57	1971 Aug 21 0441:00	Rocketsonde	-	-	Starute, Dataonide	-	-	-	KHR	-	-	-	61	-	-
1971-H1145	2441184.57	1971 Aug 23 1349:59	Rocketsonde	-	-	Starute, Dataonide	-	-	-	CC	LC43	-	-	64	-	-
1971-H1146	2441187.08	1971 Aug 23 1400:00	Rocketsonde	-	-	Starute, Dataonide	-	-	-	ASC	-	-	-	60	-	-
1971-H1147	2441187.12	1971 Aug 23 1500:00	Rocketsonde	-	-	Starute, Dataonide	-	-	-	SHER	-	-	-	69	-	-
1971-H1148	2441187.17	1971 Aug 23 1559:59	Rocketsonde	-	-	Starute, Dataonide	-	-	-	PRUH	-	-	-	69	-	-
1971-H1149	2441187.21	1971 Aug 23 1700:00	Rocketsonde	-	-	Chaff	-	-	-	WS	-	-	-	54	-	-
1971-H1150	2441187.21	1971 Aug 23 1700:00	Rocketsonde	-	-	Starute, Dataonide	-	-	-	PH	-	-	-	59	-	-
1971-H1151	2441187.25	1971 Aug 23 1800:59	Rocketsonde	-	-	Met. Para.	-	-	-	WI	-	-	-	57	-	-
1971-H1152	2441187.30	1971 Aug 23 1912:59	Rocketsonde	-	-	Starute, Dataonide	-	-	-	GRLY	-	-	-	60	-	-
1971-H1153	2441187.35	1971 Aug 23 2020:00	Rocketsonde	-	-	Starute, Dataonide	-	-	-	KAU	-	-	-	58	-	-
1971-H1154	2441187.40	1971 Aug 23 2130:00	Rocketsonde	-	-	Starute, Dataonide	-	-	-	KHR	-	-	-	61	-	-
1971-H1155	2441187.40	1971 Aug 24 0130:00	Rocketsonde	-	-	Starute, Dataonide	-	-	-	PH	-	-	-	61	-	-
1971-H1156	2441188.21	1971 Aug 24 1704:59	Rocketsonde	-	-	Starute, Dataonide	-	-	-	KAU	-	-	-	56	-	-
1971-H1157	2441188.21	1971 Aug 24 2100:00	Rocketsonde	-	-	Starute, Dataonide	-	-	-	ASC	LC43	-	-	90	-	-
1971-H1158	2441188.38	1971 Aug 25 1115:00	Rocketsonde	-	-	Met. Sphere	-	-	-	CC	-	-	-	63	-	-
1971-H1159	2441189.06	1971 Aug 25 1330:00	Rocketsonde	-	-	Starute, Dataonide	-	-	-	ASC	-	-	-	66	-	-
1971-H1160	2441189.08	1971 Aug 25 1400:00	Rocketsonde	-	-	Starute, Dataonide	-	-	-	SHER	-	-	-	61	-	-
1971-H1161	2441189.12	1971 Aug 25 1500:00	Rocketsonde	-	-	Starute, Dataonide	-	-	-	PRUH	-	-	-	69	-	-
1971-H1162	2441189.19	1971 Aug 25 1627:59	Rocketsonde	-	-	Starute, Dataonide	-	-	-	WS	-	-	-	68	-	-
1971-H1163	2441189.24	1971 Aug 25 1745:00	Rocketsonde	-	-	Starute, Dataonide	-	-	-	PH	-	-	-	85	-	-
1971-H1164	2441189.25	1971 Aug 25 1802:59	Rocketsonde	-	-	Met. Sphere	-	-	-	PH	-	-	-	55	-	-
1971-H1165	2441189.30	1971 Aug 25 1904:59	Rocketsonde	-	-	Starute, Dataonide	-	-	-	PH	-	-	-	58	-	-
1971-H1166	2441189.31	1971 Aug 25 1921:59	Rocketsonde	-	-	Starute, Dataonide	-	-	-	GRLY	-	-	-	58	-	-
1971-H1167	2441189.33	1971 Aug 25 2000:00	Rocketsonde	-	-	Starute, Dataonide	-	-	-	ASC	-	-	-	62	-	-
1971-H1168	2441189.40	1971 Aug 25 2142:00	Rocketsonde	-	-	Chaff	-	-	-	SHER	-	-	-	60	-	-
1971-H1169	2441189.42	1971 Aug 25 2159:59	Rocketsonde	-	-	Starute, Dataonide	-	-	-	WS	-	-	-	59	-	-
1971-H1170	2441191.06	1971 Aug 27 1500:00	Rocketsonde	-	-	Starute, Dataonide	-	-	-	PH	-	-	-	39	-	-
1971-H1171	2441191.12	1971 Aug 27 1600:00	Rocketsonde	-	-	Starute, Dataonide	-	-	-	PH	-	-	-	39	-	-
1971-H1172	2441191.21	1971 Aug 27 1700:00	Rocketsonde	-	-	Starute, Dataonide	-	-	-	PH	-	-	-	39	-	-
1971-H1173	2441191.23	1971 Aug 27 1726:00	Rocketsonde	-	-	Starute, Dataonide	-	-	-	PH	-	-	-	39	-	-
1971-H1174	2441191.25	1971 Aug 27 1754:00	Rocketsonde	-	-	Starute, Dataonide	-	-	-	PH	-	-	-	39	-	-
1971-H1175	2441191.25	1971 Aug 27 1754:00	Rocketsonde	-	-	Starute, Dataonide	-	-	-	PH	-	-	-	39	-	-
1971-H1176	2441191.30	1971 Aug 27 1754:00	Rocketsonde	-	-	Starute, Dataonide	-	-	-	PH	-	-	-	39	-	-
1971-H1177	2441191.30	1971 Aug 27 1910:59	Rocketsonde	-	-	Starute, Dataonide	-	-	-	KAU	-	-	-	64	-	-
1971-H1178	2441191.36	1971 Aug 27 2100:00	Rocketsonde	-	-	Starute, Dataonide	-	-	-	GRLY	-	-	-	56	-	-
1971-H1179	2441191.44	1971 Aug 27 2240:00	Rocketsonde	-	-	Starute, Dataonide	-	-	-	ASC	LC43	-	-	60	-	-
1971-H1180	2441194.05	1971 Aug 30 1334:59	Rocketsonde	-	-	Starute, Dataonide	-	-	-	ASC	-	-	-	60	-	-
1971-H1181	2441194.06	1971 Aug 30 1400:00	Rocketsonde	-	-	Starute, Dataonide	-	-	-	SHER	-	-	-	61	-	-
1971-H1182	2441194.08	1971 Aug 30 1500:00	Rocketsonde	-	-	Starute, Dataonide	-	-	-	PH	-	-	-	46	-	-
1971-H1183	2441194.13	1971 Aug 30 1554:59	Rocketsonde	-	-	Starute, Dataonide	-	-	-	PH	-	-	-	61	-	-
1971-H1184	2441194.17	1971 Aug 30 1554:59	Rocketsonde	-	-	Starute, Dataonide	-	-	-	PH	-	-	-	61	-	-
1971-H1185	2441194.23	1971 Aug 30 1600:00	Rocketsonde	-	-	Met. Para./Arctasonde	-	-	-	WI	-	-	-	69	-	-
1971-H1186	2441194.25	1971 Aug 30 1600:00	Rocketsonde	-	-	Starute, Dataonide	-	-	-	WI	-	-	-	67	-	-
1971-H1187	2441194.38	1971 Aug 30 2100:00	Rocketsonde	-	-	Starute, Dataonide	-	-	-	GRLY	-	-	-	54	-	-
1971-H1188	2441194.38	1971 Aug 31 0130:00	Rocketsonde	-	-	Starute, Dataonide	-	-	-	KAU	-	-	-	61	-	-
1971-H1189	2441195.01	1971 Aug 31 1415:00	Rocketsonde	-	-	Starute, Dataonide	-	-	-	KHR	-	-	-	59	-	-
1971-H1190	2441195.01	1971 Aug 31 1415:00	Rocketsonde	-	-	Starute, Dataonide	-	-	-	PH	-	-	-	59	-	-
1971-H1191	2441195.03	1971 Aug 31 1415:00	Rocketsonde	-	-	Starute, Dataonide	-	-	-	PH	-	-	-	59	-	-
1971-H1192	2441195.43	1971 Aug 31 2225:59	Rocketsonde	-	-	Starute, Dataonide	-	-	-	KAU	-	-	-	61	-	-
1971-H1193	2441195.70	1971 Sep 1 0614:59	Rocketsonde	-	-	Starute, Dataonide	-	-	-	KAU	-	-	-	61	-	-
1971-H1194	2441195.92	1971 Sep 1 0959:59	Rocketsonde	-	-	Met. Sphere	-	-	-	KHR	-	-	-	94	-	-
1971-H1195	2441196.01	1971 Sep 1 1251:59	Rocketsonde	-	-	Starute, Dataonide	-	-	-	ASC	-	-	-	55	-	-
1971-H1196	2441196.04	1971 Sep 1 1259:59	Rocketsonde	-	-	Met. Para./Arctasonde	-	-	-	KHR	-	-	-	58	-	-
1971-H1197	2441196.08	1971 Sep 1 1400:59	Rocketsonde	-	-	Starute, Dataonide	-	-	-	ANT	-	-	-	58	-	-
1971-H1198	2441196.09	1971 Sep 1 1415:00	Rocketsonde	-	-	Starute, Dataonide	-	-	-	ASC	-	-	-	61	-	-
1971-H1199	2441196.11	1971 Sep 1 1445:00	Rocketsonde	-	-	Met. Para./M/DK-9	-	-	-	CC	LC43	-	-	65	-	-
1971-H1200	2441196.11	1971 Sep 1 1445:00	Rocketsonde	-	-	Starute, Dataonide	-	-	-	THU	-	-	-	60	-	-
1971-H1201	2441196.13	1971 Sep 1 1510:00	Rocketsonde	-	-	Starute, Dataonide	-	-	-	PH	-	-	-	59	-	-
1971-H1202	2441196.14	1971 Sep 1 1520:00	Rocketsonde	-	-	Starute, Dataonide	-	-	-	WS	-	-	-	71	-	-
1971-H1203	2441196.17	1971 Sep 1 1559:59	Rocketsonde	-	-	Starute, Dataonide	-	-	-	PRUH	-	-	-	63	-	-
1971-H1204	2441196.17	1971 Sep 1 1609:59	Rocketsonde	-	-	Met. Sphere	-	-	-	CC	LC43	-	-	65	-	-
1971-H1205	2441196.32	1971 Sep 1 1934:59	Rocketsonde	-	-	Met. Sphere	-	-	-	WS	-	-	-	70	-	-
1971-H1206	2441196.43	1971 Sep 1 2222:59	Rocketsonde	-	-	Starute, Dataonide	-	-	-	WS	-	-	-	64	-	-
1971-H1207	2441196.56	1971 Sep 2 0130:00	Rocketsonde	-	-	Starute, Dataonide	-	-	-	KAU	-	-	-	63	-	-
1971-H1208	2441197.17	1971 Sep 2 1601:59	Rocketsonde	-	-	Starute, Dataonide	-	-	-	KHR	-	-	-	59	-	-
1971-H1209	2441197.42	1971 Sep 2 2159:59	Rocketsonde	-	-	Starute, Dataonide	-	-	-	PH	-	-	-	57	-	-
1971-H1210	2441198.06	1971 Sep 3 1330:00	Rocketsonde	-	-	Starute, Dataonide	-	-	-	CC	LC43	-	-	64	-	-
1971-H1211	2441198.06	1971 Sep 3 1330:00	Rocketsonde	-	-	Starute, Dataonide	-	-	-	ASC	-	-	-	61	-	-
1971-H1212	2441198.08	1971 Sep 3 1430:00	Rocketsonde	-	-	Met. Para./M/DK-9	-	-	-	THU	-	-	-	69	-	-
1971-H1213	2441198.10	1971 Sep 3 1430:00	Rocketsonde	-	-	Starute, Dataonide	-	-	-	WS	-	-	-	55	-	-
1971-H1214	2441198.20	1971 Sep 3 1634:59	Rocketsonde	-	-	Starute, Dataonide	-	-	-	KAU	-	-	-	60	-	-
1971-H1215	2441198.38	1971 Sep 3 2100:00	Rocketsonde	-	-	Starute, Dataonide	-	-	-	PH	-	-	-	61	-	-
1971-H1216	2441198.57	1971 Sep 4 0134:59	Rocketsonde	-	-	Starute, Dataonide	-	-	-	KHR	-	-	-	54	-	-
1971-H1217	2441202.21	1971 Sep 7 1700:00	Rocketsonde	-	-	Starute, Dataonide	-	-	-	WS	-	-	-	60	-	-
1971-H1218	2441202.29	1971 Sep 7 1856:59	Rocketsonde	-	-	Met. Para./Arctasonde	-	-	-	WI	-	-	-	41	-	-
1971-H1219	2441202.29	1971 Sep 7 1859:59	Rocketsonde	-	-	Met. Sphere	-	-	-	GRLY	-	-	-	64	-	-
1971-H1220	2441202.38	1971 Sep 7 1859:59	Rocketsonde	-	-	Starute, Dataonide	-	-	-	WS	-	-	-	61	-	-
1971-H1221	2441202.38	1971 Sep 7 2100:00	Rocketsonde	-	-	Starute, Dataonide	-	-	-	PH	-	-	-	56	-	-
1971-H1222	2441202.42	1971 Sep 8 0959:59	Rocketsonde	-	-	Met. Sphere	-	-	-	ASC	-	-	-	92	-	-
1971-H1223	2441203.06	1971 Sep 8 1330:00	Rocketsonde	-	-	Starute, Dataonide	-	-	-	CC	LC43	-	-	62	-	-
1971-H1224	2441203.08	1971 Sep 8 1400:00	Rocketsonde	-	-	Starute, Dataonide	-	-	-	ASC	-	-	-	62	-	-



Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Launch_Mission	FlightCode	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee_Km	Range_Km	Dest
1971-H1225	2441203-08	1971 Sep 8 1402:00	Rocketsonde			Met. Para, Arcasonde				AMT				60		
1971-H1226	2441203-14	1971 Sep 8 1524:59	Rocketsonde			Starute, Baseonde				WS				58		
1971-H1227	2441203-20	1971 Sep 8 1644:59	Rocketsonde			Starute, Baseonde				WS				55		
1971-H1228	2441203-21	1971 Sep 8 1703:59	Rocketsonde			Starute, Baseonde				PRIM				64		
1971-H1229	2441203-32	1971 Sep 8 1941:59	Rocketsonde			Starute, Baseonde				WI				60		
1971-H1230	2441203-38	1971 Sep 8 2100:00	Rocketsonde			Starute, Baseonde				KAU				57		
1971-H1231	2441203-59	1971 Sep 9 0209:00	Rocketsonde			Starute, Baseonde				KHR				60		
1971-H1232	2441204-21	1971 Sep 9 1657:59	Rocketsonde			Starute, Baseonde				PH				60		
1971-H1233	2441204-38	1971 Sep 9 2100:00	Rocketsonde			Starute, Baseonde				KAU				61		
1971-H1234	2441205-08	1971 Sep 10 1400:00	Rocketsonde			Met. Para, Arcasonde				CC	LC43			62		
1971-H1235	2441205-08	1971 Sep 10 1400:00	Rocketsonde			Starute, Baseonde				ASC				63		
1971-H1236	2441205-11	1971 Sep 10 1420:00	Rocketsonde			Met. Para, Arcasonde				AMT				59		
1971-H1238	2441205-11	1971 Sep 10 1442:00	Rocketsonde			Met. Para, Arcasonde				WI				54		
1971-H1239	2441205-12	1971 Sep 10 1452:00	Rocketsonde			Starute, Baseonde				PH				60		
1971-H1240	2441205-21	1971 Sep 10 1700:00	Rocketsonde			Starute, Baseonde				WS				53		
1971-H1241	2441205-38	1971 Sep 10 2111:59	Rocketsonde			Starute, Baseonde				KAU				59		
1971-H1242	2441205-57	1971 Sep 11 0136:59	Rocketsonde			Starute, Baseonde				KHR				60		
1971-H1243	2441206-08	1971 Sep 13 1352:00	Rocketsonde			Starute, Baseonde				CC	LC43			63		
1971-H1244	2441206-08	1971 Sep 13 1500:00	Rocketsonde			Starute, Baseonde				ASC				49		
1971-H1246	2441206-21	1971 Sep 13 1700:00	Rocketsonde			Starute, Baseonde				WS				51		
1971-H1247	2441206-30	1971 Sep 13 1904:59	Rocketsonde			Starute, Baseonde				WI				59		
1971-H1248	2441206-38	1971 Sep 13 2100:00	Rocketsonde			Starute, Baseonde				KAU				62		
1971-H1249	2441206-61	1971 Sep 14 0244:00	Rocketsonde			Starute, Baseonde				KHR				59		
1971-H1250	2441209-38	1971 Sep 15 2100:00	Rocketsonde			Starute, Baseonde				CC	LC43			56		
1971-H1251	2441210-06	1971 Sep 15 1330:00	Rocketsonde			Starute, Baseonde				ASC				66		
1971-H1252	2441210-08	1971 Sep 15 1400:00	Rocketsonde			Starute, Baseonde				PH				59		
1971-H1254	2441210-12	1971 Sep 15 1447:00	Rocketsonde			Starute, Baseonde				WS				64		
1971-H1255	2441210-17	1971 Sep 15 1559:59	Rocketsonde			Starute, Baseonde				WI				58		
1971-H1257	2441210-23	1971 Sep 15 1733:00	Rocketsonde			Starute, Baseonde				KAU				62		
1971-H1258	2441210-36	1971 Sep 15 2100:00	Rocketsonde			Starute, Baseonde				KHR				58		
1971-H1259	2441210-56	1971 Sep 16 0130:00	Rocketsonde			Starute, Baseonde				KAU				59		
1971-H1260	2441211-42	1971 Sep 16 2159:59	Rocketsonde			Starute, Baseonde				KAU				59		
1971-H1261	2441211-75	1971 Sep 17 0653:59	Rocketsonde			Chaff				ORL				62		
1971-H1262	2441211-75	1971 Sep 17 0653:59	Rocketsonde			Starute, Baseonde				WS				60		
1971-H1263	2441212-06	1971 Sep 17 1330:00	Rocketsonde			Starute, Baseonde				CC	LC43			61		
1971-H1264	2441212-06	1971 Sep 17 1400:00	Rocketsonde			Starute, Baseonde				ASC				65		
1971-H1265	2441212-09	1971 Sep 17 1415:00	Rocketsonde			Met. Para, Arcasonde				AMT				55		
1971-H1266	2441212-10	1971 Sep 17 1450:00	Rocketsonde			Met. Para, Arcasonde				THU				60		
1971-H1268	2441212-14	1971 Sep 17 1527:59	Rocketsonde			Starute, Baseonde				WI				59		
1971-H1269	2441212-23	1971 Sep 17 1527:59	Rocketsonde			Starute, Baseonde				PH				59		
1971-H1270	2441212-35	1971 Sep 17 1734:00	Rocketsonde			Starute, Baseonde				PRIM				50		
1971-H1271	2441212-56	1971 Sep 18 0130:59	Rocketsonde			Starute, Baseonde				KHR				59		
1971-H1272	2441215-06	1971 Sep 20 1330:00	Rocketsonde			Starute, Baseonde				CC	LC43			62		
1971-H1273	2441215-06	1971 Sep 20 1400:00	Rocketsonde			Starute, Baseonde				ASC				64		
1971-H1274	2441215-06	1971 Sep 20 1400:00	Rocketsonde			Starute, Baseonde				PH				60		
1971-H1275	2441215-06	1971 Sep 20 1400:00	Rocketsonde			Starute, Baseonde				PRIM				69		
1971-H1276	2441215-26	1971 Sep 20 1559:00	Rocketsonde			Starute, Baseonde				WS				65		
1971-H1278	2441215-26	1971 Sep 20 1730:00	Rocketsonde			Starute, Baseonde				KAU				59		
1971-H1279	2441215-38	1971 Sep 20 2100:00	Rocketsonde			Starute, Baseonde				KHR				59		
1971-H1280	2441215-56	1971 Sep 21 0139:59	Rocketsonde			Starute, Baseonde				PH				59		
1971-H1281	2441216-11	1971 Sep 21 1457:00	Rocketsonde			Starute, Baseonde				WI				62		
1971-H1282	2441216-12	1971 Sep 21 1541:00	Rocketsonde			Starute, Baseonde				KAU				61		
1971-H1283	2441216-35	1971 Sep 21 2120:00	Rocketsonde			Starute, Baseonde				ASC				61		
1971-H1284	2441216-92	1971 Sep 22 0959:59	Rocketsonde			Met. Sphe, Baseonde				CC	LC43			62		
1971-H1285	2441217-06	1971 Sep 22 1330:00	Rocketsonde			Starute, Baseonde				ASC				61		
1971-H1287	2441217-13	1971 Sep 22 1510:00	Rocketsonde			Starute, Baseonde				AMT				60		
1971-H1288	2441217-15	1971 Sep 22 1530:00	Rocketsonde			Met. Para, Arcasonde				CC	LC43			85		
1971-H1289	2441217-20	1971 Sep 22 1851:00	Rocketsonde			Starute, Baseonde				PH				58		
1971-H1290	2441217-23	1971 Sep 22 1730:00	Rocketsonde			Starute, Baseonde				WS				59		
1971-H1291	2441217-25	1971 Sep 22 1800:00	Rocketsonde			Starute, Baseonde				PRIM				69		
1971-H1292	2441217-30	1971 Sep 22 1918:00	Rocketsonde			Met. Sphe, Baseonde				WS				59		
1971-H1293	2441217-38	1971 Sep 22 2100:00	Rocketsonde			Starute, Baseonde				WI				62		
1971-H1294	2441217-56	1971 Sep 23 0130:00	Rocketsonde			Starute, Baseonde				KAU				58		
1971-H1295	2441218-11	1971 Sep 23 1445:00	Rocketsonde			Met. Para, Baseonde				WS				50		
1971-H1296	2441218-15	1971 Sep 23 1530:00	Rocketsonde			Starute, Baseonde				PH				56		
1971-H1297	2441218-38	1971 Sep 23 2100:00	Rocketsonde			Starute, Baseonde				KAU				63		
1971-H1299	2441219-04	1971 Sep 24 1330:59	Rocketsonde			Met. Para, Arcasonde				AMT				57		
1971-H1300	2441219-06	1971 Sep 24 1330:00	Rocketsonde			Starute, Baseonde				CC	LC43			58		
1971-H1301	2441219-08	1971 Sep 24 1400:00	Rocketsonde			Starute, Baseonde				WS				57		
1971-H1303	2441219-21	1971 Sep 24 2100:00	Rocketsonde			Starute, Baseonde				ASC				61		
1971-H1304	2441219-56	1971 Sep 24 2100:00	Rocketsonde			Starute, Baseonde				WS				63		
1971-H1305	2441219-56	1971 Sep 25 0130:00	Rocketsonde			Starute, Baseonde				KAU				59		
1971-H1306	2441220-19	1971 Sep 25 1640:00	Rocketsonde			Starute, Baseonde				THU				61		
1971-H1308	2441222-06	1971 Sep 27 1330:00	Rocketsonde			Starute, Baseonde				PM				65		
1971-H1309	2441222-21	1971 Sep 27 1658:59	Rocketsonde			Starute, Baseonde				WS				65		
1971-H1310	2441222-21	1971 Sep 27 1700:00	Rocketsonde			Starute, Baseonde				WI				62		
1971-H1311	2441222-38	1971 Sep 27 1914:59	Rocketsonde			Starute, Baseonde				KAU				61		
1971-H1312	2441222-38	1971 Sep 27 2100:00	Rocketsonde			Starute, Baseonde				KHR				60		
1971-H1313	2441222-60	1971 Sep 28 0217:00	Rocketsonde			Starute, Baseonde				PH				51		
1971-H1314	2441223-19	1971 Sep 28 1630:00	Rocketsonde			Met. Para, Baseonde				ASC				59		
1971-H1315	2441223-38	1971 Sep 28 2100:00	Rocketsonde			Starute, Baseonde				KAU				52		
1971-H1318	2441224-21	1971 Sep 29 1700:00	Rocketsonde			Starute, Baseonde				WS				59		
1971-H1319	2441224-24	1971 Sep 29 1749:59	Rocketsonde			Starute, Baseonde				PRIM				63		
1971-H1320	2441224-32	1971 Sep 29 1940:00	Rocketsonde			Starute, Baseonde				WI				58		

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Mission	FlightCode	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee_Km	Range_Km	Dest
1971-H1321	2441224-38	1971 Sep 29 21:00:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	KAU	-	-	-	61	-	-
1971-H1322	2441224-56	1971 Sep 30 03:30:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	KHR	-	-	-	61	-	-
1971-H84	2441225-17	1971 Sep 30 16:02:59	Rocketsonde	-	-	Met. Para.	-	-	-	PH	-	-	-	46	-	-
1971-H1323	2441225-35	1971 Sep 30 20:25:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	WS	-	-	-	60	-	-
1971-H1324	2441225-39	1971 Sep 30 21:14:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	KAU	-	-	-	61	-	-
1971-H1325	2441226-08	1971 Oct 1 14:00:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	ASC	-	-	-	61	-	-
1971-H1327	2441226-13	1971 Oct 1 15:04:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PH	-	-	-	59	-	-
1971-H1328	2441226-21	1971 Oct 1 17:00:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	WS	-	-	-	56	-	-
1971-H1329	2441226-23	1971 Oct 1 17:31:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PR1H	-	-	-	70	-	-
1971-H1330	2441226-43	1971 Oct 1 22:14:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	KAU	-	-	-	61	-	-
1971-H1331	2441229-06	1971 Oct 4 13:30:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	CC	LC43	-	-	62	-	-
1971-H1332	2441229-08	1971 Oct 4 14:00:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	ASC	-	-	-	61	-	-
1971-H1334	2441229-16	1971 Oct 4 15:56:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PH	-	-	-	59	-	-
1971-H1335	2441229-21	1971 Oct 4 17:03:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	WS	-	-	-	64	-	-
1971-H1336	2441229-23	1971 Oct 4 17:30:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PR1H	-	-	-	66	-	-
1971-H1337	2441229-30	1971 Oct 4 19:18:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	VI	-	-	-	61	-	-
1971-H1338	2441229-38	1971 Oct 4 21:00:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	KAU	-	-	-	59	-	-
1971-H1339	2441230-38	1971 Oct 5 21:00:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	KAU	-	-	-	59	-	-
1971-H300	2441230-96	1971 Oct 6 11:00:00	Rocketsonde	-	-	Met. Sphere	-	-	-	ASC	-	-	-	85	-	-
1971-H1341	2441231-08	1971 Oct 6 14:00:00	Rocketsonde	-	-	Met. Para. Arcasonde	-	-	-	ASC	-	-	-	57	-	-
1971-H1342	2441231-08	1971 Oct 6 14:00:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	ASC	-	-	-	60	-	-
1971-H1344	2441231-21	1971 Oct 6 17:03:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	WS	-	-	-	63	-	-
1971-H1346	2441231-23	1971 Oct 6 17:30:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PR1H	-	-	-	69	-	-
1971-H1348	2441231-35	1971 Oct 6 20:27:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	KAU	-	-	-	54	-	-
1971-H1347	2441231-41	1971 Oct 6 21:56:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PH	-	-	-	58	-	-
1971-H1348	2441231-56	1971 Oct 7 01:30:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	KHR	-	-	-	56	-	-
1971-H1350	2441232-13	1971 Oct 7 15:13:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	VI	-	-	-	59	-	-
1971-H1351	2441232-15	1971 Oct 7 15:29:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	WS	-	-	-	60	-	-
1971-H1352	2441232-21	1971 Oct 7 17:00:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	VI	-	-	-	61	-	-
1971-H1353	2441232-22	1971 Oct 7 17:19:00	Rocketsonde	-	-	Starute	-	-	-	VI	-	-	-	62	-	-
1971-H1354	2441232-25	1971 Oct 7 18:07:00	Rocketsonde	-	-	Starute	-	-	-	VI	-	-	-	66	-	-
1971-H1355	2441232-26	1971 Oct 7 18:18:00	Rocketsonde	-	-	Starute	-	-	-	PH	-	-	-	49	-	-
1971-H86	2441232-27	1971 Oct 7 18:32:00	Rocketsonde	-	-	Met. Para.	-	-	-	VI	-	-	-	67	-	-
1971-H1356	2441232-30	1971 Oct 7 19:07:00	Rocketsonde	-	-	Starute	-	-	-	VI	-	-	-	67	-	-
1971-H1357	2441232-32	1971 Oct 7 19:54:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	VI	-	-	-	67	-	-
1971-H1358	2441232-35	1971 Oct 7 20:30:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	KAU	-	-	-	63	-	-
1971-H1359	2441233-07	1971 Oct 8 13:36:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	CC	LC43	-	-	56	-	-
1971-H1360	2441233-08	1971 Oct 8 15:00:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	ASC	-	-	-	62	-	-
1971-H1361	2441233-12	1971 Oct 8 15:00:00	Rocketsonde	-	-	Met. Para. SIS	-	-	-	WS	-	-	-	52	-	-
1971-H1363	2441233-54	1971 Oct 8 20:09:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	KHR	-	-	-	61	-	-
1971-H1364	2441233-56	1971 Oct 8 20:30:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	KAU	-	-	-	54	-	-
1971-H1365	2441237-21	1971 Oct 12 17:00:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	WS	-	-	-	60	-	-
1971-H1366	2441237-34	1971 Oct 12 20:03:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PH	-	-	-	59	-	-
1971-H1367	2441237-43	1971 Oct 12 22:14:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	VI	-	-	-	65	-	-
1971-H1368	2441238-06	1971 Oct 13 14:56:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	KAU	-	-	-	89	-	-
1971-H1369	2441238-08	1971 Oct 13 15:46:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	ASC	-	-	-	61	-	-
1971-H1370	2441238-11	1971 Oct 13 17:04:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	WS	-	-	-	62	-	-
1971-H1372	2441238-21	1971 Oct 13 17:47:00	Rocketsonde	-	-	Met. Para. Arcasonde	-	-	-	ANT	-	-	-	56	-	-
1971-H1373	2441238-24	1971 Oct 13 17:47:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PR1H	-	-	-	67	-	-
1971-H1375	2441238-25	1971 Oct 13 19:04:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	VI	-	-	-	57	-	-
1971-H1376	2441238-26	1971 Oct 13 19:54:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	VI	-	-	-	57	-	-
1971-H1377	2441238-27	1971 Oct 13 20:34:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PH	-	-	-	56	-	-
1971-H1378	2441238-37	1971 Oct 13 20:54:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PM	-	-	-	59	-	-
1971-H1379	2441238-37	1971 Oct 13 20:54:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	KAU	-	-	-	58	-	-
1971-H1380	2441238-56	1971 Oct 14 01:30:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	KHR	-	-	-	58	-	-
1971-H1382	2441239-38	1971 Oct 14 21:00:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	CC	LC43	-	-	64	-	-
1971-H1383	2441239-44	1971 Oct 14 23:27:59	Rocketsonde	-	-	Starute	-	-	-	CC	LC43	-	-	65	-	-
1971-H1384	2441239-54	1971 Oct 15 00:24:59	Rocketsonde	-	-	Met. Para. Arcasonde	-	-	-	ASC	-	-	-	64	-	-
1971-H1385	2441240-08	1971 Oct 15 14:00:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	ANT	-	-	-	61	-	-
1971-H1386	2441240-08	1971 Oct 15 14:00:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	VI	-	-	-	61	-	-
1971-H1387	2441240-10	1971 Oct 15 14:26:59	Rocketsonde	-	-	Met. Para. Arcasonde	-	-	-	VI	-	-	-	64	-	-
1971-H1389	2441240-27	1971 Oct 15 18:30:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	KHR	-	-	-	56	-	-
1971-H1390	2441240-58	1971 Oct 16 09:00:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	CC	LC43	-	-	60	-	-
1971-H1391	2441243-06	1971 Oct 18 13:30:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	CC	LC43	-	-	57	-	-
1971-H1392	2441243-06	1971 Oct 18 13:30:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	ASC	-	-	-	60	-	-
1971-H1394	2441243-27	1971 Oct 18 18:22:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PH	-	-	-	57	-	-
1971-H1395	2441243-38	1971 Oct 18 21:02:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	KAU	-	-	-	61	-	-
1971-H1396	2441243-57	1971 Oct 19 01:41:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	KHR	-	-	-	61	-	-
1971-H87	2441244-13	1971 Oct 19 15:00:59	Rocketsonde	-	-	-	-	-	-	VI	-	-	-	43	-	-
1971-H1397	2441244-17	1971 Oct 19 15:58:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PM	-	-	-	59	-	-
1971-H1398	2441244-38	1971 Oct 19 21:00:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	KAU	-	-	-	62	-	-
1971-Y318	2441244-93	1971 Oct 20 10:14:59	Rocketsonde	-	-	Met. Sphere	-	-	-	ASC	-	-	-	85	-	-
1971-H1399	2441245-06	1971 Oct 20 13:30:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	ASC	-	-	-	57	-	-
1971-H1400	2441245-08	1971 Oct 20 14:00:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	CC	LC43	-	-	66	-	-
1971-H1403	2441245-23	1971 Oct 20 17:30:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PR1H	-	-	-	58	-	-
1971-H1404	2441245-32	1971 Oct 20 19:44:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PH	-	-	-	66	-	-
1971-H1405	2441245-34	1971 Oct 20 20:06:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	WS	-	-	-	57	-	-
1971-H1406	2441245-40	1971 Oct 20 21:30:00	Rocketsonde	-	-	Met. Para. Arcasonde	-	-	-	KAU	-	-	-	60	-	-
1971-H1407	2441245-56	1971 Oct 21 01:30:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	KHR	-	-	-	60	-	-
1971-H1408	2441246-17	1971 Oct 21 15:59:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PH	-	-	-	58	-	-
1971-H1409	2441246-38	1971 Oct 21 21:06:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	KAU	-	-	-	54	-	-
1971-H1410	2441247-08	1971 Oct 22 14:00:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	ASC	-	-	-	59	-	-
1971-H1411	2441247-09	1971 Oct 22 14:15:00	Rocketsonde	-	-	Met. Para. Arcasonde	-	-	-	ANT	-	-	-	64	-	-
1971-H1413	2441247-23	1971 Oct 22 17:30:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PR1H	-	-	-	64	-	-
1971-H1414	2441247-23	1971 Oct 22 17:31:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PH	-	-	-	59	-	-
1971-H1415	2441247-40	1971 Oct 22 21:32:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	KAU	-	-	-	58	-	-

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Mission	FlightCode	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee km	Range km	Dest
1971-11416	2441247.42	1971 Oct 22 22:03:59	Rocketsonde			Met. Para, Arcasonde				WS				55		
1971-11417	2441247.56	1971 Oct 23 03:00:00	Rocketsonde			Starute, Datasonde				RHR				61		
1971-11419	2441251.17	1971 Oct 26 16:07:00	Rocketsonde			Starute, Datasonde				WS				61		
1971-11420	2441251.30	1971 Oct 26 19:21:59	Rocketsonde			Starute, Datasonde				WS				65		
1971-11421	2441251.31	1971 Oct 26 19:26:59	Rocketsonde			Starute, Datasonde				WI				65		
1971-11422	2441251.38	1971 Oct 26 21:01:59	Rocketsonde			Starute, Datasonde				KAU				54		
1971-11423	2441252.06	1971 Oct 27 13:00:00	Rocketsonde			Starute, Datasonde				CC	LC43			54		
1971-11424	2441252.07	1971 Oct 27 13:44:59	Rocketsonde			Met. Para, Arcasonde				AIT				58		
1971-11425	2441252.08	1971 Oct 27 14:00:00	Rocketsonde			Starute, Datasonde				CC	LC43			62		
1971-11426	2441252.09	1971 Oct 27 14:15:00	Rocketsonde			Starute, Datasonde				CC				57		
1971-11429	2441252.17	1971 Oct 27 16:04:59	Rocketsonde			Starute, Datasonde				PH				58		
1971-11430	2441252.21	1971 Oct 27 16:29:00	Rocketsonde			Met. Para, Arcasonde				WI				60		
1971-11432	2441252.22	1971 Oct 27 17:15:00	Rocketsonde			Starute, Datasonde				WS				61		
1971-11433	2441252.38	1971 Oct 27 21:00:00	Rocketsonde			Starute, Datasonde				KAU				61		
1971-11434	2441252.57	1971 Oct 28 04:42:59	Rocketsonde			Starute, Datasonde				RHR				61		
1971-1325	2441252.85	1971 Oct 28 08:26:00	Rocketsonde			Met. Sphere				KAU				86		
1971-11435	2441253.21	1971 Oct 28 16:57:59	Rocketsonde			Starute, Datasonde				PH				61		
1971-11436	2441253.38	1971 Oct 28 21:00:00	Rocketsonde			Starute, Datasonde				KAU				61		
1971-11437	2441254.06	1971 Oct 29 13:00:00	Rocketsonde			Starute, Datasonde				CC	LC43			48		
1971-11439	2441254.08	1971 Oct 29 14:00:00	Rocketsonde			Starute, Datasonde				ASC				61		
1971-11440	2441254.21	1971 Oct 29 17:02:00	Rocketsonde			Starute, Datasonde				WI				59		
1971-11441	2441254.23	1971 Oct 29 17:32:00	Rocketsonde			Met. Para, Arcasonde				PRUH				61		
1971-11442	2441254.26	1971 Oct 29 18:14:59	Rocketsonde			Starute, Datasonde				WS				67		
1971-11443	2441254.28	1971 Oct 29 18:45:00	Rocketsonde			Starute, Datasonde				PH				59		
1971-11444	2441257.08	1971 Nov 1 14:00:00	Rocketsonde			Starute, Datasonde				ASC				62		
1971-11445	2441257.12	1971 Nov 1 16:19:59	Rocketsonde			Starute, Datasonde				SHER				61		
1971-11446	2441257.29	1971 Nov 1 16:59:00	Rocketsonde			Starute, Datasonde				CC	LC43			57		
1971-11447	2441257.38	1971 Nov 1 21:06:00	Rocketsonde			Starute, Datasonde				WI				60		
1971-1326	2441258.96	1971 Nov 3 10:54:59	Rocketsonde			Met. Sphere				PH				62		
1971-11452	2441259.06	1971 Nov 3 14:00:00	Rocketsonde			Starute, Datasonde				ASC				86		
1971-11453	2441259.10	1971 Nov 3 14:30:00	Rocketsonde			Starute, Datasonde				ASC				61		
1971-11455	2441259.19	1971 Nov 3 16:50:00	Rocketsonde			Met. Sphere				CC	LC43			60		
1971-11456	2441259.22	1971 Nov 3 17:20:00	Rocketsonde			Met. Sphere				CC	LC43			85		
1971-11457	2441259.25	1971 Nov 3 18:00:00	Rocketsonde			Met. Sphere				AIT				55		
1971-11458	2441259.29	1971 Nov 3 18:59:59	Rocketsonde			Starute, Datasonde				WS				60		
1971-11461	2441260.15	1971 Nov 4 15:02:59	Rocketsonde			Starute, Datasonde				WI				62		
1971-11462	2441260.18	1971 Nov 4 15:53:00	Rocketsonde			Starute, Datasonde				SHER				63		
1971-11464	2441260.24	1971 Nov 4 17:40:00	Rocketsonde			Starute, Datasonde				CC	LC43			62		
1971-11465	2441260.26	1971 Nov 4 18:36:59	Rocketsonde			Starute, Datasonde				PH				59		
1971-11466	2441261.10	1971 Nov 5 16:30:00	Rocketsonde			Starute, Datasonde				SHER				62		
1971-11467	2441261.12	1971 Nov 5 18:00:00	Rocketsonde			Starute, Datasonde				SHER				39		
1971-11468	2441261.18	1971 Nov 5 18:50:00	Rocketsonde			Starute, Datasonde				WI				60		
1971-11469	2441261.23	1971 Nov 5 19:14:59	Rocketsonde			Starute, Datasonde				PRUH				59		
1971-11470	2441261.31	1971 Nov 5 19:30:00	Rocketsonde			Starute, Datasonde				WI				59		
1971-11471	2441264.06	1971 Nov 8 14:00:00	Rocketsonde			Starute, Datasonde				PRUH				61		
1971-11472	2441264.12	1971 Nov 8 14:30:00	Rocketsonde			Starute, Datasonde				ASC	LC43			63		
1971-11473	2441264.23	1971 Nov 8 17:30:00	Rocketsonde			Starute, Datasonde				SHER				66		
1971-11475	2441264.25	1971 Nov 8 17:50:00	Rocketsonde			Starute, Datasonde				PRUH				61		
1971-11476	2441264.29	1971 Nov 8 18:50:59	Rocketsonde			Starute, Datasonde				ASC				65		
1971-11477	2441264.31	1971 Nov 8 19:27:59	Rocketsonde			Starute, Datasonde				WS				59		
1971-11478	2441264.33	1971 Nov 8 20:00:00	Rocketsonde			Starute, Datasonde				WI				59		
1971-11479	2441264.38	1971 Nov 8 21:00:00	Rocketsonde			Starute, Datasonde				KAU				60		
1971-11480	2441266.12	1971 Nov 9 13:07:00	Rocketsonde			Met. Para, Arcasonde				WS				60		
1971-11481	2441266.15	1971 Nov 9 16:09:59	Rocketsonde			Met. Sphere				PH				90		
1971-11482	2441266.17	1971 Nov 9 16:30:00	Rocketsonde			Met. Sphere				WS				59		
1971-11483	2441266.30	1971 Nov 9 20:19:00	Rocketsonde			Met. Para, Arcasonde				PH				61		
1971-11484	2441266.35	1971 Nov 10 14:30:00	Rocketsonde			Starute, Datasonde				PH				61		
1971-11485	2441266.12	1971 Nov 10 15:00:00	Rocketsonde			Starute, Datasonde				CC	LC43			60		
1971-11486	2441266.14	1971 Nov 10 15:00:00	Rocketsonde			Starute, Datasonde				ASC				59		
1971-11487	2441266.24	1971 Nov 10 17:49:00	Rocketsonde			Met. Para, Arcasonde				WI				61		
1971-11488	2441266.26	1971 Nov 10 18:14:59	Rocketsonde			Starute, Datasonde				PRUH				63		
1971-11489	2441266.35	1971 Nov 10 20:30:00	Rocketsonde			Starute, Datasonde				THU				64		
1971-11490	2441266.42	1971 Nov 10 20:59:59	Rocketsonde			Starute, Datasonde				WS				57		
1971-11491	2441267.38	1971 Nov 11 21:00:00	Rocketsonde			Starute, Datasonde				KAU				63		
1971-11492	2441267.48	1971 Nov 11 23:30:00	Rocketsonde			Met. Sphere				WS				39		
1971-11493	2441268.08	1971 Nov 12 14:00:00	Rocketsonde			Starute, Datasonde				ASC				60		
1971-11494	2441268.13	1971 Nov 12 15:10:00	Rocketsonde			Starute, Datasonde				SHER				64		
1971-11495	2441268.15	1971 Nov 12 15:30:00	Rocketsonde			Met. Para, Arcasonde				THU				67		
1971-11496	2441268.23	1971 Nov 12 17:30:00	Rocketsonde			Starute, Datasonde				ASC				57		
1971-11497	2441268.27	1971 Nov 12 18:30:00	Rocketsonde			Starute, Datasonde				PRUH				57		
1971-11498	2441268.29	1971 Nov 12 18:59:59	Rocketsonde			Met. Para, Arcasonde				THU				63		
1971-11499	2441271.11	1971 Nov 15 14:40:00	Rocketsonde			Starute, Datasonde				WS				64		
1971-11501	2441271.19	1971 Nov 15 14:40:00	Rocketsonde			Met. Sphere				WS				65		
1971-11502	2441271.25	1971 Nov 15 18:00:00	Rocketsonde			Met. Para				WS				63		
1971-11503	2441271.25	1971 Nov 15 18:00:59	Rocketsonde			Density gauge				CC	LC43			55		
1971-11504	2441271.28	1971 Nov 15 18:40:00	Rocketsonde			Starute, Datasonde				CC				65		
1971-11505	2441271.34	1971 Nov 15 18:59:59	Rocketsonde			Starute, Datasonde				WS				57		
1971-11506	2441271.42	1971 Nov 15 20:08:00	Rocketsonde			Starute, Datasonde				WI				61		
1971-11507	2441271.44	1971 Nov 15 20:08:00	Rocketsonde			Met. Sphere				KAU				95		
1971-11509	2441272.20	1971 Nov 16 14:30:00	Rocketsonde			Starute, Datasonde				CC	LC43			62		
1971-11510	2441272.31	1971 Nov 16 19:19:59	Rocketsonde			Starute, Datasonde				CC	LC43			62		
1971-11511	2441272.38	1971 Nov 16 21:00:00	Rocketsonde			Starute, Datasonde				PH				61		
1971-11512	2441272.92	1971 Nov 17 09:59:59	Rocketsonde			Met. Sphere				ASC				91		
1971-11513	2441273.08	1971 Nov 17 14:00:00	Rocketsonde			Starute, Datasonde				ASC				62		

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Mission	FlightCode	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee km	Range km	Dest
1971-A898	2441273-11	1971 Nov 17 1441:00	Rocketsonde	-	-	Met. Para, Arcasonde	-	-	-	CC	LC43	-	-	44	-	-
1971-M1514	2441273-12	1971 Nov 17 1500:00	Rocketsonde	-	-	Met. Para, AM/DHQ-9	-	-	-	THU	-	-	-	62	-	-
1971-M1515	2441273-13	1971 Nov 17 1500:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	SHER	-	-	-	59	-	-
1971-M1517	2441273-21	1971 Nov 17 1700:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	WS	-	-	-	66	-	-
1971-A899	2441273-25	1971 Nov 17 1800:00	Rocketsonde	-	-	Met. Para, Arcasonde	-	-	-	CC	LC43	-	-	46	-	-
1971-M1518	2441273-35	1971 Nov 17 2028:59	Rocketsonde	-	-	Met. Para, Arcasonde	-	-	-	WI	-	-	-	56	-	-
1971-M1519	2441273-36	1971 Nov 17 2038:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PH	-	-	-	59	-	-
1971-M1520	2441273-38	1971 Nov 17 2100:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	KAU	-	-	-	60	-	-
1971-A1100	2441274-17	1971 Nov 18 1603:59	Rocketsonde	-	-	Met. Para, Arcasonde	-	-	-	CC	LC43	-	-	36	-	-
1971-1342	2441274-20	1971 Nov 18 1654:59	Rocketsonde	-	-	Met. Sphere	-	-	-	CC	LC43	-	-	84	-	-
1971-M1522	2441274-23	1971 Nov 18 1730:00	Rocketsonde	-	-	Met. Para	-	-	-	WS	-	-	-	67	-	-
1971-M1524	2441274-25	1971 Nov 18 1738:00	Rocketsonde	-	-	Met. Para	-	-	-	PH	-	-	-	61	-	-
1971-M1524	2441274-25	1971 Nov 18 1804:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	WS	-	-	-	63	-	-
1971-M1526	2441274-34	1971 Nov 18 2010:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	KAU	-	-	-	58	-	-
1971-M1526	2441274-34	1971 Nov 18 2010:00	Rocketsonde	-	-	Met. Para, AM/DHQ-9	-	-	-	ASC	-	-	-	58	-	-
1971-M1527	2441275-08	1971 Nov 19 1400:00	Rocketsonde	-	-	Met. Para, Arcasonde	-	-	-	THU	-	-	-	70	-	-
1971-M1528	2441275-10	1971 Nov 19 1430:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	CC	LC43	-	-	51	-	-
1971-M1529	2441275-11	1971 Nov 19 1500:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	SHER	-	-	-	64	-	-
1971-M1530	2441275-12	1971 Nov 19 1500:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	VI	-	-	-	53	-	-
1971-M1532	2441275-12	1971 Nov 19 2100:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	KAU	-	-	-	63	-	-
1971-M1533	2441275-36	1971 Nov 19 2300:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	WS	-	-	-	50	-	-
1971-M1534	2441276-46	1971 Nov 19 2300:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	ASC	-	-	-	59	-	-
1971-M1536	2441276-09	1971 Nov 22 1400:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	SHER	-	-	-	63	-	-
1971-M1537	2441276-17	1971 Nov 22 1659:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PH	-	-	-	60	-	-
1971-M1538	2441276-32	1971 Nov 22 1602:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	VI	-	-	-	62	-	-
1971-M1539	2441276-32	1971 Nov 22 1946:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	WS	-	-	-	59	-	-
1971-M1540	2441276-42	1971 Nov 22 2100:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	KAU	-	-	-	60	-	-
1971-M1541	2441276-42	1971 Nov 22 2159:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PH	-	-	-	60	-	-
1971-M1542	2441279-16	1971 Nov 23 1556:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	ASC	-	-	-	61	-	-
1971-M1544	2441280-06	1971 Nov 24 1400:00	Rocketsonde	-	-	Met. Para, Arcasonde	-	-	-	THU	-	-	-	63	-	-
1971-M1544	2441280-12	1971 Nov 24 1500:00	Rocketsonde	-	-	Met. Para, AM/DHQ-9	-	-	-	SHER	-	-	-	64	-	-
1971-M1546	2441280-12	1971 Nov 24 1500:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	WI	-	-	-	54	-	-
1971-M1547	2441280-15	1971 Nov 24 1507:00	Rocketsonde	-	-	Met. Para, Arcasonde	-	-	-	MIT	-	-	-	56	-	-
1971-M1549	2441280-22	1971 Nov 24 1652:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PH	-	-	-	61	-	-
1971-M1549	2441280-31	1971 Nov 24 1930:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	WS	-	-	-	56	-	-
1971-M1550	2441280-34	1971 Nov 24 2004:59	Rocketsonde	-	-	Met. Sphere	-	-	-	WS	-	-	-	56	-	-
1971-M1551	2441280-37	1971 Nov 24 2058:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	WS	-	-	-	63	-	-
1971-M1552	2441280-46	1971 Nov 24 2300:00	Rocketsonde	-	-	Met. Sphere	-	-	-	CC	LC43	-	-	63	-	-
1971-M1554	2441282-06	1971 Nov 26 1400:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	ASC	-	-	-	60	-	-
1971-M1556	2441282-06	1971 Nov 26 1400:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	CC	LC43	-	-	61	-	-
1971-M1557	2441282-12	1971 Nov 26 1452:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	THU	-	-	-	58	-	-
1971-M1559	2441282-12	1971 Nov 26 1800:00	Rocketsonde	-	-	Met. Para, AM/DHQ-9	-	-	-	SHER	-	-	-	59	-	-
1971-M1560	2441282-29	1971 Nov 26 1650:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PH	-	-	-	65	-	-
1971-M1561	2441282-29	1971 Nov 26 1650:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	ASC	-	-	-	62	-	-
1971-M1562	2441282-12	1971 Nov 29 1400:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	SHER	-	-	-	61	-	-
1971-M1563	2441282-14	1971 Nov 29 1328:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	ASC	-	-	-	63	-	-
1971-M1565	2441285-22	1971 Nov 29 1328:00	Rocketsonde	-	-	Met. Para, Arcasonde	-	-	-	PH	-	-	-	63	-	-
1971-M1566	2441285-25	1971 Nov 29 1307:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	WS	-	-	-	60	-	-
1971-M1567	2441285-31	1971 Nov 29 1307:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	CC	LC43	-	-	63	-	-
1971-M1568	2441285-36	1971 Nov 29 2300:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	KAU	-	-	-	60	-	-
1971-M1569	2441285-46	1971 Nov 29 2313:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PH	-	-	-	60	-	-
1971-M1571	2441286-10	1971 Nov 30 1630:00	Rocketsonde	-	-	Met. Para, Arcasonde	-	-	-	WS	-	-	-	74	-	-
1971-Y348	2441286-20	1971 Nov 30 1649:59	Rocketsonde	-	-	Met. Para, SIS	-	-	-	PH	-	-	-	50	-	-
1971-M1572	2441286-26	1971 Nov 30 1715:00	Rocketsonde	-	-	Met. Sphere	-	-	-	PH	-	-	-	65	-	-
1971-M1573	2441286-26	1971 Nov 30 1945:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	WS	-	-	-	65	-	-
1971-M1574	2441286-38	1971 Nov 30 2100:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	WS	-	-	-	65	-	-
1971-Y351	2441286-90	1971 Dec 1 0959:59	Rocketsonde	-	-	Met. Sphere	-	-	-	KAU	-	-	-	61	-	-
1971-M1576	2441287-08	1971 Dec 1 1400:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	ASC	-	-	-	59	-	-
1971-M1576	2441287-11	1971 Dec 1 1437:00	Rocketsonde	-	-	Met. Sphere	-	-	-	ASC	-	-	-	66	-	-
1971-M1577	2441287-12	1971 Dec 1 1437:00	Rocketsonde	-	-	Met. Para, AM/DHQ-9	-	-	-	THU	-	-	-	46	-	-
1971-M1578	2441287-14	1971 Dec 1 1500:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	VI	-	-	-	60	-	-
1971-A1102	2441287-14	1971 Dec 1 1526:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	MIT	-	-	-	49	-	-
1971-Y353	2441287-23	1971 Dec 1 1730:00	Rocketsonde	-	-	Met. Para, Arcasonde	-	-	-	CC	LC43	-	-	85	-	-
1971-A1103	2441287-27	1971 Dec 1 1830:00	Rocketsonde	-	-	Met. Para, Arcasonde	-	-	-	CC	LC43	-	-	48	-	-
1971-M1580	2441287-33	1971 Dec 1 2000:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	WS	-	-	-	65	-	-
1971-M1581	2441287-38	1971 Dec 1 2100:00	Rocketsonde	-	-	Met. Sphere	-	-	-	WS	-	-	-	70	-	-
1971-M1582	2441287-38	1971 Dec 1 2102:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PH	-	-	-	54	-	-
1971-M1583	2441287-40	1971 Dec 1 2143:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	KAU	-	-	-	59	-	-
1971-M1585	2441288-23	1971 Dec 2 1730:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	WS	-	-	-	65	-	-
1971-M1586	2441288-38	1971 Dec 2 2100:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	KAU	-	-	-	59	-	-
1971-A1104	2441289-12	1971 Dec 3 1500:00	Rocketsonde	-	-	Met. Para, AM/DHQ-9	-	-	-	THU	-	-	-	45	-	-
1971-M1587	2441289-12	1971 Dec 3 1500:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	SHER	-	-	-	57	-	-
1971-M1588	2441289-13	1971 Dec 3 1506:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	VI	-	-	-	59	-	-
1971-M1590	2441289-22	1971 Dec 3 1723:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PH	-	-	-	62	-	-
1971-M1591	2441289-38	1971 Dec 3 2100:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	KAU	-	-	-	58	-	-
1971-M1592	2441289-39	1971 Dec 3 2114:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	WS	-	-	-	62	-	-
1971-M1593	2441289-42	1971 Dec 6 1500:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	SHER	-	-	-	60	-	-
1971-M1595	2441289-21	1971 Dec 6 1658:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PH	-	-	-	56	-	-
1971-M1596	2441289-30	1971 Dec 6 1914:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	CC	LC43	-	-	59	-	-
1971-M1597	2441289-35	1971 Dec 7 1930:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	WS	-	-	-	65	-	-
1971-A1107	2441283-38	1971 Dec 7 2100:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	KAU	-	-	-	45	-	-
1971-M1599	2441284-08	1971 Dec 8 1400:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	ASC	-	-	-	60	-	-
1971-A11600	2441294-08	1971 Dec 8 1400:00	Rocketsonde	-	-	Met. Para, Arcasonde	-	-	-	CC	LC43	-	-	58	-	-
1971-A11601	2441294-10	1971 Dec 8 1430:00	Rocketsonde	-	-	Met. Para, Arcasonde	-	-	-	CC	LC43	-	-	50	-	-

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Mission	FlightCode	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee km	Range km	Dest
1971-M1602	2441294.12	1971 Dec 8 1500:00	Rocketsonde	-	-	Starvue, Dataonide	-	-	-	SHER	-	-	-	60	-	-
1971-M1604	2441294.23	1971 Dec 8 1730:00	Rocketsonde	-	-	Starvue, Dataonide	-	-	-	GRUC	-	-	-	57	-	-
1971-M1605	2441294.23	1971 Dec 8 1730:00	Rocketsonde	-	-	Starvue, Dataonide	-	-	-	WS	-	-	-	63	-	-
1971-M1606	2441294.33	1971 Dec 8 2002:00	Rocketsonde	-	-	Starvue, Dataonide	-	-	-	WI	-	-	-	58	-	-
1971-M1608	2441294.40	1971 Dec 8 2141:00	Rocketsonde	-	-	Starvue, Dataonide	-	-	-	PH	-	-	-	58	-	-
1971-M1609	2441295.12	1971 Dec 9 1500:00	Rocketsonde	-	-	Chaff	-	-	-	WS	-	-	-	78	-	-
1971-M1610	2441295.19	1971 Dec 9 1630:00	Rocketsonde	-	-	Starvue, Dataonide	-	-	-	WS	-	-	-	55	-	-
1971-M1611	2441295.21	1971 Dec 9 1703:00	Rocketsonde	-	-	Starvue, Dataonide	-	-	-	PH	-	-	-	59	-	-
1971-M1613	2441296.08	1971 Dec 10 1400:00	Rocketsonde	-	-	Starvue, Dataonide	-	-	-	ASC	-	-	-	61	-	-
1971-M1615	2441296.11	1971 Dec 10 1448:00	Rocketsonde	-	-	Starvue, Dataonide	-	-	-	CC	LC43	-	-	60	-	-
1971-M1617	2441296.12	1971 Dec 10 1500:00	Rocketsonde	-	-	Starvue, Dataonide	-	-	-	ASC	-	-	-	63	-	-
1971-M1618	2441296.13	1971 Dec 10 1501:59	Rocketsonde	-	-	Starvue, Dataonide	-	-	-	WI	-	-	-	56	-	-
1971-M1620	2441296.17	1971 Dec 10 1609:59	Rocketsonde	-	-	Starvue, Dataonide	-	-	-	WS	-	-	-	59	-	-
1971-M1621	2441296.18	1971 Dec 10 1622:59	Rocketsonde	-	-	Starvue, Dataonide	-	-	-	PH	-	-	-	61	-	-
1971-M1624	2441299.08	1971 Dec 13 1400:00	Rocketsonde	-	-	Starvue, Dataonide	-	-	-	ASC	-	-	-	61	-	-
1971-M1625	2441299.12	1971 Dec 13 1500:00	Rocketsonde	-	-	Starvue, Dataonide	-	-	-	SHER	-	-	-	64	-	-
1971-M109	2441299.16	1971 Dec 13 1548:00	Rocketsonde	-	-	Met. Para, Arcasonde	-	-	-	PH	LC43	-	-	48	-	-
1971-M1627	2441299.21	1971 Dec 13 1658:59	Rocketsonde	-	-	Starvue, Dataonide	-	-	-	PH	-	-	-	60	-	-
1971-M1628	2441299.24	1971 Dec 13 1742:00	Rocketsonde	-	-	Starvue, Dataonide	-	-	-	WS	-	-	-	64	-	-
1971-M1629	2441299.27	1971 Dec 13 1858:59	Rocketsonde	-	-	Starvue, Dataonide	-	-	-	WS	-	-	-	58	-	-
1971-M1630	2441299.33	1971 Dec 13 1956:59	Rocketsonde	-	-	Starvue, Dataonide	-	-	-	WI	-	-	-	57	-	-
1971-M1631	2441300.27	1971 Dec 14 1634:59	Rocketsonde	-	-	Starvue, Dataonide	-	-	-	WS	-	-	-	63	-	-
1971-M1632	2441300.44	1971 Dec 14 2200:59	Rocketsonde	-	-	Met. Para	-	-	-	PH	-	-	-	63	-	-
1971-M1633	2441300.44	1971 Dec 14 2200:59	Rocketsonde	-	-	Met. Sphere	-	-	-	KAU	-	-	-	58	-	-
1971-M1634	2441300.56	1971 Dec 15 1104:59	Rocketsonde	-	-	Starvue, Dataonide	-	-	-	ASC	-	-	-	92	-	-
1971-M1635	2441301.08	1971 Dec 15 1400:00	Rocketsonde	-	-	Starvue, Dataonide	-	-	-	ASC	LC43	-	-	59	-	-
1971-M1636	2441301.14	1971 Dec 15 1524:59	Rocketsonde	-	-	Starvue, Dataonide	-	-	-	CC	-	-	-	62	-	-
1971-M1638	2441301.19	1971 Dec 15 1653:59	Rocketsonde	-	-	Met. Para	-	-	-	SHER	-	-	-	64	-	-
1971-M1639	2441301.21	1971 Dec 15 1700:00	Rocketsonde	-	-	Starvue, Dataonide	-	-	-	PH	LC43	-	-	60	-	-
1971-M1640	2441301.25	1971 Dec 15 1700:00	Rocketsonde	-	-	Starvue, Dataonide	-	-	-	GRUC	-	-	-	64	-	-
1971-M1641	2441301.27	1971 Dec 15 1830:00	Rocketsonde	-	-	Starvue, Dataonide	-	-	-	WS	-	-	-	60	-	-
1971-M1642	2441302.11	1971 Dec 16 1441:00	Rocketsonde	-	-	Met. Sphere	-	-	-	WS	LC43	-	-	88	-	-
1971-M1643	2441302.17	1971 Dec 16 1608:59	Rocketsonde	-	-	Starvue, Dataonide	-	-	-	CC	LC43	-	-	86	-	-
1971-M1646	2441302.32	1971 Dec 16 1609:59	Rocketsonde	-	-	Starvue, Dataonide	-	-	-	KAU	LC43	-	-	59	-	-
1971-M110	2441302.32	1971 Dec 16 1609:59	Rocketsonde	-	-	Starvue, Dataonide	-	-	-	CC	LC43	-	-	78	-	-
1971-M1647	2441302.43	1971 Dec 17 2218:59	Rocketsonde	-	-	Met. Sphere	-	-	-	SHER	-	-	-	57	-	-
1971-M1648	2441303.06	1971 Dec 17 1416:00	Rocketsonde	-	-	Starvue, Dataonide	-	-	-	WS	-	-	-	44	-	-
1971-M1649	2441303.14	1971 Dec 17 1618:59	Rocketsonde	-	-	Starvue, Dataonide	-	-	-	KAU	-	-	-	58	-	-
1971-M1651	2441303.18	1971 Dec 17 1840:00	Rocketsonde	-	-	Starvue, Dataonide	-	-	-	PH	-	-	-	86	-	-
1971-M1652	2441303.19	1971 Dec 17 2301:00	Rocketsonde	-	-	Starvue, Dataonide	-	-	-	ASC	-	-	-	58	-	-
1971-M1653	2441306.47	1971 Dec 20 1430:00	Rocketsonde	-	-	Starvue, Dataonide	-	-	-	PH	-	-	-	61	-	-
1971-M1654	2441306.47	1971 Dec 20 1430:00	Rocketsonde	-	-	Starvue, Dataonide	-	-	-	ASC	-	-	-	58	-	-
1971-M1655	2441308.12	1971 Dec 20 1646:59	Rocketsonde	-	-	Starvue, Dataonide	-	-	-	PH	-	-	-	59	-	-
1971-M1657	2441308.20	1971 Dec 20 1646:59	Rocketsonde	-	-	Starvue, Dataonide	-	-	-	PH	-	-	-	57	-	-
1971-M1658	2441308.28	1971 Dec 20 2109:59	Rocketsonde	-	-	Starvue, Dataonide	-	-	-	KAU	-	-	-	56	-	-
1971-M1681	2441307.39	1971 Dec 21 1629:00	Rocketsonde	-	-	Starvue, Dataonide	-	-	-	PH	-	-	-	60	-	-
1971-M1682	2441308.10	1971 Dec 21 2058:00	Rocketsonde	-	-	Starvue, Dataonide	-	-	-	KAU	-	-	-	56	-	-
1971-M1684	2441308.12	1971 Dec 22 1430:00	Rocketsonde	-	-	Starvue, Dataonide	-	-	-	CC	LC43	-	-	61	-	-
1971-M1685	2441308.12	1971 Dec 22 1500:00	Rocketsonde	-	-	Starvue, Dataonide	-	-	-	SHER	-	-	-	59	-	-
1971-M1687	2441308.12	1971 Dec 22 1840:00	Rocketsonde	-	-	Starvue, Dataonide	-	-	-	PH	-	-	-	63	-	-
1971-M1688	2441309.37	1971 Dec 23 2055:00	Rocketsonde	-	-	Starvue, Dataonide	-	-	-	PH	-	-	-	61	-	-
1971-M1671	2441309.38	1971 Dec 23 2107:00	Rocketsonde	-	-	Starvue, Dataonide	-	-	-	KAU	-	-	-	60	-	-
1971-M1673	2441313.38	1971 Dec 27 2100:00	Rocketsonde	-	-	Starvue, Dataonide	-	-	-	CC	LC43	-	-	61	-	-
1971-M1674	2441314.12	1971 Dec 28 1500:00	Rocketsonde	-	-	Starvue, Dataonide	-	-	-	KAU	-	-	-	65	-	-
1971-M1675	2441314.31	1971 Dec 28 1920:59	Rocketsonde	-	-	Starvue, Dataonide	-	-	-	PH	-	-	-	62	-	-
1971-M1677	2441314.45	1971 Dec 28 2241:59	Rocketsonde	-	-	Starvue, Dataonide	-	-	-	PH	-	-	-	59	-	-
1971-M1678	2441315.15	1971 Dec 29 1430:00	Rocketsonde	-	-	Starvue, Dataonide	-	-	-	KAU	-	-	-	59	-	-
1971-M1679	2441315.13	1971 Dec 29 1500:59	Rocketsonde	-	-	Starvue, Dataonide	-	-	-	CC	LC43	-	-	59	-	-
1971-M1680	2441315.20	1971 Dec 29 1641:59	Rocketsonde	-	-	Starvue, Dataonide	-	-	-	SHER	-	-	-	85	-	-
1971-M1682	2441315.26	1971 Dec 29 1819:00	Rocketsonde	-	-	Starvue, Dataonide	-	-	-	PH	LC43	-	-	58	-	-
1971-M1683	2441315.30	1971 Dec 29 1904:59	Rocketsonde	-	-	Starvue, Dataonide	-	-	-	PH	-	-	-	82	-	-
1971-M1684	2441315.42	1971 Dec 29 2137:59	Rocketsonde	-	-	Met. Sphere	-	-	-	KAU	-	-	-	73	-	-
1971-M1685	2441315.42	1971 Dec 29 2207:59	Rocketsonde	-	-	Starvue, Dataonide	-	-	-	KAU	-	-	-	59	-	-
1971-M1686	2441316.12	1971 Dec 30 1500:00	Rocketsonde	-	-	Starvue, Dataonide	-	-	-	SHER	-	-	-	63	-	-
1971-M1688	2441316.25	1971 Dec 30 1756:00	Rocketsonde	-	-	Starvue, Dataonide	-	-	-	PH	-	-	-	58	-	-
1971-M1690	2441320.11	1972 Jan 3 1452:00	Rocketsonde	-	-	Starvue, Dataonide	-	-	-	CC	LC43	-	-	62	-	-
1972-M05	2441530.09	1972 Jul 31 1413:00	Rocketsonde	-	-	Met. Para	-	-	-	CC	LC43	-	-	61	-	-
1972-M883	2441530.25	1972 Jul 31 1800:00	Rocketsonde	-	-	Starvue, Dataonide	-	-	-	WS	-	-	-	56	-	-
1972-M884	2441530.26	1972 Jul 31 1811:59	Rocketsonde	-	-	Starvue, Dataonide	-	-	-	WI	-	-	-	59	-	-
1972-M885	2441530.47	1972 Jul 31 2314:00	Rocketsonde	-	-	Starvue, Dataonide	-	-	-	WI	-	-	-	62	-	-
1972-M887	2441532.08	1972 Aug 2 1352:59	Rocketsonde	-	-	Starvue, Dataonide	-	-	-	CC	LC43	-	-	59	-	-
1972-M888	2441532.08	1972 Aug 2 1400:00	Rocketsonde	-	-	Starvue, Dataonide	-	-	-	CC	-	-	-	55	-	-
1972-M889	2441532.10	1972 Aug 2 1421:00	Rocketsonde	-	-	Starvue, Dataonide	-	-	-	WI	-	-	-	59	-	-
1972-M891	2441532.11	1972 Aug 2 1445:00	Rocketsonde	-	-	Starvue, Dataonide	-	-	-	WI	-	-	-	55	-	-
1972-M892	2441532.12	1972 Aug 2 1448:00	Rocketsonde	-	-	Starvue, Dataonide	-	-	-	PH	-	-	-	64	-	-
1972-M893	2441532.12	1972 Aug 2 1448:59	Rocketsonde	-	-	Starvue, Dataonide	-	-	-	PH	-	-	-	60	-	-
1972-M183	2441532.17	1972 Aug 2 1607:00	Rocketsonde	-	-	Met. Sphere	-	-	-	CC	LC43	-	-	96	-	-
1972-M894	2441532.21	1972 Aug 2 1700:00	Rocketsonde	-	-	Starvue, Dataonide	-	-	-	WS	-	-	-	64	-	-

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Mission	FlightCode	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee_Km	Range_Km	Dest
1972-1095	2441532-27	1972 Aug 2 1833:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PF	-	-	-	62	-	-
1972-1096	2441532-37	1972 Aug 2 2046:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PH	-	-	-	58	-	-
1972-1097	2441532-41	1972 Aug 2 2153:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	KAU	-	-	-	59	-	-
1972-1098	2441532-51	1972 Aug 3 0020:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	MNR	-	-	-	59	-	-
1972-1099	2441534-08	1972 Aug 4 1400:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	ASC	-	-	-	62	-	-
1972-1100	2441534-10	1972 Aug 4 1431:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PRIM	-	-	-	59	-	-
1972-11001	2441534-12	1972 Aug 4 1457:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	WI	-	-	-	59	-	-
1972-11002	2441534-15	1972 Aug 4 1531:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	CC	LC43	-	-	62	-	-
1972-11003	2441534-31	1972 Aug 4 1922:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PH	-	-	-	56	-	-
1972-11004	2441534-42	1972 Aug 4 2206:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	KAU	-	-	-	57	-	-
1972-11005	2441534-46	1972 Aug 4 2300:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	WS	-	-	-	58	-	-
1972-11006	2441537-08	1972 Aug 7 1400:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	ASC	-	-	-	61	-	-
1972-11007	2441537-12	1972 Aug 7 1455:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	THU	-	-	-	60	-	-
1972-11008	2441537-19	1972 Aug 7 1630:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	CC	LC43	-	-	62	-	-
1972-11009	2441537-21	1972 Aug 7 1700:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	WS	-	-	-	59	-	-
1972-11010	2441537-27	1972 Aug 7 1830:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PF	-	-	-	59	-	-
1972-11011	2441537-39	1972 Aug 7 2120:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	KAU	-	-	-	59	-	-
1972-11012	2441537-59	1972 Aug 8 0200:00	Rocketsonde	-	-	Met. Para.	-	-	-	WS	-	-	-	59	-	-
1972-11013	2441538-17	1972 Aug 8 1559:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	WS	-	-	-	66	-	-
1972-11014	2441538-17	1972 Aug 8 1659:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	WS	-	-	-	66	-	-
1972-11015	2441539-28	1972 Aug 8 1800:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	ASC	-	-	-	61	-	-
1972-11016	2441539-28	1972 Aug 8 1800:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	CC	LC43	-	-	58	-	-
1972-11017	2441539-25	1972 Aug 9 1859:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	WS	-	-	-	66	-	-
1972-11018	2441539-28	1972 Aug 9 1848:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	WI	-	-	-	60	-	-
1972-11019	2441539-31	1972 Aug 9 1848:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PF	-	-	-	57	-	-
1972-11020	2441539-31	1972 Aug 9 1850:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PH	-	-	-	59	-	-
1972-11021	2441539-36	1972 Aug 9 2032:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	KAU	-	-	-	59	-	-
1972-11022	2441539-50	1972 Aug 9 2356:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	CC	LC43	-	-	63	-	-
1972-11023	2441541-07	1972 Aug 11 1344:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	ASC	-	-	-	63	-	-
1972-11024	2441541-09	1972 Aug 11 1404:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PH	-	-	-	57	-	-
1972-11025	2441541-22	1972 Aug 11 1731:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PH	-	-	-	58	-	-
1972-11026	2441541-23	1972 Aug 11 1731:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PF	-	-	-	62	-	-
1972-11028	2441541-27	1972 Aug 11 1850:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	VI	-	-	-	57	-	-
1972-11029	2441541-32	1972 Aug 11 1938:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	WS	-	-	-	60	-	-
1972-11030	2441541-50	1972 Aug 12 0000:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	ORUC	-	-	-	58	-	-
1972-11031	2441541-69	1972 Aug 12 0440:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	WS	-	-	-	60	-	-
1972-11032	2441541-91	1972 Aug 12 0956:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	ASC	-	-	-	60	-	-
1972-11033	2441542-46	1972 Aug 12 2300:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	WS	-	-	-	70	-	-
1972-11034	2441542-54	1972 Aug 13 0059:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	WS	-	-	-	60	-	-
1972-11035	2441542-54	1972 Aug 13 0059:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	WS	-	-	-	60	-	-
1972-11036	2441542-69	1972 Aug 13 0430:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	Met. Para.	-	-	-	52	-	-
1972-11037	2441543-23	1972 Aug 13 1728:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	Met. Para.	-	-	-	60	-	-
1972-11038	2441544-06	1972 Aug 14 1400:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	Met. Para.	-	-	-	53	-	-
1972-11039	2441544-15	1972 Aug 14 1506:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	ASC	-	-	-	56	-	-
1972-11040	2441544-15	1972 Aug 14 1506:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PRIM	-	-	-	57	-	-
1972-11041	2441544-20	1972 Aug 14 1558:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	VI	-	-	-	57	-	-
1972-11042	2441544-30	1972 Aug 14 1659:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PH	-	-	-	63	-	-
1972-11043	2441544-30	1972 Aug 14 1744:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	KAU	LC43	-	-	41	-	-
1972-11044	2441544-39	1972 Aug 14 2121:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	CC	-	-	-	60	-	-
1972-11045	2441544-39	1972 Aug 14 2121:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	ASC	-	-	-	60	-	-
1972-11046	2441545-08	1972 Aug 16 1304:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	ASC	-	-	-	55	-	-
1972-11047	2441545-10	1972 Aug 16 1430:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	Met. Para.	-	-	-	55	-	-
1972-11048	2441545-11	1972 Aug 16 1440:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PRIM	-	-	-	67	-	-
1972-11049	2441545-11	1972 Aug 16 1440:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PRIM	-	-	-	67	-	-
1972-11050	2441545-13	1972 Aug 16 1510:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	SHER	-	-	-	60	-	-
1972-11051	2441545-13	1972 Aug 16 1510:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	SHER	-	-	-	60	-	-
1972-11052	2441545-21	1972 Aug 16 1700:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	WS	-	-	-	64	-	-
1972-11053	2441545-21	1972 Aug 16 1700:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PF	-	-	-	59	-	-
1972-11054	2441545-28	1972 Aug 16 1829:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	KAU	-	-	-	60	-	-
1972-11055	2441546-07	1972 Aug 18 1344:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PH	-	-	-	60	-	-
1972-11056	2441546-13	1972 Aug 18 1509:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PH	-	-	-	57	-	-
1972-11057	2441547-13	1972 Aug 17 1531:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	CC	LC43	-	-	61	-	-
1972-11058	2441548-07	1972 Aug 18 1344:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	SHER	-	-	-	67	-	-
1972-11059	2441548-12	1972 Aug 18 1500:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	THU	-	-	-	61	-	-
1972-11060	2441548-14	1972 Aug 18 1500:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PF	-	-	-	62	-	-
1972-11061	2441548-27	1972 Aug 18 1830:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PF	-	-	-	59	-	-
1972-11062	2441548-27	1972 Aug 18 1830:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	VI	-	-	-	55	-	-
1972-11063	2441548-30	1972 Aug 18 1934:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	VI	-	-	-	55	-	-
1972-11064	2441548-38	1972 Aug 18 1904:59	Rocketsonde	-	-	Met. Para.	-	-	-	WI	-	-	-	59	-	-
1972-11065	2441548-38	1972 Aug 18 2100:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	KAU	-	-	-	64	-	-
1972-11066	2441548-38	1972 Aug 18 2100:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	ASC	-	-	-	62	-	-
1972-11067	2441551-12	1972 Aug 21 1400:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	SHER	-	-	-	60	-	-
1972-11068	2441551-25	1972 Aug 21 1500:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	WS	-	-	-	50	-	-
1972-11069	2441551-30	1972 Aug 21 1800:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	VI	-	-	-	58	-	-
1972-11070	2441551-38	1972 Aug 21 2110:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	VI	-	-	-	59	-	-
1972-11071	2441553-07	1972 Aug 23 1344:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	CC	LC43	-	-	63	-	-
1972-11072	2441553-08	1972 Aug 23 1400:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	ASC	-	-	-	62	-	-
1972-11073	2441553-14	1972 Aug 23 1519:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PH	-	-	-	58	-	-
1972-11074	2441553-14	1972 Aug 23 1519:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	ASC	-	-	-	65	-	-
1972-11075	2441553-23	1972 Aug 23 1725:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	Met. Para.	-	-	-	68	-	-
1972-11076	2441553-27	1972 Aug 23 1823:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	Met. Para.	-	-	-	59	-	-
1972-11077	2441553-27	1972 Aug 23 1823:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	Met. Para.	-	-	-	68	-	-
1972-11078	2441553-43	1972 Aug 23 2317:00	Rocketsonde	-	-	Met. Sphere	-	-	-	PF	-	-	-	95	-	-
1972-11079	2441553-45	1972 Aug 23 2241:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	KAU	-	-	-	57	-	-
1972-11080	2441555-09	1972 Aug 25 1411:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	KAU	-	-	-	58	-	-
1972-11081	2441555-11	1972 Aug 25 1441:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	WI	-	-	-	66	-	-
1972-11082	2441555-12	1972 Aug 25 1500:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PRIM	-	-	-	48	-	-
1972-11083	2441555-18	1972 Aug 25 1623:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	SHER	-	-	-	56	-	-
1972-11084	2441555-20	1972 Aug 25 1641														

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Mission	FlightCode	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee km	Range km	Dest
1972-H1087	2441555-50	1972 Aug 25 2355:00	Rocketsonde	-	-	Starute, Dataonide	-	-	-	RNR	-	-	-	58	-	-
1972-H1088	2441558-07	1972 Aug 28 1344:59	Rocketsonde	-	-	Starute, Dataonide	-	-	-	CC	LC43	-	-	62	-	-
1972-H1089	2441558-08	1972 Aug 28 1400:00	Rocketsonde	-	-	Starute, Dataonide	-	-	-	ASC	-	-	-	61	-	-
1972-H1090	2441558-10	1972 Aug 28 1430:00	Rocketsonde	-	-	Starute, Dataonide	-	-	-	PRUH	-	-	-	70	-	-
1972-H1092	2441558-12	1972 Aug 28 1500:00	Rocketsonde	-	-	Starute, Dataonide	-	-	-	SHER	-	-	-	61	-	-
1972-H1093	2441558-15	1972 Aug 28 1530:00	Rocketsonde	-	-	Starute, Dataonide	-	-	-	PH	-	-	-	61	-	-
1972-H1094	2441558-21	1972 Aug 28 1700:00	Rocketsonde	-	-	Met. Para.	-	-	-	WS	-	-	-	62	-	-
1972-H1095	2441558-27	1972 Aug 28 1830:00	Rocketsonde	-	-	Starute, Dataonide	-	-	-	PF	-	-	-	63	-	-
1972-H1096	2441558-38	1972 Aug 28 2100:00	Rocketsonde	-	-	Starute, Dataonide	-	-	-	RAU	-	-	-	60	-	-
1972-H1097	2441558-49	1972 Aug 30 2345:00	Rocketsonde	-	-	Starute, Dataonide	-	-	-	RNR	-	-	-	61	-	-
1972-H1100	2441560-07	1972 Aug 30 1344:59	Rocketsonde	-	-	Starute, Dataonide	-	-	-	CC	LC43	-	-	62	-	-
1972-H1101	2441560-09	1972 Aug 30 1415:00	Rocketsonde	-	-	Starute, Dataonide	-	-	-	ASC	-	-	-	61	-	-
1972-H1102	2441560-10	1972 Aug 30 1430:00	Rocketsonde	-	-	Starute, Dataonide	-	-	-	PRUH	-	-	-	67	-	-
1972-H1103	2441560-11	1972 Aug 30 1431:00	Rocketsonde	-	-	Starute, Dataonide	-	-	-	CLBI	-	-	-	63	-	-
1972-H93	2441560-12	1972 Aug 30 1500:00	Rocketsonde	-	-	Starute, Dataonide	-	-	-	SHER	-	-	-	24	-	-
1972-H1105	2441560-12	1972 Aug 30 1500:00	Rocketsonde	-	-	Starute, Dataonide	-	-	-	WS	-	-	-	56	-	-
1972-H1107	2441560-21	1972 Aug 30 1700:00	Rocketsonde	-	-	Starute, Dataonide	-	-	-	WI	-	-	-	59	-	-
1972-H1108	2441560-28	1972 Aug 30 1843:00	Rocketsonde	-	-	Starute, Dataonide	-	-	-	PF	-	-	-	60	-	-
1972-H1109	2441560-28	1972 Aug 30 1849:59	Rocketsonde	-	-	Starute, Dataonide	-	-	-	WS	-	-	-	63	-	-
1972-H1111	2441561-42	1972 Aug 31 2159:59	Rocketsonde	-	-	Starute, Dataonide	-	-	-	CC	-	-	-	62	-	-
1972-H1112	2441562-07	1972 Sep 1 1344:59	Rocketsonde	-	-	Starute, Dataonide	-	-	-	ASC	LC43	-	-	61	-	-
1972-H1113	2441562-08	1972 Sep 1 1400:00	Rocketsonde	-	-	Starute, Dataonide	-	-	-	PRUH	-	-	-	67	-	-
1972-H1114	2441562-11	1972 Sep 1 1445:00	Rocketsonde	-	-	Starute, Dataonide	-	-	-	PH	-	-	-	62	-	-
1972-H1115	2441562-12	1972 Sep 1 2100:00	Rocketsonde	-	-	Starute, Dataonide	-	-	-	RAU	-	-	-	60	-	-
1972-H1116	2441562-38	1972 Sep 1 2123:59	Rocketsonde	-	-	Starute, Dataonide	-	-	-	RNR	-	-	-	61	-	-
1972-H1117	2441562-49	1972 Sep 1 2349:59	Rocketsonde	-	-	Starute, Dataonide	-	-	-	WS	-	-	-	66	-	-
1972-H1118	2441566-21	1972 Sep 5 1700:00	Rocketsonde	-	-	Met. Para.	-	-	-	WS	-	-	-	66	-	-
1972-H1119	2441566-27	1972 Sep 5 1830:00	Rocketsonde	-	-	Starute, Dataonide	-	-	-	PF	-	-	-	61	-	-
1972-H1120	2441567-07	1972 Sep 6 1344:59	Rocketsonde	-	-	Starute, Dataonide	-	-	-	CC	LC43	-	-	60	-	-
1972-H1121	2441567-08	1972 Sep 6 1400:00	Rocketsonde	-	-	Starute, Dataonide	-	-	-	ASC	-	-	-	64	-	-
1972-H1122	2441567-10	1972 Sep 6 1430:00	Rocketsonde	-	-	Starute, Dataonide	-	-	-	PH	-	-	-	58	-	-
1972-H95	2441567-12	1972 Sep 6 1500:00	Rocketsonde	-	-	Starute, Dataonide	-	-	-	SHER	-	-	-	23	-	-
1972-H1123	2441567-12	1972 Sep 6 1500:00	Rocketsonde	-	-	Starute, Dataonide	-	-	-	PRUH	-	-	-	48	-	-
1972-H96	2441567-16	1972 Sep 6 1615:59	Rocketsonde	-	-	Starute, Dataonide	-	-	-	WS	-	-	-	76	-	-
1972-H1124	2441567-21	1972 Sep 6 1700:00	Rocketsonde	-	-	Starute, Dataonide	-	-	-	PF	-	-	-	64	-	-
1972-H1125	2441567-27	1972 Sep 6 1830:00	Rocketsonde	-	-	Starute, Dataonide	-	-	-	PH	-	-	-	57	-	-
1972-H1126	2441567-39	1972 Sep 6 2123:59	Rocketsonde	-	-	Starute, Dataonide	-	-	-	RNR	-	-	-	56	-	-
1972-H1127	2441567-50	1972 Sep 7 0002:59	Rocketsonde	-	-	Starute, Dataonide	-	-	-	WS	-	-	-	77	-	-
1972-H1129	2441568-21	1972 Sep 7 1700:00	Rocketsonde	-	-	Met. Para.	-	-	-	WS	-	-	-	61	-	-
1972-H1130	2441569-07	1972 Sep 8 1344:59	Rocketsonde	-	-	Starute, Dataonide	-	-	-	ASC	LC43	-	-	59	-	-
1972-H1131	2441569-08	1972 Sep 8 1400:00	Rocketsonde	-	-	Starute, Dataonide	-	-	-	PH	-	-	-	83	-	-
1972-H1132	2441569-09	1972 Sep 8 1430:00	Rocketsonde	-	-	Starute, Dataonide	-	-	-	WS	-	-	-	53	-	-
1972-H1133	2441569-19	1972 Sep 8 1631:59	Rocketsonde	-	-	Starute, Dataonide	-	-	-	PH	-	-	-	91	-	-
1972-H1134	2441569-21	1972 Sep 8 1700:00	Rocketsonde	-	-	Starute, Dataonide	-	-	-	WS	-	-	-	62	-	-
1972-H1135	2441569-29	1972 Sep 8 2345:00	Rocketsonde	-	-	Starute, Dataonide	-	-	-	RNR	-	-	-	62	-	-
1972-H1136	2441570-22	1972 Sep 8 1720:00	Rocketsonde	-	-	Met. Para.	-	-	-	WS	-	-	-	65	-	-
1972-H1137	2441570-22	1972 Sep 10 1700:00	Rocketsonde	-	-	Met. Para.	-	-	-	WS	-	-	-	62	-	-
1972-H1138	2441572-08	1972 Sep 10 1359:59	Rocketsonde	-	-	Starute, Dataonide	-	-	-	CC	LC43	-	-	63	-	-
1972-H1139	2441572-08	1972 Sep 11 1358:59	Rocketsonde	-	-	Met. Para, Arcasonde	-	-	-	ASC	-	-	-	58	-	-
1972-H1140	2441572-08	1972 Sep 11 1358:59	Rocketsonde	-	-	Starute, Dataonide	-	-	-	ASC	-	-	-	48	-	-
1972-H1141	2441572-12	1972 Sep 11 1500:00	Rocketsonde	-	-	Starute, Dataonide	-	-	-	SHER	-	-	-	72	-	-
1972-H1142	2441572-12	1972 Sep 11 1556:59	Rocketsonde	-	-	Starute, Dataonide	-	-	-	WS	-	-	-	63	-	-
1972-H1143	2441572-23	1972 Sep 12 2000:00	Rocketsonde	-	-	Met. Para	-	-	-	WS	-	-	-	55	-	-
1972-H1144	2441574-07	1972 Sep 12 1344:59	Rocketsonde	-	-	Met. Para	-	-	-	CC	LC43	-	-	65	-	-
1972-H1145	2441574-08	1972 Sep 13 1400:00	Rocketsonde	-	-	Starute, Dataonide	-	-	-	CC	-	-	-	55	-	-
1972-H1146	2441574-11	1972 Sep 13 1445:00	Rocketsonde	-	-	Starute, Dataonide	-	-	-	CLBI	-	-	-	63	-	-
1972-H1147	2441574-11	1972 Sep 13 1445:00	Rocketsonde	-	-	Met. Para, Arcasonde	-	-	-	ASC	-	-	-	58	-	-
1972-H1148	2441574-12	1972 Sep 13 1500:00	Rocketsonde	-	-	Starute, Dataonide	-	-	-	ASC	-	-	-	0	-	-
1972-H1149	2441574-13	1972 Sep 13 1500:00	Rocketsonde	-	-	Starute, Dataonide	-	-	-	SHER	-	-	-	48	-	-
1972-H1150	2441574-13	1972 Sep 13 1503:59	Rocketsonde	-	-	Starute, Dataonide	-	-	-	PH	-	-	-	59	-	-
1972-H1151	2441574-21	1972 Sep 13 1655:59	Rocketsonde	-	-	Met. Sphere	-	-	-	PH	-	-	-	85	-	-
1972-H1152	2441574-25	1972 Sep 13 1758:00	Rocketsonde	-	-	Starute, Dataonide	-	-	-	PH	-	-	-	55	-	-
1972-H1153	2441574-25	1972 Sep 13 1800:00	Rocketsonde	-	-	Starute, Dataonide	-	-	-	VI	-	-	-	60	-	-
1972-H1154	2441574-27	1972 Sep 13 1830:00	Rocketsonde	-	-	Starute, Dataonide	-	-	-	WS	-	-	-	74	-	-
1972-H1155	2441575-21	1972 Sep 14 1700:00	Rocketsonde	-	-	Met. Para	-	-	-	PF	-	-	-	61	-	-
1972-H1156	2441576-08	1972 Sep 15 1349:59	Rocketsonde	-	-	Starute, Dataonide	-	-	-	WS	-	-	-	64	-	-
1972-H1157	2441576-08	1972 Sep 15 1400:00	Rocketsonde	-	-	Starute, Dataonide	-	-	-	CC	LC43	-	-	62	-	-
1972-H1158	2441576-11	1972 Sep 15 1440:00	Rocketsonde	-	-	Starute, Dataonide	-	-	-	ASC	-	-	-	53	-	-
1972-H1159	2441576-26	1972 Sep 15 1814:59	Rocketsonde	-	-	Starute, Dataonide	-	-	-	VI	-	-	-	73	-	-
1972-H1160	2441576-49	1972 Sep 15 2345:00	Rocketsonde	-	-	Starute, Dataonide	-	-	-	RNR	-	-	-	60	-	-
1972-H1162	2441577-21	1972 Sep 16 1700:00	Rocketsonde	-	-	Starute, Dataonide	-	-	-	WS	-	-	-	52	-	-
1972-H1163	2441578-23	1972 Sep 17 1731:00	Rocketsonde	-	-	Met. Para	-	-	-	WS	-	-	-	51	-	-
1972-H1164	2441579-07	1972 Sep 18 1344:59	Rocketsonde	-	-	Starute, Dataonide	-	-	-	WS	-	-	-	74	-	-
1972-H1165	2441579-08	1972 Sep 18 1400:00	Rocketsonde	-	-	Starute, Dataonide	-	-	-	ASC	-	-	-	62	-	-
1972-H1166	2441579-12	1972 Sep 18 1500:00	Rocketsonde	-	-	Starute, Dataonide	-	-	-	SHER	-	-	-	62	-	-
1972-H1167	2441579-17	1972 Sep 18 1559:59	Rocketsonde	-	-	Starute, Dataonide	-	-	-	WS	-	-	-	73	-	-
1972-H1168	2441579-24	1972 Sep 18 1745:00	Rocketsonde	-	-	Met. Para, Arcasonde	-	-	-	WS	-	-	-	63	-	-
1972-H1169	2441579-26	1972 Sep 18 1819:00	Rocketsonde	-	-	Starute, Dataonide	-	-	-	VI	-	-	-	52	-	-
1972-H1170	2441579-27	1972 Sep 18 1834:59	Rocketsonde	-	-	Starute, Dataonide	-	-	-	PH	-	-	-	62	-	-
1972-H1171	2441579-38	1972 Sep 18 2107:00	Rocketsonde	-	-	Starute, Dataonide	-	-	-	KAU	-	-	-	59	-	-
1972-H1173	2441581-08	1972 Sep 20 1400:00	Rocketsonde	-	-	Starute, Dataonide	-	-	-	ASC	-	-	-	58	-	-
1972-H101	2441581-12	1972 Sep 20 1500:00	Rocketsonde	-	-	Starute, Dataonide	-	-	-	SHER	-	-	-	23	-	-
1972-H102	2441581-12	1972 Sep 20 1500:00	Rocketsonde	-	-	Starute, Dataonide	-	-	-	SHER	-	-	-	49	-	-
1972-H226	2441581-15	1972 Sep 20 1533:00	Rocketsonde	-	-	Met. Sphere	-	-	-	PH	-	-	-	82	-	-

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Mission	FlightCode	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee_Km	Range_Km	Dest
1972-H1174	2441581-16	1972 Sep 20 1556:59	Rocketsonde			Starute, Datasonde				PRLM				65		
1972-H1175	2441581-17	1972 Sep 20 1607:00	Rocketsonde			Starute, Datasonde				PH				60		
1972-H1176	2441581-25	1972 Sep 20 1800:00	Rocketsonde			Starute, Datasonde				WS				68		
1972-H1178	2441581-29	1972 Sep 20 1859:59	Rocketsonde			Starute, Datasonde				WS				58		
1972-H1227	2441581-38	1972 Sep 20 2100:00	Rocketsonde			Met. Sphere				KAU				86		
1972-H1179	2441581-40	1972 Sep 20 2137:59	Rocketsonde			Starute, Datasonde				KAU				59		
1972-H1180	2441581-49	1972 Sep 20 2345:00	Rocketsonde			Starute, Datasonde				KRR				59		
1972-H1181	2441583-12	1972 Sep 22 1500:00	Rocketsonde			Starute, Datasonde				WS				60		
1972-H1182	2441583-23	1972 Sep 22 1730:00	Rocketsonde			Starute, Datasonde				WS				75		
1972-H1183	2441583-27	1972 Sep 22 1834:59	Rocketsonde			Starute, Datasonde				PF				62		
1972-H1184	2441583-49	1972 Sep 22 2346:00	Rocketsonde			Starute, Datasonde				KRR				56		
1972-H1186	2441586-08	1972 Sep 25 1400:00	Rocketsonde			Starute, Datasonde				ASC				63		
1972-H1187	2441586-12	1972 Sep 25 1500:00	Rocketsonde			Starute, Datasonde				SHER				60		
1972-H1188	2441586-15	1972 Sep 25 1531:00	Rocketsonde			Starute, Datasonde				PRLM				67		
1972-H1189	2441586-15	1972 Sep 25 1541:00	Rocketsonde			Starute, Datasonde				PH				58		
1972-H1191	2441586-21	1972 Sep 25 1700:00	Rocketsonde			Starute, Datasonde				WS				72		
1972-H1192	2441586-26	1972 Sep 25 1808:00	Rocketsonde			Met. Para, Arcasonde				MIT				59		
1972-H1193	2441586-27	1972 Sep 25 1830:00	Rocketsonde			Starute, Datasonde				PF				61		
1972-H1194	2441586-53	1972 Sep 26 0045:00	Rocketsonde			Starute, Datasonde				CC	LC43			59		
1972-H1195	2441587-07	1972 Sep 26 1344:59	Rocketsonde			Starute, Datasonde				WS				70		
1972-H1196	2441587-17	1972 Sep 26 1559:59	Rocketsonde			Starute, Datasonde				WS				72		
1972-H1197	2441588-07	1972 Sep 27 1344:59	Rocketsonde			Starute, Datasonde				CC	LC43			60		
1972-H1198	2441588-08	1972 Sep 27 1400:00	Rocketsonde			Starute, Datasonde				ASC				61		
1972-H1200	2441588-10	1972 Sep 27 1428:00	Rocketsonde			Met. Para, Arcasonde				MIT				60		
1972-H1201	2441588-11	1972 Sep 27 1434:00	Rocketsonde			Starute, Datasonde				CLBI				58		
1972-H1202	2441588-12	1972 Sep 27 1500:00	Rocketsonde			Starute, Datasonde				SHER				60		
1972-H1203	2441588-12	1972 Sep 27 1500:00	Rocketsonde			Starute, Datasonde				PRLM				66		
1972-H1205	2441588-25	1972 Sep 27 1753:00	Rocketsonde			Starute, Datasonde				VI				57		
1972-H1206	2441588-25	1972 Sep 27 1753:00	Rocketsonde			Starute, Datasonde				WS				74		
1972-H1207	2441590-07	1972 Sep 28 1344:59	Rocketsonde			Starute, Datasonde				CC	LC43			62		
1972-H1208	2441590-08	1972 Sep 28 1400:00	Rocketsonde			Met. Para, Arcasonde				MIT				60		
1972-H1210	2441590-12	1972 Sep 28 1500:00	Rocketsonde			Starute, Datasonde				SHER				58		
1972-H1211	2441590-12	1972 Sep 28 1500:00	Rocketsonde			Starute, Datasonde				PRLM				68		
1972-H1212	2441590-22	1972 Sep 28 1715:00	Rocketsonde			Starute, Datasonde				WS				72		
1972-H1213	2441590-36	1972 Sep 29 2103:59	Rocketsonde			Starute, Datasonde				KJU				58		
1972-H1214	2441593-07	1972 Oct 2 1344:59	Rocketsonde			Starute, Datasonde				CC	LC43			60		
1972-H1215	2441593-08	1972 Oct 2 1400:00	Rocketsonde			Starute, Datasonde				ASC				60		
1972-H1216	2441593-09	1972 Oct 2 1440:59	Rocketsonde			Met. Para, Arcasonde				MIT				58		
1972-H1218	2441593-14	1972 Oct 2 1514:59	Rocketsonde			Starute, Datasonde				SHER				39		
1972-H1219	2441593-15	1972 Oct 2 1551:00	Rocketsonde			Starute, Datasonde				PRLM				67		
1972-H1220	2441593-16	1972 Oct 2 1556:59	Rocketsonde			Starute, Datasonde				VI				54		
1972-H1221	2441593-21	1972 Oct 2 1700:00	Rocketsonde			Starute, Datasonde				WS				65		
1972-H1222	2441593-21	1972 Oct 2 1709:00	Rocketsonde			Starute, Datasonde				PH				39		
1972-H1223	2441593-36	1972 Oct 2 2009:00	Rocketsonde			Starute, Datasonde				KJU				63		
1972-H1224	2441593-38	1972 Oct 2 2112:59	Rocketsonde			Met. Para, SIS				WS				65		
1972-H1225	2441593-38	1972 Oct 2 2112:59	Rocketsonde			Met. Para, SIS				WS				62		
1972-H1226	2441594-12	1972 Oct 2 1403:59	Rocketsonde			Starute, Datasonde				CC	LC43			62		
1972-H1227	2441595-09	1972 Oct 2 1430:00	Rocketsonde			Starute, Datasonde				MIT				61		
1972-H1228	2441595-10	1972 Oct 2 1430:00	Rocketsonde			Starute, Datasonde				ASC				59		
1972-H1229	2441595-12	1972 Oct 2 1440:00	Rocketsonde			Starute, Datasonde				VI				57		
1972-H1230	2441595-12	1972 Oct 2 1514:59	Rocketsonde			Starute, Datasonde				SHER				56		
1972-H1231	2441595-15	1972 Oct 2 1550:59	Rocketsonde			Starute, Datasonde				PRLM				64		
1972-H1232	2441595-15	1972 Oct 2 1550:59	Rocketsonde			Starute, Datasonde				WS				65		
1972-H1233	2441595-15	1972 Oct 2 1634:59	Rocketsonde			Met. Para, Arcasonde				CC	LC43			80		
1972-H103	2441595-23	1972 Oct 2 1725:00	Rocketsonde			Met. Sphere				PH				45		
1972-H1234	2441595-26	1972 Oct 2 1754:00	Rocketsonde			Starute, Datasonde				PM				58		
1972-H1234	2441595-26	1972 Oct 2 1754:00	Rocketsonde			Starute, Datasonde				KJU				61		
1972-H1236	2441597-07	1972 Oct 6 1344:59	Rocketsonde			Starute, Datasonde				CC	LC43			62		
1972-H1237	2441597-07	1972 Oct 6 1400:00	Rocketsonde			Starute, Datasonde				ASC				61		
1972-H1238	2441597-08	1972 Oct 6 1430:00	Rocketsonde			Starute, Datasonde				PRLM				70		
1972-H1239	2441597-15	1972 Oct 6 1530:00	Rocketsonde			Starute, Datasonde				MIT				59		
1972-H1240	2441597-21	1972 Oct 6 1700:00	Rocketsonde			Met. Para, Arcasonde				WS				63		
1972-H1241	2441597-25	1972 Oct 6 1800:00	Rocketsonde			Met. Para, Arcasonde				WS				65		
1972-H1242	2441597-42	1972 Oct 6 2159:59	Rocketsonde			Starute, Datasonde				KAU				58		
1972-H1244	2441600-08	1972 Oct 9 1356:59	Rocketsonde			Starute, Datasonde				CC	LC43			62		
1972-H1245	2441600-08	1972 Oct 9 1400:00	Rocketsonde			Starute, Datasonde				ASC				59		
1972-H1246	2441601-21	1972 Oct 10 1500:00	Rocketsonde			Starute, Datasonde				WS				65		
1972-H1247	2441601-21	1972 Oct 10 1700:00	Rocketsonde			Starute, Datasonde				WS				65		
1972-H1249	2441602-07	1972 Oct 11 1344:59	Rocketsonde			Starute, Datasonde				CC	LC43			60		
1972-H1250	2441602-08	1972 Oct 11 1400:00	Rocketsonde			Starute, Datasonde				ASC				62		
1972-H1251	2441602-12	1972 Oct 11 1500:00	Rocketsonde			Starute, Datasonde				VI				60		
1972-H1252	2441602-12	1972 Oct 11 1500:00	Rocketsonde			Starute, Datasonde				SHER				56		
1972-H1253	2441602-16	1972 Oct 11 1532:00	Rocketsonde			Starute, Datasonde				PRLM				71		
1972-H1254	2441602-17	1972 Oct 11 1551:00	Rocketsonde			Starute, Datasonde				PH				57		
1972-H1255	2441602-18	1972 Oct 11 1559:59	Rocketsonde			Met. Sphere				CC	LC43			95		
1972-H1257	2441602-28	1972 Oct 11 1625:59	Rocketsonde			Starute, Datasonde				PM				57		
1972-H1259	2441602-39	1972 Oct 11 2124:59	Rocketsonde			Starute, Datasonde				WS				64		
1972-H1260	2441604-07	1972 Oct 13 1344:59	Rocketsonde			Starute, Datasonde				WS				74		
1972-H1261	2441604-07	1972 Oct 13 1400:00	Rocketsonde			Starute, Datasonde				KAU				60		
1972-H1262	2441604-08	1972 Oct 13 1404:59	Rocketsonde			Starute, Datasonde				CC	LC43			63		
1972-H1263	2441604-08	1972 Oct 13 1404:59	Rocketsonde			Starute, Datasonde				ASC				60		
1972-H1264	2441604-12	1972 Oct 13 1500:00	Rocketsonde			Met. Para, Arcasonde				MIT				62		
1972-H1266	2441604-20	1972 Oct 13 1652:59	Rocketsonde			Starute, Datasonde				SHER				63		
1972-H1267	2441604-27	1972 Oct 13 1830:00	Rocketsonde			Starute, Datasonde				VI				61		
1972-H1269	2441607-21	1972 Oct 16 1700:00	Rocketsonde			Met. Para, Arcasonde				MIT				60		



Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Mission	FlightCode	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee km	Range km	Dest
1972-H1270	2441607-21	1972 Oct 16 17:00:00	Rocketsonde	-	-	Met. Para, Arcasonde	-	-	-	WS	-	-	-	63	-	-
1972-H1271	2441607-34	1972 Oct 16 20:04:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PH	-	-	-	58	-	-
1972-H1272	2441608-29	1972 Oct 17 18:59:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	WI	-	-	-	61	-	-
1972-H1273	2441608-42	1972 Oct 17 21:59:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	WI	-	-	-	61	-	-
1972-H1274	2441608-47	1972 Oct 17 23:20:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	WI	-	-	-	63	-	-
1972-H1275	2441609-07	1972 Oct 18 13:44:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	CC	LC43	-	-	60	-	-
1972-H1276	2441609-08	1972 Oct 18 14:00:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	ASC	-	-	-	62	-	-
1972-H1278	2441609-12	1972 Oct 18 15:00:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	SHER	-	-	-	57	-	-
1972-H1279	2441609-17	1972 Oct 18 16:03:59	Rocketsonde	-	-	Met. Sphere	-	-	-	CC	LC43	-	-	66	-	-
1972-H1280	2441609-21	1972 Oct 18 17:00:00	Rocketsonde	-	-	Met. Para, Arcasonde	-	-	-	WS	-	-	-	61	-	-
1972-H1281	2441609-27	1972 Oct 18 18:31:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	WI	-	-	-	62	-	-
1972-H1282	2441609-29	1972 Oct 18 19:03:59	Rocketsonde	-	-	Met. Sphere	-	-	-	PH	-	-	-	85	-	-
1972-H1283	2441609-31	1972 Oct 18 19:29:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PH	-	-	-	60	-	-
1972-H1284	2441609-42	1972 Oct 18 22:02:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	WI	-	-	-	58	-	-
1972-H1286	2441609-49	1972 Oct 18 23:58:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	WI	-	-	-	60	-	-
1972-H1288	2441610-09	1972 Oct 19 14:07:00	Rocketsonde	-	-	Met. Para, Arcasonde	-	-	-	WS	-	-	-	60	-	-
1972-H1289	2441610-22	1972 Oct 20 17:15:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	ASC	-	-	-	65	-	-
1972-H1287	2441611-07	1972 Oct 20 13:54:59	Rocketsonde	-	-	Met. Para, Arcasonde	-	-	-	CC	LC43	-	-	62	-	-
1972-H1289	2441611-08	1972 Oct 20 14:00:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	ASC	-	-	-	62	-	-
1972-H1289	2441611-09	1972 Oct 20 14:00:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	WI	-	-	-	57	-	-
1972-H1290	2441611-12	1972 Oct 20 15:00:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PH	-	-	-	62	-	-
1972-H1293	2441611-14	1972 Oct 20 15:24:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PH	-	-	-	53	-	-
1972-H1294	2441611-21	1972 Oct 20 17:00:00	Rocketsonde	-	-	Met. Para, Arcasonde	-	-	-	WS	-	-	-	62	-	-
1972-H246	2441611-38	1972 Oct 20 21:00:00	Rocketsonde	-	-	Met. Sphere	-	-	-	KAU	-	-	-	90	-	-
1972-H1295	2441611-40	1972 Oct 20 21:30:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	KAU	-	-	-	62	-	-
1972-H1297	2441611-40	1972 Oct 20 21:30:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	SHER	-	-	-	68	-	-
1972-H1298	2441615-12	1972 Oct 24 15:00:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	WS	-	-	-	66	-	-
1972-H1299	2441616-07	1972 Oct 25 17:00:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	CC	LC43	-	-	61	-	-
1972-H1300	2441616-08	1972 Oct 25 14:44:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	ASC	-	-	-	57	-	-
1972-H1301	2441616-10	1972 Oct 25 14:00:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	SHER	-	-	-	56	-	-
1972-H1301	2441616-12	1972 Oct 25 14:00:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PH, UH	-	-	-	62	-	-
1972-H1303	2441616-15	1972 Oct 25 15:34:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	WS	-	-	-	63	-	-
1972-H1304	2441616-21	1972 Oct 25 17:00:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	VI	-	-	-	56	-	-
1972-H1305	2441616-28	1972 Oct 25 18:54:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	KAU	-	-	-	62	-	-
1972-H1306	2441616-38	1972 Oct 25 21:01:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PH	-	-	-	60	-	-
1972-H1307	2441616-39	1972 Oct 25 21:14:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PH	-	-	-	58	-	-
1972-H1308	2441616-42	1972 Oct 25 22:05:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	VI	-	-	-	65	-	-
1972-H1309	2441616-47	1972 Oct 25 23:22:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	VI	-	-	-	65	-	-
1972-H1310	2441617-11	1972 Oct 26 14:55:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	CEBI	-	-	-	63	-	-
1972-H1311	2441617-30	1972 Oct 26 18:52:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	VI	-	-	-	61	-	-
1972-H1312	2441617-42	1972 Oct 26 20:05:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	VI	-	-	-	61	-	-
1972-H1313	2441617-42	1972 Oct 26 20:05:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	ORLC	-	-	-	39	-	-
1972-H1314	2441617-52	1972 Oct 27 03:34:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	WS	-	-	-	66	-	-
1972-H1315	2441617-65	1972 Oct 27 03:34:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	CC	-	-	-	66	-	-
1972-H1317	2441618-07	1972 Oct 27 12:54:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	VI	-	-	-	60	-	-
1972-H1319	2441618-10	1972 Oct 27 15:59:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	VI	-	-	-	58	-	-
1972-H1320	2441618-12	1972 Oct 27 15:59:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	SHER	-	-	-	58	-	-
1972-H1321	2441618-25	1972 Oct 27 18:00:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	WS	-	-	-	65	-	-
1972-H1322	2441618-38	1972 Oct 27 21:00:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	KAU	-	-	-	60	-	-
1972-H1323	2441618-48	1972 Oct 27 23:49:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	KHR	-	-	-	59	-	-
1972-H1324	2441621-08	1972 Oct 30 14:00:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	ASC	-	-	-	61	-	-
1972-H1325	2441621-14	1972 Oct 30 15:14:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	SHER	-	-	-	69	-	-
1972-H1326	2441621-21	1972 Oct 30 16:41:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PRIM	-	-	-	70	-	-
1972-H1327	2441621-21	1972 Oct 30 17:00:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	CC	LC43	-	-	58	-	-
1972-H1328	2441621-29	1972 Oct 30 18:59:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PH	-	-	-	63	-	-
1972-H1329	2441621-38	1972 Oct 30 19:59:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	KU	-	-	-	54	-	-
1972-H1330	2441621-38	1972 Oct 30 21:00:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	WS	-	-	-	60	-	-
1972-H1332	2441622-30	1972 Oct 31 19:09:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	VI	-	-	-	60	-	-
1972-H1333	2441622-44	1972 Oct 31 21:45:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	VI	-	-	-	61	-	-
1972-H1334	2441622-46	1972 Oct 31 23:04:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	VI	-	-	-	63	-	-
1972-H1336	2441622-83	1972 Nov 1 07:52:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	ASC	-	-	-	62	-	-
1972-H1337	2441623-08	1972 Nov 1 14:00:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	CC	LC43	-	-	65	-	-
1972-H1338	2441623-09	1972 Nov 1 14:06:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	CC	LC43	-	-	64	-	-
1972-H1339	2441623-20	1972 Nov 1 16:34:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PRIM	-	-	-	61	-	-
1972-H1340	2441623-27	1972 Nov 1 18:30:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	WS	-	-	-	60	-	-
1972-H1341	2441623-29	1972 Nov 1 18:52:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	VI	-	-	-	61	-	-
1972-H1342	2441623-41	1972 Nov 1 21:45:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	VI	-	-	-	62	-	-
1972-H1343	2441623-47	1972 Nov 1 23:04:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	VI	-	-	-	90	-	-
1972-H1344	2441623-49	1972 Nov 1 23:54:00	Rocketsonde	-	-	Met. Sphere	-	-	-	KAU	-	-	-	59	-	-
1972-H1345	2441623-50	1972 Nov 1 23:54:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	KHR	-	-	-	58	-	-
1972-H1348	2441625-08	1972 Nov 3 14:00:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	ASC	-	-	-	59	-	-
1972-H1349	2441625-09	1972 Nov 3 14:15:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	ASC	-	-	-	57	-	-
1972-H1350	2441625-14	1972 Nov 3 14:30:00	Rocketsonde	-	-	Met. Para, Arcasonde	-	-	-	CC	LC43	-	-	67	-	-
1972-H1351	2441625-14	1972 Nov 3 15:14:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	VI	-	-	-	60	-	-
1972-H1353	2441625-19	1972 Nov 3 18:19:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PRIM	-	-	-	60	-	-
1972-H1354	2441625-26	1972 Nov 3 18:19:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PH	-	-	-	60	-	-
1972-H1355	2441625-33	1972 Nov 3 20:00:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	WS	-	-	-	63	-	-
1972-H1356	2441625-38	1972 Nov 3 21:00:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	WS	-	-	-	59	-	-
1972-H1357	2441628-08	1972 Nov 6 14:00:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	KAU	-	-	-	59	-	-
1972-H1358	2441628-08	1972 Nov 6 14:00:00	Rocketsonde	-	-	Met. Para, Arcasonde	-	-	-	ASC	-	-	-	64	-	-
1972-H1359	2441628-08	1972 Nov 6 14:00:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	ASC	-	-	-	61	-	-
1972-H1361	2441628-29	1972 Nov 6 16:52:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	CC	LC43	-	-	57	-	-
1972-H1362	2441628-29	1972 Nov 6 18:59:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	WS	-	-	-	62	-	-
1972-H1363	2441628-38	1972 Nov 6 21:00:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	KAU	-	-	-	58	-	-

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Mission	FlightCode	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee_Km	Range_Km	Dest
1972-H1364	2441628-38	1972 Nov 6 2100:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PH	-	-	-	62	-	-
1972-H1367	2441630-08	1972 Nov 8 1400:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	ASC	-	-	-	62	-	-
1972-H1368	2441630-09	1972 Nov 8 1415:00	Rocketsonde	-	-	Met. Para, Arcasonde	-	-	-	AUT	-	-	-	55	-	-
1972-H1369	2441630-12	1972 Nov 8 1500:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	SHER	-	-	-	64	-	-
1972-H1370	2441630-20	1972 Nov 8 1641:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PRHM	-	-	-	68	-	-
1972-H1373	2441630-21	1972 Nov 8 1700:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	CC	LC43	-	-	65	-	-
1972-H1374	2441630-22	1972 Nov 8 1720:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	WS	-	-	-	65	-	-
1972-H1375	2441630-30	1972 Nov 8 1918:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	WI	-	-	-	65	-	-
1972-H1376	2441630-40	1972 Nov 8 2134:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	KAU	-	-	-	59	-	-
1972-H1377	2441630-46	1972 Nov 8 2300:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	WI	-	-	-	62	-	-
1972-H1378	2441630-47	1972 Nov 8 2315:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	KHR	-	-	-	56	-	-
1972-H1379	2441630-49	1972 Nov 8 2347:00	Rocketsonde	-	-	Met. Sphere	-	-	-	PH	-	-	-	88	-	-
1972-H1380	2441630-67	1972 Nov 9 0410:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PH	-	-	-	59	-	-
1972-H1382	2441630-70	1972 Nov 9 0448:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	WI	-	-	-	57	-	-
1972-H1383	2441631-29	1972 Nov 9 1902:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	WI	-	-	-	60	-	-
1972-H1384	2441631-40	1972 Nov 9 2137:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	WI	-	-	-	62	-	-
1972-H1386	2441632-07	1972 Nov 10 1344:59	Rocketsonde	-	-	Met. Para, Arcasonde	-	-	-	AUT	-	-	-	56	-	-
1972-H1387	2441632-09	1972 Nov 10 1410:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	ASC	-	-	-	54	-	-
1972-H1388	2441632-09	1972 Nov 10 1415:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	CC	LC43	-	-	69	-	-
1972-H1390	2441632-19	1972 Nov 10 1630:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PRHM	-	-	-	64	-	-
1972-H1392	2441632-28	1972 Nov 10 1844:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	WI	-	-	-	56	-	-
1972-H1393	2441632-31	1972 Nov 10 1927:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	WS	-	-	-	63	-	-
1972-H1394	2441632-40	1972 Nov 10 2134:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	KAU	-	-	-	62	-	-
1972-H1395	2441632-42	1972 Nov 10 2159:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	WI	-	-	-	58	-	-
1972-H1396	2441632-47	1972 Nov 10 2315:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	ASC	-	-	-	61	-	-
1972-H1397	2441635-08	1972 Nov 13 1400:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	CC	LC43	-	-	62	-	-
1972-H1398	2441635-09	1972 Nov 13 1404:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	SHER	-	-	-	47	-	-
1972-H1399	2441635-29	1972 Nov 13 1852:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	CC	LC43	-	-	60	-	-
1972-H1400	2441635-30	1972 Nov 13 1914:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PH	-	-	-	60	-	-
1972-H1401	2441635-42	1972 Nov 13 2159:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	WS	-	-	-	63	-	-
1972-H1403	2441637-08	1972 Nov 15 1400:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	ASC	-	-	-	58	-	-
1972-H1404	2441637-12	1972 Nov 15 1415:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	CC	LC43	-	-	62	-	-
1972-H110	2441637-12	1972 Nov 15 1500:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	SHER	-	-	-	64	-	-
1972-H1406	2441637-20	1972 Nov 15 1648:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	WI	LC43	-	-	39	-	-
1972-H285	2441637-21	1972 Nov 15 1700:00	Rocketsonde	-	-	Met. Sphere	-	-	-	CC	LC43	-	-	97	-	-
1972-H1407	2441637-29	1972 Nov 15 1901:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	WI	-	-	-	62	-	-
1972-H1408	2441637-35	1972 Nov 15 2030:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	WS	-	-	-	61	-	-
1972-H1409	2441637-39	1972 Nov 15 2124:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	KAU	-	-	-	59	-	-
1972-H1410	2441637-45	1972 Nov 15 2359:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	WI	-	-	-	58	-	-
1972-H1411	2441638-27	1972 Nov 16 1654:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	WI	-	-	-	58	-	-
1972-H1413	2441638-40	1972 Nov 16 2351:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	WI	-	-	-	60	-	-
1972-H1415	2441638-45	1972 Nov 16 2351:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	WI	-	-	-	61	-	-
1972-H1417	2441639-08	1972 Nov 17 1410:00	Rocketsonde	-	-	Met. Para, Arcasonde	-	-	-	ASC	-	-	-	70	-	-
1972-H1419	2441639-10	1972 Nov 17 1440:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	CC	LC43	-	-	72	-	-
1972-H1416	2441639-10	1972 Nov 17 1440:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PRHM	-	-	-	69	-	-
1972-H1421	2441639-25	1972 Nov 17 1800:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	WS	-	-	-	65	-	-
1972-H1422	2441639-29	1972 Nov 17 1930:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PH	-	-	-	61	-	-
1972-H1423	2441639-31	1972 Nov 17 1930:59	Rocketsonde	-	-	Met. Sphere	-	-	-	PH	-	-	-	90	-	-
1972-H1424	2441639-33	1972 Nov 17 2124:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	KAU	-	-	-	61	-	-
1972-H1425	2441639-35	1972 Nov 17 2209:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	WI	-	-	-	60	-	-
1972-H1426	2441639-42	1972 Nov 17 2249:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	ASC	-	-	-	63	-	-
1972-H1427	2441642-08	1972 Nov 20 1400:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	WI	-	-	-	60	-	-
1972-H1429	2441642-27	1972 Nov 20 1839:59	Rocketsonde	-	-	Met. Para, STS	-	-	-	WS	-	-	-	65	-	-
1972-H1430	2441642-28	1972 Nov 20 1843:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	WI	-	-	-	60	-	-
1972-H1431	2441642-31	1972 Nov 20 2039:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PH	-	-	-	60	-	-
1972-H1432	2441642-36	1972 Nov 20 2039:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	KAU	-	-	-	59	-	-
1972-H1433	2441642-38	1972 Nov 20 2100:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	WI	-	-	-	60	-	-
1972-H1434	2441642-41	1972 Nov 20 2345:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	KHR	-	-	-	58	-	-
1972-H1436	2441644-08	1972 Nov 22 1415:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	ASC	-	-	-	61	-	-
1972-H1437	2441644-13	1972 Nov 22 1504:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	CC	LC43	-	-	63	-	-
1972-H1438	2441644-12	1972 Nov 22 1504:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	SHER	-	-	-	57	-	-
1972-H1439	2441644-13	1972 Nov 22 1504:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	WI	-	-	-	73	-	-
1972-H1441	2441644-21	1972 Nov 22 1640:00	Rocketsonde	-	-	Met. Para, STS	-	-	-	PRHM	-	-	-	67	-	-
1972-H1442	2441644-21	1972 Nov 22 1700:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	CC	LC43	-	-	91	-	-
1972-H1443	2441644-28	1972 Nov 22 1845:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PM	-	-	-	58	-	-
1972-H1444	2441644-29	1972 Nov 22 1859:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	WS	-	-	-	61	-	-
1972-H1445	2441644-41	1972 Nov 22 2149:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	KAU	-	-	-	59	-	-
1972-H1448	2441646-29	1972 Nov 24 1859:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	WS	-	-	-	63	-	-
1972-H111	2441646-64	1972 Nov 25 0315:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	KHR	-	-	-	49	-	-
1972-H1449	2441649-08	1972 Nov 27 1400:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	ASC	-	-	-	62	-	-
1972-H1450	2441649-11	1972 Nov 27 1445:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	CC	LC43	-	-	70	-	-
1972-H1451	2441649-18	1972 Nov 27 1633:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PRHM	-	-	-	68	-	-
1972-H1452	2441649-29	1972 Nov 27 1859:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	WS	-	-	-	63	-	-
1972-H1453	2441649-34	1972 Nov 27 1920:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PH	-	-	-	59	-	-
1972-H1454	2441649-34	1972 Nov 27 2006:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	WI	-	-	-	62	-	-
1972-H1455	2441649-49	1972 Nov 27 2345:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	KHR	-	-	-	54	-	-
1972-H1459	2441651-08	1972 Nov 29 1400:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	ASC	-	-	-	60	-	-
1972-H113	2441651-12	1972 Nov 29 1500:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	CC	LC43	-	-	43	-	-
1972-H1460	2441651-12	1972 Nov 29 1500:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	SHER	-	-	-	58	-	-
1972-H1461	2441651-15	1972 Nov 29 1542:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	WI	-	-	-	61	-	-
1972-H1462	2441651-19	1972 Nov 29 1638:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PRHM	-	-	-	56	-	-

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Mission	FlightCode	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee_Km	Range_Km	Dest
1972-Y280	2441651-21	1972 Nov 29 17:00:00	Rocketsonde	-	-	Met. Sphere	-	-	-	CC	LC43	-	-	96	-	-
1972-H1463	2441651-25	1972 Nov 29 18:00:00	Rocketsonde	-	-	Starute, Dataonide	-	-	-	WS	LC43	-	-	65	-	-
1972-H1464	2441651-27	1972 Nov 29 18:30:00	Rocketsonde	-	-	Met. Para, Dataonide	-	-	-	CC	LC43	-	-	70	-	-
1972-H1467	2441653-10	1972 Dec 1 14:19:00	Rocketsonde	-	-	Starute, Dataonide	-	-	-	CC	LC43	-	-	66	-	-
1972-H1468	2441653-19	1972 Dec 1 16:31:59	Rocketsonde	-	-	Starute, Dataonide	-	-	-	PRUH	LC43	-	-	56	-	-
1972-H1469	2441653-26	1972 Dec 1 18:00:00	Rocketsonde	-	-	Met. Para, SIS	-	-	-	WS	-	-	-	63	-	-
1972-H1470	2441653-26	1972 Dec 1 18:09:00	Rocketsonde	-	-	Starute, Dataonide	-	-	-	WI	-	-	-	61	-	-
1972-H1471	2441653-29	1972 Dec 1 18:59:59	Rocketsonde	-	-	Starute, Dataonide	-	-	-	WS	-	-	-	63	-	-
1972-Y282	2441653-35	1972 Dec 1 20:27:59	Rocketsonde	-	-	Met. Sphere	-	-	-	PH	-	-	-	87	-	-
1972-H1472	2441653-37	1972 Dec 1 20:46:00	Rocketsonde	-	-	Starute, Dataonide	-	-	-	PH	-	-	-	58	-	-
1972-H1474	2441656-08	1972 Dec 4 14:00:00	Rocketsonde	-	-	Starute, Dataonide	-	-	-	ASC	-	-	-	58	-	-
1972-H1475	2441656-14	1972 Dec 4 14:20:00	Rocketsonde	-	-	Starute, Dataonide	-	-	-	ASC	LC43	-	-	58	-	-
1972-H1476	2441656-14	1972 Dec 4 15:20:00	Rocketsonde	-	-	Starute, Dataonide	-	-	-	CC	-	-	-	61	-	-
1972-H1477	2441656-15	1972 Dec 4 16:30:00	Rocketsonde	-	-	Met. Para, Arcasonide	-	-	-	AIT	-	-	-	57	-	-
1972-H1478	2441656-35	1972 Dec 4 20:30:00	Rocketsonde	-	-	Starute, Dataonide	-	-	-	PRUH	-	-	-	60	-	-
1972-H1479	2441656-49	1972 Dec 4 23:45:00	Rocketsonde	-	-	Starute, Dataonide	-	-	-	KHR	-	-	-	59	-	-
1972-H1481	2441657-04	1972 Dec 5 12:59:59	Rocketsonde	-	-	Starute, Dataonide	-	-	-	CC	LC43	-	-	61	-	-
1972-H1482	2441657-19	1972 Dec 5 16:30:00	Rocketsonde	-	-	Starute, Dataonide	-	-	-	WS	-	-	-	63	-	-
1972-H1483	2441657-23	1972 Dec 5 17:33:00	Rocketsonde	-	-	Starute, Dataonide	-	-	-	WS	-	-	-	58	-	-
1972-H1484	2441657-29	1972 Dec 5 19:01:59	Rocketsonde	-	-	Starute, Dataonide	-	-	-	PH	-	-	-	57	-	-
1972-H1487	2441658-19	1972 Dec 6 16:35:59	Rocketsonde	-	-	Starute, Dataonide	-	-	-	PRUH	-	-	-	59	-	-
1972-H1488	2441658-21	1972 Dec 6 17:00:00	Rocketsonde	-	-	Starute, Dataonide	-	-	-	CC	LC43	-	-	59	-	-
1972-H1489	2441658-25	1972 Dec 6 18:00:00	Rocketsonde	-	-	Starute, Dataonide	-	-	-	WS	-	-	-	65	-	-
1972-H1489	2441658-25	1972 Dec 6 18:04:59	Rocketsonde	-	-	Met. Para, SIS	-	-	-	WS	-	-	-	67	-	-
1972-H1490	2441658-32	1972 Dec 6 19:44:59	Rocketsonde	-	-	Starute, Dataonide	-	-	-	KAU	-	-	-	61	-	-
1972-H1491	2441658-35	1972 Dec 6 20:00:00	Rocketsonde	-	-	Starute, Dataonide	-	-	-	KHR	-	-	-	64	-	-
1972-H1492	2441658-49	1972 Dec 6 23:45:00	Rocketsonde	-	-	Starute, Dataonide	-	-	-	CC	LC43	-	-	60	-	-
1972-H1495	2441658-84	1972 Dec 7 08:15:00	Rocketsonde	-	-	Starute, Dataonide	-	-	-	CC	-	-	-	60	-	-
1972-H1497	2441659-30	1972 Dec 7 19:08:59	Rocketsonde	-	-	Starute, Dataonide	-	-	-	WI	-	-	-	60	-	-
1972-H1498	2441659-55	1972 Dec 8 01:14:59	Rocketsonde	-	-	Starute, Dataonide	-	-	-	GRUC	-	-	-	61	-	-
1972-H1500	2441660-05	1972 Dec 8 06:00:00	Rocketsonde	-	-	Starute, Dataonide	-	-	-	GRUC	-	-	-	56	-	-
1972-H1501	2441660-08	1972 Dec 8 14:00:00	Rocketsonde	-	-	Starute, Dataonide	-	-	-	ASC	-	-	-	61	-	-
1972-H1502	2441660-09	1972 Dec 8 14:15:00	Rocketsonde	-	-	Starute, Dataonide	-	-	-	CC	LC43	-	-	66	-	-
1972-H1503	2441660-12	1972 Dec 8 15:00:00	Rocketsonde	-	-	Starute, Dataonide	-	-	-	THU	-	-	-	61	-	-
1972-H1504	2441660-40	1972 Dec 8 21:30:00	Rocketsonde	-	-	Starute, Dataonide	-	-	-	WS	-	-	-	60	-	-
1972-H1509	2441663-08	1972 Dec 11 14:00:00	Rocketsonde	-	-	Starute, Dataonide	-	-	-	ASC	-	-	-	60	-	-
1972-H1510	2441663-08	1972 Dec 11 14:00:00	Rocketsonde	-	-	Starute, Dataonide	-	-	-	ASC	LC43	-	-	60	-	-
1972-H1511	2441663-10	1972 Dec 11 14:28:00	Rocketsonde	-	-	Starute, Dataonide	-	-	-	CC	-	-	-	60	-	-
1972-H1512	2441663-10	1972 Dec 11 14:28:00	Rocketsonde	-	-	Starute, Dataonide	-	-	-	THU	LC43	-	-	60	-	-
1972-H1513	2441663-22	1972 Dec 11 14:27:00	Rocketsonde	-	-	Met. Para, Arcasonide	-	-	-	AIT	-	-	-	66	-	-
1972-H1514	2441663-29	1972 Dec 11 16:59:59	Rocketsonde	-	-	Starute, Dataonide	-	-	-	PH	-	-	-	37	-	-
1972-H1514	2441663-29	1972 Dec 11 19:11:59	Rocketsonde	-	-	Starute, Dataonide	-	-	-	WS	-	-	-	38	-	-
1972-H1515	2441663-29	1972 Dec 11 23:45:00	Rocketsonde	-	-	Starute, Dataonide	-	-	-	VI	-	-	-	64	-	-
1972-H1516	2441664-25	1972 Dec 12 08:00:00	Rocketsonde	-	-	Starute, Dataonide	-	-	-	KHR	-	-	-	64	-	-
1972-H1518	2441664-25	1972 Dec 12 08:00:00	Rocketsonde	-	-	Starute, Dataonide	-	-	-	WS	-	-	-	65	-	-
1972-H1519	2441664-51	1972 Dec 13 01:01:00	Rocketsonde	-	-	Starute, Dataonide	-	-	-	KHR	-	-	-	62	-	-
1972-H1520	2441665-05	1972 Dec 13 14:00:00	Rocketsonde	-	-	Starute, Dataonide	-	-	-	ASC	-	-	-	65	-	-
1972-H1521	2441665-07	1972 Dec 13 14:00:00	Rocketsonde	-	-	Starute, Dataonide	-	-	-	CC	LC43	-	-	85	-	-
1972-H1522	2441665-27	1972 Dec 13 18:59:00	Rocketsonde	-	-	Starute, Dataonide	-	-	-	WS	-	-	-	64	-	-
1972-H1523	2441665-27	1972 Dec 13 18:59:00	Rocketsonde	-	-	Starute, Dataonide	-	-	-	VI	-	-	-	60	-	-
1972-H1524	2441665-29	1972 Dec 13 18:59:59	Rocketsonde	-	-	Starute, Dataonide	-	-	-	WS	-	-	-	60	-	-
1972-H1525	2441665-31	1972 Dec 13 19:39:59	Rocketsonde	-	-	Met. Sphere	-	-	-	WS	-	-	-	59	-	-
1972-H1526	2441665-31	1972 Dec 13 23:45:00	Rocketsonde	-	-	Starute, Dataonide	-	-	-	KHR	-	-	-	61	-	-
1972-H1528	2441666-29	1972 Dec 14 20:25:00	Rocketsonde	-	-	Starute, Dataonide	-	-	-	ASC	-	-	-	55	-	-
1972-H1529	2441666-29	1972 Dec 14 20:25:00	Rocketsonde	-	-	Starute, Dataonide	-	-	-	PH	-	-	-	59	-	-
1972-H1531	2441667-35	1972 Dec 15 15:59:59	Rocketsonde	-	-	Met. Para, SIS	-	-	-	PM	-	-	-	65	-	-
1972-H1532	2441667-10	1972 Dec 15 16:29:00	Rocketsonde	-	-	Starute, Dataonide	-	-	-	PM	-	-	-	60	-	-
1972-H1533	2441667-25	1972 Dec 15 16:29:00	Rocketsonde	-	-	Starute, Dataonide	-	-	-	WS	-	-	-	68	-	-
1972-H1534	2441667-45	1972 Dec 15 18:00:00	Rocketsonde	-	-	Starute, Dataonide	-	-	-	CC	LC43	-	-	60	-	-
1972-H1536	2441667-45	1972 Dec 15 23:49:59	Rocketsonde	-	-	Starute, Dataonide	-	-	-	CC	-	-	-	60	-	-
1972-H1539	2441670-08	1972 Dec 18 14:00:00	Rocketsonde	-	-	Starute, Dataonide	-	-	-	KHR	-	-	-	59	-	-
1972-H1539	2441670-08	1972 Dec 18 14:19:00	Rocketsonde	-	-	Starute, Dataonide	-	-	-	ASC	-	-	-	59	-	-
1972-H1539	2441670-17	1972 Dec 18 14:19:00	Rocketsonde	-	-	Starute, Dataonide	-	-	-	CC	LC43	-	-	60	-	-
1972-H1539	2441670-17	1972 Dec 18 15:59:59	Rocketsonde	-	-	Starute, Dataonide	-	-	-	VI	-	-	-	59	-	-
1972-H1540	2441670-23	1972 Dec 18 17:26:00	Rocketsonde	-	-	Starute, Dataonide	-	-	-	PM	-	-	-	63	-	-
1972-H1541	2441670-44	1972 Dec 18 19:24:00	Rocketsonde	-	-	Starute, Dataonide	-	-	-	WS	-	-	-	60	-	-
1972-H1543	2441670-92	1972 Dec 19 09:59:59	Rocketsonde	-	-	Starute, Dataonide	-	-	-	CC	LC43	-	-	61	-	-
1972-H1544	2441671-14	1972 Dec 19 15:17:00	Rocketsonde	-	-	Starute, Dataonide	-	-	-	THU	LC43	-	-	61	-	-
1972-H1546	2441671-17	1972 Dec 19 16:06:00	Rocketsonde	-	-	Met. Para	-	-	-	VI	-	-	-	56	-	-
1972-H1547	2441671-29	1972 Dec 19 18:06:00	Rocketsonde	-	-	Met. Para, Arcasonide	-	-	-	VI	-	-	-	57	-	-
1972-H1548	2441671-37	1972 Dec 19 18:59:59	Rocketsonde	-	-	Starute, Dataonide	-	-	-	WS	-	-	-	63	-	-
1972-H1549	2441671-58	1972 Dec 19 20:49:59	Rocketsonde	-	-	Starute, Dataonide	-	-	-	PM	-	-	-	60	-	-
1972-H1550	2441672-10	1972 Dec 20 01:57:59	Rocketsonde	-	-	Starute, Dataonide	-	-	-	PM	-	-	-	61	-	-
1972-H1550	2441672-10	1972 Dec 20 14:26:00	Rocketsonde	-	-	Starute, Dataonide	-	-	-	KHR	-	-	-	61	-	-
1972-H1551	2441672-12	1972 Dec 20 14:54:00	Rocketsonde	-	-	Starute, Dataonide	-	-	-	CC	LC43	-	-	76	-	-
1972-Y295	2441672-17	1972 Dec 20 16:09:59	Rocketsonde	-	-	Met. Sphere	-	-	-	ASC	-	-	-	62	-	-
1972-H1553	2441672-25	1972 Dec 20 18:00:00	Rocketsonde	-	-	Starute, Dataonide	-	-	-	CC	LC43	-	-	91	-	-
1972-H1554	2441672-25	1972 Dec 20 18:00:00	Rocketsonde	-	-	Starute, Dataonide	-	-	-	AIT	-	-	-	57	-	-
1972-H1555	2441672-31	1972 Dec 20 19:20:59	Rocketsonde	-	-	Starute, Dataonide	-	-	-	WS	-	-	-	66	-	-
1972-H1556	2441672-51	1972 Dec 21 00:11:00	Rocketsonde	-	-	Starute, Dataonide	-	-	-	VI	-	-	-	61	-	-
1972-H1558	2441673-21	1972 Dec 21 16:57:59	Rocketsonde	-	-	Starute, Dataonide	-	-	-	KHR	-	-	-	60	-	-
1972-H119	2441673-38	1972 Dec 21 21:00:00	Rocketsonde	-	-	Starute, Dataonide	-	-	-	PM	-	-	-	57	-	-
1972-H119	2441673-38	1972 Dec 21 21:00:00	Rocketsonde	-	-	Starute, Dataonide	-	-	-	KAU	-	-	-	44	-	-
1972-H1560	2441674-29	1972 Dec 22 18:59:59	Rocketsonde	-	-	Starute, Dataonide	-	-	-	WS	-	-	-	63	-	-
1972-H1561	2441674-33	1972 Dec 22 20:00:00	Rocketsonde	-	-	Starute, Dataonide	-	-	-	WS	-	-	-	51	-	-
1972-H1562	2441678-28	1972 Dec 26 18:49:59	Rocketsonde	-	-	Starute, Dataonide	-	-	-	KAU	-	-	-	56	-	-
1972-H1563	2441678-38	1972 Dec 26 21:07:00	Rocketsonde	-	-	Starute, Dataonide	-	-	-	PM	-	-	-	61	-	-
1972-H1565	2441679-18	1972 Dec 27 16:24:59	Rocketsonde	-	-	Starute, Dataonide	-	-	-	KAU	-	-	-	72	-	-
1972-Y302	2441679-27	1														

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Launch_Mission	FlightCode	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee_Km	Range_Km	Dest
1972-W1568	2441679-40	1972 Dec 27 2134:59	Rocketsonde	-	-	Starute, Dataosnde	-	-	-	KAU	-	-	-	60	-	-
1972-T303	2441679-43	1972 Dec 27 2219:59	Rocketsonde	-	-	Met. Sphere	-	-	-	KAU	-	-	-	90	-	-
1972-W1569	2441679-49	1972 Dec 27 2346:00	Rocketsonde	-	-	Starute, Dataosnde	-	-	-	KRR	-	-	-	60	-	-
1972-W1571	2441681-10	1972 Dec 29 1824:00	Rocketsonde	-	-	Starute, Dataosnde	-	-	-	PH	LC43	-	-	71	-	-
1972-W1573	2441681-27	1972 Dec 29 1833:00	Rocketsonde	-	-	Starute, Dataosnde	-	-	-	CC	-	-	-	57	-	-
1972-W1574	2441681-29	1972 Dec 29 1859:59	Rocketsonde	-	-	Starute, Dataosnde	-	-	-	KRR	-	-	-	62	-	-
1972-W1575	2441681-49	1972 Dec 29 2346:00	Rocketsonde	-	-	Starute, Dataosnde	-	-	-	KRR	-	-	-	66	-	-
1973-W949	2441891-14	1973 Jul 27 1515:59	Rocketsonde	-	-	Met. Para., Dataosnde	-	-	-	WI	-	-	-	69	-	-
1973-W950	2441891-16	1973 Jul 27 1546:00	Rocketsonde	-	-	Met. Para., Dataosnde	-	-	-	WI	-	-	-	68	-	-
1973-W951	2441891-29	1973 Jul 27 1859:59	Rocketsonde	-	-	Starute, Dataosnde	-	-	-	PH	-	-	-	69	-	-
1973-W952	2441892-03	1973 Jul 28 1244:00	Rocketsonde	-	-	Starute, Dataosnde	-	-	-	CC	LC43	-	-	63	-	-
1973-W953	2441894-14	1973 Jul 30 1524:59	Rocketsonde	-	-	Starute, Dataosnde	-	-	-	ASC	-	-	-	50	-	-
1973-W954	2441894-19	1973 Jul 30 1630:00	Rocketsonde	-	-	Met. Para., Arcasonde	-	-	-	AIT	-	-	-	38	-	-
1973-W955	2441894-23	1973 Jul 30 1730:00	Rocketsonde	-	-	Starute, Dataosnde	-	-	-	SHER	-	-	-	60	-	-
1973-W956	2441894-25	1973 Jul 30 1755:00	Rocketsonde	-	-	Starute, Dataosnde	-	-	-	CC	LC43	-	-	62	-	-
1973-W957	2441894-31	1973 Jul 30 1950:00	Rocketsonde	-	-	Starute, Dataosnde	-	-	-	WS	-	-	-	71	-	-
1973-W958	2441894-41	1973 Jul 30 2156:00	Rocketsonde	-	-	Starute, Dataosnde	-	-	-	WS	-	-	-	68	-	-
1973-W959	2441895-31	1973 Jul 31 1919:59	Rocketsonde	-	-	Starute, Dataosnde	-	-	-	KAU	-	-	-	60	-	-
1973-W960	2441895-52	1973 Aug 1 0035:59	Rocketsonde	-	-	Starute, Dataosnde	-	-	-	PF	-	-	-	56	-	-
1973-W961	2441896-07	1973 Aug 1 1344:59	Rocketsonde	-	-	Starute, Dataosnde	-	-	-	KRR	-	-	-	76	-	-
1973-W962	2441896-08	1973 Aug 1 1344:59	Rocketsonde	-	-	Starute, Dataosnde	-	-	-	CC	LC43	-	-	64	-	-
1973-W963	2441896-08	1973 Aug 1 1400:00	Rocketsonde	-	-	Starute, Dataosnde	-	-	-	CLBI	-	-	-	64	-	-
1973-W964	2441896-09	1973 Aug 1 1404:59	Rocketsonde	-	-	Starute, Dataosnde	-	-	-	ASC	-	-	-	61	-	-
1973-W965	2441896-10	1973 Aug 1 1430:00	Rocketsonde	-	-	Met. Para., Arcasonde	-	-	-	AIT	-	-	-	51	-	-
1973-W966	2441896-12	1973 Aug 1 1466:00	Rocketsonde	-	-	Starute, Dataosnde	-	-	-	CC	LC43	-	-	63	-	-
1973-W970	2441896-17	1973 Aug 1 1569:59	Rocketsonde	-	-	Met. Para., Arcasonde	-	-	-	WI	-	-	-	50	-	-
1973-W971	2441896-17	1973 Aug 1 1602:59	Rocketsonde	-	-	Met. Sphere	-	-	-	WI	LC43	-	-	96	-	-
1973-W972	2441896-19	1973 Aug 1 1630:59	Rocketsonde	-	-	Met. Sphere	-	-	-	PH	-	-	-	87	-	-
1973-W973	2441896-27	1973 Aug 2 1630:59	Rocketsonde	-	-	Starute, Dataosnde	-	-	-	SHER	-	-	-	62	-	-
1973-W974	2441897-05	1973 Aug 2 1514:59	Rocketsonde	-	-	SIS	-	-	-	WS	-	-	-	83	-	-
1973-W975	2441897-35	1973 Aug 2 1752:00	Rocketsonde	-	-	Starute, AN/DNQ-9	-	-	-	THU	-	-	-	60	-	-
1973-W976	2441898-07	1973 Aug 3 0762:00	Rocketsonde	-	-	Starute, Dataosnde	-	-	-	WS	-	-	-	67	-	-
1973-W977	2441898-08	1973 Aug 3 1344:59	Rocketsonde	-	-	Starute, Dataosnde	-	-	-	WS	-	-	-	68	-	-
1973-W978	2441898-10	1973 Aug 3 1400:00	Rocketsonde	-	-	Starute, Dataosnde	-	-	-	CC	LC43	-	-	62	-	-
1973-W979	2441898-10	1973 Aug 3 1426:00	Rocketsonde	-	-	Starute, Dataosnde	-	-	-	ASC	-	-	-	61	-	-
1973-W980	2441898-36	1973 Aug 3 2000:00	Rocketsonde	-	-	Starute, Dataosnde	-	-	-	WI	-	-	-	63	-	-
1973-W981	2441898-40	1973 Aug 3 2100:00	Rocketsonde	-	-	Starute, Dataosnde	-	-	-	WI	-	-	-	69	-	-
1973-W982	2441898-55	1973 Aug 4 0046:00	Rocketsonde	-	-	Met. Sphere	-	-	-	KAU	-	-	-	67	-	-
1973-W983	2441901-07	1973 Aug 6 1542:59	Rocketsonde	-	-	Starute, Dataosnde	-	-	-	KRR	-	-	-	58	-	-
1973-W984	2441901-14	1973 Aug 6 1630:00	Rocketsonde	-	-	Starute, AN/DNQ-9	-	-	-	THU	LC43	-	-	53	-	-
1973-W985	2441901-19	1973 Aug 6 1634:59	Rocketsonde	-	-	Starute, Dataosnde	-	-	-	SHER	-	-	-	89	-	-
1973-W986	2441901-21	1973 Aug 6 1630:00	Rocketsonde	-	-	Starute, Dataosnde	-	-	-	WS	-	-	-	89	-	-
1973-W987	2441901-25	1973 Aug 6 1807:00	Rocketsonde	-	-	Starute, Dataosnde	-	-	-	PH	-	-	-	69	-	-
1973-W988	2441901-26	1973 Aug 6 1807:00	Rocketsonde	-	-	Starute, Dataosnde	-	-	-	PH	-	-	-	69	-	-
1973-W989	2441901-53	1973 Aug 7 0045:59	Rocketsonde	-	-	Met. Para., Arcasonde	-	-	-	AIT	-	-	-	50	-	-
1973-W990	2441903-07	1973 Aug 8 1344:59	Rocketsonde	-	-	Starute, Dataosnde	-	-	-	KAU	-	-	-	54	-	-
1973-W991	2441903-14	1973 Aug 8 1506:59	Rocketsonde	-	-	Starute, Dataosnde	-	-	-	KRR	-	-	-	81	-	-
1973-W992	2441903-14	1973 Aug 8 1506:59	Rocketsonde	-	-	Starute, Dataosnde	-	-	-	CC	LC43	-	-	63	-	-
1973-W993	2441903-21	1973 Aug 8 1630:00	Rocketsonde	-	-	Starute, Dataosnde	-	-	-	ASC	-	-	-	70	-	-
1973-W994	2441903-21	1973 Aug 8 1700:00	Rocketsonde	-	-	Met. Sphere	-	-	-	PH	-	-	-	85	-	-
1973-W995	2441903-21	1973 Aug 8 1700:00	Rocketsonde	-	-	Starute, Dataosnde	-	-	-	SHER	-	-	-	61	-	-
1973-W996	2441903-21	1973 Aug 8 1909:59	Rocketsonde	-	-	Starute, Dataosnde	-	-	-	CC	LC43	-	-	95	-	-
1973-W997	2441903-36	1973 Aug 8 2034:00	Rocketsonde	-	-	Starute, Dataosnde	-	-	-	WS	-	-	-	60	-	-
1973-W998	2441903-36	1973 Aug 8 2193:59	Rocketsonde	-	-	Starute, Dataosnde	-	-	-	PF	-	-	-	61	-	-
1973-W999	2441903-42	1973 Aug 8 2167:59	Rocketsonde	-	-	Starute, Dataosnde	-	-	-	WI	-	-	-	59	-	-
1973-W1000	2441903-54	1973 Aug 9 0053:00	Rocketsonde	-	-	Starute, Dataosnde	-	-	-	KAU	-	-	-	59	-	-
1973-W1001	2441904-25	1973 Aug 9 1755:00	Rocketsonde	-	-	Starute, Dataosnde	-	-	-	KRR	-	-	-	77	-	-
1973-W1002	2441904-31	1973 Aug 9 1919:59	Rocketsonde	-	-	Starute, Dataosnde	-	-	-	WS	-	-	-	71	-	-
1973-W1003	2441904-97	1973 Aug 10 1122:00	Rocketsonde	-	-	Starute, Dataosnde	-	-	-	PF	-	-	-	61	-	-
1973-W1004	2441905-07	1973 Aug 10 1345:59	Rocketsonde	-	-	Starute, Dataosnde	-	-	-	WS	-	-	-	71	-	-
1973-W1005	2441905-08	1973 Aug 10 1400:00	Rocketsonde	-	-	Starute, Dataosnde	-	-	-	CC	LC43	-	-	62	-	-
1973-W1006	2441905-14	1973 Aug 10 1520:00	Rocketsonde	-	-	Starute, Dataosnde	-	-	-	ASC	-	-	-	70	-	-
1973-W1007	2441905-17	1973 Aug 10 1611:59	Rocketsonde	-	-	Starute, Dataosnde	-	-	-	WI	-	-	-	64	-	-
1973-W1008	2441905-21	1973 Aug 10 1700:00	Rocketsonde	-	-	Starute, Dataosnde	-	-	-	SHER	-	-	-	68	-	-
1973-W1009	2441905-31	1973 Aug 10 1919:59	Rocketsonde	-	-	Starute, Dataosnde	-	-	-	WI	-	-	-	69	-	-
1973-W1010	2441905-53	1973 Aug 11 0045:00	Rocketsonde	-	-	Starute, Dataosnde	-	-	-	PF	-	-	-	61	-	-
1973-W1011	2441908-08	1973 Aug 13 1524:59	Rocketsonde	-	-	Starute, Dataosnde	-	-	-	WI	-	-	-	65	-	-
1973-W1012	2441908-14	1973 Aug 13 1700:00	Rocketsonde	-	-	Starute, Dataosnde	-	-	-	ASC	-	-	-	71	-	-
1973-W1013	2441908-21	1973 Aug 13 1700:00	Rocketsonde	-	-	Starute, Dataosnde	-	-	-	CC	LC43	-	-	73	-	-
1973-W1014	2441908-21	1973 Aug 13 1700:00	Rocketsonde	-	-	Starute, Dataosnde	-	-	-	WS	-	-	-	66	-	-
1973-W1015	2441908-22	1973 Aug 13 1715:00	Rocketsonde	-	-	Starute, Dataosnde	-	-	-	WS	-	-	-	66	-	-
1973-W1016	2441908-25	1973 Aug 13 1800:00	Rocketsonde	-	-	Starute, Dataosnde	-	-	-	SHER	-	-	-	71	-	-
1973-W1017	2441908-25	1973 Aug 13 1800:00	Rocketsonde	-	-	Starute, Dataosnde	-	-	-	WS	-	-	-	63	-	-
1973-W1018	2441908-41	1973 Aug 13 1919:59	Rocketsonde	-	-	Starute, Dataosnde	-	-	-	CC	LC43	-	-	66	-	-
1973-W1019	2441908-41	1973 Aug 13 2149:59	Rocketsonde	-	-	Starute, Dataosnde	-	-	-	WS	-	-	-	62	-	-
1973-W1020	2441909-53	1973 Aug 14 0045:00	Rocketsonde	-	-	Starute, Dataosnde	-	-	-	PF	-	-	-	60	-	-
1973-W1021	2441909-25	1973 Aug 14 1757:00	Rocketsonde	-	-	Starute, Dataosnde	-	-	-	KAU	-	-	-	80	-	-
1973-W1022	2441909-31	1973 Aug 14 1924:59	Rocketsonde	-	-	Starute, Dataosnde	-	-	-	KRR	-	-	-	61	-	-
1973-W1023	2441909-73	1973 Aug 15 0630:00	Rocketsonde	-	-	Starute, Dataosnde	-	-	-	PRIM	-	-	-	58	-	-
1973-W1024	2441910-07	1973 Aug 15 1344:59	Rocketsonde	-	-	Starute, Dataosnde	-	-	-	PF	-	-	-	66	-	-
1973-W1025	2441910-07	1973 Aug 15 1345:59	Rocketsonde	-	-	Starute, Dataosnde	-	-	-	WS	-	-	-	70	-	-
1973-W1026	2441910-08	1973 Aug 15 1400:00	Rocketsonde	-	-	Chaff	-	-	-	CC	LC43	-	-	64	-	-
1973-W1027	2441910-11	1973 Aug 15 1437:59	Rocketsonde	-	-	Starute, Dataosnde	-	-	-	ASC	-	-	-	60	-	-

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Mission	FlightCode	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee km	Range km	Dest
1973-H1028	2441910-15	1973 Aug 15 1558:59	Rocketsonde	-	-	Starute, Dataonide	-	-	-	PRLM	-	-	-	58	-	-
1973-H1029	2441910-19	1973 Aug 15 1632:59	Rocketsonde	-	-	Starute, Dataonide	-	-	-	SHER	-	-	-	56	-	-
1973-H1030	2441910-21	1973 Aug 15 1700:00	Rocketsonde	-	-	Met. Sphere	-	-	-	CC	LC43	-	-	98	-	-
1973-H1031	2441910-29	1973 Aug 15 1859:59	Rocketsonde	-	-	Starute, Dataonide	-	-	-	WS	-	-	-	66	-	-
1973-H1032	2441910-36	1973 Aug 15 2040:00	Rocketsonde	-	-	Met. Sphere	-	-	-	PH	-	-	-	72	-	-
1973-H1033	2441910-38	1973 Aug 15 2100:00	Rocketsonde	-	-	Starute, Dataonide	-	-	-	WS	-	-	-	76	-	-
1973-H1034	2441910-41	1973 Aug 15 2102:59	Rocketsonde	-	-	Starute, Dataonide	-	-	-	PH	-	-	-	90	-	-
1973-H1035	2441910-44	1973 Aug 15 2156:59	Rocketsonde	-	-	Met. Sphere	-	-	-	KAU	-	-	-	57	-	-
1973-H1036	2441910-44	1973 Aug 15 2227:59	Rocketsonde	-	-	Starute, Dataonide	-	-	-	KAU	-	-	-	90	-	-
1973-H1037	2441911-05	1973 Aug 16 0004:59	Rocketsonde	-	-	Starute, Dataonide	-	-	-	KRR	-	-	-	77	-	-
1973-H1038	2441911-21	1973 Aug 16 1307:59	Rocketsonde	-	-	Starute, Dataonide	-	-	-	THU	-	-	-	46	-	-
1973-H1039	2441911-25	1973 Aug 16 1700:00	Rocketsonde	-	-	Starute, Dataonide	-	-	-	WS	-	-	-	71	-	-
1973-H1040	2441911-25	1973 Aug 16 1755:00	Rocketsonde	-	-	Starute, Dataonide	-	-	-	WS	-	-	-	66	-	-
1973-H1041	2441911-93	1973 Aug 17 1019:59	Rocketsonde	-	-	Starute, Dataonide	-	-	-	PF	-	-	-	61	-	-
1973-H1042	2441912-08	1973 Aug 17 1400:00	Rocketsonde	-	-	Starute, Dataonide	-	-	-	ASC	-	-	-	71	-	-
1973-H1043	2441912-12	1973 Aug 17 1500:00	Rocketsonde	-	-	Starute, Dataonide	-	-	-	CC	LC43	-	-	0	-	-
1973-H1044	2441912-12	1973 Aug 17 1500:00	Rocketsonde	-	-	Starute, Dataonide	-	-	-	SHER	-	-	-	57	-	-
1973-H1045	2441912-17	1973 Aug 17 1559:59	Rocketsonde	-	-	Starute, Dataonide	-	-	-	SHER	-	-	-	70	-	-
1973-H1046	2441914-19	1973 Aug 17 1630:00	Rocketsonde	-	-	Starute, Dataonide	-	-	-	WS	-	-	-	57	-	-
1973-H1047	2441914-32	1973 Aug 20 1009:59	Rocketsonde	-	-	Starute, Dataonide	-	-	-	PRLM	-	-	-	61	-	-
1973-H1048	2441915-06	1973 Aug 20 1348:59	Rocketsonde	-	-	Starute, Dataonide	-	-	-	PF	LC43	-	-	66	-	-
1973-H1049	2441915-15	1973 Aug 20 1530:00	Rocketsonde	-	-	Starute, Dataonide	-	-	-	CC	-	-	-	66	-	-
1973-H1050	2441915-19	1973 Aug 20 1630:00	Rocketsonde	-	-	Starute, Dataonide	-	-	-	PRLM	-	-	-	70	-	-
1973-H1051	2441915-21	1973 Aug 20 1700:00	Rocketsonde	-	-	Starute, Dataonide	-	-	-	SHER	-	-	-	66	-	-
1973-H1052	2441915-53	1973 Aug 21 0045:00	Rocketsonde	-	-	Starute, Dataonide	-	-	-	WS	-	-	-	71	-	-
1973-H1053	2441915-52	1973 Aug 21 0959:59	Rocketsonde	-	-	Starute, Dataonide	-	-	-	KRR	-	-	-	77	-	-
1973-H1054	2441916-25	1973 Aug 21 1755:00	Rocketsonde	-	-	Starute, Dataonide	-	-	-	PF	-	-	-	62	-	-
1973-H1055	2441916-25	1973 Aug 21 1755:00	Rocketsonde	-	-	Starute, Dataonide	-	-	-	PRLM	-	-	-	60	-	-
1973-H1056	2441916-94	1973 Aug 22 1040:00	Rocketsonde	-	-	Starute, Dataonide	-	-	-	THU	-	-	-	52	-	-
1973-H1057	2441917-02	1973 Aug 22 1354:59	Rocketsonde	-	-	Starute, Dataonide	-	-	-	PF	-	-	-	66	-	-
1973-H1058	2441917-11	1973 Aug 22 1500:00	Rocketsonde	-	-	Starute, Dataonide	-	-	-	SHER	-	-	-	66	-	-
1973-H1059	2441917-21	1973 Aug 22 1703:00	Rocketsonde	-	-	Starute, Dataonide	-	-	-	PRLM	-	-	-	70	-	-
1973-H1060	2441917-25	1973 Aug 22 1723:00	Rocketsonde	-	-	Starute, Dataonide	-	-	-	PH	-	-	-	68	-	-
1973-H1061	2441917-25	1973 Aug 22 1800:00	Rocketsonde	-	-	Starute, Dataonide	-	-	-	CC	LC43	-	-	68	-	-
1973-H1062	2441917-51	1973 Aug 23 0010:00	Rocketsonde	-	-	Starute, Dataonide	-	-	-	WS	-	-	-	68	-	-
1973-H1063	2441917-50	1973 Aug 23 0230:00	Rocketsonde	-	-	Starute, Dataonide	-	-	-	KRR	-	-	-	70	-	-
1973-H1064	2441917-60	1973 Aug 23 0345:00	Rocketsonde	-	-	Starute, Dataonide	-	-	-	PH	-	-	-	96	-	-
1973-H1065	2441918-04	1973 Aug 23 1239:59	Rocketsonde	-	-	Starute, Dataonide	-	-	-	THU	-	-	-	52	-	-
1973-H1066	2441918-57	1973 Aug 24 0145:59	Rocketsonde	-	-	Starute, Dataonide	-	-	-	WS	-	-	-	71	-	-
1973-H1067	2441918-57	1973 Aug 24 0145:59	Rocketsonde	-	-	Starute, Dataonide	-	-	-	WS	-	-	-	70	-	-
1973-H1068	2441918-32	1973 Aug 24 0750:00	Rocketsonde	-	-	Starute, Dataonide	-	-	-	PF	-	-	-	61	-	-
1973-H1069	2441918-32	1973 Aug 24 0750:00	Rocketsonde	-	-	Starute, Dataonide	-	-	-	CC	LC43	-	-	68	-	-
1973-H1070	2441918-07	1973 Aug 24 1344:59	Rocketsonde	-	-	Starute, Dataonide	-	-	-	THU	-	-	-	68	-	-
1973-H1071	2441918-06	1973 Aug 24 1427:59	Rocketsonde	-	-	Starute, Dataonide	-	-	-	WS	-	-	-	61	-	-
1973-H1072	2441918-10	1973 Aug 24 1427:59	Rocketsonde	-	-	Starute, Dataonide	-	-	-	CC	LC43	-	-	67	-	-
1973-H1073	2441918-17	1973 Aug 24 1604:59	Rocketsonde	-	-	Starute, Dataonide	-	-	-	ASC	-	-	-	83	-	-
1973-H1074	2441918-17	1973 Aug 24 1604:59	Rocketsonde	-	-	Starute, Dataonide	-	-	-	THU	LC43	-	-	69	-	-
1973-H1075	2441919-34	1973 Aug 24 2030:00	Rocketsonde	-	-	Starute, Dataonide	-	-	-	PH	-	-	-	68	-	-
1973-H1076	2441919-35	1973 Aug 25 0045:00	Rocketsonde	-	-	Starute, Dataonide	-	-	-	WS	-	-	-	64	-	-
1973-H1077	2441921-93	1973 Aug 27 1014:59	Rocketsonde	-	-	Starute, Dataonide	-	-	-	PRLM	LC43	-	-	53	-	-
1973-H1078	2441922-07	1973 Aug 27 1344:59	Rocketsonde	-	-	Starute, Dataonide	-	-	-	CC	-	-	-	62	-	-
1973-H1079	2441922-07	1973 Aug 27 1344:59	Rocketsonde	-	-	Starute, Dataonide	-	-	-	PH	-	-	-	64	-	-
1973-H1080	2441922-15	1973 Aug 27 1539:00	Rocketsonde	-	-	Starute, Dataonide	-	-	-	ASC	LC43	-	-	63	-	-
1973-H1081	2441922-15	1973 Aug 27 1539:00	Rocketsonde	-	-	Starute, Dataonide	-	-	-	PRLM	-	-	-	68	-	-
1973-H1082	2441922-15	1973 Aug 28 0045:00	Rocketsonde	-	-	Starute, Dataonide	-	-	-	SHER	-	-	-	50	-	-
1973-H1083	2441922-53	1973 Aug 28 0045:00	Rocketsonde	-	-	Starute, Dataonide	-	-	-	PH	-	-	-	76	-	-
1973-H1084	2441922-81	1973 Aug 28 0720:59	Rocketsonde	-	-	Starute, Dataonide	-	-	-	KRR	-	-	-	60	-	-
1973-H1085	2441922-86	1973 Aug 28 0900:00	Rocketsonde	-	-	Starute, Dataonide	-	-	-	PH	-	-	-	60	-	-
1973-H1086	2441923-10	1973 Aug 28 1419:00	Rocketsonde	-	-	Starute, Dataonide	-	-	-	PF	-	-	-	69	-	-
1973-H1087	2441923-10	1973 Aug 28 1419:00	Rocketsonde	-	-	Starute, Dataonide	-	-	-	VI	-	-	-	66	-	-
1973-H1088	2441923-14	1973 Aug 28 1430:00	Rocketsonde	-	-	Met. Para	-	-	-	VI	-	-	-	64	-	-
1973-H1089	2441924-08	1973 Aug 29 1400:00	Rocketsonde	-	-	Met. Para	-	-	-	VI	-	-	-	60	-	-
1973-H1090	2441924-11	1973 Aug 29 1437:00	Rocketsonde	-	-	Starute, Dataonide	-	-	-	PF	-	-	-	62	-	-
1973-H1091	2441923-92	1973 Aug 29 0959:59	Rocketsonde	-	-	Starute, Dataonide	-	-	-	KAU	-	-	-	61	-	-
1973-H1092	2441923-93	1973 Aug 29 1019:59	Rocketsonde	-	-	Starute, Dataonide	-	-	-	KRR	-	-	-	81	-	-
1973-H1093	2441923-96	1973 Aug 29 1056:59	Rocketsonde	-	-	Starute, Dataonide	-	-	-	CLBI	-	-	-	61	-	-
1973-H1094	2441924-07	1973 Aug 29 1344:59	Rocketsonde	-	-	Met. Para, Arcasonde	-	-	-	AUT	-	-	-	57	-	-
1973-H1095	2441924-08	1973 Aug 29 1400:00	Rocketsonde	-	-	Starute, Dataonide	-	-	-	ASC	-	-	-	55	-	-
1973-H1096	2441924-11	1973 Aug 29 1445:00	Rocketsonde	-	-	Starute, Dataonide	-	-	-	VI	-	-	-	67	-	-
1973-H1097	2441924-12	1973 Aug 29 1500:00	Rocketsonde	-	-	Starute, Dataonide	-	-	-	THU	-	-	-	58	-	-
1973-H1098	2441924-21	1973 Aug 29 1559:59	Rocketsonde	-	-	Starute, Dataonide	-	-	-	SHER	-	-	-	62	-	-
1973-H1099	2441924-21	1973 Aug 29 1700:00	Rocketsonde	-	-	Starute, Dataonide	-	-	-	CC	LC43	-	-	97	-	-
1973-H1100	2441924-39	1973 Aug 29 2120:00	Rocketsonde	-	-	Starute, Dataonide	-	-	-	WS	-	-	-	60	-	-
1973-H1101	2441924-50	1973 Aug 30 0004:59	Rocketsonde	-	-	Starute, Dataonide	-	-	-	PH	-	-	-	59	-	-
1973-H1102	2441924-92	1973 Aug 30 0959:59	Rocketsonde	-	-	Starute, Dataonide	-	-	-	KRR	-	-	-	79	-	-
1973-H1103	2441925-02	1973 Aug 30 1249:59	Rocketsonde	-	-	Starute, Dataonide	-	-	-	PF	-	-	-	60	-	-
1973-H1104	2441925-05	1973 Aug 30 1755:00	Rocketsonde	-	-	Starute, Dataonide	-	-	-	THU	-	-	-	70	-	-
1973-H1105	2441925-25	1973 Aug 30 2149:59	Rocketsonde	-	-	Starute, Dataonide	-	-	-	PRLM	-	-	-	64	-	-
1973-H1106	2441925-25	1973 Aug 30 2149:59	Rocketsonde	-	-	Starute, Dataonide	-	-	-	WS	-	-	-	68	-	-
1973-H1107	2441925-41	1973 Aug 31 0949:59	Rocketsonde	-	-	Starute, Dataonide	-	-	-	KAU	-	-	-	59	-	-
1973-H1108	2441925-07	1973 Aug 31 1344:59	Rocketsonde	-	-	Starute, Dataonide	-	-	-	PF	-	-	-	60	-	-
1973-H1109	2441926-08	1973 Aug 31 1400:00	Rocketsonde	-	-	Starute, Dataonide	-	-	-	CC	LC43	-	-	61	-	-
1973-H1110	2441926-09	1973 Aug 31 1410:00	Rocketsonde	-	-	Starute, Dataonide	-	-	-	ASC	-	-	-	56	-	-
1973-H1111	2441926-18	1973 Aug 31 1618:00	Rocketsonde	-	-	Met. Para, Arcasonde	-	-	-	AUT	-	-	-	44	-	-
1973-H1112	2441926-18	1973 Aug 31 1618:00	Rocketsonde	-	-	Starute, Dataonide	-	-	-	PH	-	-	-	88	-	-
1973-H1113	2441926-22	1973 Aug 31 1720:00	Rocketsonde	-	-	Starute, Dataonide	-	-	-	WS	-	-	-	69	-	-

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Mission	FlightCode	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee_Km	Range_Km	Dest
1973-1116	2441926-33	1973 Aug 31 1958:59	Rocketsonde	-	-	Met. Sphere	-	-	-	PH	-	-	-	79	-	-
1973-1962	2441926-36	1973 Aug 31 2044:00	Rocketsonde	-	-	Met. Sphere, MK-1	-	-	-	PH	-	-	-	85	-	-
1973-1963	2441926-38	1973 Aug 31 2113:59	Rocketsonde	-	-	Met. Sphere, MK-1	-	-	-	PH	-	-	-	86	-	-
1973-1117	2441926-53	1973 Sep 4 1504:50	Rocketsonde	-	-	Starute, Datasonde	-	-	-	KHR	-	-	-	88	-	-
1973-1118	2441930-13	1973 Sep 4 1501:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	KHR	-	-	-	62	-	-
1973-1119	2441930-25	1973 Sep 4 1755:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PHLM	-	-	-	58	-	-
1973-1121	2441930-31	1973 Sep 4 1919:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PF	-	-	-	56	-	-
1973-1124	2441931-07	1973 Sep 5 1344:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	CC	LC43	-	-	60	-	-
1973-1125	2441931-08	1973 Sep 5 1400:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	ASC	-	-	-	24	-	-
1973-1126	2441931-12	1973 Sep 5 1500:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	SHER	-	-	-	66	-	-
1973-1127	2441931-12	1973 Sep 5 1500:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	WS	-	-	-	66	-	-
1973-1373	2441931-12	1973 Sep 5 1730:00	Rocketsonde	-	-	Met. Sphere	-	-	-	CC	LC43	-	-	85	-	-
1973-1128	2441931-26	1973 Sep 5 1820:00	Rocketsonde	-	-	Met. Para. Arcasonde	-	-	-	WI	-	-	-	58	-	-
1973-1129	2441931-26	1973 Sep 5 1859:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PF	-	-	-	63	-	-
1973-1130	2441931-29	1973 Sep 5 2153:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	KHR	-	-	-	58	-	-
1973-1131	2441931-40	1973 Sep 6 0001:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	RAU	-	-	-	78	-	-
1973-1132	2441932-38	1973 Sep 6 2154:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PH	-	-	-	59	-	-
1973-1133	2441933-07	1973 Sep 7 1344:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	CC	LC43	-	-	62	-	-
1973-1134	2441933-07	1973 Sep 7 1400:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	SHER	-	-	-	24	-	-
1973-1135	2441933-07	1973 Sep 7 1545:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	SHER	-	-	-	69	-	-
1973-1136	2441933-16	1973 Sep 7 1545:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	SHER	-	-	-	52	-	-
1973-1137	2441933-23	1973 Sep 7 1737:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PH	-	-	-	57	-	-
1973-1138	2441933-23	1973 Sep 7 1737:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PH	-	-	-	56	-	-
1973-1139	2441933-24	1973 Sep 7 1746:00	Rocketsonde	-	-	Met. Para. Arcasonde	-	-	-	WS	-	-	-	64	-	-
1973-1140	2441933-31	1973 Sep 7 1919:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	WS	-	-	-	61	-	-
1973-1374	2441933-53	1973 Sep 8 0045:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PH	-	-	-	82	-	-
1973-1141	2441936-07	1973 Sep 10 1344:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	KHR	LC43	-	-	64	-	-
1973-1142	2441936-08	1973 Sep 10 1400:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	CC	-	-	-	69	-	-
1973-1143	2441936-08	1973 Sep 10 1559:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	ASC	-	-	-	55	-	-
1973-1144	2441936-17	1973 Sep 10 1644:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PHLM	-	-	-	59	-	-
1973-1145	2441936-20	1973 Sep 10 1644:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PH	-	-	-	59	-	-
1973-1146	2441936-20	1973 Sep 10 1644:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	SHER	-	-	-	59	-	-
1973-1147	2441936-29	1973 Sep 10 1859:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	WS	-	-	-	61	-	-
1973-1148	2441936-30	1973 Sep 10 1904:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	VI	-	-	-	54	-	-
1973-1149	2441936-51	1973 Sep 11 0215:59	Rocketsonde	-	-	Met. Para. Arcasonde	-	-	-	KHR	-	-	-	78	-	-
1973-1151	2441937-33	1973 Sep 11 0752:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PH	-	-	-	60	-	-
1973-1152	2441937-31	1973 Sep 11 0915:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PH	-	-	-	57	-	-
1973-1153	2441937-30	1973 Sep 12 0706:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	KJU	LC43	-	-	61	-	-
1973-1154	2441938-07	1973 Sep 12 1344:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	CC	-	-	-	65	-	-
1973-1155	2441938-07	1973 Sep 12 1345:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	ALBEI	-	-	-	40	-	-
1973-1156	2441938-08	1973 Sep 12 1400:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	SHER	-	-	-	64	-	-
1973-1157	2441938-08	1973 Sep 12 1400:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	ASC	-	-	-	62	-	-
1973-1158	2441938-12	1973 Sep 12 1600:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	SHER	-	-	-	62	-	-
1973-1159	2441938-12	1973 Sep 12 1600:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PHLM	-	-	-	61	-	-
1973-1160	2441938-16	1973 Sep 12 1546:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PHLM	-	-	-	95	-	-
1973-1161	2441938-16	1973 Sep 12 1546:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	CELAT	-	-	-	95	-	-
1973-1162	2441938-21	1973 Sep 12 1559:59	Rocketsonde	-	-	Met. Sphere	-	-	-	CC	LC43	-	-	70	-	-
1973-1163	2441938-21	1973 Sep 12 1559:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	CC	-	-	-	70	-	-
1973-1164	2441938-20	1973 Sep 13 0050:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	KHR	-	-	-	58	-	-
1973-1165	2441938-71	1973 Sep 13 0504:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PH	-	-	-	79	-	-
1973-1166	2441939-26	1973 Sep 13 1814:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	SHER	-	-	-	63	-	-
1973-1167	2441940-06	1973 Sep 14 1351:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	WS	-	-	-	70	-	-
1973-1168	2441940-08	1973 Sep 14 1351:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	CC	LC43	-	-	63	-	-
1973-1169	2441940-11	1973 Sep 14 1557:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PH	-	-	-	60	-	-
1973-1170	2441940-21	1973 Sep 14 1700:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	WS	-	-	-	67	-	-
1973-1171	2441940-31	1973 Sep 14 1919:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PH	-	-	-	62	-	-
1973-1172	2441940-51	1973 Sep 15 0930:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PH	-	-	-	79	-	-
1973-1173	2441941-51	1973 Sep 16 0015:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	CC	LC43	-	-	65	-	-
1973-1174	2441941-56	1973 Sep 16 0119:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	CC	-	-	-	62	-	-
1973-1175	2441943-07	1973 Sep 17 1344:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	CC	LC43	-	-	63	-	-
1973-1176	2441943-08	1973 Sep 17 1400:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	CC	-	-	-	66	-	-
1973-1177	2441943-19	1973 Sep 17 1830:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	SHER	-	-	-	0	-	-
1973-1178	2441943-19	1973 Sep 17 1830:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	SHER	-	-	-	64	-	-
1973-1179	2441943-25	1973 Sep 17 1800:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	WS	-	-	-	69	-	-
1973-1180	2441943-31	1973 Sep 17 1919:59	Rocketsonde	-	-	Met. Para. Arcasonde	-	-	-	VI	-	-	-	57	-	-
1973-1181	2441943-31	1973 Sep 17 1919:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PH	-	-	-	59	-	-
1973-1182	2441944-25	1973 Sep 18 1755:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	WS	-	-	-	70	-	-
1973-1183	2441944-25	1973 Sep 18 1755:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	KHR	-	-	-	74	-	-
1973-1184	2441944-54	1973 Sep 19 0034:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	ASC	-	-	-	64	-	-
1973-1185	2441945-08	1973 Sep 19 1400:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	WS	-	-	-	70	-	-
1973-1186	2441945-10	1973 Sep 19 1430:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	ASC	-	-	-	59	-	-
1973-1187	2441945-12	1973 Sep 19 1500:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	SHER	LC43	-	-	63	-	-
1973-1188	2441945-17	1973 Sep 19 1559:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	CC	-	-	-	67	-	-
1973-1189	2441945-17	1973 Sep 19 1559:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	VI	-	-	-	63	-	-
1973-1190	2441945-26	1973 Sep 19 1758:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PH	-	-	-	67	-	-
1973-1191	2441945-26	1973 Sep 19 1815:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PH	-	-	-	75	-	-
1973-1192	2441945-29	1973 Sep 19 1859:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PH	-	-	-	59	-	-
1973-1193	2441945-29	1973 Sep 19 1859:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PH	-	-	-	79	-	-
1973-1194	2441945-53	1973 Sep 20 0041:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PH	-	-	-	59	-	-
1973-1195	2441945-53	1973 Sep 20 0449:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	KHR	-	-	-	23	-	-
1973-1196	2441945-70	1973 Sep 20 0449:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	SHER	-	-	-	45	-	-
1973-1197	2441946-19	1973 Sep 20 1630:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	SHER	-	-	-	79	-	-
1973-1198	2441946-25	1973 Sep 20 1755:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	KHR	-	-	-	70	-	-
1973-1199	2441947-07	1973 Sep 21 1344:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	WS	-	-	-	61	-	-
1973-1200	2441947-08	1973 Sep 21 1400:00	Rocketsonde	-	-	Met. Para. Arcasonde	-	-	-	CC	LC43	-	-	51	-	-
1973-1200	2441947-08	1973 Sep 21 1400:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	ASC	-	-	-	65	-	-

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Mission	FlightCode	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee km	Range km	Dest
1973-H1201	2441947-21	1973 Sep 21 1701:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PH	-	-	-	61	-	-
1973-H1202	2441947-22	1973 Sep 21 1715:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	WS	-	-	-	70	-	-
1973-H1203	2441947-24	1973 Sep 21 1740:00	Rocketsonde	-	-	Met. Para, Arcasonde	-	-	-	WI	-	-	-	55	-	-
1973-H1204	2441947-31	1973 Sep 21 1924:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PF	-	-	-	62	-	-
1973-H1205	2441950-08	1973 Sep 24 1400:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	ASC	-	-	-	63	-	-
1973-H1206	2441950-09	1973 Sep 24 1415:00	Rocketsonde	-	-	Met. Para, Arcasonde	-	-	-	ASC	-	-	-	56	-	-
1973-H1207	2441950-14	1973 Sep 24 1514:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	AUT	-	-	-	62	-	-
1973-H1208	2441950-15	1973 Sep 24 1532:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PRUH	-	-	-	62	-	-
1973-H1209	2441950-23	1973 Sep 24 1731:00	Rocketsonde	-	-	Met. Para, Arcasonde	-	-	-	WI	-	-	-	57	-	-
1973-H1210	2441950-25	1973 Sep 24 1759:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PH	-	-	-	58	-	-
1973-H1211	2441950-27	1973 Sep 24 1830:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	WS	-	-	-	64	-	-
1973-H1212	2441950-31	1973 Sep 24 1919:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PF	-	-	-	60	-	-
1973-H1213	2441950-50	1973 Sep 25 0000:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	KRR	-	-	-	78	-	-
1973-H1214	2441950-85	1973 Sep 25 0822:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PH	-	-	-	60	-	-
1973-H1215	2441950-87	1973 Sep 25 0855:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	WS	-	-	-	71	-	-
1973-H1216	2441950-93	1973 Sep 25 1024:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	WS	-	-	-	70	-	-
1973-H1218	2441952-07	1973 Sep 26 1344:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	CC	LC43	-	-	62	-	-
1973-H1219	2441952-08	1973 Sep 26 1400:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	ASC	-	-	-	63	-	-
1973-H1220	2441952-10	1973 Sep 26 1430:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	WS	-	-	-	66	-	-
1973-H1222	2441952-15	1973 Sep 26 1530:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	SHER	-	-	-	66	-	-
1973-H1223	2441952-22	1973 Sep 26 1714:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	WI	-	-	-	61	-	-
1973-H1224	2441952-24	1973 Sep 26 1745:00	Rocketsonde	-	-	Met. Para, Arcasonde	-	-	-	AUT	-	-	-	55	-	-
1973-H1225	2441952-27	1973 Sep 26 1830:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PF	-	-	-	60	-	-
1973-H1226	2441952-56	1973 Sep 27 0124:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	KRR	-	-	-	62	-	-
1973-H1227	2441952-93	1973 Sep 27 0249:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	KRR	-	-	-	58	-	-
1973-H1229	2441953-19	1973 Sep 27 1630:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	SHER	-	-	-	61	-	-
1973-H400	2441953-43	1973 Sep 27 2213:59	Rocketsonde	-	-	Met. Sphere	-	-	-	KRR	-	-	-	86	-	-
1973-H1230	2441953-45	1973 Sep 27 2242:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	KRR	-	-	-	58	-	-
1973-H57	2441954-06	1973 Sep 28 1400:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	KRR	-	-	-	55	-	-
1973-H1231	2441954-08	1973 Sep 28 1400:00	Rocketsonde	-	-	Met. Para, AM/DIQ-9	-	-	-	AUT	-	-	-	48	-	-
1973-H1232	2441954-10	1973 Sep 28 1416:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	ASC	-	-	-	66	-	-
1973-H1233	2441954-11	1973 Sep 28 1416:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	WI	-	-	-	61	-	-
1973-H1234	2441954-17	1973 Sep 28 1600:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PRUH	-	-	-	68	-	-
1973-H1235	2441954-21	1973 Sep 28 1700:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PH	-	-	-	70	-	-
1973-H1236	2441954-29	1973 Sep 28 1855:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PH	-	-	-	74	-	-
1973-H68	2441954-31	1973 Sep 28 1920:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PF	-	-	-	24	-	-
1973-H1244	2441955-77	1973 Sep 30 0623:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	KRR	-	-	-	78	-	-
1973-H403	2441955-96	1973 Sep 30 0655:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	KRR	-	-	-	80	-	-
1973-H1246	2441957-08	1973 Oct 1 1344:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	CC	LC43	-	-	60	-	-
1973-H1248	2441957-09	1973 Oct 1 1400:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	ASC	-	-	-	69	-	-
1973-H1249	2441957-15	1973 Oct 1 1530:00	Rocketsonde	-	-	Met. Para, AM/DIQ-9	-	-	-	AUT	-	-	-	32	-	-
1973-H1247	2441957-16	1973 Oct 1 1530:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PRUH	-	-	-	63	-	-
1973-H1250	2441958-51	1973 Oct 2 0755:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	KRR	-	-	-	67	-	-
1973-H1251	2441958-51	1973 Oct 2 0755:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PRUH	-	-	-	65	-	-
1973-H1252	2441958-25	1973 Oct 2 2159:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	WS	-	-	-	67	-	-
1973-H1253	2441958-25	1973 Oct 2 2159:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	KRR	-	-	-	62	-	-
1973-H1254	2441958-40	1973 Oct 2 2154:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	WS	-	-	-	81	-	-
1973-H1255	2441959-05	1973 Oct 3 1430:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	KRR	-	-	-	63	-	-
1973-H1254	2441959-10	1973 Oct 3 1430:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	ASC	LC43	-	-	58	-	-
1973-H1256	2441959-10	1973 Oct 3 1630:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	ASC	LC43	-	-	74	-	-
1973-H1259	2441959-12	1973 Oct 3 1837:00	Rocketsonde	-	-	Met. Sphere	-	-	-	PRUH	-	-	-	66	-	-
1973-H1260	2441959-26	1973 Oct 3 1837:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PH	-	-	-	74	-	-
1973-H1268	2441959-26	1973 Oct 3 1857:59	Rocketsonde	-	-	Met. Sphere	-	-	-	PH	-	-	-	69	-	-
1973-H1269	2441959-29	1973 Oct 3 1859:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PF	-	-	-	61	-	-
1973-H1260	2441959-33	1973 Oct 3 2335:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	WS	-	-	-	62	-	-
1973-H410	2441959-54	1973 Oct 4 0059:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	KRR	-	-	-	81	-	-
1973-H1261	2441959-54	1973 Oct 4 0130:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	WS	-	-	-	68	-	-
1973-H1262	2441959-56	1973 Oct 4 0235:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	WS	-	-	-	73	-	-
1973-H1263	2441959-61	1973 Oct 4 0419:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	WS	-	-	-	62	-	-
1973-H1264	2441959-68	1973 Oct 4 0449:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	WS	-	-	-	62	-	-
1973-H1265	2441960-27	1973 Oct 4 1825:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PH	-	-	-	88	-	-
1973-H412	2441960-28	1973 Oct 4 1825:59	Rocketsonde	-	-	Met. Sphere, Wf-1	-	-	-	PH	-	-	-	88	-	-
1973-H1266	2441960-28	1973 Oct 4 2134:59	Rocketsonde	-	-	Met. Sphere, Wf-1	-	-	-	PH	-	-	-	88	-	-
1973-H1267	2441961-07	1973 Oct 5 1334:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	KRR	-	-	-	60	-	-
1973-H1268	2441961-08	1973 Oct 5 1400:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	ASC	LC43	-	-	60	-	-
1973-H1269	2441961-10	1973 Oct 5 1425:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	ASC	LC43	-	-	60	-	-
1973-H1270	2441961-15	1973 Oct 5 1530:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	AUT	-	-	-	62	-	-
1973-H413	2441961-20	1973 Oct 5 1633:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PRUH	-	-	-	72	-	-
1973-H1271	2441961-21	1973 Oct 5 1700:00	Rocketsonde	-	-	Met. Sphere, Wf-1	-	-	-	PH	-	-	-	87	-	-
1973-H414	2441961-21	1973 Oct 5 1700:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	WS	-	-	-	70	-	-
1973-H415	2441961-23	1973 Oct 5 1727:59	Rocketsonde	-	-	Met. Sphere, Wf-1	-	-	-	PH	-	-	-	86	-	-
1973-H416	2441961-24	1973 Oct 5 1748:59	Rocketsonde	-	-	Met. Sphere, Wf-1	-	-	-	PH	-	-	-	86	-	-
1973-H417	2441961-38	1973 Oct 5 2111:00	Rocketsonde	-	-	Met. Sphere, Wf-1	-	-	-	PH	-	-	-	85	-	-
1973-H1272	2441961-40	1973 Oct 5 2130:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PH	-	-	-	69	-	-
1973-H418	2441961-41	1973 Oct 5 1643:59	Rocketsonde	-	-	Met. Sphere, Wf-1	-	-	-	PH	-	-	-	85	-	-
1973-H1273	2441964-08	1973 Oct 8 1400:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	ASC	LC43	-	-	68	-	-
1973-H1274	2441964-15	1973 Oct 8 1533:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	CC	LC43	-	-	75	-	-
1973-H1276	2441965-24	1973 Oct 9 1749:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	WI	-	-	-	54	-	-
1973-H1277	2441965-25	1973 Oct 9 1755:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	WS	-	-	-	70	-	-
1973-H1278	2441965-25	1973 Oct 9 1830:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PH	-	-	-	56	-	-
1973-H1279	2441965-29	1973 Oct 9 1858:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PH	-	-	-	60	-	-
1973-H1280	2441965-29	1973 Oct 9 2134:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PH	-	-	-	56	-	-
1973-H1281	2441966-10	1973 Oct 10 1203:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	KRR	-	-	-	69	-	-
1973-H1282	2441966-10	1973 Oct 10 1422:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	WS	-	-	-	59	-	-
1973-H1283	2441966-10	1973 Oct 10 1430:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	WI	-	-	-	65	-	-
1973-H425	2441966-19	1973 Oct 10 1630:00	Rocketsonde	-	-	Met. Sphere	-	-	-	ASC	-	-	-	98	-	-
1973-H1285	2441966-27	1973 Oct 10 1832:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	CC	LC43	-	-	70	-	-
1973-H1286	2441966-29	1973 Oct 10 1859:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PF	-	-	-	62	-	-

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Mission	FlightCode	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee	Range	Dest
1973-H1287	2441966-55	1973 Oct 11 01:18:59	Rocketsonde	-	-	Starvue, Dataonide	-	-	-	RNR	-	-	-	72	-	-
1973-H1288	2441966-94	1973 Oct 11 10:40:00	Rocketsonde	-	-	Starvue, Dataonide	-	-	-	KAU	-	-	-	62	-	-
1973-H1289	2441967-32	1973 Oct 11 19:46:59	Rocketsonde	-	-	Starvue, Dataonide	-	-	-	WI	-	-	-	73	-	-
1973-H1290	2441967-40	1973 Oct 11 21:34:59	Rocketsonde	-	-	Starvue, Dataonide	-	-	-	KAU	-	-	-	58	-	-
1973-H1291	2441968-07	1973 Oct 12 13:44:59	Rocketsonde	-	-	Starvue, Dataonide	-	-	-	CC	LC43	-	-	72	-	-
1973-H1292	2441968-17	1973 Oct 12 16:07:00	Rocketsonde	-	-	Starvue, Dataonide	-	-	-	WS	-	-	-	66	-	-
1973-H1293	2441968-21	1973 Oct 12 17:00:00	Rocketsonde	-	-	Starvue, Dataonide	-	-	-	WS	-	-	-	71	-	-
1973-H1294	2441968-33	1973 Oct 12 19:49:59	Rocketsonde	-	-	Starvue, Dataonide	-	-	-	PF	-	-	-	59	-	-
1973-H1295	2441968-38	1973 Oct 12 14:00:00	Rocketsonde	-	-	Starvue, Dataonide	-	-	-	ASC	-	-	-	66	-	-
1973-H1297	2441971-08	1973 Oct 15 15:14:59	Rocketsonde	-	-	Starvue, Dataonide	-	-	-	CC	LC43	-	-	61	-	-
1973-H1298	2441971-14	1973 Oct 15 15:14:59	Rocketsonde	-	-	Starvue, Dataonide	-	-	-	PRHM	-	-	-	96	-	-
1973-H1299	2441971-21	1973 Oct 15 17:00:00	Rocketsonde	-	-	Starvue, Dataonide	-	-	-	WS	-	-	-	70	-	-
1973-H1300	2441971-23	1973 Oct 15 17:00:00	Rocketsonde	-	-	Starvue, Dataonide	-	-	-	ASC	-	-	-	58	-	-
1973-H1301	2441971-24	1973 Oct 15 17:45:00	Rocketsonde	-	-	Met. Para. Arcsonide	-	-	-	WI	-	-	-	66	-	-
1973-H1302	2441971-25	1973 Oct 15 18:03:59	Rocketsonde	-	-	Met. Para. Arcsonide	-	-	-	PF	-	-	-	58	-	-
1973-H1303	2441971-27	1973 Oct 15 18:03:59	Rocketsonde	-	-	Starvue, Dataonide	-	-	-	WI	-	-	-	68	-	-
1973-H1304	2441971-28	1973 Oct 15 18:46:59	Rocketsonde	-	-	Met. Para. Arcsonide	-	-	-	WI	-	-	-	63	-	-
1973-H1305	2441971-31	1973 Oct 15 19:50:00	Rocketsonde	-	-	Starvue, Dataonide	-	-	-	RNR	-	-	-	82	-	-
1973-H1306	2441971-51	1973 Oct 16 01:13:59	Rocketsonde	-	-	Starvue, Dataonide	-	-	-	CC	LC43	-	-	96	-	-
1973-H1307	2441972-25	1973 Oct 16 17:55:00	Rocketsonde	-	-	Met. Sphere	-	-	-	WS	-	-	-	69	-	-
1973-H1308	2441972-28	1973 Oct 16 17:55:00	Rocketsonde	-	-	Starvue, Dataonide	-	-	-	KAU	-	-	-	58	-	-
1973-H1309	2441972-40	1973 Oct 16 21:34:59	Rocketsonde	-	-	Starvue, Dataonide	-	-	-	CC	LC43	-	-	70	-	-
1973-H1310	2441973-10	1973 Oct 17 14:19:00	Rocketsonde	-	-	Starvue, Dataonide	-	-	-	WI	-	-	-	60	-	-
1973-H1311	2441973-10	1973 Oct 17 14:30:00	Rocketsonde	-	-	Starvue, Dataonide	-	-	-	ASC	-	-	-	73	-	-
1973-H1312	2441973-10	1973 Oct 17 14:30:00	Rocketsonde	-	-	Starvue, Dataonide	-	-	-	PRHM	-	-	-	73	-	-
1973-H1313	2441973-15	1973 Oct 17 15:00:00	Rocketsonde	-	-	Met. Sphere	-	-	-	WS	-	-	-	86	-	-
1973-H1314	2441973-21	1973 Oct 17 18:00:00	Rocketsonde	-	-	Starvue, Dataonide	-	-	-	CC	LC43	-	-	69	-	-
1973-H1315	2441973-25	1973 Oct 17 18:00:00	Rocketsonde	-	-	Starvue, Dataonide	-	-	-	WS	-	-	-	82	-	-
1973-H1316	2441973-27	1973 Oct 17 18:52:00	Rocketsonde	-	-	Starvue, Dataonide	-	-	-	PH	-	-	-	74	-	-
1973-H1317	2441973-30	1973 Oct 17 19:07:59	Rocketsonde	-	-	Starvue, Dataonide	-	-	-	PF	-	-	-	58	-	-
1973-H1318	2441973-33	1973 Oct 17 19:49:59	Rocketsonde	-	-	Starvue, Dataonide	-	-	-	WS	-	-	-	70	-	-
1973-H1319	2441973-38	1973 Oct 17 21:00:00	Rocketsonde	-	-	Met. Sphere	-	-	-	KAU	-	-	-	86	-	-
1973-H1320	2441973-40	1973 Oct 17 21:00:00	Rocketsonde	-	-	Starvue, Dataonide	-	-	-	KAU	-	-	-	59	-	-
1973-H1321	2441973-53	1973 Oct 18 04:45:59	Rocketsonde	-	-	Starvue, Dataonide	-	-	-	RNR	-	-	-	77	-	-
1973-H1322	2441974-06	1973 Oct 18 04:45:59	Rocketsonde	-	-	Starvue, Dataonide	-	-	-	CC	LC43	-	-	96	-	-
1973-H1323	2441974-06	1973 Oct 18 04:45:59	Rocketsonde	-	-	Met. Sphere	-	-	-	PH	-	-	-	74	-	-
1973-H1324	2441974-06	1973 Oct 18 04:45:59	Rocketsonde	-	-	Starvue, Dataonide	-	-	-	CC	LC43	-	-	76	-	-
1973-H1325	2441975-08	1973 Oct 18 14:00:00	Rocketsonde	-	-	Starvue, Dataonide	-	-	-	PH	-	-	-	73	-	-
1973-H1326	2441975-08	1973 Oct 18 14:00:00	Rocketsonde	-	-	Starvue, Dataonide	-	-	-	CC	LC43	-	-	76	-	-
1973-H1327	2441975-20	1973 Oct 18 14:14:00	Rocketsonde	-	-	Starvue, Dataonide	-	-	-	ASC	-	-	-	60	-	-
1973-H1328	2441975-21	1973 Oct 18 14:14:00	Rocketsonde	-	-	Starvue, Dataonide	-	-	-	WI	-	-	-	60	-	-
1973-H1329	2441975-21	1973 Oct 18 17:00:00	Rocketsonde	-	-	Met. Sphere	-	-	-	WS	-	-	-	60	-	-
1973-H1330	2441975-25	1973 Oct 19 17:56:00	Rocketsonde	-	-	Starvue, Dataonide	-	-	-	CC	LC43	-	-	59	-	-
1973-H1331	2441975-27	1973 Oct 19 17:56:00	Rocketsonde	-	-	Starvue, Dataonide	-	-	-	PRHM	-	-	-	74	-	-
1973-H1332	2441975-53	1973 Oct 20 04:45:59	Rocketsonde	-	-	Starvue, Dataonide	-	-	-	PH	-	-	-	53	-	-
1973-H1333	2441975-53	1973 Oct 20 04:45:59	Rocketsonde	-	-	Starvue, Dataonide	-	-	-	RNR	-	-	-	73	-	-
1973-H1334	2441976-06	1973 Oct 20 04:45:59	Rocketsonde	-	-	Starvue, Dataonide	-	-	-	WS	-	-	-	60	-	-
1973-H1335	2441976-06	1973 Oct 20 04:45:59	Rocketsonde	-	-	Starvue, Dataonide	-	-	-	WS	-	-	-	59	-	-
1973-H1336	2441976-06	1973 Oct 20 04:45:59	Rocketsonde	-	-	Starvue, Dataonide	-	-	-	VT	-	-	-	58	-	-
1973-H1337	2441976-21	1973 Oct 21 18:47:59	Rocketsonde	-	-	Starvue, Dataonide	-	-	-	PH	-	-	-	68	-	-
1973-H1338	2441976-32	1973 Oct 21 18:47:59	Rocketsonde	-	-	Met. Para. Arcsonide	-	-	-	WI	-	-	-	72	-	-
1973-H1339	2441976-32	1973 Oct 21 18:47:59	Rocketsonde	-	-	Starvue, Dataonide	-	-	-	KAU	-	-	-	68	-	-
1973-H1340	2441976-35	1973 Oct 21 21:46:59	Rocketsonde	-	-	Starvue, Dataonide	-	-	-	WS	-	-	-	70	-	-
1973-H1341	2441976-35	1973 Oct 21 21:46:59	Rocketsonde	-	-	Starvue, Dataonide	-	-	-	WS	-	-	-	62	-	-
1973-H1342	2441976-35	1973 Oct 21 21:46:59	Rocketsonde	-	-	Starvue, Dataonide	-	-	-	CC	LC43	-	-	62	-	-
1973-H1343	2441976-35	1973 Oct 21 21:46:59	Rocketsonde	-	-	Starvue, Dataonide	-	-	-	CC	LC43	-	-	62	-	-
1973-H1344	2441976-35	1973 Oct 21 21:46:59	Rocketsonde	-	-	Starvue, Dataonide	-	-	-	ASC	-	-	-	64	-	-
1973-H1345	2441976-35	1973 Oct 21 21:46:59	Rocketsonde	-	-	Met. Para. Arcsonide	-	-	-	ASC	-	-	-	66	-	-
1973-H1346	2441976-35	1973 Oct 21 21:46:59	Rocketsonde	-	-	Starvue, Dataonide	-	-	-	ASC	-	-	-	66	-	-
1973-H1347	2441976-35	1973 Oct 21 21:46:59	Rocketsonde	-	-	Met. Sphere	-	-	-	CC	LC43	-	-	95	-	-
1973-H1348	2441976-35	1973 Oct 21 21:46:59	Rocketsonde	-	-	Starvue, Dataonide	-	-	-	PRHM	-	-	-	65	-	-
1973-H1349	2441976-35	1973 Oct 21 21:46:59	Rocketsonde	-	-	Starvue, Dataonide	-	-	-	PH	-	-	-	87	-	-
1973-H1350	2441976-35	1973 Oct 21 21:46:59	Rocketsonde	-	-	Starvue, Dataonide	-	-	-	PH	-	-	-	80	-	-
1973-H1351	2441976-35	1973 Oct 21 21:46:59	Rocketsonde	-	-	Starvue, Dataonide	-	-	-	PH	-	-	-	76	-	-
1973-H1352	2441976-35	1973 Oct 21 21:46:59	Rocketsonde	-	-	Starvue, Dataonide	-	-	-	PH	-	-	-	87	-	-
1973-H1353	2441976-35	1973 Oct 21 21:46:59	Rocketsonde	-	-	Starvue, Dataonide	-	-	-	Met. Sphere	-	-	-	59	-	-
1973-H1354	2441976-35	1973 Oct 21 21:46:59	Rocketsonde	-	-	Starvue, Dataonide	-	-	-	KAU	-	-	-	62	-	-
1973-H1355	2441976-35	1973 Oct 21 21:46:59	Rocketsonde	-	-	Starvue, Dataonide	-	-	-	CC	LC43	-	-	64	-	-
1973-H1356	2441976-35	1973 Oct 21 21:46:59	Rocketsonde	-	-	Starvue, Dataonide	-	-	-	WI	-	-	-	59	-	-
1973-H1357	2441976-35	1973 Oct 21 21:46:59	Rocketsonde	-	-	Starvue, Dataonide	-	-	-	PH	-	-	-	71	-	-
1973-H1358	2441976-35	1973 Oct 21 21:46:59	Rocketsonde	-	-	Starvue, Dataonide	-	-	-	WS	-	-	-	71	-	-
1973-H1359	2441976-35	1973 Oct 21 21:46:59	Rocketsonde	-	-	Starvue, Dataonide	-	-	-	PRHM	-	-	-	57	-	-
1973-H1360	2441976-35	1973 Oct 21 21:46:59	Rocketsonde	-	-	Starvue, Dataonide	-	-	-	PF	-	-	-	79	-	-
1973-H1361	2441976-35	1973 Oct 21 21:46:59	Rocketsonde	-	-	Starvue, Dataonide	-	-	-	PH	-	-	-	61	-	-
1973-H1362	2441976-35	1973 Oct 21 21:46:59	Rocketsonde	-	-	Starvue, Dataonide	-	-	-	RNR	-	-	-	66	-	-
1973-H1363	2441976-35	1973 Oct 21 21:46:59	Rocketsonde	-	-	Starvue, Dataonide	-	-	-	CC	LC43	-	-	69	-	-
1973-H1364	2441976-35	1973 Oct 21 21:46:59	Rocketsonde	-	-	Starvue, Dataonide	-	-	-	PRHM	-	-	-	67	-	-
1973-H1365	2441976-35	1973 Oct 21 21:46:59	Rocketsonde	-	-	Starvue, Dataonide	-	-	-	WS	-	-	-	59	-	-
1973-H1366	2441976-35	1973 Oct 21 21:46:59	Rocketsonde	-	-	Starvue, Dataonide	-	-	-	PH	-	-	-	80	-	-
1973-H1367	2441976-35	1973 Oct 21 21:46:59	Rocketsonde	-	-	Starvue, Dataonide	-	-	-	KAU	-	-	-	59	-	-
1973-H1368	2441976-35	1973 Oct 21 21:46:59	Rocketsonde	-	-	Starvue, Dataonide	-	-	-	KAU	-	-	-	65	-	-
1973-H1369	2441976-35	1973 Oct 21 21:46:59	Rocketsonde	-	-	Starvue, Dataonide	-	-	-	ASC	-	-	-	54	-	-
1973-H1370	2441976-35	1973 Oct 21 21:46:59	Rocketsonde	-	-	Starvue, Dataonide	-	-	-	CC	LC43	-	-	64	-	-
1973-H1371	2441976-35	1973 Oct 21 21:46:59	Rocketsonde	-	-	Starvue, Dataonide	-	-	-	PH	-	-	-	60	-	-
1973-H1372	2441976-35	1973 Oct 21 21:46:59	Rocketsonde	-	-	Starvue, Dataonide	-	-	-	WS	-	-	-	70	-	-
1973-H1373	2441976-35	1973 Oct 21 21:46:59	Rocketsonde	-	-	Starvue, Dataonide	-	-	-	WI	-	-	-	61	-	-
1973-H1374	2441976-35	1973 Oct 21 21:46:59	Rocketsonde	-	-	Starvue, Dataonide	-	-	-	PF	-	-	-	60	-	-
1973-H1375	2441976-35	1973 Nov 1 00:45:00	Rocketsonde	-	-	Starvue, Dataonide	-	-	-	RNR	-	-	-	81	-	-
1973-H137																



Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Mission	FlightCode	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee km	Range km	Dest
1973-1455	2441988-50	1973 Nov 2 0000:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	NHR	-	-	-	81	-	-
1973-1376	2441988-87	1973 Nov 2 0848:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PH	-	-	-	54	-	-
1973-1377	2441989-08	1973 Nov 2 1400:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	ASC	-	-	-	66	-	-
1973-1378	2441989-10	1973 Nov 2 1430:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	CC	LC43	-	-	57	-	-
1973-1380	2441989-19	1973 Nov 2 1637:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PH	-	-	-	61	-	-
1973-1381	2441989-22	1973 Nov 2 1715:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	WS	-	-	-	70	-	-
1973-1382	2441989-27	1973 Nov 2 1833:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	WI	-	-	-	69	-	-
1973-1383	2441989-32	1973 Nov 2 1934:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	WI	-	-	-	77	-	-
1973-1384	2441989-38	1973 Nov 2 1400:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	ASC	-	-	-	68	-	-
1973-1385	2441992-11	1973 Nov 5 1445:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	CC	LC43	-	-	62	-	-
1973-1386	2441992-19	1973 Nov 5 1630:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PRUH	-	-	-	70	-	-
1973-1387	2441992-20	1973 Nov 5 1646:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PH	-	-	-	58	-	-
1973-1388	2441992-25	1973 Nov 5 1800:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	WS	-	-	-	71	-	-
1973-1389	2441992-32	1973 Nov 5 1934:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PF	-	-	-	58	-	-
1973-1390	2441994-32	1973 Nov 7 1400:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	ASC	-	-	-	65	-	-
1973-1391	2441994-38	1973 Nov 7 1400:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	CC	LC43	-	-	62	-	-
1973-1392	2441994-11	1973 Nov 7 1540:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	WI	-	-	-	60	-	-
1973-1461	2441994-23	1973 Nov 7 1730:00	Rocketsonde	-	-	Met. Sphere	-	-	-	PRUH	LC43	-	-	59	-	-
1973-1394	2441994-25	1973 Nov 7 1757:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	WS	-	-	-	70	-	-
1973-1395	2441994-28	1973 Nov 7 1845:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PF	-	-	-	58	-	-
1973-1396	2441994-32	1973 Nov 7 1934:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	NHR	-	-	-	58	-	-
1973-1397	2441994-32	1973 Nov 8 0048:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	KAU	-	-	-	60	-	-
1973-1398	2441994-95	1973 Nov 8 1041:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	KAU	-	-	-	46	-	-
1973-1466	2441995-14	1973 Nov 8 1520:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	WI	-	-	-	63	-	-
1973-1467	2441995-17	1973 Nov 8 1600:00	Rocketsonde	-	-	Met. Para.	-	-	-	WI	-	-	-	63	-	-
1973-1468	2441995-50	1973 Nov 9 0000:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	NHR	-	-	-	81	-	-
1973-1469	2441996-08	1973 Nov 9 0000:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	ASC	-	-	-	64	-	-
1973-1470	2441996-11	1973 Nov 9 1400:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	CC	LC43	-	-	64	-	-
1973-1402	2441996-12	1973 Nov 9 1485:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	CC	-	-	-	56	-	-
1973-1404	2441996-25	1973 Nov 9 1785:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PRUH	-	-	-	62	-	-
1973-1405	2441996-28	1973 Nov 9 1847:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	WI	-	-	-	76	-	-
1973-1463	2441996-33	1973 Nov 9 2000:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	WI	-	-	-	90	-	-
1973-1406	2441996-35	1973 Nov 9 2000:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	WS	-	-	-	71	-	-
1973-1464	2441996-36	1973 Nov 9 2103:59	Rocketsonde	-	-	Met. Sphere	-	-	-	KAU	-	-	-	85	-	-
1973-1407	2441996-40	1973 Nov 9 2154:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	KAU	-	-	-	60	-	-
1973-1408	2441999-13	1973 Nov 12 1511:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	KAU	-	-	-	56	-	-
1973-1409	2441999-19	1973 Nov 12 1640:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	WI	-	-	-	56	-	-
1973-1410	2441999-28	1973 Nov 12 1847:59	Rocketsonde	-	-	Met. Para, Arcasonde	-	-	-	CC	LC43	-	-	55	-	-
1973-1411	2441999-28	1973 Nov 12 1859:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	WI	-	-	-	69	-	-
1973-1412	2441999-34	1973 Nov 12 2010:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PH	-	-	-	86	-	-
1973-1413	2441999-36	1973 Nov 12 2100:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	KAU	-	-	-	91	-	-
1973-1414	2441999-39	1973 Nov 13 1146:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	WS	-	-	-	72	-	-
1973-1415	2441999-39	1973 Nov 13 1146:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	WS	-	-	-	72	-	-
1973-1417	2442000-31	1973 Nov 13 1315:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PH	-	-	-	72	-	-
1973-1418	2442000-31	1973 Nov 13 1350:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PH	-	-	-	72	-	-
1973-1419	2442001-08	1973 Nov 14 1400:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	WI	-	-	-	67	-	-
1973-1420	2442001-08	1973 Nov 14 1430:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	ASC	-	-	-	70	-	-
1973-1421	2442001-11	1973 Nov 14 1430:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	ASC	LC43	-	-	57	-	-
1973-1422	2442001-11	1973 Nov 14 1526:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	WI	-	-	-	57	-	-
1973-1424	2442001-11	1973 Nov 14 1526:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	WI	-	-	-	57	-	-
1973-1425	2442001-26	1973 Nov 14 1854:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	ASC	-	-	-	59	-	-
1973-1426	2442001-33	1973 Nov 14 1854:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PH	-	-	-	62	-	-
1973-1427	2442001-33	1973 Nov 14 1926:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PM	-	-	-	57	-	-
1973-1428	2442001-53	1973 Nov 15 0045:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PH	-	-	-	60	-	-
1973-1429	2442001-53	1973 Nov 15 0045:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	KHR	-	-	-	61	-	-
1973-1430	2442002-04	1973 Nov 15 1359:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	KHR	LC43	-	-	61	-	-
1973-1431	2442002-23	1973 Nov 15 1726:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PM	-	-	-	49	-	-
1973-1432	2442002-50	1973 Nov 16 0000:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PM	-	-	-	76	-	-
1973-1433	2442003-08	1973 Nov 16 1400:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	KHR	-	-	-	67	-	-
1973-1434	2442003-08	1973 Nov 16 1400:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	ASC	-	-	-	73	-	-
1973-1435	2442003-18	1973 Nov 16 1430:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	ASC	-	-	-	63	-	-
1973-1436	2442003-18	1973 Nov 16 1814:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	CC	LC43	-	-	61	-	-
1973-1437	2442003-25	1973 Nov 16 1852:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	CC	LC43	-	-	61	-	-
1973-1438	2442003-25	1973 Nov 16 1755:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	WI	-	-	-	61	-	-
1973-1439	2442003-44	1973 Nov 16 2143:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	WS	-	-	-	61	-	-
1973-1440	2442003-44	1973 Nov 16 2233:59	Rocketsonde	-	-	Met. Sphere	-	-	-	KAU	-	-	-	76	-	-
1973-1441	2442006-08	1973 Nov 19 1400:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	WI	-	-	-	70	-	-
1973-1442	2442006-11	1973 Nov 19 1445:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	WI	LC43	-	-	64	-	-
1973-1443	2442006-25	1973 Nov 19 1804:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	CC	-	-	-	62	-	-
1973-1444	2442006-31	1973 Nov 19 1807:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PM	-	-	-	61	-	-
1973-1445	2442006-32	1973 Nov 19 1930:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	WI	-	-	-	72	-	-
1973-1446	2442006-50	1973 Nov 19 1940:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PF	-	-	-	57	-	-
1973-1447	2442006-50	1973 Nov 20 0000:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PH	-	-	-	79	-	-
1973-1448	2442007-31	1973 Nov 20 1932:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PH	-	-	-	59	-	-
1973-1449	2442007-32	1973 Nov 20 1934:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PH	-	-	-	51	-	-
1973-1451	2442007-85	1973 Nov 21 0825:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PM	-	-	-	67	-	-
1973-1452	2442008-08	1973 Nov 21 1400:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PM	-	-	-	57	-	-
1973-1453	2442008-11	1973 Nov 21 1640:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	ASC	-	-	-	69	-	-
1973-1454	2442008-19	1973 Nov 21 1445:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	CC	LC43	-	-	57	-	-
1973-1455	2442008-23	1973 Nov 21 1730:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	WS	-	-	-	94	-	-
1973-1456	2442008-23	1973 Nov 21 1734:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	CC	LC43	-	-	63	-	-
1973-1457	2442008-33	1973 Nov 21 1801:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PM	-	-	-	63	-	-
1973-1458	2442008-33	1973 Nov 21 2000:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PH	-	-	-	56	-	-
1973-1459	2442008-44	1973 Nov 21 2230:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PH	-	-	-	59	-	-
1973-1478	2442008-53	1973 Nov 22 0045:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	KAU	-	-	-	80	-	-
1973-1461	2442013-08	1973 Nov 26 1400:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	KHR	-	-	-	57	-	-
1973-1462	2442013-08	1973 Nov 26 1400:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	ASC	-	-	-	68	-	-

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Mission	FlightCode	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee km	Range km	Dest
1973-H1463	2442013-11	1973 Nov 26 1445:00	Rocketsonde	-	-	Starute, Dataosonde	-	-	-	CC	LC43	-	-	62	-	-
1973-H1464	2442013-19	1973 Nov 26 1630:00	Rocketsonde	-	-	Starute, Dataosonde	-	-	-	WS	-	-	-	71	-	-
1973-H1466	2442013-26	1973 Nov 26 1814:59	Rocketsonde	-	-	Starute, Dataosonde	-	-	-	WI	-	-	-	60	-	-
1973-H1467	2442013-30	1973 Nov 26 1918:59	Rocketsonde	-	-	Starute, Dataosonde	-	-	-	WI	-	-	-	58	-	-
1973-170	2442013-32	1973 Nov 26 1934:59	Rocketsonde	-	-	Starute, Dataosonde	-	-	-	PF	-	-	-	47	-	-
1973-H1468	2442013-93	1973 Nov 27 1019:59	Rocketsonde	-	-	Starute, Dataosonde	-	-	-	WS	-	-	-	69	-	-
1973-H1469	2442014-03	1973 Nov 27 1245:59	Rocketsonde	-	-	Starute, Dataosonde	-	-	-	WS	-	-	-	72	-	-
1973-171	2442014-08	1973 Nov 27 1352:59	Rocketsonde	-	-	SIS	-	-	-	WS	-	-	-	47	-	-
1973-H1470	2442014-50	1973 Nov 28 0000:59	Rocketsonde	-	-	Starute, Dataosonde	-	-	-	KHR	-	-	-	75	-	-
1973-H1471	2442015-11	1973 Nov 28 1445:00	Rocketsonde	-	-	Starute, Dataosonde	-	-	-	CC	LC43	-	-	67	-	-
1973-H1472	2442015-15	1973 Nov 28 1534:59	Rocketsonde	-	-	Starute, Dataosonde	-	-	-	WI	-	-	-	60	-	-
1973-H1474	2442015-20	1973 Nov 28 1649:59	Rocketsonde	-	-	Starute, Dataosonde	-	-	-	WS	-	-	-	68	-	-
1973-H1475	2442015-32	1973 Nov 28 1934:59	Rocketsonde	-	-	Starute, Dataosonde	-	-	-	PF	-	-	-	54	-	-
1973-H1476	2442015-40	1973 Nov 28 2133:00	Rocketsonde	-	-	Starute, Dataosonde	-	-	-	KAU	-	-	-	69	-	-
1973-H1477	2442015-41	1973 Nov 28 2145:00	Rocketsonde	-	-	Met. Sphere	-	-	-	WS	-	-	-	62	-	-
1973-H1478	2442015-42	1973 Nov 28 2201:59	Rocketsonde	-	-	Starute, Dataosonde	-	-	-	KAU	-	-	-	57	-	-
1973-H1479	2442015-53	1973 Nov 29 0045:00	Rocketsonde	-	-	Starute, Dataosonde	-	-	-	KHR	-	-	-	78	-	-
1973-H1481	2442016-42	1973 Nov 29 2158:59	Rocketsonde	-	-	Starute, Dataosonde	-	-	-	KHR	-	-	-	78	-	-
1973-H1486	2442017-11	1973 Nov 30 1435:00	Rocketsonde	-	-	Starute, Dataosonde	-	-	-	KHR	-	-	-	75	-	-
1973-H1487	2442017-13	1973 Nov 30 1504:59	Rocketsonde	-	-	Starute, Dataosonde	-	-	-	CC	LC43	-	-	68	-	-
1973-H1489	2442017-19	1973 Nov 30 1504:59	Rocketsonde	-	-	Starute, Dataosonde	-	-	-	WI	-	-	-	60	-	-
1973-1467	2442017-21	1973 Nov 30 1700:00	Rocketsonde	-	-	Met. Sphere	-	-	-	WI	-	-	-	60	-	-
1973-H1491	2442017-32	1973 Nov 30 1934:59	Rocketsonde	-	-	Starute, Dataosonde	-	-	-	CC	LC43	-	-	82	-	-
1973-H1492	2442017-34	1973 Nov 30 2004:59	Rocketsonde	-	-	Starute, Dataosonde	-	-	-	PF	-	-	-	58	-	-
1973-H1493	2442017-40	1973 Nov 30 2140:00	Rocketsonde	-	-	Starute, Dataosonde	-	-	-	WS	-	-	-	68	-	-
1973-H1494	2442020-11	1973 Dec 3 1644:59	Rocketsonde	-	-	Starute, Dataosonde	-	-	-	KAU	-	-	-	61	-	-
1973-H1496	2442020-21	1973 Dec 3 1657:59	Rocketsonde	-	-	Starute, Dataosonde	-	-	-	PH	-	-	-	66	-	-
1973-H1497	2442020-21	1973 Dec 3 1700:00	Rocketsonde	-	-	Starute, Dataosonde	-	-	-	PH	-	-	-	60	-	-
1973-H1498	2442020-25	1973 Dec 3 1846:59	Rocketsonde	-	-	Starute, Dataosonde	-	-	-	PRLM	-	-	-	67	-	-
1973-173	2442021-20	1973 Dec 4 1644:59	Rocketsonde	-	-	Starute, Dataosonde	-	-	-	WS	-	-	-	47	-	-
1973-H1502	2442021-26	1973 Dec 4 1846:59	Rocketsonde	-	-	Starute, Dataosonde	-	-	-	PH	-	-	-	61	-	-
1973-H1503	2442022-11	1973 Dec 5 1445:00	Rocketsonde	-	-	Starute, Dataosonde	-	-	-	SHER	-	-	-	65	-	-
1973-H1505	2442022-19	1973 Dec 5 1630:00	Rocketsonde	-	-	Starute, Dataosonde	-	-	-	CC	LC43	-	-	82	-	-
1973-H1506	2442022-25	1973 Dec 5 1726:00	Rocketsonde	-	-	Starute, Dataosonde	-	-	-	PH	-	-	-	59	-	-
1973-H1507	2442022-25	1973 Dec 5 1755:00	Rocketsonde	-	-	Starute, Dataosonde	-	-	-	PRLM	-	-	-	62	-	-
1973-H1508	2442022-26	1973 Dec 5 1814:59	Rocketsonde	-	-	Starute, Dataosonde	-	-	-	WS	-	-	-	68	-	-
1973-H1509	2442022-32	1973 Dec 5 1836:59	Rocketsonde	-	-	Starute, Dataosonde	-	-	-	PH	-	-	-	71	-	-
1973-H1510	2442022-35	1973 Dec 6 0046:59	Rocketsonde	-	-	Starute, Dataosonde	-	-	-	KHR	-	-	-	56	-	-
1973-H1511	2442022-50	1973 Dec 6 0930:00	Rocketsonde	-	-	Starute, Dataosonde	-	-	-	WS	-	-	-	79	-	-
1973-H1513	2442023-20	1973 Dec 6 1646:59	Rocketsonde	-	-	Starute, Dataosonde	-	-	-	VI	-	-	-	67	-	-
1973-H1514	2442023-26	1973 Dec 6 1824:00	Rocketsonde	-	-	Starute, Dataosonde	-	-	-	PH	-	-	-	62	-	-
1973-H1515	2442023-26	1973 Dec 7 1846:59	Rocketsonde	-	-	Starute, Dataosonde	-	-	-	WS	-	-	-	71	-	-
1973-H1516	2442023-26	1973 Dec 7 1846:59	Rocketsonde	-	-	Starute, Dataosonde	-	-	-	PH	-	-	-	62	-	-
1973-H1517	2442023-70	1973 Dec 7 1920:00	Rocketsonde	-	-	Starute, Dataosonde	-	-	-	PH	-	-	-	62	-	-
1973-H1518	2442024-06	1973 Dec 7 1420:00	Rocketsonde	-	-	Starute, Dataosonde	-	-	-	PH	-	-	-	62	-	-
1973-H1519	2442024-14	1973 Dec 7 1510:00	Rocketsonde	-	-	Starute, Dataosonde	-	-	-	PH	-	-	-	62	-	-
1973-H1520	2442024-18	1973 Dec 7 1614:59	Rocketsonde	-	-	Starute, Dataosonde	-	-	-	ASC	-	-	-	66	-	-
1973-H1522	2442024-31	1973 Dec 7 1934:59	Rocketsonde	-	-	Starute, Dataosonde	-	-	-	ASC	-	-	-	60	-	-
1973-H1523	2442024-31	1973 Dec 7 1934:59	Rocketsonde	-	-	Starute, Dataosonde	-	-	-	VI	-	-	-	60	-	-
1973-H1524	2442024-32	1973 Dec 7 1934:59	Rocketsonde	-	-	Starute, Dataosonde	-	-	-	VI	-	-	-	62	-	-
1973-175	2442024-32	1973 Dec 7 1934:59	Rocketsonde	-	-	Starute, Dataosonde	-	-	-	PH	-	-	-	72	-	-
1973-H1526	2442024-32	1973 Dec 7 2134:59	Rocketsonde	-	-	Starute, Dataosonde	-	-	-	PH	-	-	-	46	-	-
1973-H1527	2442027-01	1973 Dec 10 1220:00	Rocketsonde	-	-	Starute, Dataosonde	-	-	-	KAU	-	-	-	61	-	-
1973-H1528	2442027-08	1973 Dec 10 1400:00	Rocketsonde	-	-	Starute, Dataosonde	-	-	-	ASC	-	-	-	66	-	-
1973-H1529	2442027-12	1973 Dec 10 1500:00	Rocketsonde	-	-	Starute, Dataosonde	-	-	-	ASC	-	-	-	63	-	-
1973-H1530	2442027-12	1973 Dec 10 1730:00	Rocketsonde	-	-	Starute, Dataosonde	-	-	-	SHER	-	-	-	62	-	-
1973-H1531	2442027-23	1973 Dec 10 1730:00	Rocketsonde	-	-	Starute, Dataosonde	-	-	-	PH	-	-	-	52	-	-
1973-H1532	2442027-25	1973 Dec 10 1755:00	Rocketsonde	-	-	Starute, Dataosonde	-	-	-	CC	LC43	-	-	67	-	-
1973-H1533	2442027-25	1973 Dec 10 1935:59	Rocketsonde	-	-	Starute, Dataosonde	-	-	-	CC	-	-	-	55	-	-
1973-H1534	2442027-33	1973 Dec 10 2000:00	Rocketsonde	-	-	Starute, Dataosonde	-	-	-	PRLM	-	-	-	55	-	-
1973-H1536	2442028-13	1973 Dec 11 1509:59	Rocketsonde	-	-	Starute, Dataosonde	-	-	-	PH	-	-	-	70	-	-
1973-H1538	2442028-23	1973 Dec 11 1730:00	Rocketsonde	-	-	Starute, Dataosonde	-	-	-	VI	-	-	-	59	-	-
1973-H1539	2442028-31	1973 Dec 11 1930:00	Rocketsonde	-	-	Starute, Dataosonde	-	-	-	WS	-	-	-	69	-	-
1973-H1540	2442028-63	1973 Dec 12 0310:00	Rocketsonde	-	-	Starute, Dataosonde	-	-	-	WS	-	-	-	64	-	-
1973-H1541	2442029-01	1973 Dec 12 1230:00	Rocketsonde	-	-	Starute, Dataosonde	-	-	-	KHR	-	-	-	78	-	-
1973-H1543	2442029-15	1973 Dec 12 1530:00	Rocketsonde	-	-	Starute, Dataosonde	-	-	-	ASC	-	-	-	69	-	-
1973-H1544	2442029-22	1973 Dec 12 1715:00	Rocketsonde	-	-	Starute, Dataosonde	-	-	-	SHER	-	-	-	59	-	-
1973-H1545	2442029-25	1973 Dec 12 1755:00	Rocketsonde	-	-	Starute, Dataosonde	-	-	-	CC	LC43	-	-	60	-	-
1973-H1546	2442029-26	1973 Dec 12 1755:00	Rocketsonde	-	-	Starute, Dataosonde	-	-	-	CC	-	-	-	58	-	-
1973-176	2442029-26	1973 Dec 12 1814:59	Rocketsonde	-	-	Starute, Dataosonde	-	-	-	PRLM	-	-	-	69	-	-
1973-H1548	2442029-32	1973 Dec 12 2007:00	Rocketsonde	-	-	Met. Sphere	-	-	-	WS	-	-	-	48	-	-
1973-H1549	2442029-34	1973 Dec 12 2040:00	Rocketsonde	-	-	Met. Sphere	-	-	-	PH	-	-	-	85	-	-
1973-H1548	2442029-36	1973 Dec 12 2134:59	Rocketsonde	-	-	Starute, Dataosonde	-	-	-	PH	-	-	-	61	-	-
1973-H1548	2442029-40	1973 Dec 12 2134:59	Rocketsonde	-	-	Starute, Dataosonde	-	-	-	VI	-	-	-	62	-	-
1973-H1548	2442029-44	1973 Dec 12 2233:59	Rocketsonde	-	-	Starute, Dataosonde	-	-	-	KAU	-	-	-	60	-	-
1973-H1549	2442029-53	1973 Dec 13 0045:00	Rocketsonde	-	-	Met. Sphere	-	-	-	KAU	-	-	-	85	-	-
1973-H1549	2442030-29	1973 Dec 13 1903:59	Rocketsonde	-	-	Starute, Dataosonde	-	-	-	KHR	-	-	-	85	-	-
1973-H1551	2442030-31	1973 Dec 13 1930:59	Rocketsonde	-	-	Starute, Dataosonde	-	-	-	WS	-	-	-	73	-	-
1973-H1553	2442031-08	1973 Dec 14 1400:00	Rocketsonde	-	-	Starute, Dataosonde	-	-	-	VI	-	-	-	72	-	-
1973-H1554	2442031-12	1973 Dec 14 1459:00	Rocketsonde	-	-	Starute, Dataosonde	-	-	-	ASC	-	-	-	69	-	-
1973-H1555	2442031-18	1973 Dec 14 1614:59	Rocketsonde	-	-	Starute, Dataosonde	-	-	-	VI	-	-	-	59	-	-
1973-H1557	2442031-25	1973 Dec 14 1755:00	Rocketsonde	-	-	Starute, Dataosonde	-	-	-	CC	LC43	-	-	66	-	-
1973-177	2442031-27	1973 Dec 14 1835:59	Rocketsonde	-	-	Starute, Dataosonde	-	-	-	WS	-	-	-	47	-	-
1973-H1558	2442031-32	1973 Dec 14 1934:59	Rocketsonde	-	-	Starute, Dataosonde	-	-	-	PH	-	-	-	55	-	-

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Mission	FlightCode	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee_Km	Range_Km	Dest
1973-1503	2442031.62	1973 Dec 15 0248:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	RNR	-	-	-	81	-	-
1973-1504	2442034.08	1973 Dec 17 1400:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	ASC	-	-	-	67	-	-
1973-1505	2442034.09	1973 Dec 17 1407:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	AIT	-	-	-	58	-	-
1973-1506	2442034.12	1973 Dec 17 1500:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	SHER	-	-	-	58	-	-
1973-1507	2442034.22	1973 Dec 17 1722:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	CC	LC43	-	-	64	-	-
1973-1508	2442034.25	1973 Dec 17 1755:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PRUH	-	-	-	59	-	-
1973-1509	2442034.28	1973 Dec 17 1850:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	WS	-	-	-	72	-	-
1973-1510	2442034.32	1973 Dec 17 1936:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PF	-	-	-	57	-	-
1973-1511	2442034.31	1973 Dec 18 1930:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	WS	-	-	-	65	-	-
1973-1512	2442035.34	1973 Dec 18 2007:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PH	-	-	-	62	-	-
1973-1513	2442035.38	1973 Dec 19 0737:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PH	-	-	-	50	-	-
1973-1514	2442036.12	1973 Dec 19 1500:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	SHER	-	-	-	48	-	-
1973-1515	2442036.13	1973 Dec 19 1504:59	Rocketsonde	-	-	Met. Para, Datasonde	-	-	-	WS	-	-	-	69	-	-
1973-1516	2442036.25	1973 Dec 19 1800:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	WS	-	-	-	56	-	-
1973-1517	2442036.32	1973 Dec 19 1934:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PF	-	-	-	86	-	-
1973-1518	2442036.36	1973 Dec 19 2106:00	Rocketsonde	-	-	Met. Sphere	-	-	-	RAU	-	-	-	61	-	-
1973-1519	2442036.40	1973 Dec 19 2134:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	RNR	-	-	-	79	-	-
1973-1520	2442036.53	1973 Dec 20 0045:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	RNR	-	-	-	59	-	-
1973-1521	2442037.21	1973 Dec 20 1700:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PH	-	-	-	66	-	-
1973-1522	2442037.29	1973 Dec 20 1859:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	WS	-	-	-	59	-	-
1973-1523	2442037.93	1973 Dec 21 1024:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	RAU	-	-	-	59	-	-
1973-1524	2442038.19	1973 Dec 21 1841:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	SHER	-	-	-	57	-	-
1973-1525	2442038.28	1973 Dec 21 1841:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PH	-	-	-	61	-	-
1973-1526	2442038.29	1973 Dec 21 1859:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	WS	-	-	-	70	-	-
1973-1527	2442038.32	1973 Dec 21 1934:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PF	-	-	-	58	-	-
1973-1528	2442038.71	1973 Dec 22 0455:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	RNR	-	-	-	77	-	-
1973-1529	2442040.96	1973 Dec 22 1135:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	SHER	-	-	-	61	-	-
1973-1530	2442041.02	1973 Dec 24 1234:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	SHER	-	-	-	61	-	-
1973-1531	2442041.11	1973 Dec 24 1334:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	SHER	-	-	-	58	-	-
1973-1532	2442041.15	1973 Dec 24 1435:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	SHER	-	-	-	63	-	-
1973-1533	2442043.12	1973 Dec 26 1500:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	SHER	-	-	-	65	-	-
1973-1534	2442043.40	1973 Dec 26 2130:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	SHER	-	-	-	85	-	-
1973-1535	2442043.53	1973 Dec 27 0045:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	RAU	-	-	-	57	-	-
1973-1536	2442044.20	1973 Dec 27 1652:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	RNR	-	-	-	80	-	-
1973-1537	2442046.17	1973 Dec 27 1851:00	Rocketsonde	-	-	Met. Sphere	-	-	-	PH	-	-	-	59	-	-
1973-1538	2442046.19	1973 Dec 28 1650:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PH	-	-	-	83	-	-
1973-1539	2442046.33	1973 Dec 28 2002:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	SHER	-	-	-	62	-	-
1973-1540	2442046.40	1973 Dec 28 2143:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	RAU	-	-	-	56	-	-
1974-106	2442050.12	1974 Jan 2 1500:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	SHER	-	-	-	61	-	-
1974-107	2442053.35	1974 Aug 23 2030:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	RAU	-	-	-	62	-	-
1974-108	2442053.36	1974 Aug 23 2034:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	WS	-	-	-	67	-	-
1974-109	2442055.07	1974 Aug 26 0315:59	Rocketsonde	-	-	Met. Para, Datasonde	-	-	-	PF	-	-	-	66	-	-
1974-110	2442056.07	1974 Aug 26 1344:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	CC	LC43	-	-	98	-	-
1974-111	2442056.08	1974 Aug 26 1345:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	AIT	-	-	-	59	-	-
1974-112	2442056.25	1974 Aug 26 1658:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	WS	-	-	-	67	-	-
1974-113	2442056.29	1974 Aug 26 2155:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	KAU	-	-	-	61	-	-
1974-114	2442057.37	1974 Aug 27 0050:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PF	-	-	-	59	-	-
1974-115	2442057.86	1974 Aug 28 0201:59	Rocketsonde	-	-	Met. Para, Datasonde	-	-	-	THU	-	-	-	48	-	-
1974-116	2442058.16	1974 Aug 28 1549:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	WS	-	-	-	68	-	-
1974-117	2442058.17	1974 Aug 28 1559:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	CC	LC43	-	-	70	-	-
1974-118	2442058.20	1974 Aug 28 1834:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	WS	-	-	-	66	-	-
1974-119	2442058.21	1974 Aug 28 1834:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	WS	-	-	-	69	-	-
1974-120	2442058.22	1974 Aug 28 1847:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	SHER	-	-	-	68	-	-
1974-121	2442058.22	1974 Aug 28 1715:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	WS	-	-	-	88	-	-
1974-122	2442058.26	1974 Aug 28 1759:00	Rocketsonde	-	-	Met. Sphere	-	-	-	PH	-	-	-	74	-	-
1974-123	2442058.26	1974 Aug 28 1821:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PH	-	-	-	68	-	-
1974-124	2442058.29	1974 Aug 28 1907:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	VI	-	-	-	49	-	-
1974-125	2442058.33	1974 Aug 28 2122:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	KAU	-	-	-	71	-	-
1974-126	2442058.35	1974 Aug 29 0114:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	RNR	-	-	-	52	-	-
1974-127	2442058.55	1974 Aug 29 0114:59	Rocketsonde	-	-	Met. Para, Datasonde	-	-	-	PF	-	-	-	61	-	-
1974-128	2442058.88	1974 Aug 29 0900:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	VI	-	-	-	60	-	-
1974-129	2442059.10	1974 Aug 29 1429:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	WS	-	-	-	65	-	-
1974-130	2442059.11	1974 Aug 29 1520:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	SHER	-	-	-	60	-	-
1974-131	2442059.35	1974 Aug 29 2030:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	KAU	-	-	-	60	-	-
1974-132	2442059.40	1974 Aug 30 1344:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	CC	LC43	-	-	72	-	-
1974-133	2442060.08	1974 Aug 30 1400:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	AIT	-	-	-	66	-	-
1974-134	2442060.13	1974 Aug 30 1501:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	VI	-	-	-	61	-	-
1974-135	2442060.14	1974 Aug 30 1527:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	WS	-	-	-	66	-	-
1974-136	2442060.17	1974 Aug 30 1559:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	WS	-	-	-	66	-	-
1974-137	2442060.19	1974 Sep 3 1435:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	WS	-	-	-	61	-	-
1974-138	2442060.23	1974 Sep 3 1730:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	CC	LC43	-	-	60	-	-
1974-139	2442060.33	1974 Sep 3 1952:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PF	-	-	-	55	-	-
1974-140	2442060.33	1974 Sep 3 1344:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	CC	LC43	-	-	60	-	-
1974-141	2442060.07	1974 Sep 4 1638:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	WS	-	-	-	58	-	-
1974-142	2442065.17	1974 Sep 4 1638:59	Rocketsonde	-	-	Met. Sphere	-	-	-	CC	LC43	-	-	96	-	-
1974-143	2442065.21	1974 Sep 4 1702:00	Rocketsonde	-	-	Met. Sphere	-	-	-	PM	-	-	-	65	-	-
1974-144	2442065.22	1974 Sep 4 1712:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	SHER	-	-	-	64	-	-
1974-145	2442065.22	1974 Sep 4 1712:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	WS	-	-	-	67	-	-
1974-146	2442065.24	1974 Sep 4 1730:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	VI	-	-	-	63	-	-
1974-147	2442065.24	1974 Sep 4 1752:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PF	-	-	-	62	-	-
1974-148	2442065.38	1974 Sep 4 2002:00	Rocketsonde	-	-	Met. Sphere	-	-	-	KAU	-	-	-	85	-	-
1974-149	2442065.38	1974 Sep 4 2100:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	KAU	-	-	-	83	-	-
1974-150	2442065.56	1974 Sep 5 0129:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	KUR	-	-	-	78	-	-
1974-151	2442066.10	1974 Sep 5 1430:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	CC	LC43	-	-	61	-	-
1974-152	2442066.21	1974 Sep 5 1704:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	WS	-	-	-	67	-	-

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Mission	FlightCode	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee_Km	Range_Km	Dest
1974-H1136	2442296-33	1974 Sep 5 1958:59	Rocketsonde	-	-	Met. Para, Dataonde	-	-	-	PF	-	-	-	63	-	-
1974-H1137	2442296-56	1974 Sep 6 0130:00	Rocketsonde	-	-	Starute, Dataonde	-	-	-	WS	-	-	-	66	-	-
1974-H1285	2442296-72	1974 Sep 6 0522:00	Rocketsonde	-	-	Starute, Dataonde	-	-	-	KHR	-	-	-	80	-	-
1974-H1138	2442296-91	1974 Sep 6 0952:00	Rocketsonde	-	-	Starute, Dataonde	-	-	-	ASC	-	-	-	63	-	-
1974-H1139	2442297-11	1974 Sep 6 1438:59	Rocketsonde	-	-	Starute, Dataonde	-	-	-	WI	-	-	-	68	-	-
1974-H1141	2442297-12	1974 Sep 6 1500:00	Rocketsonde	-	-	Starute, Dataonde	-	-	-	SHER	-	-	-	63	-	-
1974-H1142	2442297-14	1974 Sep 6 1526:59	Rocketsonde	-	-	Starute, Dataonde	-	-	-	PH	-	-	-	61	-	-
1974-H1143	2442297-15	1974 Sep 6 1532:00	Rocketsonde	-	-	Starute, Dataonde	-	-	-	AMT	-	-	-	74	-	-
1974-H1144	2442297-15	1974 Sep 6 1536:59	Rocketsonde	-	-	Starute, Dataonde	-	-	-	PRIH	-	-	-	63	-	-
1974-H1146	2442297-38	1974 Sep 6 2100:00	Rocketsonde	-	-	Starute, Dataonde	-	-	-	KAU	-	-	-	59	-	-
1974-H1147	2442298-71	1974 Sep 7 0501:00	Rocketsonde	-	-	Starute, Dataonde	-	-	-	KHR	-	-	-	60	-	-
1974-H1149	2442300-15	1974 Sep 8 0500:00	Rocketsonde	-	-	Starute, Dataonde	-	-	-	SHER	-	-	-	76	-	-
1974-H1150	2442300-27	1974 Sep 9 1830:00	Rocketsonde	-	-	Starute, Dataonde	-	-	-	WS	-	-	-	66	-	-
1974-H1151	2442300-42	1974 Sep 9 2203:59	Rocketsonde	-	-	Starute, Dataonde	-	-	-	KAU	-	-	-	62	-	-
1974-H1152	2442300-90	1974 Sep 10 0942:00	Rocketsonde	-	-	Starute, Dataonde	-	-	-	ASC	-	-	-	66	-	-
1974-H1153	2442301-06	1974 Sep 10 1323:59	Rocketsonde	-	-	Starute, Dataonde	-	-	-	AMT	-	-	-	76	-	-
1974-H1154	2442301-23	1974 Sep 10 1730:00	Rocketsonde	-	-	Starute, Dataonde	-	-	-	PRIH	-	-	-	52	-	-
1974-H1156	2442301-33	1974 Sep 10 1949:59	Rocketsonde	-	-	Met. Para, Dataonde	-	-	-	PF	-	-	-	51	-	-
1974-H1288	2442301-96	1974 Sep 11 1044:59	Rocketsonde	-	-	Starute, Dataonde	-	-	-	KHR	-	-	-	80	-	-
1974-H1157	2442302-08	1974 Sep 11 1400:00	Rocketsonde	-	-	Starute, Dataonde	-	-	-	ASC	-	-	-	68	-	-
1974-H1158	2442302-10	1974 Sep 11 1428:00	Rocketsonde	-	-	Starute, Dataonde	-	-	-	AMT	-	-	-	76	-	-
1974-H1160	2442302-15	1974 Sep 11 1530:00	Rocketsonde	-	-	Starute, Dataonde	-	-	-	PRIH	-	-	-	63	-	-
1974-H1161	2442302-15	1974 Sep 11 1534:59	Rocketsonde	-	-	Starute, Dataonde	-	-	-	ASC	-	-	-	68	-	-
1974-H1162	2442302-15	1974 Sep 11 1538:59	Rocketsonde	-	-	Starute, Dataonde	-	-	-	SHER	-	-	-	59	-	-
1974-H1163	2442302-19	1974 Sep 11 1630:00	Rocketsonde	-	-	Starute, Dataonde	-	-	-	WI	-	-	-	68	-	-
1974-H1164	2442302-21	1974 Sep 11 1700:00	Rocketsonde	-	-	Starute, Dataonde	-	-	-	CC	-	-	-	62	-	-
1974-H1165	2442302-33	1974 Sep 11 2000:00	Rocketsonde	-	-	Starute, Dataonde	-	-	-	WS	-	-	-	67	-	-
1974-H1290	2442302-35	1974 Sep 11 2030:00	Rocketsonde	-	-	Met. Sphere	-	-	-	PF	-	-	-	62	-	-
1974-H1166	2442302-38	1974 Sep 11 2100:00	Rocketsonde	-	-	Starute, Dataonde	-	-	-	KAU	-	-	-	86	-	-
1974-H1167	2442302-94	1974 Sep 12 1030:00	Rocketsonde	-	-	Starute, Dataonde	-	-	-	ASC	-	-	-	61	-	-
1974-H1168	2442303-25	1974 Sep 12 1804:59	Rocketsonde	-	-	Starute, Dataonde	-	-	-	WS	-	-	-	67	-	-
1974-H1169	2442303-33	1974 Sep 12 2002:00	Rocketsonde	-	-	Met. Para, Dataonde	-	-	-	PF	-	-	-	57	-	-
1974-H1170	2442303-40	1974 Sep 12 2134:59	Rocketsonde	-	-	Starute, Dataonde	-	-	-	KAU	-	-	-	59	-	-
1974-H1171	2442304-08	1974 Sep 13 1400:00	Rocketsonde	-	-	Starute, Dataonde	-	-	-	ASC	-	-	-	59	-	-
1974-H1172	2442304-09	1974 Sep 13 1403:00	Rocketsonde	-	-	Starute, Dataonde	-	-	-	WI	-	-	-	73	-	-
1974-H1173	2442304-10	1974 Sep 13 1418:00	Rocketsonde	-	-	Starute, Dataonde	-	-	-	SHER	-	-	-	58	-	-
1974-H1175	2442304-21	1974 Sep 13 1658:59	Rocketsonde	-	-	Starute, Dataonde	-	-	-	PH	-	-	-	90	-	-
1974-H1176	2442304-21	1974 Sep 13 1700:00	Rocketsonde	-	-	Starute, Dataonde	-	-	-	CC	-	-	-	94	-	-
1974-H1177	2442304-39	1974 Sep 14 0321:00	Rocketsonde	-	-	Starute, Dataonde	-	-	-	KHR	-	-	-	74	-	-
1974-H1178	2442306-38	1974 Sep 14 0321:59	Rocketsonde	-	-	Starute, Dataonde	-	-	-	ASC	-	-	-	94	-	-
1974-H1179	2442307-07	1974 Sep 16 1304:59	Rocketsonde	-	-	Starute, Dataonde	-	-	-	AMT	-	-	-	72	-	-
1974-H1180	2442307-14	1974 Sep 16 1526:00	Rocketsonde	-	-	Starute, Dataonde	-	-	-	WI	-	-	-	60	-	-
1974-H1182	2442307-20	1974 Sep 16 1644:59	Rocketsonde	-	-	Starute, Dataonde	-	-	-	SHER	-	-	-	59	-	-
1974-H1184	2442307-20	1974 Sep 16 1644:59	Rocketsonde	-	-	Starute, Dataonde	-	-	-	PRIH	-	-	-	66	-	-
1974-H1185	2442307-21	1974 Sep 16 1654:59	Rocketsonde	-	-	Starute, Dataonde	-	-	-	VI	-	-	-	65	-	-
1974-H1186	2442307-31	1974 Sep 16 1927:59	Rocketsonde	-	-	Starute, Dataonde	-	-	-	PF	-	-	-	61	-	-
1974-H1187	2442307-31	1974 Sep 16 2034:59	Rocketsonde	-	-	Met. Para, Dataonde	-	-	-	VI	-	-	-	69	-	-
1974-H1188	2442308-36	1974 Sep 17 1504:59	Rocketsonde	-	-	Starute, Dataonde	-	-	-	KAU	-	-	-	69	-	-
1974-H1189	2442308-36	1974 Sep 17 2036:00	Rocketsonde	-	-	Starute, Dataonde	-	-	-	ASC	-	-	-	65	-	-
1974-H1191	2442309-07	1974 Sep 18 1344:59	Rocketsonde	-	-	Starute, Dataonde	-	-	-	CC	-	-	-	70	-	-
1974-H1192	2442309-07	1974 Sep 18 1344:59	Rocketsonde	-	-	Starute, Dataonde	-	-	-	ASC	-	-	-	65	-	-
1974-H1193	2442309-08	1974 Sep 18 1400:00	Rocketsonde	-	-	Starute, Dataonde	-	-	-	CC	-	-	-	70	-	-
1974-H1194	2442309-13	1974 Sep 18 1509:59	Rocketsonde	-	-	Starute, Dataonde	-	-	-	AMT	-	-	-	61	-	-
1974-H1196	2442309-13	1974 Sep 18 1529:00	Rocketsonde	-	-	Starute, Dataonde	-	-	-	SHER	-	-	-	66	-	-
1974-H1197	2442309-15	1974 Sep 18 1836:00	Rocketsonde	-	-	Starute, Dataonde	-	-	-	PRIH	-	-	-	98	-	-
1974-H1206	2442309-21	1974 Sep 18 1700:00	Rocketsonde	-	-	Met. Sphere	-	-	-	WS	-	-	-	68	-	-
1974-H1198	2442309-35	1974 Sep 18 2026:59	Rocketsonde	-	-	Met. Para, Dataonde	-	-	-	PF	-	-	-	53	-	-
1974-H1200	2442309-36	1974 Sep 18 2037:00	Rocketsonde	-	-	Starute, Dataonde	-	-	-	PM	-	-	-	56	-	-
1974-H1201	2442309-57	1974 Sep 19 0144:59	Rocketsonde	-	-	Starute, Dataonde	-	-	-	KHR	-	-	-	67	-	-
1974-H1202	2442310-02	1974 Sep 19 1233:59	Rocketsonde	-	-	Starute, Dataonde	-	-	-	ASC	-	-	-	62	-	-
1974-H1203	2442310-09	1974 Sep 19 1403:59	Rocketsonde	-	-	Starute, Dataonde	-	-	-	SHER	-	-	-	61	-	-
1974-H1204	2442310-18	1974 Sep 19 1618:59	Rocketsonde	-	-	Starute, Dataonde	-	-	-	CC	-	-	-	63	-	-
1974-H1205	2442310-26	1974 Sep 19 1810:00	Rocketsonde	-	-	Starute, Dataonde	-	-	-	WS	-	-	-	70	-	-
1974-H1206	2442310-26	1974 Sep 19 1812:59	Rocketsonde	-	-	Starute, Dataonde	-	-	-	PRIH	-	-	-	63	-	-
1974-H1207	2442310-32	1974 Sep 19 1942:59	Rocketsonde	-	-	Starute, Dataonde	-	-	-	VI	-	-	-	70	-	-
1974-H1208	2442311-15	1974 Sep 20 1536:00	Rocketsonde	-	-	Starute, Dataonde	-	-	-	PRIH	-	-	-	58	-	-
1974-H1210	2442311-35	1974 Sep 20 2021:00	Rocketsonde	-	-	Starute, Dataonde	-	-	-	PM	-	-	-	67	-	-
1974-H1211	2442311-35	1974 Sep 20 2024:00	Rocketsonde	-	-	Met. Para, Dataonde	-	-	-	PF	-	-	-	57	-	-
1974-H1212	2442311-57	1974 Sep 21 0144:59	Rocketsonde	-	-	Starute, Dataonde	-	-	-	KHR	-	-	-	78	-	-
1974-H1213	2442314-09	1974 Sep 23 1415:00	Rocketsonde	-	-	Starute, Dataonde	-	-	-	AMT	-	-	-	72	-	-
1974-H1214	2442314-12	1974 Sep 23 1500:00	Rocketsonde	-	-	Starute, Dataonde	-	-	-	PM	-	-	-	61	-	-
1974-H1215	2442314-20	1974 Sep 23 1646:59	Rocketsonde	-	-	Starute, Dataonde	-	-	-	SHER	-	-	-	63	-	-
1974-H1216	2442314-26	1974 Sep 23 1755:00	Rocketsonde	-	-	Starute, Dataonde	-	-	-	VI	-	-	-	70	-	-
1974-H1217	2442314-36	1974 Sep 23 2032:00	Rocketsonde	-	-	Starute, Dataonde	-	-	-	ASC	-	-	-	55	-	-
1974-H1218	2442314-36	1974 Sep 24 1222:00	Rocketsonde	-	-	Starute, Dataonde	-	-	-	KAU	-	-	-	64	-	-
1974-H1219	2442315-11	1974 Sep 24 1441:00	Rocketsonde	-	-	Starute, Dataonde	-	-	-	CC	-	-	-	74	-	-
1974-H1220	2442315-11	1974 Sep 24 1700:00	Rocketsonde	-	-	Starute, Dataonde	-	-	-	WS	-	-	-	69	-	-
1974-H1221	2442315-25	1974 Sep 24 1800:59	Rocketsonde	-	-	Starute, Dataonde	-	-	-	PRIH	-	-	-	64	-	-
1974-H1222	2442315-25	1974 Sep 25 0049:59	Rocketsonde	-	-	Starute, Dataonde	-	-	-	KHR	-	-	-	66	-	-
1974-H1223	2442315-53	1974 Sep 25 1330:00	Rocketsonde	-	-	Starute, Dataonde	-	-	-	ASC	-	-	-	66	-	-
1974-H1224	2442316-07	1974 Sep 25 1344:59	Rocketsonde	-	-	Starute, Dataonde	-	-	-	CC	-	-	-	60	-	-
1974-H1225	2442316-12	1974 Sep 25 1447:00	Rocketsonde	-	-	Starute, Dataonde	-	-	-	VI	-	-	-	63	-	-

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Mission	FlightCode	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee km	Range km	Dest
1974-H1227	2442316.12	1974 Sep 25 15:00:00	Rocketsonde	-	-	Starute, Dataosonde	-	-	-	SHER	-	-	-	63	-	-
1974-H37	2442316.15	1974 Sep 25 15:00:00	Rocketsonde	-	-	Starute, Dataosonde	-	-	-	PRLM	-	-	-	45	-	-
1974-H312	2442316.19	1974 Sep 25 15:00:00	Rocketsonde	-	-	Met. Sphere	-	-	-	CC	LC43	-	-	96	-	-
1974-H1229	2442316.27	1974 Sep 25 15:00:00	Rocketsonde	-	-	Starute, Dataosonde	-	-	-	PH	-	-	-	59	-	-
1974-H1230	2442316.27	1974 Sep 25 15:00:00	Rocketsonde	-	-	Starute, Dataosonde	-	-	-	WS	-	-	-	68	-	-
1974-H1231	2442316.53	1974 Sep 26 04:09:59	Rocketsonde	-	-	Starute, Dataosonde	-	-	-	KRR	-	-	-	71	-	-
1974-H1232	2442317.14	1974 Sep 26 15:20:00	Rocketsonde	-	-	Starute, Dataosonde	-	-	-	CC	LC43	-	-	61	-	-
1974-H1233	2442317.22	1974 Sep 26 17:20:00	Rocketsonde	-	-	Starute, Dataosonde	-	-	-	WS	-	-	-	64	-	-
1974-H1234	2442317.26	1974 Sep 26 18:14:59	Rocketsonde	-	-	Starute, Dataosonde	-	-	-	KRR	-	-	-	60	-	-
1974-H1235	2442317.54	1974 Sep 27 05:05:00	Rocketsonde	-	-	Starute, Dataosonde	-	-	-	PRLM	-	-	-	75	-	-
1974-H1236	2442318.11	1974 Sep 27 14:38:00	Rocketsonde	-	-	Starute, Dataosonde	-	-	-	WI	-	-	-	70	-	-
1974-H1238	2442318.15	1974 Sep 27 15:00:00	Rocketsonde	-	-	Starute, Dataosonde	-	-	-	PRLM	-	-	-	59	-	-
1974-H1239	2442318.15	1974 Sep 27 16:21:59	Rocketsonde	-	-	Starute, Dataosonde	-	-	-	SHER	-	-	-	62	-	-
1974-H1240	2442318.98	1974 Sep 28 11:37:00	Rocketsonde	-	-	Starute, Dataosonde	-	-	-	KRR	-	-	-	76	-	-
1974-H1260	2442321.10	1974 Sep 30 14:28:59	Rocketsonde	-	-	Starute, Dataosonde	-	-	-	CC	LC43	-	-	68	-	-
1974-H1261	2442321.15	1974 Sep 30 15:00:00	Rocketsonde	-	-	Starute, Dataosonde	-	-	-	PRLM	-	-	-	61	-	-
1974-H1262	2442321.17	1974 Sep 30 15:59:59	Rocketsonde	-	-	Starute, Dataosonde	-	-	-	WS	-	-	-	65	-	-
1974-H1264	2442321.20	1974 Sep 30 16:51:00	Rocketsonde	-	-	Starute, Dataosonde	-	-	-	SHER	-	-	-	64	-	-
1974-H1265	2442321.20	1974 Sep 30 16:52:00	Rocketsonde	-	-	Starute, Dataosonde	-	-	-	PH	-	-	-	60	-	-
1974-H1266	2442321.24	1974 Sep 30 17:49:59	Rocketsonde	-	-	Starute, Dataosonde	-	-	-	WI	-	-	-	60	-	-
1974-H1267	2442321.36	1974 Sep 30 20:40:00	Rocketsonde	-	-	Met. Para, Dataosonde	-	-	-	PF	-	-	-	48	-	-
1974-H39	2442321.36	1974 Sep 30 20:40:00	Rocketsonde	-	-	Starute, Dataosonde	-	-	-	RAU	-	-	-	58	-	-
1974-H1267	2442321.38	1974 Oct 1 14:15:00	Rocketsonde	-	-	Starute, Dataosonde	-	-	-	SHER	-	-	-	64	-	-
1974-H1268	2442322.09	1974 Oct 1 09:34:59	Rocketsonde	-	-	Starute, Dataosonde	-	-	-	ASC	-	-	-	63	-	-
1974-H1269	2442322.90	1974 Oct 2 13:30:00	Rocketsonde	-	-	Starute, Dataosonde	-	-	-	CC	LC43	-	-	72	-	-
1974-H1269	2442323.06	1974 Oct 2 13:30:00	Rocketsonde	-	-	Starute, Dataosonde	-	-	-	CC	-	-	-	72	-	-
1974-H1261	2442323.07	1974 Oct 2 15:24:59	Rocketsonde	-	-	Starute, Dataosonde	-	-	-	PRLM	LC43	-	-	64	-	-
1974-H1263	2442323.14	1974 Oct 2 16:21:59	Rocketsonde	-	-	Starute, Dataosonde	-	-	-	SHER	-	-	-	64	-	-
1974-H1264	2442323.16	1974 Oct 2 16:21:59	Rocketsonde	-	-	Starute, Dataosonde	-	-	-	PRLM	-	-	-	52	-	-
1974-H1264	2442323.19	1974 Oct 2 16:30:00	Rocketsonde	-	-	Met. Sphere	-	-	-	WI	LC43	-	-	97	-	-
1974-H1266	2442323.24	1974 Oct 2 17:52:00	Rocketsonde	-	-	Starute, Dataosonde	-	-	-	PF	-	-	-	74	-	-
1974-H1266	2442323.24	1974 Oct 2 20:00:00	Rocketsonde	-	-	Met. Para, Dataosonde	-	-	-	WS	-	-	-	64	-	-
1974-H1267	2442323.33	1974 Oct 2 20:00:00	Rocketsonde	-	-	Starute, Dataosonde	-	-	-	PH	-	-	-	68	-	-
1974-H1268	2442323.35	1974 Oct 2 20:00:00	Rocketsonde	-	-	Starute, Dataosonde	-	-	-	PH	-	-	-	72	-	-
1974-H1268	2442323.36	1974 Oct 2 20:04:00	Rocketsonde	-	-	Starute, Dataosonde	-	-	-	RAU	-	-	-	85	-	-
1974-H1269	2442323.39	1974 Oct 2 21:25:59	Rocketsonde	-	-	Starute, Dataosonde	-	-	-	KAU	-	-	-	80	-	-
1974-H1269	2442323.51	1974 Oct 3 00:14:59	Rocketsonde	-	-	Starute, Dataosonde	-	-	-	KRR	-	-	-	79	-	-
1974-H320	2442323.66	1974 Oct 3 09:00:00	Rocketsonde	-	-	Starute, Dataosonde	-	-	-	KRR	-	-	-	90	-	-
1974-H1271	2442324.13	1974 Oct 3 15:10:00	Rocketsonde	-	-	Starute, Dataosonde	-	-	-	CC	LC43	-	-	70	-	-
1974-H1272	2442324.15	1974 Oct 3 17:38:00	Rocketsonde	-	-	Starute, Dataosonde	-	-	-	WS	-	-	-	67	-	-
1974-H1273	2442324.34	1974 Oct 3 20:06:00	Rocketsonde	-	-	Met. Para, Dataosonde	-	-	-	ASC	-	-	-	62	-	-
1974-H1274	2442325.07	1974 Oct 4 13:47:59	Rocketsonde	-	-	Starute, Dataosonde	-	-	-	WI	-	-	-	89	-	-
1974-H1275	2442325.11	1974 Oct 4 14:45:59	Rocketsonde	-	-	Starute, Dataosonde	-	-	-	ATL	-	-	-	89	-	-
1974-H1275	2442325.11	1974 Oct 4 14:45:59	Rocketsonde	-	-	Starute, Dataosonde	-	-	-	ATL	-	-	-	89	-	-
1974-H1276	2442325.11	1974 Oct 4 14:45:59	Rocketsonde	-	-	Starute, Dataosonde	-	-	-	SHER	-	-	-	63	-	-
1974-H1276	2442325.38	1974 Oct 4 15:24:59	Rocketsonde	-	-	Starute, Dataosonde	-	-	-	KAU	-	-	-	58	-	-
1974-H329	2442327.63	1974 Oct 5 03:01:59	Rocketsonde	-	-	Starute, Dataosonde	-	-	-	ASC	-	-	-	61	-	-
1974-H1280	2442327.90	1974 Oct 7 09:37:59	Rocketsonde	-	-	Starute, Dataosonde	-	-	-	KRR	-	-	-	64	-	-
1974-H1281	2442328.12	1974 Oct 7 15:07:59	Rocketsonde	-	-	Starute, Dataosonde	-	-	-	ATL	-	-	-	73	-	-
1974-H1282	2442328.12	1974 Oct 7 15:07:59	Rocketsonde	-	-	Starute, Dataosonde	-	-	-	ATL	-	-	-	73	-	-
1974-H1283	2442328.12	1974 Oct 7 15:07:59	Rocketsonde	-	-	Starute, Dataosonde	-	-	-	ATL	-	-	-	73	-	-
1974-H1284	2442328.12	1974 Oct 7 15:07:59	Rocketsonde	-	-	Starute, Dataosonde	-	-	-	ATL	-	-	-	73	-	-
1974-H1284	2442328.12	1974 Oct 7 15:07:59	Rocketsonde	-	-	Starute, Dataosonde	-	-	-	ATL	-	-	-	73	-	-
1974-H1285	2442328.23	1974 Oct 7 17:38:00	Rocketsonde	-	-	Starute, Dataosonde	-	-	-	CC	LC43	-	-	61	-	-
1974-H1286	2442328.48	1974 Oct 7 23:36:00	Rocketsonde	-	-	Starute, Dataosonde	-	-	-	KRR	-	-	-	78	-	-
1974-H1286	2442329.15	1974 Oct 8 15:30:00	Rocketsonde	-	-	Starute, Dataosonde	-	-	-	CC	LC43	-	-	60	-	-
1974-H1287	2442329.22	1974 Oct 8 17:10:00	Rocketsonde	-	-	Starute, Dataosonde	-	-	-	WS	-	-	-	65	-	-
1974-H1289	2442329.32	1974 Oct 8 19:49:59	Rocketsonde	-	-	Met. Para, Dataosonde	-	-	-	PF	-	-	-	66	-	-
1974-H43	2442329.37	1974 Oct 9 13:44:59	Rocketsonde	-	-	Starute, Dataosonde	-	-	-	ASC	-	-	-	47	-	-
1974-H1292	2442330.15	1974 Oct 9 15:30:00	Rocketsonde	-	-	Starute, Dataosonde	-	-	-	PRLM	-	-	-	67	-	-
1974-H1293	2442330.15	1974 Oct 9 15:30:00	Rocketsonde	-	-	Starute, Dataosonde	-	-	-	VI	-	-	-	59	-	-
1974-H1294	2442330.34	1974 Oct 9 20:15:00	Rocketsonde	-	-	Starute, Dataosonde	-	-	-	WS	-	-	-	67	-	-
1974-H1295	2442330.35	1974 Oct 9 20:30:00	Rocketsonde	-	-	Met. Para, Dataosonde	-	-	-	PF	-	-	-	66	-	-
1974-H1296	2442330.35	1974 Oct 9 20:30:00	Rocketsonde	-	-	Starute, Dataosonde	-	-	-	KAU	-	-	-	62	-	-
1974-H1297	2442330.38	1974 Oct 9 21:04:59	Rocketsonde	-	-	Starute, Dataosonde	-	-	-	WS	-	-	-	65	-	-
1974-H1298	2442330.41	1974 Oct 9 21:55:00	Rocketsonde	-	-	Starute, Dataosonde	-	-	-	WS	-	-	-	60	-	-
1974-H1299	2442330.57	1974 Oct 10 01:40:00	Rocketsonde	-	-	Starute, Dataosonde	-	-	-	KRR	-	-	-	65	-	-
1974-H1300	2442330.89	1974 Oct 10 09:17:00	Rocketsonde	-	-	Starute, Dataosonde	-	-	-	VI	-	-	-	65	-	-
1974-H1301	2442331.26	1974 Oct 10 18:14:59	Rocketsonde	-	-	Starute, Dataosonde	-	-	-	VI	-	-	-	83	-	-
1974-H1302	2442331.38	1974 Oct 10 21:02:59	Rocketsonde	-	-	Starute, Dataosonde	-	-	-	KAU	-	-	-	85	-	-
1974-H1303	2442331.39	1974 Oct 10 21:26:59	Rocketsonde	-	-	Starute, Dataosonde	-	-	-	KAU	-	-	-	59	-	-
1974-H1304	2442332.09	1974 Oct 11 14:08:00	Rocketsonde	-	-	Starute, Dataosonde	-	-	-	CC	LC43	-	-	62	-	-
1974-H1305	2442332.09	1974 Oct 11 14:08:00	Rocketsonde	-	-	Starute, Dataosonde	-	-	-	PRLM	-	-	-	70	-	-
1974-H1306	2442332.15	1974 Oct 11 15:59:59	Rocketsonde	-	-	Starute, Dataosonde	-	-	-	WS	-	-	-	68	-	-
1974-H1307	2442332.17	1974 Oct 11 18:45:00	Rocketsonde	-	-	Starute, Dataosonde	-	-	-	ATL	-	-	-	59	-	-
1974-H1308	2442332.28	1974 Oct 11 18:45:00	Rocketsonde	-	-	Starute, Dataosonde	-	-	-	ATL	-	-	-	68	-	-
1974-H1309	2442332.36	1974 Oct 11 20:00:00	Rocketsonde	-	-	Starute, Dataosonde	-	-	-	PF	-	-	-	61	-	-
1974-H1310	2442332.53	1974 Oct 12 01:30:59	Rocketsonde	-	-	Met. Para, Dataosonde	-	-	-	KRR	-	-	-	75	-	-
1974-H1311	2442334.71	1974 Oct 14 00:44:00	Rocketsonde	-	-	Starute, Dataosonde	-	-	-	KRR	-	-	-	78	-	-
1974-H1312	2442336.05	1974 Oct 15 09:21:00	Rocketsonde	-	-	Starute, Dataosonde	-	-	-	KRR	-	-	-	79	-	-
1974-H1313	2442336.89	1974 Oct 15 13:04:59	Rocketsonde	-	-	Starute, Dataosonde	-	-	-	ASC	-	-	-	65	-	-
1974-H1314	2442336.85	1974 Oct 15 16:18:59	Rocketsonde	-	-	Starute, Dataosonde	-	-	-	ATL	-	-	-	74	-	-
1974-H1315	2442336.21	1974 Oct 15 17:04:59	Rocketsonde	-	-	Starute, Dataosonde	-	-	-	SHER	-	-	-	65	-	-
1974-H1316	2442336.21	1974 Oct 15 17:04:59	Rocketsonde	-	-	Starute, Dataosonde	-	-	-	WS	-	-	-	70	-	-
1974-H1317	2442336.24	1974 Oct 15 20:35:00	Rocketsonde	-	-	Starute, Dataosonde	-	-	-	PRLM	-	-	-	58	-	-
1974-H1318	2442337.07	1974 Oct 16 13:44:59	Rocketsonde	-	-	Met. Para, Dataosonde	-	-	-	PF	-	-	-	68	-	-
1974-H1319	2442337.11	1974 Oct 16 14:40:00	Rocketsonde	-	-	Starute, Dataosonde	-	-	-	ASC	-	-	-	65	-	-
1974-H1319	2442337.11	1974 Oct 16 14:40:00	Rocketsonde	-	-	Starute, Dataosonde	-	-	-	CC	LC43	-	-	57	-	-

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Mission	FlightCode	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee	Range	Dest
1974-H1320	2442337.12	1974 Oct 16 1451:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	WI	-	-	-	73	-	-
1974-H1322	2442337.15	1974 Oct 16 1530:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	MIT	-	-	-	73	-	-
1974-H1331	2442337.17	1974 Oct 16 1537:59	Rocketsonde	-	-	Met. Sphere	-	-	-	PH	-	-	-	86	-	-
1974-H1332	2442337.19	1974 Oct 16 1630:00	Rocketsonde	-	-	Met. Sphere	-	-	-	CC	LC43	-	-	69	-	-
1974-H1323	2442337.21	1974 Oct 16 1700:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	WS	-	-	-	67	-	-
1974-H1324	2442337.38	1974 Oct 16 2030:00	Rocketsonde	-	-	Met. Para, Datasonde	-	-	-	PF	-	-	-	67	-	-
1974-H1333	2442337.36	1974 Oct 16 2111:59	Rocketsonde	-	-	Met. Sphere	-	-	-	KAU	-	-	-	63	-	-
1974-H1325	2442337.40	1974 Oct 16 2141:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	KAU	-	-	-	67	-	-
1974-H1326	2442337.55	1974 Oct 17 0117:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	MNR	-	-	-	67	-	-
1974-H1327	2442338.05	1974 Oct 17 1314:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	WS	-	-	-	67	-	-
1974-H1328	2442338.16	1974 Oct 17 1545:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	WS	-	-	-	67	-	-
1974-H46	2442339.07	1974 Oct 18 1343:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	MIT	-	-	-	42	-	-
1974-H1329	2442339.08	1974 Oct 18 1356:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	WI	-	-	-	59	-	-
1974-H1330	2442339.11	1974 Oct 18 1436:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	CC	LC43	-	-	60	-	-
1974-H1331	2442339.12	1974 Oct 18 1500:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	CC	-	-	-	69	-	-
1974-H1332	2442339.15	1974 Oct 18 1500:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PRUH	-	-	-	67	-	-
1974-H1333	2442339.21	1974 Oct 18 1700:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	WS	-	-	-	68	-	-
1974-H1335	2442339.25	1974 Oct 18 1756:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PH	-	-	-	67	-	-
1974-H1336	2442339.28	1974 Oct 18 2000:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PF	-	-	-	60	-	-
1974-H1337	2442339.39	1974 Oct 18 2121:00	Rocketsonde	-	-	Met. Para, Datasonde	-	-	-	PH	-	-	-	61	-	-
1974-H1338	2442342.11	1974 Oct 21 1438:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	CC	LC43	-	-	53	-	-
1974-H1339	2442342.12	1974 Oct 21 1500:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PRUH	-	-	-	52	-	-
1974-H1340	2442342.15	1974 Oct 21 1550:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	WS	-	-	-	67	-	-
1974-H1341	2442342.17	1974 Oct 21 1559:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PH	-	-	-	62	-	-
1974-H1343	2442342.24	1974 Oct 21 1751:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PH	-	-	-	70	-	-
1974-H1344	2442342.28	1974 Oct 21 1806:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PF	-	-	-	69	-	-
1974-H1345	2442342.35	1974 Oct 21 2000:00	Rocketsonde	-	-	Met. Para, Datasonde	-	-	-	PF	-	-	-	69	-	-
1974-H1346	2442343.09	1974 Oct 22 1412:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	WI	-	-	-	73	-	-
1974-H1347	2442344.03	1974 Oct 23 1247:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	MIT	-	-	-	76	-	-
1974-H1348	2442344.06	1974 Oct 23 1350:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	ASC	-	-	-	64	-	-
1974-H1349	2442344.07	1974 Oct 23 1544:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	ASC	LC43	-	-	58	-	-
1974-H1350	2442344.08	1974 Oct 23 1554:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	VI	-	-	-	70	-	-
1974-H1351	2442344.15	1974 Oct 23 1552:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PRUH	-	-	-	58	-	-
1974-H1352	2442344.16	1974 Oct 23 1551:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	SHER	-	-	-	69	-	-
1974-H1353	2442344.23	1974 Oct 23 1723:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PH	-	-	-	71	-	-
1974-H1354	2442344.29	1974 Oct 23 1859:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	WS	-	-	-	69	-	-
1974-H1355	2442344.34	1974 Oct 23 2016:59	Rocketsonde	-	-	Met. Para, Datasonde	-	-	-	PH	-	-	-	64	-	-
1974-H358	2442344.38	1974 Oct 23 2100:00	Rocketsonde	-	-	Met. Sphere	-	-	-	KAU	-	-	-	82	-	-
1974-H1356	2442344.39	1974 Oct 23 2114:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	KAU	-	-	-	63	-	-
1974-H1357	2442345.08	1974 Oct 24 1353:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	SHER	-	-	-	69	-	-
1974-H1358	2442346.06	1974 Oct 24 2050:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	KAU	-	-	-	61	-	-
1974-H1359	2442346.09	1974 Oct 25 0247:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	ASC	-	-	-	86	-	-
1974-H1360	2442346.10	1974 Oct 25 0247:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	CC	-	-	-	51	-	-
1974-H1361	2442346.16	1974 Oct 25 1354:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	VI	-	-	-	59	-	-
1974-H1362	2442346.20	1974 Oct 25 1655:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PRUH	-	-	-	62	-	-
1974-H1363	2442346.21	1974 Oct 25 1700:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	WS	-	-	-	68	-	-
1974-H1365	2442346.34	1974 Oct 26 1306:00	Rocketsonde	-	-	Met. Para, Datasonde	-	-	-	PH	-	-	-	64	-	-
1974-H1366	2442349.27	1974 Oct 28 1834:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	ASC	-	-	-	60	-	-
1974-H1367	2442350.24	1974 Oct 29 2026:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	ASC	LC43	-	-	75	-	-
1974-H1368	2442350.31	1974 Oct 29 2033:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	MIT	-	-	-	65	-	-
1974-H40	2442350.36	1974 Oct 29 2033:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	KAU	-	-	-	48	-	-
1974-H1370	2442350.38	1974 Oct 29 2100:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PF	-	-	-	60	-	-
1974-H1371	2442350.90	1974 Oct 30 0922:00	Rocketsonde	-	-	Met. Para, Datasonde	-	-	-	ASC	-	-	-	76	-	-
1974-H1372	2442351.07	1974 Oct 30 1344:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	MIT	LC43	-	-	57	-	-
1974-H1373	2442351.10	1974 Oct 30 1430:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	VI	-	-	-	71	-	-
1974-H1374	2442351.13	1974 Oct 30 1509:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PRUH	-	-	-	61	-	-
1974-H1375	2442351.21	1974 Oct 30 1656:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	CC	LC43	-	-	96	-	-
1974-H343	2442351.23	1974 Oct 30 1720:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	WS	-	-	-	68	-	-
1974-H1376	2442351.29	1974 Oct 30 1750:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	WS	-	-	-	68	-	-
1974-H1377	2442351.38	1974 Oct 30 1859:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	WS	-	-	-	68	-	-
1974-H1383	2442352.08	1974 Oct 31 1415:00	Rocketsonde	-	-	Met. Para, Datasonde	-	-	-	PF	-	-	-	59	-	-
1974-H1384	2442352.13	1974 Oct 31 1504:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	WS	-	-	-	65	-	-
1974-H1385	2442352.21	1974 Oct 31 1700:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	CC	LC43	-	-	59	-	-
1974-H1386	2442353.06	1974 Nov 1 1330:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	WS	-	-	-	61	-	-
1974-H1388	2442353.19	1974 Nov 1 1630:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	MIT	-	-	-	72	-	-
1974-H1389	2442353.36	1974 Nov 1 1830:00	Rocketsonde	-	-	Met. Para, Datasonde	-	-	-	PRUH	-	-	-	61	-	-
1974-H1390	2442353.42	1974 Nov 1 2032:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	KAU	-	-	-	60	-	-
1974-H1391	2442355.50	1974 Nov 4 0000:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PF	-	-	-	66	-	-
1974-H1392	2442356.09	1974 Nov 4 1404:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PF	-	-	-	65	-	-
1974-H1394	2442356.27	1974 Nov 4 1830:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	CC	LC43	-	-	66	-	-
1974-H1395	2442356.27	1974 Nov 4 1830:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	VI	-	-	-	62	-	-
1974-H1396	2442357.14	1974 Nov 5 1526:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	CC	LC43	-	-	64	-	-
1974-H1397	2442357.17	1974 Nov 5 1526:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	VI	-	-	-	67	-	-
1974-H1399	2442357.33	1974 Nov 5 2002:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	WS	-	-	-	54	-	-
1974-H1400	2442358.06	1974 Nov 6 1330:00	Rocketsonde	-	-	Met. Para, Datasonde	-	-	-	PF	-	-	-	63	-	-
1974-H1401	2442358.08	1974 Nov 6 1400:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	ASC	-	-	-	67	-	-
1974-H1402	2442358.14	1974 Nov 6 1430:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	MIT	-	-	-	63	-	-
1974-H1403	2442358.14	1974 Nov 6 1514:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	CC	LC43	-	-	71	-	-
1974-H1405	2442358.25	1974 Nov 6 1800:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	VI	-	-	-	67	-	-
1974-H1406	2442358.27	1974 Nov 6 1834:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	WS	-	-	-	66	-	-
1974-H1407	2442358.38	1974 Nov 6 2100:00	Rocketsonde	-	-	Met. Para, Datasonde	-	-	-	PF	-	-	-	67	-	-
1974-H1408	2442358.88	1974 Nov 7 0913:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	ASC	-	-	-	64	-	-
1974-H1409	2442359.04	1974 Nov 7 1258:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	MIT	-	-	-	73	-	-
1974-H1411	2442359.19	1974 Nov 7 1640:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PRUH	-	-	-	69	-	-
1974-H1412	2442360.10	1974 Nov 8 1430:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	CC	LC43	-	-	64	-	-

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Mission	FlightCode	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee_Km	Range_Km	Dest
1974-1413	2442380-13	1974 Nov 8 1508:00	Rocketsonde	-	-	Starute, Dataosnde	-	-	-	WI	-	-	-	78	-	-
1974-1414	2442380-17	1974 Nov 8 1559:59	Rocketsonde	-	-	Starute, Dataosnde	-	-	-	WS	-	-	-	67	-	-
1974-1415	2442380-21	1974 Nov 8 1700:00	Rocketsonde	-	-	Starute, Dataosnde	-	-	-	PRLM	-	-	-	52	-	-
1974-1416	2442380-35	1974 Nov 8 2030:00	Rocketsonde	-	-	Met. Para, Dataosnde	-	-	-	PF	-	-	-	60	-	-
1974-1417	2442380-09	1974 Nov 11 1415:00	Rocketsonde	-	-	Starute, Dataosnde	-	-	-	CC	LC43	-	-	58	-	-
1974-1418	2442383-09	1974 Nov 11 1559:59	Rocketsonde	-	-	Starute, Dataosnde	-	-	-	THU	-	-	-	70	-	-
1974-1420	2442383-17	1974 Nov 11 1759:00	Rocketsonde	-	-	Starute, Dataosnde	-	-	-	PH	-	-	-	57	-	-
1974-1421	2442383-25	1974 Nov 11 1830:00	Rocketsonde	-	-	Starute, Dataosnde	-	-	-	WI	-	-	-	47	-	-
1974-1422	2442383-38	1974 Nov 11 2100:00	Rocketsonde	-	-	Met. Para, Dataosnde	-	-	-	PF	-	-	-	64	-	-
1974-1423	2442384-04	1974 Nov 12 1301:59	Rocketsonde	-	-	Starute, Dataosnde	-	-	-	ASC	-	-	-	63	-	-
1974-1424	2442385-06	1974 Nov 13 1330:00	Rocketsonde	-	-	Starute, Dataosnde	-	-	-	CC	LC43	-	-	66	-	-
1974-1425	2442385-09	1974 Nov 13 1409:00	Rocketsonde	-	-	Starute, Dataosnde	-	-	-	WI	-	-	-	62	-	-
1974-1426	2442385-12	1974 Nov 13 1456:00	Rocketsonde	-	-	Starute, Dataosnde	-	-	-	SHER	-	-	-	62	-	-
1974-1427	2442385-17	1974 Nov 13 1611:59	Rocketsonde	-	-	Starute, Dataosnde	-	-	-	PRLM	-	-	-	59	-	-
1974-1429	2442385-19	1974 Nov 13 1650:59	Rocketsonde	-	-	Starute, Dataosnde	-	-	-	WI	-	-	-	76	-	-
1974-1430	2442385-21	1974 Nov 13 1700:00	Rocketsonde	-	-	Starute, Dataosnde	-	-	-	CC	LC43	-	-	95	-	-
1974-1431	2442385-25	1974 Nov 13 1800:00	Rocketsonde	-	-	Met. Sphere	-	-	-	WS	-	-	-	67	-	-
1974-1352	2442385-28	1974 Nov 13 1800:00	Rocketsonde	-	-	Starute, Dataosnde	-	-	-	PF	-	-	-	56	-	-
1974-1433	2442385-38	1974 Nov 13 2100:00	Rocketsonde	-	-	Met. Para, Dataosnde	-	-	-	PRLM	-	-	-	59	-	-
1974-1434	2442385-38	1974 Nov 14 1708:00	Rocketsonde	-	-	Starute, Dataosnde	-	-	-	PH	-	-	-	61	-	-
1974-1435	2442386-21	1974 Nov 14 1854:00	Rocketsonde	-	-	Starute, Dataosnde	-	-	-	WI	-	-	-	60	-	-
1974-1436	2442386-29	1974 Nov 14 1854:00	Rocketsonde	-	-	Starute, Dataosnde	-	-	-	CC	LC43	-	-	62	-	-
1974-1437	2442387-03	1974 Nov 15 1241:00	Rocketsonde	-	-	Starute, Dataosnde	-	-	-	WI	-	-	-	60	-	-
1974-1438	2442387-08	1974 Nov 15 1400:00	Rocketsonde	-	-	Starute, Dataosnde	-	-	-	WS	-	-	-	67	-	-
1974-1439	2442387-16	1974 Nov 15 1530:00	Rocketsonde	-	-	Starute, Dataosnde	-	-	-	PRLM	-	-	-	68	-	-
1974-1441	2442387-19	1974 Nov 15 1530:00	Rocketsonde	-	-	Starute, Dataosnde	-	-	-	PH	-	-	-	60	-	-
1974-1442	2442387-22	1974 Nov 15 1715:00	Rocketsonde	-	-	Starute, Dataosnde	-	-	-	CC	LC43	-	-	59	-	-
1974-1443	2442387-24	1974 Nov 15 1738:59	Rocketsonde	-	-	Starute, Dataosnde	-	-	-	PF	-	-	-	60	-	-
1974-1444	2442387-33	1974 Nov 15 2000:00	Rocketsonde	-	-	Met. Para, Dataosnde	-	-	-	CC	LC43	-	-	61	-	-
1974-1445	2442387-55	1974 Nov 16 1412:00	Rocketsonde	-	-	Starute, Dataosnde	-	-	-	US	-	-	-	68	-	-
1974-1446	2442387-16	1974 Nov 16 1614:59	Rocketsonde	-	-	Starute, Dataosnde	-	-	-	PH	-	-	-	63	-	-
1974-1447	2442387-19	1974 Nov 16 1650:00	Rocketsonde	-	-	Starute, Dataosnde	-	-	-	PRLM	-	-	-	61	-	-
1974-1449	2442387-36	1974 Nov 16 1800:00	Rocketsonde	-	-	Met. Para, Dataosnde	-	-	-	PF	-	-	-	65	-	-
1974-1450	2442387-39	1974 Nov 16 2100:00	Rocketsonde	-	-	Starute, Dataosnde	-	-	-	KAU	-	-	-	62	-	-
1974-1451	2442370-35	1974 Nov 16 2115:59	Rocketsonde	-	-	Starute, Dataosnde	-	-	-	WI	-	-	-	60	-	-
1974-1452	2442372-16	1974 Nov 20 1545:59	Rocketsonde	-	-	Starute, Dataosnde	-	-	-	CC	LC43	-	-	66	-	-
1974-1454	2442372-21	1974 Nov 20 1700:00	Rocketsonde	-	-	Starute, Dataosnde	-	-	-	WS	-	-	-	66	-	-
1974-1456	2442372-21	1974 Nov 20 1700:00	Rocketsonde	-	-	Starute, Dataosnde	-	-	-	CC	LC43	-	-	66	-	-
1974-1457	2442372-23	1974 Nov 20 1735:00	Rocketsonde	-	-	Starute, Dataosnde	-	-	-	CC	LC43	-	-	66	-	-
1974-1459	2442372-25	1974 Nov 20 1803:59	Rocketsonde	-	-	Starute, Dataosnde	-	-	-	PH	-	-	-	67	-	-
1974-1460	2442372-25	1974 Nov 20 1803:59	Rocketsonde	-	-	Starute, Dataosnde	-	-	-	CC	LC43	-	-	39	-	-
1974-1461	2442373-17	1974 Nov 21 1658:59	Rocketsonde	-	-	Starute, Dataosnde	-	-	-	PH	-	-	-	47	-	-
1974-1462	2442373-36	1974 Nov 21 1859:59	Rocketsonde	-	-	Starute, Dataosnde	-	-	-	KAU	-	-	-	61	-	-
1974-1463	2442374-13	1974 Nov 21 2045:00	Rocketsonde	-	-	Starute, Dataosnde	-	-	-	WI	-	-	-	62	-	-
1974-1465	2442374-15	1974 Nov 21 1904:59	Rocketsonde	-	-	Starute, Dataosnde	-	-	-	PRLM	-	-	-	70	-	-
1974-1466	2442374-17	1974 Nov 21 1904:59	Rocketsonde	-	-	Starute, Dataosnde	-	-	-	PH	-	-	-	68	-	-
1974-1467	2442374-24	1974 Nov 21 2100:00	Rocketsonde	-	-	Starute, Dataosnde	-	-	-	WI	-	-	-	67	-	-
1974-1468	2442374-38	1974 Nov 21 2114:59	Rocketsonde	-	-	Met. Sphere	-	-	-	KAU	-	-	-	87	-	-
1974-1469	2442374-39	1974 Nov 21 2114:59	Rocketsonde	-	-	Starute, Dataosnde	-	-	-	WS	-	-	-	66	-	-
1974-1470	2442377-05	1974 Nov 25 1314:59	Rocketsonde	-	-	Starute, Dataosnde	-	-	-	ASC	-	-	-	75	-	-
1974-1471	2442377-11	1974 Nov 25 1445:59	Rocketsonde	-	-	Starute, Dataosnde	-	-	-	WI	-	-	-	65	-	-
1974-1472	2442377-14	1974 Nov 25 1517:00	Rocketsonde	-	-	Starute, Dataosnde	-	-	-	WS	-	-	-	68	-	-
1974-1473	2442377-17	1974 Nov 25 1559:59	Rocketsonde	-	-	Starute, Dataosnde	-	-	-	CC	LC43	-	-	68	-	-
1974-1474	2442377-34	1974 Nov 25 1630:00	Rocketsonde	-	-	Starute, Dataosnde	-	-	-	PRLM	-	-	-	65	-	-
1974-1475	2442377-34	1974 Nov 25 2015:59	Rocketsonde	-	-	Met. Para, Dataosnde	-	-	-	PF	-	-	-	65	-	-
1974-1476	2442377-38	1974 Nov 25 2111:59	Rocketsonde	-	-	Starute, Dataosnde	-	-	-	KAU	-	-	-	78	-	-
1974-1477	2442377-38	1974 Nov 25 2111:59	Rocketsonde	-	-	Starute, Dataosnde	-	-	-	KHR	-	-	-	58	-	-
1974-1479	2442378-36	1974 Nov 26 0114:59	Rocketsonde	-	-	Starute, Dataosnde	-	-	-	KAU	-	-	-	76	-	-
1974-1480	2442378-50	1974 Nov 26 2045:00	Rocketsonde	-	-	Starute, Dataosnde	-	-	-	KHR	-	-	-	61	-	-
1974-1481	2442379-10	1974 Nov 27 0030:00	Rocketsonde	-	-	Starute, Dataosnde	-	-	-	CC	LC43	-	-	64	-	-
1974-1482	2442379-15	1974 Nov 27 1430:00	Rocketsonde	-	-	Starute, Dataosnde	-	-	-	WI	-	-	-	67	-	-
1974-1483	2442379-15	1974 Nov 27 1531:00	Rocketsonde	-	-	Starute, Dataosnde	-	-	-	WS	-	-	-	55	-	-
1974-1485	2442379-20	1974 Nov 27 1854:59	Rocketsonde	-	-	Starute, Dataosnde	-	-	-	PRLM	-	-	-	98	-	-
1974-1486	2442379-23	1974 Nov 27 1730:00	Rocketsonde	-	-	Met. Sphere	-	-	-	PM	-	-	-	62	-	-
1974-1487	2442379-27	1974 Nov 27 1832:00	Rocketsonde	-	-	Starute, Dataosnde	-	-	-	WS	-	-	-	66	-	-
1974-1488	2442379-28	1974 Nov 27 1845:00	Rocketsonde	-	-	Starute, Dataosnde	-	-	-	KS	-	-	-	85	-	-
1974-1489	2442379-42	1974 Nov 27 2148:59	Rocketsonde	-	-	Starute, Dataosnde	-	-	-	KAU	-	-	-	63	-	-
1974-1490	2442379-55	1974 Nov 27 2203:59	Rocketsonde	-	-	Starute, Dataosnde	-	-	-	KAU	-	-	-	77	-	-
1974-1492	2442381-19	1974 Nov 28 0118:59	Rocketsonde	-	-	Starute, Dataosnde	-	-	-	KHR	-	-	-	63	-	-
1974-1499	2442384-21	1974 Nov 29 1640:00	Rocketsonde	-	-	Starute, Dataosnde	-	-	-	CC	LC43	-	-	59	-	-
1974-1501	2442384-21	1974 Dec 2 1430:00	Rocketsonde	-	-	Starute, Dataosnde	-	-	-	WS	-	-	-	70	-	-
1974-1503	2442384-23	1974 Dec 2 1725:00	Rocketsonde	-	-	Starute, Dataosnde	-	-	-	PM	-	-	-	58	-	-
1974-1504	2442384-23	1974 Dec 2 1826:59	Rocketsonde	-	-	Starute, Dataosnde	-	-	-	WI	-	-	-	64	-	-
1974-1505	2442384-37	1974 Dec 2 2120:00	Rocketsonde	-	-	Starute, Dataosnde	-	-	-	KAU	-	-	-	66	-	-
1974-1506	2442384-39	1974 Dec 2 2120:00	Rocketsonde	-	-	Starute, Dataosnde	-	-	-	WS	-	-	-	65	-	-
1974-1507	2442385-33	1974 Dec 3 1700:00	Rocketsonde	-	-	Starute, Dataosnde	-	-	-	PF	-	-	-	45	-	-
1974-1508	2442385-33	1974 Dec 3 1958:59	Rocketsonde	-	-	Met. Para, Dataosnde	-	-	-	CC	LC43	-	-	61	-	-
1974-1509	2442385-38	1974 Dec 3 2100:00	Rocketsonde	-	-	Starute, Dataosnde	-	-	-	KAU	-	-	-	77	-	-
1974-1510	2442385-38	1974 Dec 3 2100:00	Rocketsonde	-	-	Starute, Dataosnde	-	-	-	KHR	-	-	-	67	-	-
1974-1511	2442386-08	1974 Dec 4 0119:59	Rocketsonde	-	-	Starute, Dataosnde	-	-	-	ASC	-	-	-	60	-	-
1974-1512	2442386-10	1974 Dec 4 1400:00	Rocketsonde	-	-	Starute, Dataosnde	-	-	-	CC	LC43	-	-	55	-	-
1974-1513	2442386-12	1974 Dec 4 1430:00	Rocketsonde	-	-	Starute, Dataosnde	-	-	-	WI	-	-	-	64	-	-
1974-1514	2442386-19	1974 Dec 4 1459:00	Rocketsonde	-	-	Starute, Dataosnde	-	-	-	PRLM	-	-	-	65	-	-
1974-1515	2442386-21	1974 Dec 4 1700:00	Rocketsonde	-	-	Starute, Dataosnde	-	-	-	WS	-	-	-	97	-	-
1974-1516	2442386-23	1974 Dec 4 1730:00	Rocketsonde	-	-	Met. Sphere	-	-	-	CC	LC43	-	-	97	-	-

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Mission	FlightCode	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee_Km	Range_Km	Dest
1974-H1515	2442386-35	1974 Dec 4 2030:00	Rocketsonde	-	-	Starvue, Dataonide	-	-	-	KAU	-	-	-	63	-	-
1974-1370	2442386-36	1974 Dec 4 2045:00	Rocketsonde	-	-	Met. Sphere	-	-	-	KAU	-	-	-	85	-	-
1974-H1516	2442386-38	1974 Dec 4 2100:00	Rocketsonde	-	-	Met. Para, Dataonide	-	-	-	PF	-	-	-	54	-	-
1974-H1517	2442386-56	1974 Dec 5 0120:59	Rocketsonde	-	-	Starvue, Dataonide	-	-	-	KHR	-	-	-	79	-	-
1974-H1519	2442387-21	1974 Dec 5 1700:00	Rocketsonde	-	-	Starvue, Dataonide	-	-	-	PH	-	-	-	57	-	-
1974-H1520	2442387-21	1974 Dec 5 1700:00	Rocketsonde	-	-	Starvue, Dataonide	-	-	-	WS	-	-	-	67	-	-
1974-H1521	2442387-38	1974 Dec 5 2100:00	Rocketsonde	-	-	Starvue, Dataonide	-	-	-	KAU	-	-	-	65	-	-
1974-H1522	2442388-05	1974 Dec 6 1314:59	Rocketsonde	-	-	Starvue, Dataonide	-	-	-	WS	-	-	-	68	-	-
1974-H1523	2442388-14	1974 Dec 6 1515:59	Rocketsonde	-	-	Starvue, Dataonide	-	-	-	WS	-	-	-	63	-	-
1974-H1524	2442388-14	1974 Dec 6 1525:59	Rocketsonde	-	-	Starvue, Dataonide	-	-	-	WI	-	-	-	72	-	-
1974-H1526	2442388-19	1974 Dec 6 1630:59	Rocketsonde	-	-	Starvue, Dataonide	-	-	-	PRUH	-	-	-	64	-	-
1974-H1527	2442388-19	1974 Dec 6 1640:59	Rocketsonde	-	-	Starvue, Dataonide	-	-	-	PH	-	-	-	60	-	-
1974-H1529	2442388-38	1974 Dec 6 2100:00	Rocketsonde	-	-	Starvue, Dataonide	-	-	-	WS	-	-	-	65	-	-
1974-H1530	2442388-38	1974 Dec 6 2100:00	Rocketsonde	-	-	Starvue, Dataonide	-	-	-	KAU	-	-	-	57	-	-
1974-H1531	2442390-38	1974 Dec 8 2100:00	Rocketsonde	-	-	Met. Para, Dataonide	-	-	-	PF	-	-	-	66	-	-
1974-H1532	2442390-38	1974 Dec 8 2100:00	Rocketsonde	-	-	Starvue, Dataonide	-	-	-	PRUH	-	-	-	61	-	-
1974-H1533	2442391-21	1974 Dec 9 1700:00	Rocketsonde	-	-	Starvue, Dataonide	-	-	-	WS	-	-	-	67	-	-
1974-H1534	2442391-27	1974 Dec 9 1827:59	Rocketsonde	-	-	Starvue, Dataonide	-	-	-	PH	-	-	-	57	-	-
1974-H1535	2442391-27	1974 Dec 9 1833:00	Rocketsonde	-	-	Starvue, Dataonide	-	-	-	WI	-	-	-	65	-	-
1974-H1536	2442391-35	1974 Dec 9 2030:00	Rocketsonde	-	-	Starvue, Dataonide	-	-	-	KAU	-	-	-	60	-	-
1974-H1538	2442391-89	1974 Dec 10 0914:59	Rocketsonde	-	-	Starvue, Dataonide	-	-	-	ASC	-	-	-	66	-	-
1974-H1539	2442392-17	1974 Dec 10 1559:59	Rocketsonde	-	-	Starvue, Dataonide	-	-	-	CC	-	-	-	57	-	-
1974-H1540	2442392-21	1974 Dec 10 1700:00	Rocketsonde	-	-	Starvue, Dataonide	-	-	-	CC	-	-	-	67	-	-
1974-H1541	2442392-25	1974 Dec 10 1800:00	Rocketsonde	-	-	Starvue, Dataonide	-	-	-	WS	-	-	-	67	-	-
1974-H1542	2442392-38	1974 Dec 10 2100:00	Rocketsonde	-	-	Starvue, Dataonide	-	-	-	KAU	-	-	-	66	-	-
1974-H1543	2442392-43	1974 Dec 10 2100:00	Rocketsonde	-	-	Starvue, Dataonide	-	-	-	WS	-	-	-	58	-	-
1974-H1544	2442393-06	1974 Dec 11 1400:00	Rocketsonde	-	-	Starvue, Dataonide	-	-	-	WS	-	-	-	66	-	-
1974-H1545	2442393-10	1974 Dec 11 1430:00	Rocketsonde	-	-	Starvue, Dataonide	-	-	-	ASC	-	-	-	62	-	-
1974-H1546	2442393-17	1974 Dec 11 1559:59	Rocketsonde	-	-	Starvue, Dataonide	-	-	-	CC	-	-	-	66	-	-
1974-H1547	2442393-17	1974 Dec 11 1605:00	Rocketsonde	-	-	Starvue, Dataonide	-	-	-	WI	-	-	-	64	-	-
1974-H1548	2442393-23	1974 Dec 11 1730:00	Rocketsonde	-	-	Starvue, Dataonide	-	-	-	CC	-	-	-	67	-	-
1974-H1549	2442393-35	1974 Dec 11 2100:00	Rocketsonde	-	-	Starvue, Dataonide	-	-	-	PF	-	-	-	60	-	-
1974-1374	2442393-38	1974 Dec 11 2100:00	Rocketsonde	-	-	Met. Para, Dataonide	-	-	-	KAU	-	-	-	81	-	-
1974-H1550	2442393-39	1974 Dec 11 2121:00	Rocketsonde	-	-	Starvue, Dataonide	-	-	-	KAU	-	-	-	85	-	-
1974-H1551	2442393-57	1974 Dec 12 0446:59	Rocketsonde	-	-	Starvue, Dataonide	-	-	-	KHR	-	-	-	78	-	-
1974-H1552	2442393-90	1974 Dec 12 0940:00	Rocketsonde	-	-	Starvue, Dataonide	-	-	-	ASC	-	-	-	66	-	-
1974-H1553	2442394-10	1974 Dec 12 1430:00	Rocketsonde	-	-	Starvue, Dataonide	-	-	-	CC	-	-	-	63	-	-
1974-H1554	2442394-16	1974 Dec 12 1430:00	Rocketsonde	-	-	Starvue, Dataonide	-	-	-	CC	-	-	-	67	-	-
1974-H1555	2442394-25	1974 Dec 12 1545:00	Rocketsonde	-	-	Starvue, Dataonide	-	-	-	WS	-	-	-	66	-	-
1974-H1556	2442394-25	1974 Dec 12 1600:00	Rocketsonde	-	-	Starvue, Dataonide	-	-	-	WS	-	-	-	62	-	-
1974-H1557	2442394-42	1974 Dec 12 2201:59	Rocketsonde	-	-	Starvue, Dataonide	-	-	-	KAU	-	-	-	62	-	-
1974-H1558	2442394-42	1974 Dec 12 2201:59	Rocketsonde	-	-	Starvue, Dataonide	-	-	-	PH	-	-	-	39	-	-
1974-H1559	2442394-71	1974 Dec 13 0801:00	Rocketsonde	-	-	Starvue, Dataonide	-	-	-	KHR	-	-	-	59	-	-
1974-H1560	2442395-10	1974 Dec 13 0914:59	Rocketsonde	-	-	Starvue, Dataonide	-	-	-	CC	-	-	-	68	-	-
1974-H1561	2442395-34	1974 Dec 13 2010:00	Rocketsonde	-	-	Starvue, Dataonide	-	-	-	CC	-	-	-	59	-	-
1974-H1562	2442395-34	1974 Dec 13 2010:00	Rocketsonde	-	-	Starvue, Dataonide	-	-	-	KAU	-	-	-	58	-	-
1974-H1563	2442395-38	1974 Dec 13 2100:00	Rocketsonde	-	-	Starvue, Dataonide	-	-	-	WS	-	-	-	62	-	-
1974-H1564	2442395-38	1974 Dec 13 2100:00	Rocketsonde	-	-	Starvue, Dataonide	-	-	-	WS	-	-	-	62	-	-
1974-H1565	2442395-47	1974 Dec 13 2340:59	Rocketsonde	-	-	Starvue, Dataonide	-	-	-	WS	-	-	-	52	-	-
1974-H1566	2442395-50	1974 Dec 13 2320:59	Rocketsonde	-	-	Starvue, Dataonide	-	-	-	WS	-	-	-	68	-	-
1974-H1567	2442395-50	1974 Dec 13 2355:00	Rocketsonde	-	-	Starvue, Dataonide	-	-	-	CC	-	-	-	69	-	-
1974-H1569	2442398-23	1974 Dec 16 1725:00	Rocketsonde	-	-	Starvue, Dataonide	-	-	-	CC	-	-	-	61	-	-
1974-H1570	2442398-23	1974 Dec 16 1827:59	Rocketsonde	-	-	Starvue, Dataonide	-	-	-	PH	-	-	-	61	-	-
1974-H1571	2442398-36	1974 Dec 16 2030:00	Rocketsonde	-	-	Starvue, Dataonide	-	-	-	WS	-	-	-	70	-	-
1974-H1572	2442398-36	1974 Dec 16 2040:00	Rocketsonde	-	-	Starvue, Dataonide	-	-	-	WS	-	-	-	70	-	-
1974-H1573	2442398-38	1974 Dec 16 2100:00	Rocketsonde	-	-	Met. Para, Dataonide	-	-	-	PF	-	-	-	68	-	-
1974-H1574	2442398-38	1974 Dec 16 2100:00	Rocketsonde	-	-	Starvue, Dataonide	-	-	-	KAU	-	-	-	64	-	-
1974-H1575	2442398-38	1974 Dec 16 2100:00	Rocketsonde	-	-	Starvue, Dataonide	-	-	-	ASC	-	-	-	64	-	-
1974-H1576	2442399-10	1974 Dec 17 0943:00	Rocketsonde	-	-	Starvue, Dataonide	-	-	-	WI	-	-	-	65	-	-
1974-H1577	2442399-10	1974 Dec 17 1423:00	Rocketsonde	-	-	Starvue, Dataonide	-	-	-	WS	-	-	-	65	-	-
1974-H1578	2442399-38	1974 Dec 17 1700:00	Rocketsonde	-	-	Starvue, Dataonide	-	-	-	WS	-	-	-	61	-	-
1974-H1579	2442399-38	1974 Dec 17 2100:00	Rocketsonde	-	-	Starvue, Dataonide	-	-	-	KAU	-	-	-	78	-	-
1974-H1580	2442399-48	1974 Dec 17 2335:00	Rocketsonde	-	-	Starvue, Dataonide	-	-	-	KHR	-	-	-	68	-	-
1974-H1581	2442400-01	1974 Dec 18 1210:00	Rocketsonde	-	-	Starvue, Dataonide	-	-	-	WI	-	-	-	74	-	-
1974-H1582	2442400-01	1974 Dec 18 1310:00	Rocketsonde	-	-	Starvue, Dataonide	-	-	-	WI	-	-	-	74	-	-
1974-H1584	2442400-21	1974 Dec 18 1403:00	Rocketsonde	-	-	Starvue, Dataonide	-	-	-	WS	-	-	-	74	-	-
1974-H1585	2442400-22	1974 Dec 18 1710:00	Rocketsonde	-	-	Starvue, Dataonide	-	-	-	WS	-	-	-	59	-	-
1974-H1586	2442400-22	1974 Dec 18 2001:00	Rocketsonde	-	-	Starvue, Dataonide	-	-	-	WS	-	-	-	65	-	-
1974-H1587	2442400-38	1974 Dec 18 2100:00	Rocketsonde	-	-	Met. Para, Dataonide	-	-	-	PF	-	-	-	59	-	-
1974-H1588	2442400-56	1974 Dec 19 0122:59	Rocketsonde	-	-	Starvue, Dataonide	-	-	-	KAU	-	-	-	76	-	-
1974-H1589	2442400-95	1974 Dec 19 0122:59	Rocketsonde	-	-	Starvue, Dataonide	-	-	-	KHR	-	-	-	60	-	-
1974-H1591	2442401-21	1974 Dec 19 1052:00	Rocketsonde	-	-	Starvue, Dataonide	-	-	-	ASC	-	-	-	67	-	-
1974-H1592	2442401-38	1974 Dec 19 1700:00	Rocketsonde	-	-	Starvue, Dataonide	-	-	-	WS	-	-	-	67	-	-
1974-H1593	2442402-10	1974 Dec 20 1430:00	Rocketsonde	-	-	Starvue, Dataonide	-	-	-	PH	-	-	-	59	-	-
1974-H1594	2442402-17	1974 Dec 20 1609:59	Rocketsonde	-	-	Starvue, Dataonide	-	-	-	CC	-	-	-	56	-	-
1974-H1596	2442402-21	1974 Dec 20 1700:00	Rocketsonde	-	-	Starvue, Dataonide	-	-	-	WI	-	-	-	67	-	-
1974-Y379	2442402-23	1974 Dec 20 1730:00	Rocketsonde	-	-	Met. Sphere	-	-	-	CC	-	-	-	100	-	-
1974-H1597	2442402-25	1974 Dec 20 1759:00	Rocketsonde	-	-	Starvue, Dataonide	-	-	-	CC	-	-	-	56	-	-
1974-H1598	2442402-38	1974 Dec 20 1759:00	Rocketsonde	-	-	Starvue, Dataonide	-	-	-	PH	-	-	-	64	-	-
1974-H1599	2442402-38	1974 Dec 20 2113:59	Rocketsonde	-	-	Starvue, Dataonide	-	-	-	PF	-	-	-	62	-	-
1974-H1600	2442402-55	1974 Dec 21 0114:59	Rocketsonde	-	-	Starvue, Dataonide	-	-	-	KAU	-	-	-	77	-	-
1974-H1601	2442405-11	1974 Dec 21 1437:59	Rocketsonde	-	-	Starvue, Dataonide	-	-	-	KHR	-	-	-	63	-	-
1974-H1602	2442405-12	1974 Dec 23 1500:00	Rocketsonde	-	-	Starvue, Dataonide	-	-	-	CC	-	-	-	55	-	-
1974-H1604	2442405-21	1974 Dec 23 1700:00	Rocketsonde	-	-	Starvue, Dataonide	-	-	-	CC	-	-	-	56	-	-
1974-H1605	2442405-25	1974 Dec 23 1758:00	Rocketsonde	-	-	Starvue, Dataonide	-	-	-	WS	-	-	-	69	-	-
1974-H1606	2442405-38	1974 Dec 23 2100:00	Rocketsonde	-	-	Starvue, Dataonide	-	-	-	PH	-	-	-	60	-	-
1974-H1607	2442405-55	1974 Dec 24 0114:59	Rocketsonde	-	-	Starvue, Dataonide	-	-	-	KHR	-	-	-	77	-	-
1974-H1608	2442406-08	1974 Dec 24 1357:59	Rocketsonde	-	-	Starvue, Dataonide	-	-	-	SHER	-	-	-	62	-	-



Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Mission	FlightCode	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee km	Range km	Dest
1974-W1610	2442406-35	1974 Dec 24 2030:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	KAU	-	-	-	62	-	-
1974-W1611	2442408-38	1974 Dec 26 2100:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	KAU	-	-	-	62	-	-
1974-W1612	2442409-12	1974 Dec 27 1500:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	SHER	-	-	-	53	-	-
1974-W1613	2442409-36	1974 Dec 27 2034:00	Rocketsonde	-	-	Met. Sphere	-	-	-	KAU	-	-	-	58	-	-
1974-W1614	2442409-37	1974 Dec 27 2049:59	Rocketsonde	-	-	Met. Sphere	-	-	-	KAU	-	-	-	85	-	-
1974-W1615	2442409-55	1974 Dec 27 2100:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	WS	-	-	-	67	-	-
1974-W1616	2442409-58	1974 Dec 28 0114:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	KHR	-	-	-	72	-	-
1974-W1618	2442412-12	1974 Dec 30 1500:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	SHER	-	-	-	61	-	-
1974-W1619	2442412-17	1974 Dec 30 1627:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	CC	LC43	-	-	66	-	-
1974-W1620	2442412-19	1974 Dec 30 1659:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PH	-	-	-	60	-	-
1974-W1621	2442412-21	1974 Dec 30 1700:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	WS	-	-	-	68	-	-
1974-W1622	2442412-23	1974 Dec 30 1730:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	CC	LC43	-	-	67	-	-
1974-W1623	2442412-27	1974 Dec 30 1829:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	WI	-	-	-	57	-	-
1974-W1625	2442413-17	1974 Dec 31 1559:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	CC	LC43	-	-	62	-	-
1974-W1626	2442413-23	1974 Dec 31 1730:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	CC	LC43	-	-	66	-	-
1975-W06	2442415-21	1975 Jan 2 1700:00	Rocketsonde	-	-	Arcasonde	-	-	-	CC	LC43	-	-	57	-	-
1975-W1016	2442665-53	1975 Sep 11 0040:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	KHR	-	-	-	74	-	-
1975-W1017	2442665-53	1975 Sep 11 0040:00	Rocketsonde	-	-	Arcasonde	-	-	-	ASC	-	-	-	68	-	-
1975-W1018	2442665-96	1975 Sep 12 1106:00	Rocketsonde	-	-	Arcasonde	-	-	-	WI	-	-	-	71	-	-
1975-W1018	2442668-14	1975 Sep 12 1514:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	WI	-	-	-	71	-	-
1975-W1019	2442668-19	1975 Sep 12 1634:59	Rocketsonde	-	-	Arcasonde	-	-	-	CC	LC43	-	-	60	-	-
1975-W1021	2442668-25	1975 Sep 12 1800:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	WS	-	-	-	66	-	-
1975-W1022	2442668-36	1975 Sep 12 2045:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	KAU	-	-	-	60	-	-
1975-W1023	2442668-40	1975 Sep 12 2137:59	Rocketsonde	-	-	Met. Sphere	-	-	-	PH	-	-	-	86	-	-
1975-W1024	2442668-42	1975 Sep 12 2200:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PH	-	-	-	63	-	-
1975-W1024	2442670-96	1975 Sep 15 1104:59	Rocketsonde	-	-	Arcasonde	-	-	-	ASC	-	-	-	64	-	-
1975-W1027	2442671-14	1975 Sep 15 1515:00	Rocketsonde	-	-	Arcasonde	-	-	-	CC	LC43	-	-	63	-	-
1975-W1027	2442671-14	1975 Sep 15 1617:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PRIM	-	-	-	68	-	-
1975-W1028	2442671-18	1975 Sep 15 1617:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	THU	-	-	-	73	-	-
1975-W1028	2442671-44	1975 Sep 15 2334:59	Rocketsonde	-	-	Starute, AN/DWQ-9	-	-	-	KAU	-	-	-	59	-	-
1975-W1029	2442671-55	1975 Sep 16 0114:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	KHR	-	-	-	65	-	-
1975-W1030	2442671-55	1975 Sep 16 0114:59	Rocketsonde	-	-	Arcasonde	-	-	-	ASC	-	-	-	66	-	-
1975-W1031	2442672-15	1975 Sep 16 1500:00	Rocketsonde	-	-	Arcasonde	-	-	-	CC	LC43	-	-	66	-	-
1975-W1032	2442672-16	1975 Sep 16 1500:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	CC	LC43	-	-	66	-	-
1975-W1032	2442672-28	1975 Sep 16 1949:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PH	-	-	-	74	-	-
1975-W1034	2442672-42	1975 Sep 16 2130:00	Rocketsonde	-	-	Met. Sphere	-	-	-	KAU	-	-	-	85	-	-
1975-W1035	2442672-42	1975 Sep 16 2210:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	KAU	-	-	-	65	-	-
1975-W1036	2442673-05	1975 Sep 17 1245:00	Rocketsonde	-	-	Arcasonde	-	-	-	ASC	-	-	-	67	-	-
1975-W1037	2442673-05	1975 Sep 17 1317:00	Rocketsonde	-	-	Arcasonde	-	-	-	CC	LC43	-	-	64	-	-
1975-W1039	2442673-11	1975 Sep 17 1425:00	Rocketsonde	-	-	Arcasonde	-	-	-	CLBI	-	-	-	61	-	-
1975-W1039	2442673-11	1975 Sep 17 1425:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	AIT	-	-	-	96	-	-
1975-W1040	2442673-13	1975 Sep 17 1445:00	Rocketsonde	-	-	Arcasonde	-	-	-	CC	LC43	-	-	65	-	-
1975-W1041	2442673-15	1975 Sep 17 1509:59	Rocketsonde	-	-	Arcasonde	-	-	-	WI	-	-	-	69	-	-
1975-W1041	2442673-15	1975 Sep 17 1509:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	WI	-	-	-	65	-	-
1975-W1043	2442673-55	1975 Sep 18 0354:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	WS	-	-	-	65	-	-
1975-W1043	2442674-06	1975 Sep 18 0354:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	KHR	-	-	-	80	-	-
1975-W1044	2442674-06	1975 Sep 18 1800:00	Rocketsonde	-	-	Arcasonde	-	-	-	ASC	-	-	-	65	-	-
1975-W1045	2442675-15	1975 Sep 18 1858:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PH	-	-	-	86	-	-
1975-W1046	2442675-16	1975 Sep 19 1315:59	Rocketsonde	-	-	Met. Sphere	-	-	-	AIT	-	-	-	80	-	-
1975-W1046	2442675-16	1975 Sep 19 1315:59	Rocketsonde	-	-	Starute, AN/DWQ-9	-	-	-	THU	-	-	-	76	-	-
1975-W1048	2442675-41	1975 Sep 19 2148:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	KHR	-	-	-	70	-	-
1975-W1049	2442675-41	1975 Sep 20 1937:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	WS	-	-	-	64	-	-
1975-W1049	2442675-28	1975 Sep 20 1937:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	WS	-	-	-	60	-	-
1975-W1050	2442677-26	1975 Sep 21 1804:59	Rocketsonde	-	-	Arcasonde	-	-	-	ASC	-	-	-	65	-	-
1975-W1051	2442677-26	1975 Sep 21 1804:59	Rocketsonde	-	-	Arcasonde	-	-	-	AIT	-	-	-	70	-	-
1975-W1052	2442678-15	1975 Sep 22 1510:00	Rocketsonde	-	-	Rocketsonde	-	-	-	CC	LC43	-	-	59	-	-
1975-W1053	2442678-15	1975 Sep 22 1530:00	Rocketsonde	-	-	Rocketsonde	-	-	-	PRIM	-	-	-	62	-	-
1975-W1054	2442678-15	1975 Sep 22 1530:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	ASC	-	-	-	65	-	-
1975-W1054	2442678-26	1975 Sep 22 1819:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	WS	-	-	-	65	-	-
1975-W1057	2442679-20	1975 Sep 23 1200:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PH	-	-	-	65	-	-
1975-W1058	2442679-20	1975 Sep 23 1300:59	Rocketsonde	-	-	Met. Sphere	-	-	-	PH	-	-	-	62	-	-
1975-W1059	2442679-52	1975 Sep 24 0033:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	KHR	-	-	-	78	-	-
1975-W1060	2442680-04	1975 Sep 24 1200:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	WS	-	-	-	62	-	-
1975-W1061	2442680-04	1975 Sep 24 1259:59	Rocketsonde	-	-	Arcasonde	-	-	-	ASC	-	-	-	67	-	-
1975-W1062	2442680-10	1975 Sep 24 1426:00	Rocketsonde	-	-	Arcasonde	-	-	-	CC	LC43	-	-	66	-	-
1975-W1063	2442680-16	1975 Sep 24 1549:59	Rocketsonde	-	-	Starute, AN/DWQ-9	-	-	-	THU	-	-	-	66	-	-
1975-W1064	2442680-19	1975 Sep 24 1630:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	WS	-	-	-	60	-	-
1975-W1066	2442680-26	1975 Sep 24 1814:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PH	-	-	-	60	-	-
1975-W1067	2442680-31	1975 Sep 24 1926:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PH	-	-	-	60	-	-
1975-W1068	2442680-45	1975 Sep 24 2243:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	KAU	-	-	-	57	-	-
1975-W1069	2442680-55	1975 Sep 25 0114:59	Rocketsonde	-	-	Arcasonde	-	-	-	CC	LC43	-	-	71	-	-
1975-W1070	2442680-55	1975 Sep 25 0114:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	KHR	-	-	-	66	-	-
1975-W1070	2442680-96	1975 Sep 25 1055:59	Rocketsonde	-	-	Arcasonde	-	-	-	ASC	-	-	-	70	-	-
1975-W1072	2442681-22	1975 Sep 25 1710:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	ASC	-	-	-	64	-	-
1975-W1073	2442681-22	1975 Sep 25 1710:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	WS	-	-	-	66	-	-
1975-W1075	2442681-27	1975 Sep 25 1814:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	WS	-	-	-	70	-	-
1975-W1076	2442681-46	1975 Sep 25 1827:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PRIM	-	-	-	59	-	-
1975-W1077	2442681-98	1975 Sep 25 2133:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	KHR	-	-	-	59	-	-
1975-W1079	2442682-08	1975 Sep 26 1354:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	WS	-	-	-	64	-	-
1975-W1080	2442682-11	1975 Sep 26 1435:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	CC	LC43	-	-	62	-	-
1975-W1081	2442682-16	1975 Sep 26 1545:00	Rocketsonde	-	-	Starute, AN/DWQ-9	-	-	-	THU	-	-	-	58	-	-
1975-W1083	2442682-21	1975 Sep 26 1658:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PRIM	-	-	-	61	-	-
1975-W1084	2442685-04	1975 Sep 29 1256:00	Rocketsonde	-	-	Arcasonde	-	-	-	ASC	-	-	-	67	-	-
1975-W1085	2442685-04	1975 Sep 29 1644:59	Rocketsonde	-	-	Arcasonde	-	-	-	CC	LC43	-	-	63	-	-
1975-W1086	2442685-20	1975 Sep 29 1654:59	Rocketsonde	-	-	Arcasonde	-	-	-	CC	LC43	-	-	56	-	-
1975-W1087	2442685-24	1975 Sep 29 1751:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	AIT	-	-	-	69	-	-
1975-W1088	2442685-30	1975 Sep 29 1914:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	WS	-	-	-	61	-	-
1975-W1089	2442685-42	1975 Sep 29 2201:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	KAU	-	-	-	59	-	-

Launch

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Mission	FlightCode	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee km	Range km	Dest
1975-H1098	2442685-54	1975 Sep 30 0059:59	Rocketsonde	-	-	Starute, Dataosnde	-	-	-	KRR	-	-	-	78	-	-
1975-T293	2442686-45	1975 Oct 30 2252:00	Rocketsonde	-	-	Met. Sphere	-	-	-	KAU	-	-	-	87	-	-
1975-A64	2442687-08	1975 Oct 1 1354:59	Rocketsonde	-	-	Arcosnde	-	-	-	AIT	-	-	-	45	-	-
1975-H1099	2442687-13	1975 Oct 1 1508:00	Rocketsonde	-	-	Starute, Dataosnde	-	-	-	WI	-	-	-	71	-	-
1975-H1100	2442687-17	1975 Oct 1 1604:59	Rocketsonde	-	-	Arcosnde	-	-	-	CC	LC43	-	-	66	-	-
1975-H1101	2442687-22	1975 Oct 1 1713:00	Rocketsonde	-	-	Starute, Dataosnde	-	-	-	PRUH	-	-	-	63	-	-
1975-H1103	2442687-38	1975 Oct 1 2104:59	Rocketsonde	-	-	Starute, Dataosnde	-	-	-	WS	-	-	-	54	-	-
1975-H1104	2442687-55	1975 Oct 2 0114:59	Rocketsonde	-	-	Starute, Dataosnde	-	-	-	KRR	-	-	-	74	-	-
1975-H1105	2442688-20	1975 Oct 2 1644:59	Rocketsonde	-	-	Starute, Dataosnde	-	-	-	WS	-	-	-	66	-	-
1975-H1106	2442688-35	1975 Oct 2 2030:00	Rocketsonde	-	-	Starute, Dataosnde	-	-	-	WS	-	-	-	65	-	-
1975-T298	2442688-38	1975 Oct 2 2100:00	Rocketsonde	-	-	Starute, Dataosnde	-	-	-	WS	-	-	-	87	-	-
1975-H1107	2442689-07	1975 Oct 3 1341:59	Rocketsonde	-	-	Arcosnde	-	-	-	ASC	-	-	-	68	-	-
1975-H1108	2442689-10	1975 Oct 3 1424:00	Rocketsonde	-	-	Arcosnde	-	-	-	CC	LC43	-	-	68	-	-
1975-H1110	2442689-14	1975 Oct 3 1522:00	Rocketsonde	-	-	Starute, Dataosnde	-	-	-	AIT	-	-	-	57	-	-
1975-H1111	2442689-15	1975 Oct 3 1533:59	Rocketsonde	-	-	Starute, Dataosnde	-	-	-	PRUH	-	-	-	69	-	-
1975-H1112	2442689-21	1975 Oct 3 1653:59	Rocketsonde	-	-	Starute, Dataosnde	-	-	-	WI	-	-	-	61	-	-
1975-H1113	2442689-30	1975 Oct 3 1909:59	Rocketsonde	-	-	Starute, Dataosnde	-	-	-	WS	-	-	-	60	-	-
1975-H1114	2442689-46	1975 Oct 3 2257:59	Rocketsonde	-	-	Starute, Dataosnde	-	-	-	KRR	-	-	-	86	-	-
1975-H1115	2442689-55	1975 Oct 4 1859:59	Rocketsonde	-	-	Starute, Dataosnde	-	-	-	WS	-	-	-	66	-	-
1975-T299	2442690-21	1975 Oct 4 1700:00	Rocketsonde	-	-	Starute, Dataosnde	-	-	-	WS	-	-	-	66	-	-
1975-H1116	2442690-29	1975 Oct 4 1869:59	Rocketsonde	-	-	Starute, Dataosnde	-	-	-	WS	-	-	-	67	-	-
1975-H1117	2442690-32	1975 Oct 4 1700:00	Rocketsonde	-	-	Starute, Dataosnde	-	-	-	WS	-	-	-	66	-	-
1975-H1118	2442691-25	1975 Oct 5 1800:00	Rocketsonde	-	-	Starute, Dataosnde	-	-	-	WS	-	-	-	64	-	-
1975-H1119	2442692-15	1975 Oct 6 1533:00	Rocketsonde	-	-	Starute, Dataosnde	-	-	-	PRUH	-	-	-	57	-	-
1975-H1120	2442692-19	1975 Oct 6 1630:00	Rocketsonde	-	-	Starute, Dataosnde	-	-	-	CC	LC43	-	-	64	-	-
1975-H1122	2442692-26	1975 Oct 6 1810:00	Rocketsonde	-	-	Starute, Dataosnde	-	-	-	WS	-	-	-	57	-	-
1975-H1123	2442692-55	1975 Oct 7 0830:00	Rocketsonde	-	-	Starute, Dataosnde	-	-	-	WS	-	-	-	69	-	-
1975-H1124	2442692-90	1975 Oct 7 0937:59	Rocketsonde	-	-	Arcosnde	-	-	-	ASC	-	-	-	66	-	-
1975-H1125	2442692-93	1975 Oct 7 1014:59	Rocketsonde	-	-	Starute, Dataosnde	-	-	-	WS	-	-	-	64	-	-
1975-H1126	2442692-95	1975 Oct 7 1630:59	Rocketsonde	-	-	Starute, Dataosnde	-	-	-	PH	-	-	-	60	-	-
1975-H1127	2442693-06	1975 Oct 7 1530:59	Rocketsonde	-	-	Starute, Dataosnde	-	-	-	ASC	-	-	-	65	-	-
1975-H1128	2442694-10	1975 Oct 8 1426:00	Rocketsonde	-	-	Arcosnde	-	-	-	ASC	LC43	-	-	72	-	-
1975-H1129	2442694-18	1975 Oct 8 1614:59	Rocketsonde	-	-	Starute, Dataosnde	-	-	-	PRUH	-	-	-	57	-	-
1975-H1131	2442694-23	1975 Oct 8 1730:00	Rocketsonde	-	-	Starute, Dataosnde	-	-	-	VI	-	-	-	71	-	-
1975-H1132	2442694-25	1975 Oct 8 1804:59	Rocketsonde	-	-	Starute, Dataosnde	-	-	-	WS	-	-	-	64	-	-
1975-H1133	2442694-25	1975 Oct 8 1945:59	Rocketsonde	-	-	Starute, Dataosnde	-	-	-	PH	-	-	-	62	-	-
1975-H135	2442694-32	1975 Oct 8 1945:59	Rocketsonde	-	-	Starute, Dataosnde	-	-	-	SHEN	-	-	-	49	-	-
1975-H135	2442694-46	1975 Oct 8 2330:00	Rocketsonde	-	-	Starute, Dataosnde	-	-	-	CC	LC43	-	-	78	-	-
1975-H134	2442695-17	1975 Oct 9 1559:59	Rocketsonde	-	-	Arcosnde	-	-	-	WS	-	-	-	65	-	-
1975-H1138	2442695-26	1975 Oct 9 1810:00	Rocketsonde	-	-	Starute, Dataosnde	-	-	-	KAU	-	-	-	57	-	-
1975-H1136	2442695-42	1975 Oct 9 2159:59	Rocketsonde	-	-	Arcosnde	-	-	-	ASC	-	-	-	66	-	-
1975-H1137	2442696-06	1975 Oct 10 1401:00	Rocketsonde	-	-	Starute, Dataosnde	-	-	-	AIT	-	-	-	46	-	-
1975-H139	2442696-14	1975 Oct 10 1514:59	Rocketsonde	-	-	Starute, Dataosnde	-	-	-	VI	-	-	-	75	-	-
1975-H1138	2442696-14	1975 Oct 10 1515:59	Rocketsonde	-	-	Starute, AN/DW/9-	-	-	-	THU	-	-	-	70	-	-
1975-H140	2442696-18	1975 Oct 10 1618:59	Rocketsonde	-	-	Starute, Dataosnde	-	-	-	VI	-	-	-	70	-	-
1975-H141	2442696-33	1975 Oct 10 1618:59	Rocketsonde	-	-	Met. Sphere	-	-	-	KAU	-	-	-	89	-	-
1975-H142	2442696-44	1975 Oct 10 2257:59	Rocketsonde	-	-	Starute, Dataosnde	-	-	-	KAU	-	-	-	87	-	-
1975-H143	2442696-46	1975 Oct 13 0923:59	Rocketsonde	-	-	Starute, Dataosnde	-	-	-	ASC	-	-	-	68	-	-
1975-H144	2442696-89	1975 Oct 13 1349:59	Rocketsonde	-	-	Arcosnde	-	-	-	AIT	-	-	-	73	-	-
1975-H145	2442696-90	1975 Oct 13 1549:59	Rocketsonde	-	-	Starute, AN/DW/9-	-	-	-	THU	-	-	-	59	-	-
1975-H146	2442696-93	1975 Oct 13 2345:00	Rocketsonde	-	-	Starute, Dataosnde	-	-	-	SHEN	-	-	-	48	-	-
1975-H147	2442696-83	1975 Oct 14 0930:00	Rocketsonde	-	-	Starute, Dataosnde	-	-	-	WS	-	-	-	62	-	-
1975-H149	2442700-17	1975 Oct 14 1609:59	Rocketsonde	-	-	Arcosnde	-	-	-	CC	LC43	-	-	67	-	-
1975-H1147	2442700-21	1975 Oct 14 1809:00	Rocketsonde	-	-	Starute, Dataosnde	-	-	-	WS	-	-	-	62	-	-
1975-H1149	2442700-21	1975 Oct 14 1809:00	Rocketsonde	-	-	Starute, Dataosnde	-	-	-	WS	-	-	-	62	-	-
1975-H1150	2442700-33	1975 Oct 15 1335:59	Rocketsonde	-	-	Arcosnde	-	-	-	KAU	-	-	-	60	-	-
1975-H1151	2442701-07	1975 Oct 15 1340:00	Rocketsonde	-	-	Arcosnde	-	-	-	CC	LC43	-	-	69	-	-
1975-H1152	2442701-08	1975 Oct 15 1356:59	Rocketsonde	-	-	Arcosnde	-	-	-	CC	LC43	-	-	73	-	-
1975-H1153	2442701-17	1975 Oct 15 1609:59	Rocketsonde	-	-	Starute, Dataosnde	-	-	-	ASC	-	-	-	67	-	-
1975-H1155	2442701-23	1975 Oct 15 1737:00	Rocketsonde	-	-	Starute, Dataosnde	-	-	-	THU	-	-	-	70	-	-
1975-H1156	2442701-31	1975 Oct 15 1930:00	Rocketsonde	-	-	Starute, Dataosnde	-	-	-	WS	-	-	-	58	-	-
1975-H1157	2442702-02	1975 Oct 16 1229:59	Rocketsonde	-	-	Arcosnde	-	-	-	ASC	-	-	-	63	-	-
1975-H1158	2442702-26	1975 Oct 16 1614:59	Rocketsonde	-	-	Arcosnde	-	-	-	ASC	LC43	-	-	64	-	-
1975-H1159	2442702-26	1975 Oct 16 1818:00	Rocketsonde	-	-	Starute, Dataosnde	-	-	-	CC	LC43	-	-	57	-	-
1975-H1160	2442702-43	1975 Oct 16 1829:00	Rocketsonde	-	-	Starute, Dataosnde	-	-	-	WS	-	-	-	60	-	-
1975-H1161	2442702-43	1975 Oct 16 2218:00	Rocketsonde	-	-	Starute, Dataosnde	-	-	-	KAU	-	-	-	60	-	-
1975-H1162	2442703-08	1975 Oct 17 1409:00	Rocketsonde	-	-	Arcosnde	-	-	-	AIT	-	-	-	58	-	-
1975-H1163	2442703-15	1975 Oct 17 1530:00	Rocketsonde	-	-	Starute, Dataosnde	-	-	-	VI	-	-	-	61	-	-
1975-H1164	2442703-27	1975 Oct 17 1834:59	Rocketsonde	-	-	Starute, AN/DW/9-	-	-	-	THU	-	-	-	71	-	-
1975-H1165	2442703-27	1975 Oct 17 1834:59	Rocketsonde	-	-	Starute, Dataosnde	-	-	-	PRUH	-	-	-	61	-	-
1975-Y309	2442703-46	1975 Oct 17 2303:59	Rocketsonde	-	-	Met. Sphere	-	-	-	KAU	-	-	-	85	-	-
1975-H1166	2442703-48	1975 Oct 17 2327:59	Rocketsonde	-	-	Starute, Dataosnde	-	-	-	KAU	-	-	-	77	-	-
1975-H1167	2442706-08	1975 Oct 20 1352:59	Rocketsonde	-	-	Arcosnde	-	-	-	ASC	-	-	-	66	-	-
1975-H1168	2442706-08	1975 Oct 20 1530:00	Rocketsonde	-	-	Starute, AN/DW/9-	-	-	-	THU	-	-	-	68	-	-
1975-H1170	2442706-22	1975 Oct 20 1723:00	Rocketsonde	-	-	Starute, Dataosnde	-	-	-	PRUH	-	-	-	66	-	-
1975-H1171	2442706-23	1975 Oct 20 1737:59	Rocketsonde	-	-	Starute, Dataosnde	-	-	-	VI	-	-	-	60	-	-
1975-H1172	2442706-26	1975 Oct 20 1813:59	Rocketsonde	-	-	Starute, Dataosnde	-	-	-	PH	-	-	-	75	-	-
1975-H1173	2442706-29	1975 Oct 20 1859:59	Rocketsonde	-	-	Starute, Dataosnde	-	-	-	WS	-	-	-	66	-	-
1975-H1174	2442706-52	1975 Oct 21 0034:59	Rocketsonde	-	-	Starute, Dataosnde	-	-	-	KRR	-	-	-	78	-	-
1975-H1175	2442706-93	1975 Oct 21 1024:59	Rocketsonde	-	-	Starute, Dataosnde	-	-	-	WS	-	-	-	62	-	-
1975-H1176	2442707-04	1975 Oct 21 1542:00	Rocketsonde	-	-	Arcosnde	-	-	-	CC	LC43	-	-	61	-	-
1975-H1177	2442707-24	1975 Oct 21 1751:00	Rocketsonde	-	-	Starute, Dataosnde	-	-	-	PRUH	-	-	-	65	-	-
1975-H1178	2442707-43	1975 Oct 21 2218:00	Rocketsonde	-	-	Starute, Dataosnde	-	-	-	KAU	-	-	-	57	-	-
1975-H1179	2442708-06	1975 Oct 22 1330:00	Rocketsonde	-	-	Arcosnde	-	-	-	ASC	-	-	-	67	-	-
1975-H1180	2442708-08	1975 Oct 22 1356:59	Rocketsonde	-	-	Arcosnde	-	-	-	CC	LC43	-	-	62	-	-
1975-H1181	2442708-09	1975 Oct 22 1408:00	Rocketsonde	-	-	Arcosnde	-	-	-	AIT	-	-	-	74	-	-

Launch

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Mission	FlightCode	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee km	Range km	Dest
1975-V311	2442708-11	1975 Oct 22 1445:00	Rocketsonde	-	-	Arcasonde	-	-	-	CC	LC43	-	-	88	-	-
1975-M1182	2442708-12	1975 Oct 22 1455:00	Rocketsonde	-	-	Starute, AN/DNQ-9	-	-	-	THU	-	-	-	53	-	-
1975-M1184	2442708-15	1975 Oct 22 1542:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	WI	-	-	-	68	-	-
1975-M1186	2442708-27	1975 Oct 22 1830:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PRUH	-	-	-	66	-	-
1975-M1187	2442708-33	1975 Oct 22 1949:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	WS	-	-	-	66	-	-
1975-M1188	2442708-48	1975 Oct 22 2332:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	KAU	-	-	-	63	-	-
1975-M1189	2442708-50	1975 Oct 23 0000:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	SHEH	-	-	-	52	-	-
1975-M1190	2442708-52	1975 Oct 23 0000:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	MNR	-	-	-	69	-	-
1975-M1191	2442709-22	1975 Oct 23 1715:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	WS	-	-	-	63	-	-
1975-M1192	2442709-40	1975 Oct 24 0333:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PH	-	-	-	62	-	-
1975-M1193	2442710-03	1975 Oct 24 1240:00	Rocketsonde	-	-	Arcasonde	-	-	-	MNR	-	-	-	71	-	-
1975-M1194	2442710-14	1975 Oct 24 1520:00	Rocketsonde	-	-	Starute, AN/DNQ-9	-	-	-	ASC	-	-	-	67	-	-
1975-M1195	2442710-18	1975 Oct 24 1619:59	Rocketsonde	-	-	Arcasonde	-	-	-	THU	-	-	-	74	-	-
1975-M1197	2442710-22	1975 Oct 24 1711:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	MIT	-	-	-	72	-	-
1975-M1198	2442710-24	1975 Oct 24 1740:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PRUH	-	-	-	68	-	-
1975-M1199	2442710-27	1975 Oct 24 1830:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	WS	-	-	-	64	-	-
1975-M1200	2442710-41	1975 Oct 24 2148:00	Rocketsonde	-	-	Starute, AN/DNQ-9	-	-	-	THU	-	-	-	51	-	-
1975-M1201	2442713-15	1975 Oct 27 1530:00	Rocketsonde	-	-	Arcasonde	-	-	-	MNR	-	-	-	69	-	-
1975-M1203	2442713-91	1975 Oct 28 0944:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	ASC	-	-	-	59	-	-
1975-M1204	2442714-23	1975 Oct 28 1731:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PRUH	-	-	-	69	-	-
1975-M1205	2442714-24	1975 Oct 28 1749:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	WS	-	-	-	63	-	-
1975-M1206	2442715-03	1975 Oct 29 1236:59	Rocketsonde	-	-	Arcasonde	-	-	-	ASC	-	-	-	66	-	-
1975-M1207	2442715-11	1975 Oct 29 1432:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	CEBI	-	-	-	62	-	-
1975-M1208	2442715-19	1975 Oct 29 1630:00	Rocketsonde	-	-	Arcasonde	-	-	-	CC	LC43	-	-	56	-	-
1975-M1209	2442715-21	1975 Oct 29 1701:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	WS	-	-	-	61	-	-
1975-M1210	2442715-22	1975 Oct 29 1728:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	THU	-	-	-	70	-	-
1975-M1212	2442715-23	1975 Oct 29 1816:00	Rocketsonde	-	-	Starute, AN/DNQ-9	-	-	-	PRUH	-	-	-	53	-	-
1975-M1214	2442715-26	1975 Oct 29 2151:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PH	-	-	-	56	-	-
1975-M1215	2442715-46	1975 Oct 29 2355:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	SHEH	-	-	-	52	-	-
1975-M1216	2442716-19	1975 Oct 30 1630:00	Rocketsonde	-	-	Arcasonde	-	-	-	CC	LC43	-	-	60	-	-
1975-M1217	2442716-20	1975 Oct 30 1647:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	KAU	-	-	-	59	-	-
1975-M1218	2442716-42	1975 Oct 30 2159:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	MNR	-	-	-	71	-	-
1975-M1220	2442717-15	1975 Oct 31 1506:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	THU	-	-	-	57	-	-
1975-M1221	2442717-16	1975 Oct 31 1549:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PRUH	-	-	-	78	-	-
1975-M1222	2442717-23	1975 Oct 31 1726:59	Rocketsonde	-	-	Starute, AN/DNQ-9	-	-	-	THU	-	-	-	58	-	-
1975-M1223	2442717-26	1975 Oct 31 1814:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	WS	-	-	-	66	-	-
1975-V319	2442717-39	1975 Oct 31 2126:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PH	-	-	-	90	-	-
1975-M1224	2442717-41	1975 Oct 31 2156:00	Rocketsonde	-	-	Reg. Sphere	-	-	-	ASC	-	-	-	73	-	-
1975-M1225	2442720-02	1975 Nov 3 1439:59	Rocketsonde	-	-	Arcasonde	-	-	-	VI	-	-	-	67	-	-
1975-M1226	2442720-19	1975 Nov 3 1631:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	CC	LC43	-	-	66	-	-
1975-M1228	2442720-32	1975 Nov 3 1834:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PC	-	-	-	96	-	-
1975-M1229	2442720-32	1975 Nov 3 1836:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	MNR	-	-	-	71	-	-
1975-M1230	2442720-50	1975 Nov 4 1027:59	Rocketsonde	-	-	Starute, AN/DNQ-9	-	-	-	THU	-	-	-	76	-	-
1975-M1231	2442721-14	1975 Nov 4 1517:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	WS	-	-	-	65	-	-
1975-M1235	2442721-22	1975 Nov 4 1738:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PRUH	-	-	-	44	-	-
1975-M1234	2442721-33	1975 Nov 4 1956:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PH	-	-	-	58	-	-
1975-M1236	2442721-33	1975 Nov 4 2006:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	KAU	-	-	-	62	-	-
1975-M1238	2442722-03	1975 Nov 5 1255:00	Rocketsonde	-	-	Arcasonde	-	-	-	ASC	-	-	-	67	-	-
1975-M1237	2442722-16	1975 Nov 5 1536:00	Rocketsonde	-	-	Starute, AN/DNQ-9	-	-	-	THU	-	-	-	41	-	-
1975-M61	2442722-19	1975 Nov 5 1630:00	Rocketsonde	-	-	Arcasonde	-	-	-	CC	LC43	-	-	63	-	-
1975-M1239	2442722-21	1975 Nov 5 1701:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PRUH	-	-	-	69	-	-
1975-M1240	2442722-22	1975 Nov 5 1710:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	WS	-	-	-	59	-	-
1975-M1241	2442722-30	1975 Nov 5 1914:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	VI	-	-	-	70	-	-
1975-M1242	2442722-40	1975 Nov 5 2130:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	KAU	-	-	-	57	-	-
1975-M1243	2442723-02	1975 Nov 6 1233:59	Rocketsonde	-	-	Arcasonde	-	-	-	ASC	-	-	-	64	-	-
1975-M1244	2442723-15	1975 Nov 6 1540:00	Rocketsonde	-	-	Starute, AN/DNQ-9	-	-	-	THU	-	-	-	78	-	-
1975-Y324	2442723-04	1975 Nov 6 1630:00	Rocketsonde	-	-	Arcasonde	-	-	-	CC	LC43	-	-	94	-	-
1975-M1246	2442723-31	1975 Nov 6 1930:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	WS	-	-	-	64	-	-
1975-M1247	2442724-11	1975 Nov 6 1982:59	Rocketsonde	-	-	Arcasonde	-	-	-	MIT	-	-	-	72	-	-
1975-M1248	2442724-11	1975 Nov 6 1982:59	Rocketsonde	-	-	Arcasonde	-	-	-	THU	-	-	-	70	-	-
1975-M1249	2442724-16	1975 Nov 6 1930:00	Rocketsonde	-	-	Starute, AN/DNQ-9	-	-	-	THU	-	-	-	65	-	-
1975-M1250	2442724-16	1975 Nov 6 1930:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	VI	-	-	-	60	-	-
1975-M1251	2442724-35	1975 Nov 7 2022:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PRUH	-	-	-	73	-	-
1975-M1253	2442724-38	1975 Nov 7 2106:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PH	-	-	-	70	-	-
1975-Y325	2442724-43	1975 Nov 7 1445:00	Rocketsonde	-	-	Mer. Sphers	-	-	-	WS	-	-	-	85	-	-
1975-Y326	2442724-55	1975 Nov 7 2224:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PH	-	-	-	65	-	-
1975-Y326	2442724-55	1975 Nov 8 0114:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	MNR	-	-	-	81	-	-
1975-M1255	2442727-04	1975 Nov 10 1253:00	Rocketsonde	-	-	Arcasonde	-	-	-	ASC	-	-	-	67	-	-
1975-M1256	2442727-19	1975 Nov 10 1630:00	Rocketsonde	-	-	Arcasonde	-	-	-	CC	LC43	-	-	59	-	-
1975-M1258	2442727-23	1975 Nov 10 1736:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PM	-	-	-	73	-	-
1975-M1259	2442727-29	1975 Nov 10 1859:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	WS	-	-	-	64	-	-
1975-M1260	2442727-42	1975 Nov 10 2209:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	KAU	-	-	-	57	-	-
1975-M1261	2442727-63	1975 Nov 11 0311:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	MNR	-	-	-	69	-	-
1975-M1262	2442728-16	1975 Nov 11 1549:59	Rocketsonde	-	-	Starute, AN/DNQ-9	-	-	-	THU	-	-	-	74	-	-
1975-M1264	2442729-06	1975 Nov 12 1330:00	Rocketsonde	-	-	Arcasonde	-	-	-	ASC	-	-	-	66	-	-
1975-M1265	2442729-16	1975 Nov 12 1555:00	Rocketsonde	-	-	Starute, AN/DNQ-9	-	-	-	THU	-	-	-	72	-	-
1975-M1266	2442729-18	1975 Nov 12 1622:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	VI	-	-	-	66	-	-
1975-M1267	2442729-20	1975 Nov 12 1644:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	CC	LC43	-	-	58	-	-
1975-M1268	2442729-22	1975 Nov 12 1723:00	Rocketsonde	-	-	Arcasonde	-	-	-	PRUH	-	-	-	67	-	-
1975-M1270	2442729-33	1975 Nov 12 2000:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	WS	-	-	-	67	-	-
1975-M1271	2442729-42	1975 Nov 12 2159:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	KAU	-	-	-	57	-	-
1975-M1272	2442729-55	1975 Nov 13 0114:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	MNR	-	-	-	76	-	-

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Mission	FlightCode	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee_Km	Range_Km	Dest
1975-11273	2442730-15	1975 Nov 13 1540:00	Rocketsonde	-	-	Starvue, AN/DWQ-9-	-	-	-	THU	-	-	-	71	-	-
1975-11275	2442730-25	1975 Nov 13 1800:00	Rocketsonde	-	-	Starvue, Dataonide	-	-	-	WS	-	-	-	66	-	-
1975-11276	2442730-34	1975 Nov 13 2008:00	Rocketsonde	-	-	Starvue, Dataonide	-	-	-	PRLM	-	-	-	53	-	-
1975-11277	2442731-15	1975 Nov 14 1540:00	Rocketsonde	-	-	Starvue, AN/DWQ-9-	-	-	-	THU	-	-	-	66	-	-
1975-1331	2442731-19	1975 Nov 14 1630:00	Rocketsonde	-	-	Arcasonde	-	-	-	CC	LC43	-	-	93	-	-
1975-11279	2442731-23	1975 Nov 14 1632:59	Rocketsonde	-	-	Starvue, Dataonide	-	-	-	WI	-	-	-	58	-	-
1975-11280	2442731-23	1975 Nov 14 1728:00	Rocketsonde	-	-	Starvue, Dataonide	-	-	-	PRLM	-	-	-	70	-	-
1975-1332	2442731-40	1975 Nov 14 2134:59	Rocketsonde	-	-	Starvue, Dataonide	-	-	-	KRR	-	-	-	80	-	-
1975-11281	2442734-19	1975 Nov 17 1630:00	Rocketsonde	-	-	Arcasonde	-	-	-	CC	LC43	-	-	76	-	-
1975-11282	2442734-19	1975 Nov 17 1630:00	Rocketsonde	-	-	Starvue, Dataonide	-	-	-	PRLM	-	-	-	62	-	-
1975-11283	2442734-19	1975 Nov 17 1630:00	Rocketsonde	-	-	Starvue, Dataonide	-	-	-	WS	-	-	-	56	-	-
1975-11284	2442734-39	1975 Nov 17 2128:59	Rocketsonde	-	-	Starvue, Dataonide	-	-	-	KRR	-	-	-	79	-	-
1975-11285	2442734-45	1975 Nov 17 2252:00	Rocketsonde	-	-	Starvue, Dataonide	-	-	-	KAO	-	-	-	58	-	-
1975-11286	2442735-19	1975 Nov 18 1630:00	Rocketsonde	-	-	Starvue, Dataonide	-	-	-	KAO	-	-	-	69	-	-
1975-11289	2442736-11	1975 Nov 19 1432:00	Rocketsonde	-	-	Starvue, Dataonide	-	-	-	CLBI	-	-	-	59	-	-
1975-11291	2442736-11	1975 Nov 19 1432:00	Rocketsonde	-	-	Arcasonde	-	-	-	CC	LC43	-	-	73	-	-
1975-11292	2442736-19	1975 Nov 19 1630:00	Rocketsonde	-	-	Starvue, Dataonide	-	-	-	WS	-	-	-	63	-	-
1975-11294	2442736-19	1975 Nov 19 1630:00	Rocketsonde	-	-	Starvue, Dataonide	-	-	-	PRLM	-	-	-	63	-	-
1975-11296	2442736-23	1975 Nov 19 1728:00	Rocketsonde	-	-	Starvue, Dataonide	-	-	-	PH	-	-	-	70	-	-
1975-1338	2442736-27	1975 Nov 19 2100:00	Rocketsonde	-	-	Met. Sphere	-	-	-	KAO	-	-	-	86	-	-
1975-11297	2442736-38	1975 Nov 19 2124:59	Rocketsonde	-	-	Starvue, Dataonide	-	-	-	KAO	-	-	-	74	-	-
1975-11298	2442736-39	1975 Nov 20 0100:59	Rocketsonde	-	-	Starvue, Dataonide	-	-	-	KRR	-	-	-	78	-	-
1975-11299	2442736-54	1975 Nov 20 1249:59	Rocketsonde	-	-	Arcasonde	-	-	-	ASC	-	-	-	66	-	-
1975-11301	2442737-03	1975 Nov 20 1632:00	Rocketsonde	-	-	Starvue, Dataonide	-	-	-	PRLM	-	-	-	58	-	-
1975-11302	2442737-27	1975 Nov 21 0134:59	Rocketsonde	-	-	Starvue, Dataonide	-	-	-	KRR	-	-	-	73	-	-
1975-11304	2442737-57	1975 Nov 21 0334:59	Rocketsonde	-	-	Starvue, Dataonide	-	-	-	WS	-	-	-	66	-	-
1975-11309	2442738-25	1975 Nov 21 1800:00	Rocketsonde	-	-	Arcasonde	-	-	-	ASC	-	-	-	68	-	-
1975-11305	2442740-90	1975 Nov 24 0934:59	Rocketsonde	-	-	Starvue, Dataonide	-	-	-	WS	-	-	-	66	-	-
1975-11307	2442741-19	1975 Nov 24 1630:00	Rocketsonde	-	-	Arcasonde	-	-	-	CC	LC43	-	-	70	-	-
1975-11308	2442741-23	1975 Nov 24 1737:59	Rocketsonde	-	-	Starvue, Dataonide	-	-	-	PRLM	-	-	-	69	-	-
1975-11310	2442742-23	1975 Nov 26 1730:00	Rocketsonde	-	-	Starvue, Dataonide	-	-	-	WS	-	-	-	89	-	-
1975-11311	2442742-26	1975 Nov 26 1814:59	Rocketsonde	-	-	Starvue, Dataonide	-	-	-	ASC	-	-	-	67	-	-
1975-11312	2442743-06	1975 Nov 26 1840:00	Rocketsonde	-	-	Arcasonde	-	-	-	PH	-	-	-	72	-	-
1975-11313	2442743-16	1975 Nov 26 1850:00	Rocketsonde	-	-	Starvue, Dataonide	-	-	-	PRLM	-	-	-	69	-	-
1975-11315	2442743-18	1975 Nov 26 1850:00	Rocketsonde	-	-	Arcasonde	-	-	-	CC	LC43	-	-	76	-	-
1975-1346	2442743-25	1975 Nov 26 1851:00	Rocketsonde	-	-	Met. Sphere	-	-	-	PH	-	-	-	97	-	-
1975-11317	2442743-27	1975 Nov 26 1851:00	Rocketsonde	-	-	Starvue, Dataonide	-	-	-	PR	-	-	-	97	-	-
1975-11318	2442743-33	1975 Nov 26 1954:59	Rocketsonde	-	-	Starvue, Dataonide	-	-	-	WS	-	-	-	67	-	-
1975-11319	2442744-23	1975 Nov 27 1728:00	Rocketsonde	-	-	Starvue, Dataonide	-	-	-	PRLM	-	-	-	70	-	-
1975-11320	2442744-23	1975 Nov 27 1728:00	Rocketsonde	-	-	Arcasonde	-	-	-	CC	LC43	-	-	69	-	-
1975-11323	2442746-19	1975 Dec 1 1635:59	Rocketsonde	-	-	Starvue, Dataonide	-	-	-	PR	-	-	-	40	-	-
1975-11324	2442746-27	1975 Dec 1 1822:00	Rocketsonde	-	-	Starvue, Dataonide	-	-	-	WS	-	-	-	49	-	-
1975-11325	2442746-27	1975 Dec 1 1830:00	Rocketsonde	-	-	Starvue, Dataonide	-	-	-	WS	-	-	-	49	-	-
1975-11326	2442746-29	1975 Dec 1 1839:59	Rocketsonde	-	-	Starvue, Dataonide	-	-	-	WS	-	-	-	54	-	-
1975-11328	2442748-31	1975 Dec 1 1930:00	Rocketsonde	-	-	Starvue, Dataonide	-	-	-	WS	-	-	-	28	-	-
1975-11329	2442748-32	1975 Dec 1 1940:00	Rocketsonde	-	-	Starvue, Dataonide	-	-	-	PRLM	-	-	-	23	-	-
1975-11330	2442748-33	1975 Dec 1 2100:00	Rocketsonde	-	-	Starvue, Dataonide	-	-	-	VI	-	-	-	55	-	-
1975-11331	2442748-38	1975 Dec 1 2100:00	Rocketsonde	-	-	Starvue, Dataonide	-	-	-	KRU	-	-	-	61	-	-
1975-11332	2442749-04	1975 Dec 2 1334:59	Rocketsonde	-	-	Starvue, Dataonide	-	-	-	WS	-	-	-	56	-	-
1975-11333	2442749-07	1975 Dec 2 1559:59	Rocketsonde	-	-	Starvue, Dataonide	-	-	-	WS	-	-	-	61	-	-
1975-11334	2442749-17	1975 Dec 2 1700:00	Rocketsonde	-	-	Starvue, Dataonide	-	-	-	PH	-	-	-	66	-	-
1975-11335	2442749-21	1975 Dec 2 1729:00	Rocketsonde	-	-	Starvue, Dataonide	-	-	-	PRLM	-	-	-	72	-	-
1975-11336	2442749-23	1975 Dec 2 1729:00	Rocketsonde	-	-	Starvue, Dataonide	-	-	-	WS	-	-	-	66	-	-
1975-11337	2442749-23	1975 Dec 2 1859:59	Rocketsonde	-	-	Starvue, Dataonide	-	-	-	KRR	-	-	-	73	-	-
1975-11338	2442749-42	1975 Dec 2 2136:59	Rocketsonde	-	-	Starvue, Dataonide	-	-	-	KRU	-	-	-	57	-	-
1975-11339	2442749-44	1975 Dec 2 2136:59	Rocketsonde	-	-	Starvue, Dataonide	-	-	-	SHEM	-	-	-	38	-	-
1975-11340	2442749-53	1975 Dec 3 0045:00	Rocketsonde	-	-	Starvue, Dataonide	-	-	-	WS	-	-	-	56	-	-
1975-11341	2442750-10	1975 Dec 3 1424:00	Rocketsonde	-	-	Arcasonde	-	-	-	CLBI	-	-	-	73	-	-
1975-11342	2442750-10	1975 Dec 3 1630:00	Rocketsonde	-	-	Starvue, Dataonide	-	-	-	WS	LC43	-	-	63	-	-
1975-11344	2442750-29	1975 Dec 3 1859:59	Rocketsonde	-	-	Starvue, Dataonide	-	-	-	PRLM	-	-	-	69	-	-
1975-11345	2442750-32	1975 Dec 3 1940:00	Rocketsonde	-	-	Starvue, Dataonide	-	-	-	SHEM	-	-	-	56	-	-
1975-11346	2442750-46	1975 Dec 3 2300:00	Rocketsonde	-	-	Starvue, Dataonide	-	-	-	WS	-	-	-	66	-	-
1975-11348	2442751-29	1975 Dec 4 1859:59	Rocketsonde	-	-	Starvue, Dataonide	-	-	-	WS	-	-	-	60	-	-
1975-11350	2442752-15	1975 Dec 5 1533:00	Rocketsonde	-	-	Arcasonde	-	-	-	ASC	-	-	-	60	-	-
1975-11351	2442752-15	1975 Dec 5 1533:00	Rocketsonde	-	-	Starvue, Dataonide	-	-	-	VI	-	-	-	73	-	-
1975-11352	2442752-19	1975 Dec 5 1631:59	Rocketsonde	-	-	Arcasonde	-	-	-	CC	LC43	-	-	95	-	-
1975-11353	2442752-29	1975 Dec 5 1859:59	Rocketsonde	-	-	Starvue, Dataonide	-	-	-	WS	-	-	-	64	-	-
1975-11355	2442752-45	1975 Dec 5 2201:59	Rocketsonde	-	-	Starvue, Dataonide	-	-	-	WS	-	-	-	76	-	-
1975-11356	2442752-45	1975 Dec 5 2263:59	Rocketsonde	-	-	Starvue, Dataonide	-	-	-	PH	-	-	-	49	-	-
1975-11358	2442755-15	1975 Dec 8 1530:00	Rocketsonde	-	-	Arcasonde	-	-	-	CC	LC43	-	-	67	-	-
1975-11359	2442755-15	1975 Dec 8 1530:00	Rocketsonde	-	-	Starvue, Dataonide	-	-	-	THU	-	-	-	67	-	-
1975-11360	2442755-23	1975 Dec 8 1725:00	Rocketsonde	-	-	Starvue, AN/DWQ-9-	-	-	-	WS	-	-	-	32	-	-
1975-11361	2442755-23	1975 Dec 8 1745:00	Rocketsonde	-	-	Starvue, Dataonide	-	-	-	WS	-	-	-	33	-	-
1975-11362	2442755-28	1975 Dec 8 1845:00	Rocketsonde	-	-	Starvue, Dataonide	-	-	-	PH	-	-	-	33	-	-
1975-11363	2442755-32	1975 Dec 8 1944:59	Rocketsonde	-	-	Starvue, Dataonide	-	-	-	PRLM	-	-	-	68	-	-
1975-11364	2442755-32	1975 Dec 8 1944:59	Rocketsonde	-	-	Starvue, Dataonide	-	-	-	WS	-	-	-	73	-	-
1975-11365	2442756-24	1975 Dec 9 1740:00	Rocketsonde	-	-	Starvue, Dataonide	-	-	-	WS	-	-	-	33	-	-
1975-11366	2442756-25	1975 Dec 9 1801:59	Rocketsonde	-	-	Starvue, Dataonide	-	-	-	PRLM	-	-	-	59	-	-
1975-11367	2442756-43	1975 Dec 9 2219:59	Rocketsonde	-	-	Starvue, Dataonide	-	-	-	PH	-	-	-	79	-	-
1975-11368	2442757-15	1975 Dec 10 1530:00	Rocketsonde	-	-	Starvue, Dataonide	-	-	-	KRR	-	-	-	64	-	-
1975-11369	2442757-15	1975 Dec 10 1530:00	Rocketsonde	-	-	Arcasonde	-	-	-	CC	LC43	-	-	72	-	-
1975-11370	2442757-17	1975 Dec 10 1604:59	Rocketsonde	-	-	Starvue, Dataonide	-	-	-	VI	-	-	-	62	-	-
1975-11371	2442757-22	1975 Dec 10 1717:00	Rocketsonde	-	-	Arcasonde	-	-	-	ASC	-	-	-	69	-	-
1975-11372	2442757-22	1975 Dec 10 1717:00	Rocketsonde	-	-	Starvue, Dataonide	-	-	-	PRLM	-	-	-	66	-	-
1975-11373	2442757-23	1975 Dec 10 1730:00	Rocketsonde	-	-	Starvue, Dataonide	-	-	-	WS	-	-	-	66	-	-

Launch

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Mission	FlightCode	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee	Range	Dest
1975-1358	2442757-50	1975 Dec 10 2357:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	RHR	-	-	-	82	-	-
1975-1359	2442757-71	1975 Dec 11 0500:00	Rocketsonde	-	-	Starute, AN/DNQ-9	-	-	-	THU	-	-	-	65	-	-
1975-1360	2442758-15	1975 Dec 11 1530:00	Rocketsonde	-	-	Arcasonde	-	-	-	CC	LC43	-	-	55	-	-
1975-1361	2442758-23	1975 Dec 11 1728:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PH	-	-	-	61	-	-
1975-1362	2442758-38	1975 Dec 11 2110:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	WS	-	-	-	66	-	-
1975-1363	2442758-65	1975 Dec 12 0336:59	Rocketsonde	-	-	Met. Sphere	-	-	-	PH	-	-	-	86	-	-
1975-1364	2442758-69	1975 Dec 12 0336:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PH	-	-	-	66	-	-
1975-1365	2442758-71	1975 Dec 12 0509:00	Rocketsonde	-	-	Met. Sphere	-	-	-	PH	-	-	-	85	-	-
1975-1366	2442758-74	1975 Dec 12 0542:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	ASC	-	-	-	72	-	-
1975-1367	2442759-14	1975 Dec 12 1514:59	Rocketsonde	-	-	Arcasonde	-	-	-	ASC	-	-	-	65	-	-
1975-1368	2442759-15	1975 Dec 12 1530:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	CC	LC43	-	-	95	-	-
1975-1369	2442759-19	1975 Dec 12 1630:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	WS	-	-	-	63	-	-
1975-1370	2442759-45	1975 Dec 12 2248:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	RAU	-	-	-	60	-	-
1975-1371	2442759-56	1975 Dec 13 0130:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	RHR	-	-	-	81	-	-
1975-1372	2442759-58	1975 Dec 13 0130:00	Rocketsonde	-	-	Starute, AN/DNQ-9	-	-	-	THU	-	-	-	50	-	-
1975-1373	2442760-60	1975 Dec 13 0215:00	Rocketsonde	-	-	Starute, AN/DNQ-9	-	-	-	THU	-	-	-	65	-	-
1975-1374	2442762-11	1975 Dec 14 0230:00	Rocketsonde	-	-	Arcasonde	-	-	-	AUT	-	-	-	73	-	-
1975-1375	2442762-11	1975 Dec 15 1435:00	Rocketsonde	-	-	Arcasonde	-	-	-	CC	LC43	-	-	59	-	-
1975-1376	2442762-15	1975 Dec 15 1530:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	WI	-	-	-	59	-	-
1975-1377	2442762-15	1975 Dec 15 1530:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PRUH	-	-	-	51	-	-
1975-1378	2442762-15	1975 Dec 15 1530:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	WS	-	-	-	61	-	-
1975-1379	2442762-20	1975 Dec 15 1643:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	RAU	-	-	-	62	-	-
1975-1380	2442762-26	1975 Dec 15 1820:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	RAU	-	-	-	82	-	-
1975-1381	2442762-41	1975 Dec 15 2153:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	THU	-	-	-	72	-	-
1975-1382	2442762-46	1975 Dec 15 2255:59	Rocketsonde	-	-	Starute, AN/DNQ-9	-	-	-	PH	-	-	-	65	-	-
1975-1383	2442762-58	1975 Dec 16 0200:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	THU	-	-	-	68	-	-
1975-1384	2442763-31	1975 Dec 16 1930:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PH	-	-	-	59	-	-
1975-1385	2442763-45	1975 Dec 16 2243:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	RHR	-	-	-	82	-	-
1975-1386	2442763-66	1975 Dec 17 0414:59	Rocketsonde	-	-	Starute, AN/DNQ-9	-	-	-	RHR	-	-	-	59	-	-
1975-1387	2442763-98	1975 Dec 17 1130:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	CEBI	-	-	-	82	-	-
1975-1388	2442764-09	1975 Dec 17 1415:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	CC	LC43	-	-	59	-	-
1975-1389	2442764-15	1975 Dec 17 1530:00	Rocketsonde	-	-	Arcasonde	-	-	-	AUT	-	-	-	59	-	-
1975-1390	2442764-21	1975 Dec 17 1658:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	WS	-	-	-	64	-	-
1975-1391	2442764-28	1975 Dec 17 1940:00	Rocketsonde	-	-	Met. Sphere	-	-	-	KAU	-	-	-	97	-	-
1975-1392	2442764-45	1975 Dec 17 2214:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	KAU	-	-	-	74	-	-
1975-1393	2442764-45	1975 Dec 18 0034:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	RHR	-	-	-	79	-	-
1975-1394	2442764-64	1975 Dec 18 0224:59	Rocketsonde	-	-	Starute, AN/DNQ-9	-	-	-	THU	-	-	-	73	-	-
1975-1395	2442764-64	1975 Dec 18 1530:00	Rocketsonde	-	-	Arcasonde	-	-	-	CC	LC43	-	-	60	-	-
1975-1400	2442765-21	1975 Dec 18 1703:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	WS	-	-	-	64	-	-
1975-1402	2442765-46	1975 Dec 18 2353:00	Rocketsonde	-	-	Arcasonde	-	-	-	KUO	LC43	-	-	96	-	-
1975-1404	2442766-15	1975 Dec 19 1530:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	THU	LC43	-	-	51	-	-
1975-1406	2442766-15	1975 Dec 19 1530:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	VI	-	-	-	72	-	-
1975-1408	2442766-19	1975 Dec 19 1657:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	WS	-	-	-	61	-	-
1975-1409	2442766-22	1975 Dec 19 1700:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PRUH	-	-	-	29	-	-
1975-1411	2442769-23	1975 Dec 20 0115:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	KHR	-	-	-	59	-	-
1975-1412	2442769-23	1975 Dec 21 1736:59	Rocketsonde	-	-	Arcasonde	-	-	-	AUT	-	-	-	58	-	-
1975-1414	2442769-23	1975 Dec 21 1736:59	Rocketsonde	-	-	Starute, AN/DNQ-9	-	-	-	THU	-	-	-	50	-	-
1975-1415	2442768-65	1975 Dec 22 0330:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	CC	LC43	-	-	95	-	-
1975-1416	2442769-65	1975 Dec 22 1345:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PRUH	-	-	-	70	-	-
1975-1417	2442769-23	1975 Dec 22 1346:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PH	-	-	-	65	-	-
1975-1418	2442769-28	1975 Dec 22 1850:59	Rocketsonde	-	-	Met. Sphere	-	-	-	PH	-	-	-	85	-	-
1975-1419	2442769-44	1975 Dec 22 2227:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	KHR	-	-	-	80	-	-
1975-1420	2442770-20	1975 Dec 23 1644:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PRUH	-	-	-	67	-	-
1975-1421	2442770-21	1975 Dec 23 1655:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	CC	LC43	-	-	60	-	-
1975-1422	2442771-15	1975 Dec 24 1530:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	WS	-	-	-	60	-	-
1975-1423	2442771-21	1975 Dec 24 1830:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PH	-	-	-	60	-	-
1975-1424	2442771-51	1975 Dec 24 1857:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PH	-	-	-	65	-	-
1975-1426	2442773-45	1975 Dec 26 2249:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	KHR	-	-	-	54	-	-
1975-1427	2442776-15	1975 Dec 29 1530:00	Rocketsonde	-	-	Arcasonde	-	-	-	CC	LC43	-	-	96	-	-
1975-1428	2442776-17	1975 Dec 29 1559:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	VI	-	-	-	69	-	-
1975-1429	2442776-30	1975 Dec 29 1907:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PH	-	-	-	57	-	-
1975-1430	2442776-39	1975 Dec 29 1926:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	SHEM	-	-	-	54	-	-
1975-1431	2442776-52	1975 Dec 30 0024:59	Rocketsonde	-	-	Starute, Datasonde	-	-	-	CC	LC43	-	-	76	-	-
1975-1432	2442776-52	1975 Dec 31 1530:00	Rocketsonde	-	-	Arcasonde	-	-	-	CC	LC43	-	-	0	-	-
1975-1433	2442778-19	1975 Dec 31 1830:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	WS	-	-	-	48	-	-
1975-1434	2442778-31	1975 Dec 31 1930:00	Rocketsonde	-	-	Starute, Datasonde	-	-	-	PH	-	-	-	60	-	-
1975-1435	2442778-31	1975 Dec 31 1930:00	Rocketsonde	-	-	Arcasonde	-	-	-	PH	-	-	-	75	-	-
1975-1436	2442778-58	1976 Jan 1 0152:00	Rocketsonde	-	-	Arcasonde	-	-	-	AUT	-	-	-	55	-	-
1975-1437	2442979-10	1976 Jan 19 1430:00	Rocketsonde	-	-	Arcasonde	-	-	-	AUT	-	-	-	68	-	-
1975-1438	2442979-23	1976 Jan 19 1725:00	Rocketsonde	-	-	Arcasonde	-	-	-	THU	-	-	-	70	-	-
1975-1439	2442979-23	1976 Jan 19 1730:00	Rocketsonde	-	-	Arcasonde	-	-	-	VI	-	-	-	69	-	-
1975-1440	2442979-25	1976 Jan 19 1804:59	Rocketsonde	-	-	Arcasonde	-	-	-	PH	-	-	-	64	-	-
1975-1441	2442979-49	1976 Jan 19 2159:59	Rocketsonde	-	-	Arcasonde	-	-	-	PF	-	-	-	64	-	-
1975-1442	2442979-49	1976 Jan 19 2347:00	Rocketsonde	-	-	Arcasonde	-	-	-	PH	-	-	-	80	-	-
1975-1443	2442980-01	1976 Jan 20 1211:59	Rocketsonde	-	-	AN/DNQ-9	-	-	-	ASC	-	-	-	66	-	-
1975-1444	2442980-12	1976 Jan 20 1445:00	Rocketsonde	-	-	Arcasonde	-	-	-	WS	-	-	-	97	-	-
1975-1445	2442980-11	1976 Jan 20 1455:00	Rocketsonde	-	-	Arcasonde	-	-	-	WS	-	-	-	61	-	-
1975-1446	2442980-41	1976 Jan 20 1449:59	Rocketsonde	-	-	Arcasonde	-	-	-	ASC	-	-	-	62	-	-
1975-1447	2442981-07	1976 Jan 21 1344:59	Rocketsonde	-	-	Arcasonde	-	-	-	KAU	-	-	-	68	-	-
1975-1448	2442981-11	1976 Jan 21 1437:00	Rocketsonde	-	-	Arcasonde	-	-	-	ASC	-	-	-	54	-	-
1975-1449	2442981-11	1976 Jan 21 1445:00	Rocketsonde	-	-	Arcasonde	-	-	-	CEBI	-	-	-	61	-	-
1975-1450	2442981-15	1976 Jan 21 1538:59	Rocketsonde	-	-	Arcasonde	-	-	-	CC	LC43	-	-	67	-	-
1975-1451	2442981-21	1976 Jan 21 1700:00	Rocketsonde	-	-	Arcasonde	-	-	-	SHEM	-	-	-	60	-	-
1975-1452	2442981-21	1976 Jan 21 1700:00	Rocketsonde	-	-	Arcasonde	-	-	-	THU	-	-	-	65	-	-
1975-1453	2442981-23	1976 Jan 21 1735:00	Rocketsonde	-	-	AN/DNQ-9	-	-	-	WS	-	-	-	74	-	-

Launch Mission

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Launch_Mission	FlightCode	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee_Km	Range_Km	Dest
1976-H1007	2442981-24	1976 Jul 21 1745:00	Rocketsonde	-	-	Arcasonde	-	-	-	WS	-	-	-	66	-	-
1976-H1008	2442981-26	1976 Jul 21 1808:00	Rocketsonde	-	-	Arcasonde	-	-	-	WI	-	-	-	70	-	-
1976-H1009	2442981-27	1976 Jul 21 1830:00	Rocketsonde	-	-	Arcasonde	-	-	-	PRLM	-	-	-	59	-	-
1976-H1010	2442981-33	1976 Jul 21 1954:59	Rocketsonde	-	-	Arcasonde	-	-	-	PF	-	-	-	65	-	-
1976-H1011	2442981-40	1976 Jul 21 2131:00	Rocketsonde	-	-	AN/DMC-97	-	-	-	KAU	-	-	-	88	-	-
1976-H1011	2442981-40	1976 Jul 21 2143:00	Rocketsonde	-	-	Arcasonde	-	-	-	KAU	-	-	-	60	-	-
1976-H1011	2442981-49	1976 Jul 21 2343:00	Rocketsonde	-	-	Arcasonde	-	-	-	SHER	-	-	-	46	-	-
1976-H1011	2442981-55	1976 Jul 22 0114:59	Rocketsonde	-	-	Arcasonde	-	-	-	KR	-	-	-	82	-	-
1976-H1012	2442982-17	1976 Jul 22 1634:59	Rocketsonde	-	-	Arcasonde	-	-	-	PH	-	-	-	68	-	-
1976-H1013	2442982-19	1976 Jul 22 1651:59	Rocketsonde	-	-	Arcasonde	-	-	-	SHER	-	-	-	50	-	-
1976-H1014	2442982-49	1976 Jul 22 2348:00	Rocketsonde	-	-	Arcasonde	-	-	-	KR	-	-	-	78	-	-
1976-H1015	2442983-01	1976 Jul 23 1212:59	Rocketsonde	-	-	Arcasonde	-	-	-	ASC	-	-	-	46	-	-
1976-H1016	2442983-07	1976 Jul 23 1344:59	Rocketsonde	-	-	Arcasonde	-	-	-	CC	LC43	-	-	75	-	-
1976-H1017	2442983-10	1976 Jul 23 1430:00	Rocketsonde	-	-	Arcasonde	-	-	-	WI	-	-	-	59	-	-
1976-H1018	2442983-15	1976 Jul 23 1530:00	Rocketsonde	-	-	Arcasonde	-	-	-	THU	-	-	-	71	-	-
1976-H1019	2442983-34	1976 Jul 23 2004:59	Rocketsonde	-	-	Arcasonde	-	-	-	PF	-	-	-	65	-	-
1976-H1020	2442986-10	1976 Jul 26 1430:00	Rocketsonde	-	-	Arcasonde	-	-	-	WI	-	-	-	70	-	-
1976-H1021	2442986-13	1976 Jul 26 1504:59	Rocketsonde	-	-	Arcasonde	-	-	-	THU	-	-	-	69	-	-
1976-H1022	2442986-13	1976 Jul 26 1510:00	Rocketsonde	-	-	Arcasonde	-	-	-	ANT	-	-	-	67	-	-
1976-H1023	2442986-26	1976 Jul 26 1818:00	Rocketsonde	-	-	Arcasonde	-	-	-	PH	-	-	-	71	-	-
1976-H1024	2442986-32	1976 Jul 26 1938:59	Rocketsonde	-	-	Arcasonde	-	-	-	PF	-	-	-	61	-	-
1976-H1025	2442986-46	1976 Jul 26 2246:59	Rocketsonde	-	-	Arcasonde	-	-	-	KR	-	-	-	80	-	-
1976-H1026	2442986-99	1976 Jul 27 1142:00	Rocketsonde	-	-	Arcasonde	-	-	-	ASC	-	-	-	65	-	-
1976-H1027	2442987-19	1976 Jul 27 1654:59	Rocketsonde	-	-	Chaff, Arcasonde	-	-	-	SHER	-	-	-	52	-	-
1976-H1028	2442987-33	1976 Jul 27 1854:59	Rocketsonde	-	-	Arcasonde	-	-	-	WS	-	-	-	63	-	-
1976-H1029	2442987-42	1976 Jul 27 2159:59	Rocketsonde	-	-	Arcasonde	-	-	-	PF	-	-	-	62	-	-
1976-H1031	2442987-46	1976 Jul 27 2330:00	Rocketsonde	-	-	Arcasonde	-	-	-	KAU	-	-	-	62	-	-
1976-H1032	2442988-02	1976 Jul 28 1232:00	Rocketsonde	-	-	Arcasonde	-	-	-	KR	-	-	-	79	-	-
1976-H1033	2442988-04	1976 Jul 28 1239:59	Rocketsonde	-	-	Arcasonde	-	-	-	ASC	-	-	-	58	-	-
1976-H1034	2442988-06	1976 Jul 28 1304:59	Rocketsonde	-	-	Arcasonde	-	-	-	ANT	-	-	-	67	-	-
1976-H1035	2442988-16	1976 Jul 28 1504:59	Rocketsonde	-	-	Arcasonde	-	-	-	CC	LC43	-	-	74	-	-
1976-H1036	2442988-16	1976 Jul 28 1514:59	Rocketsonde	-	-	Arcasonde	-	-	-	VI	-	-	-	70	-	-
1976-H1037	2442988-21	1976 Jul 28 1700:00	Rocketsonde	-	-	Arcasonde	-	-	-	THU	-	-	-	67	-	-
1976-H1038	2442988-25	1976 Jul 28 1726:59	Rocketsonde	-	-	Arcasonde	-	-	-	SHER	-	-	-	62	-	-
1976-H1039	2442988-25	1976 Jul 28 1804:59	Rocketsonde	-	-	Arcasonde	-	-	-	DELAT	-	-	-	60	-	-
1976-H1040	2442988-26	1976 Jul 28 1814:59	Rocketsonde	-	-	Chaff, Arcasonde	-	-	-	WS	-	-	-	97	-	-
1976-H1041	2442988-27	1976 Jul 28 1822:59	Rocketsonde	-	-	Arcasonde	-	-	-	WS	-	-	-	81	-	-
1976-H1042	2442988-39	1976 Jul 28 2135:00	Rocketsonde	-	-	Arcasonde	-	-	-	SHER	-	-	-	64	-	-
1976-H1043	2442988-39	1976 Jul 28 2122:59	Rocketsonde	-	-	Arcasonde	-	-	-	KR	-	-	-	50	-	-
1976-H1044	2442989-10	1976 Jul 29 1126:59	Rocketsonde	-	-	Arcasonde	-	-	-	KAU	-	-	-	73	-	-
1976-H1045	2442989-12	1976 Jul 29 1246:00	Rocketsonde	-	-	Arcasonde	-	-	-	CELI	-	-	-	62	-	-
1976-H1049	2442989-50	1976 Jul 29 1800:00	Rocketsonde	-	-	Arcasonde	-	-	-	ANT	-	-	-	53	-	-
1976-H1050	2442989-50	1976 Jul 29 1836:00	Rocketsonde	-	-	Arcasonde	-	-	-	WS	-	-	-	64	-	-
1976-H1051	2442990-02	1976 Jul 30 1437:59	Rocketsonde	-	-	Arcasonde	-	-	-	ANT	-	-	-	67	-	-
1976-H1052	2442990-11	1976 Jul 30 1529:59	Rocketsonde	-	-	Arcasonde	-	-	-	PRLM	LC43	-	-	64	-	-
1976-H1053	2442990-13	1976 Jul 30 1626:59	Rocketsonde	-	-	Arcasonde	-	-	-	THU	-	-	-	66	-	-
1976-H1054	2442990-19	1976 Jul 30 1820:00	Rocketsonde	-	-	Arcasonde	-	-	-	SHER	-	-	-	58	-	-
1976-H1055	2442990-33	1976 Jul 30 2110:59	Rocketsonde	-	-	Arcasonde	-	-	-	PF	-	-	-	69	-	-
1976-H1056	2442991-31	1976 Jul 31 1830:00	Rocketsonde	-	-	Arcasonde	-	-	-	ASC	-	-	-	71	-	-
1976-H1062	2442993-02	1976 Aug 2 1235:59	Rocketsonde	-	-	Arcasonde	-	-	-	CC	LC43	-	-	70	-	-
1976-H1064	2442993-10	1976 Aug 2 1344:59	Rocketsonde	-	-	Arcasonde	-	-	-	ANT	-	-	-	68	-	-
1976-H1066	2442993-16	1976 Aug 2 1421:00	Rocketsonde	-	-	Arcasonde	-	-	-	THU	-	-	-	68	-	-
1976-H1067	2442993-22	1976 Aug 2 1549:59	Rocketsonde	-	-	Arcasonde	-	-	-	PH	-	-	-	57	-	-
1976-H1068	2442993-26	1976 Aug 2 1733:00	Rocketsonde	-	-	Arcasonde	-	-	-	VI	-	-	-	73	-	-
1976-H1069	2442993-26	1976 Aug 2 1810:00	Rocketsonde	-	-	Arcasonde	-	-	-	WS	-	-	-	64	-	-
1976-H1070	2442993-33	1976 Aug 2 2002:00	Rocketsonde	-	-	Chaff, Arcasonde	-	-	-	PF	-	-	-	62	-	-
1976-H1071	2442993-47	1976 Aug 2 2315:59	Rocketsonde	-	-	Arcasonde	-	-	-	KR	-	-	-	79	-	-
1976-H1072	2442994-05	1976 Aug 4 1630:00	Rocketsonde	-	-	Arcasonde	-	-	-	SHER	-	-	-	58	-	-
1976-H1073	2442995-05	1976 Aug 4 1304:59	Rocketsonde	-	-	Arcasonde	-	-	-	ASC	-	-	-	64	-	-
1976-H1074	2442995-08	1976 Aug 4 1400:00	Rocketsonde	-	-	Arcasonde	-	-	-	ANT	-	-	-	73	-	-
1976-H1075	2442995-10	1976 Aug 4 1426:59	Rocketsonde	-	-	Arcasonde	-	-	-	CELI	-	-	-	48	-	-
1976-H1076	2442995-11	1976 Aug 4 1444:00	Rocketsonde	-	-	Arcasonde	-	-	-	VI	-	-	-	70	-	-
1976-H1077	2442995-13	1976 Aug 4 1510:00	Rocketsonde	-	-	Arcasonde	-	-	-	THU	-	-	-	62	-	-
1976-H1078	2442995-19	1976 Aug 4 1630:00	Rocketsonde	-	-	Arcasonde	-	-	-	CC	LC43	-	-	66	-	-
1976-H1079	2442995-19	1976 Aug 4 1630:00	Rocketsonde	-	-	Arcasonde	-	-	-	PRIM	-	-	-	69	-	-
1976-H1081	2442995-21	1976 Aug 4 1640:00	Rocketsonde	-	-	Arcasonde	-	-	-	SHER	-	-	-	57	-	-
1976-H1081	2442995-22	1976 Aug 4 1700:00	Rocketsonde	-	-	AN/DMC-97	-	-	-	WS	-	-	-	97	-	-
1976-H1082	2442995-33	1976 Aug 4 1710:00	Rocketsonde	-	-	Chaff, Arcasonde	-	-	-	WS	-	-	-	64	-	-
1976-H1083	2442995-34	1976 Aug 4 1956:59	Rocketsonde	-	-	Arcasonde	-	-	-	PH	-	-	-	89	-	-
1976-H1084	2442995-38	1976 Aug 4 2006:00	Rocketsonde	-	-	Arcasonde	-	-	-	PM	-	-	-	74	-	-
1976-H1084	2442995-38	1976 Aug 4 2104:59	Rocketsonde	-	-	Arcasonde	-	-	-	PM	-	-	-	50	-	-
1976-H1084	2442995-41	1976 Aug 4 2156:59	Rocketsonde	-	-	AN/DMC-97	-	-	-	KAU	-	-	-	60	-	-
1976-H1084	2442995-42	1976 Aug 4 2210:59	Rocketsonde	-	-	Arcasonde	-	-	-	KAU	-	-	-	85	-	-
1976-H1085	2442995-55	1976 Aug 5 0114:59	Rocketsonde	-	-	Arcasonde	-	-	-	KR	-	-	-	80	-	-
1976-H1086	2442996-01	1976 Aug 5 1220:00	Rocketsonde	-	-	Arcasonde	-	-	-	ASC	-	-	-	65	-	-
1976-H1086	2442996-17	1976 Aug 5 1602:59	Rocketsonde	-	-	Arcasonde	-	-	-	CELAT	-	-	-	63	-	-
1976-H1087	2442997-11	1976 Aug 6 1437:59	Rocketsonde	-	-	Arcasonde	-	-	-	KR	-	-	-	80	-	-
1976-H1088	2442997-15	1976 Aug 6 1437:59	Rocketsonde	-	-	Arcasonde	-	-	-	VI	-	-	-	59	-	-
1976-H1089	2442997-19	1976 Aug 6 1530:00	Rocketsonde	-	-	Arcasonde	-	-	-	CC	LC43	-	-	68	-	-
1976-H1090	2442997-19	1976 Aug 6 1630:00	Rocketsonde	-	-	Arcasonde	-	-	-	ANT	-	-	-	72	-	-
1976-H1090	2442997-19	1976 Aug 6 1630:00	Rocketsonde	-	-	Arcasonde	-	-	-	THU	-	-	-	70	-	-

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Mission	FlightCode	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee_Km	Range_Km	Dest
1976-H1092	2442987-21	1976 Aug 6 17:00:00	Rocketsonde	-	-	Arcasonde	-	-	-	SHER	-	-	-	58	-	-
1976-H1093	2442987-25	1976 Aug 6 18:00:00	Rocketsonde	-	-	Chaff, Arcasonde	-	-	-	WS	-	-	-	64	-	-
1976-H1094	2442987-36	1976 Aug 6 20:32:00	Rocketsonde	-	-	Arcasonde	-	-	-	PF	-	-	-	53	-	-
1976-H48	2442987-37	1976 Aug 6 20:59:00	Rocketsonde	-	-	Arcasonde	-	-	-	SHER	-	-	-	47	-	-
1976-H1095	2443000-07	1976 Aug 9 13:44:59	Rocketsonde	-	-	Arcasonde	-	-	-	ASC	-	-	-	63	-	-
1976-H1096	2443000-14	1976 Aug 9 13:45:59	Rocketsonde	-	-	Arcasonde	-	-	-	AIT	-	-	-	65	-	-
1976-H1097	2443000-14	1976 Aug 9 15:14:59	Rocketsonde	-	-	Arcasonde	-	-	-	THU	-	-	-	57	-	-
1976-H1098	2443000-18	1976 Aug 9 16:25:59	Rocketsonde	-	-	Arcasonde	-	-	-	PRIM	-	-	-	65	-	-
1976-H1099	2443000-19	1976 Aug 9 16:30:00	Rocketsonde	-	-	Arcasonde	-	-	-	CC	LC43	-	-	66	-	-
1976-H1100	2443000-20	1976 Aug 9 16:44:59	Rocketsonde	-	-	Arcasonde	-	-	-	SHER	-	-	-	62	-	-
1976-H1102	2443000-28	1976 Aug 9 18:40:00	Rocketsonde	-	-	Chaff, Arcasonde	-	-	-	WS	-	-	-	65	-	-
1976-H1103	2443000-36	1976 Aug 9 20:40:00	Rocketsonde	-	-	Arcasonde	-	-	-	PF	-	-	-	65	-	-
1976-H1104	2443000-41	1976 Aug 9 21:51:00	Rocketsonde	-	-	Arcasonde	-	-	-	SHER	-	-	-	52	-	-
1976-H1105	2443000-47	1976 Aug 9 23:15:59	Rocketsonde	-	-	Arcasonde	-	-	-	KUR	-	-	-	77	-	-
1976-H1106	2443002-01	1976 Aug 11 12:08:00	Rocketsonde	-	-	Arcasonde	-	-	-	ASC	-	-	-	63	-	-
1976-H1107	2443002-08	1976 Aug 11 14:00:00	Rocketsonde	-	-	Arcasonde	-	-	-	CC	LC43	-	-	68	-	-
1976-H1108	2443002-10	1976 Aug 11 14:30:00	Rocketsonde	-	-	Arcasonde	-	-	-	AIT	-	-	-	53	-	-
1976-H1109	2443002-11	1976 Aug 11 14:34:00	Rocketsonde	-	-	Arcasonde	-	-	-	CELAT	-	-	-	53	-	-
1976-H1110	2443002-12	1976 Aug 11 15:00:00	Rocketsonde	-	-	Arcasonde	-	-	-	THU	-	-	-	65	-	-
1976-H346	2443002-18	1976 Aug 11 15:55:00	Rocketsonde	-	-	Arcasonde	-	-	-	PH	-	-	-	88	-	-
1976-H1111	2443002-18	1976 Aug 11 16:18:59	Rocketsonde	-	-	Arcasonde	-	-	-	PH	-	-	-	74	-	-
1976-H1113	2443002-21	1976 Aug 11 16:51:00	Rocketsonde	-	-	Arcasonde	-	-	-	WI	-	-	-	50	-	-
1976-H1114	2443002-21	1976 Aug 11 17:04:59	Rocketsonde	-	-	Arcasonde	-	-	-	SHER	-	-	-	64	-	-
1976-H1115	2443002-25	1976 Aug 11 18:00:00	Rocketsonde	-	-	Arcasonde	-	-	-	WS	-	-	-	63	-	-
1976-H350	2443002-26	1976 Aug 11 18:01:00	Rocketsonde	-	-	AN/DMP-9	-	-	-	WS	-	-	-	98	-	-
1976-H1116	2443002-40	1976 Aug 11 21:34:59	Rocketsonde	-	-	Arcasonde	-	-	-	PF	-	-	-	65	-	-
1976-H1117	2443002-56	1976 Aug 12 01:14:59	Rocketsonde	-	-	Arcasonde	-	-	-	SHER	-	-	-	57	-	-
1976-H1118	2443002-62	1976 Aug 12 02:22:59	Rocketsonde	-	-	Arcasonde	-	-	-	KUR	-	-	-	77	-	-
1976-H1120	2443002-64	1976 Aug 12 03:22:59	Rocketsonde	-	-	Arcasonde	-	-	-	KUR	-	-	-	76	-	-
1976-H1121	2443003-13	1976 Aug 12 15:01:00	Rocketsonde	-	-	Arcasonde	-	-	-	CELAT	-	-	-	53	-	-
1976-H1122	2443003-25	1976 Aug 12 17:30:00	Rocketsonde	-	-	Arcasonde	-	-	-	WS	-	-	-	66	-	-
1976-H1123	2443003-50	1976 Aug 12 23:59:00	Rocketsonde	-	-	Arcasonde	-	-	-	WS	-	-	-	53	-	-
1976-H1124	2443004-02	1976 Aug 13 14:30:00	Rocketsonde	-	-	Arcasonde	-	-	-	KUR	-	-	-	77	-	-
1976-H1125	2443004-10	1976 Aug 13 14:30:00	Rocketsonde	-	-	Arcasonde	-	-	-	KUR	-	-	-	65	-	-
1976-H1126	2443004-12	1976 Aug 13 14:49:59	Rocketsonde	-	-	Arcasonde	-	-	-	ASC	-	-	-	59	-	-
1976-H1127	2443004-17	1976 Aug 13 16:08:59	Rocketsonde	-	-	Arcasonde	-	-	-	THU	-	-	-	69	-	-
1976-H1129	2443004-21	1976 Aug 13 17:04:59	Rocketsonde	-	-	Arcasonde	-	-	-	THU	LC43	-	-	63	-	-
1976-H1130	2443004-25	1976 Aug 13 17:29:00	Rocketsonde	-	-	Arcasonde	-	-	-	SHER	-	-	-	63	-	-
1976-H1131	2443004-35	1976 Aug 13 20:28:00	Rocketsonde	-	-	Arcasonde	-	-	-	PH	-	-	-	71	-	-
1976-H1132	2443004-35	1976 Aug 13 20:28:00	Rocketsonde	-	-	Arcasonde	-	-	-	PH	-	-	-	65	-	-
1976-H49	2443004-40	1976 Aug 13 21:30:00	Rocketsonde	-	-	Arcasonde	-	-	-	KUR	-	-	-	39	-	-
1976-H1134	2443004-41	1976 Aug 13 21:35:00	Rocketsonde	-	-	Arcasonde	-	-	-	KUR	-	-	-	45	-	-
1976-H1135	2443004-44	1976 Aug 13 21:45:00	Rocketsonde	-	-	Arcasonde	-	-	-	AIT	-	-	-	90	-	-
1976-H1136	2443007-12	1976 Aug 16 14:55:00	Rocketsonde	-	-	Arcasonde	-	-	-	THU	-	-	-	71	-	-
1976-H1137	2443007-13	1976 Aug 16 15:11:00	Rocketsonde	-	-	Arcasonde	-	-	-	THU	-	-	-	68	-	-
1976-H1138	2443007-23	1976 Aug 16 15:14:59	Rocketsonde	-	-	Arcasonde	-	-	-	PR	-	-	-	70	-	-
1976-H1139	2443007-32	1976 Aug 16 18:00:00	Rocketsonde	-	-	Arcasonde	-	-	-	PR	-	-	-	66	-	-
1976-H1140	2443007-32	1976 Aug 16 18:00:00	Rocketsonde	-	-	Arcasonde	-	-	-	PF	-	-	-	61	-	-
1976-H1141	2443007-51	1976 Aug 17 02:21:00	Rocketsonde	-	-	Chaff, Arcasonde	-	-	-	SHER	-	-	-	54	-	-
1976-H1142	2443007-74	1976 Aug 17 02:45:00	Rocketsonde	-	-	Arcasonde	-	-	-	KUR	-	-	-	77	-	-
1976-H1143	2443007-85	1976 Aug 17 09:20:00	Rocketsonde	-	-	Arcasonde	-	-	-	KUR	-	-	-	55	-	-
1976-H1144	2443007-85	1976 Aug 17 09:20:00	Rocketsonde	-	-	Arcasonde	-	-	-	KUR	-	-	-	78	-	-
1976-H1145	2443008-03	1976 Aug 17 12:44:59	Rocketsonde	-	-	Arcasonde	-	-	-	KUR	-	-	-	65	-	-
1976-H1146	2443008-12	1976 Aug 17 15:00:00	Rocketsonde	-	-	Arcasonde	-	-	-	ASC	-	-	-	70	-	-
1976-H1147	2443008-14	1976 Aug 17 15:29:59	Rocketsonde	-	-	Arcasonde	-	-	-	CC	LC43	-	-	68	-	-
1976-H1148	2443008-23	1976 Aug 17 17:20:00	Rocketsonde	-	-	Arcasonde	-	-	-	SHER	-	-	-	64	-	-
1976-H1149	2443008-31	1976 Aug 18 12:11:00	Rocketsonde	-	-	Arcasonde	-	-	-	ASC	-	-	-	65	-	-
1976-H1150	2443009-01	1976 Aug 18 14:25:00	Rocketsonde	-	-	Arcasonde	-	-	-	CELAT	-	-	-	57	-	-
1976-H1151	2443009-10	1976 Aug 18 15:00:00	Rocketsonde	-	-	Arcasonde	-	-	-	THU	-	-	-	63	-	-
1976-H1152	2443009-13	1976 Aug 18 15:06:00	Rocketsonde	-	-	Arcasonde	-	-	-	VI	-	-	-	73	-	-
1976-H1153	2443009-17	1976 Aug 18 16:04:59	Rocketsonde	-	-	Arcasonde	-	-	-	PRIM	-	-	-	68	-	-
1976-H1154	2443009-17	1976 Aug 18 16:04:59	Rocketsonde	-	-	Arcasonde	-	-	-	CELAT	-	-	-	65	-	-
1976-H1155	2443009-21	1976 Aug 18 17:00:00	Rocketsonde	-	-	Arcasonde	-	-	-	SHER	-	-	-	50	-	-
1976-H1156	2443009-22	1976 Aug 18 17:15:00	Rocketsonde	-	-	Arcasonde	-	-	-	Arcasonde	-	-	-	58	-	-
1976-H356	2443009-25	1976 Aug 18 17:49:59	Rocketsonde	-	-	AN/DMP-9	-	-	-	WS	LC43	-	-	99	-	-
1976-H1157	2443009-25	1976 Aug 18 18:00:00	Rocketsonde	-	-	Arcasonde	-	-	-	WS	-	-	-	64	-	-
1976-H1158	2443009-39	1976 Aug 18 19:40:00	Rocketsonde	-	-	Arcasonde	-	-	-	Chaff, Arcasonde	-	-	-	75	-	-
1976-H1159	2443009-39	1976 Aug 18 21:19:00	Rocketsonde	-	-	Arcasonde	-	-	-	PF	-	-	-	64	-	-
1976-H1160	2443009-42	1976 Aug 18 22:08:59	Rocketsonde	-	-	Arcasonde	-	-	-	KUR	-	-	-	79	-	-
1976-H1162	2443010-11	1976 Aug 19 14:37:00	Rocketsonde	-	-	Arcasonde	-	-	-	KUR	-	-	-	79	-	-
1976-H1163	2443010-12	1976 Aug 19 15:00:00	Rocketsonde	-	-	Arcasonde	-	-	-	CC	LC43	-	-	62	-	-
1976-H1164	2443010-13	1976 Aug 19 15:00:00	Rocketsonde	-	-	Arcasonde	-	-	-	VI	-	-	-	72	-	-
1976-H1165	2443010-14	1976 Aug 19 15:01:00	Rocketsonde	-	-	Arcasonde	-	-	-	AIT	-	-	-	50	-	-
1976-H1166	2443010-20	1976 Aug 19 16:45:59	Rocketsonde	-	-	Chaff, Arcasonde	-	-	-	WS	-	-	-	61	-	-
1976-H1167	2443010-37	1976 Aug 19 20:48:00	Rocketsonde	-	-	Arcasonde	-	-	-	KUR	-	-	-	69	-	-
1976-H1168	2443011-02	1976 Aug 20 12:29:00	Rocketsonde	-	-	Arcasonde	-	-	-	SHER	-	-	-	46	-	-
1976-H1169	2443011-12	1976 Aug 20 15:00:00	Rocketsonde	-	-	Arcasonde	-	-	-	ASC	-	-	-	66	-	-
1976-H1170	2443011-14	1976 Aug 20 15:14:59	Rocketsonde	-	-	Arcasonde	-	-	-	ASC	-	-	-	69	-	-
1976-H1172	2443011-34	1976 Aug 20 20:04:59	Rocketsonde	-	-	Arcasonde	-	-	-	THU	-	-	-	64	-	-
1976-H384	2443011-39	1976 Aug 20 21:22:59	Rocketsonde	-	-	Arcasonde	-	-	-	PF	-	-	-	80	-	-
1976-H1173	2443011-55	1976 Aug 21 01:04:59	Rocketsonde	-	-	Arcasonde	-	-	-	KUR	-	-	-	77	-	-
1976-H1174	2443013-12	1976 Aug 22 15:00:00	Rocketsonde	-	-	Arcasonde	-	-	-	KUR	-	-	-	73	-	-
1976-H1175	2443014-07	1976 Aug 23 13:44:59	Rocketsonde	-	-	Arcasonde	-	-	-	ASC	-	-	-	67	-	-
1976-H1176	2443014-11	1976 Aug 23 14:42:00	Rocketsonde	-	-	Arcasonde	-	-	-	CC	LC43	-	-	76	-	-
1976-H1177	2443014-13	1976 Aug 23 15:01:00	Rocketsonde	-	-	Arcasonde	-	-	-	THU	-	-	-	69	-	-

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Mission	FlightCode	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee_Km	Range_Km	Dest
1976-H1178	2443014.14	1976 Aug 23 15:14:59	Rocketsonde	-	-	Arcasonde	-	-	-	WI	-	-	-	70	-	-
1976-H1180	2443014.18	1976 Aug 23 16:19:59	Rocketsonde	-	-	Chaff_Arcasonde	-	-	-	WS	-	-	-	62	-	-
1976-H1181	2443014.32	1976 Aug 23 19:44:59	Rocketsonde	-	-	Arcasonde	-	-	-	PF	-	-	-	64	-	-
1976-H1182	2443014.47	1976 Aug 23 23:15:00	Rocketsonde	-	-	Arcasonde	-	-	-	KRR	-	-	-	79	-	-
1976-H1184	2443015.18	1976 Aug 24 16:23:59	Rocketsonde	-	-	Arcasonde	-	-	-	WI	-	-	-	72	-	-
1976-H1185	2443015.18	1976 Aug 24 16:23:59	Rocketsonde	-	-	Arcasonde	-	-	-	SHER	-	-	-	64	-	-
1976-H1186	2443015.02	1976 Aug 24 16:49:59	Rocketsonde	-	-	Arcasonde	-	-	-	ASC	-	-	-	66	-	-
1976-H1187	2443016.07	1976 Aug 25 13:44:59	Rocketsonde	-	-	Arcasonde	-	-	-	ASC	-	-	-	53	-	-
1976-H1188	2443016.10	1976 Aug 25 14:22:00	Rocketsonde	-	-	Arcasonde	-	-	-	CC	LC43	-	-	73	-	-
1976-H1189	2443016.10	1976 Aug 25 14:22:00	Rocketsonde	-	-	Arcasonde	-	-	-	CLBI	-	-	-	57	-	-
1976-H1191	2443016.14	1976 Aug 25 15:14:59	Rocketsonde	-	-	Arcasonde	-	-	-	THU	-	-	-	69	-	-
1976-H1193	2443016.22	1976 Aug 25 17:00:00	Rocketsonde	-	-	Arcasonde	-	-	-	SHER	-	-	-	54	-	-
1976-H1195	2443016.22	1976 Aug 25 17:22:00	Rocketsonde	-	-	AN/DMP-9	-	-	-	WS	-	-	-	98	-	-
1976-H1194	2443016.35	1976 Aug 25 20:20:00	Rocketsonde	-	-	Arcasonde	-	-	-	PF	-	-	-	71	-	-
1976-H1196	2443016.35	1976 Aug 25 20:24:00	Rocketsonde	-	-	Arcasonde	-	-	-	PH	-	-	-	70	-	-
1976-H1198	2443016.58	1976 Aug 26 0:48:59	Rocketsonde	-	-	Arcasonde	-	-	-	KRR	-	-	-	78	-	-
1976-H1199	2443017.12	1976 Aug 26 15:00:00	Rocketsonde	-	-	Arcasonde	-	-	-	WI	-	-	-	54	-	-
1976-H1201	2443017.14	1976 Aug 26 15:15:59	Rocketsonde	-	-	Arcasonde	-	-	-	WI	-	-	-	70	-	-
1976-H1201	2443018.03	1976 Aug 27 12:44:00	Rocketsonde	-	-	Arcasonde	-	-	-	ASC	-	-	-	66	-	-
1976-H1202	2443018.14	1976 Aug 27 15:20:00	Rocketsonde	-	-	Arcasonde	-	-	-	WI	-	-	-	71	-	-
1976-H1203	2443018.17	1976 Aug 27 15:59:59	Rocketsonde	-	-	Arcasonde	-	-	-	PH	-	-	-	72	-	-
1976-H1204	2443018.18	1976 Aug 27 16:14:59	Rocketsonde	-	-	Arcasonde	-	-	-	CC	LC43	-	-	73	-	-
1976-H1206	2443018.18	1976 Aug 27 16:40:00	Rocketsonde	-	-	Arcasonde	-	-	-	SHER	-	-	-	53	-	-
1976-H1207	2443018.37	1976 Aug 27 16:40:00	Rocketsonde	-	-	Arcasonde	-	-	-	PF	-	-	-	64	-	-
1976-H1209	2443019.19	1976 Aug 28 16:26:59	Rocketsonde	-	-	Arcasonde	-	-	-	WI	-	-	-	70	-	-
1976-H1210	2443020.13	1976 Aug 29 15:01:59	Rocketsonde	-	-	Arcasonde	-	-	-	WI	-	-	-	73	-	-
1976-H1211	2443021.03	1976 Aug 30 13:28:59	Rocketsonde	-	-	Arcasonde	-	-	-	ASC	-	-	-	96	-	-
1976-H1212	2443021.04	1976 Aug 30 13:03:59	Rocketsonde	-	-	Arcasonde	-	-	-	WI	-	-	-	54	-	-
1976-H1213	2443021.12	1976 Aug 30 15:00:00	Rocketsonde	-	-	Arcasonde	-	-	-	WI	-	-	-	73	-	-
1976-H1214	2443021.25	1976 Aug 30 21:25:00	Rocketsonde	-	-	Arcasonde	-	-	-	THU	-	-	-	62	-	-
1976-H1215	2443021.56	1976 Aug 30 21:05:00	Rocketsonde	-	-	Arcasonde	-	-	-	PF	-	-	-	65	-	-
1976-H1223	2443021.67	1976 Aug 31 0:11:59	Rocketsonde	-	-	Arcasonde	-	-	-	KRR	-	-	-	77	-	-
1976-H1224	2443021.67	1976 Aug 31 0:40:15:59	Rocketsonde	-	-	Arcasonde	-	-	-	KRR	-	-	-	74	-	-
1976-H1226	2443021.74	1976 Aug 31 0:40:15:59	Rocketsonde	-	-	Arcasonde	-	-	-	KRR	-	-	-	79	-	-
1976-H1228	2443022.15	1976 Aug 31 0:54:15:00	Rocketsonde	-	-	Arcasonde	-	-	-	WI	-	-	-	73	-	-
1976-H1227	2443022.20	1976 Aug 31 15:11:59	Rocketsonde	-	-	Arcasonde	-	-	-	SHER	-	-	-	64	-	-
1976-H1228	2443022.34	1976 Aug 31 16:44:59	Rocketsonde	-	-	Arcasonde	-	-	-	PH	-	-	-	69	-	-
1976-H1229	2443022.37	1976 Aug 31 20:45:00	Rocketsonde	-	-	Arcasonde	-	-	-	KRR	-	-	-	64	-	-
1976-H1230	2443022.38	1976 Aug 31 21:01:59	Rocketsonde	-	-	Arcasonde	-	-	-	KRR	-	-	-	63	-	-
1976-H1231	2443023.07	1976 Sep 1 13:44:59	Rocketsonde	-	-	Arcasonde	-	-	-	SHER	-	-	-	94	-	-
1976-H1232	2443023.09	1976 Sep 1 14:15:00	Rocketsonde	-	-	Arcasonde	-	-	-	WI	-	-	-	94	-	-
1976-H1233	2443023.12	1976 Sep 1 14:15:00	Rocketsonde	-	-	Arcasonde	-	-	-	CLBI	-	-	-	60	-	-
1976-H1234	2443023.12	1976 Sep 1 14:46:00	Rocketsonde	-	-	Arcasonde	-	-	-	WI	-	-	-	98	-	-
1976-H1235	2443023.16	1976 Sep 1 15:03:59	Rocketsonde	-	-	Arcasonde	-	-	-	ASC	-	-	-	71	-	-
1976-H1236	2443023.17	1976 Sep 1 16:14:59	Rocketsonde	-	-	Arcasonde	-	-	-	PF	-	-	-	62	-	-
1976-H1237	2443023.27	1976 Sep 1 18:24:59	Rocketsonde	-	-	Arcasonde	-	-	-	WI	-	-	-	68	-	-
1976-H1238	2443023.27	1976 Sep 1 19:53:00	Rocketsonde	-	-	Arcasonde	-	-	-	ASC	-	-	-	62	-	-
1976-H1239	2443023.33	1976 Sep 1 21:38:59	Rocketsonde	-	-	Arcasonde	-	-	-	KRR	-	-	-	81	-	-
1976-H1241	2443023.42	1976 Sep 1 21:59:59	Rocketsonde	-	-	Arcasonde	-	-	-	WI	-	-	-	72	-	-
1976-H1242	2443023.42	1976 Sep 2 0:19:59	Rocketsonde	-	-	Arcasonde	-	-	-	ASC	-	-	-	68	-	-
1976-H1243	2443024.12	1976 Sep 2 15:40:00	Rocketsonde	-	-	Arcasonde	-	-	-	WI	-	-	-	72	-	-
1976-H1244	2443025.02	1976 Sep 2 12:53:59	Rocketsonde	-	-	Arcasonde	-	-	-	ASC	-	-	-	65	-	-
1976-H1245	2443025.02	1976 Sep 2 12:53:59	Rocketsonde	-	-	Arcasonde	-	-	-	ASC	-	-	-	49	-	-
1976-H1246	2443025.11	1976 Sep 2 15:00:00	Rocketsonde	-	-	Arcasonde	-	-	-	WI	-	-	-	73	-	-
1976-H1247	2443025.12	1976 Sep 2 15:14:59	Rocketsonde	-	-	Arcasonde	-	-	-	THU	-	-	-	52	-	-
1976-H1248	2443025.13	1976 Sep 2 15:14:59	Rocketsonde	-	-	Arcasonde	-	-	-	CC	LC43	-	-	73	-	-
1976-H1249	2443025.14	1976 Sep 2 16:18:59	Rocketsonde	-	-	Arcasonde	-	-	-	THU	-	-	-	49	-	-
1976-H1251	2443025.21	1976 Sep 2 17:06:00	Rocketsonde	-	-	Arcasonde	-	-	-	SHER	-	-	-	85	-	-
1976-H1252	2443025.21	1976 Sep 2 17:52:00	Rocketsonde	-	-	AN/DMP-9	-	-	-	PH	-	-	-	85	-	-
1976-H1253	2443025.46	1976 Sep 2 23:00:00	Rocketsonde	-	-	Arcasonde	-	-	-	SHER	-	-	-	55	-	-
1976-H1254	2443025.51	1976 Sep 4 0:01:59	Rocketsonde	-	-	Arcasonde	-	-	-	SHER	-	-	-	77	-	-
1976-H1255	2443025.13	1976 Sep 4 15:06:00	Rocketsonde	-	-	Arcasonde	-	-	-	KRR	-	-	-	73	-	-
1976-H1256	2443027.12	1976 Sep 5 15:00:00	Rocketsonde	-	-	Arcasonde	-	-	-	WI	-	-	-	72	-	-
1976-H1257	2443028.14	1976 Sep 6 14:55:00	Rocketsonde	-	-	Arcasonde	-	-	-	THU	-	-	-	66	-	-
1976-H1258	2443028.12	1976 Sep 6 15:22:00	Rocketsonde	-	-	Arcasonde	-	-	-	WI	-	-	-	74	-	-
1976-H1259	2443029.21	1976 Sep 7 15:25:59	Rocketsonde	-	-	Arcasonde	-	-	-	CC	LC43	-	-	68	-	-
1976-H1260	2443029.22	1976 Sep 7 17:00:00	Rocketsonde	-	-	Arcasonde	-	-	-	SHER	-	-	-	62	-	-
1976-H1261	2443029.24	1976 Sep 7 17:15:00	Rocketsonde	-	-	Arcasonde	-	-	-	WI	-	-	-	65	-	-
1976-H1262	2443029.25	1976 Sep 7 17:46:00	Rocketsonde	-	-	Arcasonde	-	-	-	PH	-	-	-	71	-	-
1976-H1263	2443029.25	1976 Sep 7 18:00:00	Super_Loki	-	-	Arcasonde	-	-	-	WS	-	-	-	50	-	-
1976-H1264	2443029.34	1976 Sep 7 20:15:00	Rocketsonde	-	-	Arcasonde	-	-	-	PF	-	-	-	69	-	-
1976-H1265	2443029.37	1976 Sep 7 20:46:00	Rocketsonde	-	-	Arcasonde	-	-	-	PH	-	-	-	51	-	-
1976-H1266	2443029.36	1976 Sep 7 23:55:00	Rocketsonde	-	-	Arcasonde	-	-	-	KRR	-	-	-	58	-	-
1976-H1267	2443029.37	1976 Sep 7 20:46:00	Rocketsonde	-	-	Arcasonde	-	-	-	KRR	-	-	-	77	-	-
1976-H1268	2443030.05	1976 Sep 8 13:04:59	Rocketsonde	-	-	Arcasonde	-	-	-	ASC	-	-	-	64	-	-
1976-H1269	2443030.11	1976 Sep 8 14:30:00	Rocketsonde	-	-	Arcasonde	-	-	-	ASC	-	-	-	46	-	-
1976-H1270	2443030.10	1976 Sep 8 14:36:00	Rocketsonde	-	-	Arcasonde	-	-	-	WI	-	-	-	74	-	-
1976-H1271	2443030.12	1976 Sep 8 15:00:00	Rocketsonde	-	-	Arcasonde	-	-	-	CC	LC43	-	-	60	-	-
1976-H1272	2443030.13	1976 Sep 8 15:09:00	Rocketsonde	-	-	Arcasonde	-	-	-	WI	-	-	-	63	-	-
1976-H1273	2443030.14	1976 Sep 8 15:20:00	Rocketsonde	-	-	Arcasonde	-	-	-	THU	-	-	-	55	-	-
1976-Y413	2443030.17	1976 Sep 8 16:01:59	Rocketsonde	-	-	Arcasonde	-	-	-	WI	-	-	-	85	-	-
1976-H1272	2443030.20	1976 Sep 8 16:49:59	Rocketsonde	-	-	AN/DMP-9	-	-	-	PH	-	-	-	73	-	-
1976-Y414	2443030.21	1976 Sep 8 17:00:00	Rocketsonde	-	-	Arcasonde	-	-	-	WI	-	-	-	98	-	-
1976-H1273	2443030.22	1976 Sep 8 17:10:00	Rocketsonde	-	-	Arcasonde	-	-	-	WS	-	-	-	65	-	-



Launch Mission

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Launch_Mission	FlightCode	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee_Km	Range_Km	Dest
1976-H1274	2443030.33	1976 Sep 8 1952:59	Rocketsonde	-	-	Arcasonde	-	-	-	PF	-	-	-	66	-	-
1976-H1275	2443030.40	1976 Sep 8 2133:59	Rocketsonde	-	-	Arcasonde	-	-	-	KHR	-	-	-	78	-	-
1976-H1276	2443030.44	1976 Sep 8 2230:00	Rocketsonde	-	-	Arcasonde	-	-	-	SHER	-	-	-	54	-	-
1976-H1278	2443031.03	1976 Sep 9 1247:59	Rocketsonde	-	-	Arcasonde	-	-	-	ASC	-	-	-	63	-	-
1976-H1280	2443031.10	1976 Sep 9 1418:00	Rocketsonde	-	-	Arcasonde	-	-	-	CLBI	-	-	-	56	-	-
1976-H1281	2443031.11	1976 Sep 9 1448:00	Rocketsonde	-	-	Arcasonde	-	-	-	WI	-	-	-	74	-	-
1976-H1283	2443031.25	1976 Sep 9 1758:00	Rocketsonde	-	-	Arcasonde	-	-	-	PH	-	-	-	71	-	-
1976-H1284	2443031.31	1976 Sep 9 1930:00	Rocketsonde	-	-	Arcasonde	-	-	-	WS	-	-	-	63	-	-
1976-H1286	2443031.51	1976 Sep 10 0011:00	Rocketsonde	-	-	Arcasonde	-	-	-	KHR	-	-	-	79	-	-
1976-H1286	2443032.12	1976 Sep 10 1448:59	Rocketsonde	-	-	Arcasonde	-	-	-	MIT	-	-	-	54	-	-
1976-H1288	2443032.15	1976 Sep 10 1531:00	Rocketsonde	-	-	Arcasonde	-	-	-	CC	LC43	-	-	31	-	-
1976-H1288	2443032.29	1976 Sep 10 1859:59	Rocketsonde	-	-	Arcasonde	-	-	-	WI	-	-	-	73	-	-
1976-H1289	2443032.33	1976 Sep 10 1951:00	Rocketsonde	-	-	Arcasonde	-	-	-	PF	-	-	-	63	-	-
1976-H1290	2443032.41	1976 Sep 10 2148:00	Rocketsonde	-	-	Arcasonde	-	-	-	KAU	-	-	-	59	-	-
1976-H1291	2443035.01	1976 Sep 13 1209:00	Rocketsonde	-	-	Arcasonde	-	-	-	ASC	-	-	-	66	-	-
1976-H1292	2443035.12	1976 Sep 13 1468:00	Rocketsonde	-	-	Arcasonde	-	-	-	MIT	-	-	-	56	-	-
1976-H1293	2443035.12	1976 Sep 13 1500:00	Rocketsonde	-	-	Arcasonde	-	-	-	THU	-	-	-	69	-	-
1976-H1294	2443035.24	1976 Sep 13 1748:00	Rocketsonde	-	-	Arcasonde	-	-	-	WS	-	-	-	67	-	-
1976-H1295	2443035.24	1976 Sep 13 1810:00	Rocketsonde	-	-	Arcasonde	-	-	-	PH	-	-	-	72	-	-
1976-H1296	2443035.35	1976 Sep 13 1953:59	Rocketsonde	-	-	Arcasonde	-	-	-	PF	-	-	-	60	-	-
1976-H1297	2443035.15	1976 Sep 14 1550:00	Rocketsonde	-	-	Arcasonde	-	-	-	ASC	-	-	-	66	-	-
1976-H1299	2443037.06	1976 Sep 15 1350:00	Rocketsonde	-	-	Arcasonde	-	-	-	CC	LC43	-	-	61	-	-
1976-H1300	2443037.09	1976 Sep 15 1418:59	Rocketsonde	-	-	Arcasonde	-	-	-	MIT	-	-	-	54	-	-
1976-H1301	2443037.12	1976 Sep 15 1468:00	Rocketsonde	-	-	Arcasonde	-	-	-	CELI	-	-	-	57	-	-
1976-H1302	2443037.14	1976 Sep 15 1514:59	Rocketsonde	-	-	Arcasonde	-	-	-	CELAT	-	-	-	44	-	-
1976-H1304	2443037.19	1976 Sep 15 1650:00	Rocketsonde	-	-	Arcasonde	-	-	-	THU	-	-	-	67	-	-
1976-H1304	2443037.20	1976 Sep 15 1650:00	Rocketsonde	-	-	Arcasonde	-	-	-	CC	LC43	-	-	61	-	-
1976-H1306	2443037.21	1976 Sep 15 1731:00	Rocketsonde	-	-	Arcasonde	-	-	-	PH	-	-	-	88	-	-
1976-H1306	2443037.23	1976 Sep 15 1731:00	Rocketsonde	-	-	Arcasonde	-	-	-	SHER	-	-	-	66	-	-
1976-H1307	2443037.26	1976 Sep 15 1800:00	Rocketsonde	-	-	Arcasonde	-	-	-	PH	-	-	-	71	-	-
1976-H1307	2443037.26	1976 Sep 15 1800:00	Rocketsonde	-	-	Arcasonde	-	-	-	WS	-	-	-	96	-	-
1976-H1308	2443037.37	1976 Sep 15 2009:00	Rocketsonde	-	-	Arcasonde	-	-	-	WS	-	-	-	65	-	-
1976-H1309	2443037.36	1976 Sep 15 2109:00	Rocketsonde	-	-	Arcasonde	-	-	-	KAU	-	-	-	89	-	-
1976-H1310	2443038.14	1976 Sep 16 1521:00	Rocketsonde	-	-	Arcasonde	-	-	-	MIT	-	-	-	51	-	-
1976-H1311	2443038.21	1976 Sep 16 1658:59	Rocketsonde	-	-	Arcasonde	-	-	-	SHER	-	-	-	65	-	-
1976-H1312	2443038.55	1976 Sep 17 0049:59	Rocketsonde	-	-	Arcasonde	-	-	-	SHER	-	-	-	85	-	-
1976-H1313	2443039.02	1976 Sep 17 1238:59	Rocketsonde	-	-	Arcasonde	-	-	-	ASC	-	-	-	92	-	-
1976-H1314	2443039.15	1976 Sep 17 1550:00	Rocketsonde	-	-	Arcasonde	-	-	-	THU	-	-	-	72	-	-
1976-H1315	2443039.17	1976 Sep 17 1700:00	Rocketsonde	-	-	Arcasonde	-	-	-	CC	LC43	-	-	57	-	-
1976-H1316	2443039.23	1976 Sep 17 1750:00	Rocketsonde	-	-	Arcasonde	-	-	-	SHER	-	-	-	62	-	-
1976-H1316	2443039.25	1976 Sep 17 1826:00	Rocketsonde	-	-	Arcasonde	-	-	-	WS	-	-	-	68	-	-
1976-H1319	2443039.26	1976 Sep 17 1959:59	Rocketsonde	-	-	Arcasonde	-	-	-	PH	-	-	-	68	-	-
1976-H1320	2443039.40	1976 Sep 19 0159:59	Rocketsonde	-	-	Arcasonde	-	-	-	KAU	-	-	-	66	-	-
1976-H1321	2443041.82	1976 Sep 20 0956:00	Rocketsonde	-	-	Arcasonde	-	-	-	PH	-	-	-	71	-	-
1976-H1322	2443042.79	1976 Sep 20 0959:59	Rocketsonde	-	-	Arcasonde	-	-	-	PF	-	-	-	70	-	-
1976-H1323	2443042.01	1976 Sep 20 1435:00	Rocketsonde	-	-	Arcasonde	-	-	-	ASC	-	-	-	64	-	-
1976-H1324	2443042.11	1976 Sep 20 1459:59	Rocketsonde	-	-	Arcasonde	-	-	-	MIT	-	-	-	63	-	-
1976-H1325	2443042.11	1976 Sep 20 1559:59	Rocketsonde	-	-	Arcasonde	-	-	-	THU	-	-	-	59	-	-
1976-H1327	2443042.17	1976 Sep 20 1859:59	Rocketsonde	-	-	Arcasonde	-	-	-	PH	-	-	-	71	-	-
1976-H1328	2443042.24	1976 Sep 20 1956:00	Rocketsonde	-	-	Arcasonde	-	-	-	WS	-	-	-	65	-	-
1976-H1329	2443042.80	1976 Sep 20 1915:59	Rocketsonde	-	-	Arcasonde	-	-	-	ASC	-	-	-	67	-	-
1976-H1331	2443042.26	1976 Sep 21 0859:59	Rocketsonde	-	-	Arcasonde	-	-	-	PRLM	-	-	-	65	-	-
1976-H1331	2443043.12	1976 Sep 21 1449:59	Rocketsonde	-	-	Arcasonde	-	-	-	CC	LC43	-	-	0	-	-
1976-H1333	2443043.17	1976 Sep 21 1559:59	Rocketsonde	-	-	Arcasonde	-	-	-	WS	-	-	-	69	-	-
1976-H1334	2443043.21	1976 Sep 21 1700:00	Rocketsonde	-	-	Arcasonde	-	-	-	SHER	-	-	-	65	-	-
1976-H1335	2443043.80	1976 Sep 22 0714:59	Rocketsonde	-	-	Arcasonde	-	-	-	PF	-	-	-	77	-	-
1976-H1336	2443044.02	1976 Sep 22 1033:00	Rocketsonde	-	-	Arcasonde	-	-	-	ASC	-	-	-	65	-	-
1976-H1337	2443044.08	1976 Sep 22 1349:59	Rocketsonde	-	-	Arcasonde	-	-	-	ASC	-	-	-	64	-	-
1976-H1337	2443044.09	1976 Sep 22 1349:59	Rocketsonde	-	-	Arcasonde	-	-	-	MIT	-	-	-	63	-	-
1976-H1338	2443044.14	1976 Sep 22 1419:00	Rocketsonde	-	-	Arcasonde	-	-	-	THU	-	-	-	59	-	-
1976-H1340	2443044.17	1976 Sep 22 1604:59	Rocketsonde	-	-	Arcasonde	-	-	-	CLBI	-	-	-	39	-	-
1976-H1341	2443044.17	1976 Sep 22 1604:59	Rocketsonde	-	-	Arcasonde	-	-	-	CC	LC43	-	-	0	-	-
1976-H1342	2443044.21	1976 Sep 22 1644:59	Rocketsonde	-	-	Arcasonde	-	-	-	CELAT	-	-	-	57	-	-
1976-H1343	2443044.21	1976 Sep 22 1700:00	Rocketsonde	-	-	Arcasonde	-	-	-	PRLM	-	-	-	67	-	-
1976-H1344	2443044.26	1976 Sep 22 1810:00	Rocketsonde	-	-	Arcasonde	-	-	-	SHER	-	-	-	66	-	-
1976-H1345	2443044.34	1976 Sep 22 1923:59	Rocketsonde	-	-	Arcasonde	-	-	-	WS	-	-	-	78	-	-
1976-H1345	2443044.34	1976 Sep 22 2008:00	Rocketsonde	-	-	Arcasonde	-	-	-	WS	-	-	-	62	-	-
1976-H1347	2443044.57	1976 Sep 23 1041:59	Rocketsonde	-	-	Arcasonde	-	-	-	PH	-	-	-	85	-	-
1976-H1348	2443045.09	1976 Sep 23 1404:59	Rocketsonde	-	-	Arcasonde	-	-	-	PH	-	-	-	76	-	-
1976-H1349	2443045.15	1976 Sep 23 1455:00	Rocketsonde	-	-	Arcasonde	-	-	-	KHR	-	-	-	79	-	-
1976-H1350	2443045.15	1976 Sep 23 1530:00	Rocketsonde	-	-	Arcasonde	-	-	-	PF	-	-	-	72	-	-
1976-H1351	2443045.52	1976 Sep 23 1559:59	Rocketsonde	-	-	Arcasonde	-	-	-	SHER	-	-	-	58	-	-
1976-H1352	2443045.79	1976 Sep 24 0033:59	Rocketsonde	-	-	Arcasonde	-	-	-	WS	-	-	-	60	-	-
1976-H1353	2443046.07	1976 Sep 24 0659:59	Rocketsonde	-	-	Arcasonde	-	-	-	KHR	-	-	-	77	-	-
1976-H1354	2443046.14	1976 Sep 24 1344:59	Rocketsonde	-	-	Arcasonde	-	-	-	PF	-	-	-	61	-	-
1976-H1355	2443046.17	1976 Sep 24 1514:59	Rocketsonde	-	-	Arcasonde	-	-	-	ASC	-	-	-	64	-	-
1976-H1356	2443046.17	1976 Sep 24 1603:59	Rocketsonde	-	-	Arcasonde	-	-	-	THU	-	-	-	67	-	-
1976-H1357	2443046.22	1976 Sep 24 1609:59	Rocketsonde	-	-	Arcasonde	-	-	-	PRLM	-	-	-	68	-	-
1976-H1359	2443046.27	1976 Sep 24 1720:00	Rocketsonde	-	-	Arcasonde	-	-	-	CC	LC43	-	-	73	-	-
1976-H1360	2443046.27	1976 Sep 24 1725:00	Rocketsonde	-	-	Arcasonde	-	-	-	THU	-	-	-	68	-	-
1976-H1361	2443046.23	1976 Sep 24 1830:00	Rocketsonde	-	-	Arcasonde	-	-	-	PH	-	-	-	74	-	-
1976-H1363	2443046.79	1976 Sep 25 0659:59	Rocketsonde	-	-	Arcasonde	-	-	-	SHER	-	-	-	65	-	-
1976-H1364	2443047.17	1976 Sep 25 1559:59	Rocketsonde	-	-	Arcasonde	-	-	-	WS	-	-	-	67	-	-

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Launch_Mission	FlightCode	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee_Km	Range_Km	Dest
1976-H1385	2443047.79	1976 Sep 26 0659:59	Rocketsonde	-	-	-	-	-	-	PF	-	-	-	67	-	-
1976-H1386	2443048.10	1976 Sep 26 1430:00	Rocketsonde	-	-	-	-	-	-	WS	-	-	-	68	-	-
1976-H1387	2443048.80	1976 Sep 27 0704:59	Rocketsonde	-	-	-	-	-	-	PF	-	-	-	67	-	-
1976-H1388	2443049.02	1976 Sep 27 1229:00	Rocketsonde	-	-	-	-	-	-	ASC	-	-	-	65	-	-
1976-H1389	2443049.09	1976 Sep 27 1403:59	Rocketsonde	-	-	-	-	-	-	SHER	-	-	-	69	-	-
1976-H1390	2443049.11	1976 Sep 27 1403:59	Rocketsonde	-	-	-	-	-	-	MIT	-	-	-	55	-	-
1976-H1391	2443049.17	1976 Sep 27 1404:59	Rocketsonde	-	-	-	-	-	-	CC	LC43	-	-	75	-	-
1976-H1392	2443049.19	1976 Sep 27 1640:00	Rocketsonde	-	-	-	-	-	-	THU	-	-	-	66	-	-
1976-H1393	2443049.27	1976 Sep 27 1830:00	Rocketsonde	-	-	-	-	-	-	WS	-	-	-	66	-	-
1976-H1394	2443049.41	1976 Sep 27 2149:59	Rocketsonde	-	-	-	-	-	-	KAU	-	-	-	60	-	-
1976-H1395	2443049.44	1976 Sep 27 2227:59	Rocketsonde	-	-	-	-	-	-	KRR	-	-	-	68	-	-
1976-H1396	2443049.79	1976 Sep 28 0702:59	Rocketsonde	-	-	-	-	-	-	PF	-	-	-	66	-	-
1976-H1397	2443050.15	1976 Sep 28 1542:00	Rocketsonde	-	-	-	-	-	-	WS	-	-	-	64	-	-
1976-H1398	2443050.34	1976 Sep 28 2014:00	Rocketsonde	-	-	-	-	-	-	WS	-	-	-	66	-	-
1976-H1399	2443050.45	1976 Sep 28 2241:59	Rocketsonde	-	-	-	-	-	-	PF	-	-	-	66	-	-
1976-H1400	2443050.55	1976 Sep 29 0041:00	Rocketsonde	-	-	-	-	-	-	SHER	-	-	-	66	-	-
1976-H1401	2443050.82	1976 Sep 29 0734:59	Rocketsonde	-	-	-	-	-	-	ASC	-	-	-	64	-	-
1976-H1402	2443051.02	1976 Sep 29 1231:00	Rocketsonde	-	-	-	-	-	-	MIT	-	-	-	62	-	-
1976-H1403	2443051.08	1976 Sep 29 1400:00	Rocketsonde	-	-	-	-	-	-	ASC	-	-	-	66	-	-
1976-H1404	2443051.09	1976 Sep 29 1411:00	Rocketsonde	-	-	-	-	-	-	CELI	-	-	-	56	-	-
1976-H1405	2443051.15	1976 Sep 29 1530:00	Rocketsonde	-	-	-	-	-	-	THU	-	-	-	68	-	-
1976-H1406	2443051.17	1976 Sep 29 1604:59	Rocketsonde	-	-	-	-	-	-	CC	LC43	-	-	76	-	-
1976-H1407	2443051.20	1976 Sep 29 1648:59	Rocketsonde	-	-	-	-	-	-	SHER	-	-	-	68	-	-
1976-H1408	2443051.21	1976 Sep 29 1701:00	Rocketsonde	-	-	-	-	-	-	WS	-	-	-	98	-	-
1976-H1409	2443051.22	1976 Sep 29 1710:00	Rocketsonde	-	-	-	-	-	-	WS	-	-	-	65	-	-
1976-H1410	2443051.25	1976 Sep 30 0114:59	Rocketsonde	-	-	-	-	-	-	KRR	-	-	-	73	-	-
1976-H1411	2443051.79	1976 Sep 30 0659:59	Rocketsonde	-	-	-	-	-	-	PF	-	-	-	67	-	-
1976-H1412	2443052.14	1976 Sep 30 1514:59	Rocketsonde	-	-	-	-	-	-	CELAT	-	-	-	59	-	-
1976-H1413	2443052.16	1976 Sep 30 1545:59	Rocketsonde	-	-	-	-	-	-	SHER	-	-	-	62	-	-
1976-H1414	2443052.23	1976 Sep 30 1730:00	Rocketsonde	-	-	-	-	-	-	WS	-	-	-	67	-	-
1976-H1415	2443052.45	1976 Sep 30 2215:59	Rocketsonde	-	-	-	-	-	-	KRR	-	-	-	66	-	-
1976-H1416	2443052.79	1976 Oct 1 0659:59	Rocketsonde	-	-	-	-	-	-	PF	-	-	-	66	-	-
1976-H1417	2443053.07	1976 Oct 1 1344:59	Rocketsonde	-	-	-	-	-	-	ASC	-	-	-	66	-	-
1976-H1418	2443053.15	1976 Oct 1 1534:59	Rocketsonde	-	-	-	-	-	-	ASC	-	-	-	66	-	-
1976-H1419	2443053.16	1976 Oct 1 1614:59	Rocketsonde	-	-	-	-	-	-	MIT	-	-	-	59	-	-
1976-H1420	2443053.18	1976 Oct 1 1650:00	Rocketsonde	-	-	-	-	-	-	MIT	-	-	-	51	-	-
1976-H1421	2443053.34	1976 Oct 1 2010:00	Rocketsonde	-	-	-	-	-	-	PRIM	-	-	-	62	-	-
1976-H1422	2443053.34	1976 Oct 1 2232:59	Rocketsonde	-	-	-	-	-	-	SHER	-	-	-	68	-	-
1976-H1423	2443053.44	1976 Oct 1 2232:59	Rocketsonde	-	-	-	-	-	-	PF	-	-	-	68	-	-
1976-H1424	2443053.79	1976 Oct 2 0659:59	Rocketsonde	-	-	-	-	-	-	KAU	-	-	-	59	-	-
1976-H1425	2443053.79	1976 Oct 2 0659:59	Rocketsonde	-	-	-	-	-	-	ASC	-	-	-	66	-	-
1976-H1426	2443056.01	1976 Oct 4 1219:00	Rocketsonde	-	-	-	-	-	-	ASC	-	-	-	64	-	-
1976-H1427	2443056.11	1976 Oct 4 1420:00	Rocketsonde	-	-	-	-	-	-	MIT	-	-	-	64	-	-
1976-H1428	2443056.11	1976 Oct 4 1420:00	Rocketsonde	-	-	-	-	-	-	THU	-	-	-	95	-	-
1976-H1429	2443056.17	1976 Oct 4 1606:00	Rocketsonde	-	-	-	-	-	-	PRIM	-	-	-	92	-	-
1976-H1430	2443056.16	1976 Oct 4 1614:59	Rocketsonde	-	-	-	-	-	-	PRIM	-	-	-	91	-	-
1976-H1431	2443056.20	1976 Oct 4 1652:59	Rocketsonde	-	-	-	-	-	-	SHER	-	-	-	61	-	-
1976-H1432	2443056.29	1976 Oct 4 1651:00	Rocketsonde	-	-	-	-	-	-	VI	-	-	-	63	-	-
1976-H1433	2443056.36	1976 Oct 4 1643:00	Rocketsonde	-	-	-	-	-	-	PR	-	-	-	76	-	-
1976-H1434	2443057.14	1976 Oct 5 1522:00	Rocketsonde	-	-	-	-	-	-	KRR	-	-	-	64	-	-
1976-H1435	2443057.14	1976 Oct 5 1522:00	Rocketsonde	-	-	-	-	-	-	ASC	-	-	-	65	-	-
1976-H1436	2443058.01	1976 Oct 6 1344:59	Rocketsonde	-	-	-	-	-	-	CELI	-	-	-	63	-	-
1976-H1437	2443058.03	1976 Oct 6 1409:00	Rocketsonde	-	-	-	-	-	-	THU	LC43	-	-	66	-	-
1976-H1438	2443058.13	1976 Oct 6 1504:59	Rocketsonde	-	-	-	-	-	-	CELAT	-	-	-	51	-	-
1976-H1439	2443058.13	1976 Oct 6 1504:59	Rocketsonde	-	-	-	-	-	-	CC	LC43	-	-	75	-	-
1976-H1440	2443058.14	1976 Oct 6 1604:59	Rocketsonde	-	-	-	-	-	-	ASC	-	-	-	63	-	-
1976-H1441	2443058.18	1976 Oct 6 1624:59	Rocketsonde	-	-	-	-	-	-	PRIM	-	-	-	87	-	-
1976-H1442	2443058.18	1976 Oct 6 1624:59	Rocketsonde	-	-	-	-	-	-	MIT	-	-	-	63	-	-
1976-H1443	2443058.20	1976 Oct 6 1630:00	Rocketsonde	-	-	-	-	-	-	ASC	-	-	-	66	-	-
1976-H1444	2443058.28	1976 Oct 6 1845:00	Rocketsonde	-	-	-	-	-	-	WS	-	-	-	59	-	-
1976-H1445	2443058.28	1976 Oct 6 1845:00	Rocketsonde	-	-	-	-	-	-	SHER	-	-	-	66	-	-
1976-H1446	2443058.33	1976 Oct 6 1909:59	Rocketsonde	-	-	-	-	-	-	WS	-	-	-	97	-	-
1976-H1447	2443058.33	1976 Oct 6 1952:59	Rocketsonde	-	-	-	-	-	-	PF	-	-	-	60	-	-
1976-H1448	2443059.04	1976 Oct 7 0114:59	Rocketsonde	-	-	-	-	-	-	KRR	-	-	-	77	-	-
1976-H1449	2443059.04	1976 Oct 7 1252:00	Rocketsonde	-	-	-	-	-	-	ASC	-	-	-	63	-	-
1976-H1450	2443059.04	1976 Oct 7 1510:00	Rocketsonde	-	-	-	-	-	-	CC	LC43	-	-	64	-	-
1976-H1451	2443059.25	1976 Oct 7 1800:00	Rocketsonde	-	-	-	-	-	-	WS	-	-	-	65	-	-
1976-H1452	2443059.33	1976 Oct 7 2000:00	Rocketsonde	-	-	-	-	-	-	PF	-	-	-	63	-	-
1976-H1453	2443059.39	1976 Oct 7 2120:00	Rocketsonde	-	-	-	-	-	-	KRR	-	-	-	77	-	-
1976-H1454	2443060.06	1976 Oct 8 1330:00	Rocketsonde	-	-	-	-	-	-	MIT	-	-	-	56	-	-
1976-H1455	2443060.11	1976 Oct 8 1440:00	Rocketsonde	-	-	-	-	-	-	THU	-	-	-	69	-	-
1976-H1456	2443060.17	1976 Oct 8 1559:59	Rocketsonde	-	-	-	-	-	-	PM	-	-	-	72	-	-
1976-H1457	2443060.54	1976 Oct 8 1630:00	Rocketsonde	-	-	-	-	-	-	SHER	-	-	-	61	-	-
1976-H1458	2443060.54	1976 Oct 9 0059:59	Rocketsonde	-	-	-	-	-	-	SHER	-	-	-	45	-	-
1976-H1459	2443063.13	1976 Oct 11 1504:59	Rocketsonde	-	-	-	-	-	-	THU	-	-	-	68	-	-
1976-H1460	2443063.13	1976 Oct 11 1504:59	Rocketsonde	-	-	-	-	-	-	MIT	-	-	-	61	-	-
1976-H1461	2443063.15	1976 Oct 11 1530:00	Rocketsonde	-	-	-	-	-	-	ASC	-	-	-	65	-	-
1976-H1462	2443064.16	1976 Oct 12 1552:00	Rocketsonde	-	-	-	-	-	-	CC	LC43	-	-	65	-	-
1976-H1463	2443064.23	1976 Oct 12 1730:00	Rocketsonde	-	-	-	-	-	-	SHER	-	-	-	60	-	-
1976-H1464	2443064.33	1976 Oct 12 2001:00	Rocketsonde	-	-	-	-	-	-	PF	-	-	-	57	-	-
1976-H1465	2443064.42	1976 Oct 12 2159:59	Rocketsonde	-	-	-	-	-	-	KAU	-	-	-	63	-	-
1976-H1466	2443065.07	1976 Oct 13 1344:59	Rocketsonde	-	-	-	-	-	-	ASC	-	-	-	63	-	-
1976-H1467	2443065.09	1976 Oct 13 1407:00	Rocketsonde	-	-	-	-	-	-	CELI	-	-	-	42	-	-
1976-H1468	2443065.10	1976 Oct 13 1430:00	Rocketsonde	-	-	-	-	-	-	MIT	-	-	-	70	-	-
1976-H1469	2443065.13	1976 Oct 13 1508:59	Rocketsonde	-	-	-	-	-	-	VI	-	-	-	86	-	-
1976-H1470	2443065.17	1976 Oct 13 1558:59	Rocketsonde	-	-	-	-	-	-	PM	-	-	-	65	-	-
1976-H1471	2443065.17	1976 Oct 13 1604:59	Rocketsonde	-	-	-	-	-	-	CC	LC43	-	-	63	-	-
1976-H1472	2443065.20	1976 Oct 13 1651:00	Rocketsonde	-	-	-	-	-	-	PM	-	-	-	63	-	-

Launch Mission

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Launch_Mission	FlightCode	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee_Km	Range_Km	Dest
1976-H1464	2443065-21	1976 Oct 13 1655:59	Rocketsonde	-	-	Arcasonde	-	-	-	WI	-	-	-	71	-	-
1976-H1465	2443065-22	1976 Oct 13 1710:00	Rocketsonde	-	-	Arcasonde	-	-	-	SHER	-	-	-	61	-	-
1976-H466	2443065-23	1976 Oct 13 1712:00	Rocketsonde	-	-	Met. Sphere	-	-	-	CC	LC43	-	-	9	-	-
1976-H467	2443065-24	1976 Oct 13 1804:59	Rocketsonde	-	-	AN/DIM-9	-	-	-	WS	-	-	-	98	-	-
1976-H468	2443065-25	1976 Oct 13 1814:59	Rocketsonde	-	-	Arcasonde	-	-	-	WS	-	-	-	67	-	-
1976-H1469	2443065-26	1976 Oct 13 1815:59	Rocketsonde	-	-	Arcasonde	-	-	-	PRLM	-	-	-	56	-	-
1976-H1470	2443065-27	1976 Oct 13 2015:59	Rocketsonde	-	-	Arcasonde	-	-	-	PF	-	-	-	65	-	-
1976-H1471	2443065-28	1976 Oct 13 2110:00	Rocketsonde	-	-	Arcasonde	-	-	-	PF	-	-	-	64	-	-
1976-H1472	2443065-29	1976 Oct 13 2138:59	Rocketsonde	-	-	Arcasonde	-	-	-	KHR	-	-	-	77	-	-
1976-H1473	2443065-30	1976 Oct 13 2141:00	Rocketsonde	-	-	Arcasonde	-	-	-	KAU	-	-	-	60	-	-
1976-H474	2443066-05	1976 Oct 14 1304:59	Rocketsonde	-	-	-	-	-	-	MIT	-	-	-	65	-	-
1976-H475	2443066-55	1976 Oct 15 0114:59	Rocketsonde	-	-	Arcasonde	-	-	-	SHER	-	-	-	45	-	-
1976-H1476	2443067-03	1976 Oct 15 1238:59	Rocketsonde	-	-	Arcasonde	-	-	-	ASC	-	-	-	68	-	-
1976-H1477	2443067-10	1976 Oct 15 1428:00	Rocketsonde	-	-	Arcasonde	-	-	-	THU	-	-	-	67	-	-
1976-H1478	2443067-19	1976 Oct 15 1428:59	Rocketsonde	-	-	Arcasonde	-	-	-	CC	LC43	-	-	53	-	-
1976-H1479	2443067-32	1976 Oct 15 1430:00	Rocketsonde	-	-	Arcasonde	-	-	-	WI	-	-	-	70	-	-
1976-H1480	2443067-33	1976 Oct 15 1534:59	Rocketsonde	-	-	Arcasonde	-	-	-	SHER	-	-	-	64	-	-
1976-H1481	2443067-34	1976 Oct 15 2054:00	Rocketsonde	-	-	Arcasonde	-	-	-	PH	-	-	-	58	-	-
1976-H1482	2443067-37	1976 Oct 15 2058:00	Rocketsonde	-	-	Arcasonde	-	-	-	PF	-	-	-	59	-	-
1976-H1483	2443067-49	1976 Oct 15 2344:00	Rocketsonde	-	-	Arcasonde	-	-	-	KAU	-	-	-	63	-	-
1976-H1484	2443070-09	1976 Oct 16 1404:59	Rocketsonde	-	-	Arcasonde	-	-	-	KHR	-	-	-	76	-	-
1976-H1485	2443070-11	1976 Oct 16 1448:00	Rocketsonde	-	-	Arcasonde	-	-	-	THU	-	-	-	69	-	-
1976-H1486	2443070-16	1976 Oct 16 1549:59	Rocketsonde	-	-	Arcasonde	-	-	-	THU	LC43	-	-	74	-	-
1976-H1487	2443070-19	1976 Oct 16 1549:59	Rocketsonde	-	-	Arcasonde	-	-	-	PH	-	-	-	56	-	-
1976-H1488	2443070-23	1976 Oct 16 1730:00	Rocketsonde	-	-	Arcasonde	-	-	-	VI	-	-	-	51	-	-
1976-H1489	2443070-25	1976 Oct 16 1730:00	Rocketsonde	-	-	Arcasonde	-	-	-	KHR	-	-	-	74	-	-
1976-H1490	2443070-33	1976 Oct 16 1943:59	Rocketsonde	-	-	Arcasonde	-	-	-	PH	-	-	-	62	-	-
1976-H1491	2443071-25	1976 Oct 19 1800:59	Rocketsonde	-	-	Arcasonde	-	-	-	MIT	-	-	-	57	-	-
1976-H1492	2443072-07	1976 Oct 20 1344:59	Rocketsonde	-	-	Startups Database	-	-	-	MIT	-	-	-	57	-	-
1976-H1493	2443072-10	1976 Oct 20 1429:00	Rocketsonde	-	-	Arcasonde	-	-	-	CEBI	-	-	-	63	-	-
1976-H1494	2443072-12	1976 Oct 20 1446:00	Rocketsonde	-	-	AN/DIM-97	-	-	-	CC	LC43	-	-	70	-	-
1976-H495	2443072-12	1976 Oct 20 1500:00	Rocketsonde	-	-	Arcasonde	-	-	-	THU	-	-	-	95	-	-
1976-H496	2443072-12	1976 Oct 20 1500:00	Rocketsonde	-	-	Arcasonde	-	-	-	THU	-	-	-	70	-	-
1976-H497	2443072-15	1976 Oct 20 1500:00	Rocketsonde	-	-	Arcasonde	-	-	-	PRLM	-	-	-	66	-	-
1976-H498	2443072-15	1976 Oct 20 1540:00	Rocketsonde	-	-	Arcasonde	-	-	-	WS	-	-	-	97	-	-
1976-H1499	2443072-18	1976 Oct 20 1619:59	Rocketsonde	-	-	AN/DIM-9	-	-	-	SHER	-	-	-	57	-	-
1976-H1500	2443072-23	1976 Oct 20 1730:00	Rocketsonde	-	-	Arcasonde	-	-	-	WS	-	-	-	66	-	-
1976-H1501	2443072-33	1976 Oct 20 1944:59	Rocketsonde	-	-	Arcasonde	-	-	-	PH	-	-	-	60	-	-
1976-H1502	2443072-45	1976 Oct 20 2214:59	Rocketsonde	-	-	Arcasonde	-	-	-	KAU	-	-	-	61	-	-
1976-H1503	2443072-46	1976 Oct 21 0000:59	Rocketsonde	-	-	Arcasonde	-	-	-	SHER	-	-	-	52	-	-
1976-H1504	2443072-56	1976 Oct 21 0356:59	Rocketsonde	-	-	Arcasonde	-	-	-	KHR	-	-	-	69	-	-
1976-H1505	2443073-25	1976 Oct 21 1300:59	Rocketsonde	-	-	Arcasonde	-	-	-	VI	-	-	-	57	-	-
1976-H1506	2443073-25	1976 Oct 21 1300:59	Rocketsonde	-	-	Arcasonde	-	-	-	VI	-	-	-	43	-	-
1976-H1507	2443074-04	1976 Oct 22 1300:59	Rocketsonde	-	-	Arcasonde	-	-	-	ASC	-	-	-	64	-	-
1976-H1508	2443074-07	1976 Oct 22 1344:59	Rocketsonde	-	-	Arcasonde	-	-	-	ASC	-	-	-	61	-	-
1976-H1509	2443074-11	1976 Oct 22 1456:00	Rocketsonde	-	-	Arcasonde	-	-	-	PRLM	-	-	-	63	-	-
1976-H1510	2443074-12	1976 Oct 22 1500:00	Rocketsonde	-	-	Arcasonde	-	-	-	THU	-	-	-	60	-	-
1976-H1511	2443074-11	1976 Oct 22 1554:59	Rocketsonde	-	-	Arcasonde	-	-	-	THU	LC43	-	-	73	-	-
1976-H1512	2443074-26	1976 Oct 22 1917:59	Rocketsonde	-	-	Arcasonde	-	-	-	PH	-	-	-	60	-	-
1976-H1513	2443074-26	1976 Oct 22 2340:59	Rocketsonde	-	-	Arcasonde	-	-	-	KAU	-	-	-	59	-	-
1976-H1514	2443074-49	1976 Oct 23 0340:59	Rocketsonde	-	-	Arcasonde	-	-	-	KHR	-	-	-	75	-	-
1976-H1515	2443075-35	1976 Oct 23 2030:59	Rocketsonde	-	-	Arcasonde	-	-	-	PF	-	-	-	64	-	-
1976-H1516	2443075-35	1976 Oct 25 1534:59	Rocketsonde	-	-	Arcasonde	-	-	-	THU	-	-	-	68	-	-
1976-H1517	2443077-08	1976 Oct 26 1400:00	Rocketsonde	-	-	Arcasonde	-	-	-	SHER	-	-	-	70	-	-
1976-H1518	2443078-08	1976 Oct 26 1757:00	Rocketsonde	-	-	Arcasonde	-	-	-	VI	-	-	-	63	-	-
1976-H1519	2443078-23	1976 Oct 26 1954:59	Rocketsonde	-	-	Arcasonde	-	-	-	PF	-	-	-	59	-	-
1976-H1520	2443078-33	1976 Oct 26 2044:00	Rocketsonde	-	-	Arcasonde	-	-	-	PF	-	-	-	62	-	-
1976-H1521	2443078-36	1976 Oct 26 2137:59	Rocketsonde	-	-	Arcasonde	-	-	-	KAU	-	-	-	79	-	-
1976-H1522	2443078-40	1976 Oct 26 2214:59	Rocketsonde	-	-	Arcasonde	-	-	-	KHR	-	-	-	55	-	-
1976-H1523	2443078-43	1976 Oct 26 2320:59	Rocketsonde	-	-	Arcasonde	-	-	-	SHER	-	-	-	66	-	-
1976-H1524	2443078-44	1976 Oct 26 2320:59	Rocketsonde	-	-	Arcasonde	-	-	-	CC	LC43	-	-	76	-	-
1976-H1525	2443079-04	1976 Oct 27 1319:59	Rocketsonde	-	-	Arcasonde	-	-	-	MIT	-	-	-	58	-	-
1976-H1526	2443079-06	1976 Oct 27 1344:59	Rocketsonde	-	-	Arcasonde	-	-	-	ASC	-	-	-	63	-	-
1976-H1527	2443079-08	1976 Oct 27 1400:00	Rocketsonde	-	-	AN/DIM-97	-	-	-	CC	LC43	-	-	96	-	-
1976-H1528	2443079-09	1976 Oct 27 1404:59	Rocketsonde	-	-	Startups Database	-	-	-	CC	LC43	-	-	63	-	-
1976-H1529	2443079-11	1976 Oct 27 1443:00	Rocketsonde	-	-	Arcasonde	-	-	-	VI	-	-	-	70	-	-
1976-H1530	2443079-13	1976 Oct 27 1504:59	Rocketsonde	-	-	Arcasonde	-	-	-	VI	LC43	-	-	62	-	-
1976-H1531	2443079-14	1976 Oct 27 1514:59	Rocketsonde	-	-	Arcasonde	-	-	-	PRLM	-	-	-	67	-	-
1976-H1532	2443079-19	1976 Oct 27 1634:59	Rocketsonde	-	-	Arcasonde	-	-	-	SHER	-	-	-	62	-	-
1976-H1533	2443079-25	1976 Oct 27 1800:00	Rocketsonde	-	-	Arcasonde	-	-	-	WS	-	-	-	97	-	-
1976-H1534	2443079-25	1976 Oct 27 1810:00	Rocketsonde	-	-	AN/DIM-9	-	-	-	WS	-	-	-	62	-	-
1976-H1535	2443079-35	1976 Oct 27 2025:00	Rocketsonde	-	-	Arcasonde	-	-	-	PF	-	-	-	56	-	-
1976-H1536	2443079-41	1976 Oct 27 2143:59	Rocketsonde	-	-	Arcasonde	-	-	-	KAU	-	-	-	87	-	-
1976-H1537	2443079-45	1976 Oct 27 2143:59	Rocketsonde	-	-	AN/DIM-97	-	-	-	KAU	-	-	-	63	-	-
1976-H1538	2443079-55	1976 Oct 28 0114:59	Rocketsonde	-	-	Arcasonde	-	-	-	KHR	-	-	-	63	-	-
1976-H1539	2443080-02	1976 Oct 28 1227:59	Rocketsonde	-	-	Arcasonde	-	-	-	ASC	-	-	-	62	-	-
1976-H1540	2443080-49	1976 Oct 28 2349:59	Rocketsonde	-	-	Arcasonde	-	-	-	ASC	-	-	-	76	-	-
1976-H1541	2443081-11	1976 Oct 29 1442:00	Rocketsonde	-	-	Arcasonde	-	-	-	CC	LC43	-	-	65	-	-
1976-H1542	2443081-12	1976 Oct 29 1452:00	Rocketsonde	-	-	Arcasonde	-	-	-	VI	-	-	-	70	-	-
1976-H1543	2443081-14	1976 Oct 29 1515:59	Rocketsonde	-	-	Arcasonde	-	-	-	PRLM	-	-	-	54	-	-
1976-H1544	2443081-15	1976 Oct 29 1530:00	Rocketsonde	-	-	Arcasonde	-	-	-	MIT	-	-	-	62	-	-
1976-H1545	2443081-16	1976 Oct 29 1545:00	Rocketsonde	-	-	Arcasonde	-	-	-	THU	-	-	-	69	-	-
1976-H1546	2443081-22	1976 Oct 29 1715:00	Rocketsonde	-	-	Arcasonde	-	-	-	SHER	-	-	-	61	-	-
1976-H1547	2443081-22	1976 Oct 29 1857:59	Rocketsonde	-	-	AN/DIM-9	-	-	-	PH	-	-	-	88	-	-
1976-H1548	2443081-32	1976 Oct 29 1946:59	Rocketsonde	-	-	Arcasonde	-	-	-	PH	-	-	-	68	-	-
1976-H1549	2443081-38	1976 Oct 29 2100:00	Rocketsonde	-	-	Arcasonde	-	-	-	KAU	-	-	-	62	-	-
1976-H1550	2443081-38	1976 Oct 29 2101:59	Rocketsonde	-	-	Arcasonde	-	-	-	PF	-	-	-	67	-	-

Launch Mission

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Launch_Mission	FlightCode	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee_Km	Range_Km	Dest
1976-H1551	2443081.42	1976 Oct 29 21:59:59	Rocketsonde	-	-	Arcasonde	-	-	-	SHEH	-	-	-	69	-	-
1976-H1552	2443081.52	1976 Oct 30 00:30:00	Rocketsonde	-	-	Arcasonde	-	-	-	WS	-	-	-	63	-	-
1976-H1557	2443084.02	1976 Nov 1 12:33:00	Rocketsonde	-	-	Arcasonde	-	-	-	ASC	-	-	-	65	-	-
1976-H1568	2443084.10	1976 Nov 1 14:20:00	Rocketsonde	-	-	Arcasonde	-	-	-	AUT	-	-	-	57	-	-
1976-H1569	2443084.16	1976 Nov 1 15:45:00	Rocketsonde	-	-	Arcasonde	-	-	-	THU	-	-	-	64	-	-
1976-H1570	2443084.19	1976 Nov 1 16:34:59	Rocketsonde	-	-	Arcasonde	-	-	-	PRUH	-	-	-	54	-	-
1976-H1572	2443084.24	1976 Nov 1 17:49:59	Rocketsonde	-	-	Arcasonde	-	-	-	SHER	-	-	-	65	-	-
1976-H1573	2443084.28	1976 Nov 1 18:36:59	Rocketsonde	-	-	Arcasonde	-	-	-	WI	-	-	-	75	-	-
1976-H1574	2443084.29	1976 Nov 1 18:54:00	Rocketsonde	-	-	Arcasonde	-	-	-	PH	-	-	-	61	-	-
1976-H1575	2443084.35	1976 Nov 1 20:30:00	Rocketsonde	-	-	Arcasonde	-	-	-	PF	-	-	-	65	-	-
1976-H1576	2443084.46	1976 Nov 1 23:00:00	Rocketsonde	-	-	Arcasonde	-	-	-	SHEH	-	-	-	56	-	-
1976-H1577	2443084.47	1976 Nov 2 13:15:59	Rocketsonde	-	-	Arcasonde	-	-	-	KRR	-	-	-	74	-	-
1976-H1578	2443085.13	1976 Nov 2 15:04:59	Rocketsonde	-	-	Arcasonde	-	-	-	CC	LC43	-	-	55	-	-
1976-H1579	2443085.07	1976 Nov 3 13:44:59	Rocketsonde	-	-	Arcasonde	-	-	-	ASC	-	-	-	65	-	-
1976-H1580	2443086.09	1976 Nov 3 14:03:59	Rocketsonde	-	-	Arcasonde	-	-	-	CLBI	-	-	-	52	-	-
1976-H1581	2443086.14	1976 Nov 3 15:24:59	Rocketsonde	-	-	Arcasonde	-	-	-	THU	LC43	-	-	73	-	-
1976-H1587	2443086.17	1976 Nov 3 15:59:59	Rocketsonde	-	-	Arcasonde	-	-	-	CC	-	-	-	90	-	-
1976-H1583	2443086.22	1976 Nov 3 17:14:00	Rocketsonde	-	-	Arcasonde	-	-	-	AUT	-	-	-	59	-	-
1976-H1584	2443086.23	1976 Nov 3 17:30:00	Rocketsonde	-	-	Arcasonde	-	-	-	PRUH	-	-	-	68	-	-
1976-H1586	2443086.29	1976 Nov 3 18:59:59	Rocketsonde	-	-	Arcasonde	-	-	-	WS	-	-	-	96	-	-
1976-H1588	2443086.31	1976 Nov 3 19:30:00	Rocketsonde	-	-	Arcasonde	-	-	-	WI	-	-	-	73	-	-
1976-H1589	2443086.32	1976 Nov 3 19:44:59	Rocketsonde	-	-	Arcasonde	-	-	-	WS	-	-	-	59	-	-
1976-H1587	2443086.40	1976 Nov 3 21:43:00	Rocketsonde	-	-	Arcasonde	-	-	-	KRR	-	-	-	79	-	-
1976-H1588	2443086.42	1976 Nov 3 21:59:59	Rocketsonde	-	-	Arcasonde	-	-	-	PF	-	-	-	61	-	-
1976-H1589	2443087.02	1976 Nov 4 12:29:00	Rocketsonde	-	-	Arcasonde	-	-	-	ASC	-	-	-	66	-	-
1976-H1590	2443087.15	1976 Nov 4 15:34:59	Rocketsonde	-	-	Arcasonde	-	-	-	SHER	-	-	-	65	-	-
1976-H1592	2443088.12	1976 Nov 5 15:00:00	Rocketsonde	-	-	Arcasonde	-	-	-	AUT	-	-	-	61	-	-
1976-H1593	2443088.16	1976 Nov 5 15:46:59	Rocketsonde	-	-	Arcasonde	-	-	-	WI	-	-	-	70	-	-
1976-H1594	2443088.21	1976 Nov 5 17:00:00	Rocketsonde	-	-	Arcasonde	-	-	-	SHER	-	-	-	66	-	-
1976-H1595	2443088.21	1976 Nov 5 17:00:00	Rocketsonde	-	-	Arcasonde	-	-	-	PRUH	LC43	-	-	47	-	-
1976-H1596	2443088.22	1976 Nov 5 17:30:00	Rocketsonde	-	-	Arcasonde	-	-	-	CC	LC43	-	-	51	-	-
1976-H1596	2443088.23	1976 Nov 5 17:50:00	Rocketsonde	-	-	Arcasonde	-	-	-	CC	LC43	-	-	61	-	-
1976-H1597	2443088.25	1976 Nov 5 18:59:59	Rocketsonde	-	-	Arcasonde	-	-	-	PF	-	-	-	67	-	-
1976-H1598	2443088.34	1976 Nov 5 20:15:00	Rocketsonde	-	-	Arcasonde	-	-	-	KAU	-	-	-	58	-	-
1976-H1599	2443088.50	1976 Nov 5 21:10:00	Rocketsonde	-	-	Arcasonde	-	-	-	KRR	-	-	-	79	-	-
1976-H1600	2443091.07	1976 Nov 8 13:44:59	Rocketsonde	-	-	Arcasonde	-	-	-	ASC	-	-	-	62	-	-
1976-H1601	2443091.12	1976 Nov 8 13:54:59	Rocketsonde	-	-	Arcasonde	-	-	-	AUT	-	-	-	64	-	-
1976-H1602	2443091.16	1976 Nov 8 15:00:00	Rocketsonde	-	-	Arcasonde	-	-	-	THU	-	-	-	62	-	-
1976-H1603	2443091.18	1976 Nov 8 16:14:59	Rocketsonde	-	-	Arcasonde	-	-	-	SHER	-	-	-	71	-	-
1976-H1604	2443091.18	1976 Nov 8 16:14:59	Rocketsonde	-	-	Arcasonde	-	-	-	CC	LC43	-	-	62	-	-
1976-H1604	2443091.15	1976 Nov 8 16:20:59	Rocketsonde	-	-	Arcasonde	-	-	-	PRUH	-	-	-	59	-	-
1976-H1606	2443091.15	1976 Nov 8 16:23:59	Rocketsonde	-	-	Arcasonde	-	-	-	WI	-	-	-	50	-	-
1976-H1607	2443091.27	1976 Nov 8 18:35:59	Rocketsonde	-	-	Arcasonde	-	-	-	PH	-	-	-	60	-	-
1976-H1609	2443091.35	1976 Nov 8 20:00:00	Rocketsonde	-	-	Arcasonde	-	-	-	KAU	-	-	-	91	-	-
1976-H1608	2443091.39	1976 Nov 8 21:15:59	Rocketsonde	-	-	Arcasonde	-	-	-	KRR	-	-	-	78	-	-
1976-H1609	2443091.47	1976 Nov 8 23:14:59	Rocketsonde	-	-	Arcasonde	-	-	-	ASC	-	-	-	61	-	-
1976-H1612	2443093.07	1976 Nov 10 13:44:59	Rocketsonde	-	-	Arcasonde	-	-	-	CLBI	LC43	-	-	64	-	-
1976-H1613	2443093.09	1976 Nov 10 13:24:59	Rocketsonde	-	-	Arcasonde	-	-	-	WI	-	-	-	68	-	-
1976-H1614	2443093.11	1976 Nov 10 14:20:00	Rocketsonde	-	-	Arcasonde	-	-	-	VT	-	-	-	70	-	-
1976-H1615	2443093.11	1976 Nov 10 14:40:00	Rocketsonde	-	-	Arcasonde	-	-	-	THU	LC43	-	-	65	-	-
1976-H1616	2443093.11	1976 Nov 10 14:40:00	Rocketsonde	-	-	Arcasonde	-	-	-	ASC	-	-	-	67	-	-
1976-H1616	2443093.13	1976 Nov 10 15:34:59	Rocketsonde	-	-	Arcasonde	-	-	-	WS	-	-	-	64	-	-
1976-H1617	2443093.13	1976 Nov 10 15:24:59	Rocketsonde	-	-	Arcasonde	-	-	-	ASC	-	-	-	59	-	-
1976-H1619	2443093.19	1976 Nov 10 16:30:00	Rocketsonde	-	-	Arcasonde	-	-	-	SHER	-	-	-	95	-	-
1976-H1619	2443093.21	1976 Nov 10 17:00:00	Rocketsonde	-	-	Arcasonde	-	-	-	CC	LC43	-	-	61	-	-
1976-H1619	2443093.22	1976 Nov 10 17:15:00	Rocketsonde	-	-	Arcasonde	-	-	-	AUT	-	-	-	67	-	-
1976-H1620	2443093.22	1976 Nov 10 19:19:59	Rocketsonde	-	-	Arcasonde	-	-	-	PRUH	-	-	-	67	-	-
1976-H1621	2443093.31	1976 Nov 10 20:00:00	Rocketsonde	-	-	Arcasonde	-	-	-	PF	-	-	-	77	-	-
1976-H1622	2443093.38	1976 Nov 10 21:00:59	Rocketsonde	-	-	Arcasonde	-	-	-	KAU	-	-	-	60	-	-
1976-H1623	2443093.40	1976 Nov 10 21:31:00	Rocketsonde	-	-	Arcasonde	-	-	-	KAU	-	-	-	60	-	-
1976-H1624	2443093.54	1976 Nov 11 00:59:59	Rocketsonde	-	-	Arcasonde	-	-	-	SHEM	-	-	-	56	-	-
1976-H1625	2443093.54	1976 Nov 11 00:59:59	Rocketsonde	-	-	Arcasonde	-	-	-	KRR	-	-	-	79	-	-
1976-H1627	2443094.04	1976 Nov 11 01:14:59	Rocketsonde	-	-	Arcasonde	-	-	-	WI	-	-	-	70	-	-
1976-H1629	2443094.21	1976 Nov 11 12:59:59	Rocketsonde	-	-	Arcasonde	-	-	-	SHER	-	-	-	64	-	-
1976-H1630	2443095.01	1976 Nov 11 17:04:59	Rocketsonde	-	-	Arcasonde	-	-	-	ASC	-	-	-	65	-	-
1976-H1631	2443095.11	1976 Nov 12 12:41:00	Rocketsonde	-	-	Arcasonde	-	-	-	AUT	-	-	-	62	-	-
1976-H1632	2443095.13	1976 Nov 12 14:45:00	Rocketsonde	-	-	Arcasonde	-	-	-	WI	-	-	-	58	-	-
1976-H1633	2443095.14	1976 Nov 12 15:24:59	Rocketsonde	-	-	Arcasonde	-	-	-	THU	-	-	-	63	-	-
1976-H1634	2443095.14	1976 Nov 12 15:24:59	Rocketsonde	-	-	Arcasonde	-	-	-	CC	LC43	-	-	64	-	-
1976-H1636	2443095.23	1976 Nov 12 16:26:59	Rocketsonde	-	-	Arcasonde	-	-	-	PM	-	-	-	85	-	-
1976-H1637	2443095.41	1976 Nov 12 17:26:59	Rocketsonde	-	-	Arcasonde	-	-	-	PRUH	-	-	-	68	-	-
1976-H1638	2443095.50	1976 Nov 12 19:30:00	Rocketsonde	-	-	Arcasonde	-	-	-	KAU	-	-	-	55	-	-
1976-H1639	2443095.50	1976 Nov 12 21:45:00	Rocketsonde	-	-	Arcasonde	-	-	-	KRR	-	-	-	56	-	-
1976-H1640	2443095.77	1976 Nov 13 00:59:59	Rocketsonde	-	-	Arcasonde	-	-	-	SHEM	-	-	-	77	-	-
1976-H1640	2443095.77	1976 Nov 13 06:30:00	Rocketsonde	-	-	Arcasonde	-	-	-	PF	-	-	-	67	-	-
1976-H1642	2443098.07	1976 Nov 15 13:44:59	Rocketsonde	-	-	Arcasonde	-	-	-	ASC	-	-	-	58	-	-
1976-H1643	2443098.15	1976 Nov 15 14:18:00	Rocketsonde	-	-	Arcasonde	-	-	-	AUT	-	-	-	68	-	-
1976-H1644	2443098.15	1976 Nov 15 15:34:59	Rocketsonde	-	-	Arcasonde	-	-	-	THU	-	-	-	53	-	-
1976-H1645	2443098.18	1976 Nov 15 16:24:59	Rocketsonde	-	-	Arcasonde	-	-	-	SHER	-	-	-	64	-	-
1976-H1646	2443098.20	1976 Nov 15 16:24:59	Rocketsonde	-	-	Arcasonde	-	-	-	CC	LC43	-	-	63	-	-
1976-H1647	2443098.28	1976 Nov 15 16:51:00	Rocketsonde	-	-	Arcasonde	-	-	-	PM	-	-	-	41	-	-
1976-H1648	2443098.28	1976 Nov 15 18:45:59	Rocketsonde	-	-	Arcasonde	-	-	-	WI	-	-	-	64	-	-
1976-H1649	2443098.47	1976 Nov 15 23:12:00	Rocketsonde	-	-	Arcasonde	-	-	-	KRR	-	-	-	77	-	-
1976-H1650	2443098.54	1976 Nov 16 00:59:59	Rocketsonde	-	-	Arcasonde	-	-	-	SHEM	-	-	-	55	-	-
1976-H1651	2443100.03	1976 Nov 17 12:45:00	Rocketsonde	-	-	Arcasonde	-	-	-	PF	-	-	-	62	-	-
1976-H1652	2443100.05	1976 Nov 17 13:14:59	Rocketsonde	-	-	Arcasonde	-	-	-	ASC	-	-	-	62	-	-
1976-H1652	2443100.05	1976 Nov 17 13:14:59	Rocketsonde	-	-	Arcasonde	-	-	-	AUT	-	-	-	74	-	-

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Launch_Mission	FlightCode	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee_Km	Range_Km	Dest
1976-H1653	2443100.12	1976 Nov 17 1500:00	Rocketsonde	-	-	Arcasonde	-	-	-	CC	LC43	-	-	61	-	-
1976-H1654	2443100.14	1976 Nov 17 1514:59	Rocketsonde	-	-	Arcasonde	-	-	-	THU	-	-	-	59	-	-
1976-H1655	2443100.15	1976 Nov 17 1533:00	Rocketsonde	-	-	Starvue, Dataasonde	-	-	-	CELAT	-	-	-	55	-	-
1976-H1656	2443100.16	1976 Nov 17 1537:59	Rocketsonde	-	-	Arcasonde	-	-	-	SHER	-	-	-	61	-	-
1976-H1657	2443100.17	1976 Nov 17 1539:59	Rocketsonde	-	-	Arcasonde	-	-	-	WI	-	-	-	70	-	-
1976-H1658	2443100.22	1976 Nov 17 1715:00	Rocketsonde	-	-	Arcasonde	-	-	-	-	LC43	-	-	96	-	-
1976-H1659	2443100.23	1976 Nov 17 1731:00	Rocketsonde	-	-	AN/DIM-9?	-	-	-	PRIM	-	-	-	57	-	-
1976-H1660	2443100.23	1976 Nov 17 1732:00	Rocketsonde	-	-	Arcasonde	-	-	-	WS	-	-	-	96	-	-
1976-H1661	2443100.30	1976 Nov 17 1904:59	Rocketsonde	-	-	AN/DIM-9?	-	-	-	WS	-	-	-	63	-	-
1976-H1662	2443100.30	1976 Nov 17 1914:59	Rocketsonde	-	-	Arcasonde	-	-	-	KAU	-	-	-	59	-	-
1976-H1663	2443100.39	1976 Nov 17 2128:59	Rocketsonde	-	-	AN/DIM-9?	-	-	-	KRR	-	-	-	69	-	-
1976-H1664	2443100.41	1976 Nov 17 2151:00	Rocketsonde	-	-	Arcasonde	-	-	-	PF	-	-	-	64	-	-
1976-H1665	2443100.49	1976 Nov 18 0348:00	Rocketsonde	-	-	Arcasonde	-	-	-	ASC	-	-	-	71	-	-
1976-H1666	2443100.69	1976 Nov 18 0430:00	Rocketsonde	-	-	Arcasonde	-	-	-	THU	-	-	-	66	-	-
1976-H1667	2443101.01	1976 Nov 18 1210:00	Rocketsonde	-	-	Arcasonde	-	-	-	MIT	-	-	-	71	-	-
1976-H1668	2443102.13	1976 Nov 19 1507:00	Rocketsonde	-	-	Arcasonde	-	-	-	WI	-	-	-	58	-	-
1976-H1669	2443102.13	1976 Nov 19 1530:59	Rocketsonde	-	-	Arcasonde	-	-	-	SHER	-	-	-	64	-	-
1976-H1670	2443102.20	1976 Nov 19 1648:59	Rocketsonde	-	-	Arcasonde	-	-	-	CC	LC43	-	-	60	-	-
1976-H1671	2443102.20	1976 Nov 19 1648:59	Rocketsonde	-	-	AN/DIM-9?	-	-	-	PH	-	-	-	57	-	-
1976-H1672	2443102.20	1976 Nov 19 1654:59	Rocketsonde	-	-	Arcasonde	-	-	-	KRR	-	-	-	73	-	-
1976-H1673	2443102.29	1976 Nov 19 1857:59	Rocketsonde	-	-	Arcasonde	-	-	-	PF	-	-	-	68	-	-
1976-H1674	2443102.29	1976 Nov 19 1857:59	Rocketsonde	-	-	Arcasonde	-	-	-	ASC	-	-	-	63	-	-
1976-H1675	2443102.40	1976 Nov 19 2137:59	Rocketsonde	-	-	Arcasonde	-	-	-	THU	-	-	-	69	-	-
1976-H1676	2443103.75	1976 Nov 21 0600:00	Rocketsonde	-	-	Arcasonde	-	-	-	SHER	-	-	-	66	-	-
1976-H1677	2443105.03	1976 Nov 21 1248:59	Rocketsonde	-	-	Arcasonde	-	-	-	PH	-	-	-	61	-	-
1976-H1678	2443105.14	1976 Nov 22 1520:00	Rocketsonde	-	-	Arcasonde	-	-	-	CC	LC43	-	-	57	-	-
1976-H1679	2443105.14	1976 Nov 22 1520:00	Rocketsonde	-	-	Arcasonde	-	-	-	PH	-	-	-	73	-	-
1976-H1680	2443105.19	1976 Nov 22 1646:59	Rocketsonde	-	-	Arcasonde	-	-	-	ASC	-	-	-	66	-	-
1976-H1681	2443105.20	1976 Nov 22 1646:59	Rocketsonde	-	-	Arcasonde	-	-	-	THU	-	-	-	69	-	-
1976-H1682	2443105.28	1976 Nov 22 1945:00	Rocketsonde	-	-	Arcasonde	-	-	-	SHER	-	-	-	66	-	-
1976-H1683	2443105.30	1976 Nov 22 1945:00	Rocketsonde	-	-	Arcasonde	-	-	-	CC	LC43	-	-	61	-	-
1976-H1684	2443105.45	1976 Nov 22 1915:59	Rocketsonde	-	-	Arcasonde	-	-	-	PH	-	-	-	59	-	-
1976-H1685	2443105.47	1976 Nov 22 2321:59	Rocketsonde	-	-	Arcasonde	-	-	-	PRIM	-	-	-	57	-	-
1976-H1686	2443105.73	1976 Nov 23 0530:00	Rocketsonde	-	-	Arcasonde	-	-	-	KAU	-	-	-	62	-	-
1976-H1687	2443105.75	1976 Nov 23 0530:00	Rocketsonde	-	-	Arcasonde	-	-	-	PH	-	-	-	71	-	-
1976-H1688	2443106.20	1976 Nov 23 1649:59	Rocketsonde	-	-	Arcasonde	-	-	-	WS	-	-	-	65	-	-
1976-H1689	2443106.75	1976 Nov 24 0601:59	Rocketsonde	-	-	Arcasonde	-	-	-	PF	-	-	-	67	-	-
1976-H1690	2443106.75	1976 Nov 24 0601:59	Rocketsonde	-	-	Arcasonde	-	-	-	ASC	-	-	-	62	-	-
1976-H1691	2443107.05	1976 Nov 24 1344:59	Rocketsonde	-	-	Arcasonde	-	-	-	MIT	-	-	-	70	-	-
1976-H1692	2443107.07	1976 Nov 24 1344:59	Rocketsonde	-	-	Arcasonde	-	-	-	ASC	-	-	-	60	-	-
1976-H1693	2443107.12	1976 Nov 24 1500:00	Rocketsonde	-	-	Arcasonde	-	-	-	CC	LC43	-	-	61	-	-
1976-H1694	2443107.12	1976 Nov 24 1509:00	Rocketsonde	-	-	Arcasonde	-	-	-	VI	-	-	-	69	-	-
1976-H1695	2443107.15	1976 Nov 24 1546:00	Rocketsonde	-	-	Arcasonde	-	-	-	THU	-	-	-	68	-	-
1976-H1696	2443107.16	1976 Nov 24 1546:00	Rocketsonde	-	-	Arcasonde	-	-	-	CC	LC43	-	-	96	-	-
1976-H1697	2443107.21	1976 Nov 24 1559:59	Rocketsonde	-	-	AN/DIM-9?	-	-	-	SHER	-	-	-	90	-	-
1976-H1698	2443107.24	1976 Nov 24 1730:00	Rocketsonde	-	-	AN/DIM-9?	-	-	-	PH	-	-	-	64	-	-
1976-H1699	2443107.24	1976 Nov 24 1730:00	Rocketsonde	-	-	AN/DIM-9?	-	-	-	WS	-	-	-	67	-	-
1976-H1700	2443107.32	1976 Nov 24 1826:59	Rocketsonde	-	-	Arcasonde	-	-	-	PH	-	-	-	73	-	-
1976-H1701	2443107.38	1976 Nov 24 1935:59	Rocketsonde	-	-	Arcasonde	-	-	-	PRIM	-	-	-	52	-	-
1976-H1702	2443107.40	1976 Nov 24 2106:00	Super_Loki	-	-	Arcasonde	-	-	-	WS	-	-	-	71	-	-
1976-H1703	2443108.11	1976 Nov 25 1454:00	Rocketsonde	-	-	Arcasonde	-	-	-	KRR	-	-	-	63	-	-
1976-H1704	2443108.12	1976 Nov 25 1454:00	Rocketsonde	-	-	Arcasonde	-	-	-	CELAT	-	-	-	59	-	-
1976-H1705	2443108.88	1976 Nov 26 0900:00	Rocketsonde	-	-	Arcasonde	-	-	-	CELAT	-	-	-	68	-	-
1976-H1706	2443108.88	1976 Nov 26 0900:00	Rocketsonde	-	-	Arcasonde	-	-	-	VI	-	-	-	63	-	-
1976-H1707	2443109.12	1976 Nov 26 1534:59	Rocketsonde	-	-	Arcasonde	-	-	-	THU	-	-	-	67	-	-
1976-H1708	2443109.15	1976 Nov 26 1534:59	Rocketsonde	-	-	Arcasonde	-	-	-	PRIM	-	-	-	58	-	-
1976-H1709	2443109.20	1976 Nov 26 1534:59	Rocketsonde	-	-	Arcasonde	-	-	-	SHER	-	-	-	58	-	-
1976-H1710	2443109.20	1976 Nov 26 1534:59	Rocketsonde	-	-	Arcasonde	-	-	-	PH	-	-	-	75	-	-
1976-H1711	2443109.21	1976 Nov 26 1700:00	Rocketsonde	-	-	Arcasonde	-	-	-	KRR	-	-	-	62	-	-
1976-H1712	2443109.25	1976 Nov 27 0114:59	Rocketsonde	-	-	Arcasonde	-	-	-	MIT	-	-	-	62	-	-
1976-H1713	2443111.73	1976 Nov 29 0530:00	Rocketsonde	-	-	Arcasonde	-	-	-	CC	LC43	-	-	62	-	-
1976-H1714	2443111.73	1976 Nov 29 0530:00	Rocketsonde	-	-	Arcasonde	-	-	-	CC	LC43	-	-	62	-	-
1976-H1715	2443112.10	1976 Nov 29 1417:00	Rocketsonde	-	-	Arcasonde	-	-	-	SHER	-	-	-	64	-	-
1976-H1716	2443112.10	1976 Nov 29 1631:59	Rocketsonde	-	-	Arcasonde	-	-	-	THU	-	-	-	66	-	-
1976-H1717	2443112.11	1976 Nov 29 1640:00	Rocketsonde	-	-	Arcasonde	-	-	-	THU	-	-	-	66	-	-
1976-H1718	2443112.21	1976 Nov 29 1704:59	Rocketsonde	-	-	Arcasonde	-	-	-	PRIM	-	-	-	69	-	-
1976-H1719	2443112.22	1976 Nov 29 1715:00	Rocketsonde	-	-	Arcasonde	-	-	-	VI	-	-	-	59	-	-
1976-H1720	2443112.28	1976 Nov 29 1943:00	Rocketsonde	-	-	Arcasonde	-	-	-	KAU	-	-	-	59	-	-
1976-H1721	2443112.42	1976 Nov 29 2311:59	Rocketsonde	-	-	Arcasonde	-	-	-	ASC	-	-	-	78	-	-
1976-H1722	2443112.47	1976 Nov 29 2311:59	Rocketsonde	-	-	Arcasonde	-	-	-	WS	-	-	-	58	-	-
1976-H1723	2443113.02	1976 Nov 30 1934:59	Rocketsonde	-	-	Arcasonde	-	-	-	WS	-	-	-	66	-	-
1976-H1724	2443113.35	1976 Nov 30 2030:00	Rocketsonde	-	-	Arcasonde	-	-	-	PF	-	-	-	58	-	-
1976-H1725	2443113.72	1976 Dec 1 0515:00	Rocketsonde	-	-	Arcasonde	-	-	-	ASC	-	-	-	64	-	-
1976-H1726	2443114.07	1976 Dec 1 1344:59	Rocketsonde	-	-	Arcasonde	-	-	-	ASC	-	-	-	72	-	-
1976-H1727	2443114.10	1976 Dec 1 1426:00	Rocketsonde	-	-	Starvue, Dataasonde	-	-	-	CC	LC43	-	-	58	-	-
1976-H1728	2443114.12	1976 Dec 1 1449:59	Rocketsonde	-	-	Arcasonde	-	-	-	CELAT	-	-	-	68	-	-
1976-H1729	2443114.13	1976 Dec 1 1513:59	Rocketsonde	-	-	Arcasonde	-	-	-	VI	-	-	-	69	-	-
1976-H1730	2443114.14	1976 Dec 1 1517:00	Rocketsonde	-	-	Arcasonde	-	-	-	MIT	-	-	-	64	-	-
1976-H1731	2443114.14	1976 Dec 1 1517:00	Rocketsonde	-	-	Arcasonde	-	-	-	THU	-	-	-	66	-	-
1976-H1732	2443114.16	1976 Dec 1 1554:59	Rocketsonde	-	-	Arcasonde	-	-	-	CC	LC43	-	-	95	-	-
1976-H1733	2443114.20	1976 Dec 1 1630:00	Rocketsonde	-	-	AN/DIM-9?	-	-	-	CC	LC43	-	-	54	-	-
1976-H1734	2443114.20	1976 Dec 1 1630:00	Rocketsonde	-	-	Arcasonde	-	-	-	PRIM	-	-	-	65	-	-
1976-H1735	2443114.25	1976 Dec 1 1644:59	Rocketsonde	-	-	Arcasonde	-	-	-	SHER	-	-	-	66	-	-
1976-H1736	2443114.26	1976 Dec 1 1800:00	Rocketsonde	-	-	AN/DIM-9?	-	-	-	WS	-	-	-	96	-	-
1976-H1737	2443114.26	1976 Dec 1 1800:00	Rocketsonde	-	-	Arcasonde	-	-	-	WS	-	-	-	60	-	-
1976-H1738	2443114.50	1976 Dec 1 2358:00	Rocketsonde	-	-	Arcasonde	-	-	-	KRR	-	-	-	62	-	-
1976-H1739	2443115.25	1976 Dec 2 1800:00	Rocketsonde	-	-	Arcasonde	-	-	-	WS	-	-	-	65	-	-
1976-H1740	2443115.30	1976 Dec 2 1912:59	Rocketsonde	-	-	Arcasonde	-	-	-	WS	-	-	-	59	-	-
1976-H1741	2443115.41	1976 Dec 2 2147:59	Rocketsonde	-	-	Arcasonde	-	-	-	PH	-	-	-	75	-	-
1976-H1742	2443115.41	1976 Dec 2 2147:59	Rocketsonde	-	-	Arcasonde	-	-	-	KRR	-	-	-	66	-	-
1976-H1743	2443116.09	1976 Dec 3 1415:00	Rocketsonde	-	-											

Launch Mission

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Launch_Site	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee_Km	Range_Km	Dest
1976-H1748	2443116.25	1976 Dec 3 1800:00	Rocketsonde	-	-	Arcasonde	WS	-	-	-	-	-	60	-	-
1976-H1749	2443116.33	1976 Dec 3 1961:00	Rocketsonde	-	-	Arcasonde	RAU	-	-	-	-	-	65	-	-
1976-H1750	2443116.40	1976 Dec 3 2131:00	Rocketsonde	-	-	Arcasonde	KAU	-	-	-	-	-	60	-	-
1976-H1751	2443119.11	1976 Dec 6 1437:59	Rocketsonde	-	-	Arcasonde	THU	-	-	-	-	-	69	-	-
1976-H1752	2443119.15	1976 Dec 6 1530:00	Rocketsonde	-	-	-	MIT	-	-	-	-	-	59	-	-
1976-H1753	2443119.19	1976 Dec 6 1634:59	Rocketsonde	-	-	Arcasonde	SHER	-	-	-	-	-	64	-	-
1976-H1754	2443119.22	1976 Dec 6 1710:00	Rocketsonde	-	-	Arcasonde	PRUH	-	-	-	-	-	64	-	-
1976-H1755	2443119.25	1976 Dec 6 1800:00	Rocketsonde	-	-	-	MIT	-	-	-	-	-	56	-	-
1976-H1756	2443119.28	1976 Dec 6 1809:00	Rocketsonde	-	-	Arcasonde	PH	-	-	-	-	-	58	-	-
1976-H1757	2443119.28	1976 Dec 6 1847:59	Rocketsonde	-	-	Arcasonde	WI	-	-	-	-	-	68	-	-
1976-H1758	2443119.28	1976 Dec 6 1859:59	Rocketsonde	-	-	Arcasonde	WS	-	-	-	-	-	64	-	-
1976-H1759	2443119.36	1976 Dec 6 2045:00	Rocketsonde	-	-	Arcasonde	PF	-	-	-	-	-	67	-	-
1976-H1760	2443119.47	1976 Dec 6 2311:00	Rocketsonde	-	-	Arcasonde	NRR	-	-	-	-	-	77	-	-
1976-H1761	2443120.00	1976 Dec 7 1204:59	Rocketsonde	-	-	Arcasonde	ASC	-	-	-	-	-	62	-	-
1976-H1762	2443120.00	1976 Dec 7 1606:00	Rocketsonde	-	-	Arcasonde	CC	-	-	LC43	-	-	48	-	-
1976-H1763	2443120.17	1976 Dec 7 1606:00	Rocketsonde	-	-	Arcasonde	WS	-	-	-	-	-	67	-	-
1976-H1764	2443120.19	1976 Dec 7 1630:00	Rocketsonde	-	-	Arcasonde	KAU	-	-	-	-	-	60	-	-
1976-H1765	2443120.34	1976 Dec 7 2015:00	Rocketsonde	-	-	Arcasonde	ASC	-	-	-	-	-	65	-	-
1976-H1766	2443121.01	1976 Dec 8 1221:00	Rocketsonde	-	-	-	MIT	-	-	-	-	-	72	-	-
1976-H1767	2443121.13	1976 Dec 8 1500:59	Rocketsonde	-	-	Arcasonde	THU	-	-	-	-	-	71	-	-
1976-H1768	2443121.13	1976 Dec 8 1504:59	Rocketsonde	-	-	Arcasonde	CC	-	-	LC43	-	-	57	-	-
1976-H1769	2443121.15	1976 Dec 8 1530:00	Rocketsonde	-	-	AN/DMM-97	CC	-	-	LC43	-	-	96	-	-
1976-H1770	2443121.15	1976 Dec 8 1530:00	Rocketsonde	-	-	Arcasonde	CC	-	-	LC43	-	-	61	-	-
1976-H1771	2443121.19	1976 Dec 8 1700:00	Rocketsonde	-	-	AN/DMM-9	SHER	-	-	-	-	-	98	-	-
1976-H1772	2443121.21	1976 Dec 8 1824:59	Rocketsonde	-	-	Arcasonde	WS	-	-	-	-	-	69	-	-
1976-H1773	2443121.27	1976 Dec 8 1830:00	Rocketsonde	-	-	Arcasonde	VI	-	-	-	-	-	67	-	-
1976-H1774	2443121.27	1976 Dec 8 1834:59	Rocketsonde	-	-	Arcasonde	WS	-	-	-	-	-	50	-	-
1976-H1775	2443121.27	1976 Dec 8 1834:59	Rocketsonde	-	-	Arcasonde	PRUH	-	-	-	-	-	58	-	-
1976-H1776	2443121.31	1976 Dec 8 1930:00	Rocketsonde	-	-	Arcasonde	PF	-	-	-	-	-	70	-	-
1976-H1777	2443121.35	1976 Dec 8 2025:00	Rocketsonde	-	-	Arcasonde	NRR	-	-	-	-	-	76	-	-
1976-H1778	2443121.52	1976 Dec 9 0034:59	Rocketsonde	-	-	Arcasonde	ASC	-	-	-	-	-	70	-	-
1976-H1779	2443122.01	1976 Dec 9 1411:00	Rocketsonde	-	-	Startur, Database	CELT	-	-	-	-	-	58	-	-
1976-H1780	2443122.09	1976 Dec 9 1411:00	Rocketsonde	-	-	Startur, Database	CELT	-	-	-	-	-	64	-	-
1976-H1781	2443122.11	1976 Dec 9 1446:00	Rocketsonde	-	-	Arcasonde	VI	-	-	-	-	-	51	-	-
1976-H1782	2443122.11	1976 Dec 9 1504:59	Rocketsonde	-	-	Arcasonde	VI	-	-	LC43	-	-	70	-	-
1976-H1783	2443122.14	1976 Dec 9 1522:00	Rocketsonde	-	-	Arcasonde	VI	-	-	-	-	-	63	-	-
1976-H1784	2443122.14	1976 Dec 9 1532:00	Rocketsonde	-	-	Arcasonde	WS	-	-	-	-	-	60	-	-
1976-H1785	2443122.15	1976 Dec 9 1552:00	Rocketsonde	-	-	Arcasonde	PH	-	-	-	-	-	63	-	-
1976-H1786	2443122.17	1976 Dec 9 1558:59	Rocketsonde	-	-	Arcasonde	THU	-	-	-	-	-	69	-	-
1976-H1787	2443122.25	1976 Dec 9 1800:00	Rocketsonde	-	-	Arcasonde	VI	-	-	-	-	-	87	-	-
1976-H1788	2443122.25	1976 Dec 9 1800:00	Rocketsonde	-	-	Arcasonde	VI	-	-	-	-	-	87	-	-
1976-H1789	2443122.25	1976 Dec 9 1826:00	Rocketsonde	-	-	AN/DMM-9	WS	-	-	-	-	-	72	-	-
1976-H1790	2443122.29	1976 Dec 9 1826:00	Rocketsonde	-	-	AN/DMM-9	WS	-	-	-	-	-	72	-	-
1976-H1791	2443123.15	1976 Dec 10 1504:59	Super_LoKI	-	-	Arcasonde	RS	-	-	-	-	-	77	-	-
1976-H1792	2443123.15	1976 Dec 10 1504:59	Super_LoKI	-	-	Arcasonde	RS	-	-	-	-	-	77	-	-
1976-H1793	2443123.15	1976 Dec 10 1504:59	Super_LoKI	-	-	Arcasonde	RS	-	-	-	-	-	77	-	-
1976-H1794	2443123.34	1976 Dec 10 2105:00	Super_LoKI	-	-	Arcasonde	RS	-	-	-	-	-	70	-	-
1976-H1795	2443123.38	1976 Dec 10 2105:00	Super_LoKI	-	-	Arcasonde	RS	-	-	-	-	-	70	-	-
1976-H1796	2443123.38	1976 Dec 10 2105:00	Super_LoKI	-	-	Arcasonde	RS	-	-	-	-	-	70	-	-
1976-H1797	2443123.42	1976 Dec 10 2130:59	Rocketsonde	-	-	AN/DMM-97	KAU	-	-	-	-	-	58	-	-
1976-H1798	2443123.42	1976 Dec 10 2130:59	Rocketsonde	-	-	Arcasonde	KAU	-	-	-	-	-	59	-	-
1976-H1799	2443123.42	1976 Dec 10 2130:59	Rocketsonde	-	-	Arcasonde	KAU	-	-	-	-	-	64	-	-
1976-H1800	2443123.42	1976 Dec 11 1530:59	Rocketsonde	-	-	Arcasonde	WS	-	-	-	-	-	62	-	-
1976-H1801	2443123.42	1976 Dec 11 1530:59	Rocketsonde	-	-	Arcasonde	WS	-	-	-	-	-	62	-	-
1976-H1802	2443123.42	1976 Dec 11 1530:59	Rocketsonde	-	-	Arcasonde	THU	-	-	LC43	-	-	67	-	-
1976-H1803	2443123.43	1976 Dec 13 1559:59	Rocketsonde	-	-	Arcasonde	CC	-	-	-	-	-	67	-	-
1976-H1804	2443123.43	1976 Dec 13 1634:59	Rocketsonde	-	-	Arcasonde	SHER	-	-	LC43	-	-	59	-	-
1976-H1805	2443123.43	1976 Dec 13 1634:59	Rocketsonde	-	-	Arcasonde	PH	-	-	-	-	-	55	-	-
1976-H1806	2443123.43	1976 Dec 13 1700:00	Rocketsonde	-	-	Arcasonde	VI	-	-	-	-	-	72	-	-
1976-H1807	2443123.43	1976 Dec 13 1830:00	Rocketsonde	-	-	Arcasonde	VI	-	-	-	-	-	72	-	-
1976-H1808	2443123.43	1976 Dec 13 1909:59	Rocketsonde	-	-	Arcasonde	PF	-	-	-	-	-	65	-	-
1976-H1809	2443123.43	1976 Dec 13 2000:00	Rocketsonde	-	-	Arcasonde	PF	-	-	-	-	-	66	-	-
1976-H1810	2443123.43	1976 Dec 13 2019:59	Rocketsonde	-	-	Arcasonde	KHR	-	-	-	-	-	75	-	-
1976-H1811	2443123.43	1976 Dec 13 2219:59	Rocketsonde	-	-	Arcasonde	KHR	-	-	-	-	-	63	-	-
1976-H1812	2443127.01	1976 Dec 14 1208:00	Rocketsonde	-	-	Arcasonde	CC	-	-	LC43	-	-	67	-	-
1976-H1813	2443127.15	1976 Dec 14 1539:59	Rocketsonde	-	-	Arcasonde	CC	-	-	LC43	-	-	67	-	-
1976-H1814	2443127.23	1976 Dec 14 1649:59	Rocketsonde	-	-	Arcasonde	WS	-	-	-	-	-	63	-	-
1976-H1815	2443127.23	1976 Dec 14 1725:00	Rocketsonde	-	-	Arcasonde	WS	-	-	-	-	-	58	-	-
1976-H1816	2443127.37	1976 Dec 14 2026:00	Rocketsonde	-	-	Arcasonde	PM	-	-	-	-	-	60	-	-
1976-H1817	2443127.37	1976 Dec 14 2026:00	Rocketsonde	-	-	Arcasonde	KAU	-	-	-	-	-	60	-	-
1976-H1818	2443128.07	1976 Dec 15 1344:59	Rocketsonde	-	-	Arcasonde	ASC	-	-	-	-	-	62	-	-
1976-H1819	2443128.09	1976 Dec 15 1415:00	Rocketsonde	-	-	Arcasonde	SHER	-	-	-	-	-	62	-	-
1976-H1820	2443128.09	1976 Dec 15 1415:00	Rocketsonde	-	-	Arcasonde	SHER	-	-	-	-	-	45	-	-
1976-H1821	2443128.11	1976 Dec 15 1430:00	Rocketsonde	-	-	Starvo, Database	CELT	-	-	LC43	-	-	67	-	-
1976-H1822	2443128.11	1976 Dec 15 1435:00	Rocketsonde	-	-	Arcasonde	THU	-	-	-	-	-	70	-	-
1976-H1823	2443128.12	1976 Dec 15 1509:59	Rocketsonde	-	-	Arcasonde	VI	-	-	-	-	-	72	-	-
1976-H1824	2443128.17	1976 Dec 15 1559:59	Rocketsonde	-	-	Arcasonde	CC	-	-	LC43	-	-	97	-	-
1976-H1825	2443128.17	1976 Dec 15 1614:59	Rocketsonde	-	-	Arcasonde	CC	-	-	LC43	-	-	66	-	-
1976-H1826	2443128.21	1976 Dec 15 1710:00	Rocketsonde	-	-	Arcasonde	WS	-	-	-	-	-	97	-	-
1976-H1827	2443128.21	1976 Dec 15 1710:00	Rocketsonde	-	-	Arcasonde	WS	-	-	-	-	-	64	-	-
1976-H1828	2443128.35	1976 Dec 15 2030:00	Rocketsonde	-	-	Arcasonde	PF	-	-	-	-	-	61	-	-
1976-H1829	2443128.35	1976 Dec 16 0020:00	Rocketsonde	-	-	Arcasonde	PF	-	-	-	-	-	73	-	-
1976-H1830	2443129.02	1976 Dec 16 1238:59	Rocketsonde	-	-	Arcasonde	KHR	-	-	-	-	-	65	-	-
1976-H1831	2443129.04	1976 Dec 16 1259:59	Rocketsonde	-	-	Arcasonde	KHR	-	-	-	-	-	65	-	-
1976-H1832	2443129.08	1976 Dec 16 1400:00	Rocketsonde	-	-	Arcasonde	WS	-	-	-	-	-	67	-	-
1976-H1833	2443129.19	1976 Dec 16 1630:00	Rocketsonde	-	-	Arcasonde	CC	-	-	LC43	-	-	98	-	-
1976-H1834	2443129.22	1976 Dec 16 1710:00	Rocketsonde	-	-	Arcasonde	CC	-	-	LC43	-	-	63	-	-
1976-H1835	2443129.22	1976 Dec 16 1715:00	Rocketsonde	-	-	Arcasonde	WS	-	-	-	-	-	68	-	-
1976-H1836	2443129.22	1976 Dec 16 2025:00	Rocketsonde	-	-	Arcasonde	CC	-	-	LC43	-	-	64	-	-
1976-H1837	2443129.39	1976 Dec 16 2121:00	Rocketsonde	-	-	Arcasonde	PF	-	-	-	-	-	60	-	-
1976-H1838	2443129.39	1976 Dec 16 2121:00	Rocketsonde	-	-	Arcasonde	KAU	-	-	-	-	-	60	-	-
1976-H1839	2443129.55	1976 Dec 17 0106:00	Rocketsonde	-	-	Arcasonde	SHER	-	-	-	-	-	50	-	-

Launch Mission

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Launch_Mission	FlightCode	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee_Km	Range_Km	Dest
1976-H1835	2443130-11	1976 Dec 17 1435:00	Rocketsonde	-	-	Arcasonde	-	-	-	CC	LC43	-	-	67	-	-
1976-H1836	2443130-12	1976 Dec 17 1455:00	Rocketsonde	-	-	Arcasonde	-	-	-	THU	-	-	-	68	-	-
1976-H1837	2443130-15	1976 Dec 17 1532:00	Rocketsonde	-	-	Arcasonde	-	-	-	WI	-	-	-	72	-	-
1976-H1839	2443130-19	1976 Dec 17 1630:00	Rocketsonde	-	-	Arcasonde	-	-	-	WS	-	-	-	65	-	-
1976-H1840	2443130-20	1976 Dec 17 1649:59	Rocketsonde	-	-	Arcasonde	-	-	-	SHER	-	-	-	64	-	-
1976-H1841	2443130-54	1976 Dec 18 0059:59	Rocketsonde	-	-	Arcasonde	-	-	-	SHER	-	-	-	55	-	-
1976-H1842	2443133-04	1976 Dec 20 1253:00	Rocketsonde	-	-	Arcasonde	-	-	-	ASC	-	-	-	61	-	-
1976-H1843	2443133-09	1976 Dec 20 1415:00	Rocketsonde	-	-	Arcasonde	-	-	-	THU	-	-	-	62	-	-
1976-H1844	2443133-10	1976 Dec 20 1420:00	Rocketsonde	-	-	Arcasonde	-	-	-	CC	LC43	-	-	67	-	-
1976-H1845	2443133-11	1976 Dec 20 1428:00	Rocketsonde	-	-	Arcasonde	-	-	-	CC	-	-	-	67	-	-
1976-H1847	2443133-19	1976 Dec 20 1634:59	Rocketsonde	-	-	Arcasonde	-	-	-	SHER	-	-	-	61	-	-
1976-H1848	2443133-19	1976 Dec 20 1638:59	Rocketsonde	-	-	Arcasonde	-	-	-	PRUH	-	-	-	61	-	-
1976-H1849	2443133-27	1976 Dec 20 1830:00	Rocketsonde	-	-	Arcasonde	-	-	-	WI	-	-	-	65	-	-
1976-H1850	2443133-27	1976 Dec 20 1830:00	Rocketsonde	-	-	Arcasonde	-	-	-	WS	-	-	-	60	-	-
1976-H1851	2443133-38	1976 Dec 20 2100:59	Rocketsonde	-	-	Arcasonde	-	-	-	PH	-	-	-	58	-	-
1976-H1852	2443133-42	1976 Dec 20 2159:59	Rocketsonde	-	-	Arcasonde	-	-	-	KAU	-	-	-	59	-	-
1976-H1853	2443133-46	1976 Dec 20 2327:59	Rocketsonde	-	-	Arcasonde	-	-	-	KAU	-	-	-	78	-	-
1976-H1855	2443134-21	1976 Dec 21 1703:59	Rocketsonde	-	-	Arcasonde	-	-	-	PH	-	-	-	60	-	-
1976-H1856	2443134-36	1976 Dec 21 2045:00	Rocketsonde	-	-	Arcasonde	-	-	-	KAU	-	-	-	63	-	-
1976-H1857	2443135-07	1976 Dec 22 1344:59	Rocketsonde	-	-	Arcasonde	-	-	-	ASC	-	-	-	63	-	-
1976-H1858	2443135-09	1976 Dec 22 1415:59	Rocketsonde	-	-	Arcasonde	-	-	-	CC	LC43	-	-	66	-	-
1976-H1859	2443135-13	1976 Dec 22 1508:00	Rocketsonde	-	-	Arcasonde	-	-	-	CC	-	-	-	57	-	-
1976-H1861	2443135-14	1976 Dec 22 1524:59	Rocketsonde	-	-	Arcasonde	-	-	-	THU	-	-	-	62	-	-
1976-H1862	2443135-17	1976 Dec 22 1603:59	Rocketsonde	-	-	Arcasonde	-	-	-	WI	-	-	-	68	-	-
1976-H1863	2443135-19	1976 Dec 22 1630:00	Rocketsonde	-	-	AN/DMG-9	-	-	-	WS	-	-	-	97	-	-
1976-H1864	2443135-19	1976 Dec 22 1657:59	Rocketsonde	-	-	Arcasonde	-	-	-	PRUH	-	-	-	68	-	-
1976-H1865	2443135-19	1976 Dec 22 1640:00	Rocketsonde	-	-	Arcasonde	-	-	-	WS	-	-	-	65	-	-
1976-H1866	2443135-22	1976 Dec 22 1720:00	Rocketsonde	-	-	Arcasonde	-	-	-	NS	-	-	-	63	-	-
1976-H1868	2443135-39	1976 Dec 22 2124:59	Rocketsonde	-	-	Arcasonde	-	-	-	SHER	-	-	-	63	-	-
1976-H1869	2443135-44	1976 Dec 22 2201:59	Rocketsonde	-	-	AN/DMG-9	-	-	-	KAU	-	-	-	61	-	-
1976-H1870	2443135-44	1976 Dec 22 2229:00	Rocketsonde	-	-	Arcasonde	-	-	-	PH	-	-	-	86	-	-
1976-H1871	2443135-55	1976 Dec 23 0114:59	Rocketsonde	-	-	Arcasonde	-	-	-	PH	-	-	-	72	-	-
1976-H1872	2443135-50	1976 Dec 23 1912:59	Rocketsonde	-	-	Arcasonde	-	-	-	KAU	-	-	-	80	-	-
1976-H1873	2443136-50	1976 Dec 24 0004:59	Rocketsonde	-	-	Arcasonde	-	-	-	KAU	-	-	-	76	-	-
1976-H1874	2443137-11	1976 Dec 24 1435:00	Rocketsonde	-	-	Arcasonde	-	-	-	PH	-	-	-	78	-	-
1976-H1875	2443137-24	1976 Dec 24 1745:59	Rocketsonde	-	-	Arcasonde	-	-	-	PH	-	-	-	70	-	-
1976-H1876	2443140-21	1976 Dec 27 1655:59	Rocketsonde	-	-	Arcasonde	-	-	-	THU	-	-	-	96	-	-
1976-H1877	2443140-25	1976 Dec 27 1800:00	Rocketsonde	-	-	Arcasonde	-	-	-	NS	-	-	-	65	-	-
1976-H1878	2443140-50	1976 Dec 27 2359:00	Rocketsonde	-	-	Arcasonde	-	-	-	NS	-	-	-	65	-	-
1976-H1879	2443141-15	1976 Dec 28 1501:59	Rocketsonde	-	-	Arcasonde	-	-	-	CC	LC43	-	-	76	-	-
1976-H1880	2443141-15	1976 Dec 28 1504:59	Rocketsonde	-	-	Arcasonde	-	-	-	THU	-	-	-	69	-	-
1976-H1881	2443142-10	1976 Dec 28 1430:00	Rocketsonde	-	-	Arcasonde	-	-	-	THU	-	-	-	69	-	-
1976-H1882	2443142-11	1976 Dec 28 1445:00	Rocketsonde	-	-	Arcasonde	-	-	-	ASC	-	-	-	98	-	-
1976-H1883	2443142-11	1976 Dec 28 1445:00	Rocketsonde	-	-	Arcasonde	-	-	-	ASC	-	-	-	98	-	-
1976-H1884	2443142-14	1976 Dec 28 1514:59	Rocketsonde	-	-	Arcasonde	-	-	-	CC	LC43	-	-	70	-	-
1976-H1885	2443142-14	1976 Dec 28 1524:59	Rocketsonde	-	-	Arcasonde	-	-	-	THU	-	-	-	70	-	-
1976-H1886	2443142-15	1976 Dec 28 1534:59	Rocketsonde	-	-	Arcasonde	-	-	-	THU	-	-	-	70	-	-
1976-H1887	2443142-15	1976 Dec 28 1534:59	Rocketsonde	-	-	Arcasonde	-	-	-	THU	-	-	-	70	-	-
1976-H1888	2443142-21	1976 Dec 29 1715:00	Rocketsonde	-	-	AN/DMG-9?	-	-	-	SHER	-	-	-	64	-	-
1976-H1889	2443142-21	1976 Dec 29 1715:00	Rocketsonde	-	-	AN/DMG-9?	-	-	-	NS	-	-	-	94	-	-
1976-H1890	2443142-26	1976 Dec 29 1800:00	Rocketsonde	-	-	AN/DMG-9	-	-	-	NS	-	-	-	88	-	-
1976-H1891	2443142-26	1976 Dec 29 1800:00	Rocketsonde	-	-	Arcasonde	-	-	-	NS	-	-	-	94	-	-
1976-H1892	2443142-54	1976 Dec 29 2154:59	Rocketsonde	-	-	Arcasonde	-	-	-	KAU	-	-	-	79	-	-
1976-H1893	2443142-54	1976 Dec 29 2154:59	Rocketsonde	-	-	Arcasonde	-	-	-	SHER	-	-	-	54	-	-
1976-H1894	2443143-02	1976 Dec 30 1231:00	Rocketsonde	-	-	Arcasonde	-	-	-	SHER	-	-	-	54	-	-
1976-H1895	2443143-02	1976 Dec 30 1231:00	Rocketsonde	-	-	Arcasonde	-	-	-	ASC	-	-	-	54	-	-
1976-H1896	2443143-10	1976 Dec 30 1631:59	Rocketsonde	-	-	Starvue, Dataonde	-	-	-	CELI	-	-	-	64	-	-
1976-H1897	2443143-10	1976 Dec 30 1631:59	Rocketsonde	-	-	Arcasonde	-	-	-	CC	LC43	-	-	70	-	-
1976-H1898	2443143-10	1976 Dec 30 2143:00	Rocketsonde	-	-	Arcasonde	-	-	-	KAU	-	-	-	72	-	-
1976-H1899	2443144-10	1976 Dec 31 1549:59	Rocketsonde	-	-	Arcasonde	-	-	-	THU	-	-	-	71	-	-
1976-H1900	2443144-10	1976 Dec 31 1549:59	Rocketsonde	-	-	Arcasonde	-	-	-	THU	-	-	-	73	-	-
1976-H1901	2443312-27	1977 Jun 17 1829:59	Rocketsonde	-	-	Arcasonde	-	-	-	PH	-	-	-	78	-	-
1976-H1902	2443312-47	1977 Jun 17 1829:59	Rocketsonde	-	-	Arcasonde	-	-	-	PH	-	-	-	78	-	-
1976-H1903	2443312-52	1977 Jun 18 0030:00	Rocketsonde	-	-	Arcasonde	-	-	-	KAU	-	-	-	59	-	-
1976-H1904	2443313-47	1977 Jun 18 2315:00	Rocketsonde	-	-	Arcasonde	-	-	-	SHER	-	-	-	79	-	-
1976-H1905	2443313-47	1977 Jun 18 2315:00	Rocketsonde	-	-	Arcasonde	-	-	-	KAU	-	-	-	78	-	-
1976-H1906	2443314-07	1977 Jun 19 2315:00	Rocketsonde	-	-	Arcasonde	-	-	-	KAU	-	-	-	67	-	-
1976-H1907	2443315-07	1977 Jun 20 1344:59	Rocketsonde	-	-	Arcasonde	-	-	-	ASC	-	-	-	74	-	-
1976-H1908	2443315-09	1977 Jun 20 1403:00	Rocketsonde	-	-	Arcasonde	-	-	-	ANT	-	-	-	74	-	-
1976-H1909	2443315-16	1977 Jun 20 1552:00	Rocketsonde	-	-	Arcasonde	-	-	-	THU	-	-	-	68	-	-
1976-H1910	2443315-16	1977 Jun 20 1623:59	Rocketsonde	-	-	Arcasonde	-	-	-	CC	LC43	-	-	69	-	-
1976-H1911	2443315-23	1977 Jun 20 1734:00	Rocketsonde	-	-	Arcasonde	-	-	-	PM	-	-	-	74	-	-
1976-H1912	2443315-48	1977 Jun 20 2335:00	Rocketsonde	-	-	Arcasonde	-	-	-	KAU	-	-	-	54	-	-
1976-H1913	2443315-50	1977 Jun 21 0004:59	Rocketsonde	-	-	Arcasonde	-	-	-	SHER	-	-	-	70	-	-
1976-H1914	2443315-99	1977 Jun 21 1141:00	Rocketsonde	-	-	Starvue, Dataonde	-	-	-	PF	-	-	-	67	-	-
1976-H1915	2443316-20	1977 Jun 21 1654:59	Rocketsonde	-	-	Arcasonde	-	-	-	NS	-	-	-	70	-	-
1976-H1916	2443316-47	1977 Jun 21 2319:00	Rocketsonde	-	-	Arcasonde	-	-	-	KAU	-	-	-	66	-	-
1976-H1917	2443317-06	1977 Jun 22 1329:00	Rocketsonde	-	-	Arcasonde	-	-	-	THU	-	-	-	69	-	-
1976-H1918	2443317-12	1977 Jun 22 1500:00	Rocketsonde	-	-	Arcasonde	-	-	-	THU	-	-	-	94	-	-
1976-H1919	2443317-15	1977 Jun 22 1531:00	Rocketsonde	-	-	AN/DMG-9?	-	-	-	CC	LC43	-	-	76	-	-
1976-H1920	2443317-17	1977 Jun 22 1609:59	Rocketsonde	-	-	Arcasonde	-	-	-	WI	-	-	-	57	-	-
1976-H1921	2443317-17	1977 Jun 22 1609:59	Rocketsonde	-	-	Arcasonde	-	-	-	ANT	-	-	-	68	-	-
1976-H1922	2443317-26	1977 Jun 22 1814:59	Rocketsonde	-	-	Arcasonde	-	-	-	CC	LC43	-	-	72	-	-
1976-H1923	2443317-35	1977 Jun 22 2025:00	Rocketsonde	-	-	Arcasonde	-	-	-	WS	-	-	-	70	-	-
1976-H1924	2443317-39	1977 Jun 22 2124:59	Rocketsonde	-	-	Starvue, Dataonde	-	-	-	PF	-	-	-	89	-	-
1976-H1925	2443317-39	1977 Jun 22 2127:59	Rocketsonde	-	-	Arcasonde	-	-	-	KAU	-	-	-	87	-	-
1976-H1926	2443317-41	1977 Jun 22 2156:00	Rocketsonde	-	-	Arcasonde	-	-	-	KAU	-	-	-	73	-	-
1976-H1927	2443317-42	1977 Jun 22 2200:59	Rocketsonde	-	-	Arcasonde	-	-	-	PH	-	-	-	73	-	-
1976-H1928	2443317-47	1977 Jun 22 2315:00	Rocketsonde	-	-	Arcasonde	-	-	-	KAU	-	-	-	77	-	-

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Mission	FlightCode	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee_Km	Range_Km	Dest
1977-H1062	2443318-01	1977 Jun 23 1209:00	Rocketsonde	-	-	Arcasonde	-	-	-	ASC	-	-	-	64	-	-
1977-H1063	2443318-13	1977 Jun 23 1501:59	Rocketsonde	-	-	Arcasonde	-	-	-	PRLH	-	-	-	70	-	-
1977-H1064	2443318-40	1977 Jun 23 2130:00	Rocketsonde	-	-	Arcasonde	-	-	-	KAU	-	-	-	56	-	-
1977-H1065	2443318-47	1977 Jun 23 2323:00	Rocketsonde	-	-	Arcasonde	-	-	-	CC	-	-	-	76	-	-
1977-H1066	2443319-10	1977 Jun 24 1423:00	Rocketsonde	-	-	Arcasonde	-	-	-	CC	LC43	-	-	68	-	-
1977-H1067	2443319-13	1977 Jun 24 1504:59	Rocketsonde	-	-	Arcasonde	-	-	-	THU	-	-	-	55	-	-
1977-H1068	2443319-14	1977 Jun 24 1514:59	Rocketsonde	-	-	Arcasonde	-	-	-	PRLH	-	-	-	70	-	-
1977-H1069	2443319-17	1977 Jun 24 1559:59	Rocketsonde	-	-	-	-	-	-	MIT	-	-	-	74	-	-
1977-H1070	2443319-26	1977 Jun 24 1708:00	Rocketsonde	-	-	-	-	-	-	WS	-	-	-	102	-	-
1977-H1071	2443319-34	1977 Jun 24 1814:59	Rocketsonde	-	-	Arcasonde	-	-	-	PH	-	-	-	68	-	-
1977-H1072	2443319-34	1977 Jun 24 2004:59	Rocketsonde	-	-	Starvue, Dataonde	-	-	-	PF	-	-	-	64	-	-
1977-H1073	2443320-48	1977 Jun 24 2326:00	Rocketsonde	-	-	Arcasonde	-	-	-	KRR	-	-	-	77	-	-
1977-H1074	2443320-47	1977 Jun 25 2319:00	Rocketsonde	-	-	Arcasonde	-	-	-	KRR	-	-	-	78	-	-
1977-H1075	2443321-47	1977 Jun 26 2322:00	Rocketsonde	-	-	Arcasonde	-	-	-	KRR	-	-	-	76	-	-
1977-H1076	2443322-03	1977 Jun 27 1245:59	Rocketsonde	-	-	Arcasonde	-	-	-	CC	LC43	-	-	66	-	-
1977-H1077	2443322-03	1977 Jun 27 1247:59	Rocketsonde	-	-	Arcasonde	-	-	-	ASC	-	-	-	64	-	-
1977-H1078	2443322-09	1977 Jun 27 1403:00	Rocketsonde	-	-	-	-	-	-	MIT	-	-	-	66	-	-
1977-H1079	2443322-13	1977 Jun 27 1510:00	Rocketsonde	-	-	Arcasonde	-	-	-	PRLH	-	-	-	61	-	-
1977-H1080	2443322-14	1977 Jun 27 1524:59	Rocketsonde	-	-	Arcasonde	-	-	-	PH	-	-	-	73	-	-
1977-H1081	2443322-27	1977 Jun 27 1824:59	Rocketsonde	-	-	Arcasonde	-	-	-	WS	-	-	-	69	-	-
1977-H1082	2443322-27	1977 Jun 27 1853:59	Rocketsonde	-	-	Arcasonde	-	-	-	THU	-	-	-	69	-	-
1977-H1083	2443322-36	1977 Jun 27 2030:00	Rocketsonde	-	-	Starvue, Dataonde	-	-	-	PF	-	-	-	70	-	-
1977-H1084	2443322-49	1977 Jun 27 2344:00	Rocketsonde	-	-	Arcasonde	-	-	-	KRR	-	-	-	77	-	-
1977-H1085	2443322-52	1977 Jun 28 0030:00	Rocketsonde	-	-	Arcasonde	-	-	-	SHEH	-	-	-	51	-	-
1977-H1086	2443322-52	1977 Jun 28 0030:00	Rocketsonde	-	-	Arcasonde	-	-	-	PRLH	-	-	-	64	-	-
1977-H1087	2443323-50	1977 Jun 28 2359:00	Rocketsonde	-	-	Arcasonde	-	-	-	KRR	-	-	-	78	-	-
1977-H1088	2443323-50	1977 Jun 29 0000:59	Rocketsonde	-	-	Arcasonde	-	-	-	SHEH	-	-	-	52	-	-
1977-H1089	2443324-07	1977 Jun 29 1344:59	Rocketsonde	-	-	Arcasonde	-	-	-	ASC	-	-	-	63	-	-
1977-H1091	2443324-10	1977 Jun 29 1426:00	Rocketsonde	-	-	Arcasonde	-	-	-	WI	-	-	-	74	-	-
1977-H1092	2443324-11	1977 Jun 29 1445:00	Rocketsonde	-	-	Arcasonde	-	-	-	CC	LC43	-	-	63	-	-
1977-H1094	2443324-12	1977 Jun 29 1453:00	Rocketsonde	-	-	-	-	-	-	MIT	-	-	-	54	-	-
1977-H1096	2443324-14	1977 Jun 29 1514:59	Rocketsonde	-	-	Arcasonde	-	-	-	THU	-	-	-	69	-	-
1977-H1097	2443324-16	1977 Jun 29 1549:59	Rocketsonde	-	-	AN/DMP-9	-	-	-	PRLH	-	-	-	52	-	-
1977-H1098	2443324-17	1977 Jun 29 1659:59	Rocketsonde	-	-	AN/DMP-9	-	-	-	CC	LC43	-	-	69	-	-
1977-H1099	2443324-25	1977 Jun 29 1800:00	Rocketsonde	-	-	Arcasonde	-	-	-	US	-	-	-	104	-	-
1977-H120	2443324-26	1977 Jun 29 1801:00	Rocketsonde	-	-	Arcasonde	-	-	-	PH	-	-	-	46	-	-
1977-H121	2443324-26	1977 Jun 29 1805:59	Rocketsonde	-	-	Arcasonde	-	-	-	PH	-	-	-	97	-	-
1977-H122	2443324-31	1977 Jun 29 1822:59	Rocketsonde	-	-	Arcasonde	-	-	-	KRR	-	-	-	82	-	-
1977-H123	2443324-31	1977 Jun 29 2315:59	Rocketsonde	-	-	Arcasonde	-	-	-	SHEH	-	-	-	54	-	-
1977-H124	2443324-47	1977 Jun 30 0000:59	Rocketsonde	-	-	Arcasonde	-	-	-	ASC	-	-	-	65	-	-
1977-H125	2443324-50	1977 Jun 30 0000:59	Rocketsonde	-	-	Arcasonde	-	-	-	CC	LC43	-	-	64	-	-
1977-H126	2443325-01	1977 Jun 30 1221:00	Rocketsonde	-	-	Arcasonde	-	-	-	PRLH	-	-	-	70	-	-
1977-H127	2443325-17	1977 Jun 30 1826:00	Rocketsonde	-	-	Arcasonde	-	-	-	ASC	-	-	-	64	-	-
1977-H128	2443325-17	1977 Jun 30 1826:00	Rocketsonde	-	-	Arcasonde	-	-	-	CC	LC43	-	-	64	-	-
1977-H129	2443325-35	1977 Jun 30 2359:00	Rocketsonde	-	-	Starvue, Dataonde	-	-	-	KRR	-	-	-	49	-	-
1977-H130	2443325-50	1977 Jun 30 2359:00	Rocketsonde	-	-	Arcasonde	-	-	-	KRR	-	-	-	63	-	-
1977-H131	2443326-50	1977 Jul 1 0006:00	Rocketsonde	-	-	Arcasonde	-	-	-	SHEH	-	-	-	49	-	-
1977-H132	2443326-50	1977 Jul 1 1706:00	Rocketsonde	-	-	Arcasonde	-	-	-	SHEH	-	-	-	49	-	-
1977-H133	2443326-21	1977 Jul 1 1706:00	Rocketsonde	-	-	Arcasonde	-	-	-	THU	-	-	-	61	-	-
1977-H134	2443326-25	1977 Jul 1 1825:00	Rocketsonde	-	-	Arcasonde	-	-	-	WS	-	-	-	70	-	-
1977-H135	2443326-25	1977 Jul 1 1825:00	Rocketsonde	-	-	Arcasonde	-	-	-	WS	-	-	-	70	-	-
1977-H136	2443326-47	1977 Jul 1 2315:00	Rocketsonde	-	-	Arcasonde	-	-	-	KRR	-	-	-	76	-	-
1977-H137	2443327-47	1977 Jul 2 2315:00	Rocketsonde	-	-	Arcasonde	-	-	-	KRR	-	-	-	77	-	-
1977-H138	2443328-47	1977 Jul 2 2315:00	Rocketsonde	-	-	Arcasonde	-	-	-	KRR	-	-	-	76	-	-
1977-H139	2443329-13	1977 Jul 3 1507:00	Rocketsonde	-	-	Arcasonde	-	-	-	THU	-	-	-	68	-	-
1977-H140	2443329-13	1977 Jul 3 1507:00	Rocketsonde	-	-	Arcasonde	-	-	-	THU	-	-	-	68	-	-
1977-H141	2443329-13	1977 Jul 3 1507:00	Rocketsonde	-	-	Arcasonde	-	-	-	KRR	-	-	-	79	-	-
1977-H142	2443329-13	1977 Jul 3 1507:00	Rocketsonde	-	-	Arcasonde	-	-	-	KRR	-	-	-	79	-	-
1977-H143	2443329-13	1977 Jul 3 1507:00	Rocketsonde	-	-	Arcasonde	-	-	-	KRR	-	-	-	79	-	-
1977-H144	2443329-13	1977 Jul 3 1507:00	Rocketsonde	-	-	Arcasonde	-	-	-	SHEH	-	-	-	64	-	-
1977-H145	2443330-21	1977 Jul 3 1700:00	Rocketsonde	-	-	Arcasonde	-	-	-	SHEH	-	-	-	64	-	-
1977-H146	2443330-21	1977 Jul 3 1700:00	Rocketsonde	-	-	Arcasonde	-	-	-	PRLH	-	-	-	70	-	-
1977-H147	2443330-25	1977 Jul 3 1800:00	Rocketsonde	-	-	Arcasonde	-	-	-	WS	-	-	-	69	-	-
1977-H148	2443330-25	1977 Jul 3 1800:00	Rocketsonde	-	-	Arcasonde	-	-	-	WS	-	-	-	69	-	-
1977-H149	2443330-38	1977 Jul 3 2137:59	Rocketsonde	-	-	Arcasonde	-	-	-	KAU	-	-	-	58	-	-
1977-H150	2443330-38	1977 Jul 3 2137:59	Rocketsonde	-	-	Arcasonde	-	-	-	KAU	-	-	-	58	-	-
1977-H151	2443330-48	1977 Jul 3 2329:00	Rocketsonde	-	-	Arcasonde	-	-	-	KRR	-	-	-	79	-	-
1977-H152	2443330-50	1977 Jul 3 6 0000:59	Rocketsonde	-	-	Arcasonde	-	-	-	SHEH	-	-	-	54	-	-
1977-H153	2443331-11	1977 Jul 3 1440:00	Rocketsonde	-	-	Arcasonde	-	-	-	THU	-	-	-	70	-	-
1977-H154	2443331-11	1977 Jul 3 1440:00	Rocketsonde	-	-	Arcasonde	-	-	-	THU	-	-	-	70	-	-
1977-H155	2443331-12	1977 Jul 3 1445:00	Rocketsonde	-	-	Arcasonde	-	-	-	SHEH	-	-	-	60	-	-
1977-H156	2443331-13	1977 Jul 3 1456:00	Rocketsonde	-	-	Arcasonde	-	-	-	VI	-	-	-	61	-	-
1977-H157	2443331-13	1977 Jul 3 1507:00	Rocketsonde	-	-	Arcasonde	-	-	-	PRLH	-	-	-	70	-	-
1977-H158	2443331-25	1977 Jul 3 1800:00	Rocketsonde	-	-	AN/DMP-9	-	-	-	WS	-	-	-	98	-	-
1977-H159	2443331-26	1977 Jul 3 1810:00	Super Lock	-	-	-	-	-	-	WS	-	-	-	72	-	-
1977-H160	2443331-33	1977 Jul 3 1954:59	Rocketsonde	-	-	Starvue, Dataonde	-	-	-	PF	-	-	-	60	-	-
1977-H161	2443331-38	1977 Jul 3 6 2106:00	Rocketsonde	-	-	AN/DMP-9	-	-	-	PF	-	-	-	87	-	-
1977-H162	2443331-47	1977 Jul 3 6 2131:00	Rocketsonde	-	-	Arcasonde	-	-	-	PM	-	-	-	73	-	-
1977-H163	2443331-47	1977 Jul 3 6 2315:00	Rocketsonde	-	-	Arcasonde	-	-	-	PM	-	-	-	73	-	-
1977-H164	2443331-47	1977 Jul 3 6 2315:00	Rocketsonde	-	-	Arcasonde	-	-	-	KRR	-	-	-	81	-	-
1977-H165	2443331-50	1977 Jul 3 7 0000:59	Rocketsonde	-	-	Starvue, Dataonde	-	-	-	SHEH	-	-	-	51	-	-
1977-H166	2443332-36	1977 Jul 3 7 2035:00	Rocketsonde	-	-	Arcasonde	-	-	-	PF	-	-	-	64	-	-
1977-H167	2443332-47	1977 Jul 3 7 2318:00	Rocketsonde	-	-	Arcasonde	-	-	-	KRR	-	-	-	78	-	-
1977-H168	2443333-08	1977 Jul 3 8 0000:59	Rocketsonde	-	-	Arcasonde	-	-	-	SHEH	-	-	-	53	-	-
1977-H169	2443333-14	1977 Jul 3 8 1354:59	Rocketsonde	-	-	Arcasonde	-	-	-	SHEH	-	-	-	65	-	-
1977-H170	2443333-14	1977 Jul 3 8 1524:59	Rocketsonde	-	-	Arcasonde	-	-	-	THU	-	-	-	67	-	-
1977-H171	2443333-14	1977 Jul 3 8 1524:59	Rocketsonde	-	-	Arcasonde	-	-	-	WS	-	-	-	69	-	-
1977-H172	2443333-24	1977 Jul 3 8 1745:00	Rocketsonde	-	-	Arcasonde	-	-	-	WS	-	-	-	69	-	-
1977-H173	2443333-36	1977 Jul 3 8 2040:00	Rocketsonde	-	-	Arcasonde	-	-	-	KAU	-	-	-	49	-	-
1977-H174	2443333-49	1977 Jul 3 8 2345:00	Rocketsonde	-	-	Arcasonde	-	-	-	KRR	-	-	-	77	-	-
1977-H175	2443333-50	1977 Jul 3 9 0000:59	Rocketsonde	-	-	Arcasonde	-	-	-	KRR	-	-	-	52	-	-
197																



Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Launch_Mission	FlightCode	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee_Km	Range_Km	Dest
1977-H1147	2443336-47	1977 Jul 11 23:15:00	Rocketsonde	-	-	Arcasonde	-	-	-	KRR	-	-	-	78	-	-
1977-H1148	2443337-10	1977 Jul 12 14:30:00	Rocketsonde	-	-	Arcasonde	-	-	-	WI	-	-	-	74	-	-
1977-H1149	2443337-23	1977 Jul 12 17:28:59	Rocketsonde	-	-	Arcasonde	-	-	-	PH	-	-	-	73	-	-
1977-H1150	2443337-38	1977 Jul 12 21:00:00	Rocketsonde	-	-	Starute, Dataasonde	-	-	-	PF	-	-	-	65	-	-
1977-H1151	2443337-47	1977 Jul 12 23:15:00	Rocketsonde	-	-	Arcasonde	-	-	-	KRR	-	-	-	78	-	-
1977-H1152	2443338-11	1977 Jul 13 14:32:00	Rocketsonde	-	-	Arcasonde	-	-	-	WI	-	-	-	77	-	-
1977-H1153	2443338-13	1977 Jul 13 15:01:00	Rocketsonde	-	-	Arcasonde	-	-	-	THU	-	-	-	70	-	-
1977-H1154	2443338-26	1977 Jul 13 18:01:00	Super_Lok1	-	-	-	-	-	-	WS	-	-	-	72	-	-
1977-H1155	2443338-26	1977 Jul 13 18:01:00	Rocketsonde	-	-	Arcasonde	-	-	-	KAU	-	-	-	78	-	-
1977-H1156	2443338-36	1977 Jul 13 20:36:00	Rocketsonde	-	-	Arcasonde	-	-	-	KAU	-	-	-	72	-	-
1977-H1157	2443338-37	1977 Jul 13 20:58:00	Rocketsonde	-	-	Arcasonde	-	-	-	KRR	-	-	-	72	-	-
1977-H1158	2443338-47	1977 Jul 13 21:07:00	Rocketsonde	-	-	Arcasonde	-	-	-	PF	-	-	-	68	-	-
1977-H1159	2443339-12	1977 Jul 13 23:21:00	Rocketsonde	-	-	Starute, Dataasonde	-	-	-	KRR	-	-	-	70	-	-
1977-H1160	2443339-12	1977 Jul 14 14:48:59	Rocketsonde	-	-	Arcasonde	-	-	-	WI	-	-	-	70	-	-
1977-H1161	2443339-15	1977 Jul 14 15:50:00	Rocketsonde	-	-	Arcasonde	-	-	-	PRUH	-	-	-	70	-	-
1977-H1162	2443339-38	1977 Jul 14 21:00:00	Rocketsonde	-	-	Starute, Dataasonde	-	-	-	KRR	-	-	-	66	-	-
1977-H1163	2443339-47	1977 Jul 14 23:15:00	Rocketsonde	-	-	Arcasonde	-	-	-	KRR	-	-	-	81	-	-
1977-H1164	2443339-50	1977 Jul 15 00:00:59	Rocketsonde	-	-	Arcasonde	-	-	-	SHER	-	-	-	52	-	-
1977-H1165	2443340-10	1977 Jul 15 14:30:00	Rocketsonde	-	-	Arcasonde	-	-	-	WI	-	-	-	72	-	-
1977-H1166	2443340-14	1977 Jul 15 15:21:00	Rocketsonde	-	-	Arcasonde	-	-	-	THU	-	-	-	64	-	-
1977-H1167	2443340-25	1977 Jul 15 18:04:59	Rocketsonde	-	-	Arcasonde	-	-	-	WS	-	-	-	67	-	-
1977-H1168	2443340-27	1977 Jul 15 18:53:59	Rocketsonde	-	-	Arcasonde	-	-	-	PRUH	-	-	-	66	-	-
1977-H1169	2443340-40	1977 Jul 15 21:30:00	Rocketsonde	-	-	Starute, Dataasonde	-	-	-	PF	-	-	-	66	-	-
1977-H1170	2443340-45	1977 Jul 15 22:47:59	Rocketsonde	-	-	Arcasonde	-	-	-	KAU	-	-	-	60	-	-
1977-H1171	2443341-10	1977 Jul 16 14:20:00	Rocketsonde	-	-	Arcasonde	-	-	-	KRR	-	-	-	79	-	-
1977-H1172	2443341-27	1977 Jul 16 18:00:00	Rocketsonde	-	-	Arcasonde	-	-	-	SHER	-	-	-	71	-	-
1977-H1173	2443341-36	1977 Jul 16 21:00:00	Rocketsonde	-	-	Starute, Dataasonde	-	-	-	PF	-	-	-	62	-	-
1977-H1174	2443341-47	1977 Jul 16 23:15:00	Rocketsonde	-	-	Arcasonde	-	-	-	KRR	-	-	-	90	-	-
1977-H1175	2443342-11	1977 Jul 17 14:41:00	Rocketsonde	-	-	Arcasonde	-	-	-	WI	-	-	-	73	-	-
1977-H1176	2443342-28	1977 Jul 17 18:59:59	Rocketsonde	-	-	Arcasonde	-	-	-	SHER	-	-	-	60	-	-
1977-H1177	2443342-36	1977 Jul 17 21:00:00	Rocketsonde	-	-	Starute, Dataasonde	-	-	-	PF	-	-	-	56	-	-
1977-H1178	2443342-47	1977 Jul 17 23:15:00	Rocketsonde	-	-	Arcasonde	-	-	-	KRR	-	-	-	78	-	-
1977-H1179	2443343-11	1977 Jul 18 14:52:00	Rocketsonde	-	-	Arcasonde	-	-	-	WI	-	-	-	69	-	-
1977-H1180	2443343-12	1977 Jul 18 15:00:00	Rocketsonde	-	-	Arcasonde	-	-	-	THU	-	-	-	69	-	-
1977-H1181	2443343-29	1977 Jul 18 18:00:00	Rocketsonde	-	-	Arcasonde	-	-	-	PRUH	-	-	-	66	-	-
1977-H1182	2443343-29	1977 Jul 18 18:59:59	Rocketsonde	-	-	Arcasonde	-	-	-	WS	-	-	-	66	-	-
1977-H1183	2443343-30	1977 Jul 18 19:11:59	Rocketsonde	-	-	Arcasonde	-	-	-	PH	-	-	-	63	-	-
1977-H1184	2443343-30	1977 Jul 18 19:14:59	Rocketsonde	-	-	Arcasonde	-	-	-	SHER	-	-	-	64	-	-
1977-H1185	2443343-38	1977 Jul 18 21:00:00	Rocketsonde	-	-	Arcasonde	-	-	-	KRR	-	-	-	58	-	-
1977-H1186	2443343-38	1977 Jul 18 21:00:00	Rocketsonde	-	-	Starute, Dataasonde	-	-	-	KAU	-	-	-	59	-	-
1977-H1187	2443343-46	1977 Jul 18 22:27:59	Rocketsonde	-	-	Arcasonde	-	-	-	PF	-	-	-	79	-	-
1977-H1188	2443344-14	1977 Jul 19 13:44:59	Rocketsonde	-	-	Arcasonde	-	-	-	KRR	-	-	-	74	-	-
1977-H1189	2443344-14	1977 Jul 19 13:44:59	Rocketsonde	-	-	Arcasonde	-	-	-	WI	-	-	-	74	-	-
1977-H1190	2443344-27	1977 Jul 19 18:56:00	Rocketsonde	-	-	Arcasonde	-	-	-	PRUH	-	-	-	73	-	-
1977-H1191	2443344-29	1977 Jul 19 18:59:59	Rocketsonde	-	-	Arcasonde	-	-	-	SHER	-	-	-	63	-	-
1977-H1192	2443344-42	1977 Jul 19 20:24:59	Rocketsonde	-	-	Starute, Dataasonde	-	-	-	PF	-	-	-	78	-	-
1977-H1193	2443344-42	1977 Jul 19 20:24:59	Rocketsonde	-	-	Arcasonde	-	-	-	KRR	-	-	-	68	-	-
1977-H1194	2443345-14	1977 Jul 20 12:27:59	Rocketsonde	-	-	Arcasonde	-	-	-	THU	-	-	-	68	-	-
1977-H1195	2443345-23	1977 Jul 20 17:41:59	Rocketsonde	-	-	Arcasonde	-	-	-	WS	-	-	-	75	-	-
1977-H1196	2443345-25	1977 Jul 20 19:00:00	Rocketsonde	-	-	Arcasonde	-	-	-	WI	-	-	-	70	-	-
1977-H1197	2443345-25	1977 Jul 20 19:06:00	Rocketsonde	-	-	Arcasonde	-	-	-	PRUH	-	-	-	67	-	-
1977-H1198	2443345-26	1977 Jul 20 19:20:00	Rocketsonde	-	-	Arcasonde	-	-	-	WS	-	-	-	72	-	-
1977-H1199	2443345-26	1977 Jul 20 19:20:00	Rocketsonde	-	-	Arcasonde	-	-	-	WS	-	-	-	72	-	-
1977-H1200	2443345-27	1977 Jul 20 19:20:00	Super_Lok1	-	-	-	-	-	-	SHER	-	-	-	66	-	-
1977-H1201	2443345-28	1977 Jul 20 19:49:59	Rocketsonde	-	-	Arcasonde	-	-	-	PF	-	-	-	72	-	-
1977-H1202	2443345-38	1977 Jul 20 21:00:00	Rocketsonde	-	-	Starute, Dataasonde	-	-	-	KRR	-	-	-	74	-	-
1977-H1203	2443345-48	1977 Jul 20 22:29:00	Rocketsonde	-	-	Arcasonde	-	-	-	KRR	-	-	-	74	-	-
1977-H1204	2443346-50	1977 Jul 21 00:20:59	Rocketsonde	-	-	Arcasonde	-	-	-	SHER	-	-	-	52	-	-
1977-H1210	2443346-50	1977 Jul 21 03:14:59	Rocketsonde	-	-	Arcasonde	-	-	-	WI	-	-	-	74	-	-
1977-H1211	2443346-25	1977 Jul 21 17:57:00	Rocketsonde	-	-	Arcasonde	-	-	-	PM	-	-	-	73	-	-
1977-H1212	2443346-25	1977 Jul 21 17:57:00	Rocketsonde	-	-	Arcasonde	-	-	-	WS	-	-	-	69	-	-
1977-H1213	2443346-25	1977 Jul 21 18:01:59	Rocketsonde	-	-	Arcasonde	-	-	-	WS	-	-	-	65	-	-
1977-H1214	2443346-26	1977 Jul 21 18:14:59	Rocketsonde	-	-	Arcasonde	-	-	-	SHER	-	-	-	65	-	-
1977-H1215	2443346-38	1977 Jul 21 21:00:00	Rocketsonde	-	-	Starute, Dataasonde	-	-	-	PF	-	-	-	76	-	-
1977-H1216	2443346-47	1977 Jul 21 23:15:00	Rocketsonde	-	-	Arcasonde	-	-	-	KRR	-	-	-	70	-	-
1977-H1219	2443347-15	1977 Jul 22 16:43:00	Rocketsonde	-	-	Arcasonde	-	-	-	THU	-	-	-	70	-	-
1977-H1222	2443347-15	1977 Jul 22 18:19:59	Rocketsonde	-	-	Arcasonde	-	-	-	PM	-	-	-	70	-	-
1977-H1224	2443347-25	1977 Jul 22 18:01:59	Rocketsonde	-	-	Arcasonde	-	-	-	WI	-	-	-	76	-	-
1977-H1226	2443347-29	1977 Jul 22 18:59:59	Rocketsonde	-	-	Arcasonde	-	-	-	SHER	-	-	-	69	-	-
1977-H1227	2443347-38	1977 Jul 22 21:00:00	Rocketsonde	-	-	Arcasonde	-	-	-	PF	-	-	-	63	-	-
1977-H1228	2443347-41	1977 Jul 22 21:30:00	Rocketsonde	-	-	Starute, Dataasonde	-	-	-	PF	-	-	-	87	-	-
1977-H1229	2443347-48	1977 Jul 22 21:53:00	Rocketsonde	-	-	Arcasonde	-	-	-	KAU	-	-	-	58	-	-
1977-H1230	2443348-10	1977 Jul 23 00:00:59	Rocketsonde	-	-	Arcasonde	-	-	-	KRR	-	-	-	53	-	-
1977-H1233	2443348-10	1977 Jul 23 14:24:00	Rocketsonde	-	-	Arcasonde	-	-	-	WI	-	-	-	68	-	-
1977-H1234	2443348-29	1977 Jul 23 21:30:00	Rocketsonde	-	-	Arcasonde	-	-	-	PF	-	-	-	67	-	-
1977-H1235	2443348-40	1977 Jul 23 23:59:00	Rocketsonde	-	-	Starute, Dataasonde	-	-	-	KRR	-	-	-	61	-	-
1977-H1236	2443348-40	1977 Jul 23 23:59:00	Rocketsonde	-	-	Arcasonde	-	-	-	WI	-	-	-	59	-	-
1977-H1237	2443349-09	1977 Jul 24 14:15:59	Rocketsonde	-	-	Arcasonde	-	-	-	KRR	-	-	-	78	-	-
1977-H1238	2443349-34	1977 Jul 24 20:10:00	Rocketsonde	-	-	Arcasonde	-	-	-	WI	-	-	-	69	-	-
1977-H1239	2443349-42	1977 Jul 24 21:59:59	Rocketsonde	-	-	Starute, Dataasonde	-	-	-	SHER	-	-	-	63	-	-
1977-Y273	2443349-47	1977 Jul 24 23:15:00	Rocketsonde	-	-	Arcasonde	-	-	-	PF	-	-	-	82	-	-
1977-H1240	2443350-11	1977 Jul 25 14:40:00	Rocketsonde	-	-	Arcasonde	-	-	-	KRR	-	-	-	66	-	-
1977-H1241	2443350-11	1977 Jul 25 14:40:00	Rocketsonde	-	-	Arcasonde	-	-	-	THU	-	-	-	69	-	-
1977-H1242	2443350-25	1977 Jul 25 17:55:00	Rocketsonde	-	-	Arcasonde	-	-	-	WI	-	-	-	73	-	-
1977-H1243	2443350-27	1977 Jul 25 18:30:00	Rocketsonde	-	-	Arcasonde	-	-	-	PM	-	-	-	62	-	-
1977-H1244	2443350-38	1977 Jul 25 21:00:00	Rocketsonde	-	-	Starute, Dataasonde	-	-	-	SHER	-	-	-	64	-	-

Launch_Tag	Launch_ID	Variant	Flight_ID	Flight	Mission	FlightCode	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee_Km	Range_Km	Dest
1977-1274	2443350-47	-	-	Arcasonde	-	-	-	KRR	-	-	-	80	-	-
1977-1275	2443351-10	-	-	Rocketsonde	-	-	-	WI	-	-	-	69	-	-
1977-1276	2443351-24	-	-	Rocketsonde	-	-	-	WS	-	-	-	65	-	-
1977-1277	2443351-27	-	-	Rocketsonde	-	-	-	PH	-	-	-	64	-	-
1977-1278	2443351-27	-	-	Rocketsonde	-	-	-	SHR	-	-	-	62	-	-
1977-1279	2443351-38	-	-	Rocketsonde	-	-	-	PF	-	-	-	62	-	-
1977-1280	2443351-50	-	-	Rocketsonde	-	-	-	SHR	-	-	-	53	-	-
1977-1281	2443352-10	-	-	Rocketsonde	-	-	-	WI	-	-	-	67	-	-
1977-1282	2443352-10	-	-	Rocketsonde	-	-	-	THU	-	-	-	70	-	-
1977-1283	2443352-26	-	-	Rocketsonde	-	-	-	WS	-	-	-	97	-	-
1977-1284	2443352-27	-	-	Rocketsonde	-	-	-	SHR	-	-	-	66	-	-
1977-1285	2443352-27	-	-	Super Lok1	-	-	-	WS	-	-	-	72	-	-
1977-1286	2443352-35	-	-	Rocketsonde	-	-	-	PH	-	-	-	70	-	-
1977-1287	2443352-38	-	-	Rocketsonde	-	-	-	PF	-	-	-	76	-	-
1977-1288	2443352-39	-	-	Rocketsonde	-	-	-	KAU	-	-	-	64	-	-
1977-1289	2443352-41	-	-	Rocketsonde	-	-	-	KRR	-	-	-	68	-	-
1977-1290	2443352-47	-	-	Rocketsonde	-	-	-	SHR	-	-	-	82	-	-
1977-1291	2443352-50	-	-	Rocketsonde	-	-	-	SHR	-	-	-	52	-	-
1977-1292	2443352-50	-	-	Rocketsonde	-	-	-	PH	-	-	-	68	-	-
1977-1293	2443352-51	-	-	Rocketsonde	-	-	-	SHR	-	-	-	72	-	-
1977-1294	2443352-51	-	-	Rocketsonde	-	-	-	PH	-	-	-	61	-	-
1977-1295	2443352-56	-	-	Rocketsonde	-	-	-	PH	-	-	-	57	-	-
1977-1296	2443352-56	-	-	Rocketsonde	-	-	-	PH	-	-	-	63	-	-
1977-1297	2443352-56	-	-	Rocketsonde	-	-	-	KRR	-	-	-	82	-	-
1977-1298	2443352-56	-	-	Rocketsonde	-	-	-	KRR	-	-	-	69	-	-
1977-1299	2443352-56	-	-	Rocketsonde	-	-	-	WI	-	-	-	66	-	-
1977-1300	2443352-56	-	-	Rocketsonde	-	-	-	THU	-	-	-	71	-	-
1977-1301	2443352-56	-	-	Rocketsonde	-	-	-	PH	-	-	-	61	-	-
1977-1302	2443352-56	-	-	Rocketsonde	-	-	-	PH	-	-	-	57	-	-
1977-1303	2443352-56	-	-	Rocketsonde	-	-	-	KAU	-	-	-	66	-	-
1977-1304	2443352-56	-	-	Rocketsonde	-	-	-	KRR	-	-	-	65	-	-
1977-1305	2443352-56	-	-	Rocketsonde	-	-	-	SHR	-	-	-	79	-	-
1977-1306	2443352-56	-	-	Rocketsonde	-	-	-	WI	-	-	-	68	-	-
1977-1307	2443352-56	-	-	Rocketsonde	-	-	-	THU	-	-	-	65	-	-
1977-1308	2443352-56	-	-	Rocketsonde	-	-	-	SHR	-	-	-	65	-	-
1977-1309	2443352-56	-	-	Rocketsonde	-	-	-	PH	-	-	-	71	-	-
1977-1310	2443352-56	-	-	Rocketsonde	-	-	-	PH	-	-	-	65	-	-
1977-1311	2443352-56	-	-	Rocketsonde	-	-	-	PH	-	-	-	79	-	-
1977-1312	2443352-56	-	-	Rocketsonde	-	-	-	KRR	-	-	-	52	-	-
1977-1313	2443352-56	-	-	Rocketsonde	-	-	-	SHR	-	-	-	65	-	-
1977-1314	2443352-56	-	-	Rocketsonde	-	-	-	WI	-	-	-	65	-	-
1977-1315	2443352-56	-	-	Rocketsonde	-	-	-	WI	-	-	-	99	-	-
1977-1316	2443352-56	-	-	Rocketsonde	-	-	-	SHR	-	-	-	63	-	-
1977-1317	2443352-56	-	-	Rocketsonde	-	-	-	SHR	-	-	-	72	-	-
1977-1318	2443352-56	-	-	Rocketsonde	-	-	-	PH	-	-	-	68	-	-
1977-1319	2443352-56	-	-	Rocketsonde	-	-	-	PH	-	-	-	69	-	-
1977-1320	2443352-56	-	-	Rocketsonde	-	-	-	KAU	-	-	-	85	-	-
1977-1321	2443352-56	-	-	Rocketsonde	-	-	-	KRR	-	-	-	75	-	-
1977-1322	2443352-56	-	-	Rocketsonde	-	-	-	KRR	-	-	-	50	-	-
1977-1323	2443352-56	-	-	Rocketsonde	-	-	-	SHR	-	-	-	68	-	-
1977-1324	2443352-56	-	-	Rocketsonde	-	-	-	SHR	-	-	-	58	-	-
1977-1325	2443352-56	-	-	Rocketsonde	-	-	-	PH	-	-	-	73	-	-
1977-1326	2443352-56	-	-	Rocketsonde	-	-	-	KRR	-	-	-	70	-	-
1977-1327	2443352-56	-	-	Rocketsonde	-	-	-	KRR	-	-	-	68	-	-
1977-1328	2443352-56	-	-	Rocketsonde	-	-	-	THU	-	-	-	69	-	-
1977-1329	2443352-56	-	-	Rocketsonde	-	-	-	THU	-	-	-	56	-	-
1977-1330	2443352-56	-	-	Rocketsonde	-	-	-	PH	-	-	-	62	-	-
1977-1331	2443352-56	-	-	Rocketsonde	-	-	-	WS	-	-	-	69	-	-
1977-1332	2443352-56	-	-	Rocketsonde	-	-	-	KRR	-	-	-	57	-	-
1977-1333	2443352-56	-	-	Rocketsonde	-	-	-	KRR	-	-	-	70	-	-
1977-1334	2443352-56	-	-	Rocketsonde	-	-	-	KRR	-	-	-	66	-	-
1977-1335	2443352-56	-	-	Rocketsonde	-	-	-	SHR	-	-	-	64	-	-
1977-1336	2443352-56	-	-	Rocketsonde	-	-	-	SHR	-	-	-	63	-	-
1977-1337	2443352-56	-	-	Rocketsonde	-	-	-	KRR	-	-	-	74	-	-
1977-1338	2443352-56	-	-	Rocketsonde	-	-	-	KRR	-	-	-	61	-	-
1977-1339	2443352-56	-	-	Rocketsonde	-	-	-	THU	-	-	-	69	-	-
1977-1340	2443352-56	-	-	Rocketsonde	-	-	-	WI	-	-	-	70	-	-
1977-1341	2443352-56	-	-	Rocketsonde	-	-	-	WS	-	-	-	65	-	-
1977-1342	2443352-56	-	-	Rocketsonde	-	-	-	PH	-	-	-	70	-	-
1977-1343	2443352-56	-	-	Rocketsonde	-	-	-	KRR	-	-	-	66	-	-
1977-1344	2443352-56	-	-	Rocketsonde	-	-	-	KRR	-	-	-	64	-	-
1977-1345	2443352-56	-	-	Rocketsonde	-	-	-	SHR	-	-	-	77	-	-
1977-1346	2443352-56	-	-	Rocketsonde	-	-	-	SHR	-	-	-	63	-	-
1977-1347	2443352-56	-	-	Rocketsonde	-	-	-	KRR	-	-	-	74	-	-
1977-1348	2443352-56	-	-	Rocketsonde	-	-	-	KRR	-	-	-	61	-	-
1977-1349	2443352-56	-	-	Rocketsonde	-	-	-	THU	-	-	-	69	-	-
1977-1350	2443352-56	-	-	Rocketsonde	-	-	-	WI	-	-	-	70	-	-
1977-1351	2443352-56	-	-	Rocketsonde	-	-	-	WS	-	-	-	65	-	-
1977-1352	2443352-56	-	-	Rocketsonde	-	-	-	PH	-	-	-	70	-	-
1977-1353	2443352-56	-	-	Rocketsonde	-	-	-	KRR	-	-	-	65	-	-
1977-1354	2443352-56	-	-	Rocketsonde	-	-	-	KRR	-	-	-	70	-	-
1977-1355	2443352-56	-	-	Rocketsonde	-	-	-	PH	-	-	-	79	-	-
1977-1356	2443352-56	-	-	Rocketsonde	-	-	-	KRR	-	-	-	66	-	-

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Mission	FlightCode	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee km	Range km	Dest
1977-H137	2443364-54	1977 Aug 9 0059:59	Rocketsonde	-	-	Arcasonde	-	-	-	SEHN	-	-	-	46	-	-
1977-H138	2443365-11	1977 Aug 9 1440:00	Rocketsonde	-	-	Arcasonde	-	-	-	WI	-	-	-	70	-	-
1977-H139	2443365-24	1977 Aug 9 1740:00	Rocketsonde	-	-	Arcasonde	-	-	-	SHER	-	-	-	58	-	-
1977-H140	2443365-27	1977 Aug 9 1830:00	Rocketsonde	-	-	Arcasonde	-	-	-	PRLN	-	-	-	68	-	-
1977-H141	2443365-48	1977 Aug 9 2326:00	Rocketsonde	-	-	Arcasonde	-	-	-	KRR	-	-	-	77	-	-
1977-H142	2443366-10	1977 Aug 10 1429:00	Rocketsonde	-	-	Arcasonde	-	-	-	THU	-	-	-	68	-	-
1977-H143	2443366-21	1977 Aug 10 1658:59	Rocketsonde	-	-	Arcasonde	-	-	-	PRLN	-	-	-	59	-	-
1977-H144	2443366-22	1977 Aug 10 1700:00	Rocketsonde	-	-	Arcasonde	-	-	-	WS	-	-	-	72	-	-
1977-H145	2443366-22	1977 Aug 10 1700:00	Rocketsonde	-	-	Arcasonde	-	-	-	WS	-	-	-	66	-	-
1977-H146	2443366-25	1977 Aug 10 1804:59	Rocketsonde	-	-	Arcasonde	-	-	-	SHER	-	-	-	87	-	-
1977-H147	2443366-30	1977 Aug 10 1911:59	Rocketsonde	-	-	Arcasonde	-	-	-	PH	-	-	-	79	-	-
1977-H148	2443367-39	1977 Aug 10 2315:00	Rocketsonde	-	-	Arcasonde	-	-	-	KRR	-	-	-	70	-	-
1977-H149	2443367-47	1977 Aug 11 2122:00	Rocketsonde	-	-	Arcasonde	-	-	-	KRR	-	-	-	58	-	-
1977-H150	2443368-21	1977 Aug 11 2122:00	Rocketsonde	-	-	Arcasonde	-	-	-	SHER	-	-	-	66	-	-
1977-H151	2443368-21	1977 Aug 12 1701:00	Rocketsonde	-	-	Arcasonde	-	-	-	WS	-	-	-	72	-	-
1977-H152	2443368-24	1977 Aug 12 1740:00	Rocketsonde	-	-	Arcasonde	-	-	-	PRLN	-	-	-	70	-	-
1977-H153	2443368-27	1977 Aug 12 1830:00	Rocketsonde	-	-	Arcasonde	-	-	-	PH	-	-	-	61	-	-
1977-H154	2443368-31	1977 Aug 12 1928:59	Rocketsonde	-	-	Arcasonde	-	-	-	KAO	-	-	-	69	-	-
1977-H155	2443368-39	1977 Aug 12 2127:59	Rocketsonde	-	-	Arcasonde	-	-	-	WS	-	-	-	61	-	-
1977-H156	2443371-15	1977 Aug 15 1536:59	Rocketsonde	-	-	Arcasonde	-	-	-	PRLN	-	-	-	64	-	-
1977-H157	2443371-18	1977 Aug 15 1614:59	Rocketsonde	-	-	Arcasonde	-	-	-	KAO	-	-	-	69	-	-
1977-H158	2443371-21	1977 Aug 15 1700:00	Rocketsonde	-	-	Arcasonde	-	-	-	WS	-	-	-	72	-	-
1977-H159	2443371-34	1977 Aug 15 2008:00	Rocketsonde	-	-	Arcasonde	-	-	-	PH	-	-	-	61	-	-
1977-H160	2443371-37	1977 Aug 15 2058:00	Rocketsonde	-	-	Arcasonde	-	-	-	PH	-	-	-	50	-	-
1977-H161	2443371-46	1977 Aug 15 2303:59	Rocketsonde	-	-	Arcasonde	-	-	-	KAO	-	-	-	81	-	-
1977-H162	2443373-16	1977 Aug 17 1533:59	Rocketsonde	-	-	Arcasonde	-	-	-	KRR	-	-	-	59	-	-
1977-H163	2443373-16	1977 Aug 17 1546:59	Rocketsonde	-	-	Arcasonde	-	-	-	THU	-	-	-	67	-	-
1977-H164	2443373-21	1977 Aug 17 1700:00	Rocketsonde	-	-	Arcasonde	-	-	-	SHER	-	-	-	66	-	-
1977-H165	2443373-22	1977 Aug 17 1700:00	Rocketsonde	-	-	Arcasonde	-	-	-	PH	-	-	-	96	-	-
1977-H166	2443373-22	1977 Aug 17 1700:00	Rocketsonde	-	-	Arcasonde	-	-	-	WS	-	-	-	55	-	-
1977-H167	2443373-25	1977 Aug 17 1800:00	Rocketsonde	-	-	Arcasonde	-	-	-	PH	-	-	-	68	-	-
1977-H168	2443373-37	1977 Aug 17 2048:00	Rocketsonde	-	-	Arcasonde	-	-	-	KAO	-	-	-	74	-	-
1977-H169	2443373-39	1977 Aug 17 2128:59	Rocketsonde	-	-	Arcasonde	-	-	-	THU	-	-	-	69	-	-
1977-H170	2443374-21	1977 Aug 18 1831:00	Rocketsonde	-	-	Arcasonde	-	-	-	WS	-	-	-	68	-	-
1977-H171	2443375-10	1977 Aug 19 1654:59	Rocketsonde	-	-	Arcasonde	-	-	-	THU	-	-	-	62	-	-
1977-H172	2443375-20	1977 Aug 19 2100:00	Rocketsonde	-	-	Arcasonde	-	-	-	SHER	-	-	-	64	-	-
1977-H173	2443375-38	1977 Aug 19 2100:00	Rocketsonde	-	-	Arcasonde	-	-	-	KAO	-	-	-	64	-	-
1977-H174	2443375-38	1977 Aug 19 2100:00	Rocketsonde	-	-	Arcasonde	-	-	-	PH	-	-	-	67	-	-
1977-H175	2443376-09	1977 Aug 22 1405:00	Rocketsonde	-	-	Arcasonde	-	-	-	THU	-	-	-	68	-	-
1977-H176	2443376-22	1977 Aug 22 1715:00	Rocketsonde	-	-	Arcasonde	-	-	-	PH	-	-	-	68	-	-
1977-H177	2443376-22	1977 Aug 22 1715:00	Rocketsonde	-	-	Arcasonde	-	-	-	WS	-	-	-	68	-	-
1977-H178	2443376-28	1977 Aug 22 1800:00	Rocketsonde	-	-	Arcasonde	-	-	-	PH	-	-	-	72	-	-
1977-H179	2443376-28	1977 Aug 22 1800:00	Rocketsonde	-	-	Arcasonde	-	-	-	PH	-	-	-	61	-	-
1977-H180	2443376-36	1977 Aug 22 2052:00	Rocketsonde	-	-	Arcasonde	-	-	-	KAO	-	-	-	68	-	-
1977-H181	2443380-11	1977 Aug 24 2100:00	Rocketsonde	-	-	Arcasonde	-	-	-	THU	-	-	-	68	-	-
1977-H182	2443380-15	1977 Aug 24 1534:59	Rocketsonde	-	-	Arcasonde	-	-	-	PRLN	-	-	-	68	-	-
1977-H183	2443380-16	1977 Aug 24 1534:59	Rocketsonde	-	-	Arcasonde	-	-	-	THU	-	-	-	68	-	-
1977-H184	2443380-24	1977 Aug 24 1534:59	Rocketsonde	-	-	Arcasonde	-	-	-	THU	-	-	-	68	-	-
1977-H185	2443380-24	1977 Aug 24 1534:59	Rocketsonde	-	-	Arcasonde	-	-	-	THU	-	-	-	68	-	-
1977-H186	2443380-26	1977 Aug 24 1814:59	Rocketsonde	-	-	Arcasonde	-	-	-	SHER	-	-	-	66	-	-
1977-H187	2443380-30	1977 Aug 24 1814:59	Rocketsonde	-	-	Arcasonde	-	-	-	WS	-	-	-	68	-	-
1977-H188	2443380-31	1977 Aug 24 1929:59	Super_Loki	-	-	Arcasonde	-	-	-	WS	-	-	-	79	-	-
1977-H189	2443380-31	1977 Aug 24 2146:00	Rocketsonde	-	-	Arcasonde	-	-	-	KRR	-	-	-	57	-	-
1977-H190	2443380-30	1977 Aug 24 2316:00	Rocketsonde	-	-	Arcasonde	-	-	-	PH	-	-	-	61	-	-
1977-H191	2443381-17	1977 Aug 25 1316:59	Super_Loki	-	-	Arcasonde	-	-	-	WS	-	-	-	78	-	-
1977-H192	2443381-17	1977 Aug 25 2131:00	Rocketsonde	-	-	Arcasonde	-	-	-	KRR	-	-	-	70	-	-
1977-H193	2443382-14	1977 Aug 26 1524:59	Rocketsonde	-	-	Arcasonde	-	-	-	THU	-	-	-	67	-	-
1977-H194	2443382-14	1977 Aug 26 1524:59	Rocketsonde	-	-	Arcasonde	-	-	-	PRLN	-	-	-	68	-	-
1977-H195	2443382-17	1977 Aug 26 1830:00	Rocketsonde	-	-	Arcasonde	-	-	-	WS	-	-	-	67	-	-
1977-H196	2443382-28	1977 Aug 26 1830:00	Rocketsonde	-	-	Arcasonde	-	-	-	PH	-	-	-	73	-	-
1977-H197	2443382-28	1977 Aug 26 1830:00	Rocketsonde	-	-	Arcasonde	-	-	-	KAO	-	-	-	55	-	-
1977-H198	2443382-45	1977 Aug 26 2244:59	Rocketsonde	-	-	Arcasonde	-	-	-	PH	-	-	-	69	-	-
1977-H199	2443382-45	1977 Aug 26 2244:59	Rocketsonde	-	-	Arcasonde	-	-	-	KAO	-	-	-	69	-	-
1977-H200	2443382-45	1977 Aug 26 2244:59	Rocketsonde	-	-	Arcasonde	-	-	-	PH	-	-	-	69	-	-
1977-H201	2443383-13	1977 Aug 29 1509:00	Rocketsonde	-	-	Arcasonde	-	-	-	THU	-	-	-	66	-	-
1977-H202	2443383-13	1977 Aug 29 1509:00	Rocketsonde	-	-	Arcasonde	-	-	-	THU	-	-	-	66	-	-
1977-H203	2443385-14	1977 Aug 29 1530:00	Rocketsonde	-	-	Arcasonde	-	-	-	SHER	-	-	-	63	-	-
1977-H204	2443385-24	1977 Aug 29 1740:00	Rocketsonde	-	-	Arcasonde	-	-	-	WS	-	-	-	75	-	-
1977-H205	2443385-24	1977 Aug 29 1745:00	Rocketsonde	-	-	Arcasonde	-	-	-	WS	-	-	-	68	-	-
1977-H206	2443385-25	1977 Aug 29 1754:00	Rocketsonde	-	-	Arcasonde	-	-	-	VI	-	-	-	63	-	-
1977-H207	2443385-31	1977 Aug 29 1930:59	Rocketsonde	-	-	Arcasonde	-	-	-	PH	-	-	-	68	-	-
1977-H208	2443385-38	1977 Aug 29 2100:00	Rocketsonde	-	-	Arcasonde	-	-	-	KAO	-	-	-	54	-	-
1977-H209	2443385-38	1977 Aug 29 2100:00	Rocketsonde	-	-	Arcasonde	-	-	-	KAO	-	-	-	64	-	-
1977-H210	2443385-38	1977 Aug 29 2100:00	Rocketsonde	-	-	Arcasonde	-	-	-	PH	-	-	-	66	-	-
1977-H211	2443387-11	1977 Aug 31 1435:00	Rocketsonde	-	-	Arcasonde	-	-	-	KRR	-	-	-	81	-	-
1977-H212	2443387-12	1977 Aug 31 1500:00	Rocketsonde	-	-	Arcasonde	-	-	-	VI	-	-	-	65	-	-
1977-H213	2443387-21	1977 Aug 31 1514:59	Rocketsonde	-	-	Arcasonde	-	-	-	PRLN	-	-	-	88	-	-
1977-H214	2443387-21	1977 Aug 31 1700:00	Rocketsonde	-	-	Arcasonde	-	-	-	THU	-	-	-	58	-	-
1977-H215	2443387-26	1977 Aug 31 1800:00	Rocketsonde	-	-	Arcasonde	-	-	-	SHER	-	-	-	69	-	-
1977-H216	2443387-26	1977 Aug 31 1800:00	Super_Loki	-	-	Arcasonde	-	-	-	WS	-	-	-	85	-	-
1977-H217	2443387-35	1977 Aug 31 2118:00	Rocketsonde	-	-	Arcasonde	-	-	-	WS	-	-	-	72	-	-
1977-H218	2443388-30	1977 Sep 1 2030:00	Rocketsonde	-	-	Arcasonde	-	-	-	KRR	-	-	-	65	-	-
1977-H219	2443388-41	1977 Sep 1 2134:59	Rocketsonde	-	-	Arcasonde	-	-	-	PH	-	-	-	66	-	-
1977-H220	2443389-14	1977 Sep 2 1520:00	Rocketsonde	-	-	Arcasonde	-	-	-	KAO	-	-	-	58	-	-
1977-H221	2443389-15	1977 Sep 2 1520:00	Rocketsonde	-	-	Arcasonde	-	-	-	KAO	-	-	-	69	-	-
1977-H222	2443389-14	1977 Sep 2 1520:00	Rocketsonde	-	-	Arcasonde	-	-	-	THU	-	-	-	66	-	-
1977-H223	2443389-25	1977 Sep 2 1800:00	Rocketsonde	-	-	Arcasonde	-	-	-	PH	-	-	-	85	-	-
1977-H224	2443389-25	1977 Sep 2 1800:00	Rocketsonde	-	-	Arcasonde	-	-	-	WS	-	-	-	60	-	-
1977-H225	2443389-25	1977 Sep 3 0633:59	Rocketsonde	-	-	Arcasonde	-	-	-	WS	-	-	-	76	-	-
1977-H226	2443390-09	1977 Sep 3 1409:00	Rocketsonde	-	-	Arcasonde	-	-	-	KRR	-	-	-	79	-	-
1977-H227	2443390-22	1977 Sep 3 1720:00	Rocketsonde	-	-	Arcasonde	-	-	-	KRR	-	-	-	82	-	-
1977-H228	2443393-20	1977 Sep 6 1649:59	Rocketsonde	-	-	Arcasonde	-</									

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Launch_Mission	FlightCode	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee_Km	Range_Km	Dest
1977-H1437	2443393-28	1977 Sep 6 1845:00	Rocketsonde	-	-	Arcasonde	-	-	-	WS	-	-	-	65	-	-
1977-H1438	2443393-33	1977 Sep 6 2002:00	Rocketsonde	-	-	Arcasonde	-	-	-	KAU	-	-	-	57	-	-
1977-H1439	2443393-38	1977 Sep 6 2100:00	Rocketsonde	-	-	Starvue, Dataasonde	-	-	-	PF	-	-	-	64	-	-
1977-H1440	2443393-42	1977 Sep 6 2207:59	Rocketsonde	-	-	Arcasonde	-	-	-	MRR	-	-	-	73	-	-
1977-H1441	2443394-11	1977 Sep 7 1434:00	Rocketsonde	-	-	Arcasonde	-	-	-	WI	-	-	-	78	-	-
1977-H1442	2443394-16	1977 Sep 7 1545:00	Rocketsonde	-	-	Arcasonde	-	-	-	PRLM	-	-	-	45	-	-
1977-H1443	2443394-21	1977 Sep 7 1700:00	Rocketsonde	-	-	Arcasonde	-	-	-	WS	-	-	-	64	-	-
1977-H1444	2443394-26	1977 Sep 7 1800:00	Rocketsonde	-	-	AN/DMQ-9	-	-	-	WS	-	-	-	100	-	-
1977-H1445	2443394-26	1977 Sep 7 1810:00	Rocketsonde	-	-	Arcasonde	-	-	-	THU	-	-	-	72	-	-
1977-H1446	2443394-26	1977 Sep 7 1814:59	Rocketsonde	-	-	Arcasonde	-	-	-	MRR	-	-	-	70	-	-
1977-H1447	2443394-55	1977 Sep 8 0114:59	Rocketsonde	-	-	Arcasonde	-	-	-	WS	-	-	-	67	-	-
1977-H1448	2443395-25	1977 Sep 8 1800:00	Rocketsonde	-	-	Arcasonde	-	-	-	THU	-	-	-	69	-	-
1977-H1449	2443396-11	1977 Sep 9 1436:00	Rocketsonde	-	-	Arcasonde	-	-	-	SHER	-	-	-	59	-	-
1977-H1451	2443396-21	1977 Sep 9 1700:00	Rocketsonde	-	-	Arcasonde	-	-	-	PH	-	-	-	72	-	-
1977-H1452	2443396-27	1977 Sep 9 1753:00	Rocketsonde	-	-	Arcasonde	-	-	-	PRLM	-	-	-	46	-	-
1977-H40	2443396-39	1977 Sep 9 1830:00	Rocketsonde	-	-	Arcasonde	-	-	-	MRR	-	-	-	77	-	-
1977-H1463	2443396-39	1977 Sep 9 2125:59	Rocketsonde	-	-	Arcasonde	-	-	-	KAU	-	-	-	52	-	-
1977-H1464	2443396-40	1977 Sep 9 2130:00	Rocketsonde	-	-	Arcasonde	-	-	-	PF	-	-	-	62	-	-
1977-H1465	2443396-41	1977 Sep 9 2145:00	Rocketsonde	-	-	Starvue, Dataasonde	-	-	-	PRLM	-	-	-	66	-	-
1977-H1466	2443399-17	1977 Sep 12 1559:59	Rocketsonde	-	-	Arcasonde	-	-	-	SHER	-	-	-	64	-	-
1977-H1467	2443399-21	1977 Sep 12 1700:00	Rocketsonde	-	-	Arcasonde	-	-	-	KAU	-	-	-	56	-	-
1977-H1468	2443399-37	1977 Sep 12 2053:00	Rocketsonde	-	-	Arcasonde	-	-	-	MRR	-	-	-	77	-	-
1977-H1469	2443399-55	1977 Sep 13 0114:59	Rocketsonde	-	-	Arcasonde	-	-	-	WS	-	-	-	66	-	-
1977-H1470	2443400-17	1977 Sep 13 1559:59	Rocketsonde	-	-	Arcasonde	-	-	-	SHER	-	-	-	63	-	-
1977-H1471	2443400-17	1977 Sep 13 1559:59	Rocketsonde	-	-	Arcasonde	-	-	-	WS	-	-	-	76	-	-
1977-H1472	2443400-18	1977 Sep 14 1354:59	Rocketsonde	-	-	Arcasonde	-	-	-	VI	-	-	-	67	-	-
1977-H1473	2443401-15	1977 Sep 14 1551:00	Rocketsonde	-	-	Arcasonde	-	-	-	PH	-	-	-	87	-	-
1977-H1474	2443401-15	1977 Sep 14 1553:59	Rocketsonde	-	-	AN/DMQ-9	-	-	-	THU	-	-	-	68	-	-
1977-H1475	2443401-15	1977 Sep 14 1753:00	Rocketsonde	-	-	Arcasonde	-	-	-	WS	-	-	-	99	-	-
1977-H1476	2443401-25	1977 Sep 14 1820:00	Rocketsonde	-	-	AN/DMQ-9	-	-	-	PF	-	-	-	72	-	-
1977-H1477	2443401-25	1977 Sep 14 2025:00	Rocketsonde	-	-	Arcasonde	-	-	-	WS	-	-	-	67	-	-
1977-H1478	2443401-35	1977 Sep 14 2132:00	Rocketsonde	-	-	Starvue, Dataasonde	-	-	-	VI	-	-	-	76	-	-
1977-H1479	2443401-41	1977 Sep 14 2146:59	Rocketsonde	-	-	Arcasonde	-	-	-	MRR	-	-	-	79	-	-
1977-H1480	2443403-10	1977 Sep 16 1420:00	Rocketsonde	-	-	Arcasonde	-	-	-	SHER	-	-	-	61	-	-
1977-H1481	2443403-12	1977 Sep 16 1447:00	Rocketsonde	-	-	Arcasonde	-	-	-	THU	-	-	-	69	-	-
1977-H1482	2443403-12	1977 Sep 16 1521:00	Rocketsonde	-	-	Arcasonde	-	-	-	PRLM	-	-	-	66	-	-
1977-H1483	2443403-25	1977 Sep 16 1800:00	Rocketsonde	-	-	Arcasonde	-	-	-	WS	-	-	-	65	-	-
1977-H1484	2443403-25	1977 Sep 16 1800:00	Rocketsonde	-	-	Arcasonde	-	-	-	WS	-	-	-	67	-	-
1977-H1485	2443403-35	1977 Sep 16 1951:00	Rocketsonde	-	-	Starvue, Dataasonde	-	-	-	PH	-	-	-	87	-	-
1977-H1486	2443403-38	1977 Sep 16 2103:59	Rocketsonde	-	-	AN/DMQ-9	-	-	-	KAU	-	-	-	67	-	-
1977-H1487	2443403-38	1977 Sep 17 2144:59	Rocketsonde	-	-	Arcasonde	-	-	-	KAU	-	-	-	88	-	-
1977-H1488	2443403-60	1977 Sep 17 0224:59	Rocketsonde	-	-	Arcasonde	-	-	-	MRR	-	-	-	90	-	-
1977-H1489	2443406-10	1977 Sep 19 1425:00	Rocketsonde	-	-	Arcasonde	-	-	-	VI	-	-	-	72	-	-
1977-H1490	2443406-11	1977 Sep 19 1455:00	Rocketsonde	-	-	Arcasonde	-	-	-	THU	-	-	-	65	-	-
1977-H1491	2443406-16	1977 Sep 19 1556:00	Rocketsonde	-	-	Arcasonde	-	-	-	PRLM	-	-	-	65	-	-
1977-H1492	2443406-16	1977 Sep 19 1640:00	Rocketsonde	-	-	Arcasonde	-	-	-	SHER	-	-	-	65	-	-
1977-H1493	2443406-23	1977 Sep 19 1906:00	Rocketsonde	-	-	Arcasonde	-	-	-	VI	-	-	-	68	-	-
1977-H1494	2443406-23	1977 Sep 19 2003:59	Rocketsonde	-	-	Arcasonde	-	-	-	KAU	-	-	-	58	-	-
1977-H1495	2443406-34	1977 Sep 19 2039:59	Rocketsonde	-	-	Starvue, Dataasonde	-	-	-	PH	-	-	-	56	-	-
1977-H1496	2443407-25	1977 Sep 20 1753:00	Rocketsonde	-	-	Arcasonde	-	-	-	VI	-	-	-	74	-	-
1977-H1497	2443408-10	1977 Sep 21 1431:00	Rocketsonde	-	-	Arcasonde	-	-	-	THU	-	-	-	67	-	-
1977-H1498	2443408-11	1977 Sep 21 1445:00	Rocketsonde	-	-	Arcasonde	-	-	-	VI	-	-	-	71	-	-
1977-H1499	2443408-11	1977 Sep 21 1445:00	Rocketsonde	-	-	Arcasonde	-	-	-	THU	-	-	-	67	-	-
1977-H1500	2443408-11	1977 Sep 21 1530:00	Rocketsonde	-	-	Arcasonde	-	-	-	WS	-	-	-	63	-	-
1977-H1501	2443408-11	1977 Sep 21 1530:00	Rocketsonde	-	-	Arcasonde	-	-	-	SHER	-	-	-	62	-	-
1977-H1502	2443408-21	1977 Sep 21 1700:00	Rocketsonde	-	-	AN/DMQ-9	-	-	-	WS	-	-	-	99	-	-
1977-H1503	2443408-26	1977 Sep 21 1800:00	Rocketsonde	-	-	Arcasonde	-	-	-	WS	-	-	-	72	-	-
1977-H1504	2443408-26	1977 Sep 21 1810:00	Rocketsonde	-	-	Arcasonde	-	-	-	KAU	-	-	-	73	-	-
1977-H1505	2443408-26	1977 Sep 21 2123:59	Rocketsonde	-	-	Arcasonde	-	-	-	PF	-	-	-	55	-	-
1977-H1506	2443408-39	1977 Sep 21 2124:59	Rocketsonde	-	-	Arcasonde	-	-	-	KAU	-	-	-	55	-	-
1977-H1507	2443408-39	1977 Sep 22 0114:59	Rocketsonde	-	-	Starvue, Dataasonde	-	-	-	MRR	-	-	-	62	-	-
1977-H1508	2443408-55	1977 Sep 22 1814:59	Rocketsonde	-	-	Arcasonde	-	-	-	WS	-	-	-	71	-	-
1977-H1509	2443409-04	1977 Sep 22 2135:59	Rocketsonde	-	-	Arcasonde	-	-	-	MRR	-	-	-	71	-	-
1977-H1510	2443410-04	1977 Sep 23 1207:59	Rocketsonde	-	-	Arcasonde	-	-	-	KAU	-	-	-	59	-	-
1977-H1511	2443410-04	1977 Sep 23 1256:59	Rocketsonde	-	-	AN/DMQ-9	-	-	-	WS	-	-	-	98	-	-
1977-H1512	2443410-09	1977 Sep 23 1400:00	Rocketsonde	-	-	Arcasonde	-	-	-	WS	-	-	-	55	-	-
1977-H1513	2443410-12	1977 Sep 23 1412:00	Rocketsonde	-	-	Arcasonde	-	-	-	VI	-	-	-	70	-	-
1977-H1514	2443410-12	1977 Sep 23 1500:00	Rocketsonde	-	-	Starvue, Dataasonde	-	-	-	PF	-	-	-	56	-	-
1977-H1515	2443410-15	1977 Sep 23 1529:00	Rocketsonde	-	-	Arcasonde	-	-	-	PRLM	-	-	-	67	-	-
1977-H1516	2443410-21	1977 Sep 23 1700:00	Rocketsonde	-	-	Arcasonde	-	-	-	SHER	-	-	-	63	-	-
1977-H1517	2443410-25	1977 Sep 23 1800:00	Rocketsonde	-	-	Arcasonde	-	-	-	WS	-	-	-	68	-	-
1977-H1518	2443412-01	1977 Sep 25 1700:00	Rocketsonde	-	-	Arcasonde	-	-	-	WS	-	-	-	70	-	-
1977-H1519	2443412-09	1977 Sep 26 1412:00	Rocketsonde	-	-	Arcasonde	-	-	-	VI	-	-	-	70	-	-
1977-H1520	2443413-17	1977 Sep 26 1546:59	Rocketsonde	-	-	Arcasonde	-	-	-	PRLM	-	-	-	69	-	-
1977-H1521	2443413-17	1977 Sep 26 1559:59	Rocketsonde	-	-	Arcasonde	-	-	-	WS	-	-	-	70	-	-
1977-H1522	2443413-21	1977 Sep 26 1644:59	Rocketsonde	-	-	Arcasonde	-	-	-	PM	-	-	-	72	-	-
1977-H1523	2443413-25	1977 Sep 26 1700:00	Rocketsonde	-	-	Arcasonde	-	-	-	PF	-	-	-	65	-	-
1977-H1524	2443413-37	1977 Sep 26 2049:59	Rocketsonde	-	-	Starvue, Dataasonde	-	-	-	WS	-	-	-	60	-	-
1977-H1525	2443414-33	1977 Sep 27 0000:00	Rocketsonde	-	-	Arcasonde	-	-	-	WS	-	-	-	58	-	-
1977-H1526	2443414-33	1977 Sep 27 2214:59	Rocketsonde	-	-	Arcasonde	-	-	-	KAU	-	-	-	77	-	-
1977-H1527	2443415-08	1977 Sep 28 1400:00	Rocketsonde	-	-	Starvue, Dataasonde	-	-	-	MRR	-	-	-	52	-	-
1977-H1528	2443415-21	1977 Sep 28 1644:59	Rocketsonde	-	-	Arcasonde	-	-	-	THU	-	-	-	53	-	-
1977-H1529	2443415-23	1977 Sep 28 1736:00	Rocketsonde	-	-	Arcasonde	-	-	-	SHER	-	-	-	59	-	-
1977-H1530	2443415-28	1977 Sep 28 1844:00	Rocketsonde	-	-	Arcasonde	-	-	-	VI	-	-	-	66	-	-
1977-H1531	2443415-35	1977 Sep 28 2017:00	Rocketsonde	-	-	AN/DMQ-9	-	-	-	PRLM	-	-	-	70	-	-
1977-H1532	2443415-35	1977 Sep 28 2017:00	Rocketsonde	-	-	Arcasonde	-	-	-	WS	-	-	-	97	-	-

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Mission	FlightCode	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee_Km	Range_Km	Dest
1977-H1530	2443415-35	1977 Sep 28 2026:59	Super Loki	-	-	-	-	-	-	WS	-	-	-	71	-	-
1977-1341	2443415-36	1977 Sep 28 2030:00	Rocketsonde	-	-	-	-	-	-	KAU	-	-	-	88	-	-
1977-H1531	2443415-37	1977 Sep 28 2057:00	Rocketsonde	-	-	-	-	-	-	KAU	-	-	-	74	-	-
1977-H1532	2443416-25	1977 Sep 29 1807:00	Super Loki	-	-	-	-	-	-	WS	-	-	-	55	-	-
1977-H1533	2443416-31	1977 Sep 29 1930:00	Super Loki	-	-	-	-	-	-	WS	-	-	-	68	-	-
1977-H1534	2443416-43	1977 Sep 29 2219:59	Super Loki	-	-	-	-	-	-	WS	-	-	-	54	-	-
1977-H1537	2443416-59	1977 Sep 30 0210:00	Rocketsonde	-	-	-	-	-	-	WS	-	-	-	66	-	-
1977-H1538	2443417-04	1977 Sep 30 1331:59	Rocketsonde	-	-	-	-	-	-	WS	-	-	-	61	-	-
1977-H1539	2443417-11	1977 Sep 30 1433:00	Rocketsonde	-	-	-	-	-	-	PRLM	-	-	-	70	-	-
1977-H1540	2443417-20	1977 Sep 30 1533:00	Rocketsonde	-	-	-	-	-	-	PH	-	-	-	87	-	-
1977-1344	2443417-22	1977 Sep 30 1722:00	Rocketsonde	-	-	-	-	-	-	PH	-	-	-	65	-	-
1977-H1543	2443417-24	1977 Sep 30 1745:00	Rocketsonde	-	-	-	-	-	-	PH	-	-	-	74	-	-
1977-H1544	2443417-25	1977 Sep 30 1800:00	Rocketsonde	-	-	-	-	-	-	KAU	-	-	-	68	-	-
1977-H1545	2443417-33	1977 Sep 30 1953:59	Rocketsonde	-	-	-	-	-	-	WS	-	-	-	61	-	-
1977-H1546	2443417-33	1977 Sep 30 2000:00	Rocketsonde	-	-	-	-	-	-	PF	-	-	-	66	-	-
1977-H1547	2443420-12	1977 Oct 3 1447:00	Rocketsonde	-	-	-	-	-	-	WI	-	-	-	66	-	-
1977-H1548	2443420-13	1977 Oct 3 1504:59	Rocketsonde	-	-	-	-	-	-	THU	-	-	-	66	-	-
1977-H1549	2443420-22	1977 Oct 3 1720:00	Rocketsonde	-	-	-	-	-	-	PH	-	-	-	72	-	-
1977-H1550	2443420-28	1977 Oct 3 1846:59	Rocketsonde	-	-	-	-	-	-	PRLM	-	-	-	66	-	-
1977-H1551	2443420-38	1977 Oct 3 2100:00	Rocketsonde	-	-	-	-	-	-	KAU	-	-	-	61	-	-
1977-H1552	2443420-52	1977 Oct 4 0032:00	Rocketsonde	-	-	-	-	-	-	WS	-	-	-	55	-	-
1977-H1553	2443421-25	1977 Oct 4 1804:59	Rocketsonde	-	-	-	-	-	-	SHER	-	-	-	69	-	-
1977-H1554	2443422-12	1977 Oct 5 1455:00	Rocketsonde	-	-	-	-	-	-	THU	-	-	-	67	-	-
1977-H1555	2443422-14	1977 Oct 5 1518:00	Rocketsonde	-	-	-	-	-	-	WI	-	-	-	70	-	-
1977-H1556	2443422-16	1977 Oct 5 1518:00	Rocketsonde	-	-	-	-	-	-	PRLM	-	-	-	70	-	-
1977-H1557	2443422-21	1977 Oct 5 1545:00	Rocketsonde	-	-	-	-	-	-	SHER	-	-	-	65	-	-
1977-H1559	2443422-33	1977 Oct 5 1700:00	Rocketsonde	-	-	-	-	-	-	KAU	-	-	-	85	-	-
1977-141	2443422-33	1977 Oct 5 1954:59	Rocketsonde	-	-	-	-	-	-	PF	-	-	-	48	-	-
1977-H1560	2443422-35	1977 Oct 5 2000:00	Rocketsonde	-	-	-	-	-	-	KAU	-	-	-	73	-	-
1977-H1561	2443422-41	1977 Oct 5 2030:00	Rocketsonde	-	-	-	-	-	-	KHR	-	-	-	77	-	-
1977-H1562	2443424-14	1977 Oct 7 1245:59	Rocketsonde	-	-	-	-	-	-	WS	-	-	-	64	-	-
1977-H1563	2443424-14	1977 Oct 7 1524:59	Rocketsonde	-	-	-	-	-	-	THU	-	-	-	73	-	-
1977-H1565	2443424-17	1977 Oct 7 1606:00	Rocketsonde	-	-	-	-	-	-	WS	-	-	-	66	-	-
1977-H1566	2443424-21	1977 Oct 7 1704:59	Rocketsonde	-	-	-	-	-	-	SHER	-	-	-	67	-	-
1977-H1567	2443424-38	1977 Oct 7 2100:00	Rocketsonde	-	-	-	-	-	-	KAU	-	-	-	60	-	-
1977-H1567	2443424-38	1977 Oct 7 2110:00	Rocketsonde	-	-	-	-	-	-	PF	-	-	-	92	-	-
1977-H1568	2443424-57	1977 Oct 8 0144:59	Rocketsonde	-	-	-	-	-	-	KHR	-	-	-	76	-	-
1977-H1571	2443427-17	1977 Oct 10 1607:00	Rocketsonde	-	-	-	-	-	-	THU	-	-	-	69	-	-
1977-H1572	2443428-21	1977 Oct 11 1700:00	Rocketsonde	-	-	-	-	-	-	SHER	-	-	-	63	-	-
1977-H1573	2443428-33	1977 Oct 11 1700:00	Rocketsonde	-	-	-	-	-	-	WS	-	-	-	65	-	-
1977-H1573	2443428-35	1977 Oct 11 1954:59	Rocketsonde	-	-	-	-	-	-	KAU	-	-	-	88	-	-
1977-H1574	2443428-38	1977 Oct 11 2100:00	Rocketsonde	-	-	-	-	-	-	THU	-	-	-	94	-	-
1977-H1575	2443428-38	1977 Oct 11 2100:00	Rocketsonde	-	-	-	-	-	-	PRM	-	-	-	75	-	-
1977-H1576	2443428-56	1977 Oct 12 2100:59	Rocketsonde	-	-	-	-	-	-	KHR	-	-	-	94	-	-
1977-H1576	2443428-56	1977 Oct 12 0125:59	Rocketsonde	-	-	-	-	-	-	KAU	-	-	-	75	-	-
1977-H1576	2443429-16	1977 Oct 12 1558:59	Rocketsonde	-	-	-	-	-	-	PRLM	-	-	-	70	-	-
1977-H1576	2443429-16	1977 Oct 12 1700:00	Rocketsonde	-	-	-	-	-	-	SHER	-	-	-	69	-	-
1977-H1581	2443429-22	1977 Oct 12 1725:00	Rocketsonde	-	-	-	-	-	-	WS	-	-	-	98	-	-
1977-H1582	2443429-22	1977 Oct 12 1725:00	Rocketsonde	-	-	-	-	-	-	WS	-	-	-	72	-	-
1977-H1582	2443429-26	1977 Oct 12 1817:00	Rocketsonde	-	-	-	-	-	-	WS	-	-	-	98	-	-
1977-H1582	2443429-26	1977 Oct 12 2120:59	Rocketsonde	-	-	-	-	-	-	KAU	-	-	-	74	-	-
1977-H1583	2443429-31	1977 Oct 12 2151:00	Rocketsonde	-	-	-	-	-	-	KAU	-	-	-	74	-	-
1977-H1584	2443429-31	1977 Oct 13 0121:59	Rocketsonde	-	-	-	-	-	-	KHR	-	-	-	67	-	-
1977-H1584	2443429-36	1977 Oct 13 1514:59	Rocketsonde	-	-	-	-	-	-	WS	-	-	-	64	-	-
1977-H1586	2443430-16	1977 Oct 13 1844:59	Rocketsonde	-	-	-	-	-	-	KAU	-	-	-	61	-	-
1977-H1587	2443430-33	1977 Oct 13 1949:59	Rocketsonde	-	-	-	-	-	-	KAU	-	-	-	61	-	-
1977-H1588	2443430-33	1977 Oct 13 2147:59	Rocketsonde	-	-	-	-	-	-	KHR	-	-	-	77	-	-
1977-H1589	2443431-11	1977 Oct 14 1524:59	Rocketsonde	-	-	-	-	-	-	PRLM	-	-	-	70	-	-
1977-H1590	2443431-21	1977 Oct 14 1700:00	Rocketsonde	-	-	-	-	-	-	SHER	-	-	-	59	-	-
1977-H1591	2443431-36	1977 Oct 14 2040:00	Rocketsonde	-	-	-	-	-	-	PF	-	-	-	57	-	-
1977-H1594	2443434-16	1977 Oct 17 1545:59	Rocketsonde	-	-	-	-	-	-	PRLM	-	-	-	70	-	-
1977-H1595	2443434-16	1977 Oct 17 1640:00	Rocketsonde	-	-	-	-	-	-	SHER	-	-	-	60	-	-
1977-H1596	2443434-21	1977 Oct 17 1659:59	Rocketsonde	-	-	-	-	-	-	THU	-	-	-	59	-	-
1977-H1597	2443434-28	1977 Oct 17 1845:00	Rocketsonde	-	-	-	-	-	-	WS	-	-	-	69	-	-
1977-H1598	2443434-42	1977 Oct 17 2159:59	Rocketsonde	-	-	-	-	-	-	KAU	-	-	-	58	-	-
1977-H1599	2443434-42	1977 Oct 17 2201:59	Rocketsonde	-	-	-	-	-	-	PF	-	-	-	64	-	-
1977-H1600	2443434-56	1977 Oct 18 0120:59	Rocketsonde	-	-	-	-	-	-	KAU	-	-	-	64	-	-
1977-H1602	2443436-10	1977 Oct 19 1430:00	Rocketsonde	-	-	-	-	-	-	KAU	-	-	-	67	-	-
1977-H1605	2443436-23	1977 Oct 19 1730:00	Rocketsonde	-	-	-	-	-	-	WI	-	-	-	71	-	-
1977-H1606	2443436-23	1977 Oct 19 1730:00	Rocketsonde	-	-	-	-	-	-	SHER	-	-	-	64	-	-
1977-H1607	2443436-24	1977 Oct 19 1730:00	Rocketsonde	-	-	-	-	-	-	WS	-	-	-	98	-	-
1977-H1608	2443436-25	1977 Oct 19 1800:59	Rocketsonde	-	-	-	-	-	-	KAU	-	-	-	72	-	-
1977-H1608	2443436-25	1977 Oct 19 1800:59	Rocketsonde	-	-	-	-	-	-	PRM	-	-	-	67	-	-
1977-H1608	2443436-26	1977 Oct 19 1814:59	Rocketsonde	-	-	-	-	-	-	WS	-	-	-	65	-	-
1977-H1609	2443436-37	1977 Oct 19 2054:00	Rocketsonde	-	-	-	-	-	-	PRLM	-	-	-	65	-	-
1977-H1610	2443436-39	1977 Oct 19 2123:59	Rocketsonde	-	-	-	-	-	-	KAU	-	-	-	88	-	-
1977-H1610	2443436-39	1977 Oct 19 2126:59	Rocketsonde	-	-	-	-	-	-	PF	-	-	-	73	-	-
1977-H1611	2443436-53	1977 Oct 20 0040:00	Rocketsonde	-	-	-	-	-	-	KAU	-	-	-	73	-	-
1977-H1612	2443436-53	1977 Oct 20 0114:59	Rocketsonde	-	-	-	-	-	-	SHER	-	-	-	47	-	-
1977-H1614	2443437-12	1977 Oct 20 1456:00	Rocketsonde	-	-	-	-	-	-	KHR	-	-	-	68	-	-
1977-H1615	2443437-25	1977 Oct 20 1800:00	Rocketsonde	-	-	-	-	-	-	PH	-	-	-	73	-	-
1977-H1616	2443438-15	1977 Oct 21 1529:00	Rocketsonde	-	-	-	-	-	-	WS	-	-	-	67	-	-
1977-H1617	2443438-15	1977 Oct 21 1540:00	Rocketsonde	-	-	-	-	-	-	PRM	-	-	-	69	-	-
1977-H1618	2443438-15	1977 Oct 21 1540:00	Rocketsonde	-	-	-	-	-	-	THU	-	-	-	70	-	-
1977-H1619	2443438-21	1977 Oct 21 1736:00	Rocketsonde	-	-	-	-	-	-	SHER	-	-	-	66	-	-
1977-H1620	2443438-23	1977 Oct 21 1736:00	Rocketsonde	-	-	-	-	-	-	PH	-	-	-	74	-	-
1977-H1622	2443438-31	1977 Oct 21 1931:59	Rocketsonde	-	-	-	-	-	-	PF	-	-	-	62	-	-
1977-H1623	2443438-33	1977 Oct 21 1949:59	Rocketsonde	-	-	-	-	-	-	KAU	-	-	-	61	-	-
1977-H1626	2443441-11	1977 Oct 24 1443:00	Rocketsonde	-	-	-	-	-	-	THU	-	-	-	69	-	-
1977-H43	2443441-26	1977 Oct 24 1814:59	Rocketsonde	-	-	-	-	-	-	PRLM	-	-	-	43	-	-



Launch Mission

Launch_Tag	Launch_ID	Flight_ID	Flight	Mission	FlightCode	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee_Km	Range_Km	Dest
1977-H1701	2443457.22	-	-	-	-	-	-	-	-	-	68	-	-
1977-H1411	2443457.25	-	-	-	-	-	PH	-	-	-	98	-	-
1977-H1412	2443457.25	-	-	-	-	-	WS	-	-	-	98	-	-
1977-H1702	2443457.39	-	-	-	-	-	KRR	-	-	-	62	-	-
1977-H1414	2443457.40	-	-	-	-	-	KAU	-	-	-	85	-	-
1977-H1703	2443457.67	-	-	-	-	-	PF	-	-	-	75	-	-
1977-H1704	2443458.15	-	-	-	-	-	WS	-	-	-	66	-	-
1977-H1706	2443458.29	-	-	-	-	-	WS	-	-	-	68	-	-
1977-H1707	2443459.09	-	-	-	-	-	SHER	-	-	-	61	-	-
1977-H1708	2443459.12	-	-	-	-	-	THU	-	-	-	67	-	-
1977-H1709	2443459.31	-	-	-	-	-	PH	-	-	-	72	-	-
1977-H1710	2443459.33	-	-	-	-	-	KAU	-	-	-	58	-	-
1977-H1711	2443459.79	-	-	-	-	-	PF	-	-	-	50	-	-
1977-H1712	2443460.73	-	-	-	-	-	KRR	-	-	-	67	-	-
1977-H1713	2443460.93	-	-	-	-	-	KRR	-	-	-	59	-	-
1977-H1714	2443461.03	-	-	-	-	-	KRR	-	-	-	61	-	-
1977-H1715	2443462.19	-	-	-	-	-	PRLM	-	-	-	70	-	-
1977-H1716	2443462.21	-	-	-	-	-	SHER	-	-	-	63	-	-
1977-H1717	2443462.21	-	-	-	-	-	PH	-	-	-	73	-	-
1977-H1719	2443462.25	-	-	-	-	-	WS	-	-	-	65	-	-
1977-H1720	2443462.33	-	-	-	-	-	KAU	-	-	-	59	-	-
1977-H1721	2443462.43	-	-	-	-	-	KRR	-	-	-	69	-	-
1977-H47	2443462.55	-	-	-	-	-	SHER	-	-	-	48	-	-
1977-H1722	2443462.90	-	-	-	-	-	PF	-	-	-	55	-	-
1977-H1724	2443463.17	-	-	-	-	-	SHER	-	-	-	64	-	-
1977-H1726	2443464.09	-	-	-	-	-	THU	-	-	-	64	-	-
1977-H1727	2443464.13	-	-	-	-	-	SHER	-	-	-	63	-	-
1977-H421	2443464.17	-	-	-	-	-	THU	-	-	-	52	-	-
1977-H1730	2443464.17	-	-	-	-	-	WS	-	-	-	39	-	-
1977-H1731	2443464.18	-	-	-	-	-	WS	-	-	-	69	-	-
1977-H422	2443464.21	-	-	-	-	-	PH	-	-	-	72	-	-
1977-H423	2443464.21	-	-	-	-	-	PH	-	-	-	87	-	-
1977-H424	2443464.21	-	-	-	-	-	WS	-	-	-	96	-	-
1977-H1735	2443464.30	-	-	-	-	-	WS	-	-	-	96	-	-
1977-H1736	2443464.39	-	-	-	-	-	PRLM	-	-	-	70	-	-
1977-H1737	2443464.50	-	-	-	-	-	KAU	-	-	-	74	-	-
1977-H1738	2443464.57	-	-	-	-	-	KRR	-	-	-	78	-	-
1977-H1739	2443464.94	-	-	-	-	-	SHER	-	-	-	58	-	-
1977-H1741	2443465.21	-	-	-	-	-	PF	-	-	-	73	-	-
1977-H1742	2443465.25	-	-	-	-	-	PH	-	-	-	72	-	-
1977-H1743	2443465.41	-	-	-	-	-	WS	-	-	-	65	-	-
1977-H1744	2443466.07	-	-	-	-	-	KAU	-	-	-	96	-	-
1977-H1745	2443466.16	-	-	-	-	-	WS	-	-	-	66	-	-
1977-H1746	2443466.16	-	-	-	-	-	THU	-	-	-	68	-	-
1977-H1747	2443466.16	-	-	-	-	-	PRLM	-	-	-	69	-	-
1977-H1748	2443466.21	-	-	-	-	-	PRLM	-	-	-	68	-	-
1977-H1749	2443466.30	-	-	-	-	-	SHER	-	-	-	94	-	-
1977-H1749	2443466.30	-	-	-	-	-	SHER	-	-	-	94	-	-
1977-H1749	2443466.30	-	-	-	-	-	PF	-	-	-	70	-	-
1977-H1749	2443466.30	-	-	-	-	-	PF	-	-	-	70	-	-
1977-H1749	2443466.30	-	-	-	-	-	THU	-	-	-	60	-	-
1977-H1749	2443466.30	-	-	-	-	-	THU	-	-	-	60	-	-
1977-H1749	2443466.30	-	-	-	-	-	WS	-	-	-	68	-	-
1977-H1749	2443466.30	-	-	-	-	-	WS	-	-	-	68	-	-
1977-H1749	2443466.30	-	-	-	-	-	PH	-	-	-	74	-	-
1977-H1749	2443466.30	-	-	-	-	-	PH	-	-	-	74	-	-
1977-H1749	2443466.30	-	-	-	-	-	SHER	-	-	-	64	-	-
1977-H1749	2443466.30	-	-	-	-	-	PF	-	-	-	63	-	-
1977-H1749	2443466.30	-	-	-	-	-	KAU	-	-	-	59	-	-
1977-H1749	2443466.30	-	-	-	-	-	PF	-	-	-	63	-	-
1977-H1749	2443466.30	-	-	-	-	-	PF	-	-	-	63	-	-
1977-H1749	2443466.30	-	-	-	-	-	KRR	-	-	-	76	-	-
1977-H1749	2443466.30	-	-	-	-	-	WS	-	-	-	67	-	-
1977-H1749	2443466.30	-	-	-	-	-	WS	-	-	-	67	-	-
1977-H1749	2443466.30	-	-	-	-	-	PRLM	-	-	-	59	-	-
1977-H1749	2443466.30	-	-	-	-	-	PRLM	-	-	-	59	-	-
1977-H1749	2443466.30	-	-	-	-	-	THU	-	-	-	66	-	-
1977-H1749	2443466.30	-	-	-	-	-	THU	-	-	-	66	-	-
1977-H1749	2443466.30	-	-	-	-	-	SHER	-	-	-	64	-	-
1977-H1749	2443466.30	-	-	-	-	-	SHER	-	-	-	98	-	-
1977-H1749	2443466.30	-	-	-	-	-	WS	-	-	-	72	-	-
1977-H1749	2443466.30	-	-	-	-	-	WS	-	-	-	98	-	-
1977-H1749	2443466.30	-	-	-	-	-	WS	-	-	-	98	-	-
1977-H1749	2443466.30	-	-	-	-	-	WS	-	-	-	98	-	-
1977-H1749	2443466.30	-	-	-	-	-	AN/DMC-9	-	-	-	71	-	-
1977-H1749	2443466.30	-	-	-	-	-	AN/DMC-9	-	-	-	71	-	-
1977-H1749	2443466.30	-	-	-	-	-	Stratvite, Datazone	-	-	-	56	-	-
1977-H1749	2443466.30	-	-	-	-	-	Stratvite, Datazone	-	-	-	56	-	-
1977-H1749	2443466.30	-	-	-	-	-	KRR	-	-	-	70	-	-
1977-H1749	2443466.30	-	-	-	-	-	KRR	-	-	-	70	-	-
1977-H1749	2443466.30	-	-	-	-	-	THU	-	-	-	60	-	-
1977-H1749	2443466.30	-	-	-	-	-	THU	-	-	-	60	-	-
1977-H1749	2443466.30	-	-	-	-	-	WS	-	-	-	69	-	-
1977-H1749	2443466.30	-	-	-	-	-	WS	-	-	-	69	-	-
1977-H1749	2443466.30	-	-	-	-	-	SHER	-	-	-	58	-	-
1977-H1749	2443466.30	-	-	-	-	-	SHER	-	-	-	58	-	-
1977-H1749	2443466.30	-	-	-	-	-	THU	-	-	-	65	-	-
1977-H1749	2443466.30	-	-	-	-	-	THU	-	-	-	65	-	-
1977-H1749	2443466.30	-	-	-	-	-	PRLM	-	-	-	64	-	-
1977-H1749	2443466.30	-	-	-	-	-	PRLM	-	-	-	64	-	-
1977-H1749	2443466.30	-	-	-	-	-	SHER	-	-	-	61	-	-
1977-H1749	2443466.30	-	-	-	-	-	SHER	-	-	-	61	-	-
1977-H1749	2443466.30	-	-	-	-	-	KAU	-	-	-	59	-	-
1977-H1749	2443466.30	-	-	-	-	-	PF	-	-	-	66	-	-
1977-H1749	2443466.30	-	-	-	-	-	PF	-	-	-	66	-	-
1977-H1749	2443466.30	-	-	-	-	-	WS	-	-	-	60	-	-
1977-H1749	2443466.30	-	-	-	-	-	WS	-	-	-	60	-	-
1977-H1749	2443466.30	-	-	-	-	-	SHER	-	-	-	66	-	-
1977-H1749	2443466.30	-	-	-	-	-	SHER	-	-	-	66	-	-
1977-H1749	2443466.30	-	-	-	-	-	WS	-	-	-	60	-	-
1977-H1749	2443466.30	-	-	-	-	-	WS	-	-	-	60	-	-
1977-H1749	2443466.30	-	-	-	-	-	KRR	-	-	-	70	-	-
1977-H1749	2443466.30	-	-	-	-	-	KRR	-	-	-	70	-	-
1977-H1749	2443466.30	-	-	-	-	-	THU	-	-	-	57	-	-
1977-H1749	2443466.30	-	-	-	-	-	THU	-	-	-	57	-	-
1977-H1749	2443466.30	-	-	-	-	-	WS	-	-	-	98	-	-
1977-H1749	2443466.30	-	-	-	-	-	WS	-	-	-	98	-	-
1977-H1749	2443466.30	-	-	-	-	-	AN/DMC-9	-	-	-	85	-	-
1977-H1749	2443466.30	-	-	-	-	-	AN/DMC-9	-	-	-	85	-	-
1977-H1749	2443466.30	-	-	-	-	-	PRLM	-	-	-	71	-	-
1977-H1749	2443466.30	-	-	-	-	-	PRLM	-	-	-	71	-	-
1977-H1749	2443466.30	-	-	-	-	-	SHER	-	-	-	63	-	-
1977-H1749	2443466.30	-	-	-	-	-	SHER	-	-	-	63	-	-
1977-H1749	2443466.30	-	-	-	-	-	WS	-	-	-	98	-	-
1977-H1749	2443466.30	-	-	-	-	-	WS	-	-	-	98	-	-

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Launch_Mission	FlightCode	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee_Km	Range_Km	Dest
1977-H1801	2443478-37	1977 Nov 30 2049:59	Rocketsonde	-	-	Startur, Datasonde	-	-	-	PF	-	-	-	72	-	-
1977-H1802	2443478-38	1977 Nov 30 2110:00	Rocketsonde	-	-	AN/DMC-9	-	-	-	WS	-	-	-	76	-	-
1977-H1803	2443478-39	1977 Nov 30 2127:59	Rocketsonde	-	-	Arcasonde	-	-	-	KRR	-	-	-	97	-	-
1977-H1804	2443478-42	1977 Nov 30 2209:59	Rocketsonde	-	-	AN/DMC-9	-	-	-	WS	-	-	-	97	-	-
1977-H1805	2443479-27	1977 Dec 1 1830:00	Rocketsonde	-	-	Arcasonde	-	-	-	WI	-	-	-	63	-	-
1977-H1806	2443479-29	1977 Dec 1 1859:59	Rocketsonde	-	-	Arcasonde	-	-	-	WS	-	-	-	63	-	-
1977-H1807	2443479-35	1977 Dec 1 2022:00	Rocketsonde	-	-	Arcasonde	-	-	-	PH	-	-	-	75	-	-
1977-H1808	2443480-19	1977 Dec 2 1640:00	Rocketsonde	-	-	Arcasonde	-	-	-	SHER	-	-	-	66	-	-
1977-H1809	2443480-22	1977 Dec 2 1720:00	Rocketsonde	-	-	Arcasonde	-	-	-	THU	-	-	-	66	-	-
1977-H1810	2443480-33	1977 Dec 2 1961:00	Rocketsonde	-	-	Arcasonde	-	-	-	PH	-	-	-	72	-	-
1977-H1811	2443480-36	1977 Dec 2 2040:00	Rocketsonde	-	-	Startur, Datasonde	-	-	-	PF	-	-	-	54	-	-
1977-H1812	2443480-41	1977 Dec 3 2155:00	Rocketsonde	-	-	Arcasonde	-	-	-	KAU	-	-	-	53	-	-
1977-H1813	2443480-57	1977 Dec 3 0140:00	Rocketsonde	-	-	Arcasonde	-	-	-	SHER	-	-	-	53	-	-
1977-H1814	2443480-61	1977 Dec 3 0232:00	Rocketsonde	-	-	Arcasonde	-	-	-	KRR	-	-	-	63	-	-
1977-H1815	2443483-11	1977 Dec 5 1437:59	Rocketsonde	-	-	Arcasonde	-	-	-	THU	-	-	-	69	-	-
1977-H1816	2443483-11	1977 Dec 5 1631:59	Rocketsonde	-	-	Arcasonde	-	-	-	PH	-	-	-	69	-	-
1977-H1817	2443483-21	1977 Dec 5 1700:00	Rocketsonde	-	-	Arcasonde	-	-	-	SHER	-	-	-	62	-	-
1977-H1818	2443483-22	1977 Dec 5 1717:00	Rocketsonde	-	-	Arcasonde	-	-	-	PRLM	-	-	-	70	-	-
1977-H1819	2443483-22	1977 Dec 5 1717:00	Rocketsonde	-	-	Arcasonde	-	-	-	PRLM	-	-	-	70	-	-
1977-H1820	2443483-26	1977 Dec 5 1814:59	Rocketsonde	-	-	Arcasonde	-	-	-	WS	-	-	-	66	-	-
1977-H1821	2443483-40	1977 Dec 6 2140:00	Rocketsonde	-	-	Arcasonde	-	-	-	KRR	-	-	-	79	-	-
1977-H1822	2443484-19	1977 Dec 6 1630:00	Rocketsonde	-	-	Arcasonde	-	-	-	WS	-	-	-	63	-	-
1977-H1823	2443484-33	1977 Dec 6 2000:00	Rocketsonde	-	-	Arcasonde	-	-	-	PH	-	-	-	74	-	-
1977-H1824	2443485-14	1977 Dec 7 1520:00	Rocketsonde	-	-	Arcasonde	-	-	-	THU	-	-	-	63	-	-
1977-H1825	2443485-14	1977 Dec 7 1640:00	Rocketsonde	-	-	Arcasonde	-	-	-	WS	-	-	-	96	-	-
1977-H1826	2443485-19	1977 Dec 7 1630:00	Rocketsonde	-	-	Arcasonde	-	-	-	SHER	-	-	-	61	-	-
1977-H1827	2443485-19	1977 Dec 7 1640:00	Rocketsonde	-	-	Arcasonde	-	-	-	WS	-	-	-	68	-	-
1977-H1828	2443485-20	1977 Dec 7 1644:59	Rocketsonde	-	-	Arcasonde	-	-	-	PRLM	-	-	-	70	-	-
1977-H1829	2443485-20	1977 Dec 7 1663:59	Rocketsonde	-	-	Arcasonde	-	-	-	THU	-	-	-	51	-	-
1977-H1830	2443485-20	1977 Dec 7 1664:59	Rocketsonde	-	-	Arcasonde	-	-	-	PH	-	-	-	79	-	-
1977-H1831	2443485-29	1977 Dec 7 1854:00	Rocketsonde	-	-	Arcasonde	-	-	-	PF	-	-	-	65	-	-
1977-H1832	2443485-29	1977 Dec 7 1854:00	Rocketsonde	-	-	Arcasonde	-	-	-	WS	-	-	-	65	-	-
1977-H1833	2443485-33	1977 Dec 7 1953:59	Rocketsonde	-	-	Startur, Datasonde	-	-	-	WS	-	-	-	67	-	-
1977-H1834	2443486-07	1977 Dec 8 1340:00	Rocketsonde	-	-	Arcasonde	-	-	-	KRR	-	-	-	76	-	-
1977-H1835	2443486-25	1977 Dec 8 1785:00	Rocketsonde	-	-	Arcasonde	-	-	-	WS	-	-	-	69	-	-
1977-H1836	2443486-41	1977 Dec 8 2145:59	Rocketsonde	-	-	Arcasonde	-	-	-	KRR	-	-	-	76	-	-
1977-H1837	2443486-41	1977 Dec 8 2145:59	Rocketsonde	-	-	Arcasonde	-	-	-	WS	-	-	-	69	-	-
1977-H1838	2443487-15	1977 Dec 9 1530:00	Rocketsonde	-	-	Arcasonde	-	-	-	THU	-	-	-	50	-	-
1977-H1839	2443487-21	1977 Dec 9 1700:00	Rocketsonde	-	-	Arcasonde	-	-	-	SHER	-	-	-	62	-	-
1977-H1840	2443487-21	1977 Dec 9 1859:59	Rocketsonde	-	-	Arcasonde	-	-	-	THU	-	-	-	50	-	-
1977-H1841	2443487-25	1977 Dec 9 1859:59	Rocketsonde	-	-	Arcasonde	-	-	-	SHER	-	-	-	62	-	-
1977-H1842	2443487-33	1977 Dec 9 1949:59	Rocketsonde	-	-	Arcasonde	-	-	-	PH	-	-	-	73	-	-
1977-H1843	2443489-16	1977 Dec 12 1947:59	Rocketsonde	-	-	Arcasonde	-	-	-	PH	-	-	-	73	-	-
1977-H1844	2443489-16	1977 Dec 12 1947:59	Rocketsonde	-	-	Arcasonde	-	-	-	THU	-	-	-	58	-	-
1977-H1845	2443489-17	1977 Dec 12 1600:59	Rocketsonde	-	-	Arcasonde	-	-	-	WS	-	-	-	68	-	-
1977-H1846	2443489-20	1977 Dec 12 1644:59	Rocketsonde	-	-	Arcasonde	-	-	-	SHER	-	-	-	63	-	-
1977-H1847	2443489-22	1977 Dec 12 1715:00	Rocketsonde	-	-	Arcasonde	-	-	-	PRLM	-	-	-	70	-	-
1977-H1848	2443489-22	1977 Dec 12 1715:00	Rocketsonde	-	-	Arcasonde	-	-	-	PRLM	-	-	-	70	-	-
1977-H1849	2443489-22	1977 Dec 12 1715:00	Rocketsonde	-	-	Arcasonde	-	-	-	PH	-	-	-	68	-	-
1977-H1850	2443489-36	1977 Dec 13 2356:00	Rocketsonde	-	-	Startur, Datasonde	-	-	-	PH	-	-	-	66	-	-
1977-H1851	2443489-36	1977 Dec 13 2356:00	Rocketsonde	-	-	Arcasonde	-	-	-	WS	-	-	-	66	-	-
1977-H1852	2443491-33	1977 Dec 13 2005:00	Rocketsonde	-	-	Arcasonde	-	-	-	KRR	-	-	-	71	-	-
1977-H1853	2443491-33	1977 Dec 13 2005:00	Rocketsonde	-	-	Arcasonde	-	-	-	KRR	-	-	-	71	-	-
1977-H1854	2443491-34	1977 Dec 13 2006:00	Rocketsonde	-	-	Arcasonde	-	-	-	PH	-	-	-	73	-	-
1977-H1855	2443491-34	1977 Dec 13 2216:00	Rocketsonde	-	-	Arcasonde	-	-	-	THU	-	-	-	68	-	-
1977-H1856	2443492-13	1977 Dec 14 1814:59	Rocketsonde	-	-	Arcasonde	-	-	-	THU	-	-	-	70	-	-
1977-H1857	2443492-13	1977 Dec 14 1814:59	Rocketsonde	-	-	Arcasonde	-	-	-	PRLM	-	-	-	70	-	-
1977-H1858	2443492-13	1977 Dec 14 1814:59	Rocketsonde	-	-	Arcasonde	-	-	-	PRLM	-	-	-	70	-	-
1977-H1859	2443492-13	1977 Dec 14 1814:59	Rocketsonde	-	-	Arcasonde	-	-	-	VI	-	-	-	70	-	-
1977-H1860	2443492-21	1977 Dec 14 1709:00	Rocketsonde	-	-	Arcasonde	-	-	-	SHER	-	-	-	62	-	-
1977-H1861	2443492-21	1977 Dec 14 1709:00	Rocketsonde	-	-	Arcasonde	-	-	-	SHER	-	-	-	62	-	-
1977-H1862	2443492-25	1977 Dec 14 1859:59	Rocketsonde	-	-	Arcasonde	-	-	-	WS	-	-	-	73	-	-
1977-H1863	2443492-25	1977 Dec 14 1859:59	Rocketsonde	-	-	Arcasonde	-	-	-	WS	-	-	-	99	-	-
1977-H1864	2443492-30	1977 Dec 14 1909:59	Rocketsonde	-	-	Arcasonde	-	-	-	WS	-	-	-	72	-	-
1977-H1865	2443492-36	1977 Dec 14 2037:00	Rocketsonde	-	-	Startur, Datasonde	-	-	-	PF	-	-	-	70	-	-
1977-H1866	2443492-36	1977 Dec 15 0205:00	Rocketsonde	-	-	Arcasonde	-	-	-	KRR	-	-	-	79	-	-
1977-H1867	2443493-17	1977 Dec 15 1535:59	Rocketsonde	-	-	Arcasonde	-	-	-	VI	-	-	-	71	-	-
1977-H1868	2443493-17	1977 Dec 15 1535:59	Rocketsonde	-	-	Arcasonde	-	-	-	VI	-	-	-	71	-	-
1977-H1869	2443493-26	1977 Dec 15 1820:00	Rocketsonde	-	-	Arcasonde	-	-	-	PM	-	-	-	64	-	-
1977-H1870	2443493-26	1977 Dec 15 1820:00	Rocketsonde	-	-	Arcasonde	-	-	-	WS	-	-	-	64	-	-
1977-H1871	2443493-42	1977 Dec 15 2159:59	Rocketsonde	-	-	Arcasonde	-	-	-	PF	-	-	-	62	-	-
1977-H1872	2443493-42	1977 Dec 15 2159:59	Rocketsonde	-	-	Startur, Datasonde	-	-	-	PF	-	-	-	68	-	-
1977-H1873	2443494-19	1977 Dec 16 1830:00	Rocketsonde	-	-	Arcasonde	-	-	-	KRR	-	-	-	70	-	-
1977-H1874	2443494-21	1977 Dec 16 1700:00	Rocketsonde	-	-	Arcasonde	-	-	-	SHER	-	-	-	60	-	-
1977-H1875	2443494-21	1977 Dec 16 1859:59	Rocketsonde	-	-	Arcasonde	-	-	-	WS	-	-	-	60	-	-
1977-H1876	2443494-33	1977 Dec 16 2000:00	Rocketsonde	-	-	Arcasonde	-	-	-	KAU	-	-	-	57	-	-
1977-H1877	2443494-33	1977 Dec 16 2000:00	Rocketsonde	-	-	Arcasonde	-	-	-	KAU	-	-	-	57	-	-
1977-H1878	2443497-21	1977 Dec 19 1711:00	Rocketsonde	-	-	Arcasonde	-	-	-	SHER	-	-	-	62	-	-
1977-H1879	2443497-22	1977 Dec 19 1711:00	Rocketsonde	-	-	Arcasonde	-	-	-	SHER	-	-	-	62	-	-
1977-H1880	2443497-22	1977 Dec 19 1711:00	Rocketsonde	-	-	Arcasonde	-	-	-	PRLM	-	-	-	70	-	-
1977-H1881	2443497-22	1977 Dec 19 1711:00	Rocketsonde	-	-	Arcasonde	-	-	-	PRLM	-	-	-	70	-	-
1977-H1882	2443497-55	1977 Dec 20 0114:59	Rocketsonde	-	-	Arcasonde	-	-	-	WS	-	-	-	66	-	-
1977-H1883	2443498-10	1977 Dec 20 1425:00	Rocketsonde	-	-	Arcasonde	-	-	-	KRR	-	-	-	76	-	-
1977-H1884	2443499-13	1977 Dec 21 1500:00	Rocketsonde	-	-	Arcasonde	-	-	-	THU	-	-	-	68	-	-
1977-H1885	2443499-13	1977 Dec 21 1519:59	Rocketsonde	-	-	Arcasonde	-	-	-	THU	-	-	-	68	-	-
1977-H1886	2443499-13	1977 Dec 21 1519:59	Rocketsonde	-	-	Arcasonde	-	-	-	THU	-	-	-	68	-	-
1977-H1887	2443499-21	1977 Dec 21 1700:00	Rocketsonde	-	-	Arcasonde	-	-	-	VI	-	-	-	69	-	-
1977-H1888	2443499-21	1977 Dec 21 1700:00	Rocketsonde	-	-	Arcasonde	-	-	-	VI	-	-	-	69	-	-
1977-H1889	2443499-25	1977 Dec 21 1804:59	Rocketsonde	-	-	Arcasonde	-	-	-	PRLM	-	-	-	70	-	-
1977-H1890	2443499-25	1977 Dec 21 1804:59	Rocketsonde	-	-	AN/DMC-9	-	-	-	WS	-	-	-	97	-	-
1977-H1891	2443499-26	1977 Dec 21 1804:59	Rocketsonde	-	-	Arcasonde	-	-	-	SHER	-	-	-			



Launch

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Mission	FlightCode	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee_Km	Range_Km	Dest
1977-162	2443506-26	1977 Dec 28 16:14:59	Rocketsonde	-	-	Arcasonde	-	-	-	WS	-	-	-	47	-	-
1977-19306	2443507-40	1977 Dec 29 21:32:00	Rocketsonde	-	-	Arcasonde	-	-	-	KRR	-	-	-	73	-	-
1977-19307	2443508-10	1977 Dec 30 14:25:00	Rocketsonde	-	-	Arcasonde	-	-	-	THU	-	-	-	65	-	-
1977-19308	2443508-17	1977 Dec 30 15:59:59	Rocketsonde	-	-	Arcasonde	-	-	-	WS	-	-	-	68	-	-
1977-19309	2443508-19	1977 Dec 30 16:40:00	Rocketsonde	-	-	Arcasonde	-	-	-	SHER	-	-	-	66	-	-
1978-1696	2443777-11	1978 Sep 25 14:32:00	Rocketsonde	-	-	Arcasonde	-	-	-	THU	-	-	-	66	-	-
1978-1697	2443777-20	1978 Sep 25 16:51:00	Rocketsonde	-	-	Arcasonde	-	-	-	PH	-	-	-	75	-	-
1978-1698	2443777-21	1978 Sep 25 17:00:00	Rocketsonde	-	-	Arcasonde	-	-	-	SHER	-	-	-	64	-	-
1978-1699	2443777-25	1978 Sep 25 18:00:00	Rocketsonde	-	-	Arcasonde	-	-	-	WS	-	-	-	53	-	-
1978-1700	2443777-39	1978 Sep 25 18:30:00	Rocketsonde	-	-	Arcasonde	-	-	-	PRLM	-	-	-	70	-	-
1978-1701	2443777-42	1978 Sep 25 21:27:59	Rocketsonde	-	-	Arcasonde	-	-	-	KRR	-	-	-	68	-	-
1978-1702	2443779-10	1978 Sep 27 14:20:00	Rocketsonde	-	-	Arcasonde	-	-	-	KAU	-	-	-	58	-	-
1978-1704	2443779-12	1978 Sep 27 14:20:00	Rocketsonde	-	-	Arcasonde	-	-	-	SHER	-	-	-	64	-	-
1978-1706	2443779-20	1978 Sep 27 16:43:59	Rocketsonde	-	-	AN/DMG-9	-	-	-	THU	-	-	-	66	-	-
1978-1361	2443779-20	1978 Sep 27 16:44:59	Rocketsonde	-	-	AN/DMG-9	-	-	-	PH	-	-	-	89	-	-
1978-1362	2443779-21	1978 Sep 27 17:00:00	Rocketsonde	-	-	AN/DMG-9	-	-	-	WS	-	-	-	98	-	-
1978-1707	2443779-22	1978 Sep 27 17:14:00	Rocketsonde	-	-	Arcasonde	-	-	-	PH	-	-	-	74	-	-
1978-1708	2443779-22	1978 Sep 27 17:15:00	Rocketsonde	-	-	Arcasonde	-	-	-	WS	-	-	-	61	-	-
1978-1709	2443779-25	1978 Sep 27 17:56:00	Rocketsonde	-	-	Arcasonde	-	-	-	VI	-	-	-	69	-	-
1978-1709	2443779-25	1978 Sep 27 18:56:00	Rocketsonde	-	-	AN/DMG-9	-	-	-	VI	-	-	-	85	-	-
1978-1363	2443779-29	1978 Sep 27 19:07:59	Rocketsonde	-	-	AN/DMG-9	-	-	-	VI	-	-	-	90	-	-
1978-1364	2443779-30	1978 Sep 27 19:07:59	Rocketsonde	-	-	Arcasonde	-	-	-	PRLM	-	-	-	68	-	-
1978-1710	2443779-31	1978 Sep 28 02:00:00	Rocketsonde	-	-	Arcasonde	-	-	-	KRR	-	-	-	68	-	-
1978-1711	2443779-51	1978 Sep 28 02:00:00	Rocketsonde	-	-	Arcasonde	-	-	-	THU	-	-	-	60	-	-
1978-1712	2443781-12	1978 Sep 28 14:54:00	Rocketsonde	-	-	Arcasonde	-	-	-	SHER	-	-	-	58	-	-
1978-1713	2443781-21	1978 Sep 28 17:22:00	Rocketsonde	-	-	Arcasonde	-	-	-	PH	-	-	-	77	-	-
1978-1715	2443781-22	1978 Sep 28 17:22:00	Rocketsonde	-	-	Arcasonde	-	-	-	WS	-	-	-	63	-	-
1978-1717	2443781-23	1978 Sep 28 17:30:00	Rocketsonde	-	-	Arcasonde	-	-	-	PRLM	-	-	-	70	-	-
1978-1718	2443781-27	1978 Sep 28 18:52:00	Rocketsonde	-	-	Arcasonde	-	-	-	KRR	-	-	-	76	-	-
1978-1722	2443781-55	1978 Sep 30 01:14:59	Rocketsonde	-	-	Arcasonde	-	-	-	THU	-	-	-	67	-	-
1978-1723	2443784-15	1978 Oct 2 15:52:00	Rocketsonde	-	-	Arcasonde	-	-	-	KRR	-	-	-	70	-	-
1978-1724	2443784-16	1978 Oct 2 15:56:00	Rocketsonde	-	-	Arcasonde	-	-	-	PRLM	-	-	-	63	-	-
1978-1726	2443784-21	1978 Oct 2 17:00:00	Rocketsonde	-	-	Arcasonde	-	-	-	SHER	-	-	-	63	-	-
1978-1727	2443784-25	1978 Oct 2 18:00:00	Rocketsonde	-	-	Arcasonde	-	-	-	WS	-	-	-	69	-	-
1978-1728	2443784-26	1978 Oct 2 18:00:00	Rocketsonde	-	-	Arcasonde	-	-	-	PH	-	-	-	76	-	-
1978-1729	2443784-55	1978 Oct 3 01:14:59	Rocketsonde	-	-	Arcasonde	-	-	-	KRR	-	-	-	90	-	-
1978-1366	2443786-09	1978 Oct 4 14:14:00	Rocketsonde	-	-	Arcasonde	-	-	-	VI	-	-	-	75	-	-
1978-1369	2443786-14	1978 Oct 4 15:22:00	Rocketsonde	-	-	Arcasonde	-	-	-	THU	-	-	-	62	-	-
1978-1703	2443786-16	1978 Oct 4 16:18:00	Rocketsonde	-	-	Arcasonde	-	-	-	PRLM	-	-	-	75	-	-
1978-1705	2443786-21	1978 Oct 4 17:05:00	Rocketsonde	-	-	Arcasonde	-	-	-	SHER	-	-	-	63	-	-
1978-1369	2443786-26	1978 Oct 4 18:14:59	Rocketsonde	-	-	Arcasonde	-	-	-	WS	-	-	-	72	-	-
1978-1369	2443786-31	1978 Oct 4 19:22:59	Rocketsonde	-	-	Arcasonde	-	-	-	PH	-	-	-	89	-	-
1978-1704	2443786-34	1978 Oct 4 19:31:59	Rocketsonde	-	-	Arcasonde	-	-	-	PRLM	-	-	-	70	-	-
1978-1705	2443786-34	1978 Oct 4 19:31:59	Rocketsonde	-	-	Arcasonde	-	-	-	KRR	-	-	-	74	-	-
1978-1706	2443786-46	1978 Oct 4 23:59:00	Rocketsonde	-	-	Arcasonde	-	-	-	PH	-	-	-	75	-	-
1978-1708	2443788-16	1978 Oct 6 17:07:00	Rocketsonde	-	-	Arcasonde	-	-	-	KRR	-	-	-	70	-	-
1978-1709	2443788-21	1978 Oct 6 19:00:00	Rocketsonde	-	-	Arcasonde	-	-	-	PRLM	-	-	-	62	-	-
1978-1710	2443788-26	1978 Oct 7 01:14:59	Rocketsonde	-	-	Arcasonde	-	-	-	SHER	-	-	-	65	-	-
1978-1711	2443788-56	1978 Oct 7 01:14:59	Rocketsonde	-	-	Arcasonde	-	-	-	WS	-	-	-	75	-	-
1978-1712	2443789-15	1978 Oct 9 15:13:59	Rocketsonde	-	-	Arcasonde	-	-	-	THU	-	-	-	67	-	-
1978-1713	2443789-15	1978 Oct 9 15:13:59	Rocketsonde	-	-	Arcasonde	-	-	-	THU	-	-	-	67	-	-
1978-1714	2443789-22	1978 Oct 10 17:15:00	Rocketsonde	-	-	Arcasonde	-	-	-	WS	-	-	-	65	-	-
1978-1714	2443789-22	1978 Oct 10 18:00:00	Rocketsonde	-	-	Arcasonde	-	-	-	WS	-	-	-	69	-	-
1978-1715	2443789-26	1978 Oct 10 20:35:00	Rocketsonde	-	-	Arcasonde	-	-	-	WS	-	-	-	49	-	-
1978-1716	2443789-30	1978 Oct 10 21:29:59	Rocketsonde	-	-	Arcasonde	-	-	-	KAU	-	-	-	58	-	-
1978-1717	2443789-31	1978 Oct 11 14:30:00	Rocketsonde	-	-	AN/DMG-9	-	-	-	VI	-	-	-	61	-	-
1978-1718	2443789-12	1978 Oct 11 14:55:00	Rocketsonde	-	-	Arcasonde	-	-	-	THU	-	-	-	67	-	-
1978-1719	2443789-12	1978 Oct 11 14:55:00	Rocketsonde	-	-	Arcasonde	-	-	-	VI	-	-	-	73	-	-
1978-1720	2443789-17	1978 Oct 11 15:59:59	Rocketsonde	-	-	Arcasonde	-	-	-	WS	-	-	-	98	-	-
1978-1721	2443789-18	1978 Oct 11 16:14:59	Rocketsonde	-	-	Arcasonde	-	-	-	WS	-	-	-	60	-	-
1978-1722	2443789-18	1978 Oct 11 16:14:59	Rocketsonde	-	-	Arcasonde	-	-	-	WS	-	-	-	70	-	-
1978-1723	2443789-21	1978 Oct 11 17:00:00	Rocketsonde	-	-	Arcasonde	-	-	-	SHER	-	-	-	61	-	-
1978-1724	2443789-31	1978 Oct 11 19:07:00	Rocketsonde	-	-	Arcasonde	-	-	-	PH	-	-	-	73	-	-
1978-1725	2443789-39	1978 Oct 11 21:29:59	Rocketsonde	-	-	Arcasonde	-	-	-	KRR	-	-	-	76	-	-
1978-1726	2443789-40	1978 Oct 11 21:30:00	Rocketsonde	-	-	AN/DMG-97	-	-	-	KAU	-	-	-	86	-	-
1978-1727	2443789-42	1978 Oct 11 22:07:59	Rocketsonde	-	-	Arcasonde	-	-	-	KAU	-	-	-	86	-	-
1978-1728	2443795-09	1978 Oct 13 14:04:59	Rocketsonde	-	-	Arcasonde	-	-	-	SHER	-	-	-	62	-	-
1978-1729	2443795-14	1978 Oct 13 15:25:59	Rocketsonde	-	-	Arcasonde	-	-	-	THU	-	-	-	69	-	-
1978-1730	2443795-14	1978 Oct 13 15:25:59	Rocketsonde	-	-	Arcasonde	-	-	-	THU	-	-	-	62	-	-
1978-1731	2443795-22	1978 Oct 13 17:13:00	Rocketsonde	-	-	Arcasonde	-	-	-	PRLM	-	-	-	65	-	-
1978-1732	2443795-36	1978 Oct 13 20:33:00	Rocketsonde	-	-	Arcasonde	-	-	-	WS	-	-	-	55	-	-
1978-1733	2443795-41	1978 Oct 13 21:56:59	Rocketsonde	-	-	Arcasonde	-	-	-	WS	-	-	-	68	-	-
1978-1734	2443798-08	1978 Oct 16 13:52:59	Rocketsonde	-	-	Arcasonde	-	-	-	SHER	-	-	-	77	-	-
1978-1735	2443798-08	1978 Oct 16 13:52:59	Rocketsonde	-	-	Arcasonde	-	-	-	KRR	-	-	-	63	-	-
1978-1736	2443798-27	1978 Oct 16 18:30:00	Rocketsonde	-	-	Arcasonde	-	-	-	SHER	-	-	-	67	-	-
1978-1737	2443798-32	1978 Oct 16 18:30:00	Rocketsonde	-	-	Arcasonde	-	-	-	THU	-	-	-	69	-	-
1978-1738	2443798-38	1978 Oct 16 21:13:59	Rocketsonde	-	-	Arcasonde	-	-	-	PH	-	-	-	75	-	-
1978-1739	2443798-40	1978 Oct 16 21:37:59	Rocketsonde	-	-	Arcasonde	-	-	-	KAU	-	-	-	59	-	-
1978-1740	2443798-40	1978 Oct 16 21:37:59	Rocketsonde	-	-	Arcasonde	-	-	-	KAU	-	-	-	59	-	-
1978-1741	2443799-05	1978 Oct 17 13:14:59	Rocketsonde	-	-	Arcasonde	-	-	-	KRR	-	-	-	73	-	-
1978-1742	2443800-10	1978 Oct 18 14:20:00	Rocketsonde	-	-	Arcasonde	-	-	-	WS	-	-	-	63	-	-
1978-1743	2443800-11	1978 Oct 18 14:37:59	Rocketsonde	-	-	AN/DMG-9	-	-	-	SHER	-	-	-	62	-	-
1978-1744	2443800-11	1978 Oct 18 14:37:59	Rocketsonde	-	-	AN/DMG-9	-	-	-	VI	-	-	-	89	-	-
1978-1745	2443800-13	1978 Oct 18 15:02:59	Rocketsonde	-	-	Arcasonde	-	-	-	THU	-	-	-	70	-	-
1978-1746	2443800-14	1978 Oct 18 15:27:59	Rocketsonde	-	-	Arcasonde	-	-	-	THU	-	-	-	66	-	-
1978-1747	2443800-21	1978 Oct 18 17:15:00	Rocketsonde	-	-	AN/DMG-9	-	-	-	WS	-	-	-	66	-	-
1978-1748	2443800-22	1978 Oct 18 17:15:00	Rocketsonde	-	-	AN/DMG-9	-	-	-	WS	-	-	-	72	-	-
1978-1749	2443800-27	1978 Oct 18 18:34:59	Rocketsonde	-	-	Arcasonde	-	-	-	PRLM	-	-	-	67	-	-
1978-1750	2443800-38	1978 Oct 18 21:00:00	Rocketsonde	-	-	AN/DMG-97	-	-	-	KAU	-	-	-	89	-	-

Launch Mission

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Mission	FlightCode	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee_Km	Range_Km	Dest
1978-11080	2443800-41	1978 Oct 18 21:55:00	Rocketsonde	-	-	Arcasonde	-	-	-	KAU	-	-	-	59	-	-
1978-1387	2443800-59	1978 Oct 19 02:12:00	Rocketsonde	-	-	Arcasonde	-	-	-	KRR	-	-	-	82	-	-
1978-11081	2443801-05	1978 Oct 19 13:14:59	Rocketsonde	-	-	Arcasonde	-	-	-	WS	-	-	-	64	-	-
1978-1061	2443801-12	1978 Oct 19 21:00:00	Rocketsonde	-	-	Arcasonde	-	-	-	WS	-	-	-	36	-	-
1978-11082	2443801-39	1978 Oct 19 21:20:00	Rocketsonde	-	-	Arcasonde	-	-	-	KRR	-	-	-	73	-	-
1978-11083	2443802-15	1978 Oct 20 15:31:00	Rocketsonde	-	-	Arcasonde	-	-	-	THU	-	-	-	70	-	-
1978-11084	2443802-21	1978 Oct 20 17:00:00	Rocketsonde	-	-	Arcasonde	-	-	-	SHER	-	-	-	65	-	-
1978-11085	2443802-23	1978 Oct 20 17:00:00	Rocketsonde	-	-	Arcasonde	-	-	-	WS	-	-	-	63	-	-
1978-1388	2443802-23	1978 Oct 20 17:32:00	Rocketsonde	-	-	Arcasonde	-	-	-	PH	-	-	-	89	-	-
1978-11086	2443802-29	1978 Oct 20 21:01:59	Rocketsonde	-	-	Arcasonde	-	-	-	AN/DMC-9	-	-	-	66	-	-
1978-11087	2443802-38	1978 Oct 20 21:00:00	Rocketsonde	-	-	Arcasonde	-	-	-	PRLM	-	-	-	59	-	-
1978-11088	2443805-13	1978 Oct 23 15:10:00	Rocketsonde	-	-	Arcasonde	-	-	-	THU	-	-	-	69	-	-
1978-11089	2443805-21	1978 Oct 23 17:00:00	Rocketsonde	-	-	Arcasonde	-	-	-	SHER	-	-	-	61	-	-
1978-11090	2443805-24	1978 Oct 23 17:43:00	Rocketsonde	-	-	Arcasonde	-	-	-	PH	-	-	-	69	-	-
1978-11091	2443805-26	1978 Oct 23 18:11:00	Rocketsonde	-	-	Arcasonde	-	-	-	WS	-	-	-	67	-	-
1978-11092	2443806-40	1978 Oct 24 21:33:00	Rocketsonde	-	-	Arcasonde	-	-	-	KRR	-	-	-	76	-	-
1978-1392	2443807-11	1978 Oct 26 14:57:00	Rocketsonde	-	-	Arcasonde	-	-	-	AN/DMC-9	-	-	-	90	-	-
1978-11093	2443807-14	1978 Oct 26 15:19:00	Rocketsonde	-	-	Arcasonde	-	-	-	THU	-	-	-	64	-	-
1978-11094	2443807-17	1978 Oct 26 16:09:59	Rocketsonde	-	-	Arcasonde	-	-	-	WI	-	-	-	69	-	-
1978-11095	2443807-21	1978 Oct 26 17:03:59	Rocketsonde	-	-	Arcasonde	-	-	-	SHER	-	-	-	66	-	-
1978-1393	2443807-25	1978 Oct 26 18:00:00	Rocketsonde	-	-	Arcasonde	-	-	-	WS	-	-	-	96	-	-
1978-11096	2443807-26	1978 Oct 26 18:14:59	Rocketsonde	-	-	Arcasonde	-	-	-	WS	-	-	-	71	-	-
1978-11097	2443807-36	1978 Oct 26 20:30:00	Rocketsonde	-	-	Arcasonde	-	-	-	SHER	-	-	-	54	-	-
1978-1394	2443807-39	1978 Oct 26 21:27:59	Rocketsonde	-	-	Arcasonde	-	-	-	AN/DMC-97	-	-	-	62	-	-
1978-11098	2443807-42	1978 Oct 26 22:03:59	Rocketsonde	-	-	Arcasonde	-	-	-	KRR	-	-	-	73	-	-
1978-11099	2443807-46	1978 Oct 26 23:7:00	Rocketsonde	-	-	Arcasonde	-	-	-	THU	-	-	-	68	-	-
1978-11100	2443806-21	1978 Oct 26 17:01:00	Rocketsonde	-	-	Arcasonde	-	-	-	WS	-	-	-	65	-	-
1978-11101	2443809-14	1978 Oct 27 15:15:59	Rocketsonde	-	-	Arcasonde	-	-	-	SHER	-	-	-	69	-	-
1978-11102	2443809-21	1978 Oct 27 17:00:00	Rocketsonde	-	-	Arcasonde	-	-	-	PRLM	-	-	-	57	-	-
1978-11103	2443809-26	1978 Oct 27 19:45:00	Rocketsonde	-	-	Arcasonde	-	-	-	THU	-	-	-	79	-	-
1978-11104	2443809-55	1978 Oct 28 01:18:59	Rocketsonde	-	-	Arcasonde	-	-	-	KRR	-	-	-	63	-	-
1978-11105	2443812-12	1978 Oct 30 14:52:00	Rocketsonde	-	-	Arcasonde	-	-	-	PH	-	-	-	73	-	-
1978-11106	2443812-21	1978 Oct 30 16:27:59	Rocketsonde	-	-	Arcasonde	-	-	-	THU	-	-	-	67	-	-
1978-11107	2443814-14	1978 Nov 1 15:57:00	Rocketsonde	-	-	Arcasonde	-	-	-	PH	-	-	-	79	-	-
1978-11108	2443814-19	1978 Nov 1 16:27:59	Rocketsonde	-	-	Arcasonde	-	-	-	KRR	-	-	-	69	-	-
1978-11109	2443814-21	1978 Nov 1 17:00:00	Rocketsonde	-	-	Arcasonde	-	-	-	PH	-	-	-	89	-	-
1978-11110	2443814-25	1978 Nov 1 18:59:59	Rocketsonde	-	-	Arcasonde	-	-	-	SHER	-	-	-	68	-	-
1978-11111	2443814-29	1978 Nov 1 18:59:59	Rocketsonde	-	-	Arcasonde	-	-	-	WS	-	-	-	96	-	-
1978-11112	2443814-32	1978 Nov 1 19:41:59	Rocketsonde	-	-	Arcasonde	-	-	-	WS	-	-	-	76	-	-
1978-11113	2443814-32	1978 Nov 1 19:45:59	Rocketsonde	-	-	Arcasonde	-	-	-	PRLM	-	-	-	66	-	-
1978-11114	2443814-54	1978 Nov 2 13:57:59	Rocketsonde	-	-	Arcasonde	-	-	-	KRR	-	-	-	69	-	-
1978-11115	2443814-94	1978 Nov 2 14:57:59	Rocketsonde	-	-	Arcasonde	-	-	-	WS	-	-	-	69	-	-
1978-11116	2443816-30	1978 Nov 3 14:59:59	Rocketsonde	-	-	Arcasonde	-	-	-	PH	-	-	-	52	-	-
1978-11117	2443816-31	1978 Nov 3 19:30:59	Rocketsonde	-	-	Arcasonde	-	-	-	PRLM	-	-	-	62	-	-
1978-11118	2443819-08	1978 Nov 6 14:00:00	Rocketsonde	-	-	Arcasonde	-	-	-	SHER	-	-	-	70	-	-
1978-11119	2443819-22	1978 Nov 6 17:19:00	Rocketsonde	-	-	Arcasonde	-	-	-	THU	-	-	-	69	-	-
1978-11120	2443819-22	1978 Nov 6 18:59:59	Rocketsonde	-	-	Arcasonde	-	-	-	WS	-	-	-	69	-	-
1978-11121	2443819-26	1978 Nov 6 21:39:00	Rocketsonde	-	-	Arcasonde	-	-	-	AN/DMC-9	-	-	-	64	-	-
1978-11122	2443821-15	1978 Nov 7 01:14:59	Rocketsonde	-	-	Arcasonde	-	-	-	KRR	-	-	-	81	-	-
1978-11141	2443821-12	1978 Nov 8 14:48:00	Rocketsonde	-	-	Arcasonde	-	-	-	THU	-	-	-	70	-	-
1978-11142	2443821-15	1978 Nov 8 15:31:00	Rocketsonde	-	-	Arcasonde	-	-	-	WS	-	-	-	73	-	-
1978-11143	2443821-20	1978 Nov 8 16:30:00	Rocketsonde	-	-	Arcasonde	-	-	-	WS	-	-	-	97	-	-
1978-11144	2443821-20	1978 Nov 8 16:34:59	Rocketsonde	-	-	Arcasonde	-	-	-	AN/DMC-9	-	-	-	67	-	-
1978-11145	2443821-21	1978 Nov 8 16:55:59	Rocketsonde	-	-	Arcasonde	-	-	-	WS	-	-	-	70	-	-
1978-11146	2443821-24	1978 Nov 8 17:40:00	Rocketsonde	-	-	Arcasonde	-	-	-	PRLM	-	-	-	65	-	-
1978-11147	2443821-24	1978 Nov 8 21:29:00	Rocketsonde	-	-	Arcasonde	-	-	-	SHER	-	-	-	89	-	-
1978-11148	2443821-47	1978 Nov 8 23:14:00	Rocketsonde	-	-	Arcasonde	-	-	-	KAU	-	-	-	62	-	-
1978-11149	2443822-21	1978 Nov 9 17:03:59	Rocketsonde	-	-	Arcasonde	-	-	-	KRR	-	-	-	78	-	-
1978-11150	2443822-21	1978 Nov 9 17:03:59	Rocketsonde	-	-	Arcasonde	-	-	-	SHER	-	-	-	62	-	-
1978-11151	2443822-26	1978 Nov 9 18:59:59	Rocketsonde	-	-	Arcasonde	-	-	-	PH	-	-	-	72	-	-
1978-11152	2443823-16	1978 Nov 10 15:49:59	Rocketsonde	-	-	Arcasonde	-	-	-	WS	-	-	-	43	-	-
1978-11153	2443823-20	1978 Nov 10 16:44:59	Rocketsonde	-	-	Arcasonde	-	-	-	THU	-	-	-	52	-	-
1978-11154	2443826-13	1978 Nov 13 15:06:00	Rocketsonde	-	-	Arcasonde	-	-	-	PRLM	-	-	-	68	-	-
1978-11155	2443826-22	1978 Nov 13 17:15:00	Rocketsonde	-	-	Arcasonde	-	-	-	THU	-	-	-	61	-	-
1978-11156	2443826-22	1978 Nov 13 17:15:00	Rocketsonde	-	-	Arcasonde	-	-	-	WS	-	-	-	68	-	-
1978-11157	2443826-24	1978 Nov 13 18:49:59	Rocketsonde	-	-	Arcasonde	-	-	-	PM	-	-	-	63	-	-
1978-11160	2443828-08	1978 Nov 14 14:00:00	Rocketsonde	-	-	Arcasonde	-	-	-	SHER	-	-	-	63	-	-
1978-11161	2443828-12	1978 Nov 15 14:48:00	Rocketsonde	-	-	Arcasonde	-	-	-	THU	-	-	-	66	-	-
1978-11162	2443828-21	1978 Nov 15 17:01:00	Rocketsonde	-	-	Arcasonde	-	-	-	SHER	-	-	-	63	-	-
1978-11163	2443828-24	1978 Nov 15 17:42:00	Rocketsonde	-	-	Arcasonde	-	-	-	VI	-	-	-	73	-	-
1978-11164	2443828-24	1978 Nov 15 18:30:00	Rocketsonde	-	-	Arcasonde	-	-	-	AN/DMC-9	-	-	-	90	-	-
1978-11165	2443828-27	1978 Nov 15 18:45:00	Rocketsonde	-	-	Arcasonde	-	-	-	WS	-	-	-	98	-	-
1978-11166	2443828-28	1978 Nov 15 19:45:00	Rocketsonde	-	-	Arcasonde	-	-	-	WS	-	-	-	70	-	-
1978-11167	2443828-37	1978 Nov 15 20:53:00	Rocketsonde	-	-	Arcasonde	-	-	-	KAU	-	-	-	90	-	-
1978-11168	2443828-39	1978 Nov 15 21:18:00	Rocketsonde	-	-	Arcasonde	-	-	-	AN/DMC-97	-	-	-	61	-	-
1978-11169	2443828-42	1978 Nov 15 23:15:00	Rocketsonde	-	-	Arcasonde	-	-	-	KRR	-	-	-	78	-	-
1978-11170	2443829-29	1978 Nov 16 18:59:59	Rocketsonde	-	-	Arcasonde	-	-	-	KRR	-	-	-	60	-	-
1978-11171	2443829-56	1978 Nov 17 01:24:59	Rocketsonde	-	-	Arcasonde	-	-	-	KRR	-	-	-	78	-	-
1978-11172	2443830-19	1978 Nov 17 16:33:59	Rocketsonde	-	-	Arcasonde	-	-	-	THU	-	-	-	60	-	-
1978-11173	2443830-21	1978 Nov 17 17:00:00	Rocketsonde	-	-	Arcasonde	-	-	-	SHER	-	-	-	63	-	-
1978-11174	2443830-21	1978 Nov 17 17:00:00	Rocketsonde	-	-	Arcasonde	-	-	-	SHER	-	-	-	63	-	-

Launch Mission

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Launch_Mission	FlightCode	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee_Km	Range_Km	Dest
1978-1418	2443830-27	1978 Nov 17 1827:59	Rocketsonde	-	-	-	-	-	-	PH	-	-	-	89	-	-
1978-14178	2443830-29	1978 Nov 17 1859:59	Rocketsonde	-	-	-	-	-	-	PH	-	-	-	76	-	-
1978-14179	2443830-40	1978 Nov 17 2129:00	Rocketsonde	-	-	-	-	-	-	KRR	-	-	-	79	-	-
1978-14180	2443830-44	1978 Nov 17 2228:59	Rocketsonde	-	-	-	-	-	-	KAU	-	-	-	62	-	-
1978-14184	2443833-09	1978 Nov 20 1415:00	Rocketsonde	-	-	-	-	-	-	WS	-	-	-	66	-	-
1978-14185	2443833-13	1978 Nov 20 1511:59	Rocketsonde	-	-	-	-	-	-	THU	-	-	-	66	-	-
1978-14187	2443833-18	1978 Nov 20 1624:59	Rocketsonde	-	-	-	-	-	-	WS	-	-	-	62	-	-
1978-14188	2443833-19	1978 Nov 20 1632:59	Rocketsonde	-	-	-	-	-	-	PRLLH	-	-	-	70	-	-
1978-14189	2443833-21	1978 Nov 20 1700:00	Rocketsonde	-	-	-	-	-	-	SHER	-	-	-	62	-	-
1978-14190	2443833-31	1978 Nov 20 1921:59	Rocketsonde	-	-	-	-	-	-	PH	-	-	-	74	-	-
1978-14191	2443833-55	1978 Nov 21 0114:59	Rocketsonde	-	-	-	-	-	-	KRR	-	-	-	79	-	-
1978-14194	2443835-08	1978 Nov 22 1400:00	Rocketsonde	-	-	-	-	-	-	SHER	-	-	-	60	-	-
1978-14196	2443835-12	1978 Nov 22 1448:59	Rocketsonde	-	-	-	-	-	-	THU	-	-	-	66	-	-
1978-1422	2443835-13	1978 Nov 22 1511:00	Rocketsonde	-	-	-	-	-	-	WI	-	-	-	90	-	-
1978-14197	2443835-15	1978 Nov 22 1558:59	Rocketsonde	-	-	-	-	-	-	WI	-	-	-	71	-	-
1978-14199	2443835-20	1978 Nov 22 1641:00	Rocketsonde	-	-	-	-	-	-	PRLLH	-	-	-	70	-	-
1978-14200	2443835-22	1978 Nov 22 1721:00	Rocketsonde	-	-	-	-	-	-	PH	-	-	-	69	-	-
1978-1423	2443835-33	1978 Nov 22 2000:00	Rocketsonde	-	-	-	-	-	-	WS	-	-	-	98	-	-
1978-14201	2443835-39	1978 Nov 22 2120:00	Rocketsonde	-	-	-	-	-	-	AN/DMC-9	-	-	-	69	-	-
1978-14202	2443835-40	1978 Nov 22 2142:00	Rocketsonde	-	-	-	-	-	-	AN/DMC-9	-	-	-	69	-	-
1978-14204	2443837-13	1978 Nov 24 1507:00	Rocketsonde	-	-	-	-	-	-	KRR	-	-	-	57	-	-
1978-14205	2443837-18	1978 Nov 24 1614:59	Rocketsonde	-	-	-	-	-	-	THU	-	-	-	73	-	-
1978-14206	2443837-22	1978 Nov 24 1718:00	Rocketsonde	-	-	-	-	-	-	WS	-	-	-	68	-	-
1978-14209	2443837-56	1978 Nov 25 0120:59	Rocketsonde	-	-	-	-	-	-	PRLLH	-	-	-	69	-	-
1978-14207	2443840-09	1978 Nov 27 1415:00	Rocketsonde	-	-	-	-	-	-	KRR	-	-	-	79	-	-
1978-14210	2443840-14	1978 Nov 27 1717:00	Rocketsonde	-	-	-	-	-	-	SHER	-	-	-	61	-	-
1978-14212	2443840-22	1978 Nov 27 1717:00	Rocketsonde	-	-	-	-	-	-	THU	-	-	-	51	-	-
1978-14214	2443840-34	1978 Nov 27 1909:59	Rocketsonde	-	-	-	-	-	-	PRLLH	-	-	-	52	-	-
1978-14215	2443840-34	1978 Nov 27 2015:00	Rocketsonde	-	-	-	-	-	-	PH	-	-	-	77	-	-
1978-14216	2443840-46	1978 Nov 28 0545:00	Rocketsonde	-	-	-	-	-	-	WS	-	-	-	69	-	-
1978-14215	2443840-66	1978 Nov 28 0545:00	Rocketsonde	-	-	-	-	-	-	KAU	-	-	-	60	-	-
1978-14216	2443840-66	1978 Nov 28 0545:00	Rocketsonde	-	-	-	-	-	-	KRR	-	-	-	79	-	-
1978-14225	2443842-12	1978 Nov 29 1459:00	Rocketsonde	-	-	-	-	-	-	AN/DMC-9	-	-	-	90	-	-
1978-14221	2443842-24	1978 Nov 29 1730:00	Rocketsonde	-	-	-	-	-	-	AN/DMC-9	-	-	-	70	-	-
1978-14222	2443842-24	1978 Nov 29 1730:00	Rocketsonde	-	-	-	-	-	-	AN/DMC-9	-	-	-	70	-	-
1978-14223	2443842-30	1978 Nov 29 1906:00	Rocketsonde	-	-	-	-	-	-	VI	-	-	-	56	-	-
1978-14223	2443842-30	1978 Nov 29 1906:00	Rocketsonde	-	-	-	-	-	-	VI	-	-	-	56	-	-
1978-14223	2443842-31	1978 Nov 29 1929:00	Rocketsonde	-	-	-	-	-	-	WS	-	-	-	98	-	-
1978-14224	2443842-40	1978 Nov 29 2130:00	Rocketsonde	-	-	-	-	-	-	PH	-	-	-	76	-	-
1978-14224	2443842-40	1978 Nov 29 2130:00	Rocketsonde	-	-	-	-	-	-	SHER	-	-	-	60	-	-
1978-14225	2443842-49	1978 Nov 29 2345:00	Rocketsonde	-	-	-	-	-	-	KRR	-	-	-	60	-	-
1978-14225	2443843-08	1978 Nov 30 1400:00	Rocketsonde	-	-	-	-	-	-	SHER	-	-	-	61	-	-
1978-14227	2443843-40	1978 Nov 30 2140:00	Rocketsonde	-	-	-	-	-	-	KRR	-	-	-	79	-	-
1978-14227	2443844-14	1978 Dec 1 1515:59	Rocketsonde	-	-	-	-	-	-	THU	-	-	-	85	-	-
1978-14229	2443844-14	1978 Dec 1 1515:59	Rocketsonde	-	-	-	-	-	-	WS	-	-	-	97	-	-
1978-14231	2443844-33	1978 Dec 1 1600:00	Rocketsonde	-	-	-	-	-	-	AN/DMC-9	-	-	-	65	-	-
1978-14231	2443844-33	1978 Dec 1 1600:00	Rocketsonde	-	-	-	-	-	-	AN/DMC-9	-	-	-	65	-	-
1978-14232	2443847-57	1978 Dec 4 1897:59	Rocketsonde	-	-	-	-	-	-	PRLLH	-	-	-	70	-	-
1978-14233	2443847-57	1978 Dec 4 1897:59	Rocketsonde	-	-	-	-	-	-	PRLLH	-	-	-	70	-	-
1978-14234	2443847-58	1978 Dec 4 2110:59	Rocketsonde	-	-	-	-	-	-	WS	-	-	-	65	-	-
1978-14334	2443847-58	1978 Dec 5 1415:00	Rocketsonde	-	-	-	-	-	-	WS	-	-	-	92	-	-
1978-14236	2443848-22	1978 Dec 5 1715:00	Rocketsonde	-	-	-	-	-	-	KRR	-	-	-	60	-	-
1978-14236	2443848-22	1978 Dec 5 1715:00	Rocketsonde	-	-	-	-	-	-	WS	-	-	-	69	-	-
1978-14237	2443848-22	1978 Dec 5 1851:00	Rocketsonde	-	-	-	-	-	-	PH	-	-	-	75	-	-
1978-14238	2443848-29	1978 Dec 5 1859:59	Rocketsonde	-	-	-	-	-	-	AN/DMC-9	-	-	-	62	-	-
1978-14238	2443848-29	1978 Dec 5 1859:59	Rocketsonde	-	-	-	-	-	-	AN/DMC-9	-	-	-	62	-	-
1978-14328	2443849-14	1978 Dec 6 1522:59	Rocketsonde	-	-	-	-	-	-	VI	-	-	-	90	-	-
1978-14240	2443849-15	1978 Dec 6 1542:00	Rocketsonde	-	-	-	-	-	-	THU	-	-	-	66	-	-
1978-14336	2443849-26	1978 Dec 6 1756:00	Rocketsonde	-	-	-	-	-	-	VI	-	-	-	71	-	-
1978-14242	2443849-26	1978 Dec 6 1891:00	Rocketsonde	-	-	-	-	-	-	AN/DMC-9	-	-	-	88	-	-
1978-14242	2443849-26	1978 Dec 6 1891:00	Rocketsonde	-	-	-	-	-	-	AN/DMC-9	-	-	-	88	-	-
1978-14243	2443849-36	1978 Dec 6 2030:00	Rocketsonde	-	-	-	-	-	-	PH	-	-	-	67	-	-
1978-14244	2443849-36	1978 Dec 6 2045:00	Rocketsonde	-	-	-	-	-	-	WS	-	-	-	98	-	-
1978-14244	2443849-40	1978 Dec 6 2230:00	Rocketsonde	-	-	-	-	-	-	WS	-	-	-	70	-	-
1978-14245	2443850-28	1978 Dec 7 1845:00	Rocketsonde	-	-	-	-	-	-	KRR	-	-	-	77	-	-
1978-14246	2443850-29	1978 Dec 7 1845:00	Rocketsonde	-	-	-	-	-	-	WS	-	-	-	68	-	-
1978-14248	2443850-41	1978 Dec 7 1954:00	Rocketsonde	-	-	-	-	-	-	PH	-	-	-	71	-	-
1978-14249	2443851-14	1978 Dec 8 1624:59	Rocketsonde	-	-	-	-	-	-	SHER	-	-	-	52	-	-
1978-14251	2443851-34	1978 Dec 8 2012:00	Rocketsonde	-	-	-	-	-	-	THU	-	-	-	70	-	-
1978-14251	2443851-34	1978 Dec 8 2012:00	Rocketsonde	-	-	-	-	-	-	AN/DMC-9	-	-	-	73	-	-
1978-14252	2443851-41	1978 Dec 8 2130:00	Rocketsonde	-	-	-	-	-	-	PH	-	-	-	55	-	-
1978-14253	2443851-41	1978 Dec 8 2147:59	Rocketsonde	-	-	-	-	-	-	SHER	-	-	-	79	-	-
1978-14254	2443851-46	1978 Dec 8 2303:59	Rocketsonde	-	-	-	-	-	-	KRR	-	-	-	61	-	-
1978-14255	2443854-33	1978 Dec 11 1508:00	Rocketsonde	-	-	-	-	-	-	AN/DMC-9	-	-	-	70	-	-
1978-14257	2443854-33	1978 Dec 11 2000:00	Rocketsonde	-	-	-	-	-	-	THU	-	-	-	65	-	-
1978-14258	2443854-41	1978 Dec 11 2156:59	Rocketsonde	-	-	-	-	-	-	WS	-	-	-	68	-	-
1978-14260	2443855-33	1978 Dec 12 1951:00	Rocketsonde	-	-	-	-	-	-	KAU	-	-	-	64	-	-
1978-14261	2443855-38	1978 Dec 12 2100:00	Rocketsonde	-	-	-	-	-	-	PH	-	-	-	74	-	-
1978-14262	2443856-15	1978 Dec 13 1542:00	Rocketsonde	-	-	-	-	-	-	AN/DMC-9	-	-	-	67	-	-
1978-14263	2443856-17	1978 Dec 13 1604:59	Rocketsonde	-	-	-	-	-	-	THU	-	-	-	66	-	-
1978-14264	2443856-31	1978 Dec 13 1934:59	Rocketsonde	-	-	-	-	-	-	WS	-	-	-	64	-	-
1978-14265	2443856-32	1978 Dec 13 1944:59	Rocketsonde	-	-	-	-	-	-	WS	-	-	-	69	-	-
1978-14266	2443856-33	1978 Dec 13 1955:59	Rocketsonde	-	-	-	-	-	-	PH	-	-	-	75	-	-
1978-14267	2443856-43	1978 Dec 13 2133:59	Rocketsonde	-	-	-	-	-	-	AN/DMC-97	-	-	-	67	-	-
1978-14268	2443856-46	1978 Dec 13 2308:00	Rocketsonde	-	-	-	-	-	-	KAU	-	-	-	77	-	-
1978-14269	2443857-29	1978 Dec 14 1859:59	Rocketsonde	-	-	-	-	-	-	KRR	-	-	-	68	-	-
1978-14270	2443857-38	1978 Dec 14 2100:00	Rocketsonde	-	-	-	-	-	-	WS	-	-	-	58	-	-
1978-14271	2443857-70	1978 Dec 15 0441:59	Rocketsonde	-	-	-	-	-	-	SHER	-	-	-	52	-	-
1978-14272	2443858-12	1978 Dec 15 1456:00	Rocketsonde	-	-	-	-	-	-	WS	-	-	-	70	-	-
1978-14274	2443858-29	1978 Dec 15 1859:59	Rocketsonde	-	-	-	-	-	-	THU	-	-	-	63	-	-
1978-14276	2443858-38	1978 Dec 15 2109:00	Rocketsonde	-	-	-	-	-	-	KAU	-	-	-	67	-	-
1978-14276	2443858-38	1978 Dec 15 2109:00	Rocketsonde	-	-	-										

Launch Mission

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Launch_Mission	FlightCode	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee_Km	Range_Km	Dest
1978-H1278	2443861.16	1978 Dec 18 15:49:59	Rocketsonde	-	-	Arcasonde	-	-	-	THU	-	-	-	69	-	-
1978-H1279	2443861.22	1978 Dec 18 17:21:00	Rocketsonde	-	-	Arcasonde	-	-	-	PRUH	-	-	-	70	-	-
1978-H1280	2443861.36	1978 Dec 18 20:33:00	Rocketsonde	-	-	Arcasonde	-	-	-	KAU	-	-	-	57	-	-
1978-H1281	2443862.27	1978 Dec 19 18:24:59	Rocketsonde	-	-	Arcasonde	-	-	-	PH	-	-	-	75	-	-
1978-H1282	2443863.11	1978 Dec 20 14:45:00	Rocketsonde	-	-	Arcasonde	-	-	-	THU	-	-	-	62	-	-
1978-H1286	2443863.19	1978 Dec 20 16:58:59	Rocketsonde	-	-	Arcasonde	-	-	-	WI	-	-	-	67	-	-
1978-H1287	2443863.20	1978 Dec 20 16:41:59	Rocketsonde	-	-	Arcasonde	-	-	-	PRUH	-	-	-	70	-	-
1978-1448	2443863.29	1978 Dec 20 18:59:59	Rocketsonde	-	-	AN/DMM-9	-	-	-	PH	-	-	-	90	-	-
1978-1449	2443863.29	1978 Dec 20 18:59:59	Rocketsonde	-	-	AN/DMM-9	-	-	-	PH	-	-	-	98	-	-
1978-H1289	2443863.30	1978 Dec 20 19:14:59	Rocketsonde	-	-	Arcasonde	-	-	-	PH	-	-	-	74	-	-
1978-H1291	2443863.47	1978 Dec 20 23:15:00	Rocketsonde	-	-	Arcasonde	-	-	-	KRR	-	-	-	72	-	-
1978-H1293	2443864.29	1978 Dec 21 18:56:00	Rocketsonde	-	-	Arcasonde	-	-	-	PH	-	-	-	61	-	-
1978-H1294	2443865.27	1978 Dec 22 18:50:00	Rocketsonde	-	-	Arcasonde	-	-	-	WS	-	-	-	66	-	-
1978-H1295	2443865.31	1978 Dec 22 19:22:59	Rocketsonde	-	-	Arcasonde	-	-	-	PH	-	-	-	75	-	-
1978-1457	2443865.40	1978 Dec 22 21:34:59	Rocketsonde	-	-	Arcasonde	-	-	-	SHEH	-	-	-	47	-	-
1978-1450	2443865.42	1978 Dec 22 21:58:59	Rocketsonde	-	-	Arcasonde	-	-	-	KRR	-	-	-	82	-	-
1978-H1296	2443870.27	1978 Dec 27 18:45:00	Rocketsonde	-	-	AN/DMM-9	-	-	-	WS	-	-	-	66	-	-
1978-1458	2443870.28	1978 Dec 27 19:45:00	Rocketsonde	-	-	Arcasonde	-	-	-	WS	-	-	-	49	-	-
1978-H1297	2443870.40	1978 Dec 27 21:31:00	Rocketsonde	-	-	Arcasonde	-	-	-	SHEH	-	-	-	54	-	-
1978-H1298	2443872.28	1978 Dec 28 19:40:00	Rocketsonde	-	-	Arcasonde	-	-	-	WS	-	-	-	66	-	-
1978-1426	2443876.32	1979 Jan 2 19:44:59	Rocketsonde	-	-	Arcasonde	-	-	-	WS	-	-	-	63	-	-
1978-H1003	2444101.26	1979 Jan 15 18:17:00	Rocketsonde	-	-	Arcasonde	-	-	-	PH	-	-	-	59	-	-
1978-H1004	2444101.53	1979 Aug 16 00:49:59	Rocketsonde	-	-	AN/DMM-9	-	-	-	KRR	-	-	-	77	-	-
1978-1439	2444102.37	1979 Aug 16 20:54:00	Rocketsonde	-	-	Arcasonde	-	-	-	KAU	-	-	-	86	-	-
1978-H1005	2444102.39	1979 Aug 16 21:18:00	Rocketsonde	-	-	Arcasonde	-	-	-	KAU	-	-	-	56	-	-
1978-1437	2444102.53	1979 Aug 17 00:45:00	Rocketsonde	-	-	Arcasonde	-	-	-	SHEH	-	-	-	46	-	-
1978-H1006	2444103.04	1979 Aug 17 12:59:59	Rocketsonde	-	-	Arcasonde	-	-	-	CC	LC43	-	-	60	-	-
1978-H1007	2444103.06	1979 Aug 17 13:50:00	Rocketsonde	-	-	Arcasonde	-	-	-	ASC	-	-	-	67	-	-
1978-H1008	2444103.13	1979 Aug 17 15:07:00	Rocketsonde	-	-	Arcasonde	-	-	-	THU	-	-	-	69	-	-
1978-H1009	2444103.25	1979 Aug 17 18:00:00	Rocketsonde	-	-	Arcasonde	-	-	-	WS	-	-	-	62	-	-
1978-H1010	2444103.28	1979 Aug 18 18:47:59	Rocketsonde	-	-	Arcasonde	-	-	-	PRUH	-	-	-	64	-	-
1978-H1011	2444103.55	1979 Aug 18 11:14:59	Rocketsonde	-	-	Arcasonde	-	-	-	KRR	-	-	-	73	-	-
1978-H1012	2444104.67	1979 Aug 19 04:03:59	Rocketsonde	-	-	Arcasonde	-	-	-	KRR	-	-	-	77	-	-
1978-H1013	2444106.05	1979 Aug 20 13:01:59	Rocketsonde	-	-	Arcasonde	-	-	-	ASC	LC43	-	-	63	-	-
1978-H1014	2444106.06	1979 Aug 20 13:50:00	Rocketsonde	-	-	Arcasonde	-	-	-	ASC	-	-	-	81	-	-
1978-H1015	2444106.10	1979 Aug 20 18:50:00	Rocketsonde	-	-	Arcasonde	-	-	-	CC	LC43	-	-	67	-	-
1978-H1016	2444106.15	1979 Aug 20 18:50:00	Rocketsonde	-	-	Arcasonde	-	-	-	THU	-	-	-	59	-	-
1978-H1017	2444106.68	1979 Aug 21 04:18:59	Rocketsonde	-	-	Arcasonde	-	-	-	KRR	-	-	-	64	-	-
1978-H1018	2444108.06	1979 Aug 22 13:50:00	Rocketsonde	-	-	Arcasonde	-	-	-	ASC	-	-	-	77	-	-
1978-H1019	2444108.07	1979 Aug 22 13:44:59	Rocketsonde	-	-	Arcasonde	-	-	-	ASC	-	-	-	70	-	-
1978-H1020	2444108.10	1979 Aug 22 14:26:00	Rocketsonde	-	-	Arcasonde	-	-	-	VI	-	-	-	62	-	-
1978-H1021	2444108.10	1979 Aug 22 14:54:59	Rocketsonde	-	-	Arcasonde	-	-	-	THU	-	-	-	69	-	-
1978-H1022	2444108.25	1979 Aug 22 16:58:59	Rocketsonde	-	-	Arcasonde	-	-	-	PRUH	-	-	-	81	-	-
1978-1438	2444108.42	1979 Aug 22 21:39:59	Rocketsonde	-	-	Arcasonde	-	-	-	CC	LC43	-	-	49	-	-
1978-H1023	2444108.42	1979 Aug 22 20:06:00	Rocketsonde	-	-	Arcasonde	-	-	-	KRR	-	-	-	59	-	-
1978-H1024	2444108.42	1979 Aug 22 21:39:59	Rocketsonde	-	-	Arcasonde	-	-	-	KRR	-	-	-	75	-	-
1978-H1025	2444108.42	1979 Aug 22 20:06:00	Rocketsonde	-	-	Arcasonde	-	-	-	KRR	-	-	-	52	-	-
1978-H1026	2444109.33	1979 Aug 23 20:06:00	Rocketsonde	-	-	Arcasonde	-	-	-	SHEH	-	-	-	60	-	-
1978-H1027	2444110.06	1979 Aug 24 13:30:00	Rocketsonde	-	-	Arcasonde	-	-	-	CC	LC43	-	-	72	-	-
1978-H1028	2444110.07	1979 Aug 24 13:44:59	Rocketsonde	-	-	Arcasonde	-	-	-	ASC	-	-	-	70	-	-
1978-H1029	2444110.15	1979 Aug 24 15:48:59	Rocketsonde	-	-	Arcasonde	-	-	-	PRUH	-	-	-	63	-	-
1978-H1030	2444110.22	1979 Aug 24 17:11:00	Rocketsonde	-	-	Arcasonde	-	-	-	PH	-	-	-	73	-	-
1978-H1031	2444110.52	1979 Aug 25 01:14:59	Rocketsonde	-	-	Arcasonde	-	-	-	KRR	-	-	-	78	-	-
1978-H1034	2444113.06	1979 Aug 27 13:30:00	Rocketsonde	-	-	Arcasonde	-	-	-	CC	LC43	-	-	68	-	-
1978-H1035	2444113.08	1979 Aug 27 13:49:59	Rocketsonde	-	-	Arcasonde	-	-	-	CC	-	-	-	59	-	-
1978-1439	2444113.13	1979 Aug 27 17:21:00	Rocketsonde	-	-	Arcasonde	-	-	-	VI	-	-	-	49	-	-
1978-H1037	2444113.23	1979 Aug 27 15:11:00	Rocketsonde	-	-	Arcasonde	-	-	-	PH	-	-	-	73	-	-
1978-H1038	2444113.27	1979 Aug 27 18:20:59	Rocketsonde	-	-	Arcasonde	-	-	-	PRUH	-	-	-	67	-	-
1978-H1039	2444113.67	1979 Aug 28 04:07:59	Rocketsonde	-	-	Arcasonde	-	-	-	PRUH	-	-	-	78	-	-
1978-H1040	2444114.27	1979 Aug 28 18:24:59	Rocketsonde	-	-	Arcasonde	-	-	-	KRR	-	-	-	66	-	-
1978-H1041	2444114.36	1979 Aug 28 20:35:59	Rocketsonde	-	-	Arcasonde	-	-	-	PRUH	-	-	-	51	-	-
1978-H1042	2444114.61	1979 Aug 29 02:45:00	Rocketsonde	-	-	Arcasonde	-	-	-	SHEH	-	-	-	67	-	-
1978-H1043	2444114.66	1979 Aug 29 03:45:00	Rocketsonde	-	-	AN/DMM-9	-	-	-	ASC	-	-	-	75	-	-
1978-H1044	2444114.67	1979 Aug 29 03:57:59	Rocketsonde	-	-	Arcasonde	-	-	-	ASC	-	-	-	76	-	-
1978-Y457	2444115.10	1979 Aug 29 14:17:00	Rocketsonde	-	-	Arcasonde	-	-	-	KRR	-	-	-	73	-	-
1978-H1045	2444115.10	1979 Aug 29 14:30:00	Rocketsonde	-	-	Arcasonde	-	-	-	VI	-	-	-	90	-	-
1978-Y458	2444115.11	1979 Aug 29 14:30:00	Rocketsonde	-	-	Arcasonde	-	-	-	THU	-	-	-	70	-	-
1978-H1046	2444115.11	1979 Aug 29 14:40:00	Rocketsonde	-	-	AN/DMM-9	-	-	-	CC	LC43	-	-	94	-	-
1978-H1047	2444115.33	1979 Aug 29 14:41:00	Rocketsonde	-	-	Arcasonde	-	-	-	VI	-	-	-	61	-	-
1978-Y460	2444115.33	1979 Aug 29 20:00:00	Rocketsonde	-	-	Arcasonde	-	-	-	SHEH	-	-	-	51	-	-
1978-H1048	2444115.44	1979 Aug 29 22:27:59	Rocketsonde	-	-	Arcasonde	-	-	-	KAU	-	-	-	89	-	-
1978-H1049	2444115.45	1979 Aug 29 22:48:59	Rocketsonde	-	-	Arcasonde	-	-	-	KAU	-	-	-	64	-	-
1978-H1050	2444115.66	1979 Aug 30 03:46:59	Rocketsonde	-	-	Arcasonde	-	-	-	KRR	-	-	-	77	-	-
1978-H1051	2444116.15	1979 Aug 30 19:58:59	Rocketsonde	-	-	Arcasonde	-	-	-	PRUH	-	-	-	68	-	-
1978-H1052	2444116.51	1979 Aug 31 13:30:00	Rocketsonde	-	-	Arcasonde	-	-	-	KRR	-	-	-	78	-	-
1978-H1053	2444117.06	1979 Aug 31 00:09:00	Rocketsonde	-	-	Arcasonde	-	-	-	CC	LC43	-	-	57	-	-
1978-H1054	2444117.10	1979 Aug 31 14:20:00	Rocketsonde	-	-	Arcasonde	-	-	-	ASC	-	-	-	66	-	-
1978-H1055	2444117.19	1979 Aug 31 16:34:59	Rocketsonde	-	-	Arcasonde	-	-	-	THU	-	-	-	66	-	-
1978-H1056	2444117.23	1979 Aug 31 17:32:00	Rocketsonde	-	-	Arcasonde	-	-	-	PH	-	-	-	69	-	-
1978-H1057	2444117.26	1979 Aug 31 18:20:00	Rocketsonde	-	-	Arcasonde	-	-	-	PRUH	-	-	-	69	-	-
1978-H1058	2444117.41	1979 Sep 1 21:54:00	Rocketsonde	-	-	Arcasonde	-	-	-	KAU	-	-	-	54	-	-
1978-H1059	2444117.55	1979 Sep 1 01:14:59	Rocketsonde	-	-	Arcasonde	-	-	-	KRR	-	-	-	79	-	-
1978-H1060	2444117.75	1979 Sep 1 06:06:00	Rocketsonde	-	-	Arcasonde	-	-	-	CC	LC43	-	-	71	-	-
1978-H1061	2444120.33	1979 Sep 3 20:00:00	Rocketsonde	-	-	Arcasonde	-	-	-	SHEH	-	-	-	52	-	-
1978-H1062	2444121.37	1979 Sep 4 20:57:00	Rocketsonde	-	-	Arcasonde	-	-	-	KAU	-	-	-	51	-	-
1978-H1063	2444122.03	1979 Sep 5 12:48:59	Rocketsonde	-	-	Arcasonde	-	-	-	ASC	-	-	-	65	-	-

Launch Mission

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Mission	FlightCode	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee Km	Range Km	Dest
1979-H1064	2444122-06	1979 Sep 5 1330:00	Rocketsonde	-	-	Arcasonde	-	-	-	MIT	-	-	-	68	-	-
1979-H1065	2444122-08	1979 Sep 5 1400:00	Rocketsonde	-	-	Arcasonde	-	-	-	CC	LC43	-	-	66	-	-
1979-H1066	2444122-10	1979 Sep 5 1408:00	Rocketsonde	-	-	AN/DMC-9	-	-	-	WI	-	-	-	90	-	-
1979-H1067	2444122-12	1979 Sep 5 1427:59	Rocketsonde	-	-	Arcasonde	-	-	-	THU	-	-	-	68	-	-
1979-H1068	2444122-19	1979 Sep 5 1626:59	Rocketsonde	-	-	Arcasonde	-	-	-	WI	-	-	-	58	-	-
1979-H1069	2444122-21	1979 Sep 5 1626:59	Rocketsonde	-	-	AN/DMC-9	-	-	-	PH	-	-	-	90	-	-
1979-H1070	2444122-27	1979 Sep 5 1830:00	Rocketsonde	-	-	Arcasonde	-	-	-	PH	-	-	-	73	-	-
1979-H1071	2444122-46	1979 Sep 5 2301:00	Rocketsonde	-	-	Arcasonde	-	-	-	PRUH	-	-	-	57	-	-
1979-H1072	2444123-53	1979 Sep 7 0040:00	Rocketsonde	-	-	Arcasonde	-	-	-	KRR	-	-	-	71	-	-
1979-H1073	2444124-06	1979 Sep 7 1330:00	Rocketsonde	-	-	Arcasonde	-	-	-	KRR	-	-	-	77	-	-
1979-H1074	2444124-06	1979 Sep 7 1330:00	Rocketsonde	-	-	Arcasonde	-	-	-	ASC	-	-	-	66	-	-
1979-H1075	2444124-10	1979 Sep 7 1430:00	Rocketsonde	-	-	Arcasonde	-	-	-	CC	LC43	-	-	66	-	-
1979-H1076	2444124-11	1979 Sep 7 1437:00	Rocketsonde	-	-	Arcasonde	-	-	-	THU	-	-	-	69	-	-
1979-H1077	2444124-21	1979 Sep 7 1559:59	Rocketsonde	-	-	Arcasonde	-	-	-	PRUH	-	-	-	68	-	-
1979-H1078	2444124-37	1979 Sep 7 1700:00	Rocketsonde	-	-	AN/DMC-9	-	-	-	CC	LC43	-	-	96	-	-
1979-H1079	2444124-62	1979 Sep 7 2057:00	Rocketsonde	-	-	Arcasonde	-	-	-	KAU	-	-	-	57	-	-
1979-H1080	2444124-62	1979 Sep 8 0253:00	Rocketsonde	-	-	Arcasonde	-	-	-	KRR	-	-	-	77	-	-
1979-H1081	2444127-07	1979 Sep 10 1330:00	Rocketsonde	-	-	Arcasonde	-	-	-	ASC	-	-	-	66	-	-
1979-H1082	2444127-10	1979 Sep 10 1344:59	Rocketsonde	-	-	Arcasonde	-	-	-	CC	LC43	-	-	58	-	-
1979-H1083	2444127-18	1979 Sep 10 1422:00	Rocketsonde	-	-	Arcasonde	-	-	-	CC	LC43	-	-	70	-	-
1979-H1084	2444127-19	1979 Sep 10 1614:59	Rocketsonde	-	-	Arcasonde	-	-	-	THU	-	-	-	57	-	-
1979-H1085	2444127-27	1979 Sep 10 1629:00	Rocketsonde	-	-	Arcasonde	-	-	-	PRUH	-	-	-	71	-	-
1979-H1086	2444127-62	1979 Sep 11 0249:59	Rocketsonde	-	-	Arcasonde	-	-	-	PH	-	-	-	73	-	-
1979-H1087	2444129-06	1979 Sep 12 1314:59	Rocketsonde	-	-	Arcasonde	-	-	-	MIT	-	-	-	64	-	-
1979-H1088	2444129-06	1979 Sep 12 1330:00	Rocketsonde	-	-	Arcasonde	-	-	-	ASC	-	-	-	64	-	-
1979-H1089	2444129-09	1979 Sep 12 1350:00	Rocketsonde	-	-	Arcasonde	-	-	-	MIT	-	-	-	59	-	-
1979-H1090	2444129-11	1979 Sep 12 1401:00	Rocketsonde	-	-	Arcasonde	-	-	-	CC	LC43	-	-	70	-	-
1979-H1091	2444129-11	1979 Sep 12 1437:59	Rocketsonde	-	-	AN/DMC-9	-	-	-	WI	-	-	-	91	-	-
1979-H1092	2444129-25	1979 Sep 12 1756:00	Rocketsonde	-	-	AN/DMC-9	-	-	-	CC	LC43	-	-	64	-	-
1979-H1093	2444129-25	1979 Sep 12 1821:00	Rocketsonde	-	-	Arcasonde	-	-	-	THU	-	-	-	66	-	-
1979-H1094	2444129-26	1979 Sep 12 2000:00	Rocketsonde	-	-	Arcasonde	-	-	-	THU	-	-	-	89	-	-
1979-H1095	2444129-35	1979 Sep 12 2045:00	Rocketsonde	-	-	Arcasonde	-	-	-	PH	-	-	-	89	-	-
1979-H1096	2444129-39	1979 Sep 12 2126:59	Rocketsonde	-	-	Arcasonde	-	-	-	PH	-	-	-	74	-	-
1979-H1097	2444129-46	1979 Sep 12 2236:59	Rocketsonde	-	-	Arcasonde	-	-	-	SHEN	-	-	-	56	-	-
1979-H1098	2444129-53	1979 Sep 13 0800:00	Rocketsonde	-	-	Arcasonde	-	-	-	WS	-	-	-	66	-	-
1979-H1099	2444129-59	1979 Sep 13 0914:59	Rocketsonde	-	-	Arcasonde	-	-	-	KAU	-	-	-	59	-	-
1979-H1100	2444129-59	1979 Sep 13 0914:59	Rocketsonde	-	-	Arcasonde	-	-	-	KRR	-	-	-	78	-	-
1979-H1101	2444130-00	1979 Sep 13 1200:00	Rocketsonde	-	-	-	-	-	-	VI	-	-	-	62	-	-
1979-H1102	2444130-08	1979 Sep 13 1400:00	Rocketsonde	-	-	Arcasonde	-	-	-	VI	-	-	-	63	-	-
1979-H1103	2444131-16	1979 Sep 13 1614:59	Rocketsonde	-	-	Arcasonde	-	-	-	VI	-	-	-	92	-	-
1979-H1104	2444131-17	1979 Sep 14 1354:59	Rocketsonde	-	-	Arcasonde	-	-	-	MIT	-	-	-	71	-	-
1979-H1105	2444131-07	1979 Sep 14 1354:59	Rocketsonde	-	-	Arcasonde	-	-	-	THU	LC43	-	-	61	-	-
1979-H1106	2444131-08	1979 Sep 14 1551:00	Rocketsonde	-	-	Arcasonde	-	-	-	THU	-	-	-	68	-	-
1979-H1107	2444131-10	1979 Sep 14 1550:00	Rocketsonde	-	-	Arcasonde	-	-	-	ASC	-	-	-	63	-	-
1979-H1108	2444131-29	1979 Sep 14 1909:59	Rocketsonde	-	-	Arcasonde	-	-	-	PH	-	-	-	73	-	-
1979-H1109	2444131-55	1979 Sep 15 0945:00	Rocketsonde	-	-	Arcasonde	-	-	-	SHEN	-	-	-	57	-	-
1979-H1110	2444131-55	1979 Sep 15 0945:00	Rocketsonde	-	-	Arcasonde	-	-	-	KRR	-	-	-	73	-	-
1979-H1111	2444134-05	1979 Sep 17 1314:59	Rocketsonde	-	-	Arcasonde	-	-	-	ASC	-	-	-	65	-	-
1979-H1112	2444134-05	1979 Sep 17 1353:59	Rocketsonde	-	-	Arcasonde	-	-	-	CC	LC43	-	-	64	-	-
1979-H1113	2444134-08	1979 Sep 17 1651:00	Rocketsonde	-	-	Arcasonde	-	-	-	THU	-	-	-	70	-	-
1979-H1114	2444134-26	1979 Sep 17 1821:00	Rocketsonde	-	-	Arcasonde	-	-	-	PH	-	-	-	76	-	-
1979-H1115	2444134-24	1979 Sep 17 2010:00	Rocketsonde	-	-	Arcasonde	-	-	-	SHEN	-	-	-	47	-	-
1979-H1116	2444134-34	1979 Sep 18 0919:00	Rocketsonde	-	-	Arcasonde	-	-	-	KRR	-	-	-	63	-	-
1979-H1117	2444134-19	1979 Sep 18 1630:00	Rocketsonde	-	-	Arcasonde	-	-	-	PRUH	-	-	-	67	-	-
1979-H1118	2444136-04	1979 Sep 19 1357:59	Rocketsonde	-	-	Arcasonde	-	-	-	ASC	-	-	-	64	-	-
1979-H1119	2444136-04	1979 Sep 19 1425:00	Rocketsonde	-	-	Arcasonde	-	-	-	CC	LC43	-	-	64	-	-
1979-H1120	2444136-11	1979 Sep 19 1437:59	Rocketsonde	-	-	Arcasonde	-	-	-	THU	-	-	-	70	-	-
1979-H1121	2444136-11	1979 Sep 19 1437:59	Rocketsonde	-	-	Arcasonde	-	-	-	THU	-	-	-	63	-	-
1979-H1122	2444136-27	1979 Sep 19 1546:59	Rocketsonde	-	-	Arcasonde	-	-	-	VI	-	-	-	56	-	-
1979-H1123	2444136-27	1979 Sep 19 1546:59	Rocketsonde	-	-	Arcasonde	-	-	-	VI	-	-	-	58	-	-
1979-H1124	2444136-28	1979 Sep 19 1838:59	Rocketsonde	-	-	Arcasonde	-	-	-	MIT	-	-	-	68	-	-
1979-H1125	2444136-43	1979 Sep 19 2215:59	Rocketsonde	-	-	AN/DMC-9	-	-	-	VI	-	-	-	91	-	-
1979-H1126	2444136-45	1979 Sep 19 2243:59	Rocketsonde	-	-	Arcasonde	-	-	-	VI	-	-	-	88	-	-
1979-H1127	2444136-45	1979 Sep 19 2243:59	Rocketsonde	-	-	Arcasonde	-	-	-	KRR	-	-	-	74	-	-
1979-H1128	2444137-24	1979 Sep 20 1738:59	Rocketsonde	-	-	Arcasonde	-	-	-	KRR	-	-	-	77	-	-
1979-H1129	2444138-06	1979 Sep 21 1330:00	Rocketsonde	-	-	Arcasonde	-	-	-	KAU	-	-	-	54	-	-
1979-H1130	2444138-11	1979 Sep 21 1336:00	Rocketsonde	-	-	Arcasonde	-	-	-	KAU	-	-	-	64	-	-
1979-H1131	2444138-16	1979 Sep 21 1436:00	Rocketsonde	-	-	Arcasonde	-	-	-	ASC	LC43	-	-	57	-	-
1979-H1132	2444138-33	1979 Sep 21 1555:00	Rocketsonde	-	-	Arcasonde	-	-	-	THU	-	-	-	72	-	-
1979-H1133	2444138-33	1979 Sep 21 2000:00	Rocketsonde	-	-	Arcasonde	-	-	-	PRUH	-	-	-	61	-	-
1979-H1134	2444138-55	1979 Sep 22 0114:59	Rocketsonde	-	-	Arcasonde	-	-	-	SHEN	-	-	-	51	-	-
1979-H1135	2444138-74	1979 Sep 22 0540:00	Rocketsonde	-	-	Arcasonde	-	-	-	KRR	-	-	-	78	-	-
1979-H1136	2444138-90	1979 Sep 22 0940:00	Rocketsonde	-	-	Arcasonde	-	-	-	KRR	-	-	-	79	-	-
1979-H1137	2444140-84	1979 Sep 24 1247:59	Rocketsonde	-	-	Arcasonde	-	-	-	KRR	-	-	-	74	-	-
1979-H1138	2444141-03	1979 Sep 24 1259:59	Rocketsonde	-	-	Arcasonde	-	-	-	WS	-	-	-	65	-	-
1979-H1139	2444141-07	1979 Sep 24 1344:59	Rocketsonde	-	-	Arcasonde	-	-	-	ASC	-	-	-	64	-	-
1979-H1140	2444141-11	1979 Sep 24 1437:00	Rocketsonde	-	-	Arcasonde	-	-	-	ASC	-	-	-	72	-	-
1979-H1141	2444141-16	1979 Sep 24 1549:59	Rocketsonde	-	-	Arcasonde	-	-	-	MIT	-	-	-	58	-	-
1979-H1142	2444141-62	1979 Sep 25 0126:59	Rocketsonde	-	-	Arcasonde	-	-	-	THU	LC43	-	-	70	-	-
1979-H1143	2444142-33	1979 Sep 25 0300:00	Rocketsonde	-	-	Arcasonde	-	-	-	PRUH	-	-	-	67	-	-
1979-H1144	2444142-33	1979 Sep 25 2000:00	Rocketsonde	-	-	Arcasonde	-	-	-	KRR	-	-	-	44	-	-
1979-H1145	2444142-33	1979 Sep 25 2000:00	Rocketsonde	-	-	Arcasonde	-	-	-	SHEN	-	-	-	76	-	-

Launch Mission

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Mission	FlightCode	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee_Km	Range_Km	Dest
1979-H1144	2444143-05	1979 Sep 26 13:14:59	Rocketsonde	-	-	Arcasonde	-	-	-	ASC	-	-	-	62	-	-
1979-H1145	2444143-06	1979 Sep 26 13:30:00	Rocketsonde	-	-	Arcasonde	-	-	-	CC	LC43	-	-	59	-	-
1979-H486	2444143-09	1979 Sep 26 14:10:00	Rocketsonde	-	-	AN/DMC-9	-	-	-	WI	-	-	-	91	-	-
1979-H1147	2444143-11	1979 Sep 26 14:38:00	Rocketsonde	-	-	Arcasonde	-	-	-	WI	-	-	-	59	-	-
1979-H1148	2444143-12	1979 Sep 26 14:48:59	Rocketsonde	-	-	Arcasonde	-	-	-	THU	-	-	-	68	-	-
1979-H1149	2444143-15	1979 Sep 26 15:30:00	Rocketsonde	-	-	Arcasonde	-	-	-	ANT	-	-	-	72	-	-
1979-H1150	2444143-16	1979 Sep 26 15:45:00	Rocketsonde	-	-	Arcasonde	-	-	-	PH	-	-	-	67	-	-
1979-H1151	2444143-28	1979 Sep 26 18:46:59	Rocketsonde	-	-	Arcasonde	-	-	-	KHR	-	-	-	76	-	-
1979-H1152	2444143-62	1979 Sep 27 02:51:00	Rocketsonde	-	-	Arcasonde	-	-	-	KHR	-	-	-	75	-	-
1979-H1153	2444144-52	1979 Sep 28 00:30:00	Rocketsonde	-	-	Arcasonde	-	-	-	SHEH	-	-	-	53	-	-
1979-H1154	2444144-64	1979 Sep 28 03:14:59	Rocketsonde	-	-	Arcasonde	-	-	-	KHR	-	-	-	72	-	-
1979-H1155	2444145-05	1979 Sep 28 13:14:59	Rocketsonde	-	-	Arcasonde	-	-	-	ASC	LC43	-	-	65	-	-
1979-H1156	2444145-06	1979 Sep 28 13:30:00	Rocketsonde	-	-	Arcasonde	-	-	-	CC	LC43	-	-	57	-	-
1979-H487	2444145-10	1979 Sep 28 14:30:00	Rocketsonde	-	-	AN/DMC-97	-	-	-	CC	LC43	-	-	90	-	-
1979-H1157	2444145-11	1979 Sep 28 14:33:00	Rocketsonde	-	-	Arcasonde	-	-	-	THU	-	-	-	70	-	-
1979-H1158	2444145-17	1979 Sep 28 16:09:59	Rocketsonde	-	-	Arcasonde	-	-	-	PRLM	-	-	-	67	-	-
1979-H1159	2444145-26	1979 Sep 28 16:14:59	Rocketsonde	-	-	Arcasonde	-	-	-	ANT	-	-	-	70	-	-
1979-H1160	2444145-43	1979 Sep 28 22:21:59	Rocketsonde	-	-	Arcasonde	-	-	-	KAU	-	-	-	56	-	-
1979-H488	2444145-55	1979 Sep 29 01:14:59	Rocketsonde	-	-	Arcasonde	-	-	-	KHR	-	-	-	82	-	-
1979-H1161	2444145-64	1979 Sep 29 03:14:59	Rocketsonde	-	-	Arcasonde	-	-	-	KHR	-	-	-	78	-	-
1979-H1162	2444146-05	1979 Sep 29 09:14:59	Rocketsonde	-	-	Arcasonde	-	-	-	ASC	-	-	-	63	-	-
1979-H1163	2444146-10	1979 Oct 1 13:14:59	Rocketsonde	-	-	Arcasonde	-	-	-	ASC	-	-	-	66	-	-
1979-H1164	2444146-11	1979 Oct 1 14:40:00	Rocketsonde	-	-	Arcasonde	-	-	-	ANT	LC43	-	-	60	-	-
1979-H1165	2444146-12	1979 Oct 1 14:59:00	Rocketsonde	-	-	Arcasonde	-	-	-	THU	-	-	-	70	-	-
1979-H1166	2444146-22	1979 Oct 1 17:11:00	Rocketsonde	-	-	Arcasonde	-	-	-	PH	-	-	-	74	-	-
1979-H1167	2444146-23	1979 Oct 1 17:37:59	Rocketsonde	-	-	Arcasonde	-	-	-	PH	-	-	-	57	-	-
1979-H1168	2444146-35	1979 Oct 1 20:18:00	Rocketsonde	-	-	Arcasonde	-	-	-	SHEH	-	-	-	51	-	-
1979-H1169	2444146-35	1979 Oct 1 20:30:00	Rocketsonde	-	-	Arcasonde	-	-	-	KAU	-	-	-	56	-	-
1979-H1170	2444146-57	1979 Oct 2 01:37:59	Rocketsonde	-	-	Arcasonde	-	-	-	KHR	-	-	-	76	-	-
1979-H1171	2444146-57	1979 Oct 2 01:57:59	Rocketsonde	-	-	Arcasonde	-	-	-	PRLM	-	-	-	70	-	-
1979-H1172	2444150-05	1979 Oct 2 13:14:59	Rocketsonde	-	-	Arcasonde	-	-	-	ASC	LC43	-	-	63	-	-
1979-H1173	2444150-06	1979 Oct 2 13:14:59	Rocketsonde	-	-	Arcasonde	-	-	-	CC	LC43	-	-	60	-	-
1979-H491	2444150-09	1979 Oct 3 14:08:00	Rocketsonde	-	-	AN/DMC-9	-	-	-	VI	-	-	-	91	-	-
1979-H1174	2444150-09	1979 Oct 3 14:08:00	Rocketsonde	-	-	Arcasonde	-	-	-	VI	-	-	-	57	-	-
1979-H1175	2444150-11	1979 Oct 3 14:35:00	Rocketsonde	-	-	Arcasonde	-	-	-	VI	-	-	-	49	-	-
1979-H44	2444150-15	1979 Oct 3 15:45:00	Rocketsonde	-	-	Arcasonde	-	-	-	PRLM	-	-	-	67	-	-
1979-H1176	2444150-16	1979 Oct 3 15:45:00	Rocketsonde	-	-	Arcasonde	-	-	-	ANT	-	-	-	70	-	-
1979-H1177	2444150-17	1979 Oct 3 16:04:59	Rocketsonde	-	-	Arcasonde	-	-	-	THU	-	-	-	67	-	-
1979-H1178	2444150-23	1979 Oct 3 16:18:00	Rocketsonde	-	-	Arcasonde	-	-	-	THU	-	-	-	71	-	-
1979-H1179	2444150-25	1979 Oct 3 17:29:00	Rocketsonde	-	-	Arcasonde	-	-	-	VI	-	-	-	55	-	-
1979-H1180	2444150-27	1979 Oct 3 18:31:00	Rocketsonde	-	-	Arcasonde	-	-	-	VI	-	-	-	58	-	-
1979-H1181	2444150-57	1979 Oct 4 01:46:59	Rocketsonde	-	-	Arcasonde	-	-	-	KHR	-	-	-	73	-	-
1979-H1182	2444151-16	1979 Oct 4 01:46:59	Rocketsonde	-	-	Arcasonde	-	-	-	PRLM	-	-	-	57	-	-
1979-H1183	2444151-34	1979 Oct 4 20:15:00	Rocketsonde	-	-	Arcasonde	-	-	-	SHEH	-	-	-	67	-	-
1979-H1184	2444151-67	1979 Oct 5 12:10:59	Rocketsonde	-	-	Arcasonde	-	-	-	KHR	-	-	-	76	-	-
1979-H1185	2444151-67	1979 Oct 5 12:10:59	Rocketsonde	-	-	Arcasonde	-	-	-	KHR	-	-	-	66	-	-
1979-H1186	2444152-07	1979 Oct 5 13:46:59	Rocketsonde	-	-	Arcasonde	-	-	-	ASC	LC43	-	-	91	-	-
1979-H1187	2444152-07	1979 Oct 5 13:46:59	Rocketsonde	-	-	Arcasonde	-	-	-	THU	-	-	-	60	-	-
1979-H1188	2444152-38	1979 Oct 5 15:22:59	Rocketsonde	-	-	Arcasonde	-	-	-	KAU	-	-	-	79	-	-
1979-H1189	2444152-38	1979 Oct 5 15:22:59	Rocketsonde	-	-	Arcasonde	-	-	-	KHR	-	-	-	62	-	-
1979-H1190	2444152-68	1979 Oct 6 04:03:59	Rocketsonde	-	-	Arcasonde	-	-	-	CC	LC43	-	-	70	-	-
1979-H1191	2444152-68	1979 Oct 6 04:03:59	Rocketsonde	-	-	Arcasonde	-	-	-	THU	-	-	-	66	-	-
1979-H1192	2444152-70	1979 Oct 6 14:26:59	Rocketsonde	-	-	Arcasonde	-	-	-	ASC	LC43	-	-	61	-	-
1979-H1193	2444152-12	1979 Oct 6 14:26:59	Rocketsonde	-	-	Arcasonde	-	-	-	ASC	LC43	-	-	61	-	-
1979-H1194	2444152-12	1979 Oct 6 16:18:00	Rocketsonde	-	-	Arcasonde	-	-	-	ANT	-	-	-	71	-	-
1979-H1195	2444152-37	1979 Oct 6 15:59:59	Rocketsonde	-	-	Arcasonde	-	-	-	PRLM	-	-	-	65	-	-
1979-H1196	2444152-37	1979 Oct 6 20:26:00	Rocketsonde	-	-	Arcasonde	-	-	-	KAU	-	-	-	61	-	-
1979-H1197	2444152-52	1979 Oct 6 00:39:59	Rocketsonde	-	-	Arcasonde	-	-	-	KHR	-	-	-	76	-	-
1979-H1198	2444152-52	1979 Oct 6 00:39:59	Rocketsonde	-	-	Arcasonde	-	-	-	KHR	-	-	-	64	-	-
1979-H1199	2444152-52	1979 Oct 6 13:30:00	Rocketsonde	-	-	Arcasonde	-	-	-	ASC	LC43	-	-	61	-	-
1979-H1200	2444152-52	1979 Oct 6 13:30:00	Rocketsonde	-	-	Arcasonde	-	-	-	CC	LC43	-	-	71	-	-
1979-H495	2444157-08	1979 Oct 10 13:54:59	Rocketsonde	-	-	AN/DMC-97	-	-	-	ANT	LC43	-	-	95	-	-
1979-H1201	2444157-10	1979 Oct 10 13:30:00	Rocketsonde	-	-	Arcasonde	-	-	-	THU	-	-	-	65	-	-
1979-H1202	2444157-11	1979 Oct 10 14:35:00	Rocketsonde	-	-	Arcasonde	-	-	-	VI	-	-	-	56	-	-
1979-H1203	2444157-14	1979 Oct 10 15:19:00	Rocketsonde	-	-	Arcasonde	-	-	-	VI	-	-	-	54	-	-
1979-H1204	2444157-39	1979 Oct 10 21:26:59	Rocketsonde	-	-	Arcasonde	-	-	-	KAU	-	-	-	73	-	-
1979-H1205	2444157-44	1979 Oct 10 23:37:59	Rocketsonde	-	-	Arcasonde	-	-	-	KHR	-	-	-	58	-	-
1979-H1206	2444159-06	1979 Oct 12 13:30:00	Rocketsonde	-	-	Arcasonde	-	-	-	CC	LC43	-	-	68	-	-
1979-H1207	2444159-06	1979 Oct 12 16:29:00	Rocketsonde	-	-	Arcasonde	-	-	-	PM	-	-	-	75	-	-
1979-H1208	2444159-24	1979 Oct 12 17:45:00	Rocketsonde	-	-	Arcasonde	-	-	-	ANT	-	-	-	70	-	-
1979-H1209	2444159-24	1979 Oct 12 18:30:00	Rocketsonde	-	-	Arcasonde	-	-	-	PRLM	-	-	-	58	-	-
1979-H1210	2444159-55	1979 Oct 13 01:14:59	Rocketsonde	-	-	Arcasonde	-	-	-	KHR	-	-	-	74	-	-
1979-H1211	2444162-04	1979 Oct 15 12:59:59	Rocketsonde	-	-	Arcasonde	-	-	-	ASC	LC43	-	-	65	-	-
1979-H1212	2444162-07	1979 Oct 15 13:44:59	Rocketsonde	-	-	Arcasonde	-	-	-	CC	LC43	-	-	59	-	-
1979-H1213	2444162-12	1979 Oct 15 14:46:00	Rocketsonde	-	-	Arcasonde	-	-	-	THU	-	-	-	51	-	-
1979-H1214	2444162-17	1979 Oct 15 16:04:59	Rocketsonde	-	-	Arcasonde	-	-	-	PRLM	-	-	-	59	-	-
1979-H1215	2444162-20	1979 Oct 15 16:51:00	Rocketsonde	-	-	Arcasonde	-	-	-	PM	-	-	-	71	-	-
1979-H1216	2444162-35	1979 Oct 15 20:26:00	Rocketsonde	-	-	Arcasonde	-	-	-	PM	-	-	-	54	-	-
1979-H1218	2444163-66	1979 Oct 17 03:44:59	Rocketsonde	-	-	Arcasonde	-	-	-	KHR	-	-	-	58	-	-
1979-H1219	2444164-05	1979 Oct 17 13:14:59	Rocketsonde	-	-	Arcasonde	-	-	-	KHR	-	-	-	71	-	-
1979-H1220	2444164-06	1979 Oct 17 13:30:00	Rocketsonde	-	-	Arcasonde	-	-	-	CC	LC43	-	-	65	-	-
1979-H1221	2444164-07	1979 Oct 17 13:44:59	Rocketsonde	-	-	Arcasonde	-	-	-	CC	LC43	-	-	58	-	-
1979-H1222	2444164-11	1979 Oct 17 14:36:00	Rocketsonde	-	-	Arcasonde	-	-	-	ANT	-	-	-	61	-	-
1979-H1223	2444164-15	1979 Oct 17 15:33:59	Rocketsonde	-	-	Arcasonde	-	-	-	THU	-	-	-	68	-	-
1979-Y500	2444164-36	1979 Oct 17 20:43:00	Rocketsonde	-	-	AN/DMC-9	-	-	-	PRLM	-	-	-	61	-	-
1979-H1224	2444164-45	1979 Oct 17 22:47:59	Rocketsonde	-	-	Arcasonde	-	-	-	PM	-	-	-	90	-	-
1979-H1225	2444166-05	1979 Oct 19 13:14:59	Rocketsonde	-	-	Arcasonde	-	-	-	KHR	-	-	-	76	-	-
1979-H1226	2444166-11	1979 Oct 19 14:41:00	Rocketsonde	-	-	Arcasonde	-	-	-	ASC	-	-	-	66	-	-
1979-H1226	2444166-11	1979 Oct 19 14:41:00	Rocketsonde	-	-	Arcasonde	-	-	-	THU	-	-	-	67	-	-

Launch Mission

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Mission	FlightCode	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee_Km	Range_Km	Dest
1979-H1227	2444166-12	1979 Oct 19 1456:00	Rocketsonde	-	-	Arcasonde	-	-	-	WI	-	-	-	50	-	-
1979-H1228	2444166-21	1979 Oct 19 1700:00	Rocketsonde	-	-	Arcasonde	-	-	-	CC	LC43	-	-	62	-	-
1979-H1229	2444166-27	1979 Oct 19 1830:00	Rocketsonde	-	-	Arcasonde	-	-	-	ANT	-	-	-	70	-	-
1979-H1230	2444166-33	1979 Oct 19 1830:00	Rocketsonde	-	-	Arcasonde	-	-	-	PRUH	-	-	-	59	-	-
1979-H1231	2444166-33	1979 Oct 19 1956:59	Rocketsonde	-	-	Arcasonde	-	-	-	PH	-	-	-	74	-	-
1979-H1232	2444166-41	1979 Oct 19 2148:00	Rocketsonde	-	-	Arcasonde	-	-	-	KAU	-	-	-	51	-	-
1979-H1233	2444166-52	1979 Oct 20 0030:00	Rocketsonde	-	-	Arcasonde	-	-	-	WS	-	-	-	63	-	-
1979-H1234	2444166-55	1979 Oct 20 0118:59	Rocketsonde	-	-	Arcasonde	-	-	-	KRR	-	-	-	76	-	-
1979-H1235	2444168-10	1979 Oct 21 1430:00	Rocketsonde	-	-	Arcasonde	-	-	-	WI	-	-	-	52	-	-
1979-H1241	2444169-02	1979 Oct 21 1851:00	Rocketsonde	-	-	Arcasonde	-	-	-	WI	-	-	-	91	-	-
1979-H1242	2444169-06	1979 Oct 22 1530:00	Rocketsonde	-	-	Arcasonde	-	-	-	CC	LC43	-	-	65	-	-
1979-H1243	2444169-11	1979 Oct 22 1347:59	Rocketsonde	-	-	Arcasonde	-	-	-	THU	-	-	-	58	-	-
1979-H1244	2444169-16	1979 Oct 22 1457:59	Rocketsonde	-	-	Arcasonde	-	-	-	THU	-	-	-	70	-	-
1979-H1245	2444169-16	1979 Oct 22 1551:00	Rocketsonde	-	-	Arcasonde	-	-	-	PRUH	-	-	-	66	-	-
1979-H1246	2444169-28	1979 Oct 22 1732:00	Rocketsonde	-	-	Arcasonde	-	-	-	PH	-	-	-	74	-	-
1979-H1247	2444169-28	1979 Oct 22 1945:00	Rocketsonde	-	-	Arcasonde	-	-	-	ANT	-	-	-	71	-	-
1979-H1248	2444170-34	1979 Oct 23 0014:59	Rocketsonde	-	-	Arcasonde	-	-	-	WS	-	-	-	60	-	-
1979-H1250	2444170-34	1979 Oct 23 2015:00	Rocketsonde	-	-	Arcasonde	-	-	-	SHEN	-	-	-	52	-	-
1979-H1251	2444170-69	1979 Oct 24 0428:59	Rocketsonde	-	-	Arcasonde	-	-	-	KRR	-	-	-	74	-	-
1979-H1252	2444171-06	1979 Oct 24 1200:00	Rocketsonde	-	-	Arcasonde	-	-	-	ANT	-	-	-	73	-	-
1979-H1253	2444171-06	1979 Oct 24 1330:00	Rocketsonde	-	-	Arcasonde	-	-	-	ASC	-	-	-	65	-	-
1979-H1254	2444171-10	1979 Oct 24 1429:00	Rocketsonde	-	-	Arcasonde	-	-	-	CC	LC43	-	-	72	-	-
1979-H1255	2444171-10	1979 Oct 24 1430:00	Rocketsonde	-	-	Arcasonde	-	-	-	THU	-	-	-	89	-	-
1979-H1256	2444171-29	1979 Oct 24 1856:59	Rocketsonde	-	-	Arcasonde	-	-	-	CC	LC43	-	-	68	-	-
1979-H1257	2444171-33	1979 Oct 24 2000:00	Rocketsonde	-	-	Arcasonde	-	-	-	PRUH	-	-	-	76	-	-
1979-H1257	2444171-67	1979 Oct 26 0401:59	Rocketsonde	-	-	Arcasonde	-	-	-	PH	-	-	-	76	-	-
1979-H1257	2444172-09	1979 Oct 26 1412:00	Rocketsonde	-	-	Arcasonde	-	-	-	KRR	-	-	-	91	-	-
1979-H1258	2444172-11	1979 Oct 26 1457:59	Rocketsonde	-	-	Arcasonde	-	-	-	WI	-	-	-	52	-	-
1979-H1259	2444172-69	1979 Oct 26 0433:59	Rocketsonde	-	-	Arcasonde	-	-	-	KRR	-	-	-	76	-	-
1979-H1260	2444173-06	1979 Oct 26 1530:00	Rocketsonde	-	-	Arcasonde	-	-	-	ASC	-	-	-	63	-	-
1979-H1261	2444173-06	1979 Oct 26 1400:00	Rocketsonde	-	-	Arcasonde	-	-	-	ANT	-	-	-	69	-	-
1979-H1262	2444173-09	1979 Oct 26 1403:00	Rocketsonde	-	-	Arcasonde	-	-	-	CC	LC43	-	-	71	-	-
1979-H1263	2444173-12	1979 Oct 26 1447:00	Rocketsonde	-	-	Arcasonde	-	-	-	THU	-	-	-	70	-	-
1979-H1264	2444173-27	1979 Oct 26 1822:00	Rocketsonde	-	-	Arcasonde	-	-	-	PRUH	-	-	-	72	-	-
1979-H1265	2444173-27	1979 Oct 26 1850:00	Rocketsonde	-	-	Arcasonde	-	-	-	PRUH	-	-	-	67	-	-
1979-H1266	2444173-29	1979 Oct 26 1856:59	Rocketsonde	-	-	Arcasonde	-	-	-	PH	-	-	-	73	-	-
1979-H1267	2444173-36	1979 Oct 26 2111:59	Rocketsonde	-	-	Arcasonde	-	-	-	KAU	-	-	-	96	-	-
1979-H1268	2444176-07	1979 Oct 28 1944:59	Rocketsonde	-	-	Arcasonde	-	-	-	ANT	-	-	-	73	-	-
1979-H1269	2444176-11	1979 Oct 28 1445:00	Rocketsonde	-	-	Arcasonde	-	-	-	CC	LC43	-	-	76	-	-
1979-H1270	2444176-14	1979 Oct 28 1822:00	Rocketsonde	-	-	Arcasonde	-	-	-	THU	-	-	-	69	-	-
1979-H1271	2444176-15	1979 Oct 28 1850:00	Rocketsonde	-	-	Arcasonde	-	-	-	ASC	-	-	-	65	-	-
1979-H1272	2444176-51	1979 Oct 28 1657:59	Rocketsonde	-	-	Arcasonde	-	-	-	PH	-	-	-	75	-	-
1979-H1273	2444176-56	1979 Oct 30 0114:59	Rocketsonde	-	-	Arcasonde	-	-	-	KRR	-	-	-	68	-	-
1979-H1274	2444178-05	1979 Oct 31 1314:59	Rocketsonde	-	-	Arcasonde	-	-	-	ANT	-	-	-	65	-	-
1979-H1275	2444178-05	1979 Oct 31 1314:59	Rocketsonde	-	-	Arcasonde	-	-	-	ASC	-	-	-	63	-	-
1979-H1276	2444178-05	1979 Oct 31 1314:59	Rocketsonde	-	-	Arcasonde	-	-	-	THU	-	-	-	72	-	-
1979-H1277	2444178-15	1979 Oct 31 1906:00	Rocketsonde	-	-	Arcasonde	-	-	-	CC	LC43	-	-	72	-	-
1979-H1277	2444178-15	1979 Oct 31 1906:00	Rocketsonde	-	-	Arcasonde	-	-	-	WS	-	-	-	98	-	-
1979-H1277	2444178-21	1979 Oct 31 1500:59	Rocketsonde	-	-	Arcasonde	-	-	-	PH	-	-	-	76	-	-
1979-H1278	2444178-26	1979 Oct 31 1927:59	Rocketsonde	-	-	Arcasonde	-	-	-	PH	-	-	-	76	-	-
1979-H1279	2444178-30	1979 Oct 31 1907:59	Rocketsonde	-	-	Arcasonde	-	-	-	PRUH	-	-	-	65	-	-
1979-H1279	2444178-30	1979 Oct 31 1930:59	Rocketsonde	-	-	Arcasonde	-	-	-	KRR	-	-	-	75	-	-
1979-H1280	2444178-43	1979 Oct 31 2324:00	Rocketsonde	-	-	Arcasonde	-	-	-	WI	-	-	-	74	-	-
1979-H1281	2444179-00	1979 Oct 31 1200:00	Rocketsonde	-	-	Arcasonde	-	-	-	VI	-	-	-	59	-	-
1979-H1282	2444179-00	1979 Nov 1 1315:59	Rocketsonde	-	-	Arcasonde	-	-	-	VI	-	-	-	68	-	-
1979-H1286	2444179-14	1979 Nov 1 1520:00	Rocketsonde	-	-	Arcasonde	-	-	-	VI	-	-	-	90	-	-
1979-H1288	2444179-33	1979 Nov 1 1942:59	Rocketsonde	-	-	Arcasonde	-	-	-	PRUH	-	-	-	66	-	-
1979-H1288	2444179-33	1979 Nov 1 2000:00	Rocketsonde	-	-	Arcasonde	-	-	-	VI	-	-	-	61	-	-
1979-H1292	2444179-42	1979 Nov 1 2201:59	Rocketsonde	-	-	Arcasonde	-	-	-	VI	-	-	-	64	-	-
1979-H1293	2444180-06	1979 Nov 2 1330:00	Rocketsonde	-	-	Arcasonde	-	-	-	ASC	-	-	-	66	-	-
1979-H1294	2444180-07	1979 Nov 2 1334:59	Rocketsonde	-	-	Arcasonde	-	-	-	ANT	-	-	-	71	-	-
1979-H1295	2444180-10	1979 Nov 2 1430:00	Rocketsonde	-	-	Arcasonde	-	-	-	THU	LC43	-	-	66	-	-
1979-H1296	2444180-12	1979 Nov 2 1447:00	Rocketsonde	-	-	Arcasonde	-	-	-	CC	LC43	-	-	84	-	-
1979-H1296	2444180-15	1979 Nov 2 1530:00	Rocketsonde	-	-	Arcasonde	-	-	-	THU	-	-	-	66	-	-
1979-H1297	2444180-21	1979 Nov 2 1656:59	Rocketsonde	-	-	Arcasonde	-	-	-	ANT	-	-	-	68	-	-
1979-H1298	2444180-58	1979 Nov 3 0202:00	Rocketsonde	-	-	Arcasonde	-	-	-	PRUH	-	-	-	79	-	-
1979-H1298	2444181-82	1979 Nov 4 0735:59	Rocketsonde	-	-	Arcasonde	-	-	-	KRR	-	-	-	69	-	-
1979-H1301	2444181-94	1979 Nov 4 1040:00	Rocketsonde	-	-	Arcasonde	-	-	-	VI	-	-	-	79	-	-
1979-H1302	2444181-95	1979 Nov 4 1053:59	Rocketsonde	-	-	Arcasonde	-	-	-	VI	-	-	-	72	-	-
1979-H1303	2444183-07	1979 Nov 5 1334:59	Rocketsonde	-	-	Arcasonde	-	-	-	ANT	-	-	-	64	-	-
1979-H1304	2444183-08	1979 Nov 5 1401:00	Rocketsonde	-	-	Arcasonde	-	-	-	THU	-	-	-	71	-	-
1979-H1305	2444183-11	1979 Nov 5 1445:00	Rocketsonde	-	-	Arcasonde	-	-	-	PH	-	-	-	74	-	-
1979-H1307	2444183-20	1979 Nov 5 1704:59	Rocketsonde	-	-	Arcasonde	-	-	-	PRUH	-	-	-	55	-	-
1979-H1308	2444183-37	1979 Nov 6 0114:59	Rocketsonde	-	-	Arcasonde	-	-	-	KRR	-	-	-	79	-	-
1979-H1309	2444183-55	1979 Nov 6 2057:00	Rocketsonde	-	-	Arcasonde	-	-	-	ASC	-	-	-	65	-	-
1979-H1310	2444185-03	1979 Nov 7 1249:59	Rocketsonde	-	-	Arcasonde	-	-	-	ASC	-	-	-	65	-	-
1979-H1311	2444185-05	1979 Nov 7 1314:59	Rocketsonde	-	-	Arcasonde	-	-	-	CC	LC43	-	-	62	-	-
1979-H1312	2444185-11	1979 Nov 7 1440:00	Rocketsonde	-	-	Arcasonde	-	-	-	CC	-	-	-	65	-	-
1979-H1313	2444185-13	1979 Nov 7 1506:00	Rocketsonde	-	-	Arcasonde	-	-	-	THU	-	-	-	69	-	-
1979-H1314	2444185-13	1979 Nov 7 1506:00	Rocketsonde	-	-	Arcasonde	-	-	-	THU	-	-	-	69	-	-
1979-H1315	2444185-15	1979 Nov 7 1556:00	Rocketsonde	-	-	Arcasonde	-	-	-	CC	LC43	-	-	61	-	-
1979-H1316	2444185-15	1979 Nov 7 1556:00	Rocketsonde	-	-	Arcasonde	-	-	-	CC	-	-	-	90	-	-
1979-H1317	2444185-16	1979 Nov 7 1556:00	Rocketsonde	-	-	Arcasonde	-	-	-	VI	-	-	-	56	-	-
1979-H1318	2444185-16	1979 Nov 7 1615:59	Rocketsonde	-	-	Arcasonde	-	-	-	VI	-	-	-	74	-	-
1979-H1319	2444185-37	1979 Nov 7 2054:00	Rocketsonde	-	-	Arcasonde	-	-	-	KRR	-	-	-	74	-	-
1979-H1320	2444185-49	1979 Nov 7 2346:00	Rocketsonde	-	-	Arcasonde	-	-	-	KRR	-	-	-	98	-	-
1979-H1320	2444186-31	1979 Nov 8 1930:00	Rocketsonde	-	-	AN/DMG-9	-	-	-	WS	-	-	-	98	-	-

Launch Mission

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Launch_Site	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee_Km	Range_Km	Dest
1979-H1321	2444186-50	1979 Nov 9 0002:59	Rocketsonde	-	-	Arcasonde	CC	-	LC43	-	-	-	67	-	-
1979-H1322	2444187-08	1979 Nov 9 1400:00	Rocketsonde	-	-	Arcasonde	CC	-	LC43	-	-	-	55	-	-
1979-H1323	2444187-11	1979 Nov 9 1437:00	Rocketsonde	-	-	Arcasonde	THU	-	-	-	-	-	70	-	-
1979-H1324	2444187-15	1979 Nov 9 1530:00	Rocketsonde	-	-	Arcasonde	ASC	-	-	-	-	-	65	-	-
1979-H1325	2444187-20	1979 Nov 9 1644:59	Rocketsonde	-	-	Arcasonde	PR1H	-	-	-	-	-	55	-	-
1979-H1326	2444187-24	1979 Nov 9 1740:00	Rocketsonde	-	-	Arcasonde	PH	-	-	-	-	-	75	-	-
1979-H1327	2444187-38	1979 Nov 9 2100:00	Rocketsonde	-	-	Arcasonde	KRR	-	-	-	-	-	74	-	-
1979-H1328	2444187-38	1979 Nov 12 1830:00	Rocketsonde	-	-	Arcasonde	THU	-	-	-	-	-	71	-	-
1979-H1329	2444191-20	1979 Nov 13 1644:59	Rocketsonde	-	-	Arcasonde	THU	-	-	-	-	-	70	-	-
1979-H1331	2444191-37	1979 Nov 13 2055:00	Rocketsonde	-	-	Arcasonde	KAU	-	-	-	-	-	54	-	-
1979-H1333	2444191-65	1979 Nov 14 0336:59	Rocketsonde	-	-	Arcasonde	KRR	-	-	-	-	-	75	-	-
1979-H1334	2444192-05	1979 Nov 14 1314:59	Rocketsonde	-	-	Arcasonde	ASC	-	-	-	-	-	63	-	-
1979-H1336	2444192-10	1979 Nov 14 1424:00	Rocketsonde	-	-	Arcasonde	THU	-	-	-	-	-	69	-	-
1979-H1337	2444192-20	1979 Nov 14 1653:59	Rocketsonde	-	-	Arcasonde	PR1H	-	-	-	-	-	68	-	-
1979-1642	2444192-22	1979 Nov 14 1710:00	Rocketsonde	-	-	Arcasonde	WI	-	-	-	-	-	89	-	-
1979-H1338	2444192-23	1979 Nov 14 1734:00	Rocketsonde	-	-	Arcasonde	WI	-	-	-	-	-	54	-	-
1979-H1339	2444192-25	1979 Nov 14 1800:00	Rocketsonde	-	-	Arcasonde	ASC	-	-	-	-	-	72	-	-
1979-H1341	2444192-45	1979 Nov 14 2251:00	Rocketsonde	-	-	Arcasonde	KRR	-	-	-	-	-	76	-	-
1979-H1343	2444194-06	1979 Nov 16 1530:00	Rocketsonde	-	-	Arcasonde	ASC	-	-	-	-	-	69	-	-
1979-H1344	2444194-10	1979 Nov 16 1831:00	Rocketsonde	-	-	Arcasonde	CC	-	LC43	-	-	-	62	-	-
1979-H1346	2444194-13	1979 Nov 16 1500:59	Rocketsonde	-	-	Arcasonde	THU	-	-	-	-	-	70	-	-
1979-H1347	2444194-16	1979 Nov 16 1548:59	Rocketsonde	-	-	Arcasonde	PR1H	-	-	-	-	-	57	-	-
1979-H1348	2444194-19	1979 Nov 16 1640:00	Rocketsonde	-	-	Arcasonde	PH	-	-	-	-	-	73	-	-
1979-H1349	2444194-32	1979 Nov 17 0258:59	Rocketsonde	-	-	Arcasonde	KRR	-	-	-	-	-	76	-	-
1979-H1350	2444194-52	1979 Nov 17 0226:59	Rocketsonde	-	-	Arcasonde	ASC	-	-	-	-	-	64	-	-
1979-H1351	2444197-06	1979 Nov 19 1530:00	Rocketsonde	-	-	Arcasonde	CC	-	LC43	-	-	-	63	-	-
1979-H1352	2444197-11	1979 Nov 19 1840:00	Rocketsonde	-	-	Arcasonde	THU	-	-	-	-	-	69	-	-
1979-H1353	2444198-65	1979 Nov 21 0340:00	Rocketsonde	-	-	Arcasonde	KRR	-	-	-	-	-	77	-	-
1979-H1355	2444198-66	1979 Nov 21 1300:00	Rocketsonde	-	-	Arcasonde	ASC	-	-	-	-	-	66	-	-
1979-H1356	2444199-10	1979 Nov 21 1423:00	Rocketsonde	-	-	Arcasonde	THU	-	-	-	-	-	70	-	-
1979-H1357	2444199-20	1979 Nov 21 1644:59	Rocketsonde	-	-	Arcasonde	PR1H	-	-	-	-	-	68	-	-
1979-1650	2444199-22	1979 Nov 21 1720:00	Rocketsonde	-	-	Arcasonde	WI	-	-	-	-	-	97	-	-
1979-1651	2444199-29	1979 Nov 21 1945:00	Rocketsonde	-	-	Arcasonde	WI	-	-	-	-	-	90	-	-
1979-H1359	2444199-31	1979 Nov 21 1935:59	Rocketsonde	-	-	Arcasonde	PH	-	-	-	-	-	76	-	-
1979-H1360	2444199-31	1979 Nov 21 1927:59	Rocketsonde	-	-	Arcasonde	VI	-	-	-	-	-	85	-	-
1979-H1361	2444199-39	1979 Nov 21 2117:00	Rocketsonde	-	-	Arcasonde	KAU	-	-	-	-	-	61	-	-
1979-H1362	2444199-63	1979 Nov 22 0301:59	Rocketsonde	-	-	Arcasonde	KRR	-	-	-	-	-	74	-	-
1979-H1363	2444201-20	1979 Nov 23 1647:59	Rocketsonde	-	-	Arcasonde	PR1H	-	-	-	-	-	66	-	-
1979-H1364	2444201-51	1979 Nov 24 0240:00	Rocketsonde	-	-	Arcasonde	KRR	-	-	-	-	-	78	-	-
1979-H1366	2444204-07	1979 Nov 26 1334:59	Rocketsonde	-	-	Arcasonde	ASC	-	-	-	-	-	96	-	-
1979-H1369	2444204-06	1979 Nov 26 1344:59	Rocketsonde	-	-	Arcasonde	ASC	-	-	-	-	-	88	-	-
1979-H1370	2444204-11	1979 Nov 26 1448:59	Rocketsonde	-	-	Arcasonde	CC	-	LC43	-	-	-	71	-	-
1979-H1371	2444204-34	1979 Nov 26 2003:59	Rocketsonde	-	-	Arcasonde	THU	-	-	-	-	-	61	-	-
1979-1659	2444205-33	1979 Nov 27 2300:00	Rocketsonde	-	-	Arcasonde	WI	-	-	-	-	-	73	-	-
1979-H1372	2444205-33	1979 Nov 28 1330:00	Rocketsonde	-	-	Arcasonde	ASC	-	-	-	-	-	68	-	-
1979-H1373	2444205-06	1979 Nov 28 1300:00	Rocketsonde	-	-	Arcasonde	ASC	-	LC43	-	-	-	60	-	-
1979-H1374	2444205-12	1979 Nov 28 1500:00	Rocketsonde	-	-	Arcasonde	THU	-	-	-	-	-	70	-	-
1979-1656	2444205-12	1979 Nov 28 1830:00	Rocketsonde	-	-	Arcasonde	ASC	-	-	-	-	-	85	-	-
1979-H1375	2444205-22	1979 Nov 28 1712:00	Rocketsonde	-	-	Arcasonde	CC	-	LC43	-	-	-	72	-	-
1979-1661	2444205-32	1979 Nov 28 2124:59	Rocketsonde	-	-	Arcasonde	PH	-	-	-	-	-	67	-	-
1979-H1376	2444205-41	1979 Nov 28 2155:00	Rocketsonde	-	-	Arcasonde	KAU	-	-	-	-	-	90	-	-
1979-1664	2444207-17	1979 Nov 28 2254:59	Rocketsonde	-	-	Arcasonde	KRR	-	-	-	-	-	78	-	-
1979-H1377	2444207-17	1979 Nov 29 1603:59	Rocketsonde	-	-	Arcasonde	VI	-	-	-	-	-	91	-	-
1979-H1380	2444207-17	1979 Nov 29 1625:59	Rocketsonde	-	-	Arcasonde	VI	-	-	-	-	-	56	-	-
1979-H1381	2444207-67	1979 Nov 30 0304:59	Rocketsonde	-	-	Arcasonde	KRR	-	-	-	-	-	78	-	-
1979-H1382	2444208-06	1979 Nov 30 1330:00	Rocketsonde	-	-	Arcasonde	ASC	-	-	-	-	-	65	-	-
1979-H1383	2444208-10	1979 Nov 30 1420:00	Rocketsonde	-	-	Arcasonde	THU	-	-	-	-	-	72	-	-
1979-H1384	2444211-06	1979 Dec 3 1330:00	Rocketsonde	-	-	Arcasonde	ASC	-	-	-	-	-	63	-	-
1979-H1385	2444211-30	1979 Dec 3 1431:00	Rocketsonde	-	-	Arcasonde	THU	-	-	-	-	-	71	-	-
1979-H1386	2444212-09	1979 Dec 4 1415:00	Rocketsonde	-	-	Arcasonde	PH	-	-	-	-	-	72	-	-
1979-1668	2444212-15	1979 Dec 4 1537:59	Rocketsonde	-	-	Arcasonde	WI	-	-	-	-	-	64	-	-
1979-H1386	2444212-17	1979 Dec 4 1606:00	Rocketsonde	-	-	Arcasonde	VI	-	-	-	-	-	90	-	-
1979-H1388	2444212-18	1979 Dec 4 1845:00	Rocketsonde	-	-	Arcasonde	VI	-	-	-	-	-	59	-	-
1979-H1390	2444213-04	1979 Dec 5 1259:59	Rocketsonde	-	-	Arcasonde	ASC	-	-	-	-	-	63	-	-
1979-H1391	2444213-10	1979 Dec 5 1430:00	Rocketsonde	-	-	Arcasonde	THU	-	-	-	-	-	70	-	-
1979-H1392	2444213-11	1979 Dec 5 1432:00	Rocketsonde	-	-	Arcasonde	ASC	-	LC43	-	-	-	61	-	-
1979-H1393	2444213-22	1979 Dec 5 1658:59	Rocketsonde	-	-	Arcasonde	THU	-	-	-	-	-	68	-	-
1979-1672	2444213-22	1979 Dec 5 1715:00	Rocketsonde	-	-	Arcasonde	WI	-	-	-	-	-	73	-	-
1979-H1394	2444213-28	1979 Dec 5 1715:00	Rocketsonde	-	-	Arcasonde	ASC	-	-	-	-	-	98	-	-
1979-1673	2444213-35	1979 Dec 5 1845:59	Rocketsonde	-	-	Arcasonde	WI	-	-	-	-	-	89	-	-
1979-H1395	2444213-37	1979 Dec 5 2026:00	Rocketsonde	-	-	Arcasonde	PH	-	-	-	-	-	70	-	-
1979-H1396	2444213-45	1979 Dec 5 2252:00	Rocketsonde	-	-	Arcasonde	PH	-	-	-	-	-	73	-	-
1979-1675	2444214-45	1979 Dec 7 0140:00	Rocketsonde	-	-	Arcasonde	KRR	-	-	-	-	-	82	-	-
1979-H1397	2444215-07	1979 Dec 7 1344:59	Rocketsonde	-	-	Arcasonde	KRR	-	-	-	-	-	63	-	-
1979-H1398	2444215-11	1979 Dec 7 1445:00	Rocketsonde	-	-	Arcasonde	ASC	-	-	-	-	-	57	-	-
1979-H1399	2444215-25	1979 Dec 7 1753:00	Rocketsonde	-	-	Arcasonde	THU	-	-	-	-	-	75	-	-
1979-H1400	2444218-13	1979 Dec 10 1510:00	Rocketsonde	-	-	Arcasonde	PH	-	-	-	-	-	69	-	-
1979-H1401	2444218-27	1979 Dec 10 1825:59	Rocketsonde	-	-	Arcasonde	THU	-	-	-	-	-	72	-	-
1979-1677	2444218-27	1979 Dec 10 1900:59	Rocketsonde	-	-	Arcasonde	WI	-	-	-	-	-	90	-	-
1979-H1402	2444218-31	1979 Dec 10 1930:00	Rocketsonde	-	-	Arcasonde	WI	-	-	-	-	-	59	-	-
1979-H1403	2444219-54	1979 Dec 12 0059:59	Rocketsonde	-	-	Arcasonde	PR1H	-	-	-	-	-	53	-	-





Launch Mission

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Mission	FlightCode	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee_Km	Range_Km	Dest
1980-Y465	2444557-36	1980 Nov 13 2037:00	Rocketsonde	-	-	AN/DMC-9-	-	-	-	PH	-	-	-	90	-	-
1980-H1043	2444558-40	1980 Nov 14 2130:00	Rocketsonde	-	-	Arcasonde	-	-	-	CC	LC43	-	-	70	-	-
1980-H1044	2444559-40	1980 Nov 14 2138:59	Rocketsonde	-	-	Arcasonde	-	-	-	PH	-	-	-	74	-	-
1980-H1045	2444559-41	1980 Nov 14 2155:00	Rocketsonde	-	-	Arcasonde	-	-	-	RAU	-	-	-	63	-	-
1980-H1046	2444561-04	1980 Nov 17 1253:00	Rocketsonde	-	-	Arcasonde	-	-	-	ASC	-	-	-	59	-	-
1980-H1047	2444561-10	1980 Nov 17 1430:00	Rocketsonde	-	-	Arcasonde	-	-	-	CC	LC43	-	-	69	-	-
1980-H1048	2444561-33	1980 Nov 17 1949:59	Rocketsonde	-	-	Arcasonde	-	-	-	PR1H	-	-	-	68	-	-
1980-H1049	2444561-42	1980 Nov 17 2159:59	Rocketsonde	-	-	Arcasonde	-	-	-	RAU	-	-	-	62	-	-
1980-H46	2444561-57	1980 Nov 18 0134:59	Rocketsonde	-	-	Arcasonde	-	-	-	SHEH	-	-	-	49	-	-
1980-H47	2444562-09	1980 Nov 18 1415:00	Rocketsonde	-	-	Arcasonde	-	-	-	WS	-	-	-	44	-	-
1980-H1052	2444562-23	1980 Nov 18 1737:00	Rocketsonde	-	-	Arcasonde	-	-	-	WS	-	-	-	66	-	-
1980-H1053	2444562-26	1980 Nov 18 1817:00	Rocketsonde	-	-	Arcasonde	-	-	-	CC	LC43	-	-	71	-	-
1980-H1054	2444562-27	1980 Nov 18 1834:59	Rocketsonde	-	-	Arcasonde	-	-	-	MIT	-	-	-	70	-	-
1980-H1055	2444562-31	1980 Nov 18 1929:00	Rocketsonde	-	-	Arcasonde	-	-	-	PH	-	-	-	70	-	-
1980-H470	2444563-11	1980 Nov 19 1445:00	Rocketsonde	-	-	AN/DMC-97	-	-	-	CC	LC43	-	-	86	-	-
1980-H1056	2444563-15	1980 Nov 19 1558:59	Rocketsonde	-	-	Arcasonde	-	-	-	PR1H	-	-	-	62	-	-
1980-H1057	2444563-20	1980 Nov 19 1649:59	Rocketsonde	-	-	Arcasonde	-	-	-	WI	-	-	-	61	-	-
1980-H1058	2444563-34	1980 Nov 19 2015:59	Rocketsonde	-	-	AN/DMC-9-	-	-	-	WI	-	-	-	90	-	-
1980-H471	2444563-34	1980 Nov 19 2223:59	Rocketsonde	-	-	Arcasonde	-	-	-	SHEH	-	-	-	52	-	-
1980-H1059	2444563-43	1980 Nov 19 2224:59	Rocketsonde	-	-	Arcasonde	-	-	-	RAU	-	-	-	66	-	-
1980-H1060	2444564-40	1980 Nov 20 2129:00	Rocketsonde	-	-	Arcasonde	-	-	-	KHR	-	-	-	72	-	-
1980-H1061	2444564-89	1980 Nov 20 2129:00	Rocketsonde	-	-	Arcasonde	-	-	-	ASC	-	-	-	60	-	-
1980-H1062	2444565-09	1980 Nov 21 1413:00	Rocketsonde	-	-	Arcasonde	-	-	-	CC	LC43	-	-	59	-	-
1980-H1063	2444565-29	1980 Nov 21 1659:59	Rocketsonde	-	-	Arcasonde	-	-	-	PH	-	-	-	64	-	-
1980-H48	2444565-36	1980 Nov 21 2040:00	Rocketsonde	-	-	Arcasonde	-	-	-	PR1H	-	-	-	49	-	-
1980-H49	2444565-38	1980 Nov 21 2100:00	Rocketsonde	-	-	Arcasonde	-	-	-	RAU	-	-	-	66	-	-
1980-H1066	2444565-38	1980 Nov 21 2100:00	Rocketsonde	-	-	Arcasonde	-	-	-	SHEH	-	-	-	49	-	-
1980-H1065	2444565-38	1980 Nov 21 2100:00	Rocketsonde	-	-	Arcasonde	-	-	-	ASC	-	-	-	66	-	-
1980-H1066	2444566-04	1980 Nov 24 1259:59	Rocketsonde	-	-	Arcasonde	-	-	-	ASC	-	-	-	63	-	-
1980-H1066	2444566-15	1980 Nov 24 1530:00	Rocketsonde	-	-	Arcasonde	-	-	-	CC	LC43	-	-	53	-	-
1980-H50	2444566-21	1980 Nov 24 1702:00	Rocketsonde	-	-	Arcasonde	-	-	-	PR1H	-	-	-	46	-	-
1980-H1067	2444566-40	1980 Nov 24 2136:59	Rocketsonde	-	-	Arcasonde	-	-	-	KHR	-	-	-	76	-	-
1980-H1068	2444566-41	1980 Nov 24 2154:00	Rocketsonde	-	-	Arcasonde	-	-	-	RAU	-	-	-	63	-	-
1980-H1070	2444570-17	1980 Nov 26 1558:59	Rocketsonde	-	-	Arcasonde	-	-	-	PR1H	-	-	-	63	-	-
1980-H1071	2444570-21	1980 Nov 26 1700:00	Rocketsonde	-	-	Arcasonde	-	-	-	ASC	-	-	-	60	-	-
1980-H479	2444570-30	1980 Nov 26 1914:59	Rocketsonde	-	-	AN/DMC-9-	-	-	-	WS	-	-	-	96	-	-
1980-H1072	2444570-39	1980 Nov 26 2126:59	Rocketsonde	-	-	Arcasonde	-	-	-	RAU	-	-	-	64	-	-
1980-H1073	2444570-45	1980 Nov 26 2241:00	Rocketsonde	-	-	AN/DMC-9-	-	-	-	PH	-	-	-	77	-	-
1980-H1074	2444570-52	1980 Nov 26 0227:59	Rocketsonde	-	-	Arcasonde	-	-	-	KHR	-	-	-	77	-	-
1980-H1075	2444572-15	1980 Nov 26 1530:00	Rocketsonde	-	-	Arcasonde	-	-	-	ASC	-	-	-	63	-	-
1980-H1076	2444572-19	1980 Nov 26 1630:00	Rocketsonde	-	-	Arcasonde	-	-	-	PR1H	-	-	-	54	-	-
1980-H1077	2444572-41	1980 Nov 26 2147:59	Rocketsonde	-	-	Arcasonde	-	-	-	KHR	-	-	-	75	-	-
1980-H1078	2444575-07	1980 Dec 1 1346:59	Rocketsonde	-	-	Arcasonde	-	-	-	ASC	-	-	-	60	-	-
1980-H1079	2444575-08	1980 Dec 1 1346:59	Rocketsonde	-	-	Arcasonde	-	-	-	ASC	-	-	-	63	-	-
1980-H1080	2444575-14	1980 Dec 1 1524:59	Rocketsonde	-	-	Arcasonde	-	-	-	ATC	-	-	-	63	-	-
1980-H1081	2444575-19	1980 Dec 1 1630:59	Rocketsonde	-	-	Arcasonde	-	-	-	PR1H	-	-	-	73	-	-
1980-H1082	2444575-23	1980 Dec 1 1639:59	Rocketsonde	-	-	Arcasonde	-	-	-	PR1H	-	-	-	63	-	-
1980-H1083	2444575-28	1980 Dec 1 1639:59	Rocketsonde	-	-	Arcasonde	-	-	-	WS	-	-	-	96	-	-
1980-H1084	2444575-28	1980 Dec 1 1639:59	Rocketsonde	-	-	Arcasonde	-	-	-	RAU	-	-	-	64	-	-
1980-H1084	2444575-28	1980 Dec 1 1639:59	Rocketsonde	-	-	Arcasonde	-	-	-	PH	-	-	-	77	-	-
1980-H1084	2444575-28	1980 Dec 1 1639:59	Rocketsonde	-	-	Arcasonde	-	-	-	ASC	-	-	-	63	-	-
1980-H1087	2444577-25	1980 Dec 2 1719:00	Rocketsonde	-	-	Arcasonde	-	-	-	PH	-	-	-	72	-	-
1980-H1088	2444577-27	1980 Dec 3 1833:00	Rocketsonde	-	-	Arcasonde	-	-	-	PR1H	-	-	-	68	-	-
1980-H1088	2444577-34	1980 Dec 3 2003:00	Rocketsonde	-	-	Arcasonde	-	-	-	KHR	-	-	-	77	-	-
1980-H1089	2444577-34	1980 Dec 3 2003:00	Rocketsonde	-	-	Arcasonde	-	-	-	ASC	-	-	-	62	-	-
1980-H1089	2444577-34	1980 Dec 3 2135:59	Rocketsonde	-	-	Arcasonde	-	-	-	ASC	-	-	-	64	-	-
1980-H1089	2444578-20	1980 Dec 3 1834:59	Rocketsonde	-	-	Arcasonde	-	-	-	ASC	-	-	-	61	-	-
1980-H1091	2444578-30	1980 Dec 4 1910:59	Rocketsonde	-	-	Arcasonde	-	-	-	MIT	-	-	-	64	-	-
1980-H1092	2444578-31	1980 Dec 4 1931:59	Rocketsonde	-	-	Arcasonde	-	-	-	CC	-	-	-	61	-	-
1980-H1093	2444578-31	1980 Dec 4 1931:59	Rocketsonde	-	-	Arcasonde	-	-	-	PR1H	-	-	-	65	-	-
1980-H1093	2444579-06	1980 Dec 5 1330:00	Rocketsonde	-	-	Arcasonde	-	-	-	ASC	-	-	-	59	-	-
1980-H1094	2444579-06	1980 Dec 5 1814:59	Rocketsonde	-	-	Arcasonde	-	-	-	ASC	-	-	-	79	-	-
1980-H1095	2444581-26	1980 Dec 8 0941:00	Rocketsonde	-	-	Arcasonde	-	-	-	PH	-	-	-	40	-	-
1980-H1096	2444582-00	1980 Dec 8 1356:59	Rocketsonde	-	-	Arcasonde	-	-	-	WS	-	-	-	61	-	-
1980-H1097	2444582-11	1980 Dec 8 1434:00	Rocketsonde	-	-	Arcasonde	-	-	-	ASC	-	-	-	64	-	-
1980-H1098	2444582-22	1980 Dec 8 1713:00	Rocketsonde	-	-	Arcasonde	-	-	-	PR1H	-	-	-	65	-	-
1980-H1099	2444582-38	1980 Dec 8 2100:00	Rocketsonde	-	-	Arcasonde	-	-	-	RAU	-	-	-	59	-	-
1980-H1100	2444582-39	1980 Dec 8 2124:59	Rocketsonde	-	-	Arcasonde	-	-	-	KHR	-	-	-	79	-	-
1980-H1101	2444582-42	1980 Dec 8 2206:00	Rocketsonde	-	-	Arcasonde	-	-	-	PH	-	-	-	73	-	-
1980-H51	2444582-65	1980 Dec 9 0330:00	Rocketsonde	-	-	Arcasonde	-	-	-	ASC	-	-	-	40	-	-
1980-H1102	2444583-03	1980 Dec 9 1249:59	Rocketsonde	-	-	Arcasonde	-	-	-	ASC	-	-	-	61	-	-
1980-Y485	2444583-11	1980 Dec 9 1445:00	Rocketsonde	-	-	AN/DMC-9-	-	-	-	WI	-	-	-	90	-	-
1980-H1105	2444584-16	1980 Dec 10 1547:59	Rocketsonde	-	-	Arcasonde	-	-	-	CC	LC43	-	-	61	-	-
1980-H1106	2444584-19	1980 Dec 10 1630:00	Rocketsonde	-	-	Arcasonde	-	-	-	PR1H	-	-	-	56	-	-
1980-H1107	2444585-19	1980 Dec 11 1630:00	Rocketsonde	-	-	Arcasonde	-	-	-	PR1H	-	-	-	68	-	-
1980-Y489	2444585-23	1980 Dec 11 1644:59	Rocketsonde	-	-	AN/DMC-9-	-	-	-	WS	-	-	-	98	-	-
1980-H1108	2444585-23	1980 Dec 11 1750:00	Rocketsonde	-	-	Arcasonde	-	-	-	WS	-	-	-	59	-	-
1980-H52	2444585-42	1980 Dec 11 2159:59	Rocketsonde	-	-	Arcasonde	-	-	-	SHEH	-	-	-	47	-	-
1980-H1111	2444586-07	1980 Dec 12 1344:59	Rocketsonde	-	-	Arcasonde	-	-	-	ASC	-	-	-	64	-	-
1980-H53	2444586-10	1980 Dec 12 1423:00	Rocketsonde	-	-	Arcasonde	-	-	-	CC	LC43	-	-	43	-	-
1980-Y492	2444586-31	1980 Dec 12 1927:59	Rocketsonde	-	-	AN/DMC-9-	-	-	-	PH	-	-	-	85	-	-
1980-H1112	2444586-34	1980 Dec 12 2003:00	Rocketsonde	-	-	Arcasonde	-	-	-	PH	-	-	-	62	-	-
1980-H1113	2444586-40	1980 Dec 12 2135:59	Rocketsonde	-	-	Arcasonde	-	-	-	KHR	-	-	-	75	-	-
1980-H1114	2444589-04	1980 Dec 15 1257:59	Rocketsonde	-	-	Arcasonde	-	-	-	ASC	-	-	-	56	-	-
1980-H1115	2444589-21	1980 Dec 15 1704:59	Rocketsonde	-	-	Arcasonde	-	-	-	PR1H	-	-	-	66	-	-
1980-H1116	2444589-74	1980 Dec 16 0548:59	Rocketsonde	-	-	Arcasonde	-	-	-	KHR	-	-	-	75	-	-
1980-H1117	2444589-91	1980 Dec 16 0944:00	Rocketsonde	-	-	Arcasonde	-	-	-	KHR	-	-	-	72	-	-
1980-H1118	2444590-08	1980 Dec 16 1400:00	Rocketsonde	-	-	Arcasonde	-	-	-	CC	LC43	-	-	67	-	-
1980-H1119	2444590-41	1980 Dec 16 2145:00	Rocketsonde	-	-	Arcasonde	-	-	-	SHEH	-	-	-	54	-	-
1980-H1120	2444590-41	1980 Dec 16 2147:59	Rocketsonde	-	-	Arcasonde	-	-	-	KHR	-	-	-	74	-	-
1980-H1124	2444590-93	1980 Dec 17 1014:59														

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Mission	FlightCode	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee km	Range km	Deat
1980-Y498	2444591.11	1980 Dec 17 1435:00	Rocketsonde	-	-	AN/DMC-97	-	-	-	CC	LC43	-	-	83	-	-
1980-H1126	2444591.39	1980 Dec 17 2114:59	Rocketsonde	-	-	Arcasonde	-	-	-	SHEH	-	-	-	54	-	-
1980-H1127	2444591.39	1980 Dec 17 2124:59	Rocketsonde	-	-	Arcasonde	-	-	-	RNR	-	-	-	76	-	-
1980-H1128	2444591.44	1980 Dec 17 2230:59	Rocketsonde	-	-	Arcasonde	-	-	-	KAU	-	-	-	64	-	-
1980-H1129	2444591.89	1980 Dec 18 0919:00	Rocketsonde	-	-	Arcasonde	-	-	-	ASC	-	-	-	60	-	-
1980-Y499	2444592.12	1980 Dec 18 1448:00	Rocketsonde	-	-	AN/DMC-9-	-	-	-	WI	-	-	-	90	-	-
1980-H1132	2444593.21	1980 Dec 19 1709:00	Rocketsonde	-	-	Arcasonde	-	-	-	PH	-	-	-	64	-	-
1980-H1133	2444595.90	1980 Dec 22 0930:00	Rocketsonde	-	-	Arcasonde	-	-	-	ASC	-	-	-	59	-	-
1980-H1134	2444596.04	1980 Dec 22 1259:59	Rocketsonde	-	-	Arcasonde	-	-	-	AIT	-	-	-	56	-	-
1980-H1135	2444596.27	1980 Dec 22 1831:00	Rocketsonde	-	-	Arcasonde	-	-	-	PH	-	-	-	70	-	-
1980-H1136	2444596.41	1980 Dec 22 2155:00	Rocketsonde	-	-	Arcasonde	-	-	-	SHEH	-	-	-	50	-	-
1980-H1137	2444597.19	1980 Dec 23 1636:59	Rocketsonde	-	-	Arcasonde	-	-	-	PH	-	-	-	71	-	-
1980-H1138	2444598.06	1980 Dec 24 1330:00	Rocketsonde	-	-	Arcasonde	-	-	-	ASC	-	-	-	60	-	-
1980-H1139	2444598.10	1980 Dec 24 1430:00	Rocketsonde	-	-	Arcasonde	-	-	-	CC	LC43	-	-	70	-	-
1980-T505	2444598.24	1980 Dec 24 1752:00	Rocketsonde	-	-	AN/DMC-9-	-	-	-	PH	-	-	-	90	-	-
1980-H1140	2444598.26	1980 Dec 24 1620:00	Rocketsonde	-	-	Arcasonde	-	-	-	PH	-	-	-	64	-	-
1980-H1141	2444598.42	1980 Dec 24 1529:59	Rocketsonde	-	-	Arcasonde	-	-	-	SHEH	-	-	-	52	-	-
1980-H1143	2444600.04	1980 Dec 26 1256:00	Rocketsonde	-	-	Arcasonde	-	-	-	ASC	-	-	-	63	-	-
1980-H1144	2444603.11	1980 Dec 29 1330:00	Rocketsonde	-	-	Arcasonde	-	-	-	ASC	-	-	-	62	-	-
1980-H1145	2444603.11	1980 Dec 29 1445:00	Rocketsonde	-	-	Arcasonde	-	-	-	CC	LC43	-	-	44	-	-
1980-H1146	2444604.40	1980 Dec 30 2136:59	Rocketsonde	-	-	Arcasonde	-	-	-	RNR	-	-	-	76	-	-
1980-H1147	2444604.41	1980 Dec 30 2149:59	Rocketsonde	-	-	Arcasonde	-	-	-	SHEH	-	-	-	55	-	-
1980-T509	2444604.56	1980 Dec 31 0130:00	Rocketsonde	-	-	Arcasonde	-	-	-	RNR	-	-	-	80	-	-
1980-H1147	2444605.03	1980 Dec 31 1245:59	Rocketsonde	-	-	Arcasonde	-	-	-	ASC	-	-	-	60	-	-
1980-H1148	2444605.14	1980 Dec 31 1524:59	Rocketsonde	-	-	Arcasonde	-	-	-	CC	LC43	-	-	70	-	-



Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	OrbPay	Agency	Launch_Code	Group	Category	LTCite	Cite	Notes
1969-1960	2440417.30	1969 Jul 14 1907:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1969-1961	2440418.08	1969 Jul 15 1400:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1969-1962	2440418.12	1969 Jul 15 1500:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1969-1963	2440418.15	1969 Jul 15 1530:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1969-1964	2440418.38	1969 Jul 15 2104:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1969-1965	2440419.08	1969 Jul 16 1400:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1969-1966	2440419.11	1969 Jul 16 1445:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1969-1969	2440419.14	1969 Jul 16 1514:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1969-1970	2440419.17	1969 Jul 16 1559:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1969-1972	2440419.21	1969 Jul 16 1700:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1969-1973	2440419.25	1969 Jul 16 1800:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1969-1974	2440419.41	1969 Jul 16 2156:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1969-1975	2440420.11	1969 Jul 17 1445:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1969-1976	2440420.24	1969 Jul 17 1740:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1969-1977	2440420.28	1969 Jul 17 1800:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1969-1978	2440420.30	1969 Jul 17 1914:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1969-1979	2440420.38	1969 Jul 17 2111:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1969-1980	2440421.08	1969 Jul 18 1400:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1969-1981	2440421.11	1969 Jul 18 1445:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1969-1982	2440421.16	1969 Jul 18 1551:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1969-1983	2440421.17	1969 Jul 18 1559:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1969-1984	2440421.21	1969 Jul 18 1700:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1969-1985	2440421.29	1969 Jul 18 1859:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1969-1986	2440421.38	1969 Jul 18 2100:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1969-1986	2440425.30	1969 Jul 22 1914:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1969-1987	2440425.36	1969 Jul 22 2100:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1969-1988	2440425.40	1969 Jul 22 2137:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1969-1990	2440426.06	1969 Jul 23 1400:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1969-1991	2440426.15	1969 Jul 23 1530:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1969-1992	2440426.17	1969 Jul 23 1602:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1969-1993	2440426.24	1969 Jul 23 1742:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1969-1994	2440426.25	1969 Jul 23 1800:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1969-1995	2440426.28	1969 Jul 23 1859:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1969-1996	2440426.36	1969 Jul 23 2026:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1969-1997	2440426.38	1969 Jul 23 2106:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1969-1998	2440426.40	1969 Jul 23 2145:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1969-1999	2440427.10	1969 Jul 24 1602:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1969-1000	2440427.17	1969 Jul 24 1940:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1969-1001	2440427.32	1969 Jul 24 2024:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1969-1003	2440427.40	1969 Jul 24 2351:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1969-1004	2440427.91	1969 Jul 25 0956:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1969-1006	2440428.02	1969 Jul 25 1324:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1969-1009	2440428.05	1969 Jul 25 1445:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1969-1010	2440428.11	1969 Jul 25 1604:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1969-1008	2440428.21	1969 Jul 25 1720:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1969-1012	2440428.22	1969 Jul 25 2114:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1969-1013	2440428.39	1969 Jul 26 1345:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1969-1014	2440431.06	1969 Jul 28 1730:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1969-1015	2440431.21	1969 Jul 28 1730:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1969-1016	2440431.23	1969 Jul 28 2034:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1969-1017	2440431.36	1969 Jul 28 2034:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1969-1018	2440432.41	1969 Jul 28 2146:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1969-1019	2440432.25	1969 Jul 29 1501:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1969-1020	2440432.42	1969 Jul 29 2200:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1969-1132	2440433.02	1969 Jul 30 1409:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1969-1102	2440433.10	1969 Jul 30 1430:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1969-1103	2440433.15	1969 Jul 30 1530:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1969-1104	2440433.27	1969 Jul 30 1830:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1969-1134	2440433.31	1969 Jul 30 1930:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1969-1106	2440433.38	1969 Jul 30 2103:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1969-1102	2440434.20	1969 Jul 31 1651:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1969-1102	2440434.38	1969 Jul 31 2112:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1969-1103	2440434.44	1969 Aug 1 1400:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1969-1135	2440435.08	1969 Aug 1 1437:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1969-1103	2440435.13	1969 Aug 1 1512:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1969-1103	2440435.17	1969 Aug 1 1600:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1969-1103	2440435.27	1969 Aug 1 1829:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1969-1103	2440435.32	1969 Aug 1 1831:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1969-1103	2440435.37	1969 Aug 1 2052:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1969-1103	2440438.08	1969 Aug 4 1400:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1969-1103	2440438.10	1969 Aug 4 1421:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1969-1104	2440438.11	1969 Aug 4 1445:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1969-1104	2440438.18	1969 Aug 4 1623:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1969-1104	2440438.32	1969 Aug 4 1944:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1969-1104	2440438.39	1969 Aug 4 2123:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1969-1104	2440439.08	1969 Aug 5 1400:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1969-1104	2440439.38	1969 Aug 5 2104:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1969-1104	2440439.40	1969 Aug 5 2136:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1969-1104	2440440.08	1969 Aug 6 1400:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Launch_t	OrbPay	Agency	Launch_Code	Group	Category	LTCite	Cite	Notes
1969-H1049	2440440.10	1969 Aug 6 1422:00	Rocketsonde	-	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1969-H1050	2440440.11	1969 Aug 6 1445:00	Rocketsonde	-	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1969-H1051	2440440.12	1969 Aug 6 1500:00	Rocketsonde	-	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1969-A136	2440440.19	1969 Aug 6 1629:00	Rocketsonde	-	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1969-H1052	2440440.19	1969 Aug 6 1630:00	Rocketsonde	-	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1969-H1053	2440440.21	1969 Aug 6 1700:00	Rocketsonde	-	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1969-H1054	2440440.29	1969 Aug 6 1859:59	Rocketsonde	-	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1969-H1055	2440440.34	1969 Aug 6 2015:00	Rocketsonde	-	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1969-H1056	2440440.40	1969 Aug 6 2129:00	Rocketsonde	-	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1969-H1057	2440441.36	1969 Aug 7 0114:59	Rocketsonde	-	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1969-H1058	2440442.08	1969 Aug 8 1400:00	Rocketsonde	-	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1969-H1059	2440442.09	1969 Aug 8 1404:59	Rocketsonde	-	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1969-H1060	2440442.11	1969 Aug 8 1445:00	Rocketsonde	-	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1969-H1061	2440442.25	1969 Aug 8 1445:00	Rocketsonde	-	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1969-H1062	2440442.25	1969 Aug 8 1800:00	Rocketsonde	-	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1969-H1063	2440442.31	1969 Aug 8 1930:00	Rocketsonde	-	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1969-H1064	2440442.42	1969 Aug 8 2204:59	Rocketsonde	-	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1969-H1065	2440442.56	1969 Aug 9 0123:59	Rocketsonde	-	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1969-H1066	2440445.12	1969 Aug 11 1449:59	Rocketsonde	-	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1969-H1067	2440445.18	1969 Aug 11 1619:59	Rocketsonde	-	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1969-A139	2440445.23	1969 Aug 11 1735:00	Rocketsonde	-	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1969-H1068	2440445.25	1969 Aug 11 1800:59	Rocketsonde	-	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1969-H1069	2440445.43	1969 Aug 11 2212:59	Rocketsonde	-	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1969-H1070	2440445.36	1969 Aug 12 2102:59	Rocketsonde	-	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1969-H1071	2440446.42	1969 Aug 12 2203:59	Rocketsonde	-	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1969-H1072	2440447.02	1969 Aug 13 1203:00	Rocketsonde	-	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1969-H1073	2440447.06	1969 Aug 13 1400:00	Rocketsonde	-	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1969-H1074	2440447.10	1969 Aug 13 1430:00	Rocketsonde	-	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1969-H1075	2440447.17	1969 Aug 13 1559:59	Rocketsonde	-	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1969-H1076	2440447.25	1969 Aug 13 1800:00	Rocketsonde	-	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1969-H1077	2440447.26	1969 Aug 13 1836:59	Rocketsonde	-	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1969-H1078	2440447.31	1969 Aug 13 1930:00	Rocketsonde	-	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1969-H1080	2440448.09	1969 Aug 14 1404:59	Rocketsonde	-	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1969-H1081	2440448.19	1969 Aug 14 1630:59	Rocketsonde	-	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1969-H1082	2440449.02	1969 Aug 15 1203:00	Rocketsonde	-	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1969-H111	2440449.11	1969 Aug 15 1400:00	Rocketsonde	-	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1969-H1084	2440449.17	1969 Aug 15 1455:00	Rocketsonde	-	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1969-H1085	2440449.25	1969 Aug 15 1559:59	Rocketsonde	-	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1969-H1086	2440449.27	1969 Aug 15 1830:00	Rocketsonde	-	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1969-H1089	2440449.29	1969 Aug 15 1859:59	Rocketsonde	-	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1969-H1091	2440451.99	1969 Aug 16 0247:00	Rocketsonde	-	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1969-H1092	2440451.76	1969 Aug 16 0647:59	Rocketsonde	-	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1969-H1093	2440452.06	1969 Aug 16 1400:00	Rocketsonde	-	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1969-H1094	2440452.11	1969 Aug 16 1455:00	Rocketsonde	-	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1969-H1095	2440452.17	1969 Aug 16 1559:59	Rocketsonde	-	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1969-H1097	2440452.20	1969 Aug 16 1856:59	Rocketsonde	-	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1969-H1107	2440452.25	1969 Aug 18 1300:00	Rocketsonde	-	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1969-H1108	2440452.31	1969 Aug 18 1330:00	Rocketsonde	-	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1969-H1109	2440452.40	1969 Aug 18 2142:59	Rocketsonde	-	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1969-H1101	2440453.56	1969 Aug 19 0122:59	Rocketsonde	-	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1969-H1102	2440453.56	1969 Aug 19 1413:00	Rocketsonde	-	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1969-H113	2440453.16	1969 Aug 19 1619:00	Rocketsonde	-	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1969-H1103	2440453.21	1969 Aug 19 1709:00	Rocketsonde	-	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1969-H1104	2440453.21	1969 Aug 19 1819:00	Rocketsonde	-	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1969-H1106	2440454.08	1969 Aug 20 1400:00	Rocketsonde	-	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1969-H1107	2440454.08	1969 Aug 20 1434:00	Rocketsonde	-	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1969-H1109	2440454.11	1969 Aug 20 1445:00	Rocketsonde	-	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1969-H1109	2440454.15	1969 Aug 20 1529:00	Rocketsonde	-	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1969-H1110	2440454.17	1969 Aug 20 1540:00	Rocketsonde	-	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1969-H1111	2440454.23	1969 Aug 20 1730:00	Rocketsonde	-	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1969-H1112	2440454.27	1969 Aug 20 1830:00	Rocketsonde	-	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1969-H1114	2440454.50	1969 Aug 21 0000:00	Rocketsonde	-	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1969-H1115	2440454.56	1969 Aug 21 0127:59	Rocketsonde	-	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1969-H1116	2440455.14	1969 Aug 21 1524:59	Rocketsonde	-	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1969-H1117	2440455.17	1969 Aug 21 1607:00	Rocketsonde	-	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1969-H1144	2440455.33	1969 Aug 21 2136:59	Rocketsonde	-	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1969-H1118	2440455.54	1969 Aug 21 2136:59	Rocketsonde	-	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1969-H1119	2440455.73	1969 Aug 22 0527:59	Rocketsonde	-	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1969-H1120	2440456.02	1969 Aug 22 1230:00	Rocketsonde	-	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1969-H1121	2440456.08	1969 Aug 22 1358:59	Rocketsonde	-	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1969-H1122	2440456.25	1969 Aug 22 1400:00	Rocketsonde	-	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1969-H1123	2440456.28	1969 Aug 22 1800:00	Rocketsonde	-	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1969-H1124	2440456.25	1969 Aug 22 1800:00	Rocketsonde	-	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1969-H1125	2440456.26	1969 Aug 22 1810:00	Rocketsonde	-	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1969-H1126	2440456.30	1969 Aug 22 1904:59	Rocketsonde	-	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1969-H1128	2440456.50	1969 Aug 23 0000:00	Rocketsonde	-	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1969-H1129	2440456.56	1969 Aug 23 0120:59	Rocketsonde	-	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1969-H1131	2440459.21	1969 Aug 25 1702:00	Rocketsonde	-	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1969-H1130	2440459.24	1969 Aug 25 1745:00	Rocketsonde	-	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1969-H1133	2440459.25	1969 Aug 25 1800:00	Rocketsonde	-	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	OrbPay	Agency	Launch_Code	Group	Category	LTCite	Cite	Notes
1969-H1134	2440459.31	1969 Aug 25 19:19:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1969-H1135	2440459.52	1969 Aug 26 00:27:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1969-H1136	2440459.57	1969 Aug 26 0:34:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1969-H1137	2440460.11	1969 Aug 26 14:37:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1969-H1138	2440460.14	1969 Aug 26 15:19:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1969-H1139	2440460.19	1969 Aug 26 15:30:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1969-H147	2440460.20	1969 Aug 26 15:47:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1969-H1140	2440460.26	1969 Aug 26 18:11:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1969-H1141	2440460.50	1969 Aug 27 00:02:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1969-H1142	2440461.04	1969 Aug 27 0:32:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1969-H1143	2440461.07	1969 Aug 27 1:34:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1969-H1144	2440461.08	1969 Aug 27 14:00:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1969-H1145	2440461.09	1969 Aug 27 14:06:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1969-H1146	2440461.15	1969 Aug 27 15:30:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1969-H1147	2440461.17	1969 Aug 27 16:00:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1969-H1149	2440461.29	1969 Aug 27 18:59:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1969-H1150	2440461.29	1969 Aug 27 18:59:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1969-H1151	2440461.31	1969 Aug 27 19:19:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1969-H1152	2440461.58	1969 Aug 28 0:48:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1969-H1153	2440462.27	1969 Aug 28 18:29:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1969-H1154	2440462.51	1969 Aug 29 00:08:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1969-H1155	2440462.98	1969 Aug 29 11:40:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1969-H1156	2440463.06	1969 Aug 29 14:00:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1969-H1157	2440463.11	1969 Aug 29 14:45:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1969-H1158	2440463.17	1969 Aug 29 16:59:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1969-H1160	2440463.29	1969 Aug 29 18:59:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1969-H1161	2440463.36	1969 Aug 29 21:00:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1969-H1162	2440463.51	1969 Aug 30 00:09:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1969-H1166	2440467.04	1969 Sep 2 12:59:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1969-H1167	2440467.29	1969 Sep 2 18:59:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1969-H1168	2440467.50	1969 Sep 3 00:00:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1969-H1169	2440467.65	1969 Sep 3 0:34:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1969-H1170	2440468.07	1969 Sep 3 1:34:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1969-H1171	2440468.08	1969 Sep 3 14:00:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1969-H1172	2440468.11	1969 Sep 3 14:45:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1969-H1173	2440468.17	1969 Sep 3 16:09:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1969-H1175	2440468.24	1969 Sep 3 17:40:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1969-H1176	2440468.40	1969 Sep 3 21:41:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1969-H1177	2440468.60	1969 Sep 4 0:24:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1969-H1178	2440469.10	1969 Sep 4 14:24:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1969-H1179	2440469.26	1969 Sep 4 16:02:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1969-H1180	2440469.50	1969 Sep 5 0:00:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1969-H1181	2440470.11	1969 Sep 5 1:45:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1969-H1182	2440470.11	1969 Sep 5 14:45:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1969-H1183	2440470.21	1969 Sep 5 17:00:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1969-H1184	2440470.21	1969 Sep 5 17:00:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1969-H1187	2440470.25	1969 Sep 5 18:59:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1969-H1188	2440470.25	1969 Sep 5 18:59:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1969-H1189	2440470.39	1969 Sep 5 21:24:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1969-H1191	2440470.50	1969 Sep 6 0:00:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1969-H1193	2440471.25	1969 Sep 6 0:14:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1969-H1196	2440473.06	1969 Sep 6 18:00:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1969-H1197	2440473.11	1969 Sep 8 14:00:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1969-H1198	2440473.11	1969 Sep 8 14:45:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1969-H1199	2440473.20	1969 Sep 8 16:14:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1969-H1200	2440473.20	1969 Sep 8 18:59:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1969-H1201	2440473.32	1969 Sep 8 18:59:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1969-H1202	2440473.57	1969 Sep 9 0:13:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1969-H1203	2440474.13	1969 Sep 9 15:10:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1969-H1204	2440474.15	1969 Sep 9 15:31:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1969-H1205	2440474.18	1969 Sep 9 16:25:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1969-H1206	2440474.21	1969 Sep 9 17:03:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1969-H1207	2440474.22	1969 Sep 9 17:20:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1969-H1208	2440474.78	1969 Sep 10 06:42:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1969-H1209	2440475.08	1969 Sep 10 14:00:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1969-H1211	2440475.11	1969 Sep 10 14:45:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1969-H1212	2440475.29	1969 Sep 10 18:59:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1969-H1213	2440475.31	1969 Sep 10 19:30:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1969-H1214	2440475.40	1969 Sep 10 21:29:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1969-H1215	2440475.58	1969 Sep 11 01:48:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1969-H1218	2440476.15	1969 Sep 11 15:30:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1969-H1219	2440476.38	1969 Sep 11 21:04:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1969-H1220	2440476.42	1969 Sep 11 22:04:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1969-H1222	2440477.08	1969 Sep 12 14:02:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1969-H1223	2440477.11	1969 Sep 12 14:45:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1969-H1224	2440477.13	1969 Sep 12 15:08:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1969-H1225	2440477.17	1969 Sep 12 15:59:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1969-H1226	2440477.18	1969 Sep 12 16:14:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1969-H1227	2440477.21	1969 Sep 12 17:00:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1969-H1228	2440477.25	1969 Sep 12 18:00:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1969-H1230	2440477.30	1969 Sep 12 19:09:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1969-H151	2440477.38	1969 Sep 12 21:02:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	OrbPay	Agency	Launch_Code	Group	Category	LTCite	Cite	Notes
1969-H1231	2440477.45	1969 Sep 12 2244:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1969-H1232	2440477.55	1969 Sep 13 0118:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1969-H1233	2440477.98	1969 Sep 13 1127:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1969-H1234	2440478.25	1969 Sep 13 1800:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1969-H1235	2440479.54	1969 Sep 15 0059:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1969-H1236	2440480.04	1969 Sep 15 1259:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1969-H1237	2440480.08	1969 Sep 15 1400:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1969-H1238	2440480.11	1969 Sep 15 1445:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1969-H1239	2440480.12	1969 Sep 15 1500:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1969-H1240	2440480.17	1969 Sep 15 1600:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1969-H1242	2440480.23	1969 Sep 15 1725:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1969-H1243	2440480.25	1969 Sep 15 1800:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1969-H1244	2440480.31	1969 Sep 15 1930:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1969-H1245	2440480.40	1969 Sep 15 2133:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1969-H1246	2440480.68	1969 Sep 16 0418:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1969-H1247	2440481.04	1969 Sep 16 1259:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1969-H1248	2440481.10	1969 Sep 16 1431:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1969-H1250	2440481.23	1969 Sep 16 1727:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1969-H1251	2440481.30	1969 Sep 16 1914:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1969-H1252	2440481.33	1969 Sep 16 1954:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1969-H1253	2440482.10	1969 Sep 17 1430:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1969-H1254	2440482.11	1969 Sep 17 1445:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1969-H1257	2440482.21	1969 Sep 17 1659:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1969-H1258	2440482.25	1969 Sep 17 1720:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1969-H1259	2440482.28	1969 Sep 17 1859:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1969-H1260	2440482.29	1969 Sep 17 2042:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1969-H1262	2440482.36	1969 Sep 17 2235:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1969-H1263	2440482.44	1969 Sep 18 0424:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1969-H1264	2440482.66	1969 Sep 18 1344:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1969-H1266	2440483.07	1969 Sep 18 1450:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1969-H1268	2440483.10	1969 Sep 18 1800:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1969-H1269	2440483.32	1969 Sep 18 1940:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1969-H154	2440483.41	1969 Sep 18 2149:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1969-H1270	2440484.10	1969 Sep 18 2230:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1969-H1271	2440484.21	1969 Sep 19 1445:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1969-H1272	2440484.29	1969 Sep 19 1600:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1969-H1274	2440484.40	1969 Sep 19 1859:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1969-H1275	2440485.00	1969 Sep 20 2130:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1969-H1277	2440485.05	1969 Sep 20 1314:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1969-H1279	2440487.06	1969 Sep 22 1400:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1969-H1280	2440487.11	1969 Sep 22 1558:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1969-H1281	2440487.17	1969 Sep 22 1914:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1969-H1282	2440487.21	1969 Sep 22 1914:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1969-H1283	2440487.30	1969 Sep 22 2206:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1969-H1285	2440487.35	1969 Sep 22 2114:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1969-H1286	2440487.38	1969 Sep 22 2204:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1969-H1287	2440487.42	1969 Sep 22 2214:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1969-H1288	2440487.43	1969 Sep 23 0045:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1969-H1289	2440487.55	1969 Sep 23 0114:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1969-H1290	2440488.15	1969 Sep 23 1630:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1969-H1292	2440488.18	1969 Sep 23 1632:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1969-H1293	2440488.38	1969 Sep 23 2130:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1969-H1294	2440488.40	1969 Sep 23 2130:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1969-H1295	2440489.00	1969 Sep 24 1405:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1969-H1296	2440489.11	1969 Sep 24 1445:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1969-H1297	2440489.13	1969 Sep 24 1610:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1969-H1298	2440489.18	1969 Sep 24 1748:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1969-H1300	2440489.24	1969 Sep 24 1909:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1969-H1301	2440489.26	1969 Sep 24 1909:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1969-H1302	2440489.40	1969 Sep 24 2130:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1969-H1303	2440489.55	1969 Sep 25 0114:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1969-H1304	2440490.15	1969 Sep 25 1534:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1969-H1305	2440490.25	1969 Sep 25 1800:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1969-H1306	2440490.38	1969 Sep 25 2111:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1969-H1307	2440490.68	1969 Sep 26 0424:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1969-H1308	2440491.09	1969 Sep 26 1412:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1969-H1309	2440491.10	1969 Sep 26 1429:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1969-H1310	2440491.18	1969 Sep 26 1622:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1969-H1311	2440491.24	1969 Sep 26 1744:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1969-H1312	2440491.25	1969 Sep 26 1756:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1969-H1313	2440491.29	1969 Sep 26 1859:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1969-H1314	2440491.30	1969 Sep 26 1918:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1969-H1315	2440491.31	1969 Sep 26 1926:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1969-H1316	2440491.32	1969 Sep 26 1946:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1969-H1317	2440491.34	1969 Sep 26 2008:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1969-H1318	2440491.40	1969 Sep 26 2133:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1969-H1319	2440491.59	1969 Sep 27 0209:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1969-H1317	2440494.11	1969 Sep 29 1445:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-



Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	OrbPay	Agency	Launch_Code	Group	Category	LTCite	Cite	Notes
1969-H1318	2440494.15	1969 Sep 29 15:50:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1969-H1319	2440494.18	1969 Sep 29 16:14:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1969-H1321	2440494.25	1969 Sep 29 18:02:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1969-H1322	2440494.32	1969 Sep 29 19:40:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1969-H1323	2440494.36	1969 Sep 29 20:46:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1969-H1324	2440494.38	1969 Sep 29 21:04:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1969-H1326	2440495.28	1969 Sep 30 18:58:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1969-H1327	2440495.37	1969 Sep 30 20:47:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1969-H1328	2440495.44	1969 Sep 30 22:38:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1969-H1329	2440495.52	1969 Oct 1 00:26:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1969-H1330	2440496.14	1969 Oct 1 15:18:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1969-H1331	2440496.16	1969 Oct 1 15:47:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1969-H1333	2440496.18	1969 Oct 1 16:18:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1969-H1334	2440496.24	1969 Oct 1 17:42:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1969-H1335	2440496.38	1969 Oct 1 21:04:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1969-H1336	2440496.50	1969 Oct 2 00:06:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1969-H1337	2440496.61	1969 Oct 2 02:38:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1969-H1338	2440497.17	1969 Oct 2 15:59:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1969-H1339	2440497.28	1969 Oct 2 18:45:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1969-H1340	2440497.35	1969 Oct 2 20:30:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1969-H1341	2440498.05	1969 Oct 3 13:04:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1969-H1342	2440498.08	1969 Oct 3 14:00:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1969-H1343	2440498.11	1969 Oct 3 14:45:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1969-H1344	2440498.22	1969 Oct 3 16:34:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1969-H1345	2440498.25	1969 Oct 3 17:20:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1969-H1346	2440498.29	1969 Oct 3 18:00:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1969-H1347	2440498.36	1969 Oct 3 18:59:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1969-H1348	2440498.56	1969 Oct 4 01:23:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1969-H1349	2440501.06	1969 Oct 6 14:00:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1969-H1350	2440501.11	1969 Oct 6 14:45:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1969-H1351	2440501.17	1969 Oct 6 16:04:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1969-H1352	2440501.19	1969 Oct 6 16:50:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1969-H1353	2440501.39	1969 Oct 6 18:14:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1969-H1354	2440501.57	1969 Oct 7 01:37:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1969-H1355	2440502.37	1969 Oct 7 20:51:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1969-H1357	2440503.06	1969 Oct 8 14:00:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1969-H1358	2440503.17	1969 Oct 8 15:09:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1969-H1360	2440503.21	1969 Oct 8 17:36:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1969-H1361	2440503.23	1969 Oct 8 17:59:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1969-H1362	2440503.26	1969 Oct 8 18:14:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1969-H1363	2440503.27	1969 Oct 8 18:50:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1969-H1364	2440503.39	1969 Oct 8 21:14:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1969-H172	2440504.96	1969 Oct 9 14:59:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1969-H1371	2440505.02	1969 Oct 10 18:19:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1969-H1365	2440505.09	1969 Oct 10 14:25:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1969-H1366	2440505.10	1969 Oct 10 14:45:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1969-H1367	2440505.11	1969 Oct 10 15:00:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1969-H1368	2440505.13	1969 Oct 10 15:06:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1969-H1369	2440505.14	1969 Oct 10 15:19:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1969-H1370	2440505.15	1969 Oct 10 15:27:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1969-H1371	2440505.16	1969 Oct 10 16:30:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1969-H1372	2440505.20	1969 Oct 10 18:44:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1969-H1373	2440505.21	1969 Oct 10 17:04:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1969-H1374	2440505.21	1969 Oct 10 17:23:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1969-H1375	2440505.21	1969 Oct 10 17:34:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1969-H1376	2440505.31	1969 Oct 10 19:30:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1969-H175	2440505.38	1969 Oct 10 21:11:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1969-H1378	2440508.08	1969 Oct 13 14:00:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1969-H1379	2440508.09	1969 Oct 13 14:15:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1969-H1380	2440508.12	1969 Oct 13 14:25:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1969-H1381	2440508.12	1969 Oct 13 14:49:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1969-H1382	2440508.21	1969 Oct 13 15:59:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1969-H1383	2440508.21	1969 Oct 13 17:00:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1969-H1384	2440508.38	1969 Oct 13 21:04:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1969-H1386	2440508.40	1969 Oct 13 21:38:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1969-H1386	2440508.46	1969 Oct 13 23:03:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1969-H1387	2440509.17	1969 Oct 14 15:59:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1969-H176	2440509.17	1969 Oct 14 15:59:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1969-H1388	2440509.38	1969 Oct 14 18:20:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1969-H1389	2440509.38	1969 Oct 14 21:00:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1969-H1391	2440510.01	1969 Oct 15 12:09:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1969-H1392	2440510.10	1969 Oct 15 14:30:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1969-H1393	2440510.12	1969 Oct 15 15:00:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1969-H1394	2440510.17	1969 Oct 15 15:59:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1969-H1395	2440510.18	1969 Oct 15 16:22:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1969-H1396	2440510.19	1969 Oct 15 16:40:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1969-H1397	2440510.21	1969 Oct 15 17:04:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1969-H1398	2440510.22	1969 Oct 15 17:44:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1969-H1399	2440510.25	1969 Oct 15 18:03:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1969-H177	2440510.27	1969 Oct 15 18:23:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1969-H1400	2440510.29	1969 Oct 15 18:59:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1969-H1402	2440511.08	1969 Oct 16 14:00:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	OrbPay	Agency	Launch_Code	Group	Category	LTCite	Cite	Notes
1969-1262	2440511.17	1969 Oct 16 1559:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1969-H1403	2440511.17	1969 Oct 16 1559:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1969-H1404	2440511.19	1969 Oct 16 1630:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1969-H1405	2440511.21	1969 Oct 16 1745:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1969-H1406	2440511.24	1969 Oct 16 1745:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1969-H1407	2440511.29	1969 Oct 16 1859:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1969-H1408	2440512.09	1969 Oct 17 1413:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1969-H1409	2440512.09	1969 Oct 17 1415:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1969-H1410	2440512.12	1969 Oct 17 1500:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1969-H1411	2440512.19	1969 Oct 17 1830:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1969-H1412	2440512.25	1969 Oct 17 1830:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1969-H1413	2440512.26	1969 Oct 17 1812:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1969-H1414	2440512.29	1969 Oct 17 1859:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1969-H179	2440512.30	1969 Oct 17 1918:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1969-H1415	2440512.31	1969 Oct 17 1921:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1969-H1416	2440512.32	1969 Oct 17 1942:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1969-H1417	2440512.43	1969 Oct 17 2233:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1969-H1418	2440515.09	1969 Oct 20 1415:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1969-H1419	2440515.10	1969 Oct 20 1430:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1969-H1420	2440515.12	1969 Oct 20 1449:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1969-H1421	2440515.40	1969 Oct 20 2142:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1969-H1422	2440515.40	1969 Oct 21 1559:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1969-H1424	2440516.17	1969 Oct 21 2109:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1969-H1425	2440516.36	1969 Oct 22 0357:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1969-H1426	2440516.67	1969 Oct 22 1400:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1969-H1427	2440517.06	1969 Oct 22 1401:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1969-H1428	2440517.06	1969 Oct 22 1401:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1969-H1430	2440517.09	1969 Oct 22 1500:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1969-H1431	2440517.12	1969 Oct 22 1503:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1969-H1432	2440517.13	1969 Oct 22 1503:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1969-H1433	2440517.16	1969 Oct 22 1549:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1969-H1434	2440517.23	1969 Oct 22 1732:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1969-H1435	2440517.30	1969 Oct 22 1904:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1969-1274	2440517.32	1969 Oct 22 1935:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1969-H1436	2440517.43	1969 Oct 22 2217:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1969-H1437	2440518.10	1969 Oct 23 1431:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1969-H1438	2440518.11	1969 Oct 23 1431:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1969-H1439	2440518.17	1969 Oct 23 1600:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1969-H1440	2440519.06	1969 Oct 24 1400:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1969-H1441	2440519.09	1969 Oct 24 1415:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1969-H1442	2440519.15	1969 Oct 24 1529:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1969-H181	2440522.10	1969 Oct 27 1455:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1969-H1444	2440522.11	1969 Oct 27 1455:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1969-H1445	2440522.12	1969 Oct 27 1524:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1969-H1446	2440522.15	1969 Oct 27 1531:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1969-H1447	2440522.16	1969 Oct 27 1557:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1969-H1448	2440522.22	1969 Oct 27 1624:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1969-H1449	2440522.27	1969 Oct 27 1859:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1969-H1451	2440522.29	1969 Oct 27 1917:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1969-H1452	2440523.30	1969 Oct 28 1445:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1969-H1453	2440523.11	1969 Oct 28 1609:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1969-H1454	2440523.17	1969 Oct 28 2004:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1969-H1455	2440523.42	1969 Oct 29 1409:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1969-H1457	2440524.09	1969 Oct 29 1500:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1969-H1458	2440524.17	1969 Oct 29 1600:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1969-H1459	2440524.26	1969 Oct 29 1820:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1969-H1461	2440524.31	1969 Oct 29 1920:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1969-H1462	2440524.31	1969 Oct 29 1947:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1969-H1463	2440524.33	1969 Oct 29 2000:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1969-H182	2440524.59	1969 Oct 30 0206:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1969-H1464	2440525.25	1969 Oct 30 1759:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1969-H1465	2440525.96	1969 Oct 30 2201:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1969-H1466	2440526.07	1969 Oct 31 1107:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1969-H183	2440526.10	1969 Oct 31 1344:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1969-H1468	2440526.12	1969 Oct 31 1430:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1969-H1469	2440526.13	1969 Oct 31 1508:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1969-H1470	2440526.16	1969 Oct 31 1534:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1969-H1471	2440526.16	1969 Oct 31 1645:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1969-H1472	2440526.17	1969 Oct 31 1607:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1969-H1473	2440526.18	1969 Oct 31 1620:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1969-H1474	2440526.33	1969 Oct 31 2000:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1969-H1475	2440526.36	1969 Oct 31 2040:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1969-H1476	2440526.42	1969 Oct 31 2208:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1969-H1482	2440529.04	1969 Nov 3 1259:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1969-H1486	2440529.19	1969 Nov 3 1630:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1969-H1487	2440529.22	1969 Nov 3 1715:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1969-H1488	2440529.26	1969 Nov 3 1808:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1969-H1489	2440529.29	1969 Nov 3 1859:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1969-H1492	2440530.21	1969 Nov 4 1700:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1969-H1493	2440530.25	1969 Nov 4 1800:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1969-H1494	2440530.33	1969 Nov 4 2000:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1969-H1495	2440530.35	1969 Nov 4 2019:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1969-H1499	2440531.12	1969 Nov 5 1500:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1969-H1500	2440531.16	1969 Nov 5 1549:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1969-H1501	2440531.16	1969 Nov 5 1555:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	OrbPay	Agency	Launch_Code	Group	Category	LTCite	Cite	Notes
1969-H1502	2440531.17	1969 Nov 5 1601:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1969-H1503	2440531.25	1969 Nov 5 1800:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1969-H1504	2440531.27	1969 Nov 5 1830:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1969-H1506	2440531.39	1969 Nov 5 2117:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1969-H1507	2440531.42	1969 Nov 5 2159:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1969-H1508	2440531.55	1969 Nov 6 0118:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1969-H1509	2440532.31	1969 Nov 6 1903:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1969-H1511	2440533.13	1969 Nov 7 1503:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1969-H1512	2440533.16	1969 Nov 7 1645:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1969-H1513	2440533.18	1969 Nov 7 1612:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1969-H1514	2440533.21	1969 Nov 7 1700:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1969-H1515	2440533.26	1969 Nov 7 1805:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1969-H1516	2440533.32	1969 Nov 7 1935:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1969-H188	2440533.33	1969 Nov 7 2002:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1969-H1517	2440536.12	1969 Nov 10 1500:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1969-H1518	2440536.22	1969 Nov 10 1710:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1969-H1519	2440536.29	1969 Nov 10 1659:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1969-H1520	2440536.40	1969 Nov 10 2129:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1969-H1522	2440538.08	1969 Nov 12 1400:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1969-H1523	2440538.14	1969 Nov 12 1514:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1969-H1524	2440538.14	1969 Nov 12 1520:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1969-H1526	2440538.20	1969 Nov 12 1909:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1969-H1527	2440538.30	1969 Nov 12 1913:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1969-H1528	2440538.35	1969 Nov 12 1953:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1969-H1530	2440539.59	1969 Nov 13 0214:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1969-H1531	2440539.11	1969 Nov 13 1445:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1969-H1532	2440539.13	1969 Nov 13 1507:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1969-H1533	2440539.37	1969 Nov 13 2055:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1969-H1534	2440539.40	1969 Nov 13 2131:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1969-H1535	2440540.21	1969 Nov 14 1700:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1969-H1536	2440540.26	1969 Nov 14 1806:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1969-H1538	2440540.31	1969 Nov 14 1930:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1969-H1539	2440540.35	1969 Nov 14 2002:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1969-H1540	2440543.09	1969 Nov 17 1412:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1969-H1541	2440543.13	1969 Nov 17 1503:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1969-H1542	2440543.15	1969 Nov 17 1506:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1969-H1543	2440543.19	1969 Nov 17 1530:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1969-H1544	2440543.22	1969 Nov 17 1715:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1969-H1546	2440543.25	1969 Nov 17 1806:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1969-H1547	2440543.29	1969 Nov 17 1826:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1969-H1549	2440543.36	1969 Nov 17 1859:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1969-H1549	2440544.09	1969 Nov 18 2100:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1969-H1550	2440544.12	1969 Nov 18 1410:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1969-H1551	2440544.19	1969 Nov 18 1800:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1969-H1552	2440544.23	1969 Nov 18 1850:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1969-H1554	2440545.17	1969 Nov 19 1500:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1969-H1555	2440545.17	1969 Nov 19 1559:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1969-H1556	2440545.21	1969 Nov 19 1836:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1969-H1557	2440545.23	1969 Nov 19 1930:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1969-H1558	2440545.24	1969 Nov 19 1747:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1969-H1560	2440545.24	1969 Nov 19 1900:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1969-H1561	2440545.43	1969 Nov 19 2017:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1969-H1562	2440545.46	1969 Nov 19 2300:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1969-H1563	2440545.56	1969 Nov 20 0131:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1969-H1565	2440546.12	1969 Nov 20 1500:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1969-H1566	2440546.12	1969 Nov 20 1500:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1969-H193	2440546.14	1969 Nov 20 1522:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1969-H1567	2440546.24	1969 Nov 20 1748:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1969-H1568	2440546.38	1969 Nov 20 2104:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1969-H1569	2440546.42	1969 Nov 20 2159:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1969-H1570	2440547.12	1969 Nov 21 1500:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1969-H1571	2440547.13	1969 Nov 21 1502:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1969-H1572	2440547.27	1969 Nov 21 1830:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1969-H1573	2440547.42	1969 Nov 21 2159:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1969-H1574	2440547.43	1969 Nov 21 2219:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1969-H1575	2440547.56	1969 Nov 22 0130:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1969-H1577	2440550.29	1969 Nov 24 1859:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1969-H1578	2440550.42	1969 Nov 24 2206:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1969-H1580	2440551.27	1969 Nov 25 1822:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1969-H1581	2440551.34	1969 Nov 25 2014:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1969-H1582	2440551.34	1969 Nov 25 2138:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1969-H1583	2440551.40	1969 Nov 25 2231:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1969-H1584	2440551.44	1969 Nov 26 0611:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1969-H1585	2440551.76	1969 Nov 26 1548:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1969-H1587	2440552.16	1969 Nov 26 1649:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1969-H1588	2440552.25	1969 Nov 26 1753:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1969-H1590	2440552.35	1969 Nov 26 2022:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1969-H1592	2440552.35	1969 Nov 26 2152:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1969-H1593	2440552.41	1969 Nov 26 2202:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1969-H1594	2440552.42	1969 Nov 27 0213:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1969-H1595	2440552.59	1969 Nov 28 1532:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1969-H195	2440554.15	1969 Nov 28 1800:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1969-H1597	2440554.25	1969 Nov 28 1800:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	OrbPay	Agency	Launch_Code	Group	Category	LTCite	Cite	Notes
1969-A196	2440554.25	1969 Nov 28 1803:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1969-A197	2440554.42	1969 Nov 28 2204:19	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1969-H1598	2440554.55	1969 Nov 29 0114:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1969-H1601	2440557.08	1969 Dec 1 1400:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1969-H1602	2440557.10	1969 Dec 1 1430:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1969-H1603	2440557.12	1969 Dec 1 1500:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1969-H1604	2440557.14	1969 Dec 1 1521:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1969-H1605	2440557.19	1969 Dec 1 1627:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1969-H1606	2440557.36	1969 Dec 1 2040:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1969-H1607	2440557.42	1969 Dec 1 2159:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1969-A199	2440558.15	1969 Dec 2 1530:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1969-H1610	2440558.44	1969 Dec 2 2230:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1969-H1611	2440558.44	1969 Dec 2 2230:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1969-H1612	2440558.91	1969 Dec 3 0955:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1969-H1613	2440559.10	1969 Dec 3 1430:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1969-H1614	2440559.11	1969 Dec 3 1433:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1969-A200	2440559.13	1969 Dec 3 1504:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1969-H1615	2440559.14	1969 Dec 3 1518:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1969-H1616	2440559.17	1969 Dec 3 1607:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1969-H1617	2440559.34	1969 Dec 3 2030:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1969-A201	2440559.36	1969 Dec 4 0114:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1969-H1618	2440559.55	1969 Dec 4 1654:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1969-H1619	2440560.20	1969 Dec 4 1713:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1969-H1620	2440560.22	1969 Dec 4 2122:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1969-H1623	2440560.39	1969 Dec 5 0000:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1969-H1624	2440560.50	1969 Dec 5 1400:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1969-H1625	2440561.06	1969 Dec 5 1510:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1969-H1626	2440561.13	1969 Dec 5 1510:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1969-H1628	2440561.25	1969 Dec 5 1800:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1969-H1629	2440561.31	1969 Dec 5 1930:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1969-H1630	2440561.36	1969 Dec 5 2100:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1969-H1632	2440561.62	1969 Dec 6 0249:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1969-H1633	2440561.10	1969 Dec 8 1430:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1969-H1634	2440561.20	1969 Dec 8 1500:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1969-H1635	2440561.21	1969 Dec 8 1654:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1969-H1636	2440561.42	1969 Dec 8 1657:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1969-H1638	2440561.31	1969 Dec 8 1930:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1969-H1639	2440561.42	1969 Dec 8 2204:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1969-H1640	2440561.56	1969 Dec 9 0121:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1969-H1641	2440565.12	1969 Dec 9 1500:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1969-H1642	2440565.31	1969 Dec 9 1930:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1969-H1643	2440565.47	1969 Dec 9 1930:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1969-H1644	2440566.10	1969 Dec 10 1430:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1969-H1645	2440566.15	1969 Dec 10 1513:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1969-H1646	2440566.17	1969 Dec 10 1604:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1969-H1647	2440566.22	1969 Dec 10 1701:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1969-A202	2440566.25	1969 Dec 10 1900:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1969-H1648	2440566.25	1969 Dec 10 1959:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1969-H1649	2440566.29	1969 Dec 10 2059:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1969-H1650	2440566.46	1969 Dec 11 0346:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1969-H1652	2440567.13	1969 Dec 11 1036:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1969-H1655	2440567.57	1969 Dec 11 2145:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1969-H1656	2440567.41	1969 Dec 12 1412:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1969-H1659	2440568.09	1969 Dec 12 1415:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1969-H1660	2440568.09	1969 Dec 12 1430:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1969-H1661	2440568.10	1969 Dec 12 1439:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1969-H1662	2440568.11	1969 Dec 12 1807:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1969-H1663	2440568.21	1969 Dec 12 1829:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1969-H1664	2440568.27	1969 Dec 12 2000:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1969-H1665	2440568.33	1969 Dec 12 2000:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1969-H1666	2440568.54	1969 Dec 13 0059:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1969-H1668	2440568.62	1969 Dec 13 0300:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1969-H1669	2440571.11	1969 Dec 15 1445:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1969-H1670	2440571.14	1969 Dec 15 1527:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1969-H1671	2440571.17	1969 Dec 15 1607:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1969-H1672	2440571.19	1969 Dec 15 1629:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1969-H1673	2440571.24	1969 Dec 15 1745:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1969-H1675	2440571.25	1969 Dec 15 1806:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1969-H1676	2440571.26	1969 Dec 15 1814:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1969-H1677	2440571.27	1969 Dec 15 1826:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1969-H1678	2440571.38	1969 Dec 15 2109:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1969-H1679	2440571.56	1969 Dec 16 0130:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1969-H1680	2440572.23	1969 Dec 16 1726:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1969-H1681	2440572.24	1969 Dec 16 1745:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1969-H1683	2440572.36	1969 Dec 16 2045:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1969-H1684	2440572.38	1969 Dec 16 2111:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1969-H1686	2440573.09	1969 Dec 17 1412:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1969-Y294	2440573.14	1969 Dec 17 1514:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1969-H1687	2440573.14	1969 Dec 17 1514:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1969-H1688	2440573.15	1969 Dec 17 1530:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1969-H1689	2440573.17	1969 Dec 17 1559:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1969-H1690	2440573.24	1969 Dec 17 1738:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1969-H1692	2440573.33	1969 Dec 17 1948:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1969-H1693	2440573.43	1969 Dec 17 2217:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1969-H1694	2440573.55	1969 Dec 18 0114:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1969-H1695	2440574.12	1969 Dec 18 1500:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	OrbPay	Agency	Launch_Code	Group	Category	LTCite	Cite	Notes
1969-H1696	2440574.18	1969 Dec 18 16:17:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteco	DSI-5850	-	-
1969-H209	2440574.34	1969 Dec 18 20:10:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteco	DSI-5850	-	-
1969-H1698	2440574.38	1969 Dec 18 21:04:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteco	DSI-5850	-	-
1969-H1700	2440575.10	1969 Dec 19 14:30:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteco	DSI-5850	-	-
1969-H1701	2440575.12	1969 Dec 19 15:00:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteco	DSI-5850	-	-
1969-H1702	2440575.16	1969 Dec 19 15:46:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteco	DSI-5850	-	-
1969-H1703	2440575.21	1969 Dec 19 17:03:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteco	DSI-5850	-	-
1969-H1706	2440575.28	1969 Dec 19 18:36:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteco	DSI-5850	-	-
1969-H1707	2440575.34	1969 Dec 19 20:15:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteco	DSI-5850	-	-
1969-H1709	2440575.59	1969 Dec 20 02:15:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteco	DSI-5850	-	-
1969-H1711	2440578.17	1969 Dec 22 15:59:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteco	DSI-5850	-	-
1969-H1712	2440578.29	1969 Dec 22 18:29:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteco	DSI-5850	-	-
1969-H1713	2440578.38	1969 Dec 22 21:01:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteco	DSI-5850	-	-
1969-H210	2440578.47	1969 Dec 22 23:10:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteco	DSI-5850	-	-
1969-H1714	2440578.57	1969 Dec 23 04:40:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteco	DSI-5850	-	-
1969-H1715	2440579.12	1969 Dec 23 15:00:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteco	DSI-5850	-	-
1969-H1717	2440579.39	1969 Dec 23 21:24:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteco	DSI-5850	-	-
1969-H1718	2440580.10	1969 Dec 24 14:30:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteco	DSI-5850	-	-
1969-H1719	2440580.12	1969 Dec 24 15:00:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteco	DSI-5850	-	-
1969-H1720	2440580.17	1969 Dec 24 16:11:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteco	DSI-5850	-	-
1969-H1722	2440580.29	1969 Dec 24 18:59:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteco	DSI-5850	-	-
1969-H1723	2440580.39	1969 Dec 24 21:18:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteco	DSI-5850	-	-
1969-H1724	2440580.57	1969 Dec 25 04:44:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteco	DSI-5850	-	-
1969-H1725	2440582.12	1969 Dec 26 15:00:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteco	DSI-5850	-	-
1969-H1726	2440582.12	1969 Dec 26 15:00:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteco	DSI-5850	-	-
1969-H1728	2440585.10	1969 Dec 28 14:30:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteco	DSI-5850	-	-
1969-H1729	2440585.12	1969 Dec 28 15:00:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteco	DSI-5850	-	-
1969-H1731	2440585.29	1969 Dec 29 18:59:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteco	DSI-5850	-	-
1969-H1732	2440585.43	1969 Dec 29 22:20:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteco	DSI-5850	-	-
1969-H1733	2440585.56	1969 Dec 30 01:24:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteco	DSI-5850	-	-
1969-H1735	2440586.32	1969 Dec 30 19:44:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteco	DSI-5850	-	-
1969-H1736	2440586.47	1969 Dec 30 23:15:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteco	DSI-5850	-	-
1969-H1737	2440586.77	1969 Dec 31 06:53:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteco	DSI-5850	-	-
1969-H1739	2440587.10	1969 Dec 31 14:30:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteco	DSI-5850	-	-
1969-H1740	2440587.19	1969 Dec 31 16:58:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteco	DSI-5850	-	-
1969-H1742	2440587.29	1969 Dec 31 18:59:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteco	DSI-5850	-	-
1969-H1743	2440587.29	1969 Dec 31 18:59:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteco	DSI-5850	-	-
1969-H1744	2440587.37	1969 Dec 31 20:48:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteco	DSI-5850	-	-
1969-H1745	2440587.41	1969 Dec 31 21:46:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteco	DSI-5850	-	-
1970-H1040	2440785.06	1970 Jul 17 14:00:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteco	DSI-5850	-	-
1970-H1041	2440785.14	1970 Jul 17 15:24:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteco	DSI-5850	-	-
1970-H1042	2440785.22	1970 Jul 17 17:24:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteco	DSI-5850	-	-
1970-H1043	2440785.24	1970 Jul 17 17:51:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteco	DSI-5850	-	-
1970-H1045	2440785.25	1970 Jul 17 17:59:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteco	DSI-5850	-	-
1970-H1046	2440785.25	1970 Jul 17 18:03:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteco	DSI-5850	-	-
1970-H1047	2440785.25	1970 Jul 17 18:06:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteco	DSI-5850	-	-
1970-H1048	2440785.39	1970 Jul 18 01:36:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteco	DSI-5850	-	-
1970-H1049	2440785.56	1970 Jul 18 11:55:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteco	DSI-5850	-	-
1970-H1050	2440788.00	1970 Jul 20 13:59:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteco	DSI-5850	-	-
1970-H1051	2440788.04	1970 Jul 20 14:09:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteco	DSI-5850	-	-
1970-H1052	2440788.05	1970 Jul 20 15:00:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteco	DSI-5850	-	-
1970-H1053	2440788.12	1970 Jul 20 15:12:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteco	DSI-5850	-	-
1970-H1054	2440788.14	1970 Jul 20 15:23:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteco	DSI-5850	-	-
1970-H1055	2440788.19	1970 Jul 20 16:30:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteco	DSI-5850	-	-
1970-H1056	2440788.21	1970 Jul 20 16:49:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteco	DSI-5850	-	-
1970-H1057	2440788.21	1970 Jul 20 17:00:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteco	DSI-5850	-	-
1970-H1058	2440788.21	1970 Jul 20 18:00:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteco	DSI-5850	-	-
1970-H1059	2440788.28	1970 Jul 20 18:36:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteco	DSI-5850	-	-
1970-H1060	2440788.39	1970 Jul 20 21:18:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteco	DSI-5850	-	-
1970-H1061	2440788.58	1970 Jul 21 01:49:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteco	DSI-5850	-	-
1970-H1062	2440789.09	1970 Jul 21 14:15:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteco	DSI-5850	-	-
1970-H1063	2440789.12	1970 Jul 21 14:59:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteco	DSI-5850	-	-
1970-H1064	2440789.15	1970 Jul 21 15:30:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteco	DSI-5850	-	-
1970-H1065	2440789.35	1970 Jul 21 20:30:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteco	DSI-5850	-	-
1970-H1066	2440790.08	1970 Jul 21 21:35:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteco	DSI-5850	-	-
1970-H1067	2440790.40	1970 Jul 21 21:40:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteco	DSI-5850	-	-
1970-H1068	2440790.18	1970 Jul 21 18:14:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteco	DSI-5850	-	-
1970-H1069	2440790.18	1970 Jul 21 18:14:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteco	DSI-5850	-	-
1970-H1070	2440790.23	1970 Jul 21 16:22:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteco	DSI-5850	-	-
1970-H1071	2440790.23	1970 Jul 21 17:30:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteco	DSI-5850	-	-
1970-H1072	2440790.25	1970 Jul 21 17:55:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteco	DSI-5850	-	-
1970-H1073	2440790.30	1970 Jul 21 18:00:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteco	DSI-5850	-	-
1970-H1074	2440790.30	1970 Jul 21 19:10:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteco	DSI-5850	-	-
1970-H1075	2440790.33	1970 Jul 21 20:00:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteco	DSI-5850	-	-
1970-H1077	2440790.58	1970 Jul 23 00:20:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteco	DSI-5850	-	-
1970-H1078	2440791.15	1970 Jul 23 15:32:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteco	DSI-5850	-	-
1970-H1079	2440791.16	1970 Jul 23 15:49:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteco	DSI-5850	-	-
1970-H1080	2440791.19	1970 Jul 23 16:30:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteco	DSI-5850	-	-
1970-H1081	2440791.21	1970 Jul 23 17:01:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteco	DSI-5850	-	-
1970-H1082	2440791.26	1970 Jul 23 18:08:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteco	DSI-5850	-	-
1970-H1083	2440791.27	1970 Jul 23 18:30:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteco	DSI-5850	-	-
1970-H1084	2440791.40	1970 Jul 23 21:31:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteco	DSI-5850	-	-
1970-H89	2440792.05	1970 Jul 24 13:06:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteco	DSI-5850	-	-

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	OrbPay	Agency	Launch_Code	Group	Category	LTCite	Cite	Notes
1970-H100	2440792.06	1970 Jul 24 1330:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1970-H1068	2440792.08	1970 Jul 24 1400:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1970-H1086	2440792.09	1970 Jul 24 1403:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1970-H1087	2440792.12	1970 Jul 24 1500:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1970-H1088	2440792.15	1970 Jul 24 1530:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1970-H1089	2440792.24	1970 Jul 24 1745:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1970-H1090	2440792.29	1970 Jul 24 1859:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1970-H1091	2440792.38	1970 Jul 24 2100:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1970-H1092	2440792.57	1970 Jul 25 0134:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1970-H1093	2440795.04	1970 Jul 27 1259:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1970-H1094	2440795.08	1970 Jul 27 1450:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1970-H1095	2440795.12	1970 Jul 27 1500:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1970-H1096	2440795.20	1970 Jul 27 1642:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1970-H1097	2440795.22	1970 Jul 27 1711:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1970-H1098	2440795.29	1970 Jul 27 1900:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1970-H1099	2440795.39	1970 Jul 27 2117:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1970-H1100	2440795.56	1970 Jul 28 0130:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1970-H1101	2440796.11	1970 Jul 28 1445:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1970-H1102	2440796.17	1970 Jul 28 1602:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1970-H1103	2440796.20	1970 Jul 28 1642:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1970-H1104	2440796.40	1970 Jul 28 2138:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1970-H1105	2440796.59	1970 Jul 29 0207:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1970-H1107	2440797.04	1970 Jul 29 1259:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1970-H1108	2440797.08	1970 Jul 29 1400:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1970-H1109	2440797.10	1970 Jul 29 1420:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1970-H1110	2440797.12	1970 Jul 29 1513:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1970-H1112	2440797.16	1970 Jul 29 1614:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1970-H1113	2440797.24	1970 Jul 29 1740:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1970-H1114	2440797.31	1970 Jul 29 1930:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1970-H1115	2440797.41	1970 Jul 29 2148:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1970-H1116	2440797.56	1970 Jul 30 0130:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1970-H1118	2440798.14	1970 Jul 30 0139:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1970-H1119	2440798.16	1970 Jul 30 0139:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1970-H1120	2440798.21	1970 Jul 30 1707:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1970-H1122	2440799.04	1970 Jul 31 1259:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1970-H1123	2440799.06	1970 Jul 31 1400:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1970-H1124	2440799.16	1970 Jul 31 1538:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1970-H1126	2440799.20	1970 Jul 31 1644:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1970-H1128	2440799.21	1970 Jul 31 1700:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1970-H1129	2440799.29	1970 Jul 31 1859:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1970-H1130	2440799.40	1970 Jul 31 2129:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1970-H1131	2440799.56	1970 Aug 1 1430:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1970-H1133	2440802.06	1970 Aug 3 1400:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1970-H1134	2440802.12	1970 Aug 3 1500:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1970-H1135	2440802.16	1970 Aug 3 1559:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1970-H1136	2440802.17	1970 Aug 3 1631:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1970-H1138	2440802.21	1970 Aug 3 1700:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1970-H1139	2440802.25	1970 Aug 3 1730:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1970-H1140	2440802.29	1970 Aug 3 1850:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1970-H1141	2440802.36	1970 Aug 3 2100:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1970-H1142	2440802.38	1970 Aug 3 2130:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1970-H1143	2440802.39	1970 Aug 3 2130:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1970-H1144	2440802.56	1970 Aug 4 0130:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1970-H1145	2440803.09	1970 Aug 4 1415:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1970-H1146	2440803.32	1970 Aug 4 1947:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1970-H1147	2440803.36	1970 Aug 4 2100:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1970-H1148	2440803.38	1970 Aug 4 2100:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1970-H1149	2440803.40	1970 Aug 5 1259:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1970-H1150	2440803.46	1970 Aug 5 1337:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1970-H1151	2440804.04	1970 Aug 5 1344:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1970-H1152	2440804.07	1970 Aug 5 1344:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1970-H1153	2440804.08	1970 Aug 5 1400:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1970-H1154	2440804.12	1970 Aug 5 1400:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1970-H1155	2440804.25	1970 Aug 5 1800:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1970-H1156	2440804.28	1970 Aug 5 1840:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1970-H1157	2440804.38	1970 Aug 5 2100:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1970-H1158	2440805.14	1970 Aug 6 0130:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1970-H1159	2440805.16	1970 Aug 6 1522:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1970-H1160	2440805.20	1970 Aug 6 1544:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1970-H1161	2440805.23	1970 Aug 6 1644:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1970-H1162	2440805.25	1970 Aug 6 2107:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1970-H1163	2440806.04	1970 Aug 7 1259:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1970-H1164	2440806.09	1970 Aug 7 1414:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1970-H1165	2440806.23	1970 Aug 7 1732:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1970-H1166	2440806.25	1970 Aug 7 1804:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1970-H1167	2440806.29	1970 Aug 7 1859:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1970-H1168	2440806.56	1970 Aug 7 1804:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1970-H1169	2440809.04	1970 Aug 10 1259:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1970-H1170	2440809.08	1970 Aug 10 1402:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1970-H1171	2440809.15	1970 Aug 10 1530:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1970-H1172	2440809.19	1970 Aug 10 1630:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1970-H1173	2440809.25	1970 Aug 10 1800:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1970-H1174	2440809.25	1970 Aug 10 1803:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1970-H1175	2440809.29	1970 Aug 10 1903:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-











Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	OrbPay	Agency	Launch_Code	Group	Category	LTCite	Cite	Notes
1970-H1534	2440876.25	1970 Oct 16 1802:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1970-H1535	2440876.32	1970 Oct 16 1934:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1970-H1536	2440876.38	1970 Oct 16 2100:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1970-H1537	2440876.56	1970 Oct 17 0433:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1970-H1538	2440879.11	1970 Oct 19 1445:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1970-H1540	2440879.11	1970 Oct 19 1445:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1970-H1541	2440879.15	1970 Oct 19 1530:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1970-H1542	2440879.18	1970 Oct 19 1618:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1970-H1543	2440879.21	1970 Oct 19 1700:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1970-H1544	2440879.34	1970 Oct 19 2015:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1970-H1546	2440879.56	1970 Oct 20 0330:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1970-H1547	2440880.16	1970 Oct 20 1556:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1970-H1548	2440881.06	1970 Oct 21 1330:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1970-H1549	2440881.08	1970 Oct 21 1400:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1970-H1550	2440881.11	1970 Oct 21 1432:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1970-H1551	2440881.12	1970 Oct 21 1500:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1970-H1552	2440881.14	1970 Oct 21 1520:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1970-H1554	2440881.15	1970 Oct 21 1543:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1970-H1555	2440881.26	1970 Oct 21 1815:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1970-H1556	2440881.29	1970 Oct 21 1859:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1970-H1558	2440881.33	1970 Oct 21 1958:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1970-H1559	2440881.36	1970 Oct 21 2100:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1970-H1567	2440881.41	1970 Oct 21 2156:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1970-H1568	2440881.56	1970 Oct 22 0130:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1970-H1569	2440882.15	1970 Oct 22 1629:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1970-H1561	2440882.36	1970 Oct 22 2100:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1970-H1562	2440883.09	1970 Oct 23 1404:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1970-H1563	2440883.11	1970 Oct 23 1442:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1970-H1564	2440883.12	1970 Oct 23 1500:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1970-H1565	2440883.12	1970 Oct 23 1500:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1970-H1566	2440883.21	1970 Oct 23 1700:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1970-H1567	2440883.29	1970 Oct 23 1859:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1970-H1568	2440883.36	1970 Oct 23 2022:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1970-H1569	2440883.46	1970 Oct 23 2325:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1970-H1570	2440883.56	1970 Oct 24 0158:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1970-H1571	2440886.06	1970 Oct 26 1400:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1970-H1572	2440886.12	1970 Oct 26 1500:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1970-H1573	2440886.21	1970 Oct 26 1701:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1970-H1574	2440886.21	1970 Oct 26 1701:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1970-H1575	2440886.25	1970 Oct 26 1907:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1970-H1576	2440886.25	1970 Oct 26 1949:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1970-H1577	2440886.33	1970 Oct 26 2001:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1970-H1578	2440886.36	1970 Oct 26 2021:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1970-H1579	2440886.36	1970 Oct 27 0329:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1970-H1580	2440887.41	1970 Oct 27 2314:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1970-H1581	2440887.94	1970 Oct 28 1030:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1970-H1583	2440888.04	1970 Oct 28 1330:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1970-H1584	2440888.06	1970 Oct 28 1410:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1970-H1585	2440888.09	1970 Oct 28 1413:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1970-H1586	2440888.09	1970 Oct 28 1500:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1970-H1588	2440888.17	1970 Oct 28 1609:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1970-H1589	2440888.16	1970 Oct 28 1814:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1970-H1590	2440888.21	1970 Oct 28 1700:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1970-H1591	2440888.25	1970 Oct 28 1715:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1970-H1592	2440888.25	1970 Oct 28 1853:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1970-H1593	2440888.33	1970 Oct 28 1952:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1970-H1594	2440888.35	1970 Oct 28 2030:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1970-H1595	2440888.44	1970 Oct 28 2141:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1970-H1596	2440888.56	1970 Oct 29 0130:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1970-H1597	2440889.17	1970 Oct 29 1609:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1970-H1598	2440889.20	1970 Oct 29 1645:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1970-H1599	2440889.22	1970 Oct 29 1710:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1970-H1600	2440889.25	1970 Oct 29 1754:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1970-H1601	2440889.31	1970 Oct 29 1924:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1970-H1602	2440889.05	1970 Oct 30 1314:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1970-H1603	2440890.08	1970 Oct 30 1400:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1970-H1604	2440890.08	1970 Oct 30 1400:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1970-H1605	2440890.12	1970 Oct 30 1500:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1970-H1607	2440890.21	1970 Oct 30 1700:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1970-H1608	2440890.34	1970 Oct 30 2026:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1970-H1610	2440890.35	1970 Oct 30 1952:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1970-H1611	2440890.38	1970 Oct 30 2026:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1970-H1613	2440890.61	1970 Oct 31 0232:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1970-H1614	2440891.33	1970 Oct 31 2006:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1970-H1615	2440893.08	1970 Nov 2 1400:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1970-H1616	2440893.12	1970 Nov 2 1500:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1970-H1618	2440893.17	1970 Nov 2 1554:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1970-H1619	2440893.17	1970 Nov 2 1630:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1970-H1620	2440893.21	1970 Nov 2 1704:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-



Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Launch	Agency	Launch_Code	Group	Category	LTCite	Cite	Notes
						Launch	Agency	Launch_Code	Group	Category	LTCite	Cite	Notes
1970-H1709	2440911.58	1970 Nov 21 0152:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1970-H1710	2440912.36	1970 Nov 21 2045:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1970-H1711	2440914.08	1970 Nov 23 1400:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1970-H1712	2440914.09	1970 Nov 23 1406:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1970-H1713	2440914.11	1970 Nov 23 1445:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1970-H1714	2440914.12	1970 Nov 23 1500:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1970-H1715	2440914.18	1970 Nov 23 1514:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1970-H1717	2440914.30	1970 Nov 23 1914:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1970-H1718	2440914.32	1970 Nov 23 1942:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1970-H1719	2440914.34	1970 Nov 23 2010:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1970-H1720	2440914.46	1970 Nov 23 2300:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1970-H1721	2440914.56	1970 Nov 24 0130:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1970-H1723	2440915.28	1970 Nov 24 1849:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1970-H123	2440915.38	1970 Nov 24 2100:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1970-H1724	2440915.38	1970 Nov 24 2101:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1970-1300	2440915.92	1970 Nov 25 0959:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1970-H1726	2440916.08	1970 Nov 25 1400:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1970-H1727	2440916.08	1970 Nov 25 1400:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1970-H1728	2440916.12	1970 Nov 25 1500:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1970-H1730	2440916.16	1970 Nov 25 1511:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1970-H1732	2440916.17	1970 Nov 25 1556:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1970-H1731	2440916.20	1970 Nov 25 1659:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1970-H1733	2440916.21	1970 Nov 25 1644:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1970-H1735	2440916.29	1970 Nov 25 1859:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1970-H1736	2440916.50	1970 Nov 25 2356:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1970-H1737	2440916.50	1970 Nov 26 0000:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1970-H1738	2440916.14	1970 Nov 27 1425:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1970-H1739	2440916.14	1970 Nov 27 1514:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1970-H1740	2440916.17	1970 Nov 27 1559:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1970-H1741	2440916.17	1970 Nov 27 1559:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1970-H1742	2440916.46	1970 Nov 27 2304:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1970-H1743	2440916.49	1970 Nov 27 2342:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1970-H1747	2440921.06	1970 Nov 30 1400:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1970-H1748	2440921.13	1970 Nov 30 1504:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1970-H1750	2440921.26	1970 Nov 30 1816:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1970-H1751	2440921.27	1970 Nov 30 1830:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1970-H1752	2440921.28	1970 Nov 30 1846:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1970-H1753	2440921.29	1970 Nov 30 1859:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1970-H1754	2440921.37	1970 Nov 30 2055:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1970-H1755	2440921.38	1970 Nov 30 2100:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1970-H1756	2440921.56	1970 Nov 30 2110:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1970-H1757	2440921.57	1970 Dec 1 1140:50	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1970-H1759	2440922.20	1970 Dec 1 1654:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1970-1300	2440922.92	1970 Dec 2 0959:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1970-H1760	2440923.04	1970 Dec 2 1259:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1970-H1761	2440923.06	1970 Dec 2 1450:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1970-H1762	2440923.12	1970 Dec 2 1559:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1970-H1763	2440923.25	1970 Dec 2 1859:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1970-H1766	2440923.40	1970 Dec 2 2130:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1970-H1767	2440923.56	1970 Dec 3 0130:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1970-H1768	2440924.12	1970 Dec 3 1453:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1970-H1770	2440924.27	1970 Dec 3 1730:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1970-1310	2440924.27	1970 Dec 3 1833:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1970-H1771	2440924.34	1970 Dec 3 1909:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1970-H1772	2440924.34	1970 Dec 3 2015:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1970-H1773	2440925.08	1970 Dec 4 1400:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1970-H1774	2440925.08	1970 Dec 4 1400:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1970-H1775	2440925.09	1970 Dec 4 1404:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1970-H1776	2440925.16	1970 Dec 4 1545:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1970-H1777	2440925.27	1970 Dec 4 1715:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1970-H1778	2440925.31	1970 Dec 4 1830:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1970-H1780	2440925.48	1970 Dec 4 1930:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1970-H1782	2440925.48	1970 Dec 7 1400:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1970-H1783	2440928.09	1970 Dec 7 1415:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1970-H1784	2440928.20	1970 Dec 7 1643:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1970-H1785	2440928.29	1970 Dec 7 1859:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1970-H1786	2440928.39	1970 Dec 7 2122:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1970-H1787	2440928.56	1970 Dec 8 0131:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1970-H1788	2440929.12	1970 Dec 8 1500:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1970-H1790	2440929.38	1970 Dec 8 2100:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1970-H1791	2440929.38	1970 Dec 8 2100:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1970-H1792	2440930.08	1970 Dec 9 1400:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1970-H1793	2440930.10	1970 Dec 9 1430:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1970-H1794	2440930.12	1970 Dec 9 1450:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1970-H1795	2440930.10	1970 Dec 9 1500:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1970-1320	2440930.21	1970 Dec 9 1606:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1970-H1798	2440930.27	1970 Dec 9 1700:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1970-H1799	2440930.27	1970 Dec 9 1824:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1970-H126	2440930.29	1970 Dec 9 1854:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1970-H1800	2440930.38	1970 Dec 9 2107:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1970-H1802	2440931.33	1970 Dec 10 2002:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1970-H1803	2440932.08	1970 Dec 11 1400:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-



Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	OrbPay	Agency	Launch_Code	Group	Category	LTCite	Cite	Notes
1970-H1892	2440951.39	1970 Dec 30 21:14:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1970-H1893	2440951.41	1970 Dec 30 21:49:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1970-H1894	2440951.57	1970 Dec 31 01:36:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1970-H1896	2440952.31	1970 Dec 31 19:50:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1970-H1897	2440952.38	1970 Dec 31 21:00:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1971-H02	2440955.36	1971 Jan 3 20:18:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1971-H975	2441154.28	1971 Jul 21 18:45:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1971-H976	2441154.42	1971 Jul 21 21:59:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1971-H977	2441154.47	1971 Jul 22 04:40:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1971-H978	2441155.26	1971 Jul 22 18:09:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1971-H979	2441155.39	1971 Jul 22 21:19:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1971-H980	2441156.06	1971 Jul 23 13:30:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1971-H981	2441156.08	1971 Jul 23 14:00:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1971-H982	2441156.09	1971 Jul 23 14:15:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1971-H983	2441156.12	1971 Jul 23 15:00:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1971-H984	2441156.13	1971 Jul 23 15:11:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1971-H985	2441156.17	1971 Jul 23 15:59:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1971-H986	2441156.19	1971 Jul 23 16:50:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1971-H987	2441156.31	1971 Jul 23 19:50:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1971-H988	2441156.39	1971 Jul 23 21:28:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1971-H989	2441156.44	1971 Jul 23 22:38:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1971-H990	2441157.03	1971 Jul 24 12:45:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1971-H991	2441157.08	1971 Jul 24 14:00:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1971-H992	2441159.09	1971 Jul 26 14:15:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1971-H993	2441159.12	1971 Jul 26 15:00:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1971-H994	2441159.13	1971 Jul 26 15:04:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1971-H995	2441159.19	1971 Jul 26 16:58:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1971-H996	2441159.21	1971 Jul 26 17:00:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1971-H997	2441159.22	1971 Jul 26 17:22:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1971-H998	2441159.30	1971 Jul 26 19:08:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1971-H999	2441159.36	1971 Jul 26 21:00:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1971-H1000	2441159.57	1971 Jul 27 01:44:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1971-H1001	2441160.25	1971 Jul 27 17:50:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1971-H1002	2441160.14	1971 Jul 28 09:59:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1971-H1003	2441160.92	1971 Jul 28 14:00:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1971-H63	2441161.06	1971 Jul 28 14:15:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1971-H1007	2441161.09	1971 Jul 28 14:45:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1971-H1008	2441161.12	1971 Jul 28 14:58:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1971-H1009	2441161.12	1971 Jul 28 14:58:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1971-H1010	2441161.15	1971 Jul 28 15:00:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1971-H1011	2441161.15	1971 Jul 28 15:04:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1971-H1012	2441161.16	1971 Jul 28 15:14:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1971-H1013	2441161.20	1971 Jul 28 16:54:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1971-H1014	2441161.27	1971 Jul 29 13:50:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1971-H1015	2441161.27	1971 Jul 29 13:50:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1971-H1017	2441162.00	1971 Jul 29 14:20:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1971-H1018	2441162.22	1971 Jul 29 17:19:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1971-H1019	2441162.25	1971 Jul 29 19:29:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1971-H1020	2441163.05	1971 Jul 30 10:06:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1971-H1021	2441163.08	1971 Jul 30 10:59:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1971-H1022	2441163.10	1971 Jul 30 12:26:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1971-H1023	2441163.12	1971 Jul 30 15:00:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1971-H1024	2441163.24	1971 Jul 30 17:19:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1971-H1025	2441163.26	1971 Jul 30 17:46:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1971-H1026	2441163.26	1971 Jul 30 18:10:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1971-H1027	2441163.26	1971 Jul 30 19:03:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1971-H1028	2441163.38	1971 Jul 30 21:11:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1971-H1031	2441163.59	1971 Jul 31 02:10:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1971-H1032	2441166.07	1971 Aug 2 13:34:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1971-H1033	2441166.08	1971 Aug 2 14:00:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1971-H1034	2441166.10	1971 Aug 2 14:30:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1971-H1035	2441166.12	1971 Aug 2 15:00:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1971-H1037	2441166.25	1971 Aug 2 17:59:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1971-H1038	2441166.29	1971 Aug 2 18:01:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1971-H1039	2441166.33	1971 Aug 2 18:59:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1971-H1040	2441166.40	1971 Aug 2 20:01:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1971-H1041	2441167.12	1971 Aug 3 10:30:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1971-H1042	2441167.34	1971 Aug 3 15:00:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1971-H1043	2441167.92	1971 Aug 4 09:59:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1971-H1044	2441168.06	1971 Aug 4 13:30:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1971-H1045	2441168.08	1971 Aug 4 14:00:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1971-H1046	2441168.12	1971 Aug 4 15:00:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1971-H1048	2441168.13	1971 Aug 4 15:08:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1971-H1049	2441168.14	1971 Aug 4 15:23:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1971-H1050	2441168.14	1971 Aug 4 15:23:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1971-H1051	2441168.17	1971 Aug 4 15:59:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1971-H1052	2441168.17	1971 Aug 4 16:10:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1971-H66	2441168.22	1971 Aug 4 17:20:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1971-H1053	2441168.24	1971 Aug 4 17:51:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1971-H1054	2441168.34	1971 Aug 4 20:15:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Launch_t	OrbPay	Agency	Launch_Code	Group	Category	LTCite	Cite	Notes
1971-Y239	2441168.38	1971 Aug 4 2100:00	Rocketsonde	-	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1971-H1055	2441168.39	1971 Aug 4 2114:59	Rocketsonde	-	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1971-H1056	2441168.56	1971 Aug 5 0130:00	Rocketsonde	-	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1971-H1057	2441169.21	1971 Aug 5 1656:59	Rocketsonde	-	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1971-H1058	2441169.22	1971 Aug 5 1715:00	Rocketsonde	-	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1971-H1059	2441169.38	1971 Aug 5 2100:00	Rocketsonde	-	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1971-H1060	2441170.07	1971 Aug 6 1341:00	Rocketsonde	-	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1971-H1061	2441170.08	1971 Aug 6 1400:00	Rocketsonde	-	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1971-H1062	2441170.09	1971 Aug 6 1400:00	Rocketsonde	-	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1971-H1063	2441170.12	1971 Aug 6 1504:59	Rocketsonde	-	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1971-H1064	2441170.13	1971 Aug 6 1504:59	Rocketsonde	-	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1971-H1065	2441170.16	1971 Aug 6 1556:00	Rocketsonde	-	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1971-H1066	2441170.20	1971 Aug 6 1641:59	Rocketsonde	-	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1971-H1067	2441170.24	1971 Aug 6 1752:00	Rocketsonde	-	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1971-H1068	2441170.38	1971 Aug 6 2100:00	Rocketsonde	-	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1971-H1069	2441170.56	1971 Aug 7 0130:00	Rocketsonde	-	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1971-H1070	2441171.38	1971 Aug 7 2106:00	Rocketsonde	-	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1971-H1071	2441171.40	1971 Aug 7 2130:00	Rocketsonde	-	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1971-H1072	2441173.08	1971 Aug 9 1400:00	Rocketsonde	-	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1971-H1073	2441173.11	1971 Aug 9 1444:00	Rocketsonde	-	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1971-H1074	2441173.13	1971 Aug 9 1510:00	Rocketsonde	-	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1971-H1075	2441173.17	1971 Aug 9 1604:59	Rocketsonde	-	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1971-H1076	2441173.24	1971 Aug 9 1740:00	Rocketsonde	-	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1971-H1077	2441173.31	1971 Aug 9 1930:00	Rocketsonde	-	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1971-H1078	2441173.44	1971 Aug 9 2230:00	Rocketsonde	-	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1971-H1079	2441173.56	1971 Aug 10 0130:00	Rocketsonde	-	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1971-H1080	2441174.47	1971 Aug 10 2316:00	Rocketsonde	-	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1971-H1081	2441174.94	1971 Aug 11 1034:59	Rocketsonde	-	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1971-H1082	2441175.06	1971 Aug 11 1400:00	Rocketsonde	-	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1971-H1083	2441175.11	1971 Aug 11 1438:59	Rocketsonde	-	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1971-H1084	2441175.15	1971 Aug 11 1501:59	Rocketsonde	-	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1971-H1085	2441175.16	1971 Aug 11 1551:00	Rocketsonde	-	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1971-H1086	2441175.16	1971 Aug 11 1615:59	Rocketsonde	-	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1971-H1087	2441175.16	1971 Aug 11 1622:59	Rocketsonde	-	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1971-H1088	2441175.33	1971 Aug 11 2000:00	Rocketsonde	-	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1971-H1089	2441175.44	1971 Aug 11 2230:00	Rocketsonde	-	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1971-H1090	2441175.46	1971 Aug 11 2231:00	Rocketsonde	-	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1971-H1091	2441175.56	1971 Aug 12 0154:59	Rocketsonde	-	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1971-H1092	2441176.12	1971 Aug 12 1456:00	Rocketsonde	-	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1971-H1093	2441176.16	1971 Aug 12 1614:59	Rocketsonde	-	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1971-H1094	2441176.39	1971 Aug 12 2124:59	Rocketsonde	-	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1971-H1095	2441177.01	1971 Aug 13 1334:59	Rocketsonde	-	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1971-H1096	2441177.06	1971 Aug 13 1350:00	Rocketsonde	-	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1971-H1097	2441177.09	1971 Aug 13 1404:59	Rocketsonde	-	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1971-H1098	2441177.10	1971 Aug 13 1416:00	Rocketsonde	-	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1971-H1099	2441177.10	1971 Aug 13 1500:00	Rocketsonde	-	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1971-H1100	2441177.12	1971 Aug 13 1530:00	Rocketsonde	-	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1971-H1101	2441177.16	1971 Aug 13 1620:59	Rocketsonde	-	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1971-H1102	2441177.16	1971 Aug 13 1626:00	Rocketsonde	-	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1971-H1103	2441177.20	1971 Aug 13 1645:59	Rocketsonde	-	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1971-H1104	2441177.20	1971 Aug 13 1645:59	Rocketsonde	-	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1971-H1105	2441177.20	1971 Aug 13 1659:59	Rocketsonde	-	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1971-H1106	2441177.56	1971 Aug 14 0130:00	Rocketsonde	-	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1971-H1107	2441180.11	1971 Aug 16 1445:00	Rocketsonde	-	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1971-H1108	2441180.12	1971 Aug 16 1500:00	Rocketsonde	-	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1971-H1109	2441180.12	1971 Aug 16 1500:00	Rocketsonde	-	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1971-H1110	2441180.16	1971 Aug 16 1600:00	Rocketsonde	-	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1971-H1111	2441180.16	1971 Aug 16 1619:59	Rocketsonde	-	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1971-H1112	2441180.21	1971 Aug 16 1645:59	Rocketsonde	-	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1971-H1113	2441180.21	1971 Aug 16 1700:00	Rocketsonde	-	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1971-H1114	2441180.25	1971 Aug 16 1757:00	Rocketsonde	-	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1971-H1115	2441180.38	1971 Aug 16 2100:00	Rocketsonde	-	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1971-H1116	2441180.46	1971 Aug 16 2300:00	Rocketsonde	-	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1971-H1117	2441180.56	1971 Aug 17 0131:59	Rocketsonde	-	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1971-H1118	2441181.20	1971 Aug 17 1654:59	Rocketsonde	-	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1971-H1119	2441181.38	1971 Aug 17 2107:00	Rocketsonde	-	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1971-H1120	2441182.08	1971 Aug 18 1400:00	Rocketsonde	-	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1971-H1121	2441182.08	1971 Aug 18 1400:00	Rocketsonde	-	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1971-H1122	2441182.10	1971 Aug 18 1401:00	Rocketsonde	-	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1971-H1123	2441182.12	1971 Aug 18 1417:00	Rocketsonde	-	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1971-H1124	2441182.12	1971 Aug 18 1500:00	Rocketsonde	-	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1971-H1125	2441182.17	1971 Aug 18 1559:59	Rocketsonde	-	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1971-H1126	2441182.21	1971 Aug 18 1700:00	Rocketsonde	-	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1971-H1127	2441182.33	1971 Aug 18 2000:00	Rocketsonde	-	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1971-H1128	2441182.43	1971 Aug 18 2217:00	Rocketsonde	-	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1971-H1129	2441182.43	1971 Aug 18 2159:59	Rocketsonde	-	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1971-H1130	2441182.58	1971 Aug 19 0157:59	Rocketsonde	-	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1971-H1131	2441183.16	1971 Aug 19 1554:00	Rocketsonde	-	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1971-H1132	2441183.40	1971 Aug 19 2132:00	Rocketsonde	-	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1971-H1133	2441183.96	1971 Aug 20 1102:00	Rocketsonde	-	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1971-H1134	2441183.97	1971 Aug 20 1111:00	Rocketsonde	-	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1971-H1135	2441184.06	1971 Aug 20 1330:00	Rocketsonde	-	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1971-H1136	2441184.08	1971 Aug 20 1340:00	Rocketsonde	-	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1971-H1137	2441184.12	1971 Aug 20 1500:00	Rocketsonde	-	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1971-H1138	2441184.12	1971 Aug 20 1500:00	Rocketsonde	-	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-





Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Launch_t	OrbPay	Agency	Launch_Code	Group	Category	LTCite	Cite	Notes
1971-H1225	2441203-08	1971 Sep 8 1402:00	Rocketsonde	-	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1971-H1226	2441203-14	1971 Sep 8 1524:59	Rocketsonde	-	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1971-H1227	2441203-20	1971 Sep 8 1644:59	Rocketsonde	-	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1971-H1228	2441203-21	1971 Sep 8 1703:59	Rocketsonde	-	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1971-H1229	2441203-32	1971 Sep 8 1941:59	Rocketsonde	-	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1971-H1230	2441203-38	1971 Sep 8 2100:00	Rocketsonde	-	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1971-H1231	2441203-59	1971 Sep 9 0209:00	Rocketsonde	-	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1971-H1232	2441204-21	1971 Sep 9 1657:59	Rocketsonde	-	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1971-H1233	2441204-38	1971 Sep 9 2100:00	Rocketsonde	-	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1971-H1234	2441205-08	1971 Sep 10 1400:00	Rocketsonde	-	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1971-H1235	2441205-08	1971 Sep 10 1400:00	Rocketsonde	-	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1971-H1236	2441205-10	1971 Sep 10 1420:00	Rocketsonde	-	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1971-H1238	2441205-11	1971 Sep 10 1442:00	Rocketsonde	-	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1971-H1239	2441205-12	1971 Sep 10 1452:00	Rocketsonde	-	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1971-H1240	2441205-21	1971 Sep 10 1700:00	Rocketsonde	-	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1971-H1241	2441205-38	1971 Sep 10 2111:59	Rocketsonde	-	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1971-H1242	2441205-57	1971 Sep 11 0138:59	Rocketsonde	-	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1971-H1243	2441208-08	1971 Sep 13 1352:00	Rocketsonde	-	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1971-H1245	2441208-08	1971 Sep 13 1500:00	Rocketsonde	-	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1971-H1246	2441208-21	1971 Sep 13 1700:00	Rocketsonde	-	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1971-H1247	2441208-30	1971 Sep 13 1904:59	Rocketsonde	-	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1971-H1248	2441208-61	1971 Sep 13 2100:00	Rocketsonde	-	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1971-H1249	2441209-38	1971 Sep 14 0244:00	Rocketsonde	-	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1971-H1251	2441210-06	1971 Sep 15 1300:00	Rocketsonde	-	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1971-H1252	2441210-12	1971 Sep 15 1447:00	Rocketsonde	-	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1971-H1254	2441210-17	1971 Sep 15 1559:59	Rocketsonde	-	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1971-H1255	2441210-17	1971 Sep 15 1659:59	Rocketsonde	-	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1971-H1257	2441210-23	1971 Sep 15 1733:00	Rocketsonde	-	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1971-H1258	2441210-36	1971 Sep 15 2100:00	Rocketsonde	-	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1971-H1259	2441210-56	1971 Sep 16 0130:00	Rocketsonde	-	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1971-H1260	2441211-42	1971 Sep 16 2159:59	Rocketsonde	-	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1971-H1261	2441211-52	1971 Sep 17 0653:59	Rocketsonde	-	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1971-H1262	2441211-75	1971 Sep 17 0853:00	Rocketsonde	-	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1971-H1263	2441212-06	1971 Sep 17 1300:00	Rocketsonde	-	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1971-H1264	2441212-06	1971 Sep 17 1400:00	Rocketsonde	-	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1971-H1265	2441212-09	1971 Sep 17 1415:00	Rocketsonde	-	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1971-H1266	2441212-14	1971 Sep 17 1450:00	Rocketsonde	-	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1971-H1268	2441212-19	1971 Sep 17 1527:59	Rocketsonde	-	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1971-H1269	2441212-25	1971 Sep 18 0134:00	Rocketsonde	-	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1971-H1270	2441212-25	1971 Sep 18 0134:00	Rocketsonde	-	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1971-H1272	2441212-56	1971 Sep 18 1300:00	Rocketsonde	-	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1971-H1273	2441212-06	1971 Sep 20 1450:00	Rocketsonde	-	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1971-H1274	2441212-16	1971 Sep 20 1550:00	Rocketsonde	-	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1971-H1275	2441212-23	1971 Sep 20 1746:59	Rocketsonde	-	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1971-H1276	2441212-23	1971 Sep 20 1746:59	Rocketsonde	-	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1971-H1277	2441212-23	1971 Sep 20 1746:59	Rocketsonde	-	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1971-H1278	2441212-26	1971 Sep 20 2100:00	Rocketsonde	-	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1971-H1279	2441215-38	1971 Sep 21 0139:59	Rocketsonde	-	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1971-H1280	2441215-57	1971 Sep 21 0157:59	Rocketsonde	-	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1971-H1281	2441216-12	1971 Sep 21 1451:00	Rocketsonde	-	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1971-H1282	2441216-15	1971 Sep 21 2120:00	Rocketsonde	-	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1971-H1283	2441216-39	1971 Sep 21 2120:00	Rocketsonde	-	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1971-H1285	2441216-92	1971 Sep 22 0959:59	Rocketsonde	-	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1971-H1284	2441217-06	1971 Sep 22 1330:00	Rocketsonde	-	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1971-H1285	2441217-06	1971 Sep 22 1330:00	Rocketsonde	-	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1971-H1287	2441217-15	1971 Sep 22 1510:00	Rocketsonde	-	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1971-H1288	2441217-15	1971 Sep 22 1510:00	Rocketsonde	-	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1971-H1289	2441217-23	1971 Sep 22 1651:00	Rocketsonde	-	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1971-H1289	2441217-23	1971 Sep 22 1730:00	Rocketsonde	-	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1971-H1290	2441217-23	1971 Sep 22 1739:00	Rocketsonde	-	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1971-H1291	2441217-30	1971 Sep 22 1800:00	Rocketsonde	-	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1971-H1292	2441217-30	1971 Sep 22 1918:00	Rocketsonde	-	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1971-H1293	2441217-56	1971 Sep 22 2100:00	Rocketsonde	-	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1971-H1294	2441217-56	1971 Sep 23 0130:00	Rocketsonde	-	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1971-H1295	2441218-11	1971 Sep 23 1445:00	Rocketsonde	-	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1971-H1296	2441218-15	1971 Sep 23 1530:00	Rocketsonde	-	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1971-H1297	2441218-38	1971 Sep 23 2100:00	Rocketsonde	-	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1971-H1299	2441219-04	1971 Sep 24 1359:59	Rocketsonde	-	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1971-H1300	2441219-06	1971 Sep 24 1330:00	Rocketsonde	-	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1971-H1301	2441219-21	1971 Sep 24 1400:00	Rocketsonde	-	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1971-H1303	2441219-21	1971 Sep 24 2100:00	Rocketsonde	-	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1971-H1304	2441219-38	1971 Sep 24 2100:00	Rocketsonde	-	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1971-H1305	2441219-56	1971 Sep 25 0130:00	Rocketsonde	-	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1971-H1306	2441220-19	1971 Sep 25 1640:00	Rocketsonde	-	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1971-H1308	2441222-06	1971 Sep 27 1330:00	Rocketsonde	-	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1971-H1309	2441222-21	1971 Sep 27 1658:59	Rocketsonde	-	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1971-H1310	2441222-21	1971 Sep 27 1700:00	Rocketsonde	-	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1971-H1311	2441222-30	1971 Sep 27 1914:59	Rocketsonde	-	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1971-H1312	2441222-38	1971 Sep 27 2100:00	Rocketsonde	-	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1971-H1313	2441222-60	1971 Sep 28 0217:00	Rocketsonde	-	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1971-H1314	2441223-19	1971 Sep 28 1630:00	Rocketsonde	-	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1971-H1315	2441223-38	1971 Sep 28 2100:00	Rocketsonde	-	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1971-H1316	2441224-19	1971 Sep 29 1700:00	Rocketsonde	-	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1971-H1319	2441224-24	1971 Sep 29 1749:59	Rocketsonde	-	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1971-H1320	2441224-32	1971 Sep 29 1940:00	Rocketsonde	-	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	OrbPay	Agency	Launch_Code	Group	Category	LTCite	Cite	Notes
1971-H1321	2441224.38	1971 Sep 29 21:00:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1971-H1322	2441224.56	1971 Sep 30 01:30:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1971-H84	2441225.17	1971 Sep 30 16:02:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1971-H1323	2441225.36	1971 Sep 30 20:25:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1971-H1324	2441225.39	1971 Sep 30 21:14:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1971-H1325	2441226.08	1971 Oct 1 15:04:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1971-H1326	2441226.13	1971 Oct 1 15:04:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1971-H1327	2441226.18	1971 Oct 1 17:00:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1971-H1328	2441226.21	1971 Oct 1 17:00:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1971-H1329	2441226.23	1971 Oct 1 17:31:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1971-H1330	2441226.43	1971 Oct 1 22:14:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1971-H1331	2441229.06	1971 Oct 4 13:30:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1971-H1332	2441229.08	1971 Oct 4 14:00:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1971-H1333	2441229.16	1971 Oct 4 15:56:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1971-H1334	2441229.21	1971 Oct 4 17:03:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1971-H1335	2441229.23	1971 Oct 4 17:30:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1971-H1336	2441229.28	1971 Oct 4 17:30:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1971-H1337	2441229.38	1971 Oct 4 19:18:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1971-H1338	2441229.38	1971 Oct 4 21:00:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1971-H1339	2441230.38	1971 Oct 5 21:00:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1971-H1340	2441230.43	1971 Oct 5 22:17:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1971-H1341	2441230.96	1971 Oct 6 11:00:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1971-H1342	2441231.08	1971 Oct 6 14:00:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1971-H1343	2441231.21	1971 Oct 6 14:00:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1971-H1344	2441231.21	1971 Oct 6 17:03:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1971-H1345	2441231.23	1971 Oct 6 17:30:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1971-H1346	2441231.35	1971 Oct 6 20:27:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1971-H1347	2441231.41	1971 Oct 6 21:56:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1971-H1348	2441231.56	1971 Oct 7 01:30:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1971-H1349	2441232.15	1971 Oct 7 15:13:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1971-H1350	2441232.15	1971 Oct 7 15:29:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1971-H1351	2441232.15	1971 Oct 7 19:07:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1971-H1352	2441232.21	1971 Oct 7 17:19:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1971-H1353	2441232.22	1971 Oct 7 17:19:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1971-H1354	2441232.25	1971 Oct 7 18:07:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1971-H1355	2441232.26	1971 Oct 7 18:18:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1971-H86	2441232.27	1971 Oct 7 18:32:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1971-H1356	2441232.30	1971 Oct 7 19:07:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1971-H1357	2441232.32	1971 Oct 7 19:54:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1971-H1358	2441232.35	1971 Oct 7 20:30:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1971-H1359	2441233.07	1971 Oct 8 13:36:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1971-H1360	2441233.06	1971 Oct 8 15:00:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1971-H1361	2441233.12	1971 Oct 8 15:00:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1971-H1362	2441233.54	1971 Oct 8 20:09:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1971-H1363	2441233.54	1971 Oct 8 20:09:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1971-H1364	2441233.56	1971 Oct 12 17:00:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1971-H1365	2441237.21	1971 Oct 12 17:00:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1971-H1366	2441237.30	1971 Oct 12 19:16:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1971-H1367	2441237.34	1971 Oct 12 20:04:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1971-H1368	2441237.46	1971 Oct 13 22:14:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1971-H1369	2441238.06	1971 Oct 13 14:56:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1971-H1370	2441238.16	1971 Oct 13 17:49:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1971-H1371	2441238.21	1971 Oct 13 17:49:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1971-H1372	2441238.24	1971 Oct 13 19:54:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1971-H1373	2441238.25	1971 Oct 13 18:56:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1971-H1374	2441238.25	1971 Oct 13 18:56:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1971-H1375	2441238.26	1971 Oct 13 20:34:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1971-H1376	2441238.26	1971 Oct 13 20:34:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1971-H1377	2441238.37	1971 Oct 13 20:54:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1971-H1378	2441238.56	1971 Oct 14 01:30:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1971-H1380	2441239.56	1971 Oct 14 21:00:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1971-H1382	2441239.36	1971 Oct 14 23:27:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1971-H1383	2441239.44	1971 Oct 15 00:24:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1971-H1384	2441239.50	1971 Oct 15 14:00:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1971-H1385	2441240.08	1971 Oct 15 14:00:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1971-H1386	2441240.08	1971 Oct 15 14:00:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1971-H1387	2441240.10	1971 Oct 15 14:26:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1971-H1389	2441240.27	1971 Oct 15 18:30:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1971-H1390	2441240.58	1971 Oct 16 00:20:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1971-H1391	2441243.06	1971 Oct 18 13:30:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1971-H1392	2441243.08	1971 Oct 18 14:00:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1971-H1393	2441243.27	1971 Oct 18 18:22:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1971-H1395	2441243.36	1971 Oct 18 20:06:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1971-H1396	2441244.13	1971 Oct 19 15:58:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1971-H1397	2441244.17	1971 Oct 19 15:58:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1971-H1398	2441244.93	1971 Oct 19 20:14:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1971-H1400	2441245.06	1971 Oct 20 13:30:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1971-H1403	2441245.08	1971 Oct 20 14:00:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1971-H1404	2441245.23	1971 Oct 20 17:30:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1971-H1405	2441245.32	1971 Oct 20 19:44:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1971-H1406	2441245.40	1971 Oct 20 20:06:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1971-H1407	2441245.44	1971 Oct 20 21:30:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1971-H1408	2441246.17	1971 Oct 21 01:30:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1971-H1409	2441246.38	1971 Oct 21 15:59:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1971-H1410	2441247.08	1971 Oct 21 21:06:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1971-H1411	2441247.09	1971 Oct 21 21:06:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1971-H1413	2441247.23	1971 Oct 22 14:15:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1971-H1414	2441247.23	1971 Oct 22 17:30:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1971-H1415	2441247.40	1971 Oct 22 21:32:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	OrbPay_t	Agency	Launch_Code	Group	Category	LTCite	Cite	Notes
1971-W1416	2441247.42	1971 Oct 22 2203:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1971-W1417	2441247.56	1971 Oct 23 0130:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1971-W1419	2441251.17	1971 Oct 26 1607:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1971-W1420	2441251.30	1971 Oct 26 1912:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1971-W1421	2441251.31	1971 Oct 26 1926:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1971-W1422	2441251.38	1971 Oct 26 2101:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1971-W1423	2441252.06	1971 Oct 27 1330:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1971-W1424	2441252.07	1971 Oct 27 1344:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1971-W1425	2441252.08	1971 Oct 27 1400:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1971-W1426	2441252.09	1971 Oct 27 1415:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1971-W1429	2441252.17	1971 Oct 27 1604:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1971-W1430	2441252.19	1971 Oct 27 1629:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1971-W1432	2441252.22	1971 Oct 27 1715:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1971-W1433	2441252.36	1971 Oct 27 2100:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1971-W1434	2441252.57	1971 Oct 28 0442:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1971-1325	2441252.86	1971 Oct 28 0626:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1971-W1435	2441253.21	1971 Oct 28 1657:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1971-W1436	2441253.36	1971 Oct 28 2100:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1971-W1437	2441254.06	1971 Oct 29 1330:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1971-W1439	2441254.08	1971 Oct 29 1400:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1971-W1440	2441254.21	1971 Oct 29 1702:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1971-W1441	2441254.26	1971 Oct 29 1732:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1971-W1442	2441254.28	1971 Oct 29 1814:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1971-W1443	2441257.06	1971 Oct 29 1646:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1971-W1444	2441257.12	1971 Nov 1 1400:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1971-W1445	2441257.16	1971 Nov 1 1500:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1971-W1446	2441257.29	1971 Nov 1 1619:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1971-W1447	2441257.36	1971 Nov 1 1865:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1971-W1448	2441257.96	1971 Nov 1 2106:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1971-1326	2441258.96	1971 Nov 3 1064:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1971-W1452	2441259.06	1971 Nov 3 1400:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1971-W1453	2441259.10	1971 Nov 3 1430:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1971-W1455	2441259.19	1971 Nov 3 1630:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1971-W1456	2441259.22	1971 Nov 3 1720:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1971-W1457	2441259.25	1971 Nov 3 1800:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1971-W1458	2441259.29	1971 Nov 3 1859:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1971-W1461	2441260.15	1971 Nov 4 1502:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1971-W1462	2441260.15	1971 Nov 4 1533:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1971-W1464	2441260.24	1971 Nov 4 1740:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1971-W1465	2441260.26	1971 Nov 4 1836:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1971-W1466	2441261.10	1971 Nov 5 1630:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1971-W1467	2441261.12	1971 Nov 5 1800:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1971-W1468	2441261.16	1971 Nov 5 1714:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1971-W1469	2441261.23	1971 Nov 5 1750:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1971-W1470	2441261.31	1971 Nov 5 1830:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1971-W1471	2441264.06	1971 Nov 8 1400:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1971-W1472	2441264.12	1971 Nov 8 1500:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1971-W1473	2441264.23	1971 Nov 8 1720:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1971-W1475	2441264.25	1971 Nov 8 1859:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1971-W1476	2441264.31	1971 Nov 8 1977:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1971-W1477	2441264.33	1971 Nov 8 2100:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1971-W1479	2441265.36	1971 Nov 9 1307:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1971-W1480	2441265.17	1971 Nov 9 1609:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1971-W1481	2441265.17	1971 Nov 9 1630:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1971-W1481	2441265.35	1971 Nov 9 2019:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1971-W1482	2441265.36	1971 Nov 10 1430:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1971-W1483	2441266.10	1971 Nov 10 1500:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1971-W1484	2441266.12	1971 Nov 10 1500:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1971-W1485	2441266.12	1971 Nov 10 1742:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1971-W1487	2441266.24	1971 Nov 10 1914:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1971-W1488	2441266.26	1971 Nov 10 2030:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1971-W1489	2441266.35	1971 Nov 10 2030:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1971-W1490	2441266.42	1971 Nov 10 2030:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1971-W1491	2441267.38	1971 Nov 11 2100:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1971-W1496	2441267.48	1971 Nov 11 2330:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1971-W1492	2441268.08	1971 Nov 12 1400:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1971-W1493	2441268.13	1971 Nov 12 1510:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1971-W1494	2441268.15	1971 Nov 12 1530:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1971-W1495	2441268.23	1971 Nov 12 1730:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1971-W1497	2441268.27	1971 Nov 12 1830:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1971-W1498	2441268.29	1971 Nov 12 1859:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1971-W1500	2441271.11	1971 Nov 15 1440:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1971-W1501	2441271.19	1971 Nov 15 1630:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1971-W1502	2441271.25	1971 Nov 15 1800:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1971-W1503	2441271.25	1971 Nov 15 1800:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1971-W1504	2441271.28	1971 Nov 15 1840:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1971-W1505	2441271.34	1971 Nov 15 1859:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1971-W1506	2441271.34	1971 Nov 15 2003:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1971-W1507	2441271.42	1971 Nov 15 2206:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1971-W1509	2441272.10	1971 Nov 16 1430:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1971-W1510	2441272.20	1971 Nov 16 1644:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1971-W1511	2441272.31	1971 Nov 16 1919:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1971-W1511	2441272.38	1971 Nov 16 2100:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1971-W1511	2441272.38	1971 Nov 16 2100:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1971-W1511	2441272.92	1971 Nov 17 0959:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1971-W1512	2441273.08	1971 Nov 17 1400:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	OrbPay	Agency	Launch_Code	Group	Category	LTCite	Cite	Notes
1971-A98	2441273-11	1971 Nov 17 1441:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1971-M1514	2441273-12	1971 Nov 17 1500:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1971-M1515	2441273-12	1971 Nov 17 1500:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1971-M1517	2441273-21	1971 Nov 17 1700:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1971-A99	2441273-25	1971 Nov 17 1800:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1971-M1518	2441273-36	1971 Nov 17 2038:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1971-M1519	2441273-38	1971 Nov 17 2100:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1971-M1520	2441273-38	1971 Nov 17 2100:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1971-M1521	2441274-17	1971 Nov 18 1603:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1971-M1522	2441274-20	1971 Nov 18 1654:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1971-M1523	2441274-23	1971 Nov 18 1730:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1971-M1524	2441274-25	1971 Nov 18 1804:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1971-M1525	2441274-34	1971 Nov 18 2010:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1971-M1526	2441275-08	1971 Nov 19 1400:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1971-M1527	2441275-10	1971 Nov 19 1430:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1971-M1528	2441275-10	1971 Nov 19 1430:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1971-M1529	2441275-12	1971 Nov 19 1500:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1971-M1530	2441275-12	1971 Nov 19 1500:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1971-M1532	2441275-36	1971 Nov 19 2100:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1971-M1533	2441275-46	1971 Nov 19 2300:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1971-M1534	2441278-06	1971 Nov 22 1659:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1971-M1536	2441278-17	1971 Nov 22 1602:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1971-M1537	2441278-32	1971 Nov 22 1946:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1971-M1538	2441278-36	1971 Nov 22 2100:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1971-M1539	2441278-42	1971 Nov 22 2159:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1971-M1540	2441279-16	1971 Nov 23 1556:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1971-M1541	2441280-06	1971 Nov 24 1400:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1971-M1542	2441280-06	1971 Nov 24 1400:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1971-M1543	2441280-12	1971 Nov 24 1500:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1971-M1544	2441280-12	1971 Nov 24 1500:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1971-M1545	2441280-15	1971 Nov 24 1507:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1971-M1547	2441280-19	1971 Nov 24 1652:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1971-M1548	2441280-22	1971 Nov 24 1725:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1971-M1549	2441280-31	1971 Nov 24 1930:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1971-M1550	2441280-34	1971 Nov 24 2004:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1971-M1551	2441280-37	1971 Nov 24 2055:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1971-M1552	2441280-46	1971 Nov 24 2300:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1971-M1554	2441282-06	1971 Nov 26 1400:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1971-M1555	2441282-06	1971 Nov 26 1400:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1971-M1556	2441282-11	1971 Nov 26 1452:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1971-M1557	2441282-12	1971 Nov 26 1500:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1971-M1559	2441282-19	1971 Nov 26 1656:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1971-M1560	2441282-29	1971 Nov 26 1859:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1971-M1561	2441285-06	1971 Nov 29 1400:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1971-M1562	2441285-12	1971 Nov 29 1500:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1971-M1563	2441285-14	1971 Nov 29 1526:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1971-M1565	2441285-22	1971 Nov 29 1926:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1971-M1566	2441285-25	1971 Nov 29 1926:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1971-M1567	2441285-31	1971 Nov 29 1926:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1971-M1568	2441285-40	1971 Nov 29 2300:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1971-M1569	2441285-40	1971 Nov 29 2313:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1971-M1571	2441286-10	1971 Nov 30 1630:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1971-Y348	2441286-15	1971 Nov 30 1649:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1971-M1572	2441286-20	1971 Nov 30 1715:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1971-M1573	2441286-22	1971 Nov 30 1945:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1971-M1574	2441286-38	1971 Nov 30 2100:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1971-Y351	2441286-90	1971 Dec 1 0959:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1971-M1575	2441287-02	1971 Dec 1 1420:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1971-M1576	2441287-11	1971 Dec 1 1437:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1971-M1577	2441287-12	1971 Dec 1 1500:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1971-M1578	2441287-14	1971 Dec 1 1526:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1971-M102	2441287-14	1971 Dec 1 1730:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1971-Y353	2441287-23	1971 Dec 1 1830:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1971-M103	2441287-33	1971 Dec 1 2000:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1971-M1580	2441287-33	1971 Dec 1 2100:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1971-M1581	2441287-38	1971 Dec 1 2102:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1971-M1582	2441287-38	1971 Dec 1 2143:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1971-M1583	2441288-23	1971 Dec 2 1730:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1971-M1585	2441288-38	1971 Dec 2 2100:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1971-M1586	2441288-38	1971 Dec 3 1500:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1971-M104	2441289-12	1971 Dec 3 1506:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1971-M1587	2441289-13	1971 Dec 3 1723:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1971-M1588	2441289-13	1971 Dec 3 1723:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1971-M1590	2441289-22	1971 Dec 3 1723:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1971-M1591	2441289-39	1971 Dec 3 2100:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1971-M1592	2441289-39	1971 Dec 3 2114:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1971-M1593	2441289-21	1971 Dec 6 1500:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1971-M1595	2441289-12	1971 Dec 6 1658:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1971-M1596	2441289-30	1971 Dec 6 1914:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1971-M1597	2441289-31	1971 Dec 6 1930:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1971-M107	2441283-35	1971 Dec 7 2030:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1971-M1599	2441283-38	1971 Dec 7 2100:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1971-M1600	2441284-08	1971 Dec 8 1400:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1971-M1601	2441284-10	1971 Dec 8 1430:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	OrbPay_t	Agency	Launch_Code	Group	Category	LTCite	Cite	Notes
1971-H1602	2441294.12	1971 Dec 8 15:00:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1971-H1604	2441294.23	1971 Dec 8 17:30:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1971-H1605	2441294.23	1971 Dec 8 17:30:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1971-H1606	2441294.33	1971 Dec 8 20:02:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1971-H1608	2441294.40	1971 Dec 8 21:41:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1971-H1609	2441295.12	1971 Dec 9 15:00:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1971-H1610	2441295.19	1971 Dec 9 16:30:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1971-H1611	2441295.21	1971 Dec 9 17:03:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1971-H1613	2441296.08	1971 Dec 10 14:00:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1971-H1615	2441296.11	1971 Dec 10 14:48:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1971-H1617	2441296.12	1971 Dec 10 15:00:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1971-H1618	2441296.13	1971 Dec 10 15:01:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1971-H1620	2441296.17	1971 Dec 10 16:09:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1971-H1621	2441296.18	1971 Dec 10 16:22:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1971-H1624	2441299.08	1971 Dec 13 14:00:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1971-H1625	2441299.12	1971 Dec 13 15:00:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1971-H109	2441299.16	1971 Dec 13 15:45:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1971-H1627	2441299.21	1971 Dec 13 16:58:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1971-H1628	2441299.24	1971 Dec 13 17:42:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1971-H1629	2441299.27	1971 Dec 13 18:58:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1971-H1630	2441299.33	1971 Dec 13 19:56:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1971-H1631	2441300.27	1971 Dec 14 16:34:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1971-H1632	2441300.44	1971 Dec 14 22:00:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1971-H1633	2441300.44	1971 Dec 14 22:00:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1971-H362	2441300.96	1971 Dec 15 11:04:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1971-H1634	2441301.06	1971 Dec 15 14:00:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1971-H1635	2441301.14	1971 Dec 15 14:30:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1971-H1636	2441301.14	1971 Dec 15 15:24:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1971-H1638	2441301.19	1971 Dec 15 16:51:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1971-H365	2441301.19	1971 Dec 15 16:53:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1971-H1639	2441301.21	1971 Dec 15 17:00:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1971-H1640	2441301.23	1971 Dec 15 17:00:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1971-H366	2441301.23	1971 Dec 15 17:00:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1971-H367	2441301.27	1971 Dec 15 17:30:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1971-H1641	2441301.36	1971 Dec 15 18:00:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1971-H1643	2441302.11	1971 Dec 15 21:00:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1971-H1645	2441302.11	1971 Dec 15 14:41:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1971-H1646	2441302.17	1971 Dec 16 16:09:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1971-H1646	2441302.17	1971 Dec 16 16:09:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1971-H110	2441302.32	1971 Dec 16 18:58:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1971-H1647	2441302.45	1971 Dec 17 22:15:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1971-H1648	2441303.06	1971 Dec 17 14:00:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1971-H1649	2441303.14	1971 Dec 17 16:18:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1971-H1651	2441303.16	1971 Dec 17 19:40:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1971-H1652	2441303.19	1971 Dec 17 23:01:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1971-H1653	2441303.47	1971 Dec 20 14:00:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1971-H1654	2441303.47	1971 Dec 20 14:00:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1971-H1655	2441305.12	1971 Dec 20 16:46:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1971-H1657	2441305.20	1971 Dec 20 16:46:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1971-H1658	2441305.20	1971 Dec 20 16:46:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1971-H1659	2441305.38	1971 Dec 20 21:09:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1971-H1660	2441305.38	1971 Dec 20 21:09:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1971-H1662	2441307.37	1971 Dec 21 20:59:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1971-H1664	2441308.10	1971 Dec 21 20:59:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1971-H1665	2441308.12	1971 Dec 22 14:30:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1971-H1667	2441308.12	1971 Dec 22 15:00:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1971-H1668	2441308.37	1971 Dec 22 18:40:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1971-H1670	2441309.36	1971 Dec 23 20:55:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1971-H1671	2441309.36	1971 Dec 23 21:07:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1971-H1673	2441313.10	1971 Dec 27 14:30:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1971-H1674	2441313.38	1971 Dec 27 21:00:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1971-H1675	2441314.12	1971 Dec 28 15:00:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1971-H1677	2441314.31	1971 Dec 28 19:20:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1971-H1678	2441314.45	1971 Dec 28 22:41:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1971-H1679	2441315.13	1971 Dec 29 14:30:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1971-H1680	2441315.13	1971 Dec 29 14:30:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1971-Y378	2441315.26	1971 Dec 29 18:41:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1971-H1682	2441315.30	1971 Dec 29 18:19:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1971-Y379	2441315.30	1971 Dec 29 19:04:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1971-H1684	2441315.40	1971 Dec 29 21:37:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1971-H1685	2441315.42	1971 Dec 29 22:07:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1971-H1686	2441316.12	1971 Dec 30 15:00:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1971-H1688	2441316.25	1971 Dec 30 17:56:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1971-H1690	2441316.38	1971 Dec 30 21:06:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1972-Y05	2441320.11	1972 Jan 3 14:52:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1972-Y08	2441530.09	1972 Jul 31 14:13:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1972-Y893	2441530.25	1972 Jul 31 18:00:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1972-Y895	2441530.26	1972 Jul 31 18:11:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1972-Y896	2441530.47	1972 Jul 31 23:14:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1972-Y897	2441532.08	1972 Aug 2 13:52:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1972-Y898	2441532.08	1972 Aug 2 14:00:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1972-Y899	2441532.11	1972 Aug 2 14:45:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1972-Y899	2441532.11	1972 Aug 2 14:45:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1972-Y892	2441532.12	1972 Aug 2 14:48:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1972-Y893	2441532.12	1972 Aug 2 14:48:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1972-Y183	2441532.17	1972 Aug 2 16:07:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1972-Y894	2441532.21	1972 Aug 2 17:00:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-



Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	OrbPay	Agency	Launch_Code	Group	Category	LTCite	Cite	Notes
1972-H1087	2441555.50	1972 Aug 25 2355:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1972-H1088	2441558.07	1972 Aug 28 1344:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1972-H1089	2441558.08	1972 Aug 28 1400:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1972-H1090	2441558.10	1972 Aug 28 1430:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1972-H1091	2441558.12	1972 Aug 28 1500:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1972-H1092	2441558.15	1972 Aug 28 1530:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1972-H1093	2441558.21	1972 Aug 28 1700:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1972-H1094	2441558.21	1972 Aug 28 1830:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1972-H1095	2441558.27	1972 Aug 28 2100:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1972-H1096	2441558.38	1972 Aug 28 2100:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1972-H1097	2441558.49	1972 Aug 28 2345:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1972-H1100	2441560.07	1972 Aug 30 1344:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1972-H1101	2441560.09	1972 Aug 30 1415:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1972-H1102	2441560.10	1972 Aug 30 1430:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1972-H1103	2441560.10	1972 Aug 30 1431:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1972-H93	2441560.12	1972 Aug 30 1500:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1972-H1105	2441560.12	1972 Aug 30 1500:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1972-H1107	2441560.21	1972 Aug 30 1700:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1972-H1108	2441560.28	1972 Aug 30 1843:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1972-H1109	2441560.28	1972 Aug 30 1849:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1972-H111	2441561.42	1972 Aug 31 2159:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1972-H112	2441562.07	1972 Sep 1 1344:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1972-H113	2441562.08	1972 Sep 1 1400:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1972-H114	2441562.11	1972 Sep 1 1435:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1972-H115	2441562.12	1972 Sep 1 1447:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1972-H116	2441562.36	1972 Sep 1 2100:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1972-H117	2441562.49	1972 Sep 1 2349:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1972-H118	2441566.21	1972 Sep 5 1700:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1972-H119	2441566.27	1972 Sep 5 1830:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1972-H120	2441567.07	1972 Sep 6 1344:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1972-H121	2441567.08	1972 Sep 6 1400:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1972-H122	2441567.10	1972 Sep 6 1430:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1972-H95	2441567.12	1972 Sep 6 1500:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1972-H123	2441567.12	1972 Sep 6 1500:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1972-H96	2441567.16	1972 Sep 6 1615:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1972-H124	2441567.21	1972 Sep 6 1700:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1972-H125	2441567.27	1972 Sep 6 1830:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1972-H126	2441567.39	1972 Sep 6 2123:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1972-H127	2441567.50	1972 Sep 7 0902:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1972-H128	2441568.21	1972 Sep 7 1700:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1972-H130	2441569.07	1972 Sep 8 1344:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1972-H131	2441569.08	1972 Sep 8 1400:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1972-H132	2441569.09	1972 Sep 8 1430:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1972-H133	2441569.19	1972 Sep 8 1600:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1972-H134	2441569.21	1972 Sep 8 1631:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1972-H135	2441569.49	1972 Sep 8 1700:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1972-H136	2441570.22	1972 Sep 8 2345:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1972-H139	2441571.21	1972 Sep 10 1720:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1972-H140	2441572.08	1972 Sep 11 1358:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1972-H141	2441572.12	1972 Sep 11 1500:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1972-H142	2441572.21	1972 Sep 11 1700:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1972-H144	2441572.33	1972 Sep 12 2000:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1972-H145	2441574.07	1972 Sep 13 1344:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1972-H146	2441574.08	1972 Sep 13 1400:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1972-H147	2441574.10	1972 Sep 13 1445:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1972-H98	2441574.11	1972 Sep 13 1500:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1972-H99	2441574.12	1972 Sep 13 1500:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1972-H148	2441574.12	1972 Sep 13 1500:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1972-H149	2441574.13	1972 Sep 13 1603:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1972-H150	2441574.21	1972 Sep 13 1631:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1972-H151	2441574.25	1972 Sep 13 1758:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1972-H152	2441574.25	1972 Sep 13 1800:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1972-H153	2441574.27	1972 Sep 13 1830:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1972-H155	2441575.21	1972 Sep 14 1700:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1972-H156	2441576.08	1972 Sep 15 1349:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1972-H157	2441576.08	1972 Sep 15 1400:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1972-H158	2441576.11	1972 Sep 15 1440:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1972-H159	2441576.26	1972 Sep 15 1814:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1972-H160	2441576.49	1972 Sep 15 2345:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1972-H162	2441577.23	1972 Sep 17 1731:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1972-H163	2441578.23	1972 Sep 18 1400:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1972-H164	2441579.08	1972 Sep 18 1344:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1972-H165	2441579.17	1972 Sep 18 1500:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1972-H166	2441579.17	1972 Sep 18 1500:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1972-H167	2441579.17	1972 Sep 18 1500:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1972-H168	2441579.24	1972 Sep 18 1745:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1972-H169	2441579.26	1972 Sep 18 1819:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1972-H170	2441579.27	1972 Sep 18 1834:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1972-H171	2441579.38	1972 Sep 18 2107:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1972-H173	2441581.08	1972 Sep 20 1400:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1972-H101	2441581.12	1972 Sep 20 1500:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1972-H102	2441581.12	1972 Sep 20 1500:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1972-H103	2441581.15	1972 Sep 20 1533:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-







Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Launch_t	OrbPay	Agency	Launch_Code	Group	Category	LTCite	Cite	Notes
1972-H1364	2441628.38	1972 Nov 6 2100:00	Rocketsonde	-	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1972-H1367	2441630.08	1972 Nov 8 1400:00	Rocketsonde	-	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1972-H1368	2441630.09	1972 Nov 8 1415:00	Rocketsonde	-	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1972-H1369	2441630.12	1972 Nov 8 1500:00	Rocketsonde	-	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1972-H1372	2441630.20	1972 Nov 8 1641:59	Rocketsonde	-	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1972-H1373	2441630.21	1972 Nov 8 1700:00	Rocketsonde	-	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1972-H1374	2441630.22	1972 Nov 8 1720:00	Rocketsonde	-	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1972-H1375	2441630.30	1972 Nov 8 2134:59	Rocketsonde	-	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1972-H1376	2441630.40	1972 Nov 8 2134:59	Rocketsonde	-	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1972-H1377	2441630.46	1972 Nov 8 2305:00	Rocketsonde	-	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1972-H1378	2441630.47	1972 Nov 8 2305:00	Rocketsonde	-	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1972-H1379	2441630.49	1972 Nov 8 2347:00	Rocketsonde	-	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1972-H1380	2441630.67	1972 Nov 9 0440:59	Rocketsonde	-	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1972-H1382	2441630.70	1972 Nov 9 0448:59	Rocketsonde	-	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1972-H1383	2441631.29	1972 Nov 9 1902:59	Rocketsonde	-	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1972-H1384	2441631.48	1972 Nov 9 2137:59	Rocketsonde	-	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1972-H1386	2441632.07	1972 Nov 10 1344:59	Rocketsonde	-	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1972-H1387	2441632.09	1972 Nov 10 1410:00	Rocketsonde	-	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1972-H1388	2441632.09	1972 Nov 10 1415:00	Rocketsonde	-	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1972-H1390	2441632.19	1972 Nov 10 1630:00	Rocketsonde	-	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1972-H1392	2441632.28	1972 Nov 10 1944:00	Rocketsonde	-	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1972-H1393	2441632.31	1972 Nov 10 1927:59	Rocketsonde	-	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1972-H1394	2441632.42	1972 Nov 10 2134:59	Rocketsonde	-	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1972-H1395	2441632.42	1972 Nov 10 2139:59	Rocketsonde	-	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1972-H1396	2441632.47	1972 Nov 10 2315:00	Rocketsonde	-	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1972-H1397	2441635.06	1972 Nov 13 1400:00	Rocketsonde	-	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1972-H1398	2441635.09	1972 Nov 13 1404:59	Rocketsonde	-	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1972-H1399	2441635.29	1972 Nov 13 1852:00	Rocketsonde	-	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1972-H1400	2441635.30	1972 Nov 13 1914:59	Rocketsonde	-	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1972-H1401	2441635.42	1972 Nov 13 2159:59	Rocketsonde	-	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1972-H1403	2441637.06	1972 Nov 15 1400:00	Rocketsonde	-	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1972-H1404	2441637.09	1972 Nov 15 1415:00	Rocketsonde	-	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1972-H110	2441637.12	1972 Nov 15 1500:00	Rocketsonde	-	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1972-H1406	2441637.20	1972 Nov 15 1648:59	Rocketsonde	-	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1972-H1407	2441637.21	1972 Nov 15 1701:00	Rocketsonde	-	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1972-H1408	2441637.28	1972 Nov 15 1901:59	Rocketsonde	-	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1972-H1409	2441637.36	1972 Nov 15 2030:00	Rocketsonde	-	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1972-H1410	2441637.39	1972 Nov 15 2124:59	Rocketsonde	-	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1972-H1411	2441637.45	1972 Nov 15 2339:59	Rocketsonde	-	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1972-H1413	2441638.27	1972 Nov 16 1651:00	Rocketsonde	-	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1972-H1415	2441638.40	1972 Nov 16 2351:00	Rocketsonde	-	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1972-H1416	2441638.46	1972 Nov 16 2345:00	Rocketsonde	-	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1972-H1417	2441639.06	1972 Nov 17 1401:00	Rocketsonde	-	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1972-H1418	2441639.10	1972 Nov 17 1440:00	Rocketsonde	-	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1972-H1421	2441639.19	1972 Nov 17 1640:00	Rocketsonde	-	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1972-H1422	2441639.25	1972 Nov 17 1909:59	Rocketsonde	-	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1972-H1423	2441639.31	1972 Nov 17 1930:00	Rocketsonde	-	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1972-H1424	2441639.31	1972 Nov 17 2030:00	Rocketsonde	-	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1972-H1425	2441639.35	1972 Nov 17 2124:59	Rocketsonde	-	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1972-H1426	2441639.42	1972 Nov 17 2209:59	Rocketsonde	-	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1972-H1427	2441639.46	1972 Nov 17 2249:59	Rocketsonde	-	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1972-H1429	2441642.27	1972 Nov 20 1400:00	Rocketsonde	-	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1972-H1430	2441642.26	1972 Nov 20 1839:59	Rocketsonde	-	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1972-H1431	2441642.31	1972 Nov 20 1943:00	Rocketsonde	-	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1972-H1432	2441642.31	1972 Nov 20 1930:00	Rocketsonde	-	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1972-H1433	2441642.36	1972 Nov 20 2039:59	Rocketsonde	-	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1972-H1434	2441642.38	1972 Nov 20 2100:00	Rocketsonde	-	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1972-H1436	2441642.48	1972 Nov 20 2345:00	Rocketsonde	-	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1972-H1437	2441644.08	1972 Nov 22 1415:00	Rocketsonde	-	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1972-H1438	2441644.09	1972 Nov 22 1415:00	Rocketsonde	-	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1972-H1439	2441644.12	1972 Nov 22 1500:00	Rocketsonde	-	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1972-H1441	2441644.13	1972 Nov 22 1504:59	Rocketsonde	-	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1972-H1442	2441644.19	1972 Nov 22 1640:00	Rocketsonde	-	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1972-H1443	2441644.21	1972 Nov 22 1700:00	Rocketsonde	-	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1972-H1444	2441644.28	1972 Nov 22 1845:00	Rocketsonde	-	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1972-H1445	2441644.29	1972 Nov 22 1859:59	Rocketsonde	-	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1972-H1446	2441644.41	1972 Nov 22 2149:59	Rocketsonde	-	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1972-H111	2441646.29	1972 Nov 24 1859:59	Rocketsonde	-	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1972-H1449	2441646.64	1972 Nov 25 0315:59	Rocketsonde	-	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1972-H1450	2441649.08	1972 Nov 27 1400:00	Rocketsonde	-	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1972-H1451	2441649.11	1972 Nov 27 1445:00	Rocketsonde	-	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1972-H1452	2441649.29	1972 Nov 27 1859:59	Rocketsonde	-	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1972-H1453	2441649.34	1972 Nov 27 1920:59	Rocketsonde	-	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1972-H1454	2441649.34	1972 Nov 27 2006:00	Rocketsonde	-	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1972-H1455	2441649.49	1972 Nov 27 2345:00	Rocketsonde	-	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1972-H1459	2441651.08	1972 Nov 29 1400:00	Rocketsonde	-	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1972-H113	2441651.08	1972 Nov 29 1415:00	Rocketsonde	-	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1972-H1460	2441651.12	1972 Nov 29 1500:00	Rocketsonde	-	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1972-H1461	2441651.15	1972 Nov 29 1542:00	Rocketsonde	-	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1972-H1462	2441651.19	1972 Nov 29 1638:59	Rocketsonde	-	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	OrbPay	Agency	Launch_Code	Group	Category	LTCite	Cite	Notes
1972-Y290	2441651.21	1972 Nov 29 17:00:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1972-H1463	2441651.25	1972 Nov 29 18:00:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1972-H1464	2441651.27	1972 Nov 29 18:30:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1972-H1467	2441653.10	1972 Dec 1 14:19:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1972-H1468	2441653.19	1972 Dec 1 16:31:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1972-H1469	2441653.26	1972 Dec 1 18:09:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1972-H1470	2441653.28	1972 Dec 1 18:59:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1972-H1471	2441653.29	1972 Dec 1 20:27:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1972-H282	2441653.35	1972 Dec 1 20:46:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1972-H1472	2441653.37	1972 Dec 4 14:00:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1972-H1474	2441656.08	1972 Dec 4 14:00:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1972-H1475	2441656.14	1972 Dec 4 15:20:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1972-H1476	2441656.14	1972 Dec 4 15:20:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1972-H1477	2441656.35	1972 Dec 4 20:30:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1972-H1478	2441656.36	1972 Dec 4 20:30:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1972-H1479	2441656.49	1972 Dec 4 23:45:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1972-H1481	2441657.04	1972 Dec 5 12:59:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1972-H1482	2441657.19	1972 Dec 5 16:30:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1972-H1483	2441657.23	1972 Dec 5 17:33:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1972-H1484	2441657.29	1972 Dec 6 19:01:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1972-H1487	2441658.19	1972 Dec 6 16:35:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1972-H1488	2441658.21	1972 Dec 6 17:00:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1972-H1489	2441658.25	1972 Dec 6 18:00:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1972-H1490	2441658.32	1972 Dec 6 19:44:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1972-H1491	2441658.32	1972 Dec 6 20:00:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1972-H1492	2441658.49	1972 Dec 6 23:45:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1972-H1495	2441658.84	1972 Dec 7 08:15:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1972-H1497	2441659.30	1972 Dec 7 19:08:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1972-H1498	2441659.55	1972 Dec 8 01:14:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1972-H1500	2441659.75	1972 Dec 8 06:00:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1972-H1501	2441660.06	1972 Dec 8 14:00:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1972-H1502	2441660.09	1972 Dec 8 14:15:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1972-H1503	2441660.12	1972 Dec 8 15:00:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1972-H1504	2441660.40	1972 Dec 8 21:30:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1972-H1509	2441663.06	1972 Dec 11 14:00:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1972-H1510	2441663.06	1972 Dec 11 14:00:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1972-H1511	2441663.10	1972 Dec 11 14:28:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1972-H1512	2441663.10	1972 Dec 11 14:30:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1972-H1513	2441663.22	1972 Dec 11 15:47:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1972-H1514	2441663.29	1972 Dec 11 18:59:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1972-H1515	2441663.49	1972 Dec 11 19:11:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1972-H1516	2441663.59	1972 Dec 12 03:45:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1972-H1518	2441664.25	1972 Dec 12 20:00:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1972-H1520	2441664.51	1972 Dec 13 01:01:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1972-H1521	2441665.06	1972 Dec 13 14:00:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1972-H1523	2441665.12	1972 Dec 13 14:00:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1972-H1524	2441665.27	1972 Dec 13 18:59:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1972-H1525	2441665.29	1972 Dec 13 18:56:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1972-H1526	2441665.31	1972 Dec 13 19:39:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1972-H1528	2441665.39	1972 Dec 13 23:45:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1972-H1529	2441666.29	1972 Dec 14 20:25:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1972-H1531	2441667.17	1972 Dec 15 16:59:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1972-H1532	2441667.18	1972 Dec 15 16:29:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1972-H1533	2441667.25	1972 Dec 15 23:49:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1972-H1534	2441667.45	1972 Dec 15 23:49:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1972-H1535	2441667.48	1972 Dec 15 23:45:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1972-H1536	2441670.08	1972 Dec 18 14:00:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1972-H1537	2441670.10	1972 Dec 18 14:19:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1972-H1539	2441670.17	1972 Dec 18 15:59:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1972-H1540	2441670.23	1972 Dec 18 17:26:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1972-H1541	2441670.27	1972 Dec 18 18:34:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1972-H1542	2441670.44	1972 Dec 18 22:40:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1972-H1543	2441670.48	1972 Dec 18 14:00:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1972-H1544	2441671.14	1972 Dec 18 14:19:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1972-H1546	2441671.17	1972 Dec 19 15:17:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1972-H1547	2441671.29	1972 Dec 19 18:06:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1972-H1548	2441671.37	1972 Dec 19 18:59:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1972-H1549	2441671.58	1972 Dec 19 20:49:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1972-H1550	2441672.10	1972 Dec 20 01:57:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1972-H1551	2441672.12	1972 Dec 20 02:25:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1972-Y295	2441672.17	1972 Dec 20 14:54:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1972-H1553	2441672.25	1972 Dec 20 16:09:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1972-H1554	2441672.25	1972 Dec 20 18:30:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1972-H1555	2441672.31	1972 Dec 20 19:20:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1972-H1556	2441672.51	1972 Dec 21 00:11:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1972-H1558	2441673.21	1972 Dec 21 16:57:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1972-H1119	2441673.38	1972 Dec 21 21:00:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1972-H1560	2441674.29	1972 Dec 22 18:59:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1972-H1561	2441674.33	1972 Dec 22 20:00:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1972-H1562	2441678.28	1972 Dec 26 18:49:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1972-H1563	2441678.38	1972 Dec 26 21:07:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1972-H1565	2441679.18	1972 Dec 27 16:24:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1972-Y302	2441679.27	1972 Dec 27 18:22:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1972-H1566	2441679.28	1972 Dec 27 18:48:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1972-H1567	2441679.29	1972 Dec 27 18:59:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	OrbPay	Agency	Launch_Code	Group	Category	LTCite	Cite	Notes
1972-H1568	2441679-40	1972 Dec 27 21:34:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1972-H303	2441679-43	1972 Dec 27 22:19:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1972-H1569	2441679-49	1972 Dec 27 23:46:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1972-H1571	2441681-10	1972 Dec 29 14:24:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1972-H1573	2441681-27	1972 Dec 29 18:33:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1972-H1574	2441681-29	1972 Dec 29 18:59:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1972-H1575	2441681-49	1972 Dec 29 23:46:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1972-H949	2441891-14	1973 Jul 27 15:15:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1972-H950	2441891-16	1973 Jul 27 15:45:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1972-H951	2441891-29	1973 Jul 27 18:59:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1972-H952	2441892-03	1973 Jul 28 12:44:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1972-H953	2441894-10	1973 Jul 30 15:24:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1972-H39	2441894-14	1973 Jul 30 15:30:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1972-H954	2441894-19	1973 Jul 30 16:50:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1972-H955	2441894-23	1973 Jul 30 17:30:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1972-H956	2441894-25	1973 Jul 30 17:55:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1972-H957	2441894-31	1973 Jul 30 19:50:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1972-H958	2441894-41	1973 Jul 30 21:55:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1972-H953	2441895-31	1973 Jul 31 19:19:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1972-H964	2441895-52	1973 Aug 1 00:35:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1972-H965	2441895-07	1973 Aug 1 13:44:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1972-H966	2441896-07	1973 Aug 1 13:44:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1972-H967	2441896-08	1973 Aug 1 14:00:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1972-H968	2441896-09	1973 Aug 1 14:00:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1972-H969	2441896-10	1973 Aug 1 14:30:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1972-H970	2441896-12	1973 Aug 1 14:55:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1972-H318	2441896-17	1973 Aug 1 15:59:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1972-H319	2441896-17	1973 Aug 1 16:02:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1972-H972	2441896-19	1973 Aug 1 16:50:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1972-H320	2441896-27	1973 Aug 2 13:14:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1972-H973	2441896-05	1973 Aug 2 21:50:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1972-H974	2441897-40	1973 Aug 3 07:52:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1972-H975	2441897-83	1973 Aug 3 13:44:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1972-H976	2441898-07	1973 Aug 3 14:00:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1972-H977	2441898-08	1973 Aug 3 14:00:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1972-H979	2441898-10	1973 Aug 3 14:26:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1972-H980	2441898-35	1973 Aug 3 20:00:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1972-H321	2441898-36	1973 Aug 3 21:00:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1972-H981	2441898-40	1973 Aug 3 21:29:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1972-H982	2441898-53	1973 Aug 4 00:45:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1972-H983	2441901-07	1973 Aug 6 13:42:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1972-H984	2441901-14	1973 Aug 6 15:14:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1972-H985	2441901-15	1973 Aug 6 15:30:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1972-H986	2441901-21	1973 Aug 6 17:00:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1972-H987	2441901-25	1973 Aug 6 18:07:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1972-H988	2441901-26	1973 Aug 6 18:20:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1972-H989	2441901-41	1973 Aug 7 00:45:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1972-H990	2441901-55	1973 Aug 8 13:44:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1972-H991	2441903-07	1973 Aug 8 14:00:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1972-H992	2441903-08	1973 Aug 8 14:00:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1972-H993	2441903-14	1973 Aug 8 15:06:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1972-H994	2441903-16	1973 Aug 8 15:56:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1972-H995	2441903-19	1973 Aug 8 16:30:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1972-H996	2441903-21	1973 Aug 8 17:00:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1972-H997	2441903-21	1973 Aug 8 17:00:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1972-H998	2441903-21	1973 Aug 8 19:09:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1972-H999	2441903-36	1973 Aug 8 20:34:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1972-H1000	2441903-36	1973 Aug 8 21:33:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1972-H1001	2441903-42	1973 Aug 8 16:30:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1972-H1002	2441903-42	1973 Aug 8 17:00:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1972-H1003	2441903-54	1973 Aug 9 00:53:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1972-H1004	2441904-25	1973 Aug 9 17:15:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1972-H1005	2441904-25	1973 Aug 9 19:19:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1972-H1006	2441905-14	1973 Aug 10 12:22:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1972-H1007	2441905-17	1973 Aug 10 13:45:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1972-H1008	2441905-21	1973 Aug 10 15:20:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1972-H1009	2441905-31	1973 Aug 10 17:00:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1972-H1010	2441905-53	1973 Aug 10 19:19:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1972-H1011	2441908-08	1973 Aug 11 00:45:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1972-H1012	2441908-14	1973 Aug 11 12:24:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1972-H1013	2441908-14	1973 Aug 11 12:24:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1972-H1014	2441908-21	1973 Aug 11 13:15:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1972-H1015	2441908-21	1973 Aug 11 13:15:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1972-H1016	2441908-22	1973 Aug 11 13:15:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1972-H1017	2441908-25	1973 Aug 11 13:15:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1972-H1018	2441908-31	1973 Aug 11 13:15:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1972-H1019	2441908-31	1973 Aug 11 13:15:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1972-H331	2441908-53	1973 Aug 13 21:49:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1972-H1020	2441909-25	1973 Aug 14 00:45:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1972-H1021	2441909-31	1973 Aug 14 17:57:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1972-H1022	2441909-73	1973 Aug 14 19:24:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1972-H1023	2441910-07	1973 Aug 15 05:30:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1972-H1024	2441910-07	1973 Aug 15 13:44:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1972-H1025	2441910-08	1973 Aug 15 14:00:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1972-H1026	2441910-11	1973 Aug 15 14:37:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Launch_t	Agency	Launch_Code	Group	Category	LTCite	Cite	Notes
1973-H1028	2441910.15	1973 Aug 15 1558:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1973-H1029	2441910.19	1973 Aug 15 1632:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1973-1334	2441910.21	1973 Aug 15 1700:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1973-H1030	2441910.29	1973 Aug 15 1859:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1973-1335	2441910.36	1973 Aug 15 2040:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1973-H1031	2441910.38	1973 Aug 15 2100:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1973-H1032	2441910.38	1973 Aug 15 2102:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1973-1336	2441910.41	1973 Aug 15 2156:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1973-H1033	2441910.44	1973 Aug 15 2227:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1973-H1034	2441910.50	1973 Aug 16 0004:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1973-H41	2441911.06	1973 Aug 16 1307:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1973-H1037	2441911.21	1973 Aug 16 1700:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1973-H1038	2441911.25	1973 Aug 16 1755:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1973-H1040	2441911.93	1973 Aug 17 1019:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1973-H1041	2441912.08	1973 Aug 17 1400:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1973-H1042	2441912.08	1973 Aug 17 1500:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1973-H42	2441912.12	1973 Aug 17 1500:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1973-H1043	2441912.12	1973 Aug 17 1559:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1973-H1044	2441912.17	1973 Aug 17 1650:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1973-H1045	2441912.19	1973 Aug 17 1650:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1973-H1046	2441914.92	1973 Aug 20 1009:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1973-H1047	2441915.06	1973 Aug 20 1348:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1973-H1049	2441915.15	1973 Aug 20 1530:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1973-H1050	2441915.19	1973 Aug 20 1630:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1973-H1051	2441915.21	1973 Aug 20 1700:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1973-H1052	2441915.53	1973 Aug 21 0959:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1973-H1053	2441915.92	1973 Aug 21 1755:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1973-H1054	2441916.25	1973 Aug 21 1755:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1973-H1055	2441916.94	1973 Aug 22 1040:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1973-H1056	2441917.06	1973 Aug 22 1354:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1973-H1058	2441917.12	1973 Aug 22 1500:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1973-H1059	2441917.15	1973 Aug 22 1703:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1973-H1060	2441917.21	1973 Aug 22 1723:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1973-H1061	2441917.22	1973 Aug 22 1723:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1973-H1062	2441917.25	1973 Aug 22 1800:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1973-H1063	2441917.51	1973 Aug 23 0101:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1973-H1064	2441917.60	1973 Aug 23 0230:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1973-H1065	2441917.90	1973 Aug 23 0941:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1973-H1066	2441918.04	1973 Aug 24 0145:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1973-H1067	2441918.57	1973 Aug 24 0745:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1973-H1068	2441918.62	1973 Aug 24 0745:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1973-H1069	2441918.92	1973 Aug 24 0959:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1973-H1070	2441919.07	1973 Aug 24 1344:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1973-H1071	2441919.06	1973 Aug 24 1427:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1973-H1072	2441919.10	1973 Aug 24 1601:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1973-H346	2441919.16	1973 Aug 24 1604:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1973-H1073	2441919.34	1973 Aug 24 2036:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1973-H1075	2441919.35	1973 Aug 24 2036:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1973-H1076	2441919.35	1973 Aug 25 0045:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1973-H1077	2441921.53	1973 Aug 27 1344:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1973-H1078	2441921.93	1973 Aug 27 1344:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1973-H1079	2441922.08	1973 Aug 27 1409:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1973-H1080	2441922.08	1973 Aug 27 1539:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1973-H1082	2441922.15	1973 Aug 28 0345:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1973-H1083	2441922.15	1973 Aug 28 0720:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1973-H1084	2441922.81	1973 Aug 28 0900:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1973-H1085	2441923.10	1973 Aug 28 1419:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1973-H1087	2441923.10	1973 Aug 28 1430:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1973-H1088	2441923.14	1973 Aug 28 1521:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1973-H1089	2441923.93	1973 Aug 29 0859:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1973-H1090	2441923.96	1973 Aug 29 1019:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1973-H1091	2441923.96	1973 Aug 29 1056:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1973-Y352	2441924.07	1973 Aug 29 1344:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1973-H1092	2441924.08	1973 Aug 29 1400:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1973-H1093	2441924.08	1973 Aug 29 1400:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1973-H1094	2441924.11	1973 Aug 29 1437:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1973-H1095	2441924.11	1973 Aug 29 1445:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1973-H1096	2441924.12	1973 Aug 29 1500:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1973-H1097	2441924.17	1973 Aug 29 1559:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1973-Y355	2441924.21	1973 Aug 29 1700:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1973-H1098	2441924.29	1973 Aug 29 1902:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1973-H1100	2441924.39	1973 Aug 29 1920:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1973-H1101	2441924.50	1973 Aug 30 0004:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1973-H1102	2441924.92	1973 Aug 30 0859:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1973-H1103	2441925.03	1973 Aug 30 1249:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1973-H1104	2441925.25	1973 Aug 30 1755:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1973-H1107	2441925.41	1973 Aug 30 2149:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1973-H1108	2441925.41	1973 Aug 31 0949:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1973-H1112	2441926.07	1973 Aug 31 1344:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1973-H1113	2441926.07	1973 Aug 31 1344:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1973-H1114	2441926.08	1973 Aug 31 1400:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1973-H43	2441926.09	1973 Aug 31 1410:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1973-Y361	2441926.18	1973 Aug 31 1618:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1973-H1115	2441926.22	1973 Aug 31 1720:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	OrbPay	Agency	Launch_Code	Group	Category	LTCite	Cite	Notes
1973-1116	2441926.33	1973 Aug 31 1958:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1973-1962	2441926.36	1973 Aug 31 2044:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1973-1963	2441926.38	1973 Aug 31 2113:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1973-1117	2441926.53	1973 Sep 1 0045:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1973-1118	2441930.13	1973 Sep 4 1501:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1973-1119	2441930.25	1973 Sep 4 1755:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1973-1121	2441930.31	1973 Sep 4 1919:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1973-1124	2441931.07	1973 Sep 5 1344:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1973-1125	2441931.08	1973 Sep 5 1400:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1973-1126	2441931.12	1973 Sep 5 1500:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1973-1127	2441931.12	1973 Sep 5 1500:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1973-1373	2441931.12	1973 Sep 5 1730:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1973-1128	2441931.26	1973 Sep 5 1820:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1973-1129	2441931.29	1973 Sep 5 1859:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1973-1130	2441931.40	1973 Sep 5 2153:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1973-1131	2441931.50	1973 Sep 6 0001:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1973-1132	2441932.38	1973 Sep 6 2111:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1973-1133	2441932.40	1973 Sep 6 2154:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1973-1134	2441933.07	1973 Sep 7 1344:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1973-1135	2441933.08	1973 Sep 7 1400:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1973-1136	2441933.16	1973 Sep 7 1545:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1973-1137	2441933.23	1973 Sep 7 1737:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1973-1138	2441933.23	1973 Sep 7 1737:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1973-1139	2441933.24	1973 Sep 7 1746:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1973-1140	2441933.31	1973 Sep 7 1919:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1973-1374	2441933.53	1973 Sep 8 0045:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1973-1141	2441936.07	1973 Sep 10 1344:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1973-1142	2441936.08	1973 Sep 10 1400:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1973-1143	2441936.17	1973 Sep 10 1559:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1973-1144	2441936.20	1973 Sep 10 1641:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1973-1145	2441936.20	1973 Sep 10 1644:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1973-1146	2441936.29	1973 Sep 10 1859:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1973-1147	2441936.30	1973 Sep 10 1904:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1973-1148	2441936.51	1973 Sep 11 0215:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1973-1149	2441936.83	1973 Sep 11 0752:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1973-1151	2441937.31	1973 Sep 11 1919:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1973-1152	2441937.80	1973 Sep 12 0706:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1973-1155	2441938.07	1973 Sep 12 1344:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1973-1156	2441938.08	1973 Sep 12 1345:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1973-1154	2441938.08	1973 Sep 12 1400:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1973-1155	2441938.08	1973 Sep 12 1400:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1973-1156	2441938.12	1973 Sep 12 1500:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1973-1158	2441938.15	1973 Sep 12 1546:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1973-1159	2441938.16	1973 Sep 12 1556:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1973-1160	2441938.17	1973 Sep 12 1559:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1973-1161	2441938.21	1973 Sep 12 1650:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1973-1162	2441938.25	1973 Sep 13 0050:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1973-1163	2441938.50	1973 Sep 13 0254:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1973-1164	2441939.21	1973 Sep 13 0914:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1973-1165	2441940.06	1973 Sep 14 1351:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1973-1167	2441940.08	1973 Sep 14 1351:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1973-1168	2441940.08	1973 Sep 14 1357:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1973-1169	2441940.17	1973 Sep 14 1700:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1973-1170	2441940.21	1973 Sep 14 1700:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1973-1171	2441940.31	1973 Sep 14 1919:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1973-1172	2441940.52	1973 Sep 15 0030:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1973-1173	2441941.51	1973 Sep 16 0015:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1973-1174	2441941.56	1973 Sep 16 0119:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1973-1175	2441943.07	1973 Sep 17 1344:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1973-1176	2441943.08	1973 Sep 17 1400:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1973-1177	2441943.19	1973 Sep 17 1630:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1973-1178	2441943.25	1973 Sep 17 1822:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1973-1179	2441943.31	1973 Sep 17 1919:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1973-1180	2441943.31	1973 Sep 17 1927:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1973-1181	2441944.25	1973 Sep 18 1755:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1973-1182	2441944.52	1973 Sep 19 0034:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1973-1183	2441944.52	1973 Sep 19 0034:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1973-1184	2441945.08	1973 Sep 19 1430:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1973-1185	2441945.10	1973 Sep 19 1430:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1973-1186	2441945.12	1973 Sep 19 1500:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1973-1187	2441945.12	1973 Sep 19 1559:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1973-1188	2441945.25	1973 Sep 19 1758:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1973-1189	2441945.25	1973 Sep 19 1815:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1973-1190	2441945.26	1973 Sep 19 1815:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1973-1191	2441945.29	1973 Sep 19 1853:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1973-1192	2441945.29	1973 Sep 19 1853:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1973-1193	2441945.53	1973 Sep 20 0041:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1973-1194	2441945.53	1973 Sep 20 0449:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1973-1195	2441945.70	1973 Sep 20 0449:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1973-1196	2441946.19	1973 Sep 20 1630:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1973-1197	2441946.25	1973 Sep 20 1755:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1973-1198	2441947.07	1973 Sep 21 1344:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1973-1199	2441947.08	1973 Sep 21 1400:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1973-1200	2441947.08	1973 Sep 21 1400:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	OrbPay	Agency	Launch_Code	Group	Category	LTCite	Cite	Notes
1973-H1201	2441947.21	1973 Sep 21 17:01:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1973-H1202	2441947.22	1973 Sep 21 17:15:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1973-H1203	2441947.24	1973 Sep 21 17:40:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1973-H1204	2441947.31	1973 Sep 21 19:24:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1973-H1205	2441950.08	1973 Sep 24 14:00:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1973-H1206	2441950.09	1973 Sep 24 14:15:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1973-H1207	2441950.14	1973 Sep 24 15:14:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1973-H1208	2441950.15	1973 Sep 24 15:31:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1973-H1209	2441950.23	1973 Sep 24 17:31:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1973-H1210	2441950.25	1973 Sep 24 17:59:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1973-H1211	2441950.27	1973 Sep 24 18:30:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1973-H1212	2441950.31	1973 Sep 24 19:19:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1973-H1213	2441950.50	1973 Sep 25 00:00:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1973-H1214	2441950.86	1973 Sep 25 08:22:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1973-H1215	2441950.87	1973 Sep 25 08:55:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1973-H1216	2441950.93	1973 Sep 25 10:24:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1973-H1218	2441952.07	1973 Sep 26 13:44:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1973-H1219	2441952.08	1973 Sep 26 14:00:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1973-H1220	2441952.10	1973 Sep 26 14:30:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1973-H1222	2441952.15	1973 Sep 26 15:30:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1973-H1223	2441952.22	1973 Sep 26 17:14:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1973-H1224	2441952.24	1973 Sep 26 17:45:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1973-H1225	2441952.27	1973 Sep 26 18:00:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1973-H1226	2441952.56	1973 Sep 27 02:24:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1973-H1227	2441952.93	1973 Sep 27 02:54:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1973-H1229	2441953.19	1973 Sep 27 21:51:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1973-H400	2441953.43	1973 Sep 27 22:42:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1973-H1230	2441953.45	1973 Sep 28 14:00:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1973-H57	2441954.06	1973 Sep 28 14:00:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1973-H1231	2441954.06	1973 Sep 28 14:00:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1973-H1232	2441954.10	1973 Sep 28 14:16:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1973-H1233	2441954.17	1973 Sep 28 16:00:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1973-H1234	2441954.21	1973 Sep 28 17:00:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1973-H1235	2441954.29	1973 Sep 28 18:55:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1973-H58	2441954.31	1973 Sep 28 19:20:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1973-H403	2441955.77	1973 Sep 30 06:25:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1973-H1236	2441955.96	1973 Sep 30 06:55:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1973-H1237	2441957.07	1973 Oct 1 13:44:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1973-H1238	2441957.08	1973 Oct 1 14:00:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1973-H1239	2441957.09	1973 Oct 1 14:04:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1973-H1240	2441957.15	1973 Oct 1 15:50:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1973-H1241	2441957.51	1973 Oct 2 07:45:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1973-H1242	2441958.25	1973 Oct 2 17:55:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1973-H1243	2441958.25	1973 Oct 2 17:55:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1973-H1244	2441958.25	1973 Oct 2 17:55:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1973-H1245	2441958.40	1973 Oct 3 21:54:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1973-H1246	2441959.09	1973 Oct 3 14:00:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1973-H1247	2441959.10	1973 Oct 3 14:30:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1973-H1248	2441959.17	1973 Oct 3 16:50:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1973-H1249	2441959.19	1973 Oct 3 18:17:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1973-H1250	2441959.26	1973 Oct 3 18:57:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1973-H1251	2441959.29	1973 Oct 3 18:59:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1973-H1252	2441959.43	1973 Oct 3 23:35:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1973-H1253	2441959.44	1973 Oct 3 23:35:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1973-H1254	2441959.54	1973 Oct 4 00:59:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1973-H1255	2441959.54	1973 Oct 4 00:59:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1973-H1256	2441959.56	1973 Oct 4 01:30:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1973-H1257	2441959.61	1973 Oct 4 02:35:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1973-H1258	2441959.65	1973 Oct 4 04:19:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1973-H1259	2441959.70	1973 Oct 4 04:49:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1973-H1260	2441959.77	1973 Oct 4 18:25:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1973-H410	2441959.77	1973 Oct 4 18:25:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1973-H411	2441960.26	1973 Oct 4 18:45:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1973-H412	2441960.26	1973 Oct 4 18:45:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1973-H1261	2441960.28	1973 Oct 4 21:34:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1973-H1262	2441960.40	1973 Oct 5 13:34:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1973-H1267	2441961.07	1973 Oct 5 14:00:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1973-H1268	2441961.08	1973 Oct 5 14:25:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1973-H1269	2441961.10	1973 Oct 5 14:35:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1973-H1270	2441961.15	1973 Oct 5 15:30:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1973-H413	2441961.20	1973 Oct 5 16:43:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1973-H1271	2441961.21	1973 Oct 5 17:00:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1973-H414	2441961.21	1973 Oct 5 17:00:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1973-H415	2441961.23	1973 Oct 5 17:27:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1973-H416	2441961.24	1973 Oct 5 17:48:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1973-H417	2441961.38	1973 Oct 5 21:11:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1973-H1272	2441961.40	1973 Oct 5 21:30:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1973-H418	2441961.41	1973 Oct 5 21:30:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1973-H1273	2441964.08	1973 Oct 8 14:00:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1973-H1274	2441964.15	1973 Oct 8 15:33:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1973-H1275	2441965.24	1973 Oct 9 17:49:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1973-H1277	2441965.25	1973 Oct 9 17:55:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1973-H1278	2441965.27	1973 Oct 9 18:30:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1973-H1279	2441965.29	1973 Oct 9 18:58:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1973-H1280	2441965.40	1973 Oct 9 21:34:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1973-H1281	2441966.10	1973 Oct 10 12:03:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1973-H1282	2441966.10	1973 Oct 10 14:22:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1973-H1283	2441966.10	1973 Oct 10 14:30:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1973-H425	2441966.19	1973 Oct 10 16:30:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1973-H1285	2441966.27	1973 Oct 10 18:32:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1973-H1286	2441966.29	1973 Oct 10 18:59:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-



Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	OrbPay	Agency	Launch_Code	Group	Category	LTCite	Cite	Notes
1973-H1287	2441966.55	1973 Oct 11 01:18:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1973-H1288	2441966.94	1973 Oct 11 10:40:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1973-H1289	2441967.32	1973 Oct 11 19:46:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1973-H1290	2441967.40	1973 Oct 11 21:34:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1973-H1291	2441968.07	1973 Oct 12 13:44:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1973-H1292	2441968.17	1973 Oct 12 16:07:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1973-H1293	2441968.21	1973 Oct 12 17:00:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1973-H1294	2441968.33	1973 Oct 12 19:49:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1973-H1295	2441968.33	1973 Oct 12 19:49:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1973-H1296	2441971.08	1973 Oct 15 14:00:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1973-H1297	2441971.14	1973 Oct 15 15:14:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1973-H1298	2441971.15	1973 Oct 15 15:58:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1973-H1299	2441971.21	1973 Oct 15 17:00:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1973-H1300	2441971.23	1973 Oct 15 17:30:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1973-H1301	2441971.24	1973 Oct 15 17:45:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1973-H1302	2441971.25	1973 Oct 15 18:03:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1973-H1303	2441971.27	1973 Oct 15 18:50:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1973-H1304	2441971.28	1973 Oct 15 19:46:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1973-H1305	2441971.31	1973 Oct 15 19:50:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1973-H1306	2441972.21	1973 Oct 16 01:31:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1973-H1307	2441972.21	1973 Oct 16 17:00:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1973-H1308	2441972.25	1973 Oct 16 17:55:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1973-H1309	2441972.26	1973 Oct 16 21:34:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1973-H1310	2441973.10	1973 Oct 17 14:51:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1973-H1311	2441973.10	1973 Oct 17 14:51:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1973-H1312	2441973.15	1973 Oct 17 14:50:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1973-H1313	2441973.15	1973 Oct 17 15:50:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1973-H1314	2441973.21	1973 Oct 17 17:00:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1973-H1315	2441973.25	1973 Oct 17 18:00:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1973-H1316	2441973.27	1973 Oct 17 18:52:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1973-H1317	2441973.30	1973 Oct 17 19:07:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1973-H1318	2441973.36	1973 Oct 17 19:49:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1973-H1319	2441973.40	1973 Oct 17 21:33:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1973-H1320	2441973.53	1973 Oct 18 04:45:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1973-H1321	2441974.06	1973 Oct 18 13:50:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1973-H1322	2441974.06	1973 Oct 18 13:50:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1973-H1323	2441974.86	1973 Oct 18 13:49:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1973-H1324	2441975.08	1973 Oct 18 14:44:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1973-H1325	2441975.08	1973 Oct 18 14:44:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1973-H1326	2441975.20	1973 Oct 19 17:00:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1973-H1327	2441975.21	1973 Oct 19 17:00:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1973-H1328	2441975.25	1973 Oct 19 18:56:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1973-H1329	2441975.27	1973 Oct 19 19:00:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1973-H1330	2441975.27	1973 Oct 23 19:47:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1973-H1331	2441975.32	1973 Oct 23 21:46:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1973-H1332	2441975.40	1973 Oct 23 21:46:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1973-H1333	2441975.85	1973 Oct 24 10:30:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1973-H1334	2441975.85	1973 Oct 24 10:30:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1973-H1335	2441980.04	1973 Oct 24 13:44:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1973-H1336	2441980.07	1973 Oct 24 13:44:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1973-H1337	2441980.08	1973 Oct 24 14:00:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1973-H1338	2441980.11	1973 Oct 24 14:45:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1973-H1339	2441980.11	1973 Oct 24 14:45:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1973-H1340	2441980.17	1973 Oct 24 15:50:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1973-H1341	2441980.17	1973 Oct 24 15:50:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1973-H1342	2441980.15	1973 Oct 24 18:30:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1973-H1343	2441980.51	1973 Oct 25 00:19:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1973-H1344	2441981.20	1973 Oct 25 21:00:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1973-H1345	2441981.38	1973 Oct 25 16:46:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1973-H1346	2441981.39	1973 Oct 25 21:25:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1973-H1347	2441982.07	1973 Oct 26 13:44:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1973-H1348	2441982.21	1973 Oct 26 12:45:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1973-H1349	2441982.21	1973 Oct 26 17:04:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1973-H1350	2441982.25	1973 Oct 26 17:55:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1973-H1351	2441982.30	1973 Oct 26 19:04:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1973-H1352	2441982.53	1973 Oct 27 00:47:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1973-H1353	2441985.14	1973 Oct 29 15:14:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1973-H1354	2441985.14	1973 Oct 29 18:59:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1973-H1355	2441985.29	1973 Oct 29 19:30:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1973-H1356	2441985.31	1973 Oct 30 00:47:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1973-H1357	2441985.93	1973 Oct 30 10:19:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1973-H1358	2441986.40	1973 Oct 30 21:34:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1973-H1359	2441987.08	1973 Oct 31 14:00:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1973-H1360	2441987.11	1973 Oct 31 14:46:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1973-H1361	2441987.11	1973 Oct 31 14:45:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1973-H1362	2441987.26	1973 Oct 31 18:17:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1973-H1363	2441987.31	1973 Oct 31 19:30:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1973-H1364	2441987.33	1973 Oct 31 19:51:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1973-H1365	2441987.53	1973 Oct 31 20:02:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1973-H1366	2441987.53	1973 Nov 1 00:45:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1973-H1367	2441988.26	1973 Nov 1 18:09:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	OrbPay_t	Agency	Launch_Code	Group	Category	LTCite	Cite	Notes
1973-Y455	2441988-50	1973 Nov 2 0000:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1973-Y456	2441988-87	1973 Nov 2 0948:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1973-Y457	2441989-08	1973 Nov 2 1400:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1973-Y458	2441989-10	1973 Nov 2 1430:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1973-Y459	2441989-19	1973 Nov 2 1637:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1973-Y460	2441989-22	1973 Nov 2 1745:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1973-Y461	2441989-27	1973 Nov 2 1833:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1973-Y462	2441989-32	1973 Nov 2 1934:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1973-Y463	2441989-38	1973 Nov 2 1400:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1973-Y464	2441992-11	1973 Nov 5 1645:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1973-Y465	2441992-19	1973 Nov 5 1630:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1973-Y466	2441992-20	1973 Nov 5 1646:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1973-Y467	2441992-25	1973 Nov 5 1800:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1973-Y468	2441992-32	1973 Nov 5 1934:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1973-Y469	2441994-08	1973 Nov 7 1400:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1973-Y470	2441994-11	1973 Nov 7 1540:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1973-Y471	2441994-15	1973 Nov 7 1750:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1973-Y472	2441994-23	1973 Nov 7 1737:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1973-Y473	2441994-25	1973 Nov 7 1845:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1973-Y474	2441994-28	1973 Nov 7 1934:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1973-Y475	2441994-32	1973 Nov 7 0048:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1973-Y476	2441994-53	1973 Nov 8 1041:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1973-Y477	2441994-96	1973 Nov 8 1520:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1973-Y478	2441995-17	1973 Nov 8 1606:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1973-Y479	2441995-50	1973 Nov 9 0000:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1973-Y480	2441996-08	1973 Nov 9 1400:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1973-Y481	2441996-11	1973 Nov 9 1445:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1973-Y482	2441996-12	1973 Nov 9 1455:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1973-Y483	2441996-25	1973 Nov 9 1755:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1973-Y484	2441996-28	1973 Nov 9 1847:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1973-Y485	2441996-33	1973 Nov 9 1952:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1973-Y486	2441996-35	1973 Nov 9 2000:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1973-Y487	2441996-36	1973 Nov 9 2103:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1973-Y488	2441996-40	1973 Nov 9 2154:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1973-Y489	2441996-15	1973 Nov 12 1511:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1973-Y490	2441999-19	1973 Nov 12 1640:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1973-Y491	2441999-25	1973 Nov 12 1847:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1973-Y492	2441999-28	1973 Nov 12 1859:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1973-Y493	2441999-34	1973 Nov 12 2010:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1973-Y494	2441999-38	1973 Nov 12 2100:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1973-Y495	2441999-90	1973 Nov 13 0930:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1973-Y496	2441999-99	1973 Nov 13 1446:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1973-Y497	2442000-31	1973 Nov 13 1335:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1973-Y498	2442000-08	1973 Nov 14 1400:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1973-Y499	2442001-06	1973 Nov 14 1438:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1973-Y500	2442001-11	1973 Nov 14 1526:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1973-Y501	2442001-26	1973 Nov 14 1854:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1973-Y502	2442001-29	1973 Nov 14 1954:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1973-Y503	2442001-33	1973 Nov 14 2126:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1973-Y504	2442001-43	1973 Nov 15 0045:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1973-Y505	2442001-52	1973 Nov 15 1259:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1973-Y506	2442002-04	1973 Nov 15 1726:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1973-Y507	2442002-25	1973 Nov 16 0000:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1973-Y508	2442003-50	1973 Nov 16 1400:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1973-Y509	2442003-08	1973 Nov 16 1400:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1973-Y510	2442003-10	1973 Nov 16 1430:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1973-Y511	2442003-18	1973 Nov 16 1814:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1973-Y512	2442003-25	1973 Nov 16 1852:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1973-Y513	2442003-28	1973 Nov 16 1755:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1973-Y514	2442003-40	1973 Nov 16 2143:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1973-Y515	2442003-44	1973 Nov 16 2233:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1973-Y516	2442006-08	1973 Nov 19 1400:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1973-Y517	2442006-11	1973 Nov 19 1445:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1973-Y518	2442006-25	1973 Nov 19 1804:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1973-Y519	2442006-31	1973 Nov 19 1807:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1973-Y520	2442006-32	1973 Nov 19 1930:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1973-Y521	2442006-50	1973 Nov 20 0000:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1973-Y522	2442007-31	1973 Nov 20 1932:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1973-Y523	2442007-32	1973 Nov 20 1934:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1973-Y524	2442007-85	1973 Nov 21 0825:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1973-Y525	2442008-08	1973 Nov 21 1400:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1973-Y526	2442008-11	1973 Nov 21 1445:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1973-Y527	2442008-19	1973 Nov 21 1640:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1973-Y528	2442008-19	1973 Nov 21 1730:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1973-Y529	2442008-23	1973 Nov 21 1734:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1973-Y530	2442008-25	1973 Nov 21 1801:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1973-Y531	2442008-33	1973 Nov 21 2000:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1973-Y532	2442008-44	1973 Nov 21 2230:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1973-Y533	2442008-53	1973 Nov 22 0045:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1973-Y534	2442013-08	1973 Nov 26 1400:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1973-Y535	2442013-08	1973 Nov 26 1400:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Launch_t	Agency	Launch_Code	Group	Category	LTCite	Cite	Notes
1973-H1463	2442013.11	1973 Nov 26 1445:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1973-H1464	2442013.19	1973 Nov 26 1630:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1973-H1466	2442013.26	1973 Nov 26 1814:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1973-H1467	2442013.30	1973 Nov 26 1918:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1973-A70	2442013.32	1973 Nov 26 1934:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1973-H1468	2442013.93	1973 Nov 27 1019:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1973-H1469	2442014.03	1973 Nov 27 1245:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1973-A71	2442014.08	1973 Nov 27 1352:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1973-H1470	2442014.50	1973 Nov 28 0000:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1973-H1471	2442015.11	1973 Nov 28 1445:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1973-H1472	2442015.15	1973 Nov 28 1534:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1973-H1474	2442015.20	1973 Nov 28 1649:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1973-H1475	2442015.32	1973 Nov 28 1934:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1973-H1476	2442015.40	1973 Nov 28 2133:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1973-H1477	2442015.41	1973 Nov 28 2145:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1973-H1478	2442015.42	1973 Nov 28 2201:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1973-H1479	2442015.53	1973 Nov 29 0045:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1973-H1481	2442016.42	1973 Nov 29 1458:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1973-H1482	2442017.11	1973 Nov 30 1435:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1973-H1487	2442017.13	1973 Nov 30 1504:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1973-H1489	2442017.15	1973 Nov 30 1626:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1973-H1490	2442017.21	1973 Nov 30 1700:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1973-H1491	2442017.34	1973 Nov 30 1934:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1973-H1492	2442017.36	1973 Nov 30 2004:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1973-H1493	2442017.40	1973 Nov 30 2140:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1973-H1494	2442020.11	1973 Dec 3 1445:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1973-H1496	2442020.21	1973 Dec 3 1657:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1973-H1497	2442020.21	1973 Dec 3 1700:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1973-H1498	2442020.25	1973 Dec 3 1755:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1973-H1499	2442020.36	1973 Dec 3 2017:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1973-A73	2442021.20	1973 Dec 4 1644:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1973-H1502	2442022.11	1973 Dec 5 1445:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1973-H1503	2442022.19	1973 Dec 5 1650:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1973-H1506	2442022.25	1973 Dec 5 1726:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1973-H1507	2442022.25	1973 Dec 5 1755:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1973-H1508	2442022.26	1973 Dec 5 1814:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1973-H1509	2442022.32	1973 Dec 5 1836:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1973-H1510	2442022.35	1973 Dec 6 0046:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1973-H1511	2442022.90	1973 Dec 6 0930:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1973-H1513	2442023.20	1973 Dec 6 1646:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1973-H1514	2442023.26	1973 Dec 6 1821:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1973-H1515	2442023.26	1973 Dec 7 0346:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1973-H1517	2442023.70	1973 Dec 7 1249:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1973-H1518	2442024.01	1973 Dec 7 1220:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1973-H1519	2442024.06	1973 Dec 7 1420:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1973-H1520	2442024.14	1973 Dec 7 1510:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1973-H1522	2442024.16	1973 Dec 7 1614:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1973-H1523	2442024.19	1973 Dec 7 1631:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1973-H1524	2442024.31	1973 Dec 7 1904:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1973-A75	2442024.32	1973 Dec 7 1934:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1973-H1526	2442024.32	1973 Dec 7 2134:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1973-H1527	2442027.01	1973 Dec 10 1220:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1973-H1529	2442027.08	1973 Dec 10 1400:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1973-H1530	2442027.12	1973 Dec 10 1500:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1973-H1531	2442027.21	1973 Dec 10 1703:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1973-H1532	2442027.21	1973 Dec 10 1730:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1973-H1533	2442027.25	1973 Dec 10 1755:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1973-H1534	2442027.33	1973 Dec 10 1935:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1973-H1536	2442028.13	1973 Dec 11 1502:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1973-H1538	2442028.23	1973 Dec 11 1726:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1973-H1539	2442028.31	1973 Dec 11 1930:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1973-H1540	2442029.01	1973 Dec 12 0310:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1973-H1541	2442029.15	1973 Dec 12 1220:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1973-H1543	2442029.22	1973 Dec 12 1530:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1973-H1544	2442029.25	1973 Dec 12 1715:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1973-H1545	2442029.25	1973 Dec 12 1755:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1973-A76	2442029.26	1973 Dec 12 1814:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1973-H1546	2442029.32	1973 Dec 12 1934:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1973-H1547	2442029.34	1973 Dec 12 2007:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1973-H1548	2442029.36	1973 Dec 12 2040:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1973-H1549	2442029.40	1973 Dec 12 2134:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1973-H1550	2442029.44	1973 Dec 12 2233:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1973-H1551	2442029.53	1973 Dec 13 0045:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1973-H1552	2442030.29	1973 Dec 13 1930:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1973-H1553	2442030.31	1973 Dec 13 1930:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1973-H1554	2442031.08	1973 Dec 14 1400:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1973-H1555	2442031.12	1973 Dec 14 1459:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1973-H1557	2442031.18	1973 Dec 14 1614:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1973-A77	2442031.25	1973 Dec 14 1755:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1973-H1558	2442031.27	1973 Dec 14 1835:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1973-H1559	2442031.32	1973 Dec 14 1934:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	OrbPay	Agency	Launch_Code	Group	Category	LTCite	Cite	Notes
1973-1503	2442031.62	1973 Dec 15 0248:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1973-1504	2442034.08	1973 Dec 17 1400:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1973-1505	2442034.09	1973 Dec 17 1407:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1973-1506	2442034.12	1973 Dec 17 1500:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1973-1507	2442034.22	1973 Dec 17 1722:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1973-1508	2442034.25	1973 Dec 17 1755:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1973-1509	2442034.28	1973 Dec 17 1936:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1973-1510	2442034.32	1973 Dec 18 1930:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1973-1511	2442035.31	1973 Dec 18 2007:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1973-1512	2442035.34	1973 Dec 19 0737:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1973-1513	2442036.12	1973 Dec 19 1500:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1973-1514	2442036.13	1973 Dec 19 1504:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1973-1515	2442036.25	1973 Dec 19 1800:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1973-1516	2442036.32	1973 Dec 19 1934:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1973-1517	2442036.36	1973 Dec 19 2106:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1973-1518	2442036.40	1973 Dec 19 2134:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1973-1519	2442036.53	1973 Dec 20 0045:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1973-1520	2442037.21	1973 Dec 20 1700:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1973-1521	2442037.29	1973 Dec 20 1859:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1973-1522	2442037.93	1973 Dec 21 1024:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1973-1523	2442038.19	1973 Dec 21 1630:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1973-1524	2442038.28	1973 Dec 21 1841:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1973-1525	2442038.29	1973 Dec 21 1859:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1973-1526	2442038.32	1973 Dec 21 1934:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1973-1527	2442038.35	1973 Dec 22 0455:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1973-1528	2442040.96	1973 Dec 22 1135:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1973-1529	2442041.02	1973 Dec 24 1234:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1973-1530	2442041.07	1973 Dec 24 1334:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1973-1531	2442041.11	1973 Dec 24 1434:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1973-1532	2442041.15	1973 Dec 24 1454:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1973-1533	2442043.12	1973 Dec 26 1500:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1973-1534	2442043.40	1973 Dec 26 2130:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1973-1535	2442043.53	1973 Dec 27 0045:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1973-1536	2442044.20	1973 Dec 27 1852:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1973-1537	2442045.19	1973 Dec 28 1831:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1973-1538	2442046.27	1973 Dec 28 1850:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1973-1539	2442046.33	1973 Dec 28 2022:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1973-1540	2442046.40	1973 Dec 28 2143:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1974-106	2442050.12	1974 Jan 24 1500:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1974-107	2442053.36	1974 Aug 23 2030:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1974-108	2442055.36	1974 Aug 23 2034:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1974-109	2442058.69	1974 Aug 26 0915:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1974-110	2442058.07	1974 Aug 26 1344:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1974-111	2442058.06	1974 Aug 26 1350:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1974-112	2442058.22	1974 Aug 26 1658:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1974-113	2442057.32	1974 Aug 27 2058:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1974-114	2442057.86	1974 Aug 28 0901:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1974-115	2442058.05	1974 Aug 28 1540:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1974-116	2442058.17	1974 Aug 28 1554:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1974-117	2442058.20	1974 Aug 28 1834:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1974-118	2442058.20	1974 Aug 28 1844:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1974-119	2442058.22	1974 Aug 28 1847:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1974-120	2442058.22	1974 Aug 28 1715:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1974-121	2442058.26	1974 Aug 28 1821:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1974-122	2442058.26	1974 Aug 28 1904:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1974-123	2442058.20	1974 Aug 28 1644:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1974-124	2442058.33	1974 Aug 28 1647:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1974-125	2442058.55	1974 Aug 29 0114:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1974-126	2442058.88	1974 Aug 29 0900:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1974-127	2442059.14	1974 Aug 29 1429:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1974-128	2442059.35	1974 Aug 29 1530:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1974-129	2442059.07	1974 Aug 30 1344:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1974-130	2442059.14	1974 Aug 30 1400:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1974-131	2442059.14	1974 Aug 30 1501:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1974-132	2442059.17	1974 Aug 30 1527:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1974-133	2442059.17	1974 Sep 3 1435:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1974-134	2442059.11	1974 Sep 3 1435:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1974-135	2442059.23	1974 Sep 3 1730:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1974-136	2442059.33	1974 Sep 3 1952:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1974-137	2442059.07	1974 Sep 4 1344:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1974-138	2442059.07	1974 Sep 4 1638:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1974-139	2442059.19	1974 Sep 4 1638:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1974-140	2442059.21	1974 Sep 4 1702:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1974-141	2442059.22	1974 Sep 4 1712:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1974-142	2442059.23	1974 Sep 4 1730:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1974-143	2442059.24	1974 Sep 4 1752:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1974-144	2442059.33	1974 Sep 4 2002:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1974-145	2442059.38	1974 Sep 4 2114:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1974-146	2442059.39	1974 Sep 4 2114:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1974-147	2442059.56	1974 Sep 5 0129:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1974-148	2442059.10	1974 Sep 5 1430:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1974-149	2442059.21	1974 Sep 5 1704:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Launch_t	OrbPay	Agency	Launch_Code	Group	Category	LTCite	Cite	Notes
1974-H1136	2442296.33	1974 Sep 5 1958:59	Rocketsonde	-	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1974-H1137	2442296.56	1974 Sep 6 0130:00	Rocketsonde	-	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1974-H1285	2442296.72	1974 Sep 6 0522:00	Rocketsonde	-	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1974-H1138	2442296.91	1974 Sep 6 0952:00	Rocketsonde	-	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1974-H1139	2442297.11	1974 Sep 6 1438:59	Rocketsonde	-	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1974-H1141	2442297.12	1974 Sep 6 1500:00	Rocketsonde	-	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1974-H1142	2442297.14	1974 Sep 6 1526:59	Rocketsonde	-	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1974-H1143	2442297.15	1974 Sep 6 1532:59	Rocketsonde	-	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1974-H1144	2442297.15	1974 Sep 6 1536:59	Rocketsonde	-	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1974-H1146	2442297.38	1974 Sep 6 2100:00	Rocketsonde	-	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1974-H1147	2442298.71	1974 Sep 7 0501:00	Rocketsonde	-	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1974-H1149	2442300.15	1974 Sep 8 0500:00	Rocketsonde	-	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1974-H1150	2442300.27	1974 Sep 9 1830:00	Rocketsonde	-	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1974-H1151	2442300.42	1974 Sep 9 2203:59	Rocketsonde	-	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1974-H1152	2442300.90	1974 Sep 10 0942:00	Rocketsonde	-	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1974-H1153	2442301.06	1974 Sep 10 1323:59	Rocketsonde	-	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1974-H1154	2442301.23	1974 Sep 10 1730:00	Rocketsonde	-	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1974-H1156	2442301.33	1974 Sep 10 1949:59	Rocketsonde	-	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1974-H1288	2442301.96	1974 Sep 11 1044:59	Rocketsonde	-	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1974-H1157	2442302.08	1974 Sep 11 1404:00	Rocketsonde	-	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1974-H1158	2442302.10	1974 Sep 11 1428:00	Rocketsonde	-	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1974-H1160	2442302.15	1974 Sep 11 1530:00	Rocketsonde	-	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1974-H1161	2442302.15	1974 Sep 11 1534:59	Rocketsonde	-	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1974-H1162	2442302.15	1974 Sep 11 1538:59	Rocketsonde	-	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1974-H1163	2442302.19	1974 Sep 11 1530:00	Rocketsonde	-	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1974-H1164	2442302.21	1974 Sep 11 1700:00	Rocketsonde	-	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1974-H1165	2442302.33	1974 Sep 11 2000:00	Rocketsonde	-	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1974-H1290	2442302.35	1974 Sep 11 2030:00	Rocketsonde	-	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1974-H1166	2442302.36	1974 Sep 11 2100:00	Rocketsonde	-	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1974-H1167	2442302.94	1974 Sep 12 1030:00	Rocketsonde	-	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1974-H1168	2442303.25	1974 Sep 12 1804:59	Rocketsonde	-	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1974-H1169	2442303.35	1974 Sep 12 2020:00	Rocketsonde	-	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1974-H1170	2442303.40	1974 Sep 12 2134:59	Rocketsonde	-	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1974-H1171	2442304.06	1974 Sep 13 1400:00	Rocketsonde	-	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1974-H1172	2442304.09	1974 Sep 13 1403:00	Rocketsonde	-	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1974-H1173	2442304.10	1974 Sep 13 1418:00	Rocketsonde	-	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1974-H1175	2442304.21	1974 Sep 13 1656:59	Rocketsonde	-	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1974-H1176	2442304.21	1974 Sep 13 1700:00	Rocketsonde	-	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1974-H1177	2442304.97	1974 Sep 14 1315:00	Rocketsonde	-	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1974-H1178	2442306.89	1974 Sep 16 0927:59	Rocketsonde	-	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1974-H1179	2442307.05	1974 Sep 16 1304:59	Rocketsonde	-	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1974-H1180	2442307.07	1974 Sep 16 1354:59	Rocketsonde	-	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1974-H1182	2442307.14	1974 Sep 16 1826:00	Rocketsonde	-	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1974-H1183	2442307.20	1974 Sep 16 1844:59	Rocketsonde	-	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1974-H1184	2442307.20	1974 Sep 16 1854:59	Rocketsonde	-	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1974-H1185	2442307.20	1974 Sep 16 1954:59	Rocketsonde	-	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1974-H1186	2442307.21	1974 Sep 16 1958:59	Rocketsonde	-	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1974-H1187	2442307.31	1974 Sep 16 1927:59	Rocketsonde	-	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1974-H1188	2442308.36	1974 Sep 16 2034:59	Rocketsonde	-	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1974-H1189	2442308.34	1974 Sep 17 1524:59	Rocketsonde	-	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1974-H1190	2442308.35	1974 Sep 17 2036:00	Rocketsonde	-	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1974-H1191	2442309.07	1974 Sep 18 1344:59	Rocketsonde	-	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1974-H1192	2442309.07	1974 Sep 18 1344:59	Rocketsonde	-	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1974-H1193	2442309.08	1974 Sep 18 1400:00	Rocketsonde	-	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1974-H1194	2442309.13	1974 Sep 18 1509:59	Rocketsonde	-	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1974-H1196	2442309.15	1974 Sep 18 1522:00	Rocketsonde	-	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1974-H1197	2442309.15	1974 Sep 18 1836:00	Rocketsonde	-	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1974-H1198	2442309.21	1974 Sep 18 1700:00	Rocketsonde	-	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1974-H1199	2442309.35	1974 Sep 18 2026:59	Rocketsonde	-	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1974-H1200	2442309.36	1974 Sep 18 2037:00	Rocketsonde	-	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1974-H1201	2442309.57	1974 Sep 19 0144:59	Rocketsonde	-	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1974-H1202	2442310.02	1974 Sep 19 1233:59	Rocketsonde	-	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1974-H1203	2442310.09	1974 Sep 19 1403:59	Rocketsonde	-	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1974-H1204	2442310.18	1974 Sep 19 1618:59	Rocketsonde	-	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1974-H1205	2442310.26	1974 Sep 19 1812:00	Rocketsonde	-	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1974-H1206	2442310.32	1974 Sep 19 1942:59	Rocketsonde	-	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1974-H1207	2442311.15	1974 Sep 20 1536:00	Rocketsonde	-	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1974-H1208	2442311.35	1974 Sep 20 2021:00	Rocketsonde	-	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1974-H1210	2442311.35	1974 Sep 20 2024:00	Rocketsonde	-	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1974-H1211	2442311.57	1974 Sep 21 0144:59	Rocketsonde	-	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1974-H1212	2442314.09	1974 Sep 23 1415:00	Rocketsonde	-	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1974-H1215	2442314.12	1974 Sep 23 1604:59	Rocketsonde	-	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1974-H1216	2442314.20	1974 Sep 23 1846:59	Rocketsonde	-	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1974-H1217	2442314.25	1974 Sep 23 1755:00	Rocketsonde	-	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1974-H1218	2442314.36	1974 Sep 23 2032:00	Rocketsonde	-	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1974-H1219	2442315.02	1974 Sep 24 1222:00	Rocketsonde	-	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1974-H1220	2442315.11	1974 Sep 24 1441:00	Rocketsonde	-	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1974-H1221	2442315.21	1974 Sep 24 1700:00	Rocketsonde	-	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1974-H1222	2442315.25	1974 Sep 24 1806:59	Rocketsonde	-	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1974-H1223	2442315.53	1974 Sep 25 0049:59	Rocketsonde	-	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1974-H1224	2442316.06	1974 Sep 25 1330:00	Rocketsonde	-	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1974-H1225	2442316.07	1974 Sep 25 1344:59	Rocketsonde	-	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1974-H1226	2442316.12	1974 Sep 25 1447:00	Rocketsonde	-	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	OrbPay_t	Agency	Launch_Code	Group	Category	LTCite	Cite	Notes
1974-H1227	2442316.12	1974 Sep 25 1500:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1974-A37	2442316.15	1974 Sep 25 1530:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1974-1312	2442316.19	1974 Sep 25 1630:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1974-H1229	2442316.27	1974 Sep 25 1830:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1974-H1230	2442316.27	1974 Sep 25 1830:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1974-H1231	2442316.53	1974 Sep 26 0049:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1974-H1232	2442317.14	1974 Sep 26 1520:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1974-H1233	2442317.22	1974 Sep 26 1720:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1974-H1234	2442317.26	1974 Sep 26 1814:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1974-H1235	2442317.54	1974 Sep 27 0055:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1974-H1236	2442318.11	1974 Sep 27 1438:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1974-H1238	2442318.15	1974 Sep 27 1530:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1974-H1239	2442318.18	1974 Sep 27 1621:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1974-H1240	2442318.98	1974 Sep 28 1137:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1974-H1250	2442321.10	1974 Sep 30 1428:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1974-H1261	2442321.17	1974 Sep 30 1559:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1974-H1262	2442321.20	1974 Sep 30 1651:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1974-H1265	2442321.24	1974 Sep 30 1749:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1974-A39	2442321.36	1974 Sep 30 2040:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1974-H1267	2442321.38	1974 Sep 30 2100:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1974-H1268	2442322.09	1974 Oct 1 1415:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1974-H1269	2442322.90	1974 Oct 2 0934:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1974-H1260	2442323.06	1974 Oct 2 1330:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1974-H1263	2442323.07	1974 Oct 2 1524:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1974-1316	2442323.14	1974 Oct 2 1621:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1974-H1266	2442323.19	1974 Oct 2 1630:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1974-H1268	2442323.24	1974 Oct 2 1732:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1974-H1266	2442323.33	1974 Oct 2 2000:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1974-H1267	2442323.35	1974 Oct 2 2044:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1974-1319	2442323.36	1974 Oct 2 2100:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1974-H1269	2442323.39	1974 Oct 2 2125:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1974-H1270	2442323.51	1974 Oct 3 0014:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1974-H1271	2442323.66	1974 Oct 3 0900:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1974-H1272	2442324.13	1974 Oct 3 1510:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1974-H1273	2442324.34	1974 Oct 3 1738:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1974-H1274	2442325.07	1974 Oct 4 1347:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1974-H1275	2442325.11	1974 Oct 4 1457:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1974-H1276	2442325.11	1974 Oct 4 1544:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1974-H1277	2442325.14	1974 Oct 4 1524:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1974-1320	2442325.38	1974 Oct 5 0301:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1974-H1280	2442327.90	1974 Oct 7 0937:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1974-H1281	2442328.12	1974 Oct 7 1550:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1974-H1282	2442328.14	1974 Oct 7 1550:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1974-H1284	2442328.17	1974 Oct 7 1659:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1974-H1285	2442328.23	1974 Oct 7 1733:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1974-H1286	2442328.43	1974 Oct 7 2336:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1974-H1285	2442329.16	1974 Oct 8 1530:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1974-H1287	2442329.22	1974 Oct 8 1710:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1974-H1289	2442329.32	1974 Oct 8 1949:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1974-A43	2442330.07	1974 Oct 9 1344:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1974-1322	2442330.15	1974 Oct 9 1530:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1974-H1284	2442330.34	1974 Oct 9 2015:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1974-H1286	2442330.35	1974 Oct 9 2030:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1974-H1287	2442330.38	1974 Oct 9 2104:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1974-H1288	2442330.41	1974 Oct 9 2155:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1974-H1289	2442330.57	1974 Oct 10 0140:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1974-H1300	2442330.89	1974 Oct 10 0917:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1974-H1301	2442331.26	1974 Oct 10 1814:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1974-H1302	2442331.38	1974 Oct 10 2109:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1974-H1303	2442331.39	1974 Oct 10 2125:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1974-H1304	2442332.09	1974 Oct 11 1408:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1974-H1305	2442332.15	1974 Oct 11 1410:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1974-H1306	2442332.17	1974 Oct 11 1559:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1974-H1307	2442332.28	1974 Oct 11 1845:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1974-H1308	2442332.33	1974 Oct 11 2000:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1974-H1309	2442332.56	1974 Oct 12 0130:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1974-H1310	2442334.53	1974 Oct 14 0044:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1974-H1311	2442334.71	1974 Oct 14 0455:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1974-H1312	2442335.89	1974 Oct 15 0921:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1974-H1313	2442336.05	1974 Oct 15 1304:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1974-H1314	2442336.18	1974 Oct 15 1618:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1974-H1315	2442336.21	1974 Oct 15 1704:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1974-H1316	2442336.24	1974 Oct 15 1740:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1974-H1317	2442336.36	1974 Oct 15 2035:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1974-H1318	2442337.07	1974 Oct 16 1344:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1974-H1319	2442337.11	1974 Oct 16 1440:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-



Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Launch_t	OrbPay	Agency	Launch_Code	Group	Category	LTCite	Cite	Notes
1974-W1413	24423860.13	1974 Nov 8 1508:00	Rocketsonde	-	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1974-W1414	24423860.17	1974 Nov 8 1559:59	Rocketsonde	-	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1974-W1415	24423860.21	1974 Nov 8 1700:00	Rocketsonde	-	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1974-W1417	24423860.36	1974 Nov 8 2030:00	Rocketsonde	-	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1974-W1418	24423863.09	1974 Nov 11 1415:00	Rocketsonde	-	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1974-W1420	24423863.17	1974 Nov 11 1559:59	Rocketsonde	-	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1974-W1421	24423863.25	1974 Nov 11 1759:00	Rocketsonde	-	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1974-W1422	24423863.27	1974 Nov 11 1830:00	Rocketsonde	-	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1974-W1423	24423863.38	1974 Nov 11 2100:00	Rocketsonde	-	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1974-W1424	24423864.04	1974 Nov 12 1301:59	Rocketsonde	-	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1974-W1426	24423865.06	1974 Nov 13 1330:00	Rocketsonde	-	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1974-W1427	24423865.09	1974 Nov 13 1406:00	Rocketsonde	-	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1974-W1429	24423865.17	1974 Nov 13 1611:59	Rocketsonde	-	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1974-W1430	24423865.19	1974 Nov 13 1630:59	Rocketsonde	-	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1974-W1431	24423865.21	1974 Nov 13 1700:00	Rocketsonde	-	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1974-W1432	24423865.25	1974 Nov 13 1800:00	Rocketsonde	-	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1974-W1433	24423865.38	1974 Nov 13 1800:00	Rocketsonde	-	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1974-W1435	24423865.38	1974 Nov 13 2100:00	Rocketsonde	-	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1974-W1436	24423865.21	1974 Nov 14 1708:00	Rocketsonde	-	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1974-W1437	24423867.08	1974 Nov 15 1241:00	Rocketsonde	-	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1974-W1438	24423867.08	1974 Nov 15 1400:00	Rocketsonde	-	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1974-W1439	24423867.15	1974 Nov 15 1530:00	Rocketsonde	-	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1974-W1441	24423867.19	1974 Nov 15 1630:00	Rocketsonde	-	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1974-W1442	24423867.22	1974 Nov 15 1715:00	Rocketsonde	-	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1974-W1443	24423867.24	1974 Nov 15 1738:59	Rocketsonde	-	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1974-W1444	24423867.33	1974 Nov 15 2000:00	Rocketsonde	-	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1974-W1445	24423870.09	1974 Nov 16 1412:00	Rocketsonde	-	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1974-W1447	24423870.16	1974 Nov 16 1614:59	Rocketsonde	-	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1974-W1448	24423870.19	1974 Nov 16 1630:00	Rocketsonde	-	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1974-W1449	24423870.36	1974 Nov 16 1850:00	Rocketsonde	-	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1974-W1450	24423870.39	1974 Nov 16 2100:00	Rocketsonde	-	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1974-W1451	24423871.27	1974 Nov 19 1823:59	Rocketsonde	-	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1974-W1453	24423872.16	1974 Nov 20 1945:59	Rocketsonde	-	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1974-W1454	24423872.21	1974 Nov 20 1700:00	Rocketsonde	-	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1974-W1457	24423872.21	1974 Nov 20 1700:00	Rocketsonde	-	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1974-W1458	24423872.25	1974 Nov 20 1735:00	Rocketsonde	-	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1974-W1459	24423872.25	1974 Nov 20 1803:59	Rocketsonde	-	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1974-W1460	24423872.25	1974 Nov 20 1803:59	Rocketsonde	-	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1974-W1462	24423873.37	1974 Nov 21 1859:59	Rocketsonde	-	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1974-W1463	24423873.36	1974 Nov 21 2046:00	Rocketsonde	-	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1974-W1465	24423874.15	1974 Nov 22 1806:00	Rocketsonde	-	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1974-W1466	24423874.17	1974 Nov 22 1806:00	Rocketsonde	-	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1974-W1467	24423874.24	1974 Nov 22 1809:59	Rocketsonde	-	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1974-W1468	24423874.38	1974 Nov 22 1738:59	Rocketsonde	-	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1974-W1469	24423874.38	1974 Nov 22 2110:00	Rocketsonde	-	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1974-W1470	24423874.38	1974 Nov 22 2110:00	Rocketsonde	-	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1974-W1471	24423877.05	1974 Nov 25 1314:59	Rocketsonde	-	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1974-W1472	24423877.11	1974 Nov 25 1445:00	Rocketsonde	-	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1974-W1473	24423877.14	1974 Nov 25 1517:00	Rocketsonde	-	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1974-W1474	24423877.15	1974 Nov 25 1559:59	Rocketsonde	-	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1974-W1475	24423877.34	1974 Nov 25 1830:00	Rocketsonde	-	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1974-W1476	24423877.34	1974 Nov 25 2015:59	Rocketsonde	-	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1974-W1477	24423877.35	1974 Nov 25 2111:59	Rocketsonde	-	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1974-W1479	24423878.36	1974 Nov 26 0114:59	Rocketsonde	-	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1974-W1480	24423878.50	1974 Nov 26 2045:00	Rocketsonde	-	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1974-W1481	24423879.10	1974 Nov 27 0030:00	Rocketsonde	-	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1974-W1482	24423879.12	1974 Nov 27 1430:00	Rocketsonde	-	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1974-W1483	24423879.15	1974 Nov 27 1459:00	Rocketsonde	-	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1974-W1485	24423879.20	1974 Nov 27 1531:00	Rocketsonde	-	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1974-W1486	24423879.23	1974 Nov 27 1730:00	Rocketsonde	-	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1974-W1487	24423879.27	1974 Nov 27 1845:00	Rocketsonde	-	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1974-W1488	24423879.28	1974 Nov 27 1845:00	Rocketsonde	-	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1974-W1489	24423879.41	1974 Nov 27 2148:59	Rocketsonde	-	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1974-W1490	24423879.55	1974 Nov 27 2203:59	Rocketsonde	-	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1974-W1500	24423881.19	1974 Nov 28 0118:59	Rocketsonde	-	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1974-W1502	24423884.21	1974 Dec 2 1720:00	Rocketsonde	-	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1974-W1503	24423884.21	1974 Dec 2 1720:00	Rocketsonde	-	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1974-W1504	24423884.23	1974 Dec 2 1725:00	Rocketsonde	-	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1974-W1505	24423884.27	1974 Dec 2 1826:59	Rocketsonde	-	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1974-W1507	24423885.21	1974 Dec 2 1920:00	Rocketsonde	-	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1974-W1508	24423885.33	1974 Dec 3 1700:00	Rocketsonde	-	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1974-W1509	24423885.38	1974 Dec 3 1958:59	Rocketsonde	-	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1974-W1510	24423885.56	1974 Dec 4 0119:59	Rocketsonde	-	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1974-W1511	24423886.08	1974 Dec 4 1400:00	Rocketsonde	-	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1974-W1512	24423886.10	1974 Dec 4 1430:00	Rocketsonde	-	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1974-W1513	24423886.12	1974 Dec 4 1633:59	Rocketsonde	-	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1974-W1514	24423886.21	1974 Dec 4 1700:00	Rocketsonde	-	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1974-W1514	24423886.21	1974 Dec 4 1700:00	Rocketsonde	-	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1974-W1514	24423886.23	1974 Dec 4 1730:00	Rocketsonde	-	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-



Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	OrbPay_t	Agency	Launch_Code	Group	Category	LTCite	Cite	Notes
1974-W1515	2442386_35	1974 Dec 4 2030:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1974-1370	2442386_36	1974 Dec 4 2045:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1974-W1516	2442386_38	1974 Dec 4 2100:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1974-W1517	2442386_56	1974 Dec 5 17:20:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1974-W1519	2442387_21	1974 Dec 5 17:00:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1974-W1520	2442387_21	1974 Dec 5 21:00:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1974-W1521	2442387_38	1974 Dec 5 21:00:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1974-W1522	2442388_05	1974 Dec 6 13:14:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1974-W1523	2442388_14	1974 Dec 6 15:15:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1974-W1524	2442388_14	1974 Dec 6 15:25:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1974-W1525	2442388_19	1974 Dec 6 16:30:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1974-W1526	2442388_19	1974 Dec 6 16:40:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1974-W1527	2442388_20	1974 Dec 6 16:44:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1974-W1529	2442388_38	1974 Dec 6 21:00:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1974-W1530	2442388_42	1974 Dec 6 21:59:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1974-W1531	2442390_38	1974 Dec 8 21:00:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1974-W1532	2442391_19	1974 Dec 9 16:30:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1974-W1533	2442391_21	1974 Dec 9 17:00:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1974-W1534	2442391_21	1974 Dec 9 18:27:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1974-W1535	2442391_27	1974 Dec 9 18:33:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1974-W1536	2442391_36	1974 Dec 9 20:30:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1974-W1538	2442391_89	1974 Dec 10 09:14:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1974-W1539	2442392_17	1974 Dec 10 15:59:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1974-W1540	2442392_21	1974 Dec 10 17:00:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1974-W1541	2442392_25	1974 Dec 10 18:00:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1974-W1542	2442392_43	1974 Dec 10 21:00:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1974-W1543	2442392_43	1974 Dec 10 21:18:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1974-W1544	2442393_06	1974 Dec 11 14:00:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1974-W1545	2442393_10	1974 Dec 11 14:30:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1974-W1546	2442393_17	1974 Dec 11 15:59:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1974-W1547	2442393_17	1974 Dec 11 16:05:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1974-W1548	2442393_23	1974 Dec 11 17:30:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1974-W1549	2442393_36	1974 Dec 11 21:00:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1974-1374	2442393_36	1974 Dec 11 21:00:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1974-W1550	2442393_39	1974 Dec 11 21:21:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1974-W1551	2442393_57	1974 Dec 12 04:46:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1974-W1552	2442393_90	1974 Dec 12 09:40:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1974-W1553	2442394_10	1974 Dec 12 14:30:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1974-W1554	2442394_16	1974 Dec 12 14:30:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1974-W1555	2442394_25	1974 Dec 12 15:45:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1974-W1556	2442394_42	1974 Dec 12 18:00:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1974-W1557	2442394_72	1974 Dec 12 22:01:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1974-W1558	2442395_11	1974 Dec 13 08:01:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1974-W1559	2442395_14	1974 Dec 13 08:14:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1974-W1560	2442395_34	1974 Dec 13 20:05:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1974-W1562	2442395_34	1974 Dec 13 20:05:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1974-W1563	2442395_38	1974 Dec 13 21:00:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1974-W1564	2442395_38	1974 Dec 13 21:00:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1974-W1565	2442395_45	1974 Dec 13 22:04:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1974-W1566	2442395_47	1974 Dec 13 22:26:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1974-W1567	2442395_50	1974 Dec 13 23:55:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1974-W1569	2442398_27	1974 Dec 16 17:25:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1974-W1570	2442398_27	1974 Dec 16 18:27:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1974-W1571	2442398_35	1974 Dec 16 20:36:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1974-W1572	2442398_36	1974 Dec 16 20:40:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1974-W1573	2442398_36	1974 Dec 16 21:00:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1974-W1574	2442398_38	1974 Dec 16 21:00:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1974-W1575	2442398_38	1974 Dec 16 21:00:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1974-W1576	2442398_90	1974 Dec 17 09:43:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1974-W1577	2442399_10	1974 Dec 17 14:23:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1974-W1578	2442399_21	1974 Dec 17 17:00:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1974-W1579	2442399_38	1974 Dec 17 21:00:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1974-W1580	2442399_48	1974 Dec 17 23:35:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1974-W1581	2442400_01	1974 Dec 18 12:10:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1974-W1582	2442400_09	1974 Dec 18 14:03:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1974-W1583	2442400_21	1974 Dec 18 17:00:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1974-W1584	2442400_22	1974 Dec 18 17:00:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1974-W1585	2442400_22	1974 Dec 18 17:00:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1974-W1586	2442400_33	1974 Dec 18 20:01:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1974-W1587	2442400_38	1974 Dec 18 21:00:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1974-W1588	2442400_56	1974 Dec 19 01:22:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1974-W1589	2442400_95	1974 Dec 19 10:52:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1974-W1591	2442401_21	1974 Dec 19 17:00:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1974-W1592	2442401_38	1974 Dec 19 21:07:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1974-W1593	2442402_10	1974 Dec 20 14:30:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1974-W1594	2442402_17	1974 Dec 20 16:09:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1974-W1596	2442402_21	1974 Dec 20 17:30:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1974-W1597	2442402_23	1974 Dec 20 17:30:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1974-W1598	2442402_25	1974 Dec 20 17:59:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1974-W1599	2442402_38	1974 Dec 20 21:00:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1974-W1600	2442402_55	1974 Dec 20 21:13:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1974-W1601	2442405_11	1974 Dec 21 01:14:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1974-W1602	2442405_12	1974 Dec 23 14:37:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1974-W1604	2442405_21	1974 Dec 23 17:00:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1974-W1605	2442405_25	1974 Dec 23 17:58:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1974-W1606	2442405_38	1974 Dec 23 21:00:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1974-W1607	2442405_55	1974 Dec 24 01:14:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1974-W1608	2442406_08	1974 Dec 24 13:57:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	OrbPay	Agency	Launch_Code	Group	Category	LTCite	Cite	Notes
1974-H1610	2442406.35	1974 Dec 24 2030:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1974-H1611	2442408.38	1974 Dec 26 2100:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1974-H1612	2442409.12	1974 Dec 27 1500:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1974-H1613	2442409.36	1974 Dec 27 2034:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1974-H1614	2442409.37	1974 Dec 27 2049:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1974-H1615	2442409.55	1974 Dec 28 0114:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1974-H1616	2442412.12	1974 Dec 30 1500:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1974-H1618	2442412.17	1974 Dec 30 1559:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1974-H1619	2442412.19	1974 Dec 30 1627:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1974-H1620	2442412.21	1974 Dec 30 1700:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1974-H1621	2442412.23	1974 Dec 30 1730:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1974-H1622	2442412.27	1974 Dec 30 1829:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1974-H1623	2442413.17	1974 Dec 31 1559:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1974-H1625	2442413.23	1974 Dec 31 1730:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1975-H06	2442415.21	1975 Jan 2 1700:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1975-H1016	2442665.53	1975 Sep 11 0040:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1975-H1017	2442667.96	1975 Sep 12 1106:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1975-H1018	2442668.14	1975 Sep 12 1514:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1975-H1019	2442668.19	1975 Sep 12 1634:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1975-H1021	2442668.25	1975 Sep 12 1800:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1975-H1022	2442668.36	1975 Sep 12 2045:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1975-H1023	2442668.40	1975 Sep 12 2137:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1975-H1024	2442670.96	1975 Sep 15 1104:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1975-H1027	2442671.16	1975 Sep 15 1617:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1975-H1028	2442671.44	1975 Sep 15 1619:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1975-H1029	2442671.55	1975 Sep 15 2234:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1975-H1030	2442672.15	1975 Sep 16 0114:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1975-H1031	2442672.16	1975 Sep 16 1500:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1975-H1032	2442672.26	1975 Sep 16 1940:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1975-H1033	2442672.40	1975 Sep 16 2100:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1975-H1034	2442672.42	1975 Sep 16 2210:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1975-H1035	2442673.05	1975 Sep 17 1245:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1975-H1036	2442673.10	1975 Sep 17 1425:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1975-H1037	2442673.11	1975 Sep 17 1445:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1975-H1039	2442673.11	1975 Sep 17 1445:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1975-H1040	2442673.15	1975 Sep 17 1639:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1975-H1041	2442673.19	1975 Sep 17 1639:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1975-H1043	2442673.55	1975 Sep 18 0321:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1975-H1044	2442674.06	1975 Sep 18 1355:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1975-H1045	2442674.25	1975 Sep 18 1800:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1975-H1046	2442675.15	1975 Sep 19 1835:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1975-H1047	2442675.16	1975 Sep 19 1835:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1975-H1048	2442675.41	1975 Sep 19 2143:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1975-H1049	2442675.41	1975 Sep 20 1937:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1975-H1050	2442677.26	1975 Sep 21 1304:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1975-H1051	2442677.36	1975 Sep 21 1304:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1975-H1052	2442678.15	1975 Sep 22 1530:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1975-H1053	2442678.15	1975 Sep 22 1530:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1975-H1054	2442678.26	1975 Sep 22 1819:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1975-H1055	2442679.20	1975 Sep 23 1300:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1975-H1056	2442679.20	1975 Sep 23 1300:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1975-H1057	2442679.20	1975 Sep 23 1300:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1975-H1058	2442679.52	1975 Sep 24 0033:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1975-H1059	2442680.04	1975 Sep 24 1200:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1975-H1060	2442680.04	1975 Sep 24 1200:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1975-H1061	2442680.04	1975 Sep 24 1200:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1975-H1062	2442680.10	1975 Sep 24 1246:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1975-H1063	2442680.16	1975 Sep 24 1549:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1975-H1064	2442680.26	1975 Sep 24 1830:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1975-H1065	2442680.26	1975 Sep 24 1814:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1975-H1067	2442680.31	1975 Sep 24 2243:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1975-H1068	2442680.45	1975 Sep 24 2243:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1975-H1069	2442680.55	1975 Sep 25 0114:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1975-H1070	2442680.55	1975 Sep 25 0114:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1975-H1071	2442680.96	1975 Sep 25 1055:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1975-H1072	2442681.22	1975 Sep 25 1710:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1975-H1073	2442681.26	1975 Sep 25 1814:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1975-H1074	2442681.40	1975 Sep 25 1827:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1975-H1075	2442681.47	1975 Sep 25 2133:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1975-H1076	2442681.46	1975 Sep 25 2301:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1975-H1077	2442681.98	1975 Sep 26 1125:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1975-H1079	2442682.08	1975 Sep 26 1354:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1975-H1080	2442682.11	1975 Sep 26 1435:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1975-H1081	2442682.21	1975 Sep 26 1545:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1975-H1083	2442682.16	1975 Sep 26 1658:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1975-H1084	2442685.04	1975 Sep 29 1256:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1975-H1085	2442685.20	1975 Sep 29 1644:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1975-H1086	2442685.24	1975 Sep 29 1654:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1975-H1087	2442685.30	1975 Sep 29 1751:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1975-H1088	2442685.30	1975 Sep 29 1914:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1975-H1089	2442685.42	1975 Sep 29 2201:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	OrbPay_t	Agency	Launch_Code	Group	Category	LTCite	Cite	Notes
1975-H1098	2442685.54	1975 Sep 30 0059:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteco	DSI-5850	-	-
1975-T293	2442686.45	1975 Sep 30 2252:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteco	DSI-5850	-	-
1975-A64	2442687.08	1975 Oct 1 1354:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteco	DSI-5850	-	-
1975-H1099	2442687.17	1975 Oct 1 1508:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteco	DSI-5850	-	-
1975-H1100	2442687.22	1975 Oct 1 1604:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteco	DSI-5850	-	-
1975-H1101	2442687.22	1975 Oct 1 1713:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteco	DSI-5850	-	-
1975-H1103	2442687.38	1975 Oct 1 2104:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteco	DSI-5850	-	-
1975-H1104	2442687.55	1975 Oct 2 0114:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteco	DSI-5850	-	-
1975-H1105	2442688.20	1975 Oct 2 0644:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteco	DSI-5850	-	-
1975-H1106	2442688.35	1975 Oct 2 2030:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteco	DSI-5850	-	-
1975-T298	2442688.38	1975 Oct 2 2100:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteco	DSI-5850	-	-
1975-H1107	2442689.07	1975 Oct 3 1341:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteco	DSI-5850	-	-
1975-H1108	2442689.10	1975 Oct 3 1424:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteco	DSI-5850	-	-
1975-H1110	2442689.14	1975 Oct 3 1522:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteco	DSI-5850	-	-
1975-H1111	2442689.15	1975 Oct 3 1533:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteco	DSI-5850	-	-
1975-H1112	2442689.21	1975 Oct 3 1655:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteco	DSI-5850	-	-
1975-H1113	2442689.30	1975 Oct 3 1909:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteco	DSI-5850	-	-
1975-H1114	2442689.46	1975 Oct 3 2257:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteco	DSI-5850	-	-
1975-H1115	2442689.55	1975 Oct 4 0118:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteco	DSI-5850	-	-
1975-T299	2442690.21	1975 Oct 4 1700:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteco	DSI-5850	-	-
1975-H1116	2442690.22	1975 Oct 4 1859:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteco	DSI-5850	-	-
1975-H1117	2442690.25	1975 Oct 4 1940:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteco	DSI-5850	-	-
1975-H1118	2442691.25	1975 Oct 5 1800:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteco	DSI-5850	-	-
1975-H1119	2442692.15	1975 Oct 6 1533:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteco	DSI-5850	-	-
1975-H1120	2442692.19	1975 Oct 6 1630:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteco	DSI-5850	-	-
1975-H1122	2442692.26	1975 Oct 6 1810:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteco	DSI-5850	-	-
1975-H1123	2442692.85	1975 Oct 7 0830:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteco	DSI-5850	-	-
1975-H1124	2442692.90	1975 Oct 7 0937:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteco	DSI-5850	-	-
1975-H1125	2442692.93	1975 Oct 7 1014:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteco	DSI-5850	-	-
1975-H1126	2442693.19	1975 Oct 7 1630:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteco	DSI-5850	-	-
1975-H1127	2442694.06	1975 Oct 8 1330:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteco	DSI-5850	-	-
1975-H1128	2442694.10	1975 Oct 8 1426:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteco	DSI-5850	-	-
1975-H1129	2442694.16	1975 Oct 8 1614:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteco	DSI-5850	-	-
1975-H1131	2442694.23	1975 Oct 8 1730:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteco	DSI-5850	-	-
1975-H1132	2442694.25	1975 Oct 8 1804:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteco	DSI-5850	-	-
1975-H1133	2442694.32	1975 Oct 8 1945:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteco	DSI-5850	-	-
1975-A65	2442694.46	1975 Oct 8 2330:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteco	DSI-5850	-	-
1975-H1134	2442695.17	1975 Oct 9 1559:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteco	DSI-5850	-	-
1975-H1135	2442695.26	1975 Oct 9 1810:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteco	DSI-5850	-	-
1975-H1136	2442695.42	1975 Oct 9 2159:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteco	DSI-5850	-	-
1975-H1137	2442696.06	1975 Oct 10 1401:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteco	DSI-5850	-	-
1975-A66	2442696.14	1975 Oct 10 1514:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteco	DSI-5850	-	-
1975-H1138	2442696.14	1975 Oct 10 1515:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteco	DSI-5850	-	-
1975-H1140	2442696.16	1975 Oct 10 1618:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteco	DSI-5850	-	-
1975-H1141	2442696.31	1975 Oct 10 1820:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteco	DSI-5850	-	-
1975-Y300	2442696.44	1975 Oct 10 2257:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteco	DSI-5850	-	-
1975-H1142	2442696.46	1975 Oct 13 0924:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteco	DSI-5850	-	-
1975-H1143	2442698.39	1975 Oct 13 1340:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteco	DSI-5850	-	-
1975-H1144	2442699.16	1975 Oct 13 1540:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteco	DSI-5850	-	-
1975-H1145	2442699.15	1975 Oct 13 2345:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteco	DSI-5850	-	-
1975-A67	2442699.49	1975 Oct 14 0930:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteco	DSI-5850	-	-
1975-H1146	2442699.83	1975 Oct 14 1609:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteco	DSI-5850	-	-
1975-H1147	2442700.17	1975 Oct 14 1809:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteco	DSI-5850	-	-
1975-H1149	2442700.25	1975 Oct 14 2001:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteco	DSI-5850	-	-
1975-H1150	2442700.33	1975 Oct 14 2031:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteco	DSI-5850	-	-
1975-H1151	2442701.07	1975 Oct 15 1345:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteco	DSI-5850	-	-
1975-H1152	2442701.08	1975 Oct 15 1346:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteco	DSI-5850	-	-
1975-H1153	2442701.17	1975 Oct 15 1355:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteco	DSI-5850	-	-
1975-H1155	2442701.23	1975 Oct 15 1609:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteco	DSI-5850	-	-
1975-H1156	2442701.23	1975 Oct 15 1737:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteco	DSI-5850	-	-
1975-H1157	2442701.31	1975 Oct 15 1930:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteco	DSI-5850	-	-
1975-H1159	2442702.18	1975 Oct 16 1229:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteco	DSI-5850	-	-
1975-H1158	2442702.26	1975 Oct 16 1614:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteco	DSI-5850	-	-
1975-H1160	2442702.26	1975 Oct 16 1818:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteco	DSI-5850	-	-
1975-H1161	2442702.43	1975 Oct 16 1820:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteco	DSI-5850	-	-
1975-H1162	2442702.08	1975 Oct 16 2218:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteco	DSI-5850	-	-
1975-H1163	2442703.08	1975 Oct 17 1400:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteco	DSI-5850	-	-
1975-H1164	2442703.15	1975 Oct 17 1530:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteco	DSI-5850	-	-
1975-H1165	2442703.15	1975 Oct 17 1534:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteco	DSI-5850	-	-
1975-Y309	2442703.27	1975 Oct 17 1830:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteco	DSI-5850	-	-
1975-H1166	2442703.46	1975 Oct 17 2303:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteco	DSI-5850	-	-
1975-H1167	2442703.48	1975 Oct 17 2327:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteco	DSI-5850	-	-
1975-H1168	2442706.08	1975 Oct 20 1352:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteco	DSI-5850	-	-
1975-H1170	2442706.15	1975 Oct 20 1530:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteco	DSI-5850	-	-
1975-H1171	2442706.22	1975 Oct 20 1733:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteco	DSI-5850	-	-
1975-H1172	2442706.23	1975 Oct 20 1737:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteco	DSI-5850	-	-
1975-H1173	2442706.26	1975 Oct 20 1813:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteco	DSI-5850	-	-
1975-H1174	2442706.29	1975 Oct 20 1859:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteco	DSI-5850	-	-
1975-H1175	2442706.52	1975 Oct 21 0034:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteco	DSI-5850	-	-
1975-H1176	2442706.93	1975 Oct 21 1024:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteco	DSI-5850	-	-
1975-H1177	2442707.24	1975 Oct 21 1542:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteco	DSI-5850	-	-
1975-H1178	2442707.45	1975 Oct 21 2151:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteco	DSI-5850	-	-
1975-H1179	2442708.06	1975 Oct 21 2218:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteco	DSI-5850	-	-
1975-H1180	2442708.08	1975 Oct 22 1356:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteco	DSI-5850	-	-
1975-H1181	2442708.09	1975 Oct 22 1408:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteco	DSI-5850	-	-





Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Launch_t	Agency	Launch_Code	Group	Category	LTCite	Cite	Notes
1975-Y358	2442757.50	1975 Dec 10 2357:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1975-W1369	2442757.71	1975 Dec 11 0500:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1975-W1370	2442758.15	1975 Dec 11 1530:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1975-W1372	2442758.28	1975 Dec 11 1728:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1975-W1373	2442758.38	1975 Dec 11 2110:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1975-Y360	2442758.65	1975 Dec 12 0336:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1975-W1374	2442758.69	1975 Dec 12 0336:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1975-Y361	2442758.71	1975 Dec 12 0542:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1975-W1375	2442758.74	1975 Dec 12 0542:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1975-W1376	2442759.14	1975 Dec 12 1514:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1975-Y362	2442759.15	1975 Dec 12 1530:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1975-W1377	2442759.19	1975 Dec 12 1630:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1975-W1379	2442759.45	1975 Dec 12 2248:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1975-Y363	2442759.56	1975 Dec 13 0130:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1975-W1380	2442759.59	1975 Dec 13 0215:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1975-W1381	2442760.60	1975 Dec 14 0230:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1975-W1382	2442762.11	1975 Dec 15 1438:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1975-W1383	2442762.15	1975 Dec 15 1530:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1975-W1384	2442762.15	1975 Dec 15 1530:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1975-W1385	2442762.20	1975 Dec 15 1643:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1975-W1386	2442762.26	1975 Dec 15 1820:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1975-W1387	2442762.41	1975 Dec 15 2153:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1975-Y364	2442762.46	1975 Dec 15 2258:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1975-W1388	2442762.58	1975 Dec 16 0200:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1975-W1389	2442763.31	1975 Dec 16 1930:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1975-W1390	2442763.31	1975 Dec 16 1930:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1975-W1391	2442763.45	1975 Dec 16 2243:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1975-W1392	2442763.66	1975 Dec 17 0414:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1975-Y366	2442763.96	1975 Dec 17 1130:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1975-W1393	2442764.09	1975 Dec 17 1415:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1975-W1394	2442764.15	1975 Dec 17 1530:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1975-W1395	2442764.21	1975 Dec 17 1658:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1975-W1396	2442764.26	1975 Dec 17 1940:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1975-Y370	2442764.45	1975 Dec 17 2241:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1975-W1398	2442764.45	1975 Dec 18 0034:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1975-W1400	2442764.64	1975 Dec 18 0324:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1975-W1401	2442765.15	1975 Dec 18 1530:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1975-W1402	2442765.21	1975 Dec 18 1703:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1975-W1404	2442765.46	1975 Dec 18 2335:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1975-W1405	2442766.15	1975 Dec 19 1830:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1975-W1406	2442766.15	1975 Dec 19 1830:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1975-W1408	2442766.19	1975 Dec 19 1657:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1975-W1409	2442766.22	1975 Dec 19 1700:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1975-W1411	2442769.59	1975 Dec 20 0210:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1975-W1412	2442769.23	1975 Dec 20 1736:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1975-W1413	2442769.45	1975 Dec 21 0236:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1975-W1415	2442769.65	1975 Dec 21 0330:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1975-Y371	2442769.65	1975 Dec 21 1345:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1975-W1416	2442769.24	1975 Dec 22 1245:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1975-W1417	2442769.26	1975 Dec 22 1346:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1975-Y377	2442769.26	1975 Dec 22 1346:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1975-Y378	2442769.44	1975 Dec 22 1927:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1975-W1420	2442770.20	1975 Dec 23 1644:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1975-W1421	2442770.21	1975 Dec 23 1655:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1975-Y383	2442771.15	1975 Dec 24 1830:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1975-W1422	2442771.21	1975 Dec 24 1830:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1975-W1423	2442771.21	1975 Dec 24 1857:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1975-W1425	2442771.51	1975 Dec 24 2357:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1975-W1426	2442773.45	1975 Dec 26 2249:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1975-Y387	2442773.45	1975 Dec 26 2249:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1975-W1427	2442776.15	1975 Dec 29 1530:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1975-W1428	2442776.17	1975 Dec 29 1559:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1975-W1429	2442776.30	1975 Dec 29 1907:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1975-W1430	2442776.39	1975 Dec 29 2125:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1975-W1431	2442776.52	1975 Dec 30 0024:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1975-Y377	2442778.15	1975 Dec 31 1530:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1975-Y378	2442778.15	1975 Dec 31 1530:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1975-W1433	2442778.31	1975 Dec 31 1830:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1975-Y391	2442778.58	1976 Jan 1 0152:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1975-W401	2442979.10	1976 Jul 19 1430:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1975-W402	2442979.23	1976 Jul 19 1725:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1975-W403	2442979.23	1976 Jul 19 1730:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1975-W404	2442979.25	1976 Jul 19 1804:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1975-W405	2442979.42	1976 Jul 19 2159:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1975-Y290	2442979.49	1976 Jul 19 2347:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1975-W406	2442980.01	1976 Jul 20 1211:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1975-Y291	2442980.11	1976 Jul 20 1445:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1975-W407	2442980.12	1976 Jul 20 1455:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1975-W408	2442980.41	1976 Jul 20 2149:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1975-W409	2442981.07	1976 Jul 21 1344:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1975-W1000	2442981.11	1976 Jul 21 1437:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1975-W1001	2442981.11	1976 Jul 21 1445:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1975-W1002	2442981.15	1976 Jul 21 1538:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1975-W1003	2442981.21	1976 Jul 21 1700:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1975-W1004	2442981.21	1976 Jul 21 1700:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1975-W1006	2442981.23	1976 Jul 21 1735:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	OrbPay	Agency	Launch_Code	Group	Category	LTCite	Cite	Notes
1976-H1007	2442981.24	1976 Jul 21 1745:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1976-H1008	2442981.26	1976 Jul 21 1808:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1976-H1009	2442981.27	1976 Jul 21 1830:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1976-H1010	2442981.33	1976 Jul 21 1954:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1976-H1011	2442981.40	1976 Jul 21 2131:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1976-H1011	2442981.40	1976 Jul 21 2143:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1976-H46	2442981.45	1976 Jul 21 2343:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1976-H299	2442981.55	1976 Jul 22 0114:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1976-H1012	2442982.17	1976 Jul 22 1634:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1976-H1013	2442982.19	1976 Jul 22 1651:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1976-H1014	2442982.20	1976 Jul 22 1644:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1976-H46	2442982.49	1976 Jul 22 2348:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1976-H1015	2442983.01	1976 Jul 23 1212:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1976-H1016	2442983.07	1976 Jul 23 1344:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1976-H1017	2442983.10	1976 Jul 23 1430:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1976-H1018	2442983.15	1976 Jul 23 1530:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1976-H1019	2442983.34	1976 Jul 23 2004:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1976-H1020	2442986.10	1976 Jul 26 1430:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1976-H1021	2442986.13	1976 Jul 26 1504:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1976-H1022	2442986.13	1976 Jul 26 1510:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1976-H1023	2442986.26	1976 Jul 26 1818:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1976-H1024	2442986.32	1976 Jul 26 1958:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1976-H303	2442986.48	1976 Jul 26 2348:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1976-H1026	2442986.99	1976 Jul 27 1442:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1976-H1027	2442987.19	1976 Jul 27 1654:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1976-H1028	2442987.20	1976 Jul 27 1654:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1976-H1029	2442987.33	1976 Jul 27 2159:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1976-H1031	2442987.46	1976 Jul 27 2330:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1976-H1032	2442987.46	1976 Jul 27 2330:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1976-H1033	2442988.02	1976 Jul 28 1232:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1976-H1034	2442988.04	1976 Jul 28 1239:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1976-H1035	2442988.06	1976 Jul 28 1304:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1976-H1036	2442988.16	1976 Jul 28 1504:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1976-H1037	2442988.16	1976 Jul 28 1514:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1976-H1038	2442988.21	1976 Jul 28 1700:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1976-H1039	2442988.25	1976 Jul 28 1726:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1976-H1040	2442988.25	1976 Jul 28 1804:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1976-H307	2442988.26	1976 Jul 28 1814:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1976-H1041	2442988.27	1976 Jul 28 1822:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1976-H1042	2442988.39	1976 Jul 28 2135:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1976-H1043	2442988.39	1976 Jul 28 2125:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1976-H1044	2442988.39	1976 Jul 28 2125:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1976-H1045	2442989.10	1976 Jul 29 1426:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1976-H1046	2442989.12	1976 Jul 29 1601:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1976-H310	2442989.15	1976 Jul 29 1654:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1976-H1047	2442989.50	1976 Jul 29 2336:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1976-H1048	2442990.02	1976 Jul 30 1437:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1976-H1049	2442990.14	1976 Jul 30 1529:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1976-H1050	2442990.14	1976 Jul 30 1529:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1976-H1051	2442990.19	1976 Jul 30 1626:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1976-H1052	2442990.19	1976 Jul 30 1630:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1976-H1053	2442990.19	1976 Jul 30 1630:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1976-H1054	2442991.31	1976 Jul 31 1936:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1976-H1062	2442993.07	1976 Aug 2 1236:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1976-H1064	2442993.07	1976 Aug 2 1344:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1976-H1065	2442993.10	1976 Aug 2 1421:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1976-H1066	2442993.16	1976 Aug 2 1549:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1976-H1067	2442993.21	1976 Aug 2 1733:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1976-H1068	2442993.26	1976 Aug 2 1733:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1976-H1069	2442993.33	1976 Aug 2 1810:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1976-H1070	2442993.33	1976 Aug 2 2002:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1976-H1071	2442993.47	1976 Aug 2 2315:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1976-H1072	2442994.19	1976 Aug 3 1630:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1976-H1073	2442995.05	1976 Aug 4 1304:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1976-H1074	2442995.08	1976 Aug 4 1400:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1976-M47	2442995.10	1976 Aug 4 1426:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1976-H1075	2442995.11	1976 Aug 4 1444:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1976-H1076	2442995.13	1976 Aug 4 1510:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1976-H1077	2442995.19	1976 Aug 4 1630:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1976-H1078	2442995.19	1976 Aug 4 1630:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1976-H1079	2442995.19	1976 Aug 4 1640:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1976-Y335	2442995.21	1976 Aug 4 1700:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1976-H1081	2442995.22	1976 Aug 4 1710:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1976-Y336	2442995.33	1976 Aug 4 1956:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1976-H1082	2442995.34	1976 Aug 4 2006:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1976-H1083	2442995.38	1976 Aug 4 2104:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1976-H1084	2442995.41	1976 Aug 4 2156:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1976-Y337	2442995.42	1976 Aug 4 2210:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1976-Y338	2442995.44	1976 Aug 5 0114:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1976-H1085	2442995.55	1976 Aug 5 1220:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1976-H1086	2442996.17	1976 Aug 5 1602:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1976-Y340	2442996.50	1976 Aug 5 2354:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1976-H1087	2442997.11	1976 Aug 6 1437:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1976-H1088	2442997.15	1976 Aug 6 1530:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1976-H1089	2442997.19	1976 Aug 6 1630:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1976-H1090	2442997.19	1976 Aug 6 1630:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	OrbPay_t	Agency	Launch_Code	Group	Category	LTCite	Cite	Notes
1976-H1092	2442997.21	1976 Aug 6 17:00:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1976-H1093	2442997.25	1976 Aug 6 18:00:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1976-H1094	2442997.36	1976 Aug 6 20:32:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1976-H48	2442997.37	1976 Aug 6 20:59:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1976-H1095	2443000.07	1976 Aug 9 13:44:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1976-H1096	2443000.14	1976 Aug 9 13:45:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1976-H1097	2443000.14	1976 Aug 9 15:14:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1976-H1098	2443000.19	1976 Aug 9 16:25:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1976-H1099	2443000.19	1976 Aug 9 16:30:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1976-H1100	2443000.20	1976 Aug 9 16:44:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1976-H1101	2443000.36	1976 Aug 9 20:40:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1976-H1102	2443000.41	1976 Aug 9 21:51:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1976-H1103	2443000.41	1976 Aug 9 21:51:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1976-H1104	2443000.47	1976 Aug 9 23:15:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1976-H1105	2443002.01	1976 Aug 11 12:08:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1976-H1106	2443002.01	1976 Aug 11 12:08:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1976-H1107	2443002.08	1976 Aug 11 14:00:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1976-H1108	2443002.10	1976 Aug 11 14:30:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1976-H1109	2443002.11	1976 Aug 11 14:34:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1976-H1110	2443002.12	1976 Aug 11 15:00:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1976-H346	2443002.16	1976 Aug 11 15:55:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1976-H1111	2443002.18	1976 Aug 11 16:18:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1976-H1113	2443002.20	1976 Aug 11 16:51:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1976-H1114	2443002.21	1976 Aug 11 17:04:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1976-H1115	2443002.25	1976 Aug 11 18:00:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1976-H350	2443002.26	1976 Aug 11 18:10:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1976-H1116	2443002.40	1976 Aug 11 21:34:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1976-H1117	2443002.42	1976 Aug 11 22:00:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1976-H1118	2443002.55	1976 Aug 12 01:14:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1976-H1120	2443002.64	1976 Aug 12 03:22:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1976-H1121	2443003.13	1976 Aug 12 15:10:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1976-H1122	2443003.23	1976 Aug 12 17:30:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1976-H1123	2443003.25	1976 Aug 12 23:59:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1976-H1124	2443004.02	1976 Aug 13 12:22:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1976-H1125	2443004.50	1976 Aug 13 14:30:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1976-H1126	2443004.10	1976 Aug 13 14:48:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1976-H1127	2443004.12	1976 Aug 13 16:08:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1976-H1128	2443004.17	1976 Aug 13 17:04:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1976-H1129	2443004.21	1976 Aug 13 17:29:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1976-H1130	2443004.25	1976 Aug 13 17:29:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1976-H1131	2443004.35	1976 Aug 13 20:25:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1976-H1132	2443004.40	1976 Aug 13 21:30:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1976-H49	2443004.41	1976 Aug 13 21:45:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1976-H1134	2443007.12	1976 Aug 16 14:55:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1976-H1135	2443007.15	1976 Aug 16 18:11:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1976-H1136	2443007.14	1976 Aug 16 17:24:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1976-H1137	2443007.23	1976 Aug 16 18:00:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1976-H1138	2443007.32	1976 Aug 16 18:00:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1976-H1139	2443007.35	1976 Aug 16 21:55:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1976-H1140	2443007.51	1976 Aug 17 02:21:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1976-H1141	2443007.71	1976 Aug 17 02:45:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1976-H1142	2443007.74	1976 Aug 17 09:20:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1976-H1143	2443007.85	1976 Aug 17 09:20:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1976-H1144	2443007.89	1976 Aug 17 12:48:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1976-H1145	2443008.03	1976 Aug 17 12:48:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1976-H1146	2443008.12	1976 Aug 17 15:00:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1976-H1147	2443008.14	1976 Aug 17 15:26:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1976-H1148	2443008.21	1976 Aug 17 17:30:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1976-H1149	2443009.01	1976 Aug 18 12:11:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1976-H1150	2443009.10	1976 Aug 18 14:25:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1976-H1151	2443009.13	1976 Aug 18 15:06:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1976-H1152	2443009.13	1976 Aug 18 15:06:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1976-H1153	2443009.17	1976 Aug 18 16:04:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1976-H1154	2443009.21	1976 Aug 18 16:34:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1976-H1155	2443009.22	1976 Aug 18 17:00:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1976-H1156	2443009.24	1976 Aug 18 17:15:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1976-H356	2443009.24	1976 Aug 18 17:49:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1976-H1157	2443009.25	1976 Aug 18 18:00:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1976-H1158	2443009.32	1976 Aug 18 19:40:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1976-H1159	2443009.39	1976 Aug 18 21:19:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1976-H1160	2443009.42	1976 Aug 18 20:38:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1976-H1162	2443010.11	1976 Aug 19 14:37:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1976-H1163	2443010.12	1976 Aug 19 15:00:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1976-H1164	2443010.13	1976 Aug 19 15:10:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1976-H1165	2443010.14	1976 Aug 19 15:14:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1976-H1166	2443010.20	1976 Aug 19 16:44:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1976-H1167	2443010.20	1976 Aug 19 20:48:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1976-H60	2443010.37	1976 Aug 20 12:29:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1976-H1168	2443011.02	1976 Aug 20 15:00:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1976-H1169	2443011.14	1976 Aug 20 15:14:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1976-H1170	2443011.34	1976 Aug 20 20:04:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1976-H384	2443011.39	1976 Aug 20 21:22:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1976-H1173	2443011.55	1976 Aug 21 01:04:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1976-H1174	2443013.12	1976 Aug 22 15:00:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1976-H1175	2443014.07	1976 Aug 23 13:44:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1976-H1176	2443014.11	1976 Aug 23 14:42:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1976-H1177	2443014.13	1976 Aug 23 15:10:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-



Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Launch_t	OrbPay	Agency	Launch_Code	Group	Category	LTCite	Cite	Notes
1976-H1178	2443014.14	1976 Aug 23 15:14:59	Rocketsonde	-	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1976-H1180	2443014.18	1976 Aug 23 16:19:59	Rocketsonde	-	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1976-H1181	2443014.32	1976 Aug 23 19:44:59	Rocketsonde	-	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1976-H1182	2443014.47	1976 Aug 23 23:15:00	Rocketsonde	-	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1976-H1184	2443015.18	1976 Aug 24 16:23:59	Rocketsonde	-	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1976-H1185	2443015.20	1976 Aug 24 16:49:59	Rocketsonde	-	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1976-H1186	2443015.02	1976 Aug 25 12:23:59	Rocketsonde	-	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1976-H1187	2443016.07	1976 Aug 25 14:44:59	Rocketsonde	-	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1976-H1188	2443016.10	1976 Aug 25 14:22:00	Rocketsonde	-	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1976-H1189	2443016.14	1976 Aug 25 15:14:59	Rocketsonde	-	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1976-H1191	2443016.21	1976 Aug 25 17:00:00	Rocketsonde	-	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1976-H1193	2443016.22	1976 Aug 25 17:22:00	Rocketsonde	-	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1976-H1194	2443016.35	1976 Aug 25 20:20:00	Rocketsonde	-	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1976-H1195	2443016.36	1976 Aug 25 20:24:00	Rocketsonde	-	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1976-H1196	2443016.58	1976 Aug 26 0:48:59	Rocketsonde	-	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1976-H1198	2443017.12	1976 Aug 26 15:00:00	Rocketsonde	-	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1976-H1199	2443017.14	1976 Aug 26 15:15:59	Rocketsonde	-	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1976-H1201	2443018.03	1976 Aug 27 12:44:00	Rocketsonde	-	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1976-H1202	2443018.14	1976 Aug 27 15:20:00	Rocketsonde	-	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1976-H1203	2443018.17	1976 Aug 27 15:59:59	Rocketsonde	-	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1976-H1204	2443018.18	1976 Aug 27 16:14:59	Rocketsonde	-	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1976-H1206	2443018.19	1976 Aug 27 16:40:00	Rocketsonde	-	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1976-H1207	2443018.37	1976 Aug 27 20:49:59	Rocketsonde	-	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1976-H1209	2443019.19	1976 Aug 28 16:26:59	Rocketsonde	-	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1976-H1210	2443020.13	1976 Aug 29 15:01:59	Rocketsonde	-	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1976-H1211	2443021.03	1976 Aug 30 12:38:59	Rocketsonde	-	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1976-H1212	2443021.04	1976 Aug 30 13:03:59	Rocketsonde	-	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1976-H1213	2443021.12	1976 Aug 30 15:00:00	Rocketsonde	-	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1976-H1214	2443021.23	1976 Aug 30 17:25:00	Rocketsonde	-	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1976-H1215	2443021.36	1976 Aug 30 21:05:00	Rocketsonde	-	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1976-H1223	2443021.56	1976 Aug 31 0:11:59	Rocketsonde	-	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1976-H1224	2443021.67	1976 Aug 31 0:40:15	Rocketsonde	-	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1976-H1225	2443021.74	1976 Aug 31 0:54:10	Rocketsonde	-	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1976-H1226	2443022.13	1976 Aug 31 15:11:59	Rocketsonde	-	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1976-H1227	2443022.20	1976 Aug 31 16:44:59	Rocketsonde	-	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1976-H1228	2443022.34	1976 Aug 31 20:15:00	Rocketsonde	-	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1976-H1229	2443022.37	1976 Aug 31 20:46:00	Rocketsonde	-	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1976-H1230	2443022.36	1976 Aug 31 21:01:59	Rocketsonde	-	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1976-H1231	2443023.07	1976 Sep 1 13:44:59	Rocketsonde	-	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1976-H1232	2443023.09	1976 Sep 1 14:15:00	Rocketsonde	-	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1976-H1233	2443023.12	1976 Sep 1 14:46:00	Rocketsonde	-	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1976-H1234	2443023.13	1976 Sep 1 15:03:59	Rocketsonde	-	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1976-H1235	2443023.16	1976 Sep 1 16:14:59	Rocketsonde	-	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1976-H1237	2443023.20	1976 Sep 1 18:24:59	Rocketsonde	-	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1976-H1238	2443023.27	1976 Sep 1 19:53:00	Rocketsonde	-	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1976-H1239	2443023.33	1976 Sep 1 21:58:59	Rocketsonde	-	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1976-H1241	2443023.42	1976 Sep 1 21:59:59	Rocketsonde	-	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1976-H1242	2443023.56	1976 Sep 2 0:18:59	Rocketsonde	-	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1976-H1243	2443024.15	1976 Sep 2 15:14:59	Rocketsonde	-	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1976-H1244	2443024.16	1976 Sep 2 16:14:59	Rocketsonde	-	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1976-H1245	2443025.02	1976 Sep 2 12:53:59	Rocketsonde	-	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1976-H1246	2443025.11	1976 Sep 2 14:40:00	Rocketsonde	-	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1976-H1247	2443025.12	1976 Sep 2 15:00:00	Rocketsonde	-	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1976-H1248	2443025.14	1976 Sep 2 15:14:59	Rocketsonde	-	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1976-H1249	2443025.21	1976 Sep 2 17:02:00	Rocketsonde	-	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1976-H1251	2443025.46	1976 Sep 3 23:00:00	Rocketsonde	-	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1976-H1252	2443026.13	1976 Sep 4 0:01:59	Rocketsonde	-	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1976-H1253	2443027.12	1976 Sep 4 15:06:00	Rocketsonde	-	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1976-H1254	2443028.12	1976 Sep 4 14:55:00	Rocketsonde	-	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1976-H1255	2443029.14	1976 Sep 6 15:22:00	Rocketsonde	-	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1976-H1256	2443029.21	1976 Sep 7 15:25:59	Rocketsonde	-	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1976-H1257	2443029.22	1976 Sep 7 17:00:00	Rocketsonde	-	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1976-H1258	2443029.24	1976 Sep 7 17:15:00	Rocketsonde	-	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1976-H1259	2443029.25	1976 Sep 7 17:46:00	Rocketsonde	-	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1976-H1260	2443029.34	1976 Sep 7 20:15:00	Super Loki	-	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1976-H1261	2443029.36	1976 Sep 7 20:46:00	Rocketsonde	-	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1976-H1262	2443029.37	1976 Sep 7 23:55:00	Rocketsonde	-	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1976-H1263	2443030.05	1976 Sep 8 13:04:59	Rocketsonde	-	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1976-H1265	2443030.10	1976 Sep 8 14:30:00	Rocketsonde	-	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1976-H1266	2443030.11	1976 Sep 8 14:36:00	Rocketsonde	-	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1976-H1267	2443030.12	1976 Sep 8 15:00:00	Rocketsonde	-	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1976-H1268	2443030.13	1976 Sep 8 15:09:00	Rocketsonde	-	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1976-H1269	2443030.14	1976 Sep 8 15:20:00	Rocketsonde	-	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1976-H1270	2443030.17	1976 Sep 8 16:01:59	Rocketsonde	-	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1976-Y413	2443030.18	1976 Sep 8 16:49:59	Rocketsonde	-	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1976-H1272	2443030.20	1976 Sep 8 16:49:59	Rocketsonde	-	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1976-Y414	2443030.21	1976 Sep 8 17:00:00	Rocketsonde	-	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1976-H1273	2443030.22	1976 Sep 8 17:10:00	Rocketsonde	-	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	OrbPay	Agency	Launch_Code	Group	Category	LTCite	Cite	Notes
1976-H1274	2443030.33	1976 Sep 8 1952:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1976-H1275	2443030.40	1976 Sep 8 2133:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1976-H1276	2443030.44	1976 Sep 8 2230:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1976-H1278	2443031.03	1976 Sep 9 1247:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1976-H1280	2443031.10	1976 Sep 9 1418:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1976-H1281	2443031.11	1976 Sep 9 1445:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1976-H1283	2443031.25	1976 Sep 9 1758:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1976-H1284	2443031.31	1976 Sep 9 1930:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1976-H1286	2443032.12	1976 Sep 10 0011:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1976-H1288	2443032.15	1976 Sep 10 1448:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1976-H1289	2443032.29	1976 Sep 10 1859:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1976-H1289	2443032.33	1976 Sep 10 1951:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1976-H1290	2443032.41	1976 Sep 10 2148:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1976-H1291	2443035.01	1976 Sep 13 1209:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1976-H1292	2443035.12	1976 Sep 13 1456:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1976-H1293	2443035.12	1976 Sep 13 1600:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1976-H1294	2443035.24	1976 Sep 13 1745:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1976-H1295	2443035.26	1976 Sep 13 1810:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1976-H1296	2443035.33	1976 Sep 13 1953:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1976-H1297	2443035.15	1976 Sep 14 1530:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1976-H1299	2443037.09	1976 Sep 15 1415:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1976-H1300	2443037.09	1976 Sep 15 1530:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1976-H1301	2443037.14	1976 Sep 15 1519:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1976-H1302	2443037.14	1976 Sep 15 1514:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1976-H1304	2443037.19	1976 Sep 15 1650:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1976-H1306	2443037.20	1976 Sep 15 1700:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1976-H1306	2443037.23	1976 Sep 15 1801:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1976-H1307	2443037.26	1976 Sep 15 2009:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1976-H1308	2443037.34	1976 Sep 15 2056:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1976-H1309	2443037.37	1976 Sep 15 2109:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1976-H1309	2443037.36	1976 Sep 15 2109:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1976-H1310	2443038.14	1976 Sep 16 1521:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1976-H1311	2443038.21	1976 Sep 16 1655:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1976-H1312	2443038.55	1976 Sep 17 0449:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1976-H1313	2443039.02	1976 Sep 17 1235:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1976-H1314	2443039.15	1976 Sep 17 1530:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1976-H1315	2443039.17	1976 Sep 17 1609:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1976-H1317	2443039.21	1976 Sep 17 1700:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1976-H1318	2443039.23	1976 Sep 17 1730:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1976-H1319	2443039.26	1976 Sep 17 1826:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1976-H1320	2443039.41	1976 Sep 19 0756:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1976-H1321	2443041.82	1976 Sep 20 0659:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1976-H1322	2443042.79	1976 Sep 20 1345:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1976-H1324	2443042.01	1976 Sep 20 1359:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1976-H1325	2443042.11	1976 Sep 20 1559:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1976-H1327	2443042.17	1976 Sep 20 1859:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1976-H1328	2443042.20	1976 Sep 20 1955:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1976-H1329	2443042.26	1976 Sep 20 1915:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1976-H1331	2443042.76	1976 Sep 21 0859:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1976-H1331	2443043.12	1976 Sep 21 1449:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1976-H1333	2443043.17	1976 Sep 21 1559:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1976-H1334	2443043.21	1976 Sep 21 1700:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1976-H1335	2443043.81	1976 Sep 22 0714:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1976-H1336	2443044.00	1976 Sep 22 1033:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1976-H1337	2443044.08	1976 Sep 22 1349:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1976-H1337	2443044.26	1976 Sep 22 1419:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1976-H1338	2443044.09	1976 Sep 22 1514:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1976-H1338	2443044.14	1976 Sep 22 1604:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1976-H1340	2443044.17	1976 Sep 22 1804:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1976-H1341	2443044.20	1976 Sep 22 1844:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1976-H1342	2443044.21	1976 Sep 22 1700:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1976-H1343	2443044.25	1976 Sep 22 1800:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1976-H1344	2443044.26	1976 Sep 22 1810:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1976-H1345	2443044.31	1976 Sep 22 1923:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1976-H1345	2443044.34	1976 Sep 22 2006:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1976-H1347	2443044.57	1976 Sep 23 0141:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1976-H1348	2443045.09	1976 Sep 23 1404:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1976-H1349	2443045.12	1976 Sep 23 1455:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1976-H1350	2443045.15	1976 Sep 23 1530:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1976-H1351	2443045.17	1976 Sep 23 1559:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1976-H1352	2443045.52	1976 Sep 24 0033:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1976-H1353	2443045.79	1976 Sep 24 0659:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1976-H1354	2443046.07	1976 Sep 24 1344:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1976-H1355	2443046.14	1976 Sep 24 1514:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1976-H1356	2443046.17	1976 Sep 24 1603:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1976-H1357	2443046.17	1976 Sep 24 1609:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1976-H1359	2443046.22	1976 Sep 24 1720:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1976-H1360	2443046.23	1976 Sep 24 1725:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1976-H1361	2443046.27	1976 Sep 24 1830:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1976-H1363	2443046.79	1976 Sep 25 0659:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1976-H1364	2443047.17	1976 Sep 25 1559:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	OrbPay	Agency	Launch_Code	Group	Category	LTCite	Cite	Notes
1976-H1365	2443047.79	1976 Sep 26 0659:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteco	DSI-5850	-	-
1976-H1366	2443048.10	1976 Sep 26 1430:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteco	DSI-5850	-	-
1976-H1367	2443048.80	1976 Sep 27 0704:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteco	DSI-5850	-	-
1976-H1368	2443049.02	1976 Sep 27 1239:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteco	DSI-5850	-	-
1976-H1369	2443049.09	1976 Sep 27 1403:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteco	DSI-5850	-	-
1976-H1370	2443049.11	1976 Sep 27 1446:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteco	DSI-5850	-	-
1976-H1371	2443049.17	1976 Sep 27 1604:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteco	DSI-5850	-	-
1976-H1372	2443049.19	1976 Sep 27 1640:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteco	DSI-5850	-	-
1976-H1373	2443049.27	1976 Sep 27 1830:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteco	DSI-5850	-	-
1976-H1374	2443049.41	1976 Sep 27 2149:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteco	DSI-5850	-	-
1976-H1375	2443049.44	1976 Sep 27 2227:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteco	DSI-5850	-	-
1976-H1377	2443049.79	1976 Sep 28 0702:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteco	DSI-5850	-	-
1976-H1378	2443050.15	1976 Sep 28 1542:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteco	DSI-5850	-	-
1976-H1380	2443050.34	1976 Sep 28 2014:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteco	DSI-5850	-	-
1976-H1381	2443050.45	1976 Sep 28 2241:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteco	DSI-5850	-	-
1976-H1382	2443050.53	1976 Sep 29 0041:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteco	DSI-5850	-	-
1976-H1384	2443050.82	1976 Sep 29 0734:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteco	DSI-5850	-	-
1976-H1386	2443051.02	1976 Sep 29 1231:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteco	DSI-5850	-	-
1976-H1388	2443051.08	1976 Sep 29 1400:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteco	DSI-5850	-	-
1976-H1387	2443051.09	1976 Sep 29 1411:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteco	DSI-5850	-	-
1976-H1388	2443051.15	1976 Sep 29 1530:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteco	DSI-5850	-	-
1976-H1389	2443051.17	1976 Sep 29 1604:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteco	DSI-5850	-	-
1976-H1390	2443051.20	1976 Sep 29 1648:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteco	DSI-5850	-	-
1976-H1403	2443051.21	1976 Sep 29 1710:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteco	DSI-5850	-	-
1976-H1392	2443051.22	1976 Sep 29 1710:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteco	DSI-5850	-	-
1976-H1402	2443051.79	1976 Sep 30 0114:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteco	DSI-5850	-	-
1976-H1403	2443051.79	1976 Sep 30 0659:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteco	DSI-5850	-	-
1976-H1404	2443052.14	1976 Sep 30 1514:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteco	DSI-5850	-	-
1976-H1405	2443052.16	1976 Sep 30 1545:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteco	DSI-5850	-	-
1976-H1406	2443052.23	1976 Sep 30 1730:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteco	DSI-5850	-	-
1976-H1407	2443052.45	1976 Sep 30 2215:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteco	DSI-5850	-	-
1976-H1408	2443052.79	1976 Oct 1 0659:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteco	DSI-5850	-	-
1976-H1409	2443053.07	1976 Oct 1 1344:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteco	DSI-5850	-	-
1976-H1410	2443053.16	1976 Oct 1 1554:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteco	DSI-5850	-	-
1976-H1411	2443053.16	1976 Oct 1 1614:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteco	DSI-5850	-	-
1976-H1414	2443053.39	1976 Oct 1 1630:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteco	DSI-5850	-	-
1976-H1414	2443053.34	1976 Oct 1 2010:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteco	DSI-5850	-	-
1976-H1415	2443053.44	1976 Oct 1 2232:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteco	DSI-5850	-	-
1976-H1416	2443053.79	1976 Oct 2 0659:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteco	DSI-5850	-	-
1976-H1417	2443056.01	1976 Oct 4 1219:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteco	DSI-5850	-	-
1976-H1418	2443056.10	1976 Oct 4 1420:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteco	DSI-5850	-	-
1976-H1419	2443056.11	1976 Oct 4 1446:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteco	DSI-5850	-	-
1976-H1420	2443056.17	1976 Oct 4 1606:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteco	DSI-5850	-	-
1976-H1421	2443056.16	1976 Oct 4 1614:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteco	DSI-5850	-	-
1976-H1422	2443056.20	1976 Oct 4 1624:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteco	DSI-5850	-	-
1976-H1423	2443056.29	1976 Oct 4 1652:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteco	DSI-5850	-	-
1976-H1424	2443056.36	1976 Oct 4 2043:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteco	DSI-5850	-	-
1976-H1425	2443056.36	1976 Oct 4 2043:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteco	DSI-5850	-	-
1976-H1427	2443057.14	1976 Oct 5 1522:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteco	DSI-5850	-	-
1976-H1428	2443058.07	1976 Oct 6 1344:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteco	DSI-5850	-	-
1976-H1429	2443058.09	1976 Oct 6 1409:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteco	DSI-5850	-	-
1976-H432	2443058.13	1976 Oct 6 1504:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteco	DSI-5850	-	-
1976-H433	2443058.13	1976 Oct 6 1504:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteco	DSI-5850	-	-
1976-H434	2443058.14	1976 Oct 6 1518:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteco	DSI-5850	-	-
1976-H435	2443058.17	1976 Oct 6 1604:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteco	DSI-5850	-	-
1976-H436	2443058.16	1976 Oct 6 1624:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteco	DSI-5850	-	-
1976-H437	2443058.28	1976 Oct 6 1820:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteco	DSI-5850	-	-
1976-H438	2443058.28	1976 Oct 6 1845:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteco	DSI-5850	-	-
1976-H439	2443058.30	1976 Oct 6 1909:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteco	DSI-5850	-	-
1976-H440	2443058.33	1976 Oct 6 1952:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteco	DSI-5850	-	-
1976-H441	2443059.04	1976 Oct 7 0114:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteco	DSI-5850	-	-
1976-H442	2443059.13	1976 Oct 7 1252:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteco	DSI-5850	-	-
1976-H443	2443059.25	1976 Oct 7 1510:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteco	DSI-5850	-	-
1976-H444	2443059.25	1976 Oct 7 1800:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteco	DSI-5850	-	-
1976-H445	2443059.33	1976 Oct 7 2000:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteco	DSI-5850	-	-
1976-H446	2443059.39	1976 Oct 7 2120:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteco	DSI-5850	-	-
1976-H447	2443060.06	1976 Oct 8 1330:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteco	DSI-5850	-	-
1976-H448	2443060.11	1976 Oct 8 1440:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteco	DSI-5850	-	-
1976-H449	2443060.17	1976 Oct 8 1559:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteco	DSI-5850	-	-
1976-H450	2443060.19	1976 Oct 8 1630:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteco	DSI-5850	-	-
1976-H451	2443060.54	1976 Oct 9 0059:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteco	DSI-5850	-	-
1976-H452	2443063.13	1976 Oct 11 1504:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteco	DSI-5850	-	-
1976-H453	2443063.15	1976 Oct 11 1530:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteco	DSI-5850	-	-
1976-H454	2443064.16	1976 Oct 12 1552:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteco	DSI-5850	-	-
1976-H455	2443064.23	1976 Oct 12 1730:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteco	DSI-5850	-	-
1976-H456	2443064.33	1976 Oct 12 2001:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteco	DSI-5850	-	-
1976-H457	2443064.42	1976 Oct 12 2144:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteco	DSI-5850	-	-
1976-H458	2443065.07	1976 Oct 13 1344:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteco	DSI-5850	-	-
1976-H459	2443065.09	1976 Oct 13 1407:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteco	DSI-5850	-	-
1976-H460	2443065.10	1976 Oct 13 1430:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteco	DSI-5850	-	-
1976-H461	2443065.13	1976 Oct 13 1503:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteco	DSI-5850	-	-
1976-H462	2443065.17	1976 Oct 13 1558:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteco	DSI-5850	-	-
1976-H463	2443065.17	1976 Oct 13 1604:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteco	DSI-5850	-	-
1976-H464	2443065.20	1976 Oct 13 1651:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteco	DSI-5850	-	-

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Launch_t	OrbPay	Agency	Launch_Code	Group	Category	LTCite	Cite	Notes
1976-H1464	2443065.21	1976 Oct 13 1655:59	Rocketsonde	-	-	0.000	HRN	SS	-	-	Meteo	DSI-5850	-	-
1976-H1465	2443065.22	1976 Oct 13 1710:00	Rocketsonde	-	-	0.000	HRN	SS	-	-	Meteo	DSI-5850	-	-
1976-H466	2443065.22	1976 Oct 13 1712:00	Rocketsonde	-	-	0.000	HRN	SS	-	-	Meteo	DSI-5850	-	-
1976-H466	2443065.25	1976 Oct 13 1804:59	Rocketsonde	-	-	0.000	HRN	SS	-	-	Meteo	DSI-5850	-	-
1976-H466	2443065.26	1976 Oct 13 1814:59	Rocketsonde	-	-	0.000	HRN	SS	-	-	Meteo	DSI-5850	-	-
1976-H467	2443065.26	1976 Oct 13 1814:59	Rocketsonde	-	-	0.000	HRN	SS	-	-	Meteo	DSI-5850	-	-
1976-H467	2443065.26	1976 Oct 13 1815:59	Rocketsonde	-	-	0.000	HRN	SS	-	-	Meteo	DSI-5850	-	-
1976-H468	2443065.34	1976 Oct 13 2015:59	Rocketsonde	-	-	0.000	HRN	SS	-	-	Meteo	DSI-5850	-	-
1976-H469	2443065.38	1976 Oct 13 2110:00	Rocketsonde	-	-	0.000	HRN	SS	-	-	Meteo	DSI-5850	-	-
1976-H470	2443065.40	1976 Oct 13 2138:59	Rocketsonde	-	-	0.000	HRN	SS	-	-	Meteo	DSI-5850	-	-
1976-H471	2443065.40	1976 Oct 13 2141:00	Rocketsonde	-	-	0.000	HRN	SS	-	-	Meteo	DSI-5850	-	-
1976-H472	2443065.05	1976 Oct 14 1304:59	Rocketsonde	-	-	0.000	HRN	SS	-	-	Meteo	DSI-5850	-	-
1976-H473	2443065.55	1976 Oct 15 0114:59	Rocketsonde	-	-	0.000	HRN	SS	-	-	Meteo	DSI-5850	-	-
1976-H473	2443067.03	1976 Oct 15 1238:59	Rocketsonde	-	-	0.000	HRN	SS	-	-	Meteo	DSI-5850	-	-
1976-H474	2443067.10	1976 Oct 15 1428:00	Rocketsonde	-	-	0.000	HRN	SS	-	-	Meteo	DSI-5850	-	-
1976-H475	2443067.10	1976 Oct 15 1428:59	Rocketsonde	-	-	0.000	HRN	SS	-	-	Meteo	DSI-5850	-	-
1976-H476	2443067.10	1976 Oct 15 1430:00	Rocketsonde	-	-	0.000	HRN	SS	-	-	Meteo	DSI-5850	-	-
1976-H478	2443067.19	1976 Oct 15 1634:59	Rocketsonde	-	-	0.000	HRN	SS	-	-	Meteo	DSI-5850	-	-
1976-H479	2443067.32	1976 Oct 15 1941:00	Rocketsonde	-	-	0.000	HRN	SS	-	-	Meteo	DSI-5850	-	-
1976-H480	2443067.36	1976 Oct 15 2034:00	Rocketsonde	-	-	0.000	HRN	SS	-	-	Meteo	DSI-5850	-	-
1976-H481	2443067.49	1976 Oct 15 2058:00	Rocketsonde	-	-	0.000	HRN	SS	-	-	Meteo	DSI-5850	-	-
1976-H482	2443067.49	1976 Oct 15 2344:00	Rocketsonde	-	-	0.000	HRN	SS	-	-	Meteo	DSI-5850	-	-
1976-H484	2443070.09	1976 Oct 18 1440:59	Rocketsonde	-	-	0.000	HRN	SS	-	-	Meteo	DSI-5850	-	-
1976-H485	2443070.11	1976 Oct 18 1445:00	Rocketsonde	-	-	0.000	HRN	SS	-	-	Meteo	DSI-5850	-	-
1976-H486	2443070.16	1976 Oct 18 1549:59	Rocketsonde	-	-	0.000	HRN	SS	-	-	Meteo	DSI-5850	-	-
1976-H487	2443070.19	1976 Oct 18 1636:59	Rocketsonde	-	-	0.000	HRN	SS	-	-	Meteo	DSI-5850	-	-
1976-H488	2443070.23	1976 Oct 18 1730:00	Rocketsonde	-	-	0.000	HRN	SS	-	-	Meteo	DSI-5850	-	-
1976-H489	2443070.53	1976 Oct 19 0043:00	Rocketsonde	-	-	0.000	HRN	SS	-	-	Meteo	DSI-5850	-	-
1976-H491	2443071.25	1976 Oct 19 1800:59	Rocketsonde	-	-	0.000	HRN	SS	-	-	Meteo	DSI-5850	-	-
1976-H493	2443072.07	1976 Oct 20 1344:59	Rocketsonde	-	-	0.000	HRN	SS	-	-	Meteo	DSI-5850	-	-
1976-H494	2443072.10	1976 Oct 20 1429:00	Rocketsonde	-	-	0.000	HRN	SS	-	-	Meteo	DSI-5850	-	-
1976-H495	2443072.12	1976 Oct 20 1446:00	Rocketsonde	-	-	0.000	HRN	SS	-	-	Meteo	DSI-5850	-	-
1976-H467	2443072.12	1976 Oct 20 1500:00	Rocketsonde	-	-	0.000	HRN	SS	-	-	Meteo	DSI-5850	-	-
1976-H496	2443072.12	1976 Oct 20 1500:00	Rocketsonde	-	-	0.000	HRN	SS	-	-	Meteo	DSI-5850	-	-
1976-H497	2443072.15	1976 Oct 20 1500:00	Rocketsonde	-	-	0.000	HRN	SS	-	-	Meteo	DSI-5850	-	-
1976-H466	2443072.15	1976 Oct 20 1540:00	Rocketsonde	-	-	0.000	HRN	SS	-	-	Meteo	DSI-5850	-	-
1976-H499	2443072.16	1976 Oct 20 1619:59	Rocketsonde	-	-	0.000	HRN	SS	-	-	Meteo	DSI-5850	-	-
1976-H500	2443072.23	1976 Oct 20 1730:00	Rocketsonde	-	-	0.000	HRN	SS	-	-	Meteo	DSI-5850	-	-
1976-H501	2443072.33	1976 Oct 20 1944:59	Rocketsonde	-	-	0.000	HRN	SS	-	-	Meteo	DSI-5850	-	-
1976-H502	2443072.45	1976 Oct 20 2214:59	Rocketsonde	-	-	0.000	HRN	SS	-	-	Meteo	DSI-5850	-	-
1976-H503	2443072.50	1976 Oct 21 0005:59	Rocketsonde	-	-	0.000	HRN	SS	-	-	Meteo	DSI-5850	-	-
1976-H504	2443072.56	1976 Oct 21 0356:59	Rocketsonde	-	-	0.000	HRN	SS	-	-	Meteo	DSI-5850	-	-
1976-H506	2443073.25	1976 Oct 21 1300:59	Rocketsonde	-	-	0.000	HRN	SS	-	-	Meteo	DSI-5850	-	-
1976-H507	2443074.04	1976 Oct 22 1300:59	Rocketsonde	-	-	0.000	HRN	SS	-	-	Meteo	DSI-5850	-	-
1976-H508	2443074.07	1976 Oct 22 1344:59	Rocketsonde	-	-	0.000	HRN	SS	-	-	Meteo	DSI-5850	-	-
1976-H509	2443074.11	1976 Oct 22 1456:00	Rocketsonde	-	-	0.000	HRN	SS	-	-	Meteo	DSI-5850	-	-
1976-H510	2443074.12	1976 Oct 22 1900:00	Rocketsonde	-	-	0.000	HRN	SS	-	-	Meteo	DSI-5850	-	-
1976-H511	2443074.17	1976 Oct 22 1554:59	Rocketsonde	-	-	0.000	HRN	SS	-	-	Meteo	DSI-5850	-	-
1976-H512	2443074.17	1976 Oct 22 1917:00	Rocketsonde	-	-	0.000	HRN	SS	-	-	Meteo	DSI-5850	-	-
1976-H513	2443074.26	1976 Oct 22 2311:59	Rocketsonde	-	-	0.000	HRN	SS	-	-	Meteo	DSI-5850	-	-
1976-H514	2443074.42	1976 Oct 22 2344:59	Rocketsonde	-	-	0.000	HRN	SS	-	-	Meteo	DSI-5850	-	-
1976-H515	2443075.49	1976 Oct 23 2030:00	Rocketsonde	-	-	0.000	HRN	SS	-	-	Meteo	DSI-5850	-	-
1976-H515	2443075.35	1976 Oct 25 1534:59	Rocketsonde	-	-	0.000	HRN	SS	-	-	Meteo	DSI-5850	-	-
1976-H519	2443077.15	1976 Oct 26 1757:00	Rocketsonde	-	-	0.000	HRN	SS	-	-	Meteo	DSI-5850	-	-
1976-H520	2443078.08	1976 Oct 26 1800:00	Rocketsonde	-	-	0.000	HRN	SS	-	-	Meteo	DSI-5850	-	-
1976-H521	2443078.25	1976 Oct 26 1954:59	Rocketsonde	-	-	0.000	HRN	SS	-	-	Meteo	DSI-5850	-	-
1976-H522	2443078.36	1976 Oct 26 2044:00	Rocketsonde	-	-	0.000	HRN	SS	-	-	Meteo	DSI-5850	-	-
1976-H523	2443078.36	1976 Oct 26 2137:59	Rocketsonde	-	-	0.000	HRN	SS	-	-	Meteo	DSI-5850	-	-
1976-H524	2443078.43	1976 Oct 26 2214:59	Rocketsonde	-	-	0.000	HRN	SS	-	-	Meteo	DSI-5850	-	-
1976-H525	2443078.44	1976 Oct 26 2232:59	Rocketsonde	-	-	0.000	HRN	SS	-	-	Meteo	DSI-5850	-	-
1976-H526	2443079.06	1976 Oct 27 1319:59	Rocketsonde	-	-	0.000	HRN	SS	-	-	Meteo	DSI-5850	-	-
1976-H527	2443079.07	1976 Oct 27 1344:59	Rocketsonde	-	-	0.000	HRN	SS	-	-	Meteo	DSI-5850	-	-
1976-H528	2443079.08	1976 Oct 27 1400:00	Rocketsonde	-	-	0.000	HRN	SS	-	-	Meteo	DSI-5850	-	-
1976-H529	2443079.09	1976 Oct 27 1404:59	Rocketsonde	-	-	0.000	HRN	SS	-	-	Meteo	DSI-5850	-	-
1976-H530	2443079.11	1976 Oct 27 1443:00	Rocketsonde	-	-	0.000	HRN	SS	-	-	Meteo	DSI-5850	-	-
1976-H531	2443079.14	1976 Oct 27 1514:59	Rocketsonde	-	-	0.000	HRN	SS	-	-	Meteo	DSI-5850	-	-
1976-H532	2443079.14	1976 Oct 27 1514:59	Rocketsonde	-	-	0.000	HRN	SS	-	-	Meteo	DSI-5850	-	-
1976-H478	2443079.25	1976 Oct 27 1800:00	Rocketsonde	-	-	0.000	HRN	SS	-	-	Meteo	DSI-5850	-	-
1976-H534	2443079.26	1976 Oct 27 1810:00	Rocketsonde	-	-	0.000	HRN	SS	-	-	Meteo	DSI-5850	-	-
1976-H535	2443079.35	1976 Oct 27 2025:00	Rocketsonde	-	-	0.000	HRN	SS	-	-	Meteo	DSI-5850	-	-
1976-H479	2443079.40	1976 Oct 27 2133:59	Rocketsonde	-	-	0.000	HRN	SS	-	-	Meteo	DSI-5850	-	-
1976-H536	2443079.41	1976 Oct 27 2147:59	Rocketsonde	-	-	0.000	HRN	SS	-	-	Meteo	DSI-5850	-	-
1976-H537	2443079.55	1976 Oct 28 0114:59	Rocketsonde	-	-	0.000	HRN	SS	-	-	Meteo	DSI-5850	-	-
1976-H539	2443080.02	1976 Oct 28 1227:59	Rocketsonde	-	-	0.000	HRN	SS	-	-	Meteo	DSI-5850	-	-
1976-H540	2443080.49	1976 Oct 28 2349:59	Rocketsonde	-	-	0.000	HRN	SS	-	-	Meteo	DSI-5850	-	-
1976-H541	2443081.11	1976 Oct 29 1442:00	Rocketsonde	-	-	0.000	HRN	SS	-	-	Meteo	DSI-5850	-	-
1976-H542	2443081.12	1976 Oct 29 1452:00	Rocketsonde	-	-	0.000	HRN	SS	-	-	Meteo	DSI-5850	-	-
1976-H543	2443081.14	1976 Oct 29 1515:59	Rocketsonde	-	-	0.000	HRN	SS	-	-	Meteo	DSI-5850	-	-
1976-H544	2443081.15	1976 Oct 29 1530:00	Rocketsonde	-	-	0.000	HRN	SS	-	-	Meteo	DSI-5850	-	-
1976-H545	2443081.16	1976 Oct 29 1545:00	Rocketsonde	-	-	0.000	HRN	SS	-	-	Meteo	DSI-5850	-	-
1976-H547	2443081.22	1976 Oct 29 1715:00	Rocketsonde	-	-	0.000	HRN	SS	-	-	Meteo	DSI-5850	-	-
1976-H480	2443081.32	1976 Oct 29 1857:59	Rocketsonde	-	-	0.000	HRN	SS	-	-	Meteo	DSI-5850	-	-
1976-H548	2443081.32	1976 Oct 29 1946:59	Rocketsonde	-	-	0.000	HRN	SS	-	-	Meteo	DSI-5850	-	-
1976-H549	2443081.38	1976 Oct 29 2100:00	Rocketsonde	-	-	0.000	HRN	SS	-	-	Meteo	DSI-5850	-	-
1976-H550	2443081.38	1976 Oct 29 2101:59	Rocketsonde	-	-	0.000	HRN	SS	-	-	Meteo	DSI-5850	-	-

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Launch_t	Agency	Launch_Code	Group	Category	LTCite	Cite	Notes
1976-H1551	2443081.42	1976 Oct 29 21:59:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteco	DSI-5850	-	-
1976-H1552	2443081.52	1976 Oct 30 00:30:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteco	DSI-5850	-	-
1976-H1557	2443084.02	1976 Nov 1 12:33:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteco	DSI-5850	-	-
1976-H1568	2443084.10	1976 Nov 1 14:20:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteco	DSI-5850	-	-
1976-H1569	2443084.16	1976 Nov 1 16:45:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteco	DSI-5850	-	-
1976-H1570	2443084.19	1976 Nov 1 16:54:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteco	DSI-5850	-	-
1976-H1572	2443084.24	1976 Nov 1 17:49:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteco	DSI-5850	-	-
1976-H1573	2443084.28	1976 Nov 1 18:36:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteco	DSI-5850	-	-
1976-H1574	2443084.29	1976 Nov 1 18:54:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteco	DSI-5850	-	-
1976-H1575	2443084.36	1976 Nov 1 20:30:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteco	DSI-5850	-	-
1976-H1576	2443084.46	1976 Nov 1 23:00:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteco	DSI-5850	-	-
1976-H1577	2443084.47	1976 Nov 1 23:15:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteco	DSI-5850	-	-
1976-H1578	2443085.13	1976 Nov 2 15:04:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteco	DSI-5850	-	-
1976-H1579	2443086.07	1976 Nov 3 13:44:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteco	DSI-5850	-	-
1976-H1580	2443086.09	1976 Nov 3 14:03:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteco	DSI-5850	-	-
1976-H1581	2443086.14	1976 Nov 3 15:24:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteco	DSI-5850	-	-
1976-H1582	2443086.17	1976 Nov 3 15:59:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteco	DSI-5850	-	-
1976-H1583	2443086.23	1976 Nov 3 17:15:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteco	DSI-5850	-	-
1976-H1584	2443086.23	1976 Nov 3 17:34:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteco	DSI-5850	-	-
1976-H1585	2443086.29	1976 Nov 3 18:59:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteco	DSI-5850	-	-
1976-H1586	2443086.31	1976 Nov 3 19:30:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteco	DSI-5850	-	-
1976-H1587	2443086.32	1976 Nov 3 19:44:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteco	DSI-5850	-	-
1976-H1588	2443086.40	1976 Nov 3 21:43:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteco	DSI-5850	-	-
1976-H1589	2443087.02	1976 Nov 4 12:29:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteco	DSI-5850	-	-
1976-H1590	2443087.15	1976 Nov 4 15:54:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteco	DSI-5850	-	-
1976-H1592	2443088.12	1976 Nov 5 15:00:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteco	DSI-5850	-	-
1976-H1594	2443088.16	1976 Nov 5 15:46:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteco	DSI-5850	-	-
1976-H1599	2443088.21	1976 Nov 5 17:00:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteco	DSI-5850	-	-
1976-H1600	2443088.22	1976 Nov 5 17:15:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteco	DSI-5850	-	-
1976-H1601	2443088.23	1976 Nov 5 17:30:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteco	DSI-5850	-	-
1976-H1602	2443088.29	1976 Nov 5 18:59:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteco	DSI-5850	-	-
1976-H1606	2443088.34	1976 Nov 5 20:15:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteco	DSI-5850	-	-
1976-H1609	2443088.36	1976 Nov 5 21:10:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteco	DSI-5850	-	-
1976-H1610	2443088.50	1976 Nov 5 23:57:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteco	DSI-5850	-	-
1976-H1611	2443091.07	1976 Nov 8 13:44:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteco	DSI-5850	-	-
1976-H1612	2443091.12	1976 Nov 8 15:00:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteco	DSI-5850	-	-
1976-H1613	2443091.16	1976 Nov 8 16:14:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteco	DSI-5850	-	-
1976-H1614	2443091.16	1976 Nov 8 16:20:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteco	DSI-5850	-	-
1976-H1615	2443091.16	1976 Nov 8 16:23:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteco	DSI-5850	-	-
1976-H1616	2443091.27	1976 Nov 8 16:53:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteco	DSI-5850	-	-
1976-H1617	2443091.36	1976 Nov 8 21:00:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteco	DSI-5850	-	-
1976-H1618	2443091.39	1976 Nov 8 21:12:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteco	DSI-5850	-	-
1976-H1619	2443093.47	1976 Nov 8 23:12:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteco	DSI-5850	-	-
1976-H1620	2443093.07	1976 Nov 10 13:44:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteco	DSI-5850	-	-
1976-H1621	2443093.09	1976 Nov 10 13:29:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteco	DSI-5850	-	-
1976-H1622	2443093.11	1976 Nov 10 14:46:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteco	DSI-5850	-	-
1976-H1623	2443093.11	1976 Nov 10 15:34:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteco	DSI-5850	-	-
1976-H1624	2443093.15	1976 Nov 10 18:14:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteco	DSI-5850	-	-
1976-H1625	2443093.19	1976 Nov 10 18:29:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteco	DSI-5850	-	-
1976-H1626	2443093.21	1976 Nov 10 18:30:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteco	DSI-5850	-	-
1976-H1627	2443093.21	1976 Nov 10 17:00:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteco	DSI-5850	-	-
1976-H1628	2443093.22	1976 Nov 10 17:15:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteco	DSI-5850	-	-
1976-H1629	2443093.33	1976 Nov 10 19:19:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteco	DSI-5850	-	-
1976-H1630	2443093.33	1976 Nov 10 20:00:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteco	DSI-5850	-	-
1976-H1631	2443093.36	1976 Nov 10 21:00:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteco	DSI-5850	-	-
1976-H1632	2443093.40	1976 Nov 10 21:31:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteco	DSI-5850	-	-
1976-H1633	2443093.44	1976 Nov 11 00:59:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteco	DSI-5850	-	-
1976-H1634	2443093.55	1976 Nov 11 00:59:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteco	DSI-5850	-	-
1976-H1635	2443094.04	1976 Nov 11 01:14:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteco	DSI-5850	-	-
1976-H1636	2443094.21	1976 Nov 11 12:59:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteco	DSI-5850	-	-
1976-H1637	2443095.03	1976 Nov 12 17:04:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteco	DSI-5850	-	-
1976-H1638	2443095.11	1976 Nov 12 12:41:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteco	DSI-5850	-	-
1976-H1639	2443095.11	1976 Nov 12 14:45:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteco	DSI-5850	-	-
1976-H1640	2443095.14	1976 Nov 12 15:01:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteco	DSI-5850	-	-
1976-H1641	2443095.14	1976 Nov 12 15:24:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteco	DSI-5850	-	-
1976-H1642	2443095.23	1976 Nov 12 18:26:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteco	DSI-5850	-	-
1976-H1643	2443095.31	1976 Nov 12 17:29:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteco	DSI-5850	-	-
1976-H1644	2443095.41	1976 Nov 12 21:45:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteco	DSI-5850	-	-
1976-H1645	2443095.50	1976 Nov 12 23:57:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteco	DSI-5850	-	-
1976-H1646	2443095.54	1976 Nov 13 00:59:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteco	DSI-5850	-	-
1976-H1647	2443095.77	1976 Nov 13 08:30:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteco	DSI-5850	-	-
1976-H1648	2443098.07	1976 Nov 15 13:44:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteco	DSI-5850	-	-
1976-H1649	2443098.10	1976 Nov 15 14:18:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteco	DSI-5850	-	-
1976-H1650	2443098.15	1976 Nov 15 15:34:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteco	DSI-5850	-	-
1976-H1651	2443098.18	1976 Nov 15 16:24:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteco	DSI-5850	-	-
1976-H1652	2443098.20	1976 Nov 15 16:51:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteco	DSI-5850	-	-
1976-H1653	2443098.28	1976 Nov 15 18:45:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteco	DSI-5850	-	-
1976-H1654	2443098.47	1976 Nov 15 18:45:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteco	DSI-5850	-	-
1976-H1655	2443098.54	1976 Nov 16 00:59:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteco	DSI-5850	-	-
1976-H1656	2443098.73	1976 Nov 16 05:30:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteco	DSI-5850	-	-
1976-H1657	2443100.03	1976 Nov 17 12:45:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteco	DSI-5850	-	-
1976-H1658	2443100.05	1976 Nov 17 13:14:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteco	DSI-5850	-	-

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	OrbPay_t	Agency	Launch_Code	Group	Category	LTCite	Cite	Notes
1976-H1653	2443100.12	1976 Nov 17 1500:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1976-H1654	2443100.14	1976 Nov 17 1514:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1976-H1655	2443100.15	1976 Nov 17 1533:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1976-H1656	2443100.19	1976 Nov 17 1637:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1976-H1657	2443100.22	1976 Nov 17 1715:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1976-H1658	2443100.23	1976 Nov 17 1731:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1976-H1659	2443100.25	1976 Nov 17 1732:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1976-H1660	2443100.30	1976 Nov 17 1904:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1976-H1661	2443100.39	1976 Nov 17 1914:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1976-H1662	2443100.41	1976 Nov 17 2125:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1976-H1663	2443100.49	1976 Nov 17 2348:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1976-H1664	2443100.69	1976 Nov 18 0430:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1976-H1665	2443101.01	1976 Nov 18 1210:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1976-H1666	2443102.13	1976 Nov 19 1504:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1976-H1667	2443102.19	1976 Nov 19 1507:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1976-H1668	2443102.20	1976 Nov 19 1648:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1976-H1669	2443102.29	1976 Nov 19 1654:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1976-H1670	2443102.40	1976 Nov 19 2137:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1976-H1671	2443103.75	1976 Nov 21 0600:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1976-H1672	2443105.14	1976 Nov 22 1248:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1976-H1673	2443105.19	1976 Nov 22 1520:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1976-H1674	2443105.20	1976 Nov 22 1630:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1976-H1675	2443105.28	1976 Nov 22 1646:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1976-H1676	2443105.45	1976 Nov 22 1915:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1976-H1677	2443105.47	1976 Nov 22 2252:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1976-H1678	2443105.75	1976 Nov 22 2311:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1976-H1679	2443106.20	1976 Nov 23 0630:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1976-H1680	2443106.24	1976 Nov 23 0649:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1976-H1681	2443107.05	1976 Nov 24 1314:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1976-H1682	2443107.12	1976 Nov 24 1544:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1976-H1683	2443107.16	1976 Nov 24 1559:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1976-H1684	2443107.17	1976 Nov 24 1545:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1976-H1685	2443107.21	1976 Nov 24 1648:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1976-H1686	2443107.25	1976 Nov 24 1705:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1976-H1687	2443107.24	1976 Nov 24 1730:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1976-H1688	2443107.25	1976 Nov 24 1826:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1976-H1689	2443107.32	1976 Nov 24 1935:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1976-H1690	2443107.36	1976 Nov 24 2100:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1976-H1691	2443107.39	1976 Nov 24 2145:00	Super Loki	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1976-H1692	2443108.12	1976 Nov 26 0900:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1976-H1693	2443108.86	1976 Nov 26 0900:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1976-H1694	2443109.15	1976 Nov 26 1534:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1976-H1695	2443109.20	1976 Nov 26 1540:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1976-H1696	2443109.21	1976 Nov 26 1654:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1976-H1697	2443109.55	1976 Nov 26 1700:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1976-H1698	2443111.75	1976 Nov 27 0114:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1976-H1699	2443111.75	1976 Nov 29 0530:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1976-H1700	2443112.10	1976 Nov 29 1417:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1976-H1701	2443112.10	1976 Nov 29 1631:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1976-H1702	2443112.19	1976 Nov 29 1840:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1976-H1703	2443112.21	1976 Nov 29 1704:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1976-H1704	2443112.22	1976 Nov 29 1715:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1976-H1705	2443112.28	1976 Nov 29 1943:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1976-H1706	2443112.42	1976 Nov 29 2311:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1976-H1707	2443112.47	1976 Nov 29 2311:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1976-H1708	2443113.02	1976 Nov 30 1934:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1976-H1709	2443113.35	1976 Nov 30 2030:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1976-H1710	2443113.72	1976 Dec 1 0515:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1976-H1711	2443114.07	1976 Dec 1 1344:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1976-H1712	2443114.10	1976 Dec 1 1426:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1976-H1713	2443114.12	1976 Dec 1 1449:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1976-H1714	2443114.13	1976 Dec 1 1513:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1976-H1715	2443114.14	1976 Dec 1 1517:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1976-H1716	2443114.15	1976 Dec 1 1534:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1976-H1717	2443114.16	1976 Dec 1 1556:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1976-H1718	2443114.19	1976 Dec 1 1630:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1976-H1719	2443114.20	1976 Dec 1 1634:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1976-H1720	2443114.25	1976 Dec 1 1800:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1976-H1721	2443114.26	1976 Dec 1 1810:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1976-H1722	2443114.28	1976 Dec 1 2358:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1976-H1723	2443115.05	1976 Dec 2 1800:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1976-H1724	2443115.15	1976 Dec 2 1912:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1976-H1725	2443115.41	1976 Dec 2 2147:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1976-H1726	2443116.09	1976 Dec 3 1415:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1976-H1727	2443116.10	1976 Dec 3 1430:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1976-H1728	2443116.12	1976 Dec 3 1451:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1976-H1729	2443116.15	1976 Dec 3 1534:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-







Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	OrbPay_t	Agency	Launch_Code	Group	Category	LTCite	Cite	Notes
1977-H1062	2443318-01	1977 Jun 23 1209:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1977-H1063	2443318-13	1977 Jun 23 1501:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1977-H1064	2443318-40	1977 Jun 23 2130:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1977-H1065	2443318-47	1977 Jun 23 2233:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1977-H1066	2443319-10	1977 Jun 24 1423:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1977-H1067	2443319-13	1977 Jun 24 1504:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1977-H1068	2443319-14	1977 Jun 24 1514:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1977-H1069	2443319-17	1977 Jun 24 1559:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1977-H1070	2443319-21	1977 Jun 24 1708:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1977-H1071	2443319-26	1977 Jun 24 1814:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1977-H1072	2443319-34	1977 Jun 24 2004:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1977-H1073	2443319-48	1977 Jun 24 2226:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1977-H1074	2443320-47	1977 Jun 25 2319:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1977-H1075	2443321-47	1977 Jun 26 2322:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1977-H1076	2443322-03	1977 Jun 27 1245:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1977-H1077	2443322-09	1977 Jun 27 1403:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1977-H1078	2443322-13	1977 Jun 27 1510:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1977-H1079	2443322-14	1977 Jun 27 1524:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1977-H1080	2443322-27	1977 Jun 27 1624:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1977-H1081	2443322-27	1977 Jun 27 1653:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1977-H1082	2443322-36	1977 Jun 27 2030:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1977-H1083	2443322-36	1977 Jun 27 2344:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1977-H1084	2443322-49	1977 Jun 28 0030:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1977-H1085	2443322-52	1977 Jun 28 0500:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1977-H1086	2443323-12	1977 Jun 28 1500:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1977-H1087	2443323-50	1977 Jun 28 2359:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1977-H1088	2443323-50	1977 Jun 29 0000:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1977-H1089	2443324-07	1977 Jun 29 1344:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1977-H1092	2443324-10	1977 Jun 29 1426:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1977-H1093	2443324-11	1977 Jun 29 1446:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1977-H1094	2443324-12	1977 Jun 29 1453:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1977-H1096	2443324-16	1977 Jun 29 1514:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1977-H1097	2443324-16	1977 Jun 29 1549:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1977-H1098	2443324-17	1977 Jun 29 1559:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1977-H1099	2443324-25	1977 Jun 29 1800:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1977-H1099	2443324-26	1977 Jun 29 1810:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1977-H1099	2443324-29	1977 Jun 29 1903:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1977-H1100	2443324-31	1977 Jun 29 2225:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1977-H1103	2443324-47	1977 Jun 29 2315:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1977-H1103	2443324-50	1977 Jun 30 0000:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1977-H1104	2443325-01	1977 Jun 30 1221:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1977-H1106	2443325-17	1977 Jun 30 1857:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1977-H1106	2443325-26	1977 Jun 30 1820:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1977-H1107	2443325-35	1977 Jun 30 2030:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1977-H1108	2443325-47	1977 Jun 30 2315:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1977-H1108	2443325-50	1977 Jul 1 0006:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1977-H1109	2443325-51	1977 Jul 1 1706:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1977-H1111	2443326-21	1977 Jul 1 1706:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1977-H1111	2443326-25	1977 Jul 1 1825:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1977-H1112	2443326-25	1977 Jul 1 2315:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1977-H1113	2443327-47	1977 Jul 2 0315:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1977-H1113	2443328-47	1977 Jul 2 0315:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1977-H1115	2443329-13	1977 Jul 4 1507:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1977-H1116	2443329-43	1977 Jul 4 2345:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1977-H1117	2443330-21	1977 Jul 5 1700:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1977-H1119	2443330-21	1977 Jul 5 1700:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1977-H1119	2443330-25	1977 Jul 5 1800:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1977-H1120	2443330-35	1977 Jul 5 2137:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1977-H1121	2443330-48	1977 Jul 5 2329:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1977-H1122	2443330-50	1977 Jul 6 0000:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1977-H1123	2443331-11	1977 Jul 6 1440:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1977-H1124	2443331-11	1977 Jul 6 1445:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1977-H1125	2443331-13	1977 Jul 6 1456:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1977-H1127	2443331-12	1977 Jul 6 1507:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1977-H1129	2443331-25	1977 Jul 6 1800:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1977-H1130	2443331-33	1977 Jul 6 1954:59	Super Lock	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1977-H1131	2443331-38	1977 Jul 6 2106:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1977-H1131	2443331-40	1977 Jul 6 2131:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1977-H1132	2443331-47	1977 Jul 6 2315:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1977-H1133	2443331-50	1977 Jul 7 0000:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1977-H1134	2443332-47	1977 Jul 7 2035:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1977-H1136	2443332-50	1977 Jul 8 0000:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1977-H1136	2443332-57	1977 Jul 8 2318:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1977-H1137	2443333-08	1977 Jul 8 1354:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1977-H1137	2443333-14	1977 Jul 8 1524:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1977-H1138	2443333-24	1977 Jul 8 1745:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1977-H139	2443333-36	1977 Jul 8 2040:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1977-H1140	2443333-49	1977 Jul 8 2345:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1977-H1141	2443334-47	1977 Jul 9 0000:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1977-H1142	2443335-47	1977 Jul 10 2315:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1977-H1143	2443336-11	1977 Jul 11 1444:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1977-H1144	2443336-16	1977 Jul 11 1555:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1977-H1145	2443336-25	1977 Jul 11 1800:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1977-H1146	2443336-29	1977 Jul 11 1853:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-





Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	OrbPay_t	Agency	Launch_Code	Group	Category	LTCite	Cite	Notes
1977-H138	2443364.54	1977 Aug 9 0059:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1977-H1337	2443365.11	1977 Aug 9 1740:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1977-H1338	2443365.24	1977 Aug 9 1740:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1977-H1339	2443365.27	1977 Aug 9 1830:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1977-H1340	2443365.48	1977 Aug 9 2326:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1977-H1343	2443366.10	1977 Aug 10 1429:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1977-H1344	2443366.21	1977 Aug 10 1658:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1977-H1345	2443366.22	1977 Aug 10 1700:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1977-H1346	2443366.25	1977 Aug 10 1700:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1977-H1347	2443366.30	1977 Aug 10 1804:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1977-H1348	2443366.47	1977 Aug 10 2315:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1977-H1349	2443367.39	1977 Aug 11 2122:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1977-H1351	2443368.21	1977 Aug 12 1701:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1977-H1352	2443368.24	1977 Aug 12 1740:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1977-H1353	2443368.27	1977 Aug 12 1830:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1977-H1354	2443368.31	1977 Aug 12 1928:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1977-H1355	2443368.39	1977 Aug 15 2157:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1977-H1357	2443371.15	1977 Aug 15 1614:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1977-H1358	2443371.21	1977 Aug 15 1700:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1977-H1360	2443371.21	1977 Aug 15 2008:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1977-H1361	2443371.37	1977 Aug 15 2058:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1977-H1362	2443371.46	1977 Aug 15 2303:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1977-H1365	2443373.16	1977 Aug 17 1553:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1977-H1366	2443373.16	1977 Aug 17 1546:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1977-H1369	2443373.21	1977 Aug 17 1700:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1977-H1370	2443373.22	1977 Aug 17 1700:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1977-H1302	2443373.25	1977 Aug 17 1800:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1977-H1373	2443373.37	1977 Aug 17 2048:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1977-H1375	2443373.39	1977 Aug 17 2128:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1977-H1376	2443374.21	1977 Aug 18 1700:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1977-H1377	2443375.10	1977 Aug 18 1843:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1977-H1378	2443375.20	1977 Aug 19 1654:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1977-H1381	2443375.36	1977 Aug 19 2100:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1977-H1382	2443375.36	1977 Aug 19 2100:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1977-H1385	2443376.09	1977 Aug 22 1403:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1977-H1386	2443376.22	1977 Aug 22 1715:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1977-H1388	2443376.25	1977 Aug 22 1800:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1977-H1387	2443376.28	1977 Aug 22 1945:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1977-H1388	2443376.36	1977 Aug 22 2052:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1977-H1389	2443376.36	1977 Aug 22 2100:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1977-H1392	2443380.11	1977 Aug 24 2100:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1977-H1393	2443380.15	1977 Aug 24 1534:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1977-H1394	2443380.16	1977 Aug 24 1546:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1977-H1395	2443380.22	1977 Aug 24 1610:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1977-H1396	2443380.26	1977 Aug 24 1844:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1977-H309	2443380.30	1977 Aug 24 1916:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1977-H1397	2443380.31	1977 Aug 24 1929:59	Super Loki	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1977-H1398	2443380.40	1977 Aug 24 2146:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1977-H1399	2443380.47	1977 Aug 24 2316:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1977-H1401	2443381.17	1977 Aug 25 2131:00	Super Loki	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1977-H1403	2443382.44	1977 Aug 26 1523:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1977-H1406	2443382.14	1977 Aug 26 1534:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1977-H1407	2443382.27	1977 Aug 26 1830:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1977-H1409	2443382.28	1977 Aug 26 1948:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1977-H1410	2443382.45	1977 Aug 26 2244:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1977-H1411	2443385.13	1977 Aug 29 1509:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1977-H1412	2443385.15	1977 Aug 29 1530:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1977-H1413	2443385.24	1977 Aug 29 1740:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1977-H1414	2443385.24	1977 Aug 29 1745:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1977-H1415	2443385.25	1977 Aug 29 1754:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1977-H1416	2443385.31	1977 Aug 29 1930:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1977-H1417	2443385.38	1977 Aug 29 2100:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1977-H1418	2443385.38	1977 Aug 29 2102:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1977-H1419	2443385.40	1977 Aug 29 2133:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1977-H1421	2443387.11	1977 Aug 31 1435:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1977-H1422	2443387.12	1977 Aug 31 1500:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1977-H1423	2443387.14	1977 Aug 31 1514:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1977-H1425	2443387.21	1977 Aug 31 1700:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1977-H1426	2443387.25	1977 Aug 31 1800:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1977-H1426	2443387.26	1977 Aug 31 1810:00	Super Loki	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1977-H1428	2443388.35	1977 Sep 1 2030:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1977-H1429	2443388.40	1977 Sep 1 2134:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1977-H1430	2443388.41	1977 Sep 1 2155:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1977-H1431	2443389.14	1977 Sep 2 1520:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1977-H1432	2443389.15	1977 Sep 2 1529:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1977-H1433	2443389.21	1977 Sep 2 1700:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1977-H1434	2443389.25	1977 Sep 2 1800:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1977-H1435	2443389.77	1977 Sep 3 0633:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1977-H1436	2443390.09	1977 Sep 3 1409:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1977-H1437	2443390.22	1977 Sep 3 1720:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1977-H1436	2443393.20	1977 Sep 6 1649:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-



Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	OrbPay	Agency	Launch_Code	Group	Category	LTCite	Cite	Notes
1977-H1530	2443415.35	1977 Sep 28 2026:59	Super Loxi	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1977-1341	2443415.35	1977 Sep 28 2030:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1977-H1531	2443415.37	1977 Sep 28 2057:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1977-H1532	2443416.25	1977 Sep 29 1807:00	Super Loxi	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1977-H1533	2443416.31	1977 Sep 29 1930:00	Super Loxi	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1977-H1534	2443416.43	1977 Sep 29 2219:59	Super Loxi	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1977-H1537	2443416.49	1977 Sep 30 1301:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1977-H1538	2443417.04	1977 Sep 30 1433:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1977-H1540	2443417.11	1977 Sep 30 1553:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1977-H1542	2443417.20	1977 Sep 30 1647:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1977-1344	2443417.22	1977 Sep 30 1722:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1977-H1543	2443417.24	1977 Sep 30 1745:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1977-H1544	2443417.25	1977 Sep 30 1800:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1977-H1545	2443417.25	1977 Sep 30 1953:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1977-H1546	2443417.33	1977 Sep 30 2000:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1977-H1547	2443420.12	1977 Oct 3 1447:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1977-H1548	2443420.13	1977 Oct 3 1504:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1977-H1549	2443420.22	1977 Oct 3 1720:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1977-H1550	2443420.28	1977 Oct 3 1846:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1977-H1551	2443420.36	1977 Oct 3 2100:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1977-H1552	2443421.25	1977 Oct 4 1804:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1977-H1553	2443421.25	1977 Oct 4 1804:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1977-H1554	2443422.14	1977 Oct 5 1465:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1977-H1555	2443422.14	1977 Oct 5 1518:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1977-H1557	2443422.16	1977 Oct 5 1545:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1977-H1559	2443422.21	1977 Oct 5 1700:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1977-1350	2443422.33	1977 Oct 5 1954:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1977-H41	2443422.33	1977 Oct 5 2000:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1977-H1560	2443422.35	1977 Oct 5 2030:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1977-H1561	2443422.41	1977 Oct 5 2145:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1977-H1562	2443424.14	1977 Oct 7 1524:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1977-H1563	2443424.17	1977 Oct 7 1606:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1977-H1564	2443424.21	1977 Oct 7 1704:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1977-H1566	2443424.36	1977 Oct 7 2100:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1977-H1567	2443424.36	1977 Oct 7 2110:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1977-H1571	2443427.17	1977 Oct 8 0144:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1977-H1572	2443428.21	1977 Oct 10 1607:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1977-1352	2443428.21	1977 Oct 11 1700:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1977-H1573	2443428.35	1977 Oct 11 1954:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1977-H1574	2443428.36	1977 Oct 11 2100:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1977-H1575	2443428.36	1977 Oct 11 2100:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1977-H1576	2443428.36	1977 Oct 12 2100:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1977-H1577	2443428.36	1977 Oct 12 2100:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1977-H1578	2443429.15	1977 Oct 12 1558:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1977-H1581	2443429.16	1977 Oct 12 1558:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1977-H1582	2443429.22	1977 Oct 12 1725:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1977-H1583	2443429.23	1977 Oct 12 1817:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1977-1356	2443429.26	1977 Oct 12 2120:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1977-H1584	2443429.41	1977 Oct 12 2151:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1977-H1585	2443429.41	1977 Oct 13 0121:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1977-H1586	2443430.16	1977 Oct 13 1614:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1977-H1587	2443430.33	1977 Oct 13 1949:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1977-H1588	2443430.33	1977 Oct 13 2147:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1977-H1589	2443431.11	1977 Oct 14 1524:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1977-H1590	2443431.14	1977 Oct 14 1700:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1977-H1591	2443431.36	1977 Oct 14 2040:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1977-H1594	2443434.16	1977 Oct 17 1545:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1977-H1595	2443434.16	1977 Oct 17 1640:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1977-H1596	2443434.21	1977 Oct 17 1859:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1977-H1597	2443434.26	1977 Oct 17 1845:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1977-H1598	2443434.42	1977 Oct 17 2201:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1977-H1599	2443434.42	1977 Oct 18 0120:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1977-H1600	2443434.56	1977 Oct 18 0120:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1977-H1605	2443436.10	1977 Oct 19 1430:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1977-1365	2443436.21	1977 Oct 19 1700:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1977-H1606	2443436.24	1977 Oct 19 1730:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1977-H1607	2443436.25	1977 Oct 19 1740:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1977-H1608	2443436.26	1977 Oct 19 1800:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1977-1366	2443436.37	1977 Oct 19 1814:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1977-H1609	2443436.39	1977 Oct 19 2054:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1977-H1610	2443436.39	1977 Oct 19 2126:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1977-M42	2443436.53	1977 Oct 20 0040:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1977-H1612	2443436.55	1977 Oct 20 0114:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1977-H1614	2443437.12	1977 Oct 20 1456:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1977-H1615	2443437.25	1977 Oct 20 1800:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1977-H1617	2443438.15	1977 Oct 21 1529:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1977-H1618	2443438.15	1977 Oct 21 1540:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1977-H1619	2443438.21	1977 Oct 21 1700:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1977-H1620	2443438.23	1977 Oct 21 1736:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1977-H1623	2443438.33	1977 Oct 21 1949:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1977-H1626	2443441.11	1977 Oct 24 1443:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1977-M43	2443441.26	1977 Oct 24 1814:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Launch_t	Agency	Launch_Code	Group	Category	LTCite	Cite	Notes
1977-H1627	2443442.14	1977 Oct 25 1526:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1977-H1628	2443442.21	1977 Oct 25 1700:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1977-H1629	2443442.27	1977 Oct 25 1830:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1977-H1630	2443442.35	1977 Oct 25 2020:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1977-H1631	2443442.59	1977 Oct 25 2121:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1977-H1632	2443443.09	1977 Oct 26 1415:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1977-H1633	2443443.13	1977 Oct 26 1508:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1977-H1634	2443443.14	1977 Oct 26 1519:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1977-H1635	2443443.24	1977 Oct 26 1749:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1977-1374	2443443.30	1977 Oct 26 1914:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1977-H1637	2443443.31	1977 Oct 26 1924:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1977-1375	2443443.31	1977 Oct 26 1927:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1977-H1638	2443443.32	1977 Oct 26 1936:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1977-1376	2443443.34	1977 Oct 26 2015:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1977-1377	2443443.36	1977 Oct 26 2018:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1977-1378	2443443.38	1977 Oct 26 2102:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1977-H1639	2443443.39	1977 Oct 26 2122:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1977-H1641	2443444.14	1977 Oct 27 1528:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1977-H1642	2443445.15	1977 Oct 28 1530:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1977-H1643	2443445.17	1977 Oct 28 1601:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1977-H1644	2443445.18	1977 Oct 28 1615:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1977-H1646	2443445.19	1977 Oct 28 1634:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1977-H1647	2443445.21	1977 Oct 28 1700:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1977-H44	2443445.56	1977 Oct 29 0040:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1977-H1664	2443446.13	1977 Oct 29 0120:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1977-H1665	2443446.19	1977 Oct 31 1634:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1977-H1667	2443446.21	1977 Oct 31 1707:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1977-H1668	2443446.25	1977 Oct 31 1800:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1977-H1669	2443446.26	1977 Oct 31 2030:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1977-H1661	2443449.34	1977 Nov 1 2201:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1977-H1662	2443449.42	1977 Nov 1 2204:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1977-H1663	2443450.12	1977 Nov 2 1449:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1977-H1664	2443450.15	1977 Nov 2 1624:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1977-H1666	2443450.21	1977 Nov 2 1700:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1977-X384	2443450.30	1977 Nov 2 1914:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1977-X385	2443450.35	1977 Nov 2 1962:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1977-H1669	2443450.36	1977 Nov 2 2026:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1977-H1670	2443450.56	1977 Nov 2 2110:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1977-H1671	2443450.57	1977 Nov 3 0146:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1977-H1672	2443451.39	1977 Nov 3 0153:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1977-H1673	2443451.44	1977 Nov 3 2230:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1977-X386	2443452.33	1977 Nov 4 1634:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1977-X387	2443452.34	1977 Nov 4 2000:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1977-X388	2443452.36	1977 Nov 4 2130:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1977-X389	2443452.41	1977 Nov 4 2135:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1977-X390	2443452.42	1977 Nov 4 2359:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1977-H1677	2443452.46	1977 Nov 5 0300:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1977-X391	2443452.50	1977 Nov 5 0300:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1977-H1678	2443452.52	1977 Nov 5 0309:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1977-H1679	2443452.54	1977 Nov 5 0359:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1977-X392	2443452.67	1977 Nov 5 0439:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1977-X393	2443452.73	1977 Nov 5 0459:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1977-X394	2443452.83	1977 Nov 5 0700:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1977-X395	2443452.89	1977 Nov 5 0800:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1977-X396	2443452.92	1977 Nov 5 0959:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1977-X397	2443452.96	1977 Nov 5 1100:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1977-H1680	2443453.04	1977 Nov 5 1214:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1977-X398	2443453.05	1977 Nov 5 1259:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1977-H1681	2443453.05	1977 Nov 5 1314:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1977-Y400	2443453.17	1977 Nov 5 1559:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1977-Y401	2443453.17	1977 Nov 5 1609:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1977-Y402	2443453.29	1977 Nov 5 1859:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1977-Y403	2443453.33	1977 Nov 5 2000:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1977-Y404	2443453.46	1977 Nov 5 2300:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1977-H1682	2443455.16	1977 Nov 7 1714:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1977-H1686	2443455.22	1977 Nov 7 1715:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1977-H1687	2443455.26	1977 Nov 7 1810:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1977-H1688	2443455.35	1977 Nov 7 2026:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1977-H1689	2443455.41	1977 Nov 8 0114:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1977-H46	2443456.55	1977 Nov 9 0115:59	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1977-H1693	2443457.14	1977 Nov 9 1521:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1977-H1694	2443457.15	1977 Nov 9 1533:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1977-H1696	2443457.19	1977 Nov 9 1640:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1977-H1697	2443457.20	1977 Nov 9 1652:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1977-H1699	2443457.21	1977 Nov 9 1700:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-
1977-H1700	2443457.22	1977 Nov 9 1710:00	Rocketsonde	-	-	0.000	HRH	SS	-	Meteo	DSI-5850	-	-







Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	OrbPay	Agency	Launch_Code	Group	Category	LTCite	Cite	Notes
1977-162	2443506.26	1977 Dec 28 16:14:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1977-19306	2443507.40	1977 Dec 29 21:32:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1977-19307	2443508.10	1977 Dec 30 14:25:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1977-19308	2443508.17	1977 Dec 30 15:59:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1977-19309	2443508.19	1977 Dec 30 16:40:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1978-1696	2443777.11	1978 Sep 25 14:32:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1978-1697	2443777.20	1978 Sep 25 16:51:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1978-1698	2443777.21	1978 Sep 25 17:00:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1978-1699	2443777.22	1978 Sep 25 18:00:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1978-1700	2443777.23	1978 Sep 25 18:30:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1978-1701	2443777.24	1978 Sep 25 21:27:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1978-1702	2443777.42	1978 Sep 25 21:59:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1978-1704	2443779.10	1978 Sep 27 14:20:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1978-1706	2443779.20	1978 Sep 27 16:43:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1978-1361	2443779.20	1978 Sep 27 16:43:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1978-1362	2443779.21	1978 Sep 27 17:00:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1978-1707	2443779.22	1978 Sep 27 17:14:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1978-1708	2443779.22	1978 Sep 27 17:15:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1978-1709	2443779.22	1978 Sep 27 17:56:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1978-1710	2443779.22	1978 Sep 27 18:56:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1978-1363	2443779.29	1978 Sep 27 19:07:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1978-1364	2443779.30	1978 Sep 27 19:07:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1978-1710	2443779.31	1978 Sep 28 00:00:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1978-1711	2443779.51	1978 Sep 28 02:00:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1978-1712	2443781.12	1978 Sep 28 14:54:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1978-1713	2443781.12	1978 Sep 28 17:00:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1978-1715	2443781.22	1978 Sep 29 17:22:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1978-1716	2443781.23	1978 Sep 29 17:30:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1978-1717	2443781.23	1978 Sep 29 17:30:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1978-1718	2443781.27	1978 Sep 29 18:52:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1978-1719	2443781.55	1978 Sep 30 01:14:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1978-1720	2443784.15	1978 Oct 2 15:52:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1978-1721	2443784.16	1978 Oct 2 15:45:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1978-1722	2443784.21	1978 Oct 2 17:00:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1978-1723	2443784.25	1978 Oct 2 18:00:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1978-1724	2443784.26	1978 Oct 3 01:14:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1978-1725	2443784.26	1978 Oct 3 01:14:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1978-1726	2443784.55	1978 Oct 4 18:04:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1978-1366	2443786.09	1978 Oct 4 19:22:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1978-1367	2443786.14	1978 Oct 4 14:14:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1978-1703	2443786.16	1978 Oct 4 15:22:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1978-1704	2443786.16	1978 Oct 4 16:18:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1978-1705	2443786.21	1978 Oct 4 17:05:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1978-1368	2443786.26	1978 Oct 4 18:14:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1978-1369	2443786.31	1978 Oct 4 19:22:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1978-1706	2443786.31	1978 Oct 4 19:22:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1978-1707	2443786.34	1978 Oct 4 19:59:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1978-1708	2443786.46	1978 Oct 4 23:59:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1978-1709	2443788.16	1978 Oct 6 17:07:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1978-1710	2443788.21	1978 Oct 6 18:15:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1978-1711	2443788.26	1978 Oct 7 01:14:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1978-1712	2443789.15	1978 Oct 9 15:13:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1978-1713	2443792.22	1978 Oct 10 17:15:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1978-1714	2443792.22	1978 Oct 10 17:00:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1978-1715	2443792.25	1978 Oct 10 20:35:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1978-1716	2443792.36	1978 Oct 10 20:26:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1978-1717	2443793.10	1978 Oct 11 14:30:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1978-1718	2443793.12	1978 Oct 11 14:55:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1978-1719	2443793.17	1978 Oct 11 14:59:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1978-1720	2443793.17	1978 Oct 11 14:59:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1978-1721	2443793.18	1978 Oct 11 16:14:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1978-1722	2443793.18	1978 Oct 11 16:34:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1978-1723	2443793.21	1978 Oct 11 17:00:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1978-1724	2443793.30	1978 Oct 11 21:22:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1978-1725	2443793.39	1978 Oct 11 21:30:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1978-1726	2443793.42	1978 Oct 11 22:07:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1978-1727	2443795.09	1978 Oct 13 14:04:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1978-1728	2443795.14	1978 Oct 13 15:25:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1978-1729	2443795.18	1978 Oct 13 16:15:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1978-1730	2443795.22	1978 Oct 13 17:13:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1978-1731	2443795.25	1978 Oct 13 18:00:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1978-1732	2443795.36	1978 Oct 13 20:33:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1978-1733	2443795.41	1978 Oct 13 21:56:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1978-1734	2443798.08	1978 Oct 16 13:52:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1978-1735	2443798.13	1978 Oct 16 15:11:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1978-1736	2443798.27	1978 Oct 16 18:30:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1978-1737	2443798.32	1978 Oct 16 19:35:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1978-1738	2443798.38	1978 Oct 16 21:13:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1978-1739	2443798.40	1978 Oct 16 21:37:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1978-1740	2443799.05	1978 Oct 17 13:14:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1978-1741	2443800.10	1978 Oct 18 14:20:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1978-1742	2443800.11	1978 Oct 18 14:37:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1978-1743	2443800.13	1978 Oct 18 15:02:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1978-1744	2443800.14	1978 Oct 18 15:27:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1978-1745	2443800.21	1978 Oct 18 17:00:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1978-1746	2443800.22	1978 Oct 18 17:15:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1978-1747	2443800.27	1978 Oct 18 18:34:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1978-1748	2443800.38	1978 Oct 18 21:00:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Launch_t	Agency	Launch_Code	Group	Category	LTCite	Cite	Notes
1978-H1080	2443800.41	1978 Oct 18 2155:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1978-H1081	2443800.59	1978 Oct 19 2122:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1978-H1082	2443801.05	1978 Oct 19 1314:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1978-H1083	2443801.12	1978 Oct 19 1500:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1978-H1084	2443801.39	1978 Oct 19 2120:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1978-H1085	2443802.15	1978 Oct 20 1531:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1978-H1086	2443802.21	1978 Oct 20 1700:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1978-H1087	2443802.23	1978 Oct 20 1732:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1978-H1088	2443802.29	1978 Oct 20 1901:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1978-H1089	2443802.38	1978 Oct 20 2100:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1978-H1090	2443805.13	1978 Oct 23 1510:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1978-H1091	2443805.21	1978 Oct 23 1700:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1978-H1092	2443805.24	1978 Oct 23 1743:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1978-H1093	2443805.26	1978 Oct 23 1811:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1978-H1094	2443806.40	1978 Oct 24 2133:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1978-H1095	2443807.11	1978 Oct 25 1457:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1978-H1096	2443807.14	1978 Oct 25 1519:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1978-H1097	2443807.17	1978 Oct 25 1609:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1978-H1098	2443807.21	1978 Oct 25 1703:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1978-H1099	2443807.25	1978 Oct 25 1800:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1978-H1100	2443807.36	1978 Oct 25 1814:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1978-H1101	2443807.39	1978 Oct 25 2127:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1978-H1102	2443807.42	1978 Oct 25 2203:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1978-H1103	2443807.46	1978 Oct 25 2307:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1978-H1104	2443808.14	1978 Oct 26 1701:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1978-H1105	2443809.14	1978 Oct 27 1515:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1978-H1106	2443809.21	1978 Oct 27 1700:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1978-H1107	2443809.27	1978 Oct 27 1830:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1978-H1108	2443809.28	1978 Oct 27 1945:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1978-H1109	2443809.55	1978 Oct 28 0118:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1978-H1110	2443812.12	1978 Oct 30 1462:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1978-H1111	2443812.21	1978 Oct 30 1700:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1978-H1112	2443812.30	1978 Oct 30 1914:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1978-H1113	2443812.31	1978 Oct 30 1951:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1978-H1114	2443812.55	1978 Oct 31 1114:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1978-H1115	2443814.12	1978 Nov 1 1465:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1978-H1116	2443814.14	1978 Nov 1 1557:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1978-H1117	2443814.19	1978 Nov 1 1627:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1978-H1118	2443814.21	1978 Nov 1 1700:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1978-H1119	2443814.25	1978 Nov 1 1859:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1978-H1120	2443814.26	1978 Nov 1 1941:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1978-H1121	2443814.32	1978 Nov 1 1945:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1978-H1122	2443814.54	1978 Nov 2 0459:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1978-H1123	2443816.30	1978 Nov 3 1939:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1978-H1124	2443819.06	1978 Nov 3 1939:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1978-H1125	2443819.09	1978 Nov 6 1440:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1978-H1126	2443819.22	1978 Nov 6 1719:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1978-H1127	2443819.25	1978 Nov 6 1859:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1978-H1128	2443819.46	1978 Nov 6 2139:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1978-H1129	2443819.55	1978 Nov 7 0114:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1978-H1130	2443821.12	1978 Nov 8 1448:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1978-H1131	2443821.15	1978 Nov 8 1531:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1978-H1132	2443821.16	1978 Nov 8 1630:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1978-H1133	2443821.19	1978 Nov 8 1634:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1978-H1134	2443821.21	1978 Nov 8 1655:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1978-H1135	2443821.24	1978 Nov 8 1740:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1978-H1136	2443821.40	1978 Nov 8 2129:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1978-H1137	2443821.47	1978 Nov 8 2314:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1978-H1138	2443822.21	1978 Nov 9 1700:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1978-H1139	2443822.21	1978 Nov 9 1703:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1978-H1140	2443822.29	1978 Nov 9 1859:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1978-H1141	2443823.16	1978 Nov 10 1549:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1978-H1142	2443823.20	1978 Nov 10 1644:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1978-H1143	2443826.13	1978 Nov 13 1506:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1978-H1144	2443826.22	1978 Nov 13 1715:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1978-H1145	2443826.22	1978 Nov 13 1849:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1978-H1146	2443827.08	1978 Nov 14 1400:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1978-H1147	2443828.12	1978 Nov 15 1448:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1978-H1148	2443828.21	1978 Nov 15 1701:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1978-H1149	2443828.24	1978 Nov 15 1742:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1978-H1150	2443828.24	1978 Nov 15 1836:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1978-H1151	2443828.28	1978 Nov 15 1845:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1978-H1152	2443828.37	1978 Nov 15 2053:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1978-H1153	2443828.39	1978 Nov 15 2118:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1978-H1154	2443828.47	1978 Nov 15 2315:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1978-H1155	2443829.29	1978 Nov 16 1859:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1978-H1156	2443829.56	1978 Nov 17 0124:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1978-H1157	2443830.19	1978 Nov 17 1633:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1978-H1177	2443830.21	1978 Nov 17 1700:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-



Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	OrbPay	Agency	Launch_Code	Group	Category	LTCite	Cite	Notes
1978-H1278	2443861.16	1978 Dec 18 1549:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1978-H1279	2443861.22	1978 Dec 18 1721:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1978-H1280	2443861.36	1978 Dec 18 2033:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1978-H1281	2443862.27	1978 Dec 19 1824:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1978-H1282	2443863.11	1978 Dec 20 1445:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1978-H1286	2443863.19	1978 Dec 20 1636:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1978-H1287	2443863.20	1978 Dec 20 1641:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1978-H1448	2443863.27	1978 Dec 20 1830:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1978-H1449	2443863.29	1978 Dec 20 1859:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1978-H1289	2443863.29	1978 Dec 20 1859:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1978-H1290	2443863.30	1978 Dec 20 1914:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1978-H1291	2443863.42	1978 Dec 20 2315:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1978-H1293	2443864.29	1978 Dec 21 1856:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1978-H1294	2443865.27	1978 Dec 22 1830:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1978-H1295	2443865.31	1978 Dec 22 1922:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1978-H57	2443865.40	1978 Dec 22 2134:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1978-H450	2443865.42	1978 Dec 22 2158:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1978-H1296	2443870.27	1978 Dec 27 1530:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1978-H68	2443870.28	1978 Dec 27 1945:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1978-H1297	2443870.40	1978 Dec 27 2131:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1978-H1298	2443872.28	1978 Dec 28 1940:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1978-H26	2443876.32	1979 Jan 2 1944:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1978-H1003	2444101.26	1979 Aug 15 1817:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1978-H1004	2444101.53	1979 Aug 16 0049:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1978-H439	2444102.37	1979 Aug 16 2054:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1978-H1005	2444102.39	1979 Aug 16 2118:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1978-H37	2444102.53	1979 Aug 17 0045:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1978-H1006	2444103.04	1979 Aug 17 1239:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1978-H1007	2444103.06	1979 Aug 17 1330:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1978-H1008	2444103.13	1979 Aug 17 1507:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1978-H1009	2444103.25	1979 Aug 17 1800:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1978-H1010	2444103.26	1979 Aug 17 1847:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1978-H1011	2444103.55	1979 Aug 18 0114:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1978-H1012	2444104.67	1979 Aug 19 0403:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1978-H1013	2444106.05	1979 Aug 20 1310:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1978-H1014	2444106.06	1979 Aug 20 1330:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1978-H1015	2444106.10	1979 Aug 20 1430:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1978-H1016	2444106.15	1979 Aug 20 1530:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1978-H1017	2444106.66	1979 Aug 21 0419:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1978-H1018	2444108.06	1979 Aug 22 1330:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1978-H1019	2444108.07	1979 Aug 22 1344:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1978-H1020	2444108.10	1979 Aug 22 1426:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1978-H1021	2444108.10	1979 Aug 22 1456:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1978-H1022	2444108.20	1979 Aug 22 1649:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1978-H38	2444108.25	1979 Aug 22 1800:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1978-H1023	2444108.42	1979 Aug 22 2139:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1978-H1024	2444108.49	1979 Aug 23 2006:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1978-H1025	2444109.33	1979 Aug 24 1330:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1978-H1026	2444110.07	1979 Aug 24 1330:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1978-H1027	2444110.07	1979 Aug 24 1344:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1978-H1028	2444110.15	1979 Aug 24 1544:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1978-H1029	2444110.22	1979 Aug 24 1711:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1978-H1030	2444110.22	1979 Aug 25 0114:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1978-H1031	2444111.55	1979 Aug 27 1330:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1978-H1034	2444113.06	1979 Aug 27 1349:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1978-H1035	2444113.08	1979 Aug 27 1511:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1978-H39	2444113.27	1979 Aug 27 1724:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1978-H1038	2444113.27	1979 Aug 28 0407:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1978-H1039	2444113.67	1979 Aug 28 1824:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1978-H1040	2444114.27	1979 Aug 28 1934:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1978-H1041	2444114.36	1979 Aug 28 2035:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1978-H1042	2444114.61	1979 Aug 29 0245:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1978-H1043	2444114.66	1979 Aug 29 0345:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1978-H1044	2444114.67	1979 Aug 29 0357:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1978-H457	2444115.10	1979 Aug 29 1417:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1978-H1045	2444115.10	1979 Aug 29 1430:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1978-H458	2444115.11	1979 Aug 29 1440:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1978-H1046	2444115.11	1979 Aug 29 1441:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1978-H1047	2444115.33	1979 Aug 29 2000:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1978-H460	2444115.44	1979 Aug 29 2227:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1978-H1048	2444115.45	1979 Aug 29 2248:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1978-H1049	2444116.15	1979 Aug 30 0346:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1978-H1052	2444116.15	1979 Aug 30 1538:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1978-H1051	2444116.51	1979 Aug 31 0009:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1978-H1053	2444117.06	1979 Aug 31 1330:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1978-H1054	2444117.19	1979 Aug 31 1420:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1978-H1055	2444117.19	1979 Aug 31 1634:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1978-H1056	2444117.23	1979 Aug 31 1732:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1978-H1057	2444117.26	1979 Aug 31 1820:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1978-H1058	2444117.41	1979 Aug 31 2154:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1978-H1059	2444117.55	1979 Sep 1 0114:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1978-H1060	2444117.75	1979 Sep 1 0606:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1978-H1061	2444120.33	1979 Sep 3 2000:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1978-H1062	2444121.37	1979 Sep 4 2057:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1978-H1063	2444122.03	1979 Sep 5 1248:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	OrbPay_t	Agency	Launch_Code	Group	Category	LTCite	Cite	Notes
1979-H1064	2444122.06	1979 Sep 5 1330:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1979-H1065	2444122.08	1979 Sep 5 1400:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1979-H1066	2444122.10	1979 Sep 5 1408:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1979-H1067	2444122.12	1979 Sep 5 1427:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1979-H1068	2444122.19	1979 Sep 5 1626:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1979-H1069	2444122.21	1979 Sep 5 1658:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1979-H1070	2444122.27	1979 Sep 5 2301:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1979-H1071	2444123.53	1979 Sep 7 0040:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1979-H1072	2444124.06	1979 Sep 7 1330:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1979-H1073	2444124.06	1979 Sep 7 1330:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1979-H1074	2444124.10	1979 Sep 7 1430:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1979-H1075	2444124.11	1979 Sep 7 1437:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1979-H1076	2444124.17	1979 Sep 7 1559:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1979-H1077	2444124.21	1979 Sep 7 1700:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1979-H1078	2444124.37	1979 Sep 7 2057:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1979-H1079	2444124.62	1979 Sep 8 0253:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1979-H1080	2444127.06	1979 Sep 10 1530:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1979-H1081	2444127.10	1979 Sep 10 1544:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1979-H1082	2444127.17	1979 Sep 10 1822:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1979-H1083	2444127.18	1979 Sep 10 1614:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1979-H1084	2444127.19	1979 Sep 10 1629:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1979-H1085	2444127.27	1979 Sep 11 0249:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1979-H1086	2444127.62	1979 Sep 12 1314:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1979-H1087	2444129.05	1979 Sep 12 1530:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1979-H1088	2444129.06	1979 Sep 12 1530:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1979-H1089	2444129.06	1979 Sep 12 1530:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1979-H1090	2444129.09	1979 Sep 12 1401:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1979-H1091	2444129.10	1979 Sep 12 1430:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1979-H1092	2444129.11	1979 Sep 12 1457:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1979-H1093	2444129.12	1979 Sep 12 1446:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1979-H1094	2444129.25	1979 Sep 12 1756:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1979-H1095	2444129.26	1979 Sep 12 1821:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1979-H1096	2444129.33	1979 Sep 12 2000:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1979-H1097	2444129.36	1979 Sep 12 2048:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1979-H1098	2444129.39	1979 Sep 12 2126:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1979-H1099	2444129.46	1979 Sep 12 2206:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1979-H1100	2444129.85	1979 Sep 13 0800:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1979-H1101	2444129.89	1979 Sep 13 0914:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1979-H1102	2444129.95	1979 Sep 13 1017:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1979-H1103	2444130.00	1979 Sep 13 1200:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1979-H1104	2444130.06	1979 Sep 13 1400:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1979-H1105	2444130.16	1979 Sep 13 1614:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1979-H1106	2444131.07	1979 Sep 14 1354:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1979-H1107	2444131.06	1979 Sep 14 1351:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1979-H1108	2444131.0	1979 Sep 14 1506:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1979-H1109	2444131.29	1979 Sep 14 1909:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1979-H1110	2444131.55	1979 Sep 15 0045:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1979-H1111	2444131.55	1979 Sep 15 0116:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1979-H1112	2444134.05	1979 Sep 17 1314:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1979-H1113	2444134.05	1979 Sep 17 1353:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1979-H1114	2444134.08	1979 Sep 17 1351:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1979-H1115	2444134.24	1979 Sep 17 1821:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1979-H1116	2444134.26	1979 Sep 17 2016:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1979-H1117	2444134.59	1979 Sep 18 0912:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1979-H1118	2444134.59	1979 Sep 18 1636:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1979-H1119	2444136.04	1979 Sep 19 1357:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1979-H1120	2444136.10	1979 Sep 19 1425:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1979-H1121	2444136.11	1979 Sep 19 1437:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1979-H1122	2444136.16	1979 Sep 19 1546:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1979-H1123	2444136.27	1979 Sep 19 1824:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1979-H1124	2444136.27	1979 Sep 19 1838:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1979-H1125	2444136.43	1979 Sep 19 2215:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1979-H1126	2444136.45	1979 Sep 19 2243:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1979-H1127	2444137.24	1979 Sep 20 1738:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1979-H1128	2444138.06	1979 Sep 21 1330:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1979-H1129	2444138.06	1979 Sep 21 1336:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1979-H1130	2444138.11	1979 Sep 21 1366:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1979-H1131	2444138.16	1979 Sep 21 1555:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1979-H1132	2444138.33	1979 Sep 21 2000:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1979-H1133	2444138.55	1979 Sep 22 0114:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1979-H1134	2444138.74	1979 Sep 22 0540:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1979-H1135	2444138.90	1979 Sep 22 0940:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1979-H1136	2444140.84	1979 Sep 24 0815:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1979-H1137	2444141.03	1979 Sep 24 1247:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1979-H1138	2444141.04	1979 Sep 24 1259:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1979-H1139	2444141.07	1979 Sep 24 1344:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1979-H1140	2444141.11	1979 Sep 24 1437:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1979-H1141	2444141.16	1979 Sep 24 1549:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1979-H1142	2444141.39	1979 Sep 24 2126:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1979-H1143	2444141.62	1979 Sep 25 0300:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1979-H1144	2444142.33	1979 Sep 25 2000:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	OrbPay	Agency	Launch_Code	Group	Category	LTCite	Cite	Notes
1979-H1144	2444143.05	1979 Sep 26 13:14:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1979-H1145	2444143.06	1979 Sep 26 13:30:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1979-H1146	2444143.09	1979 Sep 26 14:10:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1979-H1147	2444143.11	1979 Sep 26 14:38:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1979-H1148	2444143.12	1979 Sep 26 14:48:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1979-H1149	2444143.15	1979 Sep 26 15:30:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1979-H1150	2444143.16	1979 Sep 26 15:45:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1979-H1151	2444143.28	1979 Sep 26 18:46:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1979-H1152	2444143.62	1979 Sep 27 02:51:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1979-H1153	2444144.52	1979 Sep 28 03:30:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1979-H1154	2444144.64	1979 Sep 28 03:14:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1979-H1155	2444145.06	1979 Sep 28 13:14:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1979-H1156	2444145.06	1979 Sep 28 13:30:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1979-H1157	2444145.10	1979 Sep 28 14:30:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1979-H1158	2444145.17	1979 Sep 28 14:33:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1979-H1159	2444145.26	1979 Sep 28 16:09:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1979-H1160	2444145.43	1979 Sep 28 22:21:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1979-H1161	2444145.56	1979 Sep 29 01:14:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1979-H1162	2444145.64	1979 Sep 29 01:14:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1979-H1163	2444146.06	1979 Oct 1 13:14:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1979-H1164	2444146.10	1979 Oct 1 14:30:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1979-H1165	2444146.11	1979 Oct 1 14:40:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1979-H1166	2444146.12	1979 Oct 1 14:59:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1979-H1167	2444146.22	1979 Oct 1 17:11:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1979-H1168	2444146.23	1979 Oct 1 17:37:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1979-H1169	2444146.35	1979 Oct 1 20:18:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1979-H1170	2444146.57	1979 Oct 1 20:30:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1979-H1171	2444149.27	1979 Oct 2 01:37:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1979-H1172	2444150.05	1979 Oct 2 18:54:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1979-H1173	2444150.06	1979 Oct 3 13:14:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1979-H1174	2444150.09	1979 Oct 3 13:30:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1979-H1175	2444150.09	1979 Oct 3 14:00:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1979-H1176	2444150.11	1979 Oct 3 14:35:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1979-H1177	2444150.15	1979 Oct 3 15:45:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1979-H1178	2444150.16	1979 Oct 3 15:45:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1979-H1179	2444150.17	1979 Oct 3 16:04:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1979-H1180	2444150.18	1979 Oct 3 16:18:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1979-H1181	2444150.23	1979 Oct 3 17:23:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1979-H1182	2444150.27	1979 Oct 3 18:31:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1979-H1183	2444150.57	1979 Oct 4 01:46:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1979-H1184	2444151.16	1979 Oct 4 01:46:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1979-H1185	2444151.34	1979 Oct 4 01:58:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1979-H1186	2444151.67	1979 Oct 4 20:15:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1979-H1187	2444152.05	1979 Oct 5 01:40:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1979-H1188	2444152.07	1979 Oct 5 01:46:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1979-H1189	2444152.14	1979 Oct 5 01:52:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1979-H1190	2444152.38	1979 Oct 5 01:52:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1979-H1191	2444152.68	1979 Oct 6 04:30:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1979-H1192	2444155.06	1979 Oct 8 13:23:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1979-H1193	2444155.06	1979 Oct 8 14:36:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1979-H1194	2444155.12	1979 Oct 8 14:41:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1979-H1195	2444155.17	1979 Oct 8 16:18:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1979-H1196	2444156.37	1979 Oct 9 15:59:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1979-H1197	2444156.52	1979 Oct 9 20:56:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1979-H1198	2444157.06	1979 Oct 10 00:33:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1979-H1199	2444157.06	1979 Oct 10 03:30:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1979-H1200	2444157.08	1979 Oct 10 13:30:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1979-H1201	2444157.10	1979 Oct 10 13:54:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1979-H1202	2444157.11	1979 Oct 10 14:35:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1979-H1203	2444157.14	1979 Oct 10 15:19:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1979-H1204	2444157.39	1979 Oct 10 21:26:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1979-H1205	2444157.44	1979 Oct 10 23:37:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1979-H1206	2444159.06	1979 Oct 12 13:30:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1979-H1207	2444159.19	1979 Oct 12 16:29:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1979-H1208	2444159.24	1979 Oct 12 17:45:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1979-H1209	2444159.27	1979 Oct 12 18:30:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1979-H1210	2444162.04	1979 Oct 13 01:14:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1979-H1211	2444162.07	1979 Oct 15 12:59:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1979-H1212	2444162.12	1979 Oct 15 13:44:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1979-H1213	2444162.17	1979 Oct 15 14:46:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1979-H1214	2444162.20	1979 Oct 15 16:04:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1979-H1215	2444162.35	1979 Oct 15 20:26:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1979-H1216	2444162.70	1979 Oct 16 04:43:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1979-H1217	2444163.66	1979 Oct 17 03:44:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1979-H1218	2444164.05	1979 Oct 17 13:14:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1979-H1219	2444164.06	1979 Oct 17 13:44:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1979-H1220	2444164.07	1979 Oct 17 13:30:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1979-H1221	2444164.11	1979 Oct 17 14:36:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1979-H1222	2444164.15	1979 Oct 17 15:33:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1979-H1223	2444164.15	1979 Oct 17 15:33:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1979-H1224	2444164.36	1979 Oct 17 20:43:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1979-H1225	2444164.45	1979 Oct 17 22:47:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1979-H1226	2444166.05	1979 Oct 19 13:14:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1979-H1226	2444166.11	1979 Oct 19 14:41:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Launch_t	Agency	Launch_Code	Group	Category	LTCite	Cite	Notes
1979-H1227	2444166.12	1979 Oct 19 1456:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1979-H1228	2444166.21	1979 Oct 19 1700:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1979-H1229	2444166.27	1979 Oct 19 1830:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1979-H1230	2444166.33	1979 Oct 19 1830:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1979-H1231	2444166.37	1979 Oct 19 1956:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1979-H1232	2444166.41	1979 Oct 19 2148:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1979-H1233	2444166.52	1979 Oct 20 0030:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1979-H1234	2444166.55	1979 Oct 20 0118:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1979-H1235	2444166.10	1979 Oct 21 1430:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1979-H1241	2444169.06	1979 Oct 21 1851:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1979-H1242	2444169.07	1979 Oct 22 1330:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1979-H1243	2444169.11	1979 Oct 22 1347:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1979-H1244	2444169.16	1979 Oct 22 1551:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1979-H1245	2444169.23	1979 Oct 22 1732:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1979-H1246	2444169.28	1979 Oct 22 1945:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1979-H1247	2444169.51	1979 Oct 23 0014:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1979-H1248	2444170.34	1979 Oct 23 2015:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1979-H1250	2444170.69	1979 Oct 24 0428:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1979-H1251	2444171.06	1979 Oct 24 1200:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1979-H1252	2444171.06	1979 Oct 24 1330:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1979-H1253	2444171.10	1979 Oct 24 1330:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1979-H1254	2444171.10	1979 Oct 24 1429:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1979-H1255	2444171.10	1979 Oct 24 1430:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1979-H1256	2444171.29	1979 Oct 24 1856:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1979-H1257	2444171.33	1979 Oct 24 2000:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1979-H1258	2444171.67	1979 Oct 25 0401:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1979-H1259	2444172.09	1979 Oct 25 1412:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1979-H1260	2444172.11	1979 Oct 25 1437:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1979-H1261	2444172.69	1979 Oct 26 0433:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1979-H1262	2444173.06	1979 Oct 26 1330:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1979-H1263	2444173.09	1979 Oct 26 1403:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1979-H1264	2444173.12	1979 Oct 26 1447:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1979-H1265	2444173.27	1979 Oct 26 1822:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1979-H1266	2444173.27	1979 Oct 26 1850:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1979-H1267	2444173.29	1979 Oct 26 1856:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1979-H1268	2444173.36	1979 Oct 26 2111:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1979-H1269	2444176.07	1979 Oct 28 1344:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1979-H1270	2444176.11	1979 Oct 28 1445:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1979-H1271	2444176.14	1979 Oct 28 1452:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1979-H1272	2444176.15	1979 Oct 28 1530:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1979-H1273	2444176.21	1979 Oct 28 1550:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1979-H1274	2444176.35	1979 Oct 30 1114:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1979-H1275	2444176.05	1979 Oct 31 1314:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1979-H1276	2444178.05	1979 Oct 31 1356:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1979-H1277	2444178.15	1979 Oct 31 1506:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1979-H1278	2444178.21	1979 Oct 31 1506:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1979-H1279	2444178.26	1979 Oct 31 1927:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1979-H1280	2444178.30	1979 Oct 31 1930:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1979-H1281	2444178.31	1979 Oct 31 1930:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1979-H1282	2444178.46	1979 Oct 31 2324:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1979-H1283	2444179.05	1979 Nov 1 1200:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1979-H1284	2444179.14	1979 Nov 1 1315:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1979-H1285	2444179.32	1979 Nov 1 1520:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1979-H1286	2444179.32	1979 Nov 1 1942:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1979-H1287	2444179.42	1979 Nov 1 2201:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1979-H1288	2444179.42	1979 Nov 1 2201:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1979-H1289	2444180.06	1979 Nov 2 1334:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1979-H1290	2444180.10	1979 Nov 2 1430:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1979-H1291	2444180.12	1979 Nov 2 1447:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1979-H1292	2444180.15	1979 Nov 2 1530:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1979-H1293	2444180.58	1979 Nov 3 0202:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1979-H1294	2444181.82	1979 Nov 4 1040:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1979-H1295	2444181.94	1979 Nov 4 1053:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1979-H1300	2444183.07	1979 Nov 5 1334:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1979-H1301	2444183.08	1979 Nov 5 1401:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1979-H1302	2444183.11	1979 Nov 5 1445:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1979-H1303	2444183.20	1979 Nov 5 1651:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1979-H1304	2444183.21	1979 Nov 5 1704:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1979-H1305	2444183.37	1979 Nov 6 2057:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1979-H1306	2444183.55	1979 Nov 6 2114:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1979-H1307	2444185.03	1979 Nov 7 1249:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1979-H1308	2444185.05	1979 Nov 7 1314:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1979-H1309	2444185.11	1979 Nov 7 1440:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1979-H1310	2444185.13	1979 Nov 7 1506:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1979-H1311	2444185.15	1979 Nov 7 1550:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1979-H1312	2444185.16	1979 Nov 7 1556:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1979-H1313	2444185.17	1979 Nov 7 1615:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1979-H1314	2444185.37	1979 Nov 7 2054:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1979-H1315	2444185.49	1979 Nov 7 2346:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1979-H1316	2444186.31	1979 Nov 8 1930:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-



Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Launch_t	Agency	Launch_Code	Group	Category	LTCite	Cite	Notes
1979-H1321	2444186.50	1979 Nov 9 0002:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1979-H1322	2444187.08	1979 Nov 9 1400:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1979-H1323	2444187.11	1979 Nov 9 1437:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1979-H1324	2444187.15	1979 Nov 9 1530:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1979-H1325	2444187.20	1979 Nov 9 1644:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1979-H1326	2444187.24	1979 Nov 9 1700:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1979-H1327	2444187.38	1979 Nov 9 2140:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1979-H1328	2444190.10	1979 Nov 12 1430:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1979-H1329	2444191.20	1979 Nov 13 1644:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1979-H1330	2444191.37	1979 Nov 13 2055:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1979-H1331	2444191.65	1979 Nov 14 0336:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1979-H1332	2444192.05	1979 Nov 14 1314:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1979-H1333	2444192.10	1979 Nov 14 1424:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1979-H1334	2444192.20	1979 Nov 14 1653:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1979-H1337	2444192.22	1979 Nov 14 1710:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1979-H1338	2444192.25	1979 Nov 14 1734:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1979-H1339	2444192.28	1979 Nov 14 1800:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1979-H1341	2444192.45	1979 Nov 14 2251:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1979-H1343	2444194.06	1979 Nov 16 1530:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1979-H1344	2444194.10	1979 Nov 16 1431:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1979-H1345	2444194.13	1979 Nov 16 1500:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1979-H1346	2444194.16	1979 Nov 16 1548:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1979-H1347	2444194.19	1979 Nov 16 1640:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1979-H1348	2444194.32	1979 Nov 16 1958:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1979-H1349	2444194.52	1979 Nov 17 0226:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1979-H1350	2444197.06	1979 Nov 19 1530:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1979-H1351	2444197.11	1979 Nov 19 1430:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1979-H1352	2444197.11	1979 Nov 19 1440:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1979-H1353	2444196.65	1979 Nov 21 0340:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1979-H1355	2444199.06	1979 Nov 21 1530:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1979-H1356	2444199.10	1979 Nov 21 1423:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1979-H1357	2444199.20	1979 Nov 21 1644:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1979-H1358	2444199.22	1979 Nov 21 1720:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1979-H1359	2444199.25	1979 Nov 21 1845:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1979-H1360	2444199.31	1979 Nov 21 1935:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1979-H1361	2444199.39	1979 Nov 21 2327:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1979-H1362	2444199.63	1979 Nov 22 2117:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1979-H1363	2444201.20	1979 Nov 23 0301:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1979-H1364	2444201.51	1979 Nov 23 1647:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1979-H1365	2444201.51	1979 Nov 24 0220:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1979-H1366	2444204.06	1979 Nov 26 1330:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1979-H1367	2444204.07	1979 Nov 26 1344:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1979-H1368	2444204.11	1979 Nov 26 1445:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1979-H1369	2444204.12	1979 Nov 26 2008:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1979-H1370	2444205.33	1979 Nov 27 2300:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1979-H1371	2444205.33	1979 Nov 28 1330:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1979-H1372	2444205.06	1979 Nov 28 1500:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1979-H1373	2444205.12	1979 Nov 28 1530:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1979-H1374	2444205.15	1979 Nov 28 1800:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1979-H1375	2444205.22	1979 Nov 28 1712:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1979-H1376	2444205.33	1979 Nov 28 2124:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1979-H1377	2444205.41	1979 Nov 28 2155:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1979-H1378	2444207.17	1979 Nov 29 1603:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1979-H1379	2444207.16	1979 Nov 29 1625:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1979-H1380	2444207.67	1979 Nov 30 0004:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1979-H1381	2444208.06	1979 Nov 30 1320:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1979-H1382	2444208.10	1979 Nov 30 1420:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1979-H1383	2444211.06	1979 Dec 3 1330:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1979-H1384	2444211.30	1979 Dec 3 1431:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1979-H1385	2444212.09	1979 Dec 4 1415:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1979-H1386	2444212.15	1979 Dec 4 1537:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1979-H1387	2444212.17	1979 Dec 4 1605:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1979-H1388	2444212.28	1979 Dec 4 1845:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1979-H1389	2444213.04	1979 Dec 5 1259:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1979-H1390	2444213.10	1979 Dec 5 1430:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1979-H1391	2444213.11	1979 Dec 5 1432:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1979-H1392	2444213.22	1979 Dec 5 1658:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1979-H1393	2444213.22	1979 Dec 5 1715:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1979-H1394	2444213.28	1979 Dec 5 1845:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1979-H1395	2444213.35	1979 Dec 5 2026:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1979-H1396	2444213.37	1979 Dec 5 2026:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1979-H1397	2444214.57	1979 Dec 7 0140:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1979-H1398	2444215.07	1979 Dec 7 1344:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1979-H1399	2444215.11	1979 Dec 7 1445:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1979-H1400	2444218.13	1979 Dec 10 1510:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1979-H1401	2444218.27	1979 Dec 10 1825:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1979-H1402	2444218.31	1979 Dec 10 1930:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1979-H1403	2444219.54	1979 Dec 12 0059:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-





Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	OrbPay	Agency	Launch_Code	Group	Category	LTCite	Cite	Notes
1980-Y498	2444591.11	1980 Dec 17 1435:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1980-H1126	2444591.39	1980 Dec 17 2114:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1980-H1127	2444591.39	1980 Dec 17 2124:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1980-H1128	2444591.44	1980 Dec 17 2230:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1980-H1129	2444591.89	1980 Dec 18 0919:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1980-Y499	2444592.12	1980 Dec 18 1448:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1980-H1132	2444593.21	1980 Dec 19 1709:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1980-H1133	2444595.90	1980 Dec 22 0930:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1980-H1134	2444596.04	1980 Dec 22 1259:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1980-H1135	2444596.27	1980 Dec 22 1831:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1980-H1136	2444596.41	1980 Dec 22 2155:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1980-H1137	2444597.19	1980 Dec 23 1636:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1980-H1138	2444598.06	1980 Dec 24 1330:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1980-H1139	2444598.10	1980 Dec 24 1430:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1980-F505	2444598.24	1980 Dec 24 1752:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1980-H1140	2444598.26	1980 Dec 24 1820:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1980-H1141	2444598.42	1980 Dec 24 2159:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1980-H1143	2444600.04	1980 Dec 26 1256:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1980-H1144	2444600.04	1980 Dec 26 1256:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1980-H1145	2444603.11	1980 Dec 29 1445:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1980-H1146	2444603.40	1980 Dec 29 1445:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1980-H1147	2444604.41	1980 Dec 30 2136:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1980-F509	2444604.41	1980 Dec 30 2149:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1980-H1147	2444605.03	1980 Dec 31 0130:00	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-
1980-H1148	2444605.14	1980 Dec 31 1245:59	Rocketsonde	-	-	0.000	HRN	SS	-	Meteo	DSI-5850	-	-



Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Launch_Mission	FlightCode	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee km	Range km	Dest
1964-A111	2438604.59	1964 Jul 28 0208	S-160	-	PT-160-1	Propellant Test	-	-	-	KASC	-	-	-	44	-	-
1965-A106	2438962.60	1965 Jul 21 0223	S-160	-	ST-160-1	Spin Test	-	-	-	KASC	-	-	-	9	-	-
1965-A107	2438962.72	1965 Jul 21 0520	S-160	-	ST-160-2	-	-	-	-	KASC	-	-	-	14	-	-
1965-A126	2438997.51	1965 Aug 26 0015	S-160	-	BT-160-1	Booster test	-	-	-	KASC	-	-	-	2	-	-
1965-A127	2438997.59	1965 Aug 26 0209	S-160	-	BT-160-2	Booster test	-	-	-	KASC	-	-	-	9	-	-
1965-S589	2439065.59	1965 Nov 1 0215	S-160	-	PT-160-2	Propellant Test	-	-	-	KASC	-	-	-	93	-	-
1965-A156	2439068.81	1965 Nov 4 0725	S-160	-	DS-160-1	Deepin Test	-	-	-	KASC	-	-	-	35	-	-
1966-M17	2439240.68	1966 Apr 26 0415	S-160	-	IT-160-1	Instrument test	-	-	-	KASC	-	-	-	68	-	-
1967-S74	2439514.83	1967 Jan 24 0800:00	S-160	-	MT-160-001	Meteo Test	-	-	-	KASC	-	-	-	86	-	-
1967-S85	2439517.59	1967 Jan 27 0215	S-160	-	IT-160-2	Instrument test	-	-	-	KASC	-	-	-	86	-	-
1968-M18	2440109.58	1968 Sep 10 0200	S-160	-	ST-160-F-1	-	-	-	-	KASC	-	-	-	80?	-	-
1968-M19	2440109.50	1968 Sep 10	S-160	-	ST-160-F-2	-	-	-	-	KASC	-	-	-	80?	-	-
1968-M20	2440111.50	1968 Sep 12	S-160	-	SO-160-1	-	-	-	-	KASC	-	-	-	80?	-	-
1968-S496	2440113.54	1968 Sep 14 0100	S-160	-	S-160-1	-	-	-	-	KASC	-	-	-	82	-	-
1968-S496	2440113.67	1968 Sep 14 0400	S-160	-	S-160-2	-	-	-	-	KASC	-	-	-	82	-	-
1969-M28	2440455.50	1969 Aug 26	S-160	-	IT-160-3	Instrumentation Test	-	-	-	KASC	-	-	-	75	-	-
1970-M02	2440609.71	1970 Jan 23 0500	S-160	-	IT-160-2	Meteo Test	-	-	-	KASC	-	-	-	87	-	-
1970-S113	2440628.02	1970 Feb 10 1230	S-160	-	S-160JA-1	JARE 11	-	-	-	STW	-	-	-	87	-	-
1970-S123	2440635.01	1970 Feb 17 1210	S-160	-	S-160JA-2	JARE 11	-	-	-	STW	-	-	-	88	-	-
1971-S263	2441071.92	1971 Apr 30 1000	S-160	-	S-160JA-3	Para. Test	-	-	-	STW	-	-	-	83	-	-
1971-M14	2441223.50	1971 Sep 29	S-160	-	S-160-3	-	-	-	-	KASC	-	-	-	80?	-	-
1972-S86	2441365.58	1972 Feb 21 0200	S-160	-	S-160-4	-	-	-	-	KASC	-	-	-	81	-	-
1972-S171	2441424.49	1972 Apr 16 2342	S-160	-	S-160JA-4	-	-	-	-	STW	-	-	-	86	-	-



Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Agency	Launch_Code	Group	Category	LTCite	Cite	Notes
1964-A111	2438604.59	1964 Jul 28 0208	S-160	-	PT-160-1	ISAS	SS	ISAS/	Test	ISTSG-8	-	-
1965-A106	2438862.60	1965 Jul 21 0223	S-160	-	ST-160-1	ISAS	SS	ISAS/	Test	ISTSG-8	-	-
1965-A107	2438862.72	1965 Jul 21 0620	S-160	-	ST-160-2	ISAS	SS	ISAS/	Test	ISTSG-8	-	-
1965-A126	2438897.51	1965 Aug 25 0015	S-160	-	BT-160-1	ISAS	SS	ISAS/	Test	ISTSG-8	-	-
1965-A127	2438897.59	1965 Aug 25 0209	S-160	-	BT-160-2	ISAS	SS	ISAS/	Test	ISTSG-8	-	-
1965-S559	2439065.59	1965 Nov 1 0215	S-160	-	PT-160-2	ISAS	SS	ISAS/	Test	ISTSG-8	-	-
1965-A156	2439065.81	1965 Nov 4 0725	S-160	-	DS-160-1	ISAS	SS	ISAS/	Test	ISTSG-8	-	-
1966-A177	2439240.68	1966 Apr 25 0415	S-160	-	IT-160-1	ISAS	SU	ISAS/	Test	ISTSG-8	-	-
1967-S74	2439514.83	1967 Jan 24 0800:00	S-160	-	MT-160-001	ISAS	SS	JMA/Arizuma1	Aeron	WDCRF	-	-
1967-S85	2439517.59	1967 Jan 27 0215	S-160	-	IT-160-2	ISAS	SU	ISAS/	Test	ISTSG-8	-	-
1968-A18	2440094.58	1968 Sep 10 0200	S-160	-	ST-160-F-1	ISAS	SS	ISAS/	Test	WDCRF	-	-
1968-A19	2440094.58	1968 Sep 10	S-160	-	ST-160-F-2	ISAS	SS	ISAS/	Test	WDCRF	-	-
1968-A20	2440111.50	1968 Sep 12	S-160	-	SU-160-1	ISAS	SS	ISAS/	Test	WDCRF	-	-
1968-S495	2440113.54	1968 Sep 14 0100	S-160	-	S-160-1	ISAS	SS	ISAS/	Test	WDCRF	-	-
1968-S496	2440113.67	1968 Sep 14 0400	S-160	-	S-160-2	ISAS	SS	ISAS/	Aeron	WDCRF	-	-
1969-A28	2440458.50	1969 Aug 25	S-160	-	IT-160-3	ISAS	SS	ISAS/	Aeron	WDCRF	-	-
1970-A02	2440609.71	1970 Jan 23 0600	S-160	-	MT-160-2	ISAS	SS	MTI/Muramatsu	Aeron	ISST9	-	-
1970-S113	2440628.02	1970 Feb 10 1230	S-160	-	S-160JN-1	NIPR	SS	NIPR/	Auroral	WDCRF	-	-
1970-S123	2440635.01	1970 Feb 17 1210	S-160	-	S-160JN-2	NIPR	SS	NIPR/	Auroral	WDCRF	-	-
1971-S263	2441071.92	1971 Apr 30 1000	S-160	-	S-160JN-3	NIPR	SS	NIPR/	Auroral	WDCRF	-	-
1971-A14	2441223.50	1971 Sep 29	S-160	-	S-160-3	ISAS	SS	ISAS/	Test	ISTSG-8	-	-
1972-S86	2441368.58	1972 Feb 21 0200	S-160	-	S-160-4	ISAS	SS	ISAS/	Fields	WDCRF	-	-
1972-S171	2441424.49	1972 Apr 16 2342	S-160	-	S-160JN-4	NIPR	SS	NIPR/	Ionos	WDCRF	-	-





Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Launch_Mission	FlightCode	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee_Km	Range_Km	Dest
1966-493	2439343.77	1966 Aug 6 0630	S-210	-	PT-210-1	-	-	-	-	KASC	-	-	-	17	-	-
1967-461	2439560.77	1967 Mar 11 0630	S-210	-	PT-210-2	-	-	-	-	KASC	-	-	-	17	-	-
1969-3443	2440440.50	1969 Aug 7	S-210	-	S-210-1	-	-	-	-	KASC	-	-	-	101	-	-
1969-3448	2440442.00	1969 Aug 8 1200	S-210	-	S-210-2	-	-	-	-	KASC	-	-	-	108	-	-
1970-374	2440003.56	1970 Jan 17 0120	S-210	-	S-210-3	-	-	-	-	KASC	-	-	-	119	-	-
1970-3537	2440357.56	1970 Sep 28 0120	S-210	-	S-210-5	-	-	-	-	KASC	-	-	-	108	-	-
1971-366	2440367.56	1971 Jan 16 0200	S-210	-	S-210-4	-	-	-	-	KASC	-	-	-	115	-	-
1971-3337	2441126.55	1971 Jun 24 0105	S-210	-	S-210JN-4	-	-	-	-	SW	-	-	-	130	-	-
1971-3373	2441154.41	1971 Jul 21 2152	S-210	-	S-210JN-3	-	-	-	-	SW	-	-	-	131	-	-
1971-3386	2441173.60	1971 Aug 10 0224	S-210	-	S-210JN-1	-	-	-	-	SW	-	-	-	139	-	-
1971-3442	2441208.41	1971 Sep 13 2150	S-210	-	S-210JN-5	-	-	-	-	SW	-	-	-	138	-	-
1971-3474	2441219.38	1971 Sep 24 2108	S-210	-	S-210JN-6	-	-	-	-	SW	-	-	-	131	-	-
1971-3560	2441239.00	1971 Sep 3 1200	S-210	-	S-210JN-2	-	-	-	-	KASC	-	-	-	1007	-	-
1972-354	2441345.50	1972 Jan 29	S-210	-	DT-210-1	-	-	-	-	KASC	-	-	-	112	-	-
1972-346	2441337.60	1972 Jan 21 0224	S-210	-	S-210-6	-	-	-	-	KASC	-	-	-	108	-	-
1972-375	2441359.00	1972 Feb 11 1200	S-210	-	S-210JN-12	-	-	-	-	SW	-	-	-	118	-	-
1972-381	2441364.83	1972 Feb 17 0800	S-210	-	S-210-7	-	-	-	-	KASC	-	-	-	118	-	-
1972-3194	2441451.47	1972 May 13 2313	S-210	-	S-210JN-9	-	-	-	-	SW	-	-	-	129	-	-
1972-3195	2441463.46	1972 May 15 2302	S-210	-	S-210JN-10	-	-	-	-	SW	-	-	-	115	-	-
1972-3280	2441536.57	1972 Aug 7 0145	S-210	-	S-210JN-11	-	-	-	-	SW	-	-	-	126	-	-
1972-3284	2441540.54	1972 Aug 11 0101	S-210	-	S-210JN-8	-	-	-	-	SW	-	-	-	127	-	-
1972-3436	2441665.39	1972 Dec 13 2123	S-210	-	S-210JN-7	-	-	-	-	SW	-	-	-	126	-	-
1973-316	2441696.49	1973 Jan 15 2340	S-210	-	S-210-8	-	-	-	-	KASC	-	-	-	122	-	-
1973-369	2441728.49	1973 Feb 14 2346:00	S-210	-	S-210JN-16	-	-	-	-	SW	-	-	-	103	-	-
1973-3120	2441767.37	1973 Mar 25 2047:28	S-210	-	S-210JN-14	-	-	-	-	SW	-	-	-	114	-	-
1973-3164	2441796.50	1973 Apr 22 2354:20	S-210	-	S-210JN-17	-	-	-	-	SW	-	-	-	124	-	-
1973-3196	2441844.35	1973 Jun 10 2020:18	S-210	-	S-210JN-13	-	-	-	-	SW	-	-	-	123	-	-
1973-3197	2441846.35	1973 Jun 11 2110:56	S-210	-	S-210JN-15	-	-	-	-	SW	-	-	-	125	-	-
1973-3233	2441879.30	1973 Jul 15 1909:12	S-210	-	S-210JN-19	-	-	-	-	SW	-	-	-	131	-	-
1973-3283	2441913.91	1973 Aug 19 0955	S-210	-	S-210-9	-	-	-	-	KASC	-	-	-	115	-	-
1973-3282	2441917.41	1973 Aug 22 2155	S-210	-	S-210JN-18	-	-	-	-	SW	-	-	-	129	-	-
1974-3284	2442279.91	1974 Aug 20 0955	S-210	-	S-210-10	-	-	-	-	KASC	-	-	-	112	-	-
1976-379	2442303.47	1976 Jan 23 2320	S-210	-	S-210JN-22	-	-	-	-	SW	-	-	-	127	-	-
1976-3209	2442354.49	1976 Jun 24 2340	S-210	-	S-210JN-20	-	-	-	-	SW	-	-	-	118	-	-
1976-3230	2442365.52	1976 Jul 26 0025	S-210	-	S-210JN-21	-	-	-	-	SW	-	-	-	116	-	-
1976-3249	2443007.50	1976 Aug 16 2354	S-210	-	S-210JN-24	-	-	-	-	SW	-	-	-	118	-	-
1976-3250	2443022.95	1976 Aug 17 1015	S-210	-	S-210-11	-	-	-	-	KASC	-	-	-	125	-	-
1976-3254	2443022.95	1976 Sep 13 0000	S-210	-	S-210JN-25	-	-	-	-	SW	-	-	-	120	-	-
1976-3280	2443034.69	1976 Sep 13 0431	S-210	-	S-210JN-23	-	-	-	-	SW	-	-	-	106	-	-
1977-3130	2443239.96	1977 Mar 21 0355	S-210	-	S-210JN-28	-	-	-	-	SW	-	-	-	108	-	-
1977-3145	2443337.11	1977 Apr 11 0600	S-210	-	S-210JN-26	-	-	-	-	SW	-	-	-	106	-	-
1977-3145	2443337.11	1977 Jul 14 1945	S-210	-	S-210JN-29	-	-	-	-	SW	-	-	-	108	-	-
1977-3229	2443366.05	1977 Aug 16 0320	S-210	-	S-210JN-27	-	-	-	-	SW	-	-	-	110	-	-
1977-3250	2443366.05	1977 Sep 15 0630	S-210	-	S-210JN-30	-	-	-	-	KASC	-	-	-	125	-	-
1978-361	2443537.35	1978 Jan 29 2050	S-210	-	S-210JN-31	-	-	-	-	SW	-	-	-	125	-	-
1978-362	2443546.25	1978 Feb 9 1855	S-210	-	S-210JN-30	-	-	-	-	SW	-	-	-	116	-	-
1982-3162	2445225.00	1982 Sep 12 1200	S-210	-	S-210-13	-	-	-	-	KASC	-	-	-	97	-	-



Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	OrbPay	Agency	Launch_Code	Group	Category	LTCite	Cite	Notes
1966-493	2439543.77	1966 Aug 6 0630	S-210	-	PT-210-1	0.000	ISAS	SU	ISAS/	Test	ISTS7	-	-
1967-461	2439560.77	1967 Mar 11 0630	S-210	-	PT-210-2	0.000	ISAS	SU	ISAS/	Test	ISTS7	-	-
1969-5443	2440440.50	1969 Aug 7	S-210	-	S-210-1	0.000	ISAS	SS	ISAS/	Plasma/Fields/XR Astron	WDCRF	-	-
1969-5448	2440442.00	1969 Aug 8 1200	S-210	-	S-210-2	0.000	ISAS	SS	ISAS/	XR Astron	WDCRF	ApSpace12,378	-
1970-574	2440033.56	1970 Jan 17 0120	S-210	-	S-210-3	0.000	ISAS	SS	ISAS/	XR Astron	WDCRF	ISTS9	-
1970-8537	2440857.56	1970 Sep 28 0120	S-210	-	S-210-4	0.000	ISAS	SS	ISAS/	Ionos	WDCRF	SR12,1335	-
1971-866	2440967.58	1971 Jun 28 0105	S-210	-	S-210-5	0.000	ISAS	SS	ISAS/Hirao	Ionos	WDCRF	-	-
1971-8337	2441126.55	1971 Jun 28 0105	S-210	-	S-210M-4	0.000	MPR	SS	NIPR/	Auroral	WDCRF	-	-
1971-8373	2441154.41	1971 Jul 21 2152	S-210	-	S-210M-3	0.000	MPR	SS	NIPR/	Auroral	WDCRF	-	-
1971-8386	2441173.60	1971 Aug 10 0224	S-210	-	S-210M-4	0.000	MPR	SS	NIPR/	Auroral	WDCRF	-	-
1971-8442	2441219.38	1971 Sep 13 2150	S-210	-	S-210M-5	0.000	MPR	SS	NIPR/	Auroral	WDCRF	JG27-113	-
1971-8474	2441269.00	1971 Sep 24 2108	S-210	-	S-210M-6	0.000	MPR	SS	NIPR/	Auroral	WDCRF	-	-
1971-8560	2441337.60	1971 Dec 3 1200	S-210	-	DT-210-1	0.000	ISAS	SS	ISAS/	Test	ISTS10	-	-
1972-854	2441345.50	1972 Jan 29	S-210	-	S-210-6	0.000	ISAS	SS	ISAS/	Ionos	WDCRF	-	-
1972-875	2441357.60	1972 Jan 21 0224	S-210	-	S-210M-12	0.000	MPR	SS	ISAS/	Ionos	WDCRF	-	-
1972-881	2441359.00	1972 Feb 11 1200	S-210	-	S-210M-11	0.000	MPR	SS	ISAS/Hirao	Ionos	WDCRF	SR13,489	-
1972-884	2441364.83	1972 Feb 17 0800	S-210	-	S-210M-12	0.000	MPR	SS	NIPR/	Auroral/Ionos/Field	WDCRF	Planspace6123,1321	-
1972-8194	2441451.47	1972 May 13 2313	S-210	-	S-210M-9	0.000	MPR	SS	NIPR/	Auroral/Ionos/Field	WDCRF	Planspace6123,1321	-
1972-5195	2441453.46	1972 May 15 2302	S-210	-	S-210M-10	0.000	MPR	SS	NIPR/	Auroral/Ionos/Field	WDCRF	Planspace6123,1321	-
1972-5280	2441536.57	1972 Aug 7 0145	S-210	-	S-210M-11	0.000	MPR	SS	NIPR/	Auroral/Ionos/Field	WDCRF	Planspace6123,1321	-
1972-5284	2441540.54	1972 Aug 11 0101	S-210	-	S-210M-8	0.000	MPR	SS	NIPR/	Ionos/Fields	WDCRF	-	-
1972-5436	2441665.39	1972 Dec 13 2123	S-210	-	S-210M-7	0.000	MPR	SS	NIPR/	Auroral/Ionos/Field	WDCRF	-	-
1973-516	2441698.49	1973 Jan 15 2340	S-210	-	S-210-6	0.000	ISAS	SS	ISAS/	Ionos	WDCRF	-	-
1973-869	2441728.49	1973 Feb 14 2346:00	S-210	-	S-210M-16	0.000	MPR	SS	NIPR/	Auroral	NIIPR9,87	-	-
1973-5120	2441767.37	1973 Mar 25 2047:26	S-210	-	S-210M-14	0.000	MPR	SS	NIPR/	Auroral	NIIPR9,87	-	-
1973-5154	2441795.50	1973 Apr 22 2354:20	S-210	-	S-210M-17	0.000	MPR	SS	NIPR/	Auroral	NIIPR9,87	JG27-113	-
1973-5156	2441844.35	1973 Jun 10 2020:18	S-210	-	S-210M-13	0.000	MPR	SS	NIPR/	Auroral	NIIPR9,87	-	-
1973-5157	2441846.38	1973 Jun 11 2110:56	S-210	-	S-210M-15	0.000	MPR	SS	NIPR/	Auroral	NIIPR9,87	-	-
1973-5253	2441879.30	1973 Jul 15 1909:12	S-210	-	S-210M-19	0.000	MPR	SS	ISAS/TUJ/Tobmatsu	Auroral	NIIPR9,87	JG27-113	-
1973-5280	2441913.91	1973 Aug 19 0955	S-210	-	S-210M-18	0.000	MPR	SS	ISAS/	Aeron	SKctCon2	SR15,241	-
1973-5282	2441917.41	1973 Aug 22 2183	S-210	-	S-210M-10	0.000	MPR	SS	ISAS/	Auroral	SKctCon2	Planspace6123,1321	-
1974-5284	2442279.91	1974 Aug 28 0955	S-210	-	S-210-10	0.000	MPR	SS	ISAS/	Auroral/Ionos	ISRU90-1	-	-
1976-5269	2442803.47	1976 Jan 25 2320	S-210	-	S-210M-22	0.000	MPR	SS	NIPR/TUJ/Tobmatsu	Auroral/Ionos	ISRU	-	-
1976-5280	2442854.49	1976 Jun 24 2340	S-210	-	S-210M-21	0.000	MPR	SS	NIPR/	Auroral	ISRU	-	-
1976-5289	2442885.52	1976 Jul 26 0023	S-210	-	S-210M-20	0.000	MPR	SS	NIPR/	Auroral	ISRU	-	-
1976-5289	2443007.50	1976 Aug 16 2354	S-210	-	S-210M-24	0.000	MPR	SS	NIPR/	Auroral	ISRU	-	-
1976-5290	2443022.93	1976 Aug 17 1015	S-210	-	S-210M-11	0.000	ISAS	SS	ISAS/Matsuoka	Auroral	WDCRF	-	-
1976-5294	2443024.69	1976 Sep 13 0431	S-210	-	S-210M-15	0.000	MPR	SS	NIPR/	Auroral/Ionos	ISRU	-	-
1976-5294	2443024.69	1976 Sep 13 0431	S-210	-	S-210M-25	0.000	MPR	SS	NIPR/	Auroral/Ionos	ISRU	-	-
1977-5136	2443224.96	1977 Mar 21 0855	S-210	-	S-210M-26	0.000	MPR	SS	NIPR/	Auroral?	ISRU	-	-
1977-5136	2443237.11	1977 Apr 12 0906	S-210	-	S-210M-29	0.000	MPR	SS	NIPR/	Auroral?	ISRU	-	-
1977-5225	2443363.11	1977 Jul 10 1915	S-210	-	S-210M-27	0.000	MPR	SS	NIPR/	Aeron	ISRU	-	-
1977-8225	2443866.03	1977 Aug 10 1915	S-210	-	S-210M-28	0.000	MPR	SS	NIPR/	Aeron	ISRU	-	-
1977-8225	2443866.03	1977 Aug 10 1915	S-210	-	S-210M-29	0.000	MPR	SS	NIPR/	Aeron	ISRU	-	-
1977-8225	2443866.03	1977 Aug 10 1915	S-210	-	S-210M-27	0.000	MPR	SS	NIPR/	Aeron	ISRU	-	-
1977-8225	2443866.03	1977 Aug 10 1915	S-210	-	S-210M-28	0.000	MPR	SS	NIPR/	Aeron	ISRU	-	-
1977-8225	2443866.03	1977 Aug 10 1915	S-210	-	S-210M-29	0.000	MPR	SS	NIPR/	Aeron	ISRU	-	-
1977-8225	2443866.03	1977 Aug 10 1915	S-210	-	S-210M-27	0.000	MPR	SS	NIPR/	Aeron	ISRU	-	-
1977-8225	2443866.03	1977 Aug 10 1915	S-210	-	S-210M-28	0.000	MPR	SS	NIPR/	Aeron	ISRU	-	-
1977-8225	2443866.03	1977 Aug 10 1915	S-210	-	S-210M-29	0.000	MPR	SS	NIPR/	Aeron	ISRU	-	-
1978-851	2443837.35	1978 Jan 28 2020	S-210	-	S-210M-30	0.000	MPR	SS	ISAS/	Auroral?	JG331-435	Planspace6123,867	-
1978-851	2443837.35	1978 Jan 28 2020	S-210	-	S-210M-31	0.000	MPR	SS	NIPR/	Auroral?	ISRU	WDCRF	-
1978-851	2443846.29	1978 Feb 1855	S-210	-	S-210M-31	0.000	MPR	SS	NIPR/	Auroral?	ISRU	-	-
1982-5162	2445225.00	1982 Sep 12 1200	S-210	-	S-210-13	0.000	ISAS	SS	ISAS/	Aeron	SRJ	-	-



Launch

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Mission	FlightCode	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee km	Range km	Dest
1966-5684	2439433.59	1966 Nov 4 0205	S-300	-	PT-300-1	-	-	-	-	RASC	-	-	-	160	-	-
1969-409	2440230.50	1969 Jan 9	S-300	-	S-300-1	-	-	-	-	RASC	-	-	-	07	-	-
1969-5466	2440457.50	1969 Aug 24	S-300	-	S-300-2	-	-	-	-	RASC	-	-	-	160?	-	-
1969-4150	2440472.93	1969 Sep 8 1020	S-300	-	S-300-3	-	-	-	-	RASC	-	-	-	10	-	-



Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	OrbPay	Agency	Launch_Code	Group	Category	LTCite	Cite	Notes
1966-S684	2439433.59	1966 Nov 4 0205	S-300	-	PT-300-1	0.000	ISAS	SS	ISAS/	Test	ISTSY	-	-
1966-A09	2440230.50	1969 Jan 9	S-300	-	S-300-1	0.000	ISAS	SF	ISAS/	Aeron	WDRP	-	-
1969-S466	2440457.50	1969 Aug 24	S-300	-	S-300-2	0.000	ISAS	SS	ISAS/	Test	WDRP	-	-
1969-A150	2440472.93	1969 Sep 8 1020	S-300	-	S-300-3	0.000	ISAS	SF	ISAS/	Aeron	WDRP	ISST9	-





Launch

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Mission	FlightCode	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee_Km	Range_Km	Dest
1966-A57	243243.58	1966 Apr 28 0200	BF-310	-	BF-310-1	-	-	-	KASC	-	-	-	1	-	-
1966-A58	243244.50	1966 Apr 29 0000	BF-310	-	BF-310-2	-	-	-	KASC	-	-	-	1	-	-
1966-A82	243243.58	1966 Aug 6 0200	BF-310	-	MM-310-1	-	Nu Scale Model	-	KASC	-	-	-	2	-	-
1975-S17	244242.67	1975 Jan 20 0410	S-310	-	S-310-1	-	-	-	KASC	-	-	-	192	-	-
1975-S262	244264.67	1975 Aug 30 0410	S-310	-	S-310-2	-	-	-	KASC	-	-	-	191	-	-
1976-S100	244282.91	1976 Feb 13 0945	S-310	-	S-310JA-1	-	VLF/HF	-	STW	-	-	-	216	-	-
1976-S268	244302.01	1976 Aug 10 0221:50	S-310	-	S-310-3	-	VLF/HF	-	STW	-	-	-	195	-	-
1977-S67	244314.52	1977 Feb 10 0022:50	S-310	-	S-310JA-2	-	VLF/HF	-	STW	-	-	-	221	-	-
1977-S218	244331.15	1977 Jul 26 1535:29	S-310	-	S-310JA-3	-	VLF/plasma/B	-	STW	-	-	-	221	-	-
1977-S251	244340.78	1977 Sep 21 0835	S-310	-	S-310-4	-	-	-	KASC	-	-	-	188	-	-
1978-S258	244359.30	1978 Mar 27 1915:50	S-310	-	S-310JA-7	-	-	-	KASC	-	-	-	220	-	-
1978-S259	244367.46	1978 Jun 10 2256:50	S-310	-	S-310JA-5	-	-	-	KASC	-	-	-	226	-	-
1978-S254	244370.52	1978 Aug 18 0032	S-310	-	S-310JA-4	-	-	-	KASC	-	-	-	199	-	-
1978-S226	244374.41	1978 Aug 28 2156:00	S-310	-	S-310JA-6	-	-	-	KASC	-	-	-	199	-	-
1979-S59	244382.87	1979 Jan 19 0850	S-310	-	S-310-6	-	-	-	KASC	-	-	-	212	-	-
1979-S56	244390.44	1979 Jan 31 0200	S-310	-	S-310-5	-	-	-	KASC	-	-	-	166	-	-
1979-S202	244413.96	1979 Sep 15 1100	S-310	-	S-310-7	-	-	-	KASC	-	-	-	185	-	-
1980-S53	244427.18	1980 Feb 2 0847	S-310	-	S-310-8	-	-	-	KASC	-	-	-	179	-	-
1981-S34	244426.41	1981 Jan 21 2146	S-310	-	S-310-9	-	-	-	KASC	-	-	-	187	-	-
1981-S147	244464.00	1981 Jan 24 1200	S-310	-	S-310-10	-	-	-	KASC	-	-	-	193	-	-
1981-S156	244464.90	1981 Aug 7 0938	S-310	-	S-310-11	-	Subm atm. spectra	-	KASC	-	-	-	200	-	-
1982-S171	244527.69	1982 Sep 25 0915	S-310	-	S-310-12	-	-	-	KASC	-	-	-	227	-	-
1983-S163	244590.42	1983 Sep 12 2200	S-310	-	S-310-13	-	-	-	KASC	-	-	-	201	-	-
1983-S164	244594.26	1983 Sep 16 1616	S-310	-	S-310-14	-	-	-	KASC	-	-	-	218	-	-
1984-S78	244679.31	1984 Apr 4 1327:01	S-310	-	S-310JA-6	-	AURORA I	-	STW	-	-	-	201	-	-
1984-S86	244682.43	1984 Apr 3 2214:10	S-310	-	S-310JA-9	-	AURORA II	-	STW	-	-	-	204	-	-
1984-S91	244689.47	1984 May 26 2317:13	S-310	-	S-310JA-10	-	AURORA III	-	STW	-	-	-	209	-	-
1985-S35	2446103.86	1985 Feb 7 0900	S-310	-	S-310-15	-	V-P I	-	KASC	K	-	-	213	-	-
1985-S79	2446214.54	1985 May 29 0659:53	S-310	-	S-310JA-11	-	V-P II	-	STW	-	-	-	212	-	-
1985-S99	2446259.32	1985 Jul 12 1935:39	S-310	-	S-310JA-12	-	E-region	-	STW	-	-	-	222	-	-
1986-S20	2446463.03	1986 Feb 1 1240	S-310	-	S-310-16	-	E-region	-	KASC	K	-	-	201	-	-
1986-S80	2446660.04	1986 Sep 6 1300	S-310	-	S-310-17	-	Airglow	-	KASC	K	-	-	202	-	-
1986-S48	2447188.58	1986 Jan 28 0200	S-310	-	S-310-18	-	D-region	-	KASC	K	-	-	230	-	-
1989-S54	2447559.00	1989 Feb 1 1200	S-310	-	S-310-19	-	-	-	KASC	K	-	-	186	-	-
1990-S53	2447919.31	1990 Jan 27 1930	S-310	-	S-310-20	-	-	-	KASC	K	-	-	223	-	-
1992-S14	2448650.00	1992 Jan 28 1200	S-310	-	S-310-21	-	NHF/ALV/ALD/DEL	-	AND	-	-	-	192	-	-
1994-S16	2448399.63	1994 Feb 16 0752	S-310	-	S-310-22	-	NHF/ALV/ALD/DEL	-	AND	-	-	-	192	-	-
1994-S64	2448660.93	1994 Nov 24 1020	S-310	-	S-310-23	-	NHF/ALV/ALD/DEL	-	AND	-	-	-	200	-	-
1996-S66	2450174.96	1996 Feb 11 1100	S-310	-	S-310-24	-	NTV-1	-	KASC	K	-	-	177	-	-
1996-S69	2450316.15	1996 Aug 20 1530	S-310	-	S-310-25	-	SIEK-1	-	KASC	K	-	-	183	-	-
1996-S51	2450322.08	1996 Aug 26 1430	S-310	-	S-310-26	-	SIEK-1	-	KASC	K	-	-	177	-	-
1996-S04	2450328.86	1996 Jan 25 1430	S-310	-	S-310-27	-	SIEK-2	-	KASC	K	-	-	199	-	-
1999-S01	2451551.99	1999 Feb 9 0430	S-310	-	S-310-28	-	SIEK-2	-	KASC	K	-	-	183	-	-
2000-S01	2451553.37	1999 Feb 9 0430	S-310	-	S-310-29	-	SIEK-2	-	KASC	K	-	-	183	-	-
2002-S58	2452440.10	2002 Feb 6 1030	S-310	-	S-310-30	-	WAVE200	-	KASC	K	-	-	179	-	-
2002-S57	2452440.10	2002 Aug 3 1430	S-310	-	S-310-31	-	WAVE200	-	KASC	K	-	-	169	-	-
2002-S53	2452020.15	2002 Aug 3 1430	S-310	-	S-310-32	-	WAVE200	-	KASC	K	-	-	177	-	-
2004-S31	2452020.15	2004 Jan 5 0815	S-310	-	S-310-33	-	WAVE200	-	KASC	K	-	-	141	-	-
2004-S50	2452256.84	2004 Aug 19 0333:00	S-310	-	S-310-34	-	S-310 Sat's	-	KASC	K	-	-	170	-	-
2004-S60	2452359.52	2004 Dec 19 0015	S-310	-	S-310-35	-	DELTA 2004	-	AND	U9	-	-	140	-	-
2007-S37	2452757.87	2007 Jan 16 0200	S-310	-	S-310-36	-	Furoshiki	-	KASC	K	-	-	130?	-	-
2008-S02	2454502.89	2008 Feb 26 0015	S-310	-	S-310-37	-	WAVE200	-	KASC	K	-	-	187	-	-
2008-S07	2454502.89	2008 Feb 26 0015	S-310	-	S-310-38	-	WAVE200	-	KASC	K	-	-	187	-	-
2009-S02	2454502.89	2009 Feb 26 0015	S-310	-	S-310-39	-	WAVE200	-	KASC	K	-	-	180?	-	-
2011-S69	2455116.87	2011 Dec 7 0730:00	S-310	-	S-310-40	-	DELTA-2	-	AND	U9	-	-	140?	-	-
2012-S61	2455166.81	2012 Aug 7 0730:00	S-310	-	S-310-41	-	MMAC	-	USC	K	-	-	180	-	-
2013-S60	2456146.81	2013 Jul 20 0200	S-310	-	S-310-42	-	-	-	USC	K	-	-	150	-	-
2014-S63	2456493.58	2014 Aug 4 1400:00	S-310	-	S-310-43	-	-	-	USC	K	-	-	139	-	-
2016-S01	2457402.62	2016 Jan 15 0300	S-310	-	S-310-44	-	-	-	USC	K	-	-	161	-	-
2020-S10	2458657.83	2020 Jan 9 0800	S-310	-	S-310-45	-	Cryo tank flow test Plasma heating Dispenser test	-	USC	K	-	-	131	-	-



Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	OrbPay	Agency	Launch_Code	Group	Category	LTCite	Cite	Notes
1966-A57	2439243.58	1966 Apr 28 0200	BF-310	-	BF-310-1	0.000	ISAS	SS	ISAS/	Test	ISTS7	-	-
1966-A58	2439244.50	1966 Apr 29 0000	BF-310	-	BF-310-2	0.000	ISAS	SS	ISAS/	Test	ISTS7	-	-
1966-A59	2439943.58	1966 Aug 6 0200	BF-310	-	MF-310-1	0.000	ISAS	SS	ISAS/	Test	FDC/Ulrich	-	-
1975-S17	2442432.67	1975 Jan 30 0410	S-310	-	S-310-1	0.000	ISAS	SS	ISAS/	Ionos	ISRJ30-1	ISRJ29-1	-
1975-S262	2442654.67	1975 Aug 30 0410	S-310	-	S-310-2	0.000	ISAS	SS	ISAS/	Ionos	ISRJ30-1	ISRJ29-1	-
1976-S100	2442821.91	1976 Feb 13 0945	S-310	-	S-310A-1	0.000	MIPR	SS	MIPR/KYO/Kimura	Ionos	WDCRR	WDCRR	-
1976-S268	2443012.01	1976 Aug 21 1210	S-310	-	S-310-3	0.000	ISAS	SS	ISAS/Itoh	Ionos	WDCRF	JG632_95	-
1977-S67	2443154.52	1977 Feb 10 0022:50	S-310	-	S-310A-2	0.000	MIPR	SS	MIPR/	Ionos	ISRJ	-	-
1977-S218	2443351.15	1977 Jul 26 1535:29	S-310	-	S-310A-3	0.000	MIPR	SS	MIPR/	Ionos	ISRJ	-	-
1977-S251	2443907.86	1977 Sep 21 0835	S-310	-	S-310-4	0.000	ISAS	SS	ISAS/Hakamura	Ionos	WDCRF	-	-
1978-S325	2443955.30	1978 Mar 27 1915:50	S-310	-	S-310A-7	0.000	ISAS	SS	ISAS/Hakamura	Auroral	AMP22_196	-	-
1978-S328	2443970.46	1978 Jun 10 2256:50	S-310	-	S-310A-5	0.000	ISAS	SS	ISAS/KYO/Kimura	Ionos	AMP22_185	-	-
1978-S324	2443738.52	1978 Aug 18 0032	S-310	-	S-310A-4	0.000	ISAS	SS	ISAS/MIPR/Ejiri	Ionos	AMP18_275	-	-
1978-S326	2443749.41	1978 Aug 28 2156:00	S-310	-	S-310A-6	0.000	ISAS	SS	ISAS/MAG/Kamada	Ionos	AMP18_453	-	-
1979-S39	2443892.87	1979 Jan 19 0850	S-310	-	S-310-6	0.000	ISAS	SS	ISAS/	Aeron/Ionos	WDCRF	PlanSpace6c133_875	-
1979-S36	2443904.56	1979 Jan 31 0200	S-310	-	S-310-5	0.000	ISAS	SS	ISAS/	Ionos/Fields	WDCRF	-	-
1979-S202	2444131.96	1979 Sep 15 1100	S-310	-	S-310-7	0.000	ISAS	SS	ISAS/	Aeron	ISRJ	-	-
1980-S33	2444271.87	1980 Feb 2 0847	S-310	-	S-310-8	0.000	ISAS	SS	ISAS/	Aeron	ISRJ	-	-
1981-S34	2444626.41	1981 Jan 21 2146	S-310	-	S-310-9	0.000	ISAS	SS	ISAS/	Aeron	ISRJ	-	-
1981-S147	2444641.00	1981 Aug 24 1200	S-310	-	S-310-10	0.000	ISAS	SS	ISAS/	Test/Auroral/Aeron	ISRJ	-	-
1981-S156	2444684.90	1981 Sep 7 0958	S-310	-	S-310-11	0.000	ISAS	SS	ISAS/TOK/Matsumaki	Aeron	ISRJ	-	-
1982-S171	2445237.69	1982 Sep 25 0915	S-310	-	S-310-12	0.000	ISAS	SS	ISAS/	Aeron	ISRJ	-	-
1983-S163	2445990.42	1983 Sep 12 2200	S-310	-	S-310-13	0.000	ISAS	SS	ISAS/	Ionos	ISRJ	-	-
1983-S164	2445994.26	1983 Sep 16 1816	S-310	-	S-310A-8	0.000	MIPR	SS	ISAS/Dyama,Hirao	Aeron	ISRJ	PlanSpace6c133_875	-
1984-S578	2445795.31	1984 Apr 4 1927:01	S-310	-	S-310A-9	0.000	MIPR	SS	MIPR/	Ionos	JG40_763	-	-
1984-S585	2445824.43	1984 May 3 2214:10	S-310	-	S-310A-9	0.000	MIPR	SS	MIPR/	Ionos	JG40_763	-	-
1984-S581	2445693.47	1984 May 26 2317:13	S-310	-	S-310A-10	0.000	MIPR	SS	MIPR/	Ionos	JG40_763	-	-
1985-S35	2446013.66	1985 Feb 7 0900	S-310	-	S-310-15	0.000	ISAS	SS	ISAS/	Ionos	ISRJ	-	-
1985-S79	2446214.54	1985 May 29 0059:53	S-310	-	S-310A-11	0.000	MIPR	SS	MIPR/	Ionos	JG40_763	-	-
1986-S59	2446259.32	1985 Jul 12 1935:39	S-310	-	S-310A-12	0.000	MIPR	SS	ISAS/TOK/Kita	Ionos	ISRJ	-	-
1986-S20	2446463.03	1986 Feb 1 1240	S-310	-	S-310-16	0.000	ISAS	SS	ISAS/famazawa,Magamo	Ionos/Aeron	ISRJ	-	-
1986-S58	2447188.58	1986 Sep 6 1300	S-310	-	S-310-17	0.000	ISAS	SS	ISAS/TOK/	Aeron	ISRJ	-	-
1986-S50	2447650.04	1986 Jan 26 0200	S-310	-	S-310-18	0.000	ISAS	SS	ISAS/TOK/	Aeron	ISRJ	-	-
1989-S54	2447559.00	1989 Feb 1 1200	S-310	-	S-310-19	0.000	ISAS	SS	ISAS/TOK/	Aeron	ISRJ	-	-
1990-S53	2447913.31	1990 Jan 27 1930	S-310	-	S-310-20	0.000	ISAS	SS	ISAS/TOK/	Aeron	ISRJ	-	-
1992-S14	2448650.00	1992 Jan 28 1200	S-310	-	S-310-21	0.000	ISAS	SS	ISAS/TOK/TOK/	Aeron	ISRJ	-	-
1994-S16	2449399.63	1994 Feb 16 0752	S-310	-	S-310-22	0.000	ISAS	SS	ISAS/TOK/TOK/	Aeron	ISRJ	-	-
1994-S64	2449690.53	1994 Nov 24 1020	S-310	-	S-310-23	0.000	ISAS	SS	ISAS/TOK/	Aeron	ISRJ	-	-
1996-S66	2450174.96	1996 Feb 11 1100	S-310	-	S-310-24	0.000	ISAS	SS	ISAS/KYO/Fuatao	Aeron	ISRJ	-	-
1996-S59	2450316.15	1996 Aug 20 1530	S-310	-	S-310-26	0.000	ISAS	SS	ISAS/KYO/Fuatao	Plasma	ISAS-WW	-	-
1996-S51	2450622.98	1996 Aug 26 1430	S-310	-	S-310-25	0.000	ISAS	SS	ISAS/KYO/Fuatao	Plasma	ISAS-WW	-	-
1996-S52	2450626.98	1996 Aug 26 1430	S-310	-	S-310-25	0.000	ISAS	SS	ISAS/TOK/	Aeron	ISAS-WW	-	-
1999-S05	2451551.97	1999 Feb 6 0930	S-310	-	S-310-26	0.000	ISAS	SS	ISAS/TOK/Ono	Ionos/XR	ESK-SP437	-	-
1999-S05	2451553.37	2000 Jan 9 0200	S-310	-	S-310-26	0.000	ISAS	SS	ISAS/	Aeron	ESK-SP471	-	-
2002-S68	2451333.94	2002 Feb 6 0200	S-310	-	S-310-29	0.000	ISAS	SS	ISAS/	Aeron	ISKS-9471	-	-
2002-S68	2451335.11	2002 Feb 6 0200	S-310	-	S-310-30	0.000	ISAS	SS	ISAS/	Aeron	ISKS-9471	-	-
2002-S68	2451336.10	2002 Aug 3 1424	S-310	-	S-310-31	0.000	ISAS	SS	ISAS/KYO/Fuatao	Aeron	ISKS-WW	-	-
2002-S57	2451430.11	2002 Aug 3 1424	S-310	-	S-310-32	0.000	ISAS	SS	ISAS/KYO/Fuatao	Aeron	ISKS-WW	-	-
2004-S53	2451922.15	2004 Aug 3 1439	S-310	-	S-310-32	0.000	ISAS	SS	ISAS/TOK/Iwagami	Aeron	ISKS-WW	-	-
2004-S53	2451922.15	2004 Jan 31 1530	S-310	-	S-310-34	0.000	ISAS	SS	ISAS/TOK/Iwahimura	Tech	www.ihl.co.jp	-	-
2004-S51	2451926.84	2004 Aug 9 0815	S-310	-	S-310-35	0.000	JAXA	SS	ISAS/Ab	Aeron	rocketrange.no	-	-
2004-S59	2451935.57	2004 Dec 9 0033:00	S-310	-	S-310-35	0.000	JAXA	SS	ISAS/Ab	Aeron	rocketrange.no	-	-
2006-S92	2451977.62	2006 Jan 22 0400	S-310	-	S-310-36	0.000	JAXA	SS	ISAS/Ab	Ionos	jaxa.jp	-	-
2007-S37	2451116.60	2007 Jan 16 0200	S-310	-	S-310-37	0.000	JAXA	SS	ISAS/Ab	Ionos	jaxa.jp	-	-
2008-S07	2451502.99	2008 Feb 6 0914:40	S-310	-	S-310-38	0.000	JAXA	SS	ISAS/Ab	Ionos	rocketrange.no	-	-
2008-S07	2451502.99	2008 Jan 26 0015	S-310	-	S-310-39	0.000	JAXA	SS	ISAS/Ab	Ionos	rocketrange.no	-	-
2011-S69	2451857.51	2011 Jan 20 0848	S-310	-	S-310-40	0.000	JAXA	SS	ISAS/Ab	Aeron	jaxa.jp	-	-
2012-S41	2451815.87	2012 Dec 7 0730:00	S-310	-	S-310-41	0.000	JAXA	SS	ISAS/Ab	Reentry test	jaxa.jp	-	-
2013-S50	2451616.81	2013 Aug 4 1400:00	S-310	-	S-310-42	0.000	JAXA	SS	ISAS/	Aeron	jaxa.jp	-	-
2014-S43	24516974.08	2014 Jul 20 0200	S-310	-	S-310-43	0.000	JAXA	SS	ISAS/	Tech	jaxa.jp	-	-
2016-S01	2457402.62	2016 Aug 15 0300	S-310	-	S-310-44	0.000	JAXA	SS	ISAS/	Ionos	jaxa.jp	-	-
2020-S10	2456857.83	2020 Jan 9 0800	S-310	-	S-310-45	0.000	JAXA	SS	ISAS/	Tech	jaxa.jp	-	-



Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Mission	FlightCode	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee_Km	Range_Km	Dest
1984-S131	2446025.50	1984 Nov 21	Sonda 4	-	PT-01	-	-	-	-	CLEI	-	-	-	616	-	-
1985-S138	2446389.04	1985 Nov 19 1300	Sonda 4	-	PT-02	GL A40.401 (HARP)	-	-	-	CLEI	-	-	-	667	-	-
1987-S167	2447107.50	1987 Nov 8	Sonda 4	-	PT-03	-	-	-	-	CLEI	-	-	-	130	-	-
1988-S48	2447613.50	1989 Mar 28	Sonda 4	-	PT-04	-	-	-	-	CLEI	-	-	-	821	-	-
1993-S26	2449079.94	1993 Apr 2 1034	YS-40	-	PT-01	-	-	-	-	ALCA	UL?	-	-	960	-	-
1997-F03	2450765.02	1997 Nov 2 1225:00	VLS-1	-	V01	SCD-2A	SCD-2A	-	-	ALCA	VLS	-	-	3	-	-
1998-S31	2450893.50	1998 Mar 21	YS-40	-	V02	VAP-1	-	-	-	ALCA	UL?	-	-	900?	-	-
1998-F05	2451524.27	1999 Dec 11 1825	VLS-1	-	V02	SACI-2	SACI-2	-	-	ALCA	VLS	-	-	10	-	-
2003-E01	2452874.19	2003 Aug 22 1630?	VLS-1	-	V03	SATEC/JUNSAT	-	-	-	ALCA	VLS	-	-	0	-	-
2012-S30	2455101.30	2012 Jun 22 1918	YS-40H	-	-	DLR SHEREX II	-	-	-	AND	03	-	-	177	-	-
2015-E01	2457340.22	2015 Nov 13 1720	YS-40H	-	V03	SRM Suborbital 1	-	-	-	ALCA	UL?	-	-	0	-	-



Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	OrbPay	Agency	Launch_Code	Group	Category	LTCite	Cite	Notes
1984-S131	2446025-50	1984 Nov 21	Sonda 4	-	PT-01	0.000	IAE	SS	INPE/	Test	ESA-SF229-361	-	-
1985-S138	2446389-04	1985 Nov 19 1300	Sonda 4	-	PT-02	0.000	IAE	SS	AFGRL/Ackema	Test	WDRNF	ESA-SF291-213/AFORL	-
1987-S167	2447107-50	1987 Nov 8	Sonda 4	-	PT-03	0.000	IAE	SF	INPE/	Test	ESA-SF370	-	-
1989-S48	2447613-50	1989 Mar 28	Sonda 4	-	PT-04	0.000	IAE	SS	INPE/	Test	ESA-SF370	F1890513-22	-
1989-S26	2449079-94	1989 Apr 2 1034	WS-40	-	PT-01	0.000	INPE	SS	INPE/	Test	Wire	ESA-SF370	-
1997-F03	2450755-02	1997 Nov 2 1225:00	WS-1	-	V01	0.150	AEB	UF	G	Sat LED 0	Wire	-	-
1998-S31	2450983-50	1998 Mar 21	WS-40	-	V02	0.000	INPE	SS	INPE/	Test	MR9811-23	brazillianspace.blog	-
1999-F05	2451524-27	1999 Dec 11 1825	WS-1	-	V02	0.060	AEB	UF	G	Sat LED 0	ww.iae.cta.br	-	-
2003-E01	2452874-19	2003 Aug 22 1630?	WS-1	-	V03	0.000	AEB	DE	G	Sat LED 0	ww.iae.cta.br	-	-
2012-S30	2456101-30	2012 Jun 22 1918	WS-40M	-	-	0.000	DLR	SS	DLR/	Hypersonic	rocketrange.no	-	-
2015-E01	2457340-22	2015 Nov 13 1720	WS-40M	-	V03	0.000	AEB	SE	-	Reentry test	brazillianspace.blog	-	-





Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Mission	FlightCode	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee Km	Range Km	Dest
1980-827	2444256.76	1980 Jan 18 0620	S-520	-	S-520-1	Heat Pipe	-	-	-	KASC	K	-	-	329	-	-
1981-357	2444633.79	1981 Jan 29 0700	S-520	-	S-520-2	TFE-2	-	-	-	KASC	K	-	-	323	-	-
1981-8154	2444652.54	1981 Sep 5 0100	S-520	-	S-520-4	PL Recovery Test	-	-	-	KASC	K	-	-	224	-	-
1982-356	2445014.95	1982 Feb 14 1050	S-520	-	S-520-3	0.3m telescope test	-	-	-	KASC	K	-	-	266	-	-
1982-8158	2445218.59	1982 Sep 6 0200:00	S-520	-	S-520-5	0.1m telescope	-	-	-	KASC	K	-	-	237	-	-
1983-8150	2445575.92	1983 Aug 29 1000	S-520	-	S-520-6	MIMIX	-	-	-	KASC	K	-	-	238	-	-
1985-840	2446107.94	1985 Feb 11 1030	S-520	-	S-520-7	-	-	-	-	KASC	K	-	-	362	-	-
1987-842	2446810.94	1987 Jan 15 0810	S-520	-	S-520-9	E field	-	-	-	KASC	K	-	-	365	-	-
1987-854	2446648.18	1987 Feb 21 1615	S-520	-	S-520-8	GOV	-	-	-	KASC	K	-	-	286	-	-
1989-889	2447774.18	1989 Sep 4 1615	S-520	-	S-520-10	CR Cosmic IR	-	-	-	KASC	K	-	-	288	-	-
1990-844	2447944.17	1990 Feb 21 1600	S-520	-	S-520-11	CR	-	-	-	AND	-	-	-	317	-	-
1990-848	2447948.59	1990 Feb 26 0206	S-520	-	S-520-12	A-1	-	-	-	AND	-	-	-	369	-	-
1991-866	2448299.65	1991 Feb 12 0329	S-520	-	S-520-14	A-2	-	-	-	KASC	K	-	-	353	-	-
1991-871	2448304.04	1991 Feb 16 1300	S-520	-	S-520-13	EW Telescopes	-	-	-	KASC	K	-	-	337	-	-
1992-816	2448654.17	1992 Feb 1 1600	S-520	-	S-520-15	CR	-	-	-	KASC	K	-	-	338	-	-
1993-814	2449036.79	1993 Feb 18 0700	S-520	-	S-520-16	METS	-	-	-	KASC	K	-	-	272	-	-
1994-867	2449698.40	1994 Dec 1 2139	S-520	-	S-520-21	-	-	-	-	AND	-	-	-	344	-	-
1995-805	2449741.02	1995 Jan 23 1230	S-520	-	S-520-17	-	-	-	-	KASC	K	-	-	346	-	-
1995-807	2449746.17	1995 Jan 23 1230	S-520	-	S-520-19	EW Telescopes	-	-	-	KASC	K	-	-	330	-	-
1997-805	2450475.51	1997 Sep 17 0730	S-520	-	S-520-20	Lunar Penetrator test	-	-	-	KASC	K	-	-	1	-	-
1998-806	2450644.69	1998 Jan 31 0430	S-520	-	S-520-18	Lunar Penetrator test	-	-	-	KASC	K	-	-	309	-	-
1998-808	2450649.85	1998 Feb 5 0830	SS-520	-	S-520-22	SULAR-B XDI	-	-	-	KASC	K	-	-	270	-	-
2000-864	2451682.89	2000 Dec 4 0916:00	SS-520	-	SS-520-1	EM/ERS/LAP	-	-	-	KASC	K	-	-	750	-	-
2007-374	2454345.93	2007 Sep 2 1020	S-520	-	S-520-23	Ion Outflow	-	-	-	SWAL	-	-	-	1108	-	-
2008-537	2454680.85	2008 Aug 2 0830	S-520	-	S-520-24	Microgravity	-	-	-	USC	K	-	-	279	-	-
2010-585	2455439.33	2010 Aug 30 2000	S-520	-	S-520-26	I-REX	-	-	-	USC	K	-	-	293	-	-
2012-502	2456939.12	2012 Jan 12 1451:00	S-520	-	S-520-28	Microgravity/Dust nuc	-	-	-	USC	K	-	-	309	-	-
2012-573	2456275.79	2012 Dec 17 0700:00	S-520	-	S-520-26	Ii release	-	-	-	USC	K	-	-	312	-	-
2013-851	2456493.62	2013 Jul 20 0257	S-520	-	S-520-27	Microgravity/Dust nuc	-	-	-	USC	K	-	-	316	-	-
2014-844	2456686.52	2014 Aug 17 1010:00	S-520	-	S-520-29	Sporadic E study	-	-	-	USC	K	-	-	343	-	-
2015-849	2457276.96	2015 Sep 11 1100	S-520	-	S-520-30	Dust nucleation	-	-	-	USC	K	-	-	312	-	-
2017-F01	2457766.44	2017 Jan 14 2353	SS-520	4	SS-520-4	TRICOM I	TRICOM-1	-	-	USC	K	-	-	220?	160?	-
2018-016	246152.71	2018 Feb 3 0603	SS-520	4	SS-520-5	Tsukui	TRICOM-IR	-	-	USC	K	-	-	2012	-	-
2021-846	2469422.35	2021 Jul 26 2030:00	S-520	-	S-520-31	DES/PANTS	-	-	-	USC	K	-	-	235	-	-
2021-875	2469522.59	2021 Nov 4 0209:25	SS-520	-	SS-520-31	-	-	-	-	USC	K	-	-	966	-	-
2022-870	2469764.33	2022 Jul 23 2000:00	S-520	-	S-520-30	S-520-RD1	-	-	-	SWAL	-	-	-	968	-	-
2022-879	2469905.10	2022 Aug 11 1420	S-520	-	S-520-32	S-520-RD1	-	-	-	USC	K	-	-	279	-	-
2023-866	2460280.79	2023 Dec 2 0700	S-520	-	S-520-33	S-520-RD2	-	-	-	USC	K	-	-	304	-	-
2024-371	2460626.60	2024 Nov 14 0230:00	S-520	-	S-520-34	DES/PANTS-2	-	-	-	USC	K	-	-	217	-	-



Launch

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	OrbPay	Agency	Launch_Code	Group	Category	LTCite	Cite	Notes
1980-527	2444256-76	1980 Jan 18 0620	S-520	-	S-520-1	0.000	ISAS	SS	ISAS/TSUK/Murakami	Aeron/Ionos	SRJ	-	-
1981-557	2444633-79	1981 Jan 29 0700	S-520	-	S-520-2	0.000	ISAS	SS	ISAS/USU/Sasaki,Maitt	Ionos/TeCher	JScR24,444	-	AdvatSci62-497
1981-554	2444632-54	1981 Sep 5 0100	S-520	-	S-520-4	0.000	ISAS	SS	ISAS/Hayashi	Test/Ionos	SRJ	-	-
1982-566	2446014-98	1982 Feb 14 1050	S-520	-	S-520-3	0.000	ISAS	SS	TUK/Tanaka	Solar/EUV	SRJ	-	ApSpSci114,387
1982-5158	2446218-58	1982 Sep 6 0200:00	S-520	-	S-520-5	0.000	ISAS	SS	ISAS/TAO/Makatsani,Hamana	Plasma physics	SRJ	-	ISASPr608
1983-5150	2446575-92	1983 Aug 29 1000	S-520	-	S-520-6	0.000	ISAS	SS	ISAS/KOBE/Itagatomo,Kaya	Aeron/Ionos	SRJ	-	-
1985-540	2446107-94	1985 Feb 11 1030	S-520	-	S-520-7	0.000	ISAS	SS	ISAS/Makamura	Aeron/Aeron	SRJ	-	JG894,5283
1987-582	2446910-84	1987 Jan 15 0910	S-520	-	S-520-9	0.000	ISAS	SS	TUK/Tanaka,Onaka	Ionos/Aeron	SRJ	-	ApJ342,238
1987-564	2446948-18	1987 Feb 21 1615	S-520	-	S-520-8	0.000	ISAS	SS	MG/Matsumura?	UV Astron	SRJ	-	-
1989-589	2447774-18	1989 Sep 4 1615	S-520	-	S-520-10	0.000	ISAS	SS	ISAS/Kanazawa	IR Astron	SRJ	-	Icarus15,199
1990-544	2447944-17	1990 Feb 21 1600	S-520	-	S-520-11	0.000	ISAS	SS	ISAS/TOKU1/	Auroral	SRJ	-	-
1990-548	2447948-59	1990 Feb 26 0206	S-520	-	S-520-12	0.000	ISAS	SS	ISAS/USK/Miyazaki	EUV Astron	SRJ	-	-
1991-566	2446299-66	1991 Feb 12 0329	S-520	-	S-520-13	0.000	ISAS	SS	ISAS/USK/Miyazaki	IR Astron	SRJ	-	Icarus15,199
1991-571	2446304-04	1991 Feb 16 1300	S-520	-	S-520-14	0.000	ISAS	SS	ISAS/Akiba,Makajima	Ionos/Active plasma	SRJ	-	SH930301-9
1992-516	2446654-17	1992 Feb 1 1600	S-520	-	S-520-15	0.000	ISAS	SS	ISAS/CRLI/TOHU/	Auroral	SRJ	-	-
1993-514	2449036-79	1993 Feb 18 0700	S-520	-	S-520-16	0.000	ISAS	SS	ISAS/MUGI/Katsuo	Submm Astron	SRJ	-	-
1994-587	2449688-40	1994 Dec 1 2139	S-520	-	S-520-21	0.000	ISAS	SS	ISAS/MUGI/Katsuo	EUV Astron	SRJ	-	-
1995-505	2449741-02	1995 Jan 23 1230	S-520	-	S-520-17	0.000	ISAS	SS	ISAS/	Tech	SRJ	-	-
1995-507	2449746-17	1995 Jan 28 1600	S-520	-	S-520-19	0.000	ISAS	SF	ISAS/	UV Astron	SRJ	-	-
1995-507	2449777-81	1995 Sep 17 0730	S-520	-	S-520-20	0.000	ISAS	SS	ISAS/	Tech	SRJ	-	JScR41,868
1997-505	2460478-81	1997 Jan 30 0730	S-520	-	S-520-18	0.000	ISAS	SS	ISAS/MAD/Shimizu	Solar XUV	ISAS-WW	-	-
1998-506	2460849-69	1998 Jan 31 0430	S-520	-	S-520-22	0.000	ISAS	SS	ISAS/TUK/	Test/Plasma	ISAS-WW	-	-
1998-508	2460849-86	1998 Feb 5 0830	S-520	-	S8-520-1	0.000	ISAS	SS	ISAS/XIU/Wada,Iwai	Ionos	AND-WW	-	-
2000-564	2461822-89	2000 Dec 4 0916:00	S-520	-	S8-520-2	0.000	ISAS	SS	TUHO/TORA/omoto,Ishida.	Ionos	ISAS-WW	-	ISTS23-2092
2007-574	2464346-39	2007 Sep 2 1020	S-520	-	S-520-23	0.000	JMA	SS	TEIK/ISAS/	Microgravity	ISAS-WW	-	-
2008-537	2464680-86	2008 Aug 2 0830	S-520	-	S-520-24	0.000	JMA	SS	KAIT/TRU/FuJii,Sumino	Tech/Ionos	www.jaxa.jp	-	www.ihl.co.jp
2010-585	2465439-33	2010 Aug 30 2000	S-520	-	S-520-25	0.000	JMA	SS	ISAS/Abs	Tech/Ionos	sacj.org/openbbs	-	-
2012-573	2465939-12	2012 Jan 12 1451:00	S-520	-	S-520-26	0.000	JMA	SS	TUK/TUKAI/HORIKI/Kimura	Aeron	jaxa.jp	-	-
2012-573	2466278-79	2012 Dec 17 0700:00	S-520	-	S-520-28	0.000	JMA	SS	ISAS/	Microgravity/Physics	jaxa.jp	-	-
2013-581	2466493-62	2013 Jul 20 0297	S-520	-	S-520-27	0.000	JMA	SS	ISAS/	Aeron	jaxa.jp	-	-
2014-544	2466586-92	2014 Aug 17 1010:00	S-520	-	S-520-29	0.000	JMA	SS	ISAS/	Ionos	jaxa.jp	-	-
2015-549	2467276-96	2015 Sep 11 1100	S-520	-	S8-520-50	0.000	JMA	SS	HORIKI/TUK/TUJAI/Kimura	Microgravity/Physics	jaxa.jp	-	-
2017-F01	2467766-46	2017 Jan 14 2333	S-520	4	S8-520-4	0.003	JMA	SS	0	Set LED 0	Wire	-	-
2018-016	2468152-71	2018 Feb 3 0503	S-520	4	SS-520-5	0.003	JMA	SS	0	Tech/Reentry test	jaxa.jp	-	-
2021-546	2468922-35	2021 Jul 26 2036:00	S-520	-	SS-520-31	0.000	JMA	SS	ISAS/	Ionos	jaxa.jp	-	-
2021-575	2468922-39	2021 Nov 4 0209:26	S-520	-	SS-520-51	0.000	JMA	SS	ISAS/	Tech/Reentry test	jaxa.jp	-	-
2022-560	2468984-33	2022 Jul 23 2005:00	S-520	-	S8-520-51	0.000	JMA	SS	ISAS/	Ionos	jaxa.jp	-	-
2022-579	2468983-10	2022 Aug 11 0420	S-520	-	S-520-52	0.000	JMA	SS	ISAS/	Tech	jaxa.jp	-	-
2023-566	2460280-79	2023 Dec 2 0700	S-520	-	S-520-33	0.000	JMA	SS	ISAS/	Tech	jaxa.jp	-	-
2024-571	2460282-60	2024 Nov 14 0230:00	S-520	-	S-520-34	0.000	JMA	SS	ISAS/	Tech	jaxa.jp	-	-



Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Launch			Launch_Pad	Ascent_Site	Ascent_Pad	Apogee km	Range km	Dest
							Mission	FlightCode	Platform						
1984-001	2445716.50	1984 Jan 17	ST-735	1	ST-735-1	SRS Sep test	-	-	-	KASC	-	-	-	-	-
1994-367	2449611.67	1994 Sep 16 0400	ST-735	-	ST-735-2	FTH Test	-	-	-	KASC	-	-	-	-	-
2002-001	2452469.57	2002 Jul 14 0134	MAL-735	-	-	MEXS1-1	-	-	-	W00	-	-	-	-	-
2005-005	2453653.40	2005 Oct 9 2136	MAL-735	-	-	MEXS1-1 F2	-	-	-	W00	-	-	-	-	-



Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Orbit	Agency	Launch_Code	Group	Category	LTCite	Cite	Notes
1984-001	2445716.50	1984 Jan 17	ST-735	1	ST-735-1	0.000	ISAS	SS	ISAS/	Test	ISASpr635	-	-
1994-367	2449611.67	1994 Sep 16 0400	ST-735	-	ST-735-2	0.000	ISAS	SS	ISAS/	Test	SKJ	-	-
2002-001	2452469.57	2002 Jul 14 0134	MAL-735	-	-	0.000	IMAL	AF	-	Test	J.A.Hill	-	-
2005-005	2453653.40	2005 Oct 9 2136	MAL-735	-	-	0.000	IMAL	AS	-	Test	-	-	-





Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Mission	Flightcode	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee Km	Range Km	Dest
1989-M02	2447666.25	1989 May 11 1800	SICBM	-	FTH-1	-	-	-	-	V	TP-01	-	-	80?	-	-
1991-S98	2446365.27	1991 Apr 18 1833	SICBM	-	FTH-2A	KWR	-	-	-	V	TP-01	-	-	1000?	-	-



Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Launch		Group	Category	LICite	Cite	Notes
						DrPay	Agency					
1989-H02	2447658.26	1989 May 11 1800	SICBH	-	FTH-1	0.000	AFSC	-	Test	AMS7890522-25	-	-
1991-S98	2448366.27	1991 Apr 18 1833	SICBH	-	FTH-2A	0.000	AFSC	-	Test	JCM	AMS7910422-17	-



Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Mission	LaunchCode	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee km	Range km	Dest
2021-M09	2459414.50	2021 Jul 19	SOMS	-	-	-	-	-	-	SINOP	-	-	-	60?	-	-



Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Display	Agency	Launch_Code	Group	Category	LTCite	Cite	Notes
2021-009	2469414.50	2021 Jul 19	SMS	-	-	0.000	DVST	SS	-	Test	Wire	-	-





Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Mission	FlightCode	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee_Km	Range_Km	Dest
1995-335	2449831.50	1995 Apr 24	Hera	-	1	BRV/Propulsion Test	-	-	-	WS	LC32	-	-	275	-	-
1995-364	2449992.50	1995 Oct 2	Hera	-	2	BRV/THAD Demo	-	-	-	WS	FIX	-	-	300	-	-
1996-305	2450115.50	1996 Feb 2	Hera	-	3	BRV/Piloted Demo	-	-	-	WS	FIX	-	-	89	-	-
1996-313	2450164.50	1996 Mar 22	Hera	-	4	BRV/THAD Target	-	-	-	WS	FIX	-	-	300	-	-
1996-341	2450279.98	1996 Jul 15 1128	Hera	-	5	BRV/THAD Target	-	-	-	WS	FIX	-	-	300	-	-
1996-361	2450366.01	1996 Oct 9 1210	Hera	-	6	BRV/THAD RST-1	-	-	-	WS	FIX	-	-	300	-	-
1997-404	2450477.50	1997 Jan 29	Storm-2	-	7	MTV-3/MTD-2 PAC Tgt	-	-	-	WS	LC32	-	-	109	-	-
1997-405	2450479.41	1997 Jan 30 2155	AltAir	-	8	AltAir (Glove Gold)	-	-	-	WS	LC32	-	-	15	-	-
1997-323	2450514.03	1997 Mar 6 1240	Hera	-	7	BRV/THAD Target	-	-	-	WS	FIX	-	-	300	-	-
1997-348	2450623.67	1997 Jun 24 0400	Storm-2	2 PIV	-	MTV-4/Patriot Targ	-	-	-	RKR	Meck	-	-	200?	-	-
1997-362	2450715.50	1997 Sep 24	Storm-2	-	8	MTV (Moving Target)	-	-	-	WS	LC32	-	-	110	-	-
1997-404	2450770.05	1997 Nov 17 1310	Hera	-	9	MTV-3	-	-	-	RKR	Meck	-	-	70?	-	-
1998-303	2450829.66	1998 Jan 16 0346	Minuteman 2 PIV	-	10	IFT-2 ERV	-	-	-	RKR	Meck	-	-	300?	-	-
1998-401	2450875.04	1998 Mar 2 1301	Hera	-	9	BRV/THAD Target	-	-	-	WS	FIX	-	-	100?	-	-
1998-343	2450946.37	1998 May 12 1122	Hera	-	10	MTV-5/MTD-3	-	-	-	WS	LC32	-	-	300	-	-
1998-356	2451081.03	1998 Sep 24 1250	Storm-2	-	-	PAC-3 SCF	-	-	-	WS	LC32	-	-	180	-	-
1998-363	2451161.01	1998 Dec 14	Hera	-	11	alt-1	-	-	-	FW	LC32	-	-	71?	-	-
1998-361	2451123.56	1998 Nov 6 0132	Hera	-	12	BRV/PAC-3 SCF-2	-	-	-	FW	LC32	-	-	94	-	-
1999-313	2451253.08	1999 Mar 15 1349	Hera	-	12	BRV/THAD Target 4	-	-	-	WS	FIX	-	-	300	-	162W 24N
1999-319	2451267.01	1999 Mar 29 1213	Hera	-	13	SHALT/ABRV-3	-	-	-	WS	FIX	-	-	99	-	-
1999-521	2451268.51	1999 Mar 31 0015	SHALT	-	13	BRV/THAD Target 5	-	-	-	WS	FIX	-	-	92	-	-
1999-533	2451323.37	1999 May 25 1114	Hera	-	14	BRV/THAD Target 5	-	-	-	WS	FIX	-	-	99	-	-
1999-535	2451339.96	1999 Jun 10 1107	Hera	-	15	BRV/THAD Target 5	-	-	-	WS	FIX	-	-	310	-	-
1999-551	2451392.98	1999 Aug 2 1137	Hera	-	16	BRV/THAD T7 / FT-11	-	-	-	WS	FIX	-	-	270	-	-
1999-559	2451427.50	1999 Sep 6	SR19/SR19	?	17	ICRF-3A	-	-	-	WAKE	-	-	-	300?	-	-
1999-561	2451436.06	1999 Sep 16 1326	Hera	-	17	BRV/PAC-3 DT-3	-	-	-	RKR	Meck	-	-	86	-	-
1999-568	2451464.60	1999 Oct 5 0222	Hera	-	18	IFT-3 ERV	-	-	-	RKR	Meck	-	-	230?	-	-
2000-302	2451562.61	2000 Jan 19 0240	Minuteman 2 PIV	-	18	IFT-4 ERV	-	-	-	RKR	Meck	-	-	230	-	-
2000-360	2451632.06	2000 Feb 14 1430	Hera	-	18	BRV/THAD T6 / FT-10	-	-	-	FW	LC36	-	-	60	-	-
2000-342	2451733.69	2000 Jul 6 0440	Storm-2	-	-	BRV/THAD T7 / FT-11	-	-	-	FW	LC36	-	-	104	-	-
2001-312	2451961.29	2001 Feb 20 1858	Minuteman 2 PIV	-	-	ICRF-6	-	-	-	RKR	Meck	-	-	300?	-	-
2001-315	2451969.50	2001 Mar 31	SR19/SR19	-	-	TCP-35	-	-	-	WAKE	-	-	-	114	-	-
2001-334	2452099.50	2001 Jul 9	Hera	-	19	MTV-6	-	-	-	FW	LC36	-	-	114	-	-
2001-336	2452106.63	2001 Jul 15 0301	Minuteman 2 PIV	-	-	BRV-5/PAC-3 DT-8a	-	-	-	FW	LC36	-	-	146	-	-
2001-352	2452247.64	2001 Dec 4 0319	Minuteman 2 PIV	-	-	BRV-1E/PAC DT/DT-9a	-	-	-	RKR	Meck	-	-	225	-	-
2002-319	2452349.61	2002 Mar 15 0252	Minuteman 2 PIV	-	-	IFT-6 ERV	-	-	-	RKR	Meck	-	-	225?	-	-
2002-322	2452386.09	2002 Mar 21 1409	Hera	-	-	IFT-7 ERV	-	-	-	RKR	Meck	-	-	225?	-	-
2002-328	2452390.04	2002 Apr 25 1300?	Storm-2	-	-	IFT-8 ERV	-	-	-	RKR	Meck	-	-	114	-	-
2002-335	2452424.58	2002 May 30 0230	SR19/SR19	-	-	PAC-3 DT/DT-1	-	-	-	MS?	-	-	-	100?	-	-
2002-367	2452562.90	2002 Oct 15 0223	Minuteman 2 PIV	-	-	PAC-3 DT-2a	-	-	-	WAKE	-	-	-	270	-	-
2002-379	2453128.67	2002 Dec 11 0846	Minuteman 2 PIV	-	-	IFT-9 ERV	-	-	-	RKR	Meck	-	-	225	-	-
2004-386	2453246.50	2004 May 3 0406	SHALT	-	-	IFT-10 ERV	-	-	-	RKR	Meck	-	-	225	-	-
2004-389	2453273.50	2004 Aug 26	SR19/SR19	-	-	LAIT-0 Demo	-	-	-	RKR	Meck	-	-	225	-	-
2004-394	2453277.50	2004 Sep 29	SR19/SR19	-	-	USF-2 Target	-	-	-	RKR	Meck	-	-	150?	-	-
2004-395	2453284.50	2004 Oct 6	SR19/SR19	-	-	USF-2 Target	-	-	-	RKR	Meck	-	-	150?	-	-
2004-396	2453287.50	2004 Oct 6	SR19/SR19	-	-	USF-2 Target	-	-	-	RKR	Meck	-	-	150?	-	-
2004-397	2453297.50	2004 Nov 16	Storm-2	-	-	USF-2 Target	-	-	-	RKR	Meck	-	-	150?	-	-
2005-339	2453327.50	2005 Nov 16	Storm-2	-	-	USF-2 Target	-	-	-	RKR	Meck	-	-	150?	-	-
2005-341	2453383.50	2005 Sep 13	SR19/SR19	-	-	USF-2 Target	-	-	-	RKR	Meck	-	-	150?	-	-
2005-345	2453385.50	2005 Apr 13	SR19/SR19	-	-	USF-2 Target	-	-	-	RKR	Meck	-	-	150?	-	-
2005-341	2453396.37	2005 Apr 13	SR19/SR19	-	-	USF-2 Target	-	-	-	RKR	Meck	-	-	150?	-	-
2005-354	2453398.94	2005 Apr 13	Hera	-	-	USF-2 Target	-	-	-	RKR	Meck	-	-	150?	-	-
2007-516	2454165.50	2007 Mar 26 1335	SHALT	-	-	USF-2 Target	-	-	-	RKR	Meck	-	-	150?	-	-
2009-519	2454916.06	2009 Jul 13 1030	Hera	-	-	USF-2 Target	-	-	-	RKR	Meck	-	-	150?	-	-
2009-535	2455035.32	2009 Mar 22 1407	SHALT	-	-	USF-2 Target	-	-	-	RKR	Meck	-	-	150?	-	-
2009-555	2455039.11	2009 Jun 22 1407	Hera	-	-	USF-2 Target	-	-	-	RKR	Meck	-	-	150?	-	-
2009-409	2455126.02	2009 Sep 16 1229	Hera	-	-	USF-2 Target	-	-	-	RKR	Meck	-	-	150?	-	-
2009-409	2455176.50	2009 Oct 11 1229	Hera	-	-	USF-2 Target	-	-	-	RKR	Meck	-	-	150?	-	-
2010-881	2455244.50	2010 Feb 17	SHALT	-	-	USF-2 Target	-	-	-	RKR	Meck	-	-	150?	-	-
2011-806	2455262.07	2011 Mar 2 1340	Hera	-	-	USF-2 Target	-	-	-	RKR	Meck	-	-	150?	-	-
2011-831	2455271.59	2011 Jul 9 0204	SHALT	-	-	USF-2 Target	-	-	-	RKR	Meck	-	-	150?	-	-
2011-845	2455283.75	2011 Jul 9 0204	SHALT	-	-	USF-2 Target	-	-	-	RKR	Meck	-	-	150?	-	-
2012-846	2455184.02	2012 Sep 13 1230	Hera	-	-	USF-2 Target	-	-	-	RKR	Meck	-	-	150?	-	-
2012-860	2455126.02	2012 Oct 16 1230	Hera	-	-	USF-2 Target	-	-	-	RKR	Meck	-	-	150?	-	-
2013-508	2455836.88	2013 Feb 13 0910	SRBM-T3	-	-	USF-2 Target	-	-	-	RKR	Meck	-	-	150?	-	-
2013-556	2455845.50	2013 Sep 10	SRBM-T1	-	-	USF-2 Target	-	-	-	RKR	Meck	-	-	150?	-	-
2014-568	2455845.50	2014 Sep 10	SRBM-T1	-	-	USF-2 Target	-	-	-	RKR	Meck	-	-	150?	-	-
2014-568	2455847.80	2014 Oct 17 0708	SRBM-T3	-	-	USF-2 Target	-	-	-	RKR	Meck	-	-	150?	-	-
2015-439	2457299.50	2015 Oct 1 0305	SRBM-T3	-	-	USF-2 Target	-	-	-	RKR	Meck	-	-	150?	-	-
2015-561	2457327.63	2015 Nov 1 0305	SRBM-T3	-	-	USF-2 Target	-	-	-	RKR	Meck	-	-	150?	-	-
2015-563	2457327.63	2015 Nov 1 0309-25	SRBM-T3	-	-	USF-2 Target	-	-	-	RKR	Meck	-	-	150?	-	-
2015-589	2457367.08	2015 Dec 10 1355	SRBM-T3	-	-	USF-2 Target	-	-	-	RKR	Meck	-	-	150?	-	-
2016-529	2457526.79	2016 May 18 0702	SRBM-T3	-	-	USF-2 Target	-	-	-	RKR	Meck	-	-	150?	-	-
2016-566	2457737.50	2016 Dec 15	SRBM-T3	-	-	USF-2 Target	-	-	-	RKR	Meck	-	-	150?	-	-
2017-575	2457994.50	2017 Jul 30	SRBM-T3	-	-	USF-2 Target	-	-	-	RKR	Meck	-	-	150?	-	-
2017-575	2457994.50	2017 Aug 29	SRBM-T3	-	-	USF-2 Target	-	-	-	RKR	Meck	-	-	150?	-	-
2017-586	2458013.50	2017 Sep 17	SRBM-T3	-	-	USF-2 Target	-	-	-	RKR	Meck	-	-	150?	-	-
2017-586	2458149.50	2018 Jan 31	SRBM-T3	-	-	USF-2 Target	-	-	-	RKR	Meck	-	-	150?	-	-
2018-566	2458941.75	2018 Oct 26	SRBM-T3	-	-	USF-2 Target	-	-	-	RKR	Meck	-	-	150?	-	-
2019-536	2458679.50	2019 Jul 15														







Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Mission	Launch_FlightCode	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee km	Range km	Dest
2024-106	2460433.72	2024 May 3 0510	SR75	-	1	-	-	-	-	KOON	-	-	-	50?	-	-



Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Launch_OrbPay	Agency	Launch_Code	Group	Category	LTCite	Cite	Notes
2024-H06	2460483.72	2024 May 3 0510	SR75	-	1	0.000	HYIMP	SS	HYIMP/	Test	tw/HyImpLuseTech	-	-





Launch

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Mission	FlightCode	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee km	Range km	Dest
1989-A217	2440431.50	1989 Jul 29	SRM	-	Flight 1	-	-	B-52H	B-52GH	HADC?	RM07/25	WS	LP1	10?	-	WSHR
1970-A190	2440726.50	1970 May 20	SRM	-	-	-	-	-	FB-111	HADC?	RM07/25	WS	LP1	10?	-	WSHR
1971-A223	2441154.50	1971 Jul 22	SRM	-	Flight 40	-	-	-	B-52GH	HADC?	RM07/25	WS	LP1	10?	-	WSHR
1972-A160	2441483.50	1972 Jun 15	SRM	-	Flight	-	-	B-52G Loring	B-52GH	HADC?	RM07/25	ETR	GTIDZ	10?	-	GTIDZ
1974-A32	2442279.96	1974 Aug 20 1109	SRM	-	-	-	-	-	FB-111	TTR?	RM13/42	TTR	LP1	10?	-	TTR
1974-A87	2442387.50	1974 Dec 6	SRM	-	-	-	-	-	B-52GH	GF	RM17/35	ETR	GTIDZ	10?	-	GTIDZ
1975-A15	2442496.96	1975 Mar 26 1101	SRM	-	-	-	-	-	B-52GH	PLATT	RM17/35	ETR	GTIDZ	10?	-	GTIDZ
1975-A24	2442524.02	1975 Apr 21 1235	SRM	-	-	-	-	-	B-52GH	GF	RM17/35	ETR	GTIDZ	10?	-	GTIDZ
1975-A27	2442594.98	1975 May 12 1124	SRM	-	-	-	-	-	B-52GH	GF	RM17/35	ETR	GTIDZ	10?	-	GTIDZ
1975-A28	2442595.00	1975 May 12 1154	SRM	-	-	-	-	-	B-52GH	PLATT	RM17/35	ETR	GTIDZ	10?	-	GTIDZ
1975-A30	2442555.98	1975 May 23 1135	SRM	-	-	-	-	-	FB-111	PLATT	RM17/35	ETR	GTIDZ	10?	-	GTIDZ
1975-A31	2442556.00	1975 May 23 1158	SRM	-	-	-	-	-	FB-111	GF?	RM17/35	ETR	GTIDZ	10?	-	GTIDZ
1975-A62	2442730.05	1975 Nov 13 1316	SRM	-	-	-	-	-	B-52GH	GF?	RM17/35	ETR	GTIDZ	10?	-	GTIDZ
1975-A65	2442731.02	1975 Nov 14 1230	SRM	-	-	-	-	-	B-52GH	GF?	RM17/35	ETR	GTIDZ	10?	-	GTIDZ
1975-A66	2442741.05	1975 Nov 24 1315	SRM	-	-	-	-	-	B-52GH	GF?	RM17/35	ETR	GTIDZ	10?	-	GTIDZ
1976-A22	2442853.00	1976 Apr 14 1201	SRM	-	-	-	-	-	FB-111	PLATT?	-	ETR	GTIDZ	10?	-	GTIDZ
1976-A23	2442853.01	1976 Apr 14 1221	SRM	-	-	-	-	-	FB-111	PLATT?	-	ETR	GTIDZ	10?	-	GTIDZ
1976-A77	2443127.00	1976 Dec 14 1200	SRM	-	-	-	-	-	FB-111	PLATT	RM17/35	ETR	GTIDZ	10?	-	GTIDZ
1976-A78	2443246.00	1976 Dec 14 1220	SRM	-	-	-	-	-	FB-111	PLATT	RM17/35	ETR	GTIDZ	10?	-	GTIDZ
1977-A19	2443482.00	1977 Apr 14 1159	SRM	-	Case 29	-	-	-	B-52GH	ELLS	RM13/31	ETR	GTIDZ	10?	-	GTIDZ
1977-A51	2443492.04	1977 Dec 14 1254	SRM	-	Case 33	-	-	-	B-52GH	BMK	RM15/33	ETR	GTIDZ	10?	-	GTIDZ
1978-A08	2443569.00	1978 Mar 1 1200	SRM	-	Case 34	-	-	B-52G	B-52GH	ROB1	RM15/33	ETR	GTIDZ	10?	-	GTIDZ
1978-A34	2443709.99	1978 Jul 20 1149	SRM	-	Case 30	-	-	-	B-52GH	GF	RM17/35	ETR	GTIDZ	10?	-	GTIDZ
1978-A55	2443856.00	1978 Dec 13 1158	SRM	-	Case 33	-	-	-	B-52GH	WORT	RM07/25	ETR	GTIDZ	10?	-	GTIDZ
1979-A02	2443891.04	1979 Jan 17 1252:41	SRM	-	-	-	-	-	FB-111	PLATX	-	ETR	GTIDZ	10?	-	GTIDZ
1979-A03	2443893.02	1979 Jan 19 1229:36	SRM	-	-	-	-	-	FB-111	PLATX	-	ETR	GTIDZ	10?	-	GTIDZ
1979-A04	2443893.00	1979 Jan 19 1159:20	SRM	-	-	-	-	-	FB-111	PLATX	-	ETR	GTIDZ	10?	-	GTIDZ
1979-A08	2443912.00	1979 Feb 7 1157:09	SRM	-	-	-	-	-	B-52GH	GF	-	ETR	GTIDZ	10?	-	GTIDZ
1979-A45	2444206.00	1979 Nov 28 1201:26	SRM	-	-	-	-	-	B-52GH	GF	-	ETR	GTIDZ	10?	-	GTIDZ
1979-A46	2444220.02	1979 Dec 12 1228:12	SRM	-	-	-	-	-	FB-111	PLATX	-	ETR	GTIDZ	10?	-	GTIDZ
1979-A47	2444220.00	1979 Dec 12 1159:36	SRM	-	-	-	-	-	FB-111	PLATX	-	ETR	GTIDZ	10?	-	GTIDZ
1980-A06	2444276.00	1980 Feb 6 1201:42	SRM	-	-	-	-	-	B-52GH	GRF	-	ETR	GTIDZ	10?	-	GR
1980-A64	2444412.50	1980 Jun 22 1207:49	SRM	-	-	-	-	-	FB-111	PLATX	-	ETR	GTIDZ	10?	-	GR
1980-A42	2444549.01	1980 Nov 5 1207:49	SRM	-	-	-	-	-	FB-111	PLATX	-	ETR	GTIDZ	10?	-	GTIDZ
1981-A33	2444946.00	1981 Dec 9 1200:52	SRM	-	Case 85	-	-	-	FB-111	PLATX	-	ETR	GTIDZ	10?	-	GTIDZ
1983-A25	2445007.96	1983 Jun 22 1056:41	SRM	-	-	-	-	-	B-52GH	GF	-	ETR	GTIDZ	10?	-	GTIDZ
1983-A27	2445551.96	1983 Jul 26 1229:54	SRM	-	-	-	-	-	B-52GH	GF	-	ETR	GTIDZ	10?	-	GTIDZ
1984-A77	2445721.28	1984 Jan 21 1532:30	ASAT	-	-	-	-	-	F-15A-386	ENFB	RM04/22?	ETR	LP11	1000	-	MTR
1985-S130	2446028.38	1985 Nov 13 2017	ASAT	-	-	-	-	-	F-15A-384	ENFB	RM04/22?	MTR	LP11	1000	-	MTR
1985-S116	2446522.36	1985 Sep 13 2040?	ASAT	-	-	-	-	-	F-15A-384	ENFB	RM04/22?	MTR	LP11	1000	-	MTR
1986-S00	2446524.95	1986 Aug 22 1045?	ASAT	-	-	-	-	-	F-15A-384	ENFB	RM04/22?	MTR	LP11	1000	-	MTR
1987-S100	2446503.95	1987 Sep 30 1045?	ASAT	-	-	-	-	-	F-15A-384	ENFB	RM04/22?	MTR	LP11	1000	-	MTR
1987-A41	2446511.50	1987 Jan 16	SRM	-	-	-	-	-	B-1B	TTR	RM13/42	TTR	LP1	10?	-	TTR
1987-A42	2446949.50	1987 Jun 3	SRM	-	-	-	-	-	B-1B	DTSS	RM16/34	TTR	LP1	10?	-	TTR



Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	OrbPay	Agency	Launch_Code	Group	Category	LTCite	Cite	Notes
1969-4217	2440431.50	1969 Jul 29	SRMH	-	Flight 1	0.000	SAMSO	HS	-	Test	SACHissileChron	-	-
1970-4190	2440726.50	1970 May 20	SRMH	-	-	0.000	SAMSO	HS	-	Test	SACHissileChron	-	-
1971-4223	2441154.50	1971 Jul 22	SRMH	-	Flight 40	0.000	SAMSO	HS	-	Test	Kritland.af.mil	-	-
1972-4160	2441485.50	1972 Jun 15	SRMH	-	Flight	0.000	SAMSO	HS	-	Test	SACHissileChron	-	-
1974-432	2442279.96	1974 Aug 20 1109	SRMH	-	-	0.000	SAMSO	HF	-	Test	ETR-IDA-FY75	-	-
1974-487	2442387.50	1974 Dec 6	SRMH	-	-	0.000	SAMSO	HS	-	Test	ETR-IDA-FY75	-	-
1975-415	2442896.96	1975 Mar 25 1101	SRMH	-	-	0.000	SAMSO	HS	-	Test	ETR-IDA-FY75	-	-
1975-424	2442824.02	1975 Apr 21 1235	SRMH	-	-	0.000	SAMSO	HS	-	Test	ETR-IDA-FY75	-	-
1975-427	2442844.98	1975 May 12 1124	SRMH	-	-	0.000	SAMSO	HS	-	Test	ETR-IDA-FY75	-	-
1975-428	2442845.00	1975 May 12 1154	SRMH	-	-	0.000	SAMSO	HS	-	Test	ETR-IDA-FY75	-	-
1975-430	2442855.98	1975 May 23 1135	SRMH	-	-	0.000	SAMSO	HS	-	Test	ETR-IDA-FY75	-	-
1975-431	2442856.00	1975 May 23 1168	SRMH	-	-	0.000	SAMSO	HS	-	Test	ETR-IDA-FY75	-	-
1975-462	2442730.05	1975 Nov 13 1316	SRMH	-	-	0.000	SAC	HS	-	Test	ETR-IDA-FY76	-	-
1975-463	2442731.02	1975 Nov 14 1230	SRMH	-	-	0.000	SAC	HS	-	Test	ETR-IDA-FY76	-	-
1975-465	2442741.05	1975 Nov 24 1315	SRMH	-	-	0.000	SAC	HS	-	Test	ETR-IDA-FY76	-	-
1976-422	2442853.00	1976 Apr 14 1201	SRMH	-	-	0.000	SAC	HS	-	Test	ETR-IDA-FY76	-	-
1976-423	2442853.01	1976 Apr 14 1221	SRMH	-	-	0.000	SAC	HS	-	Test	ETR-IDA-FY76	-	-
1976-478	2443127.00	1976 Dec 14 1200	SRMH	-	-	0.000	SAC	HS	-	Test	ETR-IDA-FY76B	-	-
1976-478	2443127.01	1976 Dec 14 1220	SRMH	-	-	0.000	SAC	HS	-	Test	ETR-IDA-FY76B	-	-
1977-451	2443245.00	1977 Apr 14 1159	SRMH	-	Case 29	0.000	SAC	HS	-	Test	ETR-IDA-C177	-	-
1977-451	2443492.04	1977 Dec 14 1284	SRMH	-	Case 33	0.000	SAC	HS	-	Test	ETR-IDA-C177	-	-
1978-408	2443569.00	1978 Mar 1 1200	SRMH	-	Case 34	0.000	SAC	HS	-	Test	ETR-IDA-C178	-	-
1978-434	2443709.99	1978 Jul 20 1149	SRMH	-	Case 30	0.000	SAC	HS	-	Test	ETR-IDA-C178	-	-
1978-455	2443856.00	1978 Dec 13 1158	SRMH	-	Case 30	0.000	SAC	HS	-	Test	ETR-IDA-C178	-	-
1979-402	2443891.04	1979 Jan 17 1252:41	SRMH	-	Case 33	0.000	SAC	HS	-	Test	Cleary95	-	-
1979-403	2443893.02	1979 Jan 19 1229:36	SRMH	-	-	0.000	SAC	HS	-	Test	Cleary95	-	-
1979-404	2443893.00	1979 Jan 19 1159:20	SRMH	-	-	0.000	SAC	HS	-	Test	Cleary95	-	-
1979-408	2443912.00	1979 Feb 7 1157:09	SRMH	-	-	0.000	SAC	HS	-	Test	Cleary95	-	-
1979-446	2444206.00	1979 Nov 26 1201:28	SRMH	-	-	0.000	SAC	HS	-	Test	Cleary95	-	-
1979-446	2444220.02	1979 Dec 12 1226:12	SRMH	-	-	0.000	SAC	HS	-	Test	Cleary95	-	-
1979-467	2444220.00	1979 Dec 12 1159:36	SRMH	-	-	0.000	SAC	HS	-	Test	Cleary95	-	-
1980-406	2444276.00	1980 Feb 6 1201:42	SRMH	-	-	0.000	SAC	HS	-	Test	Cleary95	-	-
1980-464	2444412.50	1980 Jun 22	SRMH	-	-	0.000	SAC	HS	-	Test	RNH15c79	-	-
1980-442	2444648.01	1980 Nov 5 1207:49	SRMH	-	-	0.000	SAC	HS	-	Test	Cleary95	-	-
1981-433	2444945.00	1981 Dec 9 1200:52	SRMH	-	Case 85	0.000	SAC	HS	-	Test	Cleary95	-	-
1983-425	2445507.96	1983 Jun 22 1058:41	SRMH	-	-	0.000	SAC	HS	-	Test	Cleary95	-	-
1983-427	2445591.96	1983 Jul 26 1129:54	SRMH	-	-	0.000	SAC	HS	-	Test	Cleary95	-	-
1984-544	2445741.29	1984 Jan 21 1852:50	ASAT	-	-	0.000	AFSD	TS	-	Test	ASAT-docl	-	-
1984-544	2446035.35	1984 Nov 13 2017	ASAT	-	-	0.000	AFSD	TS	-	Test	ASAT-docl	-	-
1985-5150	2446222.56	1985 Sep 13 2040:07	ASAT	-	-	0.000	AFSD	TS	-	Test	Deseretclass841114	ANST684119-28	-
1986-5318	2446222.56	1986 Aug 22	ASAT	-	-	0.000	AFSD	TS	-	Interceptor	Svengram	ANST680901-45	-
1986-5300	2446503.56	1986 Sep 30 1045:07	ASAT	-	-	0.000	AFSD	TS	-	Interceptor	USAFChron	-	-
1986-53100	2446503.56	1986 Sep 30 1045:07	ASAT	-	-	0.000	AFSD	TS	-	Interceptor	USAFChron	-	-
1987-441	2446531.50	1987 Jan 16	SRMH	-	-	0.000	SAC	HS	-	Test	USAFChron	-	-
1987-442	2446949.50	1987 Jun 3	SRMH	-	-	0.000	SAC	HS	-	Test	USAFChron	-	-



Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variat	Flight_ID	Flight	Mission	Launch	FlightCode	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee km	Range km	Dest
2009-406	2465135.15	2009 Oct 28 1530:00	Ares I-X	-	Ares I-X	USS/CHLAS	-	-	-	MLP1	KSC	LC99B	-	-	-	-	-



Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Day	Agency	Launch_Code	Group	Category	LTCite	Cite	Notes
2009-A06	2455133.15	2009 Oct 28 1530:00	Ares I-X	-	Ares I-X	0.000	MSFC	SS	JSC/	Test	Wire	-	-





Launch

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Mission	FlightCode	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee Km	Range Km	Dest
2003-A03	2452779.50	2003 May 20	Spaceship One	-	24C/01C	-	-	-	WKL	MHV	RM12/30	-	-	14	-	-
2003-A05	2452849.50	2003 Jul 29	Spaceship One	-	28C/02C	-	-	-	WKL	MHV	RM12/30	-	-	14	-	-
2003-A06	2452859.11	2003 Aug 7 1437	Spaceship One	-	30L/03G	-	-	-	WKL	MHV	RM12/30	MHV	LP1	14	-	-
2003-A07	2452878.50	2003 Aug 27	Spaceship One	-	31LC/04GC	-	-	-	WKL	MHV	RM12/30	MHV	LP1	14	-	-
2003-A08	2452878.50	2003 Aug 27	Spaceship One	-	32L/05G	-	-	-	WKL	MHV	RM12/30	MHV	LP1	14	-	-
2003-A09	2452905.50	2003 Sep 23	Spaceship One	-	37L/06G	-	-	-	WKL	MHV	RM12/30	MHV	LP1	14	-	-
2003-A10	2452929.50	2003 Oct 17	Spaceship One	-	38L/07G	-	-	-	WKL	MHV	RM12/30	MHV	LP1	14	-	-
2003-A12	2452957.50	2003 Nov 14	Spaceship One	-	40L/08G	-	-	-	WKL	MHV	RM12/30	MHV	LP1	14	-	-
2003-A13	2452962.50	2003 Nov 19	Spaceship One	-	41L/09G	-	-	-	WKL	MHV	RM12/30	MHV	LP1	14	-	-
2003-A14	2452977.50	2003 Dec 4	Spaceship One	-	42L/10G	-	-	-	WKL	MHV	RM12/30	MHV	LP1	14	-	-
2003-A16	2452991.18	2003 Dec 17 1615	Spaceship One	-	43L/11P	-	-	-	WKL	MHV	RM12/30	MHV	LP1	14	-	-
2004-A02	2453075.50	2004 Mar 11	Spaceship One	-	49L/12G	-	-	-	WKL	MHV	RM12/30	MHV	LP1	14	-	-
2004-A04	2453104.13	2004 Apr 8 1511	Spaceship One	-	53L/13P	-	-	-	WKL	MHV	RM12/30	MHV	LP1	32	-	-
2004-M01	2453139.16	2004 May 13 1531	Spaceship One	-	56L/14P	-	-	-	WKL	MHV	RM12/30	MHV	BAR	64	-	-
2004-S22	2453178.12	2004 Jun 21 1450	Spaceship One	-	60L/15P	-	-	-	WKL	MHV	RM30	MHV	BAR	100	-	-
2004-S63	2453278.13	2004 Sep 29 1509:53	Spaceship One	-	65L/16P	-	-	-	WKL	MHV	RM30	MHV	BAR	103	-	-
2004-S66	2453283.12	2004 Oct 4 1449:11	Spaceship One	-	66L/17P	-	-	-	WKL	MHV	RM30	MHV	BAR	112	-	-



Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	DrPay	Agency	Launch_Code	Group	Category	LTCite	Cite	Notes
2003-403	2452779.50	2003 May 20	Spaceship One	-	24C/01C	0.000	SCAL	YS	-	Test	scaled.com	-	-
2003-405	2452849.50	2003 Jul 29	Spaceship One	-	29C/02C	0.000	SCAL	YS	SCAL/Melvill 0:00	Test	scaled.com	-	-
2003-406	2452859.11	2003 Aug 7 1437	Spaceship One	-	30L/03G	0.000	SCAL	YS	SCAL/Melvill 19:00	Test	scaled.com	-	-
2003-407	2452878.50	2003 Aug 27	Spaceship One	-	31LC/044C	0.000	SCAL	YS	SCAL/Melvill 0:00	Test	scaled.com	-	-
2003-408	2452878.50	2003 Aug 27	Spaceship One	-	32L/05G	0.000	SCAL	YS	SCAL/Melvill 10:30	Test	scaled.com	-	-
2003-409	2452905.50	2003 Sep 23	Spaceship One	-	37L/06G	0.000	SCAL	YS	SCAL/Melvill 12:15	Test	scaled.com	-	-
2003-410	2452929.50	2003 Oct 17	Spaceship One	-	38L/07G	0.000	SCAL	YS	SCAL/Melvill 17:49	Test	scaled.com	-	-
2003-411	2452957.50	2003 Nov 14	Spaceship One	-	40L/08G	0.000	SCAL	YS	SCAL/S1ebold 19:55	Test	scaled.com	-	-
2003-412	2452962.50	2003 Nov 19	Spaceship One	-	41L/09G	0.000	SCAL	YS	SCAL/Melvill 12:25	Test	scaled.com	-	-
2003-413	2452977.50	2003 Dec 4	Spaceship One	-	42L/10G	0.000	SCAL	YS	SCAL/Bimite 13:14	Test	scaled.com	-	-
2003-414	2452991.18	2003 Dec 17 1615	Spaceship One	-	43L/11P	0.000	SCAL	YS	SCAL/Bimite 18:10	Test	scaled.com	-	-
2004-402	2453075.50	2004 Mar 11	Spaceship One	-	49L/12G	0.000	SCAL	YS	SCAL/S1ebold 18:30	Test	scaled.com	-	-
2004-404	2453104.13	2004 Apr 8 1511	Spaceship One	-	53L/13P	0.000	SCAL	YS	SCAL/S1ebold 16:27	Test	scaled.com	-	-
2004-401	2453139.15	2004 May 13 1531	Spaceship One	-	56L/14P	0.000	SCAL	YS	SCAL/Melvill 20:44	Test	scaled.com	-	-
2004-522	2453178.12	2004 Jun 21 1450	Spaceship One	-	60L/16P	0.000	SCAL	YS	SCAL/Melvill 24:05	Test	Wire	-	-
2004-523	2453278.13	2004 Sep 29 1509:53	Spaceship One	-	65L/16P	0.000	SCAL	YS	SCAL/Melvill 24:00	Test	www.xprize.org	-	-
2004-524	2453278.13	2004 Oct 4 1449:11	Spaceship One	-	66L/17P	0.000	SCAL	YS	SCAL/Bimite 24:00	Test	www.xprize.org	-	-













Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Mission	FlightCode	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee km	Range km	Dest
2022-002	2469798.66	2022 Aug 7 0348:00	SSLV	-	SSLV-D1	EUS-02	EUS-02	-	-	SHAR	FLP	-	-	349	-	-
2023-019	2469986.66	2023 Feb 10 0348	SSLV	-	SSLV-D2	EUS-07	EUS-07	-	-	SHAR	FLP	-	-	349	-	-
2024-147	2460638.66	2024 Aug 16 0347	SSLV	-	SSLV-D3	EUS-08	EUS-08	-	-	SHAR	FLP	-	-	349	-	-



Launch													
Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Orbit	Agency	Launch_Code	Group	Category	LTCite	Cite	Notes
2022-002	2459795.66	2022 Aug 7 0348:00	SSLV	-	SSLV-D1	0.138	ISR0	0F	G	Sat LEO 0	ISR0Hebcast	-	-
2023-019	2459985.66	2023 Feb 10 0348	SSLV	-	SSLV-D2	0.175	ISR0	0S	G	Sat LEO 0	ISR0Hebcast	-	-
2024-147	2460638.66	2024 Aug 16 0347	SSLV	-	SSLV-D3	0.175	ISR0	0S	G	Sat LEO 0	ISR0Hebcast	-	-



Launch

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Mission	FlightCode	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee km	Range km	Dest
1963-M40	2438251.71	1963 Aug 10 0458	S-A	-	S-A1	-	-	-	-	MLJ	-	-	-	5	-	-
1963-M41	2438251.81	1963 Aug 10 0720	S-A	-	S-A2	-	-	-	-	MLJ	-	-	-	5	-	-
1963-M42	2438251.87	1963 Aug 10 0858	S-A	-	S-A3	-	-	-	-	MLJ	-	-	-	5	-	-
1964-M16	2438593.81	1964 Jul 17 0720	S-B	-	S-B1	-	-	-	-	MLJ	-	-	-	60*	-	-
1964-M18	2438595.66	1964 Jul 19 0347	S-B	-	S-B2	-	-	-	-	MLJ	-	-	-	60*	-	-
1964-M20	2438599.66	1964 Jul 23 0337	S-B	-	S-B3	-	-	-	-	MLJ	-	-	-	60*	-	-
1965-M18	2438926.60	1965 Jun 15 0230	S-B	-	S-B4	-	-	-	-	MLJ	-	-	-	60*	-	-
1965-M19	2438927.67	1965 Jun 16 0400	S-B	-	S-B5	-	-	-	-	MLJ	-	-	-	60*	-	-
1965-A161	2439080.59	1965 Nov 16 0209	ST	-	ST-I F1	-	-	-	-	MLJ	-	-	-	75*	-	-
1965-M42	2439082.78	1965 Nov 18 0642	S-B	-	SB-II F6	-	-	-	-	MLJ	-	-	-	75*	-	-
1965-M43	2439083.57	1965 Nov 19 0144	S-B	-	SB-II F7	-	-	-	-	MLJ	-	-	-	20*	-	-
1968-A88	2440116.80	1968 Sep 17 0710	S-B	-	SA-II A9	-	-	-	-	TMSC	T	-	-	20*	-	-
1969-S120	2440259.77	1969 Feb 7 0630	S-C	-	SC-3	-	-	-	-	TMSC	T	-	-	85*	-	-
1969-S121	2440260.56	1969 Feb 8 0130	S-C	-	SC-4	-	-	-	-	TMSC	T	-	-	85*	-	-
1969-S124	2440260.77	1969 Feb 8 0630	S-C	-	SC-1	-	-	-	-	TMSC	T	-	-	85*	-	-
1969-M29	2440473.77	1969 Sep 9 0630	S-B	-	SB-III F11	-	-	-	-	TMSC	T	-	-	75*	-	-
1971-M01	2440985.57	1971 Feb 3 0135	S-B	-	SB-III A12	-	-	-	-	TMSC	T	-	-	75*	-	-
1971-M02	2440985.77	1971 Feb 3 0630	S-B	-	SB-III A13	-	-	-	-	TMSC	T	-	-	75*	-	-
1971-M12	2441200.57	1971 Sep 6 0135	S-B	-	SB-III A14	-	-	-	-	TMSC	T	-	-	75*	-	-
1971-M13	2441205.57	1971 Sep 11 0145	S-B	-	SB-III A15	-	-	-	-	TMSC	T	-	-	75*	-	-



Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	OrbPay	Agency	Launch_Code	Group	Category	LTCite	Cite	Notes
1963-M40	2438251.71	1963 Aug 10 0468	S-A	-	S-A1	0.000	STA	SS	STA/	Test	MASDA-MWW	SFLT18-399	-
1963-M41	2438251.81	1963 Aug 10 0720	S-A	-	S-A2	0.000	STA	SS	STA/	Test	MASDA-MWW	SFLT18-399	-
1963-M42	2438251.87	1963 Aug 10 0858	S-A	-	S-A3	0.000	STA	SS	STA/	Test	MASDA-MWW	SFLT18-399	-
1964-M16	2438593.81	1964 Jul 17 0720	S-B	-	S-B1	0.000	STA	SS	STA/	Test	MASDA-MWW	-	-
1964-M18	2438595.66	1964 Jul 19 0347	S-B	-	S-B2	0.000	STA	SS	STA/	Test	MASDA-MWW	-	-
1964-M20	2438599.65	1964 Jul 23 0337	S-B	-	S-B3	0.000	STA	SS	STA/	Test	MASDA-MWW	-	-
1965-M18	2438926.60	1965 Jun 15 0230	S-B	-	S-B4	0.000	STA	SS	STA/	Test	MASDA-MWW	-	-
1965-M19	2438927.67	1965 Jun 16 0400	S-B	-	S-B5	0.000	STA	SS	STA/	Test	MASDA-MWW	-	-
1965-A161	2439080.59	1965 Nov 16 0209	ST	-	ST-I F1	0.000	STA	SS	STA/	Test	MASDA-MWW	-	-
1965-M42	2439082.78	1965 Nov 18 0642	S-B	-	SB-II F6	0.000	STA	SS	STA/	Test	MASDA-MWW	-	-
1965-M43	2439083.57	1965 Nov 19 0144	S-B	-	SB-II F7	0.000	STA	SS	STA/	Test	MASDA-MWW	-	-
1965-A98	2440116.80	1968 Sep 17 0710	SA-II	-	SA-II A9	0.000	STA	SS	STA/	Test	MASDA-MWW	-	-
1969-S120	2440289.77	1969 Feb 7 0630	S-C	-	SC-3	0.000	STA	SS	STA/	Test	MASDA-MWW	-	-
1969-S121	2440289.77	1969 Feb 8 0130	S-C	-	SC-4	0.000	STA	SS	STA/	Test	MASDA-MWW	-	-
1969-S124	2440280.56	1969 Feb 8 0630	S-C	-	SC-4	0.000	STA	SS	STA/	Test	MASDA-MWW	-	-
1969-M29	2440473.77	1969 Sep 9 0630	S-B	-	SB-III F11	0.000	STA	SS	STA/	Test	MASDA-MWW	-	-
1971-M01	2440985.57	1971 Feb 3 0135	S-B	-	SB-III A12	0.000	STA	SS	STA/	Test	MASDA-MWW	-	-
1971-M02	2440985.77	1971 Feb 3 0630	S-B	-	SB-III A13	0.000	STA	SS	STA/	Test	MASDA-MWW	-	-
1971-M12	2441200.57	1971 Feb 6 0135	S-B	-	SB-III A14	0.000	STA	SS	STA/	Test	MASDA-MWW	-	-
1971-M13	2441205.57	1971 Sep 11 0146	S-B	-	SB-III A15	0.000	STA	SS	STA/	Test	MASDA-MWW	-	-





Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Launch				Ascent_Site	Ascent_Pad	Apogee km	Range km	Dest
							Mission	FlightCode	Platform	Launch_Site					
2012-427	2466206.50	2012 Oct 6	STIG-B	-	1	-	-	-	SPAM	VLA LCI	-	-	-	-	-
2012-428	2466235.18	2012 Nov 3 1626	STIG-B	-	2	-	-	-	SPAM	VLA LCI	-	1?	-	-	-
2013-401	2466298.28	2013 Jan 5 1841	STIG-B	-	3	-	-	-	SPAM	VLA LCI	-	1?	-	-	-
2018-4135	2468356.28	2018 Aug 25 1815?	SRGE	-	P	-	-	-	SPAM	VLA LCI	-	6	-	-	-
2019-401	2468546.25	2019 Mar 2 1753	SRGE	-	M1	SRGE Pathfinder	-	-	SPAM	VLA LCI	-	28	-	-	-
2019-495	2468664.25	2019 Jun 29 1800?	SRGE	-	M2	SRGE Mission 1	-	-	SPAM	VLA LCI	-	20	-	-	-
2019-4108	2468783.24	2019 Oct 26 1740	SRGE	-	M3	SRGE Mission 2	-	-	SPAM	VLA LCI	-	3	-	-	-
						SRGE Mission 3	-	-			-	12	-	-	-



Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Launch		Group	Category	LTCite	Cite	Notes
						OrbPay	Agency					
2012-A27	2456206.50	2012 Oct 6	STIG-B	-	1	0.000	ARMAD	ARMAD/	Test	armadilloerospace.	-	-
2012-A28	2456235.18	2012 Nov 3 1626	STIG-B	-	2	0.000	ARMAD	ARMAD/	Test	armadilloerospace.	-	-
2013-A01	2456298.28	2013 Jan 5 1941	STIG-B	-	3	0.000	ARMAD	ARMAD/	Test	armadilloerospace.	-	-
2018-A136	2458356.26	2018 Aug 25 1815?	SARGE	-	P	0.000	EXOSA	EXOSA/	Test	Wire	-	-
2019-A01	2458945.25	2019 Mar 2 1753	SARGE	-	M1	0.000	EXOSA	EXOSA/	Microgravity/Tech	Youtube	-	-
2019-A95	2458664.25	2019 Jun 29 1800?	SARGE	-	M2	0.000	EXOSA	EXOSA/	Microgravity/Tech	Youtube	-	-
2019-A108	2458753.24	2019 Oct 26 1740	SARGE	-	M3	0.000	EXOSA	EXOSA/	Microgravity/Tech	Youtube	-	-



Launch

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Mission	FlightCode	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee km	Range km	Dest
2011-A27	2455900.26	2011 Dec 4 18157	STIG-A	-	I	-	-	-	-	SPAM	VLA LCI	-	-	43	-	-
2012-S03	2455955.26	2012 Jan 28 18157	STIG-A	-	III	-	-	-	-	SPAM	VLA LCI	-	-	82	-	-



Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variat	Flight_ID	OrbPay	Agency	Launch_Code	Group	Category	LTcite	Cite	Notes
2011-427	2455900.26	2011 Dec 4 1815?	STIG-A	-	I	0.000	ARMAD	SS	ARMAD/	Test	armadilloerospace.	-	-
2012-503	2455955.26	2012 Jan 28 1815?	STIG-A	-	III	0.000	ARMAD	SS	ARMAD/	Test	armadilloerospace.	-	-





Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Mission	FlightCode	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee_Km	Range_Km	Dest
1981-034	2444707.00	1981 Apr 12 12:00:04	Space Shuttle	-	STS-1	0FT-1	0V-102 DFT-1	-	MLP1	LC39A	-	-	-	277	-	-
1981-111	2444921.13	1981 Nov 12 15:00:00	Space Shuttle	-	STS-2	0FT-2/OSTA-1	0V-102 DFT-2	-	MLP1	LC39A	-	-	-	285	-	-
1982-022	2446051.17	1982 Mar 22 16:00:00	Space Shuttle	-	STS-3	0FT-3/ISS-1	0V-102 DFT-3	-	MLP1	LC39A	-	-	-	257	-	-
1982-065	2445148.12	1982 Jun 27 15:00:00	Space Shuttle	-	STS-4	0FT-4/Dod	0V-102 DFT-4	-	MLP1	LC39A	-	-	-	324	-	-
1982-110	2446285.01	1982 Nov 11 12:19:00	Space Shuttle	-	STS-5	PAM-D Deploy	0V-102 PAM deploy	-	MLP2	LC39A	-	-	-	37345	-	-
1983-026	2446429.27	1983 Apr 4 18:30:00	Space Shuttle	-	STS-6	PAM-D	0V-099 IUS deploy	-	MLP2	LC39A	-	-	-	40438	-	-
1983-059	2446503.98	1983 Jun 18 11:38:00	Space Shuttle	-	STS-7	PAM-D Deploy/SPAS	0V-099 PAM deploy/FF	-	MLP2	LC39A	-	-	-	37287	-	-
1983-089	2446576.77	1983 Aug 30 06:32:00	Space Shuttle	-	STS-8	PAM-D Deploy/PFTA	0V-099 PAM deploy	-	MLP2	LC39A	-	-	-	38385	-	-
1983-116	2446667.17	1983 Nov 26 16:00:00	Space Shuttle	-	STS-9	SpaceLab 1	0V-102 SpaceLab	-	MLP2	LC39A	-	-	-	285	-	-
1984-004	2446734.04	1984 Feb 3 13:00:00	Space Shuttle	-	STS-11/41-B	PAM-D Deploy/MHU	0V-099 PAM deploy/FF	-	MLP2	LC39A	-	-	-	1310	-	-
1984-047	2446797.08	1984 Apr 6 13:58:00	Space Shuttle	-	STS-13/41-C	SM Repair/DEF	0V-099 LEI deploy/ff	-	MLP2	LC39A	-	-	-	0	-	-
1984-078	2446878.03	1984 Jun 26 12:41:06	Space Shuttle	-	STS-14/41-D	RSLS Abort	-	-	MLP2	LC39A	-	-	-	38048	-	-
1984-093	2446943.03	1984 Aug 30 12:41:50	Space Shuttle	-	STS-17/41-G	PAM-D/Leasat Deploy	0V-103 PAM deploy	-	MLP2	LC39A	-	-	-	611	-	-
1984-104	2446978.96	1984 Oct 5 11:03:00	Space Shuttle	-	STS-17/41-G	ERBS/OSTA-3	0V-099 LEI deploy	-	MLP2	LC39A	-	-	-	38667	-	-
1984-113	2446983.01	1984 Nov 8 12:15:00	Space Shuttle	-	STS-19/51-A	RS-376 Rescue/PAM-D	0V-103 PAM deploy/ff	-	MLP2	LC39A	-	-	-	36717	-	-
1985-010	2446990.33	1985 Jan 24 19:50:05	Space Shuttle	-	STS-20/51-C	USA 8 (ORION 1)	0V-103 IUS deploy	-	MLP1	LC39A	-	-	-	37102	-	-
1985-028	2446168.08	1985 Apr 29 16:02:18	Space Shuttle	-	STS-24/51-B	PAM-D/Leasat Deploy	0V-103 PAM deploy	-	MLP2	LC39A	-	-	-	389	-	-
1985-044	2446253.98	1985 Jun 17 11:38:00	Space Shuttle	-	STS-26/51-G	SpaceLab 3	0V-109 SpaceLab	-	MLP2	LC39A	-	-	-	37774	-	-
1985-048	2446276.38	1985 Jul 12 21:00:00	Space Shuttle	-	STS 51-F Abort	RSLS Abort	-	-	MLP2	LC39A	-	-	-	0	-	-
1985-063	2446292.96	1985 Jul 29 20:00:00	Space Shuttle	-	STS-27/51-F	SpaceLab 2	0V-099 SpaceLab	-	MLP2	LC39A	-	-	-	327	-	-
1985-072	2446304.96	1985 Aug 27 10:58:01	Space Shuttle	-	STS-27/51-F	Leasat Rescue/PAM-D	0V-103 PAM deploy/ff	-	MLP2	LC39A	-	-	-	37103	-	-
1985-086	2446342.14	1985 Oct 3 15:15:30	Space Shuttle	-	STS-28/51-J	USA 11/12 (DSG)	0V-104 IUS deploy	-	MLP1	LC39A	-	-	-	36199	-	-
1985-104	2446396.21	1985 Oct 30 17:00:00	Space Shuttle	-	STS-29/61-A	SpaceLab D-1	0V-099 SpaceLab	-	MLP2	LC39A	-	-	-	333	-	-
1985-109	2446396.52	1985 Nov 27 02:29:00	Space Shuttle	-	STS-30/61-B	PAM-D Deploy	0V-104 PAM deploy	-	MLP2	LC39A	-	-	-	36768	-	-
1986-003	2446443.00	1986 Jan 12 11:58:00	Space Shuttle	-	STS-32/61-C	PAM-D Deploy/MSL-2	0V-102 PAM deploy	-	MLP2	LC39A	-	-	-	36288	-	-
1986-001	2446465.19	1986 Jan 28 16:39:00	Space Shuttle	-	STS-33/61-L	TRS-D/Spartan	0V-099 IUS deploy	-	MLP2	LC39B	-	-	-	15	-	-
1986-091	2447434.15	1986 Sep 29 15:37:00	Space Shuttle	-	STS-26R	TRS-C	0V-103 IUS deploy	-	MLP2	LC39B	-	-	-	37208	-	-
1986-106	2447496.10	1986 Dec 2 14:30:34	Space Shuttle	-	STS-27R	USA 9 (LAGROSSE 1)	0V-104 LEI deploy	-	MLP1	LC39B	-	-	-	731	-	-
1986-021	2447599.12	1986 Mar 13 14:57:00	Space Shuttle	-	STS-28R	TRS-D	0V-103 IUS deploy	-	MLP2	LC39B	-	-	-	36792	-	-
1986-033	2447747.05	1986 May 4 18:46:39	Space Shuttle	-	STS-30R	Magellan	0V-104 IUS deploy	-	MLP1	LC39B	-	-	-	150000	-	-
1986-084	2447818.20	1986 May 8 12:37:00	Space Shuttle	-	STS-28R	USA 40/41 (QUASAR 87)	0V-102 medium deploy	-	MLP2	LC39B	-	-	-	8223	-	-
1986-090	2447853.52	1986 Oct 16 16:53:40	Space Shuttle	-	STS-34R	Gallileo	0V-102 IUS deploy	-	MLP2	LC39B	-	-	-	150000	-	-
1986-099	2447901.02	1986 Nov 23 02:23:30	Space Shuttle	-	STS-35R	DEF Marietta	0V-102 IUS deploy	-	MLP2	LC39B	-	-	-	37442	-	-
1986-039	2447950.83	1986 Jan 9 12:35:52	Space Shuttle	-	STS-36R	USA 53 (DSTI)	0V-102 medium dep/ff	-	MLP2	LC39B	-	-	-	37442	-	-
1986-037	2448060.02	1986 Feb 26 07:50:22	Space Shuttle	-	STS-31R	AST	0V-104 LEI mission	-	MLP1	LC39A	-	-	-	628	-	-
1986-097	2448211.99	1986 Oct 6 11:47:16	Space Shuttle	-	STS-41	Olyses	0V-103 IUS deploy	-	MLP2	LC39B	-	-	-	808	-	-
1986-106	2448227.76	1986 Dec 2 06:49:00	Space Shuttle	-	STS-38	USA 67 (QUASAR 9)	0V-103 IUS deploy	-	MLP2	LC39B	-	-	-	36426	-	-
1987-021	2448392.00	1987 Apr 9 14:22:49	Space Shuttle	-	STS-37R	SpaceLab Astro 1	0V-102 SpaceLab	-	MLP3	LC39B	-	-	-	912	-	-
1987-031	2448374.98	1987 Jun 2 13:51:14	Space Shuttle	-	STS-39	SD10/SPAS	0V-104 LEI deploy	-	MLP3	LC39B	-	-	-	270	-	-
1987-063	2448413.06	1987 Jun 5 18:24:51	Space Shuttle	-	STS-40	SpaceLab SLS-1	0V-102 Research/FF	-	MLP3	LC39B	-	-	-	299	-	-
1987-069	2448471.13	1987 Aug 12 09:21:00	Space Shuttle	-	STS-43	TRS-E	0V-102 SpaceLab	-	MLP3	LC39B	-	-	-	300	-	-
1987-092	2448532.40	1987 Sep 24 22:51:04	Space Shuttle	-	STS-44	USA 75 (OSP F-16)	0V-103 LEI deploy	-	MLP3	LC39A	-	-	-	38010	-	-
1987-099	2448585.12	1987 Nov 24 13:31:39	Space Shuttle	-	STS-42	SpaceLab HL-1	0V-103 LEI deploy	-	MLP3	LC39A	-	-	-	36146	-	-
1987-015	2448705.05	1987 Mar 24 15:31:33	Space Shuttle	-	STS-45	SpaceLab Titus 1	0V-104 IUS deploy	-	MLP3	LC39A	-	-	-	309	-	-
1987-034	2448750.49	1987 May 7 23:03:00	Space Shuttle	-	STS-46	SpaceLab Titus 2	0V-104 IUS deploy	-	MLP3	LC39A	-	-	-	371	-	-
1987-034	2448759.18	1987 Jun 26 15:12:22	Space Shuttle	-	STS-49	SpaceLab Rescue	0V-105 Rendezvous	-	MLP2	LC39B	-	-	-	338	-	-
1987-048	2448835.08	1987 Jul 31 13:55:46	Space Shuttle	-	STS-50	SpaceLab USL-1	0V-102 Research/FF	-	MLP3	LC39B	-	-	-	545	-	-
1987-061	2448878.10	1987 Sep 22 14:23:00	Space Shuttle	-	STS-46	SS-1/Furca	0V-104 Research/FF	-	MLP1	LC39B	-	-	-	314	-	-
1987-070	2448918.22	1987 Oct 12 17:09:40	Space Shuttle	-	STS-47	SpaceLab USL-1	0V-102 Research/FF	-	MLP2	LC39B	-	-	-	39013	-	-
1987-086	2448959.06	1987 Dec 22 13:24:40	Space Shuttle	-	STS-52	SpaceLab/Alite	0V-103 Research/ff dep	-	MLP3	LC39B	-	-	-	38493	-	-
1987-020	2449081.08	1988 Dec 13 13:59:30	Space Shuttle	-	STS-53	USA 88 (QUASAR 10)	0V-103 Medium deploy	-	MLP1	LC39A	-	-	-	37683	-	-
1987-020	2449089.12	1988 Jan 22 14:50:57	Space Shuttle	-	STS-54	RSLS Abort	-	-	MLP2	LC39B	-	-	-	0	-	-
1987-023	2449085.72	1988 Apr 8 05:29:00	Space Shuttle	-	STS-56	SpaceLab Atlantis 2	0V-103 SpaceLab	-	MLP3	LC39B	-	-	-	301	-	-
1987-032	2449104.12	1988 Apr 26 14:50:00	Space Shuttle	-	STS-56	SpaceLab D-2	0V-102 SpaceLab	-	MLP3	LC39A	-	-	-	307	-	-
1987-037	2449160.05	1988 Jun 21 13:07:22	Space Shuttle	-	STS-57	SH-D/SHOOT	0V-105 Research/ff/rendez	-	MLP3	LC39B	-	-	-	482	-	-
1987-021	2449212.05	1988 Aug 12 13:13:32	Space Shuttle	-	STS-51 Abort	RSLS Abort	-	-	MLP3	LC39B	-	-	-	0	-	-
1987-058	2449242.99	1988 Sep 12 11:45:00	Space Shuttle	-	STS-51	ACTS/Orfava	0V-103 IUS deploy/FF	-	MLP3	LC39B	-	-	-	48531	-	-
1987-065	2449270.13	1988 Oct 18 14:53:10	Space Shuttle	-	STS-58	SpaceLab SLS 2	0V-102 SpaceLab	-	MLP1	LC39B	-	-	-	291	-	-
1987-075	2449323.89	1988 Dec 2 09:27:10	Space Shuttle	-	STS-61	HST SW-1	0V-105 HST mission	-	MLP3	LC39B	-	-	-	601	-	-
1987-006	2449387.00	1984 Feb 3 12:10:00	Space Shuttle	-	STS-60	SH-02/USF	0V-103 Research/FF	-	MLP3	LC39A	-	-	-	372	-	-
1987-004	2449416.05	1984 Mar 4 13:53:00	Space Shuttle	-	STS-62	USWF-2/DAST-2	0V-102 Research	-	MLP1	LC39B	-	-	-	305	-	-
1987-010	2449451.96	1984 Apr 9 11:05:01	Space Shuttle	-	STS-69	SRL-1	0V-105 SpaceLab	-	MLP2	LC39A	-	-	-	228	-	-
1987-039	2449542.20	1984 Jul 8 16:43:00	Space Shuttle	-	STS-65	SpaceLab TML-2	0V-102 SpaceLab	-	MLP2	LC39A	-	-	-	304	-	-
1987-048	2449605.43	1984 Sep 9 22:22:53	Space Shuttle	-	STS-64	SpaceLab/ALITE	0V-102 SpaceLab	-	MLP3	LC39B	-	-	-	267	-	-
1987-062	2449625.97	1984 Aug 18 11:53:58	Space Shuttle	-	STS-68	RSLS Abort	-	-	MLP1	LC39A	-	-	-	226	-	-
1987-073	2449660.21	1984 Sep 30 11:16:00	Space Shuttle	-	STS-68	SpaceLab Atlantis 3	0V-104 SpaceLab	-	MLP1	LC39A	-	-	-	318	-	-
1987-004	2449751.72	1984 Feb 3 16:59:43	Space Shuttle	-	STS-66	SH-03/MLR Shuttle/MLR	0V-103 Shuttle/MLR	-	MLP3	LC39B	-	-	-	395	-	-
1987-007	2449778.78	1985 Mar 2 06:38:13	Space Shuttle	-	STS-67	SpaceLab Astro 2	0V-105 Shuttle/MLR	-	MLP3	LC39B	-	-	-	363	-	-
1987-035	2449896.31	1985 Jun 27 19:22:18	Space Shuttle	-	STS-71	Shuttle/MLR-1	0V-104 Shuttle/MLR	-	MLP3	LC39A	-	-	-	400	-	-
1987-035	2449896.31	1985 Jul 13 13:41:55	Space Shuttle	-	STS-70	USF/Spartan/TEH-1	0V-103 IUS deploy	-	MLP1	LC39A	-	-	-	38308	-	-
1987-066	2450004.02	1985 Sep 7 15:09:00	Space Shuttle	-	STS-73	SpaceLab USM-2	0V-102 Research/FF	-	MLP2	LC39B	-	-	-	280	-	-
1987-081	2450034.02	1985 Oct 20 13:53:00	Space Shuttle	-	STS-74	Shuttle/MLR-2	0V-102 Shuttle/MLR	-	MLP3	LC39A	-	-	-	527	-	-
1987-012	2450093.90	1986 Dec 20 12:30:43	Space Shuttle	-	STS-75	TSS-1B	0V-105 Research/FF	-	MLP1	LC39B	-	-	-	562	-	-
1987-012	2450136.35	1986 Feb 22 20:18:00	Space Shuttle	-	STS-76	SH-04/Spartan/TEAMS	0V-102 Research/FF	-	MLP2	LC39B	-	-	-	416	-	-
1987-018	2450164.84	1986 Mar 22 08:13:04	Space Shuttle	-	STS-77	SpaceLab LMS	0V-104 Shuttle/MLR	-	MLP1	LC39B	-	-	-	398	-	-
1987-032	2450222.94	1986 May 19 10:30:00	Space Shuttle	-	STS-78	Shuttle/MLR-3	0V-104 Shuttle/MLR	-	MLP2	LC39B	-	-	-	295	-	-
1987-036	2450255.12	1986 Jun 20 14:49:00	Space Shuttle	-	STS-79	SpaceLab LMS	0V-102 SpaceLab	-	MLP3	LC39A	-	-	-	285	-	-
1987-067	2450342.87	1986 Sep 16 08:54:49	Space Shuttle	-	STS-79	Shuttle/MLR-4	0V-104 Shuttle/MLR	-	MLP3	LC39A	-	-	-	390	-	

Launch

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Mission	FlightCode	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee_Km	Range_Km	Dest
1997-004	2450480-87	1997 Feb 11 0855:17	Space Shuttle	-	STS-82	HST SR-2	0V-103 HST mission	-	MLP1	KSC	LC39A	-	-	619	-	-
1997-023	2450543-31	1997 Apr 4 1920:32	Space Shuttle	-	STS-83	SpaceLab MSL-1	0V-102 SpaceLab	-	MLF3	KSC	LC39A	-	-	304	-	-
1997-033	2450583-84	1997 May 15 0807:48	Space Shuttle	-	STS-84	Shuttle/Mir-6	0V-104 Shuttle/Mir	-	MLF3	KSC	LC39A	-	-	386	-	-
1997-032	2450631-25	1997 Jul 1 1802:00	Space Shuttle	-	STS-85	SpaceLab MSL-IR	0V-102 SpaceLab	-	MLP1	KSC	LC39A	-	-	304	-	-
1997-039	2450668-11	1997 Aug 7 1441:00	Space Shuttle	-	STS-86	CRISTM/MPD/IEH	0V-103 Research/FF	-	MLF3	KSC	LC39A	-	-	308	-	-
1997-065	2450717-61	1997 Sep 26 0234:19	Space Shuttle	-	STS-87	Shuttle/Mir-7	0V-104 Shuttle/Mir	-	MLP2	KSC	LC39A	-	-	381	-	-
1997-073	2450772-32	1997 Nov 19 1946:00	Space Shuttle	-	STS-88	Spartan 201/USP-4	0V-102 Research/FF	-	MLP1	KSC	LC39B	-	-	286	-	-
1998-001	2450836-62	1998 Jan 23 0248:15	Space Shuttle	-	STS-89	Shuttle/Mir-8	0V-105 Shuttle/Mir	-	MLF3	KSC	LC39A	-	-	387	-	-
1998-022	2450921-26	1998 Jan 17 1819:00	Space Shuttle	-	STS-90	NeuroLab	0V-102 SpaceLab	-	MLP2	KSC	LC39B	-	-	280	-	-
1998-044	2450967-42	1998 Jun 29 1919:34	Space Shuttle	-	STS-91	Shuttle/Mir-9	0V-103 Shuttle/Mir	-	MLP1	KSC	LC39A	-	-	379	-	-
1998-064	2451116-31	1998 Oct 29 1919:34	Space Shuttle	-	STS-96	Spartan 201/Spacehab	0V-103 Research/FF	-	MLP2	KSC	LC39B	-	-	403	-	-
1998-069	2451151-86	1998 Dec 4 0835:34	Space Shuttle	-	STS-98	ISS 2A (Unity)	0V-105 ISS	-	MLF3	KSC	LC39A	-	-	411	-	-
1998-030	2451325-96	1999 May 27 1049:42	Space Shuttle	-	STS-96	ISS 2A (Unity)	0V-102 JDS	-	MLP3	KSC	LC39B	-	-	146417	-	-
1999-040	2451362-69	1999 Jul 23 0431:00	Space Shuttle	-	STS-93	Chaandra	0V-102 JDS	-	MLP1	KSC	LC39B	-	-	611	-	-
1999-069	2451532-53	1999 Dec 20 0050:00	Space Shuttle	-	STS-103	HST SR-3A	0V-105 SpaceLab	-	MLF3	KSC	LC39B	-	-	245	-	-
2000-010	2451586-24	2000 Feb 11 1743:40	Space Shuttle	-	STS-101	SKIM (SHL-3)	0V-104 JDS	-	MLP1	KSC	LC39A	-	-	381	-	-
2000-027	2451653-92	2000 May 19 1011:10	Space Shuttle	-	STS-106	ISS 2A.2a	0V-104 JDS	-	MLP2	KSC	LC39B	-	-	387	-	-
2000-063	2451796-03	2000 Sep 8 1245:47	Space Shuttle	-	STS-106	ISS 3A	0V-104 JDS	-	MLP2	KSC	LC39B	-	-	387	-	-
2000-062	2451829-47	2000 Oct 11 2317:00	Space Shuttle	-	STS-92	ISS 3A	0V-104 JDS	-	MLP2	KSC	LC39A	-	-	381	-	-
2000-078	2451879-63	2000 Dec 1 0305:01	Space Shuttle	-	STS-97	ISS 4A	0V-104 JDS	-	MLP1	KSC	LC39B	-	-	381	-	-
2001-006	2451948-47	2001 Feb 7 2313:02	Space Shuttle	-	STS-96	ISS 5A	0V-104 JDS	-	MLP2	KSC	LC39A	-	-	389	-	-
2001-010	2452019-28	2001 Mar 8 1142:09	Space Shuttle	-	STS-102	ISS 5A.1	0V-105 JDS	-	MLF3	KSC	LC39B	-	-	385	-	-
2001-016	2452019-28	2001 Apr 19 1940:42	Space Shuttle	-	STS-104	ISS 6A	0V-105 JDS	-	MLP1	KSC	LC39A	-	-	404	-	-
2001-028	2452102-88	2001 Jul 12 0903:59	Space Shuttle	-	STS-104	ISS 7A.1	0V-104 JDS	-	KSC	LC39A	-	-	-	400	-	-
2001-035	2452132-38	2001 Aug 10 2110:14	Space Shuttle	-	STS-105	ISS 7A.1	0V-104 JDS	-	KSC	LC39A	-	-	-	400	-	-
2001-064	2452249-43	2001 Dec 5 2219:28	Space Shuttle	-	STS-108	ISS 6A	0V-105 JDS	-	KSC	LC39A	-	-	-	403	-	-
2002-010	2452334-97	2002 Mar 1 1122:02	Space Shuttle	-	STS-109	HST SR-5B	0V-102 HST mission	-	MLP1	KSC	LC39B	-	-	390	-	-
2002-018	2452373-36	2002 Apr 8 2044:19	Space Shuttle	-	STS-110	ISS 6A	0V-104 JDS	-	KSC	LC39B	-	-	-	412	-	-
2002-028	2452431-39	2002 Jun 5 2122:49	Space Shuttle	-	STS-111	ISS 9A	0V-104 JDS	-	KSC	LC39A	-	-	-	420	-	-
2002-062	2452555-32	2002 Oct 7 1945:51	Space Shuttle	-	STS-112	ISS 9A	0V-104 JDS	-	KSC	LC39A	-	-	-	405	-	-
2003-003	2452656-15	2003 Jan 16 1539:00	Space Shuttle	-	STS-115	ISS 11A	0V-105 JDS	-	KSC	LC39B	-	-	-	389	-	-
2003-028	2453076-11	2003 Jul 26 1439:00	Space Shuttle	-	STS-107	SpaceLab	0V-102 Research	-	KSC	LC39A	-	-	-	289	-	-
2004-026	2453988-14	2006 Sep 9 1514:55	Space Shuttle	-	STS-114	ISS LP-1	0V-103 JDS	-	KSC	LC39A	-	-	-	388	-	-
2005-036	2453988-14	2006 Jul 4 1837:55	Space Shuttle	-	STS-115	ISS LP-1	0V-103 JDS	-	KSC	LC39B	-	-	-	380	-	-
2005-065	2454079-57	2006 Sep 9 1514:55	Space Shuttle	-	STS-116	ISS 12A	0V-104 JDS	-	KSC	LC39B	-	-	-	351	-	-
2007-004	2454260-46	2007 Jun 8 2236:04	Space Shuttle	-	STS-117	ISS 12A	0V-104 JDS	-	KSC	LC39B	-	-	-	351	-	-
2007-035	2454321-44	2007 Aug 9 1447:35	Space Shuttle	-	STS-118	ISS 13A	0V-104 JDS	-	KSC	LC39B	-	-	-	364	-	-
2007-060	2454397-15	2007 Oct 23 1556:19	Space Shuttle	-	STS-120	ISS 13A.1	0V-105 JDS	-	KSC	LC39A	-	-	-	349	-	-
2008-006	2454504-32	2008 Feb 1 1945:39	Space Shuttle	-	STS-122	ISS 15A	0V-105 JDS	-	KSC	LC39A	-	-	-	343	-	-
2008-007	2454536-37	2008 Mar 31 0729:14	Space Shuttle	-	STS-124	ISS 15A	0V-105 JDS	-	KSC	LC39A	-	-	-	359	-	-
2008-059	2454765-54	2008 May 31 0855:12	Space Shuttle	-	STS-124	ISS 15A	0V-105 JDS	-	KSC	LC39A	-	-	-	357	-	-
2008-069	2454906-25	2009 May 15 0941:44	Space Shuttle	-	STS-119	HST SR-4	0V-103 HST mission	-	KSC	LC39A	-	-	-	381	-	-
2008-076	2454965-42	2009 Nov 15 2345:39	Space Shuttle	-	STS-125	HST SR-4	0V-104 HST mission	-	KSC	LC39A	-	-	-	453	-	-
2008-085	2455025-42	2009 Jul 15 2345:39	Space Shuttle	-	STS-127	ISS 21/A	0V-105 HST	-	KSC	LC39A	-	-	-	453	-	-
2008-092	2455152-31	2009 Aug 29 0359:37	Space Shuttle	-	STS-128	ISS 17/A	0V-105 HST	-	KSC	LC39A	-	-	-	345	-	-
2009-004	2455236-88	2009 Nov 16 1929:10	Space Shuttle	-	STS-129	ISS 20/A	0V-105 HST	-	KSC	LC39A	-	-	-	345	-	-
2010-004	2455236-88	2010 Feb 8 0914:08	Space Shuttle	-	STS-129	ISS 20/A	0V-105 HST	-	KSC	LC39A	-	-	-	345	-	-
2010-010	2455236-88	2010 Apr 5 0031:25	Space Shuttle	-	STS-130	ISS 19A	0V-105 HST	-	KSC	LC39A	-	-	-	352	-	-
2010-010	2455236-88	2010 Apr 5 0031:25	Space Shuttle	-	STS-130	ISS 19A	0V-105 HST	-	KSC	LC39A	-	-	-	352	-	-
2010-010	2455236-88	2010 Apr 5 0031:25	Space Shuttle	-	STS-130	ISS 19A	0V-105 HST	-	KSC	LC39A	-	-	-	352	-	-
2010-010	2455236-88	2010 Apr 5 0031:25	Space Shuttle	-	STS-130	ISS 19A	0V-105 HST	-	KSC	LC39A	-	-	-	352	-	-
2010-010	2455236-88	2010 Apr 5 0031:25	Space Shuttle	-	STS-130	ISS 19A	0V-105 HST	-	KSC	LC39A	-	-	-	352	-	-
2010-010	2455236-88	2010 Apr 5 0031:25	Space Shuttle	-	STS-130	ISS 19A	0V-105 HST	-	KSC	LC39A	-	-	-	352	-	-
2010-010	2455236-88	2010 Apr 5 0031:25	Space Shuttle	-	STS-130	ISS 19A	0V-105 HST	-	KSC	LC39A	-	-	-	352	-	-
2010-010	2455236-88	2010 Apr 5 0031:25	Space Shuttle	-	STS-130	ISS 19A	0V-105 HST	-	KSC	LC39A	-	-	-	352	-	-
2010-010	2455236-88	2010 Apr 5 0031:25	Space Shuttle	-	STS-130	ISS 19A	0V-105 HST	-	KSC	LC39A	-	-	-	352	-	-
2010-010	2455236-88	2010 Apr 5 0031:25	Space Shuttle	-	STS-130	ISS 19A	0V-105 HST	-	KSC	LC39A	-	-	-	352	-	-
2010-010	2455236-88	2010 Apr 5 0031:25	Space Shuttle	-	STS-130	ISS 19A	0V-105 HST	-	KSC	LC39A	-	-	-	352	-	-
2010-010	2455236-88	2010 Apr 5 0031:25	Space Shuttle	-	STS-130	ISS 19A	0V-105 HST	-	KSC	LC39A	-	-	-	352	-	-
2010-010	2455236-88	2010 Apr 5 0031:25	Space Shuttle	-	STS-130	ISS 19A	0V-105 HST	-	KSC	LC39A	-	-	-	352	-	-
2010-010	2455236-88	2010 Apr 5 0031:25	Space Shuttle	-	STS-130	ISS 19A	0V-105 HST	-	KSC	LC39A	-	-	-	352	-	-
2010-010	2455236-88	2010 Apr 5 0031:25	Space Shuttle	-	STS-130	ISS 19A	0V-105 HST	-	KSC	LC39A	-	-	-	352	-	-
2010-010	2455236-88	2010 Apr 5 0031:25	Space Shuttle	-	STS-130	ISS 19A	0V-105 HST	-	KSC	LC39A	-	-	-	352	-	-
2010-010	2455236-88	2010 Apr 5 0031:25	Space Shuttle	-	STS-130	ISS 19A	0V-105 HST	-	KSC	LC39A	-	-	-	352	-	-
2010-010	2455236-88	2010 Apr 5 0031:25	Space Shuttle	-	STS-130	ISS 19A	0V-105 HST	-	KSC	LC39A	-	-	-	352	-	-
2010-010	2455236-88	2010 Apr 5 0031:25	Space Shuttle	-	STS-130	ISS 19A	0V-105 HST	-	KSC	LC39A	-	-	-	352	-	-
2010-010	2455236-88	2010 Apr 5 0031:25	Space Shuttle	-	STS-130	ISS 19A	0V-105 HST	-	KSC	LC39A	-	-	-	352	-	-
2010-010	2455236-88	2010 Apr 5 0031:25	Space Shuttle	-	STS-130	ISS 19A	0V-105 HST	-	KSC	LC39A	-	-	-	352	-	-
2010-010	2455236-88	2010 Apr 5 0031:25	Space Shuttle	-	STS-130	ISS 19A	0V-105 HST	-	KSC	LC39A	-	-	-	352	-	-
2010-010	2455236-88	2010 Apr 5 0031:25	Space Shuttle	-	STS-130	ISS 19A	0V-105 HST	-	KSC	LC39A	-	-	-	352	-	-
2010-010	2455236-88	2010 Apr 5 0031:25	Space Shuttle	-	STS-130	ISS 19A	0V-105 HST	-	KSC	LC39A	-	-	-	352		



Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Agency	Launch_Code	Group	Category	LTCite	Cite	Notes
1981-034	2444707.00	1981 Apr 12 1200:04	Space Shuttle	-	STS-1	JSC/MSPC	05	G	Sat LE0 SR	STSJSC	-	-
1981-111	2444821.13	1981 Nov 12 1510:00	Space Shuttle	-	STS-2	JSC/MSPC	05	G	Sat LE0 SR	STSJSC	-	-
1982-022	2445051.17	1982 Mar 22 1600:00	Space Shuttle	-	STS-3	JSC/MSPC	05	G	Sat LE0 SR	STSJSC	-	-
1982-065	2445148.12	1982 Jun 27 1500:00	Space Shuttle	-	STS-4	JSC/MSPC	05	G	Sat LE0 SR	STSJSC	-	-
1982-110	2445285.01	1982 Nov 11 1219:00	Space Shuttle	-	STS-5	JSC/MSPC	05	G	Sat LE0 SR	STSJSC	-	-
1983-026	2445238.27	1983 Apr 4 1630:00	Space Shuttle	-	STS-6	JSC/MSPC	05	G	Sat LE0 SR	STSJSC	-	-
1983-059	2445503.98	1983 Jun 18 1133:00	Space Shuttle	-	STS-7	JSC/MSPC	05	G	Sat LE0 SR	STSJSC	-	-
1983-089	2445576.77	1983 Aug 30 0632:00	Space Shuttle	-	STS-8	JSC/MSPC	05	G	Sat LE0 SR	STSJSC	-	-
1984-011	2445734.04	1984 Feb 3 1300:00	Space Shuttle	-	STS-9	JSC/MSPC	05	G	Sat LE0 SR	STSJSC	-	-
1984-034	2445797.08	1984 Apr 6 1358:00	Space Shuttle	-	STS-11/41-B	JSC/MSPC	05	G	Sat LE0 SR	STSJSC	-	-
1984-047	2445878.03	1984 Jun 26 1243:06	Space Shuttle	-	STS-11/41-C	JSC/MSPC	05	G	Sat LE0 SR	STSJSC	-	-
1984-104	2445943.03	1984 Aug 30 1241:50	Space Shuttle	-	STS-14/41-D	JSC/MSPC	05	G	Sat LE0 SR	STSJSC	-	-
1984-113	2445878.96	1984 Oct 5 1103:00	Space Shuttle	-	STS-14/41-E	JSC/MSPC	05	G	Sat LE0 SR	STSJSC	-	-
1984-118	2446013.01	1984 Oct 8 1216:00	Space Shuttle	-	STS-17/41-G	JSC/MSPC	05	G	Sat LE0 SR	STSJSC	-	-
1985-010	2446090.33	1985 Jan 24 1950:00	Space Shuttle	-	STS-19/91-A	JSC/MSPC	05	G	Sat LE0 SR	STSJSC	-	-
1985-028	2446168.08	1985 Apr 12 1359:05	Space Shuttle	-	STS-20/91-C	JSC/MSPC	05	G	Sat LE0 SR	STSJSC	-	-
1985-034	2446186.17	1985 Apr 29 1102:18	Space Shuttle	-	STS-23/91-D	JSC/MSPC	05	G	Sat LE0 SR	STSJSC	-	-
1985-048	2446233.98	1985 Jun 17 1133:00	Space Shuttle	-	STS-24/91-B	JSC/MSPC	05	G	Sat LE0 SR	STSJSC	-	-
1985-059	2446276.38	1985 Jul 29 2100:00	Space Shuttle	-	STS-25/91-G	JSC/MSPC	05	G	Sat LE0 SR	STSJSC	-	-
1985-063	2446304.96	1985 Aug 27 1058:01	Space Shuttle	-	STS-26/91-F	JSC/MSPC	05	G	Sat LE0 SR	STSJSC	-	-
1985-072	2446342.14	1985 Jul 29 2100:00	Space Shuttle	-	STS-26/91-I	JSC/MSPC	05	G	Sat LE0 SR	STSJSC	-	-
1985-104	2446396.52	1985 Oct 30 1700:00	Space Shuttle	-	STS-27/91-J	JSC/MSPC	05	G	Sat LE0 SR	STSJSC	-	-
1985-109	2446396.52	1985 Nov 27 0229:00	Space Shuttle	-	STS-29/91-A	JSC/MSPC	05	G	Sat LE0 SR	STSJSC	-	-
1986-003	2446443.00	1986 Jan 12 1155:00	Space Shuttle	-	STS-30/91-B	JSC/MSPC	05	G	Sat LE0 SR	STSJSC	-	-
1986-004	2446459.19	1986 Jan 28 1638:00	Space Shuttle	-	STS-32/91-C	JSC/MSPC	05	G	Sat LE0 SR	STSJSC	-	-
1986-091	2447434.15	1986 Sep 29 1537:00	Space Shuttle	-	STS-53/91-1	JSC/MSPC	05	G	Sat LE0 SR	STSJSC	-	-
1986-106	2447434.15	1986 Dec 2 1430:34	Space Shuttle	-	STS-26R	JSC/MSPC	05	G	Sat LE0 SR	STSJSC	-	-
1986-021	2447539.12	1986 Mar 13 1487:00	Space Shuttle	-	STS-27R	JSC/MSPC	05	G	Sat LE0 SR	STSJSC	-	-
1986-033	2447551.28	1986 May 4 1646:59	Space Shuttle	-	STS-30R	JSC/MSPC	05	G	Sat LE0 SR	STSJSC	-	-
1986-051	2447747.03	1986 Aug 6 1237:00	Space Shuttle	-	STS-28R	JSC/MSPC	05	G	Sat LE0 SR	STSJSC	-	-
1986-084	2447816.20	1986 Oct 18 1653:40	Space Shuttle	-	STS-34R	JSC/MSPC	05	G	Sat LE0 SR	STSJSC	-	-
1986-090	2447953.52	1986 Nov 23 0228:30	Space Shuttle	-	STS-35R	JSC/MSPC	05	G	Sat LE0 SR	STSJSC	-	-
1986-020	2447901.02	1986 Jan 9 1235:00	Space Shuttle	-	STS-32R	JSC/MSPC	05	G	Sat LE0 SR	STSJSC	-	-
1986-019	2447950.83	1986 Feb 28 0750:22	Space Shuttle	-	STS-36R	JSC/MSPC	05	G	Sat LE0 SR	STSJSC	-	-
1986-037	2448006.02	1986 Apr 24 1233:52	Space Shuttle	-	STS-31R	JSC/MSPC	05	G	Sat LE0 SR	STSJSC	-	-
1986-090	2448170.99	1986 Oct 6 1447:16	Space Shuttle	-	STS-41	JSC/MSPC	05	G	Sat LE0 SR	STSJSC	-	-
1986-097	2448211.49	1986 Nov 15 2346:15	Space Shuttle	-	STS-38	JSC/MSPC	05	G	Sat LE0 SR	STSJSC	-	-
1986-100	2448221.78	1986 Dec 2 0649:00	Space Shuttle	-	STS-38R	JSC/MSPC	05	G	Sat LE0 SR	STSJSC	-	-
1986-027	2448327.10	1986 Apr 28 1422:46	Space Shuttle	-	STS-39R	JSC/MSPC	05	G	Sat LE0 SR	STSJSC	-	-
1986-031	2448342.96	1986 Apr 28 1335:14	Space Shuttle	-	STS-39	JSC/MSPC	05	G	Sat LE0 SR	STSJSC	-	-
1986-034	2448313.06	1986 Jun 5 1624:51	Space Shuttle	-	STS-40	JSC/MSPC	05	G	Sat LE0 SR	STSJSC	-	-
1986-041	2448411.13	1986 Aug 15 1524:00	Space Shuttle	-	STS-43	JSC/MSPC	05	G	Sat LE0 SR	STSJSC	-	-
1986-063	2448516.47	1986 Sep 12 2341:04	Space Shuttle	-	STS-46	JSC/MSPC	05	G	Sat LE0 SR	STSJSC	-	-
1986-090	2448544.49	1986 Nov 24 1454:00	Space Shuttle	-	STS-42	JSC/MSPC	05	G	Sat LE0 SR	STSJSC	-	-
1986-022	2448708.12	1986 Jan 24 1312:53	Space Shuttle	-	STS-45	JSC/MSPC	05	G	Sat LE0 SR	STSJSC	-	-
1986-038	2448760.05	1986 Mar 7 2340:59	Space Shuttle	-	STS-48	JSC/MSPC	05	G	Sat LE0 SR	STSJSC	-	-
1986-034	2448769.18	1986 Jun 25 1612:20	Space Shuttle	-	STS-49	JSC/MSPC	05	G	Sat LE0 SR	STSJSC	-	-
1986-034	2448825.08	1986 Jun 31 1356:46	Space Shuttle	-	STS-46	JSC/MSPC	05	G	Sat LE0 SR	STSJSC	-	-
1986-061	2448878.10	1986 Sep 13 1429:46	Space Shuttle	-	STS-47	JSC/MSPC	05	G	Sat LE0 SR	STSJSC	-	-
1986-070	2448918.20	1986 Oct 22 1709:00	Space Shuttle	-	STS-52	JSC/MSPC	05	G	Sat LE0 SR	STSJSC	-	-
1986-088	2448959.06	1986 Dec 2 1324:00	Space Shuttle	-	STS-53	JSC/MSPC	05	G	Sat LE0 SR	STSJSC	-	-
1986-003	2449001.08	1986 Jan 13 1359:30	Space Shuttle	-	STS-54	JSC/MSPC	05	G	Sat LE0 SR	STSJSC	-	-
1986-023	2449069.12	1986 Mar 22 1459:57	Space Shuttle	-	STS-56	JSC/MSPC	05	G	Sat LE0 SR	STSJSC	-	-
1986-020	2449085.73	1986 Apr 8 0529:07	Space Shuttle	-	STS-56	JSC/MSPC	05	G	Sat LE0 SR	STSJSC	-	-
1986-027	2449104.13	1986 Apr 26 1450:00	Space Shuttle	-	STS-57	JSC/MSPC	05	G	Sat LE0 SR	STSJSC	-	-
1986-037	2449160.05	1986 Jun 21 1307:22	Space Shuttle	-	STS-51	JSC/MSPC	05	G	Sat LE0 SR	STSJSC	-	-
1986-021	2449212.05	1986 Aug 12 1312:32	Space Shuttle	-	STS-51	JSC/MSPC	05	G	Sat LE0 SR	STSJSC	-	-
1986-055	2449242.99	1986 Oct 18 1445:00	Space Shuttle	-	STS-58	JSC/MSPC	05	G	Sat LE0 SR	STSJSC	-	-
1986-062	2449279.12	1986 Oct 18 1453:10	Space Shuttle	-	STS-58	JSC/MSPC	05	G	Sat LE0 SR	STSJSC	-	-
1986-075	2449323.89	1986 Dec 2 0927:10	Space Shuttle	-	STS-60	JSC/MSPC	05	G	Sat LE0 SR	STSJSC	-	-
1986-076	2449387.01	1994 Feb 3 1210:00	Space Shuttle	-	STS-62	JSC/MSPC	05	G	Sat LE0 SR	STSJSC	-	-
1986-018	2449416.08	1994 Mar 4 1363:00	Space Shuttle	-	STS-62	JSC/MSPC	05	G	Sat LE0 SR	STSJSC	-	-
1986-020	2449451.96	1994 Apr 9 1105:01	Space Shuttle	-	STS-59	JSC/MSPC	05	G	Sat LE0 SR	STSJSC	-	-
1986-039	2449542.20	1994 Jul 8 1643:00	Space Shuttle	-	STS-65	JSC/MSPC	05	G	Sat LE0 SR	STSJSC	-	-
1986-059	2449605.43	1994 Sep 9 2222:53	Space Shuttle	-	STS-64	JSC/MSPC	05	G	Sat LE0 SR	STSJSC	-	-
1986-062	2449629.97	1994 Aug 18 1053:58	Space Shuttle	-	STS-68	JSC/MSPC	05	G	Sat LE0 SR	STSJSC	-	-
1986-074	2449660.21	1994 Aug 30 1116:00	Space Shuttle	-	STS-66	JSC/MSPC	05	G	Sat LE0 SR	STSJSC	-	-
1986-004	2449751.72	1995 Feb 3 0522:04	Space Shuttle	-	STS-63	JSC/MSPC	05	G	Sat LSS SR	STSJSC	-	-
1986-073	2449778.78	1995 Mar 2 0638:13	Space Shuttle	-	STS-67	JSC/MSPC	05	G	Sat LSS SR	STSJSC	-	-
1986-030	2449896.31	1995 Jun 27 1932:18	Space Shuttle	-	STS-71	JSC/MSPC	05	G	Sat LSS SR	STSJSC	-	-
1986-035	2449912.07	1995 Jul 13 1341:55	Space Shuttle	-	STS-70	JSC/MSPC	05	G	Sat LSS SR	STSJSC	-	-
1986-048	2449968.13	1995 Sep 7 1509:00	Space Shuttle	-	STS-69	JSC/MSPC	05	G	Sat LSS SR	STSJSC	-	-
1986-058	2450011.08	1995 Oct 20 1353:00	Space Shuttle	-	STS-73	JSC/MSPC	05	G	Sat LSS SR	STSJSC	-	-
1986-011	2450034.02	1995 Nov 12 1230:43	Space Shuttle	-	STS-74	JSC/MSPC	05	G	Sat LSS SR	STSJSC	-	-
1986-012	2450093.90	1996 Jan 11 0941:00	Space Shuttle	-	STS-72	JSC/MSPC	05	G	Sat LSS SR	STSJSC	-	-
1986-018	2450136.35	1996 Feb 22 2018:00	Space Shuttle	-	STS-75	JSC/MSPC	05	G	Sat LSS SR	STSJSC	-	-
1986-032	2450164.84	1996 Mar 22 0813:04	Space Shuttle	-	STS-76	JSC/MSPC	05	G	Sat LSS SR	STSJSC	-	-
1986-036	2450222.94	1996 May 19 1030:00	Space Shuttle	-	STS-77	JSC/MSPC	05	G	Sat LSS SR	STSJSC	-	-
1986-057	2450255.12	1996 Jun 20 1449:00	Space Shuttle	-	STS-78	JSC/MSPC	05	G	Sat LSS SR	STSJSC	-	-
1986-065	2450342.87	1996 Sep 16 0854:49	Space Shuttle	-	STS-79	JSC/MSPC	05	G	Sat LSS SR	STSJSC	-	-
1986-065	2450407.33	1996 Nov 19 1955:47	Space Shuttle	-	STS-80	JSC/MSPC	05	G	Sat LSS SR	STSJSC	-	-
1987-001	2450460.89	1987 Jan 12 0927:23	Space Shuttle	-	STS-81	JSC/MSPC	05	G	Sat LSS SR	MSPCFLASH	-	-

Launch

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	OrbPay	Agency	Launch_Code	Group	Category	LTCite	Cite	Notes
1997-004	2450490.87	1997 Feb 11 0655:17	Space Shuttle	-	STS-82	108.673	JSC/NSFC	05	G	Sat LEO SR	NSFCFLASH	-	-
1997-013	2450543.31	1997 Apr 4 1920:32	Space Shuttle	-	STS-83	126.098	JSC/NSFC	05	G	Sat LEO SR	NSFCFLASH	-	-
1997-023	2450583.84	1997 May 15 0807:48	Space Shuttle	-	STS-84	116.114	JSC/NSFC	05	G	Sat LEO SR	NSFCFLASH	-	-
1997-032	2450631.25	1997 Jul 1 1802:00	Space Shuttle	-	STS-85	126.294	JSC/NSFC	05	G	Sat LEO SR	NSFCFLASH	-	-
1997-039	2450668.11	1997 Aug 7 1441:00	Space Shuttle	-	STS-86	111.542	JSC/NSFC	05	G	Sat LEO SR	NSFCFLASH	-	-
1997-055	2450717.61	1997 Sep 26 0234:19	Space Shuttle	-	STS-87	116.219	JSC/NSFC	05	G	Sat LEO SR	Wire	-	-
1998-003	2450772.32	1997 Nov 19 1946:00	Space Shuttle	-	STS-88	118.383	JSC/NSFC	05	G	Sat LEO SR	NSFCFLASH	-	-
1998-006	2450836.62	1998 Jan 23 0248:15	Space Shuttle	-	STS-89	114.552	JSC/NSFC	05	G	Sat LEO SR	NSFCFLASH	-	-
1998-022	2450921.26	1998 Jan 23 0248:15	Space Shuttle	-	STS-90	126.468	JSC/NSFC	05	G	Sat LEO SR	NSFCFLASH	-	-
1998-034	2450967.42	1998 Jun 2 2206:24	Space Shuttle	-	STS-91	118.765	JSC/NSFC	05	G	Sat LEO SR	NSFCFLASH	-	-
1998-064	2451116.31	1998 Oct 29 1919:34	Space Shuttle	-	STS-92	119.261	JSC/NSFC	05	G	Sat LEO SR	NSFCFLASH	-	-
1998-030	2451325.95	1998 Dec 4 0835:34	Space Shuttle	-	STS-93	124.147	JSC/NSFC	05	G	Sat LEO SR	NSFCFLASH	-	-
1999-000	2451382.69	1999 May 27 1049:42	Space Shuttle	-	STS-94	126.738	JSC/NSFC	05	G	Sat LEO SR	NSFCFLASH	-	-
1999-040	2451532.53	1999 Jul 23 0431:00	Space Shuttle	-	STS-95	126.360	JSC/NSFC	05	G	Sat LEO SR	NSFCFLASH	-	-
1999-069	2451586.24	1999 Dec 20 0050:00	Space Shuttle	-	STS-103	107.177	JSC/NSFC	05	G	Sat LEO SR	JCN-P	-	-
2000-027	2451688.92	2000 Feb 11 1743:40	Space Shuttle	-	STS-109	109.915	JSC/NSFC	05	G	Sat LEO SR	Wire	-	-
2000-053	2451796.03	2000 May 19 1011:10	Space Shuttle	-	STS-101	123.259	JSC/NSFC	05	G	Sat LEO SR	Wire	-	-
2000-062	2451828.47	2000 Sep 8 1245:47	Space Shuttle	-	STS-106	126.169	JSC/NSFC	05	G	Sat LEO SR	Wire	-	-
2000-078	2451879.63	2000 Oct 11 2317:00	Space Shuttle	-	STS-92	124.447	JSC/NSFC	05	G	Sat LEO SR	Wire	-	-
2001-006	2451948.47	2001 Feb 7 2313:02	Space Shuttle	-	STS-97	130.994	JSC/NSFC	05	G	Sat LEO SR	Wire	-	-
2001-010	2451976.99	2001 Mar 8 1142:09	Space Shuttle	-	STS-102	127.414	JSC/NSFC	05	G	Sat LEO SR	Wire	-	-
2001-016	2452019.28	2001 Apr 19 1840:42	Space Shuttle	-	STS-100	126.848	JSC/NSFC	05	G	Sat LEO SR	Wire	-	-
2001-028	2452102.88	2001 Jul 12 0903:59	Space Shuttle	-	STS-104	121.467	JSC/NSFC	05	G	Sat LEO SR	Wire	-	-
2001-035	2452132.38	2001 Aug 10 2110:14	Space Shuttle	-	STS-105	126.607	JSC/NSFC	05	G	Sat LEO SR	Wire	-	-
2001-054	2452249.45	2001 Dec 5 2219:26	Space Shuttle	-	STS-108	126.960	JSC/NSFC	05	G	Sat LEO SR	Wire	-	-
2002-010	2452334.97	2002 Mar 1 1122:02	Space Shuttle	-	STS-109	113.638	JSC/NSFC	05	G	Sat LEO SR	Wire	-	-
2002-018	2452373.36	2002 Apr 6 2044:19	Space Shuttle	-	STS-110	127.597	JSC/NSFC	05	G	Sat LEO SR	Wire	-	-
2002-028	2452431.39	2002 Jun 5 2122:49	Space Shuttle	-	STS-111	127.344	JSC/NSFC	05	G	Sat LEO SR	Wire	-	-
2002-047	2452555.32	2002 Oct 7 1945:51	Space Shuttle	-	STS-112	127.868	JSC/NSFC	05	G	Sat LEO SR	Wire	-	-
2003-002	2452602.53	2002 Nov 24 0049:47	Space Shuttle	-	STS-113	126.008	JSC/NSFC	05	G	Sat LEO SR	Wire	-	-
2003-003	2452658.15	2003 Jan 16 1539:00	Space Shuttle	-	STS-107	113.521	JSC/NSFC	05	G	Sat LEO SR	Wire	-	-
2003-028	2452676.11	2003 Jul 4 1637:56	Space Shuttle	-	STS-121	124.469	JSC/NSFC	05	G	Sat LEO SR	Wire	-	-
2006-038	2453988.14	2006 Sep 9 1514:55	Space Shuttle	-	STS-115	130.540	JSC/NSFC	05	G	Sat LEO SR	Wire	-	-
2006-058	2454079.57	2006 Dec 10 1447:36	Space Shuttle	-	STS-116	121.928	JSC/NSFC	05	G	Sat LEO SR	Wire	-	-
2007-024	2454260.46	2007 Jun 8 2338:04	Space Shuttle	-	STS-117	132.028	JSC/NSFC	05	G	Sat LEO SR	Wire	-	-
2007-055	2454321.44	2007 Aug 23 2236:42	Space Shuttle	-	STS-118	122.353	JSC/NSFC	05	G	Sat LEO SR	Wire	-	-
2007-060	2454397.15	2007 Oct 23 0538:19	Space Shuttle	-	STS-120	126.552	JSC/NSFC	05	G	Sat LEO SR	Wire	-	-
2008-005	2454504.72	2008 Feb 11 1945:30	Space Shuttle	-	STS-122	114.608	JSC/NSFC	05	G	Sat LEO SR	Wire	-	-
2008-009	2454538.76	2008 Mar 11 0628:14	Space Shuttle	-	STS-123	124.757	JSC/NSFC	05	G	Sat LEO SR	Wire	-	-
2008-059	2454735.36	2008 May 15 0102:13	Space Shuttle	-	STS-124	128.756	JSC/NSFC	05	G	Sat LEO SR	Wire	-	-
2008-083	2454768.54	2008 Mar 19 0345:34	Space Shuttle	-	STS-126	128.212	JSC/NSFC	05	G	Sat LEO SR	Wire	-	-
2009-003	2454863.25	2009 May 15 1801:55	Space Shuttle	-	STS-128	115.383	JSC/NSFC	05	G	Sat LEO SR	Wire	-	-
2009-038	2455079.42	2009 Jul 15 2001:03	Space Shuttle	-	STS-127	131.787	JSC/NSFC	05	G	Sat LEO SR	Wire	-	-
2009-062	2455150.31	2009 Aug 29 0339:37	Space Shuttle	-	STS-129	129.892	JSC/NSFC	05	G	Sat LEO SR	Wire	-	-
2010-004	2455295.88	2010 Feb 5 0914:10	Space Shuttle	-	STS-130	129.434	JSC/NSFC	05	G	Sat LEO SR	Wire	-	-
2010-012	2455291.98	2010 Apr 5 1031:26	Space Shuttle	-	STS-131	129.185	JSC/NSFC	05	G	Sat LEO SR	Wire	-	-
2010-112	2455291.26	2010 May 24 1829:34	Space Shuttle	-	STS-132	125.934	JSC/NSFC	05	G	Sat LEO SR	Wire	-	-
2011-008	2455517.41	2011 Feb 24 2159:34	Space Shuttle	-	STS-133	119.068	JSC/NSFC	05	G	Sat LEO SR	Wire	-	-
2011-030	2455608.01	2011 Mar 16 1958:38	Space Shuttle	-	STS-134	122.600	JSC/NSFC	05	G	Sat LEO SR	Wire	-	-
2011-031	2455751.15	2011 Jul 8 1529:04	Space Shuttle	-	STS-135	126.920	JSC/NSFC	05	G	Sat LEO SR	Wire	-	-
2022-156	2456999.78	2022 Nov 16 0647:44	STS Block 1	-	1	31.938	NSFC	DS	G	Sat DSO E	Wire	-	-



Launch

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Mission	FlightCode	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee km	Range km	Dest
2001-A24	2452144.50	2001 Aug 23	Al Sanoūd 2	-	-	Test 1	-	-	-	IQ160	-	-	-	45?	-	-
2001-A17	2452179.06	2001 Sep 26 1332	Al Sanoūd 2	-	-	Test 2	-	-	-	IQ160	-	-	-	45?	-	-
2001-A25	2452193.50	2001 Oct 11	Al Sanoūd 2	-	-	Test 2	-	-	-	IQ160	-	-	-	45?	-	-
2001-A26	2452220.77	2001 Nov 7 0630	Al Sanoūd 2	-	-	Test 2	-	-	-	IQ160	-	-	-	45?	-	-
2001-A18	2452272.50	2001 Dec 29	Al Sanoūd 2	-	-	Test 2	-	-	-	IQ160	-	-	-	45?	-	-
2002-A09	2452283.91	2002 Jan 9 0949	Al Sanoūd 2	-	-	Test 2	-	-	-	IQ160	-	-	-	45?	-	-
2002-A10	2452284.50	2002 Jan 10	Al Sanoūd 2	-	-	Test 2	-	-	-	IQ160	-	-	-	45?	-	-
2002-A11	2452306.02	2002 Jan 31 1229	Al Sanoūd 2	-	-	Test 2	-	-	-	IQ160	-	-	-	45?	-	-
2002-A12	2452347.50	2002 Mar 14	Al Sanoūd 2	-	-	Test 2	-	-	-	IQ160	-	-	-	45?	-	-
2002-A13	2452375.50	2002 Apr 11	Al Sanoūd 2	-	-	Test 2	-	-	-	IQ160	-	-	-	45?	-	-
2002-A14	2452404.50	2002 May 10	Al Sanoūd 2	-	-	Test 2	-	-	-	IQ160	-	-	-	45?	-	-
2002-A15	2452431.50	2002 Jun 6	Al Sanoūd 2	-	-	Test 2	-	-	-	IQ160	-	-	-	45?	-	-
2002-A16	2452442.63	2002 Jun 17 0307	Al Sanoūd 2	-	-	Test 2	-	-	-	IQ160	-	-	-	45?	-	-
2002-A17	2452443.63	2002 Jun 18 0312	Al Sanoūd 2	-	-	Test 2	-	-	-	IQ160	-	-	-	45?	-	-
2002-A18	2452473.66	2002 Jul 18 0354	Al Sanoūd 2	-	-	Test 2	-	-	-	IQ160	-	-	-	45?	-	-
2002-A19	2452476.62	2002 Jul 23 0256	Al Sanoūd 2	-	-	Test 2	-	-	-	IQ160	-	-	-	45?	-	-
2002-A05	2452511.50	2002 Aug 25 0345	Al Sanoūd 2	-	-	Test 2	-	-	-	IQ160	-	-	-	45?	-	-
2002-A06	2452511.50	2002 Aug 25	Al Sanoūd 2	-	-	Test 2	-	-	-	IQ160	-	-	-	45?	-	-
2002-A07	2452577.75	2002 Oct 30 0604	Al Sanoūd 2	-	-	Test 2	-	-	-	IQ160	-	-	-	45?	-	-
2002-A20	2452577.84	2002 Oct 30 0612	Al Sanoūd 2	-	-	Test 2	-	-	-	IQ160	-	-	-	45?	-	-
2002-A21	2452594.50	2002 Nov 16	Al Sanoūd 2	-	-	Test 2	-	-	-	IQ160	-	-	-	45?	-	-
2003-A19	2452719.42	2003 Mar 20 2208	Al Sanoūd 2	?	-	Kuwait	-	-	-	QBA	II	-	-	45?	-	-
2003-A20	2452722.42	2003 Mar 23 2159	Al Sanoūd 2	?	-	Camp III	-	-	-	QBA	III	-	-	45?	-	-
2003-A21	2452722.94	2003 Mar 24 1036	Al Sanoūd 2	?	-	Camp VA/Camp NJ	-	-	-	QBA	III	-	-	45?	-	-
2003-A23	2452730.75	2003 Apr 1 0603	Al Sanoūd 2	?	-	US Forces Iraq	-	-	-	IQIJ	-	-	-	45?	-	-





Launch

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	DrbPay	Agency	Launch_Code	Group	Category	LTCite	Cite	Notes
2001-A24	2452144.50	2001 Aug 23	Al Samoud 2	-	-	0.000	IQHC	NS	-	Test	UHHOVIC	-	-
2001-A17	2452179.06	2001 Sep 26 1332	Al Samoud 2	-	-	0.000	IQHC	NS	-	Test	UHHOVIC	-	-
2001-A25	2452193.50	2001 Oct 11	Al Samoud 2	-	-	0.000	IQHC	NS	-	Test	UHHOVIC	-	-
2001-A26	2452220.77	2001 Nov 7 0630	Al Samoud 2	-	-	0.000	IQHC	NS	-	Test	UHHOVIC	-	-
2001-A18	2452272.50	2001 Dec 29	Al Samoud 2	-	-	0.000	IQHC	NS	-	Test	UHHOVIC	-	-
2002-A09	2452283.91	2002 Jan 9 0949	Al Samoud 2	-	-	0.000	IQHC	NS	-	Test	UHHOVIC	-	-
2002-A10	2452284.50	2002 Jan 10	Al Samoud 2	-	-	0.000	IQHC	NS	-	Test	UHHOVIC	-	-
2002-A11	2452306.02	2002 Jan 31 1229	Al Samoud 2	-	-	0.000	IQHC	NS	-	Test	UHHOVIC	-	-
2002-A12	2452347.50	2002 Mar 14	Al Samoud 2	-	-	0.000	IQHC	NS	-	Test	UHHOVIC	-	-
2002-A13	2452375.50	2002 Apr 11	Al Samoud 2	-	-	0.000	IQHC	NS	-	Test	UHHOVIC	-	-
2002-A14	2452404.50	2002 May 10	Al Samoud 2	-	-	0.000	IQHC	NS	-	Test	UHHOVIC	-	-
2002-A15	2452431.50	2002 Jun 6	Al Samoud 2	-	-	0.000	IQHC	NS	-	Test	UHHOVIC	-	-
2002-A16	2452442.63	2002 Jun 17 0307	Al Samoud 2	-	-	0.000	IQHC	NS	-	Test	UHHOVIC	-	-
2002-A17	2452443.63	2002 Jun 18 0312	Al Samoud 2	-	-	0.000	IQHC	NS	-	Test	UHHOVIC	-	-
2002-A18	2452473.66	2002 Jul 18 0364	Al Samoud 2	-	-	0.000	IQHC	NS	-	Test	UHHOVIC	-	-
2002-A19	2452478.62	2002 Jul 23 0266	Al Samoud 2	-	-	0.000	IQHC	NS	-	Test	UHHOVIC	-	-
2002-A05	2452511.66	2002 Aug 25 0345	Al Samoud 2	-	-	0.000	IQHC	NS	-	Test	UHHOVIC	-	-
2002-A06	2452511.50	2002 Aug 25	Al Samoud 2	-	-	0.000	IQHC	NS	-	Test	UHHOVIC	-	-
2002-A07	2452577.75	2002 Oct 30 0604	Al Samoud 2	-	-	0.000	IQHC	NS	-	Test	UHHOVIC	-	-
2002-A20	2452577.64	2002 Oct 30 0812	Al Samoud 2	-	-	0.000	IQHC	NS	-	Test	UHHOVIC	-	-
2003-A19	2452594.50	2002 Nov 16	Al Samoud 2	-	-	0.000	IQH	NS	-	Test	UHHOVIC	-	-
2003-A20	2452719.42	2003 Mar 20 2208	Al Samoud 2	?	-	0.000	IQH	NS	-	Weapon	OIF-TMMD	-	-
2003-A21	2452722.42	2003 Mar 23 2159	Al Samoud 2	?	-	0.000	IQH	NS	-	Weapon	OIF-TMMD	-	-
2003-A21	2452722.94	2003 Mar 24 1036	Al Samoud 2	?	-	0.000	IQH	NS	-	Weapon	OIF-TMMD	-	-
2003-A23	2452730.75	2003 Apr 1 0603	Al Samoud 2	?	-	0.000	IQH	NS	-	Weapon	OIF-TMMD	-	-



Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Launch_Mission	FlightCode	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee Km	Range Km	Dest
1966-A96	2439347.50	1966 Aug 10	Sandhawk	-	Sandia 281-1	-	-	-	-	TTR	-	-	-	0?	-	-
1966-A106	2439383.50	1966 Sep 15	Sandhawk	-	Sandia 281-2	-	-	-	-	TTR	-	-	-	0?	-	-
1967-S89	2439507.50	1967 Jan 17	Sandhawk	-	Sandia 281-3	-	-	-	-	TTR	-	-	-	188	-	-
1967-S266	2439621.50	1967 May 11	Sandhawk	-	Sandia 281-4	-	-	-	-	KAO	-	-	-	151	-	-
1967-S267	2439621.50	1967 May 11	Sandhawk	-	Sandia 281-5	Dart	AEC SKOL	-	-	KAO	-	-	-	116	-	-
1967-S464	2439760.50	1967 Sep 27	Sandhawk	-	Sandia 281-6	Dart	JTF-8 Steward	-	-	J1	-	-	-	104	-	-
1968-S473	2440091.70	1968 Aug 23 0448	Sandhawk	-	Sandia 152-?	LRL XLE-2	-	-	-	TTR	-	-	-	187	-	-
1969-S312	2440341.50	1969 May	Sandhawk Tomahawk	-	Sandia 152-128	Dualhawk-9 Test	-	-	-	KAO	-	-	-	528	-	-
1970-S644	2440689.50	1970 Oct	Sandhawk Tomahawk	-	Sandia 152-134	Dualhawk-9 Test	-	-	-	KAO	-	-	-	515	-	-
1971-S702	2440968.53	1971 Jan 17 0040	Sandhawk Tomahawk	-	-	-	-	-	-	EGL	-	-	-	400?	-	-
1971-S628	2441242.50	1971 Oct 18	Sandhawk Tomahawk	-	BUBIA	-	-	-	-	KAO	-	-	-	470	-	-
1971-S651	2441243.50	1971 Oct 19	Sandhawk Tomahawk	-	BUBIA	-	-	-	-	KAO	-	-	-	467	-	-
1972-S103	2441382.11	1972 Mar 5 1435	Sandhawk Tomahawk	-	DLR T-DH-43	ISRO 21.01	TERLS-420 Dual Hawk	-	-	TERLS	-	-	-	52	-	-
1972-S103	2441383.79	1972 Mar 7 0652	Sandhawk Tomahawk	-	Sandia 152-188	Ba OUSIK	-	-	-	PF	-	-	-	500	-	-
1972-S03	2441388.11	1972 Mar 11 1438	Sandhawk Tomahawk	-	DLT T-DH-44	ISRO 21.02	TERLS-424 Dual Hawk	-	-	TERLS	-	-	-	52	-	-
1972-S334	2441600.04	1972 Oct 9 1251.36	Sandhawk Tomahawk	-	Sandia 152-191	Ba CHGRLACA	-	-	-	PF	-	-	-	500	-	-
1972-A106	2441602.05	1972 Oct 11 1313	Sandhawk Tomahawk	-	Sandia 152-192	Ba FALSON	-	-	-	PF	-	-	-	0?	-	-
1973-S69	2441718.70	1973 Feb 5 0448:49	Sandhawk Tomahawk	-	Sandia 152-201	Ba ZURITA	-	-	-	PF	-	-	-	500	-	-
1974-S137	2442123.02	1974 Mar 16 1228:15	Sandhawk Tomahawk	-	-	Conviga Ba ISPIDA	-	-	-	PF	-	-	-	576	-	-



Launch

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	OrbPay	Agency	Launch_Code	Group	Category	LTCite	Cite	Notes
1966-496	2439347.50	1966 Aug 10	Sandhawk	-	Sandtia 281-1	0.000	SAMD	SF	SAMD/	Test	FDS	-	-
1966-4105	2439383.50	1966 Sep 15	Sandhawk	-	Sandtia 281-2	0.000	SAMD	SF	SAMD/	Test	FDS	-	-
1967-859	2439507.50	1967 Jan 17	Sandhawk	-	Sandtia 281-3	0.000	SAMD	SS	SAMD/	Test/Aeron?	FDS	-	-
1967-5256	2439621.50	1967 May 11	Sandhawk	-	Sandtia 281-4	0.000	SAMD	SS	SAMD/	Test/Aeron?	FDS	SkctCon2	-
1967-5257	2439621.50	1967 May 11	Sandhawk	-	Sandtia 281-5	0.000	SAMD	SS	SAMD/	Test/Aeron?	FDS	-	-
1967-5454	2439760.50	1967 Sep 27	Sandhawk	-	Sandtia 281-6	0.000	SAMD	SS	SAMD/	Test/Aeron?	FDS	-	-
1968-5473	2440091.70	1968 Aug 23 0448	Sandhawk Tomahawk	-	Sandtia 152-?	0.000	SAMD	SS	LRL/	XR Aeron	FDS	UCL-50587	-
1969-8312	2440341.50	1969 May	Sandhawk Tomahawk	-	Sandtia 152-128	0.000	SAMD	SS	SAMD/	Test	SkctCon2	-	-
1970-8544	2440359.50	1970 Oct	Sandhawk Tomahawk	-	Sandtia 152-134	0.000	SAMD	SS	SAMD/	Test	SkctCon2	-	-
1971-8702	2440369.53	1971 Jan 17 0040	Sandhawk Tomahawk	-	-	0.000	SAMD	SS	SAMD/	Test	Ulrich/FDC	-	-
1971-8528	2441242.50	1971 Oct 18	Sandhawk Tomahawk	-	BUBIA	0.000	SAMD?	SS	UAF/LASL/Wescott, Peak	Aeron/Fields	WDRF	-	-
1971-8531	2441242.50	1971 Oct 19	Sandhawk Tomahawk	-	BUBIA	0.000	SAMD?	SS	UAF/LASL/Wescott, Peak	Aeron/Fields	WDRF	-	-
1972-402	2441382.11	1972 Mar 5 1435	Sandhawk Tomahawk	-	DLR T-DH-43	0.000	ISRO/DLR	SF	MPE/PRL/UCB/Haeren., Rao	Ionos	Morba	Powell	EqusSpreadF
1972-5103	2441383.79	1972 Mar 7 0652	Sandhawk Tomahawk	-	DLR T-DH-43	0.000	ISRO/DLR	SF	UAF/LASL/Wescott	Fields	PRR	-	-
1972-403	2441385.11	1972 Mar 11 1438	Sandhawk Tomahawk	-	DLT T-DH-44	0.000	ISRO/DLR	SF	MPE/PRL/UCB/Haeren., Rao	Fields	Morba	Powell	EqusSpreadF
1972-5354	2441600.04	1972 Oct 9 1251:35	Sandhawk Tomahawk	-	Sandtia 152-191	0.000	SAMD	SS	UAF/LASL/Wescott	Aeron/Fields	PRR	-	-
1972-4106	2441602.05	1972 Oct 11 1313	Sandhawk Tomahawk	-	Sandtia 152-192	0.000	SAMD	SF	UAF/LASL/Wescott	Aeron/Fields	PRR	-	-
1973-859	2441715.70	1973 Feb 5 0448:49	Sandhawk Tomahawk	-	Sandtia 152-201	0.000	SAMD	SF	UAF/LASL/Wescott	Aeron/Fields	PRR	-	-
1974-5137	2442123.02	1974 Mar 16 1228:15	Sandhawk Tomahawk	-	-	0.000	SAMD	SS	UAF/LASL/HUS/Wescott	Aeron/Fields	SRIG_631	PFRR	-



Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Mission	Launch				Apogee km	Range km	Dest
								FlightCode	Platform	Launch_Site	Launch_Pad			
2022-S27	2456960.01	2022 Apr 20 1212	Sarmat	-	-	-	-	-	-	-	-	1000?	-	Kura (Kura)
2023-S05	2459993.91	2023 Feb 18 0945?	Sarmat	-	-	-	-	GMLP	-	-	-	100?	-	(Kura)
2024-A09	2460674.50	2024 Sep 21?	Sarmat	-	-	-	-	GMLP	LC-SARM	-	-	0	-	(Kura)





Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	OrbPay	Agency	Launch_Code	Group	Category	LTCite	Cite	Notes
2022-S27	2459690.01	2022 Apr 20 12:12	Sarmat	-	-	0.000	RWSHR	MS	-	Test	Wire	-	-
2023-S05	2459993.91	2023 Feb 18 09:45?	Sarmat	-	-	0.000	RWSHR	MF	-	Test	Wire	-	-
2024-A09	2460574.50	2024 Sep 21?	Sarmat	-	-	0.000	RWSHR	MF	-	Test	Wire	-	-



Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Mission	Launch_Site	Platform	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee km	Range km	Dest
1961-8357	2437800.13	1961 Oct 27 1506:04	Saturn C-1	-	SA-1	-	-	CC	-	LC34	-	-	136	-	-
1962-8108	2437780.08	1962 Apr 25 1400:34	Saturn C-1	-	SA-2	-	-	CC	-	LC34	-	-	145	-	-
1962-8460	2437985.24	1962 Nov 16 1746:02	Saturn C-1	-	SA-3	-	-	CC	-	LC34	-	-	167	-	-
1963-8121	2438117.34	1963 Mar 28 2011:55	Saturn I	-	SA-4	-	-	CC	-	LC34	-	-	129	-	-
1964-005	2438424.18	1964 Jan 29 1628:01	Saturn I	BLK2	SA-5	SA-5	Jupiter Moscone/Ballast	CC	-	LC37B	-	-	757	-	-
1964-025	2438544.21	1964 May 28 1707:00	Saturn I	BLK2	SA-6	AS-106	Apollo BP-13 CH	CC	-	LC37B	-	-	218	-	-
1964-057	2438657.18	1964 Sep 18 1622:43	Saturn I	BLK2	SA-7	AS-107	Apollo BP-15 CH	CC	-	LC37B	-	-	217	-	-
1965-009	2438805.11	1965 Feb 16 1437:03	Saturn I	BLK2	SA-8	AS-108/Pegasus 1	Pegasus 1	CC	-	LC37B	-	-	741	-	-
1965-039	2438905.82	1965 May 25 0738:01	Saturn I	BLK2	SA-9	AS-109/Pegasus 2	Pegasus 2	CC	-	LC37B	-	-	742	-	-
1965-060	2438972.04	1965 Jul 30 1300:00	Saturn I	BLK2	SA-10	AS-110/Pegasus 3	Pegasus 3	CC	-	LC37B	-	-	742	-	-
1966-004	2439183.18	1966 Feb 26 1612:01	Saturn IB	-	SA-201	AS-201	Apollo CM-009	CC	-	LC34	-	-	568	-	-
1966-059	2439312.12	1966 Jul 6 1453:17	Uprated Saturn I	-	SA-202	AS-202	Subcritical Cyo LM2 Exp	CC	-	LC34	-	-	488	-	-
1966-066	2439363.22	1966 Aug 25 1718:32	Uprated Saturn I	-	SA-203	AS-203	Apollo CM-011	CC	-	LC34	-	-	214	-	-
1966-007	2439875.45	1966 Jan 22 2248:08	Saturn IB	-	SA-204	AS-204	Apollo CM-101	CC	-	LC34	-	-	1143	-	-
1968-089	2440141.13	1968 Oct 11 1502:46	Saturn IB	-	SA-205	Apollo 5	Apollo 5	CC	-	LC34	-	-	960	-	-
1973-032	2441828.04	1973 May 25 1300:00	Saturn IB	-	SA-206	Apollo 7	Apollo CM-116	RSC	-	LC34	-	-	446	-	-
1973-050	2441891.97	1973 Jul 28 1110:50	Saturn IB	-	SA-207	Skylab 2	Apollo CM-117	RSC	LOTI	LC39B	-	-	440	-	-
1973-090	2442803.08	1973 Nov 16 1401:23	Saturn IB	-	SA-208	Skylab 3	CH-118	RSC	LOTI	LC39B	-	-	466	-	-
1975-066	2442809.33	1975 Jul 15 1960:01	Saturn IB	-	SA-210	ASTP	Apollo CM-111	RSC	LOTI	LC39B	-	-	236	-	-



Launch

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	OrbPay	Agency	Launch_Code	Group	Category	LTCite	Cite	Notes
1961-3587	2437600.13	1961 Oct 27 1506:04	Saturn C-1	-	SA-1	0.000	MSFC	TS	-	Test	MPR-SAT-WF-61-8	-	-
1962-S108	2437760.08	1962 Apr 25 1400:34	Saturn C-1	-	SA-2	0.000	MSFC	TS	-	Test	SP-4205	-	-
1962-S480	2437985.24	1962 Nov 16 1745:02	Saturn C-1	-	SA-3	0.000	MSFC	TS	-	Test	SP-4205	-	-
1963-S121	2438117.34	1963 Mar 28 2011:56	Saturn I	-	SA-4	0.000	MSFC	TS	-	Test	SP-4205	-	-
1964-005	2438424.18	1964 Jan 29 1625:01	Saturn I	BLK2	SA-5	0.000	MSFC	US	G	Sat LED A	SP-4205	-	-
1964-025	2438544.21	1964 May 28 1707:00	Saturn I	BLK2	SA-6	16.237	MSFC	US	G	Sat LED 0	SP-4205	-	-
1964-057	2438657.18	1964 Sep 18 1622:43	Saturn I	BLK2	SA-7	16.393	MSFC	US	G	Sat LED 0	SP-4205	-	-
1965-009	2438808.11	1965 Feb 16 1437:03	Saturn I	BLK2	SA-9	15.370	MSFC	US	G	Sat LED 0	SP-4205	-	-
1965-039	2438905.82	1965 May 25 0735:01	Saturn I	BLK2	SA-8	15.473	MSFC	US	G	Sat LED 0	SP-4205	-	-
1965-060	2438972.04	1965 Jul 30 1300:00	Saturn I	BLK2	SA-10	15.620	MSFC	US	G	Sat LED 0	SP-4205	-	-
1966-004	2439183.18	1966 Feb 26 1612:01	Saturn IB	-	SA-201	8.684	MSFC	TS	-	Reentry Test	SP-4205	-	-
1966-059	2439312.12	1966 Jul 5 1453:17	Up-rated Saturn I	-	SA-203	1.656	MSFC	US	G	Reentry Test	SP-4205	-	-
1966-106	2439453.22	1966 Aug 25 1715:32	Saturn IB	-	SA-202	10.038	MSFC	TS	-	Reentry Test	SP-4205	-	-
1966-007	2439876.45	1966 Jan 22 2248:08	Saturn IB	-	SA-204	14.747	MSFC	US	G	Sat LED 0	SP-4205	-	-
1968-089	2440141.13	1968 Oct 11 1502:46	Saturn IB	-	SA-205	14.780	MSFC	US	G	Sat LED 0	SP-4205	-	-
1973-032	2441626.04	1973 May 25 1300:00	Saturn IB	-	SA-206	14.023	MSFC	US	G	Sat LED 0	MPR-SAT-FE-73-3	-	-
1973-050	2441891.97	1973 Jul 28 1110:50	Saturn IB	-	SA-207	14.168	MSFC	US	G	Sat LED 0	MPR-SAT-FE-73-5	-	-
1973-090	2442003.08	1973 Nov 16 1401:23	Saturn IB	-	SA-208	14.888	MSFC	US	G	Sat LED 0	MPR-SAT-FE-74-1	-	-
1975-066	2442609.33	1975 Jul 15 1950:01	Saturn IB	-	SA-210	16.116	MSFC	US	G	Sat LED 0	AdvMst55134	-	-



Launch

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Mission	FlightCode	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee_Km	Range_Km	Dest
1967-113	2439804.00	1967 Nov 9 1200:01	Saturn V	-	SA-501	Apollo 4	Apollo CM-017	-	LUT1	RSC	LC39A	-	-	18188	-	-
1968-025	2439951.00	1968 Apr 4 1200:01	Saturn V	-	SA-502	Apollo 6	Apollo CM-020	-	LUT2	RSC	LC39A	-	-	22618	-	-
1968-118	2440212.04	1968 Dec 21 1251:00	Saturn V	-	SA-503	Apollo 8	Apollo CM-103	-	LUT1	RSC	LC39A	-	-	150000	-	-
1969-018	2440284.17	1969 Mar 3 1600:00	Saturn V	-	SA-504	Apollo 9	Apollo CM-104	-	LUT2	RSC	LC39A	-	-	150000	-	-
1969-043	2440360.20	1969 May 18 1649:00	Saturn V	-	SA-505	Apollo 10	Apollo CM-106	-	LUT3	RSC	LC39B	-	-	150000	-	-
1969-069	2440419.06	1969 Jul 16 1332:00	Saturn V	-	SA-506	Apollo 11	Apollo CM-107	-	LUT1	RSC	LC39A	-	-	150000	-	-
1969-099	2440540.18	1969 Nov 14 1622:00	Saturn V	-	SA-507	Apollo 12	Apollo CM-108	-	LUT2	RSC	LC39A	-	-	150000	-	-
1970-029	2440688.30	1970 Apr 11 1913:03	Saturn V	-	SA-508	Apollo 13	Apollo CM-109	-	LUT3	RSC	LC39A	-	-	150000	-	-
1971-008	2440983.38	1971 Jan 31 2103:02	Saturn V	-	SA-509	Apollo 14	Apollo CM-110	-	LUT2	RSC	LC39A	-	-	150000	-	-
1971-063	2441159.07	1971 Jul 28 1334:00	Saturn V	-	SA-510	Apollo 15	Apollo CM-112	-	LUT3	RSC	LC39A	-	-	150000	-	-
1972-031	2441424.25	1972 Apr 16 1754:00	Saturn V	-	SA-511	Apollo 16	Apollo CM-113	-	LUT3	RSC	LC39A	-	-	150000	-	-
1972-096	2441658.73	1972 Dec 7 0533:00	Saturn V	-	SA-512	Apollo 17	Apollo CM-114	-	LUT3	RSC	LC39A	-	-	150000	-	-
1973-027	2441817.23	1973 May 14 1730:00	Saturn V	2	SA-513	Skylab 1	Skylab I OMS	-	LUT2	RSC	LC39A	-	-	1065	-	-





Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	DrPay	Agency	Launch_Code	Group	Category	LTCite	Cite	Notes
1967-113	2439904.00	1967 Nov 9 1200:01	Saturn V	-	SK-501	23.542	MSFC	OS	G	Sat LE0 D	KHR-1	-	-
1968-025	2439951.00	1968 Apr 4 1200:01	Saturn V	-	SK-502	50.372	MSFC	OS	G	Sat LE0 D	KHR-1	-	-
1968-118	2440212.04	1968 Dec 21 1251:00	Saturn V	-	SK-503	29.968	MSFC	DS	G	Sat EEO E	Wre	-	-
1969-018	2440284.17	1969 Mar 3 1600:00	Saturn V	-	SK-504	42.479	MSFC	DS	G	Sat LE0 E	KHR-1	-	-
1969-043	2440360.20	1969 May 18 1649:00	Saturn V	-	SK-505	42.676	MSFC	DS	G	Sat EEO E	KHR-1	-	-
1969-059	2440419.06	1969 Jul 16 1332:00	Saturn V	-	SK-506	45.060	MSFC	DS	G	Sat EEO E	KHR-1	-	-
1969-099	2440540.18	1969 Nov 14 1622:00	Saturn V	-	SK-507	45.237	MSFC	DS	G	Sat EEO E	KHR-1	-	-
1970-029	2440688.30	1970 Apr 11 1913:03	Saturn V	-	SK-508	47.140	MSFC	DS	G	Sat EEO E	KHR-1	-	-
1971-008	2440983.38	1971 Jan 31 2103:02	Saturn V	-	SK-509	45.680	MSFC	DS	G	Sat EEO E	KHR-1	-	-
1971-063	2441159.07	1971 Jul 26 1334:00	Saturn V	-	SK-510	48.002	MSFC	DS	G	Sat EEO E	KHR-1	-	-
1972-031	2441424.25	1972 Apr 16 1754:00	Saturn V	-	SK-511	48.024	MSFC	DS	G	Sat EEO E	KHR-1	-	-
1972-096	2441655.73	1972 Dec 7 0533:00	Saturn V	-	SK-512	47.994	MSFC	DS	G	Sat EEO E	KHR-1	-	-
1973-027	2441817.23	1973 May 14 1730:00	Saturn V	2	SK-513	85.694	MSFC	OS	G	Sat LSS 0	KHR-1	-	-





Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Mission	Launch	FlightCode	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee Km	Range Km	Dest
1973-081	2441986.53	1973 Oct 30 0037:02	Scout A-1	-	S178C	MMS 0-20 (H-15)	MMS 0-20	-	-	-	VS	SILCS	-	-	1197	-	-
1974-077	2442336.82	1974 Oct 15 0747:00	Scout B-1	-	S187C	Ariael 5	OR 5	-	-	-	SMLC	-	-	-	552	-	-
1976-047	2442920.82	1976 May 22 0742:16	Scout B-1	-	S179CR	P76-5	MMS 0-15	-	-	-	VS	SILCS	-	-	1126	-	-



Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	OrbPay	Agency	Launch_Code	Group	Category	LTCsite	Cite	Notes
1960-A100	2427043-46	1960 Apr 18 2309	Scout X	-	SK-1	0.000	LARCN	RF	LARC/	Test	UPI	RP-1028	-
1960-S161	2427117-50	1960 Jul 2 0004	Scout X-1	-	SF-1	0.000	LARCN	RF	LARC/	Test	Desind,Wire	AE1960	-
1960-O103	2427212-14	1960 Oct 4 1523	Scout X-1	-	SF-2	0.081	LARCN	RF	AFSNC/Knecht,Hale	Plasma	WDRF	AE1960	-
1960-F117	2427273-38	1960 Dec 4 2114	Scout X-1	-	SF-3	0.006	LARCN	OF	AFSNC/Knecht,Hale	Plasma	Wire	RM601212-10	-
1961-S12	2427307-23	1961 Jan 7 1733-42	Blue Scout I	-	D-3	0.000	AFRMD	OS	HGO/Lilley,Katz	Plasma/Rf	Wire	AFCR22	-
1961-DEL	2427347-05	1961 Feb 16 1305	Scout X-1	-	D-4	0.006	AFRMD	OS	AFSNC/Knecht	Plasma	UPI	NYT610217	-
1961-S66	2427362-17	1961 Mar 3 1602	Blue Scout II	-	D-5	0.000	AFRMD	OS	AFSNC/Knecht	Plasma	UPI	AE1961	-
1961-S109	2427401-75	1961 Apr 12 0607	Blue Scout II	-	D-6	0.000	AFSSD	RF	AFSNC/Sagalyn,Katz	Plasma	UPI	JCR69-1809	-
1961-A123	2427429-17	1961 May 9 1600-22	Blue Scout I	-	D-6	0.000	AFSSD	RF	AFSNC/Sagalyn,Katz	Plasma	UPI	AE1961	-
1961-F06	2427481-21	1961 Jun 30 1709	Scout X-1	-	SF-6	0.086	LARCN	OS	G	Sat LED A	UPI	AF66-80960	-
1961-F03	2427537-27	1961 Oct 19 1738	Scout X-1	-	SF-7	0.067	LARCN	OS	G	Sat LED A	UPI	AF66-80960	-
1961-F12	2427605-15	1961 Nov 1 1532	Scout X-1	-	D-8	0.068	LARCN	OS	G	Sat LED A	UPI	AF66-80960	-
1962-S01	2427724-71	1962 Mar 1 0507	Blue Scout II	-	SF-8	0.000	LARCN	TS	GSFC/Bauer,Jackson	Reentry Test	WDRF	TI-D-2468	-
1962-A50	2427752-81	1962 Mar 29 0727	Scout X-1A	1C	SF-9	0.067	LARCN	RS	GSFC/Bauer,Jackson	Reentry Test	WDRF	TI-D-2468	-
1962-F03	2427767-17	1962 Apr 12 1600-25	Blue Scout I	-	D-7	0.000	AFSSD	TF	AFSNC/Knecht	Reentry Test	Desind	JCR68-2058	-
1962-F05	2427780-95	1962 Apr 26 1049	Scout X-2	-	S111	0.025	AFSSD	OF	G	Sat LED 0	MDC-HIST	P11kington	-
1962-F06	2427806-50	1962 May 24	Scout X-2R	-	S112	0.050	AFSSD	OF	G	Sat SSO 0	VAFB	-	-
1962-O03	2427839-98	1962 Aug 23 1133F	Scout X-2R	-	S117	0.050	AFSSD	OF	G	Sat SSO 0	VAFB	-	-
1962-B CHI	2428015-11	1962 Aug 31 1625	Scout X-3A	-	S114	0.083	LARCN	TS	LARC/	Reentry Test	TI-D-1818	-	-
1962-B PSI	2428017-56	1962 Dec 16 1433:04	Scout X-3	-	S115	0.100	LARCN	TS	LARC/	Reentry Test	TI-D-1818	-	-
1962-O05	2428060-20	1963 Feb 19 1652:45	Scout X-3	-	S118	0.059	AFSSD	OS	G	Sat LED 0	LARFB	-	-
1963-F04	2431145-50	1963 Apr 5 0301:43	Scout X-3	-	S126	0.050	AFSSD	OF	G	Sat SSO 0	LARFB	-	-
1963-S226	2431171-69	1963 Apr 26 0438	Scout X-2R	-	S121	0.050	AFSSD	OF	G	Sat SSO 0	VAFB	-	-
1963-O26	2431196-58	1963 Jun 16 0148:52	Scout X-3	-	S116	0.000	LARCN	TS	G	Reentry Test	Desind	SP-4004	-
1963-A109	2432059-39	1963 Jun 28 2119:22	Scout X-4	-	S113	0.089	LARCN	OS	G	Sat LED 0	LARFB	-	-
1963-F12	2432059-97	1963 Jul 20 0644:08	Scout X-3A	-	S110	0.000	LARCN	TF	LARC/	Reentry Test	STL179-446	SP-4004	-
1964-O05	2432363-28	1963 Sep 27 1117:49	Scout X-4	-	S132	0.050	AFSSD	OS	G	Sat SSO 0	LARFB	-	-
1964-O26	2432462-23	1964 Mar 27 1725:23	Scout X-3	-	S128	0.068	LARCN	OS	G/OG	Sat LED 0	LARFB	-	-
1964-F08	2432571-57	1964 Jun 4 0350:55	Scout X-4	-	S128R	0.079	LARCN	OS	G/OG	Sat LED 0	LARFB	-	-
1964-S371	2432586-95	1964 Jun 25 0140:24	Scout X-4	-	S128R	0.000	LARCN	OS	LEGC/gold	Reentry Test	MOR R-711-64-04	-	-
1964-O04	2432625-75	1964 Aug 16 0605	Scout X-4A	-	S128R	0.177	LARCN	OS	LARC/Hallissy	Reentry Test	MOR R-711-64-04	-	-
1964-O01	2432633-07	1964 Aug 26 0343R	Scout X-4	-	S130R	0.000	AFSSD	OS	G	Reentry Test	Wire	WD-3283-2	-
1964-O04	2432677-67	1964 Oct 10 0501	Scout X-4	-	S130R	0.052	LARCN	TS	G	Reentry Test	Wire	WD-3283-2	-
1964-O74	2432705-00	1964 Nov 6 1202:09	Scout X-4	-	S135R	0.134	LARCN	OS	G	Sat LED 0	Wire	TI-D-4284	-
1964-O76	2432721-22	1964 Nov 21 0709:39	Scout X-4	-	S135R	0.049	AFSSD	OS	G	Sat LED 0	Wire	TI-D-4284	-
1964-O54	2432745-35	1964 Dec 15 2020:04	Scout X-4	-	S137R	0.116	LARCN	OS	G/OG	Sat LED 0	MOR S-865-64-02	-	-
1964-O22	2432869-10	1965 Apr 29 1747:00	Scout X-4	-	S137R	0.085	LARCN	OS	G	Sat LED 0	LARFB	-	-
1964-O03	2432869-25	1965 Aug 19 0148:09	Scout B	-	S138R	0.057	LARCN	OS	G	Sat LED 0	LARFB	-	-
1964-O03	2433063-70	1965 Nov 9 0105:27	Scout X-4	-	S138R	0.052	AFSSD	OS	G/OG	Sat LED 0	LARFB	-	-
1965-O01	2433101-38	1965 Dec 29 2105:47	Scout X-4	-	S140R	0.051	AFSSD	OS	G	Sat LED 0	LARFB	-	-
1965-O08	2433154-21	1966 Dec 28 1765:04	Scout X-4	-	S142C	0.051	AFSSD	OS	G	Sat LED 0	LARFB	-	-
1965-O03	2433165-54	1966 Feb 26 0935:00	Scout X-4A	-	S144C	0.105	LARCN	TS	LARC/Hallissy	Reentry Test	MOR R-711-66-05	-	-
1965-O04	2433201-64	1966 Feb 26 0935:00	Scout X-4	-	S144C	0.105	LARCN	TS	LARC/Hallissy	Reentry Test	MOR R-711-66-05	-	-
1965-O04	2433237-91	1966 Mar 22 0945:00	Scout B	-	S145C	0.051	AFSSD	OS	G	Sat LED 0	LARFB	-	-
1965-O04	2433264-60	1966 Apr 19 0927:00	Scout B	-	S146C	0.051	AFSSD	OS	G	Sat LED 0	LARFB	-	-
1965-O02	2433296-68	1966 Jun 10 0441:00	Scout B	-	S147C	0.077	AFSSD	OS	G	Sat LED 0	LARFB	-	-
1965-O70	2433341-95	1966 Jun 4 1045:01	Scout B	-	S147C	0.077	AFSSD	OS	G	Sat LED 0	LARFB	-	-
1965-O76	2433355-60	1966 Aug 18 0225:02	Scout B	-	S149C	0.049	AFSSD	OS	G	Sat LED 0	LARFB	-	-
1965-O07	2433427-00	1966 Oct 28 1155:02	Scout B	-	S150C	0.092	AFSSD	OS	G	Sat LED 0	LARFB	-	-
1967-F01	2433524-03	1967 Jan 31 1245:01	Scout B	-	S154C	0.095	AFSSD	OS	G	Sat LED 0	LARFB	-	-
1967-O34	2433584-64	1967 Apr 14 0925:00	Scout B	-	S154C	0.050	AFSSD	OS	G	Sat LED 0	LARFB	-	-
1967-O38	2433606-90	1967 Apr 26 1006:24	Scout B	-	S155C	0.129	CRN	OS	G/OG	Sat LED 0	LARFB	-	-
1967-O48	2433616-17	1967 May 18 0905:01	Scout B	-	S155C	0.090	AFSSD	OS	G/OG	Sat LED 0	LARFB	-	-
1967-F08	2433628-88	1967 May 18 0905:01	Scout B	-	S156C	0.050	AFSSD	OS	G/OG	Sat LED 0	LARFB	-	-
1967-F05	2433640-59	1967 May 30 0205:00	Scout B	-	S156C	0.076	AFSSD	OF	G/OG	Sat SSO 0	LARFB	-	-
1967-O02	2433763-23	1967 Sep 25 0825:00	Scout B	-	S157C	0.050	SMSO	OS	G/OG	Sat LED 0	LARFB	-	-
1967-O04	2433783-85	1967 Dec 19 1733:00	Scout B	-	S159C	0.152	LARCN	TS	LARC/Slms	Reentry Test	TI-D-5615	MOR R-730-67-01	-
1967-120	2433829-54	1967 Dec 5 0103:46	Scout B	-	S159C	0.050	SMSO	OS	G	Sat LED 0	LARFB	-	-
1968-012	2433917-66	1968 Mar 2 0355:01	Scout B	-	S159C	0.050	SMSO	OS	G	Sat LED 0	LARFB	-	-
1968-017	2433921-27	1968 Mar 5 1828:00	Scout B	-	S162C	0.069	SMSO	OS	G	Sat LED 0	LARFB	-	-
1968-028	2433973-72	1968 Apr 27 0519	Scout B	-	S160C	0.119	LARCN	OS	LARC/Hastings	Reentry Test	MOR R-711-68-06	-	-
1968-041	2433983-59	1968 Apr 27 0519	Scout B	-	S160C	0.000	LARCN	TS	LARC/Hastings	Reentry Test	MOR R-711-68-06	-	-
1968-066	2440077-34	1968 Mar 17 0205:00	Scout B	-	S161C	0.074	SMSO	OS	G/OG	Sat SSO 0	LARFB	-	-
1968-084	2440091-14	1968 Aug 8 2012:00	Scout B	-	S165C	0.086	SMSO	OS	G	Sat LED 0	LARFB	-	-
1968-084	2440133-37	1968 Oct 3 2049:39	Scout B	-	S168C	0.152	LARCN	TS	LARC/Slms	Reentry Test	MOR R-730-68-02	-	-
1969-083	2440196-44	1969 Oct 1 2229:00	Scout B	-	S167C	0.085	SMSO	OS	G/OG	Sat LED 0	LARFB	-	-
1969-097	2440533-58	1969 Nov 8 0152	Scout B	-	S172C	0.085	SMSO	OS	G/OG	Sat LED 0	LARFB	-	-
1970-067	2440826-06	1970 Aug 27 1323:34	Scout B	-	S169C	0.064	SMSO	OS	G	Sat SSO 0	LARFB	-	-
1970-064	2440860-34	1970 Sep 30 2006:29	Scout B	-	S171C	0.000	LARCN	TS	LARC/Slms,Key	Reentry Test	MOR R-730-70-03	-	-
1970-104	2440899-75	1970 Nov 9 0600:00	Scout B	-	S174C	0.201	LARCN	OS	G	Sat LED 0	LARFB	-	-
1970-036	2441065-81	1971 Apr 24 0732:29	Scout B	-	S175C	0.143	CRN	OS	G	Sat LED 0	LARFB	-	-
1971-S334	2441123-31	1971 Jun 20 1931:00	Scout B	-	S173C	0.000	LARCN	TS	ARC/Saiff	Reentry Test	MOR R-711-71-01	-	-
1971-071	2441141-46	1971 Jul 8 2258:00	Scout B	-	S177C	0.119	LARCN	OS	G	Sat LED 0	LARFB	-	-
1971-103	2441180-28	1971 Aug 16 1839:00	Scout B-1	F	S180C	0.084	LARCN	OS	G/OG	Sat LED 0	LARFB	-	-
1971-086	2441215-48	1971 Sep 20 2331:00	Scout B	-	S166C	0.064	LARCN	RS	MPE/Haerndel	Plasma Ra	MOR S-874-71-02	-	-
1971-109	2441297-37	1971 Dec 11 2047:01	Scout B-1	F	S183C	0.052	CRN	OS	G/OG	Sat LED 0	LARFB	-	-
1972-069	2441563-24	1972 Sep 2 1750:30	Scout B-1	F	S182C	0.094	SMSO	OS	G	Sat LED 0	LARFB	-	-

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	OrbPay	Launch		Group	Category	LTCite	Cite	Notes
							Agency	Launch_Code					
1973-081	2441985.53	1973 Oct 30 0037:02	Scout A-1	-	S17EC	0.064	SAMSU	OS	G	Sat LEO 0	VCR	LAAFB	-
1974-077	2442335.82	1974 Oct 15 0747:00	Scout B-1	-	S187C	0.135	GRA	OS	G/OG	Sat LEO 0	LAAFB	-	-
1976-047	2442320.82	1976 May 22 0742:16	Scout B-1	-	S178CR	0.072	SAMSU	OS	G	Sat SSO 0	LAAFB	-	-





Launch

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Mission	FlightCode	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee km	Range km	Deat
1972-061	2441543.13	1972 Aug 13 1510	Scout D-1	F	S184C	Explorer 46	Meteoroid Technology Sat	-	-	LA3A	LA3A	-	-	836	-	-
1972-091	2441637.43	1972 Nov 15 2213:46	Scout D-1	F	S170CR	Explorer 48	SAS B	-	-	-	-	-	-	621	-	-
1972-092	2441633.51	1972 Nov 22 0017:01	Scout D-1	F	S186C	ESRO 4	ESRO 4	-	-	SMLC	SMLC	-	-	1171	-	-
1972-009	2441667.98	1972 Dec 16 1124:56	Scout D-1	F	S181C	Aeros	GRS-B	-	-	VS	SMLC	-	-	860	-	-
1974-009	2442096.92	1974 Feb 18 1005:28	Scout D-1	F	S190C	San Marco 4	San Marco C2	-	-	SMLC	-	-	-	939	-	-
1974-013	2442115.60	1974 Mar 9 0222:11	Scout D-1	F	S191C	Miranda	X-4	-	-	VS	SMLC	-	-	939	-	-
1974-040	2442202.46	1974 Jun 3 2309:11	Scout E-1	F	S191C	Explorer 52	Injun 6	-	-	VS	SMLC	-	-	126601	-	-
1974-055	2442244.99	1974 Jul 16 1151:01	Scout D-1	F	S186C	Aeros 2	Aeros B	-	-	VS	SMLC	-	-	871	-	-
1974-070	2442290.09	1974 Aug 30 1407:39	Scout D-1	-	S189C	Aeros 2	Aeros B	-	-	VS	SMLC	-	-	1172	-	-
1975-037	2442340.45	1975 May 7 2245:01	Scout F-1	-	S196C	Explorer 53	SAS C	-	-	VS	SMLC	-	-	510	-	-
1975-F06	2442752.65	1975 Oct 12 0639:36	Scout F-1	-	S196C	TIP 2	TIP 2	-	-	VS	SMLC	-	-	829	-	-
1976-002	2442847.99	1976 Jun 18 1141	Scout F-1	-	S193C	DAD A/B	DAD-A	-	-	VS	SMLC	-	-	1007	-	-
1976-089	2443023.38	1976 Sep 1 2114:02	Scout D-1	-	S197C	GP-A	GP-A	-	-	VS	SMLC	-	-	10230	-	-
1977-006	2443444.70	1977 Oct 28 0452:04	Scout D-1	-	S200C	Transat	NMS 0-11	-	-	VS	SMLC	-	-	938	-	-
1978-041	2443524.18	1978 Apr 26 1020	Scout D-1	-	S201C	HCNH	ARI-A	-	-	VS	SMLC	-	-	1111	-	-
1979-013	2443624.93	1979 Feb 16 1618	Scout D-1	-	S202C	SAGE	ARI-B	-	-	VS	SMLC	-	-	651	-	-
1979-047	2444027.48	1979 Jun 2 2326	Scout D-1	-	S198C	Ariel 6	Ariel 6	-	-	VS	SMLC	-	-	767	-	-
1979-094	2444177.09	1979 Oct 30 1416	Scout G-1	-	S203C	Magsat	ARI-C	-	-	VS	SMLC	-	-	564	-	-
1981-044	2444739.76	1981 May 15 0607:17	Scout G-1	-	S192C	Nova 1	Nova 1	-	-	VS	SMLC	-	-	1204	-	-
1983-063	2445813.15	1983 Jun 27 1537:09	Scout D-1	-	S206C	P83-1	NMS 0-16	-	-	VS	SMLC	-	-	903	-	-
1984-110	2445985.57	1984 Oct 12 0146:34	Scout G-1	-	S208C	Nova 3	Nova 3	-	-	VS	SMLC	-	-	1243	-	-
1985-066	2446280.65	1985 Aug 3 0331:20	Scout G-1	-	S209C	USA 13/14 (ITV 1/2)	NMS 0-24	-	-	VS	SMLC	-	-	1309	-	-
1985-114	2446412.61	1985 Dec 13 0235	Scout G-1	-	S207C	ITV 1	NMS 0-17	-	-	VS	SMLC	-	-	774	-	-
1986-088	2446746.52	1986 Nov 14 0023	Scout G-1	-	S204C	897-1	NMS 0-27	-	-	VS	SMLC	-	-	1062	-	-
1987-080	2447055.31	1987 Sep 16 1922	Scout G-1	-	S206C	San Marco 5	NMS 0-23	-	-	VS	SMLC	-	-	1274	-	-
1988-025	2447246.53	1988 Mar 25 1950	Scout G-1	-	S211C	San Marco 5	NMS 0-23	-	-	VS	SMLC	-	-	621	-	-
1988-033	2447277.56	1988 Apr 26 0157	Scout G-1	-	S211C	Nova 2	NMS 0-23	-	-	VS	SMLC	-	-	1388	-	-
1988-052	2447326.79	1988 Jun 16 0654	Scout G-1	-	S213C	Nova 2	NMS 0-25	-	-	VS	SMLC	-	-	1209	-	-
1988-074	2447395.79	1988 Aug 25 0659	Scout G-1	-	S214C	MCSAT 1/2	NMS 0-25	-	-	VS	SMLC	-	-	1184	-	-
1990-043	2448021.24	1990 May 9 1750	Scout G-1	-	S212C	REX	MCSAT 1	-	-	VS	SMLC	-	-	863	-	-
1991-045	244837.06	1991 Jun 29 1400	Scout G-1	-	S216C	SARPEX	REX	-	-	VS	SMLC	-	-	966	-	-
1992-038	2448807.10	1992 Jul 3 1419	Scout G-1	-	S215C	SARPEX	SARPEX	-	-	VS	SMLC	-	-	722	-	-
1992-078	2448946.07	1992 Nov 21 1345	Scout G-1	-	S210C	MSTI 1	MSTI-1	-	-	VS	SMLC	-	-	444	-	-
1993-041	2449164.46	1993 Jun 25 2330	Scout G-1	-	S217C	RADCAL	RADCAL	-	-	VS	SMLC	-	-	965	-	-
1994-028	2449481.62	1994 May 9 0247	Scout G-1	-	S218C	MSTI 2	MSTI-2	-	-	VS	SMLC	-	-	464	-	-



Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	DrPay	Agency	Launch_Code	Group	Category	LTCite	Cite	Notes
1972-061	2441543.13	1972 Aug 13 1510	Scout D-1	F	S184C	0.206	LARCN	0S	G	Sat LEU A	LAMFB	-	-
1972-091	2441637.43	1972 Nov 15 2213:46	Scout D-1	F	S170CR	0.174	GRA	0S	G	Sat LEU 0	LAMFB	-	-
1972-092	2441643.51	1972 Nov 22 0017:01	Scout D-1	F	S185C	0.115	AFSC	0S	G/OG	Sat LEU 0	VCR	LAMFB	-
1972-100	2441667.98	1972 Dec 16 1124:56	Scout D-1	F	S181C	0.125	AFSC	0S	G/OG	Sat SSU 0	VCR	LAMFB	-
1974-009	2442096.92	1974 Feb 18 1005:28	Scout D-1	F	S190C	0.176	GRA	0S	G/OG	Sat LEU 0	LAMFB	-	-
1974-013	2442115.60	1974 Mar 9 0222:11	Scout D-1	F	S188C	0.093	AFSC	0S	G	Sat SSU 0	VCR	LAMFB	-
1974-040	2442202.46	1974 Jun 3 2309:11	Scout E-1	F	S191C	0.027	AFSC	0S	G	Sat HEU 00	VCR	LAMFB	-
1974-045	2442244.99	1974 Jul 16 1151:01	Scout D-1	F	S186C	0.125	AFSC	0S	G/OG	Sat SSU 0	VCR	LAMFB	-
1974-070	2442290.09	1974 Aug 30 1407:39	Scout D-1	F	S189C	0.139	AFSC	0S	G/OG	Sat SSU 0	VCR	LAMFB	-
1975-037	2442540.45	1975 May 7 2245:01	Scout F-1	-	S194C	0.189	GRA	0S	G	Sat LEU 0	LAMFB	-	-
1975-099	2442697.78	1975 Oct 12 0639:36	Scout D-1	-	S196C	0.160	AFSC	0S	G	Sat LEU 0	LAMFB	-	-
1975-F06	2442752.65	1975 Dec 6 0335:01	Scout F-1	-	S193C	0.130	AFSC	RS	G	Physics	MASAHIST	LAMFB	-
1976-002	2442947.99	1976 Jun 18 1141	Scout D-1	-	S197C	0.166	AFSC	0S	G	MOCR	LAMFB	-	-
1976-089	2443023.38	1976 Sep 1 2114:02	Scout D-1	-	S200C	0.092	LARCN	0S	G	Sat LEU 0	LAMFB	-	-
1977-106	2443444.70	1977 Oct 28 0452:04	Scout D-1	-	S201C	0.135	LARCN	0S	G	Sat LEU 0	LAMFB	-	-
1978-041	2443624.93	1978 Apr 26 1020	Scout D-1	-	S202C	0.149	LARCN	0S	G	Sat SSU 0	SP-4024	-	-
1979-013	2443923.18	1979 Feb 18 1618	Scout D-1	-	S198C	0.154	LARCN	0S	G/OG	Sat LEU 0	SP-4024	-	-
1979-047	2444027.48	1979 Jun 2 2326	Scout D-1	-	S203C	0.181	LARCN	0S	G	Sat SSU 0	APL-TDI-3	-	-
1979-094	2444177.09	1979 Oct 30 1416	Scout G-1	-	S192C	0.165	LARCN	0S	G	Sat LEU 0	LAMFB	-	-
1981-044	2444739.76	1981 May 15 0607:17	Scout G-1	-	S205C	0.113	LARCN	0S	G	Sat LEU 0	LAMFB	-	-
1983-063	2445153.15	1983 Jun 27 1537:09	Scout D-1	-	S206C	0.173	LARCN	0S	G	Sat LEU 0	LAMFB	-	-
1984-110	2445985.57	1984 Oct 12 0143:34	Scout G-1	-	S208C	0.164	LARCN	0S	G	Sat LEU 0	LAMFB	-	-
1985-066	2446280.65	1985 Aug 3 0331:20	Scout G-1	-	S209C	0.130	LARCN	0S	G	Sat LEU 0	LAMFB	-	-
1985-114	2446412.61	1985 Dec 13 0235	Scout G-1	-	S207C	0.116	LARCN	0S	G	Sat LEU 0	LAMFB	-	-
1986-088	2446746.52	1986 Nov 14 0023	Scout G-1	-	S199C	0.237	LARCN	0S	G	Sat LEU 0	APL-TDS-3	-	-
1987-060	2447055.31	1987 Sep 16 1922	Scout G-1	-	S204C	0.130	LARCN	0S	G	Sat LEU 0	JCH	-	-
1988-026	2447246.33	1988 Mar 25 1950	Scout G-1	-	S206C	0.130	GRA	0S	G/OG	Sat LEU 0	TRMSL-24	-	-
1988-053	2447277.58	1988 Apr 26 0157	Scout G-1	-	S211C	0.130	LARCN	0S	G	Sat LEU 0	JCH	-	-
1988-052	2447326.79	1988 Jun 16 0654	Scout G-1	-	S213C	0.170	LARCN	0S	G	Sat LEU 0	JCH	-	-
1988-074	2447396.79	1988 Aug 25 0659	Scout G-1	-	S214C	0.130	LARCN	0S	G	Sat LEU 0	LTV-PR	-	-
1990-043	2448021.24	1990 May 9 1750	Scout G-1	-	S212C	0.140	LARCN	0S	G	Sat LEU 0	JCH	-	-
1991-045	2448437.08	1991 Jun 29 1400	Scout G-1	-	S216C	0.085	LARCN	0S	G	Sat LEU 0	MASK-PR91-102	-	-
1992-038	2448807.10	1992 Jul 3 1419	Scout G-1	-	S215C	0.156	LARCN	0S	G	Sat LEU 0	AWST20713-19	-	-
1992-078	2448946.07	1992 Nov 21 1345	Scout G-1	-	S210C	0.147	LARCN	0S	G	Sat SSU 0	Wire	-	-
1993-041	2449164.46	1993 Jun 25 2330	Scout G-1	-	S217C	0.087	LARCN	0S	G	Sat LEU 0	Wire	-	-
1994-028	2449461.62	1994 May 9 0247	Scout G-1	-	S218C	0.169	LARCN	0S	G	Sat SSU 0	AWST940516-17	-	-



Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Mission	Launch_FlightCode	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee km	Range km	Dest
2007-576	2454424.50	2007 Nov 20	Ashura	-	RED	-	-	-	-	SENK	-	-	-	300?	-	-
2008-561	2454781.50	2008 Nov 11?	Sejjil	-	RED	Sejjil-1	-	-	-	SENK	-	-	-	500?	-	-
2009-522	2454971.50	2009 May 20	Sejjil-2	-	RED	Sejjil-2	-	-	-	SENK	-	-	-	800	-	-
2009-549	2455102.50	2009 Sep 28	Sejjil-2	-	RED	Sejjil-2	-	-	-	SENK	-	-	-	800?	-	-
2009-568	2455181.50	2009 Dec 16	Sejjil-2	-	RED	Sejjil-2	-	-	-	SENK	-	-	-	800?	-	-
2010-582	2455469.50	2010 Oct	Sejjil-2	-	RED	Sejjil-2	-	-	-	SENK	-	-	-	800?	-	-
2011-520	2455592.50	2011 Feb	Sejjil-2	-	RED	Sejjil-2	-	-	-	SENK	-	-	-	800?	-	-
2021-502	2459230.50	2021 Jan 16	Sejjil-2	-	-	Sejjil-2	-	-	-	GARM	-	-	-	800?	1800?	Indian O.
2021-503	2459230.50	2021 Jan 16	Sejjil-2	-	-	Sejjil-2	-	-	-	GARM	-	-	-	800?	1800?	Indian O.
2021-504	2459230.50	2021 Jan 16	Sejjil-2	-	-	Sejjil-2	-	-	-	GARM	-	-	-	800?	1800?	Indian O.



Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	OrbPay	Agency	Launch_Code	Group	Category	LTCite	Cite	Notes
2007-576	2454424.50	2007 Nov 20	Ashura	-	RMD	0.000	IR	MF	-	Test	Wire	-	-
2008-561	2454781.50	2008 Nov 11?	Sejji1	-	RMD	0.000	IR	MF	-	Test	Wire	-	-
2008-522	2454971.50	2009 May 20	Sejji1-2	-	RMD	0.000	IR	MS	-	Test	Wire	-	-
2009-549	2455102.50	2009 Sep 28	Sejji1-2	-	RMD	0.000	IR	MS	-	Test	Wire	-	-
2009-568	2455181.50	2009 Dec 16	Sejji1-2	-	RMD	0.000	IR	MS	-	Test	Wire	-	-
2010-582	2455469.50	2010 Oct	Sejji1-2	-	RMD	0.000	IR	MS	-	Test	AMS110613-25	-	-
2011-520	2455592.50	2011 Feb	Sejji1-2	-	RMD	0.000	IR	MS	-	Test	AMS110613-25	-	-
2021-502	2459230.50	2021 Jan 16	Sejji1-2	-	-	0.000	IR	MS	-	Test	t rtter/inbarspace	-	-
2021-503	2459230.50	2021 Jan 16	Sejji1-2	-	-	0.000	IR	MS	-	Test	t rtter/inbarspace	-	-
2021-504	2459230.50	2021 Jan 16	Sejji1-2	-	-	0.000	IR	MS	-	Test	t rtter/inbarspace	-	-





Launch

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Mission	FlightCode	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee km	Range km	Dest
1962-A199	2437987.50	1962 Nov 19	Selliger 1	-	-	-	-	-	-	COX	-	-	-	40	-	-
1962-A200	2437987.50	1962 Nov 19	Selliger 1	-	-	-	-	-	-	COX	-	-	-	40	-	-
1962-A201	2437987.50	1962 Nov 19	Selliger 1	-	-	-	-	-	-	COX	-	-	-	40	-	-
1963-M15	2438067.50	1963 Feb 7	Selliger 1	-	-	-	-	-	-	COX	-	-	-	52	-	-
1963-M16	2438067.50	1963 Feb 7	Selliger 2	-	-	-	-	-	-	COX	-	-	-	80	-	-
1963-M17	2438067.50	1963 Feb 7	Selliger 2	?	-	-	-	-	-	COX	-	-	-	80?	-	-
1963-M27	2438151.50	1963 May 2	Selliger 1	-	-	-	-	-	-	COX	-	-	-	50	-	-
1963-S187	2438152.13	1963 May 2 1503	Selliger 1	-	-	-	-	-	-	COX	-	-	-	120	-	-
1963-A180	2438368.50	1963 Dec 5	Selliger 1	?	-	-	-	-	-	COX	-	-	-	30	-	-



Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	DrPay	Agency	Launch_Code	Group	Category	LTCite	Cite	Notes
1962-4199	2437987.50	1962 Nov 19	Saiger 1	-	-	0.000	DRG	SS	DRG/Saiger	Test	astronautix.com	-	-
1962-4200	2437987.50	1962 Nov 19	Saiger 1	-	-	0.000	DRG	SS	DRG/Saiger	Test	astronautix.com	-	-
1962-4201	2437987.50	1962 Nov 19	Saiger 1	-	-	0.000	DRG	SS	DRG/Saiger	Test	astronautix.com	-	-
1963-415	2438067.50	1963 Feb 7	Saiger 1	-	-	0.000	DRG	SS	DRG/Saiger	Test	astronautix.com	-	-
1963-416	2438067.50	1963 Feb 7	Saiger 2	-	-	0.000	DRG	SS	DRG/Saiger	Test	astronautix.com	-	-
1963-417	2438067.50	1963 Feb 7	Saiger 2	?	-	0.000	DRG	SS	DRG/Saiger	Test	astronautix.com	-	-
1963-427	2438151.50	1963 May 2	Saiger 1	-	-	0.000	DRG	SS	DRG/Saiger	Test	astronautix.com	-	-
1963-5187	2438152.13	1963 May 2 1503	Saiger 3	-	-	0.000	DRG	SS	DRG/Saiger	Test	astronautix.com	-	-
1963-4180	2438368.50	1963 Dec 5	Saiger 1	?	-	0.000	DRG	SS	DRG/Saiger	Test	astronautix.com	-	-



Launch Mission

Launch_Tag	Launch_ID	Launch_Date	L.V_Type	Variant	Flight_ID	Flight	Launch_Mission	FlightCode	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee_Km	Range_Km	Deat
1953-M01	2434419.50	1953 Feb 11	RV-A-10	-	1	Hermes A2 engine	-	-	CC	-	-	-	-	507	-	-
1953-M02	2434440.50	1953 Mar 4	RV-A-10	-	2	[Impact Vero Beach]	-	-	CC	-	-	-	-	207	-	-
1953-M03	2434461.50	1953 Mar 25	RV-A-10	-	3	-	-	-	CC	-	-	-	-	507	-	-
1953-M04	2434461.50	1953 Mar 25	RV-A-10	-	4	-	-	-	CC	-	-	-	-	507	-	-
1953-M05	2435426.29	1955 Aug 26 1903	X-17	-	D-1	-	-	-	CC	LC3	-	-	-	3	-	-
1953-M06	2435473.30	1955 Sep 23 1910	X-17	-	D-2	-	-	-	CC	LC3	-	-	-	5	-	-
1953-M07	2435443.37	1955 Dec 1 2056	X-17	-	D-3	-	-	-	CC	LC3	-	-	-	40	-	-
1956-M01	2435493.25	1956 Jan 19 1806	Sergeant	-	1	JPL-329 motor	-	-	WS	ALA1	-	-	-	507	-	-
1956-M02	2435531.50	1956 Feb 28	Sergeant	-	2	JPL-329	-	-	WS	ALA1	-	-	-	132	-	-
1956-M03	2435538.39	1956 Mar 5 2120	X-17	-	D-5	-	-	-	CC	LC3	-	-	-	507	-	-
1956-M04	2435580.94	1956 Apr 17 1030	X-17	-	R-1	-	-	-	CC	LC3	-	-	-	116	237	-
1956-M05	2435587.50	1956 Apr 24	Sergeant	-	3	JPL-329	-	-	WS	ALA1	-	-	-	1007	-	-
1956-M06	2435651.06	1956 Jun 26 1324	X-17	-	D-6A	-	-	-	CC	LC3	-	-	-	140	163	-
1956-M07	2435671.81	1956 Jul 17 0728	X-17	-	R-2	4203-3	-	-	CC	LC3	-	-	-	142	165	-
1956-M08	2435682.59	1956 Jul 28 0212	X-17	-	R-3	4203-4	-	-	CC	LC3	-	-	-	145	165	-
1956-M09	2435703.65	1956 Aug 18 0631	X-17	-	R-4	4203-5	-	-	CC	LC3	-	-	-	17	-	-
1956-M10	2435709.19	1956 Aug 23 1632	X-17	-	R-5	4203-6	-	-	CC	LC3	-	-	-	142	146	-
1956-M11	2435714.04	1956 Aug 28 1302	X-17	-	R-6	4203-7	-	-	CC	LC3	-	-	-	1007	-	-
1956-M12	2435725.17	1956 Sep 6 1609	X-17	-	R-7	4203-8	-	-	CC	LC3	-	-	-	394	1204	-
1956-M13	2435748.39	1956 Oct 1 2121	X-17	-	R-8	4203-9	-	-	CC	LC3	-	-	-	145	139	-
1956-M14	2435762.11	1956 Oct 5 1452	X-17	-	R-9	4203-10	-	-	CC	LC3	-	-	-	117	241	-
1956-M15	2435760.24	1956 Oct 13 1746	X-17	-	R-10	4203-11	-	-	CC	LC3	-	-	-	102	252	-
1956-M16	2435765.08	1956 Oct 18 1349	X-17	-	R-11	4203-12	-	-	CC	LC3	-	-	-	155	128	-
1956-M17	2435772.23	1956 Oct 25 1729	X-17	-	R-12	JPL-477	-	-	CC	ALA1	-	-	-	124	239	-
1956-M18	2435760.50	1956 Nov 5	Sergeant	-	4	JPL-477	-	-	WS	ALA1	-	-	-	507	-	-
1956-M19	2435763.05	1956 Nov 5 1309	X-17	-	R-13	4203-13	-	-	CC	LC3	-	-	-	116	241	-
1956-M20	2435794.11	1956 Nov 16 1438	X-17	-	R-14	4203-14	-	-	CC	LC3	-	-	-	107	267	-
1956-M21	2435801.06	1956 Nov 23 1357	X-17	-	R-15	4203-15	-	-	CC	LC3	-	-	-	143	-	-
1956-M22	2435811.15	1956 Dec 3 1556	X-17	-	R-16	4203-16	-	-	CC	LC3	-	-	-	125	213	-
1956-M23	2435819.03	1956 Dec 11 1237	X-17	-	R-17	4203-17	-	-	CC	LC3	-	-	-	144	124	-
1957-M01	2435847.25	1957 Jan 6 1759	X-17	-	R-18	4203-18	-	-	CC	LC3	-	-	-	140	157	-
1957-M02	2435854.19	1957 Jan 15 1630	X-17	-	R-19	4203-19	-	-	CC	LC3	-	-	-	146	107	-
1957-M03	2435868.19	1957 Jan 29 1630	X-17	-	R-20	4203-20	-	-	CC	LC3	-	-	-	27	-	-
1957-M04	2435869.50	1957 Jan 31	Sergeant	-	5	4203-21	-	-	WS	ALA1	-	-	-	507	-	-
1957-M05	2435877.04	1957 Feb 7 1300	X-17	-	R-21	4203-22	-	-	CC	LC3	-	-	-	107	299	-
1957-M06	2435884.04	1957 Feb 14 1412	X-17	-	R-22	4203-23	-	-	CC	LC3	-	-	-	176	-	-
1957-M07	2435893.08	1957 Mar 1 1158	X-17	-	R-23	4203-24	-	-	CC	LC3	-	-	-	141	90	-
1957-M08	2435909.08	1957 Mar 11 1307	X-17	-	R-24	4203-25	-	-	CC	LC3	-	-	-	181	197	-
1957-M09	2435919.08	1957 Mar 21 1394	X-17	-	R-25	4203-26	-	-	CC	LC3	-	-	-	134	181	-
1957-M10	2435944.50	1957 Apr 16	Sergeant	-	6	4203-27	-	-	WS	ALA1	-	-	-	103	250	-
1957-M11	2435944.50	1957 Apr 16	Polaris FTV-5	-	VI-1	-	-	-	WS	ALA1	-	-	-	507	-	-
1957-M12	2435944.50	1957 Apr 16	Polaris FTV-5	-	VI-1	-	-	-	WS	ALA1	-	-	-	507	-	-
1957-M13	2435944.50	1957 Apr 16	Polaris FTV-5	-	VI-1	-	-	-	WS	ALA1	-	-	-	507	-	-
1957-M14	2435944.50	1957 Apr 16	Polaris FTV-5	-	VI-1	-	-	-	WS	ALA1	-	-	-	507	-	-
1957-M15	2435944.50	1957 Apr 16	Polaris FTV-5	-	VI-1	-	-	-	WS	ALA1	-	-	-	507	-	-
1957-M16	2435944.50	1957 Apr 16	Polaris FTV-5	-	VI-1	-	-	-	WS	ALA1	-	-	-	507	-	-
1957-M17	2435944.50	1957 Apr 16	Polaris FTV-5	-	VI-1	-	-	-	WS	ALA1	-	-	-	507	-	-
1957-M18	2435944.50	1957 Apr 16	Polaris FTV-5	-	VI-1	-	-	-	WS	ALA1	-	-	-	507	-	-
1957-M19	2435944.50	1957 Apr 16	Polaris FTV-5	-	VI-1	-	-	-	WS	ALA1	-	-	-	507	-	-
1957-M20	2435944.50	1957 Apr 16	Polaris FTV-5	-	VI-1	-	-	-	WS	ALA1	-	-	-	507	-	-
1957-M21	2435944.50	1957 Apr 16	Polaris FTV-5	-	VI-1	-	-	-	WS	ALA1	-	-	-	507	-	-
1957-M22	2435944.50	1957 Apr 16	Polaris FTV-5	-	VI-1	-	-	-	WS	ALA1	-	-	-	507	-	-
1957-M23	2435944.50	1957 Apr 16	Polaris FTV-5	-	VI-1	-	-	-	WS	ALA1	-	-	-	507	-	-
1957-M24	2435944.50	1957 Apr 16	Polaris FTV-5	-	VI-1	-	-	-	WS	ALA1	-	-	-	507	-	-
1957-M25	2435944.50	1957 Apr 16	Polaris FTV-5	-	VI-1	-	-	-	WS	ALA1	-	-	-	507	-	-
1957-M26	2435944.50	1957 Apr 16	Polaris FTV-5	-	VI-1	-	-	-	WS	ALA1	-	-	-	507	-	-
1957-M27	2435944.50	1957 Apr 16	Polaris FTV-5	-	VI-1	-	-	-	WS	ALA1	-	-	-	507	-	-
1957-M28	2435944.50	1957 Apr 16	Polaris FTV-5	-	VI-1	-	-	-	WS	ALA1	-	-	-	507	-	-
1957-M29	2435944.50	1957 Apr 16	Polaris FTV-5	-	VI-1	-	-	-	WS	ALA1	-	-	-	507	-	-
1957-M30	2435944.50	1957 Apr 16	Polaris FTV-5	-	VI-1	-	-	-	WS	ALA1	-	-	-	507	-	-
1957-M31	2435944.50	1957 Apr 16	Polaris FTV-5	-	VI-1	-	-	-	WS	ALA1	-	-	-	507	-	-
1957-M32	2435944.50	1957 Apr 16	Polaris FTV-5	-	VI-1	-	-	-	WS	ALA1	-	-	-	507	-	-
1957-M33	2435944.50	1957 Apr 16	Polaris FTV-5	-	VI-1	-	-	-	WS	ALA1	-	-	-	507	-	-
1957-M34	2435944.50	1957 Apr 16	Polaris FTV-5	-	VI-1	-	-	-	WS	ALA1	-	-	-	507	-	-
1957-M35	2435944.50	1957 Apr 16	Polaris FTV-5	-	VI-1	-	-	-	WS	ALA1	-	-	-	507	-	-
1957-M36	2435944.50	1957 Apr 16	Polaris FTV-5	-	VI-1	-	-	-	WS	ALA1	-	-	-	507	-	-
1957-M37	2435944.50	1957 Apr 16	Polaris FTV-5	-	VI-1	-	-	-	WS	ALA1	-	-	-	507	-	-
1957-M38	2435944.50	1957 Apr 16	Polaris FTV-5	-	VI-1	-	-	-	WS	ALA1	-	-	-	507	-	-
1957-M39	2435944.50	1957 Apr 16	Polaris FTV-5	-	VI-1	-	-	-	WS	ALA1	-	-	-	507	-	-
1957-M40	2435944.50	1957 Apr 16	Polaris FTV-5	-	VI-1	-	-	-	WS	ALA1	-	-	-	507	-	-
1957-M41	2435944.50	1957 Apr 16	Polaris FTV-5	-	VI-1	-	-	-	WS	ALA1	-	-	-	507	-	-
1957-M42	2435944.50	1957 Apr 16	Polaris FTV-5	-	VI-1	-	-	-	WS	ALA1	-	-	-	507	-	-
1957-M43	2435944.50	1957 Apr 16	Polaris FTV-5	-	VI-1	-	-	-	WS	ALA1	-	-	-	507	-	-
1957-M44	2435944.50	1957 Apr 16	Polaris FTV-5	-	VI-1	-	-	-	WS	ALA1	-	-	-	507	-	-
1957-M45	2435944.50	1957 Apr 16	Polaris FTV-5	-	VI-1	-	-	-	WS	ALA1	-	-	-	507	-	-
1957-M46	2435944.50	1957 Apr 16	Polaris FTV-5	-	VI-1	-	-	-	WS	ALA1	-	-	-	507	-	-
1957-M47	2435944.50	1957 Apr 16	Polaris FTV-5	-	VI-1	-	-	-	WS	ALA1	-	-	-	507	-	-
1957-M48	2435944.50	1957 Apr 16	Polaris FTV-5	-	VI-1	-	-	-	WS	ALA1	-	-	-	507	-	-
1957-M49	2435944.50	1957 Apr 16	Polaris FTV-5	-	VI-1	-	-	-	WS	ALA1	-	-	-	507	-	-
1957-M50	2435944.50	1957 Apr 16	Polaris FTV-5	-	VI-1	-	-	-	WS	ALA1	-	-	-	507	-	-
1957-M51	2435944.50	1957 Apr 16	Polaris FTV-5	-	VI-1	-	-	-	WS	ALA1	-	-	-	507	-	-
1957-M52	2435944.50	1957 Apr 16	Polaris FTV-5	-	VI-1	-	-	-	WS	ALA1	-	-	-	507	-	-
1957-M53	2435944.50	1957 Apr 16	Polaris FTV-5	-	VI-1	-	-	-	WS	ALA1	-	-	-	507	-	-
1957-M54	2435944.50	1957 Apr 16	Polaris FTV-5	-	VI-1	-	-	-	WS	ALA1	-	-	-	507	-	-
1957-M55	2435944.50	1957 Apr 16	Polaris FTV-5	-	VI-1	-	-	-	WS	ALA1	-	-	-	507	-	-
1957-M56	2435944.50	1957 Apr 16	Polaris FTV-5	-	VI-1	-	-	-	WS	ALA1	-	-	-	507	-	-
1957-M57	2435944.50	1957 Apr 16	Polaris FTV-5	-	VI-1	-	-	-	WS	ALA1	-	-	-	507	-	-
1957-M58	2435944.50	1957 Apr 16	Polaris FTV-5	-	VI-1	-	-	-	WS	ALA1	-	-	-	507	-	-
1957-M59	2435944.50	1957 Apr 16	Polaris FTV-5	-	VI-1	-	-	-	WS	ALA1	-	-	-	507	-	-
1957-M60	2435944.50	1957 Apr 16	Polaris FTV-5	-	VI-1	-	-	-	WS	ALA1	-	-	-	507	-	-
1957-M61	2435944.50	1957 Apr 16	Polaris FTV-5	-	VI-1	-	-	-	WS	ALA1	-	-	-	507	-	-
1957-M62	2435944.50	1957 Apr 16	Polaris FTV-5	-	VI-1	-										

Launch_Tag	Launch_ID	Launch_Date	L_V_Type	Variant	Flight_ID	Flight	Launch_Mission	FlightCode	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee_Km	Range_Km	Deat
1988-H26	2436548.50	1988 Dec 11	Sergeant	-	19	JPL-477	-	-	-	WS	-	-	-	507	-	-
1988-S287	2436553.50	1988 Dec 16	Bold Orion	2	Missile 7	-	-	-	B-47E-220	EGL	RM12/30	AMR	LPI	2007	1722	-
1988-H29	2436556.50	1988 Dec 19	High Virgo WS199C	-	2	High Virgo	-	-	B-58-660	EGL	RM12/30	AMR	LPI	76	343	-
1989-A30	2436616.38	1989 Feb 16 2103	Draco	-	S/N 1	Alpha Draco	-	-	-	CC	LC10	-	-	30	-	-
1989-A47	2436643.50	1989 Mar 16	Draco	-	S/N 2	Alpha Draco	-	-	-	CC	LC10	-	-	30	-	-
1989-M04	2436650.50	1989 Mar 23	Sergeant	-	21	JPL-500	-	-	-	WS	-	-	-	507	-	-
1989-M05	2436652.50	1989 Mar 25	Sergeant	-	22	-	-	-	-	WS	-	-	-	507	-	-
1989-S42	2436652.50	1989 Mar 25	Bold Orion	2	-	-	-	-	B-47E-220	EGL?	RM12/30?	AMR	LPI	2007	-	-
1989-S49	2436662.29	1989 Apr 4	Draco	-	S/N 3	Alpha Draco	-	-	-	CC	LC10	-	-	197	-	-
1989-M17	2436723.50	1989 Jun 4	Bold Orion	1	-	High Virgo	-	-	B-58-660	EGL	RM12/30	AMR	LPI	51	-	-
1989-S83	2436731.50	1989 Jun 8	Bold Orion	3	-	High Virgo	-	-	B-47E-220	EGL	RM12/30	AMR	LPI	1007	-	-
1989-S92	2436739.15	1989 Jun 19 1530	Bold Orion	1	-	-	-	-	B-47E-220	EGL	RM12/30	AMR	LPI	1007	-	-
1989-M24	2436805.50	1989 Aug 25	Sergeant	-	23	-	-	-	-	WS	-	-	-	507	-	-
1989-S326	2436833.92	1989 Sep 22 1010?	High Virgo WS199C	-	4	King Loftus IV	Discoverer 5 Intercept	-	B-58-660	EGL	RM12/30	AMR	HV4	3507	-	-
1989-S269	2436864.88	1989 Oct 13 0900	Bold Orion	2	4	-	-	-	B-47E-220	EGL?	RM12/30?	AMR	LPI	2007	-	-
1989-H52	2436862.50	1989 Oct 21	Sergeant	-	26	-	-	-	-	WS	-	-	-	507	-	-
1989-H53	2436867.50	1989 Oct 26	Sergeant	-	27	-	-	-	-	WS	-	-	-	507	-	-
1989-S226	2436870.44	1989 Oct 28 2240	Shoptup	1	1	E60 Echo Test	-	-	-	WI	-	-	-	400	-	-
1989-H34	2436870.50	1989 Oct 29	Sergeant	-	28	-	-	-	-	WS	-	-	-	507	-	-
1989-A14	2436941.50	1989 Jan 6	Sergeant 5-stage	-	2	Mercury model	-	-	-	WI	-	-	-	34	-	-
1989-S13	2436950.44	1989 Jan 16 2235	Shoptup	2	2	E60 Echo Test	-	-	-	WI	-	-	-	41.3	-	-
1989-S41	2436992.47	1989 Feb 27 2320	Shoptup	3	3	E60 Echo Test	-	-	-	WI	-	-	-	36.2	-	-
1989-A74	2437017.50	1989 Mar 24	Sergeant 5-stage	-	4	Mercury model	-	-	-	WI	-	-	-	34	-	-
1989-M09	2437026.50	1989 Apr 1 2355	Shoptup	4	4	E60 Echo Test	-	-	-	WI	-	-	-	3207	-	-
1989-M10	2437073.50	1989 Apr 19	Sergeant	-	30	-	-	-	-	WS	-	-	-	507	-	-
1989-H10	2437074.50	1989 May 20	Sergeant	-	31	-	-	-	-	WS	-	-	-	507	-	-
1989-H11	2437077.50	1989 May 23	Sergeant	-	32	-	-	-	-	WS	-	-	-	507	-	-
1989-H12	2437085.50	1989 May 31	Sergeant	-	33	-	-	-	-	WS	-	-	-	507	-	-
1989-S116	2437085.50	1989 May 31	Sergeant	-	34	-	-	-	-	WS	-	-	-	507	-	-
1989-H17	2437141.50	1989 Jun 12	Sergeant	-	35	-	-	-	-	WS	-	-	-	507	-	-
1989-H22	2437158.50	1989 Jun 26	Sergeant	-	36	E60 Echo Test	-	-	-	WS	-	-	-	507	-	-
1989-M24	2437192.50	1989 Aug 12	Sergeant	-	37	-	-	-	-	WS	-	-	-	507	-	-
1989-S275	2437197.15	1989 Sep 15 1535	Journeyman	-	MSA 11.01GE	NERV I	-	-	-	PA	LC-A	-	-	1884	-	-
1989-M25	2437198.50	1989 Sep 19	Sergeant	-	37	-	-	-	-	WS	-	-	-	507	-	-
1989-M26	2437199.04	1989 Sep 21 1301:53	Sergeant	-	D-1	HETS	HETS	-	-	WS	LC-A	-	-	26700	-	-
1989-H26	2437200.50	1989 Sep 23	Sergeant	-	D-2	HETS	HETS	-	-	CC	LC18A	-	-	2007	-	-
1989-S582	2437207.05	1989 Nov 6 1318	Blue Scout Jr	-	40	HETS	-	-	-	CC	LC18A	-	-	507	-	-
1989-H51	2437289.50	1989 Dec 1	Sergeant	-	40	-	-	-	-	WS	-	-	-	507	-	-
1989-H52	2437289.50	1989 Dec 12	Sergeant	-	42	-	-	-	-	WS	-	-	-	507	-	-
1989-H53	2437281.50	1989 Dec 13	Sergeant	-	41	-	-	-	-	WS	-	-	-	507	-	-
1989-M01	2437291.50	1989 Jan 10	Sergeant	-	43	-	-	-	-	WS	-	-	-	507	-	-
1989-M02	2437295.90	1989 Jan 20	Sergeant	-	45	-	-	-	-	WS	-	-	-	507	-	-
1989-M03	2437287.25	1989 Jan 26	Astroneer 1500	?	45	456.305	-	-	-	EGL	-	-	-	451	-	-
1989-M04	2437288.50	1989 Mar 6 1753	Sergeant	-	49	-	-	-	-	WS	-	-	-	507	-	-
1989-M11	2437243.50	1989 May 4	Sergeant	-	50	-	-	-	-	WS	-	-	-	507	-	-
1989-M12	2437243.50	1989 May 15	Sergeant	-	54	-	-	-	-	WS	-	-	-	507	-	-
1989-M13	2437243.50	1989 May 15	Sergeant	-	53	-	-	-	-	WS	-	-	-	507	-	-
1989-M14	2437243.50	1989 May 19	Sergeant	-	51	-	-	-	-	WS	-	-	-	507	-	-
1989-M15	2437243.50	1989 May 19	Sergeant	-	52	-	-	-	-	WS	-	-	-	507	-	-
1989-M16	2437243.50	1989 May 19	Sergeant	-	51	-	-	-	-	WS	-	-	-	507	-	-
1989-M17	2437243.50	1989 May 19	Sergeant	-	52	-	-	-	-	WS	-	-	-	507	-	-
1989-M18	2437243.50	1989 May 19	Sergeant	-	53	-	-	-	-	WS	-	-	-	507	-	-
1989-M19	2437243.50	1989 May 19	Sergeant	-	54	-	-	-	-	WS	-	-	-	507	-	-
1989-M20	2437243.50	1989 May 19	Sergeant	-	55	-	-	-	-	WS	-	-	-	507	-	-
1989-M21	2437243.50	1989 May 19	Sergeant	-	56	-	-	-	-	WS	-	-	-	507	-	-
1989-M22	2437243.50	1989 May 19	Sergeant	-	55	-	-	-	-	WS	-	-	-	507	-	-
1989-M23	2437243.50	1989 May 19	Sergeant	-	56	-	-	-	-	WS	-	-	-	507	-	-
1989-M24	2437243.50	1989 May 19	Sergeant	-	55	-	-	-	-	WS	-	-	-	507	-	-
1989-S276	2437261.07	1989 Sep 15 1343	Journeyman	-	NASA 11.04GB	BIOS I	-	-	-	WS	LC-A	-	-	1057	-	-
1989-S277	2437262.07	1989 Nov 19 1342	Journeyman	-	NASA 11.05GB	BIOS II	-	-	-	PA	LC-A	-	-	1057	-	-
1989-M04	2437637.67	1989 Nov 19 1342	Blue Scout Jr	-	0-2	-	-	-	-	PA	LC-A	-	-	44300	-	-
1989-S241	2437641.84	1989 Dec 8 0815	Astroneer 1500	-	-	-	-	-	-	PA	LC-A	-	-	21300	-	-
1989-S245	2437647.90	1989 Dec 14 0709:48	Trailblazer 2	-	Trailblazer 2	Project CUMBRIDGE	-	-	-	PA	LC-A	-	-	157	-	-
1989-S246	2437717.02	1989 Feb 21 1230	RAM A	-	RAM A-2	Trailblazer IIa	-	-	-	VI	-	-	-	1000?	-	-
1989-M02	2437750.74	1989 Feb 21 1230	RAM A	-	RAM A-2	Trailblazer 2	-	-	-	VI	-	-	-	280	-	-
1989-S162	2437816.21	1989 Mar 6 0541:00	Blue Scout Jr SLV-1C	M	TE 1TB	Meteor 1	Meteor 1 pellet	-	-	VI	LC-A	-	-	830	-	-
1989-M12	2437845.50	1989 May 31 1708:44	Sergeant	-	102	ERCS/279L 1	-	-	-	WS	-	-	-	507	-	-
1989-M13	2437845.50	1989 Jul 1	Sergeant	-	-	Eng Service Test	-	-	-	WS	-	-	-	507	-	-
1989-M14	2437865.50	1989 Jul 20	Sergeant	-	-	-	-	-	-	WS	-	-	-	507	-	-
1989-S284	2437854.87	1989 Jul 9 0851:39	Shik A	-	Project 6.7 SNIK	STARFISH Diag P-4	-	-	-	VI	Pad_25	-	-	8207	-	-
1989-S284	2437854.87	1989 Jul 9 0852:09	Journeyman	-	-	STARFISH Diag	-	-	-	VI	LC-A	-	-	1007	-	-
1989-A106	2437854.87	1989 Jul 9 0852:19	Astroneer 1500	-	-	STARFISH Diag	-	-	-	PA	LC-B	-	-	17	-	-
1989-S285	2437854.87	1989 Jul 9 0852:27	Shik A	-	Project 6.7 SNIK	STARFISH Diag P-2	-	-	-	VI	Pad 1	-	-	1100?	-	-
1989-S286	2437854.87	1989 Jul 9 0855:43	Shik A	-	Project 6.7 SNIK	STARFISH Diag P-7	-	-	-	VI	Pad 2	-	-	1200?	-	-
1989-S287	2437854.87	1989 Jul 9 0857:29	Shik A	-	Project 6.7 SNIK	STARFISH Diag P-6	-	-	-	VI	Pad 24	-	-	1030?	-	-
1989-S288	2437854.87	1989 Jul 9 0857:49	Shik A	-	Project 6.7 SNIK	STARFISH Diag P-3	-	-	-	VI	Pad 23	-	-	900?	-	-
1989-S289	2437870.23	1989 Jul 24 1729:12	Blue Scout Jr SLV-1C	-	101	ERCS/279L 2	-	-	-	PA	LC-A	-	-	1000?	-	-
1989-M20	2437907.50	1989 Sep	Sergeant	-	-	-	-	-	-	WS	-	-	-	507	-	-
1989-M21	2437907.50	1989 Sep	Sergeant	-	-	-	-	-	-	WS	-	-	-	507	-	-
1989-M21	2437907.50	1989 Sep 21	RAM B	-	-	RAM B-1	-	-	-	WS	-	-	-	20	-	-
1989-A1166	2437928.50	1989 Sep 21	RAM B	-	-	RAM B-1	-	-	-	WS	-	-	-	20	-	-
1989-S299	2437929.78	1989 Sep 22 0645	Shik A	-	Cert Round	-	-	-	-	VI	-	-	-	1007	-	-
1989-S343	2437929.78	1989 Sep 22 0645	Journeyman	-	NASA 11.02JR	-	-	-	-	VI	-	-	-	1691	-	-
1989-S640	2437937.50	1989 Sep 30	Shik A	-	Test Round	-	-	-	-	VI	-	-	-	1007	-	-
1989-S641	2437937.50	1989 Oct	Shik A	-	Test Round	-	-	-	-	VI	-	-	-	1007	-	-
1989-M24	2437937.50	1989 Oct	Sergeant	-	-	-	-	-	-	WS	-	-	-	507	-	-
1989-M25	2437937.50	1989 Oct	Sergeant	-	-	-	-	-	-	WS	-	-	-	507	-	-
1989-S406	2437957.85	1989 Oct 20 0830	Shik A	-	CHECKMATE	CHECKMATE	-	-	-	VI	-	-	-	147	-	-
1989-S289	2437957.85	1989 Oct 20 0831?	Shik A	-	Project 6.7 SNIK	CHECKMATE	-	-	-	VI	-	-	-	300?	-	-





Launch_Tag	Launch_ID	Launch_Date	L_V_Type	Variant	Flight_ID	Flight	Launch_Mission	FlightCode	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee_Km	Range_Km	Dest
1964-5938	2438706.64	1964 Nov 7 0321	Athena	-	C004	Mk 11 Mod B Decoys	ABRES E-5 (USAF)	-	-	GRLC	Pad 1	-	-	260	-	-
1964-A176	2438727.64	1964 Nov 28 0323	Athena	-	C003	Mk 11 decoy?	ABRES E-4 (USAF)	-	-	GRLC	Pad 3	-	-	07	-	-
1964-5670	2438734.69	1964 Dec 5 0430	Athena	-	C002	Mk 11 Mod A Decoy	ABRES E-3 (USAF)	-	-	GRLC	Pad 2	-	-	2007	-	-
1964-H28	2438739.50	1964 Dec 10	Sergeant	-	-	-	-	-	-	WS	-	-	-	507	-	-
1964-5696	2438751.67	1964 Dec 22 0400?	Blue Scout Jr. SLV-1B(m)	-	21-3	Ion Engine Test C	Program 661A	QUAKER TOWN	-	PA	LC-A	-	-	500	-	-
1965-A05	2438760.50	1965 Jan	ARPA	-	-	-	-	-	-	WS	Pad 2	-	-	307	-	-
1965-538	2438776.72	1965 Jan 16 0513	Athena	-	C006	Mk 11 decoy?	ABRES P-7 (USAF)	-	-	GRLC	Pad 2	-	-	2007	-	-
1965-554	2438789.04	1965 Jan 28 1251:10	Blue Scout Jr.	-	22-3 (GAR Probe 3)	DAR 22-3/AFCLR-309	-	-	-	CC	LC19A	-	-	2007	-	-
1965-A18	2438791.50	1965 Feb	ARPA	-	-	-	-	-	-	WS	-	-	-	307	-	-
1965-M01	2438791.50	1965 Feb	Sergeant	-	-	-	-	-	-	WS	-	-	-	507	-	-
1965-M02	2438791.50	1965 Feb	Sergeant	-	-	-	-	-	-	WS	-	-	-	507	-	-
1965-A20	2438793.77	1965 Feb 2 0630	Athena	-	D003	ABRES P-1 (USAF)	ABRES P-1 (USAF)	-	-	GRLC	Pad 2	-	-	507	-	-
1965-A26	2438803.50	1965 Feb 12	Athena	-	D002	ABRES P-2 (USAF)	ABRES P-2 (USAF)	-	-	GRLC	Pad 3	-	-	07	-	-
1965-A30	2438807.74	1965 Feb 16 0551	Athena	-	D008	ABRES P-4 (USAF)	ABRES P-4 (USAF)	-	-	GRLC	Pad 1	-	-	107	-	-
1965-M04	2438819.50	1965 Mar	Sergeant	-	-	-	-	-	-	WS	-	-	-	507	-	-
1965-M05	2438819.50	1965 Mar	Sergeant	-	-	-	-	-	-	WS	-	-	-	507	-	-
1965-M06	2438820.17	1965 Mar 30 1609:31	Blue Scout Jr.	-	22-4 (GAR Probe 4)	DAR 22-4/AFCLR-35	AFCLR-35	-	-	CC	LC19A	-	-	16500	-	-
1965-M08	2438850.26	1965 Apr 9 1810:37	Blue Scout Jr.	-	22-9 (GAR Probe 5)	DAR 22-9/AFWL-14	AWFL-14	-	-	CC	LC19A	-	-	26422	-	-
1965-S328	2438865.11	1965 Apr 14 1439	Journeyman	-	M5A 11.070E	Minnesota Particles	-	-	-	WI	-	-	-	1680	-	-
1965-S370	2438864.50	1965 May 4	Traillblazer 2	-	D88-5639	Reentry expt.	-	-	-	WI	-	-	-	300	-	-
1965-M07	2438893.17	1965 May 12 1602:36	Blue Scout Jr.	-	22-8 (GAR Probe 6)	DAR 22-8/AFCLR-335	AFCLR-335	-	-	CC	LC19A	-	-	13586	-	-
1965-M13	2438911.50	1965 Jun	Sergeant	-	-	-	-	-	-	WS	-	-	-	507	-	-
1965-M14	2438911.50	1965 Jun	Sergeant	-	-	-	-	-	-	WS	-	-	-	507	-	-
1965-M15	2438911.50	1965 Jun	Sergeant	-	-	-	-	-	-	WS	-	-	-	507	-	-
1965-M16	2438921.16	1965 Jun 9 1626:15	Blue Scout Jr.	-	22-5 (GAR Probe 7)	DAR 22-5/AFWL-304	AFWL-304	-	-	CC	LC19A	-	-	17553	-	-
1965-M08	2438927.50	1965 Jun 16	Sergeant	-	-	-	RESGO Training	-	-	CC	LC19A	-	-	507	-	-
1965-5369	2438933.68	1965 Jun 22 0415	Athena	-	B002	USN subscale Mk 2 RV?	ABRES Q-2 (USN)	-	-	GRLC	Pad 3	-	-	2007	-	-
1965-5371	2438933.68	1965 Jun 22 0737	Athena	-	B001	O-C-scale USN Mk 2 RV	ABRES Q-1 (USN)	-	-	GRLC	Pad 2	-	-	2007	-	-
1965-5783	2438936.73	1965 Jun 27 0524:22	Traillblazer 2	-	Mo. 40	-	-	-	-	WI	-	-	-	3007	-	-
1965-5412	2438941.73	1965 Jun 30 0633	Journeyman	-	M5A 11.030R	-	-	-	-	WI	LA4	-	-	1770	-	-
1965-5426	2438956.50	1965 Jul 17	Athena	-	B003	USN subscale Mk 2 RV?	ABRES Q-3 (USN)	-	-	GRLC	Pad 1	-	-	2007	-	-
1965-A104	2438961.67	1965 Jul 20 0400?	Athena	-	C007	Chaff Payload E-1	ABRES E-1 (USAF)	-	-	GRLC	Pad 3	-	-	07	-	-
1965-5434	2438968.67	1965 Jul 27 0715	Athena	-	C011	Chaff Payload E-2	ABRES E-2 (USAF)	-	-	GRLC	Pad 2	-	-	2007	-	-
1965-A112	2438968.68	1965 Jul 31	Athena	-	D005	ABRES P-5 (USAF)	ABRES P-5 (USAF)	-	-	GRLC	Pad 1	-	-	07	-	-
1965-5439	2438972.50	1965 Jul 31	Athena	-	D004	Small Blunt RV	ABRES P-6 (USAF)	-	-	GRLC	Pad 2	-	-	2007	-	-
1965-5440	2438975.70	1965 Aug 3 0447:00	Athena	-	C014	Chaff Payload E-3	ABRES E-3 (USAF)	-	-	GRLC	Pad 3	-	-	170	-	-
1965-A118	2438976.50	1965 Aug 4	Sergeant	-	-	SUS Test	-	-	-	WS	-	-	-	107	-	-
1965-5446	2438980.50	1965 Aug 6	Athena	-	C005	Mk 11 decoy?	ABRES E-6 (USAF)	-	-	GRLC	Pad 2	-	-	2007	-	-
1965-5447	2438980.50	1965 Aug 6	Athena	-	C009	Chaff Payload E-4	ABRES E-4 (USAF)	-	-	GRLC	Pad 1	-	-	2007	-	-
1965-5472	2438983.50	1965 Aug 21	Athena	-	C008	Mk 11 decoy?	ABRES E-8 (USAF)	-	-	GRLC	Pad 3	-	-	2007	-	-
1965-A121	2438993.50	1965 Aug 21	Athena	-	D009	Subscale RV?	ABRES C-2 (USAF)	-	-	GRLC	Pad 1	-	-	07	-	-
1965-5482	2438993.50	1965 Aug 27	Athena	-	D012	ABRES P-9 (USAF)	ABRES P-9 (USAF)	-	-	GRLC	Pad 2	-	-	2007	-	-
1965-H68	2439007.50	1965 Aug 2	Sergeant	-	-	RESGO Training	-	-	-	SUJST	-	-	-	507	-	-
1965-H69	2439007.50	1965 Aug 2	Sergeant	-	-	RESGO Training	-	-	-	SUJST	-	-	-	507	-	-
1965-S03	2439017.94	1965 Sep 14 0545	Athena	-	B004	VTE Tomizing Pellets	ABRES Q-3 (USAF)	-	-	GRLC	Pad 1	-	-	2007	-	-
1965-S04	2439017.94	1965 Sep 14 0745	Athena	-	D033	Subscale Low Obs RVs	ABRES C-3 (USAF)	-	-	GRLC	Pad 3	-	-	2007	-	-
1965-S02	2439021.82	1965 Sep 21	Athena	-	D036	ABRES P-7 (USAF)	ABRES P-7 (USAF)	-	-	GRLC	Pad 2	-	-	2007	-	-
1965-S05	2439024.50	1965 Sep 21	Athena	-	D035	MARST	ABRES W-1 (USAF)	-	-	GRLC	Pad 1	-	-	2007	-	-
1965-S04	2439034.50	1965 Sep 27	Athena	-	C002	VTE Tomizing Pellets	ABRES W-1 (USAF)	-	-	GRLC	Pad 2	-	-	2007	-	-
1965-S04	2439045.50	1965 Oct 10	Athena	-	B006	MARAS	ABRES W-2 (USAF)	-	-	GRLC	Pad 3	-	-	2007	-	-
1965-S04	2439045.50	1965 Oct 10	Athena	-	C006	ABRES P-6 (USAF)	ABRES P-6 (USAF)	-	-	GRLC	Pad 1	-	-	2007	-	-
1965-S04	2439046.50	1965 Nov 20	Athena	-	B007	Tomizing pellets?	ABRES W-3 (USAF)	-	-	GRLC	Pad 3	-	-	07	-	-
1965-S04	2439046.50	1965 Dec 8	Athena	-	C017	MARAS?	ABRES W-3 (USAF)	-	-	GRLC	Pad 3	-	-	2007	-	-
1965-S04	2439103.50	1965 Dec 8	Athena	-	C023	ECM Decoy?	ABRES H-1 (USAF)	-	-	GRLC	Pad 3	-	-	2007	-	-
1965-S04	2439103.50	1966 Jan 21	Athena	-	C025	ECM Decoy?	ABRES H-2 (USAF)	-	-	GRLC	Pad 2	-	-	2007	-	-
1965-S04	2439116.50	1966 Feb	Traillblazer 2	-	-	AFAL 1	-	-	-	VI	-	-	-	2007	-	-
1965-S04	2439156.50	1966 Feb	Athena	-	C030	ECM Decoy H-3?	ABRES H-3 (USAF)	-	-	GRLC	Pad 3	-	-	2007	-	-
1965-S04	2439173.50	1966 Feb 17	Athena	-	D014	ECM Decoy F-1	ABRES F-1 (USAF)	-	-	GRLC	Pad 2	-	-	2007	-	-
1965-S04	2439173.50	1966 Feb 17	Athena	-	D014	ECM Decoy F-1	ABRES F-1 (USAF)	-	-	GRLC	Pad 2	-	-	2007	-	-
1965-S04	2439216.50	1966 Mar 18 0115	Traillblazer 2	-	Moort 8	-	-	-	-	VI	-	-	-	280	-	-
1965-S04	2439216.50	1966 Mar 18 0115	Traillblazer 2	-	Moort 8	-	-	-	-	VI	-	-	-	280	-	-
1965-S04	2439216.50	1966 Apr 1	Athena	-	B009	Delayed Chaff Payload	ABRES T-1 (USAF)	-	-	GRLC	Pad 1	-	-	2007	-	-
1965-S04	2439216.50	1966 Apr 1	Athena	-	D018	ECM Decoy F-3	ABRES F-3 (USAF)	-	-	GRLC	Pad 3	-	-	2007	-	-
1965-S04	2439216.50	1966 May 13?	Athena	-	D019	ECM Decoy F-2	ABRES F-2 (USAF)	-	-	GRLC	Pad 3	-	-	2007	-	-
1965-S04	2439272.50	1966 May 27	Athena	-	D031	Chaff Payload E-6	ABRES E-6 (USAF)	-	-	GRLC	Pad 1	-	-	2007	-	-
1965-S04	2439272.50	1966 May 27	Athena	-	C019	Chaff Payload E-7	ABRES E-7 (USAF)	-	-	GRLC	Pad 2	-	-	2007	-	-
1965-M21	2439276.50	1966 Jun	Sergeant	-	-	-	-	-	-	WS	-	-	-	507	-	-
1965-M22	2439276.50	1966 Jun	Sergeant	-	-	-	-	-	-	WS	-	-	-	507	-	-
1965-S00	2439284.16	1966 Jun 7 1557	HASP	-	-	WASP slash test	-	-	-	VI	-	-	-	238	-	-
1965-A174	2439286.75	1966 Jun 10 0600?	Athena	-	D021	ECM Decoy F-4?	ABRES F-4 (USAF)	-	-	GRLC	Pad 3	-	-	07	-	-
1965-S08	2439286.88	1966 Jun 10 0900	Athena	-	D023	ABRES Q-1 (USAF)	ABRES Q-1 (USAF)	-	-	GRLC	Pad 2	-	-	2007	-	-
1965-S331	2439299.50	1966 Jun 23	Athena	-	D034	RVTOP	ABRES SS-1 (USAF)	-	-	GRLC	Pad 3	-	-	2007	-	-
1965-S370	2439321.35	1966 Jul 14 2023	Athena	-	C015	ABRES G-1 (ARPA)	ABRES G-1 (ARPA)	-	-	GRLC	Pad 2	-	-	2007	-	-
1965-M145	2439351.76	1966 Aug 16 0618	Sergeant	-	-	Scanner 1	BR650 Training	-	-	SUJST	-	-	-	507	-	-
1965-S447	2439355.50	1966 Aug 18	Athena	-	B011	VTE Tomizing Pellets	ABRES N-6 (USN)	-	-	GRLC	Pad 1	-	-	612	-	-
1965-S448	2439356.50	1966 Aug 19	Athena	-	E001	FATE ID-1	ABRES I-1 (USAF)	-	-	GRLC	Pad 3	-	-	2007	-	-
1965-S03	2439360.12	1966 Aug 22 1500	Castor Lance	-	ADDFEP TB-4	Textile Ballute 4	-	-	-	EGL	-					

Launch_Tag	Launch_ID	Launch_Date	L_V_Type	Variant	Flight_ID	Flight	Launch_Mission	FlightCode	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee_Km	Range_Km	Dest
1966-S588	2439436.50	1966 Nov 7	Athena	-	D041	RVTD	ABRES SS-4 (USAF)	-	-	GRLC	Pad 3	-	-	2007	-	-
1966-S593	2439440.71	1966 Nov 11 0222	Athena	-	D020	Poselidon SFT-4	ABRES RR-4 (USAF)	-	-	GRLC	Pad 1	-	-	2007	-	-
1966-S592	2439440.71	1966 Nov 11 0507	Athena	-	B017	FATE	ABRES I-2 (USAF)	-	-	GRLC	Pad 1	-	-	2007	-	-
1966-S596	2439440.61	1966 Nov 11 0706	Athena	-	D047	Scammer 2	ABRES WW-2 (USAF)	-	-	GRLC	Pad 3	-	-	2007	-	-
1966-S676	2439474.50	1966 Dec 10 0242	Scammer	-	-	-	-	-	-	WI	-	-	-	709	-	-
1966-S688	2439474.50	1966 Dec 15	Athena	-	D038	RVTU?	ABRES SS-3 (USAF)	-	-	GRLC	Pad 2	-	-	2007	-	-
1966-S692	2439474.50	1966 Dec 16	Athena	-	D042	ABRES QQ-3 (USAF)	ABRES QQ-3 (USAF)	-	-	GRLC	Pad 3	-	-	2007	-	-
1967-H05	2439502.35	1967 Jan 11 0228	Castor	-	IFTV	Marquardt Scramjet	Marquardt Scramjet	-	-	V	4300C	-	-	54	-	-
1967-H05	2439502.35	1967 Jan 11 0228	Castor	-	B045	Ionizing Pellets?	Ionizing Pellets?	TREE MOSS	-	GRLC	Pad 3	-	-	07	-	-
1967-H01	2439535.74	1967 Feb 14 0652	Traillblazer 2	H	Meteor 10	-	Meteor 10	-	-	WI	-	-	-	306	-	-
1967-S126	2439544.50	1967 Feb 23	Athena	-	D037	Poselidon SFT-5	ABRES RR-5 (USAF)	-	-	GRLC	Pad 3	-	-	2007	-	-
1967-S129	2439546.61	1967 Feb 25 0235	Astrobbee 1500	-	MASA 16.05US	-	ABRES RR-5 (USAF)	-	-	WI	-	-	-	2380	-	-
1967-S134	2439552.50	1967 Mar 3?	Athena	-	C048	HAPDEC	ABRES AB-1 (ARPA)	-	-	GRLC	LAZAR?	-	-	2007	-	-
1967-S158	2439565.50	1967 Mar 16	Athena	-	B012	IMPALA 1	ABRES YI-2 (USAF)	-	-	GRLC	Pad 2	-	-	2007	-	-
1967-S162	2439565.50	1967 Mar 17	Athena	-	D051	ABRES SS-5 (USAF)	ABRES SS-5 (USAF)	-	-	GRLC	Pad 1	-	-	2007	-	-
1967-S161	2439566.94	1967 Mar 17 1030	Athena	-	D040	ABRES QQ-4 (USAF)	ABRES QQ-4 (USAF)	-	-	GRLC	Pad 2	-	-	2007	-	-
1967-S178	2439579.50	1967 Mar 30	Athena	-	D046	ABRES SS-7 (USAF)	ABRES SS-7 (USAF)	-	-	GRLC	Pad 3	-	-	2007	-	-
1967-S177	2439579.50	1967 Mar 30	Athena	-	C049	HAPDEC	ABRES AB-2 (ARPA)	-	-	GRLC	Pad 2	-	-	2007	-	-
1967-S183	2439580.50	1967 Mar 31	Athena	-	E002	FATE I-06	ABRES I-6 (USAF)	-	-	GRLC	Pad 1	-	-	2007	-	-
1967-S196	2439587.50	1967 Apr 7?	Athena	-	D043	Poselidon SFT-6	ABRES RR-6 (USAF)	-	-	GRLC	Pad 1	-	-	2007	-	-
1967-S194	2439587.50	1967 Apr 7?	Athena	-	B031	Ionizing Pellets?	ABRES I-6 (USAF)	-	-	GRLC	Pad 1	-	-	2007	-	-
1967-S207	2439614.50	1967 Apr 12	Athena	-	B020	FATE I-03	ABRES I-3 (USAF)	-	-	GRLC	Pad 2	-	-	2007	-	-
1967-A175	2439614.50	1967 May 4	Athena	-	D030	Poselidon SFT-7	ABRES RR-7 (USAF)	-	-	GRLC	Pad 3	-	-	07	-	-
1967-S246	2439615.50	1967 May 5	Athena	-	B033	IMPALA 2	ABRES YI-5 (USAF)	-	-	GRLC	Pad 3	-	-	2007	-	-
1967-S244	2439615.50	1967 May 5	Athena	-	B032	Ionizing Pellets?	ABRES I-7 (USAF)	-	-	GRLC	Pad 1	-	-	2007	-	-
1967-H11	2439641.50	1967 Jun	Sergeant	-	-	-	-	-	-	WS	-	-	-	507	-	-
1967-H12	2439641.50	1967 Jun 2 0800?	Sergeant	-	B034	IMPALA 3	ABRES YI-6 (USAF)	-	-	GRLC	Pad 3	-	-	507	-	-
1967-S280	2439643.63	1967 Jun 2 0800?	Athena	-	D053	ABRES SS-8 (USAF)	ABRES SS-8 (USAF)	-	-	GRLC	Pad 2	-	-	2007	-	-
1967-S296	2439649.50	1967 Jun 6	Athena	-	D055	ABRES SS-8 (USAF)	ABRES SS-8 (USAF)	-	-	GRLC	Pad 2	-	-	2007	-	-
1967-S325	2439660.36	1967 Jun 18 2032	Traillblazer 2	-	AD21.860	AFCLR T2-1	ABRES SS-6 (USAF)	-	-	WI	-	-	-	200	-	-
1967-S347	2439693.50	1967 Jul 22	Athena	-	D050	ABRES WW-3 (USAF)	ABRES WW-3 (USAF)	-	-	GRLC	Pad 2	-	-	2007	-	-
1967-S391	2439720.50	1967 Aug 18	Athena	-	E005	FATE I-04	ABRES I-4 (USAF)	-	-	GRLC	Pad 3	-	-	2007	-	-
1967-S392	2439720.50	1967 Aug 18	Athena	-	D055	ABRES WW-4 (USAF)	ABRES WW-4 (USAF)	-	-	GRLC	Pad 3	-	-	2007	-	-
1967-A110	2439720.50	1967 Aug 25	Athena	-	D059	Poselidon SFT-8	ABRES AC-1 (USAF)	-	-	GRLC	Pad 3	-	-	07	-	-
1967-S394	2439727.50	1967 Aug 25	Athena	-	D048	ABRES QQ-5 (USAF)	ABRES QQ-5 (USAF)	-	-	GRLC	Pad 1	-	-	2007	-	-
1967-S396	2439732.50	1967 Aug 30	Astrobbee 1500	-	MASA 16.03OR	-	ABRES I-1 (USAF)	-	-	WI	LAZAR?	-	-	1500?	-	-
1967-S428	2439741.82	1967 Sep 6 0736	Athena	-	D057	ABRES AD-1 (USAF)	ABRES AD-1 (USAF)	-	-	GRLC	Pad 3	-	-	2007	-	-
1967-S439	2439747.50	1967 Sep 14	Athena	-	D056	HAPDEC	ABRES AB-1 (ARPA)	-	-	GRLC	Pad 1	-	-	2007	-	-
1967-S466	2439762.66	1967 Sep 23 0345	Athena	-	C051	HAPDEC	ABRES AB-1 (ARPA)	-	-	GRLC	Pad 1	-	-	2007	-	-
1967-S469	2439762.66	1967 Sep 23 0545	Athena	-	D066	Poselidon SFT-9	ABRES AC-2 (USAF)	-	-	GRLC	Pad 2	-	-	2007	-	-
1967-S460	2439762.81	1967 Sep 23 0730	Athena	-	C050 [090]	HAPDEC	ABRES AH-1 (ARPA)	-	-	GRLC	Pad 3	-	-	2007	-	-
1967-S465	2439824.50	1967 Oct	Athena	-	D063 [092]	IMPALA 3	ABRES YI-3 (USAF)	-	-	GRLC	Pad 1	-	-	2007	-	-
1967-H29	2439824.50	1967 Oct	Sergeant	-	B023 [093]	FATE	ABRES I-9 (USAF)	-	-	GRLC	Pad 3	-	-	2007	-	-
1967-H29	2439824.50	1967 Dec	Sergeant	-	-	-	-	-	-	VS	-	-	-	507	-	-
1968-H70	2439864.50	1968 Jan 11	Athena	-	B022 [094]	FATE	ABRES I-7 (USAF)	-	-	GRLC	Pad 2	-	-	2007	-	-
1968-S70	2439873.50	1968 Jan 18	Athena	-	B030 [095]	ABRES X-1 (USAF)	ABRES X-1 (USAF)	-	-	GRLC	Pad 1	-	-	2007	-	-
1968-S70	2439873.50	1968 Jan 18	Athena	-	B030 [095]	ABRES X-1 (USAF)	ABRES X-1 (USAF)	-	-	GRLC	Pad 1	-	-	2007	-	-
1968-H65	2439915.50	1968 Feb 1	Sergeant	-	B037 [096]	IMPALA 5	ABRES YI-4 (USAF)	-	-	GRLC	Pad 3	-	-	2007	-	-
1968-H66	2439915.50	1968 Feb 1	Sergeant	-	-	-	BRECO Training	-	-	NAMEI	-	-	-	507	-	-
1968-H66	2439915.50	1968 Feb 1	Sergeant	-	-	-	BRECO Training	-	-	NAMEI	-	-	-	507	-	-
1968-S700	2439936.50	1968 Mar 21	Athena	-	B046 [097]	ABRES AH-10 (USAF)	ABRES AH-10 (USAF)	-	-	GRLC	Pad 3	-	-	2007	-	-
1968-S721	2439944.82	1968 Mar 29 0300?	Athena	-	D068 [098]	ABRES AH-2 (USAF)	ABRES AH-2 (USAF)	-	-	GRLC	Pad 2	-	-	2007	-	-
1968-S720	2439944.82	1968 Mar 29 0424	Athena	-	B044 [098]	EC3?	ABRES I-2 (USAF)	-	-	GRLC	Pad 1	-	-	2007	-	-
1968-S726	2439944.81	1968 Mar 29 0724	Athena	-	Y114C [100]	HAPDEC	ABRES AH-5 (ARPA)	-	-	GRLC	Pad 3	-	-	2007	-	-
1968-S721	2439967.23	1968 Apr 20 1738	Astrobbee 1500	-	MASA 16.040U	-	-	-	-	VI	LAZAR?	-	-	1250	-	-
1968-H67	2439976.50	1968 May 2	Sergeant	-	-	-	-	-	-	VS	-	-	-	507	-	-
1968-H63	2439978.50	1968 May 2	Sergeant	-	-	-	-	-	-	NAMEI	-	-	-	507	-	-
1968-H76	2439978.50	1968 May 2	Athena	-	Y116B [101]	KINOTRUBUS 68	BRECO Training	-	-	NAMEI	-	-	-	07	-	-
1968-H78	2439993.78	1968 May 17 0650?	Athena	-	D061 [102]	ECS	ABRES I-3 (USAF)	-	-	GRLC	Pad 1	-	-	07	-	-
1968-H12	2440007.50	1968 Jun	Athena	-	-	Poselidon SFT-11?	ABRES AC-4 (USAF)	-	-	GRLC	Pad 3	-	-	2007	-	-
1968-H13	2440007.50	1968 Jun	Sergeant	-	-	-	-	-	-	VS	-	-	-	507	-	-
1968-H64	2440017.50	1968 Jun 10	Sergeant	-	-	-	BRECO Training	-	-	NAMEI	-	-	-	507	-	-
1968-H47	2440056.50	1968 Jul 19?	Athena	-	B040 [103]	EC3?	ABRES I-4 (USAF)	-	-	NAMEI	-	-	-	507	-	-
1968-S561	2440160.50	1968 Nov	Athena	-	-	RV-1	ABRES I-4 (USAF)	-	-	GRLC	Pad 3	-	-	2007	-	-
1968-S562	2440160.50	1968 Nov	Athena	-	-	RV-1	ABRES I-4 (USAF)	-	-	GRLC	Pad 3	-	-	2007	-	-
1968-S582	2440175.73	1968 Nov 15 0530?	Athena	-	Y120B [104]	ABRES AH-11 (USAF)	ABRES AH-11 (USAF)	-	-	VI	-	-	-	2007	-	-
1968-S583	2440175.73	1968 Nov 15 0700?	Athena	-	D062 [105]	Poselidon SFT-12	ABRES AC-5 (USAF)	-	-	GRLC	Pad 3	-	-	2007	-	-
1968-H23	2440182.50	1968 Nov 22	Sergeant	-	-	-	-	-	-	VS	-	-	-	507	-	-
1968-H27	2440190.50	1968 Dec	Sergeant	-	-	-	-	-	-	VS	-	-	-	507	-	-
1968-S628	2440196.81	1968 Dec 6 0240	Athena	-	D045 [106]	ABRES QD-6 (USAF)	ABRES QD-6 (USAF)	-	-	GRLC	Pad 2	-	-	2007	-	-
1968-S627	2440196.79	1968 Dec 6 0700?	Athena	-	Y137D [107]	ABRES AM-3 (USAF)	ABRES AM-3 (USAF)	-	-	GRLC	Pad 1	-	-	2007	-	-
1968-S631	2440196.96	1968 Dec 6 0835	Athena	-	Y136D [108]	ABRES AM-3 (USAF)	ABRES AM-3 (USAF)	-	-	GRLC	Pad 3	-	-	2007	-	-
1968-S645	2440203.59	1968 Dec 13 0210	Athena	-	Y118B [109]	Poselidon SFT-13	ABRES AC-6 (USAF)	-	-	GRLC	Pad 2	-	-	2007	-	-
1969-S223	2440221.50	1969 Jan 17 0305	STYPI VI	-	-	RV-1	-	-	-	KAV?	-	-	-	2007	-	-
1969-H18	2440238.63	1969 Jan 17 0305	Athena	-	Y145D [110?]	ABRES AM-1 (USAF)	ABRES AM-1 (USAF)	-	-	GRLC	Pad 1	-	-	07	-	-
1969-S70	2440238.50	1969 Jan 17	Athena	-	Y140D [111?]	ABRES AH-4 (USAF)	ABRES AH-4 (USAF)	-	-	GRLC	Pad 3	-	-	2007	-	-
1969-S80	2440245.68	1969 Jan 24 0200?	Athena	-	B038 [112?]	FATE Type IIIB	ABRES I-11 (USAF)	-	-	GRLC	Pad 2	-	-	2007	-	-
1969-S131	2440266.64	1969 Feb 14 0320	Athena	-	B043 [113?]	Edo DeCoq D-5	ABRES I-11 (USAF)	-	-	GRLC	Pad 1	-	-	2007	-	-
1969-S223	2440308.71	1969 Mar 28 0500	Athena	-	Y138D [114?]	ABRES AJ-1 (ARPA)	ABRES AJ-1 (ARPA)	-	-	GRLC	Pad 3	-	-	2007	-	-
1969-H24	2440345.50	1969 May 4	Sergeant	-	-	-	-	-	-	VS	LC32W	-	-	507	-	-
1969-S356	2440378.70	1969 May 4	Athena	-	B036 [115]	FATE	ABRES I-9 (USAF)	-	-	VS	LC32E	-	-	507	-	-
1969-S356	2440378.87	1969 Jun 6 0855	Athena	-	Y132D [116]	ABRES AJ-2 (ARPA)	ABRES AJ-2 (ARPA)	-	-	GRLC	Pad 2	-	-	2007	-	-
1969-S368	2440390.58	1969 Jun 18 0156	Traillblazer 2	-	GRL AD21.861	AFCLR T2-2	-	-	-	WI	-	-	-	299	-	-



Launch_Tag	Launch_ID	Launch_Date	L_V_Type	Variant	Flight_ID	Flight	Launch_Mission	FlightCode	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee km	Range km	Deat
1979-554	2443904.50	1979 Feb	Strypl VIIR	?	SERVE	-	-	-	-	KAU	-	-	-	200?	-	-
1979-5210	2444141.50	1979 Sep 26	Sergeant Hydac	-	ABRES	HAVE LEWIT IV	-	-	-	PF	-	-	-	400?	-	-
1979-5240	2444190.70	1979 Nov 13	Strypl II	-	MASA 12.370E	ECHD V	-	-	-	PF	-	-	-	215	-	-
1980-539	2444274.50	1980 Feb 5	DUT	-	-	-	-	-	-	RR	-	-	-	324	-	-
1980-5304	2444338.50	1980 Jul 18	Sergeant Hydac	-	ABRES	HAVE JEEP V	-	-	-	RR	-	-	-	300?	-	-
1980-5305	2444444.50	1980 Jul 24	Sergeant Hydac	-	ABRES	HAVE JEEP V	-	-	-	RR	-	-	-	300?	-	-
1980-5372	2444498.50	1980 Sep 16	DUT	-	-	-	-	-	-	RR	-	-	-	296	-	-
1980-5164	2444511.50	1980 Sep 29	Strypl VIIR	-	-	-	-	-	-	KAU	-	-	-	200?	-	-
1980-5165	2444621.50	1980 Sep	Strypl VIIR	?	SERVE II-1	-	-	-	-	KAU	-	-	-	200?	-	-
1981-352	2444682.50	1981 Feb 5	Sergeant	-	GL A30.072	FWIF IV	-	-	-	PF	-	-	-	130	-	-
1981-374	2444661.22	1981 Feb 26	Sergeant Hydac	-	-	HAVE SLED	-	-	-	PF	-	-	-	400?	-	-
1981-376	2444669.20	1981 Mar 5	Sergeant Hydac	-	-	HAVE SLED	-	-	-	PF	-	-	-	400?	-	-
1981-352	2444675.69	1981 Mar 5	Sergeant Hydac	-	-	HAVE SLED	-	-	-	PF	-	-	-	400?	-	-
1981-3117	2444767.50	1981 Jun 12	DUT	-	-	-	-	-	-	RR	-	-	-	303	-	-
1981-3167	2444916.00	1981 Nov 7	Sergeant	-	GL A30.175	FWIF V	-	-	-	RR	-	-	-	130	-	-
1982-3251	2445185.50	1982 Aug 4	Castor	2R	-	-	-	-	-	RR	-	-	-	230?	-	-
1983-3589	2445437.88	1983 Apr 13	Sergeant	-	GL A30.276	FWIF VI	-	-	-	PF	-	-	-	500?	-	-
1985-380	2446233.68	1985 Jun 17	Castor Lance	-	GL A44.362	BEAM	-	-	-	CLBI	-	-	-	140	-	-
1985-318	2446155.50	1985 Apr	Strypl VIIR	?	SERVE III	-	-	-	-	KAU	-	-	-	200?	-	-
1987-5203	2447200.50	1987 Apr?	Strypl XI	-	-	-	-	-	-	KAU	-	-	-	200?	-	-
1988-351	2447200.50	1988 Jan	Strypl XI	-	-	-	-	-	-	KAU	-	-	-	200?	-	-
1989-3116	2447526.50	1989 Jan	Strypl XI	?	-	-	-	-	-	KAU	-	-	-	200?	-	-
1991-372	2448306.10	1991 Feb 18	Strypl XI	-	LACE	THURNY MELT	-	-	-	KAU	-	-	-	200?	-	-
1992-312	2448638.50	1992 Jan 17	Storm	-	-	Bow Shock 2	-	-	-	LC17	-	-	-	120	-	-
1992-351	2448739.50	1992 Jun 16	Storm	-	S1	BTIV-1 Validation	-	-	-	LC17	-	-	-	200?	-	-
1993-511	2449024.18	1993 Feb 5	Storm	-	S2	BTIV-2 Validation	-	-	-	LC1	-	-	-	200?	-	-
1993-564	2449268.50	1993 Oct 8	Storm	-	S3	BTIV-3 Validation	-	-	-	SULF	-	-	-	200?	-	-
1993-566	2449266.50	1993 Oct 26	Storm	-	-	BTIV-4 PAC-2 Target	-	-	-	SULF	-	-	-	200?	-	-
1993-575	2449321.50	1993 Nov 30	Storm	-	-	BTIV-5 ERINT Mutimode	-	-	-	SULF	-	-	-	200?	-	-
1993-576	2449338.50	1993 Dec 17	Storm	-	-	BTIV-6 ERINT GTF-2	-	-	-	LC36	-	-	-	200?	-	-
1994-515	2449399.18	1994 Feb 15	Storm	-	-	BTIV-7 ERINT Demo	-	-	-	SULF	-	-	-	200?	-	-
1994-566	2449541.50	1994 Jul 6	Sergeant	-	-	NSI-2 target	-	-	-	VI	-	-	-	100?	-	-
1994-563	2449572.50	1994 Aug 6	Sergeant	-	-	JTF-95 CAC Target	-	-	-	VI	-	-	-	100?	-	-
1994-566	2449583.52	1994 Aug 19	Storm	-	S9	BTIV-9 THAMD Demo	-	-	-	VS	-	-	-	200?	-	-
1995-511	2449795.50	1995 Feb 7	Storm	-	-	BTIV-6 THAMD Demo	-	-	-	VS	-	-	-	200?	-	-
1995-546	2449894.50	1995 Jun 26	Strypl IX	-	-	BTIV-11	-	-	-	KAU	-	-	-	200?	-	-
1995-564	2449947.50	1995 Jun 29	Storm	-	-	BTIV-2 THAMD Demo	-	-	-	KAU	-	-	-	200?	-	-
1995-567	2450094.11	1995 Aug 16	Storm	-	S10?	BTIV-2 THAMD Demo	-	-	-	VS	-	-	-	200?	-	-
1995-567	2450094.11	1995 Oct 13	Storm	-	S11	BTIV-9 THAMD Target	-	-	-	VS	-	-	-	200?	-	-
1995-566	2450095.07	1995 Dec 13	Storm	-	-	BTIV-10 THAMD Target	-	-	-	VS	-	-	-	200	-	-
1997-511	2450493.77	1997 Feb 10	Strypl XIIR	-	REIFF 1	-	-	-	-	NTS	-	-	-	220	-	TTB
1997-566	2450726.27	1997 Oct 4	Strypl XIIR	-	REIFF 2	-	-	-	-	NTS	-	-	-	200?	-	Goldfield, NV
										Area 26	Area 26			190		





Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	DrpPay	Agency	Launch_Code	Group	Category	LTCite	Cite	Notes
1955-M26	2436548-50	1958 Dec 11	Sergeant	-	19	0.000	ARMA	MS	-	UT?	WSMR	-	-
1955-M27	2436553-50	1958 Dec 16	Bold Orion	2	Missile 7	0.000	AFBMD	TS	-	Test	Cleary95	-	-
1955-M29	2436556-50	1958 Dec 19	High Virgo WS199C	-	-	0.000	AFBMD	TS	LMS/C/	Test	B-56	-	-
1955-A30	2436616-38	1959 Feb 16 2103	Draco	-	S/N 1	0.000	AFBMD	MS	-	Test	Brulle2008	MR610730-36	-
1955-A47	2436643-50	1959 Mar 16	Draco	-	S/N 2	0.000	AFBMD	MS	-	Test	Quest6-1-45	-	-
1955-M04	2436650-50	1959 Mar 23	Sergeant	-	21	0.000	ARMA	MS	-	UT?	WSMR	-	-
1955-M05	2436652-50	1959 Mar 25	Sergeant	-	22	0.000	ARMA	MS	-	UT?	WSMR	-	-
1955-M42	2436662-50	1959 Apr 4	Bold Orion	2	-	0.000	AFBMD	MS	LMS/C/	Interceptor	Cleary95	Quest6-1-45	Brulle2008
1955-M69	2436686-29	1959 Apr 27 1855	Draco	-	S/N 3	0.000	AFBMD	MF	-	Test	Ulrich/Wire	-	-
1955-M17	2436723-50	1959 Jun 4	High Virgo WS199C	3	-	0.000	AFBMD	TS	-	Interceptor	B-58	-	-
1955-M83	2436727-50	1959 Jun 8	Bold Orion	1	-	0.000	AFBMD	TS	-	Interceptor	Cleary95	-	-
1955-S92	2436739-15	1959 Jun 19 1550	Bold Orion	1	-	0.000	AFBMD	TS	-	Interceptor	Wire/Ulrich	Cleary95	EST
1955-M24	2436805-50	1959 Aug 25	Sergeant	-	23	0.000	ARMA	MS	-	UT?	WSMR	-	-
1955-M426	2436833-92	1959 Sep 22 1010?	High Virgo WS199C	4	-	0.000	AFBMD	TF	LMS/C/	Interceptor	TLE	Cleary95	-
1955-M209	2436854-88	1959 Oct 13 0900	Bold Orion	2	-	0.000	AFBMD	TS	-	Interceptor	Wire	B-58	-
1955-M32	2436862-50	1959 Oct 21	Sergeant	-	26	0.000	ARMA	MS	-	UT?	WSMR	-	-
1955-M33	2436867-50	1959 Oct 26	Sergeant	-	27	0.000	ARMA	MS	-	UT?	WSMR	-	-
1955-M226	2436870-44	1959 Oct 28 2240	Shoptut	-	1	0.000	LARCN	MS	LARC/O/Sullivan	SC Test	JE1534-10	-	-
1955-M34	2436870-44	1959 Oct 29	Sergeant	-	28	0.000	ARMA	MS	-	UT?	WSMR	-	-
1955-M34	2436870-44	1959 Oct 29	Sergeant	-	28	0.000	ARMA	MS	-	UT?	WSMR	-	-
1955-M14	2436891-50	1960 Jan 8	Sergeant 5-stage	-	1	0.000	LARCN	AS	LARC/O/Sullivan	Reentry Test	RF-1028	-	-
1955-S13	2436890-44	1960 Jan 16 2235	Shoptut	-	2	0.000	LARCN	AS	LARC/O/Sullivan	SC Test	JE1534-10	-	-
1955-M41	2436892-47	1960 Feb 27 2520	Shoptut	-	3	0.000	LARCN	AS	LARC/O/Sullivan	SC Test	Majoract60	-	-
1955-M74	2437017-50	1960 Mar 24	Sergeant 5-stage	-	4	0.000	LARCN	AS	LARC/O/Sullivan	Reentry Test	RF-1028	RP-1028	-
1955-S70	2437026-50	1960 Apr 1 2355	Shoptut	-	5	0.000	LARCN	AS	LARC/O/Sullivan	SC Test	IMSA-PR60-158	-	-
1955-M09	2437073-50	1960 May 19	Sergeant	-	30	0.000	ARMA	MS	-	UT?	WSMR	-	-
1955-M10	2437074-50	1960 May 20	Sergeant	-	31	0.000	ARMA	MS	-	UT?	WSMR	-	-
1955-M11	2437077-50	1960 May 23	Sergeant	-	32	0.000	ARMA	MS	-	UT?	WSMR	-	-
1955-M12	2437085-50	1960 May 31	Sergeant	-	33	0.000	ARMA	MS	-	UT?	WSMR	-	-
1955-M15	2437085-50	1960 May 31	Sergeant	-	32	0.000	ARMA	MS	-	UT?	WSMR	-	-
1955-M17	2437141-50	1960 Jul 26	Sergeant	-	36	0.000	ARMA	MS	-	UT?	WSMR	-	-
1955-M22	2437155-50	1960 Aug 12	Sergeant	-	35	0.000	ARMA	MS	-	UT?	WSMR	-	-
1955-M24	2437182-50	1960 Sep 15	Sergeant	-	34	0.000	ARMA	MS	-	UT?	WSMR	-	-
1955-S275	2437187-15	1960 Sep 19 1555	Journeyman	-	MSA 11.01GE	0.000	GSCF	MS	GSCF/FSU/Fichte1,Debusk	Cosmic rays/Bio	IMSA-PR-60-259A	RP-1028, TH-D-412	-
1955-M25	2437186-50	1960 Sep 21	Sergeant	-	37	0.000	ARMA	MS	-	UT?	WSMR	-	-
1955-M25	2437186-50	1960 Sep 21 1301:53	Blue Scout Jr	-	D-1	0.023	AFBMD	MS	AFS/C/	Magnetospheric	Waldron	JE1535-22	-
1955-M02	2437189-04	1960 Sep 21	Sergeant	-	D-1	0.000	ARMA	MS	-	UT?	WSMR	-	-
1955-S26	2437200-50	1960 Sep 23	Sergeant	-	D-2	0.000	ARMA	RF	AFS/C/	Magnetospheric	Desind	JE1535-22	-
1955-S32	2437247-05	1960 Nov 6 1318	Blue Scout Jr	-	40	0.000	ARMA	MS	-	UT?	WSMR	-	-
1955-M31	2437269-50	1960 Dec 1	Sergeant	-	42	0.000	ARMA	MS	-	UT?	WSMR	-	-
1955-M32	2437280-50	1960 Dec 12	Sergeant	-	40	0.000	ARMA	MS	-	UT?	WSMR	-	-
1955-M33	2437281-50	1960 Dec 13	Sergeant	-	41	0.000	ARMA	MS	-	UT?	WSMR	-	-
1955-M01	2437309-50	1961 Jan 10	Sergeant	-	43	0.000	ARMA	MS	-	UT?	WSMR	-	-
1955-M02	2437325-50	1961 Jan 26	Sergeant	-	44	0.000	ARMA	MS	-	UT?	WSMR	-	-
1955-S75	2437367-25	1961 Mar 6 1753	Astrobee 1500	?	ME16.305	0.000	AFBCL	SS	AFBCL/Gustafson,Swenson	Jonos	WDCRF	-	-
1955-M03	2437368-50	1961 Mar 10	Sergeant	-	49	0.000	ARMA	MS	-	UT?	WSMR	-	-
1955-M11	2437423-50	1961 Mar 17	Sergeant	-	50	0.000	ARMA	MS	-	UT?	WSMR	-	-
1955-M12	2437434-50	1961 May 15	Sergeant	-	54	0.000	ARMA	MS	-	UT?	WSMR	-	-
1955-M13	2437438-50	1961 May 17	Sergeant	-	53	0.000	ARMA	MS	-	UT?	WSMR	-	-
1955-M14	2437458-50	1961 May 17	Sergeant	-	54	0.000	ARMA	MS	-	UT?	WSMR	-	-
1955-M183	2437559-36	1961 Aug 1 2018	Astrobee 1500	-	AA16.304	0.000	AFBCL	RF	AFBCL/Gustafson	Test/Geodetic	WDCRF	MR620912-24	-
1955-M01	2437559-36	1961 Aug 17 1429	Blue Scout Jr	-	AFS/C/?	0.022	AFSSD	RS	AFS/C/?	Magnetospheric	TH-X-760	Cleary95	-
1955-S06	2437562-02	1961 Aug 20 1234	RAM A	-	RAM A-1	0.000	LARCN	MS	LARC/?	Reentry Test	TH-D-1611	-	-
1955-M21	2437563-50	1961 Sep 26	Sergeant	-	56	0.000	ARMA	MS	-	UT?	WSMR	-	-
1955-M22	2437568-50	1961 Sep 28	Sergeant	-	58	0.000	ARMA	MS	-	UT?	WSMR	-	-
1955-M23	2437570-50	1961 Sep 28	Sergeant	-	59	0.000	ARMA	MS	-	UT?	WSMR	-	-
1955-M24	2437570-50	1961 Sep 28	Sergeant	-	59	0.000	ARMA	MS	-	UT?	WSMR	-	-
1955-S378	2437619-07	1961 Nov 15 1343	Journeyman	-	MSA 11.04GB	0.000	GSCF	MS	GSCF/FSU/Campbell,DeBusk	Biology ABC/	WDCRF	-	-
1955-S385	2437622-07	1961 Nov 18 1342	Journeyman	-	MSA 11.05GB	0.000	GSCF	MS	AFS/C/?	Biological	WDCRF	-	-
1955-M04	2437637-67	1961 Dec 4 0400:16	Blue Scout Jr	-	0-2	0.023	AFSSD	RS	GSCF/Campbell,Young	Geodetic	WDCRF	MR611211-10	-
1955-S415	2437641-84	1961 Dec 8 0835	Aste Scout 1500	-	RAM A	0.000	AFBCL	SS	LARC/Swenson	Magnetospheric	WDCRF	AFBCL	-
1955-S425	2437647-80	1961 Dec 14 0709:48	Trailblazer 2	-	TB 11a	0.000	LARCN	SS	LARC/Swenson	Reentry Test	TH-X-2053	TH-D-3214/IRL-5624	-
1955-M42	2437717-02	1962 Feb 21 1230	RAM A	-	RAM A-2	0.000	LARCN	SS	LARC/Swenson	Reentry Test	TH-X-907	-	-
1955-S402	2437790-74	1962 Feb 6 0541:00	Trailblazer 2	X	TB 11b	0.052	LARCN?	SS	AFBCL/Soberman	Reentry Test	SAD-SR317	TH-D-2347	-
1955-S152	2437816-21	1962 May 6 1708:44	Blue Scout Jr SLV-1C	-	102	0.000	AFSSD	TS	-	Comms	WSMR	-	-
1955-M12	2437845-50	1962 Jul 31	Sergeant	-	101	0.000	ADWC	MS	-	UT?	WSMR	-	-
1955-M13	2437845-50	1962 Jul 31	Sergeant	-	101	0.000	ADWC	MS	-	UT?	WSMR	-	-
1955-M14	2437845-50	1962 Jul 31	Sergeant	-	101	0.000	ADWC	MS	-	UT?	WSMR	-	-
1955-S694	2437854-87	1962 Jul 9 0851:39	Swik A	-	Project 6.7 SHIK	0.000	DASA	SS	AFS/C/Whitaker	Diagnostic	AD-495428	-	-
1955-S234	2437854-87	1962 Jul 9 0852:09	Swik A	-	Project 6.7 SHIK	0.000	SAND	SS	LASU/Heorlin	Magnetospheric?	AD-495411	VAFB	-
1955-A106	2437854-87	1962 Jul 9 0852:19	Astrobee 1500	-	Project 6.7 SHIK	0.000	SAND	SS	LASU/Heorlin	Magnetospheric?	AD-495411/VAFB	TH-X-63174	-
1955-S695	2437854-87	1962 Jul 9 0852:27	Swik A	-	Project 6.7 SHIK	0.000	DASA	SS	AFS/C/Whitaker	Diagnostic	AD-495428	-	-
1955-S696	2437854-87	1962 Jul 9 0855:43	Swik A	-	Project 6.7 SHIK	0.000	DASA	SS	AFS/C/Whitaker	Diagnostic	AD-495428	-	-
1955-S697	2437854-87	1962 Jul 9 0857:29	Swik A	-	Project 6.7 SHIK	0.000	DASA	SS	AFS/C/Whitaker	Diagnostic	AD-495428	-	-
1955-S698	2437854-87	1962 Jul 9 0857:49	Swik A	-	Project 6.7 SHIK	0.000	DASA	SS	AFS/C/Whitaker	Diagnostic	AD-495428	-	-
1955-S257	2437870-23	1962 Jul 24 1729:12	Blue Scout Jr SLV-1C	-	101	0.000	AFSSD	TS	SAC/	Comms	WDCRF	-	-
1955-M19	2437907-50	1962 Sep	Sergeant	-	101	0.000	ADWC	MS	-	UT?	WSMR	-	-
1955-M20	2437907-50	1962 Sep	Sergeant	-	101	0.000	ADWC	MS	-	UT?	WSMR	-	-
1955-M21	2437907-50	1962 Sep	Sergeant	-	101	0.000	ADWC	MS	-	UT?	WSMR	-	-
1955-M21	2437907-50	1962 Sep 21	RAM B	-	RAM B-1	0.000	LARCN	SS	LARC/	Reentry Test	SP-4012	-	-
1955-S699	2437929-50	1962 Sep 22	Strppi	-	Cart Round	0.000	SAND	SS	SAND/	Test	WDCRF	RP-1028	-
1955-S343	2437929-78	1962 Sep 22 0645	Journeyman	-	MSA 11.02IR	0.000	GSCF	SS	UMI/Coates,Schulte	RF Astron	SAND63	-	-
1955-S640	2437937-50	1962 Sep 30	Strppi	-	Test Round	0.000	SAND	SS	SAND/	Test	SAND63	-	-
1955-S641	2437937-50	1962 Oct	Strppi	-	Test Round	0.000	SAND	SS	SAND/	Test	SAND63	-	-
1955-M24	2437937-50	1962 Oct	Sergeant	-	-	0.000	ADWC	MS	-	UT?	WSMR	-	-
1955-M25	2437937-50	1962 Oct	Sergeant	-	-	0.000	ADWC	MS	-	UT?	WSMR	-	-
1955-S406	2437957-85	1962 Oct 20 0830	Strppi	-	-	0.000	AEC						

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	DrpPay	Agency	Launch_Code	Group	Category	LTCite	Cite	Notes
1962-5590	2437957-86	1962 Oct 20 0832?	Swik A		Project 6.7 SWIK	0.000	DASA	SS	AFWL/	Diagnostic	AD-4956428		
1962-5627	2437961-50	1962 Oct 24	Sergeant			0.000	NICOM	MS		Test	MR621029-5		
1962-5630	2437970-50	1962 Nov 2	Sergeant			0.000	NICOM	MS		Test	MR621112-10		
1962-5685	2437990-26	1962 Nov 21 1920:35	Blue Scout Jr SLV-1C		201	0.000	AFSSD	TS	SAC/	Comms	VCR		
1962-5635	2437998-50	1962 Dec	Sergeant			0.000	NICOM	MS		UT?	WSNR		
1962-5636	2437998-50	1962 Dec	Sergeant			0.000	NICOM	MS		UT?	WSNR		
1962-5637	2437998-50	1962 Dec	Sergeant			0.000	NICOM	MS		UT?	WSNR		
1962-5638	2437998-50	1962 Dec	Sergeant			0.000	ARPA	MU		Test	WSNR		
1962-5673	2438017-50	1962 Dec 19	Blue Scout Jr SLV-1B (a)		21-1	0.000	AFSSD	MU	EUS/AFAPL/Davis. J	Tech	JPP17, 517		
1962-5678	2438017-50	1962 Dec 19	Blue Scout Jr SLV-1B (a)		21-1	0.000	AFSSD	MU	EUS/AFAPL/Davis. J	Tech	TP-DJ-1866		
1962-5688	2438029-50	1963	Trallblazer 2	M	TB IIid	0.000	LARCN	SS	LARC/	Reentry Test			
1962-5689	2438029-50	1963	Sergeant			0.000	NICOM	MS		UT?	WSNR		
1962-5690	2438029-50	1963	Sergeant			0.000	NICOM	MS		UT?	WSNR		
1962-5691	2438029-50	1963	Sergeant			0.000	NICOM	MS		UT?	WSNR		
1962-5692	2438029-50	1963	Sergeant			0.000	NICOM	MS		UT?	WSNR		
1962-5693	2438029-50	1963	Sergeant			0.000	NICOM	MS		UT?	WSNR		
1962-5694	2438029-50	1963	Sergeant			0.000	NICOM	MS		UT?	WSNR		
1962-5695	2438029-50	1963	Sergeant			0.000	NICOM	MS		UT?	WSNR		
1962-5696	2438029-50	1963	Sergeant			0.000	NICOM	MS		UT?	WSNR		
1962-5697	2438029-50	1963	Sergeant			0.000	NICOM	MS		UT?	WSNR		
1962-5698	2438036-50	1963	ARPA			0.000	ARPA	MU		Test	WSNR		
1962-5699	2438060-50	1963	Sergeant			0.000	NICOM	MS		UT?	WSNR		
1962-5700	2438060-50	1963	Sergeant			0.000	NICOM	MS		UT?	WSNR		
1962-5701	2438060-50	1963	Sergeant			0.000	NICOM	MS		UT?	WSNR		
1962-5702	2438060-50	1963	Sergeant			0.000	NICOM	MS		UT?	WSNR		
1962-5703	2438060-50	1963	Sergeant			0.000	NICOM	MS		UT?	WSNR		
1962-5704	2438060-50	1963	Sergeant			0.000	NICOM	MS		UT?	WSNR		
1962-5705	2438060-50	1963	Sergeant			0.000	NICOM	MS		UT?	WSNR		
1962-5706	2438060-50	1963	Sergeant			0.000	NICOM	MS		UT?	WSNR		
1962-5707	2438060-50	1963	Sergeant			0.000	NICOM	MS		UT?	WSNR		
1962-5708	2438060-50	1963	Sergeant			0.000	NICOM	MS		UT?	WSNR		
1962-5709	2438060-50	1963	Sergeant			0.000	NICOM	MS		UT?	WSNR		
1962-5710	2438060-50	1963	Sergeant			0.000	NICOM	MS		UT?	WSNR		
1962-5711	2438060-50	1963	Sergeant			0.000	NICOM	MS		UT?	WSNR		
1962-5712	2438060-50	1963	Sergeant			0.000	NICOM	MS		UT?	WSNR		
1962-5713	2438060-50	1963	Sergeant			0.000	NICOM	MS		UT?	WSNR		
1962-5714	2438060-50	1963	Sergeant			0.000	NICOM	MS		UT?	WSNR		
1962-5715	2438060-50	1963	Sergeant			0.000	NICOM	MS		UT?	WSNR		
1962-5716	2438060-50	1963	Sergeant			0.000	NICOM	MS		UT?	WSNR		
1962-5717	2438060-50	1963	Sergeant			0.000	NICOM	MS		UT?	WSNR		
1962-5718	2438060-50	1963	Sergeant			0.000	NICOM	MS		UT?	WSNR		
1962-5719	2438060-50	1963	Sergeant			0.000	NICOM	MS		UT?	WSNR		
1962-5720	2438060-50	1963	Sergeant			0.000	NICOM	MS		UT?	WSNR		
1962-5721	2438060-50	1963	Sergeant			0.000	NICOM	MS		UT?	WSNR		
1962-5722	2438060-50	1963	Sergeant			0.000	NICOM	MS		UT?	WSNR		
1962-5723	2438060-50	1963	Sergeant			0.000	NICOM	MS		UT?	WSNR		
1962-5724	2438060-50	1963	Sergeant			0.000	NICOM	MS		UT?	WSNR		
1962-5725	2438060-50	1963	Sergeant			0.000	NICOM	MS		UT?	WSNR		
1962-5726	2438060-50	1963	Sergeant			0.000	NICOM	MS		UT?	WSNR		
1962-5727	2438060-50	1963	Sergeant			0.000	NICOM	MS		UT?	WSNR		
1962-5728	2438060-50	1963	Sergeant			0.000	NICOM	MS		UT?	WSNR		
1962-5729	2438060-50	1963	Sergeant			0.000	NICOM	MS		UT?	WSNR		
1962-5730	2438060-50	1963	Sergeant			0.000	NICOM	MS		UT?	WSNR		
1962-5731	2438060-50	1963	Sergeant			0.000	NICOM	MS		UT?	WSNR		
1962-5732	2438060-50	1963	Sergeant			0.000	NICOM	MS		UT?	WSNR		
1962-5733	2438060-50	1963	Sergeant			0.000	NICOM	MS		UT?	WSNR		
1962-5734	2438060-50	1963	Sergeant			0.000	NICOM	MS		UT?	WSNR		
1962-5735	2438060-50	1963	Sergeant			0.000	NICOM	MS		UT?	WSNR		
1962-5736	2438060-50	1963	Sergeant			0.000	NICOM	MS		UT?	WSNR		
1962-5737	2438060-50	1963	Sergeant			0.000	NICOM	MS		UT?	WSNR		
1962-5738	2438060-50	1963	Sergeant			0.000	NICOM	MS		UT?	WSNR		
1962-5739	2438060-50	1963	Sergeant			0.000	NICOM	MS		UT?	WSNR		
1962-5740	2438060-50	1963	Sergeant			0.000	NICOM	MS		UT?	WSNR		
1962-5741	2438060-50	1963	Sergeant			0.000	NICOM	MS		UT?	WSNR		
1962-5742	2438060-50	1963	Sergeant			0.000	NICOM	MS		UT?	WSNR		
1962-5743	2438060-50	1963	Sergeant			0.000	NICOM	MS		UT?	WSNR		
1962-5744	2438060-50	1963	Sergeant			0.000	NICOM	MS		UT?	WSNR		
1962-5745	2438060-50	1963	Sergeant			0.000	NICOM	MS		UT?	WSNR		
1962-5746	2438060-50	1963	Sergeant			0.000	NICOM	MS		UT?	WSNR		
1962-5747	2438060-50	1963	Sergeant			0.000	NICOM	MS		UT?	WSNR		
1962-5748	2438060-50	1963	Sergeant			0.000	NICOM	MS		UT?	WSNR		
1962-5749	2438060-50	1963	Sergeant			0.000	NICOM	MS		UT?	WSNR		
1962-5750	2438060-50	1963	Sergeant			0.000	NICOM	MS		UT?	WSNR		
1962-5751	2438060-50	1963	Sergeant			0.000	NICOM	MS		UT?	WSNR		
1962-5752	2438060-50	1963	Sergeant			0.000	NICOM	MS		UT?	WSNR		
1962-5753	2438060-50	1963	Sergeant			0.000	NICOM	MS		UT?	WSNR		
1962-5754	2438060-50	1963	Sergeant			0.000	NICOM	MS		UT?	WSNR		
1962-5755	2438060-50	1963	Sergeant			0.000	NICOM	MS		UT?	WSNR		
1962-5756	2438060-50	1963	Sergeant			0.000	NICOM	MS		UT?	WSNR		
1962-5757	2438060-50	1963	Sergeant			0.000	NICOM	MS		UT?	WSNR		
1962-5758	2438060-50	1963	Sergeant			0.000	NICOM	MS		UT?	WSNR		
1962-5759	2438060-50	1963	Sergeant			0.000	NICOM	MS		UT?	WSNR		
1962-5760	2438060-50	1963	Sergeant			0.000	NICOM	MS		UT?	WSNR		
1962-5761	2438060-50	1963	Sergeant			0.000	NICOM	MS		UT?	WSNR		
1962-5762	2438060-50	1963	Sergeant			0.000	NICOM	MS		UT?	WSNR		
1962-5763	2438060-50	1963	Sergeant			0.000	NICOM	MS		UT?	WSNR		
1962-5764	2438060-50	1963	Sergeant			0.000	NICOM	MS		UT?	WSNR		
1962-5765	2438060-50	1963	Sergeant			0.000	NICOM	MS		UT?	WSNR		
1962-5766	2438060-50	1963	Sergeant			0.000	NICOM	MS		UT?	WSNR		
1962-5767	2438060-50	1963	Sergeant			0.000	NICOM	MS		UT?	WSNR		
1962-5768	2438060-50	1963	Sergeant			0.000	NICOM	MS		UT?	WSNR		
1962-5769	2438060-50	1963	Sergeant			0.000	NICOM	MS		UT?	WSNR		
1962-5770	2438060-50	1963	Sergeant			0.000	NICOM	MS		UT?	WSNR		
1962-5771	2438060-50	1963	Sergeant			0.000	NICOM	MS		UT?	WSNR		
1962-5772	2438060-50	1963	Sergeant			0.000	NICOM	MS		UT?	WSNR		
1962-5773	2438060-50	1963	Sergeant			0.000	NICOM	MS		UT?	WSNR		
1962-5774	2438060-50	1963	Sergeant			0.000	NICOM	MS		UT?	WSNR		
1962-5775	2438060-50	1963	Sergeant			0.000	NICOM	MS		UT?	WSNR		
1962-5776	2438060-50	1963	Sergeant			0.000	NICOM	MS		UT?	WSNR	</	



Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	DrpPay	Agency	Launch_Code	Group	Category	LTCite	Cite	Notes
1964-S598	2438706-64	1964 Nov 7 0321	Athens	-	C004	0.000	AFPSD	MS	-	Reentry Test		GranduncBem641107	-
1964-A176	2438727-64	1964 Nov 28 0323	Athens	-	C003	0.000	AFPSD	MF	-	Reentry Test	SalLakeTri641107	SAMSU-LL	-
1964-S670	2438734-69	1964 Dec 5 0430	Athens	-	C002	0.000	AFPSD	MS	-	Reentry Test	Wire/Ulrich	SAMSU-LL	-
1964-M228	2438739-50	1964 Dec 10	Sergeant	-	C003	0.000	NICOM	MS	-	UT?	WDRF	-	-
1964-S696	2438751-67	1964 Dec 22 0400?	Blue Scout Jr SLV-1B (m)	-	21-3	0.000	AFPSD	RF	EUS/AFAPL/Davis, J	Tech	UPI	JPT17-517	-
1965-A05	2438760-50	1965 Jan 16 0513	Athens	-	C006	0.000	ARPA	MU	-	Test	WSMR	-	-
1965-S338	2438776-72	1965 Jan 28 1251:10	Blue Scout Jr	-	C006	0.000	AFPSD	RF	-	Reentry Test	Wire/Ulrich	SAMSU-LL	-
1965-S564	2438789-04	1965 Feb 28 1251:10	Blue Scout Jr	-	22-3 (GAR Probe 3)	0.000	AFPSD	RF	AFCL/Hutchinson	Magnatospheric Test	UPI	M650208-8	-
1965-A18	2438791-50	1965 Feb	ARPA	-	-	0.000	ARPA	MU	-	Test	WSMR	-	-
1965-M01	2438791-50	1965 Feb	Sergeant	-	-	0.000	NICOM	MS	-	UT?	WSMR	-	-
1965-M02	2438791-50	1965 Feb	Sergeant	-	-	0.000	NICOM	MS	-	UT?	WSMR	-	-
1965-A20	2438793-77	1965 Feb 2 0630	Athens	-	D003	0.000	AFPSD	MF	-	Reentry Test	Desrecthews650203	SAMSU-LL	-
1965-A26	2438803-50	1965 Feb 12	Athens	-	D002	0.000	AFPSD	MF	-	Reentry Test	SAMSU-LL	-	-
1965-A30	2438807-74	1965 Feb 16 0551	Athens	-	D008	0.000	AFPSD	MF	-	Reentry Test	Ulrich/Wire	SAMSU-LL	-
1965-M04	2438819-50	1965 Mar	Sergeant	-	-	0.000	NICOM	MS	-	UT?	WSMR	-	-
1965-M05	2438819-50	1965 Mar	Sergeant	-	-	0.000	NICOM	MS	-	UT?	WSMR	-	-
1965-M06	2438850-17	1965 Mar 30 1609:31	Blue Scout Jr	-	22-4 (GAR Probe 4)	0.031	AFPSD	MS	AFCL/ASE/Paolini,Katz	Magnatospheric	UF?	WDRF	-
1965-M06	2438850-26	1965 Apr 9 1810:37	Blue Scout Jr	-	22-9 (GAR Probe 5)	0.023	AFPSD	MS	AFWL/	Magnatospheric	Deshd	-	-
1965-S235	2438865-11	1965 Apr 14 1439	Journeyman	-	MSA 11.07VE	0.000	GSFC	BS	UM/Winkel	Plasma	WDRF	-	-
1965-S270	2438864-50	1965 May 4	Trailblazer 2	-	D56-S639	0.000	LARC	SS	LARC/Winkel	Reentry test	TP-V-1474	TH-D-4937	-
1965-M07	2438893-17	1965 May 12 1602:35	Blue Scout Jr	-	22-8 (GAR Probe 6)	0.031	AFPSD	MS	AFCL/Katz	Magnatospheric	naf-koenn	-	-
1965-M13	2438911-50	1965 Jun	Sergeant	-	-	0.000	NICOM	MS	-	UT?	WSMR	-	-
1965-M14	2438911-50	1965 Jun	Sergeant	-	-	0.000	NICOM	MS	-	UT?	WSMR	-	-
1965-M15	2438911-50	1965 Jun 9 1626:15	Blue Scout Jr	-	22-5 (GAR Probe 7)	0.024	AFPSD	MS	AFWL/	Magnatospheric	naf-koenn	Clary95	-
1965-M08	2438921-18	1965 Jun 16	Sergeant	-	-	0.000	EMHR	MS	-	UT	peternali.de	-	-
1965-M66	2438927-50	1965 Jun 22 0415	Athens	-	B002	0.000	AFPSD	MF	-	Reentry Test	MoatIndep650624	SAMSU-LL	-
1965-S369	2438933-68	1965 Jun 22 0737	Athens	-	B001	0.000	AFPSD	MS	-	Reentry Test	MoatIndep650624	SAMSU-LL	-
1965-S371	2438933-62	1965 Jun 27 0224:22	Trailblazer 2	-	MS 40	0.000	LARC	SS	LARC/SAL/	Reentry test	SHoLab	-	-
1965-S763	2438936-73	1965 Jun 30 0553	Journeyman	-	MSA 11.03UR	0.000	GSFC	MS	UM/Schulte,Lindsay	R Astron	WDRF	CR-74173	-
1965-S412	2438941-73	1965 Jul 17	Athens	-	-	0.000	AFPSD	MS	-	Reentry Test	SAMSU-LL	-	-
1965-S425	2438956-50	1965 Jul 20	Athens	-	C007	0.000	AFPSD	MF	-	Reentry Test	SAMSU-LL	-	-
1965-A104	2438961-50	1965 Jul 27 0400?	Athens	-	C011	0.000	AFPSD	MF	-	Reentry Test	Ulrich/Wire	SAMSU-LL	-
1965-S454	2438966-67	1965 Jul 27 0715	Athens	-	D005	0.000	AFPSD	MF	-	Reentry Test	Ulrich/Wire	SAMSU-LL	-
1965-A112	2438968-50	1965 Jul 31	Athens	-	D004	0.000	AFPSD	MF	-	Reentry Test	SAMSU-LL	-	-
1965-S439	2438972-50	1965 Aug 3 0447:00	Athens	-	C014	0.000	AFPSD	MS	-	Reentry Test	ML-FR6507	SAMSU-LL	-
1965-S440	2438976-70	1965 Aug 4	Sergeant	-	C005	0.000	USISPO	MS	-	Tech	M650616-10	SAMSU-LL	-
1965-A118	2438980-50	1965 Aug 6	Athens	-	C009	0.000	AFPSD	MF	-	Reentry Test	SAMSU-LL	-	-
1965-S446	2438980-50	1965 Aug 6	Athens	-	C008	0.000	AFPSD	MF	-	Reentry Test	SAMSU-LL	-	-
1965-S477	2438983-50	1965 Aug 21?	Athens	-	D009	0.000	AFPSD	MF	-	Reentry Test	SAMSU-LL	-	-
1965-S472	2438983-50	1965 Aug 21?	Athens	-	D012	0.000	AFPSD	MF	-	Reentry Test	SAMSU-LL	-	-
1965-M22	2438989-50	1965 Aug 27	Athens	-	-	0.000	EMHR	MS	-	UT	-	-	-
1965-M68	2438972-50	1965 Aug 2	Sergeant	-	-	0.000	EMHR	MS	-	UT	peternali.de	-	-
1965-M83	2439005-70	1965 Sep 14 0545	Athens	-	B004	0.000	AFPSD	MS	-	Reentry Test	peternali.de	SAMSU-LL	-
1965-S394	2439017-62	1965 Sep 14 0745	Athens	-	D033	0.000	AFPSD	MS	-	Reentry Test	MoatIndep650916	SAMSU-LL	-
1965-S602	2439024-50	1965 Sep 17	Athens	-	C012	0.000	AFPSD	MS	-	Reentry Test	MoatIndep650916	SAMSU-LL	-
1965-S515	2439034-50	1965 Sep 27	Athens	-	B006	0.000	AFPSD	MS	-	Reentry Test	SAMSU-LL	-	-
1965-S534	2439045-50	1965 Oct 2	Athens	-	C016	0.000	AFPSD	MS	-	Reentry Test	SAMSU-LL	-	-
1965-S546	2439045-50	1965 Oct 2 0615?	Athens	-	D007	0.000	AFPSD	MF	-	Reentry Test	Ulrich	-	-
1965-S600	2439076-76	1965 Nov 22	Athens	-	B007	0.000	AFPSD	MS	-	Reentry Test	SAMSU-LL	-	-
1965-A165	2439096-50	1965 Dec 8?	Athens	-	C017	0.000	AFPSD	MF	-	Reentry Test	SAMSU-LL	-	-
1965-S663	2439102-50	1965 Dec 10	Athens	-	C023	0.000	AFPSD	MS	-	Reentry Test	SAMSU-LL	-	-
1965-S671	2439104-50	1965 Dec 10	Athens	-	C025	0.000	AFPSD	MS	-	Reentry Test	SAMSU-LL	-	-
1965-S72	2439146-50	1966 Jan 21	Athens	-	-	0.000	AFAL/	SS	-	Reentry Test	SP-369	-	-
1965-S702	2439156-50	1966 Feb	Trailblazer 2	-	C030	0.000	AFPSD	MS	-	Reentry Test	SAMSU-LL	-	-
1965-S84	2439160-50	1966 Feb 17	Athens	-	D014	0.000	AFPSD	MS	-	Reentry Test	SAMSU-LL	-	-
1965-S114	2439173-50	1966 Feb 17	Athens	-	Metear 8	0.000	LARC	SS	LARC/Alysts	Reentry Test	SAMSU-LL	-	-
1965-M05	2439202-55	1966 Mar 18 0115	Trailblazer 2	-	B009	0.000	LARC	SS	-	Reentry Test	SAMSU-LL	-	-
1965-S204	2439216-50	1966 Apr 1	Athens	-	D018	0.000	AFPSD	MS	-	Reentry Test	SAMSU-LL	-	-
1965-S203	2439216-50	1966 Apr 1	Athens	-	D019	0.000	AFPSD	MS	-	Reentry Test	SAMSU-LL	-	-
1965-S260	2439258-50	1966 May 13?	Athens	-	D031	0.000	AFPSD	MS	-	Reentry Test	SAMSU-LL	-	-
1965-S284	2439272-50	1966 May 27	Athens	-	C019	0.000	AFPSD	MS	-	Reentry Test	SAMSU-LL	-	-
1965-S283	2439272-50	1966 May 27	Athens	-	C019	0.000	AFPSD	MS	-	Reentry Test	SAMSU-LL	-	-
1965-M21	2439276-50	1966 Jun	Sergeant	-	-	0.000	NICOM	MS	-	UT?	WSMR	-	-
1965-M22	2439276-50	1966 Jun	Sergeant	-	-	0.000	NICOM	MS	-	UT?	WSMR	-	-
1965-S300	2439284-16	1966 Jun 7 1557	WASB	-	-	0.000	LERC	SS	LERC/Gold	Tech	W-R-86-34	TH-D-3985	-
1965-M74	2439284-75	1966 Jun 10 0600?	Athens	-	D021	0.000	AFPSD	MS	-	Reentry Test	Ulrich	SAMSU-LL	-
1965-S308	2439286-88	1966 Jun 10 0900	Athens	-	D023	0.000	AFPSD	MS	-	Reentry Test	Ulrich	SAMSU-LL	-
1965-S331	2439289-50	1966 Jun 23	Athens	-	D034	0.000	AFPSD	MS	-	Reentry Test	Ulrich	SAMSU-LL	-
1965-S370	2439321-35	1966 Jul 14 2023	Athens	-	C015	0.000	EMHR	MS	-	Reentry Test	vare-history.org	SAMSU-LL	-
1965-M145	2439351-50	1966 Aug 14	Sergeant	-	-	0.000	AFPSD	MS	-	Reentry Test	peternali.de	-	-
1965-S444	2439353-76	1966 Aug 16 0618	Scasor	-	B011	0.000	LARC	SS	LARC/Walsh	Astronomy	W-R-86-43	TH-D-4742	-
1965-S448	2439355-50	1966 Aug 18	Athens	-	-	0.000	AFPSD	MS	-	Reentry Test	SAMSU-LL	-	-
1965-S443	2439355-50	1966 Aug 19	Athens	-	E001	0.000	AFPSD	MS	-	Reentry Test	SAMSU-LL	-	-
1965-S803	2439360-12	1966 Aug 22 1500	Athens	-	ADDPPE TB-4	0.000	AFPSD	MS	-	Test	AFPLU-TR-67-25	-	-
1965-S474	2439369-50	1966 Sep 5	Castor Lance	-	-	0.000	SAND	SS	SAND/	Reentry Test	-	-	-
1965-S476	2439369-50	1966 Sep 5	Strypi IV	-	-	0.000	SAND	SS	-	Reentry Test	SRTCos6	-	-
1965-S478	2439370-50	1966 Sep 2	Athens	-	D029	0.000	AFPSD	MS	-	Reentry Test	SAMSU-LL	-	-
1965-S501	2439391-74	1966 Sep 23 0550?	Athens	-	B015	0.000	AFPSD	MS	-	Reentry Test	SAMSU-LL	-	-
1965-S531	2439405-50	1966 Oct 7?	Athens	-	D024	0.000	AFPSD	MS	-	Reentry Test	Ulrich	-	-
1965-S533	2439405-50	1966 Oct 7	Athens	-	D049	0.000	AFPSD	MS	-	Reentry Test	SAMSU-LL	-	-
1965-S543	2439412-50	1966 Oct 14	Athens	-	D036	0.000	AFPSD	MS	-	Reentry Test	SAMSU-LL	-	-
1965-S542	2439412-50	1966 Oct 14	Athens	-	D035	0.000	AFPSD	MS	-	Reentry Test	SAMSU-LL	-	-
1965-S563	2439424-50	1966 Oct 26	Trailblazer 2	-	-	0.000	AFAL	SS	AFAL/GSU/	Reentry Test	M66G1107-10	-	-
1965-S589	2439436-50	1966 Nov 7	Athens	-	D039	0.000	AFPSD	MS	-	Reentry Test	SAMSU-LL	-	-



Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	DrpPay	Agency	Launch	Launch_Code	Group	Category	LTCite	Cite	Notes
1965-5372	2440392.83	1969 Jun 20 0802	Athens	-	V119D [117]	0.000	SAMSO	MS	MS	-	Reentry Test	SAMSO-LL	-	-
1965-5381	2440399.50	1969 Jun 27	Athens	-	V142D [118]	0.000	SAMSO	MS	MS	-	Reentry Test	SAMSO-LL	-	-
1965-5382	2440464.61	1969 Aug 31	Sergeant	-	-	0.000	BWHR	MS	MS	-	UT	petarhall.de	-	-
1965-5489	2440474.76	1969 Sep 10 0615	Athens	-	V147D [119]	0.000	SAMSO	MS	MS	-	Reentry Test	SAMSO-LL	-	-
1965-5520	2440490.50	1969 Sep 26?	Athens	-	V130D [120]	0.000	SAMSO	MS	MS	-	Reentry Test	SAMSO-LL	-	-
1965-5549	2440510.45	1969 Oct 15 2245:00	Astrobac 1500	-	MASA 16.06GR	0.000	GSFC/Weber	MS	MS	-	Radio Astron	JCR	-	-
1965-5634	2440555.50	1969 Dec	Sergeant	-	-	0.000	NICOM	MS	MS	-	UT?	WSMR	-	-
1970-5324	2440700.82	1970 Apr 24 0744	Athens	-	V141D [121]	0.000	SAMSO	MS	MS	-	Reentry Test	Wire/Ulrich	SAMSO-LL	-
1970-5689	2440732.83	1970 May 26 0800?	Strypi VI	-	Sandia 428-12	0.000	SAND/	SS	SS	-	Tech	Acorn7.9	ElecPhem3.305	-
1970-5749	2440733.50	1970 May 27	Strypi VI	-	-	0.000	SAND/	SS	SS	-	Reentry Test	WSMR	-	-
1970-5822	2440737.50	1970 Jun	Sergeant	-	-	0.000	NICOM	MS	MS	-	UT?	WSMR	-	-
1970-6623	2440737.50	1970 Jun	Sergeant	-	-	0.000	NICOM	MS	MS	-	UT?	WSMR	-	-
1970-5690	2440743.83	1970 Jun 6 0800?	Strypi	-	Sandia 428-	0.000	SAND/	MS	MS	-	Tech	Acorn7.9	ElecPhem3.305	-
1970-5638	2440829.50	1970 Sep	Sergeant	-	-	0.000	BWHR	MS	MS	-	UT	petarhall.de	-	-
1970-5427	2440776.86	1970 Jul 11 0840	Athens	2R	V123D [122]	0.000	LARC/Pride	MS	MS	-	Reentry Test	SaltLakeTrib/00712	(MexicoImpact)	-
1970-5853	2440869.25	1970 Oct 9 1757	Caster	-	GRL A21.011-1	0.000	LARC	SS	SS	-	Reentry Test	FDC/Ulrich	USCSPARK7	-
1970-5619	2440915.60	1970 Nov 24 2356	Trailblazer 2	-	GRL A21.011-1	0.000	AFCLR/Maloney	SS	SS	-	Reentry Test	WI-PVO-21	AFCLR	-
1970-5626	2440915.64	1970 Nov 25 0317	Blue Scout Jr SLV-1C	?	MRL M222.208	0.000	AFCLR/Rotman,Maloney	SS	SS	-	IV Astron	SP-4015	BAMS.58	-
1970-5824	2440920.42	1970 Dec	Sergeant	-	V144D [123]	0.000	NICOM	MS	MS	-	UT?	WSMR	-	-
1971-5105	2440980.42	1971 Jan 8 2211	Athens	-	B035 [124]	0.000	SAMSO	MS	MS	-	Reentry Test	MoatIndep710114	SAMSO-LL	-
1971-5153	2441022.79	1971 Jan 29 2352	Strypi	-	V127D [126]	0.000	SAMSO	MS	MS	-	Reentry Test	PlanSpaceSci22.67	WDRF	-
1971-5236	2441060.77	1971 Apr 19 0650	Athens	-	-	0.000	SAMSO	MS	MS	-	Reentry Test	Ulrich/Wire	SAMSO-LL	-
1971-610	2441071.50	1971 May	Sergeant	-	V146D [127]	0.000	NICOM	MS	MS	-	UT?	MoatIndep710422	SAMSO-LL	-
1971-5281	2441085.50	1971 Jun 4 0543	Athens	-	B041 [128]	0.000	SAMSO	MS	MS	-	Reentry Test	WSMR	-	-
1971-5320	2441113.73	1971 Jun 11 0525	Athens	-	V139D [128]	0.000	SAMSO	MS	MS	-	Reentry Test	Ulrich/Wire	SAMSO-LL	-
1971-5326	2441164.10	1971 Aug 20 1450	Athens	-	V131D [131]	0.000	SAMSO	MS	MS	-	Reentry Test	MoatIndep710617	SAMSO-LL	-
1971-5396	2441211.71	1971 Sep 17 0500	Athens	-	V126D [132]	0.000	SAMSO	MS	MS	-	Reentry Test	Wire/Ulrich	SAMSO-LL	-
1971-5655	2441285.50	1971 Nov?	Strypi	-	Sandia 428-025	0.000	SAND/	SS	SS	-	Tech	Acorn7.9	SAMSO-LL	-
1971-615	2441285.50	1971 Nov	Sergeant	-	-	0.000	NICOM	MS	MS	-	UT?	WSMR	ElecPhem3.305	-
1971-616	2441285.50	1971 Dec	Sergeant	-	-	0.000	NICOM	MS	MS	-	UT?	WSMR	-	-
1972-606	2441468.50	1972 Jun	Sergeant	-	-	0.000	NICOM	MS	MS	-	UT?	WSMR	-	-
1972-607	2441468.50	1972 Jun	Sergeant	-	-	0.000	NICOM	MS	MS	-	UT?	WSMR	-	-
1972-5274	2441527.25	1972 Jul 28 1859	Trailblazer 2	-	GRL A21.011-1	0.000	AFCLR/Maloney	SS	SS	-	Reentry Test	AFCLR	-	-
1972-5349	2441606.12	1972 Oct 15 1500	Strypi VIIMAR	-	MASA 12.18ME	0.000	GSFC	SS	SS	-	Test/Electron gun	Kress	Davis-Poker	-
1972-608	2441621.50	1972 Nov	Sergeant	-	-	0.000	NICOM	MS	MS	-	UT?	WSMR	-	-
1972-609	2441621.50	1972 Nov	Sergeant	-	-	0.000	NICOM	MS	MS	-	UT?	WSMR	-	-
1973-609	2441621.50	1973 May	Sergeant	-	-	0.000	NICOM	MS	MS	-	UT?	WSMR	-	-
1973-610	2441621.50	1973 May	Sergeant	-	-	0.000	NICOM	MS	MS	-	UT?	WSMR	-	-
1973-611	2441621.50	1973 May	Sergeant	-	-	0.000	NICOM	MS	MS	-	UT?	WSMR	-	-
1973-612	2441621.50	1973 May	Sergeant	-	-	0.000	NICOM	MS	MS	-	UT?	WSMR	-	-
1973-613	2441621.50	1973 May	Sergeant	-	-	0.000	NICOM	MS	MS	-	UT?	WSMR	-	-
1973-614	2441621.50	1973 May	Sergeant	-	-	0.000	NICOM	MS	MS	-	UT?	WSMR	-	-
1973-615	2441621.50	1973 May	Sergeant	-	-	0.000	NICOM	MS	MS	-	UT?	WSMR	-	-
1973-616	2441621.50	1973 May	Sergeant	-	-	0.000	NICOM	MS	MS	-	UT?	WSMR	-	-
1973-617	2441621.50	1973 May	Sergeant	-	-	0.000	NICOM	MS	MS	-	UT?	WSMR	-	-
1973-618	2441621.50	1973 May	Sergeant	-	-	0.000	NICOM	MS	MS	-	UT?	WSMR	-	-
1973-619	2441621.50	1973 May	Sergeant	-	-	0.000	NICOM	MS	MS	-	UT?	WSMR	-	-
1973-620	2441621.50	1973 May	Sergeant	-	-	0.000	NICOM	MS	MS	-	UT?	WSMR	-	-
1973-621	2441621.50	1973 May	Sergeant	-	-	0.000	NICOM	MS	MS	-	UT?	WSMR	-	-
1973-622	2441621.50	1973 May	Sergeant	-	-	0.000	NICOM	MS	MS	-	UT?	WSMR	-	-
1973-623	2441621.50	1973 May	Sergeant	-	-	0.000	NICOM	MS	MS	-	UT?	WSMR	-	-
1973-624	2441621.50	1973 May	Sergeant	-	-	0.000	NICOM	MS	MS	-	UT?	WSMR	-	-
1973-625	2441621.50	1973 May	Sergeant	-	-	0.000	NICOM	MS	MS	-	UT?	WSMR	-	-
1973-626	2441621.50	1973 May	Sergeant	-	-	0.000	NICOM	MS	MS	-	UT?	WSMR	-	-
1973-627	2441621.50	1973 May	Sergeant	-	-	0.000	NICOM	MS	MS	-	UT?	WSMR	-	-
1973-628	2441621.50	1973 May	Sergeant	-	-	0.000	NICOM	MS	MS	-	UT?	WSMR	-	-
1973-629	2441621.50	1973 May	Sergeant	-	-	0.000	NICOM	MS	MS	-	UT?	WSMR	-	-
1973-630	2441621.50	1973 May	Sergeant	-	-	0.000	NICOM	MS	MS	-	UT?	WSMR	-	-
1973-631	2441621.50	1973 May	Sergeant	-	-	0.000	NICOM	MS	MS	-	UT?	WSMR	-	-
1973-632	2441621.50	1973 May	Sergeant	-	-	0.000	NICOM	MS	MS	-	UT?	WSMR	-	-
1973-633	2441621.50	1973 May	Sergeant	-	-	0.000	NICOM	MS	MS	-	UT?	WSMR	-	-
1973-634	2441621.50	1973 May	Sergeant	-	-	0.000	NICOM	MS	MS	-	UT?	WSMR	-	-
1973-635	2441621.50	1973 May	Sergeant	-	-	0.000	NICOM	MS	MS	-	UT?	WSMR	-	-
1973-636	2441621.50	1973 May	Sergeant	-	-	0.000	NICOM	MS	MS	-	UT?	WSMR	-	-
1973-637	2441621.50	1973 May	Sergeant	-	-	0.000	NICOM	MS	MS	-	UT?	WSMR	-	-
1973-638	2441621.50	1973 May	Sergeant	-	-	0.000	NICOM	MS	MS	-	UT?	WSMR	-	-
1973-639	2441621.50	1973 May	Sergeant	-	-	0.000	NICOM	MS	MS	-	UT?	WSMR	-	-
1973-640	2441621.50	1973 May	Sergeant	-	-	0.000	NICOM	MS	MS	-	UT?	WSMR	-	-
1973-641	2441621.50	1973 May	Sergeant	-	-	0.000	NICOM	MS	MS	-	UT?	WSMR	-	-
1973-642	2441621.50	1973 May	Sergeant	-	-	0.000	NICOM	MS	MS	-	UT?	WSMR	-	-
1973-643	2441621.50	1973 May	Sergeant	-	-	0.000	NICOM	MS	MS	-	UT?	WSMR	-	-
1973-644	2441621.50	1973 May	Sergeant	-	-	0.000	NICOM	MS	MS	-	UT?	WSMR	-	-
1973-645	2441621.50	1973 May	Sergeant	-	-	0.000	NICOM	MS	MS	-	UT?	WSMR	-	-
1973-646	2441621.50	1973 May	Sergeant	-	-	0.000	NICOM	MS	MS	-	UT?	WSMR	-	-
1973-647	2441621.50	1973 May	Sergeant	-	-	0.000	NICOM	MS	MS	-	UT?	WSMR	-	-
1973-648	2441621.50	1973 May	Sergeant	-	-	0.000	NICOM	MS	MS	-	UT?	WSMR	-	-
1973-649	2441621.50	1973 May	Sergeant	-	-	0.000	NICOM	MS	MS	-	UT?	WSMR	-	-
1973-650	2441621.50	1973 May	Sergeant	-	-	0.000	NICOM	MS	MS	-	UT?	WSMR	-	-
1973-651	2441621.50	1973 May	Sergeant	-	-	0.000	NICOM	MS	MS	-	UT?	WSMR	-	-
1973-652	2441621.50	1973 May	Sergeant	-	-	0.000	NICOM	MS	MS	-	UT?	WSMR	-	-
1973-653	2441621.50	1973 May	Sergeant	-	-	0.000	NICOM	MS	MS	-	UT?	WSMR	-	-
1973-654	2441621.50	1973 May	Sergeant	-	-	0.000	NICOM	MS	MS	-	UT?	WSMR	-	-
1973-655	2441621.50	1973 May	Sergeant	-	-	0.000	NICOM	MS	MS	-	UT?	WSMR	-	-
1973-656	2441621.50	1973 May	Sergeant	-	-	0.000	NICOM	MS	MS	-	UT?	WSMR	-	-
1973-657	2441621.50	1973 May	Sergeant	-	-	0.000	NICOM	MS	MS	-	UT?	WSMR	-	-
1973-658	2441621.50	1973 May	Sergeant	-	-	0.000	NICOM	MS	MS	-	UT?	WSMR	-	-
1973-659	2441621.50	1973 May	Sergeant	-	-	0.000	NICOM							

Launch

Launch_Tag	Launch_ID	Launch_Date	L_V_Type	Variant	Flight_ID	DrpPay	Agency	Launch_Code	Group	Category	LTCite	Cite	Notes
1975-564	2443904.50	1979 Feb 26	Strypi VIIR	?	SWEARVE	0.000	SAMD	SS	SAMD/	Reentry Test	Powell	-	-
1975-5210	2444141.50	1979 Sep 25	Sergeant Hydac	-	ABRES	0.000	SAMSU/	SS	UMU/Winkler	Test?	SAMSU	-	-
1975-5240	2444190.70	1979 Nov 13	Strypi II	-	MASA 12.37UE	0.000	GSFC	SS	-	Auroral	ASI79-1	-	-
1980-539	2444274.50	1980 Feb 5	DUT	-	ABRES	0.000	ABHDD	MS	-	Interceptor	KRRList/79	-	-
1980-5304	2444438.50	1980 Jul 18	Sergeant Hydac	-	ABRES	0.000	ABHDD	MS	-	Reentry Test	KRRList/79	-	-
1980-5305	2444444.50	1980 Jul 24	Sergeant Hydac	-	ABRES	0.000	ABHDD	MS	-	Reentry Test	KRRList/79	-	-
1980-5172	2444498.50	1980 Sep 16	DUT	-	-	0.000	ABHDD	MS	-	Interceptor	KRRList/79	-	-
1980-5164	2444511.50	1980 Sep 29	Strypi VIIR	-	SWEARVE II-1	0.000	SAMD	SS	SAMD/	Reentry Test	SandNews810131	-	Powell
1980-5165	2444522.50	1980 Sep 29	Strypi VIIR	?	SWEARVE II-2	0.000	SAMD	SS	SAMD/	Reentry Test	SandNews810131	-	Powell
1981-562	2444640.98	1981 Feb 5 1125	Sergeant	-	GL A30.072	0.000	AFCL2	SS	AFCL2/Wheeler	Auroral	WDFH	-	-
1981-574	2444661.22	1981 Mar 25 1720	Sergeant Hydac	-	-	0.000	AFBMD	SS	MILL/Longaker	Test	WW-PFRK	-	-
1981-576	2444669.20	1981 Mar 5 1648	Sergeant Hydac	-	-	0.000	AFBMD	SS	MILL/Longaker	Test	WW-PFRK	-	-
1981-582	2444675.69	1981 Mar 12 0430	Sergeant Hydac	-	-	0.000	AFBMD	SS	MILL/Longaker	Test	WW-PFRK	-	-
1981-5117	2444767.50	1981 Jun 12	DUT	-	-	0.000	AFCL2	MS	-	Interceptor	JCR	-	-
1981-5167	2444916.00	1981 Nov 7 1203:40	Sergeant	-	GL A30.175	0.000	AFCL2	MS	AFCL2/Wheeler	Auroral	WDFH	-	-
1982-5251	2445185.50	1982 Aug 4	Castor	2R	-	0.000	ABHDD	MS	-	Auroral	JCR	-	-
1983-569	2445437.88	1983 Apr 13 0906:23	Sergeant	-	GL A30.276	0.000	AFCL2	MS	AFCL2/OUT/Cook	Interceptor	WDFH	-	-
1985-590	2446233.68	1985 Jun 17 0415	Castor Lance	-	GL A44.362	0.000	AFCL2	SF	AFCL2/Price	Auroral	DARSS2	-	-
1985-518	2446155.50	1985 Apr	Strypi XI	?	SWEARVE III	0.000	SAMD	SS	SAMD/	Reentry Test	WDFH	-	-
1987-5203	2446885.50	1987 Apr?	Strypi XI	-	-	0.000	SDIO/SAMD	SS	SDIO/	Reentry Test?	Misc77H-104313	-	-
1988-561	2447200.50	1988 Jan 9	Strypi XI	-	-	0.000	SDIO/SAMD	SS	SDIO/	Reentry Test?	SAND2000-3070	-	-
1988-5115	2447526.50	1988 Jan 16 1418:35	Strypi XI	?	LACE	0.000	SDIO/SAMD	SS	SDIO/	Reentry Test?	DDE/EA-0492	-	-
1991-572	2448306.10	1991 Feb 16 1418:35	Strypi XI	-	-	0.000	SDIO/SAMD	SS	SDIO/	Reentry Test	MFL-FR-8121	-	JThermIT7,704
1992-512	2448538.50	1992 Jan 17	Storm	-	S1	0.000	SDIC	MS	-	Test	Powell	-	-
1992-551	2448769.50	1992 Jun 16	Storm	-	S2	0.000	SDIC	MS	-	Test	Powell	-	-
1993-511	2449024.18	1993 Feb 5 1624	Storm	-	S3	0.000	SDIC	MS	-	Test	ww.smdc.army.mil	-	-
1993-564	2449268.50	1993 Oct 8	Storm	-	-	0.000	SDIC	MS	-	Target	ww.smdc.army.mil	-	-
1993-566	2449286.50	1993 Oct 26	Storm	-	-	0.000	SDIC	MS	-	Target	ww.smdc.army.mil	-	-
1993-575	2449321.50	1993 Nov 30	Storm	-	-	0.000	SDIC	MS	-	Target	Powell	-	-
1993-576	2449336.50	1993 Dec 17	Storm	-	-	0.000	SDIC	MS	-	Target	ww.smdc.army.mil	-	-
1994-516	2449399.18	1994 Feb 15 1618	Storm	-	-	0.000	SDIC	MS	-	Target	ww.smdc.army.mil	-	-
1994-546	2449541.50	1994 Jul 8	Storm	-	-	0.000	SDIC	MS	-	Target	USC-PA	-	-
1994-563	2449572.50	1994 Aug 6	Sergeant	-	-	0.000	OSCC/BHDD	SS	BHDD/	Target	ASIP/ProgRev	-	SIN940725
1994-566	2449585.52	1994 Aug 19 0023	Sergeant	-	-	0.000	OSCC/BHDD	SS	USN/	Target	SH941112-13	-	-
1995-511	2449785.50	1995 Feb 7	Sergeant	-	S9	0.000	SDIC	MS	BHDD/	Target	SH941112-13	-	-
1995-548	2449894.50	1995 Jun 26	Storm	-	-	0.000	SDIC	MS	-	Target	ww.smdc.army.mil	-	-
1995-546	2449897.50	1995 Jun 29	Strypi IX	-	-	0.000	SDIC	SF	SDIC/	Target	ww.smdc.army.mil	-	-
1995-564	2449946.50	1995 Jun 29	Storm	-	-	0.000	SDIC	MS	-	Target	ww.smdc.army.mil	-	-
1995-564	2450004.11	1995 Aug 16	Storm	-	S10?	0.000	SDIC	MS	-	Target	SH950528-8	-	-
1995-586	2450065.00	1995 Oct 13 1440	Storm	-	S11	0.000	SDIC	MS	-	Target	Wire	-	Powell
1997-511	2450463.77	1997 Feb 10 0630	Strypi XIIIR	-	RBIEFF 1	0.000	SAMD	SS	SAMD/	Test	LasVegasSun	-	Feb 9?
1997-511	2450726.27	1997 Oct 4 1830	Strypi XIIIR	-	RBIEFF 2	0.000	SAMD	SF	SAMD/	Test	LasVegasSun	-	-



Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Mission	FlightCode	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee km	Range km	Dest
1953-A305	2434582.50	1953 Jul 24	HPAG Deacon	-	-	-	-	-	-	WI	-	-	-	107	-	-
1954-A38	2434771.50	1954 Jan 29	Double HPAG Deacon	-	-	F-102 Model	-	-	-	WI	-	-	-	107	-	-
1963-M64	2438383.50	1963 Dec 20	Seagull	-	-	F-102 Model	-	-	-	PA	LC-A	-	-	507	-	-
1964-Y01	2438394.50	1964	Sidevinder-Raven	-	-	-	-	-	-	WS	-	-	-	113	-	-
1964-Y02	2438394.50	1964	Sidevinder-Raven	-	-	-	-	-	-	WS	-	-	-	113	-	-
1964-5777	2438729.50	1964 Dec	Sidevinder-Arcas	-	-	Test 1 (of 10)	-	-	-	PH	-	-	-	1007	-	-
1965-A227	2438890.50	1965 May 10?	Sidevinder-Arcas	-	-	-	Boosted Hooster	-	-	SMI	-	-	-	107	-	-
1965-A228	2438890.50	1965 May 10?	Sidevinder-Arcas	-	-	-	Boosted Hooster	-	-	SMI	-	-	-	107	-	-
1965-A229	2438890.50	1965 May 10?	Sidevinder-Arcas	-	-	-	Boosted Hooster	-	-	SMI	-	-	-	107	-	-
1966-M16	2439217.08	1966 Apr 1 1357	Sidevinder-Arcas	-	-	-	-	-	-	FC	-	-	-	103	-	-
1966-M66	2439397.26	1966 Sep 28 1812	Sidevinder-Arcas	-	-	-	-	-	-	AND	-	-	-	17	-	-
1967-A107	2439722.53	1967 Aug 20 0040:33	Sidevinder-Arcas	-	-	MSA 15-2111	-	-	-	AND	-	-	-	84	-	-
1967-5395	2439728.49	1967 Aug 25 2343:00	Sidevinder-Arcas	-	-	MSA 15-2211	-	-	-	AND	-	-	-	86	-	-
1967-5480	2439772.69	1967 Oct 9 0436:00	Sidevinder-Arcas	-	-	MSA 15-2311	-	-	-	AND	-	-	-	87	-	-
1967-5491	2439776.70	1967 Oct 13 0447:00	Sidevinder-Arcas	-	-	MSA 15-2411	-	-	-	AND	-	-	-	807	-	-
1968-M26	2440161.71	1968 Nov 1 0459:00	Sidevinder-Arcas	-	-	-	-	-	-	AND	-	-	-	86	-	-
1968-S150	2440278.06	1968 Feb 25 1321:00	Sidevinder-Arcas	-	-	-	-	-	-	AND	-	-	-	88	-	-
1968-M06	2440278.40	1968 Feb 25 2137:10	Sidevinder-Arcas	-	-	-	-	-	-	AND	-	-	-	122	-	-
1968-5701	2440295.30	1968 Mar 14 1905	Sidevinder-Arcas	-	-	Recovery test	-	-	-	WI	-	-	-	51	-	-
1968-M08	2440324.82	1968 Apr 13 0743:13	Sidevinder-Arcas	-	-	ESRO M40/6	-	-	-	AND	-	-	-	66	-	-
1968-M09	2440324.90	1968 Apr 13 0940:40	Sidevinder-Arcas	-	-	ESRO M40/4	-	-	-	AND	-	-	-	56	-	-
1968-M10	2440326.17	1968 Apr 14 1611:00	Sidevinder-Arcas	-	-	ESRO M40/5	-	-	-	AND	-	-	-	58	-	-
1968-M11	2440326.29	1968 Apr 14 1900:04	Sidevinder-Arcas	-	-	ESRO M40/1	-	-	-	AND	-	-	-	97	-	-
1968-5345	2440368.62	1968 May 27 0246	Sidevinder-Arcas	-	-	ORL A30-900-1	-	-	-	FC	-	-	-	96	-	-
1968-5691	2440528.36	1968 Nov 2 2111	Sidevinder-Arcas	-	-	ORL A30-900-2	-	-	-	FC	-	-	-	99	-	-
1968-5612	2440530.42	1968 Nov 4 2206	Sidevinder-Arcas	-	-	ORL A30-900-3	-	-	-	FC	-	-	-	99	-	-
1975-5293	2442687.50	1975 Oct 2	Sidevinder-Arcas	-	-	MSAC 2L 7503	-	-	-	WS	-	-	-	90	-	-



Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	OrbPay	Agency	Launch_Code	Group	Category	LTCite	Cite	Notes
1953-A305	2434652.50	1953 Jul 24	HPAG Deacon	-	-	0.000	PARD	AS	WFF/	Test	RF-1028	-	-
1954-A38	2434771.50	1954 Jan 29	Double HPAG Deacon	-	-	0.000	PARD	AS	WFF/	Test	RF-1028	-	-
1963-H54	2435883.50	1963 Dec 20	Seagull	-	-	0.000	MITS?	SU	USM/	Aeron?	VAFB	MR631028-16	-
1964-101	2435994.50	1964	Slideinnder-Raven	-	-	0.000	ERDL	SS	ERDL/	Test	Morrow	-	-
1964-102	2435994.50	1964	Slideinnder-Raven	-	-	0.000	ERDL	SS	ERDL/	Test	Morrow	-	-
1964-3777	2438729.50	1964 Dec	Slideinnder-Arcas	-	-	0.000	MMC	SS	MMC/	Test	MR641221-21	Morrow	-
1965-A227	2438890.50	1965 May 10?	Slideinnder-Arcas	-	-	0.000	AFCL	SF	AFCL/	Test	PRRHist65	-	-
1965-A228	2438890.50	1965 May 10?	Slideinnder-Arcas	-	-	0.000	AFCL	SF	AFCL/	Test	PRRHist65	-	-
1965-A229	2438890.50	1965 May 10?	Slideinnder-Arcas	-	-	0.000	AFCL	SF	AFCL/	Test	PRRHist65	-	-
1966-H16	2439217.08	1966 Apr 1 1357	Slideinnder-Arcas	-	-	0.000	AFCL	SF	AFCL/	Test	PRRHist65	-	-
1966-H36	2439397.26	1966 Sep 28 1812	Slideinnder-Arcas	-	-	0.000	AFCL	SS	AFCL/Saudeck	Aeron	FC	WDCRF	-
1967-A107	2439722.53	1967 Aug 20 0040:33	Slideinnder-Arcas	-	-	0.000	MSM/NTIF	SS	NDRE/HoIt, Landmark	Ionos	FC	WDCRF	-
1967-3396	2439728.49	1967 Aug 25 2343:00	Slideinnder-Arcas	-	MSA 15.21II	0.000	MSM/NTIF	SS	NDRE/HoIt, Landmark	Ionos	AND	SP-4401	-
1967-3680	2439772.69	1967 Oct 9 0436:00	Slideinnder-Arcas	-	MSA 15.22II	0.000	MSM/NTIF	SS	BERG/NDRE/Arshes	Ionos	AND	SP-4401	-
1967-3691	2439776.70	1967 Oct 13 0447:00	Slideinnder-Arcas	-	MSA 15.23II	0.000	MSM/NTIF	SS	BERG/NDRE/Arshes	Ionos	AND	SP-4401	-
1968-H26	2440161.71	1968 Nov 1 0459:00	Slideinnder-Arcas	-	MSA 15.24II	0.000	MSM/NTIF	SF	UCL/DSRI/Wrem, Peters	Ionos/Plasma	WDCRF	AND	-
1969-S150	2440278.06	1969 Feb 25 1321:00	Slideinnder-Arcas	-	-	0.000	ESRO	SS	UCL/DSRI/Wrem, Peters	Ionos/Plasma/Field	ESRO-SP80	SK10, 831	-
1969-H06	2440278.40	1969 Feb 25 2137:10	Slideinnder-Arcas	-	-	0.000	ESRO	SS	UCL/DSRI/Wrem, Peters	Ionos/Plasma/Field	ESRO-SP80	SK10, 831	-
1969-S701	2440295.30	1969 Mar 14 1905	Slideinnder-Arcas	-	-	0.000	WFF	SS	WFF/Hanning	Test	WI-PR69-7	SP-4014	-
1969-H08	2440324.82	1969 Apr 13 0743:13	Slideinnder-Arcas	-	-	0.000	ESRO	SS	UCL/DSRI/Wrem, Peters	Ionos/Plasma/Field	ESRO-SP80	WDCRF/ESR069	-
1969-H09	2440324.90	1969 Apr 13 0940:40	Slideinnder-Arcas	-	-	0.000	ESRO	SS	UCL/DSRI/Wrem, Peters	Ionos/Plasma/Field	ESRO-SP80	WDCRF/Massey	-
1969-H10	2440326.17	1969 Apr 14 1611:00	Slideinnder-Arcas	-	-	0.000	ESRO	SS	UCL/DSRI/Wrem, Peters	Ionos/Plasma/Field	ESRO-SP80	WDCRF/ESR069	-
1969-H11	2440326.29	1969 Apr 14 1900:04	Slideinnder-Arcas	-	-	0.000	ESRO	SS	UCL/DSRI/Wrem, Peters	Ionos/Plasma/Field	ESRO-SP80	WDCRF/ESR069	-
1969-5346	2440368.62	1969 May 27 0246	Slideinnder-Arcas	-	CRL A30, 900-1	0.000	AFCL	SS	AFCL/Weeks	Aeron	WDCRF	WDCRF	-
1969-5691	2440528.38	1969 Nov 2 2111	Slideinnder-Arcas	-	CRL A30, 900-2	0.000	AFCL	SS	AFCL/Weeks	Aeron	FC	WDCRF	-
1969-5612	2440530.42	1969 Nov 4 2206	Slideinnder-Arcas	-	CRL A30, 900-3	0.000	AFCL	SS	AFCL/Weeks	Aeron	FC	WDCRF	-
1975-5293	2442687.50	1975 Oct 2	Slideinnder-Arcas	-	MSAC 2L 7503	0.000	DFVLR	SS	HPAB/Widde1	Ionos	ESR-SP291-80	-	-





Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Launch				Ascent_Pad	Apogee km	Range km	Dest
							Mission	FlightCode	Platform	Launch_Site				
1964-A105	2438551.50	1964 Jul 15	Sirecco	-	LM-4	-	-	WS	-	-	9	-	-	
1964-A116	2438607.50	1964 Jul 31	Sirecco	-	LM-5	-	-	WS	-	-	5	-	-	
1964-A118	2438613.50	1964 Aug 6	Sirecco	-	LM-6	-	-	WS	-	-	1	-	-	
1964-A134	2438654.50	1964 Sep 16	Sirecco	-	LM-10	-	-	WS	-	-	2	-	-	
1964-W76	2438666.50	1964 Sep 28	Sirecco	-	LM-9	-	-	WS	-	-	59	-	-	
1964-W89	2438676.50	1964 Oct 8	Sirecco	-	LM-13	-	-	WS	-	-	54	-	-	
1964-A150	2438677.50	1964 Oct 9	Sirecco	-	LM-14	-	-	WS	-	-	23	-	-	
1964-A169	2438703.50	1964 Nov 4	Sirecco	-	LM-12	-	-	WS	-	-	1	-	-	
1964-W118	2438733.50	1964 Dec 4	Sirecco	-	LM-19	-	-	WS	-	-	56	-	-	
1964-W126	2438745.50	1964 Dec 16	Sirecco	-	LM-21	-	-	WS	-	-	67	-	-	
1964-W127	2438746.50	1964 Dec 17	Sirecco	-	LM-22	-	-	WS	-	-	60	-	-	
1965-W09	2438779.50	1965 Jan 19	Sirecco	-	LM-27	-	-	WS	-	-	74	-	-	
1965-A11	2438781.50	1965 Jan 21	Sirecco	-	LM-20	-	-	WS	-	-	2	-	-	
1965-W52	2438850.50	1965 Mar 31	Sirecco	-	EX-1.8	-	-	EGL	-	-	70	-	-	
1965-A98	2438954.50	1965 Jul 13	Sirecco	-	EX-1.8	-	-	EGL	-	-	1	-	-	
1965-A111	2438967.50	1965 Jul 26	Sirecco	-	EX-1.8	-	-	EGL	-	-	1	-	-	
1965-W153	2439061.50	1965 Oct 26	Sirecco	-	EX-1.8	-	-	WS	-	-	70	-	-	
1966-W33	2439188.39	1966 Feb 1 2115	Sirecco	-	-	-	-	WS	-	-	607	-	-	
1966-W48	2439180.17	1966 Feb 3 1600	Sirecco	-	-	-	-	WS	-	-	607	-	-	



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Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	OrbPay	Agency	Launch_Code	Group	Category	LTCite	Cite	Notes
1964-A105	2438591.50	1964 Jul 15	Sirocco	-	LM-4	0.000	DASA	SF	DASA/	Test	Morrow	-	-
1964-A116	2438607.50	1964 Jul 31	Sirocco	-	LM-5	0.000	DASA	SF	DASA/	Test	Morrow	-	-
1964-A118	2438613.50	1964 Aug 6	Sirocco	-	LM-6	0.000	DASA	SF	DASA/	Test	Morrow	-	-
1964-A134	2438654.50	1964 Sep 16	Sirocco	-	LM-10	0.000	DASA	SF	DASA/	Test	Morrow	-	-
1964-W76	2438666.50	1964 Sep 28	Sirocco	-	LM-9	0.000	DASA	SS	DASA/	Test	Morrow	-	-
1964-W89	2438676.50	1964 Oct 8	Sirocco	-	LM-13	0.000	DASA	SS	DASA/	Test	Morrow	-	-
1964-A150	2438677.50	1964 Oct 9	Sirocco	-	LM-14	0.000	DASA	SF	DASA/	Test	Morrow	-	-
1964-A169	2438703.50	1964 Nov 4	Sirocco	-	LM-12	0.000	DASA	SF	DASA/	Test	Morrow	-	-
1964-W118	2438733.50	1964 Dec 4	Sirocco	-	LM-19	0.000	DASA	SS	DASA/	Test	Morrow	-	-
1964-W126	2438746.50	1964 Dec 16	Sirocco	-	LM-21	0.000	DASA	SS	DASA/PSU/	Test/Ionos	EDPE	Morrow	-
1965-W09	2438779.50	1964 Dec 17	Sirocco	-	LM-22	0.000	DASA	SS	DASA/	Test	Morrow	-	-
1965-A11	2438791.50	1965 Jan 19	Sirocco	-	LM-20	0.000	DASA	SS	DASA/	Test	Morrow	-	-
1965-W52	2438850.50	1965 Jan 21	Sirocco	-	LM-27	0.000	DASA	SF	DASA/	Test	Morrow	-	-
1965-A98	2438954.50	1965 Mar 31	Sirocco	-	EX-1.8	0.000	DASA	SS	DASA/	Aeron	Morrow	-	-
1965-A111	2438967.50	1965 Jul 13	Sirocco	-	EX-1.8	0.000	DASA	SF	DASA/	Aeron	Morrow	-	-
1965-W153	2439061.50	1965 Jul 26	Sirocco	-	EX-1.8	0.000	DASA	SS	DASA/	Aeron	Morrow	-	-
1965-W33	2439158.39	1966 Feb 1 2115	Sirocco	-	-	0.000	PRN	SS	DASA/	Aeron	MRN54	-	-
1966-W48	2439160.17	1966 Feb 3 1600	Sirocco	-	-	0.000	PRN	SS	DASA/	Aeron	MRN54	-	-



Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Launch_Mission	FlightCode	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee_Km	Range_Km	Dest
1962-W01	2437664.50	1962	Skua			Test				SUIST				70?		
1964-W133	2438407.17	1964 Jan 12 1600	Skua			Wind_Temp				SUIST				50		
1964-W134	2438410.29	1964 Jan 15 1900	Skua			Wind_Temp				SUIST				57		
1964-W135	2438412.33	1964 Jan 17 2000	Skua			Wind_Temp				SUIST				65		
1964-A191	2438418.46	1964 Jan 23 2300	Skua			Wind_Temp				SUIST				40		
1964-W157	2438661.96	1964 Sep 23 1102	Skua	M27		NO Sonde				ABER				75		
1964-W158	2438668.98	1964 Sep 30 1129	Skua	M28		MO Sonde				SK				73		
1966-W76	2439165.33	1966 Feb 08 2000:00	Skua							SUIST				62		
1966-W99	2439167.33	1966 Feb 10 2000:00	Skua							SUIST				62		
1966-W113	2439169.33	1966 Feb 12 2000:00	Skua							SUIST				62		
1966-W121	2439171.33	1966 Feb 14 2000:00	Skua							SUIST				64		
1966-W150	2439175.33	1966 Feb 18 2000:00	Skua							SUIST				64		
1966-W164	2439178.42	1966 Feb 21 2000:00	Skua							SUIST				65		
1966-W178	2439180.33	1966 Feb 23 2000:00	Skua							SUIST				57		
1966-W198	2439183.33	1966 Feb 26 2000:00	Skua							SUIST				65		
1966-W215	2439185.33	1966 Feb 28 2000:00	Skua							SUIST				65		
1966-W218	2439187.33	1966 Mar 02 2000:00	Skua							SUIST				65		
1966-W219	2439189.33	1966 Mar 04 2000:00	Skua							SUIST				64		
1966-W220	2439192.33	1966 Mar 07 2000:00	Skua							SUIST				64		
1966-W222	2439192.33	1966 Mar 09 2000:00	Skua							SUIST				69		
1966-W254	2439194.33	1966 Apr 18 2153:00	Skua							SUIST				89		
1966-W256	2439234.41	1966 Apr 21 2203:00	Skua							SUIST				88		
1966-W258	2439237.42	1966 Jun 03 0948:00	Skua	SA-1						SUIST				70		
1966-W338	2439279.57	1966 Jun 03 0948:00	Skua							SUIST				59		
1966-W44	2439396.36	1966 Sep 27 2037:00	Skua			Carabela 4				ELAR				81		
1966-W124	2439413.96	1966 Oct 15 1056	Skua	LITA S-6601						ELAR				0		
1966-W465	2439417.96	1966 Oct 19 1105	Skua	LITA S-6602						ELAR				75?		
1966-W464	2439445.95	1966 Nov 16 1055	Skua	LITA S-6603						ELAR				75?		
1967-W147	2439459.96	1966 Nov 30 1102	Skua	LITA S-6604						ELAR				73		
1967-W41	2439653.51	1967 Jul 12 0011:00	Skua	SUJH		D-rigion				SUIST				81		
1968-W56	2439653.96	1967 Feb 7 1106	Skua	LITA S-6601						SUIST				88		
1968-W133	2439692.16	1968 Feb 15 1546:00	Skua 2	LITA S-6601						ELAR				100?		
1968-W134	2439692.96	1968 Feb 16 1058:00	Skua 2	LITA S-6602						ELAR				84		
1968-W136	2439694.00	1968 Feb 17 1194:00	Skua 2	LITA S-6603						ELAR				81		
1968-W59	2439821.96	1968 Mar 6 1134	Skua	LITA S-6602						ELAR				75?		
1968-W104	2439823.44	1968 Mar 6 2236	Skua 2	AND-52-5		02 profile				FC				88		
1968-W121	2439845.09	1968 Mar 29 1353	Skua	SUBH						SUIST				88		
1968-W276	2439869.97	1968 Apr 23 1118:00	Skua 2	LITA S-6604						ELAR				100?		
1968-W278	2439970.94	1968 Apr 24 1029:00	Skua 2	LITA S-6605						ELAR				84		
1968-W279	2439971.05	1968 Apr 24 1237:00	Skua 2	LITA S-6606						ELAR				81		
1968-W284	2439976.42	1968 Apr 29 2204	Skua 2	AND-52-5		OH profile				FC				109		
1968-W69	2439976.56	1968 Apr 30 0200	Skua 2	AND-52-7						FC				72		
1968-W109	2439976.52	1968 Apr 30 1059	Skua 2	AND-52-6						FC				59		
1968-W31	2440029.02	1968 Jun 21 1528:00	Skua	SUJH						SUIST				81		
1968-W137	2440030.14	1968 Jun 22 1516:00	Skua	SUJH						SUIST				90?		
1968-W40	2440040.07	1968 Jul 1 1345	Skua	SUJH						SUIST				100		
1968-W46	2440076.02	1968 Jul 8 1315	Skua	SUJH						SUIST				04		
1968-W152	2440083.65	1968 Aug 15 0223	Skua	S101		Met				SUIST				65		
1968-W20	2440084.01	1968 Sep 4 0123	Skua	S102		Met				SUIST				65		
1968-W30	2440117.98	1968 Sep 18 1113	Skua	S103		Met				SUIST				64		
1968-W31	2440130.51	1968 Sep 18 1113	Skua	S104		Met				SUIST				67		
1968-W32	2440168.97	1968 Oct 06 1122:00	Skua 2	LITA S-6607						ELAR				92		
1968-W33	2440168.40	1968 Nov 7 2136:00	Skua 2	LITA S-6608						ELAR				92		
1968-W574	2440168.96	1968 Nov 08 1106:00	Skua 2	LITA S-6609						ELAR				90?		
1968-W93	2440169.00	1968 Nov 08 1200:00	Skua 2	Sx10H						SUIST				94		
1968-W578	2440172.97	1968 Nov 12 1120:00	Skua 2	LITA S-6610						ELAR				90		
1968-W580	2440173.99	1968 Nov 13 1146:00	Skua 2	LITA S-6611						ELAR				90		
1968-W585	2440176.00	1968 Nov 15 1158:00	Skua 2	Sx11H						SUIST				95		
1968-W95	2440176.99	1968 Nov 16 1149	Skua 2	LITA S-6612						ELAR				92		
1968-W597	2440179.95	1968 Nov 19 1051:00	Skua 2	LITA S-6613						SUIST				61		
1968-W41	2440180.00	1968 Nov 19 1203	Skua 2	LITA S-6614						ELAR				100?		
1968-W599	2440181.11	1968 Nov 20 1445:00	Skua 2	LITA S-6615						ELAR				66		
1968-W42	2440181.21	1968 Nov 20 1703	Skua 2	LITA S-6616						ELAR				99		
1968-W606	2440182.95	1968 Nov 22 1043:00	Skua 2	Sx7H						SUIST				94		
1968-W606	2440183.04	1968 Nov 22 1256	Skua 2	LITA S-6617						ELAR				86		
1968-W610	2440185.96	1968 Nov 25 1101:00	Skua 2	LITA S-6618						ELAR				94		
1968-W613	2440188.13	1968 Nov 27 1502:00	Skua 2	LITA S-6619						ELAR				87		
1968-W615	2440189.97	1968 Nov 29 1121:00	Skua 2	LITA S-6620						SUIST				62		
1968-W43	2440193.43	1968 Dec 2 2223	Skua	S108		Met				ELAR				111		
1968-W99	2440195.98	1968 Dec 5 1136	Skua	Sx75H						SUIST				92		
1968-W100	2440196.08	1968 Dec 5 1348	Skua	Sx12H						SUIST				54		
1969-W21	2440227.20	1969 Jan 5 1641:59	Skua							SUIST				54		
1969-W31	2440229.28	1969 Jan 7 1948:59	Skua							SUIST				60		
1969-W38	2440230.27	1969 Jan 8 1833:00	Skua							SUIST				53		
1969-W47	2440232.25	1969 Jan 10 1755:00	Skua							SUIST				61		
1969-W62	2440235.25	1969 Jan 13 1801:59	Skua							SUIST				56		
1969-W78	2440237.28	1969 Jan 15 1847:59	Skua							SUIST				64		
1969-W100	2440240.24	1969 Jan 18 1748:00	Skua							SUIST				39		
1969-W35	2440249.29	1969 Jan 27 1857:59	Skua							SUIST				65		
1969-W12	2440328.11	1969 Apr 16 1445:00	Skua							GAN				52		
1969-W13	2440330.11	1969 Apr 18 1437:00	Skua							GAN				62		
1969-W15	2440333.11	1969 Apr 21 1437:59	Skua							GAN				66		
1969-W16	2440335.10	1969 Apr 23 1423:00	Skua							GAN				64		
1969-W17	2440336.09	1969 Apr 24 1415:00	Skua							GAN				63		
1969-W18	2440339.33	1969 Apr 27 1953:59	Skua							GAN				63		

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Launch_Mission	FlightCode	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee_Km	Range_Km	Dest
1969-M19	2440341.08	1969 Apr 29 14:00:00	Skua							GAN				62		
1969-M20	2440343.35	1969 May 1 20:27:59	Skua							GAN				64		
1969-M21	2440345.08	1969 May 3 13:52:00	Skua							GAN				60		
1969-M22	2440346.33	1969 May 3 19:56:59	Skua							GAN				59		
1969-M30	2440488.11	1969 Sep 23 14:40:00	Skua							GAN				62		
1969-M163	2440491.13	1969 Sep 26 15:10:00	Skua							GAN				31		
1969-M1591	2440552.30	1969 Nov 26 19:09:59	Skua							SUIT				50		
1969-M1599	2440555.24	1969 Nov 29 17:43:00	Skua							SUIT				60		
1969-M1609	2440558.27	1969 Dec 2 18:30:00	Skua							SUIT				60		
1969-M1622	2440560.26	1969 Dec 4 18:17:00	Skua							SUIT				54		
1969-M1637	2440564.25	1969 Dec 8 17:54:00	Skua							SUIT				60		
1969-M663	2440565.00	1969 Dec 9 12:03	Skua 3							ELAR				90?		
1969-M664	2440566.12	1969 Dec 9 14:49	Skua 3							ELAR				96		
1969-M665	2440566.00	1969 Dec 10 11:54	Skua 3							ELAR				90		
1969-M666	2440566.00	1969 Dec 10 12:02	Skua 3							ELAR				99		
1969-M1654	2440567.25	1969 Dec 11 18:00:00	Skua 2							SUIT				61		
1969-M667	2440567.99	1969 Dec 12 11:50:00	Skua 2							ELAR				100?		
1969-M1658	2440568.01	1969 Dec 12 12:12:00	Skua 2							ELAR				100?		
1969-M670	2440568.04	1969 Dec 12 13:04	Skua 2							SUIT				79		
1969-M671	2440569.00	1969 Dec 13 12:00:00	Skua 2							ELAR				100?		
1969-M672	2440571.00	1969 Dec 15 12:00:00	Skua 2							ELAR				86		
1969-M679	2440572.00	1969 Dec 16 11:56:00	Skua 2							ELAR				96		
1969-M291	2440572.11	1969 Dec 16 14:43	Skua 2							SUIT				89		
1969-M681	2440572.99	1969 Dec 17 11:50:00	Skua 2							ELAR				36		
1969-M208	2440573.25	1969 Dec 17 17:53:00	Skua							SUIT				88		
1969-M685	2440574.06	1969 Dec 18 11:58:00	Skua 2							ELAR				95		
1969-M686	2440574.06	1969 Dec 18 13:28:00	Skua 2							ELAR				95		
1969-M1704	2440575.23	1969 Dec 19 17:35:00	Skua							SUIT				62		
1969-M1716	2440579.22	1969 Dec 23 17:20:00	Skua							SUIT				61		
1969-M1727	2440583.23	1969 Dec 27 17:36:00	Skua							SUIT				55		
1969-M1730	2440585.28	1969 Dec 29 18:46:59	Skua							SUIT				61		
1969-M1734	2440586.24	1969 Dec 30 17:46:00	Skua							SUIT				63		
1970-M54	2440592.10	1970 Jan 05 14:23:00	Skua							ESR				77		
1970-M50	2440594.10	1970 Jan 07 14:26:18	Skua							ESR				75		
1970-M59	2440596.10	1970 Jan 9 14:17	Skua							SUIT				62		
1970-M65	2440596.11	1970 Jan 09 14:44:00	Skua							ESR				74		
1970-M75	2440599.11	1970 Jan 12 14:39:00	Skua							ESR				68		
1970-M54	2440598.98	1970 Jan 12 11:53:00	Skua 2							ELAR				88		
1970-M14	2440599.08	1970 Jan 12 13:53:00	Skua							SUIT				85		
1970-M16	2440601.11	1970 Jan 14 14:40:00	Skua 2							ESR				79		
1970-M72	2440603.00	1970 Jan 16 12:00:00	Skua							ELAR				97		
1970-M413	2440604.12	1970 Jan 17 14:46:00	Skua							ESR				72		
1970-M76	2440605.99	1970 Jan 17 11:46:00	Skua 2							ELAR				89		
1970-M74	2440606.59	1970 Jan 19 15:46:00	Skua							ELAR				59		
1970-M114	2440606.98	1970 Jan 19 15:01:00	Skua							ESR				67		
1970-M115	2440606.13	1970 Jan 21 15:16:00	Skua 2							ELAR				100?		
1970-M121	2440606.08	1970 Jan 21 15:35:00	Skua 2							ESR				71		
1970-M131	2440607.99	1970 Jan 23 15:06:00	Skua							ESR				73		
1970-M166	2440610.13	1970 Jan 23 15:06:00	Skua							ESR				75		
1970-M167	2440613.14	1970 Jan 26 15:18:00	Skua							ESR				78		
1970-M178	2440615.14	1970 Jan 26 15:27:00	Skua							ESR				78		
1970-M191	2440634.01	1970 Feb 16 12:13:00	Skua 2							ELAR				94		
1970-M192	2440635.00	1970 Feb 17 12:03:00	Skua 2							ELAR				94		
1970-M193	2440635.90	1970 Feb 18 09:35	Skua 2							TERLS				92		
1970-M196	2440636.00	1970 Feb 18 11:53:00	Skua 2							ELAR				95		
1970-M197	2440637.00	1970 Feb 19 12:00:00	Skua 2							ELAR				95		
1970-M198	2440638.00	1970 Feb 20 12:00:00	Skua 2							ELAR				96		
1970-M199	2440639.00	1970 Feb 21 12:00:00	Skua 2							ELAR				94		
1970-M194	2440641.00	1970 Feb 23 12:07:00	Skua 2							ELAR				90		
1970-M197	2440641.50	1970 Feb 24 00:00:00	Skua 2							ELAR				100?		
1970-M198	2440641.51	1970 Feb 24 00:16:00	Skua 2							ELAR				100?		
1970-M199	2440641.67	1970 Feb 24 04:01:00	Skua 2							ELAR				100		
1970-M141	2440641.83	1970 Feb 24 08:00:00	Skua 2							ELAR				100		
1970-M142	2440642.00	1970 Feb 24 12:00:00	Skua 2							ELAR				97		
1970-M144	2440642.33	1970 Feb 24 20:00:00	Skua 2							ELAR				102		
1970-M146	2440642.50	1970 Feb 25 00:00:00	Skua 2							Chaff				102		
1970-M148	2440642.67	1970 Feb 25 04:00:00	Skua 2							ELAR				98		
1970-M149	2440642.83	1970 Feb 25 08:00:00	Skua 2							ELAR				98		
1970-M150	2440642.85	1970 Feb 25 08:00:00	Skua 2							ELAR				100?		
1970-M151	2440643.00	1970 Feb 25 12:01:00	Skua 2							ELAR				95		
1970-M152	2440643.17	1970 Feb 25 16:00:00	Skua 2							ELAR				96		
1970-M154	2440643.33	1970 Feb 25 20:00:00	Skua 2							ELAR				101		
1970-M155	2440643.50	1970 Feb 26 00:00:00	Skua 2							ELAR				100?		
1970-M156	2440643.51	1970 Feb 26 00:11:00	Skua 2							ELAR				95		
1970-M157	2440643.67	1970 Feb 26 04:00:00	Skua 2							ELAR				100		
1970-M159	2440643.83	1970 Feb 26 08:00:00	Skua 2							ELAR				96		
1970-M162	2440644.33	1970 Feb 26 20:00:00	Skua 2							ELAR				100		
1970-M163	2440644.50	1970 Feb 27 00:00:00	Skua 2							ELAR				103		
1970-M164	2440644.67	1970 Feb 27 04:00:00	Skua 2							ELAR				96		
1970-M165	2440644.83	1970 Feb 27 08:00:00	Skua 2							ELAR				94		
1970-M166	2440645.00	1970 Feb 27 12:00:00	Skua 2							ELAR				97		
1970-M167	2440645.17	1970 Feb 27 16:00:00	Skua 2							ELAR				95		
1970-M168	2440645.34	1970 Feb 27 20:10:00	Skua 2							ELAR				100?		
1970-M169	2440645.37	1970 Feb 27 20:55:00	Skua 2							ELAR				104		
1970-M173	2440645.50	1970 Feb 28 00:00:00	Skua 2							ELAR				103		

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Launch_Mission	FlightCode	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee_Km	Range_Km	Dest
1970-5175	2440645.67	1970 Feb 28 0400:00	Skua 2	-	INTA SN-7031	-	-	-	-	ELAR	-	-	-	96	-	-
1970-5176	2440645.63	1970 Feb 28 0800:00	Skua 2	-	INTA SN-7032	-	Tidal Mesosphere	-	-	ELAR	-	-	-	99	-	-
1970-5177	2440646.00	1970 Feb 28 1200:00	Skua 2	-	INTA MP-7014	-	-	-	-	ELAR	-	-	-	99	-	-
1970-5178	2440646.53	1970 Mar 4 0045:59	Skua 2	-	INTA MP-7015	-	-	-	-	ELAR	-	-	-	96	-	-
1970-5191	2440651.01	1970 Mar 05 1213:00	Skua 2	-	INTA MP-7015	-	Horiz Sep. Chaff	-	-	ELAR	-	-	-	91	-	-
1970-5192	2440651.01	1970 Mar 05 1217:00	Skua 2	-	INTA MP-7016	-	Horiz Sep. Chaff	-	-	ELAR	-	-	-	94	-	-
1970-5193	2440652.07	1970 Mar 6 1345	Skua 2	-	ISRO 16.02	-	TERLS-154	-	-	TERLS	-	-	-	61	-	-
1970-5194	2440654.07	1970 Mar 08 1346:00	Skua 2	-	ISRO 16.03	-	TERLS-155	-	-	TERLS	-	-	-	58	-	-
1970-5195	2440654.09	1970 Mar 10 1415:00	Skua 2	-	ISRO-16.004	-	TERLS-159	-	-	TERLS	-	-	-	60	-	-
1970-5196	2440656.11	1970 Mar 10 1438	Skua 2	-	ISRO-16.005	-	TERLS-160	-	-	TERLS	-	-	-	50?	-	-
1970-5197	2440658.07	1970 Mar 12 1400	Skua 2	-	-	-	-	-	-	TERLS	-	-	-	66	-	-
1970-5198	2440658.08	1970 Mar 12 1400	Skua 2	-	-	-	-	-	-	TERLS	-	-	-	50?	-	-
1970-5199	2440659.11	1970 Mar 13 1438	Skua 2	-	-	-	-	-	-	TERLS	-	-	-	50?	-	-
1970-5200	2440659.11	1970 Mar 13 1438	Skua 2	-	-	-	-	-	-	TERLS	-	-	-	50?	-	-
1970-5201	2440660.05	1970 Mar 14 1305:00	Skua 2	-	ISRO-16.006	-	TERLS-161	-	-	TERLS	-	-	-	63	-	-
1970-5202	2440660.10	1970 Mar 14 1420	Skua 2	-	ISRO-16.007	-	TERLS-162	-	-	TERLS	-	-	-	50?	-	-
1970-5203	2440662.07	1970 Mar 16 1345:00	Skua 2	-	ISRO-16.008	-	TERLS-163	-	-	TERLS	-	-	-	50?	-	-
1970-5204	2440662.09	1970 Mar 16 1412	Skua 2	-	ISRO-16.009	-	TERLS-169	-	-	TERLS	-	-	-	62	-	-
1970-5205	2440662.49	1970 Mar 18 1346:00	Skua 2	-	ISRO-16.009	-	TERLS-169	-	-	TERLS	-	-	-	62	-	-
1970-5206	2440664.09	1970 Mar 18 1416	Skua 2	-	K70/01	-	RTG SK33/1	-	-	GAN	-	-	-	50?	-	-
1970-5207	2440664.09	1970 Mar 18 1416	Skua 2	-	K70/01	-	RTG SK33/1	-	-	ESK	-	-	-	108	-	-
1970-5208	2440664.64	1970 Mar 19 0230:50	Skua 2	-	K70/02	-	RTG SK33/2	-	-	ESK	-	-	-	108	-	-
1970-5209	2440664.64	1970 Mar 19 0323:30	Skua 2	-	K70/03	-	RTG SK33/3 (K70/03P)	-	-	ESK	-	-	-	101	-	-
1970-5210	2440664.66	1970 Mar 19 0356:40	Skua 2	-	K70/04	-	RTG SK33/4 (K70/04F)	-	-	ESK	-	-	-	105	-	-
1970-5211	2440664.69	1970 Mar 19 0428:50	Skua 2	-	K70/04	-	RTG SK33/5 (K70/06F)	-	-	ESK	-	-	-	105	-	-
1970-5212	2440664.72	1970 Mar 19 0518:00	Skua 2	-	K70/05F	-	ISRO 16.10	-	-	TERLS	-	-	-	88	-	-
1970-5213	2440666.07	1970 Mar 20 1345:00	Skua 2	-	ISRO-16.010	-	TERLS-173	-	-	TERLS	-	-	-	50?	-	-
1970-5214	2440666.10	1970 Mar 20 1450	Skua 2	-	ISRO-16.011	-	TERLS-174	-	-	TERLS	-	-	-	94	-	-
1970-5215	2440668.07	1970 Mar 22 1535:00	Skua 2	-	ISRO-16.011	-	TERLS-174	-	-	TERLS	-	-	-	50?	-	-
1970-5216	2440668.15	1970 Mar 22 1541	Skua 2	-	-	-	-	-	-	TERLS	-	-	-	50?	-	-
1970-5217	2440669.10	1970 Mar 23 1450	Skua 2	-	SU28H	-	-	-	-	GAN	-	-	-	50?	-	-
1970-5218	2440669.05	1970 Apr 11 1506	Skua 2	-	SU27H	-	-	-	-	GAN	-	-	-	50?	-	-
1970-5219	2440668.17	1970 Apr 11 1606	Skua 2	-	SU16H	-	-	-	-	SUIT	-	-	-	90?	-	-
1970-5220	2440690.59	1970 Apr 14 0915	Skua 2	-	SU17H	-	-	-	-	SUIT	-	-	-	82	-	-
1970-5221	2440691.02	1970 Apr 14 1253	Skua 2	-	SU157/C	-	TERLS-182	-	-	SUIT	-	-	-	82	-	-
1970-5222	2440691.92	1970 Apr 15 1005	Skua 2	-	SU147/C	-	TERLS-182	-	-	TERLS	-	-	-	85	-	-
1970-5223	2440692.58	1970 Apr 16 0150	Skua 2	-	SU16H	-	TERLS-183	-	-	TERLS	-	-	-	91	-	-
1970-5224	2440694.05	1970 Apr 17 1306	Skua 2	-	INTA S-7003	-	-	-	-	TERLS	-	-	-	95	-	-
1970-5225	2440712.47	1970 Jun 5 2315:00	Skua 2	-	INTA S-7004	-	-	-	-	ELAR	-	-	-	57	-	-
1970-5226	2440740.96	1970 Jun 5 1105:00	Skua 2	-	SU28H	-	-	-	-	ELAR	-	-	-	93	-	-
1970-5227	2440762.13	1970 Jun 24 1509	Skua 2	-	SU29H	-	-	-	-	SUIT	-	-	-	90?	-	-
1970-5228	2440769.13	1970 Jul 1 1550	Skua 2	-	INTA S-7005	-	-	-	-	SUIT	-	-	-	90?	-	-
1970-5229	2440765.42	1970 Jul 8 2159:59	Skua 2	-	INTA S-7006	-	-	-	-	ELAR	-	-	-	80	-	-
1970-5230	2440765.45	1970 Jul 15 2212:59	Skua 2	-	-	-	-	-	-	ELAR	-	-	-	86	-	-
1970-5231	2440828.50	1970 Sep	Skua 2	-	-	-	Can Diurnal 1	-	-	GAN	-	-	-	60?	-	-
1970-5232	2440828.50	1970 Sep	Skua 2	-	-	-	Can Diurnal 2	-	-	GAN	-	-	-	60?	-	-
1970-5233	2440828.50	1970 Sep	Skua 2	-	-	-	Can Diurnal 3	-	-	GAN	-	-	-	60?	-	-
1970-5234	2440828.50	1970 Sep	Skua 2	-	-	-	Can Diurnal 4	-	-	GAN	-	-	-	60?	-	-
1970-5235	2440828.50	1970 Sep	Skua 2	-	-	-	Can Diurnal 5	-	-	GAN	-	-	-	60?	-	-
1970-5236	2440828.50	1970 Sep	Skua 2	-	-	-	Can Diurnal 6	-	-	GAN	-	-	-	60?	-	-
1970-5237	2440828.50	1970 Sep	Skua 2	-	-	-	Can Diurnal 7	-	-	GAN	-	-	-	60?	-	-
1970-5238	2440828.50	1970 Sep	Skua 2	-	-	-	Can Diurnal 8	-	-	GAN	-	-	-	60?	-	-
1970-5239	2440828.50	1970 Sep	Skua 2	-	-	-	Can Diurnal 9	-	-	GAN	-	-	-	60?	-	-
1970-5240	2440828.50	1970 Sep	Skua 2	-	-	-	Can Diurnal 10	-	-	GAN	-	-	-	60?	-	-
1970-5241	2440828.50	1970 Sep	Skua 2	-	-	-	Can Diurnal 11	-	-	GAN	-	-	-	60?	-	-
1970-5242	2440828.50	1970 Sep	Skua 2	-	-	-	Can Diurnal 12	-	-	GAN	-	-	-	60?	-	-
1970-5243	2440828.50	1970 Sep	Skua 2	-	-	-	D-region 0 profile	-	-	FC	-	-	-	98	-	-
1970-5244	2440904.39	1970 Sep 13 2127	Skua 2	-	AW-52-9	-	-	-	-	FC	-	-	-	97	-	-
1970-5245	2440930.02	1970 Dec 9 1330:00	Skua 2	-	INTA EMP-7001	-	-	-	-	ELAR	-	-	-	90?	-	-
1970-5246	2440930.15	1970 Dec 11 1537:00	Skua 2	-	INTA EMP-7002	-	-	-	-	ELAR	-	-	-	90?	-	-
1970-5247	2440932.99	1970 Dec 12 1140:00	Skua 2	-	INTA EMP-7003	-	-	-	-	ELAR	-	-	-	90?	-	-
1970-5248	2440960.13	1971 Jan 8 1502	Skua 2	-	SK83/1	-	-	-	-	ESR	-	-	-	67	-	-
1970-5249	2440967.14	1971 Jan 15 1525	Skua 2	-	SK83/2	-	ESRO SK83/1	-	-	ESR	-	-	-	69	-	-
1970-5250	2440969.17	1971 Jan 17 1600	Skua 2	-	SK83/3	-	ESRO SK83/2	-	-	ESR	-	-	-	35	-	-
1970-5251	2440970.50	1971 Jan 19 1520	Skua 2	-	SK83/4	-	ESRO SK83/3	-	-	ESR	-	-	-	100?	-	-
1970-5252	2440971.14	1971 Jan 19 1520	Skua 2	-	SK83/4	-	ESRO SK83/4	-	-	ABER	-	-	-	71	-	-
1970-5253	2440971.50	1971 Jan 20	Skua 2	-	Y-325H	-	-	-	-	ESR	-	-	-	60	-	-
1970-5254	2440972.50	1971 Jan 21	Skua 2	-	Y-322A	-	-	-	-	SUIT	-	-	-	100?	-	-
1970-5255	2440973.13	1971 Jan 21 1507:26	Skua 2	-	SK83/5	-	ESRO SK83/5	-	-	ABER	-	-	-	60	-	-
1970-5256	2440973.50	1971 Jan 22	Skua 2	-	Y-327H	-	-	-	-	ESR	-	-	-	69	-	-
1970-5257	2440973.50	1971 Jan 22	Skua 2	-	Y-324A	-	-	-	-	SUIT	-	-	-	60	-	-
1970-5258	2440974.50	1971 Jan 23	Skua 2	-	Y-329H	-	-	-	-	ABER	-	-	-	55	-	-
1970-5259	2440975.16	1971 Jan 23 1553:30	Skua 2	-	SK83/6	-	ESRO SK83/6	-	-	ESR	-	-	-	67	-	-
1970-5260	2440977.13	1971 Jan 25 1510	Skua 2	-	SK83/7	-	ESRO SK83/7	-	-	ESR	-	-	-	68	-	-
1970-5261	2440976.50	1971 Jan 25	Skua 2	-	Y-331H	-	-	-	-	ESR	-	-	-	60	-	-
1970-5262	2440977.50	1971 Jan 26	Skua 2	-	Y-326A	-	-	-	-	ABER	-	-	-	61	-	-
1970-5263	2440979.14	1971 Jan 27 1525:40	Skua 2	-	SK83/8	-	ESRO SK83/8	-	-	ESR	-	-	-	47	-	-
1970-5264	2440979.50	1971 Jan 28	Skua 2	-	Y-333H	-	-	-	-	SUIT	-	-	-	47	-	-
1970-5265	2440979.50	1971 Jan 28	Skua 2	-	Y-328A	-	-	-	-	ABER	-	-	-	57	-	-
1970-5266	2440981.22	1971 Jan 29 1721	Skua 2	-	SK83/9	-	ESRO SK83/9	-	-	ESR	-	-	-	71	-	-
1970-5267	2440983.20	1971 Feb 01 1645	Skua 2	-	SK83/10	-	ESRO SK83/10	-	-	ESR	-	-	-	70	-	-
1970-5268	2440983.50	1971 Feb 01	Skua 2	-	Y-335H	-	-	-	-	SUIT	-	-	-	58	-	-
1970-5269	2440985.50	1971 Feb 03	Skua 2	-	Y-336H	-	-	-	-	SUIT	-	-	-	58	-	-
1970-5270	2440986.26	1971 Feb 3 1812	Skua 2	-	SK83/11	-	ESRO SK83/11	-	-	ESR	-	-	-	68	-	-
1970-5271	2440986.50	1971 Feb 04	Skua 2	-	Y-330A	-	-	-	-	ABER	-	-	-	62	-	-
1970-5272	2440987.50	1971 Feb 05	Skua 2	-	Y-337H	-	-	-	-	SUIT	-	-	-	58	-	-
1970-5273	2440989.50	1971 Feb 08	Skua 2	-	Y-332A	-	-	-	-	ABER	-	-	-	62	-	-
1970-5274	2440991.37	1971 Feb 8 2048:17	Skua 2	-	SK83/12	-	ESRO SK83/12	-	-	ESR	-	-	-	48	-	-



Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Launch_Mission	FlightCode	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee_Km	Range_Km	Dest
1971-W233	2440992.25	1971 Feb 9 1800	Skua 2	-	SK63/13	ESRD SK63/13	-	-	-	ESR	-	-	-	67	-	-
1971-W236	2440992.50	1971 Feb 10	Skua	-	N-338H	-	-	-	-	SU1ST	-	-	-	60	-	-
1971-W237	2440992.50	1971 Feb 10	Skua	-	N-334A	-	-	-	-	ABER	-	-	-	62	-	-
1971-W251	2440994.24	1971 Feb 11 1750	Skua 2	-	SK63/14	ESRD SK63/14	-	-	-	ESR	-	-	-	65	-	-
1971-W258	2440995.23	1971 Feb 12 1730	Skua 2	-	SK63/15	ESRD SK63/15	-	-	-	ESR	-	-	-	67	-	-
1971-W05	2441033.45	1971 Mar 22 2200:00	Skua 2	-	LITA AB-7101	-	-	-	-	ELAR	-	-	-	65	-	-
1971-W06	2441034.43	1971 Mar 23 2215:00	Skua 2	-	LITA AB-7102	-	-	-	-	ELAR	-	-	-	72	-	-
1971-W07	2441034.47	1971 Mar 23 2321:00	Skua 2	-	LITA AB-7103	-	-	-	-	ELAR	-	-	-	74	-	-
1971-W08	2441035.32	1971 Mar 24 1942:00	Skua 2	-	LITA AB-7104	-	-	-	-	ELAR	-	-	-	74	-	-
1971-W09	2441035.35	1971 Mar 24 2020:00	Skua 2	-	LITA AB-7105	-	-	-	-	ELAR	-	-	-	74	-	-
1971-S299	2441039.44	1971 May 21 2235	Skua 2	-	LITA RP-7101	SA-7101?	-	-	-	ELAR	-	-	-	81	-	-
1971-S312	2441099.62	1971 May 28 0256:00	Skua 2	-	LITA RP-7102	SC-7101	-	-	-	ELAR	-	-	-	96	-	-
1971-S325	2441099.68	1971 May 28 0425	Skua 2	-	LITA RP-7103	SC-7102	-	-	-	ELAR	-	-	-	82	-	-
1971-S314	2441099.69	1971 May 28 0431	Skua 2	-	LITA RP-7104	SC-7102	-	-	-	ELAR	-	-	-	103	-	-
1971-Y201	2441133.50	1971 Jul 1	Skua	-	SK39H [spirious?]	Ionos/Neutral sht.	-	-	-	SU1ST	-	-	-	89	-	-
1971-Y211	2441147.03	1971 Jul 14 1280	Skua	-	SK35H	-	-	-	-	SU1ST	-	-	-	100?	-	-
1971-Y231	2441163.02	1971 Jul 30 1294	Skua	-	SK37H	-	-	-	-	SU1ST	-	-	-	100?	-	-
1971-Y276	2441210.06	1971 Sep 15 1322	Skua	-	SK38H	-	-	-	-	SU1ST	-	-	-	82	-	-
1971-Y315	2441239.00	1971 Oct 14 1155	Skua	-	SK41H	-	-	-	-	SU1ST	-	-	-	91	-	-
1971-Y343	2441275.00	1971 Nov 19 1153	Skua	-	SK42H	-	-	-	-	SU1ST	-	-	-	92	-	-
1972-A03	2441322.05	1972 Jan 5 1314	Skua	-	SK307/C	-	-	-	-	TERLS	-	-	-	2	-	-
1972-Y25	2441352.01	1972 Jan 15 1214	Skua	-	SK43H	-	-	-	-	TERLS	-	-	-	87	-	-
1972-A06	2441354.53	1972 Jan 16 0037	Skua	-	SK317/C	ISRD-16.14	-	-	-	TERLS	-	-	-	40	-	-
1972-W01	2441348.06	1972 Jan 31 1322	Skua 2	-	SK327/C	ISRD-16.15	-	-	-	TERLS	-	-	-	79	-	-
1972-Y129	2441422.01	1972 Apr 14 1216:00	Skua 2	-	LITA NSC-7201	ISRD-16.16	-	-	-	ELAR	-	-	-	101	-	-
1972-Y176	2441426.98	1972 Apr 19 1137	Skua	-	SK45H	-	-	-	-	SU1ST	-	-	-	87	-	-
1972-Y176	2441428.98	1972 Apr 19 1222:00	Skua 2	-	LITA NSC-7202	-	-	-	-	ELAR	-	-	-	90	-	-
1972-Y176	2441433.97	1972 Apr 26 1123	Skua 2	-	LITA NSCL-7201	-	-	-	-	ELAR	-	-	-	94	-	-
1972-Y176	2441435.97	1972 Apr 26 1123	Skua 2	-	LITA NSCL-7202	-	-	-	-	ELAR	-	-	-	94?	-	-
1972-Y176	2441440.96	1972 Apr 26 1123	Skua 2	-	LITA NSCL-7203	-	-	-	-	ELAR	-	-	-	95	-	-
1972-Y176	2441442.97	1972 Apr 26 1123	Skua 2	-	LITA NSCL-7204	-	-	-	-	ELAR	-	-	-	96	-	-
1972-Y191	2441447.97	1972 May 05 1115:00	Skua 2	-	LITA NSCL-7205	-	-	-	-	ELAR	-	-	-	100?	-	-
1972-Y191	2441447.97	1972 May 10 1122:00	Skua 2	-	LITA NSCL-7206	-	-	-	-	ELAR	-	-	-	83	-	-
1972-Y191	2441447.97	1972 May 17 1115:00	Skua 2	-	LITA NSC-7204	-	-	-	-	ELAR	-	-	-	83	-	-
1972-Y158	2441464.98	1972 May 17 1154	Skua	-	SK44H	-	-	-	-	SU1ST	-	-	-	83	-	-
1972-S269	2441461.96	1972 May 24 1108:00	Skua 2	-	LITA NSC-7205	-	-	-	-	ELAR	-	-	-	89	-	-
1972-S228	2441468.97	1972 May 31 1115:00	Skua 2	-	LITA NSC-7206	-	-	-	-	ELAR	-	-	-	94	-	-
1972-S253	2441475.97	1972 Jun 07 1123:00	Skua 2	-	LITA NSC-7207	-	-	-	-	ELAR	-	-	-	95	-	-
1972-S240	2441482.98	1972 Jun 04 1126:00	Skua 2	-	LITA NSC-7208	-	-	-	-	ELAR	-	-	-	90	-	-
1972-S246	2441489.99	1972 Jun 21 1126:00	Skua 2	-	LITA NSC-7209	-	-	-	-	ELAR	-	-	-	90	-	-
1972-Y195	2441486.97	1972 Jun 21 1126:00	Skua 2	-	LITA NSC-7210	-	-	-	-	ELAR	-	-	-	90?	-	-
1972-Y276	2441498.97	1972 Jul 05 1117:00	Skua	-	SK46H	-	-	-	-	ELAR	-	-	-	70	-	-
1972-S263	2441498.97	1972 Jul 05 1117:00	Skua 2	-	LITA NSC-7211	-	-	-	-	ELAR	-	-	-	87	-	-
1972-S267	2441510.98	1972 Jul 12 1135:00	Skua 2	-	LITA NSC-7212	-	-	-	-	ELAR	-	-	-	90	-	-
1972-S267	2441510.98	1972 Jul 12 1135:00	Skua 2	-	SK19	-	-	-	-	AND	-	-	-	100?	-	-
1972-S262	2441602.68	1972 Oct 12 0944:00	Skua 2	-	LITA NSCLD-7201	-	-	-	-	AND	-	-	-	100?	-	-
1972-S282	2441609.01	1972 Oct 18 1209:00	Skua 2	-	LITA NSCLD-7201	-	-	-	-	AND	-	-	-	91	-	-
1972-S284	2441611.08	1972 Oct 20 1517:00	Skua 2	-	SK20	-	-	-	-	AND	-	-	-	100?	-	-
1972-S284	2441611.08	1972 Oct 23 1517:00	Skua 2	-	LITA NSCLD-7202	-	-	-	-	AND	-	-	-	95	-	-
1972-S288	2441614.01	1972 Oct 23 1208:00	Skua 2	-	LITA NSCLD-7203	-	-	-	-	AND	-	-	-	95	-	-
1972-S288	2441620.01	1972 Oct 25 1208:00	Skua 2	-	SK21A	-	-	-	-	AND	-	-	-	100?	-	-
1972-S271	2441620.01	1972 Oct 29 1546:00	Skua 2	-	-	-	-	-	-	CSG	-	-	-	100?	-	-
1973-Y01	2441682.50	1973	Skua	-	-	-	-	-	-	CSG	-	-	-	100?	-	-
1973-Y02	2441682.50	1973	Skua	-	-	-	-	-	-	CSG	-	-	-	100?	-	-
1973-Y02	2441682.50	1973	Skua	-	-	-	-	-	-	CSG	-	-	-	100?	-	-
1973-Y02	2441682.50	1973	Skua	-	-	-	-	-	-	CSG	-	-	-	100?	-	-
1973-Y05	2441682.50	1973	Skua	-	-	-	-	-	-	CSG	-	-	-	100?	-	-
1973-Y06	2441682.50	1973	Skua	-	-	-	-	-	-	CSG	-	-	-	100?	-	-
1973-Y07	2441682.50	1973	Skua	-	-	-	-	-	-	CSG	-	-	-	100?	-	-
1973-Y08	2441682.50	1973	Skua	-	-	-	-	-	-	CSG	-	-	-	100?	-	-
1973-Y09	2441682.50	1973	Skua	-	-	-	-	-	-	CSG	-	-	-	100?	-	-
1973-Y10	2441682.50	1973	Skua	-	-	-	-	-	-	CSG	-	-	-	100?	-	-
1973-Y11	2441682.50	1973	Skua	-	-	-	-	-	-	CSG	-	-	-	100?	-	-
1973-Y12	2441682.50	1973	Skua	-	-	-	-	-	-	CSG	-	-	-	100?	-	-
1973-Y12	2441682.50	1973	Skua	-	-	-	-	-	-	CSG	-	-	-	100?	-	-
1973-S11	2441693.03	1973 Jan 10 1245:00	Skua 2	-	LITA NSCLD-7301	-	-	-	-	ELAR	-	-	-	82	-	-
1973-S21	2441701.99	1973 Jan 19 1149:00	Skua 2	-	LITA NSCLD-7302	-	-	-	-	ELAR	-	-	-	80	-	-
1973-W01	2441702.98	1973 Jan 20 1138:00	Skua 2	-	LITA NSCL-7301	-	-	-	-	ELAR	-	-	-	80?	-	-
1973-S542	2441703.98	1973 Jan 21 1135	Skua 2	-	LITA NSCL-7301	-	-	-	-	ELAR	-	-	-	91	-	-
1973-S23	2441704.98	1973 Jan 22 1138:00	Skua 2	-	LITA NSCLD-7303	-	-	-	-	ELAR	-	-	-	88	-	-
1973-S23	2441706.98	1973 Jan 24 1137:00	Skua 2	-	LITA NSCLD-7304	-	-	-	-	ELAR	-	-	-	94	-	-
1973-S30	2441707.99	1973 Jan 25 1147:00	Skua 2	-	LITA NSCLD-7305	-	-	-	-	ELAR	-	-	-	87	-	-
1973-S34	2441709.99	1973 Jan 27 1143:00	Skua 2	-	LITA NSCLD-7305	-	-	-	-	ELAR	-	-	-	90	-	-
1973-S38	2441712.03	1973 Jan 29 1245:00	Skua 2	-	LITA NSCLD-7303	-	-	-	-	ELAR	-	-	-	70	-	-
1973-W03	2441714.04	1973 Jan 31 1257:00	Skua 4	-	LITA NSCLD-7301	-	-	-	-	ELAR	-	-	-	100?	-	-
1973-S104	2441756.09	1973 Mar 14 1415:00	Skua 2	-	SIPARCD/MB/71	-	-	-	-	SOM	-	-	-	58	-	-
1973-W04	2441757.09	1973 Mar 15 1415:00	Skua 2	-	SIPARCD/MB/72	-	-	-	-	SOM	-	-	-	58	-	-
1973-S117	2441765.02	1973 Mar 23 1236:00	Skua 2	-	LITA NSC-7302	-	-	-	-	ELAR	-	-	-	79	-	-
1973-W06	2441768.02	1973 Mar 26 1235:00	Skua 2	-	LITA NSC-7303	-	-	-	-	ELAR	-	-	-	92	-	-
1973-S125	2441771.03	1973 Mar 29 1250:00	Skua 2	-	LITA NSC-7304	-	-	-	-	ELAR	-	-	-	96	-	-
1973-S138	2441776.00	1973 Apr 03 1205:00	Skua 2	-	LITA NSC-7305	-	-	-	-	ELAR	-	-	-	93	-	-
1973-S145	2441779.01	1973 Apr 06 1219:00	Skua 2	-	LITA NSC-7306	-	-	-	-	ELAR	-	-	-	93	-	-
1973-W08	2441791.10	1973 Apr 18 1430:00	Skua 2	-	SIPARCD/MB/73	-	-	-	-	SOM	-	-	-	65	-	-
1973-H1621	2441946.66	1973 Sep 21 0344	Skua	-	CTNO	BMO Sonda	-	-	-	CSG	-	-	-	50?	-	-
1973-H1622	2441947.15	1973 Sep 21 1539	Skua	-	CTNO	BMO Sonda	-	-	-	CSG	-	-	-	65	-	-
1973-H1623	2441947.69	1973 Sep 22 0431	Skua	-	CTNO	BMO Sonda	-	-	-	CSG	-	-	-	69	-	-
1973-H1624	2441950.54	1973 Sep 25 0051	Skua	-	CTNO	BMO Sonda	-	-	-	CSG	-	-	-	70	-	-
1973-H1625	2441951.27	1973 Sep 25 1835	Skua	-	CTNO	BMO Sonda	-	-	-	CSG	-	-	-	70	-	-
1973-H1626	2441951.54	1973 Sep 26 0101	Skua	-	CTNO	BMO Sonda	-	-	-	CSG	-	-	-	64	-	-

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Launch_Mission	FlightCode	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee_Km	Range_Km	Dest
1973-1627	2441952.11	1973 Sep 26 1435	Skua 2	-	CIHD	BMD Sonde	-	-	-	CSG	-	-	-	65	-	-
1973-1628	2441953.10	1973 Sep 27 1420	Skua 2	-	CIHD	BMD Sonde	-	-	-	CSG	-	-	-	66	-	-
1973-1629	2441953.03	1973 Sep 28 0306	Skua 2	-	CIHD	BMD Sonde	-	-	-	CSG	-	-	-	70	-	-
1973-1630	2441954.64	1973 Sep 29 0324	Skua 2	-	CIHD	BMD Sonde	-	-	-	CSG	-	-	-	88	-	-
1973-1631	2441956.67	1973 Oct 1 0402	Skua 2	-	CIHD	BMD Sonde	-	-	-	CSG	-	-	-	53	-	-
1973-5369	2441975.02	1973 Oct 19 1236:00	Skua 2	-	LITA MSC2A-7301	-	-	-	-	ELAR	-	-	-	92	-	-
1973-8414	2442016.98	1973 Nov 30 1139:00	Skua 2	-	LITA MSC2A-7306	-	-	-	-	ELAR	-	-	-	81	-	-
1973-8416	2442019.99	1973 Dec 03 1139:00	Skua 2	-	LITA MSC2A-7306	-	-	-	-	ELAR	-	-	-	90	-	-
1973-8417	2442021.07	1973 Dec 4 1345	Skua 2	-	LITA MSC2A-7307	-	-	-	-	FC	-	-	-	124	-	-
1973-8419	2442021.25	1973 Dec 4 1800	Skua 2	-	AMR-S2-11	Oxygen profile	-	-	-	FC	-	-	-	108	-	-
1973-8420	2442021.44	1973 Dec 4 2234	Skua 2	-	AMR-S2-12	-	-	-	-	FC	-	-	-	108	-	-
1973-8421	2442021.79	1973 Dec 5 0652	Skua 2	-	AMR-S2-13	-	-	-	-	FC	-	-	-	110	-	-
1973-8422	2442021.99	1973 Dec 5 1146:00	Skua 2	-	LITA MSC2A-7308	-	-	-	-	ELAR	-	-	-	90	-	-
1973-8423	2442022.09	1973 Dec 5 1405	Skua 2	-	AMR-S2-14	-	-	-	-	FC	-	-	-	110	-	-
1973-8431	2442023.98	1973 Dec 07 1132:00	Skua 2	-	LITA MSC2A-7309	-	-	-	-	ELAR	-	-	-	90	-	-
1973-8436	2442027.95	1973 Dec 11 1046:00	Skua 2	-	LITA MSC2A-7310	-	-	-	-	ELAR	-	-	-	90	-	-
1973-8438	2442028.96	1973 Dec 12 1108:00	Skua 2	-	LITA MSC2A-7311	-	-	-	-	ELAR	-	-	-	91	-	-
1973-8440	2442028.96	1973 Dec 14 1136:00	Skua 2	-	LITA MSC2A-7312	-	-	-	-	ELAR	-	-	-	85	-	-
1973-8441	2442032.98	1973 Dec 16 1130:00	Skua 2	-	LITA MSC2A-7313	-	-	-	-	ELAR	-	-	-	92	-	-
1973-8441	2442032.98	1973 Dec 16 1130:00	Skua 2	-	LITA MSC2A-7313	-	-	-	-	ELAR	-	-	-	93	-	-
1974-854	2442057.98	1974 Jan 10 1130:00	Skua 2	-	LITA MSC2A-7401	-	-	-	-	ELAR	-	-	-	100?	-	-
1974-854	2442058.99	1974 Jan 11 1134:00	Skua 2	-	LITA MSC2A-7402	-	-	-	-	ELAR	-	-	-	86	-	-
1974-856	2442063.98	1974 Jan 14 1138:00	Skua 2	-	LITA MSC2A-7403	-	-	-	-	ELAR	-	-	-	110	-	-
1974-862	2442063.98	1974 Jan 16 1138:00	Skua 2	-	LITA MSC2A-7404	-	-	-	-	ELAR	-	-	-	86	-	-
1974-866	2442066.98	1974 Jan 19 1134:00	Skua 4	-	LITA MSC2A-7401	-	-	-	-	ELAR	-	-	-	114	-	-
1974-869	2442066.98	1974 Jan 21 1130:00	Skua 4	-	LITA MSC2A-7401	-	-	-	-	ELAR	-	-	-	106	-	-
1974-875	2442070.98	1974 Jan 23 1130:00	Skua 4	-	LITA MSC2A-7402	-	-	-	-	ELAR	-	-	-	109	-	-
1974-877	2442072.98	1974 Jan 25 1130:00	Skua 4	-	LITA MSC2A-7403	-	-	-	-	ELAR	-	-	-	106	-	-
1975-847	2442438.06	1975 Jan 30 1533:00	Skua 2	-	LITA MSC2A-7601	-	-	-	-	ELAR	-	-	-	91	-	-
1975-854	2442443.09	1975 Jan 30 1502:00	Skua 4	-	LITA MSC2A-7601	-	-	-	-	ELAR	-	-	-	90	-	-
1975-862	2442449.04	1975 Feb 05 1302:00	Skua 2	-	LITA MSC2A-7602	-	-	-	-	ELAR	-	-	-	85	-	-
1975-8143	2442457.97	1975 Jun 04 1122:00	Skua 2	-	LITA MSC2A-7602	-	-	-	-	ELAR	-	-	-	94	-	-
1975-8146	2442570.96	1975 Jun 07 1104:00	Skua 2	-	LITA MSC2A-7603	-	-	-	-	ELAR	-	-	-	85	-	-
1975-8354	2442763.96	1975 Dec 17 1104:00	Skua 2	-	LITA MSC2A-7604	-	-	-	-	ELAR	-	-	-	94	-	-
1976-844	2442780.12	1976 Jan 2 1459	Skua 3	-	LITA MSC2A-7604	Winter boom	-	-	-	ELAR	-	-	-	94	-	-
1976-846	2442782.16	1976 Jan 04 1547:00	Skua 3	-	LITA MSC2A-7601	Winter boom	-	-	-	ELAR	-	-	-	103	-	-
1976-846	2442782.16	1976 Jan 04 2258:00	Skua 3	-	LITA MSC2A-7601	Winter boom	-	-	-	ELAR	-	-	-	100?	-	-
1976-850	2442782.46	1976 Jan 06 1546:00	Skua 4	-	LITA MSC2A-7601	Winter boom	-	-	-	ELAR	-	-	-	96	-	-
1976-851	2442784.16	1976 Jan 06 1546:00	Skua 2	-	LITA MSC2A-7601	Winter boom	-	-	-	ELAR	-	-	-	100?	-	-
1976-854	2442787.17	1976 Jan 09 1511:00	Skua 2	-	LITA MSC2A-7602	Winter boom	-	-	-	ELAR	-	-	-	96	-	-
1976-856	2442790.10	1976 Jan 12 1420:00	Skua 3	-	LITA MSC2A-7602	Winter boom	-	-	-	ELAR	-	-	-	100?	-	-
1976-857	2442792.09	1976 Jan 14 1410:00	Skua 2	-	LITA MSC2A-7602	Winter boom	-	-	-	ELAR	-	-	-	91	-	-
1976-865	2442798.17	1976 Jan 20 1510:00	Skua 3	-	LITA MSC2A-7603	Winter boom	-	-	-	ELAR	-	-	-	89	-	-
1976-870	2442799.15	1976 Jan 21 2240:00	Skua 2	-	LITA MSC2A-7603	Winter boom	-	-	-	ELAR	-	-	-	95	-	-
1976-874	2442799.44	1976 Jan 22 1616:00	Skua 4	-	LITA MSC2A-7604	Winter boom	-	-	-	ELAR	-	-	-	99	-	-
1976-877	2442800.19	1976 Jan 22 1616:00	Skua 2	-	LITA MSC2A-7604	Winter boom	-	-	-	ELAR	-	-	-	99	-	-
1976-874	2442801.16	1976 Jan 23 1610:00	Skua 2	-	LITA MSC2A-7604	Winter boom	-	-	-	ELAR	-	-	-	100	-	-
1976-880	2442804.16	1976 Jan 26 1619:00	Skua 3	-	LITA MSC2A-7603	Winter boom	-	-	-	ELAR	-	-	-	100?	-	-
1976-882	2442806.17	1976 Feb 02 1510:00	Skua 2	-	LITA MSC2A-7604	Winter boom	-	-	-	ELAR	-	-	-	102	-	-
1976-891	2442811.46	1976 Feb 08 1551:00	Skua 4	-	LITA MSC2A-7604	Winter boom	-	-	-	ELAR	-	-	-	101	-	-
1976-895	2442817.44	1976 Feb 08 1534:00	Skua 2	-	LITA MSC2A-7607	Winter boom	-	-	-	ELAR	-	-	-	101	-	-
1976-8412	2442817.15	1976 Feb 4 1130	Skua 4	-	LITA MSC2A-7607	Winter boom	-	-	-	ELAR	-	-	-	100?	-	-
1976-8413	2442803.70	1976 May 4 2130	Skua 2	-	LITA MSC2A-7604	Winter boom	-	-	-	ELAR	-	-	-	95	-	-
1976-8414	2442803.70	1976 May 5 0430	Skua 4	-	LITA MSC2A-7609	Winter boom	-	-	-	ELAR	-	-	-	100?	-	-
1976-8413	2442803.70	1976 May 5 2130	Skua 2	-	LITA MSC2A-7609	Winter boom	-	-	-	ELAR	-	-	-	100?	-	-
1976-8414	2442803.70	1976 May 8 1530	Skua 4	-	LITA MSC2A-7601	Winter boom	-	-	-	ELAR	-	-	-	100?	-	-
1976-8415	2442814.15	1976 May 8 1531	Skua 2	-	LITA MSC2A-7602	Winter boom	-	-	-	ELAR	-	-	-	99	-	-
1980-8198	2444554.52	1980 May 11 0322:00	Skua 2	-	WPSC-8001A	EBC-C E7	-	-	-	AND	-	-	-	97	-	-
1980-8206	2444554.52	1980 May 11 0322:00	Skua 2	-	WPSC-8002A	EBC-B E7	-	-	-	AND	-	-	-	97	-	-
1980-8206	2444554.56	1980 May 11 0121:30	Skua 2	-	WPSC-8002A	EBC-B E7	-	-	-	AND	-	-	-	96	-	-
1980-8206	2444559.73	1980 May 16 0346:00	Skua 2	-	WPSC-8003A	EBC-A2 E7	-	-	-	AND	-	-	-	94	-	-
1980-8216	2444571.66	1980 May 29 0344:36	Skua 2	-	WPSC-8003A	EBC-A2 E7	-	-	-	AND	-	-	-	94	-	-
1980-8262	2444574.59	1980 May 29 0344:36	Skua 2	-	WPSC-8003A	EBC-A2 E7	-	-	-	AND	-	-	-	92	-	-
1981-1427	2444948.42	1981 Dec 9 2201:59	Skua 4	-	E8	EBCB1 E8	-	-	-	ESR	-	-	-	70	-	-
1981-1428	2444948.46	1981 Dec 9 2255:30	Skua 2	-	E7	EBCB1 E7	-	-	-	ESR	-	-	-	94	-	-







Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	OrbPay	Agency	Launch_Code	Group	Category	LTCite	Cite	Notes
1970-S175	2440645.67	1970 Feb 28 0400:00	Skua 2	-	INTA SH-7031	0.000	INTA	SS	INTA/APAE/Sanchez,Rose	Ionos	WDCRF	-	-
1970-S176	2440645.83	1970 Feb 28 0800:00	Skua 2	-	INTA SH-7032	0.000	INTA	SS	INTA/APAE/Sanchez,Rose	Ionos	WDCRF	-	-
1970-S177	2440646.00	1970 Feb 28 1200:00	Skua 2	-	INTA MP-7014	0.000	INTA	SS	INTA/APAE/Sanchez,Rose	Ionos	WDCRF	-	-
1970-W336	2440649.53	1970 Mar 4 0049:19	Skua 2	-	INTA S-7002	0.000	INTA	SS	INTA/APAE/Sanchez,Rose	Meteo	DSI-5850	-	-
1970-S191	2440651.01	1970 Mar 05 1213:00	Skua 2	-	INTA MP-7015	0.000	INTA	SS	INTA/APAE/Sanchez,Rose	Ionos	WDCRF	SR12,613	-
1970-S192	2440651.01	1970 Mar 05 1217:00	Skua 2	-	INTA MP-7016	0.000	INTA	SS	INTA/APAE/Sanchez,Rose	Ionos	WDCRF	SR12,613	-
1970-W350	2440652.07	1970 Mar 6 1345	Skua	-	ISRD 16.02	0.000	ISRD	SS	PLR/Fisharoty	Aeron	WDCRF	-	-
1970-W365	2440654.07	1970 Mar 08 1345:00	Skua	-	ISRD-16.003	0.000	ISRD	SS	PLR/Fisharoty	Aeron	WDCRF	-	-
1970-W374	2440656.09	1970 Mar 10 1415:00	Skua	-	ISRD-16.004	0.000	ISRD	SS	PLR/Fisharoty	Aeron	WDCRF	-	-
1970-W389	2440656.11	1970 Mar 12 1345:00	Skua	-	ISRD-16.005	0.000	ISRD	SS	PLR/Fisharoty	Meteo	rocketservices	-	-
1970-W388	2440658.07	1970 Mar 12 1400	Skua	-	-	0.000	ISRD	SS	UKMO/	Meteo	rocketservices	-	-
1970-W11	2440658.08	1970 Mar 13 1436	Skua	-	-	0.000	UKMO	SS	UKMO/	Meteo	rocketservices	-	-
1970-W12	2440659.11	1970 Mar 14 1305:00	Skua	-	ISRD-16.006	0.000	UKMO	SS	PLR/Fisharoty	Meteo	rocketservices	-	-
1970-W400	2440660.05	1970 Mar 14 1420	Skua	-	-	0.000	UKMO	SS	UKMO/	Meteo	rocketservices	-	-
1970-W401	2440662.07	1970 Mar 16 1412	Skua	-	ISRD-16.007	0.000	UKMO	SS	PLR/Fisharoty	Meteo	rocketservices	-	-
1970-W411	2440662.09	1970 Mar 16 1412	Skua	-	ISRD-16.009	0.000	ISRD	SS	PLR/Fisharoty	Meteo	rocketservices	-	-
1970-W407	2440664.49	1970 Mar 18 1345:00	Skua	-	ISRD-16.008	0.000	ISRD	SS	PLR/Fisharoty	Aeron	WDCRF	-	-
1970-W15	2440664.09	1970 Mar 18 1416	Skua	-	ISRD-16.009	0.000	UKMO	SS	UKMO/	Meteo	rocketservices	-	-
1970-S250	2440664.09	1970 Mar 19 0230:50	Skua 2	-	K70/01	0.000	RTG	SS	RTG/4itt	Meteo	rocketservices	-	-
1970-S252	2440664.64	1970 Mar 19 0323:30	Skua 2	-	K70/02	0.000	RTG	SS	RTG/4itt	Aerom/Ionos	WDCRF/Sven	-	-
1970-S253	2440664.66	1970 Mar 19 0356:40	Skua 2	-	K70/03	0.000	RTG	SS	RTG/4itt	Aerom/Ionos	WDCRF/Sven	-	-
1970-S254	2440664.69	1970 Mar 19 0428:50	Skua 2	-	K70/04	0.000	RTG	SS	RTG/4itt	Aerom/Ionos	WDCRF/Sven	-	-
1970-S255	2440664.72	1970 Mar 19 0518:00	Skua 2	-	K70/05?	0.000	RTG	SS	RTG/4itt	Aerom/Ionos	WDCRF/Sven	-	-
1970-W422	2440666.07	1970 Mar 20 1345:00	Skua	-	ISRD-16.010	0.000	UKMO	SS	PLR/Fisharoty	Meteo	rocketservices	-	-
1970-W16	2440666.10	1970 Mar 20 1430	Skua	-	ISRD-16.011	0.000	ISRD	SS	PLR/Fisharoty	Meteo	rocketservices	-	-
1970-W16	2440666.15	1970 Mar 22 1535:00	Skua	-	ISRD-16.011	0.000	UKMO	SS	UKMO/	Meteo	rocketservices	-	-
1970-W19	2440668.05	1970 Mar 23 1430	Skua	-	Su28H	0.000	UKMO	SS	UKMO/	Meteo	rocketservices	-	-
1970-W136	2440668.05	1970 Apr 11 1306	Skua	-	Su27H	0.000	UKMO	SS	UKMO/	Meteo	rocketservices	-	-
1970-W137	2440668.17	1970 Apr 11 1606	Skua	-	Su16H	0.000	UKMO	SS	UKMO/	Meteo	rocketservices	-	-
1970-W139	2440669.89	1970 Apr 14 0915	Skua	-	Su17H	0.000	UKMO	SS	UKMO/	Meteo	rocketservices	-	-
1970-W140	2440691.02	1970 Apr 14 1253	Skua	-	Su1577/C	0.000	UKMO	SS	UKMO/	Meteo	rocketservices	-	-
1970-W144	2440691.52	1970 Apr 15 1005	Skua 2	-	Su1477/C	0.000	UKMO	SS	UKMO/	Meteo	rocketservices	-	-
1970-W146	2440694.58	1970 Apr 16 0150	Skua	-	Su16H	0.000	UKMO	SS	UKMO/	Meteo	rocketservices	-	-
1970-W152	2440694.05	1970 Apr 17 1306	Skua	-	Su18H	0.000	UKMO	SS	UKMO/	Meteo	rocketservices	-	-
1970-W682	2440712.47	1970 May 5 2315:00	Skua	-	INTA S-7003	0.000	INTA	SS	INTA/	Meteo	DSI-5850	-	-
1970-W185	2440740.96	1970 Jun 3 1103:00	Skua	-	INTA S-7004	0.000	INTA	SS	INTA/	Meteo	DSI-5850	-	-
1970-W186	2440762.13	1970 Jun 24 1509	Skua	-	Su28H	0.000	UKMO	SS	UKMO/	Meteo	rocketservices	-	-
1970-W188	2440769.13	1970 Jun 24 1509	Skua	-	Su29H	0.000	UKMO	SS	UKMO/	Meteo	rocketservices	-	-
1970-W493	2440776.42	1970 Jul 8 2159:59	Skua	-	INTA S-7005	0.000	INTA	SS	INTA/	Meteo	rocketservices	-	-
1970-W1653	2440783.45	1970 Jul 15 2212:59	Skua	-	INTA S-7006	0.000	INTA	SS	INTA/	Meteo	rocketservices	-	-
1970-W1891	2440823.50	1970 Sep	Skua	-	-	0.000	UKMO	SS	UKMO/Hamilton	Meteo	rocketservices	-	-
1970-W1892	2440823.50	1970 Sep	Skua	-	-	0.000	UKMO	SS	UKMO/Hamilton	Meteo	rocketservices	-	-
1970-W1893	2440823.50	1970 Sep	Skua	-	-	0.000	UKMO	SS	UKMO/Hamilton	Meteo	rocketservices	-	-
1970-W1894	2440823.50	1970 Sep	Skua	-	-	0.000	UKMO	SS	UKMO/Hamilton	Meteo	rocketservices	-	-
1970-W1895	2440823.50	1970 Sep	Skua	-	-	0.000	UKMO	SS	UKMO/Hamilton	Meteo	rocketservices	-	-
1970-W1896	2440823.50	1970 Sep	Skua	-	-	0.000	UKMO	SS	UKMO/Hamilton	Meteo	rocketservices	-	-
1970-W1897	2440823.50	1970 Sep	Skua	-	-	0.000	UKMO	SS	UKMO/Hamilton	Meteo	rocketservices	-	-
1970-W1898	2440823.50	1970 Sep	Skua	-	-	0.000	UKMO	SS	UKMO/Hamilton	Meteo	rocketservices	-	-
1970-W1899	2440823.50	1970 Sep	Skua	-	-	0.000	UKMO	SS	UKMO/Hamilton	Meteo	rocketservices	-	-
1970-W1900	2440823.50	1970 Sep	Skua	-	-	0.000	UKMO	SS	UKMO/Hamilton	Meteo	rocketservices	-	-
1970-W1901	2440823.50	1970 Sep	Skua	-	-	0.000	UKMO	SS	UKMO/Hamilton	Meteo	rocketservices	-	-
1970-W1902	2440823.50	1970 Sep	Skua	-	-	0.000	UKMO	SS	UKMO/Hamilton	Meteo	rocketservices	-	-
1970-W1903	2440823.50	1970 Sep	Skua	-	-	0.000	UKMO	SS	UKMO/Hamilton	Meteo	rocketservices	-	-
1970-W1904	2440823.50	1970 Sep	Skua	-	-	0.000	UKMO	SS	UKMO/Hamilton	Meteo	rocketservices	-	-
1970-W1905	2440823.50	1970 Sep	Skua	-	-	0.000	UKMO	SS	UKMO/Hamilton	Meteo	rocketservices	-	-
1970-W1906	2440823.50	1970 Sep	Skua	-	-	0.000	UKMO	SS	UKMO/Hamilton	Meteo	rocketservices	-	-
1970-W1907	2440823.50	1970 Sep	Skua	-	-	0.000	UKMO	SS	UKMO/Hamilton	Meteo	rocketservices	-	-
1970-W1908	2440823.50	1970 Sep	Skua	-	-	0.000	UKMO	SS	UKMO/Hamilton	Meteo	rocketservices	-	-
1970-W1909	2440823.50	1970 Sep	Skua	-	-	0.000	UKMO	SS	UKMO/Hamilton	Meteo	rocketservices	-	-
1970-W1910	2440823.50	1970 Sep	Skua	-	-	0.000	UKMO	SS	UKMO/Hamilton	Meteo	rocketservices	-	-
1970-W1911	2440823.50	1970 Sep	Skua	-	-	0.000	UKMO	SS	UKMO/Hamilton	Meteo	rocketservices	-	-
1970-W1912	2440823.50	1970 Sep	Skua	-	-	0.000	UKMO	SS	UKMO/Hamilton	Meteo	rocketservices	-	-
1970-W1913	2440823.50	1970 Sep	Skua	-	-	0.000	UKMO	SS	UKMO/Hamilton	Meteo	rocketservices	-	-
1970-W1914	2440823.50	1970 Sep	Skua	-	-	0.000	UKMO	SS	UKMO/Hamilton	Meteo	rocketservices	-	-
1970-W1915	2440823.50	1970 Sep	Skua	-	-	0.000	UKMO	SS	UKMO/Hamilton	Meteo	rocketservices	-	-
1970-W1916	2440823.50	1970 Sep	Skua	-	-	0.000	UKMO	SS	UKMO/Hamilton	Meteo	rocketservices	-	-
1970-W1917	2440823.50	1970 Sep	Skua	-	-	0.000	UKMO	SS	UKMO/Hamilton	Meteo	rocketservices	-	-
1970-W1918	2440823.50	1970 Sep	Skua	-	-	0.000	UKMO	SS	UKMO/Hamilton	Meteo	rocketservices	-	-
1970-W1919	2440823.50	1970 Sep	Skua	-	-	0.000	UKMO	SS	UKMO/Hamilton	Meteo	rocketservices	-	-
1970-W1920	2440823.50	1970 Sep	Skua	-	-	0.000	UKMO	SS	UKMO/Hamilton	Meteo	rocketservices	-	-
1970-W1921	2440823.50	1970 Sep	Skua	-	-	0.000	UKMO	SS	UKMO/Hamilton	Meteo	rocketservices	-	-
1970-W1922	2440823.50	1970 Sep	Skua	-	-	0.000	UKMO	SS	UKMO/Hamilton	Meteo	rocketservices	-	-
1970-W1923	2440823.50	1970 Sep	Skua	-	-	0.000	UKMO	SS	UKMO/Hamilton	Meteo	rocketservices	-	-
1970-W1924	2440823.50	1970 Sep	Skua	-	-	0.000	UKMO	SS	UKMO/Hamilton	Meteo	rocketservices	-	-
1970-W1925	2440823.50	1970 Sep	Skua	-	-	0.000	UKMO	SS	UKMO/Hamilton	Meteo	rocketservices	-	-
1970-W1926	2440823.50	1970 Sep	Skua	-	-	0.000	UKMO	SS	UKMO/Hamilton	Meteo	rocketservices	-	-
1970-W1927	2440823.50	1970 Sep	Skua	-	-	0.000	UKMO	SS	UKMO/Hamilton	Meteo	rocketservices	-	-
1970-W1928	2440823.50	1970 Sep	Skua	-	-	0.000	UKMO	SS	UKMO/Hamilton	Meteo	rocketservices	-	-
1970-W1929	2440823.50	1970 Sep	Skua	-	-	0.000	UKMO	SS	UKMO/Hamilton	Meteo	rocketservices	-	-
1970-W1930	2440823.50	1970 Sep	Skua	-	-	0.000	UKMO	SS	UKMO/Hamilton	Meteo	rocketservices	-	-
1970-W1931	2440823.50	1970 Sep	Skua	-	-	0.000	UKMO	SS	UKMO/Hamilton	Meteo	rocketservices	-	-
1970-W1932	2440823.50	1970 Sep	Skua	-	-	0.000	UKMO	SS	UKMO/Hamilton	Meteo	rocketservices	-	-
1970-W1933	2440823.50	1970 Sep	Skua	-	-	0.000	UKMO	SS	UKMO/Hamilton	Meteo	rocketservices	-	-
1970-W1934	2440823.50	1970 Sep	Skua	-	-	0.000	UKMO	SS	UKMO/Hamilton	Meteo	rocketservices	-	-
1970-W1935	2440823.50	1970 Sep	Skua	-	-	0.000	UKMO	SS	UKMO/Hamilton	Meteo	rocketservices	-	-
1970-W1936	2440823.50	1970 Sep	Skua	-	-	0.000	UKMO	SS	UKMO/Hamilton	Meteo	rocketservices	-	-
1970-W1937	2440823.50	1970 Sep	Skua	-	-	0.000	UKMO	SS	UKMO/Hamilton	Meteo	rocketservices	-	-
1970-W1938	2440823.50	1970 Sep	Skua	-	-	0.000	UKMO	SS	UKMO/Hamilton	Meteo	rocketservices	-	-
1970-W1939	2440823.50	1970 Sep	Skua	-	-	0.000	UKMO	SS	UKMO/Hamilton	Meteo	rocketservices	-	-
1970-W1940	2440823.50	1970 Sep	Skua	-	-	0.000	UKMO	SS	UKMO/Hamilton	Meteo	rocketservices	-	-
1970-W1941	2440823.50	1970 Sep	Skua	-	-	0.000	UKMO	SS	UKMO/Hamilton	Meteo	rocketservices	-	-
1970-W1942	2440823.50	1970 Sep	Skua	-	-	0.000	UKMO	SS	UKMO/Hamilton	Meteo	rocketservices	-	-
1970-W1943	2440823.50	1970 Sep	Skua	-	-	0.000	UKMO	SS	UKMO/Hamilton	Meteo	rocketservices	-	-
1970-W1944	2440823.50	1970 Sep	Skua	-	-	0.000	UKMO	SS	UKMO/Hamilton	Meteo	rocketservices	-	-
1970-W1945	2440823.50	1970 Sep	Skua	-	-	0.000	UKMO	SS	UKMO/Hamilton	Meteo	rocketservices	-	-
1970-W1946	2440823.50	1970 Sep	Skua	-	-	0.000	UKMO	SS	UKMO/Hamilton	Meteo	rocketservices	-	-
1970-W1947	2440823.50	1970 Sep	Skua	-	-	0.000	UKMO	SS	UKMO/Hamilton	Meteo	rocketservices	-	-
1970-W1948	2440823.50												

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	OrbPay	Agency	Launch_Code	Group	Category	LTCite	Cite	Notes
1971-W233	2440992.25	1971 Feb 9 1800	Skua 2	-	SK63/13	0.000	ESRD	SS	UCL/Scott	Aeronomy	WDCRF	-	-
1971-W236	2440992.50	1971 Feb 10	Skua	-	N-336H	0.000	UKMO	SS	UKMO/	Aeron	WDCRF	-	-
1971-W237	2440992.50	1971 Feb 10	Skua	-	M-394A	0.000	UKMO	SS	UKMO/	Aeron	WDCRF	-	-
1971-W251	2440994.24	1971 Feb 11 1750	Skua 2	-	SK63/14	0.000	ESRD	SS	UCL/Scott	Aeronomy	WDCRF	-	-
1971-W258	2440995.23	1971 Feb 12 1730	Skua 2	-	SK63/15	0.000	ESRD	SS	UCL/Scott	Aeronomy	WDCRF	-	-
1971-W05	2441033.45	1971 Mar 22 2250.00	Skua 2	-	INTA AB-7101	0.000	INTA	SS	JASB/Ackerman	Aeron	WDCRF	-	-
1971-W06	2441034.43	1971 Mar 23 2215.00	Skua 2	-	INTA AB-7102	0.000	INTA	SS	JASB/Ackerman	Aeron	WDCRF	-	-
1971-W07	2441034.47	1971 Mar 23 2321.00	Skua 2	-	INTA AB-7103	0.000	INTA	SS	JASB/Ackerman	Aeron	WDCRF	-	-
1971-W08	2441034.47	1971 Mar 24 1942.00	Skua 2	-	INTA AB-7104	0.000	INTA	SS	JASB/Ackerman	Aeron	WDCRF	-	-
1971-W09	2441035.32	1971 Mar 24 2020.00	Skua 2	-	INTA AB-7105	0.000	INTA	SS	JASB/Ackerman	Aeron	WDCRF	-	-
1971-W299	2441093.44	1971 May 21 2235.00	Skua 2	-	INTA PP-7101	0.000	INTA	SS	INTA/Peres	Ionos	Serra	-	-
1971-W312	2441099.62	1971 May 28 0255.00	Skua 2	-	INTA PP-7102	0.000	INTA	SS	INTA/Peres	Ionos	WDCRF	-	-
1971-W325	2441099.68	1971 May 28 0425.00	Skua 2	-	INTA PP-7103	0.000	INTA	SS	INTA/Peres	Ionos	WDCRF	-	-
1971-W314	2441099.69	1971 May 28 0431.00	Skua 2	-	INTA PP-7104	0.000	INTA	SS	INTA/Peres	Ionos	WDCRF	-	-
1971-W201	2441133.50	1971 Jun 1	Skua	-	SK63/16	0.000	SRC	SS	UCL/Williams	Ionos	WDC	Serra	-
1971-W217	2441147.03	1971 Jun 14 1250	Skua	-	SK63/17	0.000	SRC	SS	UCL/Williams	Ionos	WDC	Serra	-
1971-W231	2441163.02	1971 Jun 30 1234	Skua	-	SK63/18	0.000	SRC	SS	UCL/Williams	Ionos	WDCRF	-	-
1971-W216	2441210.06	1971 Sep 15 1322	Skua	-	SK63/19	0.000	SRC	SS	UCL/Williams	Ionos	WDCRF	-	-
1971-W315	2441239.00	1971 Oct 14 1155	Skua	-	SK64/1H	0.000	SRC	SS	UCL/Williams	Ionos	WDCRF	-	-
1971-W349	2441275.00	1971 Nov 9 1514	Skua	-	SK64/2H	0.000	SRC	SS	UCL/Williams	Ionos	WDCRF	-	-
1972-W03	2441322.05	1972 Jan 5 1214	Skua	-	SK63/7C	0.000	SRC	SS	UCL/Williams	Ionos	WDCRF	-	-
1972-W25	2441334.53	1972 Jan 15 1214	Skua	-	SK64/3H	0.000	SRC	SS	UCL/Williams	Ionos	WDCRF	-	-
1972-W06	2441346.05	1972 Jan 18 0037	Skua	-	SK63/7C	0.000	SRC	SS	UCL/Williams	Ionos	WDCRF	-	-
1972-W01	2441422.01	1972 Jan 31 1216.00	Skua 2	-	INTA MSC-7201	0.000	INTA/DLR	SS	UCL/Williams	Ionos	WDCRF	-	-
1972-W129	2441426.98	1972 Apr 19 1137	Skua 2	-	SK64/5H	0.000	SRC	SS	UCL/Williams	Ionos	WDCRF	-	-
1972-W176	2441426.98	1972 Apr 19 1222.00	Skua 2	-	INTA MSC-7202	0.000	INTA/DLR	SS	UCL/Williams	Ionos	WDCRF	-	-
1972-W175	2441426.98	1972 Apr 19 1222.00	Skua 2	-	INTA MSC-7202	0.000	INTA/DLR	SS	UCL/Williams	Ionos	WDCRF	-	-
1972-W176	2441426.98	1972 Apr 26 1123.00	Skua 2	-	INTA MSC-7202	0.000	INTA/DLR	SS	UCL/Williams	Ionos	WDCRF	-	-
1972-W181	2441435.97	1972 Apr 26 1119.00	Skua 2	-	INTA MSC-7203	0.000	INTA/DLR	SS	UCL/Williams	Ionos	WDCRF	-	-
1972-W188	2441440.96	1972 Apr 26 1130.00	Skua 2	-	INTA MSC-7203	0.000	INTA/DLR	SS	UCL/Williams	Ionos	WDCRF	-	-
1972-W190	2441442.97	1972 Apr 26 1115.00	Skua 2	-	INTA MSC-7204	0.000	INTA/DLR	SS	UCL/Williams	Ionos	WDCRF	-	-
1972-W191	2441447.97	1972 Apr 26 1122.00	Skua 2	-	INTA MSC-7205	0.000	INTA/DLR	SS	UCL/Williams	Ionos	WDCRF	-	-
1972-W199	2441454.97	1972 Apr 27 1115.00	Skua 2	-	INTA MSC-7204	0.000	INTA/DLR	SS	UCL/Williams	Ionos	WDCRF	-	-
1972-W138	2441454.98	1972 Apr 27 1115.00	Skua 2	-	SK64/4H	0.000	SRC	SS	UCL/Williams	Ionos	WDCRF	-	-
1972-W209	2441461.96	1972 Apr 24 1105.00	Skua 2	-	INTA MSC-7206	0.000	INTA/DLR	SS	UCL/Williams	Ionos	WDCRF	-	-
1972-W229	2441466.97	1972 Apr 27 1123.00	Skua 2	-	INTA MSC-7207	0.000	INTA/DLR	SS	UCL/Williams	Ionos	WDCRF	-	-
1972-W233	2441476.97	1972 Jun 07 1123.00	Skua 2	-	INTA MSC-7208	0.000	INTA/DLR	SS	UCL/Williams	Ionos	WDCRF	-	-
1972-W240	2441482.98	1972 Jun 04 1125.00	Skua 2	-	INTA MSC-7209	0.000	INTA/DLR	SS	UCL/Williams	Ionos	WDCRF	-	-
1972-W246	2441486.98	1972 Jun 21 1125.00	Skua 2	-	INTA MSC-7210	0.000	INTA/DLR	SS	UCL/Williams	Ionos	WDCRF	-	-
1972-W186	2441486.97	1972 Jun 26 1115	Skua 2	-	INTA MSC-7211	0.000	UKMO	SS	UCL/Williams	Ionos	WDCRF	-	-
1972-W266	2441486.99	1972 Jun 26 1115	Skua 2	-	INTA MSC-7211	0.000	UKMO	SS	UCL/Williams	Ionos	WDCRF	-	-
1972-W269	2441503.99	1972 Jul 05 1117.00	Skua 2	-	INTA MSC-7212	0.000	INTA/DLR	SS	UCL/Williams	Ionos	WDCRF	-	-
1972-W270	2441510.98	1972 Jul 12 1135.00	Skua 2	-	SK19	0.000	SRC	SS	SUS/Martelli	Ionos	WDCRF	-	-
1972-W324	2441609.01	1972 Oct 12 0414.00	Skua 2	-	INTA MSCLO-7301	0.000	INTA/DLR	SS	UCL/Williams	Ionos	WDCRF	-	-
1972-W325	2441611.00	1972 Oct 20 1209.00	Skua 2	-	INTA MSCLO-7302	0.000	INTA/DLR	SS	UCL/Williams	Ionos	WDCRF	-	-
1972-W326	2441614.13	1972 Oct 23 1214.57	Skua 2	-	SK20	0.000	SRC	SS	SUS/Martelli	Ionos	WDCRF	-	-
1972-W363	2441616.01	1972 Oct 23 1208.00	Skua 2	-	INTA MSCLO-7303	0.000	INTA/DLR	SS	UCL/Williams	Ionos	WDCRF	-	-
1972-W371	2441682.10	1972 Oct 29 1546.00	Skua 2	-	SK21A	0.000	SRC	SS	SUS/Martelli	Ionos	WDCRF	-	-
1972-W01	2441682.50	1973	Skua	-	-	0.000	CHES?	SS	CHES/	Aerout?	CHES20	-	-
1972-W02	2441682.50	1973	Skua	-	-	0.000	CHES?	SS	CHES/	Aerout?	CHES20	-	-
1972-W03	2441682.50	1973	Skua	-	-	0.000	CHES?	SS	CHES/	Aerout?	CHES20	-	-
1972-W04	2441682.50	1973	Skua	-	-	0.000	CHES?	SS	CHES/	Aerout?	CHES20	-	-
1972-W05	2441682.50	1973	Skua	-	-	0.000	CHES?	SS	CHES/	Aerout?	CHES20	-	-
1972-W06	2441682.50	1973	Skua	-	-	0.000	CHES?	SS	CHES/	Aerout?	CHES20	-	-
1972-W07	2441682.50	1973	Skua	-	-	0.000	CHES?	SS	CHES/	Aerout?	CHES20	-	-
1972-W08	2441682.50	1973	Skua	-	-	0.000	CHES?	SS	CHES/	Aerout?	CHES20	-	-
1972-W09	2441682.50	1973	Skua	-	-	0.000	CHES?	SS	CHES/	Aerout?	CHES20	-	-
1972-W10	2441682.50	1973	Skua	-	-	0.000	CHES?	SS	CHES/	Aerout?	CHES20	-	-
1972-W11	2441682.50	1973	Skua	-	-	0.000	CHES?	SS	CHES/	Aerout?	CHES20	-	-
1972-W12	2441682.50	1973	Skua	-	-	0.000	CHES?	SS	CHES/	Aerout?	CHES20	-	-
1972-W13	2441682.50	1973	Skua	-	-	0.000	CHES?	SS	CHES/	Aerout?	CHES20	-	-
1972-W14	2441682.50	1973	Skua	-	-	0.000	CHES?	SS	CHES/	Aerout?	CHES20	-	-
1972-W15	2441682.50	1973	Skua	-	-	0.000	CHES?	SS	CHES/	Aerout?	CHES20	-	-
1972-W16	2441682.50	1973	Skua	-	-	0.000	CHES?	SS	CHES/	Aerout?	CHES20	-	-
1972-W17	2441682.50	1973	Skua	-	-	0.000	CHES?	SS	CHES/	Aerout?	CHES20	-	-
1972-W18	2441682.50	1973	Skua	-	-	0.000	CHES?	SS	CHES/	Aerout?	CHES20	-	-
1972-W19	2441682.50	1973	Skua	-	-	0.000	CHES?	SS	CHES/	Aerout?	CHES20	-	-
1972-W20	2441682.50	1973	Skua	-	-	0.000	CHES?	SS	CHES/	Aerout?	CHES20	-	-
1972-W21	2441682.50	1973	Skua	-	-	0.000	CHES?	SS	CHES/	Aerout?	CHES20	-	-
1972-W22	2441682.50	1973	Skua	-	-	0.000	CHES?	SS	CHES/	Aerout?	CHES20	-	-
1972-W23	2441682.50	1973	Skua	-	-	0.000	CHES?	SS	CHES/	Aerout?	CHES20	-	-
1972-W24	2441682.50	1973	Skua	-	-	0.000	CHES?	SS	CHES/	Aerout?	CHES20	-	-
1972-W25	2441682.50	1973	Skua	-	-	0.000	CHES?	SS	CHES/	Aerout?	CHES20	-	-
1972-W26	2441682.50	1973	Skua	-	-	0.000	CHES?	SS	CHES/	Aerout?	CHES20	-	-
1972-W27	2441682.50	1973	Skua	-	-	0.000	CHES?	SS	CHES/	Aerout?	CHES20	-	-
1972-W28	2441682.50	1973	Skua	-	-	0.000	CHES?	SS	CHES/	Aerout?	CHES20	-	-
1972-W29	2441682.50	1973	Skua	-	-	0.000	CHES?	SS	CHES/	Aerout?	CHES20	-	-
1972-W30	2441682.50	1973	Skua	-	-	0.000	CHES?	SS	CHES/	Aerout?	CHES20	-	-
1972-W31	2441682.50	1973	Skua	-	-	0.000	CHES?	SS	CHES/	Aerout?	CHES20	-	-
1972-W32	2441682.50	1973	Skua	-	-	0.000	CHES?	SS	CHES/	Aerout?	CHES20	-	-
1972-W33	2441682.50	1973	Skua	-	-	0.000	CHES?	SS	CHES/	Aerout?	CHES20	-	-
1972-W34	2441682.50	1973	Skua	-	-	0.000	CHES?	SS	CHES/	Aerout?	CHES20	-	-
1972-W35	2441682.50	1973	Skua	-	-	0.000	CHES?	SS	CHES/	Aerout?	CHES20	-	-
1972-W36	2441682.50	1973	Skua	-	-	0.000	CHES?	SS	CHES/	Aerout?	CHES20	-	-
1972-W37	2441682.50	1973	Skua	-	-	0.000	CHES?	SS	CHES/	Aerout?	CHES20	-	-
1972-W38	2441682.50	1973	Skua	-	-	0.000	CHES?	SS	CHES/	Aerout?	CHES20	-	-
1972-W39	2441682.50	1973	Skua	-	-	0.000	CHES?	SS	CHES/	Aerout?	CHES20	-	-
1972-W40	2441682.50	1973	Skua	-	-	0.000	CHES?	SS	CHES/	Aerout?	CHES20	-	-
1972-W41	2441682.50	1973	Skua	-	-	0.000	CHES?	SS	CHES/	Aerout?	CHES20	-	-
1972-W42	2441682.50	1973	Skua	-	-	0.000	CHES?	SS	CHES/	Aerout?	CHES20	-	-
1972-W43	2441682.50	1973	Skua	-	-	0.000	CHES?	SS	CHES/	Aerout?	CHES20	-	-
1972-W44	2441682.50	1973	Skua	-	-	0.000	CHES?	SS	CHES/	Aerout?	CHES20	-	-
1972-W45	2441682.50	1973	Skua	-	-	0.000	CHES?	SS	CHES/	Aerout?	CHES20	-	-
1972-W46	2441682.50	1973	Skua	-	-	0.000	CHES?	SS	CHES/	Aerout?	CHES20	-	-
1972-W47	2441682.50	1973	Skua	-	-	0.000	CHES?	SS	CHES/	Aerout?	CHES20	-	-
1972-W48	2441682.50	1973	Skua	-	-	0.000	CHES?	SS	CHES/	Aerout?	CHES20	-	-
1972-W49	2441682.50	1973	Skua	-	-	0.000	CHES?	SS	CHES/	Aerout?	CHES20	-	-
1972-W50	2441682.50	1973	Skua	-	-	0.000	CHES?	SS	CHES/	Aerout?	CHES20	-	-

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	OrbPay	Agency	Launch_Code	Group	Category	LTCite	Cite	Notes
1973-11627	2441952.11	1973 Sep 26 1435	Skua	-	CIHD	0.000	UKHO	SS	UKHO/	Meteo	SR15, 143	-	-
1973-11628	2441953.10	1973 Sep 27 1420	Skua	-	CIHD	0.000	UKHO	SS	UKHO/	Meteo	SR15, 143	-	-
1973-11629	2441953.63	1973 Sep 28 0306	Skua	-	CIHD	0.000	UKHO	SS	UKHO/	Meteo	SR15, 143	-	-
1973-11630	2441954.64	1973 Sep 29 0324	Skua	-	CIHD	0.000	UKHO	SS	UKHO/	Meteo	SR15, 143	-	-
1973-11631	2441956.67	1973 Oct 1 0402	Skua	-	CIHD	0.000	UKHO	SS	UKHO/	Meteo	SR15, 143	-	-
1973-5359	2441975.02	1973 Oct 19 1236.00	Skua 2	-	INTA MS2A-7301	0.000	INTA/DLR	SS	MPAE/Rose, Cisneros	Ionos	WDRF	-	-
1973-5414	2442016.98	1973 Nov 30 1130.00	Skua 2	-	INTA MSCLD-7306	0.000	INTA/DLR	SS	MPAE/Rose, Cisneros	Ionos	WDRF	-	-
1973-5416	2442019.99	1973 Dec 03 1139.00	Skua 2	-	INTA MSCLD-7307	0.000	INTA/DLR	SS	MPAE/Cisneros, Rose	Ionos	WDRF	-	-
1973-5417	2442021.07	1973 Dec 4 1345	Skua 2	-	AW-52-10	0.000	HRCC	SS	YURK/Schiff	Aeron	WDRF	-	-
1973-5419	2442021.25	1973 Dec 4 1800	Skua 2	-	AW-52-11	0.000	HRCC	SS	YURK/Schiff	Aeron	WDRF	-	-
1973-5420	2442021.44	1973 Dec 4 2234	Skua 2	-	AW-52-12	0.000	HRCC	SS	YURK/Schiff	Aeron	WDRF	-	-
1973-5421	2442021.79	1973 Dec 5 0652	Skua 2	-	AW-52-13	0.000	HRCC	SS	MPAE/Cisneros, Rose	Ionos	WDRF	-	-
1973-5422	2442021.99	1973 Dec 05 1146.00	Skua 2	-	INTA MSCLD-7308	0.000	INTA/DLR	SS	MPAE/Cisneros, Rose	Ionos	WDRF	-	-
1973-5423	2442022.09	1973 Dec 5 1405	Skua 2	-	AW-52-14	0.000	HRCC	SS	MPAE/Cisneros, Rose	Ionos	WDRF	-	-
1973-5431	2442023.98	1973 Dec 07 1132.00	Skua 2	-	INTA MSCLD-7309	0.000	INTA/DLR	SS	MPAE/Cisneros, Rose	Ionos	WDRF	-	-
1973-5436	2442023.95	1973 Dec 11 1046.00	Skua 2	-	INTA MSCLD-7310	0.000	INTA/DLR	SS	MPAE/Cisneros, Rose	Ionos	WDRF	-	-
1973-5438	2442028.96	1973 Dec 12 1108.00	Skua 2	-	INTA MSCLD-7311	0.000	INTA/DLR	SS	MPAE/Cisneros, Rose	Ionos	WDRF	-	-
1973-5440	2442028.96	1973 Dec 14 1136.00	Skua 2	-	INTA MSCLD-7312	0.000	INTA/DLR	SS	MPAE/Cisneros, Rose	Ionos	WDRF	-	-
1973-5441	2442032.98	1973 Dec 16 1130.00	Skua 2	-	INTA MSCLD-7313	0.000	INTA/DLR	SS	MPAE/Cisneros, Rose	Ionos	WDRF	-	-
1973-5453	2442032.98	1974 Jan 10 1130.00	Skua 2	-	INTA MSCLD-7401	0.000	INTA/DLR	SU	MPAE/Cisneros, Rose	Ionos	WDRF	-	-
1974-554	2442056.99	1974 Jan 11 1140.00	Skua 2	-	INTA MSCLD-7402	0.000	INTA/DLR	SS	MPAE/Cisneros, Rose	Ionos	WDRF	-	-
1974-554	2442056.99	1974 Jan 14 1135.00	Skua 2	-	INTA MSCLD-7403	0.000	INTA/DLR	SS	MPAE/Cisneros, Rose	Ionos	WDRF	-	-
1974-562	2442063.98	1974 Jan 16 1138.00	Skua 2	-	INTA MSCLD-7404	0.000	INTA/DLR	SS	MPAE/Cisneros, Rose	Ionos	WDRF	-	-
1974-566	2442066.98	1974 Jan 19 1134.00	Skua 4	-	INTA MSCL-7401	0.000	INTA/DLR	SS	MPAE/Cisneros, Rose	Ionos	WDRF	-	-
1974-569	2442066.98	1974 Jan 21 1130.00	Skua 4	-	INTA MSCL-7501	0.000	INTA/DLR	SS	MPAE/Cisneros, Rose	Ionos	WDRF	-	-
1974-575	2442070.98	1974 Jan 23 1130.00	Skua 4	-	INTA MSCL-7502	0.000	INTA/DLR	SS	MPAE/Cisneros, Rose	Ionos	WDRF	-	-
1974-577	2442072.98	1974 Jan 25 1130.00	Skua 4	-	INTA MSCL-7503	0.000	INTA/DLR	SS	MPAE/Cisneros, Rose	Ionos	WDRF	-	-
1975-547	2442436.06	1975 Jan 30 1533.00	Skua 2	-	INTA MSCL-7601	0.000	INTA/DLR	SS	MPAE/Cisneros, Rose	Ionos	WDRF	-	-
1975-554	2442443.09	1975 Feb 05 1502.00	Skua 2	-	INTA MSCL-7602	0.000	INTA/DLR	SS	MPAE/Cisneros, Rose	Ionos	WDRF	-	-
1975-562	2442449.04	1975 Feb 05 1122.00	Skua 2	-	INTA MSCL-7603	0.000	INTA/DLR	SS	MPAE/Rose, Viddel	Aeron/Tonos	WDRF	WDRF (Mag)	-
1975-5143	2442570.96	1975 Jun 07 1104.00	Skua 2	-	INTA MSCL-7604	0.000	INTA/DLR	SS	MPAE/Rose, Viddel	Aeron/Tonos	WDRF	WDRF (Mag)	-
1975-5146	2442570.96	1975 Jun 07 1104.00	Skua 3	-	INTA MSCL-7601	0.000	INTA/DLR	SS	MPAE/Rose, Viddel	Aeron/Tonos	WDRF	JATP41, 1105	-
1975-5354	2442763.96	1976 Jan 2 1459	Skua 3	-	INTA MSCL-7601	0.000	INTA/DLR	SS	MPAE/Rose, Viddel	Aeron/Tonos	WDRF	JATP41, 1105	-
1976-544	2442780.12	1976 Jan 04 1547.00	Skua 3	-	INTA MSCL-7601	0.000	INTA/DLR	SS	MPAE/Rose, Viddel	Aeron/Tonos	WDRF	JATP41, 1105	-
1976-546	2442782.16	1976 Jan 04 2258.00	Skua 4	-	INTA MSCL-7601	0.000	INTA/DLR	SS	MPAE/Rose, Viddel	Aeron/Tonos	WDRF	JATP41, 1105	-
1976-550	2442782.46	1976 Jan 06 1546.00	Skua 4	-	INTA MSCL-7601	0.000	INTA/DLR	SS	MPAE/Rose, Viddel	Aeron/Tonos	WDRF	JATP41, 1105	-
1976-551	2442787.17	1976 Jan 09 1611.00	Skua 2	-	INTA MSCL-7602	0.000	INTA/DLR	SS	MPAE/Rose, Viddel	Aeron/Tonos	WDRF	JATP41, 1105	-
1976-554	2442790.10	1976 Jan 12 1420.00	Skua 3	-	INTA MSCL-7602	0.000	INTA/DLR	SS	MPAE/Rose, Viddel	Aeron/Tonos	WDRF	JATP41, 1105	-
1976-556	2442792.09	1976 Jan 14 1410.00	Skua 3	-	INTA MSCL-7603	0.000	INTA/DLR	SS	MPAE/Rose, Viddel	Aeron/Tonos	WDRF	JATP41, 1105	-
1976-557	2442796.11	1976 Jan 20 1610.00	Skua 5	-	INTA MSCL-7603	0.000	INTA/DLR	SS	MPAE/Rose, Viddel	Aeron/Tonos	WDRF	JATP41, 1105	-
1976-563	2442798.15	1976 Jan 21 0540.00	Skua 2	-	INTA MSCL-7602	0.000	INTA/DLR	SS	MPAE/Rose, Viddel	Aeron/Tonos	WDRF	JATP41, 1105	-
1976-570	2442798.44	1976 Jan 21 2238.00	Skua 4	-	INTA MSCL-7604	0.000	INTA/DLR	SS	MPAE/Rose, Viddel	Aeron/Tonos	WDRF	JATP41, 1105	-
1976-571	2442800.15	1976 Jan 22 1616.00	Skua 2	-	INTA MSCL-7604	0.000	INTA/DLR	SS	MPAE/Rose, Viddel	Aeron/Tonos	WDRF	JATP41, 1105	-
1976-574	2442801.15	1976 Jan 23 1610.00	Skua 2	-	INTA MSCL-7603	0.000	INTA/DLR	SS	MPAE/Rose, Viddel	Aeron/Tonos	WDRF	JATP41, 1105	-
1976-580	2442804.16	1976 Jan 26 1619.00	Skua 3	-	INTA MSCL-7603	0.000	INTA/DLR	SS	MPAE/Rose, Viddel	Aeron/Tonos	WDRF	JATP41, 1105	-
1976-581	2442806.17	1976 Jan 28 1619.00	Skua 2	-	INTA MSCL-7604	0.000	INTA/DLR	SU	MPAE/Rose, Viddel	Aeron/Tonos	WDRF	JATP41, 1105	-
1976-582	2442814.16	1976 Feb 02 1510.00	Skua 4	-	INTA MSCL-7604	0.000	INTA/DLR	SS	MPAE/Rose, Viddel	Aeron/Tonos	WDRF	JATP41, 1105	-
1976-595	2442814.44	1976 Feb 05 2230.00	Skua 4	-	INTA MSCL-7603	0.000	INTA/DLR	SS	MPAE/Rose, Viddel	Aeron/Tonos	WDRF	JATP41, 1105	-
1976-598	2442817.15	1976 Feb 08 1534.00	Skua 4	-	INTA MSCL-7607-603	0.000	INTA/DLR	SS	MPAE/Rose, Viddel	Aeron/Tonos	WDRF	JATP41, 1105	-
1976-5412	2442803.70	1976 May 4 2130	Skua 4	-	INTA MSCL-7604	0.000	INTA/DLR	SU	MPAE/Rose, Viddel	Aeron/Tonos	WDRF	JATP41, 1105	-
1976-5415	2442803.70	1976 May 5 0430	Skua 4	-	INTA MSCL-7604	0.000	INTA/DLR	SU	MPAE/Rose, Viddel	Aeron/Tonos	WDRF	JATP41, 1105	-
1976-5413	2442803.70	1976 May 5 2130	Skua 4	-	INTA MSCL-7609	0.000	INTA/DLR	SU	MPAE/Rose, Viddel	Aeron/Tonos	WDRF	JATP41, 1105	-
1976-5414	2442807.15	1976 May 8 1531	Skua 2	-	INTA MSCL-7605	0.000	INTA/DLR	SU	MPAE/Rose, Viddel	Aeron/Tonos	WDRF	JATP41, 1105	-
1976-5415	2442814.15	1976 May 15 1531	Skua 2	-	WRSC-8001A	0.000	DEVIL	SS	MPAE/H4da1	Aeron	WDRF	-	-
1980-5188	2444554.50	1980 May 11 0030.00	Skua 2	-	WRSC-8002A	0.000	DEVIL	SS	MPAE/H4da1	Aeron	WDRF	-	-
1980-5260	2444554.56	1980 May 11 0131.30	Skua 2	-	WRSC-8003A	0.000	DEVIL	SS	MPAE/H4da1	Aeron	WDRF	-	-
1980-5265	2444559.66	1980 May 16 0345.00	Skua 2	-	E7	0.000	DEVIL	SS	MPAE/H4da1	Aeron	WDRF	-	-
1980-5261	2444559.73	1980 May 16 0537.30	Skua 2	-	E7	0.000	DEVIL	SS	MPAE/H4da1	Aeron	WDRF	-	-
1980-5261	2444571.66	1980 May 28 0344.36	Skua 2	-	E7	0.000	DEVIL	SS	MPAE/H4da1	Aeron	WDRF	-	-
1980-5262	2444574.69	1980 Dec 1 0209.30	Skua 4	-	E8	0.000	DEVIL	SS	MPAE/H4da1	Aeron	WDRF	-	-
1981-5427	2444948.22	1981 Dec 9 2201.59	Skua 2	-	E9	0.000	DEVIL	SS	MPAE/H4da1	Aeron	WDRF	-	-
1981-5428	2444948.46	1981 Dec 9 2255.30	Skua 2	-	E7	0.000	DEVIL	SS	MPAE/H4da1	Aeron	WDRF	-	-





Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Mission	Launch				Ascent_Pad	Apogee km	Range km	Dest
								Platform	Launch_Site	Launch_Pad	Ascent_Site				
1962-454	2437774.38	1962 Apr 19 2103	Skyboot ALBM	-	20025	PL.1	-	B-52G-473	EGL	RW12/30?	ARR	LP1	78	280	-
1962-A103	2437844.50	1962 Jun 29	Skyboot ALBM	-	20026	PL.2	-	B-52G-473	EGL	RW12/30?	ARR	LP1	12	-	-
1962-A164	2437920.50	1962 Sep 13	Skyboot ALBM	-	20027	PL.3	-	B-52G-473	EGL	RW12/30?	ARR	LP1	10?	-	-
1962-3626	2437933.09	1962 Sep 25 1409	Skyboot ALBM	-	20028	PL.4	-	B-52G-473	EGL	RW12/30?	ARR	LP1	100?	-	-
1962-4204	2437997.28	1962 Nov 28 1846	Skyboot ALBM	-	20031	GL.1	-	B-52G-473	EGL	RW12/30?	ARR	LP1	10?	-	-
1962-3583	2438021.09	1962 Dec 22 1415	Skyboot ALBM	-	20032	GL.2	-	B-52G-473	EGL	RW12/30?	ARR	LP1	580?	1968	-



Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Launch		Group	Category	LTCLite	Cite	Notes
						OrbPay	Agency					
1962-A64	2437774.38	1962 Apr 19 2103	SKybol1t ALBH	-	20025	0.000	AFBSSD	-	Test	DEF07.2160	ETR-IDX-FY62	St2/ftig
1962-A103	2437844.50	1962 Jun 29	SKybol1t ALBH	-	20026	0.000	AFBSSD	-	Test	MM620709-10	ETR-IDX-FY62	St1/ftig
1962-A154	2437920.50	1962 Sep 13	SKybol1t ALBH	-	20027	0.000	AFBSSD	-	Test	MM621024-10	ETR-IDX-FY63	-
1962-S626	2437933.09	1962 Sep 25 1409	SKybol1t ALBH	-	20028	0.000	AFBSSD	-	Test	UP1/MM621001-12	ETR-IDX-FY63	St2 partial
1962-A204	2437997.28	1962 Nov 28 1645	SKybol1t ALBH	-	20031	0.000	AFBSSD	-	Test	MM621203-10	ETR-IDX-FY63	-
1962-S663	2438021.09	1962 Dec 22 1415	SKybol1t ALBH	-	20032	0.000	AFBSSD	-	Test	ETR-IDX-FY63	-	-



Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Mission	LaunchCode	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee km	Range km	Dest
2022-A27	2459860.50	2022 Oct 8	Skyjark L	-	1	-	-	-	-	LANG	-	-	-	0	-	Norw. Sea



Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Orbit	Agency	Launch_Code	Group	Category	LTCite	Cite	Notes
2022-427	2458660.50	2022 Oct 8	Skyhawk L	-	1	0.000	SNR	AF	-	-	twitter.com	-	-





Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Mission	LaunchCode	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee km	Range km	Dest
2020-A18	2459075.50	2020 Aug 177	SkyLark Micro	-	1	-	-	-	-	LANC	-	-	-	27	-	Norw. Sea



Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	OrbPay	Agency	Launch_Code	Group	Category	LTCite	Cite	Notes
2020-418	2459078.50	2020 Aug 177	Skylark Micro	-	1	0.000	SKYR	AS	-	-	twitter.com	-	-





Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Launch_Mission	FlightCode	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee km	Range km	Dest
1958-441	2436331.18	1958 May 7 1620?	Snark	-	N-89E N-3409	-	-	-	-	LC1/2?	-	-	-	10?	-	-
1958-449	2436351.50	1958 May 28	Snark	-	N-89E N-3410	-	-	-	-	LC1/2?	-	-	-	10?	-	-
1958-463	2436382.09	1958 Jun 27 1409	Snark	-	N-89E N-3413	-	-	-	-	LC2	-	-	-	10?	-	-
1958-4103	2436441.64	1958 Aug 28 0320	Snark	-	N-89E N-3411	-	-	-	-	LC2	-	-	-	10?	-	-
1958-4106	2436445.81	1958 Aug 30 0725	Snark	-	N-89E N-3412	-	-	-	-	LC1/2?	-	-	-	10?	-	-
1958-4120	2436465.86	1958 Sep 19 0835	Snark	-	N-89E N-3414	-	-	-	-	LC2	-	-	-	10?	-	-
1958-4139	2436499.88	1958 Oct 23 0910	Snark	-	N-89D N-3318	-	-	-	-	LC1	-	-	-	10?	-	-
1958-4141	2436515.89	1958 Nov 8 0925	Snark	-	N-89D N-3317	-	-	-	-	LC1/2?	-	-	-	10?	-	-
1958-4162	2436548.50	1958 Dec 11	Snark	-	N-89D N-3319	-	-	-	-	LC1/2?	-	-	-	10?	-	-
1958-4164	2436553.92	1958 Dec 16 1000?	Snark	-	N-89D N-3308	-	-	-	-	LC1/2?	-	-	-	10?	-	-
1959-428	2436611.96	1959 Feb 12 1058	Snark	-	N-89D N-3320	-	-	-	-	LC1/2?	-	-	-	10?	-	-
1959-445	2436637.88	1959 Mar 10 0901	Snark	-	SN-62A N-3520	-	-	-	-	LC1/2?	-	-	-	10?	-	-
1959-459	2436665.56	1959 Apr 7 0126	Snark	-	SN-62A N-3520-1	-	-	-	-	LC1/2?	-	-	-	10?	-	-
1959-464	2436679.87	1959 Apr 21 0855	Snark	-	SN-62A N-3423	-	-	-	-	LC1/2?	-	-	-	10?	-	-
1959-475	2436694.65	1959 May 6 0336	Snark	-	SN-62A N-3424	-	-	-	-	LC1/2?	-	-	-	10?	-	-
1959-482	2436715.61	1959 May 27 0237	Snark	-	N-89D N-3520	-	-	-	-	LC1/2?	-	-	-	10?	-	-
1959-4113	2436751.77	1959 Jul 2 0624	Snark	-	N-89D N-3415	-	-	-	-	LC2	-	-	-	10?	-	-
1959-4165	2436836.50	1959 Sep 25	Snark	-	SN-62A N-3417	-	-	-	-	LC2	-	-	-	10?	-	-
1959-4169	2436879.50	1959 Nov 7 0000	Snark	-	SN-62A N-3416	-	-	-	-	LC1	-	-	-	10?	-	-
1959-4203	2436914.45	1959 Dec 11 2244	Snark	-	SN-62A N-3425	-	-	-	-	LC2	-	-	-	10?	-	-
1959-4206	2436919.17	1959 Dec 16 1612	Snark	-	N-89D N-3317-3	-	-	-	-	LC1	-	-	-	10?	-	-
1960-444	2436976.50	1960 Feb 12	Snark	-	SN-62A N-3426	-	-	-	-	LC1	-	-	-	10?	-	-
1960-460	2436996.50	1960 Mar 3	Snark	-	SN-62A N-3427	-	-	-	-	LC2	-	-	-	10?	-	-
1960-492	2437030.50	1960 Apr 6	Snark	-	SN-62A N-3444	-	-	-	-	LC1/2?	-	-	-	10?	-	-
1960-4123	2437070.50	1960 May 16	Snark	-	SN-62A N-3445	-	-	-	-	LC1/2?	-	-	-	10?	-	-
1960-4163	2437101.50	1960 Jun 16	Snark	-	SN-62A N-3446	-	-	-	-	LC1/2?	-	-	-	10?	-	-
1960-4210	2437123.50	1960 Jul 6	Snark	-	SN-62A N-3446	Cat IIE-6, Stal2	-	-	-	LC1/2?	-	-	-	10?	-	-
1960-4230	2437173.38	1960 Aug 28 2113	Snark	-	SN-62A N-3446	Cat IIE-7, Stal2	-	-	-	LC1/2?	-	-	-	10?	-	-
1960-4245	2437204.36	1960 Sep 28 2042	Snark	-	SN-62A N-3462	Cat IIE-6, Stal2	-	-	-	LC1/2?	-	-	-	10?	-	-
1960-4261	2437221.50	1960 Oct 14	Snark	-	SN-62A N-3464	Cat IIE-9	-	-	-	LC1/2?	-	-	-	10?	-	-
1960-4281	2437253.16	1960 Nov 14 1625	Snark	-	SN-62A N-3460	Cat IIE-10	-	-	-	LC1/2?	-	-	-	10?	-	-
1960-4289	2437274.36	1960 Dec 5 2038	Snark	-	SN-62A N-3468	Cat IIE-11, Stal2	-	-	-	LC1/2?	-	-	-	10?	-	-







Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Agency	Launch_Code	Group	Category	LFCite	Cite	Notes
1968-A41	2438331.18	1968 May 7 1620?	Shark	-	N-69E N-3409	AFMTC	NS	-	Test	Ulrich	MF60-2644	-
1968-A49	2438351.50	1968 May 28	Shark	-	N-69E N-3410	AFMTC	NS	-	Test	MF60-2644	-	-
1968-A63	2438382.09	1968 Jun 27 1409	Shark	-	N-69E N-3413	566SMS	NS	-	Test	Ulrich	MF60-2644	EST
1968-A103	2438441.64	1968 Aug 26 0320	Shark	-	N-69E N-3411	AFMTC	NS	-	Test	Ulrich	MF60-2644	Cleary
1968-A106	2438445.81	1968 Aug 30 0725	Shark	-	N-69E N-3412	AFMTC	NS	-	Test	Ulrich	MF60-2644	-
1968-A120	2438465.86	1968 Sep 19 0835	Shark	-	N-69E N-3414	AFMTC	NS	-	Test	Ulrich	MF60-2644	EST
1968-A139	2438499.88	1968 Oct 23 0910	Shark	-	N-69D N-3318	AFMTC	NS	-	Test	Ulrich/Wire	MF60-2644	Cleary
1968-A141	2438515.89	1968 Nov 8 0925	Shark	-	N-69D N-3317	AFMTC	NS	-	Test	Ulrich/Wire	MF60-2644	-
1968-A162	2438548.50	1968 Dec 11	Shark	-	N-69D N-3319	AFMTC	NS	-	Test	Wire	MF60-2644	-
1968-A164	2438553.92	1968 Dec 16 1000?	Shark	-	N-69D N-3308	AFMTC	NS	-	Test	Wire	MF60-2644	-
1969-A26	2438611.96	1969 Feb 12 1058	Shark	-	N-69D N-3320	AFMTC	NS	-	Test	Wire	MF60-2644	-
1969-A45	2438637.88	1969 Mar 10 0901	Shark	-	N-69D N-3322	AFMTC	NS	-	Test	Wire	MF60-2644	-
1969-A69	2438665.56	1969 Apr 7 0126	Shark	-	SH-62A N-3422	AFMTC	NS	-	OT	Wire	MF60-2644	-
1969-A64	2438679.87	1969 Apr 21 0856	Shark	-	N-69D N-3320-1	AFMTC	NS	-	OT	Ulrich/Wire	MF60-2644	Cleary
1969-A75	2438694.65	1969 May 6 0336	Shark	-	SH-62A N-3423	AFMTC	NS	-	OT	Wire	MF60-2644	-
1969-A82	2438715.61	1969 May 27 0237	Shark	-	SH-62A N-3424	AFMTC	NS	-	OT	Wire	MF60-2644	-
1969-A113	2438751.77	1969 Jul 2 0624	Shark	-	N-69D N-3320	AFMTC	NS	-	OT	Ulrich	MF60-2644	-
1969-A165	2438836.50	1969 Sep 25	Shark	-	SH-62A N-3415	AFMTC	NS	-	OT	MF60-2644	-	Cleary
1969-A189	2438879.50	1969 Nov 7 0000	Shark	-	SH-62A N-3416	AFMTC	NS	-	OT	Ulrich/Wire	MF60-2644	Cleary
1969-A203	2438914.45	1969 Dec 11 2244	Shark	-	SH-62A N-3417	AFMTC	NS	-	OT	Ulrich	MF60-2644	Cleary
1969-A206	2438919.17	1969 Dec 16 1612	Shark	-	N-69D N-3317-3	AFMTC	NS	-	OT	Ulrich	MF60-2644	Cleary
1960-A44	2438976.50	1960 Feb 12	Shark	-	SH-62A N-3425	AFMTC	NS	-	OT	Ulrich	Cleary	-
1960-A60	2438996.50	1960 Mar 3	Shark	-	SH-62A N-3426	AFMTC	NS	-	OT	MF60-2644	-	-
1960-A92	2437030.50	1960 Apr 6	Shark	-	SH-62A N-3427	AFMTC	NS	-	OT	MF60-2644	-	-
1960-A123	2437070.50	1960 May 16	Shark	-	SH-62A N-3444	AFMTC	NS	-	OT	MF60-2644	-	-
1960-A152	2437101.50	1960 Jun 16	Shark	-	SH-62A N-3445	AFMTC	NS	-	OT	MF60-2644	-	-
1960-A163	2437123.50	1960 Jun 16	Shark	-	SH-62A N-3446	702SMW	NS	-	OT	MF60-2644	-	-
1960-A210	2437173.38	1960 Aug 26 2113	Shark	-	SH-62A N-3446	SAC	NS	-	OT	Ulrich	MF60-2644	EST
1960-A230	2437204.36	1960 Sep 26 2042	Shark	-	SH-62A N-3452	SAC	NS	-	OT	Ulrich/Wire	MF60-2644	-
1960-A245	2437221.50	1960 Oct 14	Shark	-	SH-62A N-3454	SAC	NS	-	OT	MF60-2644	-	-
1960-A261	2437253.18	1960 Nov 14 1625	Shark	-	SH-62A N-3460	SAC	NS	-	OT	Ulrich/Wire	MF60-2644	-
1960-A289	2437274.36	1960 Dec 5 2038	Shark	-	SH-62A N-3458	SAC	NS	-	OT	Ulrich/Wire	MF60-2644	-



Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Launch			Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee km	Range km	Dest
							Mission	FlightCode	FlightCode								
1965-1653	2438560.50	1965 Apr 5 1355	Sonda 1	-	1	-	-	-	-	CLBI	-	-	-	657	-	-	
1966-1663	2439435.08	1966 Nov 5 1355	Sonda 1	?	D-4C	-	-	-	-	CASS	-	-	-	657	-	-	
1966-1664	2439442.07	1966 Nov 12 1338	Sonda 1	?	D-3C	-	-	-	-	CASS	-	-	-	657	-	-	
1966-1665	2439442.09	1966 Nov 12 1408	Sonda 1	?	D-10C	-	-	-	-	CASS	-	-	-	657	-	-	
1966-1666	2439442.12	1966 Nov 12 1450	Sonda 1	?	D-15C	-	-	-	-	CASS	-	-	-	657	-	-	
1966-1667	2439442.12	1966 Nov 12 1450	Sonda 1	?	D-4	-	-	-	-	CASS	-	-	-	657	-	-	
1966-1668	2439442.13	1966 Nov 12 1508	Sonda 1	?	D-11	-	-	-	-	CASS	-	-	-	657	-	-	
1966-1669	2439442.14	1966 Nov 12 1522	Sonda 1	?	D-13	-	-	-	-	CASS	-	-	-	657	-	-	
1966-1670	2439442.15	1966 Nov 12 1535	Sonda 1	?	D-16C	-	-	-	-	CASS	-	-	-	657	-	-	
1973-11645	2441952.12	1973 Sep 26 1500	Sonda 2	-	-	-	-	-	-	CLBI	-	-	-	607	-	-	
1973-11646	2441952.19	1973 Sep 26 1630	Sonda 2	-	-	-	-	-	-	CLBI	-	-	-	607	-	-	
1973-11647	2441952.38	1973 Sep 26 2100	Sonda 2	-	-	-	-	-	-	CLBI	-	-	-	607	-	-	
1973-11648	2441951.50	1973 Sep 26?	Sonda 2	-	-	-	-	-	-	CLBI	-	-	-	607	-	-	
1973-11649	2441952.50	1973 Sep 27 0000	Sonda 2	-	-	-	-	-	-	CLBI	-	-	-	607	-	-	
1973-11650	2441952.71	1973 Sep 27 0600	Sonda 2	-	-	-	-	-	-	CLBI	-	-	-	607	-	-	
1973-11651	2441952.81	1973 Sep 27 0730	Sonda 2	-	-	-	-	-	-	CLBI	-	-	-	607	-	-	
1973-11652	2441953.04	1973 Sep 27 1300	Sonda 2	-	-	-	-	-	-	CLBI	-	-	-	607	-	-	
1986-115	2446399.50	1986 Dec	Sonda 2	-	VLS-R1	-	-	-	-	CLBI	-	-	-	107	-	-	
1989-103	2447664.50	1989 May 18?	VLS-R2	-	-	-	-	-	-	CLBI	-	-	-	407	-	-	
1990-342	2447943.50	1990 Feb 21	Sonda 2	-	Alcantara	-	-	-	-	ALCA	-	-	-	101	-	-	
1990-3169	2448221.50	1990 Nov 26	Sonda 2	-	Manival	-	-	-	-	ALCA	-	-	-	91	-	-	
1991-3180	2448000.38	1991 Dec 9 2105	Sonda 2	-	Agua Belas	-	-	-	-	ALCA	-	-	-	88	-	-	
1992-116	2448926.50	1992 Oct 31	Sonda 2	-	Ponta de Areia	-	-	-	-	ALCA	-	-	-	32	-	-	
1993-524	2449068.50	1993 Mar 22	Sonda 2	-	Maruda	-	-	-	-	ALCA	-	-	-	102	-	-	
1994-540	2449326.50	1994 Jun 22	Sonda 2	-	Otuita	-	-	-	-	CLBI?	-	-	-	93	-	-	
1996-352	2450323.50	1996 Aug 28	Sonda 2	-	-	-	-	-	-	CLBI	-	-	-	87	-	-	



Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	OrbPay	Agency	Launch_Code	Group	Category	LTCite	Cite	Notes
1965-W53	2438850.50	1965 Apr	Sonda 1	-	1	0.000	IAE	SS	INPE/	Test	www.ise.cta.br	-	-
1966-W363	2439435.08	1966 Nov 5 1355	Sonda 1	?	D-4C	0.000	IAE	SS	INPE/	Ionos	WDCRF	-	-
1966-W364	2439442.07	1966 Nov 12 1338	Sonda 1	?	D-3C	0.000	IAE	SS	INPE/	Eclipse	WDCRF	-	-
1966-W365	2439442.09	1966 Nov 12 1408	Sonda 1	?	D-10C	0.000	IAE	SS	INPE/	Eclipse	WDCRF	-	-
1966-W366	2439442.12	1966 Nov 12 1455	Sonda 1	?	D-15C	0.000	IAE	SS	INPE/	Eclipse	WDCRF	-	-
1966-W367	2439442.12	1966 Nov 12 1455	Sonda 1	?	D-4	0.000	IAE	SS	INPE/	Eclipse	WDCRF	-	-
1966-W368	2439442.13	1966 Nov 12 1508	Sonda 1	?	D-11	0.000	IAE	SS	INPE/	Eclipse	WDCRF	-	-
1966-W369	2439442.14	1966 Nov 12 1522	Sonda 1	?	D-13	0.000	IAE	SS	INPE/	Eclipse	WDCRF	-	-
1966-W370	2439442.15	1966 Nov 12 1535	Sonda 1	?	D-16C	0.000	IAE	SS	INPE/	Eclipse	WDCRF	-	-
1973-W1645	2441952.12	1973 Sep 26 1500	Sonda 2	-	-	0.000	IAE	SS	IAE/	Meteo	SRI16_393	-	-
1973-W1646	2441952.19	1973 Sep 26 1630	Sonda 2	-	-	0.000	IAE	SS	IAE/	Meteo	SRI16_393	-	-
1973-W1647	2441952.38	1973 Sep 26 2100	Sonda 2	-	-	0.000	IAE	SS	IAE/	Meteo	SRI16_393	-	-
1973-W1648	2441951.50	1973 Sep 26?	Sonda 2	-	-	0.000	IAE	SS	IAE/	Meteo	SRI16_393	-	-
1973-W1649	2441952.50	1973 Sep 27 0000	Sonda 2	-	-	0.000	IAE	SS	IAE/	Meteo	SRI16_393	-	-
1973-W1650	2441952.71	1973 Sep 27 0500	Sonda 2	-	-	0.000	IAE	SS	IAE/	Meteo	SRI16_393	-	-
1973-W1651	2441952.81	1973 Sep 27 0730	Sonda 2	-	-	0.000	IAE	SS	IAE/	Meteo	SRI16_393	-	-
1973-W1652	2441953.04	1973 Sep 27 1300	Sonda 2	-	-	0.000	IAE	SS	IAE/	Meteo	SRI16_393	-	-
1985-A15	2446399.50	1985 Dec	VLS-R1	-	VLS-R1	0.000	IAE	SF	INPE/	Test	SpacePolicy7.72	JSD94-196	-
1989-M03	2447664.50	1989 May 18?	VLS-R2	-	VLS-R2	0.000	IAE	SS	INPE/	Test	JCH	-	-
1990-S42	2447943.50	1990 Feb 21	Sonda 2	-	XV-53	0.000	INPE/IAE	SS	INPE/	Ionos?	ESA-SF370	-	-
1990-S159	2448221.50	1990 Nov 26	Sonda 2	-	XV-54	0.000	INPE/IAE	SS	INPE/	Ionos?	ESA-SF370	-	-
1991-S180	2448600.38	1991 Dec 9 2105	Sonda 2	-	XV-56	0.000	INPE/IAE	SS	INPE/SMSK/Batista, Llew.	Aeron	JGR101,7917	ESA-SF370	-
1992-A16	2448926.50	1992 Oct 31	Sonda 2	-	XV-56	0.000	INPE/IAE	SS	INPE/	Ionos?	ESA-SF370	-	-
1993-S24	2449068.50	1993 Mar 22	Sonda 2	-	XV-57	0.000	INPE/IAE	SS	INPE/	Ionos?	ESA-SF370	-	-
1994-S40	2449525.50	1994 Jun 22	Sonda 2	-	XV-57	0.000	INPE/IAE	SS	INPE/	Ionos?	ESA-SF370	-	-
1996-S52	2450323.50	1996 Aug 28	Sonda 2	-	XV-58	0.000	INPE/IAE	SS	INPE/	Ionos?	Wire	Wire	-



Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Mission	FlightCode	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee_Km	Range_Km	Dest
1976-A11	2442834.50	1976 Feb 26	Sonda 3	-	XV-01	Serido	-	-	-	CLBJ	-	-	-	47	-	-
1976-S295	2443042.50	1976 Sep 21	Sonda 3	-	XV-02	-	-	-	-	CLBJ	-	-	-	543	-	-
1977-S141	2443233.50	1977 Mar 31	Sonda 3	-	XV-03	-	-	-	-	CLBJ	-	-	-	546	-	-
1977-S262	2443435.50	1977 Oct 19	Sonda 3	-	XV-04	-	-	-	-	CLBJ	-	-	-	590	-	-
1978-S126	2443625.29	1978 Apr 26 1900	Sonda 3	-	XV-05	-	-	-	-	CLBJ	-	-	-	615	-	-
1978-S216	2443778.50	1978 Sep 27	Sonda 3	-	XV-06	-	-	-	-	CLBJ	-	-	-	230	-	-
1979-S192	2444108.50	1979 Aug 23	Sonda 3	M2	XV-07	-	-	-	-	CLBJ	-	-	-	248	-	-
1980-S159	2444478.50	1980 Aug 27	Sonda 3	M1	XV-08	-	-	-	-	CLBJ	-	-	-	245	-	-
1980-S240	2444695.50	1980 Dec 22	Sonda 3	-	XV-09	-	-	-	-	CLBJ	-	-	-	600	-	-
1981-S163	2444948.50	1981 Dec 10	Sonda 3	M1	XV-10	-	-	-	-	CLBJ	-	-	-	239	-	-
1982-S136	2445150.50	1982 Jun 30	Sonda 3	-	XV-11	BIME Test Flight	-	-	-	CLBJ	-	-	-	549	-	-
1982-S160	2445221.41	1982 Sep 8 2152	Sonda 3	-	XV-12	GL A20-123-01 BIME	-	-	-	CLBJ	-	-	-	525	-	-
1982-S166	2445226.38	1982 Sep 13 2106	Sonda 3	-	XV-13	GL A20-123-02 BIME	-	-	-	CLBJ	-	-	-	506	-	-
1982-S168	2445230.37	1982 Sep 17 2066	Sonda 3	-	XV-14	Colored Bubbles	-	-	-	CLBJ	-	-	-	336	-	-
1982-S169	2445231.36	1982 Sep 18 2045	Sonda 3	-	XV-15	Colored Bubbles	-	-	-	CLBJ	-	-	-	336	-	-
1983-S108	2445466.50	1983 Jun 1	Sonda 3	-	XV-16	Manicore	-	-	-	CLBJ?	-	-	-	599	-	-
1983-S197	2445639.44	1983 Oct 31 2236	Sonda 3	-	XV-17	GL A20-327-01 (IHS)	-	-	-	WI	-	-	-	25	-	-
1983-S198	2445639.44	1983 Oct 31 2236	Sonda 3	-	XV-17	GL A20-327-02 (IHS)	-	-	-	WI	-	-	-	15	-	-
1983-S202	2445652.93	1983 Nov 14 1020	Sonda 3	-	XV-18	-	-	-	-	CLBJ	-	-	-	566	-	-
1984-S103	2445908.25	1984 Jul 26 1805	Sonda 3	-	XV-19	-	-	-	-	CLBJ	-	-	-	516	-	-
1985-S141	2446411.46	1985 Dec 11 2330	Sonda 3	-	XV-20	-	-	-	-	CLBJ	-	-	-	444	-	-
1986-S104	2446735.58	1986 Nov 1 0159	Sonda 3	-	XV-21	-	-	-	-	CLBJ?	-	-	-	500	-	-
1990-S168	2446225.50	1990 Nov 30	Sonda 3	-	XV-22	-	-	-	-	CLBJ?	-	-	-	441	-	-
1991-S100	2446375.50	1991 Apr 29	Sonda 3	-	XV-23	-	-	-	-	CLBJ?	-	-	-	282	-	-
1992-S47	2446774.62	1992 Jun 1 0252	Sonda 3	-	XV-24	-	-	-	-	CLBJ?	-	-	-	955	-	-
1993-S59	2450070.55	1993 Nov 17 0117	Sonda 3	-	XV-25	-	-	-	-	ALCA	-	-	-	128	-	-
1995-S58	2450070.55	1995 Dec 19 0117	Sonda 3	-	XV-26	-	-	-	-	ALCA	-	-	-	957	-	-
1995-S58	2450070.55	1995 Dec 19 0117	Sonda 3	-	XV-26	-	-	-	-	ALCA	-	-	-	957	-	-
1997-S54	2450567.20	1997 Apr 28 1642	VS-30	-	XV-01	DLR AL-1930-223	-	-	-	ALCA	-	-	-	128	-	-
1998-S59	2450733.55	1997 Oct 12 0119	VS-30	-	XV-02	DLR AL-1930-226	-	-	-	ALCA	-	-	-	120	-	-
1998-S59	2450733.55	1998 Jan 31 2343	VS-30	-	XV-03	DLR AL-1930-229	-	-	-	ALCA	-	-	-	128	-	-
1999-S12	2451282.91	1999 Mar 15 0952	VS-30	-	XV-04	Operacao San Marcos	-	-	-	ALCA	-	-	-	315	-	-
2000-S04	2451581.19	2000 Feb 6 1637	VS-30	-	XV-05	Lencois Maranhenses	-	-	-	ALCA	-	-	-	148	-	-
2000-S47	2451778.34	2000 Aug 21 2014	VS-30/Orion	-	XV-01	Baronesa	-	-	-	ALCA	-	-	-	430	-	-
2000-S65	2451778.34	2000 Dec 9 1220	VS-30	-	XV-02	Alacrin	-	-	-	ALCA	-	-	-	300	-	-
2002-S52	2452406.70	2002 May 12 0447	Sonda 3	-	XV-31	Pirapirama F2010v-2	-	-	-	CLBJ	-	-	-	434	-	-
2002-S73	2452602.43	2002 Nov 23 2218	VS-30/Orion	-	XV-02	Pirapirama	-	-	-	CLBJ	-	-	-	393	-	-
2002-S75	2452610.02	2002 Dec 1 1233	VS-30	-	XV-06	Cuma	-	-	-	ALCA	-	-	-	240	-	-
2004-S61	2453002.20	2004 Oct 23 1651:00	VS-30	-	XV-01	Cajucana	-	-	-	ALCA	-	-	-	211	-	-
2005-S66	2453671.07	2005 Dec 27 1345:00	VS-30/Orion	-	Y02	DLR SHEFEX	-	-	-	ESR	-	-	-	263	-	-
2005-S66	2453671.07	2005 Dec 27 1345:00	VS-30	-	Y03	DLR TEXUS 42 (EML-1)	-	-	-	ESR	-	-	-	237	-	-
2006-S50	2453705.88	2006 May 11 0812	VS-30	-	Y04	DLR TEXUS 43	-	-	-	ESR	-	-	-	242	-	-
2007-S29	2453866.84	2006 May 11 0812	VS-30	-	Y04	Cuma 11	-	-	-	ALCA	-	-	-	120	-	-
2007-S52	2454301.13	2007 Jul 19 1513	VS-30	-	Y07	Angicos	-	-	-	CLBJ	-	-	-	381	-	-
2008-S05	2454400.89	2008 Dec 16 0151:38	VS-30	-	Y07	ARR ROPRAY-2	-	-	-	ESR	-	-	-	264	-	-
2008-S06	2454507.30	2008 Jan 31 1314:00	VS-30/Orion	-	Y04	DLR TEXUS 44 (EML-2)	-	-	-	ESR	-	-	-	207	-	-
2008-S09	2454503.96	2008 Feb 11 1305	VS-30	-	Y06	DLR TEXUS 45	-	-	-	ESR	-	-	-	252	-	-
2008-S22	2454617.76	2008 Feb 11 1305	VS-30	-	Y06	SSC MASER 11	-	-	-	ESR	-	-	-	330	-	-
2008-S62	2454691.67	2008 Dec 5 0139:10	VS-30/Orion	-	Y08	TCI-1	-	-	-	SVL	-	-	-	252	-	-
2008-S62	2454691.67	2008 Dec 5 0139:10	VS-30	-	Y08	DLR TEXUS 46	-	-	-	ESR	-	-	-	264	-	-
2009-S62	2454691.67	2008 Nov 25 0910	VS-30	-	Y08	DLR TEXUS 47	-	-	-	ESR	-	-	-	242	-	-
2009-S62	2454691.67	2009 Nov 25 0910	VS-30	-	Y08	DLR TEXUS 48	-	-	-	ESR	-	-	-	268	-	-
2010-S72	2455463.18	2010 Dec 30 0601:00	VS-30	-	Y15	Maracá 1 / MICROG 1A	-	-	-	ALCA	-	-	-	211	-	-
2011-S60	2455643.75	2011 Mar 30 0601:00	VS-30	-	Y14	DLR TEXUS 49	-	-	-	ESR	-	-	-	268	-	-
2011-S60	2455643.75	2011 Mar 30 0601:00	VS-30	-	Y14	DLR TEXUS 48	-	-	-	ESR	-	-	-	268	-	-
2011-S63	2455698.92	2011 Nov 7 2020	VS-30	-	Y08	Br-1-A Lemamba	-	-	-	CLBJ	-	-	-	172?	-	-
2011-S64	2455698.92	2011 Dec 3 0721:31	VS-30/Orion	-	Y08	TCI-3	-	-	-	SVL	-	-	-	354	-	-
2012-S05	2455970.90	2012 Dec 13 0952	VS-30	-	Y16	SSC MASER 12	-	-	-	ESR	-	-	-	260	-	-
2012-S20	2456040.88	2012 Feb 23 0900	VS-30	-	Y06	SSC MASER 12	-	-	-	ESR	-	-	-	107	-	-
2012-S54	2456193.50	2012 Sep 13	VS-30/Orion	-	Y07	HIFire-5	-	-	-	AND	-	-	-	345	-	-
2012-S72	2456270.38	2012 Sep 13	VS-30/Orion	-	Y10	HIFire-3	-	-	-	AND	-	-	-	428	-	-
2013-S22	2456394.88	2013 Mar 22 0425	VS-30	-	Y17	TCI-2	-	-	-	ALCA	-	-	-	261	-	-
2013-S68	2456471.49	2013 Jul 15 0553	VS-30	-	Y09	HADIS 1	-	-	-	ESR	-	-	-	115	-	-
2013-A18	2456554.05	2013 Sep 18 1318	VS-30	-	Y10	DLR MAPHEUS 4	-	-	-	AND	-	-	-	151	-	-
2014-S49	2456602.58	2014 Sep 2 0202	VS-30	-	Y13	SCRAMSPACE 1	-	-	-	AND	-	-	-	57	-	-
2015-S15	2457073.42	2015 Feb 22 0752	VS-30	-	Y11	ERI-ME	-	-	-	ALCA	-	-	-	130?	-	-
2015-S16	2457075.83	2015 Feb 22 0752	VS-30	-	Y20	TCI-4	-	-	-	AND	-	-	-	365	-	-
2015-S17	2457086.57	2015 Mar 5 0144	VS-30	-	Y11	Cryofenix	-	-	-	ESR	-	-	-	265	-	-
2015-S39	2457112.14	2015 Mar 30 1526	VS-30	-	Y13	HIFire-7	-	-	-	AND	-	-	-	115	-	-
2015-S27	2457135.82	2015 Mar 30 0735	VS-30	-	Y18	DLR TEXUS E1	-	-	-	ESR	-	-	-	308	-	-
2015-S28	2457139.70	2015 Apr 23 0735	VS-30	-	Y18	DLR TEXUS E2	-	-	-	ESR	-	-	-	261	-	-
2015-S40	2457203.70	2015 Jun 30 0455	VS-30	-	Y24	DLR MAPHEUS 5	-	-	-	ESR	-	-	-	255	-	-
2015-S52	2457297.74	2015 Oct 9 0639	VS-31/Orion	-	Y01	DLR MAPHEUS 6	-	-	-	ESR	-	-	-	248	-	-
2015-S56	2457315.09	2015 Oct 9 1409	VS-31/Orion	-	Y02	SSC 0-STATES 1	-	-	-	MAN	-	-	-	244	-	-
2015-S83	2457357.71	2015 Dec 1 0500	VS-30	-	Y23?	SSC MASER 13	-	-	-	ESR	-	-	-	260	-	-
2016-S03	2457410.85	2016 Jan 23 0830	VS-30	-	Y23?	DLR TEXUS E3	-	-	-	ESR	-	-	-	263	-	-
2016-S06	2457421.38	2016 Jan 23 0830	VS-30	-	Y12	SSC SPIDER/LEENAVES	-	-	-	ESR	-	-	-	138	-	-
2016-S30	2457526.53	2016 May 18 0045?	VS-30	-	Y11	HIFire-5B	-	-	-	AND	-	-	-	278	-	-
2016-S79	2457730.05	2016 Dec 7 1310	VS-30	-	Y19?	AEB MICROC2	-	-	-	ALCA	-	-	-	100?	-	-
2017-S02	2457776.60	2017 Jan 23 0230	VS-30	-	-	DLR MAUIS-1	-	-	-	ESR	-	-	-	238?	-	-
2017-S30	2457886.89	2017 May 13 0920:00	VS-30	-	-	DLR MAPHEUS 6	-	-	-	ESR	-	-	-	254	-	-
2017-S58	2457934.50	2017 Jun 30 0730	VS-30	-	Y12?	DLR MAPHEUS 7	-	-	-	AND	-	-	-	292?	-	-
2018-S26	2458166.79	2018 Feb 17 0700	VS-31/ATM	-	-	HIFire-4	-	-	-	ESR	-	-	-	248	-	-
2018-S27	2458251.85	2018 May 13 0830	VS-30	-	-	DLR MAPHEUS 7	-	-	-	ESR	-	-	-	261	-	-
2018-S37	2458269.67	2018 May 31 0400	VS-30	-	-	DLR TEXUS F4	-	-	-	ESR	-	-	-	255	-	-
2018-S75	2458462.15	2018 Dec 9 1543	VS-30	-	Y14	DLR TEXUS E5	-	-	-	ESR	-	-	-	120	-	-
2019-S33	2458647.60	2019 Jun 13 0221	VS-30	-	-	AEB PSR-01	-	-	-	ALCA	-	-	-	240	-	-
2019-S32	2458668.79	2019 Jun 24 0652	VS-30	-	-	DLR ATEK/MAPHEUS 8	-	-	-	ESR	-	-	-	260	-	-
2019-S32	2458668.79	2019 Jun 24 0652	VS-30	-	-	SSC MASER 14	-	-	-	ESR	-	-	-	260	-	-



Launch

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Mission	FlightCode	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee km	Range km	Dest
2019-S70	2458802.90	2019 Nov 15 0935	VSB-30	-	-	DLR TEXUS 56	-	-	-	ESR	S	-	-	256	-	-
2021-S35	2459388.53	2021 Jun 23 0050	VS-31/Orion	-	-	DLR BDLT-1	-	-	-	ESR	S	-	-	280?	-	-
2021-S90	2459662.50	2021 Dec 14	VSB-30	-	V32	FAB 14-XS	-	-	-	ALCA	UL	-	-	160	200	-
2022-S85	2459756.60	2022 Jun 26 0219:00	S31/S30/ID	-	-	STURK	-	-	-	AUD	-	-	-	100?	-	-
2022-S103	2459853.77	2022 Oct 1 0626	VSB-30	-	-	DLR TEXUS 57	-	-	-	ESR	S	-	-	260?	-	-
2022-S117	2459876.22	2022 Oct 23 1720	VSB-30	-	V29	PSH-MQ	-	-	-	ALCA	UL	-	-	227	185	-
2022-S131	2459906.81	2022 Nov 23 0723	VSB-30	-	-	Operacao Santa Franca	-	SIX-3	-	ESR	S	-	-	260	-	-
2023-S21	2460058.72	2023 Apr 24 0520:00	VSB-30	-	-	Suborbital Express 3	-	-	-	ESR	S	-	-	250	-	Norway
2023-S67	2460280.81	2023 Dec 2 0730	VSB-30	-	-	DLR TEXUS 58	-	-	-	ESR	S	-	-	230?	-	-
2024-S04	2460356.11	2024 Feb 15 1442:00	VSB-30	-	-	DLR MAIUS-2	-	-	-	ESR	S	-	-	264	-	-
2024-S10	2460393.91	2024 Mar 24 0945	VSB-30	-	-	DLR TEXUS 59	-	-	-	ESR	S	-	-	264?	-	-
2024-S10	2460393.91	2024 Mar 24 0945	VSB-30	-	-	DLR TEXUS 60	-	-	-	ESR	S	-	-	264?	-	-
2024-S77	2460640.71	2024 Nov 26 0500	VSB-30	-	-	Suborbital Express 4	-	-	-	ESR	S	-	-	256	-	-



Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	OrbPay	Agency	Launch_Code	Group	Category	LTCite	Cite	Notes
1976-A11	2442894.50	1976 Feb 26	Sonda 3	-	XV-01	0.000	IAE	SF	INPE/	Test	ESA-SP183-333	-	-
1976-S295	2443042.50	1976 Sep 21	Sonda 3	-	XV-02	0.000	IAE	SS	INPE/	Test	ESA-SP183-333	-	-
1977-S141	2443233.50	1977 Mar 31	Sonda 3	-	XV-03	0.000	IAE	SS	INPE/	Ionos?	ESA-SP183-333	-	-
1977-S262	2443435.50	1977 Oct 19	Sonda 3	-	XV-04	0.000	IAE	SS	INPE/	Ionos?	ESA-SP183-333	-	-
1978-S126	2443625.29	1978 Apr 26 1900	Sonda 3	-	XV-05	0.000	IAE	SS	INPE/	Ionos?	WikiLeaks	-	ESA-SP183-333
1978-S216	2443778.50	1978 Sep 27	Sonda 3	M1	XV-06	0.000	IAE	SS	INPE/	Ionos?	ESA-SP183-333	-	-
1979-S192	2444108.50	1979 Aug 23	Sonda 3	M2	XV-07	0.000	IAE	SS	INPE/	Ionos?	ESA-SP183-333	-	-
1980-S159	2444478.50	1980 Aug 27	Sonda 3	M1	XV-08	0.000	IAE	SS	INPE/	Ionos?	ESA-SP183-333	-	-
1980-S240	2444595.50	1980 Dec 22	Sonda 3	-	XV-09	0.000	IAE	SS	INPE/	Ionos?	ESA-SP183-333	-	-
1981-S183	2444948.50	1981 Dec 10	Sonda 3	M1	XV-10	0.000	IAE	SS	INPE/	Ionos?	ESA-SP183-333	-	-
1982-S130	2445150.50	1982 Jun 30	Sonda 3	-	XV-11	0.000	IAE	SS	INPE/	Test	WDRF	-	ESA-SP183-333
1982-S160	2445221.41	1982 Sep 8 2152	Sonda 3	-	XV-12	0.000	IAE	SS	ARCRU/INPE/Harcisi	Ionos	WDRF	-	ESA-SP183-333
1982-S165	2445226.38	1982 Sep 13 2105	Sonda 3	-	XV-13	0.000	IAE	SS	ARCRU/INPE/Harcisi	Ionos	WDRF	-	ESA-SP183-333
1982-S168	2445230.37	1982 Sep 17 2056	Sonda 3	-	XV-14	0.000	IAE	SS	INPE/Abdu	Ionos	Power11	-	ESA-SP183-333
1982-S169	2445231.36	1982 Sep 18 2046	Sonda 3	-	XV-15	0.000	IAE	SS	INPE/INPE/	Ionos	Power11	-	ESA-SP183-333
1983-S108	2445268.50	1983 Jun 1	Sonda 3	-	XV-16	0.000	IAE	SS	INPE/	Ionos?	ESA-SP370	-	-
1983-S197	2445639.44	1983 Oct 31 2235	Sonda 3	-	XV-17	0.000	IAE	SF	ARCRU/Weber	Ionos?	WDRF	-	ARCRU
1983-S182	2445662.93	1983 Nov 14 1020	Sonda 3	-	XV-18	0.000	IAE	SF	ARCRU/Weber	Ionos	WDRF	-	ARCRU
1984-S103	2445908.25	1984 Jul 26 1805	Sonda 3	-	XV-19	0.000	IAE	SS	INPE/Abdu	Ionos	ASR37_1091	-	ESA-SP370
1985-S144	2446411.48	1985 Dec 11 2330	Sonda 3	-	XV-20	0.000	IAE	SS	INPE/Takaahshi	Aeron	ASR7_10_47	-	ESA-SP370
1986-S104	2446735.58	1986 Nov 1 0159	Sonda 3	-	XV-21	0.000	IAE	SS	INPE/Takaahshi	Aeron	PlanSpace136, 547	-	ESA-SP370
1990-S168	2446225.50	1990 Nov 30	Sonda 3	-	XV-22	0.000	IAE	SS	INPE/	Ionos?	ESA-SP370	-	-
1991-S100	2446375.50	1991 Apr 29	Sonda 3	-	XV-23	0.000	IAE	SS	INPE/	Ionos?	JGR101,1D2,4033	-	ESA-SP370
1992-S47	2446774.62	1992 Jun 1 0252	Sonda 3	-	XV-24	0.000	IAE	SS	INPE/	Ionos?	JGR101,1D2,4033	-	ESA-SP370
1993-S69	2449308.50	1993 Nov 17	Sonda 3	-	XV-25	0.000	IAE	SS	INPE/Muralikrishna	Ionos?	CUSPAL2006	-	ASR37_903
1995-S88	2450070.55	1995 Dec 19 0117	Sonda 3	-	XV-26?	0.000	IAE	SS	INPE/DLA/	Test	Moraba	-	EarthPlanSpace51,615
1997-S54	2450567.20	1997 Apr 28 1642	V5-30	-	XV-01 RONALD	0.000	INPE/DLR	SS	INPE/DLA/	Aeron	Moraba	-	ASR37_903
1997-S69	2450733.55	1997 Oct 12 0119	V5-30	-	XV-02 RONALD 2	0.000	INPE/DLR	SS	INPE/DLA/	Aeron	Moraba	-	ASR37_903
1998-S02	2451551.31	1998 Jan 31 2343	V5-30	-	XV-03	0.000	AB	SS	INPE/DLA/	Aeron	Moraba	-	ASR37_903
1999-S14	2451252.31	1999 Feb 6 1637	V5-30	-	XV-04	0.000	AB	SS	INPE/	Micrograv	SH990412-3	-	ASR37_903
2000-S47	2451778.34	2000 Aug 21 2014	V5-30/Orion	-	XV-05	0.000	AB	SS	INPE/	Micrograv	www.iae.cta.br	-	ASR37_903
2000-S85	2451388.01	2000 Dec 9 1220	Sonda 3	-	XV-01	0.000	AB/DLA	SS	INPE/	Micrograv	www.iae.cta.br	-	ASR37_903
2002-S52	2452406.70	2002 May 12 0447	Sonda 3	-	XV-31	0.000	AB	SS	INPE/	Micrograv	www.iae.cta.br	-	ASR37_903
2002-S73	2452602.43	2002 Nov 23 2216	Sonda 3	-	XV-02	0.000	AB	SS	INPE/	Ionos	www.iae.cta.br	-	ASR37_903
2002-S74	2452610.02	2002 Dec 1 1283	V5-30	-	XV-01	0.000	AB	SS	INPE/	Micrograv	www.iae.cta.br	-	ASR37_903
2004-S61	2453502.20	2004 Oct 23 1951:00	V5-30	-	XV-06	0.000	AB	SS	INPE/	Test	IAC-4-IAF-3.5.05	-	ESA-SP30-145
2006-S46	2453765.88	2006 Oct 27 1345:00	V5-30/Orion	-	XV-03	0.000	SSC/DLA	SS	DLN/longo	Beamtry Test	www.rocketrange.no	-	www.aeb.gov.br
2006-S50	2453866.94	2006 May 11 0812	V5-30	-	02	0.000	SSC/DLA	SS	ESA/DLH/Wunderlich	Micrograv	www.sec.se	-	ANSTOS1114-94
2007-S29	2454301.13	2007 Jul 19 1511:38	V5-30	-	03	0.000	AB	SS	ESA/Fronberg	Micrograv	www.sec.se	-	Rigg
2007-S61	2454160.38	2007 Dec 19 1914:38	V5-30	-	04	0.000	AB	SS	INPE/	Micrograv	www.aeb.gov.br	-	JASTF73,2228
2008-S05	2454593.38	2008 Jan 31 1914:00	V5-30/Orion	-	05	0.000	AB	SS	LESES/Plane	Techn/GPS	rocketrange.no	-	-
2008-S08	2454593.38	2008 Feb 21 1135	V5-30/Orion	-	06	0.000	SSC/DLA	SS	DLN/Fecht	Micrograv	www.sec.se	-	-
2008-S22	2454617.76	2008 Feb 21 0615	V5-30	-	08	0.000	SSC/DLA	SS	ESL/?	Micrograv/Bio	www.sec.se	-	-
2008-S22	2454617.76	2008 Feb 21 0615	V5-30	-	09	0.000	SSC/DLA	SS	ESL/?	Micrograv/Bio	www.sec.se	-	-
2008-S22	2454617.76	2008 Feb 21 0615	V5-30	-	10	0.000	SSC/DLA	SS	ESL/?	Micrograv/Bio	www.sec.se	-	-
2009-S62	2454661.94	2009 May 15 0351:10	V5-30/Orion	-	05	0.000	SSC/DLA	SS	ESL/?	Micrograv/Bio	www.sec.se	-	-
2009-S62	2454661.94	2009 May 15 0351:10	V5-30	-	06	0.000	SSC/DLA	SS	ESL/?	Micrograv/Bio	www.sec.se	-	-
2009-S62	2454661.94	2009 May 15 0351:10	V5-30	-	07	0.000	SSC/DLA	SS	ESL/?	Micrograv/Bio	www.sec.se	-	-
2009-S62	2454661.94	2009 May 15 0351:10	V5-30	-	08	0.000	SSC/DLA	SS	ESL/?	Micrograv/Bio	www.sec.se	-	-
2010-S72	2455553.15	2010 Mar 30 0631:00	V5-30	-	09	0.000	SSC/DLA	SS	INPE/	Micrograv	www.aeb.gov.br	-	brazilianinspace.blogspot
2011-S60	2455649.75	2011 Mar 30 0631:00	V5-30	-	14	0.000	SSC/DLA	SS	INPE/ESA?	Micrograv	www.sec.se	-	-
2011-S63	2455892.48	2011 Apr 27 0910	V5-30	-	15	0.000	SSC/DLA	SS	INPE/IAE/DLR/	Ionos/Test	www.rocketrange.no	-	-
2011-S64	2455898.81	2011 Dec 3 0721:31	V5-30/Orion	-	08	0.000	AB/PORISK	SS	OSLD/?	Micrograv	www.rocketrange.no	-	-
2012-S05	2455970.90	2012 Feb 13 0932	V5-30	-	16	0.000	SSC	SS	SSC/?	Micrograv	www.rocketrange.no	-	-
2012-S20	2456040.88	2012 Apr 23 0800	V5-30/Orion	-	06	0.000	DLR	SF	ARFL/ASTO/MSA	Micrograv	brazilianinspace.blogspot	-	-
2012-S74	2456193.50	2012 Sep 13	V5-30/Orion	-	07	0.000	DLR	SS	ARFL/ASTO/MSA	Micrograv	www.icas.org	-	-
2013-S22	2456394.68	2013 Apr 8 2100	V5-30/Orion	-	17	0.000	AB	SS	INPE/	Ionos	brazilianinspace.blogspot	-	-
2013-S68	2456471.49	2013 Jun 27 2352:30	V5-30	-	09	0.000	DLR	SS	IAP/TRSS/	Aeron	rocketrange.no	-	-
2013-S49	2456488.75	2013 Jul 15 0553	V5-30	-	10	0.000	DLR	SS	UQU/	Micrograv	www.rocketrange.no	-	-
2013-A18	2456554.05	2013 Sep 18 1318	V5-30/Orion	-	09	0.000	DLR	SF	UQU/	Micrograv	www.rocketrange.no	-	-
2014-S49	2456902.58	2014 Sep 2 0202	V5-30	-	13	0.000	AB	SS	IAE/	Technomic	brazilianinspace.blogspot	-	-
2015-S15	2457073.42	2015 Feb 19 2006	V5-30/Orion	-	11	0.000	AB	SS	IAE/	Technomic	rocketrange.no	-	-
2015-S16	2457075.83	2015 Feb 22 0752	V5-30/Orion	-	12	0.000	AB	SS	IAE/	Technomic	rocketrange.no	-	-
2015-S17	2457086.57	2015 Mar 5 0144	V5-30	-	20	0.000	SSC	SS	CHES/	Aeron	brazilianinspace.blogspot	-	-
2015-S39	2457112.14	2015 Mar 5 0144	V5-30	-	21	0.000	DLR	SS	OSLD/mean	Techn	blog-eggs.fi	-	-
2015-S27	2457135.82	2015 Mar 30 1526	V5-30	-	13	0.000	DLR	SS	IAP/TRSS/	Aeron	www.dir.de	-	brazilianinspace.blogspot
2015-S28	2457139.70	2015 Apr 23 0735	V5-30	-	18	0.000	SSC/DLR	SS	ARFL/ASTO/MSA/	Hypersonic	brazilianinspace.blogspot	-	-
2015-S40	2457203.70	2015 Jun 30 0455	V5-30	-	22	0.000	DLR	SS	DLR/	Micrograv	www.space.com	-	-
2015-S52	2457297.74	2015 Jun 30 0455	V5-30	-	24	0.000	DLR	SS	DLR/	Micrograv	www.space.com	-	-
2015-S56	2457315.09	2015 Oct 2 0539	V5-31/Orion	-	02	0.000	SSC	SS	SSC/	Aeron	www.space.com	-	-
2015-S83	2457357.71	2015 Oct 19 1409	V5-31/Orion	-	02	0.000	SSC	SS	SSC/	Aeron	www.space.com	-	-
2016-S03	2457410.85	2016 Jan 23 0830	V5-30	-	22?	0.000	SSC/DLR	SS	DLR/	Micrograv	www.space.com	-	-
2016-S06	2457421.38	2016 Jan 23 0830	V5-30	-	23?	0.000	SSC/DLR	SS	DLR/	Micrograv	www.space.com	-	-
2016-S26	2457595.53	2016 Feb 18 0045?	V5-30/Orion	-	12	0.000	SSC	SS	ARFL/ASTO/UQU/	Hypersonic	UQ/priv.comm	-	-
2016-S79	2457730.05	2016 Dec 7 1310	V5-30	-	11?	0.000	AB	SS	ZBW/Guertebek	Physics	fabmail.br	-	-
2017-S02	2457786.89	2017 Jan 23 0230	V5-30	-	11?	0.000	DLR	SS	ARFL/ASTO/UQU/	Physics	www.space.com	-	-
2017-S58	2457896.99	2017 Jun 30 0920:00	V5-30	-	12?	0.000	DLR	SS	DLR/	Micrograv	www.space.com	-	-
2018-S26	2458166.79	2018 Feb 17 0700	V5-31/IM	-	-	0.000	SSC/DLR	SS	DLR/	Micrograv	boeing.com	-	-
2018-S27	2458251.85	2018 May 13 0830	V5-30	-	-	0.000	DLR	SS	DLR/	Micrograv	www.space.com	-	-
2018-S37	2458269.67	2018 May 31 0400	V5-30	-	-	0.000	SSC/DLR	SS	DLR/	Micrograv	www.space.com	-	-
2018-S75	2458462.15	2018 Dec 9 1543	V5-30	-	14	0.000	AB	SS	IAE/	Ionos/Teach	brazilianinspace.blogspot	-	-
2019-S33	2458647.60	2019 Jun 13 0221	V5-30	-	-	0.000	DLR	SS	DLR/	Micrograv	www.space.com	-	-
2019-S32	2458658.79	2019 Jun 24 0652	V5-30	-	-	0.000	SSC	SS	SSC/	Micrograv	www.sec.se	-	Or IM/V5-30?

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	OrbPay	Agency	Launch_Code	Group	Category	LTCite	Cite	Notes
2019-S70	2458602.90	2019 Nov 15 0935	VSB-30	-	-	0.000	SSC/DLR	SS	ESA/DLR/	Micrograv	sscspace.com	-	-
2021-S35	2459388.53	2021 Jun 23 0050	VSB-31/Orion	-	-	0.000	DLR	SS	DLR/	Hypersonic	Wire	-	-
2021-S90	2459562.50	2021 Dec 14	VSB-30	-	V32	0.000	FAB	SS	IAE/	Hypersonic	Wire	-	-
2022-S85	2459766.60	2022 Jun 26 02:19:00	S31/S30/I0	-	-	0.000	DLR	SS	DLR/	Hypersonic	youtube.com	-	-
2022-S103	2459863.77	2022 Oct 1 0626	VSB-30	-	-	0.000	SSC/DLR	SS	ESA/DLR/	Micrograv	airbus.com	-	-
2022-S117	2459876.22	2022 Oct 23 1720	VSB-30	-	V29	0.000	FAB	SS	IAE/	Hypersonic	Wire	-	-
2022-S131	2459906.81	2022 Nov 23 0723	VSB-30	-	-	0.000	SSC	SS	SSC/	Micrograv	www.ssc.se	-	-
2023-S21	2460068.72	2023 Apr 24 0520:00	VSB-30	-	-	0.000	SSC/DLR	SS	ESA/DLR/	Micrograv	airbus.com	-	-
2023-S67	2460280.81	2023 Dec 2 0730	VSB-30	-	-	0.000	DLR	SS	ZARM/Querlebeck	Physics	www.sscspace.com	-	-
2024-S04	2460366.11	2024 Feb 15 1442:00	VSB-30	-	-	0.000	DLR	SS	ZARM/ESM/	Microgravity	www.sscspace.com	-	-
2024-S10	2460393.91	2024 Mar 24 0945	VSB-30	-	-	0.000	DLR	SS	ZARM/ESM/	Microgravity	www.sscspace.com	-	-
2024-S77	2460640.71	2024 Nov 26 0500	VSB-30	-	-	0.000	SSC	SS	SSC/ESN/	Microgravity	www.sscspace.com	-	-



Launch

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Mission	FlightCode	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee km	Range km	Deet
2006-A06	2454004.34	2006 Sep 26 2014	SpaceLoft XL	-	SpaceLoft SL-1	-	-	-	-	SPAH	VLA LCI	-	-	12	-	-
2007-S19	2454219.12	2007 Apr 28 1456	SpaceLoft XL	-	SpaceLoft SL-2	Celestis Legacy	-	-	-	SPAH	VLA LCI	-	-	117	-	-
2009-A03	2454964.08	2009 May 2 1400	SpaceLoft XL	-	SpaceLoft SL-3	Education Launch	-	-	-	SPAH	VLA LCI	-	-	107	-	-
2010-S82	2455321.03	2010 May 4 1241:02	SpaceLoft XL	-	SpaceLoft SL-4	-	-	-	-	SPAH	VLA LCI	-	-	113	-	-
2011-S18	2455702.06	2011 May 20 1321	SpaceLoft XL	-	SpaceLoft SL-5	-	-	-	-	SPAH	VLA LCI	-	-	118	-	-
2012-S16	2456023.10	2012 Apr 5 1418	SpaceLoft XL	-	SpaceLoft SL-6	-	-	-	-	SPAH	VLA LCI	-	-	117	-	-
2013-S41	2456465.08	2013 Jun 21 1357	SpaceLoft XL	-	SpaceLoft SL-7	MASA FUP-1	-	-	-	SPAH	VLA LCI	-	-	119	-	-
2013-S88	2456609.17	2013 Nov 12 1612	SpaceLoft XL	-	SpaceLoft SL-8	MASA FUP-2	-	-	-	SPAH	VLA LCI	-	-	116	-	-
2014-S64	2456964.06	2014 Oct 23 1333	SpaceLoft XL	-	SpaceLoft SL-9	MASA FUP-3	-	-	-	SPAH	VLA LCI	-	-	124	-	-
2015-S72	2457333.13	2015 Nov 6 1501	SpaceLoft XL	-	SpaceLoft SL-10	MASA FUP-4/Maraia	-	-	-	SPAH	VLA LCI	-	-	121	-	-
2018-S52	2458374.11	2018 Sep 12 1433	SpaceLoft XL	-	SpaceLoft SL-11	MASA FUP-67/ADEPT	-	-	-	SPAH	VLA LCI	-	-	114	-	-
2018-S68	2458379.09	2018 Sep 17 1409	SpaceLoft XL	-	SpaceLoft SL-12	MASA FUP-67	-	-	-	SPAH	VLA LCI	-	-	114	-	-
2019-S72	2458810.14	2019 Nov 22 1519	SpaceLoft XL	-	SpaceLoft SL-14	-	-	-	-	SPAH	VLA LCI	-	-	92	-	-
2021-S59	2459438.11	2021 Aug 11 1444	SpaceLoft XL	-	SpaceLoft SL-16	RedX-1	-	-	-	SPAH	VLA LCI	-	-	100?	-	-
2023-A14	2460066.20	2023 May 1 1645	SpaceLoft XL	-	SpaceLoft SL-17	-	-	-	-	SPAH	VLA LCI	-	-	0	-	-
2024-S62	2460585.05	2024 Oct 1 1309	SpaceLoft XL	-	SpaceLoft SL-15	MASA FUP	-	-	-	SPAH	VLA LCI	-	-	100?	-	-
2024-S67	2460622.50	2024 Nov 8	SpaceLoft XL	-	SpaceLoft SL-20	LML Cyclone-1	-	-	-	SPAH	VLA LCI	-	-	100?	-	-



Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	DrPay	Agency	Launch_Code	Group	Category	LTCite	Cite	Notes
2006-A06	2454004.34	2006 Sep 25 2014	SpaceLoft XL	-	SpaceLoft SL-1	0.000	UPAE	SF	UPAE/	Test	Wire	-	-
2007-S19	2454219.12	2007 Apr 28 1456	SpaceLoft XL	-	SpaceLoft SL-2	0.000	UPAE	SS	SSICZ/	Test/Burial	Wire	-	-
2009-A03	2454954.08	2009 May 2 1400	SpaceLoft XL	-	SpaceLoft SL-3	0.000	UPAE	SF	MNSU/Hynes	Test	Wire	-	-
2010-S52	2455321.03	2010 May 4 1241:02	SpaceLoft XL	-	SpaceLoft SL-4	0.000	UPAE	SS	UPAE/SSICE/	Edw/Burial	Wire	-	-
2011-S18	2455702.06	2011 May 20 1321	SpaceLoft XL	-	SpaceLoft SL-5	0.000	UPAE	SS	UPAE/SSICE/	Edw/Burial	Wire	-	-
2012-S16	2456023.10	2012 Apr 5 1418	SpaceLoft XL	-	SpaceLoft SL-6	0.000	UPAE	SS	UPAE/AFORS/	Tech	Wire	-	-
2013-S91	2456465.08	2013 Jun 21 1357	SpaceLoft XL	-	SpaceLoft SL-7	0.000	UPAE	SS	UPAE/DFRC/	Tech	Wire	-	-
2013-S88	2456609.17	2013 Nov 12 1612	SpaceLoft XL	-	SpaceLoft SL-8	0.000	UPAE	SS	UPAE/DFRC/	Tech	Wire	-	-
2014-S64	2456954.06	2014 Oct 23 1333	SpaceLoft XL	-	SpaceLoft SL-9	0.000	UPAE	SS	UPAE/DFRC/	Tech	Wire	-	-
2015-S72	2457333.13	2015 Nov 6 1501	SpaceLoft XL	-	SpaceLoft SL-10	0.000	UPAE	SS	UPAE/DFRC/	Tech	Wire	-	-
2018-S52	2458374.11	2018 Sep 12 1433	SpaceLoft XL	-	SpaceLoft SL-11	0.000	UPAE	SS	UPAE/DFRC/ARC/	Tech	Wire	-	-
2018-S58	2458379.09	2018 Sep 17 1409	SpaceLoft XL	-	SpaceLoft SL-11	0.000	UPAE	SS	UPAE/DFRC/SSICE/	Tech/Burial	Wire	-	-
2019-S72	2458810.14	2019 Nov 22 1519	SpaceLoft XL	-	SpaceLoft SL-14	0.000	UPAE	SS	UPAE/DFRC/ARC/	Tech	Wire	-	-
2021-S59	2459438.11	2021 Aug 11 1444	SpaceLoft XL	-	SpaceLoft SL-16	0.000	UPAE	SS	UPAE/LML/	Tech	Wire	-	-
2023-A14	2460066.20	2023 May 1 1645	SpaceLoft XL	-	SpaceLoft SL-17	0.000	UPAE	SF	UPAE/	Tech/Burial	Wire	-	-
2024-S62	2460585.05	2024 Oct 1 1309	SpaceLoft XL	-	SpaceLoft SL-15	0.000	UPAE	SS	UPAE/	Tech	Wire	-	-
2024-S67	2460622.50	2024 Nov 8	SpaceLoft XL	-	SpaceLoft SL-20	0.000	UPAE	SS	UPAE/LML/	Tech	Wire	-	-















Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Mission	FlightCode	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee_Km	Range_Km	Dest
1963-558	2438080.50	1963 Feb 20	Mike Zeus	3	ZK-557	-	-	-	-	WS	LC38	-	-	507	-	-
1963-573	2438088.50	1963 Feb 28 0950?	Mike Zeus	3	ZK-137	K-10 Atlas Intercept	-	-	-	KRR	-	-	-	707	-	-
1963-529	2438109.50	1963 Mar 21	Mike Zeus DM-155	3	ZK-147/MODFLAP 3	DM-155 Test 3	-	-	-	KRR	-	-	-	200?	-	-
1963-5129	2438118.50	1963 Apr 30	Mike Zeus	3	ZK-157 20114	K-17 Titan Intercept	-	-	-	KRR	-	-	-	80	-	-
1963-5149	2438132.50	1963 Apr 13	Mike Zeus	3	ZK-167	K-21 Titan Intercept	-	-	-	KRR	-	-	-	70?	-	-
1963-5162	2438137.50	1963 Apr 18	Mike Zeus	3	ZK-567	-	-	-	-	WS	LC38	-	-	50?	-	-
1963-5160	2438138.50	1963 Apr 19	Mike Zeus DM-155	3	ZK-177	DM-155 Sln Target	-	-	-	KRR	-	-	-	50?	-	-
1963-5172	2438143.50	1963 Apr 24	Mike Zeus	3	ZK-577	-	-	-	-	WS	LC38	-	-	50?	-	-
1963-5172	2438159.50	1963 May 10	Mike Zeus	3	ZK-587	-	-	-	-	WS	LC38	-	-	20?	-	-
1963-461	2438119.50	1963 Q2?	Mike Zeus	3	ZK-187	-	-	-	-	KRR	-	-	-	70?	-	-
1963-462	2438119.50	1963 Q2?	Mike Zeus	3	ZK-197	-	-	-	-	KRR	-	-	-	70?	-	-
1963-4198	2438119.50	1963 Q2?	Mike Zeus	3	ZK-597	-	-	-	-	WS	LC38	-	-	50?	-	-
1963-4199	2438119.50	1963 Q2?	Mike Zeus	3	ZK-607	-	-	-	-	WS	LC38	-	-	50?	-	-
1963-4200	2438119.50	1963 Q2?	Mike Zeus	3	ZK-617	-	-	-	-	WS	LC38	-	-	50?	-	-
1963-5229	2438173.50	1963 May 24	Mike Zeus DM-155	3	ZK-20 20138 (100)	ZK-20 DM-155 Agena	-	-	-	KRR	-	-	-	200?	-	-
1963-5631	2438180.50	1963 May 31	Mike Zeus	3	ZK-627	-	-	-	-	WS	-	-	-	50?	-	-
1963-5259	2438186.50	1963 Jun 5	Mike Zeus	3	ZK-63	JFK Demo	-	-	-	WS	LC38	-	-	50?	-	-
1963-5272	2438192.50	1963 Jun 12 0950?	Mike Zeus	3	ZK-21	K-15 Atlas Intercept	-	-	-	KRR	-	-	-	80?	-	-
1963-5319	2438211.50	1963 Jun 1	Mike Zeus	3	ZK-64 (104)	-	-	-	-	WS	LC38	-	-	50?	-	-
1963-5324	2438213.50	1963 Jun 3	Mike Zeus	3	ZK-227	K-23 Atlas Intercept	-	-	-	KRR	-	-	-	80?	-	-
1963-5325	2438213.50	1963 Jun 3	Mike Zeus	3	ZK-667	-	-	-	-	WS	LC38	-	-	50?	-	-
1963-5360	2438236.50	1963 Jun 26	Mike Zeus	3	ZK-677	Mike X TMD	-	-	-	WS	LC38	-	-	40?	-	-
1963-5362	2438249.50	1963 Aug 6	Mike Zeus	3	ZK-237	K-26 Titan Intercept	-	-	-	KRR	-	-	-	80?	-	-
1963-5368	2438266.50	1963 Aug 15	Mike Zeus	3	ZK-247	-	-	-	-	KRR	-	-	-	80?	-	-
1963-5406	2438265.50	1963 Aug 24	Mike Zeus	3	ZK-257	K-28 Atlas Intercept	-	-	-	KRR	-	-	-	80?	-	-
1963-466	2438292.50	1963 Sep 20	Mike Zeus	3	ZK-267	-	-	-	-	KRR	-	-	-	80?	-	-
1963-464	2438310.50	1963 Oct 6	Mike Zeus	3	ZK-687	-	-	-	-	KRR	-	-	-	80?	-	-
1963-4201	2438313.50	1963 Oct 11?	Mike Zeus	3	ZK-697	-	-	-	-	WS	LC38	-	-	50?	-	-
1963-5620	2438325.50	1963 Oct 23	Mike Zeus	3	ZK-707	-	-	-	-	WS	LC38	-	-	50?	-	-
1963-5630	2438334.50	1963 Nov 1	Mike Zeus	3	ZK-277	K-24 Titan Intercept	-	-	-	KRR	-	-	-	80?	-	-
1963-5655	2438345.50	1963 Nov 14	Mike Zeus	3	ZK-287	-	-	-	-	KRR	-	-	-	80?	-	-
1963-5657	2438347.50	1963 Nov 14	Mike Zeus	3	ZK-297	-	-	-	-	KRR	-	-	-	80?	-	-
1963-5658	2438353.50	1963 Nov 20	Mike Zeus	3	ZK-307	-	-	-	-	KRR	-	-	-	80?	-	-
1963-465	2438360.50	1963 Nov 27	Mike Zeus	3	ZK-717	Mike X TMD, last US	-	-	-	KRR	-	-	-	80?	-	-
1963-5602	2438374.50	1963 Dec 11?	Mike Zeus	3	ZK-317	-	-	-	-	WS	LC38	-	-	50?	-	-
1963-466	2438379.50	1963?	Mike Zeus	3	ZK-327	-	-	-	-	KRR	-	-	-	80?	-	-
1963-469	24383829.50	1963?	Mike Zeus	3	ZK-337	ASMT training	-	-	-	KRR	-	-	-	80?	-	-
1964-51	2438400.50	1964 Jan 6	Mike Zeus DM-155	3	ZK-347	-	-	-	-	KRR	-	-	-	80?	-	-
1964-4158	2438443.50	1964 Feb 08?	Mike Zeus	3	ZK-357	-	-	-	-	KRR	-	-	-	80?	-	-
1964-4159	2438428.50	1964 Feb 08?	Mike Zeus	3	ZK-367	-	-	-	-	KRR	-	-	-	80?	-	-
1964-4160	2438428.50	1964 Feb 08?	Mike Zeus DM-155	3	ZK-377	ASMT training	-	-	-	KRR	-	-	-	80?	-	-
1964-4161	2438454.50	1964 Mar 07	Mike Zeus	3	ZK-387	-	-	-	-	KRR	-	-	-	80?	-	-
1964-4162	2438464.50	1964 Mar 07	Mike Zeus	3	ZK-397	-	-	-	-	KRR	-	-	-	80?	-	-
1964-4163	2438465.50	1964 Apr 07	Mike Zeus	3	ZK-407	-	-	-	-	KRR	-	-	-	80?	-	-
1964-4164	2438466.50	1964 Apr 07	Mike Zeus	3	ZK-417	-	-	-	-	KRR	-	-	-	80?	-	-
1964-4165	2438515.50	1964 May 07	Mike Zeus	3	ZK-427	-	-	-	-	KRR	-	-	-	80?	-	-
1964-4166	2438515.50	1964 May 07	Mike Zeus	3	ZK-437	-	-	-	-	KRR	-	-	-	80?	-	-
1964-4167	2438515.50	1964 May 07	Mike Zeus	3	ZK-447	-	-	-	-	KRR	-	-	-	80?	-	-
1964-4168	2438516.50	1964 May 07	Mike Zeus	3	ZK-457	-	-	-	-	KRR	-	-	-	80?	-	-
1964-4169	2438516.50	1964 May 07	Mike Zeus	3	ZK-467	-	-	-	-	KRR	-	-	-	80?	-	-
1964-4170	2438546.50	1964 Jun 07	Mike Zeus	3	ZK-477	-	-	-	-	KRR	-	-	-	80?	-	-
1964-4171	2438546.50	1964 Jun 07	Mike Zeus	3	ZK-487	-	-	-	-	KRR	-	-	-	80?	-	-
1964-4172	2438555.50	1964 Jun 07	Mike Zeus	3	ZK-497	-	-	-	-	KRR	-	-	-	80?	-	-
1964-4173	2438555.50	1964 Jun 07	Mike Zeus	3	ZK-507	Sim Target Intercept	-	-	-	KRR	-	-	-	70?	-	-
1964-4174	2438555.50	1964 Jun 07	Mike Zeus	3	ZK-517	Sim Target Intercept	-	-	-	KRR	-	-	-	70?	-	-
1964-4175	2438555.50	1964 Jun 07	Mike Zeus	3	ZK-527	-	-	-	-	KRR	-	-	-	80?	-	-
1964-4176	2438555.50	1964 Jun 07	Mike Zeus	3	ZK-537	-	-	-	-	KRR	-	-	-	80?	-	-
1964-4177	2438555.50	1964 Jun 07	Mike Zeus	3	ZK-547	-	-	-	-	KRR	-	-	-	80?	-	-
1964-4178	2438555.50	1964 Jun 07	Mike Zeus	3	ZK-557	-	-	-	-	KRR	-	-	-	80?	-	-
1964-4179	2438555.50	1964 Jun 07	Mike Zeus	3	ZK-567	-	-	-	-	KRR	-	-	-	80?	-	-
1964-4180	2438555.50	1964 Jun 07	Mike Zeus	3	ZK-577	-	-	-	-	KRR	-	-	-	80?	-	-
1964-4181	2438555.50	1964 Jun 07	Mike Zeus	3	ZK-587	-	-	-	-	KRR	-	-	-	80?	-	-
1964-4182	2438555.50	1964 Jun 07	Mike Zeus	3	ZK-597	-	-	-	-	KRR	-	-	-	80?	-	-
1964-4183	2438555.50	1964 Jun 07	Mike Zeus	3	ZK-60	-	-	-	-	KRR	-	-	-	80?	-	-
1964-4184	2438555.50	1964 Jun 07	Mike Zeus	3	ZK-61 20139	-	-	-	-	KRR	-	-	-	80?	-	-
1964-4185	2438555.50	1964 Jun 07	Mike Zeus	3	ZK-62	-	-	-	-	KRR	-	-	-	80?	-	-
1964-4186	2438555.50	1964 Jun 07	Mike Zeus	3	ZK-63	-	-	-	-	KRR	-	-	-	80?	-	-
1964-4187	2438555.50	1964 Jun 07	Mike Zeus	3	ZK-64	-	-	-	-	KRR	-	-	-	80?	-	-
1964-4188	2438555.50	1964 Jun 07	Mike Zeus	3	ZK-65	-	-	-	-	KRR	-	-	-	80?	-	-
1964-4189	2438555.50	1964 Jun 07	Mike Zeus	3	ZK-66	-	-	-	-	KRR	-	-	-	80?	-	-
1964-4190	2438555.50	1964 Jun 07	Mike Zeus	3	ZK-67	-	-	-	-	KRR	-	-	-	80?	-	-
1964-4191	2438555.50	1964 Jun 07	Mike Zeus	3	ZK-68	-	-	-	-	KRR	-	-	-	80?	-	-
1964-4192	2438555.50	1964 Jun 07	Mike Zeus	3	ZK-69	-	-	-	-	KRR	-	-	-	80?	-	-
1964-4193	2438555.50	1964 Jun 07	Mike Zeus	3	ZK-70	-	-	-	-	KRR	-	-	-	80?	-	-
1964-4194	2438555.50	1964 Jun 07	Mike Zeus	3	ZK-71	-	-	-	-	KRR	-	-	-	80?	-	-
1964-4195	2438555.50	1964 Jun 07	Mike Zeus	3	ZK-72	-	-	-	-	KRR	-	-	-	80?	-	-
1964-4196	2438555.50	1964 Jun 07	Mike Zeus	3	ZK-73	-	-	-	-	KRR	-	-	-	80?	-	-
1964-4197	2438555.50	1964 Jun 07	Mike Zeus	3	ZK-74	-	-	-	-	KRR	-	-	-	80?	-	-
1964-4198	2438555.50	1964 Jun 07	Mike Zeus	3	ZK-75	-	-	-	-	KRR	-	-	-	80?	-	-
1964-4199	2438555.50	1964 Jun 07	Mike Zeus	3	ZK-76	-	-	-	-	KRR	-	-	-	80?	-	-
1964-4200	2438555.50	1964 Jun 07	Mike Zeus	3	ZK-77	-	-	-	-	KRR	-	-	-	80?	-	-
1964-4201	2438555.50	1964 Jun 07	Mike Zeus	3	ZK-78	-	-	-	-	KRR	-	-	-	80?	-	-
1964-4202	2438555.50	1964 Jun 07	Mike Zeus	3	ZK-79	-	-	-	-	KRR	-	-	-	80?	-	-
1964-4203	2438555.50	1964 Jun 07	Mike Zeus	3	ZK-80	-	-	-	-	KRR	-	-	-	80?	-	-
1964-4204	2438555.50	1964 Jun 07	Mike Zeus	3	ZK-81	-	-	-	-	KRR	-	-	-	80?	-	-
1964-4205	2438555.50	1964 Jun 07	Mike Zeus	3	ZK-82	-	-	-	-	KRR	-	-	-	80?	-	-
1964-4206	2438555.50	1964 Jun 07	Mike Zeus	3	ZK-83	-	-	-	-	KRR	-	-	-	80?	-	-
1964-4207	2438555.50	1964 Jun 07	Mike Zeus	3	ZK-84	-	-	-	-	KRR	-	-	-	80?	-	-
1964-4208	2438555.50	1964 Jun 07	Mike Zeus	3	ZK-85	-	-	-	-	KRR	-	-	-	80?	-	-
1964-4209	2438555.50	1964 Jun 07	Mike Zeus	3	ZK-86	-	-	-	-	KRR	-	-	-	80?	-	-
1964-4210	2438555.50	1964 Jun 07	Mike Zeus	3	ZK-87	-	-	-	-	KRR	-	-	-	80?	-	-
1964-4211	2438555.50	1964 Jun 07	Mike Zeus	3	ZK-88	-	-	-	-	KRR	-	-	-	80?	-	-
1964-4212	2438555.50	1964 Jun 07	Mike Zeus	3	ZK-89	-	-	-	-	KRR	-	-	-	80?	-	-
1964-4213	2438555.50	1964 Jun 07	Mike Zeus	3	ZK-90	-	-	-	-	KRR	-	-	-	80?	-	-
1964-4214	2438555.															

Launch

Launch_Tag	Launch_JD	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Mission	FlightCode	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee km	Range km	Dest
1971-857	2440962.50	1971 Jan 11	Spartan ABH	-	800021	SAFEGUARD M1-30	-	-	-	KRR	Meck	-	-	100?	-	-
1971-858	2441062.50	1971 Jan 21	Spartan ABH	-	800024	SAFEGUARD M1-30	-	-	-	KRR	Meck	-	-	100?	-	-
1971-8289	2441062.50	1971 Apr 21	Spartan ABH	-	-	SAFEGUARD M1-7A	-	-	-	KRR	Meck	-	-	100?	-	-
1971-8412	2441190.50	1971 Aug 27	Spartan ABH	-	800031	SAFEGUARD M2-1	-	-	-	KRR	Meck	-	-	123	-	-
1971-882	2441217.50	1971 Sep 23	Spartan ABH	-	800032	SAFEGUARD M1-14A	-	-	-	KRR	Meck	-	-	10?	-	-
1971-8597	2441293.50	1971 Dec 8	Spartan ABH	-	800027	SAFEGUARD M2-3	-	-	-	KRR	Meck	-	-	148	-	-
1972-844	2441336.50	1972 Jan 20	Spartan ABH	-	800030	SAFEGUARD M2-6	-	-	-	KRR	Meck	-	-	88	-	-
1972-8141	2441406.50	1972 Mar 30	Spartan ABH	-	800033	SAFEGUARD M2-9	-	-	-	KRR	Meck	-	-	130	-	-
1972-864	2441477.50	1972 Jun 9	Spartan ABH	?	-	Isolated Nail Test	-	-	-	KRR	Meck	-	-	1?	-	-
1972-807	2441491.50	1972 Jun 23	Spartan ABH	-	800026	SAFEGUARD M2-19	-	-	-	KRR	Meck	-	-	70	-	-
1972-8277	2441532.50	1972 Aug 3	Spartan ABH	-	800029	SAFEGUARD M2-34	-	-	-	KRR	Meck	-	-	100?	-	-
1972-8366	2441616.50	1972 Oct 26	Spartan ABH	-	800037	SAFEGUARD M2-12	-	-	-	KRR	Meck	-	-	100?	-	-
1972-810	2441624.50	1972 Nov 3	Spartan ABH	-	800036	SAFEGUARD M2-40	-	-	-	KRR	Meck	-	-	50?	-	-
1973-831	2441707.50	1973 Jan 25	Spartan ABH	-	800038	SAFEGUARD M2-26	-	-	-	KRR	Meck	-	-	150?	-	-
1973-858	2441716.50	1973 Feb 3	Spartan ABH	-	800035	SAFEGUARD M2-43	-	-	-	KRR	Meck	-	-	100?	-	-
1973-8206	2441656.50	1973 Feb 22	Spartan ABH	-	PPT-01	SAFEGUARD M2-45	-	-	-	KRR	Meck	-	-	34?	-	-
1973-8207	2441656.50	1973 Jun 22	Spartan ABH	-	PPT-02	SAFEGUARD M2-45	-	-	-	KRR	Meck	-	-	20?	-	-
1974-803	2442069.50	1974 Jan 22	Spartan ABH	-	-	SAFEGUARD M2-24S	-	-	-	KRR	Meck	-	-	100?	-	-
1974-8271	2442246.50	1974 Jul 18	Spartan ABH	-	PPT-02A	SAFEGUARD TM-133	-	-	-	KRR	Meck	-	-	100?	-	-
1974-8311	2442310.50	1974 Sep 20	Spartan ABH	-	PPT-3	SAFEGUARD M2-24SA	-	-	-	KRR	Meck	-	-	100?	-	-
1974-8370	2442352.50	1974 Nov 1	Spartan ABH	-	PPT-4	SAFEGUARD M2-44S	-	-	-	KRR	Meck	-	-	100?	-	-
1975-8114	2442506.50	1975 Apr 3	Spartan ABH	-	PPT-4	SAFEGUARD M2-54S	-	-	-	KRR	Meck	-	-	100?	-	-
1975-8126	2442619.50	1975 Apr 17	Spartan ABH	-	PPT-5	SAFEGUARD M2-54S	-	-	-	KRR	Meck	-	-	100?	-	-





Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Orbpay	Agency	Launch_Code	Group	Category	LTCite	Cite	Notes
1959-A145	2438607.23	1959 Aug 26 1735	Nike Zeus A	-	ZM-1/101	0.000	ARGMA	MF	-	Test	Wire(NST7)	MR61109-26	-
1959-A146	2438607.23	1959 Oct 14 1630	Nike Zeus A	-	ZM-2/102	0.000	ARGMA	MS	-	Test	ElPasoheralPo/NST7	-	-
1959-A207	2438618.50	1959 Dec 16	Nike Zeus A	-	ZM-3/104	0.000	ARGMA	MS	-	Test	UPI	-	-
1960-M01	2438688.38	1960 Feb 3 2102	Nike Zeus A	-	ZM-4/106	0.000	ARGMA	MS	-	Test	ElPasoheralPo	MR600516-12	-
1960-M03	2437002.50	1960 Mar 9	Nike Zeus A	-	ZM-5/106	0.000	ARGMA	MS	-	Test	ElPasoheralPo	MR600516-12	-
1960-S85	2437053.12	1960 Apr 28 1450	Nike Zeus A	?	ZM-6/107	0.000	ARGMA	MS	-	Test	Wire	-	-
1960-M13	2437079.50	1960 May 26 0030	Nike Zeus A	?	ZM-7	0.000	ARGMA	MS	-	Test	Wire	-	-
1960-S116	2437107.50	1960 Jun 10	Nike Zeus A	?	ZM-8	0.000	ARGMA	MS	-	Test	Wire	MR600912-11	-
1960-S229	2437156.50	1960 Jun 22	Nike Zeus A	-	ZM-9/20009	0.000	ARGMA	MS	-	Test	Wire	-	-
1960-S304	2437181.50	1960 Sep 4	Nike Zeus	-	ZM-10	0.000	ARGMA	MS	-	Test	Ulrich	-	-
1960-S386	2437238.50	1960 Nov7	Nike Zeus	-	ZM-11	0.000	ARGMA	MS	-	Test	Stat	-	-
1960-S392	2437269.50	1960 Dec 1	Nike Zeus	-	ZM-12/20013	0.000	ARGMA	MS	-	Test	MR601212-11	-	-
1961-S111	2437315.50	1961 Jan 16	Nike Zeus	-	ZM-13	0.000	ARGMA	MF	-	Test	Ulrich	-	-
1961-A255	2437330.50	1961 Jan 31	Nike Zeus	-	ZM-14/20016	0.000	ARGMA	MF	-	Test	Ulrich	-	-
1961-A256	2437415.50	1961 Apr 26	Nike Zeus	-	ZM-15	0.000	ARGMA	MF	-	Test	Ulrich	-	-
1961-S194	2437445.52	1961 May 26 0030	Nike Zeus	-	ZM-16/20021	0.000	ARGMA	MF	-	Test	Wire/Vlrich	-	-
1961-A257	2437449.50	1961 May 30	Nike Zeus	-	ZM-17	0.000	ARGMA	HU	-	Test	Stat	-	-
1961-S398	2437474.49	1961 Jun 23 2340	Nike Zeus	-	ZM-18	0.000	ARGMA	MS	-	Test	Wire(NST7)	-	-
1961-S196	2437480.50	1961 Q3	Nike Zeus	-	ZM-19	0.000	ARGMA	MS	-	Test	Stat	-	-
1961-A258	2437486.50	1961 Jul 26	Nike Zeus	-	ZM-20	0.000	ARGMA	HU	-	Test	Stat	-	-
1961-A259	2437506.50	1961 Aug 25 2034	Nike Zeus	-	ZM-21	0.000	ARGMA	MS	-	Test	NSRR-ARC-98.122.003	-	-
1961-S197	2437537.36	1961 Aug 31	Nike Zeus	-	ZM-22.20019	0.000	ARGMA	MS	-	Test	Wire	-	-
1961-S198	2437542.50	1961 Aug 31	Nike Zeus	-	ZM-23	0.000	ARGMA	MS	-	Test	Ulrich	-	-
1961-A259	2437548.50	1961 Sep 6	Nike Zeus	-	ZM-24	0.000	ARGMA	HU	-	Test	MR610918-11	-	-
1961-A197	2437552.33	1961 Sep 9 2002	Nike Zeus	-	ZM-1.20025	0.000	ARGMA	MF	-	Test	MR610925-10	-	-
1961-A200	2437557.50	1961 Sep 15	Nike Zeus	-	ZM-25	0.000	ARGMA	HU	-	Test	Ulrich	-	-
1961-A260	2437563.50	1961 Sep 21	Nike Zeus	-	ZM-26	0.000	ARGMA	HU	-	Test	Wire(PDRT)	MR611016-11	-
1961-A217	2437560.25	1961 Oct 7 1803	Nike Zeus	-	ZM-2	0.000	ARGMA	MF	-	Test	Ulrich	-	-
1961-A261	2437610.50	1961 Nov 7	Nike Zeus	-	ZM-27	0.000	ARGMA	MS	-	Test	Stat	-	-
1961-S375	2437616.50	1961 Nov 15	Nike Zeus	-	ZM-28.20030	0.000	ARGMA	MS	-	Test	CSMD	-	-
1961-S376	2437618.50	1961 Nov 15	Nike Zeus	-	ZM-29	0.000	ARGMA	MS	-	Test	Wire	-	-
1961-S380	2437620.36	1961 Nov 16 2037	Nike Zeus	-	ZM-3	0.000	ARGMA	MS	-	Test	Wire	-	-
1961-S385	2437625.29	1961 Nov 21 1900	Nike Zeus	-	ZM-4	0.000	ARGMA	MS	-	Test	Wire	-	-
1961-S396	2437633.50	1961 Nov 30	Nike Zeus	3	ZM-30	0.000	ARGMA	MS	-	Test	Ulrich	-	-
1961-S397	2437637.50	1961 Dec 4	Nike Zeus	-	ZM-31	0.000	NIKEZ	HU	-	Test	Ulrich	-	-
1961-A262	2437641.50	1961 Dec 8	Nike Zeus	-	ZM-32	0.000	NIKEZ	HU	-	Test	Stat	-	-
1961-A263	2437647.50	1961 Q4	Nike Zeus	-	ZM-33	0.000	NIKEZ	HU	-	Test	Stat	-	-
1961-S560	2437672.50	1961 Dec 9 1900	Nike Zeus	3	ZM-5	0.000	NIKEZ	MF	-	Test	MR620101-7	MR620101-7	-
1961-S524	2437646.38	1961 Dec 14 2000?	Nike Zeus	3	ZK-1.20047	0.000	NIKEZ	MF	-	Test	Wire	-	-
1961-S523	2437646.38	1961 Dec 14 2025	Nike Zeus	-	ZM-6.20043	0.000	NIKEZ	MS	-	Test	MR620101-7	-	-
1961-A246	2437646.38	1961 Dec 14 2100?	Nike Zeus	-	ZM-54.20041	0.000	NIKEZ	MS	-	Test	NSR-archlve	Wire-620126	-
1962-S07	2437682.50	1962 Jan 16	Nike Zeus	-	ZM-35	0.000	NIKEZ	MS	-	Test	MR620212-10	MR620205-10	-
1962-S26	2437690.42	1962 Jan 26 2202	Nike Zeus	-	ZM-36	0.000	NIKEZ	MS	-	Test	Wire	-	-
1962-S32	2437696.50	1962 Feb 7	Nike Zeus	3	ZM-37	0.000	NIKEZ	MS	-	Test	Ulrich	MR620219-10	-
1962-S34	2437702.60	1962 Feb 7	Nike Zeus	-	ZM-38	0.000	NIKEZ	MF	-	Test	Ulrich	-	-
1962-S35	2437708.74	1962 Feb 13 0852	Nike Zeus	-	ZM-39	0.000	NIKEZ	MS	-	Test	MR620319-10	Wire-620126	-
1962-S36	2437716.50	1962 Feb 23	Nike Zeus	3	ZK-5	0.000	NIKEZ	MS	-	Test	MR620319-11	MR620319-11	-
1962-S39	2437725.51	1962 Mar 9 0016	Nike Zeus	3	ZK-6	0.000	NIKEZ	MF	-	Test	MR620416-10	-	-
1962-S35	2437732.50	1962 Mar 13	Nike Zeus	3	ZM-39	0.000	NIKEZ	MS	-	Test	MR620416-10	MR620423-10	-
1962-S36	2437736.50	1962 Mar 13	Nike Zeus	3	ZM-40	0.000	NIKEZ	MS	-	Test	MR620439-10	-	-
1962-S38	2437736.50	1962 Mar 13	Nike Zeus	3	ZM-40	0.000	NIKEZ	MS	-	Test	MR620507-10	-	-
1962-A245	2437761.50	1962 Mar 26	Nike Zeus	3	ZK-3	0.000	NIKEZ	MS	-	Test	MR620514-10	-	-
1962-A246	2437761.50	1962 Q1?	Nike Zeus	3	ZK-4	0.000	NIKEZ	HU	-	Test	Ulrich	MR620521-8	-
1962-A247	2437761.50	1962 Q2?	Nike Zeus	3	ZK-5	0.000	NIKEZ	HU	-	Test	Stat	MR620604-10	-
1962-S88	2437769.50	1962 Q2?	Nike Zeus	3	ZK-6	0.000	NIKEZ	HU	-	Test	Stat	-	-
1962-S89	2437769.50	1962 Apr 5	Nike Zeus	3	ZK-7	0.000	NIKEZ	HU	-	Test	Stat	-	-
1962-S90	2437767.34	1962 Apr 12 2009	Nike Zeus	3	ZM-42	0.000	NIKEZ	MS	-	Test	MR620616-10	-	-
1962-S95	2437773.50	1962 Apr 19	Nike Zeus	3	ZM-107	0.000	NIKEZ	MS	-	Test	Stat	MR620623-10	-
1962-S112	2437773.50	1962 Apr 29	Nike Zeus	3	ZM-117	0.000	NIKEZ	MS	-	Test	MR620639-10	-	-
1962-S116	2437781.50	1962 Apr 30	Nike Zeus	3	ZM-43	0.000	NIKEZ	MS	-	Test	MR620657-10	-	-
1962-S129	2437784.50	1962 Apr 30	Nike Zeus	3	ZM-44	0.000	NIKEZ	MS	-	Test	MR620657-10	-	-
1962-A248	2437794.42	1962 May 9 2208	Nike Zeus	3	ZM-12	0.000	NIKEZ	MF	-	Test	Ulrich	MR6206514-10	-
1962-A249	2437796.50	1962 May 12	Nike Zeus	3	ZM-45	0.000	NIKEZ	MS	-	Test	Ulrich	MR6206521-8	-
1962-S143	2437811.25	1962 May 26 1904	Nike Zeus	3	ZM-13	0.000	NIKEZ	MS	-	Test	WZaus	MR620604-10	-
1962-A100	2437841.98	1962 Jun 26 1130?	Nike Zeus	3	ZK-6	0.000	NIKEZ	MF	-	Test	WZaus	-	-
1962-S245	2437843.50	1962 Jun 26	Nike Zeus	3	ZM-46	0.000	NIKEZ	MS	-	Test	WZaus	-	-
1962-S246	2437843.50	1962 Jun 26	Nike Zeus	3	ZM-47	0.000	NIKEZ	MS	-	Test	WZaus	-	-
1962-S243	2437861.50	1962 Jul 16	Nike Zeus	3	ZM-47	0.000	NIKEZ	MS	-	Test	WZaus	-	-
1962-S248	2437864.98	1962 Jul 19 1135?	Nike Zeus	3	ZM-48	0.000	NIKEZ	MS	-	Test	WZaus	-	-
1962-S249	2437876.50	1962 Jul 31	Nike Zeus	3	ZM-48	0.000	NIKEZ	MS	-	Test	WZaus	-	-
1962-S310	2437901.50	1962 Aug 25 0207	Nike Zeus	3	ZM-14	0.000	NIKEZ	MF	-	Test	Ulrich	MR620903-10	-
1962-S314	2437905.70	1962 Aug 29 0450	Nike Zeus	3	ZM-47	0.000	NIKEZ	MF	-	Test	Ulrich/Hite	MR620903-10	-
1962-S346	2437934.50	1962 Sep 27	Nike Zeus	3	ZM-49	0.000	NIKEZ	MF	-	Test	MR621008-10	-	-
1962-S346	2437962.29	1962 Oct 24 1900	Nike Zeus	3	ZM-15 (F44)	0.000	NIKEZ	MF	-	Test	Wire	MR621105-11	-
1962-S472	2437976.50	1962 Nov 9 0312	Nike Zeus	3	ZM-50	0.000	NIKEZ	MS	-	Test	Wire	MR621109-9	-
1962-S497	2437997.63	1962 Nov 9 2325	Nike Zeus	3	ZM-16	0.000	NIKEZ	MS	-	Test	Wire	MR621119-9	-
1962-S501	2437997.48	1962 Nov 29	Nike Zeus	3	ZM-17	0.000	NIKEZ	MS	-	Test	Wire	MR621210-12	-
1962-S537	2438007.39	1962 Dec 8 2120	Nike Zeus	3	ZM-18	0.000	NIKEZ	MS	-	Test	Wire	MR621210-12	-
1962-S557	2438011.01	1962 Dec 12 1210?	Nike Zeus	3	ZK-8? 20066	0.000	NIKEZ	MF	-	Test	PressCourtier621210	MR621217-12	-
1962-A241	2438015.01	1962 Dec 17 1210?	Nike Zeus	3	ZK-9? 20077	0.000	NIKEZ	MF	-	Test	WZaus	MR621217-12	-
1962-S507	2438018.41	1962 Dec 17 1210?	Nike Zeus	3	ZM-52? NUDFLAP 1	0.000	NIKEZ	MF	-	Test	WZaus	MR621217-12	-
1962-S574	2438020.92	1962 Dec 19 2151	Nike Zeus	3	ZK-10? 20068	0.000	NIKEZ	MS	-	Test	ASAT Test NUDFLAP	MR621224-10	-
1962-A242	2438020.92	1962 Dec 22 1000?	Nike Zeus	3	ZK-11? 20100	0.000	NIKEZ	MS	-	Test	WZaus	MR621224-10	-
1963-S630	2438066.50	1963 Feb 6	Nike Zeus	3	ZM-53?	0.000	NIKEZ	MF	-	Test	Wire	MR621224-10	-
1963-S47	2438074.02	1963 Feb 13 1230?	Nike Zeus	3	ZK-12?	0.000	NIKEZ	MS	-	Test	WZaus	MR621224-10	-
1963-S52	2438076.52	1963 Feb 16 0930	Nike Zeus	3	ZM-54? NUDFLAP 2	0.000	NIKEZ	MS	-	Test	ASAT Test	MR621224-10	-

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Agency	Launch_Code	Group	Category	LTCite	Cite	Notes
1965-588	2438080-50	1965 Feb 20	Mike Zeus	3	ZM-557	MIKEZ	MS	-	Test	F1650801-177	WSNR	-
1965-573	2438088-90	1965 Feb 28 0930?	Mike Zeus	3	ZK-137	MIKEZ	MS	-	Test	MIKEZ	-	-
1965-579	2438109-50	1965 Mar 21	Mike Zeus	3	ZK-147/NUDFLAP 3	MIKEZ	MS	-	ASAT Test	Bell	-	-
1965-5125	2438118-50	1965 Mar 30	Mike Zeus	3	ZK-157 20114	MIKEZ	MS	-	Test	MIKEZ	F163801-177	-
1965-5149	2438132-50	1965 Apr 13	Mike Zeus	3	ZK-167	MIKEZ	MS	-	Test	MIKEZ	-	-
1965-5162	2438137-50	1965 Apr 18	Mike Zeus	3	ZM-567	MIKEZ	MS	-	Test	F163801-177	-	-
1965-5160	2438138-50	1965 Apr 19	Mike Zeus	3	ZK-177	MIKEZ	MS	-	Test	Bell	-	-
1965-5172	2438143-50	1965 Apr 24	Mike Zeus	3	ZM-577	MIKEZ	MF	-	Test	F163801-177	-	-
1965-472	2438159-50	1965 May 10	Mike Zeus	3	ZM-587	MIKEZ	MS	-	Test	SP-4004	Wire	-
1965-561	2438119-50	1965 Q2?	Mike Zeus	3	ZK-187	MIKEZ	MS	-	Test	Stat	-	-
1965-562	2438119-50	1965 Q2?	Mike Zeus	3	ZK-197	MIKEZ	MS	-	Test	Stat	-	-
1965-5198	2438119-50	1965 Q2?	Mike Zeus	3	ZM-597	MIKEZ	MS	-	Test	Ulrich	-	-
1965-5199	2438119-50	1965 Q2?	Mike Zeus	3	ZM-607	MIKEZ	MS	-	Test	Ulrich	-	-
1965-4200	2438119-50	1965 Q2?	Mike Zeus	3	ZM-617	MIKEZ	MS	-	Test	ASAT Test	-	-
1965-5229	2438173-50	1965 May 24	Mike Zeus	3	ZK-20 20138 (100)	MIKEZ	MS	-	Test	F163801-177	-	-
1965-5651	2438165-50	1965 May 31	Mike Zeus	3	ZM-627	MIKEZ	MF	-	Test	SP-4004	-	-
1965-5259	2438165-50	1965 Jun 5	Mike Zeus	3	ZM-63	MIKEZ	MS	-	Test	SP-4004	-	-
1965-5272	2438192-90	1965 Jun 12 0930?	Mike Zeus	3	ZK-21	MIKEZ	MS	-	Test	Wire	-	-
1965-5319	2438211-50	1965 Jun 11	Mike Zeus	3	ZM-64 (104)	MIKEZ	MS	-	Test	Bell	-	-
1965-5324	2438213-50	1965 Jul 3	Mike Zeus	3	ZK-227	MIKEZ	MS	-	Test	JCH	-	-
1965-5325	2438213-50	1965 Jul 3	Mike Zeus	3	ZM-657	MIKEZ	MS	-	Test	JCH	-	-
1965-5360	2438236-50	1965 Jul 26	Mike Zeus	3	ZM-667	MIKEZ	MS	-	Test	Wire	-	-
1965-5382	2438249-50	1965 Aug 8	Mike Zeus	3	ZM-677	MIKEZ	MS	-	Test	JCH	-	-
1965-5388	2438256-50	1965 Aug 16	Mike Zeus	3	ZK-237	MIKEZ	MS	-	Test	Bell	-	-
1965-5386	2438265-50	1965 Aug 24	Mike Zeus	3	ZK-247	MIKEZ	MS	-	Test	Bell	-	-
1965-5406	2438282-50	1965 Sep 20	Mike Zeus	3	ZK-267	MIKEZ	MS	-	Interceptor	Ulrich/vsmr-archiv	-	-
1965-5464	2438310-50	1965 Oct 6	Mike Zeus	3	ZK-287	MIKEZ	MS	-	Test	Ulrich	-	-
1965-4201	2438313-50	1965 Oct 11?	Mike Zeus	3	ZM-687	MIKEZ	MS	-	Test	Wire	-	-
1965-5820	2438326-50	1965 Oct 23	Mike Zeus	3	ZM-697	MIKEZ	MS	-	Test	Ulrich/vsmr-archiv	-	-
1965-5850	2438354-50	1965 Nov 1	Mike Zeus	3	ZM-707	MIKEZ	MS	-	Test	Ulrich/vsmr-archiv	-	-
1965-5856	2438359-50	1965 Nov 12	Mike Zeus	3	ZK-277	MIKEZ	MS	-	Interceptor	Bell	-	-
1965-5865	2438347-50	1965 Nov 14	Mike Zeus	3	ZK-287	MIKEZ	MS	-	Interceptor	Ulrich/vsmr-archiv	-	-
1965-5853	2438353-50	1965 Nov 20	Mike Zeus	3	ZK-297	MIKEZ	MS	-	Interceptor	Ulrich/vsmr-archiv	-	-
1965-5867	2438350-50	1965 Nov 27	Mike Zeus	3	ZK-307	MIKEZ	MS	-	Test	Wire(thisweek)	-	-
1965-5865	2438374-50	1965 Dec 11?	Mike Zeus	3	ZM-717	MIKEZ	MS	-	Test	Stat	-	-
1965-5868	2438029-50	1965?	Mike Zeus	3	ZK-317	MIKEZ	MS	-	Interceptor	Stat	-	-
1965-5869	2438029-50	1965?	Mike Zeus	3	ZK-327	MIKEZ	MS	-	Interceptor	Stat	-	-
1964-5138	2438400-50	1964 Jan 6	Mike Zeus	3	ZK-337	MIKEZ	MS	-	Interceptor	Stat	-	-
1964-5139	2438443-50	1964 Feb 18?	Mike Zeus	3	ZK-347	MIKEZ	MS	-	Interceptor	Stat	-	-
1964-5140	2438426-50	1964 Feb?	Mike Zeus	3	ZK-357	MIKEZ	MS	-	Interceptor	Stat	-	-
1964-5141	2438454-50	1964 Mar?	Mike Zeus	3	ZK-367	MIKEZ	MS	-	Interceptor	Stat	-	-
1964-5142	2438454-50	1964 Mar?	Mike Zeus	3	ZK-377	MIKEZ	MS	-	Interceptor	Stat	-	-
1964-5143	2438455-50	1964 Apr?	Mike Zeus	3	ZK-387	MIKEZ	MS	-	Interceptor	Stat	-	-
1964-5144	2438455-50	1964 May?	Mike Zeus	3	ZK-397	MIKEZ	MS	-	Interceptor	Stat	-	-
1964-5145	2438455-50	1964 May?	Mike Zeus	3	ZK-407	MIKEZ	MS	-	Interceptor	Stat	-	-
1964-5146	2438455-50	1964 May?	Mike Zeus	3	ZK-417	MIKEZ	MS	-	Interceptor	Stat	-	-
1964-5147	2438455-50	1964 May?	Mike Zeus	3	ZK-427	MIKEZ	MS	-	Interceptor	Stat	-	-
1964-5148	2438455-50	1964 May?	Mike Zeus	3	ZK-437	MIKEZ	MS	-	Interceptor	Stat	-	-
1964-5149	2438455-50	1964 Jun?	Mike Zeus	3	ZK-447	MIKEZ	MS	-	Interceptor	Stat	-	-
1964-5150	2438455-50	1964 Jun?	Mike Zeus	3	ZK-457	MIKEZ	MS	-	Interceptor	Stat	-	-
1964-5151	2438456-50	1964 Jun?	Mike Zeus	3	ZK-467	MIKEZ	MS	-	Interceptor	Stat	-	-
1964-5152	2438456-50	1964 Jun?	Mike Zeus	3	ZK-477	MIKEZ	MS	-	Interceptor	Stat	-	-
1964-5153	2438456-50	1964 Jun?	Mike Zeus	3	ZK-487	MIKEZ	MS	-	Interceptor	Stat	-	-
1964-5154	2438456-50	1964 Jul 9	Mike Zeus	3	ZK-497	MIKEZ	MS	-	Interceptor	Stat	-	-
1964-5155	2438456-50	1964 Jul 9	Mike Zeus	3	ZK-507	MIKEZ	MS	-	Interceptor	Stat	-	-
1964-5156	2438456-50	1964 Jul 9	Mike Zeus	3	ZK-517	MIKEZ	MS	-	Interceptor	Stat	-	-
1964-5157	2438456-50	1964 Jul 9	Mike Zeus	3	ZK-527	MIKEZ	MS	-	Interceptor	Stat	-	-
1964-5158	2438456-50	1964 Jul 9	Mike Zeus	3	ZK-537	MIKEZ	MS	-	Interceptor	Stat	-	-
1964-5159	2438456-50	1964 Jul 9	Mike Zeus	3	ZK-547	MIKEZ	MS	-	Interceptor	Stat	-	-
1964-5160	2438456-50	1964 Jul 9	Mike Zeus	3	ZK-557	MIKEZ	MS	-	Interceptor	Stat	-	-
1964-5161	2438456-50	1964 Jul 9	Mike Zeus	3	ZK-567	MIKEZ	MS	-	Interceptor	Stat	-	-
1964-5162	2438456-50	1964 Jul 9	Mike Zeus	3	ZK-577	MIKEZ	MS	-	Interceptor	Stat	-	-
1964-5163	2438456-50	1964 Jul 9	Mike Zeus	3	ZK-587	MIKEZ	MS	-	Interceptor	Stat	-	-
1964-5164	2438456-50	1964 Jul 9	Mike Zeus	3	ZK-597	MIKEZ	MS	-	Interceptor	Stat	-	-
1964-5165	2438456-50	1964 Jul 9	Mike Zeus	3	ZK-607	MIKEZ	MS	-	Interceptor	Stat	-	-
1964-5166	2438456-50	1964 Jul 9	Mike Zeus	3	ZK-617	MIKEZ	MS	-	Interceptor	Stat	-	-
1964-5167	2438456-50	1964 Jul 9	Mike Zeus	3	ZK-627	MIKEZ	MS	-	Interceptor	Stat	-	-
1964-5168	2438456-50	1964 Jul 9	Mike Zeus	3	ZK-637	MIKEZ	MS	-	Interceptor	Stat	-	-
1964-5169	2438456-50	1964 Jul 9	Mike Zeus	3	ZK-647	MIKEZ	MS	-	Interceptor	Stat	-	-
1964-5170	2438456-50	1964 Jul 9	Mike Zeus	3	ZK-657	MIKEZ	MS	-	Interceptor	Stat	-	-
1964-5171	2438456-50	1964 Jul 9	Mike Zeus	3	ZK-667	MIKEZ	MS	-	Interceptor	Stat	-	-
1964-5172	2438456-50	1964 Jul 9	Mike Zeus	3	ZK-677	MIKEZ	MS	-	Interceptor	Stat	-	-
1964-5173	2438456-50	1964 Jul 9	Mike Zeus	3	ZK-687	MIKEZ	MS	-	Interceptor	Stat	-	-
1964-5174	2438456-50	1964 Jul 9	Mike Zeus	3	ZK-697	MIKEZ	MS	-	Interceptor	Stat	-	-
1964-5175	2438456-50	1964 Jul 9	Mike Zeus	3	ZK-707	MIKEZ	MS	-	Interceptor	Stat	-	-
1964-5176	2438456-50	1964 Jul 9	Mike Zeus	3	ZK-717	MIKEZ	MS	-	Interceptor	Stat	-	-
1964-5177	2438456-50	1964 Jul 9	Mike Zeus	3	ZK-727	MIKEZ	MS	-	Interceptor	Stat	-	-
1964-5178	2438456-50	1964 Jul 9	Mike Zeus	3	ZK-737	MIKEZ	MS	-	Interceptor	Stat	-	-
1964-5179	2438456-50	1964 Jul 9	Mike Zeus	3	ZK-747	MIKEZ	MS	-	Interceptor	Stat	-	-
1964-5180	2438456-50	1964 Jul 9	Mike Zeus	3	ZK-757	MIKEZ	MS	-	Interceptor	Stat	-	-
1964-5181	2438456-50	1964 Jul 9	Mike Zeus	3	ZK-767	MIKEZ	MS	-	Interceptor	Stat	-	-
1964-5182	2438456-50	1964 Jul 9	Mike Zeus	3	ZK-777	MIKEZ	MS	-	Interceptor	Stat	-	-
1964-5183	2438456-50	1964 Jul 9	Mike Zeus	3	ZK-787	MIKEZ	MS	-	Interceptor	Stat	-	-
1964-5184	2438456-50	1964 Jul 9	Mike Zeus	3	ZK-797	MIKEZ	MS	-	Interceptor	Stat	-	-
1964-5185	2438456-50	1964 Jul 9	Mike Zeus	3	ZK-807	MIKEZ	MS	-	Interceptor	Stat	-	-
1964-5186	2438456-50	1964 Jul 9	Mike Zeus	3	ZK-817	MIKEZ	MS	-	Interceptor	Stat	-	-
1964-5187	2438456-50	1964 Jul 9	Mike Zeus	3	ZK-827	MIKEZ	MS	-	Interceptor	Stat	-	-
1964-5188	2438456-50	1964 Jul 9	Mike Zeus	3	ZK-837	MIKEZ	MS	-	Interceptor	Stat	-	-
1964-5189	2438456-50	1964 Jul 9	Mike Zeus	3	ZK-847	MIKEZ	MS	-	Interceptor	Stat	-	-
1964-5190	2438456-50	1964 Jul 9	Mike Zeus	3	ZK-857	MIKEZ	MS	-	Interceptor	Stat	-	-
1964-5191	2438456-50	1964 Jul 9	Mike Zeus	3	ZK-867	MIKEZ	MS	-	Interceptor	Stat	-	-
1964-5192	2438456-50	1964 Jul 9	Mike Zeus	3	ZK-877	MIKEZ	MS	-	Interceptor	Stat	-	-
1964-5193	2438456-50	1964 Jul 9	Mike Zeus	3	ZK-887	MIKEZ	MS	-	Interceptor	Stat	-	-
1964-5194	2438456-50	1964 Jul 9	Mike Zeus	3	ZK-897	MIKEZ	MS	-	Interceptor	Stat	-	-
1964-5195	2438456-50	1964 Jul 9	Mike Zeus	3	ZK-907	MIKEZ	MS	-	Interceptor	Stat	-	-
1964-5196	2438456-50	1964 Jul 9	Mike Zeus	3	ZK-917	MIKEZ	MS	-	Interceptor	Stat	-	-
1964-5197	2438456-50	1964 Jul 9	Mike Zeus	3	ZK-927	MIKEZ	MS	-	Interceptor	Stat	-	-
1964-5198	2438456-50	1964 Jul 9	Mike Zeus	3	ZK-937	MIKEZ	MS	-	Interceptor	Stat	-	-
1964-5199	2438456-50	1964 Jul 9	Mike Zeus	3	ZK-947	MIKEZ	MS	-	Interceptor	Stat	-	-
1964-5200	2438456-50	1964 Jul 9	Mike Zeus	3	ZK-957	MIKEZ	MS	-	Interceptor	Stat	-	-
1964-5201	2438456-50	1964 Jul 9	Mike Zeus	3	ZK-967	MIKEZ	MS	-	Interceptor	Stat	-	-
1964-5202	2438456-50	1964 Jul 9	Mike Zeus	3	ZK-977	MIKEZ	MS	-	Interceptor	Stat	-	-
1964-5203	2438456-50	1964 Jul 9	Mike Zeus	3	ZK-987	MIKEZ	MS	-	Interceptor	Stat	-	-
1964-5204	2438456-50	1964 Jul 9	Mike Zeus	3	ZK-997	MIKEZ	MS	-	Interceptor	Stat	-	-
1964-5205	2438456-50	1964 Jul 9	Mike Zeus	3	ZK-1007	MIKEZ	MS	-	Interceptor	Stat	-	-
1964-5206	2438456-50	1964 Jul 9	Mike Zeus	3	ZK-1017	MIKEZ	MS	-	Interceptor	Stat	-	-
1964-5207	2438456-50	1964 Jul 9	Mike Zeus	3	ZK-1027	MIKEZ	MS	-	Interceptor	Stat	-	-
1964-5208	2438456-50	1964 Jul 9	Mike Zeus	3	ZK-1037	MIKEZ	MS	-	Interceptor	Stat	-	-
1964-5209	2438456-50	1964 Jul 9	Mike Zeus	3	ZK-1047	MIKEZ	MS	-	Interceptor	Stat	-	-
1964-5210	2438456-50											

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Orbpay	Agency	Launch_Code	Group	Category	LTCite	Cite	Notes
1971-857	2440962.50	1971 Jan 11	Spartan ABM	-	800021	0.000	SAFSC	MS	-	Interceptor	Safeguard	-	-
1971-858	2440962.50	1971 Jan 11	Spartan ABM	-	800024	0.000	SAFSC	MS	-	Interceptor	Safeguard	-	-
1971-8239	2441062.50	1971 Apr 21	Spartan ABM	-	-	0.000	SAFSC	MS	-	Interceptor	Safeguard	-	-
1971-8412	2441190.50	1971 Aug 27	Spartan ABM	-	800031	0.000	SAFSC	MS	-	Interceptor	Safeguard	-	-
1971-862	2441217.50	1971 Sep 23	Spartan ABM	-	800032	0.000	SAFSC	MF	-	Interceptor	Safeguard	-	-
1971-8597	2441293.50	1971 Dec 8	Spartan ABM	-	800027	0.000	SAFSC	MS	-	Interceptor	Safeguard	-	-
1972-844	2441336.50	1972 Jan 20	Spartan ABM	-	800030	0.000	SAFSC	MS	-	Interceptor	Safeguard	-	-
1972-844	2441406.50	1972 Mar 30	Spartan ABM	-	800033	0.000	SAFSC	MS	-	Interceptor	Safeguard	-	-
1972-864	2441477.50	1972 Jun 9	Spartan ABM	?	-	0.000	SAFSC	MS	-	Test	Safeguard	-	-
1972-807	2441491.50	1972 Jun 23	Spartan ABM	-	800026	0.000	SAFSC	MS	-	Interceptor	Safeguard	-	-
1972-8277	2441532.50	1972 Aug 3	Spartan ABM	-	800029	0.000	SAFSC	MS	-	Interceptor	Safeguard	-	-
1972-8366	2441616.50	1972 Oct 26	Spartan ABM	-	800037	0.000	SAFSC	MS	-	Interceptor	Safeguard	-	-
1972-810	2441624.50	1972 Nov 3	Spartan ABM	-	800036	0.000	SAFSC	MS	-	Interceptor	Safeguard	-	-
1973-831	2441707.50	1973 Jan 26	Spartan ABM	-	800039	0.000	SAFSC	MS	-	Interceptor	Safeguard	-	-
1973-868	2441716.50	1973 Feb 3	Spartan ABM	-	800035	0.000	SAFSC	MS	-	Interceptor	Safeguard	-	-
1973-8206	2441855.50	1973 Jun 22	Spartan ABM	-	PFT-01	0.000	SAFSC	MS	-	Interceptor	Safeguard	-	-
1973-8207	2441855.50	1973 Jun 22	Spartan ABM	-	PFT-02	0.000	SAFSC	MS	-	Interceptor	Safeguard	-	-
1974-803	2442069.50	1974 Jan 22	Spartan ABM	-	PFT-02	0.000	AB000	MF	-	Interceptor	Safeguard	-	-
1974-8271	2442246.50	1974 Jul 18	Spartan ABM	-	PFT-02A	0.000	AB000	MS	-	Interceptor	Safeguard	-	-
1974-8311	2442310.50	1974 Sep 20	Spartan ABM	-	PFT-3	0.000	AB000	MS	-	Interceptor	Safeguard	-	-
1974-8370	2442352.50	1974 Nov 1	Spartan ABM	-	PFT-3	0.000	AB000	MS	-	Interceptor	Safeguard	-	-
1975-8114	2442505.50	1975 Apr 3	Spartan ABM	-	PFT-4	0.000	AB000	MS	-	Interceptor	Safeguard	-	-
1975-8126	2442519.50	1975 Apr 17	Spartan ABM	-	PFT-5	0.000	AB000	MS	-	Interceptor	Safeguard	-	-



Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Mission	FlightCode	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee_Km	Range_Km	Deest
1965-A176	2438945.50	1965 Mar 26	Sprint ABH	-	PTV-1	-	-	-	-	WS	LC377	-	-	37	-	-
1965-A221	2438920.50	1965 Jun 9	Sprint ABH	-	PTV-2	-	-	-	-	WS	LC377	-	-	37	-	-
1965-A160	2439081.50	1965 Nov 17	Sprint ABH	-	FLA-1	-	-	-	-	WS	LC50	-	-	3	-	-
1966-A22	2439150.50	1966 Jan 25	Sprint ABH	-	FLA-2	-	-	-	-	WS	LC50	-	-	0	-	-
1966-A62	2439248.50	1966 May 3	Sprint ABH	-	FLA-4	-	-	-	-	WS	LC50	-	-	0	-	-
1966-A90	2439339.50	1966 Aug 2	Sprint ABH	-	FLA-5	-	-	-	-	WS	LC50	-	-	0	-	-
1966-A134	2439389.50	1966 Nov 3	Sprint ABH	-	FLA-6	-	-	-	-	WS	LC50	-	-	0	-	-
1967-A68	2439698.50	1967 Apr 18	Sprint ABH	-	FLA-9	-	-	-	-	WS	LC50	-	-	17	-	-
1967-A84	2439633.50	1967 May 23	Sprint ABH	-	FLA-10	-	-	-	-	WS	LC50	-	-	17	-	-
1967-A97	2439689.50	1967 Jul 18	Sprint ABH	-	FLA-11	-	-	-	-	WS	LC50	-	-	27	-	-
1967-A103	2439710.50	1967 Aug 8	Sprint ABH	-	FLA-11	-	-	-	-	WS	LC50	-	-	17	-	-
1967-A119	2439752.50	1967 Sep 19	Sprint ABH	-	FLA-12	-	-	-	-	WS	LC50	-	-	6	-	-
1967-A127	2439773.50	1967 Oct 10	Sprint ABH	-	FLA-7	-	-	-	-	WS	LC50	-	-	67	-	-
1967-A133	2439794.50	1967 Oct 20	Sprint ABH	-	FLA-14	-	-	-	-	WS	LC50	-	-	67	-	-
1967-A135	2439814.50	1967 Nov 30	Sprint ABH	-	FLA-15	-	-	-	-	WS	LC50	-	-	67	-	-
1967-A143	2439835.50	1967 Dec 11	Sprint ABH	-	FLA-13	-	-	-	-	WS	LC50	-	-	37	-	-
1968-A57	2439891.50	1968 Feb 5	Sprint ABH	-	FLA-16	-	-	-	-	WS	LC50	-	-	67	-	-
1968-A63	2439912.50	1968 Feb 26	Sprint ABH	-	FLA-17	-	-	-	-	WS	LC50	-	-	67	-	-
1968-A68	2439940.50	1968 Mar 25	Sprint ABH	-	FLA-18	-	-	-	-	WS	LC50	-	-	27	-	-
1968-A73	2439965.50	1968 Apr 22	Sprint ABH	-	FLA-19	-	-	-	-	WS	LC50	-	-	67	-	-
1968-A83	2440034.50	1968 Jun 27	Sprint ABH	-	FLA-20	-	-	-	-	WS	LC50	-	-	67	-	-
1968-A88	2440066.50	1968 Jul 29	Sprint ABH	-	FLA-21	-	-	-	-	WS	LC50	-	-	67	-	-
1968-A91	2440090.50	1968 Aug 2	Sprint ABH	-	FLA-22	-	-	-	-	WS	LC50	-	-	67	-	-
1968-A93	2440090.50	1968 Aug 9	Sprint ABH	-	FLA-23	-	-	-	-	WS	LC50	-	-	67	-	-
1968-A106	2440137.50	1968 Sep 9	Sprint ABH	-	FLA-24	-	-	-	-	WS	LC50	-	-	67	-	-
1968-A108	2440157.50	1968 Oct 28	Sprint ABH	-	FLA-25	-	-	-	-	WS	LC50	-	-	67	-	-
1968-A114	2440192.50	1968 Dec 2	Sprint ABH	-	FLA-26	-	-	-	-	WS	LC50	-	-	0	-	-
1969-A42	2440262.50	1969 Feb 10	Sprint ABH	-	FLA-27	-	-	-	-	WS	LC50	-	-	67	-	-
1969-A48	2440297.50	1969 Mar 17	Sprint ABH	-	FLA-30	-	-	-	-	WS	LC50	-	-	67	-	-
1969-A64	2440332.50	1969 Apr 21	Sprint ABH	-	FLA-28	-	-	-	-	WS	LC50	-	-	67	-	-
1969-A90	2440397.50	1969 May 26	Sprint ABH	-	FLA-31	-	-	-	-	WS	LC50	-	-	67	-	-
1969-A105	2440395.50	1969 Jun 23	Sprint ABH	-	FLA-29	-	-	-	-	WS	LC50	-	-	67	-	-
1969-A150	2440424.50	1969 Jul 22	Sprint ABH	-	FLA-32	-	-	-	-	WS	LC50	-	-	107	-	-
1969-A152	2440479.50	1969 Sep 15	Sprint ABH	-	FLA-35	-	-	-	-	WS	LC50	-	-	0	-	-
1969-A171	2440500.50	1969 Oct 6	Sprint ABH	-	FLA-36	-	-	-	-	WS	LC50	-	-	0	-	-
1969-A160	2440517.50	1969 Oct 23	Sprint ABH	-	FLA-38	-	-	-	-	WS	LC50	-	-	107	-	-
1969-A157	2440551.50	1969 Nov 6	Sprint ABH	-	FLA-33	-	-	-	-	WS	LC50	-	-	27	-	-
1969-A198	2440556.50	1969 Dec 1	Sprint ABH	-	FLA-34	-	-	-	-	WS	LC50	-	-	27	-	-
1970-A34	2440664.50	1970 Mar 19	Sprint ABH	-	FLA-39	-	-	-	-	WS	LC50	-	-	27	-	-
1970-A67	2440734.50	1970 May 28	Sprint ABH	-	FLA-40	-	-	-	-	WS	LC50	-	-	107	-	-
1970-A70	2440746.50	1970 Jun 9	Sprint ABH	-	FLA-44	-	-	-	-	WS	LC50	-	-	107	-	-
1970-A75	2440765.50	1970 Jun 29	Sprint ABH	-	FLA-45	-	-	-	-	WS	LC50	-	-	107	-	-
1970-A84	2440850.50	1970 Aug 12	Sprint ABH	-	FLA-46	-	-	-	-	WS	LC50	-	-	0	-	-
1970-A114	2440897.50	1970 Oct 28	Sprint ABH	-	-	-	SAFEGUARD W1-9	-	-	KHR	Meck	-	-	0	-	-
1970-A125	2440995.50	1970 Dec 23	Sprint ABH	-	FLA-48	-	-	-	-	KHR	Meck	-	-	107	-	-
1970-A145	2440943.50	1971 Feb 23	Sprint ABH	-	FLA-46	-	-	-	-	KHR	Meck	-	-	107	-	-
1971-A33	2441025.50	1971 Feb 23	Sprint ABH	-	FLA-46	-	-	-	-	KHR	Meck	-	-	107	-	-
1971-A31	2441027.50	1971 Mar 17	Sprint ABH	-	FLA-51	-	-	-	-	KHR	Meck	-	-	107	-	-
1971-A32	2441027.50	1971 Mar 17	Sprint ABH	-	FLA-51	-	-	-	-	KHR	Meck	-	-	107	-	-
1971-A51	2441075.50	1971 May 7	Sprint ABH	-	FLA-46	-	-	-	-	KHR	Meck	-	-	107	-	-
1971-A85	2441075.50	1971 Oct 7	Sprint ABH	-	FLA-46	-	-	-	-	KHR	Meck	-	-	5	-	-
1971-A89	2441065.50	1971 Nov 10	Sprint ABH	-	FLA-57	-	-	-	-	KHR	Meck	-	-	5	-	-
1971-A94	2441267.50	1971 Nov 12	Sprint ABH	-	FLA-56	-	-	-	-	KHR	Meck	-	-	5	-	-
1972-A04	2441322.50	1971 Nov 16	Sprint ABH	-	FLA-61 Sim targ	-	-	-	-	KHR	Meck	-	-	57	-	-
1972-A04	2441322.50	1971 Nov 16	Sprint ABH	-	FLA-61	-	-	-	-	KHR	Meck	-	-	57	-	-
1972-A43	2441442.50	1972 Mar 5	Sprint ABH	-	FLA-64	-	-	-	-	KHR	Meck	-	-	57	-	-
1972-A45	2441461.50	1972 May 5	Sprint ABH	-	FLA-54	-	-	-	-	KHR	Meck	-	-	57	-	-
1972-A59	2441513.50	1972 May 24	Sprint ABH	-	FLA-59	-	-	-	-	KHR	Meck	-	-	57	-	-
1972-A72	2441513.50	1972 Jul 15	Sprint ABH	-	FLA-53	-	-	-	-	KHR	Meck	-	-	26	-	-
1972-A89	2441546.50	1972 Aug 17	Sprint ABH	-	FLA-70	-	-	-	-	KHR	Meck	-	-	0	-	-
1972-A89	2441546.50	1972 Aug 17	Sprint ABH	-	FLA-70	-	-	-	-	KHR	Meck	-	-	0	-	-
1972-A91	2441553.50	1972 Aug 24	Sprint ABH	-	FLA-66	-	-	-	-	KHR	Meck	-	-	107	-	-
1972-A105	2441601.50	1972 Oct 11	Sprint ABH	-	FLA-52	-	-	-	-	KHR	Meck	-	-	17	-	-
1972-A115	2441656.50	1972 Dec 5	Sprint ABH	-	FLA-58	-	-	-	-	KHR	Meck	-	-	107	-	-
1972-A117	2441656.50	1972 Dec 5	Sprint ABH	-	FLA-58	-	-	-	-	KHR	Meck	-	-	107	-	-
1973-A08	2441735.50	1973 Feb 22	Sprint ABH	-	FLA-76	-	-	-	-	KHR	Meck	-	-	107	-	-
1973-A09	2441735.50	1973 Feb 22	Sprint ABH	-	FLA-73	-	-	-	-	KHR	Meck	-	-	107	-	-
1973-A25	2441735.50	1973 Feb 22	Sprint ABH	-	FLA-60	-	-	-	-	KHR	Meck	-	-	107	-	-
1973-A33	2441843.50	1973 Jun 7	Sprint ABH	-	FLA-74	-	-	-	-	KHR	Meck	-	-	4	-	-
1973-A33	2441843.50	1973 Jun 7	Sprint ABH	-	FLA-74	-	-	-	-	KHR	Meck	-	-	4	-	-
1973-A59	2441960.50	1973 Jul 20	Sprint ABH	-	FLA-54	-	-	-	-	KHR	Meck	-	-	107	-	-
1973-A64	2441988.50	1973 Oct 2	Sprint ABH	-	PAVT-1	-	-	-	-	KHR	Meck	-	-	107	-	-
1973-A72	2442015.50	1973 Nov 2	Sprint ABH	-	PAVT-2	-	-	-	-	KHR	Meck	-	-	107	-	-
1974-A08	2442092.50	1974 Feb 14	Sprint ABH	-	FLA-65	-	-	-	-	KHR	Meck	-	-	107	-	-
1974-A17	2442163.50	1974 Apr 16	Sprint ABH	-	FLA-79 Block V wh	-	-	-	-	KHR	Meck	-	-	107	-	-
1974-A31	2442261.50	1974 Aug 2	Sprint ABH	-	FLA-81	-	-	-	-	KHR	Meck	-	-	107	-	-
1974-A41	2442322.50	1974 Oct 2	Sprint ABH	-	PAVT-3	-	-	-	-	KHR	Meck	-	-	107	-	-
1974-A45	2442337.50	1974 Oct 17	Sprint ABH	-	PAVT-4	-	-	-	-	KHR	Meck	-	-	47	-	-
1975-A25	2442532.50	1975 Apr 30	Sprint ABH	-	PAVT-5	-	-	-	-	KHR	Meck	-	-	257	-	-
1990-A01	2447918.19	1990 Jan 26	HEDI	-	PAVT-6	-	-	-	-	KHR	Meck	-	-	47	-	-
1991-A05	2448523.15	1991 Sep 23	HEDI	-	-	-	KITE-1	-	-	KHR	Meck	-	-	10	-	-
1992-A12	2448861.10	1992 Aug 26	HEDI	-	-	-	KITE-2	-	-	WS	LC37	-	-	0	-	-
1992-A12	2448861.10	1992 Aug 26	HEDI	-	-	-	KITE-2A	-	-	WS	LC37	-	-	12	-	-



Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Launch_Code	Agency	Group	Category	LTCite	Cite	Notes
1965-A176	2439846.50	1965 Mar 26	Sprint ARM	-	PTV-1	MS	MIHEX	-	Test	ChronBHD	Ulrich	-
1965-A221	2439920.50	1965 Jun 9	Sprint ARM	-	PTV-2	MS	MIHEX	-	Test	Ulrich	-	-
1965-A160	2439901.50	1965 Nov 17	Sprint ARM	-	FLA-1	MS	MIHEX	-	Test	Safeguard	-	-
1966-A22	2439150.50	1966 Jan 25	Sprint ARM	-	FLA-2	MS	MIHEX	-	Test	Safeguard	-	-
1966-A62	2439248.50	1966 May 3	Sprint ARM	-	FLA-4	MS	MIHEX	-	Test	Safeguard	-	-
1966-A90	2439339.50	1966 Aug 2	Sprint ARM	-	FLA-5	MS	MIHEX	-	Test	Safeguard	-	-
1966-A134	2439432.50	1966 Nov 3	Sprint ARM	-	FLA-6	MS	MIHEX	-	Test	Safeguard	-	-
1967-A68	2439598.50	1967 Apr 18	Sprint ARM	-	FLA-9	MS	MIHEX	-	Test	Safeguard	-	-
1967-A84	2439653.50	1967 May 23	Sprint ARM	-	FLA-10	MS	MIHEX	-	Test	Safeguard	-	-
1967-A97	2439699.50	1967 Jul 18	Sprint ARM	-	FLA-8	MS	SEISC	-	Test	Safeguard	-	-
1967-A103	2439710.50	1967 Aug 8	Sprint ARM	-	FLA-11	MS	SEISC	-	Test	Safeguard	-	-
1967-A119	2439752.50	1967 Sep 19	Sprint ARM	-	FLA-12	MS	SEISC	-	Test	Safeguard	-	-
1967-A127	2439773.50	1967 Oct 10	Sprint ARM	-	FLA-7	MS	SEISC	-	Test	Brookings-WW	Safeguard	-
1967-A133	2439794.50	1967 Oct 31	Sprint ARM	-	FLA-14	MS	SEISC	-	Test	Safeguard	-	-
1967-A135	2439814.50	1967 Nov 20	Sprint ARM	-	FLA-15	MS	SEISC	-	Test	Safeguard	-	-
1967-A143	2439858.50	1967 Nov 20	Sprint ARM	-	FLA-13	MS	SEISC	-	Test	Safeguard	-	-
1968-A57	2439891.50	1968 Feb 5	Sprint ARM	-	FLA-16	MS	SEISC	-	Test	Safeguard	-	-
1968-A63	2439912.50	1968 Feb 26	Sprint ARM	-	FLA-17	MS	SEISC	-	Test	Safeguard	-	-
1968-A68	2439940.50	1968 Mar 25	Sprint ARM	-	FLA-18	MS	SEISC	-	Test	Safeguard	-	-
1968-A73	2439968.50	1968 Apr 22	Sprint ARM	-	FLA-19	MS	SEISC	-	Test	Safeguard	-	-
1968-A83	2440034.50	1968 Jun 27	Sprint ARM	-	FLA-20	MS	SEISC	-	Test	Safeguard	-	-
1968-A89	2440066.50	1968 Jul 29	Sprint ARM	-	FLA-21	MS	SEISC	-	Test	Safeguard	-	-
1968-A91	2440090.50	1968 Aug 22	Sprint ARM	-	FLA-22	MS	SEISC	-	Test	Safeguard	-	-
1968-A93	2440108.50	1968 Sep 9	Sprint ARM	-	FLA-23	MS	SEISC	-	Test	Safeguard	-	-
1968-A106	2440137.50	1968 Oct 6	Sprint ARM	-	FLA-24	MS	SEISC	-	Test	Safeguard	-	-
1968-A108	2440157.50	1968 Oct 28	Sprint ARM	-	FLA-25	MS	SEISC	-	Test	Safeguard	-	-
1968-A114	2440192.50	1968 Dec 2	Sprint ARM	-	FLA-26	MS	SEISC	-	Test	Safeguard	-	-
1969-A42	2440262.50	1969 Feb 10	Sprint ARM	-	FLA-27	MS	SFSC	-	Test	Safeguard	-	-
1969-A52	2440297.50	1969 Mar 17	Sprint ARM	-	FLA-30	MS	SFSC	-	Test	Safeguard	-	-
1969-A64	2440332.50	1969 Apr 21	Sprint ARM	-	FLA-28	MS	SFSC	-	Test	Safeguard	-	-
1969-A90	2440367.50	1969 May 26	Sprint ARM	-	FLA-31	MS	SFSC	-	Test	Safeguard	-	-
1969-A105	2440395.50	1969 Jun 23	Sprint ARM	-	FLA-29	MS	SFSC	-	Test	Safeguard	-	-
1969-A130	2440424.50	1969 Jul 22	Sprint ARM	-	FLA-32	MS	SFSC	-	Test	Safeguard	-	-
1969-A152	2440473.50	1969 Sep 15	Sprint ARM	-	FLA-35	MS	SFSC	-	Test	Safeguard	-	-
1969-A171	2440500.50	1969 Oct 6	Sprint ARM	-	FLA-36	MS	SFSC	-	Test	Safeguard	-	-
1969-A180	2440517.50	1969 Oct 23	Sprint ARM	-	FLA-38	MS	SFSC	-	Test	Safeguard	-	-
1969-A187	2440551.50	1969 Nov 6	Sprint ARM	-	FLA-33	MS	SFSC	-	Test	Safeguard	-	-
1969-A196	2440586.50	1969 Dec 1	Sprint ARM	-	FLA-34	MS	SFSC	-	Test	Safeguard	-	-
1970-A34	2440664.50	1970 Mar 8	Sprint ARM	-	FLA-40	MS	SFSC	-	Test	Safeguard	-	-
1970-A67	2440734.50	1970 May 28	Sprint ARM	-	FLA-44	MS	SFSC	-	Test	Safeguard	-	-
1970-A70	2440748.50	1970 Jun 6	Sprint ARM	-	FLA-45	MS	SFSC	-	Test	Safeguard	-	-
1970-A75	2440766.50	1970 Jun 29	Sprint ARM	-	FLA-43	MS	SFSC	-	Test	Safeguard	-	-
1970-A92	2440833.50	1970 Aug 22	Sprint ARM	-	FLA-46	MS	SFSC	-	Test	Safeguard	-	-
1970-A114	2440881.50	1970 Oct 28	Sprint ARM	-	FLA-45	MS	SFSC	-	Test	Safeguard	-	-
1970-A125	2440924.50	1970 Dec 23	Sprint ARM	-	FLA-49	MS	SFSC	-	Test	Safeguard	-	-
1970-A40	2440948.50	1970 Dec 23	Sprint ARM	-	FLA-46	MS	SFSC	-	Test	Safeguard	-	-
1971-A23	2441027.50	1971 Feb 23	Sprint ARM	-	FLA-50	MS	SFSC	-	Test	Safeguard	-	-
1971-A32	2441027.50	1971 Mar 17	Sprint ARM	-	FLA-50	MS	SFSC	-	Test	Safeguard	-	-
1971-A51	2441074.50	1971 May 7	Sprint ARM	-	FLA-52	MS	SFSC	-	Test	Safeguard	-	-
1971-A81	2441091.50	1971 Oct 7	Sprint ARM	-	FLA-48	MS	SFSC	-	Test	Safeguard	-	-
1971-A85	2441091.50	1971 Oct 7	Sprint ARM	-	FLA-48	MS	SFSC	-	Test	Safeguard	-	-
1971-A95	2441095.50	1971 Nov 10	Sprint ARM	-	FLA-47	MS	SFSC	-	Test	Safeguard	-	-
1971-A98	2441095.50	1971 Nov 10	Sprint ARM	-	FLA-47	MS	SFSC	-	Test	Safeguard	-	-
1972-A04	2441097.50	1971 Nov 12	Sprint ARM	-	FLA-56	MS	SFSC	-	Test	Safeguard	-	-
1972-A23	2441220.50	1972 Mar 6	Sprint ARM	-	FLA-61 Sim tang	MS	SFSC	-	Test	Safeguard	-	-
1972-A45	2441243.50	1972 Mar 16	Sprint ARM	-	FLA-63	MS	SFSC	-	Test	Safeguard	-	-
1972-A55	2441243.50	1972 Mar 16	Sprint ARM	-	FLA-64	MS	SFSC	-	Test	Safeguard	-	-
1972-A65	2441243.50	1972 Mar 24	Sprint ARM	-	FLA-60	MS	SFSC	-	Test	Safeguard	-	-
1972-A76	2441243.50	1972 Mar 24	Sprint ARM	-	FLA-59	MS	SFSC	-	Test	Safeguard	-	-
1972-A89	2441513.50	1972 Jul 15	Sprint ARM	-	FLA-70	MS	SFSC	-	Test	Safeguard	-	-
1972-A91	2441513.50	1972 Jul 15	Sprint ARM	-	FLA-70	MS	SFSC	-	Test	Safeguard	-	-
1972-A99	2441553.50	1972 Aug 24	Sprint ARM	-	FLA-73	MS	SFSC	-	Test	Safeguard	-	-
1972-A105	2441553.50	1972 Oct 11	Sprint ARM	-	FLA-66	MS	SFSC	-	Test	Safeguard	-	-
1972-A115	2441601.50	1972 Dec 5	Sprint ARM	-	FLA-58	MS	SFSC	-	Test	Safeguard	-	-
1972-A116	2441654.50	1972 Dec 5	Sprint ARM	-	FLA-58	MS	SFSC	-	Test	Safeguard	-	-
1972-A117	2441654.50	1972 Dec 5	Sprint ARM	-	FLA-58	MS	SFSC	-	Test	Safeguard	-	-
1972-A118	2441654.50	1972 Dec 8	Sprint ARM	-	FLA-76	MS	SFSC	-	Test	Safeguard	-	-
1972-A119	2441654.50	1972 Dec 8	Sprint ARM	-	FLA-76	MS	SFSC	-	Test	Safeguard	-	-
1973-A07	2441735.50	1973 Feb 22	Sprint ARM	-	FLA-73	MS	SFSC	-	Test	Safeguard	-	-
1973-A08	2441735.50	1973 Feb 22	Sprint ARM	-	FLA-73	MS	SFSC	-	Test	Safeguard	-	-
1973-A09	2441735.50	1973 Feb 22	Sprint ARM	-	FLA-60	MS	SFSC	-	Test	Safeguard	-	-
1973-A25	2441840.50	1973 Jun 7	Sprint ARM	-	FLA-75	MS	SFSC	-	Test	Safeguard	-	-
1973-A33	2441840.50	1973 Jun 7	Sprint ARM	-	FLA-74	MS	SFSC	-	Test	Safeguard	-	-
1973-A35	2441840.50	1973 Jun 20	Sprint ARM	-	FLA-54	MS	SFSC	-	Test	Safeguard	-	-
1973-A59	2441969.50	1973 Oct 5	Sprint ARM	-	PAWT-1	MS	SFSC	-	Test	Safeguard	-	-
1973-A64	2441969.50	1973 Oct 5	Sprint ARM	-	PAWT-1	MS	SFSC	-	Test	Safeguard	-	-
1973-A69	2441969.50	1973 Nov 2	Sprint ARM	-	PAWT-2	MS	SFSC	-	Test	Safeguard	-	-
1973-A72	24420015.50	1973 Nov 29	Sprint ARM	-	FLA-65	MS	SFSC	-	Test	Safeguard	-	-
1973-A77	24420015.50	1973 Feb 14	Sprint ARM	-	FLA-79 Block V oh	MS	SFSC	-	Test	Safeguard	-	-
1974-A108	2442092.50	1974 Feb 14	Sprint ARM	-	FLA-79	MS	SFSC	-	Test	Safeguard	-	-
1974-A117	2442153.50	1974 Apr 16	Sprint ARM	-	FLA-81	MS	SFSC	-	Test	Safeguard	-	-
1974-A131	2442261.50	1974 Aug 2	Sprint ARM	-	PAWT-3	MS	ABDDO	-	Test	Safeguard	-	-
1974-A41	2442322.50	1974 Oct 2	Sprint ARM	-	PAWT-4	MS	ABDDO	-	Test	Safeguard	-	-
1974-A45	2442337.50	1974 Oct 17	Sprint ARM	-	PAWT-5	MS	ABDDO	-	Test	Safeguard	-	-
1975-A25	2442532.50	1975 Apr 30	Sprint ARM	-	PAWT-6	MS	ABDDO	-	Test	Safeguard	-	-
1990-A01	2447918.19	1990 Apr 26 1638	HEDI	-	-	MS	SDIO	-	Test	Wire	ANST900205-33	-
1991-A05	2448523.15	1991 Sep 23 1540	HEDI	-	-	MS	SDIO	-	Test	Wire	SI9110930-70	-
1992-A12	2448861.10	1992 Aug 26 1431	HEDI	-	-	MS	SDIO	-	Test	Wire	ANST920907-42	-





Launch

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Mission	FlightCode	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee km	Range km	Dest
1963-A242	2438339.50	1963 Nov 6	Squirt	-	1	Squirt MTV-1	-	-	-	WS	LCS7	-	-	3?	-	-
1964-A189	2438471.50	1964 Mar 17	Squirt	-	2	Squirt MTV-2	-	-	-	WS	LCS7	-	-	3?	-	-
1964-A190	2438690.50	1964 Jul 14	Squirt	-	3	Squirt MTV-3	-	-	-	WS	LCS7	-	-	3?	-	-
1964-A188	2438661.50	1964 Sep 23	Squirt	-	4	Squirt MTV-4	-	-	-	WS	LCS7	-	-	3?	-	-



Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	OrbPay	Agency	Launch_Code	Group	Category	LTCite	Cite	Notes
1963-4242	2438395.50	1963 Nov 6	Squirt	-	1	0.000	MIKEX	MS	-	Test	wsmr-history.org	-	-
1964-A189	2438371.50	1964 Mar 17	Squirt	-	2	0.000	MIKEX	MS	-	Test	CBRD	Safeguard	-
1964-A190	2438390.50	1964 Jul 14	Squirt	-	3	0.000	MIKEX	MS	-	Test	Wire/Ulrich	wsmr-history.org	-
1964-A188	2438661.50	1964 Sep 23	Squirt	-	4	0.000	MIKEX	MS	-	Test	wsmr-history.org	-	-



Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Mission	FlightCode	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee km	Range km	Dest
2007-A11	2454217.40	2007 Apr 26 2132	SH-2MR	?	Aegis FTR-11 (2-3A)	-	-	CG-70	KAU	P0A	-	-	-	107	-	-
2014-A37	2456968.42	2014 Nov 6 22067	SH-2MR	?	Aegis FTR-25	2-3A	-	DDG-53	KAU	P0A	-	-	-	107	-	-
2014-A38	2456968.42	2014 Nov 6 22067	SH-2MR	?	Aegis FTR-25	2-3A	-	DDG-53	KAU	P0A	-	-	-	107	-	-
2018-A43	2458214.50	2018 Apr 6	Lynx	-	FTR-3S Target	-	-	-	WS	-	-	-	-	107	-	-



Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	OrbPay	Agency	Launch_Code	Group	Category	LTCite	Cite	Notes
2007-A11	2454217.40	2007 Apr 26 2132	SN-2MR	?	Aegis FTH-11 (2-3A)	0.000	MDA	MS	-	Test	www.mda.mil	-	-
2014-A37	2456968.42	2014 Nov 6 22067	SN-2MR	?	Aegis FTH-25	0.000	MDA	AS	-	Interceptor	mda.mil	-	-
2014-A38	2456968.42	2014 Nov 6 22067	SN-2MR	?	Aegis FTH-25	0.000	MDA	AS	-	Interceptor	mda.mil	-	-
2016-A43	2458214.50	2018 Apr 6	Lynx	-	FIX-38 Target	0.000	MDA	AS	-	Target	mda.mil	-	-





Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Mission	Launch				Ascent_Pad	Apogee km	Range km	Dest
								Platform	Launch_Site	Launch_Pad	Ascent_Site				
2014-A10	2456857.38	2014 Jun 28 21:05:00	LDSB	-	LDSB SFD1-1	SIAD-R/SSDS	-	BLM-LDSB	KAU	BLP	KAU	LP2	54	-	-
2015-A06	2457152.40	2015 Jun 8 21:35:00	LDSB	-	LDSB SFD1-2	SIAD-R/SSRS	-	BLM-LDSB	KAU	BLP	KAU	LP2	54	-	-



Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Orbit	Agency	Launch_Code	Group	Category	LTCite	Cite	Notes
2014-A10	2456637.38	2014 Jun 28 2105:00	LDSB	-	LDSB SFTT-1	0.000	JPL	AS	-	Test	Wire	-	-
2015-A06	2457152.40	2015 Jun 8 2135:00	LDSB	-	LDSB SFTT-2	0.000	JPL	AS	-	Test	Wire	-	-



Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Mission	FlightCode	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee_Km	Range_Km	Dest
2020-A16	2459066.50	2020 Aug 4 2357	Starship V1.0 Ship	-	S16 F1	150m hop	-	-	-	BCB	LPIA	-	-	0	-	-
2020-A19	2459096.24	2020 Sep 3 1747	Starship V1.0 Ship	-	S16 F1	150m hop	-	-	-	BCB	LPIA	-	-	0	-	-
2020-A21	2459193.46	2020 Dec 9 2245	Starship V1.0 Ship	-	S18 F1	15 Km attempt	-	-	-	BCB	LPIA	-	-	12	-	-
2021-A01	2459248.35	2021 Feb 2 2025	Starship V1.0 Ship	-	S19 F1	10 Km attempt	-	-	-	BCB	LPIA	-	-	107	-	-
2021-A02	2459277.47	2021 Mar 3 2314	Starship V1.0 Ship	-	S10 F1	10 Km attempt	-	-	-	BCB	LPIB	-	-	107	-	-
2021-A03	2459277.47	2021 Mar 3 2328	Starship V1.0 Ship	-	S10 F1	Accidental flight	-	-	-	BCB	-	-	-	0	-	-
2021-A04	2459304.04	2021 Mar 30 1300	Starship V1.0 Ship	-	S11 F1	10 Km attempt	-	-	-	BCB	LPIB	-	-	10	-	-
2021-A07	2459340.43	2021 May 5 2224	Starship V1.0 Ship	-	S15 F1	10 Km attempt	-	-	-	BCB	LPIA	-	-	10	-	-
2023-F05	2460055.06	2023 Apr 20 1333:08	Starship V1.0	-	B07/S24	Starship Flight 1	Ship 24	-	-	STB	OLPI	-	-	39	-	-
2024-F11	2460267.04	2023 Nov 18 1302:53P	Starship V1.0	-	B09/S26	Starship Flight 2	Ship 25	-	-	STB	OLPI	-	-	148	-	-
2024-001	2460384.06	2024 Mar 14 1326:00	Starship V1.0	-	E10/S28	Starship Flight 3	Ship 28	-	-	STB	OLPI	-	-	254	-	-
2024-003	2460468.03	2024 Jun 6 1250:00	Starship V1.0	-	E11/S29	Starship Flight 4	Ship 29	-	-	STB	OLPI	-	-	214	-	-
2024-004	2460597.02	2024 Oct 13 1226:00	Starship V1.0	-	E12/S30	Starship Flight 5	Ship 30	-	-	STB	OLPI	-	-	213	-	-
2024-006	2460634.42	2024 Nov 19 2200:00	Starship V1.0	-	E13/S31	Starship Flight 6	Ship 31	-	-	STB	OLPI	-	-	190	-	-



Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	DrPlay	Agency	Launch_Code	Group	Category	LTCite	Cite	Notes
2020-A16	2459066.50	2020 Aug 4 2357	Starship V1.0 Ship	-	SN5 F1	0.000	SPX	AS	SPX/	Test	nasaSpaceflight.com	-	-
2020-A19	2459096.24	2020 Sep 3 1747	Starship V1.0 Ship	-	SN6 F1	0.000	SPX	AS	SPX/	Test	nasaSpaceflight.com	-	-
2020-A21	2459193.45	2020 Dec 9 2245	Starship V1.0 Ship	-	SN8 F1	0.000	SPX	AS	SPX/	Test	nasaSpaceflight.com	-	-
2021-A01	2459248.35	2021 Feb 2 2025	Starship V1.0 Ship	-	SN9 F1	0.000	SPX	AS	SPX/	Test	nasaSpaceflight.com	-	-
2021-A02	2459277.47	2021 Mar 3 2314	Starship V1.0 Ship	-	SN10 F1	0.000	SPX	AS	SPX/	Test	nasaSpaceflight.com	-	-
2021-A03	2459277.47	2021 Mar 3 2328	Starship V1.0 Ship	-	SN10 F1 RUD	0.000	SPX	AF	SPX/	Explosion	nasaSpaceflight.com	-	-
2021-A04	2459304.04	2021 Mar 30 1300	Starship V1.0 Ship	-	SN11 F1	0.000	SPX	AF	SPX/	Test	nasaSpaceflight.com	-	-
2021-A07	2459340.43	2021 May 5 2224	Starship V1.0 Ship	-	SN15 F1	0.000	SPX	AS	SPX/	Test	nasaSpaceflight.com	-	-
2023-F05	2460065.06	2023 Apr 20 1333:08	Starship V1.0	-	807/524	120.000	SPX	OF	C	Sat LE0 S	nasaSpaceflight.com	-	St 1 sep failed
2023-F11	2460267.04	2023 Nov 18 1302:53P	Starship V1.0	-	809/525	120.000	SPX	OF	C	Sat LE0 S	nasaSpaceflight.com	-	St 2 underburn,destruct
2024-001	2460384.06	2024 Mar 14 1526:00	Starship V1.0	-	B10/528	120.000	SPX	C	C	Sat LE0 S	nasaSpaceflight.com	-	-
2024-003	2460469.03	2024 Jun 6 1250:00	Starship V1.0	-	B11/529	120.000	SPX	OS	C	Sat LE0 S	nasaSpaceflight.com	-	-
2024-004	2460597.02	2024 Oct 13 1225:00	Starship V1.0	-	B12/530	120.000	SPX	OS	C	Sat LE0 S	nasaSpaceflight.com	-	-
2024-006	2460634.42	2024 Nov 19 2200:00	Starship V1.0	-	B13/531	120.000	SPX	OS	C	Sat LE0 S	nasaSpaceflight.com	-	-





Launch

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Mission	FlightCode	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee km	Range km	Dest
1969-A165	2440495.50	1969 Oct 1	Falstaff	1	F.00	HRV 933	-	-	-	W00	LA2 HRV	-	-	30	-	-
1976-S149	2442641.50	1976 May 9	Falstaff	-	F.0	-	-	-	-	W00	LA2 HRV	-	-	119	-	-
1976-S106	2442628.50	1976 Feb 20	Falstaff	-	F.01	-	-	-	-	W00	LA2 HRV	-	-	117	-	-
1978-A22	2443661.50	1978 May 23	Falstaff	-	F.1	CHEVALINE F1	-	-	-	W00	LA2 HRV	-	-	2?	-	-
1978-S209	2443766.50	1978 Sep 15	Falstaff	-	F.2	CHEVALINE F2	-	-	-	W00	LA2 HRV	-	-	97	-	-
1978-S250	2443648.50	1978 Dec 6	Falstaff	-	F.3	CHEVALINE F3	-	-	-	W00	LA2 HRV	-	-	98	-	-
1979-S89	2443918.50	1979 Feb 14	Falstaff	-	F.4	CHEVALINE F4	-	-	-	W00	LA2 HRV	-	-	93	-	-
1979-S113	2443967.50	1979 Apr 4	Falstaff	-	F.5	CHEVALINE F5	-	-	-	W00	LA2 HRV	-	-	103	-	-



Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	OrbPay	Agency	Launch_Code	Group	Category	LTCite	Cite	Notes
1969-A165	2440495.50	1969 Oct 1	Falstraff	1	F.00	0.000	RAE	SS	RAE/	Test	IAC-04.JAA.6.15.3.07	-	-
1976-S149	2442541.50	1976 May 9	Falstraff	-	F.0	0.000	RAE	SS	RAE/	Test	IAC-04.JAA.6.15.3.07	Pittfield19	-
1976-S106	2442825.50	1976 Feb 20	Falstraff	-	F.01	0.000	RAE	SS	RAE/	Test	SPC-KH-211-5	IAC-04.JAA.6.15.3.07	-
1978-A22	2443651.50	1978 May 23	Falstraff	-	F.1	0.000	RAE	SF	RAE/	Test	RAE	Pittfield19	-
1978-S209	2443766.50	1978 Sep 15	Falstraff	-	F.2	0.000	RAE	SS	RAE/	Test	IAC-04.JAA.6.15.3.07	Pittfield19	-
1978-S250	2443845.50	1978 Dec 6	Falstraff	-	F.3	0.000	RAE	SS	RAE/	Test	IAC-04.JAA.6.15.3.07	Pittfield19	-
1979-S59	2443915.50	1979 Feb 14	Falstraff	-	F.4	0.000	RAE	SS	RAE/	Test	IAC-04.JAA.6.15.3.07	Pittfield19	-
1979-S113	2443967.50	1979 Apr 4	Falstraff	-	F.5	0.000	RAE	SS	RAE/	Test	IAC-04.JAA.6.15.3.07	Pittfield19	-



Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Mission	Launch				Apogee_Km	Range_Km	Dest
								FlightCode	Platform	Launch_Site	Launch_Pad			
2015-418	2457312.11	2015 Oct 16 1433	Stratos II+	-	1	-	-	-	-	-	-	21	-	-
2015-4251	2458325.50	2018 Jul 26	Stratos III	-	1	-	-	ELAR	-	ELAR	-	10	-	-



Launch													
Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Orbit	Agency	Launch_Code	Group	Category	LTCite	Cite	Notes
2015-418	2457312.11	2015 Oct 16 1433	Stratos II+	-	1	0.000	DARE	AS	DARE/	Test	dare.tudelift.nl	-	-
2018-4251	2466525.50	2018 Jul 26	Stratos III	-	1	0.000	DARE	AF	DARE/	Test	dare.tudelift.nl	-	-





Launch Mission

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Launch_Mission	FlightCode	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee_Km	Range_Km	Dest
1954-A712	2454941.50	1954 Apr 9	SE4400		F02					HIG				07		
1955-AB02	2455385.50	1955 Oct 5	SE4400		F41					HIG				207		
1955-AB03	2455386.50	1955 Oct 8	SE4400		F40	SEPR 505 booster				HIG				207		
1957-A443	2453985.50	1957 May 27	SE4400		F77	SEPR 732 booster				HIG				207		
1957-A449	2453997.50	1957 Jun 8	SE4400		F78					HIG				207		
1957-A139	2456186.50	1957 Dec 14	SE4400		F79					HIG				207		
1957-A140	2456188.50	1957 Dec 16	SE4400		F80					HIG				207		
1957-A142	2456189.50	1957 Dec 17	SE4400		F81					HIG				207		
1957-A143	2456191.50	1957 Dec 19	SE4400		F84					HIG				207		
1958-A28	2456293.50	1958 Mar 31	SE4400		F75					HIG				207		
1958-A28	2456293.50	1958 Mar 31	SE4400		F85					HIG				207		
1958-A29	2456294.50	1958 Apr 1	SE4400		F83					HIG				207		
1958-A11	2456575.50	1958 Jan 10	SE4400		F86					HIG				207		
1958-A12	2456581.50	1958 Jan 13	SE4400		F87					HIG				207		
1959-589	2456690.50	1959 May 2	SE4400		001					CERES				40		
1959-491	2456720.50	1959 Jun 1	SE4400		002	DP4-56-39-22D				HIG				1507		
1959-492	2456724.50	1959 Jun 5	SE4400		F88					HIG				407		
1959-5218	2456963.50	1959 Oct 22	DP4-56-39-22D		F76					HIG				407		
1959-5219	2456963.50	1959 Oct 22	DP4-56-39-22D		002					CERES				1507		
1959-5218	2456963.50	1959 Oct 22	DP4-56-39-22D		003					CERES				1507		
1960-A112	2457056.50	1960 May 2	SE4400		F89					HIG				207		
1960-592	2457056.50	1960 May 2	DP4-56-39-22D		004					CERES				1507		
1960-A114	2457059.50	1960 May 5	SE4400		F90					HIG				207		
1960-594	2457059.50	1960 May 5	DP4-56-39-22D		005					CERES				150		
1960-5286	2457203.50	1960 Sep 26	DP4-56-39-22D		006					CERES				1507		
1960-5305	2457207.50	1960 Sep 30	DP4-56-39-22D		007					CERES				1507		
1960-A371	2457238.50	1960 Nov	Stataltex		STX-01					CERES				13		
1960-A372	2457238.50	1960 Nov	Stataltex		STX-02					CERES				19		
1960-5351	2457263.50	1960 Nov 25	Antares		008					CERES				1507		
1960-5357	2457265.50	1960 Nov 30	Antares		009					CERES				1507		
1960-A304	2457285.50	1960 Dec 17	VELO Aigle							HIG	Bacchus			207		
1960-A305	2457287.50	1960 Dec 19	VELO Aigle							HIG	Bacchus			207		
1961-A05	2457299.50	1961 Mar	Vega Statoracteur							HIG	Bacchus			28		
1961-307	2457361.50	1961 Mar 3	Antares		010					HIG				207		
1961-308	2457364.50	1961 Mar 6	Antares		011					HIG				207		
1961-373	2457366.50	1961 Mar 7	Antares		012					CERES				1507		
1961-404	2457365.50	1961 Mar 7	Antares		013					CERES				1507		
1961-405	2457365.50	1961 Mar 7	SE4400		F91					HIG				65		
1961-406	2457365.50	1961 Mar 10	SE4400		F92					HIG				67		
1961-476	2457374.50	1961 Mar 16	VELO Aigle							HIG	Bacchus			207		
1961-476	2457374.50	1961 Mar 16	VELO Aigle							HIG	Bacchus			207		
1961-476	2457374.50	1961 Mar 21	VELO Aigle							HIG	Bacchus			207		
1961-4376	2457419.50	1961 May	Stataltex		STX-03					HIG	Bacchus			6		
1961-4377	2457419.50	1961 May	Stataltex		STX-04					HIG	Bacchus?			2807		
1961-3342	2457462.50	1961 May 13	Antares		STX-05					CERES				30		
1961-4378	2457462.50	1961 Dec 13	Stataltex		STX-06					CERES				2707		
1961-4379	2457462.50	1961 Dec 13	Stataltex		STX-06					CERES				2707		
1962-5023	2457593.50	1962 Jun 27	Stataltex		STX-07					CERES				2707		
1962-5026	2457593.50	1962 Jun 27	Berenice		001					CERES				11		
1962-5026	2457593.50	1962 Jul 6	Stataltex		STX-07					CERES				11		
1962-4953	2457594.50	1962 Jul 9	Stataltex		STX-08					CERES				2707		
1962-4953	2457594.50	1962 Jul 9	Stataltex		003					CERES				2707		
1962-4953	2457594.50	1962 Jul 9	Stataltex		004					CERES				2707		
1962-4953	2457594.50	1962 Jul 9	Berenice		005					CERES				2707		
1962-4953	2457594.50	1962 Jul 9	Berenice		006					CERES				2707		
1962-4953	2457594.50	1962 Jul 9	Berenice		007					CERES				2707		
1962-4953	2457594.50	1962 Jul 9	Berenice		008					CERES				2707		
1962-4953	2457594.50	1962 Jul 9	Berenice		009					CERES				2707		
1962-4953	2457594.50	1962 Jul 9	Berenice		010					CERES				2707		
1962-4953	2457594.50	1962 Jul 9	Berenice		011					CERES				2707		
1962-4953	2457594.50	1962 Jul 9	Berenice		012					CERES				2707		
1962-4953	2457594.50	1962 Jul 9	Berenice		013					CERES				2707		
1962-4953	2457594.50	1962 Jul 9	Berenice		014					CERES				2707		
1962-4953	2457594.50	1962 Jul 9	Berenice		015					CERES				2707		
1962-4953	2457594.50	1962 Jul 9	Berenice		016					CERES				2707		
1962-4953	2457594.50	1962 Jul 9	Berenice		017					CERES				2707		
1962-4953	2457594.50	1962 Jul 9	Berenice		018					CERES				2707		
1962-4953	2457594.50	1962 Jul 9	Berenice		019					CERES				2707		
1962-4953	2457594.50	1962 Jul 9	Berenice		020					CERES				2707		
1962-4953	2457594.50	1962 Jul 9	Berenice		021					CERES				2707		
1962-4953	2457594.50	1962 Jul 9	Berenice		022					CERES				2707		
1962-4953	2457594.50	1962 Jul 9	Berenice		023					CERES				2707		
1962-4953	2457594.50	1962 Jul 9	Berenice		024					CERES				2707		
1962-4953	2457594.50	1962 Jul 9	Berenice		025					CERES				2707		
1962-4953	2457594.50	1962 Jul 9	Berenice		026					CERES				2707		
1962-4953	2457594.50	1962 Jul 9	Berenice		027					CERES				2707		
1962-4953	2457594.50	1962 Jul 9	Berenice		028					CERES				2707		
1962-4953	2457594.50	1962 Jul 9	Berenice		029					CERES				2707		
1962-4953	2457594.50	1962 Jul 9	Berenice		030					CERES				2707		
1962-4953	2457594.50	1962 Jul 9	Berenice		031					CERES				2707		
1962-4953	2457594.50	1962 Jul 9	Berenice		032					CERES				2707		
1962-4953	2457594.50	1962 Jul 9	Berenice		033					CERES				2707		
1962-4953	2457594.50	1962 Jul 9	Berenice		034					CERES				2707		
1962-4953	2457594.50	1962 Jul 9	Berenice		035					CERES				2707		
1962-4953	2457594.50	1962 Jul 9	Berenice		036					CERES				2707		
1962-4953	2457594.50	1962 Jul 9	Berenice		037					CERES				2707		
1962-4953	2457594.50	1962 Jul 9	Berenice		038					CERES				2707		
1962-4953	2457594.50	1962 Jul 9	Berenice		039					CERES				2707		
1962-4953	2457594.50	1962 Jul 9	Berenice		040					CERES				2707		
1962-4953	2457594.50	1962 Jul 9	Berenice		041					CERES				2707		
1962-4953	2457594.50	1962 Jul 9	Berenice		042					CERES				2707		
1962-4953	2457594.50	1962 Jul 9	Berenice		043					CERES				2707		
1962-4953	2457594.50	1962 Jul 9	Berenice		044					CERES				2707		
1962-4953	2457594.50	1962 Jul 9	Berenice		045					CERES				2707		
1962-4953	2457594.50	1962 Jul 9	Berenice		046					CERES				2707		
1962-4953	2457594.50	1962 Jul 9	Berenice		047					CERES				2707		
1962-4953	2457594.50	1962 Jul 9	Berenice		048					CERES				2707		
1962-4953	2457594.50	1962 Jul 9	Berenice		049					CERES				2707		
1962-4953	2457594.50	1962 Jul 9	Berenice		050					CERES				2707		
1962-4953	2457594.50	1962 Jul 9	Berenice		051					CERES				2707		
1962-4953	2457594.50	1962 Jul 9	Berenice		052					CERES				2707		
1962-4953	2457594.50	1962 Jul 9	Berenice		053					CERES				2707		
1962-4953	2457594.50	1962 Jul 9	Berenice		054					CERES				2707		
1962-																



Launch Mission

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Mission	FlightCode	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee Km	Range Km	Dest
1992-5203	2445017.07	1992 Feb 16 1339	RH-560	-	RH-560-21/ASV.26	Spread F	-	-	-	SHAR	RH	-	-	364	-	-
1992-5203	2445025.50	1992 Mar 1	RH-560	-	RH-560-22	RH-560-22	-	-	-	SHAR	RH	-	-	2007	-	-
1992-5204	2445030.07	1992 Mar 1 1335	RH-560	-	ASV.30	ASV.30	-	-	-	SHAR	RH	-	-	364	-	-
1992-5204	2445030.07	1992 Mar 1 1335	RH-560	-	RH-560-23/ASV.30	RH-560-23/ASV.30	-	-	-	SHAR	RH	-	-	2007	-	-
1992-5204	2445030.07	1992 Mar 1 1335	RH-560	-	RH-560-24	RH-560-24	-	-	-	SHAR	RH	-	-	2007	-	-
1992-5205	2445059.50	1992 Aug 31	RH-560	-	RH-560-S-04	RH-560-S-04	-	-	-	SHAR	RH	-	-	2007	-	-
1992-5205	2445192.50	1992 Aug 31	RH-560	-	RH-560-24	RH-560-24	-	-	-	SHAR	RH	-	-	2007	-	-
1992-5201	2445297.13	1992 Nov 23 1510	RH-560	-	RH-560-25	Spread F	-	-	-	SHAR	RH	-	-	330	-	-
1992-5202	2445303.20	1992 Nov 29 1650	RH-560	-	RH-560-26	Spread F	-	-	-	SHAR	RH	-	-	2007	-	-
1993-5310	2445346.50	1993 Jan 12	RH-560	-	RH-560-27	RH-560-27	-	-	-	SHAR	RH	-	-	330	-	-
1993-5311	2445465.50	1993 May 11	RH-560	-	RH-560-28	RH-560-28	-	-	-	SHAR	RH	-	-	2007	-	-
1996-5195	2446546.50	1996 Apr 26	RH-560	-	RH-560-29?	DFVLR flight	-	-	-	SHAR	RH	-	-	2007	-	-
1987-5153	2446913.69	1987 May 4 0440	RH-560	-	RH-560-30	SPICE-2?	Equatorial Spread F	-	-	SHAR	RH	-	-	280	-	-
1988-5126	2447439.17	1988 Oct 4 1600	RH-560	-	RH-560-31	ESF	-	-	-	SHAR	RH	-	-	348	-	-
1989-5122	2447557.50	1989 Feb	Hafz I	-	-	-	-	-	-	SUM	-	-	-	70?	-	-
1991-5122	2447557.50	1989 Feb	Hafz II	-	-	-	-	-	-	SUM	-	-	-	100?	-	-
1991-5122	2448371.50	1991 Apr 25	RH-560	-	RH-560-32?	APC-REX	Auton.Pay Control REXp	-	-	SHAR	RH	-	-	107	-	-
1992-562	2448806.86	1992 Jul 3 0633	RH-560	-	RH-560-33?	-	-	-	-	SHAR	RH	-	-	320	-	-
1993-577	2449038.05	1993 Feb 19 1315	RH-560	-	RH-560-34?	Ba release	Ion Hole Expt	-	-	SHAR	RH	-	-	300?	-	-
1993-578	2449038.07	1993 Feb 19 1345	RH-560	-	RH-560-35?	Ba release	Ion Hole Expt	-	-	SHAR	RH	-	-	290	-	-
1993-529	2449096.74	1993 Apr 19 0650	RH-560	-	RH-560-36?	SPICE-3	-	-	-	SHAR	RH	-	-	323	-	-
1996-555	2449945.50	1996 Aug 16	RH-560/300 Mk II	-	RH-560-II F01	-	-	-	-	SHAR	RH	-	-	420	-	-
1996-580	2450225.50	1996 May 22	RH-560/300 Mk II	-	RH-560-II F02	-	-	-	-	SHAR	RH	-	-	420	-	-
1997-535	2450544.50	1997 Apr 6	RH-560/300 Mk II	-	RH-560-II F03	-	-	-	-	SHAR	RH	-	-	420	-	-
1997-583	2450695.50	1997 Sep 4	RH-560/300 Mk II	-	RH-560-II F04	-	-	-	-	SHAR	RH	-	-	420?	-	-
1998-539	2450923.08	1998 Apr 19 1351	RH-560/300 Mk II	-	DEUS F05	DEUS F05	-	-	-	SHAR	RH	-	-	433	-	-
1998-559	2450923.08	1998 Apr 19 1351	RH-560/300 Mk II	-	DEUS F07	DEUS F07	-	-	-	SHAR	RH	-	-	425	-	-
1998-555	2451075.12	1998 Sep 21 1451	RH-560/300 Mk II	-	RH-560-II F07	DEUS F06	-	-	-	SHAR	RH	-	-	422	-	-
1998-557	2451085.13	1998 Sep 28 1511	RH-560/300 Mk II	-	RH-560-II F06	DEUS F06	-	-	-	SHAR	RH	-	-	422	-	-
2000-453	2451574.50	2000 Feb	Hafz I	-	Hafz-1A	-	-	-	-	SUM?	-	-	-	70?	-	-
2002-455	2452520.50	2002 May 26	Hafz II	-	Abdall1	-	-	-	-	SUM?	-	-	-	70?	-	-
2003-415	2452724.50	2003 Mar 26	Hafz II	-	-	-	-	-	-	SUM?	-	-	-	70?	-	-
2005-407	2453460.50	2005 Mar 31	Hafz II	-	-	-	-	-	-	SUM?	-	-	-	70?	-	-
2007-547	2454162.50	2007 Mar 3	Hafz II	-	-	-	-	-	-	SUM?	-	-	-	70?	-	-
2010-509	2455211.62	2010 Jan 15 0745	RH-560/300 Mk II	-	RH-560-II F08?	Sooryagrahan 2010	Eclipse	-	-	SUSC	RI	-	-	523	-	-
2010-505	2455213.62	2010 Jan 17 0300	RH-560/300 Mk II	-	RH-560-II F09?	Sooryagrahan 2010	Eclipse	-	-	SUSC	RI	-	-	546	-	-
2010-401	2455255.62	2010 Mar 5 0300	ATV	-	ATV-D01	SPEX Scremjet	-	-	-	SUSC	RI	-	-	46	-	-
2016-402	2457628.62	2016 Aug 28 0030	ATV	-	ATV-P02	SPEX Scremjet	DMRJ Dual Mode Ramjet	-	-	SUSC	RI	-	-	70	-	-
2021-520	2459265.07	2021 Mar 12 1345	RH-560 Mk III	-	RH-560-III F01	SUMREX	-	-	-	SUSC	RI	-	-	512	-	-
2024-546	2460513.56	2024 Jul 22 0130	ATV	-	ATV-D03	RH-560	-	-	-	SUSC	RI	-	-	100?	-	-





Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	OrbPay	Agency	Launch_Code	Group	Category	LTCite	Cite	Notes
1966-5603	2439442-07	1966 Nov 12 1340:57	Titus	-	002	0.000	CHES	SS	CHES/Mallique	Solar Eclipse	Taillede	CHES	-
1967-5883	2439516-47	1967 Jan 25 2316:00	Dragon	-	D-24	0.000	CHES	SS	GRI/Berteller	Ionos	SpaceWorId6804-18	-	-
1967-5887	2439519-00	1967 Jan 28 1205:33	Dragon	-	D-25	0.000	CHES	SS	GRI/Berteller	Ionos	SpaceWorId6804-18	-	-
1967-5888	2439519-56	1967 Jan 29 0121:35	Dragon	-	D-26	0.000	CHES	SS	GRI/Berteller	Ionos	SpaceWorId6804-18	-	-
1967-5889	2439519-63	1967 Jan 29 0309:20	Dragon	-	D-27	0.000	CHES	SS	GRI/Berteller	Ionos	SpaceWorId6804-18	-	-
1967-A147	2439569-50	1967 Mar 20	Dauphin	-	DA001	0.000	CHES	SF	CHES/Cade	Test	CHES	-	-
1967-A147	2439569-50	1967 Mar 20	Dauphin	-	DA001	0.000	CHES	SF	SUPA	Test	CHES	-	-
1967-5249	2439616-12	1967 May 5 1449	Dragon	-	D-33	0.000	CHES	SS	CHES/Cade	Test	CHES	-	-
1967-5324	2439669-50	1967 Jun 28 1312:30	Dauphin	-	DA002	0.000	CHES	SS	URU/BUNN/Denboggende	Solar X/Aeronomy	AND/MDCRF	IAC03-IIA2.3.05	-
1967-5472	2439768-05	1967 Oct 4 1032:00	Dragon	-	D-35	0.000	ESKO	SS	URU/AFE/Denboggende	Solar X/Aeronomy	AND/MDCRF	ESR067	-
1967-5477	2439770-94	1967 Oct 7 1032:00	Dragon	-	D-36	0.000	ESKO	SF	URU/BUNN/Denboggende	Solar X/Aeronomy	AND/MDCRF	ESR067	-
1967-A128	2439774-08	1967 Oct 10 1401:00	Dragon	-	D-36	0.000	ESKO	SF	CEM/Libeyrie	XR Astron	CHES	-	-
1967-A138	2439817-50	1967 Nov 23	Tacte	-	002	0.000	CHES	SF	CHES/Delaboudiniere	Solar UV	CHES	-	-
1966-5131	2439900-50	1966 Feb 14	Dragon	-	D-32	0.000	CHES	SS	CHES/Cade	Test	CHES	-	-
1966-5171	2439923-50	1966 Mar 8	Dauphin	-	DA003	0.000	CHES	SS	GRI/Gendrin	Ionos	SK10,891	CHES	-
1966-5176	2439930-65	1966 Mar 15 0943	Dragon	2B	D-251A	0.000	CHES	SS	GRI/Gendrin	Ionos	SK10,891/Tizliou	CHES	-
1966-5212	2439943-83	1966 Mar 28 0755	Dragon	2B	D-252	0.000	CHES	SS	CHES/Cade	Test	Tizliou	CHES	-
1966-5216	2439944-10	1966 Mar 28 1430	Dauphin	-	DA004	0.000	CHES	SS	CHES/Cade	Test	CHES	-	-
1966-5229	2439945-10	1966 Mar 29 1420	Dragon	2B	D-54	0.000	CHES	SS	GRI/Gendrin	Ionos	SK10,861	CHES	-
1966-5249	2439947-64	1966 Apr 1 0326	Dragon	2B	D-55	0.000	CHES	SS	SUPA/CHET/Chanin,Almed	Ionos/Solar X	AppUpPr9,4,903	CHES	-
1966-5319	2439991-53	1966 May 15 0038	Tacte	-	TACTIE 02	0.000	ESKO	SF	OMEGA/Girard	Aeron	ESKO-Sp-79	CHES	-
1966-5339	2440000-85	1966 May 22 1628:44	Dragon	-	D-31	0.000	CHES	SF	RP1K/OTV/Zahringr	Test	SciIns968,4,46	CHES	-
1966-5404	2440060-85	1966 Jul 23 0824	Dragon	3	D-301	0.000	CHES	SF	CHES/Cade	Test	CHES	-	-
1966-A117	2440125-50	1966 Sep 26	Eridan	-	E002	0.000	CHES	SF	CHES/Cade	Test	CHES	-	-
1966-5652	2440144-93	1966 Oct 15 1015	Dragon	2B	D-254	0.000	CHES	SS	CHES/Ponsar,Remondiere	Test/Solar	TizliouCollection	N73-23940	-
1966-5656	2440163-57	1966 Nov 3 0142:24	Dragon	2B	D-254	0.000	CHES	SS	ESKO/CHES/Reme,bruston	Ionos	CHES	AMD	-
1966-5110	2440258-94	1969 Feb 6 1330	Dragon	2B	D-256	0.000	CHES	SS	CHET/AM/Pokhnukov,Giraud	Amos	CHES-PR	SR10,751	-
1966-5115	2440259-07	1969 Feb 6 1346	Dragon	2B	D-257	0.000	CHES	SS	CHET/AM/Pokhnukov,Giraud	Amos	CHES-PR	SR10,751	-
1966-5117	2440259-44	1969 Feb 6 12230	Dragon	2B	D-256	0.000	CHES	SS	CHET/AM/Pokhnukov,Giraud	Amos	CHES-PR	SR10,751	-
1966-5119	2440259-56	1969 Feb 7 0122	Dragon	2B	D-259	0.000	CHES	SS	CHET/AM/Pokhnukov,Giraud	Amos	CHES-PR	SR10,751	-
1966-5196	2440296-01	1969 Mar 17 1209	Dragon	2B	D-29	0.000	CHES	SS	ORLAS/Palaboudiniere	Solar EDV	CHES	-	-
1966-5261	2440323-50	1969 Apr 12	Eridan	-	E005	0.000	CHES	SS	CHES/Cade	Test	CHES	-	-
1966-5263	2440324-52	1969 Apr 13 0033:10	Dragon	2B	D-255	0.000	CHES	SS	ESKO/CHES	Ionos	CHES	AMD	-
1966-5275	2440329-41	1969 Apr 17 2146:04	Dragon	2B	D-280	0.000	CHES	SS	CHES/PEP/Bruston,Hazer	Ionos/Ba	SR12,1387	CHES	-
1966-5294	2440334-50	1969 Apr 23	Eridan	-	E003	0.000	CHES	SS	CHES/Cade	Test	CHES	-	-
1966-5300	2440337-50	1969 Apr 26	Dragon	3	D-302	0.000	CHES	SF	CHES/Cade	Test	CHES	-	-
1966-5344	2440386-50	1969 May 27	Dragon	3	D-302	0.000	CHES	SF	GRI/Sechin	Ionos	CHES	-	-
1966-5645	2440485-50	1969 Aug 22	Eridan	-	E004	0.000	CHES	SF	CHES/Cade	Test	CHES	-	-
1966-5651	2440485-33	1969 Sep 20 2000	Dragon	-	D-38	0.000	ESKO	SF	PRU/GNS/Shirke	Ionos	CHES	-	-
1966-8629	2440594-07	1971 Feb 22 1859	Dragon	3	D-304	0.000	CHES	SS	GRI/Sechin	Ionos	CHES	-	-
1970-5844	2440713-45	1970 May 6 2226	Dragon	3	D-304	0.000	CHES	SS	GRI/Sechin	Ionos	CHES	-	-
1970-5853	2440685-35	1970 Oct 9 1050	Dragon	3	D-305	0.000	CHES	SS	PRU/GNS/Shirke	Ionos	CHES	-	-
1971-5976	2441068-56	1971 Feb 22 0823	Dragon	3	D-305	0.000	CHES	SS	GRI/Sechin	Ionos	CHES	-	-
1971-5982	2441068-56	1971 Feb 22 1859	Tibere	-	D-306	0.000	CHES	SS	PRU/GNS/Shirke	Test/Plasma/Fields/Aeron	SK11,1071	CHES	-
1971-5984	2441208-68	1971 Sep 14 0420	Eridan	-	E006	0.000	CHES	SS	CHES/Seinberg	Ionos	CHES	-	-
1971-5975	2441208-68	1971 Oct 16 1920	Eridan	-	E006	0.000	CHES	SS	CHES/Seinberg	Ionos	CHES	-	-
1972-5180	2441235-50	1972 Apr 21 0010	Tibere	-	DA005	0.000	CHES	SS	CHES/Remondiere	Reentry Test/Aeron	JGR79,1299	CHES	-
1972-5180	2441235-50	1972 Apr 21 0010	Tibere	-	DA005	0.000	CHES	SS	CHES/Remondiere	Reentry Test/Aeron	JGR79,1299	CHES	-
1972-5181	2441235-50	1972 Apr 21 0010	Tibere	-	E007 (FU-202)	0.000	CHES	SS	CHES/Remondiere	Reentry Test/Aeron	JGR79,1299	CHES	-
1972-5182	2441235-50	1972 Apr 21 0010	Tibere	-	E008	0.000	CHES	SS	CHES/Remondiere	Reentry Test/Aeron	JGR79,1299	CHES	-
1972-5183	2441235-50	1972 Apr 21 0010	Tibere	-	E009	0.000	CHES	SS	CHES/Remondiere	Reentry Test/Aeron	JGR79,1299	CHES	-
1972-5184	2441235-50	1972 Apr 21 0010	Tibere	-	E010	0.000	CHES	SS	CHES/Remondiere	Reentry Test/Aeron	JGR79,1299	CHES	-
1972-5185	2441235-50	1972 Apr 21 0010	Tibere	-	E011	0.000	CHES	SS	CHES/Remondiere	Reentry Test/Aeron	JGR79,1299	CHES	-
1972-5186	2441235-50	1972 Apr 21 0010	Tibere	-	E012	0.000	CHES	SS	CHES/Remondiere	Reentry Test/Aeron	JGR79,1299	CHES	-
1972-5187	2441235-50	1972 Apr 21 0010	Tibere	-	E013	0.000	CHES	SS	CHES/Remondiere	Reentry Test/Aeron	JGR79,1299	CHES	-
1972-5188	2441235-50	1972 Apr 21 0010	Tibere	-	E014	0.000	CHES	SS	CHES/Remondiere	Reentry Test/Aeron	JGR79,1299	CHES	-
1972-5189	2441235-50	1972 Apr 21 0010	Tibere	-	E015	0.000	CHES	SS	CHES/Remondiere	Reentry Test/Aeron	JGR79,1299	CHES	-
1972-5190	2441235-50	1972 Apr 21 0010	Tibere	-	E016	0.000	CHES	SS	CHES/Remondiere	Reentry Test/Aeron	JGR79,1299	CHES	-
1972-5191	2441235-50	1972 Apr 21 0010	Tibere	-	E017	0.000	CHES	SS	CHES/Remondiere	Reentry Test/Aeron	JGR79,1299	CHES	-
1972-5192	2441235-50	1972 Apr 21 0010	Tibere	-	E018	0.000	CHES	SS	CHES/Remondiere	Reentry Test/Aeron	JGR79,1299	CHES	-
1972-5193	2441235-50	1972 Apr 21 0010	Tibere	-	E019	0.000	CHES	SS	CHES/Remondiere	Reentry Test/Aeron	JGR79,1299	CHES	-
1972-5194	2441235-50	1972 Apr 21 0010	Tibere	-	E020	0.000	CHES	SS	CHES/Remondiere	Reentry Test/Aeron	JGR79,1299	CHES	-
1972-5195	2441235-50	1972 Apr 21 0010	Tibere	-	E021	0.000	CHES	SS	CHES/Remondiere	Reentry Test/Aeron	JGR79,1299	CHES	-
1972-5196	2441235-50	1972 Apr 21 0010	Tibere	-	E022	0.000	CHES	SS	CHES/Remondiere	Reentry Test/Aeron	JGR79,1299	CHES	-
1972-5197	2441235-50	1972 Apr 21 0010	Tibere	-	E023	0.000	CHES	SS	CHES/Remondiere	Reentry Test/Aeron	JGR79,1299	CHES	-
1972-5198	2441235-50	1972 Apr 21 0010	Tibere	-	E024	0.000	CHES	SS	CHES/Remondiere	Reentry Test/Aeron	JGR79,1299	CHES	-
1972-5199	2441235-50	1972 Apr 21 0010	Tibere	-	E025	0.000	CHES	SS	CHES/Remondiere	Reentry Test/Aeron	JGR79,1299	CHES	-
1972-5200	2441235-50	1972 Apr 21 0010	Tibere	-	E026	0.000	CHES	SS	CHES/Remondiere	Reentry Test/Aeron	JGR79,1299	CHES	-
1972-5201	2441235-50	1972 Apr 21 0010	Tibere	-	E027	0.000	CHES	SS	CHES/Remondiere	Reentry Test/Aeron	JGR79,1299	CHES	-
1972-5202	2441235-50	1972 Apr 21 0010	Tibere	-	E028	0.000	CHES	SS	CHES/Remondiere	Reentry Test/Aeron	JGR79,1299	CHES	-
1972-5203	2441235-50	1972 Apr 21 0010	Tibere	-	E029	0.000	CHES	SS	CHES/Remondiere	Reentry Test/Aeron	JGR79,1299	CHES	-
1972-5204	2441235-50	1972 Apr 21 0010	Tibere	-	E030	0.000	CHES	SS	CHES/Remondiere	Reentry Test/Aeron	JGR79,1299	CHES	-
1972-5205	2441235-50	1972 Apr 21 0010	Tibere	-	E031	0.000	CHES	SS	CHES/Remondiere	Reentry Test/Aeron	JGR79,1299	CHES	-
1972-5206	2441235-50	1972 Apr 21 0010	Tibere	-	E032	0.000	CHES	SS	CHES/Remondiere	Reentry Test/Aeron	JGR79,1299	CHES	-
1972-5207	2441235-50	1972 Apr 21 0010	Tibere	-	E033	0.000	CHES	SS	CHES/Remondiere	Reentry Test/Aeron	JGR79,1299	CHES	-
1972-5208	2441235-50	1972 Apr 21 0010	Tibere	-	E034	0.000	CHES	SS	CHES/Remondiere	Reentry Test/Aeron	JGR79,1299	CHES	-
1972-5209	2441235-50	1972 Apr 21 0010	Tibere	-	E035	0.000	CHES	SS	CHES/Remondiere	Reentry Test/Aeron	JGR79,1299	CHES	-
1972-5210	2441235-50	1972 Apr 21 0010	Tibere	-	E036	0.000	CHES	SS	CHES/Remondiere	Reentry Test/Aeron	JGR79,1299	CHES	-
1972-5211	2441235-50	1972 Apr 21 0010	Tibere	-	E037	0.000	CHES	SS	CHES/Remondiere	Reentry Test/Aeron	JGR79,1299	CHES	-
1972-5212	2441235-50	1972 Apr 21 0010	Tibere	-	E038	0.000	CHES	SS	CHES/Remondiere	Reentry Test/Aeron	JGR79,1299	CHES	-
1972-5213	2441235-50	1972 Apr 21 0010	Tibere	-	E039	0.000	CHES	SS	CHES/Remondiere	Reentry Test/Aeron	JGR79,1299	CHES	-
1972-5214	2441235-50	1972 Apr 21 0010	Tibere	-	E040	0.000	CHES	SS	CHES/Remondiere	Reentry Test/Aeron	JGR79,1299	CHES	-
1972-5215	2441235-50	1972 Apr 21 0010	Tibere	-	E041	0.000	CHES	SS	CHES/Remondiere	Reentry Test/Aeron	JGR79,1299	CHES	-
1972-5216	2441235-50	1972 Apr 21 0010	Tibere	-	E042	0.000	CHES	SS	CHES/Remondiere	Reentry Test/Aeron	JGR79,1299	CHES	-
1972-5217	2441235-50	1972 Apr 21 0010	Tibere	-	E043	0.000	CHES	SS	CHES/Remondiere	Reentry Test/Aeron	JGR79,1299	CHES	-
1972-5218	2441235-50	1972 Apr 21 0010	Tibere	-	E044	0.000	CHES	SS	CHES/Remondiere	Reentry Test/Aeron	JGR79,1299	CHES	-
1972-5219	2441235-50	1972 Apr 21 0010	Tibere	-	E045	0.000	CHES	SS	CHES/Remondiere	Reentry Test/Aeron	JGR79,1299	CHES	-
1972-5220	2441235-50	1972 Apr 21 0010	Tibere	-	E046	0.000	CHES	SS	CHES/Remondiere	Reentry Test/Aeron	JGR79,1299	CHES	-
1972-5221	2441235-50	1972 Apr 21 0010	Tibere	-	E047	0.000	CHES	SS	CHES/Remondiere	Reentry Test			

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	OrbPay	Agency	Launch_Code	Group	Category	LTCite	Cite	Notes
1992-5203	24465017-07	1982 Feb 16 1339	RH-560	-	RH-560-21/ASV, 26	0.000	ISRO	SS	PKL/Gupta	Ionos	ASR18_6_335	-	-
1992-5283	2446029-50	1982 Mar 1	RH-560	-	RH-560-22	0.000	ISRO	SU	ISRO/	Test	SUSC-SR	-	-
1992-5204	2446030-07	1982 Mar 1 1335	RH-560	-	RH-560-23/ASV, 30	0.000	ISRO	SU	ISRO/?	Ionos	ASR18_6_335	-	-
1992-5284	2446059-50	1982 Mar 31	RH-560S	-	RH-560-S-04	0.000	ISRO	SU	ISRO/	Test	SUSC-SR	-	-
1992-5285	2446192-50	1982 Aug 11	RH-560	-	RH-560-24	0.000	ISRO	SU	ISRO/	Test	SUSC-SR	-	-
1992-5201	2446287-13	1982 Nov 23 1510	RH-560	-	RH-560-25	0.000	ISRO	SS	PKL/Prakash	Ionos	ASR5_7_39	-	-
1992-5202	2446303-20	1982 Nov 29 1650	RH-560	-	RH-560-26	0.000	ISRO	SS	ISRO/	Test	SUSC-SR	-	-
1992-5310	2446346-50	1983 Jan 12	RH-560	-	RH-560-27	0.000	ISRO	SU	ISRO/	Test	SUSC-SR	-	-
1992-5311	2446465-50	1983 May 11	RH-560	-	RH-560-28	0.000	ISRO	SU	ISRO/	Test	SUSC-SR	-	-
1992-5195	2446919-69	1987 Apr 26	RH-560	-	RH-560-29P	0.000	ISRO	SS	DFVLK/	Test	SUSC-SR	-	-
1987-5183	2446919-69	1987 May 4 0440	RH-560	-	RH-560-30	0.000	ISRO	SS	PKL/FREIB/Gupta, Navar	Ionos	ASR18_6_335	SpaceIndia9504	-
1989-5126	2447439-17	1988 Oct 4 1600	RH-560	-	RH-560-31	0.000	ISRO	NS	PKL/Kaizada, Chandra	Ionos	Ambeceph18,141	JATP59_191	-
1989-5122	2447557-50	1989 Feb	Hatf I	-	-	0.000	SUPA/	NS	SUPA/	Test	Eat.IngGrass	-	-
1991-412	2448371-50	1991 Apr 25	RH-560	-	RH-560-32P	0.000	SUPA/	NS	ISRO/DLR/	Test	SUSC-SR	-	-
1992-562	2448806-86	1992 Jul 3 0633	RH-560	-	RH-560-33P	0.000	ISRO	SF	ISRO/DLR/	Test	CUSPAR95	-	-
1993-577	2449038-05	1993 Feb 19 1315	RH-560	-	RH-560-34P	0.000	ISRO	SS	PKL/Sridharan	Ionos/Release	SpaceIndia9504	JATP59_2051	-
1993-578	2449038-07	1993 Feb 19 1345	RH-560	-	RH-560-35P	0.000	ISRO	SS	PKL/Sridharan	Ionos/Release	SpaceIndia9504	-	-
1993-579	2449096-74	1993 Apr 19 0550	RH-560	-	RH-560-36P	0.000	ISRO	SS	PKL/FREIB/Gupta, Navar	Ionos	ESA-SF370	SpaceIndia9504	-
1993-585	2449946-50	1995 Aug 16	RH-560/300 Mr II	-	RH-560-II F01	0.000	ISRO	SS	ISRO/	Test	sonyaceramics.com	-	-
1996-580	2460225-50	1996 May 22	RH-560/300 Mr II	-	RH-560-II F02	0.000	ISRO	SS	ISRO/	Test	SUSC-SR	-	-
1997-535	2460544-50	1997 Apr 6	RH-560/300 Mr II	-	RH-560-II F03	0.000	ISRO	SS	ISRO/	Test	Doshamp97-43	-	-
1997-583	2460695-50	1997 Sep 4	RH-560/300 Mr II	-	RH-560-II F04	0.000	ISRO	SS	ISRO/	Test	Doshamp97-43	-	-
1998-539	2460923-08	1998 Apr 19 1351	RH-560/300 Mr II	-	RH-560-II F05	0.000	ISRO/DLR	SS	KTEL/Steigles	Ionos	ISIR951012-6	ASR25_1,109	-
1998-585	2461076-12	1998 Sep 21 1461	RH-560/300 Mr II	-	RH-560-II F07	0.000	ISRO/DLR	SS	KTEL/Steigles	Ionos	ISIR951012-6	-	-
1998-587	2461085-13	1998 Sep 28 1511	RH-560/300 Mr II	-	RH-560-II F06	0.000	ISRO/DLR	SS	KTEL/Steigles	Ionos	ISIR951012-6	-	-
2000-563	2461574-50	2000 Feb	Hatf I	-	Hatf-1A	0.000	PK	NS	-	Test	Eat.IngGrass	-	-
2002-565	2462420-50	2002 May 26	Hatf II	-	Abta11	0.000	PK	NS	-	Test	R-EG	-	-
2003-515	2462724-50	2003 Mar 26	Hatf II	-	-	0.000	PK	NS	-	Test	R-EG	-	-
2005-507	2463460-50	2005 Mar 31	Hatf II	-	-	0.000	PK	NS	-	Test	Wire	-	-
2007-547	2464162-50	2007 Mar 3	Hatf I	-	-	0.000	PK	NS	-	Test	Wire	-	-
2010-509	2465211-82	2010 Jan 15 0745	RH-560/300 Mr II	-	RH-560-II F08P	0.000	ISRO	SS	VSSC/	Eclipse	Thehindu100115	www.isro.org	-
2010-505	2465213-82	2010 Jan 17	RH-560/300 Mr II	-	RH-560-II F09P	0.000	ISRO	SS	VSSC/	Eclipse	SUSC_SR	www.isro.org	-
2010-M01	2465258-62	2010 Mar 3 0300	ATV	-	ATV-D01	0.000	ISRO	SS	VSSC/	Test/Tech	www.isro.org	-	-
2010-M02	2467628-52	2010 Aug 28 0030	ATV	-	ATV-D02	0.000	ISRO	SS	VSSC/	Test/Tech	Wire	-	-
2021-520	2469286-07	2021 Mar 12 1345	RH-560 Mr III	-	RH-560-III F01	0.000	ISRO	SS	VSSC/	Test/AEmos	shar.gov.in	-	-
2024-546	2466513-56	2024 Jul 22 0130	ATV	-	ATV-D03	0.000	ISRO	SS	VSSC/	Test/Tech	isro.gov.in	-	-





Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Mission	FlightCode	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee_Km	Range_Km	Dest
1968-123	2439960.50	1968 Apr 22	Super Loki	-	Test 1	-	-	-	-	WS	-	-	-	128	-	-
1968-127	2439983.19	1968 May 6 1632	Super Loki	-	Test 2	-	-	-	-	WS	-	-	-	125	-	-
1968-128	2439982.50	1968 May 6	Super Loki	-	Test 3	-	-	-	-	WS	-	-	-	125?	-	-
1968-129	2439990.50	1968 May 20	Super Loki	-	Test 4	-	-	-	-	WS	-	-	-	125	-	-
1968-128	2439996.50	1968 May 20	Super Loki	-	Test 5	-	-	-	-	WS	-	-	-	123	-	-
1968-128	2439996.50	1968 May 20	Super Loki	-	-	-	-	-	-	WS	-	-	-	123	-	-
1968-128	2440181.45	1968 Nov 20 2245:00	Super Loki	-	-	-	-	-	-	CC	LO43	-	-	75?	-	-
1968-128	2440210.25	1968 Dec 19 1800:00	Super Loki	-	-	-	-	-	-	CC	LO43	-	-	75?	-	-
1968-1273	2440210.30	1968 Dec 19 1910:00	Super Loki	-	-	-	-	-	-	CC	LO43	-	-	75?	-	-
1968-1273	2440210.30	1968 Dec 19 1910:00	Super Loki	-	-	-	-	-	-	CC	LO43	-	-	75?	-	-
1968-150	2440246.62	1969 Jan 25 0300	Super Loki	-	-	-	-	-	-	WS	-	-	-	126	-	-
1969-162	2440249.42	1969 Jan 27 2200	Super Loki	-	-	-	-	-	-	WS	-	-	-	127	-	-
1969-1101	2440272.31	1969 Feb 19 1930	Super Loki	-	-	-	-	-	-	WS	-	-	-	120?	-	-
1969-1121	2440352.68	1969 Apr 21 0415	Super Loki	-	-	-	-	-	-	WS	-	-	-	120?	-	-
1969-1136	2440352.79	1969 May 11 0700	Super Loki	-	-	-	-	-	-	WS	-	-	-	126	-	-
1969-1156	2440399.50	1969 Jun 27	Super Loki	-	-	-	-	-	-	CC	LO43	-	-	91	-	-
1970-16521	2440687.35	1970 Apr 10 2020:00	Super Loki	-	-	-	-	-	-	CC	LO43	-	-	75?	-	-
1970-16526	2440688.40	1970 Apr 11 2143:00	Super Loki	-	-	-	-	-	-	CC	LO43	-	-	75?	-	-
1970-14365	2440688.28	1970 Oct 06 1840:00	Super Loki	-	AFCLR 70-1	-	-	-	-	CC	LO43	-	-	75?	-	-
1970-14374	2440687.17	1970 Oct 07 1800:00	Super Loki	-	AFCLR 70-2	-	-	-	-	CC	LO43	-	-	72	-	-
1970-14379	2440688.04	1970 Oct 08 1300:00	Super Loki	-	AFCLR 70-3	-	-	-	-	CC	LO43	-	-	78	-	-
1970-14380	2440688.14	1970 Oct 08 1515:00	Super Loki	-	AFCLR 70-4	-	-	-	-	CC	LO43	-	-	74	-	-
1970-14381	2440688.18	1970 Oct 08 1623:00	Super Loki	-	AFCLR 70-5	-	-	-	-	CC	LO43	-	-	76	-	-
1970-14381	2441419.55	1972 Apr 12 0105	Super Loki	-	-	-	ALADDIN II sphere	-	-	BSL	-	-	-	116?	-	-
1972-5448	2441419.55	1972 Sep 19	Stable Super Loki	-	DI-6160 SSL 1-1	-	Robin Dart E4-1	-	-	MI?	-	-	-	99	-	-
1972-5465	2441579.50	1972 Sep 19	Stable Super Loki	-	DI-6161 SSL 1-2	-	Robin Dart E4-1	-	-	MI?	-	-	-	99?	-	-
1972-5466	2441579.50	1972 Sep 19	Stable Super Loki	-	DI-6162 SSL 1-3	-	Robin Dart E4-1	-	-	MI?	-	-	-	99?	-	-
1972-5467	2441579.50	1972 Sep 19	Stable Super Loki	-	DI-6163 SSL 1-8	-	Robin Dart E4-1A	-	-	MI?	-	-	-	97	-	-
1972-5468	2441592.60	1972 Oct 2	Stable Super Loki	-	DI-6168 SSL 2-9	-	Robin Dart E4-2	-	-	MI?	-	-	-	120	-	-
1973-5464	2441691.60	1973 Jan 9	Stable Super Loki	-	DI-6169 SSL 2-10	-	Robin Dart E4-2	-	-	MI?	-	-	-	120	-	-
1973-5465	2441691.60	1973 Jan 9	Stable Super Loki	-	DI-6170 SSL 2-11	-	Robin Dart E4-2	-	-	MI?	-	-	-	119	-	-
1973-5466	2441691.60	1973 Jan 9	Stable Super Loki	-	DI-6171 SSL 2-12	-	Robin Dart E4-2	-	-	MI?	-	-	-	118	-	-
1973-5467	2441770.50	1973 Mar 29	Stable Super Loki	-	DI-6172 SSL 3-13	-	Robin Dart E4-3	-	-	MI?	-	-	-	104	-	-
1973-5468	2441770.50	1973 Mar 29	Stable Super Loki	-	DI-6173 SSL 3-14	-	Robin Dart E4-3	-	-	MI?	-	-	-	106	-	-
1973-5469	2441771.50	1973 Mar 30	Stable Super Loki	-	DI-6175 SSL 3-16	-	Robin Dart E4-4	-	-	MI?	-	-	-	77	-	-
1973-5470	2441771.50	1973 Mar 30	Stable Super Loki	-	DI-6176 SSL 3-17	-	Robin Dart E4-4	-	-	MI?	-	-	-	75	-	-
1973-5471	2441771.50	1973 Mar 30	Stable Super Loki	-	DI-6177 SSL 3-18	-	Robin Dart E4-4	-	-	MI?	-	-	-	112	-	-
1973-5472	2441531.50	1973 May 29	Stable Super Loki	-	DI-6178 SSL 3-15	-	Dart F4-1	-	-	MI?	-	-	-	73	-	-
1973-5473	2441774.50	1973 Apr 2	Stable Super Loki	-	DI-6478 SSL 3-19	-	Dart F4-1	-	-	MI?	-	-	-	72	-	-
1973-481	2441854.50	1973 Jun 21	Stable Super Loki	-	DI-6179 SSL 4-20	-	Dart F4-1	-	-	MI?	-	-	-	21	-	-
1973-720	2441854.50	1973 Jun 21	Stable Super Loki	-	DI-6180 SSL 4-21	-	Dart F4-1	-	-	MI?	-	-	-	22	-	-
1973-721	2441854.50	1973 Jun 21	Stable Super Loki	-	DI-6181 SSL 4-22	-	Dart F4-1	-	-	MI?	-	-	-	66	-	-
1973-722	2441854.50	1973 Jun 21	Stable Super Loki	-	DI-6182 SSL 4-23	-	Dart F4-1	-	-	MI?	-	-	-	70	-	-
1973-723	2441854.50	1973 Jun 21	Stable Super Loki	-	DI-6183 SSL 4-24	-	Dart F4-1	-	-	MI?	-	-	-	70	-	-
1973-5474	2441855.50	1973 Jun 22	Stable Super Loki	-	DI-6184 SSL 4-25	-	Robin Dart E4-3	-	-	MI?	-	-	-	105	-	-
1973-5475	2441855.50	1973 Jun 22	Stable Super Loki	-	DI-6185 SSL 4-26	-	Robin Dart E4-3	-	-	MI?	-	-	-	106	-	-
1973-5476	2441855.50	1973 Jun 22	Stable Super Loki	-	DI-6186 SSL 4-27	-	Robin Dart E4-3	-	-	MI?	-	-	-	107	-	-
1973-5477	2441855.50	1973 Jun 22	Stable Super Loki	-	DI-6187 SSL 4-28	-	Robin Dart E4-3	-	-	MI?	-	-	-	104	-	-
1973-5478	2441855.50	1973 Jun 26	Stable Super Loki	-	DI-6188 SSL 4-29	-	Robin Dart E4-3	-	-	MI?	-	-	-	100?	-	-
1973-5479	2441855.50	1973 Jun 26	Stable Super Loki	-	DI-6189 SSL 4-30	-	Robin Dart E4-3	-	-	MI?	-	-	-	104	-	-
1973-1646	2441863.50	1973 Jun 26	Super Loki	-	-	-	-	-	-	FC	-	-	-	75?	-	-
1973-1647	2441863.50	1973 Jun 26	Super Loki	-	-	-	-	-	-	FC	-	-	-	75?	-	-
1973-1648	2441863.50	1973 Jun 26	Super Loki	-	-	-	-	-	-	FC	-	-	-	81	-	-
1973-7290	2441881.21	1973 Jul 17 1658:00	Super Loki	-	T 1-6682	-	-	-	-	MI	-	-	-	81	-	-
1973-7291	2441881.21	1973 Jul 17 1801:00	Super Loki	-	T 1-6684	-	-	-	-	MI	-	-	-	75?	-	-
1973-7294	2441881.25	1973 Jul 17 1772	Super Loki	-	-	-	-	-	-	MI	-	-	-	75?	-	-
1973-1696	2441890.50	1973 Jul 17	Super Loki	-	-	-	-	-	-	MI	-	-	-	75?	-	-
1973-1697	2441890.50	1973 Jul 17	Super Loki	-	-	-	-	-	-	MI	-	-	-	75?	-	-
1973-1698	2441890.50	1973 Jul 17	Super Loki	-	-	-	-	-	-	MI	-	-	-	75?	-	-
1973-1699	2441890.50	1973 Jul 17	Super Loki	-	-	-	-	-	-	MI	-	-	-	75?	-	-
1973-1700	2441890.50	1973 Jul 17	Super Loki	-	-	-	-	-	-	MI	-	-	-	75?	-	-
1973-1701	2441890.50	1973 Jul 17	Super Loki	-	-	-	-	-	-	MI	-	-	-	75?	-	-
1973-1702	2441890.50	1973 Jul 17	Super Loki	-	-	-	-	-	-	MI	-	-	-	75?	-	-
1973-1703	2441890.50	1973 Jul 17	Super Loki	-	-	-	-	-	-	MI	-	-	-	75?	-	-
1973-1704	2441890.50	1973 Jul 17	Super Loki	-	-	-	-	-	-	MI	-	-	-	75?	-	-
1973-1705	2441890.50	1973 Jul 17	Super Loki	-	-	-	-	-	-	MI	-	-	-	75?	-	-
1973-1706	2441890.50	1973 Jul 17	Super Loki	-	-	-	-	-	-	MI	-	-	-	75?	-	-
1973-1707	2441890.50	1973 Jul 17	Super Loki	-	-	-	-	-	-	MI	-	-	-	75?	-	-
1973-1708	2441890.50	1973 Jul 17	Super Loki	-	-	-	-	-	-	MI	-	-	-	75?	-	-
1973-1709	2441890.50	1973 Jul 17	Super Loki	-	-	-	-	-	-	MI	-	-	-	75?	-	-
1973-1710	2441890.50	1973 Jul 17	Super Loki	-	-	-	-	-	-	MI	-	-	-	75?	-	-
1973-1711	2441890.50	1973 Jul 17	Super Loki	-	-	-	-	-	-	MI	-	-	-	75?	-	-
1973-1712	2441890.50	1973 Jul 17	Super Loki	-	-	-	-	-	-	MI	-	-	-	75?	-	-
1973-1713	2441890.50	1973 Jul 17	Super Loki	-	-	-	-	-	-	MI	-	-	-	75?	-	-
1973-1714	2441890.50	1973 Jul 17	Super Loki	-	-	-	-	-	-	MI	-	-	-	75?	-	-
1973-1715	2441890.50	1973 Jul 17	Super Loki	-	-	-	-	-	-	MI	-	-	-	75?	-	-
1973-1716	2441890.50	1973 Jul 17	Super Loki	-	-	-	-	-	-	MI	-	-	-	75?	-	-
1973-1717	2441890.50	1973 Jul 17	Super Loki	-	-	-	-	-	-	MI	-	-	-	75?	-	-
1973-1718	2441890.50	1973 Jul 17	Super Loki	-	-	-	-	-	-	MI	-	-	-	75?	-	-
1973-1719	2441890.50	1973 Jul 17	Super Loki	-	-	-	-	-	-	MI	-	-	-	75?	-	-
1973-1720	2441890.50	1973 Jul 17	Super Loki	-	-	-	-	-	-	MI	-	-	-	75?	-	-
1973-1721	2441890.50	1973 Jul 17	Super Loki	-	-	-	-	-	-	MI	-	-	-	75?	-	-
1973-1722	2441890.50	1973 Jul 17	Super Loki	-	-	-	-	-	-	MI	-	-	-	75?	-	-
1973-1723	2441890.50	1973 Jul 17	Super Loki	-	-	-	-	-	-	MI	-	-	-	75?	-	-
1973-1724	2441890.50	1973 Jul 17	Super Loki	-	-	-	-	-	-	MI	-	-	-	75?	-	-
1973-1725	2441890.50	1973 Jul 17	Super Loki	-	-	-	-	-	-	MI	-	-	-	75?	-	-
1973-1726	2441890.50	1973 Jul 17	Super Loki	-	-	-	-	-	-	MI	-	-	-	75?	-	-
1973-1727	2441890.50	1973 Jul 17	Super Loki	-	-	-	-	-	-	MI	-	-	-	75?	-	-
1973-1728	2441890.50	1973 Jul 17	Super Loki	-	-	-	-	-	-	MI	-	-	-	75?	-	-
1973-1729	2441890.50	1973 Jul 17	Super Loki	-	-	-	-	-	-	MI	-	-	-	75?	-	-
1973-1730	2441890.50	1973 Jul 17	Super Loki	-	-	-	-	-	-	MI	-	-	-	75?	-	-
1973-1731	2441890.50	1973 Jul 17	Super Loki	-	-	-	-	-	-	MI	-	-	-	75?	-	-
1973-1732	2441890.50	1973 Jul 17	Super Loki	-	-	-	-	-	-	MI	-	-	-	75?	-	-
1973-1733	2441890.50	1973 Jul 17	Super Loki	-	-	-	-	-								



Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Launch_Mission	FlightCode	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee_Rm	Range_Rm	Dest
1974-4606	2442171.11	1974 May 3 1445:00	Super Loki	-	-	Starute,Dataonde	-	-	-	FC	-	-	-	65	-	-
1974-4606	2442171.11	1974 May 6 1442:00	Super Loki	-	-	Starute,Dataonde	-	-	-	FC	-	-	-	67	-	-
1974-4636	2442175.19	1974 May 9 1634:59	Super Loki	-	-	Starute,Dataonde	-	-	-	FC	-	-	-	61	-	-
1974-4645	2442177.16	1974 May 14 1654:59	Super Loki	-	-	Starute,Dataonde	-	-	-	FC	-	-	-	58	-	-
1974-4661	2442182.19	1974 May 15 1514:59	Super Loki	-	-	Starute,Dataonde	-	-	-	FC	-	-	-	63	-	-
1974-4666	2442183.14	1974 May 15 1514:59	Super Loki	-	-	Starute,Dataonde	-	-	-	FC	-	-	-	61	-	-
1974-4676	2442185.17	1974 May 17 1609:59	Super Loki	-	-	Starute,Dataonde	-	-	-	FC	-	-	-	62	-	-
1974-4689	2442190.14	1974 May 22 1517:00	Super Loki	-	-	Starute,Dataonde	-	-	-	FC	-	-	-	62	-	-
1974-4701	2442192.18	1974 May 24 1614:59	Super Loki	-	-	Starute,Dataonde	-	-	-	FC	-	-	-	65	-	-
1974-4704	2442195.11	1974 May 27 1438:59	Super Loki	-	-	Starute,Dataonde	-	-	-	FC	-	-	-	60	-	-
1974-4729	2442199.18	1974 May 31 1614:59	Super Loki	-	-	Starute,Dataonde	-	-	-	FC	-	-	-	64	-	-
1974-4736	2442202.17	1974 Jun 3 1559:59	Super Loki	-	-	Starute,Dataonde	-	-	-	FC	-	-	-	62	-	-
1974-4745	2442204.14	1974 Jun 5 1522:59	Super Loki	?	-	Starute,Dataonde	-	-	-	FC	-	-	-	63	-	-
1974-4751	2442206.18	1974 Jun 7 1619:59	Super Loki	?	-	Starute,Dataonde	-	-	-	FC	-	-	-	56	-	-
1974-4752	2442211.14	1974 Jun 12 1519:00	Super Loki	?	-	Starute,Dataonde	-	-	-	FC	-	-	-	63	-	-
1974-4684	2442226.24	1974 Jun 29 1740:00	Super Loki	-	I 1-7328	ALADDIN 74	-	-	-	MI	-	-	-	75?	-	-
1974-4685	2442226.31	1974 Jun 29 1930:00	Super Loki	-	I 1-7329	ALADDIN 74	-	-	-	MI	-	-	-	75?	-	-
1974-4687	2442226.36	1974 Jun 29 2035:00	Super Loki	-	I 1-7330	ALADDIN 74	-	-	-	MI	-	-	-	75?	-	-
1974-4689	2442226.40	1974 Jun 29 2140:00	Super Loki	-	I 1-7331	ALADDIN 74	-	-	-	MI	-	-	-	75?	-	-
1974-4680	2442226.48	1974 Jun 29 2330:00	Super Loki	-	I 1-7332	ALADDIN 74	-	-	-	MI	-	-	-	75?	-	-
1974-4681	2442226.58	1974 Jun 30 0230:00	Super Loki	-	I 1-7333	ALADDIN 74	-	-	-	MI	-	-	-	75?	-	-
1974-4683	2442226.70	1974 Jun 30 0435:00	Super Loki	-	I 1-7334	ALADDIN 74	-	-	-	MI	-	-	-	75?	-	-
1974-4684	2442226.76	1974 Jun 30 0520:00	Super Loki	-	I 1-7335	ALADDIN 74	-	-	-	MI	-	-	-	75?	-	-
1974-4686	2442226.61	1974 Jun 30 0720:00	Super Loki	-	I 1-7336	ALADDIN 74	-	-	-	MI	-	-	-	75?	-	-
1974-4686	2442226.68	1974 Jun 30 0910:00	Super Loki	-	I 1-7337	ALADDIN 74	-	-	-	MI	-	-	-	75?	-	-
1974-4670	2442226.93	1974 Jun 30 1020:00	Super Loki	-	I 1-7338	ALADDIN 74	-	-	-	MI	-	-	-	75?	-	-
1974-4671	2442226.97	1974 Jun 30 1110:00	Super Loki	-	I 1-7339	ALADDIN 74	-	-	-	MI	-	-	-	75?	-	-
1974-4673	2442226.07	1974 Jun 30 1345:00	Super Loki	-	I 1-7340	ALADDIN 74	-	-	-	MI	-	-	-	75?	-	-
1974-4676	2442226.21	1974 Jun 30 1700:00	Super Loki	-	I 1-7341	ALADDIN 74	-	-	-	MI	-	-	-	75?	-	-
1974-4656	2442226.50	1974 Jul	Super Loki	-	-	-	-	-	-	FC	-	-	-	75?	-	-
1974-4657	2442226.50	1974 Jul	Super Loki	-	-	-	-	-	-	FC	-	-	-	75?	-	-
1974-4658	2442226.50	1974 Jul	Super Loki	-	-	-	-	-	-	FC	-	-	-	75?	-	-
1974-4659	2442226.50	1974 Jul	Super Loki	-	-	-	-	-	-	FC	-	-	-	75?	-	-
1974-4672	2442259.10	1974 Jul 30 1422:00	Super Loki	-	G 1-7460	-	-	-	-	FC	-	-	-	72	-	-
1974-4674	2442259.22	1974 Jul 30 1716:00	Super Loki	-	G 1-7461	-	-	-	-	FC	-	-	-	72	-	-
1974-4675	2442259.29	1974 Jul 30 1900:00	Super Loki	-	G 1-7462	-	-	-	-	FC	-	-	-	72	-	-
1974-4680	2442259.50	1974 Aug	Super Loki	-	-	-	-	-	-	FC	-	-	-	75?	-	-
1974-4681	2442259.50	1974 Aug	Super Loki	-	-	-	-	-	-	FC	-	-	-	75?	-	-
1974-4682	2442259.50	1974 Aug	Super Loki	-	-	-	-	-	-	FC	-	-	-	75?	-	-
1974-4683	2442259.50	1974 Aug	Super Loki	-	-	-	-	-	-	FC	-	-	-	75?	-	-
1974-4114	2442259.50	1974 Aug	Super Loki	-	-	-	-	-	-	FC	-	-	-	75?	-	-
1974-4115	2442259.50	1974 Sep	Super Loki	-	-	-	-	-	-	FC	-	-	-	75?	-	-
1974-4116	2442259.50	1974 Sep	Super Loki	-	-	-	-	-	-	FC	-	-	-	75?	-	-
1974-4117	2442259.50	1974 Sep	Super Loki	-	-	-	-	-	-	FC	-	-	-	75?	-	-
1974-4118	2442259.50	1974 Oct	Super Loki	-	-	-	-	-	-	FC	-	-	-	75?	-	-
1974-4119	2442259.50	1974 Oct	Super Loki	-	-	-	-	-	-	FC	-	-	-	75?	-	-
1974-4120	2442259.50	1974 Oct	Super Loki	-	-	-	-	-	-	FC	-	-	-	75?	-	-
1974-4121	2442259.50	1974 Oct	Super Loki	-	-	-	-	-	-	FC	-	-	-	75?	-	-
1974-4122	2442259.50	1974 Oct	Super Loki	-	-	-	-	-	-	FC	-	-	-	75?	-	-
1974-4123	2442259.50	1974 Oct	Super Loki	-	-	-	-	-	-	FC	-	-	-	75?	-	-
1974-4124	2442259.50	1974 Oct	Super Loki	-	-	-	-	-	-	FC	-	-	-	75?	-	-
1974-4125	2442259.50	1974 Oct	Super Loki	-	-	-	-	-	-	FC	-	-	-	75?	-	-
1974-4126	2442259.50	1974 Oct	Super Loki	-	-	-	-	-	-	FC	-	-	-	75?	-	-
1974-4127	2442259.50	1974 Oct	Super Loki	-	-	-	-	-	-	FC	-	-	-	75?	-	-
1974-4128	2442259.50	1974 Oct	Super Loki	-	-	-	-	-	-	FC	-	-	-	75?	-	-
1974-4129	2442259.50	1974 Oct	Super Loki	-	-	-	-	-	-	FC	-	-	-	75?	-	-
1974-4130	2442259.50	1974 Oct	Super Loki	-	-	-	-	-	-	FC	-	-	-	75?	-	-
1974-4131	2442259.50	1974 Oct	Super Loki	-	-	-	-	-	-	FC	-	-	-	75?	-	-
1974-4132	2442259.50	1974 Oct	Super Loki	-	-	-	-	-	-	FC	-	-	-	75?	-	-
1974-4133	2442259.50	1974 Oct	Super Loki	-	-	-	-	-	-	FC	-	-	-	75?	-	-
1974-4134	2442259.50	1974 Oct	Super Loki	-	-	-	-	-	-	FC	-	-	-	75?	-	-
1974-4135	2442259.50	1974 Oct	Super Loki	-	-	-	-	-	-	FC	-	-	-	75?	-	-
1974-4136	2442259.50	1974 Oct	Super Loki	-	-	-	-	-	-	FC	-	-	-	75?	-	-
1974-4137	2442259.50	1974 Oct	Super Loki	-	-	-	-	-	-	FC	-	-	-	75?	-	-
1974-4138	2442259.50	1974 Oct	Super Loki	-	-	-	-	-	-	FC	-	-	-	75?	-	-
1974-4139	2442259.50	1974 Oct	Super Loki	-	-	-	-	-	-	FC	-	-	-	75?	-	-
1974-4140	2442259.50	1974 Dec	Super Loki	-	-	-	-	-	-	FC	-	-	-	75?	-	-
1974-4141	2442259.50	1974 Dec	Super Loki	-	-	-	-	-	-	FC	-	-	-	75?	-	-
1974-4142	2442259.50	1974 Dec	Super Loki	-	-	-	-	-	-	FC	-	-	-	75?	-	-
1974-4143	2442259.50	1974 Dec	Super Loki	-	-	-	-	-	-	FC	-	-	-	75?	-	-
1974-4144	2442259.50	1975 Jan	Super Loki	-	-	-	-	-	-	FC	-	-	-	75?	-	-
1974-4145	2442259.50	1975 Jan	Super Loki	-	-	-	-	-	-	FC	-	-	-	75?	-	-
1974-4146	2442259.50	1975 Jan	Super Loki	-	-	-	-	-	-	FC	-	-	-	75?	-	-
1974-4147	2442259.50	1975 Jan 17 2100	Super Loki	-	-	-	-	-	-	FC	-	-	-	75?	-	-
1974-448	2442430.38	1975 Jan 17 2150	Super Loki	-	-	ALADDIN 75	-	-	-	MI	-	-	-	75?	-	-
1974-463	2442430.41	1975 Jan 18 0011	Super Loki	-	-	ALADDIN 75	-	-	-	MI	-	-	-	75?	-	-
1974-463	2442430.51	1975 Jan 18 0012	Super Loki	-	-	ALADDIN 75	-	-	-	MI	-	-	-	75?	-	-
1974-469	2442430.55	1975 Jan 18 0114	Super Loki	-	-	ALADDIN 75	-	-	-	MI	-	-	-	75?	-	-
1974-4115	2442443.50	1975 Feb	Super Loki	?	-	-	-	-	-	FC	-	-	-	75?	-	-
1974-4116	2442443.50	1975 Feb	Super Loki	?	-	-	-	-	-	FC	-	-	-	75?	-	-
1974-4199	2442464.26	1975 Feb 20 1811:00	Super Loki	-	G 1-7763	-	-	-	-	MI	-	-	-	69	-	-
1974-4201	2442464.31	1975 Feb 20 1927:00	Super Loki	-	G 1-7764	-	-	-	-	MI	-	-	-	67	-	-
1974-4201	2442464.30	1975 Feb 21 1910:00	Super Loki	-	G 1-7765	-	-	-	-	MI	-	-	-	70	-	-
1974-4241	2442471.50	1975 Mar	Super Loki	-	-	-	-	-	-	FC	-	-	-	75?	-	-
1974-4242	2442471.50	1975 Mar	Super Loki	-	-	-	-	-	-	FC	-	-	-	75?	-	-
1974-4243	2442471.50	1975 Mar	Super Loki	-	-	-	-	-	-	FC	-	-	-	75?	-	-
1974-4385	2442502.50	1975 Mar	Super Loki	-	-	-	-	-	-	FC	-	-	-	75?	-	-
1974-4419	2442510.29	1975 Mar 07 1851:00	Super Loki	-	G 1-7766	-	-	-	-	MI	-	-	-	70	-	-
1974-4502	2442532.50	1975 May	Super Loki	-	-	-	-	-	-	FC	-	-	-	75?	-	-
1974-4503	2442532.50	1975 May	Super Loki	-	-	-	-	-	-	FC	-	-	-	75?	-	-
1974-4504	2442532.50	1975 May	Super Loki	-	-	-	-	-	-	FC	-	-	-	75?	-	-
1974-4505	2442532.50	1975 May	Super Loki	-	-	-	-	-	-	FC	-	-	-	75?	-	-
1974-4698	2442557.10	1975 May 24 1424:00	Super Loki	-	GUI-7743	Antarqui SI Ozone 1	-	-	-	CHI	-	-	-	70	-	-
1974-4699	2442557.29	1975 May 24 1900:00	Super Loki	-	GUI-7742	Antarqui SI Ozone 2	-	-	-	CHI	-	-	-	69	-	-
1974-4610	2442558.32	1975 May 25 1944:00	Super Loki	-	GUI-7744	Antarqui SI Ozone 2	-	-	-	CHI	-	-	-	70	-	-
1974-4649	2442563.50	1975 Jun	Super Loki	-												



Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Launch_Mission	FlightCode	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee_Km	Range_Km	Dest
1976-W758	2442916.23	1976 May 19 17:34:00	Super Loki	-	T 1-8286	-	-	-	-	MI	-	-	-	71	-	-
1976-W763	2442915.32	1976 May 19 19:27:00	Super Loki	-	T 1-8288	-	-	-	-	MI	-	-	-	71	-	-
1976-W768	2442915.21	1976 May 20 17:02:00	Super Loki	-	T 1-8287	-	-	-	-	MI	-	-	-	71	-	-
1976-W812	2442925.50	1976 Jun	Super Loki	-	-	-	-	-	-	FC	-	-	-	75?	-	-
1976-W813	2442925.50	1976 Jun	Super Loki	-	-	-	-	-	-	FC	-	-	-	75?	-	-
1976-W814	2442925.50	1976 Jun	Super Loki	-	-	-	-	-	-	FC	-	-	-	75?	-	-
1976-W815	2442925.50	1976 Jun	Super Loki	-	-	-	-	-	-	FC	-	-	-	75?	-	-
1976-W821	2442932.14	1976 Jun 2 15:23	Super Loki	-	-	-	-	-	-	MI	-	-	-	80?	-	-
1976-W908	2442953.21	1976 Jun 23 17:01:00	Super Loki	-	T 1-8332	-	-	-	-	MI	-	-	-	71	-	-
1976-W924	2442959.11	1976 Jun 29 14:27:00	Super Loki	-	T 1-8289	-	-	-	-	MI	-	-	-	57	-	-
1976-W981	2442974.25	1976 Jul 14 17:54:00	Super Loki	-	T 1-8333	-	-	-	-	MI	-	-	-	72	-	-
1976-W1054	2442990.50	1976 Aug	Super Loki	-	-	-	-	-	-	FC	-	-	-	75?	-	-
1976-W1055	2442990.50	1976 Aug	Super Loki	-	-	-	-	-	-	FC	-	-	-	75?	-	-
1976-W1056	2442990.50	1976 Aug	Super Loki	-	-	-	-	-	-	FC	-	-	-	75?	-	-
1976-W1057	2442990.50	1976 Aug	Super Loki	-	-	-	-	-	-	FC	-	-	-	75?	-	-
1976-W1058	2442990.50	1976 Aug	Super Loki	-	-	-	-	-	-	FC	-	-	-	75?	-	-
1976-W1183	2443015.12	1976 Aug 24 14:58:00	Super Loki	-	T 1-8439	-	-	-	-	MI	-	-	-	66	-	-
1976-W1190	2443016.11	1976 Aug 25 14:45:00	Super Loki	-	T 1-8440	-	-	-	-	MI	-	-	-	66	-	-
1976-W1197	2443017.12	1976 Aug 26 14:57:00	Super Loki	-	T 1-8437	-	-	-	-	MI	-	-	-	67	-	-
1976-W1200	2443017.17	1976 Aug 26 16:04:00	Super Loki	-	T 1-8450	-	-	-	-	MI	-	-	-	67	-	-
1976-W1216	2443021.50	1976 Sep	Super Loki	-	-	-	-	-	-	FC	-	-	-	75?	-	-
1976-W1217	2443021.50	1976 Sep	Super Loki	-	-	-	-	-	-	FC	-	-	-	75?	-	-
1976-W1218	2443021.50	1976 Sep	Super Loki	-	-	-	-	-	-	FC	-	-	-	75?	-	-
1976-W1219	2443021.50	1976 Sep	Super Loki	-	-	-	-	-	-	FC	-	-	-	75?	-	-
1976-W1229	2443031.09	1976 Sep 09 14:16:00	Super Loki	-	T 1-8454	-	-	-	-	FC	-	-	-	70	-	-
1976-W1279	2443031.09	1976 Sep 09 15:30:00	Super Loki	-	T 1-8455	-	-	-	-	FC	-	-	-	68	-	-
1976-W1282	2443031.15	1976 Sep 22 18:00:00	Super Loki	-	T 1-8401	-	-	-	-	MI	-	-	-	70	-	-
1976-W1339	2443044.17	1976 Sep 28 19:47:00	Super Loki	-	TH-8521	-	-	-	-	PF	-	-	-	70	-	-
1976-W1379	2443050.32	1976 Oct	Super Loki	-	-	-	-	-	-	FC	-	-	-	75?	-	-
1976-W1393	2443051.50	1976 Oct	Super Loki	-	-	-	-	-	-	FC	-	-	-	75?	-	-
1976-W1394	2443051.50	1976 Oct	Super Loki	-	-	-	-	-	-	FC	-	-	-	75?	-	-
1976-W1396	2443051.50	1976 Oct	Super Loki	-	-	-	-	-	-	FC	-	-	-	75?	-	-
1976-W1397	2443051.50	1976 Oct	Super Loki	-	-	-	-	-	-	FC	-	-	-	75?	-	-
1976-W1413	2443053.30	1976 Oct 01 19:15:00	Super Loki	-	TH-8522	-	-	-	-	PF	-	-	-	74	-	-
1976-W1455	2443073.21	1976 Oct 21 17:00:00	Super Loki	-	T 1-8402	-	-	-	-	MI	-	-	-	70	-	-
1976-W1553	2443082.50	1976 Nov	Super Loki	-	-	-	-	-	-	FC	-	-	-	75?	-	-
1976-W1554	2443082.50	1976 Nov	Super Loki	-	-	-	-	-	-	FC	-	-	-	75?	-	-
1976-W1555	2443082.50	1976 Nov	Super Loki	-	-	-	-	-	-	FC	-	-	-	75?	-	-
1976-W1556	2443082.50	1976 Nov	Super Loki	-	-	-	-	-	-	FC	-	-	-	75?	-	-
1976-W1557	2443082.50	1976 Nov	Super Loki	-	-	-	-	-	-	FC	-	-	-	75?	-	-
1976-W1558	2443082.50	1976 Nov	Super Loki	-	-	-	-	-	-	FC	-	-	-	75?	-	-
1976-W1559	2443082.50	1976 Nov	Super Loki	-	-	-	-	-	-	FC	-	-	-	75?	-	-
1976-W1561	2443083.01	1976 Nov 10 12:15:00	Super Loki	-	T 1-8404	-	-	-	-	MI	-	-	-	68	-	-
1976-W1625	2443084.01	1976 Nov 11 12:16:00	Super Loki	-	T 1-8407	-	-	-	-	MI	-	-	-	68	-	-
1976-W1626	2443084.01	1976 Nov 11 12:16:00	Super Loki	-	T 1-8407	-	-	-	-	MI	-	-	-	68	-	-
1976-W1625	2443084.08	1976 Nov 11 15:00:00	Super Loki	-	T 1-8408	-	-	-	-	MI	-	-	-	71	-	-
1976-W1657	2443100.19	1976 Nov 17 18:53:00	Super Loki	-	T 1-8406	-	-	-	-	MI	-	-	-	70	-	-
1976-W1657	2443100.18	1976 Nov 17 18:53:00	Super Loki	-	T 1-8406	-	-	-	-	MI	-	-	-	70	-	-
1976-W1752	2443117.04	1976 Dec 04 12:51:00	Super Loki	-	FLIGHT-141	-	Ozone	-	-	MI	-	-	-	51	-	-
1976-W1753	2443117.09	1976 Dec 04 14:01:59	Super Loki	-	FLIGHT-142	-	Ozone	-	-	MI	-	-	-	51	-	-
1976-W1754	2443117.25	1976 Dec 06 18:10:00	Super Loki	-	FLIGHT-142	-	Ozone	-	-	MI	-	-	-	52	-	-
1976-W1755	2443125.35	1976 Dec 12 19:18	Super Loki	-	-	-	-	-	-	MI	-	-	-	70?	-	-
1976-W1756	2443125.35	1976 Dec 13 20:17	Super Loki	-	-	-	-	-	-	MI	-	-	-	70?	-	-
1976-W1757	2443125.35	1976 Dec 13 20:17	Super Loki	-	-	-	-	-	-	MI	-	-	-	70?	-	-
1976-W1860	2443138.17	1976 Dec 22 15:14:59	Super Loki	-	TH-8549	-	-	-	-	MI	-	-	-	69	-	-
1976-W1863	2443138.17	1976 Dec 22 16:04:00	Super Loki	-	T 1-8408	-	-	-	-	MI	-	-	-	70	-	-
1977-W03	2443143.50	1977 Jan	Super Loki	-	-	-	-	-	-	FC	-	-	-	75?	-	-
1977-W03	2443143.50	1977 Jan	Super Loki	-	-	-	-	-	-	FC	-	-	-	75?	-	-
1977-W04	2443143.50	1977 Jan	Super Loki	-	-	-	-	-	-	FC	-	-	-	75?	-	-
1977-W04	2443143.50	1977 Jan	Super Loki	-	-	-	-	-	-	FC	-	-	-	75?	-	-
1977-W561	2443160.98	1977 Jan 17 11:36	Super Loki	-	DTA SLW-7701	-	Prog: Meso Nacional	-	-	FC	-	-	-	75?	-	-
1977-W562	2443160.98	1977 Jan 19 11:33	Super Loki	-	DTA SLW-7702	-	Prog: Meso Nacional	-	-	FC	-	-	-	100?	-	-
1977-W563	2443165.01	1977 Jan 19 12:08	Super Loki	-	DTA SLW-7703	-	Prog: Meso Nacional	-	-	FC	-	-	-	100?	-	-
1977-W118	2443165.15	1977 Jan 19 15:35:59	Super Loki	-	-	-	-	-	-	FC	-	-	-	70	-	-
1977-W123	2443165.23	1977 Jan 19 17:20:00	Super Loki	-	T 1-8414	-	Ozone Flight 144	-	-	MI	-	-	-	71	-	-
1977-W564	2443164.98	1977 Jan 21 11:34	Super Loki	-	DTA SLW-7704	-	Prog: Meso Nacional	-	-	FC	-	-	-	100?	-	-
1977-W565	2443167.98	1977 Jan 24 11:31	Super Loki	-	DTA SLW-7705	-	Prog: Meso Nacional	-	-	FC	-	-	-	100?	-	-
1977-W566	2443168.00	1977 Jan 24 12:00	Super Loki	-	DTA SLW-7706	-	Prog: Meso Nacional	-	-	FC	-	-	-	100?	-	-
1977-W567	2443169.98	1977 Jan 26 11:34	Super Loki	-	DTA SLW-7707	-	Prog: Meso Nacional	-	-	FC	-	-	-	100?	-	-
1977-W568	2443170.01	1977 Jan 26 12:21	Super Loki	-	DTA SLW-7708	-	Prog: Meso Nacional	-	-	FC	-	-	-	100?	-	-
1977-W569	2443171.98	1977 Jan 28 11:33	Super Loki	-	DTA SLW-7709	-	Prog: Meso Nacional	-	-	FC	-	-	-	100?	-	-
1977-W570	2443175.00	1977 Jan 31 11:55	Super Loki	-	DTA SLW-7710	-	Prog: Meso Nacional	-	-	FC	-	-	-	75?	-	-
1977-W226	2443174.50	1977 Feb	Super Loki	-	-	-	-	-	-	FC	-	-	-	75?	-	-
1977-W416	2443174.50	1977 Feb	Super Loki	-	-	-	-	-	-	FC	-	-	-	75?	-	-
1977-W416	2443176.98	1977 Feb 2 11:38	Super Loki	-	DTA SLW-7711	-	Prog: Meso Nacional	-	-	FC	-	-	-	100?	-	-
1977-W371	2443178.98	1977 Feb 4 11:32	Super Loki	-	DTA SLW-7712	-	Prog: Meso Nacional	-	-	FC	-	-	-	100?	-	-
1977-W372	2443179.96	1977 Feb 5 11:59	Super Loki	-	DTA SLW-7713	-	Prog: Meso Nacional	-	-	FC	-	-	-	100?	-	-
1977-W373	2443179.99	1977 Feb 5 11:50	Super Loki	-	DTA SLW-7714	-	Prog: Meso Nacional	-	-	FC	-	-	-	100?	-	-
1977-W374	2443181.98	1977 Feb 7 11:32	Super Loki	-	DTA SLW-7715	-	Prog: Meso Nacional	-	-	FC	-	-	-	100?	-	-
1977-W375	2443183.98	1977 Feb 9 11:32	Super Loki	-	DTA SLW-7716	-	Prog: Meso Nacional	-	-	FC	-	-	-	100?	-	-
1977-W376	2443185.98	1977 Feb 11 11:37	Super Loki	-	DTA SLW-7717	-	Prog: Meso Nacional	-	-	FC	-	-	-	100?	-	-
1977-W377	2443190.98	1977 Feb 16 11:33	Super Loki	-	DTA SLW-7718	-	Prog: Meso Nacional	-	-	FC	-	-	-	69	-	-
1977-W378	2443191.16	1977 Feb 16 15:45:59	Super Loki	-	T 1-8491	-	Arcasomide	-	-	MI	-	-	-	73	-	-
1977-W362	2443191.23	1977 Feb 16 17:32:00	Super Loki	-	T 1-8415	-	-	-	-	MI	-	-	-	73	-	-
1977-W363	2443191.25	1977 Feb 16 18:07:00	Super Loki	-	TH-8708	-	Ozone Flight 145	-	-	FC	-	-	-	51	-	-
1977-W364	2443191.26	1977 Feb 16 18:12:00	Super Loki	-	T 1-8418	-	-	-	-	MI	-	-	-	60	-	-
1977-W366	2443191.32	1977 Feb 16 19:44:59	Super Loki	-	-	-	-	-	-	MS	-	-	-	56	-	-
1977-W367	2443191.39	1977 Feb 16 21:20:00	Super Loki	-	-	-	-	-	-	MS	-	-	-	56	-	-
1977-W378	2443198.00	1977 Feb 23 11:53	Super Loki	-	-	-	-	-	-	MI	-	-	-	100?	-	-
1977-W378	2443198.17	1977 Feb 23 16:00	Super Loki	-	DTA SLW-7719	-	Prog: Meso Nacional	-	-	MI	-	-	-	71	-	-



Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Launch_Mission	FlightCode	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee_Km	Range_Km	Dest
1977-M13	2443374.62	1977 Aug 19 0300	Super Loki	-	US-USR Intercomp	No. 12 Dataonde	-	-	-	WI	-	-	-	77	-	-
1977-5438	2443374.73	1977 Aug 19 0524	Super Loki	-	US-USR Intercomp	No. 13 Sphere	-	-	-	WI	-	-	-	114	-	-
1977-M14	2443374.73	1977 Aug 19 0524	Super Loki	-	US-USR Intercomp	No. 13 Dataonde	-	-	-	WI	-	-	-	76	-	-
1977-5403	2443374.99	1977 Aug 19 1139	Super Loki	-	INTA SLM-7744	Prog. Meteo Nacional	-	-	-	ELAR	-	-	-	100?	-	-
1977-M16	2443375.33	1977 Aug 19 2000	Super Loki	-	US-USR Intercomp	No. 14 Dataonde	-	-	-	WI	-	-	-	77	-	-
1977-5439	2443375.42	1977 Aug 20 0100	Super Loki	-	US-USR Intercomp	No. 15 Dataonde	-	-	-	WI	-	-	-	80	-	-
1977-M17	2443375.42	1977 Aug 20 0100	Super Loki	-	US-USR Intercomp	No. 16 Dataonde	-	-	-	WI	-	-	-	76	-	-
1977-5409	2443375.46	1977 Aug 23 0300	Super Loki	-	US-USR Intercomp	No. 17 Dataonde	-	-	-	WI	-	-	-	74	-	-
1977-M18	2443375.54	1977 Aug 23 0100	Super Loki	-	US-USR Intercomp	No. 18 Dataonde	-	-	-	WI	-	-	-	74	-	-
1977-M19	2443375.65	1977 Aug 23 0359	Super Loki	-	US-USR Intercomp	No. 19 Dataonde	-	-	-	WI	-	-	-	76	-	-
1977-M20	2443375.66	1977 Aug 24 0128	Super Loki	-	US-USR Intercomp	No. 20 Dataonde	-	-	-	WI	-	-	-	73	-	-
1977-M1910	2443375.62	1977 Aug 24 0300	Super Loki	-	US-USR Intercomp	No. 21 Dataonde	-	-	-	WI	-	-	-	75	-	-
1977-5404	2443393.98	1977 Sep 7 1131	Super Loki	-	INTA SLM-7745	Prog. Meteo Nacional	-	-	-	ELAR	-	-	-	100?	-	-
1977-5405	2443394.01	1977 Sep 7 1208	Super Loki	-	INTA SLM-7746	Prog. Meteo Nacional	-	-	-	ELAR	-	-	-	100?	-	-
1977-5406	2443394.98	1977 Sep 14 1131	Super Loki	-	INTA SLM-7747	Prog. Meteo Nacional	-	-	-	ELAR	-	-	-	100?	-	-
1977-M1467	2443401.25	1977 Sep 14 1802:00	Super Loki	-	FLIGHT 172 /T 1-	-	-	-	-	WI	-	-	-	68	-	-
1977-M1494	2443401.98	1977 Sep 21 1131	Super Loki	-	INTA SLM-7748	Prog. Meteo Nacional	-	-	-	ELAR	-	-	-	100?	-	-
1977-5408	2443406.26	1977 Sep 21 1810:00	Super Loki	-	FLIGHT 173 /THI-	-	-	-	-	FC	-	-	-	72	-	-
1977-5410	2443410.97	1977 Sep 24 1115:00	Super Loki	-	-	-	-	-	-	WS	-	-	-	103	-	-
1977-7338	2443410.97	1977 Sep 24 1214:59	Super Loki	-	-	-	-	-	-	WS	-	-	-	101	-	-
1977-7337	2443411.01	1977 Sep 24 1234:59	Super Loki	-	-	-	-	-	-	WS	-	-	-	98	-	-
1977-7337	2443411.02	1977 Sep 24 1234:59	Super Loki	-	-	-	-	-	-	WS	-	-	-	98	-	-
1977-5408	2443415.02	1977 Sep 28 1230	Super Loki	-	-	-	-	-	-	ELAR	-	-	-	100?	-	-
1977-7343	2443416.27	1977 Sep 29 1822:00	Super Loki	-	INTA SLM-7749	Prog. Meteo Nacional	-	-	-	WS	-	-	-	84	-	-
1977-5408	2443422.02	1977 Oct 5 1234	Super Loki	-	FLIGHT 174 /THI-	-	-	-	-	ELAR	-	-	-	100?	-	-
1977-M1621	2443428.21	1977 Oct 12 1700:00	Super Loki	-	INTA SLM-7750	Prog. Meteo Nacional	-	-	-	WI	-	-	-	73	-	-
1977-5410	2443436.02	1977 Oct 19 1234	Super Loki	-	FLIGHT 175 /T 1-	-	-	-	-	FC	-	-	-	72	-	-
1977-5411	2443436.02	1977 Oct 19 1234	Super Loki	-	FLIGHT 176 /THI-	-	-	-	-	ELAR	-	-	-	100?	-	-
1977-5412	2443436.02	1977 Oct 21 1800:00	Super Loki	-	INTA SLM-7752	Prog. Meteo Nacional	-	-	-	ELAR	-	-	-	100?	-	-
1977-M1733	2443464.23	1977 Nov 16 1231	Super Loki	-	FLIGHT 177 /T 1-	-	-	-	-	WI	-	-	-	72	-	-
1977-M1734	2443464.23	1977 Nov 16 1737:00	Super Loki	-	FLIGHT 177 /T 1-	-	-	-	-	FC	-	-	-	75	-	-
1977-M1734	2443464.25	1977 Nov 16 1800:00	Super Loki	-	FLIGHT 176 /THI-	-	-	-	-	ELAR	-	-	-	100?	-	-
1977-5413	2443475.04	1977 Nov 30 1231	Super Loki	-	INTA SLM-7754	Prog. Meteo Nacional	-	-	-	WI	-	-	-	86	-	-
1977-5414	2443475.04	1977 Nov 30 1231	Super Loki	-	INTA SLM-7754	Prog. Meteo Nacional	-	-	-	WI	-	-	-	87	-	-
1977-M1662	2443492.22	1977 Dec 15 1826:00	Super Loki	-	FLIGHT 179 /T 1-	-	-	-	-	FC	-	-	-	75	-	-
1977-M1676	2443493.21	1977 Dec 15 1826:00	Super Loki	-	FLIGHT 180 /T 1-	-	-	-	-	FC	-	-	-	75	-	-
1977-5415	2443494.25	1977 Dec 16 1800:00	Super Loki	-	FLIGHT 181 /THI-	-	-	-	-	WI	-	-	-	86	-	-
1977-5415	2443495.03	1977 Dec 16 1800:00	Super Loki	-	FLIGHT 181 /THI-	-	-	-	-	WI	-	-	-	87	-	-
1978-5307	2443525.25	1978 Jan 18 1804:00	Super Loki	-	INTA SLM-7806	Prog. Meteo Nacional	-	-	-	FC	-	-	-	75	-	-
1978-5308	2443525.02	1978 Jan 20 1237	Super Loki	-	INTA SLM-7806	Prog. Meteo Nacional	-	-	-	ELAR	-	-	-	100?	-	-
1978-5309	2443525.02	1978 Jan 23 1231	Super Loki	-	INTA SLM-7807	Prog. Meteo Nacional	-	-	-	ELAR	-	-	-	100?	-	-
1978-5310	2443525.02	1978 Jan 27 1231	Super Loki	-	INTA SLM-7808	Prog. Meteo Nacional	-	-	-	ELAR	-	-	-	100?	-	-
1978-5311	2443525.02	1978 Jan 31 1235	Super Loki	-	INTA SLM-7809	Prog. Meteo Nacional	-	-	-	ELAR	-	-	-	100?	-	-
1978-5311	2443543.02	1978 Feb 3 1235	Super Loki	-	INTA SLM-7810	Prog. Meteo Nacional	-	-	-	ELAR	-	-	-	100?	-	-
1978-5312	2443543.02	1978 Feb 6 1238	Super Loki	-	INTA SLM-7811	Prog. Meteo Nacional	-	-	-	ELAR	-	-	-	100?	-	-
1978-5313	2443543.02	1978 Feb 13 1231	Super Loki	-	INTA SLM-7812	Prog. Meteo Nacional	-	-	-	ELAR	-	-	-	100?	-	-
1978-5314	2443543.02	1978 Feb 13 1231	Super Loki	-	FLIGHT 184 /T 1-	-	-	-	-	WI	-	-	-	74	-	-
1978-M162	2443543.25	1978 Jan 18 1804:00	Super Loki	-	FLIGHT 182 /T 1-	-	-	-	-	FC	-	-	-	74	-	-
1978-5307	2443545.25	1978 Jan 20 1237	Super Loki	-	FLIGHT 185 /THI-	-	-	-	-	FC	-	-	-	76	-	-
1978-5308	2443545.25	1978 Jan 23 1231	Super Loki	-	FLIGHT 185 /THI-	-	-	-	-	FC	-	-	-	76	-	-
1978-5309	2443545.25	1978 Jan 27 1231	Super Loki	-	FLIGHT 187 /T 1-	-	-	-	-	FC	-	-	-	74	-	-
1978-5310	2443545.25	1978 Jan 31 1235	Super Loki	-	FLIGHT 188 /THI-	-	-	-	-	FC	-	-	-	74	-	-
1978-5311	2443545.25	1978 Feb 3 1238	Super Loki	-	FLIGHT 188 /THI-	-	-	-	-	FC	-	-	-	74	-	-
1978-5312	2443545.25	1978 Feb 6 1238	Super Loki	-	FLIGHT 188 /THI-	-	-	-	-	FC	-	-	-	74	-	-
1978-5313	2443545.25	1978 Feb 13 1231	Super Loki	-	FLIGHT 188 /THI-	-	-	-	-	FC	-	-	-	74	-	-
1978-5314	2443545.25	1978 Feb 13 1231	Super Loki	-	FLIGHT 188 /THI-	-	-	-	-	FC	-	-	-	74	-	-
1978-5315	2443545.25	1978 Feb 15 1803:00	Super Loki	-	FLIGHT 187 /T 1-	-	-	-	-	FC	-	-	-	74	-	-
1978-5316	2443545.25	1978 Feb 15 1803:00	Super Loki	-	FLIGHT 187 /T 1-	-	-	-	-	FC	-	-	-	74	-	-
1978-5317	2443545.25	1978 Feb 15 1803:00	Super Loki	-	FLIGHT 187 /T 1-	-	-	-	-	FC	-	-	-	74	-	-
1978-5318	2443545.25	1978 Feb 15 1803:00	Super Loki	-	FLIGHT 187 /T 1-	-	-	-	-	FC	-	-	-	74	-	-
1978-5319	2443545.25	1978 Feb 15 1803:00	Super Loki	-	FLIGHT 187 /T 1-	-	-	-	-	FC	-	-	-	74	-	-
1978-5320	2443545.25	1978 Feb 15 1803:00	Super Loki	-	FLIGHT 187 /T 1-	-	-	-	-	FC	-	-	-	74	-	-
1978-5321	2443545.25	1978 Feb 15 1803:00	Super Loki	-	FLIGHT 187 /T 1-	-	-	-	-	FC	-	-	-	74	-	-
1978-5322	2443545.25	1978 Feb 15 1803:00	Super Loki	-	FLIGHT 187 /T 1-	-	-	-	-	FC	-	-	-	74	-	-
1978-5323	2443545.25	1978 Feb 15 1803:00	Super Loki	-	FLIGHT 187 /T 1-	-	-	-	-	FC	-	-	-	74	-	-
1978-5324	2443545.25	1978 Feb 15 1803:00	Super Loki	-	FLIGHT 187 /T 1-	-	-	-	-	FC	-	-	-	74	-	-
1978-5325	2443545.25	1978 Feb 15 1803:00	Super Loki	-	FLIGHT 187 /T 1-	-	-	-	-	FC	-	-	-	74	-	-
1978-5326	2443545.25	1978 Feb 15 1803:00	Super Loki	-	FLIGHT 187 /T 1-	-	-	-	-	FC	-	-	-	74	-	-
1978-5327	2443545.25	1978 Feb 15 1803:00	Super Loki	-	FLIGHT 187 /T 1-	-	-	-	-	FC	-	-	-	74	-	-
1978-5328	2443545.25	1978 Feb 15 1803:00	Super Loki	-	FLIGHT 187 /T 1-	-	-	-	-	FC	-	-	-	74	-	-
1978-5329	2443545.25	1978 Feb 15 1803:00	Super Loki	-	FLIGHT 187 /T 1-	-	-	-	-	FC	-	-	-	74	-	-
1978-5330	2443545.25	1978 Feb 15 1803:00	Super Loki	-	FLIGHT 187 /T 1-	-	-	-	-	FC	-	-	-	74	-	-
1978-5331	2443545.25	1978 Feb 15 1803:00	Super Loki	-	FLIGHT 187 /T 1-	-	-	-	-	FC	-	-	-	74	-	-
1978-5332	2443545.25	1978 Feb 15 1803:00	Super Loki	-	FLIGHT 187 /T 1-	-	-	-	-	FC	-	-	-	74	-	-
1978-5333	2443545.25	1978 Feb 15 1803:00	Super Loki	-	FLIGHT 187 /T 1-	-	-	-	-	FC	-	-	-	74	-	-
1978-5334	2443545.25	1978 Feb 15 1803:00	Super Loki	-	FLIGHT 187 /T 1-	-	-	-	-	FC	-	-	-	74	-	-
1978-5335	2443545.25	1978 Feb 15 1803:00	Super Loki	-	FLIGHT 187 /T 1-	-	-	-	-	FC	-	-	-	74	-	-
1978-5336	2443545.25	1978 Feb 15 1803:00	Super Loki	-	FLIGHT 187 /T 1-	-	-	-	-	FC	-	-	-	74	-	-
1978-5337	2443545.25	1978 Feb 15 1803:00	Super Loki	-	FLIGHT 187 /T 1-	-	-	-	-	FC	-	-	-	74	-	-
1978-5338	2443545.25	1978 Feb 15 1803:00	Super Loki	-	FLIGHT 187 /T 1-	-	-	-	-	FC	-	-	-	74	-	-
1978-5339	2443545.25	1978 Feb 15 1803:00	Super Loki	-	FLIGHT 187 /T 1-	-	-	-	-	FC	-	-	-	74	-	-
1978-5340	2443545.25	1978 Feb 15 1803:00	Super Loki	-	FLIGHT 187 /T 1-	-	-	-	-	FC	-	-	-	74	-	-
1978-5341	2443545.25	1978 Feb 15 1803:00	Super Loki	-	FLIGHT 187 /T 1-	-	-	-	-	FC	-	-	-	74	-	-
1978-5342	2443545.25	1978 Feb 15 1803:00	Super Loki	-	FLIGHT 187 /T 1-	-	-	-	-	FC	-	-	-	74	-	-
1978-5343	2443545.25	1978 Feb 15 1803:00	Super Loki	-	FLIGHT 187 /T 1-	-	-	-	-	FC	-	-	-	74	-	-
1978-5344	2443545.25	1978 Feb 15 1803:00	Super Loki	-	FLIGHT 187 /T 1-	-	-	-	-	FC	-	-	-	74	-	-
1978-5345	2443545.25	1978 Feb 15 1803:00	Super Loki	-	FLIGHT 187 /T 1-	-	-	-	-	FC	-	-	-	74	-	-
1978-5346	2443545.25	1978 Feb 15 1803:00	Super Loki	-	FLIGHT 187 /T 1-	-	-	-</								





Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Launch_Mission	FlightCode	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee_Rm	Range_Rm	Dest
1980-W144	2444284.17	1980 Feb 14 1612:00	Super Loki	-	FLIGHT 261 /T 1-	-	-	-	-	WI	-	-	-	66	-	-
1980-W160	2444286.30	1980 Feb 18 1906:00	Super Loki	-	FLIGHT 262 /TH1-	-	-	-	-	CLBI	-	-	-	75?	-	-
1980-W162	2444289.13	1980 Feb 19 1510:00	Super Loki	-	FLIGHT 263 /TH1-	-	-	-	-	CLBI	-	-	-	64	-	-
1980-W177	2444294.13	1980 Feb 24 1510:00	Super Loki	-	FLIGHT 264 /TH1-	-	-	-	-	CLBI	-	-	-	54	-	-
1980-W214	2444300.05	1980 Mar 01 1310:00	Super Loki	-	FLIGHT 265 /TH1-	-	-	-	-	CLBI	-	-	-	65	-	-
1980-W248	2444311.05	1980 Mar 12 1311:00	Super Loki	-	FLIGHT 266 /TH1-	-	-	-	-	CLBI	-	-	-	65	-	-
1980-W276	2444317.38	1980 Mar 18 2105:00	Super Loki	-	FLIGHT 267 /T 1-	-	-	-	-	WI	-	-	-	63	-	-
1980-W352	2444339.17	1980 Apr 09 1609:00	Super Loki	-	FLIGHT 268 /TH1-	-	-	-	-	WI	-	-	-	75?	-	-
1980-W362	2444372.25	1980 Apr 12 1800:00	Super Loki	-	FLIGHT 269 /TH1-	-	-	-	-	PRIM	-	-	-	65	-	-
1980-W515	2444386.42	1980 May 26 2200:00	Super Loki	-	FLIGHT 270 /T 1-	-	-	-	-	WI	-	-	-	67	-	-
1980-W568	2444400.18	1980 Jun 09 1617:00	Super Loki	-	FLIGHT 271 /T 1-	-	-	-	-	WI	-	-	-	69	-	-
1980-W572	2444404.25	1980 Jun 09 1804:00	Super Loki	-	FLIGHT 272 /TH1-	-	-	-	-	PRIM	-	-	-	66	-	-
1980-W655	2444426.27	1980 Jul 05 1830:00	Super Loki	-	FLIGHT 273	-	-	-	-	CLBI	-	-	-	68	-	-
1980-W656	2444427.09	1980 Jul 06 1403:00	Super Loki	-	FLIGHT 274	-	-	-	-	CLBI	-	-	-	62	-	-
1980-W659	2444438.07	1980 Jul 17 1347:00	Super Loki	-	FLIGHT 275	-	-	-	-	CLBI	-	-	-	64	-	-
1980-W707	2444444.18	1980 Jul 23 1615:00	Super Loki	-	FLIGHT 276 /T 1-	-	-	-	-	WI	-	-	-	78	-	-
1980-W713	2444444.64	1980 Jul 23 1615:00	Super Loki	-	FLIGHT 277 /TH1-	-	-	-	-	WI	-	-	-	70	-	-
1980-W714	2444445.65	1980 Jul 25 0341:00	Super Loki	-	FLIGHT 278 /TH1-	-	-	-	-	PF	-	-	-	66	-	-
1980-W736	2444455.44	1980 Aug 20 1615:00	Super Loki	-	FLIGHT 279 /TH1-	-	-	-	-	PF	-	-	-	66	-	-
1980-W936	2444519.36	1980 Oct 06 2034:00	Super Loki	-	FLIGHT 280 /T 1-	-	-	-	-	WI	-	-	-	53	-	-
1980-W938	2444519.48	1980 Oct 06 2327:00	Super Loki	-	TI-6190	-	-	-	-	AND	-	-	-	70?	-	-
1980-W938	2444519.69	1980 Oct 07 0428:57	Super Loki	-	TI-6078	-	-	-	-	AND	-	-	-	84	-	-
1980-W938	2444519.75	1980 Oct 07 0601:52	Super Loki	-	TI-6192	-	-	-	-	AND	-	-	-	60?	-	-
1980-W947	2444521.13	1980 Oct 08 1503:00	Super Loki	-	FLIGHT 282 /TH1-	-	-	-	-	CLBI	-	-	-	80?	-	-
1980-W429	2444521.55	1980 Oct 09 0115:00	Super Loki	-	TI-6193	-	-	-	-	AND	-	-	-	80?	-	-
1980-W451	2444522.42	1980 Oct 09 2302:00	Super Loki	-	TI-6194	-	-	-	-	AND	-	-	-	85?	-	-
1980-W951	2444523.40	1980 Oct 10 2129:12	Super Loki	-	TI-6196	-	-	-	-	AND	-	-	-	80?	-	-
1980-W953	2444523.36	1980 Oct 11 2033:20	Super Loki	-	TI-6197	-	-	-	-	AND	-	-	-	69?	-	-
1980-W953	2444524.44	1980 Oct 11 2328:30	Super Loki	-	TI-7128	-	-	-	-	AND	-	-	-	81?	-	-
1980-W954	2444524.46	1980 Oct 12 0026:00	Super Loki	-	TI-6422	-	-	-	-	AND	-	-	-	65	-	-
1980-W954	2444524.52	1980 Oct 12 0026:00	Super Loki	-	TI-6423	-	-	-	-	AND	-	-	-	46?	-	-
1980-W436	2444525.31	1980 Oct 15 1923:00	Super Loki	-	TI-6424	-	-	-	-	AND	-	-	-	67?	-	-
1980-W965	2444525.37	1980 Oct 15 2053:00	Super Loki	-	TI-6425	-	-	-	-	AND	-	-	-	80?	-	-
1980-W439	2444525.46	1980 Oct 15 2004:00	Super Loki	-	FLIGHT 284 /T 1-	-	-	-	-	WI	-	-	-	66	-	-
1980-W969	2444525.20	1980 Oct 16 1646:00	Super Loki	-	FLIGHT 285 /T 1-	-	-	-	-	WI	-	-	-	66	-	-
1980-W970	2444525.26	1980 Oct 16 1820:00	Super Loki	-	TI-6674	-	-	-	-	AND	-	-	-	82?	-	-
1980-W976	2444530.59	1980 Oct 18 0207:14	Super Loki	-	TI-7129	-	-	-	-	AND	-	-	-	84?	-	-
1980-W141	2444530.64	1980 Oct 18 0317:35	Super Loki	-	TI-7130	-	-	-	-	AND	-	-	-	83	-	-
1980-W978	2444530.66	1980 Oct 18 0435:02	Super Loki	-	TI-6875	-	-	-	-	AND	-	-	-	78?	-	-
1980-W979	2444530.69	1980 Nov 07 2250	Super Loki	-	FW-12A?	-	-	-	-	ESR-C E98	-	-	-	85	-	-
1980-W515	2444531.42	1980 Nov 10 0010	Super Loki	-	-	-	-	-	-	ESR-C E98	-	-	-	104	-	-
1980-W515	2444531.45	1980 Nov 10 0100	Super Loki	-	-	-	-	-	-	ESR-C E98	-	-	-	85	-	-
1980-W515	2444531.51	1980 Nov 10 0218	Super Loki	-	-	-	-	-	-	ESR-C E98	-	-	-	104	-	-
1980-W515	2444531.54	1980 Nov 10 0218	Super Loki	-	-	-	-	-	-	ESR-C E98	-	-	-	104	-	-
1980-W515	2444531.60	1980 Nov 10 0218	Super Loki	-	-	-	-	-	-	ESR-C E98	-	-	-	85	-	-
1980-W515	2444531.62	1980 Nov 10 0218	Super Loki	-	-	-	-	-	-	ESR-C E98	-	-	-	104	-	-
1980-W521	2444534.49	1980 Nov 10 0306	Super Loki	-	-	-	-	-	-	ESR-C E98	-	-	-	104	-	-
1980-W521	2444534.51	1980 Nov 11 0151:30	Super Loki	-	-	-	-	-	-	ESR-C E98	-	-	-	85	-	-
1980-W524	2444534.58	1980 Nov 11 0236:30	Super Loki	-	-	-	-	-	-	ESR-C E98	-	-	-	104	-	-
1980-W524	2444534.60	1980 Nov 12 0236:30	Super Loki	-	-	-	-	-	-	ESR-C E98	-	-	-	85	-	-
1980-W525	2444535.55	1980 Nov 12 0107:00	Super Loki	-	-	-	-	-	-	ESR-C E98	-	-	-	104	-	-
1980-W526	2444535.55	1980 Nov 15 0235:30	Super Loki	-	-	-	-	-	-	ESR-C E98	-	-	-	85	-	-
1980-W527	2444535.44	1980 Nov 15 0235:30	Super Loki	-	-	-	-	-	-	ESR-C E98	-	-	-	104	-	-
1980-W528	2444535.72	1980 Nov 16 0512:30	Super Loki	-	-	-	-	-	-	ESR-C E98	-	-	-	85	-	-
1980-W529	2444535.77	1980 Nov 16 0633:00	Super Loki	-	-	-	-	-	-	ESR-C E98	-	-	-	104	-	-
1980-W530	2444535.81	1980 Nov 16 0721:00	Super Loki	-	-	-	-	-	-	ESR-C E98	-	-	-	85	-	-
1980-W531	2444535.83	1980 Nov 16 0751:30	Super Loki	-	-	-	-	-	-	ESR-C E98	-	-	-	104	-	-
1980-W532	2444535.85	1980 Nov 16 0823:00	Super Loki	-	-	-	-	-	-	ESR-C E98	-	-	-	85	-	-
1980-W533	2444537.45	1980 Nov 27 0245:30	Super Loki	-	-	-	-	-	-	ESR-C E98	-	-	-	104	-	-
1980-W534	2444571.53	1980 Nov 28 0047:00	Super Loki	-	-	-	-	-	-	ESR-C E98	-	-	-	85	-	-
1980-W535	2444571.65	1980 Nov 28 0329:00	Super Loki	-	-	-	-	-	-	ESR-C E98	-	-	-	104	-	-
1980-W536	2444571.68	1980 Nov 28 0419:10	Super Loki	-	-	-	-	-	-	ESR-C E98	-	-	-	85	-	-
1980-W537	2444574.52	1980 Dec 1 0024:00	Super Loki	-	-	-	-	-	-	ESR-C E98	-	-	-	104	-	-
1980-W538	2444574.57	1980 Dec 1 0138:00	Super Loki	-	-	-	-	-	-	ESR-C E98	-	-	-	85	-	-
1980-W539	2444574.61	1980 Dec 1 0233:30	Super Loki	-	-	-	-	-	-	ESR-C E98	-	-	-	104	-	-
1980-W540	2444574.64	1980 Dec 1 0324:00	Super Loki	-	-	-	-	-	-	ESR-C E98	-	-	-	85	-	-
1980-W1086	2444577.26	1980 Dec 03 1812:00	Super Loki	-	FLIGHT 286 /TH1-	-	-	-	-	PRIM	-	-	-	66	-	-
1981-W433	2444627.18	1981 Jan 22 1617:00	Super Loki	-	FLIGHT 289 /T 1-	-	-	-	-	WI	-	-	-	67	-	-
1981-W437	2444638.26	1981 Feb 02 1808:00	Super Loki	-	FLIGHT 290 /TH1-	-	-	-	-	PRIM	-	-	-	65	-	-
1981-W125	2444662.19	1981 Feb 26 1628:00	Super Loki	-	FLIGHT 291 /T 1-	-	-	-	-	WI	-	-	-	66	-	-
1981-W125	2444662.36	1981 Feb 26 2045:00	Super Loki	-	FLIGHT 292 /T 1-	-	-	-	-	WI	-	-	-	66	-	-
1981-W119	2444809.29	1981 Jul 23 1900?	Super Loki	-	-	-	-	-	-	WI	-	-	-	70?	-	-
1981-W504	2444809.30	1981 Jul 23 1918:59	Super Loki	-	-	-	-	-	-	WI	-	-	-	66	-	-
1981-W608	2444861.17	1981 Sep 13 1605	Super Loki	-	F-293/T 1-6617	-	-	-	-	WI	-	-	-	67	-	-
1981-W727	2444883.17	1981 Oct 05 1610:00	Super Loki	-	FLIGHT 294 /T 1-	-	-	-	-	WI	-	-	-	67	-	-
1981-W247	2444921.27	1981 Nov 12 1829:00	Super Loki	-	FLIGHT 295 /T 1-	-	-	-	-	WI	-	-	-	100?	-	-
1981-W248	2444934.11	1981 Nov 25 1443	Super Loki	-	INTA SLD-8101	-	-	-	-	ELAR	-	-	-	100?	-	-
1981-W249	2444951.11	1981 Dec 16 1434	Super Loki	-	INTA SLD-8102	-	-	-	-	ELAR	-	-	-	100?	-	-
1982-W271	2444978.08	1982 Jan 22 1440	Super Loki	-	INTA SLD-8103	-	-	-	-	ELAR	-	-	-	100?	-	-
1982-W272	2444988.09	1982 Jan 8 1402	Super Loki	-	INTA SLD-8201	-	-	-	-	ELAR	-	-	-	100?	-	-
1982-W273	2444988.08	1982 Jan 18 1416	Super Loki	-	INTA SLD-8202	-	-	-	-	ELAR	-	-	-	100?	-	-
1982-W443	2444990.10	1982 Jan 20 1429	Super Loki	-	INTA SLD-8203	-	-	-	-	ELAR	-	-	-	100?	-	-
1982-W455	2444995.17	1982 Jan 25 1600:00	Super Loki	-	FLIGHT 297 /TH1-	-	-	-	-	WI	-	-	-	66	-	-
1982-W456	2444995.19	1982 Jan 25 1640:00	Super Loki	-	FLIGHT 298 /TH1-	-	-	-	-	CLBI	-	-	-	67	-	-

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Launch_Mission	FlightCode	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee_Km	Range_Km	Dest
1982-568	2444895.27	1982 Jan 25 1830:00	Super Loki	-	FLIGHT 299 /THI-INTA SLD-8204	-	-	-	-	CEBI	-	-	-	62	-	-
1982-574	2444897.10	1982 Jan 27 1423	Super Loki	-	FLIGHT 300 /THI-INTA SLD-8206	-	-	-	-	ELAR	-	-	-	100?	-	-
1982-862	2445001.14	1982 Jan 31 1523:00	Super Loki	-	FLIGHT 301 /THI-INTA SLD-8206	-	-	-	-	CEBI	-	-	-	65	-	-
1982-575	2445006.10	1982 Feb 5 1423	Super Loki	-	FLIGHT 302 /THI-INTA SLD-8206	-	-	-	-	ELAR	-	-	-	100?	-	-
1982-576	2445009.10	1982 Feb 8 1418	Super Loki	-	FLIGHT 303 /THI-INTA SLD-8207	-	-	-	-	ELAR	-	-	-	100?	-	-
1982-577	2445016.11	1982 Feb 15 1442	Super Loki	-	FLIGHT 304 /THI-INTA SLD-8207	-	-	-	-	CEBI	-	-	-	100?	-	-
1982-4114	2445016.21	1982 Feb 15 1708:00	Super Loki	-	FLIGHT 305 /THI-INTA SLD-8207	-	-	-	-	VCH	-	-	-	69	-	-
1982-4115	2445016.30	1982 Feb 15 1915:00	Super Loki	-	FLIGHT 306 /THI-INTA SLD-8207	-	-	-	-	VCH	-	-	-	70	-	-
1982-4124	2445016.30	1982 Feb 17 1907:00	Super Loki	-	FLIGHT 307 /THI-INTA SLD-8207	-	-	-	-	VCH	-	-	-	70	-	-
1982-4135	2445022.20	1982 Feb 21 1653:00	Super Loki	-	FLIGHT 308 /THI-INTA SLD-8207	-	-	-	-	VCH	-	-	-	70	-	-
1982-4140	2445024.30	1982 Feb 23 1911:00	Super Loki	-	FLIGHT 309 /THI-INTA SLD-8207	-	-	-	-	VCH	-	-	-	79	-	-
1982-4146	2445025.29	1982 Feb 24 1900:00	Super Loki	-	FLIGHT 310 /THI-INTA SLD-8207	-	-	-	-	WI	-	-	-	82	-	-
1982-4159	2445025.29	1982 Feb 25 1900:00	Super Loki	-	FLIGHT 311 /THI-INTA SLD-8207	-	-	-	-	WI	-	-	-	82	-	-
1982-4146	2445025.29	1982 Feb 25 1900:00	Super Loki	-	FLIGHT 312 /THI-INTA SLD-8207	-	-	-	-	WI	-	-	-	82	-	-
1982-4150	2445027.20	1982 Feb 26 1651:00	Super Loki	-	FLIGHT 313 /THI-INTA SLD-8207	-	-	-	-	VCH	-	-	-	74	-	-
1982-760	2445027.31	1982 Feb 26 1920:00	Super Loki	-	FLIGHT 314 /THI-INTA SLD-8207	-	-	-	-	VCH	-	-	-	75	-	-
1982-4153	2445028.32	1982 Feb 28 1946:00	Super Loki	-	FLIGHT 315 /THI-INTA SLD-8207	-	-	-	-	WI	-	-	-	80	-	-
1982-761	2445030.33	1982 Mar 01 2000:00	Super Loki	-	FLIGHT 316 /THI-INTA SLD-8207	-	-	-	-	WI	-	-	-	80	-	-
1982-762	2445031.33	1982 Mar 02 1955:00	Super Loki	-	FLIGHT 317 /THI-INTA SLD-8207	-	-	-	-	WI	-	-	-	81	-	-
1982-766	2445032.29	1982 Mar 03 1900:00	Super Loki	-	FLIGHT 318 /THI-INTA SLD-8207	-	-	-	-	WI	-	-	-	81	-	-
1982-766	2445033.29	1982 Mar 04 1900:00	Super Loki	-	FLIGHT 319 /THI-INTA SLD-8207	-	-	-	-	WI	-	-	-	81	-	-
1982-770	2445034.29	1982 Mar 05 1903:00	Super Loki	-	FLIGHT 320 /THI-INTA SLD-8207	-	-	-	-	WI	-	-	-	81	-	-
1982-770	2445034.29	1982 Mar 06 1908:00	Super Loki	-	FLIGHT 321 /THI-INTA SLD-8207	-	-	-	-	WI	-	-	-	81	-	-
1982-772	2445037.30	1982 Mar 08 1900:00	Super Loki	-	FLIGHT 322 /THI-INTA SLD-8207	-	-	-	-	WI	-	-	-	76	-	-
1982-4168	2445038.29	1982 Mar 09 1900:00	Super Loki	-	FLIGHT 323 /THI-INTA SLD-8207	-	-	-	-	WI	-	-	-	79	-	-
1982-4171	2445039.29	1982 Mar 10 1900:00	Super Loki	-	FLIGHT 324 /THI-INTA SLD-8207	-	-	-	-	WI	-	-	-	79	-	-
1982-4171	2445040.29	1982 Mar 11 1900:00	Super Loki	-	FLIGHT 325 /THI-INTA SLD-8207	-	-	-	-	WI	-	-	-	79	-	-
1982-4175	2445041.29	1982 Mar 12 1900:00	Super Loki	-	FLIGHT 326 /THI-INTA SLD-8207	-	-	-	-	WI	-	-	-	79	-	-
1982-4182	2445045.29	1982 Mar 16 1900:00	Super Loki	-	FLIGHT 327 /THI-INTA SLD-8207	-	-	-	-	WI	-	-	-	76	-	-
1982-4184	2445046.31	1982 Mar 17 1923:00	Super Loki	-	FLIGHT 328 /THI-INTA SLD-8207	-	-	-	-	WI	-	-	-	79	-	-
1982-4186	2445047.29	1982 Mar 18 1901:00	Super Loki	-	FLIGHT 329 /THI-INTA SLD-8207	-	-	-	-	WI	-	-	-	60	-	-
1982-4187	2445048.29	1982 Mar 19 1900:00	Super Loki	-	FLIGHT 330 /THI-INTA SLD-8207	-	-	-	-	WI	-	-	-	76	-	-
1982-4194	2445051.31	1982 Mar 22 1924:00	Super Loki	-	FLIGHT 331 /THI-INTA SLD-8207	-	-	-	-	WI	-	-	-	75	-	-
1982-7205	2445053.29	1982 Mar 24 1901:00	Super Loki	-	FLIGHT 332 /THI-INTA SLD-8207	-	-	-	-	WI	-	-	-	74	-	-
1982-7218	2445058.09	1982 Mar 29 1405:00	Super Loki	-	FLIGHT 333 /THI-INTA SLD-8207	-	-	-	-	WI	-	-	-	75	-	-
1982-7219	2445058.12	1982 Mar 29 1457:00	Super Loki	-	FLIGHT 334 /THI-INTA SLD-8207	-	-	-	-	WI	-	-	-	71	-	-
1982-7121	2445059.06	1982 Mar 30 1530:00	Super Loki	-	FLIGHT 335 /THI-INTA SLD-8207	-	-	-	-	WI	-	-	-	97	-	-
1982-7225	2445059.10	1982 Mar 30 1420:00	Super Loki	-	FLIGHT 336 /THI-INTA SLD-8207	-	-	-	-	WI	-	-	-	65	-	-
1982-7253	2445060.17	1982 Apr 02 1559:00	Super Loki	-	FLIGHT 337 /THI-INTA SLD-8207	-	-	-	-	WI	-	-	-	64	-	-
1982-7254	2445060.20	1982 Apr 20 1641:00	Super Loki	-	FLIGHT 338 /THI-INTA SLD-8207	-	-	-	-	WI	-	-	-	64	-	-
1982-7255	2445060.20	1982 Apr 20 1646:00	Super Loki	-	FLIGHT 339 /THI-INTA SLD-8207	-	-	-	-	WI	-	-	-	66	-	-
1982-7256	2445060.22	1982 Apr 20 1717:00	Super Loki	-	FLIGHT 340 /THI-INTA SLD-8207	-	-	-	-	WI	-	-	-	63	-	-
1982-7500	2445114.21	1982 May 24 1400:00	Super Loki	-	FLIGHT 341 /THI-INTA SLD-8207	-	-	-	-	WI	-	-	-	61	-	-
1982-7520	2445125.11	1982 Jun 28 1457:00	Super Loki	-	FLIGHT 342 /THI-INTA SLD-8207	-	-	-	-	WI	-	-	-	64	-	-
1982-7217	2445129.13	1982 Jun 29 1510:00	Super Loki	-	FLIGHT 343 /THI-INTA SLD-8207	-	-	-	-	WI	-	-	-	85	-	-
1982-7214	2445141.09	1982 Jun 29 1445:00	Super Loki	-	FLIGHT 344 /THI-INTA SLD-8207	-	-	-	-	WI	-	-	-	85	-	-
1982-7237	2445141.84	1982 Jul 04 1900:00	Super Loki	-	FLIGHT 345 /THI-INTA SLD-8207	-	-	-	-	WI	-	-	-	97	-	-
1982-7238	2445141.89	1982 Jul 04 1100:00	Super Loki	-	FLIGHT 346 /THI-INTA SLD-8207	-	-	-	-	WI	-	-	-	86	-	-
1982-4629	2445141.89	1982 Jul 04 1100:00	Super Loki	-	FLIGHT 347 /THI-INTA SLD-8207	-	-	-	-	WI	-	-	-	86	-	-
1982-4616	2445148.57	1982 Aug 0 0331:30	Super Loki	-	FLIGHT 348 /THI-INTA SLD-8207	-	-	-	-	ESR	-	-	-	84	-	-
1982-4617	2445148.57	1982 Aug 12 0043:00	Super Loki	-	FLIGHT 349 /THI-INTA SLD-8207	-	-	-	-	ESR	-	-	-	84	-	-
1982-4400	2445151.28	1982 Aug 12 0043:00	Super Loki	-	FLIGHT 350 /THI-INTA SLD-8207	-	-	-	-	ESR	-	-	-	84	-	-
1982-4405	2445151.28	1982 Aug 12 0043:00	Super Loki	-	FLIGHT 351 /THI-INTA SLD-8207	-	-	-	-	ESR	-	-	-	84	-	-
1982-4406	2445152.13	1982 Sep 03 0845:00	Super Loki	-	FLIGHT 352 /THI-INTA SLD-8207	-	-	-	-	ESR	-	-	-	84	-	-
1982-4408	2445223.10	1982 Sep 16 1405:00	Super Loki	-	FLIGHT 353 /THI-INTA SLD-8207	-	-	-	-	WI	-	-	-	72	-	-
1982-4409	2445223.10	1982 Sep 16 1405:00	Super Loki	-	FLIGHT 354 /THI-INTA SLD-8207	-	-	-	-	WI	-	-	-	72	-	-
1982-4419	2445242.29	1982 Sep 16 1900:00	Super Loki	-	FLIGHT 355 /THI-INTA SLD-8207	-	-	-	-	WI	-	-	-	77	-	-
1982-4420	2445242.29	1982 Sep 16 1900:00	Super Loki	-	FLIGHT 356 /THI-INTA SLD-8207	-	-	-	-	WI	-	-	-	77	-	-
1982-4376	2445266.87	1982 Nov 16 0856	Super Loki	-	FLIGHT 357 /THI-INTA SLD-8207	-	-	-	-	WI	-	-	-	86	-	-
1982-4377	2445268.88	1982 Nov 16 0931	Super Loki	-	FLIGHT 358 /THI-INTA SLD-8207	-	-	-	-	WI	-	-	-	84	-	-
1982-4378	2445268.90	1982 Nov 16 0931	Super Loki	-	FLIGHT 359 /THI-INTA SLD-8207	-	-	-	-	WI	-	-	-	88	-	-
1982-4378	2445268.90	1982 Nov 16 0931	Super Loki	-	FLIGHT 360 /THI-INTA SLD-8207	-	-	-	-	WI	-	-	-	88	-	-
1982-4378	2445268.90	1982 Nov 16 0931	Super Loki	-	FLIGHT 361 /THI-INTA SLD-8207	-	-	-	-	WI	-	-	-	78	-	-
1982-4385	2445297.87	1982 Nov 16 0946:00	Super Loki	-	FLIGHT 362 /THI-INTA SLD-8207	-	-	-	-	WI	-	-	-	110	-	-
1982-4393	2445297.87	1982 Nov 24 0947:00	Super Loki	-	FLIGHT 363 /THI-INTA SLD-8207	-	-	-	-	WI	-	-	-	117	-	-
1982-4394	2445297.88	1982 Nov 24 0943:00	Super Loki	-	FLIGHT 364 /THI-INTA SLD-8207	-	-	-	-	WI	-	-	-	105	-	-
1982-4395	2445297.91	1982 Nov 24 0950:00	Super Loki	-	FLIGHT 365 /THI-INTA SLD-8207	-	-	-	-	WI	-	-	-	97	-	-
1982-4396	2445297.91	1982 Dec 20 0930:00	Super Loki	-	FLIGHT 366 /THI-INTA SLD-8207	-	-	-	-	WI	-	-	-	91	-	-
1982-4424	2445293.85	1982 Dec 20 0930:00	Super Loki	-	FLIGHT 367 /THI-INTA SLD-8207	-	-	-	-	WI	-	-	-	91	-	-
1982-4425	2445293.85	1982 Dec 20 0930:00	Super Loki	-	FLIGHT 368 /THI-INTA SLD-8207	-	-	-	-	WI	-	-	-	78	-	-
1983-401	2445339.85	1983 Jan 05 0927:00	Super Loki	-	FLIGHT 369 /THI-INTA SLD-8301	-	-	-	-	ELAR	-	-	-	100?	-	-
1983-402	2445347.03	1983 Jan 12 1241	Super Loki	-	FLIGHT 370 /THI-INTA SLD-8301	-	-	-	-	ELAR	-	-	-	67	-	-
1983-409	2445348.29	1983 Jan 13 1902:59	Super Loki	-	FLIGHT 371 /THI-INTA SLD-8302	-	-	-	-	WI	-	-	-	100?	-	-
1983-409	2445348.29	1983 Jan 13 1902:59	Super Loki	-	FLIGHT 372 /THI-INTA SLD-8302	-	-	-	-	WI	-	-	-	100?	-	-
1983-4275	2445356.06	1983 Jan 21 1327	Super Loki	-	FLIGHT 373 /THI-INTA SLD-8303	-	-	-	-	ELAR	-	-	-	100?	-	-
1983-4276	2445356.02	1983 Jan 28 1230	Super Loki	-	FLIGHT 374 /THI-INTA SLD-8304	-	-	-	-	ELAR	-	-	-	100?	-	-
1983-4277	2445356.02	1983 Jan 30 1226	Super Loki	-	FLIGHT 375 /THI-INTA SLD-8305	-	-	-	-	ELAR	-	-	-	100?	-	-
1983-4278	2445367.02	1983 Feb 1 1231	Super Loki	-	FLIGHT 376 /THI-INTA SLD-8306	-	-	-	-	ELAR	-	-	-	100?	-	-
1983-4279	2445370.02	1983 Feb 4 1228	Super Loki	-	FLIGHT 377 /THI-INTA SLD-8306	-	-	-	-	ELAR	-	-	-	111	-	-
1983-432	2445372.89	1983 Feb 07 0925:00	Super Loki	-	FLIGHT 378 /THI-INTA SLD-8307	-	-	-	-	WI	-	-	-	100?	-	-
1983-4280	2445375.02	1983 Feb 9 1234	Super Loki	-	FLIGHT 379 /THI-INTA SLD-8307	-	-	-	-	ELAR	-	-	-	100?	-	-
1983-4281	2445382.00	1983 Feb 16 1202	Super Loki	-	FLIGHT 380 /THI-INTA SLD-8308	-	-	-	-	WI	-	-	-	100?	-	-
1983-4																



Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Launch_Mission	FlightCode	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee_Km	Range_Km	Dest
1984-S243	2445724.05	1984 Jan 24 1316	Super Loki	-	INTA SLD-8404	Winter Anom/Dyn.Atm.	-	-	-	ELAR	-	-	-	100?	-	-
1984-W34	2445725.31	1984 Jan 25 1981	Super Loki	-	MAP/WINE	N-D 20A	-	-	-	AND	-	-	-	72	-	-
1984-W37	2445725.28	1984 Jan 25 1985	Super Loki	-	MAP/WINE	N-D 21A	-	-	-	AND	-	-	-	78	-	-
1984-W42	2445725.23	1984 Jan 28 1730	Super Loki	-	MAP/WINE	N-D 22A	-	-	-	AND	-	-	-	74	-	-
1984-S244	2445730.08	1984 Jan 30 1357	Super Loki	-	INTA SLD-8405	Winter Anom/Dyn.Atm.	-	-	-	ELAR	-	-	-	100?	-	-
1984-W43	2445731.18	1984 Jan 31 1672	Super Loki	-	MAP/WINE	N-D 23A	-	-	-	AND	-	-	-	61	-	-
1984-W38	2445731.23	1984 Jan 31 1731	Super Loki	-	MAP/WINE	N-C 11	-	-	-	AND	-	-	-	87	-	-
1984-W40	2445731.31	1984 Jan 31 1920	Super Loki	-	MAP/WINE	N-C 12	-	-	-	AND	-	-	-	87	-	-
1984-W44	2445734.33	1984 Feb 3 2000	Super Loki	-	MAP/WINE	N-D 24A	-	-	-	AND	-	-	-	80	-	-
1984-W51	2445737.33	1984 Feb 6 2000	Super Loki	-	MAP/WINE	N-D 25A	-	-	-	AND	-	-	-	77	-	-
1984-W56	2445739.54	1984 Feb 9 0052	Super Loki	-	MAP/WINE	N-D 26A	-	-	-	AND	-	-	-	75	-	-
1984-W50	2445739.59	1984 Feb 9 0216	Super Loki	-	MAP/WINE	N-C 13	-	-	-	AND	-	-	-	90	-	-
1984-W58	2445740.21	1984 Feb 9 1703:59	Super Loki	-	MAP/WINE	N-C 14	-	-	-	AND	-	-	-	75	-	-
1984-W79	2445740.23	1984 Feb 9 1730?	Super Loki	-	MAP/WINE	R030Z-A 328	-	-	-	WI	-	-	-	75?	-	-
1984-W78	2445740.23	1984 Feb 9 1730?	Super Loki	-	MAP/WINE	R030Z-A 329	-	-	-	WI	-	-	-	75?	-	-
1984-W59	2445740.31	1984 Feb 9 1922:59	Super Loki	-	MAP/WINE	Database	-	-	-	WI	-	-	-	71	-	-
1984-W61	2445740.55	1984 Feb 10 0107	Super Loki	-	MAP/WINE	N-D 27A	-	-	-	AND	-	-	-	75	-	-
1984-W55	2445740.58	1984 Feb 10 0151	Super Loki	-	MAP/WINE	N-C 15	-	-	-	AND	-	-	-	85	-	-
1984-W56	2445740.68	1984 Feb 10 0420	Super Loki	-	MAP/WINE	N-D 28A	-	-	-	AND	-	-	-	109	-	-
1984-W58	2445742.00	1984 Feb 11 2000:00	Super Loki	-	MAP/WINE	T 1-0784	-	-	-	WI	-	-	-	66	-	-
1984-W71	2445744.33	1984 Feb 13 2000	Super Loki	-	MAP/WINE	N-D 29A	-	-	-	AND	-	-	-	77	-	-
1984-W73	2445746.60	1984 Feb 16 0228	Super Loki	-	MAP/WINE	N-D 30A	-	-	-	AND	-	-	-	74	-	-
1984-W66	2445748.53	1984 Feb 18 0047	Super Loki	-	MAP/WINE	N-C 16	-	-	-	AND	-	-	-	87	-	-
1984-W60	2445748.58	1984 Feb 18 0149	Super Loki	-	MAP/WINE	N-D 31A	-	-	-	AND	-	-	-	87	-	-
1984-W67	2445748.61	1984 Feb 18 0238	Super Loki	-	MAP/WINE	N-C 17	-	-	-	AND	-	-	-	87	-	-
1984-W69	2445748.66	1984 Feb 18 0355	Super Loki	-	MAP/WINE	N-C 18	-	-	-	AND	-	-	-	82	-	-
1984-W61	2445749.93	1984 Feb 19 1026	Super Loki	-	MAP/WINE	N-D 32A	-	-	-	AND	-	-	-	87	-	-
1984-W62	2445749.99	1984 Feb 19 1152:00	Super Loki	-	MAP/WINE	N-D 033A	-	-	-	AND	-	-	-	77	-	-
1984-W65	2445752.34	1984 Feb 21 2005:00	Super Loki	-	MAP/WINE	N-D 034A	-	-	-	AND	-	-	-	77	-	-
1984-W76	2445754.21	1984 Feb 23 1700:00	Super Loki	-	MAP/WINE	N-D 035A	-	-	-	AND	-	-	-	82	-	-
1984-S246	2445769.00	1984 Mar 29 1205	Super Loki	-	INTA SLD-8406	Winter Anom/Dyn.Atm.	-	-	-	ELAR	-	-	-	100?	-	-
1984-W68	2445804.05	1984 Apr 13 1314:00	Super Loki	-	MAP/WINE	T 1-0883	-	-	-	WI	-	-	-	110	-	-
1984-W149	2445804.08	1984 Apr 13 1348:00	Super Loki	-	MAP/WINE	T 1-0884	-	-	-	WI	-	-	-	73	-	-
1984-W197	2445806.51	1984 Jun 07 0016:00	Super Loki	-	MAP/WINE	Winter Anom/Dyn.Atm.	-	-	-	ELAR	-	-	-	68	-	-
1984-S246	2445806.96	1984 Jun 15 1105	Super Loki	-	INTA SLD-8407	Winter Anom/Dyn.Atm.	-	-	-	ELAR	-	-	-	100?	-	-
1984-S247	2445806.96	1984 Jun 15 1105	Super Loki	-	INTA SLD-8408	Winter Anom/Dyn.Atm.	-	-	-	ELAR	-	-	-	100?	-	-
1984-W206	2445871.50	1984 Jun 19 2339:00	Super Loki	-	MAP/WINE	AN/DNQ-9-Sphere	-	-	-	WI	-	-	-	75?	-	-
1984-W96	2445905.98	1984 Jul 24 1127:59	Super Loki	-	MAP/WINE	Database	-	-	-	WI	-	-	-	83	-	-
1984-W285	2445926.13	1984 Aug 15 1511:00	Super Loki	-	MAP/WINE	R030Z-A 330	-	-	-	WI	-	-	-	87	-	-
1984-W60	2445926.17	1984 Aug 15 1611	Super Loki	-	MAP/WINE	Database	-	-	-	PF	-	-	-	75?	-	-
1984-W92	2445926.50	1984 Aug 23 0926:59	Super Loki	-	MAP/WINE	Database	-	-	-	PF	-	-	-	100?	-	-
1984-W262	2445935.89	1984 Sep 6 1425	Super Loki	-	MAP/WINE	Winter Anom/Dyn.Atm.	-	-	-	WI	-	-	-	60	-	-
1984-W269	2445949.06	1984 Sep 6 1532:00	Super Loki	-	MAP/WINE	PWH-12A/TT-903	-	-	-	WI	-	-	-	108	-	-
1984-W269	2445949.06	1984 Sep 6 1532:00	Super Loki	-	MAP/WINE	PWH-11D/TT-904	-	-	-	WI	-	-	-	72	-	-
1984-W269	2445949.34	1984 Sep 10 2010	Super Loki	-	MAP/WINE	PWH-11D/TT-904	-	-	-	WI	-	-	-	70	-	-
1984-W267	2445954.34	1984 Sep 18 0800:00	Super Loki	-	MAP/WINE	Database	-	-	-	WI	-	-	-	60	-	-
1984-W81	2445959.09	1984 Sep 18 1450:00	Super Loki	-	MAP/WINE	R030Z-A 331	-	-	-	WI	-	-	-	75?	-	-
1984-W82	2445962.12	1984 Sep 18 1505	Super Loki	-	MAP/WINE	R030Z-A 332	-	-	-	WI	-	-	-	75?	-	-
1984-W81	2445962.13	1984 Sep 18 1505	Super Loki	-	MAP/WINE	R030Z-A 333	-	-	-	WI	-	-	-	75?	-	-
1984-W82	2445962.18	1984 Sep 18 1628	Super Loki	-	MAP/WINE	R030Z-A 334	-	-	-	WI	-	-	-	75?	-	-
1984-W84	2445965.19	1984 Sep 18 1658	Super Loki	-	MAP/WINE	Winter Anom/Dyn.Atm.	-	-	-	ELAR	-	-	-	100?	-	-
1984-S248	2445965.19	1984 Sep 18 1658	Super Loki	-	MAP/WINE	Winter Anom/Dyn.Atm.	-	-	-	ELAR	-	-	-	100?	-	-
1984-W210	2445970.36	1984 Sep 26 2027:00	Super Loki	-	MAP/WINE	Database	-	-	-	WI	-	-	-	78	-	-
1984-W117	2445975.35	1984 Oct 04 2018:00	Super Loki	-	MAP/WINE	PWH-11D	-	-	-	WI	-	-	-	80	-	-
1984-W122	2445987.21	1984 Oct 13 1639	Super Loki	-	MAP/WINE	PWH-12A	-	-	-	WI	-	-	-	79	-	-
1984-W327	2445987.21	1984 Oct 13 1639	Super Loki	-	MAP/WINE	PWH-12A/TT-963	-	-	-	WI	-	-	-	114	-	-
1984-W350	2445996.15	1984 Oct 22 1520:00	Super Loki	-	MAP/WINE	Database	-	-	-	WI	-	-	-	70	-	-
1984-W850	2445996.19	1984 Oct 26 0915	Super Loki	-	MAP/WINE	Database	-	-	-	WI	-	-	-	64	-	-
1984-W850	2445996.19	1984 Oct 26 0915	Super Loki	-	MAP/WINE	R030Z-A 335	-	-	-	WI	-	-	-	75?	-	-
1984-W825	2446018.14	1984 Oct 26 0915	Super Loki	-	MAP/WINE	PWH-11D	-	-	-	WI	-	-	-	79	-	-
1984-W825	2446018.14	1984 Oct 26 0915	Super Loki	-	MAP/WINE	Database	-	-	-	WI	-	-	-	60	-	-
1984-W86	2446018.14	1984 Nov 13 1615	Super Loki	-	MAP/WINE	Database	-	-	-	WI	-	-	-	75?	-	-
1984-W86	2446018.14	1984 Nov 13 1615	Super Loki	-	MAP/WINE	R030Z-A 336	-	-	-	WI	-	-	-	72	-	-
1984-W86	2446020.99	1984 Nov 16 1149:00	Super Loki	-	MAP/WINE	PWH-12A	-	-	-	WI	-	-	-	113	-	-
1985-W45	2446081.20	1985 Jan 15 1500?	Super Loki	-	MAP/WINE	Database	-	-	-	WI	-	-	-	75?	-	-
1985-W52	2446081.20	1985 Jan 15 1649	Super Loki	-	MAP/WINE	R030Z-A 337	-	-	-	WI	-	-	-	75?	-	-
1985-W43	2446093.40	1985 Jan 27 2130:00	Super Loki	-	MAP/WINE	Database	-	-	-	WI	-	-	-	79	-	-
1985-W53	2446103.14	1985 Feb 6 1612	Super Loki	-	MAP/WINE	Database	-	-	-	WI	-	-	-	72	-	-
1985-W63	2446103.17	1985 Feb 6 1612	Super Loki	-	MAP/WINE	R030Z-A 338	-	-	-	WI	-	-	-	75?	-	-
1985-W63	2446103.17	1985 Feb 6 1612	Super Loki	-	MAP/WINE	Database	-	-	-	WI	-	-	-	75?	-	-
1985-W63	2446150.23	1985 Mar 25 1735	Super Loki	-	MAP/WINE	R030Z-A 339	-	-	-	WI	-	-	-	75?	-	-
1985-W63	2446150.23	1985 Mar 25 1735	Super Loki	-	MAP/WINE	Database	-	-	-	WI	-	-	-	75?	-	-
1985-W92	2446154.27	1985 Mar 29 1829:00	Super Loki	-	MAP/WINE	R030Z-A 340	-	-	-	WI	-	-	-	75?	-	-
1985-W93	2446157.22	1985 Apr 01 1717:00	Super Loki	-	MAP/WINE	Database	-	-	-	WI	-	-	-	75	-	-
1985-W94	2446157.31	1985 Apr 01 1928:00	Super Loki	-	MAP/WINE	PWH-11D	-	-	-	WI	-	-	-	75	-	-
1985-W94	2446157.31	1985 Apr 01 1928:00	Super Loki	-	MAP/WINE	Database	-	-	-	WI	-	-	-	75	-	-
1985-W67	2446160.14	1985 Apr 4 1523	Super Loki	-	MAP/WINE	PWH-11D	-	-	-	WI	-	-	-	75	-	-
1985-W67	2446160.14	1985 Apr 4 1523	Super Loki	-	MAP/WINE	Database	-	-	-	WI	-	-	-	75	-	-
1985-W64	2446161.94	1985 Apr 5 1036	Super Loki	-	MAP/WINE	R030Z-A 341	-	-	-	WI	-	-	-	75?	-	-
1985-W64	2446161.94	1985 Apr 5 1036	Super Loki	-	MAP/WINE	Database	-	-	-	WI	-	-	-	75?	-	-
1985-W65	2446169.25	1985 Apr 6 1031	Super Loki	-	MAP/WINE	R030Z-A 342	-	-	-	WI	-	-	-	75?	-	-
1985-W65	2446169.25	1985 Apr 6 1031	Super Loki	-	MAP/WINE	Database	-	-	-	WI	-	-	-	75?	-	-
1985-W66	2446171.14	1985 Apr 15 1519	Super Loki	-	MAP/WINE	R030Z-A 343	-	-	-	WI	-	-	-	75?	-	-
1985-W66	2446171.14	1985 Apr 15 1519	Super Loki	-	MAP/WINE	Database	-	-	-	WI	-	-	-	80	-	-
1985-W11	2446175.07	1985 Apr 19 1335:00	Super Loki	-	MAP/WINE	PWH-11D	-	-	-	WI	-	-	-	73	-	-
1985-W127	2446181.28	1985 Apr 25 1845:00	Super Loki	-	MAP/WINE	Database	-	-	-	WI	-	-	-	75?	-	-
1985-W54	2446181.32	1985 Apr 25 1945	Super Loki	-	MAP/WINE	R030Z-A 344	-	-	-	WI	-	-	-	75?	-	-
1985-W55	2446206.22	1985 May 20 1715	Super Loki	-	MAP/WINE	R030Z-A 345	-	-	-	WI	-	-	-	74	-	-
1985-W162	2446206.27	1985 May 20 1822:59	Super Loki	-	MAP/WINE	Database	-	-	-	WI	-	-	-	75?	-	-
1985-W188	2446236.27	1985 Jun 19 1826:59	Super Loki	-	MAP/WINE	Database	-	-	-	WI	-	-	-	69	-	-
1985-W56	2446236.31	1985 Jun 19 1925	Super													

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Launch_Mission	FlightCode	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee_Km	Range_Km	Dest
1985-1658	2446292.30	1985 Aug 14 1915	Super Loki	-	-	R000Z-A 350	-	-	-	WI	-	-	-	75?	-	-
1985-1659	2446315.57	1985 Sep 10 0139:00	Super Loki	-	-	PW-11D Datasonde	-	-	-	WI	-	-	-	76	-	-
1985-1660	2446327.31	1985 Sep 18 1930	Super Loki	-	-	R000Z-A 351	-	-	-	WI	-	-	-	75?	-	-
1985-1661	2446327.35	1985 Nov 16 2030:00	Super Loki	-	-	Datasonde	-	-	-	WI	-	-	-	72	-	-
1985-1662	2446386.01	1985 Nov 16 1217:00	Super Loki	-	-	-	-	-	-	WI	-	-	-	77	-	-
1985-1663	2446409.53	1985 Dec 10 0050:00	Super Loki	-	-	PW-11D	-	-	-	WI	-	-	-	70	-	-
1985-1664	2446410.50	1985 Dec 11 0000:00	Super Loki	-	-	PW-11D	-	-	-	WI	-	-	-	75	-	-
1985-1665	2446416.50	1985 Dec 17 0000:00	Super Loki	-	-	PW-11D	-	-	-	WI	-	-	-	76	-	-
1985-1666	2446416.54	1985 Dec 17 0100:00	Super Loki	-	-	PW-11D	-	-	-	WI	-	-	-	112	-	-
1985-1667	2446416.56	1985 Dec 17 0130:00	Super Loki	-	-	PW-11D	-	-	-	WI	-	-	-	79	-	-
1985-1668	2446417.54	1985 Dec 18 0055:00	Super Loki	-	-	PW-11D	-	-	-	WI	-	-	-	115	-	-
1985-1669	2446417.56	1985 Dec 18 0120:00	Super Loki	-	-	PW-11D	-	-	-	WI	-	-	-	80	-	-
1985-1670	2446438.43	1986 Jul 26 2214:30	Super Loki	-	-	PW-12A Robin	-	-	-	ESK	L	-	-	116	-	-
1985-1671	2446438.48	1986 Jul 26 2328:10	Super Loki	-	-	PW-12A Robin	-	-	-	ESK	L	-	-	110	-	-
1985-1672	2446438.50	1986 Jul 27 0006:00	Super Loki	-	-	PW-12A Robin	-	-	-	ESK	L	-	-	110	-	-
1985-1673	2446438.53	1986 Jul 27 0050:00	Super Loki	-	-	PW-12A Robin	-	-	-	ESK	L	-	-	118	-	-
1985-1674	2446438.54	1986 Jul 27 2214:30	Super Loki	-	-	PW-12A Robin	-	-	-	ESK	L	-	-	120	-	-
1985-1675	2446439.47	1986 Jul 27 2316:00	Super Loki	-	-	PW-12A Robin	-	-	-	ESK	L	-	-	117	-	-
1987-1423	2446562.00	1987 Jun 15 1157	Super Loki	-	-	Sphere	-	-	-	AUD	-	-	-	07	-	-
1987-1424	2446569.02	1987 Jun 22 1230	Super Loki	-	-	Chaff	-	-	-	AUD	-	-	-	84	-	-
1987-1425	2446569.05	1987 Jun 22 1311	Super Loki	-	-	Chaff	-	-	-	AUD	-	-	-	80?	-	-
1987-1426	2446970.97	1987 Jun 24 1120	Super Loki	-	-	Chaff	-	-	-	AUD	-	-	-	83	-	-
1987-1427	2446971.00	1987 Jun 24 1153	Super Loki	-	-	Chaff	-	-	-	AUD	-	-	-	95	-	-
1987-1428	2446971.02	1987 Jun 24 1225	Super Loki	-	-	Chaff	-	-	-	AUD	-	-	-	83?	-	-
1987-1429	2446971.06	1987 Jun 24 1240	Super Loki	-	-	Chaff	-	-	-	AUD	-	-	-	97	-	-
1987-1430	2446971.06	1987 Jun 24 1353	Super Loki	-	-	Chaff	-	-	-	AUD	-	-	-	89	-	-
1987-1431	2446972.98	1987 Jun 26 1127	Super Loki	-	-	Chaff	-	-	-	AUD	-	-	-	95	-	-
1987-1432	2446973.00	1987 Jun 26 1201	Super Loki	-	-	Chaff	-	-	-	AUD	-	-	-	83?	-	-
1987-1433	2446973.03	1987 Jun 26 1244	Super Loki	-	-	Chaff	-	-	-	AUD	-	-	-	96	-	-
1987-1434	2446975.07	1987 Jun 26 1536	Super Loki	-	-	Chaff	-	-	-	AUD	-	-	-	86	-	-
1987-1435	2446975.39	1987 Jul 01 2128:00	Super Loki	-	-	Light Chaff	-	-	-	AUD	-	-	-	85	-	-
1987-1436	2446975.43	1987 Jul 01 2315:00	Super Loki	-	-	Light Chaff	-	-	-	AUD	-	-	-	82	-	-
1987-1437	2446975.46	1987 Jul 01 2334:00	Super Loki	-	-	Light Chaff	-	-	-	AUD	-	-	-	86	-	-
1987-1438	2446975.49	1987 Jul 01 2349:00	Super Loki	-	-	Light Chaff	-	-	-	AUD	-	-	-	84	-	-
1987-1439	2446976.57	1987 Jul 14 0952:00	Super Loki	-	-	Light Chaff	-	-	-	AUD	-	-	-	85	-	-
1987-1440	2446976.59	1987 Jul 14 0943:00	Super Loki	-	-	Light Chaff	-	-	-	AUD	-	-	-	86	-	-
1987-1441	2446976.90	1987 Jul 14 1013:00	Super Loki	-	-	Light Chaff	-	-	-	AUD	-	-	-	80	-	-
1987-1442	2446976.96	1987 Jul 14 1106:00	Super Loki	-	-	Light Chaff	-	-	-	AUD	-	-	-	90	-	-
1987-1443	2446981.00	1987 Jul 14 1203:00	Super Loki	-	-	Light Chaff	-	-	-	AUD	-	-	-	94	-	-
1987-1444	2446981.05	1987 Jul 14 1307:00	Super Loki	-	-	Light Chaff	-	-	-	AUD	-	-	-	94	-	-
1987-1445	2446981.60	1987 Jul 15 0223:00	Super Loki	-	-	Light Chaff	-	-	-	AUD	-	-	-	64	-	-
1987-1446	2446981.65	1987 Jul 15 0306:00	Super Loki	-	-	Light Chaff	-	-	-	AUD	-	-	-	85	-	-
1987-1447	2446981.95	1987 Jul 15 2030:00	Super Loki	-	-	Light Chaff	-	-	-	AUD	-	-	-	89	-	-
1987-1448	2446982.35	1987 Jul 15 2117:00	Super Loki	-	-	Light Chaff	-	-	-	AUD	-	-	-	87	-	-
1987-1449	2446982.42	1987 Jul 15 2201:00	Super Loki	-	-	Light Chaff	-	-	-	AUD	-	-	-	97	-	-
1987-1450	2446982.44	1987 Jul 15 2204:00	Super Loki	-	-	Light Chaff	-	-	-	AUD	-	-	-	86	-	-
1987-1451	2446982.45	1987 Jul 15 2205:00	Super Loki	-	-	Light Chaff	-	-	-	AUD	-	-	-	86	-	-
1987-1452	2447003.76	1987 Jul 27 0654:00	Super Loki	-	-	Light Chaff	-	-	-	AUD	-	-	-	77	-	-
1987-1453	2447003.92	1987 Oct 15 0957:00	Super Loki	-	-	Light Chaff	-	-	-	AUD	-	-	-	87	-	-
1987-1454	2447003.98	1987 Oct 15 1120:00	Super Loki	-	-	Falling Sphere	-	-	-	AUD	-	-	-	83	-	-
1987-1455	2447003.98	1987 Oct 15 1131:00	Super Loki	-	-	Falling Sphere	-	-	-	AUD	-	-	-	86	-	-
1987-1456	2447004.06	1987 Oct 15 1322:00	Super Loki	-	-	Falling Sphere	-	-	-	AUD	-	-	-	84	-	-
1987-1457	2447004.06	1987 Oct 15 2208:00	Super Loki	-	-	Falling Sphere	-	-	-	AUD	-	-	-	90	-	-
1987-1458	2447009.42	1987 Oct 21 2228:00	Super Loki	-	-	Falling Sphere	-	-	-	AUD	-	-	-	81	-	-
1987-1459	2447009.44	1987 Oct 21 2227:00	Super Loki	-	-	Falling Sphere	-	-	-	AUD	-	-	-	82	-	-
1987-1460	2447009.44	1987 Oct 28 0011:00	Super Loki	-	-	Falling Sphere	-	-	-	AUD	-	-	-	92	-	-
1987-1461	2447009.51	1987 Oct 28 0031:00	Super Loki	-	-	Falling Sphere	-	-	-	AUD	-	-	-	91	-	-
1987-1462	2447009.52	1987 Nov 01 1430:00	Super Loki	-	-	Chaff Test 2	-	-	-	AUD	-	-	-	82	-	-
1987-1463	2447111.53	1987 Nov 12 0041:00	Super Loki	-	-	Falling Sphere	-	-	-	AUD	-	-	-	95	-	-
1987-1464	2447111.54	1987 Nov 12 0101:00	Super Loki	-	-	Falling Sphere	-	-	-	AUD	-	-	-	90	-	-
1987-1465	2447111.54	1988 Oct 31 2017	Super Loki	-	-	-	-	-	-	AUD	-	-	-	75?	-	-
1987-1466	2447111.54	1988 Oct 31 2017	Super Loki	-	-	-	-	-	-	PK	-	-	-	75?	-	-
1987-1467	2447167.35	1988 Nov 1 2025	Super Loki	-	-	-	-	-	-	PK	-	-	-	75?	-	-
1987-1468	2447168.42	1988 Nov 2 2237	Super Loki	-	-	-	-	-	-	PK	-	-	-	75?	-	-
1987-1469	2447171.44	1988 Nov 20 1939	Super Loki	-	-	-	-	-	-	PK	-	-	-	75?	-	-
1987-1470	2447238.32	1988 Jul 26 1922	Super Loki	-	-	-	-	-	-	PK	-	-	-	75?	-	-
1987-1471	2447238.37	1988 Jul 26 2053	Super Loki	-	-	-	-	-	-	PK	-	-	-	75?	-	-
1987-1472	2447238.28	1988 Jul 27 1849	Super Loki	-	-	-	-	-	-	PK	-	-	-	75?	-	-
1987-1473	2447238.27	1988 Jul 28 1827	Super Loki	-	-	-	-	-	-	PK	-	-	-	75?	-	-
1987-1474	2447241.23	1989 Mar 2 1738	Super Loki	-	-	-	-	-	-	PK	-	-	-	75?	-	-
1987-1475	2447241.23	1989 Mar 11 2121:00	Super Loki	-	-	-	-	-	-	PK	-	-	-	75?	-	-
1987-1476	2447241.23	1989 Mar 11 2129:00	Super Loki	-	-	-	-	-	-	PK	-	-	-	66	-	-
1987-1477	2447241.23	1989 Mar 15 2140	Super Loki	-	-	-	-	-	-	PK	-	-	-	75?	-	-
1987-1478	2447241.23	1989 Mar 16 0431	Super Loki	-	-	-	-	-	-	PK	-	-	-	75?	-	-
1987-1479	2447241.23	1989 Mar 16 0431	Super Loki	-	-	-	-	-	-	PK	-	-	-	75?	-	-
1987-1480	2447241.23	1989 Mar 17 1310	Super Loki	-	-	-	-	-	-	PK	-	-	-	75?	-	-
1987-1481	2447241.23	1989 Mar 18 2109	Super Loki	-	-	-	-	-	-	PK	-	-	-	75?	-	-
1987-1482	2447241.23	1989 Mar 18 2115:40	Super Loki	-	-	-	-	-	-	PK	-	-	-	75?	-	-
1987-1483	2447241.23	1989 Mar 19 0407:00	Super Loki	-	-	-	-	-	-	PK	-	-	-	77	-	-
1987-1484	2447241.23	1989 Mar 22 2056	Super Loki	-	-	-	-	-	-	PK	-	-	-	52	-	-
1987-1485	2447241.23	1989 Mar 23 0345	Super Loki	-	-	-	-	-	-	PK	-	-	-	90?	-	-
1987-1486	2447241.23	1989 Mar 23 2117	Super Loki	-	-	-	-	-	-	PK	-	-	-	90?	-	-
1987-1487	2447241.23	1989 Mar 23 2117	Super Loki	-	-	-	-	-	-	PK	-	-	-	90?	-	-
1987-1488	2447241.23	1989 Mar 23 2117	Super Loki	-	-	-	-	-	-	PK	-	-	-	90?	-	-
1987-1489	2447241.23	1989 Mar 23 2117	Super Loki	-	-	-	-	-	-	PK	-	-	-	90?	-	-
1987-1490	2447241.23	1989 Mar 23 2117	Super Loki	-	-	-	-	-	-	PK	-	-	-	90?	-	-
1987-1491	2447241.23	1989 Mar 23 2117	Super Loki	-	-	-	-	-	-	PK	-	-	-	90?	-	-
1987-1492	2447241.23	1989 Mar 23 2117	Super Loki	-	-	-	-	-	-	PK	-	-	-	90?	-	-
1987-1493	2447241.23	1989 Mar 23 2117	Super Loki	-	-	-	-	-	-	PK	-	-	-	90?	-	-
1987-1494	2447241.23	1989 Mar 23 2117	Super Loki	-	-	-	-	-	-	PK	-	-	-	90?	-	-
1987-1495	2447241.23	1989 Mar 23 2117	Super Loki	-	-	-	-	-	-	PK	-	-	-	90?	-	-
1987-1496	2447241.23	1989 Mar 23 2117	Super Loki	-	-	-	-	-	-	PK	-	-	-	90?	-	-
1987-1497	2447241.23	1989 Mar 23 2117	Super Loki	-	-	-	-	-	-	PK	-	-	-	90?	-	-
1987-1498																



Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Mission	FlightCode	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee_Rm	Range_Rm	Dest
1997-449	2450670.47	1997 Aug 9 2312	Super Loka	-	Datasonde	CRISTA	-	-	-	WI	-	-	-	75?	-	-
1997-450	2450671.39	1997 Aug 10 2121:20	Super Loka	-	Datasonde	CRISTA	-	-	-	WI	-	-	-	75	-	-
1997-451	2450671.40	1997 Aug 10 2130:10	Super Loka	-	Falling Sphere	CRISTA	-	-	-	WI	-	-	-	111	-	-
1997-452	2450672.07	1997 Aug 11 1338	Super Loka	-	Falling Sphere	CRISTA	-	-	-	WI	-	-	-	107	-	-
1997-453	2450672.38	1997 Aug 11 2110	Super Loka	-	Datasonde	CRISTA	-	-	-	WI	-	-	-	78	-	-
1997-454	2450672.39	1997 Aug 11 2119	Super Loka	-	Datasonde	CRISTA	-	-	-	WI	-	-	-	75	-	-
1997-455	2450672.40	1997 Aug 11 2134	Super Loka	-	Falling Sphere	CRISTA	-	-	-	WI	-	-	-	106	-	-
1997-456	2450673.01	1997 Aug 12 1210	Super Loka	-	Falling Sphere	CRISTA	-	-	-	WI	-	-	-	111	-	-
1997-457	2450673.02	1997 Aug 12 1228:06	Super Loka	-	Falling Sphere	CRISTA	-	-	-	WI	-	-	-	111	-	-
1997-458	2450673.40	1997 Aug 12 2130	Super Loka	-	Datasonde	CRISTA	-	-	-	WI	-	-	-	118	-	-
1997-459	2450673.40	1997 Aug 12 2141	Super Loka	-	Falling Sphere	CRISTA	-	-	-	WI	-	-	-	77	-	-
1997-460	2450673.40	1997 Aug 12 2141	Super Loka	-	Sphere	CRISTA	-	-	-	WI	-	-	-	112	-	-
1997-461	2450674.08	1997 Aug 13 1380	Super Loka	-	Sphere	CRISTA	-	-	-	WI	-	-	-	117	-	-
1997-462	2450674.08	1997 Aug 13 1385	Super Loka	-	Datasonde	CRISTA	-	-	-	WI	-	-	-	121	-	-
1997-463	2450674.39	1997 Aug 13 2123	Super Loka	-	Datasonde	CRISTA	-	-	-	WI	-	-	-	80	-	-
1997-464	2450674.40	1997 Aug 13 2140	Super Loka	-	Sphere	CRISTA	-	-	-	WI	-	-	-	121	-	-
1997-465	2450674.40	1997 Aug 13 2140	Super Loka	-	Sphere	CRISTA	-	-	-	WI	-	-	-	115	-	-
1997-466	2450675.02	1997 Aug 14 1222	Super Loka	-	Datasonde	CRISTA	-	-	-	WI	-	-	-	75	-	-
1997-467	2450675.39	1997 Aug 14 2127:10	Super Loka	-	-	-	-	-	-	WI	-	-	-	40?	-	-
1997-468	2450675.95	1997 Aug 15 1053	Super Loka	-	-	-	-	-	-	WI	-	-	-	121	-	-
1997-469	2450676.35	1997 Aug 15 2025	Super Loka	-	-	-	-	-	-	WI	-	-	-	78	-	-
1997-470	2450676.35	1997 Aug 16 1930	Super Loka	-	-	-	-	-	-	WI	-	-	-	74	-	-
1997-471	2450676.31	1997 Aug 18 1940	Super Loka	-	-	-	-	-	-	WI	-	-	-	74	-	-
1997-472	2450676.32	1997 Aug 18 1940	Super Loka	-	-	-	-	-	-	WI	-	-	-	74	-	-
1997-473	2450676.32	1997 Aug 18 1940	Super Loka	-	-	-	-	-	-	WI	-	-	-	74	-	-
1997-474	2450752.14	1997 Oct 30 1524:07	Super Loka	-	DLR KO-SL-227	Ariane Met	-	-	-	CSG	-	-	-	75?	-	-
1997-475	2450752.21	1997 Oct 30 1700	Super Loka	-	DLR KO-SL-228	Ariane Met	-	-	-	CSG	-	-	-	75?	-	-
1998-476	2450975.52	1998 Mar 7 0033	Super Loka	-	Chaff	-	-	-	-	ESR	L	-	-	100?	-	-
1998-477	2450975.56	1998 Mar 7 0124	Super Loka	-	Chaff	-	-	-	-	ESR	L	-	-	100?	-	-
1998-478	2450940.50	1998 May 7	Super Loka	-	-	-	-	-	-	ESR	L	-	-	100?	-	-
1998-479	2451107.50	1998 Oct 21	Super Loka	-	-	THAAD prep	-	-	-	WS	-	-	-	75?	-	-
1998-480	2451109.48	1998 Oct 21 2330?	Super Loka	-	-	Ariane Met	-	-	-	CSG	-	-	-	80?	-	-
1998-481	2451109.48	1998 Oct 22 2330?	Super Loka	-	-	PHYSK support	-	-	-	CSG	-	-	-	90?	-	-
1998-482	2451109.52	1998 Oct 23 0030?	Super Loka	-	-	PHYSK support	-	-	-	CSG	-	-	-	90?	-	-
1998-483	2451364.46	1999 Jul 4 2355:00	Super Loka	-	MD-CH-01	-	-	-	-	CCA	-	-	-	90?	-	-
1999-404	2451365.60	1999 Jul 6 0729	Super Loka	-	MD-CH-11	-	-	-	-	CCA	-	-	-	90?	-	-
1999-412	2451375.90	1999 Jul 16 0930	Super Loka	-	MD-CH-19	-	-	-	-	AUD	-	-	-	90?	-	-
1999-419	2451375.90	2000 Jan 21 1622	Super Loka	-	MD-CH-19	-	-	-	-	AUD	-	-	-	90?	-	-
2000-405	2451569.18	2000 Jan 21 1622	Super Loka	-	Litestar	-	-	-	-	CC	-	-	-	75?	-	-
2000-452	2451569.33	2000 Dec 12 2000	Super Loka	-	Litestar	-	-	-	-	CC	-	-	-	75?	-	-
2000-453	2451592.17	2000 Dec 13 1600	Super Loka	-	Litestar	-	-	-	-	CC	-	-	-	75?	-	-
2001-415	2452262.93	2001 Dec 15 1020:30	Super Loka	-	Wind	-	-	-	-	ESR	L	-	-	75?	-	-
2001-416	2452269.00	2001 Dec 15 1133:30	Super Loka	-	Wind	-	-	-	-	ESR	L	-	-	110?	-	-
2001-417	2452269.63	2001 Dec 16 0911:30	Super Loka	-	Falling Sphere	-	-	-	-	ESR	L	-	-	75?	-	-
2001-417	2452269.74	2001 Dec 16 0943	Super Loka	-	Falling Sphere	-	-	-	-	ESR	L	-	-	75?	-	-
2001-418	2452269.76	2001 Dec 16 0918	Super Loka	-	Falling Sphere	-	-	-	-	ESR	L	-	-	75?	-	-
2002-405	2452454.22	2002 Jun 28 1710:00	Super Loka	-	-	-	-	-	-	AUD	-	-	-	75?	-	-
2002-406	2452454.22	2002 Jul 1 1720:00	Super Loka	-	-	-	-	-	-	AUD	-	-	-	75?	-	-
2002-407	2452457.31	2002 Jul 1 1820:00	Super Loka	-	-	-	-	-	-	AUD	-	-	-	75?	-	-
2002-415	2452457.53	2002 Jul 2 0950:00	Super Loka	-	-	-	-	-	-	AUD	-	-	-	75?	-	-
2002-416	2452457.64	2002 Jul 2 0950:00	Super Loka	-	-	-	-	-	-	AUD	-	-	-	75?	-	-
2002-417	2452458.30	2002 Jul 2 0945:00	Super Loka	-	-	-	-	-	-	AUD	-	-	-	75?	-	-
2002-417	2452458.30	2002 Jul 4 2045:00	Super Loka	-	-	-	-	-	-	AUD	-	-	-	75?	-	-
2002-421	2452460.43	2002 Jul 4 2045:00	Super Loka	-	-	-	-	-	-	AUD	-	-	-	75?	-	-
2002-427	2452460.67	2002 Jul 5 0400:00	Super Loka	-	-	-	-	-	-	AUD	-	-	-	75?	-	-
2002-428	2452460.71	2002 Jul 5 0500:00	Super Loka	-	-	-	-	-	-	AUD	-	-	-	75?	-	-
2002-429	2452460.71	2002 Jul 5 0500:00	Super Loka	-	-	-	-	-	-	AUD	-	-	-	75?	-	-
2002-430	2452460.71	2002 Jul 5 0500:00	Super Loka	-	-	-	-	-	-	AUD	-	-	-	75?	-	-
2003-437	2452465.12	2003 Jan 13 1449	Super Loka	-	-	-	-	-	-	SAOE-3	-	-	-	110?	-	-
2003-438	2452465.12	2003 Jan 13 1449	Super Loka	-	-	-	-	-	-	SAOE-3	-	-	-	110?	-	-
2003-439	2452465.04	2003 Jan 14 1300	Super Loka	-	-	-	-	-	-	SAOE-3	-	-	-	110?	-	-
2003-440	2452465.04	2003 Jan 14 1400	Super Loka	-	-	-	-	-	-	SAOE-3	-	-	-	110?	-	-
2003-441	2452465.04	2003 Jan 16 1302	Super Loka	-	-	-	-	-	-	SAOE-3	-	-	-	110?	-	-
2003-442	2452465.04	2003 Jan 16 1302	Super Loka	-	-	-	-	-	-	SAOE-3	-	-	-	110?	-	-
2003-443	2452465.04	2003 Jan 17 1300	Super Loka	-	-	-	-	-	-	SAOE-3	-	-	-	110?	-	-
2003-444	2452465.04	2003 Jan 17 1300	Super Loka	-	-	-	-	-	-	SAOE-3	-	-	-	110?	-	-
2003-445	2452465.04	2003 Jan 18 1300	Super Loka	-	-	-	-	-	-	SAOE-3	-	-	-	110?	-	-
2003-446	2452465.04	2003 Jan 19 1300	Super Loka	-	-	-	-	-	-	SAOE-3	-	-	-	110?	-	-
2003-447	2452465.04	2003 Jan 19 1300	Super Loka	-	-	-	-	-	-	SAOE-3	-	-	-	110?	-	-
2003-448	2452465.04	2003 Jan 21 1300	Super Loka	-	-	-	-	-	-	SAOE-3	-	-	-	110?	-	-
2003-449	2452465.04	2003 Jan 21 1300	Super Loka	-	-	-	-	-	-	SAOE-3	-	-	-	110?	-	-
2003-450	2452465.04	2003 Jan 22 1335	Super Loka	-	-	-	-	-	-	SAOE-3	-	-	-	110?	-	-
2003-451	2452465.04	2003 Jan 22 1335	Super Loka	-	-	-	-	-	-	SAOE-3	-	-	-	110?	-	-
2003-452	2452465.04	2003 Jan 23 1315	Super Loka	-	-	-	-	-	-	SAOE-3	-	-	-	110?	-	-
2003-453	2452465.04	2003 Jan 23 1315	Super Loka	-	-	-	-	-	-	SAOE-3	-	-	-	110?	-	-
2003-454	2452465.04	2003 Jan 23 1315	Super Loka	-	-	-	-	-	-	SAOE-3	-	-	-	110?	-	-
2003-455	2452465.04	2003 Jan 23 1315	Super Loka	-	-	-	-	-	-	SAOE-3	-	-	-	110?	-	-
2003-456	2452465.04	2003 Jan 23 1315	Super Loka	-	-	-	-	-	-	SAOE-3	-	-	-	110?	-	-
2003-457	2452465.04	2003 Jan 23 1315	Super Loka	-	-	-	-	-	-	SAOE-3	-	-	-	110?	-	-
2003-458	2452465.04	2003 Jan 24 1403	Super Loka	-	-	-	-	-	-	SAOE-3	-	-	-	110?	-	-
2003-459	2452465.04	2003 Jan 24 1403	Super Loka	-	-	-	-	-	-	SAOE-3	-	-	-	110?	-	-
2003-460	2452465.04	2003 Jan 24 1505	Super Loka	-	-	-	-	-	-	SAOE-3	-	-	-	110?	-	-
2003-461	2452465.13	2003 Jan 24 1600	Super Loka	-	-	-	-	-	-	SAOE-3	-	-	-	110?	-	-
2003-462	2452465.17	2003 Jan 24 1600	Super Loka	-	-	-	-	-	-	SAOE-3	-	-	-	110?	-	-
2003-463	2452465.25	2003 Jan 24 1700	Super Loka	-	-	-	-	-	-	SAOE-3	-	-	-	110?	-	-
2003-464	2452465.25	2003 Jan 24 1800	Super Loka	-	-	-	-	-	-	SAOE-3	-	-	-	110?	-	-
2003-465	2452465.25	2003 Jan 24 1800	Super Loka	-	-	-	-	-	-	SAOE-3	-	-	-	110?	-	-
2003-466	2452465.25	2003 Jan 24 1800	Super Loka	-	-	-	-	-	-	SAOE-3	-	-	-	110?	-	-
2003-467	2452465.25	2003 Jan 24 1800	Super Loka	-	-	-	-	-	-	SAOE-3	-	-	-	110?	-	-
2003-468	2452465.25	2003 Jan 24 1800	Super Loka	-	-	-	-	-	-	SAOE-3	-	-	-	110?	-	-
2003-469	2452465.25	2003 Jan 24 1800	Super Loka	-	-	-	-	-	-	SAOE-3	-	-	-	110?	-	-
2003-470	2452465.25	2003 Jan 24 1800	Super Loka	-	-	-	-	-	-	SAOE-3	-	-	-	110?	-	-
2003-471	2452465.25	2003 Jan 24 1800	Super Loka	-	-	-	-	-	-	SAOE-3	-	-	-	110?	-	-
2003-472	24															



Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Launch_Mission	FlightCode	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee_Km	Range_Km	Dest
2003-754	2452867.31	2003 Jan 27 1926	Super Loki	-	ES03SL317	MP-LFS-	-	-	-	ESR	L	-	-	117	-	-
2003-755	2452867.32	2003 Jan 27 1938	Super Loki	-	ES03SL327	MP-LFS-	-	-	-	ESR	L	-	-	115?	-	-
2003-716	2452868.04	2003 Jan 28 1300	Super Loki	-	ES03SL34	MP-LFS-	-	-	-	ESR	L	-	-	115	-	-
2003-717	2452868.13	2003 Jan 28 1504	Super Loki	-	ES03SL36	MP-LFS-	-	-	-	ESR	L	-	-	116	-	-
2003-718	2452868.16	2003 Jan 28 1557	Super Loki	-	ES03SL36	MP-LFS-	-	-	-	ESR	L	-	-	120	-	-
2003-730	2452868.21	2003 Jan 28 1656	Super Loki	-	ES03SL33?	MP-LFS-	-	-	-	ESR	L	-	-	115	-	-
2003-720	2452868.25	2003 Jan 28 1757	Super Loki	-	ES03SL39	MP-LFS-	-	-	-	ESR	L	-	-	117	-	-
2003-720	2452868.28	2003 Jan 28 1842	Super Loki	-	ES03SL41	MP-LFS-	-	-	-	ESR	L	-	-	108	-	-
2003-722	2452868.32	2003 Jan 29 1300	Super Loki	-	ES03SL42	MP-LFS-	-	-	-	ESR	L	-	-	114	-	-
2003-725	2452869.04	2003 Jan 30 1300	Super Loki	-	-	MP-LFS-	-	-	-	ESR	L	-	-	113	-	-
2003-726	2452870.04	2003 Jan 30 1312	Super Loki	-	-	MP-LFS-	-	-	-	ESR	L	-	-	117	-	-
2003-727	2452870.05	2003 Jan 30 1312	Super Loki	-	-	MP-LFS-	-	-	-	ESR	L	-	-	112	-	-
2003-728	2452870.38	2003 Jan 30 2110	Super Loki	-	-	MP-LFS-	-	-	-	ESR	L	-	-	107	-	-
2003-729	2452870.41	2003 Jan 30 2155	Super Loki	-	-	MP-LFS-	-	-	-	ESR	L	-	-	114	-	-
2003-731	2452870.42	2003 Jan 30 2203	Super Loki	-	-	MP-LFS-	-	-	-	ESR	L	-	-	96	-	-
2003-734	2452880.10	2003 Aug 8 1430	Shadow 1	-	1	Shadow	-	-	-	SPFL	LC47	-	-	110?	-	-
2003-736	2452880.15	2003 Aug 8 1530	Shadow 1	-	2	Shadow	-	-	-	SPFL	LC47	-	-	110?	-	-
2003-738	2452883.50	2003 Aug 12	Super Loki	-	-	Irish School Expt	-	-	-	SPFL	LC47	-	-	110?	-	-
2003-736	2452883.50	2003 Aug 12	Super Loki	-	-	Demo	-	-	-	SPFL	LC47	-	-	60?	-	-
2004-701	2452950.50	2003 Nov 7	Super Loki	-	-	PWJ-10X	-	-	-	SPFL	LC47	-	-	60?	-	-
2004-701	2452950.10	2004 Sep 1 1430	Shadow 1	-	Shadow 1B	-	-	-	-	SPFL	LC47	-	-	110?	-	-
2006-701	2453360.65	2005 Jan 10 0329	Super Loki	-	-	SSC MAGIC support	-	-	-	ESR	L	-	-	85	-	-
2006-702	2453360.75	2005 Jan 10 0600	Super Loki	-	-	SSC MAGIC support	-	-	-	ESR	L	-	-	77	-	-
2006-703	2453360.79	2005 Jan 10 0703	Super Loki	-	-	SSC MAGIC support	-	-	-	ESR	L	-	-	80	-	-
2006-709	2453369.08	2005 Jan 18 1358:00	Super Loki	-	-	ROMA 2005 RWCH05	-	-	-	AUD	-	-	-	100?	-	-
2006-712	2453369.17	2005 Jan 18 1607	Super Loki	-	-	ROMA 2005 RWCH06	-	-	-	AUD	-	-	-	100?	-	-
2006-715	2453369.25	2005 Jan 18 1757	Super Loki	-	-	ROMA 2005 RWCH11	-	-	-	AUD	-	-	-	100?	-	-
2006-716	2453390.69	2005 Jan 20 0916	Super Loki	-	-	ROMA 2005 RWCH14	-	-	-	AUD	-	-	-	100?	-	-
2006-401	2453573.08	2006 May 17 1400	Super Loki	-	-	-	-	-	-	SPFL	LC47	-	-	4?	-	-
2006-701	2453594.93	2006 Jun 6 1020	Super Loki	-	Genesis test	-	-	-	-	WI	-	-	-	60?	-	-
2007-414	2454440.17	2007 Dec 5 1606:25	Shadow 1	-	Shadow 1B	-	-	-	-	WS	-	-	-	50?	-	-
2008-573	2454732.06	2008 Sep 22 1330	Super Loki	-	-	Space Express	-	-	-	SPFL	LC47	-	-	108	-	-
2009-521	2454936.97	2009 Apr 17 1118	FalconLaunch	-	FalconLaunch 7	-	-	-	-	WS	-	-	-	100?	-	-
2013-567	2456469.50	2013 Jun 26	Super Loki	-	-	WADIS S11	-	-	-	AUD	-	-	-	100?	-	-
2013-569	2456470.50	2013 Jun 27	Super Loki	-	-	WADIS S12	-	-	-	AUD	-	-	-	100?	-	-
2013-570	2456470.50	2013 Jun 27	Super Loki	-	-	WADIS S13	-	-	-	AUD	-	-	-	100?	-	-
2013-571	2456470.50	2013 Jun 27	Super Loki	-	-	WADIS S14	-	-	-	AUD	-	-	-	100?	-	-
2013-572	2456471.50	2013 Jun 27	Super Loki	-	-	WADIS S15	-	-	-	AUD	-	-	-	100?	-	-
2013-573	2456471.50	2013 Jun 28	Super Loki	-	-	WADIS S16	-	-	-	AUD	-	-	-	100?	-	-
2013-574	2456472.50	2013 Jun 28	Super Loki	-	-	WADIS S17	-	-	-	AUD	-	-	-	100?	-	-
2013-575	2456472.50	2013 Jun 28	Super Loki	-	-	WADIS S18	-	-	-	AUD	-	-	-	100?	-	-
2013-576	2456473.50	2013 Jun 28	Super Loki	-	-	WADIS S19	-	-	-	AUD	-	-	-	100?	-	-
2013-577	2456474.50	2013 Jul 1	Super Loki	-	-	WADIS S18	-	-	-	AUD	-	-	-	100?	-	-
2013-577	2456475.50	2013 Jul 2	Super Loki	-	-	WADIS S19	-	-	-	AUD	-	-	-	100?	-	-
2013-578	2456476.50	2013 Jul 3	Super Loki	-	-	WADIS S110	-	-	-	AUD	-	-	-	100?	-	-











Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	OrbPay	Agency	Launch_Code	Group	Category	LTCite	Cite	Notes
1976-W768	2442918.23	1976 May 19 17:34:00	Super Loki	-	T 1-8286	0.000	WFC	SU	WFF/Krueger	Aeron	WDCRF	-	-
1976-W763	2442918.32	1976 May 19 19:37:00	Super Loki	-	T 1-8288	0.000	WFC	SU	PSU/Rale	Ionos	WDCRF	-	-
1976-W768	2442919.21	1976 May 20 17:02:00	Super Loki	-	T 1-8287	0.000	WFC	SU	WFF/Krueger	Aeron	WDCRF	-	-
1976-W812	2442929.50	1976 Jun	Super Loki	-	-	0.000	MRN	SS	USAF/6WW	Nesao	FC	-	-
1976-W813	2442929.50	1976 Jun	Super Loki	-	-	0.000	MRN	SS	USAF/6WW	Nesao	FC	-	-
1976-W814	2442929.50	1976 Jun	Super Loki	-	-	0.000	MRN	SS	USAF/6WW	Nesao	FC	-	-
1976-W815	2442929.50	1976 Jun	Super Loki	-	-	0.000	MRN	SS	USAF/6WW	Nesao	FC	-	-
1976-S021	2442932.14	1976 Jun 2 16:23	Super Loki	-	-	0.000	WFC	SS	USAF/6WW	Nesao	FC	-	-
1976-W908	2442933.21	1976 Jun 23 17:01:00	Super Loki	-	T 1-8332	0.000	WFC	SU	WFF/Krueger	Aeron/Test	CR-2968	-	-
1976-W924	2442959.11	1976 Jun 29 14:37:00	Super Loki	-	T 1-8289	0.000	WFC	SU	WFF/Krueger	Aeron	WDCRF	-	-
1976-W981	2442974.25	1976 Jul 14 17:54:00	Super Loki	-	T 1-8333	0.000	WFC	SU	WFF/Krueger	Aeron	WDCRF	-	-
1976-W1054	2442990.50	1976 Aug	Super Loki	-	-	0.000	MRN	SS	USAF/6WW	Nesao	FC	-	-
1976-W1055	2442990.50	1976 Aug	Super Loki	-	-	0.000	MRN	SS	USAF/6WW	Nesao	FC	-	-
1976-W1056	2442990.50	1976 Aug	Super Loki	-	-	0.000	MRN	SS	USAF/6WW	Nesao	FC	-	-
1976-W1057	2442990.50	1976 Aug	Super Loki	-	-	0.000	MRN	SS	USAF/6WW	Nesao	FC	-	-
1976-W1058	2442990.50	1976 Aug	Super Loki	-	-	0.000	MRN	SS	USAF/6WW	Nesao	FC	-	-
1976-W1163	2443015.12	1976 Aug 24 14:55:00	Super Loki	-	T 1-8439	0.000	GSFC	SU	PSU/Rale	Ionos	WDCRF	-	-
1976-W1190	2443016.11	1976 Aug 25 14:45:00	Super Loki	-	T 1-8440	0.000	GSFC	SU	PSU/Rale	Ionos	WDCRF	-	-
1976-W1197	2443017.12	1976 Aug 26 14:57:00	Super Loki	-	T 1-8437	0.000	GSFC	SU	PSU/Rale	Ionos	WDCRF	-	-
1976-W1200	2443017.17	1976 Aug 26 16:04:00	Super Loki	-	T 1-8450	0.000	GSFC	SU	PSU/Rale	Ionos	WDCRF	-	-
1976-W1216	2443021.50	1976 Sep	Super Loki	-	-	0.000	MRN	SS	USAF/6WW	Nesao	FC	-	-
1976-W1217	2443021.50	1976 Sep	Super Loki	-	-	0.000	MRN	SS	USAF/6WW	Nesao	FC	-	-
1976-W1218	2443021.50	1976 Sep	Super Loki	-	-	0.000	MRN	SS	USAF/6WW	Nesao	FC	-	-
1976-W1219	2443021.50	1976 Sep	Super Loki	-	-	0.000	MRN	SS	USAF/6WW	Nesao	FC	-	-
1976-W1279	2443031.09	1976 Sep 09 14:16:00	Super Loki	-	T 1-8454	0.000	GSFC	SU	PSU/Rale	Ionos	WDCRF	-	-
1976-W1282	2443031.15	1976 Sep 09 15:30:00	Super Loki	-	T 1-8455	0.000	GSFC	SU	PSU/Rale	Ionos	WDCRF	-	-
1976-W1359	2443044.17	1976 Sep 22 16:00:00	Super Loki	-	T 1-8401	0.000	WFF	SU	WFF/Krueger	Aeron	WDCRF	-	-
1976-W1379	2443050.22	1976 Sep 26 19:47:00	Super Loki	-	TH1-8521	0.000	WFF	SU	WFF/Krueger	Aeron	WDCRF	-	-
1976-W1393	2443051.50	1976 Oct	Super Loki	-	-	0.000	MRN	SS	USAF/6WW	Nesao	FC	-	-
1976-W1394	2443051.50	1976 Oct	Super Loki	-	-	0.000	MRN	SS	USAF/6WW	Nesao	FC	-	-
1976-W1396	2443051.50	1976 Oct	Super Loki	-	-	0.000	MRN	SS	USAF/6WW	Nesao	FC	-	-
1976-W1397	2443051.50	1976 Oct	Super Loki	-	-	0.000	MRN	SS	USAF/6WW	Nesao	FC	-	-
1976-W1413	2443073.21	1976 Oct 01 19:15:00	Super Loki	-	TH1-8522	0.000	WFF	SU	WFF/Krueger	Aeron	WDCRF	-	-
1976-W1505	2443073.21	1976 Oct 21 17:00:00	Super Loki	-	T 1-8402	0.000	WFF	SU	WFF/Krueger	Aeron	WDCRF	-	-
1976-W1554	2443082.50	1976 Nov	Super Loki	-	-	0.000	MRN	SS	USAF/6WW	Nesao	FC	-	-
1976-W1555	2443082.50	1976 Nov	Super Loki	-	-	0.000	MRN	SS	USAF/6WW	Nesao	FC	-	-
1976-W1556	2443082.50	1976 Nov	Super Loki	-	-	0.000	MRN	SS	USAF/6WW	Nesao	FC	-	-
1976-W1611	2443093.01	1976 Nov 10 12:15:00	Super Loki	-	T 1-8404	0.000	WFF	SU	WFF/Krueger	Aeron	WDCRF	-	-
1976-W1626	2443094.01	1976 Nov 11 12:16:00	Super Loki	-	T 1-8407	0.000	WFF	SU	WFF/Krueger	Aeron	WDCRF	-	-
1976-W1625	2443094.05	1976 Nov 11 16:00:00	Super Loki	-	T 1-8403	0.000	WFF	SU	WFF/Krueger	Aeron	WDCRF	-	-
1976-W1667	2443100.13	1976 Nov 17 16:53:00	Super Loki	-	T 1-8406	0.000	WFF	SU	WFF/Krueger	Aeron	WDCRF	-	-
1976-W1756	2443117.04	1976 Dec 04 12:53:00	Super Loki	-	T 1-8405	0.000	WFF	SU	WFF/Krueger	Aeron	WDCRF	-	-
1976-W1772	2443117.09	1976 Dec 04 14:59:00	Super Loki	-	ELIGHT-141	0.000	WFF	SS	WFF/Krueger	Aeron	WDCRF	-	-
1976-W1783	2443119.59	1976 Dec 06 14:10:00	Super Loki	-	ELIGHT-142	0.000	WFF	SS	WFF/Krueger	Aeron	WDCRF	-	-
1976-W1795	2443128.25	1976 Dec 12 18:00:00	Super Loki	-	-	0.000	MRN	SS	USAF/6SH	Nesao	FC	-	-
1976-W1846	2443128.35	1976 Dec 13 19:08:00	Super Loki	-	T 1-8412	0.000	WFF	SS	USAF/6SH	Nesao	FC	-	-
1976-W1845	2443128.35	1976 Dec 13 20:17:00	Super Loki	-	T 1-8413	0.000	WFF	SS	USAF/6SH	Nesao	FC	-	-
1976-W1860	2443131.14	1976 Dec 22 15:14:59	Super Loki	-	TH-8589	0.000	WFF	SS	WFF/Krueger	Aeron	WDCRF	-	-
1976-W1863	2443131.17	1976 Dec 22 16:04:00	Super Loki	-	T 1-8408	0.000	WFF	SS	WFF/Krueger	Aeron	WDCRF	-	-
1977-W02	2443143.50	1977 Jan	Super Loki	-	-	0.000	MRN	SS	USAF/6SH	Nesao	FC	-	-
1977-W03	2443143.50	1977 Jan	Super Loki	-	-	0.000	MRN	SS	USAF/6SH	Nesao	FC	-	-
1977-W04	2443143.50	1977 Jan	Super Loki	-	-	0.000	MRN	SS	USAF/6SH	Nesao	FC	-	-
1977-W05	2443143.50	1977 Jan	Super Loki	-	-	0.000	MRN	SS	USAF/6SH	Nesao	FC	-	-
1977-W361	2443160.98	1977 Jan 17 11:36:00	Super Loki	-	INTA SLM-7701	0.000	INTA	SS	INTA	Aeron	ELAREN	-	-
1977-W362	2443162.98	1977 Jan 19 11:33:00	Super Loki	-	INTA SLM-7702	0.000	INTA	SS	INTA	Aeron	ELAREN	-	-
1977-W363	2443163.01	1977 Jan 19 12:08:00	Super Loki	-	INTA SLM-7703	0.000	INTA	SS	INTA	Aeron	ELAREN	-	-
1977-W1123	2443163.15	1977 Jan 19 15:35:59	Super Loki	-	-	0.000	MRN	SS	-	Mesao	DST-5850	-	-
1977-W364	2443163.23	1977 Jan 19 17:30:00	Super Loki	-	T 1-8414	0.000	WFF	SS	WFF/Krueger	Aeron	WDCRF	-	-
1977-W365	2443164.98	1977 Jan 21 11:34:00	Super Loki	-	INTA SLM-7704	0.000	INTA	SS	INTA	Aeron	ELAREN	-	-
1977-W366	2443167.98	1977 Jan 24 11:31:00	Super Loki	-	INTA SLM-7705	0.000	INTA	SS	INTA	Aeron	ELAREN	-	-
1977-W367	2443168.00	1977 Jan 24 12:00:00	Super Loki	-	INTA SLM-7706	0.000	INTA	SS	INTA	Aeron	ELAREN	-	-
1977-W368	2443169.98	1977 Jan 26 11:34:00	Super Loki	-	INTA SLM-7707	0.000	INTA	SS	INTA	Aeron	ELAREN	-	-
1977-W369	2443170.01	1977 Jan 26 12:21:00	Super Loki	-	INTA SLM-7708	0.000	INTA	SS	INTA	Aeron	ELAREN	-	-
1977-W370	2443170.01	1977 Jan 28 11:33:00	Super Loki	-	INTA SLM-7709	0.000	INTA	SS	INTA	Aeron	ELAREN	-	-
1977-W371	2443175.00	1977 Jan 31 11:55:00	Super Loki	-	INTA SLM-7710	0.000	INTA	SS	INTA	Aeron	ELAREN	-	-
1977-W225	2443174.50	1977 Feb	Super Loki	-	-	0.000	MRN	SS	USAF/6SH	Nesao	FC	-	-
1977-W416	2443174.50	1977 Feb	Super Loki	-	-	0.000	MRN	SS	USAF/6SH	Nesao	FC	-	-
1977-W417	2443174.50	1977 Feb	Super Loki	-	-	0.000	MRN	SS	USAF/6SH	Nesao	FC	-	-
1977-W418	2443174.50	1977 Feb	Super Loki	-	-	0.000	MRN	SS	USAF/6SH	Nesao	FC	-	-
1977-W419	2443174.50	1977 Feb	Super Loki	-	-	0.000	MRN	SS	USAF/6SH	Nesao	FC	-	-
1977-W420	2443174.50	1977 Feb	Super Loki	-	-	0.000	MRN	SS	USAF/6SH	Nesao	FC	-	-
1977-W421	2443174.50	1977 Feb	Super Loki	-	-	0.000	MRN	SS	USAF/6SH	Nesao	FC	-	-
1977-W422	2443174.50	1977 Feb	Super Loki	-	-	0.000	MRN	SS	USAF/6SH	Nesao	FC	-	-
1977-W423	2443174.50	1977 Feb	Super Loki	-	-	0.000	MRN	SS	USAF/6SH	Nesao	FC	-	-
1977-W424	2443174.50	1977 Feb	Super Loki	-	-	0.000	MRN	SS	USAF/6SH	Nesao	FC	-	-
1977-W425	2443174.50	1977 Feb	Super Loki	-	-	0.000	MRN	SS	USAF/6SH	Nesao	FC	-	-
1977-W426	2443174.50	1977 Feb	Super Loki	-	-	0.000	MRN	SS	USAF/6SH	Nesao	FC	-	-
1977-W427	2443174.50	1977 Feb	Super Loki	-	-	0.000	MRN	SS	USAF/6SH	Nesao	FC	-	-
1977-W428	2443174.50	1977 Feb	Super Loki	-	-	0.000	MRN	SS	USAF/6SH	Nesao	FC	-	-
1977-W429	2443174.50	1977 Feb	Super Loki	-	-	0.000	MRN	SS	USAF/6SH	Nesao	FC	-	-
1977-W430	2443174.50	1977 Feb	Super Loki	-	-	0.000	MRN	SS	USAF/6SH	Nesao	FC	-	-
1977-W431	2443174.50	1977 Feb	Super Loki	-	-	0.000	MRN	SS	USAF/6SH	Nesao	FC	-	-
1977-W432	2443174.50	1977 Feb	Super Loki	-	-	0.000	MRN	SS	USAF/6SH	Nesao	FC	-	-
1977-W433	2443174.50	1977 Feb	Super Loki	-	-	0.000	MRN	SS	USAF/6SH	Nesao	FC	-	-
1977-W434	2443174.50	1977 Feb	Super Loki	-	-	0.000	MRN	SS	USAF/6SH	Nesao	FC	-	-
1977-W435	2443174.50	1977 Feb	Super Loki	-	-	0.000	MRN	SS	USAF/6SH	Nesao	FC	-	-
1977-W436	2443174.50	1977 Feb	Super Loki	-	-	0.000	MRN	SS	USAF/6SH	Nesao	FC	-	-
1977-W437	2443174.50	1977 Feb	Super Loki	-	-	0.000	MRN	SS	USAF/6SH	Nesao	FC	-	-
1977-W438	2443174.50	1977 Feb	Super Loki	-	-	0.000	MRN	SS	USAF/6SH	Nesao	FC	-	-
1977-W439	2443174.50	1977 Feb	Super Loki	-	-	0.000	MRN	SS	USAF/6SH	Nesao	FC	-	-
1977-W440	2443174.50	1977 Feb	Super Loki	-	-	0.000	MRN	SS	USAF/6SH	Nesao	FC	-	-
1977-W441	2443174.50	1977 Feb	Super Loki	-	-	0.000	MRN	SS	USAF/6SH	Nesao	FC	-	-
1977-W442	2443174.50	1977 Feb	Super Loki	-	-	0.000	MRN	SS	USAF/6SH	Nesao	FC	-	-
1977-W443	2443174.50	1977 Feb	Super Loki	-	-	0.000	MRN	SS	USAF/6SH	Nesao	FC	-	-
1977-W444	2443174.50	1977 Feb	Super Loki	-	-	0.000	MRN	SS	USAF/6SH	Nesao	FC	-	-
1977-W445	2443174.50	1977 Feb	Super Loki	-	-	0.000	MRN	SS	USAF/6SH	Nesao	FC	-	-
1977-W446	2443174.50	1977 Feb	Super Loki	-	-	0.000	MRN	SS	USAF/6SH	Nesao	FC	-	-
1977-W447	2443174.50	1977 Feb	Super Loki	-	-	0.000	MRN	SS	USAF/6SH	Nesao	FC	-	-
1977-W448	2443174.50												

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	OrbPay	Agency	Launch_Code	Group	Category	LTCite	Cite	Notes
1977-4393	2443198.21	1977 Feb 23 17:00:00	Super Loki	-	FLIGHT 146 / T 1-	0.000	WFF	SU	WFF/Wright	Aeron	WDCRF	-	-
1977-4415	2443202.50	1977 Mar	Super Loki	-	-	0.000	MRN	SS	USAF/GW	Nesoe	FC	-	-
1977-4416	2443202.50	1977 Mar	Super Loki	-	-	0.000	MRN	SS	USAF/GW	Nesoe	FC	-	-
1977-4417	2443202.50	1977 Mar	Super Loki	-	-	0.000	MRN	SS	USAF/GW	Nesoe	FC	-	-
1977-4418	2443202.50	1977 Mar	Super Loki	-	-	0.000	MRN	SS	USAF/GW	Nesoe	FC	-	-
1977-3579	2443205.00	1977 Mar 2 11:54	Super Loki	-	INTA SLW-7720	0.000	INTA	SS	INTA/	Aeron	ELAREN	-	-
1977-3580	2443211.98	1977 Mar 9 11:31	Super Loki	-	INTA SLW-7721	0.000	INTA	SS	INTA/	Aeron	ELAREN	-	-
1977-3581	2443218.98	1977 Mar 16 11:30	Super Loki	-	INTA SLW-7722	0.000	INTA	SS	INTA/	Aeron	ELAREN	-	-
1977-4620	2443219.26	1977 Mar 16 18:19:00	Super Loki	-	T 1-8416	0.000	WFF	SU	WFF/Wright	Aeron	WDCRF	-	-
1977-4622	2443219.26	1977 Mar 16 18:19:00	Super Loki	-	FLIGHT 150 / TH1-	0.000	WFF	SU	WFF/Wright	Aeron	WDCRF	-	-
1977-3582	2443221.98	1977 Mar 23 11:35	Super Loki	-	INTA SLW-7723	0.000	INTA	SS	INTA/	Aeron	ELAREN	-	-
1977-3583	2443232.99	1977 Mar 30 11:41	Super Loki	-	INTA SLW-7724	0.000	INTA	SS	INTA/	Aeron	ELAREN	-	-
1977-3584	2443234.99	1977 Apr 1 11:31	Super Loki	-	INTA SLW-7725	0.000	INTA	SS	INTA/	Aeron	ELAREN	-	-
1977-4607	2443235.11	1977 Apr 01 14:40:00	Super Loki	-	T 1-8722	0.000	WFF	SU	WFF/Wright	Aeron	WDCRF	-	-
1977-3586	2443237.98	1977 Apr 4 11:51	Super Loki	-	INTA SLW-7726	0.000	INTA	SS	INTA/	Aeron	ELAREN	-	-
1977-3587	2443244.98	1977 Apr 11 11:51	Super Loki	-	INTA SLW-7727	0.000	INTA	SS	INTA/	Aeron	ELAREN	-	-
1977-3588	2443246.98	1977 Apr 13 11:54	Super Loki	-	INTA SLW-7728	0.000	INTA	SS	INTA/	Aeron	ELAREN	-	-
1977-3589	2443248.98	1977 Apr 15 11:31	Super Loki	-	INTA SLW-7729	0.000	INTA	SS	INTA/	Aeron	ELAREN	-	-
1977-3590	2443251.98	1977 Apr 18 11:31	Super Loki	-	INTA SLW-7730	0.000	INTA	SS	INTA/	Aeron	ELAREN	-	-
1977-421	2443253.96	1977 Apr 20 11:31	Super Loki	-	INTA SLW-7731	0.000	INTA	SS	INTA/	Aeron	ELAREN	-	-
1977-421	2443254.21	1977 Apr 20 16:55:00	Super Loki	-	T 1-8721	0.000	WFF	SU	WFF/Wright	Aeron	WDCRF	-	-
1977-4702	2443254.25	1977 Apr 20 18:00:00	Super Loki	-	TH1-8710	0.000	WFF	SU	WFF/Wright	Aeron	WDCRF	-	-
1977-3591	2443256.98	1977 Apr 22 11:31	Super Loki	-	INTA SLW-7732	0.000	INTA	SS	INTA/	Aeron	ELAREN	-	-
1977-3592	2443258.98	1977 Apr 25 11:32	Super Loki	-	INTA SLW-7733	0.000	INTA	SS	INTA/	Aeron	ELAREN	-	-
1977-3593	2443260.98	1977 Apr 27 11:59	Super Loki	-	INTA SLW-7734	0.000	INTA	SS	INTA/	Aeron	ELAREN	-	-
1977-3594	2443262.96	1977 Apr 29 11:31	Super Loki	-	INTA SLW-7735	0.000	INTA	SS	INTA/	Aeron	ELAREN	-	-
1977-3596	2443267.98	1977 May 4 11:32	Super Loki	-	INTA SLW-7736	0.000	INTA	SS	INTA/	Aeron	ELAREN	-	-
1977-3596	2443275.00	1977 May 11 11:54	Super Loki	-	INTA SLW-7737	0.000	INTA	SS	INTA/	Aeron	ELAREN	-	-
1977-3510	2443281.51	1977 May 18 07:26	Super Loki	?	Flight 2025	0.000	ARGL	SS	ARGL/Philbrick	Aeron	SR20, 79	-	-
1977-3511	2443281.90	1977 May 18 09:50	Super Loki	?	Flight 2026	0.000	ARGL	SS	ARGL/Philbrick	Aeron	SR20, 79	-	-
1977-3512	2443282.03	1977 May 18 12:57	Super Loki	?	Flight 2028	0.000	ARGL	SS	ARGL/Philbrick	Aeron	SR20, 79	-	-
1977-3513	2443282.06	1977 May 18 13:20	Super Loki	?	Flight AC6	0.000	ARGL	SS	ARGL/Philbrick	Aeron	SR20, 79	-	-
1977-3514	2443282.07	1977 May 18 13:43	Super Loki	?	FLIGHT 154 / T 1-	0.000	WFF	SU	WFF/Wright	Aeron	WDCRF	-	-
1977-4657	2443282.26	1977 May 18 16:58:00	Super Loki	-	FLIGHT 156 / TH1-	0.000	WFF	SU	WFF/Wright	Aeron	WDCRF	-	-
1977-4660	2443282.26	1977 May 18 18:13:00	Super Loki	-	Intercomp prep 1A	0.000	MRN	SS	-	Nesoe	DS1-5660	-	-
1977-4661	2443281.11	1977 May 27 14:54:00	Super Loki	-	Intercomp prep 1B	0.000	MRN	SS	-	Nesoe	DS1-5660	-	-
1977-4696	2443281.11	1977 May 27 14:54:00	Super Loki	-	Intercomp prep 2A	0.000	MRN	SS	-	Nesoe	DS1-5660	-	-
1977-4697	2443281.28	1977 May 27 18:58:59	Super Loki	-	Intercomp prep 2B	0.000	MRN	SS	-	Nesoe	DS1-5660	-	-
1977-4698	2443281.28	1977 May 27 18:58:59	Super Loki	-	Intercomp prep 3A	0.000	MRN	SS	-	Nesoe	DS1-5660	-	-
1977-4699	2443281.46	1977 May 27 22:56:59	Super Loki	-	Intercomp prep 3B	0.000	MRN	SS	-	Nesoe	DS1-5660	-	-
1977-4912	2443281.46	1977 May 27 22:56:59	Super Loki	-	Intercomp prep 4A	0.000	MRN	SS	-	Nesoe	DS1-5660	-	-
1977-4913	2443281.46	1977 May 28 02:50:00	Super Loki	-	Intercomp prep 4B	0.000	MRN	SS	-	Nesoe	DS1-5660	-	-
1977-4914	2443281.60	1977 May 28 02:50:00	Super Loki	-	Intercomp prep 5A	0.000	MRN	SS	-	Nesoe	DS1-5660	-	-
1977-4915	2443281.61	1977 May 28 04:47:00	Super Loki	-	Intercomp prep 5B	0.000	MRN	SS	-	Nesoe	DS1-5660	-	-
1977-4916	2443281.76	1977 May 28 10:42:00	Super Loki	-	Intercomp prep 6A	0.000	MRN	SS	-	Nesoe	DS1-5660	-	-
1977-4917	2443281.76	1977 May 28 10:42:00	Super Loki	-	Intercomp prep 6B	0.000	MRN	SS	-	Nesoe	DS1-5660	-	-
1977-4918	2443281.98	1977 May 28 13:57:00	Super Loki	-	Intercomp prep 7A	0.000	MRN	SS	-	Nesoe	DS1-5660	-	-
1977-4919	2443282.02	1977 Jun 6 11:37:00	Super Loki	-	FLIGHT 155 / TH1-	0.000	WFF	SU	WFF/Wright	Aeron	WDCRF	-	-
1977-4920	2443282.02	1977 Jun 6 16:56:00	Super Loki	-	FLIGHT 157 / TH1-	0.000	WFF	SU	WFF/Wright	Aeron	WDCRF	-	-
1977-4921	2443312.98	1977 Jun 15 11:51	Super Loki	-	INTA SLW-7739	0.000	INTA	SS	INTA/	Aeron	ELAREN	-	-
1977-4922	2443312.98	1977 Jun 22 18:01	Super Loki	-	FLIGHT 157 / TH1-	0.000	WFF	SU	WFF/Wright	Aeron	WDCRF	-	-
1977-4923	2443312.98	1977 Jun 22 18:01	Super Loki	-	FLIGHT 158 / TH1-	0.000	WFF	SU	WFF/Wright	Aeron	WDCRF	-	-
1977-4924	2443312.98	1977 Jun 22 18:01	Super Loki	-	FLIGHT 159 / T 1-	0.000	WFF	SU	WFF/Wright	Aeron	WDCRF	-	-
1977-4925	2443312.98	1977 Jun 22 18:01	Super Loki	-	FLIGHT 160 / T 1-	0.000	WFF	SU	WFF/Wright	Aeron	WDCRF	-	-
1977-4926	2443312.98	1977 Jun 22 18:01	Super Loki	-	FLIGHT 161 / TH1-	0.000	WFF	SU	WFF/Wright	Aeron	WDCRF	-	-
1977-4927	2443312.98	1977 Jun 22 18:01	Super Loki	-	FLIGHT 162 / TH1-	0.000	WFF	SU	WFF/Wright	Aeron	WDCRF	-	-
1977-4928	2443312.98	1977 Jun 22 18:01	Super Loki	-	FLIGHT 163 / T 1-	0.000	WFF	SU	WFF/Wright	Aeron	WDCRF	-	-
1977-4929	2443312.98	1977 Jun 22 18:01	Super Loki	-	FLIGHT 164 / T 1-	0.000	WFF	SU	WFF/Wright	Aeron	WDCRF	-	-
1977-4930	2443312.98	1977 Jun 22 18:01	Super Loki	-	FLIGHT 165 / T 1-	0.000	WFF	SU	WFF/Wright	Aeron	WDCRF	-	-
1977-4931	2443312.98	1977 Jun 22 18:01	Super Loki	-	FLIGHT 166 / T 1-	0.000	WFF	SU	WFF/Wright	Aeron	WDCRF	-	-
1977-4932	2443312.98	1977 Jun 22 18:01	Super Loki	-	FLIGHT 167 / T 1-	0.000	WFF	SU	WFF/Wright	Aeron	WDCRF	-	-
1977-4933	2443312.98	1977 Jun 22 18:01	Super Loki	-	FLIGHT 168 / T 1-	0.000	WFF	SU	WFF/Wright	Aeron	WDCRF	-	-
1977-4934	2443312.98	1977 Jun 22 18:01	Super Loki	-	FLIGHT 169 / T 1-	0.000	WFF	SU	WFF/Wright	Aeron	WDCRF	-	-
1977-4935	2443312.98	1977 Jun 22 18:01	Super Loki	-	INTA SLW-7740	0.000	INTA	SS	INTA/	Aeron	ELAREN	-	-
1977-4936	2443312.98	1977 Jun 22 18:01	Super Loki	-	INTA SLW-7741	0.000	INTA	SS	INTA/	Aeron	ELAREN	-	-
1977-4937	2443312.98	1977 Jun 22 18:01	Super Loki	-	INTA SLW-7742	0.000	INTA	SS	INTA/	Aeron	ELAREN	-	-
1977-4938	2443312.98	1977 Jun 22 18:01	Super Loki	-	US-USSR Intercomp	0.000	MRN	SS	WFF/	Nesoe	RP-1063	DS1-5660	-
1977-4939	2443312.98	1977 Jun 22 18:01	Super Loki	-	US-USSR Intercomp	0.000	MRN	SS	WFF/	Nesoe	RP-1063	-	-
1977-4940	2443312.98	1977 Jun 22 18:01	Super Loki	-	US-USSR Intercomp	0.000	MRN	SS	WFF/	Nesoe	RP-1063	-	-
1977-4941	2443312.98	1977 Jun 22 18:01	Super Loki	-	US-USSR Intercomp	0.000	MRN	SS	WFF/	Nesoe	RP-1063	-	-
1977-4942	2443312.98	1977 Jun 22 18:01	Super Loki	-	US-USSR Intercomp	0.000	MRN	SS	WFF/	Nesoe	RP-1063	-	-
1977-4943	2443312.98	1977 Jun 22 18:01	Super Loki	-	US-USSR Intercomp	0.000	MRN	SS	WFF/	Nesoe	RP-1063	-	-
1977-4944	2443312.98	1977 Jun 22 18:01	Super Loki	-	US-USSR Intercomp	0.000	MRN	SS	WFF/	Nesoe	RP-1063	-	-
1977-4945	2443312.98	1977 Jun 22 18:01	Super Loki	-	US-USSR Intercomp	0.000	MRN	SS	WFF/	Nesoe	RP-1063	-	-
1977-4946	2443312.98	1977 Jun 22 18:01	Super Loki	-	US-USSR Intercomp	0.000	MRN	SS	WFF/	Nesoe	RP-1063	-	-
1977-4947	2443312.98	1977 Jun 22 18:01	Super Loki	-	US-USSR Intercomp	0.000	MRN	SS	WFF/	Nesoe	RP-1063	-	-
1977-4948	2443312.98	1977 Jun 22 18:01	Super Loki	-	US-USSR Intercomp	0.000	MRN	SS	WFF/	Nesoe	RP-1063	-	-
1977-4949	2443312.98	1977 Jun 22 18:01	Super Loki	-	US-USSR Intercomp	0.000	MRN	SS	WFF/	Nesoe	RP-1063	-	-
1977-4950	2443312.98	1977 Jun 22 18:01	Super Loki	-	US-USSR Intercomp	0.000	MRN	SS	WFF/	Nesoe	RP-1063	-	-
1977-4951	2443312.98	1977 Jun 22 18:01	Super Loki	-	US-USSR Intercomp	0.000	MRN	SS	WFF/	Nesoe	RP-1063	-	-
1977-4952	2443312.98	1977 Jun 22 18:01	Super Loki	-	US-USSR Intercomp	0.000	MRN	SS	WFF/	Nesoe	RP-1063	-	-
1977-4953	2443312.98	1977 Jun 22 18:01	Super Loki	-									



Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	OrbPay	Agency	Launch_Code	Group	Category	LTCite	Cite	Notes
1977-H13	2443374.62	1977 Aug 19 0300	Super Loki	-	US-USSR Intercomp	0.000	NRN	SS	WFF/	Meteo	RP-1053	-	-
1977-S638	2443374.73	1977 Aug 19 0524	Super Loki	-	US-USSR Intercomp	0.000	NRN	SS	WFF/	Meteo	RP-1053	-	-
1977-H14	2443374.77	1977 Aug 19 0537	Super Loki	-	US-USSR Intercomp	0.000	NRN	SS	WFF/	Meteo	RP-1053	-	-
1977-S603	2443374.99	1977 Aug 19 1139	Super Loki	-	INTA SLM-7744	0.000	INTA	SS	INTA/	Aeron	ELAREN	-	-
1977-H16	2443375.33	1977 Aug 19 2000	Super Loki	-	US-USSR Intercomp	0.000	NRN	SS	WFF/	Meteo	RP-1053	-	-
1977-S639	2443375.42	1977 Aug 19 2210	Super Loki	-	US-USSR Intercomp	0.000	NRN	SS	WFF/	Meteo	RP-1053	-	-
1977-H17	2443375.54	1977 Aug 20 0100	Super Loki	-	US-USSR Intercomp	0.000	NRN	SS	WFF/	Meteo	RP-1053	-	-
1977-H09	2443378.46	1977 Aug 22 2308	Super Loki	-	US-USSR Intercomp	0.000	NRN	SS	WFF/	Meteo	RP-1053	-	-
1977-H18	2443378.54	1977 Aug 23 0100	Super Loki	-	US-USSR Intercomp	0.000	NRN	SS	WFF/	Meteo	RP-1053	-	-
1977-H19	2443378.65	1977 Aug 23 0339	Super Loki	-	US-USSR Intercomp	0.000	NRN	SS	WFF/	Meteo	RP-1053	-	-
1977-H20	2443379.56	1977 Aug 24 0128	Super Loki	-	US-USSR Intercomp	0.000	NRN	SS	WFF/	Meteo	RP-1053	-	-
1977-H1910	2443379.62	1977 Aug 24 0300	Super Loki	-	INTA SLM-7745	0.000	INTA	SS	WFF/Schmidlin	Aeron	SK19_127	-	-
1977-S604	2443383.98	1977 Sep 7 1131	Super Loki	-	INTA SLM-7746	0.000	INTA	SS	INTA/	Aeron	ELAREN	-	-
1977-S605	2443384.01	1977 Sep 7 1208	Super Loki	-	INTA SLM-7747	0.000	INTA	SS	INTA/	Aeron	ELAREN	-	-
1977-S606	2443400.98	1977 Sep 14 1131	Super Loki	-	FLIGHT 172 /T 1-	0.000	WFF	SS	WFF/Airight	Aeron	WDCRF	-	-
1977-H1467	2443401.25	1977 Sep 14 1802:00	Super Loki	-	INTA SLM-7748	0.000	INTA	SS	WFF/Airight	Aeron	WDCRF	-	-
1977-S607	2443407.98	1977 Sep 21 1131	Super Loki	-	FLIGHT 173 /TH1-	0.000	WFF	SS	WFF/Airight	Aeron	WDCRF	-	-
1977-H1494	2443408.26	1977 Sep 21 1810:00	Super Loki	-	-	0.000	NRN	SS	-	Meteo	DS1-5680	FDC	-
1977-S608	2443410.97	1977 Sep 24 1254:59	Super Loki	-	INTA SLM-7749	0.000	NRN	SS	-	Meteo	DS1-5680	FDC	-
1977-S609	2443411.01	1977 Sep 24 1254:59	Super Loki	-	FLIGHT 174 /TW1-	0.000	WFF	SS	INTA/	Aeron	WDCRF	-	-
1977-S610	2443415.02	1977 Sep 28 1230	Super Loki	-	FLIGHT 175 /T 1-	0.000	WFF	SS	INTA/	Aeron	WDCRF	-	-
1977-S611	2443416.27	1977 Sep 29 1822:00	Super Loki	-	FLIGHT 176 /TH1-	0.000	WFF	SS	WFF/Airight	Aeron	WDCRF	-	-
1977-S612	2443422.02	1977 Oct 5 1234	Super Loki	-	FLIGHT 177 /T 1-	0.000	WFF	SS	WFF/Airight	Aeron	WDCRF	-	-
1977-S613	2443429.21	1977 Oct 12 1700:00	Super Loki	-	FLIGHT 178 /T 1-	0.000	WFF	SS	WFF/Airight	Aeron	WDCRF	-	-
1977-S614	2443436.25	1977 Oct 21 1800:00	Super Loki	-	FLIGHT 179 /TH1-	0.000	WFF	SS	WFF/Airight	Aeron	WDCRF	-	-
1977-S615	2443437.02	1977 Nov 2 1231	Super Loki	-	FLIGHT 180 /TH1-	0.000	WFF	SS	WFF/Airight	Aeron	WDCRF	-	-
1977-S616	2443437.94	1977 Nov 16 1231	Super Loki	-	FLIGHT 181 /TH1-	0.000	WFF	SS	WFF/Airight	Aeron	WDCRF	-	-
1977-S617	2443446.02	1977 Nov 16 1737:00	Super Loki	-	FLIGHT 182 /TH1-	0.000	WFF	SS	WFF/Airight	Aeron	WDCRF	-	-
1977-H1734	2443464.25	1977 Nov 30 1231	Super Loki	-	INTA SLM-7801	0.000	INTA	SS	INTA/	Aeron	ELAREN	-	-
1977-H1735	2443476.04	1977 Nov 16 1800:00	Super Loki	-	INTA SLM-7802	0.000	INTA	SS	INTA/	Aeron	ELAREN	-	-
1977-H1862	2443482.22	1977 Dec 14 1712:00	Super Loki	-	INTA SLM-7803	0.000	INTA	SS	INTA/	Aeron	ELAREN	-	-
1977-H1869	2443483.21	1977 Dec 15 1656:00	Super Loki	-	INTA SLM-7804	0.000	INTA	SS	INTA/	Aeron	ELAREN	-	-
1977-H1876	2443484.25	1977 Dec 16 1800:00	Super Loki	-	INTA SLM-7805	0.000	INTA	SS	INTA/	Aeron	ELAREN	-	-
1977-S618	2443489.03	1977 Dec 21 1232	Super Loki	-	FLIGHT 183 /TH1-	0.000	WFF	SS	WFF/Airight	Aeron	WDCRF	-	-
1977-S619	2443499.03	1977 Dec 21 1232	Super Loki	-	FLIGHT 184 /TH1-	0.000	WFF	SS	WFF/Airight	Aeron	WDCRF	-	-
1977-S620	2443520.02	1978 Jan 11 1235	Super Loki	-	INTA SLM-7806	0.000	INTA	SS	INTA/	Aeron	ELAREN	-	-
1977-S621	2443522.03	1978 Jan 11 1235	Super Loki	-	INTA SLM-7807	0.000	INTA	SS	INTA/	Aeron	ELAREN	-	-
1977-S622	2443525.03	1978 Jan 16 1245	Super Loki	-	INTA SLM-7808	0.000	INTA	SS	INTA/	Aeron	ELAREN	-	-
1977-S623	2443526.03	1978 Jan 16 1305	Super Loki	-	INTA SLM-7809	0.000	INTA	SS	INTA/	Aeron	ELAREN	-	-
1977-H1884	2443527.02	1978 Jan 18 1753	Super Loki	-	FLIGHT 185 /TH1-	0.000	WFF	SU	WFF/Airight	Aeron	WDCRF	-	-
1977-S624	2443527.25	1978 Jan 18 1708:00	Super Loki	-	FLIGHT 186 /TH1-	0.000	WFF	SU	WFF/Airight	Aeron	WDCRF	-	-
1977-S625	2443529.03	1978 Jan 20 1247	Super Loki	-	INTA SLM-7810	0.000	INTA	SS	INTA/	Aeron	ELAREN	-	-
1977-S626	2443530.02	1978 Jan 23 1231	Super Loki	-	INTA SLM-7811	0.000	INTA	SS	INTA/	Aeron	ELAREN	-	-
1977-S627	2443532.02	1978 Jan 23 1231	Super Loki	-	INTA SLM-7812	0.000	INTA	SS	INTA/	Aeron	ELAREN	-	-
1977-S628	2443536.02	1978 Jan 23 1235	Super Loki	-	INTA SLM-7813	0.000	INTA	SS	INTA/	Aeron	ELAREN	-	-
1977-S629	2443538.02	1978 Jan 31 1235	Super Loki	-	INTA SLM-7814	0.000	INTA	SS	INTA/	Aeron	ELAREN	-	-
1977-S630	2443543.02	1978 Feb 8 1235	Super Loki	-	INTA SLM-7815	0.000	INTA	SS	INTA/	Aeron	ELAREN	-	-
1977-S631	2443546.02	1978 Feb 8 1235	Super Loki	-	FLIGHT 187 /T 1-	0.000	WFF	SU	WFF/Airight	Aeron	WDCRF	-	-
1977-S632	2443555.01	1978 Feb 15 1703:00	Super Loki	-	FLIGHT 188 /TH1-	0.000	WFF	SU	WFF/Airight	Aeron	WDCRF	-	-
1977-H1892	2443555.02	1978 Feb 15 1803:00	Super Loki	-	FLIGHT 189 /T 1-	0.000	WFF	SU	WFF/Airight	Aeron	WDCRF	-	-
1977-H1894	2443555.55	1978 Feb 15 1714:00	Super Loki	-	FLIGHT 190 /TH1-	0.000	WFF	SU	WFF/Airight	Aeron	WDCRF	-	-
1977-H1916	2443563.22	1978 Mar 22 1801:00	Super Loki	-	FLIGHT 191 /T 1-	0.000	WFF	SU	WFF/Airight	Aeron	WDCRF	-	-
1977-H1945	2443569.35	1978 Mar 22 1835:00	Super Loki	-	FLIGHT 192 /TH1-	0.000	WFF	SU	WFF/Airight	Aeron	WDCRF	-	-
1977-H1947	2443569.97	1978 Mar 22 1835:00	Super Loki	-	FLIGHT 193 /T 1-	0.000	WFF	SU	WFF/Airight	Aeron	WDCRF	-	-
1977-S633	2443603.87	1978 Apr 8 1856	Super Loki	-	FLIGHT 194 /TH1-	0.000	WFF	SU	WFF/Airight	Aeron	WDCRF	-	-
1977-S634	2443603.95	1978 Apr 8 1943	Super Loki	-	FLIGHT 195 /T 1-	0.000	WFF	SU	WFF/Airight	Aeron	WDCRF	-	-
1977-S635	2443604.03	1978 Apr 8 1943	Super Loki	-	FLIGHT 196 /TH1-	0.000	WFF	SU	WFF/Airight	Aeron	WDCRF	-	-
1977-H4629	2443627.99	1978 Apr 22 1700:00	Super Loki	-	FLIGHT 197 /T 1-	0.000	WFF	SU	WFF/Airight	Aeron	WDCRF	-	-
1977-H4632	2443646.13	1978 May 17 1503:00	Super Loki	-	T 1-9411	0.000	WFF	SU	WFF/Airight	Aeron	WDCRF	-	-
1977-H4634	2443646.14	1978 May 17 1505:00	Super Loki	-	T 1-9412	0.000	WFF	SU	WFF/Airight	Aeron	WDCRF	-	-
1977-H4638	2443646.21	1978 May 17 1702:00	Super Loki	-	T 1-9413	0.000	WFF	SU	WFF/Airight	Aeron	WDCRF	-	-
1977-H4641	2443646.28	1978 May 17 1843:00	Super Loki	-	T 1-9414	0.000	WFF	SU	WFF/Airight	Aeron	WDCRF	-	-
1977-H4644	2443646.33	1978 May 17 1905:00	Super Loki	-	FLIGHT 192 /TH1-	0.000	WFF	SU	WFF/Airight	Aeron	WDCRF	-	-
1977-H4646	2443646.30	1978 May 17 2000:00	Super Loki	-	FLIGHT 193 /T 1-	0.000	WFF	SU	WFF/Airight	Aeron	WDCRF	-	-
1977-H4647	2443646.33	1978 May 17 2000:00	Super Loki	-	FLIGHT 194 /TH1-	0.000	WFF	SU	WFF/Airight	Aeron	WDCRF	-	-
1977-H4648	2443653.21	1978 May 24 1800:00	Super Loki	-	FLIGHT 195 /T 1-	0.000	WFF	SU	WFF/Airight	Aeron	WDCRF	-	-
1977-H4649	2443674.22	1978 Jun 14 1711:00	Super Loki	-	FLIGHT 196 /TH1-	0.000	WFF	SU	WFF/Airight	Aeron	WDCRF	-	-
1977-H4651	2443674.25	1978 Jun 14 1806:00	Super Loki	-	FLIGHT 197 /T 1-	0.000	WFF	SU	WFF/Airight	Aeron	WDCRF	-	-
1977-H4652	2443674.22	1978 Jun 12 1704:00	Super Loki	-	FLIGHT 198 /TH1-	0.000	WFF	SU	WFF/Airight	Aeron	WDCRF	-	-
1977-H4653	2443702.21	1978 Jul 17 1836:00	Super Loki	-	FLIGHT 199 /TH1-	0.000	WFF	SU	WFF/Airight	Aeron	WDCRF	-	-
1977-H4654	2443702.97	1978 Jul 17 1131	Super Loki	-	INTA SLM-7813	0.000	INTA	SS	INTA/	Aeron	ELAREN	-	-
1977-H4655	2443706.98	1978 Jul 17 1227	Super Loki	-	INTA SLM-7814	0.000	INTA	SS	INTA/	Aeron	ELAREN	-	-
1977-S636	2443707.02	1978 Jul 18 1412	Super Loki	-	INTA SLM-7815	0.000	INTA	SS	INTA/	Aeron	ELAREN	-	-
1977-S637	2443715.98	1978 Jul 26 1131	Super Loki	-	INTA SLM-7816	0.000	INTA	SS	INTA/	Aeron	ELAREN	-	-
1977-S638	2443724.99	1978 Aug 4 1144	Super Loki	-	INTA SLM-7817	0.000	INTA	SS	INTA/	Aeron	ELAREN	-	-
1977-H4648	2443737.23	1978 Aug 16 1707:00	Super Loki	-	FLIGHT 197 /T 1-	0.000	WFF	SU	WFF/Airight	Aeron	WDCRF	-	-
1977-H4649	2443737.23	1978 Aug 16 1729:00	Super Loki	-	FLIGHT 198 /T 1-	0.000	WFF	SU	WFF/Airight	Aeron	WDCRF	-	-
1977-H4650	2443737.25	1978 Aug 16 1816:00	Super Loki	-	FLIGHT 199 /TH1-	0.000	WFF	SU	WFF/Airight	Aeron	WDCRF	-	-
1977-H4651	2443738.98	1978 Aug 18 1136	Super Loki	-	INTA SLM-7818	0.000	INTA	SS	INTA/	Aeron	ELAREN	-	-
1977-H4652	2443744.23	1978 Aug 23 1734:00	Super Loki	-	FLIGHT 200 /T 1-	0.000	WFF	SU	WFF/Airight	Aeron	WDCRF	-	-
1977-H4653	2443744.23	1978 Aug 25 1703:00	Super Loki	-	FLIGHT 201 /T 1-	0.000	WFF	SU	WFF/Airight	Aeron	WDCRF	-	-
1977-H4654	2443746.21	1978 Aug 31 1304:00	Super Loki	-	FLIGHT 202 /T 1-	0.000	WFF	SU	WFF/Airight	Aeron	WDCRF	-	-
1977-H4655	2443752.04	1978 Aug 31 1708:00	Super Loki	-	FLIGHT 203 /T 1-	0.000	WFF	SU	WFF/Airight	Aeron	WDCRF	-	-
1977-H4656	2443752.21	1978 Aug 31 1708:00	Super Loki	-	FLIGHT 204 /T 1-	0.000	WFF	SU	WFF/Airight	Aeron	WDCRF	-	-





Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	OrbPay	Agency	Launch_Code	Group	Category	LTCite	Cite	Notes
1982-W58	2444995.27	1982 Jan 25 1830:00	Super Loki	-	FLIGHT 295 /7U1-	0.000	WFF	SU	WFF/Reed	Aeron	WDCRF	-	-
1982-S274	2444997.10	1982 Jan 27 1423	Super Loki	-	INTA SLD-S204	0.000	INTA	SS	INTA/	Aeron	ELAREN	-	-
1982-W62	2445001.14	1982 Jan 31 1523:00	Super Loki	-	FLIGHT 300 /7U1-	0.000	WFF	SU	WFF/Reed	Aeron	WDCRF	-	-
1982-S275	2445006.10	1982 Feb 5 1423	Super Loki	-	INTA SLD-S205	0.000	INTA	SS	INTA/	Aeron	ELAREN	-	-
1982-S276	2445009.10	1982 Feb 8 1418	Super Loki	-	INTA SLD-S206	0.000	INTA	SS	INTA/	Aeron	ELAREN	-	-
1982-S277	2445016.11	1982 Feb 15 1442	Super Loki	-	INTA SLD-S207	0.000	INTA	SS	INTA/	Aeron	ELAREN	-	-
1982-W114	2445016.21	1982 Feb 15 1708:00	Super Loki	-	FLIGHT 301 /7Z1-	0.000	WFF/OHIE	SU	WFF/Reed	Aeron	WDCRF	-	-
1982-W115	2445016.30	1982 Feb 15 1915:00	Super Loki	-	FLIGHT 302 /7Z1-	0.000	WFF/OHIE	SU	WFF/Reed	Aeron	WDCRF	-	-
1982-W124	2445018.30	1982 Feb 17 1907:00	Super Loki	-	FLIGHT 304 /7Z1-	0.000	WFF/OHIE	SU	WFF/Reed	Aeron	WDCRF	-	-
1982-W135	2445022.20	1982 Feb 21 1653:00	Super Loki	-	FLIGHT 305 /7Z1-	0.000	WFF/OHIE	SU	WFF/Reed	Aeron	WDCRF	-	-
1982-W140	2445024.30	1982 Feb 23 1911:00	Super Loki	-	T 1-0105	0.000	WFF	SU	WFF/Reed	Aeron	WDCRF	-	-
1982-W169	2445025.29	1982 Feb 24 1900:00	Super Loki	-	T 1-0106	0.000	WFF	SU	WFF/Schmidlin	Test/Aeron	WDCRF	-	-
1982-W146	2445026.29	1982 Feb 25 1900:00	Super Loki	-	T 1-0107	0.000	WFF	SU	WFF/Schmidlin	Test/Aeron	WDCRF	-	-
1982-W150	2445027.20	1982 Feb 26 1651:00	Super Loki	-	T 1-0108	0.000	WFF	SU	WFF/Schmidlin	Test/Aeron	WDCRF	-	-
1982-W160	2445027.31	1982 Feb 26 1920:00	Super Loki	-	FLIGHT 306 /7Z1-	0.000	WFF/OHIE	SU	WFF/Reed	Aeron	WDCRF	-	-
1982-W163	2445029.32	1982 Feb 28 1946:00	Super Loki	-	T 1-0108	0.000	WFF	SU	WFF/Schmidlin	Test/Aeron	WDCRF	-	-
1982-W161	2445030.33	1982 Feb 01 2000:00	Super Loki	-	T 1-0112	0.000	WFF	SU	WFF/Schmidlin	Test/Aeron	WDCRF	-	-
1982-W162	2445031.33	1982 Feb 02 1955:00	Super Loki	-	T 1-0113	0.000	WFF	SU	WFF/Schmidlin	Test/Aeron	WDCRF	-	-
1982-W166	2445032.29	1982 Feb 03 1900:00	Super Loki	-	T 1-0116	0.000	WFF	SU	WFF/Schmidlin	Test/Aeron	WDCRF	-	-
1982-W158	2445033.29	1982 Feb 04 1900:00	Super Loki	-	T 1-0117	0.000	WFF	SU	WFF/Schmidlin	Test/Aeron	WDCRF	-	-
1982-W170	2445034.29	1982 Feb 05 1903:00	Super Loki	-	T 1-0118	0.000	WFF	SU	WFF/Schmidlin	Test/Aeron	WDCRF	-	-
1982-W172	2445037.30	1982 Feb 09 1908:00	Super Loki	-	T 1-0119	0.000	WFF	SU	WFF/Schmidlin	Test/Aeron	WDCRF	-	-
1982-W168	2445038.29	1982 Feb 09 1900:00	Super Loki	-	T 1-0122	0.000	WFF	SU	WFF/Schmidlin	Test/Aeron	WDCRF	-	-
1982-W171	2445039.29	1982 Feb 10 1900:00	Super Loki	-	T 1-0124	0.000	WFF	SU	WFF/Schmidlin	Test/Aeron	WDCRF	-	-
1982-W173	2445040.29	1982 Feb 11 1900:00	Super Loki	-	T 1-0125	0.000	WFF	SU	WFF/Schmidlin	Test/Aeron	WDCRF	-	-
1982-W175	2445041.29	1982 Feb 12 1900:00	Super Loki	-	T 1-0126	0.000	WFF	SU	WFF/Schmidlin	Test/Aeron	WDCRF	-	-
1982-W182	2445045.29	1982 Feb 16 1900:00	Super Loki	-	T 1-0130	0.000	WFF	SU	WFF/Schmidlin	Test/Aeron	WDCRF	-	-
1982-W184	2445046.31	1982 Feb 17 1923:00	Super Loki	-	T 1-0131	0.000	WFF	SU	WFF/Schmidlin	Test/Aeron	WDCRF	-	-
1982-W186	2445047.29	1982 Feb 18 1901:00	Super Loki	-	T 1-0132	0.000	WFF	SU	WFF/Schmidlin	Test/Aeron	WDCRF	-	-
1982-W187	2445046.29	1982 Feb 19 1900:00	Super Loki	-	T 1-0133	0.000	WFF	SU	WFF/Schmidlin	Test/Aeron	WDCRF	-	-
1982-W194	2445051.31	1982 Feb 22 1924:00	Super Loki	-	T 1-0135	0.000	WFF	SU	WFF/Schmidlin	Test/Aeron	WDCRF	-	-
1982-W205	2445053.29	1982 Feb 24 1901:00	Super Loki	-	T 1-0289	0.000	WFF	SU	WFF/Schmidlin	Test/Aeron	WDCRF	-	-
1982-W218	2445058.09	1982 Feb 29 1405:00	Super Loki	-	T 1-0283	0.000	WFF	SU	WFF/Schmidlin	Test/Aeron	WDCRF	-	-
1982-W219	2445058.12	1982 Feb 29 1457:00	Super Loki	-	T 1-0285	0.000	WFF	SU	WFF/Schmidlin	Test/Aeron	WDCRF	-	-
1982-W121	2445059.06	1982 Mar 30 1530:00	Super Loki	-	T 1-0294	0.000	WFF	SU	WFF/Schmidlin	Test/Aeron	WDCRF	-	-
1982-W228	2445059.10	1982 Mar 30 1420:00	Super Loki	-	T 1-0130	0.000	WFF	SU	WFF/Schmidlin	Test/Aeron	WDCRF	-	-
1982-W253	2445060.17	1982 Apr 20 1589:00	Super Loki	-	FLIGHT 307 /T 1-	0.000	WFF	SU	WFF/Reed	Aeron	WDCRF	-	-
1982-W254	2445060.20	1982 Apr 20 1641:00	Super Loki	-	FLIGHT 308 /T 1-	0.000	WFF	SU	WFF/Reed	Aeron	WDCRF	-	-
1982-W256	2445060.22	1982 Apr 20 1546:00	Super Loki	-	FLIGHT 309 /T 1-	0.000	WFF	SU	WFF/Reed	Aeron	WDCRF	-	-
1982-W256	2445060.22	1982 Apr 20 1717:00	Super Loki	-	FLIGHT 310 /T 1-	0.000	WFF	SU	WFF/Reed	Aeron	WDCRF	-	-
1982-W300	2445104.21	1982 May 24 1709:00	Super Loki	-	FLIGHT 316 /T 1-	0.000	WFF	SU	WFF/Reed	Aeron	WDCRF	-	-
1982-W309	2445125.13	1982 Jun 06 1457:00	Super Loki	-	T 1-0286	0.000	WFF	SU	WFF/Reed	Aeron	WDCRF	-	-
1982-W310	2445125.15	1982 Jun 09 1510:00	Super Loki	-	T 1-0301	0.000	WFF	SU	WFF/Reed	Aeron	WDCRF	-	-
1982-W314	2445135.99	1982 Jun 29 1146:00	Super Loki	-	T 1-0302	0.000	WFF	SU	WFF/Reed	Aeron	WDCRF	-	-
1982-W317	2445135.99	1982 Jun 29 1146:00	Super Loki	-	T 1-0303	0.000	WFF	SU	WFF/Reed	Aeron	WDCRF	-	-
1982-W320	2445144.99	1982 Jul 04 1100:00	Super Loki	-	T 1-0305	0.000	WFF	SU	WFF/Reed	Aeron	WDCRF	-	-
1982-W327	2445154.99	1982 Jul 11 1100:00	Super Loki	-	T 1-0306	0.000	WFF	SU	WFF/Reed	Aeron	WDCRF	-	-
1982-W329	2445154.99	1982 Jul 11 1100:00	Super Loki	-	T 1-0307	0.000	WFF	SU	WFF/Reed	Aeron	WDCRF	-	-
1982-W316	2445154.99	1982 Jul 11 1100:00	Super Loki	-	T 1-0308	0.000	WFF	SU	WFF/Reed	Aeron	WDCRF	-	-
1982-W317	2445154.99	1982 Jul 11 1100:00	Super Loki	-	T 1-0309	0.000	WFF	SU	WFF/Reed	Aeron	WDCRF	-	-
1982-W318	2445154.99	1982 Jul 11 1100:00	Super Loki	-	T 1-0310	0.000	WFF	SU	WFF/Reed	Aeron	WDCRF	-	-
1982-W319	2445154.99	1982 Jul 11 1100:00	Super Loki	-	T 1-0311	0.000	WFF	SU	WFF/Reed	Aeron	WDCRF	-	-
1982-W320	2445154.99	1982 Jul 11 1100:00	Super Loki	-	T 1-0312	0.000	WFF	SU	WFF/Reed	Aeron	WDCRF	-	-
1982-W321	2445154.99	1982 Jul 11 1100:00	Super Loki	-	T 1-0313	0.000	WFF	SU	WFF/Reed	Aeron	WDCRF	-	-
1982-W322	2445154.99	1982 Jul 11 1100:00	Super Loki	-	T 1-0314	0.000	WFF	SU	WFF/Reed	Aeron	WDCRF	-	-
1982-W323	2445154.99	1982 Jul 11 1100:00	Super Loki	-	T 1-0315	0.000	WFF	SU	WFF/Reed	Aeron	WDCRF	-	-
1982-W324	2445154.99	1982 Jul 11 1100:00	Super Loki	-	T 1-0316	0.000	WFF	SU	WFF/Reed	Aeron	WDCRF	-	-
1982-W325	2445154.99	1982 Jul 11 1100:00	Super Loki	-	T 1-0317	0.000	WFF	SU	WFF/Reed	Aeron	WDCRF	-	-
1982-W326	2445154.99	1982 Jul 11 1100:00	Super Loki	-	T 1-0318	0.000	WFF	SU	WFF/Reed	Aeron	WDCRF	-	-
1982-W327	2445154.99	1982 Jul 11 1100:00	Super Loki	-	T 1-0319	0.000	WFF	SU	WFF/Reed	Aeron	WDCRF	-	-
1982-W328	2445154.99	1982 Jul 11 1100:00	Super Loki	-	T 1-0320	0.000	WFF	SU	WFF/Reed	Aeron	WDCRF	-	-
1982-W329	2445154.99	1982 Jul 11 1100:00	Super Loki	-	T 1-0321	0.000	WFF	SU	WFF/Reed	Aeron	WDCRF	-	-
1982-W330	2445154.99	1982 Jul 11 1100:00	Super Loki	-	T 1-0322	0.000	WFF	SU	WFF/Reed	Aeron	WDCRF	-	-
1982-W331	2445154.99	1982 Jul 11 1100:00	Super Loki	-	T 1-0323	0.000	WFF	SU	WFF/Reed	Aeron	WDCRF	-	-
1982-W332	2445154.99	1982 Jul 11 1100:00	Super Loki	-	T 1-0324	0.000	WFF	SU	WFF/Reed	Aeron	WDCRF	-	-
1982-W333	2445154.99	1982 Jul 11 1100:00	Super Loki	-	T 1-0325	0.000	WFF	SU	WFF/Reed	Aeron	WDCRF	-	-
1982-W334	2445154.99	1982 Jul 11 1100:00	Super Loki	-	T 1-0326	0.000	WFF	SU	WFF/Reed	Aeron	WDCRF	-	-
1982-W335	2445154.99	1982 Jul 11 1100:00	Super Loki	-	T 1-0327	0.000	WFF	SU	WFF/Reed	Aeron	WDCRF	-	-
1982-W336	2445154.99	1982 Jul 11 1100:00	Super Loki	-	T 1-0328	0.000	WFF	SU	WFF/Reed	Aeron	WDCRF	-	-
1982-W337	2445154.99	1982 Jul 11 1100:00	Super Loki	-	T 1-0329	0.000	WFF	SU	WFF/Reed	Aeron	WDCRF	-	-
1982-W338	2445154.99	1982 Jul 11 1100:00	Super Loki	-	T 1-0330	0.000	WFF	SU	WFF/Reed	Aeron	WDCRF	-	-
1982-W339	2445154.99	1982 Jul 11 1100:00	Super Loki	-	T 1-0331	0.000	WFF	SU	WFF/Reed	Aeron	WDCRF	-	-
1982-W340	2445154.99	1982 Jul 11 1100:00	Super Loki	-	T 1-0332	0.000	WFF	SU	WFF/Reed	Aeron	WDCRF	-	-
1982-W341	2445154.99	1982 Jul 11 1100:00	Super Loki	-	T 1-0333	0.000	WFF	SU	WFF/Reed	Aeron	WDCRF	-	-
1982-W342	2445154.99	1982 Jul 11 1100:00	Super Loki	-	T 1-0334	0.000	WFF	SU	WFF/Reed	Aeron	WDCRF	-	-
1982-W343	2445154.99	1982 Jul 11 1100:00	Super Loki	-	T 1-0335	0.000	WFF	SU	WFF/Reed	Aeron	WDCRF	-	-
1982-W344	2445154.99	1982 Jul 11 1100:00	Super Loki	-	T 1-0336	0.000	WFF	SU	WFF/Reed	Aeron	WDCRF	-	-
1982-W345	2445154.99	1982 Jul 11 1100:00	Super Loki	-	T 1-0337	0.000	WFF	SU	WFF/Reed	Aeron	WDCRF	-	-
1982-W346	2445154.99	1982 Jul 11 1100:00	Super Loki	-	T 1-0338	0.000	WFF	SU	WFF/Reed	Aeron	WDCRF	-	-
1982-W347	2445154.99	1982 Jul 11 1100:00	Super Loki	-	T 1-0339	0.000	WFF	SU	WFF/Reed	Aeron	WDCRF	-	-
1982-W348	2445154.99	1982 Jul 11 1											

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	OrbPay	Agency	Launch_Code	Group	Category	LTCite	Cite	Notes
1983-180	2445402.76	1983 Mar 09 06:10:00	Super Loki	-	TUL-0386 FWM-12A	0.000	WFF	SU	WFF/Schmidlin	Aeron	WDCRF	-	-
1983-181	2445402.82	1983 Mar 09 07:46:00	Super Loki	-	TUL-0390 FWM-11A	0.000	WFF	SF	WFF/Schmidlin	Aeron	WDCRF	-	-
1983-182	2445402.85	1983 Mar 09 08:20:00	Super Loki	-	TUL-0386 FWM-12A	0.000	WFF	SU	WFF/Schmidlin	Aeron	WDCRF	-	-
1983-183	2445402.89	1983 Mar 09 09:20:00	Super Loki	-	TUL-0361 FWM-11A	0.000	WFF	SU	WFF/Schmidlin	Aeron	WDCRF	-	-
1983-493	2445417.29	1983 Mar 23 18:52:00	Super Loki	-	TUL-0391	0.000	WFF	SU	WFF/Schmidlin	Aeron	WDCRF	-	-
1983-Y139	2445434.10	1983 Apr 09 14:30:00	Super Loki	-	T 1-0460	0.000	WFF	SU	WFF/Schmidlin	Test/Aeron	WDCRF	-	-
1983-Y140	2445434.12	1983 Apr 09 14:50:00	Super Loki	-	T 1-0459	0.000	WFF	SU	WFF/Schmidlin	Test/Aeron	WDCRF	-	-
1983-Y1209	2445509.98	1983 Jun 24 11:30:00	Super Loki	-	T 1-0548	0.000	WFF	SU	WFF/Schmidlin	Test/Aeron	WDCRF	-	-
1983-Y1210	2445510.00	1983 Jun 24 12:01:00	Super Loki	-	T 1-0547	0.000	WFF	SU	WFF/Schmidlin	Test/Aeron	WDCRF	-	-
1983-168	2445570.18	1983 Aug 23 16:25	Super Loki	-	-	0.000	GSFC	SS	GSFC/Parsons Barnes	Aeron, Ozome	JR894_ID, 2239	-	-
1983-169	2445570.21	1983 Aug 23 17:00?	Super Loki	-	-	0.000	GSFC	SS	GSFC/Parsons Barnes	Aeron, Ozome	JR894_ID, 2239	-	-
1983-17275	2445582.81	1983 Sep 05 07:30:00	Super Loki	-	T 1-0663	0.000	WFF	SU	WFF/Schmidlin	Test/Aeron	WDCRF	-	-
1983-4255	2445582.83	1983 Sep 05 07:57:00	Super Loki	-	INTA SLD-8311	0.000	INTA	SU	WFF/Schmidlin	Test/Aeron	WDCRF	-	-
1983-3284	2445586.35	1983 Sep 9 08:31	Super Loki	-	INTA SLD-8312	0.000	INTA	SS	INTA/	Aeron	ELAREN	-	-
1983-3286	2445587.96	1983 Sep 10 11:03	Super Loki	-	INTA SLD-8313	0.000	INTA	SS	INTA/	Aeron	ELAREN	-	-
1983-3286	2445591.64	1983 Sep 14 03:21	Super Loki	-	INTA SLD-8314	0.000	INTA	SS	INTA/	Aeron	ELAREN	-	-
1983-3287	2445591.96	1983 Sep 14 11:05	Super Loki	-	INTA SLD-8315	0.000	INTA	SS	INTA/	Aeron	ELAREN	-	-
1983-3288	2445598.03	1983 Sep 20 12:43	Super Loki	-	INTA SLD-8315	0.000	WFF	SU	WFF/Schmidlin	Test/Aeron	WDCRF	-	-
1983-4277	2445598.51	1983 Sep 21 00:15:00	Super Loki	-	INTA SLD-8316	0.000	INTA	SS	INTA/	Aeron	ELAREN	-	-
1983-3289	2445601.96	1983 Sep 24 11:00	Super Loki	-	-	0.000	RRU	SS	GSFC/	Neveo	DS1-5660	-	-
1983-4281	2445604.14	1983 Sep 26 15:20:00	Super Loki	-	-	0.000	GSFC	SS	GSFC/Parsons Barnes	Aeron, Ozome	JR891_ID13, 14521	-	-
1983-160	2445604.23	1983 Sep 26 17:32	Super Loki	-	-	0.000	GSFC	SS	GSFC/Parsons Barnes	Aeron, Ozome	JR891_ID13, 14521	-	-
1983-161	2445604.24	1983 Sep 26 17:59	Super Loki	-	-	0.000	GSFC	SS	GSFC/Parsons Barnes	Aeron, Ozome	JR891_ID13, 14521	-	-
1983-162	2445604.26	1983 Sep 26 18:17	Super Loki	-	-	0.000	GSFC	SS	GSFC/Parsons Barnes	Aeron, Ozome	JR891_ID13, 14521	-	-
1983-163	2445604.28	1983 Sep 26 18:46	Super Loki	-	-	0.000	GSFC	SS	GSFC/Parsons Barnes	Aeron, Ozome	JR891_ID13, 14521	-	-
1983-4301	2445635.14	1983 Oct 27 15:25:59	Super Loki	-	-	0.000	RRU	SS	GSFC/Parsons Barnes	Aeron, Ozome	JR891_ID13, 14521	-	-
1983-164	2445635.18	1983 Oct 27 16:24	Super Loki	-	-	0.000	GSFC	SS	GSFC/Parsons Barnes	Aeron, Ozome	JR891_ID13, 14521	-	-
1983-165	2445635.19	1983 Oct 27 16:51	Super Loki	-	-	0.000	GSFC	SS	GSFC/Parsons Barnes	Aeron, Ozome	JR891_ID13, 14521	-	-
1983-166	2445635.22	1983 Oct 27 17:20	Super Loki	-	T 1-0763	0.000	WFF	SU	WFF/Schmidlin	Test/Aeron	WDCRF	-	-
1983-167	2445635.25	1983 Oct 27 17:54	Super Loki	-	T 1-0794	0.000	WFF	SU	WFF/Schmidlin	Test/Aeron	WDCRF	-	-
1983-1292	2445635.29	1983 Nov 17 09:26:00	Super Loki	-	T 1-0794	0.000	WFF	SU	WFF/Schmidlin	Test/Aeron	WDCRF	-	-
1983-1293	2445637.91	1983 Nov 19 09:45:00	Super Loki	-	T 1-0794	0.000	WFF	SU	WFF/Schmidlin	Test/Aeron	WDCRF	-	-
1983-4324	2445661.15	1983 Nov 22 15:30:00	Super Loki	-	T 1-0771	0.000	WFF	SU	WFF/Schmidlin	Test/Aeron	WDCRF	-	-
1983-168	2445661.20	1983 Nov 22 16:50	Super Loki	-	-	0.000	GSFC	SS	GSFC/Parsons Barnes	Aeron, Ozome	JR894_ID, 2239	-	-
1983-4333	2445669.39	1983 Nov 30 21:20	Super Loki	-	MIP/HINE M-H	0.000	DFVLR	SS	GSFC/Parsons Barnes	Aeron, Ozome	JR894_ID, 2239	-	-
1983-4334	2445669.40	1983 Nov 30 21:20	Super Loki	-	MIP/HINE M-H	0.000	DFVLR	SS	GSFC/Parsons Barnes	Aeron, Ozome	JR894_ID, 2239	-	-
1983-4335	2445672.33	1983 Dec 3 20:00:00	Super Loki	-	MIP/HINE M-H	0.000	DFVLR	SS	GSFC/Parsons Barnes	Aeron, Ozome	JR894_ID, 2239	-	-
1983-4337	2445672.43	1983 Dec 3 22:25	Super Loki	-	MIP/HINE M-H	0.000	DFVLR	SS	GSFC/Parsons Barnes	Aeron, Ozome	JR894_ID, 2239	-	-
1983-4339	2445674.52	1983 Dec 6 10:07:00	Super Loki	-	MIP/HINE M-H	0.000	DFVLR	SS	GSFC/Parsons Barnes	Aeron, Ozome	JR894_ID, 2239	-	-
1983-4340	2445674.55	1983 Dec 6 10:49:30	Super Loki	-	MIP/HINE M-H	0.000	DFVLR	SS	GSFC/Parsons Barnes	Aeron, Ozome	JR894_ID, 2239	-	-
1983-4346	2445676.22	1983 Dec 7 11:12:00	Super Loki	-	MIP/HINE M-H	0.000	DFVLR	SS	GSFC/Parsons Barnes	Aeron, Ozome	JR894_ID, 2239	-	-
1983-4347	2445676.28	1983 Dec 7 11:49:00	Super Loki	-	MIP/HINE M-H	0.000	DFVLR	SS	GSFC/Parsons Barnes	Aeron, Ozome	JR894_ID, 2239	-	-
1983-4348	2445676.35	1983 Dec 7 12:55:00	Super Loki	-	MIP/HINE M-H	0.000	DFVLR	SS	GSFC/Parsons Barnes	Aeron, Ozome	JR894_ID, 2239	-	-
1983-4349	2445676.39	1983 Dec 7 13:25:00	Super Loki	-	MIP/HINE M-H	0.000	DFVLR	SS	GSFC/Parsons Barnes	Aeron, Ozome	JR894_ID, 2239	-	-
1983-4352	2445677.26	1983 Dec 08 18:25:00	Super Loki	-	T 1-0797	0.000	WFC	SU	WFF/Schmidlin	Test/Aeron	WDCRF	-	-
1983-4361	2445677.28	1983 Dec 08 18:45:00	Super Loki	-	T 1-0796	0.000	WFC	SU	WFF/Schmidlin	Test/Aeron	WDCRF	-	-
1983-4362	2445677.30	1983 Dec 09 18:50:00	Super Loki	-	T 1-0767	0.000	WFC	SU	WFF/Schmidlin	Test/Aeron	WDCRF	-	-
1983-4363	2445678.20	1983 Dec 9 19:00	Super Loki	-	MIP/HINE M-H	0.000	GSFC	SS	GSFC/Parsons Barnes	Aeron, Ozome	JR894_ID, 2239	-	-
1983-4364	2445678.24	1983 Dec 10 19:30	Super Loki	-	MIP/HINE M-H	0.000	GSFC	SS	GSFC/Parsons Barnes	Aeron, Ozome	JR894_ID, 2239	-	-
1983-4367	2445679.54	1983 Dec 10 21:34:00	Super Loki	-	MIP/HINE M-H	0.000	DFVLR	SS	GSFC/Parsons Barnes	Aeron, Ozome	JR894_ID, 2239	-	-
1983-4369	2445682.00	1983 Dec 15 20:00:00	Super Loki	-	MIP/HINE M-H	0.000	DFVLR	SS	GSFC/Parsons Barnes	Aeron, Ozome	JR894_ID, 2239	-	-
1983-4370	2445684.37	1983 Dec 15 15:58:59	Super Loki	-	MIP/HINE M-H	0.000	DFVLR	SS	GSFC/Parsons Barnes	Aeron, Ozome	JR894_ID, 2239	-	-
1983-4371	2445684.38	1983 Dec 15 20:00:00	Super Loki	-	MIP/HINE M-H	0.000	DFVLR	SS	GSFC/Parsons Barnes	Aeron, Ozome	JR894_ID, 2239	-	-
1983-4372	2445684.39	1983 Dec 15 20:00:00	Super Loki	-	MIP/HINE M-H	0.000	DFVLR	SS	GSFC/Parsons Barnes	Aeron, Ozome	JR894_ID, 2239	-	-
1983-4373	2445684.39	1983 Dec 15 20:00:00	Super Loki	-	MIP/HINE M-H	0.000	DFVLR	SS	GSFC/Parsons Barnes	Aeron, Ozome	JR894_ID, 2239	-	-
1983-4374	2445686.33	1983 Dec 17 21:00	Super Loki	-	MIP/HINE M-H	0.000	DFVLR	SS	GSFC/Parsons Barnes	Aeron, Ozome	JR894_ID, 2239	-	-
1983-4375	2445686.33	1983 Dec 17 19:50:00	Super Loki	-	MIP/HINE M-H	0.000	DFVLR	SS	GSFC/Parsons Barnes	Aeron, Ozome	JR894_ID, 2239	-	-
1983-4376	2445690.31	1983 Dec 21 19:00:00	Super Loki	-	MIP/HINE M-H	0.000	DFVLR	SS	GSFC/Parsons Barnes	Aeron, Ozome	JR894_ID, 2239	-	-
1983-4377	2445690.31	1983 Dec 21 21:22	Super Loki	-	MIP/HINE M-H	0.000	DFVLR	SS	GSFC/Parsons Barnes	Aeron, Ozome	JR894_ID, 2239	-	-
1983-4380	2445696.86	1983 Dec 28 08:32:00	Super Loki	-	MIP/HINE M-H	0.000	DFVLR	SS	GSFC/Parsons Barnes	Aeron, Ozome	JR894_ID, 2239	-	-
1983-4381	2445696.93	1983 Dec 28 10:19:00	Super Loki	-	MIP/HINE M-H	0.000	DFVLR	SS	GSFC/Parsons Barnes	Aeron, Ozome	JR894_ID, 2239	-	-
1983-4382	2445698.33	1983 Dec 29 19:50:00	Super Loki	-	MIP/HINE M-H	0.000	DFVLR	SS	GSFC/Parsons Barnes	Aeron, Ozome	JR894_ID, 2239	-	-
1983-4383	2445700.16	1983 Dec 31 15:56:00	Super Loki	-	MIP/HINE M-H	0.000	DFVLR	SS	GSFC/Parsons Barnes	Aeron, Ozome	JR894_ID, 2239	-	-
1983-4383	2445700.21	1983 Dec 31 17:00:00	Super Loki	-	MIP/HINE M-H	0.000	DFVLR	SS	GSFC/Parsons Barnes	Aeron, Ozome	JR894_ID, 2239	-	-
1984-402	2445704.33	1984 Jan 4 20:52	Super Loki	-	MIP/HINE M-H	0.000	DFVLR	SS	GSFC/Parsons Barnes	Aeron, Ozome	JR894_ID, 2239	-	-
1984-104	2445706.37	1984 Jan 6 20:52	Super Loki	-	MIP/HINE M-H	0.000	DFVLR	SS	GSFC/Parsons Barnes	Aeron, Ozome	JR894_ID, 2239	-	-
1984-106	2445706.42	1984 Jan 6 22:10	Super Loki	-	MIP/HINE M-H	0.000	DFVLR	SS	GSFC/Parsons Barnes	Aeron, Ozome	JR894_ID, 2239	-	-
1984-406	2445706.45	1984 Jan 6 22:44	Super Loki	-	MIP/HINE M-H	0.000	DFVLR	SS	GSFC/Parsons Barnes	Aeron, Ozome	JR894_ID, 2239	-	-
1984-407	2445707.33	1984 Jan 7 20:00	Super Loki	-	MIP/HINE M-H	0.000	DFVLR	SS	GSFC/Parsons Barnes	Aeron, Ozome	JR894_ID, 2239	-	-
1984-408	2445710.04	1984 Jan 10 13:01	Super Loki	-	INTA SLD-8401	0.000	INTA	SS	INTA/	Aeron	ELAREN	-	-
1984-410	2445712.28	1984 Jan 12 18:37	Super Loki	-	MIP/HINE M-H	0.000	DFVLR	SS	GSFC/Parsons Barnes	Aeron, Ozome	JR894_ID, 2239	-	-
1984-411	2445712.31	1984 Jan 12 19:20	Super Loki	-	MIP/HINE M-H	0.000	DFVLR	SS	GSFC/Parsons Barnes	Aeron, Ozome	JR894_ID, 2239	-	-
1984-415	2445712.35	1984 Jan 12 20:19	Super Loki	-	MIP/HINE M-H	0.000	DFVLR	SS	GSFC/Parsons Barnes	Aeron, Ozome	JR894_ID, 2239	-	-
1984-416	2445712.42	1984 Jan 12 22:06	Super Loki	-	MIP/HINE M-H	0.000	DFVLR	SS	GSFC/Parsons Barnes	Aeron, Ozome	JR894_ID, 2239	-	-
1984-414	2445713.35	1984 Jan 13 20:18	Super Loki	-	MIP/HINE M-H	0.000	DFVLR	SS	GSFC/Parsons Barnes	Aeron, Ozome	JR894_ID, 2239	-	-
1984-417	2445713.47	1984 Jan 13 23:16	Super Loki	-	MIP/HINE M-H	0.000	DFVLR	SS	GSFC/Parsons Barnes	Aeron, Ozome	JR894_ID, 2239	-	-
1984-418	2445715.35	1984 Jan 15 20:20	Super Loki	-	MIP/HINE M-H	0.000	DFVLR	SS	GSFC/Parsons Barnes	Aeron, Ozome	JR894_ID, 2239	-	-
1984-422	2445718.01	1984 Jan 18 12:15	Super Loki	-	MIP/HINE M-H	0.000	DFVLR	SS	GSFC/Parsons Barnes	Aeron, Ozome	JR894_ID, 2239	-	-
1984-5241	2445718.04	1984 Jan 18 12:53	Super Loki	-	INTA SLD-8402	0.000	INTA	SS	INTA/	Aeron	ELAREN	-	-
1984-425	2445718.33	1984 Jan 18 20:00	Super Loki	-	MIP/HINE M-H	0.000	DFVLR	SS	GSFC/Parsons Barnes	Aeron, Ozome	JR894_ID, 2239	-	-
1984-426	2445720.98	1984 Jan 21 11:31	Super Loki	-	MIP/HINE M-H	0.000	DFVLR	SS	GSFC/Parsons Barnes	Aeron, Ozome	JR894_ID, 2239	-	-
1984-5242	2445721.04	1984 Jan 21 12:52	Super Loki	-	INTA SLD-8403	0.000	INTA	SS	INTA/	Aeron	ELAREN	-	-
1984-429	2445721.05	1984 Jan 21 13:08	Super Loki	-	MIP/HINE M-H	0.000	DFVLR	SS	GSFC/Parsons Barnes	Aeron, Ozome	JR894_ID, 2239	-	-
1984-430	2445721.08	1984 Jan 21 13:49	Super Loki	-	MIP/HINE M-H	0.000	DFVLR	SS	GSFC/Parsons Barnes	Aeron, Ozome	JR894_ID, 2239	-	-
1984-428	2445721.11	1984 Jan 21 14:44	Super Loki	-	MIP/HINE M-H	0.000	DFVLR	SS	GSFC/Parsons Barnes	Aeron, Ozome	JR894_ID, 2239	-	-



Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	OrbPay	Agency	Launch_Code	Group	Category	LTCite	Cite	Notes
1985-H58	2446292.30	1985 Aug 14 1915	Super Loki	-	-	0.000	GSFC	SS	GSFC/Parsons Barnes	Aeron. Dzone	JR94_ID2, 2239	-	-
1985-H238	2446318.57	1985 Sep 10 0139:00	Super Loki	-	-	0.000	WFF	SU	WFF/	Test/Aeron	WDRP	-	-
1985-H59	2446327.31	1985 Sep 18 1930	Super Loki	-	-	0.000	GSFC	SS	GSFC/Parsons Barnes	Aeron. Dzone	JR94_ID2, 2239	-	-
1985-H247	2446327.35	1985 Sep 16 1217:00	Super Loki	-	-	0.000	MRN	SS	-	Neteo	DSL-5850	-	-
1985-H297	2446386.01	1985 Dec 11 0050:00	Super Loki	-	-	0.000	WFF	SU	WFF/	Test/Aeron	WDRP	-	-
1985-H327	2446409.53	1985 Dec 11 0050:00	Super Loki	-	-	0.000	WFF	SU	WFF/	Test/Aeron	WDRP	-	-
1985-H328	2446410.50	1985 Dec 17 0000:00	Super Loki	-	-	0.000	WFF	SU	WFF/	Test/Aeron	WDRP	-	-
1985-H338	2446416.54	1985 Dec 17 0000:00	Super Loki	-	-	0.000	WFF	SU	WFF/	Test/Aeron	WDRP	-	-
1985-H152	2446416.56	1985 Dec 17 0130:00	Super Loki	-	-	0.000	WFF	SU	WFF/	Test/Aeron	WDRP	-	-
1985-H339	2446417.54	1985 Dec 18 0055:00	Super Loki	-	-	0.000	WFF	SU	WFF/	Test/Aeron	WDRP	-	-
1985-H154	2446417.56	1985 Dec 18 0120:00	Super Loki	-	-	0.000	WFF	SU	WFF/	Test/Aeron	WDRP	-	-
1985-H155	2446418.43	1986 Jun 26 2214:30	Super Loki	-	-	0.000	GSFC	SS	GSFC/	Aeron	ssc.se	-	-
1985-H243	2446638.43	1986 Jun 26 2214:30	Super Loki	-	-	0.000	GSFC	SS	GSFC/	Aeron	ssc.se	-	-
1985-H244	2446638.48	1986 Jun 26 2328:10	Super Loki	-	-	0.000	GSFC	SS	GSFC/	Aeron	ssc.se	-	-
1985-H245	2446638.50	1986 Jun 27 0005:00	Super Loki	-	-	0.000	GSFC	SS	GSFC/	Aeron	ssc.se	-	-
1985-H246	2446638.53	1986 Jun 27 0050:00	Super Loki	-	-	0.000	GSFC	SS	GSFC/	Aeron	ssc.se	-	-
1985-H247	2446639.43	1986 Jun 27 2214:30	Super Loki	-	-	0.000	GSFC	SS	GSFC/	Aeron	ssc.se	-	-
1985-H248	2446639.47	1986 Jun 27 2316:00	Super Loki	-	-	0.000	GSFC	SS	GSFC/	Aeron	ssc.se	-	-
1987-423	2446662.00	1987 Jun 15 1157	Super Loki	-	-	0.000	DLR	SF	BMV/VonZahn	Aeron	MAPZ26	-	-
1987-423	2446669.02	1987 Jun 22 1230	Super Loki	-	-	0.000	DLR	SS	BMV/VonZahn	Aeron	JASTP63,1831	-	-
1987-1407	2446669.05	1987 Jun 22 1311	Super Loki	-	-	0.000	DLR	SF	BMV/VonZahn	Aeron	JASTP63,1831	-	-
1987-1392	2446670.37	1987 Jun 24 1120	Super Loki	-	-	0.000	DLR	SS	BMV/VonZahn	Aeron	JASTP63,1831	-	-
1987-1393	2446671.00	1987 Jun 24 1153	Super Loki	-	-	0.000	DLR	SS	BMV/VonZahn	Aeron	JASTP63,1831	-	-
1987-1406	2446671.02	1987 Jun 24 1225	Super Loki	-	-	0.000	DLR	SS	BMV/VonZahn	Aeron	JASTP63,1831	-	-
1987-1394	2446671.05	1987 Jun 24 1240	Super Loki	-	-	0.000	DLR	SS	BMV/VonZahn	Aeron	JASTP63,1831	-	-
1987-1395	2446671.06	1987 Jun 24 1353	Super Loki	-	-	0.000	DLR	SS	BMV/VonZahn	Aeron	JASTP63,1831	-	-
1987-1396	2446672.36	1987 Jun 26 1127	Super Loki	-	-	0.000	DLR	SS	BMV/VonZahn	Aeron	JASTP63,1831	-	-
1987-1411	2446673.00	1987 Jun 26 1201	Super Loki	-	-	0.000	DLR	SS	BMV/VonZahn	Aeron	JASTP63,1831	-	-
1987-1397	2446673.03	1987 Jun 26 1244	Super Loki	-	-	0.000	DLR	SS	BMV/VonZahn	Aeron	JASTP63,1831	-	-
1987-1398	2446673.07	1987 Jun 26 1336	Super Loki	-	-	0.000	DLR	SS	BMV/VonZahn	Aeron	JASTP63,1831	-	-
1987-1201	2446676.39	1987 Jun 01 2128:00	Super Loki	-	-	0.000	DLR	SS	BMV/VonZahn	Aeron	JASTP63,1831	-	-
1987-1202	2446676.46	1987 Jun 01 2215:00	Super Loki	-	-	0.000	DLR	SS	BMV/VonZahn	Aeron	JASTP63,1831	-	-
1987-1177	2446676.48	1987 Jun 01 2349:00	Super Loki	-	-	0.000	DLR	SS	BMV/VonZahn	Aeron	JASTP63,1831	-	-
1987-1204	2446676.48	1987 Jun 01 2349:00	Super Loki	-	-	0.000	DLR	SS	BMV/VonZahn	Aeron	JASTP63,1831	-	-
1987-1219	2446680.57	1987 Jun 14 0852:00	Super Loki	-	-	0.000	DLR	SS	BMV/VonZahn	Aeron	JASTP63,1831	-	-
1987-1221	2446680.90	1987 Jun 14 0945:00	Super Loki	-	-	0.000	DLR	SS	BMV/VonZahn	Aeron	JASTP63,1831	-	-
1987-1222	2446680.90	1987 Jun 14 1019:00	Super Loki	-	-	0.000	DLR	SS	BMV/VonZahn	Aeron	JASTP63,1831	-	-
1987-1224	2446680.95	1987 Jun 14 1130:00	Super Loki	-	-	0.000	DLR	SS	BMV/VonZahn	Aeron	JASTP63,1831	-	-
1987-1225	2446691.00	1987 Jun 14 1203:00	Super Loki	-	-	0.000	DLR	SS	BMV/VonZahn	Aeron	JASTP63,1831	-	-
1987-1227	2446691.05	1987 Jun 14 1307:00	Super Loki	-	-	0.000	DLR	SS	BMV/VonZahn	Aeron	JASTP63,1831	-	-
1987-1168	2446691.60	1987 Jun 15 0223:00	Super Loki	-	-	0.000	WFF	SS	WFF/Schmidlin	Neteo	DSL-5850	-	-
1987-1331	2446692.95	1987 Jun 15 1306:00	Super Loki	-	-	0.000	DLR	SS	BMV/VonZahn	Aeron	JASTP63,1831	-	-
1987-1234	2446692.95	1987 Jun 15 2109:00	Super Loki	-	-	0.000	DLR	SS	BMV/VonZahn	Aeron	JASTP63,1831	-	-
1987-1236	2446692.95	1987 Jun 15 2117:00	Super Loki	-	-	0.000	DLR	SS	BMV/VonZahn	Aeron	JASTP63,1831	-	-
1987-1238	2446692.95	1987 Jun 15 2201:00	Super Loki	-	-	0.000	DLR	SS	BMV/VonZahn	Aeron	JASTP63,1831	-	-
1987-1239	2446692.95	1987 Jun 15 2230:00	Super Loki	-	-	0.000	DLR	SS	BMV/VonZahn	Aeron	JASTP63,1831	-	-
1987-1240	2446692.95	1987 Jun 15 2325:00	Super Loki	-	-	0.000	DLR	SS	BMV/VonZahn	Aeron	JASTP63,1831	-	-
1987-1169	2447002.70	1987 Jun 17 0654:00	Super Loki	-	-	0.000	MRN	SS	WFF/Schmidlin	Neteo	DSL-5850	-	-
1987-1233	2447083.66	1987 Oct 15 1057:00	Super Loki	-	-	0.000	DLR	SS	WFF/Schmidlin	Neteo	DSL-5850	-	-
1987-1234	2447083.66	1987 Oct 15 1132:00	Super Loki	-	-	0.000	DLR	SS	WFF/Schmidlin	Neteo	DSL-5850	-	-
1987-1235	2447083.66	1987 Oct 15 1153:00	Super Loki	-	-	0.000	DLR	SS	WFF/Schmidlin	Neteo	DSL-5850	-	-
1987-1236	2447083.66	1987 Oct 15 1213:00	Super Loki	-	-	0.000	DLR	SS	WFF/Schmidlin	Neteo	DSL-5850	-	-
1987-1237	2447084.06	1987 Oct 15 1326:00	Super Loki	-	-	0.000	DLR	SS	WFF/Schmidlin	Neteo	DSL-5850	-	-
1987-1238	2447084.06	1987 Oct 15 1352:00	Super Loki	-	-	0.000	DLR	SS	WFF/Schmidlin	Neteo	DSL-5850	-	-
1987-1239	2447084.06	1987 Oct 15 1430:00	Super Loki	-	-	0.000	DLR	SS	WFF/Schmidlin	Neteo	DSL-5850	-	-
1987-1240	2447084.06	1987 Oct 15 1430:00	Super Loki	-	-	0.000	DLR	SS	WFF/Schmidlin	Neteo	DSL-5850	-	-
1987-1241	2447084.06	1987 Oct 15 1430:00	Super Loki	-	-	0.000	DLR	SS	WFF/Schmidlin	Neteo	DSL-5850	-	-
1987-1242	2447084.06	1987 Oct 15 1430:00	Super Loki	-	-	0.000	DLR	SS	WFF/Schmidlin	Neteo	DSL-5850	-	-
1987-1243	2447084.06	1987 Oct 15 1430:00	Super Loki	-	-	0.000	DLR	SS	WFF/Schmidlin	Neteo	DSL-5850	-	-
1987-1244	2447084.06	1987 Oct 15 1430:00	Super Loki	-	-	0.000	DLR	SS	WFF/Schmidlin	Neteo	DSL-5850	-	-
1987-1245	2447084.06	1987 Oct 15 1430:00	Super Loki	-	-	0.000	DLR	SS	WFF/Schmidlin	Neteo	DSL-5850	-	-
1987-1246	2447084.06	1987 Oct 15 1430:00	Super Loki	-	-	0.000	DLR	SS	WFF/Schmidlin	Neteo	DSL-5850	-	-
1987-1247	2447084.06	1987 Oct 15 1430:00	Super Loki	-	-	0.000	DLR	SS	WFF/Schmidlin	Neteo	DSL-5850	-	-
1987-1248	2447084.06	1987 Oct 15 1430:00	Super Loki	-	-	0.000	DLR	SS	WFF/Schmidlin	Neteo	DSL-5850	-	-
1987-1249	2447084.06	1987 Oct 15 1430:00	Super Loki	-	-	0.000	DLR	SS	WFF/Schmidlin	Neteo	DSL-5850	-	-
1987-1250	2447084.06	1987 Oct 15 1430:00	Super Loki	-	-	0.000	DLR	SS	WFF/Schmidlin	Neteo	DSL-5850	-	-
1987-1251	2447084.06	1987 Oct 15 1430:00	Super Loki	-	-	0.000	DLR	SS	WFF/Schmidlin	Neteo	DSL-5850	-	-
1987-1252	2447084.06	1987 Oct 15 1430:00	Super Loki	-	-	0.000	DLR	SS	WFF/Schmidlin	Neteo	DSL-5850	-	-
1987-1253	2447084.06	1987 Oct 15 1430:00	Super Loki	-	-	0.000	DLR	SS	WFF/Schmidlin	Neteo	DSL-5850	-	-
1987-1254	2447084.06	1987 Oct 15 1430:00	Super Loki	-	-	0.000	DLR	SS	WFF/Schmidlin	Neteo	DSL-5850	-	-
1987-1255	2447084.06	1987 Oct 15 1430:00	Super Loki	-	-	0.000	DLR	SS	WFF/Schmidlin	Neteo	DSL-5850	-	-
1987-1256	2447084.06	1987 Oct 15 1430:00	Super Loki	-	-	0.000	DLR	SS	WFF/Schmidlin	Neteo	DSL-5850	-	-
1987-1257	2447084.06	1987 Oct 15 1430:00	Super Loki	-	-	0.000	DLR	SS	WFF/Schmidlin	Neteo	DSL-5850	-	-
1987-1258	2447084.06	1987 Oct 15 1430:00	Super Loki	-	-	0.000	DLR	SS	WFF/Schmidlin	Neteo	DSL-5850	-	-
1987-1259	2447084.06	1987 Oct 15 1430:00	Super Loki	-	-	0.000	DLR	SS	WFF/Schmidlin	Neteo	DSL-5850	-	-
1987-1260	2447084.06	1987 Oct 15 1430:00	Super Loki	-	-	0.000	DLR	SS	WFF/Schmidlin	Neteo	DSL-5850	-	-
1987-1261	2447084.06	1987 Oct 15 1430:00	Super Loki	-	-	0.000	DLR	SS	WFF/Schmidlin	Neteo	DSL-5850	-	-
1987-1262	2447084.06	1987 Oct 15 1430:00	Super Loki	-	-	0.000	DLR	SS	WFF/Schmidlin	Neteo	DSL-5850	-	-
1987-1263	2447084.06	1987 Oct 15 1430:00	Super Loki	-	-	0.000	DLR	SS	WFF/Schmidlin	Neteo	DSL-5850	-	-
1987-1264	2447084.06	1987 Oct 15 1430:00	Super Loki	-	-	0.000	DLR	SS	WFF/Schmidlin	Neteo	DSL-5850	-	-
1987-1265	2447084.06	1987 Oct 15 1430:00	Super Loki	-	-	0.000	DLR	SS	WFF/Schmidlin	Neteo	DSL-5850	-	-
1987-1266	2447084.06	1987 Oct 15 1430:00	Super Loki	-	-	0.000	DLR	SS	WFF/Schmidlin	Neteo	DSL-5850	-	-
1987-1267	24470												





Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	OrbPay	Agency	Launch_Code	Group	Category	LTCite	Cite	Notes
1997-469	2450670.47	1997 Aug 9 2312	Super Loki	-	Datasonde	0.000	WFF	SS	WFF/Schmidlin	Aeron			
1997-460	2450671.39	1997 Aug 10 2121.20	Super Loki	-	Datasonde	0.000	WFF	SS	WFF/Schmidlin	Aeron			
1997-413	2450671.40	1997 Aug 10 2130.10	Super Loki	-	Falling Sphere	0.000	WFF	SS	WFF/Schmidlin	Aeron			
1997-415	2450672.07	1997 Aug 11 1338	Super Loki	-	Falling Sphere	0.000	WFF	SS	WFF/Schmidlin	Aeron			
1997-464	2450672.38	1997 Aug 11 2110	Super Loki	-	Datasonde	0.000	WFF	SS	WFF/Schmidlin	Aeron			
1997-465	2450672.39	1997 Aug 11 2119	Super Loki	-	Datasonde	0.000	WFF	SS	WFF/Schmidlin	Aeron			
1997-417	2450672.40	1997 Aug 11 2134	Super Loki	-	Falling Sphere	0.000	WFF	SS	WFF/Schmidlin	Aeron			
1997-418	2450673.01	1997 Aug 12 1210	Super Loki	-	Falling Sphere	0.000	WFF	SS	WFF/Schmidlin	Aeron			
1997-420	2450673.02	1997 Aug 12 1226.06	Super Loki	-	Falling Sphere	0.000	WFF	SS	WFF/Schmidlin	Aeron			
1997-466	2450673.40	1997 Aug 12 2130	Super Loki	-	Datasonde	0.000	WFF	SS	WFF/Schmidlin	Aeron			
1997-471	2450673.40	1997 Aug 12 2141	Super Loki	-	Falling Sphere	0.000	WFF	SS	WFF/Schmidlin	Aeron			
1997-472	2450674.08	1997 Aug 13 1350	Super Loki	-	Sphere	0.000	WFF	SS	WFF/Schmidlin	Aeron			
1997-473	2450674.08	1997 Aug 13 1355	Super Loki	-	Sphere	0.000	WFF	SS	WFF/Schmidlin	Aeron			
1997-474	2450674.39	1997 Aug 13 2123	Super Loki	-	Datasonde	0.000	WFF	SS	WFF/Schmidlin	Aeron			
1997-125	2450674.40	1997 Aug 13 2140	Super Loki	-	Sphere	0.000	WFF	SS	WFF/Schmidlin	Aeron			
1997-126	2450675.02	1997 Aug 14 1227.10	Super Loki	-	Sphere	0.000	WFF	SS	WFF/Schmidlin	Aeron			
1997-460	2450675.39	1997 Aug 14 2127.10	Super Loki	-	Datasonde	0.000	WFF	SS	WFF/Schmidlin	Aeron			
1997-461	2450675.39	1997 Aug 15 1053	Super Loki	-	-	0.000	WFF	SF	WFF/Schmidlin	Aeron			
1997-462	2450676.35	1997 Aug 15 2025	Super Loki	-	-	0.000	WFF	SS	WFF/Schmidlin	Aeron			
1997-463	2450679.31	1997 Aug 18 1930	Super Loki	-	-	0.000	WFF	SS	WFF/Schmidlin	Aeron			
1997-463	2450679.32	1997 Aug 18 1940	Super Loki	-	-	0.000	WFF	SS	WFF/Schmidlin	Aeron			
1997-477	2450752.21	1997 Oct 30 1524.07	Super Loki	-	DLR KU-SL-227	0.000	DLR	SS	WFF/Schmidlin	Aeron			
1997-478	2450752.21	1997 Oct 30 1700	Super Loki	-	Chaff	0.000	SSTC	SS	WFF/Schmidlin	Aeron			
1998-137	2450879.52	1998 Mar 7 0033	Super Loki	-	Chaff	0.000	SSTC	SS	WFF/Schmidlin	Aeron			
1998-138	2450879.56	1998 Mar 7 0124	Super Loki	-	-	0.000	WSNR	SS	WFF/Schmidlin	Aeron			
1998-416	2450940.50	1998 May 7	Super Loki	-	-	0.000	WSNR	SS	WFF/Schmidlin	Aeron			
1998-374	2451107.50	1998 Oct 21	Super Loki	-	-	0.000	WSNR	SS	WFF/Schmidlin	Aeron			
1998-135	2451109.46	1998 Oct 22 23307	Super Loki	-	-	0.000	WSNR	SS	WFF/Schmidlin	Aeron			
1998-136	2451109.46	1998 Oct 23 06307	Super Loki	-	-	0.000	WSNR	SS	WFF/Schmidlin	Aeron			
1999-404	2451364.46	1999 Jul 4 2338:00	Super Loki	-	MD-CH-01	0.000	NKC	SS	RSC/	Aeron			
1999-412	2451365.60	1999 Jul 6 0229	Super Loki	-	MD-CH-11	0.000	NDRS	SS	INDRE/IRP/	Aeron			
1999-419	2451376.30	1999 Jul 16 0930	Super Loki	-	MD-CH-19	0.000	NDRS	SS	INDRE/IRP/	Aeron			
2000-403	2451566.18	2000 Jan 21 1622	Super Loki	-	Litestar	0.000	SPL	SS	PLASE/	Education			
2000-432	2451581.33	2000 Jan 21 1622	Super Loki	-	Litestar	0.000	SPL	SS	PLASE/	Education			
2000-463	2451582.17	2000 Dec 12 2000	Super Loki	-	Litestar	0.000	SPL	SS	PLASE/	Education			
2001-415	2452286.35	2001 Dec 15 1020.30	Super Loki	-	Wind	0.000	SSTC	SS	STU/	Aeron			
2001-415	2452286.50	2001 Dec 15 1153.30	Super Loki	-	Wind	0.000	SSTC	SS	STU/	Aeron			
2001-416	2452289.63	2001 Dec 16 0911:30	Super Loki	-	Falling Sphere	0.000	SSTC	SS	STU/	Aeron			
2001-417	2452289.74	2001 Dec 16 0945	Super Loki	-	Falling Sphere	0.000	SSTC	SS	STU/	Aeron			
2002-405	2452454.22	2002 Jun 28 0918	Super Loki	-	-	0.000	SSTC	SS	STU/	Aeron			
2002-409	2452457.22	2002 Jun 28 1120:00	Super Loki	-	-	0.000	SSTC	SS	STU/	Aeron			
2002-410	2452457.22	2002 Jul 1 1120:00	Super Loki	-	-	0.000	SSTC	SS	STU/	Aeron			
2002-413	2452457.55	2002 Jul 4 0320:00	Super Loki	-	-	0.000	SSTC	SS	STU/	Aeron			
2002-415	2452457.80	2002 Jul 2 0220:00	Super Loki	-	-	0.000	SSTC	SS	STU/	Aeron			
2002-419	2452457.94	2002 Jul 4 0320:00	Super Loki	-	-	0.000	SSTC	SS	STU/	Aeron			
2002-419	2452460.36	2002 Jul 4 2048:00	Super Loki	-	-	0.000	SSTC	SS	STU/	Aeron			
2002-427	2452460.83	2002 Jul 4 2048:00	Super Loki	-	-	0.000	SSTC	SS	STU/	Aeron			
2002-428	2452460.87	2002 Jul 5 0400:00	Super Loki	-	-	0.000	SSTC	SS	STU/	Aeron			
2002-429	2452460.75	2002 Jul 5 0600:00	Super Loki	-	-	0.000	SSTC	SS	STU/	Aeron			
2003-427	2452463.05	2003 Jan 13 1308	Super Loki	-	-	0.000	WFF	SS	WFF/Schmidlin	Aeron			
2003-428	2452463.05	2003 Jan 13 1409	Super Loki	-	-	0.000	WFF	SS	WFF/Schmidlin	Aeron			
2003-439	2452463.12	2003 Jan 14 1430	Super Loki	-	-	0.000	WFF	SS	WFF/Schmidlin	Aeron			
2003-440	2452463.04	2003 Jan 14 1400	Super Loki	-	-	0.000	WFF	SS	WFF/Schmidlin	Aeron			
2003-440	2452463.04	2003 Jan 14 1400	Super Loki	-	-	0.000	WFF	SS	WFF/Schmidlin	Aeron			
2003-441	2452463.04	2003 Jan 16 1300	Super Loki	-	-	0.000	WFF	SS	WFF/Schmidlin	Aeron			
2003-442	2452463.04	2003 Jan 17 1300	Super Loki	-	-	0.000	WFF	SS	WFF/Schmidlin	Aeron			
2003-443	2452463.04	2003 Jan 17 1300	Super Loki	-	-	0.000	WFF	SS	WFF/Schmidlin	Aeron			
2003-444	2452463.04	2003 Jan 19 1300	Super Loki	-	-	0.000	WFF	SS	WFF/Schmidlin	Aeron			
2003-445	2452463.04	2003 Jan 19 1300	Super Loki	-	-	0.000	WFF	SS	WFF/Schmidlin	Aeron			
2003-446	2452463.05	2003 Jan 23 1315	Super Loki	-	-	0.000	WFF	SS	WFF/Schmidlin	Aeron			
2003-447	2452463.08	2003 Jan 23 1350	Super Loki	-	-	0.000	WFF	SS	WFF/Schmidlin	Aeron			
2003-448	2452463.04	2003 Jan 24 1300	Super Loki	-	-	0.000	WFF	SS	WFF/Schmidlin	Aeron			
2003-448	2452463.04	2003 Jan 24 1300	Super Loki	-	-	0.000	WFF	SS	WFF/Schmidlin	Aeron			
2003-449	2452463.05	2003 Jan 24 1311	Super Loki	-	ES03SL13	0.000	GSFC	SS	GSFC/Golberg	Aeron			
2003-449	2452463.05	2003 Jan 24 1403	Super Loki	-	ES03SL14	0.000	GSFC	SS	GSFC/Golberg	Aeron			
2003-449	2452463.05	2003 Jan 24 1505	Super Loki	-	ES03SL15	0.000	GSFC	SS	GSFC/Golberg	Aeron			
2003-449	2452463.05	2003 Jan 24 1600	Super Loki	-	ES03SL16	0.000	GSFC	SS	GSFC/Golberg	Aeron			
2003-449	2452463.05	2003 Jan 24 1700	Super Loki	-	ES03SL17	0.000	GSFC	SS	GSFC/Golberg	Aeron			
2003-449	2452463.05	2003 Jan 23 1315	Super Loki	-	ES03SL18	0.000	GSFC	SS	GSFC/Golberg	Aeron			
2003-449	2452463.05	2003 Jan 23 1350	Super Loki	-	ES03SL19	0.000	GSFC	SS	GSFC/Golberg	Aeron			
2003-449	2452463.05	2003 Jan 24 1800	Super Loki	-	ES03SL20	0.000	GSFC	SS	GSFC/Golberg	Aeron			
2003-449	2452463.05	2003 Jan 24 2000	Super Loki	-	ES03SL21	0.000	GSFC	SS	GSFC/Golberg	Aeron			
2003-449	2452463.05	2003 Jan 24 2102	Super Loki	-	ES03SL22	0.000	GSFC	SS	GSFC/Golberg	Aeron			
2003-449	2452463.05	2003 Jan 24 2200	Super Loki	-	ES03SL23	0.000	GSFC	SS	GSFC/Golberg	Aeron			
2003-449	2452463.05	2003 Jan 24 2300	Super Loki	-	ES03SL24	0.000	GSFC	SS	GSFC/Golberg	Aeron			
2003-449	2452463.05	2003 Jan 25 0000	Super Loki	-	ES03SL25	0.000	GSFC	SS	GSFC/Golberg	Aeron			
2003-449	2452463.05	2003 Jan 25 0058	Super Loki	-	ES03SL26	0.000	GSFC	SS	GSFC/Golberg	Aeron			
2003-449	2452463.05	2003 Jan 26 1300	Super Loki	-	ES03SL267	0.000	GSFC	SS	GSFC/Golberg	Aeron			
2003-450	2452463.04	2003 Jan 27 1300	Super Loki	-	ES03SL267	0.000	GSFC	SS	GSFC/Golberg	Aeron			
2003-451	2452463.13	2003 Jan 27 1505	Super Loki	-	ES03SL267	0.000	GSFC	SS	GSFC/Golberg	Aeron			
2003-452	2452463.15	2003 Jan 27 1545	Super Loki	-	ES03SL267	0.000	GSFC	SS	GSFC/Golberg	Aeron			
2003-453	2452463.19	2003 Jan 27 1633	Super Loki	-	ES03SL307	0.000	GSFC	SS	GSFC/Golberg	Aeron			

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	OrbPay	Agency	Launch_Code	Group	Category	LTCite	Cite	Notes
2003-154	2452667.31	2003 Jan 27 1926	Super Loki	-	ES03SL31?	0.000	GSFC	SS	GSFC/GolIberg	Aeron	ssc.se	-	-
2003-155	2452667.32	2003 Jan 27 1938	Super Loki	-	ES03SL32?	0.000	GSFC	SS	GSFC/GolIberg	Aeron	ssc.se	www.ssc.se	-
2003-116	2452668.04	2003 Jan 28 1300	Super Loki	-	ES03SL34	0.000	GSFC	SS	GSFC/GolIberg	Aeron	Goldberg,etal	www.ssc.se	-
2003-117	2452668.13	2003 Jan 28 1504	Super Loki	-	ES03SL36	0.000	GSFC	SS	GSFC/GolIberg	Aeron	Goldberg,etal	www.ssc.se	-
2003-118	2452668.16	2003 Jan 28 1557	Super Loki	-	ES03SL35	0.000	GSFC	SS	GSFC/GolIberg	Aeron	Goldberg,etal	www.ssc.se	-
2003-130	2452668.21	2003 Jan 28 1656	Super Loki	-	ES03SL33?	0.000	GSFC	SS	GSFC/GolIberg	Aeron	ssc.se	-	-
2003-119	2452668.21	2003 Jan 28 1705	Super Loki	-	ES03SL38	0.000	GSFC	SS	GSFC/GolIberg	Aeron	Goldberg,etal	www.ssc.se	-
2003-120	2452668.25	2003 Jan 28 1757	Super Loki	-	ES03SL39	0.000	GSFC	SS	GSFC/GolIberg	Aeron	Goldberg,etal	www.ssc.se	-
2003-171	2452668.28	2003 Jan 28 1842	Super Loki	-	ES03SL41	0.000	GSFC	SS	GSFC/GolIberg	Aeron	Goldberg,etal	www.ssc.se	-
2003-122	2452668.32	2003 Jan 29 1942	Super Loki	-	ES03SL42	0.000	GSFC	SS	GSFC/GolIberg	Aeron	Goldberg,etal	www.ssc.se	-
2003-125	2452670.04	2003 Jan 29 1300	Super Loki	-	-	0.000	GSFC	SS	GSFC/GolIberg	Aeron	www.ssc.se	-	-
2003-126	2452670.04	2003 Jan 30 1300	Super Loki	-	-	0.000	GSFC	SS	GSFC/GolIberg	Aeron	www.ssc.se	-	-
2003-127	2452670.05	2003 Jan 30 1312	Super Loki	-	-	0.000	WFF	SS	WFF/Schmidlin	Aeron	www.ssc.se	-	-
2003-128	2452670.38	2003 Jan 30 2110	Super Loki	-	-	0.000	WFF	SS	WFF/Schmidlin	Aeron	www.ssc.se	-	-
2003-129	2452670.41	2003 Jan 30 2155	Super Loki	-	-	0.000	WFF	SS	WFF/Schmidlin	Aeron	www.ssc.se	-	-
2003-131	2452670.42	2003 Jan 30 2203	Super Loki	-	-	0.000	WFF	SS	WFF/Schmidlin	Aeron	www.ssc.se	-	-
2003-134	2452680.10	2003 Aug 8 1430	Shadow 1	-	1	0.000	FLASP	SS	LRC/	Edu	SpaceNews0618-15	LRC.pdf	-
2003-135	2452680.15	2003 Aug 8 1630	Shadow 1	-	2	0.000	FLASP	SS	LRC/	Edu	SpaceNews0618-15	LRC.pdf	-
2003-136	2452683.50	2003 Aug 12	Super Loki	-	-	0.000	FLASP	SS	FLASP/	Edu	Wire	SpaceNews0618-15	-
2003-401	2452950.50	2003 Nov 7	Super Loki	-	Shadow 1B	0.000	FLASP	SS	FLASP/FLASP/	Edu	Wire	SpaceNews0618-15	-
2005-101	2453250.10	2004 Sep 1 1430	Super Loki	-	-	0.000	SSC	SS	STU/	Aeron	www.ssc.se	-	-
2005-102	2453380.85	2005 Jan 10 0629	Super Loki	-	-	0.000	SSC	SS	STU/	Aeron	www.ssc.se	-	-
2005-103	2453380.79	2005 Jan 10 0703	Super Loki	-	-	0.000	DLA	SS	IMF/Lubken	Aeron	www.rockstrange.no	-	-
2005-109	2453389.09	2005 Jan 18 1385.00	Super Loki	-	-	0.000	DLA	SS	IMF/Lubken	Aeron	www.rockstrange.no	-	-
2005-112	2453389.17	2005 Jan 18 1607	Super Loki	-	-	0.000	DLA	SS	IMF/Lubken	Aeron	www.rockstrange.no	-	-
2005-115	2453389.25	2005 Jan 18 1757	Super Loki	-	-	0.000	DLA	SS	IMF/Lubken	Aeron	www.rockstrange.no	-	-
2005-118	2453390.89	2005 Jan 20 0916	Super Loki	-	-	0.000	SPPL	SS	BRCC/	Aeron/Test	Missiler16,21	-	-
2006-401	2453973.08	2006 May 17 1400	Super Loki	-	Genesis test	0.000	WFF	SS	PSU/WFF/Creskey	Aeron/Test	ESN-SF67-241	www.wff.nasa.gov	-
2006-101	2453994.93	2006 Jun 8 1020	Super Loki	-	-	0.000	WFF	SS	RTSP/	Tech	youtube/BHjRhm9zfk	-	-
2007-414	2454440.17	2007 Dec 5 1606:25	Shadow 1	-	Shadow 1B	0.000	SPPL	SS	SPL/	Test	nasaspaceflight.no	-	-
2008-573	2454732.06	2008 Sep 22 1330	Super Loki	-	-	0.000	DLA	SS	USAF/	Test	Wire	-	-
2009-521	2454938.97	2009 Apr 17 1118	FalconLaunch	-	FalconLaunch 7	0.000	DLA	SS	IMF/IRSS/	Aeron	rockstrange.no	-	-
2013-567	2454649.50	2013 Jun 26	Super Loki	-	-	0.000	DLA	SS	IMF/IRSS/	Aeron	rockstrange.no	-	-
2013-569	245470.50	2013 Jun 27	Super Loki	-	-	0.000	DLA	SS	IMF/IRSS/	Aeron	rockstrange.no	-	-
2013-570	245470.50	2013 Jun 27	Super Loki	-	-	0.000	DLA	SS	IMF/IRSS/	Aeron	rockstrange.no	-	-
2013-571	245470.50	2013 Jun 27	Super Loki	-	-	0.000	DLA	SS	IMF/IRSS/	Aeron	rockstrange.no	-	-
2013-572	245470.50	2013 Jun 27	Super Loki	-	-	0.000	DLA	SS	IMF/IRSS/	Aeron	rockstrange.no	-	-
2013-573	245471.50	2013 Jun 28	Super Loki	-	-	0.000	DLA	SS	IMF/IRSS/	Aeron	rockstrange.no	-	-
2013-574	245472.50	2013 Jun 29	Super Loki	-	-	0.000	DLA	SS	IMF/IRSS/	Aeron	rockstrange.no	-	-
2013-575	245473.50	2013 Jun 30	Super Loki	-	-	0.000	DLA	SS	IMF/IRSS/	Aeron	rockstrange.no	-	-
2013-576	245474.50	2013 Jul 1	Super Loki	-	-	0.000	DLA	SS	IMF/IRSS/	Aeron	rockstrange.no	-	-
2013-577	245475.50	2013 Jul 2	Super Loki	-	-	0.000	DLA	SS	IMF/IRSS/	Aeron	rockstrange.no	-	-
2013-578	245476.50	2013 Jul 3	Super Loki	-	-	0.000	DLA	SS	IMF/IRSS/	Aeron	rockstrange.no	-	-



Launch																
Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Mission	FlightCode	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee km	Range km	Dest
1965-A374	2436251.25	1965 May 23 1805	X-17 QTV	-	Q-1	-	-	-	-	CC	LC3	-	-	10	17	-
1965-A375	2436251.32	1965 May 23 1944	X-17 QTV	-	Q-2	-	-	-	-	CC	LC3	-	-	11	17	-



Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	OrbPay	Agency	Launch_Code	Group	Category	LTCite	Cite	Notes
1965-4374	2435251.25	1965 May 23 1905	X-17 QTV	-	Q-1	0.000	6555A	AS	-	Test	X17FR	X-Planes	-
1965-4375	2435251.32	1965 May 23 1944	X-17 QTV	-	Q-2	0.000	6555A	AS	-	Test	X17FR	X-Planes	-



Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Launch			Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee km	Range km	Dest
							Mission	FlightCode	Platform								
1960-450	2458985.50	1960 Feb 19	T-7H	-	-	-	-	-	-	LA0G	-	-	-	8	-	-	
1960-424	2437177.50	1960 Sep	T-7	-	-	-	-	-	-	SHIJ	-	-	-	60	-	-	
1963-5578	2438363.50	1963 Dec	T-7A	-	-	-	-	-	-	SHIJ?	-	-	-	115	-	-	
1964-417	2438895.50	1964 Jul 19	T-7A-S	-	-	Life Sci (mice)	-	-	-	SHIJ?	-	-	-	70	-	-	
1965-416	2438912.50	1965 Jun 1	T-7A-S	-	-	Life Sci (mice)	-	-	-	SHIJ?	-	-	-	70?	-	-	
1965-417	2438916.50	1965 Jun 5	T-7A-S	-	-	Life Sci (mice)	-	-	-	SHIJ?	-	-	-	70?	-	-	
1965-701	2438760.50	1965	T-7	-	-	DPH test	-	-	-	JQ	-	-	-	83	-	-	
1966-5371	2439520.50	1966 Jul 14	T-7A-S2	-	-	Life Sci (dog)	-	-	-	SHIJ?	-	-	-	100	-	-	
1966-5399	2439334.50	1966 Jul 28	T-7A-S2	-	-	Life Sci (dog)	-	-	-	SHIJ?	-	-	-	100	-	-	
1968-5445	2440076.50	1968 Aug 8	T-7/GF-01A	-	-	GF-01A test	-	-	-	JQ?	-	-	-	311	-	-	
1968-5462	2440088.50	1968 Aug 20	T-7/GF-01A	-	-	GF-01A test	-	-	-	JQ?	-	-	-	311	-	-	
1969-701	2440221.50	1969	T-7	-	-	DPH test	-	-	-	JQ	-	-	-	81	-	-	
1969-5364	2440372.50	1969 Jun	T-7A	-	-	FSW test	-	-	-	JQ	-	-	-	100?	-	-	
1969-5366	2440402.50	1969 Jul	T-7A	-	-	FSW test	-	-	-	JQ	-	-	-	100?	-	-	





Launch

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	OrbPay	Agency	Launch_Code	Group	Category	LTCite	Cite	Notes
1960-450	2436983.50	1960 Feb 19	T-7H	-	-	0.000	SIMED	SS	SIMED/Wang	Test	Harvey	-	-
1960-424	2437177.50	1960 Sep	T-7	-	-	0.000	SIMED	SS	SIMED/Wang	Test	Harvey	-	-
1960-3578	2438263.50	1963 Dec	T-7A	-	-	0.000	SIMED	SS	SIMED/Wang	Test	Harvey	-	-
1964-M17	2438595.50	1964 Jul 19	T-7A-S	-	-	0.000	SIMED	SS	SIMED/Wang?	Biology	Harvey	-	-
1965-M16	2438912.50	1965 Jun 1	T-7A-S	-	-	0.000	SIMED	SS	SIMED/	Biology	Harvey	-	-
1965-M17	2438916.50	1965 Jun 5	T-7A-S	-	-	0.000	SIMED	SS	SIMED/	Biology	Harvey	-	-
1965-Y01	2438760.50	1965	T-7	-	-	0.000	CALT	SS	CAST/	Tech	Harvey	-	-
1966-S371	2439220.50	1966 Jul 14	T-7A-S2	-	-	0.000	SIMED	SS	SIMED/	Biology	Harvey	-	-
1966-S399	2439334.50	1966 Jul 28	T-7A-S2	-	-	0.000	SIMED	SS	SIMED/	Biology	Harvey	-	-
1968-S445	2440076.50	1968 Aug 8	T-7/GF-01A	-	-	0.000	CALT	SS	ARMT/	Test	Harvey	-	-
1968-S462	2440088.50	1968 Aug 20	T-7/GF-01A	-	-	0.000	CALT	SS	ARMT/	Test	Harvey	-	-
1969-Y01	2440221.50	1969	T-7	-	-	0.000	CALT	SS	CAST/	Tech	Harvey	-	-
1969-S384	2440372.50	1969 Jun	T-7A	-	-	0.000	CALT	SS	CAST/	Tech	Harvey	-	-
1969-S386	2440402.50	1969 Jul	T-7A	-	-	0.000	CALT	SS	CAST/	Tech	Harvey	-	-



Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Mission	FlightCode	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee km	Range km	Dest
1953-4263	2434553.50	1953 Jun 25	Mike T48 Ajax	-	12498-1217	Mike 222R	-	-	-	WS	-	-	-	10?	-	-
1953-4296	2434576.50	1953 Jul 17	Mike T48 Ajax	-	12498-1239	Mike 229R	-	-	-	WS	-	-	-	10?	-	-
1953-4431	2434694.50	1953 Nov 03	Mike T48 Ajax	-	12948-1261 T48	Mike 260R/Bell motor	-	-	-	WS	-	-	-	10?	-	-
1954-4298	2434688.50	1954 May 26	Mike T48 Ajax	-	12494-193	Mike 287R T48E2	-	-	-	WS	-	-	-	10?	-	-
1954-4299	2434688.50	1954 May 26	Mike T48 Ajax	-	12494-190	Mike 289R T48E2	-	-	-	WS	-	-	-	10?	-	-
1954-4312	2434696.50	1954 Jun 02	Mike T48 Ajax	-	12498-1409	Mike 292R T48E2	-	-	-	WS	-	-	-	10?	-	-
1954-4313	2434696.50	1954 Jun 02	Mike T48 Ajax	-	12498-1303	Mike 292R T48E2	-	-	-	WS	-	-	-	10?	-	-
1954-4464	2434979.50	1954 Aug 25	Mike T48 Ajax	-	12498-2517	Mike 364R T48E2	-	-	-	WS	-	-	-	10?	-	-
1954-4468	2434979.50	1954 Aug 25	Mike T48 Ajax	-	12498-2521	Mike 366R T48E2	-	-	-	WS	-	-	-	10?	-	-
1954-4496	2434986.50	1954 Sep 01	Mike T48 Ajax	-	12498-2529	Mike 368R T48E2	-	-	-	WS	-	-	-	10?	-	-
1954-4498	2434986.50	1954 Sep 01	Mike T48 Ajax	-	12498-2549	Mike 367R T48E2	-	-	-	WS	-	-	-	10?	-	-
1954-4524	2435000.50	1954 Sep 15	Mike T48 Ajax	-	12498-2533	Mike 374R T48E2	-	-	-	WS	-	-	-	10?	-	-
1954-4525	2435000.50	1954 Sep 15	Mike T48 Ajax	-	12498-2795	Mike 375R T48E2	-	-	-	WS	-	-	-	10?	-	-
1954-4533	2435007.50	1954 Sep 22	Mike T48 Ajax	-	12498-2685	Mike 376R T48E2	-	-	-	WS	-	-	-	10?	-	-
1954-4536	2435007.50	1954 Sep 22	Mike T48 Ajax	-	12498-2615	Mike 378R T48E2	-	-	-	WS	-	-	-	10?	-	-
1954-4561	2435014.50	1954 Sep 29	Mike T48 Ajax	-	12498-2847	Mike 379R T48E2	-	-	-	WS	-	-	-	10?	-	-
1954-4562	2435014.50	1954 Sep 29	Mike T48 Ajax	-	12498-2873	Mike 382R T48E2	-	-	-	WS	-	-	-	10?	-	-
						Mike 383R T48E2	-	-	-	WS	-	-	-	10?	-	-



Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	OrbPay	Agency	Launch_Code	Group	Category	LTCite	Cite	Notes
1953-4263	2434653.50	1953 Jun 25	Mike T48 A/jax	-	12498-1217	0.000	OR0	AS	-	Test	wsmr-history.org	-	-
1953-4296	2434676.50	1953 Jul 17	Mike T48 A/jax	-	12498-1239	0.000	OR0	AS	-	Test	wsmr-history.org	-	-
1953-4431	2434684.50	1953 Nov 03	Mike T48 A/jax	-	12498-1261 T48	0.000	OR0	AS	-	Test	wsmr-history.org	-	-
1954-4298	2434688.50	1954 May 26	Mike T48 A/jax	-	12494-193	0.000	OR0	AS	-	Test	wsmr-history.org	-	-
1954-4299	2434688.50	1954 May 26	Mike T48 A/jax	-	12494-190	0.000	OR0	AS	-	Test	wsmr-history.org	-	-
1954-4312	2434695.50	1954 Jun 02	Mike T48 A/jax	-	12498-1409	0.000	OR0	AS	-	Test	wsmr-history.org	-	-
1954-4313	2434695.50	1954 Jun 02	Mike T48 A/jax	-	12498-1303	0.000	OR0	AS	-	Test	wsmr-history.org	-	-
1954-4464	2434979.50	1954 Aug 25	Mike T48 A/jax	-	12498-2517	0.000	OR0	AS	-	Test	wsmr-history.org	-	-
1954-4468	2434986.50	1954 Aug 25	Mike T48 A/jax	-	12498-2521	0.000	OR0	AS	-	Test	wsmr-history.org	-	-
1954-4496	2434986.50	1954 Sep 01	Mike T48 A/jax	-	12498-2529	0.000	OR0	AS	-	Test	wsmr-history.org	-	-
1954-4524	2435000.50	1954 Sep 15	Mike T48 A/jax	-	12498-2549	0.000	OR0	AS	-	Test	wsmr-history.org	-	-
1954-4525	2435000.50	1954 Sep 15	Mike T48 A/jax	-	12498-2533	0.000	OR0	AS	-	Test	wsmr-history.org	-	-
1954-4533	2435007.50	1954 Sep 15	Mike T48 A/jax	-	12498-2795	0.000	OR0	AS	-	Test	wsmr-history.org	-	-
1954-4536	2435007.50	1954 Sep 22	Mike T48 A/jax	-	12498-2685	0.000	OR0	AS	-	Test	wsmr-history.org	-	-
1954-4561	2435014.50	1954 Sep 29	Mike T48 A/jax	-	12498-2815	0.000	OR0	AS	-	Test	wsmr-history.org	-	-
1954-4562	2435014.50	1954 Sep 29	Mike T48 A/jax	-	12498-2847	0.000	OR0	AS	-	Test	wsmr-history.org	-	-
					12498-2873	0.000	OR0	AS	-	Test	wsmr-history.org	-	-



Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Mission	FlightCode	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee_Km	Range_Km	Dest
1995-834	2449829.13	1995 Apr 21 1504	THAAD	1	FT-01	-	-	-	-	WS	-	-	-	100	-	-
1995-852	2449929.50	1995 Jul 31	THAAD	1	FT-02	-	-	-	-	WS	-	-	-	100?	-	-
1995-868	2450004.11	1995 Oct 13 1441?	THAAD	1	FT-03	-	-	-	-	WS	-	-	-	100?	-	-
1995-887	2450065.00	1995 Dec 13 1205	THAAD	1	FT-04	-	-	-	-	WS	-	-	-	100?	-	-
1996-814	2450164.50	1996 Mar 22	THAAD	1	FT-05	-	-	-	-	WS	-	-	-	100?	-	-
1996-842	2450279.98	1996 Jul 15 1131?	THAAD	1	FT-06	-	-	-	-	WS	-	-	-	100?	-	-
1997-524	2450514.03	1997 Mar 6 1241?	THAAD	1	FT-07	-	-	-	-	WS	-	-	-	0?	-	-
1998-401	2450945.97	1998 May 12 1120	THAAD	1	FT-08	-	-	-	-	WS	-	-	-	100?	-	-
1998-520	2451267.01	1999 Mar 29 1220	THAAD	1	FT-09	-	-	-	-	WS	-	-	-	90?	-	-
1999-836	2451339.97	1999 Jun 10 1114	THAAD	1	FT-10	-	-	-	-	WS	-	-	-	100	-	-
1999-852	2451392.99	1999 Aug 2 1144	THAAD	1	FT-11	-	-	-	-	WS	-	-	-	100?	-	-
2006-854	2453696.50	2006 Nov 22	THAAD	-	THAAD FTI-01	Exo	-	-	-	WS	-	-	-	100?	-	-
2006-821	2453866.50	2006 May 11	THAAD	-	THAAD FTI-02	Block 04 Demo FT-12	-	-	-	WS	-	-	-	100?	-	-
2006-802	2453928.97	2006 Jul 12 1120	THAAD	-	THAAD FTI-03	Virtual Target FT-13	-	-	-	WS	-	-	-	100?	-	-
2007-507	2454127.72	2007 Jan 27 0520	THAAD	-	THAAD FTI-06	High Endo	-	-	-	MAU	-	-	-	90?	-	-
2007-802	2454196.78	2007 Apr 6 0645	THAAD	-	THAAD FTI-07	High Endo	-	-	-	MAU	-	-	-	90?	-	-
2007-405	2454277.50	2007 Jun 26	THAAD	-	THAAD FTI-08	Mid Endo	-	-	-	MAU	-	-	-	40?	-	-
2007-853	2454400.80	2007 Oct 27 0718?	THAAD	-	THAAD FTI-09	Exo	-	-	-	MAU	-	-	-	100?	-	-
2008-802	2454643.60	2008 Jun 26 0222	THAAD	-	THAAD FTI-10a	Mid Endo	-	-	-	MAU	-	-	-	60?	-	-
2009-805	2454908.52	2009 Mar 18 0030	THAAD	-	THAAD FTI-10a Salvo	High Endo	-	-	-	MAU	-	-	-	60?	-	-
2009-404	2454908.52	2009 Mar 18 0030	THAAD	-	THAAD FTI-10a Salvo	High Endo	-	-	-	MAU	-	-	-	60?	-	-
2010-403	2455376.52	2010 Jun 29 0737	THAAD	-	THAAD FTI-14	Low Endo	-	-	-	MAU	-	-	-	20?	-	-
2011-847	2455639.75	2011 Oct 5 0800?	THAAD	-	THAAD FTI-12	-	-	-	-	MAU	-	-	-	100?	-	-
2011-846	2456225.50	2012 Oct 26?	THAAD	-	THAAD FTI-01	-	-	-	-	RMR	-	-	-	100?	-	-
2013-860	2456645.50	2013 Sep 10	THAAD	-	THAAD FTI-01	eMBM intercept	-	-	-	RMR	Meck	-	-	100?	-	-
2013-861	2456645.50	2013 Sep 10	THAAD	-	THAAD FTI-01	Aegis Backup	-	-	-	RMR	Meck	-	-	100?	-	-
2015-862	2457327.63	2015 Nov 1 0307?	THAAD	-	THAAD FTI-02 E2a	SRALT intercept	-	-	-	RMR	Meck	-	-	100?	-	-
2015-864	2457327.63	2015 Nov 1 0312?	THAAD	-	THAAD FTI-02 E2a	eMBM intercept	-	-	-	WARE	I	-	-	100?	-	-
2017-857	2457945.50	2017 Jul 11	THAAD	-	THAAD FTI-18	RBMX intercept	-	-	-	WARE	I	-	-	100?	-	-
2017-866	2457964.50	2017 Jul 30	THAAD	-	THAAD FTI-1	RBMX intercept	-	-	-	PSCA	LP3C	-	-	100?	-	-
2019-849	2458725.50	2019 Aug 30	THAAD	-	THAAD FTI-23	RBMX intercept	-	-	-	RMR	Meck	-	-	100?	-	-





Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	DrPay	Agency	Launch_Code	Group	Category	LfCite	Cite	Notes
1995-S54	2449929-13	1995 Apr 21 1504	THAAD	1	FT-01	0.000	SSDC	MS	-	Test	Imco.com	-	-
1995-S52	2449929-50	1995 Jul 31	THAAD	1	FT-02	0.000	SSDC	MS	-	Test	AMST960807-58	-	-
1995-S68	2450004-11	1995 Oct 13 1441?	THAAD	1	FT-03	0.000	SSDC	MS	-	Test	Imco.com	-	-
1995-S87	2450065-00	1995 Dec 13 1205	THAAD	1	FT-04	0.000	SSDC	MS	-	ABM Test	Wire/Imco.com	-	-
1996-S14	2450164-50	1996 Mar 22	THAAD	1	FT-05	0.000	SSDC	MS	-	ABM Test	AMST960401-28	-	-
1996-S42	2450279-98	1996 Jul 15 1131?	THAAD	1	FT-06	0.000	SSDC	MS	-	ABM Test	S1960722-16	-	-
1997-S24	2450514-03	1997 Mar 6 1241?	THAAD	1	FT-07	0.000	SSDC	MS	-	ABM Test	Wire	-	AMST970303-65
1998-A01	2450945-97	1998 May 12 1120	THAAD	1	FT-08	0.000	SHDC	RF	-	ABM Test	Wire	-	-
1998-S20	2451287-01	1998 Mar 29 1220	THAAD	1	FT-09	0.000	SHDC	MS	-	ABM Test	www.defenselink.mil	-	-
1999-S36	2451339-97	1999 Jun 10 1114	THAAD	1	FT-10	0.000	SHDC	MS	-	ABM Test	www.defenselink.mil	-	-
1999-S52	2451392-99	1999 Aug 2 1144	THAAD	1	FT-11	0.000	SHDC	MS	-	ABM Test	Wire	-	-
2005-S54	2453896-50	2005 Nov 22	THAAD	-	THAAD FT-01	0.000	LIPCO/SHDC	MS	-	Test	Wire	-	-
2006-S21	2453866-50	2006 May 11	THAAD	-	THAAD FT-02	0.000	LIPCO/SHDC	MS	-	Test	Wire	-	-
2006-M02	2453928-97	2006 Jul 12 1120	THAAD	-	THAAD FT-03	0.000	LIPCO/SHDC	MS	-	ABM Test	Wire	-	-
2007-S07	2454127-72	2007 Jan 27 0520	THAAD	-	THAAD FT-06	0.000	SHDC	MS	-	ABM Test	mda.mil	-	-
2007-M02	2454196-78	2007 Apr 6 0645	THAAD	-	THAAD FT-07	0.000	SHDC	MS	-	ABM Test	mda.mil	-	-
2007-A05	2454277-50	2007 Jun 26	THAAD	-	THAAD FT-05	0.000	SHDC	MS	-	Test	mda.mil	-	-
2007-S53	2454400-80	2007 Oct 27 0718?	THAAD	-	THAAD FT-08	0.000	SHDC	MS	-	ABM Test	mda.mil	-	-
2008-M02	2454643-60	2008 Jun 26 0222	THAAD	-	THAAD FT-09	0.000	SHDC	MS	-	ABM Test	mda.mil	-	-
2009-M05	2454908-52	2009 Mar 18 0030	THAAD	-	THAAD FT-10a Salvo	0.000	SHDC	MS	-	ABM Test	mda.mil	-	-
2009-A04	2454908-52	2009 Mar 18 0030	THAAD	-	THAAD FT-10a Salvo	0.000	SHDC	MS	-	ABM Test	mda.mil	-	-
2010-A03	2455376-82	2010 Jun 29 0737	THAAD	-	THAAD FT-14	0.000	SHDC	MS	-	ABM Test	mda.mil	-	-
2011-S47	2455639-76	2011 Oct 5 0600?	THAAD	-	THAAD FT-12	0.000	MDATH	MS	-	ABM Test	www.mda.mil	-	-
2012-S87	2456226-50	2012 Oct 28?	THAAD	-	THAAD FT-12	0.000	MDATH	MS	-	ABM Test	www.mda.mil	-	-
2013-S80	2456546-50	2013 Sep 10	THAAD	-	THAAD FT-01	0.000	MDATH	MS	-	ABM Test	www.mda.mil	-	-
2013-S61	2456546-50	2013 Sep 10	THAAD	-	THAAD FT-01	0.000	MDATH	MS	-	ABM Test	www.mda.mil	-	-
2015-S62	2457327-63	2015 Nov 1 0307?	THAAD	-	THAAD FT-02 E2a	0.000	MDATH	MS	-	ABM Test	www.mda.mil	-	-
2015-S64	2457327-63	2015 Nov 1 0312?	THAAD	-	THAAD FT-02 E2a	0.000	MDATH	MS	-	ABM Test	www.mda.mil	-	-
2017-S57	2457946-50	2017 Jul 11	THAAD	-	THAAD FT-16	0.000	MDATH	MS	-	ABM Test	www.mda.mil	-	-
2017-S66	2457964-50	2017 Jul 30	THAAD	-	THAAD FT-1	0.000	MDATH	MS	-	ABM Test	www.mda.mil	-	-
2019-S49	2458726-50	2019 Aug 30	THAAD	-	THAAD FT-23	0.000	MDATH	MS	-	ABM Test	www.mda.mil	-	-



Launch

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Mission	FlightCode	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee km	Range km	Dest
1979-A61	2443983-50	1979 Apr 20	TKS VA SRS	-	TKS VA AS	Launch abort	TKS VA No. 103	Proton 300-02	-	MIP-5	LC81/24	-	-	1	1	MIP-5
1979-A62	2444101-50	1979 Aug 16	TKS VA SRS	-	-	Pad abort test	TKS VA No. 005	-	-	MIP-5	LC81	-	-	1	1	MIP-5
1979-A63	2444146-50	1979 Oct	TKS VA SRS	-	-	Pad abort test	TKS VA No. 005	-	-	MIP-5	LC81	-	-	1	1	MIP-5
1979-A64	2444146-50	1979 Q4	TKS VA SRS	-	-	Pad abort test	TKS VA No. 005	-	-	MIP-5	LC81	-	-	1	1	MIP-5
1980-A65	2444238-50	1980?	TKS VA SRS	-	-	Pad abort test	TKS VA No. 007	-	-	MIP-5	LC81	-	-	1	1	MIP-5
1980-A66	2444479-50	1980 Aug 28	TKS VA SRS	-	-	Pad abort test	TKS VA No. 007	-	-	MIP-5	LC81	-	-	1	1	MIP-5



Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Orbit	Agency	Launch_Code	Group	Category	LTCite	Cite	Notes
1979-A61	2443983.50	1979 Apr 20	TKS VA SMS	-	TKS VA AS	0.000	ORBS2	AS	-	Escape tower	russianspaceweb	-	-
1979-A62	2444101.50	1979 Aug 16	TKS VA SMS	-	-	0.000	ORBS2	AS	-	Escape tower	russianspaceweb	-	-
1979-A63	2444146.50	1979 Oct	TKS VA SMS	-	-	0.000	ORBS2	AS	-	Escape tower	russianspaceweb	-	-
1979-A64	2444146.50	1979 Q4	TKS VA SMS	-	-	0.000	ORBS2	AS	-	Escape tower	russianspaceweb	-	-
1980-A65	2444238.50	1980?	TKS VA SMS	-	-	0.000	ORBS2	AS	-	Escape tower	russianspaceweb	-	-
1980-A66	2444479.50	1980 Aug 28	TKS VA SMS	-	-	0.000	ORBS2	AS	-	Escape tower	russianspaceweb	-	-



Launch

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Mission	FlightCode	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee km	Range km	Dest
2023-049	2460036.87	2023 Apr 2 0948:15	Tianlong-2	-	Y1	Jinta	-	-	-	JQ	-	-	-	-	-	-





Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Launch Display	Agency	Launch_Code	Group	Category	LTCite	Cite	Notes
2023-049	2460036.87	2023 Apr 2 0848:15	Tiamlong-2	-	Y1	0.108	TIAMB	08	C	Sat 850 D	tw/cmspaceflight	-	-



Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Mission	FlightCode	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee km	Range km	Dest
2024-A06	2460491.82	2024 Jun 30 0743	Tianlong-3 S1	-	Y1	-	-	-	-	GONGYI	-	-	-	1?	1	-



Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Orbit	Agency	Launch_Code	Group	Category	LTCite	Cite	Notes
2024-406	2460491.82	2024 Jun 30 0743	Tianlong-3 S1	-	Y1	0.000	TIAMB	AF	-	Static Fail	twitter/aj_lfi	-	-



Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Launch			Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee km	Range km	Dest
							Mission	FlightCode	FlightCode								
1988-802	2447410.46	1988 Sep 5 2300	TR-1	-	TR-1-1	H-II 1/4 Scale	-	-	-	TNSC	T	-	-	85	-	-	
1989-801	2447553.46	1989 Jan 26 2300	TR-1	-	TR-1-2	H-II 1/4 Scale	-	-	-	TNSC	T	-	-	80	-	-	
1989-804	2447758.46	1989 Aug 19 2300	TR-1	-	TR-1-3	H-II 1/4 Scale	-	-	-	TNSC	T	-	-	85	-	-	
1991-5148	2448515.46	1991 Sep 15 2300	TR-1A	-	TR-1A-1	-	-	-	-	TNSC	T	-	-	270	-	-	
1992-574	2448554.48	1992 Aug 19 2330	TR-1A	-	TR-1A-2	-	-	-	-	TNSC	T	-	-	290	-	-	
1993-351	2449247.46	1993 Sep 16 2300	TR-1A	-	TR-1A-3	-	-	-	-	TNSC	T	-	-	264	-	-	
1996-357	2449954.42	1996 Aug 24 2200	TR-1A	-	TR-1A-4	-	-	-	-	TNSC	T	-	-	270	-	-	
1996-356	2450351.42	1996 Sep 24 2200	TR-1A	-	TR-1A-5	-	-	-	-	TNSC	T	-	-	264?	-	-	
1997-353	2450716.52	1997 Sep 25 0030	TR-1A	-	TR-1A-6	-	-	-	-	TNSC	T	-	-	264?	-	-	
1998-353	2451136.46	1998 Nov 18 2300	TR-1A	-	TR-1A-7	-	-	-	-	TNSC	T	-	-	266	-	-	





Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Agency	Launch_Code	Group	Category	LTCite	Cite	Notes
1988-M02	2447410.46	1988 Sep 5 2300	TR-1	-	TR-1-1	MASDA	SS	MASDA/	Test	MASDA-WMI	SFLT30-421	-
1989-M01	2447553.46	1989 Jan 26 2300	TR-1	-	TR-1-2	MASDA	SS	MASDA/	Test	MASDA-WMI	-	-
1989-M04	2447755.46	1989 Aug 19 2300	TR-1	-	TR-1-3	MASDA	SS	MASDA/	Test	MASDA-WMI	AMST090828-11	-
1991-S148	2446515.46	1991 Sep 15 2300	TR-1A	-	TR-1A-1	MASDA	SS	MASDA/	Micrograv	MASDA-WMI	SRJ	-
1992-S74	2446854.48	1992 Aug 19 2300	TR-1A	-	TR-1A-2	MASDA	SS	MASDA/	Micrograv	MASDA-WMI	SRJ	-
1993-S61	2449247.46	1993 Sep 16 2300	TR-1A	-	TR-1A-3	MASDA	SS	MASDA/	Micrograv	MASDA-WMI	SRJ	-
1995-S57	2449954.42	1995 Aug 24 2200	TR-1A	-	TR-1A-4	MASDA	SS	MASDA/	Micrograv	MASDA-WMI	S0950828-2	-
1996-S56	2450351.42	1996 Sep 24 2200	TR-1A	-	TR-1A-5	MASDA	SS	MASDA/	Micrograv	MASDA-WMI	-	-
1997-S63	2450716.52	1997 Sep 25 0030	TR-1A	-	TR-1A-6	MASDA	SS	MASDA/	Micrograv	MASDA-WMI	-	-
1998-S63	2451136.46	1998 Nov 18 2300	TR-1A	-	TR-1A-7	MASDA	SS	MASDA/	Micrograv	MASDA-WMI	-	-



Launch

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Mission	Flightcode	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee Km	Range Km	Dest
1975-S247	2442641.75	1975 Aug 17 0600	TT-210	-	TT-210-1F	-	-	-	-	TNSC	T	-	-	113	-	-
1976-S81	2442804.75	1976 Jan 27 0600	TT-210	-	TT-210-2F	-	-	-	-	TNSC	T	-	-	100?	-	-
1976-S298	2443045.56	1976 Sep 24 0130	TT-210	-	TT-210-3F	-	-	-	-	TNSC	T	-	-	100?	-	-



Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Orbit	Agency	Launch_Code	Group	Category	LTCite	Cite	Notes
1975-5247	2442541.75	1975 Aug 17 0600	TT-210	-	TT-210-1F	0.000	MASDA	SS	MASDA/	Test	MASDA-1111	-	-
1976-581	2442504.75	1976 Jan 27 0600	TT-210	-	TT-210-2F	0.000	MASDA	SS	MASDA/	Test	MASDA-1111	-	-
1976-5288	2443045.56	1976 Sep 24 0130	TT-210	-	TT-210-3F	0.000	MASDA	SS	MASDA/	Test	MASDA-1111	-	-







Launch Mission

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Mission	FlightCode	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee_Km	Range_Km	Dest
2005-A01	2453435_94	2005 Mar 6 10:31:17	Black Brant XII	-	MSA 40.0170E	CASCADES	-	-	-	-	-	-	-	29	-	-
2006-S07	2454002_14	2006 Sep 23 15:17:54	Black Brant XI	1	MSA 12.0640T	Igniter test	-	-	-	LC4	-	-	-	300?	-	-
2007-S10	2454144_03	2007 Feb 12 12:45:04	Black Brant XII	-	MSA 40.0200E	ROPA	-	-	-	WI	-	-	-	300?	-	-
2007-S15	2454159_96	2007 Feb 28 09:39:41	Black Brant XII	-	MSA 40.0190E	CHARM	-	-	-	PF	-	-	-	748	-	-
2007-S24	2454286_61	2007 Jun 15 02:45	Talos Castor	-	-	HYANUSE	-	-	-	WDD	-	-	-	454	-	-
2007-S71	2454444_88	2007 Dec 10 09:00:00	Black Brant XII	-	MSA 40.0180E	TRICE High	-	-	-	AND	US	-	-	1150	-	-
2008-S03	2454444_88	2007 Dec 10 09:02:00	Black Brant XII	-	MSA 40.0220E	TRICE Low	-	-	-	AND	Athens	-	-	630	-	-
2008-S30	2454443_81	2008 Jun 18 07:30:00	Black Brant XII	-	MSA 40.0210E	SCIFER-2	-	-	-	AND	-	-	-	1460	-	-
2009-S18	2454644_33	2008 Jun 26 19:57	Black Brant XI	-	MSA 39.0090R	NGSP-1	-	-	-	WI	LAI	-	-	300?	-	-
2009-S45	2454910_96	2009 Mar 20 11:04:01	Black Brant XII	-	MSA 40.0230E	CASCADES II	-	-	-	PF	LC3	-	-	564	-	-
2009-S80	2455094_49	2009 Sep 19 23:46	Black Brant XI	-	MSA 39.0090R	CARE	-	-	-	WI	LAI	-	-	240	-	-
2010-S19	2455140_50	2009 Nov 5	Talos Castor	?	Aeg's F7X-0654 Tgt	ARAV-C	-	-	-	KAU	-	-	-	300?	-	-
2010-S73	2455243_91	2010 Feb 16 09:49:11	Black Brant XII	-	MSA 40.0280E	CHARM LI	-	-	-	PF	-	-	-	803	-	-
2011-S35	2455522_78	2010 Dec 12 06:38:00	Black Brant XII	-	MSA 40.0280E	REJU	-	-	-	AND	-	-	-	340	-	-
2012-S53	2456229_50	2011 Mar 9	Talos Castor	?	Aeg's F7X-16/SSTS	ARAV-C++	-	-	-	AND	-	-	-	150?	-	-
2012-S59	2456151_96	2012 Jul 23 11:01	Black Brant XI	-	MSA 39.0110R	IRWE-LII	-	-	-	WI	LAI, AML	-	-	468	-	-
2013-S07	2456152_96	2012 Sep 22 11:00:00	Talos Terrier Oriole	-	MSA 12.0760T	TRIEDR/Dummy	SRPO Diagnostic/APRA	-	-	WI	LAI, AML	-	-	289	-	-
2013-S35	2456330_85	2013 Feb 7 09:21	Oriole IV	-	MSA 49.0010E	VISIONS	-	-	-	PF	LC4	-	-	754	-	-
2013-S38	2456428_64	2013 May 16 03:26	Talos Castor	?	Aeg's F7X-19 Tgt	ARAV-C	-	-	-	KAU	-	-	-	300?	-	-
2013-S64	2456449_63	2013 Jun 6 03:05:00	Black Brant XII	-	MSA 40.0300G	CIBER-1 F4	-	-	-	WI	LAI, AML	-	-	577	-	-
2014-S78	2456594_52	2013 Sep 19 00:30	Talos Castor	?	Aeg's F7X-21 Tgt	ARAV-C++	-	-	-	KAU	-	-	-	300?	-	-
2015-S05	2456985_84	2014 Nov 24 09:05	Black Brant XIII	-	MSA 52.0010E	C-REX	-	-	-	AND	US	-	-	486	-	-
2015-S80	2457080_96	2015 Jan 28 10:41	Oriole IV	-	MSA 49.0020E	ASSP	-	-	-	AND	LC4	-	-	590?	-	-
2015-S80	2457282_30	2015 Sep 16 19:06	Black Brant XI	-	MSA 49.0020E	CARE-I	-	-	-	AND	US	-	-	289	-	-
2015-S80	2457386_81	2015 Sep 16 07:34	Black Brant XIII	-	MSA 49.0030E	CMFR	-	-	-	AND	-	-	-	100?	-	-
2016-S73	2457369_82	2015 Dec 8 09:26	Black Brant XIII	-	MSA 52.0030E	REJU 2	-	-	-	AND	-	-	-	447	-	-
2016-S74	2458460_85	2018 Dec 6 09:26	Black Brant XIII	-	MSA 52.0030E	TRICE-2 High	-	-	-	AND	-	-	-	1042	-	-
2019-S01	2458467_69	2019 Jan 4 09:27:00	Black Brant XIII	-	MSA 52.0030E	TRICE-2 Low	-	-	-	AND	-	-	-	756	-	-
2019-S15	2458579_43	2019 Apr 5 22:14	Black Brant XIII	-	MSA 51.0010E	AZURE 1	-	-	-	AND	-	-	-	774	-	-
2019-S16	2458579_43	2019 Apr 5 22:16	Black Brant XIII	-	MSA 51.0010E	AZURE 1	-	-	-	AND	-	-	-	321	-	-
2021-S24	2459551_53	2021 May 17 09:44	Black Brant XIII	-	MSA 52.0070E	KINET-X	-	-	-	AND	-	-	-	486	-	-
2021-S62	2459549_85	2021 Dec 1 09:25	Oriole IV	-	MSA 49.0040E	C-REX 2	-	-	-	WI	LAI, AML	-	-	631	-	-
2023-S62	2460267_33	2023 Nov 9 10:14:00	Black Brant XIII	-	MSA 52.0090E	Beam-PIE	-	-	-	PF	US	-	-	450?	-	-



Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	OrbPay	Agency	Launch	Launch_Code	Group	Category	LTCite	Cite	Notes
1952-A195	2434313.50	1952 Oct 28	Talos			0.000	BURD	MS			Test	APL-TD3-2-135		
1970-S888	2440890.50	1970 Oct 21	Super Chief I			0.000	MRL	SU		MRL/Artritt	Test	TR-X-65777		
1972-A159	2441651.50	1972 Dec	TATER			0.000	SAND	AS			Test	Urach		
1973-A40	2441969.50	1973 Aug 2	TATER			0.000	SAND	AS			Test	SANSU		
1974-A76	2442095.21	1974 Nov 2 1506	TATER			0.000	SAND	AS			Test	FCV/Orlich		
1974-A64	2442118.45	1974 Feb 16 1658	TATER			0.000	SAND	AS			Test	FCV/Orlich		
1974-A62	2442123.24	1974 Mar 11 2251	TATER			0.000	SAND	AS			Test	FCV/Orlich		
1974-A63	2442123.27	1974 Mar 16 1751	TATER			0.000	SAND	AS			Test	FCV/Orlich		
1974-S139	2442126.29	1974 Mar 19 1902	Super Chief II			0.000	MRL	SS		MRL/UMD/Opal	Test	FCV/Orlich		SSI has Mar 17
1974-A65	2442136.44	1974 Mar 29 2236	TATER			0.000	SAND	AS			Test	FCV/Orlich		
1974-A66	2442136.46	1974 Mar 29 2305	TATER			0.000	SAND	AS			Test	FCV/Orlich		
1974-A67	2442136.59	1974 Mar 30 0206	TATER			0.000	SAND	AS			Test	FCV/Orlich		
1974-A74	2442146.26	1974 Apr 8 1764	TATER			0.000	SAND	AS			Test	FCV/Orlich		
1974-A68	2442170.36	1974 Apr 8 1809	TATER			0.000	SAND	AS			Test	FCV/Orlich		
1974-A69	2442170.36	1974 May 2 2035	TATER			0.000	SAND	AS			Test	FCV/Orlich		
1974-A75	2442176.50	1974 May 7 1445	TATER			0.000	SAND	AS			Test	RE-FRR		
1974-A76	2442252.63	1974 Jul 24 0908	Super Chief II		Roll Test Eval	0.000	MRL	SS		MRL/ADEL/Carruthers Bib.	Test	UV Astron/Aeron	CR-41036	
1974-A77	2442302.50	1974 Sep 12	TATER			0.000	SAND	AS			Test	BibbioIO		
1975-A02	2442421.62	1975 Jan 9 0300	TATER		Q3-7680	0.000	SAND	AS			Test	FCV/Orlich		
1975-A01	2442421.63	1975 Jan 9 0301	TATER		Q3-7681	0.000	SAND	AS			Test	FCV/Orlich		
1975-A11	2442479.36	1975 Mar 7 2105	TATER			0.000	SAND	AS			Test	FCV/Orlich		
1975-A23	2442516.01	1975 Apr 15 1215	TATER			0.000	SAND	AS			Test	ALAM-SRA		
1975-A69	2442749.50	1975 Jun 3	TATER			0.000	SAND	AS			Test	ALAM-SRA		
1976-A68	2442791.50	1976 Jan 14	TATER			0.000	SAND	AS			Test	RV Test	DMA-4369F	
1976-A65	2442847.04	1976 Mar 9 1303	TATER		Sandia 487-602	0.000	SAND	AS		DMA/	Test	FirstdayCover	DMA-4369F	
1976-A67	2442854.06	1976 Mar 27 2258	TATER		Sandia 487-509	0.000	SAND	AS		DMA/	Test	FirstdayCover	DMA-4369F	
1976-A68	2442894.37	1976 Apr 25 2047	TATER		Sandia 487-516	0.000	SAND	AS		DMA/	Test	FirstdayCover	DMA-4369F	
1976-S224	2443097.67	1976 Nov 15 0316-20	Talos Sergeant Hydac		Sandia 487-512	0.000	SAND	AS		DMA/	Test	FirstdayCover	DMA-4369F	
1977-S254	2443101.67	1976 Sep 28 1533-16	Talos Castor		DMA TEG54.52-1	0.000	DMA	SS		SDCO/Fisher	Plasma	FCV/Orlich		
1976-S223	2443567.99	1976 Oct 28 0952	Talos Castor		DMA TEG54.52-1	0.000	DMA	SS		AFM/AFRL/Dick	Plasma	FCV/Orlich		
1983-S72	2444165.74	1983 Oct 19 0946-40	Talos Castor		DMA W5854.55-1	0.000	DMA	SS		AFM/AFRL/Dick	Plasma	FCV/Orlich		
1983-S73	2444165.74	1983 Oct 19 0946-40	Talos Castor		DMA W5854.55-1	0.000	DMA	SS		AFM/AFRL/Dick	Plasma	FCV/Orlich		
1984-S46	2446726.16	1984 Jun 26 1600-06	Talos Sergeant Hydac		GL A51.970	0.000	AFM/D	SS		AFM/AFRL/Dick	Plasma	FCV/Orlich		
1984-S53	2446753.15	1984 Feb 2 1536	Talos Sergeant Hydac		GL A51.378	0.000	AFM/D	SS		AFM/AFRL/Dick	Plasma	FCV/Orlich		
1989-S59	2446780.17	1989 Apr 8 0942-25	Talos Castor			0.000	AFM/D	SS		AFM/AFRL/Dick	Plasma	FCV/Orlich		
1987-A25	2446930.17	1987 May 14 1600	Talos Sergeant Hydac		BRV Flythrough	0.000	DMA	AS			Target	AD-433821		
1987-A26	2446930.17	1987 May 14 1600	Talos Sergeant Hydac		BRV Flythrough	0.000	DMA	AS			Target	AD-433821		
1987-A27	2446930.17	1987 May 14 1600	Talos Sergeant Hydac		BRV Flythrough	0.000	DMA	AS			Target	AD-433821		
1988-S62	2447271.50	1988 Mar 7	Talos Sergeant Hydac		BRV Flythrough	0.000	AFM/D	SS			Target	AD-433821		
1988-S63	2447271.50	1988 Mar 7	Talos Sergeant Hydac		BRV Flythrough	0.000	AFM/D	SS			Target	AD-433821		
1988-S125	2447435.26	1988 Sep 30 1910	Black Brant XII		MSA 12.41VT	0.000	CSFC	SS		WFF/Flowers	Test/Aeron	Desaid		
1989-S11	2447486.31	1989 Dec 5 0930	Black Brant XII		MSA 12.42VT	0.000	CSFC	SS		WFF/Flowers	Test/Aeron	Desaid		
1990-S34	2447521.39	1990 Feb 20 2122	Black Brant XII		MSA 39.00UE	0.000	CSFC	SS		AFM/AFRL/Dick	Test	AFRL2		
1990-S35	2447521.39	1990 Feb 20 2122	Black Brant XII		MSA 39.00UE	0.000	CSFC	SS		AFM/AFRL/Dick	Test	AFRL2		
1990-S66	2447572.00	1990 Feb 20 0738-26	Black Brant XII		MSA 40.00UE	0.000	CSFC	SS		AFM/AFRL/Dick	Test	AFRL2		
1990-S170	2448243.65	1990 Dec 18 0937-25	Black Brant XII		MSA 40.00UE	0.000	CSFC	SS		AFM/AFRL/Dick	Test	AFRL2		
1991-S60	2448293.81	1991 Feb 13 0729-21	Black Brant XII		MSA 40.00UE	0.000	CSFC	SS		AFM/AFRL/Dick	Test	AFRL2		
1991-S61	2448293.81	1991 Feb 13 0911-54	Black Brant XII		MSA 40.00UE	0.000	CSFC	SS		AFM/AFRL/Dick	Test	AFRL2		
1991-S95	2448368.88	1991 Apr 12 0550	Black Brant XII		MSA 40.00UE	0.000	CSFC	SS		AFM/AFRL/Dick	Test	AFRL2		
1991-S144	2448563.74	1991 Sep 12 0541	Talos Castor		MSA 40.00UE	0.000	CSFC	SS		AFM/AFRL/Dick	Test	AFRL2		
1992-S34	2448710.81	1992 Mar 29 0727	Black Brant XI		MSA 40.00UE	0.000	CSFC	SS		AFM/AFRL/Dick	Test	AFRL2		
1992-S33	2448710.81	1992 Mar 29 0727	Black Brant XI		MSA 40.00UE	0.000	CSFC	SS		AFM/AFRL/Dick	Test	AFRL2		
1992-S38	2448727.88	1992 Apr 15 0909-45	Black Brant XII		MSA 40.00UE	0.000	CSFC	SS		AFM/AFRL/Dick	Test	AFRL2		
1993-A02	2449014.95	1993 Jan 27 1043-41	Black Brant XII		MSA 40.00UE	0.000	CSFC	SS		AFM/AFRL/Dick	Test	AFRL2		
1993-S10	2449015.50	1993 Jan 27 1043-41	Black Brant XII		MSA 40.00UE	0.000	CSFC	SS		AFM/AFRL/Dick	Test	AFRL2		
1993-A03	2449029.50	1993 Feb 11	Black Brant XII		MSA 40.00UE	0.000	CSFC	SS		AFM/AFRL/Dick	Test	AFRL2		
1993-S34	2449130.89	1993 May 23 0917	Black Brant XII		MSA 40.00UE	0.000	CSFC	SS		AFM/AFRL/Dick	Test	AFRL2		
1993-S26	2449135.86	1993 May 28 0934	Black Brant XII		MSA 40.00UE	0.000	CSFC	SS		AFM/AFRL/Dick	Test	AFRL2		
1993-S25	2449079.92	1993 Apr 2 1009	Black Brant XII		MSA 40.00UE	0.000	CSFC	SS		AFM/AFRL/Dick	Test	AFRL2		
1994-S20	2449417.85	1994 Mar 6 0821	Black Brant XII		MSA 40.00UE	0.000	CSFC	SS		AFM/AFRL/Dick	Test	AFRL2		
1995-S06	2449742.77	1995 Jan 25 0624-48	Black Brant XII		MSA 40.00UE	0.000	CSFC	SS		AFM/AFRL/Dick	Test	AFRL2		
1995-S14	2449772.93	1995 Feb 24 1021-46	Black Brant XII		MSA 40.00UE	0.000	CSFC	SS		AFM/AFRL/Dick	Test	AFRL2		
1995-S74	2450028.78	1995 Nov 7 0638-18	Black Brant XII		MSA 40.00UE	0.000	CSFC	SS		AFM/AFRL/Dick	Test	AFRL2		
1996-S62	2450328.92	1996 Oct 16 1041-15	Black Brant XII		MSA 40.00UE	0.000	CSFC	SS		AFM/AFRL/Dick	Test	AFRL2		
1997-S10	2450489.72	1997 Feb 10 0517-11	Black Brant XII		MSA 40.00UE	0.000	CSFC	SS		AFM/AFRL/Dick	Test	AFRL2		
1997-S11	2450490.36	1997 Feb 10 0517-11	Black Brant XII		MSA 40.00UE	0.000	CSFC	SS		AFM/AFRL/Dick	Test	AFRL2		
1997-S12	2450492.88	1997 Feb 12 2100	Black Brant XII		MSX CEP 1	0.000	CSFC	SS		AFM/AFRL/Dick	Test	AFRL2		
1997-S20	2450502.92	1997 Feb 23 1005	Black Brant XII		MSX CEP 2	0.000	CSFC	SS		AFM/AFRL/Dick	Test	AFRL2		
1998-S36	2450591.21	1998 Apr 17 1706	Talos Castor			0.000	SAND/BMD	SS			Test			
1999-S01	2451199.76	1999 Jan 21 0613-30	Black Brant XII		MSA 40.0121E	0.000	CSFC	SS			Test			
1999-S02	2451201.08	1999 Jan 22 1357-03	Black Brant XII		MSA 40.0130P	0.000	CSFC	SS			Test			
2000-S07	2451599.82	2000 Feb 25 0745-10	Black Brant XII		MSA 40.0081E	0.000	CSFC	SS			Test			
2000-S12	2451600.89	2000 Feb 26 0919-11	Black Brant XII		MSA 40.0151E	0.000	CSA	SS			Test			
2002-S02	2452288.85	2002 Jan 14 0823-05	Black Brant XII		MSA 40.0140E	0.000	CSFC	SS			Test			
2002-S06	2452311.90	2002 Feb 6 0938-15	Black Brant XII		MSA 40.0140E	0.000	CSFC	SS			Test			
2003-S21	2452789.90	2003 May 30 0935-00	Black Brant XI		MSA 39.0050P	0.000	MAMA/MTLL	SS			Target			
2003-S22	2452792.89	2003 Jun 2 0928-00	Black Brant XI		MSA 39.0050P	0.000	MAMA/MTLL	SS			Target			

Launch

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	OrbPay	Agency	Launch_Code	Group	Category	LTCite	Cite	Notes
2005-A01	2453435-94	2005 Mar 6 10:31:17	Black Brant XII	-	MASH 40.017UE	0.000	GSFC	SF	DMRT/Lynch	Auroral	Wire	-	-
2006-S57	2454002-14	2006 Sep 23 15:17:54	Black Brant XI	1	MASH 12.066GT	0.000	GSFC	SS	GSFC/Hickman	Test	www.wff.nasa.gov	ESA-SP-647	-
2007-S10	2454144-03	2007 Feb 12 12:45:04	Black Brant XII	-	MASH 40.020UE	0.000	GSFC	SS	DMRT/Lynch, Lessard	Auroral	www.wff.nasa.gov	-	-
2007-S15	2454159-86	2007 Feb 28 08:59:41	Black Brant XII	-	MASH 40.019UE	0.000	GSFC	SS	DMRT/Labelle	Auroral	www.wff.nasa.gov	-	-
2007-S24	2454266-61	2007 Jun 15 02:45	Talos Castor	-	-	0.000	DSTO	SS	DSTO/Harch	Test	Wire	ALMA2008-2680	-
2007-S70	2454444-88	2007 Dec 10 09:00:00	Black Brant XII	-	MASH 40.019UE	0.000	GSFC	SS	UIA/Kletzing	Plasma	www.wff.nasa.gov	-	-
2008-S03	2454444-88	2007 Dec 10 09:02:00	Black Brant XII	-	MASH 40.020UE	0.000	GSFC	SS	UIA/Kletzing	Plasma	www.wff.nasa.gov	-	-
2008-S03	2454444-88	2008 Jun 18 07:30:00	Black Brant XII	-	MASH 40.021UE	0.000	GSFC	SS	UIA/Kletzing	Plasma	www.rocketrange.no	-	-
2008-S30	2454644-33	2008 Jun 26 19:57	Black Brant XI	-	MASH 39.009DR	0.000	GSFC	SS	DMRT/Kivner	Plasma	www.rocketrange.no	-	-
2009-S18	2454910-96	2009 Mar 20 11:04:01	Black Brant XII	-	MASH 40.023UE	0.000	GSFC	SS	MDA/Leclair	Sensor test/Decoys	www.usf.edu AKDT	-	-
2009-S45	2455094-49	2009 Sep 19 23:46	Black Brant XI	-	MASH 39.009DR	0.000	GSFC	SS	DMRT/Lynch	Auroral	www.wff.nasa.gov	-	-
2009-S60	2455140-50	2009 Nov 5	Talos Castor	?	Aegis FTX-0654 Tgt	0.000	MDA	MS	IRL/Bernhardt	Target	mda.mil	-	-
2010-S19	2455243-91	2010 Feb 16 09:49:11	Black Brant XII	-	MASH 40.023UE	0.000	GSFC	SS	DMRT/Labelle	Auroral	www.wff.nasa.gov	-	-
2010-S73	2455542-78	2010 Dec 12 06:38:00	Black Brant XII	-	MASH 40.023UE	0.000	GSFC	SS	UHM/Lessard	Auroral	www.rocketrange.no	-	-
2011-S35	2455629-50	2011 Mar 9	Talos Castor	?	MASH 49.002UE	0.000	MDA	MS	UHM/Lessard	Target	spacedaily.com	-	-
2012-S39	2456131-96	2012 Jul 23 11:01	Black Brant XI	-	MASH 12.075RT	0.000	GSFC	SS	LACM/Chesterwood	Reentry test	www.wff.nasa.gov	-	-
2012-S63	2456131-96	2012 Sep 22 11:00:00	Talos Terrier Oriole	-	MASH 12.075RT	0.000	GSFC	SS	WFF/USAF/Brodell	Test	www.wff.nasa.gov	-	-
2013-S07	2456530-86	2013 Feb 7 09:21	Oriole IV	-	MASH 49.001UE	0.000	MDA	MS	GSFC/Rovland	Auroral	mda.mil	-	-
2013-S35	2456428-64	2013 May 16 03:28	Talos Castor	?	Aegis FTX-19 Tgt	0.000	GSFC	MS	CIT/Bock	Target	www.wff.nasa.gov	-	-
2013-S38	2456428-64	2013 Jun 6 03:05:00	Black Brant XII	-	MASH 40.030UG	0.000	GSFC	SS	UAF/Conde	IR Astron	www.wff.nasa.gov	-	-
2013-S64	2456594-52	2013 Sep 19 00:30	Talos Castor	?	MASH 52.001UE	0.000	MDA	MS	IRL/Bernhardt	Plasma	mda.mil	-	-
2014-S78	2456985-84	2014 Nov 24 09:05	Black Brant XIIA	-	MASH 49.002UE	0.000	GSFC	SS	USU/Svenson	Plasma	www.wff.nasa.gov	-	-
2015-S05	2457050-96	2015 Jan 28 10:41	Oriole IV	-	MASH 39.012DR	0.000	GSFC	SS	DMRT/Barnson	Auroral	www.wff.nasa.gov	-	-
2015-S80	2457282-30	2015 Sep 16 19:06	Black Brant XI	-	MASH 49.003UE	0.000	GSFC	SS	UHM/Lessard	Ionos/Cal	andoyospace.no	-	655 kg
2016-S53	2457369-82	2015 Nov 30 07:25	Oriole IV	-	MASH 52.002UE	0.000	GSFC	SS	UHM/Lessard	Auroral	www.wff.nasa.gov	-	-
2016-S74	2458460-86	2015 Dec 8 09:28	Black Brant XIIA	-	MASH 52.003UE	0.000	GSFC	SS	UIA/Kletzing	Plasma	www.rocketrange.no	-	-
2016-S74	2458460-86	2018 Dec 8 09:28	Black Brant XIIA	-	MASH 52.003UE	0.000	GSFC	SS	UIA/Kletzing	Plasma	www.wff.nasa.gov	-	-
2019-S01	2458460-86	2019 Jan 4 09:27:00	Black Brant XIIA	-	MASH 52.003UE	0.000	GSFC	SS	DMRT/Labelle	Plasma	www.wff.nasa.gov	-	-
2019-S15	2458579-43	2019 Apr 5 22:14	Black Brant XIIA	-	MASH 51.001UE	0.000	GSFC	SS	CLEM/Larsen	Auroral	twitter/andoyospace	-	-
2019-S16	2458579-43	2019 Apr 5 22:14	Black Brant XIIA	-	MASH 51.002UE	0.000	GSFC	SS	CLEM/Larsen	Auroral	twitter/andoyospace	-	-
2021-S24	2459351-53	2021 May 17 09:44	Black Brant XIIA	-	MASH 52.007UE	0.000	GSFC	SS	UAF/DeLamere	Plasma	www.wff.nasa.gov	-	-
2021-S62	2459351-53	2021 Dec 1 09:25	Oriole IV	-	MASH 49.004UE	0.000	GSFC	SS	UAF/Conde	Plasma	www.wff.nasa.gov	-	-
2023-S62	2460257-93	2023 Nov 9 10:44:00	Black Brant XIIA	-	MASH 52.009ME	0.000	GSFC	SS	LML/Reeves	Auroral	facebook.com	-	-



Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Mission	Launch	FlightCode	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee km	Range km	Dest
1967-A168	2439850.50	1967 Dec 26	Temp-ZS	-	IRS	152N42 Br-1	-	-	-	-	Grp-4	LC231	-	-	1	-	Grp-4
1968-A147	2439855.50	19687	Temp-ZS	-	IRS	152N42 Br-2	-	-	-	-	Grp-4	LC231	-	-	1	-	Grp-4
1968-A148	2439855.50	19687	Temp-ZS	-	IRS	152N42 Br-3	-	-	-	-	Grp-4	LC231	-	-	1	-	Grp-4
1968-A149	2439855.50	19687	Temp-ZS	-	IRS	152N42 Br-4	-	-	-	-	Grp-4	LC231	-	-	1	-	Grp-4
1972-S111	2441391.24	1972 Mar 14 1740	Temp-ZS	-	44654-735-2L	152N42 Br-5	-	-	-	-	Grp-4	LC157	-	-	1000?	-	Kura
1972-S143	2441426.23	1972 Apr 18 1732	Temp-ZS	1L	152N42 LKI-1	152N42 LKI-1	NGCh 15F421	Mobile PU	-	-	NIIP-53	LC158?	-	-	0?	-	(Kura)
1972-S226	2441471.00	1972 Jun 2 1200	Temp-ZS	-	3L	152N42 LKI-2	152N42 LKI-2	NGCh 15F421	-	-	NIIP-53	LC158?	-	-	0?	-	(Kura)
1972-S296	2441521.67	1972 Aug 3 0400	Temp-ZS	-	4L	152N42 LKI-3	152N42 LKI-3	NGCh 15F421	-	-	NIIP-53	LC158?	-	-	1?	-	(Kura)
1972-S299	2441589.32	1972 Sep 28 1940	Temp-ZS	-	36444-30-113-5L	152N42 LKI-4	152N42 LKI-4	NGCh 15F421	-	-	NIIP-53	LC158	-	-	1000?	-	Kura
1973-S163	2441625.28	1973 May 22 1845	Temp-ZS	-	64553-51-483-6L	152N42 LKI-5	152N42 LKI-5	NGCh 15F421	-	-	NIIP-53	LC158	-	-	1000?	-	Kura
1973-S191	2441684.06	1973 Jun 8 1330	Temp-ZS	-	64553-21-731-7L	152N42 LKI-6	152N42 LKI-6	NGCh 15F421	-	-	NIIP-53	LC158	-	-	1000?	-	Kura
1973-S217	2441842.06	1973 Jun 4 2200	Temp-ZS	-	64513-51-481-8L	152N42 LKI-7	152N42 LKI-7	NGCh 15F421	-	-	NIIP-53	LC158	-	-	1000?	-	Kura
1973-S260	2441924.05	1973 Aug 29 1310	Temp-ZS	-	64553-51-484-9L	152N42 LKI-8	152N42 LKI-8	NGCh 15F421	-	-	NIIP-53	LC158	-	-	1000?	-	Kura
1973-S264	2441955.10	1973 Sep 29 1427	Temp-ZS	-	10L	152N42 LKI-9	152N42 LKI-9	NGCh 15F421	-	-	NIIP-53	LC158?	-	-	20?	-	(Kura)
1973-S266	2441990.12	1973 Nov 5 1450	Temp-ZS	-	11L	152N42 LKI-10	152N42 LKI-10	NGCh 15F421	-	-	NIIP-53	LC158?	-	-	20?	-	(Kura)
1973-S295	2442030.42	1973 Dec 22 2203	Temp-ZS	-	64529-877-12L	152N42 LKI-11	152N42 LKI-11	NGCh 15F421	-	-	NIIP-53	LC158?	-	-	1000?	-	(Kura)
1974-S282	2442078.22	1974 Jan 30 1715	Temp-ZS	-	13L	152N42 LKI-12	152N42 LKI-12	NGCh 15F421	-	-	NIIP-53	LC158?	-	-	20?	-	(Kura)
1974-S284	2442107.46	1974 Feb 28 2300	Temp-ZS	-	64549-679-14L	152N42 LKI-13	152N42 LKI-13	NGCh 15F421	-	-	NIIP-53	LC158	-	-	1000?	-	Kura
1974-S285	2442175.36	1974 May 7 2040	Temp-ZS	-	64549-692-15L	152N42 LKI-14	152N42 LKI-14	NGCh 15F421	-	-	NIIP-53	LC158	-	-	1000?	-	Kura
1974-S286	2442206.35	1974 Jun 7 2030	Temp-ZS	-	64549-678-16L	152N42 LKI-15	152N42 LKI-15	NGCh 15F421	-	-	NIIP-53	LC158	-	-	1000?	-	Kura
1974-S287	2442217.38	1974 Jun 18 2110	Temp-ZS	-	64511-642-17L	152N42 LKI-16	152N42 LKI-16	NGCh 15F421	-	-	NIIP-53	LC158	-	-	1000?	-	Kura
1974-S288	2442224.36	1974 Jun 25 2040	Temp-ZS	-	64549-684-18L	152N42 LKI-17	152N42 LKI-17	NGCh 15F421	-	-	NIIP-53	LC158	-	-	1000?	-	Kura
1974-S289	2442227.33	1974 Jun 28 1955	Temp-ZS	-	19L	152N42 LKI-18	152N42 LKI-18	NGCh 15F421	-	-	NIIP-53	LC158	-	-	0?	-	(Kura)
1974-S289	2442262.47	1974 Jun 23 2310	Temp-ZS	-	64511-644-20L	152N42 LKI-19	152N42 LKI-19	NGCh 15F421	-	-	NIIP-53	LC158?	-	-	1000?	-	Kura
1974-S289	2442267.33	1974 Aug 27 2000	Temp-ZS	-	64553-51-482-21L	152N42 LKI-20	152N42 LKI-20	NGCh 15F421	-	-	NIIP-53	LC158	-	-	1000?	-	Kura
1974-S289	2442290.31	1974 Aug 30 1930	Temp-ZS	-	64511-646-22L	152N42 LKI-21	152N42 LKI-21	NGCh 15F421	-	-	NIIP-53	LC158	-	-	1000?	-	Kura
1974-S289	2442311.50	1974 Sep 21	Pioneer	-	-	152N46 LKI-1	152N46 LKI-1	NGCh 15F421	NGCh 15F453	-	Grp-4	-	-	-	500?	-	BALRH
1974-S289	2442290.50	1974 Sep?	Pioneer	-	-	152N46 LKI-2	152N46 LKI-2	NGCh 15F421	NGCh 15F453	-	Grp-4	-	-	-	500?	-	BALRH
1974-S289	2442290.50	1974 Sep?	Pioneer	-	-	152N46 LKI-3	152N46 LKI-3	NGCh 15F421	NGCh 15F453	-	Grp-4	-	-	-	500?	-	BALRH
1974-S289	2442290.50	1974 Sep?	Pioneer	-	-	152N46 LKI-4	152N46 LKI-4	NGCh 15F421	NGCh 15F453	-	Grp-4	-	-	-	500?	-	BALRH
1974-S289	2442290.50	1974 Sep?	Pioneer	-	-	152N46 LKI-5	152N46 LKI-5	NGCh 15F421	NGCh 15F453	-	Grp-4	-	-	-	500?	-	BALRH
1974-S289	2442290.50	1974 Sep?	Pioneer	-	-	152N46 LKI-6	152N46 LKI-6	NGCh 15F421	NGCh 15F453	-	Grp-4	-	-	-	500?	-	BALRH
1974-S289	2442290.50	1974 Sep?	Pioneer	-	-	152N46 LKI-7	152N46 LKI-7	NGCh 15F421	NGCh 15F453	-	Grp-4	-	-	-	500?	-	BALRH
1974-S289	2442290.50	1974 Sep?	Pioneer	-	-	152N46 LKI-8	152N46 LKI-8	NGCh 15F421	NGCh 15F453	-	Grp-4	-	-	-	500?	-	BALRH
1974-S289	2442290.50	1974 Sep?	Pioneer	-	-	152N46 LKI-9	152N46 LKI-9	NGCh 15F421	NGCh 15F453	-	Grp-4	-	-	-	500?	-	BALRH
1974-S289	2442290.50	1974 Sep?	Pioneer	-	-	152N46 LKI-10	152N46 LKI-10	NGCh 15F421	NGCh 15F453	-	Grp-4	-	-	-	500?	-	BALRH
1974-S289	2442320.50	1974 Sep 30 1020	Temp-ZS	-	23L	152N46 LKI-11	152N46 LKI-11	NGCh 15F421	NGCh 15F453	-	NIIP-53	LC158?	-	-	0?	-	(Kura)
1974-S289	2442320.50	1974 Oct?	Pioneer	-	-	152N46 LKI-12	152N46 LKI-12	NGCh 15F421	NGCh 15F453	-	Grp-4	-	-	-	500?	-	BALRH
1974-S289	2442320.50	1974 Oct?	Pioneer	-	-	152N46 LKI-13	152N46 LKI-13	NGCh 15F421	NGCh 15F453	-	Grp-4	-	-	-	500?	-	BALRH
1974-S289	2442320.50	1974 Oct?	Pioneer	-	-	152N46 LKI-14	152N46 LKI-14	NGCh 15F421	NGCh 15F453	-	Grp-4	-	-	-	500?	-	BALRH
1974-S289	2442320.50	1974 Oct?	Pioneer	-	-	152N46 LKI-15	152N46 LKI-15	NGCh 15F421	NGCh 15F453	-	Grp-4	-	-	-	500?	-	BALRH
1974-S289	2442320.50	1974 Oct?	Pioneer	-	-	152N46 LKI-16	152N46 LKI-16	NGCh 15F421	NGCh 15F453	-	Grp-4	-	-	-	500?	-	BALRH
1974-S289	2442320.50	1974 Oct?	Pioneer	-	-	152N46 LKI-17	152N46 LKI-17	NGCh 15F421	NGCh 15F453	-	Grp-4	-	-	-	500?	-	BALRH
1974-S289	2442320.50	1974 Oct?	Pioneer	-	-	152N46 LKI-18	152N46 LKI-18	NGCh 15F421	NGCh 15F453	-	Grp-4	-	-	-	500?	-	BALRH
1974-S289	2442320.50	1974 Oct?	Pioneer	-	-	152N46 LKI-19	152N46 LKI-19	NGCh 15F421	NGCh 15F453	-	Grp-4	-	-	-	500?	-	BALRH
1974-S289	2442320.50	1974 Oct?	Pioneer	-	-	152N46 LKI-20	152N46 LKI-20	NGCh 15F421	NGCh 15F453	-	Grp-4	-	-	-	500?	-	BALRH
1974-S289	2442320.50	1974 Oct?	Pioneer	-	-	152N46 LKI-21	152N46 LKI-21	NGCh 15F421	NGCh 15F453	-	Grp-4	-	-	-	500?	-	BALRH
1974-S289	2442320.50	1974 Oct?	Pioneer	-	-	152N46 LKI-22	152N46 LKI-22	NGCh 15F421	NGCh 15F453	-	Grp-4	-	-	-	500?	-	BALRH
1974-S289	2442320.50	1974 Oct?	Pioneer	-	-	152N46 LKI-23	152N46 LKI-23	NGCh 15F421	NGCh 15F453	-	Grp-4	-	-	-	500?	-	BALRH
1974-S289	2442320.50	1974 Oct?	Pioneer	-	-	152N46 LKI-24	152N46 LKI-24	NGCh 15F421	NGCh 15F453	-	Grp-4	-	-	-	500?	-	BALRH
1974-S289	2442320.50	1974 Oct?	Pioneer	-	-	152N46 LKI-25	152N46 LKI-25	NGCh 15F421	NGCh 15F453	-	Grp-4	-	-	-	500?	-	BALRH
1974-S289	2442320.50	1974 Oct?	Pioneer	-	-	152N46 LKI-26	152N46 LKI-26	NGCh 15F421	NGCh 15F453	-	Grp-4	-	-	-	500?	-	BALRH
1974-S289	2442320.50	1974 Oct?	Pioneer	-	-	152N46 LKI-27	152N46 LKI-27	NGCh 15F421	NGCh 15F453	-	Grp-4	-	-	-	500?	-	BALRH
1974-S289	2442320.50	1974 Oct?	Pioneer	-	-	152N46 LKI-28	152N46 LKI-28	NGCh 15F421	NGCh 15F453	-	Grp-4	-	-	-	500?	-	BALRH
1974-S289	2442320.50	1974 Dec 13 0300	Temp-ZS	-	64511-645-28L	152N42 LKI-29	152N42 LKI-29	NGCh 15F421	NGCh 15F453	-	NIIP-53	LC158?	-	-	1000?	-	Kura
1974-S289	2442320.50	1974 Dec 15 0300	Temp-ZS	-	64511-645-29L	152N42 LKI-30	152N42 LKI-30	NGCh 15F421	NGCh 15F453	-	NIIP-53	LC158?	-	-	1000?	-	Kura
1974-S289	2442341.75	1974 Dec 29 0600	Temp-ZS	-	64549-680-27L	152N46 LKI K-1/19	152N46 LKI K-1/19	NGCh 15F421	NGCh 15F453	-	KANSK	LC158?	-	-	500?	-	Kashmer-Yu
1975-S419	2442412.50	1975	Pioneer	-	-	152N46 LKI K-2/20	152N46 LKI K-2/20	NGCh 15F421	NGCh 15F453	-	KANSK	LC158?	-	-	500?	-	Kura
1975-S405	2442412.50	1975	Pioneer	-	-	152N46 LKI K-2/20	152N46 LKI K-2/20	NGCh 15F421	NGCh 15F453	-	KANSK	LC158?	-	-	500?	-	Kura
1975-S200	2442517.37	1975 Apr 14 1830	Temp-ZS	-	64521-61-875-35L	152N42 UBP-1	152N42 UBP-1	NGCh 15F421	NGCh 15F453	-	NIIP-53	LC158?	-	-	1000?	-	Kura
1975-S201	2442518.30	1975 Apr 15 1915	Temp-ZS	-	64536-51-852-31L	152N42 UBP-2	152N42 UBP-2	NGCh 15F421	NGCh 15F453	-	NIIP-53	LC158?	-	-	1000?	-	Kura
1975-S272	2442552.31	1975 Aug 19 1930	Temp-ZS	-	64521-61-869-34L	152N42 UBP-3	152N42 UBP-3	NGCh 15F421	NGCh 15F453	-	NIIP-53	LC158?	-	-	1000?	-	Kura
1975-S373	2442786.50	1975 Aug 26	Temp-ZS	-	64521-61-874-32L	152N42 UBP-4	152N42 UBP-4	NGCh 15F421	NGCh 15F453	-	NIIP-53	LC158?	-	-	1000?	-	Kura
1976-S432	2442786.50	1976 Jan 9	Pioneer	-	-	152N46 LKI-21	152N46 LKI-21	NGCh 15F421	NGCh 15F453	-	Grp-4	-	-	-	500?	-	BALRH
1976-S53	2442787.50	1976 Jan 10	Pioneer	-	-	152N46 LKI K-3	152N46 LKI K-3	NGCh 15F421	NGCh 15F453	-	KANSK	-	-	-	500?	-	Kura
1976-S431	2442787.50	1976 Jan 10	Pioneer	-	-	152N46 LKI K-4	152N46 LKI K-4	NGCh 15F421	NGCh 15F453	-	KANSK	-	-	-	500?	-	Kura
1976-S504	2442789.50	1976 Jan 12?	Pioneer	-	Pioneer-K	152N46 LKI-1	152N46 LKI-1	3 BB 15F452/AA74	RCCh 15F453	-	Grp-4	-	-	-	500?	-	BALRH
1976-S503	2442789.50	1976 Jan 12?	Pioneer	-	Pioneer-K	152N46 LKI-2	152N46 LKI-2	3 BB 15F452/AA74	RCCh 15F453	-	Grp-4	-	-	-	500?	-	BALRH
1976-S502	2442789.50	1976 Jan 12?	Pioneer	-	Pioneer-K	152N46 LKI-3	152N46 LKI-3	3 BB 15F452/AA74	RCCh 15F453	-	Grp-4	-	-	-	500?	-	BALRH
1976-S501	2442789.50	1976 Jan 12?	Pioneer	-	Pioneer-K	152N46 LKI-4	152N46 LKI-4	3 BB 15F452/AA74	RCCh 15F453	-	Grp-4	-	-				





















Launch

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Orbity	Agency	Launch_Code	Group	Category	LTCite	Cite	Notes
1961-A268	2437403.50	1961 Apr 14	Temp	-	-	0.000	RVSN	MS	-	Test	KY60	-	-
1961-A269	2437389.50	1961 Q27	Temp	-	-	0.000	RVSN	MS	-	Test	KY60	-	-
1961-A270	2437526.50	1961 Aug 15	Temp	-	-	0.000	RVSN	MS	-	Test	KY60	-	-
1961-A271	2437572.50	1961 Oct	Temp	-	-	0.000	RVSN	MF	-	Test	KY60	-	-
1961-5460	2437299.50	1961?	Temp	-	-	0.000	RVSN	MF	-	Test	KY60	-	-
1963-A210	2438029.50	1963?	Temp	-	-	0.000	RVSN	MF	-	Test	KY60	-	-
1963-5637	2438210.50	1963 Jul	Temp	-	-	0.000	RVSN	MF	-	Test	KY60	-	-
1964-5809	2438468.50	1964 Mar 14	Temp-S	-	UTR-22S	0.000	RVSN	MS	-	Test	KY60	-	-
1964-A206	2438468.50	1964 Apr?	Temp-S	-	-	0.000	RVSN	MF	-	Test	KY60	-	-
1964-A207	2438515.50	1964 May?	Temp-S	-	-	0.000	RVSN	MF	-	Test	KY60	-	-
1964-5810	2438546.50	1964 Jun?	Temp-S	-	-	0.000	RVSN	MS	-	Test	KY60	-	-
1964-5811	2438594.50	1964 Jul 18	Temp-S	-	-	0.000	RVSN	MS	-	Test	KY60	-	-
1966-5774	2439419.50	1966 Oct 21	Temp-S	-	-	0.000	RVSN	MS	-	Test	RPCB	-	-
1971-5661	2441126.50	1971 Jun 24	Temp-S	-	-	0.000	RVSN	MS	-	Test	RPCB	-	-
1971-5662	2441127.50	1971 Jun 25	Temp-S	-	-	0.000	RVSN	MS	-	Test	RPCB	-	-





Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Mission	Launch_FlightCode	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee km	Range km	Dest
2023-F04	2460026.64	2023 Mar 23 0326:00	Terran 1	-	1	GLHF	-	Good Luck Have Fun	-	CC	LC16	-	-	130	-	-



Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	DrpPct	Agency	Launch_Code	Group	Category	LTCite	Cite	Notes
2023-F04	2460026.64	2023 Mar 23 0925:00	Terran 1	-	1	0.001	RELEP	DF	C	Sat LED 0	youtube.com	-	-



Launch Mission

Launch_Tag	Launch_JD	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Mission	FlightCode	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee Km	Range Km	Dest
1952-A285	245424.23	1952 Nov 7 1734	Terrier			Booster Test 5		St 2 launch		WS				1		
1959-A74	245669.50	1959 May 1	Terrier ASROC Cajun		Terrasca	Radar beacon				PH				07		
1959-S97	245674.50	1959 Jun 26	Terrier ASROC Cajun		Terrasca	UV Scanner				PH				1007		
1959-A135	245679.50	1959 Aug 12	Terrier ASROC Cajun		Tarp	UV Scanner				PH				1007		
1959-S191	245694.50	1959 Sep 30	Terrier Asp		Tarp	TASCAN 1				PH?				207		
1960-A378	245708.50	1960 Jun	Terrier Asp		Tarp	TASCAN 2				PH?				207		
1960-A379	245715.50	1960 Jul?	Terrier Asp		Tarp	TASCAN 3				PH?				207		
1960-A380	245717.50	1960 Sep?	Terrier Asp		Tarp	TASCAN 4				PH?				207		
1960-S507	245720.50	1960 Oct	Terrier Asp		Tarp	TASCAN 5				PH?				807		
1961-S455	245747.12	1961 Jun 27 1500	Hugo		Hugo III S/H-02	RB-14A Camera				WS	LC-85			161		
1962-S67	245779.15	1962 Mar 14 1542	Terrier Asp IV			Vista-300				PA	LC-B			1507		
1962-A251	245774.50	1962 Feb 19	Terrier Viper I		HTAB-BWSS-01	TRISTONE				EGL				107		
1962-S638	245783.50	1962 Jun 23	Terrier Viper I		HTAB-BWSS-02	TRISTONE				EGL				1407		
1962-S652	245801.50	1962 Dec 13	Terrier Asp IV		Vista-300	Vista-300				PA	LC-B			1507		
1963-S636	245850.50	1963 Nov 27	Terrier Viper I		HTAB-BWSS-03					EGL				1407		
1964-S603	245854.50	1964 Jun 8	Hugo			Diagnostic				PH				117		
1964-A104	245854.50	1964 Jun 8	Terrier Tomahawk		Hugo IV	Diagnostic				PH				1		
1964-A205	245854.50	1964 Jun 30	Hugo			Diagnostic				PH				107		
1964-A124	245852.52	1964 Aug 25 0030	Terrier Tomahawk		Hugo IV	TV payload				PH				30		
1964-S606	245865.50	1964 Sep 30	Terrier Hydac			Terrhawk-12				PH				5007		
1964-S604	245865.50	1964 Oct 15	Terrier Hydac			Terrhawk-12				PH				07		
1964-A154	245864.50	1964 Oct 16	Terrier Tomahawk		Hugo IV	Terrhawk-12				PH				5007		
1965-S792	245828.50	1965 Mar 9	Terrier Hydac		Sandia 152-70					SHL				5		
1965-A147	245955.56	1965 Dec 1 0128:20?	Terrier	?		Flight test 1			SHIP-US					8		
1965-A190	245939.50	1966 Mar 16?	Terrier			Flight test 2				SHL				5		
1966-S442	245939.50	1966 Aug 2	Terrier Hydac			Flight test 1				SHL				5		
1967-S446	245974.50	1967 Sep 21	Terrier Hydac			Flight test 2				SHL				5		
1967-S468	245976.50	1967 Oct 3	Terrier Sandhawk		Sandia 281-7					SHL				443		
1968-S556	2440156.98	1968 Oct 29 1132	Terrier Sandhawk		Sandia 281-8					SHL				443		
1968-S572	2440167.78	1968 Nov 7 0645	Terrier Sandhawk		Sandia 281-10					SHL				443		
1968-S607	2440171.50	1968 Nov 7 0645	Terrier Sandhawk		Sandia 281-11					SHL				443		
1969-S268	2440300.73	1969 Nov 11	Terrier Tomahawk		SECEDE R8					SHL				5007		
1969-S342	2440305.74	1969 Mar 20 0537	Terrier Tomahawk		SECEDE 152-126					SHL				5		
1970-S586	2440721.97	1970 May 24 0552:44	Terrier Tomahawk		Sandia 152-126					SHL				8		
1970-S586	2440721.97	1970 May 24 0552:44	Terrier Tomahawk		Sandia 281-14					SHL				8		
1970-S586	2440721.97	1970 May 15 1114	Terrier Sandhawk		SECEDE R9					SHL				176		
1970-S589	2440722.94	1970 May 16 0945	Terrier Sandhawk		SECEDE R10					SHL				176		
1970-S571	2440723.94	1970 May 21	Terrier Recruit	?	SECEDE R11					SHL				1507		
1970-S571	2440723.94	1970 May 21	Terrier Sandhawk		SECEDE R10					SHL				1507		
1970-S565	2440732.98	1970 May 26 0910	Terrier Sandhawk		Sandia 281-16					SHL				320		
1970-S567	2440743.94	1970 Jun 06 0550	Terrier Sandhawk	?	SECEDE R11					SHL				320		
1970-A170	2440650.50	1970 Oct 9?	Terrier Sandhawk	?	SECEDE R11					SHL				320		
1970-A170	2440650.50	1970 Oct 9?	Terrier Recruit		SECEDE R11					SHL				320		
1970-A170	2440650.50	1970 Oct 16	Terrier Recruit		Sandia					SHL				320		
1971-S658	2440955.46	1971 Jun 16 2332	Terrier Tomahawk		SECEDE R12					SHL				176		
1971-S658	2440955.46	1971 Jun 20 2345:31	Terrier Tomahawk	?	SECEDE R12					SHL				176		
1971-S658	2440955.46	1971 Jun 20 2345:31	Terrier Tomahawk	?	SECEDE R12					SHL				176		
1971-S672	2440972.49	1971 Jun 20 2545	Terrier Tomahawk		SECEDE R13					SHL				180		
1971-S672	2440972.49	1971 Jun 20 2545	Terrier Tomahawk		SECEDE R13					SHL				180		
1971-S659	2440975.16	1971 Jun 26 2338:51	Terrier Tomahawk	?	SECEDE R14/R15					SHL				2607		
1971-S659	2440975.16	1971 Jun 26 2338:51	Terrier Tomahawk	?	SECEDE R14/R15					SHL				2607		
1971-S659	2440975.16	1971 Jun 26 2338:51	Terrier Tomahawk	?	SECEDE R14/R15					SHL				2607		
1971-S659	2440975.16	1971 Jun 26 2338:51	Terrier Tomahawk	?	SECEDE R14/R15					SHL				2607		
1971-S659	2440975.16	1971 Jun 26 2338:51	Terrier Tomahawk	?	SECEDE R14/R15					SHL				2607		
1971-S659	2440975.16	1971 Jun 26 2338:51	Terrier Tomahawk	?	SECEDE R14/R15					SHL				2607		
1971-S659	2440975.16	1971 Jun 26 2338:51	Terrier Tomahawk	?	SECEDE R14/R15					SHL				2607		
1971-S659	2440975.16	1971 Jun 26 2338:51	Terrier Tomahawk	?	SECEDE R14/R15					SHL				2607		
1971-S659	2440975.16	1971 Jun 26 2338:51	Terrier Tomahawk	?	SECEDE R14/R15					SHL				2607		
1971-S659	2440975.16	1971 Jun 26 2338:51	Terrier Tomahawk	?	SECEDE R14/R15					SHL				2607		
1971-S659	2440975.16	1971 Jun 26 2338:51	Terrier Tomahawk	?	SECEDE R14/R15					SHL				2607		
1971-S659	2440975.16	1971 Jun 26 2338:51	Terrier Tomahawk	?	SECEDE R14/R15					SHL				2607		
1971-S659	2440975.16	1971 Jun 26 2338:51	Terrier Tomahawk	?	SECEDE R14/R15					SHL				2607		
1971-S659	2440975.16	1971 Jun 26 2338:51	Terrier Tomahawk	?	SECEDE R14/R15					SHL				2607		
1971-S659	2440975.16	1971 Jun 26 2338:51	Terrier Tomahawk	?	SECEDE R14/R15					SHL				2607		
1971-S659	2440975.16	1971 Jun 26 2338:51	Terrier Tomahawk	?	SECEDE R14/R15					SHL				2607		
1971-S659	2440975.16	1971 Jun 26 2338:51	Terrier Tomahawk	?	SECEDE R14/R15					SHL				2607		
1971-S659	2440975.16	1971 Jun 26 2338:51	Terrier Tomahawk	?	SECEDE R14/R15					SHL				2607		
1971-S659	2440975.16	1971 Jun 26 2338:51	Terrier Tomahawk	?	SECEDE R14/R15					SHL				2607		
1971-S659	2440975.16	1971 Jun 26 2338:51	Terrier Tomahawk	?	SECEDE R14/R15					SHL				2607		
1971-S659	2440975.16	1971 Jun 26 2338:51	Terrier Tomahawk	?	SECEDE R14/R15					SHL				2607		
1971-S659	2440975.16	1971 Jun 26 2338:51	Terrier Tomahawk	?	SECEDE R14/R15					SHL				2607		
1971-S659	2440975.16	1971 Jun 26 2338:51	Terrier Tomahawk	?	SECEDE R14/R15					SHL				2607		
1971-S659	2440975.16	1971 Jun 26 2338:51	Terrier Tomahawk	?	SECEDE R14/R15					SHL				2607		
1971-S659	2440975.16	1971 Jun 26 2338:51	Terrier Tomahawk	?	SECEDE R14/R15					SHL				2607		
1971-S659	2440975.16	1971 Jun 26 2338:51	Terrier Tomahawk	?	SECEDE R14/R15					SHL				2607		
1971-S659	2440975.16	1971 Jun 26 2338:51	Terrier Tomahawk	?	SECEDE R14/R15					SHL				2607		
1971-S659	2440975.16	1971 Jun 26 2338:51	Terrier Tomahawk	?	SECEDE R14/R15					SHL				2607		
1971-S659	2440975.16	1971 Jun 26 2338:51	Terrier Tomahawk	?	SECEDE R14/R15					SHL				2607		
1971-S659	2440975.16	1971 Jun 26 2338:51	Terrier Tomahawk	?	SECEDE R14/R15					SHL				2607		
1971-S659	2440975.16	1971 Jun 26 2338:51	Terrier Tomahawk	?	SECEDE R14/R15					SHL				2607		
1971-S659	2440975.16	1971 Jun 26 2338:51	Terrier Tomahawk	?	SECEDE R14/R15					SHL				2607		
1971-S659	2440975.16	1971 Jun 26 2338:51	Terrier Tomahawk	?	SECEDE R14/R15					SHL				2607		
1971-S659	2440975.16	1971 Jun 26 2338:51	Terrier Tomahawk	?	SECEDE R14/R15					SHL				2607		



Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Mission	FlightCode	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee	Range	Dest
														km	km	
1986-838	2446535.88	1986 Apr 13 09:14:01	Black Brant X		MASA 35.0166E					PF				977		
1986-841	2446542.87	1986 Apr 22 09:49	Black Brant X		MASA 35.0130G					WI				9007		
1986-846	2446563.82	1986 May 13 07:40	Black Brant X		MASA 35.0140E					WI				4307		
1986-8117	2446780.32	1986 Dec 15 19:35	Black Brant IX		MASA 36.190U	GSCF Solar WVI 3				WS	LC36			322		
1987-846	2446824.30	1987 Jan 28 19:15	Black Brant IX		MASA 36.160U	PAGE 2				WS	LC36			265		
1987-847	2446831.99	1987 Jan 31 09:52	Black Brant IX		MASA 36.040E	SCEX II				PF				211		
1987-856	2446855.49	1987 Feb 26 23:49:10	Black Brant IX		GL A21.628	COPE II/POLAR ARCS				SSG				387		
1987-857	2446855.49	1987 Feb 26 23:49:10	Black Brant IX		MASA 29.250E	COPE II				SSG				5007		
1987-858	2446859.77	1987 Mar 5 06:32:40	Torrier Walemute		MASA 29.250E	COPE II				SSG				5007		
1987-805	2446861.78	1987 Mar 7 06:35:20	Black Brant X		MASA 35.0180E	COPE II				PF				107		
1987-862	2446873.92	1987 Mar 19 10:00:00	Black Brant IX		MASA 36.140E	SSC MASER 1				ESR	MLL			295		
1987-874	2446885.70	1987 Mar 31 04:47:00	Black Brant IX		MASA 36.130E	COPE II Main				SSG				436		
1987-8125	2447007.66	1987 Jul 31 03:53:49	Black Brant IX		MASA 36.020G	WTP				WI				3007		
1987-8128	2447023.23	1987 Aug 15 17:25	Black Brant IX		MASA 36.010G	ASME S/NP XRT				WS	LC36			3007		
1987-8174	2447114.09	1987 Nov 14 14:10	Black Brant IX		MASA 36.020G	ASME S/NP XRT				WDD	LA2 N			3007		
1987-8176	2447116.05	1987 Nov 18 13:06	Black Brant IX		MASA 36.020G	FUWS 1				WDD	LA2 N			3007		
1987-8177	2447134.21	1987 Dec 4 17:05	Black Brant IX		MASA 36.020H	CAL XR 15				WDD	LA2 N			3007		
1987-8179	2447141.26	1987 Dec 11 18:15	Black Brant IX		MASA 36.36CS	ASME S/NP XRT				WS	LC36			3007		
1987-8180	2447141.26	1987 Dec 11 18:15	Black Brant IX		MASA 36.20DS	HRTS 5				WS	LC36			3007		
1987-8181	2447143.57	1987 Dec 14 01:45	Black Brant X		GL A22.703	SPAR 1				WI	LA2			370		
1988-846	2447179.86	1988 Jan 19 09:40:04	Black Brant X		MASA 35.0170E	TPM2 II				PF				926		
1988-846	2447184.27	1988 Jan 23 18:50	Black Brant IX		MASA 36.290U	ERIC II				WI	LC36			3007		
1988-850	2447190.29	1988 Jan 29 19:03:41	Black Brant IX		MASA 36.390E	ECHO VII				WI				3007		
1988-852	2447200.65	1988 Feb 9 09:16:49	Black Brant IX		MASA 36.150E	SXS				PF				282		
1988-852	2447206.07	1988 Feb 16 13:54	Black Brant IX		MASA 36.022GH	ERIC III				WDD	LA2 N			3007		
1988-862	2447220.01	1988 Feb 28 12:10	Black Brant IX		MASA 36.460E	HRTS 6/ASL-San Marco				WDD	LA2 N			3007		
1988-862	2447220.01	1988 Feb 28 12:10	Black Brant IX		MASA 36.0220H	SRR 67a				WDD	LA2 N			3007		
1988-864	2447224.79	1988 Feb 29 09:54:30	Black Brant IX		MASA 2	SSC MASER 2				ESR	MLL			318		
1988-866	2447234.79	1988 Mar 4 06:55	Black Brant X		MASA 35.0236E	SSC MASER 2				PF				1000		
1988-866	2447234.79	1988 Mar 13 13:54	Black Brant IX		MASA 36.0270G	UCH Alaska '88				WDD	LA2 N			3007		
1988-867	2447236.35	1988 Mar 17 20:25	Black Brant IX		MASA 36.360S	FUWS (SHR 67a)				WS	LC36			3007		
1988-8100	2447236.35	1988 Jun 23 17:40	Black Brant IX		MASA 36.360S	EVW-HL 1				WS	LC36			3007		
1988-8116	2447415.22	1988 Sep 10 17:10:12	Black Brant IX		MASA 36.460E	MIAT				WI	LC36			3007		
1988-8117	2447415.51	1988 Sep 11 07:30	Black Brant IX		MASA 36.310G	ERIC III				WS	LC36			281		
1988-8129	2447459.25	1988 Oct 24 18:03:01	Black Brant IX		MASA 36.410U	SOLLY				WS	LC36			3007		
1988-8136	2447466.27	1988 Nov 20 18:50	Black Brant IX		MASA 35.0240E	HRTS 6/ASL-San Marco				WS	LC36			3007		
1988-8147	2447512.96	1988 Dec 17 11:01	Black Brant X		MASA 36.490G	GSP				AMD	LC36			515		
1989-401	2447536.54	1989 Jan 9 09:10	Black Brant IX		MASA 36.490G	JRU FOT 8 (Io)				WS	LC36			101		
1989-828	2447544.39	1989 Jan 17 19:00:03	Black Brant IX		MASA 36.490G	JRU FOT 8 (Io)				WS	LC36			907		
1989-853	2447557.39	1989 Jan 30 21:14:40	Black Brant XB		AMF-XB-02	GENIPIUS A				WS	LC36			912		
1989-854	2447615.15	1989 Mar 29 15:41	Black Brant XB		MASA 35.022E	CONDORT 1				WS	LC36 L-630			388		
1989-850	2447615.60	1989 Apr 8 02:27	Torrier Walemute		MASA 35.022E	CONDORT 1				WI				2907		
1989-851	2447626.89	1989 Apr 9 06:21:39	Black Brant XB		MASA 3	CONDORT 1				WI				368		
1989-852	2447626.89	1989 Apr 10 08:21:00	Black Brant IX		MASA 35.0916E	NEW AIR 1				ESR	MLL			2907		
1989-853	2447626.89	1989 Apr 11 03:26	Black Brant XB		MASA 35.0916E	NEW AIR 1				FC				4307		
1989-856	2447650.57	1989 May 5 17:42:10	Black Brant IX		MASA 36.250S	GENIPIUS-2 (GRIT-2)				WI				320		
1989-857	2447650.57	1989 May 5 17:42:10	Black Brant IX		MASA 36.250S	GENIPIUS-2 (GRIT-2)				WI				320		
1989-857	2447650.57	1989 May 5 17:42:10	Black Brant IX		MASA 36.250S	GENIPIUS-2 (GRIT-2)				WI				320		
1989-852	2447690.72	1989 Jun 20 19:00	Black Brant IX		MASA 36.450G	EDW-HL-2 (NARV/CP-2)				WS	LC36			3007		
1989-852	2447690.72	1989 Jun 20 19:00	Black Brant IX		MASA 36.450G	EDW-HL-2 (NARV/CP-2)				WS	LC36			3007		
1989-879	2447738.75	1989 Jul 27 06:00:01	Black Brant IX		SDIO Black Star 3	Maha UV Telescope				WI				9007		
1989-880	2447738.75	1989 Jul 31 10:42	Black Brant X		SDIO Black Star 4	Maha UV Telescope				WI				9007		
1989-880	2447764.25	1989 Aug 23 16:05	Black Brant IX		MASA 36.590U	EDW Spectrometer				WS	LC36			333		
1989-880	2447764.25	1989 Aug 23 16:05	Black Brant IX		MASA 36.590U	EDW Spectrometer				WS	LC36			333		
1989-886	2447773.50	1989 Sep 11 16:36	Torrier Walemute		MASA 36.590U	EDW Spectrometer				KAU	LC36 L-630			723		
1989-891	2447784.19	1989 Sep 11 16:36	Torrier Walemute		MASA 36.590U	EDW Spectrometer				KAU	LC36 L-630			723		
1989-891	2447784.19	1989 Sep 11 16:36	Torrier Walemute		MASA 36.590U	EDW Spectrometer				KAU	LC36 L-630			723		
1989-8102	2447820.58	1989 Oct 23 01:58	Black Brant IX		MASA 36.590U	EDW Spectrometer				KAU	LC36 L-630			723		
1989-811	2447846.16	1989 Nov 15 15:45	Black Brant 9CM1		MASA 36.370E	CONDORT 2				WI				310		
1989-831	2447915.32	1990 Nov 23 19:40	Black Brant IX		MASA 36.370E	CONDORT 2				WS	LC36 L-630			10		
1989-845	2447945.81	1990 Feb 23 07:31:25	Black Brant IX		MASA 36.300E	PAGE				WS	LC36			3007		
1989-845	2447945.81	1990 Feb 23 07:31:25	Black Brant IX		MASA 36.300E	PAGE				WS	LC36			3007		
1989-864	2447960.25	1990 Mar 9 19:00	Black Brant IX		MASA 36.660U	ARCS 4				WS	LC36			586		
1989-864	2447967.69	1990 Mar 17 04:50	Black Brant IX		MASA 36.340H	ARCS 4				WS	LC36			3007		
1989-873	2447979.89	1990 Mar 29 09:26	Torrier Walemute		SDIO Laser Target	CONDORT 3				WI				462		
1989-876	2447979.89	1990 Mar 29 09:26	Torrier Walemute		MASA 4	CONDORT 3				ESR	MLL			317		
1989-877	2447981.21	1990 Mar 30 17:00	Black Brant IX		MASA 36.530E	MASA 4				ESR	MLL			3007		
1989-878	2447987.07	1990 Apr 5 13:47	Black Brant IX		MASA 36.530E	MASA 4				WI	LC36			586		
1989-879	2447990.87	1990 Apr 9 08:50	Black Brant IX		MASA 36.670G	WSP 1				WI	LC36			586		
1989-880	2447998.75	1990 Apr 17 06:00	Black Brant IX		MASA 36.670G	FUWS				WS	LC36			3007		
1989-881	2448002.93	1990 Apr 21 01:15	Black Brant IX		MASA 36.0630G	FUWS				WS	LC36			3007		
1989-882	2448006.73	1990 Apr 25 05:32	Black Brant IX		MASA 36.730G	DUVE				WS	LC36			3007		
1989-884	2448009.91	1990 Apr 28 09:45	Torrier Walemute		MASA 36.730G	HU FOT 9 (C/Austin)				WS	LC36			3007		
1989-884	2448028.07	1990 May 16 13:40	Black Brant IX		MASA 36.740G	HU FOT 9 (C/Austin)				WS	LC36			3007		
1989-894	2448044.10	1990 Jul 30 09:48:44	Black Brant IX		MASA 36.690U	FUWS (C/Austin)				WS	LC36 L-630			304		
1989-8106	2448102.91	1990 Jul 30 09:48:44	Torrier Walemute		MASA 36.690U	FUWS (C/Austin)				WS	LC36 L-630			304		
1989-8113	2448105.82	1990 Aug 2 10:07:0														





Launch_Tag	Launch_JD	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Mission	FlightCode	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee	Range	Dest
														km	km	
1996-870	2450401.27	1996 Nov 13 1850:00	Black Brant IX		MASA 36.1426S	SERTS-96 (07)				WS	LC36			3007		
1996-871	2450405.06	1996 Nov 17 1330:00	Terrier Improved Orion		MASA 41.0056P	DARTFire 3				WS	LC36			1507		
1997-821	2450506.33	1997 Feb 26 2000:00	Black Brant IX		MASA 36.161NP					WS	LC36			3007		
1997-825	2450520.93	1997 Mar 13 1020:31	Black Brant IX		MASA 36.1390E	Hale-Bopp				PF				282		
1997-829	2450532.64	1997 Mar 25 0315	Black Brant IX		MASA 36.1580L					WS	LC36			3007		
1997-830	2450537.64	1997 Apr 3 0325	Black Brant IX		MASA 36.1550L					WS	LC36			3007		
1997-831	2450544.66	1997 Apr 6 0345	Black Brant 9CM1		MASA 36.1560L	JHU FOT 13				WS	LC36			3007		
1997-832	2450546.66	1997 Apr 8 0355	Black Brant 9CM1		MASA 36.1570L	WISP 3				WS	LC36			3757		
1997-836	2450570.81	1997 May 2 0730	Black Brant IX		MASA 36.0930H					WS	LC36			3007		
1997-837	2450576.80	1997 May 8 0710	Black Brant IX		MASA 36.1330E					WS	LC36			3007		
1997-839	2450584.30	1997 May 15 1916	Black Brant IX		MASA 36.1350E	MCAR/CO-6 MUUVI				WS	LC36			3007		
1997-841	2450592.41	1997 May 23 2144	Terrier Orion		MASA 41.130T					WI	LC36			1507		
1997-842	2450597.71	1997 May 29 0456	Black Brant IX		MASA 36.1630R	NITE 1				WI	LC36			945		
1997-843	2450605.06	1997 Aug 8 1324:30	Terrier Improved Orion		MASA 41.110E	COONS/ROCKI (CRISTA)				WI				207		
1997-853	2450627.26	1997 Aug 11 1818:00	Black Brant IX		MASA 36.1640S	USC-2 SUHO Cal				WS				307		
1997-854	2450633.79	1997 Sep 2 0700	Terrier Improved Orion		MASA 41.140T	DOUDEE 1				ANNA				3007		
1997-855	2450636.67	1997 Sep 5 0400	Terrier Improved Orion		MASA 41.150T	DOUDEE 2				ANNA				3007		
1997-857	2450702.11	1997 Sep 10 1440	Black Brant IX		MASA 36.1650P					WS				3007		
1997-858	2450707.13	1997 Sep 10 1510	Black Brant IX		MASA 36.1690M					WS				3007		
1997-859	2450701.58	1997 Sep 10 0200	Terrier Improved Orion		MASA 41.160T	DARTFire 4				WS				3007		
1997-859	2450703.34	1997 Sep 11 2015:30	Terrier Improved Orion		MASA 41.170T	DOUDEE 3				ANNA				3007		
1997-861	2450711.04	1997 Sep 19 1300:00	Black Brant IX		MASA 36.1400E	DOUDEE 4 (NSX)				ANNA				3007		
1997-864	2450722.34	1997 Sep 30 2010:00	Black Brant IX		MASA 36.1400E					WS				3007		
1997-870	2450736.29	1997 Oct 16 1500:00	Black Brant IX		MASA 36.1290S	HRTS 10				WS	LC36			3007		
1997-872	2450758.33	1997 Nov 5 2002:00	Terrier Improved Orion		MASA 41.041E	EIT-CALROC				WS				350		
1997-874	2450766.71	1997 Nov 14 0500:00	Black Brant IX		MASA 36.0800G	SCAR 1				WS				3007		
1997-875	2450771.32	1997 Nov 18 1535:00	Black Brant IX		MASA 36.1631E					WS				120		
1997-876	2450784.66	1997 Dec 3 0942:00	Black Brant IX		MASA 36.1521E					WS				3007		
1997-877	2450785.68	1997 Dec 5 0942:00	Black Brant IX		MASA 41.080E	EDDY				WS	LC36			443		
1998-822	2450869.83	1996 Feb 25 0730:00	Terrier Improved Orion		MASA 36.1590E	Coqui Dos LaTur				SVAL				128		
1998-830	2450884.49	1996 Mar 11 2333:00	Black Brant IX		MASA 36.1770G	SCAR 2				TURT				3757		
1998-837	2450921.61	1996 Apr 18 0400	Black Brant IX		MASA 36.1600G					WS				3007		
1998-838	2450924.61	1996 Apr 18 0730	Black Brant IX		MASA 36.1600G					WS				3007		
1998-840	2450932.01	1996 Apr 28 1210:00	Black Brant IX		MASA 36.1600G					WS				3007		
1998-844	2450955.77	1996 May 22 0622:00	Black Brant IX		MASA 36.1750R	ACTIVE				WS				315		
1998-871	2450994.90	1996 Jul 1	SH-2		Aegle THT-1					KAU				337		
1998-880	2451040.73	1996 Aug 15 0550	Black Brant IX		MASA 36.1760H	NITE 2				KAU				800		
1998-884	2451075.12	1996 Sep 18 1500	Black Brant IX		EVAC CD	ALPAC 96				WS				3007		
1998-886	2451120.26	1996 Sep 18 1620	Black Brant IX		MASA 36.1500P	SOMAX-1 Hypersonic				WS	LC36			314		
1998-872	2451138.50	1996 Nov 16	SH-2		MASA 36.171CS	SOPHIE (MCMV/CO-7)				WS				350		
1998-862	2451158.15	1996 Nov 16 1540	Black Brant IX		Aegle THT-2	LINBACKER				KAU				870		
1999-809	2451220.78	1999 Feb 11 0645:31	Black Brant IX		MASA 36.1780M	ENUTROPHY				WS				3007		
1999-810	2451226.77	1999 Feb 20 0445:00	Black Brant IX		MASA 36.0320E					PF				1071		
1999-824	2451236.77	1999 Feb 20 0445:00	Black Brant IX		MASA 36.1500G	SPIN 2				WS				3702		
1999-831	2451236.77	1999 Apr 2 0635:00	Black Brant 9CM1		MASA 36.1720S	VAULT 1				WS				3757		
1999-837	2451304.33	1999 May 7 2007:06	Black Brant IX		MASA 36.1810S	VAULT 1				WS				3007		
1999-857	2451354.21	1999 Jun 14 0740	Black Brant 9CM1		MASA 36.1860S	JHU FOT 14				WS				3007		
1999-866	2451360.51	1999 Jun 24 1700	Black Brant IX		MASA 36.1826S	SERTS-99 (09)				WS				3007		
1999-855	2451409.25	1999 Aug 18 1805	SH-2		Aegle THT	Suggen THT				KAU				707		
1999-855	2451414.25	1999 Aug 24 0707:02	Black Brant 9CM1		MASA 36.1810S	USC-3 (SUDO Cal)				WS	LC36			314		
1999-855	2451443.92	1999 Sep 27 1700:00	Black Brant IX		MASA 36.1890G	EDB				WS				3209		
1999-855	2451450.22	1999 Sep 27 1700:00	Black Brant IX		MASA 36.1890G	MC_Pool Boiling				WS				158		
2000-800	2451586.64	2000 Feb 15 0327:00	Terrier Improved Orion		MASA 41.0200M	JHU FOT 15				WS				3007		
2000-801	2451586.64	2000 Feb 15 0327:00	Black Brant 9CM1		MASA 36.1860G					WS				107		
2000-401	2451600.71	2000 Feb 26 0459:00	Black Brant IX		MASA 36.1830G	J-PEX 1				WS				273		
2000-877	2451670.77	2000 May 6 0634:59	Black Brant IX		MASA 36.1830G	PAGELITZ 00				KAU				107		
2000-403	2451703.50	2000 Jun 8	SH-2		Aegle THT	PAGELITZ 00				KAU				107		
2000-404	2451703.50	2000 Jun 8	SH-2		Aegle THT					KAU				107		
2000-839	2451723.11	2000 Jul 6 1441:00	Black Brant IX		MASA 36.1660M					WS				3007		
2000-840	2451723.11	2000 Jul 7 1025	Terrier Orion		MASA 36.1860G					WS				368		
2000-845	2451752.25	2000 Jul 26 1806:00	Black Brant IX		MASA 36.1850G	SERTS-00 (10)				WS	LC36			3007		
2000-846	2451761.71	2000 Aug 5 0500:02	Black Brant IX		MASA 36.1890G	SPIN 3				WS				406		
2000-849	2451793.25	2000 Sep 5 1922:00	Black Brant IX		MASA 36.1510S					WS				3007		
2000-859	2451831.11	2000 Oct 13 1445:02	Black Brant IX		MASA 41.0210P					WS				1007		
2000-867	2451898.00	2000 Dec 19 1157	Terrier Improved Orion		MASA 12.500P					WS				3007		
2001-807	2451949.67	2001 Feb 9 0400:06	Black Brant 9CM1		MASA 36.1980G	MANC				WS				3007		
2001-808	2451953.19	2001 Feb 12 1628:00	Black Brant IX		MASA 36.1870M	JHU FOT 16				WS				3007		
2001-813	2451962.70	2001 Feb 22 0455:00	Black Brant IX		MASA 36.1950G	I-PEX 2				WS				3007		
2001-826	2452082.23	2001 Jun 21 1732:00	Black Brant IX		MASA 36.1930S	TYI				WS				272		
2001-844	2452180.17	2001 Oct 30 0231	Terrier Wk 70 Orion		MASA 42.010P					WS	LC36			3007		
2001-848	2452219.60	2001 Dec 6 0320:00	Black Brant IX		T-Orion 5A	Hyshot 1 'Hilary'				KAU				1007		
2001-853	2452249.64	2002 Feb 8 1841:30	Black Brant IX		MASA 36.1890L	WISP 5 comet study				WS				3007		
2002-807	2452314.28	2002 Feb 8 1841:30	Black Brant IX		MASA 36.1920E	MCAR/CO-8				WS	LC36			3007		
2002-829	2452396.25	2002 Apr 30 1820:10	Black Brant IX		MASA 36.1940S	MSSTA III				WS				270		
2002-837	2452430.95	2002 Jun 5 1043:00	Terrier Orion		MASA 41.0230E	SAMPLER				WS				1307		
2002-838	2452430.97	2002 Jun 5 1113:00	Terrier Orion		MASA 41.0230E	SAMPLER				WS				1307		
2002-842	2452436.99	2002 Jun 11 0700:00	Black Brant IX		MASA 36.1120G	MUWENS 2				WS	LC36			3007		
2002-845	2452440.26	2002 Jun 14 1810:00	Black Brant IX		MASA 36.1960S	VAULT II (Lya Loops)				WS	LC36			273		
2002-846																

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Mission	FlightCode	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee_Km	Range_Km	Dest
2003-802	2452664.37	2003 Jan 24 2050:00	Terrier Orion		MASA 41.0300E	MacWAVE				ESR				131		
2003-803	2452667.83	2003 Jan 28 0750:02	Black Brant IX		MASA 36.2000E	RIDAR				PF				385		
2003-804	2452668.27	2003 Jan 28 1852:00	Terrier Orion		MASA 41.0310E	MacWAVE				ESR				130		
2003-805	2452676.81	2003 Feb 6 0730:00	Black Brant IX		MASA 36.2040E	MOVIEWS 3				WS				300?		
2003-806	2452723.91	2003 Mar 25 0950:01	Black Brant IX		MASA 41.0340E	HEX H				PF	LC2			160		
2003-809	2452723.92	2003 Mar 25 1009:01	Terrier Improved Orion		MASA 41.0340E	HEX V				PF	LC3			180		
2003-812	2452726.01	2003 Mar 27 1209:01	Black Brant IX		MASA 36.2060E	JOULE				PF	LC5			193		
2003-802	2452726.01	2003 Mar 27 1210:01	Terrier Improved Orion		MASA 41.0290E	JOULE				PF	LC5			107		
2003-814	2452726.01	2003 Mar 27 1213:01	Terrier Improved Orion		MASA 41.0290E	JOULE				PF	LC2			180?		
2003-817	2452746.53	2003 Apr 17 0301:54	Black Brant IX		MASA 36.2010L	DEPR				WS				300?		
2003-823	2452800.77	2003 Jun 10 0631:00	Terrier Malemute		MASA 29.0350L	DEPR				WS				800		
2003-827	2452820.74	2003 Jun 30 0319:00	Terrier Improved Orion		MASA 41.0360E	Release II/Dir				WI				202		
2003-828	2452820.74	2003 Jun 30 0541:00	Terrier Improved Orion		MASA 41.0370E	Release II/Dir				WI				206		
2003-830	2452820.60	2003 Jun 30 0707:00	Terrier Improved Orion		MASA 41.0380E	Release II/Dir				WI				204		
2003-834	2452838.79	2003 Jul 15 0702:00	Terrier Improved Orion		MASA 41.0260E	SAMPLER (CWAS)				WS				128		
2003-836	2452838.61	2003 Jul 15 0722:00	Terrier Improved Orion		MASA 41.0240E	SAMPLER (CWAS)				WS				130?		
2003-838	2452852.93	2003 Aug 1 1025:03	Terrier Rk 70 Orion		MASA 12.0626T	IMACS Test				WI				204		
2003-838	2452864.27	2003 Aug 12 1823:30	Black Brant IX		MASA 36.2050E	LASP/CO-9 (SEE)				WS				300?		
2003-840	2452871.96	2003 Aug 20 1105:00	Terrier Orion		MASA 41.0400P	VALPE-2				WI				135		
2003-842	2452916.10	2003 Oct 3 1430:00	Terrier Improved Orion		MASA 41.0350E	VALPE-2				WI				130?		
2003-841	2452931.29	2003 Oct 18 1900	Terrier Rk 70 Orion		FAST SPV-1	Dummy Scramjet				WI				20		
2003-843	2452936.95	2003 Oct 24 1046:17	Terrier Rk 70 Orion		MASA 12.0650T	Dummy Scramjet	SOAREX-3			WI				156		
2003-843	2452936.95	2003 Dec 5 1930:00	Black Brant IX		MASA 36.2110S	USC-5 (SOUND SEH)				WS				300?		
2003-847	2452979.33	2003 Dec 5 1930:00	Black Brant IX		MASA 36.2110S	USC-5 (SOUND SEH)				WS				300?		
2003-846	2452979.33	2003 Dec 5 1930:00	Black Brant IX		MASA 36.1940S	JHU FUT 17/LIDUS				WS				300?		
2003-852	2452989.62	2003 Dec 6 0300	Black Brant IX		MASA 36.2080G	BPRV/VOLCAN				WS				263?		
2004-802	2453021.02	2004 Jan 16 1229:22	Black Brant IX		MASA 36.2100L	SENS10				WS				782		
2004-804	2453026.67	2004 Jan 22 0957:00	Black Brant IX		MASA 35.0350E	SENS10				WS				122		
2004-814	2453108.65	2004 Apr 13 0330	Terrier Rk 70 Orion		MASA 12.566T	Dummy Scramjet				WI				20		
2004-816	2453112.21	2004 Apr 16 1656	Terrier Orion		FAST SPV-2	Dummy Scramjet				WI				1		
2004-805	2453145.50	2004 May 18	Coyote		MASA 36.2090G	ISIS (Cyg Loop)				PH				300?		
2004-819	2453157.53	2004 Jun 1 0750	Black Brant IX		MASA 36.2090G	ISIS (Cyg Loop)				PH				1		
2004-819	2453204.50	2004 Jun 1 0750	AAV-PR		MASA 29.0370E	ARMY-ENV/star 20				KAU				200?		
2004-826	2453224.67	2004 Jul 1 0852:55	Terrier Malemute		MASA 41.0430E	EQUIS II				KAU				460		
2004-829	2453224.68	2004 Aug 7 0907:30	Terrier Improved Orion		MASA 41.0430E	EQUIS II				KAU				130?		
2004-830	2453224.98	2004 Aug 7 0911:30	Terrier Improved Orion		MASA 41.0430E	EQUIS II				KAU				130?		
2004-834	2453232.85	2004 Aug 15 0821:53	Terrier Malemute		MASA 29.0380E	EQUIS II				KAU				460		
2004-838	2453232.85	2004 Aug 15 0847:00	Terrier Improved Orion		MASA 41.0440E	EQUIS II				KAU				130?		
2004-836	2453232.87	2004 Aug 15 0851:00	Terrier Improved Orion		MASA 41.0460E	EQUIS II				KAU				100?		
2004-810	2453244.50	2004 Aug 27 2042:43	Coyote		MASA 41.0410E	GM-163A Test				PH				1		
2004-837	2453246.45	2004 Aug 27 2042:43	Terrier Improved Orion		MASA 41.0460E	EQUIS II				KAU				130?		
2004-841	2453266.50	2004 Sep 1 2856:00	Terrier Improved Orion		MASA 41.0460E	EQUIS II				KAU				130?		
2004-846	2453269.84	2004 Sep 17 0932	Terrier Improved Orion		MASA 41.0420E	EQUIS II				KAU				130?		
2004-846	2453269.84	2004 Sep 17 0932	Terrier Improved Orion		MASA 12.566T	IMACS Test				WS				320?		
2004-859	2453271.62	2004 Sep 23 0728:33	Terrier Rk 70 Orion		MASA 36.2170E	LASP/CO-10 (SEE)				WS				20?		
2004-859	2453271.62	2004 Sep 23 0728:33	Black Brant IX		MASA 12.0610T	GM-163A Test				PH				300?		
2004-815	2453283.62	2004 Nov 24 0500:00	Terrier Orion		MASA 41.0450R	GM-163A Test				PH				1		
2005-805	2453304.37	2005 Feb 2 2057:00	Coyote		MASA 41.58DR	GM-163A Test				PH				20?		
2005-805	2453304.37	2005 Feb 2 2057:00	Terrier Orion		MASA 41.58DR	GM-163A Test				PH				20?		
2005-809	2453431.47	2005 Mar 1 2313:00	Terrier Orion		MASA 41.58DR	GM-163A Test				KAU				130?		
2005-812	2453431.47	2005 Mar 2 2111:00	Terrier Orion		MASA 41.58DR	GM-163A Test				KAU				130?		
2005-815	2453433.42	2005 Mar 3 2205:00	Terrier Oriole		MASA 45.01DR	GM-163A Test				KAU				300?		
2005-802	2453433.42	2005 Mar 24	Coyote							PH				1		
2005-802	2453433.42	2005 Mar 24	Coyote							PH				1		
2005-819	2453486.90	2005 Mar 25 0935:00	Terrier Improved Orion		MASA 41.0670P	MCFTS-1/HS1				PH				156		
2005-827	2453500.45	2005 Mar 28 2254	Terrier ASAS		MASA 12.0600T	Test 41/light				VI				275		
2005-829	2453509.18	2005 Jul 7 1603:00	Black Brant IX		MASA 36.2220S	VALT II Light				VI				300?		
2005-831	2453589.28	2005 Jul 3 1845:00	Black Brant IX		MASA 36.2270S	USC-6 (SOUND SEM)				WS				300?		
2005-844	2453677.44	2005 Aug 2 2234	Terrier Wk 70 Oriole		MASA 45.02DR	ARAV-82 TRACKEX FTH-8				KAU				300?		
2005-850	2453689.35	2005 Nov 14 2030	Terrier Improved Orion		MASA 41.65DR	ARAV-82 TRACKEX FTH-8				KAU				130?		
2005-853	2453693.38	2005 Nov 18 2113	Terrier Improved Orion		MASA 41.67DR	ARAV-82 TRACKEX FTH-8				WS				130?		
2005-807	2453714.98	2005 Dec 10 1130	Terrier Orion		MASA 41.67DR	ARAV-82 TRACKEX FTH-8				WS				19		
2005-857	2453725.23	2005 Dec 20 1735:47	Terrier Orion		MASA 12.630T	Water recovery test				VI				191		
2006-803	2453775.28	2006 Feb 8 1847	Black Brant IX		MASA 36.193	FAST				VI				191		
2006-807	2453819.64	2006 Mar 25 0315	Terrier Wk 70 Orion		MASA 36.193	FAST				WS				325		
2006-810	2453824.61	2006 Mar 30 0240	Terrier Wk 70 Orion		MASA 41.0680T	Hyshot 3				WS				280		
2006-812	2453831.17	2006 Mar 5 1600	Terrier Improved Orion		MASA 41.0680T	Hyshot 3				WS				282		
2006-814	2453838.26	2006 Mar 12 1810	Black Brant IX		MASA 36.2036S	Hyshot 4 (JMA)				WS				290		
2006-823	2453877.00	2006 Mar 22 0830	Terrier Improved Orion		MASA 12.580T	Descent imagery/RSO				WS	LC36			125		
2006-824	2453892.17	2006 Mar 5 1605	Terrier Improved Orion		MASA 41.0730R	ACS test				WS				318?		
2006-826	2453894.42	2006 Jun 7 2200	Terrier Improved Orion		MASA 41.0730R	ACS test				WS				150?		
2006-826	2453894.42	2006 Jun 7 2200	Terrier Improved Orion		MASA 41.0730R	ACS test				KAU				130?		
2006-826	2453895.17	2006 Jun 8 1600	Terrier Improved Orion		MASA 41.0740R	ACS test				KAU				130?		
2006-831	2453910.46	2006 Jun 23 2302	Terrier Improved Orion		MASA 41.0740R	ACS test				KAU				130?		
2006-833	2453910.46	2006 Jun 23 2302	Terrier Improved Orion		MASA 41.0660D	DUNDEE target				KAU				130?		
2006-846	2453969.10	2006 Aug 21 1430	Black Brant IX		MASA 36.2380R	THAD Target				AND				169		
2006-847	2454037.25	2006 Aug 25 1430	Black Brant IX		MASA 36.2370R	THAD Target				WS				380?		
2006-858	2454037.25	2006 Oct 28 1758:00	Black Brant IX		MASA 36.2330S	THAD Target				WS				382		
2006-862	2454047.31	2006 Nov 7 1930	Black Brant IX		MASA 36.2360S	THAD Target				WS				300?		
2006-																

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Mission	FlightCode	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee_Km	Range_Km	Dest
2007-820	2454217.40	2007 Apr 26 21:31	Terrier Orion	-	Aegis FTM-11E4 Tgt	ARAV-A	-	-	-	KAU	-	-	-	1607	-	-
2007-835	2454266.50	2007 Jun 15	Terrier Orion	-	Aegis FTM-12-2 Targ	ARAV-A TRACKEX	-	-	-	KAU	-	-	-	1607	-	-
2007-836	2454266.50	2007 Jun 15	Terrier Orion	-	Aegis FTM-12-2 Targ	ARAV-A TRACKEX	-	-	-	KAU	-	-	-	1607	-	-
2007-826	2454272.73	2007 Jun 21 05:38:00	Terrier Improved Orion	-	MASA 12.0596T	Star tracker/ACS	-	-	-	WS	-	-	-	1307	-	-
2007-830	2454316.45	2007 Aug 3 22:51:20	Terrier Improved Orion	-	MASA 41.069	MASA 1 (ULCS)	-	-	-	AND	-	-	-	1307	-	-
2007-832	2454316.45	2007 Aug 6 22:56:00	Terrier Improved Orion	-	MASA 41.070	MASA 2 (ULCS)	-	-	-	AND	-	-	-	1307	-	-
2007-833	2454325.74	2007 Aug 13 05:45	Black Brant IX	-	MASA 36.2200G	JRU F01 19/LIDDS 2	-	-	-	WS	-	-	-	2787	-	-
2007-878	2454343.50	2007 Aug 31	Terrier Orion	?	Aegis FTM-11a Target	JRU F01 19/LIDDS 2	-	-	-	KAU?	-	-	-	160	-	-
2007-845	2454350.38	2007 Sep 6 21:08:00	Terrier Improved Orion	-	MASA 41.065BP	IRVE	-	-	-	WI	-	-	-	1307	-	-
2007-855	2454403.68	2007 Oct 30 04:12:52	Black Brant IX	-	MASA 36.2180E	STURMS (Midlat Spf)	-	-	-	WI	-	-	-	395	-	-
2007-856	2454411.25	2007 Nov 6 18:00	STAR	-	Ballistic Target	EDUIS 2	-	-	-	MMRFI	-	-	-	85	-	-
2007-861	2454411.25	2007 Nov 6 18:00	Black Brant IX	-	Aegis FTM-13 Target	PAC-2 target	EDUIS-07	-	-	WS	-	-	-	3007	-	-
2007-859	2454411.67	2007 Nov 7 04:12	Terrier Orion	-	Aegis FTM-13 Target	ARAV-A	-	-	-	KAU	-	-	-	1507	-	-
2007-860	2454451.68	2007 Dec 17 04:13	Terrier Oriole	-	JFTM-1 TRACKEX	ARAV-B4 TRACKEX	-	-	-	KAU	-	-	-	1507	-	-
2008-801	2454476.72	2008 Jan 11 05:23:00	Black Brant IX	2	MASA 36.2430G	JRU F01 19/LIDDS 3	-	-	-	WS	-	-	-	315	-	-
2008-876	2454554.50	2008 Mar 29	STAR	-	Ballistic Target	PAC-2 target	-	-	-	CTCL	-	-	-	857	-	-
2008-877	2454554.50	2008 Mar 29	STAR	-	Ballistic Target	PAC-2 target	-	-	-	CTCL	-	-	-	857	-	-
2008-878	2454554.50	2008 Mar 29	STAR	-	Ballistic Target	PAC-2 target	-	-	-	CTCL	-	-	-	857	-	-
2008-879	2454554.50	2008 Mar 29	STAR	-	Ballistic Target	PAC-2 target	-	-	-	CTCL	-	-	-	857	-	-
2008-814	2454571.21	2008 Apr 14 16:58	Black Brant IX	-	MASA 36.2400E	Ballistic Target	-	-	-	WS	-	-	-	3007	-	-
2008-816	2454587.73	2008 May 1 08:30	Black Brant IX	-	MASA 36.2230H	LAS/CO-12 (SEE/EVE)	-	-	-	WS	-	-	-	3007	-	-
2008-827	2454630.50	2008 Jun 13	Terrier Oriole	-	FTM-14 TRACKEX	ARAV-B5 TRACKEX	-	-	-	KAU	-	-	-	1507	-	-
2008-828	2454630.50	2008 Jun 13	Terrier Oriole	-	FTM-14 TRACKEX	ARAV-B6 TRACKEX	-	-	-	KAU	-	-	-	1507	-	-
2008-858	2454651.92	2008 Jul 14 10:10	Black Brant IX	-	MASA 41.079BP (GTT)	Sutrec-11	-	-	-	WI	-	-	-	1307	-	-
2008-850	2454739.86	2008 Oct 20 08:39:01	Black Brant IX	-	MASA 36.2070G	J-PEX	-	-	-	WS	-	-	-	3007	-	-
2008-881	2454774.50	2008 Nov 4	STAR	-	Ballistic Target	PAC-2 target	-	-	-	CTCL	-	-	-	857	-	-
2008-872	2454774.50	2008 Nov 4	STAR	-	Ballistic Target	PAC-2 target	-	-	-	CTCL	-	-	-	857	-	-
2008-883	2454775.50	2008 Nov 4	STAR	-	Ballistic Target	PAC-2 target	-	-	-	CTCL	-	-	-	857	-	-
2008-884	2454775.50	2008 Nov 5	STAR	-	Ballistic Target	PAC-2 target	-	-	-	CTCL	-	-	-	857	-	-
2008-885	2454775.50	2008 Nov 5	STAR	-	Ballistic Target	PAC-2 target	-	-	-	CTCL	-	-	-	857	-	-
2009-803	2454860.91	2009 Jan 29 09:49:41	Black Brant IX	-	MASA 36.2420E	ACES 1	-	-	-	FF	-	-	-	364	-	-
2009-806	2454860.91	2009 Feb 18 09:52:00	Terrier Improved Orion	-	MASA 41.076	turbopause	-	-	-	FF	-	-	-	1407	-	-
2009-806	2454860.94	2009 Feb 18 10:29:00	Terrier Improved Orion	-	MASA 41.078	turbopause	-	-	-	FF	-	-	-	1407	-	-
2009-807	2454860.96	2009 Feb 18 10:59:00	Terrier Improved Orion	-	MASA 41.079	turbopause	-	-	-	FF	-	-	-	1407	-	-
2009-806	2454860.99	2009 Feb 18 11:49:00	Terrier Improved Orion	-	MASA 41.077	turbopause	-	-	-	FF	-	-	-	1407	-	-
2009-811	2454861.95	2009 Feb 25 10:45	Black Brant IX	-	CHEN-1	CHEN-1	-	-	-	WS	-	-	-	330	-	-
2009-823	2454866.61	2009 May 02:42:00	Terrier Orion	-	MASA 36.2260G	HiFire HFO	-	-	-	WDD	-	-	-	3147	-	-
2009-825	2454866.61	2009 May 26 16:22	Terrier Orion	-	MASA 41.080HR	SPAREX-7 DRV	-	-	-	WI	-	-	-	130	-	-
2009-826	2454866.61	2009 Jun 6	Terrier Lynx	-	-	ABL Target	-	-	-	SHI	-	-	-	807	-	-
2009-829	2454936.50	2009 Jun 13	Terrier Lynx	-	-	ABL Target	-	-	-	SHI	-	-	-	807	-	-
2009-830	2454936.50	2009 Jun 13	Terrier Lynx	-	-	ABL Target	-	-	-	SHI	-	-	-	807	-	-
2009-831	2455008.00	2009 Jun 13 08:50	Black Brant IX	-	MASA 41.0830D	Rockdon	-	-	-	WS	-	-	-	307	-	-
2009-832	2455009.81	2009 Jun 27 07:30	Black Brant IX	-	MASA 36.2410G	DICE	-	-	-	WS	-	-	-	307	-	-
2009-837	2455043.65	2009 Jul 31 05:07	Terrier Orion	-	FTM-06E1 TRACKEX	ARAV-A	-	-	-	KAU	-	-	-	1007	-	-
2009-839	2455043.67	2009 Jul 31 05:07	Terrier Orion	-	FTM-06E2 TRACKEX	ARAV-A	-	-	-	KAU	-	-	-	1007	-	-
2009-842	2455061.04	2009 Aug 11 04:50:32	Black Brant IX	-	MASA 36.2420R	TRVE-11	-	-	-	WI	-	-	-	210	-	-
2009-844	2455069.24	2009 Aug 17 12:52:00	Black Brant IX	-	MASA 36.2018S	HERSCHEL HEIT/SCORE	-	-	-	WS	-	-	-	3007	-	-
2009-874	2455117.50	2009 Oct 13	Terrier Oriole	-	JFTM-3 TRACKEX	ARAV-B8	-	-	-	KAU	-	-	-	1007	-	-
2009-872	2455117.50	2009 Oct 13	Terrier Oriole	-	JFTM-3 TRACKEX	ARAV-B9	-	-	-	KAU	-	-	-	1007	-	-
2009-855	2455120.50	2009 Oct 16	Terrier Oriole	-	FTM-05E3	ARAV-B10	-	-	-	KAU	-	-	-	1007	-	-
2009-855	2455120.50	2009 Oct 16	Terrier Oriole	-	FTM-05E3	ARAV-B11	-	-	-	KAU	-	-	-	1007	-	-
2009-861	2455149.60	2009 Oct 16	Black Brant IX	-	MASA 36.2520H	EXOS/CYRESS	-	-	-	WS	-	-	-	3007	-	-
2009-870	2455189.64	2009 Dec 17 03:25:00	Terrier Oriole	-	MASA 41.0860D	HARB	-	-	-	WS	-	-	-	1307	-	-
2010-810	2455207.46	2010 Feb 10 23:00:00	Black Brant IX	-	MASA 36.2470R	MARTI ABL Target	-	-	-	SHI	-	-	-	1007	-	-
2010-820	2455231.84	2010 Feb 4 08:23:07	Black Brant IX	-	MASA 36.2600R	MARTI ABL Target	-	-	-	SHI	-	-	-	1007	-	-
2010-816	2455236.88	2010 Feb 9 09:01:00	Terrier Improved Orion	-	MASA 41.0840E	Amal	-	-	-	PF	-	-	-	1607	-	-
2010-818	2455238.73	2010 Feb 12 05:31:20	Black Brant IX	-	MASA 36.2510R	MARTI ABL Target	-	-	-	SHI	-	-	-	1507	-	-
2010-829	2455277.53	2010 Mar 22 00:45	Terrier Improved Orion	-	MASA 36.2510R	HiFire HFI	-	-	-	WDD	-	-	-	288	-	-
2010-827	2455293.09	2010 Mar 27 14:09:56	Terrier Imp Malenave	2	MASA 12.0670T	Test/ADAMSat/CP1U	-	-	-	WI	-	-	-	270	-	-
2010-835	2455319.91	2010 May 3 09:47:00	Black Brant IX	-	MASA 36.2490R	MARTI ABL Target	-	-	-	SHI	-	-	-	1507	-	-
2010-831	2455320.27	2010 May 3 18:32:00	Black Brant IX	-	MASA 36.2680E	MARTI ABL Target	-	-	-	SHI	-	-	-	2807	-	-
2010-836	2455337.88	2010 May 21 09:00:00	Black Brant IX	-	MASA 36.2700G	DICE	-	-	-	WS	-	-	-	3257	-	-
2010-843	2455371.97	2010 Jun 24 11:17:00	Terrier Improved Orion	-	MASA 41.0880D	RockDb	-	-	-	WI	-	-	-	117	-	-
2010-845	2455388.70	2010 Jul 11 04:50:00	Black Brant IX	-	MASA 36.2650G	CEBER-I F2	-	-	-	WS	-	-	-	3207	-	-
2010-849	2455408.26	2010 Jul 30 18:21:00	Black Brant IX	-	MASA 36.2138S	SUMI	-	-	-	WS	-	-	-	2467	-	-
2010-850	2455412.89	2010 Aug 4 09:15:03	Black Brant IX	-	MASA 12.0730T	Motor test	-	-	-	WI	-	-	-	6917	-	-
2010-853	2455432.25	2010 Aug 23 17:57:00	Black Brant IX	-	MASA 36.2190S	RAISE	-	-	-	WI	-	-	-	295	-	-
2010-858	2455461.05	2010 Sep 21 13:07:30	Terrier Improved Orion	-	MASA 41.0820P	SUBTEC III	-	-	-	WI	-	-	-	1307	-	-
2010-884	2455475.50	2010 Oct 6	Terrier Oriole	-	Aegis Target	JFTM-4 E1	-	-	-	KAU	-	-	-	1007	-	-
2010-885	2455475.50	2010 Oct 6	Terrier Oriole	?	Aegis Target	JFTM-4 E1	-	-	-	KAU	-	-	-	1007	-	-
2010-861	2455491.21	2010 Oct 21 17:00	Black Brant IX	-	MASA 36.2300R	MARTI ABL Target	-	-	-	SHI	-	-	-	1007	-	-
2010-883	2455512.50	2010 Oct 12	Terrier Oriole	-	Aegis Target 16E2B	ARAV-B14	-	-	-	KAU	-	-	-	1007	-	-
2010-869	2455537.20	2010 Dec 6 16:45:00	Terrier Improved Orion	-	MASA 41.0870T	TRAINED	-	-	-	WS	-	-	-	120	-	-
2011-801	2455563.76	2011 Jan 22 06:10	Terrier Oriole	-	Aegis Target	ARAV-B	-	-	-	WI	-	-	-	1007	-	-
2011-802	2455569.95	2011 Feb 28 10:46:00	Black Brant IX	-	MASA 36.2670G	FIRE	-	-	-	PF	-	-	-	2407	-	-
2011-803	2455597.84	2011 Feb 5 08:11:11	Black Brant IX	-	MASA 36.2660E	POLAR NOX	-	-	-	PF	-	-	-			

Launch

Launch_Tag	Launch_JD	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Mission	FlightCode	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee_Km	Range_Km	Dest
2011-423	2455815.07	2011 Sep 8 1345	Terrier	-	MASA 12.076GT	Terrier Mk12 Test Flight	-	-	-	WI	LA2 MRL	-	-	107	-	-
2011-856	2455842.93	2011 Oct 8 1025:01	Black Brant IX	-	MASA 36.2520G	PICTURE	-	-	-	WS	-	-	-	2607	-	-
2011-849	2455846.39	2011 Oct 11 2115:00	Terrier Improved Orion	-	MASA 41.094UE	CHMPS	-	-	-	AND	Achena	-	-	1307	-	-
2011-850	2455846.08	2011 Oct 13 1350:00	Terrier Improved Orion	-	MASA 41.093UE	CHMPS	-	-	-	AND	03	-	-	1307	-	-
2011-854	2455871.79	2011 Nov 6 0700:00	Black Brant IX	-	MASA 36.2640H	XQC F5	-	-	-	WS	-	-	-	2607	-	-
2011-870	2455950.94	2011 Dec 10 1030:00	Black Brant IX	-	MASA 36.2740H	CODEX	-	-	-	WS	-	-	-	2607	-	-
2011-874	2455950.50	2011 Dec 15	Terrier Oriole	?	Aegis Target	FTV-16 Event 3	-	-	-	KAU	-	-	-	1007	-	-
2012-801	2455938.06	2012 Jan 11 1325:00	Terrier Imp Malmute	2	MASA 12.074GT	-	-	-	-	WI	-	-	-	261	-	-
2012-806	2455976.74	2012 Feb 19 0541:07	Black Brant IX	-	MASA 36.2770G	MICA	-	-	-	PF	LCS	-	-	325	-	-
2012-810	2456008.88	2012 Mar 22 0900	Black Brant IX	-	MASA 36.2770G	CIHER-1 F3	-	-	-	WS	-	-	-	3207	-	-
2012-811	2456013.87	2012 Mar 27 0858:00	Terrier Rk.70 Oriole	-	MASA 45.004UE	ATHEM 1	-	-	-	WI	LA2 ARC	-	-	3767	-	-
2012-812	2456013.87	2012 Mar 27 0859:20	Terrier Imp Malmute	1	MASA 46.002UE	ATHEM 2	-	-	-	WI	LA2 MRL	-	-	2007	-	-
2012-813	2456013.88	2012 Mar 27 0900:40	Terrier Rk.12 Imp Orion	-	MASA 41.097UE	ATHEM 3	-	-	-	WI	LA2 HAD	-	-	1577	-	-
2012-814	2456013.88	2012 Mar 27 0902:00	Terrier Imp Malmute	2	MASA 46.003UE	ATHEM 4	-	-	-	WI	LA1 ANL	-	-	2847	-	-
2012-815	2456013.88	2012 Mar 27 0903:20	Terrier Rk.70 Imp Orion	-	MASA 41.098UE	ATHEM 5	-	-	-	WI	LA2 HAD	-	-	1697	-	-
2012-817	2456015.50	2012 Mar 29	Terrier Oriole	?	PAC target	-	-	-	-	WS	-	-	-	807	-	-
2012-802	2456045.50	2012 May 1	Terrier Oriole	-	-	HiFire 2	-	-	-	KAU	-	-	-	43	-	-
2012-820	2456057.76	2012 May 10 0618	Terrier Improved Orion	-	Aegis FTM-6E2a Targ	ARAV-A	-	-	-	KAU	-	-	-	1007	-	-
2012-829	2456059.94	2012 Jun 21 1040	Terrier Rk.12 Imp Orion	-	MASA 41.1010G	Rockon	-	-	-	WI	LA2 MRL	-	-	117	-	-
2012-831	2456102.31	2012 Jun 23 1930	Black Brant IX	-	MASA 36.2680E	SDD EYE Cal 3	-	-	-	WS	-	-	-	3007	-	-
2012-834	2456114.28	2012 Jul 5 1649:59	Black Brant IX	-	MASA 36.2640S	SDD EYE Cal 3	-	-	-	WS	-	-	-	2767	-	-
2012-838	2456120.28	2012 Jul 11 1860	Black Brant IX	-	MASA 36.2720S	HI-C	-	-	-	WS	-	-	-	268	-	-
2012-840	2456135.30	2012 Jul 24 1917	Black Brant IX	-	MASA 36.2650S	DPS	-	-	-	WS	-	-	-	324	-	-
2012-840	2456135.30	2012 Jul 24 1917	Black Brant IX	-	MASA 36.2650S	DPS	-	-	-	WS	-	-	-	324	-	-
2012-847	2456162.70	2012 Sep 12 0446:00	Terrier Lynx	-	MASA 46.004GD	Sharx* 01/Star 13C	-	-	-	WI	LA2 ARC	-	-	3007	-	-
2012-852	2456194.97	2012 Sep 21 1116:30	Terrier Imp Malmute	2	FTI-01 Aegis Target	Rockstar-X 2	-	-	-	WI	LA2 ARC	-	-	153	-	-
2012-861	2456228.50	2012 Oct 2 287	Terrier Oriole	-	MASA 36.2680G	ARAV-B	-	-	-	MAKE	-	-	-	1007	-	-
2012-865	2456234.25	2012 Nov 2 1755:00	Black Brant IX	-	MASA 36.2550S	FOAST 1	-	-	-	WS	-	-	-	321	-	-
2012-868	2456232.45	2012 Nov 21 0955:13	Black Brant IX	-	MASA 36.2600G	IMAGER	-	-	-	WS	-	-	-	291	-	-
2013-506	2456232.45	2012 Dec 13 0920	Black Brant IX	-	MASA 36.2630H	DLX/STORM	-	-	-	WS	-	-	-	2677	-	-
2013-506	2456232.45	2013 Jan 29 2250	Terrier Rk.70 Imp Orion	-	MASA 41.107GT	Li release test	-	-	-	WI	LA2 MRL	-	-	1307	-	-
2013-526	2456335.27	2013 Feb 15 1534:31	Terrier Improved Orion	-	MASA 41.104GT	-	-	-	-	WI	LA2 MRL	-	-	1307	-	-
2013-521	2456363.01	2013 Mar 11 1209	Terrier Lynx	-	MASA 36.2710G	Sharx* 02/Star 13C	-	-	-	WI	LA2 MRL	-	-	3187	-	-
2013-526	2456403.53	2013 Apr 21 0950	Black Brant IX	-	MASA 36.2696S	SILIE	-	-	-	WS	-	-	-	3207	-	-
2013-527	2456405.23	2013 Apr 23 1730	Black Brant IX	-	MASA 36.2696S	EDMIS 3	-	-	-	WS	-	-	-	3207	-	-
2013-529	2456413.52	2013 May 1 0735	Terrier Improved Orion	-	MASA 41.1000R	MOSC 1A	-	-	-	MRA	RU	-	-	185	-	-
2013-530	2456423.17	2013 May 11 0930	Black Brant IX	-	MASA 36.2680G	FOFTIS 1	-	-	-	MRA	RU	-	-	280	-	-
2013-531	2456439.82	2013 May 7 0735:00	Terrier Oriole	-	MASA 46.0010E	EYEX	-	-	-	MRA	RU	-	-	3507	-	-
2013-532	2456441.61	2013 May 9 0723	Terrier Imp Malmute	-	MASA 41.102DR	MOSC 1B	-	-	-	MRA	RU	-	-	1907	-	-
2013-534	2456461.81	2013 May 9 0723	Terrier Improved Orion	-	MASA 41.1060G	Rockon 2013	-	-	-	WI	LA1 ANL	-	-	168	-	-
2013-540	2456465.90	2013 Jun 20 0930	Terrier Rk.12 Imp Orion	-	MASA 41.0960E	Daytime Dynamo	-	-	-	WI	LA2 MRL	-	-	118	-	-
2013-546	2456470.11	2013 Jul 4 1451:40	Black Brant IX	-	MASA 36.2690S	VENIS	-	-	-	WI	LA2 MRL	-	-	1607	-	-
2013-555	2456513.02	2013 Aug 13 0630	Black Brant IX	1	MASA 36.2690S	Rockstar-X 3	-	-	-	WI	LA2 ARC	-	-	450	-	-
2013-555	2456513.02	2013 Aug 13 0630	Black Brant IX	1	MASA 36.2690S	Rockstar-X 3	-	-	-	WI	LA2 ARC	-	-	450	-	-
2013-559	2456595.25	2013 Oct 1 0933	Terrier Oriole	?	Aegis FTM-25 target	ARAV-B	-	-	-	KAU	-	-	-	1507	-	-
2013-592	2456595.25	2013 Oct 2 0850	Black Brant IX	-	MASA 36.2900E	SDD EYE Cal 4	-	-	-	WS	-	-	-	2787	-	-
2013-599	2456596.58	2013 Nov 20 0745:00	Black Brant IX	-	MASA 36.2900E	XQC F6	-	-	-	WS	-	-	-	2607	-	-
2013-599	2456596.58	2013 Nov 20 0745:00	Black Brant IX	-	MASA 36.2900E	XQC F6	-	-	-	WS	-	-	-	2607	-	-
2013-800	2456597.88	2013 Nov 27 1153	Black Brant IX	-	MASA 36.2510G	V-SHA	-	-	-	WS	-	-	-	2777	-	-
2014-302	2456572.88	2014 Jun 15 0959:00	Terrier Improved Orion	-	FTX-18 Target	ARAV-A	-	-	-	WI	LA2 MRL	-	-	1307	-	-
2014-302	2456572.88	2014 Jun 15 0959:20	Terrier Improved Orion	-	FTX-18 Target	ARAV-A	-	-	-	WI	LA2 HAD	-	-	1307	-	-
2014-304	2456572.88	2014 Jun 15 0959:40	Terrier Improved Orion	-	FTX-18 Target	ARAV-A	-	-	-	WI	LA2 HAD	-	-	1307	-	-
2014-304	2456572.88	2014 Jun 15 0959:40	Terrier Improved Orion	-	FTX-18 Target	ARAV-A	-	-	-	WI	LA2 HAD	-	-	1307	-	-
2014-304	2456574.97	2014 Mar 3 1054:51	Black Brant IX	3	MASA 36.2840E	GREENE	-	-	-	PF	LC3	-	-	335	-	-
2014-304	2456574.97	2014 Mar 3 1054:51	Black Brant IX	3	MASA 36.2840E	GREENE	-	-	-	PF	LC3	-	-	335	-	-
2014-307	2456570.83	2014 Mar 3 0800:01	Black Brant IX	-	MASA 36.2850S	HYFE	-	-	-	WS	-	-	-	278	-	-
2014-307	2456570.83	2014 Mar 3 0800:01	Black Brant IX	-	MASA 36.2850S	HYFE	-	-	-	WS	-	-	-	278	-	-
2014-321	2456801.92	2014 May 24 0735:00	Terrier Oriole	-	MASA 36.2850G	Polar Bear	-	-	-	KAU?	-	-	-	2007	-	-
2014-324	2456824.92	2014 May 26 1121:00	Black Brant IX	-	MASA 41.1000G	Rockon 2014	-	-	-	WI	LA2 MRL	-	-	278	-	-
2014-324	2456824.92	2014 May 26 1121:00	Black Brant IX	-	MASA 41.1000G	Rockon 2014	-	-	-	WI	LA2 MRL	-	-	278	-	-
2014-341	2456840.86	2014 Jul 2 0836:00	Terrier Wk.12 Imp Orion	1	MASA 46.007GP	SubTuc-6	-	-	-	WI	LA2 ARC	-	-	118	-	-
2014-342	2456840.86	2014 Jul 2 0836:00	Terrier Wk.12 Imp Orion	1	MASA 46.007GP	SubTuc-6	-	-	-	WI	LA2 ARC	-	-	118	-	-
2014-342	2456840.86	2014 Jul 2 0836:00	Terrier Wk.12 Imp Orion	1	MASA 46.007GP	SubTuc-6	-	-	-	WI	LA2 ARC	-	-	118	-	-
2014-348	2456893.05	2014 Aug 23 1313	Black Brant IX	3	MASA 36.2890S	DPSep	-	-	-	WI	-	-	-	920	-	-
2014-348	2456893.05	2014 Aug 23 1313	Black Brant IX	3	MASA 36.2890S	DPSep	-	-	-	WI	-	-	-	920	-	-
2014-548	2456931.25	2014 Nov 30 0900:30	Black Brant IX	-	MASA 36.2890S	MVA Shark Ho. 3	-	-	-	WI	LA2	-	-	1507	-	-
2014-548	2456931.25	2014 Nov 30 0900:30	Black Brant IX	-	MASA 36.2890S	MVA Shark Ho. 3	-	-	-	WI	LA2	-	-	1507	-	-
2014-558	2456931.25	2014 Nov 30 1807	Black Brant IX	-	MASA 36.2890S	VAULT 2 0	-	-	-	WI	LA2 MRL	-	-	2907	-	-
2014-558	2456931.25	2014 Nov 30 1807	Black Brant IX	-	MASA 36.2890S	VAULT 2 0	-	-	-	WI	LA2 MRL	-	-	2907	-	-
2014-560	2456942.69	2014 Oct 12 0427	Terrier Lynx	-	MASA 36.2880S	MVA Shark Ho. 4	-	-	-	WI	LA2	-	-	1507	-	-
2014-571	2456968.30	2014 Nov 6 1907	Black Brant IX	-	MASA 36.2880S	MVA Shark Ho. 4	-	-	-	WI	LA2	-	-	1507	-	-
2014-571	2456968.30	2014 Nov 6 1907	Black Brant IX	-	MASA 36.2880S	MVA Shark Ho. 4	-	-	-	WI	LA2	-	-	1507	-	-
2014-569	2456968.42	2014 Nov 6 2203	Black Brant IX	-	MASA 36.2630S	RAISE 2	-	-	-	KAU	-	-	-	3007	-	-
2014-577	2457003.30	2014 Dec 11 1911	Black Brant IX	-	M											

Launch_Tag	Launch_JD	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Mission	Launch	FlightCode	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee	Range	Dest
															km	km	
2016-809	2457440.68	2016 Feb 22 0415	Black Brant IX	-	MASA 36.2970G	CHES 2	-	WS	-	-	WS	-	-	-	309	-	-
2016-810	2457449.12	2016 Mar 1 1450:00	Terrier Imp Malemute	-	MASA 46.011GP	MUSIC	-	WI	-	-	WI	-	-	-	185	-	-
2016-811	2457455.00	2016 Mar 7 1205	Terrier Improved Orion	-	FDP/SOMEX-9	FDP/SOMEX-9	-	WI	-	-	WI	-	-	-	160	-	-
2016-836	2457541.29	2016 Jun 1 1900	Black Brant IX	-	MASA 36.3180E	MASA 36.3180E	-	WS	-	-	WS	-	-	-	290	-	-
2016-840	2457563.92	2016 Jun 24 1006	Terrier Improved Orion	-	Rockdon 9/Rocksat-C 8	Rockdon 9/Rocksat-C 8	-	WI	-	-	WI	-	-	-	119	-	-
2016-846	2457598.67	2016 Jul 19 0405	Terrier Improved Orion	-	ROTEX-1	ROTEX-1	-	ESR	-	-	ESR	-	-	-	182	-	-
2016-847	2457597.27	2016 Jul 17 1826	Black Brant IX	-	MASA 36.3148S	MASA 36.3148S	-	WS	-	-	WS	-	-	-	260?	-	-
2016-849	2457617.98	2016 Aug 17 1133:30	Terrier Imp Malemute	-	MASA 46.0140D	Rocksat-X 6	-	LA2	-	-	LA2	-	-	-	153	-	-
2016-849	2457781.07	2017 Jan 27 1345	Black Brant IX	-	MASA 36.3020E	PolarMdx	-	LC3	-	-	LC3	-	-	-	283	-	-
2017-807	2457786.85	2017 Feb 4 0830	Terrier Terrier Oriole	-	Aegis SFW-01 Target	ASFW-01	-	RAO	-	-	RAO	-	-	-	200?	-	-
2017-815	2457806.93	2017 Feb 22 1014	Black Brant IX	-	MASA 36.3030E	IRHML-4E	-	PF	-	-	PF	-	-	-	362	-	-
2017-816	2457814.74	2017 Mar 2 0541:00	Black Brant IX	-	MASA 36.3010E	NJMA 1	-	PF	-	-	PF	-	-	-	330	-	-
2017-817	2457814.74	2017 Mar 2 0542:30	Black Brant IX	-	MASA 36.3060E	NJMA 2	-	PF	-	-	PF	-	-	-	190	-	-
2017-818	2457814.93	2017 Mar 2 0750:00	Black Brant IX	-	MASA 36.3040E	ISUNGLASS 2	-	PF	-	-	PF	-	-	-	365	-	-
2017-851	2457827.50	2017 Mar 15	Terrier Oriole	?	AMR Target	AMR Target	-	RAO	-	-	RAO	-	-	-	200?	-	-
2017-829	2457879.27	2017 May 6 1624:58	Black Brant IX	-	MASA 36.3090S	RAISE 3	-	WS	-	-	WS	-	-	-	296	-	-
2017-833	2457889.91	2017 May 16 0946:00	Black Brant IX	-	MASA 36.317GP	Satrec-7	-	WI	-	-	WI	-	-	-	248	-	-
2017-846	2457926.72	2017 Jun 22 0520	Terrier Terrier Oriole	?	Aegis SFW-02 Target	ASFW-02	-	RAO	-	-	RAO	-	-	-	200?	-	-
2017-846	2457926.72	2017 Jun 22 0520	Terrier Terrier Oriole	?	Aegis SFW-02 Target	ASFW-02	-	RAO	-	-	RAO	-	-	-	200?	-	-
2017-852	2457931.72	2017 Jun 27 0510	Black Brant IX	-	MASA 36.3230G	CHES 3	-	WS	-	-	WS	-	-	-	300?	-	-
2017-850	2457933.95	2017 Jun 29 0925:00	Terrier Imp Malemute	-	MASA 46.0156T	Ampoule Test	-	WI	-	-	WI	-	-	-	190	-	-
2017-853	2457975.90	2017 Aug 13 0930:00	Terrier Imp Malemute	-	MASA 46.0170D	Rocksat-X 7	-	WI	-	-	WI	-	-	-	151	-	-
2017-851	2458005.98	2017 Sep 9 1138:00	Black Brant IX	-	MASA 36.3210E	WINDY 1	-	KHR	-	-	KHR	-	-	-	409	-	-
2017-852	2458005.99	2017 Sep 9 1138:03	Black Brant IX	-	MASA 36.3210E	WINDY 2	-	KHR	-	-	KHR	-	-	-	400?	-	-
2017-805	2458028.99	2017 Oct 3 1045	Terrier Malemute	-	MASA 36.3268R	ASPIRE	-	WI	-	-	WI	-	-	-	51	-	-
2017-867	2458021.50	2017 Sep 25	Terrier Oriole	-	-	ASPIRE	Formidable Shield 2017	SUIST	-	-	SUIST	-	-	-	300?	-	-
2017-867	2458021.50	2017 Sep 25	Terrier Oriole	-	-	ASPIRE	Formidable Shield 2017	SUIST	-	-	SUIST	-	-	-	320	-	-
2017-856	2458041.50	2017 Oct 15	Terrier Oriole	-	-	ASPIRE	Formidable Shield 2017	SUIST	-	-	SUIST	-	-	-	280?	-	-
2017-856	2458041.50	2017 Oct 15	Terrier Oriole	-	-	ASPIRE	Formidable Shield 2017	SUIST	-	-	SUIST	-	-	-	280?	-	-
2017-859	2458056.92	2017 Oct 30 1000:00	Black Brant IX	-	MASA 36.3110G	DUEL	-	WS	-	-	WS	-	-	-	230	-	-
2018-802	2458136.01	2016 Jan 19 1217	Black Brant IX	-	MASA 36.3290H	DXL-3	-	PF	-	-	PF	-	-	-	100	-	-
2018-803	2458146.00	2016 Jan 26 1411:15	Terrier Improved Orion	-	MASA 41.1190E	Super Soaker 1	-	PF	-	-	PF	-	-	-	100	-	-
2018-804	2458146.00	2016 Jan 26 1448:00	Terrier Improved Orion	-	MASA 41.1200E	Super Soaker 2	-	PF	-	-	PF	-	-	-	100	-	-
2018-805	2458146.12	2016 Jan 26 1448:00	Terrier Improved Orion	-	MASA 41.1210E	Super Soaker 3	-	PF	-	-	PF	-	-	-	160	-	-
2018-814	2458202.95	2016 Mar 25 1051	Terrier Imp Malemute	-	MASA 46.0190D	USIP	-	VI	-	-	VI	-	-	-	172	-	-
2018-803	2458209.18	2016 Mar 31 1619	Black Brant IX	-	MASA 36.3278R	ASPIRE 2	-	VI	-	-	VI	-	-	-	51	-	-
2018-819	2458212.94	2016 Apr 4 1040	Black Brant IX	-	MASA 36.3300H	ARA-R	-	KHR	-	-	KHR	-	-	-	204	-	-
2018-822	2458225.20	2016 Apr 16 1647	Black Brant IX	-	MASA 36.3530G	CHES 4	-	KHR	-	-	KHR	-	-	-	200?	-	-
2018-866	2458261.50	2016 May 23	Terrier Malemute	-	Scandia HRT SHOT 1	HRT SHOT 1	-	WS	-	-	WS	-	-	-	280?	-	-
2018-834	2458267.14	2016 Jun 1 1517:00	Black Brant IX	-	MASA 36.3428S	HRT SHOT 2	-	WS	-	-	WS	-	-	-	100?	-	-
2018-838	2458277.94	2016 Jun 16 1900:00	Black Brant IX	-	MASA 36.3580E	Boosted Zombie	-	WS	-	-	WS	-	-	-	290	-	-
2018-839	2458286.29	2016 Jun 16 1900:00	Black Brant IX	-	MASA 36.3580E	Boosted Zombie	-	WS	-	-	WS	-	-	-	290	-	-
2018-840	2458290.70	2016 Jun 21 0950	Terrier Improved Orion	-	MASA 41.1280D	Rock On 11/Rocksat-C 10	-	VI	-	-	VI	-	-	-	120	-	-
2018-842	2458324.95	2016 Jul 23 0600	Black Brant IX	-	MASA 36.2460H	VI-C-2	-	VI	-	-	VI	-	-	-	158	-	-
2018-844	2458342.93	2016 Aug 14 1013	Terrier Imp Malemute	-	MASA 46.0160D	RCSat-X 8	-	VI	-	-	VI	-	-	-	314	-	-
2018-845	2458346.06	2016 Aug 14 1013	Black Brant IX	-	MASA 36.3268R	ASPIRE 3	-	VI	-	-	VI	-	-	-	51	-	-
2018-848	2458369.22	2016 Sep 7 1350	Black Brant IX	-	MASA 36.3268R	ASPIRE 3	-	VI	-	-	VI	-	-	-	51	-	-
2018-859	2458373.86	2016 Sep 12 0657	Terrier Oriole	?	Aegis FS-17 Target	ASFW-17	-	KVI	-	-	KVI	-	-	-	150?	-	-
2018-850	2458373.86	2016 Sep 12 0657	Terrier Oriole	?	Aegis FS-17 Target	ASFW-17	-	KVI	-	-	KVI	-	-	-	150?	-	-
2018-871	2458459.96	2016 Dec 7 1105	Black Brant IX	-	MASA 35.0390E	VISIONS-2 1	-	SVAL	-	-	SVAL	-	-	-	605	-	-
2018-872	2458459.96	2016 Dec 7 1105	Black Brant IX	-	MASA 35.0390E	VISIONS-2 2	-	SVAL	-	-	SVAL	-	-	-	605	-	-
2018-880	2458470.85	2016 Dec 18 0746	Black Brant IX	4	MASA 36.3310G	DELICE 2	-	WS	-	-	WS	-	-	-	192	-	-
2018-801	2458494.88	2016 Dec 18 0746	Black Brant IX	4	MASA 45.0180G	C-CHASER/Rocksat-XII	-	AND	-	-	AND	-	-	-	273	-	-
2019-801	2458494.88	2016 Dec 18 0746	Black Brant IX	4	MASA 45.0180G	C-CHASER/Rocksat-XII	-	AND	-	-	AND	-	-	-	273	-	-
2019-817	2458596.50	2019 Apr 11 1651	Terrier Imp Malemute	-	MASA 46.0190D	USIP	-	VI	-	-	VI	-	-	-	320?	-	-
2019-821	2458596.50	2019 Apr 11 1651	Terrier Imp Malemute	-	MASA 46.0190D	USIP	-	VI	-	-	VI	-	-	-	320?	-	-
2019-826	2458597.50	2019 Apr 23	Terrier Malemute	-	MASA 36.3290H	ASPIRE 3	-	VI	-	-	VI	-	-	-	172	-	-
2019-829	2458653.98	2019 Jun 19 1128	Black Brant IX	-	MASA 36.3441E	TOUCHINDY 2	-	KHR	-	-	KHR	-	-	-	373	-	-
2019-831	2458654.98	2019 Jun 19 1128	Black Brant IX	-	MASA 36.3441E	TOUCHINDY 2	-	KHR	-	-	KHR	-	-	-	373	-	-
2019-843	2458704.75	2019 Aug 13 0944	Terrier Imp Malemute	-	MASA 46.0210P	SISTINE	-	VI	-	-	VI	-	-	-	117	-	-
2019-844	2458707.91	2019 Aug 13 0944	Terrier Imp Malemute	-	MASA 46.0210P	SISTINE	-	VI	-	-	VI	-	-	-	154	-	-
2019-856	2458744.94	2019 Sep 30 1804	Black Brant IX	-	MASA 36.3400R	Rocksat-X 9	-	VI	-	-	VI	-	-	-	246	-	-
2019-857	2458757.25	2019 Sep 30 1804	Black Brant IX	-	MASA 36.3400R	Rocksat-X 9	-	VI	-	-	VI	-	-	-	246	-	-
2019-864	2458764.12	2019 Oct 7 1500	Black Brant IX	-	MASA 36.3430T?	ESTS	-	WS	-	-	WS	-	-	-	338	-	-
2019-882	2458775.50	2019 Oct 19	Black Dagger	-	MASA 46.0340T?	DST	-	F4	-	-	F4	-	-	107	-	-	
2019-882	2458775.50	2019 Oct 19	Black Dagger	-	MASA 46.0340T?	DST	-	F4	-	-	F4	-	-	107	-	-	
2019-865	2458781.50	2019 Oct 25 0000	Terrier Imp Malemute	-	MASA 46.0200T	SubToc-8	-	VI	-	-	VI	-	-	-	209	-	-
2019-866	2458784.69	2019 Oct 28 0430	Black Brant IX	-	MASA 36.3520G	VISIONS-2 2	-	WS	-	-	WS	-	-	-	261	-	-
2019-873	2458813.82	2019 Dec 26 0743	Terrier Imp Malemute	-	MASA 46.0291E	DELICE 3	-	SVAL	-	-	SVAL	-	-	-	253	-	-
2019-880	2458827.07	2019 Dec 10 0830	Black Brant IX	-	MASA 36.3490E	ICI-5	-	SVAL	-	-	SVAL	-	-	-	360	-	-
2020-812	2458876.07	2020 Feb 27 1340	Black Brant IX	-	MASA 36.3560E	CHI	-	PF	-	-	PF	-	-	-	260	-	-
2020-829	2458900.07	2020 Feb 20 1337	Black Dagger	-	MASA 36.3560E												









Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Orb_Pay	Agency	Launch	Launch_Code	Group	Category	LTCite	Cite	Notes
1973-5208	2441856.95	1973 Jun 23 1045:30	Terrier Sandhawk	-	Sandia 281-32	0.000	SAMD	SS	SS	LRL/	XR Astron	FDS	LRL-ENW73-172	-
1973-493	2441862.30	1973 Jun 28 1906	Terrier Recruit	-	-	0.000	SAMD	AS	AS	WFF/	Test	FDC/Olrich	-	-
1973-494	2441986.50	1973 Nov	Terrier Recruit	-	-	0.000	SAMD	AS	AS	SAMD/	Test	FDC/Olrich	-	-
1974-401	2442047.50	1974	Terrier Mike	-	Sandia MRV	0.000	SAMD/	AS	AS	SAMD/	Test	RUTW2004	-	-
1974-460	2442073.52	1974 Jan 26 0959	Terrier Tomahawk	-	Sandia 152-202	0.000	SAMD	SF	SF	LRL/	XR Astron	FDS	-	-
1974-472	2442074.25	1974 Jan 26 1800	Terrier Recruit	-	Sandia	0.000	SAMD/	AS	AS	SAMD/	Test	FDC/Olrich	-	-
1974-473	2442146.50	1974 Apr 8	Terrier Recruit	-	Sandia	0.000	SAMD/	AS	AS	SAMD/	Test	FDC/Olrich	-	-
1974-471	2442148.72	1974 Jun 20 0511	Terrier Recruit	-	Sandia	0.000	SAMD/	AS	AS	SAMD/UCD/	Solar UV Eclipse	Philp/4	-	-
1974-5225	2442218.72	1974 Jun 20 0511	Terrier Sandhawk	-	Sandia 281-?	0.000	SAMD	SS	SS	SAMD/UCD/	Solar UV Eclipse	Philp/4	-	-
1974-5226	2442228.96	1974 Jun 30 1104:00	Terrier Sandhawk	-	Sandia 281-3	0.000	SAMD	SS	SS	SAMD/UCD/	Solar UV Eclipse	Philp/4	-	-
1974-5225	2442362.01	1974 Jun 10 1209:00	Terrier Sandhawk	-	Sandia 497-002	0.000	SAMD	SF	SF	LRL/HILL/Seward	XR Astron	JSR29-1	-	-
1974-5374	2442362.50	1974 Nov 11	Terrier Valenute	-	Sandia 497-002	0.000	SAMD	SF	SF	LEID/UMG/Bleeker	XR Astron	JSR29-1	-	-
1975-5150	2442564.08	1975 May 9 1400	Terrier Sandhawk	-	Sandia 497-004	0.000	SAMD	SS	SS	LASL/Benton	Monitoring	SCTCon3	-	-
1975-5151	2442564.50	1975 May 12	Terrier Valenute	-	Sandia	0.000	SAMD	SS	SS	SAMD/	Test	SCTCon3	-	-
1975-5154	2442564.50	1975 May 14	Terrier Tomahawk	-	Sandia	0.000	SAMD	SS	SS	-	Plasma Ba	SCTCon3	-	-
1975-5155	2442567.50	1975 May 15	Terrier Tomahawk	-	Sandia	0.000	SAMD	SS	SS	-	Plasma Ba	SCTCon3	-	-
1975-5216	2442591.34	1975 Jun 27 2010	Terrier Tomahawk	-	Sandia	0.000	SAMD	SF	SF	GSFC/Bolter	Test	SCTCon2	-	-
1976-558	2442793.27	1976 Jun 15 1830	Terrier Valenute	-	NASA 12.34CT-GT	0.000	GSFC	SF	SF	GSFC/Bolter	Test	SCTCon2	-	-
1976-5448	2442913.78	1976 May 15 0642	Terrier Sandhawk	-	Sandia 281-042	0.000	SAMD	SF	SF	LASL/	Ulrich	WDGRF	-	-
1976-5159	2442927.91	1976 May 29 0949:30	Terrier Sandhawk	-	Sandia 281-042	0.000	SAMD	SS	SS	LEID/UMG/Bleeker, Ha	XR Astron	AMP99.145	-	-
1976-5197	2442935.86	1976 Jun 6 0944	Terrier Sandhawk	-	Sandia	0.000	SAMD	SS	SS	LASL/	Powell	WDGRF	-	-
1976-5246	2443002.30	1976 Aug 11 1912	Terrier Valenute	-	NASA 12.36GT	0.000	GSFC	SS	SS	GSFC/Bolter	Test	WDGRF	-	-
1976-5359	2443110.37	1977 Nov 27 2051:41	Terrier Valenute	-	NASA 29.061E	0.000	GSFC	SS	SS	USLO/NDRE/England	Auroral/Aeron/Ionos	WDGRF	-	-
1977-5359	2443157.93	1977 Jan 14 1018:10	Terrier Valenute	-	NASA 29.03NE	0.000	GSFC	SS	SS	UMM/Events	Auroral/Plasma	WDGRF	-	-
1977-405	2443161.74	1977 Jan 18 0543:20	Terrier Valenute	-	NASA 29.04NE	0.000	GSFC	SF	SF	UMI/Scherb	Active Ionos	WDGRF	-	-
1977-5238	2443386.74	1977 Sep 2 0650:54	Terrier Sandhawk	-	Lagopedo Uno	0.000	SAMD	SS	SS	LASL/	Active Ionos	WDGRF	-	-
1977-5243	2443396.50	1977 Sep 10	Terrier Valenute	-	Sandia 497-008	0.000	SAMD	SS	SS	LASL/	Active Ionos	WDGRF	-	-
1977-5244	2443396.75	1977 Sep 12 0600:09	Terrier Sandhawk	-	Lagopedo Dos	0.000	SAMD	SS	SS	UMI/Scherb	Test	WDGRF	-	-
1978-556	2443561.57	1978 Feb 2 0854	Terrier Valenute	-	NASA 29.080E	0.000	GSFC	SS	SS	UMI/Scherb	Plasma	WDGRF	-	-
1978-590	2443576.64	1978 Mar 9 0813:10	Terrier Valenute	-	NASA 29.070E	0.000	GSFC	SS	SS	RICE/Anderson	Plasma	WDGRF	-	-
1979-545	2443699.96	1979 Apr 26 1101	Terrier Valenute	-	NASA 29.110E	0.000	GSFC	SF	SF	GSFC/Hopper	Plasma	WDGRF	-	-
1979-5124	2443699.96	1979 Apr 15 0931:01	Terrier Valenute	-	NASA 29.110E	0.000	GSFC	SS	SS	GSFC/Hopper	Plasma	WDGRF	-	-
1979-5125	2443699.96	1979 Apr 15 0931:01	Terrier Valenute	-	NASA 29.120E	0.000	GSFC	SS	SS	UMI/Scherb	Plasma	WDGRF	-	-
1979-5165	2444071.02	1979 Jul 16 1231:30	Terrier Valenute	-	Sandia 497-011	0.000	SAMD	SS	SS	UMI/Scherb	Aeron/Release	JRSF19, 215	-	-
1979-5172	2444071.91	1979 Jul 16 1231:30	Terrier Valenute	-	Sandia 497-012	0.000	SAMD	SS	SS	UMI/Scherb	Aeron/Release	JRSF19, 215	-	-
1979-5216	2444159.50	1979 Oct 13 0957:30	Terrier Valenute	-	Sandia 497-012	0.000	SAMD	SS	SS	UMI/Scherb	Test/Release	SCTCon6	-	-
1980-550	2444265.29	1980 Jan 27 0917	Terrier Valenute	-	NASA 29.140E	0.000	GSFC	SS	SS	UMI/Gallit	Plasma	JRSF19, 453	-	-
1980-5221	2444676.46	1980 Dec 4 2305:00	Terrier Tomahawk	-	-	0.000	SAMD/DMA	SS	SS	UMI/Gallit	Plasma	JRSF19, 453	-	-
1980-5224	2444680.46	1980 Dec 6 2305:00	Terrier Tomahawk	-	-	0.000	SAMD/DMA	SS	SS	UMI/Gallit	Plasma	JRSF19, 453	-	-
1980-5224	2444682.47	1980 Dec 8 2310:50	Terrier Tomahawk	-	-	0.000	SAMD/DMA	SS	SS	UMI/Gallit	Plasma	JRSF19, 453	-	-
1980-5225	2444682.49	1980 Dec 8 2356:58	Terrier Tomahawk	-	-	0.000	SAMD/DMA	SS	SS	UMI/Gallit	Plasma	JRSF19, 453	-	-
1980-5227	2444682.49	1980 Dec 8 2356:58	Terrier Tomahawk	-	-	0.000	SAMD/DMA	SS	SS	UMI/Gallit	Plasma	JRSF19, 453	-	-
1980-5228	2444686.47	1980 Dec 12 2311:00	Terrier Tomahawk	-	-	0.000	SAMD/DMA	SS	SS	UMI/Gallit	Plasma	JRSF19, 453	-	-
1980-5229	2444686.47	1980 Dec 12 2311:00	Terrier Tomahawk	-	-	0.000	SAMD/DMA	SS	SS	UMI/Gallit	Plasma	JRSF19, 453	-	-
1981-5145	2444890.52	1981 Aug 14 0949	Black Brant X	-	NASA 12.38CT	0.000	GSFC	SS	SS	GSFC/Hopper	Test	WDGRF	-	-
1981-5146	2444893.52	1981 Dec 7 0356:40	Black Brant X	-	NASA 35.001UE	0.000	GSFC	SS	SS	GSFC/Hopper	Test	WDGRF	-	-
1981-5147	2444902.52	1981 Dec 7 0356:40	Black Brant X	-	NASA 35.017UE	0.000	GSFC	SS	SS	GSFC/Hopper	Test	WDGRF	-	-
1981-5148	2444902.52	1981 Dec 7 0356:40	Black Brant X	-	NASA 35.020UE	0.000	GSFC	SS	SS	GSFC/Hopper	Test	WDGRF	-	-
1982-5107	2444952.45	1982 Jan 23 0254:25	Black Brant X	-	NASA 35.021UE	0.000	GSFC	SS	SS	GSFC/Hopper	Test	WDGRF	-	-
1982-5107	2444952.45	1982 Jan 23 0254:25	Black Brant X	-	NASA 35.021UE	0.000	GSFC	SS	SS	GSFC/Hopper	Test	WDGRF	-	-
1982-5107	2444952.45	1982 Jan 23 0254:25	Black Brant X	-	NASA 35.021UE	0.000	GSFC	SS	SS	GSFC/Hopper	Test	WDGRF	-	-
1982-5107	2444952.45	1982 Jan 23 0254:25	Black Brant X	-	NASA 35.021UE	0.000	GSFC	SS	SS	GSFC/Hopper	Test	WDGRF	-	-
1982-5107	2444952.45	1982 Jan 23 0254:25	Black Brant X	-	NASA 35.021UE	0.000	GSFC	SS	SS	GSFC/Hopper	Test	WDGRF	-	-
1982-5107	2444952.45	1982 Jan 23 0254:25	Black Brant X	-	NASA 35.021UE	0.000	GSFC	SS	SS	GSFC/Hopper	Test	WDGRF	-	-
1982-5107	2444952.45	1982 Jan 23 0254:25	Black Brant X	-	NASA 35.021UE	0.000	GSFC	SS	SS	GSFC/Hopper	Test	WDGRF	-	-
1982-5107	2444952.45	1982 Jan 23 0254:25	Black Brant X	-	NASA 35.021UE	0.000	GSFC	SS	SS	GSFC/Hopper	Test	WDGRF	-	-
1982-5107	2444952.45	1982 Jan 23 0254:25	Black Brant X	-	NASA 35.021UE	0.000	GSFC	SS	SS	GSFC/Hopper	Test	WDGRF	-	-
1982-5107	2444952.45	1982 Jan 23 0254:25	Black Brant X	-	NASA 35.021UE	0.000	GSFC	SS	SS	GSFC/Hopper	Test	WDGRF	-	-
1982-5107	2444952.45	1982 Jan 23 0254:25	Black Brant X	-	NASA 35.021UE	0.000	GSFC	SS	SS	GSFC/Hopper	Test	WDGRF	-	-
1982-5107	2444952.45	1982 Jan 23 0254:25	Black Brant X	-	NASA 35.021UE	0.000	GSFC	SS	SS	GSFC/Hopper	Test	WDGRF	-	-
1982-5107	2444952.45	1982 Jan 23 0254:25	Black Brant X	-	NASA 35.021UE	0.000	GSFC	SS	SS	GSFC/Hopper	Test	WDGRF	-	-
1982-5107	2444952.45	1982 Jan 23 0254:25	Black Brant X	-	NASA 35.021UE	0.000	GSFC	SS	SS	GSFC/Hopper	Test	WDGRF	-	-
1982-5107	2444952.45	1982 Jan 23 0254:25	Black Brant X	-	NASA 35.021UE	0.000	GSFC	SS	SS	GSFC/Hopper	Test	WDGRF	-	-
1982-5107	2444952.45	1982 Jan 23 0254:25	Black Brant X	-	NASA 35.021UE	0.000	GSFC	SS	SS	GSFC/Hopper	Test	WDGRF	-	-
1982-5107	2444952.45	1982 Jan 23 0254:25	Black Brant X	-	NASA 35.021UE	0.000	GSFC	SS	SS	GSFC/Hopper	Test	WDGRF	-	-
1982-5107	2444952.45	1982 Jan 23 0254:25	Black Brant X	-	NASA 35.021UE	0.000	GSFC	SS	SS	GSFC/Hopper	Test	WDGRF	-	-
1982-5107	2444952.45	1982 Jan 23 0254:25	Black Brant X	-	NASA 35.021UE	0.000	GSFC	SS	SS	GSFC/Hopper	Test	WDGRF	-	-
1982-5107	2444952.45	1982 Jan 23 0254:25	Black Brant X	-	NASA 35.021UE	0.000	GSFC	SS	SS	GSFC/Hopper	Test	WDGRF	-	-
1982-5107	2444952.45	1982 Jan 23 0254:25	Black Brant X	-	NASA 35.021UE	0.000	GSFC	SS	SS	GSFC/Hopper	Test	WDGRF	-	-
1982-5107	2444952.45	1982 Jan 23 0254:25	Black Brant X	-	NASA 35.021UE	0.000	GSFC	SS	SS	GSFC/Hopper	Test	WDGRF	-	-
1982-5107	2444952.45	1982 Jan 23 0254:25	Black Brant X	-	NASA 35.021UE	0.000	GSFC	SS	SS	GSFC/Hopper	Test	WDGRF	-	-
1982-5107	2444952.45	1982 Jan 23 0254:25	Black Brant X	-	NASA 35.021UE	0.000	GSFC	SS	SS	GSFC/Hopper	Test	WDGRF	-	-
1982-5107	2444952.45	1982 Jan 23 0254:25	Black Brant X	-	NASA 35.021UE	0.000	GSFC	SS	SS	GSFC/Hopper	Test	WDGRF	-	-
1982-5107	2444952.45	1982 Jan 23 0254:25	Black Brant X	-	NASA 35.021UE	0.000	GSFC	SS	SS	GSFC/Hopper	Test	WDGRF	-	-
1982-5107	2444952.45	1982 Jan 23 0254:25	Black Brant X	-	NASA 35.021UE	0.000	GSFC	SS	SS	GSFC/Hopper	Test	WDGRF	-	-
1982-5107	2444952.45	1982 Jan 23 0254:25	Black Brant X	-	NASA 35.021UE	0.000	GSFC	SS	SS	GSFC/Hopper	Test	WDGRF	-	-
1982-5107	2444952.45	1982 Jan 23 0254:25												

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Orb_Pay	Agency	Launch_Code	Group	Category	LTCite	Cite	Notes
1986-538	2446533.88	1986 Apr 13 0914:01	Black Brant X	-	MASA 35. 0161GE	0.000	GSFC	SS	GSFC/Heppner	Plasma	WISR	-	-
1986-541	2446542.87	1986 Apr 13 0740	Black Brant X	-	MASA 35. 0130G	0.000	GSFC	SS	UMD/Torbert	UV Astron?	WISR	-	-
1986-546	2446563.62	1986 May 13 0949	Black Brant X	-	MASA 35. 0140E	0.000	GSFC	SS	UMH/Forbert	Plasma	WISR	-	-
1986-517	2446780.32	1986 Dec 15 1935	Black Brant IX	-	MASA 36. 1690	0.000	GSFC	SS	GSFC/Mentall	Solar	WISR	WIPR86-54	-
1987-546	2446824.90	1987 Jan 28 1915	Black Brant IX	-	MASA 36. 160L	0.000	GSFC	SS	PITTY/Ziipf	Aeronomy	WISR	WIPR87-5	-
1987-547	2446824.90	1987 Jan 31 0952	Black Brant IX	-	MASA 36. 040E	0.000	GSFC	SS	UMH/P. Keillogg	Plasma	WISR	JG049, 1257	-
1987-556	2446853.49	1987 Feb 26 2349:10	Black Brant IX	-	GL A21.628	0.000	AFRL	SS	AFRL/Weber	PolarArcsRept	WISR	AFRL	-
1987-557	2446853.49	1987 Feb 26 2343:10	Black Brant IX	-	MASA 29. 250E	0.000	GSFC	SS	UMH/Wescott	Plasma	WISR	-	-
1987-558	2446859.77	1987 Mar 5 0652:40	Terrier Walenute	-	MASA 29. 260E	0.000	GSFC	SS	UMH/Wescott	Plasma	WISR	-	-
1987-565	2446861.78	1987 Mar 7 0639:20	Black Brant X	-	MASA 35. 0180E	0.000	SSC	SF	UCB/Carlson	Plasma	WISR	-	-
1987-562	2446873.52	1987 Mar 19 1000:00	Black Brant IXB	-	MASER 1	0.000	SSC	SS	Micrograv	Micrograv	WISR	-	-
1987-574	2446885.70	1987 Mar 31 0447:00	Black Brant IX	-	MASA 36. 140E	0.000	GSFC	SS	UMH/Kelley	Plasma	WISR	www.casas.usu.edu	-
1987-5125	2447007.66	1987 Jul 31 0553:49	Black Brant IX	-	MASA 36. 130E	0.000	GSFC	SS	UMH/Kinther	Plasma	WISR	-	-
1987-5128	2447023.23	1987 Aug 15 1725	Black Brant IX	-	MASA 36. 021GS	0.000	GSFC	SS	ASE/Moses	Plasma	WISR	-	-
1987-5174	2447114.09	1987 Nov 14 1410	Black Brant IX	-	MASA 36. 0300H	0.000	GSFC	SS	PSU/Garmire	XR Astron	WISR	MASA-PR	-
1987-5176	2447138.05	1987 Nov 18 1306	Black Brant IX	-	MASA 36. 0240H	0.000	GSFC	SS	UCD/Cash	XR Astron	WISR	-	-
1987-5177	2447138.21	1987 Dec 4 1705	Black Brant IX	-	MASA 36. 380S	0.000	GSFC	SS	CAL/Novick	Solar SX	WISR	-	-
1987-5179	2447141.26	1987 Dec 11 1815	Black Brant IX	-	MASA 36. 380S	0.000	GSFC	SS	ASE/Moses	Solar SX	WISR	-	-
1987-5180	2447141.28	1987 Dec 11 1845	Black Brant IX	-	MASA 36. 20DS	0.000	GSFC	SS	RRL/Braucmer	Solar	WISR	-	-
1987-5181	2447143.57	1987 Dec 14 0145	Black Brant X	-	GL A22.703	0.000	SDIO	SS	USU/AFRCR/Maitt, Raikie	Active Plasma	WISR	DMA-TR-91-132	-
1988-546	2447179.96	1988 Jan 19 0840:04	Black Brant X	-	MASA 35. 0170E	0.000	GSFC	SS	UMH/Kinther	Plasma	WISR	ESM-SP365-327	-
1988-546	2447184.27	1988 Jan 23 1830	Black Brant IX	-	MASA 36. 290U	0.000	GSFC	SS	GSFC/Mentall	Aeron?	WISR	-	-
1988-550	2447190.29	1988 Jan 29 1903:41	Black Brant IX	-	MASA 36. 369E	0.000	GSFC	SS	BU/Mentillo	Plasma/Art. Comet	WISR	-	-
1988-552	2447200.95	1988 Feb 9 0616:49	Black Brant IX	-	MASA 36. 150E	0.000	GSFC	SS	UMH/AFRCR/Winckler	Plasma/Tether	WISR	-	-
1988-559	2447206.07	1988 Feb 16 1334	Black Brant IX	-	MASA 36. 0226H	0.000	GSFC	SS	GSFC/Serlemiteos	XR Astronomy	WISR	AFRL	-
1988-562	2447220.01	1988 Feb 28 1210	Black Brant IX	-	MASA 36. 0320H	0.000	GSFC	SS	PSU/Garmire	XR Astronomy	WISR	ApJ347, 1114	-
1988-563	2447220.96	1988 Feb 29 0654:30	Black Brant IX	-	MASER 2	0.000	SSC	SS	Micrograv	Micrograv	WISR	www.nrl.nl	-
1988-564	2447224.79	1988 Mar 4 0655	Black Brant X	-	MASA 35. 0235E	0.000	GSFC	SS	UCB/Carlson	Plasma	WISR	-	-
1988-566	2447234.07	1988 Mar 13 1334	Black Brant IX	-	MASA 36. 0270G	0.000	GSFC	SS	UCD/Cash	UV Astron	WISR	ApJ347, L61	-
1988-567	2447236.35	1988 Mar 17 2025	Black Brant IX	-	MASA 36. 360S	0.000	GSFC	SS	UCD/Acroton	Solar EVJ	WISR	SN691009-22	-
1988-5100	2447356.24	1988 Jun 23 1740	Black Brant IX	-	MASA 36. 360S	0.000	GSFC	SS	SHO/Golub	Solar	WISR	-	-
1988-5116	2447415.22	1988 Sep 10 1710:12	Black Brant IX	-	MASA 36. 460E	0.000	GSFC	SS	BU/Mentillo	Plasma	WISR	-	-
1988-5117	2447415.51	1988 Sep 11 0730	Black Brant IX	-	MASA 36. 310G	0.000	GSFC	SS	PLIN/Jenkins	UV Astron	WISR	MASA-PR88-30	-
1988-5129	2447469.25	1988 Oct 24 1803:01	Black Brant IX	-	MASA 36. 410L	0.000	GSFC	SS	USCLA/Judge	UV Astron	WISR	ESM-SP291-24	-
1988-5136	2447466.27	1988 Nov 20 1830	Black Brant IX	-	MASA 36. 440S	0.000	GSFC	SS	RRL/Braucmer	Test/Solar	WISR	ESM-SP291-24	-
1988-5147	2447512.96	1988 Dec 17 1101	Black Brant X	-	MASA 36. 0240E	0.000	GSFC	SF	UMH/Feldman	UV Astron	WISR	-	-
1989-401	2447535.94	1989 Jan 9 0910	Black Brant IX	-	MASA 36. 450G	0.000	GSFC	SF	GSFC/Mentall	UV Astron	WISR	-	-
1989-526	2447544.29	1989 Jan 17 1940:03	Black Brant IX	-	MASA 36. 470G	0.000	GSFC	SF	GSFC/Mentall	Plasma/Tether	WISR	-	-
1989-533	2447597.39	1989 Jan 30 2114:40	Black Brant IX	-	AMF-86-02	0.000	SSA	SS	UMH/	Aeron?	WISR	-	-
1989-549	2447615.60	1989 Apr 8 0727:39	Black Brant SCM1	-	Starfire 1/F1	0.000	SSI	SS	UMH/	Micrograv	WISR	JGR101, A9, 19663	-
1989-550	2447615.60	1989 Apr 8 0727:39	Black Brant SCM1	-	Starfire 2/F2	0.000	GSFC	SS	UMH/	Micrograv	WISR	ESM-SP1206	-
1989-551	2447625.96	1989 Apr 10 0821:00	Black Brant XE	-	MASA 35. 0228E	0.000	SSC	SS	GSFC/Hoffman	Plasma	WISR	-	-
1989-552	2447626.96	1989 Apr 10 0821:00	Black Brant XE	-	MASA 35. 0310E	0.000	SSC	SS	GSFC/Hoffman	Micrograv	WISR	-	-
1989-553	2447627.65	1989 Apr 11 0336	Black Brant XE	-	MASA 36. 019E	0.000	GSFC	SS	UMH/Torbert	Plasma/Ba	WISR	GR117, 1601	-
1989-557	2447650.57	1989 May 4 142:10	Black Brant IX	-	MASA 36. 260S	0.000	GSFC	SS	GSFC/Wempert	Solar	WISR	AP5391, 461	-
1989-557	2447650.57	1989 May 5 142:10	Black Brant IX	-	MASA 36. 530S	0.000	GSFC	SS	UCB/Acroton	Solar	WISR	SN691009-22	-
1989-557	2447650.57	1989 May 5 142:10	Black Brant IX	-	MASA 36. 430S	0.000	GSFC	SS	GSFC/Smith	Solar	WISR	-	-
1989-565	2447708.76	1989 Jun 20 1900	Black Brant IX	-	SDIO B1 Star 3	0.000	SDIO	SS	SDIO/	UV Astron	WISR	ApJ391, L81	-
1989-579	2447734.95	1989 Jul 31 0942	Black Brant X	-	SDIO B1 Star 4	0.000	SDIO	SS	SDIO/	Target	WISR	-	-
1989-580	2447761.95	1989 Aug 23 1805	Black Brant X	-	MASA 36. 590L	0.000	GSFC	SS	USCLA/Judge	Aeron/Solar EVJ	WISR	-	-
1989-585	2447761.95	1989 Aug 23 1805	Black Brant X	-	SDIO Staramate	0.000	SDIO	SS	SDIO/	Target	WISR	-	-
1989-586	2447773.35	1989 Sep 11 1636	Black Brant IX	-	SDIO Staramate	0.000	SDIO	SS	SDIO/	Target	WISR	-	-
1989-591	2447781.50	1989 Sep 11 1636	Terrier Walenute	-	SDIO Staramate	0.000	SDIO	SS	SDIO/	Target	WISR	-	-
1989-591	2447781.50	1989 Sep 11 1636	Black Brant IX	-	MASA 36. 530E	0.000	GSFC	SS	SAD/Golub	Plasma	WISR	RadioSci72, 289	-
1989-5102	2447825.88	1989 Oct 23 0158	Black Brant IX	-	MASA 36. 370E	0.000	GSFC	SS	NRL/LASL/Bernhardt, Argo	Plasma	WISR	ANST981120-43	-
1989-531	2447845.31	1989 Nov 15 1545	Black Brant SCM1	-	Starfire 1/F2	0.000	SSI	SF	UMH/	Micrograv	WISR	-	-
1989-545	2447915.30	1990 Feb 23 1940	Black Brant IX	-	MASA 36. 200E	0.000	GSFC	SS	PITTY/Ziipf	Aeronomy	WISR	-	-
1989-545	2447915.31	1990 Feb 23 0731:25	Black Brant IX	-	MASA 36. 660G	0.000	GSFC	SS	UMH/Arnoldy	Plasma	WISR	-	-
1989-564	2447960.25	1990 Mar 9 1800	Black Brant IX	-	MASA 36. 340H	0.000	GSFC	SS	GSFC/Mentall	Aeron?	WISR	-	-
1989-564	2447967.69	1990 Mar 17 0430	Black Brant IX	-	MASA 36. 340H	0.000	GSFC	SS	PSU/Garmire	XR Astron	WISR	-	-
1989-573	2447979.89	1990 Mar 29 0926	Terrier Walenute	-	SDIO Laser Target	0.000	SDIO	SS	MTLL/	Target	WISR	LiacoLab12, 383; AM	-
1989-576	2447979.84	1990 Mar 29 0897:00	Black Brant IX	-	MASER 4	0.000	SSC	SS	Micrograv	Micrograv	WISR	-	-
1989-577	2447981.21	1990 Mar 30 1700	Black Brant IX	-	MASA 36. 530E	0.000	GSFC	SS	NRL/McGoy	Plasma	WISR	-	-
1989-578	2447987.07	1990 Apr 5 1347	Black Brant IX	-	MASA 35. 282E	0.000	GSFC	SS	TBH/Taylor	Plasma	WISR	-	-
1989-579	2447990.87	1990 Apr 9 0850	Black Brant IX	-	MASA 36. 670G	0.000	GSFC	SS	UCB/Cash	UV Astron	WISR	-	-
1989-580	2447998.75	1990 Apr 9 0850	Black Brant IX	-	MASA 36. 0630G	0.000	GSFC	SS	UCB/Beyrer	UV Astron	WISR	-	-
1989-581	2448006.73	1990 Apr 21 1015	Black Brant IX	-	MASA 36. 730G	0.000	GSFC	SS	JHU/Feldman	UV Astron	WISR	-	-
1989-582	2448006.73	1990 Apr 25 0532	Terrier Walenute	-	SDIO BSWJ	0.000	SDIO	SS	SDIO/PITTY/Ziipf	Reentry Test	WISR	SN600430-17	-
1989-584	2448029.07	1990 May 16 1340	Black Brant SCM1	-	Starfire 1/F3	0.000	SSI	SS	UMH/	UV Astron	WISR	SN600430-11	-
1989-594	2448044.41	1990 Jun 1 1425	Black Brant IX	-	MASA 29. 290E	0.000	GSFC	SS	UCD/Cash	UV Astron	WISR	ANST900521-34	-
1989-5106	2448102.91	1990 Jun 10 0948:44	Terrier Walenute	-	MASA 29. 280E	0.000	GSFC	SS	UCD/Barth	Plasma	WISR	-	-
1989-5113	2448105.92	1990 Aug 2 1007:09	Terrier Walenute	-	MASA 29. 290E	0.000	GSFC	SS	GSFC/Pfeiff	Plasma	WISR	-	-
1989-5122	2448125.84	1990 Aug 22 0816	Black Brant IX	-	MASA 36. 560E	0.000	GSFC	SS	CBRN/Kelley	Plasma	WISR	-	-
1989-5124	2448128.79	1990 Aug 25 0704	Black Brant IX	-	SDI BP-1	0.000	SDIO	SS	NRL/Bernhardt	Plasma	WISR	-	-
1989-5131	2448139.29	1990 Sep 4 1904	Black Brant IX	-	MASA 36. 720L	0.000	SDIO	SS	USCLA/Judge	Tech	WISR	ANST920921-22	-
1989-5142	2448164.60	1990 Oct 20	Terrier Walenute	-	MASA 36. 0680S	0.000	GSFC	SS	NRL/Voses	Solar	WISR	-	-
1989-5156	2448217.50	1990 Nov 21 1815	Black Brant IX	-	MASA 36. 0600S	0.000	GSFC	SS	NRL/Voses	Solar	WISR	-	-
1989-5167	2448217.28	1990 Nov 21 1840	Black Brant IX	-	MASA 36. 0570G	0.000	GSFC	SS	JHU/Braucmer	Solar	WISR	-	-
1991-548	2448252.77	1991 Jan 26 0625	Black Brant IX	-	MASA 12. 44MT	0.000	GSFC	SS	SHO/Golub	Solar	WISR	-	-
1991-577	2448310.32	1991 Feb 22 1946	Black Brant IX	-	MASA 36. 0700S	0.000	GSFC	SS	WFF/Konstafakis	Test	WISR	-	-
1991-401	2448321.30	1991 Mar 5 1919	Terrier	-	MASA 36. 0770H	0.000	GSFC	SS	UCD/Cash	XR Astron	WISR	CR-198866	-
1991-587	2448333.93	1991 Mar 18 1015	Black Brant IX	-	MASA 36. 6862G	0.000	GSFC	SS	GSFC/Smith	UV Astron	WISR	-	-
1991-590	2448338.79	1991 Mar 23 0700	Black Brant IX	-	MASA 36. 0780L	0.000	GSFC	SS	UCD/Barth	Aeron	WISR	-	-
1991-591	2448345.60	1991 Mar 30 0227	Black Brant IX	-	SDI BP-2	0.000	SDIO	SS	SDIO/LINI/	Tech	WISR	-	-
1991-597	2448363.82	1991 Apr 17 0740	Black Brant IX	-	SDI BP-2	0.000	SDIO	SS	SDIO/LINI/	Tech	WISR	-	-

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Orb_Pay	Agency	Launch	Launch_Code	Group	Category	LTCite	Cite	Notes
1991-S103	2448390.67	1991 May 4 0410	Black Brant IX	-	MASA 36. 0620U	0.000	GSFC	SS	SS	UMI/Clarke	UV Astron	WISR	SF1E1745.251	-
1991-S104	2448394.25	1991 May 7 1805	Black Brant IX	-	MASA 36. 0866S	0.000	GSFC	SS	SS	GFSC/Davilla	Solar X	WISR	-	-
1991-S109	2448390.29	1991 May 13 1903	Black Brant IX	-	MASA 36. 0490S	0.000	GSFC	SS	SS	STAM/Wallier	Solar	WISR	-	-
1991-S123	2448457.23	1991 Jun 11 1725	Black Brant IX	-	MASA 36. 0870S	0.000	GSFC	SS	SS	SMD/Golub	Solar EDV/Eclipse	WISR	-	-
1991-S171	2448457.15	1991 Nov 16 1530	Black Brant 9CM1	-	Starfire 1/F4	0.000	SSI	SS	SS	UMH/	Micrograv	SN911125-7	-	-
1992-S11	2448632.65	1992 Jan 11 0340	Black Brant IX	-	MASA 36. 0790U	0.000	GSFC	SS	SS	UCD/Green	EDV Astron	WISR	-	-
1992-S11	2448646.30	1992 Jan 23 1919	Black Brant IX	-	MASA 36. 0790U	0.000	GSFC	SS	SS	PITTY/Ziipf	Plasma	WISR	-	-
1992-S15	2448653.00	1992 Feb 22 0315	Black Brant IX	-	MASA 36. 0960H	0.000	GSFC	SS	SS	UCD/Cash	XR Astron	WISR	-	-
1992-S22	2448674.64	1992 Feb 22 0315	Black Brant IX	-	MASA 36. 0890U	0.000	GSFC	SS	SS	UCD/Green	UV Astron	WISR	-	-
1992-S32	2448701.17	1992 Mar 19 1605	Black Brant IX	-	CSAR 1	0.000	CSA	SS	SS	WRL/KcCoy	Micrograv	ESA-SP955-123	-	-
1992-S103	2448721.94	1992 Apr 9 1040	Black Brant IX	-	MASER 5	0.000	SSC	SS	SS	SSC/ESTEC/	Micrograv	JGR105.23025	-	-
1992-S41	2448755.10	1992 May 12 1426	Black Brant IX	-	MASA 36. 048CS	0.000	GSFC	SS	SS	LPARK/Brumer	Micrograv	Sven	ESA-SP206	-
1992-S44	2448766.50	1992 May 24	Black Brant IX	-	MASA 36. 048CS	0.000	GSFC	SS	SS	LPARK/Brumer	Micrograv	CR-189340	-	-
1992-S46	2448772.84	1992 May 30 0811	Black Brant IX	-	MASA 36. 65DE	0.000	SSC	SS	SS	WRL/Barnhardt	Target	environment-hawaii	-	-
1992-S49	2448779.98	1992 Jun 6 0857:31	Black Brant IX	-	MASA 36. 64CE	0.000	GSFC	SS	SS	SALC/Szuzezewicz	Plasma	WISR	JGR101.15749	-
1992-S50	2448782.73	1992 Jun 9 0532	Black Brant IX	-	MASA 36. 71UE	0.000	GSFC	SS	SS	CBRN/Kelly	Plasma	WISR	TP-108494	-
1992-S61	2448607.87	1992 Jul 2 0901:15	Black Brant IX	-	MASA 36. 82DE	0.000	GSFC	SS	SS	AFGL/Wobber	Plasma	WISR	TP-108494	-
1992-S63	2448607.87	1992 Jul 4 0658	Black Brant IX	-	MASA 36. 82DE	0.000	GSFC	SS	SS	AFGL/Wobber	Plasma	WISR	TP-108494	-
1992-S64	2448615.88	1992 Jul 12 0902:00	Black Brant IX	-	MASA 36. 81CE	0.000	GSFC	SS	SS	ARND/Djuch	Plasma	WISR	TP-108494	-
1992-S76	2448659.19	1992 Aug 24 1630	Black Brant IX	-	MASA 36. 0900S	0.000	GSFC	SS	SS	WRL/Bruelmeier	Solar	WISR	-	-
1992-S84	2448676.10	1992 Sep 10 1430	Black Brant 9CM1	-	Starfire 1/F5	0.000	SSI	SF	SF	UMH/	Micrograv	SN920914-20	-	-
1992-S84	2448676.10	1992 Sep 24	Black Brant 9CM1	-	Rockwell LEAP	0.000	USNMEG	SS	SS	USM/	Interceptor	JCH	-	-
1992-S90	2448689.50	1992 Sep 27 1830	Black Brant IX	-	MASA 36. 0980E	0.000	GSFC	SS	SS	UCD/Woods	Solar UV	WISR	ESA-SP365-145	-
1992-S100	2448923.27	1992 Dec 9	Black Brant 9CM1	-	MATRA	0.000	ATRA	SS	SS	DDA/MATRA/Oricourt	Chesser	WISR	-	-
1992-S102	2448935.50	1992 Dec 15 0300	Black Brant IX	-	MASA 36. 0850U	0.000	GSFC	SS	SS	JHU/Feldman	UV Astron	WISR	-	-
1992-S103	2449071.62	1993 Feb 6 2000	Black Brant IX	-	MASA 36. 100NS	0.000	GSFC	SS	SS	NSFC/Davis	Solar	WISR	-	-
1992-S15	2449027.35	1993 Feb 16 0212:41	Black Brant 9CM1	-	Starfire 1/F6	0.000	SSI	SS	SS	USO/Raatt	Micrograv	MASA-PR	SN930222-2	-
1993-S23	2449062.59	1993 Mar 16 1800	Black Brant 9CM1	-	MASA 36. 0990S	0.000	SSC	SS	SS	SMD/Golub	Active plasma	WISR	www.usr.edu	-
1993-S27	2449090.22	1993 Apr 17 0915	Black Brant IX	-	MASA 36. 0950H	0.000	GSFC	SS	SS	UCD/Cash	XR Astron	WISR	-	-
1993-S26	2449094.69	1993 Jun 16 0439	Black Brant IX	-	MASA 36. 1010U	0.000	GSFC	SS	SS	UMH/Clarke	Aeron	WISR	-	-
1993-S44	2449154.69	1993 Jul 22 0825	Black Brant X	-	MASA 35. 290E	0.000	GSFC	SS	SS	CBRN/Kinnner	Plasma	WISR	-	-
1993-S46	2449190.85	1993 Jul 27	Black Brant 9CM1	-	MATRA	0.000	ATRA	SS	SS	DDA/MATRA/	Imaging	Chesser	-	-
1993-S50	2449195.50	1993 Aug 17 1800	Black Brant IX	-	MASA 36. 1056S	0.000	GSFC	SS	SS	GFSC/Davilla	Solar	WISR	-	-
1993-S54	2449217.25	1993 Sep 21	Black Brant IX	-	USNMEG	0.000	USNMEG	SS	SS	USM/	Interceptor	JCH	-	-
1993-S54	2449217.25	1993 Sep 21	Black Brant IX	-	Rockwell LEAP	0.000	USNMEG	SS	SS	USM/	Interceptor	JCH	-	-
1993-S62	2449265.24	1993 Oct 4 1745	Black Brant IX	-	MASA 36. 1070E	0.000	GSFC	SS	SS	UCD/HM/Woods	Solar UV	WISR	AmG00e16.148	-
1994-S10	2449395.49	1994 Feb 9 2345	Black Brant IX	-	MASA 36. 1101E	0.000	MASA/INTF	SS	SS	BRG/Soraa	Aurora.	ESA-SP370	-	-
1994-S11	2449412.50	1994 Feb 10 0535	Black Brant 9CM1	-	MASA 36. 0971E	0.000	MASA/CSA	SS	SS	NSFC/Harris	Plasma	Chesser	-	-
1994-S19	2449422.79	1994 Mar 11 0650:42	Black Brant 9CM1	-	MASA 36. 114DE	0.000	ATRA	SS	SS	DDA/MATRA/	Imaging	Chesser	-	-
1994-S26	2449442.79	1994 Mar 11 0650:42	Black Brant IX	-	MASA 36. 1046E	0.000	GSFC	SS	SS	WRL/KcCoy	Aurora.	WISR	-	-
1994-S30	2449460.69	1994 Apr 5 8225	Black Brant IX	-	MASA 36. 1290S	0.000	GSFC	SS	SS	JHU/Feldman	UV Astron	WISR	-	-
1994-S31	2449468.36	1994 Apr 25 0435	Black Brant IX	-	MASA 36. 1290S	0.000	GSFC	SS	SS	JHU/Feldman	UV Astron	WISR	-	-
1994-S31	2449468.36	1994 Apr 25 0435	Black Brant IX	-	MASA 36. 1290S	0.000	GSFC	SS	SS	JHU/Feldman	UV Astron	WISR	-	-
1994-S31	2449468.36	1994 Apr 25 0435	Black Brant IX	-	MASA 36. 1290S	0.000	GSFC	SS	SS	JHU/Feldman	UV Astron	WISR	-	-
1994-S31	2449468.36	1994 Apr 25 0435	Black Brant IX	-	MASA 36. 1290S	0.000	GSFC	SS	SS	JHU/Feldman	UV Astron	WISR	-	-
1994-S31	2449468.36	1994 Apr 25 0435	Black Brant IX	-	MASA 36. 1290S	0.000	GSFC	SS	SS	JHU/Feldman	UV Astron	WISR	-	-
1994-S31	2449468.36	1994 Apr 25 0435	Black Brant IX	-	MASA 36. 1290S	0.000	GSFC	SS	SS	JHU/Feldman	UV Astron	WISR	-	-
1994-S31	2449468.36	1994 Apr 25 0435	Black Brant IX	-	MASA 36. 1290S	0.000	GSFC	SS	SS	JHU/Feldman	UV Astron	WISR	-	-
1994-S31	2449468.36	1994 Apr 25 0435	Black Brant IX	-	MASA 36. 1290S	0.000	GSFC	SS	SS	JHU/Feldman	UV Astron	WISR	-	-
1994-S31	2449468.36	1994 Apr 25 0435	Black Brant IX	-	MASA 36. 1290S	0.000	GSFC	SS	SS	JHU/Feldman	UV Astron	WISR	-	-
1994-S31	2449468.36	1994 Apr 25 0435	Black Brant IX	-	MASA 36. 1290S	0.000	GSFC	SS	SS	JHU/Feldman	UV Astron	WISR	-	-
1994-S31	2449468.36	1994 Apr 25 0435	Black Brant IX	-	MASA 36. 1290S	0.000	GSFC	SS	SS	JHU/Feldman	UV Astron	WISR	-	-
1994-S31	2449468.36	1994 Apr 25 0435	Black Brant IX	-	MASA 36. 1290S	0.000	GSFC	SS	SS	JHU/Feldman	UV Astron	WISR	-	-
1994-S31	2449468.36	1994 Apr 25 0435	Black Brant IX	-	MASA 36. 1290S	0.000	GSFC	SS	SS	JHU/Feldman	UV Astron	WISR	-	-
1994-S31	2449468.36	1994 Apr 25 0435	Black Brant IX	-	MASA 36. 1290S	0.000	GSFC	SS	SS	JHU/Feldman	UV Astron	WISR	-	-
1994-S31	2449468.36	1994 Apr 25 0435	Black Brant IX	-	MASA 36. 1290S	0.000	GSFC	SS	SS	JHU/Feldman	UV Astron	WISR	-	-
1994-S31	2449468.36	1994 Apr 25 0435	Black Brant IX	-	MASA 36. 1290S	0.000	GSFC	SS	SS	JHU/Feldman	UV Astron	WISR	-	-
1994-S31	2449468.36	1994 Apr 25 0435	Black Brant IX	-	MASA 36. 1290S	0.000	GSFC	SS	SS	JHU/Feldman	UV Astron	WISR	-	-
1994-S31	2449468.36	1994 Apr 25 0435	Black Brant IX	-	MASA 36. 1290S	0.000	GSFC	SS	SS	JHU/Feldman	UV Astron	WISR	-	-
1994-S31	2449468.36	1994 Apr 25 0435	Black Brant IX	-	MASA 36. 1290S	0.000	GSFC	SS	SS	JHU/Feldman	UV Astron	WISR	-	-
1994-S31	2449468.36	1994 Apr 25 0435	Black Brant IX	-	MASA 36. 1290S	0.000	GSFC	SS	SS	JHU/Feldman	UV Astron	WISR	-	-
1994-S31	2449468.36	1994 Apr 25 0435	Black Brant IX	-	MASA 36. 1290S	0.000	GSFC	SS	SS	JHU/Feldman	UV Astron	WISR	-	-
1994-S31	2449468.36	1994 Apr 25 0435	Black Brant IX	-	MASA 36. 1290S	0.000	GSFC	SS	SS	JHU/Feldman	UV Astron	WISR	-	-
1994-S31	2449468.36	1994 Apr 25 0435	Black Brant IX	-	MASA 36. 1290S	0.000	GSFC	SS	SS	JHU/Feldman	UV Astron	WISR	-	-
1994-S31	2449468.36	1994 Apr 25 0435	Black Brant IX	-	MASA 36. 1290S	0.000	GSFC	SS	SS	JHU/Feldman	UV Astron	WISR	-	-
1994-S31	2449468.36	1994 Apr 25 0435	Black Brant IX	-	MASA 36. 1290S	0.000	GSFC	SS	SS	JHU/Feldman	UV Astron	WISR	-	-
1994-S31	2449468.36	1994 Apr 25 0435	Black Brant IX	-	MASA 36. 1290S	0.000	GSFC	SS	SS	JHU/Feldman	UV Astron	WISR	-	-
1994-S31	2449468.36	1994 Apr 25 0435	Black Brant IX	-	MASA 36. 1290S	0.000	GSFC	SS	SS	JHU/Feldman	UV Astron	WISR	-	-
1994-S31	2449468.36	1994 Apr 25 0435	Black Brant IX	-	MASA 36. 1290S	0.000	GSFC	SS	SS	JHU/Feldman	UV Astron	WISR	-	-
1994-S31	2449468.36	1994 Apr 25 0435	Black Brant IX	-	MASA 36. 1290S	0.000	GSFC	SS	SS	JHU/Feldman	UV Astron	WISR	-	-
1994-S31	2449468.36	1994 Apr 25 0435	Black Brant IX	-	MASA 36. 1290S	0.000	GSFC	SS	SS	JHU/Feldman	UV Astron	WISR	-	-
1994-S31	2449468.36	1994 Apr 25 0435	Black Brant IX	-	MASA 36. 1290S	0.000	GSFC	SS	SS	JHU/Feldman	UV Astron	WISR	-	-
1994-S31	2449468.36	1994 Apr 25 0435	Black Brant IX	-	MASA 36. 1290S	0.000	GSFC	SS	SS	JHU/Feldman	UV Astron	WISR	-	-
1994-S31	2449468.36	1994 Apr 25 0435	Black Brant IX	-	MASA 36. 1290S	0.000	GSFC	SS	SS	JHU/Feldman	UV Astron	WISR	-	-
1994-S31	2449468.36	1994 Apr 25 0435	Black Brant IX	-	MASA 36. 1290S	0.000	GSFC	SS	SS	JHU/Feldman	UV Astron	WISR	-	-
1994-S31	2449468.36	1994 Apr 25 0435	Black Brant IX	-	MASA 36. 1290S	0.000	GSFC	SS	SS	JHU/Feldman	UV Astron	WISR	-	-

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Orb_Pay	Agency	Launch_Code	Group	Category	LTCite	Cite	Notes
1996-570	2450401.27	1996 Nov 13 1830:00	Black Brant IX	-	MASA 36.142GS	0.000	GSFC	SS	GSFC/Davila	Solar EDV	WMW-WFF	-	-
1996-571	2450405.06	1996 Feb 17 1330:00	Terrier Improved Orion	-	MASA 41.005GP	0.000	GSFC	SS	GSFC/Daily	Test?	WMW-WFF	-	-
1997-521	2450506.33	1997 Feb 26 2000:00	Black Brant IX	-	MASA 36.161HP	0.000	GSFC	SS	GSFC/Olson	Microgravity	WMW-WFF	-	-
1997-525	2450520.93	1997 Mar 13 1020:31	Black Brant IX	-	MASA 36.1590E	0.000	GSFC	SS	UMA/Parks	Ionos	WMW-WFF	-	-
1997-529	2450532.64	1997 Mar 25 0315	Black Brant IX	-	MASA 36.1580L	0.000	GSFC	SS	UCD/Green	UV Astronomy	SN1970331-9	SFLT199-302	-
1997-530	2450537.64	1997 Mar 30 0325	Black Brant IX	-	MASA 36.156CL	0.000	GSFC	SS	SHR/Le/Stern	UV Astronomy	APJ521.920	SFLT199-302	-
1997-531	2450544.64	1997 Apr 6 0345	Black Brant 9CM1	-	MASA 36.1550L	0.000	GSFC	SS	JHU/Feldman	UV Astronomy	www.wff.nasa.gov	SFLT199-302	-
1997-532	2450546.66	1997 Apr 8 0355	Black Brant 9CM1	-	MASA 36.0930H	0.000	GSFC	SS	JHU/Harris	UV Astronomy	www.wff.nasa.gov	SFLT199-302	-
1997-536	2450570.81	1997 May 2 0730	Black Brant IX	-	MASA 36.1330G	0.000	GSFC	SS	PSU/Garmire	UV Astronomy	www.wff.nasa.gov	-	-
1997-537	2450576.80	1997 May 8 0710	Black Brant IX	-	MASA 36.135AE	0.000	GSFC	SS	UCI/Wooda	Solar UV	WMW-WFF	-	-
1997-539	2450584.30	1997 May 15 1916	Terrier Orion	-	MASA 41.130T	0.000	GSFC	SS	UCI/Wooda	Solar UV	WMW-WFF	-	-
1997-541	2450592.41	1997 May 23 2144	Black Brant IX	-	MASA 36.163UR	0.000	GSFC	SS	SDC/Boman	Target	WMW-WFF	-	-
1997-542	2450597.71	1997 May 29 0456	Black Brant IX	-	MASA 36.164US	0.000	GSFC	SS	CIT/AFSL/Lange	IR Astron	WMW-WFF	Launchspace9710-70	-
1997-551	2450659.06	1997 Aug 1 1524:30	Terrier Improved Orion	-	MASA 41.110E	0.000	GSFC	SF	USU/Olwick	Ionos/Aeron	WMW-WFF	JGR104.28521	-
1997-553	2450672.26	1997 Aug 11 1818:00	Black Brant IX	-	MASA 36.164US	0.000	GSFC	SS	USC/LA/Judge	Solar EDV	WMW-WFF	-	-
1997-554	2450693.79	1997 Sep 2 0700	Terrier Improved Orion	-	MASA 41.140T	0.000	GSFC	SS	SDC/Boman	Target	WMW-WFF	-	-
1997-555	2450696.67	1997 Sep 2 0700	Terrier Improved Orion	-	MASA 41.140T	0.000	GSFC	SS	SDC/Boman	Target	WMW-WFF	-	-
1997-557	2450702.11	1997 Sep 10 1440	Black Brant IX	-	MASA 36.165BH	0.000	GSFC	SS	SDC/Boman	Target	WMW-WFF	-	-
1997-558	2450702.13	1997 Sep 10 1510	Black Brant IX	-	MASA 36.165BH	0.000	GSFC	SS	SDC/Boman	Target	WMW-WFF	-	-
1997-559	2450703.34	1997 Sep 11 0200	Terrier Improved Orion	-	MASA 41.160T	0.000	GSFC	SS	LERC/Olson	Microgravity	WMW-WFF	-	-
1997-561	2450711.04	1997 Sep 11 2015:30	Black Brant IX	-	MASA 41.160T	0.000	GSFC	SS	SDC/Boman	Target	WMW-WFF	-	-
1997-562	2450722.34	1997 Sep 19 1300:00	Black Brant IX	-	MASA 36.1440E	0.000	GSFC	SS	PITTY/Zilp	Ionos	WMW-WFF	-	-
1997-570	2450738.29	1997 Sep 30 2010:00	Black Brant IX	-	MASA 36.1290S	0.000	GSFC	SS	RRL/Roses	Solar	WMW-WFF	SPTES442.15	-
1997-572	2450766.53	1997 Oct 16 1900:00	Black Brant IX	-	MASA 41.041E	0.000	GSFC	SS	RRL/Roses	Solar	WMW-WFF	AMU-1000	-
1997-574	2450766.71	1997 Nov 14 0500:00	Terrier Improved Orion	-	MASA 36.0800G	0.000	GSFC	SS	BU/Chakrabarti	UV Astronomy	WMW-WFF	ApJ559.491	-
1997-575	2450771.52	1997 Nov 18 1935:00	Black Brant IX	-	MASA 36.1676S	0.000	GSFC	SS	BU/Chakrabarti	UV Astronomy	WMW-WFF	JGR105.43.5245	-
1997-576	2450784.86	1997 Dec 2 0942:00	Black Brant IX	-	MASA 36.1531E	0.000	GSFC	SS	MHC/Maynard	Plasma	WMW-WFF	-	-
1997-577	2450785.88	1997 Dec 3 0905:00	Black Brant IX	-	MASA 36.1531E	0.000	GSFC	SS	MHC/Maynard	Plasma	WMW-WFF	-	-
1998-522	2450689.43	1998 Feb 25 0750:00	Terrier Improved Orion	-	MASA 41.080E	0.000	GSFC	SS	USU/Olwick	Ionos	WMW-WFF	ApJ559.491	-
1998-530	2450684.91	1998 Feb 25 0750:00	Black Brant IX	-	MASA 36.1590E	0.000	GSFC	SS	USU/Olwick	Ionos	WMW-WFF	-	-
1998-537	2450921.67	1998 Apr 18 0400	Black Brant IX	-	MASA 36.1770G	0.000	GSFC	SS	BU/Chakrabarti	UV Astron	WMW-WFF	-	-
1998-538	2450921.67	1998 Apr 18 0730	Black Brant IX	-	MASA 36.1770G	0.000	GSFC	SS	BU/Chakrabarti	UV Astron	WMW-WFF	-	-
1998-540	2450952.01	1998 Apr 28 1210:00	Black Brant IXB	-	MASA 36.1600G	0.000	CSA	SS	UCD/Green	Ionos	WMW-WFF	-	-
1998-544	2450955.77	1998 Apr 28 1622:00	Black Brant IX	-	MASA 36.175UR	0.000	GSFC	SS	CAL/O	IR Astron	WMW-WFF	WMW-WFF	-
1998-571	2450994.50	1998 Jul 1	SH-2	-	Aegle PHT-1	0.000	USNAEG	MS	CIT/AFSL/Lange	Target	WMW-WFF	-	-
1998-572	2451040.73	1998 Aug 15 0530	Black Brant IX	-	MASA 36.1760H	0.000	GSFC	MS	PSU/Garmire	XR Astronomy	WMW-FSU	Astronomer112798	-
1998-580	2451040.73	1998 Aug 15 0530	Black Brant IX	-	MASA 36.1500P	0.000	ARC	MS	ARC/Ansbach	Test	WMW-FSU	Astronomer112798	-
1998-584	2451075.12	1998 Sep 18 1500	Black Brant IX	-	MASA 36.171CS	0.000	GSFC	SS	SHR/Le/Stern	Solar UV	WMW-LASP	GRL27.5825	-
1998-586	2451120.26	1998 Sep 18 1620	Black Brant IX	-	MASA 36.171CS	0.000	GSFC	SS	SHR/Le/Stern	Solar UV	WMW-LASP	GRL27.5825	-
1998-572	2451135.50	1998 Nov 18 1540	Black Brant IX	-	Aegle PHT-2	0.000	USNAEG	MS	LERC/Ross	Target	WMW-WFF	-	-
1998-582	2451136.15	1998 Nov 18 1540	Black Brant IX	-	MASA 36.1760H	0.000	GSFC	MS	LERC/Ross	Target	WMW-WFF	-	-
1999-305	2451200.76	1999 Feb 11 0645:31	Black Brant IX	-	MASA 36.032AE	0.000	GSFC	SS	WM/Lynch	Micrograv	www.jfrr.alaska.edu	-	-
1999-309	2451225.77	1999 Feb 20 0345:00	Black Brant IX	-	MASA 36.1290G	0.000	GSFC	SS	BU/Chakrabarti	UV Astron	WMW-WFF	-	-
1999-324	2451260.00	1999 Apr 7 2005:00	Black Brant 9CM1	-	MASA 36.1720G	0.000	GSFC	SS	BU/Chakrabarti	UV Astron?	WMW-WFF	-	-
1999-331	2451346.53	1999 Apr 22 0605:00	Black Brant IX	-	MASA 36.1720G	0.000	GSFC	SS	WM/Arendtjke	Solar UV	WMW-WFF	-	-
1999-337	2451346.53	1999 Apr 22 0605:00	Black Brant IX	-	MASA 36.1360S	0.000	GSFC	SS	JHU/Feldman	Solar UV	WMW-WFF	-	-
1999-337	2451346.53	1999 Jun 14 0740	Black Brant 9CM1	-	MASA 36.1360S	0.000	GSFC	SS	JHU/Feldman	Solar UV	WMW-WFF	-	-
1999-338	2451346.53	1999 Jun 14 0740	Black Brant 9CM1	-	MASA 36.1360S	0.000	GSFC	SS	JHU/Feldman	Solar UV	WMW-WFF	-	-
1999-401	2451384.21	1999 Jun 24 1700	Black Brant IX	-	MASA 36.1920S	0.000	USNAEG	MS	GSFC/Davila	Test	WMW-WFF	SPTES4139.70	-
1999-402	2451384.21	1999 Jun 24 1700	Black Brant IX	-	MASA 36.1920S	0.000	USNAEG	MS	GSFC/Davila	Test	WMW-WFF	SPTES4139.70	-
1999-455	2451441.95	1999 Aug 18 1805	Black Brant 9CM1	-	MASA 36.181US	0.000	USNAEG	MS	USC/LA/Judge	Solar EDV	WMW-WFF	Wire	-
1999-456	2451441.95	1999 Aug 27 0707:02	Black Brant IX	-	MASA 36.181US	0.000	USNAEG	MS	USC/LA/Judge	Solar EDV	WMW-WFF	Wire	-
1999-457	2451441.95	1999 Aug 27 0707:02	Black Brant IX	-	MASA 36.181US	0.000	USNAEG	MS	USC/LA/Judge	Solar EDV	WMW-WFF	Wire	-
1999-458	2451441.95	1999 Aug 27 0707:02	Black Brant IX	-	MASA 36.181US	0.000	USNAEG	MS	USC/LA/Judge	Solar EDV	WMW-WFF	Wire	-
1999-459	2451441.95	1999 Aug 27 0707:02	Black Brant IX	-	MASA 36.181US	0.000	USNAEG	MS	USC/LA/Judge	Solar EDV	WMW-WFF	Wire	-
1999-460	2451441.95	1999 Aug 27 0707:02	Black Brant IX	-	MASA 36.181US	0.000	USNAEG	MS	USC/LA/Judge	Solar EDV	WMW-WFF	Wire	-
1999-461	2451441.95	1999 Aug 27 0707:02	Black Brant IX	-	MASA 36.181US	0.000	USNAEG	MS	USC/LA/Judge	Solar EDV	WMW-WFF	Wire	-
1999-462	2451441.95	1999 Aug 27 0707:02	Black Brant IX	-	MASA 36.181US	0.000	USNAEG	MS	USC/LA/Judge	Solar EDV	WMW-WFF	Wire	-
1999-463	2451441.95	1999 Aug 27 0707:02	Black Brant IX	-	MASA 36.181US	0.000	USNAEG	MS	USC/LA/Judge	Solar EDV	WMW-WFF	Wire	-
1999-464	2451441.95	1999 Aug 27 0707:02	Black Brant IX	-	MASA 36.181US	0.000	USNAEG	MS	USC/LA/Judge	Solar EDV	WMW-WFF	Wire	-
1999-465	2451441.95	1999 Aug 27 0707:02	Black Brant IX	-	MASA 36.181US	0.000	USNAEG	MS	USC/LA/Judge	Solar EDV	WMW-WFF	Wire	-
1999-466	2451441.95	1999 Aug 27 0707:02	Black Brant IX	-	MASA 36.181US	0.000	USNAEG	MS	USC/LA/Judge	Solar EDV	WMW-WFF	Wire	-
1999-467	2451441.95	1999 Aug 27 0707:02	Black Brant IX	-	MASA 36.181US	0.000	USNAEG	MS	USC/LA/Judge	Solar EDV	WMW-WFF	Wire	-
1999-468	2451441.95	1999 Aug 27 0707:02	Black Brant IX	-	MASA 36.181US	0.000	USNAEG	MS	USC/LA/Judge	Solar EDV	WMW-WFF	Wire	-
1999-469	2451441.95	1999 Aug 27 0707:02	Black Brant IX	-	MASA 36.181US	0.000	USNAEG	MS	USC/LA/Judge	Solar EDV	WMW-WFF	Wire	-
1999-470	2451441.95	1999 Aug 27 0707:02	Black Brant IX	-	MASA 36.181US	0.000	USNAEG	MS	USC/LA/Judge	Solar EDV	WMW-WFF	Wire	-
1999-471	2451441.95	1999 Aug 27 0707:02	Black Brant IX	-	MASA 36.181US	0.000	USNAEG	MS	USC/LA/Judge	Solar EDV	WMW-WFF	Wire	-
1999-472	2451441.95	1999 Aug 27 0707:02	Black Brant IX	-	MASA 36.181US	0.000	USNAEG	MS	USC/LA/Judge	Solar EDV	WMW-WFF	Wire	-
1999-473	2451441.95	1999 Aug 27 0707:02	Black Brant IX	-	MASA 36.181US	0.000	USNAEG	MS	USC/LA/Judge	Solar EDV	WMW-WFF	Wire	-
1999-474	2451441.95	1999 Aug 27 0707:02	Black Brant IX	-	MASA 36.181US	0.000	USNAEG	MS	USC/LA/Judge	Solar EDV	WMW-WFF	Wire	-
1999-475	2451441.95	1999 Aug 27 0707:02	Black Brant IX	-	MASA 36.181US	0.000	USNAEG	MS	USC/LA/Judge	Solar EDV	WMW-WFF	Wire	-
1999-476	2451441.95	1999 Aug 27 0707:02	Black Brant IX	-	MASA 36.181US	0.000	USNAEG	MS	USC/LA/Judge	Solar EDV	WMW-WFF	Wire	-
1999-477	2451441.95	1999 Aug 27 0707:02	Black Brant IX	-	MASA 36.181US	0.000	USNAEG	MS	USC/LA/Judge	Solar EDV	WMW-WFF	Wire	-
1999-478	2451441.95	1999 Aug 27 0707:02	Black Brant IX	-	MASA 36.181US	0.000	USNAEG	MS	USC/LA/Judge	Solar EDV	WMW-WFF	Wire	-
1999-479	2451441.95	1999 Aug 27 0707:02	Black Brant IX	-	MASA 36.181US	0.000	USNAEG	MS	USC/LA/Judge	Solar EDV	WMW-WFF	Wire	-
1999-480	2451441.95	1999 Aug 27 0707:02	Black Brant IX	-	MASA 36.181US	0.000	USNAEG	MS	USC/LA/Judge	Solar EDV	WMW-WFF	Wire	-
1999-481	2451441.95	1999 Aug 27 0707:02	Black Brant IX	-	MASA 36.181US	0.000	USNAEG						

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	OrbPay	Agency	Launch	Launch_Code	Group	Category	LTCite	Cite	Notes
2003-S02	2452664.37	2003 Jan 24 2050:00	Terrier Orion	-	MASA 41.0300E	0.000	GSFC	SS	SS	GSFC/Goldberg	Plasma	www.wff.nasa.gov	-	-
2003-S03	2452667.83	2003 Jan 28 0750:02	Black Brant IX	-	MASA 36.2000E	0.000	GSFC	SS	SS	DART/Labelle	Auroral	www.wff.nasa.gov	-	-
2003-S04	2452668.27	2003 Jan 28 1832:00	Terrier Orion	-	MASA 41.0310E	0.000	GSFC	SS	SS	GSFC/Goldberg	Plasma/Aeron	www.wff.nasa.gov	-	-
2003-S05	2452676.61	2003 Feb 6 0730:00	Black Brant IX	-	MASA 36.2040E	0.000	GSFC	SS	SS	CIT/Martin	UV Astron	www.wff.nasa.gov	-	-
2003-S06	2452723.91	2003 Mar 25 0950:01	Black Brant IX	-	MASA 36.2040E	0.000	GSFC	SS	SS	UMF/Conde	Auroral/Release	www.wff.nasa.gov	-	-
2003-S07	2452723.92	2003 Mar 25 1009:01	Terrier Improved Orion	-	MASA 41.0340E	0.000	GSFC	SS	SS	UMF/Conde	Auroral/Release	www.wff.nasa.gov	-	-
2003-S08	2452726.01	2003 Mar 27 1209:01	Black Brant IX	-	MASA 36.2060E	0.000	GSFC	SS	SS	CLEW/Larson	Auroral/Release	www.wff.nasa.gov	ESA-SF590-331	-
2003-S09	2452726.01	2003 Mar 27 1210:01	Terrier Improved Orion	-	MASA 41.0290E	0.000	GSFC	SF	SF	CLEW/Larson	Auroral/Release	www.wff.nasa.gov	pfrf alaska.edu	-
2003-S10	2452726.01	2003 Mar 27 1213:01	Terrier Improved Orion	-	MASA 41.0290E	0.000	GSFC	SS	SS	CLEW/Larson	Auroral/Release	www.wff.nasa.gov	-	-
2003-S11	2452726.01	2003 Mar 27 1213:01	Terrier Improved Orion	-	MASA 36.2010L	0.000	GSFC	SS	SS	SMR/LeSturm	UV Astron	www.comworld.ru	-	-
2003-S12	2452746.63	2003 Apr 10 0531:00	Black Brant IX	-	MASA 36.2010L	0.000	GSFC	SS	SS	USU/Hovart	Tech	www.wff.nasa.gov	aprl.dh.erau.edu	-
2003-S23	2452800.77	2003 Jun 10 0631:00	Terrier Malemute	-	MASA 41.0360E	0.000	GSFC	SS	SS	UMD/Reedy,Barle	Aeron/Release	GR131.L19807	www.wff.nasa.gov	-
2003-S27	2452820.64	2003 Jun 30 0319:00	Terrier Improved Orion	-	MASA 41.0370E	0.000	GSFC	SS	SS	UMD/Reedy,Barle	Aeron/Release	GR131.L19807	www.wff.nasa.gov	-
2003-S28	2452820.74	2003 Jun 30 0541:00	Terrier Improved Orion	-	MASA 41.0380E	0.000	GSFC	SS	SS	UMD/Reedy,Barle	Aeron/Release	GR131.L19807	www.wff.nasa.gov	-
2003-S30	2452820.80	2003 Jun 30 0702:00	Terrier Improved Orion	-	MASA 41.0380E	0.000	GSFC	SS	SS	EMAU/Erchan	Aeron	www.wff.nasa.gov	-	-
2003-S34	2452835.79	2003 Jun 15 0707:00	Terrier Improved Orion	-	MASA 41.0240E	0.000	GSFC	SS	SS	NSROC/Krause	Test	www.wff.nasa.gov	-	-
2003-S35	2452835.81	2003 Jun 15 0732:00	Terrier Improved Orion	-	MASA 41.0240E	0.000	GSFC	SS	SS	NSROC/Krause	Test	www.wff.nasa.gov	-	-
2003-S36	2452852.93	2003 Aug 1 1023:03	Black Brant IX	-	MASA 36.2050E	0.000	GSFC	SS	SS	AFRL/Walpe	Plasma	www.wff.nasa.gov	-	-
2003-S38	2452864.27	2003 Aug 2 1823:30	Black Brant IX	-	MASA 41.0400D	0.000	GSFC	SS	SS	PSU/fane	Test	www.wff.nasa.gov	-	-
2003-S40	2452871.96	2003 Aug 2 1105:00	Terrier Orion	-	MASA 41.0350E	0.000	GSFC	SS	SS	AFRL/Walpe	Plasma	www.wff.nasa.gov	-	-
2003-S42	2452916.10	2003 Oct 5 1430:00	Terrier Orion	-	MASA 41.0350E	0.000	GSFC	SS	SS	PSU/fane	Test	www.wff.nasa.gov	-	-
2003-S43	2452916.10	2003 Oct 18 1900	Terrier Improved Orion	-	FAST SPV-1	0.000	DARPA	SS	SS	NSROC/Krause	Aeron/Release	www.wff.nasa.gov	-	-
2003-S44	2452936.95	2003 Oct 24 1045:17	Terrier Improved Orion	-	FAST SPV-1	0.000	DARPA	SS	SS	NSROC/Krause	Aeron/Release	www.wff.nasa.gov	-	-
2003-S45	2452936.95	2003 Dec 5 1930:00	Black Brant IX	-	MASA 36.20530T	0.000	GSFC	SS	SS	USCLA/Judge	Test	www.wff.nasa.gov	-	-
2003-S47	2452979.31	2003 Dec 5 1930:00	Black Brant IX	-	MASA 36.1840S	0.000	GSFC	SS	SS	NSROC/Krause	Test	www.wff.nasa.gov	-	-
2003-S48	2452979.33	2003 Dec 5 2000	Black Brant IX	-	MASA 36.1840S	0.000	GSFC	SS	SS	NSROC/Krause	Test	www.wff.nasa.gov	-	-
2003-S49	2452979.33	2003 Dec 5 2000	Black Brant IX	-	MASA 36.2080U	0.000	GSFC	SS	SS	RHL/Roses	Solar EUV	www.wff.nasa.gov	-	-
2003-S52	2452989.62	2003 Dec 16 0300	Black Brant IX	-	MASA 36.2080U	0.000	GSFC	SS	SS	JHU/Feldman	Solar EUV?	www.wff.nasa.gov	-	-
2003-S52	2452989.62	2003 Dec 16 0300	Black Brant IX	-	MASA 36.2100L	0.000	GSFC	SS	SS	JHU/Feldman	Solar EUV?	www.wff.nasa.gov	ApJ-628,750	-
2004-S02	2453021.02	2004 Jan 16 1229:22	Black Brant IX	-	MASA 36.2100L	0.000	GSFC	SS	SS	SMR/LeSturm	UV Astron	www.wff.nasa.gov	-	-
2004-S04	2453026.87	2004 Jan 22 0857:00	Black Brant IX	-	MASA 35.0350E	0.000	GSFC	SS	SS	CRN/Kincher	Plasma	www.wff.nasa.gov	-	-
2004-S04	2453026.87	2004 Jan 22 0857:00	Black Brant IX	-	MASA 35.0350E	0.000	GSFC	SS	SS	CRN/Kincher	Plasma	www.wff.nasa.gov	JGR112.A08307	-
2004-S14	2453106.65	2004 Apr 13 0530	Terrier Rk 70 Orion	-	MASA 12.846T	0.000	DARPA	SS	SS	NSROC/Krause	Test	www.wff.nasa.gov	-	-
2004-S16	2453112.21	2004 Apr 16 1656	Terrier Orion	-	FAST SPV-2	0.000	DARPA	SS	SS	NSROC/Krause	Test	www.wff.nasa.gov	-	-
2004-S05	2453145.50	2004 May 16	Coyote	-	MASA 36.2099G	0.000	NAVSTAR	AS	AS	UCD/Wilkinson,Green	Test	www.wff.nasa.gov	-	-
2004-S06	2453157.83	2004 Jun 1 0750	Black Brant IX	-	MASA 36.2099G	0.000	GSFC	AS	AS	UCD/Wilkinson,Green	Test	www.wff.nasa.gov	-	-
2004-S19	2453202.90	2004 Jun 1 0750	Black Brant IX	-	MASA 29.0370E	0.000	USNMBG	MS	MS	BND5-TestList	Target	www.wff.nasa.gov	-	-
2004-S26	2453224.57	2004 Aug 7 0852:55	Terrier Malemute	-	MASA 41.0430E	0.000	GSFC	SS	SS	CRN/Hysell	Ionos	www.wff.nasa.gov	-	-
2004-S29	2453224.88	2004 Aug 7 0907:30	Terrier Improved Orion	-	MASA 41.0430E	0.000	GSFC	SS	SS	CRN/Hysell	Ionos	www.wff.nasa.gov	-	-
2004-S30	2453224.88	2004 Aug 7 0911:30	Terrier Improved Orion	-	MASA 41.0430E	0.000	GSFC	SS	SS	CRN/Hysell	Ionos	www.wff.nasa.gov	-	-
2004-S34	2453232.85	2004 Aug 15 0821:53	Terrier Malemute	-	MASA 29.0360E	0.000	GSFC	SS	SS	CRN/Hysell	Ionos	www.wff.nasa.gov	-	-
2004-S35	2453232.87	2004 Aug 15 0847:00	Terrier Improved Orion	-	MASA 41.0440E	0.000	GSFC	SS	SS	CRN/Hysell	Ionos	www.wff.nasa.gov	-	-
2004-S36	2453232.87	2004 Aug 15 0851:00	Terrier Improved Orion	-	MASA 41.0460E	0.000	GSFC	SS	SS	CRN/Hysell	Ionos	www.wff.nasa.gov	-	-
2004-S37	2453244.50	2004 Aug 27 2242:43	Coyote	-	MASA 41.0410E	0.000	NAVSTAR	AS	AS	CLEM/Emmacher	Test	www.wff.nasa.gov	ESASFS90-167	-
2004-S37	2453244.50	2004 Aug 27 2242:43	Terrier Improved Orion	-	MASA 41.0410E	0.000	GSFC	AS	AS	CLEM/Emmacher	Test	www.wff.nasa.gov	ESASFS90-167	-
2004-S41	2453256.90	2004 Sep 1 2556:00	Terrier Improved Orion	-	MASA 41.0480E	0.000	GSFC	SS	SS	GSFC/F-4aif	Ionos	www.wff.nasa.gov	-	-
2004-S46	2453265.94	2004 Sep 17 0912	Terrier Improved Orion	-	MASA 41.0420E	0.000	GSFC	SS	SS	GSFC/F-4aif	Ionos	www.wff.nasa.gov	-	-
2004-S46	2453265.94	2004 Sep 17 0912	Terrier Improved Orion	-	MASA 41.0420E	0.000	GSFC	SS	SS	GSFC/F-4aif	Ionos	www.wff.nasa.gov	-	-
2004-S49	2453271.02	2004 Sep 19 2330	Terrier Improved Orion	-	MASA 11.5240E	0.000	GSFC	SF	SF	NSM/Emmacher	Test	www.wff.nasa.gov	www.wff.nasa.gov	-
2004-S59	2453282.57	2004 Sep 23 0558	Terrier Rk 70 Orion	-	MASA 36.2170E	0.000	GSFC	SS	SS	NSM/OC/Krause	Solar EUV	www.wff.nasa.gov	-	-
2004-S59	2453282.57	2004 Sep 23 0558	Black Brant IX	-	MASA 36.2170E	0.000	GSFC	SS	SS	NSM/OC/Krause	Solar EUV	www.wff.nasa.gov	-	-
2004-S59	2453282.57	2004 Sep 23 0558	Black Brant IX	-	MASA 36.2170E	0.000	GSFC	SS	SS	NSM/OC/Krause	Solar EUV	www.wff.nasa.gov	-	-
2004-S60	2453282.57	2004 Sep 23 0558	Black Brant IX	-	MASA 36.2170E	0.000	GSFC	SS	SS	NSM/OC/Krause	Solar EUV	www.wff.nasa.gov	-	-
2004-S60	2453282.57	2004 Sep 23 0558	Black Brant IX	-	MASA 36.2170E	0.000	GSFC	SS	SS	NSM/OC/Krause	Solar EUV	www.wff.nasa.gov	-	-
2004-S60	2453282.57	2004 Sep 23 0558	Black Brant IX	-	MASA 36.2170E	0.000	GSFC	SS	SS	NSM/OC/Krause	Solar EUV	www.wff.nasa.gov	-	-
2004-S60	2453282.57	2004 Sep 23 0558	Black Brant IX	-	MASA 36.2170E	0.000	GSFC	SS	SS	NSM/OC/Krause	Solar EUV	www.wff.nasa.gov	-	-
2004-S60	2453282.57	2004 Sep 23 0558	Black Brant IX	-	MASA 36.2170E	0.000	GSFC	SS	SS	NSM/OC/Krause	Solar EUV	www.wff.nasa.gov	-	-
2004-S60	2453282.57	2004 Sep 23 0558	Black Brant IX	-	MASA 36.2170E	0.000	GSFC	SS	SS	NSM/OC/Krause	Solar EUV	www.wff.nasa.gov	-	-
2004-S60	2453282.57	2004 Sep 23 0558	Black Brant IX	-	MASA 36.2170E	0.000	GSFC	SS	SS	NSM/OC/Krause	Solar EUV	www.wff.nasa.gov	-	-
2004-S60	2453282.57	2004 Sep 23 0558	Black Brant IX	-	MASA 36.2170E	0.000	GSFC	SS	SS	NSM/OC/Krause	Solar EUV	www.wff.nasa.gov	-	-
2004-S60	2453282.57	2004 Sep 23 0558	Black Brant IX	-	MASA 36.2170E	0.000	GSFC	SS	SS	NSM/OC/Krause	Solar EUV	www.wff.nasa.gov	-	-
2004-S60	2453282.57	2004 Sep 23 0558	Black Brant IX	-	MASA 36.2170E	0.000	GSFC	SS	SS	NSM/OC/Krause	Solar EUV	www.wff.nasa.gov	-	-
2004-S60	2453282.57	2004 Sep 23 0558	Black Brant IX	-	MASA 36.2170E	0.000	GSFC	SS	SS	NSM/OC/Krause	Solar EUV	www.wff.nasa.gov	-	-
2004-S60	2453282.57	2004 Sep 23 0558	Black Brant IX	-	MASA 36.2170E	0.000	GSFC	SS	SS	NSM/OC/Krause	Solar EUV	www.wff.nasa.gov	-	-
2004-S60	2453282.57	2004 Sep 23 0558	Black Brant IX	-	MASA 36.2170E	0.000	GSFC	SS	SS	NSM/OC/Krause	Solar EUV	www.wff.nasa.gov	-	-
2004-S60	2453282.57	2004 Sep 23 0558	Black Brant IX	-	MASA 36.2170E	0.000	GSFC	SS	SS	NSM/OC/Krause	Solar EUV	www.wff.nasa.gov	-	-
2004-S60	2453282.57	2004 Sep 23 0558	Black Brant IX	-	MASA 36.2170E	0.000	GSFC	SS	SS	NSM/OC/Krause	Solar EUV	www.wff.nasa.gov	-	-
2004-S60	2453282.57	2004 Sep 23 0558	Black Brant IX	-	MASA 36.2170E	0.000	GSFC	SS	SS	NSM/OC/Krause	Solar EUV	www.wff.nasa.gov	-	-
2004-S60	2453282.57	2004 Sep 23 0558	Black Brant IX	-	MASA 36.2170E	0.000	GSFC	SS	SS	NSM/OC/Krause	Solar EUV	www.wff.nasa.gov	-	-
2004-S60	2453282.57	2004 Sep 23 0558	Black Brant IX	-	MASA 36.2170E	0.000	GSFC	SS	SS	NSM/OC/Krause	Solar EUV	www.wff.nasa.gov	-	-
2004-S60	2453282.57	2004 Sep 23 0558	Black Brant IX	-	MASA 36.2170E	0.000	GSFC	SS	SS	NSM/OC/Krause	Solar EUV	www.wff.nasa.gov	-	-
2004-S60	2453282.57	2004 Sep 23 0558	Black Brant IX	-	MASA 36.2170E	0.000	GSFC	SS	SS	NSM/OC/Krause	Solar EUV	www.wff.nasa.gov	-	-
2004-S60	2453282.57	2004 Sep 23 0558	Black Brant IX	-	MASA 36.2170E	0.000	GSFC	SS	SS	NSM/OC/Krause	Solar EUV	www.wff.nasa.gov	-	-
2004-S60	2453282.57	2004 Sep 23 0558	Black Brant IX	-	MASA 36.2170E	0.000	GSFC	SS	SS	NSM/OC/Krause	Solar EUV			

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Orb_Pay	Agency	Launch_Code	Group	Category	LTCite	Cite	Notes
2007-520	2454217.40	2007 Apr 26 2131	Terrier Orion	-	Aegis FTH-11EA Tgt	0.000	USNAEG	MS	-	Target	ww.mda.mil	InsideWallops070507	-
2007-535	2454266.50	2007 Jun 15	Terrier Orion	-	Aegis FTH-12-2 Targ	0.000	USNAEG/SAMD	MS	-	Target	InsideWallops061807	-	-
2007-536	2454266.50	2007 Jun 15	Terrier Orion	-	Aegis FTH-12-2 Targ	0.000	USNAEG/SAMD	MS	-	Target	InsideWallops061807	-	-
2007-526	2454272.73	2007 Jun 21 0538:00	Terrier Improved Orion	-	NASA 12.069GT	0.000	GSFC	SS	NSRDC/Coastello	Test	ww.wff.nasa.gov	-	-
2007-530	2454316.45	2007 Aug 3 2251:20	Terrier Improved Orion	-	NASA 41.069	0.000	GSFC	SS	UCD/Robertson	Aeron	ww.rockstrange.no	-	-
2007-532	2454319.46	2007 Aug 6 2256:00	Terrier Improved Orion	-	NASA 41.070	0.000	GSFC	SS	JHU/McCandless	UV Astron	ww.rockstrange.no	-	-
2007-533	2454325.74	2007 Aug 13 0545	Black Brant IX	-	NASA 36.220UG	0.000	USNAEG	SS	JHU/McCandless	Target	ww.mda.mil	-	-
2007-578	2454343.38	2007 Aug 31	Terrier Orion	?	Aegis FTH-11a Target	0.000	GSFC	SS	LAC/Player	Test?	ww.wff.nasa.gov	-	-
2007-545	2454350.38	2007 Sep 6 2109:00	Terrier Improved Orion	-	NASA 41.065SH	0.000	GSFC	SS	LAC/Player	Plasma	ww.wff.nasa.gov	-	-
2007-585	2454363.08	2007 Oct 30 0412:52	Black Brant IX	-	NASA 36.2180E	0.000	MAF1	SS	UTD/Earle	Test	nasaspaceflight.com	-	-
2007-586	2454410.50	2007 Nov 6	STAR	-	NASA 36.241US	0.000	MAF1	SS	-	Test	AMST071029-17	-	-
2007-587	2454411.25	2007 Nov 6 1800	STAR	-	Ballistic Target	0.000	MAF1	SS	GSFC/Rabin	Solar EUV	ww.wff.nasa.gov	-	-
2007-581	2454411.67	2007 Nov 7 0412	Black Brant IX	-	Aegis FTH-13 Target	0.000	USNAEG	SS	-	Target	ww.mda.mil	-	-
2007-589	2454411.67	2007 Nov 7 0412	Black Brant IX	-	Aegis FTH-13 Target	0.000	USNAEG	SS	-	Target	ww.mda.mil	-	-
2007-580	2454451.68	2007 Nov 7 0413	Terrier Orion	-	JFTH-1 TRACKEX	0.000	USNAEG	MS	-	Target	IGARAV	-	-
2007-582	2454476.72	2007 Dec 17 00	Terrier Orion	2	Ballistic Target	0.000	MAF1	SS	JHU/McCandless	UV Astron	McCandless.com	-	-
2008-501	2454569.50	2008 Jan 11 0523:00	Black Brant IX	-	Ballistic Target	0.000	MAF1	SS	-	Test	Blackanthem.com	-	-
2008-577	2454594.50	2008 Mar 29	STAR	-	Ballistic Target	0.000	MAF1	MS	-	Test	Blackanthem.com	-	-
2008-578	2454594.50	2008 Mar 29	STAR	-	Ballistic Target	0.000	MAF1	MS	-	Test	Blackanthem.com	-	-
2008-579	2454594.50	2008 Mar 29	STAR	-	Ballistic Target	0.000	MAF1	MS	-	Test	Blackanthem.com	-	-
2008-514	2454571.21	2008 Apr 14 1658	Black Brant IX	-	Ballistic Target	0.000	MAF1	MS	-	Test	Blackanthem.com	-	-
2008-518	2454661.52	2008 May 1 0650	Black Brant IX	-	Ballistic Target	0.000	MAF1	MS	-	Test	Blackanthem.com	-	-
2008-527	2454650.50	2008 Jun 13	Terrier Orion	-	NASA 36.2400E	0.000	GSFC	SS	UCD/Woods	Solar EUV	nasaspaceflight.com	-	-
2008-528	2454650.50	2008 Jun 13	Terrier Orion	-	NASA 36.2230H	0.000	GSFC	SS	UML/GSFC/McChumon	XR Astron	ww.wff.nasa.gov	-	-
2008-529	2454650.50	2008 Jun 13	Terrier Orion	-	FTH-14 TRACKEX	0.000	USNAEG	SS	-	Target	ww.mda.mil	-	-
2008-535	2454661.52	2008 Jun 14 1010	Terrier Orion	-	NASA 41.075NP (GTT)	0.000	GSFC	SS	WFF/Eberspacher,Smith	Test	nasaspaceflight.com	-	-
2008-580	2454759.86	2008 Oct 20 0839:01	Black Brant IX	-	NASA 36.207DG	0.000	MAF1	SS	IRL/Kowalski	UV Astron	ww.wff.nasa.gov	-	-
2008-581	2454774.50	2008 Nov 4	STAR	-	Ballistic Target	0.000	MAF1	MS	-	Test	lurtwaffe.de	-	-
2008-582	2454774.50	2008 Nov 4	STAR	-	Ballistic Target	0.000	MAF1	MS	-	Test	lurtwaffe.de	-	-
2008-583	2454775.50	2008 Nov 4	STAR	-	Ballistic Target	0.000	MAF1	MS	-	Test	lurtwaffe.de	-	-
2008-584	2454775.50	2008 Nov 5	STAR	-	Ballistic Target	0.000	MAF1	MS	-	Test	lurtwaffe.de	-	-
2008-585	2454775.50	2008 Nov 5	STAR	-	Ballistic Target	0.000	MAF1	MS	-	Test	lurtwaffe.de	-	-
2009-503	2454775.50	2009 Jun 29 0949:41	Black Brant IX	-	NASA 36.2420E	0.000	GSFC	SS	UJA/Bounds	Auroral	ww.wff.nasa.gov	-	-
2009-505	2454860.91	2009 Jun 29 0949:41	Black Brant IX	-	NASA 41.076	0.000	GSFC	SS	CLEW/Linnacher	Aeron	ww.wff.nasa.gov	-	-
2009-506	2454860.91	2009 Feb 18 0922:00	Terrier Improved Orion	-	NASA 41.078	0.000	GSFC	SS	CLEW/Linnacher	Aeron	ww.wff.nasa.gov	-	-
2009-507	2454860.94	2009 Feb 18 1029:00	Terrier Improved Orion	-	NASA 41.078	0.000	GSFC	SS	CLEW/Linnacher	Aeron	ww.wff.nasa.gov	-	-
2009-508	2454860.96	2009 Feb 18 1039:00	Terrier Improved Orion	-	NASA 41.077	0.000	GSFC	SS	CLEW/Linnacher	Aeron	ww.wff.nasa.gov	-	-
2009-509	2454860.99	2009 Feb 18 1149:00	Terrier Improved Orion	-	NASA 41.077	0.000	GSFC	SS	CLEW/Linnacher	Aeron	ww.wff.nasa.gov	-	-
2009-511	2454867.95	2009 Feb 25 1045	Black Brant IX	-	NASA 36.226UG	0.000	DSTD	SS	APRL/DSTO/	IR Astron	nasaspaceflight.com	arxiv1004.5445	-
2009-523	2454958.51	2009 May 0242:00	Terrier Orion	-	NASA 36.226UG	0.000	GSFC	SS	ARC/Murdoch	Hypersonic	ww.wff.nasa.gov	nasaspaceflight.com	-
2009-525	2454980.20	2009 May 28 1652	Terrier Orion	-	NASA 41.080NR	0.000	MA	SS	-	Target	ww.mda.mil	-	-
2009-526	2454980.20	2009 Jun 6	Terrier Lynx	-	-	0.000	MA	SS	-	Target	ww.mda.mil	-	-
2009-529	2454986.50	2009 Jun 6	Terrier Lynx	-	-	0.000	MA	SS	-	Target	ww.mda.mil	-	-
2009-535	2455006.30	2009 Jun 26 0930	Terrier Orion	-	NASA 41.083UG	0.000	GSFC	SS	UCD/Green	Education	ww.wff.nasa.gov	-	-
2009-532	2455006.30	2009 Jun 26 0930	Black Brant IX	-	NASA 36.210UG	0.000	GSFC	SS	UPF/	UV Astron	nasaspaceflight.com	-	-
2009-537	2455045.65	2009 Jun 31 0340:00	Terrier Orion	-	NASA 36.210UG	0.000	GSFC	SS	UCD/Green	UV Astron	ww.mda.mil	-	-
2009-539	2455045.65	2009 Jun 31 0340:00	Terrier Orion	-	JFTH-06E TRACKEX	0.000	MA	MS	-	Target	mda.mil	-	-
2009-540	2455045.67	2009 Jul 31 0400:00	Terrier Orion	-	NASA 36.254NR	0.000	MA	MS	-	Target	mda.mil	-	-
2009-541	2455045.67	2009 Jul 31 0400:00	Black Brant IX	-	NASA 36.254NR	0.000	MA	MS	-	Target	mda.mil	-	-
2009-542	2455054.74	2009 Aug 17 1222:00	Black Brant IX	-	JFTH-3 TRACKEX	0.000	GSFC	SS	LAC/Cheestwood	Beamtry test	nasaspaceflight.com	-	-
2009-544	2455089.54	2009 Sep 14 1740:00	Black Brant IX	-	JFTH-3 TRACKEX	0.000	GSFC	SS	IRL/Horae	Target	ww.mda.mil	-	-
2009-573	2455117.50	2009 Oct 13	Terrier Orion	-	FTH-06E2	0.000	MA	MS	-	Target	ww.wff.nasa.gov	-	-
2009-572	2455117.50	2009 Oct 13	Terrier Orion	-	FTH-06E2	0.000	MA	MS	-	Target	ww.wff.nasa.gov	-	-
2009-585	2455120.50	2009 Oct 16	Terrier Orion	-	FTH-06E2	0.000	MA	MS	-	Target	ww.wff.nasa.gov	-	-
2009-586	2455149.50	2009 Oct 16	Black Brant IX	-	NASA 36.2520H	0.000	GSFC	SS	UCD/Cash	Aeron	nasaspaceflight.com	-	-
2009-574	2455185.84	2009 Nov 17 0325:00	Terrier Orion	-	NASA 41.086UG	0.000	GSFC	SS	ERAU/Erchan	Target	ww.wff.nasa.gov	-	-
2010-510	2455207.66	2010 Feb 17 0300:00	Black Brant IX	-	NASA 36.2470R	0.000	MA	SS	-	Target	mda.mil	-	-
2010-520	2455231.94	2010 Feb 4 0803:07	Black Brant IX	-	NASA 36.2500R	0.000	GSFC	SS	UAF/Conde	Target	mda.mil	-	-
2010-516	2455236.88	2010 Feb 9 0901:00	Terrier Orion	-	NASA 41.084UG	0.000	GSFC	SS	UAF/Conde	Target	mda.mil	-	-
2010-518	2455239.73	2010 Feb 12 0531:20	Black Brant IX	-	NASA 36.2510R	0.000	MA	SS	APRL/DSTO/	XR Astron	ww.wff.nasa.gov	SPIE7722-R	-
2010-529	2455277.53	2010 Mar 22 0045	Black Brant IX	-	NASA 36.2510R	0.000	DSTD	SS	UAF/UKY/CALP/Hall	Target	mda.mil	-	-
2010-527	2455283.09	2010 Mar 27 1409:56	Terrier Improved Orion	2	NASA 12.067GT	0.000	GSFC	SS	UAF/UKY/CALP/Hall	Hypersonic	ww.wff.nasa.gov	AMST110609-41	-
2010-535	2455283.91	2010 Mar 31 0947:00	Black Brant IX	-	NASA 36.2480R	0.000	MA	SS	UAF/UKY/CALP/Hall	Target	mda.mil	-	-
2010-531	2455300.27	2010 Mar 31 1822:00	Black Brant IX	-	NASA 36.2480R	0.000	MA	SS	UAF/UKY/CALP/Hall	Target	mda.mil	-	-
2010-536	2455327.88	2010 Mar 31 0900:00	Black Brant IX	-	NASA 36.270UG	0.000	GSFC	SS	UAF/UKY/CALP/Hall	Target	mda.mil	-	-
2010-543	2455371.97	2010 Jun 24 1117:00	Terrier Improved Orion	-	NASA 41.088UG	0.000	GSFC	SS	UAF/UKY/CALP/Hall	Target	mda.mil	-	-
2010-545	2455388.70	2010 Jul 31 0450:00	Black Brant IX	-	NASA 36.265UG	0.000	GSFC	SS	UAF/UKY/CALP/Hall	Target	mda.mil	-	-
2010-549	2455408.26	2010 Jul 30 1821:00	Black Brant IX	-	NASA 36.213NS	0.000	GSFC	SS	NSFC/Davis,Cittain	Solar EUV	ww.wff.nasa.gov	-	-
2010-550	2455412.89	2010 Aug 4 0915:03	Black Brant IX	-	NASA 12.073GT	0.000	GSFC	SS	UAF/UKY/CALP/Hall	Target	mda.mil	-	-
2010-553	2455432.25	2010 Aug 23 1757:00	Black Brant IX	-	NASA 36.219US	0.000	GSFC	SS	UAF/UKY/CALP/Hall	Target	mda.mil	-	-
2010-558	2455461.05	2010 Sep 21 1307:30	Terrier Orion	-	NASA 41.082NP	0.000	GSFC	SS	UAF/UKY/CALP/Hall	Target	mda.mil	-	-
2010-584	2455475.50	2010 Oct 6	Terrier Orion	?	Aegis Target	0.000	USNAEG	MS	-	Target	twitter.com/NASA_Hallops	-	-
2010-585	2455475.50	2010 Oct 6	Terrier Orion	?	Aegis Target	0.000	USNAEG	MS	-	Target	twitter.com/NASA_Hallops	-	-
2010-586	2455491.21	2010 Oct 21 1700	Black Brant IX	-	NASA 36.2300R	0.000	MA	MS	-	Target	Standis2010	-	-
2010-583	2455512.50	2010 Oct 12	Terrier Orion	-	Aegis Target 6E2B	0.000	MA	MS	-	Target	mda.mil	-	-
2010-569	2455537.20	2010 Dec 6 1645:00	Terrier Improved Orion	-	NASA 41.087GT	0.000	USNAEG	MS	MDA/Kratos	Target	kratosdefense.com	-	-
2011-501	2455583.76	2011 Jan 22 0610	Terrier Orion	-	Aegis Target	0.000	GSFC	SS	JPL/Hayne	Target	ww.wff.nasa.gov	-	-
2011-502	2455589.95	2011 Jan 28 1046:00	Black Brant IX	-	NASA 36.257UG	0.000	USNAEG	SS	JPL/Hayne	Target	ww.wff.nasa.gov	-	-
2011-503	2455597.84	2011 Feb 5 0811:11	Black Brant IX	-	NASA 36.256UG	0.000	GSFC	SS	UAF/Bailey	UV Astron	ww.wff.nasa.gov	-	-
2011-509	2455636.50	2011 Mar 16	Terrier Orion	-	SSTS Target	0.000	MA	SS	-	Target	mda.mil	-	-
2011-511	2455644.28	2011 Mar 23 1850:00	Black Brant IX	-	NASA 36.275UE	0.000	GSFC	SS	UCD/Hoods	Solar EUV	ww.wff.nasa.gov	laep.colorado.edu	-
2011-515													

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Orb_Pay	Agency	Launch	Launch_Code	Group	Category	LTCite	Cite	Notes
2011-423	2455813.07	2011 Sep 8 1345	Terrier	-	MASA 12. 076GT	0.000	GSFC	SS	SS	WFF/Brodell	Test	ww.wff.nasa.gov	-	-
2011-856	2455842.93	2011 Oct 8 1025:01	Black Brant IX	-	MASA 36. 2250G	0.000	GSFC	SS	SS	BU/Chakrabarti	Opt Astron	ww.wff.nasa.gov	-	-
2011-849	2455846.39	2011 Oct 11 2115:00	Terrier Improved Orion	-	MASA 41. 0940E	0.000	GSFC	SS	SS	UCD/Robertson	Meteor dust	ww.wff.nasa.gov	-	-
2011-850	2455848.90	2011 Oct 13 1350:00	Terrier Improved Orion	-	MASA 41. 0930E	0.000	GSFC	SS	SS	UCD/Robertson	Meteor dust	ww.wff.nasa.gov	-	-
2011-854	2455871.79	2011 Nov 6 0700:00	Black Brant IX	-	MASA 36. 2640H	0.000	GSFC	SS	SS	UML/GSFC/McCammon	XR Astron	ww.wff.nasa.gov	-	-
2011-874	2455905.94	2011 Dec 10 1030:00	Black Brant IX	-	MASA 36. 2740H	0.000	GSFC	SS	SS	UCD/Cash,Zeiger	XR Astron	ww.wff.nasa.gov	-	-
2011-870	2455910.50	2011 Dec 15	Terrier Oriole	?	Aegle Target	0.000	USNAEG	MS	MS	-	Target	Sandia2011	-	-
2012-801	2455938.06	2012 Jan 11 1325:00	Terrier Imp Malemate	2	MASA 12. 074GT	0.000	GSFC	SS	SS	WFF/Hall	Test	ww.wff.nasa.gov	-	-
2012-806	2455976.74	2012 Feb 19 0541:07	Black Brant IX	-	MASA 36. 2730E	0.000	GSFC	SS	SS	CHM/Powell	Auroral	spaceref.com	-	-
2012-810	2456008.88	2012 Mar 22 0900	Black Brant IX	-	MASA 46. 0040E	0.000	GSFC	SS	SS	CITY/Bock	IR Astron	ww.wff.nasa.gov	-	-
2012-811	2456013.87	2012 Mar 27 0858:00	Terrier Rk 70 Oriole	-	MASA 46. 0020E	0.000	GSFC	SS	SS	CLEW/Larsen	Aeron	ww.wff.nasa.gov	-	-
2012-812	2456013.88	2012 Mar 27 0900:40	Terrier Imp Malemate	1	MASA 41. 0970E	0.000	GSFC	SS	SS	CLEW/Larsen	Aeron	ww.wff.nasa.gov	-	-
2012-813	2456013.88	2012 Mar 27 0900:40	Terrier Rk 12 Imp Orion	-	MASA 46. 0030E	0.000	GSFC	SS	SS	CLEW/Larsen	Aeron	ww.wff.nasa.gov	-	-
2012-814	2456013.88	2012 Mar 27 0902:00	Terrier Imp Malemate	2	MASA 41. 0930E	0.000	GSFC	SS	SS	CLEW/Larsen	Aeron	ww.wff.nasa.gov	-	-
2012-815	2456013.88	2012 Mar 27 0903:20	Terrier Rk 70 Imp Orion	-	PAC target	0.000	ADA	MS	MS	-	Target	raytheon.com	-	-
2012-817	2456045.50	2012 May 1	Terrier Orion	?	-	0.000	AFRL	AS	AS	AFRL/DSTO/MASA/	Hypersonic	ANST120514-15	-	-
2012-820	2456057.76	2012 May 10 0618	Terrier Terrier Oriole	-	Aegle FTW16E2a Targ	0.000	ADA	MS	MS	WFF/Koehler	Target	mda.mil	-	-
2012-829	2456099.94	2012 Jun 21 1040	Terrier Rk 12 Imp Orion	-	MASA 41. 1010U	0.000	GSFC	SS	SS	WFF/Koehler	Test	ww.wff.nasa.gov	-	-
2012-831	2456102.31	2012 Jun 23 1930	Black Brant IX	-	MASA 36. 2800E	0.000	GSFC	SS	SS	USFC/Cirrain	Solar EUV	lasp.colorado.edu	-	-
2012-834	2456116.28	2012 Jun 5 1649:59	Black Brant IX	-	MASA 36. 294NS	0.000	GSFC	SS	SS	USFC/Cirrain	Solar EUV	ww.wff.nasa.gov	-	-
2012-838	2456120.28	2012 Jun 11 1860	Black Brant IX	-	MASA 36. 272NS	0.000	GSFC	SS	SS	USFC/Cirrain	Solar EUV	ww.wff.nasa.gov	-	-
2012-840	2456133.30	2012 Jun 24 1917	Black Brant IX	-	MASA 36. 263US	0.000	GSFC	SS	SS	USCLA/Judge	Solar EUV	ww.wff.nasa.gov	-	-
2012-847	2456162.70	2012 Sep 12 0445:00	Terrier Lynx	-	MASA 46. 0040G	0.000	ADA	MS	MS	WFF/Asonova	Target	WRS2012	-	nasa.spaceflight.com
2012-852	2456191.97	2012 Sep 21 1116:30	Terrier Imp Malemate	2	MASA 46. 0040G	0.000	GSFC	MS	MS	WFF/Asonova	Edu/Tech	ww.wff.nasa.gov	-	-
2012-861	2456225.90	2012 Oct 29 29:00	Terrier Oriole	-	FTI-01 Aegle Target	0.000	ADA	MS	MS	UCB/Krueker	Target	ww.mda.mil	-	-
2012-865	2456234.25	2012 Nov 2 1755:00	Black Brant IX	-	MASA 36. 285US	0.000	GSFC	SS	SS	USFC/Cirrain	Solar X	ww.wff.nasa.gov	-	-
2012-866	2456252.96	2012 Nov 21 1055:13	Black Brant IX	-	MASA 36. 2800G	0.000	GSFC	SS	SS	UML/MI/Goetz	UY Astron	ww.wff.nasa.gov	-	-
2012-869	2456274.72	2012 Dec 13 0520	Black Brant IX	-	MASA 36. 283UH	0.000	GSFC	SS	SS	UML/MI/Goetz	XR Astron	ww.wff.nasa.gov	-	-
2013-806	2456322.45	2013 Jan 29 2250	Terrier Rk 70 Imp Orion	-	MASA 41. 107GT	0.000	GSFC	SS	SS	WFF/WFF/Mest	Aeron/Tech	ww.wff.nasa.gov	-	-
2013-809	2456359.27	2013 Feb 15 1834:31	Terrier Improved Orion	-	MASA 41. 104GT	0.000	GSFC	SS	SS	WFF/Asonova	Target	facebook/MGSNMF	-	-
2013-821	2456365.01	2013 Apr 11 1269	Terrier Lynx	-	MASA 46. 0040G	0.000	ADA	MS	MS	UCB/Krueker	Target	ww.wff.nasa.gov	-	-
2013-826	2456403.53	2013 Apr 21 0800	Black Brant IX	-	MASA 36. 2710U	0.000	GSFC	SS	SS	USFC/Cirrain	Solar EUV	ww.wff.nasa.gov	-	-
2013-827	2456406.23	2013 Apr 23 1730	Black Brant IX	-	MASA 41. 100DR	0.000	GSFC	SS	SS	AFRL/Catton	Active plasma Ss	ww.wff.nasa.gov	-	-
2013-829	2456413.52	2013 May 1 0738	Terrier Improved Orion	-	MASA 36. 286US	0.000	GSFC	SS	SS	JHU/McCandless	UY Astron	ww.wff.nasa.gov	-	-
2013-830	2456415.62	2013 May 7 0739:00	Terrier Oriole	-	MASA 46. 0090E	0.000	GSFC	SS	SS	UIC/Kudecki	Aeron/release	ww.wff.nasa.gov	-	-
2013-831	2456421.51	2013 May 7 0740:30	Terrier Imp Malemate	-	MASA 46. 0010E	0.000	GSFC	SS	SS	UIC/Kudecki	Aeron/release	ww.wff.nasa.gov	-	-
2013-832	2456421.51	2013 May 9 0723	Terrier Improved Orion	-	MASA 41. 102DR	0.000	GSFC	SS	SS	AFRL/Catton	Active plasma Ss	ww.wff.nasa.gov	-	-
2013-840	2456463.90	2013 Jun 20 0930	Terrier Rk 70 Imp Orion	-	MASA 41. 1060U	0.000	GSFC	SS	SS	USFC/Pratt	Edu	ww.wff.nasa.gov	-	-
2013-846	2456476.11	2013 Jul 8 1431:40	Black Brant IX	-	MASA 36. 283US	0.000	GSFC	SS	SS	UIC/Korendyke	Solar UV	ww.wff.nasa.gov	-	-
2013-855	2456513.52	2013 Aug 6 0510	Terrier Imp Malemate	1	MASA 46. 0030U	0.000	ADA	MS	MS	UCB/Koehler	Edu	ww.wff.nasa.gov	-	-
2013-859	2456519.75	2013 Oct 1 0955	Terrier Terrier Oriole	?	Aegle FTW-20 target	0.000	ADA	MS	MS	UCB/Koehler	Target	mda.mil	-	-
2013-892	2456599.75	2013 Oct 21 1800	Black Brant IX	-	MASA 36. 294US	0.000	GSFC	SS	SS	UIC/USC/UCCammon	XR Astron	ww.wff.nasa.gov	-	-
2013-893	2456599.75	2013 Oct 21 1800	Black Brant IX	-	MASA 36. 296U	0.000	GSFC	SS	SS	JHU/McCandless	UY Astron	ww.wff.nasa.gov	-	-
2013-894	2456623.58	2013 Nov 20 0926:00	Black Brant IX	-	MASA 36. 2810U	0.000	GSFC	SS	SS	BU/Clarke	UY Astron	ww.wff.nasa.gov	-	-
2013-899	2456625.99	2013 Nov 20 0926:00	Black Brant IX	-	FTX-18 Target	0.000	ADA	MS	MS	MDA/	Target	ww.wff.nasa.gov	-	-
2013-900	2456625.99	2013 Nov 20 0926:00	Black Brant IX	-	FTX-18 Target	0.000	ADA	MS	MS	MDA/	Target	ww.wff.nasa.gov	-	-
2014-302	2456672.98	2014 Jan 15 0909:00	Terrier Improved Orion	-	FTX-18 Target	0.000	ADA	MS	MS	MDA/	Target	ww.wff.nasa.gov	-	-
2014-303	2456672.98	2014 Jan 15 0909:00	Terrier Improved Orion	-	FTX-18 Target	0.000	ADA	MS	MS	MDA/	Target	ww.wff.nasa.gov	-	-
2014-304	2456716.97	2014 Jan 31 0951:40	Terrier Improved Orion	-	MASA 36. 281E	0.000	GSFC	SS	SS	USC/USC/USC	UY Astron	ww.wff.nasa.gov	-	-
2014-306	2456750.93	2014 Mar 3 0800:00	Black Brant IX	3	MASA 36. 283US	0.000	GSFC	SS	SS	UNZ/Harris	UY Astron	ww.wff.nasa.gov	-	-
2014-327	2456800.10	2014 Mar 24 0800:00	Terrier Oriole	-	MASA 36. 283US	0.000	GSFC	SS	SS	UNZ/Harris	UY Astron	ww.wff.nasa.gov	-	-
2014-331	2456801.92	2014 Mar 24 0735:00	Terrier Terrier Oriole	-	MASA 36. 285UG	0.000	GSFC	SS	SS	UCD/France	UY Astron	ww.wff.nasa.gov	-	-
2014-334	2456824.92	2014 Mar 26 1121:00	Black Brant IX	-	MASA 41. 1100U	0.000	GSFC	SS	SS	USFC/Cirrain	Edu	ww.wff.nasa.gov	-	-
2014-411	2456894.96	2014 Jul 2 0836:00	Terrier Imp Malemate	1	MASA 46. 007GP	0.000	GSFC	SS	SS	WFF/Asonova	Tech	ww.wff.nasa.gov	-	-
2014-842	2456963.05	2014 Jul 22 1313	Black Brant IX	3	MASA 36. 289US	0.000	GSFC	SS	SS	NSC/USC/USC	Tech	ww.wff.nasa.gov	-	-
2014-845	2456963.05	2014 Aug 28 0900:30	Terrier Lynx	-	MASA 36. 289US	0.000	GSFC	SS	SS	NSC/USC/USC	Tech	ww.wff.nasa.gov	-	-
2014-848	2456997.98	2014 Aug 28 0900:30	Terrier Oriole	-	MASA 36. 288US	0.000	GSFC	SS	SS	NSC/USC/USC	Tech	ww.wff.nasa.gov	-	-
2014-858	2456997.98	2014 Aug 28 0900:30	Terrier Oriole	-	MASA 36. 288US	0.000	GSFC	SS	SS	NSC/USC/USC	Tech	ww.wff.nasa.gov	-	-
2014-860	2456997.98	2014 Aug 28 0900:30	Terrier Oriole	-	MASA 36. 288US	0.000	GSFC	SS	SS	NSC/USC/USC	Tech	ww.wff.nasa.gov	-	-
2014-871	2456997.98	2014 Aug 28 0900:30	Terrier Oriole	-	MASA 36. 288US	0.000	GSFC	SS	SS	NSC/USC/USC	Tech	ww.wff.nasa.gov	-	-
2014-874	2456997.98	2014 Aug 28 0900:30	Terrier Oriole	-	MASA 36. 288US	0.000	GSFC	SS	SS	NSC/USC/USC	Tech	ww.wff.nasa.gov	-	-
2014-877	2457003.30	2014 Dec 11 1911	Terrier Oriole	-	Aegle FTW-25 Target	0.000	ADA	MS	MS	SHR1/Hassler	Target	mda.mil	-	-
2015-501	2457004.88	2015 Jan 26 0913:01	Black Brant IX	-	MASA 36. 285US	0.000	GSFC	SS	SS	UCB/Krueker	Solar X	ww.wff.nasa.gov	-	-
2015-502	2457004.88	2015 Jan 26 0913:01	Black Brant IX	-	MASA 46. 0090E	0.000	GSFC	SS	SS	UAF/Cosillas	Aeron	ww.wff.nasa.gov	-	-
2015-503	2457004.88	2015 Jan 26 0913:01	Terrier Improved Orion	-	MASA 41. 111UE	0.000	GSFC	SS	SS	CLEW/Larsen	Aeron	ww.wff.nasa.gov	-	-
2015-504	2457004.91	2015 Jan 26 0946:01	Terrier Imp Malemate	1	MASA 46. 010UE	0.000	GSFC	SS	SS	UAF/Cosillas	Aeron	ww.wff.nasa.gov	-	-
2015-509	2457007.65	2015 Feb 24 0330:00	Terrier Improved Orion	-	MASA 41. 112UE	0.000	GSFC	SS	SS	UAF/Cosillas	Aeron	ww.wff.nasa.gov	-	-
2015-810	2457077.65	2015 Feb 24 0330:08	Terrier Oriole	-	FTY-19 Target	0.000	GSFC	SS	SS	MDA/	Target	RRS2015	-	-
2015-811	2457077.65	2015 Feb 24 0330:20	Terrier Oriole	-	FTY-19 Target	0.000	GSFC	SS	SS	MDA/	Target	RRS2015	-	-
2015-812	2457079.02	2015 Feb 24 1226	Terrier Oriole	-	FTY-19 Target	0.000	GSFC	SS	SS	MDA/	Target	RRS2015	-	-
2015-825	2457130.96	2015 Apr 18 1101	Terrier Imp Malemate	1	MASA 46. 0080U	0.000	GSFC	SS	SS	AFRL/Pederson	Active plasma	ww.wff.nasa.gov	-	-
2015-830	2457144.95	2015 Apr 18 1101	Black Brant IX	-	MASA 36. 2920H	0.000	GSFC	SS	SS	UIC/Koehler	Edu	ww.wff.nasa.gov	-	-
2015-834	2457164.30	2015 May 21 1915	Black Brant IX	-	MASA 36. 3000U	0.000	GSFC	SS	SS	UIC/Koehler	XR Astron	ww.wff.nasa.gov	-	-
2015-835	2457168.92	2015 May 21 1915	Black Brant IX	-	MASA 36. 3000U	0.000	GSFC	SS	SS	UIC/Koehler	XR Astron	ww.wff.nasa.gov	-	-
2015-838														



Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Orb_Pay	Agency	Launch	Launch_Code	Group	Category	LTCite	Cite	Notes
2016-S09	2457440.68	2016 Feb 22 0415	Black Brant IX	-	MASA 36. 297UG	0.000	GSFC	SS	SS	UCD/France	UV Astron	ww.nasa.gov	-	-
2016-S10	2457449.12	2016 Mar 1 1450:00	Terrier Imp Malemate	-	MASA 46. 011GP	0.000	GSFC	SS	SS	WFF/Milliner	Tech	ww.nasa.gov	-	-
2016-S11	2457455.00	2016 Mar 7 1205	Terrier Improved Orion	-	MASA 41.114HP	0.000	GSFC	SS	SS	ARC/DeLeon	Tech	ww.nasa.gov	-	-
2016-S36	2457641.29	2016 Jun 1 1900	Black Brant IX	-	MASA 36. 3180E	0.000	GSFC	SS	SS	UCD/Woods	Solar UV	ww.nasa.gov	-	-
2016-S40	2457663.92	2016 Jun 24 1006	Terrier Improved Orion	-	MASA 41.1160U	0.000	GSFC	SS	SS	UCD/Koehler	Edu	ww.nasa.gov	-	-
2016-S46	2457698.67	2016 Jul 19 0405	Terrier Improved Orion	-	ROTEX-T	0.000	DLR	SS	SS	DLR/AMCHR/	Hypersonic test	d.r.-de	-	-
2016-S47	2457697.27	2016 Jul 27 1826	Black Brant IX	-	MASA 36. 314MS	0.000	GSFC	SS	SS	NSFC/Cirrain	Solar EDV	ww.nasa.gov	-	-
2016-S49	2457617.98	2016 Aug 17 1133:30	Terrier Imp Malemate	-	MASA 46. 0140U	0.000	GSFC	SS	SS	UCD/Koehler	Edu	ww.nasa.gov	-	-
2016-S49	2457781.07	2017 Jan 27 1345	Black Brant IX	-	MASA 36. 3020E	0.000	GSFC	SS	SS	VAP/Bailey	Aeron	ww.nasa.gov	-	-
2017-S07	2457806.93	2017 Feb 4 0830	Terrier Terrier Oriole	-	Aegle 3FM-01 Target	0.000	MDA/AMT	MS	MS	DMRT/Lynch	Target	mda.mil	-	-
2017-S15	2457806.93	2017 Feb 22 1014	Black Brant IX	-	MASA 36. 3030E	0.000	GSFC	SS	SS	GSFC/Pfaff	Auroral	ww.nasa.gov	-	-
2017-S16	2457814.74	2017 Mar 2 0641:00	Black Brant IX	-	MASA 36. 3010E	0.000	GSFC	SS	SS	GSFC/Pfaff	Auroral	ww.nasa.gov	-	-
2017-S17	2457814.74	2017 Mar 2 0642:30	Black Brant IX	-	MASA 36. 3060E	0.000	GSFC	SS	SS	GSFC/Pfaff	Auroral	ww.nasa.gov	-	-
2017-S18	2457814.63	2017 Mar 2 0750:00	Black Brant IX	-	MASA 36. 3040E	0.000	GSFC	SS	SS	DMRT/Lynch	Auroral	ww.nasa.gov	-	-
2017-S51	2457627.60	2017 Mar 15	Terrier Oriole	?	AMR Target	0.000	MDA/AMT	MS	MS	SMR/Hassler	Target	kratosdefense.com	-	-
2017-S29	2457679.27	2017 May 5 1624:58	Black Brant IX	-	MASA 36. 3090S	0.000	GSFC	SS	SS	WFF/Hesh	Solar EDV	ww.nasa.gov	-	-
2017-S33	2457689.91	2017 May 16 0945:00	Black Brant IX	-	MASA 36. 317GP	0.000	GSFC	SS	SS	UCD/France	Tech	ww.nasa.gov	-	-
2017-S46	2457926.90	2017 Jun 22 0520	Terrier Improved Orion	-	Aegle 3FM-02 Target	0.000	MDA/AMT	MS	MS	UCD/Koehler	Target	mda.mil	-	-
2017-S46	2457926.90	2017 Jun 22 0520	Terrier Improved Orion	-	MASA 41.1210U	0.000	GSFC	SS	SS	UCD/France	Edu	ww.nasa.gov	-	-
2017-S52	2457931.72	2017 Jun 27 0510	Black Brant IX	-	MASA 36. 3230G	0.000	GSFC	SS	SS	WFF/Hall	UV Astron	ww.nasa.gov	-	-
2017-S50	2457933.85	2017 Jun 29 0825:00	Terrier Imp Malemate	-	MASA 46. 015GT	0.000	GSFC	SS	SS	UCD/Koehler	Tech/Aeron	ww.nasa.gov	-	-
2017-S63	2457976.90	2017 Aug 13 0930:00	Black Brant IX	-	MASA 36. 3210E	0.000	GSFC	SS	SS	UCD/Koehler	Edu	ww.nasa.gov	-	-
2017-S81	2458005.98	2017 Sep 9 1134:00	Black Brant IX	-	MASA 36. 3210E	0.000	GSFC	SS	SS	CDRM/Hysell	Ionos	ww.nasa.gov	-	-
2017-S82	2458005.99	2017 Sep 9 1139:03	Terrier Malemate	-	MASA 29. 0420E	0.000	GSFC	SF	SF	CDRM/Hysell	Ionos	ww.nasa.gov	-	-
2017-H05	2458029.95	2017 Oct 3 1045	Black Brant IX	-	MASA 36. 3260R	0.000	GSFC	SS	SS	JPL/Clark	Tech	ww.nasa.gov	-	-
2017-S87	2458021.60	2017 Sep 25	Terrier Oriole	-	-	0.000	USMAG	MS	MS	thalasgroup.com	Target	ww.nasa.gov	-	-
2017-S88	2458041.60	2017 Oct 15	Terrier Oriole	-	-	0.000	USMAG	MS	MS	thalasgroup.com	Target	navy.mil	-	-
2017-S95	2458056.92	2017 Oct 30 1000:00	Black Brant IX	-	MASA 36. 311UG	0.000	GSFC	SS	SS	UCD/Green	UV Astron	ww.nasa.gov	-	-
2018-S02	2458136.01	2018 Jun 19 1217	Black Brant IX	-	MASA 36. 3290H	0.000	GSFC	SS	SS	UNLMT/Galeazzi	UV Astron	ww.nasa.gov	-	-
2018-S03	2458145.09	2018 Jun 26 1411:15	Terrier Improved Orion	-	MASA 41.119CE	0.000	GSFC	SS	SS	ASTRA/Assem	Aeron	ww.nasa.gov	-	-
2018-S04	2458145.12	2018 Jun 26 1448:00	Terrier Improved Orion	-	MASA 41.120CE	0.000	GSFC	SS	SS	ASTRA/Assem	Aeron	ww.nasa.gov	-	-
2018-S05	2458145.12	2018 Jun 26 1449:30	Terrier Improved Orion	-	MASA 41.121CE	0.000	GSFC	SS	SS	ASTRA/Assem	Aeron	ww.nasa.gov	-	-
2018-S14	2458202.95	2018 Mar 25 1051	Terrier Imp Malemate	-	MASA 46. 0190U	0.000	GSFC	SS	SS	WFF/Yleria	Edu	ww.nasa.gov	-	-
2018-H03	2458209.19	2018 Mar 31 1619	Black Brant IX	-	MASA 36. 3270R	0.000	GSFC	SS	SS	JPL/Clark	Tech	ww.nasa.gov	-	-
2018-S19	2458212.94	2018 Apr 4 1040	Black Brant IX	-	MASA 36. 3300H	0.000	GSFC	SS	SS	PSU/McIntaffer	UV Astron	ww.nasa.gov	-	-
2018-S65	2458225.20	2018 Apr 16 1647	Black Brant IX	-	MASA 36. 3330G	0.000	GSFC	SS	SS	UCD/France	UV Astron	ww.nasa.gov	-	-
2018-S66	2458261.50	2018 May 23	Terrier Malemate	-	Sandia HRT SHOT 1	0.000	SAND	MS	MS	RSFC/Linebarger	Solar EDV	ww.nasa.gov	-	sandia.gov
2018-S34	2458266.29	2018 May 29 1854	Black Brant IX	-	MASA 36. 342MS	0.000	GSFC	SS	SS	SBD/Creemore	Tech	ww.nasa.gov	-	-
2018-S58	2458277.14	2018 Jun 14 0517:00	Black Dager	-	MASA 12. 0912E-DR	0.000	GSFC/SHMC	SS	SS	UCD/Woods	Test	ww.nasa.gov	-	-
2018-S59	2458286.29	2018 Jun 18 1900:00	Black Brant IX	-	MASA 36. 3560E	0.000	GSFC	SS	SS	UCD/Woods	Solar UV	ww.nasa.gov	-	-
2018-S40	2458290.99	2018 Jun 21 0830	Terrier Improved Orion	-	MASA 36. 3281U	0.000	GSFC	SS	SS	UCD/Koehler	Edu	ww.nasa.gov	-	-
2018-S42	2458322.75	2018 Jul 23 0600	Black Brant IX	-	MASA 36. 3450U	0.000	GSFC	SS	SS	UCD/Figueroa	UV Astron	ww.nasa.gov	-	-
2018-S44	2458342.75	2018 Aug 14 1013	Terrier Imp Malemate	-	MASA 36. 3230U	0.000	GSFC	SS	SS	UCD/Koehler	Edu	ww.nasa.gov	-	-
2018-S44	2458342.75	2018 Aug 14 1013	Black Brant IX	-	MASA 36. 3230U	0.000	GSFC	SS	SS	JPL/Clark	Edu	ww.nasa.gov	-	-
2018-S45	2458359.59	2018 Sep 7 1530	Black Brant IX	-	MASA 36. 3250E	0.000	GSFC	SS	SS	UMI/Glesener	Tech	ww.nasa.gov	-	-
2018-S50	2458373.66	2018 Sep 12 0837	Terrier Oriole	?	Aegle 3FM-03 Target	0.000	USMAG	MS	MS	UCD/Green	Target	ww.nasa.gov	-	-
2018-S71	2458455.96	2018 Dec 7 1106	Black Brant IX	-	MASA 36. 3400E	0.000	GSFC	SS	SS	GSFC/Boylard	Auroral	ww.nasa.gov	-	-
2018-S71	2458455.96	2018 Dec 7 1106	Black Brant IX	-	MASA 36. 3400E	0.000	GSFC	SS	SS	GSFC/Boylard	Auroral	ww.nasa.gov	-	-
2018-S80	2458470.90	2018 Dec 13 0743:00	Black Brant IX	4	MASA 46. 0181U	0.000	GSFC	SS	SS	UCD/Green	UV Astron	ww.nasa.gov	-	-
2018-S17	2458496.96	2019 Jun 18 0943:00	Terrier Imp Malemate	-	MASA 36. 3230S	0.000	GSFC	SS	SS	NSFC/McIntaffer	Aeron	ww.nasa.gov	-	-
2019-S25	2458586.20	2019 Apr 11 1651	Black Brant IX	-	MASA 36. 343GT?	0.000	SAND	MS	MS	SAND/	Solar UV	ww.nasa.gov	-	-
2019-S26	2458597.50	2019 Apr 23	Terrier Malemate	-	Sandia HRT SHOT	0.000	SAND	MS	MS	SAND/	Target	sandia.gov	-	sandia.gov
2019-S26	2458597.50	2019 Apr 23	Terrier Malemate	-	Sandia HRT SHOT	0.000	SAND	MS	MS	SAND/	Target	sandia.gov	-	sandia.gov
2019-S29	2458653.98	2019 Jun 19 1128	Black Brant IX	-	MASA 36. 3440E	0.000	GSFC	SS	SS	COB/Hysell	Ionos/Release	ww.nasa.gov	-	-
2019-S31	2458654.98	2019 Jun 19 1133	Black Brant IX	-	MASA 41. 1260U	0.000	GSFC	SS	SS	COB/Hysell	Ionos	ww.nasa.gov	-	-
2019-S43	2458706.75	2019 Jun 20 0930	Terrier Improved Orion	-	MASA 41. 1260U	0.000	GSFC	SS	SS	UCD/Koehler	Edu	ww.nasa.gov	-	-
2019-S44	2458707.51	2019 Aug 12 0944	Black Brant IX	-	MASA 46. 0201U	0.000	GSFC	SS	SS	UCD/Koehler	UV Astron	ww.nasa.gov	-	-
2019-S56	2458744.90	2019 Sep 18 0930?	Black Brant IX	-	MASA 36. 3400B	0.000	GSFC	SS	SS	UCD/Koehler	Edu	ww.nasa.gov	-	-
2019-S57	2458757.25	2019 Sep 30 1804	Black Brant IX	-	MASA 36. 3200S	0.000	GSFC	SS	SS	NSU/Aschborg	Tech	ww.nasa.gov	-	-
2019-S64	2458764.12	2019 Oct 7 1500	Black Brant IX	-	MASA 36. 343GT?	0.000	GSFC	SS	SS	GSFC/Smith	Solar UV	ww.nasa.gov	-	-
2019-S82	2458775.10	2019 Oct 19	Black Dager	-	Black Dager	0.000	SWDC	MS	MS	MDA/	Micrograv	ww.nasa.gov	-	-
2019-S65	2458781.60	2019 Oct 25 0000	Terrier Imp Malemate	-	MASA 46. 020GT	0.000	GSFC	SS	SS	WFF/Hesh	Target	ww.nasa.gov	-	-
2019-S66	2458784.90	2019 Oct 28 0430	Black Brant IX	-	MASA 36. 3520G	0.000	GSFC	SS	SS	HU/McCordliss	Tech	ww.nasa.gov	-	-
2019-S73	2458813.92	2019 Dec 26 0743	Terrier Imp Malemate	-	MASA 46. 0291E	0.000	ABR	SS	SS	GSLO/	UV Astron	ww.nasa.gov	-	-
2019-S80	2458827.90	2019 Dec 10 0930	Black Brant IX	-	MASA 36. 3490E	0.000	GSFC	SS	SS	CLEW/Larson	Ionos	ww.nasa.gov	-	-
2020-S12	2458876.90	2020 Feb 27 1340	Black Brant IX	-	MASA 36. 3560E	0.000	GSFC	SS	SS	VAP/Bailey	Ionos	ww.nasa.gov	-	-
2020-S29	2458900.07	2020 Feb 20 1337	Black Dager	-	Black Dager	0.000	SWDC	MS	MS	MDA/	Aeron	ww.nasa.gov	-	-
2020-S42	2459061.50	2020 Aug 20	Terrier Improved Orion	-	Pacific Dragon 2020	0.000	MDA	MS	MS	-	Target	callindependent	-	mda.mil
2020-S31	2459101.25	2020 Aug 20	Black Dager	-	Black Dager	0.000	SWDC	MS	MS	-	Target	mda.mil	-	-
2020-S28	2459123.50	2020 Sep 8 1800	Black Brant IX	-	MASA 36. 3565G	0.000	GSFC	SS	SS	GSFC/Smith	Physics	defensanews.com	-	-
2020-S32	2459123.50	2020 Oct 1	Black Dager	-	Black Dager	0.000	SWDC	MS	MS	-	Target	mda.mil	-	-
2020-S37	2459155.94	2020 Nov 2 1040	Black Brant IX	-	MASA 36. 3680G	0.000	GSFC	SS	SS	UCD/Green	UV Astron	ww.nasa.gov	-	-
2021-S18	2459276.90	2021 Mar 3	Terrier Terrier Oriole	-	APRL Chem Release	0.000	AFRL	SS	SS	UMZ/Harris	Ionos	ww.nasa.gov	-	-
2021-S22	2459323.85	2021 Apr 19 0830	Black Brant IX	-	MASA 36. 3240S	0.000	GSFC	SS	SS	GSFC/Daw	Solar UV	ww.nasa.gov	-	-
2021-S25	2459383.27	2021 May 18 1830	Black Brant IX	-	MASA 36. 3226S	0.000	GSFC	SS	SS	-	Target	ww.nasa.gov	-	-
2021-S29	2459383.50	2021 May	Coyote	-	MASA 36. 3226S	0.000	GSFC	SS	SS	-	Target	ww.nasa.gov	-	-
2021-S29	2459386.50	2021 May 26	Terrier Oriole	-	T4-R Target	0.000	MDA	MS	MS	UCB/Bonnell	Target			

Launch

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Orb_Pay	Agency	Launch_Code	Group	Category	LTCite	Cite	Notes
2021-850	2459426.26	2021 Jul 30 1820	Black Brant IX	-	MASA 36. 319MS	0.000	GSFC	SS	NSFC/Winebarger	Solar X	Webcast	-	-
2021-854	2459446.38	2021 Aug 19 2100:00	Terrier Imp Malemute	-	MASA 46. 0300U	0.000	GSFC	SS	UCD/Koehler	Edu	Youtube.com	-	-
2021-858	2459467.23	2021 Sep 9 1725	Black Brant IX	-	MASA 36. 3630US	0.000	GSFC	SS	UCD/Woods	Solar EDV	www.nasa.gov	-	-
2021-860	2459469.42	2021 Sep 11 2207:30	Terrier Imp Malemute	-	MASA 46. 033AR	0.000	GSFC	SS	SAMD/Rickenzie	Tech	Youtube.com	-	-
2021-868	2459496.24	2021 Oct 8 1740	Black Brant IX	-	MASA 36. 374MS	0.000	GSFC	SS	NSFC/Rickenzie	Solar UV	nasa.gov	-	-
2021-871	2459507.50	2021 Oct 20	Terrier Malemute	-	H4H 1	0.000	SAMD	SS	SAMD/	Hypersonic	Wire	-	-
2021-872	2459507.50	2021 Oct 20	Terrier Malemute	-	H4H 2	0.000	SAMD	SS	SAMD/	Hypersonic	Wire	-	-
2021-873	2459507.50	2021 Oct 20	Terrier Malemute	-	H4H 3	0.000	SAMD	SS	SAMD/	Hypersonic	Wire	-	-
2021-885	2459526.69	2021 Nov 8 0925	Black Brant IX	-	MASA 36. 3730G	0.000	GSFC	SS	UCD/France	Hypersonic	www.nasa.gov	-	-
2021-886	2459526.69	2021 Nov 8 0925	Black Brant IX	-	MASA 36. 3630UH	0.000	GSFC	SS	UCD/France	Hypersonic	www.nasa.gov	-	-
2022-801	2459568.71	2022 Jan 9 0500	Black Brant IX	-	MASA 36. 3610E	0.000	GSFC	SS	UNLAMI/Glaeazzi	XR Astron	www.nasa.gov	-	-
2022-817	2459643.98	2022 Mar 5 1127	Black Brant IX	-	MASA 36. 307DS	0.000	GSFC	SS	NSFC/Halford	Auroral	www.nasa.gov	-	-
2022-818	2459648.27	2022 Mar 9 1625	Black Brant IX	-	IFRC Target	0.000	MDA	SS	IRL/Run	Solar UV	www.nasa.gov	-	-
2022-823	2459660.50	2022 Mar 12	Black Dagger	-	THAD FTI-21 Target	0.000	MDA	SS	AFRL/Holden	Target	mda.mil	-	-
2022-819	2459660.47	2022 Mar 21 2312	Terrier Imp Malemute	-	THAD FTI-21 Target	0.000	MDA	SS	AFRL/Holden	Target	mda.mil	-	-
2022-820	2459667.50	2022 Mar 29	Black Dagger	-	MASA 46. 0310E	0.000	MDA	SS	CLEM/Keeper	Hypersonic	www.nasa.gov	-	-
2022-825	2459677.03	2022 Apr 7 1247	Terrier Imp Malemute	-	MASA 36. 3600E	0.000	GSFC	SS	CLEM/Keeper	Auroral	www.nasa.gov	-	-
2022-826	2459677.03	2022 Apr 7 1250	Black Brant IX	-	MASA 47. 0010E	0.000	GSFC	SS	GSFC/Collinson	Auroral	www.nasa.gov	-	-
2022-831	2459710.56	2022 May 11 0131	Orion IIIA	-	MASA 41. 1310U	0.000	GSFC	SS	UCD/Koehler	Plasma	www.nasa.gov	-	-
2022-854	2459754.90	2022 Jun 24 0935	Terrier Improved Orion	-	MASA 46. 0290E	0.000	GSFC	SS	UCD/Koehler	Edu	www.nasa.gov	-	-
2022-857	2459757.10	2022 Jun 26 1429	Black Brant IX	-	MASA 36. 3670H	0.000	GSFC	SS	UNL/GSFC/McChannon	XR Astron	www.vfr.nasa.gov	-	-
2022-858	2459767.07	2022 Jul 6 1347	Black Brant IX	-	MASA 36. 3690G	0.000	GSFC	SS	UCD/France	UV Astron	www.vfr.nasa.gov	-	-
2022-859	2459771.96	2022 Jul 11 1101	Black Brant IX	-	MASA 36. 3500G	0.000	GSFC	SS	UCD/Fleming	UV Astron	www.vfr.nasa.gov	-	-
2022-859	2459800.50	2022 Aug 9	Terrier Oriole	-	Target	0.000	MDA	SS	MDA/	Target	Yahoo.com	-	-
2022-878	2459803.42	2022 Aug 11 2208:32	Terrier Imp Malemute	-	MASA 46. 0360U	0.000	GSFC	SS	UCD/Koehler	Edu	www.nasa.gov	-	-
2022-879	2459813.73	2022 Aug 22 0530	Black Brant IX	-	MASA 36. 3590H	0.000	GSFC	SS	IMU/Figueria	XR Astron	www.nasa.gov	-	-
2022-883	2459815.95	2022 Aug 24 0116:00	Terrier Imp Malemute	-	MASA 46. 0290E	0.000	GSFC	SS	EMU/Barjatya	Ionos	www.nasa.gov	-	-
2022-885	2459846.67	2022 Sep 26 0410	Black Brant IX	-	MASA 36. 3670H	0.000	GSFC	SS	PSU/McIntaffer	XR Astron	www.nasa.gov	-	-
2022-887	2459879.50	2022 Oct 26 1630	Terrier Imp Malemute	-	HOYH 2-1	0.000	SAMD	SS	SAMD/	Hypersonic	Wire	-	-
2022-8106	2459879.50	2022 Oct 27	Terrier Imp Malemute	-	HOYH 2-2	0.000	SAMD	SS	SAMD/	Hypersonic	Wire	-	-
2022-8115	2459899.50	2022 Nov 16	Terrier Oriole	-	14-E Target	0.000	MDA	SS	MDA/	Target	Yahoo.com	-	-
2022-8123	2459899.50	2022 Nov 19	Terrier Oriole	-	SNB Target	0.000	MDA	SS	MDA/	Target	Yahoo.com	-	-
2022-8128	2459904.22	2022 Nov 20 1720:00	Black Brant IX	-	MASA 36. 3590E	0.000	GSFC	SS	UJA/Bounds	Target	www.nasa.gov	-	-
2022-8128	2459904.22	2022 Nov 20 1721:40	Black Brant IX	-	MASA 36. 3590E	0.000	GSFC	SS	UJA/Bounds	Target	www.nasa.gov	-	-
2022-8128	2459904.22	2022 Nov 23 2100:00	Black Brant IX	-	MASA 36. 3640E	0.000	GSFC	SS	UJA/Bounds	Auroral	www.nasa.gov	-	-
2023-806	2460027.38	2023 Mar 23 2102:00	Terrier Improved Orion	-	MASA 41. 1270E	0.000	GSFC	SS	CLEM/Lemacher	Auroral	www.nasa.gov	-	-
2023-809	2460027.38	2023 Mar 23 2102:00	Black Brant IX	-	MASA 36. 3610E	0.000	GSFC	SS	CLEM/Lemacher	Auroral	www.nasa.gov	-	-
2023-812	2460051.71	2023 Apr 17 0903	Black Brant IX	-	MASA 36. 3630G	0.000	GSFC	SS	RIT/Zemcov	XR Astron	www.nasa.gov	-	-
2023-823	2460060.47	2023 Apr 25 2315:00	Terrier Imp Malemute	-	MASA 46. 032AR	0.000	GSFC	SS	WFF/Hesh	Tech	www.nasa.gov	-	-
2023-824	2460066.27	2023 May 5 1650:00	Black Brant IX	-	MASA 36. 3590US	0.000	GSFC	SS	UCD/Woods	Solar EDV	www.nasa.gov	-	-
2023-830	2460122.33	2023 Jun 26 2000	Terrier Oriole	-	MASA 46. 0380U	0.000	MDA	SS	UCD/Woods	Test	air-cosmos.com	-	-
2023-835	2460172.55	2023 Aug 16 1021:00	Terrier Imp Malemute	-	MASA 41. 1320U	0.000	GSFC	SS	UCD/Koehler	Edu	www.nasa.gov	-	-
2023-836	2460172.55	2023 Aug 17 1000:00	Terrier Improved Orion	-	MASA 41. 1320U	0.000	GSFC	SS	UCD/Koehler	Edu	www.nasa.gov	-	-
2023-843	2460207.69	2023 Oct 14 1659	Black Brant IX	-	MASA 36. 387HE	0.000	MDA	SS	UCD/Koehler	Hypersonic	Wire	-	-
2023-844	2460207.69	2023 Oct 14 1659	Black Brant IX	-	MASA 36. 387HE	0.000	MDA	SS	UCD/Koehler	Hypersonic	Wire	-	-
2023-846	2460232.19	2023 Oct 14 1658	Black Brant IX	-	MASA 36. 388HE	0.000	MDA	SS	UCD/Koehler	Hypersonic	Wire	-	-
2023-847	2460232.22	2023 Oct 14 1710	Black Brant IX	-	SNB Target	0.000	MDA	SS	UCD/Koehler	Hypersonic	Wire	-	-
2023-846	2460247.24	2023 Oct 25	Terrier Oriole	-	MASA 36. 371MS	0.000	GSFC	SS	NSFC/Savage	Solar X	www.nasa.gov	-	-
2023-859	2460247.24	2023 Oct 25	Terrier Oriole	-	MASA 36. 3960G	0.000	GSFC	SS	RIT/Zemcov	XR Astron	www.nasa.gov	-	-
2023-859	2460247.24	2023 Oct 25	Terrier Oriole	-	HTE-1	0.000	MDA	SS	RIT/Zemcov	XR Astron	www.nasa.gov	-	-
2023-861	2460256.00	2023 Nov 8 0941:00	Terrier Oriole	-	MASA 41. 1330U	0.000	MDA	SS	WFF/Koehler	Hypersonic	www.nasa.gov	-	-
2023-861	2460256.00	2023 Nov 8 0941:00	Terrier Oriole	-	MASA 41. 1330U	0.000	MDA	SS	WFF/Koehler	Hypersonic	www.nasa.gov	-	-
2023-864	2460265.50	2023 Nov 15	Terrier Imp Mal.	-	H4H #?	0.000	SAMD	SS	SAMD/	Hypersonic	www.nasa.gov	-	-
2023-864	2460265.50	2023 Nov 15	Terrier Imp Mal.	-	H4H #?	0.000	SAMD	SS	SAMD/	Hypersonic	www.nasa.gov	-	-
2023-865	2460265.50	2023 Nov 15	Terrier Imp Mal.	-	H4H #?	0.000	SAMD	SS	SAMD/	Hypersonic	www.nasa.gov	-	-
2023-811	2460409.28	2024 Apr 8 1840:00	Black Brant IX	-	MASA 36. 3920E	0.000	GSFC	SS	EMU/Barjatya	Hypersonic	www.nasa.gov	-	-
2023-814	2460409.28	2024 Apr 8 1925:00	Black Brant IX	-	MASA 36. 3930E	0.000	GSFC	SS	EMU/Barjatya	Hypersonic	www.nasa.gov	-	-
2023-815	2460409.35	2024 Apr 8 2025:00	Black Brant IX	-	MASA 36. 3940E	0.000	GSFC	SS	EMU/Barjatya	Eclipse	www.nasa.gov	-	-
2023-831	2460418.43	2024 Apr 17 2113:00	Black Brant IX	-	MASA 36. 3700E	0.000	GSFC	SS	EMU/Barjatya	Eclipse	www.nasa.gov	-	-
2023-832	2460418.43	2024 Apr 17 2214:00	Black Brant IX	-	MASA 36. 371MS	0.000	GSFC	SS	IMU/Glennier	Solar X	www.nasa.gov	-	-
2023-833	2460435.65	2024 Apr 5 0352:00	Black Brant IX	-	MASA 36. 371MS	0.000	GSFC	SS	NSFC/Savage	Solar X	www.nasa.gov	-	-
2023-838	2460473.50	2024 Jun 12	Terrier Oriole	-	MASA 36. 3960G	0.000	GSFC	SS	RIT/Zemcov	XR Astron	www.nasa.gov	-	-
2023-840	2460481.94	2024 Jun 20 1030	Terrier Oriole	-	HTE-1	0.000	MDA	SS	RIT/Zemcov	XR Astron	www.nasa.gov	-	-
2023-844	2460508.29	2024 Jul 16 1901:00	Terrier Improved Orion	-	MASA 41. 1330U	0.000	MDA	SS	WFF/Koehler	Hypersonic	www.nasa.gov	-	-
2023-848	2460535.92	2024 Jul 13 1000:00	Black Brant IX	-	MASA 36. 385MS	0.000	GSFC	SS	NSFC/Hinabarger	Edu	www.nasa.gov	-	-
2023-850	2460548.67	2024 Aug 26 0400	Terrier Imp Malemute	-	MASA 46. 0420U	0.000	GSFC	SS	WFF/Koehler	Solar X	www.nasa.gov	-	-
2023-853	2460582.31	2024 Sep 3 1921:00	Black Brant IX	-	MASA 36. 3840U	0.000	GSFC	SS	JHU/McCardless	UV Astron	www.nasa.gov	-	-
2023-861	2460682.25	2024 Sep 28 1800	Terrier Oriole	-	MASA 36. 3660US	0.000	GSFC	SS	NSU/Rankelborg	Solar UV	www.nasa.gov	-	-
2023-865	2460682.25	2024 Oct 24 2310	Terrier Oriole	-	JAME	0.000	MDA	SS	-	Target?	Wire	-	-
2023-811	2460682.27	2024 Nov 7 1700?	Coyote	-	-	0.000	MDA	SS	-	Target?	Wire	-	-
2023-812	2460682.27	2024 Nov 7 1700?	Coyote	-	-	0.000	MDA	SS	-	Target?	Wire	-	-
2023-869	2460682.40	2024 Nov 10 2136:00	Black Brant IX	-	MASA 36. 3620E	0.000	GSFC	SS	Clemson/Lehmacher	Target	www.nasa.gov	-	-
2023-870	2460682.40	2024 Nov 10 2138?	Black Brant IX	-	MASA 41. 1280E	0.000	GSFC	SS	Clemson/Lehmacher	Aeron	andoyospace.jp	-	-







Launch_Tag	Launch_JD	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Mission	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee_Km	Range_Km	Dest
1962 E G4H	2457940.42	1962 Oct 2 22:11:30	Thor Delta A	-	345/0013	Explorer 14	EPH B	-	CC	LCTB	-	-	98859	-	-
1962 E EFS	2457947.27	1962 Oct 9 18:35:39	Thor Agena B	-	152/1134	CORONA S5/9046A	ARGON 9	-	V	75-3-4	-	-	472	-	-
1962-A171	2457953.89	1962 Oct 16 09:14:38	Thor DSV-2E	-	366/1136	BLUEGILL DOUBLE PRIME	-	-	JI	LE2	-	-	10	-	-
1962-5428	2457963.18	1962 Oct 26 09:44:05	Thor DSV-2E	-	141	BLUEGILL TRIPLE PRIME	-	-	JI	LE1	-	-	5007	-	-
1962 E KAP	2457964.18	1962 Oct 26 16:14:39	Thor Agena D	-	353/1401	CORONA S4/STARAD	CORONA ROAD FTV 1401	-	CC	75-1-2	-	-	5570	-	-
1962 E LAH	2457965.47	1962 Oct 27 23:15:01	Thor Delta A	-	346/0014	Explorer 15	EPH C	-	CC	LCTB	-	-	17652	-	-
1962 E NU	2457968.84	1962 Oct 31 08:08	Thor Ablestar	-	319/AB012	ANNA 1B	ANNA 1B	-	CC	LCTA	-	-	1197	-	-
1962-5853	2457970.00	1962 Nov 1 11:54:48	Thor DSV-2E	-	226	KINGFISH	-	-	JI	LE2	-	-	5007	-	-
1962 E OMI	2457974.42	1962 Nov 5 22:04:32	Thor Agena B	-	356/1136	CORONA S5/9047	CORONA M-14	-	CC	75-3-4	-	-	407	-	-
1962 E RHD	2457993.42	1962 Nov 24 22:00:54	Thor Agena D	-	367/1135	CORONA S6/9048	CORONA M-15	-	V	75-3-4	-	-	339	-	-
1962 E SIG	2458003.40	1962 Dec 4 21:30:35	Thor Agena D	-	361/1155	CORONA S7/9049	CORONA M-16	-	V	75-1-2	-	-	309	-	-
1962 E THAU	2458011.67	1962 Dec 13 04:07	Thor Agena D	-	365/2351	POPPY 1/ML Comp 2	Relay 1	-	CC	LCTA	-	-	2794	-	-
1962 E UFS	2458012.48	1962 Dec 13 23:00:01	Thor Delta B	-	355/0015	CORONA S6/9050	CORONA M-17	-	CC	LCTA	-	-	391	-	-
1962 E PHI	2458013.39	1962 Dec 14 21:26:07	Thor Agena D	-	369/1156	CORONA S9/9051	CORONA M-18	-	V	75-3-5	-	-	395	-	-
1965-002	2458037.38	1965 Jan 7 21:09:49	Thor Agena D	-	369/1157	OPS O1E0	Syncom 1	-	V	75-3-5	-	-	546	-	-
1965-003	2458046.42	1965 Jan 16 21:59	Thor Agena B	-	359/0016	OPS O1E0	Syncom 1	-	CC	LCTB	-	-	37015	-	-
1965-004	2458074.73	1965 Feb 14 05:58:08	Thor Delta B	-	359/0016	Syncom 1	Syncom 1	-	CC	LCTB	-	-	43	-	-
1965-002	2458089.41	1965 Feb 28 21:48:30	Thor SLV-2A Agena D	-	354/1159	CORONA 60/9052	CORONA M-20	-	V	75-3-5	-	-	48	-	-
1965-002	2458107.38	1965 Mar 15 21:13:01	Thor SLV-2A Agena D	-	360/1164	CORONA 61/LANVARD 1	LANVARD 1	-	V	75-3-4	-	-	1837	-	-
1965-007	2458121.46	1965 Apr 1 23:01:00	Thor Agena D	-	376/1160	CORONA 62/9053	CORONA M-19	-	V	75-3-5	-	-	408	-	-
1965-009	2458122.56	1965 Apr 3 02:00:02	Thor Delta B	-	357/0017	Explorer 17	AE-A	-	CC	LCTA	-	-	923	-	-
1965-007	2458146.34	1965 Apr 26 20:12:57	Thor Agena D	-	372/1411	Explorer 17	ARGON 12	-	CC	75-1-1	-	-	6187	-	-
1965-013	2458156.96	1965 May 7 11:38:03	Thor Delta B	-	366/0018	Telstar 2	Telstar 2	-	CC	LCTB	-	-	10818	-	-
1965-016	2458168.45	1965 May 18 22:21:38	Thor SLV-2A Agena D	-	364/1165	CORONA 64/LANVARD 2	LANVARD 2	-	V	75-3-5	-	-	507	-	-
1965-019	2458195.50	1965 Jun 12 23:58:36	Thor SLV-2A Agena D	-	362/1161	CORONA 65/9054	CORONA M-21	-	V	75-3-4	-	-	421	-	-
1965-021	2458196.10	1965 Jun 19 09:50:01	Thor Delta B	-	379/2353	POPPY 2/ML Comp 3	SURCAL	-	V	75-1-1	-	-	921	-	-
1965-024	2458196.91	1965 Jun 19 09:50:01	Thor Delta B	-	359/0019	Tiros G	Tiros G	-	CC	LCTB	-	-	688	-	-
1965-025	2458207.44	1965 Jun 27 00:37:26	Thor SLV-2A Agena D	-	351/1166	CORONA 66/9056	CORONA M-22	-	V	75-1-2	-	-	4136	-	-
1965-027	2458210.54	1965 Jun 29 22:30	Thor SLV-2A Agena B	-	380/2314	OPS 1440	Ferret 4	-	V	75-3-5	-	-	530	-	-
1965-029	2458229.50	1965 Jul 19 00:00:10	Thor Agena D	-	385/0412	Syncom 2	Syncom 2	-	CC	LCTA	-	-	36873	-	-
1965-031	2458231.11	1965 Jul 26 14:53:00	Thor Delta B	-	370/0020	Syncom 2	Syncom 2	-	CC	LCTA	-	-	466	-	-
1965-032	2458241.50	1965 Jul 31 00:00:26	Thor SLV-2A Agena D	-	372/1167	CORONA 68/LANVARD 3	LANVARD 3	-	V	75-1-2	-	-	436	-	-
1965-034	2458256.52	1965 Aug 25 02:59:58	Thor SLV-2A Agena D	-	357/1162	CORONA 69/1001	CORONA J-1	-	V	75-3-4	-	-	468	-	-
1965-035	2458271.35	1965 Aug 29 20:31:04	Thor SLV-2 Agena D	-	394/1169	CORONA 70/9058A	ARGON 11	-	CC	LCTB	-	-	96	-	-
1965-044	2458290.90	1965 Sep 15 09:59	Thor DSV-2F	-	232	ASSET 1	CORONA J-2	-	CC	LCTB	-	-	366	-	-
1965-037	2458296.46	1965 Sep 23 23:00:00	Thor SLV-2A Agena D	-	359/1163	CORONA 71/1002	CORONA J-2	-	V	75-1-2	-	-	442	-	-
1965-038	2458301.35	1965 Sep 25 02:22	Thor Ablestar	2	379/AB013	Transit VBN-1	Transit VBN-1	-	V	75-1-1	-	-	1180	-	-
1965-042	2458332.39	1965 Oct 29 21:19:04	Thor SLV-2A Agena D	-	360/1601	CORONA 72/9059A	ARGON 6	-	V	75-3-4	-	-	865	-	-
1965-044	2458345.35	1965 Nov 27 02:57:54	Thor SLV-2 Agena D	-	460/0711	CORONA 73/9060	CORONA M-24	-	V	75-3-4	-	-	902	-	-
1965-046	2458360.60	1965 Nov 27 23:00:01	Thor Delta C	-	387/0021	Explorer 18	JIP A	-	CC	LCTB	-	-	180000	-	-
1965-048	2458361.39	1965 Nov 27 23:00:01	Thor SLV-2 Agena D	-	366/1172	CORONA 74/9061	JIP A	-	PA	LCTB	-	-	366	-	-
1965-049	2458364.41	1965 Nov 27 23:00:01	Thor Ablestar	2	389/AB05	Transit VBN-2	Transit VBN-2	-	V	75-1-1	-	-	1027	-	-
1965-054	2458368.40	1965 Dec 21 09:50:00	Thor Delta B	-	359/0022	ASSET 2	CORONA J-5	-	CC	LCTB	-	-	329	-	-
1965-055	2458368.41	1965 Dec 21 09:50:00	Thor Delta B	-	359/0022	ASSET 2	CORONA J-5	-	CC	LCTB	-	-	329	-	-
1965-056	2458368.41	1965 Dec 21 09:50:00	Thor Delta B	-	359/0022	ASSET 2	CORONA J-5	-	CC	LCTB	-	-	329	-	-
1965-058	2458368.41	1965 Dec 21 09:50:00	Thor Delta B	-	359/0022	ASSET 2	CORONA J-5	-	CC	LCTB	-	-	329	-	-
1965-061	2458368.41	1965 Dec 21 09:50:00	Thor Delta B	-	359/0022	ASSET 2	CORONA J-5	-	CC	LCTB	-	-	329	-	-
1965-062	2458368.41	1965 Dec 21 09:50:00	Thor Delta B	-	359/0022	ASSET 2	CORONA J-5	-	CC	LCTB	-	-	329	-	-
1965-063	2458368.41	1965 Dec 21 09:50:00	Thor Delta B	-	359/0022	ASSET 2	CORONA J-5	-	CC	LCTB	-	-	329	-	-
1965-064	2458368.41	1965 Dec 21 09:50:00	Thor Delta B	-	359/0022	ASSET 2	CORONA J-5	-	CC	LCTB	-	-	329	-	-
1965-065	2458368.41	1965 Dec 21 09:50:00	Thor Delta B	-	359/0022	ASSET 2	CORONA J-5	-	CC	LCTB	-	-	329	-	-
1965-066	2458368.41	1965 Dec 21 09:50:00	Thor Delta B	-	359/0022	ASSET 2	CORONA J-5	-	CC	LCTB	-	-	329	-	-
1965-067	2458368.41	1965 Dec 21 09:50:00	Thor Delta B	-	359/0022	ASSET 2	CORONA J-5	-	CC	LCTB	-	-	329	-	-
1965-068	2458368.41	1965 Dec 21 09:50:00	Thor Delta B	-	359/0022	ASSET 2	CORONA J-5	-	CC	LCTB	-	-	329	-	-
1965-069	2458368.41	1965 Dec 21 09:50:00	Thor Delta B	-	359/0022	ASSET 2	CORONA J-5	-	CC	LCTB	-	-	329	-	-
1965-070	2458368.41	1965 Dec 21 09:50:00	Thor Delta B	-	359/0022	ASSET 2	CORONA J-5	-	CC	LCTB	-	-	329	-	-
1965-071	2458368.41	1965 Dec 21 09:50:00	Thor Delta B	-	359/0022	ASSET 2	CORONA J-5	-	CC	LCTB	-	-	329	-	-
1965-072	2458368.41	1965 Dec 21 09:50:00	Thor Delta B	-	359/0022	ASSET 2	CORONA J-5	-	CC	LCTB	-	-	329	-	-
1965-073	2458368.41	1965 Dec 21 09:50:00	Thor Delta B	-	359/0022	ASSET 2	CORONA J-5	-	CC	LCTB	-	-	329	-	-
1965-074	2458368.41	1965 Dec 21 09:50:00	Thor Delta B	-	359/0022	ASSET 2	CORONA J-5	-	CC	LCTB	-	-	329	-	-
1965-075	2458368.41	1965 Dec 21 09:50:00	Thor Delta B	-	359/0022	ASSET 2	CORONA J-5	-	CC	LCTB	-	-	329	-	-
1965-076	2458368.41	1965 Dec 21 09:50:00	Thor Delta B	-	359/0022	ASSET 2	CORONA J-5	-	CC	LCTB	-	-	329	-	-
1965-077	2458368.41	1965 Dec 21 09:50:00	Thor Delta B	-	359/0022	ASSET 2	CORONA J-5	-	CC	LCTB	-	-	329	-	-
1965-078	2458368.41	1965 Dec 21 09:50:00	Thor Delta B	-	359/0022	ASSET 2	CORONA J-5	-	CC	LCTB	-	-	329	-	-
1965-079	2458368.41	1965 Dec 21 09:50:00	Thor Delta B	-	359/0022	ASSET 2	CORONA J-5	-	CC	LCTB	-	-	329	-	-
1965-080	2458368.41	1965 Dec 21 09:50:00	Thor Delta B	-	359/0022	ASSET 2	CORONA J-5	-	CC	LCTB	-	-	329	-	-
1965-081	2458368.41	1965 Dec 21 09:50:00	Thor Delta B	-	359/0022	ASSET 2	CORONA J-5	-	CC	LCTB	-	-	329	-	-
1965-082	2458368.41	1965 Dec 21 09:50:00	Thor Delta B	-	359/0022	ASSET 2	CORONA J-5	-	CC	LCTB	-	-	329	-	-
1965-083	2458368.41	1965 Dec 21 09:50:00	Thor Delta B	-	359/0022	ASSET 2	CORONA J-5	-	CC	LCTB	-	-	329	-	-
1965-084	2458368.41	1965 Dec 21 09:50:00	Thor Delta B	-	359/0022	ASSET 2	CORONA J-5	-	CC	LCTB	-	-	329	-	-
1965-085	2458368.41	1965 Dec 21 09:50:00	Thor Delta B	-	359/0022	ASSET 2	CORONA J-5	-	CC	LCTB	-	-	329	-	-
1965-086	2458368.41	1965 Dec 21 09:50:00	Thor Delta B	-	359/0022	ASSET 2	CORONA J-5	-	CC	LCTB	-	-	329	-	-
1965-087	2458368.41	1965 Dec 21 09:50:00	Thor Delta B	-	359/0022	ASSET 2	CORONA J-5	-	CC	LCTB	-	-			

Launch_Tag	Launch_JD	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Mission	FlightCode	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee_Km	Range_Km	Dest
1965-003	2438779-71	1965 Jan 19 05:03:42	Thor M0-18	-	224	DAPP/DPS 7040	DAPP 10	ASTRAL LAMP	V	430086	-	-	853	-	-
1965-004	2438782-83	1965 Jan 20 07:52:00	Thor Delta C	-	374/D028	Tiros 9	Tiros 1	-	CC	LCTA	-	-	2666	-	-
1965-007	2438795-19	1965 Feb 3 16:36:00	Thor Delta C	-	411/D029	USO 2	USO B2	-	CC	LCTB	-	-	638	-	-
1965-003	2438815-11	1965 Feb 23 14:36	Thor DSU-26	-	482	ASSET 6	-	-	CC	LCTB	-	-	707	-	-
1965-013	2438817-41	1965 Feb 25 21:44:55	Thor SLV-2A Agena D	-	442/1611	CORONA 92/1017	CORONA J-14	TAG108/BOAT CAMP	VS	PALCI-1	-	-	373	-	-
1965-016	2438829-27	1965 Mar 11 18:29:47	Thor SLV-2A Agena D	-	419/2701	POPPY 4/NRL Comp 5	Secor Type II S/N 1	TAG109/DEUCE SPOT	V	75-1-2	-	-	947	-	-
1965-017	2438831-07	1965 Mar 11 13:39:59	Thor Ablestar	2	440/AB018	NMS 0-3	Secor Type II S/N 3	BUSH CATTLE	V	75-1-1	-	-	1044	-	-
1965-021	2438837-70	1965 Mar 18 04:45:46	Thor M0-18	-	441/D031	DAPP/DPS 7383	CORONA J-19	ASTRAL BODY	V	430086	-	-	863	-	-
1965-026	2438845-38	1965 Mar 25 21:11:17	Thor M0-18	-	429/1612	DAPP/DPS 7383	CORONA J-19	TAG110/PAPER ROUTE	V	75-3-4	-	-	381	-	-
1965-0216	2438855-81	1965 Apr 5 07:20	Thor DSU-21	-	155	APP-437 CTL	-	-	JI	LE2	-	-	826	-	-
1965-028	2438857-49	1965 Apr 6 23:47:50	Thor Delta D	-	426/D030	Ferry Bird	INTELSAT I	-	CC	LCTA	-	-	37102	-	-
1965-033	2438880-41	1965 Apr 29 21:44:56	Thor SLV-2A Agena D	-	437/1614	CORONA 94/1019	CORONA J-4	TAG111/MUSK OX	VS	PALCI-1	-	-	1162	-	-
1965-037	2438890-25	1965 May 15 18:02:18	Thor SLV-2A Agena D	-	438/1615	CORONA 95/1021	CORONA J-21	TAG112/LIVY WINE	V	75-3-4	-	-	329	-	-
1965-038	2438901-19	1965 May 20 10:51:53	Thor Burner 1	-	282	DAPP/DPS 6386	IMP C (Block 3)	ROYAL EAGLE	V	430086	-	-	1066	-	-
1965-042	2438910-10	1965 May 29 12:00:00	Thor Delta C	-	441/D031	Explorer 28	-	-	CC	LCTB	-	-	150000	-	-
1965-045	2438921-42	1965 Jun 2 21:58:16	Thor SLV-2A Agena D	-	444/AB019	CORONA 96/1020	CORONA J-20	TAG113/FEMALE LOGIC	V	75-3-5	-	-	363	-	-
1965-048	2438936-44	1965 Jun 24 22:38:29	Thor Ablestar	2	447/AB019	NMS 0-4	NMS 0-4	PARADISE TREE	V	75-1-1	-	-	1144	-	-
1965-051	2438943-67	1965 Jul 1 04:07:00	Thor Delta C	-	415/D032	Tiros 10	Tiros 011	-	CC	LCTB	-	-	884	-	-
1965-055	2438958-75	1965 Jul 17 06:55:01	Thor SLV-2A Agena D	-	422/2702	OPS 8411	Ferret 8	TAG114/LOST NOVEMBER	V	75-1-2	-	-	522	-	-
1965-057	2438961-42	1965 Aug 19 22:01:12	Thor SLV-2A Agena D	-	446/1617	CORONA 97/1022	CORONA J-22	TAG115/RUCKY RIVER	VS	PALCI-1	-	-	472	-	-
1965-065	2438966-42	1965 Aug 13 22:11:24	Thor Ablestar	2	455/AB020	NMS 0-5	Dodecapole 2	BEAUTY SHOP	V	75-1-1	-	-	1200	-	-
1965-067	2438990-37	1965 Aug 17 20:59:57	Thor SLV-2A Agena D	-	449/1618	CORONA 98/1023	CORONA J-23	TAG116/LIGHTS OUT	VS	PALCI-1	-	-	427	-	-
1965-069	2438996-14	1965 Aug 25 15:17:00	Thor Delta C	-	434/D033	USO C	USO C	TAG117/WORD SCRAMBLE	CC	LCTB	-	-	562	-	-
1965-070	2439006-33	1965 Sep 2 20:00:16	Thor SLV-2 Agena D	-	401/1602	CORONA 99/RND	CORONA RND FTV 1602	TAG117/WORD SCRAMBLE	V	75-3-5	-	-	11	-	-
1965-072	2439013-70	1965 Sep 10 04:41:38	Thor Burner 1	-	213	DAPP/DPS 6068	DAPP 15	VICTORIA CROSS	V	430086	-	-	1184	-	-
1965-074	2439026-40	1965 Sep 22 21:31:14	Thor SLV-2A Agena D	-	455/1619	CORONA 100/1024	CORONA J-24	TAG118/TICKLE SILVER	VS	PALCI-1	-	-	362	-	-
1965-079	2439038-24	1965 Oct 5 17:45:57	Thor SLV-2A Agena D	-	435/1616	CORONA 101/1025	CORONA J-24	TAG119/ORDON LEADER	V	75-3-5	-	-	323	-	-
1965-081	2439046-06	1965 Oct 14 13:11:55	Thor SLV-2A Agena D	-	435/6901 (TA4)	060 2	060 C	TAG120/OLD ABBEY	V	75-1-1	-	-	1512	-	-
1965-086	2439062-39	1965 Oct 28 21:17:12	Thor SLV-2A Agena D	-	439/1620	CORONA 102/1026	CORONA J-25	TAG121/HIGH JOURNEY	VS	PALCI-1	-	-	602	-	-
1965-089	2439071-26	1965 Nov 6 18:48:43	Thor Delta E	-	457/D034	Explorer 29	GD5 A	TAG122/RE HEAT	CC	LCTA	-	-	2350	-	-
1965-098	2439095-10	1965 Nov 26 04:45:47	Thor SLV-2 Agena D	-	457/D034 (TA5)	IS15-X	Alouette 2	-	II	LE2	-	-	467	-	-
1965-0987	2439102-60	1965 Dec 8 0:22:28	Thor DSU-21	-	185/D031	AFF-437 (DP)	-	-	II	LE2	-	-	467	-	-
1965-102	2439124-36	1965 Dec 9 21:01:19	Thor SLV-2A Agena D	-	448/1621	CORONA 103/1027	CORONA JX-27	TAG123/LUCKY FELLOW	CC	LCTA	-	-	150000	-	-
1965-105	2439110-81	1965 Dec 16 07:31:21	Thor Delta E	-	460/D035	Pioneer 6	Pioneer A	TAG124/TALL STORY	V	75-3-5	-	-	433	-	-
1965-110	2439139-36	1965 Dec 24 21:06:15	Thor SLV-2A Agena D	-	451/1610	CORONA 104/1028	CORONA J-26	TAG124/TALL STORY	V	75-3-4	-	-	450	-	-
1966-001	2439132-70	1966 Jan 10 04:45:23	Thor Burner 1	-	251	DAPP/DPS 2394	DAPP 14	PENSIAN LAMB	V	430086	-	-	8507	-	-
1966-071	2439144-26	1966 Jan 15 18:11	Thor SLV-2A Agena D	-	282	AFF-437 (DP)	CORONA J-27	TAG125/SEA LEVEL	II	LE2	-	-	426	-	-
1966-007	2439159-40	1966 Feb 2 21:32:13	Thor SLV-2A Agena D	-	450/1623	CORONA 106/1029	CORONA J-27	TAG126/IRON BACK	CC	LCTB	-	-	459	-	-
1966-008	2439158-82	1966 Feb 3 04:12:23	Thor Delta C	-	450/D036	ESSA	Tiros 0T3	-	CC	LCTB	-	-	963	-	-
1966-009	2439166-32	1966 Feb 26 19:45:01	Thor Delta E	-	420/2703	DPS 149	Ferret 9	TAG126/IRON BACK	V	75-1-2	-	-	514	-	-
1966-016	2439181-06	1966 Feb 26 19:45:01	Thor Delta E	-	461/D037	ESSA 2	Tiros 0T2	TAG127/ENZY CHAIR	CC	LCTB	-	-	1567	-	-
1966-018	2439184-52	1966 Mar 12 20:02:05	Thor SLV-2A Agena D	-	452/1622	CORONA 107/1030	CORONA J-29	TAG127/ENZY CHAIR	V	75-3-4	-	-	441	-	-
1966-018	2439184-52	1966 Mar 12 20:02:05	Thor SLV-2A Agena D	-	452/1622	CORONA 107/1030	CORONA J-29	TAG127/ENZY CHAIR	V	75-3-4	-	-	441	-	-
1966-018	2439184-52	1966 Mar 12 20:02:05	Thor SLV-2A Agena D	-	452/1622	CORONA 107/1030	CORONA J-29	TAG127/ENZY CHAIR	V	75-3-4	-	-	441	-	-
1966-018	2439184-52	1966 Mar 12 20:02:05	Thor SLV-2A Agena D	-	452/1622	CORONA 107/1030	CORONA J-29	TAG127/ENZY CHAIR	V	75-3-4	-	-	441	-	-
1966-018	2439184-52	1966 Mar 12 20:02:05	Thor SLV-2A Agena D	-	452/1622	CORONA 107/1030	CORONA J-29	TAG127/ENZY CHAIR	V	75-3-4	-	-	441	-	-
1966-018	2439184-52	1966 Mar 12 20:02:05	Thor SLV-2A Agena D	-	452/1622	CORONA 107/1030	CORONA J-29	TAG127/ENZY CHAIR	V	75-3-4	-	-	441	-	-
1966-018	2439184-52	1966 Mar 12 20:02:05	Thor SLV-2A Agena D	-	452/1622	CORONA 107/1030	CORONA J-29	TAG127/ENZY CHAIR	V	75-3-4	-	-	441	-	-
1966-018	2439184-52	1966 Mar 12 20:02:05	Thor SLV-2A Agena D	-	452/1622	CORONA 107/1030	CORONA J-29	TAG127/ENZY CHAIR	V	75-3-4	-	-	441	-	-
1966-018	2439184-52	1966 Mar 12 20:02:05	Thor SLV-2A Agena D	-	452/1622	CORONA 107/1030	CORONA J-29	TAG127/ENZY CHAIR	V	75-3-4	-	-	441	-	-
1966-018	2439184-52	1966 Mar 12 20:02:05	Thor SLV-2A Agena D	-	452/1622	CORONA 107/1030	CORONA J-29	TAG127/ENZY CHAIR	V	75-3-4	-	-	441	-	-
1966-018	2439184-52	1966 Mar 12 20:02:05	Thor SLV-2A Agena D	-	452/1622	CORONA 107/1030	CORONA J-29	TAG127/ENZY CHAIR	V	75-3-4	-	-	441	-	-
1966-018	2439184-52	1966 Mar 12 20:02:05	Thor SLV-2A Agena D	-	452/1622	CORONA 107/1030	CORONA J-29	TAG127/ENZY CHAIR	V	75-3-4	-	-	441	-	-
1966-018	2439184-52	1966 Mar 12 20:02:05	Thor SLV-2A Agena D	-	452/1622	CORONA 107/1030	CORONA J-29	TAG127/ENZY CHAIR	V	75-3-4	-	-	441	-	-
1966-018	2439184-52	1966 Mar 12 20:02:05	Thor SLV-2A Agena D	-	452/1622	CORONA 107/1030	CORONA J-29	TAG127/ENZY CHAIR	V	75-3-4	-	-	441	-	-
1966-018	2439184-52	1966 Mar 12 20:02:05	Thor SLV-2A Agena D	-	452/1622	CORONA 107/1030	CORONA J-29	TAG127/ENZY CHAIR	V	75-3-4	-	-	441	-	-
1966-018	2439184-52	1966 Mar 12 20:02:05	Thor SLV-2A Agena D	-	452/1622	CORONA 107/1030	CORONA J-29	TAG127/ENZY CHAIR	V	75-3-4	-	-	441	-	-
1966-018	2439184-52	1966 Mar 12 20:02:05	Thor SLV-2A Agena D	-	452/1622	CORONA 107/1030	CORONA J-29	TAG127/ENZY CHAIR	V	75-3-4	-	-	441	-	-
1966-018	2439184-52	1966 Mar 12 20:02:05	Thor SLV-2A Agena D	-	452/1622	CORONA 107/1030	CORONA J-29	TAG127/ENZY CHAIR	V	75-3-4	-	-	441	-	-
1966-018	2439184-52	1966 Mar 12 20:02:05	Thor SLV-2A Agena D	-	452/1622	CORONA 107/1030	CORONA J-29	TAG127/ENZY CHAIR	V	75-3-4	-	-	441	-	-
1966-018	2439184-52	1966 Mar 12 20:02:05	Thor SLV-2A Agena D	-	452/1622	CORONA 107/1030	CORONA J-29	TAG127/ENZY CHAIR	V	75-3-4	-	-	441	-	-
1966-018	2439184-52	1966 Mar 12 20:02:05	Thor SLV-2A Agena D	-	452/1622	CORONA 107/1030	CORONA J-29	TAG127/ENZY CHAIR	V	75-3-4	-	-	441	-	-
1966-018	2439184-52	1966 Mar 12 20:02:05	Thor SLV-2A Agena D	-	452/1622	CORONA 107/1030	CORONA J-29	TAG127/ENZY CHAIR	V	75-3-4	-	-	441	-	-
1966-018	2439184-52	1966 Mar 12 20:02:05	Thor SLV-2A Agena D	-	452/1622	CORONA 107/1030	CORONA J-29	TAG127/ENZY CHAIR	V	75-3-4	-	-	441	-	-
1966-018	2439184-52	1966 Mar 12 20:02:05	Thor SLV-2A Agena D	-	452/1622	CORONA 107/1030	CORONA J-29	TAG127/ENZY CHAIR	V	75-3-4	-	-	441	-	-
1966-018	2439184-52	1966 Mar 12 20:02:05	Thor SLV-2A Agena D	-	452/1622	CORONA 107/1030	CORONA J-29	TAG127/ENZY CHAIR	V	75-3-4	-	-	441	-	-
1966-018	2439184-52	1966 Mar 12 20:02:05	Thor SLV-2A Agena D	-	452/1622	CORONA 107/1030	CORONA J-29	TAG127/ENZY CHAIR	V	75-3-4	-	-	441	-	-
1966-018	2439184-52	1966 Mar													

Launch_Tag	Launch_JD	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Mission	FlightCode	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee_Km	Range_Km	Dest
1967-100	2439782.17	1967 Oct 18 1558:00	Thor Delta CI	-	480/0063	OSD 4	OSD D	-	-	CC	LCTB	-	-	573	-	-
1967-109	2439790.20	1967 Nov 2 2131:19	Thor Delta CI	-	513/1639	CORONA 121/1044	CORONA J-41	TAG148	-	V	SLCIE	-	-	525	-	-
1967-114	2439805.25	1967 Nov 10 1753:08	Thor Delta EI	-	480/0064	ESSA 6	TUS D	-	-	V	SLCIE	-	-	1499	-	-
1967-122	2439834.03	1967 Dec 9 2225:41	Thor Delta EI	-	514/1642	CORONA 122/1102	CORONA CR-2	TAG149	-	V	SLCIE	-	-	261	-	-
1967-123	2439838.09	1967 Dec 13 1408:00	Thor Delta EI	-	489/0065	Pioneer 8	Pioneer C	-	-	CC	LCTB	-	-	150000	-	-
1968-002	2439867.18	1968 Jan 11 1616:00	Thor Delta EI	-	484/0066	Explorer 36	Geos B	-	-	V	SLCIE	-	-	1587	-	-
1968-004	2439872.92	1968 Jan 17 1012	Thor Delta EI	-	489/2733	OPS 1965	MULTIGROUP 3	TAG150	-	V	SLCIE	-	-	545	-	-
1968-008	2439880.43	1968 Jan 24 2226	Thor Delta EI	-	516/1640	CORONA 123/1045	CORONA J-46	TAG151	-	V	SLCIE	-	-	543	-	-
1968-020	2439930.42	1968 Mar 14 2200:14	Thor Delta EI	-	519/1638	CORONA 124/1046	CORONA J-48	TAG152	-	V	SLCIE	-	-	522	-	-
1968-039	2439979.40	1968 May 1 2131	Thor Delta EI	-	511/1643	CORONA 125/1103	CORONA CR-3	TAG153	-	VS	SLCIE	-	-	281	-	-
1968-318	2439990.80	1968 May 14 0705	Thor Delta EI	-	205	APF-437 CEL	-	-	-	JI	LEI	-	-	823	-	-
1968-F04	2439994.85	1968 May 15 0823	Thor Delta EI	-	520/6221 (TA8)	Nimbus B	Nimbus B	TAG154	-	V	SLCIE	-	-	207	-	-
1968-042	2439999.69	1968 May 23 0438:12	Thor Burner 2	-	277/8111-6	DAPP 5420	DAPP 5420	-	-	V	SLCIE	-	-	904	-	-
1968-052	2440028.41	1968 Jun 20 2146:05	Thor Delta J	-	517/1645	CORONA 126/1047	CORONA J-47	TAG155	-	V	SLCIE	-	-	518	-	-
1968-055	2440042.23	1968 Jul 4 1726:50	Thor Delta J	-	476/0067	Explorer 38	RAE A	-	-	V	SLCIE	-	-	5936	-	-
1968-065	2440076.40	1968 Aug 7 2136:56	Thor Delta J	-	522/1644	CORONA 127/1104	CORONA CR-4	TAG156	-	VS	SLCIE	-	-	268	-	-
1968-069	2440084.96	1968 Aug 16 1124:33	Thor Delta N	-	528/0068	ESSA 7	TUS E	-	-	V	SLCIE	-	-	1565	-	-
1968-078	2440118.40	1968 Sep 18 2132	Thor Delta N	-	524/1647	CORONA 128/1048	CORONA J-49	TAG157	-	CC	LCTA	-	-	524	-	-
1968-088	2440134.97	1968 Sep 19 0009:00	Thor Delta N	-	529/0069	Intelsat III F-1	Intelsat III F-1	TAG158	-	CC	LCTA	-	-	157	-	-
1968-086	2440134.97	1968 Oct 5 1167	Thor Burner 2	-	527/2734	OPS 0964	STRAMMAN 1	TAG159	-	V	SLCIE	-	-	509	-	-
1968-092	2440152.69	1968 Oct 23 0434:03	Thor Burner 2	-	173/8111-8	DAPP 6422	DAPP 6422	-	-	V	SLCIE	-	-	888	-	-
1968-098	2440164.40	1968 Nov 3 2130	Thor Delta EI	-	515/1646	CORONA 129/1105	CORONA CR-5	TAG159	-	VS	SLCIE	-	-	294	-	-
1968-100	2440168.91	1968 Nov 8 0946:29	Thor Delta EI	-	479/0066	Pioneer 9	Pioneer D	-	-	CC	LCTB	-	-	150000	-	-
1968-3596	2440180.80	1968 Nov 20 0708	Thor Delta EI	-	282	APF-437 CEL	-	-	-	JI	LEI	-	-	1168	-	-
1968-039	2440196.29	1968 Dec 5 1655:00	Thor Delta EI	-	481/0061	HEIS A1	HEIS A1	TAG160	-	CC	LCTB	-	-	150000	-	-
1968-112	2440203.43	1968 Dec 12 2222	Thor Delta N	-	527/1648	CORONA 130/1049	CORONA J-50	-	-	VS	SLCIE	-	-	1513	-	-
1968-114	2440206.22	1968 Dec 15 1721:04	Thor Delta N	-	527/0062	ESSA 8	TUS F	-	-	V	SLCIE	-	-	1676	-	-
1968-116	2440209.52	1968 Dec 19 0032:00	Thor Delta N	-	536/0064	Intelsat III F-2	Intelsat III F-2	-	-	V	SLCIE	-	-	39851	-	-
1968-066	2440244.20	1969 Jan 22 1648:00	Thor Delta CI	-	487/0064	OSD 5	OSD F	-	-	CC	LCTA	-	-	963	-	-
1969-010	2440251.76	1969 Jan 30 0646	Thor Delta EI	-	485/0067	ISIS 1	ISIS A	-	-	VS	SLCIE	-	-	3639	-	-
1969-011	2440256.52	1969 Feb 5 2159:54	Thor Delta EI	-	519/1650	CORONA 131/1106	CORONA CR-6	TAG161	-	VS	SLCIE	-	-	4165	-	-
1969-016	2440268.42	1969 Feb 26 0747:01	Thor Delta EI	-	485/0067	Intelsat III F-3	Intelsat III F-3	-	-	CC	LCTA	-	-	1507	-	-
1969-020	2440300.20	1969 Mar 19 0754:03	Thor Delta EI	-	541/1651	CORONA 132/1050	CORONA J-43	TAG162	-	VS	SLCIE	-	-	513	-	-
1969-037	2440324.85	1969 Apr 14 2156:50	Thor Delta EI	-	543/6222 (TA10)	Nimbus 3	Nimbus B2	TAG163	-	VS	SLCIE	-	-	1139	-	-
1969-041	2440343.57	1969 May 2 0146:56	Thor Delta EI	-	544/1649	CORONA 133/1051	CORONA J-44	TAG164	-	CC	LCTA	-	-	470	-	-
1969-045	2440353.96	1969 May 24 0200:00	Thor Delta N	-	553/0068	Intelsat III F-4	Intelsat III F-4	-	-	CC	LCTA	-	-	39782	-	-
1969-051	2440378.11	1969 Jun 5 1442:46	Thor Delta EI	-	820/6803 (TA11)	OSD 6	OSD F	-	-	V	SLCIE	-	-	1088	-	-
1969-053	2440393.87	1969 Jun 25 0847:58	Thor Delta EI	-	482/0069	Explorer 41	RIP G	TAG165	-	-	SLCIE	-	-	150000	-	-
1969-066	2440401.64	1969 Jun 29 0315:59	Thor Delta EI	-	539/0070	Biosatellite 3	Biosatellite D Adapter	-	-	CC	LCTA	-	-	945	-	-
1969-062	2440428.69	1969 Jul 23 0458:55	Thor Burner 2	-	479/8111-7	DAPP 7431	DAPP 7431	TAG166	-	VS	SLCIE	-	-	322	-	-
1969-063	2440436.56	1969 Jul 26 0350:58	Thor Delta N	-	545/0062	CORONA 134/1107	CORONA CR-7	-	-	CC	LCTA	-	-	336	-	-
1969-064	2440438.39	1969 Jul 26 0206:00	Thor Delta N	-	545/0062	Intelsat III F-5	Intelsat III F-5	-	-	CC	LCTA	-	-	9444	-	-
1969-068	2440435.85	1969 Jul 31 1075:00	Thor Delta N	-	539/2735	OSD 6285	STRAMMAN 2	TAG167	-	CC	LCTA	-	-	560	-	-
1969-069	2440441.85	1969 Aug 7 0721:00	Thor Delta N	-	540/0072	OSD 6	OSD G	-	-	CC	LCTA	-	-	560	-	-
1969-072	2440447.85	1969 Aug 27 2119:00	Thor Delta N	-	540/0072	Pioneer E	Pioneer E	-	-	CC	LCTA	-	-	4097	-	-
1969-073	2440450.35	1969 Aug 27 2119:00	Thor Delta N	-	540/0072	Delta G	Delta G	-	-	VS	SLCIE	-	-	4907	-	-
1969-082	2440495.07	1969 Sep 20 1340:00	Thor Delta N	-	552/1653	CORONA 135/1052	CORONA J-46	TAG168	-	VS	SLCIE	-	-	1004	-	-
1969-101	2440540.55	1969 Sep 20 0037:00	Thor Delta N	-	552/2736	POPPY 6/NRL Comp 7	P-11 No. 4407	TAG169	-	VS	SLCIE	-	-	37088	-	-
1969-005	2440540.55	1969 Dec 4 2138:00	Thor Delta N	-	552/2736	Shuttle	Shuttle	TAG170	-	CC	LCTA	-	-	249	-	-
1970-003	2440601.51	1970 Jan 23 1131:00	Thor Delta N	-	549/1655	CORONA 136/1108	CORONA CR-9	-	-	CC	LCTA	-	-	1483	-	-
1970-008	2440609.95	1970 Jan 23 1131:00	Thor Delta N	-	549/1655	Intelsat III F-6	Intelsat III F-6	-	-	V	SLCIE	-	-	1083	-	-
1970-009	2440621.02	1970 Feb 4 0259:50	Thor Delta N	-	552/0076	TUS B	TUS B	TAG171	-	V	SLCIE	-	-	873	-	-
1970-013	2440628.21	1970 Feb 11 0847:57	Thor Burner 2	-	534/6111 (TA12)	SEST 2	SEST 2	-	-	VS	SLCIE	-	-	3777	-	-
1970-016	2440634.95	1970 Feb 11 0847:57	Thor Burner 2	-	551/1657	DAPP 1524	DAPP Block 5A F-1	TAG172	-	VS	SLCIE	-	-	512	-	-
1970-021	2440686.45	1970 Mar 20 2352:00	Thor Delta N	-	558/0077	CORONA 137/1109	CORONA CR-10	-	-	CC	LCTA	-	-	1074	-	-
1970-025	2440698.92	1970 Apr 8 0817:56	Thor Delta N	-	558/0077	MATO 2A	MATO 2A	-	-	CC	LCTA	-	-	1100	-	-
1970-032	2440701.50	1970 Apr 23 0046:12	Thor Delta N	-	152	APF-437	MATO 11A	-	-	CC	LCTA	-	-	36842	-	-
1970-328	2440701.50	1970 Apr 25	Thor Delta N	-	553/6231 (TA13)	Nimbus 4	Nimbus D	TAG173	-	CC	LCTA	-	-	5007	-	-
1970-040	2440727.40	1970 May 20 2136:10	Thor Delta N	-	555/1656	Intelsat III F-7	Intelsat III F-7	-	-	CC	LCTA	-	-	36842	-	-
1970-054	2440790.56	1970 Jul 23 0125	Thor Delta N	-	556/1654	SDP (OSDP)	SDP (OSDP)	-	-	CC	LCTA	-	-	5007	-	-
1970-065	2440781.47	1970 Jul 23 2323:00	Thor Delta N	-	563/0079	CORONA 138/1110	CORONA CR-11	TAG174	-	VS	SLCIE	-	-	502	-	-
1970-065	2440781.47	1970 Jul 23 2323:00	Thor Delta N	-	563/0079	CORONA 139/1111	CORONA CR-12	TAG175	-	VS	SLCIE	-	-	408	-	-
1970-066	2440824.01	1970 Aug 19 1211:00	Thor Delta N	-	561/0080	Intelsat III F-8	Intelsat III F-8	-	-	CC	LCTA	-	-	36706	-	-
1970-066	2440824.01	1970 Aug 26 1001:00	Thor Delta N	-	535/2736	Explorer 43	Explorer 43	TAG176	-	CC	LCTA	-	-	36706	-	-
1970-070	2440832.86	1970 Sep 2 0839:45	Thor Burner 2	-	288/8111-13	DAPP 2525	STRAMMAN 3	-	-	V	SLCIE	-	-	501	-	-
1970-3532	2440834.04	1970 Sep 24 1954:01	Thor Delta N	-	271	HAP/STRE	DAPP Block 5A F-2	-	-	VS	SLCIE	-	-	873	-	-
1970-069	2440931.98	1970 Sep 24 2128:00	Thor Delta N	-	552/1658	CORONA 140/1112	CORONA CR-2R	TAG177	-	VS	SLCIE	-	-	500	-	-
1970-106	2440931.98	1970 Dec 11 1135:00	Thor Delta N	-	546/0081	NOMA 1	NOMA 1	-	-	VS	SLCIE	-	-	510	-	-
1971-012	2440990.34	1971 Feb 17 0352:00	Thor Burner 2	-	560/0082	MATO 2B	MATO 2B	-	-	CC	LCTA	-	-	37712	-	-
1971-019	2441000.66	1971 Feb 17 0352:00	Thor Burner 2	-	249/8111-11	DAPP 3526	DAPP Block 5A F-3	-	-	CC	LCTA	-	-	833	-	-
1971-022	2441024.38	197														



Launch_Tag	Launch_JD	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Mission	FlightCode	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee_Km	Range_Km	Dest
1972-032	2441427.41	1972 Apr 19 21:48:59	Thorad SLV-2H Agena D	-	569/1661	CORDIA 144/1116	CORDIA CR-16	TAG184	-	VS	SLSW	-	-	291	-	-
1972-039	2441463.28	1972 May 25 18:41:00	Thorad SLV-2H Agena D	-	571/1663	CORDIA 145/1117	CORDIA CR-GR	TAG185	-	VS	SLSW	-	-	315	-	-
1972-068	2441522.22	1972 Jul 23 18:06:06	Belta 0900	-	574/0089	ERTS 1	ERTS A	-	-	V	SLSW	-	-	921	-	-
1972-073	2441683.56	1972 Sep 23 02:00:00	Belta 1604	-	579/0090	Explorer 47	IMP H	-	-	CC	LCTB	-	-	150000	-	-
1972-082	2441686.22	1972 Oct 15 17:19:19	Belta 0300	-	579/0091	ROMA 2	IMP H	-	-	V	SLSW	-	-	1474	-	-
1972-089	2441630.64	1972 Nov 9 03:23:46	Thor Burner 2A	-	294/BELIA-16	DNSP 6630	DNSP Block SB F-3	-	-	V	SLSW	-	-	882	-	-
1972-090	2441631.55	1972 Nov 10 01:14:03	Belta 1914	-	580/0092	ANK A1	ANK A1	-	-	CC	LCTB	-	-	37092	-	-
1972-097	2441662.83	1972 Dec 11 07:56:00	Belta 0900	-	577/0093	Limbus 5	Limbus E	-	-	V	SLSW	-	-	1519	-	-
1973-023	2441793.49	1973 Apr 20 23:47:03	Belta 1914	-	583/0094	ANK A2	ANK A2	-	-	CC	LCTB	-	-	36563	-	-
1973-039	2441844.09	1973 Jun 10 14:13:00	Belta 1913	-	581/0095	RAE B	RAE B	-	-	CC	LCTB	-	-	150000	-	-
1973-054	2441911.70	1973 Jul 16 17:01:21	Belta 0300	-	291/BELIA-21	ITUS E	ITUS E	-	-	V	SLSW	-	-	2007	-	-
1973-078	2441981.60	1973 Oct 26 02:28:03	Belta 1604	-	582/0097	DNSP 7529	DNSP Block SB F-4	-	-	CC	LCTB	-	-	860	-	-
1973-086	2441993.21	1973 Nov 6 17:02:00	Belta 0300	-	576/0098	ROMA 3	IMP J	-	-	V	SLSW	-	-	150000	-	-
1973-101	2442032.76	1973 Dec 16 06:18:00	Belta 0300	-	585/0099	Explorer 51	AE-C	-	-	V	SLSW	-	-	1950	-	-
1974-002	2442066.57	1974 Jan 19 03:38:47	Belta 2313	-	587/0100	SKYNET 2A	SKYNET IIA	-	-	CC	LCTB	-	-	4297	-	-
1974-015	2442122.83	1974 Mar 16 08:00:11	Thor Burner 2A	-	207/BELIA-19	DNSP 8631	DNSP Block SB F-5	-	-	V	SLSW	-	-	887	-	-
1974-022	2442151.48	1974 Apr 13 23:33:03	Belta 2914	-	588/0101	Westar 1	Westar 1	-	-	CC	LCTB	-	-	36351	-	-
1974-033	2442184.90	1974 May 17 09:51:00	Belta 2914	-	590/0102	SNS 1	SNS A	-	-	CC	LCTB	-	-	36248	-	-
1974-063	2442331.45	1974 Aug 9 03:22:47	Belta 2914	-	275/BELIA-22	DNSP 9632	DNSP Block SC F-1	-	-	V	SLSW	-	-	36441	-	-
1974-075	2442331.45	1974 Oct 10 22:53:00	Belta 2914	-	589/0103	Westar 2	Westar 2	-	-	CC	LCTB	-	-	876	-	-
1974-089	2442367.22	1974 Nov 15 17:11:00	Belta 2310	-	591/0104	ROMA 4	ITUS G	-	-	V	SLSW	-	-	36441	-	-
1974-094	2442374.52	1974 Nov 23 02:28:01	Belta 2313	-	592/0105	SKYNET 2B	SKYNET IIB	-	-	V	SLSW	-	-	1862	-	-
1974-101	2442400.61	1974 Dec 19 02:39:00	Belta 2914	-	589/0106	Symphonie 1	Symphonie W1	-	-	CC	LCTB	-	-	36944	-	-
1975-004	2442435.25	1975 Jan 22 17:59:52	Belta 2910	-	595/0107	Landast 2	Landast B	-	-	CC	LCTB	-	-	36245	-	-
1975-011	2442450.42	1975 Feb 6 22:04:00	Belta 2914	-	584/0108	SNS 2	SNS B	-	-	V	SLSW	-	-	1054	-	-
1975-027	2442512.50	1975 Apr 9 23:58:02	Belta 1410	-	584/0109	Geos 3	Geos C	-	-	V	SLSW	-	-	36786	-	-
1975-043	2442596.64	1975 May 24 03:22:41	Thor Burner 2A	-	596/0110	ANK A3	ANK A3	-	-	V	SLSW	-	-	36156	-	-
1975-068	2442876.84	1975 Jun 12 08:12:01	Belta 2910	-	595/0111	Limbus 6	Limbus F	-	-	V	SLSW	-	-	595	-	-
1975-087	2442884.99	1975 Jun 21 11:45:00	Belta 1910	-	586/0112	OSD 6	OSD 1	-	-	CC	LCTB	-	-	1183	-	-
1975-072	2442831.56	1975 Aug 9 01:50:00	Belta 2913	-	622/0113	CUS-B	CUS-B	-	-	V	SLSW	-	-	99873	-	-
1975-077	2442858.57	1975 Aug 27 01:42:00	Belta 2914	-	594/0114	Symphonie 2	Symphonie W2	-	-	CC	LCTA	-	-	36187	-	-
1975-082	2442864.73	1975 Sep 9 06:50:00	Thor DSV-2J	-	N-1(F)	K14U-1	ETS 1	-	-	THSC	LCTA	-	-	1104	-	-
1975-3277	2442874.76	1975 Sep 19 06:50:00	Thor DSV-2J	-	201	Do-5	ETS 1	-	-	THSC	LCTA	-	-	1104	-	-
1975-086	2442891.86	1975 Oct 6 09:00:50	Belta 2910	-	600/0115	Explorer 54	AE-D	-	-	CC	LCTB	-	-	5007	-	-
1975-100	2442702.44	1975 Oct 16 22:40:00	Belta 2914	-	597/0116	ERTS 1	ERTS A	-	-	CC	LCTB	-	-	3801	-	-
1975-3314	2442722.74	1975 Nov 6 06:46:00	Thor DSV-2J	-	204	Do-3	ERTS 1	-	-	CC	LCTB	-	-	3801	-	-
1975-107	2442736.59	1975 Nov 20 02:06:48	Belta 2910	-	604/0117	Explorer 55	AE-E	-	-	CC	LCTB	-	-	3065	-	-
1975-117	2442758.56	1975 Dec 19 01:59:14	Belta 2914	-	607/0118	Satcom 1	RCA-A	-	-	CC	LCTA	-	-	36219	-	-
1976-004	2442795.95	1976 Jan 19 23:27:54	Belta 2914	-	606/0119	CIS	DNSP Block SC F-3	-	-	V	SLSW	-	-	46866	-	-
1976-016	2442829.83	1976 Feb 19 17:52:52	Thor Burner 2A	-	182/BELIA-25	DNSP 11534	DNSP Block SC F-3	-	-	V	SLSW	-	-	36810	-	-
1976-016	2442829.83	1976 Feb 19 17:52:52	Belta 2914	-	605/0120	Haristat 1	Haristat A	-	-	THSC	LCTB	-	-	36952	-	-
1976-039	2442864.65	1976 Feb 26 03:30:00	Belta 2914	-	612/0121	One	TS	-	-	THSC	LCTB	-	-	36810	-	-
1976-039	2442864.65	1976 Feb 26 03:30:00	Belta 2914	-	612/0121	One	TS	-	-	THSC	LCTB	-	-	36810	-	-
1976-039	2442864.65	1976 Feb 26 03:30:00	Belta 2914	-	612/0121	One	TS	-	-	THSC	LCTB	-	-	36810	-	-
1976-039	2442864.65	1976 Feb 26 03:30:00	Belta 2914	-	612/0121	One	TS	-	-	THSC	LCTB	-	-	36810	-	-
1976-039	2442864.65	1976 Feb 26 03:30:00	Belta 2914	-	612/0121	One	TS	-	-	THSC	LCTB	-	-	36810	-	-
1976-039	2442864.65	1976 Feb 26 03:30:00	Belta 2914	-	612/0121	One	TS	-	-	THSC	LCTB	-	-	36810	-	-
1976-039	2442864.65	1976 Feb 26 03:30:00	Belta 2914	-	612/0121	One	TS	-	-	THSC	LCTB	-	-	36810	-	-
1976-039	2442864.65	1976 Feb 26 03:30:00	Belta 2914	-	612/0121	One	TS	-	-	THSC	LCTB	-	-	36810	-	-
1976-039	2442864.65	1976 Feb 26 03:30:00	Belta 2914	-	612/0121	One	TS	-	-	THSC	LCTB	-	-	36810	-	-
1976-039	2442864.65	1976 Feb 26 03:30:00	Belta 2914	-	612/0121	One	TS	-	-	THSC	LCTB	-	-	36810	-	-
1976-039	2442864.65	1976 Feb 26 03:30:00	Belta 2914	-	612/0121	One	TS	-	-	THSC	LCTB	-	-	36810	-	-
1976-039	2442864.65	1976 Feb 26 03:30:00	Belta 2914	-	612/0121	One	TS	-	-	THSC	LCTB	-	-	36810	-	-
1976-039	2442864.65	1976 Feb 26 03:30:00	Belta 2914	-	612/0121	One	TS	-	-	THSC	LCTB	-	-	36810	-	-
1976-039	2442864.65	1976 Feb 26 03:30:00	Belta 2914	-	612/0121	One	TS	-	-	THSC	LCTB	-	-	36810	-	-
1976-039	2442864.65	1976 Feb 26 03:30:00	Belta 2914	-	612/0121	One	TS	-	-	THSC	LCTB	-	-	36810	-	-
1976-039	2442864.65	1976 Feb 26 03:30:00	Belta 2914	-	612/0121	One	TS	-	-	THSC	LCTB	-	-	36810	-	-
1976-039	2442864.65	1976 Feb 26 03:30:00	Belta 2914	-	612/0121	One	TS	-	-	THSC	LCTB	-	-	36810	-	-
1976-039	2442864.65	1976 Feb 26 03:30:00	Belta 2914	-	612/0121	One	TS	-	-	THSC	LCTB	-	-	36810	-	-
1976-039	2442864.65	1976 Feb 26 03:30:00	Belta 2914	-	612/0121	One	TS	-	-	THSC	LCTB	-	-	36810	-	-
1976-039	2442864.65	1976 Feb 26 03:30:00	Belta 2914	-	612/0121	One	TS	-	-	THSC	LCTB	-	-	36810	-	-
1976-039	2442864.65	1976 Feb 26 03:30:00	Belta 2914	-	612/0121	One	TS	-	-	THSC	LCTB	-	-	36810	-	-
1976-039	2442864.65	1976 Feb 26 03:30:00	Belta 2914	-	612/0121	One	TS	-	-	THSC	LCTB	-	-	36810	-	-
1976-039	2442864.65	1976 Feb 26 03:30:00	Belta 2914	-	612/0121	One	TS	-	-	THSC	LCTB	-	-	36810	-	-
1976-039	2442864.65	1976 Feb 26 03:30:00	Belta 2914	-	612/0121	One	TS	-	-	THSC	LCTB	-	-	36810	-	-
1976-039	2442864.65	1976 Feb 26 03:30:00	Belta 2914	-	612/0121	One	TS	-	-	THSC	LCTB	-	-	36810	-	-
1976-039	2442864.65	1976 Feb 26 03:30:00	Belta 2914	-	612/0121	One	TS	-	-	THSC	LCTB	-	-	36810	-	-
1976-039	2442864.65	1976 Feb 26 03:30:00	Belta 2914	-	612/0121	One	TS	-	-	THSC	LCTB	-	-	36810	-	-
1976-039	2442864.65	1976 Feb 26 03:30:00	Belta 2914	-	612/0121	One	TS	-	-	THSC	LCTB	-	-	36810	-	-
1976-039	2442864.65	1976 Feb 26 03:30:00	Belta 2914	-	612/0121	One	TS	-	-	THSC	LCTB	-	-	36810	-	-
1976-039	2442864.65	1976 Feb 26 03:30:00	Belta 2914	-	612/0121	One	TS	-	-	THSC	LCTB	-	-	36810	-	-
1976-039																

Launch_Tag	Launch_JD	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Mission	Launch	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee_Km	Range_Km	Dest
1991-012	2444646.85	1981 Feb 11 0830	H-2	-	N-7(F)	Kiku-3	ETS-4	TNSC	-	N	LCTA	-	-	36253	-	-
1991-049	2444747.44	1981 May 27 2229	Delta 3914	-	645/D164	GES 5	DE A	CC	-	V	SLS2W	-	-	49767	-	-
1991-070	2444819.91	1981 Aug 3 0956	Delta 3913	-	642/D165	GES 2	DE A	V	-	-	LCTA	-	-	23507	-	-
1991-076	2444827.34	1981 Aug 24 2003	H-2	-	N-8(F)	SBS 2	SBS 2	TNSC	-	-	LCTA	-	-	37091	-	-
1991-096	2444872.46	1981 Sep 24 2309	Delta 3910/PAM	-	641/D166	SNE	Solar Mesosphere Explorer	CC	-	-	LCTA	-	-	37399	-	-
1991-100	2444883.98	1981 Oct 6 1127	Delta 3910	-	639/D167	SNE	Solar Mesosphere Explorer	V	-	-	SLS2W	-	-	27650	-	-
1991-114	2444928.57	1981 Nov 20 0137	Delta 3910/PAM	-	640/D168	Satcom 3R	Satcom 3R	CC	-	-	LCTA	-	-	368931	-	-
1992-004	2444988.58	1982 Jan 16 0155	Delta 3910/PAM	-	643/D169	Satcom 4	Satcom 4	CC	-	-	LCTA	-	-	368283	-	-
1992-014	2445026.50	1982 Feb 26 0004.44	Delta 3910/PAM	-	644/D160	Westar 4	Westar 4	CC	-	-	LCTA	-	-	36724	-	-
1992-031	2445069.78	1982 Apr 10 0647	Delta 3910/PAM	-	647/D161	Instat 1A	Instat 1A	CC	-	-	LCTA	-	-	36720	-	-
1992-058	2445129.52	1982 Jun 9 0024	Delta 3910/PAM	-	649/D162	Westar 5	Westar 5	CC	-	-	LCTA	-	-	37690	-	-
1992-072	2445167.25	1982 Jul 16 1759	Delta 3920	-	648/D163	Landsat 4	Landsat 4	V	-	-	SLS2W	-	-	712	-	-
1992-082	2445208.47	1982 Aug 26 2310	Delta 3920/PAM	-	649/D164	Anik D-1	Anik D-1	CC	-	-	LCTB	-	-	36366	-	-
1992-087	2445216.71	1982 Sep 3 0500	H-1	-	N-9(F)	Kiku-4	ETS 3	TNSC	-	-	LCTB	-	-	1262	-	-
1992-105	2445270.56	1982 Oct 28 0127.49	Delta 3924	-	652/D165	Satcom 5	Satcom 5	CC	-	-	LCTB	-	-	36677	-	-
1993-004	2445350.60	1983 Jan 26 0217.00	Delta 3910	-	650/D166	IRMS	IRMS	V	-	-	SLS2W	-	-	915	-	-
1993-006	2445359.86	1983 Feb 4 0837	Delta 3910	-	N-10(F)	CS 2A	CS 2A	TNSC	-	-	LCTB	-	-	37172	-	-
1993-030	2445436.44	1983 Apr 11 2239	Delta 3924	-	653/D167	Satcom 1R	Satcom 1R	CC	-	-	LCTB	-	-	37376	-	-
1993-041	2445453.43	1983 Apr 28 2226	Delta 3914	-	D168	GES 6	GES 6	CC	-	-	LCTB	-	-	49686	-	-
1993-051	2445481.14	1983 May 26 1518	Delta 3914	-	D169	Exosat	Exosat	V	-	-	SLS2W	-	-	150000	-	-
1993-065	2445514.46	1983 Jun 28 2305	Delta 3920/PAM	-	D170	Galaxy 1	Galaxy 1	CC	-	-	LCTB	-	-	36433	-	-
1993-077	2445544.45	1983 Jul 28 2249	Delta 3920/PAM	-	D171	Teistar 301	Teistar 301	CC	-	-	LCTA	-	-	39860	-	-
1993-081	2445552.35	1983 Aug 5 2029	H-2	-	N-11(F)	CS 2B	CS 2B	TNSC	-	-	LCTA	-	-	36705	-	-
1993-094	2445586.45	1983 Sep 8 2252	Delta 3924	-	D172	Satcom 2R	Satcom 2R	CC	-	-	LCTB	-	-	36650	-	-
1993-098	2445600.45	1983 Sep 22 2216	Delta 3920/PAM	-	D173	Galaxy 2	Galaxy 2	CC	-	-	LCTA	-	-	36773	-	-
1994-005	2445722.83	1984 Jan 23 0755	H-2	-	N-12(F)	RS 2A	RS 2A	TNSC	-	-	LCTA	-	-	36280	-	-
1994-021	2445761.25	1984 Mar 1 1769	Delta 3920	-	D174	Landsat 5	Landsat 5	V	-	-	SLS2W	-	-	716	-	-
1994-080	2445916.35	1984 Aug 16 1446	Delta 3920	-	N-13(F)	AMS 3	AMS 3	CC	-	-	LCTA	-	-	36724	-	-
1994-088	2445929.12	1984 Aug 16 1446	Delta 3924	-	D175	AMTE	AMTE-CEE	CC	-	-	LCTA	-	-	114669	-	-
1994-101	2445956.45	1984 Sep 21 2215	Delta 3920/PAM	-	D176	Galaxy 3	Galaxy 3	CC	-	-	LCTB	-	-	37086	-	-
1994-118	2446018.52	1984 Nov 14 0034	Delta 3914	-	D177	MATO 3D	MATO 3D	CC	-	-	LCTA	-	-	36584	-	-
1996-016	2446473.83	1986 Feb 12 0755	H-2	-	N-14(F)	RS 2B	RS 2B	TNSC	-	-	LCTA	-	-	36490	-	-
1996-044	2446594.43	1986 May 5 2218	Delta 3914	-	D178	GES 6	GES 6	CC	-	-	LCTA	-	-	307	-	-
1996-061	2446655.36	1986 Aug 12 0045.00	H-1	(2)	H-15(F)	EGP	EGP	CC	-	-	LCTB	-	-	1896	-	-
1996-069	2446679.13	1986 Sep 5 1508.01	Delta 3920	-	D180	USA 19 (SD10 D180)	Payload Adapter System	CC	-	-	LCTB	-	-	765	-	-
1997-018	2446845.46	1987 Feb 19 0123	Delta 3924	-	N-16(F)	Home	MUS-1	CC	-	-	LCTA	-	-	921	-	-
1997-022	2446853.46	1987 Feb 26 2305	Delta 3924	-	D179	Palapa B2P	Palapa B2P	CC	-	-	LCTA	-	-	40919	-	-
1997-029	2446974.85	1987 Mar 20 2222	Delta 3920/PAM	-	D181	ETS-5	ETS-5	CC	-	-	LCTB	-	-	37616	-	-
1997-070	2447034.89	1987 Aug 27 0250	H-1	-	N-17(F)	Palapa B2P	Palapa B2P	TNSC	-	-	LCTB	-	-	36812	-	-
1998-005	2447100.42	1988 Feb 6 2207.00	Delta 3910	-	D182	USA 30 (SD10 D181)	Comuster Cluster	CC	-	-	LCTB	-	-	340	-	-
1998-012	2447110.92	1988 Feb 19 0025	H-1	-	N-18(F)	CS 3A	CS 3A	TNSC	-	-	LCTB	-	-	37479	-	-
1998-019	2447172.92	1988 Sep 16 0825	H-1	-	H-19(F)	CS 3B	CS 3B	TNSC	-	-	LCTB	-	-	26844	-	-
1998-033	2447172.27	1988 Sep 16 0825	Delta 6925	-	D183	Navstar GPS SWN 14	Navstar GPS SWN 14	CC	-	-	LCTA	-	-	5399	-	-
1998-038	2447248.41	1988 Mar 24 2300.49	Delta 6920-8	-	D184	USA 35 (GPS II-1)	USA 35 (GPS II-1)	CC	-	-	LCTA	-	-	26844	-	-
1998-048	2447268.44	1988 Jun 10 2300.00	Delta 6925	-	D185	Delta Star	Delta Star	CC	-	-	LCTA	-	-	21336	-	-
1998-044	2447268.44	1988 Jun 10 2300.00	Delta 6925	-	D186	Navstar GPS SWN 13	Navstar GPS SWN 13	CC	-	-	LCTA	-	-	23896	-	-
1998-064	2447267.75	1988 Jun 19 0557.59	Delta 6925	-	D187	USA 42 (GPS II-5)	USA 42 (GPS II-5)	CC	-	-	LCTA	-	-	4813	-	-
1998-067	2447276.75	1988 Sep 27 0257.59	Delta 6925	-	D188	Macropolo 1	Macropolo 1	CC	-	-	LCTB	-	-	4813	-	-
1998-070	2447276.30	1988 Sep 27 0257.59	Delta 6925	6R	H-20(F)	AMS 4	AMS 4	TNSC	-	-	LCTB	-	-	28520	-	-
1998-085	2447320.00	1988 Oct 21 0931.01	H-1	-	D189	Navstar GPS SWN 19	Navstar GPS SWN 19	CC	-	-	LCTA	-	-	28520	-	-
1998-089	2447349.11	1988 Nov 18 1434	Delta 6925	-	D190	COBE	COBE	V	-	-	SLS2W	-	-	89505	-	-
1998-097	2447372.26	1988 Dec 11 1810.01	Delta 6925	-	D191	USA 49 (GPS II-5)	USA 49 (GPS II-5)	CC	-	-	LCTB	-	-	23041	-	-
1998-098	2447372.26	1988 Dec 11 1810.01	Delta 6925	-	D190	USA 50 (GPS II-5)	USA 50 (GPS II-5)	CC	-	-	LCTA	-	-	21029	-	-
1998-103	2447396.45	1989 Jan 24 2255.01	Delta 6925	-	D191	Navstar GPS SWN 18	Navstar GPS SWN 18	CC	-	-	LCTA	-	-	1747	-	-
1998-115	2447399.56	1989 Feb 6 0133.00	H-1	(2)	H-21(F)	Macropolo 2	Macropolo 2	TNSC	-	-	LCTB	-	-	549	-	-
1998-115	2447399.56	1989 Feb 6 0133.00	Delta 6920-8	-	D192	USA 51/F5 (LAGE/RHE)	USA 51/F5 (LAGE/RHE)	CC	-	-	LCTB	-	-	22009	-	-
1998-115	2447399.56	1989 Feb 6 0133.00	Delta 6925	-	D192	USA 54 (GPS II-7)	USA 54 (GPS II-7)	CC	-	-	LCTA	-	-	37794	-	-
1998-115	2447399.56	1989 Feb 6 0133.00	Delta 6925	-	D192	USA 54 (GPS II-7)	USA 54 (GPS II-7)	CC	-	-	LCTA	-	-	585	-	-
1998-115	2447399.56	1989 Feb 6 0133.00	Delta 6925	-	D192	USA 54 (GPS II-7)	USA 54 (GPS II-7)	CC	-	-	LCTA	-	-	39941	-	-
1998-115	2447399.56	1989 Feb 6 0133.00	Delta 6925	-	D192	USA 54 (GPS II-7)	USA 54 (GPS II-7)	CC	-	-	LCTA	-	-	21697	-	-
1998-115	2447399.56	1989 Feb 6 0133.00	Delta 6925	-	D192	USA 54 (GPS II-7)	USA 54 (GPS II-7)	CC	-	-	LCTA	-	-	37622	-	-
1998-115	2447399.56	1989 Feb 6 0133.00	Delta 6925	-	D192	USA 54 (GPS II-7)	USA 54 (GPS II-7)	CC	-	-	LCTA	-	-	38084	-	-
1998-115	2447399.56	1989 Feb 6 0133.00	Delta 6925	-	D192	USA 54 (GPS II-7)	USA 54 (GPS II-7)	CC	-	-	LCTA	-	-	22810	-	-
1998-115	2447399.56	1989 Feb 6 0133.00	Delta 6925	-	D192	USA 54 (GPS II-7)	USA 54 (GPS II-7)	CC	-	-	LCTA	-	-	36945	-	-
1998-115	2447399.56	1989 Feb 6 0133.00	Delta 6925	-	D192	USA 54 (GPS II-7)	USA 54 (GPS II-7)	CC	-	-	LCTA	-	-	21385	-	-
1998-115	2447399.56	1989 Feb 6 0133.00	Delta 6925	-	D192	USA 54 (GPS II-7)	USA 54 (GPS II-7)	CC	-	-	LCTA	-	-	36395	-	-
1998-115	2447399.56	1989 Feb 6 0133.00	Delta 6925	-	D192	USA 54 (GPS II-7)	USA 54 (GPS II-7)	CC	-	-	LCTA	-	-	36644	-	-
1998-115	2447399.56	1989 Feb 6 0133.00	Delta 6925	-	D192	USA 54 (GPS II-7)	USA 54 (GPS II-7)	CC	-	-	LCTA	-	-	36060	-	-
1998-115	2447399.56	1989 Feb 6 0133.00	Delta 6925	-	D192	USA 54 (GPS II-7)	USA 54 (GPS II-7)	CC	-	-	LCTA	-	-	36928	-	-
1998-115	2447399.56	1989 Feb 6 0133.00	Delta 6925	-	D192	USA 54 (GPS II-7)	USA 54 (GPS II-7)	CC	-	-	LCTA	-	-	21071	-	-
1998-115	2447399.56	1989 Feb 6 0133.00	Delta 6925	-	D192	USA 54 (GPS II-7)	USA 54 (GPS II-7)	CC	-	-	LCTA	-	-	37569	-	-
1998-115	2447399.56	1989 Feb 6 0133.00	Delta 6925	-	D192	USA 54 (GPS II-7)	USA 54 (GPS II-7)	CC	-	-	LCTA	-	-</			

Launch_Tag	Launch_JD	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Mission	Launch_Code	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee_Km	Range_Km	Dest
1998-064	2449230-03	1993 Aug 30 1238:00	Delta 7925	-	D222	USA 94 (GPS IIA-22)	Navstar GPS SWI 35	-	-	CC	LCTB	-	-	21375	-	-
1998-068	2449237-21	1993 Oct 26 1704:00	Delta 7925	-	D223	USA 96 (GPS IIA-23)	Navstar GPS SWI 34	-	-	CC	LCTB	-	-	21328	-	-
1998-076	2449328-51	1993 Dec 8 0048:00	Delta 7925	-	D224	USA 98 (MATD 4B)	MATD 4B	-	-	CC	LCTA	-	-	36991	-	-
1994-013	2449403-45	1994 Feb 19 2346:00	Delta 7925-8	-	D225	Galaxy IR	Galaxy IR	-	-	CC	LCTB	-	-	37295	-	-
1994-016	2449421-65	1994 Mar 10 0340:01	Delta 7925	-	D226	USA 100 (GPS IIA-24)	Navstar GPS SWI 36	-	-	CC	LCTB	-	-	24068	-	-
1994-071	2449487-97	1994 Nov 1 0931:00	Delta 7925-10	-	D227	Wind	Wind	-	-	CC	LCTB	-	-	150000	-	-
1995-041	2449494-97	1995 Aug 5 1110:00	Delta 7925	-	D228	Koreasat 1	Koreasat 1	-	-	CC	LCTB	-	-	36319	-	-
1995-059	2450026-10	1995 Nov 4 1422:00	Delta 7925-10	-	D229	RadarSat	RadarSat	-	-	V	SLC2W	-	-	1495	-	-
1995-074	2450082-08	1995 Dec 30 1348:00	Delta 7920-10	-	D230	XTE	XTE	-	-	CC	LCTB	-	-	694	-	-
1996-003	2450136-97	1996 Jan 17 1110:00	Delta 7925	-	D231	Koreasat 2	Koreasat 2	-	-	CC	LCTB	-	-	42212	-	-
1996-013	2450137-98	1996 Feb 28 0021:00	Delta 7925-10	-	D232	NEAR	NEAR	-	-	CC	LCTB	-	-	55683	-	-
1996-019	2450170-51	1996 Mar 28 0221:00	Delta 7925	-	D233	Polar	Navstar GPS SWI 33	-	-	V	SLC2W	-	-	38271	-	-
1996-024	2450196-02	1996 Apr 24 1227:40	Delta 7920-10	-	D234	MSX	MSX	-	-	V	SLC2W	-	-	30067	-	-
1996-033	2450227-55	1996 May 24 0110:00	Delta 7925	-	D235	Galaxy 9	Galaxy 9	-	-	CC	LCTB	-	-	33649	-	-
1996-041	2450230-53	1996 Jul 16 0649:00	Delta 7925	-	D236	USA 128 (GPS IIA-26)	Navstar GPS SWI 40	-	-	CC	LCTA	-	-	150000	-	-
1996-066	2450338-87	1996 Sep 12 0849:00	Delta 7925	-	D238	USA 128 (GPS IIA-27)	Navstar GPS SWI 30	-	-	CC	LCTA	-	-	20919	-	-
1996-068	2450342-79	1996 Nov 7 1700:49	Delta 7925	-	D239	HFF	HFF Lander	-	-	CC	LCTB	-	-	150000	-	-
1997-011	2450446-19	1997 Jan 17 1628:01	Delta 7925	-	D240	GPS IIR-1	Navstar GPS SWI 42	-	-	CC	LCTA	-	-	1	-	-
1997-020	2450574-12	1997 May 5 1465:28	Delta 7920-10C	-	D242	Iridium MS-1A	Iridium MS-1A	-	-	V	SLC2W	-	-	962	-	-
1997-026	2450589-44	1997 May 20 2239:00	Delta 7925	-	D243	Thor 1I	Thor 2A	-	-	CC	LCTA	-	-	36758	-	-
1997-034	2450638-04	1997 Jul 9 1304	Delta 7920-10C	-	D244	Iridium MS-2	Iridium MS-2	-	-	V	SLC2W	-	-	791	-	-
1997-038	2450681-53	1997 Jul 23 0343:01	Delta 7925	-	D245	USA 132 (GPS IIR-2)	Navstar GPS SWI 43	-	-	CC	LCTA	-	-	28218	-	-
1997-043	2450682-11	1997 Aug 25 1439:00	Delta 7920-10C	-	D246	Iridium MS-3	Iridium MS-3	-	-	V	SLC2W	-	-	792	-	-
1997-046	2450686-11	1997 Aug 27 0123:36	Delta 7920-6	-	D247	ACE	Advanced Composition Exp	-	-	V	LCTA	-	-	150000	-	-
1997-066	2450736-52	1997 Sep 27 0130:26	Delta 7925-10C	-	D248	Iridium MS-4	Iridium MS-4	-	-	CC	LCTA	-	-	609	-	-
1997-067	2450737-52	1997 Nov 6 0030:00	Delta 7925	-	D249	USA 134 (GPS IIR-28)	Navstar GPS SWI 38	-	-	V	SLC2W	-	-	21607	-	-
1997-082	2450803-05	1997 Dec 20 1316	Delta 7925-10C	-	D250	Iridium MS-5	Iridium MS-5	-	-	V	SLC2W	-	-	786	-	-
1998-002	2450823-52	1998 Jan 10 0032:01	Delta 7925-9.5	-	D252	Iridium MS-6	Iridium MS-6	-	-	V	SLC2W	-	-	786	-	-
1998-008	2450859-11	1998 Feb 14 1434:00	Delta 7920-10C	-	D253	Skynet 4D	Skynet 4D	-	-	CC	LCTB	-	-	37426	-	-
1998-010	2450865-06	1998 Feb 15 1359:09	Delta 7920-10C	-	D254	Globalstar 1-4	Globalstar D-1	-	-	CC	LCTA	-	-	1861	-	-
1998-016	2450902-75	1998 Mar 30 0602:46	Delta 7920-10C	-	D256	Iridium MS-7	Iridium MS-7	-	-	V	SLC2W	-	-	1337	-	-
1998-023	2450926-44	1998 Apr 24 2238:34	Delta 7920-10C	-	D256	Iridium MS-8	Iridium MS-8	-	-	V	SLC2W	-	-	846	-	-
1998-032	2450951-39	1998 May 17 2116:56	Delta 7920-10C	-	D257	Globalstar 5-8	Globalstar D-2	-	-	CC	LCTA	-	-	1929	-	-
1998-035	2450974-52	1998 Jun 27 0035:01	Delta 7920-10C	-	D258	Iridium MS-9	Iridium MS-9	-	-	V	SLC2W	-	-	786	-	-
1998-038	2451022-56	1998 Aug 27 0117:00	Delta 8930	-	D259	Galaxy X	Galaxy X	-	-	CC	LCTB	-	-	37244	-	-
1998-061	2451066-36	1998 Sep 8 2113	Delta 7920-10C	-	D260	Iridium MS-10	Iridium MS-10	-	-	V	SLC2W	-	-	467	-	-
1998-061	2451111-01	1998 Oct 24 2329:51	Delta 7920-10C	-	D261	Deep Space 1	Deep Space 1	-	-	V	SLC2W	-	-	782	-	-
1998-066	2451124-07	1998 Nov 22 1327:52	Delta 7920-10C	-	D262	Iridium MS-11	Iridium MS-11	-	-	V	SLC2W	-	-	150000	-	-
1998-068	2451150-26	1998 Nov 22 2354:00	Delta 7925-9.5	-	D263	ROSE	ROSE	-	-	V	SLC2W	-	-	786	-	-
1998-073	2451182-26	1998 Nov 21 0645:52	Delta 7925-9.5	-	D264	MOH-1	MOH-1	-	-	CC	LCTB	-	-	36315	-	-
1998-081	2451197-35	1998 Jan 7 2021:10	Delta 7425-9.5	-	D266	Mars Climate Orbiter	Mars Climate Orbiter	-	-	CC	LCTA	-	-	150000	-	-
1998-083	2451207-36	1998 Feb 27 0116:15	Delta 7426-9.5	-	D266	Mars Polar Lander	Mars Polar Lander	-	-	CC	LCTB	-	-	150000	-	-
1998-089	2451232-74	1998 Feb 28 0229:55	Delta 7920-10	-	D266	Stardust	Stardust	-	-	V	SLC2W	-	-	876	-	-
1998-090	2451238-27	1998 Feb 28 0132:00	Delta 7920-10	-	D267	ANGS	ANGS	-	-	V	SLC2W	-	-	876	-	-
1998-094	2451303-54	1998 May 5 1632:00	Delta 8930	-	D268	Landsat 7	Landsat 7	-	-	CC	LCTB	-	-	2529	-	-
1998-098	2451340-54	1998 May 10 1646:03	Delta 7920-10C	-	D270	Globalstar 3	Globalstar D-3	-	-	CC	LCTB	-	-	2162	-	-
1998-098	2451354-16	1998 Jun 24 1344:00	Delta 7920-10C	-	D271	Globalstar 4	Globalstar D-3	-	-	CC	LCTB	-	-	619	-	-
1998-098	2451369-87	1998 Jun 24 1844:37	Delta 7420-10C	-	D272	Globalstar 4	Earth Spec. Explorer	-	-	CC	LCTA	-	-	2151	-	-
1998-098	2451384-82	1998 Jul 25 0745:03	Delta 7420-10C	-	D272	Globalstar 5	Globalstar D-5	-	-	CC	LCTA	-	-	2159	-	-
1998-098	2451407-62	1998 Aug 17 0435:03	Delta 7420-10C	-	D274	Globalstar 6	Globalstar D-6	-	-	CC	LCTA	-	-	2166	-	-
1998-098	2451469-04	1998 Oct 7 1251:41	Delta 7925-9.5	-	D274	USA 145 (GPS IIR-3)	Navstar GPS SWI 46	-	-	CC	LCTA	-	-	21912	-	-
2000-008	2451583-34	2000 Feb 8 2124:01	Delta 7420-10C	-	D276	Globalstar 7	Globalstar D-7	-	-	CC	LCTA	-	-	1748	-	-
2000-017	2451629-36	2000 Mar 25 2034:43	Delta 7926-9.5	-	D277	TMAE	TMAE	-	-	V	SLC2W	-	-	46468	-	-
2000-025	2451675-56	2000 May 11 0148:00	Delta 7926-9.5	-	D278	USA 150 (GPS IIR-4)	Navstar GPS SWI 51	-	-	CC	LCTA	-	-	20399	-	-
2000-040	2451741-86	2000 Jul 16 0917:00	Delta 7926-9.5	-	D279	USA 151 (GPS IIR-5)	Navstar GPS SWI 44	-	-	CC	LCTA	-	-	21226	-	-
2000-048	2451779-96	2000 Aug 23 1105:02	Delta 8930	-	D280	DM-F3	DM-F3	-	-	CC	LCTB	-	-	20855	-	-
2000-071	2451820-27	2000 Nov 21 1714:02	Delta 7926-9.5	-	D282	USA 154 (GPS IIR-6)	Navstar GPS SWI 41	-	-	CC	LCTA	-	-	20675	-	-
2000-075	2451870-27	2000 Nov 21 1924:25	Delta 7920-10	-	D282	Earth Orbiter 1	Earth Orbiter 1	-	-	V	SLC2W	-	-	1806	-	-
2001-004	2451939-83	2001 Jan 30 0755:01	Delta 7926-9.5	-	D283	USA 156 (GPS IIR-7)	Navstar GPS SWI 54	-	-	CC	LCTA	-	-	21097	-	-
2001-013	2452007-13	2001 Apr 7 1502:22	Delta 7926-9.5	-	D284	2001 Mars Odyssey	2001 Mars Odyssey	-	-	CC	LCTA	-	-	150000	-	-
2001-020	2452048-24	2001 Mar 18 1745:01	Delta 7926-9.5	-	D285	MAP	GeoLITE	-	-	CC	LCTB	-	-	36284	-	-
2001-027	2452091-32	2001 Jun 30 1946:46	Delta 7426-10	-	D286	Genesis	Genesis	-	-	CC	LCTB	-	-	150000	-	-
2001-034	2452130-18	2001 Aug 8 1613:40	Delta 7926-9.5	-	D287	QuickBird 2	QuickBird	-	-	CC	LCTB	-	-	150000	-	-
2001-047	2452201-29	2001 Dec 18 1851:26	Delta 7920-10	-	D288	Jason/TIMED	Jason/TIMED	-	-	V	SLC2W	-	-	480	-	-
2001-055	2452261-13	2002 Dec 7 1507:35	Delta 7920-10C	-	D289	Triadum IS-1	Triadum IS-1	-	-	V	SLC2W	-	-	1367	-	-
2000-022	2452308-91	2002 Feb 11 1743:44	Delta 7920-10C	-	D290	Ana	EGS PK-1	-	-	V	SLC2W	-	-	783	-	-
2000-034	2452468-58	2002 Jul 3 0647:41	Delta 7426-9.5	-	D292	CONTour	Contour	-	-	CC	LCTA	-	-	712	-	-
2003-002	2452652-53	2003 Jan 13 0045:00	Delta 7920-10	-	D294	TOESAT/ChipSat	TOESAT/ChipSat	-	-	V	SLC2W	-	-	150000	-	-
2003-005	2452669-25	2003 Jan 29 1806:00	Delta 7926-9.5	-	D295	USA 166 (GPS IIR-8)	Navstar GPS SWI 56	-	-	CC	LCTB	-	-	602	-	-
2003-010	2452730-42	2003 Mar 31 2209:01	Delta 7926-9.5	-	D297	USA 168 (GPS IIR-9)	Navstar GPS SWI 45	-	-	CC	LCTB	-	-	20518	-	-
2003-027	2452801-25	2003 Jun 10 1759:47	Delta 7926-9.5	-	D298	NER-A	Mars Exploration Rover 2	-	-	CC	LCTA	-	-	1		

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Mission	FlightCode	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee km	Range km	Dest
2005-018	245510-1.93	2005 May 20 1022:01	Beta 7920-10C	-	D312	NOAA N	NOAA N	-	-	V	SLC2W	-	-	867	-	-
2005-038	245339-65	2005 Sep 26 0337:00	Beta 7925-9.15	-	D313	USA 185 (GPS LIRM-1)	Navstar GPS SVN 53	-	-	CC	SLC17A	-	-	20654	-	-
2006-016	2453853-92	2006 Apr 28 1002:16	Beta 7420-10C	-	D314	Galileo/Cloudsat	Cloudsat	-	-	V	SLC2W	-	-	710	-	-
2006-024	2453908-43	2006 Jun 21 2215	Beta 7925-9.15	-	D316	USA 187-189 (MITEK)	MITEK USC satellite	-	-	CC	SLC17A	-	-	36334	-	-
2006-042	2454004-28	2006 Sep 25 1850	Beta 7925-9.15	-	D318	USA 190 (GPS LIRM-2)	Navstar GPS SVN 52	-	-	CC	SLC17A	-	-	20471	-	-
2006-047	2454034-54	2006 Oct 26 0052:00	Beta 7925-10L	-	D319	STEREO A/B	STEREO Ahead	-	-	CC	SLC17B	-	-	150000	-	-
2006-052	2454057-30	2006 Nov 17 1912:00?	Beta 7925-9.15	-	D321	USA 192 (GPS LIRM-3)	Navstar GPS SVN 58	-	-	CC	SLC17A	-	-	20412	-	-
2006-057	2454084-38	2006 Dec 14 2100:00	Beta 7920-10C	-	D322	USA 193	NOOL-21	NOOL-21	-	V	SLC2W	-	-	374	-	-
2007-004	2454149-46	2007 Feb 17 2301:00	Beta 7920-10C	-	D324	THEMIS	THEMIS P5	-	-	CC	SLC17B	-	-	150000	-	-
2007-023	2454259-61	2007 Jun 8 0234:00	Beta 7920-10C	-	D324	COSMO 1	COSMO-Skymed	-	-	V	SLC2W	-	-	626	-	-
2007-034	2454316-89	2007 Aug 4 0926:34	Beta 7925-9.15	-	D325	Mars Phoenix	Phoenix Lander	-	-	CC	SLC17A	-	-	150000	-	-
2007-041	2454362-27	2007 Sep 15 1635:00	Beta 7920-10C	-	D326	WorldView-1	WorldView-1	-	-	V	SLC2W	-	-	498	-	-
2007-043	2454370-98	2007 Sep 27 1134:00	Beta 7925H	-	D327	Dawn	Dawn	-	-	CC	SLC17B	-	-	150000	-	-
2007-047	2454391-02	2007 Oct 17 1223:00	Beta 7925-9.15	-	D328	COSMO 2	Navstar GPS SVN 55	-	-	CC	SLC17B	-	-	20663	-	-
2007-069	2454443-61	2007 Oct 17 1223:42	Beta 7920-10C	-	D330	USA 196 (GPS LIRM-4)	USA 196 (GPS LIRM-4)	-	-	CC	SLC17A	-	-	642	-	-
2007-062	2454455-34	2007 Dec 20 2004:00	Beta 7925-9.15	-	D331	USA 198 (GPS LIRM-5)	Navstar GPS SVN 57	-	-	V	SLC17A	-	-	20369	-	-
2008-012	2454540-76	2008 Mar 15 0610	Beta 7925-9.15	-	D332	USA 201 (GPS LIRM-6)	Navstar GPS SVN 48	-	-	CC	SLC17A	-	-	20622	-	-
2008-029	2454629-17	2008 Jun 11 1605:01	Beta 7920H	-	D333	GLAST	GLAST	-	-	CC	SLC17B	-	-	588	-	-
2008-032	2454637-82	2008 Jun 20 0746:25	Beta 7320-10C	-	D334	Jason-2	Jason-2	-	-	V	SLC2W	-	-	4372	-	-
2008-042	2454716-29	2008 Sep 6 1860:57	Beta 7420-10C	-	D335	GeotEye-1	GeotEye-1	-	-	V	SLC2W	-	-	688	-	-
2008-054	2454764-60	2008 Oct 25 0222:25	Beta 7420-10C	-	D336	COSMO 3	COSMO-Skymed 3	-	-	V	SLC2W	-	-	635	-	-
2009-005	2454668-93	2009 Feb 6 1022:00	Beta 7320-10C	-	D338	NOAA N'	NOAA N'	-	-	V	SLC2W	-	-	867	-	-
2009-011	2454697-66	2009 Mar 7 0349:57	Beta 7925-10L	-	D339	Kepler	Kepler	-	-	CC	SLC17B	-	-	150000	-	-
2009-014	2454914-86	2009 Mar 24 0834:00	Beta 7925-9.15	-	D340	USA 203 (GPS LIRM-7)	Navstar GPS SVN 49	-	-	CC	SLC17B	-	-	20605	-	-
2009-023	2454957-35	2009 May 5 2024:26	Beta 7920-10C	-	D341	USA 205	ST5 Adv Tech Risk Reduc	-	-	CC	SLC17A	-	-	902	-	-
2009-043	2455060-94	2009 Aug 17 1035:00	Beta 7925-9.15	-	D343	USA 206 (GPS LIRM8)	Navstar GPS SVN 50	-	-	V	SLC17A	-	-	20389	-	-
2009-052	2455100-01	2009 Sep 25 1220:00	Beta 7920-10C	-	D344	USA 209/USA 209	ST5 1	-	-	CC	SLC17B	-	-	1378	-	-
2009-055	2455113-29	2009 Oct 6 1851:01	Beta 7920-10C	-	D345	WorldView-2	WorldView-2	-	-	V	SLC2W	-	-	769	-	-
2009-071	2455180-09	2009 Dec 14 1409:33	Beta 7320-10C	-	D347	WISB	Wide Field IR Explorer	-	-	V	SLC2W	-	-	11110	-	-
2010-060	2455506-60	2010 Nov 6 0220:03	Beta 7420-10C	-	D350	COSMO 4	COSMO-Skymed 4	-	-	V	SLC2W	-	-	632	-	-
2011-024	2455723-10	2011 Jun 10 1420:13	Beta 7320-10C	-	D354	SAC-D	SAC-D	-	-	V	SLC2W	-	-	660	-	-
2011-046	2455815-05	2011 Sep 10 1306:52	Beta 7920H	-	D356	GRALL-A/GRALL-B	GRALL A	-	-	CC	SLC17B	-	-	150000	-	-
2011-061	2455862-91	2011 Oct 28 0946:02	Beta 7920-10C	-	D357	RFP	RPODS Prep Project	-	-	V	SLC2W	-	-	834	-	-
2014-038	2456540-91	2014 Jul 2 0965:23	Beta 7320-10C	-	D367	OC0-2	OC0-2	-	-	V	SLC2W	-	-	10148	-	-
2015-003	2457054-10	2015 Jan 31 1422:00	Beta 7320-10C	-	D370	SNAP	SNAP	-	-	V	SLC2W	-	-	867	-	-
2017-073	2458075-91	2017 Nov 18 0947:36	Beta 7920-10C	-	D378	NOAA-20	JFSS-1	-	-	V	SLC2W	-	-	828	-	-
2018-070	2458377-04	2018 Sep 15 1302	Beta 7420-10C	-	D381	ICESAT-2	ICESAT-2	-	-	V	SLC2W	-	-	468	-	-



Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	OrbPay	Agency	Launch_Code	Group	Category	LTCite	Cite	Notes
1987-A06	2435664.53	1987 Jan 26 0045Z	Thor DM-18	-	101	0.000	AFBMD/6555A	HF	-	Test	Wire	CBMO	-
1987-A28	2435948.69	1987 Apr 20 0431	Thor DM-18	-	102	0.000	AFBMD/6555A	HF	-	Test	Wire	CBMO	-
1987-A41	2435980.71	1987 May 22 0500Z	Thor DM-18	-	103	0.000	AFBMD/6555A	HE	-	Test	Wire	CBMO	-
1987-A89	2436061.34	1987 Aug 30 2010	Thor DM-18	-	104	0.000	AFBMD/6555A	HF	-	Test	MilwaukeeSem570631	CBMO	-
1987-S111	2436102.10	1987 Sep 20 1425	Thor DM-18	-	105	0.000	AFBMD/6555A	HS	-	Test	UPI	CBMO	-
1987-S116	2436115.22	1987 Oct 3 1713Z	Thor DM-18	-	107	0.000	AFBMD/6555A	HF	-	Test	PH	CBMO	-
1987-S120	2436123.19	1987 Oct 11 1633	Thor DM-18	-	108	0.000	AFBMD/6555A	HS	-	Test	AP	CBMO	-
1987-S144	2436136.19	1987 Oct 24 1638	Thor DM-18	-	109	0.000	AFBMD/6555A	HS	-	Test	Wire	CBMO	-
1987-S173	2436180.42	1987 Oct 24 1638	Thor DM-18	-	112	0.000	AFBMD/6555A	HS	-	Test	PH	CBMO	-
1987-S182	2436192.33	1987 Dec 19 1957	Thor DM-18	-	113	0.000	AFBMD/6555A	HS	-	Test	Wire571220	CBMO	-
1988-A06	2436232.34	1988 Jan 28 2016	Thor DM-18	-	114	0.000	AFBMD/6555A	HF	-	Test	JNS	CBMO	-
1988-A13	2436263.06	1988 Feb 28 1308	Thor DM-18	-	120	0.000	AFBMD/6555A	HF	-	Test	Wire/CMBO	CBMO	-
1988-A33	2436313.16	1988 Apr 19 1330	Thor DM-18	-	121	0.000	AFBMD/6555A	HF	-	Test	CMBO/OFI	CBMO	-
1988-S303	2436317.51	1988 Apr 24 0010	Thor Able	-	115	0.000	AFBMD/6555A	HF	-	Reentry Test	Thor/Wire	CBMO/OFI	-
1988-S379	2436359.39	1988 Jun 4 2117	Thor DM-18	-	116	0.000	AFBMD/6555A	HS	-	Reentry Test	CMBO/Wire	CBMO/OFI	-
1988-S84	2436368.13	1988 Jun 15 1506	Thor DM-18	-	122	0.000	AFBMD/6555A	HS	-	Reentry Test	Wire	CBMO/Wire	Thor
1988-S100	2436396.77	1988 Jul 10 0249	Thor Able	-	118	0.000	AFBMD/6555A	HS	-	Reentry Test	CMBO/Wire	Wire	-
1988-S107	2436408.43	1988 Jul 12 0636	Thor Able	-	119	0.000	AFBMD/6555A	HS	-	Reentry Test	CMBO/Wire	CBMO/Wire	-
1988-A62	2436410.78	1988 Jul 26 0940	Thor DM-18	-	126	0.000	AFBMD/6555A	HF	-	Test	Thor/Wire	CBMO/Wire	-
1988-S136	2436422.36	1988 Aug 6 2024	Thor DM-18	-	117	0.000	AFBMD/6555A	HF	-	Test	UPI/Dirich	CBMO	-
1988-F09	2436443.01	1988 Aug 17 1218	Thor Able I	-	130	0.038	AFBMD	UF	-	Sat EEO E	NASA-5-26-59H-Y3	-	-
1988-S251	2436457.86	1988 Oct 11 0942:13	Thor Able I	-	127	0.038	AFBMD	US	G	Sat EEO E	NASA-5-26-59H-Y3	-	-
1988-F19	2436512.87	1988 Nov 5 0953	Thor DM-18A	-	138	0.000	AFBMD	HS	-	Test	Thor/Wire	-	-
1988-S269	2436533.88	1988 Nov 26 0909	Thor DM-18A	-	129	0.038	AFBMD	UF	G	Sat EEO E	NASA-5-26-59H-Y3	-	-
1988-S279	2436543.53	1988 Dec 6 0041	Thor DM-18A	-	140	0.000	AFBMD	HS	-	Test	CMBO/Wire	-	-
1988-S292	2436594.49	1988 Dec 16 2344:45	Thor DM-18A	-	145	0.000	AFBMD	HS	-	Test	CMBO/Wire	-	-
1988-S286	2436594.67	1988 Dec 17 0400	Thor DM-18A	-	161	0.000	AFBMD	HS	-	Test	VCR	-	-
1988-A172	2436668.56	1988 Dec 31 0202	Thor DM-18A	-	146	0.000	AFBMD	HS	-	Test	CMBO/Wire	-	-
1989-E01	2436689.50	1989 Jan 21 0809	Thor Argona A	-	149	0.000	AFBMD	HF	-	Sat LED A	CMBO/Wire	Thor	-
1989-S291	2436691.71	1989 Jan 23 0809	Thor Argona A	-	160/1019	0.000	AFBMD	DE	G	Reentry Test	NR3524	Thor	-
1989-S12	2436699.50	1989 Jan 30 2353	Thor DM-18A	-	128	0.000	AFBMD	HS	-	Test	CMBO	CBMO	-
1989-S20	2436699.50	1989 Jan 30 2353	Thor DM-18A	-	154	0.000	AFBMD	HS	-	Test	CMBO	CBMO	-
1989-BE1	2436628.41	1989 Feb 28 0756	Thor Argona A	-	131	0.000	AFBMD	HS	-	Reentry Test	FresnoBe690228	Thor	-
1989-S54	2436646.76	1989 Mar 21 0619	Thor Argona A	-	132	0.000	AFBMD	HS	-	Reentry Test	NR2104	Thor	-
1989-S55	2436649.94	1989 Mar 22 0058	Thor DM-18A	-	156	0.000	AFBMD	HS	-	Test	Wire	Thor	-
1989-S57	2436664.77	1989 Mar 27 0402	Thor DM-18A	-	162	0.000	AFBMD	HS	-	Test	DaclandTri-b590322	CBMO	-
1989-S46	2436666.39	1989 Apr 6 0635	Thor Argona A	-	153	0.000	AFBMD	HS	-	Reentry Test/Particles	Wire	PULS,9	-
1989-GM1	2436672.39	1989 Apr 13 2118:39	Thor Argona A	-	160/1018	0.788	AFBMD	US	G	Sat LED A	NR3524	VCR	-
1989-S49	2436675.73	1989 Apr 16 2046	Thor DM-18A	-	161	0.000	AFBMD	HS	-	Test	VCR	CBMO	-
1989-S56	2436681.73	1989 Apr 25 0529	Thor DM-18A	-	166	0.000	AFBMD	HS	-	Test	AtensombJbul590423	CBMO	-
1989-S58	2436683.51	1989 Apr 25 0529	Thor DM-18A	-	164	0.000	AFBMD	HS	-	Test	AP/Dirich	CBMO	-
1989-S58	2436701.23	1989 May 12 0735	Thor DM-18A	-	157	0.000	AFBMD	HS	-	Test	AP/Dirich	CBMO	-
1989-S73	2436709.78	1989 May 21 0630	Thor Argona A	-	185	0.000	AFBMD	HS	-	Reentry Test	TroyTimesRece690521	CBMO	-
1989-F04	2436711.11	1989 Jun 3 2009:20	Thor DM-18A	-	174/1020	0.829	AFBMD	OF	G	Sat LED A	TecosmdlyC1590523	CBMO	-
1989-S96	2436726.78	1989 Jun 15 0444	Thor Argona A	-	137	0.000	AFBMD	HS	-	Reentry Test	NR3524	VCR	-
1989-A100	2436736.41	1989 Jun 25 2247:45	Thor DM-18A	-	179/1023	0.270	AFBMD	OF	G	Sat LED A	NR3524	VCR	-
1989-B06	2436745.45	1989 Jun 26 0318	Thor Argona A	-	196	0.000	AFBMD	HS	-	Test	NR3524	VCR	-
1989-S89	2436749.61	1989 Jun 30 0937	Thor DM-18A	-	203	0.000	AFBMD	HS	-	Test	CMBO/Wire	-	-
1989-A119	2436770.81	1989 Jul 21 0723	Thor DM-18A	-	202	0.000	AFBMD	HS	-	Test	CMBO/Wire	-	-
1989-A124	2436774.03	1989 Jul 24 1247	Thor DM-18A	-	175	0.000	RAF	HS	-	Test	CMBO/Wire	-	-
1989-S133	2436794.40	1989 Aug 6 0248	Thor DM-18A	-	208	0.000	AFBMD	HS	-	Test	NR3524	VCR	-
1989-DE1	2436796.62	1989 Aug 7 1434:20	Thor Argona A	-	194	0.000	AFBMD	OS	-	Test	NR3524	VCR	-
1989-E95	2436798.10	1989 Aug 13 1900:08	Thor Able II	-	134	0.042	AFBMD	OS	G	Sat LED 0	RAF/RSC	-	-
1989-S141	2436794.88	1989 Aug 14 0900Z	Thor DM-18A	-	192/1029	0.870	AFBMD	OS	G	Sat LED A	NR3524	VCR	-
1989-A138	2436795.32	1989 Aug 14 1936:04	Thor Argona A	-	204	0.000	AFBMD	HS	-	Test	CMBO	-	-
1989-S217	2436800.31	1989 Aug 19 1924:44	Thor Argona A	-	200/1028	0.810	AFBMD	OS	G	Sat LED A	NR3524	VCR	-
1989-S152	2436803.03	1989 Aug 27 1246	Thor DM-18A	-	216	0.000	AFBMD	HS	-	Test	SACT383	-	-
1989-S169	2436823.76	1989 Sep 12 0603	Thor DM-18A	-	217	0.000	AFBMD	HS	-	Test	NR3524	VCR	-
1989-F08	2436829.38	1989 Sep 17 1434	Thor Able II	M1	136	0.000	RAF	OF	G	Sat LED 0	Dirich	CBMO	-
1989-S177	2436839.29	1989 Sep 22 1909	Thor DM-18A	-	228	0.000	RAF	HS	-	Test	Wire	CBMO	-
1989-S184	2436834.26	1989 Sep 22 1800	Thor DM-18A	-	222	0.000	AFBMD	HS	-	Loss/Meteorites	SasMateoTimes590917	CBMO	-
1989-S198	2436848.20	1989 Oct 6 1626	Thor DM-18A	-	235	0.000	RAF	HS	-	Test	CMBO/Wire	-	-
1989-S200	2436848.27	1989 Oct 6 1626	Thor DM-18A	-	239	0.000	RAF	HS	-	Test	CMBO/Wire	-	-
1989-S210	2436865.68	1989 Oct 14 0415	Thor DM-18A	-	221	0.000	AFBMD	HS	-	Test	NR3524	VCR	-
1989-S217	2436863.46	1989 Oct 21 2257	Thor DM-18A	-	220	0.000	RAF	HS	-	Test	NR3524	VCR	-
1989-S224	2436870.69	1989 Oct 29 0212	Thor DM-18A	-	238	0.000	AFBMD	HS	-	Meteorites	RAF	CBMO	-
1989-S231	2436876.67	1989 Nov 4 0358	Thor DM-18A	-	238	0.000	AFBMD	OS	-	Meteorites	Dirich	CBMO	-
1989-KAP	2436895.35	1989 Nov 12 1924	Thor Argona A	-	181	0.000	RAF	HS	-	Test	Wire	CBMO	-
1989-S239	2436895.35	1989 Nov 12 1924	Thor DM-18A	-	244	0.000	AFBMD	OS	G	Sat LED A	NR3524	VCR	-
1989-S243	2436893.61	1989 Nov 20 0056	Thor Argona A	-	254	0.000	AFBMD	HS	-	Test	CMBO/Wire	CBMO	-
1989-A200	2436904.21	1989 Dec 1 1700Z	Thor DM-18A	-	265	0.000	RAF	MF	-	Test	VCR	VCR	-
1989-A205	2436917.69	1989 Dec 2 0509	Thor DM-18A	-	185	0.000	RAF	MF	-	Test	VCR	CBMO	-
1989-S270	2436920.26	1989 Dec 17 1818	Thor DM-18A	-	255	0.000	AFBMD	HS	-	Meteorites	Dirich	CBMO	-
1989-S118	2436948.19	1989 Jan 14 1635	Thor DM-18C	-	216	0.000	RAF	HS	-	Test/Hire	VCR	CBMO	-
1989-F01	2436955.34	1989 Jan 21 2010	Thor DM-18A	-	215	0.000	RAF	HS	-	Test	NR3524	VCR	-
1989-F02	2436969.29	1989 Feb 4 1851:45	Thor Argona A	-	218/1052	0.330	AFBMD	OF	G	Sat LED A	NR3524	VCR	-
1989-F02	2436974.22	1989 Feb 9 1711	Thor DM-18C	-	259	0.000	AFBMD	HS	-	Test	CMBO/Wire	CBMO	-
1989-F02	2436984.34	1989 Feb 19 2015:14	Thor Argona A	-	223/1054	0.330	AFBMD	OF	G	Sat LED A	NR3524	VCR	-
1989-S43	2436994.17	1989 Feb 29 1600	Thor DM-18C	-	263	0.000	AFBMD	HS	-	Test	Dirich	CBMO	-

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	OrbPay	Agency	Launch_Code	Group	Category	LTCite	Cite	Notes
1960-546	2438996-34	1960 Mar 2 2006	Thor DM-18A	-	272	0.000	RAF	MS	-	UT	VCR	-	-
1960 ALP	2437005-04	1960 Mar 11 1300:07	Thor Able IV	-	219	0.043	AFBMD	DS	-	Sat LE0 E	MASA-PR60-145	-	-
1960 BET	2437025-99	1960 Apr 1 1140:09	Thor Able II	M1	148	0.124	AFBMD	US	G	Sat LE0 0	MASA-TR-R131	-	-
1960 GAM	2437030-00	1960 Apr 13 1202:36	Thor Ablestar	-	257/AB002	0.123	AFBMD	US	G	Sat LE0 0	RAZ/PSC	-	-
1960 DEL	2437040-35	1960 Apr 15 2030:37	Thor Agenna A	-	234/1085	0.781	AFBMD	US	G	Sat LE0 0	MR03E24	VCR	-
1960-F07	2437067-89	1960 May 13 0916:05	Thor Delta	-	144/0001	0.075	GSFC	UF	G	Sat LE0 0	TR-1022	-	-
1960 ETA	2437107-75	1960 Jun 22 2328	Thor Ablestar	-	281/AB003	0.119	AFBMD	US	G	Sat LE0 0	SpaceWor146111-33	-	-
1960-F08	2437108-48	1960 Jun 29 2200:44	Thor DM-18A	-	233	0.000	RAF	MS	-	UT	VCR	-	-
1960-F09	2437115-42	1960 Jun 29 2200:44	Thor Agenna A	-	160/1083	0.330	AFBMD	MS	-	Sat LE0 A	MR03E24	VCR	-
1960 THE	2437157-36	1960 Aug 10 2037:54	Thor Agenna A	-	231/1057	0.780	AFBMD	US	G	Sat LE0 0	MR03E24	VCR	-
1960 IOT	2437158-90	1960 Aug 12 0939:43	Thor Delta	-	270/0002	0.085	GSFC	US	G	Sat LE0 0	TR-1022	-	-
1960-KAP	2437165-33	1960 Aug 18 1957:08	Thor Agenna A	-	237/1056	0.810	AFBMD	US	G	Sat LE0 0	MR03E24	VCR	-
1960-F10	2437165-33	1960 Aug 18 1958	Thor Ablestar	-	262/AB004	0.225	AFBMD	UF	G	Sat LE0 0	Wire	-	-
1960-MU	2437191-43	1960 Sep 13 2213:39	Thor Agenna A	-	246/1058	0.810	AFBMD	US	G	Sat LE0 0	MR03E24	VCR	-
1960-MU	2437212-24	1960 Oct 4 1760	Thor Ablestar	-	293/AB005	0.225	AFBMD	US	G	Sat LE0 0	MR03E24	VCR	-
1960-S315	2437219-41	1960 Oct 11 2153	Thor DM-18A	-	186	0.000	RAF	MS	-	UT	MR03E24	-	-
1960-F15	2437294-35	1960 Oct 26 2026:09	Thor Agenna B	-	253/1061	0.320	AFBMD	MS	-	Sat LE0 A	VCR	-	-
1960-MI	2437281-36	1960 Nov 12 2042:32	Thor Agenna B	-	297/1062	1.037	AFBMD	US	G	Sat LE0 0	TR-1022	-	-
1960-F16	2437281-37	1960 Nov 23 1113:03	Thor Delta	-	245/0003	0.124	GSFC	G	G	Sat LE0 0	AP	-	-
1960-F16	2437289-35	1960 Nov 30 1950	Thor Agenna B	-	283/AB006	0.110	AFBMD	UF	G	Sat LE0 A	VCR	-	-
1960-SIG	2437276-35	1960 Dec 7 2020:56	Thor Ablestar	-	296/1103	1.040	AFBMD	US	G	Sat LE0 0	VCR	-	-
1960-S404	2437282-34	1960 Dec 13 2008	Thor DM-18A	-	267	0.000	RAF	MS	-	UT	VCR	-	-
1960-TAU	2437289-36	1960 Dec 20 2032	Thor Agenna B	-	286/1101	0.936	AFBMD	MS	-	Sat LE0 A	VCR	-	-
1961-EFS	2437348-35	1961 Feb 17 2225:02	Thor Agenna B	-	296/1104	1.038	AFBMD	US	G	Sat LE0 A	VCR	-	-
1961-ZET	2437349-46	1961 Feb 18 2257:56	Thor Agenna B	-	261/1102	0.936	AFBMD	US	G	Sat LE0 A	VCR	-	-
1961-ETA	2437352-66	1961 Feb 22 0945	Thor Ablestar	-	313/AB007	0.796	AFBMD	US	G	Sat LE0 0	SRL-609	-	-
1961-KAP	2437384-14	1961 Mar 25 1517:04	Thor Delta	-	295/0004	0.035	GSFC	G	G	Sat DS0 0	TR-1022	-	-
1961-S37	2437388-72	1961 Mar 30 0513:43	Thor DM-18A	-	243	0.000	RAF	MS	-	UT	VCR	-	-
1961-F02	2437389-36	1961 Mar 30 2034:43	Thor Agenna B	-	300/1105	0.320	AFBMD	MS	-	Sat LE0 A	VCR	-	-
1961-LAM	2437396-31	1961 Apr 6 2116:06	Thor Agenna B	-	307/1106	1.091	AFSSD	US	G	Sat LE0 A	MR0-104	-	-
1961-F05	2437459-39	1961 Jun 8 2121:02	Thor Agenna B	-	302/1108	0.330	AFSSD	UF	G	Sat LE0 A	TR-1022	-	-
1961-XI	2437467-46	1961 Jun 16 2302:52	Thor Agenna B	-	303/1107	1.114	AFSSD	US	G	Sat LE0 A	VCR	-	-
1961-S183	2437471-50	1961 Jun 20 2354	Thor DM-18A	-	276	0.000	RAF	MS	-	UT	VCR	-	-
1961-OMI	2437479-66	1961 Jun 29 0423	Thor Ablestar	-	315/AB008	0.121	AFSSD	US	-	Sat LE0 0	MR0C-HIST	Wire	-
1961-PI	2437486-46	1961 Jul 7 2329:46	Thor Agenna B	-	308/1109	1.115	AFSSD	US	G	Sat LE0 A	MR0-104	VCR	-
1961-MU	2437482-35	1961 Jul 12 1025:00	Thor Delta	-	286/0005	0.131	GSFC	US	G	Sat LE0 0	TR-1022	-	-
1961-F07	2437502-44	1961 Jul 21 2235:00	Thor Agenna B	-	322/1110	0.330	AFSSD	UF	G	Sat LE0 0	VCR	-	-
1961-F08	2437515-50	1961 Aug 4 0001	Thor Agenna B	-	309/1111	0.330	AFSSD	US	G	Sat LE0 A	TR-1022	-	-
1961-EFS	2437527-64	1961 Aug 16 0321:05	Thor Delta	-	312/0006	1.038	GSFC	US	G	Sat LE0 0	VCR	-	-
1961-S31	2437542-33	1961 Aug 30 2000	Thor Agenna B	-	323/1112	1.126	AFSSD	US	G	Sat LE0 A	VCR	-	-
1961-S269	2437549-44	1961 Sep 6 2238:00	Thor DM-18A	-	165	0.000	RAF	MS	-	UT	VCR	-	-
1961-OME	2437555-38	1961 Sep 12 1959	Thor Agenna B	-	310/1113	1.124	AFSSD	US	G	Sat LE0 A	VCR	-	-
1961-A-BET	2437560-36	1961 Sep 17 0422	Thor Agenna B	-	328/1114	1.153	AFSSD	US	G	Sat LE0 A	VCR	-	-
1961-OMI	2437566-31	1961 Oct 13 1922	Thor Agenna B	-	328/1115	1.446	AFSSD	US	G	Sat LE0 A	VCR	-	-
1961-F10	2437586-31	1961 Oct 23 1922	Thor Agenna B	-	329/1119	1.320	AFSSD	US	G	Sat LE0 A	VCR	-	-
1961-A-BET	2437609-38	1961 Nov 5 2003:30	Thor Agenna B	-	336/1116	1.163	AFSSD	US	G	Sat LE0 A	VCR	-	-
1961-ETA	2437619-39	1961 Nov 15 2221:46	Thor Agenna B	-	336/1116	1.163	AFSSD	US	G	Sat LE0 A	VCR	-	-
1961-S410	2437630-56	1961 Nov 18 0126	Thor Ablestar	-	305/AB009?	0.194	AFSSD	US	G	Sat LE0 0	ComonStar611116	RAE	-
1961-KAP	2437630-56	1961 Dec 9 2040:21	Thor DM-18A	-	215	0.000	RAF	MS	-	Sat LE0 0	VCR	-	-
1962-F04	2437636-36	1962 Dec 15 1107:01	Thor Agenna B	-	325/1119	0.300	AFSSD	US	G	Sat LE0 A	VCR	-	-
1962-S14	2437679-06	1962 Jan 13 2141:02	Thor Agenna B	-	327/1120	0.480	AFSSD	US	G	Sat LE0 A	VCR	-	-
1962-F02	2437679-06	1962 Jan 15 1107:01	Thor Agenna B	-	327	0.000	AFSSD	US	G	Sat LE0 A	TR-1022	-	-
1962-F02	2437688-90	1962 Jan 24 0930	Thor DS1-2B	-	311/AB010	0.097	AFSSD	US	G	Payload Test	FTG30406-527	-	-
1962-BET	2437704-03	1962 Feb 6 1243:45	Thor Ablestar	-	317/0007	0.131	GSFC	US	G	Sat LE0 0	TR-1022	-	-
1962-DEL	2437717-28	1962 Feb 27 1939:20	Thor Delta	-	332/2301	1.089	AFSSD	US	G	Sat LE0 A	VCR	-	-
1962-EPS	2437733-32	1962 Feb 27 1939:20	Thor Agenna B	-	241/1123	1.247	AFSSD	US	G	Sat LE0 A	TR-1022	-	-
1962-ZET	2437731-17	1962 Mar 7 1606:18	Thor DM-18A	-	301/0008	0.208	GSFC	US	G	UT	VCR	-	-
1962-LAM	2437772-54	1962 Mar 19 2328	Thor Agenna B	-	229	0.000	RAF	MS	-	Sat LE0 0	VCR	-	-
1962-OMI	2437781-26	1962 Apr 18 0053:47	Thor Delta	-	331/1124	1.217	AFSSD	US	G	Sat LE0 A	TR-1022	-	-
1962-RHO	2437783-52	1962 Apr 26 1800:16	Thor Agenna B	-	320/0069	0.062	GSFC	US	G	Sat LE0 0	TR-1022	-	-
1962-S121	2437787-49	1962 Apr 29 0930:12	Thor Delta	-	333/1125	1.196	AFSSD	US	G	Sat LE0 A	VCR	-	-
1962-F04	2437795-00	1962 May 10 1206	Thor DS1-2E	-	177	0.000	AFSSD	MS	-	Test	Outland1	-	-
1962-SIG	2437800-32	1962 May 15 1936	Thor Ablestar	-	314/AB011	0.161	AFSSD	US	G	Sat LE0 0	VCR	-	-
1962-CHI	2437814-54	1962 May 30 0100:04	Thor Agenna B	-	334/1126	1.074	AFSSD	US	G	Sat LE0 A	VCR	-	-
1962-PHT	2437817-52	1962 Jun 2 0031:28	Thor Agenna B	-	336/1128	1.242	AFSSD	US	G	Sat LE0 A	VCR	-	-
1962-S161	2437819-91	1962 Jun 4 0944:17	Thor DS1-2E	-	335/1127	1.228	AFSSD	US	G	Sat LE0 A	SAMUS	-	-
1962-OME	2437834-35	1962 Jun 18 2020	Thor Agenna B	-	199	0.000	AFSSD	MS	-	Nuclear Test	VCR	-	-
1962-A-ALP	2437834-35	1962 Jun 19 0030	Thor DM-18A	-	343/2312	1.145	AFSSD	US	G	Sat LE0 A	VCR	-	-
1962-A-ALP	2437835-01	1962 Jun 19 1219:01	Thor Delta	-	269	0.000	RAF	MS	-	UT	VCR	-	-
1962-A-ALP	2437835-01	1962 Jun 19 1219:01	Thor DS1-2E	-	321/0010	0.131	GSFC	US	G	Sat LE0 A	TR-1022	-	-
1962-A-ALP	2437835-07	1962 Jun 20 0946:16	Thor Agenna B	-	193	0.000	AFSSD	MS	-	Nuclear Test	VCR	-	-
1962-A-GAM	2437838-52	1962 Jun 23 0930:47	Thor Agenna B	-	339/1129	1.231	AFSSD	US	G	Sat LE0 A	SAMUS	-	-
1962-A-S235	2437843-55	1962 Jun 28 0109	Thor Agenna D	-	340/1151	1.250	AFSSD	US	G	Sat LE0 A	VCR	-	-
1962-A-EPS	2437855-86	1962 Jul 1 0946:28	Thor DS1-2E	-	195	0.000	AFSSD	MS	-	Nuclear Test	VCR	-	-
1962-A-ETA	2437866-54	1962 Jul 10 0930:12	Thor Agenna B	-	316/0011	0.077	GSFC	US	G	Sat WE0 0	TR-1022	-	-
1962-A-KAP	2437873-52	1962 Jul 21 0056:40	Thor Agenna B	-	338	0.000	AFSSD	US	G	Payload Test	TR-1022	-	-
1962-A-KAP	2437873-52	1962 Jul 21 0056:40	Thor Agenna B	-	342/1130	1.236	AFSSD	US	G	Sat LE0 A	SAMUS	-	-
1962-A-SIG	2437905-36	1962 Aug 2 0017	Thor Agenna B	-	180	0.000	AFSSD	MS	-	Nuclear Test	VCR	-	-
1962-A-SIG	2437905-36	1962 Aug 2 0017	Thor Agenna B	-	347/1131	1.239	AFSSD	US	G	Sat LE0 A	VCR	-	-
1962-A-UPS	2437909-54	1962 Aug 29 0100:36	Thor Agenna D	-	344/1152	1.230	AFSSD	US	G	Sat LE0 A	VCR	-	-
1962-A-CHI	2437925-49	1962 Sep 1 2039:09	Thor Agenna B	-	349/1153	1.244	AFSSD	US	G	Sat LE0 A	SAMUS	-	-
1962-A-CHI	2437925-49	1962 Sep 17 2346:18	Thor Agenna B	-	348/1132	1.204	AFSSD	US	G	Sat LE0 A	SAMUS	-	-
1962-B-ALP	2437936-75	1962 Sep 18 0853:08	Thor Delta	-	350/1133	1.247	AFSSD	US	G	Sat LE0 A	VCR	-	-
1962-B-BET	2437937-48	1962 Sep 29 2334:50	Thor Agenna B	-	318/0012	0.129	GSFC	US	G	Sat LE0 0	TR-1022	-	-
1962-B-BET	2437937-48	1962 Sep 29 2334:50	Thor Agenna D	-	341/6101 (TA1)	1.045	LERC/AFSSD	US	G	Sat LE0 0	VCR	-	-
1962-B-BET	2437937-48	1962 Sep 29 2334:50	Thor Agenna D	-	351/1154	1.246	AFSSD	US	G	Sat LE0 A	MR03E88	-	-

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	OrbPay	Agency	Launch_Code	Group	Category	LTCite	Cite	Notes
1962 B GMH	2437940-42	1962 Oct 2 22:11:30	Thor Delta A	-	345/0013	0.040	GSFC	05	G	Sat HEO 0	TR-1022	-	-
1962 B EPS	2437947-27	1962 Oct 9 18:35:39	Thor Delta B	-	352/1134	1.147	AFSSD	05	-	Nuclear Test	SRMUS	VCR	-
1962-A171	2437953-89	1962 Oct 16 09:14:38	Thor Delta B	-	156	0.000	AFSSD	MF	-	Nuclear Test	VCR	-	-
1962-B-5828	2437963-91	1962 Oct 26 16:44:39	Thor Delta A	-	141	0.000	AFSSD	MS	-	Nuclear Test	SRMUS	VCR	-
1962 B KAP	2437964-18	1962 Oct 26 16:14:39	Thor Delta A	-	353/1401	0.915	AFSSD	MS	G	Sat HEO 0	TR-1022	-	-
1962 B LMH	2437965-47	1962 Oct 27 23:15:01	Thor Delta A	-	346/0014	0.044	GSFC	05	G	Sat HEO 0	GetLand1	-	-
1962-5453	2437970-00	1962 Oct 31 08:08	Thor Delta A	-	319/AB012	0.057	AFSSD	05	-	Nuclear Test	VCR	-	-
1962 B UNI	2437974-42	1962 Nov 1 11:54:48	Thor Delta B	-	226	0.000	AFSSD	MS	-	Nuclear Test	SRMUS	VCR	-
1962 B RIG	2437993-42	1962 Nov 5 22:04:32	Thor Delta B	-	356/1136	1.250	AFSSD	05	G	Sat LEO A	SRMUS	VCR	-
1962 B STG	2438003-40	1962 Nov 24 22:00:54	Thor Delta B	-	367/1135	1.296	AFSSD	05	G	Sat LEO A	SRMUS	VCR	-
1962 B TRU	2438011-67	1962 Dec 13 04:07	Thor Delta B	-	367/1135	1.276	AFSSD	05	G	Sat LEO A	SRMUS	VCR	-
1962 B UFS	2438012-38	1962 Dec 13 23:50:01	Thor Delta B	-	365/2015	1.083	AFSSD	05	G	Sat LEO A	SRMUS	VCR	-
1962 B PHI	2438013-38	1962 Dec 14 21:26:07	Thor Delta B	-	365/2015	1.282	AFSSD	05	G	Sat LEO A	SRMUS	VCR	-
1965-002	2438037-38	1965 Jan 7 21:09:49	Thor Delta B	-	369/1157	1.269	AFSSD	05	G	Sat LEO A	TR-1022	MRD-WS117L-004	-
1965-003	2438046-42	1965 Jan 16 21:59	Thor Delta B	-	369/1157	1.176	AFSSD	05	G	Sat LEO A	MRD	VCR	-
1965-004	2438074-73	1965 Feb 14 05:35:08	Thor Delta B	-	358/0016	0.068	GSFC	05	G	Sat LEO A	VCR	-	-
1965-005	2438089-41	1965 Feb 28 21:46:30	Thor Delta B	-	358/0016	0.720	AFSSD	05	G	Sat LEO A	TR-1022	VCR	-
1965-F03	2438107-38	1965 Mar 18 21:13:01	Thor Delta B	-	360/1164	0.626	AFSSD	05	G	Sat LEO A	SRMUS	VCR	-
1965-007	2438121-46	1965 Apr 1 23:01:00	Thor Delta B	-	376/1160	1.275	AFSSD	05	G	Sat LEO A	VCR	-	-
1965-009	2438122-58	1965 Apr 3 02:00:02	Thor Delta B	-	376/1160	0.542	GSFC	05	G	Sat LEO A	TR-1022	VCR	-
1965-F07	2438146-34	1965 Apr 26 20:12:57	Thor Delta B	-	372/1411	0.968	AFSSD	05	G	Sat LEO A	SRMUS	VCR	-
1965-013	2438156-36	1965 May 7 11:38:03	Thor Delta B	-	366/0018	0.079	GSFC	05	G	Sat LEO A	TR-1022	VCR	-
1965-016	2438168-43	1965 May 18 22:21:36	Thor Delta B	-	364/1165	1.585	AFSSD	05	G	Sat LEO A	SRMUS	VCR	-
1965-019	2438193-50	1965 Jun 12 23:55:58	Thor Delta B	-	362/1161	1.528	AFSSD	05	G	Sat LEO A	SRMUS	VCR	-
1965-021	2438196-10	1965 Jun 15 14:29	Thor Delta B	-	359/0019	1.112	AFSSD	05	G	Sat LEO A	SRMUS	VCR	-
1965-025	2438199-31	1965 Jun 19 09:50:01	Thor Delta B	-	381/1166	0.137	GSFC	05	G	Sat LEO A	TR-1022	VCR	-
1965-026	2438207-53	1965 Jun 27 00:37:26	Thor Delta B	-	381/1166	1.573	AFSSD	05	G	Sat LEO A	SRMUS	VCR	-
1965-027	2438210-44	1965 Jun 28 22:30	Thor Delta B	-	380/2314	1.309	AFSSD	05	G	Sat LEO A	VCR	-	-
1965-029	2438229-50	1965 Jul 19 00:00:10	Thor Delta B	-	386/1412	1.233	AFSSD	05	G	Sat LEO A	TR-1022	VCR	-
1965-031	2438237-11	1965 Jul 26 14:33:00	Thor Delta B	-	370/0020	0.066	GSFC	05	G	Sat LEO A	SRMUS	VCR	-
1965-032	2438241-50	1965 Jul 31 00:00:26	Thor Delta B	-	382/1167	1.894	AFSSD	05	G	Sat LEO A	SRMUS	VCR	-
1965-034	2438266-52	1965 Aug 25 00:28:56	Thor Delta B	-	377/1162	1.630	AFSSD	05	G	Sat LEO A	SRMUS	VCR	-
1965-035	2438271-35	1965 Aug 28 20:31:04	Thor Delta B	-	384/1169	1.171	AFSSD	05	G	Sat LEO A	VCR	-	-
1965-H44	2438280-30	1965 Sep 18 09:39	Thor Delta B	-	232	0.000	AFSSD	TS	-	Reentry Test	Wire	-	-
1965-037	2438286-46	1965 Sep 23 23:00:00	Thor Delta B	-	383/1163	0.563	AFSSD	05	G	Sat LEO A	VCR	-	-
1965-038	2438301-36	1965 Sep 28 20:22	Thor Delta B	-	375/AB013	1.128	AFSSD	05	G	Sat LEO A	CR-66649	-	-
1965-F42	2438332-38	1965 Oct 29 21:19:04	Thor Delta B	-	366/1601	0.370	AFSSD	05	G	Sat LEO A	SRMUS	VCR	-
1965-F14	2438343-35	1965 Nov 9 20:27:04	Thor Delta B	-	400/1171	0.665	AFSSD	05	G	Sat LEO A	MRD-WS117L-028	-	-
1965-046	2438360-60	1965 Nov 27 02:50:01	Thor Delta B	-	387/0021	0.963	GSFC	05	G	Sat LEO A	TR-1022	VCR	-
1965-048	2438369-39	1965 Nov 27 12:15:40	Thor Delta B	-	486/1172	0.345	AFSSD	05	G	Sat LEO A	MRD-WS117L-008	-	-
1965-049	2438385-61	1965 Dec 9 21:30:00	Thor Delta B	-	385/AB015	0.177	GSFC	05	G	Sat LEO A	FushFlight22	-	-
1965-054	2438389-90	1965 Dec 21 01:45:42	Thor Delta B	-	388/1022	0.122	GSFC	05	G	Sat LEO A	VCR	-	-
1965-055	2438385-34	1965 Dec 21 21:45:42	Thor Delta B	-	388/1022	0.925	AFSSD	05	G	Sat LEO A	VCR	-	-
1964-001	2438406-34	1964 Jan 21 00:59:54	Thor Delta B	-	380/2354	0.825	AFSSD	05	G	Sat LEO A	VCR	-	-
1964-002	2438413-36	1964 Jan 31 21:41:59	Thor Delta B	-	373/2353	0.083	AFSSD	05	G	Sat LEO A	VCR	-	-
1964-003	2438414-38	1964 Jan 31 21:41:59	Thor Delta B	-	373/2353	0.083	AFSSD	05	G	Sat LEO A	VCR	-	-
1964-004	2438414-38	1964 Jan 31 21:41:59	Thor Delta B	-	373/2353	0.083	AFSSD	05	G	Sat LEO A	VCR	-	-
1964-008	2438439-82	1964 Feb 14 07:47	Thor Delta B	-	389/0063	0.548	LERC/AFSSD	MS	DAC/	Intreceptor	PA37	-	-
1964-009	2438441-40	1964 Feb 15 21:38:23	Thor Delta B	-	389/1174	1.598	AFSSD	05	G	Sat LEO A	VCR	-	-
1964-011	2438453-64	1964 Feb 28 09:20	Thor Delta B	-	389/1174	1.598	AFSSD	05	G	Sat LEO A	VCR	-	-
1964-012	2438453-64	1964 Feb 28 09:20	Thor Delta B	-	389/1174	1.598	AFSSD	05	G	Sat LEO A	VCR	-	-
1964-017	2438473-78	1964 Mar 28 06:20	Thor Delta B	-	209/0006	0.000	LOAHS	05	G	Sat LEO A	PA37	-	-
1964-F02	2438479-01	1964 Mar 19 11:13:41	Thor Delta B	-	209/0006	0.054	GSFC	05	G	Sat LEO A	PA37	-	-
1964-M07	2438479-01	1964 Mar 24 12:15:15	Thor Delta B	-	240	0.000	AFSSD	05	G	Sat LEO A	PA37	-	-
1964-F04	2438479-01	1964 Mar 24 22:22:48	Thor Delta B	-	240	0.000	AFSSD	05	G	Sat LEO A	PA37	-	-
1964-S20	2438506-76	1964 Mar 24 06:15	Thor Delta B	-	290/0003	0.627	LOAHS	05	G	Sat LEO A	Desind	MR640330-16	-
1964-030	2438507-28	1964 Apr 21 19:50	Thor Delta B	-	379/AB014	1.339	AFSSD	05	G	Sat LEO A	Desind	MRD-WS117L-007	-
1964-033	2438513-81	1964 Apr 27 23:23:43	Thor Delta B	-	395/1604	1.593	AFSSD	05	G	Sat LEO A	VCR	-	-
1964-036	2438513-81	1964 Apr 28 07:32	Thor Delta B	-	227/0007	0.000	AFSSD	05	G	Sat LEO A	PA37	-	-
1964-037	2438513-81	1964 Apr 28 07:32	Thor Delta B	-	227/0007	0.000	AFSSD	05	G	Sat LEO A	PA37	-	-
1964-039	2438560-16	1964 Jun 4 9:25	Thor Delta B	-	403/1176	1.588	AFSSD	05	G	Sat LEO A	Intreceptor	-	-
1964-040	2438560-16	1964 Jun 13 15:47	Thor Delta B	-	408/1606	1.320	AFSSD	05	G	Sat LEO A	VCR	-	-
1964-041	2438564-71	1964 Jun 18 04:56:08	Thor Delta B	-	407/2304	0.100	AFSSD	05	G	Sat LEO A	VCR	-	-
1964-042	2438566-47	1964 Jun 19 23:18:07	Thor Delta B	-	410/1609	1.572	AFSSD	05	G	Sat LEO A	VCR	-	-
1964-035	2438579-50	1964 Jul 2 9:59:16	Thor Delta B	-	409/2315	1.368	AFSSD	05	G	Sat LEO A	VCR	-	-
1964-037	2438587-47	1964 Jul 10 23:14:04	Thor Delta B	-	404/1177	1.600	AFSSD	05	G	Sat LEO A	PER	-	-
1964-M19	2438589-15	1964 Jul 22 15:39	Thor Delta B	-	250	0.000	AFSSD	05	G	Sat LEO A	Reentry Test	SP-4005	-
1964-043	2438613-47	1964 Aug 5 23:15:35	Thor Delta B	-	413/1605	1.641	AFSSD	05	G	Sat LEO A	Desind	-	-
1964-047	2438627-01	1964 Aug 19 12:15:02	Thor Delta B	-	417/0025	0.066	GSFC	05	G	Sat LEO A	TR-1022	VCR	-
1964-048	2438629-16	1964 Aug 21 15:45	Thor Delta B	-	412/1603	1.325	AFSSD	05	G	Sat LEO A	TR-1022	VCR	-
1964-052	2438635-83	1964 Aug 28 07:56:57	Thor Delta B	-	389/6201	0.376	LERC/AFSSD	05	G	Sat LEO A	VCR	-	-
1964-056	2438653-45	1964 Sep 14 22:53:43	Thor Delta B	-	405/1178	1.576	AFSSD	05	G	Sat LEO A	PER	VCR	-
1964-060	2438672-66	1964 Oct 4 03:45:00	Thor Delta B	-	392/0026	0.062	GSFC	05	G	Sat LEO A	TR-1022	VCR	-
1964-061	2438674-41	1964 Oct 5 17:04:14	Thor Delta B	-	421/1170	1.590	AFSSD	05	G	Sat LEO A	VCR	-	-
1964-063	2438675-21	1964 Oct 6 17:04:14	Thor Delta B	-	421/1170	0.085	AFSSD	05	G	Sat LEO A	VCR	-	-
1964-067	2438696-42	1964 Oct 29 03:35	Thor Delta B	-	418/1179	1.637	AFSSD	05	G	Sat LEO A	Reentry Test	SP-4005	-
1964-M25	2438697-65	1964 Oct 29 03:35	Thor Delta B	-	418/1179	0.000	AFSSD	05	G	Sat LEO A	Reentry Test	SP-4005	-
1964-071	2438702-40	1964 Nov 2 21:20:23	Thor Delta B	-	260	0.000	AFSSD	05	G	Sat LEO A	VCR	-	-
1964-072	2438703-59	1964 Nov 4 02:12:10	Thor Delta B	-	420/1173	1.648	AFSSD	05	G	Sat LEO A	VCR	-	-
1964-077	2438715-79	1964 Nov 18 06:55:54	Thor Delta B	-	430/2317	1.526	AFSSD	05	G	Sat LEO A	VCR	-	-</



Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	OrbPay	Agency	Launch_Code	Group	Category	LTCite	Cite	Notes
1965-003	2438779.71	1965 Jan 19 0503:42	Thor HG-18	-	224	0.094	S4300	05	G	Sat S50 0	VCR	-	-
1965-004	2438782.83	1965 Jan 22 0752:00	Thor Delta C	-	374/0028	0.140	GSFC	0575	G	Sat S50 0	TR-1022	-	-
1965-005	2438795.19	1965 Feb 3 1636:00	Thor Delta C	-	411/0029	0.236	GSFC	0575	G	Sat S50 0	TR-1022	-	-
1965-003	2438815.11	1965 Feb 23 1436	Thor DSV-2G	-	248	0.000	AFSSD	TS	G	Reentry Test	MR650301-12	-	-
1965-013	2438817.41	1965 Feb 25 2144:55	Thor SLV-2A Agena D	-	432/1611	1.585	AFSSD	05	G	Sat LEO A	VCR	-	-
1965-016	2438829.27	1965 Mar 1 1829:47	Thor SLV-2 Agena D	-	419/2701	0.251	AFSSD	05	G	Sat LEO 0	VCR	-	-
1965-017	2438831.07	1965 Mar 11 1339:59	Thor Ablestar	2	440/AB018	0.072	AFSSD	05	G	Sat LEO 0	VCR	-	-
1965-021	2438837.70	1965 Mar 18 0443:46	Thor RG-18	-	306	0.050	S4300	05	G	Sat S50 0	VCR	-	-
1965-026	2438845.38	1965 Mar 25 2111:17	Thor SLV-2A Agena D	-	429/1612	1.585	AFSSD	05	G	Sat LEO A	VCR	-	-
1965-0216	2438855.81	1965 Apr 5 0720	Thor DSV-2J	-	155	0.000	AFSSD	MS	-	Interceptor	P437	-	-
1965-028	2438857.49	1965 Apr 6 2347:50	Thor Delta D	-	426/0030	0.068	GSFC	05	G	Sat DTG 0	TR-1022	MR650412-12	-
1965-033	2438880.41	1965 Apr 29 2144:56	Thor SLV-2A Agena D	-	437/1614	1.615	AFSSD	05	G	Sat LEO A	VCR	-	-
1965-037	2438899.25	1965 May 18 1802:18	Thor SLV-2A Agena D	-	438/1615	1.615	AFSSD	05	G	Sat LEO A	VCR	-	-
1965-038	2438901.19	1965 May 20 1630:53	Thor Burner 1	-	282	0.072	S4300	05	G	Sat S50 0	VCR	-	-
1965-042	2438910.00	1965 May 29 1200:00	Thor Delta C	-	441/0031	0.059	GSFC	05	G	Sat D50 S0	TR-1022	-	-
1965-045	2438921.42	1965 Jun 9 2158:16	Thor SLV-2 Agena D	-	444/1613	1.615	AFSSD	05	G	Sat LEO 0	VCR	-	-
1965-048	2438936.44	1965 Jun 24 2235:29	Thor Ablestar	2	447/AB019	0.064	AFSSD	05	G	Sat LEO 0	VCR	-	-
1965-051	2438943.57	1965 Jul 1 0407:00	Thor Delta C	-	415/0032	0.129	GSFC	05	G	Sat S50 0	TR-1022	-	-
1965-055	2438955.75	1965 Jul 17 0555:01	Thor SLV-2A Agena D	-	422/2702	1.600	AFSSD	05	G	Sat S50 0	VCR	-	-
1965-057	2438961.42	1965 Jul 19 2201:12	Thor SLV-2A Agena D	-	446/1617	1.615	AFSSD	05	G	Sat LEO A	VCR	-	-
1965-065	2438986.42	1965 Aug 13 2211:24	Thor Ablestar	2	465/AB020	0.079	AFSSD	05	G	Sat LEO A	VCR	-	-
1965-074	2438990.37	1965 Aug 17 2059:57	Thor SLV-2A Agena D	-	449/1618	1.615	AFSSD	05	G	Sat LEO A	VCR	-	-
1965-079	2438998.14	1965 Aug 25 1517:00	Thor Delta C	-	434/0033	0.282	GSFC	05	G	Sat LEO 0	TR-1022	-	-
1965-082	2439005.33	1965 Sep 2 2000:16	Thor Burner 1	-	401/1602	0.522	AFSSD	05	G	Sat LEO 0	VCR	-	-
1965-072	2439013.70	1965 Sep 10 0441:38	Thor Burner 1	-	213	0.072	S4300	05	G	Sat S50 0	VCR	-	-
1965-074	2439026.40	1965 Sep 22 2131:14	Thor SLV-2A Agena D	-	468/1619	1.615	AFSSD	05	G	Sat LEO A	VCR	-	-
1965-079	2439039.24	1965 Sep 25 1745:57	Thor SLV-2A Agena D	-	453/1616	1.615	AFSSD	05	G	Sat LEO A	VCR	-	-
1965-081	2439045.05	1965 Oct 14 1311:55	Thor SLV-2A Agena D	-	455/0601 (T14)	0.507	LERG/AFSSD	05	G	Sat LEO 0	VCR	-	-
1965-086	2439062.38	1965 Oct 28 2117:12	Thor SLV-2A Agena D	-	459/1620	1.616	AFSSD	05	G	Sat LEO 0	VCR	-	-
1965-089	2439071.28	1965 Nov 6 1838:43	Thor Delta E	-	467/0034	0.176	GSFC	05	G	Sat LEO 0	TR-1022	-	-
1965-093	2439083.70	1965 Nov 29 0446:47	Thor SLV-2 Agena B	-	463/0102 (T15)	0.267	LERG/AFSSD	05	G	Sat LEO 0	VCR	-	-
1965-098	2439102.60	1965 Dec 6 0228	Thor DSV-2J	-	188/20011	0.000	AFSSD	TS	-	Interceptor	P437	-	-
1965-102	2439104.36	1965 Dec 9 2110:19	Thor SLV-2A Agena D	-	448/1621	1.615	AFSSD	05	G	Sat LEO A	VCR	-	-
1965-105	2439110.81	1965 Dec 16 0731:21	Thor Delta E	-	460/0035	0.063	GSFC	05	G	Sat LEO 0E	TR-1022	-	-
1965-110	2439119.38	1965 Dec 24 2106:15	Thor SLV-2A Agena D	-	461/1610	1.615	AFSSD	05	G	Sat LEO A	VCR	-	-
1966-001	2439122.70	1966 Jan 7 0446:25	Thor Burner 1	-	251	0.000	S4300	05	G	Sat S50 0	VCR	-	-
1966-071	2439144.26	1966 Jan 16 1511	Thor DSV-2J	-	242	0.000	AFSSD	05	G	Interceptor	P437	-	-
1966-008	2439159.40	1966 Feb 2 2132:13	Thor SLV-2A Agena D	-	460/1623	0.615	AFSSD	05	G	Sat LEO A	TR-1022	-	-
1966-008	2439159.82	1966 Feb 3 0741:23	Thor Delta C	-	445/0036	1.140	GSFC	05	G	Sat S50 0	VCR	-	-
1966-009	2439166.32	1966 Feb 9 1946:01	Thor SLV-2A Agena D	-	428/2703	0.600	AFSSD	05	G	Sat LEO A	TR-1022	-	-
1966-016	2439165.05	1966 Feb 28 2355:00	Thor Delta E	-	461/0037	1.132	G.C.	05	G	Sat S50 0	TR-1022	-	-
1966-018	2439194.42	1966 Mar 9 0456:00	Thor SLV-2A Agena D	-	462/1622	0.640	AFSSD	05	G	Sat LEO A	TR-1022	-	-
1966-019	2439195.53	1966 Mar 12 0841:04	Thor DSV-2J	-	136	0.072	S4300	05	G	Interceptor	P437	-	-
1966-026	2439215.74	1966 Mar 31 0541:04	Thor Burner 1	-	474/1627	0.176	AFSSD	05	G	Sat S50 0	VCR	-	-
1966-029	2439223.42	1966 Apr 3 2202:56	Thor SLV-2A Agena D	-	465/1625	0.615	AFSSD	05	G	Sat LEO A	VCR	-	-
1966-035	2439249.31	1966 Apr 3 1929:54	Thor SLV-2A Agena B	-	465/1625	0.390	AFSSD	05	G	Sat S50 A	VCR	-	-
1966-040	2439260.83	1966 May 14 0955:24	Thor SLV-2A Agena D	-	469/2702 (T16)	0.474	LERG/AFSSD	05	G	Sat S50 A	VCR	-	-
1966-044	2439271.68	1966 May 14 0200:33	Thor SLV-2A Agena D	-	469/2702	1.615	AFSSD	05	G	Sat S50 0	VCR	-	-
1966-044	2439271.68	1966 May 15 1400:30	Thor Delta C1	-	469/0038	0.234	GSFC	05	G	Sat LEO 0	TR-1022	-	-
1966-055	2439298.40	1966 May 21 2131:30	Thor SLV-2A Agena D	-	466/1626	1.615	AFSSD	05	G	Sat LEO A	VCR	-	-
1966-062	2439305.51	1966 Jun 24 0012:00	Thor SLV-2A Agena D	-	473/0531 (T17)	0.085	LERG/AFSSD	05	G	Sat WER 0	VCR	-	-
1966-068	2439308.17	1966 Jun 24 1602:25	Thor Delta E1	-	467/0039	0.094	GSFC	05	G	Sat S50 00 1	TR-1022	-	-
1966-072	2439309.37	1966 Jul 9 0953	Thor DSV-2J	-	259	0.000	AFSSD	MS	-	Interceptor	P437	-	-
1966-072	2439347.37	1966 Jul 9 2046:03	Thorad SLV-2G Agena D	-	506/1631	1.615	AFSSD	05	G	Sat S50 0	TR-1022	-	-
1966-075	2439355.14	1966 Aug 17 1520:17	Thor Delta E1	-	462/0040	0.063	GSFC	05	G	Sat WER 0E	TR-1022	-	-
1966-082	2439364.69	1966 Sep 16 0436:09	Thor Burner 2	-	167/017-1	0.079	S4300	05	G	Sat S50 0E	SAC7383	-	-
1966-085	2439369.38	1966 Sep 20 2144:05	Thor SLV-2 Agena D	-	477/1629	0.05	AFSSD	05	G	Sat LEO 0	VCR	-	-
1966-097	2439400.94	1966 Oct 2 0339:03	Thor Delta E1	-	463/0041	0.160	GSFC	05	G	Sat LEO 0	TR-1022	-	-
1966-096	2439405.46	1966 Oct 26 2305:00	Thor Delta E1	-	464/0042	0.162	GSFC	05	G	Sat DTG 00	TR-1022	-	-
1966-102	2439438.33	1966 Nov 8 1953:02	Thorad SLV-2G Agena D	-	507/1632	1.615	AFSSD	05	G	Sat LEO 0	VCR	-	-
1966-114	2439474.31	1966 Dec 14 1920:03	Thor Delta C	-	471/0043	0.672	GSFC	05	G	Sat LEO 0	TR-1022	-	-
1966-118	2439489.00	1966 Dec 29 1200:06	Thor SLV-2A Agena D	-	459/2731	1.600	AFSSD	05	G	Sat DTG 00	TR-1022	-	-
1967-001	2439501.95	1967 Jan 11 1055:00	Thor Delta C	-	468/0044	0.163	GSFC	05	G	Sat LEO 0	TR-1022	-	-
1967-002	2439505.39	1967 Jan 14 2128:21	Thor SLV-2A Agena D	-	495/1629	0.284	GSFC	05	G	Sat LEO 0	TR-1022	-	-
1967-006	2439517.83	1967 Jan 26 1731	Thor Delta E	-	472/0045	0.130	GSFC	05	G	Sat DTG 00	TR-1022	-	-
1967-010	2439529.83	1967 Feb 8 0800:52	Thor Burner 2	-	169/017-2	0.079	S4300	05	G	Sat S50 0	TR-1022	-	-
1967-015	2439544.42	1967 Feb 22 2202:15	Thor SLV-2A Agena D	-	493/1635	1.615	AFSSD	05	G	Sat LEO 0	TR-1022	-	-
1967-020	2439557.56	1967 Mar 8 1612:00	Thor Delta C	-	431/0046	0.284	GSFC	05	G	Sat LEO 0	TR-1022	-	-
1967-029	2439580.29	1967 Mar 30 1854:23	Thor SLV-2A Agena D	-	470/0047	0.163	GSFC	05	G	Sat DTG 00	TR-1022	-	-
1967-036	2439600.97	1967 Mar 31 0644	Thor DSV-2J	-	501/1636	1.615	AFSSD	05	G	Sat LEO 0	VCR	-	-
1967-041	2439620.41	1967 Apr 20 1121:10	Thor Delta E	-	168	0.000	AFSSD	MS	-	Interceptor	P437	-	-
1967-051	2439635.09	1967 May 9 2150:42	Thorad SLV-2G Agena D	-	484/0048	0.147	GSFC	05	G	Sat S50 0	TR-1022	-	-
1967-052	2439641.90	1967 May 24 1405:54	Thor Delta E1	-	508/1634	1.720	AFSSD	05	G	Sat LEO 0	VCR	-	-
1967-063	2439658.40	1967 May 31 0930:48	Thor SLV-2 Agena D	-	486/0049	0.074	GSFC	05	G	Sat S50 0	TR-1022	LR670524	-
1967-065	2439671.38	1967 Jun 16 2135:22	Thorad SLV-2G Agena D	-	443/2704	0.371	AFSSD	05	G	Sat LEO 0	VCR	-	-
1967-070	2439691.10	1967 Jun 29 2101:44	Thor Burner 2	-	509/1633	1.720	AFSSD	05	G	Sat LEO 0	VCR	-	-
1967-071	2439696.66	1967 Jul 19 1419:02	Thor Delta E1	-	171/017-3	0.097	LOAHS	05	G	Sat WER 0E	SAC7383	-	-
1967-073	2439700.10	1967 Jul 28 1421:07	Thor SLV-2A Agena D	-	488/0050	0.067	GSFC	05	G	Sat LEO 0E	TR-1022	-	-
1967-076	2439710.41	1967 Jul 25 0348:10	Thor SLV-2A Agena D	-	496/2732	1.600	SANSO	05	G	Sat LEO A	VCR	-	-
1967-080	2439725.70	1967 Aug 23 0441:04	Thor Burner 2	-	478/6802 (T18)	0.551	LERG/SANSO	05	G	Sat LEO A	VCR	-	-
1967-083	2439741.42	1967 Sep 15 1941:13	Thor Delta G	-	510/1637	1.640	SANSO	05	G	Sat S50 0	SAC7383	-	-
1967-087	2439749.32	1967 Sep 15 2204:26	Thorad SLV-2G Agena D	-	266/017-4	0.079	LOAHS	05	G	Sat LEO 0	TR-1022	-	-
1967-094	2439761.53	1967 Sep 28 0945:00	Thor Delta E1	-	475/0051	1.990	SANSO	05	G	Sat LEO 0	TR-1022	-	-
1967-096	2439774.83	1967 Oct 11 0757:56	Thor Burner 2	-	442/0052	0.163	GSFC	05	G	Sat DTG 00	TR-1022	-	-
1967-096	2439774.83	1967 Oct 11 0757:56	Thor Burner 2	-	268/017-5	0.079	LOAHS	05	G	Sat S50 0	SAC7383	-	-

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	OrbPay	Agency	Launch_Code	Group	Category	LTCite	Cite	Notes
1967-100	2439792.17	1967 Oct 18 1555:00	Thor Delta C1	-	490/D053	0.285	GSFC	OS	G	Sat LEO 0	TR-1022/TLE	-	-
1967-109	2439797.40	1967 Nov 2 2131:19	Thor Delta EL	Thor Delta C1	490/D053	1.720	SMSD	OS	G	Sat LEO A	PER	-	-
1967-114	2439805.25	1967 Nov 10 1755:08	Thor Delta EL	Thor Delta C1	480/D054	0.135	GSFC	OS	G	Sat SSO 0	TR-1022	-	-
1967-122	2439834.43	1967 Dec 9 2225:41	Thor Delta EL	Thor Delta C1	514/D642	1.990	SMSD	OS	G	Sat LEO A	PER	-	-
1967-123	2439838.09	1967 Dec 13 1408:00	Thor Delta EL	Thor Delta C1	489/D055	0.083	GSFC	OS	G	Sat LEO OE	TR-1022	-	-
1968-004	2439867.18	1968 Jan 11 1616:00	Thor Delta EL	Thor Delta C1	484/D056	0.212	GSFC	OS	G	Sat LEO A	TR-1022	-	-
1968-004	2439872.92	1968 Jan 17 1012	Thor Delta EL	Thor Delta C1	498/D2733	1.600	SMSD	OS	G	Sat LEO A	LR680117	-	-
1968-008	2439880.43	1968 Jan 24 2228	Thor Delta EL	Thor Delta C1	516/D640	1.795	SMSD	OS	G	Sat LEO A	PER	-	-
1968-020	2439930.42	1968 Mar 14 2200:14	Thor Delta EL	Thor Delta C1	518/D638	1.770	SMSD	OS	G	Sat LEO A	PER	-	-
1968-039	2439978.40	1968 May 1 2131	Thor Delta EL	Thor Delta C1	511/D643	2.015	SMSD	OS	G	Sat LEO A	PER	-	-
1968-5318	2439990.80	1968 May 14 0705	Thor Delta EL	Thor Delta C1	205	0.000	SMSD	MS	-	Interceptor	P437	-	-
1968-F04	2439994.85	1968 May 18 0833:12	Thor Delta EL	Thor Delta C1	520/D621 (TA9)	0.595	LERC/SMSD	OF	G	Sat SSO 0	JG9602	-	-
1968-F04	2439999.69	1968 May 23 0438:12	Thor Delta EL	Thor Delta C1	277/B11-6	0.079	LOANS	OS	G	Sat SSO 0	SAC7383	-	-
1968-052	2440028.41	1968 Jun 20 2146:50	Thor Delta EL	Thor Delta C1	517/D645	1.770	SMSD	OS	G	Sat LEO A	PH	-	-
1968-055	2440042.23	1968 Jul 4 1726:50	Thor Delta EL	Thor Delta C1	476/D057	0.268	GSFC	OS	G	Sat LEO A	MOR S-677-68-01	-	-
1968-065	2440076.40	1968 Aug 7 2136:55	Thor Delta EL	Thor Delta C1	522/D644	1.990	SMSD	OS	G	Sat LEO A	PER	-	-
1968-069	2440084.96	1968 Aug 16 1124:33	Thor Delta EL	Thor Delta C1	524/D647	1.770	SMSD	OS	G	Sat LEO A	PER	-	-
1968-078	2440118.40	1968 Sep 19 0059:00	Thor Delta EL	Thor Delta C1	529/D059	0.294	GSFC	OF	G	Sat LEO A	PER	-	-
1968-086	2440134.97	1968 Oct 5 1116:17	Thor Delta EL	Thor Delta C1	521/D2734	1.796	SMSD	OS	G	Sat LEO A	PER	-	-
1968-092	2440152.69	1968 Oct 23 0434:03	Thor Delta EL	Thor Delta C1	173/B11-8	0.079	LOANS	OS	G	Sat LEO A	PER	-	-
1968-098	2440164.40	1968 Nov 3 2130	Thor Delta EL	Thor Delta C1	515/D646	1.990	SMSD	OS	G	Sat LEO A	LR681104	-	-
1968-100	2440168.91	1968 Nov 8 0946:29	Thor Delta EL	Thor Delta C1	479/D060	0.085	GSFC	OS	G	Sat LEO OE	TR-1022	-	-
1968-5596	2440180.80	1968 Nov 20 0706	Thor Delta EL	Thor Delta C1	282	0.000	SMSD	MS	-	Interceptor	P437	-	-
1968-109	2440196.29	1968 Dec 5 1655:00	Thor Delta EL	Thor Delta C1	461/D061	0.109	GSFC	OS	G/OC	Sat SSO 0	TR-1022	-	-
1968-112	2440203.45	1968 Dec 12 2222:04	Thor Delta EL	Thor Delta C1	527/D648	1.810	SMSD	OS	G	Sat LEO A	LR681213	-	-
1968-114	2440206.22	1968 Dec 15 1721:04	Thor Delta EL	Thor Delta C1	532/D062	0.131	GSFC	OS	G	Sat LEO A	TR-1022	-	-
1968-116	2440209.52	1968 Dec 19 0032:00	Thor Delta EL	Thor Delta C1	536/D063	0.294	GSFC	OS	G	Sat LEO A	TR-1022	-	-
1969-006	2440244.20	1969 Jan 22 1646:00	Thor Delta EL	Thor Delta C1	467/D064	0.293	GSFC	OS	G	Sat LEO A	TR-1022	-	-
1969-009	2440251.76	1969 Jan 30 0646	Thor Delta EL	Thor Delta C1	465/D065	0.236	GSFC	OS	G/OC	Sat LEO A	TR-1022	-	-
1969-010	2440258.53	1969 Feb 5 0039:00	Thor Delta EL	Thor Delta C1	519/D650	2.095	SMSD	OS	G	Sat LEO A	PER	-	-
1969-011	2440278.82	1969 Feb 26 0747:01	Thor Delta EL	Thor Delta C1	463/D067	0.291	GSFC	OS	G	Sat LEO A	TR-1022	-	-
1969-026	2440300.40	1969 Apr 14 0754:03	Thor Delta EL	Thor Delta C1	941/D651	1.810	SMSD	OS	G	Sat LEO A	TR-1022	-	-
1969-041	2440343.57	1969 May 21 0200:00	Thor Delta EL	Thor Delta C1	943/D622 (TA10)	0.894	LERC/SMSD	OS	G	Sat LEO A	LR690320	-	-
1969-046	2440363.96	1969 May 24 0200:00	Thor Delta EL	Thor Delta C1	944/D649	0.294	SMSD	OS	G	Sat LEO A	PER	-	-
1969-051	2440378.11	1969 Jun 21 0847:58	Thor Delta EL	Thor Delta C1	535/D068	0.294	GSFC	OS	G	Sat LEO A	TR-1022	-	-
1969-052	2440393.87	1969 Jun 28 0315:59	Thor Delta EL	Thor Delta C1	526/D069	0.620	LERC/SMSD	OS	G	Sat LEO A	TR-1022	-	-
1969-056	2440401.64	1969 Jun 29 0438:59	Thor Delta EL	Thor Delta C1	539/D070	0.697	GSFC	OS	G	Sat LEO A	TR-1022	-	-
1969-062	2440425.69	1969 Jul 23 0338:56	Thor Delta EL	Thor Delta C1	219/B11-7	0.079	LOANS	OS	G	Sat LEO A	TR-1022	-	-
1969-063	2440426.36	1969 Jul 26 0338:56	Thor Delta EL	Thor Delta C1	945/D652	0.990	SMSD	OS	G	Sat LEO A	SAC7383	-	-
1969-064	2440428.39	1969 Jul 26 0338:56	Thor Delta EL	Thor Delta C1	947/D074	1.794	GSFC	OS	G	Sat LEO A	TR-1022	-	-
1969-065	2440435.83	1969 Jul 31 1013:00	Thor Delta EL	Thor Delta C1	523/D735	0.796	SMSD	OS	G	Sat LEO A	TR-1022	-	-
1969-066	2440442.43	1969 Aug 07 0755:00	Thor Delta EL	Thor Delta C1	946/D072	0.085	GSFC	OS	G	Sat LEO A	LR680731	-	-
1969-067	2440461.42	1969 Aug 27 2159:00	Thor Delta EL	Thor Delta C1	530/D073	0.085	GSFC	OS	G	Sat LEO A	TR-1022	-	-
1969-072	2440468.38	1969 Sep 22 1411:02	Thor Delta EL	Thor Delta C1	531/D076	0.810	SMSD	OS	G	Sat LEO OE	TR-1022	-	-
1969-073	2440495.07	1969 Sep 22 1340:00	Thor Delta EL	Thor Delta C1	535/D078	0.610	SMSD	OS	G	Sat LEO OE	PERL02	-	-
1969-082	2440507.53	1969 Sep 22 0037:00	Thor Delta EL	Thor Delta C1	554/D074	0.243	GSFC	OS	G/OC	Sat LEO 0	JG9602	-	-
1969-101	2440560.40	1969 Dec 2 2138	Thor Delta EL	Thor Delta C1	549/D655	1.990	SMSD	OS	G	Sat LEO A	TR-1022	-	-
1970-003	2440560.58	1970 Jan 15 1516:03	Thor Delta EL	Thor Delta C1	557/D075	0.294	GSFC	OS	G	Sat LEO A	TR-1022	-	-
1970-008	2440560.98	1970 Jan 23 1331:02	Thor Delta EL	Thor Delta C1	542/D076	0.327	GSFC	OS	G	Sat LEO 0	TR-1022	-	-
1970-009	2440561.92	1970 Feb 11 0940:47	Thor Delta EL	Thor Delta C1	534/D611 (TA12)	1.524	LERC/SMSD	OS	G	Sat SSO 0	TR-1022	-	-
1970-012	2440569.86	1970 Feb 11 0840:47	Thor Delta EL	Thor Delta C1	287/B11-9	0.104	LOANS	OS	G	Sat LEO 0	SAC7383	-	-
1970-016	2440580.43	1970 Mar 2 2245:00	Thor Delta EL	Thor Delta C1	551/D657	2.095	SMSD	OS	G	Sat LEO A	PER	-	-
1970-020	2440586.49	1970 Mar 20 2352:00	Thor Delta EL	Thor Delta C1	559/D077	0.243	GSFC	OS	G	Sat LEO A	TR-1022	-	-
1970-027	2440673.82	1970 Mar 28 0737:22	Thor Delta EL	Thor Delta C1	152	0.000	SMSD	MS	-	Interceptor	ADCMes	-	-
1970-035	2440699.63	1970 Apr 8 0817:46	Thor Delta EL	Thor Delta C1	553/D631 (TA13)	0.637	LERC/SMSD	OS	G	Sat SSO 0	TR-1022	-	-
1970-038	2440701.50	1970 Apr 23 0046:12	Thor Delta EL	Thor Delta C1	225	0.294	GSFC	OS	G	Sat LEO 0	TR-1022	-	-
1970-040	2440727.40	1970 May 20 2135:10	Thor Delta EL	Thor Delta C1	559/D078	0.000	SMSD	MS	-	Interceptor	P437	-	-
1970-044	2440730.56	1970 Jul 23 0125:00	Thor Delta EL	Thor Delta C1	555/D656	2.095	SMSD	OS	G	Sat LEO A	PER	-	-
1970-055	2440791.47	1970 Jul 23 2323:00	Thor Delta EL	Thor Delta C1	556/D654	1.990	SMSD	OS	G	Sat LEO A	TR-1022	-	-
1970-062	2440818.01	1970 Aug 19 1211:00	Thor Delta EL	Thor Delta C1	563/D079	0.294	GSFC	OS	G/OC	Sat LEO 0	TR-1022	-	-
1970-066	2440824.92	1970 Aug 26 1001:00	Thor Delta EL	Thor Delta C1	561/D080	0.243	GSFC	OS	G	Sat LEO 0	LR700826	-	-
1970-070	2440832.86	1970 Sep 3 0839:45	Thor Delta EL	Thor Delta C1	535/D736	1.796	SMSD	OS	G	Sat LEO A	SAC7383	-	-
1970-070	2440834.95	1970 Sep 3 0839:45	Thor Delta EL	Thor Delta C1	288/B11-13	0.104	LOANS	OS	G	Sat LEO A	PER	-	-
1970-083	2440854.04	1970 Sep 14 1254:01	Thor Delta EL	Thor Delta C1	271	0.000	SMSD	MS	-	Interceptor	FDS	-	-
1970-088	2440909.39	1970 Sep 18 2128:00	Thor Delta EL	Thor Delta C1	552/D658	2.095	SMSD	OS	G	Sat LEO A	PERL112	-	-
1970-106	2440931.98	1970 Dec 11 1135:00	Thor Delta EL	Thor Delta C1	546/D081	0.311	GSFC	OS	G	Sat LEO A	TR-1022	-	-
1971-009	2440985.57	1971 Feb 3 0141:40	Thor Delta EL	Thor Delta C1	560/D082	0.243	GSFC	OS	G	Sat LEO A	TR-1022	-	-
1971-012	2441000.34	1971 Feb 17 0352:05	Thor Delta EL	Thor Delta C1	249/B11-11	0.107	LOANS	OS	G	Sat LEO 0	PERL113	-	-
1971-F01	2441024.18	1971 Feb 17 2004:30	Thor Delta EL	Thor Delta C1	537/D659	0.830	SMSD	OS	G	Sat SSO 0	TR-1022	-	-
1971-019	2441035.38	1971 Mar 13 1615:00	Thor Delta EL	Thor Delta C1	562/D083	0.290	GSFC	OS	G	Sat LEO A	PERL114	-	-
1971-022	2441042.62	1971 Mar 24 2106:00	Thor Delta EL	Thor Delta C1	538/D660	1.990	SMSD	OS	G/OC	Sat LEO A	TR-1022	-	-
1971-024	2441042.62	1971 Apr 1 0257:07	Thor Delta EL	Thor Delta C1	491/D084	0.264	GSFC	OS	G	Sat LEO A	TR-1022	-	-
1971-054	2441111.08	1971 Jun 8 1400:05	Thor Delta EL	Thor Delta C1	210/B11-12	0.300	LOANS	OS	G	Sat LEO A	SAC7383	-	-
1971-060	2441148.95	1971 Jul 16 1049	Thor Delta EL	Thor Delta C1	550/D737	1.796	SMSD	OS	G	Sat LEO A	TR-1022	-	-
1971-076	2441205.40	1971 Sep 10 2132:56	Thor Delta EL	Thor Delta C1	567/D662	2.095	SMSD	OS	G	Sat LEO A	EVL15929-71	-	-
1971-083	2441238.83	1971 Sep 29 0945:00	Thor Delta EL	Thor Delta C1	565/D085	0.660	GSFC	OS	G	Sat LEO A	PERL115	-	-
1971-087	2441242.07	1971 Oct 14 0751:17	Thor Delta EL	Thor Delta C1	159/B11A-10	0.192	LOANS	OS	G	Sat LEO 0	TR-1022	-	-
1971-089	2441242.07	1971 Oct 17 1336	Thor Delta EL	Thor Delta C1	570/7	1.800	SMSD	OS	G	Sat LEO A	PERL116	-	-
1971-091	2441245.98	1971 Oct 21 1132:00	Thor Delta EL	Thor Delta C1	572/D086								

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	OrbPay	Agency	Launch_Code	Group	Category	LTCite	Cite	Notes
1972-032	2441427.41	1972 Apr 19 21:43:59	Thorad SILV-2H	Agens D	569/1661	1.990	SMSD	OS	G	Sat LEO A	PER	-	-
1972-039	2441463.28	1972 May 25 19:41:00	Thorad SILV-2H	Agens D	571/1663	1.984	SMSD	OS	G	Sat SSO A	JCM	-	-
1972-058	2441522.25	1972 Jul 23 16:06:06	Delta 0900		574/0089	0.891	GSFC	OS	G	Sat SSO 0	MOR E-641-72-01	-	-
1972-073	2441583.56	1972 Oct 23 01:20:00	Delta 1604		579/0090	0.390	GSFC	OS	G	Sat SSO L	TR-1022	-	-
1972-089	2441606.22	1972 Oct 15 17:19:19	Thor Burner 2A		576/0091	0.327	GSFC	OS	G	Sat SSO L	TR-1022	-	-
1972-089	2441630.64	1972 Nov 9 03:23:46	Thor Burner 2A		294/811A-16	0.192	10ADS	OS	G/C	Sat SSO L	SAC7383	-	-
1972-099	2441631.55	1972 Nov 10 01:14:03	Delta 1914		580/0092	1.080	GSFC	OS	G	Sat SSO 0	TR-1022	-	-
1972-097	2441662.83	1972 Dec 11 07:56:00	Delta 0900		577/0093	0.715	GSFC	OS	G	Sat SSO 0	TR-1022	-	-
1973-023	2441793.49	1973 Apr 20 23:47:03	Delta 1914		583/0094	0.544	GSFC	OS	G/C	Sat SSO 0	TR-1022	-	-
1973-039	2441844.09	1973 Jun 10 14:13:00	Delta 1913		581/0095	0.462	GSFC	OS	G	Sat SSO 0	TR-1022	-	-
1973-054	2441880.22	1973 Jun 16 17:10:21	Delta 0300		578/0096	0.340	GSFC	OS	G	Sat SSO 0	TR-1022	-	-
1973-078	2441911.70	1973 Aug 17 04:49:12	Thor Burner 2A		291/811A-21	0.192	10ADS	OS	G	Sat SSO 0	SAC7383	-	-
1973-086	2441983.21	1973 Oct 26 02:26:00	Delta 1604		582/0097	0.398	GSFC	OS	G	Sat SSO 0	TR-1022	-	-
1973-101	2442032.76	1973 Dec 16 06:16:00	Delta 0300		576/0098	0.340	GSFC	OS	G	Sat SSO 0	TR-1022	-	-
1974-002	2442066.57	1974 Jan 19 03:38:47	Delta 2313		585/0099	0.668	GSFC	OS	G	Sat SSO 0	TR-1022	-	-
1974-015	2442122.83	1974 Mar 16 08:00:11	Thor Burner 2A		587/0100	0.438	GSFC	OS	G	Sat SSO 0	TR-1022	-	-
1974-022	2442151.48	1974 Apr 13 23:53:03	Delta 2914		207/811A-19	0.192	10ADS	OS	G/C	Sat SSO 0	TR-1022	-	-
1974-063	2442288.64	1974 Aug 9 03:22:47	Thor Burner 2A		586/0101	0.574	GSFC	OS	G	Sat SSO 0	TR-1022	-	-
1974-075	2442331.45	1974 Oct 10 22:53:00	Delta 2914		590/0102	0.627	GSFC	OS	G/C	Sat SSO 0	TR-1022	-	-
1974-089	2442374.22	1974 Nov 15 17:11:00	Delta 2310		589/0103	0.196	GSFC	OS	G	Sat SSO 0	TR-1022	-	-
1974-094	2442400.61	1974 Dec 19 02:39:00	Delta 2313		592/0104	0.399	GSFC	OS	G	Sat SSO 0	TR-1022	-	-
1975-004	2442435.25	1975 Jan 22 17:58:52	Delta 2914		591/0105	0.438	GSFC	OS	G/C	Sat SSO 0	TR-1022	-	-
1975-011	2442450.42	1975 Feb 6 22:04:00	Delta 2914		589/0106	0.400	GSFC	OS	G/C	Sat SSO 0	TR-1022	-	-
1975-027	2442512.50	1975 Apr 9 23:58:02	Delta 1410		598/0107	0.953	GSFC	OS	G	Sat SSO L	TR-1022	-	-
1975-038	2442540.46	1975 May 7 23:35:26	Delta 2914		583/0108	0.628	GSFC	OS	G	Sat SSO L	TR-1022	-	-
1975-043	2442556.64	1975 May 24 03:22:41	Thor Burner 2A		584/0109	0.544	GSFC	OS	G	Sat SSO 0	TR-1022	-	-
1975-052	2442575.84	1975 Jun 12 08:12:00	Delta 2910		596/0110	0.196	10ADS	OS	G	Sat SSO 0	TR-1022	-	-
1975-057	2442584.99	1975 Jun 21 11:43:00	Delta 1910		585/0111	0.827	GSFC	OS	G	Sat SSO 0	TR-1022	-	-
1975-072	2442633.36	1975 Aug 9 01:50:00	Delta 2913		586/0112	1.064	GSFC	OS	G/C	Sat SSO 0	TR-1022	-	-
1975-077	2442651.57	1975 Aug 27 01:42:00	Delta 2914		602/0113	0.278	GSFC	OS	G/C	Sat SSO 0	TR-1022	-	-
1975-082	2442664.73	1975 Sep 9 05:30:00	N-1		994/0114	0.400	GSFC	OS	G/C	Sat SSO 0	TR-1022	-	-
1975-8277	2442674.78	1975 Sep 19 06:50:00	Thor USV-2J		201	0.000	SMSD	RS	-	Targets	WW-NASDA	PA37	-
1975-086	2442691.36	1975 Oct 6 09:00:50	Delta 2910		600/0115	0.675	GSFC	OS	G	Sat SSO 0	TR-1022	-	-
1975-100	2442702.44	1975 Oct 16 22:40:00	Delta 2914		597/0116	0.612	GSFC	OS	G	Sat SSO 0	TR-1022	-	-
1975-5314	2442722.74	1975 Nov 6 05:36:48	Thor USV-2J		274	0.700	SMSD	RS	-	Targets	WW-NASDA	PA37	-
1975-107	2442759.38	1975 Nov 20 02:06:48	Delta 2910		604/0117	0.720	GSFC	OS	G/C	Sat SSO 0	TR-1022	-	-
1976-117	2442789.36	1976 Dec 13 01:56:14	Delta 2914		607/0118	0.867	GSFC	OS	G/C	Sat SSO 0	TR-1022	-	-
1976-004	244285.48	1976 Jan 17 23:51:54	Delta 2914		606/0119	0.685	GSFC	OS	G/C	Sat SSO 0	TR-1022	-	-
1976-010	2442857.83	1976 Feb 19 03:52:52	Thor Burner 2A		182/811A-25	0.192	10ADS	OS	G	Sat SSO 0	TR-1022	-	-
1976-010	2442857.83	1976 Feb 19 03:52:52	Delta 2914		605/0120	0.738	GSFC	OS	G/C	Sat SSO 0	TR-1022	-	-
1976-019	2442857.46	1976 Feb 26 22:47:00	N-1		172 (F)	0.835	GSFC	OS	G/C	Sat SSO 0	TR-1022	-	-
1976-029	2442891.37	1976 Mar 25 20:46:00	Delta 3914		619/0121	0.897	GSFC	OS	G	Sat SSO 0	TR-1022	-	-
1976-035	2442891.37	1976 Mar 25 20:46:00	Delta 2914		608/0122	0.679	GSFC	OS	G	Sat SSO 0	TR-1022	-	-
1976-039	2442893.51	1976 Jun 8 23:31:00	Delta 2913		609/0123	0.679	GSFC	OS	G	Sat SSO 0	TR-1022	-	-
1976-066	2442968.48	1976 Jun 8 23:31:00	Delta 2914		611/0125	0.738	GSFC	OS	G/C	Sat SSO 0	TR-1022	-	-
1976-077	2442989.21	1976 Jul 9 21:10:07	Delta 2914		605/0126	0.340	GSFC	OS	G/C	Sat SSO 0	TR-1022	-	-
1976-051	2443032.83	1976 Sep 14 08:00:55	Thor USV-2U		183	1.183	10ADS	OS	G	Sat SSO 0	SAC7383	-	-
1976-051	2443032.83	1976 Sep 14 08:00:55	Delta 2914		614/0127	0.655	GSFC	OS	G/C	Sat SSO 0	TR-1022	-	-
1976-101	2443171.53	1977 Feb 23 08:50:00	Delta 2914		613/0128	0.701	GSFC	OS	G/C	Sat SSO 0	TR-1022	-	-
1977-005	2443197.87	1977 Feb 23 08:50:00	N-1		N-3 (F)	0.264	NASDA	OS	-	Targets	WW-NASDA	PA37	-
1977-014	2443213.47	1977 Mar 10 23:16:00	Delta 2914		612/0129	0.576	GSFC	OS	G/C	Sat SSO 0	TR-1022	-	-
1977-019	2443253.83	1977 Mar 20 10:15:00	Delta 2914		617/0130	0.573	GSFC	OS	G/C	Sat SSO 0	TR-1022	-	-
1977-044	2443299.82	1977 Apr 6 02:59:02	Thor USV-2U		183	1.182	10ADS	OS	G	Sat SSO 0	SAC7383	-	-
1977-048	2443310.96	1977 Jun 16 08:51:00	Delta 2914		616/0131	0.624	GSFC	OS	G	Sat SSO 0	TR-1022	-	-
1977-085	2443338.94	1977 Jul 14 10:39:00	Delta 2914		619/0132	0.664	GSFC	OS	G/C	Sat SSO 0	TR-1022	-	-
1977-080	2443391.94	1977 Aug 25 23:49:59	Delta 2913		615/0133	0.398	GSFC	OS	G/C	Sat SSO 0	TR-1022	-	-
1977-F04	2443400.48	1977 Sep 13 23:31:00	Delta 3914		619/0134	0.838	GSFC	OS	G/C	Sat SSO 0	TR-1022	-	-
1977-102	2443439.08	1977 Oct 22 13:53:00	Delta 2914		623/0135	0.505	GSFC	OS	G/C	Sat SSO 0	TR-1022	-	-
1977-108	2443470.57	1977 Nov 23 01:56:00	Delta 2914		620/0136	0.699	GSFC	OS	G/C	Sat SSO 0	TR-1022	-	-
1977-118	2443492.53	1977 Dec 15 00:47:00	Delta 2914		624/0137	0.677	GSFC	OS	G/C	Sat SSO 0	TR-1022	-	-
1978-012	2443535.23	1978 Jan 26 17:46:00	Delta 2914		628/0138	0.673	GSFC	OS	G	Sat SSO 0	TR-1022	-	-
1978-018	2443555.67	1978 Feb 16 00:00:00	N-1		N-4 (F)	0.141	NASDA	OS	-	Targets	WW-NASDA	PA37	-
1978-026	2443573.26	1978 Mar 5 17:54:00	Delta 2910		621/0139	0.927	GSFC	OS	G/C	Sat SSO 0	TR-1022	-	-
1978-039	2443606.42	1978 Apr 7 22:01:00	Delta 2914		626/0140	0.678	GSFC	OS	G/C	Sat SSO 0	TR-1022	-	-
1978-044	2443629.63	1978 May 1 03:05:04	Thor USV-2U		143	1.043	10ADS	OS	-	Targets	WW-NASDA	PA37	-
1978-044	2443640.46	1978 May 11 22:59:00	Delta 3914		627/0141	1.885	GSFC	OS	G/C	Sat SSO 0	TR-1022	-	-
1978-062	2443675.95	1978 Jul 16 10:49:00	Delta 2914		625/0142	0.628	GSFC	OS	G/C	Sat SSO 0	TR-1022	-	-
1978-071	2443703.95	1978 Jul 14 10:43:00	Delta 2914		631/0143	0.575	GSFC	OS	G/C	Sat SSO 0	TR-1022	-	-
1978-079	2443733.13	1978 Jul 14 10:43:00	Delta 2914		633/0144	1.921	GSFC	OS	G/C	Sat SSO 0	TR-1022	-	-
1978-088	2443805.84	1978 Oct 24 08:14:01	Delta 2910		630/0145	1.921	GSFC	OS	G	Sat SSO 0	TR-1022	-	-
1978-106	2443831.53	1978 Nov 19 00:46:00	Delta 2914		634/0146	0.706	GSFC	OS	G/C	Sat SSO 0	TR-1022	-	-
1978-116	2443858.53	1978 Dec 16 00:21:00	Delta 2914		632/0147	0.922	GSFC	OS	G/C	Sat SSO 0	TR-1022	-	-
1979-007	2443904.40	1979 Jan 30 21:42:00	Delta 2914		629/0148	0.388	GSFC	OS	G/C	Sat SSO 0	TR-1022	-	-
1979-009	2443910.87	1979 Feb 6 08:46:00	N-1		N-5 (F)	0.260	NASDA	OS	-	Targets	WW-NASDA	PA37	-
1979-031	2444031.27	1979 Jun 6 18:22:12	Thor USV-2U		264	1.183	10ADS	OS	-	Targets	WW-NASDA	PA37	-
1979-072	2444095.51	1979 Aug 10 00:20:00	Delta 2914		638/0149	0.572	GSFC	OS	G/C	Sat SSO 0	TR-1022	-	-
1980-014	2444214.57	1979 Dec 7 01:35:00	Delta 3914		622/0150	0.867	GSFC	OS	G/C	Sat SSO 0	TR-1022	-	-
1980-018	2444284.16	1980 Feb 14 15:57:00	Delta 3910		635/0151	2.315	GSFC	OS					

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	OrbPay	Agency	Launch_Code	Group	Category	LTCite	Cite	Notes
1981-012	2444646-85	1981 Feb 11 0830	H-2	-	H-7(F)	0.650	MASDA	DS	G	Sat STD 00	WW-MASDA	-	-
1981-049	2444747-44	1981 May 22 2229	Delta 3914	-	645/D154	0.836	GSCC	DS	G	Sat STD 00	Falworth	-	-
1981-070	2444819-91	1981 Aug 3 0956	Delta 3913	-	642/D155	0.844	GSCC	DS	G	Sat STD 00	MOR S-850-81-03	-	-
1981-076	2444827-34	1981 Sep 10 2003	H-2	-	H-8(F)	0.653	MASDA	DS	G	Sat STD 00	WW-MASDA	-	-
1981-096	2444872-46	1981 Sep 24 2309	Delta 3910/PM	-	641/D156	1.064	GSCC	DS	G/C	Sat STD 00	Falworth	-	-
1981-100	2444883-98	1981 Oct 6 1127	Delta 2310	-	639/D157	0.489	GSCC	DS	G/C	Sat STD 00	Falworth	-	-
1981-114	2444928-57	1981 Nov 20 0137	Delta 3910/PM	-	640/D158	1.082	GSCC	DS	G/C	Sat STD 00	JCR	-	-
1982-004	2444985-58	1982 Jan 16 0155	Delta 3910/PM	-	643/D159	1.082	GSCC	DS	G/C	Sat STD 00	MOR 0-492-206-82-05	-	-
1982-014	2445026-50	1982 Feb 26 0004:44	Delta 3910/PM	-	644/D160	1.095	GSCC	DS	G/C	Sat STD 00	JCR	-	-
1982-031	2445069-78	1982 Apr 10 0647	Delta 3910/PM	-	647/D161	1.149	GSCC	DS	G/OG	Sat STD 00	Falworth	-	-
1982-058	2445129-52	1982 Jun 9 0024	Delta 3920	-	649/D162	1.095	GSCC	DS	G/C	Sat STD 00	Falworth	-	-
1982-072	2445208-47	1982 Jul 16 1759	Delta 3920	-	648/D163	1.938	GSCC	DS	G/C	Sat STD 00	Falworth	-	-
1982-082	2445267-25	1982 Aug 26 2310	Delta 3920/PM	-	651/D164	1.232	GSCC	DS	G/C	Sat STD 00	Falworth	-	-
1982-087	2445215-71	1982 Sep 3 0500	H-1	-	651/D164	0.385	MASDA	DS	G	Sat STD 00	WW-MASDA	-	-
1982-105	2445270-56	1982 Oct 28 0217:49	Delta 3924	-	652/D165	1.116	GSCC	DS	G/C	Sat STD 00	MOR	-	-
1983-004	2445580-60	1983 Jan 26 0217:00	Delta 3910	-	650/D166	1.077	GSCC	DS	G	Sat STD 00	JCR	-	-
1983-006	2445589-36	1983 Feb 4 0837	H-2	-	H-10(F)	0.670	MASDA	DS	G	Sat STD 00	WW-MASDA	-	-
1983-030	2445636-44	1983 Apr 11 2239	Delta 3924	-	653/D167	1.116	GSCC	DS	G/C	Sat STD 00	MOR + TLE	-	-
1983-041	2445653-43	1983 Apr 28 2228	Delta 3914	-	D168	0.839	GSCC	DS	G/C	Sat STD 00	Falworth	-	-
1983-051	2445681-14	1983 May 26 1518	Delta 3914	-	D169	0.510	GSCC	DS	G/OG	Sat STD 00	LRS0526	-	-
1983-065	2445614-46	1983 Jun 28 2308	Delta 3920/PM	-	D170	1.219	GSCC	DS	G/C	Sat STD 00	Desind	-	-
1983-077	2445644-45	1983 Jul 28 2249	Delta 3920/PM	-	D171	1.225	GSCC	DS	G/C	Sat STD 00	JCR	-	-
1983-078	2445652-35	1983 Aug 5 2029	H-1	-	H-11(F)	0.670	MASDA	DS	G	Sat STD 00	WW-MASDA	-	-
1983-094	2445686-45	1983 Sep 8 2252	Delta 3924	-	D172	1.116	GSCC	DS	G/C	Sat STD 00	MOR N-492-206-83-08	-	-
1983-096	2445690-43	1983 Sep 22 2216	Delta 3920/PM	-	D173	1.219	GSCC	DS	G/C	Sat STD 00	Desind	-	-
1984-005	2445722-53	1984 Jan 23 0758	H-2	-	H-12(F)	0.693	MASDA	DS	G	Sat STD 00	WW-MASDA	-	-
1984-021	2445701-25	1984 Mar 1 1759	Delta 3920	-	D174	1.996	GSCC	DS	G	Sat STD 00	LRS40301	-	-
1984-060	2445915-35	1984 Aug 2 2030	Delta 3920	-	D175	0.666	MASDA	DS	G	Sat STD 00	WW-MASDA	-	-
1984-086	2445929-12	1984 Aug 16 1448	Delta 3924	-	D176	1.054	GSCC	DS	G/C	Sat STD 00	MOR N-492-206-83-08	-	-
1984-101	2445965-43	1984 Sep 21 2216	Delta 3920/PM	-	D177	1.146	GSCC	DS	G/C	Sat STD 00	Desind	-	-
1984-115	2446018-32	1984 Nov 14 0034	Delta 3914	-	H-14(F)	0.680	GSCC	DS	G/C	Sat STD 00	JCR	-	-
1986-016	2446473-33	1986 Feb 12 0758	H-1	-	D178	0.693	MASDA	DS	G	Sat STD 00	WW-MASDA	-	-
1986-044	2446594-43	1986 May 3 2215	Delta 3914	-	H-15(F)	0.736	GSCC	DS	G	Sat STD 00	WW-MASDA	-	-
1986-061	2446655-36	1986 Aug 12 2045:00	H-1	(2)	D169	2.029	MASDA	DS	G	Sat STD 00	ANSTP60512-20	-	-
1986-069	2446679-13	1986 Sep 5 1508:01	Delta 3920	-	H-16(F)	0.740	MASDA	DS	G	Sat STD 00	WW-MASDA	-	-
1987-018	2446845-36	1987 Feb 19 0123	Delta 3924	-	D179	0.840	GSCC	DS	G	Sat STD 00	WW-MASDA	-	-
1987-022	2446853-46	1987 Feb 26 2305	H-2	-	D180	0.840	GSCC	DS	G	Sat STD 00	WW-MASDA	-	-
1987-029	2446875-43	1987 Mar 20 2222	Delta 3920/PM	-	D182	1.203	GSCC	DS	G/C	Sat STD 00	Wire	-	-
1987-070	2447034-39	1987 Aug 27 0520	H-1	-	H-17(F)	1.996	MASDA	DS	G	Sat STD 00	WW-MASDA	-	-
1988-005	2447200-42	1988 Feb 8 2207:00	Delta 3910	-	D181	2.780	GSCC	DS	G	Sat STD 00	WW-MASDA	-	-
1988-012	2447210-32	1988 Feb 19 1065	H-1	-	H-18(F)	1.099	MASDA	DS	G	Sat STD 00	WW-MASDA	-	-
1988-066	2447200-32	1988 Feb 19 1065	H-1	-	H-18(F)	1.099	MASDA	DS	G	Sat STD 00	WW-MASDA	-	-
1988-068	2447200-32	1988 Feb 19 1065	H-1	-	H-18(F)	1.099	MASDA	DS	G	Sat STD 00	WW-MASDA	-	-
1988-070	2447200-32	1988 Feb 19 1065	H-1	-	H-18(F)	1.099	MASDA	DS	G	Sat STD 00	WW-MASDA	-	-
1988-072	2447200-32	1988 Feb 19 1065	H-1	-	H-18(F)	1.099	MASDA	DS	G	Sat STD 00	WW-MASDA	-	-
1988-074	2447200-32	1988 Feb 19 1065	H-1	-	H-18(F)	1.099	MASDA	DS	G	Sat STD 00	WW-MASDA	-	-
1988-076	2447200-32	1988 Feb 19 1065	H-1	-	H-18(F)	1.099	MASDA	DS	G	Sat STD 00	WW-MASDA	-	-
1988-078	2447200-32	1988 Feb 19 1065	H-1	-	H-18(F)	1.099	MASDA	DS	G	Sat STD 00	WW-MASDA	-	-
1988-080	2447200-32	1988 Feb 19 1065	H-1	-	H-18(F)	1.099	MASDA	DS	G	Sat STD 00	WW-MASDA	-	-
1988-082	2447200-32	1988 Feb 19 1065	H-1	-	H-18(F)	1.099	MASDA	DS	G	Sat STD 00	WW-MASDA	-	-
1988-084	2447200-32	1988 Feb 19 1065	H-1	-	H-18(F)	1.099	MASDA	DS	G	Sat STD 00	WW-MASDA	-	-
1988-086	2447200-32	1988 Feb 19 1065	H-1	-	H-18(F)	1.099	MASDA	DS	G	Sat STD 00	WW-MASDA	-	-
1988-088	2447200-32	1988 Feb 19 1065	H-1	-	H-18(F)	1.099	MASDA	DS	G	Sat STD 00	WW-MASDA	-	-
1988-090	2447200-32	1988 Feb 19 1065	H-1	-	H-18(F)	1.099	MASDA	DS	G	Sat STD 00	WW-MASDA	-	-
1988-092	2447200-32	1988 Feb 19 1065	H-1	-	H-18(F)	1.099	MASDA	DS	G	Sat STD 00	WW-MASDA	-	-
1988-094	2447200-32	1988 Feb 19 1065	H-1	-	H-18(F)	1.099	MASDA	DS	G	Sat STD 00	WW-MASDA	-	-
1988-096	2447200-32	1988 Feb 19 1065	H-1	-	H-18(F)	1.099	MASDA	DS	G	Sat STD 00	WW-MASDA	-	-
1988-098	2447200-32	1988 Feb 19 1065	H-1	-	H-18(F)	1.099	MASDA	DS	G	Sat STD 00	WW-MASDA	-	-
1988-100	2447200-32	1988 Feb 19 1065	H-1	-	H-18(F)	1.099	MASDA	DS	G	Sat STD 00	WW-MASDA	-	-
1988-102	2447200-32	1988 Feb 19 1065	H-1	-	H-18(F)	1.099	MASDA	DS	G	Sat STD 00	WW-MASDA	-	-
1988-104	2447200-32	1988 Feb 19 1065	H-1	-	H-18(F)	1.099	MASDA	DS	G	Sat STD 00	WW-MASDA	-	-
1988-106	2447200-32	1988 Feb 19 1065	H-1	-	H-18(F)	1.099	MASDA	DS	G	Sat STD 00	WW-MASDA	-	-
1988-108	2447200-32	1988 Feb 19 1065	H-1	-	H-18(F)	1.099	MASDA	DS	G	Sat STD 00	WW-MASDA	-	-
1988-110	2447200-32	1988 Feb 19 1065	H-1	-	H-18(F)	1.099	MASDA	DS	G	Sat STD 00	WW-MASDA	-	-
1988-112	2447200-32	1988 Feb 19 1065	H-1	-	H-18(F)	1.099	MASDA	DS	G	Sat STD 00	WW-MASDA	-	-
1988-114	2447200-32	1988 Feb 19 1065	H-1	-	H-18(F)	1.099	MASDA	DS	G	Sat STD 00	WW-MASDA	-	-
1988-116	2447200-32	1988 Feb 19 1065	H-1	-	H-18(F)	1.099	MASDA	DS	G	Sat STD 00	WW-MASDA	-	-
1988-118	2447200-32	1988 Feb 19 1065	H-1	-	H-18(F)	1.099	MASDA	DS	G	Sat STD 00	WW-MASDA	-	-
1988-120	2447200-32	1988 Feb 19 1065	H-1	-	H-18(F)	1.099	MASDA	DS	G	Sat STD 00	WW-MASDA	-	-
1988-122	2447200-32	1988 Feb 19 1065	H-1	-	H-18(F)	1.099	MASDA	DS	G	Sat STD 00	WW-MASDA	-	-
1988-124	2447200-32	1988 Feb 19 1065	H-1	-	H-18(F)	1.099	MASDA	DS	G	Sat STD 00	WW-MASDA	-	-
1988-126	2447200-32	1988 Feb 19 1065	H-1	-	H-18(F)	1.099	MASDA	DS	G	Sat STD 00	WW-MASDA	-	-
1988-128	2447200-32	1988 Feb 19 1065	H-1	-	H-18(F)	1.099	MASDA	DS	G	Sat STD 00	WW-MASDA	-	-
1988-130	2447200-32	1988 Feb 19 1065	H-1	-	H-18(F)	1.099	MASDA	DS	G	Sat STD 00	WW-MASDA	-	-
1988-132	2447200-32	1988 Feb 19 1065	H-1	-	H-18(F)	1.099	MASDA	DS	G	Sat STD 00	WW-MASDA	-	-
1988-134	2447200-32	1988 Feb 19 1065	H-1	-	H-18(F)	1.099	MASDA	DS	G	Sat STD 00	WW-MASDA	-	-
1988-136	2447200-32	1988 Feb 19 1065	H-1	-	H-18(F)	1.099	MASDA	DS	G	Sat STD 00	WW-MASDA	-	-
1988-138	2447200-32	1988 Feb 19 1065	H-1	-	H-18(F)	1.099	MASDA	DS	G	Sat STD 00	WW-MASDA	-	-
1988-140	2447200-32	1988 Feb 19 1065	H-1	-	H-18(F)	1.099	MASDA	DS	G	Sat STD 00	WW-MASDA	-	-
1988-142	2447200-32	1988 Feb 19 1065	H-1	-	H-18(F)	1.099	MASDA	DS	G	Sat STD 00	WW-MASDA	-	-
1988-144	2447200-32	1988 Feb 19 1065	H-1	-	H-18(F)	1.099	MASDA	DS	G	Sat STD 00	WW-MASDA	-	-
1988-146	2447200-32	1988 Feb 19 1065	H-1	-	H-18(F)	1.099	MASDA	DS	G	Sat STD 00	WW-MASDA	-	-
1988-148	2447200-32	1988 Feb 19 1065	H-1	-	H-18(F)	1.099	MASDA	DS	G	Sat STD 00	WW-MASDA	-	-
1988-150	2447200-32	1988 Feb 19 1065	H-1	-	H-18(F)	1.099	MASDA	DS	G	Sat STD 00	WW-MASDA	-	-
1988-152	2447200-32	1988 Feb 19 1065	H-1	-	H-18(F)	1.099	MASDA	DS	G	Sat STD 00	WW-MASDA	-	-
1988-154	2447200-32	1988 Feb 19 1065	H-1	-	H-18(F)	1.099	MASDA	DS	G	Sat STD 00	WW-MASDA	-	-
1988-156	2447200-32	1988 Feb 19 1065	H-1	-	H-18(F)	1.099	MASDA	DS	G	Sat STD 00	WW-MASDA	-	-
1988-158	2447200-32	1988 Feb 19 1065	H-1	-	H-18(F)	1.099	MASDA	DS	G	Sat STD 00	WW-MASDA	-	-
1988-160	2447200-32	1988 Feb 19 1065	H-1	-	H-18(F)	1.099	MASDA	DS	G	Sat STD 00	WW-MASDA	-	-
1988-162	2447200-32	1988 Feb 19 1065	H-1	-	H-18(F)	1.099	MASDA	DS	G	Sat STD 00	WW-MASDA	-	-
1988-164	2447200-32	1988 Feb 19 1065	H-1	-	H-18(F)	1.099	MASDA	DS	G	Sat STD 00	WW-MASDA	-	-
1988-166	2447200-32	1988 Feb 19 1065	H-1	-	H-18(F)	1.099	MASDA	DS	G	Sat STD 00	WW-MASDA	-	-
1988-168	2447200-32	1988 Feb 19 1065	H-1	-	H-18(F)	1.099	MASDA	DS	G	Sat STD 00	WW-MASDA	-	-
1988-170													

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	OrbPay	Agency	Launch_Code	Group	Category	LTCite	Cite	Notes
1993-054	2449230.03	1993 Aug 30 1238:00	Delta 7925	-	D222	1.902	MSSC	05	CG	Sat WTD 80 1	Wire	-	-
1993-068	2449237.21	1993 Oct 26 1704:00	Delta 7925	-	D223	1.882	MSSC	05	CG	Sat WTD 80 1	Wire	-	-
1993-076	2449239.53	1993 Dec 8 0048:00	Delta 7925	-	D224	1.431	MSSC	05	CG	Sat WTD 80	Wire	-	-
1994-013	2449403.49	1994 Feb 19 2345:00	Delta 7925-8	-	D225	1.393	MSSC	05	CG	Sat GTD 00	Wire	Rugg	-
1994-016	2449421.65	1994 Mar 10 0940:01	Delta 7925	-	D226	1.932	MSSC	05	CG	Sat WTD 80 1	Wire	-	-
1994-071	2449657.90	1994 Nov 1 0931:00	Delta 7925-10	-	D227	1.215	MSSC	05	CG	Sat DSD 80	Wire	-	-
1995-041	2449994.97	1995 Aug 5 1110:00	Delta 7925	-	D228	1.464	MSSC	05	CG	Sat GTD 80	Rugg	-	-
1995-059	2450026.10	1995 Nov 4 1422:00	Delta 7920-10	-	D229	2.790	MSSC	05	CG/GG	Sat SSO F	Wire	-	-
1995-074	2450082.08	1995 Dec 30 1348:00	Delta 7920-10	-	D230	2.965	MSSC	05	CG	Sat LEO L	Wire	-	-
1996-003	2450096.97	1996 Jan 14 1110:00	Delta 7925-8	-	D231	1.459	MSSC	05	CG	Sat GTD LD	Wire	-	-
1996-013	2450131.36	1996 Feb 17 2043:27	Delta 7925-8	-	D232	1.469	MSSC	05	CG	Sat EEO BE	Wire	-	-
1996-019	2450170.51	1996 Mar 28 0021:00	Delta 7925-10	-	D233	1.274	MSSC	05	CG	Sat WTD 80 1	Wire	-	-
1996-031	2450187.02	1996 Apr 24 1124:00	Delta 7925	-	D234	1.882	MSSC	05	CG	Sat WTD 80 1	Rugg	-	-
1996-024	2450198.02	1996 Apr 24 1227:40	Delta 7920-10	-	D235	2.812	MSSC	05	CG	Sat SSO L	Wire	-	-
1996-033	2450227.55	1996 May 24 0110:00	Delta 7925	-	D236	1.400	MSSC	05	CG	Sat GTD LD	Rugg	-	-
1996-041	2450280.53	1996 Jul 16 0050:00	Delta 7925	-	D237	1.882	MSSC	05	CG	Sat WTD 80 1	Wire	-	-
1996-055	2450338.37	1996 Sep 12 0849:00	Delta 7925	-	D238	1.882	MSSC	05	CG	Sat WTD 80 1	Wire	-	-
1996-062	2450395.21	1996 Nov 7 1700:49	Delta 7925	-	D239	1.062	MSSC	05	CG	Sat EEO OE	Wire	-	-
1996-068	2450421.79	1996 Dec 4 0658:07	Delta 7925	-	D240	0.880	MSSC	05	CG	Sat WTD 80 1	Wire	-	-
1997-001	2450466.19	1997 Jan 17 1628:01	Delta 7925	-	D241	2.033	MSSC	05	CG	Sat WTD 80 1	Wire	-	-
1997-020	2450574.12	1997 May 5 1485:28	Delta 7920-10C	-	D242	1.882	MSSC	05	CG	Sat LEO L	Wire	AMSF970512-25	-
1997-025	2450589.44	1997 May 20 2239:00	Delta 7925	-	D243	1.467	MSSC	05	CG	Sat GTD LD	Wire	-	-
1997-034	2450689.04	1997 Jul 9 1304	Delta 7920-10C	-	D244	3.310	MSSC	05	CG	Sat WTD 80 1	Wire	-	-
1997-035	2450689.44	1997 Jul 23 0943:01	Delta 7920-10C	-	D245	2.033	MSSC	05	CG	Sat WTD 80 1	Wire	-	-
1997-043	2450682.65	1997 Aug 21 0038:40	Delta 7920-10C	-	D246	2.033	MSSC	05	CG	Sat WTD 80 1	Wire	-	-
1997-045	2450681.53	1997 Aug 25 1438:00	Delta 7920-5	-	D247	3.310	BLS	05	CG	Sat EEO 0	Wire	-	-
1997-046	2450686.11	1997 Aug 25 1438:00	Delta 7920-5	-	D248	0.785	BLS	05	CG	Sat LEO L	Wire	-	-
1997-056	2450718.56	1997 Sep 27 0123:36	Delta 7920-10C	-	D249	3.310	BLS	05	CG	Sat WTD 80 1	Wire	-	-
1997-067	2450758.52	1997 Nov 6 0030:00	Delta 7925	-	D250	1.882	BLS	05	CG	Sat WTD 80 1	Wire	-	-
1997-069	2450761.57	1997 Nov 9 0134:26	Delta 7920-10C	-	D251	3.310	BLS	05	CG	Sat WTD 80 1	Wire	-	-
1997-082	2450803.05	1997 Dec 20 1316	Delta 7920-10C	-	D252	3.310	BLS	05	CG	Sat WTD 80 1	Wire	-	-
1998-002	2450823.52	1998 Jan 10 0032:01	Delta 7925-5	-	D253	1.490	BLS	05	CG	Sat GTD LD	Wire	-	-
1998-005	2450869.11	1998 Feb 14 1454:00	Delta 7420-10C	-	D254	1.800	BLS	05	CG	Sat LEO L	Wire	-	-
1998-010	2450863.08	1998 Feb 18 1855:09	Delta 7920-10C	-	D255	3.310	BLS	05	CG	Sat LEO L	Wire	-	-
1998-019	2450922.75	1998 Mar 30 0602:46	Delta 7920-10C	-	D256	3.310	BLS	05	CG	Sat LEO L	Rugg	-	-
1998-023	2450926.44	1998 Apr 24 2236:34	Delta 7920-10C	-	D257	1.800	BLS	05	CG	Sat LEO L	Wire	-	-
1998-032	2450951.32	1998 May 17 2116:56	Delta 7920-10C	-	D258	3.310	BLS	05	CG	Sat LEO L	Wire	-	-
1998-035	2450974.59	1998 Jun 10 0035:01	Delta 7925-9.5	-	D259	4.451	BLS	05	CG	Sat GTD 80	Wire	-	-
1998-055	2451022.58	1998 Aug 27 0117:00	Delta 6950	-	D260	3.876	BLS	05	CG	Sat GTD 0	Wire	-	-
1998-063	2451065.36	1998 Sep 8 2113	Delta 7920-10C	-	D261	3.310	BLS	05	CG	Sat LEO L	Wire	-	-
1998-061	2451111.01	1998 Oct 24 1206:01	Delta 7526-9.5	-	D262	3.310	BLS	05	CG	Sat EEO 80	Wire	-	-
1998-066	2451124.01	1998 Nov 6 1537:52	Delta 7920-10C	-	D263	1.800	BLS	05	CG	Sat LEO L	Wire	-	-
1998-068	2451140.00	1998 Nov 22 1345:00	Delta 7925-9.5	-	D264	0.825	BLS	05	CG	Sat GTD LD	Wire	-	-
1998-073	2451189.28	1998 Dec 11 1945:52	Delta 7425-9.5	-	D265	0.629	BLS	05	CG	Sat EEO BE	Wire	-	-
1999-001	2451192.38	1999 Jan 9 2021:10	Delta 7425-9.5	-	D266	0.629	BLS	05	CG	Sat EEO BE	Wire	-	-
1999-003	2451192.38	1999 Jan 9 2021:10	Delta 7425-9.5	-	D267	0.385	BLS	05	CG	Sat EEO BE	Wire	-	-
1999-020	2451232.34	1999 Feb 23 1029:55	Delta 7920-10	-	D268	2.812	BLS	05	CG	Sat SSO L	Wire	-	-
1999-021	2451232.34	1999 Feb 23 1029:55	Delta 7920-10	-	D269	2.812	BLS	05	CG	Sat SSO L	Wire	-	-
1999-027	2451267.07	1999 Apr 15 0152:00	Delta 8920	-	D270	4.300	BLS	05	CG	Sat SSO L	Wire	-	-
1999-031	2451303.54	1999 May 6 0105:00	Delta 8920	-	D271	1.800	BLS	05	CG	Sat LEO L	Wire	-	-
1999-035	2451354.16	1999 Jun 24 1544:00	Delta 7920-10C	-	D272	1.130	BLS	05	CG	Sat LEO L	Wire	-	-
1999-037	2451369.37	1999 Jun 24 1544:00	Delta 7920-10C	-	D273	1.800	BLS	05	CG	Sat LEO L	Wire	-	-
1999-041	2451384.82	1999 Jul 16 0945:37	Delta 7420-10C	-	D274	1.800	BLS	05	CG	Sat LEO L	Wire	-	-
1999-047	2451407.99	1999 Jul 25 0746:30	Delta 7420-10C	-	D275	1.800	BLS	05	CG	Sat LEO L	Wire	-	-
1999-045	2451467.64	1999 Aug 17 0437:41	Delta 7925-9.5	-	D276	2.033	BLS	05	CG	Sat WTD 80 1	Wire	-	-
1999-055	2451469.04	1999 Oct 7 1251:01	Delta 7925-9.5	-	D277	1.800	BLS	05	CG	Sat WTD 80 1	Wire	-	-
2000-008	2451553.94	2000 Feb 9 2124:00	Delta 7420-10C	-	D278	0.496	BLS	05	CG	Sat EEO 0	Wire	-	-
2000-009	2451629.36	2000 Mar 25 2034:43	Delta 7925-9.5	-	D279	2.033	BLS	05	CG	Sat WTD 80 1	Wire	-	-
2000-017	2451675.68	2000 May 11 0143:00	Delta 7925-9.5	-	D280	2.033	BLS	05	CG	Sat WTD 80 1	Wire	-	-
2000-025	2451741.89	2000 Jul 16 0917:00	Delta 7925-9.5	-	D281	4.348	BLS	05	CG	Sat GTD 0	Wire	-	-
2000-040	2451779.96	2000 Aug 23 1105:02	Delta 8920	-	D282	4.348	BLS	05	CG	Sat GTD 0	Wire	-	-
2000-048	2451859.22	2000 Nov 10 1714:02	Delta 7925-9.5	-	D283	2.033	BLS	05	CG	Sat WTD 80 1	Wire	-	-
2000-075	2451870.27	2000 Nov 21 1924:25	Delta 7920-10	-	D284	1.247	BLS	05	CG	Sat SSO B	Wire	-	-
2000-076	2451870.27	2000 Nov 21 1924:25	Delta 7920-10	-	D285	2.033	BLS	05	CG	Sat WTD 80 1	Wire	-	-
2001-004	2451939.83	2001 Jan 30 0755:01	Delta 7925-9.5	-	D286	0.725	BLS	05	CG	Sat EEO OE	Wire	-	-
2001-013	2452007.13	2001 Apr 7 1502:22	Delta 7925-9.5	-	D287	1.870	BLS	05	CG	Sat GTD 0	Wire	-	-
2001-020	2452048.24	2001 May 18 1745:01	Delta 7925-9.5	-	D288	0.840	BLS	05	CG	Sat DSD 00	Wire	-	-
2001-027	2452091.32	2001 Jun 30 1946:46	Delta 7425-10	-	D289	0.856	BLS	05	CG	Sat EEO 80	Wire	-	-
2001-034	2452130.18	2001 Aug 8 1613:40	Delta 7326-9.5	-	D290	0.856	BLS	05	CG	Sat EEO 80	Wire	-	-
2001-047	2452201.29	2001 Oct 18 1851:26	Delta 7320-10	-	D291	1.028	BLS	05	CG	Sat LEO L	spaceflightnow.com	-	-
2001-055	2452251.13	2001 Dec 7 1507:35	Delta 7920-10	-	D292	1.273	BLS	05	CG	Sat LEO L	spaceflightnow.com	-	-
2002-022	2452398.91	2002 Feb 11 1743:44	Delta 7920-10C	-	D293	3.078	BLS	05	CG	Sat LEO L	spaceflightnow.com	-	-
2002-022	2452398.91	2002 Feb 11 1743:44	Delta 7920-10C	-	D294	3.078	BLS	05	CG	Sat LEO L	spaceflightnow.com	-	-
2003-002	2452458.78	2003 Jan 3 0647:41	Delta 7425-9.5	-	D295	0.938	BLS	05	CG	Sat DSD P0	spaceflightnow.com	-	-
2003-004	2452562.63	2003 Jun 13 0045:00	Delta 7320-10	-	D296	1.069	BLS	05	CG	Sat LEO L	spaceflightnow.com	-	-
2003-005	2452669.25	2003 Mar 31 2209:01	Delta 7925-9.5	-	D297	2.033	BLS	05	CG	Sat WTD 80 1	spaceflightnow.com	-	-
2003-010	2452730.42	2003 Mar 31 2209:01	Delta 7925-9.5	-	D298	2.033	BLS	05	CG	Sat WTD 80 1	spaceflightnow.com	-	-
2003-027	2452801.25	2003 Jun 10 1758:47	Delta 7925-9.5	-	D299	1.064	BLS	05	CG	Sat EEO P0	spaceflightnow.com	-	-
2003-032	2452828.64	2003 Jul 8 0318:15	Delta 7925H	-	D300	1.065	BLS	05	CG	Sat EEO P0	spaceflightnow.com	-	-
2003-038	2452876.73	2003 Aug 25 0535:39	Delta 7920H	-	D301	0.922	BLS	05	CG	Sat EEO F	spaceflightnow.com	-	-
2003-058	2452994.84	2003 Dec 21 0805:00	Delta 7925-9.5	-	D302	2.033	BLS	05	CG	Sat WTD 80 1	spaceflightnow.com	-	-
2004-009	2453085.25	2004 Mar 20 1753:00	Delta 7925-9.5	-	D303	2.033	BLS	05	CG	Sat WTD 80 1	spaceflightnow.com	-	-
2004-014	2453116.21	2004 Apr 20 1657:24	Delta 7920-10C	-	D304	3.145	BLS	05	CG	Sat LEO L	spaceflightnow.com	-	-
2004-023	2453180.45	2004 Jun 23 2264:00	Delta 7925-9.5	-	D305	2.932	BLS	05	CG	Sat WTD P0 1	spaceflightnow.com	-	-
2004-026	2453200.92	2004 Jul 15 1001:59	Delta 7920-10C	-	D306	3.112	BLS	05	CG	Sat SSO L	spaceflightnow.com	-	-
2004-030	2453220.76	2004 Aug 3 0615:57	Delta 7925H	-	D307	1.108	BLS	05	CG	Sat EEO PE	spaceflightnow.com	-	-
2004-040	2453315.74	2004 Nov 6 0539:00	Delta 7925-9.5	-	D308	2.032	BLS	05	CG	Sat WTD P0 1	spaceflightnow.com	-	-
2004-047	2453330.22	2004 Nov 20 1716:01	Delta 7320-10C	-	D309	1.470	BLS	05	CG	Sat LEO L	spaceflightnow.com	-	-
2005-001	2453383.28	2005 Jan 12 1847:08	Delta 7925-9.5	-	D311	0.973	BLS	05	CG	Sat EEO PE	spaceflightnow.com	-	-

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	OrbPay t	Launch_Agency	Launch_Code	Group	Category	LTCite	Cite	Notes
2005-018	2455510.93	2005 May 20 1022:01	Delta 7320-10C	-	D312	1.420	BLS	US	CG	Sat S50 P	spaceflightnow.com	-	-
2005-038	2453639.65	2005 Sep 26 0337:00	Delta 7925-9.5	-	D313	2.032	BLS	US	CG	Sat W10 L	spaceflightnow.com	-	-
2006-016	2453853.92	2006 Apr 28 1002:16	Delta 7420-10C	-	D314	1.621	BLS	US	CG	Sat S50 L	spaceflightnow.com	-	-
2006-024	2453908.43	2006 Jun 21 2215	Delta 7925-9.5	-	D316	1.500	BLS	US	CG	Sat W10 B0 1	spaceflightnow.com	-	-
2006-042	2454004.28	2006 Sep 25 1850	Delta 7925-10L	-	D318	2.032	BLS	US	CG	Sat W10 B0 1	spaceflightnow.com	-	-
2006-047	2454034.54	2006 Oct 26 0052:00	Delta 7925-9.5	-	D319	1.240	BLS	US	CG	Sat ED0 BE	spaceflightnow.com	-	-
2006-052	2454057.30	2006 Nov 17 1912:00?	Delta 7925-10C	-	D321	2.032	BLS	US	CG	Sat W10 B0 1	spaceflightnow.com	-	-
2006-057	2454094.38	2006 Dec 14 2100:00	Delta 7925-10C	-	D322	2.300	ULAB	US	CG	Sat LE0 0	spaceflightnow.com	-	-
2007-004	2454149.46	2007 Feb 17 2301:00	Delta 7925-10C	-	D323	0.675	ULAB	US	CG	Sat HE0 L0	spaceflightnow.com	-	-
2007-023	2454259.61	2007 Jun 8 0234:00	Delta 7420-10C	-	D324	1.870	ULAB	US	CG/OG	Sat S50 L	spaceflightnow.com	-	-
2007-034	2454316.89	2007 Aug 18 1835:34	Delta 7925-9.5	-	D325	0.680	ULAB	US	CG	Sat ED0 OE	spaceflightnow.com	-	-
2007-041	2454362.27	2007 Sep 18 1835:00	Delta 7925-10C	-	D326	2.500	ULAB	US	CG	Sat ED0 OE	spaceflightnow.com	-	-
2007-043	2454370.98	2007 Sep 27 1134:00	Delta 7925H	-	D327	1.218	ULAB	US	CG	Sat S50 L	spaceflightnow.com	-	-
2007-047	2454391.02	2007 Oct 17 1233:00	Delta 7925-9.5	-	D328	2.032	ULAB	US	CG	Sat W10 B0 1	spaceflightnow.com	-	-
2007-059	2454443.61	2007 Oct 17 1233:00	Delta 7420-10C	-	D330	1.900	ULAB	US	CG	Sat W10 B0 1	spaceflightnow.com	-	-
2007-062	2454455.34	2007 Dec 20 2004:00	Delta 7925-9.5	-	D331	2.032	ULAB	US	CG	Sat W10 B0 1	spaceflightnow.com	-	-
2008-012	2454540.76	2008 Mar 15 0610	Delta 7925-9.5	-	D332	2.032	ULAB	US	CG	Sat W10 B0 1	spaceflightnow.com	-	-
2008-029	2454629.17	2008 Jun 11 1605:01	Delta 7920H	-	D333	4.277	ULAB	US	CG	Sat LE0 P	spaceflightnow.com	-	-
2008-032	2454637.82	2008 Jun 20 0746:25	Delta 7320-10C	-	D334	0.506	ULAB	US	CG	Sat LE0 B	spaceflightnow.com	-	-
2008-042	2454716.29	2008 Sep 6 1850:57	Delta 7420-10C	-	D335	1.923	ULAB	US	CG	Sat S50 P	spaceflightnow.com	-	-
2008-054	2454764.60	2008 Oct 25 0228:25	Delta 7420-10C	-	D336	1.900	ULAB	US	CG	Sat S50 P	spaceflightnow.com	-	-
2009-005	2454868.93	2009 Feb 6 1022:00	Delta 7925-10C	-	D338	1.420	ULAB	US	CG	Sat S50 P	spaceflightnow.com	-	-
2009-011	2454887.66	2009 Mar 7 0349:57	Delta 7925-10L	-	D339	1.060	ULAB	US	CG	Sat ED0 BE	spaceflightnow.com	-	-
2009-014	2454914.36	2009 Mar 24 0834:00	Delta 7925-9.5	-	D340	2.032	ULAB	US	CG	Sat W10 P0 1	spaceflightnow.com	-	-
2009-023	2454957.35	2009 May 5 2024:26	Delta 7920-10C	-	D341	2.000	ULAB	US	CG	Sat W10 P0 1	spaceflightnow.com	-	-
2009-043	2455060.94	2009 Aug 17 1035:00	Delta 7920-10C	-	D343	2.032	ULAB	US	CG	Sat W10 P0 1	spaceflightnow.com	-	-
2009-052	2455100.01	2009 Sep 25 1220:00	Delta 7920-10C	-	D344	2.244	ULAB	US	CG	Sat LE0 P	spaceflightnow.com	-	-
2009-055	2455113.29	2009 Oct 6 1651:01	Delta 7920-10C	-	D345	2.615	ULAB	US	CG	Sat S50 L	spaceflightnow.com	-	-
2009-071	2455180.09	2009 Dec 14 1409:33	Delta 7920-10C	-	D347	0.678	ULAB	US	CG	Sat S50 B	spaceflightnow.com	-	-
2010-060	2455506.60	2010 Nov 6 0220:03	Delta 7420-10C	-	D350	1.900	ULAB	US	CG/OG	Sat S50 L	spaceflightnow.com	-	-
2011-024	2455723.10	2011 Jun 10 1420:13	Delta 7920-10C	-	D354	0.350	ULAB	US	CG/OG	Sat S50 L	spaceflightnow.com	-	-
2011-046	2455815.06	2011 Sep 10 1308:52	Delta 7920H	-	D356	2.138	ULAB	US	CG	Sat ED0 E	spaceflightnow.com	-	-
2011-061	2455862.91	2011 Oct 26 0946:02	Delta 7920-10C	-	D357	2.138	ULAB	US	CG	nanaspacerflight.com	nanaspacerflight.com	-	-
2014-035	2456840.91	2014 Jul 2 0946:23	Delta 7920-10C	-	D370	0.464	ULAB	US	CG	nanaspacerflight.com	nanaspacerflight.com	-	-
2015-003	2457094.10	2015 Jan 31 1422:00	Delta 7320-10C	-	D378	0.966	ULAB	US	CG	Sat S50 D	nanaspacerflight.com	-	-
2017-073	2458075.91	2017 Nov 18 0947:36	Delta 7320-10C	-	D381	2.231	ULAB	US	CG	Sat S50 D	nanaspacerflight.com	-	-
2018-070	2458577.04	2018 Sep 15 1302	Delta 7420-10C	-	D381	1.592	ULAB	US	CG	Sat LE0 D	nanaspacerflight.com	-	-



Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Launch				Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee km	Range km	Dest
					Flight_ID	Flight	Mission	FlightCode								
2011-S16	2455688-46	2011 May 6 2302	Tianyong-3C	-	Kumpeng-1	-	-	-	HAI	-	-	-	197	-	-	
2013-S24	2456387-41	2013 Apr 4 2155	Tianyong-3E	-	Kumpeng-1	-	-	-	HAI	-	-	-	191	-	-	
2016-S28	2457905-21	2016 Apr 26 1700	Tianyong-3F	-	Kumpeng-1B	-	-	-	HAI	-	-	-	316	-	-	
2021-S84	2459565-77	2021 Dec 17 0630	Huay1-1	-	HY-1A	-	-	-	JQ?	-	-	-	250	-	-	





Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Orbpay	Agency	Launch_Code	Group	Category	LTCite	Cite	Notes
2011-S16	2455688.46	2011 May 6 2302	Tianying-3C	-	Kumpeng-1	0.000	CSSAR	SS	CSSAR/	Ionos	Wire	-	-
2013-S24	2456387.41	2013 Apr 4 2156	Tianying-3E	-	Kumpeng-1	0.000	CSSAR	SS	CSSAR/	Ionos	masapaceflight.com	-	-
2016-S28	2457606.21	2016 Apr 26 1700	Tianying-3F	-	Kumpeng-1B	0.000	CSSAR	SS	CSSAR/	Ionos	Wire	-	-
2021-S84	2459566.77	2021 Dec 17 0630	Huay1-1	-	HY-1A	0.000	HUAY1	SS	HUOPI/XZKJ/	Micrograv/Bio	cn.chinadaily.com	-	-



Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Mission	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee_Km	Range_Km	Dest
1959-S15	2436606.39	1959 Feb 6 2122	Titan I	-	A-3	P200 RV	Dummy St 2	CC	LC15	-	-	2007	448	B0A500
1959-S17	2436625.32	1959 Feb 26 1945	Titan I	-	A-5	P200 RV	Dummy St 2	CC	LC15	-	-	2007	483	B0A500
1959-S41	2436662.22	1959 Apr 3 1711	Titan I	-	A-4	P200 RV	Dummy St 2	CC	LC15	-	-	2007	233	B0A500
1959-S60	2436693.27	1959 May 4 1830	Titan I	-	A-6	P200 RV	Dummy St 2, Sep test	CC	LC15	-	-	2007	563	B0A500
1959-A137	2436795.25	1959 Aug 14 1756	Titan I	-	B-5	P13 RV	-	CC	LC19	-	-	0?	0	B0A3750
1959-A204	2436915.22	1959 Dec 12 1711	Titan I	-	C-3	RXK-3	-	CC	LC16	-	-	0	0	B0A6020
1960-S29	2436967.22	1960 Feb 2 1808	Titan I	-	B-7A	RXK-3	B-6 Stage 2	CC	LC19	-	-	1000?	3762	B0A3750
1960-A33	2436970.41	1960 Feb 5 2146	Titan I	-	C-4	RXK-3	-	CC	LC16	-	-	0?	10	B0A6020
1960-A38	2436989.17	1960 Feb 24 1603	Titan I	-	C-4	RXK-4A	-	CC	LC15	-	-	1000?	8038	B0A6045
1960-A63	2437002.25	1960 Mar 8 1800?	Titan I	-	C-1	RXK-4A	-	CC	LC15	-	-	100?	796	B0A6045
1960-S72	2437016.41	1960 Mar 22 2148	Titan I	-	C-5	RXK-4A	-	CC	LC15	-	-	1000?	7971	B0A6045
1960-S78	2437033.26	1960 Apr 8 1811	Titan I	-	C-5	RXK-4A	-	CC	LC15	-	-	1000?	1104	B0A6045
1960-S78	2437046.37	1960 Apr 21 2055	Titan I	-	C-6	RXK-4A	-	CC	LC15	-	-	1000?	7928	B0A6045
1960-S86	2437053.36	1960 Apr 26 2018	Titan I	-	C-6	P13 RV	-	CC	LC16	-	-	1000?	6008	B0A6020
1960-S97	2437065.39	1960 May 13 2125	Titan I	-	C-7	P13 RV	-	CC	LC15	-	-	1000?	8133	ASC
1960-S107	2437082.22	1960 May 27 1720	Titan I	-	C-9	ME 4-1 RV	-	CC	LC16	-	-	1000?	8140	ASC
1960-S144	2437110.50	1960 Jun 26 0094	Titan I	-	C-10	ME 4-1A RV	-	CC	LC15	-	-	1000?	8153	ASC
1960-A160	2437117.23	1960 Jul 1 1729	Titan I	-	J-2	ME 4-2 RV	-	CC	LC20	-	-	0	0	ASC
1960-S200	2437144.40	1960 Jul 28 2138	Titan I	-	J-4	ME 4-1 RV	-	CC	LC19	-	-	100?	185	ASC
1960-S200	2437157.46	1960 Aug 10 2246	Titan I	-	J-7	ME 4-2 RV	-	CC	LC19	-	-	1000?	7926	ASC
1960-S258	2437177.28	1960 Aug 30 1948	Titan I	-	J-5	ME 4-1 RV	-	CC	LC20	-	-	1000?	8134	ASC
1960-S292	2437206.06	1960 Sep 28 1332	Titan I	-	J-8	ME 4-2 RV	-	CC	LC19	-	-	1000?	8134	ASC
1960-S296	2437207.10	1960 Sep 29 1420	Titan I	-	J-8	RXK-5B	-	CC	LC15	-	-	1000?	9438	B0A16100
1960-S311	2437215.20	1960 Oct 7 1642	Titan I	-	J-3	ME 4-2 RV	-	CC	LC20	-	-	1000?	8134	ASC
1960-S336	2437232.47	1960 Oct 24 2516	Titan I	-	J-6	ME 4-1 RV	-	CC	LC19	-	-	1000?	9908	B0A9900
1960-S336	2437232.47	1960 Oct 24 2516	Titan I	-	J-6	Dummy RV?	-	CC	US1F	-	-	0	0	-
1960-A306	2437272.73	1960 Dec 4 0535	Titan I	-	J-9	ME 4-4 RV	-	CC	LC20	-	-	100?	730	(ASC)
1960-A306	2437289.43	1960 Dec 20 2221	Titan I	-	J-9	ME 4-4 RV	-	CC	LC19	-	-	100?	695	(ASC)
1961-A27	2437320.37	1961 Jan 20 0253	Titan I	-	AJ-10	ME 4-1 RV	-	CC	LC19	-	-	1000?	8124	ASC
1961-S41	2437350.57	1961 Feb 10 0855	Titan I	-	AJ-11	ME 3-2B RV	-	CC	LC20	-	-	1000?	8124	ASC
1961-S55	2437351.54	1961 Feb 21 0100	Titan I	-	AJ-13	ME 4-4 RV	-	CC	LC19	-	-	1000?	8134	ASC
1961-A70	2437361.57	1961 Mar 3 0145	Titan I	-	AJ-12	ME 4-1 RV	-	CC	LC19	-	-	1000?	8134	ASC
1961-S96	2437357.68	1961 Mar 29 0333	Titan I	-	AJ-14	RXK-5B	-	CC	LC15	-	-	1000?	9438	B0A16100
1961-A98	2437359.36	1961 Mar 31 2044	Titan I	-	AJ-16	ME 4-2 RV	-	CC	LC20	-	-	1000?	8134	ASC
1961-S134	2437423.34	1961 May 3 2010:44	Titan I	-	WS-1	ME 4-2 RV	Dummy St2	CC	LC19	-	-	1000?	9908	B0A9900
1961-S134	2437443.64	1961 May 24 0327	Titan I	-	WS-1	ME 4-2B RV?	-	CC	US1F	-	-	0	0	-
1961-A156	2437474.64	1961 Jun 24 0328	Titan I	-	N-1	ME 4-4 RV	-	CC	LC19	-	-	1000?	8126	ASC
1961-S211	2437501.58	1961 Jul 21 0200	Titan I	-	N-18	ME 4-2A RV/Rk I Decay	-	CC	LC19	-	-	1000?	702	B0A0040
1961-S220	2437506.30	1961 Jul 21 0200	Titan I	-	N-2	ME 4-4 RV	-	CC	LC19	-	-	1000?	8041	B0A0040
1961-S229	2437515.97	1961 Jul 26 1905	Titan I	-	N-19	ME 4-4 RV/Rk II Decay	-	CC	LC20	-	-	1000?	8128	ASC
1961-S266	2437515.97	1961 Aug 4 0140	Titan I	-	N-17	ME 4-2A RV/capsule	-	CC	LC19	-	-	1000?	9628	B0A9620
1961-S270	2437549.56	1961 Sep 7 0139	Titan I	-	N-20	ME 4-4 RV	-	CC	LC19	-	-	1000?	8293	ASC
1961-S295	2437550.58	1961 Sep 9 0139	Titan I	-	SN-66-2	ME 4-4 RV	-	CC	LC19	-	-	1000?	8293	ASC
1961-S295	2437550.58	1961 Sep 23 2036	Titan I	-	SN-66-2	ME 4-4 RV	-	CC	LC20	-	-	1000?	9228	ASC
1961-S301	2437571.58	1961 Sep 29 0132	Titan I	-	AJ-20	ME 4-4 RV	-	CC	LC19	-	-	1000?	8069	WAKE
1961-S325	2437579.48	1961 Oct 24 2028	Titan I	-	AJ-21	ME 4-4 RV	-	CC	LC19	-	-	1000?	8069	WAKE
1961-S346	2437593.52	1961 Nov 22 0030	Titan I	-	N-21	ME 4-4 RV	Midas target	CC	LC19	-	-	1000?	8069	WAKE
1961-S386	2437633.57	1961 Nov 25 1817:20	Titan I	-	N-22	Nike TVX-3	-	CC	LC20	-	-	1000?	8041	B0A0040
1961-S393	2437633.57	1961 Nov 25 1817:20	Titan I	-	N-23	Nike TVX-3	-	CC	LC19	-	-	1000?	8128	ASC
1961-S427	2437649.56	1961 Dec 16 0120	Titan I	-	N-23	Nike TVX-3	-	CC	LC19	-	-	1000?	8126	ASC
1962-S706	2437685.54	1962 Jan 21 0057	Titan I	-	SN-66-4	ME 4-5B RV	-	CC	LC19	-	-	100?	700	(ASC)
1962-S729	2437758.50	1962 Jan 29 2330:56	Titan I	-	SN-66-4	ME 4-5B RV	DOUBLE MARTINI	CC	295-A3	-	-	1000?	100	WAKE
1962-S729	2437758.50	1962 Feb 23 2330:56	Titan I	-	SN-66-4	ME 4-5B RV	DOUBLE MARTINI	CC	295-A1	-	-	1000?	507	(ASC)?
1962-S770	2437740.26	1962 Mar 16 1905:58	Titan I	-	SN-66-18	ME 4-5B RV	BLUE GANDER	CC	295-A1	-	-	1000?	426	(ASC)?
1962-S125	2437780.40	1962 Mar 16 1905:58	Titan I	-	SN-34	ME 4-5B RV	BLUE GANDER	CC	295-A1	-	-	1000?	8130?	ASC
1962-S174	2437823.27	1962 Jun 7 1821:37	Titan II	-	SN-34	ME 6 BV	SILVER TOP	CC	295-A1	-	-	1000?	-	-
1962-S238	2437857.27	1962 Jun 11 1851:54	Titan II	-	N-4	ME 6 BV	-	CC	LC15	-	-	1300?	-	-
1962-S263	2437871.18	1962 Jul 25 1817:20	Titan II	-	N-4	ME 6 BV	-	CC	LC15	-	-	1300?	-	-
1962-S322	2437920.16	1962 Sep 12 1550:00	Titan II	-	N-5	ME 6 BV	-	CC	LC16	-	-	1300?	-	-
1962-S381	2437943.50	1962 Oct 6 1550:00	Titan II	-	SN-35	ME 4 BV	-	CC	LC15	-	-	1300?	-	-
1962-S387	2437943.50	1962 Oct 6 1550:00	Titan II	-	SN-35	ME 4 BV	TIGHT BRACELET	CC	295-A1	-	-	1000?	-	-
1962-S435	2437984.21	1962 Oct 12 1624:03	Titan II	-	N-9	ME 6 BV	-	CC	LC15	-	-	1300?	-	-
1962-S435	2437984.21	1962 Oct 26 1705:34	Titan II	-	N-12	ME 6 BV	-	CC	LC15	-	-	1300?	-	-
1962-S531	2438003.50	1962 Dec 5 2031:37	Titan II	-	SN-11	ME 4 BV	-	CC	295-A1	-	-	1000?	-	-
1962-S540	2438005.36	1962 Dec 6 2031:37	Titan II	-	SN-11	ME 4 BV	-	CC	295-A1	-	-	1000?	-	-
1962-S575	2438018.34	1962 Dec 19 2008:28	Titan II	-	N-13	ME 4 BV	-	CC	LC16	-	-	500?	-	-
1963-S10	2438039.73	1963 Jan 10 0531:02	Titan II	-	N-15	ME 4 BV	-	CC	LC15	-	-	1300?	-	-
1963-S216	2438068.50	1963 Jan 29 1608:32	Titan II	-	SN-8	ME 4 BV	-	CC	LC16	-	-	1000?	-	-
1963-S238	2438077.25	1963 Feb 6 1758:24	Titan II	-	N-16	ME 4 BV	-	CC	295-A1	-	-	1000?	-	WAKE
1963-A124	2438077.41	1963 Feb 16 2145	Titan II	-	N-7	ME 6 BV	-	CC	LC15	-	-	1300?	-	-
1963-S108	2438110.14	1963 Mar 21 1522:48	Titan II	-	N-18	ME 6 BV	-	CC	295-C	-	-	5	-	-
1963-S126	2438118.86	1963 Mar 30 0845	Titan II	-	N-18	Nike TVX-32	-	CC	LC15	-	-	1300?	-	-
1963-S133	2438124.70	1963 Mar 31 0845	Titan I	-	SN-3	Nike TVX-32	NTMP K-17	CC	LC15	-	-	1000?	-	-
1963-S150	2438132.50	1963 Apr 5 0452:37	Titan I	-	V-1	Nike TVX-33	-	V	395-A2	-	-	1000?	-	-
1963-S179	2438139.33	1963 Apr 13 1608:32	Titan I	-	SN-1	Nike TVX-33	-	V	395-A3	-	-	1000?	-	-
1963-A68	2438146.50	1963 Apr 19 2000:11	Titan II	-	N-21	ME 6 BV	-	CC	295-C	-	-	500?	-	-
1963-S193	2438159.17	1963 May 1 1015	Titan II	-	N-8	ME 6 BV	-	V	395-C	-	-	1300?	-	-
1963-S199	2438162.50	1963 May 9 1608:32	Titan II	-	N-14	ME 4 BV	-	V	395-A1	-	-	0	-	-
1963-S233	2438174.23	1963 May 13 1735:05	Titan II	-	N-19	ME 6 BV	-	V	395-D	-	-	1000?	-	-
1963-S266	2438179.21	1963 May 29 1655:24	Titan II	-	N-20	ME 6 BV	-	CC	LC16	-	-	1300?	-	-
1963-S266	2438200.50	1963 Jun 20 1655:24	Titan II	-	N-22	ME 6 BV	-	CC	LC16	-	-	1300?	-	-
1963-S340	2438226.50	1963 Jun 20 1655:24	Titan II	-	SN-24	ME 4 BV	-	V	395-C	-	-	1300?	-	-
1963-S389	2438256.50	1963 Aug 15 1523:55	Titan I	-	SN-7	Nike TVX-13	-	V	395-A2	-	-	1000?	-	-
1963-S400	2438263.39	1963 Aug 21 2123:55	Titan II	-	N-24	ME 6 BV/Pod T-202	-	V	LC15	-	-	1000?	-	-
1963-S444	2438269.50	1963 Sep 17 1655:24	Titan I	-	SN-56	ME 4 BV	-	V	395-A3	-	-	1000?	-	-
1963-S450	2438295.50	1963 Sep 23 1655:24	Titan II	-	SN-83	ME 4 BV	-	V	395-A2	-	-	1000?	-	-
1963-S450	2438295.50	1963 Sep 23 1655:24	Titan II	-	N-23	ME 6 BV	-	V	395-D	-	-	1300?	-	-



Launch_Thg	Launch_JD	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Launch_Mission	FlightCode	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee_Km	Range_Km	Dest
1968-S250	2439948.50	1968 Apr 2	Titan II	-	B-36	Mk 6 RV	FUT GT10T	GLORY TRAP 10T	-	V	39S-C	-	-	13007	-	-
1968-031	2439964.21	1968 Apr 17 1700	Titan IIIB	-	3B-16	KH-8	GAMBIT-3 Mission 4313	-	-	VS	SLOCW	-	-	434	-	-
1968-047	2440013.23	1968 Jun 5 1733	Titan IIIB	-	3B-16	KH-8	GAMBIT-3 Mission 4314	-	-	VS	SLOCW	-	-	464	-	-
1968-S374	2440019.50	1968 Jun 12	Titan II	-	B-32	Mk 6 RV	FUT GT08T	GLORY TRAP 08T	-	V	39S-C	-	-	13007	-	-
1968-050	2440021.09	1968 Jun 13 1403:50	Titan IIIC	-	3C-16	DCSP	DCSP	-	-	CC	LC41	-	-	43412	-	-
1968-064	2440075.19	1968 Aug 6 1630	Titan II	-	3B-17	KH-8	GAMBIT-3 Mission 4315	-	-	VS	SLOCW	-	-	462	-	-
1968-S466	2440090.04	1968 Aug 21 1300?	Titan II	-	B-53	Mk 6 RV	FUT GT18T	GLORY TRAP 18T	-	V	39S-C	-	-	13007	-	-
1968-074	2440120.27	1968 Sep 26 0737:01	Titan IIIB	-	3B-18	KH-8	GAMBIT-3 Mission 4316	-	-	VS	SLOCW	-	-	412	-	-
1968-081	2440125.82	1968 Sep 26 0737:01	Titan IIIC	-	3C-5	0V2-5/LES 6	0V2-5	-	-	CC	LC41	-	-	37427	-	-
1968-089	2440157.30	1968 Nov 6 1910	Titan IIIB	-	3B-19	KH-8	GAMBIT-3 Mission 4317	-	-	VS	SLOCW	-	-	394	-	-
1968-S588	2440179.50	1968 Nov 19	Titan II	-	B-3	Mk 6 RV	FUT GT26T	GLORY TRAP 26T	-	V	39S-B	-	-	13007	-	-
1968-108	2440195.31	1968 Dec 4 1923	Titan IIIB	-	3B-20	KH-8	GAMBIT-3 Mission 4318	-	-	VS	SLOCW	-	-	741	-	-
1969-007	2440244.30	1969 Jan 22 1910	Titan IIIB	-	3B-6	KH-8	GAMBIT-3 Mission 4319	-	-	VS	SLOCW	-	-	1094	-	-
1969-013	2440252.38	1969 Feb 9 2109:00	Titan IIIC	-	3C-17	Tacsat	Tacsat	-	-	CC	LC41	-	-	37324	-	-
1969-019	2440255.31	1969 Mar 4 1930	Titan IIIB	-	3B-7	KH-8	GAMBIT-3 Mission 4320	-	-	VS	SLOCW	-	-	466	-	-
1969-039	2440327.23	1969 Apr 16 1730	Titan IIIB	-	3B-21	KH-8	GAMBIT-3 Mission 4321	-	-	VS	SLOCW	-	-	470	-	-
1969-S536	2440351.50	1969 May 23 0757:01	Titan II	-	B-53	Mk 6 RV	FUT GT39T	-	-	V	39S-B	-	-	13007	-	-
1969-046	2440364.83	1969 May 23 0757:01	Titan IIIC	-	3C-22	Vela 5A/5B	ERS 29	-	-	CC	LC41	-	-	150000	-	-
1969-050	2440376.20	1969 Jun 3 1649	Titan IIIB	-	3B-15	KH-8	GAMBIT-3 Mission 4322	-	-	VS	SLOCW	-	-	432	-	-
1969-074	2440377.17	1969 Aug 23 1610	Titan 238	-	238-1 (3B-23)	KH-8A?	GAMBIT-3 Mission 4323	-	-	VS	SLOCW	-	-	401	-	-
1969-095	2440519.26	1969 Oct 24 1510	Titan 238	-	238-2 (3B-24)	KH-8A	GAMBIT-3 Mission 4324	-	-	VS	SLOCW	-	-	757	-	-
1970-002	2440601.28	1970 Jan 14 1843	Titan 238	-	238-3 (3B-25)	KH-8A	GAMBIT-3 Mission 4325	-	-	VS	SLOCW	-	-	413	-	-
1970-027	2440654.96	1970 Apr 8 1050:01	Titan IIIC	-	3C-18	Vela 6A/6B	Vela 6A	-	-	CC	LC40	-	-	150000	-	-
1970-031	2440659.12	1970 Apr 16 1552	Titan 238	-	238-4 (3B-26)	KH-8A	GAMBIT-3 Mission 4326	-	-	VS	SLOCW	-	-	409	-	-
1970-046	2440753.12	1970 Jun 26 1450	Titan 238	-	238-5 (3B-27)	KH-8A	GAMBIT-3 Mission 4327	-	-	VS	SLOCW	-	-	421	-	-
1970-061	2440817.11	1970 Aug 16 1445	Titan 238	-	238-6 (3B-28)	KH-8A?	GAMBIT-3 Mission 4328	-	-	VS	SLOCW	-	-	443	-	-
1970-080	2440853.24	1970 Oct 23 1740	Titan 238	-	238-7 (3B-29)	KH-8A?	GAMBIT-3 Mission 4329	-	-	VS	SLOCW	-	-	433	-	-
1970-089	2440896.94	1970 Nov 6 1035:57	Titan IIIC	-	3C-19	DSP 1	DSP 1	-	-	CC	LC40	-	-	36494	-	-
1971-005	2440973.26	1971 Jan 21 1620	Titan 238	-	238-9 (3B-30)	KH-8A	GAMBIT-3 Mission 4330	-	-	VS	SLOCW	-	-	417	-	-
1971-021	2441031.66	1971 Mar 21 0945	Titan 238	-	238-10 (3B-31)	OPS 4768	Jumpsat 1	-	-	VS	SLOCW	-	-	39521	-	-
1971-053	2441094.15	1971 Apr 22 1530	Titan 238	-	238-9 (3B-31)	KH-8A	GAMBIT-3 Mission 4331	-	-	VS	SLOCW	-	-	421	-	-
1971-069	2441116.28	1971 May 5 0743:01	Titan IIIC	-	3C-20	HEXAGON SV1	HEXAGON SV-1	-	-	CC	LC40	-	-	36617	-	-
1971-086	2441123.45	1971 Jun 16 1841	Titan IIID	-	239-1	HEXAGON SV1	HEXAGON SV-1	-	-	VS	SLOCW	-	-	306	-	-
1971-S573	2441176.15	1971 Aug 10 2245	Titan II	-	B-12	Mk 6 SSTT T1	SATSCOM M1-17	-	-	V	39S-C	-	-	13007	-	-
1971-070	2441191.60	1971 Aug 12 1550	Titan 248	-	248-1 (3B-32)	KH-8A	GAMBIT-3 Mission 4332	-	-	VS	SLOCW	-	-	431	-	-
1971-S413	2441242.22	1971 Oct 23 0710	Titan II	-	B-100	Mk 6 SSTT T2	SATSCOM M2-1	-	-	V	39S-C	-	-	13007	-	-
1971-082	2441256.65	1971 Nov 3 0309:06	Titan 248	-	248-2 (3B-33)	KH-8A	GAMBIT-3 Mission 4333	-	-	VS	SLOCW	-	-	781	-	-
1971-095	2441285.27	1971 Jan 20 1656	Titan IIIC	-	3C-5 (3C-21)	DCSG II 1/2	DCSG II 1/2	-	-	CC	LC40	-	-	37407	-	-
1972-002	2441337.27	1972 Jan 20 1656	Titan IIID	-	239-2 (3B-37)	HEXAGON SV2	HEXAGON SV-2	-	-	VS	SLOCW	-	-	865	-	-
1972-001	2441353.92	1972 Feb 16 0955	Titan 338	-	338-2 (3B-37)	OPS 1944	Jumpsat 2	-	-	VS	SLOCW	-	-	807	-	-
1972-010	2441377.90	1972 Mar 1 0939:28	Titan IIIC	-	3C-3 (3C-22)	KH-8A	GAMBIT-3 Mission 4334	-	-	VS	SLOCW	-	-	38166	-	-
1972-016	2441384.21	1972 Mar 30 1700	Titan 248	-	248-3 (3B-34)	KH-8A	GAMBIT-3 Mission 4335	-	-	VS	SLOCW	-	-	415	-	-
1972-030	2441456.24	1972 May 24 2045	Titan 248	-	248-4 (3B-35)	HEXAGON SV3	HEXAGON SV-3	-	-	V	39S-C	-	-	13007	-	-
1972-S208	2441522.23	1972 Sep 1 1746	Titan II	-	B-46	Mk 6 SSTT T3	SATSCOM M2-20	-	-	VS	SLOCW	-	-	497	-	-
1972-068	2441526.25	1972 Oct 1 0903	Titan 248	-	248-5 (3B-39)	HEXAGON SV3	HEXAGON SV-3	-	-	VS	SLOCW	-	-	865	-	-
1972-079	2441528.23	1972 Oct 1 0903	Titan 248	-	248-3 (3B-39)	HEXAGON SV3	HEXAGON SV-3	-	-	VS	SLOCW	-	-	807	-	-
1972-S339	2441531.25	1972 Oct 1 1930	Titan IIID	-	239-3	HEXAGON SV4	HEXAGON SV-4	-	-	V	39S-C	-	-	13007	-	-
1972-103	2441573.24	1972 Dec 31 1745	Titan 248	-	248-6 (3B-40)	Mk 6 SSTT T4	SATSCOM M2-14/ChaserT	-	-	VS	SLOCW	-	-	1489	-	-
1972-014	2441584.19	1972 Mar 9 2109	Titan IIID	-	239-4	KH-8A	GAMBIT-3 Mission 4337	-	-	VS	SLOCW	-	-	419	-	-
1972-078	2441585.10	1972 May 16 1640	Titan 248	-	248-7 (3B-41)	HEXAGON SV5	HEXAGON SV-5	-	-	VS	SLOCW	-	-	285	-	-
1972-040	2441585.40	1972 Jun 26 1700	Titan IIIC	-	3C-6 (3C-24)	DCSG II 3/4	DCSG II 3/4	-	-	CC	LC40	-	-	37111	-	-
1972-F04	2441586.21	1972 Jun 26 1700	Titan 248	-	248-9 (3B-43)	KH-8A	GAMBIT-3 Mission 4338	-	-	VS	SLOCW	-	-	1307	-	-
1972-046	2441597.26	1972 Jul 13 2023	Titan IIID	-	239-7 (3B-43)	HEXAGON SV6	HEXAGON SV-6	-	-	VS	SLOCW	-	-	40003	-	-
1972-066	2441616.17	1972 Jul 31 1607	Titan 338	-	338-3 (3B-38)	OPS 7724	Jumpsat 3	-	-	VS	SLOCW	-	-	281	-	-
1972-088	2441653.22	1972 Sep 27 1715	Titan 248	-	248-8 (3B-42)	KH-8A	GAMBIT-3 Mission 4340	-	-	VS	SLOCW	-	-	419	-	-
1972-S342	2441661.50	1972 Oct 6	Titan II	-	B-69	Mk 6 SSTT T5	SATSCOM M2-27	-	-	V	39S-C	-	-	13007	-	-
1972-084	2441697.34	1972 Nov 10 2012?	Titan IIID	-	239-8	HEXAGON SV7	HEXAGON SV-7	-	-	VS	SLOCW	-	-	39873	-	-
1972-100	2442030.50	1972 Dec 13 2357:01	Titan IIIC	-	3C-8 (3C-26)	DCSG II 3/4	DCSG II 3/4	-	-	CC	LC40	-	-	1481	-	-
1974-F01	2442030.98	1974 Feb 11 1348:02	Titan IIIE	-	23E-1/TC-1	Centaur Proof Test	Centaur Proof Test	-	-	CC	LC41	-	-	180	-	-
1974-007	2442092.25	1974 Feb 13 1800?	Titan 248	-	248-10 (3B-44)	KH-8A	GAMBIT-3 Mission 4341	-	-	VS	SLOCW	-	-	415	-	-
1974-S123	2442107.90	1974 Mar 1 0940	Titan II	-	B-95	Mk 6 SSTT T6	SATSCOM M2-31	-	-	V	39S-C	-	-	13007	-	-
1974-020	2442148.35	1974 Mar 10 2020:01	Titan IIID	-	239-9 (3C-27)	HEXAGON SV8	HEXAGON SV-8	-	-	VS	SLOCW	-	-	896	-	-
1974-030	2442205.19	1974 Jun 6 1630	Titan IIIC	-	3C-9 (3C-27)	ATS F	ATS F	-	-	CC	LC40	-	-	35900	-	-
1974-042	2442224.16	1974 Jun 14 1545	Titan 248	-	248-11 (3B-45)	KH-8A	GAMBIT-3 Mission 4342	-	-	VS	SLOCW	-	-	428	-	-
1974-085	2442274.16	1974 Aug 14 1545	Titan 248	-	248-12 (3B-46)	KH-8A	GAMBIT-3 Mission 4343	-	-	VS	SLOCW	-	-	422	-	-
1974-089	2442350.31	1974 Dec 29 1930:00	Titan IIIE	-	23E-2/TC-2	HEXAGON SV9	HEXAGON SV-9	-	-	VS	SLOCW	-	-	3732	-	-
1974-097	2442361.80	1974 Dec 30 0711:02	Titan IIIE	-	23E-2/TC-2	Haliotes 1	Haliotes 1	-	-	CC	LC41	-	-	150000	-	-
1975-S34	2442422.60	1975 Dec 10 0227:56	Titan II	-	B-27	Mk 6 RV	SUFT	-	-	V	39S-C	-	-	13007	-	-
1975-017	2442481.70	1975 Mar 10 0441	Titan 348	-	348-1 (3B-50)	OPS 2439	Jumpsat 4	-	-	VS	SLOCW	-	-	39577	-	-
1975-032	2442521.20	1975 Apr 18 1645:47	Titan 248	-	248-14 (3B-48)	KH-8A	GAMBIT-3 Mission 4344	-	-	VS	SLOCW	-	-	453	-	-
1975-040	2442553.09	1975 May 20 1403:48	Titan 248	-	23E-7/TC-3	DCSG II 5/6	DCSG II 5/6	-	-	CC	LC40	-	-	334	-	-
1975-051	2															

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Launch_Mission	FlightCode	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee_Km	Range_Km	Dest
1976-065	2442988.27	1976 Jul 8 1830	Titan IIID	-	230-14	HEXAGON SV12	HEXAGON SV-12	-	-	VS	SLOCHE	-	-	7781	-	-
1976-080	2442997.43	1976 Aug 6 2221	Titan 34B	-	34B-6 (3B-56)	HR-6A	SOS 2	-	-	VS	SLOCW	-	-	39989	-	-
1976-094	2443037.28	1976 Sep 15 1850	Titan 24B	-	24B-17 (3B-51)	HR-6A	GAMBIT-3 Mission 4547	-	-	VS	SLOCW	-	-	352	-	-
1976-125	2443132.26	1977 Feb 19 1619	Titan IIIC	-	230-15	HR-11	HR11-1 KENNAN	-	-	VS	SLOCHE	-	-	565	-	-
1977-007	2443150.75	1977 Dec 6 0600:01	Titan IIIC	-	230-5 (3C-23)	DSP 9	DSP 9	-	-	CC	SLOCW	-	-	36952	-	-
1977-019	2443216.28	1977 Mar 13 1941:10	Titan 24B	-	24B-19 (3B-54)	HR-6A	GAMBIT-3 Mission 4548	-	-	CC	SLOCW	-	-	362	-	-
1977-034	2443216.18	1977 May 12 1428:58	Titan IIIC	-	230-14 (3C-32)	DSP 11	DSP 11 C-7	-	-	CC	SLOCW	-	-	38626	-	-
1977-056	2443322.27	1977 Jun 27 1830	Titan IIIC	-	230-17	HEXAGON SV13	HEXAGON SV-13	-	-	CC	SLOCHE	-	-	271	-	-
1977-076	2443376.10	1977 Aug 20 1428:44	Titan IIIE	-	230-17	Voyager 2	Voyager 2	-	-	CC	SLOCHE	-	-	150000	-	-
1977-084	2443392.04	1977 Sep 5 1256:01	Titan IIIE	-	235-5/TC-6	Voyager 1	Voyager 1	-	-	CC	SLOCHE	-	-	150000	-	-
1977-094	2443410.27	1977 Sep 23 1834	Titan 24B	-	24B-23 (3B-58)	HR-6A	GAMBIT-3 Mission 4549	-	-	VS	SLOCW	-	-	364	-	-
1978-021	2443564.71	1978 Feb 26 0500:07	Titan 34B	-	34B-23 (3B-49)	HR-6A	Jumpseat 5	-	-	VS	SLOCW	-	-	34272	-	-
1978-029	2443584.28	1978 Mar 16 1940:07	Titan 34B	-	34B-20	HEXAGON SV14	HEXAGON SV-14	-	-	VS	SLOCW	-	-	645	-	-
1978-051	2443593.26	1978 Mar 26 1605:00	Titan IIIC	-	230-17 (3C-35)	DSP 11	DSP 11 C-9	-	-	CC	SLOCHE	-	-	150	-	-
1978-068	2443670.30	1978 Jun 10 1905	Titan IIIC	-	230-15 (3C-33)	DSP 11	DSP 11 C-9	-	-	CC	SLOCHE	-	-	42405	-	-
1978-060	2443674.27	1978 Jun 10 1623:37	Titan IIIC	-	230-18	HR-11	HR11-2 KENNAN	-	-	VS	SLOCHE	-	-	551	-	-
1978-075	2443725.71	1978 Aug 5 0500:07	Titan 34B	-	34B-7 (3B-57)	DSP 11	DSP 11	-	-	VS	SLOCHE	-	-	39377	-	-
1978-113	2443856.53	1978 Dec 14 0040:02	Titan IIIC	-	230-18 (3C-36)	DSP 11	DSP 11 C-11	-	-	CC	SLOCHE	-	-	44588	-	-
1979-025	2443949.27	1979 Mar 16 1830	Titan IIIC	-	230-18 (3C-36)	HR-6A	HEXAGON SV15	-	-	VS	SLOCHE	-	-	624	-	-
1979-044	2444022.27	1979 May 28 1630	Titan 24B	-	24B-25 (3B-61)	HR-6A	GAMBIT-3 Mission 4550	-	-	VS	SLOCHE	-	-	323	-	-
1979-063	2444035.07	1979 Jun 10 1535:00	Titan IIIC	-	230-13 (3C-31)	DSP 11	DSP 11	-	-	CC	SLOCW	-	-	37355	-	-
1979-086	2444147.97	1979 Oct 1 1122:00	Titan IIIC	-	230-16 (3C-34)	DSP 11	DSP 11	-	-	CC	SLOCW	-	-	46316	-	-
1979-098	2444195.59	1979 Nov 21 0209:36	Titan IIIC	-	230-19 (3C-37)	DSP 11	DSP 11	-	-	CC	SLOCHE	-	-	508	-	-
1980-010	2444277.38	1980 Feb 7 2110	Titan IIID	-	230-16	HEXAGON SV16	HEXAGON SV-16	-	-	VS	SLOCHE	-	-	1340	-	-
1980-052	2444409.27	1980 Feb 16 1630	Titan IIID	-	230-16	HR-11	HR11-3 KENNAN	-	-	VS	SLOCHE	-	-	0	-	-
1980-100	2444501.63	1980 Sep 19 0800	Titan II	-	230-16	HR-11	HR11-3 KENNAN	-	-	VS	SLOCHE	-	-	0	-	-
1980-102	2444507.17	1980 Sep 19 0800	Titan II	-	230-16	HR-11	HR11-3 KENNAN	-	-	VS	SLOCHE	-	-	0	-	-
1981-019	2444664.30	1981 Feb 28 1910:07	Titan 24B	-	24B-3 (3B-53)	HR-6A	SOS 4	-	-	VS	SLOCW	-	-	39130	-	-
1981-025	2444660.31	1981 Feb 28 1910:07	Titan 24B	-	24B-24 (3B-59)	HR-6A	GAMBIT-3 Mission 4551	-	-	VS	SLOCW	-	-	336	-	-
1981-038	2444719.40	1981 Apr 24 2132	Titan IIIC	-	230-22 (3C-40)	DSP 10	DSP 10	-	-	CC	SLOCW	-	-	36295	-	-
1981-058	2444851.27	1981 Sep 3 1829:59	Titan 34B	-	34B-5 (3B-60)	HR-11	Jumpseat 6	-	-	VS	SLOCW	-	-	39500	-	-
1981-107	2444906.89	1981 Oct 31 0922:00	Titan IIIC	-	230-22 (3C-39)	HR-11	HR11-4 KENNAN	-	-	VS	SLOCHE	-	-	517	-	-
1981-107	2444931.31	1982 Jun 21 1950:01	Titan 24B	-	24B-26 (3B-62)	HR-6A	VORTEX 3	-	-	CC	SLOCW	-	-	40594	-	-
1982-019	2445035.31	1982 Mar 6 1925:00	Titan IIIC	-	230-20 (3C-38)	HR-6A	GAMBIT-3 Mission 4552	-	-	VS	SLOCHE	-	-	665	-	-
1982-041	2445101.27	1982 May 11 1635	Titan IIIC	-	230-24	DSP 13	DSP 13	-	-	CC	SLOCHE	-	-	36618	-	-
1982-106	2445272.67	1982 Oct 30 0405:01	Titan 340/Titanstage	-	340-1 (04D-87)	HEXAGON SV17	HEXAGON SV-17	-	-	VS	SLOCHE	-	-	222	-	-
1982-111	2445272.38	1982 Nov 17 2118:07	Titan IIID	-	340-23	DSP 13	DSP 13	-	-	CC	SLOCHE	-	-	45133	-	-
1983-032	2445540.28	1983 Apr 15 1645	Titan 24B	-	24B-27 (3B-63)	HR-6A	HR11-5 KENNAN	-	-	VS	SLOCHE	-	-	536	-	-
1983-060	2445596.28	1983 Jun 20 1945	Titan 34B	-	34B-5 (04D-5)	HEXAGON SV18	HEXAGON SV-18	-	-	VS	SLOCW	-	-	3297	-	-
1983-078	2445597.15	1983 Jul 31 1594	Titan 34B	-	34B-9 (3B-65)	DSP 10	DSP 10	-	-	VS	SLOCW	-	-	38347	-	-
1984-009	2445750.63	1984 Jun 31 0925:01	Titan 340/Titanstage	-	340-10 (05D-1)	DSP 10	DSP 10	-	-	VS	SLOCW	-	-	315	-	-
1984-037	2445805.20	1984 Apr 14 1652:02	Titan 340/Titanstage	-	340-10 (05D-1)	DSP 10	DSP 10	-	-	VS	SLOCW	-	-	3297	-	-
1984-039	2445805.20	1984 Apr 14 1652:02	Titan 340/Titanstage	-	340-10 (05D-1)	DSP 10	DSP 10	-	-	VS	SLOCW	-	-	3297	-	-
1984-059	2445877.25	1984 Jun 25 1937	Titan 34B	-	34B-11 (3B-67)	DSP 10	DSP 10	-	-	VS	SLOCW	-	-	40466	-	-
1984-065	2445911.25	1984 Jun 25 1937	Titan 34B	-	34B-11 (3B-67)	DSP 10	DSP 10	-	-	VS	SLOCW	-	-	39499	-	-
1984-091	2445951.25	1984 Jun 25 1937	Titan 34B	-	34B-6 (3B-64)	DSP 10	DSP 10	-	-	VS	SLOCW	-	-	714	-	-
1984-122	2446029.25	1984 Dec 22 0202:03	Titan 340/Titanstage	-	340-13 (05D-3)	HR-6A	HR11-6 KENNAN	-	-	VS	SLOCHE	-	-	30244	-	-
1985-014	2446104.76	1985 Feb 29 1600:00	Titan 34B	-	34B-13 (05D-3)	HR-6A	HR11-6 KENNAN	-	-	VS	SLOCHE	-	-	30244	-	-
1985-030	2446160.76	1985 Aug 28 1510	Titan 34B	-	34B-13 (05D-3)	HR-6A	HR11-6 KENNAN	-	-	VS	SLOCHE	-	-	30244	-	-
1985-032	2446160.76	1985 Aug 28 1510	Titan 34B	-	34B-13 (05D-3)	HR-6A	HR11-6 KENNAN	-	-	VS	SLOCHE	-	-	30244	-	-
1985-032	2446160.76	1985 Aug 28 1510	Titan 34B	-	34B-13 (05D-3)	HR-6A	HR11-6 KENNAN	-	-	VS	SLOCHE	-	-	30244	-	-
1985-032	2446160.76	1985 Aug 28 1510	Titan 34B	-	34B-13 (05D-3)	HR-6A	HR11-6 KENNAN	-	-	VS	SLOCHE	-	-	30244	-	-
1985-032	2446160.76	1985 Aug 28 1510	Titan 34B	-	34B-13 (05D-3)	HR-6A	HR11-6 KENNAN	-	-	VS	SLOCHE	-	-	30244	-	-
1985-032	2446160.76	1985 Aug 28 1510	Titan 34B	-	34B-13 (05D-3)	HR-6A	HR11-6 KENNAN	-	-	VS	SLOCHE	-	-	30244	-	-
1985-032	2446160.76	1985 Aug 28 1510	Titan 34B	-	34B-13 (05D-3)	HR-6A	HR11-6 KENNAN	-	-	VS	SLOCHE	-	-	30244	-	-
1985-032	2446160.76	1985 Aug 28 1510	Titan 34B	-	34B-13 (05D-3)	HR-6A	HR11-6 KENNAN	-	-	VS	SLOCHE	-	-	30244	-	-
1985-032	2446160.76	1985 Aug 28 1510	Titan 34B	-	34B-13 (05D-3)	HR-6A	HR11-6 KENNAN	-	-	VS	SLOCHE	-	-	30244	-	-
1985-032	2446160.76	1985 Aug 28 1510	Titan 34B	-	34B-13 (05D-3)	HR-6A	HR11-6 KENNAN	-	-	VS	SLOCHE	-	-	30244	-	-
1985-032	2446160.76	1985 Aug 28 1510	Titan 34B	-	34B-13 (05D-3)	HR-6A	HR11-6 KENNAN	-	-	VS	SLOCHE	-	-	30244	-	-
1985-032	2446160.76	1985 Aug 28 1510	Titan 34B	-	34B-13 (05D-3)	HR-6A	HR11-6 KENNAN	-	-	VS	SLOCHE	-	-	30244	-	-
1985-032	2446160.76	1985 Aug 28 1510	Titan 34B	-	34B-13 (05D-3)	HR-6A	HR11-6 KENNAN	-	-	VS	SLOCHE	-	-	30244	-	-
1985-032	2446160.76	1985 Aug 28 1510	Titan 34B	-	34B-13 (05D-3)	HR-6A	HR11-6 KENNAN	-	-	VS	SLOCHE	-	-	30244	-	-
1985-032	2446160.76	1985 Aug 28 1510	Titan 34B	-	34B-13 (05D-3)	HR-6A	HR11-6 KENNAN	-	-	VS	SLOCHE	-	-	30244	-	-
1985-032	2446160.76	1985 Aug 28 1510	Titan 34B	-	34B-13 (05D-3)	HR-6A	HR11-6 KENNAN	-	-	VS	SLOCHE	-	-	30244	-	-
1985-032	2446160.76	1985 Aug 28 1510	Titan 34B	-	34B-13 (05D-3)	HR-6A	HR11-6 KENNAN	-	-	VS	SLOCHE	-	-	30244	-	-
1985-032	2446160.76	1985 Aug 28 1510	Titan 34B	-	34B-13 (05D-3)	HR-6A	HR11-6 KENNAN	-	-	VS	SLOCHE	-	-	30244	-	-
1985-032	2446160.76	1985 Aug 28 1510	Titan 34B	-	34B-13 (05D-3)	HR-6A	HR11-6 KENNAN	-	-	VS	SLOCHE	-	-	30244	-	-
1985-032	2446160.76	1985 Aug 28 1510	Titan 34B	-	34B-13 (05D-3)	HR-6A	HR11-6 KENNAN	-	-	VS	SLOCHE	-	-	30244	-	-
1985-032	2446160.76	1985 Aug 28 1510	Titan 34B	-	34B-13 (05D-3)	HR-6A	HR11-6 KENNAN	-	-	VS	SLOCHE	-	-	30244	-	-
1985-032	2446160.76	1985 Aug 28 1510	Titan 34B	-	34B-13 (05D-3)	HR-6A	HR11-6 KENNAN	-	-	VS	SLOCHE	-	-			

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Launch	Mission	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee km	Range km	Dest
1997-012	2450543.20	1997 Apr 4 1647	Titan II SLV	-	236-6	USA 131 (DMSP)	DMSP Block 5D-2 S-14		VS	SLC4W	-	-	869	-	-
1997-061	2450736.86	1997 Oct 15 0943:01	Titan 401B/Centaur	-	4B-33/TC-21 (4B5-13)	Cassini	Cassini		CC	SLC4E	-	-	150000	-	-
1997-064	2450745.61	1997 Oct 24 0232:00	Titan 403A	-	4A-18 (K-18, 4B5-3)	USA 133 [LAC3]	LACROSSE 3		VS	LC41	-	-	685	-	-
1997-068	2450760.59	1997 Nov 8 0205:01	Titan 401B/Centaur	-	4A-17/TC-16 (4B5-7)	USA 136 [JST10]	TROMPET 3		CC	LC40	-	-	39661	-	-
1998-029	2450942.57	1998 May 9 0138:01	Titan 401B/Centaur	-	4B-25/TC-18 (K-26)	USA 139 [RHS]	ORION 4		CC	SLC4W	-	-	36192	-	-
1998-030	2450947.16	1998 May 13 1552:04	Titan II SLV	-	236-12	NDA 15	NDA K		VS	SLC4W	-	-	825	-	-
1998-F02	2451037.98	1998 Aug 12 1130:01	Titan 401A/Centaur	-	4A-20/TC-9 (K-17)	- [CY16]	MERCURY 3		CC	LC41	-	-	5	-	-
1998-023	2451278.21	1999 Apr 9 1701:00	Titan 402B/IUS	-	4B-27 (K-32)	USA 142 [DSP19]	DSP 19?		CC	LC40	-	-	36682	-	-
1999-017	2451289.19	1999 Apr 30 1630:00	Titan 401B/Centaur	-	4B-32/TC-14 (K-26)	USA 143 (M11star 3)	M11star DFS-3		CC	LC40	-	-	5165	-	-
1999-028	2451320.90	1999 May 22 0936	Titan 404B	?	4B-12	USA 144 [MIST2]	MISTY 2?		VS	SLC4E	-	-	3141	-	-
1999-034	2451349.59	1999 Jun 20 0215:00	Titan II SLV	-	236-7	Quikscat	Quikscat		VS	SLC4W	-	-	830	-	-
1999-067	2451525.23	1999 Dec 12 1738:01	Titan 402B/IUS	-	236-8	USA 147 (DMSP F1e)	DMSP Block 5D-3 S-15		VS	SLC4W	-	-	852	-	-
2000-024	2451673.17	2000 May 8 1601:00	Titan 403B	-	4B-29	USA 149 [DSP20]	DSP 18?		CC	LC40	-	-	37012	-	-
2000-047	2451774.49	2000 Aug 17 2345:01	Titan 403B	?	4B-28	USA 152 [LAC4]	ONYX 4		VS	SLC4E	-	-	864	-	-
2000-065	2451808.93	2000 Sep 21 1022	Titan II SLV	-	236-13	NDA 16	NDA L		VS	SLC4W	-	-	35969	-	-
2001-009	2451965.39	2001 Feb 27 2120:00	Titan 401B/Centaur	-	4B-41/TC-22 (K-30)	USA 157 (M11star 4)	M11star DFS-4		CC	SLC40	-	-	36055	-	-
2001-044	2452127.81	2001 Aug 6 0728:00	Titan 404B	?	4B-31	USA 159 [DSP21]	Improved CRYSTAL 2107?		CC	SLC40	-	-	985	-	-
2002-001	2452188.39	2001 Oct 5 2121:01	Titan 401B/Centaur	-	4B-34	USA 161 [LC7]	M11star DFS-5		VS	SLC4E	-	-	36071	-	-
2002-032	2452290.52	2002 Jan 16 0030:01	Titan II SLV	-	236-14	NDA 17	NDA M		VS	SLC4W	-	-	823	-	-
2003-001	2452450.27	2002 Jan 24 1523:04	Titan II SLV	-	236-4	Coriolis	P98-2 Coriolis		VS	SLC4W	-	-	860	-	-
2003-012	2452496.10	2003 Jun 6 1419	Titan 401B/Centaur	-	4B-36/TC-23	USA 169 (M11star 6)	M11star DFS-6		CC	SLC40	-	-	36203	-	-
2003-041	2452736.07	2003 Apr 8 1343:00	Titan 401B/Centaur	-	4B-30/TC-20	USA 171 [RHS]	ORION 5		CC	SLC40	-	-	36042	-	-
2003-048	2452891.69	2003 Sep 9 0429:00	Titan 401B/Centaur	-	236-9	USA 172 (DMSP F1e)	DMSP Block 5D-3 S-20		VS	SLC4W	-	-	866	-	-
2004-004	2453050.28	2003 Oct 18 1611	Titan II SLV	-	4B-39	USA 176 [DSP22]	DSP F22		CC	SLC40	-	-	36118	-	-
2005-016	2453490.53	2004 Feb 14 1850:00	Titan 402B/IUS	?	4B-50	USA 182 [LAC5]	ONYX 5		CC	SLC40	-	-	726	-	-
2005-042	2453653.25	2005 Oct 19 1805	Titan 404B	?	4B-26	USA 186 [LCS]	Improved CRYSTAL 2108?		VS	SLC4E	-	-	1070	-	-







Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	DrbPay	Agency	Launch_Code	Group	Category	LTCite	Cite	Notes
1963-5533	2438335-34	1963 Nov 1 20:14:54	Titan II	-	N-25	0.000	AFBSS	RS	AFORL/ULwvick	Test/Plume study	AFORL2	MM/Titan	-
1963-5545	2438342-50	1963 Nov 9	Titan II	-	N-27	0.000	AFBSS	MS	-	Test	Uirich	MM/Titan	-
1963-5554	2438348-07	1963 Nov 14 13:42	Titan I	-	SF-68	0.000	SAC	MS	AFORL/Block	Test/Plume study	Uirich	MM/Titan	-
1963-5559	2438376-33	1963 Dec 12 20:00:01	Titan II	-	N-29	0.000	AFBSS	RS	AFORL/Block	Test/Plume study	Uirich/Wire	MM/Titan	-
1963-5580	2438380-52	1963 Dec 17 00:30	Titan II	-	N-28	0.000	AFBSS	MS	AFORL/Block	Test	nsf-koenn	MM/Titan	-
1964-331	2438410-35	1964 Jan 15 20:30:19	Titan II	-	N-31	0.000	AFBSS	MS	-	Test	MM/Titan	MM/Titan	-
1964-337	2438417-35	1964 Jan 23	Titan II	-	N-26	0.000	AFBSS	MS	-	Test	MM/Titan/Wire	MM/Titan	-
1964-3101	2438443-18	1964 Feb 17 16:15	Titan II	-	N-15	0.000	AFBSS	MS	-	Test	MM/Titan/Wire	MM/Titan	-
1964-3147	2438462-34	1964 Feb 26 20:14:44	Titan II	-	N-32	0.000	AFBSS	MS	-	Test	MM/Titan/Wire	MM/Titan	-
1964-3147	2438467-36	1964 Mar 13	Titan II	-	N-30	0.000	AFBSS	MS	-	Test	MM/Titan	MM/Titan	-
1964-3147	2438478-36	1964 Mar 23 20:41:57	Titan II	-	N-33	0.000	AFBSS	MS	AFORL/ULwvick,Block	Test/Plume study	AFORL	MM/Titan	-
1964-318	2438494-17	1964 Apr 8 16:00:01	Titan II	-	GLV-1	0.000	AFBSS/MS	US	AFORL/ULwvick,Block	Sat LEO A	SP-4203	MM/Titan	-
1964-3195	2438495-38	1964 Apr 9 21:04:50	Titan II	-	N-3A	0.000	AFBSS	MS	AFORL/Block	Test/Plume study	SP-4203	MM/Titan	-
1964-3319	2438607-14	1964 Jul 30 15:20:38	Titan II	-	B-28 (62-009)	0.000	SAC	MS	-	OT	DKS	MM/Titan	-
1964-3417	2438619-14	1964 Aug 11 15:21:43	Titan II	-	B-9 (61-2763)	0.000	SAC	MS	-	OT	DKS	MM/Titan	-
1964-3425	2438621-13	1964 Aug 13 14:56:52	Titan IIA	-	B-7 (61-2761)	0.000	SAC	MS	-	OT	DKS	MM/Titan	-
1964-3425	2438621-13	1964 Sep 1 15:00:06	Titan IIA	-	3A-2	1.414	AFSSD	OF	G	Sac LEO A	TitanReview	MM/Titan	-
1964-3449	2438671-20	1964 Oct 2 16:43:57	Titan II	-	B-1 (61-2755)	0.000	SAC	MS	-	OT	DKS	MM/Titan	-
1964-3572	2438704-21	1964 Nov 4 16:58:59	Titan II	-	B-32 (62-015)	0.000	SAC	MS	-	OT	DKS	MM/Titan/Wire	-
1964-3572	2438737-50	1964 Dec 8	Titan I	-	SF-86	0.000	SAC	MS	-	OT	DKS	MM/Titan	-
1964-3581	2438740-20	1964 Dec 10 16:53:33	Titan IIA	-	3A-1	0.000	AFSSD	US	G	Sac LEO A	MM/Titan	MM/Titan	-
1965-337	2438775-00	1965 Jan 14 12:00	Titan I	-	SF-53	0.000	SAC	MS	-	Sac LEO A	MM/Titan	MM/Titan	-
1965-337	2438786-09	1965 Jan 19 14:04:00	Titan II	-	GLV-2	0.000	AFSSD/MS	TS	-	SC Test	TitanReview	MM/Titan	-
1965-3068	2438803-14	1965 Feb 11 15:19:05	Titan IIA	-	3A-3	0.494	AFSSD	US	G	Sac MEQ 0	SP-4203	MM/Titan	-
1965-3134	2438824-50	1965 Mar 5	Titan I	-	SF-60	0.000	SAC	MS	-	OT	TitanReview-2h	MM/Titan	-
1965-3191	2438843-10	1965 Mar 23 14:24:00	Titan II	-	GLV-3	3.127	AFSSD/MS	US	G	Sac LEO 0	SP-4203	MM/Titan	-
1965-3240	2438844-59	1965 Mar 28 02:15:16	Titan II	-	B-60	0.000	SAC	MS	-	OT	PH	MM/Titan	-
1965-3191	2438861-31	1965 Apr 16 19:19:55	Titan II	-	B-46	0.000	SAC	MS	-	OT	PH	MM/Titan	-
1965-3271	2438881-30	1965 Apr 30 19:05:07	Titan II	-	B-64	0.000	SAC	MS	-	OT	PH	MM/Titan	-
1965-304	2438887-13	1965 May 6 15:00:03	Titan IIA	-	3A-6	2.500	AFSSD	US	G	Sac MEQ 0	TitanReview	MM/Titan	-
1965-3302	2438902-50	1965 May 21 23:53:25	Titan II	-	B-51	0.000	SAC	MS	-	OT	PH	MM/Titan	-
1965-343	2438915-14	1965 Jun 3 15:16:00	Titan II	-	GLV-4	3.581	AFSSD/MS	US	G	Sac LEO 0	SP-4203	MM/Titan	-
1965-3356	2438926-06	1965 Jun 14 13:51:30	Titan II	-	B-22	0.000	SAC	MS	-	OT	PH	MM/Titan	-
1965-3447	2438930-06	1965 Jun 16 14:00:04	Titan IIC	-	3C-7	6.948	AFSSD	US	G	Sac LEO 0	TitanReview	MM/Titan	-
1965-3413	2438942-10	1965 Jun 30 14:28:30	Titan II	-	B-30	0.000	SAC	MS	-	OT	PH	MM/Titan	-
1965-3468	2438963-26	1965 Jul 21 18:18:46	Titan II	-	B-62	0.000	SAC	MS	-	OT	PH	MM/Titan	-
1965-3468	2438963-26	1965 Aug 16 20:04:56	Titan II	-	B-6	0.000	SAC	MS	-	OT	PH	MM/Titan	-
1965-3479	2438994-06	1965 Aug 21 14:00:00	Titan II	-	GLV-5	3.358	AFSSD/MS	US	G	Sac LEO 0	SP-4203	MM/Titan	-
1965-3505	2439026-09	1965 Aug 28 00:44:43	Titan II	-	B-19	0.000	SAC	MS	-	OT	PH	MM/Titan	-
1965-3505	2439026-09	1965 Sep 21 14:04:23	Titan IIC	-	B-58	0.000	SAC	MS	-	OT	PH	MM/Titan	-
1965-3565	2439043-22	1965 Oct 15 17:23:59	Titan II	-	B-35	0.000	SAC	MS	-	OT	PH	MM/Titan	-
1965-3565	2439043-22	1965 Oct 27 16:09:22	Titan II	-	B-20	0.000	SAC	MS	-	OT	PH	MM/Titan	-
1965-3565	2439091-92	1965 Nov 30 14:00:50	Titan II	-	B-20	0.000	SAC	MS	-	OT	PH	MM/Titan	-
1965-3600	2439096-31	1965 Nov 30 14:00:50	Titan II	-	B-20	0.000	SAC	MS	-	OT	PH	MM/Titan	-
1965-3600	2439096-31	1965 Dec 10 19:30:43	Titan II	-	GLV-7	3.345	AFSSD/MS	US	G	Sac LEO 0	SP-4203	MM/Titan	-
1965-3245	2439109-04	1965 Dec 13 14:54:06	Titan II	-	GLV-6	3.083	AFSSD/MS	US	G	Sac LEO 0	SP-4203	MM/Titan	-
1965-3245	2439110-12	1965 Dec 15 13:37:26	Titan II	-	GLV-6	3.083	AFSSD/MS	US	G	Sac LEO 0	SP-4203	MM/Titan	-
1965-3245	2439116-07	1965 Dec 21 14:10:46	Titan IIC	-	3C-8	2.730	AFSSD	US	G	Sac GEO SO	TitanReview	MM/Titan	-
1965-3694	2439117-09	1965 Dec 22 14:10:46	Titan IIC	-	B-78	0.000	SAC	MS	-	OT	PH	MM/Titan	-
1965-398	2439159-09	1966 Feb 3 11:11:04	Titan II	-	B-67	0.000	SAC	MS	-	OT	PH	MM/Titan	-
1965-3115	2439173-91	1966 Feb 17 04:45:52	Titan II	-	B-81	0.000	SAC	MS	-	OT	PH	MM/Titan	-
1965-3115	2439207-90	1966 Feb 16 16:44:52	Titan II	-	GLV-8	3.369	AFSSD/MS	US	G	Sac LEO 0	SP-4203	MM/Titan	-
1965-3190	2439209-20	1966 Mar 25 09:45:03	Titan II	-	B-60	0.000	SAC	MS	-	OT	PH	MM/Titan	-
1965-3211	2439221-16	1966 Apr 5 16:20:19	Titan II	-	B-55	0.000	SAC	MS	-	OT	PH	MM/Titan	-
1965-3224	2439235-86	1966 Apr 20 08:44:54	Titan II	-	B-81	0.000	SAC	MS	-	OT	PH	MM/Titan	-
1965-3278	2439269-30	1966 May 24 13:39:33	Titan II	-	CT-9	0.000	AFSSD/MS	US	G	Sac LEO 0	MM/Titan	MM/Titan	-
1965-3278	2439280-07	1966 Jun 3 13:39:33	Titan II	-	CT-9	0.000	AFSSD/MS	US	G	Sac LEO 0	MM/Titan	MM/Titan	-
1965-3278	2439283-08	1966 Jun 16 14:00:01	Titan IIC	-	3C-11	0.321	AFSSD/MS	US	G	Sac LEO 0	SP-4203	MM/Titan	-
1965-3278	2439283-08	1966 Jul 18 22:20:27	Titan II	-	GLV-10	3.233	AFSSD/MS	US	G	Sac GEO SO	TitanReview	MM/Titan	-
1965-3285	2439325-43	1966 Jul 18 22:20:27	Titan II	-	B-95	0.000	SAC	MS	-	OT	PH	MM/Titan	-
1965-3285	2439328-50	1966 Jul 22	Titan II	-	B-95	0.000	SAC	MS	-	OT	PH	MM/Titan	-
1965-3285	2439328-50	1966 Jul 29 18:30:20	Titan IIB	-	3B-1	3.650	AFSSD	US	G	Sac LEO A	GAMHEX-C27	MM/Titan	-
1965-3285	2439328-50	1966 Aug 26 13:59:56	Titan IIC	-	3C-12	0.360	AFSSD	US	G	Sac GEO SO	TitanReview	MM/Titan	-
1965-3285	2439381-11	1966 Sep 12 14:42:27	Titan II	-	GLV-11	3.519	AFSSD/MS	US	G	Sac LEO 0	SP-4203	MM/Titan	-
1965-3285	2439381-11	1966 Sep 16	Titan II	-	B-40	0.000	SAC	MS	-	OT	PH	MM/Titan	-
1965-3285	2439397-30	1966 Sep 28 19:07	Titan IIB	-	3B-2	11.269	AFSSD	US	G	Sac LEO A	GAMHEX-C2	MM/Titan	-
1965-3285	2439433-08	1966 Nov 3 13:50:42	Titan IIC	-	GLV-12	3.261	AFSSD/MS	US	G	Sac LEO 0	SP-4203	MM/Titan	-
1965-3285	2439441-37	1966 Nov 11 20:46:53	Titan II	-	B-68	0.000	SAC	MS	-	OT	PH	MM/Titan	-
1965-3285	2439474-26	1966 Nov 24 10:06:33	Titan II	-	B-68	0.000	SAC	MS	-	OT	PH	MM/Titan	-
1965-3285	2439509-10	1966 Dec 14 18:14	Titan IIB	-	3B-3	3.650	AFSSD	US	G	Sac GEO SO	TitanReview	MM/Titan	-
1965-3285	2439509-10	1967 Jan 18 14:19:08	Titan IIC	-	3C-13	0.360	AFSSD	US	G	Sac LEO A	GAMHEX-C2	MM/Titan	-
1965-3285	2439546-33	1967 Feb 24 19:59	Titan IIB	-	3B-4	3.650	AFSSD	US	G	Sac LEO A	GAMHEX-C2	MM/Titan	-
1965-3285	2439566-50	1967 Mar 17	Titan IIB	-	B-76	0.000	SAC	MS	-	OT	PH	MM/Titan	-
1965-3285	2439592-50	1967 Apr 12	Titan II	-	B-81	0.000	SAC	MS	-	OT	PH	MM/Titan	-
1965-3285	2439607-25	1967 Apr 26 18:00	Titan IIB	-	3B-5	2.440	AFSSD	US	G	Sac LEO A	L670426	MM/Titan	-
1965-3285	2439608-92	1967 Apr 28 10:01:01	Titan IIC	-	3C-10	0.360	AFSSD	US	G	Sac GEO SO	TitanReview	MM/Titan	-
1965-3285	2439662-18	1967 Jun 20 16:15	Titan IIB	-	3B-8	3.650	AFSSD	US	G	Sac LEO A	GAMHEX-C2	MM/Titan	-
1965-3285	2439664-50	1967 Jun 23	Titan II	-	B-70	0.000	SAC	MS	-	OT	PH	MM/Titan	-
1965-3285	2439664-50	1967 Jul 1 13:15:01	Titan IIC	-	3C-14	0.000	SAC	MS	-	OT	PH	MM/Titan	-
1965-3285	2439719-21	1967 Aug 16 17:07	Titan IIB	-	3B-9	3.650	AFSSD	US	G	Sac LEO A	GAMHEX-C2	MM/Titan	-
1965-3285	2439744-50	1967 Sep 11	Titan II	-	B-21	0.000	SAC	MS	-	OT	PH	MM/Titan	-
1965-3285	2439763-28	1967 Sep 19 18:37	Titan IIB	-	3B-10	3.650	AFSSD	US	G	Sac LEO A	GAMHEX-C2	MM/Titan	-
1965-3285	2439769-30	1967 Oct 25 19:15	Titan IIB	-	3B-11	3.650	AFSSD	US	G	Sac LEO A	L671026	MM/Titan	-
1965-3285	2439830-28	1967 Dec 5 18:45	Titan IIB	-	3B-12	3.650	AFSSD	US	G	Sac LEO A	GAMHEX-C2	MM/Titan	-
1965-3285	2439874-29	1968 Jan 18 19:04	Titan IIB	-	3B-13	3.650	AFSSD	US	G	Sac LEO A	L680118	MM/Titan	-
1965-3285	2439915-12	1968 Feb 28 15:00	Titan II	-	B-88	0.000	SAC	MS	-	OT	PH	MM/Titan	-
1965-3285	2439929-33	1968 Mar 13 19:51	Titan IIB	-	3B-14	3.650	AFSSD	US	G	Sac SSO A	GAMHEX-C2	MM/Titan	-

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	DrbPay	Agency	Launch_Code	Group	Category	LTCite	Cite	Notes
1968-5250	2459948:50	1968 Apr 2	Titan II	-	B-36	0.000	SAC	NS	-	OT	MM/Titan	MM/Titan	-
1968-031	2459964:21	1968 Apr 17 1700	Titan IILB	-	3B-15	3.650	SAMSO	OS	G	Sat LEO A	LR60417	MM/Titan	-
1968-047	2440013:23	1968 Jun 5 1733	Titan IILB	-	3B-16	3.650	SAMSO	OS	G	Sat LEO A	GAMHX-G2	MM/Titan	-
1968-3374	2440019:50	1968 Jun 12	Titan II	-	B-82	0.000	SAC	MS	G	OT	MM/Titan	MM/Titan	-
1968-050	2440021:09	1968 Jun 13 1408:50	Titan IILC	-	3C-16	0.380	SAMSO	MS	G	Sat GEO SO	AFT3	MM/Titan	-
1968-064	2440076:19	1968 Aug 6 1630	Titan IILB	-	3B-17	3.650	SAMSO	MS	G	Sat LEO A	GAMHX-G2	MM/Titan	-
1968-066	2440090:04	1968 Aug 21 13007	Titan II	-	B-63	0.000	SAC	MS	G	OT	ProjBlueBook	MM/Titan	-
1968-074	2440110:27	1968 Sep 10 1630	Titan IILB	-	3B-18	3.650	SAMSO	OS	G	Sat LEO A	LR60910	MM/Titan	-
1968-081	2440126:82	1968 Sep 26 0737:01	Titan IILC	-	3C-5	0.392	SAMSO	OS	G	Sat GEO SO	AFT3	MM/Titan	-
1968-099	2440167:30	1968 Nov 6 1910	Titan IILB	-	3B-19	3.807	SAMSO	OS	G	Sat LEO A	LR681107	MM/Titan	-
1968-5588	2440179:50	1968 Nov 19	Titan II	-	B-3	0.000	SAC	MS	G	OT	MM/Titan	MM/Titan	-
1968-108	2440196:31	1968 Dec 4 1923	Titan IILB	-	3B-20	3.807	SAMSO	OS	G	Sat LEO A	LR681205	MM/Titan	-
1968-077	2440244:30	1969 Jan 22 1910	Titan IILB	-	3B-6	3.807	SAMSO	OS	G	Sat LEO A	LR690122	MM/Titan	-
1968-013	2440262:38	1969 Feb 9 2109:00	Titan IILC	-	3C-17	0.721	SAMSO	OS	G	Sat GEO SO	AFT3	MM/Titan	-
1968-019	2440266:31	1969 Mar 4 1930	Titan IILB	-	3B-7	3.807	SAMSO	OS	G	Sat LEO A	LR690305	MM/Titan	-
1968-5339	2440327:23	1969 Apr 15 1730	Titan IILB	-	3B-21	3.807	SAMSO	OS	G	Sat LEO A	LR690415	MM/Titan	-
1968-5335	2440361:50	1969 May 20	Titan II	-	B-63	0.000	SAC	MS	G	OT	MM/Titan	MM/Titan	-
1968-046	2440364:83	1969 May 23 0757:01	Titan IILC	-	3C-15	0.740	SAMSO	OS	G	Sat GEO SO	AFT3	MM/Titan	-
1968-060	2440376:20	1969 Jun 3 1649	Titan IILB	-	3B-22	3.807	SAMSO	OS	G	Sat LEO A	LR690603	MM/Titan	-
1968-074	2440457:17	1969 Aug 23 1600	Titan 23B	-	23B-1 (3B-23)	3.964	SAMSO	OS	G	Sat LEO A	LR690623	MM/Titan	-
1968-095	2440519:26	1969 Oct 24 1810	Titan 23B	-	23B-2 (3B-24)	4.414	SAMSO	OS	G	Sat LEO A	J09602	MM/Titan	-
1970-002	2440601:28	1970 Jan 14 1843	Titan 23B	-	23B-3 (3B-25)	4.414	SAMSO	OS	G	Sat LEO A	J09602	MM/Titan	-
1970-027	2440684:96	1970 Apr 8 1050:01	Titan IILC	-	3C-16	0.717	SAMSO	OS	G	Sat GEO SO	AFT3	MM/Titan	-
1970-031	2440692:16	1970 Apr 15 1852	Titan 23B	-	23B-4 (3B-26)	4.414	SAMSO	OS	G	Sat LEO A	J09602	MM/Titan	-
1970-046	2440687:12	1970 Aug 18 1445	Titan 23B	-	23B-5 (3B-27)	4.414	SAMSO	OS	G	Sat LEO A	LR700625	MM/Titan	-
1970-061	2440687:11	1970 Aug 18 1445	Titan 23B	-	23B-6 (3B-28)	4.414	SAMSO	OS	G	Sat LEO A	LR700616	MM/Titan	-
1970-060	2440683:24	1970 Oct 23 1740	Titan 23B	-	23B-7 (3B-29)	4.414	SAMSO	OS	G	Sat LEO A	LR701024	MM/Titan	-
1970-093	2440896:94	1970 Nov 6 1035:57	Titan IILC	-	23C-1 (3C-19)	0.694	SAMSO	OS	G	Sat GEO 00	AFT3	MM/Titan	-
1971-005	2440973:26	1971 Jan 21 1620	Titan 23B	-	23B-8 (3B-30)	4.414	SAMSO	OS	G	Sat LEO A	WIRE	MM/Titan	-
1971-021	2441031:66	1971 Mar 21 0845	Titan 33B	-	33B-1 (3B-36)	1.000	SAMSO	OS	G	Sat MOL 0	LR710322	MM/Titan	-
1971-033	2441064:15	1971 Apr 22 1530	Titan 23B	-	23B-9 (3B-31)	4.414	SAMSO	OS	G	Sat LEO A	LR710422	MM/Titan	-
1971-039	2441076:82	1971 May 5 0743:01	Titan IILC	-	23C-2 (3C-20)	0.393	SAMSO	OS	G	Sat GEO 00	AFT3	MM/Titan	-
1971-066	2441128:46	1971 Jun 15 1841	Titan IILB	-	23D-1	0.566	SAMSO	OS	G	Sat SSO 0	WIRE	MM/Titan	-
1971-5353	2441128:46	1971 Jun 20 2245	Titan II	-	B-12	0.000	SAC	MS	G	Target	MM/Titan	MM/Titan	-
1971-070	2441176:15	1971 Aug 12 1530	Titan 24B	-	24B-1 (3B-32)	4.414	SAMSO	OS	G	Sat LEO A	LR710911	MM/Titan	-
1971-5413	2441191:60	1971 Aug 28 0222	Titan II	-	B-100	0.000	SAC	MS	G	Target	MM/Titan	MM/Titan	-
1971-082	2441246:22	1971 Oct 23 1710	Titan 24B	-	24B-2 (3B-33)	4.414	SAMSO	OS	G	Sat LEO A	WIRE	MM/Titan	-
1971-086	2441256:63	1971 Nov 5 0309:06	Titan IILC	-	23C-3 (3C-21)	0.152	SAMSO	OS	G	Sat GEO 00	F73	MM/Titan	-
1971-002	2441337:27	1972 Jan 20 1836	Titan IILC	-	23D-2	0.380	SAMSO	OS	G	Sat SSO 0	WIRE	MM/Titan	-
1972-701	2441363:92	1972 Feb 16 0859	Titan 33B	-	33B-2 (3B-37)	1.000	SAMSO	OS	G	Sat MOL 0	AP	MM/Titan	-
1972-710	2441377:90	1972 Mar 17 0939:28	Titan IILC	-	23C-4 (3B-22)	0.393	SAMSO	OS	G	Sat GEO 00	AFT3	MM/Titan	-
1972-010	2441388:21	1972 Mar 17 1530	Titan 24B	-	24B-3 (3B-34)	4.292	SAMSO	OS	G	Sat LEO A	WIRE	MM/Titan	-
1972-508	2441462:19	1972 May 24 2346	Titan 24B	-	24B-4 (3B-35)	4.300	SAMSO	OS	G	Sat LEO A	WIRE	MM/Titan	-
1972-068	2441526:24	1972 Jul 1 1746	Titan IILB	-	24G	0.000	SAC	MS	G	Target	HEXSTORY	MM/Titan	-
1972-068	2441526:25	1972 Sep 10 1736	Titan IILB	-	23D-5 (3B-39)	0.075	SAMSO	OS	G	Sat SSO 0	WIRE	MM/Titan	-
1972-068	2441526:25	1972 Sep 10 1736	Titan IILB	-	23D-5 (3B-39)	0.075	SAMSO	OS	G	Sat SSO 0	WIRE	MM/Titan	-
1972-5339	2441601:26	1972 Oct 11 1893	Titan IILC	-	23B-5	0.000	SAC	MS	G	Target	MM/Titan	MM/Titan	-
1972-014	2441673:24	1972 Dec 21 1746	Titan 24B	-	24B-6 (3B-40)	4.414	SAMSO	OS	G	Target	LR721921	MM/Titan	-
1972-014	2441819:38	1973 Mar 9 2100	Titan IILB	-	24B-7 (3B-41)	0.577	SAMSO	OS	G	Sat SSO 0	LR730310	MM/Titan	-
1972-048	2441845:80	1973 May 15 1640	Titan 24B	-	24B-8 (3B-42)	4.414	SAMSO	OS	G	Sat SSO 0	LR730310	MM/Titan	-
1972-704	2441860:21	1973 Jun 15 0714:06	Titan IILC	-	23B-5 (3C-24)	0.166	SAMSO	OS	G	Sat GEO 00	AFT3	MM/Titan	-
1972-704	2441860:21	1973 Jun 26 1700	Titan 24B	-	24B-9 (3B-43)	4.600	SAMSO	OS	G	Sat LEO A	LR730626	MM/Titan	-
1972-046	2441916:17	1973 Jul 13 2029	Titan IILB	-	23B-7	0.526	SAMSO	OS	G	Sat SSO 0	RAE/WIRE	MM/Titan	-
1972-068	2441963:22	1973 Aug 21 1607	Titan 33B	-	33B-3 (3B-38)	1.000	SAMSO	OS	G	Sat MOL 0	JCM	MM/Titan	-
1972-342	2441981:54	1973 Sep 27 1715	Titan 24B	-	24B-8 (3B-42)	4.414	SAMSO	OS	G	Sat LEO A	JCM	MM/Titan	-
1972-007	2441981:54	1973 Oct 10 20192	Titan II	-	B-69	0.000	SAC	MS	G	Target	MM/Titan/WIRE	MM/Titan	-
1972-007	2442030:58	1973 Dec 13 2357:01	Titan IILC	-	23B-8 (3C-26)	1.199	SAMSO	OS	G	Sat SSO 0	WIRE	MM/Titan	-
1972-007	2442030:58	1973 Dec 13 2357:01	Titan IILC	-	23B-8 (3C-26)	1.199	SAMSO	OS	G	Sat SSO 0	WIRE	MM/Titan	-
1974-007	2442090:08	1974 Feb 11 1349:02	Titan IILC	-	23C-1 (7C-1)	3.611	LERC/SAMSO	OS	G	Sat GEO 00	AFT3	MM/Titan	-
1974-007	2442092:25	1974 Feb 13 19007	Titan IILB	-	23C-1 (7C-1)	3.611	LERC/SAMSO	OS	G	Sat GEO 00	AFT3	MM/Titan	-
1974-5123	2442107:90	1974 Feb 13 19007	Titan II	-	24B-10 (3B-44)	0.000	SAC	MS	G	Target	MM/Titan	MM/Titan	-
1974-039	2442148:35	1974 Apr 10 2020:01	Titan IILC	-	23B-9	10.744	SAMSO	OS	G	Sat LEO 0	LR740301	MM/Titan	-
1974-039	2442198:04	1974 May 30 1300:01	Titan IILC	-	23C-9 (3C-27)	1.357	SAMSO	OS	G	Sat GEO 00	AFT3	MM/Titan	-
1974-042	2442205:19	1974 Jun 6 1630	Titan 24B	-	24B-11 (3B-45)	4.414	SAMSO	OS	G	Sat LEO 00	AFT3	MM/Titan	-
1974-042	2442205:19	1974 Jun 6 1630	Titan 24B	-	24B-11 (3B-45)	4.414	SAMSO	OS	G	Sat LEO 00	AFT3	MM/Titan	-
1974-046	2442274:16	1974 Aug 14 1545	Titan 24B	-	24B-12 (3B-46)	4.414	SAMSO	OS	G	Sat LEO A	JCM	MM/Titan	-
1974-067	2442360:31	1974 Oct 29 1930:00	Titan IILB	-	23D-4	10.506	SAMSO	OS	G	Sat SSO 0	WIRE	MM/Titan	-
1974-099	2442391:80	1974 Dec 10 0711:02	Titan IILC	-	23B-2 (7C-2)	0.463	LERC/SAMSO	OS	G	Sat GEO SOE	TR-1022	MM/Titan	-
1975-534	2442422:60	1975 Jan 10 0227:56	Titan II	-	B-27	0.000	SAC	MS	G	Target	PH	MM/Titan	-
1975-017	2442481:70	1975 Mar 10 0441	Titan 34B	-	34B-1 (3B-50)	1.000	SAMSO	OS	G	Sat MOL 0	JCM	MM/Titan	-
1975-032	2442521:20	1975 Apr 18 16457	Titan 24B	-	24B-14 (3B-48)	4.414	SAMSO	OS	G	Sat LEO A	WIRE	MM/Titan	-
1975-040	2442563:09	1975 May 20 1403:48	Titan IILC	-	23C-7 (3C-25)	1.070	SAMSO	OS	G	Sat GEO 00	AFT3	MM/Titan	-
1975-051	2442572:27	1975 Jun 8 1830	Titan IILB	-	23D-10	10.964	SAMSO	OS	G	Sat SSO 0	LR750609	MM/Titan	-
1975-5238	2442632:58	1975 Aug 8 0150	Titan II	-	B-64	0.000	SAC	MS	G	Target	SantaAnaReg750609-54	MM/Titan	-
1975-075	2442645:39	1975 Aug 20 2122:00	Titan IILC	-	23B-4 (7C-4)	3.519	LERC/SAMSO	OS	G	Sat GEO E	AFT3	MM/Titan	-
1975-083	2442665:28	1975 Sep 9 1839:00	Titan IILB	-	23C-5 (7C-3)	3.519	LERC/SAMSO	OS	G	Sat GEO E	AFT3	MM/Titan	-
1975-088	2442695:30	1975 Oct 9 1915	Titan 24B	-	24B-13 (3B-47)	4.414	SAMSO	OS	G	Sat SSO A	WIRE	MM/Titan	-
1975-114	2442751:35	1975 Dec 4 20307	Titan IILB	-	23D-13	11.001	SAMSO	OS	G	Sat SSO 0	WIRE	MM/Titan	-
1975-5344	2442751:35	1975 Dec 4 20307	Titan II	-	B-41	0.000	SAC	MS	G	Target	MM/Titan	MM/Titan	-
1975-5344	2442751:35	1975 Dec 4 20307	Titan II	-	B-41	0.000	SAC	MS	G	Target	MM/Titan	MM/Titan	

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	DrbPay	Agency	Launch_Code	Group	Category	LTCite	Cite	Notes
1976-065	2442968.27	1976 Jul 8 1830	Titan II/D	-	23D-14	11.429	SANSD	OS	G	Sat S50 0	J09602	MM/Titan	-
1976-080	2442987.43	1976 Aug 6 2221	Titan 3/B	-	34B-3 (3B-56)	0.000	SANSD	OS	G	Sat MOL 0	J09602	MM/Titan	-
1976-094	2443037.28	1976 Sep 15 1850	Titan 2/B	-	24B-17 (3B-51)	4.414	SANSD	OS	G	Sat S50 0	J09602	MM/Titan	-
1976-125	2443132.26	1976 Dec 19 1819	Titan II/D	-	23D-15	13.500	SANSD	OS	G	Sat S50 0	J09602	MM/Titan	-
1977-007	2443180.75	1977 Feb 6 0600:01	Titan II/D	-	23C-5 (3C-23)	1.041	SANSD	OS	G	Sat GEO 00	AFT3	MM/Titan	-
1977-019	2443216.28	1977 Mar 13 1841:10	Titan 2/B	-	24B-19 (3B-54)	4.224	SANSD	OS	G	Sat S50 0	J09602	MM/Titan	-
1977-034	2443276.10	1977 May 12 1426:58	Titan II/D	-	23C-14 (3C-32)	1.224	SANSD	OS	G	Sat GEO 00	AFT3	MM/Titan	-
1977-056	2443322.27	1977 Jun 27 1830	Titan II/D	-	23D-17	11.431	SANSD	OS	G	Sat S50 0	J09602	MM/Titan	-
1977-076	2443376.10	1977 Aug 20 1429:44	Titan II/D	-	23E-7/TC-7	1.026	LERC/SANSD	OS	G	Sat EDO EE	AFT3	MM/Titan	-
1977-084	2443392.04	1977 Sep 5 1256:01	Titan II/D	-	23E-6/TC-6	1.026	LERC/SANSD	OS	G	Sat EDO EE	AFT3	MM/Titan	-
1978-021	2443464.71	1978 Feb 25 0600:07	Titan 3/B	-	24B-23 (3B-58)	4.100	SANSD	OS	G	Sat MOL 0	J09602	MM/Titan	-
1978-029	2443584.28	1978 Mar 16 1840:07	Titan 3/B	-	24B-20 (3B-49)	11.831	SANSD	OS	G	Sat S50 0	TLE	MM/Titan	-
1978-101	2443593.26	1978 Mar 25 1809:00	Titan II/D	-	23D-20	1.200	SANSD	OF	G	Sat GEO 00	AFT3	MM/Titan	-
1978-058	2443670.30	1978 Jun 10 1908	Titan II/D	-	23C-17 (3C-35)	1.000	SANSD	OS	G	Sat GEO 00	AFT3	MM/Titan	-
1978-075	2443674.27	1978 Jun 14 1823:37	Titan 3/B	-	23D-18	13.500	SANSD	OS	G	Sat S50 0	TLE	MM/Titan	-
1978-113	2443856.53	1978 Aug 5 0600:07	Titan II/D	-	23B-7 (3B-57)	0.800	SANSD	OS	G	Sat MOL 0	ARE	MM/Titan	-
1979-044	2443949.27	1979 Mar 16 1830	Titan II/D	-	23C-18 (3C-36)	1.220	SANSD	OS	G	Sat GEO 00	patrick.af.mil	MM/Titan	-
1979-055	2444022.27	1979 May 28 1830	Titan 2/B	-	23D-21	11.831	SANSD	OS	G	Sat S50 0	TLE	MM/Titan	-
1979-068	2444035.07	1979 Jun 10 1539:00	Titan II/D	-	24B-25 (3B-61)	4.100	SANSD	OS	G	Sat S50 0	TLE	MM/Titan	-
1979-086	2444147.97	1979 Oct 1 1122:00	Titan II/D	-	23C-13 (3C-31)	1.181	SANSD	OS	G	Sat GEO 00	CHOPS	MM/Titan	-
1980-010	2444198.59	1979 Nov 21 0209:36	Titan II/D	-	23C-16 (3C-34)	1.000	AFSO	OS	G	Sat GEO 00	patrick.af.mil	MM/Titan	-
1980-052	2444277.38	1980 Feb 7 2110	Titan II/D	-	23D-19	13.500	AFSO	OS	G	Sat S50 0	LR00208	MM/Titan	-
1980-102	2444601.83	1980 Jun 16 1830	Titan II	-	23D-16	11.611	SAC	ML	G	Explosion	CommandAndControl	MM/Titan	-
1980-109	2444687.17	1980 Sep 19 0800	Titan 3/B	-	34B-3 (3B-53)	0.000	AFSO	OS	G	Sat MOL 0	Inspcrucker	MM/Titan	-
1981-028	2444664.30	1981 Feb 28 1910:07	Titan 2/B	-	24B-24 (3B-59)	4.100	AFSO	OS	G	Sat S50 0	TLE	MM/Titan	-
1981-039	2444680.31	1981 Mar 15 1924:00	Titan II/D	-	23C-22 (3C-40)	1.180	AFSO	OS	G	Sat GEO 00	patrick.af.mil	MM/Titan	-
1981-088	2444719.40	1981 Apr 24 2132	Titan 3/B	-	34B-5 (3B-60)	13.500	AFSO	OS	G	Sat MOL 0	LR10426	MM/Titan	-
1981-107	2444865.89	1981 Sep 3 1829:07	Titan II/D	-	23D-22	1.000	AFSO	OS	G	Sat S50 0	TLE	MM/Titan	-
1982-049	2444991.31	1982 Jan 31 0922:00	Titan II/D	-	23C-21 (3C-39)	4.000	AFSO	OS	G	Sat GEO 00	patrick.af.mil	MM/Titan	-
1982-066	2445005.31	1982 Mar 6 1928:00	Titan II/D	-	24B-26 (3B-62)	4.183	AFSO	OS	G	Sat S50 0	Inspcrucker	MM/Titan	-
1982-111	2445051.27	1982 May 11 1835	Titan II/D	-	23C-20 (3C-38)	1.180	AFSO	OS	G	Sat GEO 00	patrick.af.mil	MM/Titan	-
1982-116	2445272.67	1982 Oct 30 0405:01	Titan 3/D/Transage	-	34D-1 (04D-67)	1.759	AFSO	OS	G	Sat GEO 000	patrick.af.mil	MM/Titan	-
1983-032	2445494.15	1983 Nov 16 2118:07	Titan II/D	-	34D-23	13.500	AFSO	OS	G	Sat S50 0	TLE	MM/Titan	-
1983-060	2445506.28	1983 Apr 25 1846	Titan 2/B	-	24B-27 (3B-63)	4.100	AFSO	OS	G	Sat S50 A	LR030415	MM/Titan	-
1983-078	2445547.15	1983 Jul 31 1841	Titan 3/B	-	34B-5 (3B-66)	11.662	AFSO	OS	G	Sat S50 0	LR030620	MM/Titan	-
1984-030	2445930.65	1984 Jan 31 0859:01	Titan 3/D/Transage	-	34D-10 (3B-61)	1.000	AFSO	OS	G	Sat MOL 0	patrick.af.mil	MM/Titan	-
1984-039	2445965.20	1984 Apr 17 1842:02	Titan 3/D/Transage	-	34B-11 (3B-62)	1.180	AFSO	OS	G	Sat GEO 00	patrick.af.mil	MM/Titan	-
1984-065	2445997.28	1984 Apr 17 1842:02	Titan 2/B	-	24B-28 (3B-67)	4.170	AFSO	OS	G	Sat S50 30	LR049416	MM/Titan	-
1984-085	2445991.28	1984 Jun 28 1847	Titan 3/B	-	34B-4 (3B-64)	10.700	AFSO	OS	G	Sat S50 0	Inspcrucker	MM/Titan	-
1984-122	2446030.25	1984 Aug 28 1847	Titan 3/B	-	34B-4 (3B-64)	10.700	AFSO	OS	G	Sat S50 0	Inspcrucker	MM/Titan	-
1985-029	2446098.25	1984 Dec 21 0002:03	Titan 3/D/Transage	-	34D-5 (3B-65)	1.800	AFSO	OS	G	Sat S50 0	LR040229	MM/Titan	-
1985-032	2446104.76	1985 Feb 8 0652:00	Titan 3/B	-	34D-14 (3B-69)	13.500	AFSO	OS	G	Sat S50 0	Inspcrucker	MM/Titan	-
1985-036	2446194.30	1985 Aug 28 2120	Titan 3/D	-	34B-13 (3B-69)	4.800	AFSO	OS	G	Sat S50 0	Inspcrucker	MM/Titan	-
1985-073	2446539.20	1986 Aug 28 1845:01	Titan 3/D	-	34D-9 (3B-65)	13.500	AFSO	OF	G	Sat MOL 0	LR060906	MM/Titan	-
1987-010	2447098.46	1987 Apr 15 1845:00	Titan 3/B	-	34B-9 (3B-66)	0.600	AFSO	OF	G	Sat S50 0	LR060926	MM/Titan	-
1987-049	2447098.46	1987 Apr 15 1845:00	Titan 3/B	-	34B-51 (3B-66)	0.600	AFSO	OF	G	Sat S50 0	LR060926	MM/Titan	-
1987-067	2447107.64	1987 Oct 29 0327:20	Titan 3/D/Transage	-	34D-5 (3B-67)	13.500	AFSO	OS	G	Sat S50 0	LR060926	MM/Titan	-
1988-078	2447109.80	1988 Sep 5 0925:02	Titan 3/D/Transage	-	34D-3 (3B-65)	1.800	AFSO	OS	G	Sat S50 0	LR060926	MM/Titan	-
1988-099	2447172.25	1988 Nov 6 1803	Titan II SLV	-	23E-1 (3B-65)	1.450	AFSO	OS	G	Sat S50 0	LR060926	MM/Titan	-
1989-035	2447857.32	1989 May 10 1847:01	Titan 3/D/Transage	-	34D-14 (3B-67)	13.500	AFSO	OS	G	Sat S50 0	LR060926	MM/Titan	-
1989-046	2447892.02	1989 Jun 14 1319:01	Titan 402A/TIUS	-	34D-16 (3B-66)	1.000	AFFSD2	OS	G	Sat S50 0	LR060926	MM/Titan	-
1989-069	2447773.75	1989 Jun 4 0554:01	Titan 3/D/Transage	-	K-1 (45B-1)	1.748	AFFSD2	OS	G	Sat GEO 000	patrick.af.mil	MM/Titan	-
1989-072	2447773.75	1989 Sep 6 0148	Titan II SLV	-	23E-2 (3B-67)	1.450	AFFSD2	OS	G	Sat GEO 000	AUST900911-41	MM/Titan	-
1990-001	2447892.50	1990 Jan 14 1159:31	Commercial Titan 3	-	CT-1	6.033	MM	OS	CO	Sat LE0 0	Wire	MM/Titan	-
1990-002	2447894.99	1990 Jan 14 1159:31	Commercial Titan 3	-	CT-2	6.033	MM	OS	CO	Sat LE0 0	Wire	MM/Titan	-
1990-060	2448050.72	1990 Jun 23 1119	Commercial Titan 3	-	K-4 (45B-4)	5.013	AFFSD2	OS	CO	Sat LE0 0	Wire	MM/Titan	-
1990-066	2448085.97	1990 Jun 23 1119	Commercial Titan 3	-	CT-3	4.700	MM	OS	CO	Sat LE0 0	Wire	MM/Titan	-
1990-067	2448208.53	1990 Nov 13 0037:02	Titan 402A/TIUS	-	K-6 (45B-2)	2.380	AFFSD2	OS	G	Sat GEO 000	patrick.af.mil	MM/Titan	-
1991-017	2448324.00	1991 Mar 8 1203	Titan 403A	-	K-5 (45B-1)	9.000	AFFSD2	OS	G	Sat LE0 0	Wire	MM/Titan	-
1991-076	2448568.80	1991 Nov 8 0707	Titan 403A	-	K-8 (45B-2)	4.398	AFFSD2	OS	G	Sat LE0 0	Wire	MM/Titan	-
1992-063	2448737.87	1992 Apr 25 0853	Titan II SLV	-	23E-3	1.450	AFFSD2	OS	G	Sat LE0 0	Wire	MM/Titan	-
1992-063	2448891.21	1992 Apr 25 0853	Commercial Titan 3	-	CT-4	3.565	MM	OS	CO/G	Sat EDO OE	AUST911118-20	MM/Titan	-
1992-063	2448965.40	1992 Apr 25 0853	Commercial Titan 3	-	K-3 (45B-1)	13.500	AFFSD2	OS	G	Sat S50 0	Wire	MM/Titan	-
1993-070	2449202.33	1993 Mar 28 2134	Titan 403A	-	K-11 (45B-9)	4.200	AFFSD2	OF	G	Sat S50 0	Wire	MM/Titan	-
1993-070	2449266.25	1993 Oct 5 1756	Titan II SLV	-	23E-5	2.750	AFFSD2	OF	G	Sat S50 A	Wire	MM/Titan	-
1994-004	2449378.19	1994 Jan 25 1834	Titan II SLV	-	23E-11	0.541	AFFSD2	OS	G	Sat LE0 0	Wire	MM/Titan	-
1994-026	2449476.01	1994 Feb 7 2147:01	Titan 401M/Centaur	-	K-10/TC-12 (45B-3)	4.500	AFFSD2	OS	G	Sat GEO 0	Wire	MM/Titan	-
1994-064	2449591.87	1994 Mar 3 1555:01	Titan 401M/Centaur	-	K-7/TC-10 (45B-1)	1.232	AFFSD2	OS	G	Sat MOL 0	Cleary06	MM/Titan	-
1994-084	2449709.43	1994 Aug 27 0858:01	Titan 402A/TIUS	-	K-9/TC-11 (45B-2)	4.500	AFFSD2	OS	G	Sat GEO 0	Cleary06	MM/Titan	-
1995-022	2449852.07	1995 May 14 1345:01	Titan 401M/Centaur	-	K-14 (45B-3)	2.360	AFFSD2	OS	G	Sat GEO 000	Wire	MM/Titan	-
1995-034	2449909.03	1995 Jul 10 1238:03	Titan 401M/Centaur	-	K-23/TC-17 (45B-8)	5.000	AFFSD2	OS	G	Sat MOL 0	Wire	MM/Titan	-
1995-060	2450027.72	1995 Nov 6 0515:01	Titan 401M/Centaur	-	K-19/TC-8 (45B-5)	3.000	AFFSD2	OS	G	Sat GEO 0	Ridge	MM/Titan	-
1995-066	2450057.39	1995 Dec 5 2118:00	Titan 404A	-	K-21/TC-13 (45B-7)	4.500	AFFSD2	OS	G	Sat S50 0	Ridge	MM/Titan	-
1996-029	2450198.48	1996 Apr 24 2337:02	Titan 401M/Centaur	-	K-15 (45B-3)	13.500	4S15/AFFSD2	OS	G	Sat S50 0	Ridge	MM/Titan	-
1996-029	2450216.40	1996 May 12 2132:00	Titan 403A	-	K-16/TC-15 (45B-4)	4.254	4S15/AFFSD2	OS	G	Sat GEO 0	Ridge	MM/Titan	-
1996-072	2450267.52	1996 Jul 3 0030:02	Titan 405A	-	K-22 (45B-11)	9.512	4S15/AFFSD2	OS	G	Sat LE0 0	Wire	MM/Titan	-
1997-008	2450503.35	1997 Feb 23 2020:01	Titan 402B/TIUS	-	K-13 (45B-5)	13.500	4S15/AFFSD2	OS	G	Sat S50 0	Wire	MM/Titan	-

Launch

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	OrbPay	Agency	Launch_Code	Group	Category	LTCite	Cite	Notes
1997-012	2450543.20	1997 Apr 4 1647	Titan II SLV	-	236-6	1.462	4SLS/AFSMC	OS	G	Sat SSO A	Wire	-	-
1997-061	2450736.86	1997 Oct 15 0843:01	Titan 401B/Centaur	-	4B-33/7C-21 (45E-13)	5.591	LEMC/AFSMC	DS	G	Sat EEO E	Wire	-	-
1997-064	2450745.61	1997 Oct 24 0232:00	Titan 403A	-	4A-19 (K-18, 45F-3)	9.000	4SLS/AFSMC	OS	G	Sat LEO 0	Wire	-	-
1997-068	2450760.59	1997 Nov 8 0205:01	Titan 401M/Centaur	-	4A-17/7C-16 (45E-7)	3.020	3SLS/AFSMC	OS	G	Sat MEO 0	Wire	-	-
1998-029	2450942.57	1998 May 9 0138:01	Titan 401B/Centaur	-	4B-25/7C-18 (K-26)	5.000	3SLS/AFSMC	OS	G	Sat GEO 0	Wire	-	-
1998-030	2450947.16	1998 May 13 1652:04	Titan II SLV	-	236-12	2.232	4SLS/AFSMC	OS	G	Sat SSO A	Wire	-	-
1998-032	2451037.98	1998 Aug 12 1130:01	Titan 401M/Centaur	-	4A-20/7C-9 (K-17)	4.500	3SLS/AFSMC	OF	G	Sat GEO 0	Wire	-	-
1999-017	2451278.21	1999 Apr 9 1701:00	Titan 402B/IUS	-	4B-27 (K-32)	2.360	3SLS/AFSMC	OF40	-	Sat GEO 000	Wire	-	-
1999-023	2451299.19	1999 Apr 30 1630:00	Titan 401B/Centaur	-	4B-32/7C-14 (K-26)	4.500	3SLS/AFSMC	OS	-	Sat GEO 0	Wire	-	-
1999-028	2451320.90	1999 May 22 0936	Titan 404B	?	4B-12	10.020	2SLS/AFSMC	OS	-	Sat LEO 0	Wire	-	-
1999-034	2451349.59	1999 Jun 20 0215:00	Titan II SLV	-	236-7	0.970	2SLS/AFSMC	OS	G	Sat SSO 0	Wire	-	-
1999-067	2451525.23	1999 Dec 12 1738:01	Titan II SLV	-	236-8	1.180	2SLS/AFSMC	OS	G	Sat SSO A	Wire	-	-
2000-024	2451673.17	2000 May 8 1601:00	Titan 402B/IUS	-	4B-29	2.361	3SLS/AFSMC	OS	G	Sat GEO 000	Wire	-	-
2000-047	2451774.49	2000 Aug 17 2345:01	Titan 403B	?	4B-28	9.000	2SLS/AFSMC	OS	G	Sat LEO 0	Wire	-	-
2000-065	2451608.93	2000 Sep 21 1022	Titan II SLV	-	236-13	2.231	2SLS/AFSMC	OS	G	Sat SSO A	Wire	-	-
2001-009	2451968.39	2001 Feb 27 2120:00	Titan 401B/Centaur	-	4B-41/7C-22 (K-30)	4.500	3SLS/AFSMC	OS	G	Sat GEO 000	Wire	-	-
2001-033	2452127.81	2001 Aug 6 0728:00	Titan 402B/IUS	-	4B-31	2.361	3SLS/AFSMC	OS	G	Sat GEO 0	Wire	-	-
2001-044	2452186.39	2001 Oct 5 2121:01	Titan 404B	?	4B-34	14.000	2SLS/AFSMC	OS	G	Sat SSO 0	Wire	-	-
2002-001	2452290.52	2002 Jan 16 0030:01	Titan 401B/Centaur	-	4B-36/7C-19	4.500	3SLS/AFSMC	OS	G	Sat GEO 0	Wire	-	-
2002-032	2452450.27	2002 Jun 24 1823:04	Titan II SLV	-	236-14	2.231	2SLS/AFSMC	OS	G	Sat SSO A	Wire	-	-
2003-001	2452946.10	2003 Jan 6 1419	Titan II SLV	-	236-4	0.827	2SLS/AFSMC	OS	G	Sat SSO 0	Wire	-	-
2003-012	2452736.07	2003 Apr 8 1343:00	Titan 401B/Centaur	-	4B-35/7C-23	4.500	3SLS/AFSMC	OS	G	Sat GEO 0	Wire	-	-
2003-041	2452891.69	2003 Sep 9 0429:00	Titan 401B/Centaur	-	4B-36/7C-20	5.000	3SLS/AFSMC	OS	G	Sat GEO 0	Wire	-	-
2003-046	2452831.16	2003 Oct 15 1617	Titan II SLV	-	236-9	1.968	2SLS/AFSMC	OS	G	Sat SSO A	Wire	-	-
2004-004	2453060.28	2004 Feb 14 1850:00	Titan 402B/IUS	-	4B-39	2.361	3SLS/AFSMC	OS	G	Sat GEO 000	Wire	-	-
2005-016	2453490.53	2005 Apr 30 0650:00	Titan 405B	?	4B-30	9.000	3SLS/AFSMC	OS	G	Sat LEO 0	Wire	-	-
2005-042	2453663.25	2005 Oct 19 1805	Titan 404B	?	4B-26	14.000	2SLS/AFSMC	OS	G	Sat SSO 0	Wire	-	-



Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Mission	Launch_FlightCode	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee_Km	Range_Km	Dest
1970-A172	2440586.50	1970 Jan	Techka	-	-	-	-	-	-	GrSP-4	-	-	-	207	-	-
1973-A87	2441888.50	1973 Jul 25	Techka	-	-	-	-	-	-	GrSP-4	-	-	-	207	-	-
1975-A61	2442412.50	1975	Techka	-	-	-	-	-	-	GrSP-4	-	-	-	207	-	-
1986-A14	2446692.50	1986 Aug	Techka-U	-	-	-	-	-	-	GrSP-4	-	-	-	267	-	-
1988-A15	2447404.50	1988 Sep	Techka-U	-	-	-	-	-	-	GrSP-4	-	-	-	267	-	-
2013-A28	2456333.50	2013 Feb 10	KI-02	-	-	-	-	-	-	WONSAN	LP3?	-	-	507	220	-
2013-A29	2456336.50	2013 Mar 15	KI-02	-	-	-	-	-	-	WONSAN	LP3?	-	-	507	220	-
2013-A30	2456430.50	2013 May 18	KI-02	-	-	-	-	-	-	WONSAN	LP3?	-	-	507	220	-
2013-A31	2456431.50	2013 May 19	KI-02	?	-	-	-	-	-	WONSAN	LP3?	-	-	507	220	-
2013-A32	2456432.50	2013 May 20	KI-02	-	-	-	-	-	-	WONSAN	LP3?	-	-	507	220	-
2013-A21	2456595.50	2013 Oct 30	Techka-U	-	-	-	-	-	-	GrSP-4	-	-	-	267	-	-
2013-A22	2456595.50	2013 Oct 30	Techka-U	-	-	-	-	-	-	GrSP-4	-	-	-	267	-	-
2013-A23	2456595.50	2013 Oct 30	Techka-U	-	-	-	-	-	-	GrSP-4	-	-	-	267	-	-
2014-A16	2456834.83	2014 Jun 26 0800?	KI-02	-	-	-	-	-	-	WONSAN	LP3?	-	-	507	220	-
2014-A17	2456834.83	2014 Jun 26 0800?	KI-02	-	-	-	-	-	-	WONSAN	LP3?	-	-	507	220	-
2014-A18	2456834.83	2014 Jun 26 0800?	KI-02	-	-	-	-	-	-	WONSAN	LP3?	-	-	507	220	-
2014-A19	2456840.50	2014 Jul 2	KI-02	-	-	-	-	-	-	WONSAN	LP3?	-	-	507	220	-
2014-A20	2456840.50	2014 Jul 2	KI-02	-	-	-	-	-	-	WONSAN	LP3?	-	-	507	220	-
2014-A21	2456868.50	2014 Jul 30	KI-02	-	-	-	-	-	-	WONSAN	LP3?	-	-	507	220	-
2014-A22	2456868.50	2014 Jul 30	KI-02	-	-	-	-	-	-	WONSAN	LP3?	-	-	507	220	-
2014-A23	2456868.50	2014 Jul 30	KI-02	-	-	-	-	-	-	WONSAN	LP3?	-	-	507	220	-
2014-A24	2456868.50	2014 Jul 30	KI-02	-	-	-	-	-	-	WONSAN	LP3?	-	-	507	220	-
2014-A25	2456883.50	2014 Aug 14	KI-02	-	-	-	-	-	-	WONSAN	LP3?	-	-	507	220	-
2014-A26	2456883.50	2014 Aug 14	KI-02	-	-	-	-	-	-	WONSAN	LP3?	-	-	507	220	-
2014-A27	2456883.50	2014 Aug 14	KI-02	-	-	-	-	-	-	WONSAN	LP3?	-	-	507	220	-
2014-A28	2456883.50	2014 Aug 14	KI-02	-	-	-	-	-	-	WONSAN	LP3?	-	-	507	220	-
2014-A29	2456883.50	2014 Aug 14	KI-02	-	-	-	-	-	-	WONSAN	LP3?	-	-	507	220	-
2015-A44	2457051.81	2015 Feb 6 0710?	KI-02	-	-	-	-	-	-	WONSAN	LP3?	-	-	507	200	-
2015-A45	2457051.81	2015 Feb 6 0730?	KI-02	-	-	-	-	-	-	WONSAN	LP3?	-	-	507	200	-
2015-A46	2457051.81	2015 Feb 6 0730?	KI-02	-	-	-	-	-	-	WONSAN	LP3?	-	-	507	200	-
2015-A47	2457051.81	2015 Feb 6 0730?	KI-02	-	-	-	-	-	-	WONSAN	LP3?	-	-	507	200	-
2015-A48	2457051.84	2015 Feb 6 0810?	KI-02	-	-	-	-	-	-	WONSAN	LP3?	-	-	507	200	-
2015-A49	2457114.56	2015 Apr 2 0130?	KI-02	-	-	-	-	-	-	WONSAN	LP3?	-	-	507	140	-
2015-A60	2457115.81	2015 Apr 3 0714	KI-02	-	-	-	-	-	-	WONSAN	LP3?	-	-	507	150?	-
2015-A61	2457115.81	2015 Apr 3 0730?	KI-02	-	-	-	-	-	-	WONSAN	LP3?	-	-	507	150?	-
2015-A62	2457115.81	2015 Apr 3 0730?	KI-02	-	-	-	-	-	-	WONSAN	LP3?	-	-	507	150?	-
2015-A63	2457115.83	2015 Apr 3 0800	KI-02	-	-	-	-	-	-	WONSAN	LP3?	-	-	507	150?	-
2015-A29	2457289.50	2015 Sep 4	Techka	-	-	-	-	-	-	SADAH?	-	-	-	40?	-	Yereb
2015-A26	2457370.50	2015 Dec 14	Techka	-	-	-	-	-	-	SADAH?	-	-	-	40?	-	Sab alMandiab
2015-A36	2457374.50	2015 Dec 14	Techka	-	-	-	-	-	-	SADAH?	-	-	-	40?	-	Yereb
2015-A35	2457380.50	2015 Dec 24	Techka	-	-	-	-	-	-	SADAH?	-	-	-	40?	-	Anadab
2015-A23	2457404.50	2016 Jan 16	Techka	-	-	-	-	-	-	SADAH?	-	-	-	40?	-	Yereb
2015-A21	2457407.50	2016 Jan 16	Techka	-	-	-	-	-	-	SADAH?	-	-	-	40?	-	Yereb
2015-A22	2457417.50	2016 Jan 16	Techka	-	-	-	-	-	-	SADAH?	-	-	-	40?	-	Anadab, Lahj
2015-A20	2457423.50	2016 Feb 5	Techka	-	-	-	-	-	-	SADAH?	-	-	-	40?	-	Yereb
2015-A11	2457423.50	2016 Feb 5	Techka	?	-	-	-	-	-	SADAH?	-	-	-	40?	-	Yereb
2015-A12	2457434.50	2016 Mar 2	Techka	-	-	-	-	-	-	SADAH?	-	-	-	40?	-	Yereb
2015-A31	2457434.50	2016 Mar 2	Techka	-	-	-	-	-	-	SADAH?	-	-	-	40?	-	Yereb
2015-A41	2457584.50	2016 Jul 9	Techka	-	-	-	-	-	-	SADAH?	-	-	-	40?	-	AL-Hazm
2015-A46	2457584.50	2016 Jul 9	Techka	-	-	-	-	-	-	YEMEN	-	-	-	40?	-	Taiz
2015-A86	2457737.50	2016 Jun 15	Techka	-	-	-	-	-	-	YEMEN	-	-	-	40?	-	Yemen
2015-A86	2457737.50	2016 Jun 15	Techka	-	-	-	-	-	-	YEMEN	-	-	-	40?	-	Yemen
2015-A104	2458234.50	2018 Jun 15	Techka	-	-	-	-	-	-	YEMEN	-	-	-	40?	-	W Coast
2015-A118	2458310.50	2018 Jun 11	Techka	-	-	-	-	-	-	YEMEN	-	-	-	40?	-	W Coast
2021-A17	2459423.50	2021 Jul 28	Techka-U	-	-	-	-	-	-	ALIBEX	-	-	-	40?	-	Black Sea
2021-A18	2459424.50	2021 Jul 29	Techka-U	-	-	-	-	-	-	ALIBEX	-	-	-	40?	-	Black Sea













Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	OrbPay	Agency	Launch_Code	Group	Category	LTCite	Cite	Notes
1963-S269	2438192.50	1963 Jun 12	Tomahawk	-	Sandia 152-1	0.000	SAMD	SS	SAMD/	Test	FDS	-	-
1963-A100	2438210.50	1963 Jun 30	Tomahawk	-	IQSY Tomahawk	0.000	SAMD?	SF	SAMD/	Test	Always	-	-
1964-S136	2438464.50	1964 Mar 10	Tomahawk	-	Sandia 152-5	0.000	SAMD	SS	SAMD/	Test/Aeron	FDS	-	-
1964-S484	2438663.50	1964 Sep 25	Tomahawk	-	IQSY Tomahawk	0.000	SAMD?	SS	SAMD/	Test	Always	-	-
1964-S508	2438676.50	1964 Oct 8	Tomahawk	-	Sandia 152-37	0.000	SAMD	SS	SAMD/	Test/Aeron?	FDS	-	-
1964-S521	2438682.50	1964 Oct 14	Tomahawk	-	Sandia 152-38	0.000	SAMD	SS	SAMD/	Test/Aeron?	FDS	-	-
1964-A156	2438688.50	1964 Oct 20	Tomahawk	-	Sandia 152-69	0.000	SAMD	SF	SAMD/	Test/Aeron?	FDS	-	-
1966-S704	2438760.50	1965?	Tomahawk	-	Sandia 276-2	0.000	SAMD	SS	SAMD/Pepper	Parachute test	JSch6,495	-	-
1966-S411	2438780.50	1965 Jan 20	Tomahawk	-	Sandia 152-14	0.000	SAMD	SS	SAMD/	Test/Aeron?	FDS	-	-
1966-S702	2438793.50	1965 Feb 2	Tomahawk	-	Sandia 152-17	0.000	SAMD	SS	SAMD/	Test/Aeron?	FDS	-	-
1966-S703	2438794.50	1965 Feb 3	Tomahawk	-	Sandia 152-47	0.000	SAMD	SS	SAMD/	Test/Aeron?	FDS	-	-
1966-A068	2438820.50	1965 Mar 1	Tomahawk	-	Sandia 152-40	0.000	SAMD	SS	SAMD/	Test/Aeron?	FDS	-	-
1966-S126	2438822.50	1965 Mar 3	Tomahawk	-	Sandia 152-39	0.000	SAMD	SS	SAMD/	Test/Aeron?	FDS	-	-
1966-S433	2438966.50	1965 Jul 25	Tomahawk	-	Sandia 152-15	0.000	SAMD	SS	SAMD/	Test	FDS	-	-
1966-S703	2439126.50	1966?	Tomahawk	-	Sandia 276-3	0.000	SAMD	SS	SAMD/Pepper	Parachute test	JSch6,495	-	-
1966-S704	2439126.50	1966?	Tomahawk	-	Sandia 276-4	0.000	SAMD	SS	SAMD/Pepper	Parachute test	JSch6,495	-	-
1966-S705	2439220.50	1966 Apr 5	Tomahawk	-	Sandia 276-5	0.000	SAMD	SS	SAMD/Pepper	Parachute test	JSch6,495	-	-
1966-A511	2439220.50	1966 Apr 5	Tomahawk	-	Sandia 152-41	0.000	SAMD	SF	SAMD/	Test	FDS	-	-
1967-S603	2439490.50	1967?	Tomahawk	-	Sandia 276-6	0.000	SAMD	SS	SAMD/Pepper	Parachute test	JSch6,495	-	-
1967-S604	2439490.50	1967?	Tomahawk	-	Sandia 276-7	0.000	SAMD	SS	SAMD/Pepper	Parachute test	JSch6,495	-	-
1967-S605	2439490.50	1967?	Tomahawk	-	Sandia 276-8	0.000	SAMD	SS	SAMD/Pepper	Parachute test	JSch6,495	-	-
1967-S606	2439490.50	1967?	Tomahawk	-	Sandia 276-9	0.000	SAMD	SS	SAMD/Pepper	Parachute test	JSch6,495	-	-
1967-S358	2439698.50	1967 Jul 27	Tomahawk	-	Sandia 152-96	0.000	SAMD	SS	SAMD/	Ionos	FDS	-	-
1967-A116	2439756.50	1967 Sep 25	Tomahawk	-	Sandia 152-61	0.000	SAMD	SS	SAMD/	Test/Aeron?	FDS	-	-
1967-S569	2439831.15	1967 Dec 6 1541	Tomahawk	-	Sandia 152-110	0.000	SAMD	SS	LRL/	AR. Aeron	FDS	UCAL-50587	-
1966-S121	2439892.29	1968 Feb 5 1900	D-Region Tomahawk	-	RMSA 12.106GT	0.000	GSFC	SS	GSFC/Sorgitt	Test	Always	-	-



Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Mission	FlightCode	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee_Km	Range_Km	Dest
1981-S191	2444876 50	1981 Sep 29	Topol'	-	46519-2017	152N88 B-1	Ejection test	-	-	MIP-53	LC167	-	-	17	-	-
1981-A38	2444907 50	1981 Oct 30	Topol'	-	46519-2027	152N88 B-2	Ejection test	-	-	MIP-53	-	-	-	17	-	-
1982-A43	2445206 50	1982 Aug 25	Topol'	-	46519-2037	152N88 B-3	Ejection test	-	-	MIP-53	-	-	-	17	-	BALKH
1982-S183	2445269 50	1982 Oct 27	Topol'	-	46519-204	152N88 B-3	NGCh 15F551/A888	-	-	GRIP-4	-	-	-	5007	-	Kura
1983-S57	2446383 77	1983 Feb 18 0630?	Topol'	-	46519-205-1L	152N88 LK1-1-1	NGCh 15F551/A888	-	-	MIP-53	-	-	-	1000?	-	Kura
1983-S94	2446469 60	1983 May 31 0230	Topol'	-	46524-401-2L	152N88 LK1-2	NGCh 15F551/A888	-	-	MIP-53	-	-	-	1000?	-	Kura
1983-S265	2446485 65	1983 Aug 10 0230	Topol'	-	46524-401-3L	152N88 LK1-3	NGCh 15F551/A888	-	-	MIP-53	-	-	-	1000?	-	Kura
1983-A56	2446556 62	1983 Aug 10 0230	Topol'	-	46524-402-4L	152N88 LK1-4	NGCh 15F551/A888	-	-	MIP-53	-	-	-	1000?	-	Kura
1983-S106	2446562 69	1983 Oct 25 0430	Topol'	-	46524-403-5L	152N88 LK1-5	NGCh 15F551/A888	-	-	MIP-53	-	-	-	1000?	-	Kura
1984-S221	2446750 38	1984 Feb 19 2215	Topol'	-	46524-404-6L	152N88 LK1-6	NGCh 15F551/A888	-	-	MIP-53	-	-	-	1000?	-	Kura
1984-S222	2446914 12	1984 Apr 23 1500	Topol'	-	46524-406-8L	152N88 LK1-7	NGCh 15F551/A888	-	-	MIP-53	-	-	-	1000?	-	Kura
1984-S223	2446944 12	1984 May 23 1500	Topol'	-	46524-407-9L	152N88 LK1-8	NGCh 15F551/A888	-	-	MIP-53	-	-	-	1000?	-	Kura
1984-S224	2446908 06	1984 Jul 26 1400	Topol'	-	46524-408-7L	152N88 LK1-9	NGCh 15F551/A888	-	-	MIP-53	-	-	-	1000?	-	Kura
1984-S225	2446954 06	1984 Sep 10 1530	Topol'	-	46524-409-10L	152N88 LK1-10	NGCh 15F551/A888	-	-	MIP-53	-	-	-	1000?	-	Kura
1984-S226	2446976 22	1984 Oct 2 1720	Topol'	-	46524-410-11L	152N88 LK1-11	NGCh 15F551/A888	-	-	MIP-53	-	-	-	1000?	-	Kura
1984-S227	2446925 28	1984 Nov 20 1600	Topol'	-	46524-221-12L	152N88 K-1 Kontrol'ny	NGCh 15F551/A888	-	-	MIP-53	-	-	-	1000?	-	Kura
1984-S228	2446940 58	1984 Dec 6 0155	Topol'	-	46524-222-13L	152N88 LK1-13	NGCh 15F551/A888	-	-	MIP-53	-	-	-	1000?	-	Kura
1984-S249	2446940 68	1984 Dec 6 0425	Topol'	-	46524-223-14L	152N88 LK1-14	NGCh 15F551/A888	-	-	MIP-53	-	-	-	1000?	-	Kura
1985-S24	2446976 50	1985 Jan 11	Skorost'	-	15L	152N88 LK1-15	3 BB	-	-	GRIP-4	-	-	-	1000?	-	-
1985-S264	2446995 36	1985 Jan 29 2030	Topol'	-	64536-224-33	152N88 K-11	NGCh 15F551/A888	-	-	MIP-53	-	-	-	1000?	-	Kura
1985-S261	2446118 30	1985 Feb 21 1905	Topol'	-	64536-224-33	152N88 K-11	NGCh 15F551/A888	-	-	MIP-53	-	-	-	1000?	-	Kura
1985-S265	2446178 19	1985 Apr 22 1630	Topol'	-	64536-210-46	152N88 K-2	NGCh 15F551/A888	-	-	MIP-53	-	-	-	1000?	-	Kura
1985-S266	2446231 21	1985 Jun 14 1700	Topol'	-	64551-421-52	152N88 K-3	NGCh 15F551/A888	-	-	MIP-53	-	-	-	1000?	-	Kura
1985-S267	2446294 15	1985 Aug 6 1531	Topol'	-	64551-431-55	152N88 K-4	NGCh 15F551/A888	-	-	MIP-53	-	-	-	1000?	-	Kura
1985-S268	2446306 10	1985 Aug 26 1420	Topol'	-	64551-431-58	152N88 K-5	NGCh 15F551/A888	-	-	MIP-53	-	-	-	1000?	-	Kura
1985-S269	2446343 33	1985 Oct 4 2000	Topol'	-	64591-431-66	152N88 K-6	NGCh 15F551/A888	-	-	MIP-53	-	-	-	1000?	-	Kura
1985-S270	2446353 67	1985 Oct 25 0400	Topol'	-	64591-441-52	152N88 K-7	NGCh 15F551/A888	-	-	MIP-53	-	-	-	1000?	-	Kura
1985-S147	2446405 99	1985 Dec 6 1147	Topol'	-	64591-461-55	152N88 K-9	NGCh 15F551/A888	-	-	MIP-53	-	-	-	1000?	-	Kura
1986-S168	2446539 08	1986 Apr 16 1520	Topol'	-	152N88 K-10	152N88 K-10	NGCh 15F551/A888	-	-	MIP-53	-	-	-	1000?	-	Kura
1986-S169	2446593 43	1986 Sep 19 2200	Topol'	-	152N88 K-11	152N88 K-11	NGCh 15F551/A888	-	-	MIP-53	-	-	-	1000?	-	Kura
1986-S170	2446794 19	1986 Nov 29 1630	Topol'	-	152N88 K-12	152N88 K-12	NGCh 15F551/A888	-	-	MIP-53	-	-	-	1000?	-	Kura
1986-S171	2446790 10	1986 Dec 25 1420	Topol'	-	152N88 K-13	152N88 K-13	NGCh 15F551/A888	-	-	MIP-53	-	-	-	1000?	-	Kura
1987-S208	2446837 38	1987 Feb 10 2100	Topol'	-	152N88 K-14	152N88 K-14	NGCh 15F551/A888	-	-	MIP-53	-	-	-	1000?	-	Kura
1987-S209	2446894 34	1987 May 25 2010	Topol'	-	152N88 K-15	152N88 K-15	NGCh 15F551/A888	-	-	MIP-53	-	-	-	1000?	-	Kura
1987-S210	2446906 63	1987 Jun 30 0310	Topol'	-	152N88 K-16	152N88 K-16	NGCh 15F551/A888	-	-	MIP-53	-	-	-	1000?	-	Kura
1987-S211	2447007 62	1987 Jul 14 0352	Topol'	-	152N88 UB-1	152N88 UB-1	NGCh 15F551/A888	-	-	MIP-53	-	-	-	1000?	-	Kura
1987-S212	2447122 97	1987 Jul 14 0352	Topol'	-	152N88 K-17	152N88 K-17	NGCh 15F551/A888	-	-	MIP-53	-	-	-	1000?	-	Kura
1987-S213	2447153 26	1987 Dec 23 0315	Topol'	-	152N88 LK1-16	152N88 LK1-16	NGCh 15F551/A888	-	-	MIP-53	-	-	-	1000?	-	Kura
1988-S174	2447251 14	1988 Apr 29 1522	Topol'	-	152N88 UB-2	152N88 UB-2	NGCh 15F551/A888	-	-	MIP-53	-	-	-	1000?	-	Kura
1988-S175	2447251 14	1988 Apr 29 1522	Topol'	-	152N88 UB-3	152N88 UB-3	NGCh 15F551/A888	-	-	MIP-53	-	-	-	1000?	-	Kura
1988-S176	2447251 14	1988 Apr 29 1522	Topol'	-	152N88 UB-4	152N88 UB-4	NGCh 15F551/A888	-	-	MIP-53	-	-	-	1000?	-	Kura
1988-S177	2447251 14	1988 Apr 29 1522	Topol'	-	152N88 UB-5	152N88 UB-5	NGCh 15F551/A888	-	-	MIP-53	-	-	-	1000?	-	Kura
1988-S178	2447251 14	1988 Apr 29 1522	Topol'	-	152N88 UB-6	152N88 UB-6	NGCh 15F551/A888	-	-	MIP-53	-	-	-	1000?	-	Kura
1988-S179	2447251 14	1988 Apr 29 1522	Topol'	-	152N88 UB-7	152N88 UB-7	NGCh 15F551/A888	-	-	MIP-53	-	-	-	1000?	-	Kura
1988-S180	2447251 14	1988 Apr 29 1522	Topol'	-	152N88 UB-8	152N88 UB-8	NGCh 15F551/A888	-	-	MIP-53	-	-	-	1000?	-	Kura
1988-S181	2447251 14	1988 Apr 29 1522	Topol'	-	152N88 UB-9	152N88 UB-9	NGCh 15F551/A888	-	-	MIP-53	-	-	-	1000?	-	Kura
1988-S182	2447251 14	1988 Apr 29 1522	Topol'	-	152N88 UB-10	152N88 UB-10	NGCh 15F551/A888	-	-	MIP-53	-	-	-	1000?	-	Kura
1988-S183	2447251 14	1988 Apr 29 1522	Topol'	-	152N88 UB-11	152N88 UB-11	NGCh 15F551/A888	-	-	MIP-53	-	-	-	1000?	-	Kura
1988-S184	2447251 14	1988 Apr 29 1522	Topol'	-	152N88 UB-12	152N88 UB-12	NGCh 15F551/A888	-	-	MIP-53	-	-	-	1000?	-	Kura
1988-S185	2447251 14	1988 Apr 29 1522	Topol'	-	152N88 UB-13	152N88 UB-13	NGCh 15F551/A888	-	-	MIP-53	-	-	-	1000?	-	Kura
1988-S186	2447251 14	1988 Apr 29 1522	Topol'	-	152N88 UB-14	152N88 UB-14	NGCh 15F551/A888	-	-	MIP-53	-	-	-	1000?	-	Kura
1988-S187	2447251 14	1988 Apr 29 1522	Topol'	-	152N88 UB-15	152N88 UB-15	NGCh 15F551/A888	-	-	MIP-53	-	-	-	1000?	-	Kura
1988-S188	2447251 14	1988 Apr 29 1522	Topol'	-	152N88 UB-16	152N88 UB-16	NGCh 15F551/A888	-	-	MIP-53	-	-	-	1000?	-	Kura
1988-S189	2447251 14	1988 Apr 29 1522	Topol'	-	152N88 UB-17	152N88 UB-17	NGCh 15F551/A888	-	-	MIP-53	-	-	-	1000?	-	Kura
1988-S190	2447251 14	1988 Apr 29 1522	Topol'	-	152N88 UB-18	152N88 UB-18	NGCh 15F551/A888	-	-	MIP-53	-	-	-	1000?	-	Kura
1988-S191	2447251 14	1988 Apr 29 1522	Topol'	-	152N88 UB-19	152N88 UB-19	NGCh 15F551/A888	-	-	MIP-53	-	-	-	1000?	-	Kura
1988-S192	2447251 14	1988 Apr 29 1522	Topol'	-	152N88 UB-20	152N88 UB-20	NGCh 15F551/A888	-	-	MIP-53	-	-	-	1000?	-	Kura
1988-S193	2447251 14	1988 Apr 29 1522	Topol'	-	152N88 UB-21	152N88 UB-21	NGCh 15F551/A888	-	-	MIP-53	-	-	-	1000?	-	Kura
1988-S194	2447251 14	1988 Apr 29 1522	Topol'	-	152N88 UB-22	152N88 UB-22	NGCh 15F551/A888	-	-	MIP-53	-	-	-	1000?	-	Kura
1988-S195	2447251 14	1988 Apr 29 1522	Topol'	-	152N88 UB-23	152N88 UB-23	NGCh 15F551/A888	-	-	MIP-53	-	-	-	1000?	-	Kura
1988-S196	2447251 14	1988 Apr 29 1522	Topol'	-	152N88 UB-24	152N88 UB-24	NGCh 15F551/A888	-	-	MIP-53	-	-	-	1000?	-	Kura
1988-S197	2447251 14	1988 Apr 29 1522	Topol'	-	152N88 UB-25	152N88 UB-25	NGCh 15F551/A888	-	-	MIP-53	-	-	-	1000?	-	Kura
1988-S198	2447251 14	1988 Apr 29 1522	Topol'	-	152N88 UB-26	152N88 UB-26	NGCh 15F551/A888	-	-	MIP-53	-	-	-	1000?	-	Kura
1988-S199	2447251 14	1988 Apr 29 1522	Topol'	-	152N88 UB-27	152N88 UB-27	NGCh 15F551/A888	-	-	MIP-53	-	-	-	1000?	-	Kura
1988-S200	2447251 14	1988 Apr 29 1522	Topol'	-	152N88 UB-28	152N88 UB-28	NGCh 15F551/A888	-	-	MIP-53	-	-	-	1000?	-	Kura
1988-S201	2447251 14	1988 Apr 29 1522	Topol'	-	152N88 UB-29	152N88 UB-29	NGCh 15F551/A888	-	-	MIP-53	-	-	-	1000?	-	Kura
1988-S202	2447251 14	1988 Apr 29 1522	Topol'	-	152N88 UB-30	152N88 UB-30	NGCh 15F551/A888	-	-	MIP-53	-	-	-	1000?	-	Kura
1988-S203	2447251 14	1988 Apr 29 1522	Topol'	-	152N88 UB-31	152N88 UB-31	NGCh 15F551/A888	-	-	MIP-53	-	-	-	1000?	-	Kura
1988-S204	2447251 14	1988 Apr 29 1522	Topol'	-	152N88 UB-32	152N88 UB-32	NGCh 15F551/A888	-	-	MIP-53	-	-	-	1000?	-	Kura
1988-S205	2447251 14	1988 Apr 29 1522	Topol'	-	152N88 UB-33	152N88 UB-33	NGCh 15F551/A888	-	-	MIP-53	-	-	-	1000?	-	Kura
1988-S206	2447251 14	1988 Apr 29 1522	Topol'	-	152N88 UB-34	152N88 UB-34	NGCh 15F551/A888	-	-	MIP-53	-	-	-	1000?	-	Kura
1988-S207	2447251 14	1988 Apr 29 1522	Topol'	-	152N88 UB-35	152N88 UB-35	NGCh 15F551/A888	-	-	MIP-53	-	-	-	1000?	-	Kura
1988-S208	2447251 14	1988 Apr 29 1522	Topol'	-	152N88 UB-36	152N88 UB-36	NGCh 15F551/A888	-	-	MIP-53	-	-	-	1000?	-	Kura
1988-S209	2447251 14	1988 Apr 29 1522	Topol'	-	152N88 UB-37	152N88 UB-37	NGCh 15F551/A888	-	-	MIP-53	-	-	-	1000?	-	Kura
1988-S210	244725															



Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Mission	Launch_Site	Platform	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee_Km	Range_Km	Dest
1998-552	2451072.97	1998 Sep 16 11:10:04	Topol'-E	-	64536-21-443	152h58 UBP-22	MCCh_15F551/AA88	GMILP	-	LC169	-	-	1000?	-	Kura
1998-A03	2451109.04	1998 Oct 22 12:52:58	Topol'-H	-	0354-59-101(5L)	152h65 LK1-5	MCCh	GMILP	-	Yu-1	-	-	40?	-	Kura
1998-567	2451155.98	1998 Dec 8 11:25	Topol'-H	-	152h65 LK1-6	152h65 LK1-6	MCCh	GMILP	-	Yu-1	-	-	1000?	-	Kura
1999-534	2451333.10	1999 Jun 3 14:20	Topol'-H	-	0354-25-101(6L)	152h65 LK1-7	MCCh	GMILP	-	Yu-1	-	-	1000?	-	Kura
1999-558	2451424.99	1999 Sep 3 11:44	Topol'-H	-	0354-33-102(8L)	152h65 LK1-8	MCCh	GMILP	-	Yu-1	-	-	1000?	-	Kura
1999-565	2451462.82	1999 Oct 1 07:42:02	Topol'-H	-	64536-21-447	152h68 UBP-23 (57)	MCCh_15F551/AA88	GMILP	-	LC169	-	-	1000?	-	Kura
1999-579	2451526.84	1999 Dec 14 08:05	Topol'-H	-	10L	152h65 LK1-9	MCCh	GMILP	-	Yu-2	-	-	1000?	-	Kura
2000-505	2451583.92	2000 Feb 9 09:59	Topol'-H	-	0354-24-211(11L)	152h65 LK1-10	MCCh	GMILP	-	LC163/18	-	-	1000?	-	Kura
2000-585	2451813.96	2000 Sep 26 11:00	Topol'-H	-	0354-43-104(11L)	152h65 LK1-1	MCCh_15F551/AA88	GMILP	-	LC163/18	-	-	1000?	-	Kura
2000-588	2451828.91	2000 Oct 21 09:30	Topol'-H	152h55	64536-21-444	152h68 UBP-24 (58)	MCCh_15F551/AA88	GMILP	-	LC169	-	-	1000?	-	Kura
2000-079	2451864.02	2001 Dec 5 12:32	Start-1	-	64516-21-434	ERUS A1	ERUS A1	GMILP	-	LC169	-	-	1000?	-	Kura
2001-007	2451960.87	2001 Feb 20 09:45:27	Start-1	-	168	152h68 UBP-25	MCCh_15F551/AA88	GMILP	-	LC169	-	-	556	-	Kura
2001-545	2452185.38	2001 Dec 1 09:00	Topol'-E	-	-	152h68 UBP-26	MCCh_15F551/AA88	GMILP	-	LC169	-	-	1000?	-	Kura
2001-549	2452215.18	2001 Nov 1 16:20	Topol'-E	-	-	152h68 UBP-27	MCCh_15F551/AA88	GMILP	-	LC169	-	-	1000?	-	Kura
2001-572	2452268.50	2001 Dec 25	Topol'-E	-	-	152h68 UBP-28	MCCh_15F551/AA88	GMILP	-	LC169	-	-	1000?	-	Kura
2002-539	2452431.97	2002 Jun 6 11:20	Topol'-H	152h55	-	152h68 UBP-29	MCCh	GMILP	-	LC169	-	-	1000?	-	Kura
2002-564	2452559.91	2002 Oct 12 09:52	Topol'-H	152h55	-	152h68 UBP-30	MCCh	GMILP	-	LC169	-	-	1000?	-	Kura
2003-511	2452725.89	2003 Mar 27 09:27:30	Topol'-E	-	-	152h68 UBP-31	MCCh_15F551/AA88	GMILP	-	LC167	-	-	1000?	-	Kura
2003-526	2452994.83	2003 Dec 11 08:00	Bulava	-	645-7351-128	152h65 GCh-1	MCCh_15F551/AA88	GMILP	-	LC167	-	-	1000?	-	Balknash
2004-504	2453053.94	2004 Feb 18 10:28	Topol'-E	-	645-6146-161	152h65 UBP-32	MCCh_15F551/AA88	GMILP	-	LC167	-	-	1000?	-	Kura
2004-515	2453116.23	2004 Apr 20 17:30	Topol'-H	152h55	-	3K30 Popul test II-1	MCCh_15F551/AA88	GMILP	TK-208	ELA	-	-	1000?	-	Kura
2004-517	2453271.50	2004 Sep 23	Bulava	-	-	152h65 LK1-3	MCCh	GMILP	-	ELA	-	-	1000?	-	Pacific
2004-564	2453311.91	2004 Nov 2 09:52	Topol'-E	-	-	3K30 Popul test II-2	MCCh_15F551/AA88	GMILP	TK-208	ELA	-	-	1000?	-	Kura
2004-573	2453363.90	2004 Dec 24 09:39	Topol'-H	152h55	0354-416-30(3L)	152h68 UBP-31	MCCh_15F551/AA88	GMILP	-	LC167	-	-	1000?	-	Kura
2005-539	2453641.06	2005 Sep 27 15:32	Bulava	-	R-30 01	152h65 LK1-4	MCCh	GMILP	-	ELA	-	-	1000?	-	Kura
2005-547	2453767.22	2005 Nov 17 17:10:13	Topol'-E	-	645-7351-128	152h65 GCh-1	MCCh_15F551/AA88	GMILP	TK-208	ELA	-	-	1000?	-	Balknash
2005-555	2453793.52	2005 Nov 29 07:44:04	Topol'-E	-	645-6146-161	152h65 UBP-32	MCCh_15F551/AA88	GMILP	TK-208	ELA	-	-	1000?	-	Kura
2005-556	2453851.70	2005 Dec 21 05:19	Bulava	-	R-30 02	3K30 LK1-2	MCCh	GMILP	-	ELA	-	-	560	-	Kura
2006-546	2453950.90	2006 Apr 25 16:47:16	Topol'-E	-	645-6021-441	152h65 UBP-33	ERUS B	GMILP	-	ELA	-	-	1000?	-	Kura
2006-546	2453950.90	2006 Aug 5 09:38:03	Topol'-E	-	645-6034-365	152h65 UBP-33	MCCh_15F551/AA88	GMILP	-	ELA	-	-	1000?	-	Kura
2006-A05	2453986.16	2006 Sep 7 15:50	Bulava	-	R-30 03	3K30 LK1-3	MCCh	GMILP	TK-208	ELA	-	-	10?	-	Kura
2006-556	2454034.05	2006 Oct 25 13:05	Bulava	-	R-30 04	3K30 LK1-4	MCCh	GMILP	TK-208	ELA	-	-	100?	-	Kura
2006-560	2454093.50	2006 Dec 24 10:25	Vars	-	IL	152h65 LK1-1	MCCh	GMILP	TK-208	ELA	-	-	1000?	-	Kura
2007-523	2454249.33	2007 May 29 10:25	Vars	-	645-6034-364	152h65 UBP-34	MCCh_15F551/AA88	GMILP	TK-208	ELA	-	-	1000?	-	Kura
2007-541	2454280.14	2007 Jun 28 15:25:00	Bulava	-	R-30 07	152h65 GCh-2	MCCh_15F551/AA88	GMILP	TK-208	ELA	-	-	1000?	-	Kura
2007-544	2454414.50	2007 Oct 18 05:10:03	Topol'-E	-	2L	152h65 GCh-2	MCCh_15F551/AA88	GMILP	TK-208	ELA	-	-	1000?	-	Balknash
2007-566	2454463.11	2007 Dec 8 14:43	Vars	-	354-3512-248	152h65 GCh-1	7/AA105-9	GMILP	-	ELA	-	-	1000?	-	Kura
2007-567	2454600.05	2008 Dec 28 13:55	Vars	-	R-30 08	152h65 LK1-F1	7/AA105-9	GMILP	-	ELA	-	-	1000?	-	Kura
2008-542	2454706.94	2008 Aug 28 10:35	Bulava	-	-	152h65 LK1-2	7/AA105-9	GMILP	TK-208	ELA	-	-	1000?	-	Kura
2008-547	2454726.11	2008 Sep 15 07:45:30	Bulava	-	-	152h65 LK1-2	7/AA105-9	GMILP	TK-208	ELA	-	-	1000?	-	Kura
2008-556	2454751.81	2008 Oct 12 07:34:30	Topol'-E	-	-	152h65 LK1-2	7/AA105-9	GMILP	TK-208	ELA	-	-	1000?	-	Kura
2008-556	2454751.81	2008 Oct 12 07:34:30	Topol'-E	-	-	152h65 LK1-2	7/AA105-9	GMILP	TK-208	ELA	-	-	1000?	-	Kura
2008-572	2454779.05	2008 Nov 26 13:19:47	Vars	-	-	152h65 LK1-2	7/AA105-9	GMILP	TK-208	ELA	-	-	1000?	-	Kura
2008-574	2454823.62	2008 Dec 23 09:55	Bulava	-	-	152h65 LK1-2	7/AA105-9	GMILP	TK-208	ELA	-	-	1000?	-	Kura
2008-574	2454823.62	2008 Dec 23 09:55	Bulava	-	-	152h65 LK1-2	7/AA105-9	GMILP	TK-208	ELA	-	-	1000?	-	Kura
2009-504	2455071.50	2009 Apr 15	Topol'-E	-	354-3511-253	152h68 UBP-35	MCCh_15F551/AA88	GMILP	TK-208	ELA	-	-	1000?	-	Kura
2009-565	2455174.78	2009 Jun 15 08:09:56	Bulava	-	R-30 11 3K30	3K30 LK1-1	MCCh	GMILP	TK-208	ELA	-	-	10?	-	(Kura?)
2009-566	2455174.78	2009 Jun 15 08:09:56	Bulava	-	R-30 12	152h65 GCh-3	MCCh	GMILP	TK-208	ELA	-	-	1000?	-	Balknash
2009-566	2455174.78	2009 Jun 15 08:09:56	Bulava	-	R-30 13	152h65 GCh-3	MCCh	GMILP	TK-208	ELA	-	-	1000?	-	Balknash
2009-566	2455174.78	2009 Jun 15 08:09:56	Bulava	-	R-30 14	152h65 GCh-4	MCCh_15F551/AA88	GMILP	TK-208	ELA	-	-	1000?	-	Balknash
2010-562	2455476.80	2010 Oct 29 01:10	Bulava	-	-	152h65 GCh-4	MCCh_15F551/AA88	GMILP	TK-208	ELA	-	-	1000?	-	Balknash
2010-562	2455476.80	2010 Oct 29 01:10	Bulava	-	-	152h65 GCh-4	MCCh_15F551/AA88	GMILP	TK-208	ELA	-	-	1000?	-	Balknash
2010-562	2455476.80	2010 Oct 29 01:10	Bulava	-	-	152h65 GCh-4	MCCh_15F551/AA88	GMILP	TK-208	ELA	-	-	1000?	-	Balknash
2011-527	2455724.00	2011 Jun 28 11:55	Topol'-E	-	-	152h65 GCh-4	MCCh_15F551/AA88	GMILP	TK-208	ELA	-	-	1000?	-	Balknash
2011-527	2455724.00	2011 Jun 28 11:55	Topol'-E	-	-	152h65 GCh-4	MCCh_15F551/AA88	GMILP	TK-208	ELA	-	-	1000?	-	Balknash
2011-527	2455724.00	2011 Jun 28 11:55	Topol'-E	-	-	152h65 GCh-4	MCCh_15F551/AA88	GMILP	TK-208	ELA	-	-	1000?	-	Balknash
2011-527	2455724.00	2011 Jun 28 11:55	Topol'-E	-	-	152h65 GCh-4	MCCh_15F551/AA88	GMILP	TK-208	ELA	-	-	1000?	-	Balknash
2011-527	2455724.00	2011 Jun 28 11:55	Topol'-E	-	-	152h65 GCh-4	MCCh_15F551/AA88	GMILP	TK-208	ELA	-	-	1000?	-	Balknash
2011-527	2455724.00	2011 Jun 28 11:55	Topol'-E	-	-	152h65 GCh-4	MCCh_15F551/AA88	GMILP	TK-208	ELA	-	-	1000?	-	Balknash
2011-527	2455724.00	2011 Jun 28 11:55	Topol'-E	-	-	152h65 GCh-4	MCCh_15F551/AA88	GMILP	TK-208	ELA	-	-	1000?	-	Balknash
2011-527	2455724.00	2011 Jun 28 11:55	Topol'-E	-	-	152h65 GCh-4	MCCh_15F551/AA88	GMILP	TK-208	ELA	-	-	1000?	-	Balknash
2011-527	2455724.00	2011 Jun 28 11:55	Topol'-E	-	-	152h65 GCh-4	MCCh_15F551/AA88	GMILP	TK-208	ELA	-	-	1000?	-	Balknash
2011-527	2455724.00	2011 Jun 28 11:55	Topol'-E	-	-	152h65 GCh-4	MCCh_15F551/AA88	GMILP	TK-208	ELA	-	-	1000?	-	Balknash
2011-527	2455724.00	2011 Jun 28 11:55	Topol'-E	-	-	152h65 GCh-4	MCCh_15F551/AA88	GMILP	TK-208	ELA	-	-	1000?	-	Balknash
2011-527	2455724.00	2011 Jun 28 11:55	Topol'-E	-	-	152h65 GCh-4	MCCh_15F551/AA88	GMILP	TK-208	ELA	-	-	1000?	-	Balknash
2011-527	2455724.00	2011 Jun 28 11:55	Topol'-E	-	-	152h65 GCh-4	MCCh_15F551/AA88	GMILP	TK-208	ELA	-	-	1000?	-	Balknash
2011-527	2455724.00	2011 Jun 28 11:55	Topol'-E	-	-	152h65 GCh-4	MCCh_15F551/AA88	GMILP	TK-208	ELA	-	-	1000?	-	Balknash
2011-527	2455724.00	2011 Jun 28 11:55	Topol'-E	-	-	152h65 GCh-4	MCCh_15F551/AA88	GMILP	TK-208	ELA	-	-	1000?	-	Balknash
2011-527	2455724.00	2011 Jun 28 11:55	Topol'-E	-	-	152h65 GCh-4	MCCh_15F551/AA88								





Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	DrbPay	Agency	Launch_Code	Group	Category	LTCite	Cite	Notes
1981-S191	2444876.50	1981 Sep 29	Topol'	-	4519-201?	0.000	RVSN	NS	-	Test	NK0709-36	-	-
1981-A38	2444907.50	1981 Oct 30	Topol'	-	4519-202?	0.000	RVSN	NS	-	Test	RPCB	-	-
1982-A43	2445206.50	1982 Aug 25	Topol'	-	4519-203?	0.000	RVSN	NS	-	Test	RPCB	-	-
1982-S183	2445269.50	1982 Oct 27	Topol'	-	4519-204	0.000	RVSN	NS	-	Test	BMLX	-	-
1983-S57	2445383.77	1983 Feb 19 0630?	Topol'	-	4519-205-1L	0.000	RVSN	NS	-	Test	RNL	-	-
1983-S94	2445459.60	1983 May 5 0220	Topol'	-	4524-401-2L	0.000	RVSN	NS	-	Test	RNL	-	-
1983-S265	2445485.65	1983 May 31 0340	Topol'	-	4524-402-3L	0.000	RVSN	NS	-	Test	RNL	-	-
1983-S106	2445556.62	1983 Aug 10 0250	Topol'	-	4524-403-4L	0.000	RVSN	NS	-	Test	RNL	-	-
1983-A66	2445632.69	1983 Oct 25 0430	Topol'	-	4524-404-5L	0.000	RVSN	NS	-	Test	RNL	-	-
1984-S106	2445750.43	1984 Feb 19 2215	Topol'	-	4524-404-6L	0.000	RVSN	NS	-	Test	RNL	-	-
1984-S221	2445786.38	1984 Mar 26 2110	Topol'	-	4524-404-6L	0.000	RVSN	NS	-	Test	RNL	-	-
1984-S222	2445814.12	1984 Apr 23 1500	Topol'	-	4524-404-6L	0.000	RVSN	NS	-	Test	RNL	-	-
1984-S223	2445844.12	1984 May 23 1500	Topol'	-	4524-404-6L	0.000	RVSN	NS	-	Test	RNL	-	-
1984-S224	2445908.08	1984 Jun 14 1400	Topol'	-	4524-404-6L	0.000	RVSN	NS	-	Test	RNL	-	-
1984-S224	2445954.06	1984 Jul 26 1400	Topol'	-	4524-404-6L	0.000	RVSN	NS	-	Test	RNL	-	-
1984-S224	2445976.22	1984 Sep 10 1330	Topol'	-	4524-404-6L	0.000	RVSN	NS	-	Test	RNL	-	-
1984-S227	2446025.25	1984 Oct 2 1720	Topol'	-	4542-221-12L	0.000	RVSN	NS	-	Test	RNL	-	-
1984-S228	2446040.58	1984 Nov 20 1800	Topol'	-	4542-222-13L	0.000	RVSN	NS	-	Test	RNL	-	-
1984-S249	2446076.50	1984 Dec 6 0425	Topol'	-	4542-222-13L	0.000	RVSN	NS	-	Test	RNL	-	-
1985-A20	2446076.50	1985 Jan 11	Skoret'	-	1L	0.000	RVSN	NS	-	Test	KY60	-	KY60 says Mar 1
1985-S254	2446095.35	1985 Jan 29 2030	Topol'	-	6456-224-33	0.000	RVSN	NS	-	Test	RNL	-	-
1985-S254	2446118.30	1985 Feb 21 1905	Topol'	-	6456-224-33	0.000	RVSN	NS	-	Test	RNL	-	-
1985-S256	2446178.19	1985 Apr 22 1630	Topol'	-	6456-214-45	0.000	RVSN	NS	-	Test	RNL	-	-
1985-S256	2446231.21	1985 Jun 14 1700	Topol'	-	6451-421-52	0.000	RVSN	NS	-	Test	RNL	-	-
1985-S257	2446284.15	1985 Aug 6 1531	Topol'	-	6451-431-55	0.000	RVSN	NS	-	Test	RNL	-	-
1985-S258	2446306.10	1985 Aug 28 1420	Topol'	-	6451-431-58	0.000	RVSN	NS	-	Test	RNL	-	-
1985-S259	2446343.33	1985 Oct 4 2000	Topol'	-	6451-431-58	0.000	RVSN	NS	-	Test	RNL	-	-
1985-S260	2446363.67	1985 Oct 25 0400	Topol'	-	6451-441-52	0.000	RVSN	NS	-	Test	RNL	-	-
1985-S147	2446405.99	1985 Dec 6 1147	Topol'	-	6451-461-55	0.000	RVSN	NS	-	Test	RNL	-	-
1985-S168	2446539.99	1986 Apr 18 1350	Topol'	-	-	0.000	RVSN	NS	-	Test	RNL	-	-
1985-S169	2446693.43	1986 Sep 19 2220	Topol'	-	-	0.000	RVSN	NS	-	Test	RNL	-	-
1985-S170	2446790.10	1986 Dec 25 1420	Topol'	-	-	0.000	RVSN	NS	-	Test	RNL	-	-
1985-S171	2446794.19	1986 Nov 29 1630	Topol'	-	-	0.000	RVSN	NS	-	Test	RNL	-	-
1985-S208	2446837.36	1987 Feb 10 2100	Topol'	-	-	0.000	RVSN	NS	-	Test	RNL	-	-
1987-S207	2446941.94	1987 May 25 2010	Topol'	-	-	0.000	RVSN	NS	-	Test	RNL	-	-
1987-S209	2446976.63	1987 Jun 30 0310	Topol'	-	-	0.000	RVSN	NS	-	Test	RNL	-	-
1987-S212	2446990.66	1987 Jul 14 0352	Topol'	-	-	0.000	RVSN	NS	-	Test	RNL	-	-
1987-S211	2447077.62	1987 Jul 31 0300	Topol'	-	-	0.000	RVSN	NS	-	Test	RNL	-	-
1987-S213	2447192.97	1987 Dec 23 1110	Topol'	-	16L	0.000	RVSN	NS	-	Test	RPCA	-	-
1987-S213	2447193.26	1987 Dec 23 1815	Topol'	-	-	0.000	RVSN	NS	-	Test	RPCA	-	-
1988-S173	2447193.26	1988 Apr 29 1522	Topol'	-	-	0.000	RVSN	NS	-	Test	RNL	-	-
1988-S174	2447281.14	1988 Aug 5 1145	Topol'	-	-	0.000	RVSN	NS	-	Test	RNL	-	-
1988-S174	2447379.24	1988 Sep 14 1249	Topol'	-	-	0.000	RVSN	NS	-	Test	RNL	-	-
1988-S174	2447459.65	1988 Sep 14 1249	Topol'	-	-	0.000	RVSN	NS	-	Test	RNL	-	-
1988-S175	2447454.92	1988 Oct 20 0200	Topol'	-	-	0.000	RVSN	NS	-	Test	RNL	-	-
1988-S172	2447594.57	1988 Dec 9 0857	Topol'	-	-	0.000	RVSN	NS	-	Test	RNL	-	-
1989-S174	2447565.10	1989 Feb 7 1455	Topol'	-	-	0.000	RVSN	NS	-	Test	RNL	-	-
1989-S174	2447697.10	1989 Mar 14 1445	Topol'	-	-	0.000	RVSN	NS	-	Test	RNL	-	-
1989-S174	2447693.91	1989 Jun 15 1445	Topol'	-	-	0.000	RVSN	NS	-	Test	RNL	-	-
1989-S174	2447729.90	1989 Jun 15 1445	Topol'	-	-	0.000	RVSN	NS	-	Test	RNL	-	-
1989-S177	2447795.90	1989 Sep 26 0927	Topol'	-	-	0.000	RVSN	NS	-	Test	RNL	-	-
1989-S175	2447925.82	1989 Oct 26 0745	Topol'	-	-	0.000	RVSN	NS	-	Test	RNL	-	-
1989-S175	2447925.82	1989 Nov 21 0950	Topol'	-	-	0.000	RVSN	NS	-	Test	RNL	-	-
1989-S175	2448033.91	1990 Mar 7 1445	Topol'	-	-	0.000	RVSN	NS	-	Test	RNL	-	-
1989-S196	2448033.91	1990 May 24 0710	Topol'	-	-	0.000	RVSN	NS	-	Test	RNL	-	-
1989-S196	2448033.91	1990 May 24 0710	Topol'	-	-	0.000	RVSN	NS	-	Test	RNL	-	-
1989-S196	2448104.00	1990 Jul 31 1155	Topol'	-	-	0.000	RVSN	NS	-	Test	RNL	-	-
1989-S196	2448106.99	1990 Jul 31 1155	Topol'	-	-	0.000	RVSN	NS	-	Test	RNL	-	-
1989-S196	2448119.81	1990 Aug 16 0720	Topol'	-	1L	0.000	RVSN	NS	-	Test	RNL	-	-
1989-S196	2448182.98	1990 Aug 17 1350	Topol'	-	2L	0.000	RVSN	NS	-	Test	RNL	-	-
1989-S147	2448197.10	1990 Oct 1 1430	Topol'	-	-	0.000	RVSN	NS	-	Test	RNL	-	-
1989-S147	2448221.97	1990 Nov 26 0859	Topol'	-	3L	0.000	RVSN	NS	-	Test	RNL	-	-
1989-S173	2448251.11	1990 Dec 25 1440	Topol'	-	4L	0.000	RVSN	NS	-	Test	RNL	-	-
1989-S174	2448251.16	1990 Dec 25 1549	Topol'	-	-	0.000	RVSN	NS	-	Test	RNL	-	-
1989-S824	2448294.84	1991 Feb 7 0815	Topol'	?	-	0.000	RVSN	NS	-	Test	RNL	-	-
1989-S824	2448332.99	1991 Feb 7 0815	Topol'	?	-	0.000	RVSN	NS	-	Test	RNL	-	-
1989-S116	2448333.21	1991 Apr 25 1700	Topol'	-	-	0.000	RVSN	NS	-	Test	RNL	-	-
1989-S137	2448388.45	1991 Aug 19 2255	Topol'	-	-	0.000	RVSN	NS	-	Test	RNL	-	-
1989-S137	2448392.16	1991 Aug 19 2255	Topol'	-	-	0.000	RVSN	NS	-	Test	RNL	-	-
1989-S137	2448392.16	1991 Oct 2 1850	Topol'	-	-	0.000	RVSN	NS	-	Test	RNL	-	-
1989-S137	2448392.16	1991 Oct 2 1850	Topol'	-	-	0.000	RVSN	NS	-	Test	RNL	-	-
1989-S114	2448404.07	1993 Feb 25 1340	Start-1	-	-	0.000	RVSN	NS	-	Test	PL06	-	-
1989-S114	2448407.05	1993 Mar 25 1315:27	Start-1	-	-	0.260	RVSNR	OS	G	Stat LED 0	NK9404-41	PL28	-
1989-S49	2448491.85	1993 Jul 23 0824	Topol'	-	-	0.000	RVSNR	NS	-	Test	AVWP	-	-
1989-S42	2448525.85	1994 Jun 22 0822	Topol'	-	-	0.000	RVSNR	NS	-	Test	RML	-	PL28
1989-S42	2448619.14	1994 Sep 23 1515	Topol'	-	-	0.000	RVSNR	NS	-	Test	PL40	-	-
1989-S42	2448666.81	1994 Sep 23 1515	Topol'	-	-	0.000	RVSNR	NS	-	Test	PL40	-	-
1989-S42	2448666.81	1994 Nov 10 0730	Topol'	-	-	0.000	RVSNR	NS	-	Test	PL40	-	-
1989-S42	2448706.87	1994 Dec 20 0850	Topol'	-	-	0.000	RVSNR	NS	-	Test	PL40	-	-
1989-S42	2448706.87	1995 Mar 28 1000	Start-1	-	1L	0.260	RVSNR	OS	G	Stat LED 0	NK9507-24	-	-
1989-S42	2448804.92	1995 Apr 14 1130	Topol'	-	-	0.000	RVSNR	NS	-	Test	ICM	-	-
1989-S42	2448921.98	1995 Apr 14 1130	Topol'	-	-	0.000	RVSNR	NS	-	Test	PL40	-	-
1989-S42	2448965.83	1995 Sep 5 0750	Topol'	-	2L	0.000	RVSNR	NS	-	Test	TASS951010	-	-
1989-S42	2449000.80	1995 Oct 10 0711	Topol'	-	-	0.000	RVSNR	NS	-	Test	RML	-	-
1989-S42	2449003.83	1995 Nov 10 0755	Topol'	-	-	0.000	RVSNR	NS	-	Test	RML	-	-
1989-S42	2449010.79	1996 Apr 17 0700	Topol'	-	-	0.000	RVSNR	NS	-	Test	Hite	-	-
1989-S46	2449028.91	1996 Jul 25 0945	Topol'	-	3L	0.000	RVSNR	NS	-	Test	RML	-	-
1989-S60	2449359.91	1996 Oct 3 0845	Topol'	-	-	0.000	RVSNR	NS	-	Test	RML	-	-
1989-S69	2449392.91	1996 Nov 5 0950	Topol'	-	E2	0.000	RVSNR	NS	-	Test	RML	-	-
1989-S10	2449511.58	1997 Mar 4 0200:02	Start-1, 2	-	-	0.087	VSSE	OS	G	Stat SSO 0	NK9705-11	-	-
1989-S49	2449563.02	1997 Jul 8 1225	Topol'	-	4L	0.000	RVSNR	NS	-	Test	PL55	-	-
1989-S65	2449724.80	1997 Oct 3 0707	Topol'	-	-	0.000	RVSNR	NS	-	Test	PL55	-	-
1989-S65	2449724.80	1997 Dec 24 1332:52	Start-1	-	-	0.284	RVSNR	OS	G	Stat SSO 0	Lisev	-	-

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	DrbPay	Agency	Launch_Code	Group	Category	LTCite	Cite	Notes
1988-852	2451072.97	1988 Sep 16 11:10:04	Topol'-E	-	64536-21-443	0.000	RVSUR	NS	-	Test	PL55	-	-
1988-403	2451109.04	1988 Oct 22 12:52:58	Topol'-H	-	00354-59-101(6L)	0.000	RVSUR	NS	-	Test	PL55	-	St 1/2 sep
1988-867	2451185.98	1988 Dec 8 11:25	Topol'-H	-	00354-25-101(6L)	0.000	RVSUR	NS	-	Test	PL55	-	-
1989-334	2451333.10	1989 Jun 3 14:20	Topol'-H	-	00354-33-101(7L)	0.000	RVSUR	NS	-	Test	Wire	-	-
1989-358	2451424.99	1989 Sep 3 11:44	Topol'-H	-	00354-33-102(8L)	0.000	RVSUR	NS	-	Test	Wire	-	-
1989-865	2451452.82	1989 Oct 1 07:42:02	Topol'-H	-	64536-21-447	0.000	RVSUR	NS	-	Test	www.nti.org	-	-
1989-379	2451526.84	1989 Dec 14 08:05	Topol'-H	-	10L	0.000	RVSUR	NS	-	Test	www.nti.org	-	-
2000-305	2451583.92	2000 Feb 9 09:59	Topol'-H	-	00354-43-103(9L)	0.000	RVSUR	NS	-	Test	Riggs	-	-
2000-354	2451813.96	2000 Sep 26 11:00	Topol'-H	-	00354-24-211(11L)	0.000	RVSUR	NS	-	Test	www.nti.org	-	-
2000-355	2451814.91	2000 Sep 27 09:50	Topol'-H 15Zh55	-	00354-43-104(1L)	0.000	RVSUR	NS	-	Test	Riggs	-	RPCA
2000-358	2451828.90	2000 Oct 11 09:30	Topol'-E	-	64536-21-444	0.250	PU	OS	CU	Sat SSO 0	www.nti.org	-	-
2000-079	2451884.02	2000 Dec 5 12:32	Start-1	-	64516-21-434	0.000	RVSUR	NS	-	OT	www.nti.org	-	-
2001-007	2451960.87	2001 Feb 20 08:48:27	Start-1	-	64536-22-434	0.250	PU	OS	CU	Sat SSO 0	www.nti.org	-	-
2001-345	2452185.88	2001 Oct 3 09:00	Topol'-E	-	168	0.000	RVSUR	NS	-	OT	www.nti.org	-	-
2001-349	2452215.18	2001 Nov 1 16:20	Topol'-E	-	-	0.000	RVSUR	NS	-	OT	Kosmodrom0111	-	-
2002-359	2452268.50	2001 Dec 25	Topol'-E	-	-	0.000	RVSUR	NS	-	OT	russian.spaceweb.com	-	-
2002-359	2452431.97	2002 Jun 6 11:20	Topol'-H 15Zh55	-	-	0.000	RVSUR	NS	-	OT	www.orbireport.com	-	-
2002-364	2452559.91	2002 Oct 12 09:52	Topol'-E	-	-	0.000	RVSUR	NS	-	OT	www.comosoid.ru	-	-
2003-311	2452725.89	2003 Mar 27 09:27:30	Topol'-E	-	-	0.000	RVSUR	NS	-	OT	www.comosoid.ru	-	-
2003-426	2452964.53	2003 Dec 11 08:00	Bulava	-	-	0.000	VHF	NS	-	Test	www.comosoid.ru	-	-
2004-308	2453053.94	2004 Feb 18 10:28	Topol'-H 15Zh55	-	-	0.000	RVSUR	NS	-	OT	russian.spaceweb.com	-	-
2004-315	2453116.23	2004 Apr 20 17:30	Topol'-H 15Zh55	-	-	0.000	RVSUR	NS	-	OT	www.comosoid.ru	-	-
2004-411	2453271.50	2004 Sep 23	Bulava	-	-	0.000	VHF	NS	-	Test	www.comosoid.ru	-	-
2004-564	2453311.91	2004 Nov 2 09:52	Topol'-E	-	-	0.000	RVSUR	NS	-	OT	russian.spaceweb.com	-	-
2004-573	2453363.90	2004 Dec 24 09:59	Topol'-H 15Zh55	-	-	0.000	RVSUR	NS	-	OT	russian.spaceweb.com	-	-
2005-339	2453641.06	2005 Sep 27 13:22	Topol'-E	-	-	0.000	VHF	NS	-	OT	russian.spaceweb.com	-	-
2005-347	2453706.22	2005 Nov 29 07:44:04	Topol'-E	-	00354-416-30(3L)	0.000	RVSUR	NS	-	OT	russian.spaceweb.com	-	Impact 1003Z
2005-355	2453725.72	2005 Dec 21 05:19	Bulava	-	R-30 01	0.000	RVSUR	NS	-	OT	www.comosoid.ru	-	St 3 fail
2005-358	2453725.72	2005 Nov 29 07:44:04	Bulava	-	645-8145-128	0.000	RVSUR	NS	-	OT	www.comosoid.ru	-	IP-10 target
2006-014	2453851.20	2006 Aug 25 16:47:16	Start-1	-	645-8145-161	0.000	VHF	NS	-	OT	www.comosoid.ru	-	-
2006-345	2453960.90	2006 Aug 3 09:58:03	Topol'-E	-	645-8621-441	0.000	RVSUR	NS	-	OT	www.comosoid.ru	-	-
2006-405	2453966.16	2006 Sep 7 15:50	Bulava	-	645-8634-365	0.000	VHF	NS	-	OT	www.comosoid.ru	-	-
2006-356	2454034.95	2006 Dec 25 13:05	Bulava	-	R-30 03	0.000	VHF	NS	-	OT	www.comosoid.ru	-	-
2006-407	2454093.50	2006 Dec 24 10:20	Bulava	-	R-30 04	0.000	VHF	NS	-	OT	www.comosoid.ru	-	-
2007-323	2454249.93	2007 May 29 10:20	hars	-	R-30 05	0.000	RVSUR	NS	-	OT	www.comosoid.ru	-	-
2007-541	2454280.14	2007 Jun 28 15:25:00	Bulava	-	1L	0.000	RVSUR	NS	-	OT	www.comosoid.ru	-	-
2007-544	2454391.72	2007 Oct 18 05:10:03	Topol'-E	-	645-8834-364	0.000	VHF	NS	-	OT	www.comosoid.ru	-	-
2007-409	2454414.50	2007 Nov 10	Bulava	-	R-30 07	0.000	RVSUR	NS	-	OT	www.comosoid.ru	-	-
2007-566	2454443.11	2007 Dec 5 14:43	Topol'-E	-	-	0.000	RVSUR	NS	-	OT	www.comosoid.ru	-	-
2007-567	2454460.05	2007 Dec 25 13:10	Vars	-	2L	0.000	RVSUR	NS	-	OT	www.comosoid.ru	-	-
2008-542	2454706.94	2008 Aug 28 10:35:03	Topol'-E	-	354-3512-248	0.000	RVSUR	NS	-	OT	www.comosoid.ru	-	-
2008-543	2454728.11	2008 Sep 15 04:50:30	Bulava	-	R-30 06	0.000	VHF	NS	-	OT	www.comosoid.ru	-	-
2008-545	2454751.51	2008 Oct 12 07:24:30	Topol'-E	-	-	0.000	RVSUR	NS	-	OT	www.comosoid.ru	-	-
2008-556	2454797.06	2008 Nov 26 13:19:47	Vars	-	-	0.000	VHF	NS	-	OT	www.comosoid.ru	-	-
2008-572	2454799.09	2008 Nov 23 04:05	Bulava	-	R-30 09	0.000	VHF	NS	-	OT	www.comosoid.ru	-	-
2008-574	2454823.52	2008 Dec 23 02:50	Bulava	-	R-30 10	0.000	VHF	NS	-	OT	www.comosoid.ru	-	-
2009-405	2454921.54	2009 Apr 15 06:59:56	Topol'-E	-	354-3511-253	0.000	RVSUR	NS	-	OT	www.comosoid.ru	-	-
2009-406	2454921.54	2009 Apr 15 06:59:56	Bulava	-	R-30 11 3M50	0.000	VHF	NS	-	OT	www.comosoid.ru	-	-
2009-566	2455176.09	2009 Dec 6 06:45	Bulava	-	R-30 12	0.000	VHF	NS	-	OT	www.comosoid.ru	-	-
2009-569	2455176.09	2009 Dec 6 06:45	Bulava	-	R-30 13	0.000	VHF	NS	-	OT	www.comosoid.ru	-	-
2010-559	2455497.90	2010 Oct 27 07:15	Bulava	-	R-30 14	0.000	VHF	NS	-	OT	www.comosoid.ru	-	-
2010-562	2455498.55	2010 Oct 28 09:59	Topol'-E	-	R-30 15	0.000	VHF	NS	-	OT	www.comosoid.ru	-	-
2010-565	2455498.55	2010 Oct 28 09:59	Topol'-E	-	R-30 16	0.000	VHF	NS	-	OT	www.comosoid.ru	-	-
2010-568	2455536.30	2010 Oct 29 01:10	Topol'-E	-	146	0.000	RVSUR	NS	-	OT	www.comosoid.ru	-	-
2010-527	2455741.00	2011 Dec 28 11:55	Topol'-E	-	2L	0.000	RVSUR	NS	-	OT	www.comosoid.ru	-	-
2011-527	2455800.84	2011 Jun 28 03:20	Bulava	-	-	0.000	VHF	NS	-	OT	www.comosoid.ru	-	-
2011-540	2455807.91	2011 Aug 27 09:46	Topol'-E	-	-	0.000	VHF	NS	-	OT	www.comosoid.ru	-	-
2011-426	2455831.90	2011 Sep 27 07:08	Bulava	-	-	0.000	RVSUR	NS	-	OT	www.comosoid.ru	-	-
2011-552	2455862.85	2011 Oct 28 03:40	Bulava	-	-	0.000	VHF	NS	-	OT	www.comosoid.ru	-	-
2011-553	2455868.78	2011 Nov 3 06:45	Topol'-E	-	-	0.000	RVSUR	NS	-	OT	www.comosoid.ru	-	-
2011-566	2455919.16	2011 Dec 23 15:50	Bulava	-	354-3511-241	0.000	VHF	NS	-	OT	www.comosoid.ru	-	-
2011-567	2455919.16	2011 Dec 23 15:50	Bulava	-	-	0.000	VHF	NS	-	OT	www.comosoid.ru	-	-
2012-522	2456070.76	2012 May 23 06:15:00	Topol'-E	-	2TL	0.000	RVSUR	NS	-	OT	www.comosoid.ru	-	-
2012-528	2456086.24	2012 Jun 7 23:39	Topol'-E	-	110	0.000	RVSUR	NS	-	OT	www.comosoid.ru	-	-
2012-564	2456225.27	2012 Oct 24 18:28:52	Rubesh	-	-	0.000	RVSUR	NS	-	OT	www.comosoid.ru	-	-
2013-539	2456450.24	2013 Jun 6 17:45	Rubesh	-	-	0.000	RVSUR	NS	-	OT	www.comosoid.ru	-	-
2013-562	2456541.72	2013 Sep 6 05:20	Bulava	-	-	0.000	VHF	NS	-	OT	www.comosoid.ru	-	-
2013-588	2456576.07	2013 Oct 10 13:39	Topol'-E	-	-	0.000	RVSUR	NS	-	OT	www.comosoid.ru	-	-
2013-593	2456595.91	2013 Oct 30 09:55	Topol'-E	-	-	0.000	RVSUR	NS	-	OT	www.comosoid.ru	-	-
2013-812	2456645.06	2013 Dec 30 13:31	Rubesh	-	-	0.000	RVSUR	NS	-	OT	www.comosoid.ru	-	-
2013-8104	2456650.79	2013 Dec 24 07:00	Vars 15Zn65M	-	-	0.000	RVSUR	NS	-	OT	www.comosoid.ru	-	-
2013-8105	2456654.23	2013 Dec 27 17:30	Topol'-E	-	-	0.000	RVSUR	NS	-	OT	www.comosoid.ru	-	-
2014-507	2456721.26	2014 Mar 4 18:10	Topol'-E	-	Topol'-E	0.000	RVSUR	NS	-	OT	www.comosoid.ru	-	-
2014-517	2456741.78	2014 Apr 14 06:40	Vars	-	-	0.000	RVSUR	NS	-	OT	www.comosoid.ru	-	-
2014-521	2456785.90	2014 May 8 09:39	Topol'-E	-	Topol'-E	0.000	RVSUR	NS	-	OT	www.comosoid.ru	-	-
2014-525	2456798.21	2014 May 20 17:08	Topol'-E	-	-	0.000	RVSUR	NS	-	OT	www.comosoid.ru	-	-
2014-550	2456910.67	2014 Sep 10 04:05	Bulava	-	-	0.000	VHF	NS	-	OT	www.comosoid.ru	-	-
2014-566	2456960.23	2014 Oct 29 17:27	Bulava	-	-	0.000	VHF	NS	-	OT	www.comosoid.ru	-	-
2014-567	2456962.76	2014 Nov 1 06:20	Topol'-H	-	-	0.000	RVSUR	NS	-	OT	www.comosoid.ru	-	-
2014-443	2456973.28	2014 Nov 11 18:46:18	Topol'-E	-	Topol'-E	0.000	RVSUR	NS	-	OT	www.comosoid.ru	-	-
2014-574	2456990.17	2014 Dec 26 08:02	Bulava	-	-	0.000	VHF	NS	-	OT	www.comosoid.ru	-	-
2014-582	2457017.53	2014 Dec 26 08:02	Vars	-	Years-S	0.000	RVSUR	NS	-	OT	www.comosoid.ru	-	-
2015-520	2457099.30	2015 Mar 17 19:14:59	Rubesh	-	-	0.000	RVSUR	NS	-	OT	www.comosoid.ru	-	-
2015-545	2457257.13	2015 Aug 22 15:13	Topol'-E	-	Topol'-E	0.000	RVSUR	NS	-	OT	www.comosoid.ru	-	-

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	DrbPay	Agency	Launch_Code	Group	Category	LTCite	Cite	Notes
2015-857	2457323.98	2015 Oct 28 1130	Yars 15Zn65M	-	Yars-S	0.000	RVSRR	NS	-	OT	RNL	-	-
2015-858	2457325.93	2015 Oct 30 1024	Topol'-E	-	-	0.000	RVSRR	NS	-	OT	RNL	-	-
2015-859	2457341.22	2015 Nov 14 1716:00	Bulava	-	-	0.000	VHF	NS	-	OT?	RNL	-	-
2015-874	2457341.22	2015 Nov 14 1716:10	Bulava	-	-	0.000	VHF	NS	-	OT?	RNL	-	-
2015-875	2457344.01	2015 Nov 17 1212:13	Topol'-E	-	Topol'-E	0.000	RVSRR	NS	-	RAD	RNL	-	-
2015-876	2457344.01	2015 Nov 17 1212:13	Topol'-E	-	Topol'-E	0.000	RVSRR	NS	-	RAD	RNL	-	-
2015-894	2457381.25	2015 Dec 24 1755	Yars-H	-	-	0.000	RVSRR	NS	-	OT	RNL	-	-
2015-896	2457625.87	2016 Aug 25 0854	Yars-H	-	15Zn80	0.000	RVSRR	NS	-	OT	RNL	-	-
2016-857	2457640.92	2016 Sep 9 1010:05	Topol'-E	-	-	0.000	VHF	NS	-	OT	RNL	-	-
2016-859	2457659.10	2016 Sep 27 1420:00	Bulava	-	-	0.000	VHF	NS	-	OT	RNL	-	-
2016-860	2457659.10	2016 Sep 27 1420:10	Bulava	-	-	0.000	VHF	NS	-	OT	RNL	-	-
2016-863	2457673.95	2016 Oct 12 1046:04	Topol'-E	-	-	0.000	RVSRR	NS	-	Test	RNL	-	-
2016-864	2457693.50	2016 Nov 1	Yars	-	-	0.000	RVSRR	NS	-	OT	RNL	-	-
2016-A107	2457693.50	2016 Nov 25 0735	Perimetr-RTs	-	-	0.000	RVSRR	NS	-	OT	RNL	-	-
2016-880	2457717.82	2017 Jan 16 0752:00	Topol'-H	-	-	0.000	RVSRR	NS	-	OT	RNL	-	-
2017-301	2457769.83	2017 Jan 26 1459	Bulava	-	-	0.000	VHF	NS	-	OT	Wire	-	-
2017-359	2458008.84	2017 Sep 12 0810	Yars-H	-	15Zn61	0.000	RVSRR	NS	-	OT	RNL	-	-
2017-377	2458008.84	2017 Sep 20 0750	Yars-H	-	-	0.000	RVSRR	NS	-	Test	RNL	-	-
2017-380	2458016.83	2017 Sep 26 1530	Topol'-E	-	-	0.000	RVSRR	NS	-	OT	RNL	-	-
2017-385	2458023.15	2017 Oct 26 1503:14	Topol'-E	-	Topol'-E	0.000	RVSRR	NS	-	RAD	Wire	-	-
2017-390	2458053.13	2017 Dec 26 0325	Topol'-E	-	Topol'-E	0.000	RVSRR	NS	-	RAD	Wire	-	-
2017-3106	2458113.64	2018 May 22 1513:00?	Bulava	-	Topol'-E	0.000	RVSRR	NS	-	OT	RNL	-	-
2018-328	2458261.13	2018 May 22 1513:00?	Bulava	-	-	0.000	VHF	NS	-	RAD	Wire	-	-
2018-329	2458261.13	2018 May 22 1513:07?	Bulava	-	-	0.000	VHF	NS	-	OT	RNL	-	-
2018-330	2458261.13	2018 May 22 1513:14?	Bulava	-	-	0.000	VHF	NS	-	OT	RNL	-	-
2018-331	2458261.13	2018 May 22 1513:21?	Bulava	-	-	0.000	VHF	NS	-	OT	RNL	-	-
2018-384	2458261.13	2018 Jun 19 0625	Yars-H	-	15Zn80	0.000	RVSRR	NS	-	OT	RNL	-	-
2018-A192	2458304.29	2018 Jul 4 1900:05	Topol'-E	-	Topol'-E	0.000	RVSRR	NS	-	RAD	Wire	-	-
2018-387	2458408.86	2018 Oct 17 0900	Topol'-H	-	-	0.000	RVSRR	NS	-	OT	RNL	-	-
2018-388	2458409.85	2018 Oct 18 0830	Topol'-E	-	-	0.000	RVSRR	NS	-	OT	RNL	-	-
2018-389	2458409.85	2018 Dec 6 1740	Topol'-E	-	Topol'-E	0.000	RVSRR	NS	-	RAD	Wire	-	-
2019-307	2458520.86	2019 Feb 6 0631:26	Yars-H	-	Topol'-E	0.000	RVSRR	NS	-	OT	RNL	-	-
2019-335	2458690.50	2019 Jun 26	Topol'-E	-	Topol'-E	0.000	RVSRR	NS	-	RAD	Wire	-	-
2019-351	2458719.50	2019 Aug 24	Bulava	-	-	0.000	VHF	NS	-	OT	RNL	-	-
2019-360	2458756.50	2019 Sep 30	Topol'-H	-	-	0.000	RVSRR	NS	-	OT	Wire	-	-
2019-361	2458773.50	2019 Oct 17?	Bulava	-	-	0.000	VHF	NS	-	OT	RNL	-	-
2019-367	2458787.12	2019 Oct 30 1457	Topol'-E	-	-	0.000	RVSRR	NS	-	OT	Wire	-	-
2019-375	2458915.50	2020 Dec 9	Yars	-	-	0.000	RVSRR	NS	-	RAD	Wire	-	-
2020-386	2459182.50	2020 Dec 9	Bulava	-	-	0.000	RVSRR	NS	-	OT	Wire	-	-
2020-388	2459186.50	2020 Dec 12	Bulava	-	-	0.000	VHF	NS	-	OT	RNL	-	-
2020-389	2459186.50	2020 Dec 12	Bulava	-	-	0.000	VHF	NS	-	OT	RNL	-	-
2020-390	2459186.50	2020 Dec 12	Bulava	-	-	0.000	VHF	NS	-	OT	RNL	-	-
2020-391	2459186.50	2020 Dec 12	Bulava	-	-	0.000	VHF	NS	-	OT	RNL	-	-
2020-392	2459376.50	2021 Jun 17	Topol'-E	-	-	0.000	RVSRR	NS	-	OT	RNL	-	-
2021-338	2459376.50	2021 Jun 17	Topol'-E	-	-	0.000	RVSRR	NS	-	OT	RNL	-	-
2021-345	2459608.50	2022 Feb 19	Bulava	-	15P182 Osina?	0.000	VHF	NS	-	OT	Wire	-	-
2022-815	2459608.50	2022 Feb 19	Yars	-	-	0.000	RVSRR	NS	-	OT	Wire	-	-
2022-816	2459730.50	2022 Jun?	Yars	-	-	0.000	RVSRR	NS	-	OT	Wire	-	-
2022-819	2459878.50	2022 Oct 26	Yars	-	-	0.000	RVSRR	NS	-	OT	Wire	-	-
2022-8120	2459884.50	2022 Nov 31	Bulava	-	-	0.000	RVSRR	NS	-	OT	Wire	-	-
2023-817	2460045.50	2023 Apr 1	Yars-E	-	-	0.000	VHF	NS	-	OT	Wire	-	-
2023-857	2460045.50	2023 Oct 25	Yars	-	-	0.000	RVSRR	NS	-	RAD	Wire	-	-
2023-860	2460045.50	2023 Nov 4?	Yars	-	-	0.000	VHF	NS	-	OT	Wire	-	-
2023-806	2460372.50	2023 Nov 4?	Bulava	-	-	0.000	RVSRR	NS	-	OT	Wire	-	-
2024-816	2460413.17	2024 Mar 15 1600?	Yars-E	-	-	0.000	RVSRR	NS	-	RAD	Wire	-	-
2024-874	2460635.62	2024 Nov 21 0300?	Oreshnik	-	-	0.000	RVSRR	NS	-	Weapon	Wire	-	-



Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Launch			Ascent_Site	Launch_Pad	Ascent_Pad	Apogee km	Range km	Dest
							Mission	FlightCode	Platform						
2018-S93	2465890.50	2018 Sep 29	Traveler	-	Traveler III	-	-	-	BRUCK	-	-	100?	-	-	
2019-S27	2465894.50	2019 Apr 21	Traveler	-	Traveler IV	-	-	-	SPAH	-	-	103	-	-	
2023-A18	2460038.50	2023 Apr 1	Traveler	-	Fireball	-	-	-	SPAH	-	-	43	-	-	
2024-A10	2460420.50	2024 Apr 20	Aftershock	-	Aftershock	-	-	-	BRUCK	-	-	1?	-	-	
2024-S63	2460604.27	2024 Oct 20 1824	Aftershock	-	Aftershock II	-	-	-	BRUCK	-	-	143	-	-	





Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	DrbPay	Agency	Launch_Code	Group	Category	LTCite	Cite	Notes
2018-893	2468890.50	2018 Sep 29	Traveler	-	Traveler III	0.000	USCLA	SS	USCLA/	Test	uscrl.com	-	-
2019-527	2468894.50	2019 Apr 21	Traveler	-	Traveler IV	0.000	USCLA	SS	USCLA/	Test	uscrl.com	-	-
2023-A18	2460036.50	2023 Apr 1	Traveler	-	Fireball	0.000	USCLA	SS	USCLA/	Test	uscrl.com	-	-
2024-A10	2460420.50	2024 Apr 20	Aftershock	-	Aftershock	0.000	USCLA	SF	USCLA/	Test	uscrl.com	-	-
2024-863	2460604.27	2024 Oct 20 1824	Aftershock	-	Aftershock II	0.000	USCLA	SS	USCLA/	Test	uscrl.com	-	-



Launch Mission

Launch_Thg	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Launch_Mission	FlightCode	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee_Km	Range_Km	Dest
1977-844	2443162.29	1977 Jan 18 1903	Trident C-4		C4X-1	-	-	-	-	CC	L25C	-	-	1000?	-	-
1977-879	2443190.47	1977 Feb 15 2310	Trident C-4		C4X-2	-	-	-	-	CC	L25C	-	-	1000?	-	-
1977-8131	2443231.14	1977 Mar 28 1517	Trident C-4		C4X-3	-	-	-	-	CC	L25C	-	-	1000?	-	-
1977-8151	2443263.09	1977 Apr 29 1109:01	Trident C-4		C4X-4	-	-	-	-	CC	L25C	-	-	1000?	-	-
1977-8206	2443321.96	1977 Jun 27 1400:01	Trident C-4		C4X-5	-	Evader 207	-	-	CC	L25C	-	-	1000?	-	-
1977-8241	2443374.30	1977 Aug 19 1918:01	Trident C-4		C4X-6	-	Mk 500 RB 207	-	-	CC	L25C	-	-	1000?	-	-
1977-8242	2443390.09	1977 Sep 3 1416:00	Trident C-4		C4X-7	-	-	-	-	CC	L25C	-	-	1000?	-	-
1977-8263	2443436.26	1977 Oct 19 1808	Trident C-4		C4X-8	-	-	-	-	CC	L25C	-	-	1000?	-	-
1977-8295	2443463.09	1977 Dec 5 1408	Trident C-4		C4X-9	-	-	-	-	CC	L25C	-	-	1000?	-	-
1978-397	2443526.35	1978 Jan 17 2021	Trident C-4		C4X-10	-	-	-	-	CC	L25C	-	-	1000?	-	-
1978-373	2443564.40	1978 Feb 14 2130	Trident C-4		C4X-11	-	Imp. Evader 106A	-	-	CC	L25C	-	-	1000?	-	-
1978-3111	2443611.15	1978 Apr 12 1531	Trident C-4		C4X-12	-	Imp. Evader 209	-	-	CC	L25C	-	-	1000?	-	-
1978-3163	2443681.99	1978 Jun 22 1149	Trident C-4		C4X-13	-	-	-	-	CC	L25C	-	-	1000?	-	-
1978-3196	2443731.60	1978 Aug 11 0220	Trident C-4		C4X-14	-	-	-	-	CC	L25C	-	-	1000?	-	-
1978-3222	2443808.12	1978 Oct 26 1463	Trident C-4		C4X-15	-	-	-	-	CC	L25C	-	-	1000?	-	-
1978-3254	2443830.35	1978 Nov 17 2017	Trident C-4		C4X-16	-	-	-	-	CC	L25C	-	-	1000?	-	-
1978-466	2443869.24	1978 Dec 16 1743	Trident C-4		C4X-17	-	-	-	-	CC	L25C	-	-	1000?	-	-
1979-352	2443897.12	1979 Jan 23 1500	Trident C-4		C4X-18	-	-	-	-	CC	L25C	-	-	1000?	-	-
1979-421	2443973.92	1979 Apr 10 1000	Trident C-4		C4T-1	-	-	-	-	CC	L25C	-	-	1000?	-	-
1979-5146	2444033.28	1979 Jun 8 1637	Trident C-4		C4T-2	-	-	-	-	SSBN-657	SLBM	-	-	1000?	-	-
1979-5149	2444044.25	1979 Jun 19 1800	Trident C-4		C4T-3	-	-	-	-	SSBN-657	SLBM	-	-	1000?	-	-
1979-5161	2444069.25	1979 Jul 14 1800	Trident C-4		C4T-4	-	-	-	-	SSBN-657	SLBM	-	-	1000?	-	-
1979-5171	2444077.25	1979 Jul 22 1800	Trident C-4		C4T-5	-	Imp. Evader 210	-	-	SSBN-657	SLBM	-	-	1000?	-	-
1979-5176	2444085.69	1979 Jul 31 0433	Trident C-4		C4T-6	-	-	-	-	SSBN-657	SLBM	-	-	1000?	-	-
1979-5194	2444114.52	1979 Aug 29 0030	Trident C-4		C4T-7	-	-	-	-	SSBN-657	SLBM	-	-	1000?	-	-
1979-5212	2444143.49	1979 Sep 26 2344	Trident C-4		C4T-8	-	-	-	-	SSBN-657	SLBM	-	-	1000?	-	-
1979-5249	2444221.23	1979 Dec 13 1730	Trident C-4		C4T-9	-	-	-	-	SSBN-657	SLBM	-	-	1000?	-	-
1980-569	2444298.05	1980 Feb 28 1313	Trident C-4		C4T-10	-	-	-	-	SSBN-657	SLBM	-	-	1000?	-	-
1980-560	2444298.09	1980 Feb 28 1315	Trident C-4		C4T-11	-	-	-	-	SSBN-657	SLBM	-	-	1000?	-	-
1980-561	2444298.09	1980 Feb 28 1415	Trident C-4		C4T-12	-	-	-	-	SSBN-657	SLBM	-	-	1000?	-	-
1980-562	2444298.09	1980 Feb 28 1415	Trident C-4		C4T-13	-	-	-	-	SSBN-657	SLBM	-	-	1000?	-	-
1980-571	2444325.01	1980 Mar 26 1219	Trident C-4		C4T-14	-	-	-	-	SSBN-657	SLBM	-	-	1000?	-	-
1980-580	2444331.02	1980 Apr 1 1236	Trident C-4		C4T-15	-	-	-	-	SSBN-657	SLBM	-	-	1000?	-	-
1980-581	2444332.03	1980 Apr 1 1239	Trident C-4		C4T-16	-	-	-	-	SSBN-657	SLBM	-	-	1000?	-	-
1980-582	2444332.10	1980 Apr 2 1423	Trident C-4		C4T-17	-	-	-	-	SSBN-657	SLBM	-	-	1000?	-	-
1980-583	2444332.10	1980 Apr 2 1423	Trident C-4		C4T-18	-	-	-	-	SSBN-657	SLBM	-	-	1000?	-	-
1980-5114	2444367.77	1980 May 28 0623	Trident C-4		C4T-19	-	-	-	-	SSBN-657	SLBM	-	-	1000?	-	-
1980-5115	2444367.77	1980 May 28 0623	Trident C-4		C4T-20	-	-	-	-	SSBN-657	SLBM	-	-	1000?	-	-
1980-5116	2444367.77	1980 May 28 0623	Trident C-4		C4T-21	-	-	-	-	SSBN-657	SLBM	-	-	1000?	-	-
1980-5117	2444367.77	1980 May 28 0623	Trident C-4		C4T-22	-	-	-	-	SSBN-657	SLBM	-	-	1000?	-	-
1980-5118	2444367.77	1980 May 28 0623	Trident C-4		C4T-23	-	-	-	-	SSBN-657	SLBM	-	-	1000?	-	-
1980-5119	2444367.77	1980 May 28 0623	Trident C-4		C4T-24	-	-	-	-	SSBN-657	SLBM	-	-	1000?	-	-
1980-5120	2444367.77	1980 May 28 0623	Trident C-4		C4T-25	-	-	-	-	SSBN-657	SLBM	-	-	1000?	-	-
1980-5121	2444367.77	1980 May 28 0623	Trident C-4		C4T-26	-	-	-	-	SSBN-657	SLBM	-	-	1000?	-	-
1980-5122	2444367.77	1980 May 28 0623	Trident C-4		C4T-27	-	-	-	-	SSBN-657	SLBM	-	-	1000?	-	-
1980-5123	2444367.77	1980 May 28 0623	Trident C-4		C4T-28	-	-	-	-	SSBN-657	SLBM	-	-	1000?	-	-
1980-5124	2444367.77	1980 May 28 0623	Trident C-4		C4T-29	-	-	-	-	SSBN-657	SLBM	-	-	1000?	-	-
1980-5125	2444367.77	1980 May 28 0623	Trident C-4		C4T-30	-	-	-	-	SSBN-657	SLBM	-	-	1000?	-	-
1980-5126	2444367.77	1980 May 28 0623	Trident C-4		C4T-31	-	-	-	-	SSBN-657	SLBM	-	-	1000?	-	-
1980-5127	2444367.77	1980 May 28 0623	Trident C-4		C4T-32	-	-	-	-	SSBN-657	SLBM	-	-	1000?	-	-
1980-5128	2444367.77	1980 May 28 0623	Trident C-4		C4T-33	-	-	-	-	SSBN-657	SLBM	-	-	1000?	-	-
1980-5129	2444367.77	1980 May 28 0623	Trident C-4		C4T-34	-	-	-	-	SSBN-657	SLBM	-	-	1000?	-	-
1980-5130	2444367.77	1980 May 28 0623	Trident C-4		C4T-35	-	-	-	-	SSBN-657	SLBM	-	-	1000?	-	-
1980-5131	2444367.77	1980 May 28 0623	Trident C-4		C4T-36	-	-	-	-	SSBN-657	SLBM	-	-	1000?	-	-
1980-5132	2444367.77	1980 May 28 0623	Trident C-4		C4T-37	-	-	-	-	SSBN-657	SLBM	-	-	1000?	-	-
1980-5133	2444367.77	1980 May 28 0623	Trident C-4		C4T-38	-	-	-	-	SSBN-657	SLBM	-	-	1000?	-	-
1980-5134	2444367.77	1980 May 28 0623	Trident C-4		C4T-39	-	-	-	-	SSBN-657	SLBM	-	-	1000?	-	-
1980-5135	2444367.77	1980 May 28 0623	Trident C-4		C4T-40	-	-	-	-	SSBN-657	SLBM	-	-	1000?	-	-
1980-5136	2444367.77	1980 May 28 0623	Trident C-4		C4T-41	-	-	-	-	SSBN-657	SLBM	-	-	1000?	-	-
1980-5137	2444367.77	1980 May 28 0623	Trident C-4		C4T-42	-	-	-	-	SSBN-657	SLBM	-	-	1000?	-	-
1980-5138	2444367.77	1980 May 28 0623	Trident C-4		C4T-43	-	-	-	-	SSBN-657	SLBM	-	-	1000?	-	-
1980-5139	2444367.77	1980 May 28 0623	Trident C-4		C4T-44	-	-	-	-	SSBN-657	SLBM	-	-	1000?	-	-
1980-5140	2444367.77	1980 May 28 0623	Trident C-4		C4T-45	-	-	-	-	SSBN-657	SLBM	-	-	1000?	-	-
1980-5141	2444367.77	1980 May 28 0623	Trident C-4		C4T-46	-	-	-	-	SSBN-657	SLBM	-	-	1000?	-	-
1980-5142	2444367.77	1980 May 28 0623	Trident C-4		C4T-47	-	-	-	-	SSBN-657	SLBM	-	-	1000?	-	-
1980-5143	2444367.77	1980 May 28 0623	Trident C-4		C4T-48	-	-	-	-	SSBN-657	SLBM	-	-	1000?	-	-
1980-5144	2444367.77	1980 May 28 0623	Trident C-4		C4T-49	-	-	-	-	SSBN-657	SLBM	-	-	1000?	-	-
1980-5145	2444367.77	1980 May 28 0623	Trident C-4		C4T-50	-	-	-	-	SSBN-657	SLBM	-	-	1000?	-	-
1980-5146	2444367.77	1980 May 28 0623	Trident C-4		C4T-51	-	-	-	-	SSBN-657	SLBM	-	-	1000?	-	-
1980-5147	2444367.77	1980 May 28 0623	Trident C-4		C4T-52	-	-	-	-	SSBN-657	SLBM	-	-	1000?	-	-
1980-5148	2444367.77	1980 May 28 0623	Trident C-4		C4T-53	-	-	-	-	SSBN-657	SLBM	-	-	1000?	-	-
1980-5149	2444367.77	1980 May 28 0623	Trident C-4		C4T-54	-	-	-	-	SSBN-657	SLBM	-	-	1000?	-	-
1980-5150	2444367.77	1980 May 28 0623	Trident C-4		C4T-55	-	-	-	-	SSBN-657	SLBM	-	-	1000?	-	-
1980-5151	2444367.77	1980 May 28 0623	Trident C-4		C4T-56	-	-	-	-	SSBN-657	SLBM	-	-	1000?	-	-
1980-5152	2444367.77	1980 May 28 0623	Trident C-4		C4T-57	-	-	-	-	SSBN-657	SLBM	-	-	1000?	-	-
1980-5153	2444367.77	1980 May 28 0623	Trident C-4		C4T-58	-	-	-	-	SSBN-657	SLBM	-	-	1000?	-	-
1980-5154	2444367.77	1980 May 28 0623	Trident C-4		C4T-59	-	-	-	-	SSBN-657	SLBM	-	-	1000?	-	-
1980-5155	2444367.77	1980 May 28 0623	Trident C-4		C4T-60	-	-	-	-	SSBN-657	SLBM	-	-	1000?	-	-
1980-5156	2444367.77	1980 May 28 0623	Trident C-4		C4T-61	-	-	-	-	SSBN-657	SLBM	-	-	1000?	-	-
1980-5157	2444367.77	1980 May 28 0623	Trident C-4		C4T-62	-	-	-	-	SSBN-657	SLBM	-	-	1000?	-	-
1980-5158	2444367.77	1980 May 28 0623	Trident C-4		C4T-63	-	-	-	-	SSBN-657	SLBM	-	-	1000?	-	-
1980-5159	2444367.77	1980 May 28 0623	Trident C-4		C4T-64	-	-	-	-	SSBN-657	SLBM	-	-	1000?	-	-
1980-5160	2444367.77	1980 May 28 0623	Trident C-4		C4T-65	-	-	-	-	SSBN-657	SLBM	-	-	1000?	-	-
1980-5161	2444367.77	1980 May 28 0623	Trident C-4		C4T-66	-	-	-	-	SSBN-657	SLBM	-	-	1000?	-	-
1980-5162	2444367.77	1980 May 28 0623	Trident C-4		C4T-67	-	-	-	-	SSBN-657	SLBM	-	-	1000?	-	-
1980-5163	2444367.77	1980 May 28 0623	Trident C-4</													



Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Launch_Mission	FlightCode	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee km	Range km	Dest
2001-855	2452253.34	2001 Dec 9 2011	Trident C-4	-	FCET-52	OT-111	-	-	SSBN-726	ETR	LPS	-	-	1000?	-	-
2001-856	2452253.40	2001 Dec 9 2136	Trident C-4	-	FCET-52	OT-111	-	-	SSBN-726	ETR	LPS	-	-	1000?	-	-
2001-857	2452253.40	2001 Dec 9 2136	Trident C-4	-	FCET-52	OT-111 (221)	-	-	SSBN-726	ETR	LPS	-	-	1000?	-	-
2001-860	2452262.34	2001 Dec 18 2011	Trident C-4	-	FCET-53	OT-111 (223)	-	-	SSBN-726	ETR	LPS	-	-	1000?	-	-
2001-861	2452262.34	2001 Dec 18 2011	Trident C-4	-	FCET-53	OT-111 (224)	-	-	SSBN-726	ETR	LPS	-	-	1000?	-	-
2001-862	2452262.42	2001 Dec 18 2204	Trident C-4	-	FCET-53	OT-111 (225)	-	-	SSBN-726	ETR	LPS	-	-	1000?	-	-
2001-863	2452262.42	2001 Dec 18 2204	Trident C-4	-	FCET-53	OT-111	-	-	SSBN-726	ETR	LPS	-	-	1000?	-	-
2010-812	2455228.49	2010 Jan 31 2339	LV-2	-	-	GMD FTU-06 Target	-	-	-	RMR	Meck	-	-	1000?	-	-
2010-876	2455228.49	2010 Dec 15 1957?	LV-2	-	-	GMD FTU-06A Target	-	-	-	RMR	Meck	-	-	1000?	-	-
2011-812	2455546.33	2011 Apr 15 1957?	LV-2	-	-	Aegis FTW-15 Target	-	-	-	RMR	Meck?	-	-	1000?	-	-
2013-597	2456479.27	2013 Jul 5 0652	LV-2	-	-	GMD FTU-07 Target	-	-	-	RMR	Meck?	-	-	1000?	-	-
2014-332	2456651.28	2014 Jun 22 1849?	LV-2	-	-	GMD FTU-06b Target	-	-	-	RMR	Meck	-	-	1000?	-	-
2017-336	2457904.30	2017 May 30 1910?	ICBM-T2	-	GBI Target	FTU-15 Target	FTU-15 Target	FTU-15	-	RMR	Meck	-	-	1300?	-	Pacific
2019-310	2456668.22	2019 Mar 25 1720?	ICBM-T2	?	GBI Target	FTU-11 Target	FTU-11 Target	FTU-11 Target	-	RMR	Meck	-	-	1300?	-	Pacific
2020-350	2459170.74	2020 Nov 17 0550	ICBM-T2	?	GBI Target	FTW-44 Target	FTW-44 Target	FTW-44 Target	-	RMR	Meck	-	-	500?	-	Pacific
2021-328	2459363.60	2021 May 29	MRBM-13c2	?	Aegis FTW-31E1 Tgt	FTW-31E1 Target	-	-	-	RMR	Meck	-	-	10?	-	Pacific
2021-425	2459508.60	2021 Oct 21	ICBM-T1	?	CPS FT-3	CH28/AHW test	-	-	-	PSCA	LP2?	-	-	10?	-	Pacific
2023-312	2460033.60	2023 Mar 30	MRBM-13c2	-	Aegis FTW-31E1a Tgt	FTW-31E1a Target	T3C2 MRBM Target	-	-	KAU	LC42	-	-	500?	-	Pacific
2024-311	2460397.60	2024 Mar 28	MRBM-13c2	-	Aegis FTW-32	FTW-32 Target	MRBM Target	-	-	KAU	LC42	-	-	500?	-	Pacific







Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Launch_Code	Group	Category	LTCite	Cite	Notes
1984-S135	2445854.50	1984 Jun 3	Trident C-4	-	-	MS	-	OT	Powell	-	-
1984-S136	2445883.50	1984 Jul 2	Trident C-4	-	-	MS	-	OT	Powell	-	-
1984-S110	2445936.50	1984 Aug 24	Trident C-4	-	-	MS	-	OT	COMDS	-	-
1984-S111	2445937.40	1984 Aug 24 2143	Trident C-4	-	-	MS	-	OT	COMDS	-	-
1984-S123	2445983.38	1984 Oct 9 2105	Trident C-4	-	-	MS	-	OT	COMDS	-	-
1984-S132	2446039.33	1984 Dec 4 1954	Trident C-4	-	-	MS	-	OT	COMDS	-	-
1984-S134	2446050.36	1984 Dec 15 2044	Trident C-4	-	-	MS	-	OT	COMDS	-	-
1985-S91	2446234.50	1985 Jun 18	Trident C-4	-	-	MS	-	OT	COMDS	-	-
1985-S92	2446234.50	1985 Jun 18	Trident C-4	-	-	MS	-	OT	COMDS	-	-
1985-S93	2446234.50	1985 Jun 18 0312	Trident C-4	-	-	MS	-	OT	COMDS	-	-
1985-S94	2446234.63	1985 Jun 18 0055	Trident C-4	-	-	MS	-	OT	COMDS	-	-
1985-S98	2446252.54	1985 Sep	Trident C-4	-	-	MS	-	OT	COMDS	-	-
1985-S341	2446308.50	1985 Dec 7 1530	Trident C-4	-	-	MS	-	OT	COMDS	-	-
1985-S140	2446407.15	1985 Feb 21 1715	Trident C-4	-	-	MS	-	OT	COMDS	-	-
1986-S23	2446483.22	1986 Feb 21 1715	Trident C-4	-	-	MS	-	OT	COMDS	-	-
1986-S25	2446483.22	1986 Feb 21 1715	Trident C-4	-	-	MS	-	OT	COMDS	-	-
1986-S73	2446640.41	1986 Jun 28 2155	Trident C-4	-	-	MS	-	OT	COMDS	-	-
1986-S88	2446673.50	1986 Aug 31	Trident C-4	-	-	MS	-	OT	COMDS	-	-
1986-S89	2446690.50	1986 Sep 17	Trident C-4	-	-	MS	-	OT	COMDS	-	-
1986-S92	2446691.29	1986 Sep 17 1904	Trident C-4	-	-	MS	-	OT	COMDS	-	-
1986-S101	2446704.14	1986 Sep 30 1520	Trident C-4	-	-	MS	-	OT	COMDS	-	-
1987-S129	2447031.66	1987 Aug 24 0352	Trident C-4	-	-	MS	-	OT	COMDS	-	-
1987-S132	2447036.50	1987 Aug 29	Trident C-4	-	-	MS	-	OT	COMDS	-	-
1987-S133	2447036.50	1987 Aug 29	Trident C-4	-	-	MS	-	OT	COMDS	-	-
1987-S134	2447036.50	1987 Aug 29	Trident C-4	-	-	MS	-	OT	COMDS	-	-
1987-S135	2447036.50	1987 Aug 29 2343	Trident C-4	-	-	MS	-	OT	COMDS	-	-
1988-A03	2447196.33	1988 Feb 6 1955	Trident C-4	-	-	MS	-	OT	COMDS	-	-
1988-S61	2447219.14	1988 Apr 15	Trident C-4	-	-	MS	-	OT	COMDS	-	-
1988-S60	2447266.50	1988 Apr 15	Trident C-4	-	-	MS	-	OT	COMDS	-	-
1988-S81	2447266.50	1988 Apr 15 0411	Trident C-4	-	-	MS	-	OT	COMDS	-	-
1988-S85	2447266.50	1988 Apr 15 0526	Trident C-4	-	-	MS	-	OT	COMDS	-	-
1988-S82	2447266.50	1988 Apr 15 0526	Trident C-4	-	-	MS	-	OT	COMDS	-	-
1988-S86	2447266.50	1988 Apr 15 0526	Trident C-4	-	-	MS	-	OT	COMDS	-	-
1988-S96	2447296.66	1988 May 15 0345	Trident C-4	-	-	MS	-	OT	COMDS	-	-
1989-S29	2447549.94	1989 Jun 23 1040:05	Trident C-4	-	-	MS	-	OT	COMDS	-	-
1989-S35	2447561.63	1989 Jun 23 1040:05	Trident C-4	-	-	MS	-	OT	COMDS	-	-
1990-S69	2447974.68	1990 Mar 24 0416	Trident C-4	-	-	MS	-	OT	COMDS	-	-
1990-S70	2447974.68	1990 Mar 24	Trident C-4	-	-	MS	-	OT	COMDS	-	-
1990-S71	2447974.68	1990 Mar 24	Trident C-4	-	-	MS	-	OT	COMDS	-	-
1990-S72	2447974.68	1990 Mar 24	Trident C-4	-	-	MS	-	OT	COMDS	-	-
1991-S86	2448334.50	1991 Mar 19	Trident C-4	-	-	MS	-	OT	COMDS	-	-
1991-S88	2448334.50	1991 Mar 19	Trident C-4	-	-	MS	-	OT	COMDS	-	-
1991-S106	2448386.50	1991 May 10	Trident C-4	-	-	MS	-	OT	COMDS	-	-
1991-S107	2448386.50	1991 May 10	Trident C-4	-	-	MS	-	OT	COMDS	-	-
1991-S169	2448386.50	1991 May 10	Trident C-4	-	-	MS	-	OT	COMDS	-	-
1991-S190	2448386.50	1991 May 10	Trident C-4	-	-	MS	-	OT	COMDS	-	-
1991-S191	2448386.50	1991 May 10	Trident C-4	-	-	MS	-	OT	COMDS	-	-
1992-S85	2448770.50	1992 Apr 8	Trident C-4	-	-	MS	-	OT	COMDS	-	-
1992-S86	2448770.50	1992 Apr 8	Trident C-4	-	-	MS	-	OT	COMDS	-	-
1992-S87	2448770.50	1992 Apr 8	Trident C-4	-	-	MS	-	OT	COMDS	-	-
1994-S24	2449440.35	1994 Mar 28 1806:55	Trident C-4	-	-	MS	-	OT	COMDS	-	-
1994-S25	2449440.35	1994 Mar 28 1807	Trident C-4	-	-	MS	-	OT	COMDS	-	-
1994-S26	2449440.35	1994 Mar 28 1807	Trident C-4	-	-	MS	-	OT	COMDS	-	-
1994-S27	2449440.35	1994 Mar 28 1807	Trident C-4	-	-	MS	-	OT	COMDS	-	-
1994-S28	2449440.35	1994 Mar 28 1807	Trident C-4	-	-	MS	-	OT	COMDS	-	-
1994-S70	2449648.34	1994 Oct 22 0009:03	Trident C-4	-	-	MS	-	OT	COMDS	-	-
1994-S89	2449694.17	1994 Dec 7 1611:40	Trident C-4	-	-	MS	-	OT	COMDS	-	-
1994-S90	2449694.17	1994 Dec 7 1611:57	Trident C-4	-	-	MS	-	OT	COMDS	-	-
1994-S98	2449694.17	1994 Dec 7 1611:57	Trident C-4	-	-	MS	-	OT	COMDS	-	-
1994-S99	2449694.17	1994 Dec 7 1611:57	Trident C-4	-	-	MS	-	OT	COMDS	-	-
1995-S16	2449783.34	1995 Feb 6 2007:32	Trident C-4	-	-	MS	-	OT	COMDS	-	-
1995-S17	2449783.34	1995 Mar 6 2007:49	Trident C-4	-	-	MS	-	OT	COMDS	-	-
1995-S18	2449783.34	1995 Mar 6 2103:25	Trident C-4	-	-	MS	-	OT	COMDS	-	-
1995-S89	2449783.38	1995 Mar 6 2103:42	Trident C-4	-	-	MS	-	OT	COMDS	-	-
1995-S19	2449791.20	1995 Mar 14 1650:01	Trident C-4	-	-	MS	-	OT	COMDS	-	-
1995-S20	2449791.20	1995 Mar 14 1650:20	Trident C-4	-	-	MS	-	OT	COMDS	-	-
1995-S71	2450020.38	1995 Oct 29 2100:03	Trident C-4	-	-	MS	-	OT	COMDS	-	-
1995-S72	2450020.38	1995 Oct 29 2100:03	Trident C-4	-	-	MS	-	OT	COMDS	-	-
1996-S21	2450220.41	1996 May 16 2148:15	Trident C-4	-	-	MS	-	OT	COMDS	-	-
1996-S22	2450220.41	1996 May 16 2148:15	Trident C-4	-	-	MS	-	OT	COMDS	-	-
1996-S23	2450220.45	1996 May 16 2250:13	Trident C-4	-	-	MS	-	OT	COMDS	-	-
1996-S24	2450220.45	1996 May 16 2250:13	Trident C-4	-	-	MS	-	OT	COMDS	-	-
1996-S58	2450359.44	1996 Oct 2 2330:03	Trident C-4	-	-	MS	-	OT	COMDS	-	-
1997-S14	2450500.34	1997 Feb 20 2011:31	Trident C-4	-	-	MS	-	OT	COMDS	-	-
1997-S15	2450500.34	1997 Feb 20 2011:49	Trident C-4	-	-	MS	-	OT	COMDS	-	-
1997-S16	2450500.39	1997 Feb 20 2124:47	Trident C-4	-	-	MS	-	OT	COMDS	-	-
1997-S17	2450500.39	1997 Feb 20 2125:04	Trident C-4	-	-	MS	-	OT	COMDS	-	-
1998-S10	2450855.40	1998 Feb 10 2133:09	Trident C-4	-	-	MS	-	OT	COMDS	-	-
1998-S11	2450855.40	1998 Feb 10 2133:26	Trident C-4	-	-	MS	-	OT	COMDS	-	-
1998-S12	2450855.44	1998 Feb 10 2236:47	Trident C-4	-	-	MS	-	OT	COMDS	-	-
1998-S13	2450855.44	1998 Feb 10 2237:04	Trident C-4	-	-	MS	-	OT	COMDS	-	-
1998-S14	2451261.41	1999 Mar 23 2146:10	Trident C-4	-	-	MS	-	OT	COMDS	-	-
1998-S15	2451261.41	1999 Mar 23 2146:28	Trident C-4	-	-	MS	-	OT	COMDS	-	-
1998-S16	2451262.51	1999 Mar 25 0017:05	Trident C-4	-	-	MS	-	OT	COMDS	-	-
1998-S17	2451262.51	1999 Mar 25 0017:22	Trident C-4	-	-	MS	-	OT	COMDS	-	-
2000-S08	2451601.33	2000 Feb 26 2000	Trident C-4	-	-	MS	-	OT	COMDS	-	-
2000-S09	2451601.33	2000 Feb 26 2000	Trident C-4	-	-	MS	-	OT	COMDS	-	-
2000-S10	2451601.45	2000 Feb 26 2243	Trident C-4	-	-	MS	-	OT	COMDS	-	-
2000-S11	2451601.45	2000 Feb 26 2243	Trident C-4	-	-	MS	-	OT	COMDS	-	-
2001-S54	2462253.34	2001 Dec 9 2011	Trident C-4	-	-	MS	-	OT	COMDS	-	-

Launch  
Orbpay  
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Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Orbpay	Agency	Launch_Code	Group	Category	LTCite	Cite	Notes
2001-555	2452253.34	2001 Dec 9 2011	Trident C-4	-	FCEI-52	0.000	USNSSP	MS	-	OT	nsf-koenn	LMSC	-
2001-556	2452253.40	2001 Dec 9 2136	Trident C-4	-	FCEI-52	0.000	USNSSP	MS	-	OT	nsf-koenn	LMSC	-
2001-557	2452253.40	2001 Dec 9 2136	Trident C-4	-	FCEI-52	0.000	USNSSP	MS	-	OT	nsf-koenn	LMSC	-
2001-560	2452262.54	2001 Dec 18 2011	Trident C-4	-	FCEI-53	0.000	USNSSP	MS	-	OT	nsf-koenn	LMSC	-
2001-561	2452262.54	2001 Dec 18 2011	Trident C-4	-	FCEI-53	0.000	USNSSP	MF	-	OT	nsf-koenn	LMSC	-
2001-562	2452262.42	2001 Dec 18 2204	Trident C-4	-	FCEI-53	0.000	USNSSP	MS	-	OT	nsf-koenn	LMSC	-
2001-563	2452262.42	2001 Dec 18 2204	Trident C-4	-	FCEI-53	0.000	USNSSP	MS	-	OT	nsf-koenn	Clary02	-
2010-512	2455228.49	2010 Jan 31 2339	LV-2	-	-	0.000	MDA	MS	-	Target	www.mda.mil	-	-
2010-576	2455546.33	2010 Dec 15 19577	LV-2	-	-	0.000	MDA	MS	-	Target	www.mda.mil	-	-
2011-512	2455666.79	2011 Apr 15 0652	LV-2	-	-	0.000	MDA	MS	-	Target	www.mda.mil	-	-
2013-547	2456479.27	2013 Jul 5 1830	LV-2	-	-	0.000	MDA	MS	-	Target	www.mda.mil	-	-
2014-532	2456631.28	2014 Jun 22 18497	LV-2	-	-	0.000	MDA	MS	HDA/	Target	www.mda.mil	-	-
2017-536	2457904.30	2017 May 30 19107	ICBM-T2	-	-	0.000	MDA	MS	HDA/	Target	-	-	-
2019-510	2458668.22	2019 Mar 25 17207	ICBM-T2	?	-	0.000	MDA	MS	-	Target	-	-	-
2020-540	2459170.74	2020 Nov 17 0550	ICBM-T2	?	-	0.000	MDA	MS	-	Target	-	-	-
2021-528	2459363.50	2021 May 29	RGBH-T3c2	-	Aegis FTR-31E1 Tgt	0.000	MDA	MS	-	Target	-	-	-
2021-425	2459508.50	2021 Oct 21	ICBM-T1	?	CPS FT-3	0.000	SMDC	MF	-	Hyperonic	-	-	-
2023-512	2460033.50	2023 Mar 30	RGBH-T3c2	-	Aegis FTR-31E1a Tgt	0.000	MDA	MS	HDA/	Target	mda.mil	-	-
2024-511	2460397.50	2024 Mar 28	RGBH-T3c2	-	Aegis FTR-32	0.000	MDA	MS	HDA/	Target	mda.mil	northroggruman.com	-



Launch

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Mission	FlightCode	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee_Km	Range_Km	Dest
1987-S43	2446811.14	1987 Jan 15 1526	Trident D-5	-	DSX-1	RAD Mk 5	-	-	-	CCA	LC46	-	-	1000?	-	-
1987-S61	2446872.23	1987 Mar 17 1726	Trident D-5	-	DSX-2	RAD Mk 5	-	-	-	CCA	LC46	-	-	1000?	-	-
1987-S81	2446916.36	1987 Apr 30 2044	Trident D-5	-	DSX-3	RAD Mk 5	-	-	-	CCA	LC46	-	-	1000?	-	-
1987-S89	2446959.46	1987 Jun 12 2245	Trident D-5	-	DSX-5	RAD Mk 5	-	-	-	CCA	LC46	-	-	1000?	-	-
1987-S110	2446997.36	1987 Jul 20 2045	Trident D-5	-	DSX-6	RAD Mk 5	-	-	-	CCA	LC46	-	-	1000?	-	-
1987-S141	2447047.42	1987 Sep 8 2201	Trident D-5	-	DSX-4	RAD Mk 5	-	-	-	CCA	LC46	-	-	1000?	-	-
1987-S150	2447075.21	1987 Oct 6 1702	Trident D-5	-	DSX-8	RAD Mk 5	-	-	-	CCA	LC46	-	-	1000?	-	-
1987-S178	2447141.06	1987 Dec 11 1326	Trident D-5	-	DSX-10	RAD Mk 5	-	-	-	CCA	LC46	-	-	1000?	-	-
1988-M01	2447151.92	1988 Jan 21 1008	Trident D-5	-	DSX-9	RAD Mk 5	-	-	-	CCA	LC46	-	-	80?	-	-
1988-S84	2447258.71	1988 Apr 7 0459	Trident D-5	-	DSX-11	RAD Mk 5	-	-	-	CCA	LC46	-	-	1000?	-	-
1988-S84	2447279.70	1988 Apr 28 0452	Trident D-5	-	DSX-12	RAD Mk 5	-	-	-	CCA	LC46	-	-	1000?	-	-
1988-S96	2447300.59	1988 May 26 0207	Trident D-5	-	DSX-7	RAD Mk 4	-	-	-	CCA	LC46	-	-	20?	-	-
1988-A06	2447350.44	1988 Jul 7 2238	Trident D-5	-	DSX-13	RAD Mk 5	-	-	-	CCA	LC46	-	-	1000?	-	-
1988-S111	2447401.34	1988 Aug 27 2004	Trident D-5	-	DSX-14	RAD Mk 5	-	-	-	CCA	LC46	-	-	1000?	-	-
1988-A07	2447424.24	1988 Sep 19 1744	Trident D-5	-	DSX-15	RAD Mk 5	-	-	-	CCA	LC46	-	-	20?	-	-
1988-S133	2447473.19	1988 Sep 17 1630	Trident D-5	-	DSX-18	RAD	-	-	-	CCA	LC46	-	-	1000?	-	-
1988-S146	2447512.03	1988 Dec 16 1249	Trident D-5	-	DSX-17	RAD	-	-	-	CCA	LC46	-	-	1000?	-	-
1989-S27	2447535.96	1989 Jan 9 1052	Trident D-5	-	DSX-19	RAD	-	-	-	CCA	LC46	-	-	1000?	-	-
1989-A02	2447552.88	1989 Jan 26 0907:00	Trident D-5	-	DSX-20	RAD	-	-	-	CCA	LC46	-	-	0	-	-
1989-A02	2447607.18	1989 Mar 21 1620	Trident D-5	-	PER-1	PER-1	-	-	SSBN-734	SLBM	-	-	-	0?	-	-
1989-S81	2447741.13	1989 Aug 2 1500:03	Trident D-5	-	PER-2	PER-2	-	-	SSBN-734	SLBM	-	-	-	0?	-	-
1989-A06	2447754.38	1989 Aug 15 2110:00	Trident D-5	-	PER-4	PER-4	-	-	SSBN-734	SLBM	-	-	-	0?	-	-
1989-S110	2447865.15	1989 Dec 4 1540:03	Trident D-5	-	PER-5	PER-5	-	-	SSBN-734	SLBM	-	-	-	1000?	-	-
1989-S113	2447874.09	1989 Dec 13 1415:03	Trident D-5	-	PER-11	PER-11	-	-	SSBN-734	SLBM	-	-	-	1000?	-	-
1989-S114	2447876.09	1989 Dec 15 1415	Trident D-5	-	PER-3	PER-3	-	-	SSBN-734	SLBM	-	-	-	1000?	-	-
1990-S26	2447907.20	1990 Jan 15 1645:07	Trident D-5	-	PER-7	PER-7	-	-	SSBN-734	SLBM	-	-	-	1000?	-	-
1990-S27	2447908.17	1990 Jan 15 1600:03	Trident D-5	-	PER-6	PER-6	-	-	SSBN-734	SLBM	-	-	-	1000?	-	-
1990-S37	2447935.09	1990 Feb 12 1410	Trident D-5	-	DASU-1	DASU-1	-	-	SSBN-734	SLBM	-	-	-	1000?	-	-
1990-S38	2447935.09	1990 Feb 12 1410:20	Trident D-5	-	PER-6	PER-6	-	-	SSBN-734	SLBM	-	-	-	1000?	-	-
1990-S52	2447962.66	1990 Mar 12 0345:03	Trident D-5	-	DASU-3	DASU-3	-	-	SSBN-735	SLBM	-	-	-	1000?	-	-
1990-S134	2448151.16	1990 Sep 26 1656	Trident D-5	-	DASU-4	DASU-4	-	-	SSBN-735	SLBM	-	-	-	1000?	-	-
1990-S149	2448199.00	1990 Nov 3 1153	Trident D-5	-	PER-7	PER-7	-	-	SSBN-734	SLBM	-	-	-	1000?	-	-
1990-S150	2448199.00	1990 Nov 3 1238:11	Trident D-5	-	PER-8	PER-8	-	-	SSBN-734	SLBM	-	-	-	1000?	-	-
1990-S151	2448199.07	1990 Nov 3 1337	Trident D-5	-	PER-9	PER-9	-	-	SSBN-734	SLBM	-	-	-	1000?	-	-
1990-S151	2448199.07	1990 Nov 3 1337	Trident D-5	-	PER-10	PER-10	-	-	SSBN-734	SLBM	-	-	-	1000?	-	-
1990-S151	2448224.33	1990 Nov 28 2000:03	Trident D-5	-	DASU-5	DASU-5	-	-	SSBN-736	SLBM	-	-	-	1000?	-	-
1991-S596	2448562.42	1991 Apr 15 2210:03	Trident D-5	-	DASU-6	DASU-6	-	-	SSBN-736	SLBM	-	-	-	1000?	-	-
1991-S128	2448666.50	1991 Jul 29	Trident D-5	-	PER-8	PER-8	-	-	SSBN-735	SLBM	-	-	-	1000?	-	-
1991-S128	2448666.50	1991 Jul 29	Trident D-5	-	PER-9	PER-9	-	-	SSBN-735	SLBM	-	-	-	1000?	-	-
1991-S128	2448666.50	1991 Jul 29	Trident D-5	-	PER-10	PER-10	-	-	SSBN-735	SLBM	-	-	-	1000?	-	-
1991-S128	2448666.50	1991 Jul 29	Trident D-5	-	PER-11	PER-11	-	-	SSBN-735	SLBM	-	-	-	1000?	-	-
1991-S128	2448666.50	1991 Jul 29	Trident D-5	-	PER-12	PER-12	-	-	SSBN-735	SLBM	-	-	-	1000?	-	-
1991-S128	2448666.50	1991 Jul 29	Trident D-5	-	PER-13	PER-13	-	-	SSBN-735	SLBM	-	-	-	1000?	-	-
1991-S128	2448666.50	1991 Jul 29	Trident D-5	-	PER-14	PER-14	-	-	SSBN-735	SLBM	-	-	-	1000?	-	-
1991-S128	2448666.50	1991 Jul 29	Trident D-5	-	PER-15	PER-15	-	-	SSBN-735	SLBM	-	-	-	1000?	-	-
1991-S128	2448666.50	1991 Jul 29	Trident D-5	-	PER-16	PER-16	-	-	SSBN-735	SLBM	-	-	-	1000?	-	-
1991-S128	2448666.50	1991 Jul 29	Trident D-5	-	PER-17	PER-17	-	-	SSBN-735	SLBM	-	-	-	1000?	-	-
1991-S128	2448666.50	1991 Jul 29	Trident D-5	-	PER-18	PER-18	-	-	SSBN-735	SLBM	-	-	-	1000?	-	-
1991-S128	2448666.50	1991 Jul 29	Trident D-5	-	PER-19	PER-19	-	-	SSBN-735	SLBM	-	-	-	1000?	-	-
1991-S128	2448666.50	1991 Jul 29	Trident D-5	-	PER-20	PER-20	-	-	SSBN-735	SLBM	-	-	-	1000?	-	-
1991-S128	2448666.50	1991 Jul 29	Trident D-5	-	PER-21	PER-21	-	-	SSBN-735	SLBM	-	-	-	1000?	-	-
1991-S128	2448666.50	1991 Jul 29	Trident D-5	-	PER-22	PER-22	-	-	SSBN-735	SLBM	-	-	-	1000?	-	-
1991-S128	2448666.50	1991 Jul 29	Trident D-5	-	PER-23	PER-23	-	-	SSBN-735	SLBM	-	-	-	1000?	-	-
1991-S128	2448666.50	1991 Jul 29	Trident D-5	-	PER-24	PER-24	-	-	SSBN-735	SLBM	-	-	-	1000?	-	-
1991-S128	2448666.50	1991 Jul 29	Trident D-5	-	PER-25	PER-25	-	-	SSBN-735	SLBM	-	-	-	1000?	-	-
1991-S128	2448666.50	1991 Jul 29	Trident D-5	-	PER-26	PER-26	-	-	SSBN-735	SLBM	-	-	-	1000?	-	-
1991-S128	2448666.50	1991 Jul 29	Trident D-5	-	PER-27	PER-27	-	-	SSBN-735	SLBM	-	-	-	1000?	-	-
1991-S128	2448666.50	1991 Jul 29	Trident D-5	-	PER-28	PER-28	-	-	SSBN-735	SLBM	-	-	-	1000?	-	-
1991-S128	2448666.50	1991 Jul 29	Trident D-5	-	PER-29	PER-29	-	-	SSBN-735	SLBM	-	-	-	1000?	-	-
1991-S128	2448666.50	1991 Jul 29	Trident D-5	-	PER-30	PER-30	-	-	SSBN-735	SLBM	-	-	-	1000?	-	-
1991-S128	2448666.50	1991 Jul 29	Trident D-5	-	PER-31	PER-31	-	-	SSBN-735	SLBM	-	-	-	1000?	-	-
1991-S128	2448666.50	1991 Jul 29	Trident D-5	-	PER-32	PER-32	-	-	SSBN-735	SLBM	-	-	-	1000?	-	-
1991-S128	2448666.50	1991 Jul 29	Trident D-5	-	PER-33	PER-33	-	-	SSBN-735	SLBM	-	-	-	1000?	-	-
1991-S128	2448666.50	1991 Jul 29	Trident D-5	-	PER-34	PER-34	-	-	SSBN-735	SLBM	-	-	-	1000?	-	-
1991-S128	2448666.50	1991 Jul 29	Trident D-5	-	PER-35	PER-35	-	-	SSBN-735	SLBM	-	-	-	1000?	-	-
1991-S128	2448666.50	1991 Jul 29	Trident D-5	-	PER-36	PER-36	-	-	SSBN-735	SLBM	-	-	-	1000?	-	-
1991-S128	2448666.50	1991 Jul 29	Trident D-5	-	PER-37	PER-37	-	-	SSBN-735	SLBM	-	-	-	1000?	-	-
1991-S128	2448666.50	1991 Jul 29	Trident D-5	-	PER-38	PER-38	-	-	SSBN-735	SLBM	-	-	-	1000?	-	-
1991-S128	2448666.50	1991 Jul 29	Trident D-5	-	PER-39	PER-39	-	-	SSBN-735	SLBM	-	-	-	1000?	-	-
1991-S128	2448666.50	1991 Jul 29	Trident D-5	-	PER-40	PER-40	-	-	SSBN-735	SLBM	-	-	-	1000?	-	-
1991-S128	2448666.50	1991 Jul 29	Trident D-5	-	PER-41	PER-41	-	-	SSBN-735	SLBM	-	-	-	1000?	-	-
1991-S128	2448666.50	1991 Jul 29	Trident D-5	-	PER-42	PER-42	-	-	SSBN-735	SLBM	-	-	-	1000?	-	-
1991-S128	2448666.50	1991 Jul 29	Trident D-5	-	PER-43	PER-43	-	-	SSBN-735	SLBM	-	-	-	1000?	-	-
1991-S128	2448666.50	1991 Jul 29	Trident D-5	-	PER-44	PER-44	-	-	SSBN-735	SLBM	-	-	-	1000?	-	-
1991-S128	2448666.50	1991 Jul 29	Trident D-5	-	PER-45	PER-45	-	-	SSBN-735	SLBM	-	-	-	1000?	-	-
1991-S128	2448666.50	1991 Jul 29	Trident D-5	-	PER-46	PER-46	-	-	SSBN-735	SLBM	-	-	-	1000?	-	-
1991-S128	2448666.50	1991 Jul 29	Trident D-5	-	PER-47	PER-47	-	-	SSBN-735	SLBM	-	-	-	1000?	-	-
1991-S128	2448666.50	1991 Jul 29	Trident D-5	-	PER-48	PER-48	-	-	SSBN-735	SLBM	-	-	-	1000?	-	-
1991-S128	2448666.50	1991 Jul 29	Trident D-5	-	PER-49	PER-49	-	-	SSBN-735	SLBM	-	-	-	1000?	-	-
1991-S128	2448666.50	1991 Jul 29	Trident D-5	-	PER-50	PER-50	-	-	SSBN-735	SLBM	-	-	-	1000?	-	-
1991-S128	2448666.50	1991 Jul 29	Trident D-5	-	PER-51	PER-51	-	-	SSBN-735	SLBM	-	-	-	1000?	-	-
1991-S128	2448666.50	1991 Jul 29	Trident D-5	-	PER-52	PER-52	-	-	SSBN-735	SLBM	-	-	-	1000?	-	-
1991-S128	2448666.50	1991 Jul 29	Trident D-5	-	PER-53	PER-53	-	-	SSBN-735	SLBM	-	-	-	1000?	-	-
1991-S128	2448666.50	1991 Jul 29	Trident D-5	-	PER-54	PER-54	-	-	SSBN-735	SLBM	-	-	-	1000?	-	-
1991-S128	2448666.50	1991 Jul 29	Trident D-5	-	PER-55	PER-55	-	-	SSBN-735	SLBM	-	-	-	1000?	-	-
1991-S128	2448666.50	1991 Jul 29	Trident D-5	-	PER-56	PER-56	-	-	SSBN-735	SL						

Launch

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Mission	FlightCode	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee_Km	Range_Km	Dest
1995-585	2450059.37	1995 Dec 7 20:47:00	Trident D-5	-	DASD-14	-	-	SSBN-741	ETR	LPS	-	-	1000?	-	-
1996-517	2450195.40	1996 Apr 21 21:36:06	Trident D-5	-	FOET-14	-	-	SSBN-738	ETR	SLDM	-	-	1000?	-	-
1996-518	2450196.23	1996 Apr 21 21:36:23	Trident D-5	-	FOET-14	-	-	SSBN-738	ETR	SLDM	-	-	1000?	-	-
1996-544	2450284.33	1996 Jul 19 20:01:01	Trident D-5	-	FOET-15	-	-	SSBN-735	ETR	SLDM	-	-	1000?	-	-
1996-545	2450284.33	1996 Jul 19 20:01:17	Trident D-5	-	FOET-15	-	-	SSBN-735	ETR	SLDM	-	-	1000?	-	-
1996-565	2450385.31	1996 Oct 28 19:30:20	Trident D-5	-	FOET-16	-	-	SSBN-734	ETR	LPS	-	-	1000?	-	-
1996-566	2450385.31	1996 Oct 28 19:30:37	Trident D-5	-	FOET-16	-	-	SSBN-734	ETR	LPS	-	-	1000?	-	-
1997-526	2450525.44	1997 Mar 17 22:28:28	Trident D-5	-	FOET-17	-	-	SSBN-736	ETR	LPS	-	-	1000?	-	-
1997-527	2450525.51	1997 Mar 18 00:16	Trident D-5	-	FOET-17	-	-	SSBN-736	ETR	LPS	-	-	1000?	-	-
1997-543	2450599.44	1997 May 30 22:30:04	Trident D-5	-	DASD-15	-	-	SSBN-742	ETR	D4	-	-	1000?	-	-
1997-567	2450732.34	1997 Oct 10 20:05:03	Trident D-5	-	DASD-5	-	-	UK-530	ETR	LPS	-	-	1000?	-	-
1997-568	2450731.50	1997 Dec 19	Trident D-5	-	DASD-6	-	-	UK-530	ETR	LPS	-	-	1000?	-	-
1997-578	2450800.50	1997 Dec 19	Trident D-5	-	DASD-16	-	-	SSBN-743	ETR	SLDM	-	-	1000?	-	-
1998-525	2450880.49	1998 Mar 7 23:42:31	Trident D-5	-	FOET-18	-	-	SSBN-736	ETR	LPS	-	-	1000?	-	-
1998-526	2450880.49	1998 Mar 7 23:42:47	Trident D-5	-	FOET-18	-	-	SSBN-736	ETR	LPS	-	-	1000?	-	-
1998-528	2450883.46	1998 Mar 10 23:33:10	Trident D-5	-	FOET-19	-	-	SSBN-736	ETR	LPS	-	-	1000?	-	-
1998-529	2450883.46	1998 Mar 11 01:16:58	Trident D-5	-	FOET-19	-	-	SSBN-736	ETR	LPS	-	-	1000?	-	-
1999-506	2451219.34	1999 Feb 9 20:10:15	Trident D-5	-	FOET-20	-	-	SSBN-740	ETR	LPS	-	-	1000?	-	-
1999-507	2451219.34	1999 Feb 9 20:10:31	Trident D-5	-	FOET-20	-	-	SSBN-740	ETR	LPS	-	-	1000?	-	-
1999-527	2451285.32	1999 Apr 26 19:47:47	Trident D-5	-	FOET-21	-	-	SSBN-738	ETR	LPS	-	-	1000?	-	-
1999-528	2451285.32	1999 Apr 26 19:47:47	Trident D-5	-	FOET-21	-	-	SSBN-738	ETR	LPS	-	-	1000?	-	-
1999-572	2451483.35	1999 Nov 10 20:23:56	Trident D-5	-	FOET-22	-	-	SSBN-737	ETR	LPS	-	-	1000?	-	-
1999-573	2451483.41	1999 Nov 10 21:50	Trident D-5	-	FOET-22	-	-	SSBN-737	ETR	LPS	-	-	1000?	-	-
2000-520	2451665.32	2000 Apr 30 19:40:32	Trident D-5	-	FOET-23	-	-	SSBN-742	ETR	LPS	-	-	1000?	-	-
2000-521	2451665.32	2000 Apr 30 19:40:32	Trident D-5	-	FOET-23	-	-	SSBN-742	ETR	LPS	-	-	1000?	-	-
2000-552	2451609.37	2000 Sep 21 20:50	Trident D-5	-	DASD-7	-	-	UK-531	ETR	SLDM	-	-	1000?	-	-
2001-521	2452043.50	2001 May 14	Trident D-5	-	FOET-24	-	-	SSBN-737	ETR	SLDM	-	-	1000?	-	-
2001-528	2452086.47	2001 Jun 25 23:16	Trident D-5	-	FOET-25	-	-	SSBN-743	ETR	LPS	-	-	1000?	-	-
2001-529	2452086.47	2001 Jun 25 23:16	Trident D-5	-	FOET-25	-	-	SSBN-743	ETR	LPS	-	-	1000?	-	-
2001-530	2452086.65	2001 Jun 26 01:13	Trident D-5	-	FOET-25	-	-	SSBN-743	ETR	LPS	-	-	1000?	-	-
2002-517	2452350.41	2002 Mar 16 21:50	Trident D-5	-	DASD-17	-	-	SSBN-732	ETR	D4	-	-	1000?	-	-
2002-525	2452389.35	2002 Apr 24 20:23	Trident D-5	-	FOET-26	-	-	SSBN-743	ETR	LPS	-	-	1000?	-	-
2002-526	2452389.35	2002 Apr 24 20:23	Trident D-5	-	FOET-26	-	-	SSBN-743	ETR	LPS	-	-	1000?	-	-
2002-527	2452389.50	2002 Apr 25	Trident D-5	-	FOET-27	-	-	SSBN-743	ETR	LPS	-	-	1000?	-	-
2002-528	2452389.50	2002 Apr 25	Trident D-5	-	FOET-27	-	-	SSBN-743	ETR	LPS	-	-	1000?	-	-
2002-568	2452970.40	2002 Oct 22 21:31	Trident D-5	-	FOET-28	-	-	SSBN-742	ETR	LPS	-	-	1000?	-	-
2002-577	2452620.33	2002 Dec 11 19:50	Trident D-5	-	DASD-16	-	-	SSBN-733	ETR	LPS	-	-	1000?	-	-
2003-518	2452753.28	2003 Apr 23 18:41	Trident D-5	-	FOET-29	-	-	SSBN-741	ETR	LPS	-	-	1000?	-	-
2003-519	2452753.28	2003 Apr 23 20:43	Trident D-5	-	FOET-29	-	-	SSBN-741	ETR	LPS	-	-	1000?	-	-
2003-544	2452949.36	2003 Nov 5 21:10:02	Trident D-5	-	FOET-30	-	-	SSBN-738	ETR	LPS	-	-	1000?	-	-
2003-545	2452949.47	2003 Nov 5 23:22:45	Trident D-5	-	FOET-30	-	-	SSBN-738	ETR	LPS	-	-	1000?	-	-
2004-509	2453061.52	2004 Feb 26 03:31:20	Trident D-5	-	FOET-31	-	-	SSBN-739	ETR	LPS	-	-	1000?	-	-
2004-510	2453061.52	2004 Feb 26 03:31:20	Trident D-5	-	FOET-31	-	-	SSBN-739	ETR	LPS	-	-	1000?	-	-
2004-576	2453433.60	2004 Nov 4	Trident D-5	-	FOET-32	-	-	SSBN-733	WTR	LPS	-	-	1000?	-	-
2005-510	2453431.91	2005 Mar 2 04:00:13	Trident D-5	-	FOET-32	-	-	SSBN-734	ETR	LPS	-	-	1000?	-	2200
2005-511	2453431.91	2005 Mar 2 05:09:16	Trident D-5	-	FOET-32	-	-	SSBN-734	ETR	LPS	-	-	1000?	-	2200
2005-544	2453674.38	2005 Oct 10 21:10:08	Trident D-5	-	FOET-33	-	-	UK-529	ETR	LPS	-	-	1000?	-	-
2005-561	2453674.38	2005 Oct 10 21:10:08	Trident D-5	-	FOET-33	-	-	UK-529	ETR	LPS	-	-	1000?	-	-
2005-562	2453714.09	2005 Dec 9 19:02:42	Trident D-5	-	DASD-8	-	-	SSBN-UNK	ETR?	LPS	-	-	1000?	-	-
2005-572	2453944.50	2006 May 9	Trident D-5	-	FOET-34	-	-	SSBN-742	ETR	LPS	-	-	1000?	-	-
2005-573	2453944.50	2006 May 9	Trident D-5	-	FOET-35	-	-	SSBN-732	WTR	LPS	-	-	1000?	-	KHR
2005-574	2453944.50	2006 May 9	Trident D-5	-	FOET-35	-	-	SSBN-732	WTR	LPS	-	-	1000?	-	KHR
2006-571	2454050.50	2006 Nov 9	Trident D-5	-	FOET-36	-	-	SSBN-736	ETR	SLDM	-	-	1000?	-	-
2006-572	2454050.50	2006 Nov 9	Trident D-5	-	FOET-36	-	-	SSBN-736	ETR	SLDM	-	-	1000?	-	-
2006-573	2454050.50	2006 Nov 9	Trident D-5	-	FOET-36	-	-	SSBN-736	ETR	SLDM	-	-	1000?	-	-
2007-528	2454235.50	2007 May 15	Trident D-5	-	FOET-37	-	-	SSBN-738	ETR	SLDM	-	-	1000?	-	-
2007-529	2454235.50	2007 May 15	Trident D-5	-	FOET-37	-	-	SSBN-738	ETR	SLDM	-	-	1000?	-	-
2007-572	2454433.50	2007 May 15	Trident D-5	-	FOET-37	-	-	SSBN-734	ETR	SLDM	-	-	1000?	-	-
2007-573	2454433.50	2007 May 15	Trident D-5	-	FOET-37	-	-	SSBN-734	ETR	SLDM	-	-	1000?	-	-
2008-521	2454594.50	2008 May 9	Trident D-5	-	DASD-19	-	-	SSBN-739	WTR	LPS	-	-	1000?	-	-
2008-522	2454594.50	2008 May 9	Trident D-5	-	FOET-38	-	-	SSBN-739	WTR	LPS	-	-	1000?	-	-
2008-540	2454703.50	2008 Aug 25	Trident D-5	-	FOET-39	-	-	SSBN-743	WTR	LPS	-	-	1000?	-	-
2008-541	2454703.50	2008 Aug 25	Trident D-5	-	FOET-39	-	-	SSBN-743	WTR	LPS	-	-	1000?	-	-
2008-575	2454800.50	2009 Feb 13	Trident D-5	-	FOET-40	-	-	SSBN-UNK	WTR	LPS	-	-	1000?	-	-
2009-510	2454875.50	2009 Feb 13	Trident D-5	-	DASD-20	-	-	SSBN-UNK	WTR	LPS	-	-	1000?	-	-
2009-536	2454977.50	2009 May 26	Trident D-5	-	DASD-9	-	-	UK-529	ETR	LPS	-	-	1000?	-	-
2009-582	2455078.50	2009 Sep 3	Trident D-5	-	FOET-41	-	-	SSBN-736	ETR	SLDM	-	-	1000?	-	-
2009-583	2455184.50	2009 Sep 4	Trident D-5	-	FOET-41	-	-	SSBN-736	ETR	SLDM	-	-	1000?	-	-
2009-589	2455355.50	2009 Dec 19	Trident D-5	-	DASD-21	-	-	SSBN-732	ETR	SLDM	-	-	1000?	-	-
2010-538	2455355.50	2010 Jun 8	Trident D-5	-	FOET-42	-	-	SSBN-738	ETR	SLDM	-	-	1000?	-	-
2010-539	2455355.50	2010 Jun 8	Trident D-5	-	FOET-42	-	-	SSBN-738	ETR	SLDM	-	-	1000?	-	-
2010-540	2455356.50	2010 Jun 9	Trident D-5	-	FOET-43	-	-	SSBN-738	ETR	SLDM	-	-	1000?	-	-
2010-541	2455356.50	2010 Jun 9	Trident D-5	-	FOET-43	-	-	SSBN-738	ETR	SLDM	-	-	1000?	-	-
2011-507	2455622.38	2011 Mar 1 21:00	Trident D-5	-	DASD-22	-	-	SSBN-733	WTR	LPS	-	-	1000?	-	WAKE
2011-540	2455561.50	2011 Mar 1 21:00	Trident D-5	-	FOET-44	-	-	SSBN-UNK	WTR	LPS	-	-	1000?	-	-
2012-508	2455979.50	2012 Feb 22	Trident D-5	-	DASD-23	-	-	SSBN-734	ETR	SLDM	-	-	1000?	-	-
2012-523	2455986.50	2012 Mar 2	Trident D-5	-	FOET-45	-	-	SSBN-UNK	WTR?	LPS	-	-	1000?	-	-
2012-524	2456031.50	2012 Apr 14	Trident D-5	-	FOET-46	-	-	SSBN-738	ETR	SLDM	-	-	1000?	-	-
2012-525	2456031.50	2012 Apr 14	Trident D-5	-	FOET-46	-	-	SSBN-738	ETR	SLDM	-	-	1000?	-	-
2012-526	2456033.50	2012 Apr 16	Trident D-5	-	FOET-47	-	-	SSBN-738	ETR	SLDM	-	-	1000?	-	-
2012-527	2456033.50	2012 Apr 16	Trident D-5	-	FOET-47	-	-	SSBN-738	ETR	SLDM	-	-	1000?	-	-
2012-575	2456223.50	2012 Oct 23	Trident D-5	-	DASD-10	-	-	UK-530	ETR	SLDM	-	-	1000?	-	-
2013-580	2456392.50	2013 Apr 7	Trident D-5	-	DASD-24	-	-	SSBN-735?	WTR?	LPS	-	-	1000?	-	-
2013-581	2456546.38	2013 Sep 10 21:10?	Trident D-5	-	FOET-48	-	-	SSBN-734	ETR	SLDM	-	-	1800?	-	AORS1
2013-582	2456546.38	2013 Sep 10 21:10?	Trident D-5	-	FOET-48	-	-	SSBN-734	ETR	SLDM	-	-	1800?	-	AORS1
2013-583	2456547.50	2013 Sep 12	Trident D-5	-	FOET-49	-	-	SSBN-734	ETR	SLDM	-	-	1000?	-	-
2013-584	2456547.50	2013 Sep 12	Trident D-5	-	FOET-49	-	-	SSBN-734	ETR	SLDM	-	-	1000?	-	-
2014-529	2456810.50	2014 Jun 2	Trident D-5	-	DASD-25 DSLE	-	-	SSBN-736	ETR	SLDM	-	-	1000?	-	AORS1
2014-530	2456810.50	2014 Jun 2	Trident D-5	-	DASD-25 DSLE	-									

Launch

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Mission	FlightCode	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee km	Range km	Dest
2014-S53	2456913.04	2014 Sep 12 1300	Trident D-5	-	FOET-50	- (151s)	-	-	SSBN-743	WTR	SCL LP2	-	-	1000?	-	-
2014-S54	2456913.04	2014 Sep 12 1300	Trident D-5	-	FOET-50	- (152s)	-	-	SSBN-743	WTR	SCL LP2	-	-	1000?	-	-
2014-S55	2456913.04	2014 Sep 12 1300	Trident D-5	-	FOET-50	- (153s)	-	-	SSBN-743	WTR	SCL LP2?	-	-	1000?	-	-
2015-S13	2457075.50	2015 Feb 22	Trident D-5	-	FOET-51	- (154s)	-	-	SSBN-735	WTR	SCL LP2?	-	-	1000?	-	-
2015-S14	2457075.50	2015 Feb 22	Trident D-5	-	FOET-51	- (155s)	-	-	SSBN-735	WTR	SCL LP2?	-	-	1000?	-	-
2015-S57	2457334.58	2015 Nov 8 0200	Trident D-5	-	DASD-26	- (156s)	-	-	SSBN-737	WTR	SCL LP2	-	-	1000?	-	RHR?
2015-S58	2457336.33	2015 Nov 9 2000?	Trident D-5	-	DASD-26	- (157s)	-	-	SSBN-737	WTR	SCL LP2	-	-	1000?	-	RHR?
2016-S20	2457461.50	2016 Mar 14	Trident D-5	-	FOET-52	- (158s)	-	-	SSBN-UNK	ETR	SLEBH	-	-	1000?	-	AURS1
2016-S21	2457462.50	2016 Mar 15	Trident D-5	-	FOET-52	- (159s)	-	-	SSBN-UNK	ETR	SLEBH	-	-	1000?	-	AURS1
2016-S22	2457463.50	2016 Mar 16	Trident D-5	-	FOET-52	- (160s)	-	-	SSBN-UNK	ETR	SLEBH	-	-	1000?	-	AURS1
2016-S23	2457559.50	2016 Jun 20	Trident D-5	-	DASD-11?	-	-	-	UK-531	ETR	SLEBH	-	-	10?	-	-
2016-S24	2457631.50	2016 Aug 31	Trident D-5	-	DASD-27	- (161s)	-	-	SSBN-738	ETR	SLEBH	-	-	1000?	-	-
2017-S11	2457798.98	2017 Feb 14 1130	Trident D-5	-	FOET-53	- (162s)	-	-	SSBN-737	WTR	LP14	-	-	1000?	-	WAKE
2017-S12	2457799.10	2017 Feb 14 1420	Trident D-5	-	FOET-53	- (163s)	-	-	SSBN-737	WTR	LP14	-	-	1000?	-	WAKE
2017-S13	2457799.50	2017 Feb 15?	Trident D-5	-	FOET-53	- (164s)	-	-	SSBN-737	WTR	LP14	-	-	1000?	-	WAKE
2017-S14	2457800.50	2017 Feb 16?	Trident D-5	-	FOET-53	- (165s)	-	-	SSBN-737	WTR	LP14	-	-	1000?	-	WAKE
2018-S17	2458204.61	2018 Mar 27 0240?	Trident D-5	-	DASD-28	- (167s)	-	-	SSBN-739	WTR	SCL LP2?	-	-	1000?	-	GUAM E BDA
2018-S18	2458204.61	2018 Mar 27 0240?	Trident D-5	-	DASD-28	- (168s)	-	-	SSBN-739	WTR	SCL LP2?	-	-	1000?	-	GUAM E BDA
2018-S19	2458118.50	2018?	Trident D-5	-	FOET-54	- (168s)	-	-	SSBN-UNK	WTR	LP5	-	-	1000?	-	-
2018-S20	2458118.50	2018?	Trident D-5	-	FOET-54	- (169s)	-	-	SSBN-UNK	WTR	LP5	-	-	1000?	-	-
2018-S21	2458118.50	2018?	Trident D-5	-	FOET-54	- (170s)	-	-	SSBN-UNK	WTR	LP5	-	-	1000?	-	-
2018-S22	2458912.50	2018?	Trident D-5	-	FOET-54	- (171s)	-	-	SSBN-UNK	WTR	LP5	-	-	1000?	-	-
2019-S22	2458912.50	2019 May 9	Trident D-5	-	DASD-29	- (172s)	-	-	SSBN-740	ETR	SLEBH	-	-	1000?	9600?	AURS3
2019-S52	2458730.50	2019 Sep 4	Trident D-5	-	CEI	- (174s)	-	-	SSBN-739	WTR	LP5	-	-	1000?	-	GUAM
2019-S53	2458730.50	2019 Sep 4	Trident D-5	-	CEI	- (175s)	-	-	SSBN-739	WTR	LP5	-	-	1000?	-	GUAM
2019-S54	2458732.50	2019 Sep 6	Trident D-5	-	CEI	- (176s)	-	-	SSBN-739	WTR	LP5	-	-	1000?	-	GUAM
2019-S55	2458732.50	2019 Sep 6	Trident D-5	-	CEI	- (177s)	-	-	SSBN-739	WTR	LP5	-	-	1000?	-	GUAM
2020-S14	2458691.50	2020 Feb 12	Trident D-5	-	DASD-30 DSLE	- (178s)	-	-	SSBN-741	WTR	LP5	-	-	1000?	9600?	WAKE?
2021-S16	2458255.46	2021 Feb 16	Trident D-5	-	DASD-30 DSLE	- (178s)	-	-	SSBN-741	WTR	LP5	-	-	1000?	9600?	WAKE?
2021-S53	2458255.50	2021 Feb 9 2330	Trident D-5	-	CEI	- (180s)	-	-	SSBN-736	ETR	LP6	-	-	1000?	8400?	AURS4
2021-S54	2458255.50	2021 Feb 10	Trident D-5	-	CEI	- (181s)	-	-	SSBN-736	ETR	LP6	-	-	1000?	8400?	AURS4
2021-S55	2458256.50	2021 Feb 11	Trident D-5	-	CEI	- (182s)	-	-	SSBN-736	ETR	LP6	-	-	1000?	8400?	AURS4
2021-S56	2458256.50	2021 Feb 11	Trident D-5	-	CEI	- (183s)	-	-	SSBN-736	ETR	LP6	-	-	1000?	8400?	AURS4
2021-S57	2458944.50	2021 Sep 17	Trident D-5	-	DASD-31 DSLE	- (184s)	-	-	SSBN-742	ETR	SLEBH	-	-	1000?	8400?	AURS4
2022-S50	2458746.50	2022 Jun 15	Trident D-5	-	DASD-31 DSLE	- (184s)	-	-	SSBN-742	ETR	SLEBH	-	-	1000?	8400?	AURS4
2022-S51	2458746.50	2022 Jun 15	Trident D-5	-	CEI?	- (185s)	-	-	SSBN-737	WTR	LP14	-	-	1000?	-	GUAM
2022-S52	2458747.50	2022 Jun 15	Trident D-5	-	CEI?	- (185s)	-	-	SSBN-737	WTR	LP14	-	-	1000?	-	GUAM
2022-S53	2458747.50	2022 Jun 17	Trident D-5	-	CEI?	- (187s)	-	-	SSBN-737	WTR	LP14	-	-	1000?	-	GUAM
2022-S54	2458747.50	2022 Jun 17	Trident D-5	-	CEI?	- (188s)	-	-	SSBN-737	WTR	LP14	-	-	1000?	-	GUAM
2023-S29	2460110.50	2023 Jun 15?	Trident D-5	-	FOET	- (188s)	-	-	SSBN-736	ETR	LP6	-	-	1000?	10600?	AURS5
2023-S30	2460110.50	2023 Jun 15?	Trident D-5	-	FOET	- (189s)	-	-	SSBN-736	ETR	LP6	-	-	1000?	10600?	AURS5
2023-S40	2460115.38	2023 Sep 27 2110	Trident D-5	-	UK-528	- (194s)	-	-	SSBN-743	WTR	LP13	-	-	1000?	-	GUAM?
2024-S41	2460339.50	2024 Jan 30	Trident D-5	-	UK-528	- (191s)	-	-	UK-528	ETR	LP7	-	-	1?	-	-







Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	OrbPay	Agency	Launch_Code	Group	Category	LTCite	Cite	Notes
1995-885	2450059.37	1995 Dec 7 2047:00	Tri.dent D-5	-	DASD-14	0.000	USNSSP	MS	-	OT	nsf-koenn	Cleary96	-
1996-317	2450195.40	1996 Apr 21 2136:03	Tri.dent D-5	-	FCET-14	0.000	USNSSP	MS	-	OT	nsf-koenn	Cleary96	-
1996-318	2450196.40	1996 Apr 21 2136:23	Tri.dent D-5	-	FCET-14	0.000	USNSSP	MS	-	OT	nsf-koenn	Cleary96	-
1996-344	2450284.33	1996 Jul 19 2001:01	Tri.dent D-5	-	FCET-15	0.000	USNSSP	MS	-	OT	nsf-koenn	Cleary96	-
1996-345	2450284.33	1996 Jul 19 2001:17	Tri.dent D-5	-	FCET-15	0.000	USNSSP	MS	-	OT	nsf-koenn	Cleary96	-
1996-365	2450385.31	1996 Oct 28 1930:20	Tri.dent D-5	-	FCET-16	0.000	USNSSP	MS	-	OT	nsf-koenn	Cleary96	-
1996-366	2450385.31	1996 Oct 28 1930:37	Tri.dent D-5	-	FCET-16	0.000	USNSSP	MS	-	OT	nsf-koenn	Cleary96	-
1997-326	2450525.44	1997 Mar 17 2226:28	Tri.dent D-5	-	FCET-17	0.000	USNSSP	MS	-	OT	nsf-koenn	Cleary96	-
1997-327	2450525.44	1997 Mar 18 0016	Tri.dent D-5	-	FCET-17	0.000	USNSSP	MS	-	OT	nsf-koenn	Cleary96	-
1997-363	2450599.44	1997 May 30 2230:04	Tri.dent D-5	-	DASD-15	0.000	USNSSP	MS	-	OT	nsf-koenn	www.spaceLine.org	EGlobes970412
1997-367	2450732.34	1997 Oct 10 2005:03	Tri.dent D-5	-	DASD-15	0.000	RI	MS	-	OT	nsf-koenn	www.spaceLine.org	-
1997-368	2450731.50	1997 Oct 10	Tri.dent D-5	-	DASD-16	0.000	RI	MS	-	OT	www.spaceLine.org	-	-
1997-378	2450800.50	1997 Dec 18	Tri.dent D-5	-	DASD-16	0.000	USNSSP	MS	-	OT	www.spaceLine.org	Cleary02	-
1998-325	2450880.49	1998 Mar 7 2342:31	Tri.dent D-5	-	FCET-18	0.000	USNSSP	MS	-	OT	nsf-koenn	Cleary02	-
1998-326	2450880.49	1998 Mar 7 2342:47	Tri.dent D-5	-	FCET-18	0.000	USNSSP	MS	-	OT	nsf-koenn	Cleary02	-
1998-328	2450883.46	1998 Mar 10 2333:10	Tri.dent D-5	-	FCET-19	0.000	USNSSP	MS	-	OT	nsf-koenn	Wire	-
1998-329	2450883.46	1998 Mar 11 0115:58	Tri.dent D-5	-	FCET-19	0.000	USNSSP	MS	-	OT	nsf-koenn	Cleary02	-
1999-307	2451219.34	1999 Feb 9 2010:00	Tri.dent D-5	-	FCET-20	0.000	USNSSP	MS	-	OT	nsf-koenn	Cleary02	-
1999-308	2451219.34	1999 Feb 9 2010:15	Tri.dent D-5	-	FCET-20	0.000	USNSSP	MS	-	OT	nsf-koenn	Cleary02	-
1999-327	2451285.32	1999 Apr 26 1947:31	Tri.dent D-5	-	FCET-21	0.000	USNSSP	MS	-	OT	nsf-koenn	Cleary02	-
1999-328	2451285.32	1999 Apr 26 1947:47	Tri.dent D-5	-	FCET-21	0.000	USNSSP	MS	-	OT	nsf-koenn	Cleary02	-
1999-372	2451493.35	1999 Nov 10 2023:56	Tri.dent D-5	-	FCET-22	0.000	USNSSP	MS	-	OT	nsf-koenn	Cleary02	-
1999-373	2451493.41	1999 Nov 10 2160	Tri.dent D-5	-	FCET-22	0.000	USNSSP	MS	-	OT	nsf-koenn	Cleary02	-
2000-320	2451665.32	2000 Apr 30 1940:32	Tri.dent D-5	-	FCET-23	0.000	USNSSP	MS	-	OT	LMSC	nsf-koenn	-
2000-321	2451664.50	2000 Apr 30	Tri.dent D-5	-	FCET-23	0.000	USNSSP	MS	-	OT	LMSC	nsf-koenn	-
2000-352	2451609.37	2000 Sep 21 2050	Tri.dent D-5	-	DASD-7	0.000	RI	MS	-	OT	Wire	nsf-koenn (21502)	-
2001-321	2452043.50	2001 May 14	Tri.dent D-5	-	FCET-24	0.000	USNSSP	MS	-	OT	LMSC	nsf-koenn	-
2001-328	2452086.47	2001 Jun 25 2316	Tri.dent D-5	-	FCET-25	0.000	USNSSP	MS	-	OT	nsf-koenn	www.orbireport.com	-
2001-329	2452086.47	2001 Jun 25 2316	Tri.dent D-5	-	FCET-25	0.000	USNSSP	MS	-	OT	nsf-koenn	www.orbireport.com	-
2001-350	2452086.85	2001 Jun 26 0113	Tri.dent D-5	-	FCET-25	0.000	USNSSP	MS	-	OT	nsf-koenn	www.orbireport.com	-
2002-317	2452380.41	2002 Mar 16 2150	Tri.dent D-5	-	DASD-17	0.000	USNSSP	MS	-	OT	Ulrich	Ulrich	AMST020401-15
2002-325	2452389.35	2002 Apr 24 2023	Tri.dent D-5	-	FCET-26	0.000	USNSSP	MS	-	OT	nsf-koenn	Cleary02	-
2002-326	2452388.50	2002 Apr 24	Tri.dent D-5	-	FCET-26	0.000	USNSSP	MS	-	OT	nsf-koenn	Cleary02	-
2002-327	2452389.50	2002 Apr 25	Tri.dent D-5	-	FCET-27	0.000	USNSSP	MS	-	OT	nsf-koenn	Cleary02	-
2002-358	2452570.40	2002 Oct 22 2131	Tri.dent D-5	-	FCET-28	0.000	USNSSP	MS	-	OT	nsf-koenn	Cleary02	-
2003-377	2452620.38	2003 Dec 11 1950	Tri.dent D-5	-	DASD-18	0.000	USNSSP	MS	-	OT	nsf-koenn	Cleary02	-
2003-318	2452793.28	2003 Apr 23 1841	Tri.dent D-5	-	FCET-29	0.000	USNSSP	MS	-	OT	nsf-koenn	www.floridatoday.com	-
2003-319	2452793.28	2003 Apr 23 2043	Tri.dent D-5	-	FCET-29	0.000	USNSSP	MS	-	OT	nsf-koenn	www.floridatoday.com	-
2003-344	2452949.38	2003 Nov 5 2110:02	Tri.dent D-5	-	FCET-30	0.000	USNSSP	MS	-	OT	nsf-koenn	www.floridatoday.com	-
2003-365	2452949.47	2003 Nov 5 2322:45	Tri.dent D-5	-	FCET-30	0.000	USNSSP	MS	-	OT	nsf-koenn	www.floridatoday.com	-
2004-309	2453061.52	2004 Feb 26 0031:20	Tri.dent D-5	-	FCET-31	0.000	USNSSP	MS	-	OT	nsf-koenn	www.floridatoday.com	-
2004-310	2453061.52	2004 Feb 26 0135:51	Tri.dent D-5	-	FCET-31	0.000	USNSSP	MS	-	OT	nsf-koenn	www.floridatoday.com	-
2004-377	2453313.50	2004 Nov 4	Tri.dent D-5	-	FCET-32	0.000	USNSSP	MS	-	OT	sep.navy.mil	NewHorizons6,1	-
2005-310	2453431.71	2005 Mar 5 0400:13	Tri.dent D-5	-	FCET-32	0.000	USNSSP	MS	-	OT	sep.navy.mil	NewHorizons6,1	-
2005-311	2453431.71	2005 Mar 5 0509:16	Tri.dent D-5	-	FCET-33	0.000	USNSSP	MS	-	OT	nsf-koenn	NewHorizons6,1	-
2005-344	2453664.38	2005 Oct 10 2110:08	Tri.dent D-5	-	FCET-33	0.000	USNSSP	MS	-	OT	nsf-koenn	www.floridatoday.com	-
2005-354	2453937.50	2005 Mar 9	Tri.dent D-5	-	DASD-6	0.000	USNSSP	MS	-	OT	nsf-koenn	www.floridatoday.com	-
2005-352	2453710.29	2005 Dec 9 1902:42	Tri.dent D-5	-	FCET-34	0.000	USNSSP	MS	-	OT	Status	www.nh.us	-
2006-362	2453664.50	2006 May 9	Tri.dent D-5	-	FCET-35	0.000	USNSSP	MS	-	OT	STPR/ULrich	www.nh.us	-
2006-371	2453664.50	2006 May 9	Tri.dent D-5	-	FCET-35	0.000	USNSSP	MS	-	OT	STPR/ULrich	www.nh.us	-
2006-372	2453664.50	2006 May 9	Tri.dent D-5	-	FCET-36	0.000	USNSSP	MS	-	OT	STPR/ULrich	www.nh.us	-
2006-373	2453664.50	2006 May 9	Tri.dent D-5	-	FCET-36	0.000	USNSSP	MS	-	OT	STPR/ULrich	www.nh.us	-
2006-374	2453664.50	2006 May 9	Tri.dent D-5	-	FCET-37	0.000	USNSSP	MS	-	OT	Patrick.af.mil	www.nh.us	-
2007-328	2453235.50	2007 May 15	Tri.dent D-5	-	FCET-37	0.000	USNSSP	MS	-	OT	Patrick.af.mil	www.nh.us	-
2007-329	2453235.50	2007 May 15	Tri.dent D-5	-	FCET-37	0.000	USNSSP	MS	-	OT	Patrick.af.mil	www.nh.us	-
2007-359	2454333.50	2007 May 29	Tri.dent D-5	-	FCET-38	0.000	USNSSP	MS	-	OT	Patrick.af.mil	www.nh.us	-
2008-321	2454594.50	2008 May 9	Tri.dent D-5	-	DASD-19	0.000	USNSSP	MS	-	OT	Patrick.af.mil	www.nh.us	-
2008-323	2454594.50	2008 May 9	Tri.dent D-5	-	FCET-38	0.000	USNSSP	MS	-	OT	Patrick.af.mil	www.nh.us	-
2008-340	2454703.50	2008 Aug 25	Tri.dent D-5	-	FCET-39	0.000	USNSSP	MS	-	OT	Patrick.af.mil	www.nh.us	-
2008-341	2454703.50	2008 Aug 25	Tri.dent D-5	-	FCET-39	0.000	USNSSP	MS	-	OT	Patrick.af.mil	www.nh.us	-
2008-375	2454800.50	2008 Dec 9	Tri.dent D-5	-	FCET-40	0.000	USNSSP	MS	-	OT	Patrick.af.mil	www.nh.us	-
2009-310	2454875.50	2009 Feb 13	Tri.dent D-5	-	DASD-20	0.000	USNSSP	MS	-	OT	Patrick.af.mil	www.nh.us	-
2009-326	2454977.50	2009 May 26	Tri.dent D-5	-	FCET-38	0.000	USNSSP	MS	-	OT	Patrick.af.mil	www.nh.us	-
2009-352	2455077.50	2009 Sep 3	Tri.dent D-5	-	FCET-41	0.000	USNSSP	MS	-	OT	Patrick.af.mil	www.nh.us	-
2009-353	2455078.50	2009 Sep 4	Tri.dent D-5	-	FCET-41	0.000	USNSSP	MS	-	OT	Patrick.af.mil	www.nh.us	-
2009-309	2455184.50	2009 Dec 19	Tri.dent D-5	-	DASD-21	0.000	USNSSP	MS	-	OT	Patrick.af.mil	www.nh.us	-
2010-338	2455355.50	2010 Jun 8	Tri.dent D-5	-	FCET-42	0.000	USNSSP	MS	-	OT	Patrick.af.mil	www.nh.us	-
2010-339	2455355.50	2010 Jun 8	Tri.dent D-5	-	FCET-42	0.000	USNSSP	MS	-	OT	Patrick.af.mil	www.nh.us	-
2010-340	2455356.50	2010 Jun 9	Tri.dent D-5	-	FCET-43	0.000	USNSSP	MS	-	OT	Patrick.af.mil	www.nh.us	-
2010-341	2455356.50	2010 Jun 9	Tri.dent D-5	-	FCET-43	0.000	USNSSP	MS	-	OT	Patrick.af.mil	www.nh.us	-
2011-307	2455622.38	2011 Mar 1 2100	Tri.dent D-5	-	DASD-22	0.000	USNSSP	MS	-	OT	Patrick.af.mil	www.nh.us	-
2011-440	2455561.50	2011 Feb 22	Tri.dent D-5	-	FCET-44	0.000	USNSSP	MS	-	OT	facebook.com	www.nh.us	-
2012-308	2455979.50	2012 Mar 22	Tri.dent D-5	-	DASD-23	0.000	USNSSP	MS	-	OT	facebook.com	www.nh.us	-
2012-323	2455986.50	2012 Mar 22	Tri.dent D-5	-	DASD-23	0.000	USNSSP	MS	-	OT	facebook.com	www.nh.us	-
2012-324	2456031.50	2012 Apr 14	Tri.dent D-5	-	FCET-45	0.000	USNSSP	MS	-	OT	facebook.com	www.nh.us	-
2012-325	2456031.50	2012 Apr 14	Tri.dent D-5	-	FCET-45	0.000	USNSSP	MS	-	OT	facebook.com	www.nh.us	-
2012-326	2456033.50	2012 Apr 16	Tri.dent D-5	-	FCET-46	0.000	USNSSP	MS	-	OT	facebook.com	www.nh.us	-
2012-327	2456033.50	2012 Apr 16	Tri.dent D-5	-	FCET-47	0.000	USNSSP	MS	-	OT	facebook.com	www.nh.us	-
2012-328	2456223.50	2012 Oct 23	Tri.dent D-5	-	FCET-47	0.000	USNSSP	MS	-	OT	facebook.com	www.nh.us	-
2013-360	2456382.50	2013 Apr 23	Tri.dent D-5	-	DASD-24	0.000	USNSSP	MS	-	OT	facebook.com	www.nh.us	-
2013-381	2456546.38	2013 Sep 10 21107	Tri.dent D-5	-	FCET-48	0.000	USNSSP	MS	-	OT	facebook.com	www.nh.us	-
2013-382	2456546.38	2013 Sep 10 21107	Tri.dent D-5	-	FCET-48	0.000	USNSSP	MS	-	OT	facebook.com	www.nh.us	-
2013-383	2456547.50	2013 Sep 12	Tri.dent D-5	-	FCET-49	0.000	USNSSP	MS	-	OT	facebook.com	www.nh.us	-
2013-384	2456547.50	2013 Sep 12	Tri.dent D-5	-	FCET-49	0.000	USNSSP	MS	-	OT	facebook.com	www.nh.us	-
2014-329	2456810.50	2014 Jun 2	Tri.dent D-5	-	DASD-25 DSLE	0.000	USNSSP	MS	-	OT	facebook.com	www.nh.us	-
2014-330	2456810.50	2014 Jun 2	Tri.dent D-5	-	DASD-25 DSLE	0.000	USNSSP	MS	-	OT	facebook.com	www.nh.us	-

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	OrbPay	Agency	Launch_Code	Group	Category	LTCite	Cite	Notes
2014-853	2456913.04	2014 Sep 12 1300	Trident D-5	-	FCET-50	0.000	USMSSP	MS	-	OT	Wire	-	-
2014-854	2456913.04	2014 Sep 12 1300	Trident D-5	-	FCET-50	0.000	USMSSP	MS	-	OT	Wire	-	-
2014-855	2456913.04	2014 Sep 12 1300	Trident D-5	-	FCET-50	0.000	USMSSP	MS	-	OT	Wire	-	-
2015-813	2457075.50	2015 Feb 22	Trident D-5	-	FCET-51	0.000	USMSSP	MS	-	OT	Wire	-	-
2015-814	2457075.50	2015 Feb 22	Trident D-5	-	FCET-51	0.000	USMSSP	MS	-	OT	Wire	-	-
2015-869	2457334.58	2015 Nov 8 0200	Trident D-5	-	DASD-26	0.000	USMSSP	MS	-	OT	Wire	-	-
2015-870	2457336.33	2015 Nov 9 2000?	Trident D-5	-	DASD-26	0.000	USMSSP	MS	-	OT	Wire	-	-
2016-320	2457461.50	2016 Mar 14	Trident D-5	-	FCET-52	0.000	USMSSP	MS	-	OT	Wire	-	-
2016-321	2457462.50	2016 Mar 15	Trident D-5	-	FCET-52	0.000	USMSSP	MS	-	OT	Wire	-	-
2016-322	2457463.50	2016 Mar 16	Trident D-5	-	FCET-52	0.000	USMSSP	MS	-	OT	Wire	-	-
2016-450	2457559.50	2016 Jun 20	Trident D-5	-	DASD-11?	0.000	USMSSP	MF	-	OT	Wire	-	-
2016-450	2457559.50	2016 Jun 20	Trident D-5	-	DASD-27	0.000	USMSSP	MF	-	OT	Wire	-	-
2016-568	2457631.50	2016 Aug 31	Trident D-5	-	DASD-27	0.000	USMSSP	MF	-	OT	Wire	-	-
2017-311	2457798.98	2017 Feb 14 1130	Trident D-5	-	FCET-53	0.000	USMSSP	MS	-	OT	Wire	-	-
2017-312	2457799.10	2017 Feb 14 1420	Trident D-5	-	FCET-53	0.000	USMSSP	MS	-	OT	Wire	-	-
2017-313	2457799.60	2017 Feb 15?	Trident D-5	-	FCET-53	0.000	USMSSP	MS	-	OT	Wire	-	-
2017-314	2457800.50	2017 Feb 16?	Trident D-5	-	FCET-53	0.000	USMSSP	MS	-	OT	Wire	-	-
2018-316	2458204.61	2018 Mar 27 0240?	Trident D-5	-	DASD-28	0.000	USMSSP	MS	-	OT	Wire	-	-
2018-317	2458204.61	2018 Mar 27 0240?	Trident D-5	-	DASD-28	0.000	USMSSP	MS	-	OT	Wire	-	-
2018-389	2458118.50	2018?	Trident D-5	-	FCET-54	0.000	USMSSP	MS	-	OT	Wire	-	-
2018-389	2458118.50	2018?	Trident D-5	-	FCET-54	0.000	USMSSP	MS	-	OT	Wire	-	-
2018-390	2458118.50	2018?	Trident D-5	-	FCET-54	0.000	USMSSP	MS	-	OT	Wire	-	-
2018-391	2458118.50	2018?	Trident D-5	-	FCET-54	0.000	USMSSP	MS	-	OT	Wire	-	-
2018-392	2458118.50	2018?	Trident D-5	-	FCET-54	0.000	USMSSP	MS	-	OT	Wire	-	-
2019-322	2458612.50	2019 May 9	Trident D-5	-	DASD-29	0.000	USMSSP	MS	-	OT	Wire	-	-
2019-352	2458730.50	2019 Sep 4	Trident D-5	-	CEI	0.000	USMSSP	MS	-	OT	Wire	-	-
2019-353	2458730.50	2019 Sep 4	Trident D-5	-	CEI	0.000	USMSSP	MS	-	OT	Wire	-	-
2019-354	2458732.50	2019 Sep 6	Trident D-5	-	CEI	0.000	USMSSP	MS	-	OT	Wire	-	-
2019-355	2458732.50	2019 Sep 6	Trident D-5	-	CEI	0.000	USMSSP	MS	-	OT	Wire	-	-
2020-314	2458691.50	2020 Feb 12	Trident D-5	-	DASD-30 DELE	0.000	USMSSP	MS	-	OT	Wire	-	-
2020-316	2458695.50	2020 Feb 16	Trident D-5	-	DASD-30 DELE	0.000	USMSSP	MS	-	OT	Wire	-	-
2021-516	2458285.48	2021 Feb 9 2330	Trident D-5	-	CEI	0.000	USMSSP	MS	-	OT	Wire	-	-
2021-563	2458285.50	2021 Feb 10	Trident D-5	-	CEI	0.000	USMSSP	MS	-	OT	Wire	-	-
2021-564	2458286.50	2021 Feb 11	Trident D-5	-	CEI	0.000	USMSSP	MS	-	OT	Wire	-	-
2021-565	2458286.50	2021 Feb 11	Trident D-5	-	CEI	0.000	USMSSP	MS	-	OT	Wire	-	-
2021-566	2458474.50	2021 Sep 17	Trident D-5	-	DASD-31 DELE	0.000	USMSSP	MS	-	OT	Wire	-	-
2021-567	2458474.50	2021 Sep 17	Trident D-5	-	DASD-31 DELE	0.000	USMSSP	MS	-	OT	Wire	-	-
2022-350	2459745.50	2022 Jun 15	Trident D-5	-	CEI?	0.000	USMSSP	MS	-	OT	Wire	-	-
2022-351	2459745.50	2022 Jun 15	Trident D-5	-	CEI?	0.000	USMSSP	MS	-	OT	Wire	-	-
2022-352	2459747.50	2022 Jun 17	Trident D-5	-	CEI?	0.000	USMSSP	MS	-	OT	Wire	-	-
2022-353	2459747.50	2022 Jun 17	Trident D-5	-	CEI?	0.000	USMSSP	MS	-	OT	Wire	-	-
2023-359	2460110.50	2023 Jun 15?	Trident D-5	-	FCET	0.000	USMSSP	MS	-	OT	Wire	-	-
2023-360	2460110.50	2023 Jun 15?	Trident D-5	-	FCET	0.000	USMSSP	MS	-	OT	Wire	-	-
2023-361	2460110.50	2023 Jun 15?	Trident D-5	-	FCET	0.000	USMSSP	MS	-	OT	Wire	-	-
2024-401	2460339.38	2024 Jan 30	Trident D-5	-	UR DASD	0.000	RM	MF	-	OT	Wire	-	-



Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Mission	FlightCode	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee km	Range km	Dest
1971-000	2441076.62	1971 May 5 0748:01	R-00K	-	23C-2 (3C-20)	Duplicate of 1971-039	See SSN 5310	-	-	CC	LC40	-	-	39563	-	-
2014-000	2456658.50	2014 Jan 1	R-00K	-	Not a launch	Entry for unknown debris	-	-	-	UNK	-	-	-	33612	-	-



Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Agency	Launch_Code	Group	Category	LTCite	Cite	Notes
1971-000	2441076.82	1971 May 5 07:43:01	R-UNK	-	23C-2 (3C-20)	UNK	-	-	Hot reel	AFT3	MM/Titan	-
2014-000	2456668.50	2014 Jan 1	R-UNK	-	Hot a launch	UNK	-	-	Hot reel	-	-	-



Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Mission	Launch	FlightCode	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee_Km	Range_Km	Dest
1965-3241	2438669.60	1965 Apr 19 0220	UR-100	-	U 10741-601	8684 LXT-1	MCH 8F121/R450	-	-	MIP-5	LC130/27	-	-	1000?	-	(Kura)
1965-3242	2438900.66	1965 May 20 0345	UR-100	-	-	8684 LXT-2	MCH 8F121/R450	-	-	MIP-5	LC130/27	-	-	0?	-	(Kura)
1965-3243	2438930.50	1965 Jun 19	UR-100	-	-	8684 LXT-3	MCH 8F121/R450	-	-	MIP-5	LC130/26	-	-	0?	-	(Kura)
1965-318	2438935.50	1965 Jun 24	UR-100	-	-	8684 LXT-4	MCH 8F121/R450	-	-	MIP-5	LC130/26	-	-	1000?	-	Kura
1965-497	2438951.50	1965 Jul 10	UR-100	-	-	8684 LXT-5	MCH 8F121/R450	-	-	MIP-5	LC131/29	-	-	0	-	(Kura)
1965-A102	2438958.78	1965 Jul 17 0640	UR-100	-	22942-601	8684 LXT-5?	MCH 8F121/R450	-	-	MIP-5	LC130/26	-	-	1000?	-	Kura
1965-320	2438965.50	1965 Jul 24	UR-100	-	-	8684 LXT-6	MCH 8F121/R450	-	-	MIP-5	LC130/26	-	-	0?	-	(Kura)
1965-A116	2438972.50	1965 Jul 31	UR-100	-	-	8684 LXT-7	MCH 8F121/R450	-	-	MIP-5	LC131/29	-	-	1000?	-	Kura
1965-321	2439003.50	1965 Aug 31	UR-100	-	-	8684 LXT-8	MCH 8F121/R450	-	-	MIP-5	LC131/28	-	-	1000?	-	(Kura)
1965-A132	2439028.92	1965 Sep 17	UR-100	-	U 22943-201	8684 LXT-9	MCH 8F121/R450	-	-	MIP-5	LC131/28	-	-	40?	-	(Kura)
1965-322	2439037.50	1965 Oct 4	UR-100	-	-	8684 LXT-10	MCH 8F121/R450	-	-	MIP-5	LC131	-	-	1000?	-	Kura
1965-323	2439039.50	1965 Oct 6	UR-100	-	-	8684 LXT-11	MCH 8F121/R450	-	-	MIP-5	LC131	-	-	1000?	-	Kura
1965-324	2439052.50	1965 Oct 19	UR-100	-	-	8684 LXT-12	MCH 8F121/R450	-	-	MIP-5	LC131	-	-	1000?	-	Kura
1965-325	2439062.50	1965 Oct 19	UR-100	-	-	8684 LXT-13	MCH 8F121/R450	-	-	MIP-5	LC132/30	-	-	1000?	-	Kura
1965-326	2439065.50	1965 Nov 1	UR-100	-	-	8684 LXT-14	MCH 8F121/R450	Salvo	-	MIP-5	LC131/28	-	-	1000?	-	Kura
1965-A154	2439067.50	1965 Nov 3	UR-100	-	-	8684 LXT-15	MCH 8F121/R450	-	-	MIP-5	LC131/29	-	-	0?	-	(Kura)
1965-A158	2439069.50	1965 Nov 5	UR-100	-	-	8684 LXT-16	MCH 8F121/R450	-	-	MIP-5	LC131	-	-	1000?	-	Kura
1965-A170	2439094.50	1965 Nov 30	UR-100	-	-	8684 LXT-17	MCH 8F121/R450	-	-	MIP-5	LC131	-	-	1000?	-	Kura
1965-327	2439111.50	1965 Dec 17	UR-100	-	-	8684 LXT-18	MCH 8F121/R450	-	-	MIP-5	LC131	-	-	1000?	-	Kura
1965-328	2439123.50	1965 Dec 19	UR-100	-	-	8684 LXT-19	MCH 8F121/R450	-	-	MIP-5	LC132/30	-	-	0?	-	(Kura)
1965-329	2439124.50	1965 Dec 29	UR-100	-	-	8684 LXT-21	MCH 8F121/R450	-	-	MIP-5	LC131	-	-	1000?	-	Kura
1965-A174	2439124.50	1965 Dec 30	UR-100	-	-	8684 LXT-22	MCH 8F121/R450	Salvo	-	MIP-5	LC132/30	-	-	0?	-	(Kura)
1965-317	2439212.50	1966 Mar 28	UR-100	-	N 10744-308	8684 LXT-23	MCH 8F121/R450	-	-	MIP-5	LC132/30	-	-	1000?	-	Kura
1965-318	2439216.50	1966 Apr 1	UR-100	-	N 10744-303	8684 LXT-24 SLI	MCH 8F121/R450	-	-	MIP-5	LC131	-	-	1000?	-	Kura
1965-319	2439227.50	1966 Apr 12	UR-100	-	N 10744-311	8684 LXT-25 SLI	MCH 8F121/R450	-	-	MIP-5	LC132/30	-	-	1000?	-	Kura
1966-485	2439236.50	1966 Apr 21	UR-100	-	N 22944-306	8684 LXT-26 SLI	MCH 8F121/R450	-	-	MIP-5	LC132/30	-	-	1000?	-	Kura
1966-320	2439239.74	1966 Apr 24 0543	UR-100	-	N 10744-312	8684 LXT-27 SLI	MCH 8F121/R450	-	-	MIP-5	LC131/29	-	-	0?	-	(Kura)
1966-321	2439243.50	1966 Apr 28	UR-100	-	N 10741-01T	8684 LXT-28 SLI	MCH 8F121/R450	-	-	MIP-5	LC131/28	-	-	1000?	-	Kura
1966-322	2439244.50	1966 Apr 29	UR-100	-	N 22901-12P	8684 LXT-29 SLI	MCH 8F121/R450	-	-	MIP-5	LC176/46	-	-	1000?	-	Kura
1966-323	2439275.50	1966 May 5	UR-100	-	N 10744-351	8684 LXT-31 SLI	MCH 8F121/R450	-	-	MIP-5	LC131/29	-	-	1000?	-	Kura
1966-324	2439284.50	1966 Jun 5	UR-100	-	N 10744-352	8684 LXT-32 SLI	MCH 8F121/R450	-	-	MIP-5	LC176/46	-	-	1000?	-	Kura
1966-A176	2439287.50	1966 Jun 11	UR-100	-	-	8684 LXT-33 SLI	MCH 8F121/R450	-	-	MIP-5	LC145/75	-	-	0?	-	(Kura)
1966-325	2439305.50	1966 Jun 29	UR-100	-	N 22944-307	8684 LXT-34 SLI	MCH 8F121/R450	-	-	MIP-5	LC131/28	-	-	1000?	-	Kura
1966-326	2439311.50	1966 Jul 1	UR-100	-	8684 LXT-35 SLI	8684 LXT-35 SLI	MCH 8F121/R450	-	-	MIP-5	LC177/47	-	-	1000?	-	Kura
1966-327	2439324.50	1966 Jul 18	UR-100	-	N 229 002	8684 LXT-36 SLI	MCH 8F121/R450	-	-	MIP-5	LC177/47	-	-	1000?	-	Kura
1966-328	2439334.50	1966 Jul 26	UR-100	-	-	8684 LXT-37 SLI	MCH 8F121/R450	-	-	MIP-5	LC132/30	-	-	1000?	-	Kura
1966-329	2439338.50	1966 Aug 1	UR-100	-	N 10744-310	8684 LXT-38 SLI	MCH 8F121/R450	-	-	MIP-5	LC132/30	-	-	1000?	-	Kura
1966-330	2439340.50	1966 Aug 3	UR-100	-	N 10744-357	8684 LXT-39 SLI	MCH 8F121/R450	-	-	MIP-5	LC131/28	-	-	1000?	-	Kura
1966-331	2439341.50	1966 Aug 4	UR-100	-	-	8684 LXT-40 SLI	MCH 8F121/R450	-	-	MIP-5	LC132/30	-	-	1000?	-	Kura
1966-332	2439346.50	1966 Aug 9	UR-100	-	N 10744-304	8684 LXT-41 SLI	MCH 8F121/R450	-	-	MIP-5	LC132/30	-	-	1000?	-	Kura
1966-333	2439348.50	1966 Aug 11	UR-100	-	-	8684 LXT-42	MCH 8F121/R450	-	-	MIP-5	LC171/45	-	-	1000?	-	Kura
1966-334	2439349.50	1966 Aug 12	UR-100	-	-	8684 LXT-43	MCH 8F121/R450	-	-	MIP-5	LC171/47	-	-	1000?	-	Kura
1966-335	2439352.50	1966 Aug 12	UR-100	-	-	8684 LXT-44	MCH 8F121/R450	-	-	MIP-5	LC132/30	-	-	0?	-	(Kura)
1966-336	2439354.50	1966 Aug 17	UR-100	-	-	8684 LXT-45	MCH 8F121/R450	-	-	MIP-5	LC131	-	-	1000?	-	Kura
1966-337	2439357.50	1966 Aug 24	UR-100	-	-	8684 LXT-46	MCH 8F121/R450	-	-	MIP-5	LC176/45	-	-	1000?	-	Kura
1966-338	2439361.50	1966 Aug 25	UR-100	-	-	8684 LXT-47	MCH 8F121/R450	-	-	MIP-5	LC174/44	-	-	1000?	-	Kura
1966-339	2439362.50	1966 Aug 25	UR-100	-	-	8684 LXT-48	MCH 8F121/R450	-	-	MIP-5	LC132/30	-	-	1000?	-	Kura
1966-340	2439364.50	1966 Aug 27	UR-100	-	-	8684 LXT-49	MCH 8F121/R450	-	-	MIP-5	LC131/28	-	-	1000?	-	Kura
1966-341	2439367.50	1966 Aug 29	UR-100	-	-	8684 UPB-25	MCH 8F121/R450	-	-	MIP-5	LC131/28	-	-	1000?	-	Kura
1966-342	2439370.50	1966 Sep 2	UR-100	-	-	8684 UPB-26	MCH 8F121/R450	-	-	MIP-5	LC131	-	-	1000?	-	Kura
1966-343	2439381.50	1966 Sep 2	UR-100	-	-	8684 UPB-27	MCH 8F121/R450	-	-	MIP-5	LC131	-	-	1000?	-	Kura
1966-344	2439390.50	1966 Sep 16	UR-100	-	-	8684 UPB-31	MCH 8F121/R450	-	-	MIP-5	LC131	-	-	1000?	-	Kura
1966-345	2439394.50	1966 Oct 1	UR-100	-	-	8684 UPB-32	MCH 8F121/R450	-	-	MIP-5	LC131	-	-	1000?	-	Kura
1966-346	2439403.50	1966 Oct 1	UR-100	-	-	8684 UPB-33	MCH 8F121/R450	-	-	MIP-5	LC131	-	-	1000?	-	Kura
1966-347	2439405.50	1966 Oct 7	UR-100	-	-	8684 UPB-34	MCH 8F121/R450	-	-	MIP-5	LC131	-	-	1000?	-	Kura
1966-348	2439419.50	1966 Oct 21	UR-100	-	-	8684 UPB-35	MCH 8F121/R450	-	-	MIP-5	LC131/28	-	-	1000?	-	Kura
1966-349	2439426.50	1966 Oct 27	UR-100	-	-	8684 LXT-24 (SLI)	MCH 8F121/R450	Pal'ma-2	-	MIP-5	LC131/28	-	-	1000?	-	Kura
1966-350	2439448.50	1966 Nov 19	UR-100	-	-	8684 UPB-36	MCH 8F121/R450	-	-	MIP-5	LC131	-	-	1000?	-	Kura
1966-351	2439448.50	1966 Nov 19	UR-100	-	-	8684 UPB-37	MCH 8F121/R450	-	-	MIP-5	LC131	-	-	1000?	-	Kura
1966-352	2439451.50	1966 Nov 22	UR-100	-	-	8684 UPB-38	MCH 8F121/R450	-	-	MIP-5	LC131/28	-	-	1000?	-	Kura
1966-353	2439460.50	1966 Dec 8	UR-100	-	-	8684 UPB-39	MCH 8F121/R450	-	-	MIP-5	LC132/30	-	-	1000?	-	Kura
1966-354	2439467.50	1966 Dec 8	UR-100	-	-	8684 UPB-40	MCH 8F121/R450	-	-	MIP-5	LC131/29	-	-	1000?	-	Kura
1966-355	2439471.50	1966 Dec 12	UR-100	-	-	8684 UPB-41	MCH 8F121/R450	-	-	MIP-5	LC131/28	-	-	1000?	-	Kura
1966-356	2439475.50	1966 Dec 16	UR-100	-	-	8684 UPB-42	MCH 8F121/R450	-	-	MIP-5	LC131/29	-	-	1000?	-	Kura
1966-357	2439485.50	1966 Dec 26	UR-100	-	-	8684 UPB-43	MCH 8F121/R450	-	-	MIP-5	LC131/29	-	-	1000?	-	Kura
1966-358	2439486.50	1966 Dec 27	UR-100	-	-	8684 UPB-44 UT	MCH 8F121/R450	-	-	MIP-5	LC131/28	-	-	1000?	-	Kura
1967-3762	2439490.50	1967	UR-100	-	-	8684 UPB-K8-1	MCH 8F121/R450	-	-	K&AS	LC131/28	-	-	1000?	-	Pacific
1967-326	2439504.50	1967 Jan 14	UR-100	-	-	8684 UPB-45 LXT	MCH 8F121/R450	-	-	MIP-5	LC132/30	-	-	1000?	-	Kura
1967-327	2439515.50	1967 Jan 25	UR-100	-	-	8684 UPB-46 UT	MCH 8F121/R450	-	-	MIP-5	LC132/30	-	-	0?	-	(Kura)
1967-328	2439551.50	1967 Mar 2	UR-100	-	-	8684 UPB-47 LXT	MCH 8F121/R450	-	-	MIP-5	LC131	-	-	1000?	-	Kura
1967-329	2439567.50	1967 Mar 18	UR-100	-	Ya10701-13T	8684 UPB-48 LXT	MCH 8F121/R450	-	-	MIP-5	LC131	-	-	1000?	-	Kura
1967-330	2439572.50	1967 Mar 23	UR-100	-	Ya10702-01T	8684 UPB-49 SLI	MCH 8F121/R450	-	-	MIP-5	LC131	-	-	1000?	-	Kura
1967-331	2439574.50	1967 Mar 25	UR-100	-	Ya22900-23P	8684 UPB-50 SLI	MCH 8F121/R450	-	-	MIP-5	LC132/30	-	-	1000?	-	Kura
1967-332	2439601.50	1967 Apr 21	UR-100	-	Ya22900-23P	8684 UPB-51 SLI	MCH 8F121/R450	-	-	MIP-5	LC131	-	-	1000?	-	Kura
1967-333	2439606.50	1967 Apr 26	UR-100	-	Ya22900-23P	8684 UPB-52 SLI	MCH 8F121/R450	-	-	MIP-5	LC131	-	-	1000?	-	Kura
1967-334	2439655.50	1967 Jun 14	UR-100	-	Ya22904-01T	8684 UPB-53 SLI	MCH 8F121/R450	-	-	MIP-5	LC131	-	-	1000?	-	Kura
1967-335	2439662.50	1967 Jun 21	UR-100	-	-	8684 UPB-54 SLI	MCH 8F121/R450	-	-	MIP-5	LC131	-	-			



Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Mission	Launch	FlightCode	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee_Km	Range_Km	Dest
1967-339	2439753.50	1967 Sep 20	UR-100	-	Yal0744-378	8684 URP-59	1 BB 15F843	MIP-5	MGCh 15F842	-	MIP-5	LC131/28	-	-	1000?	-	Kura
1967-340	2439754.50	1967 Sep 21	UR-100	-	Yal22901-24P	8684 URP-60	-	MIP-5	-	-	MIP-5	LC132/30	-	-	1000?	-	Kura
1967-341	2439765.50	1967 Oct 2	UR-100	-	Yal10744-379	8684 URP-61	1 BB 15F843	MIP-5	MGCh 15F842	-	MIP-5	LC131/29	-	-	1000?	-	Kura
1967-342	2439769.50	1967 Oct 6	UR-100	-	Yal10744-372	8684 URP-62	1 BB 15F843	MIP-5	MGCh 15F842	-	MIP-5	LC132/30	-	-	1000?	-	Kura
1967-343	2439786.50	1967 Oct 23	UR-100	-	Yal226 01U	8684 URP-63	-	MIP-5	-	-	MIP-5	LC132/30	-	-	1000?	-	Kura
1967-344	2439792.50	1967 Oct 29	UR-100	-	Yal10706-01T	8684 URP-64	-	MIP-5	-	-	MIP-5	LC132/30	-	-	1000?	-	Kura
1967-345	2439792.50	1967 Oct 29	UR-100	-	Yal226 02U	8684 URP-65	-	MIP-5	-	-	MIP-5	LC131/28	-	-	1000?	-	Kura
1967-346	2439808.50	1967 Oct 29	UR-100	-	Yal22601-01T	8684 URP-66	-	MIP-5	-	-	MIP-5	LC132/30	-	-	1000?	-	Kura
1967-347	2439819.50	1967 Nov 14	UR-100	-	Yal10702-13T	8684 URP-67	-	MIP-5	-	-	MIP-5	LC131/28	-	-	1000?	-	Kura
1967-348	2439822.50	1967 Nov 28	UR-100	-	Yal10744-377	8684 URP-68	1 BB 15F843	MIP-5	MGCh 15F842	-	MIP-5	LC132/30	-	-	1000?	-	Kura
1967-349	2439838.50	1967 Dec 14	UR-100	-	Yal10706-13T	8684 URP-69	-	MIP-5	-	-	MIP-5	LC132/30	-	-	1000?	-	Kura
1967-350	2439839.50	1967 Dec 15	UR-100	-	Yal10706-13T	8684 URP-70	-	MIP-5	-	-	MIP-5	LC132/30	-	-	1000?	-	Kura
1967-351	2439845.50	1967 Dec 21	UR-100	-	Yal22906-24P	8684 URP-71	-	MIP-5	-	-	MIP-5	LC131/29	-	-	1000?	-	Kura
1968-376	2439855.50	1968	UR-100	-	-	8684 URP-98	-	TEVK	-	-	TEVK	-	-	-	1000?	-	Kura
1968-3730	2439855.50	1968?	UR-100	-	-	8684 54 RD URP-1	-	TEVK	-	-	TEVK	-	-	-	1000?	-	Kura
1968-3731	2439855.50	1968?	UR-100	-	-	8684 54 RD URP-2	-	TEVK	-	-	TEVK	-	-	-	1000?	-	Kura
1968-3732	2439855.50	1968?	UR-100	-	-	8684 54 RD URP-3	-	TEVK	-	-	TEVK	-	-	-	1000?	-	Kura
1968-350	2439893.50	1968 Feb 7	UR-100	-	-	8684 URP-72	-	MIP-5	-	-	MIP-5	LC131/29	-	-	1000?	-	Kura
1968-351	2439899.50	1968 Feb 13	UR-100	-	-	8684 URP-73	1 BB 15F843	MIP-5	MGCh 15F842	-	MIP-5	LC132/30	-	-	1000?	-	Kura
1968-3740	2439915.50	1968 Mar 22	UR-100	-	-	8684 URP-74	-	YSMA	-	-	YSMA	LC760/5/3	-	-	1000?	-	Pacific
1968-352	2439937.50	1968 Mar 28	UR-100	-	-	8684 URP-75	-	MIP-5	-	-	MIP-5	LC132/30	-	-	1000?	-	Kura
1968-353	2439943.50	1968 Mar 28	UR-100	-	-	8684 URP-76	-	MIP-5	-	-	MIP-5	LC131/29	-	-	1000?	-	Kura
1968-354	2439945.50	1968 Mar 30	UR-100	-	-	8684 URP-77	-	MIP-5	-	-	MIP-5	LC132/30	-	-	1000?	-	Kura
1968-355	2439961.50	1968 Apr 6	UR-100	-	-	8684 URP-77	-	MIP-5	-	-	MIP-5	LC131/29	-	-	1000?	-	Kura
1968-356	2440013.50	1968 Jun 6	UR-100	-	-	8684 URP-78	-	MIP-5	-	-	MIP-5	LC177/47	-	-	1000?	-	Kura
1968-3769	2440014.50	1968 Jun 7	UR-100	-	-	8684 URP	-	DROV	-	-	DROV	LC830/21	-	-	1000?	-	Kura
1968-3770	2440014.50	1968 Jun 7	UR-100	-	-	8684 URP	-	DROV	-	-	DROV	LC830/21	-	-	1000?	-	Kura
1968-357	2440019.50	1968 Jun 12	UR-100	-	-	8684 URP-79	-	MIP-5	-	-	MIP-5	LC131/28	-	-	1000?	-	Kura
1968-358	2440031.50	1968 Jun 24	UR-100	-	-	8684 URP-80	-	MIP-5	-	-	MIP-5	LC131/28	-	-	1000?	-	Kura
1968-359	2440039.50	1968 Jul 2	UR-100	-	-	8684 URP-81	-	MIP-5	-	-	MIP-5	LC131/29	-	-	1000?	-	Kura
1968-360	2440043.50	1968 Jul 6	UR-100	-	-	8684 URP-82	-	MIP-5	-	-	MIP-5	LC132/30	-	-	1000?	-	Kura
1968-361	2440046.50	1968 Jul 9	UR-100	-	-	8684 URP-83	-	MIP-5	-	-	MIP-5	LC131/28	-	-	1000?	-	Kura
1968-362	2440047.50	1968 Jul 11	UR-100	-	-	8684 URP-84	-	MIP-5	-	-	MIP-5	LC131/28	-	-	1000?	-	Kura
1968-363	2440060.50	1968 Jul 13	UR-100	-	-	8684 URP-85	-	MIP-5	-	-	MIP-5	LC132/30	-	-	1000?	-	Kura
1968-364	2440065.50	1968 Aug 17	UR-100	-	-	8684 URP-86	-	MIP-5	-	-	MIP-5	LC131/28	-	-	1000?	-	Kura
1968-365	2440096.50	1968 Aug 27	UR-100	-	-	8684 URP-87	-	MIP-5	-	-	MIP-5	LC132/30	-	-	1000?	-	Kura
1968-366	2440098.50	1968 Aug 30	UR-100	-	-	8684 URP-88	-	MIP-5	-	-	MIP-5	LC132/30	-	-	1000?	-	Kura
1968-367	2440115.50	1968 Sep 16	UR-100	-	-	8684 URP-89	-	MIP-5	-	-	MIP-5	LC131/29	-	-	1000?	-	Kura
1968-368	2440141.50	1968 Oct 12	UR-100	-	-	8684 URP-90	-	MIP-5	-	-	MIP-5	LC132/30	-	-	1000?	-	Kura
1968-369	2440146.50	1968 Oct 19	UR-100	-	-	8684 URP-91	-	MIP-5	-	-	MIP-5	LC132/30	-	-	1000?	-	Kura
1968-370	2440157.50	1968 Oct 28	UR-100	-	-	8684 URP-92	-	MIP-5	-	-	MIP-5	LC132/30	-	-	1000?	-	Kura
1968-371	2440158.50	1968 Oct 29	UR-100	-	-	8684 URP-93	-	MIP-5	-	-	MIP-5	LC132/30	-	-	1000?	-	Kura
1968-372	2440181.50	1968 Nov 21	UR-100	-	-	8684 URP-94	-	MIP-5	-	-	MIP-5	LC132/30	-	-	1000?	-	Kura
1968-373	2440194.50	1968 Dec 4	UR-100	-	-	8684 URP-95	-	MIP-5	-	-	MIP-5	LC132/30	-	-	1000?	-	Kura
1968-374	2440202.50	1968 Dec 12	UR-100	-	-	8684 URP-96	-	MIP-5	-	-	MIP-5	LC132/30	-	-	1000?	-	Kura
1968-375	2440204.50	1968 Dec 24	UR-100	-	-	8684 URP-97	-	MIP-5	-	-	MIP-5	LC131/29	-	-	1000?	-	Kura
1968-376	2440221.50	1968?	UR-100	-	-	8684 54 RD URP-4	-	TEVK	-	-	TEVK	-	-	-	1000?	-	Kura
1968-3747	2440221.50	1968?	UR-100	-	-	8684 54 RD URP-5	-	TEVK	-	-	TEVK	-	-	-	1000?	-	Kura
1968-3748	2440221.50	1968?	UR-100	-	-	8684 54 RD URP-6	-	TEVK	-	-	TEVK	-	-	-	1000?	-	Kura
1968-3749	2440221.50	1968?	UR-100	-	-	8684 54 RD URP-7	-	TEVK	-	-	TEVK	-	-	-	1000?	-	Kura
1968-320	2440242.50	1969 Jan 21	UR-100	-	-	8684 URP-98	-	MIP-5	-	-	MIP-5	LC131/28	-	-	1000?	-	Kura
1968-321	2440242.50	1969 Jan 21	UR-100	-	-	8684 URP-99	-	MIP-5	-	-	MIP-5	LC131/28	-	-	1000?	-	Kura
1968-322	2440245.50	1969 Jan 21	UR-100	-	-	8684 URP-100	-	MIP-5	-	-	MIP-5	LC174/44	-	-	1000?	-	Kura
1968-323	2440252.50	1969 Jan 21	UR-100	-	-	8684 URP-101	-	MIP-5	-	-	MIP-5	LC132/30	-	-	1000?	-	Kura
1968-324	2440300.50	1969 Mar 21	UR-100	-	-	8684 URP-102	-	MIP-5	-	-	MIP-5	LC132/30	-	-	1000?	-	Kura
1968-325	2440334.50	1969 Apr 24	UR-100	-	-	8684 URP-103	-	MIP-5	-	-	MIP-5	LC177/47	-	-	1000?	-	Kura
1968-326	2440334.50	1969 Apr 24	UR-100	-	-	8684 URP-104	-	MIP-5	-	-	MIP-5	LC132/30	-	-	1000?	-	Kura
1968-327	2440334.50	1969 Apr 29	UR-100	-	-	8684 URP-105	-	MIP-5	-	-	MIP-5	LC132/30	-	-	1000?	-	Kura
1968-328	2440334.50	1969 Apr 29	UR-100	-	-	8684 URP-106	-	MIP-5	-	-	MIP-5	LC132/30	-	-	1000?	-	Kura
1968-329	2440334.50	1969 Apr 29	UR-100	-	-	8684 URP-107	-	MIP-5	-	-	MIP-5	LC177/47	-	-	1000?	-	Kura
1968-330	2440334.50	1969 Apr 29	UR-100	-	-	8684 URP-108	-	MIP-5	-	-	MIP-5	LC132/30	-	-	1000?	-	Kura
1968-331	2440334.50	1969 Apr 29	UR-100	-	-	8684 URP-109	-	MIP-5	-	-	MIP-5	LC132/30	-	-	1000?	-	Kura
1968-332	2440334.50	1969 Apr 29	UR-100	-	-	8684 URP-110	-	MIP-5	-	-	MIP-5	LC177/47	-	-	1000?	-	Kura
1968-333	2440334.50	1969 Apr 29	UR-100	-	-	8684 URP-111	-	MIP-5	-	-	MIP-5	LC177/47	-	-	1000?	-	Kura
1968-334	2440334.50	1969 Apr 29	UR-100	-	-	8684 URP-112	-	MIP-5	-	-	MIP-5	LC131/28	-	-	1000?	-	Kura
1968-335	2440334.50	1969 Apr 29	UR-100	-	-	8684 URP-113	-	MIP-5	-	-	MIP-5	LC131/28	-	-	1000?	-	Kura
1968-336	2440334.50	1969 Apr 29	UR-100	-	-	8684 URP-114	-	MIP-5	-	-	MIP-5	LC176/46	-	-	1000?	-	Kura
1968-337	2440334.50	1969 Apr 29	UR-100	-	-	8684 URP-115	-	MIP-5	-	-	MIP-5	LC131/28	-	-	1000?	-	Kura
1968-338	2440334.50	1969 Apr 29	UR-100	-	-	8684 URP-116	-	MIP-5	-	-	MIP-5	LC176/46	-	-	1000?	-	Kura
1968-339	2440334.50	1969 Apr 29	UR-100	-	-	8684 URP-117	-	MIP-5</									

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Mission	Launch_Site	Platform	FlightCode	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee_Km	Range_Km	Dest
1970-333	2440635.59	1970 Feb 18 0207	UR-100K	-	Yu10761-010	15A20 LKI-10	3 BB 15F201/RA65	MIP-5	-	RCh. 15B20	MIP-5	LC131/29	-	-	1000?	-	Kura IK
1970-334	2440636.59	1970 Feb 19 0209	UR-100K	-	Yu10761-011?	15A20 LKI-11	1 BB RA64	MIP-5	-	MCh. 15F202	MIP-5	LC131/29	-	-	1000?	-	Kura IK
1970-318	2440638.50	1970 Feb 21	UR-100	-	-	8684 UBP-122	-	MIP-5	-	-	MIP-5	LC177/47	-	-	1000?	-	Kura IK
1970-335	2440690.67	1970 Apr 14 0410	UR-100K	-	Yu10761-012	15A20 LKI-12	1 BB RA64	MIP-5	-	MCh. 15F202	MIP-5	LC131/28	-	-	1000?	-	Kura IK
1970-336	2440693.67	1970 Apr 17 0405	UR-100K	-	Yu10761-013	15A20 LKI-13	1 BB RA64	MIP-5	-	MCh. 15F202	MIP-5	LC131/28	-	-	1000?	-	Kura IK
1970-337	2440722.68	1970 May 16 0425	UR-100K	-	Yu10761-014	15A20 LKI-14	3 BB 15F201/RA65	MIP-5	-	RCh. 15B20	MIP-5	LC131/29	-	-	1000?	-	Kura IK
1970-338	2440733.69	1970 May 27 0431	UR-100K	-	Rh10761-017	15A20 LKI-15	3 BB 15F201/RA65	MIP-5	-	RCh. 15B20	MIP-5	LC131/29	-	-	1000?	-	Kura IK
1970-339	2440742.76	1970 Jun 5 0615	UR-100K	-	Rh10761-016	15A20 LKI-16	1 BB RA64	MIP-5	-	MCh. 15F202 /MinRange	MIP-5	LC131/29	-	-	1000?	-	Bekdash
1970-320	2440748.50	1970 Jun 11	UR-100	-	-	8684 UBP-124	-	MIP-5	-	-	MIP-5	LC175/45	-	-	1000?	-	Kura
1970-3716	2440758.50	1970 Jun 21 0235	UR-100K	-	-	8684 54 RD UBP-8	-	MIP-5	-	-	MIP-5	LC131/28	-	-	1000?	-	Kura
1970-340	2440759.64	1970 Jun 22	UR-100	-	-	15A20 LKI-17	-	MIP-5	-	RCh. 15B20 /MinRange	MIP-5	LC177/47	-	-	1000?	-	Kzyl-Tu
1970-321	2440763.50	1970 Jun 26	UR-100	-	-	8684 UBP-125M	-	MIP-5	-	-	MIP-5	LC177/47	-	-	1000?	-	Kura
1970-341	2440770.63	1970 Jul 3 0310	UR-100K	-	Rh10761-019	15A20 LKI-18	1 BB RA64	MIP-5	-	MCh. 15F202 /MinRange	MIP-5	LC131/28	-	-	1000?	-	Kzyl-Tu
1970-342	2440775.67	1970 Jul 8 0402	UR-100K	-	Yu10761-021	15A20 LKI-19	1 BB RA64	MIP-5	-	MCh. 15F202	MIP-5	LC174/44	-	-	1000?	-	Kura IK
1970-343	2440791.68	1970 Jul 24 0422	UR-100K	-	5115761-021	15A20 LKI-20	3 BB 15F201/RA65	MIP-5	-	RCh. 15B20	MIP-5	LC131/28	-	-	1000?	-	Kura IK
1970-329	2440794.73	1970 Jul 27 0537	UR-100K	-	6305761-022	15A20 LKI-21	1 BB RA64	MIP-5	-	MCh. 15F202	MIP-5	LC174/44	-	-	1000?	-	Pacific
1970-330	2440796.71	1970 Jul 28 0502	UR-100K	-	Rh10761-022	15A20 LKI-22	1 BB RA64	MIP-5	-	MCh. 15F202	MIP-5	LC131/28	-	-	1000?	-	Pacific
1970-346	2440819.67	1970 Aug 21 0410	UR-100K	-	4925761-023	15A20 LKI-23	3 BB 15F201/RA65	MIP-5	-	RCh. 15B20	MIP-5	LC131/28	-	-	1000?	-	Pacific
1970-347	2440820.20	1970 Aug 22 0215	UR-100K	-	5115761-024	15A20 LKI-24	-	MIP-5	-	RCh. 15B20	MIP-5	LC131/28	-	-	1000?	-	Pacific
1970-3468	2440853.50	1970 Sep 24	UR-100	-	-	8684 UBP-126M	-	MIP-5	-	-	MIP-5	LC177/47	-	-	1000?	-	Kura
1970-3469	2440859.50	1970 Sep 30	UR-100	-	-	8684 UBP-127M	-	MIP-5	-	-	MIP-5	LC171/48	-	-	1000?	-	Kura
1970-324	2440863.50	1970 Oct 4	UR-100	-	-	8684 UBP-128M	-	MIP-5	-	-	MIP-5	LC175/45	-	-	1000?	-	Kura
1970-348	2440874.65	1970 Oct 15 0332	UR-100K	-	-	8684 UBP-128M	-	MIP-5	-	RCh. 15B20	MIP-5	LC131/28	-	-	1000?	-	Kura IK
1970-344	2440880.68	1970 Oct 21 0413	UR-100K	-	-	15A20 LKI-25	-	MIP-5	-	RCh. 15B20	MIP-5	LC131/28	-	-	1000?	-	Kura IK
1970-325	2440882.50	1970 Oct 23	UR-100	-	-	8684 UBP-129M	-	MIP-5	-	-	MIP-5	LC177/47	-	-	1000?	-	Kura
1970-326	2440887.50	1970 Oct 28	UR-100	-	-	0xk missile	-	MIP-5	-	-	MIP-5	LC175/45	-	-	1000?	-	Kura
1970-326	2440889.50	1970 Oct 30	UR-100	-	-	8684 UBP-130M	-	MIP-5	-	-	MIP-5	LC175/45	-	-	1000?	-	Kura
1970-327	2440890.50	1970 Oct 31	UR-100	-	-	8684 UBP-130M	-	MIP-5	-	-	MIP-5	LC177/47	-	-	1000?	-	Kura
1970-3717	2440901.50	1970 Nov 11	UR-100	-	-	8684 54 RD UBP-9	-	MIP-5	-	-	MIP-5	LC131/28	-	-	1000?	-	Kura
1970-3718	2440901.50	1970 Nov 11	UR-100	-	-	8684 54 RD UBP-10	-	MIP-5	-	-	MIP-5	LC131/28	-	-	1000?	-	Kura
1970-3719	2440901.50	1970 Nov 11	UR-100	-	-	8684 10 RD UBP-3	-	MIP-5	-	-	MIP-5	LC157/62	-	-	1000?	-	Kura
1970-3720	2440901.50	1970 Nov 11	UR-100	-	-	8684 UBP-52 RD	-	MIP-5	-	-	MIP-5	LC157/62	-	-	1000?	-	Kura
1970-3721	2440902.26	1970 Nov 11	UR-100	-	-	8684 UBP-52 RD	-	MIP-5	-	-	MIP-5	LC157/62	-	-	1000?	-	Kura
1970-3722	2440902.26	1970 Nov 11	UR-100	-	-	0xk missile	-	MIP-5	-	-	MIP-5	LC157/62	-	-	1000?	-	Kura
1970-3723	2440902.26	1970 Nov 11	UR-100	-	-	8684 54 RD UBP-11	-	MIP-5	-	-	MIP-5	LC131/28	-	-	1000?	-	Kura
1970-3724	2440902.26	1970 Nov 11	UR-100	-	-	8684 54 RD UBP-12	-	MIP-5	-	-	MIP-5	LC131/28	-	-	1000?	-	Kura
1970-328	2440916.50	1970 Nov 26	UR-100	-	-	8684 UBP-132M	-	MIP-5	-	-	MIP-5	LC177/47	-	-	1000?	-	Pacific
1970-328	2440924.50	1970 Dec 4	UR-100	-	-	8684 UBP-133M	-	MIP-5	-	-	MIP-5	LC177/47	-	-	1000?	-	Kura
1970-323	2440930.50	1970 Dec 6	UR-100	-	-	8684 UBP-134M	-	MIP-5	-	-	MIP-5	LC175/45	-	-	1000?	-	Kura
1970-3468	2440938.50	1970 Dec 18	UR-100	-	-	8684 UBP-135M	-	MIP-5	-	-	MIP-5	LC175/45	-	-	1000?	-	Kura
1970-3468	2440942.50	1970 Dec 22 0237	UR-100K	-	-	8684 UBP-136M	-	MIP-5	-	-	MIP-5	LC177/47	-	-	1000?	-	Kura
1970-346	2440943.61	1970 Dec 22 0237	UR-100K	-	4925761-147T	8684 UBP-136M	1 BB RA64	MIP-5	-	MCh. 15F202	MIP-5	LC131/28	-	-	1000?	-	Kura
1970-344	2440946.61	1970 Dec 26 0235	UR-100K	-	4764732-1P	15A20 LKI-26	3 BB 15F201/RA65	MIP-5	-	RCh. 15B20	MIP-5	LC131/28	-	-	500?	-	(Kura)
1971-3674	2440951.50	1971	UR-100	-	-	8684 54 RD UBP-11	-	MIP-5	-	-	MIP-5	LC131/28	-	-	1000?	-	-
1971-3675	2440951.50	1971	UR-100	-	-	8684 54 RD UBP-12	-	MIP-5	-	-	MIP-5	LC131/28	-	-	1000?	-	-
1971-339	2440951.89	1971 Jan 19 0340	UR-100K	-	-	5044732-2P	-	MIP-5	-	-	MIP-5	LC131/28	-	-	1000?	-	Kura
1971-340	2440974.59	1971 Jan 23 0215	UR-100K	-	-	15A20 LKI-27	-	MIP-5	-	-	MIP-5	LC131/28	-	-	1000?	-	Kura
1971-340	2440974.59	1971 Feb 2 0546	UR-100K	-	-	5045761-028	-	MIP-5	-	-	MIP-5	LC131/28	-	-	1000?	-	Kura
1971-341	2440986.16	1971 Feb 7 0546	UR-100K	-	-	5045761-028	-	MIP-5	-	MCh. 15F242P1/Svinets	MIP-5	LC131/28	-	-	1000?	-	Kura
1971-341	2440994.94	1971 Feb 7 0546	UR-100K	-	-	8684M	-	MIP-5	-	MCh. 15F242	MIP-5	LC171/48	-	-	1000?	-	Kura
1971-341	2441021.67	1971 Feb 12 0410	UR-100K	-	-	5115761-027	-	MIP-5	-	RCh. 15B20	MIP-5	LC131/28	-	-	1000?	-	Kura
1971-341	2441025.61	1971 Mar 15 0235	UR-100K	-	-	15A20 LKI-28	-	MIP-5	-	RCh. 15B20	MIP-5	LC131/28	-	-	1000?	-	Kura
1971-346	2441026.61	1971 Mar 15 0235	UR-100K	-	-	15A20 Control mly	-	MIP-5	-	RCh. 15B20	MIP-5	LC131/28	-	-	1000?	-	Kura
1971-342	2441034.50	1971 Mar 20	UR-100M	-	-	8684M	-	MIP-5	-	MCh. 15F242	MIP-5	LC171/48	-	-	1000?	-	Kura
1971-342	2441058.50	1971 Apr 7	UR-100M	-	-	8684M	-	MIP-5	-	MCh. 15F242	MIP-5	LC171/48	-	-	1000?	-	Kura
1971-327	2441098.50	1971 Apr 20	UR-100M	-	-	8684 UBP-137	-	MIP-5	-	-	MIP-5	LC171/48	-	-	1000?	-	Kura
1971-344	2441092.50	1971 Apr 29 0418	UR-100M	-	-	8684M	-	MIP-5	-	MCh. 15F242	MIP-5	LC171/48	-	-	1000?	-	Kura
1971-344	2441105.50	1971 Apr 29 0418	UR-100M	-	-	8684M	-	MIP-5	-	MCh. 15F242	MIP-5	LC171/48	-	-	1000?	-	Kura
1971-344	2441105.50	1971 Apr 29 0418	UR-100M	-	-	8684 UBP-138	-	MIP-5	-	MCh. 15F242P3	MIP-5	LC171/48	-	-	1000?	-	Kura
1971-344	2441105.50	1971 Apr 29 0418	UR-100M	-	-	8684 UBP-139	-	MIP-5	-	MCh. 15F242P3	MIP-5	LC171/48	-	-	1000?	-	Kura
1971-329	2441118.50	1971 Jun 16	UR-100	-	-	15A20 LKI-17	-	MIP-5	-	-	MIP-5	LC131M/57	-	-	1000?	-	Kura
1971-329	2441118.50	1971 Jun 16	UR-100	-	-	8684 UBP-152 RD	-	MIP-5	-	-	MIP-5	LC131M/57	-	-	1000?	-	Kura
1971-329	2441118.50	1971 Jun 16	UR-100	-	-	8684 UBP-152 RD	-	MIP-5	-	-	MIP-5	LC131M/57	-	-	1000?	-	Kura
1971-329	2441118.50	1971 Jun 16	UR-100	-	-	8684 UBP-152 RD	-	MIP-5	-	-	MIP-5	LC131M/57	-	-	1000?	-	Kura
1971-329	2441118.50	1971 Jun 16	UR-100	-	-	8684 UBP-152 RD	-	MIP-5	-	-	MIP-5	LC131M/57	-	-	1000?	-	Kura
1971-329	2441118.50	1971 Jun 16	UR-100	-	-	8684 UBP-152 RD	-										

Launch

Launch_Tag	Launch_ID	Launch_Date	Lv_Type	Variant	Flight_ID	Flight	Mission	FlightCode	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee_Km	Range_Km	Dest
1972-828	2441663.50	1972 Dec 12	UR-100U	-	-	15A200 K ZP-6	Duga-1	-	-	MIP-5	LC131N/57	-	-	1000?	-	Kura
1972-829	2441672.50	1972 Dec 21	UR-100	-	D01	8684 4 RD UBP-2	Duga-1	-	-	DRUV	LC830/27	-	-	1000?	-	Kura
1972-830	2441673.58	1972 Dec 22 0202	UR-100K	-	D02	8684 4 RD UBP-3	Duga-1	-	-	DRUV	LC830/30	-	-	1000?	-	Kura
1973-829	2441679.50	1972 Dec 28	UR-100U	-	51173-21-180T	15A200 UBP-4 K	3 BB 15F201/RA65	RCh. 15F20	-	MIP-5	LC131/28	-	-	1000?	-	Kura
1973-830	2441682.50	1973?	UR-100	-	-	15A200 K ZP-7	-	-	-	MIP-5	LC132/30	-	-	1000?	-	Kura
1973-8307	2441682.50	1973?	UR-100	-	T07	8684 4 RD UBP-1	Duga-1	-	-	YSNYA	-	-	-	1000?	-	Pacific
1973-8308	2441682.50	1973?	UR-100	-	T08	8684 47 RD UBP-2	Duga-1	-	-	YSNYA	-	-	-	1000?	-	Pacific
1973-8309	2441682.50	1973?	UR-100	-	T09	8684 47 RD UBP-3	Duga-1	-	-	YSNYA	-	-	-	1000?	-	Pacific
1973-8310	2441682.50	1973?	UR-100	-	T10	8684 47 RD UBP-4	Duga-1	-	-	YSNYA	-	-	-	1000?	-	Pacific
1973-8311	2441682.50	1973?	UR-100	-	T11	8684 47 RD UBP-5	Duga-1	-	-	YSNYA	-	-	-	1000?	-	Pacific
1973-8312	2441682.50	1973?	UR-100	-	T12	8684 47 RD UBP-6	Duga-1	-	-	YSNYA	-	-	-	1000?	-	Pacific
1973-8313	2441682.50	1973?	UR-100	-	T13	8684 47 RD UBP-7	Duga-1	-	-	YSNYA	-	-	-	1000?	-	Pacific
1973-8314	2441682.50	1973?	UR-100	-	T14	8684 47 RD UBP-8	Duga-1	-	-	YSNYA	-	-	-	1000?	-	Pacific
1973-8315	2441682.50	1973?	UR-100	-	T15	8684 47 RD UBP-9	Duga-1	-	-	YSNYA	-	-	-	1000?	-	Pacific
1973-8316	2441682.50	1973?	UR-100	-	T16	8684 47 RD UBP-10	Duga-1	-	-	YSNYA	-	-	-	1000?	-	Pacific
1973-8317	2441682.50	1973?	UR-100	-	T17	8684 47 RD UBP-11	Duga-1	-	-	YSNYA	-	-	-	1000?	-	Pacific
1973-8318	2441682.50	1973?	UR-100	-	T18	8684 47 RD UBP-12	Duga-1	-	-	YSNYA	-	-	-	1000?	-	Pacific
1973-8319	2441682.50	1973?	UR-100	-	T19	8684 47 RD UBP-13	Duga-1	-	-	YSNYA	-	-	-	1000?	-	Pacific
1973-8320	2441682.50	1973?	UR-100	-	T20	8684 47 RD UBP-14	Duga-1	-	-	YSNYA	-	-	-	1000?	-	Pacific
1973-8321	2441682.50	1973?	UR-100	-	T21	8684 47 RD UBP-15	Duga-1	-	-	YSNYA	-	-	-	1000?	-	Pacific
1973-8322	2441682.50	1973?	UR-100	-	T22	8684 47 RD UBP-16	Duga-1	-	-	YSNYA	-	-	-	1000?	-	Pacific
1973-8351	2441682.50	1973?	UR-100	-	-	8684 27 RD UBP-1	Duga-1	-	-	500B	-	-	-	1000?	-	Kura
1973-8352	2441682.50	1973?	UR-100	-	-	8684 27 RD UBP-2	Duga-1	-	-	500B	-	-	-	1000?	-	Kura
1973-8353	2441682.50	1973?	UR-100	-	-	8684 27 RD UBP-3	Duga-1	-	-	500B	-	-	-	1000?	-	Kura
1973-8354	2441682.50	1973?	UR-100	-	-	8684 27 RD UBP-4	Duga-1	-	-	500B	-	-	-	1000?	-	Kura
1973-8355	2441682.50	1973?	UR-100	-	-	8684 27 RD UBP-5	Duga-1	-	-	500B	-	-	-	1000?	-	Kura
1973-8356	2441682.50	1973?	UR-100	-	-	8684 27 RD UBP-6	Duga-1	-	-	500B	-	-	-	1000?	-	Kura
1973-8357	2441682.50	1973?	UR-100	-	-	8684 27 RD UBP-7	Duga-1	-	-	500B	-	-	-	1000?	-	Kura
1973-8358	2441682.50	1973?	UR-100	-	-	8684 27 RD UBP-8	Duga-1	-	-	500B	-	-	-	1000?	-	Kura
1973-8359	2441682.50	1973?	UR-100	-	-	8684 27 RD UBP-9	Duga-1	-	-	500B	-	-	-	1000?	-	Kura
1973-8360	2441682.50	1973?	UR-100	-	-	8684 27 RD UBP-10	Duga-1	-	-	500B	-	-	-	1000?	-	Kura
1973-8361	2441682.50	1973?	UR-100	-	-	8684 27 RD UBP-11	Duga-1	-	-	500B	-	-	-	1000?	-	Kura
1973-8362	2441682.50	1973?	UR-100	-	-	8684 27 RD UBP-12	Duga-1	-	-	500B	-	-	-	1000?	-	Kura
1973-8363	2441682.50	1973?	UR-100	-	-	8684 27 RD UBP-13	Duga-1	-	-	500B	-	-	-	1000?	-	Kura
1973-8364	2441682.50	1973?	UR-100	-	-	8684 27 RD UBP-14	Duga-1	-	-	500B	-	-	-	1000?	-	Kura
1973-8365	2441682.50	1973?	UR-100	-	-	8684 27 RD UBP-15	Duga-1	-	-	500B	-	-	-	1000?	-	Kura
1973-8366	2441682.50	1973?	UR-100	-	-	8684 27 RD UBP-16	Duga-1	-	-	500B	-	-	-	1000?	-	Kura
1973-8367	2441682.50	1973?	UR-100M	-	-	8684H 27 RD UBP-17	Duga-1	-	-	500B	-	-	-	1000?	-	Kura
1973-846	2441704.60	1973 Jan 22 0230	UR-100K	-	47663-41-27P	15A200 UBP-5 K	3 BB 15F201/RA65	RCh. 15E20	-	MIP-5	LC131/28	-	-	1000?	-	Kura
1973-810	2441702.50	1973 Jan 30	UR-100U	-	-	15A200 K ZP-8	-	-	-	MIP-5	LC131N/57	-	-	1000?	-	Kura
1973-849	2441706.70	1973 Mar 17 0442	UR-100K	-	47639-21-273P	15A200 UBP-9 ZP	3 BB 15F201/RA65	RCh. 15E20	-	MIP-5	LC131/28	-	-	1000?	-	Kura
1973-854	2441704.65	1973 Mar 23 0340	UR-100K	-	65039-31-233T	15A200 UBP-9 ZP	3 BB 15F201/RA65	RCh. 15E20	-	MIP-5	LC131/28	-	-	1000?	-	Kura
1973-8544	2441706.90	1973 Mar 25	UR-100M	-	D12	8684H 4 RD UBP-13	Duga-1	-	-	DRUV	LC830/34	-	-	1000?	-	Kura
1973-8538	2441706.90	1973 Mar 26	UR-100M	-	D13	8684H 4 RD UBP-14	Duga-1	-	-	DRUV	LC830/31	-	-	1000?	-	Kura
1973-8539	2441707.90	1973 Mar 29	UR-100M	-	D14	8684H 4 RD UBP-15	Duga-1	-	-	DRUV	LC830/37	-	-	1000?	-	Kura
1973-8537	2441707.90	1973 Mar 30	UR-100M	-	D15	8684H 4 RD UBP-16	Duga-1	-	-	DRUV	LC830/36	-	-	1000?	-	Kura
1973-8500	2441779.50	1973 Apr 25	UR-100M	-	T01	8684M 47 RD UBP-17	Duga-1	-	-	MIP-5	LC131/28	-	-	1000?	-	Pacific
1973-8408	2441831.80	1973 Apr 25	UR-100M	-	-	8684M 10 RD UBP-18	Zapad-73	-	-	YSNYA	LC179/1	-	-	1000?	-	Pacific
1973-8501	2441833.90	1973 Jun 22 1840	UR-100K	-	50439-22-273P	15A200 UBP-8 ZP	3 BB 15F201/RA65	RCh. 15E20	-	MIP-5	LC131/28	-	-	1000?	-	Pacific
1973-848	2441863.46	1973 Jun 27 2305	UR-100K	-	48239-32-216T	15A200 UBP-9 ZP	3 BB 15F201/RA65	RCh. 15E20	-	MIP-5	LC131/28	-	-	1000?	-	Pacific
1973-8502	2441863.50	1973 Jul 1?	UR-100	-	T03	8684 47 RD UBP-19	Duga-1	-	-	YSNYA	LC750/6	-	-	1000?	-	Pacific
1973-8539	2441868.50	1973 Jul 1?	UR-100	-	D16	8684 47 RD UBP-17	Duga-1	-	-	DRUV	LC830/63	-	-	1000?	-	Pacific
1973-8539	2441868.50	1973 Jul 1?	UR-100	-	D17	8684 47 RD UBP-18	Duga-1	-	-	DRUV	LC830/67	-	-	1000?	-	Pacific
1973-8539	2441868.50	1973 Jul 1?	UR-100	-	D18	8684 47 RD UBP-19	Duga-1	-	-	DRUV	LC830/66	-	-	1000?	-	Pacific
1973-8550	2441910.70	1973 Aug 16 0455	UR-100K	-	50439-22-274P	15A200 UBP-10 K	3 BB 15F201/RA65	RCh. 15E20	-	MIP-5	LC131/28	-	-	1000?	-	Kura
1973-8541	2441953.50	1973 Aug 24	UR-100K	-	D19	8684 47 RD UBP-20	Duga-1	-	-	DRUV	LC830/32	-	-	1000?	-	Kura
1973-851	2441953.61	1973 Aug 28 0357	UR-100K	-	64149-23-273P	15A200 UBP-11 K	3 BB 15F201/RA65	RCh. 15E20	-	MIP-5	LC131/28	-	-	1000?	-	Kura
1973-852	2441982.82	1973 Sep 17 0235	UR-100K	-	51159-33-234T	15A200 UBP-12 ZP	3 BB 15F201/RA65	RCh. 15E20	-	MIP-5	LC131/28	-	-	1000?	-	Kura
1973-8487	2441986.50	1973 Oct 28?	UR-100K	-	-	15A200 5A RD UBP-1	-	-	-	TEVK	-	-	-	1000?	-	Kura
1973-8503	2441986.50	1973 Nov	UR-100	-	T04	8684 47 RD UBP-21	Duga-1	-	-	YSNYA	LC750/4/7	-	-	1000?	-	Pacific
1973-8504	2441986.50	1973 Nov	UR-100	-	T05	8684 47 RD UBP-22	Duga-1	-	-	YSNYA	LC750/4/4	-	-	1000?	-	Pacific
1973-8505	2441986.50	1973 Nov	UR-100	-	T06	8684 47 RD UBP-23	Duga-1	-	-	YSNYA	LC750/4/10	-	-	1000?	-	Pacific
1973-8394	2442020.52	1973 Dec 4 0033	UR-100K	-	49239-32-228T	15A200 UBP-13 K	3 BB 15F201/RA65	RCh. 15E20	-	MIP-5	LC131/28	-	-	1000?	-	Kura
1973-8363	2442042.54	1973 Dec 26 0100	UR-100K	-	47649-24-273P	15A200 UBP-14 ZP	3 BB 15F201/RA65	RCh. 15E20	-	MIP-5	LC131/28	-	-	1000?	-	Kura
1974-5471	2442047.50	1974?	UR-100	-	T24	8684 47 RD UBP-24	Duga-1	-	-	YSNYA	-	-	-	1000?	-	Pacific
1974-5472	2442047.50	1974?	UR-100	-	T25	8684 47 RD UBP-25	Duga-1	-	-	YSNYA	-	-	-	1000?	-	Pacific
1974-5473	2442047.50	1974?	UR-100	-	T26	8684 47 RD UBP-26	Duga-1	-	-	YSNYA	-	-	-	1000?	-	Pacific
1974-5474	2442047.50	1974?	UR-100	-	T27	8684 47 RD UBP-27	Duga-1	-	-	YSNYA	-	-	-	1000?	-	Pacific
1974-5475	2442047.50	1974?	UR-100	-	T28	8684 47 RD UBP-28	Duga-1	-	-	YSNYA	-	-	-	1000?	-	Pacific
1974-5476	2442047.50	1974?	UR-100	-	T29	8684 47 RD UBP-29	Duga-1	-	-	YSNYA	-	-	-	1000?	-	Pacific
1974-5477	2442047.50	1974?	UR-100	-	T30	8684 47 RD UBP-30	Duga-1	-	-	YSNYA	-					

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Mission	Launch	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee_Km	Range_Km	Dest
1974-8489	2442047.50	1974?	UR-100	-	T42	8684 47 RD URP-42	Duga-1	YSNIA	-	YSNIA	-	-	-	1000?	-	Pacific
1974-8490	2442047.50	1974?	UR-100	-	T43	8684 47 RD URP-43	Duga-1	YSNIA	-	YSNIA	-	-	-	1000?	-	Pacific
1974-8491	2442047.50	1974?	UR-100	-	T44	8684 47 RD URP-44	Duga-1	YSNIA	-	YSNIA	-	-	-	1000?	-	Kura
1974-8492	2442047.50	1974?	UR-100	-	T45	8684 47 RD URP-45	Duga-1	YSNIA	-	YSNIA	-	-	-	1000?	-	Kura
1974-8512	2442047.50	1974?	UR-100	-	-	8684 27 RD URP-19	Duga-1	SOB	-	SOB	-	-	-	1000?	-	Kura
1974-8513	2442047.50	1974?	UR-100	-	-	8684 27 RD URP-20	Duga-1	SOB	-	SOB	-	-	-	1000?	-	Kura
1974-8514	2442047.50	1974?	UR-100	-	-	8684 27 RD URP-21	Duga-1	SOB	-	SOB	-	-	-	1000?	-	Kura
1974-8515	2442047.50	1974?	UR-100	-	-	8684 27 RD URP-22	Duga-1	SOB	-	SOB	-	-	-	1000?	-	Kura
1974-8516	2442047.50	1974?	UR-100	-	-	8684 27 RD URP-23	Duga-1	SOB	-	SOB	-	-	-	1000?	-	Kura
1974-8517	2442047.50	1974?	UR-100	-	-	8684 27 RD URP-24	Duga-1	SOB	-	SOB	-	-	-	1000?	-	Kura
1974-8518	2442047.50	1974?	UR-100	-	-	8684 27 RD URP-25	Duga-1	SOB	-	SOB	-	-	-	1000?	-	Kura
1974-8519	2442047.50	1974?	UR-100	-	-	8684 27 RD URP-26	Duga-1	SOB	-	SOB	-	-	-	1000?	-	Kura
1974-8520	2442047.50	1974?	UR-100	-	-	8684 27 RD URP-27	Duga-1	SOB	-	SOB	-	-	-	1000?	-	Kura
1974-8521	2442047.50	1974?	UR-100	-	-	8684 27 RD URP-28	Duga-1	SOB	-	SOB	-	-	-	1000?	-	Kura
1974-8522	2442047.50	1974?	UR-100	-	-	8684 27 RD URP-29	Duga-1	SOB	-	SOB	-	-	-	1000?	-	Kura
1974-8523	2442047.50	1974?	UR-100	-	-	8684 27 RD URP-30	Duga-1	SOB	-	SOB	-	-	-	1000?	-	Kura
1974-8524	2442047.50	1974?	UR-100	-	-	8684 27 RD URP-31	Duga-1	SOB	-	SOB	-	-	-	1000?	-	Kura
1974-8525	2442047.50	1974?	UR-100	-	-	8684 27 RD URP-32	Duga-1	SOB	-	SOB	-	-	-	1000?	-	Kura
1974-8526	2442047.50	1974?	UR-100	-	-	8684 27 RD URP-33	Duga-1	SOB	-	SOB	-	-	-	1000?	-	Kura
1974-8527	2442047.50	1974?	UR-100	-	-	8684 27 RD URP-34	Duga-1	SOB	-	SOB	-	-	-	1000?	-	Kura
1974-8489	2442074.50	1974 Jan 27	UR-100	?	-	Unk missile	-	MIP-5	-	MIP-5	-	-	-	1000?	-	-
1974-8500	2442098.50	1974 Feb 20	UR-100	?	-	Unk missile	-	MIP-5	-	MIP-5	-	-	-	1000?	-	-
1974-8501	2442106.50	1974 Feb 27	UR-100	?	-	Unk missile	-	MIP-5	-	MIP-5	-	-	-	1000?	-	-
1974-8502	2442132.65	1974 Mar 26 0340	UR-100K	-	63011-61-263T	15A20 URP-15 ZP	1 BB RA64	MIP-5	-	MIP-5	LC131/28	-	-	1000?	-	Kura
1974-8503	2442132.65	1974 Mar 26 0340	UR-100K	-	47611-51-143P	15A20 URP-16 ZP	1 BB RA64	MIP-5	-	MIP-5	LC131/28	-	-	1000?	-	Kura
1974-8504	2442136.60	1974 Mar 30 0230	UR-100K	-	-	8684H URP	Duga-1	DRUV	-	DRUV	LC830/5/1	-	-	1000?	-	Kura
1974-8505	2442161.50	1974 Apr 24	UR-100M	-	-	8684H URP	Duga-1	DRUV	-	DRUV	LC830/5/2	-	-	1000?	-	Kura
1974-8506	2442162.50	1974 Apr 25	UR-100M	-	-	8684H URP	Duga-1	DRUV	-	DRUV	LC830/5/2	-	-	1000?	-	Kura
1974-8507	2442162.50	1974 Apr 25	UR-100M	-	-	8684H URP	Duga-1	DRUV	-	DRUV	LC830/5/6	-	-	1000?	-	Kura
1974-8508	2442163.50	1974 Apr 26	UR-100M	-	-	8684H URP	Duga-1	DRUV	-	DRUV	LC830/5/6	-	-	1000?	-	Kura
1974-8509	2442163.50	1974 Apr 26	UR-100M	-	-	8684H URP	Duga-1	DRUV	-	DRUV	LC830/5/9	-	-	1000?	-	Kura
1974-8510	2442197.04	1974 May 29 1300	UR-100K	-	49211-62-263T	8684H URP	Duga-1	DRUV	-	DRUV	LC131/28	-	-	1000?	-	Kura
1974-8511	2442224.67	1974 Jun 26 0410	UR-100K	-	52411-52-143P	15A20 URP-17 ZP	1 BB RA64	MIP-5	-	MIP-5	LC131/28	-	-	1000?	-	Kura
1974-8512	2442224.67	1974 Jun 26 0410	UR-100K	-	-	15A20 URP-18 ZP	1 BB RA64	MIP-5	-	MIP-5	LC131/28	-	-	1000?	-	Kura
1974-8513	2442253.50	1974 Jul 1	UR-100	?	-	Unk missile	-	MIP-5	-	MIP-5	-	-	-	1000?	-	-
1974-8514	2442258.50	1974 Jul 1	UR-100	?	T46	8684 47 RD URP-46	Duga-1	YSNIA	-	YSNIA	-	-	-	1000?	-	-
1974-8489	2442258.50	1974 Jul 1	UR-100	-	49211-62-264T	8684 47 RD URP-46	Duga-1	YSNIA	-	YSNIA	LC131/28	-	-	1000?	-	Kura
1974-8517	2442263.94	1974 Jul 25 0100	UR-100K	-	-	15A20 URP-19 ZP	1 BB RA64	MIP-5	-	MIP-5	LC131/28	-	-	1000?	-	Kura
1974-8518	2442263.94	1974 Aug 23 1800	UR-100K	-	47611-51-144P	15A20 URP-20 ZP	1 BB RA64	MIP-5	-	MIP-5	LC131/28	-	-	1000?	-	Kura
1974-8519	2442284.32	1974 Sep 5 1940	UR-100K	?	-	Unk missile	-	MIP-5	-	MIP-5	-	-	-	1000?	-	-
1974-8520	2442286.50	1974 Sep 5	UR-100M	-	-	8684H URP-142	Swinets	MIP-5	-	MIP-5	LC176/46	-	-	1000?	-	Kura
1974-8521	2442306.50	1974 Sep 5	UR-100M	-	-	Unk missile	-	MIP-5	-	MIP-5	-	-	-	1000?	-	-
1974-8522	2442307.50	1974 Sep 19	UR-100	?	-	Unk missile	-	MIP-5	-	MIP-5	-	-	-	1000?	-	-
1974-8523	2442317.80	1974 Sep 17	UR-100M	-	-	Unk missile	-	MIP-5	-	MIP-5	-	-	-	1000?	-	-
1974-8524	2442317.80	1974 Sep 17	UR-100M	-	-	Unk missile	-	MIP-5	-	MIP-5	-	-	-	1000?	-	-
1974-8525	2442317.80	1974 Sep 17	UR-100M	-	-	Unk missile	-	MIP-5	-	MIP-5	-	-	-	1000?	-	-
1974-8526	2442317.80	1974 Sep 17	UR-100M	-	-	Unk missile	-	MIP-5	-	MIP-5	-	-	-	1000?	-	-
1974-8527	2442317.80	1974 Sep 17	UR-100M	-	-	Unk missile	-	MIP-5	-	MIP-5	-	-	-	1000?	-	-
1974-8528	2442317.80	1974 Sep 17	UR-100M	-	-	Unk missile	-	MIP-5	-	MIP-5	-	-	-	1000?	-	-
1974-8529	2442317.80	1974 Sep 17	UR-100M	-	-	Unk missile	-	MIP-5	-	MIP-5	-	-	-	1000?	-	-
1974-8530	2442317.80	1974 Sep 17	UR-100M	-	-	Unk missile	-	MIP-5	-	MIP-5	-	-	-	1000?	-	-
1974-8531	2442317.80	1974 Sep 17	UR-100M	-	-	Unk missile	-	MIP-5	-	MIP-5	-	-	-	1000?	-	-
1974-8532	2442317.80	1974 Sep 17	UR-100M	-	-	Unk missile	-	MIP-5	-	MIP-5	-	-	-	1000?	-	-
1974-8533	2442317.80	1974 Sep 17	UR-100M	-	-	Unk missile	-	MIP-5	-	MIP-5	-	-	-	1000?	-	-
1974-8534	2442317.80	1974 Sep 17	UR-100M	-	-	Unk missile	-	MIP-5	-	MIP-5	-	-	-	1000?	-	-
1974-8535	2442317.80	1974 Sep 17	UR-100M	-	-	Unk missile	-	MIP-5	-	MIP-5	-	-	-	1000?	-	-
1974-8536	2442317.80	1974 Sep 17	UR-100M	-	-	Unk missile	-	MIP-5	-	MIP-5	-	-	-	1000?	-	-
1974-8537	2442317.80	1974 Sep 17	UR-100M	-	-	Unk missile	-	MIP-5	-	MIP-5	-	-	-	1000?	-	-
1974-8538	2442317.80	1974 Sep 17	UR-100M	-	-	Unk missile	-	MIP-5	-	MIP-5	-	-	-	1000?	-	-
1974-8539	2442317.80	1974 Sep 17	UR-100M	-	-	Unk missile	-	MIP-5	-	MIP-5	-	-	-	1000?	-	-
1974-8540	2442317.80	1974 Sep 17	UR-100M	-	-	Unk missile	-	MIP-5	-	MIP-5	-	-	-	1000?	-	-
1974-8541	2442317.80	1974 Sep 17	UR-100M	-	-	Unk missile	-	MIP-5	-	MIP-5	-	-	-	1000?	-	-
1974-8542	2442317.80	1974 Sep 17	UR-100M	-	-	Unk missile	-	MIP-5	-	MIP-5	-	-	-	1000?	-	-
1974-8543	2442317.80	1974 Sep 17	UR-100M	-	-	Unk missile	-	MIP-5	-	MIP-5	-	-	-	1000?	-	-
1974-8544	2442317.80	1974 Sep 17	UR-100M	-	-	Unk missile	-	MIP-5	-	MIP-5	-	-	-	1000?	-	-
1974-8545	2442317.80	1974 Sep 17	UR-100M	-	-	Unk missile	-	MIP-5	-	MIP-5	-	-	-	1000?	-	-
1974-8546	2442317.80	1974 Sep 17	UR-100M	-	-	Unk missile	-	MIP-5	-	MIP-5	-	-	-	1000?	-	-
1974-8547	2442317.80	1974 Sep 17	UR-100M	-	-	Unk missile	-	MIP-5	-	MIP-5	-	-	-	1000?	-	-
1974-8548	2442317.80	1974 Sep 17	UR-100M	-	-	Unk missile	-	MIP-5	-	MIP-5	-	-	-	1000?	-	-
1974-8549	2442317.80	1974 Sep 17	UR-100M	-	-	Unk missile	-	MIP-5	-	MIP-5	-	-	-	1000?	-	-
1974-8550	2442317.80	1974 Sep 17	UR-100M	-	-	Unk missile	-	MIP-5	-	MIP-5	-	-	-	1000?	-	-
1974-8551	2442317.80	1974 Sep 17	UR-100M	-	-	Unk missile	-	MIP-5	-	MIP-5	-	-	-	1000?	-	-
1974-8552	2442317.80	1974 Sep 17	UR-100M	-	-	Unk missile	-	MIP-5	-	MIP-5	-	-	-	1000?	-	-
1974-8553	2442317.80	1974 Sep 17	UR-100M	-	-	Unk missile	-	MIP-5	-	MIP-5	-	-	-	1000?	-	-
1974-8554	2442317.80	1974 Sep 17	UR-100M	-	-	Unk missile	-	MIP-5	-	MIP-5	-	-	-	1000?	-	-
1974-8555																

Launch

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Mission	FlightCode	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee km	Range km	Dest
1977-5475	2443321.50	1977 Jun 27	UR-100U	-	-	15A200 UBP	Duga-1	-	-	DRUV	LC830/5/7	-	-	1000?	-	Pacific
1977-5349	2443386.50	1977 Sep	UR-100U	-	-	15A200 54 RD UBP-3	-	-	-	TEVK	LC175/45	-	-	1000?	-	Kura
1977-527	2443422.50	1977 Oct 6	UR-100K	-	-	15A200 LKI-11	3 BB 15F204	RGCh. 15F202P2	-	MILP-5	LC131/28	-	-	1000?	-	Kura
1977-528	2443437.85	1977 Oct 21	UR-100K	-	524332-122(12L)	15A200-T-UCh. LKI-2	3 BB 15F204	RGCh. 15F202P2	-	MILP-5	LC175/45	-	-	1000?	-	Kura
1977-529	2443444.50	1977 Oct 28	UR-100K	-	-	15A200 LKI-12? K	3 BB 15F204	RGCh. 15F202P2	-	MILP-5	LC175/45	-	-	1000?	-	Kura
1977-5462	2443461.50	1977 Nov 14	UR-100U	-	-	15A200 UBP	Duga-1	-	-	DRUV	LC830/3/1	-	-	1000?	-	Pacific
1977-5463	2443462.50	1977 Nov 15	UR-100U	-	-	15A200 UBP	Duga-1	-	-	DRUV	LC830/3/3	-	-	1000?	-	Pacific
1977-5464	2443465.50	1977 Nov 18	UR-100U	-	-	15A200 UBP	Duga-1	-	-	DRUV	LC830/3/2	-	-	1000?	-	Pacific
1977-5465	2443465.50	1977 Nov 18	UR-100U	-	-	15A200 UBP	Duga-1	-	-	DRUV	LC830/3/7	-	-	1000?	-	Pacific
1977-5466	2443465.50	1977 Nov 18	UR-100U	-	-	15A200 UBP	Duga-1	-	-	DRUV	LC830/3/8	-	-	1000?	-	Pacific
1977-5467	2443465.50	1977 Nov 18	UR-100U	-	-	15A200 UBP	Duga-1	-	-	DRUV	LC830/3/9	-	-	1000?	-	Pacific
1977-5468	2443476.50	1977 Nov 29	UR-100U	-	-	15A200 UBP	Duga-1	-	-	DRUV	LC830/3/10	-	-	1000?	-	Pacific
1978-5359	2443508.50	1978?	UR-100K	-	-	8R6RH UBP	-	-	-	MILP-5?	-	-	-	1000?	-	Kura
1978-5362	2443508.50	1978?	UR-100K	-	-	8R6RH UBP	-	-	-	MILP-5?	-	-	-	1000?	-	Kura
1978-5291	2443508.50	1978?	UR-100K	-	K09	15A200 47 RD UBP-11	Duga-1	-	-	YSNYA	-	-	-	1000?	-	Pacific
1978-5292	2443508.50	1978?	UR-100K	-	K10	15A200 47 RD UBP-12	Duga-1	-	-	YSNYA	-	-	-	1000?	-	Pacific
1978-5293	2443508.50	1978?	UR-100K	-	K11	15A200 47 RD UBP-13	Duga-1	-	-	YSNYA	-	-	-	1000?	-	Pacific
1978-5294	2443508.50	1978?	UR-100K	-	K12	15A200 47 RD UBP-14	Duga-1	-	-	YSNYA	-	-	-	1000?	-	Pacific
1978-5375	2443508.50	1978?	UR-100K	-	K13	15A200 47 RD UBP-15	Duga-1	-	-	YSNYA	-	-	-	1000?	-	Pacific
1978-5376	2443508.50	1978?	UR-100K	-	K14	15A200 47 RD UBP-16	Duga-1	-	-	YSNYA	-	-	-	1000?	-	Pacific
1978-5377	2443508.50	1978?	UR-100K	-	K15	15A200 47 RD UBP-17	Duga-1	-	-	YSNYA	-	-	-	1000?	-	Pacific
1978-5378	2443508.50	1978?	UR-100K	-	K16	15A200 47 RD UBP-18	Duga-1	-	-	YSNYA	-	-	-	1000?	-	Pacific
1978-5293	2443563.50	1978 May 25	UR-100K	-	-	15A200 UBP	Duga-1	-	-	DRUV	LC830/2/8	-	-	1000?	-	Pacific
1978-5294	2443569.50	1978 May 31	UR-100K	-	-	15A200 UBP	Duga-1	-	-	DRUV	LC830/2/7	-	-	1000?	-	Pacific
1978-5295	2443569.50	1978 Jun 2	UR-100K	-	-	15A200 UBP	Duga-1	-	-	DRUV	LC830/2/2	-	-	1000?	-	Pacific
1978-5296	2443569.50	1978 Jun 2	UR-100K	-	-	15A200 UBP	Duga-1	-	-	DRUV	LC830/2/3	-	-	1000?	-	Pacific
1978-5297	2443569.50	1978 Jun 2	UR-100K	-	-	15A200 UBP	Duga-1	-	-	DRUV	LC830/2/5	-	-	1000?	-	Pacific
1978-5298	2443569.50	1978 Jun 2	UR-100K	-	-	15A200 UBP	Duga-1	-	-	DRUV	LC830/2/6	-	-	1000?	-	Pacific
1978-5299	2443569.50	1978 Jun 2	UR-100K	-	-	15A200 UBP	Duga-1	-	-	DRUV	LC830/2/4	-	-	1000?	-	Pacific
1978-5344	2443584.50	1978 Jun 26	UR-100U	-	-	URk Hiselle	Duga-1	-	-	DRUV	LC830/2/1	-	-	1000?	-	Pacific
1978-5345	2443763.50	1978 Oct 26	UR-100U	-	-	15A200 RGCh	Duga-1	-	-	DRUV	LC830/2/1	-	-	1000?	-	Pacific
1978-5352	2443941.50	1978 Nov 29?	UR-100U	-	-	15A200 RGCh	Duga-1	-	-	DRUV	LC830/2/1	-	-	1000?	-	Pacific
1979-5269	2444068.50	1979 Aug 3	UR-100U	-	-	URk Hiselle	Duga-1	-	-	DRUV	LC12/7	-	-	1000?	-	Kura
1980-5275	2444238.50	1980	UR-100K	-	-	8R6RH 10 RD UBP-7	-	-	-	YGTRA	-	-	-	1000?	-	Kura
1980-5276	2444238.50	1980	UR-100K	-	-	8R6RH 10 RD UBP-4	-	-	-	TEVK	-	-	-	1000?	-	Kura
1980-5277	2444238.50	1980	UR-100K	-	-	15A200 84 RD UBP-5	-	-	-	TEVK	-	-	-	1000?	-	Kura
1980-5278	2444238.50	1980	UR-100K	-	-	15A200 84 RD UBP-6	-	-	-	TEVK	-	-	-	1000?	-	Kura
1980-5279	2444238.50	1980	UR-100K	-	-	8R6RH UBP	-	-	-	YGTRA?	-	-	-	1000?	-	Kura
1980-5280	2444238.50	1980	UR-100K	-	-	8R6RH UBP	-	-	-	YGTRA?	-	-	-	1000?	-	Kura
1981-5281	2444604.50	1981	UR-100U	-	-	15A200 36 RD UBP-1	Vostok-81	-	-	RGMS	-	-	-	1000?	-	Kura
1981-5281	2444647.50	1981 Sep	UR-100U	-	-	15A200 36 RD UBP-2	Vostok-81	-	-	BERSH	-	-	-	1000?	-	Kura
1981-5282	2444647.50	1981 Sep	UR-100U	-	-	15A200 36 RD UBP-2	Vostok-81	-	-	TEVK	-	-	-	1000?	-	Kura
1981-5283	2444686.50	1981 Sep 11	UR-100U	-	-	15A200 52 RD UBP-1	-	-	-	BERSH	-	-	-	1000?	-	Kura
1982-5284	2444686.50	1982	UR-100K	-	-	15A200 52 RD UBP-7	-	-	-	TEVK	-	-	-	1000?	-	Kura
1982-5285	2445109.50	1982	UR-100K	-	-	8R6RH 10 RD UBP-6	-	-	-	TEVK	-	-	-	1000?	-	Kura
1982-5286	2445131.50	1982 Jun 11	UR-100K	-	-	15A200 UBP	-	-	-	YGTRA	LC12/8	-	-	1000?	-	Kura
1982-5287	2445131.50	1982 Jun 11	UR-100K	-	-	15A200 UBP	-	-	-	BERSH	LC4/1	-	-	1000?	-	Kura
1982-5288	2445138.50	1982 Jun 18	UR-100U	-	-	15A200 54 RD UBP-3	-	-	-	BERSH	LC4/9	-	-	1000?	-	Kura
1982-5289	2445138.50	1982 Jun 18	UR-100U	-	-	15A200 54 RD UBP-6	-	-	-	BERSH	LC4/9	-	-	1000?	-	Kura
1982-5290	2445138.50	1982 Jun 18	UR-100U	-	-	15A200 54 RD UBP-9	-	-	-	TEVK	LC820/6	-	-	1000?	-	Kura
1982-5291	2445138.50	1982 Jun 18	UR-100U	-	-	15A200 54 RD UBP-9	-	-	-	TEVK	LC820/6	-	-	1000?	-	Kura
1982-5292	2445324.50	1982 Aug 15	UR-100U	-	-	15A200 UBP	-	-	-	TEVK	-	-	-	1000?	-	-
1982-5293	2445324.50	1983	UR-100U	-	-	15A200 36 RD UBP-3	-	-	-	YGTRA	LC12/10	-	-	1000?	-	-
1983-5269	2445324.50	1983	UR-100U	-	-	8R6RH 10 RD UBP-9	-	-	-	YGTRA	LC12/10	-	-	1000?	-	-
1983-5270	2445324.50	1983	UR-100U	-	-	8R6RH 10 RD UBP-9	-	-	-	YGTRA	LC12/10	-	-	1000?	-	-
1983-5271	2445324.50	1983	UR-100U	-	-	8R6RH 10 RD UBP-10	-	-	-	YGTRA	LC12/10	-	-	1000?	-	-
1984-532	2445698.50	1984	UR-100U	-	-	OT	-	-	-	MILP-5	-	-	-	1000?	-	-
1984-533	2445698.50	1984	UR-100U	-	-	OT	-	-	-	MILP-5	-	-	-	1000?	-	-
1984-534	2445698.50	1984	UR-100U	-	-	OT	-	-	-	MILP-5	-	-	-	1000?	-	-
1984-535	2445698.50	1984	UR-100U	-	-	OT	-	-	-	MILP-5	-	-	-	1000?	-	-
1984-536	2445698.50	1984	UR-100U	-	-	OT	-	-	-	MILP-5	-	-	-	1000?	-	-
1984-537	2445698.50	1984	UR-100U	-	-	OT	-	-	-	MILP-5	-	-	-	1000?	-	-
1984-538	2445698.50	1984	UR-100U	-	-	OT	-	-	-	MILP-5	-	-	-	1000?	-	-
1984-539	2445845.50	1984 May 25	UR-100K	-	-	15A200 52 RD UBP	-	-	-	BERSH	LC6/1	-	-	1000?	-	Kura
1985-5269	2446065.50	1985	UR-100U	-	-	15A200 54 RD UBP-10	-	-	-	TEVK	LC630/2	-	-	1000?	-	Kura
1986-5185	2446531.50	1986 Apr 11	UR-100U	-	-	15A200 36 RD UBP-4	-	-	-	RGMS	LC1/8	-	-	1000?	-	Kura
1986-5186	2446531.50	1986 Apr 11	UR-100U	-	-	15A200 36 RD UBP-4	-	-	-	RGMS	LC1/8	-	-	1000?	-	Kura
1986-5187	2446531.50	1986 Apr 11	UR-100U	-	-	15A200 36 RD UBP-4	-	-	-	RGMS	LC1/8	-	-	1000?	-	Kura
1986-5188	2446531.50	1986 Apr 11	UR-100U	-	-	15A200 36 RD UBP-4	-	-	-	RGMS	LC1/8	-	-	1000?	-	Kura
1986-5189	2446531.50	1986 Apr 11	UR-100U	-	-	15A200 36 RD UBP-4	-	-	-	RGMS	LC1/8	-	-	1000?	-	Kura
1986-5190	2446531.50	1986 Apr 11	UR-100U	-	-	15A200 36 RD UBP-4	-	-	-	RGMS	LC1/8	-	-	1000?	-	Kura
1986-5191	2446531.50	1986 Apr 11	UR-100U	-	-	15A200 36 RD UBP-4	-	-	-	RGMS	LC1/8	-	-	1000?	-	Kura
1986-5192	2446531.50	1986 Apr 11	UR-100U	-	-	15A200 36 RD UBP-4	-	-	-	RGMS	LC1/8	-	-	1000?	-	Kura
1986-5193	2446531.50	1986 Apr 11	UR-100U	-	-	15A200 36 RD UBP-4	-	-	-	RGMS	LC1/8	-	-	1000?	-	Kura
1986-5194	2446531.50	1986 Apr 11	UR-100U	-	-	15A200 36 RD UBP-4	-	-	-	RGMS	LC1/8	-	-	1000?	-	Kura
1986-5195	2446531.50	1986 Apr 11	UR-100U	-	-	15A200 36 RD UBP-4	-	-	-	RGMS	LC1/8	-	-	1000?	-	Kura
1986-5196	2446531.50	1986 Apr 11	UR-100U	-	-	15A200 36 RD UBP-4	-	-	-	RGMS	LC1/8	-	-	1000?	-	Kura
1986-5197	2446531.50	1986 Apr 11	UR-100U	-	-	15A200 36 RD UBP-4	-	-	-	RGMS	LC1/8	-	-	1000?	-	Kura
1986-5198	2446531.50	1986 Apr 11	UR-100U	-	-	15A200 36 RD UBP-4	-	-	-	RGMS	LC1/8	-	-	1000?	-	Kura
1986-5199	2446531.50	1986 Apr 11	UR-100U	-	-	15A200 36 RD UBP-4	-	-	-	RGMS	LC1/8	-	-	1000?	-	Kura
1986-5200	2446531.50	1986 Apr 11	UR-100U	-	-	15A200 36 RD UBP-4	-	-	-	RGMS	LC1/8	-	-	1000?	-	Kura
1986-5201	2446531.50	1986 Apr 11	UR-100U	-	-	15A200 36 RD UBP-4	-	-	-	RGMS	LC1/8	-	-	1000?	-	Kura
1986-5202	2446531.50	1986 Apr 11	UR-100U	-	-	15A200 36 RD UBP-4	-	-	-	RGMS	LC1/8	-	-	1000?	-	Kura
1986-5203	2446531.50	1986 Apr 11	UR-100U	-	-	15A200 36 RD UBP-4	-	-	-	RGMS						



Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	DrPay	Agency	Launch_Code	Group	Category	LTCite	Cite	Notes
1965-S241	2438869-60	1965 Apr 19 0220	UR-100	-	U 10741-601	0.000	RWSH	MS	-	Test	Glazami	Erteev	-
1965-A74	2438900-66	1965 May 20 0345	UR-100	-	-	0.000	RWSH	MF	-	Test	MS-66	AVMS	-
1965-A87	2438930-50	1965 Jun 19	UR-100	-	-	0.000	RWSH	MF	-	Test	REF	-	-
1965-S18	2438935-50	1965 Jun 24	UR-100	-	-	0.000	RWSH	MS	-	Test	Glazami	-	-
1965-A97	2438951-50	1965 Jul 10	UR-100	-	-	0.000	RWSH	MS	-	Test	REF	-	-
1965-A102	2438988-78	1965 Jul 17 0640	UR-100	-	-	0.000	RWSH	ME	-	Test	Glazami	Erteev	-
1965-S20	2438965-50	1965 Jul 24	UR-100	-	22942-001	0.000	RWSH	MS	-	Test	REF	-	-
1965-A116	2438972-50	1965 Jul 31	UR-100	-	-	0.000	RWSH	MF	-	Test	REF	-	-
1965-S21	2439003-50	1965 Aug 31	UR-100	-	-	0.000	RWSH	MS	-	Test	REF	-	-
1965-A132	2439028-92	1965 Sep 25 1003	UR-100	-	U 22943-201	0.000	RWSH	MF	-	Test	RML	-	[Jun25]?
1965-S22	2439037-50	1965 Oct 4	UR-100	-	-	0.000	RWSH	MS	-	Test	REF	-	-
1965-S23	2439039-50	1965 Oct 6	UR-100	-	-	0.000	RWSH	MS	-	Test	REF	-	-
1965-S24	2439052-50	1965 Oct 19	UR-100	-	-	0.000	RWSH	MS	-	Test	REF	-	-
1965-S25	2439062-50	1965 Oct 19	UR-100	-	-	0.000	RWSH	MS	-	Test	REF	-	-
1965-S26	2439065-50	1965 Nov 1	UR-100	-	-	0.000	RWSH	MS	-	Test	REF	-	-
1965-A154	2439067-50	1965 Nov 3	UR-100	-	-	0.000	RWSH	MF	-	Test	REF	-	-
1965-A158	2439069-50	1965 Nov 5	UR-100	-	-	0.000	RWSH	MF	-	Test	REF	-	-
1965-A170	2439094-50	1965 Nov 30	UR-100	-	-	0.000	RWSH	MS	-	Test	REF	-	-
1965-S27	2439111-50	1965 Dec 17	UR-100	-	-	0.000	RWSH	MS	-	Test	REF	-	-
1965-A173	2439113-50	1965 Dec 19	UR-100	-	-	0.000	RWSH	MF	-	Test	REF	-	-
1965-S28	2439123-50	1965 Dec 29	UR-100	-	-	0.000	RWSH	MF	-	Test	REF	-	-
1965-A174	2439124-50	1965 Dec 30	UR-100	-	-	0.000	RWSH	MF	-	Test	REF	-	-
1965-S296	2439124-50	1965 Dec 30	UR-100	-	-	0.000	RWSH	MF	-	Test	REF	-	-
1965-S17	2439212-50	1965 Dec 28	UR-100	-	-	0.000	RWSH	MS	-	Test	REF	-	-
1965-S18	2439216-50	1965 Dec 28	UR-100	-	-	0.000	RWSH	MS	-	Test	REF	-	-
1965-S19	2439227-50	1965 Dec 28	UR-100	-	-	0.000	RWSH	MS	-	Test	REF	-	-
1965-A85	2439236-50	1965 Apr 24 0543	UR-100	-	U 10744-306	0.000	RWSH	MS	-	OT	REF	-	-
1965-S20	2439243-50	1965 Apr 28	UR-100	-	U 10744-303	0.000	RWSH	MS	-	OT	REF	-	-
1965-S21	2439244-50	1965 Apr 28	UR-100	-	U 10744-311	0.000	RWSH	MS	-	OT	REF	-	-
1965-S22	2439245-50	1965 Apr 28	UR-100	-	U 22944-306	0.000	RWSH	MF	-	OT	REF	-	-
1965-S23	2439275-50	1965 May 30	UR-100	-	U 10744-312	0.000	RWSH	MS	-	OT	BHL	-	-
1965-S24	2439284-50	1965 Jun 6	UR-100	-	U 10701-011	0.000	RWSH	MS	-	OT	REF	-	-
1965-A76	2439287-50	1965 Jun 11	UR-100	-	U 10744-351	0.000	RWSH	MF	-	OT	REF	-	-
1965-S25	2439305-50	1965 Jun 29	UR-100	-	U 10744-352	0.000	RWSH	MF	-	OT	REF	-	-
1965-S26	2439311-50	1965 Jul 5	UR-100	-	U 22944-307	0.000	RWSH	MS	-	OT	REF	-	-
1965-S27	2439324-50	1965 Jul 18	UR-100	-	U 229 001	0.000	RWSH	MS	-	OT	REF	-	-
1965-S28	2439334-50	1965 Jul 26	UR-100	-	U 229 002	0.000	RWSH	MS	-	OT	REF	-	-
1965-S29	2439338-50	1965 Aug 1	UR-100	-	U 10744-310	0.000	RWSH	MS	-	OT	REF	-	-
1965-S30	2439340-50	1965 Aug 3	UR-100	-	U 10744-357	0.000	RWSH	MS	-	OT	REF	-	-
1965-S31	2439341-50	1965 Aug 4	UR-100	-	U 10744-304	0.000	RWSH	MS	-	OT	REF	-	-
1965-S32	2439346-50	1965 Aug 9	UR-100	-	-	0.000	RWSH	MS	-	OT	REF	-	-
1965-S33	2439346-50	1965 Aug 11	UR-100	-	-	0.000	RWSH	MS	-	OT	REF	-	-
1965-S34	2439349-50	1965 Aug 12	UR-100	-	-	0.000	RWSH	MF	-	OT	REF	-	-
1965-S35	2439352-50	1965 Aug 15	UR-100	-	-	0.000	RWSH	MF	-	OT	REF	-	-
1965-S36	2439354-50	1965 Aug 17	UR-100	-	-	0.000	RWSH	MS	-	OT	REF	-	-
1965-S37	2439351-50	1965 Aug 20	UR-100	-	-	0.000	RWSH	MS	-	OT	REF	-	-
1965-S38	2439362-50	1965 Aug 24	UR-100	-	-	0.000	RWSH	MS	-	OT	REF	-	-
1965-S39	2439364-50	1965 Aug 27	UR-100	-	-	0.000	RWSH	MS	-	OT	REF	-	-
1965-S40	2439370-50	1965 Aug 30	UR-100	-	-	0.000	RWSH	MS	-	OT	REF	-	-
1965-S41	2439374-50	1965 Sep 2	UR-100	-	-	0.000	RWSH	MS	-	OT	REF	-	-
1965-S42	2439380-50	1965 Sep 2	UR-100	-	-	0.000	RWSH	MS	-	OT	REF	-	-
1965-S43	2439384-50	1965 Sep 16	UR-100	-	-	0.000	RWSH	MS	-	OT	REF	-	-
1965-S44	2439389-50	1965 Sep 16	UR-100	-	-	0.000	RWSH	MS	-	OT	REF	-	-
1965-S45	2439399-50	1965 Sep 16	UR-100	-	-	0.000	RWSH	MS	-	OT	REF	-	-
1965-S46	2439403-50	1965 Oct 4	UR-100	-	-	0.000	RWSH	MS	-	OT	REF	-	-
1965-S47	2439405-50	1965 Oct 5	UR-100	-	-	0.000	RWSH	MS	-	OT	REF	-	-
1965-S48	2439419-50	1965 Oct 21	UR-100	-	-	0.000	RWSH	MS	-	OT	REF	-	-
1965-S49	2439425-50	1965 Oct 27	UR-100	-	-	0.000	RWSH	MS	-	OT	REF	-	-
1965-S50	2439446-50	1965 Nov 17	UR-100	-	-	0.000	RWSH	MS	-	OT	REF	-	-
1965-S51	2439448-50	1965 Nov 19	UR-100	-	-	0.000	RWSH	MS	-	OT	REF	-	-
1965-S52	2439451-50	1966 Nov 22	UR-100	-	-	0.000	RWSH	MS	-	OT	REF	-	-
1965-S53	2439460-50	1966 Dec 1	UR-100	-	-	0.000	RWSH	MS	-	OT	REF	-	-
1965-S54	2439471-50	1966 Dec 6	UR-100	-	-	0.000	RWSH	MS	-	OT	REF	-	-
1965-S55	2439475-50	1966 Dec 12	UR-100	-	-	0.000	RWSH	MS	-	OT	REF	-	-
1965-S56	2439485-50	1966 Dec 16	UR-100	-	-	0.000	RWSH	MS	-	OT	REF	-	-
1965-S57	2439486-50	1966 Dec 26	UR-100	-	-	0.000	RWSH	MS	-	OT	REF	-	-
1967-S762	2439490-50	1967 Dec 27	UR-100	-	-	0.000	RWSH	MS	-	OT	RML	-	-
1967-S26	2439504-50	1967 Jan 14	UR-100	-	-	0.000	RWSH	MS	-	Test	REF	-	-
1967-A53	2439515-50	1967 Jan 25	UR-100	-	-	0.000	RWSH	MF	-	Test	REF	-	RML
1967-S27	2439551-50	1967 Mar 2	UR-100	-	-	0.000	RWSH	MS	-	Test	REF	-	-
1967-S28	2439567-50	1967 Mar 18	UR-100	-	Ya10701-13T	0.000	RWSH	MS	-	Test	REF	-	-
1967-S29	2439572-50	1967 Mar 23	UR-100	-	Ya10702-01T	0.000	RWSH	MS	-	OT	REF	-	-
1967-S30	2439574-50	1967 Mar 25	UR-100	-	Ya22902-23P	0.000	RWSH	MS	-	OT	REF	-	-
1967-S31	2439601-50	1967 Apr 21	UR-100	-	Ya22903-23P	0.000	RWSH	MS	-	OT	REF	-	-
1967-S32	2439606-50	1967 Apr 26	UR-100	-	Ya10703-01T	0.000	RWSH	MS	-	OT	REF	-	-
1967-S33	2439655-50	1967 Jun 14	UR-100	-	Ya22904-23P	0.000	RWSH	MS	-	OT	REF	-	-
1967-S34	2439662-50	1967 Jun 21	UR-100	-	Ya10704-01T	0.000	RWSH	MS	-	OT	REF	-	-
1967-S741	2439691-50	1967 Jul 20	UR-100	-	-	0.000	RWSH	MS	-	OT	REF	-	-
1967-S740	2439691-50	1967 Jul 20	UR-100	-	-	0.000	RWSH	MS	-	OT	REF	-	-
1967-S35	2439705-50	1967 Aug 3	UR-100	-	-	0.000	RWSH	MS	-	OT	REF	-	-
1967-S36	2439733-50	1967 Aug 31	UR-100	-	Ya22905-23P	0.000	RWSH	MS	-	OT	REF	-	-
1967-S37	2439735-50	1967 Sep 2	UR-100	-	Ya10704-13T	0.000	RWSH	MS	-	OT	REF	-	-
1967-S38	2439753-50	1967 Sep 20	UR-100	-	Ya22906-23P	0.000	RWSH	MS	-	OT	REF	-	-
1967-S38	2439753-50	1967 Sep 20	UR-100	-	Ya10744-376	0.000	RWSH	MS	-	OT	REF	-	-

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	OrbPay_t	Agency	Launch_Code	Group	Category	LTCite	Cite	Notes
1967-S59	2439753.50	1967 Sep 20	UR-100	-	Y10744-378	0.000	RWSH	MS	-	OT	RPCA	-	-
1967-S40	2439754.50	1967 Sep 21	UR-100	-	Y22901-24P	0.000	RWSH	MS	-	OT	RPCA	-	-
1967-S41	2439765.50	1967 Oct 2	UR-100	-	Y10744-379	0.000	RWSH	MS	-	OT	RPCA	-	-
1967-S42	2439769.50	1967 Oct 6	UR-100	-	Y10744-372	0.000	RWSH	MS	-	OT	RPCA	-	-
1967-S43	2439786.50	1967 Oct 23	UR-100	-	Y226 01U	0.000	RWSH	MS	-	OT	RPCA	-	-
1967-S44	2439792.50	1967 Oct 29	UR-100	-	Y10706-01T	0.000	RWSH	MS	-	OT	RPCA	-	-
1967-S45	2439792.50	1967 Oct 29	UR-100	-	Y226 02U	0.000	RWSH	MS	-	OT	RPCA	-	-
1967-S46	2439808.50	1967 Nov 14	UR-100	-	Y226 01T	0.000	RWSH	MS	-	OT	RPCA	-	-
1967-S47	2439819.50	1967 Nov 28	UR-100	-	Y10702-13T	0.000	RWSH	MS	-	OT	RPCA	-	-
1967-S48	2439822.50	1967 Nov 28	UR-100	-	Y10706-13T	0.000	RWSH	MS	-	OT	RPCA	-	-
1967-S49	2439838.50	1967 Dec 14	UR-100	-	Y10706-13T	0.000	RWSH	MS	-	OT	RPCA	-	-
1967-S50	2439839.50	1967 Dec 15	UR-100	-	Y10706-13T	0.000	RWSH	MS	-	OT	RPCA	-	-
1967-S51	2439845.50	1967 Dec 15	UR-100	-	Y10706-13T	0.000	RWSH	MS	-	OT	RPCA	-	-
1968-S76	2439855.50	1968	UR-100	-	Y22906-24P	0.000	RWSH	MS	-	OT	RPCA	-	-
1968-S730	2439855.50	1968?	UR-100	-	-	0.000	RWSH	MS	-	OT	RPCA	-	-
1968-S731	2439855.50	1968?	UR-100	-	-	0.000	RWSH	MS	-	OT	RPCA	-	-
1968-S732	2439855.50	1968?	UR-100	-	-	0.000	RWSH	MS	-	OT	RPCA	-	-
1968-S50	2439883.50	1968 Feb 7	UR-100	-	-	0.000	RWSH	MS	-	OT	RPCA	-	-
1968-S51	2439889.50	1968 Feb 13	UR-100	-	-	0.000	RWSH	MS	-	OT	RPCA	-	-
1968-S740	2439915.50	1968 Mar 22	UR-100	-	-	0.000	RWSH	MS	-	OT	RPCA	-	-
1968-S52	2439937.50	1968 Mar 22	UR-100	-	-	0.000	RWSH	MS	-	OT	RPCA	-	-
1968-S53	2439943.50	1968 Mar 28	UR-100	-	-	0.000	RWSH	MS	-	OT	RPCA	-	-
1968-S54	2439945.50	1968 Mar 30	UR-100	-	-	0.000	RWSH	MS	-	OT	RPCA	-	-
1968-S55	2439951.50	1968 Apr 5	UR-100	-	-	0.000	RWSH	MS	-	OT	RPCA	-	-
1968-S56	2440013.50	1968 Jun 6	UR-100	-	-	0.000	RWSH	MS	-	OT	RPCA	-	-
1968-S769	2440014.50	1968 Jun 7	UR-100	-	-	0.000	RWSH	MS	-	OT	RML	-	-
1968-S770	2440014.50	1968 Jun 7	UR-100	-	-	0.000	RWSH	MS	-	OT	RML	-	-
1968-S57	2440019.50	1968 Jun 12	UR-100	-	-	0.000	RWSH	MS	-	OT	RPCA	-	-
1968-S58	2440031.50	1968 Jun 24	UR-100	-	-	0.000	RWSH	MS	-	OT	RPCA	-	-
1968-S59	2440039.50	1968 Jul 2	UR-100	-	-	0.000	RWSH	MS	-	OT	RPCA	-	-
1968-S60	2440043.50	1968 Jul 6	UR-100	-	-	0.000	RWSH	MS	-	OT	RPCA	-	-
1968-S61	2440046.50	1968 Jul 9	UR-100	-	-	0.000	RWSH	MS	-	OT	RPCA	-	-
1968-S62	2440047.50	1968 Jul 10	UR-100	-	-	0.000	RWSH	MS	-	OT	RPCA	-	-
1968-S63	2440080.50	1968 Jul 13	UR-100	-	-	0.000	RWSH	MS	-	OT	RPCA	-	-
1968-S64	2440085.50	1968 Aug 17	UR-100	-	-	0.000	RWSH	MS	-	OT	RPCA	-	-
1968-S65	2440095.50	1968 Aug 17	UR-100	-	-	0.000	RWSH	MS	-	OT	RPCA	-	-
1968-S66	2440098.50	1968 Aug 30	UR-100	-	-	0.000	RWSH	MS	-	OT	RPCA	-	-
1968-S67	2440115.50	1968 Sep 16	UR-100	-	-	0.000	RWSH	MS	-	OT	RPCA	-	-
1968-S68	2440141.50	1968 Oct 12	UR-100	-	-	0.000	RWSH	MS	-	OT	RPCA	-	-
1968-S69	2440146.50	1968 Oct 19	UR-100	-	-	0.000	RWSH	MS	-	OT	RPCA	-	-
1968-S70	2440157.50	1968 Oct 28	UR-100	-	-	0.000	RWSH	MS	-	OT	RPCA	-	-
1968-S71	2440186.50	1968 Oct 29	UR-100	-	-	0.000	RWSH	MS	-	OT	RPCA	-	-
1968-S72	2440181.50	1968 Nov 21	UR-100	-	-	0.000	RWSH	MS	-	OT	RPCA	-	-
1968-S74	2440194.50	1968 Dec 4	UR-100	-	-	0.000	RWSH	MS	-	OT	RPCA	-	-
1968-S75	2440202.50	1968 Dec 12	UR-100	-	-	0.000	RWSH	MS	-	OT	RPCA	-	-
1968-S76	2440214.50	1968 Dec 15	UR-100	-	-	0.000	RWSH	MS	-	OT	RPCA	-	-
1968-S746	2440211.50	1968?	UR-100	-	-	0.000	RWSH	MS	-	OT	RPCA	-	RML68
1968-S747	2440221.50	1968?	UR-100	-	-	0.000	RWSH	MS	-	OT	RPCA	-	-
1968-S748	2440221.50	1968?	UR-100	-	-	0.000	RWSH	MS	-	OT	RPCA	-	-
1968-S749	2440221.50	1968?	UR-100	-	-	0.000	RWSH	MS	-	OT	RPCA	-	-
1968-S24	2440243.50	1968 Jan 21	UR-100	-	-	0.000	RWSH	MS	-	OT	RPCA	-	-
1968-S25	2440249.50	1968 Jan 26	UR-100	-	-	0.000	RWSH	MS	-	OT	RPCA	-	-
1968-S26	2440252.50	1968 Jan 31	UR-100	-	-	0.000	RWSH	MS	-	OT	RPCA	-	-
1968-S27	2440301.50	1968 Mar 21	UR-100	-	-	0.000	RWSH	MS	-	OT	RPCA	-	-
1968-S28	2440335.50	1968 Mar 24	UR-100	-	-	0.000	RWSH	MS	-	OT	RPCA	-	-
1968-S29	2440340.50	1968 Apr 29	UR-100	-	-	0.000	RWSH	MS	-	OT	RPCA	-	-
1968-S30	2440364.50	1968 Apr 29	UR-100	-	-	0.000	RWSH	MS	-	OT	RPCA	-	-
1968-S31	2440372.50	1968 May 23	UR-100	-	-	0.000	RWSH	MS	-	OT	RPCA	-	-
1968-S32	2440379.50	1968 May 27	UR-100	-	-	0.000	RWSH	MS	-	OT	RPCA	-	-
1968-S33	2440382.50	1968 Jun 10	UR-100	-	-	0.000	RWSH	MS	-	OT	RPCA	-	-
1968-S34	2440399.50	1968 Jun 10	UR-100	-	-	0.000	RWSH	MS	-	OT	RPCA	-	-
1968-S35	2440412.50	1968 Jun 10	UR-100	-	-	0.000	RWSH	MS	-	OT	RPCA	-	-
1968-S36	2440420.50	1968 Jun 18	UR-100	-	-	0.000	RWSH	MS	-	OT	RPCA	-	-
1968-S414	2440425.73	1968 Jul 23 0530	UR-100K	-	Y10761-001	0.000	RWSH	MS	-	Test	RPCA	Kosmodrom912	-
1968-S760	2440426.50	1968 Jul 24	UR-100	-	-	0.000	RWSH	MS	-	OT	RPCA	-	-
1968-S761	2440429.50	1968 Jul 27	UR-100	-	-	0.000	RWSH	MS	-	OT	RPCA	-	-
1968-S37	2440430.50	1968 Jul 28	UR-100	-	-	0.000	RWSH	MS	-	OT	RPCA	-	-
1968-S46	2440448.71	1968 Aug 15 0500	UR-100K	-	Y10761-002	0.000	RWSH	MS	-	Test	RPCA	XPC	-
1968-S38	2440451.50	1968 Aug 18	UR-100	-	-	0.000	RWSH	MS	-	OT	RPCA	-	-
1968-S39	2440461.50	1968 Aug 28	UR-100	-	-	0.000	RWSH	MS	-	OT	RPCA	-	-
1968-S40	2440476.63	1968 Sep 12 0304	UR-100K	-	Y10761-003	0.000	RWSH	MS	-	Test	RPCA	XPC	-
1968-S47	2440491.50	1968 Sep 27	UR-100K	-	Y10761-004	0.000	RWSH	MS	-	Test	RPCA	XPC	-
1968-S48	2440494.70	1968 Sep 30 0450	UR-100K	-	Y10761-005	0.000	RWSH	MS	-	Test	RPCA	XPC	-
1968-S49	2440505.50	1968 Oct 11 0000	UR-100K	-	-	0.000	RWSH	MS	-	Test	RPCA	-	-
1968-S42	2440517.50	1968 Oct 23	UR-100	-	-	0.000	RWSH	MS	-	OT	RPCA	-	-
1968-S43	2440518.50	1968 Oct 24	UR-100	-	-	0.000	RWSH	MS	-	OT	RPCA	-	-
1968-S44	2440523.50	1968 Oct 29	UR-100	-	-	0.000	RWSH	MS	-	OT	RPCA	-	-
1968-S50	2440523.54	1968 Oct 29 0103	UR-100K	-	Y10761-006	0.000	RWSH	MS	-	Test	RPCA	XPC	-
1968-S51	2440526.65	1968 Oct 29 0342	UR-100K	-	Y10761-007	0.000	RWSH	MS	-	Test	RPCA	XPC	-
1968-S45	2440559.50	1968 Dec 4	UR-100	-	-	0.000	RWSH	MS	-	OT	RPCA	-	-
1970-S776	2440586.50	1970?	UR-100	-	-	0.000	RWSH	MS	-	OT	RPCA	-	-
1970-S31	2440592.63	1970 Jan 6 0305	UR-100K	-	Y10761-009	0.000	RWSH	MS	-	Test	RPCA	RPCA	-
1970-S17	2440602.50	1970 Jan 16	UR-100	-	-	0.000	RWSH	MS	-	OT	RPCA	-	-
1970-S32	2440605.60	1970 Jan 19 0230	UR-100K	-	Y10761-008	0.000	RWSH	MS	-	Test	RPCA	RPCA	-
1970-S765	2440634.50	1970 Feb 17	UR-100	-	-	0.000	RWSH	MS	-	OT	RPCA	-	-



Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	OrbPay_t	Agency	Launch_Code	Group	Category	LTCsite	Cite	Notes
1970-S53	2440655-59	1970 Feb 18 0207	UR-100K	-	Yui0761-010	0.000	RWSN	MS	-	Test	RPCA	-	BML0207/0430
1970-S54	2440656-59	1970 Feb 19 0209	UR-100K	-	Yui0761-011?	0.000	RWSN	MS	-	Test	RPCA	-	BML0209/0325
1970-S18	2440658-50	1970 Feb 21	UR-100	-	-	0.000	RWSN	MS	-	OT	RPCA	-	-
1970-S35	2440680-67	1970 Apr 14 0410	UR-100K	-	Yui0761-012	0.000	RWSN	MS	-	Test	BML	RPCA	-
1970-S36	2440683-67	1970 Apr 17 0405	UR-100K	-	Yui0761-013	0.000	RWSN	MS	-	Test	BML	RPCA	-
1970-S37	2440722-68	1970 May 16 0425	UR-100K	-	Yui0761-014	0.000	RWSN	MS	-	Test	BML	RPCA	-
1970-S38	2440733-69	1970 May 27 0431	UR-100K	-	Rh10761-017	0.000	RWSN	MS	-	Test	BML	RPCA	-
1970-S39	2440742-76	1970 Jun 5 0615	UR-100K	-	Rh10761-016	0.000	RWSN	MS	-	Test	BML	RPCA	-
1970-S20	2440748-50	1970 Jun 11	UR-100	-	-	0.000	RWSN	MS	-	OT	RPCA	-	-
1970-S716	2440758-50	1970 Jun 21	UR-100K	-	-	0.000	RWSN	MS	-	OT	RPCA	-	-
1970-S60	2440759-64	1970 Jun 22 0325	UR-100K	-	Rh10761-018	0.000	RWSN	MS	-	Test	BML	RPCA	-
1970-S21	2440763-50	1970 Jun 26	UR-100	-	-	0.000	RWSN	MS	-	OT	RPCA	-	-
1970-S51	2440770-63	1970 Jul 3 0310	UR-100K	-	Rh10761-019	0.000	RWSN	MS	-	Test	BML	RPCA	-
1970-S52	2440775-67	1970 Jul 8 0402	UR-100K	-	Yui0761-015	0.000	RWSN	MS	-	Test	BML	RPCA	-
1970-S53	2440781-68	1970 Jul 24 0422	UR-100K	-	5115761-021	0.000	RWSN	MS	-	Test	BML	RPCA	-
1970-S29	2440794-73	1970 Jul 27 0537	UR-100K	-	6305761-022	0.000	RWSN	MS	-	Test	BML	RPCA	-
1970-S30	2440795-71	1970 Jul 28 0502	UR-100K	-	Rh10761-020	0.000	RWSN	MS	-	Test	BML	RPCA	-
1970-S46	2440819-67	1970 Aug 21 0410	UR-100K	-	4925761-023	0.000	RWSN	MS	-	Test	BML	RPCA	-
1970-S47	2440820-59	1970 Aug 22 0215	UR-100K	-	5115761-024	0.000	RWSN	MS	-	Test	BML	RPCA	-
1970-S468	2440853-50	1970 Sep 24	UR-100	-	-	0.000	RWSN	MS	-	OT	REF	-	-
1970-S469	2440859-50	1970 Sep 30	UR-100	-	-	0.000	RWSN	MS	-	OT	REF	-	-
1970-S24	2440863-50	1970 Oct 4	UR-100	-	-	0.000	RWSN	MS	-	OT	RPCA	-	-
1970-S48	2440874-65	1970 Oct 15 0332	UR-100K	-	-	0.000	RWSN	MS	-	OT	BML	RPCA	-
1970-S44	2440880-68	1970 Oct 21 0413	UR-100K	-	-	0.000	RWSN	MS	-	OT	BML	RPCA	-
1970-S25	2440882-50	1970 Oct 23	UR-100	-	-	0.000	RWSN	MS	-	OT	RPCA	-	-
1970-S26	2440887-50	1970 Oct 28	UR-100	-	-	0.000	RWSN	MS	-	Test	BML	-	-
1970-S22	2440889-50	1970 Oct 30	UR-100	-	-	0.000	RWSN	MS	-	Test	BML	-	-
1970-S27	2440890-50	1970 Oct 31	UR-100	-	-	0.000	RWSN	MS	-	OT	RPCA	-	-
1970-S717	2440901-50	1970 Nov 11	UR-100	-	-	0.000	RWSN	MS	-	OT	RPCA	-	-
1970-S718	2440901-50	1970 Nov 11	UR-100	-	-	0.000	RWSN	MS	-	OT	RPCA	-	-
1970-S719	2440901-50	1970 Nov 11	UR-100	-	-	0.000	RWSN	MS	-	OT	RPCA	-	-
1970-S720	2440901-50	1970 Nov 11	UR-100	-	-	0.000	RWSN	MS	-	OT	RPCA	-	-
1970-S721	2440901-50	1970 Nov 11	UR-100	-	-	0.000	RWSN	MS	-	OT	RPCA	-	-
1970-S723	2440902-25	1970 Nov 11 1753	UR-100	-	-	0.000	RWSN	MS	-	Test	BML	-	-
1970-S722	2440902-50	1970 Nov 12	UR-100	-	-	0.000	RWSN	MS	-	OT	RPCA	-	-
1970-S28	2440916-50	1970 Nov 26	UR-100	-	-	0.000	RWSN	MS	-	OT	REF	-	-
1970-S22	2440924-50	1970 Dec 4	UR-100	-	-	0.000	RWSN	MS	-	OT	RPCA	-	-
1970-S23	2440930-50	1970 Dec 10	UR-100	-	-	0.000	RWSN	MS	-	OT	RPCA	-	-
1970-S448	2440936-50	1970 Dec 18	UR-100	-	-	0.000	RWSN	MS	-	OT	RPCA	-	-
1970-S463	2440942-50	1970 Dec 22 0237	UR-100	-	-	0.000	RWSN	MS	-	OT	RPCA	-	-
1970-S45	2440943-61	1970 Dec 23 0237	UR-100K	-	4925761-147T	0.000	RWSN	MS	-	OT	RPCA	-	ScpFal13-44
1970-S441	2440946-61	1970 Dec 26 0233	UR-100K	-	4764732-1P	0.000	RWSN	MS	-	OT	RPCA	-	RML70
1971-S674	2440951-30	1971?	UR-100	-	-	0.000	RWSN	MS	-	OT	RPCA	-	RML70
1971-S675	2440951-30	1971?	UR-100	-	-	0.000	RWSN	MS	-	OT	RPCA	-	RML70
1971-S29	2440970-68	1971 Jan 19 0340	UR-100K	-	5344732-2P	0.000	RWSN	MS	-	Test	BML	XPC	-
1971-S28	2440970-68	1971 Jan 20 0215	UR-100K	-	6305761-028	0.000	RWSN	MS	-	Test	BML	XPC	-
1971-S109	2440985-19	1971 Feb 2 1545	UR-100K	-	80634M	0.000	RWSN	MS	-	Test	BML	RPCA	-
1971-S121	2440985-16	1971 Feb 2 1545	UR-100K	-	80634M	0.000	RWSN	MS	-	Test	BML	RPCA	-
1971-S211	2441071-67	1971 Feb 14 0410	UR-100K	-	5115761-027	0.000	RWSN	MS	-	Test	BML	XPC	-
1971-S166	2441075-61	1971 Mar 15 0235	UR-100K	-	4764732-1P	0.000	RWSN	MS	-	Test	BML	Kosmodrom912	-
1971-S40	2441084-50	1971 Mar 15	UR-100	-	-	0.000	RWSN	MS	-	Test	BML	-	-
1971-S43	2441084-50	1971 Mar 15	UR-100	-	-	0.000	RWSN	MS	-	Test	BML	-	-
1971-S43	2441084-50	1971 Mar 15	UR-100	-	-	0.000	RWSN	MS	-	Test	BML	-	-
1971-S27	2441089-50	1971 Apr 7	UR-100	-	-	0.000	RWSN	MS	-	Test	BML	-	-
1971-S44	2441089-50	1971 Apr 21	UR-100M	-	-	0.000	RWSN	MS	-	Test	BML	-	-
1971-S45	2441089-50	1971 Apr 21	UR-100M	-	-	0.000	RWSN	MS	-	Test	BML	-	-
1971-S44	2441089-50	1971 May 29 0418	UR-100M	-	-	0.000	RWSN	MS	-	Test	BML	-	-
1971-S44	2441105-50	1971 Jun 16	UR-100	-	-	0.000	RWSN	MS	-	OT	RPCA	-	-
1971-S28	2441118-50	1971 Jun 16	UR-100	-	-	0.000	RWSN	MS	-	OT	RPCA	-	-
1971-S276	2441118-50	1971 Jun 16	UR-100	-	-	0.000	RWSN	MS	-	OT	RPCA	-	-
1971-S29	2441186-50	1971 Aug 23	UR-100	-	-	0.000	RWSN	MS	-	Test	BML	-	-
1971-S46	2441196-50	1971 Aug 23	UR-100M	-	-	0.000	RWSN	MS	-	Test	BML	-	-
1971-S47	2441201-50	1971 Sep 7	UR-100M	-	-	0.000	RWSN	MS	-	Test	BML	-	-
1971-S417	2441201-50	1971 Sep 7	UR-100M	-	-	0.000	RWSN	MS	-	Test	BML	-	-
1971-S32	2441210-50	1971 Sep 16	UR-100M	-	-	0.000	RWSN	MS	-	Test	BML	-	-
1971-S32	2441221-66	1971 Sep 27 0355	UR-100M	-	4924461-053	0.000	RWSN	MS	-	Test	BML	-	-
1971-S30	2441223-50	1971 Sep 29	UR-100M	-	-	0.000	RWSN	MS	-	Test	BML	-	-
1971-S31	2441224-50	1971 Sep 30	UR-100M	-	-	0.000	RWSN	MS	-	Test	BML	-	-
1971-S33	2441234-50	1971 Oct 10	UR-100	-	-	0.000	RWSN	MS	-	Test	BML	-	-
1971-S38	2441244-72	1971 Oct 20 0521	UR-100M	-	64147-332T1	0.000	RWSN	MS	-	Test	BML	RPCA	-
1971-S34	2441245-50	1971 Oct 21	UR-100M	-	-	0.000	RWSN	MS	-	Test	BML	-	-
1971-S35	2441279-50	1971 Nov 24	UR-100M	-	15A200T	0.000	RWSN	MS	-	Test	BML	-	-
1971-S37	2441295-57	1971 Dec 10 0145	UR-100M	-	-	0.000	RWSN	MS	-	Test	BML	-	-
1971-S684	2441302-50	1971 Dec 10 1940	UR-100M	-	-	0.000	RWSN	MS	-	Test	BML	-	-
1971-S49	2441307-50	1971 Dec 22	UR-100M	-	-	0.000	RWSN	MS	-	Test	BML	-	-
1971-S49	2441310-50	1971 Dec 25	UR-100M	-	-	0.000	RWSN	MS	-	Test	BML	-	-
1971-S497	2441316-50	1971 Dec 25	UR-100M	-	-	0.000	RWSN	MS	-	Test	BML	-	-
1972-S209	2441393-50	1972?	UR-100	-	-	0.000	RWSN	MS	-	OT	RPCA	-	RML70
1972-S22	2441393-50	1972 Mar 17	UR-100M	-	-	0.000	RWSN	MS	-	Test	BML	-	-
1972-S23	2441394-50	1972 Mar 18	UR-100M	-	-	0.000	RWSN	MS	-	Test	BML	-	-
1972-S24	2441403-50	1972 Mar 27	UR-100M	-	-	0.000	RWSN	MS	-	Test	BML	-	-
1972-S24	2441484-50	1972 Jun 16	UR-100M	-	-	0.000	RWSN	MS	-	Test	BML	-	-
1972-S792	2441497-50	1972 Jun 29	UR-100M	-	-	0.000	RWSN	MS	-	Test	BML	-	-
1972-S25	2441511-50	1972 Jul 13	UR-100M	-	-	0.000	RWSN	MS	-	Test	BML	-	-
1972-S26	2441603-75	1972 Oct 13 0600:01	UR-100M	-	-	0.000	RWSN	MS	-	Test	BML	-	-
1972-S27	2441608-50	1972 Oct 18 0310	UR-100M	-	-	0.000	RWSN	MS	-	Test	BML	-	-
1972-S17	2441639-63	1972 Nov 18 1205	UR-100K	-	49257-51-148T	0.000	RWSN	MS	-	Test	BML	RPCA	-
1972-S18	2441650-00	1972 Nov 28 1205	UR-100K	-	51173-21-179T	0.000	RWSN	MS	-	Test	BML	RPCA	-
1972-S19	2441659-59	1972 Dec 8 0215	UR-100K	-	47653-41-273L	0.000	RWSN	MS	-	Test	BML	RPCA	-

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	DrPay	Agency	Launch_Code	Group	Category	LTCite	Cite	Notes
1972-S28	2441663.50	1972 Dec 12	UR-100U	-	-	0.000	RWSH	MS	-	Test	RPCA	-	-
1972-S796	2441672.50	1972 Dec 21	UR-100	-	D01	0.000	RWSH	MS	-	OT	RPCA	-	-
1972-S796	2441672.50	1972 Dec 21	UR-100	-	D02	0.000	RWSH	MS	-	OT	RPCA	-	-
1972-S20	2441673.58	1972 Dec 22 0202	UR-100K	-	51173-21-180T	0.000	RWSH	MS	-	Test	BML	-	-
1972-S29	2441679.50	1972 Dec 28	UR-100U	-	-	0.000	RWSH	MS	-	Test	RPCA	-	-
1973-S806	2441682.50	1973?	UR-100	-	T07	0.000	RWSH	MS	-	OT	RPCA	BMLX	-
1973-S807	2441682.50	1973?	UR-100	-	T08	0.000	RWSH	MS	-	OT	RPCA	BMLX	-
1973-S808	2441682.50	1973?	UR-100	-	T09	0.000	RWSH	MS	-	OT	RPCA	BMLX	-
1973-S809	2441682.50	1973?	UR-100	-	T10	0.000	RWSH	MS	-	OT	RPCA	BMLX	-
1973-S810	2441682.50	1973?	UR-100	-	T11	0.000	RWSH	MS	-	OT	RPCA	BMLX	-
1973-S811	2441682.50	1973?	UR-100	-	T12	0.000	RWSH	MS	-	OT	RPCA	BMLX	-
1973-S812	2441682.50	1973?	UR-100	-	T13	0.000	RWSH	MS	-	OT	RPCA	BMLX	-
1973-S813	2441682.50	1973?	UR-100	-	T14	0.000	RWSH	MS	-	OT	RPCA	BMLX	-
1973-S814	2441682.50	1973?	UR-100	-	T15	0.000	RWSH	MS	-	OT	RPCA	BMLX	-
1973-S815	2441682.50	1973?	UR-100	-	T16	0.000	RWSH	MS	-	OT	RPCA	BMLX	-
1973-S816	2441682.50	1973?	UR-100	-	T17	0.000	RWSH	MS	-	OT	RPCA	BMLX	-
1973-S817	2441682.50	1973?	UR-100	-	T18	0.000	RWSH	MS	-	OT	RPCA	BMLX	-
1973-S818	2441682.50	1973?	UR-100	-	T19	0.000	RWSH	MS	-	OT	RPCA	BMLX	-
1973-S819	2441682.50	1973?	UR-100	-	T20	0.000	RWSH	MS	-	OT	RPCA	BMLX	-
1973-S820	2441682.50	1973?	UR-100	-	T21	0.000	RWSH	MS	-	OT	RPCA	BMLX	-
1973-S821	2441682.50	1973?	UR-100	-	T22	0.000	RWSH	MS	-	OT	RPCA	BMLX	-
1973-S850	2441682.50	1973?	UR-100	-	-	0.000	RWSH	MS	-	OT	BMLX	-	-
1973-S851	2441682.50	1973?	UR-100	-	-	0.000	RWSH	MS	-	OT	BMLX	-	-
1973-S852	2441682.50	1973?	UR-100	-	-	0.000	RWSH	MS	-	OT	BMLX	-	-
1973-S853	2441682.50	1973?	UR-100	-	-	0.000	RWSH	MS	-	OT	BMLX	-	-
1973-S854	2441682.50	1973?	UR-100	-	-	0.000	RWSH	MS	-	OT	BMLX	-	-
1973-S855	2441682.50	1973?	UR-100	-	-	0.000	RWSH	MS	-	OT	BMLX	-	-
1973-S856	2441682.50	1973?	UR-100	-	-	0.000	RWSH	MS	-	OT	BMLX	-	-
1973-S857	2441682.50	1973?	UR-100	-	-	0.000	RWSH	MS	-	OT	BMLX	-	-
1973-S858	2441682.50	1973?	UR-100	-	-	0.000	RWSH	MS	-	OT	BMLX	-	-
1973-S859	2441682.50	1973?	UR-100	-	-	0.000	RWSH	MS	-	OT	BMLX	-	-
1973-S860	2441682.50	1973?	UR-100	-	-	0.000	RWSH	MS	-	OT	BMLX	-	-
1973-S861	2441682.50	1973?	UR-100	-	-	0.000	RWSH	MS	-	OT	BMLX	-	-
1973-S862	2441682.50	1973?	UR-100	-	-	0.000	RWSH	MS	-	OT	BMLX	-	-
1973-S863	2441682.50	1973?	UR-100	-	-	0.000	RWSH	MS	-	OT	BMLX	-	-
1973-S864	2441682.50	1973?	UR-100	-	-	0.000	RWSH	MS	-	OT	BMLX	-	-
1973-S865	2441682.50	1973?	UR-100	-	-	0.000	RWSH	MS	-	OT	BMLX	-	-
1973-S866	2441682.50	1973?	UR-100	-	-	0.000	RWSH	MS	-	OT	BMLX	-	-
1973-S867	2441682.50	1973?	UR-100H	-	-	0.000	RWSH	MS	-	OT	BMLX	-	-
1973-S868	2441704.60	1973 Jan 22 0230	UR-100K	-	47683-41-27P	0.000	RWSH	MS	-	Test	BML	-	-
1973-S869	2441712.50	1973 Jan 30	UR-100U	-	-	0.000	RWSH	MS	-	OT	RPCA	-	-
1973-S870	2441721.50	1973 Mar 17 0442	UR-100K	-	47639-21-273P	0.000	RWSH	MS	-	Test	BML	RPCA	-
1973-S871	2441726.78	1973 Mar 23 0340	UR-100K	-	65039-31-253T	0.000	RWSH	MS	-	Test	BML	RPCA	-
1973-S872	2441764.66	1973 Mar 27	UR-100H	-	D12	0.000	RWSH	MS	-	OT	RPCA	BMLX	-
1973-S873	2441768.30	1973 Mar 28	UR-100H	-	D13	0.000	RWSH	MS	-	OT	RPCA	BMLX	-
1973-S874	2441770.30	1973 Mar 29	UR-100H	-	D14	0.000	RWSH	MS	-	OT	RPCA	BMLX	-
1973-S875	2441771.50	1973 Mar 30	UR-100H	-	D15	0.000	RWSH	MS	-	OT	RPCA	BMLX	-
1973-S876	2441778.50	1973 Apr 6	UR-100H	-	-	0.000	RWSH	MS	-	OT	RPCA	BMLX	-
1973-S877	2441797.50	1973 Apr 26	UR-100H	-	T01	0.000	RWSH	MS	-	OT	RPCA	BMLX	-
1973-S878	2441831.50	1973 May 29	UR-100H	-	-	0.000	RWSH	MS	-	OT	RPCA	BMLX	-
1973-S879	2441833.50	1973 Jun 22 1840	UR-100K	-	T02	0.000	RWSH	MS	-	OT	RPCA	BMLX	-
1973-S880	2441856.28	1973 Jun 27 2305	UR-100K	-	59439-22-273P	0.000	RWSH	MS	-	Test	BML	RPCA	-
1973-S881	2441861.48	1973 Jun 27 2305	UR-100K	-	48239-32-216T	0.000	RWSH	MS	-	Test	BML	RPCA	-
1973-S882	2441863.50	1973 Jul 7	UR-100	-	T23	0.000	RWSH	MS	-	OT	RPCA	-	-
1973-S883	2441863.50	1973 Jul 7	UR-100	-	T24	0.000	RWSH	MS	-	OT	RPCA	-	-
1973-S884	2441868.50	1973 Jul 5	UR-100	-	T25	0.000	RWSH	MS	-	OT	RPCA	BMLX	-
1973-S885	2441868.50	1973 Jul 5	UR-100	-	T26	0.000	RWSH	MS	-	OT	RPCA	BMLX	-
1973-S886	2441868.50	1973 Jul 5	UR-100	-	T27	0.000	RWSH	MS	-	OT	RPCA	BMLX	-
1973-S887	2441868.50	1973 Jul 5	UR-100	-	T28	0.000	RWSH	MS	-	OT	RPCA	BMLX	-
1973-S888	2441868.50	1973 Jul 5	UR-100	-	T29	0.000	RWSH	MS	-	OT	RPCA	BMLX	-
1973-S889	2441868.50	1973 Jul 5	UR-100	-	T30	0.000	RWSH	MS	-	OT	RPCA	BMLX	-
1973-S890	2441868.50	1973 Jul 5	UR-100	-	T31	0.000	RWSH	MS	-	OT	RPCA	BMLX	-
1973-S891	2441868.50	1973 Jul 5	UR-100	-	T32	0.000	RWSH	MS	-	OT	RPCA	BMLX	-
1973-S892	2441868.50	1973 Jul 5	UR-100	-	T33	0.000	RWSH	MS	-	OT	RPCA	BMLX	-
1973-S893	2441868.50	1973 Jul 5	UR-100	-	T34	0.000	RWSH	MS	-	OT	RPCA	BMLX	-
1973-S894	2441868.50	1973 Jul 5	UR-100	-	T35	0.000	RWSH	MS	-	OT	RPCA	BMLX	-
1973-S895	2441868.50	1973 Jul 5	UR-100	-	T36	0.000	RWSH	MS	-	OT	RPCA	BMLX	-
1973-S896	2441868.50	1973 Jul 5	UR-100	-	T37	0.000	RWSH	MS	-	OT	RPCA	BMLX	-
1973-S897	2441868.50	1973 Jul 5	UR-100	-	T38	0.000	RWSH	MS	-	OT	RPCA	BMLX	-
1973-S898	2441868.50	1973 Jul 5	UR-100	-	T39	0.000	RWSH	MS	-	OT	RPCA	BMLX	-
1973-S899	2441868.50	1973 Jul 5	UR-100	-	T40	0.000	RWSH	MS	-	OT	RPCA	BMLX	-
1973-S900	2441868.50	1973 Jul 5	UR-100	-	T41	0.000	RWSH	MS	-	OT	RPCA	BMLX	-



Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	DrPay	Agency	Launch_Code	Group	Category	LTCite	Cite	Notes
1977-5475	2445321.50	1977 Jun 27	UR-1000	-	-	0.000	RWSH	MS	-	OT	RML	-	-
1977-5549	2445386.50	1977 Sep	UR-1000	-	-	0.000	RWSH	MS	-	OT	RFCA	-	-
1977-5527	2445622.50	1977 Oct 6	UR-100K	-	-	0.000	RWSH	MS	-	OT	RFCA	XPC	-
1977-5528	2445637.85	1977 Oct 21	UR-100K	-	0825	0.000	RWSH	MS	-	OT	BML	-	-
1977-5529	2445644.50	1977 Oct 28	UR-100K	-	52482-122(12L)	0.000	RWSH	MS	-	OT	REF	-	-
1977-5462	2445661.50	1977 Nov 14	UR-1000	-	-	0.000	RWSH	MS	-	OT	RML	-	-
1977-5463	2445662.50	1977 Nov 15	UR-1000	-	-	0.000	RWSH	MS	-	OT	RML	-	-
1977-5464	2445665.50	1977 Nov 18	UR-1000	-	-	0.000	RWSH	MS	-	OT	RML	-	-
1977-5465	2445665.50	1977 Nov 18	UR-1000	-	-	0.000	RWSH	MS	-	OT	RML	-	-
1977-5466	2445665.50	1977 Nov 18	UR-1000	-	-	0.000	RWSH	MS	-	OT	RML	-	-
1977-5467	2445665.50	1977 Nov 18	UR-1000	-	-	0.000	RWSH	MS	-	OT	RML	-	-
1977-5468	2445676.50	1977 Nov 29	UR-1000	-	-	0.000	RWSH	MS	-	OT	RML	-	-
1978-5359	2445508.50	1978?	UR-100H	-	-	0.000	RWSH	MS	-	OT	RML	-	-
1978-5362	2445508.50	1978?	UR-100H	-	-	0.000	RWSH	MS	-	OT	RML	-	-
1978-5291	2445508.50	1978?	UR-100K	-	K09	0.000	RWSH	MS	-	OT	RFCA	-	-
1978-5292	2445508.50	1978?	UR-100K	-	K10	0.000	RWSH	MS	-	OT	RFCA	-	-
1978-5369	2445508.50	1978?	UR-100K	-	K11	0.000	RWSH	MS	-	OT	RFCA	-	-
1978-5375	2445508.50	1978?	UR-100K	-	K12	0.000	RWSH	MS	-	OT	RFCA	-	-
1978-5370	2445508.50	1978?	UR-100K	-	K13	0.000	RWSH	MS	-	OT	RFCA	-	-
1978-5371	2445508.50	1978?	UR-100K	-	K14	0.000	RWSH	MS	-	OT	RFCA	-	-
1978-5372	2445508.50	1978?	UR-100K	-	K15	0.000	RWSH	MS	-	OT	RFCA	-	-
1978-5373	2445508.50	1978?	UR-100K	-	K16	0.000	RWSH	MS	-	OT	RFCA	-	-
1978-5293	2445653.50	1978 May 25	UR-100K	-	-	0.000	RWSH	MS	-	OT	RML	-	-
1978-5294	2445659.50	1978 May 31	UR-100K	-	-	0.000	RWSH	MS	-	OT	RML	-	-
1978-5295	2445661.50	1978 Jun 2	UR-100K	-	-	0.000	RWSH	MS	-	OT	RML	-	-
1978-5296	2445661.50	1978 Jun 2	UR-100K	-	-	0.000	RWSH	MS	-	OT	RML	-	-
1978-5297	2445661.50	1978 Jun 2	UR-100K	-	-	0.000	RWSH	MS	-	OT	RML	-	-
1978-5298	2445661.50	1978 Jun 2	UR-100K	-	-	0.000	RWSH	MS	-	OT	RML	-	-
1978-5299	2445661.50	1978 Jun 2	UR-100K	-	-	0.000	RWSH	MS	-	OT	RML	-	-
1978-5344	2445680.50	1978 Jun 21	UR-100H	?	-	0.000	RWSH	MS	-	Test	RML	-	-
1978-5344	2445685.50	1978 Jun 26	UR-1000	-	-	0.000	RWSH	MS	-	OT	RML	-	-
1978-5345	2445763.50	1978 Oct 2	UR-1000	-	-	0.000	RWSH	MS	-	OT	RML	-	-
1978-5322	2445861.50	1978 Nov 29?	UR-100H	?	-	0.000	RWSH	MS	-	OT	RML	-	-
1979-5289	2444088.50	1979 Aug 5	UR-100H	-	-	0.000	RWSH	MS	-	Test	RFCA	-	-
1980-5276	2444238.50	1980	UR-100K	-	-	0.000	RWSH	MS	-	OT	RML	-	-
1980-5280	2444238.50	1980	UR-100K	-	-	0.000	RWSH	MS	-	OT	REF	-	-
1980-5280	2444238.50	1980	UR-100K	-	-	0.000	RWSH	MS	-	OT	REF	-	-
1981-5283	2444604.50	1981	UR-100H	-	-	0.000	RWSH	MS	-	OT	RML	-	-
1981-5241	2444647.50	1981 Sep	UR-1000	-	-	0.000	RWSH	MS	-	OT	RFCA	-	-
1981-5242	2444647.50	1981 Sep	UR-1000	-	-	0.000	RWSH	MS	-	OT	RFCA	-	-
1981-5243	2444647.50	1981 Sep 11	UR-1000	-	-	0.000	RWSH	MS	-	OT	RFCA	-	-
1982-5283	2444688.50	1982	UR-1000	-	-	0.000	RWSH	MS	-	OT	RFCA	-	-
1982-5283	2444688.50	1982	UR-1000	-	-	0.000	RWSH	MS	-	OT	RFCA	-	-
1982-5284	2445109.50	1982 May 20	UR-100K	-	-	0.000	RWSH	MS	-	OT	RFCA	-	-
1982-5285	2445109.50	1982 Jun 11	UR-100K	-	-	0.000	RWSH	MS	-	OT	RFCA	-	-
1982-5286	2445131.50	1982 Jun 11	UR-100K	-	-	0.000	RWSH	MS	-	OT	RFCA	-	-
1982-5287	2445131.50	1982 Jun 18	UR-1000	-	-	0.000	RWSH	MS	-	OT	RML	-	-
1982-5288	2445131.50	1982 Jun 18	UR-1000	-	-	0.000	RWSH	MS	-	OT	RML	-	-
1982-5289	2445131.50	1982 Jun 18	UR-1000	-	-	0.000	RWSH	MS	-	OT	RML	-	-
1982-5290	2445131.50	1982 Jun 18	UR-1000	-	-	0.000	RWSH	MS	-	OT	RML	-	-
1982-5291	2445131.50	1982 Jun 18	UR-1000	-	-	0.000	RWSH	MS	-	OT	RML	-	-
1982-5292	2445334.50	1982 Aug 15	UR-1000	-	-	0.000	RWSH	MS	-	OT	RFCA	-	-
1983-5268	2445334.50	1983	UR-1000	-	-	0.000	RWSH	MS	-	OT	REF	-	-
1983-5269	2445334.50	1983	UR-1000	-	-	0.000	RWSH	MS	-	OT	REF	-	-
1983-5270	2445396.50	1983 Mar 3	UR-1000	-	-	0.000	RWSH	MS	-	OT	RFCA	-	-
1983-5271	2445396.50	1983 Mar 3	UR-1000	-	-	0.000	RWSH	MS	-	OT	RFCA	-	-
1984-5271	2445396.50	1984	UR-100K	-	-	0.000	RWSH	MS	-	OT	RFCA	-	-
1984-5272	2445689.50	1984	UR-100K	-	-	0.000	RWSH	MS	-	OT	REF	-	-
1984-5273	2445689.50	1984	UR-100K	-	-	0.000	RWSH	MS	-	OT	REF	-	-
1984-5274	2445689.50	1984	UR-100K	-	-	0.000	RWSH	MS	-	OT	REF	-	-
1984-5275	2445689.50	1984	UR-100K	-	-	0.000	RWSH	MS	-	OT	REF	-	-
1984-5276	2445689.50	1984	UR-100K	-	-	0.000	RWSH	MS	-	OT	REF	-	-
1984-5277	2445689.50	1984	UR-100K	-	-	0.000	RWSH	MS	-	OT	REF	-	-
1984-5278	2445689.50	1984	UR-100K	-	-	0.000	RWSH	MS	-	OT	REF	-	-
1984-5279	2445689.50	1984	UR-100K	-	-	0.000	RWSH	MS	-	OT	REF	-	-
1985-5269	2445689.50	1984 May 25	UR-100K	-	-	0.000	RWSH	MS	-	OT	RFCA	-	-
1986-5168	2446065.50	1986	UR-1000	-	-	0.000	RWSH	MS	-	OT	REF	-	-
1986-5168	2446531.50	1986 Apr 11	UR-1000	-	-	0.000	RWSH	MS	-	OT	RFCA	-	-
1986-5168	2446531.50	1986 Apr 11	UR-1000	-	-	0.000	RWSH	MS	-	OT	RFCA	-	-
1986-5168	2446531.50	1986 Jun 6	UR-1000	-	-	0.000	RWSH	MS	-	OT	RFCA	-	-
1987-5223	2446795.50	1987 Jun 6	UR-100K	-	-	0.000	RWSH	MS	-	OT	REF	-	-
1987-5224	2446795.50	1987	UR-100K	-	-	0.000	RWSH	MS	-	OT	REF	-	-
1987-5225	2446795.50	1987	UR-100K	-	-	0.000	RWSH	MS	-	OT	REF	-	-
1987-5226	2446795.50	1987	UR-100K	-	-	0.000	RWSH	MS	-	OT	REF	-	-
1988-5164	2447160.50	1988	UR-1000	-	-	0.000	RWSH	MS	-	OT	RFCA	-	-
1988-5165	2447160.50	1988	UR-1000	-	-	0.000	RWSH	MS	-	OT	RML	-	-
1989-5130	2447579.50	1989 Feb 22	UR-1000	-	-	0.000	RWSH	MS	-	OT	RML	-	-
1989-5130	2447579.50	1989 Sep 15	UR-1000	-	-	0.000	RWSH	MS	-	OT	RFCA	-	-
1989-5133	2447584.50	1989 Sep 15	UR-1000	-	-	0.000	RWSH	MS	-	OT	RFCA	-	-
1990-5191	2448089.50	1990 Jun 17	UR-1000	-	-	0.000	RWSH	MS	-	OT	RFCA	-	-



Launch_Tag	Launch_ID	Variant	Flight_ID	Flight	Mission	FlightCode	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee_Km	Range_Km	Dest
1972-A100	2441386.67	-	51144-70-801	15430 BL-1	Silo eject test	-	-	MIP-5	LC131/29	-	-	1	-	MIP-5
1972-A02	2441491.50	-	65013-70-802	15430 BL-2	-	-	-	MIP-5	LC131/29	-	-	07	-	MIP-5 (Kura)
1973-S146	2441781.72	-	51173-72-003	15430 KLI-1	6 BB 1F5305/RA74	RcCh 15B103T	-	MIP-5	LC174/44	-	-	1007	-	Kura
1973-S192	2441889.79	-	51138-72-002	15430 KLI-2	6 BB 1F5305/RA74	RcCh 15B103T	-	MIP-5	LC179/42	-	-	1007	-	Kura
1973-S218	2441894.73	-	51138-72-003	15430 KLI-3	6 BB 1F5305/RA74	RcCh 15B103T	-	MIP-5	LC179/42	-	-	1007	-	Kura
1973-S261	2441926.72	-	51159-72-004	15430 KLI-4	6 BB 1F5305/RA74	RcCh 15B103	-	MIP-5	LC174/44	-	-	1007	-	Kura
1973-S290	2441942.73	-	51159-72-004	15430 KLI-5	6 BB 1F5305/RA74	RcCh 15B103	-	MIP-5	LC179/42	-	-	1007	-	Kura
1973-S291	2441949.70	-	51159-72-006	15430 KLI-6	6 BB 1F5305/RA74	RcCh 15B103	-	MIP-5	LC174/44	-	-	1007	-	Kura
1973-S335	2441973.50	-	51159-72-007	15430 KLI-7	6 BB 1F5305/RA74	RcCh 15B103	-	MIP-5	LC179/42	-	-	1007	-	Kura
1973-S376	2442008.50	-	51159-72-008	15430 KLI-8	6 BB 1F5305/RA74	RcCh 15B103	-	MIP-5	LC174/44	-	-	1007	-	Kura
1973-S413	2442037.50	-	51159-72-011	15430 KLI-10	6 BB 1F5305/RA74	RcCh 15B103	-	MIP-5	LC179/42	-	-	1007	-	Kura
1974-S76	2442073.50	-	- 2-013	15430 KLI-11	6 BB 1F5305/RA74	RcCh 15B103	-	MIP-5	LC174/44	-	-	1007	-	Kura
1974-S79	2442074.50	-	- 2-010	15430 KLI-12	6 BB 1F5305/RA74	RcCh 15B103	-	MIP-5	LC179/42	-	-	1007	-	Kura
1974-S105	2442106.50	-	- 2-014	15430 KLI-13	6 BB 1F5305/RA74	RcCh 15B103	-	MIP-5	LC174/44	-	-	1007	-	Pacific
1974-S311	2442111.50	-	- 2-014	15430 KLI-14	6 BB 1F5305/RA74	RcCh 15B103	-	MIP-5	LC179/42	-	-	1007	-	Kura
1974-S342	2442135.50	-	- 2-016	15430 KLI-15	6 BB 1F5305/RA74	RcCh 15B103	-	MIP-5	LC174/44	-	-	1007	-	Kura
1974-S343	2442194.50	-	- 2-019	15430 KLI-16	6 BB 1F5305/RA74	RcCh 15B103	-	MIP-5	LC179/42	-	-	1007	-	Kura
1974-S344	2442234.50	-	- 2-020	15430 KLI-17	6 BB 1F5305/RA74	RcCh 15B103	-	MIP-5	LC174/44	-	-	1007	-	Kura
1974-S345	2442288.50	-	- 2-024	15430 KLI-18	6 BB 1F5305/RA74	RcCh 15B103	-	MIP-5	LC179/42	-	-	1007	-	Kura
1974-S346	2442320.50	-	- 2-028	15430 KLI-19	6 BB 1F5305/RA74	RcCh 15B103	-	MIP-5	LC174/44	-	-	1007	-	Kura
1974-S347	2442389.50	-	51121-72-026	15430 KLI-21	6 BB 1F5305/RA74	RcCh 15B103	-	MIP-5	LC179/42	-	-	1007	-	Kura
1974-S348	2442403.50	-	51121-72-027	15430 KLI-22	6 BB 1F5305/RA74	RcCh 15B103	-	MIP-5	LC174/44	-	-	1007	-	Kura
1974-S349	2442406.50	-	51121-72-028	15430 KLI-23	6 BB 1F5305/RA74	RcCh 15B103	-	MIP-5	LC179/42	-	-	1007	-	Kura
1974-S350	2442507.50	-	63046-41-381P	15430 KLI-24	6 BB 1F5305/RA74	RcCh 15B103	-	MIP-5	LC174/44	-	-	1007	-	Kura
1975-A29	2442579.50	-	63046-41-382T	15430 UBP-1 2P	6 BB 1F5305/RA74	RcCh 15B103	-	MIP-5	LC179/42	-	-	1007	-	(Pacific)
1975-A42	2442587.50	-	51121-72-027	15430 UBP-2 2P	6 BB 1F5305/RA74	RcCh 15B103	-	MIP-5	LC174/44	-	-	20?	-	(Pacific)
1975-A52	2442653.50	-	49286-42-378T	15430 UBP-3 2P	6 BB 1F5306	RcCh 15B126	-	MIP-5	LC179/42	-	-	1007	-	Kura
1975-S29	2442675.50	-	63056-41-383T	15430 UBP-4 2P	6 BB 1F5305/RA74	RcCh 15B103	-	MIP-5	LC174/44	-	-	1007	-	Kura
1975-S30	2442698.50	-	51122-91-4385T	15430 UBP-5 2P	6 BB 1F5305/RA74	RcCh 15B103	-	MIP-5	LC179/42	-	-	1007	-	Kura
1976-S34	2442849.50	-	51156-79-003T	15430 KLI-B1	1 BB 1F5306	RcCh 15B126	-	MIP-5	LC174/44	-	-	1007	-	Kura
1976-S35	2442849.50	-	51156-79-003T	15430 KLI-B2	6 BB 1F5306	RcCh 15B126P	-	MIP-5	LC179/42	-	-	1007	-	Kura
1976-S36	2442935.50	-	63022-92-440T	15430 UBP-6 2P	6 BB 1F5305/RA74	RcCh 15B103	-	MIP-5	LC174/44	-	-	1007	-	Kura
1976-S37	2442922.50	-	51122-91-4385T	15430 UBP-7 2P	1 BB 1F5306	RcCh 15B126	-	MIP-5	LC179/42	-	-	1007	-	Kura
1976-S38	2442946.66	-	63056-41-383T	15430 UBP-8 2P	1 BB 1F5306	RcCh 15B126	-	MIP-5	LC174/44	-	-	1007	-	Kura
1976-A61	2443011.66	-	49242-83-440T	15430 KLI-B4	6 BB 1F5306	RcCh 15B126P	-	MIP-5	LC179/42	-	-	1007	-	Kura
1976-S40	2443046.66	-	51122-91-4385T	15430 KLI-B5	6 BB 1F5305/RA74	RcCh 15B103	-	MIP-5	LC174/44	-	-	1007	-	Kura
1976-S41	2443072.28	-	49242-83-440T	15430 UBP-10 2P	6 BB 1F5305/RA74	RcCh 15B103	-	MIP-5	LC179/42	-	-	1007	-	Kura
1976-S42	2443128.54	-	51122-91-4385T	15430 KLI-B6	6 BB 1F5306	RcCh 15B126	-	MIP-5	LC174/44	-	-	1007	-	Kura
1976-A76	2443128.54	-	51122-91-4385T	15430 UBP-13 2P	6 BB 1F5305/RA74	RcCh 15B103	-	MIP-5	LC179/42	-	-	1007	-	Kura
1976-S43	2443128.54	-	51122-91-4385T	15430 UBP-14 2P	1 BB 1F5306	RcCh 15B126	-	MIP-5	LC174/44	-	-	1007	-	Kura
1976-S44	2443128.54	-	51122-91-4385T	15430 KLI-B8	1 BB 1F5306	RcCh 15B126	-	MIP-5	LC179/42	-	-	1007	-	Kura
1976-S45	2443128.54	-	51122-91-4385T	15430 KLI-B9	1 BB 1F5306	RcCh 15B126	-	MIP-5	LC174/44	-	-	1007	-	Kura
1976-S46	2443128.54	-	51122-91-4385T	15430 KLI-B10	1 BB 1F5306	RcCh 15B126	-	MIP-5	LC179/42	-	-	1007	-	Kura
1976-S47	2443128.54	-	51122-91-4385T	15430 KLI-B11	1 BB 1F5306	RcCh 15B126	-	MIP-5	LC174/44	-	-	1007	-	Kura
1976-S48	2443128.54	-	51122-91-4385T	15430 UBP-15 2P	6 BB 1F5305/RA74	RcCh 15B103	-	MIP-5	LC179/42	-	-	1007	-	Kura
1976-S49	2443128.54	-	51122-91-4385T	15430 UBP-16 2P	6 BB 1F5305/RA74	RcCh 15B103	-	MIP-5	LC174/44	-	-	1007	-	Kura
1976-S50	2443128.54	-	51122-91-4385T	15430 UBP-17 2P	6 BB 1F5305/RA74	RcCh 15B103	-	MIP-5	LC179/42	-	-	1007	-	Kura
1976-S51	2443128.54	-	51122-91-4385T	15430 UBP-18 2P	6 BB 1F5305/RA74	RcCh 15B103	-	MIP-5	LC174/44	-	-	1007	-	Kura
1976-S52	2443128.54	-	51122-91-4385T	15430 UBP-19 2P	6 BB 1F5305/RA74	RcCh 15B103	-	MIP-5	LC179/42	-	-	1007	-	Kura
1976-S53	2443128.54	-	51122-91-4385T	15430 UBP-20 2P	6 BB 1F5305/RA74	RcCh 15B103	-	MIP-5	LC174/44	-	-	1007	-	Kura
1976-S54	2443128.54	-	51122-91-4385T	15430 UBP-21 2P	6 BB 1F5305/RA74	RcCh 15B103	-	MIP-5	LC179/42	-	-	1007	-	Kura
1976-S55	2443128.54	-	51122-91-4385T	15430 UBP-22 2P	6 BB 1F5305/RA74	RcCh 15B103	-	MIP-5	LC174/44	-	-	1007	-	Kura
1976-S56	2443128.54	-	51122-91-4385T	15430 UBP-23 2P	6 BB 1F5305/RA74	RcCh 15B103	-	MIP-5	LC179/42	-	-	1007	-	Kura
1976-S57	2443128.54	-	51122-91-4385T	15430 UBP-24 2P	6 BB 1F5305/RA74	RcCh 15B103	-	MIP-5	LC174/44	-	-	1007	-	Kura
1976-S58	2443128.54	-	51122-91-4385T	15430 UBP-25 2P	6 BB 1F5305/RA74	RcCh 15B103	-	MIP-5	LC179/42	-	-	1007	-	Kura
1976-S59	2443128.54	-	51122-91-4385T	15430 UBP-26 2P	6 BB 1F5305/RA74	RcCh 15B103	-	MIP-5	LC174/44	-	-	1007	-	Kura
1976-S60	2443128.54	-	51122-91-4385T	15430 UBP-27 2P	6 BB 1F5305/RA74	RcCh 15B103	-	MIP-5	LC179/42	-	-	1007	-	Kura
1976-S61	2443128.54	-	51122-91-4385T	15430 UBP-28 2P	6 BB 1F5305/RA74	RcCh 15B103	-	MIP-5	LC174/44	-	-	1007	-	Kura
1976-S62	2443128.54	-	51122-91-4385T	15430 UBP-29 2P	6 BB 1F5305/RA74	RcCh 15B103	-	MIP-5	LC179/42	-	-	1007	-	Kura
1976-S63	2443128.54	-	51122-91-4385T	15430 UBP-30 2P	6 BB 1F5305/RA74	RcCh 15B103	-	MIP-5	LC174/44	-	-	1007	-	Kura
1976-S64	2443128.54	-	51122-91-4385T	15430 UBP-31 2P	6 BB 1F5305/RA74	RcCh 15B103	-	MIP-5	LC179/42	-	-	1007	-	Kura
1976-S65	2443128.54	-	51122-91-4385T	15430 UBP-32 2P	6 BB 1F5305/RA74	RcCh 15B103	-	MIP-5	LC174/44	-	-	1007	-	Kura
1976-S66	2443128.54	-	51122-91-4385T	15430 UBP-33 2P	6 BB 1F5305/RA74	RcCh 15B103	-	MIP-5	LC179/42	-	-	1007	-	Kura
1976-S67	2443128.54	-	51122-91-4385T	15430 UBP-34 2P	6 BB 1F5305/RA74	RcCh 15B103	-	MIP-5	LC174/44	-	-	1007	-	Kura
1976-S68	2443128.54	-	51122-91-4385T	15430 UBP-35 2P	6 BB 1F5305/RA74	RcCh 15B103	-	MIP-5	LC179/42	-	-	1007	-	Kura
1976-S69	2443128.54	-	51122-91-4385T	15430 UBP-36 2P	6 BB 1F5305/RA74	RcCh 15B103	-	MIP-5	LC174/44	-	-	1007	-	Kura
1976-S70	2443128.54	-	51122-91-4385T	15430 UBP-37 2P	6 BB 1F5305/RA74	RcCh 15B103	-	MIP-5	LC179/42	-	-	1007	-	Kura
1976-S71	2443128.54	-	51122-91-4385T	15430 UBP-38 2P	6 BB 1F5305/RA74	RcCh 15B103	-	MIP-5	LC174/44	-	-	1007	-	Kura
1976-S72	2443128.54	-	51122-91-4385T	15430 UBP-39 2P	6 BB 1F5305/RA74	RcCh 15B103	-	MIP-5	LC179/42	-	-	1007	-	Kura
1976-S73	2443128.54	-	51122-91-4385T	15430 UBP-40 2P	6 BB 1F5305/RA74	RcCh 15B103	-	MIP-5	LC174/44	-	-	1007	-	Kura
1976-S74	2443128.54	-	51122-91											



Launch

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Mission	FlightCode	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee_Km	Range_Km	Dest
2005-032	2453609.27	2005 Aug 26 18:34:28	Roket	-	650-7823-115/72507	Monitor-E	98H	-	-	GfK-1	LCl33/3	-	-	600	-	-
2005-F03	2453622.13	2005 Oct 8 15:02:00	Roket	-	492-8882-030/72508	Cryosat	Cryosat	-	-	GfK-1	LCl33/3	-	-	700?	-	-
2005-S45	2453663.81	2005 Oct 20 07:30:00	UR-100NU 15A35	-	492-3821-111	15A35 UBP-53	6 BB 15F3566/RA74	15F356P7 476-78-411	-	GfK-5	LCl75	-	-	1000?	-	Kura
2006-031	2453944.88	2006 Jul 28 07:05:43	Roket	-	492-8882-032/72504	Kompas-2	KOMPASAT-2	-	-	GfK-1	LCl33/3	-	-	704	-	-
2006-S46	2454008.98	2006 Nov 9 11:35	UR-100NU 15A35	-	492-3821-114	15A35 UBP-54	6 BB 15F3566/RA74	15F356P7 524-67-385	-	GfK-5	LCl75/59	-	-	1000?	-	Kura
2007-S84	2454002.18	2007 Oct 29 09:00:01	Roket	-	492-3821-113	15A35 UBP-55	6 BB 15F3566/RA74	15F356P7 641-78-416	-	GfK-5	LCl75/59	-	-	1000?	-	Kura
2008-S25	2454610.14	2008 May 23 15:20:09	UR-100NU 15A35	-	511-6922-114/72509	Kosmos-2437-2439/Yub	Yub11eysiy	-	-	GfK-1	LCl33/3	-	-	1512	-	-
2008-S51	2454761.88	2008 Oct 22 09:09:58	UR-100NU 15A35	-	511-6922-236	15A35 UBP-56	6 BB 15F3566/RA74	15F356P7	-	GfK-5	LCl75/59	-	-	1000?	-	Kura
2009-013	2454908.10	2009 Mar 17 14:21:14	Roket	-	511-6922-012P/72511	GUCE	GUCE	-	-	GfK-1	LCl33/3	-	-	280	-	-
2009-036	2455018.56	2009 Jul 6 01:26:34	Roket	-	Kosmos-2451-2453	Kosmos-2451-2453	Strelna-3	-	-	GfK-1	LCl33/3	-	-	1515	-	-
2009-059	2455137.58	2009 Nov 2 01:50:51	Roket	-	492-1791-573/72510	SMOS/Proba-2	SMOS	-	-	GfK-1	LCl33/3	-	-	764	-	-
2010-023	2455349.58	2010 Jun 2 01:59:12	Roket	-	492-8882-033/72513	SERVIS-2	SERVIS-2	-	-	GfK-1	LCl33/3	-	-	1214	-	-
2010-043	2455447.65	2010 Sep 8 03:30:18	Roket	-	511-1992-007P/72516	Geos-IR-2	Geosets-N Kosmos	Geosets-N No. 12	-	GfK-1	LCl33/3	-	-	1518	-	-
2011-005	2455594.08	2011 Feb 1 14:00:14	Roket	-	630-9793-567/72514	Geo-IR-2	Musson-2 No. 11	Musson-2 No. 11	-	GfK-1	LCl33/3	-	-	1066	-	-
2011-S88	2455923.00	2011 Dec 27 12:00:00	UR-100NU 15A35P	-	511-6922-249	15A35P LKL-7	15TU70/10ZE Proekt 4202	Yu-70 No. 7 (30801)	-	GfK-5	LCl32/30	-	-	1000?	-	Kura
2012-041	2456136.57	2012 Jul 28 01:36:34	Roket	-	492-6391-533/72515	Geosets-N Blok 11/Kosmos	Geosets-N No. 13,15	-	-	GfK-1	LCl33/3	-	-	1515	-	-
2013-001	2456308.18	2013 Jan 15 16:24:59	Roket	-	492-6391-534/72518	Kosmos-2482/3/4	Strelna-3M	-	-	GfK-1	LCl33/3	-	-	1517	-	-
2013-032	2456471.20	2013 Jun 27 16:53:00	Strelna	-	492-6391-532	Kosmos-2487	Kondor No. 202	-	-	GfK-5	LCl75/59	-	-	544	-	-
2013-048	2456562.63	2013 Sep 11 23:23:04	Roket	-	492-6391-535/72519	Geosets-N Blok 12	Geosets-N No. 14/16/17	-	-	GfK-1	LCl33/3	-	-	1516	-	Kura?
2013-S102	2456619.00	2013 Sep 27 03:01:49	UR-100NU 15A35P	-	492-6391-537	15A35-71 LKL-1	Yu-71 Hypersonic RV	Yu-71 No. 1	-	YAS	Sh370/12	-	-	1000?	-	-
2013-076	2456651.52	2013 Dec 25 00:31:55	Roket	-	492-8882-031/72524	SMARR	SMARR 1,2,3	-	-	GfK-1	LCl33/3	-	-	519	-	-
2014-028	2456800.73	2014 May 25 05:27:54	Roket	-	492-3931-130/72520	Kosmos-2488/89/90/91	Geosets-N No. 18/19/20	-	-	GfK-1	LCl33/3	-	-	1613	-	-
2014-036	2456862.03	2014 Jul 3 12:43:52	Roket	-	630-4393-851/72521	Kosmos-2496/97/98/99	Rodnik	-	-	GfK-1	LCl33/3	-	-	1609	-	-
2014-064	2457010.70	2014 Dec 19 04:43:32	Strelna	-	492-9794-556/72522	Geosets-N Blok 13	Geosets-N No. 2	-	-	GfK-1	LCl75/59	-	-	1516	-	-
2015-A02	2457079.63	2015 Feb 26 08:01:49	UR-100NU 15A35P	-	630-9793-560	Kondor-E No. 2	Kondor-E No. 2	Yu-71 / Proekt 4202	-	GfK-5	LCl75/59	-	-	502	-	(Kura)
2015-020	2457113.07	2015 Mar 31 13:47:56	Roket	-	511-3922-119	15A35-71 LKL-2	Geosets-N Blok 14/K-2604	Yu-71 No. 2	-	YAS	Sh370/12	-	-	40?	-	-
2016-011	2457435.25	2016 Feb 16 17:57:45	Roket	-	492-9794-554/72526	Geosets-N Blok 14/K-2604	Geosets-N No. 21/22/23	-	-	GfK-1	LCl33/3	-	-	1516	-	-
2016-524	2457497.78	2016 Sep 23 21:59:35	Roket	-	511-2361-274/72512	Sentinel-3A	Rodnik	-	-	GfK-1	LCl33/3	-	-	1520	-	-
2016-564	2457584.08	2016 Apr 19 06:41:55	UR-100NU 15A35P	-	492-9152-331	Sentinel-3A	Sentinel-3A	Yu-71 / Proekt 4202	-	GfK-1	LCl33/3	-	-	606	-	Kura
2016-564	2457686.88	2016 Jun 4 14:00:14	UR-100NU 15A35P	-	492-9152-331	Geo-IR-2 No. 12	Musson-2 No. 12	Yu-71 No. 3	-	YAS	Sh370/12	-	-	1000?	-	-
2017-064	2458039.89	2017 Oct 13 09:27:44	Roket	-	511-1992-008P/72528	Sentinel-5P	Sentinel-5P	Yu-71 No. 4	-	GfK-1	LCl33/3	-	-	963	-	Kura
2018-039	2458254.25	2018 Apr 25 17:57:51	Roket	-	492-3921-010P/72523	Sentinel-5B	Sentinel-5B	-	-	GfK-1	LCl33/3	-	-	830	-	-
2018-097	2458472.60	2018 Nov 30 02:27:54	Roket	-	492-3921-126/72529	Kosmos-2650/31/32	Geosets-N No. 13	Yu-71 No. 5	-	GfK-1	LCl33/3	-	-	1613	-	-
2018-S82	2458478.92	2018 Dec 26 09:59	UR-100NU 15A35P	-	492-3921-128/72530	15A35-71 LKL-6	Avangard	-	-	YAS	Sh370/12	-	-	4000?	-	Kura
2019-057	2458726.08	2019 Aug 30 14:00	Roket	-	-	Geosets-N Blok 15	Musson-2 No. 13	-	-	GfK-1	LCl33/3	-	-	968	-	-
2019-086	2458844.47	2019 Dec 26 23:11:58	Roket	-	-	-	Geosets-N No. 24/25/26	-	-	GfK-1	LCl33/3	-	-	4099	-	-





Launch_Tag	Launch_ID	Launch_Date	Lv_Type	Variant	Flight_ID	Agency	Launch_Code	Group	Category	LTCite	Cite	Notes
1972-A100	2441356.67	1972 Feb 9 0400	UR-100M	-	51144-70-501	RVSN	MS	-	Test	RPCA	RPCB	-
1972-A02	2441491.50	1972 Jun 23	UR-100M	-	63013-70-502	RVSN	MF	-	Test	RPCA	-	-
1973-S146	2441761.72	1973 Apr 9 0515	UR-100M	-	51173-72-001	RVSN	MF	-	Test	BHL	RPCA	-
1973-S192	2441639.79	1973 Jun 6 0653	UR-100M	-	51139-72-002	RVSN	MS	-	Test	BHL	RPCA	-
1973-S218	2441694.73	1973 Jul 31 0530	UR-100M	-	51139-72-003	RVSN	MS	-	Test	BHL	RPCA	-
1973-S261	2441925.72	1973 Aug 31 0510	UR-100M	-	51159-72-004	RVSN	MS	-	Test	BHL	RPCA	-
1973-S290	2441942.73	1973 Sep 17 0525	UR-100M	-	51159-72-005	RVSN	MS	-	Test	BHL	RPCA	-
1973-S291	2441949.70	1973 Sep 24 0465	UR-100M	-	51159-72-006	RVSN	MS	-	Test	BHL	RPCA	-
1973-S335	2441973.50	1973 Oct 18	UR-100M	-	51159-72-007	RVSN	MS	-	Test	RPCA	-	-
1973-S376	2442008.50	1973 Nov 22	UR-100M	-	51159-72-008	RVSN	MS	-	Test	RPCA	-	-
1973-S413	2442037.50	1973 Dec 21	UR-100M	-	51159-72-009	RVSN	MS	-	Test	RPCA	-	-
1973-S450	2442043.50	1973 Dec 27	UR-100M	-	51159-72-010	RVSN	MS	-	Test	RPCA	-	-
1974-S76	2442074.50	1974 Jan 26	UR-100M	-	51159-72-011	RVSN	MS	-	Test	RFX	-	-
1974-S79	2442074.50	1974 Jan 27	UR-100M	-	- 2-013	RVSN	MS	-	Test	RFX	-	-
1974-S105	2442106.50	1974 Feb 28	UR-100M	-	- 2-010	RVSN	MS	-	Test	RPCA	-	-
1974-S112	2442111.50	1974 Mar 5	UR-100M	-	- 2-014	RVSN	MS	-	Test	RPCA	-	-
1974-S41	2442135.50	1974 Mar 29	UR-100M	-	- 2-015	RVSN	MS	-	Test	RPCA	-	-
1974-S42	2442194.50	1974 May 27	UR-100M	-	- 2-016	RVSN	MS	-	Test	RPCA	-	-
1974-S43	2442198.50	1974 May 31	UR-100M	-	- 2-017	RVSN	MS	-	Test	RPCA	-	-
1974-S245	2442234.50	1974 Jul 6	UR-100M	-	- 2-020	RVSN	MS	-	Test	RPCA	-	-
1974-S44	2442268.50	1974 Aug 9	UR-100M	-	- 2-024	RVSN	MS	-	Test	RPCA	-	-
1974-S46	2442320.50	1974 Sep 30	UR-100M	-	- 2-025	RVSN	MS	-	Test	RPCA	-	-
1974-S47	2442353.50	1974 Nov 2	UR-100M	-	51121-72-026	RVSN	MS	-	Test	RPCA	-	-
1974-S48	2442399.58	1974 Dec 18 0150	UR-100M	-	51121-72-029T	RVSN	MS	-	Test	RPCA	-	-
1974-S49	2442403.50	1974 Dec 22	UR-100M	-	- 2-021	RVSN	MS	-	Test	RPCA	-	-
1974-S50	2442406.50	1974 Dec 25	UR-100M	-	- 2-022	RVSN	MS	-	Test	RPCA	-	-
1975-S27	2442507.50	1975 Apr 5	UR-100M	-	63046-41-381P	RVSN	MF	-	OT	RPCA	-	-
1975-S29	2442579.50	1975 Jun 16	UR-100M	-	63046-41-382T	RVSN	MF	-	OT	RPCA	-	-
1975-S31	2442597.50	1975 Jul 4	UR-100M	-	51121-72-027	RVSN	MF	-	OT	RPCA	-	-
1975-S28	2442653.50	1975 Aug 29	UR-100M	-	51156-79-001T	RVSN	MS	-	OT	RPCA	-	-
1975-S29	2442675.50	1975 Sep 20	UR-100M	-	49266-42-376T	RVSN	MS	-	OT	RPCA	-	-
1975-S30	2442698.50	1975 Oct 13	UR-100M	-	63066-41-385T	RVSN	MS	-	OT	RPCA	-	-
1975-S34	2442826.50	1975 Feb 18	UR-100M	-	51122-81-635T	RVSN	MS	-	OT	RPCA	-	-
1975-S35	2442849.50	1976 Mar 12	UR-100M	-	51156-79-003T	RVSN	MS	-	OT	RPCA	-	-
1975-S36	2442915.59	1976 May 24 0215	UR-100M	-	51156-79-005T	RVSN	MS	-	OT	BHL	RPCA	-
1976-S41	2442922.50	1976 May 24 0455	UR-100M	-	51156-79-004T	RVSN	MS	-	OT	BHL	RPCA	-
1976-S37	2442929.70	1976 Jun 16 0830	UR-100M	-	51122-81-635T	RVSN	MS	-	OT	BHL	RPCA	-
1976-S38	2442946.65	1976 Jun 16 0830	UR-100M	-	51122-81-635T	RVSN	MS	-	OT	BHL	RPCA	-
1976-S39	2442996.58	1976 Aug 5 0150	UR-100M	-	63066-41-385T	RVSN	MS	-	OT	BHL	RPCA	-
1976-S40	2443011.66	1976 Aug 21 0355	UR-100M	-	51122-82-440T	RVSN	MS	-	OT	BHL	RPCA	-
1976-S41	2443026.60	1976 Sep 27 0230	UR-100M	-	51156-79-004T	RVSN	MS	-	OT	BHL	RPCA	-
1976-S42	2443126.54	1976 Oct 22 0210	UR-100M	-	49242-85-440T	RVSN	MS	-	OT	BHL	RPCA	-
1976-S43	2443126.54	1976 Dec 13 0100	UR-100M	-	49242-85-440T	RVSN	MS	-	OT	BHL	RPCA	-
1976-S44	2443126.54	1976 Dec 14 0000	UR-100M	-	49242-85-440T	RVSN	MS	-	OT	BHL	RPCA	-
1976-S45	2443126.54	1976 Dec 16 0000	UR-100M	-	49242-85-440T	RVSN	MS	-	OT	BHL	RPCA	-
1976-S46	2443126.54	1976 Dec 23 0100	UR-100M	-	49242-85-440T	RVSN	MS	-	OT	BHL	RPCA	-
1976-S47	2443126.54	1976 Dec 23 0230	UR-100M	-	49242-85-440T	RVSN	MS	-	OT	BHL	RPCA	-
1976-S48	2443126.54	1976 Dec 23 0230	UR-100M	-	49242-85-440T	RVSN	MS	-	OT	BHL	RPCA	-
1976-S49	2443126.54	1976 Dec 23 0230	UR-100M	-	49242-85-440T	RVSN	MS	-	OT	BHL	RPCA	-
1976-S50	2443126.54	1976 Dec 23 0230	UR-100M	-	49242-85-440T	RVSN	MS	-	OT	BHL	RPCA	-
1976-S51	2443126.54	1976 Dec 23 0230	UR-100M	-	49242-85-440T	RVSN	MS	-	OT	BHL	RPCA	-
1976-S52	2443126.54	1976 Dec 23 0230	UR-100M	-	49242-85-440T	RVSN	MS	-	OT	BHL	RPCA	-
1976-S53	2443126.54	1976 Dec 23 0230	UR-100M	-	49242-85-440T	RVSN	MS	-	OT	BHL	RPCA	-
1976-S54	2443126.54	1976 Dec 23 0230	UR-100M	-	49242-85-440T	RVSN	MS	-	OT	BHL	RPCA	-
1976-S55	2443126.54	1976 Dec 23 0230	UR-100M	-	49242-85-440T	RVSN	MS	-	OT	BHL	RPCA	-
1976-S56	2443126.54	1976 Dec 23 0230	UR-100M	-	49242-85-440T	RVSN	MS	-	OT	BHL	RPCA	-
1976-S57	2443126.54	1976 Dec 23 0230	UR-100M	-	49242-85-440T	RVSN	MS	-	OT	BHL	RPCA	-
1976-S58	2443126.54	1976 Dec 23 0230	UR-100M	-	49242-85-440T	RVSN	MS	-	OT	BHL	RPCA	-
1976-S59	2443126.54	1976 Dec 23 0230	UR-100M	-	49242-85-440T	RVSN	MS	-	OT	BHL	RPCA	-
1976-S60	2443126.54	1976 Dec 23 0230	UR-100M	-	49242-85-440T	RVSN	MS	-	OT	BHL	RPCA	-
1976-S61	2443126.54	1976 Dec 23 0230	UR-100M	-	49242-85-440T	RVSN	MS	-	OT	BHL	RPCA	-
1976-S62	2443126.54	1976 Dec 23 0230	UR-100M	-	49242-85-440T	RVSN	MS	-	OT	BHL	RPCA	-
1976-S63	2443126.54	1976 Dec 23 0230	UR-100M	-	49242-85-440T	RVSN	MS	-	OT	BHL	RPCA	-
1976-S64	2443126.54	1976 Dec 23 0230	UR-100M	-	49242-85-440T	RVSN	MS	-	OT	BHL	RPCA	-
1976-S65	2443126.54	1976 Dec 23 0230	UR-100M	-	49242-85-440T	RVSN	MS	-	OT	BHL	RPCA	-
1976-S66	2443126.54	1976 Dec 23 0230	UR-100M	-	49242-85-440T	RVSN	MS	-	OT	BHL	RPCA	-
1976-S67	2443126.54	1976 Dec 23 0230	UR-100M	-	49242-85-440T	RVSN	MS	-	OT	BHL	RPCA	-
1976-S68	2443126.54	1976 Dec 23 0230	UR-100M	-	49242-85-440T	RVSN	MS	-	OT	BHL	RPCA	-
1976-S69	2443126.54	1976 Dec 23 0230	UR-100M	-	49242-85-440T	RVSN	MS	-	OT	BHL	RPCA	-
1976-S70	2443126.54	1976 Dec 23 0230	UR-100M	-	49242-85-440T	RVSN	MS	-	OT	BHL	RPCA	-
1976-S71	2443126.54	1976 Dec 23 0230	UR-100M	-	49242-85-440T	RVSN	MS	-	OT	BHL	RPCA	-
1976-S72	2443126.54	1976 Dec 23 0230	UR-100M	-	49242-85-440T	RVSN	MS	-	OT	BHL	RPCA	-
1976-S73	2443126.54	1976 Dec 23 0230	UR-100M	-	49242-85-440T	RVSN	MS	-	OT	BHL	RPCA	-
1976-S74	2443126.54	1976 Dec 23 0230	UR-100M	-	49242-85-440T	RVSN	MS	-	OT	BHL	RPCA	-
1976-S75	2443126.54	1976 Dec 23 0230	UR-100M	-	49242-85-440T	RVSN	MS	-	OT	BHL	RPCA	-
1976-S76	2443126.54	1976 Dec 23 0230	UR-100M	-	49242-85-440T	RVSN	MS	-	OT	BHL	RPCA	-
1976-S77	2443126.54	1976 Dec 23 0230	UR-100M	-	49242-85-440T	RVSN	MS	-	OT	BHL	RPCA	-
1976-S78	2443126.54	1976 Dec 23 0230	UR-100M	-	49242-85-440T	RVSN	MS	-	OT	BHL	RPCA	-
1976-S79	2443126.54	1976 Dec 23 0230	UR-100M	-	49242-85-440T	RVSN	MS	-	OT	BHL	RPCA	-
1976-S80	2443126.54	1976 Dec 23 0230	UR-100M	-	49242-85-440T	RVSN	MS	-	OT	BHL	RPCA	-
1976-S81	2443126.54	1976 Dec 23 0230	UR-100M	-	49242-85-440T	RVSN	MS	-	OT	BHL	RPCA	-
1976-S82	2443126.54	1976 Dec 23 0230	UR-100M	-	49242-85-440T	RVSN	MS	-	OT	BHL	RPCA	-
1976-S83	2443126.54	1976 Dec 23 0230	UR-100M	-	49242-85-440T	RVSN	MS	-	OT	BHL	RPCA	-
1976-S84	2443126.54	1976 Dec 23 0230	UR-100M	-	49242-85-440T	RVSN	MS	-	OT	BHL	RPCA	-
1976-S85	2443126.54	1976 Dec 23 0230	UR-100M	-	49242-85-440T	RVSN	MS	-	OT	BHL	RPCA	-
1976-S86	2443126.54	1976 Dec 23 0230	UR-100M	-	49242-85-440T	RVSN	MS	-	OT	BHL	RPCA	-
1976-S87	2443126.54	1976 Dec 23 0230	UR-100M	-	49242-85-440T	RVSN	MS	-	OT	BHL	RPCA	-
1976-S88	2443126.54	1976 Dec 23 0230	UR-100M	-	49242-85-440T	RVSN	MS	-	OT	BHL	RPCA	-
1976-S89	2443126.54	1976 Dec 23 0230	UR-100M	-	49242-85-440T	RVSN	MS	-	OT	BHL	RPCA	-
1976-S90	2443126.54	1976 Dec 23 0230	UR-100M	-	49242-85-440T	RVSN	MS	-	OT	BHL	RPCA	-
1976-S91	2443126.54	1976 Dec 23 0230	UR-100M	-	49242-85-440T	RVSN	MS	-	OT	BHL	RPCA	-
1976-S92	2443126.54	1976 Dec 23 0230	UR-100M	-	49242-85-440T	RVSN	MS	-	OT	BHL	RPCA	-
1976-S93	2443126.54	1976 Dec 23 0230	UR-100M	-	49242-85-440T	RVSN	MS	-	OT	BHL	RPCA	-
1976-S94	2443126.54	1976 Dec 23 0230	UR-100M	-	49242-85-440T	RVSN	MS	-	OT	BHL	RPCA	-
1976-S95	2443126.54	1976 Dec 23 0230	UR-100M	-	49242-85-440T	RVSN	MS	-	OT	BHL	RPCA	-
1976-S96	2443126.54	1976 Dec 23 0230	UR-100M	-	49242-85-440T	RVSN	MS	-	OT	BHL	RPCA	-
1976-S97	2443126.54	1976 Dec 23 0230	UR-100M	-	49242-85-440T	RVSN	MS	-	OT	BHL	RPCA	-
1976-S98	2443126.54	1976 Dec 23 0230	UR-100M	-	49242-85-440T	RVSN	MS	-	OT	BHL	RPCA	-
1976-S99	2443126.54	1976 Dec 23 0230	UR-100M	-	49242-85-440T	RVSN	MS	-	OT	BHL	RPCA	-
1976-S00	2443126.54											

Launch_Tag	Launch_ID	Launch_Date	Lv_Type	Variant	Flight_ID	Agency	Launch_Code	Group	Category	LTCite	Cite	Notes
1981-5228	2444706.50	1981 Apr 12	UR-1000		49242-68-024	RVSN	MF		OT	RPCA		
1981-543	2444715.50	1981 Apr 21	UR-1000U	15A35	49219-21-133T(1E)	RVSN	MS		OT	RPCA		
1981-538	2444743.48	1981 May 18 2330	UR-1000		63085-53-241(2E)	RVSN	MS		OT	BHL		
1981-539	2444761.28	1981 Jun 5 1845	UR-1000		63085-53-251T(3E)	RVSN	MS		OT	BHL		
1981-544	2444778.50	1981 Jun 23	UR-1000U	15A35	49243-94-541T(4E)	RVSN	MS		OT	RPCA		
1981-540	2444787.16	1981 Jul 1 1550	UR-1000		63085-53-248(5E)	RVSN	MS		OT	BHL		
1981-545	2444804.57	1981 Jul 19 0140	UR-1000U	15A35	51139-22-121T(6E)	RVSN	MS		OT	BHL		
1981-546	2444813.52	1981 Jul 28 0025	UR-1000U	15A35	51139-22-120T(7E)	RVSN	MS		OT	BHL		
1981-541	2444816.50	1981 Jul 31 0005	UR-1000		63085-53-249(8E)	RVSN	MS		OT	BHL		
1981-547	2444837.50	1981 Aug 21	UR-1000U	15A35	51139-82-019T(9E)	RVSN	MS		OT	RPCA		
1981-422	2444855.52	1981 Sep 8 0030	UR-1000		49285-79-034T(10E)	RVSN	MF		OT	BHL		500km long
1981-542	2444857.46	1981 Sep 9 2300	UR-1000U	15A35	49285-79-033T(11E)	RVSN	MS		OT	BHL		
1981-548	2444859.54	1981 Sep 12 0100	UR-1000U	15A35	51139-82-020(12E)	RVSN	MS		OT	BHL		
1982-532	2444976.99	1982 Jan 7 1147	UR-1000U	15A35	51139-22-122T(1P)	RVSN	MS		OT	BHL		
1982-5262	2444977.50	1982 Jan 8	UR-1000		63085-53-233	RVSN	MS		OT	RPCA		
1982-533	2445086.14	1982 Apr 26 1520?	UR-1000U	15A35	51124-62-662T(2P)	RVSN	MS		OT	BHL		
1982-5257	2445263.65	1982 Oct 21 0335	UR-1000U	15A35	51184-62-664T(3P)	RVSN	MS		OT	BHL		
1982-5256	2445311.53	1982 Dec 6 0045	UR-1000U	15A35	49217-91-572(4P)	RVSN	MS		OT	BHL		
1982-438	2445325.54	1982 Dec 22 0055	UR-1000U	15A35	63024-82-025T(1L)	RVSN	MS		OT	BHL		
1983-5266	2445362.50	1983 Jan 28	UR-1000U	15A35	63046-22-026T(6L)	RVSN	MF		OT	RFX		St:Fail108s
1983-531	2445367.50	1983 Feb 2	UR-1000		49242-63-426	RVSN	MS		OT	RPCA		
1983-532	2445397.50	1983 Mar 4	UR-1000U	15A35	49282-71-395T(6P)	RVSN	MS		OT	RPCA		
1983-533	2445417.04	1983 Mar 23 1300	UR-1000U	15A35	63084-82-027(2L)	RVSN	MS		OT	BHL		
1983-534	2445466.50	1983 May 12	UR-1000U	15A35	51165-52-247(6P)	RVSN	MS		OT	RPCA		
1983-535	2445467.50	1983 May 13	UR-1000U	15A35	51139-82-022T(3L)	RVSN	MS		OT	RPCA		
1983-536	2445481.50	1983 May 27	UR-1000U	15A35	63024-82-023T(4L)	RVSN	MS		OT	RPCA		
1983-537	2445482.50	1983 Jul 13	UR-1000U	15A35	63085-53-250	RVSN	MS		OT	RPCA		
1983-538	2445572.50	1983 Aug 26	UR-1000U	15A35	63046-22-026T(6L)	RVSN	MF		OT	RFX		
1983-429	2445579.50	1983 Sep 2	UR-1000U	15A35	51132-723?	RVSN	MS		OT	RPCA		
1983-539	2445674.50	1983 Dec 6	UR-1000U	15A35	63032-82-028T(8L)	RVSN	MS		OT	RPCA		
1983-540	2445694.50	1983 Dec 16	UR-1000U	15A35	51126-51-285T	RVSN	MS		OT	RPCA		
1984-536	2445716.50	1984 Jan 17	UR-1000U	15A35	63085-53-240	RVSN	MS		OT	RPCA		
1984-537	2445727.50	1984 Jan 27	UR-1000U	15A35	51163-92-944	RVSN	MS		OT	RPCA		
1984-538	2445827.50	1984 May 7	UR-1000U	15A35	49256-42-374	RVSN	MF		OT	BHL		
1984-5238	2445891.50	1984 Jul 10	UR-1000U	15A35	49256-42-374	RVSN	MF		OT	BHL		
1984-534	2446007.20	1984 Nov 2 1655	UR-1000		51184-62-661	RVSN	MS		OT	RPCA		
1984-437	2446040.50	1984 Dec 6	UR-1000U	15A35	49282-71-363	RVSN	MS		OT	RPCA		
1985-519	2446117.50	1985 Feb 21	UR-1000U	15A35	49253-91-543	RVSN	MS		OT	RPCA		
1985-520	2446138.50	1985 Mar 14	UR-1000U	15A35	63071-32-28	RVSN	MS		OT	RPCA		
1985-521	2446139.50	1985 Mar 15	UR-1000U	15A35	63046-41-361	RVSN	MS		OT	RPCA		
1985-522	2446207.50	1985 May 22	UR-1000U	15A35		RVSN	MS		OT	RPCA		
1985-523	2446296.50	1985 Nov 29	UR-1000U	15A35		RVSN	MS		OT	RPCA		
1985-524	2446322.50	1985 Dec 5	UR-1000U	15A35		RVSN	MS		OT	RPCA		
1986-513	2446553.50	1986 Apr 3	UR-1000U	15A35		RVSN	MS		OT	RPCA		
1986-514	2446572.50	1986 Jul 22	UR-1000U	15A35		RVSN	MS		OT	RPCA		
1986-516	2446647.50	1986 Aug 5	UR-1000U	15A35		RVSN	MS		OT	RPCA		
1986-518	2446670.50	1986 Sep 17	UR-1000U	15A35		RVSN	MS		OT	RPCA		
1986-519	2446670.50	1986 Sep 17	UR-1000U	15A35		RVSN	MS		OT	RPCA		
1987-5165	2446773.50	1987 Dec 6	UR-1000U	15A35		RVSN	MS		OT	RPCA		
1987-409	2446838.50	1987 Feb 12	UR-1000U	15A35		RVSN	MF		OT	RFX		
1987-409	2446838.50	1987 Feb 12	UR-1000U	15A35		RVSN	MF		OT	RFX		
1987-5231	2446877.50	1987 Jun 30 1430	UR-1000U		49217-91-568	RVSN	MS		OT	RFX		
1987-5232	2447054.10	1987 Jul 16	UR-1000U			RVSN	MS		OT	RFX		
1987-541	2447054.96	1987 Sep 16 0945	UR-1000U	15A35		RVSN	MS		OT	RFX		
1987-541	2447055.94	1987 Sep 17 0905	UR-1000U	15A35		RVSN	MS		OT	RFX		
1987-5205	2447132.76	1987 Dec 3 0610	UR-1000U	15A35		RVSN	MS		OT	RFX		
1988-542	2447396.50	1988 Dec 23 0650	UR-1000U	15A35		RVSN	MS		OT	RFX		
1989-554	2447950.76	1990 Feb 28 0645	UR-1000U	15A35		RVSN	MS		OT	RFX		
1990-574	2447979.78	1990 Feb 29 0645	UR-1000U	15A35		RVSN	MS		OT	RFX		
1990-417	2448159.90	1990 Dec 25 0930	UR-1000U	15A35		RVSN	MS		OT	RFX		
1990-5155	2448215.67	1990 Dec 20 0402	UR-1000U	15A35		RVSN	MS		OT	RFX		
1990-5172	2448216.94	1990 Dec 21 0805	UR-1000U	15A35		RVSN	MS		OT	RFX		
1991-5136	2448484.00	1991 Dec 15 1205	UR-1000U	15A35		RVSN	MS		OT	RFX		
1991-5174	2448586.56	1991 Dec 26 0130	UR-1000U	15A35		RVSN	MS		OT	RFX		
1991-5181	2448611.35	1991 Dec 20 2030	UR-1000U	15A35		RVSN	MS		OT	RFX		
1992-566	2448832.24	1992 Jul 28 1740	UR-1000U	15A35		RVSN	MS		OT	RFX		
1992-418	2448957.89	1992 Dec 1 0925	UR-1000U	15A35		RVSN	MS		OT	RFX		
1993-509	2449224.50	1994 Mar 25	UR-1000U	15A35		RVSN	MS		OT	RFX		
1994-503	2449680.50	1994 Mar 24	UR-1000U	15A35		RVSN	MS		OT	RFX		
1994-583	2449712.03	1994 Dec 26 0301.16	UR-1000U	15A35		RVSN	MS		OT	RFX		
1995-845	2449717.63	1995 Jun 8 1245	UR-1000U	15A35		RVSN	MS		OT	RFX		
1996-528	2450240.81	1996 Jun 6	UR-1000U	15A35		RVSN	MS		OT	RFX		
1997-545	2450609.50	1997 Oct 7 1200	UR-1000U	15A35		RVSN	MS		OT	RFX		
1998-559	2451094.00	1998 Oct 7 2000	UR-1000U	15A35		RVSN	MS		OT	RFX		
1999-569	2451471.88	1999 Oct 20 0900	UR-1000U	15A35		RVSN	MS		OT	RFX		
2000-026	2451680.95	2000 Mar 16 0827.41	UR-1000U	15A35		RVSN	MS		OT	RFX		
2000-562	2451849.92	2000 Nov 1 1000	UR-1000U	15A35		RVSN	MS		OT	RFX		
2001-547	2452087.92	2001 Oct 26 1233	UR-1000U	15A35		RVSN	MS		OT	RFX		
2002-012	2452099.02	2001 Oct 26 1233	UR-1000U	15A35		RVSN	MS		OT	RFX		
2002-031	2452345.90	2002 Mar 17 0921.27	UR-1000U	15A35		RVSN	MS		OT	RFX		
2003-031	2452618.72	2002 Jun 20 0933.46	UR-1000U	15A35		RVSN	MS		OT	RFX		
2003-031	2452821.09	2002 Jun 30 1415.26	UR-1000U	15A35		RVSN	MS		OT	RFX		
2003-050	2452943.75	2003 Dec 30 1343.42	UR-1000U	15A35		RVSN	MS		OT	RFX		
2003-055	2452978.75	2003 Dec 5 0600.00	UR-1000U	15A35		RVSN	MS		OT	RFX		
2004-507	2453053.88	2004 Feb 18 0900	UR-1000U	15A35		RVSN	MS		OT	RFX		
2004-533	2453228.93	2004 Aug 11 1025	UR-1000U	15A35		RVSN	MS		OT	RFX		

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Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Orbday	Agency	Launch_Code	Group	Category	LTCite	Cite	Notes
2005-032	2453609.27	2005 Aug 26 18:54:28	Rokot	-	630-7823-115/72507	0.750	KVR	OS	G	Sat SSD P	MK0510-16	-	-
2005-F03	2453652.13	2005 Dec 8 15:02:00	UR-100MU 15A3S5	-	492-5882-030/72508	0.870	EDUUK	OF	CU/G	Sat SSD L	MK0512-34	-	-
2005-545	2453663.81	2005 Dec 20 07:30:00	Rokot	-	492-3821-111	0.000	RVSIR	MS	-	OT	Wire	-	-
2006-361	2453944.80	2006 Jul 28 07:05:43	Rokot	-	492-5882-032/72504	0.765	EDUUK	MS	CU/OG	Sat SSD L	MK0609-52	-	-
2006-031	2454048.98	2006 Nov 9 11:35	UR-100MU 15A3S5	-	492-3821-114	0.000	RVSIR	MS	-	OT	Wire	-	-
2007-354	2454402.88	2007 Dec 29 09:00:01	UR-100MU 15A3S5	-	492-3821-113	0.000	RVSIR	MS	-	OT	MK0712-35	-	-
2008-025	2454610.14	2008 May 23 15:20:09	Rokot	-	511-3922-114/72509	0.723	KVR	MS	G	Sat LED L	MK0807-33	-	-
2008-351	2454761.88	2008 Dec 22 09:59:58	UR-100MU 15A3S5	-	511-6552-236	1.200	EDUUK	MS	CU/G	OT	Wire	-	-
2009-013	2454908.10	2009 Mar 17 14:21:14	Rokot	-	511-6992-0129/72511	1.000	EDUUK	OS	-	OT	MK0905-38	-	-
2009-036	2455018.56	2009 Jul 6 01:26:34	Rokot	-	492-1791-573/72510	0.730	KVR	OS	G	Sat SSD 0	vesti.ru	MK0909-33	-
2009-059	2455137.58	2009 Nov 2 04:50:51	Rokot	-	492-5882-033/72513	0.788	EDUUK	OS	CU/G	Sat LED L	MK1001-26	-	-
2010-023	2455349.58	2010 Jun 2 04:59:12	Rokot	-	511-1992-0079/72516	0.740	EDUUK	OS	CU/OG	Sat SSD L	MK1008-16	-	-
2010-043	2455447.65	2010 Sep 6 03:30:18	Rokot	-	630-9793-557/72514	0.785	KVR	OS	G	Sat LED L	MK1011-25	-	-
2011-005	2455694.08	2011 Feb 1 14:00:14	Rokot	-	630-9793-558/72517	0.900	KVR	OF-40	G	Sat SSD 0	MK1104-26	-	-
2011-568	2455923.00	2011 Dec 27 12:00:00	UR-100MU 15A3GP	-	511-6552-249	0.000	RVSIR	MS	-	OT	russianforces.org	-	-
2012-041	2456136.57	2012 Jul 28 01:35:34	Rokot	-	492-6391-535/72515	0.850	KVR	OS	G	Sat SSD L	nasaspaceflight.com	-	-
2013-001	2456308.18	2013 Jan 15 16:24:59	Rokot	-	492-6391-531/72518	0.940	KVR	OS	G	Sat SSD L	nasaspaceflight.com	-	-
2013-032	2456471.20	2013 Jun 27 16:53:00	Strela	-	492-6391-532	1.150	RVSIR	OS	G	Sat LED S0	nasaspaceflight.com	-	-
2013-048	2456477.47	2013 Sep 11 23:23:04	Rokot	-	492-6391-537	0.840	KVR	OS	G	Sat LED L	nasaspaceflight.com	-	-
2013-5102	2456662.63	2013 Sep 27 05:01:49	UR-100MU 15A3GP	-	492-6391-537	0.000	RVSIR	OF	-	Test	nasaspaceflight.com	MK1311-38	RPCA
2013-067	2456619.00	2013 Nov 22 12:02:29	Rokot	-	492-5882-031/72524	1.419	EDUUK	OS	CU	Sat LED L	nasaspaceflight.com	-	-
2013-076	2456651.52	2013 Dec 25 00:31:55	Rokot	-	492-3931-130/72520	0.940	KVR	OS	G	Sat LED L	MK1402-55	-	-
2014-028	2456800.73	2014 May 23 05:27:54	Rokot	-	630-4393-551/72521	0.940	KVR	OS	G	Sat LED L	gonets.ru	-	-
2014-036	2456842.03	2014 Jul 5 12:43:52	Rokot	-	492-9794-555/72522	0.940	KVR	OS	G	Sat LED L	MK1502-34	-	-
2014-064	2457010.70	2014 Dec 19 04:43:32	Strela	-	630-9793-560	1.150	RVSIR	OS	G	Test	nasaspaceflight.com	-	SzFTI
2015-402	2457079.63	2015 Feb 26 08:01:49	UR-100MU 15A3GP	-	511-3922-119	0.000	RVSIR	OF	-	Test	nasaspaceflight.com	-	-
2015-020	2457113.07	2015 Mar 5 13:47:56	Rokot	-	492-9794-554/72526	0.775	KVR	OS	G	Sat LED L	gonets.ru	-	-
2015-050	2457289.42	2015 Sep 23 21:59:38	Rokot	-	511-2361-274/72512	0.940	KVR	OS	G	Sat LED L	nasaspaceflight.com	-	-
2016-011	2457435.25	2016 Feb 16 17:57:45	Rokot	-	492-9794-553/72525	1.250	EDUUK	OS	CU/G	Sat SSD L	nasaspaceflight.com	-	-
2016-524	2457497.78	2016 Apr 19 06:41:55	UR-100MU 15A3GP	-	492-9152-331	0.000	RVSIR	MS	-	Test	RPCB	MK1605-16	-
2016-034	2457544.08	2016 Jun 4 14:00:14	Rokot	-	492-6391-534/72527	0.900	KVR	OS	G	Sat SSD L	nasaspaceflight.com	-	-
2016-564	2457686.88	2016 Oct 25 09:30:04	UR-100MU 15A3GP	-	511-1992-0089/72528	0.000	RVSIR	MS	-	Test	NHL	-	-
2017-064	2458039.89	2017 Dec 13 09:27:44	Rokot	-	492-1992-0106/72523	0.820	EDUUK	OS	CU/G	Sat SSD L	nasaspaceflight.com	-	-
2018-039	2458234.25	2018 Apr 25 17:57:51	Rokot	-	492-3921-126/72529	1.250	EDUUK	OS	CU/G	Sat SSD L	nasaspaceflight.com	-	-
2018-097	2458452.60	2018 Nov 30 02:27:34	Rokot	-	492-3921-129/72530	0.857	KVR	MS	G	Test	russianforces.org	-	-
2018-562	2458476.52	2018 Dec 26 09:59	UR-100MU 15A3GP	-	-	0.000	RVSIR	MS	G	Sat SSD L	nasaspaceflight.com	-	-
2019-057	2458726.08	2019 Aug 30 14:00	Rokot	-	-	0.900	KVR	OS	G	Sat SSD L	nasaspaceflight.com	-	-
2019-096	2458944.47	2019 Dec 26 23:11:58	Rokot	-	-	3.112	KVR	OS	G	Sat LED L	nasaspaceflight.com	-	-



Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Launch			Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee Km	Range Km	Dest
							Mission	FlightCode	Launch_Site								
1963-A162	2438338.93	1963 Nov 5 1024:25	UR-200	-	G10701-301	8K81 LKI-1	MGCb SF114	-	-	M1IP-5	LC90/19	-	-	0	0	(Kura)	
1964-A62	2438496.80	1964 Apr 11 0705:54	UR-200	-	R10701-601	8K81 LKI-2	MGCb SF114	-	-	M1IP-5	LC90/19	-	-	70?	-	(Kura)	
1964-S248	2438530.79	1964 May 15 0656:00	UR-200	-	-	8K81 LKI-3	MGCb SF114	-	-	M1IP-5	LC90/19	-	-	689	-	Kura	
1964-S272	2438545.67	1964 May 30 0402:51	UR-200	-	-	8K81 LKI-4	MGCb SF114	-	-	M1IP-5	LC90/19	-	-	695	-	Kura	
1964-S298	2438563.67	1964 Jun 17 0400:31	UR-200	-	-	8K81 LKI-5	MGCb SF114	-	-	M1IP-5	LC90/19	-	-	694	-	Kura	
1964-S399	2438608.75	1964 Aug 1 0554:49	UR-200	-	-	8K81 LKI-6	MGCb SF114	-	-	M1IP-5	LC90/19	-	-	686	-	Kura	
1964-S482	2438662.75	1964 Sep 24 0556:15	UR-200	-	-	8K81 LKI-7	MGCb SF114	-	-	M1IP-5	LC90/20?	-	-	686	-	Kura	
1964-S601	2438670.65	1964 Oct 2 0335:14	UR-200	-	-	8K81 LKI-8	MGCb SF114	-	-	M1IP-5	LC90/20	-	-	681	-	Kura	
1964-S633	2438688.60	1964 Oct 20 0229?	UR-200	-	-	8K81 LKI-9	MGCb SF114	-	-	M1IP-5	LC90/20	-	-	1129	-	Kura	



Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Orbit	Agency	Launch_Code	Group	Category	LTCite	Cite	Notes
1963-A162	2438388.93	1963 Nov 5 1024:25	UR-200	-	G10701-301	0.000	RVSN	MF	-	Test	BML	MK9801-45	MK0008-68
1964-A62	2438496.80	1964 Apr 11 0705:54	UR-200	-	R10701-601	0.000	RVSN	MF	-	Test	MSB-65	MK0008-68/MK9801-45	-
1964-S248	2438530.79	1964 May 15 0655:00	UR-200	-	-	0.000	RVSN	MS	-	Test	MSB-65	MK0008-68/MK9801-45	[BML]1201
1964-S272	2438545.67	1964 May 30 0402:51	UR-200	-	-	0.000	RVSN	MS	-	Test	MSB-65	MK0008-68/MK9801-45	-
1964-S298	2438563.67	1964 Jun 17 0400:31	UR-200	-	-	0.000	RVSN	MS	-	Test	MSB-65	MK0008-68/MK9801-45	-
1964-S399	2438608.75	1964 Aug 1 0554:49	UR-200	-	-	0.000	RVSN	MS	-	Test	MSB-65	MK0008-68/MK9801-45	-
1964-S482	2438652.75	1964 Sep 24 0556:15	UR-200	-	-	0.000	RVSN	MS	-	Test	MSB-65	MK0008-68/MK9801-45	-
1964-S601	2438670.65	1964 Oct 2 0335:14	UR-200	-	-	0.000	RVSN	MS	-	Test	MSB-65	MK0008-68/MK9801-45	-
1964-S653	2438688.60	1964 Oct 20 0229?	UR-200	-	-	0.000	RVSN	MS	-	Test	MSB-65	MK0008-68/MK9801-45	-





Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Mission	FlightCode	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee Km	Range Km	Dest
2006-A04	2455921.33	2006 Jul 4 2001	Uhha-1	?	1	-	-	-	-	TUNGH	-	-	-	40?	-	-
2009-F02	2454926.60	2009 Apr 5 0230	Uhha-2	-	2	Kwangyongsong-2	-	-	-	SUHME	-	-	-	490?	-	-
2012-F01	2456030.44	2012 Apr 12 2238:55	Uhha-3	-	3	Kwangyongsong-3	-	-	-	SUHME	LC1	-	-	120?	-	-
2012-072	2456273.53	2012 Dec 12 0049:46	Uhha-3	-	4	Kwangyongsong-3/F2	RMS-3 Unit 2	-	-	SUHME	LC1	-	-	591	-	-
2016-009	2457426.52	2016 Feb 7 0030:00	Kwangyongsong	-	5	Kwangyongsong-4	RMS-4 Unit 1	-	-	SUHME	LC1	-	-	502	-	-
2016-S25	2457497.90	2016 Apr 19 0933	Shmorgh	-	1	-	-	-	-	SEH	IKSC	-	-	200?	-	-
2017-S112	2457961.90	2017 Jul 27 0930?	Shmorgh	-	2	Tolou-1	-	-	-	SEH	IKSC	-	-	200?	-	-
2019-F01	2458498.52	2019 Jan 15 0030	Shmorgh	-	3	Payan	-	-	-	SEH	IKSC	-	-	500?	-	-
2020-F01	2458689.16	2020 Feb 9 1548:14	Shmorgh	-	4	Zafar	-	-	-	SEH	IKSC	-	-	540	-	-
2021-F03	2459377.50	2021 Jun 12	Shmorgh	-	5	Tolou-2?	-	-	-	SEH	IKSC	-	-	500?	-	-
2021-F11	2459578.65	2021 Dec 30 0330	Shmorgh	-	6	Test satelites	-	-	-	SEH	IKSC	-	-	470	-	-
2024-018	2460337.50	2024 Jan 28 0004?	Shmorgh	-	7	Mehda	Mehda	-	-	SEH	IKSC	-	-	-	-	-



Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Drbby	Agency	Launch_Code	Group	Category	LTCite	Cite	Notes
2006-404	2453921.33	2006 Jul 4 2001	Unha-1	?	1	0.000	KCST	MF	-	Test	Wire	-	-
2009-F02	2454926.60	2009 Apr 5 0230	Unha-2	-	2	0.050	KCST	OF	G	Sat LED 0	Wire	-	-
2012-F01	2456030.44	2012 Apr 12 2238:55	Unha-3	-	3	0.100	KCST	OF	G	Sat SSD 0	Wire	-	-
2012-072	2456273.53	2012 Dec 12 0048:46	Unha-3	-	4	0.100	KCST	OS	G	Sat SSD 0	northcom.mil	-	-
2015-009	2457425.52	2016 Feb 7 0030:00	Kwangyongsong	-	5	0.100	MADA	OS	G	Sat SSD 0	northcom.mil	-	-
2015-S25	2457497.90	2016 Apr 19 0933	Simorgh	-	1	0.000	IRSA	TS	-	Test	naspaceflight.com	-	-
2017-S112	2457961.90	2017 Jul 27 0930?	Simorgh	-	2	0.000	IRSA	TF	-	Test	naspaceflight.com	-	-
2019-F01	2458498.52	2019 Jan 15 0030	Simorgh	-	3	0.090	IRSA	OF	G	Sat LED 0	naspaceflight.com	-	-
2020-F01	2458869.16	2020 Feb 9 1548:14	Simorgh	-	4	0.090	IRSA	OF	G	Sat LED 0	naspaceflight.com	-	-
2021-F03	2459377.50	2021 Jun 12	Simorgh	-	5	0.090	IRSA	OF	G	Sat LED 0	private-comm	-	-
2021-F11	2459678.66	2021 Dec 30 0330	Simorgh	-	6	0.090	IRSA	OF	G	Sat LED 0	mehrnews.com	-	-
2024-018	2460337.50	2024 Jan 28 0004?	Simorgh	-	7	0.042	IRSA	OS	G	Sat LED 0	TLE	farsnews.ir	-



Launch

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Mission	FlightCode	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee km	Range km	Dest
1958-A136	2456492.50	1958 Oct 16	V-1000	-	-	LKI	-	-	-	BALXH	L06	-	-	15	-	-
1960-A121	2437066.50	1960 May 12	V-1000	-	-	LKI	-	-	-	BALXH	L06	-	-	10	-	-
1960-A02	2436933.50	1960	V-1000	-	-	LKI	-	-	-	BALXH	L06	-	-	20	-	-
1960-A03	2436933.50	1960	V-1000	-	-	LKI	-	-	-	BALXH	L06	-	-	20	-	-
1960-A04	2436933.50	1960	V-1000	-	-	LKI	-	-	-	BALXH	L06	-	-	20	-	-
1960-A05	2436933.50	1960	V-1000	-	-	LKI	-	-	-	BALXH	L06	-	-	20	-	-
1960-A06	2436933.50	1960	V-1000	-	-	LKI	-	-	-	BALXH	L06	-	-	20	-	-
1960-A07	2436933.50	1960	V-1000	-	-	LKI	-	-	-	BALXH	L06	-	-	20	-	-
1960-A08	2436933.50	1960	V-1000	-	-	LKI	-	-	-	BALXH	L06	-	-	20	-	-
1960-A09	2436933.50	1960	V-1000	-	-	LKI	-	-	-	BALXH	L06	-	-	20	-	-
1960-A10	2436933.50	1960	V-1000	-	-	LKI	-	-	-	BALXH	L06	-	-	20	-	-
1960-A11	2436933.50	1960	V-1000	-	-	LKI	-	-	-	BALXH	L06	-	-	20	-	-
1960-A273	2437262.50	1960 Nov 24	V-1000	-	-	LKI	-	-	-	BALXH	L06	-	-	25	-	-
1960-A287	2437262.50	1960 Dec 10	V-1000	-	-	LKI	-	-	-	BALXH	L06	-	-	25	-	-
1960-A307	2437276.50	1960 Dec 23	V-1000	-	-	-	-	-	-	BALXH	L06	-	-	10	-	-
1960-A308	2437291.50	1960 Dec 31	V-1000	-	-	-	-	-	-	BALXH	L06	-	-	10	-	-
1961-A20	2437299.50	1961 Dec 31	V-1000	-	-	-	-	-	-	BALXH	L06	-	-	10	-	-
1961-A22	2437312.50	1961 Jan 13	V-1000	-	-	-	-	-	-	BALXH	L06	-	-	10	-	-
1961-A49	2437346.50	1961 Jan 14	V-1000	-	-	-	-	-	-	BALXH	L06	-	-	25	-	-
1961-A49	2437346.50	1961 Feb 18	V-1000	-	-	-	-	-	-	BALXH	L06	-	-	25	-	-
1961-A52	2437352.50	1961 Feb 22	V-1000	-	-	-	-	-	-	BALXH	L06	-	-	25	-	-
1961-A69	2437360.50	1961 Mar 2	V-1000	-	-	-	-	-	-	BALXH	L06	-	-	25	-	-
1961-A71	2437362.50	1961 Mar 4	V-1000	-	-	-	-	-	-	BALXH	L06	-	-	25	-	-
1961-A82	2437364.50	1961 Mar 26	V-1000	-	-	-	-	R-12 Intercept	-	BALXH	L06	-	-	25	-	-
1961-A09	2437299.50	1961	V-1000	-	-	-	-	-	-	BALXH	L06	-	-	25	-	-
1961-A10	2437299.50	1961	V-1000	-	-	-	-	-	-	BALXH	L06	-	-	25	-	-
1961-A11	2437299.50	1961	V-1000	-	-	-	-	-	-	BALXH	L06	-	-	25	-	-
1961-A151	2437458.50	1961 Jun 9	V-1000	-	-	-	-	-	-	BALXH	L06	-	-	25	-	-
1961-A12	2437299.50	1961	V-1000	-	-	-	-	-	-	BALXH	L06	-	-	25	-	-
1961-A13	2437299.50	1961	V-1000	-	-	-	-	-	-	BALXH	L06	-	-	25	-	-
1961-A14	2437299.50	1961	V-1000	-	-	-	-	-	-	BALXH	L06	-	-	25	-	-
1961-A15	2437299.50	1961	V-1000	-	-	-	-	-	-	BALXH	L06	-	-	25	-	-
1961-A16	2437299.50	1961	V-1000	-	-	-	-	-	-	BALXH	L06	-	-	25	-	-
1961-A225	2437599.50	1961 Oct 27	V-1000	-	-	Op K-1	-	-	-	BALXH	L06	-	-	25	-	-
1961-A226	2437599.50	1961 Oct 27	V-1000	-	-	Op K-2	-	-	-	BALXH	L06	-	-	25	-	-
1962-A176	2437965.50	1962 Oct 22	V-1000	-	-	Op R-3	-	-	-	BALXH	L06	-	-	25	-	-
1962-A179	2437965.50	1962 Oct 28	V-1000	-	-	Op R-4	-	-	-	BALXH	L06	-	-	25	-	-
1962-A185	2437965.50	1962 Oct 28	V-1000	-	-	Op R-5	-	-	-	BALXH	L06	-	-	25	-	-
1966-8551	2435399.50	1966 Oct 1	V-1000	-	-	Yantar--1	-	-	-	BALXH	L06	-	-	370	-	-
1966-8558	2435970.50	1966 Oct 1	V-1000	-	-	Yantar--2	-	-	-	BALXH	L06	-	-	370	-	-
1968-8721	2440394.50	1968 Apr 24	V-1000	-	-	Yantar--3	-	-	-	CTSP-4	-	-	-	300	-	-
1970-8722	2440394.50	1968 Oct 1	V-1000	-	-	Yantar--3	-	-	-	CTSP-4	-	-	-	300	-	-
1970-8627	2440769.50	1970 Aug 1	V-1000	-	-	Yantar--4	-	-	-	CTSP-4	-	-	-	300	-	-
1971-8648	2440961.50	1971	V-1000	-	-	Yantar--4	-	-	-	CTSP-4	-	-	-	382	-	-



Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	OrbPay	Agency	Launch_Code	Group	Category	LTCite	Cite	Notes
1965-A136	2436452.50	1958 Oct 16	V-1000	-	-	0.000	PRU	HS	-	Test	Zhelez	-	-
1960-A121	2437066.50	1960 May 12	V-1000	-	-	0.000	PRU	HF	-	Test	Zhelez	-	-
1960-A02	2436933.50	1960	V-1000	-	-	0.000	PRU	HS	-	Test	Zhelez	-	-
1960-A03	2436933.50	1960	V-1000	-	-	0.000	PRU	HS	-	Test	Zhelez	-	-
1960-A04	2436933.50	1960	V-1000	-	-	0.000	PRU	HS	-	Test	Zhelez	-	-
1960-A05	2436933.50	1960	V-1000	-	-	0.000	PRU	HS	-	Test	Zhelez	-	-
1960-A06	2436933.50	1960	V-1000	-	-	0.000	PRU	HS	-	Test	Zhelez	-	-
1960-A07	2436933.50	1960	V-1000	-	-	0.000	PRU	HS	-	Test	Zhelez	-	-
1960-A08	2436933.50	1960	V-1000	-	-	0.000	PRU	HS	-	Test	Zhelez	-	-
1960-A09	2436933.50	1960	V-1000	-	-	0.000	PRU	HS	-	Test	Zhelez	-	-
1960-A10	2436933.50	1960	V-1000	-	-	0.000	PRU	HS	-	Test	Zhelez	-	-
1960-A11	2436933.50	1960	V-1000	-	-	0.000	PRU	HS	-	Test	Zhelez	-	-
1960-A273	2437252.50	1960 Nov 24	V-1000	-	-	0.000	PRU	HS	-	ABM Test	Zhelez	Karpenko98	-
1960-A297	2437278.50	1960 Dec 10	V-1000	-	-	0.000	PRU	HF	-	ABM Test	Zhelez	-	-
1960-A307	2437291.50	1960 Dec 23	V-1000	-	-	0.000	PRU	HF	-	ABM Test	Zhelez	-	-
1960-A308	2437299.50	1960 Dec 31	V-1000	-	-	0.000	PRU	HF	-	ABM Test	Zhelez	-	-
1961-A20	2437312.50	1961 Jan 13	V-1000	-	-	0.000	PRU	HF	-	ABM Test	Zhelez	-	-
1961-A22	2437313.50	1961 Jan 14	V-1000	-	-	0.000	PRU	HS	-	ABM Test	Zhelez	-	-
1961-A49	2437348.50	1961 Feb 18	V-1000	-	-	0.000	PRU	HS	-	ABM Test	Zhelez	-	-
1961-A52	2437352.50	1961 Feb 22	V-1000	-	-	0.000	PRU	HS	-	ABM Test	Zhelez	-	-
1961-A69	2437360.50	1961 Mar 2	V-1000	-	-	0.000	PRU	HS	-	ABM Test	Zhelez	-	-
1961-A71	2437362.50	1961 Mar 4	V-1000	-	-	0.000	PRU	HS	-	ABM Test	Zhelez	-	-
1961-A82	2437384.50	1961 Mar 26	V-1000	-	-	0.000	PRU	HS	-	ABM Test	Zhelez	-	-
1961-A09	2437299.50	1961	V-1000	-	-	0.000	PRU	HS	-	ABM Test	Karpenko98	Zhelez	-
1961-A10	2437299.50	1961	V-1000	-	-	0.000	PRU	HS	-	ABM Test	Zhelez	-	-
1961-A11	2437299.50	1961	V-1000	-	-	0.000	PRU	HS	-	ABM Test	Zhelez	-	-
1961-A151	2437459.50	1961 Jun 9	V-1000	-	-	0.000	PRU	HS	-	ABM Test	Zhelez	-	-
1961-A12	2437299.50	1961	V-1000	-	-	0.000	PRU	HS	-	ABM Test	Karpenko98	-	-
1961-A13	2437299.50	1961	V-1000	-	-	0.000	PRU	HS	-	ABM Test	Zhelez	-	-
1961-A14	2437299.50	1961	V-1000	-	-	0.000	PRU	HS	-	ABM Test	Zhelez	-	-
1961-A15	2437299.50	1961	V-1000	-	-	0.000	PRU	HS	-	ABM Test	Zhelez	-	-
1961-A16	2437299.50	1961	V-1000	-	-	0.000	PRU	HS	-	ABM Test	Zhelez	-	-
1961-A228	2437599.50	1961 Oct 27	V-1000	-	-	0.000	PRU	HS	-	ABM Test	Zhelez	-	-
1961-A228	2437599.50	1961 Oct 27	V-1000	-	-	0.000	PRU	HS	-	ABM Test	Zhelez	-	-
1962-A176	2437959.50	1962 Oct 22	V-1000	-	-	0.000	PRU	HS	-	ABM Test	Zhelez	-	-
1962-A179	2437965.50	1962 Oct 22	V-1000	-	-	0.000	PRU	HS	-	ABM Test	Zhelez	-	-
1962-A185	2437969.50	1962 Oct 26	V-1000	-	-	0.000	PRU	HS	-	ABM Test	Zhelez	-	-
1966-5651	2438990.50	1966 Nov 1	V-1000	-	-	0.000	PRU	HS	-	ABM Test	Zhelez	-	-
1968-5658	2438990.50	1968 Apr 24	1R27A	-	-	0.000	AIU	SS	AM/	Tech/Ionus	Sideriq. pc2010	SNS,267	-
1969-5721	2440294.50	1969 Oct	1R27A	-	-	0.000	AIU	SS	AM/	Tech/Ionus	Sideriq. pc2010	FTD-HT-2318775	-
1970-5677	2440294.50	1970 Aug	1R27A	-	-	0.000	AIU	SS	AM/	Tech/Ionus	Sideriq. pc2010	-	-
1971-5646	2440951.50	1971	1R27A	-	-	0.000	AIU	SS	AM/	Tech/Ionus	Sideriq. pc2010	FTD-HT-2318775	-





Launch Mission

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Mission	FlightCode	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee_Km	Range_Km	Dest
1942-001	2430523.95	1942 Jun 13 1052	A-4	-	2	-	-	-	-	HWP	P7	-	-	1	-	-
1942-002	2430887.97	1942 Aug 16 1115	A-4	-	3	-	-	-	-	HWP	P7	-	-	11	-	-
1942-001	2430636.12	1942 Oct 3 1458	A-4	-	4	-	-	-	-	HWP	P7	-	-	85	-	-
1942-003	2430653.50	1942 Oct 21	A-4	-	5	-	-	-	-	HWP	P7	-	-	40?	-	-
1942-001	2430672.50	1942 Nov 9	A-4	-	6	-	-	-	-	HWP	P7	-	-	67	-	-
1942-004	2430691.50	1942 Nov 28	A-4	-	7	-	-	-	-	HWP	P7	-	-	57	-	-
1942-005	2430705.50	1942 Dec 12	A-4	-	9	-	-	-	-	HWP	P7	-	-	0	-	-
1943-001	2430731.50	1943 Jan 7	A-4	-	10	-	-	-	-	HWP	P7	-	-	40?	-	-
1943-002	2430749.50	1943 Jan 25	A-4	-	11	-	-	-	-	HWP	P7	-	-	30?	-	-
1943-003	2430772.50	1943 Feb 17	A-4	-	12	-	-	-	-	HWP	P7	-	-	0	-	-
1943-004	2430774.50	1943 Feb 19	A-4	-	13	-	-	-	-	HWP	P7	-	-	1?	-	-
1943-005	2430786.50	1943 Mar 3	A-4	-	16	-	-	-	-	HWP	P7	-	-	0	-	-
1943-001	2430801.50	1943 Mar 18	A-4	-	18	-	-	-	-	HWP	P7	-	-	95?	-	-
1943-006	2430808.50	1943 Mar 25	A-4	-	19	-	-	-	-	HWP	P7	-	-	0	-	-
1943-002	2430828.50	1943 Mar 25	A-4	-	20	-	-	-	-	HWP	P7	-	-	95?	-	-
1943-003	2430837.10	1943 Apr 14	A-4	-	21	-	-	-	-	HWP	P7	-	-	95?	-	-
1943-004	2430858.50	1943 Apr 22 1425	A-4	-	22	-	-	-	-	HWP	P7	-	-	95?	-	-
1943-005	2430870.96	1943 May 14	A-4	-	26	-	-	-	-	HWP	P7	-	-	40?	-	-
1943-007	2430871.19	1943 May 26 1100	A-4	-	25	-	-	-	-	HWP	P7	-	-	95?	-	-
1943-006	2430871.50	1943 May 26 1630?	A-4	-	24	-	-	-	-	HWP	P7	-	-	95?	-	-
1943-007	2430876.50	1943 May 27	A-4	-	23	-	-	-	-	HWP	P7	-	-	95?	-	-
1943-008	2430886.50	1943 Jun 1	A-4	-	28	-	-	-	-	HWP	P7	-	-	95?	-	-
1943-009	2430891.50	1943 Jun 11	A-4	-	31	-	-	-	-	HWP	P7	-	-	95?	-	-
1943-008	2430897.50	1943 Jun 16	A-4	-	28	-	-	-	-	HWP	P7	-	-	57	-	-
1943-010	2430899.50	1943 Jun 22	A-4	-	30	-	-	-	-	HWP	P7	-	-	95?	-	-
1943-011	2430901.50	1943 Jun 24	A-4	-	36	-	-	-	-	HWP	P7	-	-	95?	-	-
1943-009	2430904.50	1943 Jun 26	A-4	-	38	-	-	-	-	HWP	P7	-	-	1	-	-
1943-012	2430904.50	1943 Jun 29	A-4	-	40	-	-	-	-	HWP	P7	-	-	95?	-	-
1943-010	2430906.50	1943 Jun 29	A-4	-	33	-	-	-	-	HWP	P7	-	-	0	-	-
1943-011	2430914.50	1943 Jul 1	A-4	-	41	-	-	-	-	HWP	P7	-	-	0	-	-
1943-012	2430914.50	1943 Jul 9	A-4	-	34	-	-	-	-	HWP	P7	-	-	0	-	-
1943-013	2431033.50	1943 Nov 5	A-4	-	43	-	-	-	-	HWP	P7	-	-	0	-	-
1943-014	2431037.50	1943 Nov 9	A-4	-	73	-	-	-	-	HWP	P7	-	-	95?	-	-
1943-015	2431038.50	1943 Nov 10	A-4	-	-	-	-	-	-	HWP	P7	-	-	95?	-	-
1943-016	2431053.54	1943 Nov 25 0100?	A-4	-	-	-	-	-	-	HWP	P7	-	-	20?	-	-
1943-015	2431053.54	1943 Dec 5 0100	A-4	-	-	-	-	-	-	HWP	P7	-	-	20?	-	-
1944-005	2431056.54	1944 Jan 6 0100?	A-4	-	-	-	-	-	-	HWP	P7	-	-	90?	-	-
1944-001	2431058.50	1944 Jan	A-4	-	-	-	-	-	-	HWP	P7	-	-	90?	-	-
1944-002	2431058.50	1944 Jan	A-4	-	-	-	-	-	-	HWP	P7	-	-	90?	-	-
1944-003	2431058.50	1944 Jan	A-4	-	-	-	-	-	-	HWP	P7	-	-	90?	-	-
1944-004	2431058.50	1944 Jan	A-4	-	-	-	-	-	-	HWP	P7	-	-	90?	-	-
1944-001	2431116.50	1944 Jan 27	A-4	-	17003	-	-	-	-	HWP	P7	-	-	0	-	-
1944-002	2431116.50	1944 Jan 29 2130?	A-4	-	-	-	-	-	-	HWP	P7	-	-	0	-	-
1944-003	2431120.50	1944 Feb	A-4	-	-	-	-	-	-	HWP	P7	-	-	90?	-	-
1944-007	2431120.50	1944 Feb	A-4	-	-	-	-	-	-	HWP	P7	-	-	90?	-	-
1944-009	2431120.50	1944 Feb	A-4	-	-	-	-	-	-	HWP	P7	-	-	90?	-	-
1944-010	2431120.50	1944 Feb	A-4	-	-	-	-	-	-	HWP	P7	-	-	90?	-	-
1944-011	2431120.50	1944 Feb	A-4	-	-	-	-	-	-	HWP	P7	-	-	90?	-	-
1944-012	2431140.50	1944 Mar	A-4	-	-	-	-	-	-	HWP	P7	-	-	90?	-	-
1944-013	2431140.50	1944 Mar	A-4	-	-	-	-	-	-	HWP	P7	-	-	90?	-	-
1944-014	2431140.50	1944 Mar	A-4	-	-	-	-	-	-	HWP	P7	-	-	90?	-	-
1944-015	2431140.50	1944 Mar	A-4	-	-	-	-	-	-	HWP	P7	-	-	90?	-	-
1944-016	2431140.50	1944 Mar	A-4	-	-	-	-	-	-	HWP	P7	-	-	90?	-	-
1944-017	2431140.50	1944 Mar	A-4	-	-	-	-	-	-	HWP	P7	-	-	90?	-	-
1944-018	2431140.50	1944 Mar	A-4	-	-	-	-	-	-	HWP	P7	-	-	90?	-	-
1944-019	2431140.50	1944 Mar	A-4	-	-	-	-	-	-	HWP	P7	-	-	90?	-	-
1944-020	2431140.50	1944 Mar	A-4	-	-	-	-	-	-	HWP	P7	-	-	90?	-	-
1944-021	2431168.96	1944 Mar 17 1100?	A-4	-	17_047	-	-	-	-	HWP	P7	-	-	1?	-	-
1944-022	2431181.45	1944 Mar 31 2250?	A-4	-	-	-	-	-	-	HWP	P7	-	-	90?	-	-
1944-021	2431180.50	1944 Apr 14	A-4	-	-	-	-	-	-	HWP	P7	-	-	90?	-	-
1944-023	2431194.50	1944 Apr 14	A-4	-	17_063	-	-	-	-	HWP	P7	-	-	90?	-	-
1944-024	2431210.50	1944 Apr 20	A-4	-	-	-	-	-	-	HWP	P7	-	-	90?	-	-
1944-025	2431230.50	1944 May 20	A-4	-	-	-	-	-	-	HWP	P7	-	-	90?	-	-
1944-026	2431236.96	1944 May 26 1100?	A-4	-	-	-	-	-	-	HWP	P7	-	-	90?	-	-
1944-028	2431237.08	1944 May 26 1400?	A-4	-	-	-	-	-	-	HWP	P7	-	-	1?	-	-
1944-029	2431242.50	1944 Jun 1	A-4	-	-	-	-	-	-	HWP	P7	-	-	90?	-	-
1944-001	2431255.13	1944 Jun 13 1503	A-4	-	169	-	-	-	-	HWP	P7	-	-	50?	-	-
1944-027	2431241.50	1944 Jun	A-4	-	-	-	-	-	-	HWP	P7	-	-	90?	-	-
1944-028	2431241.50	1944 Jun	A-4	-	-	-	-	-	-	HWP	P7	-	-	90?	-	-
1944-029	2431241.50	1944 Jun	A-4	-	-	-	-	-	-	HWP	P7	-	-	90?	-	-
1944-030	2431241.50	1944 Jun	A-4	-	-	-	-	-	-	HWP	P7	-	-	90?	-	-
1944-031	2431241.50	1944 Jun	A-4	-	-	-	-	-	-	HWP	P7	-	-	90?	-	-
1944-032	2431241.50	1944 Jun	A-4	-	-	-	-	-	-	HWP	P7	-	-	90?	-	-
1944-033	2431241.50	1944 Jun	A-4	-	-	-	-	-	-	HWP	P7	-	-	90?	-	-
1944-034	2431241.50	1944 Jun	A-4	-	-	-	-	-	-	HWP	P7	-	-	90?	-	-
1944-035	2431241.50	1944 Jun	A-4	-	-	-	-	-	-	HWP	P7	-	-	90?	-	-
1944-036	2431241.50	1944 Jun 20	A-4	-	-	-	-	-	-	HWP	P7	-	-	90?	-	-
1944-037	2431241.50	1944 Jun 24	A-4	-	-	-	-	-	-	HWP	P7	-	-	90?	-	-
1944-038	2431241.50	1944 Jun 27	A-4	-	-	-	-	-	-	HWP	P7	-	-	90?	-	-
1944-039	2431241.50	1944 Jul 31?	A-4	-	-	-	-	-	-	HWP	P7	-	-	90?	-	-
1944-040	2431241.50	1944 Jul 31?	A-4	-	-	-	-	-	-	HWP	P7	-	-	90?	-	-
1944-041	2431241.50	1944 Aug 13 1607	A-4	-	V205	-	-	-	-	HWP	P7	-	-	90?	-	-
1944-042	2431241.50	1944 Aug 13 1815	A-4	-	18296	-	-	-	-	HWP	P7	-	-	90?	-	-
1944-043	2431241.50	1944 Aug 13 1815	A-4	-	18296	-	-	-	-	HWP	P7	-	-	90?	-	-
1944-044	2431241.50	1944 Aug 14 0637	A-4	-	18298	-	-	-	-	HWP	P7	-	-	90?	-	-
1944-045	2431241.50	1944 Aug 14 0717	A-4	-	18307	-	-	-	-	HWP	P7	-	-	90?	-	-
1944-046	2431241.50	1944 Aug 14 0717	A-4	-	18307	-	-	-	-	HWP	P7	-	-	90?	-	-
1944-047	2431241.50	1944 Aug 14 0804	A-4	-	18302	-	-	-	-	HWP	P7	-	-	90?	-	-
1944-048	2431241.50	1944 Aug 14 0804	A-4	-	18291	-	-	-	-	HWP	P7	-	-	90?	-	-
1944-049	2431241.50	1944 Aug 14 0833	A-4	-	18301	-	-	-	-	HWP	P7	-	-	90?	-	-
1944-050	2431241.50	1944 Aug 14 0833	A-4	-	18301	-	-	-	-	HWP	P7	-	-	90?	-	-
1944-051	2431241.50	1944 Aug 14 0852	A-4	-	18303	-	-	-	-	HWP	P7	-	-	90?	-	-
1944-052	2431241.50	1944 Aug 14 1123	A-4	-	18303	-	-	-	-	HWP	P7	-	-	90?	-	-
1944-053	2431241.50	1944 Aug 14 1253	A-4	-	18305	-	-	-	-	HWP	P7	-	-	90?	-	-
1944-054	2431241.50	1944 Aug 14 1253	A-4	-	18305	-	-	-	-	HWP	P7	-	-	90?	-	-

Heidelager Test

Mittelwerk Eval

(30 in Apr?)

(30 in May?)

Kalmar impact

Vertical test

Vertical test

Vertical test

Vertical test

Launch Mission

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight	FlightCode	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee_Km	Range_Km	Dest
1944-A10	2451317.23	1944 Aug 14 1730	V-2	-	Na126	-	-	HRR	-	-	-	0	-	-
1944-S37	2451317.31	1944 Aug 14 1928	V-2	-	Na127	-	-	HRR	-	-	-	907	-	-
1944-S38	2451317.92	1944 Aug 15 1008	A-4	-	Na113	-	-	HRR	-	-	-	907	-	-
1944-S39	2451317.96	1944 Aug 15 1054	A-4	-	Na114	-	-	HRR	-	-	-	907	-	-
1944-S40	2451318.00	1944 Aug 15 1157	A-4	-	Na128	-	-	HRR	-	-	-	907	-	-
1944-S41	2451318.11	1944 Aug 15 1441	A-4	-	Na131	-	-	HRR	-	-	-	907	-	-
1944-S42	2451318.21	1944 Aug 15 1704	A-4	-	Na143	-	-	HRR	-	-	-	907	-	-
1944-S43	2451318.23	1944 Aug 15 1724	A-4	-	Na132	-	-	HRR	-	-	-	907	-	-
1944-S44	2451318.32	1944 Aug 15 1937	A-4	-	Na140	-	-	HRR	-	-	-	907	-	-
1944-S45	2451318.81	1944 Aug 16 0723	A-4	-	Na138	-	-	HRR	-	-	-	907	-	-
1944-S46	2451318.82	1944 Aug 16 0738	A-4	-	Na136	-	-	HRR	-	-	-	907	-	-
1944-S47	2451318.94	1944 Aug 16 1040	V-2	-	Na111	-	-	HRR	-	-	-	907	-	-
1944-S48	2451318.96	1944 Aug 16 1053	A-4	-	Na129	-	-	HRR	-	-	-	907	-	-
1944-S49	2451319.10	1944 Aug 16 1430	A-4	-	Na133	-	-	HRR	-	-	-	907	-	-
1944-S50	2451320.03	1944 Aug 17 1242	A-4	-	Na142	-	-	HRR	-	-	-	907	-	-
1944-A11	2451320.04	1944 Aug 17 1266	V-2	-	Na116	-	-	HRR	-	-	-	107	-	-
1944-S51	2451320.06	1944 Aug 17 1314	A-4	-	Na134	-	-	HRR	-	-	-	907	-	-
1944-S52	2451320.06	1944 Aug 17 1331	V-2	-	Na109	-	-	HRR	-	-	-	907	-	-
1944-S53	2451320.19	1944 Aug 17 1639	A-4	-	Na147	-	-	HRR	-	-	-	907	-	-
1944-S54	2451320.22	1944 Aug 17 1723	A-4	-	Na144	-	-	HRR	-	-	-	907	-	-
1944-S55	2451320.23	1944 Aug 17 1735	V-2	-	Na124	-	-	HRR	-	-	-	907	-	-
1944-S56	2451320.36	1944 Aug 17 2045	A-4	-	Na107	-	-	HRR	-	-	-	907	-	-
1944-S57	2451320.82	1944 Aug 18 0746	A-4	-	Na146	-	-	HRR	-	-	-	907	-	-
1944-S58	2451321.04	1944 Aug 18 1259	A-4	-	Na150	-	-	HRR	-	-	-	907	-	-
1944-A12	2451321.19	1944 Aug 18 1653	A-4	-	Na156	-	-	HRR	-	-	-	407	-	-
1944-S59	2451321.21	1944 Aug 18 1653	A-4	-	Na121	-	-	HRR	-	-	-	907	-	-
1944-S60	2451321.31	1944 Aug 18 1929	A-4	-	Na157	-	-	HRR	-	-	-	907	-	-
1944-S61	2451321.32	1944 Aug 18 1940	A-4	-	Na135	-	-	HRR	-	-	-	907	-	-
1944-S62	2451321.35	1944 Aug 18 2028	A-4	-	Na112	-	-	HRR	-	-	-	907	-	-
1944-S63	2451326.30	1944 Aug 22 1906	A-4	-	Na141	-	-	HRR	-	-	-	907	-	-
1944-S64	2451326.32	1944 Aug 22 1946	A-4	-	Na150	-	-	HRR	-	-	-	907	-	-
1944-S65	2451327.11	1944 Aug 28 1439	A-4	-	Na129	-	-	HRR	-	-	-	907	-	-
1944-A13	2451328.71	1944 Aug 28 0457	A-4	-	Na155	-	-	HRR	-	-	-	107	-	-
1944-S66	2451328.73	1944 Aug 28 0594	A-4	-	Na146	-	-	HRR	-	-	-	907	-	-
1944-S67	2451328.91	1944 Aug 28 0954	A-4	-	Na145	-	-	HRR	-	-	-	907	-	-
1944-S68	2451332.96	1944 Aug 30 1125	A-4	-	Na117	-	-	HYP	SK	-	-	937	-	-
1944-S69	2451333.16	1944 Aug 30 1544	A-4	-	Na154	-	-	HRR	-	-	-	907	-	-
1944-S70	2451333.17	1944 Aug 30 1610	A-4	-	Na137	-	-	HRR	-	-	-	907	-	-
1944-A14	2451336.16	1944 Sep 2 1545	A-4	-	Na159	-	-	HYP	SK	-	-	357	-	-
1944-A15	2451338.90	1944 Sep 6 0930	V-2	-	Parris	-	-	HYP	SK	-	-	357	-	-
1944-A16	2451338.94	1944 Sep 6 1040	V-2	-	Parris	-	-	HYP	SK	-	-	357	-	-
1944-S71	2451341.62	1944 Sep 6 0734	V-2	-	Parris	-	-	VZTEL	-	-	-	17	-	-
1944-S72	2451341.90	1944 Sep 6 1635	A-4	-	Parris	-	-	VZROUF	-	-	-	957	-	-
1944-S73	2451342.19	1944 Sep 6 1638	A-4	-	Parris	-	-	VZROUF	-	-	-	957	-	-
1944-S74	2451342.19	1944 Sep 6 1638	V-2	-	London	-	-	VZROUF	LP1	-	-	957	-	-
1944-S75	2451344.31	1944 Sep 10 1929	V-2	-	London	-	-	VZROUF	LP1	-	-	957	-	-
1944-S76	2451344.79	1944 Sep 11 0729	V-2	-	London	-	-	VZROUF	-	-	-	957	-	-
1944-S77	2451344.81	1944 Sep 11 0729	V-2	-	London	-	-	VZROUF	-	-	-	957	-	-
1944-S78	2451345.71	1944 Sep 12 0619	V-2	-	London	-	-	VZROUF	-	-	-	957	-	-
1944-S79	2451345.76	1944 Sep 12 0619	V-2	-	London	-	-	VZROUF	-	-	-	957	-	-
1944-S80	2451345.76	1944 Sep 12 0647	V-2	-	London	-	-	VZROUF	-	-	-	957	-	-
1944-S81	2451346.01	1944 Sep 12 1915	A-4	-	Pa184	-	-	HRR	-	-	-	907	-	-
1944-S82	2451346.16	1944 Sep 13 0303	V-2	-	Pa184	-	-	HRR	-	-	-	907	-	-
1944-S83	2451346.65	1944 Sep 13 0303	A-4	-	Pa184	-	-	HRR	-	-	-	907	-	-
1944-S84	2451347.38	1944 Sep 13 2109	V-2	-	Pa184	-	-	HRR	-	-	-	907	-	-
1944-S85	2451347.13	1944 Sep 13 1508	A-4	-	Pa184	-	-	HRR	-	-	-	907	-	-
1944-S86	2451347.20	1944 Sep 13 1647	A-4	-	Pa184	-	-	HRR	-	-	-	907	-	-
1944-S87	2451347.50	1944 Sep 14	A-4	-	Pa184	-	-	HRR	SK	-	-	907	-	-
1944-S88	2451347.50	1944 Sep 14	A-4	-	Pa184	-	-	HRR	SK	-	-	907	-	-
1944-S89	2451347.50	1944 Sep 14	V-2	-	Pa184	-	-	HRR	SK	-	-	907	-	-
1944-S90	2451347.50	1944 Sep 14	V-2	-	Pa184	-	-	HRR	SK	-	-	907	-	-
1944-S91	2451347.62	1944 Sep 14 0248	V-2	-	Pa184	-	-	HRR	SK	-	-	907	-	-
1944-S92	2451347.62	1944 Sep 14 0248	V-2	-	Pa184	-	-	HRR	SK	-	-	907	-	-
1944-S93	2451347.50	1944 Sep 14 1046	V-2	-	Pa184	-	-	HRR	SK	-	-	907	-	-
1944-S94	2451347.95	1944 Sep 14 1046	A-4	-	Pa184	-	-	HRR	SK	-	-	907	-	-
1944-S95	2451348.09	1944 Sep 14 1412	A-4	-	Pa184	-	-	HRR	SK	-	-	907	-	-
1944-S96	2451348.59	1944 Sep 15 0204	V-2	-	Pa184	-	-	HRR	SK	-	-	907	-	-
1944-S97	2451348.94	1944 Sep 15 1037	V-2	-	Pa184	-	-	HRR	SK	-	-	907	-	-
1944-S98	2451348.94	1944 Sep 15 1037	V-2	-	Pa184	-	-	HRR	SK	-	-	907	-	-
1944-S99	2451349.25	1944 Sep 15 1754	V-2	-	Pa184	-	-	HRR	SK	-	-	907	-	-
1944-S100	2451349.50	1944 Sep 16 1150	V-2	-	Pa184	-	-	HRR	SK	-	-	907	-	-
1944-S101	2451349.50	1944 Sep 16 1150	V-2	-	Pa184	-	-	HRR	SK	-	-	907	-	-
1944-S102	2451349.99	1944 Sep 16 1655	A-4	-	Pa184	-	-	HRR	SK	-	-	907	-	-
1944-S103	2451350.20	1944 Sep 16 1655	A-4	-	Pa184	-	-	HRR	SK	-	-	907	-	-
1944-S104	2451349.50	1944 Sep 16 1655	V-2	-	Pa184	-	-	HRR	SK	-	-	907	-	-
1944-S105	2451349.50	1944 Sep 16 1655	V-2	-	Pa184	-	-	HRR	SK	-	-	907	-	-
1944-S106	2451349.50	1944 Sep 16 1655	V-2	-	Pa184	-	-	HRR	SK	-	-	907	-	-
1944-S107	2451349.50	1944 Sep 16 1655	V-2	-	Pa184	-	-	HRR	SK	-	-	907	-	-
1944-S108	2451350.50	1944 Sep 17	V-2	-	Pa184	-	-	HRR	SK	-	-	907	-	-
1944-S109	2451350.50	1944 Sep 17 1036	V-2	-	Pa184	-	-	HRR	SK	-	-	907	-	-
1944-S110	2451351.04	1944 Sep 17 1355	A-4	-	Pa184	-	-	HRR	SK	-	-	907	-	-
1944-S111	2451350.50	1944 Sep 17 1355	V-2	-	Pa184	-	-	HRR	SK	-	-	907	-	-
1944-S112	2451351.92	1944 Sep 18 0958	V-2	-	Pa184	-	-	HRR	SK	-	-	907	-	-
1944-S113	2451351.92	1944 Sep 18 0958	V-2	-	Pa184	-	-	HRR	SK	-	-	907	-	-
1944-S114	2451351.95	1944 Sep 18 1048	V-2	-	Pa184	-	-	HRR	SK	-	-	907	-	-
1944-S115	2451352.10	1944 Sep 18 1422	A-4	-	Pa183	-	-	HRR	-	-	-	907	-	-
1944-S116	2451352.18	1944 Sep 18 1625	A-4	-	Pa176	-	-	HRR	-	-	-	907	-	-





Launch Mission

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Mission	FlightCode	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee_Km	Range_Km	Dest
1944-S248	2431410.00	1944 Nov 15 1202	V-2	-	19548	Ma289	-	-	-	HRR	-	-	-	907	-	-
1944-S353	2431410.50	1944 Nov 16	V-2	-	-	Antwerp	-	-	-	UNKV2	-	-	-	907	-	-
1944-S354	2431410.50	1944 Nov 16	V-2	-	-	Antwerp	-	-	-	UNKV2	-	-	-	907	-	-
1944-S355	2431410.50	1944 Nov 16	V-2	-	-	Antwerp	-	-	-	UNKV2	-	-	-	907	-	-
1944-S356	2431411.50	1944 Nov 17	V-2	-	-	Antwerp	-	-	-	UNKV2	-	-	-	907	-	-
1944-S249	2431413.29	1944 Nov 18 1900	V-2	-	19544	Ma290	-	-	-	HRR	-	-	-	907	-	-
1944-S357	2431413.50	1944 Nov 19	V-2	-	-	London	-	-	-	UNKV2	-	-	-	907	-	-
1944-S358	2431413.50	1944 Nov 19	V-2	-	-	London	-	-	-	UNKV2	-	-	-	907	-	-
1944-S359	2431413.93	1944 Nov 19 1014	V-2	-	19547	Ma292	-	-	-	HRR	-	-	-	907	-	-
1944-S250	2431413.99	1944 Nov 19 1147	V-2	-	19545	Ma291	-	-	-	HRR	-	-	-	907	-	-
1944-S251	2431414.91	1944 Nov 20 0946	V-2	-	19533	Ma293	-	-	-	HRR	-	-	-	907	-	-
1944-S252	2431414.91	1944 Nov 20 0946	V-2	-	19533	Ma293	-	-	-	HRR	-	-	-	907	-	-
1944-S253	2431415.09	1944 Nov 20 1413	V-2	-	19550	Ma295	-	-	-	HRR	-	-	-	907	-	-
1944-S254	2431415.16	1944 Nov 20 1548	V-2	-	19552	Ma294	-	-	-	HRR	-	-	-	907	-	-
1944-S359	2431415.50	1944 Nov 21	V-2	-	-	London 226	-	-	-	UNKV2	-	-	-	907	-	-
1944-S255	2431415.50	1944 Nov 21 0848	V-2	-	19551	Ma296	-	-	-	HRR	-	-	-	907	-	-
1944-S256	2431415.92	1944 Nov 21 1000	V-2	-	19546	Ma297	-	-	-	HRR	-	-	-	907	-	-
1944-S257	2431416.10	1944 Nov 21 1426	V-2	-	19546	Ma301	-	-	-	HRR	-	-	-	907	-	-
1944-S360	2431416.50	1944 Nov 22	V-2	-	19829	London 236	-	-	-	UNKV2	-	-	-	907	-	-
1944-S258	2431416.98	1944 Nov 22 1135	V-2	-	19843	Ma308	-	-	-	HRR	-	-	-	907	-	-
1944-S259	2431417.17	1944 Nov 22 1559	V-2	-	19830	Ma300	-	-	-	HRR	-	-	-	907	-	-
1944-A20	2431417.35	1944 Nov 22 2031	V-2	-	19832	Ma302	-	-	-	HRR	-	-	-	907	-	-
1944-S260	2431419.10	1944 Nov 24 1417	V-2	-	19833	Ma303	-	-	-	HRR	-	-	-	907	-	-
1944-S261	2431419.21	1944 Nov 24 1657	V-2	-	19844	Ma271	-	-	-	HRR	-	-	-	907	-	-
1944-A21	2431419.33	1944 Nov 24 1956	V-2	-	19834	Ma304	-	-	-	HRR	-	-	-	207	-	-
1944-S351	2431416.50	1944 Nov 24	V-2	-	-	London 250	-	-	-	UNKV2	-	-	-	307	-	-
1944-A22	2431419.96	1944 Nov 25 1106	V-2	-	19835	Ma298	-	-	-	HRR	-	-	-	307	-	-
1944-S352	2431419.97	1944 Nov 25 1117	V-2	-	-	London	-	-	-	UNKV2	-	-	-	307	-	-
1944-S262	2431421.07	1944 Nov 26 1359	V-2	-	19836	Ma305	-	-	-	HRR	-	-	-	907	-	-
1944-S353	2431421.92	1944 Nov 27 0007	V-2	-	-	Antwerp	-	-	-	UNKV2	-	-	-	907	-	-
1944-S354	2431422.35	1944 Nov 27 2007	V-2	-	-	London	-	-	-	HRZ76	-	-	-	907	-	-
1944-S263	2431421.96	1944 Nov 27 1050	V-2	-	19831	Ma306	-	-	-	HRR	-	-	-	907	-	-
1944-A23	2431421.97	1944 Nov 27 1113	V-2	-	19840	Ma299	-	-	-	HRR	-	-	-	907	-	-
1944-S264	2431422.87	1944 Nov 28 0859	V-2	-	19827	Ma316	-	-	-	HRR	-	-	-	907	-	-
1944-S265	2431423.94	1944 Nov 29 1032	V-2	-	19841	Ma277	-	-	-	HRR	-	-	-	907	-	-
1944-S266	2431424.26	1944 Nov 29 1840	V-2	-	19825	Ma310	-	-	-	HRR	-	-	-	907	-	-
1944-S272	2431424.97	1944 Nov 30 1119	V-2	-	19846	Ma312	-	-	-	HRR	-	-	-	907	-	-
1944-S273	2431424.99	1944 Nov 30 1143	V-2	-	19849	Antwerp	-	-	-	VZALCH	-	-	-	907	-	-
1944-S267	2431424.50	1944 Dec	V-2	-	-	Antwerp	-	-	-	VZBRNG	-	-	-	907	-	-
1944-S268	2431424.50	1944 Dec	V-2	-	-	Antwerp	-	-	-	VZBRNG	-	-	-	907	-	-
1944-S269	2431424.50	1944 Dec	V-2	-	-	Antwerp	-	-	-	VZBRNG	-	-	-	907	-	-
1944-S270	2431424.50	1944 Dec	V-2	-	-	Antwerp	-	-	-	VZBRNG	-	-	-	907	-	-
1944-S271	2431424.50	1944 Dec	V-2	-	-	Antwerp	-	-	-	VZBRNG	-	-	-	907	-	-
1944-S274	2431425.36	1944 Dec 1 1134	V-2	-	19848	Ma311	-	-	-	HRR	-	-	-	907	-	-
1944-S275	2431426.33	1944 Dec 1 1352	V-2	-	19850	Ma275	-	-	-	HRR	-	-	-	907	-	-
1944-S276	2431426.33	1944 Dec 1 1352	V-2	-	19850	Ma275	-	-	-	HRR	-	-	-	907	-	-
1944-S277	2431426.33	1944 Dec 1 1352	V-2	-	19850	Ma275	-	-	-	HRR	-	-	-	907	-	-
1944-S278	2431426.33	1944 Dec 1 1352	V-2	-	19850	Ma275	-	-	-	HRR	-	-	-	907	-	-
1944-S279	2431426.33	1944 Dec 1 1352	V-2	-	19850	Ma275	-	-	-	HRR	-	-	-	907	-	-
1944-S280	2431426.33	1944 Dec 1 1352	V-2	-	19850	Ma275	-	-	-	HRR	-	-	-	907	-	-
1944-S281	2431426.33	1944 Dec 1 1352	V-2	-	19850	Ma275	-	-	-	HRR	-	-	-	907	-	-
1944-S282	2431426.33	1944 Dec 1 1352	V-2	-	19850	Ma275	-	-	-	HRR	-	-	-	907	-	-
1944-S283	2431426.33	1944 Dec 1 1352	V-2	-	19850	Ma275	-	-	-	HRR	-	-	-	907	-	-
1944-S284	2431426.33	1944 Dec 1 1352	V-2	-	19850	Ma275	-	-	-	HRR	-	-	-	907	-	-
1944-S285	2431426.33	1944 Dec 1 1352	V-2	-	19850	Ma275	-	-	-	HRR	-	-	-	907	-	-
1944-S286	2431426.33	1944 Dec 1 1352	V-2	-	19850	Ma275	-	-	-	HRR	-	-	-	907	-	-
1944-S287	2431426.33	1944 Dec 1 1352	V-2	-	19850	Ma275	-	-	-	HRR	-	-	-	907	-	-
1944-S288	2431426.33	1944 Dec 1 1352	V-2	-	19850	Ma275	-	-	-	HRR	-	-	-	907	-	-
1944-S289	2431426.33	1944 Dec 1 1352	V-2	-	19850	Ma275	-	-	-	HRR	-	-	-	907	-	-
1944-S290	2431426.33	1944 Dec 1 1352	V-2	-	19850	Ma275	-	-	-	HRR	-	-	-	907	-	-
1944-S291	2431426.33	1944 Dec 1 1352	V-2	-	19850	Ma275	-	-	-	HRR	-	-	-	907	-	-
1944-S292	2431426.33	1944 Dec 1 1352	V-2	-	19850	Ma275	-	-	-	HRR	-	-	-	907	-	-
1944-S293	2431426.33	1944 Dec 1 1352	V-2	-	19850	Ma275	-	-	-	HRR	-	-	-	907	-	-
1944-S294	2431426.33	1944 Dec 1 1352	V-2	-	19850	Ma275	-	-	-	HRR	-	-	-	907	-	-
1944-S295	2431426.33	1944 Dec 1 1352	V-2	-	19850	Ma275	-	-	-	HRR	-	-	-	907	-	-
1944-S296	2431426.33	1944 Dec 1 1352	V-2	-	19850	Ma275	-	-	-	HRR	-	-	-	907	-	-
1944-S297	2431426.33	1944 Dec 1 1352	V-2	-	19850	Ma275	-	-	-	HRR	-	-	-	907	-	-
1944-S298	2431426.33	1944 Dec 1 1352	V-2	-	19850	Ma275	-	-	-	HRR	-	-	-	907	-	-
1944-S299	2431426.33	1944 Dec 1 1352	V-2	-	19850	Ma275	-	-	-	HRR	-	-	-	907	-	-
1944-S300	2431426.33	1944 Dec 1 1352	V-2	-	19850	Ma275	-	-	-	HRR	-	-	-	907	-	-
1944-S301	2431426.33	1944 Dec 1 1352	V-2	-	19850	Ma275	-	-	-	HRR	-	-	-	907	-	-
1944-S302	2431426.33	1944 Dec 1 1352	V-2	-	19850	Ma275	-	-	-	HRR	-	-	-	907	-	-
1944-S303	2431426.33	1944 Dec 1 1352	V-2	-	19850	Ma275	-	-	-	HRR	-	-	-	907	-	-
1944-S304	2431426.33	1944 Dec 1 1352	V-2	-	19850	Ma275	-	-	-	HRR	-	-	-	907	-	-
1944-S305	2431426.33	1944 Dec 1 1352	V-2	-	19850	Ma275	-	-	-	HRR	-	-	-	907	-	-
1944-S306	2431426.33	1944 Dec 1 1352	V-2	-	19850	Ma275	-	-	-	HRR	-	-	-	907	-	-
1944-S307	2431426.33	1944 Dec 1 1352	V-2	-	19850	Ma275	-	-	-	HRR	-	-	-	907	-	-
1944-S308	2431426.33	1944 Dec 1 1352	V-2	-	19850	Ma275	-	-	-	HRR	-	-	-	907	-	-
1944-S309	2431426.33	1944 Dec 1 1352	V-2	-	19850	Ma275	-	-	-	HRR	-	-	-	907	-	-
1944-S310	2431426.33	1944 Dec 1 1352	V-2	-	19850	Ma275	-	-	-	HRR	-	-	-	907	-	-
1944-S311	2431426.33	1944 Dec 1 1352	V-2	-	19850	Ma275	-	-	-	HRR	-	-	-	907	-	-
1944-S312	2431426.33	1944 Dec 1 1352	V-2	-	19850	Ma275	-	-	-	HRR	-	-	-	907	-	-
1944-S313	2431426.33	1944 Dec 1 1352	V-2	-	19850	Ma275	-	-	-	HRR	-	-	-	907	-	-
1944-S314	2431426.33	1944 Dec 1 1352	V-2	-	19850	Ma275	-	-	-	HRR	-	-	-	907	-	-
1944-S315	2431426.33	1944 Dec 1 1352	V-2	-	19850	Ma275	-	-	-	HRR	-	-	-	907	-	-
1944-S316	2431426.33	1944 Dec 1 1352	V-2	-	19850	Ma275	-	-	-	HRR	-	-	-	907	-	-
1944-S317	2431426.33	1944 Dec 1 1352	V-2	-	19850	Ma275	-	-	-	HRR	-	-	-	907	-	-
1944-S318	2431426.33	1944 Dec 1 1352	V-2	-	19850	Ma275	-	-	-	HRR	-	-	-	907	-	-
1944-S319	2431426.33	1944 Dec 1 1352	V-2	-	19850	Ma275	-	-	-	HRR	-	-	-	907	-	-
1944-S320	2431426.33	1944 Dec 1 1352	V-2	-	19850	Ma275	-	-	-	HRR	-	-	-	907	-	-
1944-S321	2431426.33	1944 Dec 1 1352	V-													

Launch Mission

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Launch_Mission	FlightCode	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee_Km	Range_Km	Dest
1944-S302	2431448.04	1944 Dec 23 1255	V-2	-	19674	-	-	-	-	HR	-	-	-	907	-	-
1944-S303	2431448.11	1944 Dec 23 1436	V-2	-	19776	-	-	-	-	HR	-	-	-	907	-	-
1944-S304	2431449.94	1944 Dec 25 1028	V-2	-	19650	-	-	-	-	HR	-	-	-	907	-	-
1944-S305	2431450.00	1944 Dec 25 1185	V-2	-	19681	-	-	-	-	HR	-	-	-	907	-	-
1944-S374	2431451.31	1944 Dec 26 1921?	V-2	-	-	-	London/Islington	-	-	UNKV2	-	-	-	0?	-	-
1944-A31	2431451.86	1944 Dec 27 0843	A-4b	-	-	-	-	-	-	HYP	-	-	-	0?	-	-
1944-S306	2431451.86	1944 Dec 27 0843	V-2	-	20853	-	-	-	-	HR	-	-	-	907	-	-
1944-S375	2431452.50	1944 Dec 28	V-2	-	-	-	-	-	-	UNKV2	-	-	-	907	-	-
1944-S376	2431452.50	1944 Dec 28	V-2	-	-	-	-	-	-	UNKV2	-	-	-	907	-	-
1944-S377	2431452.50	1944 Dec 28	V-2	-	-	-	-	-	-	UNKV2	-	-	-	907	-	-
1944-S378	2431452.50	1944 Dec 28	V-2	-	-	-	-	-	-	UNKV2	-	-	-	907	-	-
1944-S379	2431452.50	1944 Dec 28	V-2	-	-	-	-	-	-	UNKV2	-	-	-	907	-	-
1944-S380	2431452.50	1944 Dec 28	V-2	-	-	-	-	-	-	UNKV2	-	-	-	907	-	-
1944-S381	2431452.50	1944 Dec 28	V-2	-	-	-	-	-	-	UNKV2	-	-	-	907	-	-
1944-S382	2431452.50	1944 Dec 28	V-2	-	-	-	-	-	-	UNKV2	-	-	-	907	-	-
1944-S307	2431452.86	1944 Dec 28 0834	V-2	-	20844	-	-	-	-	HR	-	-	-	907	-	-
1944-S308	2431452.93	1944 Dec 28 1018	V-2	-	20845	-	-	-	-	HR	-	-	-	907	-	-
1944-A32	2431452.98	1944 Dec 28 1137	V-2	-	20848	-	-	-	-	HR	-	-	-	207	-	-
1944-S309	2431455.19	1944 Dec 30 1627	V-2	-	20848	-	-	-	-	HR	-	-	-	907	-	-
1944-S310	2431455.27	1944 Dec 30 1627	V-2	-	20820	-	-	-	-	HR	-	-	-	907	-	-
1944-S311	2431456.03	1944 Dec 31 1244	V-2	-	20816	-	-	-	-	HR	-	-	-	907	-	-
1944-S312	2431456.14	1944 Dec 31 1523	V-2	-	20847	-	-	-	-	HR	-	-	-	907	-	-
1944-S353	2431456.14	1944 Dec 31 2138?	V-2	-	20825	-	-	-	-	UNKV2	-	-	-	907	-	-
1944-A62	2431456.50	1944 Dec 31	V-2	-	-	-	-	-	-	0	-	-	-	0	-	-
1945-S01	2431456.50	1945 Jan	V-2	-	-	-	-	-	-	VZHAMG	-	-	-	907	-	-
1945-S02	2431456.50	1945 Jan	V-2	-	-	-	-	-	-	VZHAMG	-	-	-	907	-	-
1945-S03	2431456.50	1945 Jan	V-2	-	-	-	-	-	-	VZAMOL	-	-	-	907	-	-
1945-S04	2431457.12	1945 Jan 1 1450	V-2	-	20852	-	-	-	-	HR	-	-	-	207	-	-
1945-S04	2431458.00	1945 Jan 2 1206	V-2	-	20815	-	-	-	-	HR	-	-	-	907	-	-
1945-S05	2431458.15	1945 Jan 2 1535	V-2	-	20817	-	-	-	-	HR	-	-	-	907	-	-
1945-S06	2431458.28	1945 Jan 2 1837	V-2	-	20818	-	-	-	-	HR	-	-	-	907	-	-
1945-S35	2431458.78	1945 Jan 3 0045?	V-2	-	-	-	-	-	-	UNKV2	-	-	-	907	-	-
1945-S07	2431459.01	1945 Jan 3 1219	V-2	-	20838	-	-	-	-	HR	-	-	-	907	-	-
1945-S08	2431459.12	1945 Jan 3 1450	V-2	-	20841	-	-	-	-	HR	-	-	-	907	-	-
1945-S09	2431459.21	1945 Jan 3 1706	V-2	-	20851	-	-	-	-	HR	-	-	-	907	-	-
1945-S39	2431459.97	1945 Jan 4 1115	V-2	-	20823	-	-	-	-	UNKV2	-	-	-	907	-	-
1945-S40	2431459.50	1945 Jan 4	V-2	-	-	-	-	-	-	UNKV2	-	-	-	907	-	-
1945-S41	2431459.50	1945 Jan 4	V-2	-	-	-	-	-	-	UNKV2	-	-	-	907	-	-
1945-S42	2431459.50	1945 Jan 4	V-2	-	-	-	-	-	-	UNKV2	-	-	-	907	-	-
1945-S43	2431459.50	1945 Jan 4	V-2	-	-	-	-	-	-	UNKV2	-	-	-	907	-	-
1945-S44	2431459.50	1945 Jan 4	V-2	-	-	-	-	-	-	UNKV2	-	-	-	907	-	-
1945-S45	2431459.50	1945 Jan 4	V-2	-	-	-	-	-	-	UNKV2	-	-	-	907	-	-
1945-S46	2431459.50	1945 Jan 4	V-2	-	-	-	-	-	-	UNKV2	-	-	-	907	-	-
1945-S47	2431459.50	1945 Jan 4	V-2	-	-	-	-	-	-	UNKV2	-	-	-	907	-	-
1945-S48	2431459.50	1945 Jan 4	V-2	-	-	-	-	-	-	UNKV2	-	-	-	907	-	-
1945-S49	2431459.50	1945 Jan 4	V-2	-	-	-	-	-	-	UNKV2	-	-	-	907	-	-
1945-S50	2431459.50	1945 Jan 4	V-2	-	-	-	-	-	-	UNKV2	-	-	-	907	-	-
1945-S51	2431459.50	1945 Jan 4	V-2	-	-	-	-	-	-	UNKV2	-	-	-	907	-	-
1945-S52	2431459.50	1945 Jan 4	V-2	-	-	-	-	-	-	UNKV2	-	-	-	907	-	-
1945-S53	2431459.50	1945 Jan 4	V-2	-	-	-	-	-	-	UNKV2	-	-	-	907	-	-
1945-S54	2431459.50	1945 Jan 4	V-2	-	-	-	-	-	-	UNKV2	-	-	-	907	-	-
1945-S55	2431459.50	1945 Jan 4	V-2	-	-	-	-	-	-	UNKV2	-	-	-	907	-	-
1945-S56	2431459.50	1945 Jan 4	V-2	-	-	-	-	-	-	UNKV2	-	-	-	907	-	-
1945-S57	2431459.50	1945 Jan 4	V-2	-	-	-	-	-	-	UNKV2	-	-	-	907	-	-
1945-S58	2431459.50	1945 Jan 4	V-2	-	-	-	-	-	-	UNKV2	-	-	-	907	-	-
1945-S59	2431459.50	1945 Jan 4	V-2	-	-	-	-	-	-	UNKV2	-	-	-	907	-	-
1945-S60	2431459.50	1945 Jan 4	V-2	-	-	-	-	-	-	UNKV2	-	-	-	907	-	-
1945-S61	2431459.50	1945 Jan 4	V-2	-	-	-	-	-	-	UNKV2	-	-	-	907	-	-
1945-S62	2431459.50	1945 Jan 4	V-2	-	-	-	-	-	-	UNKV2	-	-	-	907	-	-
1945-S63	2431459.50	1945 Jan 4	V-2	-	-	-	-	-	-	UNKV2	-	-	-	907	-	-
1945-S64	2431459.50	1945 Jan 4	V-2	-	-	-	-	-	-	UNKV2	-	-	-	907	-	-
1945-S65	2431459.50	1945 Jan 4	V-2	-	-	-	-	-	-	UNKV2	-	-	-	907	-	-
1945-S66	2431459.50	1945 Jan 4	V-2	-	-	-	-	-	-	UNKV2	-	-	-	907	-	-
1945-S67	2431459.50	1945 Jan 4	V-2	-	-	-	-	-	-	UNKV2	-	-	-	907	-	-
1945-S68	2431459.50	1945 Jan 4	V-2	-	-	-	-	-	-	UNKV2	-	-	-	907	-	-
1945-S69	2431459.50	1945 Jan 4	V-2	-	-	-	-	-	-	UNKV2	-	-	-	907	-	-
1945-S70	2431459.50	1945 Jan 4	V-2	-	-	-	-	-	-	UNKV2	-	-	-	907	-	-
1945-S71	2431459.50	1945 Jan 4	V-2	-	-	-	-	-	-	UNKV2	-	-	-	907	-	-
1945-S72	2431459.50	1945 Feb 10 0853?	V-2	-	-	-	-	-	-	UNKV2	-	-	-	907	-	-
1945-S73	2431459.50	1945 Feb 11	V-2	-	-	-	-	-	-	UNKV2	-	-	-	907	-	-
1945-S69	2431459.50	1945 Feb 13	V-2	-	-	-	-	-	-	UNKV2	-	-	-	907	-	-
1945-S23	2431501.15	1945 Feb 14 1540	V-2	-	4299	-	-	-	-	HYP	-	-	-	907	-	-
1945-S70	2431501.33	1945 Feb 14 1953?	V-2	-	-	-	-	-	-	UNKV2	-	-	-	907	-	-
1945-S30	2431508.50	1945 Feb 22	V-2	-	-	-	-	-	-	UNKV2	-	-	-	907	-	-

Launch Mission

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Mission	FlightCode	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee Km	Range Km	Dest
1946-531	2431512.50	1945 Feb 26	V-2	-	-	London	-	-	-	UNKV2	-	-	-	90?	-	-
1946-571	2431513.50	1945 Feb 27	V-2	-	-	London	-	-	-	UNKV2	-	-	-	90?	-	-
1946-572	2431517.50	1945 Mar 3?	V-2	-	-	London	-	-	-	VZHAM6	LP3	-	-	90?	-	-
1946-532	2431521.56	1945 Mar 7 0115?	V-2	-	-	London	-	-	-	UNKV2	-	-	-	90?	-	-
1946-533	2431522.96	1945 Mar 8 1015?	V-2	-	-	London/Smithfield	-	-	-	UNKV2	-	-	-	90?	-	-
1946-534	2431523.50	1945 Mar 9	V-2	-	-	Remagen	-	-	-	VZHELL	-	-	-	90?	-	-
1946-584	2431525.50	1945 Mar 11	V-2	-	-	London	-	-	-	VZACH	-	-	-	90?	-	-
1946-525	2431530.50	1945 Mar 16 0028?	V-2	-	-	Antwerp?	-	-	-	UNKV2	-	-	-	90?	-	-
1946-585	2431530.52	1945 Mar 17 0356?	V-2	-	-	London	-	-	-	UNKV2	-	-	-	90?	-	-
1946-586	2431531.66	1945 Mar 17 2021?	V-2	-	-	London	-	-	-	UNKV2	-	-	-	90?	-	-
1946-587	2431532.35	1945 Mar 17	V-2	-	-	Remagen	-	-	-	VZHELL	-	-	-	90?	-	-
1946-524	2431531.50	1945 Mar 17	V-2	-	-	Remagen	-	-	-	VZHELL	-	-	-	90?	-	-
1946-573	2431531.50	1945 Mar 17	V-2	-	-	Remagen	-	-	-	VZHELL	-	-	-	90?	-	-
1946-574	2431531.50	1945 Mar 17	V-2	-	-	Remagen	-	-	-	VZHELL	-	-	-	90?	-	-
1946-575	2431531.50	1945 Mar 17	V-2	-	-	Remagen	-	-	-	VZHELL	-	-	-	90?	-	-
1946-576	2431531.50	1945 Mar 17	V-2	-	-	Remagen	-	-	-	VZHELL	-	-	-	90?	-	-
1946-577	2431531.50	1945 Mar 17	V-2	-	-	Remagen	-	-	-	VZHELL	-	-	-	90?	-	-
1946-578	2431531.50	1945 Mar 17	V-2	-	-	Remagen	-	-	-	VZHELL	-	-	-	90?	-	-
1946-579	2431531.50	1945 Mar 17	V-2	-	-	Remagen	-	-	-	VZHELL	-	-	-	90?	-	-
1946-580	2431531.50	1945 Mar 17	V-2	-	-	Remagen	-	-	-	VZHELL	-	-	-	90?	-	-
1946-581	2431531.50	1945 Mar 17	V-2	-	-	Remagen	-	-	-	VZHELL	-	-	-	90?	-	-
1946-582	2431531.50	1945 Mar 17	V-2	-	-	Remagen	-	-	-	VZHELL	-	-	-	90?	-	-
1946-583	2431532.50	1945 Mar 18	V-2	-	-	London	-	-	-	UNKV2	-	-	-	90?	-	-
1946-586	2431535.50	1945 Mar 21	V-2	-	-	London	-	-	-	UNKV2	-	-	-	90?	-	-
1946-589	2431535.90	1945 Mar 21 0934?	V-2	-	-	London	-	-	-	VZHAM6	-	-	-	90?	-	-
1946-539	2431537.79	1945 Mar 25 0700	V-2	-	-	London?	-	-	-	UNKV2	-	-	-	90?	-	-
1946-538	2431540.37	1945 Mar 25 2056?	V-2	-	-	London	-	-	-	UNKV2	-	-	-	90?	-	-
1946-536	2431541.50	1945 Mar 27	V-2	-	-	London	-	-	-	UNKV2	-	-	-	90?	-	-
1946-537	2431541.50	1945 Mar 27	V-2	-	-	London	-	-	-	UNKV2	-	-	-	90?	-	-
1946-590	2431541.50	1945 Mar 27	V-2	-	-	London	-	-	-	UNKV2	-	-	-	90?	-	-
1946-591	2431541.50	1945 Mar 27	V-2	-	-	London	-	-	-	UNKV2	-	-	-	90?	-	-
1946-592	2431541.72	1945 Mar 27 0516?	V-2	-	-	London	-	-	-	UNKV2	-	-	-	90?	-	-
1946-593	2431542.12	1945 Mar 27 0449?	V-2	-	-	London/Oxfordington	-	-	-	UNKV2	-	-	-	90?	-	-
1946-594	2431542.36	1945 Mar 27 2043?	V-2	-	-	Antwerp/Norstal	-	-	-	UNKV2	-	-	-	90?	-	-
1946-526	2431731.07	1945 Oct 2 1341:12	V-2	-	-	Backfire 1	-	-	-	VZHAM6	-	-	-	90?	-	-
1946-605	2431733.06	1945 Oct 4 1313:33	V-2	-	-	Backfire 2	-	-	-	CUX	-	-	-	69	-	-
1946-528	2431744.09	1945 Oct 19 1406:26	V-2	-	-	Backfire 3	-	-	-	CUX	-	-	-	69	-	-
1946-602	2431827.41	1946 Apr 16 2147	V-2	US	-	-	-	-	-	LC33	-	-	-	9	-	-
1946-601	2431851.39	1946 May 10 2115	V-2	US	-	-	-	-	-	LC33	-	-	-	112	-	-
1946-602	2431870.38	1946 May 29 2112	V-2	US	-	-	-	-	-	LC33	-	-	-	112	-	-
1946-603	2431865.49	1946 Jun 28 2340	V-2	US	-	-	-	-	-	LC33	-	-	-	117	-	-
1946-604	2432001.31	1946 Jun 28 1925	V-2	US	-	-	-	-	-	LC33	-	-	-	106	-	-
1946-605	2432011.31	1946 Jul 19 1925	V-2	US	-	-	-	-	-	LC33	-	-	-	134	-	-
1946-606	2432031.30	1946 Jul 19 1931	V-2	US	-	-	-	-	-	LC33	-	-	-	167	-	-
1946-607	2432032.32	1946 Jul 30 1936	V-2	US	-	-	-	-	-	LC33	-	-	-	3	-	-
1946-610	2432048.25	1946 Aug 13 1916	V-2	US	-	-	-	-	-	LC33	-	-	-	164	-	-
1946-611	2432055.22	1946 Aug 22 1915	V-2	US	-	-	-	-	-	LC33	-	-	-	164	-	-
1946-607	2432100.22	1946 Oct 24 1802	V-2	US	-	-	-	-	-	LC33	-	-	-	105	-	-
1946-608	2432118.26	1946 Oct 24 1915	V-2	US	-	-	-	-	-	LC33	-	-	-	167	-	-
1946-609	2432130.30	1946 Nov 7 2031	V-2	US	-	-	-	-	-	LC33	-	-	-	167	-	-
1946-610	2432146.30	1946 Nov 21 1655	V-2	US	-	-	-	-	-	LC33	-	-	-	167	-	-
1946-611	2432160.30	1946 Dec 5 2038	V-2	US	-	-	-	-	-	LC33	-	-	-	187	-	-
1946-612	2432172.74	1946 Dec 18 0512:49	V-2	US	-	-	-	-	-	LC33	-	-	-	116	-	-
1947-501	2432166.35	1947 Jan 10 2113	V-2	US	-	-	-	-	-	LC33	-	-	-	506	-	-
1947-502	2432209.55	1947 Jan 24 0022	V-2	US	-	-	-	-	-	LC33	-	-	-	109	-	-
1947-503	2432237.26	1947 Feb 20 1816	V-2	US	-	-	-	-	-	LC33	-	-	-	169	-	-
1947-504	2432252.27	1947 Mar 7 1823	V-2	US	-	-	-	-	-	LC33	-	-	-	124	-	-
1947-504	2432277.34	1947 Apr 1 2010	V-2	US	-	-	-	-	-	LC33	-	-	-	103	-	-
1947-504	2432284.54	1947 Apr 9 0010	V-2	US	-	-	-	-	-	LC33	-	-	-	140	-	-
1947-506	2432283.47	1947 Apr 17 2322	V-2	US	-	-	-	-	-	LC33	-	-	-	122	-	-
1947-507	2432321.46	1947 May 15 2308	V-2	US	-	-	-	-	-	LC33	-	-	-	16	-	-
1947-504	2432355.60	1947 May 30 0230	Hermes II	-	-	Hermes II Dummy Ram	-	-	-	LC33	-	-	-	159	-	-
1947-513	2432377.30	1947 Jul 10 1918	V-2	US	-	-	-	-	-	LC33	-	-	-	16	-	-
1947-508	2432396.04	1947 Jul 29 1255	V-2	US	-	-	-	-	-	LC33	-	-	-	1	-	-
1947-509	2432455.16	1947 Oct 6 1563	V-2	US	-	-	-	-	-	LC33	-	-	-	156	-	-
1947-510	2432468.30	1947 Oct 9 1915	V-2	US	-	-	-	-	-	LC33	-	-	-	207	-	-
1947-511	2432476.78	1947 Oct 18 0647	A-4	-	-	Operation Sandy	-	-	-	SANDY	-	-	-	86	-	-
1947-511	2432478.80	1947 Oct 20 0714	A-4	-	-	Operation Sandy	-	-	-	CTRF-4	-	-	-	231	-	-
1947-512	2432482.05	1947 Oct 23 1305	A-4	-	-	Operation Sandy	-	-	-	CTRF-4	-	-	-	14	-	-
1947-512	2432487.16	1947 Oct 28 1547	A-4	-	-	Operation Sandy	-	-	-	CTRF-4	-	-	-	274	-	-
1947-512	2432490.15	1947 Oct 31 1541	A-4	-	-	Operation Sandy	-	-	-	CTRF-4	-	-	-	0	-	-
1947-513	2432492.09	1947 Nov 2 1414	A-4	-	-	Operation Sandy	-	-	-	CTRF-4	-	-	-	88	-	-
1947-513	2432492.96	1947 Nov 3 1105	A-4	-	-	Operation Sandy	-	-	-	CTRF-4	-	-	-	0	-	-
1947-514	2432494.08	1947 Nov 4 1402	A-4	-	-	Operation Sandy	-	-	-	CTRF-4	-	-	-	0	-	-
1947-514	2432494.86	1947 Nov 10 0839	A-4	-	-	Operation Sandy	-	-	-	CTRF-4	-	-	-	89	-	-
1947-515	2432502.81	1947 Nov 13 0730	A-4	-	-	Operation Sandy	-	-	-	CTRF-4	-	-	-	11	-	-
1947-516	2432503.04	1947 Nov 13 1300	A-4	-	-	Operation Sandy	-	-	-	CTRF-4	-	-	-	24	-	-
1947-516	2432510.49	1947 Nov 20 2347	A-4	-	-	Operation Sandy	-	-	-	CTRF-4	-	-	-	89	-	-
1947-517	2432528.40	1947 Dec 8 2142	A-4	-	-	Operation Sandy	-	-	-	CTRF-4	-	-	-	270	-	-
1948-501	2432573.34	1948 Jan 22 2012	V-2	US	-	-	-	-	-	LC33	-	-	-	262	-	-
1948-502	2432588.22	1948 Feb 6 1717	V-2	US	-	-	-	-	-	LC33	-	-	-	-	-	-
1948-502	2432630.47	1948 Mar 19 2310	V-2	US	-	-	-	-	-	LC33	-	-	-	113	-	-
1948-504	2432644.07	1948 Apr 2 1347	V-2	US	-	-	-	-	-	LC33	-	-	-	5	-	-
1948-504	2432661.33	1948 Apr 19 1954	V-2	US	-	-	-	-	-	LC33	-	-	-	144	-	-
1948-506	2432685.07	1948 May 13 1343	Bumper-MAC	-	-	-	-	-	-	LC33	-	-	-	56	-	-
1948-507	2432689.09	1948 May 27 1415	V-2	US	-	-	-	-	-	LC33	-	-	-	127	-	-
1948-507	2432689.09	1948 May 27 1415	V-2	US	-	-	-	-	-	LC33	-	-	-	140	-	-



Launch Mission

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee_Km	Range_Km	Dest
1948-N02	2452713.93	1946 Jun 11 1022	V-2	US	37	Blossom III (Albert)		WS	LC33			63	-	
1948-S09	2452759.25	1946 Jul 26 1803	V-2	US	40			WS	LC33			97	-	
1948-S10	2452769.00	1946 Aug 5 1207	V-2	US	43	UV Spec/Solar X		WS	LC33			166	-	
1948-S23	2452783.11	1946 Aug 19 1445	Bumper-WAC	US	Bumper 2			WS	LC33			13	-	
1948-S12	2452797.54	1946 Sep 3 0100	V-2	US	33	UK-2 Grenades		WS	LC33			151	-	
1948-A30	2452811.50	1946 Sep 17	R-1		I-4			GRSF-4				1	12	
1948-S13	2452825.15	1946 Sep 30 1530:09	Bumper-WAC		Bumper 3			WS	LC33			150	-	
1948-S14	2452834.50	1946 Oct 10	R-1		I-1			GRSF-4				1007	288	
1948-S15	2452837.50	1946 Oct 13	R-1		I-9			GRSF-4				1007	288	
1948-S16	2452845.50	1946 Oct 21	R-1		I-6			GRSF-4				1007	257	
1948-S17	2452847.50	1946 Oct 23	R-1		I-10			GRSF-4				1007	255	
1948-S18	2452856.50	1946 Nov 1	R-1		I-3			GRSF-4				1007	256	
1948-A41	2452857.10	1946 Nov 1 1424:38	Bumper-WAC		Bumper 4			WS	LC33			8	-	
1948-S20	2452858.50	1946 Nov 3	R-1		I-12			GRSF-4				1007	271	
1948-S21	2452859.50	1946 Nov 4	R-1		I-2			GRSF-4				1007	208	
1948-S22	2452860.50	1946 Nov 5	R-1		I-11			GRSF-4				1007	253	
1948-S23	2452861.50	1946 Nov 5	R-1		I-11			GRSF-4				1007	253	
1948-S24	2452874.44	1946 Nov 16 2235	V-2	US	44	Hermes B ramjet		WS	LC33			145	-	
1948-S25	2452885.17	1946 Dec 9 1608	V-2	US	42	Hermes II RTV-G-3		WS	LC33			108	-	
1948-A02	2452930.35	1949 Jan 13 2026	Hermes II		B-1 No. 1			WS	LC33			1	-	
1948-N01	2452945.22	1949 Jan 29 1720	V-2	US	46	Blossom		WS	LC33			60	-	
1948-S05	2452965.21	1949 Feb 17 1700	V-2	US	46			WS	LC33			400	-	
1948-S06	2452972.43	1949 Feb 24 2222:44	Bumper-WAC		Bumper 5			WS	LC33			393	-	
1948-S07	2452997.78	1949 Mar 22 0643	V-2	US	41	Blossom IVA		WS	LC33			429	-	
1948-N02	2453016.42	1949 Apr 11 2205	V-2	US	50	UK-3		WS	LC33			85	-	
1948-A14	2453026.51	1949 Apr 22 0017:16	Bumper-WAC		Bumper 6			WS	LC33			80	-	
1948-S09	2453042.14	1949 May 5 1515	V-2	US	46	Hermes B		WS	LC33			8	-	
1948-S09	2453043.59	1949 May 7 0212	R-1A		1			GRSF-4				1007	271	
1948-S10	2453047.12	1949 May 10 1467	R-1A		2			GRSF-4				1007	-	
1948-S11	2453051.56	1949 May 15 0146	R-1A		3			GRSF-4				1007	-	
1948-S12	2453053.57	1949 May 16 2055	R-1A		4	FIAR-1		GRSF-4				1007	-	
1948-S13	2453060.53	1949 May 24 0040	R-1A		5			GRSF-4				1007	-	
1948-S14	2453064.53	1949 May 28 0080	R-1A		6			GRSF-4				1007	-	
1948-S15	2453062.44	1949 Jun 14 2235	V-2	US	47	Blossom IVB (Alb 2)		WS	LC33			134	-	
1948-S19	2453169.50	1949 Sep 10	R-1		II-1			GRSF-4				1007	271	
1948-S20	2453170.50	1949 Sep 11	R-1		II-2			GRSF-4				1007	278	
1948-S21	2453172.50	1949 Sep 13	R-1		II-11			GRSF-4				1007	270	
1948-S22	2453173.50	1949 Sep 14	R-1		II-11			GRSF-4				1007	270	
1948-S23	2453176.47	1949 Sep 15 2319	V-2	US	52	Blossom IVC (Alb 3)		WS	LC33			1007	286	
1948-S24	2453176.50	1949 Sep 17	R-1		II-8			GRSF-4				5	286	
1948-S25	2453176.50	1949 Sep 19	R-1		II-8			GRSF-4				1007	286	
1948-S26	2453179.50	1949 Sep 20	R-1		II-9			GRSF-4				1007	0	
1948-S27	2453182.50	1949 Sep 21	R-1		II-15			GRSF-4				0	0	
1948-S28	2453187.57	1949 Sep 25 1116	R-1		II-10			GRSF-4				0	0	
1948-S29	2453189.21	1949 Sep 29 1658	V-2	US	49	2RE ZI		WS	LC33			1007	542	
1948-S30	2453189.99	1949 Sep 30 1149	R-2e		2	NRL Ionos 1		GRSF-4				51	562	
1948-S31	2453190.96	1949 Oct 2 1100	R-2e		2	2RE ZI		GRSF-4				1007	454	
1948-S32	2453192.50	1949 Oct 2 1100	R-2e		2	2RE ZI		GRSF-4				1007	257	
1948-S33	2453195.50	1949 Oct 3	R-1		II-14			WS	LC33			1007	4	
1948-S34	2453197.50	1949 Oct 8	Hermes II		P-1 No. 2	Hermes II RTV-G-3		GRSF-4				1007	538	
1948-S35	2453197.75	1949 Oct 8 0605	R-1		II-16			GRSF-4				1007	271	
1948-S36	2453199.50	1949 Oct 10	R-2e		5	2RE ZI		GRSF-4				1007	271	
1948-S37	2453201.00	1949 Oct 11 1245	R-2e		5	2RE ZI		GRSF-4				107	269	
1948-S38	2453202.50	1949 Oct 12	R-1		II-7			GRSF-4				1007	9	
1948-S39	2453202.50	1949 Oct 13	R-1		II-13			GRSF-4				1007	269	
1948-S40	2453204.50	1949 Oct 15	R-1		II-17			GRSF-4				1007	273	
1948-S41	2453207.50	1949 Oct 18	R-1		II-19			GRSF-4				1007	274	
1948-S42	2453208.50	1949 Oct 19	R-1		II-23			GRSF-4				1007	159	
1948-S43	2453211.50	1949 Oct 22	R-1		II-22			GRSF-4				1007	234	
1948-S44	2453212.50	1949 Oct 23	R-1		II-3			GRSF-4				1007	267	
1948-S45	2453239.17	1949 Nov 18 1603	V-2	US	56	DM Sampling Grenades		WS	LC33			124	-	
1948-S46	2453259.30	1949 Dec 8 1915	V-2	US	31	Blossom IVD (Alb 4)		WS	LC33			127	-	
1948-S47	2453269.30	1950 Feb 17 1801	V-2	US	63			WS	LC33			148	-	
1948-N09	2453330.25	1950 Jul 24 1429	Bumper-WAC		Bumper 8			CC	LC3			207	-	
1948-N10	2453487.10	1950 Jul 29 1144	Bumper-WAC		Bumper 7			CC	LC3			50	-	
1948-S08	2453525.21	1950 Aug 31 1709	V-2	US	51			WS	LC33			137	-	
1948-S13	2453575.50	1950 Oct 21	R-2		1	Blossom IVC (House)		GRSF-4				1507	345	
1948-S09	2453580.50	1950 Oct 26	R-2		1	82A38 EDI-1-1		GRSF-4				1507	8	
1948-S16	2453581.46	1950 Oct 26 2302	R-2		61	82A38 EDI-1-2		WS	LC33			1507	566	
1948-S17	2453584.50	1950 Oct 27	R-2		3	82A38 EDI-1-3		GRSF-4				1507	563	
1948-S14	2453584.50	1950 Oct 30	R-2		4	82A38 EDI-1-4		GRSF-4				1507	563	
1948-S15	2453593.50	1950 Nov 8	R-2		5	82A38 EDI-1-5		GRSF-4				1507	157	
1948-S16	2453594.50	1950 Nov 9	Hermes II		P-1 No. 2A	Hermes II RTV-G-3		WS	LC33			1507	544	
1948-S17	2453599.50	1950 Nov 14	R-2		6	82A38 EDI-1-6		GRSF-4				1507	544	
1948-S18	2453603.50	1950 Nov 18	R-2		7	82A38 EDI-1-7		GRSF-4				1507	352	
1948-S19	2453611.50	1950 Nov 26	R-2		8	82A38 EDI-1-8		GRSF-4				1507	07	
1948-S22	2453626.50	1950 Dec 11	R-2		9	82A38 EDI-1-9		GRSF-4				1507	557	
1948-S23	2453627.50	1950 Dec 12	R-2		10	82A38 EDI-1-10		GRSF-4				1507	554	
1948-S24	2453631.50	1950 Dec 16	R-2		11	82A38 EDI-1-11		GRSF-4				1507	555	
1948-S28	2453635.50	1950 Dec 20	R-2		12	82A38 EDI-1-12		GRSF-4				1507	07	
1948-N01	2453665.34	1951 Jan 18 2014	V-2	US	54			WS	LC33			2	-	
1948-N03	2453675.50	1951 Jan 29	R-1		IIIA-1	KI		GRSF-4				1007	268	
1948-S04	2453676.50	1951 Jan 30	R-1		IIIA-5			GRSF-4				1007	268	
1948-S05	2453677.50	1951 Jan 31	R-1		IIIA-2			GRSF-4				1007	268	
1948-S06	2453678.50	1951 Feb 1	R-1		IIIA-6			GRSF-4				1007	267	

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Launch_Mission	FlightCode	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee_Km	Range_Km	Dest
1951-307	2433679.50	1951 Feb 2	R-1	US	IIIA-3	-	-	-	-	GRSF-4	-	-	-	1007	288	-
1951-406	2433714.64	1951 Mar 9 0316	V-2	-	57	Blossom IVE	-	-	-	WS	LC33	-	-	3	-	-
1951-510	2433810.50	1951 Jun 13	R-1	US	IIIB-11	-	-	-	-	GRSF-4	-	-	-	1007	275	-
1951-A29	2433812.08	1951 Jun 14 1348	V-2	US	56	-	-	-	-	WS	LC33	-	-	0	-	-
1951-311	2433811.50	1951 Jun 14	R-1	-	IIIB-10	-	-	-	-	GRSF-4	-	-	-	1007	288	-
1951-312	2433815.50	1951 Jun 18	R-1	-	IIIB-1	-	-	-	-	GRSF-4	-	-	-	1007	288	-
1951-313	2433816.50	1951 Jun 19	R-1	-	IIIB-2	-	-	-	-	GRSF-4	-	-	-	1007	271	-
1951-314	2433817.50	1951 Jun 20	R-1	-	IIIB-3	-	-	-	-	GRSF-4	-	-	-	1007	287	-
1951-315	2433819.50	1951 Jun 22	R-1	-	IIIB-7	-	-	-	-	GRSF-4	-	-	-	1007	83	-
1951-316	2433820.50	1951 Jun 23	R-1	-	IIIB-8	Short range test	-	-	-	GRSF-4	-	-	-	1007	79	-
1951-317	2433821.50	1951 Jun 24	R-1	-	IIIB-9	Short range test	-	-	-	GRSF-4	-	-	-	1007	84	-
1951-318	2433822.50	1951 Jun 25	R-1	-	IIIB-6	-	-	-	-	GRSF-4	-	-	-	1007	147	-
1951-319	2433823.50	1951 Jun 26	R-1	-	IIIB-5	-	-	-	-	GRSF-4	-	-	-	1007	146	-
1951-320	2433824.50	1951 Jun 27	R-1	-	IIIB-14	-	-	-	-	GRSF-4	-	-	-	1007	273	-
1951-326	2433826.40	1951 Jun 28 2143	V-2	US	52	Blossom IVF	-	-	-	WS	LC33	-	-	6	-	-
1951-332	2433829.50	1951 Jul 2	R-2	-	II-1	-	-	-	-	GRSF-4	-	-	-	1507	557	-
1951-321	2433831.50	1951 Jul 4	R-2	-	II-2	82A38 EDI-2-1	-	-	-	GRSF-4	-	-	-	1507	555	-
1951-322	2433834.50	1951 Jul 7	R-2	-	II-3	82A38 EDI-2-2	-	-	-	GRSF-4	-	-	-	1507	557	-
1951-323	2433836.50	1951 Jul 9	R-2	-	II-4	82A38 EDI-2-3	-	-	-	GRSF-4	-	-	-	1507	546	-
1951-324	2433837.50	1951 Jul 10	R-2	-	II-5	82A38 EDI-2-4	-	-	-	GRSF-4	-	-	-	1507	566	-
1951-325	2433838.50	1951 Jul 11	R-2	-	II-6	82A38 EDI-2-5	-	-	-	GRSF-4	-	-	-	1507	561	-
1951-326	2433839.50	1951 Jul 12	R-2	-	II-7	82A38 EDI-2-6	-	-	-	GRSF-4	-	-	-	07	0	-
1951-327	2433841.50	1951 Jul 14	R-2	-	II-8	82A38 EDI-2-7	-	-	-	GRSF-4	-	-	-	1507	549	-
1951-328	2433843.50	1951 Jul 16	R-2	-	II-9	82A38 EDI-2-8	-	-	-	GRSF-4	-	-	-	1507	544	-
1951-329	2433847.50	1951 Jul 20	R-2	-	II-10	82A38 EDI-2-9	-	-	-	GRSF-4	-	-	-	1507	551	-
1951-333	2433849.50	1951 Jul 22	R-IV	-	1	I-8B	-	-	-	GRSF-4	-	-	-	89	-	-
1951-330	2433850.50	1951 Jul 23	R-2	-	II-11	82A38 EDI-2-11	-	-	-	GRSF-4	-	-	-	1507	566	-
1951-331	2433852.50	1951 Jul 25	R-2	-	II-12	82A38 EDI-2-12	-	-	-	GRSF-4	-	-	-	1507	552	-
1951-334	2433854.50	1951 Jul 27	R-2	-	II-13	82A38 EDI-2-13	-	-	-	GRSF-4	-	-	-	1507	556	-
1951-335	2433856.50	1951 Jul 29	R-IB	-	1	-	-	-	-	GRSF-4	-	-	-	101	-	-
1951-336	2433857.50	1951 Aug 15	R-IB	-	2	-	-	-	-	GRSF-4	-	-	-	101	-	-
1951-339	2433866.50	1951 Aug 19	R-IV	-	3	-	-	-	-	GRSF-4	-	-	-	1007	-	-
1951-341	2433867.50	1951 Aug 28	R-IB	-	4	-	-	-	-	GRSF-4	-	-	-	101	-	-
1951-342	2433868.50	1951 Aug 28	R-IB	-	3	-	-	-	-	GRSF-4	-	-	-	101	-	-
1951-340	2433872.50	1951 Sep 5	R-IB	US	TP1	Probe	-	-	-	WS	LC33	-	-	213	-	-
1951-344	2433881.29	1951 Aug 22 1900	V-2	US	60	-	-	-	-	WS	LC33	-	-	137	-	-
1951-344	2433849.50	1952 May 20 1606	V-2	US	59/TF2	-	-	-	-	WS	LC33	-	-	124	-	-
1952-309	2434153.17	1952 May 20 1606	V-2	US	59/TF2	-	-	-	-	WS	LC33	-	-	124	-	-
1952-319	2434232.50	1952 Aug 8	R-2	-	KT-1	82A38 KI-1	-	-	-	GRSF-4	-	-	-	1507	552	-
1952-312	2434233.50	1952 Aug 8	R-2	-	KT-2	82A38 KI-2	-	-	-	GRSF-4	-	-	-	1507	544	-
1952-313	2434236.50	1952 Aug 12	R-2	-	KT-3	82A38 KI-3	-	-	-	GRSF-4	-	-	-	1507	550	-
1952-314	2434238.50	1952 Aug 14	R-2	-	KT-4	82A38 KI-4	-	-	-	GRSF-4	-	-	-	1507	489	-
1952-320	2434244.50	1952 Aug 20	R-1	8A11	8A11	-	-	-	-	GRSF-4	-	-	-	1007	289	-
1952-321	2434245.50	1952 Aug 20	R-1	8A11	8A11	-	-	-	-	GRSF-4	-	-	-	1007	289	-
1952-321	2434245.50	1952 Aug 20	R-2	US	TP3	8A11	-	-	-	WS	LC33	-	-	79	-	-
1952-315	2434249.50	1952 Aug 22 0733	V-2	US	TP3	82A38 KI-5	-	-	-	WS	LC33	-	-	1007	554	-
1952-316	2434249.50	1952 Aug 25	R-2	-	KT-5	82A38 KI-5	-	-	-	GRSF-4	-	-	-	1007	289	-
1952-322	2434249.50	1952 Aug 25	R-2	-	KT-6	82A38 KI-6	-	-	-	GRSF-4	-	-	-	1007	289	-
1952-317	2434250.50	1952 Aug 26	R-2	-	KT-7	82A38 KI-7	-	-	-	GRSF-4	-	-	-	1507	267	-
1952-318	2434251.50	1952 Aug 27	R-2	-	KT-8	82A38 KI-8	-	-	-	GRSF-4	-	-	-	1507	267	-
1952-324	2434250.50	1952 Aug 28	R-2	-	KT-9	82A38 KI-9	-	-	-	GRSF-4	-	-	-	1507	276	-
1952-324	2434251.50	1952 Sep 2	R-2	-	KT-8	82A38 KI-8	-	-	-	GRSF-4	-	-	-	1507	368	-
1952-325	2434270.50	1952 Sep 15	R-2	-	KT-10	82A38 KI-10	-	-	-	GRSF-4	-	-	-	1507	554	-
1952-326	2434271.50	1952 Sep 16	R-2	-	KT-11	82A38 KI-11	-	-	-	GRSF-4	-	-	-	1507	554	-
1952-327	2434271.50	1952 Sep 16	R-2	-	KT-12	82A38 KI-12	-	-	-	GRSF-4	-	-	-	1507	549	-
1952-328	2434272.50	1952 Sep 17	R-2	-	KT-13	82A38 KI-13	-	-	-	GRSF-4	-	-	-	1507	550	-
1952-330	2434273.50	1952 Sep 18	R-2	-	KT-14	82A38 KI-14	-	-	-	GRSF-4	-	-	-	1507	552	-
1952-1161	2434275.16	1952 Sep 19 1549	V-2	US	TF5	82A38 KI-14	-	-	-	WS	LC33	-	-	7	-	-
1952-342	2434300.50	1952 Oct 15	R-2R	-	RUD 1	-	-	-	-	GRSF-4	-	-	-	1507	578	-
1952-343	2434303.50	1952 Oct 18	R-2R	-	RUD 2	-	-	-	-	GRSF-4	-	-	-	1507	553	-
1952-344	2434304.50	1952 Oct 19	R-2R	-	RUD 3	-	-	-	-	GRSF-4	-	-	-	1507	483	-
1952-345	2434309.50	1952 Oct 23	R-2R	-	RUD 4	-	-	-	-	GRSF-4	-	-	-	1507	531	-
1952-346	2434312.50	1952 Oct 27	R-2R	-	RUD 5	-	-	-	-	GRSF-4	-	-	-	1507	552	-
1952-336	2434314.50	1952 Oct 29	R-1	8A11	8A11	-	-	-	-	GRSF-4	-	-	-	1007	269	-
1952-337	2434315.50	1952 Oct 30	R-1	8A11	8A11	-	-	-	-	GRSF-4	-	-	-	1007	268	-
1952-337	2434315.50	1952 Oct 30	R-1	8A11	8A11	-	-	-	-	GRSF-4	-	-	-	1007	268	-
1952-338	2434337.50	1952 Nov 21	R-1	8A11	8A11	-	-	-	-	GRSF-4	-	-	-	1007	268	-
1952-305	2434437.50	1953 Mar 1	R-1	8A11	8A11	-	-	-	-	GRSF-4	-	-	-	1007	271	-
1952-306	2434441.50	1953 Mar 5	R-1	8A11	8A11	-	-	-	-	GRSF-4	-	-	-	1007	267	-
1952-307	2434455.50	1953 Mar 19	R-1	8A11	8A11	-	-	-	-	GRSF-4	-	-	-	1007	263	-
1952-317	2434509.50	1953 May 11	R-1	8A11	8A11	-	-	-	-	GRSF-4	-	-	-	1007	269	-
1952-324	2434564.50	1953 Jul 6	R-1	8A11	8A11	-	-	-	-	GRSF-4	-	-	-	1007	268	-
1952-342	2434618.50	1953 Aug 29	R-2	530-80-118	82A38 SP-1	NTI-88 Production	-	-	-	GRSF-4	-	-	-	1007	689	-
1952-343	2434666.50	1953 Oct 16	R-1	8A11	8A11	-	-	-	-	GRSF-4	-	-	-	1007	-	-
1952-343	2434667.50	1953 Oct 17	R-1	8A11	8A11	-	-	-	-	GRSF-4	-	-	-	1007	-	-
1952-344	2434669.50	1953 Oct 19	R-1	8A11	8A11	-	-	-	-	GRSF-4	-	-	-	1007	-	-
1952-345	2434670.50	1953 Oct 20	R-1	8A11	8A11	-	-	-	-	GRSF-4	-	-	-	1007	-	-
1952-370	2434674.50	1953 Oct 24	R-2	530-90-220	8A11	NTI-88 Production	-	-	-	GRSF-4	-	-	-	1007	-	-
1952-346	2434676.50	1953 Oct 26	R-1	8A11	8A11	-	-	-	-	GRSF-4	-	-	-	1007	-	-
1952-347	2434677.50	1953 Oct 27	R-1	8A11	8A11	-	-	-	-	GRSF-4	-	-	-	1007	-	-
1952-348	2434678.50	1953 Oct 28	R-1	8A11	8A11	-	-	-	-	GRSF-4	-	-	-	1007	-	-
1952-349	2434678.50	1953 Oct 28	R-1	8A11	8A11	-	-	-	-	GRSF-4	-	-	-	1007	-	-
1952-361	2434693.50	1953 Nov 12	R-1	8A11	8A11	-	-	-	-	GRSF-4	-	-	-	1007	-	-
1952-363	2434696.50	1953 Nov 15	R-1	8A11	8A11	-	-	-	-	GRSF-4	-	-	-	1007	-	-
1952-365	2434705.50	1953 Nov 24	R-1	8A11	8A11	-	-	-	-	GRSF-4	-	-	-	1007	-	-
1952-336	2434720.50	1953 Dec 9	R-2	530-50-101	8A11	NTI-88 Production	-	-	-	GRSF-4	-	-	-	1007	-	-
1952-337	2434730.50	1953 Dec 21	R-2	531-10-320	8A11	NTI-88 Production	-	-	-	GRSF-4	-	-	-	1007	-	-
1954-315	2434801.50	1954 Feb 28	R-2	531-20-420	8A11	NTI-88 Production	-	-	-	GRSF-4	-	-	-	1507	-	-

Launch Mission

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Launch_Site	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee_Km	Range_Km	Dest
1954-516	2454811.50	1954 Mar 10	R-2		531-20-520	MI-88 Production	GRSF-4						1507		
1954-504	2454812.50	1954 Mar 11	R-1 8A11		No 1820		GRSF-4						1007		
1954-505	2454817.50	1954 Mar 16	R-1 8A11		No 1916		GRSF-4						1007		
1954-506	2454817.50	1954 Mar 16	R-1 8A11		No 1920		GRSF-4						1007		
1954-507	2454821.50	1954 Mar 20	R-1 8A11		No 1918		GRSF-4						1007		
1954-510	2454855.50	1954 Apr 23	R-1 8A11		No 1920		GRSF-4						1007		
1954-511	2454855.50	1954 Apr 23	R-1 8A11		No 1910		GRSF-4						1007		
1954-512	2454858.50	1954 Apr 26	R-1 8A11		No 1912		GRSF-4						1007		
1954-513	2454861.50	1954 Apr 29	R-1 8A11		No 2120		GRSF-4						1007		
1954-524	2454865.50	1954 May 3	R-1 8A11		No 1620		GRSF-4						1007		
1954-525	2454865.50	1954 May 4	R-1 8A11		No 1420		GRSF-4						1007		
1954-526	2454865.50	1954 May 4	R-1 8A11		No 2020		GRSF-4						1007		
1954-527	2454869.50	1954 May 7	R-1 8A11		No 220		GRSF-4						1007		
1954-521	2454874.50	1954 May 12	R-2		Prod. missile	MI-88 Production	GRSF-4						1507		
1954-522	2454876.50	1954 May 14	R-2		Prod. missile	MI-88 Production	GRSF-4						1507		
1954-523	2454877.50	1954 May 15	R-2		Prod. missile	MI-88 Production	GRSF-4						1507		
1954-520	2454879.50	1954 May 17	R-2		Prod. missile	MI-88 Production	GRSF-4						1507		
1954-531	2454883.50	1954 May 21	R-1 8A11		No 120	[Same as R-27]	GRSF-4						1007		
1954-533	2454889.10	1954 May 28 1424	A-1		Geophysical rocket		GRSF-4						106		
1954-534	2454888.50	1954 May 26	R-2		Prod. missile	MI-88 Prod GIM-2	GRSF-4						1507		
1954-517	2454888.50	1954 May 26	R-2		Prod. missile	MI-88 Prod GIM-2	GRSF-4						1507		
1954-518	2454893.50	1954 May 31	R-2		Prod. missile	ZM6586 Prod GIM-2	GRSF-4						1507		
1954-519	2454893.50	1954 Jun 2	R-2		Prod. missile	ZM6586 Prod GIM-2	GRSF-4						1507		
1954-586	2454901.50	1954 Jun 8	R-2		Prod. missile	ZM6586 Prod GIM-2	GRSF-4						1507		
1954-587	2454902.50	1954 Jun 9	R-2		Prod. missile	ZM6586 Prod GIM-2	GRSF-4						1507		
1954-536	2454904.50	1954 Jun 11	R-1 8A11		No 12-1965		GRSF-4						1007		
1954-537	2454905.50	1954 Jun 12	R-1 8A11		No 720-1952		GRSF-4						1007		
1954-538	2454907.50	1954 Jun 14	R-1 8A11		No 14-1961		GRSF-4						1007		
1954-540	2454920.06	1954 Jun 26 1324	R-ID		1	IRD	GRSF-4						1007		
1954-541	2454925.50	1954 Jul 2	R-ID		2	IRD	GRSF-4						1007		
1954-542	2454930.50	1954 Jul 2	R-ID		3	IRD	GRSF-4						1007		
1954-586	2454945.50	1954 Jul 22	R-2		306-6	UGCh	GRSF-4						1507		
1954-587	2454946.50	1954 Aug 2	R-1 8A11		No 320		GRSF-4						1007		
1954-581	2454981.50	1954 Aug 27	R-1 8A11		No 520		GRSF-4						1007		
1954-586	2454981.50	1954 Aug 27	R-1 8A11		No 420		GRSF-4						1007		
1954-589	2455015.50	1954 Sep 30	R-2		K1-20		GRSF-4						1507		
1954-510	2455016.50	1954 Oct 1	R-2		K1-20		GRSF-4						1507		
1954-510	2455020.50	1954 Oct 1	R-2		K2-20		GRSF-4						1507		
1954-510	2455031.50	1954 Oct 16	R-2		K2-10		GRSF-4						1707		
1954-510	2455045.50	1954 Oct 30	R-2		K3-10	UDP	GRSF-4						1707		
1954-584	2455079.50	1954 Nov 17	R-2		D21-14		GRSF-4						1007		
1954-585	2455079.50	1954 Nov 30	R-2		No 1915 (1953)	Genera cor-2	GRSF-4						1007		
1954-586	2455077.50	1954 Dec 1	R-2		No 620	Genera cor-2	GRSF-4						1007		
1954-586	2455082.50	1954 Dec 1	R-2		No 620	Genera cor-2	GRSF-4						1007		
1954-510	2455085.50	1954 Dec 6	R-2		K3-20		GRSF-4						1707		
1954-589	2455089.50	1954 Dec 23	R-2			Genera cor-2	GRSF-4						1707		
1954-510	2455099.50	1954 Dec 25	R-2			Genera cor-2	GRSF-4						307		
1954-510	2455111.50	1955 Jan 15	R-2		409	Genera cor-2	GRSF-4						1707		
1954-511	2455120.50	1955 Jan 15	R-2		408	Genera cor-2	GRSF-4						1707		
1954-511	2455120.50	1955 Jan 25	R-2		403	Genera cor-2	GRSF-4						1707		
1954-512	2455120.50	1955 Jan 25	R-2		403	Genera cor-2	GRSF-4						1007		
1954-509	2455126.50	1955 Jan 28	R-1E		No 720	IRE	GRSF-4						1007		
1954-509	2455126.50	1955 Jan 28	R-1 8A11		No 920		GRSF-4						1007		
1954-512	2455141.50	1955 Jan 31	R-2		402	Genera cor-2	GRSF-4						1007		
1954-513	2455141.50	1955 Feb 3	R-1E		No 820	IRE	GRSF-4						1007		
1954-513	2455143.50	1955 Feb 5	R-1E		2		GRSF-4						1007		
1954-517	2455145.50	1955 Feb 7	R-2		No 1020		GRSF-4						1007		
1954-512	2455146.50	1955 Feb 8	R-2		K5-20		GRSF-4						1007		
1954-512	2455146.50	1955 Feb 8	R-2		K4-20		GRSF-4						1707		
1954-513	2455163.50	1955 Feb 25	R-2		K7-20		GRSF-4						1707		
1954-513	2455166.50	1955 Feb 28	R-2		K8-20		GRSF-4						1707		
1954-513	2455167.50	1955 Mar 1	R-2		K6-20		GRSF-4						1707		
1954-513	2455168.50	1955 Mar 2	R-2		K3-5D		GRSF-4						157		
1954-513	2455187.50	1955 Mar 21	R-2		K0-10	UGCh	GRSF-4						1707		
1954-513	2455201.50	1955 Apr 4	R-2		K0-11	UGCh	GRSF-4						1707		
1954-528	2455205.50	1955 Apr 8	R-1 8A11		No 410		GRSF-4						1007		
1954-528	2455205.50	1955 Apr 9	R-1 8A11		No 1811		GRSF-4						1007		
1954-529	2455209.50	1955 Apr 12	R-1 8A11		No 405		GRSF-4						1007		
1954-530	2455212.50	1955 Apr 15	R-1 8A11		No 215		GRSF-4						1007		
1954-513	2455247.50	1955 May 18	R-2		S1-20 TAD		GRSF-4						1707		
1954-513	2455247.50	1955 May 20	R-2		S2-20 TAD		GRSF-4						1707		
1954-514	2455255.50	1955 May 28	R-2		K8-12		GRSF-4						1707		
1954-514	2455259.50	1955 May 31	R-2		K6-9		GRSF-4						1707		
1954-545	2455276.50	1955 Jun 1	R-2		K6-9		GRSF-4						1707		
1954-545	2455276.50	1955 Jun 18	R-1 8A11		No 318		GRSF-4						1007		
1954-513	2455278.50	1955 Jun 20	R-2		S3-20		GRSF-4						1707		
1954-548	2455282.50	1955 Jun 24	R-1 8A11		No 305		GRSF-4						1007		
1954-514	2455286.50	1955 Jun 28	R-2		S6-20		GRSF-4						1707		
1954-514	2455303.50	1955 Jul 15	R-2		S0-1		GRSF-4						1707		
1954-564	2455308.50	1955 Jul 20	R-2		S0-3		GRSF-4						1007		
1954-567	2455313.50	1955 Jul 25	R-1 8A11		No 104		GRSF-4						1007		
1954-568	2455314.50	1955 Jul 26	R-1 8A11		No 119		GRSF-4						157		
1954-669	2455314.50	1955 Jul 26	R-2		S0-4		GRSF-4						1007		
1954-569	2455317.50	1955 Jul 29	R-1 8A11		No 0427	UGCh	GRSF-4						157		
1954-563	2455320.50	1955 Aug 1	R-1 8A11		No 0430		GRSF-4						1007		

Launch Mission

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Launch_Mission	FlightCode	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee_Km	Range_Km	Dest
1955-5146	2435322.50	1955 Aug 3	R-2	-	S7-20	-	-	-	-	GRSP-4	-	-	-	1707	-	-
1955-582	2435324.50	1955 Aug 5	R-2	-	S0-2	UGCh	Genera cor-2	-	-	GRSP-4	-	-	-	1707	-	-
1955-5147	2435325.50	1955 Aug 6	R-2	-	406	UGCh	-	-	-	GRSP-4	-	-	-	1707	-	-
1955-5148	2435327.50	1955 Aug 8	R-2	-	S0-5	-	-	-	-	GRSP-4	-	-	-	1707	-	-
1955-585	2435343.50	1955 Aug 24	R-1 8A11	-	No 302	-	-	-	-	GRSP-4	-	-	-	1007	-	-
1955-5149	2435343.50	1955 Aug 24	R-2	-	S0-8	UGCh	-	-	-	GRSP-4	-	-	-	1007	-	-
1955-586	2435344.50	1955 Aug 25	R-1 8A11	-	No 0315	-	-	-	-	GRSP-4	-	-	-	1707	-	-
1955-5150	2435346.50	1955 Aug 27	R-2	-	S8-7	UGCh	-	-	-	GRSP-4	-	-	-	1707	-	-
1955-5151	2435349.50	1955 Aug 30	R-2	-	S9-20	-	-	-	-	GRSP-4	-	-	-	1707	-	-
1955-5152	2435350.50	1955 Aug 31	R-2	-	S11-20	-	-	-	-	GRSP-4	-	-	-	1707	-	-
1955-5154	2435381.50	1955 Oct 1	R-2	-	No KI-17	-	-	-	-	GRSP-4	-	-	-	1007	-	-
1955-589	2435385.50	1955 Oct 5	R-1 8A11	-	S10-20	-	-	-	-	GRSP-4	-	-	-	1007	-	-
1955-591	2435386.50	1955 Oct 8	R-1 8A11	-	No KI-19	-	-	-	-	GRSP-4	-	-	-	1007	-	-
1955-5155	2435411.50	1955 Oct 31	R-2	-	S12-20	-	-	-	-	GRSP-4	-	-	-	1707	-	-
1955-5156	2435430.50	1955 Nov 19	R-2	-	S13-20	-	-	-	-	GRSP-4	-	-	-	1707	-	-
1955-5157	2435434.50	1955 Nov 23	R-2	-	S14-20	-	-	-	-	GRSP-4	-	-	-	1707	-	-
1955-5158	2435434.50	1955 Nov 23	R-2	-	415	-	Genera cor-2	-	-	GRSP-4	-	-	-	1707	-	-
1955-5159	2435457.50	1955 Dec 16	R-2	-	S15-20	-	-	-	-	GRSP-4	-	-	-	1707	-	-
1955-5160	2435458.50	1955 Dec 17	R-2	-	S16-20	-	-	-	-	GRSP-4	-	-	-	1707	-	-
1955-5161	2435465.50	1955 Dec 24	R-2	-	S18-10	-	-	-	-	GRSP-4	-	-	-	1707	-	-
1955-5162	2435465.50	1955 Dec 27	R-2	-	S17-20	-	-	-	-	GRSP-4	-	-	-	1707	-	-
1955-5163	2435469.50	1955 Dec 28	R-2	-	S19-20	-	-	-	-	GRSP-4	-	-	-	1707	-	-
1955-5164	2435471.50	1955 Dec 30	R-2	-	S19-19	-	-	-	-	GRSP-4	-	-	-	1707	-	-
1955-5100	2435415.50	1955 Nov 4	R-1E	-	3	-	-	-	-	GRSP-4	-	-	-	1007	-	-
1956-505	2435493.50	1955 Nov 21	R-1 8A11	-	No 101	-	-	-	-	GRSP-4	-	-	-	1007	-	-
1956-5114	2435496.50	1955 Jan 24	R-1 8A11	-	No 465	-	-	-	-	GRSP-4	-	-	-	1007	-	-
1956-511	2435516.50	1955 Feb 13	R-1 8A11	-	No 431	-	-	-	-	GRSP-4	-	-	-	1007	-	-
1956-512	2435517.50	1955 Feb 14	R-1 8A11	-	No 453	-	-	-	-	GRSP-4	-	-	-	1007	-	-
1956-5118	2435520.50	1955 Feb 17	R-2	-	KI-20	-	-	-	-	GRSP-4	-	-	-	1707	-	-
1956-521	2435541.50	1955 Mar 9	R-2	-	AL-20	-	-	-	-	GRSP-4	-	-	-	1707	-	-
1956-522	2435560.50	1955 Mar 28	R-1 8A11	-	No 0316	-	-	-	-	GRSP-4	-	-	-	1707	-	-
1956-5123	2435573.50	1955 Apr 16	R-1 8A11	-	No 0317	-	-	-	-	GRSP-4	-	-	-	1007	-	-
1956-5124	2435601.50	1955 May 8	R-2	-	A3-20	-	-	-	-	GRSP-4	-	-	-	1007	-	-
1956-5125	2435601.50	1955 May 8	R-10UK	-	0106	Project T-3	-	-	-	GRSP-4	-	-	-	1707	-	-
1956-5126	2435603.50	1955 May 10	R-10UK	-	41-1	Project T-3	-	-	-	GRSP-4	-	-	-	1007	-	-
1956-5127	2435603.50	1955 May 10	R-10UK	-	31-1	Project T-3	-	-	-	GRSP-4	-	-	-	1007	-	-
1956-535	2435624.62	1955 May 31 0257	R-1E	-	5	Project T-3	-	-	-	GRSP-4	-	-	-	1007	-	-
1956-5328	2435630.50	1955 Jun 9	R-10UK	-	51-2	Project T-3	-	-	-	GRSP-4	-	-	-	1007	-	-
1956-535	2435631.50	1955 Jun 9	R-1E (A-1)	-	51-1	Project T-3	-	-	-	GRSP-4	-	-	-	1007	-	-
1956-5129	2435632.50	1955 Jun 6	R-10UK	-	71-2	Project T-3	-	-	-	GRSP-4	-	-	-	1007	-	-
1956-5130	2435636.50	1955 Jun 12	R-10UK	-	71-1	Project T-3	-	-	-	GRSP-4	-	-	-	1007	-	-
1956-531	2435636.50	1955 Jun 12	R-10UK	-	61-2	Project T-3	-	-	-	GRSP-4	-	-	-	1007	-	-
1956-532	2435638.50	1955 Jun 14	R-1E	-	81-2	Project T-3	-	-	-	GRSP-4	-	-	-	1007	-	-
1956-5132	2435643.50	1955 Jun 18	R-10UK	-	81-1	Project T-3	-	-	-	GRSP-4	-	-	-	1007	-	-
1956-5133	2435644.50	1955 Jun 20	R-10UK	-	01-3	Project T-3	-	-	-	GRSP-4	-	-	-	1007	-	-
1956-5134	2435645.50	1955 Jun 21	R-10UK	-	01-3	Project T-3	-	-	-	GRSP-4	-	-	-	1007	-	-
1956-540	2435654.50	1955 Jun 21	R-1 8A11	-	No 5112	-	-	-	-	GRSP-4	-	-	-	1707	-	-
1956-5135	2435666.50	1955 Jun 12	R-2	-	207	-	-	-	-	GRSP-4	-	-	-	453	-	-
1956-5142	2435674.50	1955 Jun 20	R-1 8A11	-	No 5301	-	-	-	-	GRSP-4	-	-	-	1007	-	-
1956-562	2435674.50	1955 Jun 24	R-1 8A11	-	No 0405	-	-	-	-	GRSP-4	-	-	-	1007	-	-
1956-564	2435680.50	1955 Jun 26	R-1 8A11	-	No 0309	-	-	-	-	GRSP-4	-	-	-	1007	-	-
1956-567	2435682.50	1955 Jun 28	R-1 8A11	-	No 0307	-	-	-	-	GRSP-4	-	-	-	1007	-	-
1956-5136	2435682.50	1955 Jun 28	R-2	-	A3-5	-	-	-	-	GRSP-4	-	-	-	1707	-	-
1956-5137	2435682.50	1955 Jun 28	R-2	-	S19-18	-	-	-	-	GRSP-4	-	-	-	1707	-	-
1956-5143	2435745.50	1955 Jun 28	R-2	-	M4-20	-	-	-	-	GRSP-4	-	-	-	1007	-	-
1956-5144	2435770.50	1955 Jun 29	R-1 8A11	-	No 102	-	-	-	-	GRSP-4	-	-	-	1007	-	-
1956-5145	2435771.50	1955 Oct 24	R-1 8A11	-	No 103	-	-	-	-	GRSP-4	-	-	-	1007	-	-
1956-5146	2435771.50	1955 Oct 25	R-2	-	0310	-	-	-	-	GRSP-4	-	-	-	1707	-	-
1956-5147	2435771.50	1955 Oct 25	R-2	-	A3-10	-	-	-	-	GRSP-4	-	-	-	1707	-	-
1956-5148	2435771.50	1955 Oct 26	R-2	-	No 104	-	-	-	-	GRSP-4	-	-	-	1707	-	-
1956-5149	2435780.50	1955 Nov 3	R-2	-	A5-20	-	-	-	-	GRSP-4	-	-	-	1707	-	-
1956-5150	2435789.50	1955 Nov 12	R-1 8A11	-	No 303	-	-	-	-	GRSP-4	-	-	-	1007	-	-
1956-5156	2435843.50	1955 Dec 6	R-1 8A11	-	No 1037	-	-	-	-	GRSP-4	-	-	-	1007	-	-
1956-5111	2435827.50	1955 Dec 20	R-1 8A11	-	-	-	-	-	-	GRSP-4	-	-	-	1007	-	-
1957-5184	2435851.50	1957 Jan 13	R-1 8A11	-	No 0406	-	-	-	-	GRSP-4	-	-	-	1007	-	-
1957-5185	2435852.50	1957 Jan 14	R-1 8A11	-	No 0408	-	-	-	-	GRSP-4	-	-	-	1007	-	-
1957-5191	2435868.50	1957 Feb 19	R-1 8A11	-	No 0920	-	-	-	-	GRSP-4	-	-	-	1007	-	-
1957-5194	2435897.50	1957 Feb 28	R-2	-	M1-25	-	-	-	-	GRSP-4	-	-	-	1707	-	-
1957-525	2435940.50	1957 Apr 12	R-2	-	-	-	-	-	-	GRSP-4	-	-	-	1007	-	-
1957-527	2435942.50	1957 Apr 14	R-2	-	-	-	-	-	-	GRSP-4	-	-	-	1007	-	-
1957-534	2435974.64	1957 May 16 0318	R-2A	-	No. 1	-	-	-	-	GRSP-4	-	-	-	200	-	-
1957-536	2435982.50	1957 May 24	R-2A	-	No. 2	-	-	-	-	GRSP-4	-	-	-	200	-	-
1957-5200	2435987.50	1957 May 29	R-2	-	M2-25	-	-	-	-	GRSP-4	-	-	-	1707	-	-
1957-5201	2435990.50	1957 Jun 1	R-1 8A11	-	0418	-	-	-	-	GRSP-4	-	-	-	1007	-	-
1957-5202	2435990.50	1957 Jun 1	R-1 8A11	-	0419	-	-	-	-	GRSP-4	-	-	-	1007	-	-
1957-5203	2435994.50	1957 Jun 5	R-2	-	0405	-	-	-	-	GRSP-4	-	-	-	1007	-	-
1957-5204	2435996.50	1957 Jun 7	R-2	-	0406	-	-	-	-	GRSP-4	-	-	-	1007	-	-
1957-538	2435996.50	1957 Jun 7	R-2	-	-	-	-	-	-	GRSP-4	-	-	-	1007	-	-
1957-539	2435999.50	1957 Jun 10	R-2	-	-	-	-	-	-	GRSP-4	-	-	-	1007	-	-
1957-542	2436011.50	1957 Jun 22	R-2	-	-	-	-	-	-	GRSP-4	-	-	-	1007	-	-
1957-543	2436012.50	1957 Jun 23	R-2	-	-	-	-	-	-	GRSP-4	-	-	-	1007	-	-
1957-547	2436017.50	1957 Jun 28	R-2	-	-	-	-	-	-	GRSP-4	-	-	-	1007	-	-
1957-548	2436018.50	1957 Jun 29	R-2	-	-	-	-	-	-	GRSP-4	-	-	-	1007	-	-
1957-554	2436023.50	1957 Jul 4	R-2	-	-	-	-	-	-	GRSP-4	-	-	-	1007	-	-

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Launch Mission

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Launch_Mission	FlightCode	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee_Km	Range_Km	Dest
1957-586	2436024.50	1957 Jul 5	R-2	-	-	MIP-A target	-	-	-	GRS-4	SP-2	-	-	100?	-	-
1957-5208	2436026.50	1957 Jul 7	R-2	-	0417RD	-	-	-	-	GRS-4	SP-2	-	-	170?	-	-
1957-5209	2436027.50	1957 Jul 8	R-1	-	52080416	-	-	-	-	GRS-4	-	-	-	100?	-	-
1957-5210	2436028.50	1957 Jul 9	R-2	-	K2-5	-	-	-	-	GRS-4	-	-	-	170?	-	-
1957-5211	2436028.50	1957 Jul 9	R-1	-	0415	-	-	-	-	GRS-4	-	-	-	100?	-	-
1957-5212	2436028.50	1957 Jul 9	R-1	-	0414	-	-	-	-	GRS-4	-	-	-	40?	-	-
1957-5160	2436029.50	1957 Jul 10	R-2	-	0409	-	-	-	-	GRS-4	-	-	-	170?	-	-
1957-5213	2436029.50	1957 Jul 10	R-1	-	52084413	-	-	-	-	GRS-4	-	-	-	40?	-	-
1957-5161	2436037.50	1957 Jul 13	R-2	-	0407	-	-	-	-	GRS-4	-	-	-	170?	-	-
1957-5214	2436037.50	1957 Jul 13	R-1	-	0408	-	-	-	-	GRS-4	-	-	-	170?	-	-
1957-5215	2436038.50	1957 Jul 19	R-2	-	0419	-	-	-	-	GRS-4	-	-	-	170?	-	-
1957-5216	2436041.50	1957 Jul 22	R-2	-	53010116	-	-	-	-	GRS-4	-	-	-	40?	-	-
1957-5219	2436043.50	1957 Jul 24	R-1	-	0319RD	-	-	-	-	GRS-4	-	-	-	170?	-	-
1957-5220	2436043.50	1957 Jul 24	R-2	-	0217RD	-	-	-	-	GRS-4	-	-	-	170?	-	-
1957-5221	2436046.50	1957 Jul 29	R-2	-	0216	-	-	-	-	GRS-4	-	-	-	170?	-	-
1957-5222	2436056.50	1957 Aug 5	R-2	-	0216	-	-	-	-	GRS-4	-	-	-	170?	-	-
1957-5223	2436057.50	1957 Aug 6	R-2	-	K3-12	-	-	-	-	GRS-4	-	-	-	170?	-	-
1957-5224	2436058.50	1957 Aug 7	R-2	-	K3-9	-	-	-	-	GRS-4	-	-	-	170?	-	-
1957-584	2436058.50	1957 Aug 8	R-2A	-	-	SOI	-	-	-	GRS-4	-	-	-	100?	-	-
1957-5225	2436070.50	1957 Aug 13	R-2	-	K3-14	-	-	-	-	GRS-4	-	-	-	170?	-	-
1957-5226	2436070.50	1957 Aug 20	R-2	-	K3-4	-	-	-	-	GRS-4	-	-	-	170?	-	-
1957-5227	2436072.50	1957 Aug 22	R-2	-	K3-13	-	-	-	-	GRS-4	-	-	-	170?	-	-
1957-5228	2436073.50	1957 Aug 23	R-2	-	Mo. 3	-	-	-	-	GRS-4	-	-	-	206	-	-
1957-584	2436075.50	1957 Aug 25 0223	R-2A	-	-	-	-	-	-	GRS-4	-	-	-	170?	-	-
1957-5229	2436077.50	1957 Aug 27	R-2	-	K3-7	-	-	-	-	GRS-4	-	-	-	170?	-	-
1957-5230	2436077.50	1957 Aug 27	R-2	-	K3-2	-	-	-	-	GRS-4	-	-	-	170?	-	-
1957-5103	2436081.73	1957 Aug 31 0530	R-2A	-	K3-1	-	-	-	-	GRS-4	-	-	-	485	-	-
1957-5108	2436091.16	1957 Sep 9 1650	R-2A	-	Mo. 4	-	-	-	-	GRS-4	-	-	-	170?	-	-
1957-5244	2436102.50	1957 Sep 21	R-2	-	Mo. 5	-	-	-	-	GRS-4	-	-	-	21.2	-	-
1957-5245	2436102.50	1957 Sep 21	R-2	-	0410	-	-	-	-	URDA	-	-	-	170?	-	-
1957-5246	2436102.50	1957 Sep 21	R-2	-	0412	-	-	-	-	URDA	-	-	-	170?	-	-
1957-5247	2436103.50	1957 Sep 22	R-2	-	0411	-	-	-	-	URDA	-	-	-	170?	-	-
1957-5248	2436104.50	1957 Sep 23	R-2	-	K3-15	-	-	-	-	URDA	-	-	-	170?	-	-
1957-5249	2436110.50	1957 Sep 29	R-2	-	0414	-	-	-	-	URDA	-	-	-	170?	-	-
1957-5249	2436111.50	1957 Sep 30	R-2	-	0413	-	-	-	-	URDA	-	-	-	170?	-	-
1957-5250	2436112.50	1957 Oct 1	R-2	-	K2-11	-	-	-	-	URDA	-	-	-	170?	-	-
1957-5251	2436113.50	1957 Oct 2	R-2	-	K3-1	-	-	-	-	URDA	-	-	-	170?	-	-
1957-5252	2436117.50	1957 Oct 6	R-1	-	K3-1088419	-	-	-	-	GRS-4	-	-	-	100?	-	-
1957-5253	2436117.50	1957 Oct 6	R-2	-	510808423	-	-	-	-	GRS-4	-	-	-	100?	-	-
1957-5254	2436123.50	1957 Oct 12	R-2	-	52120311	-	-	-	-	GRS-4	-	-	-	170?	-	-
1957-5255	2436124.50	1957 Oct 13	R-1	-	510808422	-	-	-	-	GRS-4	-	-	-	100?	-	-
1957-5256	2436124.50	1957 Oct 13	R-2	-	52120313	-	-	-	-	GRS-4	-	-	-	170?	-	-
1957-5256	2436124.50	1957 Oct 13	R-2	-	K3-6	-	-	-	-	GRS-4	-	-	-	170?	-	-
1957-5259	2436126.50	1957 Oct 14	R-1	-	510808429	-	-	-	-	GRS-4	-	-	-	100?	-	-
1957-5260	2436136.50	1957 Oct 24	R-1	-	53010818	-	-	-	-	GRS-4	-	-	-	100?	-	-
1957-5261	2436136.50	1957 Oct 24	R-1	-	53010818	-	-	-	-	GRS-4	-	-	-	100?	-	-
1957-5262	2436136.50	1957 Oct 24	R-1	-	53081315	-	-	-	-	GRS-4	-	-	-	100?	-	-
1957-5264	2436137.50	1957 Oct 26	R-2	-	53050110	-	-	-	-	GRS-4	-	-	-	170?	-	-
1957-5265	2436138.50	1957 Oct 26	R-2	-	50120369	-	-	-	-	GRS-4	-	-	-	170?	-	-
1957-5266	2436146.50	1957 Nov 9	R-2	-	52120308	-	-	-	-	GRS-4	-	-	-	170?	-	-
1957-5167	2436150.20	1957 Nov 9 1664	A-1	-	-	-	-	-	-	GRS-4	-	-	-	330	-	-
1958-5304	2436213.50	1959 Jan 10	R-1	-	53030610	-	-	-	-	GRS-4	-	-	-	100?	-	-
1958-5305	2436214.50	1959 Jan 10	R-1	-	53071261	-	-	-	-	GRS-4	-	-	-	100?	-	-
1958-5306	2436214.50	1959 Jan 11	R-1	-	53091713	-	-	-	-	GRS-4	-	-	-	100?	-	-
1958-5307	2436220.50	1959 Jan 17	R-2	-	530120317	-	-	-	-	GRS-4	-	-	-	170?	-	-
1958-5308	2436234.50	1959 Feb 31	R-1	-	D2111	-	-	-	-	GRS-4	-	-	-	100?	-	-
1958-5309	2436245.50	1959 Feb 11	R-1	-	510808433	-	-	-	-	GRS-4	-	-	-	100?	-	-
1958-5310	2436254.50	1959 Feb 20	R-2	-	K3-18	-	-	-	-	GRS-4	-	-	-	170?	-	-
1958-5312	2436248.50	1959 Mar 26	R-2	-	K2-19	-	-	-	-	GRS-4	-	-	-	100?	-	-
1958-5314	2436248.50	1959 Mar 27	R-1	-	K3-9	-	-	-	-	GRS-4	-	-	-	100?	-	-
1958-5315	2436260.50	1959 Mar 27	R-1	-	K3-9	-	-	-	-	GRS-4	-	-	-	100?	-	-
1958-591	2436266.71	1959 Jul 2 0500	R-1	-	K1-3	-	-	-	-	GRS-4	-	-	-	210	-	-
1958-5316	2436268.50	1959 Jul 4	R-2A	-	52120418	-	-	-	-	GRS-4	-	-	-	170?	-	-
1958-5317	2436268.50	1959 Jul 4	R-2	-	52080408	-	-	-	-	GRS-4	-	-	-	170?	-	-
1958-5318	2436269.50	1959 Jul 8	R-2	-	52120416	-	-	-	-	GRS-4	-	-	-	170?	-	-
1958-5321	2436292.50	1959 Jul 8	R-2	-	52120415	-	-	-	-	GRS-4	-	-	-	170?	-	-
1958-5322	2436292.50	1959 Jul 8	R-2	-	52080407	-	-	-	-	GRS-4	-	-	-	100?	-	-
1958-5333	2436292.50	1959 Jul 8	R-1	-	52080410	-	-	-	-	GRS-4	-	-	-	100?	-	-
1958-5335	2436299.50	1959 Jul 15	R-2	-	52080411	-	-	-	-	GRS-4	-	-	-	100?	-	-
1958-5336	2436299.50	1959 Jul 15	R-2	-	52120417	-	-	-	-	GRS-4	-	-	-	100?	-	-
1958-5337	2436299.50	1959 Jul 15	R-2	-	51120504	-	-	-	-	GRS-4	-	-	-	100?	-	-
1958-5338	2436298.50	1959 Jul 24	R-1	-	51120106	-	-	-	-	GRS-4	-	-	-	100?	-	-
1958-5339	2436299.50	1959 Jul 24	R-1	-	51120107	-	-	-	-	GRS-4	-	-	-	100?	-	-
1958-4215	2436413.50	1959 Jul 25	R-2	-	51120301	-	-	-	-	GRS-4	-	-	-	100?	-	-
1958-5343	2436413.50	1959 Jul 29	R-2	-	51120303	-	-	-	-	GRS-4	-	-	-	40?	-	-
1958-5344	2436416.50	1959 Aug 1	R-2	-	53120416RD	-	-	-	-	GRS-4	-	-	-	40?	-	-
1958-5114	2436417.74	1959 Aug 1	R-2A	-	Mo. 6	-	-	-	-	GRS-4	-	-	-	100?	-	-
1958-5133	2436417.74	1959 Aug 2 0547	R-2	-	S13-11D	-	-	-	-	GRS-4	-	-	-	211	-	-
1958-5136	2436422.50	1959 Aug 7	R-2	-	S13-11D	-	-	-	-	GRS-4	-	-	-	100?	-	-
1958-5159	2436428.58	1959 Aug 13 0200	R-2A	-	Mo. 7	-	-	-	-	GRS-4	-	-	-	208	-	-
1958-5344	2436431.50	1959 Aug 16	R-1	-	52090501	-	-	-	-	GRS-4	-	-	-	100?	-	-
1958-5164	2436432.50	1959 Aug 17	R-2	-	53120418RD	-	-	-	-	GRS-4	-	-	-	100?	-	-
1958-5167	2436442.50	1959 Aug 27	R-2	-	S13-15D	-	-	-	-	GRS-4	-	-	-	100?	-	-
1958-5345	2436447.50	1959 Sep 1	R-2	-	M2-18	-	-	-	-	GRS-4	-	-	-	170?	-	-
1958-5346	2436447.50	1959 Sep 1	R-2	-	K3-3	-	-	-	-	GRS-4	-	-	-	170?	-	-

Launch Mission

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Launch_Mission	FlightCode	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee_Km	Range_Km	Dest
1958-S347	2436454.50	1958 Sep 8	R-1	-	D2115	-	-	-	-	GRSP-4	-	-	-	1007	-	-
1958-S348	2436454.50	1958 Sep 8	R-2	-	M2-3D	-	-	-	-	GRSP-4	-	-	-	1707	-	-
1958-S349	2436459.50	1958 Sep 13	R-2	-	M2-16	-	-	-	-	GRSP-4	-	-	-	1707	-	-
1958-S350	2436462.50	1958 Sep 16	R-2	-	A3-6	-	-	-	-	GRSP-4	-	-	-	1707	-	-
1958-S351	2436462.50	1958 Sep 16	R-2	-	A3-6 (DUP?)	-	-	-	-	GRSP-4	-	-	-	1707	-	-
1958-S227	2436491.50	1958 Oct 15	R-2	-	-	-	MIP-A target	-	-	SP-2	-	-	-	1007	-	-
1959-S296	2436397.50	1959 Jan 29	R-2	-	53060204	-	-	-	-	GRSP-4	-	-	-	1007	-	-
1959-S297	2436397.50	1959 May 4	R-1	-	D217	-	-	-	-	GRSP-4	-	-	-	1007	-	-
1959-S313	2436692.50	1959 May 4	R-2	-	36-2	-	-	-	-	GRSP-4	-	-	-	1707	-	-
1959-S314	2436701.50	1959 May 13	R-2	-	39-4	-	-	-	-	GRSP-4	-	-	-	1707	-	-
1959-S315	2436706.50	1959 May 18	R-2	-	36-1	-	-	-	-	GRSP-4	-	-	-	1707	-	-
1959-S316	2436709.50	1959 May 21	R-2	-	32-1	-	-	-	-	GRSP-4	-	-	-	1707	-	-
1959-S317	2436709.50	1959 May 21	R-2	-	32-1	-	-	-	-	GRSP-4	-	-	-	1707	-	-
1959-S318	2436710.50	1959 May 22	R-2	-	32-9	-	-	-	-	GRSP-4	-	-	-	1707	-	-
1959-S324	2436720.50	1959 Jun 1	R-2	-	32-7	-	-	-	-	GRSP-4	-	-	-	1707	-	-
1959-S325	2436724.50	1959 Jun 5	R-2	-	32-4	-	-	-	-	GRSP-4	-	-	-	1707	-	-
1959-S326	2436725.50	1959 Jun 6	R-2	-	36-3	-	-	-	-	GRSP-4	-	-	-	1707	-	-
1959-S327	2436730.50	1959 Jun 11	R-2	-	32-3	-	-	-	-	GRSP-4	-	-	-	1707	-	-
1959-S328	2436730.50	1959 Jun 11	R-2	-	32-3	-	-	-	-	GRSP-4	-	-	-	1707	-	-
1959-S333	2436734.50	1959 Jun 15	R-2	-	32-2	-	-	-	-	GRSP-4	-	-	-	1707	-	-
1959-S334	2436735.50	1959 Jun 16	R-2	-	32-2	-	-	-	-	GRSP-4	-	-	-	1707	-	-
1959-S339	2436739.50	1959 Jun 20	R-2	-	32-6	-	-	-	-	GRSP-4	-	-	-	1007	-	-
1959-S340	2436739.50	1959 Jun 20	R-1	-	54010808	-	-	-	-	GRSP-4	-	-	-	1007	-	-
1959-S103	2436751.78	1959 Jul 2 0640	R-2A	-	Mo. 9	-	-	-	-	GRSP-4	-	-	-	220	-	-
1959-S335	2436752.50	1959 Jul 3	R-2	-	35-1	-	-	-	-	GRSP-4	-	-	-	1707	-	-
1959-S336	2436757.50	1959 Jul 8	R-2	-	32-12	-	-	-	-	GRSP-4	-	-	-	1707	-	-
1959-S337	2436757.50	1959 Jul 8	R-2	-	32-18	-	-	-	-	GRSP-4	-	-	-	1707	-	-
1959-S338	2436758.50	1959 Jul 9	R-2	-	32-14	-	-	-	-	GRSP-4	-	-	-	1707	-	-
1959-S107	2436759.70	1959 Jul 10 0447	R-2A	-	Mo. 10	-	-	-	-	GRSP-4	-	-	-	205	-	-
1959-S345	2436762.50	1959 Jul 13	R-2	-	32-19	-	-	-	-	GRSP-4	-	-	-	1707	-	-
1959-S346	2436762.50	1959 Jul 13	R-2	-	35-2	-	-	-	-	GRSP-4	-	-	-	1707	-	-
1959-S347	2436763.50	1959 Jul 14	R-2	-	32-17	-	-	-	-	GRSP-4	-	-	-	1707	-	-
1959-S348	2436763.50	1959 Jul 14	R-2	-	35-4	-	-	-	-	GRSP-4	-	-	-	1707	-	-
1959-S108	2436763.65	1959 Jul 14 0340	R-2A	-	Mo. 10	-	-	-	-	GRSP-4	-	-	-	205	-	-
1959-S349	2436765.50	1959 Jul 16	R-2	-	32-13	-	-	-	-	GRSP-4	-	-	-	1707	-	-
1959-S350	2436765.50	1959 Jul 16	R-2	-	32-16	-	-	-	-	GRSP-4	-	-	-	1707	-	-
1959-S351	2436768.50	1959 Jul 20	R-2	-	53060119	-	-	-	-	GRSP-4	-	-	-	1707	-	-
1959-S352	2436768.50	1959 Jul 20	R-2	-	35-3	-	-	-	-	GRSP-4	-	-	-	1707	-	-
1959-S353	2436769.50	1959 Jul 20	R-2	-	35-6	-	-	-	-	GRSP-4	-	-	-	1707	-	-
1959-S120	2436771.55	1959 Jul 22 0114	R-2A	-	[dup?]	-	-	-	-	GRSP-4	-	-	-	211	-	-
1959-S354	2436781.50	1959 Aug 17	R-1	-	53061418	-	-	-	-	GRSP-4	-	-	-	1007	-	-
1959-S355	2436781.50	1959 Aug 17	R-2	-	531-10	-	-	-	-	GRSP-4	-	-	-	1007	-	-
1959-S356	2436782.50	1959 Nov 20	R-2	-	53-9	-	-	-	-	GRSP-4	-	-	-	1707	-	-
1959-S359	2436782.50	1959 Nov 20	R-2	-	53-14	-	-	-	-	GRSP-4	-	-	-	1707	-	-
1959-S390	2436786.50	1959 Nov 26	R-2	-	53-14	-	-	-	-	GRSP-4	-	-	-	1707	-	-
1959-S391	2436789.50	1959 Nov 26	R-2	-	53-12	-	-	-	-	GRSP-4	-	-	-	1707	-	-
1959-S392	2436800.50	1959 Nov 27	R-2	-	53-13	-	-	-	-	GRSP-4	-	-	-	207	-	-
1959-S393	2436805.50	1959 Nov 28	R-2	-	54-6	-	-	-	-	GRSP-4	-	-	-	1707	-	-
1959-S411	2436805.50	1959 Dec 23	R-2	-	54-7	-	-	-	-	GRSP-4	-	-	-	1707	-	-
1959-S412	2436808.50	1959 Dec 24	R-2	-	54-8	-	-	-	-	GRSP-4	-	-	-	1707	-	-
1959-S413	2436808.50	1959 Dec 24	R-2	-	54-8	-	-	-	-	GRSP-4	-	-	-	1707	-	-
1959-S414	2436800.50	1959 Dec 28	R-2	-	54-12	-	-	-	-	GRSP-4	-	-	-	1707	-	-
1959-S415	2436800.50	1959 Dec 28	R-2	-	54-9	-	-	-	-	GRSP-4	-	-	-	1707	-	-
1959-S465	2437078.50	1960 May 24	R-2	-	5306-0203	-	-	-	-	GRSP-4	-	-	-	1707	-	-
1960-S449	2437093.50	1960 Jun 8	R-1	-	5306-1414	-	-	-	-	GRSP-4	-	-	-	537	-	-
1960-S450	2437100.61	1960 Jun 15 0243	R-2A	-	Mo. 12	-	-	-	-	GRSP-4	-	-	-	240	-	-
1960-S142	2437109.46	1960 Jun 23 2300	R-2A	-	Mo. 13	-	-	-	-	GRSP-4	-	-	-	208	-	-
1960-S163	2437119.50	1960 Jul 6	R-2	-	[Dubious]	-	-	-	-	GRSP-4	-	-	-	196	-	-
1960-S168	2437131.50	1960 Jul 4	R-2	-	W2-7D	-	-	-	-	GRSP-4	-	-	-	1007	-	-
1960-S466	2437139.50	1960 Jul 6	R-2	-	W2-7D	-	-	-	-	GRSP-4	-	-	-	1007	-	-
1960-S191	2437150.50	1960 Jul 14	R-2	-	S10-1	-	-	-	-	GRSP-4	-	-	-	200	-	-
1960-S467	2437150.50	1960 Jul 15	R-2	-	5307-0214	-	-	-	-	GRSP-4	-	-	-	200	-	-
1960-S213	2437158.50	1960 Jul 23	R-2	-	W2-6D	-	-	-	-	GRSP-4	-	-	-	2007	-	-
1960-S468	2437147.50	1960 Jul 31	R-2	-	W2-4D	-	-	-	-	GRSP-4	-	-	-	2007	-	-
1960-S471	2437147.50	1960 Aug 10	R-2	-	W2-9D	-	-	-	-	GRSP-4	-	-	-	200	-	-
1960-S472	2437156.50	1960 Aug 10	R-2	-	S10-2	-	-	-	-	GRSP-4	-	-	-	200	-	-
1960-S469	2437157.50	1960 Aug 11	R-2	-	S10-3	-	-	-	-	GRSP-4	-	-	-	200	-	-
1960-S470	2437157.50	1960 Aug 11	R-2	-	A1-2	-	-	-	-	GRSP-4	-	-	-	200	-	-
1960-S473	2437177.50	1960 Aug 31	R-2	-	A1-1	-	-	-	-	GRSP-4	-	-	-	200	-	-
1960-S272	2437177.50	1960 Aug 31	R-2	-	S10-7	-	-	-	-	GRSP-4	-	-	-	200	-	-
1960-S281	2437193.50	1960 Sep 16	R-2A	-	Mo. 10	-	-	-	-	GRSP-4	-	-	-	185	-	-
1960-S282	2437200.37	1960 Sep 22 2056	R-2A	-	Mo. 11	-	-	-	-	GRSP-4	-	-	-	190	-	-
1960-S350	2437243.54	1960 Nov 5 0100	R-2	-	-	-	-	-	-	JO	-	-	-	1007	-	-
1960-S388	2437268.50	1960 Dec	DF-1	-	LA3	-	-	-	-	JO	-	-	-	1007	-	-
1960-S389	2437268.50	1960 Dec	DF-1	-	LA3	-	-	-	-	JO	-	-	-	1007	-	-
1960-S450	2437263.50	1960 Dec 14	R-1	-	-	-	-	-	-	JO	-	-	-	1007	-	-
1960-S474	2437263.50	1960 Dec 14	R-2	-	D20-19	-	-	-	-	GRSP-4	-	-	-	266	-	-
1960-S451	2437263.50	1960 Dec 15	R-1	-	5312-0507	-	-	-	-	GRSP-4	-	-	-	563	-	-
1960-S452	2437263.50	1960 Dec 15	R-1	-	5304-0918	-	-	-	-	GRSP-4	-	-	-	1007	-	-
1960-S475	2437263.50	1960 Dec 15	R-2	-	5162-0467	-	-	-	-	GRSP-4	-	-	-	1007	-	-
1960-S476	2437263.50	1960 Dec 16	R-2	-	S17-19	-	-	-	-	GRSP-4	-	-	-	1007	-	-
1960-S453	2437264.50	1960 Dec 16	R-1	-	5205-0219	-	-	-	-	GRSP-4	-	-	-	240	-	-
1960-S454	2437264.50	1960 Dec 16	R-1	-	5205-0505	-	-	-	-	GRSP-4	-	-	-	266	-	-
1960-S476	2437264.50	1960 Dec 16	R-2	-	S14-19	-	-	-	-	GRSP-4	-	-	-	1007	-	-
1960-S477	2437264.50	1960 Dec 16	R-2	-	S18-1	-	-	-	-	GRSP-4	-	-	-	2007	-	-
1960-S478	2437265.50	1960 Dec 17	R-2	-	S16-1	-	-	-	-	GRSP-4	-	-	-	2007	-	-

Launch Mission

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Launch_Mission	FlightCode	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee_Km	Range_Km	Dest
1960-5455	2437287.50	1960 Dec 19	R-1	-	5310-1903	-	-	-	-	GRSP-4	-	-	-	1007	-	-
1960-5456	2437287.50	1960 Dec 19	R-1	-	5309-1519	-	-	-	-	GRSP-4	-	-	-	1007	-	-
1960-5457	2437287.50	1960 Dec 19	R-1	-	5302-0304	-	-	-	-	GRSP-4	-	-	-	1007	-	-
1960-5458	2437287.50	1960 Dec 19	R-1	-	5303-0606	-	-	-	-	GRSP-4	-	-	-	1007	-	-
1960-5479	2437288.50	1960 Dec 20	R-2	-	S12-19	-	-	-	-	GRSP-4	-	-	-	563	-	-
1960-5480	2437288.50	1960 Dec 20	R-2	-	S10-4	-	-	-	-	GRSP-4	-	-	-	240	-	-
1960-5489	2437289.50	1960 Dec 21	R-1	-	5303-0717	-	-	-	-	GRSP-4	-	-	-	1007	-	-
1960-5491	2437292.50	1960 Dec 24	R-2	-	S9-19	-	-	-	-	GRSP-4	-	-	-	1007	-	-
1960-5460	2437294.50	1960 Dec 26	R-1	-	5307-1301	-	-	-	-	GRSP-4	-	-	-	1007	-	-
1960-5462	2437294.50	1960 Dec 26	R-2	-	5212-0901	-	-	-	-	GRSP-4	-	-	-	1007	-	-
1960-5463	2437294.50	1960 Dec 26	R-2	-	5309-0312	-	-	-	-	GRSP-4	-	-	-	1007	-	-
1960-5464	2437294.50	1960 Dec 26	R-2	-	S15-19	-	-	-	-	GRSP-4	-	-	-	1007	-	-
1960-5465	2437294.50	1960 Dec 26	R-2	-	S11-1	-	-	-	-	GRSP-4	-	-	-	1007	-	-
1960-5466	2437296.50	1960 Dec 28	R-2	-	5212-0302	-	-	-	-	GRSP-4	-	-	-	1007	-	-
1960-5467	2437296.50	1960 Dec 28	R-2	-	S8-1	-	-	-	-	GRSP-4	-	-	-	1007	-	-
1960-5468	2437296.50	1960 Dec 28	R-2	-	S1-2	-	-	-	-	GRSP-4	-	-	-	1007	-	-
1960-5469	2437297.50	1960 Dec 29	R-1	-	5303-0801	-	-	-	-	GRSP-4	-	-	-	1007	-	-
1960-5464	2437297.50	1960 Dec 29	R-1	-	5307-1204	-	-	-	-	GRSP-4	-	-	-	1007	-	-
1960-5468	2437298.50	1960 Dec 30	R-2	-	5309-1608	-	-	-	-	GRSP-4	-	-	-	1007	-	-
1960-5476	2437298.50	1960 Dec 30	R-2	-	S7-7	-	-	-	-	GRSP-4	-	-	-	1007	-	-
1961-5461	2437302.50	1961 Jan 3	R-1	-	5306-0107	-	-	-	-	GRSP-4	-	-	-	1007	-	-
1961-5462	2437302.50	1961 Jan 3	R-1	-	5309-1707	-	-	-	-	GRSP-4	-	-	-	07	-	-
1961-5463	2437302.50	1961 Jan 3	R-1	-	5303-0802	-	-	-	-	GRSP-4	-	-	-	1007	-	-
1961-5464	2437302.50	1961 Jan 3	R-1	-	5302-0601	-	-	-	-	GRSP-4	-	-	-	1007	-	-
1961-5469	2437302.50	1961 Jan 3	R-2	-	5310-1801	-	-	-	-	GRSP-4	-	-	-	1007	-	-
1961-5480	2437302.50	1961 Jan 3	R-2	-	5306-0201	-	-	-	-	GRSP-4	-	-	-	1007	-	-
1961-5485	2437304.50	1961 Jan 5	R-1	-	5311-0414	-	-	-	-	GRSP-4	-	-	-	1007	-	-
1961-5486	2437304.50	1961 Jan 5	R-1	-	5206-0303	-	-	-	-	GRSP-4	-	-	-	1007	-	-
1961-5487	2437304.50	1961 Jan 5	R-1	-	5210-0601	-	-	-	-	GRSP-4	-	-	-	1007	-	-
1961-5488	2437304.50	1961 Jan 5	R-1	-	5212-1001	-	-	-	-	GRSP-4	-	-	-	1007	-	-
1961-5491	2437305.50	1961 Jan 6	R-1	-	S8-5D	-	-	-	-	GRSP-4	-	-	-	1007	-	-
1961-5492	2437305.50	1961 Jan 6	R-2	-	S4-14	-	-	-	-	GRSP-4	-	-	-	540	-	-
1961-5493	2437305.50	1961 Jan 6	R-2	-	S8-6	-	-	-	-	GRSP-4	-	-	-	1007	-	-
1961-5494	2437305.50	1961 Jan 6	R-2	-	S8-19	-	-	-	-	GRSP-4	-	-	-	1007	-	-
1961-5495	2437305.50	1961 Jan 6	R-2	-	S8-17	-	-	-	-	GRSP-4	-	-	-	1007	-	-
1961-5496	2437305.50	1961 Jan 6	R-2	-	S8-2	-	-	-	-	GRSP-4	-	-	-	1007	-	-
1961-5497	2437305.50	1961 Jan 6	R-2	-	S8-16	-	-	-	-	GRSP-4	-	-	-	1007	-	-
1961-5498	2437305.50	1961 Jan 6	R-2	-	S8-5	-	-	-	-	GRSP-4	-	-	-	1007	-	-
1961-5499	2437305.50	1961 Jan 6	R-2	-	S10-6	-	-	-	-	GRSP-4	-	-	-	1007	-	-
1961-5500	2437305.50	1961 Jan 6	R-2	-	S10-11D	-	-	-	-	GRSP-4	-	-	-	1007	-	-
1961-5501	2437305.50	1961 Jan 6	R-2	-	S10-13D	-	-	-	-	GRSP-4	-	-	-	1007	-	-
1961-5502	2437305.50	1961 Jan 6	R-2	-	S9-13	-	-	-	-	GRSP-4	-	-	-	1007	-	-
1961-5503	2437305.50	1961 Jan 6	R-2	-	S9-12	-	-	-	-	GRSP-4	-	-	-	1007	-	-
1961-5504	2437305.50	1961 Jan 6	R-2	-	S9-17	-	-	-	-	GRSP-4	-	-	-	1007	-	-
1961-5505	2437305.50	1961 Jan 6	R-2	-	S9-2	-	-	-	-	GRSP-4	-	-	-	1007	-	-
1961-5506	2437305.50	1961 Jan 6	R-2	-	S9-6	-	-	-	-	GRSP-4	-	-	-	1007	-	-
1961-5507	2437305.50	1961 Jan 6	R-2	-	S9-18	-	-	-	-	GRSP-4	-	-	-	1007	-	-
1961-5508	2437305.50	1961 Jan 6	R-2	-	S9-12	-	-	-	-	GRSP-4	-	-	-	1007	-	-
1961-5509	2437305.50	1961 Jan 6	R-2	-	S9-11D	-	-	-	-	GRSP-4	-	-	-	1007	-	-
1961-5510	2437305.50	1961 Jan 6	R-2	-	S9-9	-	-	-	-	GRSP-4	-	-	-	1007	-	-
1961-5511	2437305.50	1961 Jan 6	R-2	-	S9-10D	-	-	-	-	GRSP-4	-	-	-	1007	-	-
1961-5512	2437305.50	1961 Jan 6	R-2	-	S9-15D	-	-	-	-	GRSP-4	-	-	-	1007	-	-
1961-5513	2437305.50	1961 Jan 6	R-2	-	S9-4	-	-	-	-	GRSP-4	-	-	-	1007	-	-
1961-5514	2437305.50	1961 Jan 6	R-2	-	S10-5D	-	-	-	-	GRSP-4	-	-	-	1007	-	-
1961-5515	2437305.50	1961 Jan 6	R-2	-	S10-10D	-	-	-	-	GRSP-4	-	-	-	1007	-	-
1961-5516	2437305.50	1961 Jan 6	R-2	-	S9-3	-	-	-	-	GRSP-4	-	-	-	1007	-	-
1961-5517	2437305.50	1961 Jan 6	R-2	-	S9-14	-	-	-	-	GRSP-4	-	-	-	1007	-	-
1961-5518	2437305.50	1961 Jan 6	R-2	-	S18-4	-	-	-	-	GRSP-4	-	-	-	1007	-	-
1961-5519	2437305.50	1961 Jan 6	R-2	-	S18-11D	-	-	-	-	GRSP-4	-	-	-	1007	-	-
1961-5520	2437305.50	1961 Jan 6	R-2	-	S18-7	-	-	-	-	GRSP-4	-	-	-	1007	-	-
1961-5521	2437305.50	1961 Jan 6	R-2	-	S18-12	-	-	-	-	GRSP-4	-	-	-	1007	-	-
1961-5522	2437305.50	1961 Jan 6	R-2	-	S18-6	-	-	-	-	GRSP-4	-	-	-	1007	-	-
1961-5523	2437305.50	1961 Jan 6	R-2	-	S18-9	-	-	-	-	GRSP-4	-	-	-	1007	-	-
1961-5524	2437305.50	1961 Jan 6	R-2	-	S18-14	-	-	-	-	GRSP-4	-	-	-	1007	-	-
1961-5525	2437305.50	1961 Jan 6	R-2	-	S18-2	-	-	-	-	GRSP-4	-	-	-	1007	-	-
1961-5526	2437305.50	1961 Jan 6	R-2	-	S18-11	-	-	-	-	GRSP-4	-	-	-	1007	-	-
1961-5527	2437305.50	1961 Jan 6	R-2	-	S18-13	-	-	-	-	GRSP-4	-	-	-	1007	-	-
1961-5528	2437305.50	1961 Jan 6	R-2	-	S18-3	-	-	-	-	GRSP-4	-	-	-	1007	-	-
1961-5529	2437305.50	1961 Jan 6	R-2	-	S18-8	-	-	-	-	GRSP-4	-	-	-	1007	-	-
1961-5549	2437305.50	1961 Jan 6	R-2	-	K2-18	-	-	-	-	GRSP-4	-	-	-	1007	-	-
1961-5541	2437305.50	1961 Jan 6	R-2	-	S18-5D	-	-	-	-	GRSP-4	-	-	-	1007	-	-
1961-5542	2437305.50	1961 Jan 6	R-2	-	K7-7	-	-	-	-	GRSP-4	-	-	-	307	-	-
1961-5543	2437305.50	1961 Jan 6	R-2	-	K5-4	-	-	-	-	GRSP-4	-	-	-	1007	-	-
1961-5544	2437305.50	1961 Jan 6	R-2	-	S16-6	-	-	-	-	GRSP-4	-	-	-	1007	-	-
1961-5545	2437305.50	1961 Jan 6	R-2	-	A3-8	-	-	-	-	GRSP-4	-	-	-	1007	-	-
1961-5546	2437305.50	1961 Jan 6	R-2	-	S12-7	-	-	-	-	GRSP-4	-	-	-	1007	-	-
1961-5547	2437305.50	1961 Oct 2	R-2	-	M4-1	-	-	-	-	GRSP-4	-	-	-	1007	-	-
1961-5548	2437305.50	1961 Oct 9	R-2	-	S12-18	-	-	-	-	GRSP-4	-	-	-	1007	-	-
1962-5548	2437305.50	1961 Oct 10	R-2	-	M5-1	-	-	-	-	GRSP-4	-	-	-	1007	-	-
1962-5549	2437305.50	1962 Mar 21	DF-2	-	1	-	-	-	-	IQ	LA3	-	-	07	-	-
1962-5550	2437305.50	1962 Mar 21	DF-2	-	2	-	-	-	-	IQ	LA3	-	-	1007	-	-
1964-5315	2438575.50	1964 Jun 29	DF-2	-	3	-	-	-	-	IQ	LA3	-	-	1007	-	-
1964-5316	2438575.50	1964 Jun 29	DF-2	-	4	-	-	-	-	IQ	LA3	-	-	1007	-	-
1964-5341	2438575.50	1964 Jul 11	DF-2	-	5	-	-	-	-	IQ	LA3	-	-	1007	-	-
1964-5821	2438575.50	1964 Q37	DF-2	-	5	-	-	-	-	IQ	LA3	-	-	1007	-	-

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Mission	FlightCode	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee km	Range km	Dest
1964-5465	2438651.62	1964 Sep 13 0257	A-1	-	-	-	-	-	-	GTsF-4	-	-	-	100?	-	-
1965-5810	2438760.50	1965	DF-2	-	6	Flight test 6	-	-	-	JQ	LA3	-	-	200?	-	-
1965-5811	2438760.50	1965	DF-2	-	7	Flight test 7	-	-	-	JQ	LA3	-	-	200?	-	-
1965-5812	2438760.50	1965	DF-2	-	8	Flight test 8	-	-	-	JQ	LA3	-	-	200?	-	-
1965-5813	2438760.50	1965?	DF-2	-	9	Flight test 9	-	-	-	JQ	LA3	-	-	200?	-	-
1965-4236	2438760.50	1965?	DF-2	-	10	Flight test 10	-	-	-	JQ	LA3	-	-	0?	-	-
1966-5796	2439337.50	1966 Aug	DF-2	-	-	Flight test 2-1	-	-	-	JQ	LA3	-	-	200?	-	-
1966-5797	2439337.50	1966 Aug?	DF-2	-	-	Flight test 2-2	-	-	-	JQ	LA3	-	-	200?	-	-
1966-5798	2439368.50	1966 Sep?	DF-2	-	-	Flight test 2-3	-	-	-	JQ	LA3	-	-	200?	-	-
1966-5799	2439368.50	1966 Sep?	DF-2	-	-	Flight test 2-4	-	-	-	JQ	LA3	-	-	200?	-	-
1966-4594	2439405.50	1966 Oct 7	DF-2	-	-	Flight test 2-5	-	-	-	JQ	LA3	-	-	200?	-	-
1966-5800	2439411.50	1966 Oct 7	DF-2	-	-	Self destruct test	-	-	-	JQ	LA3	-	-	10?	-	-
1966-5801	2439411.50	1966 Oct 13	DF-2	-	-	Cold flight test	-	-	-	JQ	LA3	-	-	640?	-	Xinjiang?
1966-5802	2439414.50	1966 Oct 16	DF-2	-	-	Cold flight test	-	-	-	JQ	LA3	-	-	640?	-	Xinjiang?
1966-5806	2439426.50	1966 Oct 27	DF-2A	-	-	Nuclear test	-	-	-	JQ	LA3	-	-	640	-	Xinjiang
1971-5635	2441255.50	1971 Nov	DF-2	?	-	-	-	-	-	JQ	LA3	-	-	200?	-	-
1974-5433	2442047.50	1974?	DF-2	?	-	-	-	-	-	JQ	LA3	-	-	200?	-	-
1974-5434	2442047.50	1974?	DF-2	?	-	-	-	-	-	JQ	LA3	-	-	200?	-	-





Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Orbit	Agency	Launch_Code	Group	Category	LTCite	Cite	Notes
1942-401	2430523.95	1942 Jun 13 1052	A-4	-	2		WEHR	MF	-	Test	Taylor	-	-
1942-402	2430587.97	1942 Aug 16 1115	A-4	-	3		WEHR	MF	-	Test	Stuhlinger	RocketTeam	-
1942-403	2430636.12	1942 Oct 3 1458	A-4	-	4		WEHR	MS	-	Test	AE1961A	AE1961A	-
1942-404	2430653.50	1942 Oct 21	A-4	-	5		WEHR	MS	-	Test	AE1961A	-	-
1942-405	2430672.50	1942 Nov 9	A-4	-	6		WEHR	MS	-	Test	AE1961A	-	-
1942-406	2430691.50	1942 Nov 28	A-4	-	7		WEHR	MF	-	Test	AE1961A	-	-
1943-401	2430705.50	1942 Dec 12	A-4	-	9		WEHR	MF	-	Test	AE1961A	-	-
1943-402	2430731.50	1943 Jan 7	A-4	-	10		WEHR	MF	-	Test	AE1961A	-	-
1943-403	2430749.50	1943 Jan 25	A-4	-	11		WEHR	MF	-	Test	AE1961A	-	-
1943-404	2430772.50	1943 Feb 17	A-4	-	12		WEHR	MF	-	Test	AE1961A	-	-
1943-405	2430774.50	1943 Feb 19	A-4	-	13		WEHR	MF	-	Test	AE1961A	-	-
1943-406	2430786.50	1943 Mar 3	A-4	-	16		WEHR	MF	-	Test	AE1961A	-	-
1943-407	2430801.50	1943 Mar 18	A-4	-	18		WEHR	MF	-	Test	AE1961A	-	-
1943-408	2430808.50	1943 Mar 25	A-4	-	19		WEHR	MF	-	Test	AE1961A	-	-
1943-409	2430825.50	1943 Apr 14	A-4	-	20		WEHR	MS	-	Test	AE1961A	-	-
1943-410	2430857.10	1943 Apr 22 1425	A-4	-	21		WEHR	MS	-	Test	AE1961A	AE1961A	-
1943-411	2430870.96	1943 May 14	A-4	-	22		WEHR	MS	-	Test	AE1961A	-	-
1943-412	2430871.19	1943 May 26 1100	A-4	-	25		WEHR	MF	-	Test	AE1961A	-	-
1943-413	2430871.50	1943 May 27	A-4	-	26		WEHR	MF	-	Test	AE1961A	-	-
1943-414	2430876.50	1943 Jun 1	A-4	-	24		WEHR	MS	-	Test	AE1961A	-	-
1943-415	2430886.50	1943 Jun 11	A-4	-	29		WEHR	MS	-	Test	AE1961A	-	-
1943-416	2430891.50	1943 Jun 16	A-4	-	31		WEHR	MS	-	Test	AE1961A	-	-
1943-417	2430897.50	1943 Jun 22	A-4	-	28		WEHR	MS	-	Test	AE1961A	-	-
1943-418	2430899.50	1943 Jun 24	A-4	-	30		WEHR	MS	-	Test	AE1961A	-	-
1943-419	2430901.50	1943 Jun 26	A-4	-	36		WEHR	MS	-	Test	AE1961A	-	-
1943-420	2430904.50	1943 Jun 29	A-4	-	38		WEHR	MS	-	Test	AE1961A	-	-
1943-421	2430904.50	1943 Jun 29	A-4	-	40		WEHR	MS	-	Test	AE1961A	-	-
1943-422	2430906.50	1943 Jul 1	A-4	-	33		WEHR	MS	-	Test	AE1961A	-	-
1943-423	2430914.50	1943 Jul 9	A-4	-	41		WEHR	MF	-	Test	AE1961A	-	-
1943-424	2430914.50	1943 Jul 9	A-4	-	34		WEHR	MF	-	Test	AE1961A	-	-
1943-425	2431033.50	1943 Nov 8	A-4	-	43		WEHR	MS	-	Test	AE1961A	-	-
1943-426	2431037.50	1943 Nov 9	A-4	-	43		WEHR	MS	-	Test	AE1961A	-	-
1943-427	2431039.50	1943 Nov 10	A-4	-	73		WEHR	MS	-	Test	AE1961A	-	-
1943-428	2431053.54	1943 Nov 25 0100?	A-4	-	-		WEHR	MS	-	Test	AE1961A	-	-
1943-429	2431053.54	1943 Dec 8 0100	A-4	-	-		WEHR	MS	-	Test	AE1961A	-	-
1943-430	2431056.54	1944 Jan 6 0100?	A-4	-	-		WEHR	MS	-	Test	AE1961A	-	-
1944-501	2431059.50	1944 Jan	A-4	-	-		WEHR	MS	-	Test	AE1961A	-	-
1944-502	2431059.50	1944 Jan	A-4	-	-		WEHR	MS	-	Test	AE1961A	-	-
1944-503	2431059.50	1944 Jan	A-4	-	-		WEHR	MS	-	Test	AE1961A	-	-
1944-504	2431059.50	1944 Jan	A-4	-	-		WEHR	MS	-	Test	AE1961A	-	-
1944-505	2431116.30	1944 Jan 27	A-4	-	17003		WEHR	MS	-	Test	AE1961A	-	-
1944-506	2431116.30	1944 Jan 29 2130?	A-4	-	-		WEHR	MS	-	Test	AE1961A	-	-
1944-507	2431120.50	1944 Feb	A-4	-	-		WEHR	MS	-	Test	AE1961A	-	-
1944-508	2431120.50	1944 Feb	A-4	-	-		WEHR	MS	-	Test	AE1961A	-	-
1944-509	2431120.50	1944 Feb	A-4	-	-		WEHR	MS	-	Test	AE1961A	-	-
1944-510	2431120.50	1944 Feb	A-4	-	-		WEHR	MS	-	Test	AE1961A	-	-
1944-511	2431149.50	1944 Feb	A-4	-	-		WEHR	MS	-	Test	AE1961A	-	-
1944-512	2431149.50	1944 Mar	A-4	-	-		WEHR	MS	-	Test	AE1961A	-	-
1944-513	2431149.50	1944 Mar	A-4	-	-		WEHR	MS	-	Test	AE1961A	-	-
1944-514	2431149.50	1944 Mar	A-4	-	-		WEHR	MS	-	Test	AE1961A	-	-
1944-515	2431149.50	1944 Mar	A-4	-	-		WEHR	MS	-	Test	AE1961A	-	-
1944-516	2431149.50	1944 Mar	A-4	-	-		WEHR	MS	-	Test	AE1961A	-	-
1944-517	2431149.50	1944 Mar	A-4	-	-		WEHR	MS	-	Test	AE1961A	-	-
1944-518	2431149.50	1944 Mar	A-4	-	-		WEHR	MS	-	Test	AE1961A	-	-
1944-519	2431149.50	1944 Mar	A-4	-	-		WEHR	MS	-	Test	AE1961A	-	-
1944-520	2431180.50	1944 Mar 14	A-4	-	-		WEHR	MS	-	Test	AE1961A	-	-
1944-521	2431180.50	1944 Mar 14	A-4	-	-		WEHR	MS	-	Test	AE1961A	-	-
1944-522	2431181.45	1944 Mar 31 2250?	A-4	-	17_047		WEHR	MS	-	Test	AE1961A	-	-
1944-523	2431181.45	1944 Mar 31 2250?	A-4	-	-		WEHR	MS	-	Test	AE1961A	-	-
1944-524	2431180.50	1944 Mar 17 1100?	A-4	-	-		WEHR	MS	-	Test	AE1961A	-	-
1944-525	2431194.50	1944 Mar 14	A-4	-	17_063		WEHR	MS	-	Test	AE1961A	-	-
1944-526	2431210.50	1944 Mar 26 1100?	A-4	-	-		WEHR	MS	-	Test	AE1961A	-	-
1944-527	2431230.50	1944 Mar 26 1100?	A-4	-	-		WEHR	MS	-	Test	AE1961A	-	-
1944-528	2431236.98	1944 Mar 26 1400?	A-4	-	-		WEHR	MS	-	Test	AE1961A	-	-
1944-529	2431237.08	1944 Mar 1	A-4	-	-		WEHR	MS	-	Test	AE1961A	-	-
1944-530	2431242.50	1944 Mar 13 1503	A-4	-	V89		WEHR	MS	-	Test	AE1961A	-	-
1944-531	2431255.13	1944 Jun 20?	A-4	-	-		WEHR	MS	-	Test	AE1961A	-	-
1944-532	2431241.50	1944 Jun	A-4	-	-		WEHR	MS	-	Test	AE1961A	-	-
1944-533	2431241.50	1944 Jun	A-4	-	-		WEHR	MS	-	Test	AE1961A	-	-
1944-534	2431241.50	1944 Jun	A-4	-	-		WEHR	MS	-	Test	AE1961A	-	-
1944-535	2431241.50	1944 Jun	A-4	-	-		WEHR	MS	-	Test	AE1961A	-	-
1944-536	2431241.50	1944 Jun	A-4	-	-		WEHR	MS	-	Test	AE1961A	-	-
1944-537	2431261.50	1944 Jun 20?	A-4	-	-		WEHR	MS	-	Test	AE1961A	-	-
1944-538	2431265.50	1944 Jul 24	A-4	-	-		WEHR	MS	-	Test	AE1961A	-	-
1944-539	2431302.50	1944 Jul 31?	A-4	-	V205		WEHR	MS	-	Test	AE1961A	-	-
1944-540	2431316.17	1944 Jul 13 1607	A-4	-	18296		WEHR444	MS	-	Training	AE1961A	-	-
1944-541	2431316.17	1944 Aug 13 1815	A-4	-	18292		WEHR485-2	MS	-	Training	AE1961A	-	-
1944-542	2431316.26	1944 Aug 14 0637	A-4	-	18298		WEHR336-3	MS	-	Training	AE1961A	-	-
1944-543	2431316.78	1944 Aug 14 0717	A-4	-	18302		WEHR444	MS	-	Training	AE1961A	-	-
1944-544	2431316.88	1944 Aug 14 0904	A-4	-	18307		WEHR444	MS	-	Training	AE1961A	-	-
1944-545	2431316.91	1944 Aug 14 0933	A-4	-	18291		WEHR485-2	MS	-	Training	AE1961A	-	-
1944-546	2431316.91	1944 Aug 14 0952	A-4	-	18301		WEHR336-3	MS	-	Training	AE1961A	-	-
1944-547	2431316.97	1944 Aug 14 1123	A-4	-	18303		WEHR485-2	MS	-	Training	AE1961A	-	-
1944-548	2431317.04	1944 Aug 14 1253	A-4	-	18305		WEHR485-2	MS	-	Training	AE1961A	-	-

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	OrbPay	Agency	Launch_Code	Group	Category	LTCite	Cite	Notes
1944-A10	2431317.23	1944 Aug 14 1730	V-2	-	18308	0.000	WER485-2	MF	-	Training	FE/VB158	-	-
1944-S37	2431317.31	1944 Aug 14 1928	V-2	-	18309	0.000	WER444	NS	-	Training	FE/VB158	-	-
1944-S38	2431317.92	1944 Aug 15 1028	A-4	-	18311	0.000	WER336-3	NS	-	Training	FE/VB159	-	-
1944-S39	2431317.95	1944 Aug 15 1054	A-4	-	18312	0.000	WER485-2	NS	-	Training	FE/VB159	-	-
1944-S40	2431315.00	1944 Aug 15 1157	A-4	-	18310	0.000	WER444	NS	-	Training	FE/VB159	-	-
1944-S41	2431315.11	1944 Aug 15 1441	A-4	-	18314	0.000	WER444	NS	-	Training	FE/VB159	-	-
1944-S42	2431315.21	1944 Aug 15 1704	A-4	-	18321	0.000	WER444	NS	-	Training	FE/VB159	-	-
1944-S43	2431315.23	1944 Aug 15 1724	A-4	-	18315	0.000	WER485-2	NS	-	Training	FE/VB159	-	-
1944-S44	2431315.32	1944 Aug 15 1937	A-4	-	18319	0.000	WER485-2	NS	-	Training	FE/VB159	-	-
1944-S45	2431315.81	1944 Aug 16 0723	A-4	-	18318	0.000	WER444	NS	-	Training	FE/VB159	-	-
1944-S46	2431315.82	1944 Aug 16 0738	A-4	-	18317	0.000	WER444	NS	-	Training	FE/VB159	-	-
1944-S47	2431315.94	1944 Aug 16 1040	V-2	-	18295	0.000	WER485-2	NS	-	Training	FE/VB158	-	-
1944-S48	2431315.95	1944 Aug 16 1053	V-2	-	18323	0.000	WER485-2	NS	-	Training	FE/VB158	-	-
1944-S49	2431315.10	1944 Aug 16 1430	A-4	-	18328	0.000	WER336-3	NS	-	Training	FE/VB159	-	-
1944-S50	2431320.03	1944 Aug 17 1282	A-4	-	18320	0.000	WER485-2	NS	-	Training	FE/VB159	-	-
1944-A11	2431320.04	1944 Aug 17 1286	V-2	-	18300	0.000	WER444	MF	-	Training	FE/VB159	-	-
1944-S51	2431320.05	1944 Aug 17 1314	A-4	-	18316	0.000	WER444	NS	-	Training	FE/VB159	-	-
1944-S52	2431320.06	1944 Aug 17 1331	V-2	-	18290	0.000	WER336-2	NS	-	Training	FE/VB158	-	-
1944-S53	2431320.19	1944 Aug 17 1639	A-4	-	18327	0.000	WER485-2	NS	-	Training	FE/VB159	-	-
1944-S54	2431320.22	1944 Aug 17 1723	A-4	-	18324	0.000	WER444	NS	-	Training	FE/VB159	-	-
1944-S55	2431320.23	1944 Aug 17 1735	V-2	-	18306	0.000	WER336-3	NS	-	Training	FE/VB158	-	-
1944-S56	2431320.36	1944 Aug 17 2045	A-4	-	18325	0.000	WER485-2	NS	-	Training	FE/VB159	-	-
1944-S57	2431320.82	1944 Aug 18 0746	A-4	-	18326	0.000	WER485-2	NS	-	Training	FE/VB159	-	-
1944-S58	2431321.04	1944 Aug 18 1289	A-4	-	18345	0.000	WER485-2	NS	-	Training	FE/VB160	-	-
1944-A12	2431321.19	1944 Aug 18 1633	A-4	-	18350	0.000	WER336-3	MF	-	Training	FE/VB160	-	-
1944-S59	2431321.20	1944 Aug 18 1645	A-4	-	18356	0.000	WER444	NS	-	Training	FE/VB160	-	-
1944-S60	2431321.31	1944 Aug 18 1929	A-4	-	18359	0.000	WER336-3	NS	-	Training	FE/VB160	-	-
1944-S61	2431321.32	1944 Aug 18 1940	A-4	-	18349	0.000	WER336-2	NS	-	Training	FE/VB160	-	-
1944-S62	2431321.35	1944 Aug 18 2028	A-4	-	18346	0.000	WER485-2	NS	-	Training	FE/VB160	-	-
1944-S63	2431325.30	1944 Aug 22 1906	A-4	-	18210	0.000	WER500	NS	-	Training	FE/VB160	-	-
1944-S64	2431325.32	1944 Aug 22 1946	A-4	-	18209	0.000	WER500	NS	-	Training	FE/VB160	-	-
1944-S65	2431327.11	1944 Aug 24 1439	A-4	-	18344	0.000	WER485-2	MF	-	Training	FE/VB160	-	-
1944-A13	2431328.73	1944 Aug 26 0536	A-4	-	18353	0.000	WER485-2	NS	-	Training	FE/VB160	-	-
1944-S66	2431328.91	1944 Aug 26 0594	A-4	-	18355	0.000	WER485-2	NS	-	Training	FE/VB160	-	-
1944-S67	2431332.98	1944 Aug 30 1125	A-4	-	18299	0.000	WEHR	NS	-	Training	FE/VB160	-	-
1944-S68	2431333.19	1944 Aug 30 1544	A-4	-	18354	0.000	WER485-2	NS	-	Training	FE/VB160	-	-
1944-S69	2431333.19	1944 Aug 30 1544	A-4	-	18354	0.000	WER485-2	NS	-	Training	FE/VB160	-	-
1944-S70	2431333.17	1944 Aug 30 1610	A-4	-	18358	0.000	WEHR	NS	-	Training	FE/VB160	-	-
1944-A14	2431336.16	1944 Sep 2 1945	A-4	-	18295	0.000	WEHR	NS	-	Test	FE/VB160	-	-
1944-A15	2431338.80	1944 Sep 6 0930	V-2	-	18693	0.000	WER444	MF	-	Weapon	Stumflinger	RocketTeam	-
1944-A16	2431339.84	1944 Sep 6 1040	V-2	-	18693	0.000	WER444	MF	-	Weapon	Stumflinger	RocketTeam	-
1944-S71	2431341.82	1944 Sep 8 0734	V-2	-	18693	0.000	WEHR	NS	-	Weapon	RocketTeam	-	-
1944-S72	2431342.19	1944 Sep 8 1635	V-2	-	18693	0.000	WEHR	NS	-	Weapon	RocketTeam	-	-
1944-S73	2431342.19	1944 Sep 8 1635	V-2	-	18693	0.000	WEHR	NS	-	Weapon	RocketTeam	-	-
1944-S74	2431344.31	1944 Sep 10 0907	V-2	-	18693	0.000	WEHR	NS	-	Weapon	RocketTeam	-	-
1944-S75	2431344.79	1944 Sep 11 0727	V-2	-	18693	0.000	WEHR	NS	-	Weapon	RocketTeam	-	-
1944-S76	2431344.81	1944 Sep 11 0727	V-2	-	18693	0.000	WEHR	NS	-	Weapon	RocketTeam	-	-
1944-S77	2431345.76	1944 Sep 12 0617	V-2	-	18693	0.000	WEHR	NS	-	Weapon	RocketTeam	-	-
1944-S78	2431345.76	1944 Sep 12 0617	V-2	-	18693	0.000	WEHR	NS	-	Weapon	RocketTeam	-	-
1944-S79	2431345.78	1944 Sep 12 0617	V-2	-	18693	0.000	WEHR	NS	-	Weapon	RocketTeam	-	-
1944-S80	2431345.01	1944 Sep 12 0915	A-4	-	18769	0.000	WER485	NS	-	Training	FE/VB161	-	-
1944-S81	2431345.16	1944 Sep 12 1557	A-4	-	18767	0.000	WER485	NS	-	Training	FE/VB161	-	-
1944-S82	2431345.63	1944 Sep 13 0303	A-4	-	18767	0.000	WER485	NS	-	Training	FE/VB161	-	-
1944-S83	2431347.13	1944 Sep 13 2107	V-2	-	18765	0.000	WER500	NS	-	Training	FE/VB161	-	-
1944-S84	2431347.38	1944 Sep 13 1508	A-4	-	18181	0.000	WEHR	NS	-	Test	FE/VB161	-	-
1944-S85	2431347.50	1944 Sep 13 1647	A-4	-	18181	0.000	WEHR	NS	-	Test	FE/VB161	-	-
1944-S86	2431347.50	1944 Sep 14	A-4	-	18181	0.000	WEHR	NS	-	Test	FE/VB161	-	-
1944-S87	2431347.50	1944 Sep 14	A-4	-	18181	0.000	WEHR	NS	-	Test	FE/VB161	-	-
1944-S88	2431347.50	1944 Sep 14	V-2	-	18181	0.000	WEHR	NS	-	Test	FE/VB161	-	-
1944-S89	2431347.50	1944 Sep 14	V-2	-	18181	0.000	WEHR	NS	-	Test	FE/VB161	-	-
1944-S90	2431347.50	1944 Sep 14	V-2	-	18181	0.000	WEHR	NS	-	Test	FE/VB161	-	-
1944-S91	2431347.50	1944 Sep 14	V-2	-	18181	0.000	WEHR	NS	-	Test	FE/VB161	-	-
1944-S92	2431347.50	1944 Sep 14	V-2	-	18181	0.000	WEHR	NS	-	Test	FE/VB161	-	-
1944-S93	2431347.50	1944 Sep 14	V-2	-	18181	0.000	WEHR	NS	-	Test	FE/VB161	-	-
1944-S94	2431347.50	1944 Sep 14	V-2	-	18181	0.000	WEHR	NS	-	Test	FE/VB161	-	-
1944-S95	2431347.50	1944 Sep 14	V-2	-	18181	0.000	WEHR	NS	-	Test	FE/VB161	-	-
1944-S96	2431347.50	1944 Sep 14	V-2	-	18181	0.000	WEHR	NS	-	Test	FE/VB161	-	-
1944-S97	2431347.50	1944 Sep 14	V-2	-	18181	0.000	WEHR	NS	-	Test	FE/VB161	-	-
1944-S98	2431347.50	1944 Sep 14	V-2	-	18181	0.000	WEHR	NS	-	Test	FE/VB161	-	-
1944-S99	2431347.50	1944 Sep 14	V-2	-	18181	0.000	WEHR	NS	-	Test	FE/VB161	-	-
1944-S100	2431347.50	1944 Sep 14	V-2	-	18181	0.000	WEHR	NS	-	Test	FE/VB161	-	-
1944-S101	2431347.50	1944 Sep 14	V-2	-	18181	0.000	WEHR	NS	-	Test	FE/VB161	-	-
1944-S102	2431347.50	1944 Sep 14	V-2	-	18181	0.000	WEHR	NS	-	Test	FE/VB161	-	-
1944-S103	2431347.50	1944 Sep 14	V-2	-	18181	0.000	WEHR	NS	-	Test	FE/VB161	-	-
1944-S104	2431347.50	1944 Sep 14	V-2	-	18181	0.000	WEHR	NS	-	Test	FE/VB161	-	-
1944-S105	2431347.50	1944 Sep 14	V-2	-	18181	0.000	WEHR	NS	-	Test	FE/VB161	-	-
1944-S106	2431347.50	1944 Sep 14	V-2	-	18181	0.000	WEHR	NS	-	Test	FE/VB161	-	-
1944-S107	2431347.50	1944 Sep 14	V-2	-	18181	0.000	WEHR	NS	-	Test	FE/VB161	-	-
1944-S108	2431347.50	1944 Sep 14	V-2	-	18181	0.000	WEHR	NS	-	Test	FE/VB161	-	-
1944-S109	2431347.50	1944 Sep 14	V-2	-	18181	0.000	WEHR	NS	-	Test	FE/VB161	-	-
1944-S110	2431347.50	1944 Sep 14	V-2	-	18181	0.000	WEHR	NS	-	Test	FE/VB161	-	-
1944-S111	2431347.50	1944 Sep 14	V-2	-	18181	0.000	WEHR	NS	-	Test	FE/VB161	-	-
1944-S112	2431347.50	1944 Sep 14	V-2	-	18181	0.000	WEHR	NS	-	Test	FE/VB161	-	-
1944-S113	2431347.50	1944 Sep 14	V-2	-	18181	0.000	WEHR	NS	-	Test	FE/VB161	-	-
1944-S114	2431347.50	1944 Sep 14	V-2	-	18181	0.000	WEHR	NS	-	Test	FE/VB161	-	-
1944-S115	2431347.50	1944 Sep 14	V-2	-	18181	0.000	WEHR	NS	-	Test	FE/VB161	-	-
1944-S116	2431347.50	1944 Sep 14	V-2	-	18181	0.000	WEHR	NS	-	Test	FE/VB161	-	-







Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	OrbPay	Agency	Launch_Code	Group	Category	LTcIte	Cite	Notes
1944-S302	2431445.04	1944 Dec 23 1255	V-2	-	19674	0.000	WEHR	NS	-	Test	FE/VB172	-	-
1944-S303	2431445.11	1944 Dec 23 1436	V-2	-	19776	0.000	WEHR	NS	-	Test	FE/VB172	-	-
1944-S304	2431449.94	1944 Dec 25 1028	V-2	-	19650	0.000	WEHR	NS	-	Test	FE/VB172	-	-
1944-S305	2431450.00	1944 Dec 25 1155	V-2	-	19681	0.000	WEHR	NS	-	Test	Defeats	-	-
1944-S374	2431451.31	1944 Dec 26 19217	V-2	-	-	0.000	WEHR	MF	-	Weapon	Stuhlring	-	-
1944-A31	2431451.50	1944 Dec 27 0843	A-4b	-	-	0.000	WEHR	NS	-	Test	FE/VB174	-	-
1944-S306	2431451.86	1944 Dec 27 0843	V-2	-	20853	0.000	WEHR	NS	-	Test	Defeats	-	-
1944-S375	2431452.50	1944 Dec 28	V-2	-	-	0.000	WEHR	NS	-	Weapon	Defeats	-	-
1944-S376	2431452.50	1944 Dec 28	V-2	-	-	0.000	WEHR	NS	-	Weapon	Defeats	-	-
1944-S377	2431452.50	1944 Dec 28	V-2	-	-	0.000	WEHR	NS	-	Weapon	Defeats	-	-
1944-S378	2431452.50	1944 Dec 28	V-2	-	-	0.000	WEHR	NS	-	Weapon	Defeats	-	-
1944-S379	2431452.50	1944 Dec 28	V-2	-	-	0.000	WEHR	NS	-	Weapon	Defeats	-	-
1944-S380	2431452.50	1944 Dec 28	V-2	-	-	0.000	WEHR	NS	-	Weapon	Defeats	-	-
1944-S381	2431452.50	1944 Dec 28	V-2	-	-	0.000	WEHR	NS	-	Weapon	Defeats	-	-
1944-S382	2431452.50	1944 Dec 28	V-2	-	-	0.000	WEHR	NS	-	Weapon	Defeats	-	-
1944-S307	2431452.86	1944 Dec 28 0834	V-2	-	20844	0.000	WEHR	NS	-	Test	FE/VB174	-	-
1944-S308	2431452.93	1944 Dec 28 1018	V-2	-	20845	0.000	WEHR	NS	-	Test	FE/VB174	-	-
1944-A32	2431452.98	1944 Dec 28 1137	V-2	-	20848	0.000	WEHR	MF	-	Test	FE/VB174	-	-
1944-S309	2431453.19	1944 Dec 30 1627	V-2	-	20820	0.000	WEHR	NS	-	Test	FE/VB174	-	-
1944-S310	2431453.27	1944 Dec 30 1628	V-2	-	20816	0.000	WEHR	NS	-	Test	FE/VB174	-	-
1944-S311	2431453.03	1944 Dec 31 1244	V-2	-	20847	0.000	WEHR	NS	-	Test	FE/VB174	-	-
1944-S312	2431453.14	1944 Dec 31 1523	V-2	-	20825	0.000	WEHR	NS	-	Test	FE/VB174	-	-
1944-S353	2431456.40	1944 Dec 31 21387	V-2	-	-	0.000	WEHR	NS	-	Weapon	Defeats	-	-
1944-A62	2431455.50	1944 Dec 31	V-2	-	-	0.000	WEHR	MF	-	Weapon	Defeats	-	-
1945-S01	2431455.50	1945 Jan	V-2	-	-	0.000	WEHR	NS	-	Weapon	Defeats	-	-
1945-S02	2431455.50	1945 Jan	V-2	-	-	0.000	WEHR	NS	-	Weapon	Defeats	-	-
1945-S03	2431455.50	1945 Jan	V-2	-	-	0.000	WEHR	NS	-	Weapon	Defeats	-	-
1945-A01	2431457.12	1945 Jan 1 1450	V-2	-	20852	0.000	WEHR	MF	-	Weapon	RocketClean	-	-
1945-S04	2431458.00	1945 Jan 2 1205	V-2	-	20815	0.000	WEHR	NS	-	Test	RocketClean	-	-
1945-S05	2431458.15	1945 Jan 2 1535	V-2	-	20817	0.000	WEHR	NS	-	Test	FE/VB174	-	-
1945-S06	2431458.28	1945 Jan 2 1837	V-2	-	20818	0.000	WEHR	NS	-	Test	FE/VB174	-	-
1945-S36	2431458.78	1945 Jan 3 09467	V-2	-	-	0.000	WEHR	NS	-	Weapon	Defeats	-	-
1945-S07	2431459.01	1945 Jan 3 1219	V-2	-	20838	0.000	WEHR	NS	-	Test	Defeats	-	-
1945-S08	2431459.12	1945 Jan 3 1450	V-2	-	20841	0.000	WEHR	NS	-	Test	FE/VB174	-	-
1945-S09	2431459.21	1945 Jan 3 1705	V-2	-	20851	0.000	WEHR	NS	-	Test	FE/VB174	-	-
1945-S10	2431459.97	1945 Jan 4 1115	V-2	-	20823	0.000	WEHR	NS	-	Test	FE/VB174	-	-
1945-S39	2431459.50	1945 Jan 4	V-2	-	-	0.000	WEHR	NS	-	Weapon	Defeats	-	-
1945-S40	2431459.50	1945 Jan 4	V-2	-	-	0.000	WEHR	NS	-	Weapon	Defeats	-	-
1945-S41	2431459.50	1945 Jan 4	V-2	-	-	0.000	WEHR	NS	-	Weapon	Defeats	-	-
1945-S42	2431459.50	1945 Jan 4	V-2	-	-	0.000	WEHR	NS	-	Weapon	Defeats	-	-
1945-S43	2431459.50	1945 Jan 4	V-2	-	-	0.000	WEHR	NS	-	Weapon	Defeats	-	-
1945-S44	2431459.50	1945 Jan 4	V-2	-	-	0.000	WEHR	NS	-	Weapon	Defeats	-	-
1945-S45	2431459.50	1945 Jan 4	V-2	-	-	0.000	WEHR	NS	-	Weapon	Defeats	-	-
1945-S46	2431459.50	1945 Jan 4	V-2	-	-	0.000	WEHR	NS	-	Weapon	Defeats	-	-
1945-S47	2431459.50	1945 Jan 4	V-2	-	-	0.000	WEHR	NS	-	Weapon	Defeats	-	-
1945-S48	2431459.50	1945 Jan 4	V-2	-	-	0.000	WEHR	NS	-	Weapon	Defeats	-	-
1945-S49	2431459.50	1945 Jan 4	V-2	-	-	0.000	WEHR	NS	-	Weapon	Defeats	-	-
1945-S50	2431459.50	1945 Jan 4	V-2	-	-	0.000	WEHR	NS	-	Weapon	Defeats	-	-
1945-S51	2431459.50	1945 Jan 4	V-2	-	-	0.000	WEHR	NS	-	Weapon	Defeats	-	-
1945-S52	2431459.99	1945 Jan 4 1143	V-2	-	20814	0.000	WEHR	MF	-	Test	FE/VB174	-	-
1945-S11	2431464.04	1945 Jan 8 1257	V-2	-	20843	0.000	WEHR	NS	-	Test	FE/VB174	-	-
1945-S12	2431464.15	1945 Jan 8 1535	V-2	-	20819	0.000	WEHR	NS	-	Test	FE/VB174	-	-
1945-S42	2431463.50	1945 Jan 8	A-4b	-	-	0.000	WEHR	MF	-	Test	D-5a/75	-	-
1945-S13	2431465.01	1945 Jan 10 1219	A-4	-	20805	0.000	WEHR	NS	-	Test	FE/75	-	-
1945-S14	2431465.28	1945 Jan 10 1827	A-4	-	20808	0.000	WEHR	NS	-	Test	FE/75	-	-
1945-S15	2431465.31	1945 Jan 10 1927	A-4	-	20809	0.000	WEHR	NS	-	Test	FE/75	-	-
1945-S16	2431465.97	1945 Jan 11 1110	A-4	-	20810	0.000	WEHR	NS	-	Test	FE/75	-	-
1945-S17	2431467.00	1945 Jan 11 1155	A-4	-	20807	0.000	WEHR	NS	-	Test	FE/75	-	-
1945-S18	2431467.13	1945 Jan 11 1502	A-4	-	20811	0.000	WEHR	NS	-	Test	FE/75	-	-
1945-S19	2431467.13	1945 Jan 11 1512	A-4	-	20804	0.000	WEHR	NS	-	Test	FE/75	-	-
1945-S20	2431467.21	1945 Jan 11 1705	A-4	-	20806	0.000	WEHR	NS	-	Test	Defeats	-	-
1945-S52	2431468.50	1945 Jan 13	V-2	-	-	0.000	WEHR	NS	-	Weapon	Defeats	-	-
1945-S53	2431475.87	1945 Jan 20 08477	V-2	-	-	0.000	WEHR	NS	-	Weapon	Defeats	-	-
1945-S54	2431475.50	1945 Jan 20	V-2	-	-	0.000	WEHR	NS	-	Weapon	Defeats	-	-
1945-S55	2431475.50	1945 Jan 20	V-2	-	-	0.000	WEHR	NS	-	Weapon	Defeats	-	-
1945-S56	2431475.50	1945 Jan 20	V-2	-	-	0.000	WEHR	NS	-	Weapon	Defeats	-	-
1945-S57	2431475.50	1945 Jan 20	V-2	-	-	0.000	WEHR	NS	-	Weapon	Defeats	-	-
1945-S58	2431475.97	1945 Jan 20 11107	V-2	-	-	0.000	WEHR	NS	-	Weapon	Defeats	-	-
1945-S59	2431475.50	1945 Jan 20	V-2	-	-	0.000	WEHR	NS	-	Weapon	Defeats	-	-
1945-S60	2431475.50	1945 Jan 20	V-2	-	-	0.000	WEHR	NS	-	Weapon	Defeats	-	-
1945-S61	2431475.50	1945 Jan 20	V-2	-	-	0.000	WEHR	NS	-	Weapon	Defeats	-	-
1945-S62	2431475.50	1945 Jan 20	V-2	-	-	0.000	WEHR	NS	-	Weapon	Defeats	-	-
1945-S63	2431475.50	1945 Jan 20	V-2	-	-	0.000	WEHR	NS	-	Weapon	Defeats	-	-
1945-S64	2431475.50	1945 Jan 20	V-2	-	-	0.000	WEHR	NS	-	Weapon	Defeats	-	-
1945-S65	2431475.50	1945 Jan 20	V-2	-	-	0.000	WEHR	NS	-	Weapon	Defeats	-	-
1945-S66	2431475.50	1945 Jan 20	V-2	-	-	0.000	WEHR	NS	-	Weapon	Defeats	-	-
1945-S67	2431475.50	1945 Jan 20	V-2	-	-	0.000	WEHR	NS	-	Weapon	Defeats	-	-
1945-S68	2431477.50	1945 Jan 22	V-2	-	-	0.000	WEHR	NS	-	Weapon	Defeats	-	-
1945-M01	2431479.50	1945 Jan 24	A-4b	-	2	0.000	WEHR	MU	-	Test	Defeats	-	-
1945-S21	2431494.50	1945 Feb 8	V-2	-	-	0.000	WEHR	NS	-	Weapon	Defeats	-	-
1945-S22	2431496.87	1945 Feb 10 08537	V-2	-	-	0.000	WEHR	NS	-	Weapon	Defeats	-	-
1945-S29	2431497.50	1945 Feb 11	V-2	-	-	0.000	WEHR	NS	-	Weapon	Defeats	-	-
1945-S69	2431499.50	1945 Feb 13	V-2	-	-	0.000	WEHR	NS	-	Weapon	Defeats	-	-
1945-S23	2431501.15	1945 Feb 14 1540	V-2	-	4299	0.000	WEHR	MU	-	Test	Defeats	-	-
1945-S70	2431501.33	1945 Feb 14 19537	V-2	-	-	0.000	WEHR	NS	-	Weapon	Defeats	-	-
1945-S30	2431508.50	1945 Feb 22	V-2	-	-	0.000	WEHR	NS	-	Weapon	Defeats	-	-





Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	OrbDay	Agency	Launch_Code	Group	Category	LTCite	Cite	Notes
1948-402	2432713.93	1948 Jun 11 1022	V-2	US	37	0.000	DRD/AFCS	SS	AFCR/L	Solar X/Ionos/Bio	Hermes-Rpt	-	-
1948-509	2432769.25	1948 Jul 26 1803	V-2	US	40	0.000	DRD/APL	SS	UMI/APL	CN/Aeron	Hermes-Rpt	-	-
1948-510	2432769.00	1948 Aug 5 1207	V-2	US	43	0.000	DRD/NRL	SS	NRL/	Test/Solar UV,X	Hermes-Rpt	-	-
1948-423	2432785.11	1948 Aug 19 1445	Bumper-WAC	US	Bumper 2	0.000	DRD/UMI	SS	UMI/	Test	Hermes-Rpt	-	-
1948-512	2432797.54	1948 Sep 3 0100	V-2	US	33	0.000	DRD/UMI	SS	UMI/SCCL/	Aeron	Hermes-Rpt	-	-
1948-430	2432811.50	1948 Sep 17	R-1	US	I-4	0.000	GA04	MF	-	Test/Solar SX	Z10	Delo	-
1948-513	2432825.15	1948 Sep 30 1530:09	Bumper-WAC	US	Bumper 3	0.000	DRD	MF	DRD/NRL/	Test	Hermes-Rpt	-	-
1948-514	2432834.50	1948 Oct 10	R-1	US	I-1	0.000	GA04	MS	-	Test	Z10	Delo	-
1948-515	2432837.50	1948 Oct 13	R-1	US	I-9	0.000	GA04	MS	-	Test	Z10	Delo	-
1948-516	2432845.50	1948 Oct 21	R-1	US	I-6	0.000	GA04	MS	-	Test	Z10	Delo	-
1948-517	2432847.50	1948 Oct 23	R-1	US	I-10	0.000	GA04	MS	-	Test	Z10	Delo	-
1948-518	2432856.50	1948 Nov 1	Bumper-WAC	US	Bumper 4	0.000	DRD/GEHTS	SF	DRD/NRL/	Test/Solar SX/Bio	Hermes-Rpt	-	-
1948-441	2432857.10	1948 Nov 1 1424:38	R-1	US	I-3	0.000	GA04	MS	-	Test	Z10	Delo	-
1948-520	2432858.50	1948 Nov 3	R-1	US	I-12	0.000	GA04	MS	-	Test	Z10	Delo	-
1948-521	2432859.50	1948 Nov 4	R-1	US	I-2	0.000	GA04	MS	-	Test	Z10	Delo	-
1948-522	2432860.50	1948 Nov 5	R-1	US	I-11	0.000	GA04	MS	-	Test	Z10	Delo	-
1948-523	2432874.44	1948 Nov 18 2235	R-1	US	I-11	0.000	DRD/GEHTS	MS	UMI/NRL/Tousey	Solar X/Biology	Hermes-Rpt	-	-
1948-524	2432874.44	1948 Nov 18 2235	R-1	US	I-11	0.000	DRD/SCCL	MS	UMI/NRL/SCCL/	Aeron/Solar X/Bio	Hermes-Rpt	-	-
1948-402	2432890.35	1948 Dec 9 1608	Hermes II	US	B-1 No. 1	0.000	DRD	MS	DRD/	Test	Hermes-Rpt	RVAS	-
1949-501	2432930.15	1949 Jan 13 2026	V-2	US	46	0.000	DRD/NRL	SF	NRL/AFCR/Seedon	Solar X/Ionos/Aeron/Bio	Hermes-Rpt	PhysRev61,652	-
1949-502	2432945.22	1949 Jan 26 1720	V-2	US	48	0.000	DRD/APL	SS	APL/NRL/WanAllen,Tousey	CN/Solar EUV/Bio	Hermes-Rpt	PhysRev64,791	-
1949-503	2432965.21	1949 Feb 24 2222:44	Bumper-WAC	US	Bumper 5	0.000	DRD/AFCS	SS	DRD/	Test	Bumper-Rpt	-	-
1949-504	2432972.43	1949 Feb 22 0643	V-2	US	41	0.000	DRD/UMI	SS	AFCRL/BV/	Ionos/Aeron/Solar X	AFCRL	-	-
1949-505	2432997.78	1949 Mar 22 0017:16	Bumper-WAC	US	Bumper 6	0.000	DRD/GEHTS	SF	UMI/SCCL/NRL/Tousey	Aeron/Solar X/Bio	Bumper-Rpt	-	-
1949-507	2433015.42	1949 Apr 11 2205	R-1	US	50	0.000	DRD/GEHTS	SF	DRD/APL/NRL/	Test/CN/Solar SX	Hermes-Rpt	-	-
1949-508	2433025.51	1949 Apr 22 0017:16	Bumper-WAC	US	Bumper 6	0.000	DRD/GEHTS	SF	NRL/	Solar EUV/X	Hermes-Rpt	-	-
1949-509	2433042.14	1949 May 5 1515	R-1	US	1	0.000	MI188A	MS	-	Test	Delo/p046	-	-
1949-509	2433043.59	1949 May 7 0212	R-1	US	2	0.000	MI188A	MS	-	Test	Delo/p046	-	-
1949-510	2433047.12	1949 May 10 1457	R-1	US	3	0.000	MI188A	MS	-	Test	Delo/p046	-	-
1949-511	2433051.58	1949 May 15 0148	R-1	US	4	0.000	MI188A	MS	-	Test	Delo/p046	-	-
1949-512	2433053.37	1949 May 16 2005	R-1	US	5	0.000	MI188A	MS	-	Test	Delo/p046	-	-
1949-513	2433060.53	1949 May 24 0040	R-1	US	6	0.000	MI188A	MS	-	Test	Delo/p046	-	-
1949-514	2433064.53	1949 May 26 0050	R-1	US	6	0.000	MI188A	MS	-	Test	Delo/p046	-	-
1949-515	2433082.44	1949 Jun 14 2235	V-2	US	47	0.000	DRD/AFCS	SS	AFCRL/UMI/WPFB	Ionos/Solar X/Biology	Hermes-Rpt	-	-
1949-519	2433169.50	1949 Sep 10	R-1	US	I1-1	0.000	GA04	MS	-	Test	Z10	-	-
1949-520	2433170.50	1949 Sep 11	R-1	US	I1-2	0.000	GA04	MS	-	Test	Z10	-	-
1949-521	2433172.50	1949 Sep 13	R-1	US	I1-2	0.000	GA04	MS	-	Test	Z10	-	-
1949-522	2433173.50	1949 Sep 14	R-1	US	I1-11	0.000	GA04	MS	-	Test	Z10	-	-
1949-523	2433176.47	1949 Sep 16 2319	V-2	US	32	0.000	DRD/AFCS	SF	AFCRL/	Solar X/Ionos/Biology	AFCRL	-	-
1949-524	2433176.50	1949 Sep 19	R-1	US	I1-8	0.000	GA04	MS	-	Test	Z10	-	-
1949-525	2433176.50	1949 Sep 20	R-1	US	I1-6	0.000	GA04	MS	-	Test	Z10	-	-
1949-526	2433179.50	1949 Sep 21	R-1	US	I1-5	0.000	GA04	MS	-	Test	Z10	-	-
1949-527	2433182.57	1949 Sep 23	R-1	US	I1-15	0.000	GA04	MS	-	Test	Z10	-	-
1949-528	2433187.57	1949 Sep 25 1116	R-2e	US	I1-10	0.000	GA04	MS	-	Test	Delo	-	-
1949-529	2433189.21	1949 Sep 26 1658	V-2	US	49	0.000	DRD/NRL	SS	NRL/Friedman,Bryam	Solar X/Ionos/Meteorites	Hermes-Rpt	PhysRev63,1025	-
1949-530	2433189.89	1949 Sep 29 1149	R-2e	US	2	0.000	GA04	MS	-	Test	Delo	-	-
1949-531	2433190.50	1949 Oct 3 1100	R-2e	US	1	0.000	GA04	MS	-	Test	Delo	-	-
1949-532	2433197.50	1949 Oct 6	Hermes II	US	B-1 No. 2	0.000	DRD	MS	US/	Test	RVAS	-	-
1949-533	2433197.75	1949 Oct 8 0605	R-2e	US	I1-16	0.000	GA04	MS	-	Test	Z10	-	-
1949-534	2433199.50	1949 Oct 10	R-1	US	I1-12	0.000	GA04	MS	-	Test	Z10	-	-
1949-535	2433201.03	1949 Oct 11 1245	R-2e	US	I1-12	0.000	GA04	MS	-	Test	Z10	-	-
1949-536	2433201.50	1949 Oct 12	R-1	US	I1-7	0.000	GA04	MS	-	Test	Z10	-	-
1949-537	2433202.50	1949 Oct 13	R-1	US	I1-13	0.000	GA04	MS	-	Test	Z10	-	-
1949-538	2433202.50	1949 Oct 15	R-1	US	I1-17	0.000	GA04	MS	-	Test	Z10	-	-
1949-539	2433204.50	1949 Oct 16	R-1	US	I1-19	0.000	GA04	MS	-	Test	Z10	-	-
1949-540	2433207.50	1949 Oct 18	R-1	US	I1-23	0.000	GA04	MS	-	Test	Z10	-	-
1949-541	2433208.50	1949 Oct 18	R-1	US	I1-22	0.000	GA04	MS	-	Test	Z10	-	-
1949-542	2433211.50	1949 Oct 23	R-1	US	I1-20	0.000	GA04	MS	-	Test	Z10	-	-
1949-543	2433212.50	1949 Oct 23	R-1	US	I1-3	0.000	GA04	MS	-	Test	Z10	-	-
1949-544	2433238.17	1949 Nov 18 1603	V-2	US	56	0.000	DRD/UMI	SS	UMI/SCCL/	Aeron/CN	Hermes-Rpt	-	-
1949-546	2433269.30	1949 Dec 8 1915	V-2	US	53	0.000	DRD/AFCR/L	SS	AFCRL/	Solar X/Ionos	Hermes-Rpt	-	-
1950-502	2433303.25	1950 Feb 17 1801	Bumper-WAC	US	Bumper 8	0.000	DRD/NRL	SS	NRL/Tousey	Solar X/CN/Aeron	Hermes-Rpt	-	-
1950-408	2433487.10	1950 Jul 24 1429	Bumper-WAC	US	Bumper 7	0.000	LCMB/GEHTS	SF	ADSWC/	Test	Hermes-Rpt	-	-
1950-508	2433525.21	1950 Aug 31 1709	V-2	US	51	0.000	DRD/AFCR/L	SS	AFCRL/BU/HAML/	Ionos/Solar X/Bio	Hermes-Rpt	-	-
1950-513	2433575.50	1950 Oct 21	R-2	US	2	0.000	GA04	MS	-	Test	Delo	-	-
1950-509	2433580.50	1950 Oct 26	R-2	US	1	0.000	GA04	MS	-	Test	Z10	-	-
1950-446	2433581.46	1950 Oct 26 2302	V-2	US	61	0.000	DRD/NRL	SF	BRL/	Ionos/Meteorites	Hermes-Rpt	-	-
1950-514	2433584.50	1950 Oct 27	R-2	US	3	0.000	GA04	MS	-	Test	Z10	-	-
1950-515	2433593.50	1950 Oct 30	R-2	US	4	0.000	GA04	MS	-	Test	Z10	-	-
1950-520	2433594.50	1950 Nov 9	Hermes II	US	B-1 No. 2A	0.000	DRD	MS	-	Test	RVAS	Delo	-
1950-516	2433599.50	1950 Nov 14	R-2	US	6	0.000	GA04	MS	-	Test	Z10	-	-
1950-517	2433603.50	1950 Nov 18	R-2	US	7	0.000	GA04	MS	-	Test	Z10	-	-
1950-518	2433611.50	1950 Nov 26	R-2	US	8	0.000	GA04	MS	-	Test	Z10	-	-
1950-522	2433626.50	1950 Dec 11	R-2	US	9	0.000	GA04	MS	-	Test	Z10	-	-
1950-523	2433627.50	1950 Dec 12	R-2	US	10	0.000	GA04	MS	-	Test	Z10	-	-
1950-524	2433631.50	1950 Dec 16	R-2	US	11	0.000	GA04	MS	-	Test	Z10	-	-
1950-528	2433635.50	1950 Dec 20	V-2	US	54	0.000	DRD/NRL	SF	NRL/	Solar UV,X/CN	Hermes-Rpt	-	-
1951-401	2433665.34	1951 Jan 18 2014	R-1	US	I1IA-1	0.000	GA04	MS	-	Test	Delo	-	-
1951-503	2433675.50	1951 Jan 29	R-1	US	I1IA-5	0.000	GA04	MS	-	Test	Z10	-	-
1951-504	2433675.50	1951 Jan 30	R-1	US	I1IA-2	0.000	GA04	MS	-	Test	Z10	-	-
1951-505	2433677.50	1951 Jan 31	R-1	US	I1IA-2	0.000	GA04	MS	-	Test	Z10	-	-
1951-506	2433678.50	1951 Feb 1	R-1	US	I1IA-6	0.000	GA04	MS	-	Test	Z10	-	-

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Orbit	Agency	Launch_Code	Group	Category	LTCite	Cite	Notes
1951-507	2433675.50	1951 Feb 2	R-1	US	IIIA-3	0.000	GA04	NS	-	UT	Z10	-	-
1951-406	2433714.64	1951 Mar 9 0516	V-2	US	57	0.000	DRD/AFORL	SF	AFORL/BU/	Ionos/Solar X/Aeron/IR	AFORL	-	-
1951-510	2433910.50	1951 Jun 13	R-1	-	ILIB-11	0.000	GA04	NS	-	UT	Z10	-	-
1951-429	2433912.08	1951 Jun 14 1348	V-2	US	58	0.000	DRD/NRL	SF	NRL/	Solar UV X/CR	Hermes-Rpt	-	-
1951-511	2433911.50	1951 Jun 14	R-1	-	ILIB-10	0.000	GA04	NS	-	UT	Z10	-	-
1951-512	2433915.50	1951 Jun 18	R-1	-	ILIB-1	0.000	GA04	NS	-	UT	Z10	-	-
1951-513	2433915.50	1951 Jun 19	R-1	-	ILIB-2	0.000	GA04	NS	-	UT	Z10	-	-
1951-514	2433917.50	1951 Jun 20	R-1	-	ILIB-3	0.000	GA04	NS	-	UT	Z10	-	-
1951-515	2433919.50	1951 Jun 22	R-1	-	ILIB-7	0.000	GA04	NS	-	UT	Z10	-	-
1951-516	2433920.50	1951 Jun 23	R-1	-	ILIB-8	0.000	GA04	NS	-	UT	Z10	-	-
1951-517	2433921.50	1951 Jun 24	R-1	-	ILIB-9	0.000	GA04	NS	-	UT	Z10	-	-
1951-518	2433922.50	1951 Jun 25	R-1	-	ILIB-4	0.000	GA04	NS	-	UT	Z10	-	-
1951-519	2433923.50	1951 Jun 26	R-1	-	ILIB-5	0.000	GA04	NS	-	UT	Z10	-	-
1951-520	2433924.50	1951 Jun 27	R-1	-	ILIB-14	0.000	DRD/AFORL	SF	AFORL/UCU/	Solar UV X/Aeron	Hermes-Rpt	-	-
1951-436	2433925.40	1951 Jun 28 2143	V-2	US	52	0.000	GA04	NS	-	UT	Z10	-	-
1951-522	2433931.50	1951 Jul 2	R-2	-	II-1	0.000	GA04	NS	-	Test	Delo/Siddiqi	-	-
1951-521	2433931.50	1951 Jul 4	R-2	-	II-2	0.000	GA04	NS	-	Test	Delo/Siddiqi	-	-
1951-523	2433934.50	1951 Jul 7	R-2	-	II-3	0.000	GA04	NS	-	Test	Delo/Siddiqi	-	-
1951-524	2433936.50	1951 Jul 9	R-2	-	II-4	0.000	GA04	NS	-	Test	Delo/Siddiqi	-	-
1951-525	2433937.50	1951 Jul 10	R-2	-	II-5	0.000	GA04	NS	-	Test	Delo/Siddiqi	-	-
1951-526	2433938.50	1951 Jul 11	R-2	-	II-6	0.000	GA04	NS	-	Test	Delo/Siddiqi	-	-
1951-527	2433939.50	1951 Jul 12	R-2	-	II-7	0.000	GA04	NS	-	Test	Delo/Siddiqi	-	-
1951-528	2433941.50	1951 Jul 14	R-2	-	II-8	0.000	GA04	NS	-	Test	Delo/Siddiqi	-	-
1951-529	2433943.50	1951 Jul 16	R-2	-	II-9	0.000	GA04	NS	-	Test	Delo/Siddiqi	-	-
1951-533	2433949.50	1951 Jul 20	R-2	-	II-10	0.000	GA04	NS	-	Test	Delo/Siddiqi	-	-
1951-530	2433950.50	1951 Jul 22	R-2	-	I	0.000	NI188A	SS	IM/	Test/Blo	Delo	-	-
1951-534	2433954.50	1951 Jul 25	R-2	-	II-11	0.000	GA04	NS	-	Test	Delo/Siddiqi	-	-
1951-535	2433956.50	1951 Jul 27	R-2	-	II-12	0.000	GA04	NS	-	Test	Delo/Siddiqi	-	-
1951-536	2433956.50	1951 Jul 29	R-1B	-	II-13	0.000	GA04	NS	-	Test	Delo/Siddiqi	-	-
1951-538	2433957.50	1951 Aug 15	R-1B	-	1	0.000	NI188A	SS	IM/FIAM/	Test/Blo	Delo	-	-
1951-539	2433977.50	1951 Aug 16	R-1B	-	2	0.000	NI188A	SS	IM/FIAM/	Test/Blo	Delo	-	-
1951-541	2433986.50	1951 Aug 26	R-1B	-	3	0.000	NI188A	SS	IM/FIAM/	Test/Blo	Delo	-	-
1951-542	2433987.50	1951 Sep 5	R-1B	-	4	0.000	NI188A	SS	IM/FIAM/	Test/Blo	Delo	-	-
1951-540	2433991.29	1951 Aug 22 1900	V-2	US	PT1	0.000	DRD/SCEL	SS	SCEL/	Test	NI188A	-	-
1951-544	2433993.39	1951 Oct 29 2104	V-2	US	60	0.000	DRD/SCEL	SS	UHI/SCEL/Jones, L	Aeron	NI188A	-	-
1952-309	2434153.17	1952 May 20 1606	V-2	US	69/TF2	0.000	DRD/SCEL	SS	UHI/SCEL/Jones, L	Test/Photo/Solar X/Aeron	NI188A	-	-
1952-319	2434232.50	1952 Aug 8	R-2	-	KT-1	0.000	GA04	NS	-	Test	Delo/Siddiqi	-	-
1952-312	2434233.50	1952 Aug 9	R-2	-	KT-2	0.000	GA04	NS	-	Test	Delo/Siddiqi	-	-
1952-313	2434236.50	1952 Aug 12	R-2	-	KT-3	0.000	GA04	NS	-	Test	Delo/Siddiqi	-	-
1952-314	2434236.50	1952 Aug 14	R-2	-	KT-4	0.000	GA04	NS	-	Test	Delo/Siddiqi	-	-
1952-320	2434244.50	1952 Aug 20	R-1	8A11	No 220	0.000	GA04	NS	-	Test	Delo/Siddiqi	-	-
1952-321	2434244.50	1952 Aug 21	R-1	8A11	PT3	0.000	GA04	NS	-	Test	Delo/Siddiqi	-	-
1952-304	2434246.81	1952 Aug 22 0723	V-2	US	KT-5	0.000	DRD/NRL	NS	NRL/	UT	Z10	-	-
1952-305	2434249.50	1952 Aug 25	R-2	-	KT-6	0.000	GA04	NS	-	Test	Delo/Siddiqi	-	-
1952-322	2434249.50	1952 Aug 26	R-2	-	KT-6	0.000	GA04	NS	-	Test	Delo/Siddiqi	-	-
1952-316	2434251.50	1952 Aug 27	R-2	-	KT-7	0.000	GA04	NS	-	Test	Delo/Siddiqi	-	-
1952-317	2434251.50	1952 Aug 28	R-2	-	KT-8	0.000	GA04	NS	-	Test	Delo/Siddiqi	-	-
1952-318	2434251.50	1952 Aug 28	R-2	-	KT-9	0.000	GA04	NS	-	Test	Delo/Siddiqi	-	-
1952-325	2434270.50	1952 Sep 15	R-2	-	KT-10	0.000	GA04	NS	-	Test	Delo/Siddiqi	-	-
1952-326	2434271.50	1952 Sep 16	R-2	-	KT-11	0.000	GA04	NS	-	Test	Delo/Siddiqi	-	-
1952-327	2434271.50	1952 Sep 17	R-2	-	KT-12	0.000	GA04	NS	-	Test	Delo/Siddiqi	-	-
1952-328	2434272.50	1952 Sep 17	R-2	-	KT-13	0.000	GA04	NS	-	Test	Delo/Siddiqi	-	-
1952-330	2434272.50	1952 Sep 18	R-2	-	KT-14	0.000	GA04	NS	-	Test	Delo/Siddiqi	-	-
1952-4161	2434275.16	1952 Sep 19 1649	V-2	US	TF5	0.000	DRD/SCEL	SF	SCEL/UMI/	Test/CR	UMS	-	-
1952-342	2434300.50	1952 Oct 15	R-2R	-	RUD 1	0.000	GA04	NS	-	Test	Z10	-	-
1952-343	2434303.50	1952 Oct 16	R-2R	-	RUD 2	0.000	GA04	NS	-	Test	Z10	-	-
1952-344	2434304.50	1952 Oct 18	R-2R	-	RUD 3	0.000	GA04	NS	-	Test	Z10	-	-
1952-345	2434309.50	1952 Oct 23	R-2R	-	RUD 4	0.000	GA04	NS	-	Test	Z10	-	-
1952-346	2434312.50	1952 Oct 27	R-2R	-	RUD 5	0.000	GA04	NS	-	Test	Z10	-	-
1952-336	2434314.50	1952 Oct 29	R-1 8A11	-	No 420	0.000	GA04	NS	-	UT	Z10	-	-
1952-338	2434315.50	1952 Oct 30	R-1 8A11	-	No 501	0.000	GA04	NS	-	UT	Z10	-	-
1952-337	2434315.50	1952 Oct 30	R-1 8A11	-	No 520	0.000	GA04	NS	-	UT	Z10	-	-
1952-339	2434337.50	1952 Nov 21	R-1 8A11	-	No 620	0.000	GA04	NS	-	UT	Z10	-	-
1953-305	2434437.50	1953 Mar 1	R-1 8A11	-	No 1020	0.000	GA04	NS	-	UT	Z10	-	-
1953-306	2434441.50	1953 Mar 5	R-1 8A11	-	No 319	0.000	GA04	NS	-	UT	Z10	-	-
1953-307	2434455.50	1953 Mar 19	R-1 8A11	-	No 820	0.000	GA04	NS	-	UT	Z10	-	-
1953-317	2434508.50	1953 May 11	R-1 8A11	-	No 420	0.000	UZZA	NS	-	UT	Z10	-	-
1953-324	2434564.50	1953 Jul 6	R-1 8A11	-	No 220	0.000	UZZA	NS	-	UT	Z10	-	-
1953-341	2434618.50	1953 Oct 29	R-1 8A11	-	530-80-118	0.000	UZZA	NS	-	UT	Z10	-	-
1953-342	2434666.50	1953 Oct 29	R-2	-	No 820	0.000	UZZA	NS	-	UT	Z10	-	-
1953-343	2434669.50	1953 Oct 17	R-1 8A11	-	No 520	0.000	UZZA	NS	-	UT	Z10	-	-
1953-344	2434669.50	1953 Oct 19	R-1 8A11	-	No 320	0.000	UZZA	NS	-	UT	Z10	-	-
1953-370	2434674.50	1953 Oct 24	R-2	-	No 620	0.000	UZZA	NS	-	UT	Z10	-	-
1953-345	2434676.50	1953 Oct 26	R-1 8A11	-	No 720	0.000	UZZA	NS	-	UT	Z10	-	-
1953-346	2434677.50	1953 Oct 27	R-1 8A11	-	No 1020	0.000	UZZA	NS	-	UT	Z10	-	-
1953-348	2434678.50	1953 Oct 28	R-1 8A11	-	No 920	0.000	UZZA	NS	-	UT	Z10	-	-
1953-349	2434678.50	1953 Oct 28	R-1 8A11	-	No 1220	0.000	UZZA	NS	-	UT	Z10	-	-
1953-361	2434693.50	1953 Nov 12	R-1 8A11	-	No 1120	0.000	UZZA	NS	-	UT	Z10	-	-
1953-363	2434696.50	1953 Nov 15	R-1 8A11	-	No 1320	0.000	UZZA	NS	-	UT	Z10	-	-
1953-365	2434705.50	1953 Nov 24	R-1 8A11	-	No 1520	0.000	UZZA	NS	-	UT	Z10	-	-
1953-336	2434720.50	1953 Dec 9	R-2	-	530-50-101	0.000	UZZA	NS	-	UT	Z10	-	-
1953-337	2434732.50	1953 Dec 21	R-2	-	531-10-320	0.000	UZZA	NS	-	UT	Z10	-	-
1954-515	2434801.50	1954 Feb 28	R-2	-	531-20-420	0.000	UZZA	NS	-	Test	Delo/Siddiqi	-	-



Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	OrbPay	Agency	Launch_Code	Group	Category	LTCite	Cite	Notes
1955-5146	2435322.50	1955 Aug 3	R-2	-	S7-20	0.000	UHRV	MS	-	UT	Z10	-	-
1955-5862	2435324.50	1955 Aug 5	R-2	-	S0-2	0.000	UHRV	MS	-	Test	Z10	Delo	-
1955-5147	2435325.50	1955 Aug 6	R-2	-	406	0.000	UHRV	MS	-	UT	Z10	-	-
1955-5148	2435327.50	1955 Aug 8	R-2	-	S0-5	0.000	UHRV	MS	-	UT	Z10	-	-
1955-5865	2435343.50	1955 Aug 24	R-1 8A11	-	No 302	0.000	UHRV	MS	-	UT	Z10	-	-
1955-5149	2435344.50	1955 Aug 24	R-2	-	S0-6	0.000	UHRV	MS	-	UT	Z10	-	-
1955-5866	2435344.50	1955 Aug 25	R-1 8A11	-	No 0315	0.000	UHRV	MS	-	UT	Z10	-	-
1955-5150	2435346.50	1955 Aug 25	R-2	-	S0-7	0.000	UHRV	MS	-	UT	Z10	-	-
1955-5151	2435349.50	1955 Aug 30	R-2	-	S8-20	0.000	UHRV	MS	-	UT	Z10	-	-
1955-5152	2435350.50	1955 Aug 31	R-2	-	S9-20	0.000	UHRV	MS	-	UT	Z10	-	-
1955-5153	2435373.50	1955 Sep 29	R-2	-	S11-20	0.000	UHRV	MS	-	UT	Z10	-	-
1955-5154	2435381.50	1955 Oct 1	R-2	-	S10-20	0.000	UHRV	MS	-	UT	Z10	-	-
1955-5889	2435385.50	1955 Oct 5	R-1 8A11	-	No K1-17	0.000	UHRV	MS	-	UT	Z10	-	-
1955-5891	2435385.50	1955 Oct 8	R-1 8A11	-	No K1-19	0.000	UHRV	MS	-	UT	Z10	-	-
1955-5155	2435411.50	1955 Oct 31	R-2	-	S12-20	0.000	UHRV	MS	-	UT	Z10	-	-
1955-5156	2435430.50	1955 Nov 19	R-2	-	S13-20	0.000	UHRV	MS	-	UT	Z10	-	-
1955-5157	2435434.50	1955 Nov 23	R-2	-	S14-20	0.000	UHRV	MS	-	UT	Z10	-	-
1955-5158	2435434.50	1955 Nov 23	R-2	-	415	0.000	UHRV	MS	-	UT	Z10	-	-
1955-5159	2435457.50	1955 Dec 16	R-2	-	S15-20	0.000	UHRV	MS	-	UT	Z10	-	-
1955-5160	2435458.50	1955 Dec 17	R-2	-	S16-20	0.000	UHRV	MS	-	UT	Z10	-	-
1955-5161	2435465.50	1955 Dec 24	R-2	-	S18-10	0.000	UHRV	MS	-	UT	Z10	-	-
1955-5162	2435468.50	1955 Dec 27	R-2	-	S17-20	0.000	UHRV	MS	-	UT	Z10	-	-
1955-5163	2435469.50	1955 Dec 28	R-2	-	S19-20	0.000	UHRV	MS	-	UT	Z10	-	-
1955-5164	2435471.50	1955 Dec 30	R-2	-	S19-19	0.000	UHRV	MS	-	UT	Z10	-	-
1955-5100	2435415.50	1955 Nov 4	R-1E	-	3	0.000	UHRV	SS	IM/FIAM/	Test	Delo	-	-
1956-506	2435493.50	1956 Jan 21	R-1 8A11	-	No 101	0.000	UHRV	MS	-	UT	Z10	-	-
1956-5114	2435496.50	1956 Jan 24	R-1 8A11	-	No 465	0.000	UHRV	MS	-	UT	Z10	-	-
1956-5115	2435515.50	1956 Feb 13	R-1 8A11	-	No 431	0.000	UHRV	MS	-	UT	Z10	-	-
1956-5116	2435517.50	1956 Feb 14	R-1 8A11	-	No 453	0.000	UHRV	MS	-	UT	Z10	-	-
1956-5118	2435520.50	1956 Feb 17	R-2	-	A1-20	0.000	UHRV	MS	-	UT	Z10	-	-
1956-5119	2435541.50	1956 Feb 9	R-2	-	A2-20	0.000	UHRV	MS	-	UT	Z10	-	-
1956-5221	2435560.50	1956 Mar 26	R-1 8A11	-	No 0316	0.000	UHRV	MS	-	UT	Z10	-	-
1956-5123	2435592.50	1956 Apr 16	R-1 8A11	-	No 0317	0.000	UHRV	MS	-	UT	Z10	-	-
1956-5124	2435601.50	1956 Apr 8	R-2	-	A3-20	0.000	UHRV	MS	-	UT	Z10	-	-
1956-5125	2435601.50	1956 Apr 8	R-1UK	-	11	0.000	UHRV	MS	-	Test	Z10	-	-
1956-5126	2435603.50	1956 May 10	R-1UK	-	11-1	0.000	UHRV	MS	-	Test	Z10	-	-
1956-5127	2435609.50	1956 May 16	R-1UK	-	31-1	0.000	UHRV	MS	-	Test	Z10	-	-
1956-5358	2435624.62	1956 May 31 0257	R-1E	-	31-1	0.000	UHRV	SS	IM/FIAM/	Test	Delo	AASHP-191	-
1956-5128	2435630.50	1956 Jun 9	R-1UK	-	51-2	0.000	UHRV	MS	-	Test	Z10	-	-
1956-5359	2435631.50	1956 Jun 9	R-1E (A-1)	-	51-2	0.000	UHRV	SS	IM/FIAM/	Test	Delo	-	-
1956-5129	2435632.50	1956 Jun 8	R-1UK	-	70-1	0.000	UHRV	MS	-	Test	Z10	-	-
1956-5130	2435636.50	1956 Jun 12	R-1UK	-	71-2	0.000	UHRV	MS	-	Test	Z10	-	-
1956-5361	2435636.50	1956 Jun 12	R-1UK	-	61-2	0.000	UHRV	MS	-	Test	Z10	-	-
1956-5362	2435636.50	1956 Jun 14	R-1UK	-	61-2	0.000	UHRV	MS	-	Test	Z10	-	-
1956-5132	2435642.50	1956 Jun 16	R-1UK	-	61-2	0.000	UHRV	SS	IM/FIAM/	Test	Delo	-	-
1956-5133	2435644.50	1956 Jun 20	R-1UK	-	61-2	0.000	UHRV	MS	-	Test	Z10	-	-
1956-5134	2435645.50	1956 Jun 20	R-1UK	-	61-3	0.000	UHRV	MS	-	Test	Z10	-	-
1956-5135	2435654.50	1956 Jun 21	R-1UK	-	61-3	0.000	UHRV	MS	-	Test	Z10	-	-
1956-5136	2435664.50	1956 Jun 21	R-1 8A11	-	No 5112	0.000	UHRV	MS	-	UT	Z10	-	-
1956-5137	2435671.50	1956 Jun 12	R-2	-	No 5301	0.000	UHRV	MS	-	UT	Z10	-	-
1956-5138	2435671.50	1956 Jun 24	R-1 8A11	-	No 0409	0.000	UHRV	MS	-	UT	Z10	-	-
1956-562	2435674.50	1956 Jul 24	R-1 8A11	-	No 0311	0.000	UHRV	MS	-	UT	Z10	-	-
1956-562	2435680.50	1956 Jul 26	R-1 8A11	-	No 0311	0.000	UHRV	MS	-	UT	Z10	-	-
1956-567	2435682.50	1956 Jul 28	R-1 8A11	-	No 0307	0.000	UHRV	MS	-	UT	Z10	-	-
1956-5139	2435682.50	1956 Jul 28	R-2	-	A3-5	0.000	UHRV	MS	-	UT	Z10	-	-
1956-5139	2435682.50	1956 Jul 28	R-2	-	S19-19	0.000	UHRV	MS	-	UT	Z10	-	-
1956-5140	2435745.50	1956 Sep 23	R-2	-	A4-20	0.000	UHRV	MS	-	UT	Z10	-	-
1956-5143	2435770.50	1956 Oct 23	R-1 8A11	-	No 102	0.000	UHRV	MS	-	UT	Z10	-	-
1956-5144	2435771.50	1956 Oct 25	R-1 8A11	-	No 103	0.000	UHRV	MS	-	UT	Z10	-	-
1956-5145	2435771.50	1956 Oct 25	R-2	-	0310	0.000	UHRV	MS	-	UT	Z10	-	-
1956-5146	2435771.50	1956 Oct 25	R-2	-	0310	0.000	UHRV	MS	-	UT	Z10	-	-
1956-5147	2435771.50	1956 Oct 25	R-1 8A11	-	A3-10	0.000	UHRV	MS	-	UT	Z10	-	-
1956-5149	2435770.50	1956 Oct 26	R-2	-	No 104	0.000	UHRV	MS	-	UT	Z10	-	-
1956-5150	2435780.50	1956 Nov 3	R-2	-	No 303	0.000	UHRV	MS	-	UT	Z10	-	-
1956-5156	2435813.50	1956 Dec 6	R-1 8A11	-	No 1037	0.000	UHRV	MS	-	UT	Z10	-	-
1956-5111	2435827.50	1956 Dec 20	A-1	-	-	0.000	UHRV	SS	FIAM/?	Tomars?	ICM	-	-
1957-5194	2435851.50	1957 Jan 13	R-1 8A11	-	No 0406	0.000	UHRV	MS	-	UT	Z10	-	-
1957-5195	2435852.50	1957 Jan 14	R-1 8A11	-	No 0408	0.000	UHRV	MS	-	UT	Z10	-	-
1957-5191	2435888.50	1957 Feb 19	R-1 8A11	-	No 0408	0.000	UHRV	MS	-	UT	Z10	-	-
1957-5194	2435897.50	1957 Feb 28	R-1 8A11	-	No 0920	0.000	UHRV	MS	-	UT	Z10	-	-
1957-5205	2435940.50	1957 Apr 12	R-2	-	M1-25	0.000	UHRV	MS	-	UT	Z10	-	-
1957-527	2435942.50	1957 Apr 14	R-2	-	-	0.000	UHRV	MS	-	Test	Delo	-	-
1957-534	2435974.64	1957 May 16 0318	R-2A	-	-	0.000	UHRV	SS	-	Test	Delo	-	-
1957-536	2435982.50	1957 May 24	R-2A	-	No. 1	0.000	AN	SS	AN/	Test/Bio	WDCRF	-	-
1957-5200	2435987.50	1957 May 29	R-2	-	M2-25	0.000	UHRV	MS	-	UT	Z10	-	-
1957-5202	2435990.50	1957 Jun 1	R-1 8A11	-	0418	0.000	UHRV	MS	-	UT	Z10	-	-
1957-5203	2435994.50	1957 Jun 5	R-1 8A11	-	0419	0.000	UHRV	MS	-	UT	Z10	-	-
1957-5204	2435996.50	1957 Jun 7	R-2	-	0406	0.000	UHRV	MS	-	UT	Z10	-	-
1957-538	2435996.50	1957 Jun 7	R-2	-	[These duplicates?]	0.000	UHRV	MS	-	UT	Z10	-	-
1957-539	2435996.50	1957 Jun 7	R-2	-	-	0.000	UHRV	MS	-	Target	MSE-65	-	-
1957-542	2436011.50	1957 Jun 22	R-2	-	-	0.000	UHRV	MS	-	Target	MSE-65	-	-
1957-543	2436012.50	1957 Jun 23	R-2	-	-	0.000	UHRV	MS	-	Target	MSE-65	-	-
1957-547	2436017.50	1957 Jun 28	R-2	-	-	0.000	UHRV	MS	-	Target	MSE-65	-	-
1957-548	2436018.50	1957 Jun 29	R-2	-	-	0.000	UHRV	MS	-	Target	MSE-65	-	-
1957-554	2436023.50	1957 Jul 4	R-2	-	-	0.000	UHRV	MS	-	Target	MSE-65	-	-

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	OrbPay	Agency	Launch_Code	Group	Category	LTCcite	Cite	Notes
1957-856	2436024.50	1957 Jul 5	R-2	-	-	0.000	DNRV	MS	-	Target	MSS-65	-	-
1957-8208	2436026.50	1957 Jul 7	R-2	-	0417RD	0.000	DNRV	MS	-	OT	Z10	-	-
1957-8209	2436027.50	1957 Jul 8	R-1	-	52080416	0.000	DNRV	MS	-	OT	Z10	-	-
1957-8210	2436028.50	1957 Jul 9	R-2	-	K2-5	0.000	DNRV	MS	-	OT	Z10	-	-
1957-8211	2436028.50	1957 Jul 9	R-2	-	0415	0.000	DNRV	MS	-	OT	Z10	-	-
1957-A160	2436028.50	1957 Jul 10	R-1	-	0414	0.000	DNRV	MS	-	OT	Z10	-	-
1957-8213	2436029.50	1957 Jul 10	R-2	-	0409	0.000	DNRV	MS	-	OT	Z10	-	-
1957-A161	2436032.50	1957 Jul 13	R-1	-	5208413	0.000	DNRV	MS	-	OT	Z10	-	-
1957-8214	2436037.50	1957 Jul 18	R-2	-	0407	0.000	DNRV	MS	-	OT	Z10	-	-
1957-8215	2436038.50	1957 Jul 19	R-2	-	0408	0.000	DNRV	MS	-	OT	Z10	-	-
1957-8218	2436041.50	1957 Jul 22	R-2	-	0419	0.000	DNRV	MS	-	OT	Z10	-	-
1957-A162	2436043.50	1957 Jul 24	R-1	-	53010116	0.000	DNRV	MS	-	OT	Z10	-	-
1957-8219	2436043.50	1957 Jul 24	R-2	-	0319RD	0.000	DNRV	MS	-	OT	Z10	-	-
1957-8220	2436046.50	1957 Jul 29	R-2	-	0217RD	0.000	DNRV	MS	-	OT	Z10	-	-
1957-8221	2436055.50	1957 Aug 5	R-2	-	0216	0.000	DNRV	MS	-	OT	Z10	-	-
1957-8222	2436056.50	1957 Aug 6	R-2	-	K3-12	0.000	DNRV	MS	-	OT	Z10	-	-
1957-8223	2436057.50	1957 Aug 7	R-2	-	K3-9	0.000	DNRV	MS	-	OT	Z10	-	-
1957-8224	2436058.50	1957 Aug 8	R-2	-	FLAN/?	0.000	DNRV	MS	FLAN/?	Sciarc UV	ANSH9-191	-	-
1957-854	2436063.50	1957 Aug 13	R-2A	-	K3-14	0.000	DNRV	MS	-	OT	Z10	-	-
1957-8225	2436070.50	1957 Aug 20	R-2	-	K3-4	0.000	DNRV	MS	-	OT	Z10	-	-
1957-8226	2436072.50	1957 Aug 22	R-2	-	K3-13	0.000	DNRV	MS	-	OT	Z10	-	-
1957-8228	2436073.50	1957 Aug 25	R-2	-	K3-7	0.000	DNRV	MS	-	OT	Z10	-	-
1957-8229	2436075.60	1957 Aug 25 0223	R-2A	-	No. 3	0.000	DNRV	MS	-	OT	Z10	-	-
1957-8230	2436077.50	1957 Aug 27	R-2	-	K3-2	0.000	DNRV	MS	-	OT	Z10	-	-
1957-8231	2436077.50	1957 Aug 27	R-2	-	K3-1	0.000	DNRV	MS	-	OT	Z10	-	-
1957-8232	2436077.50	1957 Aug 27	R-2	-	K3-1	0.000	DNRV	MS	-	OT	Z10	-	-
1957-8233	2436081.73	1957 Aug 31 0530	R-2A	-	No. 4	0.000	DNRV	MS	IM/	Imnos/Blo	IG36	-	-
1957-8234	2436091.16	1957 Sep 9 1650	R-2A	-	No. 5	0.000	DNRV	MS	IM/	Imnos/Blo	IG36	-	-
1957-8244	2436102.50	1957 Sep 21	R-2	-	0410	0.000	DNRV	MS	-	OT	Z10	-	-
1957-8245	2436102.50	1957 Sep 21	R-2	-	0412	0.000	DNRV	MS	-	OT	Z10	-	-
1957-8246	2436103.50	1957 Sep 22	R-2	-	0411	0.000	DNRV	MS	-	OT	Z10	-	-
1957-8247	2436104.50	1957 Sep 23	R-2	-	K3-15	0.000	DNRV	MS	-	OT	Z10	-	-
1957-8248	2436110.50	1957 Sep 29	R-2	-	0414	0.000	DNRV	MS	-	OT	Z10	-	-
1957-8249	2436111.50	1957 Sep 30	R-2	-	0413	0.000	DNRV	MS	-	OT	Z10	-	-
1957-8250	2436112.50	1957 Oct 1	R-2	-	K2-11	0.000	DNRV	MS	-	OT	Z10	-	-
1957-8251	2436113.50	1957 Oct 2	R-2	-	K2-11	0.000	DNRV	MS	-	OT	Z10	-	-
1957-8252	2436117.50	1957 Oct 6	R-1	-	K2-6	0.000	DNRV	MS	-	OT	Z10	-	-
1957-8253	2436117.50	1957 Oct 6	R-1	-	510808419	0.000	DNRV	MS	-	OT	Z10	-	-
1957-8254	2436123.50	1957 Oct 12	R-2	-	510808423	0.000	DNRV	MS	-	OT	Z10	-	-
1957-8255	2436123.50	1957 Oct 12	R-2	-	52120311	0.000	DNRV	MS	-	OT	Z10	-	-
1957-8256	2436124.50	1957 Oct 13	R-1	-	52120312	0.000	DNRV	MS	-	OT	Z10	-	-
1957-8257	2436124.50	1957 Oct 13	R-2	-	510808422	0.000	DNRV	MS	-	OT	Z10	-	-
1957-8258	2436124.50	1957 Oct 13	R-2	-	52120313	0.000	DNRV	MS	-	OT	Z10	-	-
1957-8259	2436124.50	1957 Oct 14	R-2	-	K2-6	0.000	DNRV	MS	-	OT	Z10	-	-
1957-8260	2436126.50	1957 Oct 14	R-1	-	510808429	0.000	DNRV	MS	-	OT	Z10	-	-
1957-8261	2436136.50	1957 Oct 24	R-1	-	53000818	0.000	DNRV	MS	-	OT	Z10	-	-
1957-8262	2436136.50	1957 Oct 24	R-1	-	53091516	0.000	DNRV	MS	-	OT	Z10	-	-
1957-8263	2436136.50	1957 Oct 24	R-1	-	53091516	0.000	DNRV	MS	-	OT	Z10	-	-
1957-8264	2436137.50	1957 Oct 24	R-1	-	53091519	0.000	DNRV	MS	-	OT	Z10	-	-
1957-8265	2436138.50	1957 Oct 26	R-2	-	5305081310	0.000	DNRV	MS	-	OT	Z10	-	-
1957-8266	2436146.50	1957 Oct 27	R-2	-	53120309	0.000	DNRV	MS	-	OT	Z10	-	-
1957-8267	2436146.50	1957 Nov 9 1654	R-2	-	54120308	0.000	DNRV	MS	-	OT	Z10	-	-
1958-8204	2436213.50	1958 Jan 10	R-1	-	53030610	0.000	MCS	MS	FLAN/	Imnos/Aeron	UDGRF	-	-
1958-8205	2436213.50	1958 Jan 10	R-1	-	53071201	0.000	DNRV	MS	-	OT	Z10	-	-
1958-8206	2436214.50	1958 Jan 10	R-1	-	530941713	0.000	DNRV	MS	-	OT	Z10	-	-
1958-8207	2436220.50	1958 Jan 11	R-2	-	53120317	0.000	DNRV	MS	-	OT	Z10	-	-
1958-8208	2436224.50	1958 Jan 11	R-1	-	D21111	0.000	DNRV	MS	-	OT	Z10	-	-
1958-8209	2436245.50	1958 Feb 31	R-1	-	510808433	0.000	DNRV	MS	-	OT	Z10	-	-
1958-8310	2436254.50	1958 Feb 21	R-2	-	K2-18	0.000	DNRV	MS	-	OT	Z10	-	-
1958-8312	2436248.50	1958 Mar 25	R-1	-	K2-19	0.000	DNRV	MS	-	OT	Z10	-	-
1958-8313	2436248.50	1958 Mar 25	R-1	-	K2-19	0.000	DNRV	MS	-	OT	Z10	-	-
1958-8314	2436250.50	1958 Mar 27	R-1	-	K2-9	0.000	DNRV	MS	-	OT	Z10	-	-
1958-8315	2436250.50	1958 Mar 27	R-1	-	K2-9	0.000	DNRV	MS	-	OT	Z10	-	-
1958-8316	2436256.71	1958 Jul 2 0800	R-2A	-	K1-3	0.000	AN	MS	AN/	OT	UDGRF	-	-
1958-8317	2436258.50	1958 Jul 4	R-2	-	54120418	0.000	DNRV	MS	-	OT	Z10	-	-
1958-8318	2436258.50	1958 Jul 4	R-2	-	52080408	0.000	DNRV	MS	-	OT	Z10	-	-
1958-8319	2436260.50	1958 Jul 8	R-2	-	52120416	0.000	DNRV	MS	-	OT	Z10	-	-
1958-8321	2436260.50	1958 Jul 8	R-2	-	52120416	0.000	DNRV	MS	-	OT	Z10	-	-
1958-8322	2436260.50	1958 Jul 8	R-1	-	52080407	0.000	DNRV	MS	-	OT	Z10	-	-
1958-8323	2436260.50	1958 Jul 8	R-1	-	52080410	0.000	DNRV	MS	-	OT	Z10	-	-
1958-8325	2436260.50	1958 Jul 15	R-1	-	52080411	0.000	DNRV	MS	-	OT	Z10	-	-
1958-8326	2436260.50	1958 Jul 15	R-2	-	52120417	0.000	DNRV	MS	-	OT	Z10	-	-
1958-8327	2436260.50	1958 Jul 24	R-1	-	51120504	0.000	DNRV	MS	-	OT	Z10	-	-
1958-8328	2436260.50	1958 Jul 24	R-1	-	51120106	0.000	DNRV	MS	-	OT	Z10	-	-
1958-8329	2436260.50	1958 Jul 25	R-1	-	51120107	0.000	DNRV	MS	-	OT	Z10	-	-
1958-8330	2436260.50	1958 Jul 29	R-2	-	51120301	0.000	DNRV	MS	-	OT	Z10	-	-
1958-8331	2436261.30	1958 Jul 29	R-2	-	51120303	0.000	DNRV	MS	-	OT	Z10	-	-
1958-8332	2436261.30	1958 Aug 1	R-2	-	53120416RD	0.000	DNRV	MS	FLAN/IM/	Target	MSS-65	Target	MSS-65
1958-8333	2436261.30	1958 Aug 1	R-2	-	53120416RD	0.000	DNRV	MS	FLAN/IM/	Target	MSS-65	Target	MSS-65
1958-8334	2436261.30	1958 Aug 1	R-2	-	53120416RD	0.000	DNRV	MS	FLAN/IM/	Target	MSS-65	Target	MSS-65
1958-8335	2436261.30	1958 Aug 1	R-2	-	53120416RD	0.000	DNRV	MS	FLAN/IM/	Target	MSS-65	Target	MSS-65
1958-8336	2436261.30	1958 Aug 1	R-2	-	53120416RD	0.000	DNRV	MS	FLAN/IM/	Target	MSS-65	Target	MSS-65
1958-8337	2436261.30	1958 Aug 1	R-2	-	53120416RD	0.000	DNRV	MS	FLAN/IM/	Target	MSS-65	Target	MSS-65
1958-8338	2436261.30	1958 Aug 1	R-2	-	53120416RD	0.000	DNRV	MS	FLAN/IM/	Target	MSS-65	Target	MSS-65
1958-8339	2436261.30	1958 Aug 1	R-2	-	53120416RD	0.000	DNRV	MS	FLAN/IM/	Target	MSS-65	Target	MSS-65
1958-8340	2436261.30	1958 Aug 1	R-2	-	53120416RD	0.000	DNRV	MS	FLAN/IM/	Target	MSS-65	Target	MSS-65
1958-8341	2436261.30	1958 Aug 1	R-2	-	53120416RD	0.000	DNRV	MS	FLAN/IM/	Target	MSS-65	Target	MSS-65
1958-8342	2436261.30	1958 Aug 1	R-2	-	53120416RD	0.000	DNRV	MS	FLAN/IM/	Target	MSS-65	Target	MSS-65
1958-8343	2436261.30	1958 Aug 1	R-2	-	53120416RD	0.000	DNRV	MS	FLAN/IM/	Target	MSS-65	Target	MSS-65
1958-8344	2436261.30	1958 Aug 1	R-2	-	53120416RD	0.000	DNRV	MS	FLAN/IM/	Target	MSS-65	Target	MSS-65
1958-8345	2436261.30	1958 Aug 1	R-2	-	53120416RD	0.000	DNRV	MS	FLAN/IM/	Target	MSS-65	Target	MSS-65
1958-8346	2436261.30	1958 Aug 1	R-2	-	53120416RD	0.000	DNRV	MS	FLAN/IM/	Target	MSS-65	Target	MSS-65
1958-8347	2436261.30	1958 Aug 1	R-2	-	53120416RD	0.000	DNRV	MS	FLAN/IM/	Target	MSS-65	Target	MSS-65
1958-8348	2436261.30	1958 Aug 1	R-2	-	53120416RD	0.000	DNRV	MS	FLAN/IM/	Target	MSS-65	Target	MSS-65
1958-8349	2436261.30	1958 Aug 1	R-2	-	53120416RD	0.000	DNRV	MS	FLAN/IM/	Target	MSS-65	Target	MSS-65
1958-8350	2436261.30	1958 Aug 1	R-2	-	53120416RD	0.000	DNRV	MS	FLAN/IM/	Target	MSS-65	Target	MSS-65
1958-8351	2436261.30	1958 Aug 1	R-2	-	53120416RD	0.000	DNRV	MS	FLAN/IM/	Target	MSS-65	Target	MSS-65
1958-8352	2436261.30	1958 Aug 1	R-2	-	53120416RD	0.000	DNRV	MS	FLAN/IM/	Target	MSS-65	Target	MSS-65
1958-8353	2436261.30	1958 Aug 1	R-2	-	5312								

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Orbit	Agency	Launch_Code	Group	Category	LTCite	Cite	Notes
1958-8347	2436454.50	1958 Sep 8	R-1	-	D2115	0.000	DNV	MS	-	UT	Z10	-	-
1958-8348	2436454.50	1958 Sep 8	R-2	-	M2-3D	0.000	DNV	MS	-	UT	Z10	-	-
1958-8349	2436459.50	1958 Sep 13	R-2	-	K2-16	0.000	DNV	MS	-	UT	Z10	-	-
1958-8350	2436462.50	1958 Sep 16	R-2	-	A3-6	0.000	DNV	MS	-	UT	Z10	-	-
1958-8351	2436462.50	1958 Sep 16	R-2	-	A3-6 (DUP?)	0.000	DNV	MS	-	UT	Z10	-	-
1958-8227	2436491.50	1958 Oct 15	R-2	-	-	0.000	DNV	MS	-	Target	MSS-65	-	-
1958-8296	2436397.50	1959 Jan 29	R-2	-	53060204	0.000	RSSH	MS	-	UT	Z10	-	-
1958-8297	2436397.50	1959 Jan 29	R-2	-	D217	0.000	RSSH	MS	-	UT	Z10	-	-
1958-8313	2436701.50	1959 May 4	R-2	-	S6-2	0.000	RSSH	MS	-	UT	Z10	-	-
1958-8314	2436706.50	1959 May 13	R-2	-	S6-4	0.000	RSSH	MS	-	UT	Z10	-	-
1958-8315	2436706.50	1959 May 18	R-2	-	S6-1	0.000	RSSH	MS	-	UT	Z10	-	-
1958-8316	2436709.50	1959 May 21	R-2	-	S7-1	0.000	RSSH	MS	-	UT	Z10	-	-
1958-8317	2436709.50	1959 May 21	R-2	-	S7-1	0.000	RSSH	MS	-	UT	Z10	-	-
1958-8318	2436710.50	1959 May 22	R-2	-	S2-9	0.000	RSSH	MS	-	UT	Z10	-	-
1958-8324	2436720.50	1959 Jun 1	R-2	-	S2-7	0.000	RSSH	MS	-	UT	Z10	-	-
1958-8325	2436724.50	1959 Jun 5	R-2	-	S2-4	0.000	RSSH	MS	-	UT	Z10	-	-
1958-8326	2436725.50	1959 Jun 6	R-2	-	S6-3	0.000	RSSH	MS	-	UT	Z10	-	-
1958-8327	2436730.50	1959 Jun 11	R-2	-	S2-3	0.000	RSSH	MS	-	UT	Z10	-	-
1958-8328	2436730.50	1959 Jun 11	R-2	-	S2-8	0.000	RSSH	MS	-	UT	Z10	-	-
1958-8334	2436734.50	1959 Jun 15	R-2	-	S2-2	0.000	RSSH	MS	-	UT	Z10	-	-
1958-8335	2436735.50	1959 Jun 16	R-2	-	S2-6	0.000	RSSH	MS	-	UT	Z10	-	-
1958-8339	2436739.50	1959 Jun 20	R-2	-	S2-6	0.000	RSSH	MS	-	UT	Z10	-	-
1958-8340	2436739.50	1959 Jun 20	R-1	-	54010809	0.000	RSSH	MS	-	UT	Z10	-	-
1958-8341	2436751.78	1959 Jun 20	R-2A	-	M0_9	0.000	WSS	MS	FIAN/	Ionos/Aeron/Bio	Z10	-	-
1958-8335	2436752.50	1959 Jul 3	R-2	-	S3-1	0.000	RSSH	MS	-	UT	Z10	-	-
1958-8336	2436757.50	1959 Jul 8	R-2	-	S2-12	0.000	RSSH	MS	-	UT	Z10	-	-
1958-8337	2436757.50	1959 Jul 8	R-2	-	S2-18	0.000	RSSH	MS	-	UT	Z10	-	-
1958-8338	2436758.50	1959 Jul 9	R-2	-	S2-14	0.000	RSSH	MS	-	UT	Z10	-	-
1958-8339	2436759.70	1959 Jul 10	R-2A	-	M0_10	0.000	WSS	MS	FIAN/	Solar UV/Bio	Z10	-	-
1958-8345	2436762.50	1959 Jul 13	R-2	-	S2-19	0.000	RSSH	MS	-	UT	Z10	-	-
1958-8346	2436762.50	1959 Jul 13	R-2	-	S2-19	0.000	RSSH	MS	-	UT	Z10	-	-
1958-8347	2436763.50	1959 Jul 14	R-2	-	S2-17	0.000	RSSH	MS	-	UT	Z10	-	-
1958-8348	2436763.50	1959 Jul 14	R-2	-	S2-4	0.000	RSSH	MS	-	UT	Z10	-	-
1958-8349	2436763.65	1959 Jul 14	R-2A	-	S3-4	0.000	WSS	MS	FIAN/	Ionos/Aeron	Z10	-	-
1958-8349	2436765.50	1959 Jul 16	R-2	-	S2-13	0.000	RSSH	MS	-	UT	Z10	-	-
1958-8350	2436765.50	1959 Jul 16	R-2	-	S2-16	0.000	RSSH	MS	-	UT	Z10	-	-
1958-8351	2436769.50	1959 Jul 20	R-2	-	S3060119	0.000	RSSH	MS	-	UT	Z10	-	-
1958-8352	2436769.50	1959 Jul 20	R-2	-	S3-3	0.000	RSSH	MS	-	UT	Z10	-	-
1958-8353	2436769.50	1959 Jul 20	R-2	-	S3-6	0.000	RSSH	MS	-	UT	Z10	-	-
1958-8320	2436771.95	1959 Jul 22 0114	R-2A	-	[dup?]	0.000	WSS	MS	AN/	Ionos/Aeron	Z10	-	-
1958-8354	2436777.50	1959 Aug 17	R-1	-	53061418	0.000	RSSH	MS	-	UT	Z10	-	-
1958-8354	2436777.50	1959 Aug 17	R-2	-	S3061418	0.000	RSSH	MS	-	UT	Z10	-	-
1958-8355	2436801.50	1959 Nov 20	R-1	-	S3-9	0.000	RSSH	MS	-	UT	Z10	-	-
1958-8356	2436802.50	1959 Nov 20	R-2	-	S3-9	0.000	RSSH	MS	-	UT	Z10	-	-
1958-8359	2436805.50	1959 Nov 20	R-2	-	S3-14	0.000	RSSH	MS	-	UT	Z10	-	-
1958-8360	2436805.50	1959 Nov 26	R-2	-	S3-16	0.000	RSSH	MS	-	UT	Z10	-	-
1958-8361	2436805.50	1959 Nov 26	R-2	-	S3-12	0.000	RSSH	MS	-	UT	Z10	-	-
1958-8362	2436805.50	1959 Nov 26	R-2	-	S3-13	0.000	RSSH	MS	-	UT	Z10	-	-
1958-8363	2436805.50	1959 Nov 27	R-2	-	S3-8	0.000	RSSH	MS	-	UT	Z10	-	-
1958-8364	2436805.50	1959 Nov 28	R-2	-	S4-6	0.000	RSSH	MS	-	UT	Z10	-	-
1958-8411	2436925.50	1959 Dec 23	R-2	-	S4-8	0.000	RSSH	MS	-	UT	Z10	-	-
1958-8411	2436925.50	1959 Dec 24	R-2	-	S4-13	0.000	RSSH	MS	-	UT	Z10	-	-
1958-8412	2436927.50	1959 Dec 25	R-2	-	S4-8	0.000	RSSH	MS	-	UT	Z10	-	-
1958-8413	2436930.50	1959 Dec 28	R-2	-	S4-12	0.000	RSSH	MS	-	UT	Z10	-	-
1958-8414	2436930.50	1959 Dec 28	R-2	-	S4-9	0.000	RSSH	MS	-	UT	Z10	-	-
1958-8465	2437075.50	1960 May 24	R-2	-	S306-0203	0.000	RSSH	MS	-	UT	Z20	-	-
1960-8469	2437093.50	1960 Jun 8	R-1	-	5306-1414	0.000	RSSH	MS	-	UT	Z20	-	-
1960-8126	2437100.61	1960 Jun 15 0213	R-2A	-	M0_12	0.000	RSSH	MS	AN/	Aeron/Ionos/Solar/Bio	ASHIP-191	-	-
1960-8129	2437109.46	1960 Jun 23 2300	R-2A	-	M0_12	0.000	RSSH	MS	FIAN/	Ionos/Aeron/Bio	Z20	-	-
1960-8163	2437119.50	1960 Jul 4	R-2	-	[Dubious]	0.000	GIUV	MS	-	Target	WDRF	-	-
1960-8166	2437121.50	1960 Jul 6	R-2	-	M2-7D	0.000	GIUV	MS	-	Target	MSS-65	-	-
1960-8466	2437129.50	1960 Jul 14	R-2	-	S10-1	0.000	GIUV	MS	-	Target	Z20	-	-
1960-8467	2437130.50	1960 Jul 15	R-2	-	S10-2	0.000	GIUV	MS	-	Target	MSS-65	-	-
1960-8191	2437138.50	1960 Jul 23	R-2	-	M2-6D	0.000	GIUV	MS	-	Target	MSS-65	-	-
1960-8213	2437148.50	1960 Jul 31	R-2	-	M2-9D	0.000	GIUV	MS	-	Target	Z20	-	-
1960-8468	2437147.50	1960 Aug 10	R-2	-	S10-2	0.000	GIUV	MS	-	Target	Z20	-	-
1960-8471	2437156.50	1960 Aug 10	R-2	-	S10-3	0.000	GIUV	MS	-	Target	Z20	-	-
1960-8472	2437156.50	1960 Aug 10	R-2	-	A1-2	0.000	GIUV	MS	-	Target	Z20	-	-
1960-8469	2437157.50	1960 Aug 11	R-2	-	A1-1	0.000	GIUV	MS	-	Target	Z20	-	-
1960-8470	2437158.50	1960 Aug 31	R-2	-	S10-7	0.000	GIUV	MS	-	Target	Z20	-	-
1960-8473	2437177.50	1960 Aug 31	R-2	-	M0_10	0.000	AN	MS	FIAN/	Ionos/Aeron/Bio	Z20	-	-
1960-8272	2437193.50	1960 Sep 16	R-2A	-	M0_11	0.000	RSSH	MS	-	Target	WDRF	-	-
1960-8281	2437200.37	1960 Sep 22 2056	R-2A	-	M0_11	0.000	RSSH	MS	FIAN/	Ionos/Aeron/Bio?	WDRF	-	-
1960-8282	2437177.50	1960 Sep 22	DF-1	-	-	0.000	CBS	MS	-	Target	Harvey	-	-
1960-8380	2437263.54	1960 Nov 5 0100	DF-1	-	-	0.000	CBS	MS	-	Target	Harvey	-	-
1960-8388	2437268.50	1960 Dec	DF-1	-	-	0.000	CBS	MS	-	Target	Harvey	-	-
1960-8460	2437282.50	1960 Dec	R-1	-	-	0.000	CBS	MS	-	Target	Z20	-	-
1960-8474	2437282.50	1960 Dec 14	R-2	-	D20-19	0.000	RSSH	MS	-	Target	Z20	-	-
1960-8451	2437283.50	1960 Dec 14	R-1	-	5312-0607	0.000	RSSH	MS	-	Target	Z20	-	-
1960-8452	2437283.50	1960 Dec 15	R-1	-	5304-0918	0.000	RSSH	MS	-	Target	Z20	-	-
1960-8475	2437283.50	1960 Dec 15	R-2	-	5162-0467	0.000	RSSH	MS	-	Target	Z20	-	-
1960-8463	2437283.50	1960 Dec 16	R-1	-	S17-19	0.000	RSSH	MS	-	Target	Z20	-	-
1960-8454	2437284.50	1960 Dec 16	R-2	-	5205-0219	0.000	RSSH	MS	-	Target	Z20	-	-
1960-8454	2437284.50	1960 Dec 16	R-1	-	5205-0605	0.000	RSSH	MS	-	Target	Z20	-	-
1960-8476	2437284.50	1960 Dec 16	R-2	-	S14-19	0.000	RSSH	MS	-	Target	Z20	-	-
1960-8477	2437284.50	1960 Dec 16	R-2	-	S18-1	0.000	RSSH	MS	-	Target	Z20	-	-
1960-8478	2437285.50	1960 Dec 17	R-2	-	S16-1	0.000	RSSH	MS	-	Target	Z20	-	-



Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Days	Agency	Launch_Code	Group	Category	LT/Cite	Cite	Notes
1964-5465	2438651.62	1964 Sep 13 0257	A-1	-	-	0.000	GDENV	SS	FLAN/	Test	WDRF	-	-
1965-5810	2438760.50	1965	DF-2	-	6	0.000	GBS	MS	-	Test	twitter/stcoi1964	-	-
1965-5811	2438760.50	1965	DF-2	-	7	0.000	GBS	MS	-	Test	twitter/stcoi1964	-	-
1965-5812	2438760.50	1965	DF-2	-	8	0.000	GBS	MS	-	Test	twitter/stcoi1964	-	-
1965-5813	2438760.50	1965?	DF-2	-	9	0.000	GBS	MS	-	Test	twitter/stcoi1964	-	-
1965-4236	2438760.50	1965?	DF-2	-	10	0.000	GBS	MF	-	Test	twitter/stcoi1964	-	-
1966-5796	2439337.50	1966 Aug	DF-2	-	-	0.000	GBS	MS	-	Test	twitter/stcoi1964	-	-
1966-5797	2439337.50	1966 Aug?	DF-2	-	-	0.000	GBS	MS	-	Test	twitter/stcoi1964	-	-
1966-5798	2439337.50	1966 Sep?	DF-2	-	-	0.000	GBS	MS	-	Test	twitter/stcoi1964	-	-
1966-5799	2439337.50	1966 Sep?	DF-2	-	-	0.000	GBS	MS	-	Test	twitter/stcoi1964	-	-
1966-5800	2439337.50	1966 Sep	DF-2	-	-	0.000	GBS	MS	-	Test	twitter/stcoi1964	-	-
1966-4394	2439405.50	1966 Oct 7	DF-2	-	-	0.000	PLAZAC	MS	-	Test	twitter/stcoi1964	-	-
1966-5801	2439411.50	1966 Oct 13	DF-2	-	-	0.000	PLAZAC	MS	-	Test	twitter/stcoi1964	-	-
1966-5802	2439414.50	1966 Oct 16	DF-2	-	-	0.000	PLAZAC	MS	-	Test	twitter/stcoi1964	-	-
1966-5806	2439425.50	1966 Oct 27	DF-2	-	-	0.000	PLAZAC	MS	-	Test	twitter/stcoi1964	-	-
1971-5635	2441255.50	1971 Nov	DF-2A	-	-	0.000	PLAZAC	MS	-	Test	Harvey	-	-
1974-5433	2442047.50	1974?	DF-2	?	-	0.000	PLAZAC	MS	-	Test	MIL13-8-74	-	-
1974-5434	2442047.50	1974?	DF-2	?	-	0.000	PLAZAC	MS	-	Test	MIL13-8-74	-	-







Launch

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Mission	FlightCode	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee km	Range km	Dest
2017-A38	2457540-50	2017 Mar 28	Qahir-H2	?	-	-	-	-	-	YEMEN	-	-	-	207	-	KHAE Asir
2017-A41	2457548-50	2017 Apr 5	Al Samoud	-	-	-	-	-	-	YEMEN	-	-	-	207	-	Taiz
2017-A43	2457555-50	2017 Apr 12	Qahir-H2	-	-	-	-	-	-	YEMEN	-	-	-	207	-	Taiz
2017-A45	2457565-50	2017 Apr 13	Qahir-H2	-	-	-	-	-	-	YEMEN	-	-	-	207	-	Taiz
2017-A46	2457567-50	2017 Apr 24	Qahir-H2	-	-	-	-	-	-	YEMEN	-	-	-	207	-	Jawf
2017-A47	2457572-50	2017 Apr 29	Qahir-H2	-	-	-	-	-	-	YEMEN	-	-	-	207	-	Jizan
2017-A52	2457586-50	2017 May 13	Al Samoud	-	-	-	-	-	-	YEMEN	-	-	-	207	-	Jizan
2017-A68	2457961-50	2017 Jul 27	Qahir-1	-	-	-	-	-	-	YEMEN	-	-	-	207	-	Taiz
2017-A69	2457964-50	2017 Jul 20	Qahir-1	-	-	-	-	-	-	YEMEN	-	-	-	207	-	Taiz
2017-A75	2457971-50	2017 Aug 6	Al Samoud	-	-	-	-	-	-	YEMEN	-	-	-	207	-	Taiz
2017-A87	2457998-50	2017 Sep 2	Qahir-H2	-	-	-	-	-	-	YEMEN	-	-	-	207	-	Jizan
2017-A92	2458020-50	2017 Sep 24	Qahir-H2	-	-	-	-	-	-	YEMEN	-	-	-	207	-	KHAE Asir
2017-A98	2458064-50	2017 Oct 28	Qahir-H2	-	-	-	-	-	-	YEMEN	-	-	-	207	-	Rajran
2017-A99	2458066-50	2017 Oct 30	Qahir-H2	-	-	-	-	-	-	YEMEN	-	-	-	207	-	Dharan
2017-A109	2458064-50	2017 Nov 7	Qahir-H2	-	-	-	-	-	-	YEMEN	-	-	-	207	-	Marib
2017-A119	2458103-50	2017 Dec 16	Qahir-H2	-	-	-	-	-	-	YEMEN	-	-	-	207	-	Jizan
2017-A121	2458106-50	2017 Dec 18	Qahir-H2	-	-	-	-	-	-	YEMEN	-	-	-	207	-	Jawf
2017-A122	2458106-50	2017 Dec 19	Qahir-H2	-	-	-	-	-	-	YEMEN	-	-	-	207	-	Jawf
2017-A123	2458111-50	2017 Dec 24	Qahir-H2	-	-	-	-	-	-	YEMEN	-	-	-	207	-	Fardak Nohm
2017-A133	2458129-50	2017 Dec 28	Qahir-H2	-	-	-	-	-	-	YEMEN	-	-	-	207	-	Marib
2018-A06	2458135-50	2018 Jan 11	Qahir-H2	-	-	-	-	-	-	YEMEN	-	-	-	207	-	Marib
2018-A28	2458138-50	2018 Jan 17	Qahir-H2	-	-	-	-	-	-	YEMEN	-	-	-	207	-	Rajran
2018-A29	2458140-50	2018 Jan 22	Qahir-H2	-	-	-	-	-	-	YEMEN	-	-	-	207	-	Rajran
2018-A18	2458148-50	2018 Jan 31	Qahir-H2	-	-	-	-	-	-	YEMEN	-	-	-	207	-	Taiz
2018-A12	2458150-50	2018 Feb 1	Qahir-H2	-	-	-	-	-	-	YEMEN	-	-	-	207	-	Jawf
2018-A17	2458154-50	2018 Feb 5	Qahir-H2	-	-	-	-	-	-	YEMEN	-	-	-	207	-	Marib
2018-A36	2458202-50	2018 Mar 25	Qahir-H2	-	-	-	-	-	-	YEMEN	-	-	-	207	-	Taiz
2018-A37	2458209-50	2018 Mar 25	Qahir-H2	-	-	-	-	-	-	YEMEN	-	-	-	207	-	Taiz
2018-A40	2458212-50	2018 Apr 1	Qahir-H2	-	-	-	-	-	-	YEMEN	-	-	-	207	-	Abha
2018-A47	2458214-50	2018 Apr 4	Qahir-H2	-	-	-	-	-	-	YEMEN	-	-	-	207	-	Jizan
2018-A48	2458214-50	2018 Apr 5	Qahir-H2	-	-	-	-	-	-	YEMEN	-	-	-	207	-	Marib
2018-A49	2458214-50	2018 Apr 6	Qahir-H2	-	-	-	-	-	-	YEMEN	-	-	-	207	-	Marib
2018-A50	2458216-50	2018 Apr 8	Qahir-H2	-	-	-	-	-	-	YEMEN	-	-	-	207	-	Rajran
2018-A50	2458217-50	2018 Apr 9	Qahir-H2	-	-	-	-	-	-	YEMEN	-	-	-	207	-	Asir
2018-A70	2458244-50	2018 May 9	Qahir-H2	-	-	-	-	-	-	YEMEN	-	-	-	207	-	Jizan
2018-A87	2458266-50	2018 May 27	Qahir-H2	-	-	-	-	-	-	YEMEN	-	-	-	207	-	Taiz
2018-A88	2458266-50	2018 May 30	Qahir-H2	-	-	-	-	-	-	YEMEN	-	-	-	207	-	Taiz
2018-A96	2458273-50	2018 Jun 10	Qahir-H2	-	-	-	-	-	-	YEMEN	-	-	-	207	-	Jawf
2018-A102	2458283-50	2018 Jun 14	Qahir-H2	-	-	-	-	-	-	YEMEN	-	-	-	207	-	W Coast
2018-A108	2458288-50	2018 Jun 20	Qahir-1	-	-	-	-	-	-	YEMEN	-	-	-	207	-	Hodeidah
2018-A109	2458296-50	2018 Jun 27	Qahir-H2	-	-	-	-	-	-	YEMEN	-	-	-	207	-	Hodeidah W Coast





Launch  
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Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	brpAy	Agency	Launch_Code	Group	Category	LfCite	Cite	Notes
2017-A38	2457840-50	2017 Mar 28	Qahir-M2	?	-	0.000	AISAL	MS	-	Weapon	sabaneus.net	-	-
2017-A41	2457848-50	2017 Apr 5	Al Samoud	-	-	0.000	AISAL	MS	-	Weapon	sabaneus.net	-	-
2017-A43	2457855-50	2017 Apr 12	Qahir-M2	-	-	0.000	AISAL	MS	-	Weapon	sabaneus.net	-	-
2017-A45	2457865-50	2017 Apr 13	Qahir-M2	-	-	0.000	AISAL	MS	-	Weapon	sabaneus.net	-	-
2017-A46	2457867-50	2017 Apr 24	Qahir-M2	-	-	0.000	AISAL	MS	-	Weapon	sabaneus.net	-	-
2017-A47	2457872-50	2017 Apr 29	Qahir-M2	-	-	0.000	AISAL	MS	-	Weapon	sabaneus.net	-	-
2017-A52	2457886-50	2017 May 13	Al Samoud	-	-	0.000	AISAL	MS	-	Weapon	sabaneus.net	-	-
2017-A68	2457961-50	2017 Jul 27	Qahir-1	-	-	0.000	AISAL	MS	-	Weapon	sabaneus.net	-	-
2017-A69	2457964-50	2017 Jul 20	Qahir-1	-	-	0.000	AISAL	MS	-	Weapon	sabaneus.net	-	-
2017-A75	2457971-50	2017 Aug 6	Al Samoud	-	-	0.000	AISAL	MS	-	Weapon	sabaneus.net	-	-
2017-A87	2457998-50	2017 Sep 2	Qahir-M2	-	-	0.000	AISAL	MS	-	Weapon	sabaneus.net	-	-
2017-A92	2458020-50	2017 Sep 24	Qahir-M2	-	-	0.000	AISAL	MS	-	Weapon	sabaneus.net	-	-
2017-A98	2458064-50	2017 Oct 28	Qahir-M2	-	-	0.000	AISAL	MS	-	Weapon	sabaneus.net	-	-
2017-A99	2458066-50	2017 Oct 30	Qahir-M2	-	-	0.000	HF	MS	-	Weapon	sabaneus.net	-	-
2017-A109	2458064-50	2017 Nov 7	Qahir-M2	-	-	0.000	AISAL	MS	-	Weapon	sabaneus.net	-	-
2017-A119	2458103-50	2017 Dec 16	Qahir-M2	-	-	0.000	AISAL	MS	-	Weapon	sabaneus.net	-	-
2017-A121	2458105-50	2017 Dec 18	Qahir-M2	-	-	0.000	AISAL	MS	-	Weapon	sabaneus.net	-	-
2017-A122	2458106-50	2017 Dec 19	Qahir-M2	-	-	0.000	AISAL	MS	-	Weapon	sabaneus.net	-	-
2017-A123	2458111-50	2017 Dec 24	Qahir-M2	-	-	0.000	AISAL	MS	-	Weapon	sabaneus.net	-	-
2017-A133	2458115-50	2017 Dec 28	Qahir-M2	-	-	0.000	AISAL	MS	-	Weapon	sabaneus.net	-	-
2018-A06	2458129-50	2018 Jan 11	Qahir-M2	-	-	0.000	AISAL	MS	-	Weapon	sabaneus.net	-	-
2018-A28	2458135-50	2018 Jan 17	Qahir-M2	-	-	0.000	AISAL	MS	-	Weapon	sabaneus.net	-	-
2018-A28	2458140-50	2018 Jan 22	Qahir-M2	-	-	0.000	AISAL	MS	-	Weapon	sabaneus.net	-	-
2018-A28	2458149-50	2018 Jan 31	Qahir-M2	-	-	0.000	AISAL	MS	-	Weapon	sabaneus.net	-	-
2018-A18	2458149-50	2018 Feb 1	Qahir-M2	-	-	0.000	AISAL	MS	-	Weapon	sabaneus.net	-	-
2018-A12	2458154-50	2018 Feb 5	Qahir-M2	-	-	0.000	AISAL	MS	-	Weapon	sabaneus.net	-	-
2018-A17	2458154-50	2018 Feb 5	Qahir-M2	-	-	0.000	AISAL	MS	-	Weapon	sabaneus.net	-	-
2018-A36	2458202-50	2018 Mar 25	Qahir-M2	-	-	0.000	AISAL	MS	-	Weapon	sabaneus.net	-	-
2018-A37	2458209-50	2018 Apr 1	Qahir-M2	-	-	0.000	AISAL	MS	-	Weapon	sabaneus.net	-	-
2018-A40	2458212-50	2018 Apr 4	Qahir-M2	-	-	0.000	AISAL	MS	-	Weapon	sabaneus.net	-	-
2018-A47	2458213-50	2018 Apr 5	Qahir-M2	-	-	0.000	AISAL	MS	-	Weapon	sabaneus.net	-	-
2018-A48	2458214-50	2018 Apr 6	Qahir-M2	-	-	0.000	AISAL	MS	-	Weapon	sabaneus.net	-	-
2018-A49	2458216-50	2018 Apr 6	Qahir-M2	-	-	0.000	AISAL	MS	-	Weapon	sabaneus.net	-	-
2018-A50	2458217-50	2018 Apr 9	Qahir-M2	-	-	0.000	AISAL	MS	-	Weapon	sabaneus.net	-	-
2018-A50	2458244-50	2018 May 6	Qahir-M2	-	-	0.000	AISAL	MS	-	Weapon	sabaneus.net	-	-
2018-A67	2458244-50	2018 May 6	Qahir-M2	-	-	0.000	AISAL	MS	-	Weapon	sabaneus.net	-	-
2018-A67	2458265-50	2018 May 27	Qahir-M2	-	-	0.000	AISAL	MS	-	Weapon	sabaneus.net	-	-
2018-A68	2458265-50	2018 May 30	Qahir-M2	-	-	0.000	AISAL	MS	-	Weapon	sabaneus.net	-	-
2018-A98	2458279-50	2018 Jun 10	Qahir-M2	-	-	0.000	AISAL	MS	-	Weapon	sabaneus.net	-	-
2018-A102	2458285-50	2018 Jun 14	Qahir-M2	-	-	0.000	AISAL	MS	-	Weapon	sabaneus.net	-	-
2018-A106	2458289-50	2018 Jun 20	Qahir-1	-	-	0.000	AISAL	MS	-	Weapon	sabaneus.net	-	-
2018-A109	2458296-50	2018 Jun 27	Qahir-M2	-	-	0.000	AISAL	MS	-	Weapon	sabaneus.net	-	-



Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Mission	Launch_FlightCode	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee km	Range km	Dest
1967-A99	2439698.50	1967 Jul 27	V-825	-	-	Dummy test	-	-	-	BALKH	-	-	-	0?	-	-
1971-A18	2440998.50	1971 Feb 16	V-825	-	-	Test	-	-	-	BALKH	-	-	-	25?	-	-
1973-A04	2441713.50	1973 Feb	V-825	-	-	Test	-	-	-	BALKH	-	-	-	25?	-	-
1976-S313	2443080.50	1976 Oct 29	V-825	-	-	Intercept	-	-	-	BALKH	-	-	-	180?	-	-
1977-S221	2443352.50	1977 Jul 28	V-825	-	-	Intercept	-	-	-	BALKH	-	-	-	180?	-	-





Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	DrPay	Agency	Launch_Code	Group	Category	LTCite	Cite	Notes
1967-A99	2439698.50	1967 Jul 27	V-825	-	-	0.000	PRD	MF	-	ABM Test	Pervoy-A	-	-
1971-A18	2440998.50	1971 Feb 16	V-825	-	-	0.000	PRD	MS	-	ABM Test	Pervoy-A	-	-
1973-A04	2441713.50	1973 Feb	V-825	-	-	0.000	PRD	MS	-	ABM Test	Pervoy-A	-	-
1976-S313	2443080.50	1976 Oct 29	V-825	-	-	0.000	PRD	MS	-	ABM Test	Pervoy-A	-	-
1977-S221	2443352.50	1977 Jul 28	V-825	-	-	0.000	PRD	MS	-	ABM Test	Pervoy-A	-	-



Launch

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Mission	FlightCode	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee_Km	Range_Km	Dest
2012-066	2455970.92	2012 Feb 13 10:00:00	Vega	-	V001	LARES/AlmaSat	LARES	VEGA DEMO	-	CSG	ZLV	-	-	1453	-	-
2013-021	2456419.59	2013 May 7 02:06:31	Vega	-	V002	PRUBA-V/VRREDSAT	PRUBA-V	VERTA 1	-	CSG	ZLV	-	-	828	-	-
2014-024	2456777.57	2014 Apr 30 01:38:15	Vega	-	V003	DZZ-HR	KazEOSat-1	VERTA 2	-	CSG	ZLV	-	-	753	-	-
2015-001	2457065.07	2015 Feb 11 13:40	Vega	-	V004	IXV	IXV	VERTA 3	-	CSG	ZLV	-	-	-	-	-
2015-028	2457196.58	2015 Jun 23 01:51:58	Vega	-	V005	Sentinel-2A	Sentinel-2A	VERTA 4	-	CSG	ZLV	-	-	790	-	-
2015-070	2457359.67	2015 Dec 3 04:04:01	Vega	1	V006	LISA Pathfinder	LISA Pathfinder	VERTA 5	-	CSG	ZLV	-	-	150000	-	-
2016-068	2457647.57	2016 Sep 16 01:43:35	Vega	1	V007	SkySat 4-7/PeruSat	SkySat 4-7/PeruSat	-	-	CSG	ZLV	-	-	700	-	-
2016-073	2457728.08	2016 Dec 5 13:51	Vega	1	V008	Gokturk-1	Gokturk-1	-	-	CSG	ZLV	-	-	691	-	-
2017-013	2457819.58	2017 Mar 7 01:49:24	Vega	1	V009	Sentinel-2B	Sentinel-2B	-	-	CSG	ZLV	-	-	793	-	-
2017-044	2457967.58	2017 Aug 2 01:58:33	Vega	1	V010	Optosat-3000/Venus	Optosat-3000/Venus	-	-	CSG	ZLV	-	-	726	-	-
2017-070	2458065.57	2017 Nov 8 01:42:30	Vega	1	V011	Mohammed VI-A	Mohammed VI-A	-	-	CSG	ZLV	-	-	640	-	-
2018-066	2458353.39	2018 Aug 22 21:20:09	Vega	1	V012	Aeolus	Aeolus	-	-	CSG	ZLV	-	-	323	-	-
2018-095	2458443.57	2018 Nov 21 04:42:31	Vega	1	V013	Mohammed VI-B	Mohammed VI-B	-	-	CSG	ZLV	-	-	36386	-	-
2019-015	2458564.58	2019 Mar 22 01:50:35	Vega	1	V014	PRISMA	PRISMA	-	-	CSG	ZLV	-	-	619	-	-
2019-F05	2458675.58	2019 Jul 11 01:53:03	Vega	1	V015	FalconEye 1	FalconEye 1	-	-	CSG	ZLV	-	-	757	-	-
2020-061	2459095.58	2020 Sep 3 01:51:10	Vega	1	V016	SSRS	SSRS	-	-	CSG	ZLV	-	-	540	-	-
2020-001	2459170.58	2020 Nov 17 01:52:20	Vega	1	V017	SEUSAT-Ingénio/Taramis	SEUSAT-Ingénio/Taramis	-	-	CSG	ZLV	-	-	200?	-	-
2021-034	2459333.58	2021 Apr 29 01:50:00	Vega	1	V018	Pleiades Neo 3	Pleiades Neo 3	-	-	CSG	ZLV	-	-	626	-	-
2021-073	2459443.57	2021 Apr 17 04:47:06	Vega	1	V019	Pleiades Neo 4	Pleiades Neo 4	-	-	CSG	ZLV	-	-	626	-	-
2021-105	2459534.69	2021 Nov 16 09:27:55	Vega	1	V020	CERES 1-3	CERES 1-3	-	-	CSG	ZLV	-	-	676	-	-
2023-155	2460226.57	2023 Oct 9 01:36:26	Vega	1	V023	THEOS-2/TRITON	THEOS-2/TRITON	-	-	CSG	ZLV	-	-	-	-	-
2024-157	2460568.58	2024 Sep 5 01:50:15	Vega	1	V024	Sentinel-2C	Sentinel-2C	-	-	CSG	ZLV	-	-	-	-	-



Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	OrbPay	Agency	Launch_Code	Group	Category	LTCite	Cite	Notes
2012-066	2455970.92	2012 Feb 13 10:00:00	Vega	-	W01	1.538	ESA	OS	G	Sat LE0 D	Wire	-	-
2013-021	2456419.59	2013 May 7 02:06:31	Vega	-	W02	0.354	ESA/AE	OS	G	Sat SS0 D	Wire	-	-
2014-024	2456777.57	2014 Apr 30 01:38:15	Vega	-	W03	0.830	ESA/AE	OS	G/OG	Sat SS0 D	spaceflightnow.com	-	-
2015-001	2457065.07	2015 Feb 11 13:40	Vega	-	W04	1.845	ESA/AE	OS	G	Sat LE0 D	spaceflightnow.com	-	-
2015-028	2457196.58	2015 Jun 23 01:51:58	Vega	1	W05	1.130	ESA/AE	OS	G	Sat SS0 L	spaceflightnow.com	-	-
2015-070	2457369.67	2015 Dec 3 04:04:01	Vega	1	W06	1.906	ESA/AE	OS	G	Sat LE0 D	spaceflightnow.com	-	-
2016-068	2457647.57	2016 Sep 16 01:43:35	Vega	1	W07	0.970	AE	OS	C/OG-C	Sat SS0 D	spaceflightnow.com	-	-
2016-073	2457728.08	2016 Dec 5 13:51	Vega	1	W08	1.060	AE	OS	C/OG	Sat SS0 D	spaceflightnow.com	-	-
2017-013	2457819.58	2017 Mar 7 01:49:24	Vega	1	W09	1.130	AE	OS	C/G	Sat SS0 D	spaceflightnow.com	-	-
2017-044	2457967.58	2017 Aug 2 01:58:33	Vega	1	W10	0.732	AE	OS	C/OG	Sat SS0 D 1	spaceflightnow.com	-	-
2017-070	2458065.57	2017 Nov 8 01:42:30	Vega	1	W11	1.110	AE	OS	C/OG	Sat SS0 D	spaceflightnow.com	-	-
2018-066	2458363.39	2018 Aug 22 21:20:09	Vega	1	W12	1.357	AE	OS	C/G	Sat SS0 D	spaceflightnow.com	-	-
2018-095	2458443.57	2018 Nov 21 01:42:31	Vega	1	W13	1.108	AE	OS	C/OG	Sat SS0 D	spaceflightnow.com	-	-
2019-015	2458564.58	2019 Mar 22 01:50:35	Vega	1	W14	0.879	AE	OS	C/G	Sat SS0 D	spaceflightnow.com	-	-
2019-F05	2458675.58	2019 Jul 11 01:53:03	Vega	1	W15	1.197	AE	OF	C/OG	Sat SS0 D	spaceflightnow.com	-	-
2020-061	2459095.58	2020 Sep 3 01:51:10	Vega	1	W16	1.465	AE	OS	C	Sat SS0 D	spaceflightnow.com	-	-
2020-001	2459170.58	2020 Nov 17 01:52:20	Vega	1	W17	0.925	AE	OF	C/OG	Sat SS0 D	spaceflightnow.com	-	-
2021-034	2459333.58	2021 Apr 29 01:50:00	Vega	1	W18	1.037	AE	OS	C/G	Sat SS0 D	spaceflightnow.com	-	-
2021-073	2459443.57	2021 Aug 17 04:47:06	Vega	1	W19	0.965	AE	OS	C/G	Sat SS0 D	spaceflightnow.com	-	-
2021-105	2459534.69	2021 Nov 16 09:27:55	Vega	1	W20	1.588	AE	OS	C/G	Sat LE0 L	spaceflightnow.com	-	-
2023-155	2460226.57	2023 Oct 9 01:36:25	Vega	1	W23	0.783	AE	OS	C/OG	Sat SS0 D	spaceflightnow.com	-	-
2024-157	2460568.58	2024 Sep 5 01:50:15	Vega	1	W24	1.143	AE	OS	C/G	Sat SS0 D	spaceflightnow.com	-	-



Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Mission	FlightCode	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee km	Range km	Dest
2022-080	2459774.05	2022 Jul 13 13:13:17	Vega C	-	WV21	LARES 2	LARES 2	-	-	CSG	ZLV	-	-	6134	-	-
2022-F06	2459934.57	2022 Dec 21 01:47:31	Vega C	-	WV22	Pleiades NE0 5/6	Pleiades NE0 5/6	-	-	CSG	ZLV	-	-	110	-	-





Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Drbby	Agency	Launch_Code	Group	Category	LTCite	Cite	Notes
2022-080	2459774.05	2022 Jul 13 13:13:17	Vega C	-	W21	0.314	ESA	OS	G	Sat MED 0	spaceflightnow.com	-	-
2022-F06	2459934.57	2022 Dec 21 01:47:31	Vega C	-	W22	1.844	AE	OF	G	Sat SSD D	spaceflightnow.com	-	-



Launch Mission

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Mission	FlightCode	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee_Km	Range_Km	Dest
1961-5161	2437446.50	1961 May 27	Centaur	-	C03	-	-	-	-	HMG	Bacchus?	-	-	130?	-	-
1961-5163	2437448.50	1961 May 29	Centaur	-	C04	-	-	-	-	HMG	Bacchus?	-	-	130?	-	-
1961-5408	2437639.50	1961 Dec 6	Centaur	-	C02	-	-	-	-	REG	-	-	-	130?	-	-
1961-5409	2437639.50	1961 Dec 6	Centaur	-	C06	-	-	-	-	HMG	Bacchus?	-	-	130?	-	-
1961-5416	2437642.50	1961 Dec 9	Centaur	-	C05	-	-	-	-	REG	-	-	-	130?	-	-
1961-5417	2437642.75	1961 Dec 9 0605	Centaur	-	C07	-	-	-	-	HMG	Bacchus?	-	-	130?	-	-
1961-5418	2437642.50	1961 Dec 9	Centaur	-	C08	-	-	-	-	HMG	Bacchus?	-	-	130?	-	-
1962-5135	2437802.50	1962 May 18	Centaur	-	C10	-	-	-	-	CERES	-	-	-	130?	-	-
1962-5135	2437813.50	1962 May 29	Centaur	-	C12	-	-	-	-	CERES	-	-	-	130?	-	-
1962-5146	2437813.50	1962 May 29	Centaur	-	C15	-	-	-	-	REG	-	-	-	130?	-	-
1962-5147	2437813.50	1962 May 29	Centaur	-	C18	-	-	-	-	HMG	Bacchus?	-	-	130?	-	-
1962-5162	2437620.50	1962 Jun 5	Centaur	-	C14	-	-	-	-	CERES	-	-	-	130?	-	-
1962-5163	2437620.50	1962 Jun 5	Centaur	-	C16	-	-	-	-	REG	-	-	-	130?	-	-
1962-5164	2437620.50	1962 Jun 5	Centaur	-	C17	-	-	-	-	HMG	Bacchus?	-	-	130?	-	-
1962-5165	2437620.50	1962 Jun 5	Centaur	-	C19	-	-	-	-	HMG	Bacchus?	-	-	130?	-	-
1962-5166	2437620.50	1962 Jun 5	Centaur	-	C20	-	-	-	-	HMG	Bacchus?	-	-	120	-	-
1962-5490	2437994.50	1962 Nov 26	Centaur	-	C30	-	-	-	-	CELPA	-	-	-	180	-	-
1962-5493	2437996.48	1962 Nov 27 2337	Centaur	-	C32	-	-	-	-	HMG	Bacchus?	-	-	160	-	-
1962-5498	2437997.23	1962 Nov 28 1738	Centaur	-	C32	-	-	-	-	HMG	Bacchus?	-	-	170	-	-
1962-5511	2437999.23	1962 Nov 30 1736	Centaur	-	C11	-	-	-	-	HMG	Bacchus?	-	-	130?	-	-
1962-5512	2437998.50	1962 Nov 30	Centaur	-	C26	-	-	-	-	HMG	Bacchus?	-	-	180	-	-
1962-5513	2437998.85	1962 Nov 30 0817	Centaur	-	C28	-	-	-	-	CELPA	-	-	-	130?	-	-
1962-5514	2437998.50	1962 Nov 30	Centaur	-	C29	-	-	-	-	CERES	-	-	-	180	-	-
1962-5514	2437998.50	1962 Nov 30	Centaur	-	C37	-	-	-	-	CERES	-	-	-	60?	-	-
1962-5523	2438002.50	1962 Dec 4	Centaur	-	C27	-	-	-	-	HMG	Bacchus?	-	-	60?	-	-
1962-5546	2438006.50	1962 Dec 8	Centaur	-	C28	-	-	-	-	HMG	Bacchus?	-	-	60?	-	-
1962-5547	2438007.50	1962 Dec 9	Centaur	-	C31	-	-	-	-	CELPA	-	-	-	180	-	-
1962-5554	2438010.50	1962 Dec 12	Centaur	-	C24	-	-	-	-	CERES	-	-	-	130?	-	-
1962-5555	2438010.50	1962 Dec 12	Centaur	-	C25	-	-	-	-	CERES	-	-	-	130?	-	-
1963-5130	2438120.50	1963 Apr 1	Centaur	-	C51	-	-	-	-	REG	Bacchus?	-	-	155	-	-
1963-5200	2438163.50	1963 May 14	Centaur	-	C42	-	-	-	-	HMG	Bacchus?	-	-	160	-	-
1963-5202	2438166.27	1963 May 15 1822	Centaur	-	C45	-	-	-	-	HMG	Bacchus?	-	-	170	-	-
1963-5221	2438170.50	1963 May 21	Centaur	-	C48	-	-	-	-	REG	-	-	-	170	-	-
1963-5222	2438171.27	1963 May 21 1825	Centaur	-	C43	-	-	-	-	CERES	-	-	-	125	-	-
1963-5254	2438173.50	1963 May 24	Centaur	-	C41	-	-	-	-	HMG	Bacchus?	-	-	15	-	-
1963-5258	2438174.50	1963 May 25	Centaur	-	C35	-	-	-	-	HMG	Bacchus?	-	-	18	-	-
1963-5246	2438175.50	1963 May 30	Centaur	-	C36	-	-	-	-	CELPA	-	-	-	180	-	-
1963-5246	2438175.50	1963 May 30	Centaur	-	C39	-	-	-	-	CELPA	-	-	-	150?	-	-
1963-5270	2438193.25	1963 Jun 12 1839	Centaur	-	C54	-	-	-	-	HMG	Bacchus	-	-	145	-	-
1963-5274	2438193.50	1963 Jun 13	Centaur	-	C55	-	-	-	-	HMG	Bacchus	-	-	145	-	-
1963-5276	2438194.50	1963 Jun 14	Centaur	-	C53	-	-	-	-	HMG	Bacchus	-	-	185	-	-
1964-5861	2438436.27	1964 Feb 9 1823	Centaur	-	C13	-	-	-	-	HMG	Bacchus	-	-	180	-	-
1964-5861	2438437.50	1964 Feb 12	Centaur	-	C52	-	-	-	-	HMG	Bacchus	-	-	23	-	-
1964-5861	2438437.50	1964 Feb 12	Centaur	-	C44	-	-	-	-	HMG	Bacchus	-	-	190	-	-
1964-5861	2438438.71	1964 Feb 13 0500	Centaur	-	C56	-	-	-	-	HMG	Bacchus	-	-	170	-	-
1964-5861	2438438.71	1964 Feb 13	Centaur	-	C57	-	-	-	-	HMG	Bacchus	-	-	190	-	-
1964-5861	2438438.71	1964 Feb 13	Centaur	-	C38	-	-	-	-	HMG	Bacchus	-	-	170	-	-
1964-5861	2438438.71	1964 Feb 13	Centaur	-	C39	-	-	-	-	HMG	Bacchus	-	-	170	-	-
1964-5861	2438438.71	1964 Feb 13	Centaur	-	C38	-	-	-	-	HMG	Bacchus	-	-	186	-	-
1964-5861	2438438.71	1964 Feb 13	Centaur	-	C34	-	-	-	-	HMG	Bacchus	-	-	189	-	-
1964-5861	2438438.71	1964 Feb 13	Centaur	-	C58	-	-	-	-	HMG	Bacchus	-	-	188	-	-
1964-5861	2438438.71	1964 Feb 13	Centaur	-	C59	-	-	-	-	HMG	Bacchus	-	-	190	-	-
1964-5861	2438438.71	1964 Feb 13	Centaur	-	C69	-	-	-	-	HMG	Bacchus	-	-	148	-	-
1964-5861	2438438.71	1964 Feb 13	Centaur	-	C33	-	-	-	-	HMG	Bacchus	-	-	151	-	-
1964-5861	2438438.71	1964 Feb 13	Centaur	-	C22	-	-	-	-	HMG	Bacchus	-	-	28	-	-
1964-5861	2438438.71	1964 Feb 13	Centaur	-	C42	-	-	-	-	HMG	Bacchus	-	-	179	-	-
1964-5861	2438438.71	1964 Feb 13	Centaur	-	C43	-	-	-	-	HMG	Bacchus	-	-	129	-	-
1964-5861	2438438.71	1964 Feb 13	Centaur	-	C23	-	-	-	-	HMG	Bacchus	-	-	143	-	-
1964-5861	2438438.71	1964 Feb 13	Centaur	-	C63	-	-	-	-	HMG	Bacchus	-	-	118	-	-
1964-5861	2438438.71	1964 Feb 13	Centaur	-	C78	-	-	-	-	HMG	Bacchus	-	-	150	-	-
1964-5861	2438438.71	1964 Feb 13	Centaur	-	C79	-	-	-	-	HMG	Bacchus	-	-	175	-	-
1964-5861	2438438.71	1964 Feb 13	Centaur	-	C80	-	-	-	-	HMG	Bacchus?	-	-	175	-	-
1964-5861	2438438.71	1964 Feb 13	Centaur	-	C47	-	-	-	-	HMG	Bacchus?	-	-	185	-	-
1964-5861	2438438.71	1964 Feb 13	Centaur	-	C64	-	-	-	-	HMG	Bacchus?	-	-	150	-	-
1964-5861	2438438.71	1964 Feb 13	Centaur	-	C72	-	-	-	-	HMG	Bacchus?	-	-	150?	-	-
1964-5861	2438438.71	1964 Feb 13	Centaur	-	C67	-	-	-	-	REG	-	-	-	150?	-	-
1964-5861	2438438.71	1964 Feb 13	Centaur	-	C80	-	-	-	-	CELPA	-	-	-	176	-	-
1964-5861	2438438.71	1964 Feb 13	Centaur	-	C66	-	-	-	-	REG	-	-	-	150?	-	-
1964-5861	2438438.71	1964 Feb 13	Centaur	-	C71	-	-	-	-	HMG	Bacchus?	-	-	150?	-	-
1964-5861	2438438.71	1964 Feb 13	Centaur	-	C79	-	-	-	-	CERES	-	-	-	103	-	-
1964-5861	2438438.71	1964 Feb 13	Centaur	-	C75/EXP-9	-	-	-	-	CELPA	-	-	-	179	-	-
1964-5861	2438438.71	1964 Feb 13	Centaur	-	C75/EXP-10	-	-	-	-	HMG	Bacchus	-	-	166	-	-
1964-5861	2438438.71	1964 Feb 13	Centaur	-	C85	-	-	-	-	HMG	Bacchus	-	-	207	-	-
1965-5131	2438923.50	1965 Mar 4	Centaur	-	C99	-	-	-	-	HMG	Bacchus	-	-	120	-	-
1965-5272	2438982.49	1965 Mar 28 2357	Centaur	-	C99	-	-	-	-	TERLS	Bacchus?	-	-	150	-	-
1965-5368	2438983.30	1965 Mar 22	Centaur	-	C100	-	-	-	-	TERLS	Bacchus?	-	-	140	-	-
1965-5373	2438983.30	1965 Mar 22	Centaur	-	C106	-	-	-	-	TERLS	Bacchus?	-	-	4?	-	-
1965-5373	2438983.30	1965 Mar 23	Centaur	-	C61	-	-	-	-	HMG	Bacchus?	-	-	150?	-	-
1965-5373	2438983.30	1965 Mar 23	Centaur	-	C65	-	-	-	-	HMG	Bacchus?	-	-	150?	-	-
1965-5373	2438983.30	1965 Mar 23	Centaur	-	C50	-	-	-	-	HMG	Bacchus?	-	-	150?	-	-
1965-5376	2438983.30	1965 Mar 23	Centaur	-	C95	-	-	-	-	HMG	Bacchus?	-	-	150?	-	-
1965-5384	2438983.30	1965 Mar 24	Centaur	-	C84	-	-	-	-	HMG	Bacchus?	-	-	150?	-	-
1965-5385	2438983.30	1965 Mar 24	Centaur	-	C74	-	-	-	-	HMG	Bacchus?	-	-	4?	-	-
1965-5386	2438983.30	1965 Mar 24	Centaur	-	C86	-	-	-	-	HMG	Bacchus?	-	-	150?	-	-
1965-5387	2438983.30	1965 Mar 24	Centaur	-	C83	-	-	-	-	HMG	Bacchus?	-	-	150?	-	-
1965-5630	2439083.24	1965 Mar 18 1745	Centaur	-	C83	-	-	-	-	HMG	Bacchus?	-	-	170	-	-
1965-5632	2439084.24	1965 Mar 19 1745	Centaur	-	C120	-	-	-	-	HMG	Bechar	-	-	190	-	-

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Mission	FlightCode	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee_Km	Range_Km	Dest
1965-8648	2439089.69	1965 Nov 25 0440	Centaur 1	-	C91	-	-	-	-	CE/LPA	-	-	-	175	-	-
1965-8649	2439089.85	1965 Nov 25 0824	Centaur 1	-	C93	-	-	-	-	CE/LPA	-	-	-	175	-	-
1965-8651	2439090.85	1965 Nov 26 0824	Centaur 1	-	C96	-	-	-	-	CE/LPA	-	-	-	175	-	-
1965-8666	2439101.66	1965 Dec 7 0853	Centaur 1	-	-	ESRO C07/1	-	-	-	SOQ	-	-	-	150	-	-
1965-8674	2439105.67	1965 Dec 11 0405	Centaur 1	-	-	ESRO C06/1	-	-	-	SOQ	-	-	-	159	-	-
1965-8680	2439109.03	1965 Dec 14 1249	Centaur 1	-	CE-6	CHES FU-148	-	-	-	SOQ	-	-	-	159	-	-
1965-8686	2439110.50	1965 Dec 16	Centaur 1	-	C128	CHES FU-148	-	-	-	HMG	Bacchus	-	-	128	-	-
1965-8685	2439110.50	1965 Dec 16	Centaur 1	-	C131	CHES FU-148	-	-	-	HMG	Bacchus	-	-	145	-	-
1965-8687	2439110.50	1965 Dec 16	Centaur 1	-	C94	CHES FU-146	-	-	-	HMG	Bacchus	-	-	170	-	-
1965-8691	2439114.50	1965 Dec 20	Centaur 1	-	C130	CHES FU-148	-	-	-	HMG	Bacchus	-	-	145	-	-
1966-8559	2439134.05	1966 Jan 8 1311	Centaur 1	-	C103	ISRO IS-03	-	-	-	TERLS	-	-	-	150	-	-
1966-863	2439143.25	1966 Jan 17 1786	Centaur 1	-	C127	CHES FU-148	-	-	-	HMG	Bacchus	-	-	124	-	-
1966-898	2439161.47	1966 Feb 4 2319:32	Centaur 1	-	CE-16	ESRO C15/1	-	-	-	AND	-	-	-	120	-	-
1966-A36	2439167.59	1966 Feb 11 0203:16	Centaur 1	-	CE-15	ESRO C15/2	-	-	-	AND	-	-	-	1	-	-
1966-8126	2439179.27	1966 Feb 22 1828:56	Centaur 1	-	CE-13	ESRO C14/1	-	-	-	AND	-	-	-	115	-	-
1966-8128	2439180.47	1966 Feb 23 2314:52	Centaur 1	-	CE-14	ESRO C14/2	-	-	-	AND	-	-	-	117	-	-
1966-8149	2439188.43	1966 Mar 3 2226	Centaur 1	-	C77	CHES FU-129	-	-	-	HMG	Bacchus	-	-	125	-	-
1966-8155	2439194.43	1966 Mar 9 2220:21	Centaur 1	-	CE-12	ESRO C13/1	-	-	-	AND	-	-	-	94	-	-
1966-8159	2439195.43	1966 Mar 10 2225:32	Centaur 1	-	CE-11	ESRO C13/2	-	-	-	AND	-	-	-	114	-	-
1966-8158	2439209.20	1966 Mar 24 1645	Centaur 1	-	C101	ISRO IS-04	-	-	-	TERLS	-	-	-	163	-	-
1966-8187	2439209.38	1966 Mar 24 2100	Centaur 1	-	C102	ISRO IS-05	-	-	-	TERLS	-	-	-	159	-	-
1966-8269	2439260.71	1966 May 15 0502	Centaur 1	-	CE-5	ESRO C05/2	-	-	-	MARY	-	-	-	143	-	-
1966-8270	2439265.99	1966 May 20 0930:30	Centaur 1	-	CE-19	ESRO C22/1	-	-	-	MARY	-	-	-	118	-	-
1966-8314	2439290.32	1966 Jun 13 1938	Centaur 1	-	CE-20	ESRO C22/2	-	-	-	MARY	-	-	-	114	-	-
1966-8519	2439292.50	1966 Jun 16	Centaur 1	-	C68	Ita/Turbulence	-	-	-	HMG	Bacchus	-	-	180	-	-
1966-8594	2439406.50	1966 Oct 6	Centaur 1	-	C140	CHES FU-109	-	-	-	HMG	Bacchus	-	-	183	-	-
1966-8618	2439443.98	1966 Nov 14 1128:21	Centaur 1	-	C105	CHES FU-167	-	-	-	HMG	Bacchus f	-	-	170	-	-
1966-8619	2439444.04	1966 Nov 14 1303:14	Centaur 1	-	C139	CHES FU-167	-	-	-	HMG	Bacchus f	-	-	170f	-	-
1966-8642	2439458.49	1966 Nov 19 2342:36	Centaur 1	-	CE-8	ESRO C9/1	-	-	-	ESR	C	-	-	123	-	-
1966-8659	2439458.55	1966 Nov 29 0106:39	Centaur 1	-	CE-22	ESRO C9/2	-	-	-	ESR	C	-	-	149	-	-
1967-8116	2439460.42	1966 Nov 30 2204:16	Centaur 1	-	CE-22	ESRO C10/1	-	-	-	ESR	C	-	-	126	-	-
1967-8121	2439557.52	1967 Feb 4 2353:31	Centaur 1	-	CE-9	ESRO C10/2	-	-	-	ESR	C	-	-	145	-	-
1967-8122	2439545.50	1967 Feb 22 0712:25	Centaur 1	-	CE-10	CHES FU-177	-	-	-	HMG	Bacchus?	-	-	153	-	-
1967-8175	2439597.50	1967 Mar 29 1619:10	Centaur 1	-	C145	ESRO C24/1	-	-	-	ESR	C	-	-	128	-	-
1967-8222	2439600.18	1967 Apr 19 0619:10	Centaur 2B	-	C57	ISRO 45.01	-	-	-	TERLS	-	-	-	128	-	-
1967-8223	2439609.76	1967 Apr 19 0614	Centaur 1	-	Rebar 15	-	-	-	-	SOH	-	-	-	150	-	-
1967-8242	2439614.10	1967 May 7 1429	Centaur 1	-	Rebar 16	-	-	-	-	SOH	-	-	-	150	-	-
1967-8251	2439615.10	1967 May 7 1430	Centaur 1	-	ESRO C20/1	-	-	-	-	ESR	C	-	-	153	-	-
1967-8563	2439702.52	1967 Jul 31 0031:18	Centaur 2B	-	CE-30	ESRO C32/1	-	-	-	CE/LPA	-	-	-	150f	-	-
1967-8564	2439709.54	1967 Jul 31 0036:23	Centaur 2B	-	CE-31	ESRO C32/1	-	-	-	CE/LPA	-	-	-	150f	-	-
1967-8565	2439729.50	1967 Sep 7	Centaur 1	-	C143	Rebar 17	-	-	-	SOH	-	-	-	131	-	-
1967-8566	2439740.50	1967 Sep 7	Centaur 1	-	C144	Rebar 18	-	-	-	SOH	-	-	-	131	-	-
1967-8567	2439746.50	1967 Sep 7	Centaur 1	-	C144	Rebar 19	-	-	-	SOH	-	-	-	131	-	-
1967-8568	2439746.50	1967 Sep 7	Centaur 1	-	C144	Rebar 20	-	-	-	SOH	-	-	-	131	-	-
1967-8569	2439816.57	1967 Nov 26 0137:10	Centaur 2B	-	CE-36	ESRO C13/P	-	-	-	ESR	C	-	-	160	-	-
1967-8570	2439816.57	1967 Nov 26 0144:22	Centaur 1	-	CE-17	ESRO C13/1	-	-	-	ESR	C	-	-	125	-	-
1967-8571	2439821.52	1967 Nov 26 0151:12	Centaur 1	-	CE-2	ESRO C31/2	-	-	-	ESR	C	-	-	129	-	-
1967-8572	2439821.52	1967 Nov 26 0151:12	Centaur 1	-	CE-2	ESRO C31/2	-	-	-	ESR	C	-	-	129	-	-
1968-8106	2439887.74	1968 Feb 1 0542:00	Centaur 2B	-	CE-34	ISRO 15.06	-	-	-	TERLS	-	-	-	159	-	-
1968-8108	2439890.73	1968 Feb 2 0539:05	Centaur 2B	-	CE-35	ISRO 15.06	-	-	-	TERLS	-	-	-	159	-	-
1968-8110	2439898.39	1968 Feb 21 1940	Centaur 1	-	CE-35	ISRO 25.02	-	-	-	TERLS	-	-	-	159	-	-
1968-8119	2439909.39	1968 Feb 23 1125	Centaur 1	-	C89	ISRO 25.01	-	-	-	TERLS	-	-	-	155	-	-
1968-8127	2439923.40	1968 Feb 6 2135:09	Centaur 1	-	CE-37	ESRO C14/P	-	-	-	ESR	C	-	-	155	-	-
1968-8205	2439935.09	1968 Mar 23 1405	Centaur 2B	-	C155	Rebar 17	-	-	-	SOH	-	-	-	131	-	-
1968-8251	2439943.53	1968 Apr 3 0036	Centaur 1	-	C155	Rebar 18	-	-	-	SOH	-	-	-	131	-	-
1968-8251	2439943.53	1968 Apr 3 0036	Centaur 1	-	C155	Rebar 19	-	-	-	SOH	-	-	-	131	-	-
1968-8251	2439943.53	1968 Apr 3 0036	Centaur 1	-	C155	Rebar 20	-	-	-	SOH	-	-	-	131	-	-
1968-8251	2439943.53	1968 Apr 3 0036	Centaur 1	-	C155	Rebar 21	-	-	-	SOH	-	-	-	131	-	-
1968-8251	2439943.53	1968 Apr 3 0036	Centaur 1	-	C155	Rebar 22	-	-	-	SOH	-	-	-	131	-	-
1968-8251	2439943.53	1968 Apr 3 0036	Centaur 1	-	C155	Rebar 23	-	-	-	SOH	-	-	-	131	-	-
1968-8251	2439943.53	1968 Apr 3 0036	Centaur 1	-	C155	Rebar 24	-	-	-	SOH	-	-	-	131	-	-
1968-8251	2439943.53	1968 Apr 3 0036	Centaur 1	-	C155	Rebar 25	-	-	-	SOH	-	-	-	131	-	-
1968-8251	2439943.53	1968 Apr 3 0036	Centaur 1	-	C155	Rebar 26	-	-	-	SOH	-	-	-	131	-	-
1968-8251	2439943.53	1968 Apr 3 0036	Centaur 1	-	C155	Rebar 27	-	-	-	SOH	-	-	-	131	-	-
1968-8251	2439943.53	1968 Apr 3 0036	Centaur 1	-	C155	Rebar 28	-	-	-	SOH	-	-	-	131	-	-
1968-8251	2439943.53	1968 Apr 3 0036	Centaur 1	-	C155	Rebar 29	-	-	-	SOH	-	-	-	131	-	-
1968-8251	2439943.53	1968 Apr 3 0036	Centaur 1	-	C155	Rebar 30	-	-	-	SOH	-	-	-	131	-	-
1968-8251	2439943.53	1968 Apr 3 0036	Centaur 1	-	C155	Rebar 31	-	-	-	SOH	-	-	-	131	-	-
1968-8251	2439943.53	1968 Apr 3 0036	Centaur 1	-	C155	Rebar 32	-	-	-	SOH	-	-	-	131	-	-
1968-8251	2439943.53	1968 Apr 3 0036	Centaur 1	-	C155	Rebar 33	-	-	-	SOH	-	-	-	131	-	-
1968-8251	2439943.53	1968 Apr 3 0036	Centaur 1	-	C155	Rebar 34	-	-	-	SOH	-	-	-	131	-	-
1968-8251	2439943.53	1968 Apr 3 0036	Centaur 1	-	C155	Rebar 35	-	-	-	SOH	-	-	-	131	-	-
1968-8251	2439943.53	1968 Apr 3 0036	Centaur 1	-	C155	Rebar 36	-	-	-	SOH	-	-	-	131	-	-
1968-8251	2439943.53	1968 Apr 3 0036	Centaur 1	-	C155	Rebar 37	-	-	-	SOH	-	-	-	131	-	-
1968-8251	2439943.53	1968 Apr 3 0036	Centaur 1	-	C155	Rebar 38	-	-	-	SOH	-	-	-	131	-	-
1968-8251	2439943.53	1968 Apr 3 0036	Centaur 1	-	C155	Rebar 39	-	-	-	SOH	-	-	-	131	-	-
1968-8251	2439943.53	1968 Apr 3 0036	Centaur 1	-	C155	Rebar 40	-	-	-	SOH	-	-	-	131	-	-
1968-8251	2439943.53	1968 Apr 3 0036	Centaur 1	-	C155	Rebar 41	-	-	-	SOH	-	-	-	131	-	-
1968-8251	2439943.53	1968 Apr 3 0036	Centaur 1	-	C155	Rebar 42	-	-	-	SOH	-	-	-	131	-	-
1968-8251	2439943.53	1968 Apr 3 0036	Centaur 1	-	C155	Rebar 43	-	-	-	SOH	-	-	-	131	-	-
1968-8251	2439943.53	1968 Apr 3 0036	Centaur 1	-	C155	Rebar 44	-	-	-	SOH	-	-	-	131	-	-
1968-8251	2439943.53	1968 Apr 3 0036	Centaur 1	-	C155	Rebar 45	-	-	-	SOH	-	-	-	131	-	-
1968-8251	2439943.53	1968 Apr 3 0036	Centaur 1	-	C155	Rebar 46	-	-	-	SOH	-	-	-	131	-	-
1968-8251	2439943.53	1968 Apr 3 0036	Centaur 1	-	C155	Rebar 47	-	-	-	SOH	-	-	-	131	-	-
1968-8251	2439943.53	1968 Apr 3 0036	Centaur 1	-	C155	Rebar 48	-	-	-	SOH	-	-	-	131	-	-
1968-8251	2439943.53	1968 Apr 3 0036	Centaur 1	-	C155	Rebar 49	-	-	-	SOH	-	-	-	131	-	-
1968-8251	2439943.53	1968 Apr 3 0036	Centaur 1	-	C155	Rebar 50	-	-	-	SOH	-	-	-	131	-	-
1968-8251	2439943.53	1														

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Mission	FlightCode	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee_Km	Range_Km	Dest
1970-5279	2440679.56	1970 Apr 3 0122	Centaura 2B	-	C57/2	ESRO C57/2	-	-	-	ESR	C	-	-	173	-	-
1970-5288	2440744.61	1970 Jun 7 0725:50	Centaura 2B	-	C49/1	ESRO C49/1	-	-	-	ESR	C	-	-	162	-	-
1970-5476	2440808.49	1970 Aug 9 2339:40	Centaura 2B	-	C58/2	ESRO C58/2	-	-	-	ESR	C	-	-	114	-	-
1970-5477	2440808.53	1970 Aug 10 0050	Centaura 2B	-	C51/2	ESRO C51/2	-	-	-	ESR	C	-	-	154	-	-
1970-5489	2440817.96	1970 Aug 19 1103	Centaura 2B	-	C49/2	ESRO C49/2	-	-	-	ESR	C	-	-	163	-	-
1971-A02	2440958.52	1971 Jan 7 0027	Centaura 2A	-	C37/2	ISRO 5.12 Recovery	TERLS-276	-	-	TERLS	C	-	-	1?	-	-
1971-869	2440965.12	1971 Jan 17 1448:10	Centaura 2B	-	C60/1	ESRO C60/1	-	-	-	ESR	C	-	-	215	-	-
1971-897	2440977.03	1971 Jan 25 1238	Centaura 2B	-	C60/2	ESRO C60/2	-	-	-	ESR	C	-	-	175	-	-
1971-890	2440979.46	1971 Jan 26 1050	Centaura 2B	-	C78/1	ESRO C78/1	-	-	-	ESR	C	-	-	167	-	-
1971-896	2440979.52	1971 Jan 27 2302:45	Centaura 2B	-	C136	INTA C-7101	-	-	-	ESR	C	-	-	140	-	-
1971-8265	2441068.32	1971 May 26 1934	Centaura 1	-	C141	INTA C-7102	-	-	-	ELAR	-	-	-	129	-	-
1971-8305	2441098.33	1971 May 26 2000	Centaura 1	-	C137	INTA C-7103	-	-	-	ELAR	-	-	-	128	-	-
1971-8309	2441098.69	1971 May 27 0436	Centaura 1	-	C142	INTA C-7104	-	-	-	ELAR	-	-	-	127	-	-
1971-8310	2441099.33	1971 May 27 2000	Centaura 1	-	C142	INTA C-7104	-	-	-	ELAR	-	-	-	103	-	-
1971-8317	2441163.51	1971 Jul 31 0021	Centaura 2C	-	C59/1	ESRO C59/1	-	-	-	ESR	C	-	-	120	-	-
1971-8380	2441164.51	1971 Jul 31 0021	Centaura 2C	-	C59/2	ESRO C59/2	-	-	-	ESR	C	-	-	119	-	-
1971-8441	2441207.60	1971 Sep 13	Centaura 1	-	C133	CHES FU-199	-	-	-	CSG	ALFS	-	-	135	-	-
1971-8462	2441214.42	1971 Sep 19 2200	Centaura 1	-	C132	CHES FU-199	-	-	-	CSG	ALFS	-	-	136	-	-
1971-8463	2441214.42	1971 Sep 19 2200	Centaura 1	-	C146	CHES FU-199	-	-	-	CSG	ALFS	-	-	128	-	-
1971-8465	2441214.42	1971 Oct 18 1400	Centaura 1	-	C154	CHES FU-199	-	-	-	CSG	ALFS	-	-	128	-	-
1971-8530	2441243.08	1971 Oct 18 1400	Centaura 1	-	C6-67	ESRO C78/2	-	-	-	ESR	C	-	-	138	-	-
1971-8568	2441278.34	1971 Nov 22 2007:40	Centaura 2B	-	C76/1	ESRO C76/1	-	-	-	ESR	C	-	-	130	-	-
1972-846	2441338.29	1972 Jan 21 1902:20	Centaura 2C	-	C76/2	ESRO C76/2	-	-	-	ESR	C	-	-	131	-	-
1972-846	2441338.54	1972 Jan 22 0058:30	Centaura 2C	-	Rebar 23	-	-	-	-	SUM	-	-	-	150	-	-
1972-8154	2441415.10	1972 Apr 7 1420	Centaura 1	-	ISRO 5.14	ISRO 5.14	TERLS-463	-	-	TERLS	-	-	-	150	-	-
1972-8154	2441416.10	1972 Apr 6 1418	Centaura 1	-	ISRO 5.16	ISRO 5.16 C05.16	TERLS-463	-	-	TERLS	-	-	-	150	-	-
1972-8286	2441641.69	1972 Aug 12 0215	Centaura 2A	-	ISRO 5.16	CHES FU-196	Electrojet	-	-	TERLS	-	-	-	151	-	-
1972-8287	2441646.92	1972 Aug 17 1002	Centaura 2A	-	ISRO 5.17	CHES FU-196	TERLS-468	-	-	TERLS	-	-	-	120	-	-
1972-8346	2441694.29	1972 Oct 13 1857	Centaura 2A	-	ISRO 5.15	ISRO 5.15 C.09	TERLS-520	-	-	TERLS	-	-	-	165	-	-
1973-822	2441703.90	1973 Jan 21 0940	Centaura 2A	-	ISRO 5.18	ISRO 5.18 C0.07	TERLS-523	-	-	TERLS	-	-	-	147	-	-
1973-856	2441716.30	1973 Feb 2 1905	Centaura 2A	-	ISRO 5.19	CHES FU-196 bis	TERLS-522	-	-	TERLS	-	-	-	125	-	-
1973-892	2441744.75	1973 Mar 3 0605	Centaura 2A	-	ISRO 5.20	ISRO 5.20	TERLS-552	-	-	TERLS	-	-	-	151	-	-
1973-8148	2441764.24	1973 Apr 11 1750	Centaura 2A	-	ISRO 5.21	ISRO 5.21	TERLS-552	-	-	TERLS	-	-	-	1?	-	-
1973-8228	2441867.95	1973 Jul 4 0115	Centaura 2C	-	ESRO C111/1	C111/1	TERLS-576	-	-	ESR	C	-	-	155	-	-
1974-8107	2442099.21	1974 Feb 20 1701:16	Centaura 2C	-	ESRO C111/2	C111/2	-	-	-	ESR	C	-	-	152	-	-
1974-8109	2442099.27	1974 Feb 20 1822:22	Centaura 2C	-	ESRO C111/2	C111/2	-	-	-	TERLS	C	-	-	150?	-	-
1974-8539	2442211.50	1974 Jun 13	Centaura 2B	-	ESRO C89/1 C207	SLV-3 Subsystems Test	-	-	-	TERLS	C	-	-	140	-	-
1974-8539	2442211.50	1974 Jun 13	Centaura 2B	-	ESRO C89/1 C207	NO-11-1 FV-225	-	-	-	CSG	ALFS	-	-	140	-	-
1974-8539	2442211.50	1974 Jun 13	Centaura 2B	-	ESRO C89/2 C201	NO-11-2 FV-225	-	-	-	CSG	ALFS	-	-	140	-	-
1974-8500	2442302.50	1974 Sep 12	Centaura 2C	-	ESRO C89/2 C209	NO-11-3 FV-225	-	-	-	CSG	ALFS	-	-	140	-	-
1975-871	2442465.74	1975 Feb 9 0650	Centaura 2B	-	ISRO 5.23	ISRO 5.23	TERLS-730	-	-	TERLS	-	-	-	150?	-	-
1975-874	2442465.73	1975 Feb 19 0655	Centaura 2B	-	ISRO 5.23 CE-1	ISRO 5.23 CE-1	TERLS-732	-	-	TERLS	-	-	-	160	-	-
1975-874	2442465.73	1975 Feb 19 0655	Centaura 2B	-	ISRO 5.24 CE-2	ISRO 5.24 CE-2	TERLS-732	-	-	TERLS	-	-	-	164	-	-
1975-874	2442465.73	1975 Feb 19 0655	Centaura 2B	-	ISRO 5.24 CE-3	ISRO 5.24 CE-3	TERLS-732	-	-	TERLS	-	-	-	164	-	-
1975-874	2442465.73	1975 Feb 19 0655	Centaura 2B	-	ISRO 5.24 CE-4	ISRO 5.24 CE-4	TERLS-732	-	-	TERLS	-	-	-	164	-	-
1975-874	2442465.73	1975 Feb 19 0655	Centaura 2B	-	ISRO 5.24 CE-5	ISRO 5.24 CE-5	TERLS-732	-	-	TERLS	-	-	-	164	-	-
1975-874	2442465.73	1975 Feb 19 0655	Centaura 2B	-	ISRO 5.24 CE-6	ISRO 5.24 CE-6	TERLS-732	-	-	TERLS	-	-	-	164	-	-
1975-874	2442465.73	1975 Feb 19 0655	Centaura 2B	-	ISRO 5.24 CE-7	ISRO 5.24 CE-7	TERLS-732	-	-	TERLS	-	-	-	164	-	-
1975-874	2442465.73	1975 Feb 19 0655	Centaura 2B	-	ISRO 5.24 CE-8	ISRO 5.24 CE-8	TERLS-732	-	-	TERLS	-	-	-	164	-	-
1975-874	2442465.73	1975 Feb 19 0655	Centaura 2B	-	ISRO 5.24 CE-9	ISRO 5.24 CE-9	TERLS-732	-	-	TERLS	-	-	-	164	-	-
1975-874	2442465.73	1975 Feb 19 0655	Centaura 2B	-	ISRO 5.24 CE-10	ISRO 5.24 CE-10	TERLS-732	-	-	TERLS	-	-	-	164	-	-
1975-874	2442465.73	1975 Feb 19 0655	Centaura 2B	-	ISRO 5.24 CE-11	ISRO 5.24 CE-11	TERLS-732	-	-	TERLS	-	-	-	164	-	-
1975-874	2442465.73	1975 Feb 19 0655	Centaura 2B	-	ISRO 5.24 CE-12	ISRO 5.24 CE-12	TERLS-732	-	-	TERLS	-	-	-	164	-	-
1975-874	2442465.73	1975 Feb 19 0655	Centaura 2B	-	ISRO 5.24 CE-13	ISRO 5.24 CE-13	TERLS-732	-	-	TERLS	-	-	-	164	-	-
1975-874	2442465.73	1975 Feb 19 0655	Centaura 2B	-	ISRO 5.24 CE-14	ISRO 5.24 CE-14	TERLS-732	-	-	TERLS	-	-	-	164	-	-
1975-874	2442465.73	1975 Feb 19 0655	Centaura 2B	-	ISRO 5.24 CE-15	ISRO 5.24 CE-15	TERLS-732	-	-	TERLS	-	-	-	164	-	-
1975-874	2442465.73	1975 Feb 19 0655	Centaura 2B	-	ISRO 5.24 CE-16	ISRO 5.24 CE-16	TERLS-732	-	-	TERLS	-	-	-	164	-	-
1975-874	2442465.73	1975 Feb 19 0655	Centaura 2B	-	ISRO 5.24 CE-17	ISRO 5.24 CE-17	TERLS-732	-	-	TERLS	-	-	-	164	-	-
1975-874	2442465.73	1975 Feb 19 0655	Centaura 2B	-	ISRO 5.24 CE-18	ISRO 5.24 CE-18	TERLS-732	-	-	TERLS	-	-	-	164	-	-
1975-874	2442465.73	1975 Feb 19 0655	Centaura 2B	-	ISRO 5.24 CE-19	ISRO 5.24 CE-19	TERLS-732	-	-	TERLS	-	-	-	164	-	-
1975-874	2442465.73	1975 Feb 19 0655	Centaura 2B	-	ISRO 5.24 CE-20	ISRO 5.24 CE-20	TERLS-732	-	-	TERLS	-	-	-	164	-	-
1975-874	2442465.73	1975 Feb 19 0655	Centaura 2B	-	ISRO 5.24 CE-21	ISRO 5.24 CE-21	TERLS-732	-	-	TERLS	-	-	-	164	-	-
1975-874	2442465.73	1975 Feb 19 0655	Centaura 2B	-	ISRO 5.24 CE-22	ISRO 5.24 CE-22	TERLS-732	-	-	TERLS	-	-	-	164	-	-
1975-874	2442465.73	1975 Feb 19 0655	Centaura 2B	-	ISRO 5.24 CE-23	ISRO 5.24 CE-23	TERLS-732	-	-	TERLS	-	-	-	164	-	-
1975-874	2442465.73	1975 Feb 19 0655	Centaura 2B	-	ISRO 5.24 CE-24	ISRO 5.24 CE-24	TERLS-732	-	-	TERLS	-	-	-	164	-	-
1975-874	2442465.73	1975 Feb 19 0655	Centaura 2B	-	ISRO 5.24 CE-25	ISRO 5.24 CE-25	TERLS-732	-	-	TERLS	-	-	-	164	-	-
1975-874	2442465.73	1975 Feb 19 0655	Centaura 2B	-	ISRO 5.24 CE-26	ISRO 5.24 CE-26	TERLS-732	-	-	TERLS	-	-	-	164	-	-
1975-874	2442465.73	1975 Feb 19 0655	Centaura 2B	-	ISRO 5.24 CE-27	ISRO 5.24 CE-27	TERLS-732	-	-	TERLS	-	-	-	164	-	-
1975-874	2442465.73	1975 Feb 19 0655	Centaura 2B	-	ISRO 5.24 CE-28	ISRO 5.24 CE-28	TERLS-732	-	-	TERLS	-	-	-	164	-	-
1975-874	2442465.73	1975 Feb 19 0655	Centaura 2B	-	ISRO 5.24 CE-29	ISRO 5.24 CE-29	TERLS-732	-	-	TERLS	-	-	-	164	-	-
1975-874	2442465.73	1975 Feb 19 0655	Centaura 2B	-	ISRO 5.24 CE-30	ISRO 5.24 CE-30	TERLS-732	-	-	TERLS	-	-	-	164	-	-
1975-874	2442465.73	1975 Feb 19 0655	Centaura 2B	-	ISRO 5.24 CE-31	ISRO 5.24 CE-31	TERLS-732	-	-	TERLS	-	-	-	164	-	-
1975-874	2442465.73	1975 Feb 19 0655	Centaura 2B	-	ISRO 5.24 CE-32	ISRO 5.24 CE-32	TERLS-732	-	-	TERLS	-	-	-	164	-	-
1975-874	2442465.73	1975 Feb 19 0655	Centaura 2B	-	ISRO 5.24 CE-33	ISRO 5.24 CE-33	TERLS-732	-	-	TERLS	-	-	-	164	-	-
1975-874	2442465.73	1975 Feb 19 0655	Centaura 2B	-	ISRO 5.24 CE-34	ISRO 5.24 CE-34	TERLS-732	-	-	TERLS	-	-	-	164	-	-
1975-874	2442465.73	1975 Feb 19 0655	Centaura 2B	-	ISRO 5.24 CE-35	ISRO 5.24 CE-35	TERLS-732	-	-	TERLS	-	-	-	164	-	-
1975-874	2442465.73	1975 Feb 19 0655	Centaura 2B	-	ISRO 5.24 CE-36	ISRO 5.24 CE-36	TERLS-732	-	-	TERLS	-	-	-	164	-	-
1975-874	2442465.73	1975 Feb 19 0655	Centaura 2B	-	ISRO 5.24 CE-37	ISRO 5.24 CE-37	TERLS-732	-	-	TERLS	-	-	-	164	-	-
1975-874	2442465.73	1975 Feb 19 0655	Centaura 2B	-	ISRO 5.24 CE-38	ISRO 5.24 CE-38	TERLS-732	-	-	TERLS	-	-	-	164	-	-
1975-874	2442465.73	1975 Feb 19 0655	Centaura 2B	-	ISRO 5.24 CE-39	ISRO 5.24 CE-39	TERLS-732	-	-	TERLS	-	-	-	164	-	-
1975-874																







Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Orb_Pay	Agency	Launch_Code	Group	Category	LTCite	Cite	Notes
1965-5648	2439089.69	1965 Nov 25 0440	Centaura 1	-	C91	0.000	CNIE	SS	DNUSJ/Zaragoza	Aeron	WDRF	-	-
1965-5649	2439089.86	1965 Nov 25 0824	Centaura 1	-	C93	0.000	CNIE	SS	DNUSJ/Zaragoza	Aeron	WDRF	-	-
1965-5651	2439090.85	1965 Nov 26 0824	Centaura 1	-	C96	0.000	CNIE	SS	DNUSJ/Zaragoza	Aeron	WDRF	-	-
1965-5666	2439101.66	1965 Dec 7 0353	Centaura 1	-	-	0.000	ESRO	SS	BOHM/Mauersberger	Aeron	ESRO64	ESRO-SP-76	-
1965-5674	2439105.67	1965 Dec 11 0405	Centaura 1	-	-	0.000	ESRO	SS	BOHM/Mauersberger	Aeron	ESRO64	ESRO-SP-76	SR-VII-1150
1965-5680	2439109.03	1965 Dec 14 1249	Centaura 1	-	CE-6	0.000	ESRO	SS	UTR/UDJ/UCL/	Solar X	WDRF	Hassey	-
1965-5686	2439110.50	1965 Dec 16	Centaura 1	-	C128	0.000	ESRO	SS	GR1/Murtin	Ionos	WDRF	-	-
1965-5685	2439110.50	1965 Dec 16	Centaura 1	-	C131	0.000	ESRO	SS	GR1/Murtin	Ionos	WDRF	-	-
1965-5687	2439110.50	1965 Dec 16	Centaura 1	-	C94	0.000	ESRO	SS	GR1/Murtin	Ionos	WDRF	-	-
1965-5691	2439134.05	1965 Dec 20	Centaura 1	-	C130	0.000	ESRO	SS	GR1/Murtin	Ionos	WDRF	-	-
1965-5693	2439143.25	1965 Jan 8 1311	Centaura 1	-	C103	0.000	ESRO	SS	PR1/Bhavaar,Prakash	Aeron/Ionos	WDRF	-	-
1965-5683	2439143.25	1965 Jan 17 1756	Centaura 1	-	C127	0.000	ESRO	SS	PR1/Bhavaar,Prakash	Aeron/Ionos	WDRF	-	-
1965-5698	2439161.47	1965 Feb 4 2319:32	Centaura 1	-	CE-16	0.000	ESRO	SS	UCL/SHEF/Boyd	Aurora/Ionos	WDRF	-	-
1965-5686	2439167.59	1965 Feb 11 0203:15	Centaura 1	-	CE-15	0.000	ESRO	SF	UCL/SHEF/Boyd	Aurora/Ionos	WDRF	-	-
1965-5686	2439179.27	1965 Feb 22 1828:56	Centaura 1	-	CE-13	0.000	ESRO	SF	UCL/SHEF/Boyd	Aurora/Ionos	WDRF	-	-
1965-5686	2439180.47	1965 Feb 23 2314:52	Centaura 1	-	CE-14	0.000	ESRO	SS	KGO/UCL/Riedler,Norman	Aurora	WDRF	-	-
1965-5686	2439186.43	1965 Mar 3 2226	Centaura 1	-	C77	0.000	ESRO	SS	KGO/UCL/Riedler,Norman	Aurora	WDRF	-	-
1965-5686	2439194.43	1965 Mar 9 2220:21	Centaura 1	-	CE-12	0.000	ESRO	SS	BREI/UCL/ASNS/Rawer	Solar UV	WDRF	-	-
1965-5686	2439195.43	1965 Mar 10 2226:32	Centaura 1	-	CE-11	0.000	ESRO	SS	BREI/UCL/ASNS/Rawer	Aurora	WDRF	-	-
1965-5686	2439209.38	1965 Mar 24 1646	Centaura 1	-	C101	0.000	ESRO	SS	PR1/Bhavaar	Aurora	WDRF	-	-
1965-5686	2439209.38	1965 Mar 24 2100	Centaura 1	-	C102	0.000	ESRO	SS	PR1/Bhavaar	Aurora	WDRF	-	-
1965-5686	2439260.71	1965 May 15 0950:30	Centaura 1	-	CE-5	0.000	ESRO	SS	UTR/UDJ/Stewarden,DJ	Solar X	WDRF	ESRO-SP-77	-
1965-5686	2439265.90	1965 May 20 0950:30	Centaura 1	-	CE-19	0.000	ESRO	SS	UTR/UDJ/NP/Boyd,Boi	Solar UV	WDRF	ESRO-SP-77	-
1965-5686	2439265.99	1965 May 20 1140:00	Centaura 1	-	CE-20	0.000	ESRO	SS	UTR/UDJ/NP/Boyd,Boi	Solar UV	WDRF	ESRO-SP-77	-
1965-5314	2439290.32	1965 Jun 13 1958	Centaura 1	-	C68	0.000	ESRO	SS	CHRS/Teelbaum	Aeronomy	WDRF/CNIES	-	-
1965-5319	2439292.50	1965 Jun 16	Centaura 1	-	C70	0.000	ESRO	SS	CHRS/Teelbaum	Aeronomy	WDRF	-	-
1965-5334	2439406.50	1965 Oct 6	Centaura 1	-	C140	0.000	ESRO	SS	CHRS/Cade	Test	WDRF	-	-
1965-5618	2439443.96	1965 Nov 14 1128:21	Centaura 1	-	C105	0.000	ESRO	SS	CHRS/Blaumont	Test	WDRF	-	-
1965-5618	2439444.96	1965 Nov 14 1303:14	Centaura 1	-	C139	0.000	ESRO	SS	CHRS/Blaumont	Aeronomy	WDRF	-	-
1965-5642	2439449.49	1965 Nov 19 2342:36	Centaura 1	-	CE-9	0.000	ESRO	SS	UTR/LIEBE/DeJager	Aeronomy	WDRF	-	-
1965-5665	2439456.55	1965 Nov 28 0106:39	Centaura 1	-	CE-7	0.000	ESRO	SS	RSSL/AREL/Boyd,Rawer	Aurora/CR	WDRF	-	-
1965-5665	2439460.42	1965 Nov 30 2204:16	Centaura 1	-	CE-22	0.000	ESRO	SS	RSSL/AREL/Boyd,Rawer	Aurora/CR	WDRF	-	-
1967-5116	2439526.50	1967 Feb 4 2353:31	Centaura 1	-	CE-9	0.000	ESRO	SS	UTR/LIEBE/DeJager	Aurora	WDRF	-	-
1967-5121	2439537.82	1967 Feb 16 0737:15	Centaura 1	-	CE-10	0.000	ESRO	SS	RSSL/AREL/Boyd	Ionospheric	WDRF	-	-
1967-5125	2439543.60	1967 Feb 22 0712:25	Centaura 1	-	C146	0.000	ESRO	SS	RSSL/AREL/Boyd	Ionospheric	WDRF	-	-
1967-5175	2439577.50	1967 Mar 28	Centaura 1	-	CE-24/1	0.000	ESRO	SS	CHRS/Chanin	Aeronomy	WDRF	-	-
1967-5222	2439600.18	1967 Apr 19 1619:10	Centaura 2B	-	CE-37	0.000	ESRO	SS	FRM/Franish	Test	WDRF	ESRO67	sec.se
1967-5223	2439599.76	1967 Apr 19 0614	Centaura 1	-	Nebar 15	0.000	ESRO	SS	CHRS/SUPA/Blaumont,S-A	Ionos	WDRF	Serra	-
1967-5242	2439614.10	1967 May 2 1429	Centaura 1	-	Nebar 16	0.000	ESRO	SS	CHRS/SUPA/Blaumont,S-A	Aeron	WDRF	AlreCos189	-
1967-5251	2439702.52	1967 Jul 31 0634:18	Centaura 2B	-	CE-30	0.000	ESRO	SS	FRM/Wirtz	Aeronomy	WDRF	SNS,394	-
1967-5253	2439702.54	1967 Jul 31 0638:23	Centaura 2B	-	CE-31	0.000	ESRO	SS	FRM/Wirtz	Aeronomy	WDRF	SNS,394	-
1967-5644	2439736.50	1967 Sep 7	Centaura 1	-	C145	0.000	ESRO	SS	PR1/LUND/	Meteorite	WDRF	-	-
1967-5646	2439736.50	1967 Sep 7	Centaura 1	-	C147	0.000	ESRO	SS	PR1/LUND/	Meteorite	WDRF	-	-
1967-5646	2439740.50	1967 Sep 7	Centaura 1	-	C148	0.000	ESRO	SS	PR1/LUND/	Meteorite	WDRF	-	-
1967-5646	2439740.50	1967 Sep 7	Centaura 1	-	C149	0.000	ESRO	SS	PR1/LUND/	Meteorite	WDRF	-	-
1967-5646	2439740.50	1967 Sep 7	Centaura 1	-	C150	0.000	ESRO	SS	PR1/LUND/	Meteorite	WDRF	-	-
1967-5646	2439740.50	1967 Sep 7	Centaura 1	-	C151	0.000	ESRO	SS	PR1/LUND/	Meteorite	WDRF	-	-
1967-5646	2439740.50	1967 Sep 7	Centaura 1	-	C152	0.000	ESRO	SS	PR1/LUND/	Meteorite	WDRF	-	-
1967-5646	2439740.50	1967 Sep 7	Centaura 1	-	C153	0.000	ESRO	SS	PR1/LUND/	Meteorite	WDRF	-	-
1967-5646	2439740.50	1967 Sep 7	Centaura 1	-	C154	0.000	ESRO	SS	PR1/LUND/	Meteorite	WDRF	-	-
1967-5646	2439740.50	1967 Sep 7	Centaura 1	-	C155	0.000	ESRO	SS	PR1/LUND/	Meteorite	WDRF	-	-
1967-5646	2439740.50	1967 Sep 7	Centaura 1	-	C156	0.000	ESRO	SS	PR1/LUND/	Meteorite	WDRF	-	-
1967-5646	2439740.50	1967 Sep 7	Centaura 1	-	C157	0.000	ESRO	SS	PR1/LUND/	Meteorite	WDRF	-	-
1967-5646	2439740.50	1967 Sep 7	Centaura 1	-	C158	0.000	ESRO	SS	PR1/LUND/	Meteorite	WDRF	-	-
1967-5646	2439740.50	1967 Sep 7	Centaura 1	-	C159	0.000	ESRO	SS	PR1/LUND/	Meteorite	WDRF	-	-
1967-5646	2439740.50	1967 Sep 7	Centaura 1	-	C160	0.000	ESRO	SS	PR1/LUND/	Meteorite	WDRF	-	-
1967-5646	2439740.50	1967 Sep 7	Centaura 1	-	C161	0.000	ESRO	SS	PR1/LUND/	Meteorite	WDRF	-	-
1967-5646	2439740.50	1967 Sep 7	Centaura 1	-	C162	0.000	ESRO	SS	PR1/LUND/	Meteorite	WDRF	-	-
1967-5646	2439740.50	1967 Sep 7	Centaura 1	-	C163	0.000	ESRO	SS	PR1/LUND/	Meteorite	WDRF	-	-
1967-5646	2439740.50	1967 Sep 7	Centaura 1	-	C164	0.000	ESRO	SS	PR1/LUND/	Meteorite	WDRF	-	-
1967-5646	2439740.50	1967 Sep 7	Centaura 1	-	C165	0.000	ESRO	SS	PR1/LUND/	Meteorite	WDRF	-	-
1967-5646	2439740.50	1967 Sep 7	Centaura 1	-	C166	0.000	ESRO	SS	PR1/LUND/	Meteorite	WDRF	-	-
1967-5646	2439740.50	1967 Sep 7	Centaura 1	-	C167	0.000	ESRO	SS	PR1/LUND/	Meteorite	WDRF	-	-
1967-5646	2439740.50	1967 Sep 7	Centaura 1	-	C168	0.000	ESRO	SS	PR1/LUND/	Meteorite	WDRF	-	-
1967-5646	2439740.50	1967 Sep 7	Centaura 1	-	C169	0.000	ESRO	SS	PR1/LUND/	Meteorite	WDRF	-	-
1967-5646	2439740.50	1967 Sep 7	Centaura 1	-	C170	0.000	ESRO	SS	PR1/LUND/	Meteorite	WDRF	-	-
1967-5646	2439740.50	1967 Sep 7	Centaura 1	-	C171	0.000	ESRO	SS	PR1/LUND/	Meteorite	WDRF	-	-
1967-5646	2439740.50	1967 Sep 7	Centaura 1	-	C172	0.000	ESRO	SS	PR1/LUND/	Meteorite	WDRF	-	-
1967-5646	2439740.50	1967 Sep 7	Centaura 1	-	C173	0.000	ESRO	SS	PR1/LUND/	Meteorite	WDRF	-	-
1967-5646	2439740.50	1967 Sep 7	Centaura 1	-	C174	0.000	ESRO	SS	PR1/LUND/	Meteorite	WDRF	-	-
1967-5646	2439740.50	1967 Sep 7	Centaura 1	-	C175	0.000	ESRO	SS	PR1/LUND/	Meteorite	WDRF	-	-
1967-5646	2439740.50	1967 Sep 7	Centaura 1	-	C176	0.000	ESRO	SS	PR1/LUND/	Meteorite	WDRF	-	-
1967-5646	2439740.50	1967 Sep 7	Centaura 1	-	C177	0.000	ESRO	SS	PR1/LUND/	Meteorite	WDRF	-	-
1967-5646	2439740.50	1967 Sep 7	Centaura 1	-	C178	0.000	ESRO	SS	PR1/LUND/	Meteorite	WDRF	-	-
1967-5646	2439740.50	1967 Sep 7	Centaura 1	-	C179	0.000	ESRO	SS	PR1/LUND/	Meteorite	WDRF	-	-
1967-5646	2439740.50	1967 Sep 7	Centaura 1	-	C180	0.000	ESRO	SS	PR1/LUND/	Meteorite	WDRF	-	-
1967-5646	2439740.50	1967 Sep 7	Centaura 1	-	C181	0.000	ESRO	SS	PR1/LUND/	Meteorite	WDRF	-	-
1967-5646	2439740.50	1967 Sep 7	Centaura 1	-	C182	0.000	ESRO	SS	PR1/LUND/	Meteorite	WDRF	-	-
1967-5646	2439740.50	1967 Sep 7	Centaura 1	-	C183	0.000	ESRO	SS	PR1/LUND/	Meteorite	WDRF	-	-
1967-5646	2439740.50	1967 Sep 7	Centaura 1	-	C184	0.000	ESRO	SS	PR1/LUND/	Meteorite	WDRF	-	-
1967-5646	2439740.50	1967 Sep 7	Centaura 1	-	C185	0.000	ESRO	SS	PR1/LUND/	Meteorite	WDRF	-	-
1967-5646	2439740.50	1967 Sep 7	Centaura 1	-	C186	0.000	ESRO	SS	PR1/LUND/	Meteorite	WDRF	-	-
1967-5646	2439740.50	1967 Sep 7	Centaura 1	-	C187	0.000	ESRO	SS	PR1/LUND/	Meteorite	WDRF	-	-
1967-5646	2439740.50	1967 Sep 7	Centaura 1	-	C188	0.000	ESRO	SS	PR1/LUND/	Meteorite	WDRF	-	-
1967-5646	2439740.50	1967 Sep 7	Centaura 1	-	C189	0.000	ESRO	SS	PR1/LUND/	Meteorite	WDRF	-	-
1967-5646	2439740.50	1967 Sep 7	Centaura 1	-	C190	0.000	ESRO	SS	PR1/LUND/	Meteorite	WDRF	-	-
1967-5646	2439740.50	1967 Sep 7	Centaura 1	-	C191	0.000	ESRO	SS	PR1/LUND/	Meteorite	WDRF	-	-
1967-5646	2439740.50	1967 Sep 7	Centaura 1	-	C192	0.000	ESRO	SS	PR1/LUND/	Meteorite	WDRF	-	-
1967-5646	2439740.50	1967 Sep 7	Centaura 1	-	C193	0.000	ESRO	SS	PR1/LUND/	Meteorite	WDRF	-	-
1967-5646	2439740.50	1967 Sep 7	Centaura 1	-	C194	0.000	ESRO	SS	PR1/LUND/	Meteorite	WDRF	-	-
1967-5646	2439740.50	1967 Sep 7	Centaura 1	-	C195	0.000	ESRO	SS	PR1/LUND/	Meteorite	WDRF	-	-
1967-5646	2439740.50	1967 Sep 7	Centaura 1	-	C196	0.000	ESRO	SS	PR1/LUND/	Meteorite	WDRF	-	-
1967-5646	2439740.50	1967 Sep 7	Centaura 1	-	C197	0.000	ESRO	SS	PR1/LUND/	Meteorite	WDRF	-	-
1967-5646	2439740.50	1967 Sep 7	Centaura 1	-									

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Orb_Stat	Agency	Launch_Code	Group	Category	LTCite	Cite	Notes
1970-5279	2440679.56	1970 Apr 3 0122	Centaura 2B	-	C57/2	0.000	ESRO	SS	UCL/Scott	Aeronomy	WDCRF	-	-
1970-5388	2440744.81	1970 Jun 7 0726:50	Centaura 2B	-	C48/1	0.000	ESRO	SS	HSSL/UTR/Bowles,DeJ	Solar UV	WDCRF/ZESRLV	-	-
1970-5416	2440808.49	1970 Aug 9 2339:40	Centaura 2B	-	C58/2	0.000	ESRO	SS	MPK/UID/Stoffregen	Ionos/Meteorites	WDCRF/ZESRLV	SR12.391	-
1970-5477	2440808.53	1970 Aug 10 0050	Centaura 2B	-	C51/2	0.000	ESRO	SS	RIG/Witt	Aeronomy	WDCRF	SR12.1379	-
1970-5489	2440817.96	1970 Aug 19 1103	Centaura 2B	-	C48/2	0.000	ESRO	SS	HSSL/UTR/Bowles,DeJ	Solar UV	WDCRF	-	-
1971-802	2440958.52	1971 Jan 7 0027	Centaura 2A	-	ISRO 5.12	0.000	ISRO	SF	RPE/Prakash	Test/Aeron	WDCRF/ZESRLV	ISTS10-1166	-
1971-869	2440969.12	1971 Jan 17 1448:10	Centaura 2B	-	C37/2	0.000	ESRO	SS	RPE/Rieger	Ionospheric Ba	WDCRF	-	-
1971-887	2440977.03	1971 Jan 25 1238	Centaura 2B	-	C60/1	0.000	ESRO	SS	KIEL/Alitte	CR/particles	WDCRF	-	-
1971-890	2440977.95	1971 Jan 25 1050	Centaura 2B	-	C60/2	0.000	ESRO	SS	KIEL/Alitte	CR/particles	WDCRF	-	-
1971-896	2440979.46	1971 Jan 27 2302:45	Centaura 2B	-	C78/1	0.000	ESRO	SS	RPE/Riever	Auroral	WDCRF/ZESRLV	-	-
1971-8285	2441068.32	1971 Apr 26 1934	Centaura 1	-	C136	0.000	CHES/INTA	SS	CHMS/INTM/Azcarraga	Aeronomy	WDCRF	CHES	-
1971-8305	2441098.33	1971 May 26 0436	Centaura 1	-	C141	0.000	CHES/INTA	SS	CHMS/INTM/Azcarraga	Aeronomy/Ionos	WDCRF	CHES	-
1971-8309	2441098.69	1971 May 27 0030	Centaura 1	-	C137	0.000	CHES/INTA	SS	CHMS/INTM/Azcarraga	Aeronomy	WDCRF	CHES	-
1971-8310	2441099.33	1971 May 27 2000	Centaura 1	-	C142	0.000	CHES/INTA	SS	CHMS/INTM/Azcarraga	Aeronomy	WDCRF	ESRO-SP34	-
1971-8377	2441153.51	1971 Jul 31 0021	Centaura 2C	-	C59/1	0.000	ESRO	SS	RIG/Witt	Aeronomy	WDCRF	ESRO-SP34	-
1971-8380	2441164.51	1971 Aug 1 0009	Centaura 2C	-	C59/2	0.000	ESRO	SS	RIG/Witt	Aeronomy	WDCRF	ESRO-SP34	-
1971-8441	2441207.50	1971 Sep 13	Centaura 1	-	C133	0.000	CHES	SS	CHMS/	Aeronomy	CHES	-	-
1971-8442	2441207.50	1971 Sep 19 2200	Centaura 1	-	C132	0.000	CHES	SS	CHMS/	Aeronomy	CHES	-	-
1971-8463	2441214.42	1971 Sep 19 2200	Centaura 1	-	C146	0.000	CHES	SS	CHMS/	Aeronomy	CHES	-	-
1971-8474	2441214.42	1971 Sep 19 2200	Centaura 1	-	C154	0.000	CHES	SS	CHMS/	Aeronomy	CHES	-	-
1971-8550	2441243.06	1971 Oct 18 1400	Centaura 1	-	C146	0.000	CHES	SS	CHMS/	Aeronomy	CHES	-	-
1971-8568	2441278.34	1971 Nov 22 2007:40	Centaura 2B	-	CE-67	0.000	ESRO	SS	LIEDGE/RSRS/Wenzel,Bryant	Recovery Test	ISTS10-1166	-	-
1972-846	2441338.29	1972 Jan 21 1902:20	Centaura 2C	-	C76/2	0.000	ESRO	SS	KGO/RSRS/Rutqvist	Particles/Auroral	WDCRF	-	-
1972-846	2441338.54	1972 Jan 22 0658:30	Centaura 2C	-	C76/2	0.000	ESRO	SS	KGO/RSRS/Rutqvist	Particles/Auroral	WDCRF	-	-
1972-8153	2441416.10	1972 Apr 7 1420	Centaura 1	-	Rehbar 23	0.000	SUPA	SS	SUPA/Ramatuallah	Aeron/Ionos	WDCRF	SR17.393	-
1972-8164	2441416.10	1972 Apr 6 1418	Centaura 1	-	Rehbar 24	0.000	SUPA	SS	SUPA/Ramatuallah	Aeron/Ionos	WDCRF	SR17.393	-
1972-8286	2441541.59	1972 Aug 12 0215	Centaura 2A	-	ISRO 5.14	0.000	ISRO	SS	PRL/Prakash	Ionos	ASR5,7,35	SR16.401	-
1972-8287	2441546.92	1972 Aug 17 1002	Centaura 2A	-	ISRO 5.16	0.000	ISRO	SS	PRL/Prakash	Ionos	ASR5,7,35	SR16.401	-
1972-8348	2441604.29	1972 Oct 13 1857	Centaura 2A	-	ISRO 5.17	0.000	ISRO	SS	PRL/Prakash	Ionos	ASR5,7,35	SR16.401	-
1972-8356	2441703.90	1973 Jan 21 0940	Centaura 2A	-	ISRO 5.15	0.000	ISRO/CHES	SS	PRL/Prakash	Ionos	ASR5,7,35	SR16.401	-
1973-850	2441716.30	1973 Feb 2 1905	Centaura 2A	-	ISRO 5.18	0.000	ISRO	SS	PRL/Prakash	Ionos	ASR5,7,35	SR16.401	-
1973-892	2441744.75	1973 Mar 5 0605	Centaura 2A	-	ISRO 5.20	0.000	ISRO	SS	PRL/Prakash	Ionos	ASR5,7,35	SR16.401	-
1973-8146	2441784.24	1973 Apr 11 1750	Centaura 2A	-	ISRO 5.19	0.000	ISRO	SS	PRL/Prakash	Ionos	ASR5,7,35	SR16.401	-
1973-8228	2441867.55	1973 Jul 4 0115	Centaura 2A	-	ISRO 5.21	0.000	ISRO	SS	PRL/Prakash	Ionos	ASR5,7,35	SR16.401	-
1974-5107	2442099.21	1974 Feb 20 1701:16	Centaura 2C	-	ESRO C111/1	0.000	ESTEC	SS	PRL/SomyaJulu	Fields	ESK-TN-132	ESK074	-
1974-5109	2442099.27	1974 Feb 20 1822:22	Centaura 2C	-	ESRO C111/2	0.000	ESTEC	SS	STO/Faiteon	Auroral	ESK-TN-132	ESK074	-
1974-5529	2442211.50	1974 Jun 13	Centaura 2C	-	ISRO 5.22T	0.000	CHES/ESTEC	SS	IASB/Nicolet	Test	BHR1	-	-
1974-5530	2442211.50	1974 Jun 13	Centaura 2C	-	ESRO C98/1, C207	0.000	CHES/ESTEC	SS	IASB/Nicolet	Aeron	Serra	ESK-SP-115	-
1974-5531	2442262.50	1974 Sep 15	Centaura 2C	-	ESRO C98/2, C201	0.000	CHES/ESTEC	SS	IASB/Nicolet	Aeron	Serra	ESK-SP-115	-
1975-367	2442682.74	1975 Feb 9 0560	Centaura 2B	-	ISRO 5.23 CE-1	0.000	ISRO	SS	PRL/ACL/Sastry,Rees	Ionospheric	WDCRF	ASR5,7,35	-
1975-374	2442682.74	1975 Feb 19 0555	Centaura 2B	-	ISRO 5.23 CE-4	0.000	ISRO	SS	PRL/ACL/Sastry,Rees	Ionospheric	WDCRF	ASR5,7,35	-
1975-382	2442682.88	1975 Feb 27 0920	Centaura 2B	-	ISRO 5.24 CE-2	0.000	ISRO	SS	PRL/ACL/Sastry,Rees	Ionospheric	WDCRF	ASR5,7,35	-
1975-389	2442682.88	1975 Feb 27 0920	Centaura 2B	-	ISRO 5.24 CE-2	0.000	ISRO	SS	PRL/ACL/Sastry,Rees	Ionospheric	WDCRF	ASR5,7,35	-
1975-3128	2442823.54	1975 Apr 21 0911	Centaura 2B	-	ISRO 5.26	0.000	ISRO	SS	PRL/Prakash	Ionos	ASR5,7,35	SR19.279	-
1975-3122	2442823.54	1975 Apr 21 0911	Centaura 2B	-	ISRO 5.26	0.000	ISRO	SS	PRL/Prakash	Ionos	ASR5,7,35	SR19.279	-
1975-317	2442828.00	1975 Apr 11 1750	Centaura 2B	-	ISRO 5.26	0.000	ISRO	SS	PRL/Prakash	Ionos	ASR5,7,35	SR19.279	-
1975-317	2442828.00	1975 Apr 11 1750	Centaura 2B	-	ISRO 5.26	0.000	ISRO	SS	PRL/Prakash	Ionos	ASR5,7,35	SR19.279	-
1975-317	2442828.00	1975 Apr 11 1750	Centaura 2B	-	ISRO 5.26	0.000	ISRO	SS	PRL/Prakash	Ionos	ASR5,7,35	SR19.279	-
1975-317	2442828.00	1975 Apr 11 1750	Centaura 2B	-	ISRO 5.26	0.000	ISRO	SS	PRL/Prakash	Ionos	ASR5,7,35	SR19.279	-
1975-317	2442828.00	1975 Apr 11 1750	Centaura 2B	-	ISRO 5.26	0.000	ISRO	SS	PRL/Prakash	Ionos	ASR5,7,35	SR19.279	-
1975-317	2442828.00	1975 Apr 11 1750	Centaura 2B	-	ISRO 5.26	0.000	ISRO	SS	PRL/Prakash	Ionos	ASR5,7,35	SR19.279	-
1975-317	2442828.00	1975 Apr 11 1750	Centaura 2B	-	ISRO 5.26	0.000	ISRO	SS	PRL/Prakash	Ionos	ASR5,7,35	SR19.279	-
1975-317	2442828.00	1975 Apr 11 1750	Centaura 2B	-	ISRO 5.26	0.000	ISRO	SS	PRL/Prakash	Ionos	ASR5,7,35	SR19.279	-
1975-317	2442828.00	1975 Apr 11 1750	Centaura 2B	-	ISRO 5.26	0.000	ISRO	SS	PRL/Prakash	Ionos	ASR5,7,35	SR19.279	-
1975-317	2442828.00	1975 Apr 11 1750	Centaura 2B	-	ISRO 5.26	0.000	ISRO	SS	PRL/Prakash	Ionos	ASR5,7,35	SR19.279	-
1975-317	2442828.00	1975 Apr 11 1750	Centaura 2B	-	ISRO 5.26	0.000	ISRO	SS	PRL/Prakash	Ionos	ASR5,7,35	SR19.279	-
1975-317	2442828.00	1975 Apr 11 1750	Centaura 2B	-	ISRO 5.26	0.000	ISRO	SS	PRL/Prakash	Ionos	ASR5,7,35	SR19.279	-
1975-317	2442828.00	1975 Apr 11 1750	Centaura 2B	-	ISRO 5.26	0.000	ISRO	SS	PRL/Prakash	Ionos	ASR5,7,35	SR19.279	-
1975-317	2442828.00	1975 Apr 11 1750	Centaura 2B	-	ISRO 5.26	0.000	ISRO	SS	PRL/Prakash	Ionos	ASR5,7,35	SR19.279	-
1975-317	2442828.00	1975 Apr 11 1750	Centaura 2B	-	ISRO 5.26	0.000	ISRO	SS	PRL/Prakash	Ionos	ASR5,7,35	SR19.279	-
1975-317	2442828.00	1975 Apr 11 1750	Centaura 2B	-	ISRO 5.26	0.000	ISRO	SS	PRL/Prakash	Ionos	ASR5,7,35	SR19.279	-
1975-317	2442828.00	1975 Apr 11 1750	Centaura 2B	-	ISRO 5.26	0.000	ISRO	SS	PRL/Prakash	Ionos	ASR5,7,35	SR19.279	-
1975-317	2442828.00	1975 Apr 11 1750	Centaura 2B	-	ISRO 5.26	0.000	ISRO	SS	PRL/Prakash	Ionos	ASR5,7,35	SR19.279	-
1975-317	2442828.00	1975 Apr 11 1750	Centaura 2B	-	ISRO 5.26	0.000	ISRO	SS	PRL/Prakash	Ionos	ASR5,7,35	SR19.279	-
1975-317	2442828.00	1975 Apr 11 1750	Centaura 2B	-	ISRO 5.26	0.000	ISRO	SS	PRL/Prakash	Ionos	ASR5,7,35	SR19.279	-
1975-317	2442828.00	1975 Apr 11 1750	Centaura 2B	-	ISRO 5.26	0.000	ISRO	SS	PRL/Prakash	Ionos	ASR5,7,35	SR19.279	-
1975-317	2442828.00	1975 Apr 11 1750	Centaura 2B	-	ISRO 5.26	0.000	ISRO	SS	PRL/Prakash	Ionos	ASR5,7,35	SR19.279	-
1975-317	2442828.00	1975 Apr 11 1750	Centaura 2B	-	ISRO 5.26	0.000	ISRO	SS	PRL/Prakash	Ionos	ASR5,7,35	SR19.279	-
1975-317	2442828.00	1975 Apr 11 1750	Centaura 2B	-	ISRO 5.26	0.000	ISRO	SS	PRL/Prakash	Ionos	ASR5,7,35	SR19.279	-
1975-317	2442828.00	1975 Apr 11 1750	Centaura 2B	-	ISRO 5.26	0.000	ISRO	SS	PRL/Prakash	Ionos	ASR5,7,35	SR19.279	-
1975-317	2442828.00	1975 Apr 11 1750	Centaura 2B	-	ISRO 5.26	0.000	ISRO	SS	PRL/Prakash	Ionos	ASR5,7,35	SR19.279	-
1975-317	2442828.00	1975 Apr 11 1750	Centaura 2B	-	ISRO 5.26	0.000	ISRO	SS	PRL/Prakash	Ionos	ASR5,7,35	SR19.279	-
1975-317	2442828.00	1975 Apr 11 1750	Centaura 2B	-	ISRO 5.26	0.000	ISRO	SS	PRL/Prakash	Ionos	ASR5,7,35	SR19.279	-
1975-317	2442828.00	1975 Apr 11 1750	Centaura 2B	-	ISRO 5.26	0.000	ISRO	SS	PRL/Prakash	Ionos	ASR5,7,35	SR19.279	-
1975-317	2442828.00	1975 Apr 11 1750	Centaura 2B	-	ISRO 5.26	0.000	ISRO	SS	PRL/Prakash	Ionos	ASR5,7,35	SR19.279	-
1975-317	2442828.00	1975 Apr 11 1750	Centaura 2B	-	ISRO 5.26	0.000	ISRO	SS	PRL/Prakash	Ionos	ASR5,7,35	SR19.279	-
1975-317	2442828.00	1975 Apr 11 1750	Centaura 2B	-	ISRO 5.26								



Launch Mission

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee_Km	Range_Km	Dest
1950-A30	2433495.50	1950 Aug 2	Veronique R	-	R1	-	-	-	-	-	-	2	-	-
1950-A32	2433497.50	1950 Aug 4	Veronique R	-	R2	-	SUP	-	-	-	-	0	-	-
1951-A09	2433736.50	1951 Apr	Veronique P2	-	P2	-	VERNON	-	-	-	-	0	-	-
1951-A68	2433921.50	1951 Oct 2	Veronique R	-	R3	-	SUP	-	-	-	-	0	-	-
1951-A69	2433924.50	1951 Oct 5	Veronique R	-	R4	-	SUP	-	-	-	-	2	-	-
1951-A69	2433925.50	1951 Oct 6	Veronique R	-	R5	-	SUP	-	-	-	-	2	-	-
1952-A11	2434036.50	1952 Jan 25	Veronique P6	-	P6-1	-	CARD	-	-	-	-	1	-	-
1952-A12	2434037.50	1952 Jan 26	Veronique R	-	R7	-	CARD	-	-	-	-	1	-	-
1952-A14	2434039.50	1952 Jan 28	Veronique P6	-	P6-2	-	CARD	-	-	-	-	1	-	-
1952-A15	2434039.50	1952 Jan 28	Veronique R	-	R6	-	CARD	-	-	-	-	1	-	-
1952-A19	2434041.50	1952 Jan 30	Veronique R	-	R8	-	CARD	-	-	-	-	1	-	-
1952-A81	2434152.50	1952 May 20	Veronique	-	R1	-	HMG	-	Bechar	-	-	19	-	-
1952-A82	2434153.50	1952 May 21	Veronique	-	R2	-	HMG	-	Bechar	-	-	14	-	-
1952-A83	2434154.50	1952 May 22	Veronique	-	R3	-	HMG	-	Bechar	-	-	60	-	-
1952-A214	2434324.50	1952 Nov 6	Veronique	-	R4	-	HMG	-	Bechar	-	-	10	-	-
1952-A215	2434325.50	1952 Nov 6	Veronique	-	R5	-	HMG	-	Bechar	-	-	1	-	-
1952-A221	2434329.50	1952 Nov 9	Veronique	-	R7	-	HMG	-	Bechar	-	-	4	-	-
1952-A223	2434332.50	1952 Nov 13	Veronique	-	R6	-	HMG	-	Bechar	-	-	1	-	-
1952-A227	2434333.50	1952 Nov 16	Veronique	-	R9	-	HMG	-	Bechar	-	-	1	-	-
1952-A230	2434334.50	1952 Nov 17	Veronique	-	R8	-	HMG	-	Bechar	-	-	07	-	-
1953-A177	2434465.50	1953 Apr 18	Veronique	-	R11	-	HMG	-	Bechar	-	-	07	-	-
1953-A183	2434468.50	1953 Apr 18	Veronique	-	R10	-	HMG	-	Bechar	-	-	45	-	-
1954-A70	2434793.50	1954 Feb 20	Veronique	-	MA15	-	HMG	-	Bechar	-	-	29	-	-
1954-A503	2434794.50	1954 Feb 21	Veronique	-	MA14	-	HMG	-	Bechar	-	-	136	-	-
1954-A578	2435032.50	1954 Oct 17	Veronique	-	MA15	-	HMG	-	Bechar	-	-	39	-	-
1959-A44	2435044.50	1959 Oct 29	Veronique	-	MA12	-	HMG	-	Bechar	-	-	90	-	-
1959-A525	2435635.32	1959 Mar 7 1934	Veronique	-	AG118	Ma release	HMG	-	Bladine	-	-	35	-	-
1959-A525	2435635.32	1959 Mar 10 1838	Veronique	-	AG117	Ma release	HMG	-	Bladine	-	-	L24	-	-
1959-A525	2435635.32	1959 Mar 12 0544	Veronique	-	AG116	Ma release	HMG	-	Bladine	-	-	L74	-	-
1960-A54	2435696.27	1960 Feb 23	Veronique	-	AG123	Ma release	HMG	-	Bladine	-	-	507	-	-
1960-A54	2435696.50	1960 Mar 5	Veronique	-	AG123	Ma release	HMG	-	Bladine	-	-	188	-	-
1960-A54	2435696.50	1960 Mar 13	Veronique	-	AG122	Ma release	HMG	-	Bladine	-	-	187	-	-
1960-A54	2435696.50	1960 Mar 16	Veronique	-	AG121	Ma release	HMG	-	Bladine	-	-	176	-	-
1960-A54	2437096.50	1960 Jun 18	Veronique	-	AG119	Ma release	HMG	-	Bladine	-	-	180	-	-
1960-A5131	2437101.50	1960 Jun 18	Veronique	-	AG128	Ma release	HMG	-	Bladine	-	-	152	-	-
1960-A5133	2437103.50	1960 Jun 18	Veronique	-	AG128	Ma release	HMG	-	Bladine	-	-	90	-	-
1960-A5137	2437107.50	1960 Jun 22	Veronique	-	AG127	Airglow	HMG	-	Bladine	-	-	91	-	-
1961-A447	2437941.95	1961 Feb 11 1041	Veronique	-	AG126	-	HMG	-	Bladine	-	-	07	-	-
1961-A447	2437943.50	1961 Feb 15 2201	Veronique	-	AG128	-	HMG	-	Bladine	-	-	150	-	-
1961-A546	2437946.42	1961 Feb 15 2201	Veronique	-	AG129	-	HMG	-	Bladine	-	-	16	-	-
1961-A546	2437946.50	1961 Feb 18	Veronique	-	AG130	-	HMG	-	Bladine	-	-	110	-	-
1961-A546	2437946.50	1961 Feb 22 0700	Veronique	-	AG131	Blo (Nat)	HMG	-	Bladine	-	-	168	-	-
1961-A546	2437946.50	1961 Jun 10	Veronique	-	AG135	-	HMG	-	Bladine	-	-	100?	-	-
1961-A546	2437946.50	1961 Jun 12	Veronique	-	AG136	-	HMG	-	Bladine	-	-	100?	-	-
1961-A546	2437946.50	1962 Aug 31	Veronique	-	AG141	-	REC	-	Bladine	-	-	100?	-	-
1962-A165	2437815.50	1962 Jun 1	Veronique	-	AG142	-	HMG	-	Bladine	-	-	120	-	-
1962-A169	2437819.50	1962 Jun 4 1947	Veronique	-	AG142	Blo (Nat)	HMG	-	Bladine	-	-	120	-	-
1962-A169	2437819.50	1962 Jun 6 1947	Veronique	-	AG137	Blo (Nat)	HMG	-	Bladine	-	-	110	-	-
1962-A389	2437952.26	1962 Oct 18 0839	Veronique	-	AG136	Blo (Nat)	HMG	-	Bladine	-	-	135	-	-
1962-A403	2437955.95	1962 Oct 18 0851	Veronique	-	AG136	Blo (Nat)	HMG	-	Bladine	-	-	135	-	-
1962-A413	2437955.50	1962 Oct 19	Veronique	-	AG145	-	HMG	-	Bladine	-	-	120	-	-
1962-A413	2437955.50	1962 Oct 22 1101	Veronique	-	AG144	-	HMG	-	Bladine	-	-	175	-	-
1962-A413	2437957.96	1962 Oct 29 2321	Veronique	-	AG139	Airglow	HMG	-	Bladine	-	-	180	-	-
1962-A439	2437957.96	1962 Oct 29 2321	Veronique	-	AG134	Airglow	HMG	-	Bladine	-	-	175	-	-
1962-A439	2437957.96	1962 Oct 20 1034	Veronique	-	AG135	Airglow	HMG	-	Bladine	-	-	175	-	-
1962-A439	2437957.96	1963 Apr 23 2204	Veronique	-	AG149	-	HMG	-	Bladine	-	-	140	-	-
1963-A186	2438143.43	1963 Apr 23 2204	Veronique	-	AG145	-	HMG	-	Bladine	-	-	160	-	-
1963-A186	2438151.21	1963 Apr 1 659	Veronique	-	AG145	-	HMG	-	Bladine	-	-	160	-	-
1963-A186	2438151.21	1963 May 10	Veronique	-	AG148	-	HMG	-	Bladine	-	-	135	-	-
1963-A186	2438151.21	1963 May 10	Veronique	-	AG148	Coronagraph	HMG	-	Bladine	-	-	160	-	-
1963-A186	2438151.21	1963 May 10	Veronique	-	AG133	-	HMG	-	Bladine	-	-	160	-	-
1963-A186	2438151.21	1963 May 10	Veronique	-	AG140	-	HMG	-	Bladine	-	-	38	-	-
1963-A186	2438151.21	1963 Jun 19	Veronique	-	AG147	-	HMG	-	Bladine	-	-	155	-	-
1963-A186	2438151.21	1963 Oct 18 0709	Veronique	-	AG147	Blo (Nat)	HMG	-	Bladine	-	-	88	-	-
1963-A514	2438320.90	1963 Oct 18 0709	Veronique	-	AG150	Blo (Nat)	HMG	-	Bladine	-	-	119	-	-
1963-A514	2438326.73	1963 Oct 14 0530	Veronique	-	AG151	Solar La	HMG	-	Bladine	-	-	260	-	-
1964-A205	2438439.50	1964 Apr 14	Veronique	-	VA75	-	HMG	-	Bladine	-	-	260	-	-
1964-A205	2438454.50	1964 Apr 14	Veronique 61	-	VA76	-	HMG	-	Bladine	-	-	150	-	-
1964-A204	2438455.50	1964 Jun 13	Veronique 61	-	VA75	-	HMG	-	Bladine	-	-	150	-	-
1964-A574	2438704.19	1964 Nov 4 1635	Veronique	-	AG153	Solar La	HMG	-	Bladine	-	-	98	-	-
1964-A574	2438707.95	1964 Nov 8 0822	Veronique	-	AG152	UV Spectrum/CU point	HMG	-	Bladine	-	-	95	-	-
1965-A594	2438803.50	1965 Feb 12	Veronique	-	AG156	-	HMG	-	Bladine	-	-	70	-	-
1965-A594	2438803.50	1965 Feb 27	Veronique 61	-	VA79	-	HMG	-	Bladine	-	-	210	-	-
1965-A570	2439056.63	1965 Oct 22 2018	Veronique AGI	-	AG1/MS4	Ly Alpha	HMG	-	Bladine	-	-	210	-	-
1965-A581	2439065.79	1965 Oct 28 0655	Veronique AGI	-	AG1/MS5	FU-115 Electron den.	HMG	-	Bladine	-	-	210	-	-
1965-A581	2439065.79	1965 Oct 28 0655	Veronique AGI	-	AG1/MS5	FU-115 electron den.	HMG	-	Bladine	-	-	209	-	-
1966-A150	2439209.21	1966 Mar 24 1702	Veronique 61M	-	VA80	-	HMG	-	Bladine	-	-	23	-	-
1966-A150	2439219.94	1966 Apr 4 0807	Veronique 61M	-	VA78	FU-145 ACS test	HMG	-	Bladine	-	-	130	-	-
1966-A150	2439222.15	1966 Apr 6 1530	Veronique AGI	-	AG1/57	FU-126 Solar corona	HMG	-	Bladine	-	-	123	-	-
1966-A345	2439304.01	1966 Jun 27 1705	Veronique AGI	-	AG1/60	FU-154 Recovery test	HMG	-	Bladine	-	-	168	-	-
1966-A345	2439304.01	1966 Oct 3	Veronique 61M	-	VA77	FU-145 Ionos	HMG	-	Bladine	-	-	230	-	-
1966-A527	2439453.50	1966 Nov 24	Veronique 61M	-	VA82	FU-145 Ionos/mass sp.	HMG	-	Bladine	-	-	122	-	-
1966-A527	2439453.50	1966 Dec 9 1520	Veronique AGI	-	AGI 59	FU-149 Astron	HMG	-	Bladine	-	-	158	-	-
1967-A554	2439469.14	1967 Jan 11	Veronique 61	-	VA84	FU-161 Astron	HMG	-	Bladine	-	-	123	-	-
1967-A554	2439501.50	1967 Jan 13 1000	Veronique AGI	-	AGI 63	FU-160 Solar corona	HMG	-	Bladine	-	-	205	-	-
1967-A554	2439503.92	1967 Jan 17	Veronique AGI	-	VA85	FU-145B Astron	HMG	-	Bladine	-	-	200	-	-
1967-A560	2439507.92	1967 Feb 24	Veronique 61	-	VA81	FU-174 Solar corona	HMG	-	Bladine	-	-	32	-	-
1967-A560	2439545.50	1967 Mar 17	Veronique AGI	-	AGI 64	FU-175 Recovery test	HMG	-	Bladine	-	-	306	-	-
1967-A64	2439566.50	1967 Mar 17	Veronique 61	-	VA86	FU-156 Ionos/Blo	HMG	-	Bladine	-	-	306	-	-
1967-A169	2439573.75	1967 Mar 24 0555	Veronique 61M	-	VA87	FU-156 Ionos/Blo	HMG	-	Bladine	-	-	306	-	-
1967-A176	2439578.77	1967 Mar 29 0625	Veronique 61M	-	VA88	FU-175 PUV-3	HMG	-	Bladine	-	-	196	-	-
1967-A190	2439584.50	1967 Apr 4	Veronique 61M	-	VA88	FU-184 Sea recovery	HMG	-	Bladine	-	-	114	-	-
1968-A2569	2439956.04	1968 Apr 9 1255	Veronique AGI	-	AGI 62	-	CSG	-	ALFS V	-	-	-	-	-

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Mission	FlightCode	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee Km	Range Km	Dest
1968-S421	2440063.30	1968 Jul 25 1915	Veronique 61H	-	61H/89	FU-185	-	-	-	CSG	ALFS V	-	-	185	-	-
1968-S653	2440208.50	1968 Dec 18	Veronique 61H	-	61H/83	FU-158 PERSEE?	-	-	-	CSG	ALFS V	-	-	162	-	-
1968-S658	2440212.50	1968 Dec 22	Veronique 61H	-	61H/90	FU-158 Crab X-rays	-	-	-	CSG	ALFS V	-	-	188	-	-
1969-S148	2440272.99	1969 Feb 20 1148	Veronique AGI	-	AGI 61	FU-170 CIRCE	-	-	-	CSG	ALFS V	-	-	107	-	-
1971-S324	2441111.32	1971 Jun 8 1946	Veronique 61H	-	61H/93	FU-194 GESAIR	-	-	-	CSG	ALFS V	-	-	210	-	-
1971-S329	2441115.32	1971 Jun 12 1944	Veronique 61H	-	61H/94	FU-194 GESAIR	-	-	-	CSG	ALFS V	-	-	210	-	-
1971-S612	2441302.33	1971 Dec 16 1957	Veronique 61H	-	61H/92	FU-208 CISASPE	-	-	-	CSG	ALFS V	-	-	227	-	-
1973-S152	2441789.94	1973 Apr 17 1030	Veronique 61H	-	61H/95	FU-200 350V	-	-	-	CSG	ALFS V	-	-	200	-	-
1975-S188	2442662.50	1975 May 30 0000	Veronique 61H	-	-	FU-216 FAUST	-	-	-	CSG	ALFS V	-	-	172	-	-



Launch_Req	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	OrbPay	Agency	Launch_Code	Group	Category	LTCite	Cite	Notes
1950-A30	2435495.50	1950 Aug 2	Veronique R	-	R1	0.000	LRBA	SF	LRBA/LREA/	Test	AAS99-260	-	-
1950-A32	2435497.50	1950 Aug 4	Veronique R	-	R2	0.000	LRBA	SS	LRBA/LREA/	Test	AAS99-260	-	-
1951-A09	2435497.50	1951 Apr	Veronique P2	-	P2	0.000	LRBA	SS	LRBA/LREA/	Test	AAS99-260	-	-
1951-A66	2435921.50	1951 Oct 2	Veronique R	-	R4	0.000	LRBA	SS	LRBA/LREA/	Test	AAS99-260	-	-
1951-A68	2435921.50	1951 Oct 5	Veronique R	-	R4	0.000	LRBA	SS	LRBA/LREA/	Test	AAS99-260	-	-
1951-A69	2435925.50	1951 Oct 6	Veronique R	-	R5	0.000	LRBA	SS	LRBA/LREA/	Test	AAS99-260	-	-
1952-A11	2436036.50	1952 Jan 25	Veronique P6	-	P6-1	0.000	LRBA	SS	LRBA/LREA/	Test	AAS99-260	-	-
1952-A12	2436037.50	1952 Jan 26	Veronique R	-	R7	0.000	LRBA	SS	LRBA/LREA/	Test	AAS99-260	-	-
1952-A14	2436039.50	1952 Jan 28	Veronique P6	-	P6-2	0.000	LRBA	SS	LRBA/LREA/	Test	AAS99-260	-	-
1952-A15	2436039.50	1952 Jan 28	Veronique R	-	R8	0.000	LRBA	SS	LRBA/LREA/	Test	AAS99-260	-	-
1952-A19	2436041.50	1952 Jan 30	Veronique R	-	R8	0.000	LRBA	SS	LRBA/LREA/	Test	AAS99-260	-	-
1952-A81	2436152.50	1952 May 20	Veronique	-	N1	0.000	LRBA	SF	LRBA/LREA/	Test	AAS99-260	-	-
1952-A82	2436153.50	1952 May 21	Veronique	-	N2	0.000	LRBA	SF	LRBA/LREA/	Test	AAS99-260	-	-
1952-H03	2436154.50	1952 May 22	Veronique	-	N3	0.000	LRBA	SS	LRBA/LREA/	Test	AAS99-260	-	-
1952-K214	2436324.50	1952 Nov 8	Veronique	-	N4	0.000	LRBA	SF	LRBA/LREA/	Test	AAS99-260	-	-
1952-K216	2436325.50	1952 Nov 9	Veronique	-	N5	0.000	LRBA	SF	LRBA/LREA/	Test	AAS99-260	-	-
1952-K221	2436329.50	1952 Nov 13	Veronique	-	N6	0.000	LRBA	SF	LRBA/LREA/	Test	AAS99-260	-	-
1952-K223	2436332.50	1952 Nov 16	Veronique	-	N8	0.000	LRBA	SF	LRBA/LREA/	Test	AAS99-260	-	-
1952-K230	2436333.50	1952 Nov 17	Veronique	-	N9	0.000	LRBA	SF	LRBA/LREA/	Test	AAS99-260	-	-
1952-K239	2436334.50	1952 Nov 18	Veronique	-	N11	0.000	LRBA	SF	LRBA/LREA/	Test	AAS99-260	-	-
1953-A168	2436485.50	1953 Apr 18	Veronique	-	N11	0.000	LRBA	SS	LRBA/LREA/	Test	AAS99-260	-	-
1954-A70	2436493.50	1954 Apr 21	Veronique	-	N15	0.000	LRBA	SF	LRBA/LREA/	Test	AAS99-260	-	-
1954-A76	2436494.50	1954 Oct 17	Veronique	-	N14	0.000	LRBA	SF	LRBA/LREA/	Test	AAS99-260	-	-
1954-S79	2436502.50	1954 Oct 29	Veronique	-	N12	0.000	LRBA	SF	LRBA/LREA/	Test	AAS99-260	-	-
1959-A44	2436635.32	1959 Mar 7 1934	Veronique	-	AG18	0.000	CASDN	SF	LRBA/LREA/	Test	AAS99-260	-	-
1959-S24	2436638.28	1959 Mar 12 0544	Veronique	-	AG17	0.000	CASDN	SS	LRBA/LREA/	Test	AAS99-260	-	-
1960-A64	2436697.50	1960 Feb 23	Veronique	-	AG16	0.000	CASDN	SS	LRBA/LREA/	Test	AAS99-260	-	-
1960-S48	2436998.27	1960 Mar 5	Veronique	-	AG123	0.000	CASDN	SS	LRBA/LREA/	Test	AAS99-260	-	-
1960-S124	2437098.50	1960 Jun 13	Veronique	-	AG120	0.000	CASDN	SS	LRBA/LREA/	Test	AAS99-260	-	-
1960-S131	2437101.50	1960 Jun 16	Veronique	-	AG121	0.000	CASDN	SS	LRBA/LREA/	Test	AAS99-260	-	-
1960-S137	2437107.50	1960 Jun 22	Veronique	-	AG119	0.000	CASDN	SS	LRBA/LREA/	Test	AAS99-260	-	-
1961-A47	2437341.95	1961 Feb 15 1041	Veronique	-	AG126	0.000	CASDN	SF	LRBA/LREA/	Test	AAS99-260	-	-
1961-S48	2437346.42	1961 Feb 15 2201	Veronique	-	AG128	0.000	CASDN	SF	LRBA/LREA/	Test	AAS99-260	-	-
1961-A60	2437398.50	1961 Feb 15	Veronique	-	AG128	0.000	CASDN	SF	LRBA/LREA/	Test	AAS99-260	-	-
1961-S69	2437522.79	1961 Feb 22 0700	Veronique	-	AG130	0.000	CASDN	SF	LRBA/LREA/	Test	AAS99-260	-	-
1961-S175	2437660.50	1961 Jun 10	Veronique	-	AG131	0.000	CASDN	SS	LRBA/LREA/	Test	AAS99-260	-	-
1962-S161	2437699.32	1962 May 24 1940	Veronique	-	AG138	0.000	CASDN	SS	LRBA/LREA/	Test	AAS99-260	-	-
1962-S165	2437815.50	1962 Jun 1	Veronique	-	AG136	0.000	CASDN	SS	LRBA/LREA/	Test	AAS99-260	-	-
1962-S169	2437822.92	1962 Jun 6 1947	Veronique	-	AG141	0.000	CASDN	SS	LRBA/LREA/	Test	AAS99-260	-	-
1962-S290	2437892.36	1962 Oct 18 0939	Veronique	-	AG143	0.000	CASDN	SS	LRBA/LREA/	Test	AAS99-260	-	-
1962-S403	2437958.95	1962 Oct 18 0831	Veronique	-	AG137	0.000	CASDN	SS	LRBA/LREA/	Test	AAS99-260	-	-
1962-S412	2437959.95	1962 Oct 18	Veronique	-	AG144	0.000	CASDN	SS	LRBA/LREA/	Test	AAS99-260	-	-
1962-S439	2437960.95	1962 Oct 18 1101	Veronique	-	AG146	0.000	CASDN	SS	LRBA/LREA/	Test	AAS99-260	-	-
1962-S439	2437960.95	1962 Oct 18 2321	Veronique	-	AG134	0.000	CASDN	SS	LRBA/LREA/	Test	AAS99-260	-	-
1963-S166	2438139.94	1963 Apr 20 1034	Veronique	-	AG136	0.000	CASDN	SS	LRBA/LREA/	Test	AAS99-260	-	-
1963-S169	2438143.42	1963 Apr 23 2204	Veronique	-	AG149	0.000	CASDN	SS	LRBA/LREA/	Test	AAS99-260	-	-
1963-S196	2438151.21	1963 May 1 1659	Veronique	-	AG145	0.000	CASDN	SS	LRBA/LREA/	Test	AAS99-260	-	-
1963-S292	2438159.50	1963 May 10	Veronique	-	AG148	0.000	CASDN	SS	LRBA/LREA/	Test	AAS99-260	-	-
1963-A82	2438199.50	1963 Jun 19	Veronique	-	AG140	0.000	CASDN	SS	LRBA/LREA/	Test	AAS99-260	-	-
1963-S514	2438320.90	1963 Oct 18 0709	Veronique	-	AG147	0.000	CASDN	SS	LRBA/LREA/	Test	AAS99-260	-	-
1964-S205	2438336.73	1963 Oct 24 0530	Veronique	-	AG160	0.000	CASDN	SS	LRBA/LREA/	Test	AAS99-260	-	-
1964-S294	2438654.50	1964 Apr 14	Veronique	-	AG151	0.000	CASDN	SS	LRBA/LREA/	Test	AAS99-260	-	-
1964-S294	2438654.50	1964 Jun 3	Veronique 61	-	W76	0.000	CASDN	SS	LRBA/LREA/	Test	AAS99-260	-	-
1964-S574	2438704.19	1964 Nov 4 1635	Veronique 61	-	W76	0.000	CASDN	SS	LRBA/LREA/	Test	AAS99-260	-	-
1964-S602	2438707.85	1964 Nov 8 0822	Veronique	-	AG162	0.000	CASDN	SS	LRBA/LREA/	Test	AAS99-260	-	-
1965-S94	2438803.50	1965 Feb 12	Veronique	-	AG166	0.000	CASDN	SS	LRBA/LREA/	Test	AAS99-260	-	-
1965-M11	2438907.50	1965 May 27	Veronique 61	-	W79	0.000	CASDN	SS	LRBA/LREA/	Test	AAS99-260	-	-
1965-S570	2439056.35	1965 Oct 22 2018	Veronique AGI	-	AG1/164	0.000	CASDN	SS	LRBA/LREA/	Test	AAS99-260	-	-
1965-S581	2439061.79	1965 Oct 28 0655	Veronique AGI	-	AG1/165	0.000	CASDN	SS	LRBA/LREA/	Test	AAS99-260	-	-
1966-S186	2439209.21	1966 Mar 24 1702	Veronique 61M	-	W80	0.000	CASDN	SS	LRBA/LREA/	Test	AAS99-260	-	-
1966-A50	2439219.84	1966 Apr 4 0807	Veronique 61M	-	W78	0.000	CASDN	SS	LRBA/LREA/	Test	AAS99-260	-	-
1966-S212	2439222.12	1966 Jun 27 1705	Veronique AGI	-	AG1/57	0.000	CASDN	SS	LRBA/LREA/	Test	AAS99-260	-	-
1966-S525	2439304.21	1966 Jun 9 1630	Veronique 61M	-	AG1/60	0.000	CASDN	SS	LRBA/LREA/	Test	AAS99-260	-	-
1966-S527	2439411.50	1966 Oct 3	Veronique 61M	-	W82	0.000	CASDN	SS	LRBA/LREA/	Test	AAS99-260	-	-
1966-S563	2439453.50	1966 Nov 24	Veronique 61M	-	W82	0.000	CASDN	SS	LRBA/LREA/	Test	AAS99-260	-	-
1966-S573	2439501.14	1966 Dec 9 1620	Veronique AGI	-	AGT 59	0.000	CASDN	SS	LRBA/LREA/	Test	AAS99-260	-	-
1967-S54	2439501.61	1967 Jan 11	Veronique 61	-	W84	0.000	CASDN	SS	LRBA/LREA/	Test	AAS99-260	-	-
1967-S55	2439503.92	1967 Jan 13 1000	Veronique AGI	-	AGT 63	0.000	CASDN	SS	LRBA/LREA/	Test	AAS99-260	-	-
1967-S60	2439507.50	1967 Jan 17	Veronique 61	-	W85	0.000	CASDN	SS	LRBA/LREA/	Test	AAS99-260	-	-
1967-S127	2439545.50	1967 Feb 24	Veronique 61	-	AGT 64	0.000	CASDN	SS	LRBA/LREA/	Test	AAS99-260	-	-
1967-A64	2439566.50	1967 Mar 17	Veronique AGI	-	W86	0.000	CASDN	SS	LRBA/LREA/	Test	AAS99-260	-	-
1967-S169	2439573.75	1967 Mar 24 0555	Veronique 61M	-	W86	0.000	CASDN	SS	LRBA/LREA/	Test	AAS99-260	-	-
1967-S176	2439578.77	1967 Mar 29 0625	Veronique 61M	-	W88	0.000	CASDN	SS	LRBA/LREA/	Test	AAS99-260	-	-
1967-S190	2439584.50	1967 Apr 4	Veronique 61M	-	W88	0.000	CASDN	SS	LRBA/LREA/	Test	AAS99-260	-	-
1968-S269	2439956.04	1968 Apr 9 1255	Veronique AGI	-	AGT 62	0.000	CASDN	SS	LRBA/LREA/	Test	AAS99-260	-	-

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	OrbPay	Agency	Launch_Code	Group	Category	LTCite	Cite	Notes
1968-S421	2440063.30	1968 Jul 25 1915	Veronique 61H	-	61H/89	0.000	CNES	SS	LAS/CEA/Morin,Rochia	XR Astron	twitter/outchepace	CNES	-
1968-S653	2440208.50	1968 Dec 18	Veronique 61H	-	61H/83	0.000	CNES	SS	LAS/Courtes	UV Astron	CNES	IAU96-130	-
1968-S658	2440212.50	1968 Dec 22	Veronique 61H	-	61H/90	0.000	CNES	SS	CEA/LAS/Courtes,Ducros	UV Astron,XR Astron	CNES	AMP/-162	-
1969-S148	2440272.99	1969 Feb 20 1148	Veronique AGI	-	AGI 61	0.000	CNES	SS	CNET/Giraud	Ionos	CNES	AASH28-219	-
1971-S324	2441111.32	1971 Jun 8 1946	Veronique 61H	-	61H/93	0.000	CNES	SS	BREL/APP/Hawer	Bio/Geophys	CNES	SR13,485	-
1971-S329	2441115.32	1971 Jun 12 1944	Veronique 61H	-	61H/94	0.000	CNES	SS	BREL/APP/Hawer	Bio/Geophys	CNES	SR13,485	-
1971-S612	2441302.33	1971 Dec 16 1957	Veronique 61H	-	61H/92	0.000	CNES	SS	CNES/AN/Beghin	Ionos	WDCRF	AASH28-219	-
1973-S152	2441789.94	1973 Apr 17 1030	Veronique 61H	-	61H/95	0.000	CNES	SS	CNES/Bonnet	Solar EUV	WDCRF	ESA-SF115	-
1975-S188	2442562.50	1975 May 30 0000	Veronique 61H	-	-	0.000	CNES	SF	LAS/Courtes	UV Astron	CNES50	Dejean	-





Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Mission	FlightCode	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee km	Range km	Dest
1965-S566	2439048.50	1965 Oct 15	Vesta	-	001	FU-123	-	-	-	HMG	Elandine	-	-	150	-	-
1965-S575	2439058.50	1965 Oct 25	Vesta	-	002	FU-123	-	-	-	HMG	Elandine	-	-	105	-	-
1967-S145	2439556.95	1967 Mar 7 1042	Vesta	-	004	FU-147 Bio (Macaca)	-	-	-	HMG	Elandine	-	-	243	-	-
1967-S153	2439562.94	1967 Mar 13 1030	Vesta	-	005	FU-147 Bio (Macaca)	-	-	-	HMG	Elandine	-	-	234	-	-
1969-S623	2440534.54	1969 Nov 9 0053:11	Vesta	-	006	FU-189 Star pt test	-	-	-	CSG	ALFS V	-	-	204	-	-



Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	OrbPay	Agency	Launch_Code	Group	Category	LTCite	Cite	Notes
1965-5556	2439048.50	1965 Oct 15	Vesta	-	001	0.000	CNES	SS	LRBA/Frey	Test	CNES	-	-
1965-5575	2439058.50	1965 Oct 25	Vesta	-	002	0.000	CNES	SS	LRBA/Frey	Test	CNES	-	-
1967-5145	2439556.96	1967 Mar 7 1042	Vesta	-	004	0.000	CNES	SS	CERMA/Grandpierre	Bio	CNESPR	AirCos670311	soframas.asso.fr
1967-5153	2439562.94	1967 Mar 13 1030	Vesta	-	005	0.000	CNES	SS	CERMA/Grandpierre	Bio	MSH27-19	soframas.asso.fr	-
1969-5623	2440534.54	1969 Nov 9 0053:11	Vesta	-	006	0.000	CNES	SS	LAS/ONERA/Montommet	Test/Astron	twitter/DutchSpace	MSH28-219	-



Launch

Launch_Tag	Launch_ID	Launch_Date	L_V_Type	Variant	Flight_ID	Flight	Mission	FlightCode	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee Km	Range Km	Dest
1949-S08	2433040.18	1949 May 3 1614	Viking	-	1	Viking 1	-	-	-	WS	ALA1	-	-	83	-	-
1949-M05	2433166.21	1949 Sep 6 1657	Viking	-	2	Viking 2	-	-	-	WS	ALA1	-	-	57	-	-
1960-M03	2433322.41	1960 Feb 9 2144	Viking	-	3	Viking 3	-	-	-	WS	ALA1	-	-	80	-	-
1960-S04	2433413.63	1960 May 12 0308	Viking	-	4	Viking 4	-	AWH1	-	JMRV	LP1	-	-	171	-	-
1960-S21	2433607.22	1960 Nov 21 1718	Viking	-	5	Viking 5	-	-	-	WS	ALA1	-	-	174	-	-
1960-M13	2433627.79	1960 Dec 12 0704	Viking	-	6	Viking 6	-	-	-	WS	ALA1	-	-	64	-	-
1961-S37	2433866.26	1961 Aug 7 1800	Viking	-	7	Viking 7	-	-	-	WS	ALA1	-	-	219	-	-
1962-A93	2434170.23	1962 Jun 6 1730	Viking Type 9	-	8	Viking 8	-	-	-	WS	HLA	-	-	6	-	-
1962-S91	2434362.40	1962 Dec 15 2138	Viking Type 9	-	9	Viking 9	-	-	-	WS	HLA	-	-	217	-	-
1964-S28	2434870.21	1964 May 7 1700	Viking Type 9	-	10	Viking 10	-	-	-	WS	HLA	-	-	219	-	-
1964-S32	2434887.21	1964 May 24 1700	Viking Type 9	-	11	Viking 11	-	-	-	WS	HLA	-	-	254	-	-
1965-S14	2435143.41	1965 Feb 4 2155	Viking Type 9	-	12	Viking 12	-	-	-	WS	HLA	-	-	231	-	-
1965-S107	2435815.75	1965 Dec 8 0603	Viking Type 9	-	13/TV0	Vanguard TV0	-	-	-	CC	LC18A	-	-	204	-	-
1967-S31	2435959.77	1967 May 1 0629:00	Viking Type 9	-	14/TV1	Vanguard TV1	-	-	-	CC	LC18A	-	-	196	-	-
1967-S142	2436136.31	1967 Oct 23 1922:54	Vanguard	-	TV-2	Vanguard TV2	-	-	-	CC	LC18A	-	-	175	-	-
1967-F01	2436179.20	1967 Feb 6 1644:35	Vanguard	-	TV-3	Vanguard TV3	Vanguard Test Satellite	-	-	CC	LC18A	-	-	0	-	-
1968-F01	2436239.81	1968 Feb 5 0733	Vanguard	-	TV-3BU	Vanguard TV3BU	Vanguard Test Satellite	-	-	CC	LC18A	-	-	6	-	-
1968-BET	2436280.01	1968 Mar 17 1215:41	Vanguard	-	TV-4	Vanguard TV4	Vanguard Test Satellite	-	-	CC	LC18A	-	-	4329	-	-
1968-F04	2436322.62	1968 Apr 29 0253:00	Vanguard	-	TV-5	Vanguard TV5	X-ray satellite	-	-	CC	LC18A	-	-	590	-	-
1968-F05	2436351.96	1968 May 28 0346:20	Vanguard	-	SLV-1	Vanguard SLV1	Lyman Alpha satellite	-	-	CC	LC18A	-	-	2500	-	-
1968-F06	2436380.71	1968 Jun 26 0500:52	Vanguard	-	SLV-2	Vanguard SLV2	X-ray satellite	-	-	CC	LC18A	-	-	165	-	-
1968-U01	2436473.15	1968 Sep 26 1538	Vanguard	-	SLV-3	Vanguard SLV3	Cloud cover satellite	-	-	CC	LC18A	-	-	426	-	-
1969-001	2436617.16	1969 Feb 17 1555	Vanguard	-	SLV-4	Vanguard IV	Cloud cover satellite	-	-	CC	LC18A	-	-	3687	-	-
1969-ALP	2436672.62	1969 Apr 14 0249:46	Vanguard	-	SLV-4	Vanguard SLV5	Radiation Balance sat	-	-	CC	LC18A	-	-	100	-	-
1969-F01	2436742.34	1969 Jun 22 2016:09	Vanguard	-	SLV-5	Vanguard SLV6	Radiation Balance sat	-	-	CC	LC18A	-	-	140	-	-
1969-F03	2436742.34	1969 Jun 22 2016:09	Vanguard	-	SLV-6	Vanguard SLV6	Radiation Balance sat	-	-	CC	LC18A	-	-	140	-	-
1969-ETA	2436829.72	1969 Sep 18 0520:07	Vanguard	X-248	SLV-7	Vanguard III	Hague-Ray satellite	-	-	CC	LC18A	-	-	3758	-	-



Launch

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	OrbPay t	Agency	Launch_Code	Group	Category	LTCite	Cite	Notes
1949-S08	2433040.18	1949 May 3 1614	Viking	-	1	0.000	NRL	SS	NRL/	Aeron/Photo	Hewell	-	-
1949-A05	2433166.21	1949 Sep 6 1657	Viking	-	2	0.000	NRL	SF	NRL/	Aeron/Photo	Hewell	-	-
1950-A03	2433322.41	1950 Feb 9 2144	Viking	-	3	0.000	NRL	SS	NRL/	Solar UV, X/Photo	Hewell	-	-
1950-S04	2433413.63	1950 May 12 0308	Viking	-	4	0.000	NRL	SS	NRL/	Lonos/Aeron	Hewell	-	-
1950-S21	2433607.22	1950 Nov 21 1718	Viking	-	5	0.000	NRL	SS	NRL/Seddon, Jackson, Kane	Lonos-solar	Hewell	-	-
1950-M13	2433627.79	1950 Dec 12 0704	Viking	-	6	0.000	NRL	SF	NRL/	Lonos-solar	Hewell	-	-
1951-S37	2433866.26	1951 Aug 7 1800	Viking	-	7	0.000	NRL	SS	NRL/	Test	Hewell	-	-
1952-A93	2434170.23	1952 Jun 6 1730	Viking Type 9	-	8	0.000	NRL	SF	NRL/Byram, Chubb	Solar X	Hewell	-	-
1952-A93	2434362.40	1952 Dec 15 2138	Viking Type 9	-	9	0.000	NRL	SS	NRL/Seddon, Jackson,	Aeron/lonos	Hewell	-	-
1954-S28	2434870.21	1954 May 7 1700	Viking Type 9	-	10	0.000	NRL	SS	NRL/	Reentry test	Hewell	-	-
1954-S32	2434887.21	1954 May 24 1700	Viking Type 9	-	11	0.000	NRL	SS	NRL/	Reentry test	Hewell	-	-
1955-S14	2435143.41	1955 Feb 4 2155	Viking Type 9	-	12	0.000	NRL	TS	NRL/Mazur	Test	Hewell	-	-
1955-S107	2435815.75	1955 Dec 8 0603	Viking Type 9	-	13/TV0	0.000	NRL	TS	NRL/Mazur	Test	Hewell	SP-4202	-
1957-S31	2435959.77	1957 May 1 0629:00	Viking Type 9	-	14/TV1	0.000	NRL	TS	NRL/Mazur	Test	Hewell	NRL-VR-17	-
1957-S142	2436135.31	1957 Oct 23 1922:54	Vanguard	-	TV-2	0.000	NRL	TS	NRL/Mazur	Test	Hewell	WDC	-
1957-F01	2436179.20	1957 Dec 6 1644:35	Vanguard	-	TV-3	0.002	NRL	OF	G	Sat MED 0	Yang-ER9470	-	-
1958-F01	2436239.81	1958 Feb 5 0733	Vanguard	-	TV-3BU	0.002	NRL	OF	G	Sat MED 0	Yang-ER946	-	-
1958-BET	2436280.01	1958 Mar 17 1215:41	Vanguard	-	TV-4	0.002	NRL	OS	G	Sat MED 0	SP-4202	-	-
1958-F04	2436322.62	1958 Apr 29 0253:00	Vanguard	-	TV-5	0.010	NRL	OF	G	Sat MED 0	Yang-ER10300	-	-
1958-F05	2436351.96	1958 May 28 0346:20	Vanguard	-	SLV-1	0.010	NRL	OF	G	Sat MED 0	Yang-ER10301	-	-
1958-F06	2436380.71	1958 Jun 26 0500:52	Vanguard	-	SLV-2	0.010	NRL	OF	G	Sat MED 0	Yang-ER10302	-	-
1958-001	2436473.15	1958 Sep 26 1538	Vanguard	-	SLV-3	0.010	NRL	OF	G	Sat MED 0	Yang-ER10303	-	-
1959-ALP	2436617.16	1959 Feb 17 1555	Vanguard	-	SLV-4	0.010	NRL	OS	G	Sat MED 0	Yang-ER10304	-	-
1959-F01	2436672.62	1959 Apr 14 0249:46	Vanguard	-	SLV-5	0.011	NRL	OF	G	Sat MED 0	Yang-ER10689	-	-
1959-F03	2436742.34	1959 Jun 22 2016:09	Vanguard	-	SLV-6	0.010	NRL	OF	G	Sat MED 0	Yang-ER-SLV6	-	-
1959-ETA	2436629.72	1959 Sep 16 0520:07	Vanguard	X-248	SLV-7	0.047	NRL	OS	G	Sat MED A	Yang-ER-SLV7	-	-





Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Mission	FlightCode	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee km	Range km	Dest
2022-S122	2465901.75	2022 Nov 18 0600	Vikram-S	-	1	Prarambh	-	-	-	SHAR	-	-	-	89	-	-



Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	OrbPay	Agency	Launch_Code	Group	Category	LTCite	Cite	Notes
2022-S122	2465901.75	2022 Nov 18 0600	Vikram-S	-	1 -	0.000	SKYRT	SS	SKYRT/	Test	Wire	-	-



Launch_Thg	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Launch_Mission	FlightCode	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee_Km	Range_Km	Dest
1960-S430	2436933.50	1960	Viper-Arrow	-	V-A	-	-	-	-	-	-	-	-	100?	-	-
1960-T03	2437159.80	1960 Aug 13 0719	Viper Falcon	-	-	TP Annie	-	-	-	TR7?	-	-	-	120	-	-
1960-T04	2437159.91	1960 Aug 13 0947	Viper Falcon	-	-	TP Norma	-	-	-	EGL	-	-	-	97	-	-
1961-S463	2437330.50	1961 Feb?	Viper-Arrow	-	V-A 23	-	-	-	-	TR7?	-	-	-	100?	-	-
1967-S614	2439707.50	1967 Aug 5	Viper-Bart	-	SOC VD-01	-	-	-	-	GSB	-	-	-	140?	-	-
1967-S615	2439707.50	1967 Aug 5	Viper-Bart	-	SOC VD-02	-	-	-	-	GSB	-	-	-	140?	-	-
1967-S616	2439707.50	1967 Aug 5	Viper-Bart	-	SOC VD-03	-	-	-	-	GSB	-	-	-	140?	-	-
1967-S617	2439707.50	1967 Aug 5	Viper-Bart	-	SOC VD-04	-	-	-	-	GSB	-	-	-	140?	-	-
1967-S618	2439827.50	1967 Dec 3	Viper-Bart	-	SOC VD-05	-	-	-	-	GSB	-	-	-	104	-	-
1967-S619	2439827.50	1967 Dec 3	Viper-Bart	-	SOC VD-06	-	-	-	-	GSB	-	-	-	109	-	-
1967-S620	2439827.50	1967 Dec 3	Viper-Bart	-	SOC VD-07	-	-	-	-	GSB	-	-	-	100?	-	-
1967-S621	2439827.50	1967 Dec 3	Viper-Bart	-	SOC VD-08	-	-	-	-	GSB	-	-	-	100?	-	-
1967-S622	2439827.50	1967 Dec 3	Viper-Bart	-	SOC VD-09	-	-	-	-	GSB	-	-	-	100?	-	-
1967-S623	2439827.50	1967 Dec 3	Viper-Bart	-	SOC VD-10	-	-	-	-	GSB	-	-	-	100?	-	-
1968-Y10	2438905.25	1968 Feb 18 1807	Viper-Bart	-	SOC VD-11	-	-	-	-	GSB	-	-	-	122	-	-
1968-Y11	2438905.29	1968 Feb 18 1857	Viper-Bart	-	SOC VD-12	-	-	-	-	GSB	-	-	-	123	-	-
1968-Y12	2438905.34	1968 Feb 18 2007	Viper-Bart	-	SOC VD-13	-	-	-	-	GSB	-	-	-	114	-	-
1968-S666	2438966.50	1968 Apr 20	Viper-Bart	-	SOC VD-14	-	ROBIN	-	-	GSB	-	-	-	131?	-	-
1968-S667	2438966.50	1968 Apr 20	Viper-Bart	-	SOC VD-15	-	-	-	-	GSB	-	-	-	126	-	-
1968-H40	2438967.50	1968 Apr 20	Viper-Bart	-	SOC VD-16	-	-	-	-	GSB	-	-	-	124	-	-
1968-S669	2438967.50	1968 Apr 21	Viper-Bart	-	SOC VD-17	-	-	-	-	GSB	-	-	-	50?	-	-
1968-S670	2438967.50	1968 Apr 21	Viper-Bart	-	SOC VD-18	-	-	-	-	GSB	-	-	-	100	-	-
1968-S671	2438967.50	1968 Apr 21	Viper-Bart	-	SOC VD-19	-	-	-	-	GSB	-	-	-	126	-	-
1968-AL11	2438997.50	1968 May 21	Viper	-	SOC VD-20	-	Kangaroo	-	-	PH7	-	-	-	131	-	-
1968-AL12	2440037.50	1968 Jul?	Viper	-	-	Kangaroo	-	-	-	PH7	-	-	-	40?	-	-
1968-AL13	2440037.50	1968 Jul?	Viper	-	-	Kangaroo	-	-	-	PH7	-	-	-	40?	-	-
1968-AL14	2440037.50	1968 Jul?	Viper	-	-	Kangaroo	-	-	-	PH7	-	-	-	40?	-	-
1968-AL24	2440179.50	1968 Nov 19	Viper-Bart	-	SOC VD-21	-	Kangaroo	-	-	PH7	-	-	-	40?	-	-
1968-S672	2440179.50	1968 Nov 19	Viper-Bart	-	SOC VD-22	-	ROBIN	-	-	CC	-	-	-	142	-	-
1968-AL20	2440180.50	1968 Nov 20	Viper-Bart	-	SOC VD-23	-	ROBIN	-	-	CC	-	-	-	40?	-	-
1968-S673	2440180.50	1968 Nov 20	Viper-Bart	-	SOC VD-24	-	ROBIN	-	-	CC	-	-	-	129	-	-
1968-S674	2440180.50	1968 Nov 20	Viper-Bart	-	SOC VD-25	-	ROBIN	-	-	CC	-	-	-	128	-	-
1968-S675	2440180.50	1968 Nov 20	Viper-Bart	-	SOC VD-26	-	ROBIN	-	-	CC	-	-	-	128	-	-
1968-S676	2440209.50	1968 Dec 19	Viper-Bart	-	SOC VD-27	-	ROBIN	-	-	CC	-	-	-	121	-	-
1968-S677	2440210.50	1968 Dec 20	Viper-Bart	-	SOC VD-28	-	ROBIN	-	-	CC	-	-	-	139	-	-
1968-S678	2440211.50	1968 Dec 21	Viper-Bart	-	SOC VD-29	-	ROBIN	-	-	CC	-	-	-	137	-	-
1969-125	2440236.30	1969 Jan 14 1905	Viper-Bart	-	Sphere 1	-	Net Sphere	-	-	MS	-	-	-	147	-	-
1969-126	2440237.31	1969 Jan 15 1930	Viper-Bart	-	Sphere 2	-	Net Sphere	-	-	MS	-	-	-	147	-	-
1969-127	2440277.50	1969 Feb 25	Viper-Bart	-	SOC VD-30	-	Net-Air Sphere	-	-	CC	-	-	-	40?	-	-
1969-128	2440278.50	1969 Feb 26	Viper-Bart	-	SOC VD-31	-	Net-Air Sphere	-	-	CC	-	-	-	40?	-	-
1969-S702	2440278.50	1969 Feb 26	Viper-Bart	-	SOC VD-32	-	Net-Air Sphere	-	-	CC	-	-	-	40?	-	-
1969-S703	2440284.27	1969 Mar 5 1629	Viper-Bart	-	SOC VD-33	-	Net-Air Sphere	-	-	CC	-	-	-	40?	-	-
1969-S704	2440284.27	1969 Mar 5 1629	Viper-Bart	-	SOC VD-34	-	Net-Air Sphere	-	-	CC	-	-	-	40?	-	-
1969-1621	2440300.29	1969 Apr 13 1900	Viper-Bart	-	Sphere 3	-	Net Sphere	-	-	MS	-	-	-	51	-	-
1969-1622	2440302.02	1969 Apr 21 0300	Viper-Bart	-	Sphere 4	-	Net Sphere	-	-	MS	-	-	-	43	-	-
1969-1623	2440307.19	1969 Apr 25 1630	Viper-Bart	-	Sphere 5	-	Net Sphere	-	-	MS	-	-	-	46	-	-
1969-1624	2440339.95	1969 Apr 28 0419	Viper-Bart	-	Sphere 6	-	Net Sphere	-	-	MS	-	-	-	146	-	-
1969-1625	2440339.95	1969 Apr 28 0419	Viper-Bart	-	Sphere 7	-	Net Sphere	-	-	MS	-	-	-	146	-	-
1969-1626	2440359.75	1969 May 1 1700	Viper-Bart	-	Sphere 8	-	Net Sphere	-	-	MS	-	-	-	146	-	-
1969-Y134	2440359.75	1969 May 1 1700	Viper-Bart	-	Sphere 9	-	Net Sphere	-	-	MS	-	-	-	145	-	-
1969-Y135	2440359.75	1969 May 1 1700	Viper-Bart	-	Sphere 10	-	Net Sphere	-	-	MS	-	-	-	145	-	-
1969-S709	2440352.68	1969 May 11 0200	Viper-Bart	-	SOC VD-35	-	ROBIN	-	-	CC	-	-	-	129	-	-
1969-S710	2440352.68	1969 May 11 0200	Viper-Bart	-	SOC VD-36	-	ROBIN	-	-	CC	-	-	-	40?	-	-
1969-S711	2440352.68	1969 May 11 0200	Viper-Bart	-	SOC VD-37	-	ROBIN	-	-	CC	-	-	-	40?	-	-
1969-S712	2440352.68	1969 May 11 0200	Viper-Bart	-	SOC VD-38	-	ROBIN	-	-	CC	-	-	-	90?	-	-
1969-S713	2440352.68	1969 May 11 0200	Viper-Bart	-	SOC VD-39	-	ROBIN	-	-	CC	-	-	-	90?	-	-
1969-S714	2440352.68	1969 May 11 0200	Viper-Bart	-	SOC VD-40	-	ROBIN	-	-	CC	-	-	-	90?	-	-
1969-S715	2440352.68	1969 May 11 0200	Viper-Bart	-	SOC VD-41	-	ROBIN	-	-	CC	-	-	-	90?	-	-
1969-S716	2440352.68	1969 May 11 0200	Viper-Bart	-	SOC VD-42	-	ROBIN	-	-	CC	-	-	-	90?	-	-
1969-S717	2440352.68	1969 May 11 0200	Viper-Bart	-	SOC VD-43	-	ROBIN	-	-	CC	-	-	-	90?	-	-
1969-S718	2440352.68	1969 May 11 0200	Viper-Bart	-	SOC VD-44	-	ROBIN	-	-	CC	-	-	-	90?	-	-
1969-S719	2440352.68	1969 May 11 0200	Viper-Bart	-	SOC VD-45	-	ROBIN	-	-	CC	-	-	-	90?	-	-
1969-S720	2440352.68	1969 May 11 0200	Viper-Bart	-	SOC VD-46	-	ROBIN	-	-	CC	-	-	-	90?	-	-
1969-S721	2440352.68	1969 May 11 0200	Viper-Bart	-	SOC VD-47	-	ROBIN	-	-	CC	-	-	-	90?	-	-
1969-S722	2440352.68	1969 May 11 0200	Viper-Bart	-	SOC VD-48	-	ROBIN	-	-	CC	-	-	-	90?	-	-
1969-S723	2440352.68	1969 May 11 0200	Viper-Bart	-	SOC VD-49	-	ROBIN	-	-	CC	-	-	-	90?	-	-
1969-S724	2440352.68	1969 May 11 0200	Viper-Bart	-	SOC VD-50	-	ROBIN	-	-	CC	-	-	-	90?	-	-
1969-S725	2440352.68	1969 May 11 0200	Viper-Bart	-	SOC VD-51	-	ROBIN	-	-	CC	-	-	-	90?	-	-
1969-S726	2440352.68	1969 May 11 0200	Viper-Bart	-	SOC VD-52	-	ROBIN	-	-	CC	-	-	-	90?	-	-
1969-S727	2440352.68	1969 May 11 0200	Viper-Bart	-	SOC VD-53	-	ROBIN	-	-	CC	-	-	-	90?	-	-
1969-S728	2440352.68	1969 May 11 0200	Viper-Bart	-	SOC VD-54	-	ROBIN	-	-	CC	-	-	-	90?	-	-
1969-S729	2440352.68	1969 May 11 0200	Viper-Bart	-	SOC VD-55	-	ROBIN	-	-	CC	-	-	-	90?	-	-
1969-S730	2440352.68	1969 May 11 0200	Viper-Bart	-	SOC VD-56	-	ROBIN	-	-	CC	-	-	-	90?	-	-
1969-S731	2440352.68	1969 May 11 0200	Viper-Bart	-	SOC VD-57	-	ROBIN	-	-	CC	-	-	-	90?	-	-
1969-S732	2440352.68	1969 May 11 0200	Viper-Bart	-	SOC VD-58	-	ROBIN	-	-	CC	-	-	-	90?	-	-
1969-S733	2440352.68	1969 May 11 0200	Viper-Bart	-	SOC VD-59	-	ROBIN	-	-	CC	-	-	-	90?	-	-
1969-S734	2440352.68	1969 May 11 0200	Viper-Bart	-	SOC VD-60	-	ROBIN	-	-	CC	-	-	-	90?	-	-
1969-S735	2440352.68	1969 May 11 0200	Viper-Bart	-	SOC VD-61	-	ROBIN	-	-	CC	-	-	-	90?	-	-
1969-S736	2440352.68	1969 May 11 0200	Viper-Bart	-	SOC VD-62	-	ROBIN	-	-	CC	-	-	-	90?	-	-
1969-S737	2440352.68	1969 May 11 0200	Viper-Bart	-	SOC VD-63	-	ROBIN	-	-	CC	-	-	-	90?	-	-
1969-S738	2440352.68	1969 May 11 0200	Viper-Bart	-	SOC VD-64	-	ROBIN	-	-	CC	-	-	-	90?	-	-
1969-S739	2440352.68	1969 May 11 0200	Viper-Bart	-	SOC VD-65	-	ROBIN	-	-	CC	-	-	-	90?	-	-
1969-S740	2440352.68	1969 May 11 0200	Viper-Bart	-	SOC VD-66	-	ROBIN	-	-	CC	-	-	-	90?	-	-
1969-S741	2440352.68	1969 May 11 0200	Viper-Bart	-	SOC VD-67	-	ROBIN	-	-	CC	-	-	-	90?	-	-
1969-S742	2440352.68	1969 May 11 0200	Viper-Bart	-	SOC VD-68	-	ROBIN	-	-	CC	-	-	-	90?	-	-
1969-S743	2440352.68	1969 May 11 0200	Viper-Bart	-	SOC VD-69	-	ROBIN	-	-	CC	-	-	-	90?	-	-
1969-S744	2440352.68	1969 May 11 0200	Viper-Bart	-	SOC VD-70	-	ROBIN	-	-	CC	-	-	-	90?	-	-
1969-S745	2440352.68	1969 May 11 0200	Viper-Bart	-	SOC VD-71	-	ROBIN	-	-	CC	-	-	-	90?	-	-
1969-S746	2440352.68	1969 May 11 0200	Viper-Bart	-	SOC VD-72	-	ROBIN	-	-	CC	-	-	-	90?	-	-
1969-S747	2440352.68	1969 May 11 0200	Viper-Bart	-	SOC VD-73	-	ROBIN	-	-	CC	-	-	-	90?	-	-
1969-S748	2440352.68	1969 May 11 0200	Viper-Bart	-	SOC VD-74	-	ROBIN	-	-	CC	-	-	-	90?	-	-
1969-S749	2440352.68	1969 May 11 0200	Viper-Bart	-	SOC VD-75	-	ROBIN	-	-	CC	-	-	-	90?	-	-
1969-S750	2440352.68	1969 May 11 0200	Viper-Bart	-	SOC VD-76	-	ROBIN	-								

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Mission	FlightCode	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee km	Range km	Dest
1974-0867	2442228.86	1974 Jun 30 0840:00	Viper-Bart	-	E 1-7319	ALADDIN 74	-	-	-	WI	-	-	-	75?	-	-
1974-0869	2442228.92	1974 Jun 30 1005:00	Viper-Bart	-	E 1-7320	ALADDIN 74	-	-	-	WI	-	-	-	75?	-	-
1974-0872	2442229.05	1974 Jun 30 1315:00	Viper-Bart	-	E 1-7321	ALADDIN 74	-	-	-	WI	-	-	-	75?	-	-
1974-0874	2442229.08	1974 Jun 30 1352:00	Viper-Bart	?	Starvue, Datensonde	ALADDIN 74	-	-	-	WI	-	-	-	68	-	-
1974-0875	2442229.10	1974 Jun 30 1430:00	Viper-Bart	-	E 1-7322	ALADDIN 74	-	-	-	WI	-	-	-	75?	-	-
1975-3404	2442689.24	1975 Oct 3 1745	Viper-Bart	-	T1-8039	-	Instrumented Sphere 1	-	-	WI	-	-	-	100?	-	-
1976-0124	2442785.29	1976 Jan 7 1854	Viper-Bart	-	T1-8059	-	Instrumented Sphere 2	-	-	WI	-	-	-	100?	-	-
1976-0126	2442785.33	1976 Jan 7 1958	Viper-Bart	-	T1-8060	-	Instrumented Sphere 3	-	-	WI	-	-	-	100?	-	-
1976-0112	2442890.27	1976 Apr 21 1833	Viper-Bart	-	T1-8278	-	Instrumented Sphere 4	-	-	WI	-	-	-	100?	-	-
1976-0127	2442891.15	1976 Apr 22 1530	Viper-Bart	-	T1-8279	-	Instrumented Sphere 5	-	-	WI	-	-	-	100?	-	-







Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	DrPay	Agency	Launch_Code	Group	Category	LTCite	Cite	Notes
1974-4867	2442228.86	1974 Jun 30 0640:00	Viper-Dart	-	E 1-7319	0.000	GSFC	SU	WFE/AFORL/	Aeron	WDCRF	-	-
1974-4869	2442228.92	1974 Jun 30 1005:00	Viper-Dart	-	E 1-7320	0.000	GSFC	SU	WFE/AFORL/	Aeron	WDCRF	-	-
1974-4872	2442229.05	1974 Jun 30 1315:00	Viper-Dart	-	E 1-7321	0.000	GSFC	SU	WFE/AFORL/	Aeron	WDCRF	-	-
1974-4874	2442229.08	1974 Jun 30 1352:00	Viper-Dart	?	Starvue_Datasonde	0.000	MRM	SS	AFORL/	Meteo	DS1-5850	-	-
1974-4875	2442229.10	1974 Jun 30 1430:00	Viper-Dart	-	E 1-7322	0.000	GSFC	SU	WFE/AFORL/	Aeron	WDCRF	-	-
1975-5404	2442689.24	1975 Oct 3 1745	Viper-Dart	-	T1-8039	0.000	GSFC	SS	ODAY7/Luers	Aeron/Test	CH-2968	-	-
1976-424	2442785.29	1976 Jan 7 1854	Viper-Dart	-	T1-8059	0.000	GSFC	SS	ODAY7/Luers	Aeron	CH-2968	-	-
1976-426	2442785.33	1976 Jan 7 1958	Viper-Dart	-	T1-8060	0.000	GSFC	SS	ODAY7/Luers	Aeron	CH-2968	-	-
1976-412	2442690.27	1976 Apr 21 1833	Viper-Dart	-	T1-8278	0.000	GSFC	SU	ODAY7/Luers	Aeron	FIC/01rich	-	-
1976-427	2442891.15	1976 Apr 22 1530	Viper-Dart	-	T1-8279	0.000	GSFC	SU	ODAY7/Luers	Aeron	CH-2968	-	-



Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Mission	FlightCode	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee_Km	Range_Km	Dest
1972-5469	2441587.50	1972 Sep 27	Viper 3A	-	Stable Viper 1-4	Robin Dart	-	-	-	MI?	-	-	-	116	-	-
1972-5460	2441587.50	1972 Sep 27	Viper 3A	-	Stable Viper 1-5	Robin Dart	-	-	-	MI?	-	-	-	120	-	-
1972-5461	2441592.50	1972 Oct 2	Viper 3A	-	Stable Viper 1-6	Robin Dart	-	-	-	MI?	-	-	-	121	-	-
1972-A130	2441592.50	1972 Oct 2	Viper 3A	-	Stable Viper 1-7	Robin Dart	-	-	-	MI?	-	-	-	12	-	-
1983-W336	2445671.25	1983 Dec 2 1801:00	Viper 3A	-	MAP/WIHE	M-F 1	-	-	-	AND	-	-	-	797	-	-
1983-W399	2445674.33	1983 Dec 2 2000:00	Viper 3A	-	MAP/WIHE	M-F 2	-	-	-	AND	-	-	-	115	-	-
1983-W300	2445676.24	1983 Dec 7 1744:00	Viper 3A	-	MAP/WIHE	M-F 3	-	-	-	AND	-	-	-	108	-	-
1983-W304	2445677.33	1983 Dec 8 2000:00	Viper 3A	-	MAP/WIHE	M-F 4	-	-	-	AND	-	-	-	103	-	-
1983-W308	2445681.33	1983 Dec 12 2000:00	Viper 3A	-	MAP/WIHE	M-F 5	-	-	-	AND	-	-	-	118	-	-
1983-W313	2445684.98	1983 Dec 16 1129:00	Viper 3A	-	MAP/WIHE	M-F 6	-	-	-	AND	-	-	-	113	-	-
1983-W314	2445688.01	1983 Dec 16 1212:00	Viper 3A	-	MAP/WIHE	M-F 7	-	-	-	AND	-	-	-	106	-	-
1983-W317	2445688.32	1983 Dec 19 1946:00	Viper 3A	-	MAP/WIHE	M-F 8	-	-	-	AND	-	-	-	108	-	-
1983-W318	2445688.34	1983 Dec 19 2015:00	Viper 3A	-	MAP/WIHE	M-F 9	-	-	-	AND	-	-	-	113	-	-
1983-W320	2445697.96	1983 Dec 29 1100:00	Viper 3A	-	MAP/WIHE	M-F 10	-	-	-	AND	-	-	-	118	-	-
1983-W321	2445697.98	1983 Dec 29 1134:00	Viper 3A	-	MAP/WIHE	M-F 11	-	-	-	AND	-	-	-	119	-	-
1983-W322	2445700.12	1983 Dec 31 1500:00	Viper 3A	-	MAP/WIHE	M-F 12	-	-	-	AND	-	-	-	100?	-	-
1984-W101	2445702.10	1984 Jan 2 1430:00	Viper 3A	-	MAP/WIHE	M-F 13	-	-	-	AND	-	-	-	119	-	-
1984-W103	2445705.33	1984 Jan 5 2000:00	Viper 3A	-	MAP/WIHE	M-F 14	-	-	-	AND	-	-	-	120	-	-
1984-W105	2445706.39	1984 Jan 6 2124	Viper 3A	-	MAP/WIHE	M-F 15	-	-	-	AND	-	-	-	119	-	-
1984-W107	2445708.33	1984 Jan 6 2000	Viper 3A	-	MAP/WIHE	M-F 16	-	-	-	AND	-	-	-	118	-	-
1984-W109	2445712.21	1984 Jan 12 1700	Viper 3A	-	MAP/WIHE	M-F 17	-	-	-	AND	-	-	-	118	-	-
1984-W114	2445712.24	1984 Jan 12 1749	Viper 3A	-	MAP/WIHE	M-F 18	-	-	-	AND	-	-	-	797	-	-
1984-W112	2445713.29	1984 Jan 13 1857	Viper 3A	-	MAP/WIHE	M-F 19	-	-	-	AND	-	-	-	120	-	-
1984-W113	2445713.31	1984 Jan 13 1931	Viper 3A	-	MAP/WIHE	M-F 20	-	-	-	AND	-	-	-	117	-	-
1984-W115	2445713.37	1984 Jan 13 2050	Viper 3A	-	MAP/WIHE	M-F 21	-	-	-	AND	-	-	-	119	-	-
1984-W116	2445713.39	1984 Jan 13 2122	Viper 3A	-	MAP/WIHE	M-F 22	-	-	-	AND	-	-	-	116	-	-
1984-W117	2445713.42	1984 Jan 13 2242	Viper 3A	-	MAP/WIHE	M-F 23	-	-	-	AND	-	-	-	121	-	-
1984-W119	2445713.46	1984 Jan 15 2244	Viper 3A	-	MAP/WIHE	M-F 24	-	-	-	AND	-	-	-	115	-	-
1984-W118	2445715.45	1984 Jan 15 2000	Viper 3A	-	MAP/WIHE	M-F 25	-	-	-	AND	-	-	-	118	-	-
1984-W121	2445717.33	1984 Jan 17 2000	Viper 3A	-	MAP/WIHE	M-F 26	-	-	-	AND	-	-	-	104	-	-
1984-W122	2445720.35	1984 Jan 20 2018	Viper 3A	-	MAP/WIHE	M-F 27	-	-	-	AND	-	-	-	116	-	-
1984-W123	2445720.82	1984 Jan 21 1000	Viper 3A	-	MAP/WIHE	M-F 28	-	-	-	AND	-	-	-	116	-	-
1984-W124	2445720.85	1984 Jan 21 1020	Viper 3A	-	MAP/WIHE	M-F 29	-	-	-	AND	-	-	-	115	-	-
1984-W125	2445720.96	1984 Jan 21 1107	Viper 3A	-	MAP/WIHE	M-F 30	-	-	-	AND	-	-	-	113	-	-
1984-W127	2445721.01	1984 Jan 21 1212	Viper 3A	-	MAP/WIHE	M-F 31	-	-	-	AND	-	-	-	112	-	-
1984-W126	2445721.03	1984 Jan 21 1246	Viper 3A	-	MAP/WIHE	M-F 32	-	-	-	AND	-	-	-	115	-	-
1984-W131	2445721.10	1984 Jan 21 1424	Viper 3A	-	MAP/WIHE	M-F 33	-	-	-	AND	-	-	-	112	-	-
1984-W132	2445724.27	1984 Jan 24 1850	Viper 3A	-	MAP/WIHE	M-F 34	-	-	-	AND	-	-	-	113	-	-
1984-W133	2445724.29	1984 Jan 24 1853	Viper 3A	-	MAP/WIHE	M-F 35	-	-	-	AND	-	-	-	115	-	-
1984-W134	2445725.17	1984 Jan 25 1609	Viper 3A	-	MAP/WIHE	M-F 36	-	-	-	AND	-	-	-	112	-	-
1984-W135	2445725.26	1984 Jan 25 1513	Viper 3A	-	MAP/WIHE	M-F 37	-	-	-	AND	-	-	-	115	-	-
1984-W136	2445725.26	1984 Jan 25 1513	Viper 3A	-	MAP/WIHE	M-F 38	-	-	-	AND	-	-	-	110	-	-
1984-W139	2445731.24	1984 Jan 26 1501	Viper 3A	-	MAP/WIHE	M-F 39	-	-	-	AND	-	-	-	118	-	-
1984-W141	2445731.31	1984 Jan 31 1523	Viper 3A	-	MAP/WIHE	M-F 40	-	-	-	AND	-	-	-	115	-	-
1984-W146	2445736.33	1984 Feb 7 2000	Viper 3A	-	MAP/WIHE	M-F 41	-	-	-	AND	-	-	-	114	-	-
1984-W148	2445736.33	1984 Feb 7 2000	Viper 3A	-	MAP/WIHE	M-F 42	-	-	-	AND	-	-	-	121	-	-
1984-W151	2445738.66	1984 Feb 8 0934	Viper 3A	-	MAP/WIHE	M-F 43	-	-	-	AND	-	-	-	101	-	-
1984-W154	2445739.66	1984 Feb 10 0934	Viper 3A	-	MAP/WIHE	M-F 44	-	-	-	AND	-	-	-	109	-	-
1984-W155	2445740.99	1984 Feb 10 0529	Viper 3A	-	MAP/WIHE	M-F 45	-	-	-	AND	-	-	-	114	-	-
1984-W157	2445740.99	1984 Feb 12 2000	Viper 3A	-	MAP/WIHE	M-F 46	-	-	-	AND	-	-	-	112	-	-
1984-W160	2445743.33	1984 Feb 12 2000	Viper 3A	-	MAP/WIHE	M-F 47	-	-	-	AND	-	-	-	114	-	-
1984-W161	2445743.33	1984 Feb 12 2000	Viper 3A	-	MAP/WIHE	M-F 48	-	-	-	AND	-	-	-	112	-	-
1984-W163	2445746.66	1984 Feb 15 0120	Viper 3A	-	MAP/WIHE	M-F 49	-	-	-	AND	-	-	-	117	-	-
1984-W164	2445746.66	1984 Feb 15 0159	Viper 3A	-	MAP/WIHE	M-F 50	-	-	-	AND	-	-	-	114	-	-
1984-W165	2445747.33	1984 Feb 16 2000	Viper 3A	-	MAP/WIHE	M-F 51	-	-	-	AND	-	-	-	100?	-	-
1984-W166	2445748.51	1984 Feb 19 0021	Viper 3A	-	MAP/WIHE	M-F 52	-	-	-	AND	-	-	-	115	-	-
1984-W168	2445748.63	1984 Feb 19 0314	Viper 3A	-	MAP/WIHE	M-F 53	-	-	-	AND	-	-	-	108	-	-
1984-W171	2445748.69	1984 Feb 19 0440	Viper 3A	-	MAP/WIHE	M-F 54	-	-	-	AND	-	-	-	118	-	-
1984-W174	2445749.92	1984 Feb 19 1000	Viper 3A	-	MAP/WIHE	M-F 55	-	-	-	AND	-	-	-	117	-	-
1984-W172	2445749.97	1984 Feb 19 1122	Viper 3A	-	MAP/WIHE	M-F 56	-	-	-	AND	-	-	-	99	-	-
1984-W173	2445750.02	1984 Feb 19 1235:00	Viper 3A	-	MAP/WIHE	M-F 57	-	-	-	AND	-	-	-	115	-	-
1984-W174	2445751.33	1984 Feb 20 2000:00	Viper 3A	-	MAP/WIHE	M-F 58	-	-	-	AND	-	-	-	115	-	-
1984-W176	2445753.33	1984 Feb 22 2000:00	Viper 3A	-	MAP/WIHE	M-F 59	-	-	-	AND	-	-	-	100?	-	-
1984-W177	2445754.00	1984 Feb 23 2000:00	Viper 3A	-	MAP/WIHE	M-F 60	-	-	-	AND	-	-	-	100?	-	-
1987-W399	2446930.17	1987 Mar 14 1600	Viper 3A	?	MISTY PICTURE 1-20	-	-	-	-	US	-	-	-	207	-	-
1987-W400	2446957.07	1987 Jun 10 1340	Viper 3A	-	Sphere	Dust Collection x20	-	-	-	AND	-	-	-	116	-	-
1987-W401	2446958.96	1987 Jun 12 1100	Viper 3A	-	Sphere	MAC-STINE S-F1	-	-	-	AND	-	-	-	115	-	-
1987-W402	2446961.98	1987 Jun 15 1124	Viper 3A	-	Sphere	MAC-STINE S-F2	-	-	-	AND	-	-	-	109	-	-
1987-W403	2446963.96	1987 Jun 17 1103	Viper 3A	-	Sphere	MAC-STINE S-F3	-	-	-	AND	-	-	-	115	-	-
1987-W404	2446965.96	1987 Jun 19 1105	Viper 3A	-	Sphere	MAC-STINE S-F4	-	-	-	AND	-	-	-	113	-	-
1987-W405	2446968.98	1987 Jun 22 1129	Viper 3A	-	Sphere	MAC-STINE S-F5	-	-	-	AND	-	-	-	114	-	-
1987-W406	2446970.96	1987 Jun 24 1100	Viper 3A	-	Sphere	MAC-STINE S-F6	-	-	-	AND	-	-	-	105	-	-
1987-W408	2446971.08	1987 Jun 24 1358	Viper 3A	-	Sphere	MAC-STINE S-F7	-	-	-	AND	-	-	-	112	-	-
1987-W409	2446972.96	1987 Jun 26 1100	Viper 3A	-	Sphere	MAC-STINE S-F8	-	-	-	AND	-	-	-	115	-	-
1987-W410	2446973.09	1987 Jun 26 1412	Viper 3A	-	Sphere	MAC-STINE S-F9	-	-	-	AND	-	-	-	114	-	-
1987-W197	2446975.96	1987 Jun 29 1106	Viper 3A	-	Sphere	MAC-STINE S-F10	-	-	-	AND	-	-	-	112	-	-
1987-W200	2446978.38	1987 Jul 01 2108:00	Viper 3A	-	Sphere	MAC-STINE S-F11	-	-	-	AND	-	-	-	112	-	-
1987-W203	2446978.46	1987 Jul 01 2305:00	Viper 3A	-	Sphere	MAC-STINE S-F12	-	-	-	AND	-	-	-	113	-	-
1987-W206	2446979.93	1987 Jul 03 1100:00	Viper 3A	-	Sphere	MAC-STINE S-F13	-	-	-	AND	-	-	-	112	-	-
1987-W208	2446983.03	1987 Jul 06 1240:00	Viper 3A	-	Sphere	MAC-STINE S-F14	-	-	-	AND	-	-	-	106	-	-
1987-W210	2446985.04	1987 Jul 08 1300:00	Viper 3A	-	Sphere	MAC-STINE S-F15	-	-	-	AND	-	-	-	108	-	-
1987-W213	2446987.01	1987 Jul 10 1212:00	Viper 3A	-	Sphere	MAC-STINE S-F16	-	-	-	AND	-	-	-	109	-	-
1987-W15	2446990.34	1987 Jul 13 1955:00	Viper 3A	-	Sphere	MAC-STINE S-F17	-	-	-	AND	-	-	-	105	-	-
1987-W217	2446990.84	1987 Jul 14 0811:00	Viper 3A	-	Sphere	MAC-STINE S-F18	-	-	-	AND	-	-	-	108	-	-
1987-W218	2446990.86	1987 Jul 14 0832:00	Viper 3A	-	Sphere	MAC-STINE S-F19	-	-	-	AND	-	-	-	105	-	-
1987-W223	2446990.96	1987 Jul 14 1102:00	Viper 3A	-	Sphere	MAC-STINE S-F20	-	-	-	AND	-	-	-	115	-	-
1987-W223	2446990.96	1987 Jul 14 1102:00	Viper 3A	-	Sphere	MAC-STINE S-F21	-	-	-	AND	-	-	-	116	-	-

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Mission	FlightCode	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee Km	Range Km	Dest
1987-Y230	2446992.03	1987 Jul 15 12:46:00	Viper 3A	-	FALLING SPHERE	MAC-SINE S-F22	-	-	-	AND	-	-	-	107	-	-
1987-Y235	2446992.38	1987 Jul 15 21:01:00	Viper 3A	-	FALLING SPHERE	MAC-SINE S-F23	-	-	-	AND	-	-	-	117	-	-
1987-Y237	2446992.40	1987 Jul 15 21:43:00	Viper 3A	-	FALLING SPHERE	MAC-SINE S-F24	-	-	-	AND	-	-	-	113	-	-
1987-Y241	2446995.96	1987 Jul 17 11:00:00	Viper 3A	-	FALLING SPHERE	MAC-SINE S-F25	-	-	-	AND	-	-	-	112	-	-
1987-Y243	2446995.96	1987 Jul 19 11:07:00	Viper 3A	-	FALLING SPHERE	MAC-SINE S-F26	-	-	-	AND	-	-	-	115	-	-
1987-Y244	2446995.97	1987 Jul 19 11:21:00	Viper 3A	-	FALLING SPHERE	MAC-SINE S-F27	-	-	-	AND	-	-	-	111	-	-
1987-Y302	2447085.95	1987 Oct 15 10:47:00	Viper 3A	-	Sphere	MAC/EPISILON E-F1	-	-	-	AND	-	-	-	114	-	-
1987-Y306	2447084.05	1987 Oct 15 13:08:00	Viper 3A	-	Chaff Test 1	MAC/EPISILON E-C3/SL	-	-	-	AND	-	-	-	114	-	-
1987-Y413	2447090.39	1987 Oct 17 11:38:00	Viper 3A	-	Sphere	MAC/EPISILON E-C6/SL	-	-	-	AND	-	-	-	106	-	-
1987-Y311	2447090.41	1987 Oct 21 21:46:00	Viper 3A	-	Chaff	MAC/EPISILON E-F2	-	-	-	AND	-	-	-	113	-	-
1987-Y316	2447111.50	1987 Nov 11 23:58:00	Viper 3A	-	Sphere	MAC/EPISILON E-C8/SL	-	-	-	AND	-	-	-	102	-	-
1987-Y344	2447111.51	1987 Nov 12 00:16:00	Viper 3A	-	Sphere	MAC/EPISILON E-F3	-	-	-	AND	-	-	-	107	-	-
1988-Y291	2447357.35	1988 Jun 24 20:28	Viper 3A	-	Sphere	MAC/EPISILON E-F4	-	-	-	AND	-	-	-	106	-	-
1988-Y292	2447357.42	1988 Jun 24 21:35	Viper 3A	-	Chaff IC01 EL Na	Sodium-68 H-101	-	-	-	AND	-	-	-	98	-	-
1988-Y293	2447357.42	1988 Jun 24 22:10	Viper 3A	-	Chaff IC02 EL Na	Sodium-68 H-102	-	-	-	AND	-	-	-	98	-	-
1988-Y294	2447357.43	1988 Jun 24 22:22	Viper 3A	-	Chaff IC03 EL Na	Sodium-68 H-103	-	-	-	AND	-	-	-	98	-	-
1988-Y295	2447357.46	1988 Jun 24 22:55	Viper 3A	-	Chaff IC04 EL Na	Sodium-68 H-104	-	-	-	AND	-	-	-	98	-	-
1988-Y296	2447342.40	1988 Jun 29 21:43	Viper 3A	-	Chaff IC05 EL Na	Sodium-68 H-105	-	-	-	AND	-	-	-	98	-	-
1988-Y297	2447347.44	1988 Jul 4 22:27	Viper 3A	-	Chaff IC06 EL Na	Sodium-68 H-106	-	-	-	AND	-	-	-	98	-	-
1988-Y298	2447356.43	1988 Jul 12 22:20	Viper 3A	-	Chaff IC07 EL Na	Sodium-68 H-107	-	-	-	AND	-	-	-	98	-	-
1988-Y299	2447356.47	1988 Jul 12 23:13	Viper 3A	-	Chaff IC08 EL Na	Sodium-68 H-108	-	-	-	AND	-	-	-	98	-	-
1988-Y300	2447356.50	1988 Jul 13 00:03	Viper 3A	-	Chaff IC09 EL Na	Sodium-68 H-109	-	-	-	AND	-	-	-	98	-	-
1988-Y301	2447356.50	1988 Jul 13 00:03	Viper 3A	-	Chaff IC10 EL Na	Sodium-68 H-110	-	-	-	AND	-	-	-	98	-	-
1988-Y302	2447904.41	1990 Jan 12 21:00	Viper 3A	-	Sphere	DYANA DMS3	-	-	-	AND	-	-	-	113	-	-
1988-Y303	2447904.41	1990 Jan 12 21:46:05	Viper 3A	-	Sphere	DYANA DMS4	-	-	-	AND	-	-	-	102	-	-
1988-Y304	2447905.40	1990 Jan 15 21:54:00	Viper 3A	-	Sphere	DYANA DMS5	-	-	-	AND	-	-	-	92	-	-
1988-Y305	2447907.30	1990 Jan 15 19:45	Viper 3A	-	Chaff	DYANA DMS6	-	-	-	AND	-	-	-	92	-	-
1988-Y306	2447907.33	1990 Jan 15 20:00	Viper 3A	-	Sphere	DYANA DMS7	-	-	-	AND	-	-	-	92	-	-
1988-Y307	2447907.34	1990 Jan 15 20:00	Viper 3A	-	Chaff	DYANA DMS8	-	-	-	AND	-	-	-	92	-	-
1988-Y308	2447909.33	1990 Jan 17 20:00	Viper 3A	-	Sphere	DYANA DMS9	-	-	-	AND	-	-	-	109	-	-
1988-Y309	2447909.36	1990 Jan 17 20:02:35	Viper 3A	-	Sphere	DYANA DMS7	-	-	-	AND	-	-	-	119	-	-
1988-Y310	2447910.32	1990 Jan 17 20:02:35	Viper 3A	-	Chaff	DYANA DMS3	-	-	-	AND	-	-	-	111	-	-
1988-Y311	2447910.34	1990 Jan 18 15:35	Viper 3A	-	Sphere	DYANA DMS4	-	-	-	AND	-	-	-	90	-	-
1988-Y312	2447910.34	1990 Jan 18 20:04	Viper 3A	-	Sphere	DYANA DMS5	-	-	-	AND	-	-	-	90	-	-
1988-Y313	2447911.33	1990 Jan 19 20:00	Viper 3A	-	Sphere	DYANA DMS11	-	-	-	AND	-	-	-	114	-	-
1988-Y314	2447913.31	1990 Jan 22 09:55:00	Viper 3A	-	Sphere	DYANA DMS12	-	-	-	AND	-	-	-	111	-	-
1988-Y315	2447913.31	1990 Jan 22 11:21:00	Viper 3A	-	Chaff	DYANA DMS14	-	-	-	AND	-	-	-	103	-	-
1988-Y316	2447913.39	1990 Jan 22 11:46:00	Viper 3A	-	Sphere	DYANA DMS14	-	-	-	AND	-	-	-	113	-	-
1988-Y317	2447914.30	1990 Jan 22 13:15:00	Viper 3A	-	Sphere	DYANA DMS15	-	-	-	AND	-	-	-	90	-	-
1988-Y318	2447914.30	1990 Jan 24 20:01:30	Viper 3A	-	Sphere	DYANA DMS6	-	-	-	AND	-	-	-	117	-	-
1988-Y319	2447916.33	1990 Jan 28 20:00	Viper 3A	-	Sphere	DYANA DMS16	-	-	-	AND	-	-	-	90	-	-
1988-Y320	2447920.37	1990 Jan 28 20:00	Viper 3A	-	Sphere	DYANA DMS20	-	-	-	AND	-	-	-	90	-	-
1988-Y321	2447920.37	1990 Jan 28 20:00:58	Viper 3A	-	Chaff	DYANA DMS22	-	-	-	AND	-	-	-	112	-	-
1988-Y322	2447923.33	1990 Jan 31 20:24	Viper 3A	-	Sphere	DYANA DMS26	-	-	-	AND	-	-	-	99	-	-
1988-Y323	2447923.35	1990 Jan 31 20:24	Viper 3A	-	Chaff	DYANA DMS7	-	-	-	AND	-	-	-	99	-	-
1988-Y324	2447924.30	1990 Feb 1 19:17	Viper 3A	-	Sphere	DYANA DMS7	-	-	-	AND	-	-	-	99	-	-
1988-Y325	2447924.30	1990 Feb 5 19:07	Viper 3A	-	Sphere	DYANA DMS7	-	-	-	AND	-	-	-	99	-	-
1988-Y326	2447926.36	1990 Feb 5 19:45	Viper 3A	-	Chaff	DYANA DMS7	-	-	-	AND	-	-	-	99	-	-
1988-Y327	2447926.36	1990 Feb 7 18:56:30	Viper 3A	-	Sphere	DYANA DMS10	-	-	-	AND	-	-	-	96	-	-
1988-Y328	2447926.36	1990 Feb 7 19:22	Viper 3A	-	Sphere	DYANA DMS10	-	-	-	AND	-	-	-	96	-	-
1988-Y329	2447926.36	1990 Feb 7 19:22	Viper 3A	-	Chaff	DYANA DMS10	-	-	-	AND	-	-	-	96	-	-
1988-Y330	2447926.36	1990 Feb 7 19:22	Viper 3A	-	Sphere	DYANA DMS10	-	-	-	AND	-	-	-	96	-	-
1988-Y331	2447926.36	1990 Feb 7 19:22	Viper 3A	-	Chaff	DYANA DMS10	-	-	-	AND	-	-	-	96	-	-
1988-Y332	2447926.36	1990 Feb 7 19:22	Viper 3A	-	Sphere	DYANA DMS10	-	-	-	AND	-	-	-	96	-	-
1988-Y333	2447926.36	1990 Feb 7 19:22	Viper 3A	-	Chaff	DYANA DMS10	-	-	-	AND	-	-	-	96	-	-
1988-Y334	2447926.36	1990 Feb 7 19:22	Viper 3A	-	Sphere	DYANA DMS10	-	-	-	AND	-	-	-	96	-	-
1988-Y335	2447926.36	1990 Feb 7 19:22	Viper 3A	-	Chaff	DYANA DMS10	-	-	-	AND	-	-	-	96	-	-
1988-Y336	2447926.36	1990 Feb 7 19:22	Viper 3A	-	Sphere	DYANA DMS10	-	-	-	AND	-	-	-	96	-	-
1988-Y337	2447926.36	1990 Feb 7 19:22	Viper 3A	-	Chaff	DYANA DMS10	-	-	-	AND	-	-	-	96	-	-
1988-Y338	2447926.36	1990 Feb 7 19:22	Viper 3A	-	Sphere	DYANA DMS10	-	-	-	AND	-	-	-	96	-	-
1988-Y339	2447926.36	1990 Feb 7 19:22	Viper 3A	-	Chaff	DYANA DMS10	-	-	-	AND	-	-	-	96	-	-
1988-Y340	2447926.36	1990 Feb 7 19:22	Viper 3A	-	Sphere	DYANA DMS10	-	-	-	AND	-	-	-	96	-	-
1988-Y341	2447926.36	1990 Feb 7 19:22	Viper 3A	-	Chaff	DYANA DMS10	-	-	-	AND	-	-	-	96	-	-
1988-Y342	2447926.36	1990 Feb 7 19:22	Viper 3A	-	Sphere	DYANA DMS10	-	-	-	AND	-	-	-	96	-	-
1988-Y343	2447926.36	1990 Feb 7 19:22	Viper 3A	-	Chaff	DYANA DMS10	-	-	-	AND	-	-	-	96	-	-
1988-Y344	2447926.36	1990 Feb 7 19:22	Viper 3A	-	Sphere	DYANA DMS10	-	-	-	AND	-	-	-	96	-	-
1988-Y345	2447926.36	1990 Feb 7 19:22	Viper 3A	-	Chaff	DYANA DMS10	-	-	-	AND	-	-	-	96	-	-
1988-Y346	2447926.36	1990 Feb 7 19:22	Viper 3A	-	Sphere	DYANA DMS10	-	-	-	AND	-	-	-	96	-	-
1988-Y347	2447926.36	1990 Feb 7 19:22	Viper 3A	-	Chaff	DYANA DMS10	-	-	-	AND	-	-	-	96	-	-
1988-Y348	2447926.36	1990 Feb 7 19:22	Viper 3A	-	Sphere	DYANA DMS10	-	-	-	AND	-	-	-	96	-	-
1988-Y349	2447926.36	1990 Feb 7 19:22	Viper 3A	-	Chaff	DYANA DMS10	-	-	-	AND	-	-	-	96	-	-
1988-Y350	2447926.36	1990 Feb 7 19:22	Viper 3A	-	Sphere	DYANA DMS10	-	-	-	AND	-	-	-	96	-	-
1988-Y351	2447926.36	1990 Feb 7 19:22	Viper 3A	-	Chaff	DYANA DMS10	-	-	-	AND	-	-	-	96	-	-
1988-Y352	2447926.36	1990 Feb 7 19:22	Viper 3A	-	Sphere	DYANA DMS10	-	-	-	AND	-	-	-	96	-	-
1988-Y353	2447926.36	1990 Feb 7 19:22	Viper 3A	-	Chaff	DYANA DMS10	-	-	-	AND	-	-	-	96	-	-
1988-Y354	2447926.36	1990 Feb 7 19:22	Viper 3A	-	Sphere	DYANA DMS10	-	-	-	AND	-	-	-	96	-	-
1988-Y355	2447926.36	1990 Feb 7 19:22	Viper 3A	-	Chaff	DYANA DMS10	-	-	-	AND	-	-	-	96	-	-
1988-Y356	2447926.36	1990 Feb 7 19:22	Viper 3A	-	Sphere	DYANA DMS10	-	-	-	AND	-	-	-	96	-	-
1988-Y357	2447926.36	1990 Feb 7 19:22	Viper 3A	-	Chaff	DYANA DMS10	-	-	-	AND	-	-	-	96	-	-
1988-Y358	2447926.36	1990 Feb 7 19:22	Viper 3A	-	Sphere	DYANA DMS10	-	-	-	AND	-	-	-	96	-	-
1988-Y359	2447926.36	1990 Feb 7 19:22	Viper 3A	-	Chaff	DYANA DMS10	-	-	-	AND	-	-	-	96	-	-
1988-Y360	2447926.36	1990 Feb 7 19:22	Viper 3A	-	Sphere	DYANA DMS10	-	-	-	AND	-	-	-	96	-	-
1988-Y361	2447926.36	1990 Feb 7 19:22	Viper 3A	-	Chaff	DYANA DMS10	-	-	-	AND	-	-	-	96	-	-
1988-Y362	2447926.36	1990 Feb 7 19:22	Viper 3A	-	Sphere	DYANA DMS10	-	-	-	AND	-	-	-	96	-	-
1988-Y363	2447926.36	1990 Feb 7 19:22	Viper 3A	-	Chaff	DYANA DMS10	-	-	-	AND	-	-	-	96	-	-
1988-Y364	2447926.36	1990 Feb 7 19:22	Viper 3A	-	Sphere	DYANA DMS10	-	-	-	AND	-	-	-	96	-	-
1988-Y365	2447926.36	1990 Feb 7 19:22	Viper 3A	-	Chaff	DYANA DMS10	-	-	-	AND	-	-	-	96	-	-
1988-Y366	2447926.36	1990 Feb 7 19:22	Viper 3A	-	Sphere	DYANA DMS10	-	-	-	AND	-	-	-	96	-	-
1988-Y367	2447926.36															

Launch

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee_Km	Range_Km	Dest
1990-Y204	2447956.63	1990 Mar 6 0301	Viper 3A	-	Chaff	DYANA D863	-	AND	-	-	-	99	-	-
1990-Y205	2447956.65	1990 Mar 6 0331	Viper 3A	-	Sphere	DYANA D864	-	CEL	-	-	-	115	-	-
1990-Y207	2447956.71	1990 Mar 6 0503:30	Viper 3A	-	Sphere	DYANA D826	-	CEL	-	-	-	110	-	-
1990-Y208	2447956.73	1990 Mar 6 0538	Viper 3A	-	Chaff	DYANA D827	-	CEL	-	-	-	90?	-	-
1990-Y209	2447956.75	1990 Mar 6 0558:30	Viper 3A	-	Sphere	DYANA D828	-	CEL	-	-	-	109	-	-
1990-Y210	2447956.76	1990 Mar 6 0620	Viper 3A	-	Sphere	DYANA D829	-	CEL	-	-	-	109	-	-
1990-Y211	2447956.78	1990 Mar 6 0640	Viper 3A	-	Chaff	DYANA D830	-	CEL	-	-	-	90?	-	-
1990-Y212	2447956.79	1990 Mar 7 1932	Viper 3A	-	Sphere	DYANA D831	-	CEL	-	-	-	90?	-	-
1990-Y215	2447956.51	1990 Mar 7 1959	Viper 3A	-	Sphere	DYANA D865	-	AND	-	-	-	117	-	-
1990-Y216	2447956.33	1990 Mar 7 2030	Viper 3A	-	Chaff	DYANA D866	-	AND	-	-	-	99	-	-
1990-Y217	2447956.35	1990 Mar 7 2114	Viper 3A	-	Chaff	DYANA D867	-	AND	-	-	-	101	-	-
1990-Y218	2447956.38	1990 Mar 8 1900	Viper 3A	-	Sphere	DYANA D868	-	AND	-	-	-	115	-	-
1990-Y220	2447959.29	1990 Mar 8 1930	Viper 3A	-	Chaff	DYANA D832	-	CEL	-	-	-	90?	-	-
1990-Y222	2447959.31	1990 Mar 8 1930	Viper 3A	-	Chaff	DYANA D833	-	CEL	-	-	-	90?	-	-
1990-Y224	2447959.40	1990 Mar 8 2141	Viper 3A	-	Chaff	DYANA D870	-	AND	-	-	-	99	-	-
1990-Y225	2447959.42	1990 Mar 8 2210	Viper 3A	-	Chaff	DYANA D871	-	AND	-	-	-	95	-	-
1990-Y226	2447959.44	1990 Mar 8 2237	Viper 3A	-	Sphere	DYANA D872	-	AND	-	-	-	119	-	-
1990-Y227	2447959.47	1990 Mar 8 2314	Viper 3A	-	Chaff	DYANA D873	-	AND	-	-	-	97	-	-
1990-Y228	2447959.49	1990 Mar 8 2345	Viper 3A	-	Chaff	DYANA D874	-	AND	-	-	-	97	-	-
1990-Y229	2447959.53	1990 Mar 9 0045	Viper 3A	-	Sphere	DYANA D875	-	AND	-	-	-	90?	-	-
1990-Y230	2447959.55	1990 Mar 9 0105	Viper 3A	-	Chaff	DYANA D877	-	AND	-	-	-	114	-	-
1990-Y232	2447960.35	1990 Mar 9 2019	Viper 3A	-	Sphere	DYANA D878	-	AND	-	-	-	106	-	-
1990-Y233	2447962.31	1990 Mar 11 1921	Viper 3A	-	Sphere	DYANA D859	-	AND	-	-	-	103	-	-
1990-Y234	2447962.32	1990 Mar 11 1941	Viper 3A	-	Chaff	DYANA D880	-	AND	-	-	-	113	-	-
1990-Y235	2447962.34	1990 Mar 11 2010	Viper 3A	-	Sphere	DYANA D881	-	AND	-	-	-	6	-	-
1990-Y236	2447962.35	1990 Mar 11 2024	Viper 3A	-	Sphere	DYANA D882	-	AND	-	-	-	112	-	-
1990-Y238	2447962.38	1990 Mar 11 2103	Viper 3A	-	Chaff	DYANA D885	-	AND	-	-	-	97	-	-
1990-Y239	2447962.41	1990 Mar 11 2152	Viper 3A	-	Sphere	DYANA D886	-	AND	-	-	-	114	-	-
1990-Y240	2447962.43	1990 Mar 11 2224	Viper 3A	-	Chaff	DYANA D887	-	AND	-	-	-	96	-	-
1990-Y245	2447963.61	1990 Mar 13 0245	Viper 3A	-	Sphere	DYANA D868	-	CEL	-	-	-	93	-	-
1990-Y246	2447963.63	1990 Mar 13 0340	Viper 3A	-	Chaff	DYANA D834	-	CEL	-	-	-	87	-	-
1990-Y247	2447963.65	1990 Mar 13 0340	Viper 3A	-	Sphere	DYANA D835	-	CEL	-	-	-	96	-	-
1990-Y249	2447963.67	1990 Mar 13 0404	Viper 3A	-	Chaff	DYANA D836	-	CEL	-	-	-	98	-	-
1990-Y250	2447963.69	1990 Mar 13 0440	Viper 3A	-	Sphere	DYANA D837	-	CEL	-	-	-	104	-	-
1990-Y251	2447963.71	1990 Mar 13 0500	Viper 3A	-	Chaff	DYANA D838	-	CEL	-	-	-	90?	-	-
1990-Y252	2447963.72	1990 Mar 13 0520	Viper 3A	-	Sphere	DYANA D839	-	CEL	-	-	-	102	-	-
1990-Y255	2447966.31	1990 Mar 15 1921	Viper 3A	-	Chaff	DYANA D840	-	CEL	-	-	-	95	-	-
1990-Y258	2448039.48	1990 Jul 26 2325	Viper 3A	-	Sphere	DYANA D851	-	CEL	-	-	-	115	-	-
1990-Y394	2448106.46	1990 Aug 2 2301	Viper 3A	-	Robin Sphere	SUSI RD1	-	ESR	-	-	-	116	-	-
1991-Y46	2448356.26	1991 Apr 9 1516	Viper 3A	-	Robin Sphere	SUSI RD2	-	ESR	-	-	-	110?	-	-
1991-Y49	2448356.31	1991 Apr 9 1920	Viper 3A	-	Robin Sphere	SUSI RD1	-	ESR	-	-	-	110?	-	-
1991-Y71	2448456.20	1991 Jul 11 1033:00	Viper 3A	-	Robin Sphere	SUSI RD1	-	ESR	-	-	-	110?	-	-
1991-Y74	2448468.20	1991 Aug 1 0103:00	Viper 3A	-	Sphere NLC-91	Anging Radiometer	-	ESR	-	-	-	90	-	-
1991-Y75	2448468.25	1991 Aug 1 0154:00	Viper 3A	-	Sphere NLC-91	N-B-301 HBE	-	ESR	-	-	-	112	-	-
1991-Y76	2448468.00	1991 Aug 1 0224:00	Viper 3A	-	Chaff NLC-91	N-B-300 HBE	-	ESR	-	-	-	111	-	-
1991-Y78	2448468.01	1991 Aug 1 0224:00	Viper 3A	-	Sphere NLC-91	N-B-300 HBE (VCH28)	-	ESR	-	-	-	112	-	-
1991-Y79	2448474.44	1991 Aug 5 2323:00	Viper 3A	-	Sphere NLC-91	N-C-808 HBE	-	ESR	-	-	-	115	-	-
1991-Y86	2448478.44	1991 Aug 9 2324:00	Viper 3A	-	Sphere NLC-91	N-C-810 HBevo C	-	ESR	-	-	-	115	-	-
1991-Y88	2448478.45	1991 Aug 9 2353:00	Viper 3A	-	Sphere NLC-91	N-A-813 NLC	-	ESR	-	-	-	5	-	-
1991-Y90	2448478.46	1991 Aug 10 0006:00	Viper 3A	-	Sphere NLC-91	N-A-813 NLC	-	ESR	-	-	-	115	-	-
1991-Y93	2448478.50	1991 Aug 10 0034:00	Viper 3A	-	Sphere NLC-91	N-A-813 NLC	-	ESR	-	-	-	115	-	-
1991-Y97	2448478.57	1991 Aug 10 0142:00	Viper 3A	-	Chaff NLC-91	N-A-813 NLC	-	ESR	-	-	-	115?	-	-
1991-Y107	2448517.57	1991 Sep 18 0007:00	Viper 3A	-	Sphere NLC-91	N-A-821 NLC (VCH42)	-	ESR	-	-	-	117	-	-
1991-Y108	2448517.58	1991 Sep 18 0048:13	Viper 3A	-	Chaff	METAL/F-C2	-	AND	-	-	-	90?	-	-
1991-Y109	2448517.55	1991 Sep 18 0106:40	Viper 3A	-	Sphere	METAL/F-C3	-	AND	-	-	-	108	-	-
1991-Y200	2448517.56	1991 Sep 18 0128:30	Viper 3A	-	Chaff	METAL/F-54	-	AND	-	-	-	100	-	-
1991-Y201	2448520.38	1991 Sep 20 2108:00	Viper 3A	-	Chaff	METAL/F-55	-	AND	-	-	-	100	-	-
1991-Y202	2448520.40	1991 Sep 20 2108:00	Viper 3A	-	Sphere	METAL/F-57	-	AND	-	-	-	100	-	-
1991-Y203	2448520.46	1991 Sep 20 2300:00	Viper 3A	-	Chaff	METAL/F-58	-	AND	-	-	-	109	-	-
1991-Y204	2448520.46	1991 Sep 20 2300:00	Viper 3A	-	Sphere	METAL/F-C10	-	AND	-	-	-	100?	-	-
1991-Y206	2448520.37	1991 Sep 20 2323:30	Viper 3A	-	Chaff	METAL/F-51	-	AND	-	-	-	109	-	-
1991-Y207	2448520.39	1991 Sep 20 2108:11	Viper 3A	-	Sphere	METAL/F-C14	-	AND	-	-	-	8	-	-
1991-Y208	2448520.39	1991 Sep 20 2119:46	Viper 3A	-	Sphere	METAL/F-516	-	AND	-	-	-	114	-	-
1991-Y209	2448520.40	1991 Sep 20 2130:09	Viper 3A	-	Chaff	METAL/F-515	-	AND	-	-	-	100?	-	-
1991-Y210	2448520.45	1991 Oct 1 2302:30	Viper 3A	-	Sphere	METAL/F-C18	-	AND	-	-	-	114	-	-
1991-Y211	2448520.47	1991 Oct 1 2316:30	Viper 3A	-	Chaff	METAL/F-519	-	AND	-	-	-	100?	-	-
1991-Y212	2448520.50	1991 Oct 1 0023:30	Viper 3A	-	Sphere	METAL/F-C19	-	AND	-	-	-	112	-	-
1991-Y213	2448520.54	1991 Oct 1 0044:00	Viper 3A	-	Chaff	METAL/F-520	-	AND	-	-	-	102	-	-
1991-Y214	2448520.54	1991 Oct 1 0102:30	Viper 3A	-	Sphere	METAL/F-523	-	AND	-	-	-	100?	-	-
1992-Y46	2448735.50	1992 Apr 23	Viper 3A	?	Sphere	METAL/F-524	-	AND	-	-	-	75?	-	-
1992-Y54	2448776.60	1992 Jun 3	Viper 3A	?	Aerocole	-	-	AND	-	-	-	75?	-	-
1992-Y77	2448828.04	1992 Jul 24 1301:20	Viper 3A	?	-	-	-	AND	-	-	-	75?	-	-
1992-Y78	2448829.03	1992 Jul 25 1246:00	Viper 3A	?	-	-	-	PF	-	-	-	75?	-	-
1993-Y42	2449196.74	1993 Jul 28 0543	Viper 3A	-	Sphere NLC-93	-	-	ESR	-	-	-	116	-	-
1993-Y43	2449198.76	1993 Jul 30 0619	Viper 3A	-	Sphere NLC-93	-	-	ESR	-	-	-	110	-	-
1993-Y38	2449201.53	1993 Aug 2 0037	Viper 3A	-	Sphere NLC-93	-	-	ESR	-	-	-	105	-	-
1993-Y39	2449201.56	1993 Aug 2 0124	Viper 3A	-	Sphere NLC-93	-	-	ESR	-	-	-	106	-	-
1993-Y40	2449201.84	1993 Aug 2 0324	Viper 3A	-	Sphere NLC-93	-	-	ESR	-	-	-	107	-	-
1993-Y41	2449201.75	1993 Aug 2 0554	Viper 3A	-	Sphere NLC-93	-	-	ESR	-	-	-	90	-	-
1994-Y03	2449351.10	1994 Aug 16 1422	Viper 3A	-	Sphere	GUARA MET HR01874	-	ALCA	-	-	-	90	-	-
1994-Y19	2449351.60	1994 Aug 17 1540	Viper 3A	-	Sphere	GUARA MET HR01875	-	ALCA	-	-	-	90	-	-
1994-Y04	2449352.15	1994 Aug 17 1408	Viper 3A	-	Sphere	GUARA MET HR01876	-	ALCA	-	-	-	90	-	-
1994-Y05	2449353.09	1994 Aug 18 1408	Viper 3A	-	Sphere	GUARA MET HR01877	-	ALCA	-	-	-	90	-	-
1994-Y06	2449354.10	1994 Aug 19 1424	Viper 3A	-	Sphere	GUARA MET HR01878	-	ALCA	-	-	-	90	-	-
1994-Y07	2449354.33	1994 Aug 19 2000	Viper 3A	-	Sphere	GUARA MET HR01879	-	ALCA	-	-	-	90	-	-

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Mission	FlightCode	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee_Km	Range_Km	Dest
1994-Y20	2449564.50	1994 Aug 20 0356	Viper 3A	-	Sphere	GUARA NET HRL18807	-	-	-	ALCA	-	-	-	90	-	-
1994-Y08	2449564.66	1994 Aug 20 0356	Viper 3A	-	Sphere	GUARA NET HRL1881	-	-	-	ALCA	-	-	-	90	-	-
1994-Y09	2449564.83	1994 Aug 20 0800	Viper 3A	-	Sphere	GUARA NET HRL1882	-	-	-	ALCA	-	-	-	90	-	-
1994-Y10	2449564.96	1994 Aug 20 0835	Viper 3A	-	Sphere	GUARA NET HRL1883	-	-	-	ALCA	-	-	-	90	-	-
1994-Y11	2449565.11	1994 Aug 20 1432	Viper 3A	-	Sphere	GUARA NET HRL1882	-	-	-	ALCA	-	-	-	90	-	-
1994-Y12	2449566.11	1994 Aug 21 1439	Viper 3A	-	Sphere	GUARA NET HRL1894	-	-	-	ALCA	-	-	-	90	-	-
1994-Y21	2449566.50	1994 Aug 22 1627	Viper 3A	-	Sphere	GUARA NET HRL1895?	-	-	-	ALCA	-	-	-	90	-	-
1994-Y13	2449567.19	1994 Aug 23 1346	Viper 3A	-	Sphere	GUARA NET HRL1896	-	-	-	ALCA	-	-	-	90	-	-
1994-Y14	2449568.07	1994 Aug 24 1352	Viper 3A	-	Sphere	GUARA NET HRL1897	-	-	-	ALCA	-	-	-	90	-	-
1994-Y15	2449569.33	1994 Aug 24 2002	Viper 3A	-	Sphere	GUARA NET HRL1898	-	-	-	ALCA	-	-	-	90	-	-
1994-Y16	2449569.08	1994 Aug 24 1352	Viper 3A	-	Sphere	GUARA NET HRL1898	-	-	-	ALCA	-	-	-	90	-	-
1994-Y17	2449569.61	1994 Aug 25 0244	Viper 3A	-	Sphere	GUARA NET HRL1899	-	-	-	ALCA	-	-	-	90	-	-
1994-Y18	2449569.89	1994 Aug 25 0926	Viper 3A	-	Sphere	GUARA NET HRL1900?	-	-	-	ALCA	-	-	-	90	-	-
1995-M04	2449796.50	1995 Mar 20	Viper 3A	?	Aerosole	GUARA NET HRL1901	-	-	-	AND	-	-	-	75?	-	-
1995-M05	2449818.50	1995 Apr 11	Viper 3A	?	Aerosole	-	-	-	-	AND	-	-	-	75?	-	-
1995-M06	2449839.50	1995 May 2	Viper 3A	?	Aerosole	-	-	-	-	AND	-	-	-	75?	-	-
1995-M07	2449868.50	1995 May 31	Viper 3A	?	Aerosole	-	-	-	-	AND	-	-	-	75?	-	-
1995-M08	2450121.50	1995 Feb 6	Viper 3A	?	Wind	-	-	-	-	RASC	-	-	-	110	-	-
1996-Y01	2450244.50	1996 Jun 10	Viper 3A	-	-	-	-	-	-	WI	-	-	-	100?	-	-
1996-Y10	2450291.50	1996 Jun 11 27	Viper 3A	-	-	-	-	-	-	AND	-	-	-	40?	-	-
1996-Y11	2450294.50	1996 Jun 13	Viper 3A	-	-	-	-	-	-	AND	-	-	-	40?	-	-
1996-Y04	2450400.50	1996 Nov 13	Viper 3A	-	-	-	-	-	-	AND	-	-	-	100?	-	-
1997-Y01	2450463.05	1997 Jan 14 1200	Viper 3A	-	-	-	-	-	-	RASC	-	-	-	100	-	-
1997-Y02	2450463.05	1997 Jan 14 1315	Viper 3A	-	-	-	-	-	-	RASC	-	-	-	100	-	-
1997-Y03	2450590.50	1997 May 22	Viper 3A	-	-	-	-	-	-	AND	-	-	-	100?	-	-
1997-M31	2450644.50	1997 Jul 15	Viper 3A	-	-	-	-	-	-	AND	-	-	-	100?	-	-
1997-M37	2450665.48	1997 Aug 4 2328	Viper 3A	-	Falling Sphere	AND-22 TTS07	-	-	-	AND	-	-	-	75?	-	-
1997-M46	2450666.46	1997 Aug 7 2302	Viper 3A	-	Falling Sphere 6	AND-22 TTS08/TRAMP	-	-	-	AND	-	-	-	75?	-	-
1997-Y12	2450671.07	1997 Aug 10 1356	Viper 3A	-	Falling Sphere	CRISTA	-	-	-	WI	-	-	-	123	-	-
1997-M62	2450671.49	1997 Aug 10 2351	Viper 3A	-	Falling Sphere 7	AND-22 TTS09/TRAMP	-	-	-	AND	-	-	-	100?	-	-
1997-M63	2450671.51	1997 Aug 11 0016	Viper 3A	-	Charf 3	AND-22 TTC0/TRAMP	-	-	-	AND	-	-	-	100	-	-
1997-Y16	2450672.07	1997 Aug 11 1343	Viper 3A	-	Falling Sphere	CRISTA	-	-	-	WI	-	-	-	119	-	-
1997-Y19	2450673.01	1997 Aug 12 1215	Viper 3A	-	Falling Sphere	CRISTA	-	-	-	WI	-	-	-	124	-	-
1997-Y27	2450675.02	1997 Aug 14 1227	Viper 3A	-	Sphere	CRISTA	-	-	-	WI	-	-	-	125	-	-
1997-M66	2450675.33	1997 Aug 14 2000	Viper 3A	-	Sphere 8	AND-22 CRISTA TTS11	-	-	-	AND	-	-	-	75?	-	-
1997-M69	2450675.35	1997 Aug 14 2022	Viper 3A	-	Charf 4	AND-22 CRISTA TTC12	-	-	-	AND	-	-	-	101?	-	-
1997-Y28	2450675.41	1997 Aug 14 2153	Viper 3A	-	Sphere	CRISTA	-	-	-	WI	-	-	-	124	-	-
1997-Y29	2450675.96	1997 Aug 15 1058	Viper 3A	-	-	-	-	-	-	WI	-	-	-	115	-	-
1997-M67	2450699.50	1997 Sep 6	Viper 3A	-	-	-	-	-	-	MD	-	-	-	75?	-	-
1997-Y36	2450773.32	1997 Nov 20 1934:00	Viper 3A	-	F-111 ISB JORN-2	Mini-DUSTY MD-05	-	-	-	SWAL	-	-	-	6?	-	-
1998-Y01	2450818.30	1998 Jan 4 910	Viper 3A	?	-	TTS01	-	-	-	ROTH	-	-	-	100?	-	-
1998-Y02	2450819.34	1998 Jan 8 2200	Viper 3A	?	-	TTS02	-	-	-	ROTH	-	-	-	100?	-	-
1998-Y03	2450822.26	1998 Jan 8 915	Viper 3A	?	-	TTS03	-	-	-	ROTH	-	-	-	100?	-	-
1998-Y04	2450822.39	1998 Jan 8 2110	Viper 3A	?	-	TTS04	-	-	-	ROTH	-	-	-	100?	-	-
1998-Y05	2450824.14	1998 Jan 10 1700	Viper 3A	?	-	TTS05	-	-	-	ROTH	-	-	-	100?	-	-
1998-Y06	2450826.74	1998 Jan 16 1636	Viper 3A	?	-	TTS06	-	-	-	ROTH	-	-	-	100?	-	-
1998-Y07	2450830.31	1998 Jan 16 1705	Viper 3A	?	-	TTS07	-	-	-	ROTH	-	-	-	100?	-	-
1998-Y08	2450833.21	1998 Jan 19 1305	Viper 3A	?	-	TTS08	-	-	-	ROTH	-	-	-	100?	-	-
1998-Y09	2450833.05	1998 Jan 21 1305	Viper 3A	?	-	TTS09	-	-	-	ROTH	-	-	-	100?	-	-
1998-Y11	2450837.92	1998 Jan 23 1712	Viper 3A	?	-	TTS10	-	-	-	ROTH	-	-	-	100?	-	-
1998-Y12	2450838.70	1998 Jan 26 0700	Viper 3A	?	-	Charf	-	-	-	RASC	-	-	-	10?	-	-
1998-Y13	2450840.21	1998 Jan 26 1703	Viper 3A	?	-	Charf	-	-	-	RASC	-	-	-	10?	-	-
1998-Y14	2450844.21	1998 Jan 28 1705	Viper 3A	?	-	TTS11	-	-	-	ROTH	-	-	-	100?	-	-
1998-Y15	2450844.21	1998 Jan 30 1700	Viper 3A	?	-	TTS12	-	-	-	ROTH	-	-	-	100?	-	-
1998-Y16	2450846.26	1998 Feb 1 1815	Viper 3A	?	-	TTS13	-	-	-	ROTH	-	-	-	100?	-	-
1998-Y17	2450849.27	1998 Feb 4 1935	Viper 3A	?	-	TTS14	-	-	-	ROTH	-	-	-	100?	-	-
1998-Y18	2450851.22	1998 Feb 6 1718	Viper 3A	?	-	TTS15	-	-	-	ROTH	-	-	-	100?	-	-
1998-Y19	2450852.17	1998 Feb 7 1510	Viper 3A	?	-	TTS16	-	-	-	ROTH	-	-	-	100?	-	-
1998-Y20	2450854.26	1998 Feb 9 1810	Viper 3A	?	-	TTS17	-	-	-	ROTH	-	-	-	100?	-	-
1998-Y21	2450856.25	1998 Feb 11 1800	Viper 3A	?	-	TTS18	-	-	-	ROTH	-	-	-	100?	-	-
1998-Y22	2450858.21	1998 Feb 13 1700	Viper 3A	?	-	TTS19	-	-	-	ROTH	-	-	-	100?	-	-
1998-Y23	2450862.07	1998 Feb 17 1334	Viper 3A	?	-	TTS20	-	-	-	ROTH	-	-	-	100?	-	-
1998-Y24	2450862.20	1998 Feb 17 1647	Viper 3A	?	-	TTS21	-	-	-	ROTH	-	-	-	100?	-	-
1998-Y25	2450864.21	1998 Feb 19 1700	Viper 3A	?	-	TTS22	-	-	-	ROTH	-	-	-	100?	-	-
1998-Y26	2450868.34	1998 Feb 23 2015	Viper 3A	?	-	TTS23	-	-	-	ROTH	-	-	-	100?	-	-
1998-Y27	2450870.17	1998 Feb 25 1605	Viper 3A	?	-	TTS24	-	-	-	ROTH	-	-	-	100?	-	-
1998-Y28	2450872.38	1998 Feb 27 2100	Viper 3A	?	-	TTS25	-	-	-	ROTH	-	-	-	100?	-	-
1999-M05	2451364.80	1999 Jul 5 0904	Viper 3A	-	MD-FS-02	MIDAS/DROPPS	-	-	-	AND	-	-	-	120?	-	-
1999-M06	2451365.47	1999 Jul 5 2313	Viper 3A	-	MD-FS-03	MIDAS/DROPPS	-	-	-	AND	-	-	-	120?	-	-
1999-M07	2451365.53	1999 Jul 6 0946	Viper 3A	-	MD-MD-06	Mini-DUSTY MD-06	-	-	-	AND	-	-	-	120?	-	-
1999-M08	2451365.55	1999 Jul 6 0111	Viper 3A	-	MD-MD-07	Mini-DUSTY MD-07	-	-	-	AND	-	-	-	120?	-	-
1999-M09	2451365.56	1999 Jul 6 0128	Viper 3A	-	MD-FS-08	MIDAS/DROPPS	-	-	-	AND	-	-	-	120?	-	-
1999-M10	2451365.59	1999 Jul 6 0149	Viper 3A	-	MD-FS-09	MIDAS/DROPPS	-	-	-	AND	-	-	-	120?	-	-
1999-M11	2451365.69	1999 Jul 6 0209:30	Viper 3A	-	MD-FS-10	MIDAS/DROPPS	-	-	-	AND	-	-	-	120?	-	-
1999-M12	2451373.80	1999 Jul 14 0226	Viper 3A	-	MD-FS-11	MIDAS/DROPPS	-	-	-	AND	-	-	-	90?	-	-
1999-M13	2451373.86	1999 Jul 14 0351	Viper 3A	-	MD-MD-14	Mini-DUSTY MD-07	-	-	-	AND	-	-	-	120?	-	-
1999-M14	2451373.87	1999 Jul 14 0410:30	Viper 3A	-	MD-FS-15	MIDAS/DROPPS	-	-	-	AND	-	-	-	120?	-	-
1999-M15	2451373.67	1999 Jul 14 0438	Viper 3A	-	MD-CH-16	MIDAS/DROPPS	-	-	-	AND	-	-	-	120?	-	-
1999-M16	2451373.69	1999 Jul 14 0504	Viper 3A	-	MD-FS-17	MIDAS/DROPPS	-	-	-	AND	-	-	-	120?	-	-
1999-M17	2451373.71	1999 Jul 14 0504	Viper 3A	-	MD-FS-18	MIDAS/DROPPS	-	-	-	AND	-	-	-	120?	-	-
1999-M18	2451375.88	1999 Jul 16 0904	Viper 3A	-	MD-FS-17	MIDAS/DROPPS	-	-	-	AND	-	-	-	120?	-	-
1999-M19	2451375.88	1999 Jul 16 0904	Viper 3A	-	MD-FS-18	MIDAS/DROPPS	-	-	-	AND	-	-	-	120?	-	-
1999-M20	2451375.92	1999 Aug 16 1012	Viper 3A	-	MD-FS-20	MIDAS/DROPPS	-	-	-	AND	-	-	-	120?	-	-
1999-M21	2451407.03	1999 Aug 16 1245:00	Viper 3A	-	TR-S-01 Sphere	TRAMP-99	-	-	-	AND	-	-	-	75?	-	-
1999-M22	2451407.91	1999 Aug 17 0944:00	Viper 3A	-	TR-S-02 Sphere	TRAMP-99	-	-	-	AND	-	-	-	75?	-	-
1999-M23	2451408.93	1999 Aug 18 1023:00	Viper 3A	-	TR-S-03 Sphere	TRAMP-99	-	-	-	AND	-	-	-	75?	-	-

Launch

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Mission	FlightCode	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee_Km	Range_Km	Dest
1999-W24	2451408.94	1999 Aug 18 1039:00	Viper 3A	-	TR-C-04 Chaif	TRAMP-99	-	-	-	AND	-	-	-	75?	-	-
1999-W25	2451408.97	1999 Aug 18 1111:25	Viper 3A	-	TR-C-05 Chaif	TRAMP-99	-	-	-	AND	-	-	-	75?	-	-
1999-W26	2451413.94	1999 Aug 23 1030:00	Viper 3A	-	TR-S-06 Sphere	TRAMP-99	-	-	-	AND	-	-	-	75?	-	-
1999-W27	2451416.92	1999 Aug 26 1000:00	Viper 3A	-	TR-S-07 Sphere	TRAMP-99	-	-	-	AND	-	-	-	75?	-	-
1999-W28	2451416.92	1999 Aug 26 1017:00	Viper 3A	-	TR-C-08 Chaif	TRAMP-99	-	-	-	AND	-	-	-	75?	-	-
1999-W29	2451420.92	1999 Aug 30 1000:00	Viper 3A	-	TR-S-09 Sphere	TRAMP-99	-	-	-	AND	-	-	-	75?	-	-
1999-W30	2451427.92	1999 Sep 6 1003:00	Viper 3A	-	TR-S-10 Sphere	TRAMP-99	-	-	-	AND	-	-	-	75?	-	-
1999-W32	2451430.93	1999 Sep 9 0800:00	Viper 3A	-	TR-S-11 Sphere	TRAMP-99	-	-	-	AND	-	-	-	75?	-	-
1999-W34	2451438.92	1999 Sep 14 1000:00	Viper 3A	-	TR-S-12 Sphere	TRAMP-99	-	-	-	AND	-	-	-	75?	-	-
1999-W35	2451438.96	1999 Sep 14 1106:00	Viper 3A	-	TR-S-13 Sphere	TRAMP-99	-	-	-	AND	-	-	-	75?	-	-
1999-W36	2451437.92	1999 Sep 16 1000:00	Viper 3A	-	TR-S-14 Sphere	TRAMP-99	-	-	-	AND	-	-	-	75?	-	-
1999-W37	2451439.92	1999 Sep 18 1000:00	Viper 3A	-	TR-S-15 Sphere	TRAMP-99	-	-	-	AND	-	-	-	75?	-	-
1999-W38	2451441.92	1999 Sep 20 1004:00	Viper 3A	-	TR-S-16 Sphere	TRAMP-99	-	-	-	AND	-	-	-	75?	-	-
1999-W39	2451443.92	1999 Sep 22 1003:00	Viper 3A	-	TR-S-17 Sphere	TRAMP-99	-	-	-	AND	-	-	-	75?	-	-
1999-W03	2451501.24	1999 Nov 18 1745	Viper 3A	-	Comet Chaser	TRAMP-99	-	-	-	RI	-	-	-	90	-	-
2000-W10	2451671.18	2000 May 6 1621	Viper 3A	-	MS-FS-01	MIDAS Sphere	-	-	-	AND	-	-	-	90?	-	-
2000-W11	2451671.20	2000 May 6 1641	Viper 3A	-	MS-FS-02	MIDAS Sphere	-	-	-	AND	-	-	-	90?	-	-
2000-W12	2451679.92	2000 May 15 0032	Viper 3A	-	MS-FS-04	MIDAS Sphere	-	-	-	AND	-	-	-	92?	-	-
2000-W13	2451679.95	2000 May 15 0112	Viper 3A	-	MS-NH-06	Ferd. 117/Mini-MIDAS	-	-	-	AND	-	-	-	75?	-	-
2001-W02	2452046.07	2001 May 16 1341:00	Viper 3A	?	MASA 12.1049UT	-	-	-	-	MI	-	-	-	75?	-	-
2001-W03	2452046.11	2001 Jun 6 1432:00	Viper 3A	-	SO-FS-01	MIDAS	-	-	-	AND	-	-	-	75?	-	-
2001-W04	2452072.95	2001 Jun 12 0110:30	Viper 3A	-	SO-FS-02	MIDAS	-	-	-	AND	-	-	-	75?	-	-
2001-W05	2452074.57	2001 Jun 14 0134:30	Viper 3A	-	SO-FS-03	MIDAS	-	-	-	AND	-	-	-	75?	-	-
2001-W06	2452077.49	2001 Jun 16 2351:00	Viper 3A	-	SO-FS-04	MIDAS	-	-	-	AND	-	-	-	75?	-	-
2001-W07	2452077.52	2001 Jun 16 0036	Viper 3A	-	SO-CH-06	MIDAS	-	-	-	AND	-	-	-	75?	-	-
2001-W08	2452077.54	2001 Jun 17 0036	Viper 3A	-	SO-CH-08	MIDAS	-	-	-	AND	-	-	-	75?	-	-
2001-W09	2452077.95	2001 Jun 17 0119	Viper 3A	-	SO-CH-09	MIDAS	-	-	-	AND	-	-	-	75?	-	-
2001-W10	2452081.57	2001 Jun 21 0144	Viper 3A	-	SO-CH-10	MIDAS	-	-	-	AND	-	-	-	75?	-	-
2001-W11	2452086.38	2001 Jun 24 2104	Viper 3A	-	SO-CH-12	MIDAS	-	-	-	AND	-	-	-	75?	-	-
2001-W12	2452086.41	2001 Jun 24 2151:00	Viper 3A	-	SO-CH-13	MIDAS	-	-	-	AND	-	-	-	75?	-	-
2001-W13	2452086.43	2001 Jun 24 2220:10	Viper 3A	-	SO-CH-14	MIDAS	-	-	-	AND	-	-	-	75?	-	-
2001-W14	2452086.48	2001 Jun 24 2246:15	Viper 3A	-	SO-CH-14	MIDAS	-	-	-	AND	-	-	-	75?	-	-
2001-W01	2452106.96	2001 Jul 16 1125	Viper 3A	-	RDS-01	ROMA	-	-	-	AND	LONG	-	-	108	-	-
2001-W02	2452109.97	2001 Jul 19 1117:20	Viper 3A	-	RDS-02	ROMA	-	-	-	AND	LONG	-	-	108	-	-
2001-W03	2452113.01	2001 Jul 22 1220:00	Viper 3A	-	RDS-03	ROMA	-	-	-	AND	LONG	-	-	100?	-	-
2001-W04	2452115.04	2001 Jul 22 1255:00	Viper 3A	-	RDS-04	ROMA	-	-	-	AND	LONG	-	-	100?	-	-
2001-W05	2452116.52	2001 Jul 25 1000:00	Viper 3A	-	RDS-05	ROMA	-	-	-	AND	LONG	-	-	100?	-	-
2001-W06	2452116.52	2001 Jul 25 1000:00	Viper 3A	-	RDS-06	ROMA	-	-	-	AND	LONG	-	-	100?	-	-
2001-W07	2452121.98	2001 Jul 28 1007:00	Viper 3A	-	RDS-07	ROMA	-	-	-	AND	LONG	-	-	100?	-	-
2001-W08	2452121.98	2001 Jul 31 0900:00	Viper 3A	-	RDS-08	ROMA	-	-	-	AND	LONG	-	-	100?	-	-
2001-W09	2452121.98	2001 Jul 31 0900:00	Viper 3A	-	RDS-09	ROMA	-	-	-	AND	LONG	-	-	100?	-	-
2001-W10	2452124.25	2001 Aug 2 1800:00	Viper 3A	-	RDS-10	ROMA	-	-	-	AND	LONG	-	-	100?	-	-
2001-W11	2452127.99	2001 Aug 6 0935:00	Viper 3A	-	RDS-11	ROMA	-	-	-	AND	LONG	-	-	100?	-	-
2001-W12	2452130.93	2001 Aug 9 0131:00	Viper 3A	-	RDS-12	ROMA	-	-	-	AND	LONG	-	-	100?	-	-
2001-W13	2452135.98	2001 Aug 12 1106:00	Viper 3A	-	RDS-13	ROMA	-	-	-	AND	LONG	-	-	100?	-	-
2001-W14	2452138.96	2001 Aug 17 1049:00	Viper 3A	-	RDS-14	ROMA	-	-	-	AND	LONG	-	-	100?	-	-
2001-W15	2452139.01	2001 Aug 17 1249:00	Viper 3A	-	RDS-15	ROMA	-	-	-	AND	LONG	-	-	100?	-	-
2001-W16	2452141.93	2001 Aug 20 1948:00	Viper 3A	-	RDS-16	ROMA	-	-	-	AND	LONG	-	-	100?	-	-
2001-W17	2452144.92	2001 Aug 23 1006:00	Viper 3A	-	RDS-17	ROMA	-	-	-	AND	LONG	-	-	100?	-	-
2001-W18	2452148.92	2001 Aug 23 1006:00	Viper 3A	-	RDS-18	ROMA	-	-	-	AND	LONG	-	-	100?	-	-
2001-W19	2452150.91	2001 Aug 28 2148:39	Viper 3A	-	RDS-19	ROMA	-	-	-	AND	LONG	-	-	100?	-	-
2001-W20	2452150.91	2001 Aug 28 2216:39	Viper 3A	-	RDS-20	ROMA	-	-	-	AND	LONG	-	-	100?	-	-
2001-W21	2452150.92	2001 Aug 29 1011:00	Viper 3A	-	RDS-21	ROMA	-	-	-	AND	LONG	-	-	100?	-	-
2001-W22	2452153.94	2001 Sep 1 0351:00	Viper 3A	-	RDS-22	ROMA	-	-	-	AND	LONG	-	-	100?	-	-
2001-W23	2452158.94	2001 Sep 5 2005:00	Viper 3A	-	RDS-23	ROMA	-	-	-	AND	LONG	-	-	100?	-	-
2001-W24	2452158.90	2001 Sep 6 0943:01	Viper 3A	-	RDS-24	ROMA	-	-	-	AND	LONG	-	-	100?	-	-
2001-W25	2452160.93	2001 Sep 8 1024:00	Viper 3A	-	RDS-25	ROMA	-	-	-	AND	LONG	-	-	100?	-	-
2001-W26	2452163.99	2001 Sep 11 0922:00	Viper 3A	-	RDS-26	ROMA	-	-	-	AND	LONG	-	-	100?	-	-
2001-W27	2452163.91	2001 Sep 11 0951:00	Viper 3A	-	RDS-27	ROMA	-	-	-	AND	LONG	-	-	100?	-	-
2001-W28	2452166.99	2001 Sep 14 0916:00	Viper 3A	-	RDS-28	ROMA	-	-	-	AND	LONG	-	-	100?	-	-
2001-W29	2452166.99	2001 Sep 14 1016:00	Viper 3A	-	RDS-29	ROMA	-	-	-	AND	LONG	-	-	100?	-	-
2001-W30	2452166.95	2001 Sep 14 1044:01	Viper 3A	-	RDS-30	ROMA	-	-	-	AND	LONG	-	-	100?	-	-
2002-W01	2452404.76	2002 May 10 0614:20	Viper 3A	-	ROCH-30	ROMA	-	-	-	AND	LONG	-	-	75?	-	-
2002-W02	2452410.75	2002 May 16 0600:00	Viper 3A	-	MASA 37.120E	-	-	-	-	MI	-	-	-	75?	-	-
2002-W03	2452410.79	2002 May 16 0700:00	Viper 3A	-	MASA 37.130E	-	-	-	-	MI	-	-	-	75?	-	-
2002-W04	2452439.69	2002 Jun 13 0440:00	Viper 3A	-	MASA 37.140E	-	-	-	-	MI	-	-	-	75?	-	-
2002-W05	2452457.95	2002 Jul 1 2020:00	Viper 3A	-	MASA 12.510E	-	-	-	-	AND	-	-	-	75?	-	-
2002-W06	2452457.99	2002 Jul 1 2120:00	Viper 3A	-	-	MM-VFS-04	-	-	-	AND	-	-	-	75?	-	-
2002-W10	2452457.43	2002 Jul 1 2220:00	Viper 3A	-	-	MM-VFS-05	-	-	-	AND	-	-	-	75?	-	-
2002-W11	2452457.47	2002 Jul 1 2320:00	Viper 3A	-	-	MM-VFS-06	-	-	-	AND	-	-	-	75?	-	-
2002-W12	2452457.51	2002 Jul 2 0020:00	Viper 3A	-	-	MM-VFS-07	-	-	-	AND	-	-	-	75?	-	-
2002-W14	2452457.56	2002 Jul 2 0120:00	Viper 3A	-	-	MM-VFS-09	-	-	-	AND	-	-	-	75?	-	-
2002-W20	2452460.40	2002 Jul 4 2130:00	Viper 3A	-	-	MM-VFS-11	-	-	-	AND	-	-	-	75?	-	-
2002-W22	2452460.46	2002 Jul 4 2320:00	Viper 3A	-	-	MM-VFS-16	-	-	-	AND	-	-	-	75?	-	-
2002-W24	2452460.50	2002 Jul 5 0219:00	Viper 3A	-	-	MM-VFS-18	-	-	-	AND	-	-	-	75?	-	-
2002-W25	2452460.60	2002 Jul 5 0300:00	Viper 3A	-	-	MM-VFS-21	-	-	-	AND	-	-	-	75?	-	-
2002-W26	2452460.62	2002 Jul 5 0645:00	Viper 3A	-	-	MM-VFS-26	-	-	-	AND	-	-	-	75?	-	-
2002-W30	2452460.78	2002 Jul 5 0945:00	Viper 3A	-	-	MM-VFS-27	-	-	-	AND	-	-	-	75?	-	-
2002-W31	2452507.93	2002 Aug 21 1023:00	Viper 3A	-	-	MM-VFS-31	-	-	-	AND	-	-	-	75?	-	-
2002-W02	2452510.92	2002 Aug 24 1000	Viper 3A	-	-	RP-A-FS-01	Roman-02	-	-	AND	-	-	-	106	-	-
2002-W32	2452510.92	2002 Aug 29 1000	Viper 3A	-	-	RP-A-FS-03	-	-	-	AND	-	-	-	108	-	-
2002-W33	2452521.92	2002 Sep 4 1000	Viper 3A	-	-	RP-A-FS-04	-	-	-	AND	-	-	-	75?	-	-
2002-W34	2452523.92	2002 Sep 6 1000	Viper 3A	-	-	RP-A-FS-06	-	-	-	AND	-	-	-	75?	-	-



Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Mission	FlightCode	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee_Km	Range_Km	Dest
2002-W35	2452527.92	2002 Sep 10 1000	Viper 3A	-	-	RD-A-FS-07	-	-	-	AND	-	-	-	757	-	-
2002-W36	2452530.95	2002 Sep 13 1050	Viper 3A	-	-	RD-A-FS-08	-	-	-	AND	-	-	-	757	-	-
2002-W37	2452531.94	2002 Sep 14 1027	Viper 3A	-	-	RD-A-FS-09	-	-	-	AND	-	-	-	757	-	-
2002-W38	2452534.92	2002 Sep 17 1000	Viper 3A	-	-	RD-A-FS-10	-	-	-	AND	-	-	-	757	-	-
2002-W39	2452537.92	2002 Sep 20 1000	Viper 3A	-	-	RD-A-FS-11	-	-	-	AND	-	-	-	757	-	-
2002-W40	2452537.94	2002 Sep 20 1035:30	Viper 3A	-	-	RD-A-FS-12	-	-	-	AND	-	-	-	757	-	-
2002-W41	2452539.92	2002 Sep 22 1000	Viper 3A	-	-	RD-A-FS-13	-	-	-	AND	-	-	-	757	-	-
2002-W42	2452543.92	2002 Sep 26 1000	Viper 3A	-	-	RD-A-FS-14	-	-	-	AND	-	-	-	757	-	-
2002-W43	2452546.92	2002 Sep 29 1000	Viper 3A	-	-	RD-A-FS-15	-	-	-	AND	-	-	-	757	-	-
2002-W44	2452546.93	2002 Sep 29 1019	Viper 3A	-	-	RD-A-FS-16	-	-	-	AND	-	-	-	757	-	-
2002-W45	2452548.46	2002 Sep 30 2305	Viper 3A	-	-	RD-A-FS-17	-	-	-	AND	-	-	-	757	-	-
2002-W46	2452552.42	2002 Oct 4 2200	Viper 3A	-	-	RD-A-FS-18	-	-	-	AND	-	-	-	757	-	-
2002-W47	2452554.92	2002 Oct 7 1000	Viper 3A	-	-	RD-A-FS-19	-	-	-	AND	-	-	-	757	-	-
2002-W48	2452554.93	2002 Oct 7 1025	Viper 3A	-	-	RD-A-FS-20	-	-	-	AND	-	-	-	757	-	-
2002-W49	2452554.95	2002 Oct 7 1048	Viper 3A	-	-	RD-A-FS-21	-	-	-	AND	-	-	-	757	-	-
2002-W50	2452557.92	2002 Oct 10 1000	Viper 3A	-	-	RD-A-FS-22	-	-	-	AND	-	-	-	757	-	-
2002-W51	2452557.94	2002 Oct 10 1029	Viper 3A	-	-	RD-A-FS-23	-	-	-	AND	-	-	-	757	-	-
2004-S79	2452568.45	2004 Sep 19 2250	Viper 3A	?	-	Sphere	-	-	-	RKR	-	-	-	857	-	-
2004-S80	2452568.50	2004 Sep 19 2250	Viper 3A	?	-	Sphere	-	-	-	RKR	-	-	-	857	-	-
2004-S81	2452568.58	2004 Sep 20 0001	Viper 3A	-	-	Sphere	-	-	-	RKR	-	-	-	857	-	-
2008-T04	2453368.89	2005 Jan 18 0918	Viper 3A	-	-	RDMA 2005 Chaff Test	-	-	-	AND	-	-	-	907	-	-
2008-T05	2453368.98	2005 Jan 18 1136:30	Viper 3A	-	Mini-NIDAS RPM-01	-	-	-	-	AND	-	-	-	907	-	-
2008-T06	2453369.00	2005 Jan 18 1206:00	Viper 3A	-	Mini-NIDAS RPM-02	-	-	-	-	AND	-	-	-	907	-	-
2008-T07	2453369.02	2005 Jan 18 1236:00	Viper 3A	-	RDMA/Winter (RM)	-	-	-	-	AND	-	-	-	907	-	-
2008-T08	2453369.05	2005 Jan 18 1315:00	Viper 3A	-	-	RDMA 2005 RFW303	-	-	-	AND	-	-	-	907	-	-
2008-T10	2453369.11	2005 Jan 18 1442	Viper 3A	-	-	RDMA 2005 RFW304	-	-	-	AND	-	-	-	907	-	-
2008-T11	2453369.15	2005 Jan 18 1531	Viper 3A	-	-	RDMA 2005 RFW307	-	-	-	AND	-	-	-	907	-	-
2008-T13	2453369.20	2005 Jan 18 1654	Viper 3A	-	-	RDMA 2005 RFW309	-	-	-	AND	-	-	-	907	-	-
2008-T14	2453369.23	2005 Jan 18 1724	Viper 3A	-	-	RDMA 2005 RFW310	-	-	-	AND	-	-	-	907	-	-
2008-T16	2453369.27	2005 Jan 18 1835	Viper 3A	-	-	RDMA 2005 RFW312	-	-	-	AND	-	-	-	907	-	-
2008-T17	2453369.57	2005 Jan 20 0946	Viper 3A	-	-	RDMA 2005 RFW313	-	-	-	AND	-	-	-	907	-	-
2008-T19	2453369.96	2005 Jan 20 1100	Viper 3A	-	-	RDMA 2005 RFW315	-	-	-	AND	-	-	-	907	-	-
2008-T20	2453369.98	2005 Jan 20 1130	Viper 3A	-	-	RDMA 2005 RFW316	-	-	-	AND	-	-	-	907	-	-
2008-T21	2453391.01	2005 Jan 20 1219	Viper 3A	-	-	RDMA 2005 RFW317	-	-	-	AND	-	-	-	907	-	-
2008-T22	2453392.05	2005 Jan 21 1306	Viper 3A	-	-	RDMA 2005 RFW318	-	-	-	AND	-	-	-	907	-	-
2008-T23	2453395.96	2005 Jan 25 0130	Viper 3A	-	-	RDMA 2005 RFW319	-	-	-	AND	-	-	-	907	-	-
2008-T24	2453395.95	2005 Jan 25 0330	Viper 3A	-	-	RDMA 2005 RFW320	-	-	-	AND	-	-	-	907	-	-
2008-T25	2453395.73	2005 Jan 25 0530	Viper 3A	-	-	RDMA 2005 RFW321	-	-	-	AND	-	-	-	907	-	-
2008-T26	2453395.51	2005 Jan 25 0730	Viper 3A	-	-	RDMA 2005 RFW322	-	-	-	AND	-	-	-	907	-	-
2009-S71	2459060.89	2009 Aug 17 1152	Viper 3A	-	-	TUBE Support 1	-	-	-	MI	-	-	-	907	-	-
2009-S74	2459060.90	2009 Aug 17	Viper 3A	-	-	TUBE Support 2	-	-	-	MI	-	-	-	907	-	-
2012-S01	2456131.50	2012 Jul 23	Viper 3A	-	-	TUBE Support 1	-	-	-	MI	-	-	-	907	-	-
2012-S02	2456131.50	2012 Jul 23	Viper 3A	-	-	TUBE Support 2	-	-	-	MI	-	-	-	907	-	-
2016-A108	2457226.50	2016 Aug 19	DART	-	TH-01	TV-01	-	-	-	ASKTH	LP1	-	-	43	-	-
2020-S33	2459111.53	2020 Sep 19 0039:47	DART	-	TH-02	TV-02	-	-	-	ASKTH	LP1	-	-	43	-	-
2021-S04	2459140.50	2021 Oct 3	DART	-	TED-01	DRUG SFI 1	-	-	-	KUN	-	-	-	95	-	-
2021-S06	2459140.50	2021 Oct 3	DART	-	TED-02?	DRUG SFI 2	-	-	-	KUN	-	-	-	95	-	-
2022-A21	2459821.50	2022 Aug 30	DART	-	-	PRUE	-	-	-	AND	-	-	-	207	-	-
2024-M02	2460347.50	2024 Feb 7	DART	-	TED-3/VE2NDH	Tech test	-	-	-	KUN	-	-	-	607	-	-
				-	-	KTH PRIME	-	-	-	ESR	LC3	-	-	607	-	-



Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	OrbPay	Agency	Launch_Code	Group	Category	LTCite	Cite	Notes
1972-5459	2441597.50	1972 Sep 27	Viper 3A	-	Stable Viper 1-4	0.000	AFRL	SS	SDCO/Bollerma	Test	AFRL-TR-73-0412	-	-
1972-5460	2441597.50	1972 Sep 27	Viper 3A	-	Stable Viper 1-5	0.000	AFRL	SS	SDCO/Bollerma	Test	AFRL-TR-73-0412	-	-
1972-5461	2441592.50	1972 Oct 2	Viper 3A	-	Stable Viper 1-6	0.000	AFRL	SS	SDCO/Bollerma	Test	AFRL-TR-73-0412	-	-
1972-4130	2445671.25	1983 Dec 2 1801:00	Viper 3A	-	MAP/WHITE	0.000	DFVLR	SS	BOMM/von Zahn	Aeron	WDCRF	-	-
1983-4336	2445674.33	1983 Dec 5 2000:00	Viper 3A	-	MAP/WHITE	0.000	DFVLR	SS	BOMM/von Zahn	Aeron	WDCRF	-	-
1983-4339	2445676.24	1983 Dec 7 1744:00	Viper 3A	-	MAP/WHITE	0.000	DFVLR	SS	BOMM/von Zahn	Aeron	WDCRF	-	-
1983-7299	2445677.33	1983 Dec 8 2000:00	Viper 3A	-	MAP/WHITE	0.000	DFVLR	SS	BOMM/von Zahn	Aeron	WDCRF	-	-
1983-7300	2445681.98	1983 Dec 12 2000:00	Viper 3A	-	MAP/WHITE	0.000	DFVLR	SS	BOMM/von Zahn	Aeron	WDCRF	-	-
1983-7304	2445684.98	1983 Dec 16 1129:00	Viper 3A	-	MAP/WHITE	0.000	DFVLR	SS	BOMM/von Zahn	Aeron	WDCRF	-	-
1983-7313	2445685.01	1983 Dec 16 1212:00	Viper 3A	-	MAP/WHITE	0.000	DFVLR	SS	BOMM/von Zahn	Aeron	WDCRF	-	-
1983-7317	2445688.32	1983 Dec 19 1946:00	Viper 3A	-	MAP/WHITE	0.000	DFVLR	SS	BOMM/von Zahn	Aeron	WDCRF	-	-
1983-7318	2445688.94	1983 Dec 19 2015:00	Viper 3A	-	MAP/WHITE	0.000	DFVLR	SS	BOMM/von Zahn	Aeron	WDCRF	-	-
1983-7320	2445697.96	1983 Dec 29 1100:00	Viper 3A	-	MAP/WHITE	0.000	DFVLR	SS	BOMM/von Zahn	Aeron	WDCRF	-	-
1983-7321	2445697.96	1983 Dec 29 1134:00	Viper 3A	-	MAP/WHITE	0.000	DFVLR	SS	BOMM/von Zahn	Aeron	WDCRF	-	-
1983-7322	2445700.12	1983 Dec 31 1500:00	Viper 3A	-	MAP/WHITE	0.000	DFVLR	SS	BOMM/von Zahn	Aeron	WDCRF	-	-
1984-101	2445702.10	1984 Jan 2 1430:00	Viper 3A	-	MAP/WHITE	0.000	DFVLR	SS	BOMM/von Zahn	Aeron	WDCRF	-	-
1984-103	2445705.33	1984 Jan 5 2000:00	Viper 3A	-	MAP/WHITE	0.000	DFVLR	SS	BOMM/von Zahn	Aeron	WDCRF	-	-
1984-105	2445706.39	1984 Jan 6 2124	Viper 3A	-	MAP/WHITE	0.000	DFVLR	SS	BOMM/von Zahn	Aeron	WDCRF	-	-
1984-107	2445706.33	1984 Jan 6 2000	Viper 3A	-	MAP/WHITE	0.000	DFVLR	SS	BOMM/von Zahn	Aeron	WDCRF	-	-
1984-109	2445712.21	1984 Jan 12 1700	Viper 3A	-	MAP/WHITE	0.000	DFVLR	SS	BOMM/von Zahn	Aeron	WDCRF	-	-
1984-414	2445712.24	1984 Jan 12 1749	Viper 3A	-	MAP/WHITE	0.000	DFVLR	SS	BOMM/von Zahn	Aeron	WDCRF	-	-
1984-112	2445713.29	1984 Jan 13 1857	Viper 3A	-	MAP/WHITE	0.000	DFVLR	SS	BOMM/von Zahn	Aeron	WDCRF	-	-
1984-113	2445713.31	1984 Jan 13 1931	Viper 3A	-	MAP/WHITE	0.000	DFVLR	SS	BOMM/von Zahn	Aeron	WDCRF	-	-
1984-115	2445713.37	1984 Jan 13 2050	Viper 3A	-	MAP/WHITE	0.000	DFVLR	SS	BOMM/von Zahn	Aeron	WDCRF	-	-
1984-116	2445713.39	1984 Jan 13 2122	Viper 3A	-	MAP/WHITE	0.000	DFVLR	SS	BOMM/von Zahn	Aeron	WDCRF	-	-
1984-117	2445713.42	1984 Jan 13 2212	Viper 3A	-	MAP/WHITE	0.000	DFVLR	SS	BOMM/von Zahn	Aeron	WDCRF	-	-
1984-118	2445713.45	1984 Jan 13 2244	Viper 3A	-	MAP/WHITE	0.000	DFVLR	SS	BOMM/von Zahn	Aeron	WDCRF	-	-
1984-119	2445715.33	1984 Jan 15 2000	Viper 3A	-	MAP/WHITE	0.000	DFVLR	SS	BOMM/von Zahn	Aeron	WDCRF	-	-
1984-121	2445717.33	1984 Jan 17 2000	Viper 3A	-	MAP/WHITE	0.000	DFVLR	SS	BOMM/von Zahn	Aeron	WDCRF	-	-
1984-122	2445720.35	1984 Jan 20 2018	Viper 3A	-	MAP/WHITE	0.000	DFVLR	SS	BOMM/von Zahn	Aeron	WDCRF	-	-
1984-123	2445720.92	1984 Jan 21 1000	Viper 3A	-	MAP/WHITE	0.000	DFVLR	SS	BOMM/von Zahn	Aeron	WDCRF	-	-
1984-124	2445720.95	1984 Jan 21 1020	Viper 3A	-	MAP/WHITE	0.000	DFVLR	SS	BOMM/von Zahn	Aeron	WDCRF	-	-
1984-125	2445720.96	1984 Jan 21 1107	Viper 3A	-	MAP/WHITE	0.000	DFVLR	SS	BOMM/von Zahn	Aeron	WDCRF	-	-
1984-127	2445721.01	1984 Jan 21 1212	Viper 3A	-	MAP/WHITE	0.000	DFVLR	SS	BOMM/von Zahn	Aeron	WDCRF	-	-
1984-128	2445721.03	1984 Jan 21 1246	Viper 3A	-	MAP/WHITE	0.000	DFVLR	SS	BOMM/von Zahn	Aeron	WDCRF	-	-
1984-131	2445721.10	1984 Jan 21 1424	Viper 3A	-	MAP/WHITE	0.000	DFVLR	SS	BOMM/von Zahn	Aeron	WDCRF	-	-
1984-132	2445724.27	1984 Jan 24 1830	Viper 3A	-	MAP/WHITE	0.000	DFVLR	SS	BOMM/von Zahn	Aeron	WDCRF	-	-
1984-133	2445724.29	1984 Jan 24 1853	Viper 3A	-	MAP/WHITE	0.000	DFVLR	SS	BOMM/von Zahn	Aeron	WDCRF	-	-
1984-134	2445725.17	1984 Jan 25 1609	Viper 3A	-	MAP/WHITE	0.000	DFVLR	SS	BOMM/von Zahn	Aeron	WDCRF	-	-
1984-135	2445725.26	1984 Jan 25 1513	Viper 3A	-	MAP/WHITE	0.000	DFVLR	SS	BOMM/von Zahn	Aeron	WDCRF	-	-
1984-139	2445726.21	1984 Jan 26 101	Viper 3A	-	MAP/WHITE	0.000	DFVLR	SS	BOMM/von Zahn	Aeron	WDCRF	-	-
1984-141	2445731.24	1984 Jan 31 1523	Viper 3A	-	MAP/WHITE	0.000	DFVLR	SS	BOMM/von Zahn	Aeron	WDCRF	-	-
1984-146	2445736.33	1984 Feb 7 2000	Viper 3A	-	MAP/WHITE	0.000	DFVLR	SS	BOMM/von Zahn	Aeron	WDCRF	-	-
1984-148	2445736.33	1984 Feb 9 2000	Viper 3A	-	MAP/WHITE	0.000	DFVLR	SS	BOMM/von Zahn	Aeron	WDCRF	-	-
1984-151	2445736.65	1984 Feb 9 0934	Viper 3A	-	MAP/WHITE	0.000	DFVLR	SS	BOMM/von Zahn	Aeron	WDCRF	-	-
1984-152	2445736.65	1984 Feb 10 0559	Viper 3A	-	MAP/WHITE	0.000	DFVLR	SS	BOMM/von Zahn	Aeron	WDCRF	-	-
1984-155	2445740.73	1984 Feb 10 0559	Viper 3A	-	MAP/WHITE	0.000	DFVLR	SS	BOMM/von Zahn	Aeron	WDCRF	-	-
1984-157	2445743.33	1984 Feb 12 2000	Viper 3A	-	MAP/WHITE	0.000	DFVLR	SS	BOMM/von Zahn	Aeron	WDCRF	-	-
1984-160	2445743.33	1984 Feb 12 2000	Viper 3A	-	MAP/WHITE	0.000	DFVLR	SS	BOMM/von Zahn	Aeron	WDCRF	-	-
1984-162	2445743.33	1984 Feb 16 0120	Viper 3A	-	MAP/WHITE	0.000	DFVLR	SS	BOMM/von Zahn	Aeron	WDCRF	-	-
1984-163	2445743.33	1984 Feb 16 0158	Viper 3A	-	MAP/WHITE	0.000	DFVLR	SS	BOMM/von Zahn	Aeron	WDCRF	-	-
1984-164	2445743.33	1984 Feb 16 0158	Viper 3A	-	MAP/WHITE	0.000	DFVLR	SS	BOMM/von Zahn	Aeron	WDCRF	-	-
1984-165	2445743.33	1984 Feb 16 0200	Viper 3A	-	MAP/WHITE	0.000	DFVLR	SS	BOMM/von Zahn	Aeron	WDCRF	-	-
1984-166	2445743.51	1984 Feb 18 0021	Viper 3A	-	MAP/WHITE	0.000	DFVLR	SS	BOMM/von Zahn	Aeron	WDCRF	-	-
1984-168	2445748.53	1984 Feb 18 0314	Viper 3A	-	MAP/WHITE	0.000	DFVLR	SS	BOMM/von Zahn	Aeron	WDCRF	-	-
1984-170	2445748.53	1984 Feb 18 0440	Viper 3A	-	MAP/WHITE	0.000	DFVLR	SS	BOMM/von Zahn	Aeron	WDCRF	-	-
1984-171	2445748.53	1984 Feb 19 1000	Viper 3A	-	MAP/WHITE	0.000	DFVLR	SS	BOMM/von Zahn	Aeron	WDCRF	-	-
1984-172	2445749.92	1984 Feb 19 1122	Viper 3A	-	MAP/WHITE	0.000	DFVLR	SS	BOMM/von Zahn	Aeron	WDCRF	-	-
1984-173	2445750.02	1984 Feb 19 1225:00	Viper 3A	-	MAP/WHITE	0.000	DFVLR	SS	BOMM/von Zahn	Aeron	WDCRF	-	-
1984-174	2445751.33	1984 Feb 20 2000:00	Viper 3A	-	K-F 057	0.000	DFVLR	SU	BOMM/von Zahn	Aeron	WDCRF	-	-
1984-175	2445753.33	1984 Feb 20 2000:00	Viper 3A	-	K-F 059	0.000	DFVLR	SU	BOMM/von Zahn	Aeron	WDCRF	-	-
1984-177	2445754.00	1984 Feb 23 1200	Viper-Start	-	-	0.000	HFC	SU	BOMM/von Zahn	Aeron	WDCRF	-	-
1984-178	2445754.00	1984 Feb 23 1200	Viper-Start	-	-	0.000	HFC	SU	BOMM/von Zahn	Aeron	WDCRF	-	-
1987-429	2446930.17	1987 Mar 14 1600	Viper 3A	?	MISTY PICTURE 1-20	0.000	DMA	AS	DMA	Test	WTP84-1	-	-
1987-439	2446957.07	1987 Mar 14 1600	Viper 3A	-	Sphere	0.000	DMA	AS	DMA	Test	AD-1263521	-	-
1987-4400	2446958.96	1987 Jun 12 1100	Viper 3A	-	Sphere	0.000	DMA	AS	BOMM/von Zahn	Aeron	WDCRF	-	-
1987-4401	2446961.98	1987 Jun 12 1100	Viper 3A	-	Sphere	0.000	DMA	AS	BOMM/von Zahn	Aeron	WDCRF	-	-
1987-4402	2446963.96	1987 Jun 17 1103	Viper 3A	-	Sphere	0.000	DMA	AS	BOMM/von Zahn	Aeron	WDCRF	-	-
1987-4403	2446965.96	1987 Jun 19 1105	Viper 3A	-	Sphere	0.000	DMA	AS	BOMM/von Zahn	Aeron	WDCRF	-	-
1987-4404	2446968.96	1987 Jun 22 1129	Viper 3A	-	Sphere	0.000	DMA	AS	BOMM/von Zahn	Aeron	WDCRF	-	-
1987-4405	2446970.96	1987 Jun 24 1100	Viper 3A	-	Sphere	0.000	DMA	AS	BOMM/von Zahn	Aeron	WDCRF	-	-
1987-4408	2446971.08	1987 Jun 24 1358	Viper 3A	-	Sphere	0.000	DMA	AS	BOMM/von Zahn	Aeron	WDCRF	-	-
1987-4409	2446972.96	1987 Jun 26 1100	Viper 3A	-	Sphere	0.000	DMA	AS	BOMM/von Zahn	Aeron	WDCRF	-	-
1987-4410	2446973.09	1987 Jun 26 1412	Viper 3A	-	Sphere	0.000	DMA	AS	BOMM/von Zahn	Aeron	WDCRF	-	-
1987-1197	2446975.96	1987 Jun 29 1106	Viper 3A	-	Sphere	0.000	DMA	AS	BOMM/von Zahn	Aeron	WDCRF	-	-
1987-7200	2446978.38	1987 Jul 01 2108:00	Viper 3A	-	FALLING SPHERE	0.000	DMA	AS	BOMM/von Zahn	Aeron	WDCRF	-	-
1987-7203	2446978.46	1987 Jul 01 2305:00	Viper 3A	-	FALLING SPHERE	0.000	DMA	AS	BOMM/von Zahn	Aeron	WDCRF	-	-
1987-7206	2446979.96	1987 Jul 03 1100:00	Viper 3A	-	FALLING SPHERE	0.000	DMA	AS	BOMM/von Zahn	Aeron	WDCRF	-	-
1987-7208	2446983.96	1987 Jul 06 1240:00	Viper 3A	-	FALLING SPHERE	0.000	DMA	AS	BOMM/von Zahn	Aeron	WDCRF	-	-
1987-7210	2446985.04	1987 Jul 08 1300:00	Viper 3A	-	FALLING SPHERE	0.000	DMA	AS	BOMM/von Zahn	Aeron	WDCRF	-	-
1987-7213	2446987.01	1987 Jul 10 1212:00	Viper 3A	-	FALLING SPHERE	0.000	DMA	AS	BOMM/von Zahn	Aeron	WDCRF	-	-
1987-7215	2446990.33	1987 Jul 13 1955:00	Viper 3A	-	Ss-F18	0.000	DMA	AS	BOMM/von Zahn	Aeron	WDCRF	-	-
1987-7217	2446990.84	1987 Jul 14 0811:00	Viper 3A	-	FALLING SPHERE	0.000	DMA	AS	BOMM/von Zahn	Aeron	WDCRF	-	-
1987-7218	2446990.86	1987 Jul 14 0832:00	Viper 3A	-	FALLING SPHERE	0.000	DMA	AS	BOMM/von Zahn	Aeron	WDCRF	-	-
1987-7223	2446990.96	1987 Jul 14 1102:00	Viper 3A	-	FALLING SPHERE	0.000	DMA	AS	BOMM/von Zahn	Aeron	WDCRF	-	-





Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	OrbPay	Agency	Launch_Code	Group	Category	LCIcite	Cite	Notes
1994-Y20	2449594.50	1994 Aug 20 207	Viper 3A	-	Sphere	0.000	GSEC	SF	GSEC/UCO/Fritts,Goldbrg	Aeron	JOR102,26179	-	-
1994-Y08	2449594.66	1994 Aug 20 0366	Viper 3A	-	Sphere	0.000	GSEC	SS	GSEC/UCO/Fritts,Goldbrg	Aeron	JOR102,26179	-	-
1994-Y09	2449594.83	1994 Aug 20 0800	Viper 3A	-	Sphere	0.000	GSEC	SS	GSEC/UCO/Fritts,Goldbrg	Aeron	JOR102,26179	-	-
1994-Y10	2449594.96	1994 Aug 20 0835	Viper 3A	-	Sphere	0.000	GSEC	SS	GSEC/UCO/Fritts,Goldbrg	Aeron	JOR102,26179	-	-
1994-Y11	2449595.11	1994 Aug 20 1432	Viper 3A	-	Sphere	0.000	GSEC	SS	GSEC/UCO/Fritts,Goldbrg	Aeron	JOR102,26179	-	-
1994-Y12	2449596.11	1994 Aug 21 1439	Viper 3A	-	Sphere	0.000	GSEC	SS	GSEC/UCO/Fritts,Goldbrg	Aeron	JOR102,26179	-	-
1994-Y21	2449596.50	1994 Aug 22 1627	Viper 3A	-	Sphere	0.000	GSEC	SF	GSEC/UCO/Fritts,Goldbrg	Aeron	JOR102,26179	-	-
1994-Y13	2449597.19	1994 Aug 22 1346	Viper 3A	-	Sphere	0.000	GSEC	SS	GSEC/UCO/Fritts,Goldbrg	Aeron	JOR102,26179	-	-
1994-Y14	2449598.07	1994 Aug 24 1352	Viper 3A	-	Sphere	0.000	GSEC	SS	GSEC/UCO/Fritts,Goldbrg	Aeron	JOR102,26179	-	-
1994-Y15	2449599.08	1994 Aug 24 1352	Viper 3A	-	Sphere	0.000	GSEC	SS	GSEC/UCO/Fritts,Goldbrg	Aeron	JOR102,26179	-	-
1994-Y16	2449599.33	1994 Aug 24 2002	Viper 3A	-	Sphere	0.000	GSEC	SS	GSEC/UCO/Fritts,Goldbrg	Aeron	JOR102,26179	-	-
1994-Y22	2449599.50	1994 Aug 25 0244	Viper 3A	-	Sphere	0.000	GSEC	SF	GSEC/UCO/Fritts,Goldbrg	Aeron	JOR102,26179	-	-
1994-Y23	2449599.61	1994 Aug 25 0244	Viper 3A	-	Sphere	0.000	GSEC	SS	GSEC/UCO/Fritts,Goldbrg	Aeron	JOR102,26179	-	-
1994-Y24	2449599.89	1994 Aug 25 0926	Viper 3A	-	Sphere	0.000	GSEC	SS	GSEC/UCO/Fritts,Goldbrg	Aeron	JOR102,26179	-	-
1995-H04	2449796.50	1995 Mar 20	Viper 3A	?	Aeroscle	0.000	DLR	SS	DLR/	Aeron	Horaba	-	-
1995-H05	2449818.50	1995 Apr 11	Viper 3A	?	Aeroscle	0.000	DLR	SS	DLR/	Aeron	Horaba	-	-
1995-H06	2449839.50	1995 Apr 2	Viper 3A	?	Aeroscle	0.000	DLR	SS	DLR/	Aeron	Horaba	-	-
1995-H07	2449868.50	1995 May 31	Viper 3A	?	Wind	0.000	DLR	SS	DLR/	Aeron	Horaba	-	-
1995-H08	2450121.50	1995 Feb 6	Viper 3A	?	Wind	0.000	DLR	SS	DLR/	Aeron	Horaba	-	-
1996-T01	2450244.50	1996 Jun 10	Viper 3A	-	MAISA 12.48MT	0.000	GSEC	SF	WFF??	Aeron	www.univ-perp.fr	-	-
1996-T02	2450291.50	1996 Jun 10	Viper 3A	-	-	0.000	ARR	SF	TRUM/	Aeron	www.univ-perp.fr	-	-
1996-T03	2450294.50	1996 Jun 10	Viper 3A	-	-	0.000	ARR	SF	TRUM/	Aeron	www.univ-perp.fr	-	-
1996-T04	2450400.50	1996 Nov 13	Viper 3A	-	-	0.000	ARR	SS	TRUM/	Aeron	www.univ-perp.fr	-	-
1997-T01	2450463.05	1997 Jan 14 1200	Viper 3A	-	-	0.000	ISAS	SS	ISAS/CRLI/	Aeron	www.isas.ac.jp	-	-
1997-T02	2450463.05	1997 Jan 14 1315	Viper 3A	-	-	0.000	ISAS	SS	ISAS/CRLI/	Aeron	www.isas.ac.jp	-	-
1997-T03	2450590.50	1997 May 22	Viper 3A	-	-	0.000	ARR	SS	TRUM/	Aeron	www.univ-perp.fr	-	-
1997-T04	2450644.50	1997 Jun 15	Viper 3A	-	-	0.000	DLR	SS	ROM/	Aeron	www.univ-perp.fr	-	-
1997-T05	2450665.48	1997 Aug 4 2328	Viper 3A	-	Falling Sphere	0.000	DLR	SS	ROM/Lubben	Aeron	Horaba	-	-
1997-T06	2450665.48	1997 Aug 7 2302	Viper 3A	-	Falling Sphere 6	0.000	DLR	SS	ROM/Lubben	Aeron	www.op-dir.de	-	-
1997-T11	2450671.07	1997 Aug 10 1336	Viper 3A	-	Falling Sphere	0.000	GSEC	SS	WFF/Schmidlin	Aeron	criscta.uni-wup	-	-
1997-T12	2450671.49	1997 Aug 10 2351	Viper 3A	-	Falling Sphere 7	0.000	DLA	SS	ROM/Lubben	Aeron	www.op-dir.de	-	-
1997-T13	2450671.51	1997 Aug 11 0016	Viper 3A	-	Chart 3	0.000	DLA	SS	ROM/Lubben	Aeron	www.op-dir.de	-	-
1997-T14	2450672.07	1997 Aug 11 1343	Viper 3A	-	Falling Sphere	0.000	GSEC	SS	WFF/Schmidlin	Aeron	criscta.uni-wup	-	-
1997-T15	2450673.01	1997 Aug 12 1215	Viper 3A	-	Falling Sphere	0.000	GSEC	SS	WFF/Schmidlin	Aeron	criscta.uni-wup	-	-
1997-T16	2450675.02	1997 Aug 14 1227	Viper 3A	-	Sphere	0.000	DLA	SS	ROM/Lubben	Aeron	www.op-dir.de	-	-
1997-T17	2450675.35	1997 Aug 14 2000	Viper 3A	-	Sphere 6	0.000	DLA	SS	ROM/Lubben	Aeron	www.op-dir.de	-	-
1997-T18	2450675.35	1997 Aug 14 2022	Viper 3A	-	Chart 4	0.000	DLA	SS	ROM/Lubben	Aeron	www.op-dir.de	-	-
1997-T19	2450675.41	1997 Aug 14 2153	Viper 3A	-	Sphere	0.000	GSEC	SS	WFF/Schmidlin	Aeron	criscta.uni-wup	-	-
1997-T20	2450675.96	1997 Aug 15 1098	Viper 3A	-	-	0.000	GSEC	SS	WFF/Schmidlin	Aeron	criscta.uni-wup	-	-
1997-T21	2450695.90	1997 Sep 6	Viper 3A	-	-	0.000	DLR	SS	ROM/Lubben?	Aeron	Horaba	-	-
1997-T22	2450773.32	1997 Nov 20 1934.00	Viper 3A	-	F-111 ISB JORNI-2	0.000	DLR	SS	TRUM/Lubben?	Aeron	AUD-111H	-	-
1998-T01	2450816.30	1998 Jan 5 1910	Viper 3A	-	-	0.000	DLA	SS	ROM/FMS/Lubben	Aeron	ORL26,3581	-	-
1998-T02	2450816.30	1998 Jan 8 2200	Viper 3A	-	-	0.000	DLA	SS	ROM/FMS/Lubben	Aeron	ORL26,3581	-	-
1998-T03	2450822.26	1998 Jan 8 2615	Viper 3A	-	-	0.000	DLA	SS	ROM/FMS/Lubben	Aeron	ORL26,3581	-	-
1998-T04	2450822.26	1998 Jan 8 2115	Viper 3A	-	-	0.000	DLA	SS	ROM/FMS/Lubben	Aeron	ORL26,3581	-	-
1998-T05	2450824.12	1998 Jan 10 1700	Viper 3A	-	-	0.000	DLA	SS	ROM/FMS/Lubben	Aeron	ORL26,3581	-	-
1998-T06	2450826.24	1998 Jan 14 1635	Viper 3A	-	-	0.000	DLA	SS	ROM/FMS/Lubben	Aeron	ORL26,3581	-	-
1998-T07	2450830.11	1998 Jan 19 1705	Viper 3A	-	-	0.000	DLA	SS	ROM/FMS/Lubben	Aeron	ORL26,3581	-	-
1998-T08	2450833.55	1998 Jan 23 1305	Viper 3A	-	-	0.000	DLA	SS	ROM/FMS/Lubben	Aeron	ORL26,3581	-	-
1998-T09	2450833.55	1998 Jan 23 1715	Viper 3A	-	-	0.000	DLA	SS	ROM/FMS/Lubben	Aeron	ORL26,3581	-	-
1998-T10	2450837.95	1998 Jan 25 0500	Viper 3A	-	-	0.000	DLA	SS	ROM/FMS/Lubben	Aeron	ORL26,3581	-	-
1998-T11	2450837.95	1998 Jan 25 0700	Viper 3A	-	-	0.000	DLA	SS	ROM/FMS/Lubben	Aeron	ORL26,3581	-	-
1998-T12	2450840.70	1998 Jan 26 1703	Viper 3A	-	-	0.000	DLA	SS	ROM/FMS/Lubben	Aeron	ORL26,3581	-	-
1998-T13	2450840.70	1998 Jan 28 1705	Viper 3A	-	-	0.000	DLA	SS	ROM/FMS/Lubben	Aeron	ORL26,3581	-	-
1998-T14	2450844.51	1998 Jan 28 1700	Viper 3A	-	-	0.000	DLA	SS	ROM/FMS/Lubben	Aeron	ORL26,3581	-	-
1998-T15	2450846.36	1998 Feb 1 1815	Viper 3A	-	-	0.000	DLR	SS	ROM/FMS/Lubben	Aeron	ORL26,3581	-	-
1998-T16	2450846.37	1998 Feb 4 1815	Viper 3A	-	-	0.000	DLR	SS	ROM/FMS/Lubben	Aeron	ORL26,3581	-	-
1998-T17	2450851.22	1998 Feb 6 1718	Viper 3A	-	-	0.000	DLR	SS	ROM/FMS/Lubben	Aeron	ORL26,3581	-	-
1998-T18	2450852.17	1998 Feb 7 1610	Viper 3A	-	-	0.000	DLR	SS	ROM/FMS/Lubben	Aeron	ORL26,3581	-	-
1998-T19	2450854.26	1998 Feb 9 1810	Viper 3A	-	-	0.000	DLR	SS	ROM/FMS/Lubben	Aeron	ORL26,3581	-	-
1998-T20	2450856.35	1998 Feb 11 1800	Viper 3A	-	-	0.000	DLR	SS	ROM/FMS/Lubben	Aeron	ORL26,3581	-	-
1998-T21	2450858.21	1998 Feb 13 1700	Viper 3A	-	-	0.000	DLR	SS	ROM/FMS/Lubben	Aeron	ORL26,3581	-	-
1998-T22	2450862.07	1998 Feb 17 1334	Viper 3A	-	-	0.000	DLR	SS	ROM/FMS/Lubben	Aeron	ORL26,3581	-	-
1998-T23	2450862.20	1998 Feb 17 1647	Viper 3A	-	-	0.000	DLR	SS	ROM/FMS/Lubben	Aeron	ORL26,3581	-	-
1998-T24	2450864.21	1998 Feb 19 1700	Viper 3A	-	-	0.000	DLR	SS	ROM/FMS/Lubben	Aeron	ORL26,3581	-	-
1998-T25	2450868.34	1998 Feb 23 2015	Viper 3A	-	-	0.000	DLR	SS	ROM/FMS/Lubben	Aeron	ORL26,3581	-	-
1998-T26	2450870.17	1998 Feb 23 1605	Viper 3A	-	-	0.000	DLR	SS	ROM/FMS/Lubben	Aeron	ORL26,3581	-	-
1998-T27	2450872.38	1998 Feb 27 2100	Viper 3A	-	-	0.000	DLR	SS	ROM/FMS/Lubben	Aeron	ORL26,3581	-	-
1999-Y05	2451364.60	1999 Jul 5 0004	Viper 3A	-	MD-FS-02	0.000	DLR	SS	NOSE/IMP/	Aeron	AUD-111H	-	-
1999-Y06	2451365.47	1999 Jul 5 2313	Viper 3A	-	MD-FS-03	0.000	NOSE	SS	NOSE/IMP/	Aeron	AUD-111H	-	-
1999-Y07	2451365.53	1999 Jul 6 0046	Viper 3A	-	MD-WM-06	0.000	NOSE	SS	NOSE/IMP/	Aeron	AUD-111H	-	-
1999-Y08	2451365.55	1999 Jul 6 0111	Viper 3A	-	MD-WM-07	0.000	NOSE	SS	NOSE/IMP/	Aeron	AUD-111H	-	-
1999-Y09	2451365.56	1999 Jul 6 0149	Viper 3A	-	MD-FS-08	0.000	NOSE	SS	NOSE/IMP/	Aeron	AUD-111H	-	-
1999-Y10	2451365.59	1999 Jul 6 0209.30	Viper 3A	-	MD-FS-09	0.000	NOSE	SS	NOSE/IMP/	Aeron	AUD-111H	-	-
1999-Y11	2451373.60	1999 Jul 14 0226	Viper 3A	-	MD-FS-10	0.000	NOSE	SS	NOSE/IMP/	Aeron	AUD-111H	-	-
1999-Y12	2451373.66	1999 Jul 14 0351	Viper 3A	-	MD-WD-12	0.000	NOSE	SS	NOSE/IMP/	Aeron	AUD-111H	-	-
1999-Y13	2451373.67	1999 Jul 14 0438	Viper 3A	-	MD-FS-14	0.000	NOSE	SS	NOSE/IMP/	Aeron	AUD-111H	-	-
1999-Y14	2451373.67	1999 Jul 14 0438	Viper 3A	-	MD-FS-14	0.000	NOSE	SS	NOSE/IMP/	Aeron	AUD-111H	-	-
1999-Y15	2451373.71	1999 Jul 14 0504	Viper 3A	-	MD-CH-16	0.000	NOSE	SS	NOSE/IMP/	Aeron	AUD-111H	-	-
1999-Y16	2451373.71	1999 Jul 16 0904	Viper 3A	-	MD-FS-17	0.000	NOSE	SS	NOSE/IMP/	Aeron	AUD-111H	-	-
1999-Y17	2451375.88	1999 Jul 16 1012	Viper 3A	-	MD-FS-18	0.000	NOSE	SS	NOSE/IMP/	Aeron	AUD-111H	-	-
1999-Y18	2451375.88	1999 Jul 16 1012	Viper 3A	-	MD-FS-18	0.000	NOSE	SS	NOSE/IMP/	Aeron	AUD-111H	-	-
1999-Y20	2451407.03	1999 Aug 16 1245.00	Viper 3A	-	Tr-S-01 Sphere	0.000	DLR	SS	NOSE/IMP/	Aeron	AUD-111H	-	-
1999-Y21	2451407.91	1999 Aug 17 0944.00	Viper 3A	-	Tr-S-02 Sphere	0.000	DLR	SS	NOSE/IMP/	Aeron	AUD-111H	-	-
1999-Y22	2451407.91	1999 Aug 17 0944.00	Viper 3A	-	Tr-S-02 Sphere	0.000	DLR	SS	NOSE/IMP/	Aeron	AUD-111H	-	-
1999-Y23	2451408.93	1999 Aug 18 1023.00	Viper 3A	-	Tr-S-03 Sphere	0.000	DLR	SS	NOSE/IMP/	Aeron	AUD-111H	-	-

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	OrbPay	Agency	Launch_Code	Group	Category	LTCite	Cite	Notes
1989-424	2451408.94	1989 Aug 18 1039:00	Viper 3A	-	TR-C-04 Chaff	0.000	DLR	SS	BOMM/Lubben	Aeron	www.rocketrange.mo	-	-
1989-425	2451408.97	1989 Aug 18 1111:25	Viper 3A	-	TR-C-05 Sphere	0.000	DLR	SS	BOMM/Lubben	Aeron	www.rocketrange.mo	-	-
1989-426	2451413.94	1989 Aug 23 1030:00	Viper 3A	-	TR-S-06 Sphere	0.000	DLR	SS	BOMM/Lubben	Aeron	www.rocketrange.mo	-	-
1989-427	2451416.92	1989 Aug 26 1000:00	Viper 3A	-	TR-S-07 Sphere	0.000	DLR	SS	BOMM/Lubben	Aeron	www.rocketrange.mo	-	-
1989-428	2451416.93	1989 Aug 26 1017:00	Viper 3A	-	TR-C-08 Chaff	0.000	DLR	SS	BOMM/Lubben	Aeron	www.rocketrange.mo	-	-
1989-429	2451420.92	1989 Aug 30 1000:00	Viper 3A	-	TR-S-09 Sphere	0.000	DLR	SS	BOMM/Lubben	Aeron	www.rocketrange.mo	-	-
1989-430	2451427.92	1989 Sep 6 1000:00	Viper 3A	-	TR-S-10 Sphere	0.000	DLR	SS	BOMM/Lubben	Aeron	www.rocketrange.mo	-	-
1989-431	2451430.83	1989 Sep 9 0800:00	Viper 3A	-	TR-S-11 Sphere	0.000	DLR	SS	BOMM/Lubben	Aeron	www.rocketrange.mo	-	-
1989-432	2451435.92	1989 Sep 14 1000:00	Viper 3A	-	TR-S-12 Sphere	0.000	DLR	SS	BOMM/Lubben	Aeron	www.rocketrange.mo	-	-
1989-433	2451435.96	1989 Sep 14 1000:00	Viper 3A	-	TR-S-13 Sphere	0.000	DLR	SS	BOMM/Lubben	Aeron	www.rocketrange.mo	-	-
1989-434	2451437.92	1989 Sep 16 1000:00	Viper 3A	-	TR-S-14 Sphere	0.000	DLR	SS	BOMM/Lubben	Aeron	www.rocketrange.mo	-	-
1989-435	2451439.92	1989 Sep 18 1000:00	Viper 3A	-	TR-S-15 Sphere	0.000	DLR	SS	BOMM/Lubben	Aeron	www.rocketrange.mo	-	-
1989-436	2451441.92	1989 Sep 20 1004:00	Viper 3A	-	TR-S-16 Sphere	0.000	DLR	SS	BOMM/Lubben	Aeron	www.rocketrange.mo	-	-
1989-437	2451443.92	1989 Sep 22 1003:00	Viper 3A	-	TR-S-17 Sphere	0.000	DLR	SS	BOMM/Lubben	Aeron	www.rocketrange.mo	-	-
1989-438	2451501.24	1989 Nov 18 1745	Viper 3A	-	FLASP/RLD/	0.000	SPFL	SS	FLASP/RLD/	Aeron/Meteorites	Wire	-	-
2000-410	2451671.18	2000 May 6 1621	Viper 3A	-	AS-FS-01	0.000	DLR	SS	NORE/THF/	Aeron	AID-WW	ESASP-471-121	-
2000-411	2451671.20	2000 May 6 1641	Viper 3A	-	AS-FS-02	0.000	DLR	SS	NORE/THF/	Aeron	AID-WW	ESASP-471-121	-
2000-412	2451679.52	2000 May 15 0032	Viper 3A	-	AS-FS-04	0.000	DLR	SS	NORE/THF/	Aeron	AID-WW	ESASP-471-121	-
2000-413	2451679.55	2000 May 15 0112	Viper 3A	-	AS-FS-04	0.000	DLR	SS	NORE/THF/	Aeron	AID-WW	ESASP-471-121	-
2001-402	2452046.07	2001 May 16 1341:00	Viper 3A	?	MSA 12.0490T	0.000	GSFC	SS	USO/Ultack	Test	WFF-WW	-	-
2001-403	2452069.11	2001 Jun 6 1432:00	Viper 3A	-	SO-FS-01	0.000	DLR	SS	NORE/THF/	Aeron	AID-WW	-	-
2001-404	2452072.85	2001 Jun 12 0140:30	Viper 3A	-	SO-FS-02	0.000	DLR	SS	NORE/THF/	Aeron	AID-WW	-	-
2001-405	2452074.57	2001 Jun 14 0134:30	Viper 3A	-	SO-FS-03	0.000	DLR	SS	NORE/THF/	Aeron	AID-WW	-	-
2001-406	2452077.49	2001 Jun 16 2351:00	Viper 3A	-	SO-FS-04	0.000	DLR	SS	NORE/THF/	Aeron	AID-WW	-	-
2001-407	2452077.52	2001 Jun 17 0036	Viper 3A	-	SO-CH-06	0.000	DLR	SS	NORE/THF/	Aeron	AID-WW	-	-
2001-408	2452077.54	2001 Jun 17 0059	Viper 3A	-	SO-FS-07	0.000	DLR	SS	NORE/THF/	Aeron	AID-WW	-	-
2001-409	2452077.85	2001 Jun 17 0119	Viper 3A	-	SO-CH-06	0.000	DLR	SS	NORE/THF/	Aeron	AID-WW	-	-
2001-410	2452081.57	2001 Jun 21 0144	Viper 3A	-	SO-CH-09	0.000	DLR	SS	NORE/THF/	Aeron	AID-WW	-	-
2001-411	2452085.36	2001 Jun 24 2104	Viper 3A	-	SO-FS-10	0.000	DLR	SS	NORE/THF/	Aeron	AID-WW	-	-
2001-412	2452085.41	2001 Jun 24 2151:00	Viper 3A	-	SO-FS-10	0.000	DLR	SS	NORE/THF/	Aeron	AID-WW	-	-
2001-413	2452085.43	2001 Jun 24 2220:10	Viper 3A	-	SO-CH-12	0.000	DLR	SS	NORE/THF/	Aeron	AID-WW	-	-
2001-414	2452085.45	2001 Jun 24 2245:15	Viper 3A	-	SO-CH-14	0.000	DLR	SS	NORE/THF/	Aeron	AID-WW	-	-
2001-415	2452085.46	2001 Jun 24 2245:15	Viper 3A	-	SO-CH-14	0.000	DLR	SS	NORE/THF/	Aeron	AID-WW	-	-
2001-416	2452106.96	2001 Jul 16 1125	Viper 3A	-	RDFS-01	0.000	DLA	SS	LAP/Lubben	Aeron	AID-WW	-	-
2001-417	2452109.97	2001 Jul 19 1117:20	Viper 3A	-	RDFS-02	0.000	DLA	SS	LAP/Lubben	Aeron	AID-WW	-	-
2001-418	2452113.01	2001 Jul 22 1220:00	Viper 3A	-	RDFS-03	0.000	DLA	SS	LAP/Lubben	Aeron	AID-WW	-	-
2001-419	2452113.04	2001 Jul 22 1220:00	Viper 3A	-	RDFS-03	0.000	DLA	SS	LAP/Lubben	Aeron	AID-WW	-	-
2001-420	2452115.92	2001 Jul 25 1000:00	Viper 3A	-	RDFS-05	0.000	DLA	SS	LAP/Lubben	Aeron	AID-WW	-	-
2001-421	2452115.92	2001 Jul 25 1000:00	Viper 3A	-	RDFS-05	0.000	DLA	SS	LAP/Lubben	Aeron	AID-WW	-	-
2001-422	2452116.92	2001 Jul 28 1007:00	Viper 3A	-	RDFS-06	0.000	DLA	SS	LAP/Lubben	Aeron	AID-WW	-	-
2001-423	2452121.86	2001 Jul 31 0900:00	Viper 3A	-	RDFS-07	0.000	DLA	SS	LAP/Lubben	Aeron	AID-WW	-	-
2001-424	2452121.91	2001 Jul 31 0900:00	Viper 3A	-	RDFS-07	0.000	DLA	SS	LAP/Lubben	Aeron	AID-WW	-	-
2001-425	2452124.25	2001 Aug 2 1800:00	Viper 3A	-	RDFS-09	0.000	DLA	SS	LAP/Lubben	Aeron	AID-WW	-	-
2001-426	2452127.89	2001 Aug 6 0935:00	Viper 3A	-	RDFS-09	0.000	DLA	SS	LAP/Lubben	Aeron	AID-WW	-	-
2001-427	2452130.89	2001 Aug 9 0135:00	Viper 3A	-	RDFS-11	0.000	DLA	SS	LAP/Lubben	Aeron	AID-WW	-	-
2001-428	2452133.89	2001 Aug 12 1146:00	Viper 3A	-	RDFS-12	0.000	DLA	SS	LAP/Lubben	Aeron	AID-WW	-	-
2001-429	2452135.89	2001 Aug 12 1146:00	Viper 3A	-	RDFS-12	0.000	DLA	SS	LAP/Lubben	Aeron	AID-WW	-	-
2001-430	2452138.89	2001 Aug 17 1138:00	Viper 3A	-	RDFS-13	0.000	DLA	SS	LAP/Lubben	Aeron	AID-WW	-	-
2001-431	2452139.01	2001 Aug 17 1138:00	Viper 3A	-	RDFS-13	0.000	DLA	SS	LAP/Lubben	Aeron	AID-WW	-	-
2001-432	2452141.93	2001 Aug 20 1743:00	Viper 3A	-	RDFS-14	0.000	DLA	SS	LAP/Lubben	Aeron	AID-WW	-	-
2001-433	2452141.93	2001 Aug 20 1743:00	Viper 3A	-	RDFS-14	0.000	DLA	SS	LAP/Lubben	Aeron	AID-WW	-	-
2001-434	2452142.93	2001 Aug 20 1743:00	Viper 3A	-	RDFS-14	0.000	DLA	SS	LAP/Lubben	Aeron	AID-WW	-	-
2001-435	2452142.93	2001 Aug 20 1743:00	Viper 3A	-	RDFS-14	0.000	DLA	SS	LAP/Lubben	Aeron	AID-WW	-	-
2001-436	2452144.92	2001 Aug 23 1009:00	Viper 3A	-	RDFS-15	0.000	DLA	SS	LAP/Lubben	Aeron	AID-WW	-	-
2001-437	2452144.92	2001 Aug 23 1009:00	Viper 3A	-	RDFS-15	0.000	DLA	SS	LAP/Lubben	Aeron	AID-WW	-	-
2001-438	2452145.95	2001 Aug 23 1045:00	Viper 3A	-	RDFS-16	0.000	DLA	SS	LAP/Lubben	Aeron	AID-WW	-	-
2001-439	2452145.95	2001 Aug 23 1045:00	Viper 3A	-	RDFS-16	0.000	DLA	SS	LAP/Lubben	Aeron	AID-WW	-	-
2001-440	2452150.43	2001 Aug 28 2148:39	Viper 3A	-	RDFS-19	0.000	DLA	SS	LAP/Lubben	Aeron	AID-WW	-	-
2001-441	2452150.43	2001 Aug 28 2148:39	Viper 3A	-	RDFS-19	0.000	DLA	SS	LAP/Lubben	Aeron	AID-WW	-	-
2001-442	2452150.89	2001 Aug 28 2148:39	Viper 3A	-	RDFS-19	0.000	DLA	SS	LAP/Lubben	Aeron	AID-WW	-	-
2001-443	2452150.89	2001 Aug 28 2148:39	Viper 3A	-	RDFS-19	0.000	DLA	SS	LAP/Lubben	Aeron	AID-WW	-	-
2001-444	2452150.89	2001 Aug 28 2148:39	Viper 3A	-	RDFS-19	0.000	DLA	SS	LAP/Lubben	Aeron	AID-WW	-	-
2001-445	2452150.89	2001 Aug 28 2148:39	Viper 3A	-	RDFS-19	0.000	DLA	SS	LAP/Lubben	Aeron	AID-WW	-	-
2001-446	2452150.89	2001 Aug 28 2148:39	Viper 3A	-	RDFS-19	0.000	DLA	SS	LAP/Lubben	Aeron	AID-WW	-	-
2001-447	2452150.89	2001 Aug 28 2148:39	Viper 3A	-	RDFS-19	0.000	DLA	SS	LAP/Lubben	Aeron	AID-WW	-	-
2001-448	2452150.89	2001 Aug 28 2148:39	Viper 3A	-	RDFS-19	0.000	DLA	SS	LAP/Lubben	Aeron	AID-WW	-	-
2001-449	2452150.89	2001 Aug 28 2148:39	Viper 3A	-	RDFS-19	0.000	DLA	SS	LAP/Lubben	Aeron	AID-WW	-	-
2001-450	2452150.89	2001 Aug 28 2148:39	Viper 3A	-	RDFS-19	0.000	DLA	SS	LAP/Lubben	Aeron	AID-WW	-	-
2001-451	2452150.89	2001 Aug 28 2148:39	Viper 3A	-	RDFS-19	0.000	DLA	SS	LAP/Lubben	Aeron	AID-WW	-	-
2001-452	2452150.89	2001 Aug 28 2148:39	Viper 3A	-	RDFS-19	0.000	DLA	SS	LAP/Lubben	Aeron	AID-WW	-	-
2001-453	2452150.89	2001 Aug 28 2148:39	Viper 3A	-	RDFS-19	0.000	DLA	SS	LAP/Lubben	Aeron	AID-WW	-	-
2001-454	2452150.89	2001 Aug 28 2148:39	Viper 3A	-	RDFS-19	0.000	DLA	SS	LAP/Lubben	Aeron	AID-WW	-	-
2001-455	2452150.89	2001 Aug 28 2148:39	Viper 3A	-	RDFS-19	0.000	DLA	SS	LAP/Lubben	Aeron	AID-WW	-	-
2001-456	2452150.89	2001 Aug 28 2148:39	Viper 3A	-	RDFS-19	0.000	DLA	SS	LAP/Lubben	Aeron	AID-WW	-	-
2001-457	2452150.89	2001 Aug 28 2148:39	Viper 3A	-	RDFS-19	0.000	DLA	SS	LAP/Lubben	Aeron	AID-WW	-	-
2001-458	2452150.89	2001 Aug 28 2148:39	Viper 3A	-	RDFS-19	0.000	DLA	SS	LAP/Lubben	Aeron	AID-WW	-	-
2001-459	2452150.89	2001 Aug 28 2148:39	Viper 3A	-	RDFS-19	0.000	DLA	SS	LAP/Lubben	Aeron	AID-WW	-	-
2001-460	2452150.89	2001 Aug 28 2148:39	Viper 3A	-	RDFS-19	0.000	DLA	SS	LAP/Lubben	Aeron	AID-WW	-	-
2001-461	2452150.89	2001 Aug 28 2148:39	Viper 3A	-	RDFS-19	0.000	DLA	SS	LAP/Lubben	Aeron	AID-WW	-	-
2001-462	2452150.89	2001 Aug 28 2148:39	Viper 3A	-	RDFS-19	0.000	DLA	SS	LAP/Lubben	Aeron	AID-WW	-	-
2001-463	2452150.89	2001 Aug 28 2148:39	Viper 3A	-	RDFS-19	0.000	DLA	SS	LAP/Lubben	Aeron	AID-WW	-	-
2001-464	2452150.89	2001 Aug 28 2148:39	Viper 3A	-	RDFS-19	0.000	DLA	SS	LAP/Lubben	Aeron	AID-WW	-	-
2001-465	2452150.89	2001 Aug 28 2148:39	Viper 3A	-	RDFS-19	0.000	DLA	SS	LAP/Lubben	Aeron	AID-WW	-	-
2001-466	2452150.89	2001 Aug 28 2148:39	Viper 3A	-	RDFS-19	0.000	DLA	SS	LAP/Lubben	Aeron	AID-WW	-	-
2001-467	2452150.89	2001 Aug 28 2148:39	Viper 3A	-	RDFS-19	0.000	DLA	SS	LAP/Lubben	Aeron	AID-WW	-	-
2001-468	2452150.89	2001 Aug 28 2148:39	Viper 3A	-	RDFS-19	0.000	DLA	SS	LAP/Lubben	Aeron	AID-WW	-	-
2001-469	2452150.89	2001 Aug 28 2148:39	Viper 3A	-	RDFS-19	0.000	DLA	SS	LAP/Lubben	Aeron	AID-WW	-	-
2001-470	2452150.89	2001 Aug 28 2148:39	Viper 3A	-	RDFS-19	0.000	DLA	SS	LAP/Lubben	Aeron	AID-WW	-	-
2001-471	2452150.89	2001 Aug 28 2148:39	Viper 3A	-	RDFS-19	0.000	DLA	SS	LAP/Lubben	Aeron	AID-WW	-	-
2001-472	2452150.89	2001 Aug 28 2148:39	Viper 3A	-	RDFS-19	0.000	DLA	SS	LAP/Lubben	Aeron	AID-WW	-	-
2001-473	2452150.89	2001 Aug 28 2148:39	Viper 3A	-	RDFS-19	0.000	DLA	SS	LAP/Lubben	Aeron	AID-WW</		

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	OrbPay	Agency	Launch_Code	Group	Category	LCIcite	Cite	Notes
2002-435	2465257.92	2002 Sep 10 1000	Viper 3A	-	-	0.000	DLR	SS	IMF/Lubken	Aeron	AID-WW	-	-
2002-436	2465250.95	2002 Sep 13 1050	Viper 3A	-	-	0.000	DLR	SS	IMF/Lubken	Aeron	AID-WW	-	-
2002-437	2465253.94	2002 Sep 14 1027	Viper 3A	-	-	0.000	DLR	SS	IMF/Lubken	Aeron	AID-WW	-	-
2002-438	2465254.92	2002 Sep 17 1000	Viper 3A	-	-	0.000	DLR	SS	IMF/Lubken	Aeron	AID-WW	-	-
2002-439	2465257.92	2002 Sep 20 1000	Viper 3A	-	-	0.000	DLR	SS	IMF/Lubken	Aeron	AID-WW	-	-
2002-440	2465257.94	2002 Sep 20 1036:30	Viper 3A	-	-	0.000	DLR	SS	IMF/Lubken	Aeron	AID-WW	-	-
2002-441	2465259.92	2002 Sep 22 1000	Viper 3A	-	-	0.000	DLR	SS	IMF/Lubken	Aeron	AID-WW	-	-
2002-442	2465254.92	2002 Sep 26 1000	Viper 3A	-	-	0.000	DLR	SS	IMF/Lubken	Aeron	AID-WW	-	-
2002-443	2465254.92	2002 Sep 29 1000	Viper 3A	-	-	0.000	DLR	SS	IMF/Lubken	Aeron	AID-WW	-	-
2002-444	24652546.93	2002 Sep 29 1019	Viper 3A	-	-	0.000	DLR	SS	IMF/Lubken	Aeron	AID-WW	-	-
2002-445	24652548.46	2002 Sep 30 2305	Viper 3A	-	-	0.000	DLR	SS	IMF/Lubken	Aeron	AID-WW	-	-
2002-446	24652552.42	2002 Oct 4 2200	Viper 3A	-	-	0.000	DLR	SS	IMF/Lubken	Aeron	AID-WW	-	-
2002-447	24652554.92	2002 Oct 7 1000	Viper 3A	-	-	0.000	DLR	SS	IMF/Lubken	Aeron	AID-WW	-	-
2002-448	24652554.92	2002 Oct 7 1025	Viper 3A	-	-	0.000	DLR	SS	IMF/Lubken	Aeron	AID-WW	-	-
2002-449	24652554.95	2002 Oct 7 1048	Viper 3A	-	-	0.000	DLR	SS	IMF/Lubken	Aeron	AID-WW	-	-
2002-450	24652557.92	2002 Oct 10 1000	Viper 3A	-	-	0.000	DLR	SS	IMF/Lubken	Aeron	AID-WW	-	-
2002-461	24652557.94	2002 Oct 10 1029	Viper 3A	-	-	0.000	DLR	SS	IMF/Lubken	Aeron	AID-WW	-	-
2004-379	2465268.45	2004 Sep 19 0001	Viper 3A	?	-	0.000	GSFC	SS	CLEM/Lemacher	Aeron	ESASPS90-167	-	-
2004-380	2465268.50	2004 Sep 20 0001	Viper 3A	?	-	0.000	GSFC	SS	CLEM/Lemacher	Aeron	ESASPS90-167	-	-
2005-104	2465385.68	2004 Sep 20 0200	Viper 3A	?	-	0.000	DLR	SS	IMF/Lubken	Aeron	ESASPS90-167	-	-
2005-105	2465385.69	2005 Jan 18 0918	Viper 3A	-	Mini-MIDAS RPM-01	0.000	DLR	SS	IMF/NDRE/Lubken,Brattll	Aeron	www.rocketrange.no	ESASPS90-109	-
2005-106	2465385.98	2005 Jan 18 1206:00	Viper 3A	-	Mini-MIDAS RPM-02	0.000	DLR	SS	IMF/NDRE/Lubken,Brattll	Aeron	www.rocketrange.no	ESASPS90-109	-
2005-107	2465385.02	2005 Jan 18 1236:00	Viper 3A	-	RDM/Miner (RW)	0.000	DLR	SS	IMF/Lubken	Aeron	www.rocketrange.no	-	-
2005-108	2465385.05	2005 Jan 18 1315:00	Viper 3A	-	-	0.000	DLR	SS	IMF/Lubken	Aeron	www.rocketrange.no	-	-
2005-110	2465385.11	2005 Jan 18 1442	Viper 3A	-	-	0.000	DLR	SS	IMF/Lubken	Aeron	www.rocketrange.no	-	-
2005-111	2465385.15	2005 Jan 18 1551	Viper 3A	-	-	0.000	DLR	SS	IMF/Lubken	Aeron	www.rocketrange.no	-	-
2005-114	2465385.20	2005 Jan 18 1654	Viper 3A	-	-	0.000	DLR	SS	IMF/Lubken	Aeron	www.rocketrange.no	-	-
2005-115	2465385.23	2005 Jan 18 1724	Viper 3A	-	-	0.000	DLR	SS	IMF/Lubken	Aeron	www.rocketrange.no	-	-
2005-116	2465385.27	2005 Jan 18 1835	Viper 3A	-	-	0.000	DLR	SS	IMF/Lubken	Aeron	www.rocketrange.no	-	-
2005-117	2465390.67	2005 Jan 20 0846	Viper 3A	-	-	0.000	DLA	SS	IMF/Lubken	Aeron	www.rocketrange.no	-	-
2005-119	2465390.96	2005 Jan 20 1100	Viper 3A	-	-	0.000	DLA	SS	IMF/Lubken	Aeron	www.rocketrange.no	-	-
2005-120	2465390.96	2005 Jan 20 1130	Viper 3A	-	-	0.000	DLA	SS	IMF/Lubken	Aeron	www.rocketrange.no	-	-
2005-121	2465391.01	2005 Jan 20 1219	Viper 3A	-	-	0.000	DLA	SS	IMF/Lubken	Aeron	www.rocketrange.no	-	-
2005-122	2465392.05	2005 Jan 21 1306	Viper 3A	-	-	0.000	DLA	SS	IMF/Lubken	Aeron	www.rocketrange.no	-	-
2005-123	2465395.66	2005 Jan 25 0130	Viper 3A	-	-	0.000	DLA	SS	IMF/Lubken	Aeron	www.rocketrange.no	-	-
2005-124	2465395.65	2005 Jan 25 0530	Viper 3A	-	-	0.000	DLA	SS	IMF/Lubken	Aeron	www.rocketrange.no	-	-
2005-125	2465395.73	2005 Jan 25 0530	Viper 3A	-	-	0.000	DLA	SS	IMF/Lubken	Aeron	www.rocketrange.no	-	-
2005-126	2465395.61	2005 Jan 25 0730	Viper 3A	-	-	0.000	DLA	SS	IMF/Lubken	Aeron	www.rocketrange.no	-	-
2009-671	2465060.89	2009 Aug 17 1162	Viper 3A	-	-	0.000	WFF	SS	WFF	Aeron	nasaspacelights.com	-	-
2009-674	2465060.80	2009 Aug 17 1162	Viper 3A	-	-	0.000	WFF	SS	WFF	Aeron	www.nasa.gov	-	-
2012-391	2466131.80	2012 Jul 23	Viper 3A	-	-	0.000	WFF	SS	WFF	Aeron	www.nasa.gov	-	-
2012-392	2466131.80	2012 Jul 23	Viper 3A	-	-	0.000	WFF	SS	WFF	Aeron	www.nasa.gov	-	-
2012-393	2466131.80	2012 Jul 23	Viper 3A	-	-	0.000	WFF	SS	WFF	Aeron	www.nasa.gov	-	-
2012-394	2466131.80	2012 Jul 23	Viper 3A	-	-	0.000	WFF	SS	WFF	Aeron	www.nasa.gov	-	-
2016-A108	2467626.80	2016 Sep 19	DART	-	TH-01	0.000	THIUS	AS	THIUS/	Test	www.nasa.gov	-	-
2016-A109	2467626.80	2016 Sep 19	DART	-	TH-02	0.000	THIUS	AS	THIUS/	Test	www.nasa.gov	-	-
2020-533	2469111.80	2020 Sep 19 0039:47	DART	-	TED-01	0.000	SLUNCH	AS	DEIC/RAF/	Tech	t-minus.nl	-	-
2020-534	2469111.80	2020 Sep 19 0219:47	DART	-	TED-02	0.000	SLUNCH	AS	DEIC/RAF/	Tech	Wire	-	-
2021-426	2469490.80	2021 Oct 3	DART	-	TED-02?	0.000	THIUS	SS	THIUS/	Test	Wire	-	-
2022-421	2469821.80	2022 Aug 30	DART	-	TED-3/VEZNDK	0.000	THIUS	SS	THIUS/	Test	t-minus.nl	-	-
2024-402	2460347.80	2024 Feb 7	DART	-	-	0.000	THIUS	SS	THIUS/	Aeron?	southerrlaunch_space	-	-
											Linkedin.com	-	-





Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Mission	FlightCode	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee km	Range km	Dest
2024-006	2460317.80	2024 Jan 8 0718	Vulcan Centaur	VC2S	V-001	Peregrine	CERT-1	-	-	CC	SLC01	-	-	-	-	-
2024-179	2460387.98	2024 Oct 4 1126:00	Vulcan Centaur	VC2S	V-002	CERT-2	CERT-2	-	-	CC	SLC01	-	-	-	-	-



Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Launch_Flight_ID	OrbPay	Agency	Launch_Code	Group	Category	LTCite	Cite	Notes
2024-006	2460317.80	2024 Jan 8 0718	Vulcan Centaur VC2S	-	V-001	1.287	ULAD	DS	C	Sat EED 0	Wire	-	-
2024-179	2460587.98	2024 Oct 4 1126:00	Vulcan Centaur VC2S	-	V-002	1.000	ULAD	DS	C	Sat EED 0	Wire	-	-



Launch

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Mission	FlightCode	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee_Km	Range_Km	Dest
1945-A35	2431725-21	1945 Sep 26 1700	Thly Tlm	-	A	Booster test	-	-	-	WS	ALAI	-	-	4	-	-
1945-A36	2431724-50	1945 Sep 26	Thly Tlm	-	B	Booster test	-	-	-	WS	ALAI	-	-	4	-	-
1945-A37	2431724-50	1945 Sep 26	Thly Tlm	-	C	Booster test	-	-	-	WS	ALAI	-	-	4	-	-
1945-A38	2431725-50	1945 Sep 27	WAC	-	D	Booster test	-	-	-	WS	ALAI	-	-	4	-	-
1945-A04	2431725-50	1945 Sep 27	WAC	-	1	Dummy	-	-	-	WS	ALAI	-	-	2?	-	-
1945-A05	2431726-50	1945 Sep 28	WAC	-	2	Dummy	-	-	-	WS	ALAI	-	-	2	-	-
1945-A06	2431729-50	1945 Oct 1	WAC	-	3	L/4 Charge	-	-	-	WS	ALAI	-	-	8	-	-
1945-A07	2431730-50	1945 Oct 2	WAC	-	4	L/4 Charge	-	-	-	WS	ALAI	-	-	8	-	-
1945-M02	2431739-50	1945 Oct 11	WAC A	-	5	-	-	-	-	WS	ALAI	-	-	72	-	-
1945-M03	2431740-50	1945 Oct 12	WAC A	-	6	-	-	-	-	WS	ALAI	-	-	72	-	-
1945-A15	2431744-50	1945 Oct 16	WAC A	-	7	-	-	-	-	WS	ALAI	-	-	27	-	-
1945-M04	2431747-50	1945 Oct 19	WAC A	-	8	-	-	-	-	WS	ALAI	-	-	20?	-	-
1945-A16	2431753-50	1945 Oct 25	WAC A	-	9	-	-	-	-	WS	ALAI	-	-	20?	-	-
1945-A17	2431753-50	1945 Oct 25	WAC A	-	10	-	-	-	-	WS	ALAI	-	-	4	-	-
1946-A27	2431947-50	1946 May 7	Thly Tlm	-	11	-	-	-	-	WS	ALAI	-	-	4	-	-
1946-M04	2431960-50	1946 May 10	WAC A	-	12	Demo round	-	-	-	WS	ALAI	-	-	20?	-	-
1946-A28	2431960-50	1946 May 20	Thly Tlm	-	13	-	-	-	-	WS	ALAI	-	-	4	-	-
1946-A29	2431963-50	1946 May 23	Thly Tlm	-	14	-	-	-	-	WS	ALAI	-	-	4	-	-
1946-A30	2431963-50	1946 May 23	Thly Tlm	-	15	-	-	-	-	WS	ALAI	-	-	4	-	-
1946-A31	2431964-50	1946 May 24	Thly Tlm	-	16	-	-	-	-	WS	ALAI	-	-	4	-	-
1946-A32	2431964-50	1946 May 24	Thly Tlm	-	17	-	-	-	-	WS	ALAI	-	-	4	-	-
1946-A33	2431966-50	1946 May 26	Thly Tlm	-	18	-	-	-	-	WS	ALAI	-	-	4	-	-
1946-A34	2431966-50	1946 May 26	Thly Tlm	-	19	-	-	-	-	WS	ALAI	-	-	4	-	-
1946-A35	2431969-50	1946 May 29	Thly Tlm	-	20	-	-	-	-	WS	ALAI	-	-	4	-	-
1946-A21	2432156-50	1946 Dec 2	WAC B	-	21	Booster test	-	-	-	WS	ALAI	-	-	4	-	-
1946-A22	2432157-50	1946 Dec 3	WAC B	-	22	Modified WAC A	-	-	-	WS	ALAI	-	-	20	-	-
1946-A23	2432160-50	1946 Dec 6	WAC B	-	23	-	-	-	-	WS	ALAI	-	-	27	-	-
1946-A24	2432166-50	1946 Dec 12	WAC B	-	24	-	-	-	-	WS	ALAI	-	-	32	-	-
1946-A25	2432166-50	1946 Dec 12	WAC B	-	25	-	-	-	-	WS	ALAI	-	-	49	-	-
1946-M01	2432167-50	1946 Dec 13	WAC B	-	26	-	-	-	-	WS	ALAI	-	-	53	-	-
1947-A05	2432234-50	1947 Feb 16	WAC B	-	27B	-	-	-	-	WS	ALAI	-	-	4?	-	-
1947-A06	2432235-50	1947 Feb 19	WAC B	-	28B	-	-	-	-	WS	ALAI	-	-	44	-	-
1947-M02	2432240-50	1947 Feb 24	WAC B	-	29B	-	-	-	-	WS	ALAI	-	-	73	-	-
1947-M03	2432247-50	1947 Mar 3	WAC B	-	30B	-	-	-	-	WS	ALAI	-	-	63	-	-
1947-M05	2432346-50	1947 Jun 12	WAC B	-	39B?	-	-	-	-	WS	ALAI	-	-	60	-	-
1949-A15	2433046-25	1949 May 9 1,805	WAC B	-	9B	-	-	-	-	WS	ALAI	-	-	40?	-	-
1949-A21	2433065-50	1949 May 27	WAC B	-	10B	-	-	-	-	WS	ALAI	-	-	40?	-	-



Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	OrbPay	Agency	Launch_Code	Group	Category	LCsite	Cite	Notes
1945-A35	2431725-21	1945 Sep 26 1700	1945 Sep 26 1700		A	0.000	OR0	SS	JPL/Malina	Test	Corp-Hist	-	-
1945-A36	2431724-50	1945 Sep 26	1945 Sep 26		B	0.000	OR0	SS	JPL/Malina	Test	Corp-Hist	-	-
1945-A37	2431724-50	1945 Sep 26	1945 Sep 26		C	0.000	OR0	SS	JPL/Malina	Test	Corp-Hist	-	-
1945-A38	2431725-50	1945 Sep 27	1945 Sep 27		D	0.000	OR0	SS	JPL/Malina	Test	Corp-Hist	-	-
1945-A04	2431725-50	1945 Sep 27	1945 Sep 27		1	0.000	OR0	SS	JPL/Malina	Test	JPLA-41	-	-
1945-A05	2431726-50	1945 Sep 28	1945 Sep 28		2	0.000	OR0	SS	JPL/Malina	Test	JPLA-41	-	-
1945-A06	2431729-50	1945 Oct 1	1945 Oct 1		3	0.000	OR0	SS	JPL/Malina	Test	JPLA-41	-	-
1945-A07	2431730-50	1945 Oct 2	1945 Oct 2		4	0.000	OR0	SS	JPL/Malina	Test	JPLA-41	-	-
1945-A02	2431739-50	1945 Oct 11	1945 Oct 11		5	0.000	OR0	SS	JPL/Malina	Test	JPLA-41	-	-
1945-A03	2431740-50	1945 Oct 12	1945 Oct 12		6	0.000	OR0	SS	JPL/Malina	Test	JPLA-41	-	-
1945-A15	2431744-50	1945 Oct 16	1945 Oct 16		7	0.000	OR0	SS	JPL/Malina	Test	JPLA-41	-	-
1945-A04	2431747-50	1945 Oct 19	1945 Oct 19		8	0.000	OR0	SS	JPL/Malina	Test	JPLA-41	-	-
1945-A16	2431753-50	1945 Oct 25	1945 Oct 25		9	0.000	OR0	SS	JPL/Malina	Test	JPLA-41	-	-
1945-A17	2431753-50	1945 Oct 25	1945 Oct 25		10	0.000	OR0	SS	JPL/Malina	Test	JPLA-41	-	-
1946-A27	2431947-50	1946 May 7	1946 May 7		11	0.000	OR0	Ar	JPL/Malina	Test	wsmr-history.org	-	-
1946-A04	2431960-50	1946 May 10	1946 May 10		12	0.000	OR0	SS	JPL/Malina	Test	JPLA-41	-	-
1946-A28	2431960-50	1946 May 20	1946 May 20		13	0.000	OR0	AS	JPL/Malina	Test	wsmr-history.org	-	-
1946-A29	2431963-50	1946 May 23	1946 May 23		14	0.000	OR0	AS	JPL/Malina	Test	wsmr-history.org	-	-
1946-A30	2431963-50	1946 May 23	1946 May 23		15	0.000	OR0	AS	JPL/Malina	Test	wsmr-history.org	-	-
1946-A31	2431964-50	1946 May 24	1946 May 24		16	0.000	OR0	AS	JPL/Malina	Test	wsmr-history.org	-	-
1946-A32	2431964-50	1946 May 24	1946 May 24		17	0.000	OR0	AS	JPL/Malina	Test	wsmr-history.org	-	-
1946-A33	2431966-50	1946 May 26	1946 May 26		18	0.000	OR0	AS	JPL/Malina	Test	wsmr-history.org	-	-
1946-A34	2431966-50	1946 May 26	1946 May 26		19	0.000	OR0	AS	JPL/Malina	Test	wsmr-history.org	-	-
1946-A35	2431969-50	1946 May 29	1946 May 29		20	0.000	OR0	AS	JPL/Malina	Test	wsmr-history.org	-	-
1946-A21	2432156-50	1946 Dec 2	1946 Dec 2		21	0.000	OR0	SF	JPL/Malina	Test	JPLA-41	-	-
1946-A22	2432157-50	1946 Dec 3	1946 Dec 3		22	0.000	OR0	SS	JPL/Malina	Test	JPLA-41	-	-
1946-A23	2432160-50	1946 Dec 6	1946 Dec 6		23	0.000	OR0	SS	JPL/Malina	Test	JPLA-41	-	-
1946-A24	2432166-50	1946 Dec 12	1946 Dec 12		24	0.000	OR0	SS	JPL/Malina	Test	JPLA-41	-	-
1946-A25	2432166-50	1946 Dec 12	1946 Dec 12		25	0.000	OR0	SS	JPL/Malina	Test	JPLA-41	-	-
1946-M01	2432167-50	1947 Feb 13	1947 Feb 13		26	0.000	OR0	SS	JPL/Malina	Test	JPLA-41	-	-
1947-A05	2432234-50	1947 Feb 18	1947 Feb 18		27B	0.000	OR0	SF	JPL/Malina	Test	JPLA-41	-	-
1947-M02	2432234-50	1947 Feb 19	1947 Feb 19		28B	0.000	OR0	SS	JPL/Malina	Test	JPLA-41	-	-
1947-M03	2432240-50	1947 Feb 24	1947 Feb 24		29B	0.000	OR0	SS	JPL/Malina	Test	JPLA-41	-	-
1947-M05	2432247-50	1947 Mar 3	1947 Mar 3		30B	0.000	OR0	SS	JPL/Malina	Test	JPLA-41	-	-
1949-A15	2433046-25	1949 Jun 12	1949 Jun 12		39B?	0.000	OR0	SS	JPL/Malina	Test	USRR-P40	-	-
1949-A16	2433046-25	1949 May 9 1805	1949 May 9 1805		39B	0.000	OR0	SU	JPL/Malina	Test	Urrich	wsmr-history.org	-
1949-A21	2433063-50	1949 May 27	1949 May 27		10B	0.000	OR0	SU	JPL/Malina	Test	wsmr-history.org	-	-





Launch

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Mission	FlightCode	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee_km	Range_km	Dest
1959-A46	2436638.24	1959 Mar 10 1750	X-15	1	1-C-1	-	-	-	HR-52-003	EAFB	RM04/22	EAFB	ROS D	11	-	EAFB
1959-A67	2436659.50	1959 Apr 1	X-15	1	1-A-2	-	-	-	HR-52-003	EAFB	RM04/22	EAFB	ROS D	11	-	EAFB
1959-A60	2436669.18	1959 Apr 10 1624	X-15	1	1-A-3	-	-	-	HR-52-003	EAFB	RM04/22	EAFB	ROS D	11	-	EAFB
1959-A80	2436709.50	1959 May 21	X-15	1	1-A-4	-	-	-	HR-52-003	EAFB	RM04/22	EAFB	ROS D	11	-	EAFB
1959-A93	2436728.15	1959 Jun 8 1638:40	X-15	1	1-1-5	-	-	-	HR-52-003	EAFB	RM04/22	EAFB	ROS D	11	-	EAFB
1959-A157	2436773.50	1959 Jul 24	X-15	1	2-A-2	-	-	-	HR-52-003	EAFB	RM04/22	EAFB	ROS C	14	-	EAFB
1959-A160	2436829.13	1959 Sep 4 1323	X-15	1	2-A-3	-	-	-	HR-52-003	EAFB	RM04/22	EAFB	ROS C	15	-	EAFB
1959-A172	2436851.50	1959 Oct 10	X-15	1	2-A-4	-	-	-	HR-52-003	EAFB	RM04/22	EAFB	ROS C	14	-	EAFB
1959-A174	2436855.50	1959 Oct 14	X-15	1	2-A-5	-	-	-	HR-52-003	EAFB	RM04/22	EAFB	ROS WALL	14	-	EAFB
1959-A175	2436865.26	1959 Oct 17 1813:07	X-15	1	2-A-6	-	-	-	HR-52-003	EAFB	RM04/22	EAFB	ROS WALL	14	-	EAFB
1959-A179	2436863.50	1959 Oct 22	X-15	1	2-A-7	-	-	-	HR-52-003	EAFB	RM04/22	EAFB	ROS WALL	14	-	EAFB
1959-A186	2436872.50	1959 Oct 31	X-15	1	2-A-8	-	-	-	HR-52-003	EAFB	RM04/22	EAFB	ROS WALL	14	-	EAFB
1959-A188	2436878.24	1959 Nov 5 1739:28	X-15	1	2-A-9	-	-	-	HR-52-003	EAFB	RM04/22	EAFB	ROS WALL	14	-	EAFB
1959-A208	2436818.50	1959 Dec 16	X-15	1	1-A-6	-	-	SAS Eval	HR-52-008	EAFB	RM04/22	EAFB	ROS WALL	13	-	EAFB
1960-A16	2436857.51	1960 Jan 24 0017:05	X-15	1	1-2-7	-	-	-	HR-52-008	EAFB	RM04/22	EAFB	ROS WALL	20	-	EAFB
1960-A31	2436868.50	1960 Feb 4	X-15	1	2-A-10	-	-	-	HR-52-008	EAFB	RM04/22	EAFB	ROS WALL	14	-	EAFB
1960-A43	2436876.26	1960 Feb 11 1815:04	X-15	1	2-A-11	-	-	SAS Eval	HR-52-008	EAFB	RM04/22	EAFB	ROS WALL	26	-	EAFB
1960-A49	2436882.24	1960 Feb 17 1741:32	X-15	1	2-8-12	-	-	SAS Eval/Stability	HR-52-008	EAFB	RM04/22	EAFB	ROS WALL	16	-	EAFB
1960-A69	2437011.19	1960 Mar 17 1631:25	X-15	1	2-8-13	-	-	-	HR-52-008	EAFB	RM04/22	EAFB	ROS WALL	16	-	EAFB
1960-A70	2437011.50	1960 Mar 18	X-15	1	2-A-14	-	-	-	HR-52-008	EAFB	RM04/22	EAFB	ROS WALL	14	-	EAFB
1960-A76	2437019.49	1960 Mar 25 2343:23	X-15	1	1-3-6	-	-	-	HR-52-008	EAFB	RM04/22	EAFB	ROS WALL	14	-	EAFB
1960-A78	2437023.25	1960 Mar 29 1759:28	X-15	1	2-8-15	-	-	SAS Gains	HR-52-008	EAFB	RM04/22	EAFB	ROS WALL	15	-	EAFB
1960-A80	2437026.20	1960 Mar 31 1642:05	X-15	1	1-4-9	-	-	-	HR-52-008	EAFB	RM04/22	EAFB	ROS WALL	14	-	EAFB
1960-A97	2437036.22	1960 Apr 13 1715:11	X-15	1	1-8-10	-	-	-	HR-52-008	EAFB	RM04/22	EAFB	ROS WALL	14	-	EAFB
1960-A101	2437044.20	1960 Apr 19 1651:44	X-15	1	2-A-17	-	-	-	HR-52-008	EAFB	RM04/22	EAFB	ROS WALL	14	-	EAFB
1960-A115	2437059.50	1960 May 5 1663:19	X-15	1	1-6-11	-	-	-	HR-52-003	EAFB	RM04/22	EAFB	ROS WALL	14	-	EAFB
1960-A117	2437067.16	1960 May 12 1547:37	X-15	1	1-7-12	-	-	Alt Buildup	HR-52-003	EAFB	RM04/22	EAFB	ROS WALL	23	-	EAFB
1960-A124	2437074.16	1960 May 19 1546:47	X-15	1	1-8-13	-	-	SAS, High alpha, BCS	HR-52-008	EAFB	RM04/22	EAFB	ROS WALL	15	-	EAFB
1960-A128	2437081.17	1960 May 25 1608:36	X-15	1	1-9-15	-	-	-	HR-52-008	EAFB	RM04/22	EAFB	ROS WALL	14	-	EAFB
1960-A130	2437081.50	1960 Jun 3	X-15	1	1-A-14	-	-	-	HR-52-003	EAFB	RM04/22	EAFB	ROS WALL	14	-	EAFB
1960-A141	2437086.50	1960 Jun 8	X-15	1	1-A-15	-	-	-	HR-52-003	EAFB	RM04/22	EAFB	ROS WALL	14	-	EAFB
1960-A146	2437093.50	1960 Jun 15	X-15	1	1-A-16	-	-	-	HR-52-003	EAFB	RM04/22	EAFB	ROS WALL	14	-	EAFB
1960-A150	2437151.17	1960 Aug 4 1559:13	X-15	1	1-9-17	-	-	Aero Heating	HR-52-003	EAFB	RM04/22	EAFB	ROS WALL	14	-	EAFB
1960-A157	2437157.50	1960 Aug 11	X-15	1	1-A-18	-	-	-	HR-52-003	EAFB	RM04/22	EAFB	ROS WALL	14	-	EAFB
1960-A159	2437159.16	1960 Aug 12 1548:43	X-15	1	1-10-19	-	-	High Alt	HR-52-003	EAFB	RM04/22	EAFB	ROS WALL	14	-	EAFB
1960-A204	2437164.50	1960 Aug 18	X-15	1	1-A-20	-	-	-	HR-52-003	EAFB	RM04/22	EAFB	ROS WALL	14	-	EAFB
1960-A205	2437166.15	1960 Aug 19 1534:22	X-15	1	1-11-21	-	-	Aero Heating	HR-52-003	EAFB	RM04/22	EAFB	ROS WALL	14	-	EAFB
1960-A218	2437178.50	1960 Sep 2	X-15	1	1-A-22	-	-	-	HR-52-008	EAFB	RM04/22	EAFB	ROS WALL	14	-	EAFB
1960-A218	2437185.26	1960 Sep 10 1845:10	X-15	1	1-12-23	-	-	Stability/Control	HR-52-008	EAFB	RM04/22	EAFB	ROS WALL	24	-	EAFB
1960-A229	2437197.50	1960 Sep 23 1652:06	X-15	1	1-A-24	-	-	-	HR-52-008	EAFB	RM04/22	EAFB	ROS WALL	14	-	EAFB
1960-A241	2437218.50	1960 Oct 1	X-15	1	1-13-26	-	-	-	HR-52-008	EAFB	RM04/22	EAFB	ROS WALL	14	-	EAFB
1960-A249	2437228.23	1960 Oct 13	X-15	1	2-A-26	-	-	Stability/Control	HR-52-008	EAFB	RM04/22	EAFB	ROS WALL	16	-	EAFB
1960-A253	2437232.28	1960 Oct 20 1730:27	X-15	1	1-A-27	-	-	-	HR-52-008	EAFB	RM04/22	EAFB	ROS WALL	14	-	EAFB
1960-A258	2437238.50	1960 Oct 28 1743:56	X-15	1	1-15-28	-	-	Stability/Control	HR-52-008	EAFB	RM04/22	EAFB	ROS WALL	14	-	EAFB
1960-A263	2437242.54	1960 Nov 4 1743:56	X-15	1	2-16-29	-	-	-	HR-52-008	EAFB	RM04/22	EAFB	ROS WALL	14	-	EAFB
1960-A267	2437243.36	1960 Nov 4 2043:33	X-15	1	1-16-29	-	-	Stability/Control	HR-52-008	EAFB	RM04/22	EAFB	ROS WALL	14	-	EAFB
1960-A284	2437244.36	1960 Nov 15 1759:00	X-15	1	2-16-21	-	-	XLR-99 Checkout	HR-52-003	EAFB	RM04/22	EAFB	ROS C	24	-	EAFB
1960-A284	2437244.36	1960 Nov 17 2043:07	X-15	1	1-17-30	-	-	XLR-99 Heating	HR-52-003	EAFB	RM04/22	EAFB	ROS C	16	-	EAFB
1960-A272	2437261.36	1960 Nov 27 2125:55	X-15	1	2-11-22	-	-	XLR-99, BCS	HR-52-003	EAFB	RM04/22	EAFB	ROS C	16	-	EAFB
1960-A289	2437262.28	1960 Nov 30 1843:43	X-15	1	1-18-21	-	-	-	HR-52-003	EAFB	RM04/22	EAFB	ROS WALL	14	-	EAFB
1960-A291	2437275.48	1960 Dec 6 2329:30	X-15	1	2-12-23	-	-	XLR-99, BCS	HR-52-003	EAFB	RM04/22	EAFB	ROS WALL	16	-	EAFB
1960-A295	2437278.33	1960 Dec 9 1952:40	X-15	1	1-19-22	-	-	Ball nose, Stab.	HR-52-008	EAFB	RM04/22	EAFB	ROS WALL	15	-	EAFB
1960-A301	2437283.50	1960 Dec 15	X-15	1	1-19-22	-	-	-	HR-52-008	EAFB	RM04/22	EAFB	ROS WALL	14	-	EAFB
1961-A19	2437310.50	1961 Jan 11	X-15	1	1-A-34	-	-	Ball/inside controller	HR-52-008	EAFB	RM04/22	EAFB	ROS WALL	14	-	EAFB
1961-A42	2437332.28	1961 Feb 1 1947:32	X-15	1	1-20-36	-	-	Stab./Control	HR-52-008	EAFB	RM04/22	EAFB	ROS WALL	15	-	EAFB
1961-A45	2437338.37	1961 Feb 7 2056:10	X-15	1	1-21-36	-	-	-	HR-52-008	EAFB	RM04/22	EAFB	ROS WALL	14	-	EAFB
1961-A51	2437351.50	1961 Feb 21	X-15	1	2-A-24	-	-	-	HR-52-008	EAFB	RM04/22	EAFB	ROS WALL	14	-	EAFB
1961-A53	2437354.50	1961 Feb 24	X-15	1	2-A-25	-	-	-	HR-52	EAFB	RM04/22	EAFB	ROS WALL	14	-	EAFB
1961-A73	2437366.27	1961 Mar 7 1828:33	X-15	1	2-13-26	-	-	Mach 4 Flight	HR-52-008	EAFB	RM04/22	EAFB	ROS WALL	23	-	EAFB
1961-A79	2437379.50	1961 Mar 21 1805:00	X-15	1	2-A-27	-	-	-	HR-52-008	EAFB	RM04/22	EAFB	ROS WALL	14	-	EAFB
1961-A80	2437389.25	1961 Mar 30 1805:00	X-15	1	2-14-28	-	-	Alt., BCS Aero	HR-52-008	EAFB	RM04/22	EAFB	ROS WALL	51	-	EAFB
1961-A108	2437411.25	1961 Apr 21 1806:17	X-15	1	2-15-29	-	-	Mach 4, Aero	HR-52-003	EAFB	RM04/22	EAFB	ROS WALL	32	-	EAFB
1961-A126	2437438.50	1961 May 19	X-15	1	2-A-30	-	-	-	HR-52-003	EAFB	RM04/22	EAFB	ROS WALL	14	-	EAFB
1961-A130	2437458.30	1961 May 25 1916:35	X-15	1	2-16-31	-	-	Mach 5, SAS, Aero	HR-52-003	EAFB	RM04/22	EAFB	ROS WALL	32	-	EAFB
1961-A154	2437470.50	1961 Jun 20	X-15	1	2-A-32	-	-	-	HR-52-008	EAFB	RM04/22	EAFB	ROS WALL	14	-	EAFB
1961-A187	2437474.38	1961 Jun 23 2109:05	X-15	1	2-17-33	-	-	Mach 5, Aero, Stab.	HR-52-003	EAFB	RM04/22	EAFB	ROS WALL	32	-	EAFB
1961-A188	2437482.28	1961 Aug 10 1727:05	X-15	1	1-22-37	-	-	XLR-99, beta-dot	HR-52-003	EAFB	RM04/22	EAFB	ROS WALL	23	-	EAFB
1961-A199	2437455.40	1961 Sep 12 2140:17	X-15	1	2-18-34	-	-	Mach 5, Aero, Stab.	HR-52-008	EAFB	RM04/22	EAFB	ROS WALL	34	-	EAFB
1961-A206	2437571.24	1961 Sep 28 1750:25	X-15	1	2-19-35	-	-	Mach 5, Heat Trans.	HR-52-008	EAFB	RM04/22	EAFB	ROS WALL	31	-	EAFB
1961-A207	2437571.50	1961 Oct 29	X-15	1	1-A-38	-	-	-	HR-52-003	EAFB	RM04/22	EAFB	ROS WALL	14	-	EAFB
1961-A215	2437576.28	1961 Oct 3 1840:50	X-15	1	1-23-39	-	-	V0 Stability	HR-52-003	EAFB	RM04/22	EAFB	ROS WALL	23	-	EAFB
1961-A239	2437584.35	1961 Oct 11 2020:00	X-15	1	2-20-36	-	-	Alt., Aero, Low q	HR-52-003	EAFB	RM04/22	EAFB	ROS WALL	66	-	EAFB
1961-A220	2437590.29	1961 Oct 17 1857:33	X-15	1	1-24-40	-	-	Mach 5, Aero, Stab	HR-52-003	EAFB	RM04/22	EAFB	ROS WALL	33	-	EAFB
1961-A227	2437599.50	1961 Oct 27	X-15	1	1-A-41	-	-	-	HR-52	EAFB	RM04/22	EAFB	ROS WALL	14	-	EAFB
1961-A231	2437605.50	1961 Nov 2	X-15	1	1-A-42	-	-	-	HR-52	EAFB	RM04/22	EAFB	ROS WALL	14	-	EAFB
1961-A232	2437606.50	1961 Nov 3	X-15	1	1-A-43	-	-	-	HR-52	EAFB	RM04/22	EAFB	ROS WALL	14	-	EAFB
1961-A233	2437613.25	1961 Nov 9 1757:17	X-15	1	2-21-37	-	-	Mach 6, Aero, Stab	HR-52-008	EAFB	RM04/22	EAFB	ROS WALL	31	-	EAFB
1961-A249	2437652.50	1961 Dec 19	X-15	1	3-A-1	-	-	MH-96	HR-52-003	EAFB	RM04/22	EAFB	ROS WALL	14	-	EAFB

Launch

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Mission	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee_km	Range_km	Dest
1962-A44	2437754-50	1962 Mar 31	X-15	-	3-A-6	-	-	EAFB	RW04/22	HH	A2	14	-	EAFB
1962-N04	2437760-25	1962 Apr 15 1804:25	X-15	-	3-3-7	HR-96	-	EAFB	RW04/22	HH	A2	54	-	EAFB
1962-B53	2437772-50	1962 Apr 18	X-15	-	1-A-45	-	-	EAFB	RW04/22	MUD	A	14	-	EAFB
1962-N05	2437774-25	1962 Apr 19 1802:20	X-15	-	1-26-46	ASAS, alpha 20, W=5	-	EAFB	RW04/22	MUD	A	46	-	EAFB
1962-N06	2437775-31	1962 Apr 20 1926:58	X-15	-	3-4-8	HR-96, W=5	-	EAFB	RW04/22	MUD	A	63	-	EAFB
1962-N07	2437779-50	1962 Apr 25	X-15	-	2-A-38	-	-	EAFB	RW04/22	HH	B2	14	-	EAFB
1962-N08	2437780-50	1962 Apr 26	X-15	-	2-A-39	-	-	EAFB	RW04/22	HH	B2	14	-	EAFB
1962-N09	2437781-50	1962 Apr 27	X-15	-	1-A-47	-	-	EAFB	RW04/22	MUD	A	14	-	EAFB
1962-N10	2437785-22	1962 Apr 30 1723:20	X-15	-	1-27-48	Alt, Low g, Aero	-	EAFB	RW04/22	MUD	A	75	-	EAFB
1962-N11	2437786-50	1962 May 2	X-15	-	(3-C)	EgLin Demo	-	EGL	RW12/30	-	-	147	-	EGL
1962-N12	2437788-50	1962 May 5	X-15	-	(3-C)	EgLin Demo	-	EGL	RW12/30	-	-	147	-	EGL
1962-N13	2437789-50	1962 May 8 1701:28	X-15	-	(3-C)	EgLin Demo	-	EGL	RW12/30	-	-	147	-	EGL
1962-N14	2437793-21	1962 May 8 1704:46	X-15	-	2-22-40	Heat 7/ASAS/High al.	-	EAFB	RM17/35L	HH	B2	21	-	EAFB
1962-N15	2437807-21	1962 May 22 1704:46	X-15	-	1-28-49	Local flow	-	EAFB	RW04/22	HH	B3	30	-	EAFB
1962-N16	2437809-50	1962 May 25	X-15	-	2-A-41	-	-	EAFB	RW04/22	DDL	LP2A	14	-	EAFB
1962-N17	2437813-50	1962 May 28	X-15	-	2-A-42	-	-	EAFB	RW04/22	DDL	LP2A	14	-	EAFB
1962-N18	2437817-24	1962 Jun 1 1751:15	X-15	-	2-23-43	ASAS, 23 alpha, W=5	-	EAFB	RW04/22	DDL	LP2A	14	-	EAFB
1962-N19	2437823-29	1962 Jun 7 1729:20	X-15	-	1-29-50	Local flow, W=5	-	EAFB	RW04/22	DDL	LP2A	14	-	EAFB
1962-N20	2437828-29	1962 Jun 12 1904:00	X-15	-	3-5-9	RCS check, W=5	-	EAFB	RW04/22	DDL	A4	31	-	EAFB
1962-N21	2437837-20	1962 Jun 21 1647:05	X-15	-	3-6-10	HR-96 Demo, W=5	-	EAFB	RW04/22	DDL	LP2A	56	-	EAFB
1962-N22	2437843-34	1962 Jun 27 2008:10	X-15	-	1-30-51	High alpha, Mach 6	-	EAFB	RW04/22	DDL	LP2A	75	-	EAFB
1962-N23	2437846-24	1962 Jun 29 1741:47	X-15	-	2-24-44	Heating rates, notch	-	EAFB	RW04/22	MUD	A	37	-	EAFB
1962-N24	2437855-50	1962 Jun 30	X-15	-	3-A-11	-	-	EAFB	RW04/22	HH	B3	25	-	EAFB
1962-N25	2437856-50	1962 Jul 11	X-15	-	3-A-12	-	-	EAFB	RW04/22	SRL	-	14	-	EAFB
1962-N26	2437861-50	1962 Jul 16	X-15	-	3-A-13	-	-	EAFB	RW04/22	SRL	-	14	-	EAFB
1962-N27	2437862-36	1962 Jul 16 2109:25	X-15	-	1-31-52	Notch/ASAS/Aero drag	-	EAFB	RW04/22	DDL	LP2A	14	-	EAFB
1962-N28	2437863-19	1962 Jul 17 1651:10	X-15	-	3-7-14	HR-96 Demo	-	EAFB	RW04/22	MUD	A	32	-	EAFB
1962-N29	2437865-20	1962 Jul 19 1653:45	X-15	-	3-7-14	Heating rates, drag	-	EAFB	RW04/22	DDL	LP2	95	-	EAFB
1962-N30	2437872-27	1962 Jul 26 1822:30	X-15	-	1-32-53	Aero stab, and drag	-	EAFB	RW04/22	HH	B3	26	-	EAFB
1962-N31	2437879-21	1962 Aug 1 1656:15	X-15	-	3-A-15	HR-96 fixed gain	-	EAFB	RW04/22	MUD	A	30	-	EAFB
1962-N32	2437881-21	1962 Aug 8 1708:35	X-15	-	3-A-16	Heating, aero drag	-	EAFB	RW04/22	MUD	A	14	-	EAFB
1962-N33	2437886-50	1962 Aug 10	X-15	-	2-26-46	-	-	EAFB	RW04/22	MUD	A6	27	-	EAFB
1962-N34	2437891-24	1962 Aug 14 1741:35	X-15	-	3-A-17	Const Theta Entry	-	EAFB	RW04/22	DDL	LP2A	14	-	EAFB
1962-N35	2437893-24	1962 Aug 20 1708:40	X-15	-	3-9-18	Heating, drag, ASAS	-	EAFB	RW04/22	DDL	LP2A	59	-	EAFB
1962-N36	2437906-23	1962 Aug 29 1736:03	X-15	-	2-28-46	Heating	-	EAFB	RW04/22	HH	A3	27	-	EAFB
1962-N37	2437934-21	1962 Sep 28 1704:55	X-15	-	2-A-49	-	-	EAFB	RW04/22	HH	B3	29	-	EAFB
1962-N38	2437942-22	1962 Oct 4 1710:11	X-15	-	2-29-50	Heating, VO Stab	-	EAFB	RW04/22	HH	B5	4	-	EAFB
1962-N39	2437947-25	1962 Oct 4 1710:11	X-15	-	3-10-19	VO Stability	-	EAFB	RW04/22	DDL	LP2A	34	-	EAFB
1962-N40	2437951-27	1962 Oct 2 1785:32	X-15	-	2-30-51	VO Stability	-	EAFB	RW04/22	DDL	LP2A	39	-	EAFB
1962-N41	2437956-27	1962 Oct 23 1830:40	X-15	-	3-11-20	VO Stability	-	EAFB	RW04/22	MUD	A	41	-	EAFB
1962-N42	2437976-27	1962 Nov 18 23:07	X-15	-	2-31-52	VO Stab, Round Layer	-	EAFB	RW04/22	MUD	A	14	-	EAFB
1962-N43	2438013-26	1962 Dec 13 1844:07	X-15	-	3-A-21	VO Stab, WPP	-	EAFB	RW04/22	MUD	A	14	-	EAFB
1962-N44	2438018-26	1962 Dec 20 1826:04	X-15	-	3-12-23	VO Stab, WPP	-	EAFB	RW04/22	MUD	A	14	-	EAFB
1962-N45	2438017-31	1962 Dec 20 1826:04	X-15	-	3-13-23	VO Stab, HR-96	-	EAFB	RW04/22	MUD	A	43	-	EAFB
1962-N46	2438031-29	1963 Apr 11 1893:57	X-15	-	1-34-54	Alt, IR opt	-	EAFB	RW04/22	DDL	LP2	82	-	EAFB
1962-N47	2438038-34	1963 Apr 15 1837:20	X-15	-	3-15-54	KC-1, IR opt	-	EAFB	RW04/22	HH	A2	22	-	EAFB
1962-N48	2438045-42	1963 Apr 25 2004:19	X-15	-	1-34-55	WPP, Local flow, IR	-	EAFB	RW04/22	HH	B3	25	-	EAFB
1962-N49	2438149-21	1963 May 2 1659:54	X-15	-	3-16-26	APU, WPP, IR, flow	-	EAFB	RW04/22	DDL	LP1	32	-	EAFB
1962-N50	2438159-50	1963 May 10	X-15	-	3-17-28	Heating WPP, IR	-	EAFB	RW04/22	HH	A4	63	-	EAFB
1962-N51	2438164-30	1963 May 14 1811:56	X-15	-	3-7-28	Opt Deg/Trav Probe	-	EAFB	RW04/22	HH	A4	15	-	EAFB
1962-N52	2438165-24	1963 May 15 1750:46	X-15	-	1-35-66	Alt WPP, WPP, VO Stab	-	EAFB	RW04/22	DDL	LP1	37	-	EAFB
1962-N53	2438179-24	1963 May 29 1743:20	X-15	-	3-18-29	Alt WPP, WPP, VO Stab	-	EAFB	RW04/22	DDL	LP2	28	-	EAFB
1962-N54	2438189-23	1963 Jun 25 1653:50	X-15	-	3-19-30	Opt Deg/Trav Probe	-	EAFB	RW04/22	DDL	LP1	68	-	EAFB
1962-N55	2438206-20	1963 Jun 26 1653:50	X-15	-	1-36-57	Opt Deg/Trav Probe	-	EAFB	RW04/22	DDL	LP1	34	-	EAFB
1962-N56	2438208-21	1963 Jun 27 1656:03	X-15	-	2-30-31	Alt/WPP, IR, horizon	-	EAFB	RW04/22	DDL	LP1	86	-	EAFB
1962-N57	2438210-50	1963 Jul 3 1912:12	X-15	-	1-A-58	Opt Deg/Trav/RAS	-	EAFB	RW04/22	DDL	LP1	14	-	EAFB
1962-N58	2438220-30	1963 Jul 9 1912:12	X-15	-	1-37-59	Opt Deg/Trav/RAS	-	EAFB	RW04/22	DDL	LP1	69	-	EAFB
1962-N59	2438229-21	1963 Jul 18 1707:20	X-15	-	1-A-60	VO Stability	-	EAFB	RW04/22	MUD	A	14	-	EAFB
1962-N60	2438230-22	1963 Jul 19 1720:05	X-15	-	3-21-32	VO, WPP, IR, RS, Balloon	-	EAFB	RW04/22	MUD	LP1	31	-	EAFB
1962-N61	2438247-50	1963 Aug 6	X-15	-	3-A-33	-	-	EAFB	RW04/22	SRL	LP1	106	-	EAFB
1962-N62	2438264-21	1963 Aug 15	X-15	-	3-A-34	-	-	EAFB	RW04/22	SRL	LP1	14	-	EAFB
1962-N63	2438266-50	1963 Aug 15	X-15	-	3-A-35	-	-	EAFB	RW04/22	SRL	LP1	14	-	EAFB
1962-N64	2438266-50	1963 Aug 22 1706:57	X-15	-	3-22-36	VO, Spectrom, Photom	-	EAFB	RW04/22	SRL	LP1	108	-	EAFB
1962-N65	2438310-31	1963 Oct 4	X-15	-	1-A-62	Checkout	-	EAFB	RW04/22	HH	A2	14	-	EAFB
1962-N66	2438316-50	1963 Oct 7 1922:56	X-15	-	1-39-63	Checkout/Opt Deg.	-	EAFB	RW04/22	HH	A2	23	-	EAFB
1962-N67	2438332-32	1963 Oct 14	X-15	-	3-A-37	Checkout/Opt Deg.	-	EAFB	RW04/22	HH	A2	14	-	EAFB
1962-N68	2438339-32	1963 Oct 29 1942:34	X-15	-	1-40-64	Sharp Upper Vert.	-	EAFB	RW04/22	HH	A2	22	-	EAFB
1962-N69	2438341-26	1963 Oct 25	X-15	-	3-A-38	Sharp Upper Vert.	-	EAFB	RW04/22	HH	A2	14	-	EAFB
1962-N70	2438344-26	1963 Nov 7 1811:14	X-15	-	3-23-39	Sharp Upper Vert.	-	EAFB	RW04/22	HH	A2	25	-	EAFB
1962-N71	2438348-31	1963 Nov 14 1919:21	X-15	-	1-41-65	CD/Opt Deg/Systems	-	EAFB	RW04/22	HH	A2	14	-	EAFB
1962-N72	2438352-50	1963 Nov 19	X-15	-	3-A-40	Checkout	-	EAFB	RW04/22	HH	A2	27	-	EAFB
1962-N73	2438361-35	1963 Nov 27 2017:40	X-15	-	3-24-41	Checkout	-	EAFB	RW04/22	HH	A2	27	-	EAFB
1962-N74	2438366-50	1963 Dec 3	X-15	-	1-A-66	Opt Deg/Sys/Mach 6	-	EAFB	RW04/22	DDL	LP1	14	-	EAFB
1962-N75	2438369-29	1963 Dec 5 1904:36	X-15	-	1-42-67	Opt Deg/Sys/Mach 6	-	EAFB	RW04/22	DDL	LP1	30	-	EAFB
1962-N76	2438381-30	1963 Dec 18	X-15	-	1-A-68	Opt Deg Stability	-	EAFB	RW04/22	MUD	A	14	-	EAFB
1964-N01	2438403-34	1964 Jan 8 2010:31	X-15	-	1-43-69	SAS Off Stability	-	EAFB	RW04/22	MUD	A	42	-	EAFB
1964-N02	2438411-25	1964 Jan 16 1803:30	X-15	-	3-25-42	Sharp Upper Vert.	-	EAFB	RW04/22	HH	A2	21	-	EAFB
1964-N03	2438423-34	1964 Feb 28 2011:36	X-15	-	1-44-70	Stability	-	EAFB	RW04/22	DDL	LP1	32	-	EAFB
1964-N04	2438445-25	1964 Feb 19 1757:24	X-15	-	3-26-43	SUV Boundary Layer	-	EAFB	RW04/22	HH	B3	23	-	EAFB
1964-N05	2438468-24	1964 Mar 13 1746:27	X-15	-	3-27-44	SUV Boundary Layer	-	EAFB	RW04/22	HH	B3	23	-	EAFB
1964-N06	2438471-50	1964 Mar 17	X-15	-	1-A-71	Optical Degradation	-	EAFB	RW04/22	DDL	LP1	14	-	EAFB
1964-N07	2438482-26	1964 Mar 27 1810:18	X-15	-	1-45-72	Optical Degradation	-	EAFB	RW04/22	DDL	LP1	30	-	EAFB
1964-N08	2438485-50	1964 Mar 31	X-15	-	3-A-45	-	-	EAFB	RW04/22	HH	A2	14	-	EAFB

Launch

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Mission	FlightCode	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee_km	Range_km	Dest
1964-N08	2438494.25	1964 Apr 8 1802:27	X-15	-	1-46-73	Opt Deg/Alt Build	-	-	HR-52-003	EAFB	RW04/22	DDL	LP1	53	-	EAFB RM187
1964-A61	2438515.21	1964 Apr 29 1700:27	X-15	-	1-47-74	Opt Deg/Alt Indic.	-	-	HR-52-003	EAFB	RW04/22	DDL	LP1	31	-	EAFB RM187
1964-B66	2438526.50	1964 May 11	X-15	-	3-A-46	SUV/BLM	-	-	HR-52	EAFB	RW04/22	HH	A2	14	-	EAFB
1964-M67	2438528.20	1964 May 12 1651:46	X-15	-	3-28-47	SUV/BLM	-	-	HR-52-003	EAFB	RW04/22	HH	A2	22	-	EAFB RM187
1964-N10	2438535.23	1964 May 19 1728:28	X-15	-	1-48-76	Opt Deg/Alt Build	-	-	HR-52-003	EAFB	RW04/22	DDL	LP1	59	-	EAFB RM23
1964-M72	2438537.19	1964 May 21 1639:34	X-15	-	3-29-48	SUV/BLM	-	-	HR-52-003	EAFB	RW04/22	SIL	C	19	-	CUD RW01/19
1964-M87	2438561.50	1964 Jun 15	X-15	-	2-C-53	Carry Test	-	-	HR-52	EAFB	RW04/22	EAFB	RUS A	14	-	EAFB
1964-N91	2438569.50	1964 Jun 23	X-15	-	2-A-54	Stability	-	-	HR-52	EAFB	RW04/22	HH	B2	14	-	EAFB
1964-N93	2438572.19	1964 Jun 25 1634:47	X-15	-	2-32-55	Stability	-	-	HR-52	EAFB	RW04/22	HH	B2	25	-	EAFB RM187
1964-N95	2438577.20	1964 Jun 30 1649:40	X-15	-	1-49-77	Opt Deg/Alt Build	-	-	HR-52	EAFB	RW04/22	DDL	LP1	14	-	EAFB
1964-N99	2438578.50	1964 Jun 11	X-15	-	3-A-49	Hor Scan/WH-96	-	-	HR-52	EAFB	RW04/22	DDL	LP1	14	-	EAFB
1964-N100	2438586.34	1964 Jul 2 2002:52	X-15	-	3-30-50	Hor Scan/WH-96	-	-	HR-52	EAFB	RW04/22	DDL	LP1	14	-	EAFB
1964-N101	2438586.50	1964 Jul 8 2002:52	X-15	-	3-A-51	Hor Scan/WH-96	-	-	HR-52	EAFB	RW04/22	DDL	LP1	51	-	EAFB
1964-N114	2438604.50	1964 Jul 29 1855:19	X-15	-	3-31-52	Heat tran/Local Flow	-	-	HR-52-003	EAFB	RW04/22	HH	B3	14	-	EAFB
1964-N115	2438606.29	1964 Jul 29 1855:19	X-15	-	3-31-52	Heat tran/Local Flow	-	-	HR-52-003	EAFB	RW04/22	HH	B3	23	-	EAFB RM18
1964-N120	2438620.22	1964 Aug 12 1712:33	X-15	-	2-33-56	Stability	-	-	HR-52-003	EAFB	RW04/22	DDL	LP1	31	-	EAFB RM18
1964-N121	2438622.20	1964 Aug 14 1654:19	X-15	-	3-33-56	Stability	-	-	HR-52-003	EAFB	RW04/22	DDL	LP1	31	-	EAFB RM18
1964-N125	2438634.24	1964 Aug 26 1742:07	X-15	-	3-34-54	HT/FP/BLM	-	-	HR-52-003	EAFB	RW04/22	HH	B3	27	-	EAFB RM187
1964-N128	2438642.24	1964 Sep 3 1654:54	X-15	-	3-34-54	HT/FP/BLM	-	-	HR-52-003	EAFB	RW04/22	HH	B3	23	-	EAFB
1964-N135	2438661.50	1964 Sep 23	X-15	-	3-A-56	Stability	-	-	HR-52	EAFB	RW04/22	DDL	LP1	14	-	EAFB
1964-N136	2438667.34	1964 Sep 28 2016:00	X-15	-	3-35-57	Stability	-	-	HR-52	EAFB	RW04/22	DDL	LP1	14	-	EAFB
1964-N140	2438668.33	1964 Sep 28 2000:13	X-15	-	2-34-57	Stab.,Star tracker	-	-	HR-52-008	EAFB	RW04/22	MUD	A	29	-	EAFB RM187
1964-N147	2438670.50	1964 Oct 2	X-15	-	1-A-78	MF/5/Tip Pod/UB-SB	-	-	HR-52	EAFB	RW04/22	HH	B3	14	-	EAFB
1964-N152	2438684.34	1964 Oct 15 2015:40	X-15	-	1-60-79	Clear mod check	-	-	HR-52-008	EAFB	RW04/22	HH	B3	25	-	EAFB RM187
1964-N158	2438697.50	1964 Oct 29	X-15	-	3-C-58	Clear mod check	-	-	HR-52	EAFB	RW04/22	HH	B3	14	-	EAFB
1964-N159	2438699.24	1964 Oct 30 1751:52	X-15	-	3-C-59	Clear mod, BLM	-	-	HR-52-008	EAFB	RW04/22	HH	B3	25	-	EAFB
1964-N170	2438705.50	1964 Nov 6	X-15	-	2-C-58	Clear mod, BLM	-	-	HR-52	EAFB	RW04/22	HH	B3	14	-	EAFB
1964-N172	2438715.50	1964 Nov 16	X-15	-	2-C-59	Clear mod, BLM	-	-	HR-52	EAFB	RW04/22	HH	B3	14	-	EAFB
1964-N177	2438730.34	1964 Nov 30 2009:32	X-15	-	2-35-60	Clear mod, Stab,ST	-	-	HR-52-008	EAFB	RW04/22	HH	B2	26	-	EAFB RM187
1964-N179	2438733.50	1964 Dec 4	X-15	-	1-A-80	3D Flow Field,MA-48R	-	-	HR-52	EAFB	RW04/22	DDL	LP1?	14	-	EAFB
1964-N182	2438735.26	1964 Dec 9 1836:17	X-15	-	3-37-60	3D Flow Field,MA-48R	-	-	HR-52-008	EAFB	RW04/22	DDL	LP1	26	-	EAFB RM187
1964-N184	2438740.30	1964 Dec 10 1910:26	X-15	-	1-81-81	IFMS/HT/Alt Den	-	-	HR-52-003	EAFB	RW04/22	DDL	LP1	34	-	EAFB RM18
1964-N186	2438742.25	1964 Dec 22 1844:52	X-15	-	3-38-61	Friction,GE TPS.,3D	-	-	HR-52-003	EAFB	RW04/22	HH	B1	24	-	EAFB
1965-N09	2438774.29	1965 Jan 13 1851:06	X-15	-	3-39-62	3D,HT,Frict,BLM	-	-	HR-52-003	EAFB	RW04/22	HH	B1	30	-	EAFB
1965-N14	2438786.50	1965 Jan 26 2050:14	X-15	-	1-A-82	MA-25S TPS,WH-96,BLM	-	-	HR-52	EAFB	RW04/22	DDL	LP1	14	-	EAFB
1965-N22	2438794.37	1965 Feb 2	X-15	-	3-40-63	Stability	-	-	HR-52-008	EAFB	RW04/22	DDL	LP1	29	-	EAFB
1965-N28	2438806.50	1965 Feb 15	X-15	-	2-C-61	Stability	-	-	HR-52	EAFB	RW04/22	EAFB	RUS A	14	-	EAFB
1965-N29	2438806.50	1965 Feb 15	X-15	-	2-C-62	Stability	-	-	HR-52	EAFB	RW04/22	EAFB	RUS A	14	-	EAFB
1965-N31	2438808.26	1965 Feb 17 1844:59	X-15	-	1-A-83	Stability	-	-	HR-52	EAFB	RW04/22	MUD	A	29	-	EAFB RM18
1965-N32	2438810.50	1965 Feb 19	X-15	-	1-A-83	Stability	-	-	HR-52	EAFB	RW04/22	MUD	A	29	-	EAFB
1965-N35	2438816.50	1965 Feb 26	X-15	-	1-A-84	MIT(Air)/Soy/Bright	-	-	HR-52	EAFB	RW04/22	DDL	LP1	14	-	EAFB
1965-N36	2438816.50	1965 Feb 26 1945:55	X-15	-	1-A-84	MIT(Air)/Soy/Bright	-	-	HR-52	EAFB	RW04/22	DDL	LP1	14	-	EAFB
1965-N38	2438818.25	1965 Feb 26 1945:55	X-15	-	1-82-86	IR Scanner/IFDS	-	-	HR-52-008	EAFB	RW04/22	DDL	LP1	46	-	EAFB RM187
1965-N40	2438841.29	1965 Mar 2 1901:59	X-15	-	1-82-86	IR Scanner/IFDS	-	-	HR-52-008	EAFB	RW04/22	DDL	LP1	31	-	EAFB RM187
1965-N47	2438847.24	1965 Apr 23 1744:16	X-15	-	3-41-64	HT/Alt TPS/BLM	-	-	HR-52-008	EAFB	RW04/22	HH	B1	24	-	EAFB RM187
1965-N49	2438874.29	1965 Apr 23 1926:20	X-15	-	2-37-64	Landing 1,0e5,Stab	-	-	HR-52-008	EAFB	RW04/22	HH	B1	28	-	EAFB RM187
1965-N65	2438893.31	1965 May 13 1658:38	X-15	-	2-38-68	Stab, landing, ST	-	-	HR-52-008	EAFB	RW04/22	MUD	A	14	-	EAFB
1965-N66	2438899.50	1965 May 13 1658:38	X-15	-	2-38-68	Stab, landing, ST	-	-	HR-52-008	EAFB	RW04/22	MUD	A	14	-	EAFB
1965-N71	2438931.51	1965 May 11	X-15	-	1-84-87	IFMS/HT/RAS Mod	-	-	HR-52	EAFB	RW04/22	MUD	A	14	-	EAFB
1965-N10	2438904.22	1965 May 26 1712:07	X-15	-	1-84-88	IFMS/HT/RAS Mod	-	-	HR-52-008	EAFB	RW04/22	MUD	A	14	-	EAFB
1965-N12	2438909.20	1965 May 26 1712:07	X-15	-	3-42-65	Radiometer/Scan/BLM	-	-	HR-52-003	EAFB	RW04/22	DDL	LP1	63	-	EAFB RM187
1965-N80	2438915.50	1965 Jun 8	X-15	-	2-A-67	Radiometer/Scan/BLM	-	-	HR-52	EAFB	RW04/22	MUD	A	14	-	EAFB
1965-N81	2438919.50	1965 Jun 8	X-15	-	2-A-68	Radiometer/Scan/BLM	-	-	HR-52	EAFB	RW04/22	MUD	A	14	-	EAFB
1965-N82	2438922.50	1965 Jun 8	X-15	-	2-A-69	Radiometer/Scan/BLM	-	-	HR-52	EAFB	RW04/22	MUD	A	14	-	EAFB
1965-N90	2438928.23	1965 Jun 16 1726:33	X-15	-	3-42-66	Radiometer/BLM	-	-	HR-52-003	EAFB	RW04/22	DDL	LP1	74	-	EAFB RM18
1965-N92	2438929.13	1965 Jun 16 1726:33	X-15	-	3-42-66	Radiometer/BLM	-	-	HR-52-003	EAFB	RW04/22	DDL	LP1	74	-	EAFB RM18
1965-N95	2438931.20	1965 Jun 17 1640:31	X-15	-	1-85-89	IR Scanner, INS	-	-	HR-52-003	EAFB	RW04/22	DDL	LP1	33	-	EAFB RM18
1965-N98	2438934.20	1965 Jun 22 1640:43	X-15	-	2-39-70	Stability ST, gear	-	-	HR-52-003	EAFB	RW04/22	DDL	LP1	47	-	EAFB RM18
1965-N392	2438941.22	1965 Jun 29 1721:17	X-15	-	3-44-67	LabC Scan,Radiom,BLM	-	-	HR-52-003	EAFB	RW04/22	DDL	LP1	85	-	EAFB RM23?
1965-N95	2438943.51	1965 Jul 2	X-15	-	2-A-71	ST,Landing,Alt	-	-	HR-52-003	EAFB	RW04/22	DDL	LP1	14	-	EAFB
1965-N92	2438943.51	1965 Jul 2	X-15	-	2-A-71	ST,Landing,Alt	-	-	HR-52-003	EAFB	RW04/22	DDL	LP1	14	-	EAFB
1965-N99	2438954.18	1965 Jul 8 1616:55	X-15	-	3-A-68	Bound,Layer Noise	-	-	HR-52	EAFB	RW04/22	DDL	LP1	32	-	EAFB RM187
1965-N105	2438962.21	1965 Jul 20 1659:28	X-15	-	3-45-69	Bound,Layer Noise	-	-	HR-52-008	EAFB	RW04/22	DDL	LP1	14	-	EAFB
1965-N110	2438964.50	1965 Jul 23	X-15	-	1-A-90	IR Scan,Stability	-	-	HR-52	EAFB	RW04/22	DDL	LP1	14	-	EAFB
1965-N113	2438969.50	1965 Jul 27	X-15	-	1-A-91	IR Scan,Stability	-	-	HR-52	EAFB	RW04/22	DDL	LP1	14	-	EAFB
1965-N114	2438969.50	1965 Jul 27	X-15	-	1-A-91	IR Scan,Stability	-	-	HR-52	EAFB	RW04/22	DDL	LP1	14	-	EAFB
1965-N24	2438976.32	1965 Aug 3 1940:05	X-15	-	2-41-73	RAS ST,Landing	-	-	HR-52-008	EAFB	RW04/22	DDL	LP1	63	-	EAFB RM187
1965-N119	2438979.20	1965 Aug 6 1641:46	X-15	-	1-86-83	IR Scan,Stability	-	-	HR-52-008	EAFB	RW04/22	DDL	LP1	31	-	EAFB RM187
1965-N461	2438983.27	1965 Aug 10 1824:21	X-15	-	3-46-70	Northrop Scan,BLM	-	-	HR-52-003	EAFB	RW04/22	DDL	LP1A	82	-	EAFB RM187
1965-N122	2438992.50	1965 Aug 20	X-15	-	1-A-94	Northrop Scan,BLM	-	-	HR-52	EAFB	RW04/22	DDL	LP1	14	-	EAFB
1965-N124	2438996.50	1965 Aug 24	X-15	-	1-A-95	Northrop Scan,BLM	-	-	HR-52	EAFB	RW04/22	DDL	LP1	14	-	EAFB
1965-N25	2438998.20	1965 Aug 26 1654:46	X-15	-	1-87-96	MIT Scan,Stability	-	-	HR-52-003	EAFB	RW04/22	DDL	LP1	65	-	EAFB RM187
1965-N26	2438999.20	1965 Aug 26 1654:46	X-15	-	1-87-96	MIT Scan,Stability	-	-	HR-52-003	EAFB	RW04/22	DDL	LP1	65	-	EAFB RM187
1965-N27	2439006.19	1965 Sep 2 1640:05	X-15	-	3-47-71	Northrop Radiom,BLM	-	-	HR-52-008	EAFB	RW04/22	DDL	LP1	73	-	EAFB RM187
1965-N130	2439013.21	1965 Sep 9 1655:50	X-15	-	2-42-74	RAS ST,Landing	-	-	HR-52-008	EAFB	RW04/22	DDL	LP1	73	-	EAFB RM187
1965-N28	2439018.21	1965 Sep 14 1701:06	X-15	-	1-88-97	IR scan,ABL TPS	-	-	HR-52-008	EAFB	RW04/22	DDL	LP1	29	-	EAFB RM187
1965-N134	2439026.25	1965 Sep 22 1759:39	X-15	-	3-48-72	IR Radiom,BLM	-	-	HR-52-008	EAFB	RW04/22	DDL	LP1	72	-	EAFB RM187
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Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	OrbPay	Agency	Launch_Code	Group	Category	LTCite	Cite	Notes
1959-A46	2438638-24	1959 Mar 10 1750	X-15	1	1-C-1	0.000	IMASN/AFFTC	YS	-	Test	Wire	Thompson	-
1959-A57	2438659-50	1959 Apr 1	X-15	1	1-A-2	0.000	IMASN/AFFTC	YF	-	Test	Thompson	-	-
1959-A60	2438669-18	1959 Apr 10 1624	X-15	1	1-A-3	0.000	IMASN/AFFTC	YF	-	Test	Thompson	-	-
1959-A80	2438709-50	1959 May 21	X-15	1	1-A-4	0.000	IMASN/AFFTC	YF	-	Test	Thompson	-	-
1959-A83	2438728-15	1959 Jun 8 1538:40	X-15	1	1-1-5	0.000	IMASN/AFFTC	YF	-	Test	Thompson	-	-
1959-A120	2438773-50	1959 Jul 24	X-15	1	2-C-2	0.000	IMASN/AFFTC	YF	-	Test	Thompson	-	-
1959-A157	2438816-06	1959 Sep 4 1323	X-15	1	2-1-3	0.000	IMASN/AFFTC	YF	-	Test	Wire	Thompson	-
1959-A160	2438829-13	1959 Sep 17 1508:48	X-15	1	2-1-3	0.000	IMASN/AFFTC	YF	-	Test	Thompson	-	-
1959-A161	2438851-50	1959 Oct 10	X-15	1	2-1-3	0.000	IMASN/AFFTC	YF	-	Test	Thompson	-	-
1959-A172	2438855-50	1959 Oct 14	X-15	1	2-1-3	0.000	IMASN/AFFTC	YF	-	Test	Thompson	-	-
1959-A174	2438859-26	1959 Oct 17 1813:07	X-15	1	2-1-3	0.000	IMASN/AFFTC	YF	-	Test	Thompson	-	-
1959-A176	2438863-50	1959 Oct 22	X-15	1	2-1-3	0.000	IMASN/AFFTC	YF	-	Test	Thompson	-	-
1959-A186	2438872-50	1959 Oct 31	X-15	1	2-1-3	0.000	IMASN/AFFTC	YF	-	Test	Thompson	-	-
1959-A178	2438878-24	1959 Nov 5 1739:28	X-15	1	2-1-3	0.000	IMASN/AFFTC	YF	-	Test	Thompson	-	-
1959-A188	2438918-50	1959 Dec 16	X-15	1	1-A-6	0.000	IMASN/AFFTC	YF	-	Test	Thompson	-	-
1960-A118	2438957-51	1960 Jan 24 0017:05	X-15	1	1-2-7	0.000	IMASN/AFFTC	YF	-	Test	Thompson	-	-
1960-A31	2438968-50	1960 Feb 4	X-15	1	2-A-10	0.000	IMASN/AFFTC	YF	-	Test	Thompson	-	-
1960-A43	2438976-26	1960 Feb 11 1815:04	X-15	1	2-4-11	0.000	IMASN/AFFTC	YF	-	Test	Thompson	-	-
1960-A49	2438982-24	1960 Feb 17 1741:32	X-15	1	2-5-12	0.000	IMASN/AFFTC	YF	-	Test	Thompson	-	-
1960-A69	2437011-19	1960 Mar 17 1631:25	X-15	1	2-6-13	0.000	IMASN/AFFTC	YF	-	Test	Thompson	-	-
1960-A70	2437011-50	1960 Mar 18	X-15	1	2-8-14	0.000	IMASN/AFFTC	YF	-	Test	Thompson	-	-
1960-A76	2437019-49	1960 Mar 25 2343:23	X-15	1	1-3-6	0.000	IMASN/AFFTC	YF	-	Test	Thompson	-	-
1960-A78	2437023-25	1960 Mar 29 1759:28	X-15	1	2-7-15	0.000	IMASN/AFFTC	YF	-	Test	Thompson	-	-
1960-A80	2437025-20	1960 Mar 31 1642:05	X-15	1	2-8-16	0.000	IMASN/AFFTC	YF	-	Test	Thompson	-	-
1960-A128	2437036-22	1960 Apr 13 1716:11	X-15	1	1-4-9	0.000	IMASN/AFFTC	YF	-	Test	Thompson	-	-
1960-A101	2437044-20	1960 Apr 19 1651:44	X-15	1	1-5-10	0.000	IMASN/AFFTC	YF	-	Test	Thompson	-	-
1960-A110	2437059-50	1960 May 5	X-15	1	2-A-17	0.000	IMASN/AFFTC	YF	-	Test	Thompson	-	-
1960-A115	2437061-20	1960 May 6 1653:19	X-15	1	1-6-11	0.000	IMASN/AFFTC	YF	-	Test	Thompson	-	-
1960-A117	2437061-16	1960 May 12 1547:37	X-15	1	1-7-12	0.000	IMASN/AFFTC	YF	-	Test	Thompson	-	-
1960-A122	2437074-16	1960 May 19 1546:47	X-15	1	1-8-13	0.000	IMASN/AFFTC	YF	-	Test	Thompson	-	-
1960-A124	2437081-17	1960 May 26 1606:36	X-15	1	2-9-16	0.000	IMASN/AFFTC	YF	-	Test	Thompson	-	-
1960-A130	2437081-50	1960 May 27	X-15	1	1-A-14	0.000	IMASN/AFFTC	YF	-	Test	Thompson	-	-
1960-A141	2437088-50	1960 Jun 3	X-15	1	1-A-15	0.000	IMASN/AFFTC	YF	-	Test	Thompson	-	-
1960-A146	2437093-50	1960 Jun 6	X-15	1	1-A-16	0.000	IMASN/AFFTC	YF	-	Test	Thompson	-	-
1960-A190	2437151-17	1960 Aug 4 1559:13	X-15	1	1-9-17	0.000	IMASN/AFFTC	YF	-	Test	Thompson	-	-
1960-A197	2437157-50	1960 Aug 11	X-15	1	1-A-18	0.000	IMASN/AFFTC	YF	-	Test	Thompson	-	-
1960-A199	2437159-16	1960 Aug 12 1548:43	X-15	1	1-10-19	0.000	IMASN/AFFTC	YF	-	Test	Thompson	-	-
1960-A204	2437164-50	1960 Aug 18	X-15	1	1-A-20	0.000	IMASN/AFFTC	YF	-	Test	Thompson	-	-
1960-A205	2437166-15	1960 Aug 19 1534:22	X-15	1	1-11-21	0.000	IMASN/AFFTC	YF	-	Test	Thompson	-	-
1960-A215	2437179-50	1960 Sep 2	X-15	1	1-A-22	0.000	IMASN/AFFTC	YF	-	Test	Thompson	-	-
1960-A216	2437185-26	1960 Sep 10 1845:10	X-15	1	1-12-23	0.000	IMASN/AFFTC	YF	-	Test	Thompson	-	-
1960-A221	2437201-50	1960 Sep 20	X-15	1	1-A-24	0.000	IMASN/AFFTC	YF	-	Test	Thompson	-	-
1960-A229	2437207-50	1960 Sep 23 1652:06	X-15	1	1-15-25	0.000	IMASN/AFFTC	YF	-	Test	Thompson	-	-
1960-A241	2437230-50	1960 Oct 11	X-15	1	2-A-26	0.000	IMASN/AFFTC	YF	-	Test	Thompson	-	-
1960-A243	2437230-24	1960 Oct 15 1730:27	X-15	1	1-16-26	0.000	IMASN/AFFTC	YF	-	Test	Thompson	-	-
1960-A253	2437235-50	1960 Oct 26 1743:56	X-15	1	2-16-26	0.000	IMASN/AFFTC	YF	-	Test	Thompson	-	-
1960-A256	2437235-50	1960 Oct 26 1743:56	X-15	1	1-16-26	0.000	IMASN/AFFTC	YF	-	Test	Thompson	-	-
1960-A264	2437243-36	1960 Nov 4 2043:33	X-15	1	1-16-26	0.000	IMASN/AFFTC	YF	-	Test	Thompson	-	-
1960-A264	2437254-25	1960 Nov 4 2043:33	X-15	1	2-16-26	0.000	IMASN/AFFTC	YF	-	Test	Thompson	-	-
1960-A266	2437256-38	1960 Nov 15 1759:00	X-15	1	1-17-21	0.000	IMASN/AFFTC	YF	-	Test	Thompson	-	-
1960-A268	2437261-38	1960 Nov 17 2043:07	X-15	1	2-17-21	0.000	IMASN/AFFTC	YF	-	Test	Thompson	-	-
1960-A272	2437261-38	1960 Nov 20 2105:55	X-15	1	2-17-21	0.000	IMASN/AFFTC	YF	-	Test	Thompson	-	-
1960-A283	2437269-28	1960 Nov 30 1842:43	X-15	1	1-19-31	0.000	IMASN/AFFTC	YF	-	Test	Thompson	-	-
1960-A291	2437275-48	1960 Dec 9 2329:30	X-15	1	2-19-33	0.000	IMASN/AFFTC	YF	-	Test	Thompson	-	-
1960-A296	2437278-33	1960 Dec 9 1952:40	X-15	1	1-19-32	0.000	IMASN/AFFTC	YF	-	Test	Thompson	-	-
1960-A301	2437283-50	1960 Dec 15	X-15	1	1-A-33	0.000	IMASN/AFFTC	YF	-	Test	Thompson	-	-
1961-A19	2437310-50	1961 Jan 11	X-15	1	1-A-34	0.000	IMASN/AFFTC	YF	-	Test	Thompson	-	-
1961-A42	2437320-28	1961 Feb 1 1847:32	X-15	1	1-20-35	0.000	IMASN/AFFTC	YF	-	Test	Thompson	-	-
1961-A45	2437328-37	1961 Feb 7 2056:10	X-15	1	1-21-36	0.000	IMASN/AFFTC	YF	-	Test	Thompson	-	-
1961-A51	2437351-50	1961 Feb 21	X-15	1	2-A-24	0.000	IMASN/AFFTC	YF	-	Test	Thompson	-	-
1961-A53	2437354-50	1961 Feb 24	X-15	1	2-A-25	0.000	IMASN/AFFTC	YF	-	Test	Thompson	-	-
1961-A53	2437354-50	1961 Feb 24	X-15	1	2-A-25	0.000	IMASN/AFFTC	YF	-	Test	Thompson	-	-
1961-A73	2437366-27	1961 Mar 7 1828:33	X-15	1	2-A-27	0.000	IMASN/AFFTC	YF	-	Test	Thompson	-	-
1961-A79	2437379-50	1961 Mar 21	X-15	1	2-14-28	0.000	IMASN/AFFTC	YF	-	Test	Thompson	-	-
1961-M07	2437389-25	1961 Mar 30 1805:00	X-15	1	2-15-29	0.000	IMASN/AFFTC	YF	-	Test	Thompson	-	-
1961-A108	2437411-25	1961 Apr 21 1805:17	X-15	1	2-A-30	0.000	IMASN/AFFTC	YF	-	Test	Thompson	-	-
1961-A126	2437438-50	1961 May 19	X-15	1	2-16-31	0.000	IMASN/AFFTC	YF	-	Test	Thompson	-	-
1961-A130	2437445-30	1961 May 25 1916:35	X-15	1	2-A-30	0.000	IMASN/AFFTC	YF	-	Test	Thompson	-	-
1961-A154	2437470-50	1961 Jun 20	X-15	1	2-A-32	0.000	IMASN/AFFTC	YF	-	Test	Thompson	-	-
1961-A158	2437474-38	1961 Jun 23 2100:05	X-15	1	2-17-33	0.000	IMASN/AFFTC	YF	-	Test	Thompson	-	-
1961-A187	2437522-23	1961 Aug 10 1727:05	X-15	1	1-22-37	0.000	IMASN/AFFTC	YF	-	Test	Thompson	-	-
1961-A199	2437555-40	1961 Sep 12 2140:17	X-15	1	2-19-34	0.000	IMASN/AFFTC	YF	-	Test	Thompson	-	-
1961-A206	2437571-24	1961 Sep 28 1750:25	X-15	1	2-19-35	0.000	IMASN/AFFTC	YF	-	Test	Thompson	-	-
1961-A207	2437571-50	1961 Sep 29	X-15	1	1-A-38	0.000	IMASN/AFFTC	YF	-	Test	Thompson	-	-
1961-A215	2437576-28	1961 Oct 3 1840:50	X-15	1	1-23-39	0.000	IMASN/AFFTC	YF	-	Test	Thompson	-	-
1961-M24	2437584-35	1961 Oct 11 2020:00	X-15	1	2-20-36	0.000	IMASN/AFFTC	YF	-	Test	Thompson	-	-
1961-A220	2437590-29	1961 Oct 17 1857:33	X-15	1	1-24-40	0.000	IMASN/AFFTC	YF	-	Test	Thompson	-	-
1961-A227	2437599-50	1961 Oct 27	X-15	1	1-A-41	0.000	IMASN/AFFTC	YF	-	Test	Thompson	-	-
1961-A231	2437606-50	1961 Nov 2	X-15	1	1-A-42	0.000	IMASN/AFFTC	YF	-	Test	Thompson	-	-
1961-A232	2437606-50	1961 Nov 3	X-15	1	1-A-43	0.000	IMASN/AFFTC	YF	-	Test	Thompson	-	-
1961-A233	2437613-25	1961 Nov 9 1757:17	X-15	1	2-21-37	0.000	IMASN/AFFTC	YF	-	Test	Thompson	-	-
1961-A249	2437652-50	1961 Dec 19	X-15	1	3-A-1	0.000	IMASN/AFFTC	YF	-	Test	Thompson	-	-
1961-A250	2437654-45	1961 Dec 20 2245:50	X-15	1	3-1-2	0.000	IMASN/AFFTC	YF	-	Test	Thompson	-	-
1962-A05	2437675-35	1962 Jan 10 2028:16	X-15	1	1-25-44	0.000	IMASN/AFFTC	YF	-	Test	Thompson	-	-
1962-A09	2437682-33	1962 Jan 17 2000:34	X-15	1	3-2-3	0.000	IMASN/AFFTC	YF	-	Test	Thompson	-	-
1962-A39	2437752-50	1962 Mar 29	X-15	1	3-A-4	0.000	IMASN/AFFTC	YF	-	Test	Thompson	-	-
1962-A41	2437753-50	1962 Mar 30	X-15	1	3-A-5	0.000	IMASN/AFFTC	YF	-	Test	Thompson	-	-

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	OrbPay	Agency	Launch_Code	Group	Category	LTCite	Cite	Notes
1962-A44	2437754.50	1962 Mar 31	X-15	-	3-A-6	0.000	IMSN/AFFTC	YF	-	Test	Thompson	-	-
1962-M04	2437760.25	1962 Apr 5 1804:26	X-15	-	3-3-7	0.000	IMSN/AFFTC	YF	-	Test	Thompson	-	-
1962-A63	2437772.50	1962 Apr 18	X-15	-	1-A-45	0.000	IMSN/AFFTC	YF	-	Test	Thompson	-	-
1962-M05	2437774.25	1962 Apr 19 1802:20	X-15	-	1-26-46	0.000	IMSN/AFFTC	YS	-	Test	Thompson	-	-
1962-M06	2437775.31	1962 Apr 20 1928:58	X-15	-	3-4-8	0.000	IMSN/AFFTC	YS	-	Test	Thompson	-	-
1962-M60	2437779.50	1962 Apr 26	X-15	-	2-A-38	0.000	IMSN/AFFTC	YF	-	Test	Thompson	-	-
1962-M61	2437780.50	1962 Apr 26	X-15	-	2-A-39	0.000	IMSN/AFFTC	YF	-	Test	Thompson	-	-
1962-M62	2437781.50	1962 Apr 27	X-15	-	1-A-47	0.000	IMSN/AFFTC	YF	-	Test	Thompson	-	-
1962-M66	2437785.22	1962 Apr 30 1723:20	X-15	-	1-27-48	0.000	IMSN/AFFTC	YF	-	Test	Thompson	-	-
1962-M65	2437786.50	1962 May 2	X-15	-	(3-C)	0.000	IMSN/AFFTC	YS	-	Demo	Jeakins-Landis	-	-
1962-A70	2437789.50	1962 May 5	X-15	-	(3-C)	0.000	IMSN/AFFTC	YS	-	Demo	Jeakins-Landis	-	-
1962-A71	2437789.50	1962 May 5	X-15	-	(3-C)	0.000	IMSN/AFFTC	YS	-	Demo	Jeakins-Landis	-	-
1962-A73	2437793.21	1962 May 8 1701:28	X-15	-	2-22-40	0.000	IMSN/AFFTC	YS	-	Test	Thompson	-	-
1962-A80	2437807.21	1962 May 22 1704:46	X-15	-	1-28-49	0.000	IMSN/AFFTC	YF	-	Test	Thompson	-	-
1962-A84	2437809.50	1962 May 26	X-15	-	2-A-41	0.000	IMSN/AFFTC	YF	-	Test	Thompson	-	-
1962-A87	2437813.50	1962 May 29	X-15	-	2-A-42	0.000	IMSN/AFFTC	YF	-	Test	Thompson	-	-
1962-A80	2437817.24	1962 Jun 1 1751:16	X-15	-	2-23-43	0.000	IMSN/AFFTC	YS	-	Test	Thompson	-	-
1962-A94	2437823.23	1962 Jun 7 1729:20	X-15	-	1-29-50	0.000	IMSN/AFFTC	YS	-	Test	Thompson	-	-
1962-H10	2437828.29	1962 Jun 12 1904:00	X-15	-	3-5-9	0.000	IMSN/AFFTC	YS	-	Test	Thompson	-	-
1962-H11	2437837.20	1962 Jun 21 1647:05	X-15	-	3-6-10	0.000	IMSN/AFFTC	YS	-	Test	Thompson	-	-
1962-A104	2437843.34	1962 Jun 27 2008:10	X-15	-	1-50-51	0.000	IMSN/AFFTC	YS	-	Test	Thompson	-	-
1962-A104	2437845.24	1962 Jun 29 1741:47	X-15	-	2-24-44	0.000	IMSN/AFFTC	YS	-	Test	Thompson	-	-
1962-A108	2437855.50	1962 Jul 10	X-15	-	3-A-11	0.000	IMSN/AFFTC	YF	-	Test	Thompson	-	-
1962-A109	2437856.50	1962 Jul 11	X-15	-	3-A-12	0.000	IMSN/AFFTC	YF	-	Test	Thompson	-	-
1962-A112	2437861.50	1962 Jul 16 2108:25	X-15	-	3-A-13	0.000	IMSN/AFFTC	YF	-	Test	Thompson	-	-
1962-A113	2437862.38	1962 Jul 16 2108:25	X-15	-	1-51-52	0.000	IMSN/AFFTC	YS	-	Test	Thompson	-	-
1962-S244	2437863.19	1962 Jul 17 1631:10	X-15	-	3-7-14	0.000	IMSN/AFFTC	YS	-	Test	Thompson	-	-
1962-A114	2437865.20	1962 Jul 19 1653:45	X-15	-	2-25-45	0.000	IMSN/AFFTC	YS	-	Test	Thompson	-	-
1962-A116	2437872.27	1962 Jul 26 1622:30	X-15	-	1-52-53	0.000	IMSN/AFFTC	YS	-	Test	Thompson	-	-
1962-A126	2437877.50	1962 Aug 1	X-15	-	3-A-15	0.000	IMSN/AFFTC	YF	-	Test	Thompson	-	-
1962-A128	2437879.21	1962 Aug 2 1656:15	X-15	-	3-6-16	0.000	IMSN/AFFTC	YF	-	Test	Thompson	-	-
1962-A131	2437885.21	1962 Aug 6 1708:35	X-15	-	2-26-46	0.000	IMSN/AFFTC	YF	-	Test	Thompson	-	-
1962-A135	2437886.50	1962 Aug 10	X-15	-	3-A-17	0.000	IMSN/AFFTC	YF	-	Test	Thompson	-	-
1962-H18	2437891.24	1962 Aug 14 1741:35	X-15	-	3-9-19	0.000	IMSN/AFFTC	YS	-	Test	Thompson	-	-
1962-A142	2437897.21	1962 Aug 20 1708:40	X-15	-	2-27-47	0.000	IMSN/AFFTC	YS	-	Test	Thompson	-	-
1962-A146	2437906.23	1962 Aug 29 1736:03	X-15	-	2-28-48	0.000	IMSN/AFFTC	YS	-	Test	Thompson	-	-
1962-A159	2437934.50	1962 Sep 27	X-15	-	2-A-49	0.000	IMSN/AFFTC	YF	-	Test	Thompson	-	-
1962-A161	2437935.21	1962 Sep 28 1704:55	X-15	-	2-29-50	0.000	IMSN/AFFTC	YF	-	Test	Thompson	-	-
1962-A166	2437942.22	1962 Oct 4 1710:11	X-15	-	3-10-19	0.000	IMSN/AFFTC	YS	-	Test	Thompson	-	-
1962-A166	2437947.25	1962 Oct 9 1758:32	X-15	-	2-30-51	0.000	IMSN/AFFTC	YS	-	Test	Thompson	-	-
1962-A167	2437961.77	1962 Oct 23 050:40	X-15	-	3-11-20	0.000	IMSN/AFFTC	YS	-	Test	Thompson	-	-
1962-A163	2437976.77	1962 Nov 9 1823:07	X-15	-	3-51-52	0.000	IMSN/AFFTC	YF	-	Test	Thompson	-	-
1962-A222	2438011.50	1962 Dec 13 1844:07	X-15	-	3-A-21	0.000	IMSN/AFFTC	YF	-	Test	Thompson	-	-
1962-A225	2438013.28	1962 Dec 14 1845:07	X-15	-	3-12-22	0.000	IMSN/AFFTC	YS	-	Test	Thompson	-	-
1962-A232	2438019.31	1962 Dec 16 1905:04	X-15	-	3-13-23	0.000	IMSN/AFFTC	YS	-	Test	Thompson	-	-
1962-S14	2438131.25	1963 Jan 11 1859:37	X-15	-	3-13-24	0.000	IMSN/AFFTC	YS	-	Test	Thompson	-	-
1962-A65	2438134.34	1963 Apr 18 2016:17	X-15	-	3-32-54	0.000	IMSN/AFFTC	YS	-	Test	Thompson	-	-
1962-A66	2438145.42	1963 Apr 18 2016:17	X-15	-	3-32-54	0.000	IMSN/AFFTC	YS	-	Test	Thompson	-	-
1962-M56	2438150.21	1963 Apr 25 2204:19	X-15	-	1-35-55	0.000	IMSN/AFFTC	YS	-	Imaging	Thompson	-	-
1962-A73	2438159.50	1963 May 14 1911:56	X-15	-	3-16-57	0.000	IMSN/AFFTC	YS	-	Test	Thompson	-	-
1962-A74	2438164.30	1963 May 14 1911:56	X-15	-	3-17-58	0.000	IMSN/AFFTC	YS	-	Test	Thompson	-	-
1962-A76	2438165.24	1963 May 15 1750:46	X-15	-	1-35-56	0.000	IMSN/AFFTC	YF	-	Test	Thompson	-	-
1962-A83	2438179.24	1963 May 29 1743:21	X-15	-	3-19-59	0.000	IMSN/AFFTC	YS	-	Test	Thompson	-	-
1962-A83	2438189.23	1963 Jun 18 1724:21	X-15	-	3-19-59	0.000	IMSN/AFFTC	YS	-	Test	Thompson	-	-
1962-A85	2438206.20	1963 Jun 25 1653:50	X-15	-	1-36-57	0.000	IMSN/AFFTC	YS	-	Tech	Thompson	-	-
1962-S204	2438208.21	1963 Jun 27 1656:03	X-15	-	3-20-31	0.000	IMSN/AFFTC	YF	-	Tech	Thompson	-	-
1962-A103	2438213.50	1963 Jun 31	X-15	-	1-A-58	0.000	IMSN/AFFTC	YF	-	Tech	Thompson	-	-
1962-M56	2438220.30	1963 Jul 9 1912:12	X-15	-	1-37-59	0.000	IMSN/AFFTC	YF	-	Tech	Thompson	-	-
1962-A106	2438229.21	1963 Jul 17 1656:03	X-15	-	1-A-60	0.000	IMSN/AFFTC	YF	-	Test	Thompson	-	-
1962-A108	2438229.21	1963 Jul 17 1656:03	X-15	-	1-A-60	0.000	IMSN/AFFTC	YF	-	Test	Thompson	-	-
1962-A108	2438230.22	1963 Jul 18 1707:20	X-15	-	3-21-52	0.000	IMSN/AFFTC	YS	-	Test	Thompson	-	-
1962-S244	2438230.22	1963 Jul 19 1720:05	X-15	-	3-A-33	0.000	IMSN/AFFTC	YF	-	Test	Thompson	-	-
1962-A117	2438234.50	1963 Aug 6	X-15	-	3-A-34	0.000	IMSN/AFFTC	YF	-	Test	Thompson	-	-
1962-A119	2438254.50	1963 Aug 13	X-15	-	3-A-35	0.000	IMSN/AFFTC	YF	-	Test	Thompson	-	-
1962-A120	2438256.50	1963 Aug 15	X-15	-	3-22-36	0.000	IMSN/AFFTC	YS	-	Test	Thompson	-	-
1962-S401	2438264.21	1963 Aug 22 1705:57	X-15	-	1-A-62	0.000	IMSN/AFFTC	YF	-	Test	Thompson	-	-
1962-A138	2438306.50	1963 Oct 4	X-15	-	1-39-61	0.000	IMSN/AFFTC	YS	-	Test	Thompson	-	-
1962-A141	2438310.31	1963 Oct 7 1922:56	X-15	-	3-21-52	0.000	IMSN/AFFTC	YS	-	Test	Thompson	-	-
1962-A146	2438316.50	1963 Oct 14 1942:34	X-15	-	3-A-37	0.000	IMSN/AFFTC	YF	-	Test	Thompson	-	-
1962-A152	2438332.30	1963 Oct 29 1942:34	X-15	-	1-40-64	0.000	IMSN/AFFTC	YS	-	Test	Thompson	-	-
1962-A154	2438337.50	1963 Oct 25	X-15	-	3-A-38	0.000	IMSN/AFFTC	YF	-	Test	Thompson	-	-
1962-A166	2438341.26	1963 Nov 7 1811:14	X-15	-	3-A-38	0.000	IMSN/AFFTC	YF	-	Test	Thompson	-	-
1962-A169	2438348.31	1963 Nov 14 1919:21	X-15	-	1-41-65	0.000	IMSN/AFFTC	YS	-	Test	Thompson	-	-
1962-A173	2438352.50	1963 Nov 19	X-15	-	3-A-40	0.000	IMSN/AFFTC	YF	-	Test	Thompson	-	-
1962-A176	2438361.35	1963 Nov 27 2017:40	X-15	-	3-24-41	0.000	IMSN/AFFTC	YF	-	Test	Thompson	-	-
1962-A181	2438366.50	1963 Dec 3	X-15	-	1-A-66	0.000	IMSN/AFFTC	YF	-	Test	Thompson	-	-
1962-A186	2438389.29	1963 Dec 18	X-15	-	1-42-67	0.000	IMSN/AFFTC	YF	-	Test	Thompson	-	-
1962-A186	2438391.50	1963 Dec 18	X-15	-	1-A-68	0.000	IMSN/AFFTC	YF	-	Tech	Thompson	-	-
1964-A02	2438403.34	1964 Jan 8 2010:31	X-15	-	1-43-69	0.000	IMSN/AFFTC	YS	-	Test	Thompson	-	-
1964-A05	2438411.25	1964 Jan 16 1803:30	X-15	-	3-25-42	0.000	IMSN/AFFTC	YS	-	Test	Thompson	-	-
1964-A14	2438423.34	1964 Jan 28 2011:36	X-15	-	1-44-70	0.000	IMSN/AFFTC	YS	-	Test	Thompson	-	-
1964-A25	2438445.25	1964 Feb 19 1757:24	X-15	-	3-26-43	0.000	IMSN/AFFTC	YS	-	Test	Thompson	-	-
1964-A34	2438468.24	1964 Mar 13 1746:27	X-15	-	3-27-44	0.000	IMSN/AFFTC	YF	-	Test	Thompson	-	-
1964-A37	2438471.50	1964 Mar 17	X-15	-	1-A-71	0.000	IMSN/AFFTC	YF	-	Tech	Thompson	-	-
1964-A44	2438482.26	1964 Mar 27 1810:18	X-15	-	1-45-72	0.000	IMSN/AFFTC	YS	-	Tech	Thompson	-	-
1964-A46	2438485.50	1964 Mar 31	X-15	-	3-A-45	0.000	IMSN/AFFTC	YF	-	Test	Thompson	-	-





Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	OrbPay	Agency	Launch_Code	Group	Category	LTCite	Cite	Notes
1966-A64	2439250.50	1966 May 5	X-15	-	2- A-78	0.000	IMSN/AFFTC	YF	-	Test	Thompson	-	-
1966-A65	2439252.35	1966 May 6 20:00:12	X-15	-	1-63-104	0.000	IMSN/AFFTC	YF	-	Aeron/Meteor/Tech	Thompson	-	-
1966-A67	2439264.23	1966 May 18 17:24:00	X-15	-	2-44-79	0.000	IMSN/AFFTC	YF	-	Test	Thompson	-	-
1966-A73	2439278.50	1966 Jun 2	X-15	-	1- A-108	0.000	IMSN/AFFTC	YF	-	Test	Thompson	-	-
1966-A75	2439286.50	1966 Jun 10	X-15	-	1- A-106	0.000	IMSN/AFFTC	YF	-	Test	Thompson	-	-
1966-A79	2439296.50	1966 Jun 20	X-15	-	3- A-76	0.000	IMSN/AFFTC	YF	-	Test	Thompson	-	-
1966-A80	2439303.50	1966 Jun 27	X-15	-	2- C-80	0.000	IMSN/AFFTC	YF	-	Test	Thompson	-	-
1966-A83	2439308.25	1966 Jul 1 18:02:36	X-15	-	2-45-81	0.000	IMSN/AFFTC	YF	-	Test	Thompson	-	-
1966-A84	2439319.27	1966 Jul 12 18:32:15	X-15	-	1-64-107	0.000	IMSN/AFFTC	YF	-	Test	Thompson	-	-
1966-A85	2439319.50	1966 Jul 13	X-15	-	3- A-77	0.000	IMSN/AFFTC	YF	-	Test	Thompson	-	-
1966-A87	2439325.28	1966 Jul 18 18:38:24	X-15	-	3-52-78	0.000	IMSN/AFFTC	YF	-	Test	Thompson	-	-
1966-A88	2439326.50	1966 Jul 21 19:02:03	X-15	-	2- A-63	0.000	IMSN/AFFTC	YF	-	Test	Thompson	-	-
1966-M27	2439328.29	1966 Jul 21 19:02:03	X-15	-	2-46-83	0.000	IMSN/AFFTC	YF	-	Test	Thompson	-	-
1966-M29	2439335.21	1966 Jul 28 17:01:12	X-15	-	1-65-108	0.000	IMSN/AFFTC	YF	-	Tech/Meteor/Aeron	Thompson	-	-
1966-M30	2439341.16	1966 Aug 3 15:45:26	X-15	-	2-47-84	0.000	IMSN/AFFTC	YF	-	Test	Thompson	-	-
1966-A91	2439342.20	1966 Aug 4 16:04:43	X-15	-	3-53-79	0.000	IMSN/AFFTC	YF	-	Test/Tech	Thompson	-	-
1966-A94	2439346.50	1966 Aug 9	X-15	-	1- A-109	0.000	IMSN/AFFTC	YF	-	Test	Thompson	-	-
1966-A97	2439347.50	1966 Aug 11 16:44:13	X-15	-	1- A-110	0.000	IMSN/AFFTC	YF	-	Test	Thompson	-	-
1966-M31	2439349.20	1966 Aug 11 16:44:13	X-15	-	1-66-111	0.000	IMSN/AFFTC	YF	-	Tech/Meteor/Aeron	Thompson	-	-
1966-M32	2439350.23	1966 Aug 12 17:28:33	X-15	-	2-48-85	0.000	IMSN/AFFTC	YF	-	Test	Thompson	-	-
1966-M33	2439357.21	1966 Aug 19 17:04:35	X-15	-	3-54-80	0.000	IMSN/AFFTC	YF	-	Test	Thompson	-	-
1966-M34	2439363.20	1966 Aug 25 16:49:11	X-15	-	1-67-112	0.000	IMSN/AFFTC	YF	-	Test/Aeron?	Thompson	-	-
1966-A101	2439368.20	1966 Aug 30 16:51:37	X-15	-	2-49-86	0.000	IMSN/AFFTC	YF	-	Tech/Meteor/Aeron	Thompson	-	-
1966-A102	2439377.24	1966 Sep 6 17:39:16	X-15	-	1-68-113	0.000	IMSN/AFFTC	YF	-	Test/Tech/OV Ast	Thompson	-	-
1966-A103	2439381.50	1966 Sep 13	X-15	-	3- A-81	0.000	IMSN/AFFTC	YF	-	Test	Thompson	-	-
1966-M35	2439383.29	1966 Sep 14 19:01:29	X-15	-	3-55-82	0.000	IMSN/AFFTC	YF	-	Test	Thompson	-	-
1966-A114	2439396.50	1966 Sep 28	X-15	-	1- A-114	0.000	IMSN/AFFTC	YF	-	Tech/Meteor/Solar	Thompson	-	-
1966-A115	2439405.30	1966 Oct 4	X-15	-	1- A-115	0.000	IMSN/AFFTC	YF	-	Test	Thompson	-	-
1966-A116	2439405.30	1966 Oct 6 19:16:59	X-15	-	1-69-116	0.000	IMSN/AFFTC	YF	-	Test	Thompson	-	-
1966-A117	2439405.30	1966 Oct 7	X-15	-	2- A-87	0.000	IMSN/AFFTC	YF	-	Test	Thompson	-	-
1966-A118	2439417.50	1966 Oct 19	X-15	-	2- A-88	0.000	IMSN/AFFTC	YF	-	Test	Thompson	-	-
1966-S79	2439431.39	1966 Nov 1 21:24:12	X-15	-	3-56-83	0.000	IMSN/AFFTC	YF	-	Test	Thompson	-	-
1966-A139	2439446.39	1966 Nov 18 21:24:07	X-15	-	2-50-89	0.000	IMSN/AFFTC	YF	-	Meteor/Aeron	Thompson	-	-
1966-A138	2439447.50	1966 Nov 18	X-15	-	3- A-85	0.000	IMSN/AFFTC	YF	-	Test	Thompson	-	-
1966-A142	2439452.50	1966 Nov 23	X-15	-	3- A-86	0.000	IMSN/AFFTC	YF	-	Test	Thompson	-	-
1966-A146	2439459.32	1966 Nov 29 19:38:32	X-15	-	3-57-86	0.000	IMSN/AFFTC	YF	-	Test	Thompson	-	-
1966-A158	2439461.50	1966 Dec 22	X-15	-	2- C-90	0.000	IMSN/AFFTC	YF	-	Test	Thompson	-	-
1967-A62	2439564.50	1967 Mar 15	X-15	-	1- A-117	0.000	IMSN/AFFTC	YF	-	Test	Thompson	-	-
1967-A66	2439570.50	1967 Mar 21	X-15	-	1- A-118	0.000	IMSN/AFFTC	YF	-	Test	Thompson	-	-
1967-A67	2439572.24	1967 Mar 22 17:52:04	X-15	-	1-70-119	0.000	IMSN/AFFTC	YF	-	Test	Thompson	-	-
1967-A68	2439600.30	1967 Apr 20 19:00:17	X-15	-	1- A-120	0.000	IMSN/AFFTC	YF	-	Test	Thompson	-	-
1967-A70	2439607.22	1967 Apr 26 19:23:32	X-15	-	3-58-87	0.000	IMSN/AFFTC	YF	-	Test	Thompson	-	-
1967-M09	2439609.22	1967 Apr 26 19:23:32	X-15	-	2-71-121	0.000	IMSN/AFFTC	YF	-	Test/Tech	Thompson	-	-
1967-A77	2439615.30	1967 May 6 19:27:38	X-15	-	2- A-91	0.000	IMSN/AFFTC	YF	-	Test	Thompson	-	-
1967-A78	2439619.31	1967 May 12	X-15	-	2-51-86	0.000	IMSN/AFFTC	YF	-	Test	Thompson	-	-
1967-A80	2439622.50	1967 May 12	X-15	-	3- A-88	0.000	IMSN/AFFTC	YF	-	Test	Thompson	-	-
1967-A82	2439632.34	1967 May 12	X-15	-	3-59-89	0.000	IMSN/AFFTC	YF	-	Test	Thompson	-	-
1967-A83	2439635.34	1967 May 12	X-15	-	1- A-122	0.000	IMSN/AFFTC	YF	-	Test	Thompson	-	-
1967-A84	2439638.50	1967 May 25	X-15	-	1- A-123	0.000	IMSN/AFFTC	YF	-	Test	Thompson	-	-
1967-A85	2439640.50	1967 Jun 14	X-15	-	1- A-124	0.000	IMSN/AFFTC	YF	-	Test	Thompson	-	-
1967-A86	2439645.50	1967 Jun 15 18:09:28	X-15	-	1-75-125	0.000	IMSN/AFFTC	YF	-	Test/Tech	Thompson	-	-
1967-A87	2439657.26	1967 Jun 22 16:57:17	X-15	-	3-62-90	0.000	IMSN/AFFTC	YF	-	Test	Thompson	-	-
1967-M13	2439654.41	1967 Jun 29 19:27:51	X-15	-	1-72-126	0.000	IMSN/AFFTC	YF	-	Test/Tech	Thompson	-	-
1967-A110	2439657.22	1967 Jul 20 17:11:00	X-15	-	3-61-91	0.000	IMSN/AFFTC	YF	-	Test	Thompson	-	-
1967-A89	2439692.50	1967 Aug 7	X-15	-	2- C-93	0.000	IMSN/AFFTC	YF	-	Test	Thompson	-	-
1967-A102	2439709.50	1967 Aug 11	X-15	-	2- A-94	0.000	IMSN/AFFTC	YF	-	Test	Thompson	-	-
1967-A108	2439713.50	1967 Aug 11	X-15	-	2- A-95	0.000	IMSN/AFFTC	YF	-	Test	Thompson	-	-
1967-A106	2439718.50	1967 Aug 16	X-15	-	2-52-96	0.000	IMSN/AFFTC	YF	-	Test	Thompson	-	-
1967-A109	2439724.26	1967 Aug 25 20:27:28	X-15	-	3-62-92	0.000	IMSN/AFFTC	YF	-	Test/Imaging?	Thompson	-	-
1967-A111	2439728.36	1967 Aug 25 20:27:28	X-15	-	3- A-93	0.000	IMSN/AFFTC	YF	-	Test	Thompson	-	-
1967-A120	2439755.50	1967 Sep 2	X-15	-	2-53-97	0.000	IMSN/AFFTC	YF	-	Test	Thompson	-	-
1967-A124	2439757.40	1967 Sep 3 21:31:50	X-15	-	3-63-94	0.000	IMSN/AFFTC	YF	-	Test	Thompson	-	-
1967-M12	2439768.22	1967 Oct 4 17:16:54	X-15	-	3-62-95	0.000	IMSN/AFFTC	YF	-	Tech/Meteor/Solar	Thompson	-	-
1967-S096	2439781.19	1967 Oct 17 16:40:23	X-15	-	3- A-96	0.000	IMSN/AFFTC	YF	-	Tech/Meteor/Solar	Thompson	-	-
1967-A134	2439794.50	1967 Oct 31 17:30:07	X-15	-	3-65-97	0.000	IMSN/AFFTC	YF	-	Test	Thompson	-	-
1967-SE35	2439810.27	1968 Feb 6	X-15	-	1- C-107	0.000	IMSN/AFFTC	YF	-	Test	Thompson	-	-
1968-A53	2439823.50	1968 Feb 7	X-15	-	1- A-128	0.000	IMSN/AFFTC	YF	-	Test	Thompson	-	-
1968-A59	2439893.50	1968 Feb 27	X-15	-	1- A-129	0.000	IMSN/AFFTC	YF	-	Test	Thompson	-	-
1968-A64	2439913.50	1968 Mar 1 19:28:11	X-15	-	1-74-130	0.000	IMSN/AFFTC	YF	-	Test	Thompson	-	-
1968-A66	2439917.31	1968 Mar 28	X-15	-	1- A-131	0.000	IMSN/AFFTC	YF	-	Test	Thompson	-	-
1968-A71	2439950.50	1968 Apr 4	X-15	-	1- A-132	0.000	IMSN/AFFTC	YF	-	Test	Thompson	-	-
1968-M05	2439951.25	1968 Apr 4 18:02:17	X-15	-	1-75-133	0.000	IMSN/AFFTC	YF	-	Test/Tech	Thompson	-	-
1968-M06	2439973.33	1968 Apr 26 19:51:49	X-15	-	1-76-134	0.000	IMSN/AFFTC	YF	-	Test/Tech	Thompson	-	-
1968-A80	2439989.50	1968 May 23	X-15	-	1- A-135	0.000	IMSN/AFFTC	YF	-	Test/Tech	Thompson	-	-
1968-M14	2440020.15	1968 Jun 12 15:31:01	X-15	-	1-77-136	0.000	IMSN/AFFTC	YF	-	Test/Tech	Thompson	-	-
1968-A84	2440052.50	1968 Jun 15	X-15	-	1- A-137	0.000	IMSN/AFFTC	YF	-	Test/Tech	Thompson	-	-
1968-M15	2440054.43	1968 Jun 16 22:23:06	X-15	-	1-78-138	0.000	IMSN/AFFTC	YF	-	Test/Tech/Aeron	Thompson	-	-
1968-S467	2440090.17	1968 Aug 21 16:04:48	X-15	-	1-79-139	0.000	IMSN/AFFTC	YF	-	Test/Tech/Aeron	Thompson	-	-
1968-M21	2440113.26	1968 Sep 13 18:19:23	X-15	-	1-80-140	0.000	IMSN/AFFTC	YF	-	Test/Tech/Aeron	Thompson	-	-
1968-M25	2440154.21	1968 Oct 24 17:02:47	X-15	-	1-81-141	0.000	IMSN/AFFTC	YF	-	Test/Tech/Aeron	Thompson	-	-
1968-A115	2440202.50	1968 Dec 12	X-15	-	1- A-142	0.000	IMSN/AFFTC	YF	-	Test/Tech/Aeron	Thompson	-	-



Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Mission	LaunchCode	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee_Km	Range_Km	Dest
1965-A642	2435251-50	1965 May 24	X-7A-3	-	83	-	-	-	B-500-068	HADC	RM07/25?	NS	LP1	10?	-	-
1965-A659	2435271-50	1965 Jun 3	X-7A-3	?	36	-	-	-	B-500-068	HADC	RM07/25?	NS	LP1	10?	-	-
1965-A660	2435279-50	1965 Jun 21	X-7A-3	?	38	-	-	-	B-500-068	HADC	RM07/25?	NS	LP1	10?	-	-
1965-A661	2435302-50	1965 Jul 14	X-7A-3	?	TV-13	-	-	-	B-500-068	HADC	RM07/25?	NS	LP1	10?	-	-
1965-A662	2435330-50	1965 Aug 11	X-7A-3	?	38	-	-	-	B-500-068	HADC	RM07/25?	NS	LP1	10?	-	-
1965-A663	2435344-50	1965 Aug 25	X-7A-3	?	39	-	-	-	B-500-068	HADC	RM07/25?	NS	LP1	10?	-	-
1965-A637	2435347-50	1965 Sep 7	X-7A-3	?	40	-	-	-	B-500-068	HADC	RM07/25?	NS	LP1	10?	-	-
1965-A638	2435359-50	1965 Sep 9	X-7A-3	?	2	-	-	-	B-500-068	HADC	RM07/25?	NS	LP1	10?	-	-
1965-A639	2435362-50	1965 Sep 12	X-7A-3	?	2	-	-	-	B-500-068	HADC	RM07/25?	NS	LP1	10?	-	-
1965-A640	2435370-50	1965 Sep 20	X-7A-3	?	47	-	-	-	B-500-068	HADC	RM07/25?	NS	LP1	10?	-	-
1965-A641	2435377-50	1965 Sep 27	X-7A-3	?	1B	-	-	-	B-500-068	HADC	RM07/25?	NS	LP1	10?	-	-
1965-A642	2435380-50	1965 Sep 30	X-7A-3	?	3	-	-	-	B-500-068	HADC	RM07/25?	NS	LP1	10?	-	-
1965-A643	2435383-50	1965 Oct 13	X-7A-3	?	42	-	-	-	B-500-068	HADC	RM07/25?	NS	LP1	10?	-	-
1965-A644	2435398-50	1965 Oct 13	X-7A-3	?	42	-	-	-	B-500-068	HADC	RM07/25?	NS	LP1	10?	-	-
1965-A644	2435408-50	1965 Oct 28	X-7A-3	?	42TV10/6	-	-	-	B-500-068	HADC	RM07/25?	NS	LP1	10?	-	-
1965-A645	2435420-50	1965 Oct 28	X-7A-3	?	11	-	-	-	B-500-068	HADC	RM07/25?	NS	LP1	10?	-	-
1965-A647	2435429-50	1965 Nov 9	X-7A-3	?	GV-2	-	-	-	B-500-068	HADC	RM07/25?	NS	LP1	10?	-	-
1965-A648	2435442-50	1965 Nov 18	X-7A-3	?	45	-	-	-	B-500-068	HADC	RM07/25?	NS	LP1	10?	-	-
1965-A648	2435447-50	1965 Dec 1	X-7A-3	?	GV-2-3	-	-	-	B-500-068	HADC	RM07/25?	NS	LP1	10?	-	-
1965-A650	2435449-50	1965 Dec 6	X-7A-3	?	46	-	-	-	B-500-068	HADC	RM07/25?	NS	LP1	10?	-	-
1965-A651	2435454-50	1965 Dec 8	X-7A-3	?	16	-	-	-	B-500-068	HADC	RM07/25?	NS	LP1	10?	-	-
1965-A652	2435461-50	1965 Dec 20	X-7A-3	?	01	-	-	-	B-500-068	HADC	RM07/25?	NS	LP1	10?	-	-
1965-A653	2435463-50	1965 Dec 20	X-7A-3	?	47	-	-	-	B-500-068	HADC	RM07/25?	NS	LP1	10?	-	-
1965-A654	2435464-50	1965 Dec 22	X-7A-3	?	2	-	-	-	B-500-068	HADC	RM07/25?	NS	LP1	10?	-	-
1965-A654	2435465-50	1965 Dec 23	X-7A-3	?	3	-	-	-	B-500-068	HADC	RM07/25?	NS	LP1	10?	-	-
1966-A341	2435513-50	1966 Jan 13	X-7A-3	?	48-TV18-1	-	-	-	B-500-068	HADC	RM07/25?	NS	LP1	10?	-	-
1966-A342	2435513-50	1966 Feb 10	X-7A-3	?	49	-	-	-	B-500-068	HADC	RM07/25?	NS	LP1	10?	-	-
1966-A343	2435541-50	1966 Mar 9	X-7A-3	?	50	-	-	-	B-500-068	HADC	RM07/25?	NS	LP1	10?	-	-
1966-A344	2435553-50	1966 Mar 21	X-7A-3	?	TV-16	-	-	-	B-500-068	HADC	RM07/25?	NS	LP1	10?	-	-
1966-A345	2435565-50	1966 Jul 31	X-7A-3	?	50	-	-	-	B-500-068	HADC	RM07/25?	NS	LP1	10?	-	-
1966-A346	2435703-50	1966 Aug 18	X-7B	-	F-191	-	-	-	B-500-068	HADC	RM07/25?	NS	LP1	10?	-	-
1966-A347	2435703-50	1966 Aug 18	X-7B	-	F-243	-	-	-	B-500-068	HADC	RM07/25?	NS	LP1	10?	-	-
1966-A348	2435703-50	1966 Aug 18	X-7B	-	F-192	-	-	-	B-500-068	HADC	RM07/25?	NS	LP1	10?	-	-
1966-A349	2435703-50	1966 Aug 18	X-7B	-	F-190	-	-	-	B-500-068	HADC	RM07/25?	NS	LP1	10?	-	-
1966-A350	2435764-50	1966 Aug 18	X-7A-3	?	-	-	-	-	B-500-068	HADC	RM07/25?	NS	LP1	10?	-	-
1966-A351	2435777-50	1966 Oct 31	X-7A-3	?	-	-	-	-	B-500-068	HADC	RM07/25?	NS	LP1	10?	-	-
1966-A352	2435786-50	1966 Oct 31	X-7A-3	?	-	-	-	-	B-500-068	HADC	RM07/25?	NS	LP1	10?	-	-
1966-A353	2435807-50	1966 Nov 9	X-7A-3	?	-	-	-	-	B-500-068	HADC	RM07/25?	NS	LP1	10?	-	-
1966-A354	2435813-50	1966 Nov 30	X-7A-3	?	-	-	-	-	B-500-068	HADC	RM07/25?	NS	LP1	10?	-	-
1966-A355	2435828-50	1966 Dec 6	X-7A-3	?	-	-	-	-	B-500-068	HADC	RM07/25?	NS	LP1	10?	-	-
1966-A328	2437135-50	1960 Jul 20	X-7A-3	-	-	-	-	-	B-500-068	HADC	RM07/25?	NS	LP1	10?	-	-



Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Orbpay	Agency	Launch_Code	Group	Category	LTCite	Cite	Notes
1955-4542	2435251.50	1955 May 24	X-7A-3	-	83	0.000	WADD?	AS	-	Test	wsmr-history.org	X-Planes	-
1955-4659	2435261.50	1955 Jun 3	X-7A-3	?	36	0.000	WADD?	AS	-	Test	wsmr-history.org	-	-
1955-4660	2435279.50	1955 Jun 21	X-7A-3	?	36	0.000	WADD?	AS	-	Test	wsmr-history.org	-	-
1955-4661	2435302.50	1955 Jul 14	X-7A-3	?	TV-13	0.000	WADD?	AS	-	Test	wsmr-history.org	-	-
1955-4662	2435330.50	1955 Aug 11	X-7A-3	?	38	0.000	WADD?	AS	-	Test	wsmr-history.org	-	-
1955-4663	2435344.50	1955 Aug 25	X-7A-3	?	39	0.000	WADD?	AS	-	Test	wsmr-history.org	-	-
1955-4638	2435357.50	1955 Sep 7	X-7A-3	?	40	0.000	WADD?	AS	-	Test	wsmr-history.org	-	-
1955-4639	2435359.50	1955 Sep 9	X-7A-3	?	2	0.000	WADD?	AS	-	Test	wsmr-history.org	-	-
1955-4640	2435362.50	1955 Sep 12	X-7A-3	?	2	0.000	WADD?	AS	-	Test	wsmr-history.org	-	-
1955-4641	2435370.50	1955 Sep 20	X-7A-3	?	47	0.000	WADD?	AS	-	Test	wsmr-history.org	-	-
1955-4642	2435377.50	1955 Sep 27	X-7A-3	?	1B	0.000	WADD?	AS	-	Test	wsmr-history.org	-	-
1955-4643	2435380.50	1955 Sep 30	X-7A-3	?	3	0.000	WADD?	AS	-	Test	wsmr-history.org	-	-
1955-4644	2435393.50	1955 Oct 13	X-7A-3	?	42	0.000	WADD?	AS	-	Test	wsmr-history.org	-	-
1955-4645	2435396.50	1955 Oct 18	X-7A-3	?	42	0.000	WADD?	AS	-	Test	wsmr-history.org	-	-
1955-4646	2435406.50	1955 Oct 28	X-7A-3	?	42ZTV10/6	0.000	WADD?	AS	-	Test	wsmr-history.org	-	-
1955-4647	2435420.50	1955 Nov 9	X-7A-3	?	11	0.000	WADD?	AS	-	Test	wsmr-history.org	-	-
1955-4648	2435429.50	1955 Nov 16	X-7A-3	?	45	0.000	WADD?	AS	-	Test	wsmr-history.org	-	-
1955-4649	2435442.50	1955 Dec 1	X-7A-3	?	46	0.000	WADD?	AS	-	Test	wsmr-history.org	-	-
1955-4650	2435447.50	1955 Dec 6	X-7A-3	?	16	0.000	WADD?	AS	-	Test	wsmr-history.org	-	-
1955-4651	2435449.50	1955 Dec 13	X-7A-3	?	01	0.000	WADD?	AS	-	Test	wsmr-history.org	-	-
1955-4652	2435461.50	1955 Dec 20	X-7A-3	?	47	0.000	WADD?	AS	-	Test	wsmr-history.org	-	-
1955-4653	2435463.50	1955 Dec 22	X-7A-3	?	2	0.000	WADD?	AS	-	Test	wsmr-history.org	-	-
1955-4654	2435464.50	1955 Dec 23	X-7A-3	?	3	0.000	WADD?	AS	-	Test	wsmr-history.org	-	-
1956-4341	2435465.50	1956 Jan 13	X-7A-3	?	46-TV18-1	0.000	WADD?	AS	-	Test	wsmr-history.org	-	-
1956-4342	2435513.50	1956 Feb 10	X-7A-3	?	49	0.000	WADD?	AS	-	Test	wsmr-history.org	-	-
1956-4343	2435541.50	1956 Mar 9	X-7A-3	?	50	0.000	WADD?	AS	-	Test	wsmr-history.org	-	-
1956-4344	2435553.50	1956 Mar 21	X-7A-3	?	TV-16	0.000	WADD?	AS	-	Test	wsmr-history.org	-	-
1956-4345	2435665.50	1956 Jul 31	X-7A-3	?	F-191	0.000	WADD?	AS	-	Test	wsmr-history.org	-	-
1956-4346	2435703.50	1956 Aug 16	X-7B	-	F-243	0.000	WADD?	AS	-	Test	wsmr-history.org	-	-
1956-4347	2435703.50	1956 Aug 18	X-7B	-	F-192	0.000	WADD?	AS	-	Test	wsmr-history.org	-	-
1956-4348	2435703.50	1956 Aug 18	X-7B	-	F-190	0.000	WADD?	AS	-	Test	wsmr-history.org	-	-
1956-4349	2435703.50	1956 Aug 18	X-7B	-	-	0.000	WADD?	AS	-	Test	wsmr-history.org	-	-
1956-4351	2435764.50	1956 Oct 16	X-7A-3	?	-	0.000	WADD?	AS	-	Test	wsmr-history.org	-	-
1956-4352	2435777.50	1956 Oct 31	X-7A-3	?	-	0.000	WADD?	AS	-	Test	wsmr-history.org	-	-
1956-4353	2435786.50	1956 Nov 9	X-7A-3	?	-	0.000	WADD?	AS	-	Test	wsmr-history.org	-	-
1956-4354	2435807.50	1956 Nov 30	X-7A-3	?	-	0.000	WADD?	AS	-	Test	wsmr-history.org	-	-
1956-4355	2435813.50	1956 Nov 30	X-7A-3	?	-	0.000	WADD?	AS	-	Test	wsmr-history.org	-	-
1956-4356	2435822.50	1956 Dec 01	X-7A-3	?	-	0.000	WADD?	AS	-	Test	wsmr-history.org	-	-
1960-4328	2437135.50	1960 Jul 20	X-7A-3	-	-	0.000	WADD?	AS	-	Test	X-Planes	-	-



Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Launch				Ascent_Site	Ascent_Pad	Apogee km	Range km	Dest
							Mission	FlightCode	Platform	Launch_Site					
2021-843	2469411.50	2021 Jul 16	YGCS	-	-	YG Chengfu Shiyong YXXYQ	-	-	-	JQ	-	-	1007	2207	Alxa RB
2022-882	2469816.50	2022 Aug 25	YGCS	-	-	YG Chengfu Shiyong YXXYQ	-	-	-	JQ	-	-	1007	2207	Alxa RB





Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	OrbPay	Agency	Launch_Code	Group	Category	LTCite	Cite	Notes
2021-S43	2459411.50	2021 Jul 16	YGCS	-	-	0.000	CALT	SS	-	Test	nasaspacerflight.com	xinhuanet.com	-
2022-S82	2459616.50	2022 Aug 25	YGCS	-	-	0.000	CALT	SS	-	Test	nasaspacerflight.com	xinhuanet.com	-



Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Mission	FlightCode	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee km	Range km	Dest
2022-087	2459757.67	2022 Jul 27 0412	Lijian-1	-	Y1	XJS	-	-	-	JQ	LC130	-	-	544	-	-
2022-167	2459922.77	2022 Dec 9 0635	Jielong-3	-	Y1	Jilin-1	-	-	CCOC	HHMI	LP6	-	-	-	-	-
2023-061	2460102.67	2023 Jun 7 0410:02	Lijian-1	-	Y2	SY24M/B	-	-	-	JQ	LC130	-	-	-	-	-
2023-190	2460284.31	2023 Dec 5 1924	Jielong-3	-	Y2	CK-20	WHJSH 03	-	BRJZ	YJ	LP1	-	-	-	-	-
2024-009	2460320.73	2024 Jan 11 0630	Yinli-1	-	Y1	Yunyao-1 18-20	-	-	DFHT	YJ	LP1	-	-	-	-	-
2024-016	2460352.67	2024 Jan 23 0403	Lijian-1	-	Y3	Taijing	-	-	-	JQ	LC130	-	-	-	-	-
2024-024	2460343.63	2024 Feb 3 0306	Jielong-3	-	Y3	MEISMT-1/DFHG-1	-	-	BRJZ	YJ	LP2	-	-	-	-	-
2024-173	2460577.61	2024 Sep 24 0231:41	Jielong-3	-	Y4	Jilin Daxue/XSD-1S/	-	-	DFHT	HHMI	LP4	-	-	-	-	-
2024-174	2460578.48	2024 Sep 24 2333	Lijian-1	-	Y4	AHSM7/Yunyao	-	-	-	JQ	LC130	-	-	-	-	-
2024-205	2460625.67	2024 Nov 11 0403	Lijian-1	-	Y6	SY-26/Jilin/Yunyao	-	-	-	JQ	LC130	-	-	-	-	-



Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	OrbPay	Agency	Launch_Code	Group	Category	LTCite	Cite	Notes
2022-087	2459787.67	2022 Jul 27 04:12	Lijian-1	-	Y1	0.899	ZKXT	OS	C	Sat SSO L	nasaspaceflight.com	-	-
2022-167	2459922.77	2022 Dec 9 06:35	Jielong-3	-	Y1	0.451	CZHU	OS	C	Sat SSO 0	nasaspaceflight.com	-	-
2023-081	2460102.67	2023 Jun 7 04:10:02	Lijian-1	-	Y2	1.426	ZKXT	OS	C	Sat SSO L	nasaspaceflight.com	-	-
2023-190	2460284.31	2023 Dec 5 19:24	Jielong-3	-	Y2	0.300	CZHU	OS	C	Sat SSO L	nasaspaceflight.com	-	-
2024-009	2460320.73	2024 Jan 11 05:30	Yinli-1	-	Y1	1.500	DFK	OS	C	Sat LEO 0	nasaspaceflight.com	-	-
2024-016	2460332.67	2024 Jan 23 04:03	Lijian-1	-	Y3	0.860	ZKXT	OS	C	Sat SSO L	nasaspaceflight.com	-	-
2024-024	2460343.63	2024 Feb 3 03:06	Jielong-3	-	Y3	0.480	CZHU	OS	C	Sat SSO L	nasaspaceflight.com	-	-
2024-173	2460577.61	2024 Sep 24 02:31:41	Jielong-3	-	Y4	0.500	CZHU	OS	C	Sat SSO L	nasaspaceflight.com	-	-
2024-174	2460578.48	2024 Sep 24 23:33	Lijian-1	-	Y4	0.850	ZKXT	OS	C	Sat SSO L	nasaspaceflight.com	-	-
2024-205	2460625.67	2024 Nov 11 04:03	Lijian-1	-	Y5	0.850	ZKXT	OS	C	Sat SSO L	nasaspaceflight.com	-	-



Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Mission	LaunchCode	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee_Km	Range_Km	Dest
2022-087	2459787.60	2022 Jul 27	Lijian-1	-	Y1	XJS	-	-	-	JQ	LC130	-	-	-	-	-





Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Agency	Launch_Code	Group	Category	LTCite	Cite	Notes
2022-087	2469787.50	2022 Jul 27	Lijian-1	-	Y1	-	0S	-	Sat	nasaspacerflight.com	-	-



Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Mission	LaunchCode	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee km	Range km	Dest
1988-M03	2447514-50	1988 Dec 19	Zhinui	-	ZH-1	-	-	-	-	HAI	-	-	-	70?	-	-
1988-M04	2447515-50	1988 Dec 20?	Zhinui	-	ZH-1	-	-	-	-	HAI	-	-	-	70?	-	-
1988-M05	2447517-50	1988 Dec 22?	Zhinui	-	ZH-1	-	-	-	-	HAI	-	-	-	70?	-	-
1988-M06	2447523-50	1988 Dec 28	Zhinui	-	ZH-1	-	-	-	-	HAI	-	-	-	70?	-	-
1991-S31	2445278-50	1991 Jan 22	Zhinui	-	ZH-3	-	-	-	-	HAI	-	-	-	120	-	-



Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Orbpay	Agency	Launch_Code	Group	Category	LTCite	Cite	Notes
1988-M03	2447514.50	1988 Dec 19	Zhinui	-	ZN-1	0.000	CSSAR	SS	CSSAR/	Test	Harvey	-	-
1988-M04	2447515.50	1988 Dec 20?	Zhinui	-	ZN-1	0.000	CSSAR	SS	CSSAR/	Test	Harvey	-	-
1988-M05	2447517.50	1988 Dec 22?	Zhinui	-	ZN-1	0.000	CSSAR	SS	CSSAR/	Test	Harvey	-	-
1988-M06	2447523.50	1988 Dec 28	Zhinui	-	ZN-1	0.000	CSSAR	SS	CSSAR/	Test	Harvey	-	-
1991-S31	2446278.50	1991 Jan 22	Zhinui	-	ZN-3	0.000	CSSAR	SS	CSSAR/	Test	Harvey	-	AWST910311-11



Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Mission	FlightCode	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee km	Range km	Dest
2022-F05	245927.85	2022 Dec 14 0830:25	Zhuque-2	-	Y1	Zhixing-1B	-	-	-	JQ	LC43/96	-	-	400	-	-
2023-097	246037.54	2023 Jul 12 0100	Zhuque-2	-	Y2	Dummy payload	-	-	-	JQ	LC43/96	-	-	400	-	-
2023-193	2460287.49	2023 Dec 8 2339:03	Zhuque-2	-	Y3	Hongling-1/2/7Y-33	-	-	-	JQ	LC43/96	-	-	400	-	-
2024-221	2460641.58	2024 Nov 27 0200	Zhuque-2E	1	Y1	Guangchuan-01/02	-	-	-	JQ	LC43/96A	-	-	400	-	-





Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	OrbPay	Agency	Launch_Code	Group	Category	LICite	Cite	Notes
2022-F05	2459927.86	2022 Dec 14 0630:25	Zhuque-2	-	Y1	0.150	LANDSP	OF	C	Sat SSD 0	nasaspaceflight.com	-	Stage 2 vernier failure
2023-097	2460137.54	2023 Jul 12 0100	Zhuque-2	-	Y2	0.050	LANDSP	OS	C	Sat SSD 0	nasaspaceflight.com	-	-
2023-193	2460287.49	2023 Dec 8 2339:03	Zhuque-2	-	Y3	0.150	LANDSP	OS	C	Sat SSD 0	nasaspaceflight.com	-	-
2024-221	2460641.58	2024 Nov 27 0200	Zhuque-2E	1	Y1	0.150	LANDSP	OS	C	Sat SSD 0	nasaspaceflight.com	-	-



Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Mission	Launch_FlightCode	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee km	Range km	Dest
1992-A04	2448699.50	1992 Mar 18	Scout II TV	-	-	-	-	-	-	SDQ	SL7	-	-	17	-	-



Launch_Tag	Launch_JD	Launch_Date	LY_Type	Variant	Flight_ID	OrbPay	Agency	Launch_Code	Group	Category	LTCite	Cite	Notes
1992-A04	2446699.50	1992 Mar 18	Scout II TV	-	-	0.000	ASI	SF	ASI/	Test	SI920413-3	Jane's94-236	-



Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Launch_Mission	FlightCode	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee_Km	Range_Km	Dest
2001-H25	2452060.50	2001 May 317	Faceh-110	-	-	R&D	-	-	-	IRAN	-	-	-	60?	-	-
2002-H36	2452523.50	2002 Sep 67	Faceh-110	-	-	R&D	-	-	-	IRAN	-	-	-	60?	-	-
2006-H13	2454041.50	2006 Nov 2	Faceh-110	-	-	-	-	-	-	IRAN	-	-	-	60?	-	-
2007-H05	2454434.50	2007 Dec	Faceh-110	-	-	-	-	-	-	SYRIA	-	-	-	60?	-	-
2007-H06	2454434.50	2007 Dec	Faceh-110	-	-	-	-	-	-	SYRIA	-	-	-	60?	-	-
2008-H11	2454800.50	2008 Dec	Faceh-110	-	-	-	-	-	-	IRAN	-	-	-	60?	-	-
2010-H12	2455433.50	2010 Aug 25	Faceh-110	-	-	-	-	-	-	IRAN	-	-	-	60?	-	-
2011-S08	2455635.62	2011 Mar 15 0300?	Kavoshgar K110	-	-	Kavoshgar Class C	-	-	-	SEMX	-	-	-	1?	-	-
2011-H26	2455811.50	2011 Sep 7	Kavoshgar K110	-	-	Kavoshgar-5	-	-	-	IRAN	-	-	-	60?	-	-
2012-H24	2456108.50	2012 Jul?	Faceh-110	-	-	-	-	-	-	SEMX	-	-	-	1?	-	-
2012-H29	2456178.69	2012 Sep 8 0430	Kavoshgar K110	-	-	Kavoshgar Class C	-	-	-	SEMX	-	-	-	1?	-	-
2012-H05	2456286.50	2012 Dec 26?	Faceh-110	-	-	-	-	-	-	ALMSR	-	-	-	60?	-	-
2013-H01	2456294.50	2013 Jan 2	Faceh-110	-	-	-	-	-	-	ALMSR	-	-	-	60?	-	-
2013-H02	2456295.50	2013 Jan 3	Faceh-110	-	-	-	-	-	-	ALMSR	-	-	-	60?	-	-
2013-H03	2456301.50	2013 Jan 9	Faceh-110	-	-	-	-	-	-	ALMSR	-	-	-	60?	-	-
2013-S05	2456520.50	2013 Jan 29	Kavoshgar K110	-	-	Kavoshgar Class C	-	-	-	SEMX	-	-	-	120	-	-
2016-H51	2457556.50	2016 Jun 17	Ze12A1-3	-	-	Pioneer Probe	-	-	-	YEMEN	-	-	-	30?	-	Hareb
2016-H52	2457557.50	2016 Jun 18	Ze12A1-3	-	-	-	-	-	-	YEMEN	-	-	-	30?	-	Jauf
2016-H53	2457558.50	2016 Jun 26	Ze12A1-3	-	-	-	-	-	-	YEMEN	-	-	-	30?	-	Jauf
2016-H54	2457577.50	2016 Jun 8	Ze12A1-3	-	-	-	-	-	-	YEMEN	-	-	-	30?	-	Hareb
2016-H55	2457578.50	2016 Jun 9	Ze12A1-3	-	-	-	-	-	-	YEMEN	-	-	-	30?	-	Jauf
2016-H56	2457579.50	2016 Jun 10	Ze12A1-3	-	-	-	-	-	-	YEMEN	-	-	-	30?	-	Hareb
2016-H57	2457579.50	2016 Jun 11	Ze12A1-3	-	-	-	-	-	-	YEMEN	-	-	-	30?	-	Hareb
2016-H58	2457582.50	2016 Jun 13	Ze12A1-3	-	-	-	-	-	-	YEMEN	-	-	-	30?	-	Hajran
2016-H59	2457585.50	2016 Jun 16	Ze12A1-3	-	-	-	-	-	-	YEMEN	-	-	-	30?	-	Hajran
2016-H60	2457585.50	2016 Jun 16	Ze12A1-3	-	-	-	-	-	-	YEMEN	-	-	-	30?	-	Hareb
2016-H62	2457588.50	2016 Jun 19	Ze12A1-3	-	-	-	-	-	-	YEMEN	-	-	-	30?	-	Jauf
2016-H63	2457588.50	2016 Jun 19	Ze12A1-3	-	-	-	-	-	-	YEMEN	-	-	-	30?	-	Hajran
2016-H64	2457590.50	2016 Jun 21	Ze12A1-3	-	-	-	-	-	-	YEMEN	-	-	-	30?	-	Hajran
2016-H65	2457592.50	2016 Jun 23	Ze12A1-3	-	-	-	-	-	-	YEMEN	-	-	-	30?	-	Hajran
2016-H66	2457596.50	2016 Jun 27	Ze12A1-3	-	-	-	-	-	-	YEMEN	-	-	-	30?	-	Hareb
2016-H69	2457599.50	2016 Jun 30	Ze12A1-3	-	-	-	-	-	-	YEMEN	-	-	-	30?	-	Hajran
2016-H70	2457606.50	2016 Aug 6	Ze12A1-3	-	-	-	-	-	-	YEMEN	-	-	-	30?	-	Hajran
2016-H73	2457615.50	2016 Aug 15	Ze12A1-3	-	-	-	-	-	-	YEMEN	-	-	-	30?	-	Hareb
2016-H74	2457620.50	2016 Aug 20	Ze12A1-3	-	-	-	-	-	-	YEMEN	-	-	-	30?	-	Hajran
2016-H75	2457623.50	2016 Aug 23	Ze12A1-3	-	-	-	-	-	-	YEMEN	-	-	-	30?	-	Jizan
2016-H76	2457623.50	2016 Aug 23	Ze12A1-3	-	-	-	-	-	-	YEMEN	-	-	-	30?	-	Hareb
2016-H78	2457623.50	2016 Aug 25	Ze12A1-3	-	-	-	-	-	-	YEMEN	-	-	-	30?	-	Hajran
2016-H80	2457631.50	2016 Aug 31	Ze12A1-3	-	-	-	-	-	-	YEMEN	-	-	-	30?	-	Hajran
2016-H81	2457633.50	2016 Sep 2	Ze12A1-2	-	-	-	-	-	-	YEMEN	-	-	-	30?	-	Hareb
2016-H82	2457637.50	2016 Sep 6	Ze12A1-3	-	-	-	-	-	-	YEMEN	-	-	-	30?	-	Hareb
2016-H83	2457640.50	2016 Sep 9	Ze12A1-3	-	-	-	-	-	-	YEMEN	-	-	-	30?	-	Asir
2016-H84	2457640.50	2016 Sep 9	Ze12A1-3	-	-	-	-	-	-	YEMEN	-	-	-	30?	-	Hareb
2016-H85	2457640.50	2016 Sep 9	Ze12A1-3	-	-	-	-	-	-	YEMEN	-	-	-	30?	-	Hareb
2016-H87	2457709.50	2016 Nov 7	Ze12A1-2	-	-	-	-	-	-	YEMEN	-	-	-	30?	-	Asir
2016-H88	2457714.50	2016 Nov 20	Ze12A1-2	-	-	-	-	-	-	YEMEN	-	-	-	30?	-	Hidibeerrt
2016-H89	2457714.50	2016 Nov 20	Ze12A1-2	-	-	-	-	-	-	YEMEN	-	-	-	30?	-	Jizan
2016-H90	2457714.50	2016 Nov 27	Ze12A1-2	-	-	-	-	-	-	YEMEN	-	-	-	30?	-	Hareb
2016-H91	2457719.50	2016 Nov 27	Ze12A1-2	-	-	-	-	-	-	YEMEN	-	-	-	30?	-	Hareb
2016-H92	2457721.50	2016 Dec 6	Ze12A1-2	-	-	-	-	-	-	YEMEN	-	-	-	30?	-	Hareb
2016-H93	2457724.50	2016 Dec 9	Ze12A1-2	-	-	-	-	-	-	YEMEN	-	-	-	30?	-	Hareb
2016-H94	2457724.50	2016 Dec 12	Ze12A1-2	-	-	-	-	-	-	YEMEN	-	-	-	30?	-	Hareb
2016-H95	2457724.50	2016 Dec 16	Ze12A1-2	-	-	-	-	-	-	YEMEN	-	-	-	30?	-	Hareb
2016-H96	2457743.50	2016 Dec 20	Ze12A1-2	-	-	-	-	-	-	YEMEN	-	-	-	30?	-	Jauf
2016-H97	2457743.50	2016 Dec 21	Ze12A1-2	-	-	-	-	-	-	YEMEN	-	-	-	30?	-	Jauf
2016-H98	2457744.50	2016 Dec 22	Ze12A1-1	-	-	-	-	-	-	YEMEN	-	-	-	30?	-	Jauf
2016-H99	2457744.50	2016 Dec 22	Ze12A1-1	-	-	-	-	-	-	YEMEN	-	-	-	30?	-	Jauf
2016-H100	2457748.50	2016 Dec 24	Ze12A1-1	-	-	-	-	-	-	YEMEN	-	-	-	30?	-	Jauf
2016-H101	2457748.50	2016 Dec 24	Ze12A1-1	-	-	-	-	-	-	YEMEN	-	-	-	30?	-	Jauf
2017-H11	2457756.50	2017 Jan 4	Ze12A1-2	-	-	-	-	-	-	YEMEN	-	-	-	30?	-	Jauf
2017-H12	2457757.50	2017 Jan 4	Ze12A1-2	-	-	-	-	-	-	YEMEN	-	-	-	30?	-	Jauf
2017-H13	2457758.50	2017 Jan 5	Ze12A1-2	-	-	-	-	-	-	YEMEN	-	-	-	30?	-	Shabwa
2017-H14	2457758.50	2017 Jan 5	Ze12A1-2	-	-	-	-	-	-	YEMEN	-	-	-	30?	-	Hajran
2017-H15	2457765.50	2017 Jan 12	Ze12A1-2	-	-	-	-	-	-	YEMEN	-	-	-	30?	-	Hajran
2017-H16	2457765.50	2017 Jan 12	Ze12A1-2	-	-	-	-	-	-	YEMEN	-	-	-	30?	-	Jauf
2017-H17	2457765.50	2017 Jan 12	Ze12A1-2	-	-	-	-	-	-	YEMEN	-	-	-	30?	-	Jauf
2017-H18	2457765.50	2017 Jan 14	Ze12A1-1	-	-	-	-	-	-	YEMEN	-	-	-	30?	-	Jauf
2017-H19	2457767.50	2017 Jan 14	Ze12A1-1	-	-	-	-	-	-	YEMEN	-	-	-	30?	-	Jauf
2017-H20	2457777.50	2017 Jan 24	Ze12A1-2	-	-	-	-	-	-	YEMEN	-	-	-	30?	-	Shabwa
2017-H21	2457782.50	2017 Jan 29	Ze12A1-2	-	-	-	-	-	-	YEMEN	-	-	-	30?	-	Hajran
2017-H22	2457784.50	2017 Jan 31	Ze12A1-2	-	-	-	-	-	-	YEMEN	-	-	-	30?	-	Hajran
2017-H23	2457784.50	2017 Jan 31	Ze12A1-2	-	-	-	-	-	-	YEMEN	-	-	-	30?	-	Shabwa
2017-H24	2457784.50	2017 Feb 8	Ze12A1-2	-	-	-	-	-	-	YEMEN	-	-	-	30?	-	Shabwa
2017-H25	2457789.50	2017 Feb 8	Ze12A1-2	-	-	-	-	-	-	YEMEN	-	-	-	30?	-	Hajran
2017-H26	2457799.50	2017 Feb 15	Ze12A1-2	-	-	-	-	-	-	YEMEN	-	-	-	30?	-	Hajran
2017-H27	2457802.50	2017 Feb 18	Ze12A1-2	-	-	-	-	-	-	YEMEN	-	-	-	30?	-	Hajran
2017-H28	2457802.50	2017 Feb 18	Ze12A1-2	-	-	-	-	-	-	YEMEN	-	-	-	30?	-	Hajran
2017-H29	2457803.50	2017 Feb 19	Ze12A1-2	-	-	-	-	-	-	YEMEN	-	-	-	30?	-	Hajran
2017-H30	2457805.50	2017 Feb 21	Ze12A1-3	-	-	-	-	-	-	YEMEN	-	-	-	30?	-	Hajran
2017-H31	2457809.50	2017 Feb 25	Ze12A1-2	-	-	-	-	-	-	YEMEN	-	-	-	30?	-	Hajran
2017-H32	2457825.50	2017 Mar 13	Ze12A1-2	-	-	-	-	-	-	YEMEN	-	-	-	30?	-	Hajran
2017-H33	2457825.50	2017 Mar 13	Ze12A1-2	-	-	-	-	-	-	YEMEN	-	-	-	30?	-	Hajran
2017-H34	2457842.50	2017 Mar 30	Ze12A1-1	-	-	-	-	-	-	YEMEN	-	-	-	30?	-	Jauf
2017-H35	2457844.50	2017 Apr 1	Ze12A1-1	-	-	-	-	-	-	YEMEN	-	-	-	30?	-	Jauf
2017-H36	2457855.50	2017 Apr 12	Ze12A1-1	-	-	-	-	-	-	YEMEN	-	-	-	30?	-	Shabwa
2017-H37	2457855.50	2017 Apr 12	Ze12A1-1	-	-	-	-	-	-	YEMEN	-	-	-	30?	-	Shabwa
2017-H38	2457868.50	2017 Apr 25	Ze12A1-2	-	-	-	-	-	-	YEMEN	-	-	-	30?	-	Shabwa
2017-H39	2457868.50	2017 Apr 25	Ze12A1-2	-	-	-	-	-	-	YEMEN	-	-	-	30?	-	Shabwa
2017-H40	2457881.50	2017 May 8	Ze12A1-2	-	-	-	-	-	-	YEMEN	-	-	-	30?	-	Shabwa
2017-H41	2457884.50	2017 May 11	Ze12A1-2	-	-	-	-	-	-	YEMEN	-	-	-	30?	-	Shabwa
2017-H42	2457884.50	2017 May 11	Ze12A1-2	-	-	-	-	-	-	YEMEN	-	-	-	30?	-	Shabwa
2017-H43	2457886.50	2017 May 13	Ze12A1-2	-	-	-	-	-	-	YEMEN	-	-	-	30?	-	Shabwa
2017-H44	2457886.50	2017 May 13	Ze12A1-2	-	-	-	-	-	-	YEMEN	-	-	-	30?	-	Shabwa
2017-H45	2457897.50	2017 May 24	Ze12A1-2	-	-	-	-	-	-	YEMEN	-	-	-	30?	-	Shabwa
2017-H46	2457897.50	2017 May 24	Ze12A1-2	-	-	-	-	-	-	YEMEN	-	-				





Launch Mission

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Mission	FlightCode	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee_Km	Range_Km	Dest
2018-A99	2468279.50	2018 Jun 10	Zelzal-2	-	-	-	-	-	-	YEMEN	-	-	-	30?	-	Taiz
2018-A105	2468284.50	2018 Jun 15	Zelzal-2	-	-	-	-	-	-	YEMEN	-	-	-	30?	-	Asir
2018-A123	2468331.50	2018 Aug 1	Zelzal-2	-	-	-	-	-	-	YEMEN	-	-	-	30?	-	Taiz
2018-A94	2468333.50	2018 Aug 3?	Fareh-110	-	-	-	-	-	-	BEJ	-	-	-	30?	-	-
2018-A126	2468338.50	2018 Aug 8	Zelzal-1	-	-	-	-	-	-	YEMEN	-	-	-	30?	-	Jawf
2018-A141	2468353.50	2018 Aug 23	Zelzal-1	-	-	-	-	-	-	YEMEN	-	-	-	30?	-	Jizan
2018-A142	2468353.50	2018 Aug 23	Zelzal-1	-	-	-	-	-	-	YEMEN	-	-	-	30?	-	Jizan
2018-A143	2468355.50	2018 Aug 25	Zelzal-1	-	-	-	-	-	-	YEMEN	-	-	-	30?	-	Jizan
2018-A144	2468355.50	2018 Aug 25	Zelzal-1	-	-	-	-	-	-	YEMEN	-	-	-	30?	-	Jizan
2018-A145	2468356.50	2018 Aug 26	Zelzal-1	-	-	-	-	-	-	YEMEN	-	-	-	30?	-	Hajran
2018-A147	2468360.50	2018 Aug 30	Zelzal-1	-	-	-	-	-	-	YEMEN	-	-	-	30?	-	Hajran
2018-A148	2468360.50	2018 Aug 30	Zelzal-1	-	-	-	-	-	-	YEMEN	-	-	-	30?	-	Hajran
2018-A149	2468360.50	2018 Aug 30	Zelzal-1	-	-	-	-	-	-	YEMEN	-	-	-	30?	-	Hajran
2018-A156	2468367.50	2018 Sep 6	Zelzal-1	-	-	-	-	-	-	YEMEN	-	-	-	30?	-	Asir
2018-A164	2468379.50	2018 Sep 18	Zelzal-1	-	-	-	-	-	-	YEMEN	-	-	-	30?	-	Asir
2018-A165	2468379.50	2018 Sep 18	Zelzal-1	-	-	-	-	-	-	YEMEN	-	-	-	30?	-	Asir
2018-A169	2468388.50	2018 Sep 27	Zelzal-1	-	-	-	-	-	-	YEMEN	-	-	-	30?	-	Jizan
2018-A170	2468388.50	2018 Sep 27	Zelzal-1	-	-	-	-	-	-	YEMEN	-	-	-	30?	-	Jizan
2018-A171	2468388.50	2018 Sep 27	Zelzal-1	-	-	-	-	-	-	YEMEN	-	-	-	30?	-	Jizan
2018-A172	2468388.50	2018 Sep 27	Zelzal-1	-	-	-	-	-	-	YEMEN	-	-	-	30?	-	Jizan
2018-A173	2468389.50	2018 Sep 28	Zelzal-1	-	-	-	-	-	-	YEMEN	-	-	-	30?	-	Taiz
2018-A174	2468389.50	2018 Sep 28	Zelzal-1	-	-	-	-	-	-	YEMEN	-	-	-	30?	-	Asir
2018-A175	2468391.50	2018 Sep 30	Zelzal-1	-	-	-	-	-	-	YEMEN	-	-	-	30?	-	Asir
2018-A176	2468394.50	2018 Oct 3	Zelzal-1	-	-	-	-	-	-	YEMEN	-	-	-	30?	-	Asir
2018-A177	2468394.50	2018 Oct 3	Zelzal-1	-	-	-	-	-	-	YEMEN	-	-	-	30?	-	Asir
2018-A178	2468394.50	2018 Oct 3	Zelzal-1	-	-	-	-	-	-	YEMEN	-	-	-	30?	-	Asir
2018-A179	2468394.50	2018 Oct 3	Zelzal-1	-	-	-	-	-	-	YEMEN	-	-	-	30?	-	Asir
2018-A180	2468394.50	2018 Oct 3	Zelzal-1	-	-	-	-	-	-	YEMEN	-	-	-	30?	-	Asir
2018-A181	2468394.50	2018 Oct 3	Zelzal-1	-	-	-	-	-	-	YEMEN	-	-	-	30?	-	Asir
2018-A182	2468409.50	2018 Oct 13	Zelzal-2	-	-	-	-	-	-	YEMEN	-	-	-	30?	-	Harib
2018-A186	2468412.50	2018 Oct 16	Zelzal-2	-	-	-	-	-	-	YEMEN	-	-	-	30?	-	Asir
2018-A194	2468416.50	2018 Oct 21	Zelzal-1	-	-	-	-	-	-	YEMEN	-	-	-	30?	-	Jizan
2018-A196	2468420.50	2018 Oct 27	Zelzal-1	-	-	-	-	-	-	YEMEN	-	-	-	30?	-	Taiz
2018-A199	2468420.50	2018 Oct 29	Zelzal-1	-	-	-	-	-	-	YEMEN	-	-	-	30?	-	Jizan
2018-A204	2468430.50	2018 Oct 29	Zelzal-1	-	-	-	-	-	-	YEMEN	-	-	-	30?	-	Hohm
2018-A206	2468436.50	2018 Nov 6	Zelzal-1	-	-	-	-	-	-	YEMEN	-	-	-	30?	-	Jizan
2018-A209	2468439.50	2018 Nov 10	Zelzal-2	-	-	-	-	-	-	YEMEN	-	-	-	30?	-	Harib
2018-A207	2468445.50	2018 Nov 17	Zelzal-1	-	-	-	-	-	-	YEMEN	-	-	-	30?	-	Harib
2018-A210	2468445.50	2018 Nov 23	Zelzal-1	-	-	-	-	-	-	YEMEN	-	-	-	30?	-	Harib
2018-A211	2468445.50	2018 Nov 23	Zelzal-1	-	-	-	-	-	-	YEMEN	-	-	-	30?	-	Harib
2018-A213	2468445.50	2018 Nov 23	Zelzal-1	-	-	-	-	-	-	YEMEN	-	-	-	30?	-	Harib
2018-A214	2468445.50	2018 Nov 23	Zelzal-1	-	-	-	-	-	-	YEMEN	-	-	-	30?	-	Harib
2018-A217	2468448.50	2018 Nov 27	Zelzal-1	-	-	-	-	-	-	YEMEN	-	-	-	30?	-	Hajjah
2018-A215	2468448.50	2018 Nov 27	Zelzal-1	-	-	-	-	-	-	YEMEN	-	-	-	30?	-	Asir
2018-A222	2468452.50	2018 Nov 30	Zelzal-1	-	-	-	-	-	-	YEMEN	-	-	-	30?	-	Asir
2018-A223	2468452.50	2018 Nov 30	Zelzal-1	-	-	-	-	-	-	YEMEN	-	-	-	30?	-	Asir
2018-A224	2468452.50	2018 Dec 7	Zelzal-1	-	-	-	-	-	-	YEMEN	-	-	-	30?	-	Asir
2018-A225	2468452.50	2018 Dec 7	Zelzal-1	-	-	-	-	-	-	YEMEN	-	-	-	30?	-	Asir
2018-A226	2468452.50	2018 Dec 7	Zelzal-1	-	-	-	-	-	-	YEMEN	-	-	-	30?	-	Asir
2018-A227	2468452.50	2018 Dec 7	Zelzal-1	-	-	-	-	-	-	YEMEN	-	-	-	30?	-	Asir
2018-A228	2468452.50	2018 Dec 7	Zelzal-1	-	-	-	-	-	-	YEMEN	-	-	-	30?	-	Asir
2018-A229	2468452.50	2018 Dec 7	Zelzal-1	-	-	-	-	-	-	YEMEN	-	-	-	30?	-	Asir
2018-A230	2468452.50	2018 Dec 8	Zelzal-1	-	-	-	-	-	-	YEMEN	-	-	-	30?	-	Asir
2018-A231	2468460.50	2018 Dec 8	Zelzal-1	-	-	-	-	-	-	YEMEN	-	-	-	30?	-	Asir
2018-A232	2468460.50	2018 Dec 8	Zelzal-1	-	-	-	-	-	-	YEMEN	-	-	-	30?	-	Asir
2018-A233	2468460.50	2018 Dec 8	Zelzal-1	-	-	-	-	-	-	YEMEN	-	-	-	30?	-	Asir
2018-A234	2468460.50	2018 Dec 8	Zelzal-1	-	-	-	-	-	-	YEMEN	-	-	-	30?	-	Asir
2018-A235	2468460.50	2018 Dec 8	Zelzal-1	-	-	-	-	-	-	YEMEN	-	-	-	30?	-	Asir
2018-A236	2468462.50	2018 Dec 10	Zelzal-1	-	-	-	-	-	-	YEMEN	-	-	-	30?	-	Asir
2018-A237	2468471.50	2018 Dec 19	Zelzal-1	-	-	-	-	-	-	YEMEN	-	-	-	30?	-	Asir
2018-A238	2468472.50	2018 Dec 19	Zelzal-1	-	-	-	-	-	-	YEMEN	-	-	-	30?	-	Asir
2018-A239	2468472.50	2018 Dec 20	Zelzal-1	-	-	-	-	-	-	YEMEN	-	-	-	30?	-	Asir
2018-A240	2468473.50	2018 Dec 21	Zelzal-1	-	-	-	-	-	-	YEMEN	-	-	-	30?	-	Asir
2018-A241	2468473.50	2018 Dec 21	Zelzal-1	-	-	-	-	-	-	YEMEN	-	-	-	30?	-	Asir
2018-A242	2468477.50	2018 Dec 25	Zelzal-1	-	-	-	-	-	-	YEMEN	-	-	-	30?	-	Asir
2018-A243	2468480.50	2018 Dec 28	Zelzal-1	-	-	-	-	-	-	YEMEN	-	-	-	30?	-	Asir
2018-A244	2468480.50	2018 Dec 28	Zelzal-1	-	-	-	-	-	-	YEMEN	-	-	-	30?	-	Asir
2018-A245	2468480.50	2018 Dec 28	Zelzal-1	-	-	-	-	-	-	YEMEN	-	-	-	30?	-	Asir
2018-A246	2468481.50	2018 Dec 29	Zelzal-1	-	-	-	-	-	-	YEMEN	-	-	-	30?	-	Asir
2018-A247	2468481.50	2018 Dec 29	Zelzal-1	-	-	-	-	-	-	YEMEN	-	-	-	30?	-	Asir
2018-A248	2468482.50	2018 Dec 30	Zelzal-1	-	-	-	-	-	-	YEMEN	-	-	-	30?	-	Asir
2018-A249	2468482.50	2018 Dec 30	Zelzal-1	-	-	-	-	-	-	YEMEN	-	-	-	30?	-	Asir
2018-A250	2468488.50	2019 Jan 5	Zelzal-1	-	-	-	-	-	-	YEMEN	-	-	-	30?	-	Asir
2019-A03	2468488.50	2019 Jan 5	Zelzal-1	-	-	-	-	-	-	YEMEN	-	-	-	30?	-	Asir
2019-A05	2468495.50	2019 Jan 12	Zelzal-1	-	-	-	-	-	-	YEMEN	-	-	-	30?	-	Asir
2019-A06	2468495.50	2019 Jan 12	Zelzal-1	-	-	-	-	-	-	YEMEN	-	-	-	30?	-	Asir
2019-A08	2468498.50	2019 Jan 15	Zelzal-1	-	-	-	-	-	-	YEMEN	-	-	-	30?	-	Asir
2019-A09	2468500.50	2019 Jan 17	Zelzal-1	-	-	-	-	-	-	YEMEN	-	-	-	30?	-	Asir
2019-A13	2468509.50	2019 Jan 26	Zelzal-1	-	-	-	-	-	-	YEMEN	-	-	-	30?	-	Asir
2019-A14	2468514.50	2019 Jan 31	Zelzal-1	-	-	-	-	-	-	YEMEN	-	-	-	30?	-	Asir
2019-A15	2468517.50	2019 Feb 3	Zelzal-1	-	-	-	-	-	-	YEMEN	-	-	-	30?	-	Asir
2019-A16	2468517.50	2019 Feb 3	Zelzal-1	-	-	-	-	-	-	YEMEN	-	-	-	30?	-	Asir
2019-A17	2468517.50	2019 Feb 3	Zelzal-1	-	-	-	-	-	-	YEMEN	-	-	-	30?	-	Asir
2019-A18	2468517.50	2019 Feb 3	Zelzal-1	-	-	-	-	-	-	YEMEN	-	-	-	30?	-	Asir

















Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Launch_Mission	FlightCode	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee_Km	Range_Km	Dest
1985-F01	2446168.83	1985 Apr 13 08:00:00	Zenit-2	-	45086-101	-	EPN No. 03.694 No. 5102	-	-	MIP-5	LC45/1	-	-	2007	-	-
1985-053	2446237.85	1985 Jun 21 08:29:32	Zenit-2	-	51076-106	-	EPN No. 03.694	-	-	MIP-5	LC45/1	-	-	340	-	-
1985-097	2446360.79	1985 Oct 22 07:00:00	Zenit-2	-	51076-106	-	Kosmos-1697	-	-	MIP-5	LC45/1	-	-	1163	-	-
1985-121	2446427.89	1985 Dec 28 09:16:30	Zenit-2	-	51041-502	-	Tselina-2 No. 3L	-	-	MIP-5	LC45/1	-	-	863	-	-
1986-056	2446641.85	1986 Jul 30 08:30:00	Zenit-2	-	67041-503/4L	-	Tselina-2 No. 3L	-	-	MIP-5	LC45/1	-	-	400	-	-
1986-080	2446725.83	1986 Oct 22 08:00:00	Zenit-2	-	67041-503/6L	-	Tselina-2 No. 3L	-	-	MIP-5	LC45/1	-	-	2664	-	-
1986-086	2446840.85	1987 Feb 14 08:30:00	Zenit-2	-	45041-504	-	Tselina-2 No. 3L	-	-	MIP-5	LC45/1	-	-	247	-	-
1987-027	2446872.85	1987 Mar 14 08:30:00	Zenit-2	-	51038-401	-	EPN No. 03.695	-	-	MIP-5	LC45/1	-	-	1185	-	-
1987-041	2446928.74	1987 May 13 08:40:00	Zenit-2	-	45038-403	-	EPN No. 03.694	-	-	MIP-5	LC45/1	-	-	1162	-	-
1987-065	2447035.87	1987 Aug 28 08:20:00	Zenit-2	-	45038-403	-	Tselina-2	-	-	MIP-5	LC45/1	-	-	198	-	-
1988-039	2447296.89	1988 May 15 09:20:00	Zenit-2	-	45038-404/10L	-	EPN No. 03.695	-	-	MIP-5	LC45/1	-	-	260	-	-
1988-052	2447489.12	1988 Jul 23 14:50:58	Zenit-2	-	51085-615/12L	-	EPN No. 03.695	-	-	MIP-5	LC45/1	-	-	1164	-	-
1990-046	2448033.72	1990 May 22 05:14:02	Zenit-2	-	67065-615/2S	-	Tselina-2	-	-	MIP-5	LC45/1	-	-	1169	-	-
1990-F03	2448168.69	1990 Oct 4 04:28:00	Zenit-2	-	45079-2167/45/1-88	-	Tselina-2	-	-	GIR-5	LC45/2	-	-	0	-	-
1991-F03	2448498.87	1991 Aug 30 08:55:01	Zenit-2	-	51019-2171/161/2-88	-	Tselina-2	-	-	GIR-5	LC45/1	-	-	1507	-	-
1992-F03	2448658.26	1992 Feb 5 18:14:00	Zenit-2	-	45082-801/71/1-91	-	Tselina-2	-	-	GIR-5	LC45/1	-	-	1170	-	-
1992-093	2448943.52	1992 Nov 17 07:47:01	Zenit-2	-	67092-802/2-91	-	Tselina-2	-	-	GIR-5	LC45/1	-	-	1170	-	-
1993-016	2449061.75	1993 Dec 25 05:55:00	Zenit-2	-	67033-806/3-90	-	Tselina-2	-	-	GIR-5	LC45/1	-	-	1164	-	-
1993-059	2449246.82	1993 Mar 26 02:21:00	Zenit-2	-	45065-614/35-87	-	Tselina-2	-	-	GIR-5	LC45/1	-	-	1322	-	-
1994-023	2449465.53	1993 Sep 15 07:36:19	Zenit-2	-	67019-2187/5-88	-	Tselina-2	-	-	GIR-5	LC45/1	-	-	1147	-	-
1994-053	2449659.11	1994 Apr 23 08:01:59	Zenit-2	-	45019-2197/1-89	-	Tselina-2	-	-	GIR-5	LC45/1	-	-	976	-	-
1994-074	2449860.74	1994 Aug 26 12:00:00	Zenit-2	-	67057-901/14/1	-	Orlets-2	-	-	GIR-5	LC45/1	-	-	972	-	-
1994-077	2449860.74	1994 Nov 4 05:47:00	Zenit-2	-	51057-902/1-87	-	Resurs-O1 No. 3L	-	-	GIR-5	LC45/1	-	-	1181	-	-
1995-058	2450030.88	1995 Oct 31 20:19:00	Zenit-2	-	45053-906/2-89	-	Tselina-2	-	-	GIR-5	LC45/1	-	-	1166	-	-
1995-061	2450350.66	1995 Sep 4 09:01:00	Zenit-2	-	51027-906/15L	-	Tselina-2	-	-	GIR-5	LC45/1	-	-	107	-	-
1997-F02	2450658.60	1997 May 20 07:07:00	Zenit-2	-	45013-902/1-90	-	Tselina-2 No. 13L	-	-	GIR-5	LC45/1	-	-	1140	-	-
1998-043	2451004.77	1998 Jul 28 09:15:00	Zenit-2	-	67021-903/18/1	-	Resurs-O1 No. 4L	-	-	GIR-5	LC45/1	-	-	1164	-	-
1998-045	2451022.89	1998 Jul 28 09:15:00	Zenit-2	-	45092-903/1-98	-	Tselina-2 No. 14L	-	-	GIR-5	LC45/1	-	-	2007	-	-
1998-F05	2451066.35	1998 Sep 9 02:59:00	Zenit-2	-	67047-901/22L	-	Globalstar	-	-	GIR-5	LC45/1	-	-	3619	-	-
1999-014	2451376.73	1999 Jul 17 05:58:00	Zenit-2	-	51025-902/17L	-	Demonst	-	-	ODYSSEY	LC45/1	-	-	959	-	-
1999-056	2451577.69	1999 Oct 10 02:35:00	Zenit-2	-	3L/DK-SL-3L	-	Okean-O No. 1	-	-	ODYSSEY	LC45/1	-	-	42115	-	-
2000-002	2451616.12	2000 Mar 12 14:49:15	Zenit-2	-	3L/DK-SL-3L	-	DirectV-IR	-	-	ODYSSEY	LC45/1	-	-	200	-	-
2000-045	2451764.45	2000 Jul 28 22:42:00	Zenit-2	-	2L/DK-SL-2L	-	Tselina-2 No. 15L	-	-	ODYSSEY	LC45/1	-	-	36326	-	-
2000-066	2451812.92	2000 Sep 25 10:10:00	Zenit-2	-	67013-903/16/1	-	ICG F1	-	-	ODYSSEY	LC45/1	-	-	60166	-	-
2000-066	2451838.74	2000 Oct 21 05:82	Zenit-2	-	67013-903/16/1	-	ICG F1	-	-	ODYSSEY	LC45/1	-	-	38776	-	-
2001-012	2451967.44	2001 Mar 15 22:55:30	Zenit-2	-	67013-903/16/1	-	ICG F1	-	-	ODYSSEY	LC45/1	-	-	39716	-	-
2001-036	2452038.42	2001 Dec 10 11:15:57	Zenit-2	-	51025-902/17L	-	ICG F1	-	-	ODYSSEY	LC45/1	-	-	324	-	-
2002-050	2452041.44	2002 Jun 15 22:59:00	Zenit-2	-	45025-901/1-94	-	ICG F1	-	-	ODYSSEY	LC45/1	-	-	41494	-	-
2003-036	2452061.06	2003 Feb 5 09:26:00	Zenit-2	-	67013-903/16/1	-	ICG F1	-	-	ODYSSEY	LC45/1	-	-	36904	-	-
2003-034	2452093.69	2003 Aug 6 03:30:15	Zenit-2	-	67013-903/16/1	-	ICG F1	-	-	ODYSSEY	LC45/1	-	-	36990	-	-
2003-044	2452113.67	2003 Oct 1 04:22:59	Zenit-2	-	67013-903/16/1	-	ICG F1	-	-	ODYSSEY	LC45/1	-	-	36989	-	-
2004-001	2452155.68	2004 Jan 11 04:22:59	Zenit-2	-	67013-903/16/1	-	ICG F1	-	-	ODYSSEY	LC45/1	-	-	36989	-	-
2004-016	2452166.56	2004 May 10 04:22:59	Zenit-2	-	67013-903/16/1	-	ICG F1	-	-	ODYSSEY	LC45/1	-	-	36989	-	-
2004-021	2452185.67	2004 Jun 19 03:58:00	Zenit-2	-	67013-903/16/1	-	ICG F1	-	-	ODYSSEY	LC45/1	-	-	36989	-	-
2005-008	2452348.81	2005 Mar 26 05:29:00	Zenit-2	-	67013-903/16/1	-	ICG F1	-	-	ODYSSEY	LC45/1	-	-	36989	-	-
2005-015	2452486.81	2005 Apr 26 14:03:20	Zenit-2	-	67013-903/16/1	-	ICG F1	-	-	ODYSSEY	LC45/1	-	-	36989	-	-
2005-022	2452545.93	2005 Nov 8 14:06:59	Zenit-2	-	67013-903/16/1	-	ICG F1	-	-	ODYSSEY	LC45/1	-	-	36989	-	-
2005-044	2452782.48	2006 Feb 15 23:24:55	Zenit-2	-	67013-903/16/1	-	ICG F1	-	-	ODYSSEY	LC45/1	-	-	36989	-	-
2006-010	2453008.48	2006 Apr 18 07:50:00	Zenit-2	-	67013-903/16/1	-	ICG F1	-	-	ODYSSEY	LC45/1	-	-	36989	-	-
2006-023	2453069.84	2006 Jun 22 03:37:01	Zenit-2	-	67013-903/16/1	-	ICG F1	-	-	ODYSSEY	LC45/1	-	-	36989	-	-
2006-034	2453039.40	2006 Oct 30 23:48:59	Zenit-2	-	67013-903/16/1	-	ICG F1	-	-	ODYSSEY	LC45/1	-	-	36989	-	-
2006-049	2453131.47	2007 Jan 30 23:22	Zenit-2	-	67013-903/16/1	-	ICG F1	-	-	ODYSSEY	LC45/1	-	-	36989	-	-
2007-F01	2454080.92	2007 Jun 29 10:00:00	Zenit-2M	-	67013-903/16/1-2005	-	ICG F1	-	-	ODYSSEY	LC45/1	-	-	1187	-	-
2008-001	2454080.99	2008 Jan 15 11:48:59	Zenit-2	-	67013-903/16/1-2005	-	ICG F1	-	-	ODYSSEY	LC45/1	-	-	36989	-	-
2008-013	2454545.35	2008 Mar 19 22:47:59	Zenit-2	-	67013-903/16/1-2005	-	ICG F1	-	-	ODYSSEY	LC45/1	-	-	41363	-	-
2008-022	2454545.35	2008 Mar 28 05:00:00	Zenit-2	-	67013-903/16/1-2005	-	ICG F1	-	-	ODYSSEY	LC45/1	-	-	36989	-	-
2008-024	2454607.71	2008 May 21 09:43:59	Zenit-2	-	67013-903/16/1-2005	-	ICG F1	-	-	ODYSSEY	LC45/1	-	-	36989	-	-
2008-035	2454667.92	2008 Jul 16 05:20:00	Zenit-2	-	67013-903/16/1-2005	-	ICG F1	-	-	ODYSSEY	LC45/1	-	-	36989	-	-
2008-045	2454733.89	2008 Sep 24 09:27:59	Zenit-2	-	67013-903/16/1-2005	-	ICG F1	-	-	ODYSSEY	LC45/1	-	-	36989	-	-
2009-009	2454689.97	2009 Feb 26 18:29:55	Zenit-2	-	67013-903/16/1-2005	-	ICG F1	-	-	ODYSSEY	LC45/1	-	-	36989	-	-
2009-020	2454941.84	2009 Jun 20 08:15:59	Zenit-2	-	67013-903/16/1-2005	-	ICG F1	-	-	ODYSSEY	LC45/1	-	-	36989	-	-
2009-032	2455000.41	2009 Jun 21 21:50:00	Zenit-2	-	67013-903/16/1-2005	-	ICG F1	-	-	ODYSSEY	LC45/1	-	-	36989	-	-
2009-067	2455166.38	2009 Nov 30 12:09:02	Zenit-2	-	67013-903/16/1-2005	-	ICG F1	-	-	ODYSSEY	LC45/1	-	-	36989	-	-
2011-001	2455682.62	2011 Jan 20 21:00:00	Zenit-2	-	67013-903/16/1-2005	-	ICG F1	-	-	ODYSSEY	LC45/1	-	-	41421	-	-
2011-037	2455760.61	2011 Jun 24 20:17:59	Zenit-2	-	67013-903/16/1-2005	-	ICG F1	-	-	ODYSSEY	LC45/1	-	-	150000	-	-
2011-051	2455829.35	2011 Sep 14 20:17:59	Zenit-2	-	67013-903/16/1-2005	-	ICG F1	-	-	ODYSSEY	LC45/1	-	-	36989	-	-
2011-056	2455840.38	2011 Oct 6 21:00:02	Zenit-2	-	67013-903/16/1-2005	-	ICG F1	-	-	ODYSSEY	LC45/1	-	-	36989	-	-
2011-065	2455874.34	2011 Nov 8 21:06:03	Zenit-2	-	67013-903/16/1-2005	-	ICG F1	-	-	ODYSSEY	LC45/1	-	-	36989	-	-
2012-030	2456079.72	2012 Jun 1 05:22:59	Zenit-2	-	67013-903/16/1-2005	-	ICG F1	-	-	ODYSSEY	LC45/1	-	-	36989	-	-
2012-045	2456158.33	2012 Aug 19 06:54:59	Zenit-2	-	67013-903/16/1-2005	-	ICG F1	-	-	ODYSSEY	LC45/1	-	-	36989	-	-
2012-069	2456265.36	2012 Dec 3 20:43:59	Zenit-2	-	67013-903/16/1-2005	-	ICG F1	-	-	ODYSSEY	LC45/1	-	-	36989	-	-
2013-F01	2456324.79	2013 Feb 1 06:56:00	Zenit-2	-	67013-903/16/1-2005	-	ICG F1	-	-	ODYSSEY	LC45/1	-	-	36989	-	-
2013-016	2456404.38	2013 Apr 21 21:00:00	Zenit-2	-	67013-903/16/1-2005	-	ICG F1	-	-	ODYSSEY	LC45/1	-	-	36989	-	-
2013-045	2456536.34	2013 Aug 31 20:05:00	Zenit-2	-	67013-903/16/1-2005	-	ICG F1	-	-	ODYSSEY	LC45/1	-	-	36989	-	-
2013-051	2456554.12	2013 Sep 18 14:58:02	Zenit-2	-	67013-903/16/1-2005	-	ICG F1	-	-	ODYSSEY	LC45/1	-	-	36989	-	-
2014-003	2456667.25	2014 Jan 9 18:07:00	Zenit													

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Mission	FlightCode	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee km	Range km	Dest
2014-F02	2456959.43	2014 Oct 28 2222:30	Antares 130	-	2TR9251.5 (5)	S.S. Deke Slayton	Cygnus Drb-3	-	-	MMS	Pad OA	-	-	0	-	-
2015-074	2457688.07	2015 Dec 11 1345:32	Zenit-SLRF	-	SLB90.4/4027/2004	Elektro-L No. 2	Elektro-L No. 2	-	-	GIK-5	LC45/1	-	-	36411	-	-
2016-062	2457679.49	2016 Oct 17 2345:40	Antares 230	-	2TR9251.7 (6)	S.S. Alan Poindexter	Cygnus OA-5	-	-	MMS	Pad OA	-	-	538	-	-
2017-071	2458070.01	2017 Nov 12 1219:51	Antares 230	-	2TR9251.8 (7)	S.S. Gene Cernan	Cygnus OA-8	-	-	MMS	Pad OA	-	-	469	-	-
2017-086	2458114.29	2017 Dec 26 1900:04	Zenit-SLRF	-	SLB90.5/2006	Angosat	Angosat	-	-	GIK-5	LC45/1	-	-	36892	-	-
2018-046	2458259.86	2018 May 21 0944:06	Antares 230	-	2TR9251.6 (8)	S.S. J.R. Thompson	Cygnus OA-9	-	-	MMS	Pad OA	-	-	490	-	-
2018-092	2458439.88	2018 Nov 17 0901:23	Antares 230	-	2TR9251.9 (9)	S.S. John Young	Cygnus OA-10	-	-	MMS	Pad OA	-	-	471	-	-
2019-022	2458591.37	2019 Apr 17 2046:07	Antares 230	-	2TR9251.10 (10)	S.S. Roger Chaffee	Cygnus OA-11	-	-	MMS	Pad OA	-	-	537	-	-
2020-011	2458790.08	2019 Nov 2 1959:47	Antares 230+	-	2TR9251.11 (11)	S.S. Alan Bean	Cygnus OA-12	-	-	MMS	Pad OA	-	-	476	-	-
2020-069	2458895.35	2020 Feb 15 2021:04	Antares 230+	-	2TR9251.12 (12)	S.S. Robert Lawrence	Cygnus OA-13	-	-	MMS	Pad OA	-	-	544	-	-
2020-069	2458125.55	2020 Oct 3 0116:12	Antares 230+	-	2TR9251.13? (13)	S.S. Kalpana Chawla	Cygnus OA-14	-	-	MMS	Pad OA	-	-	489	-	-
2021-013	2459266.23	2021 Feb 20 1736:49	Antares 230+	-	2TR9251.14? (14)	S.S. Katherine Johnson	Cygnus OA-15	-	-	MMS	Pad OA	-	-	506	-	-
2021-072	2459437.42	2021 Aug 10 2201:05	Antares 230+	-	2TR9251.15? (15)	S.S. Ellison Sizuka	Cygnus OA-16	-	-	MMS	Pad OA	-	-	464	-	-
2022-015	2459630.24	2022 Feb 19 1740:03	Antares 230+	-	2TR9251.16? (16)	S.S. Piers Sellers	Cygnus OA-17	-	-	MMS	Pad OA	-	-	425	-	-
2022-149	2459890.94	2022 Nov 7 1032:42	Antares 230+	-	2TR9251.17? (17)	S.S. Sally Ride	Cygnus OA-18	-	-	MMS	Pad OA	-	-	-	-	-
2023-110	2460158.52	2023 Aug 2 0031:18	Antares 230+	-	2TR9251.18? (18)	S.S. Laurel Clark	Cygnus OA-19	-	-	MMS	Pad OA	-	-	-	-	-



Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	OrbPay	Agency	Launch_Code	Group	Category	LTCite	Cite	Notes
1985-F01	2446168.83	1985 Apr 13 05:00:00	Zenit-2	-	45086-101	3.200	DNKS	0F	G	Sat LEO 0 4	AK15	AWIS	MKforum:1000
1985-063	2446237.85	1985 Jun 21 02:39:32	Zenit-2	-	51076-105	3.204	DNKS	0F	G	Sat LEO 0 4	AK15/PANEX	AWIS	-
1985-097	2446360.79	1985 Oct 22 07:00:00	Zenit-2	-	51076-106	3.250	DNKS	0S	G	Sat LEO 0 4	AK15/PANEX	-	-
1986-121	2446427.89	1986 Dec 28 09:16:30	Zenit-2	-	51041-502	14.550	DNKS	0S	G	Sat LEO 0 4	AK15/PANEX	AWIS	-
1986-056	2446461.85	1986 Jul 30 09:30:00	Zenit-2	-	45061-501/4L	10.350	DNKS	0S	G	Sat LEO 0 4	AK15/PANEX	-	-
1986-080	2446725.83	1986 Oct 22 09:00:00	Zenit-2	-	67041-503/6L	4.000	DNKS	0S	G	Sat LEO 0 4	AK15/PANEX	-	-
1987-016	2446840.85	1987 Feb 14 09:30:00	Zenit-2	-	45041-504	10.363	DNKS	0S	G	Sat LEO 0 4	AK15/PANEX	-	-
1987-027	2446872.85	1987 Mar 18 09:30:00	Zenit-2	-	51038-401	3.250	DNKS	0S	G	Sat LEO 0 4	AK15/PANEX	-	-
1987-041	2446928.74	1987 May 13 05:40:00	Zenit-2	-	45068-403	3.250	DNKS	0S	G	Sat LEO 0 4	AK15/PANEX	-	-
1987-065	2447008.67	1987 Aug 1 03:59:59	Zenit-2	-	45069-404	11.078	DNKS	0S	G	Sat LEO 0 4	AK15/PANEX	-	-
1987-071	2447335.85	1987 Aug 28 09:20:00	Zenit-2	-	51068-404/10L	11.000	DNKS	0S	G	Sat LEO 0 4	AK15/PANEX	-	-
1988-039	2447396.89	1988 May 15 09:20:00	Zenit-2	-	51065-615/12L	3.250	DNKS	0S	G	Sat LEO 0 4	AK15/PANEX	-	-
1988-102	2447489.12	1988 Nov 23 14:50:58	Zenit-2	-	51065-612/13L	3.250	DNKS	0S	G	Sat LEO 0 4	AK15/PANEX	-	-
1990-046	2448033.72	1990 May 22 05:42:02	Zenit-2	-	67059-613/25	3.250	DNKS	0S	G	Sat LEO 0 4	AK15/PANEX	-	-
1990-F05	2448168.69	1990 Oct 4 04:28:00	Zenit-2	-	45059-613/25	3.200	DNKS	0F	G	Sat LEO 0 4	AK15	AVMMLJ	-
1991-F03	2448438.37	1991 Aug 30 06:56:01	Zenit-2	-	45059-613/25	3.200	DNKS	0F	G	Sat LEO 0 4	AK15	AVMMLJ	-
1992-F01	2448568.26	1992 Feb 5 18:14:00	Zenit-2	-	45062-801/17L/1-91	3.200	DNKS	0F	G	Sat LEO 0 4	AK15	-	-
1992-F06	2448943.52	1992 Nov 17 07:47:01	Zenit-2	-	67032-802/2-91	3.250	YKSR	0S	G	Sat LEO 0 4	AK15/PANEX	-	-
1992-093	2449311.75	1992 Dec 25 05:56:00	Zenit-2	-	67033-306/3-90	3.250	YKSR	0S	G	Sat LEO 0 4	AK15/PANEX	-	-
1993-016	2449072.60	1993 Mar 26 02:21:00	Zenit-2	-	45065-614/35-87	3.250	YKSR	0S	G	Sat LEO 0 4	AK15/PANEX	-	-
1993-059	2449246.82	1993 Sep 16 07:36:19	Zenit-2	-	67019-216/3-88	3.250	YKSR	0S	G	Sat LEO 0 4	AK15/PANEX	-	-
1994-023	2449465.83	1994 Apr 23 09:01:59	Zenit-2	-	45019-216/1-89	3.250	YKSR	0S	G	Sat LEO 0 4	AK15/PANEX	-	-
1994-053	2449531.00	1994 Aug 26 12:00:00	Zenit-2	-	67057-901/140L	12.004	YKSR	0S	G	Sat LEO 0 4	AK15/PANEX	-	-
1994-074	2449660.74	1994 Nov 4 05:47:00	Zenit-2	-	45037-902/1-87	1.900	YKSR	0S	G	Sat LEO 0 4	AK15/PANEX	-	-
1994-077	2449680.89	1994 Nov 24 09:15:59	Zenit-2	-	45033-306/2-90	3.250	YKSR	0S	G	Sat LEO 0 4	AK15/PANEX	-	-
1995-056	2450022.35	1995 Oct 31 20:19:00	Zenit-2	-	45057-903/2-89	3.250	YKSR	0S	G	Sat LEO 0 4	AK15/PANEX	-	-
1995-051	2450330.86	1995 Sep 4 09:01:00	Zenit-2	-	51027-906/15L	3.250	YKSR	0S	G	Sat LEO 0 4	AK15/PANEX	-	-
1997-F02	2450586.90	1997 May 20 07:07:00	Zenit-2	-	67013-303/160L	3.200	YKSR	0F	G	Sat LEO 0 4	AK15/PANEX	-	-
1998-044	2451004.77	1998 Jul 10 06:30:00	Zenit-2	-	67021-803/160L	2.679	YKSR	0S	G	Sat LEO 0 4	AK15/PANEX	-	-
1998-F06	2451022.39	1998 Sep 9 20:23:00	Zenit-2	-	45092-803/1-96	3.250	YKSR	0F	G	Sat LEO 0 4	AK15/PANEX	-	-
1998-F05	2451066.35	1998 Sep 9 20:23:00	Zenit-2	-	67047-801/22L	4.700	YKSR	0F	G/C	Sat LEO 0 4	AK15/PANEX	IKR902-45	67047-801
1999-014	2451265.36	1999 Jul 17 05:36:00	Zenit-2	-	17/DH-3SL-1TL	4.600	SEALC	0S	G/C	Sat LEO 0 4	AK15/PANEX	45043-601	45043-601
1999-029	2451461.64	1999 Oct 10 05:26:00	Zenit-2	-	37/DH-3SL-5L	3.447	SEALC	0S	G/C	Sat LEO 0 4	AK15/PANEX	51028-802	51028-802
1999-006	2451577.89	2000 Feb 5 09:26:00	Zenit-2	-	45028-801/1-94	3.254	YKSR	0S	G/C	Sat LEO 0 4	AK15/PANEX	45028-802	45028-802
2000-F02	2451616.12	2000 Mar 12 14:49:15	Zenit-3SL	-	27/DH-3SL-2L	2.750	SEALC	0F	G/C	Sat LEO 0 4	AK15/PANEX	67043-703	67043-703
2000-F04	2451791.45	2000 Jul 28 22:42:00	Zenit-3SL	-	67013-303/160L	5.660	SEALC	0S	G/C	Sat LEO 0 4	AK15/PANEX	51021-102	51021-102
2000-066	2451812.32	2000 Sep 25 05:10:00	Zenit-2	-	12.008	12.008	YKSR	0S	G/C	Sat LEO 0 4	AK15/PANEX	67013-303	67013-303
2000-066	2451835.74	2000 Oct 21 02:52:00	Zenit-3SL	-	77/DH-3SL-6L	5.108	SEALC	0S	G/C	Sat LEO 0 4	AK15/PANEX	45046-901	45046-901
2001-012	2451987.42	2001 Mar 16 22:35:30	Zenit-3SL	-	77/DH-3SL-5L	4.662	SEALC	0S	G/C	Sat LEO 0 4	AK15/PANEX	67021-203	67021-203
2001-018	2452036.42	2001 Feb 8 22:10:29	Zenit-3SL	-	46/DH-3SL-7L	4.667	SEALC	0S	G/C	Sat LEO 0 4	AK15/PANEX	45022-302	45022-302
2002-056	2452394.22	2002 Dec 10 13:31:57	Zenit-3SL	-	46/DH-3SL-19L	3.911	SEALC	0S	G/C	Sat LEO 0 4	AK15/PANEX	45022-301	45022-301
2003-026	2452541.48	2003 Jan 15 22:50:59	Zenit-3SL	-	46/DH-3SL-6L	4.850	SEALC	0S	G/C	Sat LEO 0 4	AK15/PANEX	45022-301	45022-301
2003-034	2452589.68	2003 Jun 6 03:30:16	Zenit-3SL	-	SL16/DH-SL-16L	4.757	SEALC	0S	G/C	Sat LEO 0 4	AK15/PANEX	45022-301	45022-301
2003-044	2452915.67	2003 Oct 1 04:01:59	Zenit-3SL	-	SL17/DH-SL-17L	4.757	SEALC	0S	G/C	Sat LEO 0 4	AK15/PANEX	45022-301	45022-301
2004-016	2453215.69	2004 May 11 14:11:59	Zenit-3SL	-	SL18/DH-SL-18L	4.694	SEALC	0S	G/C	Sat LEO 0 4	AK15/PANEX	45022-301	45022-301
2004-016	2453215.69	2004 May 11 14:11:59	Zenit-3SL	-	SL14/DH-SL-6L	5.893	SEALC	0S	G/C	Sat LEO 0 4	AK15/PANEX	45022-301	45022-301
2004-016	2453215.69	2004 May 11 14:11:59	Zenit-3SL	-	70191-402/1-95	3.254	KVR	0S	G/C	Sat LEO 0 4	AK15/PANEX	45022-301	45022-301
2004-021	2453186.56	2004 Jun 20 03:58:19	Zenit-3SL	-	SL11/DH-SL-11L	4.650	SEALC	0S	G/C	Sat LEO 0 4	AK15/PANEX	45022-301	45022-301
2004-021	2453186.57	2004 Jun 20 03:58:19	Zenit-3SL	-	SL17/DH-SL-17L	4.650	SEALC	0S	G/C	Sat LEO 0 4	AK15/PANEX	45022-301	45022-301
2005-068	2453480.66	2005 Mar 26 07:31:29	Zenit-3SL	-	SL19/DH-SL-19L	4.680	SEALC	0S	G/C	Sat LEO 0 4	AK15/PANEX	45022-301	45022-301
2005-010	2453486.81	2005 Apr 26 10:33:00	Zenit-3SL	-	SL14/DH-SL-14L	5.493	SEALC	0S	G/C	Sat LEO 0 4	AK15/PANEX	45022-301	45022-301
2005-022	2453545.09	2005 Mar 8 14:03:00	Zenit-3SL	-	SL19/DH-SL-19L	5.958	SEALC	0S	G/C	Sat LEO 0 4	AK15/PANEX	45022-301	45022-301
2005-044	2453683.09	2005 May 6 14:06:16	Zenit-3SL	-	SL15/DH-SL-15L	4.393	SEALC	0S	G/C	Sat LEO 0 4	AK15/PANEX	45022-301	45022-301
2006-003	2453782.48	2006 Feb 15 23:34:55	Zenit-3SL	-	SL16/DH-SL-16L	4.400	SEALC	0S	G/C	Sat LEO 0 4	AK15/PANEX	45022-301	45022-301
2006-010	2453838.48	2006 Apr 19 07:50:59	Zenit-3SL	-	SL21/DH-SL-21L	4.400	SEALC	0S	G/C	Sat LEO 0 4	AK15/PANEX	45022-301	45022-301
2006-023	2453904.83	2006 Jun 18 07:50:59	Zenit-3SL	-	SL20/DH-SL-20L	4.400	SEALC	0S	G/C	Sat LEO 0 4	AK15/PANEX	45022-301	45022-301
2006-034	2453969.64	2006 Aug 22 03:27:01	Zenit-3SL	-	SL23/DH-SL-23L	4.448	SEALC	0S	G/C	Sat LEO 0 4	AK15/PANEX	45022-301	45022-301
2006-049	2454039.49	2006 Oct 30 23:48:59	Zenit-3SL	-	SL22/DH-SL-22L	5.193	SEALC	0S	G/C	Sat LEO 0 4	AK15/PANEX	45022-301	45022-301
2007-F01	2454131.47	2007 Jan 30 23:22:00	Zenit-3SL	-	SL24/DH-SL-24L	5.920	SEALC	0F	G/C	Sat LEO 0 4	AK15/PANEX	45022-301	45022-301
2007-029	2454280.92	2007 Jun 29 10:00:00	Zenit-2M	-	70141-301/1-2005	3.254	KVR	0S	G/C	Sat LEO 0 4	AK15/PANEX	45022-301	45022-301
2008-001	2454480.99	2008 Jan 15 11:48:59	Zenit-3SL	-	SL25/DH-SL-15L	5.180	SEALC	0S	G/C	Sat LEO 0 4	AK15/PANEX	45022-301	45022-301
2008-013	2454545.45	2008 Mar 19 22:47:59	Zenit-3SL	-	SL26/DH-SL-26L	6.060	SEALC	0S	G/C	Sat LEO 0 4	AK15/PANEX	45022-301	45022-301
2008-022	2454584.71	2008 Apr 28 05:00:00	Zenit-3SL	-	SR60.1/SLB.17L	1.360	STS	0S	G/C	Sat LEO 0 4	AK15/PANEX	45022-301	45022-301
2008-024	2454667.91	2008 May 21 09:43:59	Zenit-3SL	-	SL27/DH-SL-27L	5.620	SEALC	0S	G/C	Sat LEO 0 4	AK15/PANEX	45022-301	45022-301
2008-035	2454667.92	2008 Jun 16 05:20:59	Zenit-3SL	-	SL28/DH-SL-28L	4.448	SEALC	0S	G/C	Sat LEO 0 4	AK15/PANEX	45022-301	45022-301
2008-049	2454733.89	2008 Sep 24 09:27:59	Zenit-3SL	-	SL29/DH-SL-29L	4.640	SEALC	0S	G/C	Sat LEO 0 4	AK15/PANEX	45022-301	45022-301
2009-009	2454889.27	2009 Feb 26 18:29:55	Zenit-3SL	-	SR60.2/SLB.2	3.038	SEALC	0S	G/C	Sat LEO 0 4	AK15/PANEX	45022-301	45022-301
2009-020	2454941.84	2009 Jun 21 21:50:00	Zenit-3SL	-	SR60.3/SLB.3L	2.366	SEALC	0S	G/C	Sat LEO 0 4	AK15/PANEX	45022-301	45022-301
2009-032	2455004.41	2009 Jun 21 21:50:00	Zenit-3SL	-	SR60.4/SLB.4L	2.484	SEALC	0S	G/C	Sat LEO 0 4	AK15/PANEX	45022-301	45022-301
2009-067	2455166.38	2009 Nov 20 21:00:00	Zenit-3SL	-	SR60.5/SLB.5L	1.984	KVR?	0S	G/C</				

Launch

Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	OrbPay	Agency	Launch_Code	Group	Category	LTCite	Cite	Notes
2014-F02	2456959.43	2014 Oct 28 2222:30	Antares 130	-	2TR251.5 (5)	8.366	OSC	0F	CX/C	Sat ISS 0	Wire	-	70103-404
2015-074	2457368.07	2015 Dec 11 1345:32	Zenit-3SLBF	-	SLB80.4/402/2004	2.219	KVR?	0S	G/G	Sat GDU 00 5	Wire	-	70102-402
2016-062	2457679.49	2016 Oct 17 2345:40	Antares 230	-	2TR251.7 (6)	8.534	OSC	0S	CX/C	Sat ISS 0	Wire	-	70105-301
2017-071	2458070.01	2017 Nov 12 1219:51	Antares 230	-	2TR251.8 (7)	7.069	OSC	0S	CX/C	Sat ISS 0	Wire	-	70105-401
2017-086	2458114.29	2017 Dec 26 1900:04	Zenit-3SLBF	-	SLB80.5/2006	2.011	KVR?	0S	G/0G	Sat GDU 00 5	Wire	-	70103-403
2018-046	2458259.86	2018 May 21 0944:06	Antares 230	-	2TR251.6 (8)	10.564	OSC	0S	CX/C	Sat ISS 0	Wire	-	70104-303
2018-092	2458439.88	2018 Nov 17 0901:23	Antares 230	-	2TR251.9 (9)	10.480	NGIS	0S	CX/C	Sat ISS 0	Wire	-	70107-302
2019-022	2458591.37	2019 Apr 17 2046:07	Antares 230	-	2TR251.10 (10)	10.461	NGIS	0S	CX/C	Sat ISS 0	Wire	-	70107-302
2019-071	2458790.08	2019 Nov 2 1359:47	Antares 230+	-	2TR251.11 (11)	11.796	NGIS	0S	CX/C	Sat ISS 0	Wire	-	70107-
2020-011	2458895.36	2020 Feb 15 2021:04	Antares 230+	-	2TR251.12 (12)	11.721	NGIS	0S	CX/C	Sat ISS 0	Wire	-	70108-401
2020-069	2459125.55	2020 Oct 3 0116:12	Antares 230+	-	2TR251.13? (13)	11.604	NGIS	0S	CX/C	Sat ISS 0	Wire	-	-
2021-013	2459266.23	2021 Feb 20 1736:49	Antares 230+	-	2TR251.14? (14)	11.986	NGIS	0S	CX/C	Sat ISS 0	Wire	-	-
2021-072	2459437.42	2021 Aug 10 2201:05	Antares 230+	-	2TR251.15? (15)	11.924	NGIS	0S	CX/C	Sat ISS 0	Wire	-	-
2022-015	2459630.24	2022 Feb 19 1740:03	Antares 230+	-	2TR251.16? (16)	11.992	NGIS	0S	CX/C	Sat ISS 0	Wire	-	-
2022-149	2459890.94	2022 Nov 7 1032:42	Antares 230+	-	2TR251.17? (17)	12.114	NGIS	0S	CX/C	Sat ISS 0	Wire	-	-
2023-110	2460168.52	2023 Aug 2 0031:18	Antares 230+	-	2TR251.18? (18)	11.809	NGIS	0S	CX/C	Sat ISS 0	Wire	-	-



Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Launch				Ascent_Site	Ascent_Pad	Apogee km	Range km	Dest
							Mission	FlightCode	Platform	Launch_Site					
1967-A159	2438790.50	1967 Oct 27	Zenit	-	1	Low impulse test	-	-	-	-	-	0	-	-	
1967-S742	2438790.50	1967 Oct 27	Zenit	-	2	Dummy payload	-	-	SDQ	-	-	140?	-	-	
1967-S805	2438791.16	1967 Oct 27 1545	Zenit	-	3	-	-	-	SDQ	-	-	145	-	-	





Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Display	Agency	Launch_Code	Group	Category	LTCite	Cite	Notes
1967-A159	2439790.50	1967 Oct 27	Zenit	-	1	0.000	CH	AS	BERN/	Test	ScIIndSpat4	-	-
1967-S742	2439790.50	1967 Oct 27	Zenit	-	2	0.000	CH	AS	BERN/	Test	ScIIndSpat4	-	-
1967-S606	2439791.16	1967 Oct 27 1545	Zenit	-	3	0.000	CH	SS	BERN/	Test	ScIIndSpat4	-	-



Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Mission	FlightCode	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee km	Range km	Dest
2021-S10	2459245.50	2021 Jan 31?	Zoljanah	-	-	Test	-	-	-	SHARQ?	-	-	-	500	-	Arabian Sea
2022-S66	2459764.50	2022 Jun 24?	Zoljanah	-	-	Test	-	-	-	SEM	-	-	-	500	-	Arabian Sea



Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	OrbPay	Agency	Launch_Code	Group	Category	LTCite	Cite	Notes
2021-S10	2459245.50	2021 Jan 31?	Zo1Janah	-	-	0.000	IRGC	TS	-	Test	Wire	-	-
2022-S66	2459754.50	2022 Jun 24?	Zo1Janah	-	-	0.000	IRGC	TS	-	Test	Wire	-	-



Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Flight	Mission	Launch_FlightCode	Platform	Launch_Site	Launch_Pad	Ascent_Site	Ascent_Pad	Apogee_km	Range_km	Dest
2017-839	2457922.50	2017 Jun 18	Zulfikar	-	Laylat-al-Qadr	-	-	Syria attack	-	KERH	-	-	-	200?	700?	Deir-ez-Zor
2017-840	2457922.50	2017 Jun 18	Zulfikar	-	-	-	-	Syria attack	-	IRKORD	-	-	-	200?	700?	Deir-ez-Zor
2017-841	2457922.50	2017 Jun 18	Zulfikar	-	-	-	-	Syria attack	-	KERH	-	-	-	200?	700?	Deir-ez-Zor
2017-842	2457922.50	2017 Jun 18	Zulfikar	-	-	-	-	Syria attack	-	KERH	-	-	-	200?	700?	Deir-ez-Zor
2017-843	2457922.50	2017 Jun 18	Zulfikar	-	-	-	-	Syria attack	-	KERH	-	-	-	200?	700?	Deir-ez-Zor
2017-844	2457922.50	2017 Jun 18	Zulfikar	-	-	-	-	Syria attack	-	KERH	-	-	-	200?	700?	Deir-ez-Zor
2018-855	2458392.50	2018 Oct 1 0000?	Zulfikar	-	-	-	-	Syria attack	-	KERH	-	-	-	200?	700?	Syria
2018-856	2458392.50	2018 Oct 1 0000?	Zulfikar	-	-	-	-	Syria attack	-	KERH	-	-	-	200?	700?	Syria
2018-A137	2458392.50	2018 Oct 1 0000?	Zulfikar	-	-	-	-	Syria attack	-	KERH	-	-	-	1?	-	-
2020-304	2458686.44	2020 Jan 7 2230?	Zulfikar	-	-	-	-	-	-	TABRIZ	-	-	-	100?	-	AynAlMead
2020-305	2458686.44	2020 Jan 7 2230?	Zulfikar	-	-	-	-	-	-	KERH	-	-	-	100?	-	AynAlMead
2020-306	2458686.44	2020 Jan 7 2237?	Zulfikar	-	-	-	-	-	-	TABRIZ	-	-	-	100?	-	AynAlMead
2020-307	2458686.44	2020 Jan 7 2237?	Zulfikar	-	-	-	-	-	-	KERH	-	-	-	100?	-	AynAlMead
2020-308	2458686.46	2020 Jan 7 2301?	Zulfikar	-	-	-	-	-	-	TABRIZ	-	-	-	100?	-	AynAlMead
2020-309	2458686.46	2020 Jan 7 2301?	Zulfikar	-	-	-	-	-	-	KERH	-	-	-	100?	-	AynAlMead
2021-308	2459230.50	2021 Jan 16	Zulfikar	-	-	-	-	Great Prophet 15	-	GRRH	-	-	-	200?	800?	Indian O.





Launch_Tag	Launch_ID	Launch_Date	LV_Type	Variant	Flight_ID	Launch_Weight	Agency	Launch_Code	Group	Category	LTCite	Cite	Notes
2017-S39	2457922.50	2017 Jun 18	Zulfaghar	-	Laylat-al-Qadr	0.000	IR	MS	-	Weapon	Wire	-	-
2017-S40	2457922.50	2017 Jun 18	Zulfaghar	-	-	0.000	IR	MS	-	Weapon	Wire	-	-
2017-S41	2457922.50	2017 Jun 18	Zulfaghar	-	-	0.000	IR	MS	-	Weapon	Wire	-	-
2017-S42	2457922.50	2017 Jun 18	Zulfaghar	-	-	0.000	IR	MS	-	Weapon	Wire	-	-
2017-S43	2457922.50	2017 Jun 18	Zulfaghar	-	-	0.000	IR	MS	-	Weapon	Wire	-	-
2017-S44	2457922.50	2017 Jun 18	Zulfaghar	-	-	0.000	IR	MS	-	Weapon	Wire	-	-
2018-S55	2458392.50	2018 Oct 1 0000?	Zulfaghar	-	-	0.000	IR	MS	-	Weapon	Wire	-	-
2018-S56	2458392.50	2018 Oct 1 0000?	Zulfaghar	-	-	0.000	IR	MS	-	Weapon	Wire	-	-
2018-A137	2458392.50	2018 Oct 1 0000?	Zulfaghar	-	-	0.000	IR	MF	-	Weapon	Wire	-	-
2020-S04	2458866.44	2020 Jan 7 2230?	Zulfaghar	-	-	0.000	IR	MS	-	Weapon	Wire	-	-
2020-S05	2458866.44	2020 Jan 7 2230?	Zulfaghar	-	-	0.000	IR	MS	-	Weapon	Wire	-	-
2020-S06	2458866.44	2020 Jan 7 2237?	Zulfaghar	-	-	0.000	IR	MS	-	Weapon	Wire	-	-
2020-S07	2458866.44	2020 Jan 7 2301?	Zulfaghar	-	-	0.000	IR	MS	-	Weapon	Wire	-	-
2020-S08	2458866.46	2020 Jan 7 2301?	Zulfaghar	-	-	0.000	IR	MS	-	Weapon	Wire	-	-
2020-S09	2458866.46	2020 Jan 7 2301?	Zulfaghar	-	-	0.000	IR	MS	-	Weapon	Wire	-	-
2021-S08	2459230.50	2021 Jan 16	Zulfaghar	-	-	0.000	IR	MS	-	Test	twitter/inbarspace	-	-